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
14325 Proposed Alternative Method Permit or Closure Plan Application

OIL CONS. DIV DIST. 3

APR 12 2016

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: Burlington Resources Oil & Gas Company, LP OGRID #: 14538
Address: PO BOX 4289, Farmington, NM 87499
Facility or well name: Canyon Largo Unit NP 256
API Number: 30-039-20907 OCD Permit Number: ___
U/L or Qtr/Qtr K Section 27 Township 25N Range 7W County: Rio Arriba
Center of Proposed Design: Latitude 36.36829 °N Longitude -107.56470 °W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

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

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

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

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

42

6.

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

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

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

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

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

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

17.
Operator Application Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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

OCD Representative Signature: Vanessa [illegible] **Approval Date:** 5/2/2016

Title: Environmental Specialist **OCD Permit Number:** _____

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date:** 5/2/2012

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): Crystal Walker Title: Regulatory Coordinator

Signature: Crystal Walker Date: 4/11/10

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

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

Lease Name: Canyon Largo Unit NP 256
API No.: 30-039-20907

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

General Plan:

1. BR shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.

   The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.

2. BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

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

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

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

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

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

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

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.0	250

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

   A release was determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

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

8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
   i. Operator's name
   ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

   Notification is was not found.

9. The surface owner shall be notified of BR's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

   The closure process notification to the landowner was not found

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

    The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. BR shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

    The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
    - Soil Backfilling and Cover Installation **(See Report)**
    - Re-vegetation application rates and seeding techniques **(See Report)**
    - Photo documentation of the site reclamation **(Included as an attachment)**
    - Confirmation Sampling Results **(Included as an attachment)**
    - Proof of closure notice **(Included as an attachment)**

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Ashley Maxwell**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 324-5169
Facility Name: **Canyon Largo Unit NP 256**	Facility Type: **Gas Well SF-078878**

Surface Owner **Federal**	Mineral Owner **Federal**	API No. **3003920907**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	**27**	**25N**	**7W**	**1520'**	**South**	**1760'**	**West**	**Rio Arriba**

Latitude 36.36826 Longitude -107.56404

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **554 yds³**	Volume Recovered **554 yds³**
Source of Release **Unknown Production Equipment**	Date and Hour of Occurrence **7/31/2012**	Date and Hour of Discovery
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.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Discovery of historical hydrocarbon impacted soil.

Describe Area Affected and Cleanup Action Taken.*
Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 60'X30'X4.5' and 554 yds³ of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.

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:	OIL CONSERVATION DIVISION	
Printed Name: **Ashley Maxwell**	Approved by Environmental Specialist:	
Title: Field Environmental Specialist	Approval Date:	Expiration Date:
E-mail Address: ashley.p.wethington@conocophillips.com	Conditions of Approval:	Attached ☐
Date: November 19, 2012 Phone: 505-324-5169		

* Attach Additional Sheets If Necessary

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

November 15, 2012

Ashley Maxwell
ConocoPhillips
San Juan Business Unit
Office 216-2
5525 Hwy 64
Farmington, New Mexico 87401

RE: Initial Release Assessment and Final Excavation Report
Canyon Largo Unit NP #256
Rio Arriba County, New Mexico

Dear Ms. Maxwell:

On May 3, August 1, and August 9, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Canyon Largo Unit NP #256, located in Rio Arriba County, New Mexico. The initial release assessment was completed on May 3, 2012. The release was characterized by three areas of surface staining within the secondary containment around the below grade and condensate tanks at the site. Two minor areas of petroleum contaminated soils were also noted north and northwest of the wellhead. The release is historical, and no information regarding cause and extent has been documented. The final excavation was completed by CoP contractors while AES was on location on August 9, 2012.

1.0 Site Information

1.1 Location

Location – NE¼ SW¼, Section 27, T25N, R7W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.36854 and W107.56476, respectively
Release Location Latitude/Longitude – N36.36829 and W107.56470, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and no prior ranking information was located. The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no

registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (http://ford.nmt.edu/react/project.html) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet below ground surface (bgs). A tributary to the wash in Palluche Canyon is located approximately 900 feet west of the release location. Based on this information, the location was assessed a ranking score of 10 per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

1.3 Initial Release Assessment

AES was initially contacted by Shelly Cook-Cowden of CoP on May 2, 2012, and on May 3, 2012, Deborah Watson and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 36 soil samples from 26 test holes and collection of 3 soil samples from the locations of Stain A and B. Based on the field screening results, AES recommended excavation of the release area. Sample locations and results are presented on Figure 3.

