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.

12588

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

RECEIVED
JAN 16 2015
NMOCD
DISTRICT III

Type of action: 45-11555
- ☐ 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: Navajo Allotted Com 1
API Number: 30-045-11555 OCD Permit Number:
U/L or Qtr/Qtr A (NENE) Section 24 Township 25N Range 10W County: San Juan
* Center of Proposed Design: Latitude 36.3907500 °N Longitude -107.8424200 °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 * NMOCD Determined Coordinates to be 36.391272°N -107.84303°W NAD83
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other Volume: _____ bbl Dimensions: L_____ x W_____ x D_____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Metal
☐ Secondary containment with leak detection ☒ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness 45 mil ☐ HDPE ☐ PVC ☒ Other LLDPE

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

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

65

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: Jonathan D. Kelly **Approval Date:** 2/4/2015

Title: Compliance Officer **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: 9/15/14**

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: 1/14/15

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

ConocoPhillips Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name: Navajo Allotted Com 1
API No.: 3004511555

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

General Plan:

1. COPC shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, 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. COPC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

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

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

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

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

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

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

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

   A release was not determined for the above referenced well. * Attached lab sample results indicate release had been determined. Separate C-141 has already been approved.

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 COPC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

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

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

    The closure process notification to the landowner 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. COPC Shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved

methods. BLM stipulated seed mixes will 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.

October 27, 2014

Lindsay Dumas
ConocoPhillips
San Juan Business Unit
Office 214-07
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
Navajo Allotted Com #1
San Juan County, New Mexico

Dear Ms. Dumas:

On June 18, September 11, and September 15, 2014, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Navajo Allotted Com #1, located in San Juan County, New Mexico. During BGT closure activities, historic contamination was discovered beneath the 80 barrel (bbl) pit tank. An initial release assessment was completed on June 18, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on September 15, 2014.

1.0 Site Information

1.1 Location

Site Name – Navajo Allotted Com #1
Location – NE¼ NE¼, Section 24, T25N, R10W
San Juan County, New Mexico
Well Head Latitude/Longitude – N36.39101; W107.84312
Release Latitude/Longitude – N36.39127; W107.84303
Land Jurisdiction – Navajo Nation Allotment
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, June 2014

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 280
Durango, CO
970-403-3084

www.animasenvironmental.com

1.2 NMOCD Ranking

The Navajo Allotted Com #1 is located within the Navajo Nation Allotment. Navajo Nation Environmental Protection Agency (NNEPA) adheres to action levels for releases and spills as established by the New Mexico Oil Conservation Division (NMOCD).

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A pit closure report form dated October 2005 for the Navajo Allotted Com #1E, located approximately 2,650 feet south of the location and 40 feet lower in elevation, reported the depth to groundwater at greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** Approximately 425 feet to the northeast is an unnamed ephemeral wash that drains to sewage lagoons located 1,800 feet southeast of the location. (10 points)

1.3 Assessment

AES was initially contacted by Joe Cavin, CoP representative on June 17, 2014, and on June 18, 2014, Deborah Watson and David Reese of AES traveled to the location. Soil sampling consisted of collection of five soil samples from below the BGT. 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.

On the same day, AES personnel completed the release assessment field work. The assessment included collection and field screening of 13 soil samples from five assessment trenches (TH-1 through TH-5). Based on field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On September 11, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. Two final confirmation soil samples (SC-6 and SC-7) from the extended excavation were collected on September 15, 2014. The final excavation measured approximately 35 feet by 23 feet by 13 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 18 soil samples (from S-1 through S-5 and from TH-1 through TH-5) and 8 composite samples (BGT SC-1 and SC-1 through SC-7) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Sample TH-4 and all composite samples (BGT SC-1 and SC-1 through SC-7) collected were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted 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

Field TPH samples were analyzed per U.S. Environmental Protection Agency (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 sample BGT SC-1 was field analyzed 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 collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were laboratory analyzed for:

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

In addition, BGT SC-1 was also analyzed for:

- Chlorides per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

On June 18, 2014, BGT closure field screening results for VOCs via OVM ranged from 21.8 ppm in S-1 up to 4,889 ppm in S-4. Field TPH concentrations ranged from 280 mg/kg in S-1 up to 3,370 mg/kg in S-4.

Initial assessment field screening readings for VOCs via OVM ranged from 3.6 ppm in TH-3 up to 4,889 ppm in TH-4. Field TPH concentrations ranged from 26.7 mg/kg in TH-3 to 3,370 mg/kg in TH-1.

Final excavation field screening results for VOCs via OVM ranged from 1.7 ppm in SC-1 up to 2,954 ppm in SC-6. Field TPH concentrations ranged from 28.9 mg/kg in SC-4 up to 746 mg/kg in SC-7. Field screening VOC and TPH results are summarized in Table 1 and on Figures 2 through 4. The AES field sampling reports are attached.

Table 1. Soil Field Sampling VOCs, TPH, and Chloride Results
Navajo Allotted Com #1 BGT Closure, Initial Release Assessment and Final Excavation
June and September 2014

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*TPH 418.1 (mg/kg)*	*Field Chlorides (mg/kg)*
*NMOCD Action Level**			*NE/100*	*1,000*	*250/NE*
S-1	6/18/14	0.5	21.8	280	NA
S-2	6/18/14	0.5	457	371	NA
S-3	6/18/14	0.5	73.1	557	NA
S-4	6/18/14	0.5	4,889	**3,370**	NA
S-5	6/18/14	0.5	1,958	496	NA
BGT SC-1	6/18/14	0.5	3,632	NA	80
TH-1	6/18/14	4	**4,889**	**3,370**	NA
		7	**2,056**	**>2,500**	NA
		13	**4,255**	701	NA
		14	NA	202	NA
TH-2	6/18/14	6	5.3	NA	NA
		9	**607**	157	NA
TH-3	6/18/14	7	3.6	NA	NA
		9	3.8	26.7	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level*			NE/100	1,000	250/NE
TH-4	6/18/14	6.5	31.9	NA	NA
		9	**3,744**	**1,780**	NA
		10	**4,661**	**2,510**	NA
TH-5	6/18/14	4	27.6	NA	NA
		9	16.0	39.5	NA
SC-1	9/11/14	1 to 13	1.7	39.4	NA
SC-2	9/11/14	1 to 13	**1,305**	323	NA
SC-3	9/11/14	1 to 13	**142**	257	NA
SC-4	9/11/14	1 to 13	30.7	28.9	NA
SC-5	9/11/14	13	**950**	93.0	NA
SC-6	9/15/14	1 to 13	**2,954**	193	NA
SC-7	9/15/14	13	**2,803**	746	NA

NA – not analyzed
NE – not established
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E.*

Laboratory analyses for sample BGT SC-1 were used to confirm field sampling results from the initial BGT closure. Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.24 mg/kg and at 12.1 mg/kg, respectively. TPH concentrations as GRO and DRO were reported at 380 mg/kg and 400 mg/kg, respectively. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg.

