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

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

Form C-144
Revised June 6, 2013

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

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

13091

45-06118

OIL CONS. DIV DIST. 3

SEP 02 2015

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

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

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

1.
Operator: ConocoPhillips Company OGRID #: 217817
Address: PO BOX 4289, Farmington, NM 87499
Facility or well name: State Com AI 33
API Number: 30-045-06118 OCD Permit Number: ______
U/L or Qtr/Qtr N Section 32 Township 27N Range 09W County: San Juan
Center of Proposed Design: Latitude 36.52749°N Longitude -107.81505°W NAD: ☐1927 ☒ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

DENIED * No closure Date, NOC-141 Indicating Results Spill Confirmed.
BY: Cory Smith
DATE: 9/30/15 (505) 334-6178 Ext. 115

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness ____mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other ______
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other ______ Volume: ____bbl Dimensions: L___ x W___ x D____

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

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

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

55 d16

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 Applic [illegible] y) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **) Permit Number:** _____

DENIED

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:** _____

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

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

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

On-site Closure Location: Latitude _____ °N _____ Longitude _____ °W _____ NAD: ☐ 1927 ☐ 1983

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): Arleen White Title: Staff Regulatory Technician

Signature: Arleen White Date: 9/1/15

e-mail address: Arleen.R.White@conocophillips.com Telephone: (505) 326-9517

ConocoPhillips Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name: **State Com AI 33**
API No.: **30-045-06118**

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 19.15.17.13 (B)(1)(b). (Sample results attached).**

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.1	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.

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 sampling method utilized was the 8015M Method instead of the 418.1 Method as required in Subsection B of 19.15.17.13 (B)(1)(b) – if the 418.1 method was used, please hide this statement before you print.

   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.

August 31, 2015

Lindsay Dumas
ConocoPhillips
San Juan Business Unit
(505) 599-4089

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

RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report
State Com AI #33
San Juan County, New Mexico

Dear Ms. Dumas:

On February 20 and March 6, 2015, 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 (COPC) State Com AI #33 located in San Juan County, New Mexico. The historic contamination was discovered during BGT closure activities at the location. An initial release assessment was completed on February 20, 2015, and the final excavation was completed by COPC contractors while AES was on location on March 6, 2015.

1.0 Site Information

1.1 Location

Site Name – State Com AI #33
Location – SE¼ SW¼, Section 32, T27N, R9W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.52776 and W107.81497, respectively
BGT/Release Location Latitude/Longitude – N36.52753 and W107.81503, respectively
Land Jurisdiction – State of New Mexico
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, February 2015

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

1911 Main, Ste 280
Durango, CO 81301
970-403-3084

www.animasenvironmental.com

1.2 NMOCD Ranking

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 below grade tank permit application (C-144 form) from February 2015 reported the depth to groundwater as 330 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**: An unnamed ephemeral stream located approximately 535 feet northeast of the release location drains to Jaquez Canyon. (10 points)

1.3 Assessment

AES was initially contacted by Danny Rudder, COPC representative, on February 19, 2015, and on February 20, 2015, Dylan Davis and Sam Glasses of AES traveled to the location. Soil sampling consisted of collection of five soil samples (S-1 through S-5) and one 5-point composite (BGT SC-1) from below the former BGT. Soil samples S-1 through S-5 were collected from approximately 0.5 feet below the BGT. Soil sample locations are included on Figure 2.

On the same day, AES personnel completed the release assessment field work. The assessment included collection and field sampling of 20 soil samples from 8 soil test holes (TH-1 through TH-8). Based on field sampling results, AES recommended excavation of the release area. Sample locations are included on Figure 3.

On March 6, 2015, 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. The area of the final excavation measured approximately 37 feet by 43 feet by 11 to 13 feet in depth. The depth of the excavation was limited due to a confining sandstone unit around 13 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 26 soil samples (from TH-1 through TH-8 and S-1 through S-5) and 6 composite samples (BGT SC-1 and SC-1 through SC-5) were collected during the

assessments. Selected soil samples were field screened for volatile organic compounds (VOCs), and selected samples were analyzed for total petroleum hydrocarbon (TPH). All composite samples (BGT SC-1 and SC-1 through SC-5) 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

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

2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil samples BGT SC-1 and SC-1 through SC-5 were laboratory analyzed for:

- TPH per USEPA Method 8015D, and
- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B.

In addition, composite soil sample BGT SC-1 was also laboratory analyzed for:

- Chlorides per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

On February 20, 2015, BGT closure field screening results for VOCs via OVM ranged from 3,416 ppm in S-5 to 4,212 ppm in S-1. TPH values were greater than 2,500 mg/kg in samples S-1 through S-5. The field chloride concentration was 140 mg/kg.

On February 20, 2015, initial assessment field screening readings for VOCs via OVM ranged from 0.0 ppm in TH-3 and TH-7 and up to 1,331 ppm in TH-5. Field TPH concentrations ranged from less than 20.0 mg/kg in TH-2, TH-3, TH-4, and TH-6 up to greater than 2,500 mg/kg in TH-1.

On March 6, 2015, final excavation field screening results for VOCs via OVM ranged from 1.6 ppm in SC-1 up to 1,423 ppm in SC-5. Field TPH concentrations ranged from less than 20 mg/kg in SC-1 up to 830 mg/kg in SC-5. 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 VOCs, TPH, and Chloride Results
State Com AI #33 BGT Closure, Release Assessment and Final Excavation
February and March 2015

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*	*Field Chlorides (mg/kg)*
*NMOCD Action Level**			*NE/100*	*100/1,000*	*250/NE*
S-1	2/20/15	0.5	**4,212**	**>2,500**	NA
S-2	2/20/15	0.5	**3,521**	**>2,500**	NA
S-3	2/20/15	0.5	**3,820**	**>2,500**	NA
S-4	2/20/15	0.5	**3,746**	**>2,500**	NA
S-5	2/20/15	0.5	**3,416**	**>2,500**	NA
BGT SC-1	2/20/15	0.5	**4,258**	NA	140
TH-1	2/20/15	8	**3,964**	**>2,500**	NA
TH-2	2/20/15	4	3.8	NA	NA
		8	0.8	<20.0	NA
		11	NA	<20.0	NA
TH-3	2/20/15	4	0.0	NA	NA
		8	2.2	NA	NA
		11	NA	<20.0	NA
TH-4	2/20/15	8	0.6	NA	NA