1.4 Final Excavation Confirmation Sampling

On August 1, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of six confirmation soil samples (SC-1 through SC-6) of the walls and base of the excavation and two confirmation soil samples from Stain A (SC-7) and Stain B (SC-8). All visibly stained soils were removed from the locations of Stain A and B. Based on field screening and laboratory results, AES recommended further excavation of the release area.

On August 9, 2012, AES returned to the location to collect additional confirmation soil samples (SC-9 and SC-10) of the expanded excavation. The total area excavated was approximately 2,951 square feet by 3.5 feet deep. Competent sandstone was present at depths between 2 and 3.5 feet and limited expansion of the excavation base. An existing pipeline also limited excavation expansion to the south. Sample locations, results, and final excavation extents are shown on Figure 4.

2.0 Soil Sampling

A total of 26 soil samples and 10 composite soil samples were collected during the initial assessment and confirmation sampling. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total

petroleum hydrocarbons (TPH). Seven composite soil samples (SC-1 through SC-4, SC-7, SC-8, and SC-10) collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per 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*.

2.2 Laboratory Analyses

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

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

2.3 Field Screening and Laboratory Analytical Results

On May 3, 2012, initial assessment field screening readings for VOCs via OVM ranged from 2.1 ppm in TH-25 up to 3,911 ppm in TH-1. Field TPH concentrations ranged from 35.8 mg/kg in TH-24 up to 33,100 mg/kg in Stain A.

On August 1 and 9, 2012, final excavation field screening readings for VOCs via OVM ranged from 7.8 ppm in SC-7 to 624 ppm in SC-4. Field TPH concentrations ranged from 239 mg/kg in SC-5 up to 8,400 mg/kg in SC-8. Results are included below in Table 1 and on Figures 4 through 6. The AES Field Screening Reports are attached.

Table 1. Soil Field Screening Results
Canyon Largo Unit NP #256 Release Assessment and Final Excavation
May and August 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)
	NMOCD Action Level*		100	1,000
TH-1	05/03/12	0.5	**3,911**	**22,900**
		2.2	**1,278**	**2,380**
TH-2	05/03/12	0.5	**462**	**5,330**
		2	36.4	300
TH-3	05/03/12	1	8.4	838
		2	7.8	61.4
TH-4	05/03/12	0.5	**123**	**3,640**
		2	**2,822**	NA
TH-5	05/03/12	0.5	**172**	**2,670**
		2	**2,258**	**8,180**
TH-6	05/03/12	0.5	**243**	**3,750**
		2	**1,904**	**10,500**
TH-7	05/03/12	0.5	12.6	NA
		2	6.5	126
TH-8	05/03/12	0.5	13.0	NA
		2	**1,685**	**8,270**
TH-9	05/03/12	0.5	147	NA
		1	**1,217**	**3,870**
TH-10	05/03/12	0.5	**1,522**	NA
		1.5	**2,594**	**8,130**
TH-11	05/03/12	1	**1,652**	**3,120**
TH-12	05/03/12	0.7	13.7	57.4
TH-13	05/03/12	1	**3,489**	NA
TH-14	05/03/12	2	**2,155**	NA
TH-15	05/03/12	2	**2,272**	NA
TH-16	05/03/12	2	**1,824**	NA
TH-17	05/03/12	1.7	**2,882**	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)
	NMOCD Action Level*		100	1,000
TH-18	05/03/12	1	7.5	97.7
TH-19	05/03/12	1.5	7.5	82.9
TH-20	05/03/12	1	4.6	80.2
TH-21	05/03/12	1	**313**	**2,520**
TH-22	05/03/12	2	6.0	**1,070**
TH-23	05/03/12	1	6.3	**>3,000**
TH-24	05/03/12	1	3.7	35.8
TH-25	05/03/12	1	2.1	312
TH-26	05/03/12	1	46.3	81.8
Stain A	05/03/12	0.5	NA	**10,100**
		2	NA	**33,100**
Stain B	05/03/12	2.0	NA	241
SC-1	08/01/12	2	**282**	**2,200**
SC-2	08/01/12	3.5	**191**	**2,760**
SC-3	08/01/12	1 to 3.5	**588**	**2,290**
SC-4	08/01/12	1 to 2	**624**	**2,790**
SC-5	08/01/12	1 to 2	16.5	239
SC-6	08/01/12	1 to 3.5	11.7	310
SC-7	08/01/12	Stain A (Surface)	7.8	**6,410**
SC-8	08/01/12	Stain B (Surface)	93.6	**8,400**
SC-9	08/09/12	1 to 3.5	23.7	322
SC-10	08/09/12	1 to 3.5	27.9	996