Laboratory analyses of TH-4 were used to confirm field sampling results from the initial assessment. Benzene concentrations were reported below laboratory detection limits and total BTEX concentrations were measured at 16.6 mg/kg. TPH concentrations as GRO and DRO were reported at 1,100 mg/kg and 950 mg/kg, respectively.

Laboratory analyses for SC-1 through SC-7 were used to confirm field sampling results from the final excavation extents. Benzene concentrations were reported below laboratory detection limits in all samples except SC-6 (0.37 mg/kg). Total BTEX concentrations ranged from below laboratory detection limits in SC-1, SC-3, and SC-4, up to 17.1 mg/kg in SC-6. Total TPH concentrations ranged from below laboratory detection limits in SC-1, SC-3, and

SC-4 up to 486 mg/kg in SC-6. Results are summarized in Table 2 and included on Figures 2 through 4. The laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
Navajo Allotted Com #1 Initial Release Assessment and Final Excavation
June and September 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	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	1,000		250/NE
BGT SC-1	6/18/14	0.5	<0.24	12.1	380	400	<30
TH-4	6/18/14	10	<0.46	16.6	**1,100**	**950**	NA
SC-1	9/11/14	1 to 13	<0.035	<0.176	<3.5	<10	NA
SC-2	9/11/14	1 to 13	<0.035	0.18	37	49	NA
SC-3	9/11/14	1 to 13	<0.033	<0.166	<3.3	<10	NA
SC-4	9/11/14	1 to 13	<0.032	<0.161	<3.2	<10	NA
SC-5	9/11/14	13	<0.031	0.512	37	<9.8	NA
SC-6	9/15/14	1 to 13	0.37	17.1	420	66	NA
SC-7	9/15/14	13	<0.072	0.19	39	50	NA

NA – not analyzed
NE – not established
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E.*

3.0 Conclusions and Recommendations

On June 18, September 11, and September 15, 2014, AES conducted a BGT closure and assessment of petroleum contaminated soils associated with a release of hydrocarbons at the Navajo Allotted Com #1. NNEPA (NMOCD) action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10.

Field BGT closure sampling TPH results in June 2014 were reported above the NMOCD action level of 1,000 mg/kg in S-4 (west wall), with a concentration of 3,370 mg/kg. Laboratory results for benzene, total BTEX, TPH (as GRO/DRO), and chloride concentrations in BGT SC-1 were reported below NMOCD action levels. Based on field concentrations, a release was confirmed.

On June 18, 2014, release assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in TH-1, TH-2, and TH-4. The highest VOC concentration was reported in TH-1 with 4,889 ppm, and the highest TPH concentration was also reported in TH-1 with a concentration of 3,370 mg/kg. Laboratory results for benzene and total BTEX concentrations in TH-4 were reported below NMOCD action levels. However, TPH concentrations exceeded NMOCD action levels of 1,000 mg/kg (2,050 mg/kg). Due to TPH concentrations above NMOCD action levels, excavation of the release area was recommended.

On September 11, 2014, excavation of the impacted area began. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for two of the final walls of the excavation. However, samples SC-2 (south wall), SC-3 (east wall), and SC-5 (base) reported VOC concentrations above the NMOCD action level with 1,305 ppm, 142 ppm, and 950 ppm, respectively. Field TPH concentrations were below the applicable NMOCD action level of 1,000 mg/kg in all samples. Laboratory analytical results confirmed benzene, total BTEX, and TPH (as GRO/DRO) concentrations below NMOCD action levels in all samples.

On September 15, 2014, the excavation was extended east to include TH-4, which was originally above NMOCD action levels, and was completed by CoP contractors prior to AES' arrival at the location. Two additional confirmation samples, SC-6 and SC-7, were collected from the extended east wall and base, respectively. Field sampling results in both samples reported VOC concentrations above applicable NMOCD action levels and TPH concentrations below NMOCD action levels. Laboratory analytical results for SC-6 and SC-7 reported benzene, total BTEX, and TPH concentrations below applicable NMOCD action levels.

Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Navajo Allotted Com #1, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the final excavation. No further work is recommended.

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

Sincerely,

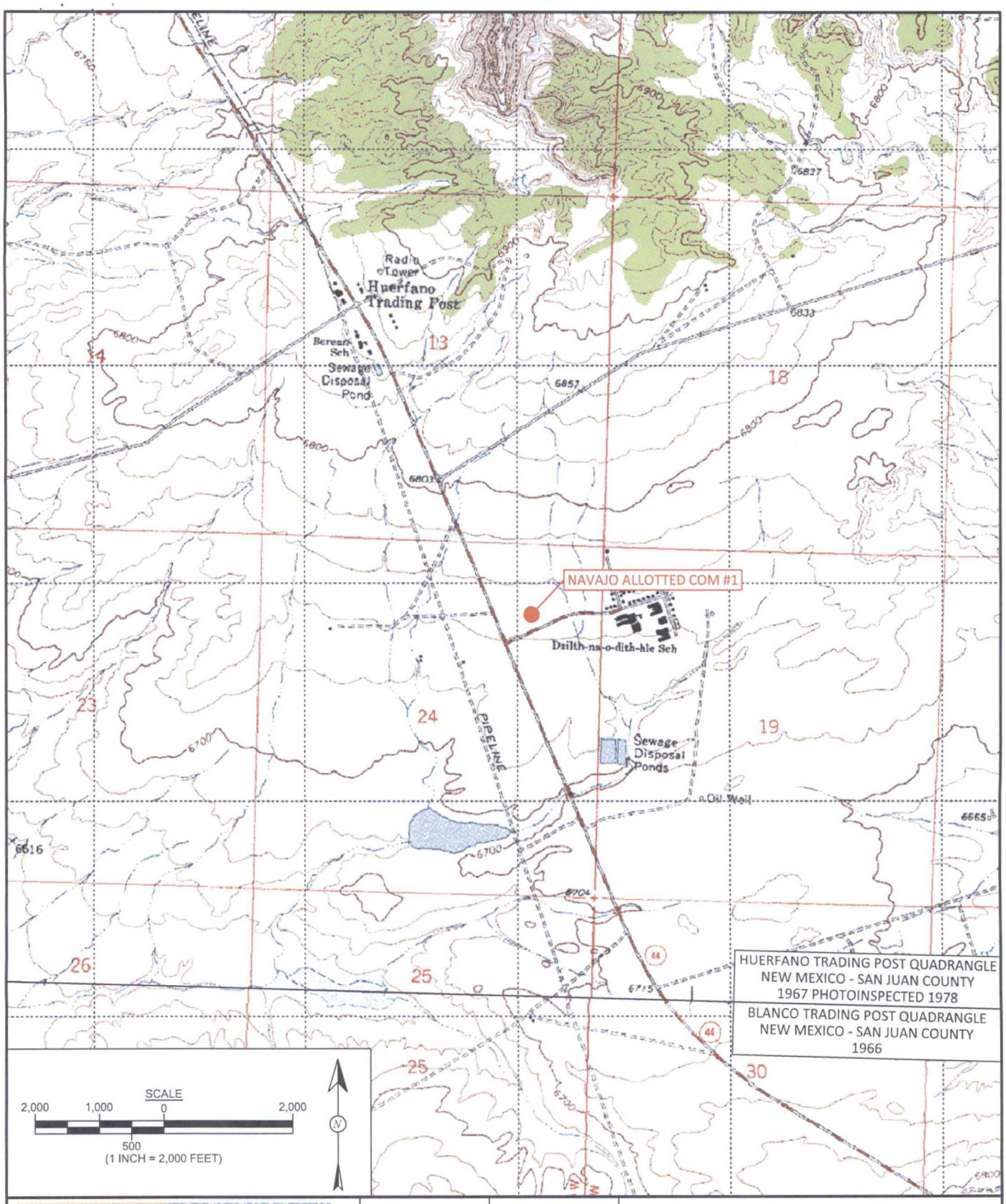
David J. Reese
Environmental Scientist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, June 2014
Figure 3. Initial Assessment Sample Locations and Results, June 2014
Figure 4. Final Excavation Sample Locations and Results, September 2014
AES BGT Field Sampling Report 061814
AES Release Field Sampling Report 061814
AES Field Sampling Report 091114
AES Field Sampling Report 091514
Hall Laboratory Analytical Report 1406A22
Hall Laboratory Analytical Report 1406A23
Hall Laboratory Analytical Report 1409571
Hall Laboratory Analytical Report 1409706