		10	1.2	<20.0	NA
TH-5	2/20/15	6	**1,331**	NA	NA
		8	14.5	NA	NA
		10	NA	**1,037**	NA
TH-6	2/20/15	4	2.3	NA	NA
		8	NA	<20.0	NA
		11	0.7	<20.0	NA
TH-7	2/20/15	4	0.4	29.7	NA
		8	NA	32.2	NA
		11	0.0	32.2	NA
TH-8	2/20/15	4	NA	37.0	NA
		8	NA	33.4	NA
		11	0.6	43.0	NA
SC-1	3/6/15	1 to 13	1.6	<20.0	NA
SC-2	3/6/15	1 to 13	6.8	25.8	NA
SC-3	3/6/15	1 to 13	7.4	27.1	NA
SC-4	3/6/15	1 to 11	4.3	77.1	NA
SC-5	3/6/15	11 to 13	**1,423**	830	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 analysis of sample BGT SC-1 was used to confirm the BGT closure field sampling results. Benzene concentrations were reported at 2.3 mg/kg, total BTEX concentrations were measured at 78.2 mg/kg, and total TPH concentrations were reported at 7,630 mg/kg. Laboratory analytical results reported the chloride concentration as less than 30 mg/kg.

Laboratory analyses for SC-1 through SC-5 were used to confirm field sampling results from the final excavation extents. Benzene and total BTEX concentrations were reported below laboratory detection limits in all samples except SC-5 (0.093 mg/kg and 3.52 mg/kg, respectively). Total TPH concentrations ranged from below laboratory detection limits in SC-1 through SC-3 up to 610 mg/kg in SC-5. 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
State Com AI #33 BGT Closure, Release Assessment, and Final Excavation
February and March 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level*			0.2/10	50	100/1,000	250/NE
BGT SC-1	2/20/15	0.5	**2.3**	**78.2**	**7,630**	<30
SC-1	3/6/15	1 to 13	<0.048	<0.241	<63.6	NA
SC-2	3/6/15	1 to 13	<0.046	<0.229	<64.6	NA
SC-3	3/6/15	1 to 13	<0.047	<0.235	<63.4	NA
SC-4	3/6/15	1 to 11	<0.047	<0.236	15	NA
SC-5	3/6/15	13	0.093	3.52	610	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 February 20, 2015, AES conducted a BGT closure and assessment of petroleum contaminated soils associated with a historic release at the State Com AI #33. 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 February 2015 were above the NMOCD action level of 100 mg/kg, with BGT SC-1 reporting a concentration at 7,630 mg/kg. Laboratory results for chloride concentrations in BGT SC-1 were reported below the NMOCD action level of 250 mg/kg. Based on field concentrations, a release was confirmed.

The same day, 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 and TH-5. The highest VOC and TPH concentrations were reported in TH-1 with 3,964 ppm and greater than 2,500 mg/kg, respectively. Excavation of the release area was recommended.

On March 6, 2015, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the final walls of the excavation, but above NMOCD action levels for the base. However, laboratory analytical results reported benzene and total BTEX concentrations in SC-1 through SC-5 below NMOCD action levels. Field TPH concentrations were below the applicable NMOCD action level of 1,000 mg/kg for the final walls and base of the excavation, and laboratory analytical results for TPH as GRO/DRO/MRO were also reported below the applicable NMOCD action level in all samples.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the State Com AI #33, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls and base of the 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,

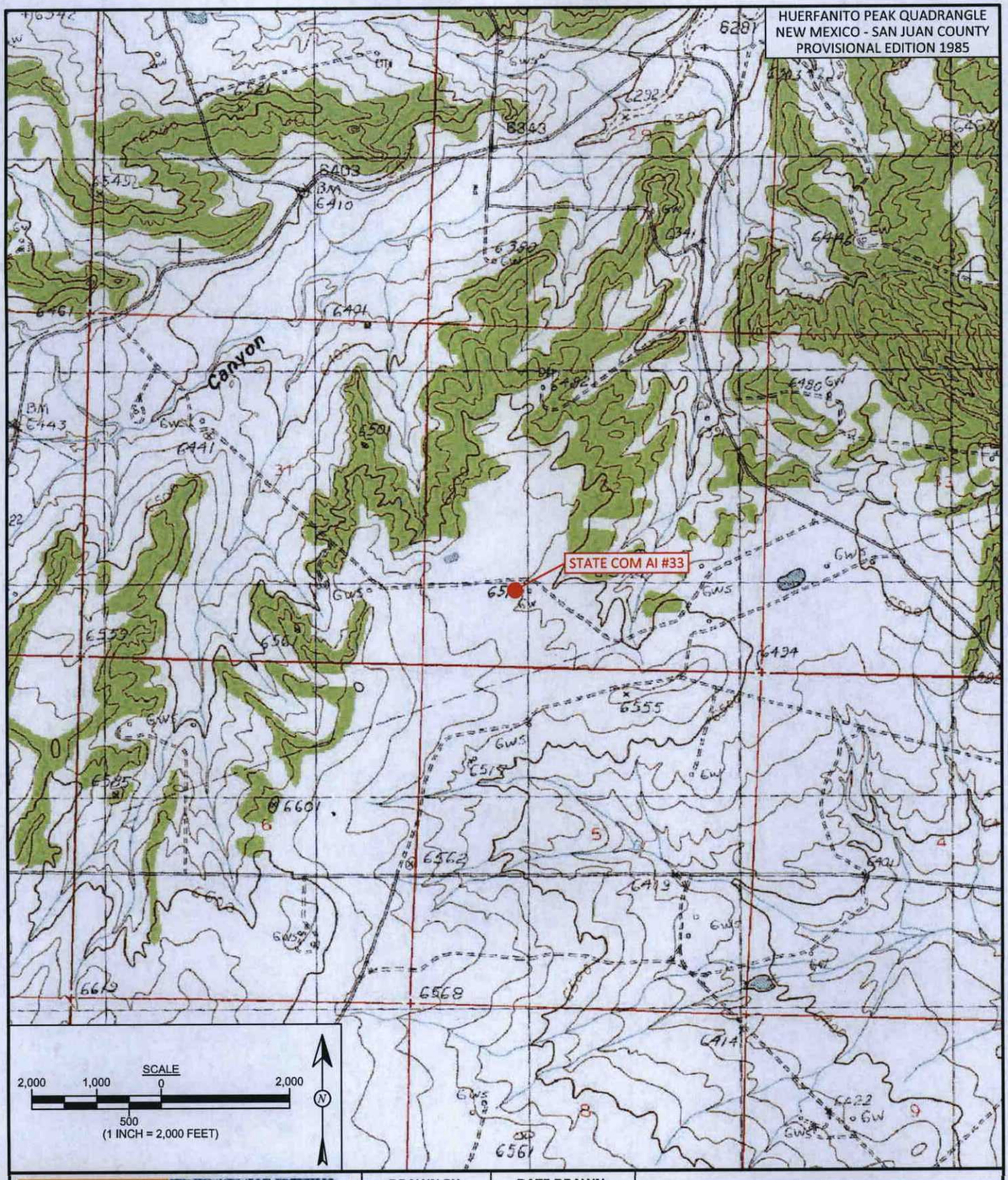
David J. Reese
Staff Environmental Scientist

Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, Below Grade Tank Closure, February 2015
- Figure 3. Release Assessment Sample Locations and Results, February 2015
- Figure 4. Final Excavation Sample Locations and Results, March 2015
- AES BGT Closure Field Sampling Report 022015
- AES Release Assessment Field Sampling Report 022015
- AES Field Sampling Report 030615
- Hall Laboratory Analytical Report 1502908
- Hall Laboratory Analytical Report 1503289
- Hall Laboratory Analytical Report 1503301

R:\Animas 2000\Dropbox\0000 Animas Server Dropbox EM\2015 Projects\ConocoPhillips\State Com AI #33\State Com AI #33 BGT Closure Assessment and Excavation Report 082715.docx

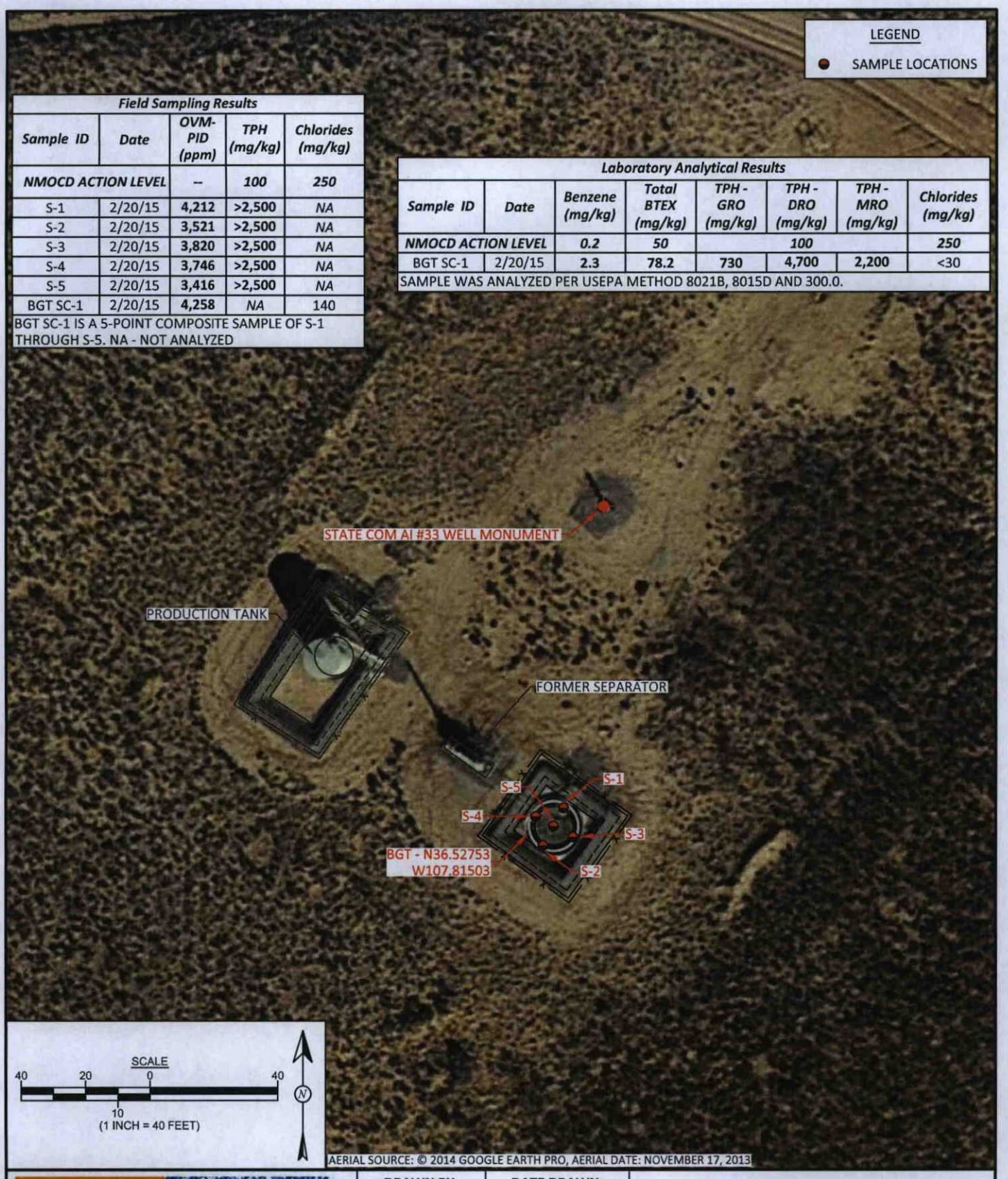


DRAWN BY: S. Glasses	**DATE DRAWN:** March 2, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** March 2, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** March 2, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** March 2, 2015