NA – Not Analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for SC-1 through SC-4, SC-7, SC-8 and SC-10 were used to confirm field screening results during excavation activities on August 1 and 9. Benzene concentrations were reported below laboratory detection limits in all samples. Total BTEX concentrations were also reported below laboratory detection limits for all the samples. TPH concentrations (as GRO/DRO) ranged from 330 mg/kg in SC-10 up to

2,522 mg/kg in SC-8. Results are presented in Table 2 and on Figure 5. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, BTEX and TPH
Canyon Largo Unit NP #256 Release Assessment and Final Excavation
May and August 2012

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*Benzene (mg/kg)*	*BTEX (mg/kg)*	*GRO (mg/kg)*	*DRO (mg/kg)*
*NMOCD Action Level**			*10*	*50*	*1,000*	
SC-1	08/01/12	2	<0.25	<1.25	97	780
SC-2	08/01/12	3.5	<0.50	<2.50	**94**	**1,100**
SC-3	08/01/12	1 to 3.5	<0.25	<1.25	**230**	**1,400**
SC-4	08/01/12	1 to 2	<0.25	<1.25	**90**	**1,000**
SC-7	08/01/12	Stain A (Surface)	<0.050	<0.25	**<5.0**	**1,400**
SC-8	08/01/12	Stain B (Surface)	<0.050	<0.25	**22**	**2,500**
SC-10	08/09/12	1 to 3.5	NA	NA	<5.0	330

NA – Not Analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

On May 3, 2012, AES conducted an initial release assessment of petroleum contaminated soils associated with a historical release at the Canyon Largo Unit NP #256, located in Rio Arriba County, New Mexico. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the release was assigned a rank of 10. Field screening results above the NMOCD action levels of 100 ppm VOCs and/or 1,000 mg/kg TPH were reported in TH-1, TH-2, TH-4 through TH-6, TH-8 through TH-11, TH-13 through TH-17, TH-21 through TH-23, and at Stain A. The highest VOC concentration was 3,911 ppm in TH-1, and the highest TPH concentration was reported in Stain A with 33,100 mg/kg.

On August 1, 2012, assessment of the excavation area, which included the areas of Stains A and B, was completed. Field screening results of the excavation extents reported VOC concentrations above the NMOCD action levels in SC-1 through SC-4, SC-7 and SC-8. Field TPH concentrations were above the NMOCD action level of 1,000 mg/kg

in all samples, except SC-5 and SC-6. Benzene concentrations in SC-1 through SC-4, SC-7, and SC-8 were reported below the NMOCD action level of 10 mg/kg in all samples. Total BTEX concentrations were also reported below the NMOCD action level of 50 mg/kg in SC-1 through SC-4, SC-7, and SC-8. Laboratory results for samples collected from final excavation extents showed that TPH concentrations (as GRO/DRO) were below the NMOCD action level of 1,000 mg/kg in SC-1, SC-5, SC-6, and SC-10. SC-2 was just above the NMOCD action level with 1,194 mg/kg of TPH.

Further excavation was completed, and confirmation sampling was conducted on August 9, 2012. Field screening results showed that VOC concentrations and field TPH concentrations were below the applicable NMOCD action levels in both SC-9 and SC-10. Laboratory analytical results for SC-10 confirmed that TPH concentrations as GRO/DRO were below the NMOCD action level with 330 mg/kg DRO.

Based on the final field screening and laboratory analytical results of the additional excavation of petroleum contaminated soils at the Canyon Largo Unit NP #256, benzene, total BTEX, and TPH (GRO/DRO) concentrations were below applicable NMOCD action levels, except in SC-2 (base). CoP consulted with NMOCD regarding elevated TPH concentrations in SC-2, and on August 13, 2012, NMOCD concurred that the excavation could be backfilled in the area of SC-2, based on depth to groundwater at the location. No further work is recommended.