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Navajo Allotted Com #1\Navajo Allotted Com #1 Release and Final Excavation Report 102714.docx



HUERFANO TRADING POST QUADRANGLE
NEW MEXICO - SAN JUAN COUNTY
1967 PHOTOINSPECTED 1978

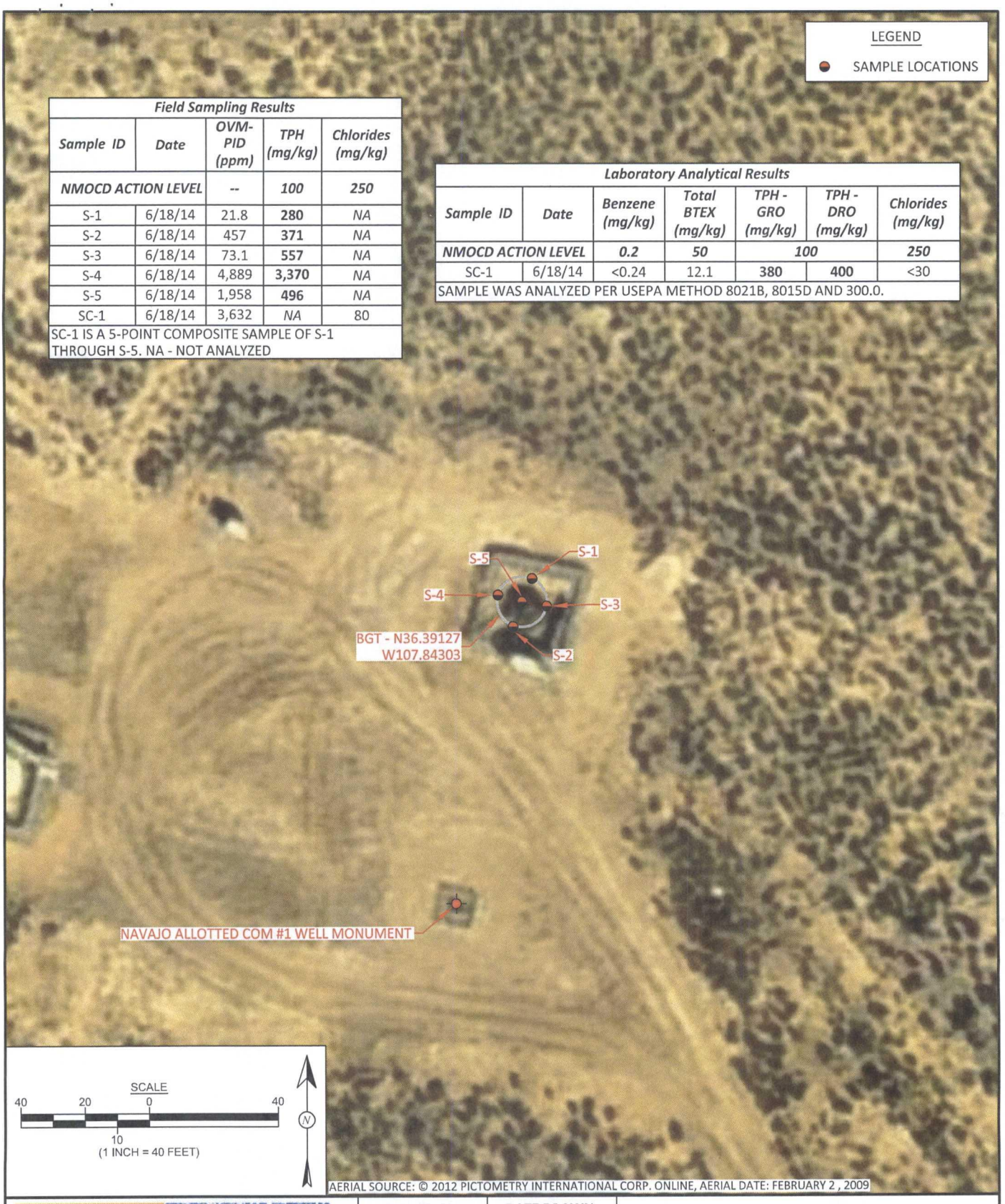
BLANCO TRADING POST QUADRANGLE
NEW MEXICO - SAN JUAN COUNTY
1966

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** June 19, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** June 19, 2014
CHECKED BY: E. Skyles	**DATE CHECKED:** June 19, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** June 19, 2014

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
NAVAJO ALLOTTED COM #1
NE¼ NE¼, SECTION 24, T25N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.39101, W107.84312



Field Sampling Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	6/18/14	21.8	**280**	NA
S-2	6/18/14	457	**371**	NA
S-3	6/18/14	73.1	**557**	NA
S-4	6/18/14	4,889	**3,370**	NA
S-5	6/18/14	1,958	**496**	NA
SC-1	6/18/14	3,632	NA	80

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	6/18/14	<0.24	12.1	**380**	**400**	<30

SAMPLE WAS ANALYZED PER USEPA METHOD 8021B, 8015D AND 300.0.