AES
Animas Environmental Services, LLC

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
STATE COM AI #33
SE¼ SW¼, SECTION 32, T27N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.52776, W107.81497



Field Sampling Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	2/20/15	4,212	>2,500	NA
S-2	2/20/15	3,521	>2,500	NA
S-3	2/20/15	3,820	>2,500	NA
S-4	2/20/15	3,746	>2,500	NA
S-5	2/20/15	3,416	>2,500	NA
BGT SC-1	2/20/15	4,258	NA	140

BGT 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)	TPH - MRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	100			250
BGT SC-1	2/20/15	2.3	78.2	730	4,700	2,200	<30

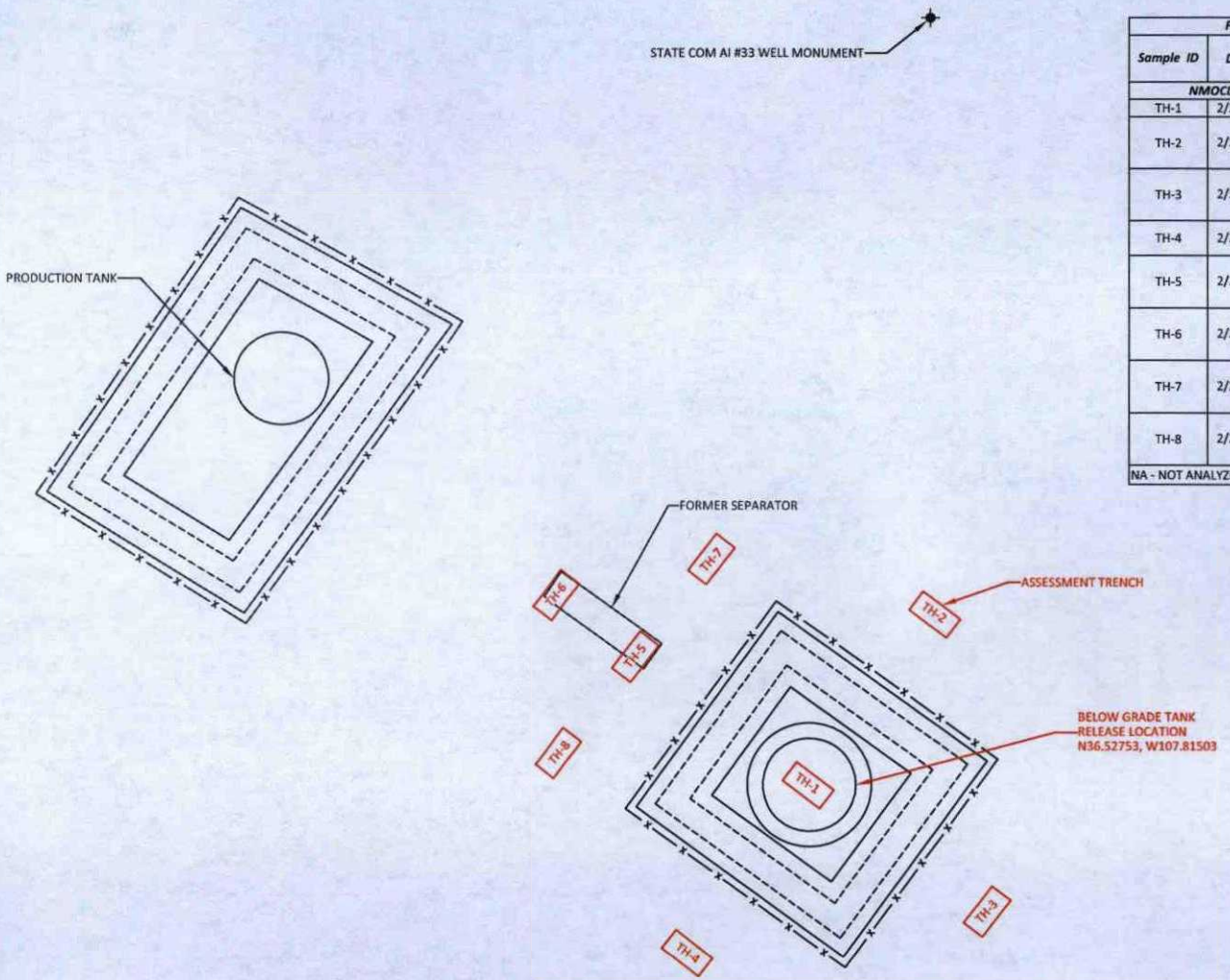
SAMPLE WAS ANALYZED PER USEPA METHOD 8021B, 8015D AND 300.0.

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	DATE DRAWN: March 2, 2015
REVISIONS BY: D. Dougi	DATE REVISED: August 28, 2015
CHECKED BY: E. Skyles	DATE CHECKED: August 28, 2015
APPROVED BY: E. McNally	DATE APPROVED: August 28, 2015

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
FEBRUARY 2015
ConocoPhillips
STATE COM AI #33
SE¼ SW¼, SECTION 32, T27N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.52776, W107.81497



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	2/20/15	8	**3,964**	**>2,500**
TH-2	2/20/15	4	3.8	NA
		8	0.8	<20.0
		11	NA	<20.0
TH-3	2/20/15	4	0.0	NA
		8	2.2	NA
		11	NA	<20.0
TH-4	2/20/15	8	0.6	NA
		10	1.2	<20.0
TH-5	2/20/15	6	**1,331**	NA
		8	14.5	NA
		10	NA	**1,037**
TH-6	2/20/15	4	2.3	NA
		8	NA	<20.0
		11	0.7	<20.0
TH-7	2/20/15	4	0.4	29.7
		8	NA	32.2
		11	0.0	32.2
TH-8	2/20/15	4	NA	37.0
		8	NA	33.4
		11	0.6	43.0
NA - NOT ANALYZED				

FIGURE 3

RELEASE ASSESSMENT
SAMPLE LOCATIONS AND RESULTS
FEBRUARY 2015
ConocoPhillips
STATE COM AI #33
SE¼ SW¼, SECTION 32, T27N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.52776, W107.81497

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** March 2, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** June 25, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** June 25, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** June 25, 2015

LEGEND

SECONDARY CONTAINMENT BERM

—x— FENCE

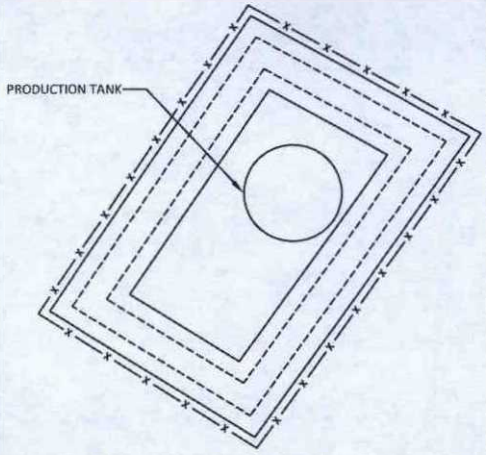
N

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

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS MARCH 2015

ConocoPhillips
STATE COM AI #33
SE¼ SW¼, SECTION 32, T27N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.52776, W107.81497



Field Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	3/6/15	1 to 13	1.6	<20.0
SC-2	3/6/15	1 to 13	6.8	25.8
SC-3	3/6/15	1 to 13	7.4	27.1
SC-4	3/6/15	1 to 11	4.3	77.1
SC-5	3/6/15	11 to 13	**1,423**	830
ALL SAMPLES WERE COMPOSITE SAMPLES.				

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000		
SC-1	3/6/15	1 to 13	<0.048	<0.241	<4.8	<9.8	<49
SC-2	3/6/15	1 to 13	<0.046	<0.229	<4.6	<10	<50
SC-3	3/6/15	1 to 13	<0.047	<0.235	<4.7	<9.7	<49
SC-4	3/6/15	1 to 11	<0.047	<0.236	<4.7	15	<50
SC-5	3/6/15	11 to 13	0.093	3.52	100	340	170
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.							

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** March 9, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** July 2, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** July 2, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** July 2, 2015

LEGEND

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

N

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

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: State Com AI #33

Date: 2/20/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	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	2/20/2015	9:50	North	4,212	NA	>2,500	10:48	20.0	1	DD
S-2	2/20/2015	9:53	South	3,521	NA	>2,500	10:52	20.0	1	DD
S-3	2/20/2015	10:00	East	3,820	NA	>2,500	10:56	20.0	1	DD
S-4	2/20/2015	9:56	West	3,746	NA	>2,500	11:00	20.0	1	DD
S-5	2/20/2015	10:05	Center	3,416	NA	>2,500	11:05	20.0	1	DD
SC-1	2/20/2015	10:15	Composite	4,258	140	*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: Dyla Daw

Report Finalized: 2/20/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: State Com AI #33

Date: 2/20/2015

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 @ 8'	2/20/2015	11:30	3,964	>2,500	12:20	20.0	1	DD
TH-2 @ 4'	2/20/2015	11:59	3.8	*Not Analyzed for TPH*				
TH-2 @ 8'	2/20/2015	12:02	0.8	18.9	13:15	20.0	1	DD
TH-2 @ 11'	2/20/2015	12:04	NA	14.0	13:37	20.0	1	DD
TH-3 @ 4'	2/20/2015	12:14	0.0	*Not Analyzed for TPH*				
TH-3 @ 8'	2/20/2015	12:16	2.2	*Not Analyzed for TPH*				
TH-3 @ 11'	2/20/2015	12:18	NA	9.16	13:44	20.0	1	DD
TH-4 @ 8'	2/20/2015	12:23	0.6	*Not Analyzed for TPH*				
TH-4 @ 10'	2/20/2015	12:25	1.2	3.12	13:50	20.0	1	DD
TH-5 @ 6'	2/20/2015	12:31	1,331	*Not Analyzed for TPH*				
TH-5 @ 8'	2/20/2015	12:33	14.5	*Not Analyzed for TPH*				
TH-5 @ 10'	2/20/2015	12:35	NA	1,037	13:56	20.0	1	DD
TH-6 @ 4'	2/20/2015	12:40	2.3	*Not Analyzed for TPH*				
TH-6 @ 8'	2/20/2015	12:42	NA	3.12	14:02	20.0	1	DD

Report Finalized: 2/20/15

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-6 @ 11'	2/20/2015	12:44	0.7	3.12	14:07	20.0	1	DD
TH-7 @ 4'	2/20/2015	12:49	0.4	29.7	14:13	20.0	1	DD
TH-7 @ 8'	2/20/2015	12:51	NA	32.2	14:19	20.0	1	DD
TH-7 @ 11'	2/20/2015	12:53	0.0	32.2	14:25	20.0	1	DD
TH-8 @ 4'	2/20/2015	12:58	NA	37.0	14:30	20.0	1	DD
TH-8 @ 8'	2/20/2015	13:00	NA	33.4	14:36	20.0	1	DD
TH-8 @ 11'	2/20/2015	13:02	0.6	43.0	14:42	20.0	1	DD

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Dyla Daw

Report Finalized: 2/20/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: State Com AI #33

Date: 3/6/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	3/6/2015	12:20	North	1.6	19.0	13:27	20.0	1	CL
SC-2	3/6/2015	9:25	South	6.8	25.8	10:33	20.0	1	CL
SC-3	3/6/2015	12:25	East	7.4	27.1	13:30	20.0	1	CL
SC-4	3/6/2015	9:35	West	4.3	77.1	10:38	20.0	1	CL
SC-5	3/6/2015	9:40	Center	1,423	830	10:40	20.0	1	CL

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Report Finalized: 3/6/15

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) 258-1643
Facility Name: State Com AI 33	Facility Type: Gas

Surface Owner: State	Mineral Owner: E-1010-1	API No. 30-045-06118

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**32**	**27N**	**09W**	**1190'**	**FSL**	**1650'**	**FWL**	**San Juan**

Latitude 36.527538 Longitude -107.81427

NATURE OF RELEASE

Type of Release: Hydrocarbons	Volume of Release: Unknown	Volume Recovered: 0
Source of Release historic release found during BGT closure activities	Date and Hour of Occurrence **unknown**	Date and Hour of Discovery **February 2015**
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.*
An historic release was found during BGT closure activities.