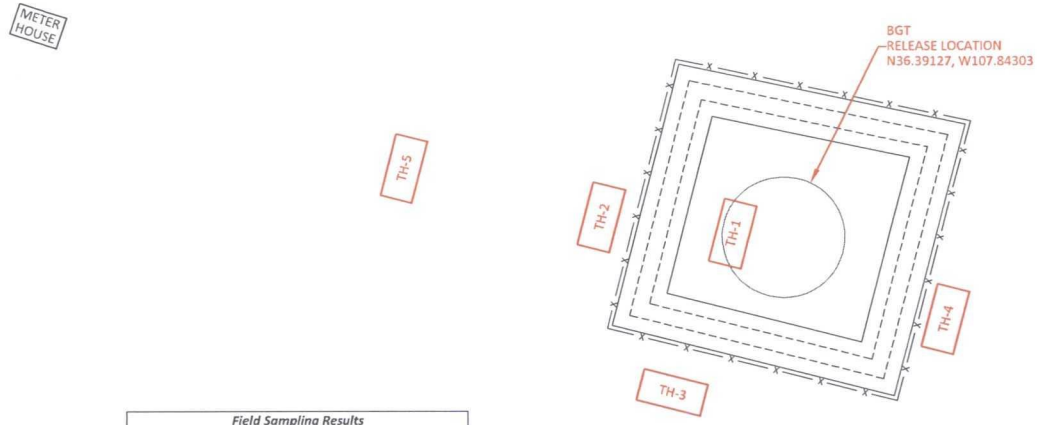
AERIAL SOURCE: © 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: FEBRUARY 2 , 2009

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** June 19, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** June 19, 2014
CHECKED BY: E. Skyles	**DATE CHECKED:** June 19, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** June 19, 2014

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
JUNE 2014
ConocoPhillips
NAVAJO ALLOTTED COM #1
NE¼ NE¼, SECTION 24, T25N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.39101, W107.84312



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	6/18/14	4	**4,889**	**3,370**
		7	**2,056**	**>2,500**
		13	**4,255**	701
		14	NA	202
TH-2	6/18/14	6	5.3	NA
		9	**607**	157
TH-3	6/18/14	7	3.6	NA
		9	3.8	26.7
TH-4	6/18/14	6.5	31.9	NA
		9	**3,744**	**1,780**
		10	**4,661**	**2,510**
TH-5	6/18/14	4	27.6	NA
		9	16.0	39.5
NA - NOT ANALYZED				

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	1,000	
TH-4	6/18/14	10	<0.46	16.6	**1,100**	**950**
SAMPLE WAS ANALYZED PER USEPA METHOD 8021B AND 8015D.						

NAVAJO ALLOTTED COM #1 MONUMENT

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS JUNE 2014

ConocoPhillips
NAVAJO ALLOTTED COM #1
NE¼ NE¼, SECTION 24, T25N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.39101, W107.84312

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** September 18, 2014
CHECKED BY: E. Skyles	**DATE CHECKED:** September 18, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** September 18, 2014

LEGEND

SECONDARY CONTAINMENT BERM

—x— FENCE

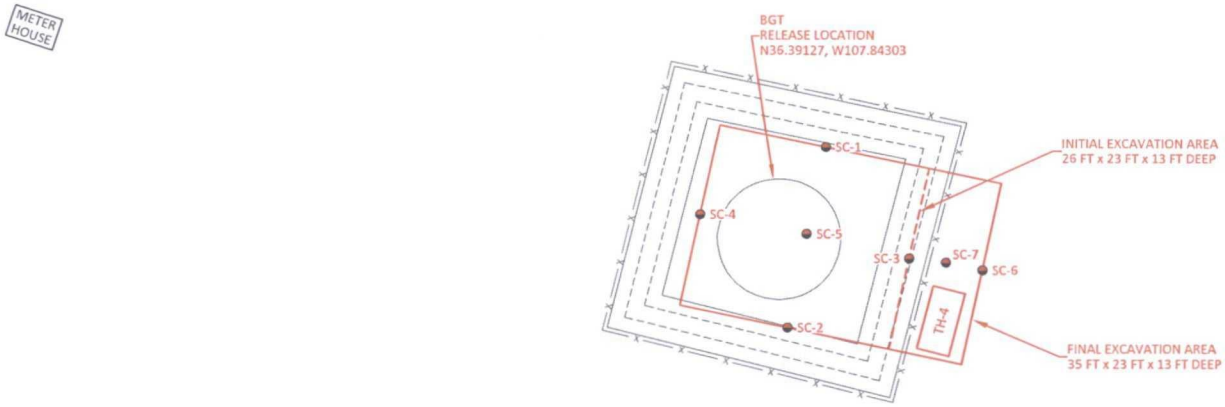
N

SCALE
15 10 5 0 15
(1 INCH = 15 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS SEPTEMBER 2014

ConocoPhillips
NAVAJO ALLOTTED COM #1
NE¼ NE¼, SECTION 24, T25N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.39101, W107.84312



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	9/11/14	1 to 13	1.7	39.4
SC-2	9/11/14	1 to 13	**1,305**	323
SC-3	9/11/14	1 to 13	**142**	257
SC-4	9/11/14	1 to 13	30.7	28.9
SC-5	9/11/14	13	**950**	93.0
SC-6	9/15/14	1 to 13	**2,954**	193
SC-7	9/15/14	13	**2,803**	746

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	1,000	
SC-1	9/11/14	1 to 13	<0.035	<0.176	<3.5	<10
SC-2	9/11/14	1 to 13	<0.035	0.18	37	49
SC-3	9/11/14	1 to 13	<0.033	<0.166	<3.3	<10
SC-4	9/11/14	1 to 13	<0.032	<0.161	<3.2	<10
SC-5	9/11/14	13	<0.031	0.512	37	<9.8
SC-6	9/15/14	1 to 13	0.37	17.1	420	66
SC-7	9/15/14	13	<0.072	0.19	39	50
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.						

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	September 12, 2014
REVISIONS BY:	**DATE REVISED:**
S. Glasses	September 18, 2014
CHECKED BY:	**DATE CHECKED:**
E. Skyles	September 18, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	September 18, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

N

SCALE
15 5 0 15
10
(1 INCH = 15 FEET)

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 Lindsay Dumas
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 599-4089
Facility Name: **Navajo Allotted Com 1**	Facility Type: **Gas Well**

Surface Owner **Navajo**	Mineral Owner **14-20-603-1376**	API No.**3004511555**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	**24**	**25N**	**10W**	**1100'**	**North Line**	**1150'**	**East Line**	**San Juan**

Latitude 36.39075 Longitude -107.84242

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **Unknown**	Volume Recovered **0**
Source of Release **BGT**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **Unknown**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Contaminated soil was found during facility activities

Describe Area Affected and Cleanup Action Taken.*
Historical hydrocarbon impacted soil was found during BGT closure activities on this location. The excavation was 22' X 36' X 12' and 366 c/yds of soil was transported to Envirotech landfarm and 366 c/yds of clean soil was transported from Aztec Machine Co. and placed in the excavation site. Based on the final field sampling and laboratory analytical results of the excavation, all were below applicable NMOCD action levels; no further remediation is recommended. 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: Lindsay Dumas	OIL CONSERVATION DIVISION	
Printed Name: Lindsay Dumas	Approved by Environmental Specialist:	
Title: **Field Environmental Specialist**	Approval Date:	Expiration Date:
E-mail Address: Lindsay.Dumas@cop.com	Conditions of Approval:	Attached ☐
Date: 11/25/2014 Phone: 505-599-4089		

* Attach Additional Sheets If Necessary

AES Field Sampling 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: Navajo Allotted Com #1