Describe Area Affected and Cleanup Action Taken.*
TPH results were above NMOCD action level for BGT closure; chlorides were below NMOCD action level for BGT closure. Based on field concentrations, a release was confirmed. Final excavation of the impacted area was completed; based on the final laboratory analytical results of the excavation of petroleum contaminated soils at the State Com AI 33, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls and base of the excavation. No further work is recommended

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**@conocophillips.com	Conditions of Approval:	Attached ☐
Date: 8/31/2015 Phone: (505) 258-1643		

* Attach Additional Sheets If Necessary

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

July 02, 2015

Emilee Skyles
Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: State Com AI #33 OrderNo.: 1502908

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/21/2015 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued February 24, 2015.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1502908**
Date Reported: **7/2/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: BGT SC-1
Project: State Com AI #33
Collection Date: 2/20/2015 10:15:00 AM
Lab ID: 1502908-001
Matrix: MEOH (SOIL)
Received Date: 2/21/2015 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	3/9/2015 11:06:57 AM	18045
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	4700	100		mg/Kg	10	2/23/2015 2:24:09 PM	17844
Motor Oil Range Organics (MRO)	2200	500		mg/Kg	10	2/23/2015 2:24:09 PM	17844
Surr: DNOP	0	63.5-128	S	%REC	10	2/23/2015 2:24:09 PM	17844
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	730	59		mg/Kg	20	2/23/2015 1:27:42 PM	17830
Surr: BFB	253	80-120	S	%REC	20	2/23/2015 1:27:42 PM	17830
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	2.3	0.59		mg/Kg	20	2/23/2015 1:27:42 PM	17830
Toluene	5.5	0.59		mg/Kg	20	2/23/2015 1:27:42 PM	17830
Ethylbenzene	7.4	0.59		mg/Kg	20	2/23/2015 1:27:42 PM	17830
Xylenes, Total	63	1.2		mg/Kg	20	2/23/2015 1:27:42 PM	17830
Surr: 4-Bromofluorobenzene	132	80-120	S	%REC	20	2/23/2015 1:27:42 PM	17830

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 Not In Range
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#: **1502908**

02-Jul-15

Client: Animas Environmental Services

Project: State Com AI #33

Sample ID	**MB-18045**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**18045**	RunNo:	**24729**					
Prep Date:	**3/9/2015**	Analysis Date:	**3/9/2015**	SeqNo:	**728382**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-18045**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**18045**	RunNo:	**24729**					
Prep Date:	**3/9/2015**	Analysis Date:	**3/9/2015**	SeqNo:	**728383**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1502908**

02-Jul-15

Client: Animas Environmental Services

Project: State Com AI #33

Sample ID **MB-17844**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **17844**	RunNo: **24453**
Prep Date: **2/23/2015**	Analysis Date: **2/23/2015**	SeqNo: **720205** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.6	63.5	128			

Sample ID **LCS-17844**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **17844**	RunNo: **24453**
Prep Date: **2/23/2015**	Analysis Date: **2/23/2015**	SeqNo: **720206** 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	94.0	67.8	130			
Surr: DNOP	4.5		5.000		89.6	63.5	128			

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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1502908**

02-Jul-15

Client: Animas Environmental Services

Project: State Com AI #33

Sample ID **MB-17830**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **17830**	RunNo: **24467**
Prep Date: **2/20/2015**	Analysis Date: **2/23/2015**	SeqNo: **720314** 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	920		1000		91.6	80	120			

Sample ID **LCS-17830**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **17830**	RunNo: **24467**
Prep Date: **2/20/2015**	Analysis Date: **2/23/2015**	SeqNo: **720315** 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	104	64	130			
Surr: BFB	990		1000		98.7	80	120			

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 Not In Range
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#: **1502908**

02-Jul-15

Client: Animas Environmental Services

Project: State Com AI #33

Sample ID **MB-17830**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **17830**	RunNo: **24467**
Prep Date: **2/20/2015**	Analysis Date: **2/23/2015**	SeqNo: **720345** Units: **mg/Kg**

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

Sample ID **LCS-17830**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **17830**	RunNo: **24467**
Prep Date: **2/20/2015**	Analysis Date: **2/23/2015**	SeqNo: **720346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	118	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 Not In Range
- 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: 1502908 | RcptNo: 1

Received by/date: AF 02/21/15

Logged By: Ashley Gallegos 2/21/2015 10:20:00 AM

Completed By: Ashley Gallegos 2/23/2015 8:29:32 AM

Reviewed By: JA 02/23/15

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (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	1.7	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Pinon St

Phone #: 505-564-2281

email or Fax#: ddavis@animasenvironmental.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: State Com AI #33

Project #:

Project Manager: E. Skyles

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.7°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1502908	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)
2/20/15	1015	Soil	SC-1	Various	Various	-001	X		X					X	MS 03/04							

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/20/15	1648			2/20/15	1648
2/20/15	1707			2/21/15	10:20

Remarks: WO# 10374348 Lead: Danny Rudder
Activity Code: T110 Supervisor: Facio Trujillo
USER ID: KGARCIA Area: 21
Run: 156

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

March 10, 2015

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

RE: CoP State Com AI #33 OrderNo.: 1503289

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/7/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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
Project: CoP State Com AI #33
Lab ID: 1503289-001 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 3/6/2015 9:40:00 AM
Received Date: 3/7/2015 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	340	9.8		mg/Kg	1	3/9/2015 3:47:41 PM	18035
Motor Oil Range Organics (MRO)	170	49		mg/Kg	1	3/9/2015 3:47:41 PM	18035
Surr: DNOP	94.8	63.5-128		%REC	1	3/9/2015 3:47:41 PM	18035
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	100	2.7		mg/Kg	1	3/9/2015 9:11:47 AM	18026
Surr: BFB	994	80-120	S	%REC	1	3/9/2015 9:11:47 AM	18026
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.093	0.027		mg/Kg	1	3/9/2015 9:11:47 AM	18026
Toluene	0.071	0.027		mg/Kg	1	3/9/2015 9:11:47 AM	18026
Ethylbenzene	0.53	0.027		mg/Kg	1	3/9/2015 9:11:47 AM	18026
Xylenes, Total	2.8	0.054		mg/Kg	1	3/9/2015 9:11:47 AM	18026
Surr: 4-Bromofluorobenzene	174	80-120	S	%REC	1	3/9/2015 9:11:47 AM	18026