Date: 6/18/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	6/18/2014	8:37	North	21.8	NA	280	9:25	20.0	1	DR
S-2	6/18/2014	8:39	South	457	NA	371	9:33	20.0	1	DR
S-3	6/18/2014	8:41	East	73.1	NA	557	9:37	20.0	1	DR
S-4	6/18/2014	8:43	West	4,889	NA	3,370	10:14	200	10	DR
S-5	6/18/2014	8:45	Center	1,958	NA	496	9:48	20.0	1	DR
SC-1	6/18/2014	8:50	Composite	3,632	80	*Not Analyzed for TPH*				

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**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: David Reese

Report Finalized: 6/18/14

AES Field Sampling 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: Navajo Allotted Com #1

Date: 6/18/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 4'	6/18/2014	8:43	4,889	3,370	10:14	200	10	DR
TH-1 @ 7'	6/18/2014	11:44	2,056	>2,500	12:01	20.0	1	DR
TH-1 @ 13'	6/18/2014	12:08	4,255	701	12:25	20.0	1	DR
TH-1 @ 14'	6/18/2014	14:04	NA	202	14:55	20.0	1	DR
TH-2 @ 6'	6/18/2014	13:01	5.3	*Not Analyzed for TPH*				
TH-2 @ 9'	6/18/2014	13:05	607	157	14:10	20.0	1	DR
TH-3 @ 7'	6/18/2014	13:15	3.6	*Not Analyzed for TPH*				
TH-3 @ 9'	6/18/2014	13:22	3.8	26.7	14:18	20.0	1	DR
TH-4 @ 6.5'	6/18/2014	13:27	31.9	*Not Analyzed for TPH*				
TH-4 @ 9'	6/18/2014	13:30	3,744	1,780	14:24	20.0	1	DR
TH-4 @ 10'	6/18/2014	13:35	4,661	2,510	14:47	20.0	1	DR
TH-5 @ 4'	6/18/2014	13:56	27.6	*Not Analyzed for TPH*				
TH-5 @ 9'	6/18/2014	13:58	16.0	39.5	14:52	20.0	1	DR

Report Finalized: 6/18/14

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

**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: David Rene

AES Field Sampling 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: Navajo Allotted Com #1

Date: 9/11/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	9/11/2014	15:35	1.7	39.4	16:04	20.0	1	EMS
SC-2	9/11/2014	15:15	1,305	323	16:12	20.0	1	EMS
SC-3	9/11/2014	15:27	142	257	16:10	20.0	1	EMS
SC-4	9/11/2014	16:30	30.7	28.9	16:44	20.0	1	EMS
SC-5	9/11/2014	15:19	950	93.0	16:17	20.0	1	EMS

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Report Finalized: 9/11/14

AES Field Sampling 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: Navajo Allotted Com #1

Date: 9/15/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	9/15/2014	10:20	2,954	193	10:53	20.0	1	EMS
SC-7	9/15/2014	10:29	2,803	746	10:56	20.0	1	EMS

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below P*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Emily Sy

Report Finalized: 9/15/14

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 26, 2014

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

RE: CoP Navajo Allottted Com #1 OrderNo.: 1406A22

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/20/2014 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.

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

Sincerely,

John Caldwell

John Caldwell
Supervisor
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Navajo Allottted Com #1
Lab ID: 1406A22-001 **Matrix:** SOIL

Client Sample ID: TH-4@10'
Collection Date: 6/18/2014 1:35:00 PM
Received Date: 6/20/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	950	9.9		mg/Kg	1	6/25/2014 12:29:24 AM	13833
Surr: DNOP	91.8	57.9-140		%REC	1	6/25/2014 12:29:24 AM	13833
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1100	93		mg/Kg	20	6/25/2014 3:19:44 AM	13836
Surr: BFB	407	80-120	S	%REC	20	6/25/2014 3:19:44 AM	13836
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.46		mg/Kg	20	6/25/2014 3:19:44 AM	13836
Toluene	ND	0.93		mg/Kg	20	6/25/2014 3:19:44 AM	13836
Ethylbenzene	3.6	0.93		mg/Kg	20	6/25/2014 3:19:44 AM	13836
Xylenes, Total	13	1.9		mg/Kg	20	6/25/2014 3:19:44 AM	13836
Surr: 4-Bromofluorobenzene	137	80-120	S	%REC	20	6/25/2014 3:19:44 AM	13836

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
S	Spike Recovery 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.
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A22**

26-Jun-14

Client: Animas Environmental

Project: CoP Navajo Allottted Com #1

Sample ID **MB-13833**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13833**	RunNo: **19428**
Prep Date: **6/23/2014**	Analysis Date: **6/23/2014**	SeqNo: **561973** 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	7.5		10.00		75.3	57.9	140			

Sample ID **LCS-13833**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13833**	RunNo: **19428**
Prep Date: **6/23/2014**	Analysis Date: **6/23/2014**	SeqNo: **561976** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.3	68.6	130			
Surr: DNOP	3.6		5.000		72.8	57.9	140			

Sample ID **MB-13859**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13859**	RunNo: **19466**
Prep Date: **6/24/2014**	Analysis Date: **6/24/2014**	SeqNo: **563203** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.4	57.9	140			

Sample ID **LCS-13859**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13859**	RunNo: **19466**
Prep Date: **6/24/2014**	Analysis Date: **6/24/2014**	SeqNo: **563204** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.6	57.9	140			

Sample ID **MB-13809**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13809**	RunNo: **19464**
Prep Date: **6/20/2014**	Analysis Date: **6/24/2014**	SeqNo: **563212** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.1		10.00		81.1	57.9	140			

Sample ID **LCS-13809**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13809**	RunNo: **19464**
Prep Date: **6/20/2014**	Analysis Date: **6/24/2014**	SeqNo: **563213** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.7	57.9	140			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A22**

26-Jun-14

Client: Animas Environmental

Project: CoP Navajo Allottted Com #1

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R19462**	RunNo: **19462**
Prep Date:	Analysis Date: **6/24/2014**	SeqNo: **563599** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.3	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R19462**	RunNo: **19462**
Prep Date:	Analysis Date: **6/24/2014**	SeqNo: **563600** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		107	80	120			

Sample ID **MB-13836**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563632** 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	850		1000		85.0	80	120			

Sample ID **LCS-13836**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563633** 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	102	71.7	134			
Surr: BFB	1000		1000		100	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A22**

26-Jun-14

Client: Animas Environmental

Project: CoP Navajo Allottted Com #1

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R19462**	RunNo: **19462**
Prep Date:	Analysis Date: **6/24/2014**	SeqNo: **563614** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R19462**	RunNo: **19462**
Prep Date:	Analysis Date: **6/24/2014**	SeqNo: **563615** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

Sample ID **MB-13836**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563675** 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	0.90		1.000		89.8	80	120			

Sample ID **LCS-13836**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563676** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	97.5	80	120			
Toluene	0.95	0.050	1.000	0	94.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	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
- S Spike Recovery 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.
- 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: 1406A22 | RcptNo: 1

Received by/date: A.T. 06/20/14

Logged By: Ashley Gallegos 6/20/2014 8:00:00 AM

Completed By: Ashley Gallegos 6/21/2014 2:44:30 PM

Reviewed By: 06/23/14

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	1.8	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche 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

Project Name: CoP Navajo Allotted Com #1

Project #:

Project Manager: D Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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. 1406A22	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)
6-18-14	1335	Soil	TH-4@10'	1-4oz jar	Cold	-001	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/19/14	1758	Delmah Watson		6/19/14	1750
6/19/14	1810			06/20/14	0800

Remarks:
Bill to ConocoPhillips
WO: 10359309
Area: 21
act code: TTTO

Supervisor: Mick Tenant
UserID: ICOARLA
Ordered by: Joe Cannon

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 30, 2014

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

RE: CoP Navajo Allotted Com #1 OrderNo.: 1406A23

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/20/2014 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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1406A23**
Date Reported: **6/30/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Navajo Allotted Com #1
Lab ID: 1406A23-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 6/18/2014 8:50:00 AM
Received Date: 6/20/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	400	9.9		mg/Kg	1	6/25/2014 12:51:16 AM	13833
Surr: DNOP	88.4	57.9-140		%REC	1	6/25/2014 12:51:16 AM	13833
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	380	49		mg/Kg	10	6/25/2014 3:49:49 AM	13836
Surr: BFB	288	80-120	S	%REC	10	6/25/2014 3:49:49 AM	13836
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.24		mg/Kg	10	6/25/2014 3:49:49 AM	13836
Toluene	ND	0.49		mg/Kg	10	6/25/2014 3:49:49 AM	13836
Ethylbenzene	1.1	0.49		mg/Kg	10	6/25/2014 3:49:49 AM	13836
Xylenes, Total	11	0.98		mg/Kg	10	6/25/2014 3:49:49 AM	13836
Surr: 4-Bromofluorobenzene	124	80-120	S	%REC	10	6/25/2014 3:49:49 AM	13836
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/25/2014 12:36:16 PM	13886

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

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A23**

30-Jun-14

Client: Animas Environmental
Project: CoP Navajo Allotted Com #1

Sample ID	**MB-13886**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**13886**		RunNo:	**19526**				
Prep Date:	**6/25/2014**	Analysis Date:	**6/25/2014**		SeqNo:	**565224**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-13886**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**13886**		RunNo:	**19526**				
Prep Date:	**6/25/2014**	Analysis Date:	**6/25/2014**		SeqNo:	**565225**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A23**

30-Jun-14

Client: Animas Environmental
Project: CoP Navajo Allotted Com #1

Sample ID **MB-13833**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13833**			RunNo: **19428**					
Prep Date: **6/23/2014**	Analysis Date: **6/23/2014**			SeqNo: **561973**		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	7.5		10.00		75.3	57.9	140			

Sample ID **LCS-13833**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13833**			RunNo: **19428**					
Prep Date: **6/23/2014**	Analysis Date: **6/23/2014**			SeqNo: **561976**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.3	68.6	130			
Surr: DNOP	3.6		5.000		72.8	57.9	140			

Sample ID **MB-13880**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13880**			RunNo: **19466**					
Prep Date: **6/25/2014**	Analysis Date: **6/25/2014**			SeqNo: **563896**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.2	57.9	140			

Sample ID **LCS-13880**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13880**			RunNo: **19466**					
Prep Date: **6/25/2014**	Analysis Date: **6/25/2014**			SeqNo: **563897**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		82.5	57.9	140			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A23**

30-Jun-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID **MB-13836**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563632** 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	850		1000		85.0	80	120			

Sample ID **LCS-13836**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563633** 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	102	71.7	134			
Surr: BFB	1000		1000		100	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406A23**

30-Jun-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID **MB-13836**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563675** 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	0.90		1.000		89.8	80	120			

Sample ID **LCS-13836**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **13836**	RunNo: **19478**
Prep Date: **6/23/2014**	Analysis Date: **6/24/2014**	SeqNo: **563676** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	97.5	80	120			
Toluene	0.95	0.050	1.000	0	94.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

40

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: 1406A23 RcptNo: 1

Received by/date: A.T. 06/20/14

Logged By: Ashley Gallegos 6/20/2014 8:00:00 AM

Completed By: Ashley Gallegos 6/21/2014 2:49:24 PM

Reviewed By: 06/23/14

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	1.8	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche 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

Project Name: CoP Navajo Allotted Com #1

Project #:

Project Manager: D Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.8

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. 1406A23	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)	300.0 Chlorides				Air Bubbles (Y or N)
6-18-14	0850	Soil	SC-1	1-4oz jar	cold	-001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/19/14	1750	Deborah Watson	[illegible]	6/19/14	1750
6/19/14	1810	[illegible]	[illegible]	6/20/14	0800

Remarks: Bill to ConocoPhillips
WO: 10359309
Area: 21
act code: TH10
Supervisor Mike Ferrari
user ID: KGarcia
ordered by: Joe Cavin

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

September 15, 2014

Emilee Skyles
Animas Environmental
624 East Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP Navajo Allotted Com #1 OrderNo.: 1409571

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/12/2014 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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1409571**
Date Reported: **9/15/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-1
Project: CoP Navajo Allotted Com #1
Collection Date: 9/11/2014 3:35:00 PM
Lab ID: 1409571-001
Matrix: MEOH (SOIL)
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/12/2014 12:08:03 PM	15253
Surr: DNOP	87.1	57.9-140		%REC	1	9/12/2014 12:08:03 PM	15253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/13/2014 4:05:52 PM	R21187
Surr: BFB	91.3	80-120		%REC	1	9/13/2014 4:05:52 PM	R21187
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.035		mg/Kg	1	9/13/2014 4:05:52 PM	R21187
Toluene	ND	0.035		mg/Kg	1	9/13/2014 4:05:52 PM	R21187
Ethylbenzene	ND	0.035		mg/Kg	1	9/13/2014 4:05:52 PM	R21187
Xylenes, Total	ND	0.071		mg/Kg	1	9/13/2014 4:05:52 PM	R21187
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	9/13/2014 4:05:52 PM	R21187

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

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
O	RSD is greater than RSDlimit	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
Client Sample ID: SC-2
Project: CoP Navajo Allotted Com #1
Collection Date: 9/11/2014 3:15:00 PM
Lab ID: 1409571-002
Matrix: MEOH (SOIL)
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	49	10		mg/Kg	1	9/12/2014 12:51:03 PM	15253
Surr: DNOP	91.3	57.9-140		%REC	1	9/12/2014 12:51:03 PM	15253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	37	3.5		mg/Kg	1	9/13/2014 5:32:00 PM	R21187
Surr: BFB	382	80-120	S	%REC	1	9/13/2014 5:32:00 PM	R21187
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.035		mg/Kg	1	9/13/2014 5:32:00 PM	R21187
Toluene	ND	0.035		mg/Kg	1	9/13/2014 5:32:00 PM	R21187
Ethylbenzene	ND	0.035		mg/Kg	1	9/13/2014 5:32:00 PM	R21187
Xylenes, Total	0.18	0.069		mg/Kg	1	9/13/2014 5:32:00 PM	R21187
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	9/13/2014 5:32:00 PM	R21187