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 Not In Range
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#: **1503289**

10-Mar-15

Client: Animas Environmental
Project: CoP State Com AI #33

Sample ID **MB-18035**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18035**	RunNo: **24705**
Prep Date: **3/9/2015**	Analysis Date: **3/9/2015**	SeqNo: **727849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		84.0	63.5	128			

Sample ID **LCS-18035**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18035**	RunNo: **24705**
Prep Date: **3/9/2015**	Analysis Date: **3/9/2015**	SeqNo: **727929** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.2	67.8	130			
Surr: DNOP	4.3		5.000		85.5	63.5	128			

Sample ID **1503289-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5**	Batch ID: **18035**	RunNo: **24705**
Prep Date: **3/9/2015**	Analysis Date: **3/9/2015**	SeqNo: **727974** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	300	9.9	49.60	335.4	-67.9	29.2	176			S
Surr: DNOP	4.9		4.960		98.4	63.5	128			

Sample ID **1503289-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5**	Batch ID: **18035**	RunNo: **24705**
Prep Date: **3/9/2015**	Analysis Date: **3/9/2015**	SeqNo: **727976** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	470	9.9	49.60	335.4	264	29.2	176	42.9	23	RS
Surr: DNOP	5.1		4.960		103	63.5	128	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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503289**

10-Mar-15

Client: Animas Environmental

Project: CoP State Com AI #33

Sample ID **MB-18026**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18026**	RunNo: **24701**
Prep Date: **3/6/2015**	Analysis Date: **3/9/2015**	SeqNo: **727984** 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		92.7	80	120			

Sample ID **LCS-18026**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18026**	RunNo: **24701**
Prep Date: **3/6/2015**	Analysis Date: **3/9/2015**	SeqNo: **727985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	64	130			
Surr: BFB	1000		1000		101	80	120			

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 Not In Range
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#: **1503289**

10-Mar-15

Client: Animas Environmental

Project: CoP State Com AI #33

Sample ID **MB-18026**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18026**	RunNo: **24701**
Prep Date: **3/6/2015**	Analysis Date: **3/9/2015**	SeqNo: **727995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **LCS-18026**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18026**	RunNo: **24701**
Prep Date: **3/6/2015**	Analysis Date: **3/9/2015**	SeqNo: **727996** 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	113	76.6	128			
Toluene	1.1	0.050	1.000	0	107	75	124			
Ethylbenzene	1.1	0.050	1.000	0	109	79.5	126			
Xylenes, Total	3.3	0.10	3.000	0	110	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1503289 | RcptNo: 1

Received by/date: AF 03/07/15

Logged By: Anne Thorne 3/7/2015 11:45:00 AM Anne Thorne

Completed By: Anne Thorne 3/9/2015 Anne Thorne

Reviewed By: 03/09/15

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (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	5.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Pinon St.
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: estyles@animasenvironmental.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name:
CoP State Com AI #33

Project #:

Project Manager:
E. Styles

Sampler: C. Lanerman

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1

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. 1503289	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)
3-6-15	940	Soil	SC-5	4oz jar MeoH/Ice	Cool MeoH	-001	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/6/15	1714			3/6/15	1714
3/10/15	1758			3/7/15	11:45

Remarks: Bill to ConocoPhillips
WO#: 10374348
UserID: KGARCIA
SUPERVISOR: FACIO TRUJILLO

ACT CODE: T110
ordered by: Ralph Sloan
Anon: 21 Run: 156

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

March 11, 2015

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

RE: CoP State Com AI #33 OrderNo.: 1503301

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/7/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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 **1503301**
Date Reported: **3/11/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP State Com AI #33
Lab ID: 1503301-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 3/6/2015 9:20:00 AM
Received Date: 3/7/2015 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/11/2015 12:02:29 AM	18046
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/11/2015 12:02:29 AM	18046
Surr: DNOP	114	63.5-128		%REC	1	3/11/2015 12:02:29 AM	18046
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/10/2015 3:07:04 PM	18044
Surr: BFB	92.4	80-120		%REC	1	3/10/2015 3:07:04 PM	18044
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	3/10/2015 3:07:04 PM	18044
Toluene	ND	0.048		mg/Kg	1	3/10/2015 3:07:04 PM	18044
Ethylbenzene	ND	0.048		mg/Kg	1	3/10/2015 3:07:04 PM	18044
Xylenes, Total	ND	0.097		mg/Kg	1	3/10/2015 3:07:04 PM	18044
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	3/10/2015 3:07:04 PM	18044

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 Not In Range
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
Project: CoP State Com AI #33
Lab ID: 1503301-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 3/6/2015 9:25:00 AM
Received Date: 3/7/2015 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/11/2015 1:05:56 AM	18046
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/11/2015 1:05:56 AM	18046
Surr: DNOP	159	63.5-128	S	%REC	1	3/11/2015 1:05:56 AM	18046
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/10/2015 3:35:48 PM	18044
Surr: BFB	91.8	80-120		%REC	1	3/10/2015 3:35:48 PM	18044
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	1	3/10/2015 3:35:48 PM	18044
Toluene	ND	0.046		mg/Kg	1	3/10/2015 3:35:48 PM	18044
Ethylbenzene	ND	0.046		mg/Kg	1	3/10/2015 3:35:48 PM	18044
Xylenes, Total	ND	0.091		mg/Kg	1	3/10/2015 3:35:48 PM	18044
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	3/10/2015 3:35:48 PM	18044