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

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Analytical Report
Lab Order **1409571**
Date Reported: **9/15/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-3
Project: CoP Navajo Allotted Com #1
Collection Date: 9/11/2014 3:27:00 PM
Lab ID: 1409571-003
Matrix: MEOH (SOIL)
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/12/2014 1:15:17 PM	15253
Surr: DNOP	95.7	57.9-140		%REC	1	9/12/2014 1:15:17 PM	15253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	9/13/2014 6:29:16 PM	R21187
Surr: BFB	105	80-120		%REC	1	9/13/2014 6:29:16 PM	R21187
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.033		mg/Kg	1	9/13/2014 6:29:16 PM	R21187
Toluene	ND	0.033		mg/Kg	1	9/13/2014 6:29:16 PM	R21187
Ethylbenzene	ND	0.033		mg/Kg	1	9/13/2014 6:29:16 PM	R21187
Xylenes, Total	ND	0.067		mg/Kg	1	9/13/2014 6:29:16 PM	R21187
Surr: 4-Bromofluorobenzene	99.0	80-120		%REC	1	9/13/2014 6:29:16 PM	R21187

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

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
O	RSD is greater than RSDlimit	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
Client Sample ID: SC-4
Project: CoP Navajo Allotted Com #1
Collection Date: 9/11/2014 4:30:00 PM
Lab ID: 1409571-004
Matrix: MEOH (SOIL)
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/12/2014 1:37:02 PM	15253
Surr: DNOP	92.1	57.9-140		%REC	1	9/12/2014 1:37:02 PM	15253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	9/13/2014 7:55:16 PM	R21187
Surr: BFB	91.9	80-120		%REC	1	9/13/2014 7:55:16 PM	R21187
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.032		mg/Kg	1	9/13/2014 7:55:16 PM	R21187
Toluene	ND	0.032		mg/Kg	1	9/13/2014 7:55:16 PM	R21187
Ethylbenzene	ND	0.032		mg/Kg	1	9/13/2014 7:55:16 PM	R21187
Xylenes, Total	ND	0.065		mg/Kg	1	9/13/2014 7:55:16 PM	R21187
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	9/13/2014 7:55:16 PM	R21187

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

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
O	RSD is greater than RSDlimit	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
Client Sample ID: SC-5
Project: CoP Navajo Allotted Com #1
Collection Date: 9/11/2014 3:19:00 PM
Lab ID: 1409571-005
Matrix: MEOH (SOIL)
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/12/2014 1:58:36 PM	15253
Surr: DNOP	86.8	57.9-140		%REC	1	9/12/2014 1:58:36 PM	15253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	37	3.1		mg/Kg	1	9/13/2014 8:23:49 PM	R21187
Surr: BFB	308	80-120	S	%REC	1	9/13/2014 8:23:49 PM	R21187
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.031		mg/Kg	1	9/13/2014 8:23:49 PM	R21187
Toluene	ND	0.031		mg/Kg	1	9/13/2014 8:23:49 PM	R21187
Ethylbenzene	0.072	0.031		mg/Kg	1	9/13/2014 8:23:49 PM	R21187
Xylenes, Total	0.44	0.061		mg/Kg	1	9/13/2014 8:23:49 PM	R21187
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	9/13/2014 8:23:49 PM	R21187

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

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409571**

15-Sep-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID **LCS-15253**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **15253**	RunNo: **21164**
Prep Date: **9/12/2014**	Analysis Date: **9/12/2014**	SeqNo: **616189** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.1	68.6	130			
Surr: DNOP	3.8		5.000		76.7	57.9	140			

Sample ID **1409571-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **15253**	RunNo: **21164**
Prep Date: **9/12/2014**	Analysis Date: **9/12/2014**	SeqNo: **616742** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.15	0	95.6	40.1	152			
Surr: DNOP	4.3		5.015		86.1	57.9	140			

Sample ID **1409571-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **15253**	RunNo: **21164**
Prep Date: **9/12/2014**	Analysis Date: **9/12/2014**	SeqNo: **616743** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.9	49.70	0	93.1	40.1	152	3.59	32.1	
Surr: DNOP	4.2		4.970		84.3	57.9	140	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409571**

15-Sep-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID **MB-15236**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **15236**	RunNo: **21187**
Prep Date: **9/11/2014**	Analysis Date: **9/13/2014**	SeqNo: **616826** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.3	80	120			

Sample ID **LCS-15236**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **15236**	RunNo: **21187**
Prep Date: **9/11/2014**	Analysis Date: **9/13/2014**	SeqNo: **616827** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.4	80	120			

Sample ID **MB-15236 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616829** 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	910		1000		91.3	80	120			

Sample ID **LCS-15236 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616830** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.6	65.8	139			
Surr: BFB	970		1000		97.4	80	120			

Sample ID **1409571-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616832** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	3.5	17.64	0	116	71.8	132			
Surr: BFB	700		705.7		99.2	80	120			

Sample ID **1409571-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616833** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	3.5	17.64	0	114	71.8	132	1.68	20	
Surr: BFB	710		705.7		100	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

50

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409571**

15-Sep-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID **MB-15236**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **15236**	RunNo: **21187**
Prep Date: **9/11/2014**	Analysis Date: **9/13/2014**	SeqNo: **616854** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			

Sample ID **LCS-15236**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **15236**	RunNo: **21187**
Prep Date: **9/11/2014**	Analysis Date: **9/13/2014**	SeqNo: **616855** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **MB-15236 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616858** 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	0.99		1.000		99.3	80	120			

Sample ID **LCS-15236 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616859** 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	100	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **1409571-003AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-3**	Batch ID: **R21187**	RunNo: **21187**
Prep Date:	Analysis Date: **9/13/2014**	SeqNo: **616863** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.69	0.033	0.6689	0	103	77.4	142			
Toluene	0.70	0.033	0.6689	0.01043	103	77	132			
Ethylbenzene	0.71	0.033	0.6689	0.007592	105	77.6	134			
Xylenes, Total	2.2	0.067	2.007	0.02199	106	77.4	132			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409571**

15-Sep-14

Client: Animas Environmental

Project: CoP Navajo Allotted Com #1

Sample ID	**1409571-003AMS**	SampType:	**MS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**SC-3**	Batch ID:	**R21187**		RunNo:	**21187**				
Prep Date:		Analysis Date:	**9/13/2014**		SeqNo:	**616863**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.69		0.6689		104	80	120			

Sample ID	**1409571-003AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**SC-3**	Batch ID:	**R21187**		RunNo:	**21187**				
Prep Date:		Analysis Date:	**9/13/2014**		SeqNo:	**616864**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.033	0.6689	0	100	77.4	142	2.91	20	
Toluene	0.68	0.033	0.6689	0.01043	100	77	132	2.81	20	
Ethylbenzene	0.69	0.033	0.6689	0.007592	102	77.6	134	2.13	20	
Xylenes, Total	2.1	0.067	2.007	0.02199	102	77.4	132	3.69	20	
Surr: 4-Bromofluorobenzene	0.71		0.6689		105	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
- S Spike Recovery 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.
- 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: 1409571 RcptNo: 1

Received by/date: 09/12/14

Logged By: Lindsay Mangin 9/12/2014 6:30:00 AM

Completed By: Lindsay Mangin 9/12/2014 6:57:35 AM

Reviewed By: AT 09/12/14

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	2.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 604 Pinon
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