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 Not In Range
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
Project: CoP State Com AI #33
Lab ID: 1503301-003 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 3/6/2015 9:30:00 AM
Received Date: 3/7/2015 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/11/2015 1:27:11 AM	18046
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/11/2015 1:27:11 AM	18046
Surr: DNOP	148	63.5-128	S	%REC	1	3/11/2015 1:27:11 AM	18046
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/10/2015 4:04:34 PM	18044
Surr: BFB	91.0	80-120		%REC	1	3/10/2015 4:04:34 PM	18044
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	1	3/10/2015 4:04:34 PM	18044
Toluene	ND	0.047		mg/Kg	1	3/10/2015 4:04:34 PM	18044
Ethylbenzene	ND	0.047		mg/Kg	1	3/10/2015 4:04:34 PM	18044
Xylenes, Total	ND	0.094		mg/Kg	1	3/10/2015 4:04:34 PM	18044
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	3/10/2015 4:04:34 PM	18044

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 Not In Range
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
Project: CoP State Com AI #33
Lab ID: 1503301-004 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 3/6/2015 9:35:00 AM
Received Date: 3/7/2015 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	15	10		mg/Kg	1	3/11/2015 2:09:27 AM	18046
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/11/2015 2:09:27 AM	18046
Surr: DNOP	120	63.5-128		%REC	1	3/11/2015 2:09:27 AM	18046
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/10/2015 10:17:12 PM	18044
Surr: BFB	90.7	80-120		%REC	1	3/10/2015 10:17:12 PM	18044
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	1	3/10/2015 10:17:12 PM	18044
Toluene	ND	0.047		mg/Kg	1	3/10/2015 10:17:12 PM	18044
Ethylbenzene	ND	0.047		mg/Kg	1	3/10/2015 10:17:12 PM	18044
Xylenes, Total	ND	0.095		mg/Kg	1	3/10/2015 10:17:12 PM	18044
Surr: 4-Bromofluorobenzene	99.8	80-120		%REC	1	3/10/2015 10:17:12 PM	18044

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 Not In Range
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#: **1503301**

11-Mar-15

Client: Animas Environmental
Project: CoP State Com AI #33

Sample ID **MB-18057**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **18057**			RunNo: **24711**					
Prep Date: **3/10/2015**	Analysis Date: **3/10/2015**			SeqNo: **728324**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.2	63.5	128			

Sample ID **LCS-18057**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **18057**			RunNo: **24711**					
Prep Date: **3/10/2015**	Analysis Date: **3/10/2015**			SeqNo: **728326**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.4	63.5	128			

Sample ID **MB-18046**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **18046**			RunNo: **24724**					
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**			SeqNo: **728339**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.6		10.00		76.3	63.5	128			

Sample ID **MB-18049**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **18049**			RunNo: **24724**					
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**			SeqNo: **728340**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.3	63.5	128			

Sample ID **LCS-18046**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **18046**			RunNo: **24724**					
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**			SeqNo: **728341**		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	93.4	67.8	130			
Surr: DNOP	4.2		5.000		83.7	63.5	128			

Sample ID **LCS-18049**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **18049**			RunNo: **24724**					
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**			SeqNo: **728364**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.5	63.5	128			

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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503301**

11-Mar-15

Client: Animas Environmental

Project: CoP State Com AI #33

Sample ID **1503301-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **18046**	RunNo: **24711**
Prep Date: **3/9/2015**	Analysis Date: **3/11/2015**	SeqNo: **728831** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.9	49.26	0	98.3	29.2	176			
Surr: DNOP	5.6		4.926		114	63.5	128			

Sample ID **1503301-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **18046**	RunNo: **24711**
Prep Date: **3/9/2015**	Analysis Date: **3/11/2015**	SeqNo: **728833** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.15	0	109	29.2	176	12.4	23	
Surr: DNOP	6.7		5.015		134	63.5	128	0	0	S

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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

WO#: **1503301**

Hall Environmental Analysis Laboratory, Inc.

11-Mar-15

Client: Animas Environmental
Project: CoP State Com AI #33

Sample ID **MB-18044**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18044**	RunNo: **24730**
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**	SeqNo: **728732** 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	900		1000		89.5	80	120			

Sample ID **LCS-18044**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18044**	RunNo: **24730**
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**	SeqNo: **728733** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	64	130			
Surr: BFB	1100		1000		108	80	120			

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 Not In Range
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#: **1503301**

11-Mar-15

Client: Animas Environmental

Project: CoP State Com AI #33

Sample ID **MB-18044**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18044**	RunNo: **24730**
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**	SeqNo: **728766** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **LCS-18044**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18044**	RunNo: **24730**
Prep Date: **3/9/2015**	Analysis Date: **3/10/2015**	SeqNo: **728767** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	116	76.6	128			
Toluene	1.1	0.050	1.000	0	109	75	124			
Ethylbenzene	1.1	0.050	1.000	0	111	79.5	126			
Xylenes, Total	3.3	0.10	3.000	0	110	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1503301** RcptNo: **1**

Received by/date: AF 03/07/15

Logged By: **Lindsay Mangin** **3/7/2015 11:45:00 AM**

Completed By: **Lindsay Mangin** **3/9/2015 10:03:39 AM**

Reviewed By: 03/09/15

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (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	5.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Piñon St.
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: eskyles@animasenvironmental.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
CoP State Com AI #33

Project #:

Project Manager:
E. Skyles

Sampler: C. Lameman

On Ice: ☐ Yes ☐ No

Sample Temperature: 5.1 / 5.1

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. 1503301	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)
6-15	920	Soil	SC-1	4oz jar	Cool	-001	X		X													
	925		SC-2			-002	X		X													
	930		SC-3			-003	X		X													
	935		SC-4			-004	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/15	1714			3/6/15	1714
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/15	1750			3/7/15	11:45

Remarks: Bill to ConocoPhillips
WO#: 10374348
UserID: KGARCIA
Supervisor: FACIOTRUJILLO
ACT CODE: T110
ordered by: Ralph Sloan
Area: 21 RUN: 156

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.


ConocoPhillips Co.
Latitude N36°31.7 Longitude W107°48.8
STATE COM. A1 Nº 33
SE¼ SW¼ 1190'FSL & 1650'FWL
SEC. 32 - T 27 N - R 9 W
SAN JUAN COUNTY, NEW MEXICO
03/11/2015 15:42


Conoco Phillips
03/11/2015 15:45


03/11/2015 15:43