Project Name: CoP Navajo Allotted Cem #1

Project #:

Project Manager: Emilee Skyles

Sampler: E. Skyles

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.1

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. 1409571	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)
9/11/14	15:35	Soil	SC-1	1-4oz MeOH kit	cool MeOH	-001	X		X									
9/11/14	15:15	Soil	SC-2	1-4oz MeOH kit	cool MeOH	-002	X		X									
9/11/14	15:27	Soil	SC-3	1-4oz MeOH kit	cool MeOH	-003	X		X									
9/11/14	16:30	Soil	SC-4	1-4oz MeOH kit	cool MeOH	-004	X		X									
9/11/14	15:19	Soil	SC-5	1-4oz MeOH kit	cool MeOH	-005	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/11/14	1800		Clint Walts	9/11/14	1800
9/11/14	1850	Clint Walts		09/12/14	0630

Remarks: Bill to ConocoPhillips
WO: 20297841
AREA: 21
SUPER: Mike Smith
USER: KGARCIA
ACT. CODE: D150
ORDERED BY: JARED CHAVEZ

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

September 23, 2014

Emilee Skyles
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: CoP Navajo Alloted Com #1 OrderNo.: 1409706

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/16/2014 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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-7
Project: CoP Navajo Alloted Com #1
Collection Date: 9/15/2014 10:20:00 AM
Lab ID: 1409706-001 **Matrix:** SOIL **Received Date:** 9/16/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	50	10		mg/Kg	1	9/16/2014 2:59:30 PM	15310
Surr: DNOP	111	57.9-140		%REC	1	9/16/2014 2:59:30 PM	15310
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	39	7.2		mg/Kg	2	9/16/2014 11:22:25 AM	R21235
Surr: BFB	245	80-120	S	%REC	2	9/16/2014 11:22:25 AM	R21235
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.072		mg/Kg	2	9/16/2014 11:22:25 AM	R21235
Toluene	ND	0.072		mg/Kg	2	9/16/2014 11:22:25 AM	R21235
Ethylbenzene	ND	0.072		mg/Kg	2	9/16/2014 11:22:25 AM	R21235
Xylenes, Total	0.19	0.14		mg/Kg	2	9/16/2014 11:22:25 AM	R21235
Surr: 4-Bromofluorobenzene	106	80-120		%REC	2	9/16/2014 11:22:25 AM	R21235

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
S	Spike Recovery 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.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-6
Project: CoP Navajo Alloted Com #1
Collection Date: 9/15/2014 10:29:00 AM
Lab ID: 1409706-002 **Matrix:** SOIL **Received Date:** 9/16/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	66	9.8		mg/Kg	1	9/16/2014 3:29:53 PM	15310
Surr: DNOP	108	57.9-140		%REC	1	9/16/2014 3:29:53 PM	15310
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	420	6.1		mg/Kg	2	9/16/2014 11:51:05 AM	R21235
Surr: BFB	856	80-120	S	%REC	2	9/16/2014 11:51:05 AM	R21235
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	0.37	0.061		mg/Kg	2	9/16/2014 11:51:05 AM	R21235
Toluene	0.21	0.061		mg/Kg	2	9/16/2014 11:51:05 AM	R21235
Ethylbenzene	1.5	0.061		mg/Kg	2	9/16/2014 11:51:05 AM	R21235
Xylenes, Total	15	0.61		mg/Kg	10	9/16/2014 2:14:20 PM	R21235
Surr: 4-Bromofluorobenzene	195	80-120	S	%REC	2	9/16/2014 11:51:05 AM	R21235

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

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409706**

23-Sep-14

Client: Animas Environmental Services

Project: CoP Navajo Alloted Com #1

Sample ID **MB-15310**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **15310**	RunNo: **21242**
Prep Date: **9/16/2014**	Analysis Date: **9/16/2014**	SeqNo: **619105** 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	9.2		10.00		92.2	57.9	140			

Sample ID **LCS-15310**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **15310**	RunNo: **21242**
Prep Date: **9/16/2014**	Analysis Date: **9/16/2014**	SeqNo: **619106** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.6	130			
Surr: DNOP	4.3		5.000		86.6	57.9	140			

Sample ID **1409706-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-7**	Batch ID: **15310**	RunNo: **21242**
Prep Date: **9/16/2014**	Analysis Date: **9/16/2014**	SeqNo: **619136** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	92	10	49.95	49.59	85.7	40.1	152			
Surr: DNOP	5.6		4.995		112	57.9	140			

Sample ID **1409706-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-7**	Batch ID: **15310**	RunNo: **21242**
Prep Date: **9/16/2014**	Analysis Date: **9/16/2014**	SeqNo: **619137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	99	9.9	49.65	49.59	99.9	40.1	152	7.13	32.1	
Surr: DNOP	5.2		4.965		105	57.9	140	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409706**

23-Sep-14

Client: Animas Environmental Services

Project: CoP Navajo Alloted Com #1

Sample ID **MB-15288 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R21235**	RunNo: **21235**
Prep Date:	Analysis Date: **9/16/2014**	SeqNo: **619069** 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	930		1000		92.5	80	120			

Sample ID **LCS-15288 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R21235**	RunNo: **21235**
Prep Date:	Analysis Date: **9/16/2014**	SeqNo: **619070** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	25.00	0	125	65.8	139			
Surr: BFB	1100		1000		107	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409706**

23-Sep-14

Client: Animas Environmental Services

Project: CoP Navajo Alloted Com #1

Sample ID **MB-15288 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R21235**	RunNo: **21235**
Prep Date:	Analysis Date: **9/16/2014**	SeqNo: **619117** 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	0.98		1.000		98.0	80	120			

Sample ID **LCS-15288 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R21235**	RunNo: **21235**
Prep Date:	Analysis Date: **9/16/2014**	SeqNo: **619118** 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	105	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	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
- S Spike Recovery 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.
- RL Reporting Detection Limit

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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: 1409706 RcptNo: 1

Received by/date: LM 09/16/14

Logged By: Anne Thorne 9/16/2014 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 9/16/2014 Anne Thorne

Reviewed By: 09/16/14

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: per ES Sample ID is SC-7 / AT 09/16/14

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 604 Pinon
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

Project Name:
Co Navajo Allotted Com #1

Project #:

Project Manager:
E. Skyles

Sampler: E. Skyles

On Ice: ☒ Yes ☐ No

Sample Temperature: 4

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 (AT 9/16/14)	Container Type and #	Preservative Type	HEAL No.	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)
9/15/14	10:20	Soil	SC-7	1-40z MeOH	cool MeOH	001	X		X													
9/15/14	10:29	Soil	SC-6	1-40z MeOH	cool MeOH	002	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/15/14	1735		Christine Walters	9/15/14	1735
Date:	Time:	Relinquished by:	Received by:	Date	Time
9/15/14	1822	Christine Walters		09/16/14	0700

Remarks:

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.

Conoco Phillips Company
Navajo Allotted Com #1
1100' FNL, 1150' FEL