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

Sincerely,

Heather M. Woods

Heather M. Woods
Staff Geologist

Elizabeth McNally

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012
Figure 3. Initial Release Assessment Sample Locations and Results, May 2012
Figure 4. Final Excavation Sample Locations and Results, August 2012
AES Field Screening Report 050312
AES Field Screening Report 080112
AES Field Screening Report 080912
Hall Laboratory Analytical Report 1208103
Hall Laboratory Analytical Report 1208475

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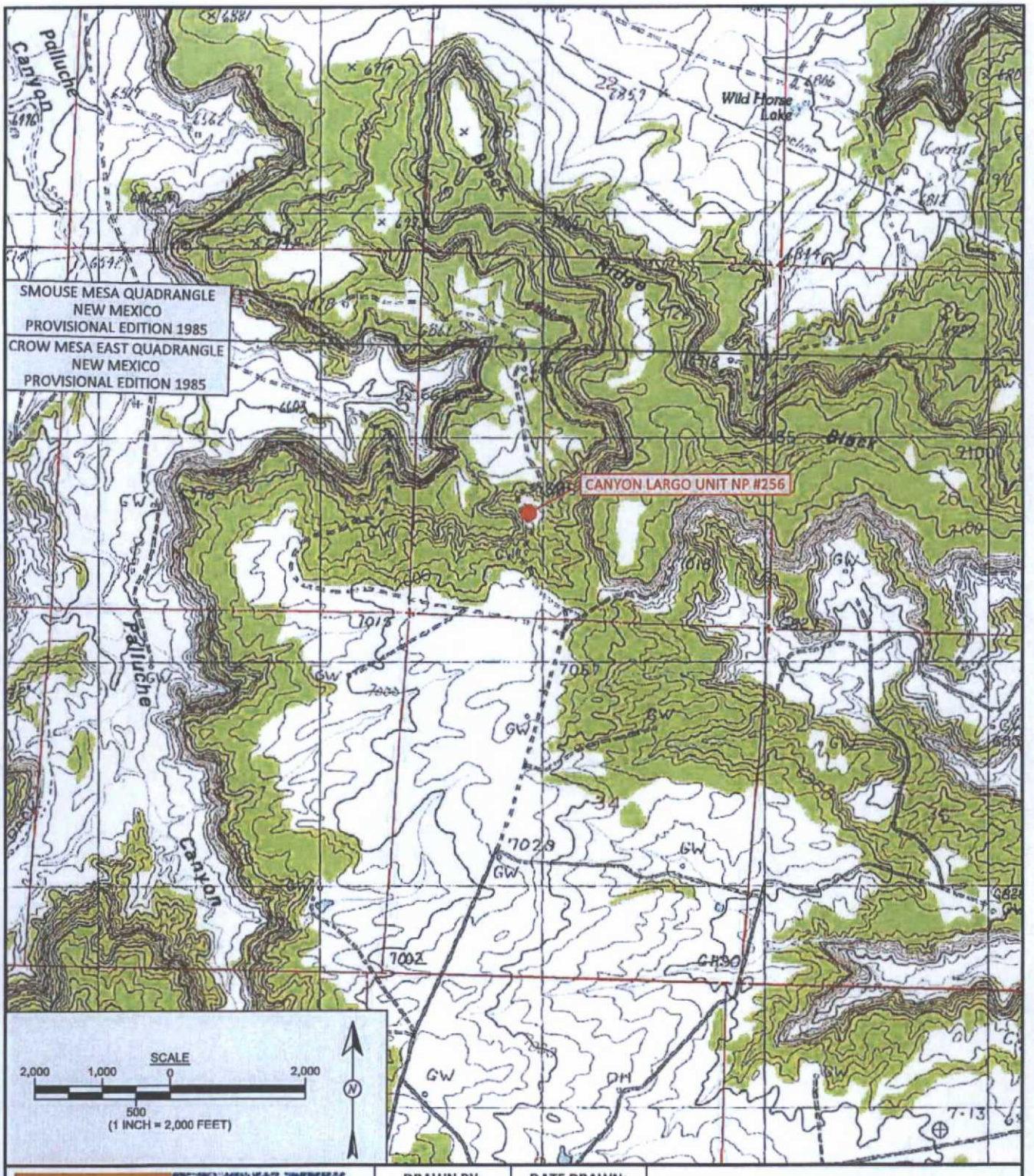
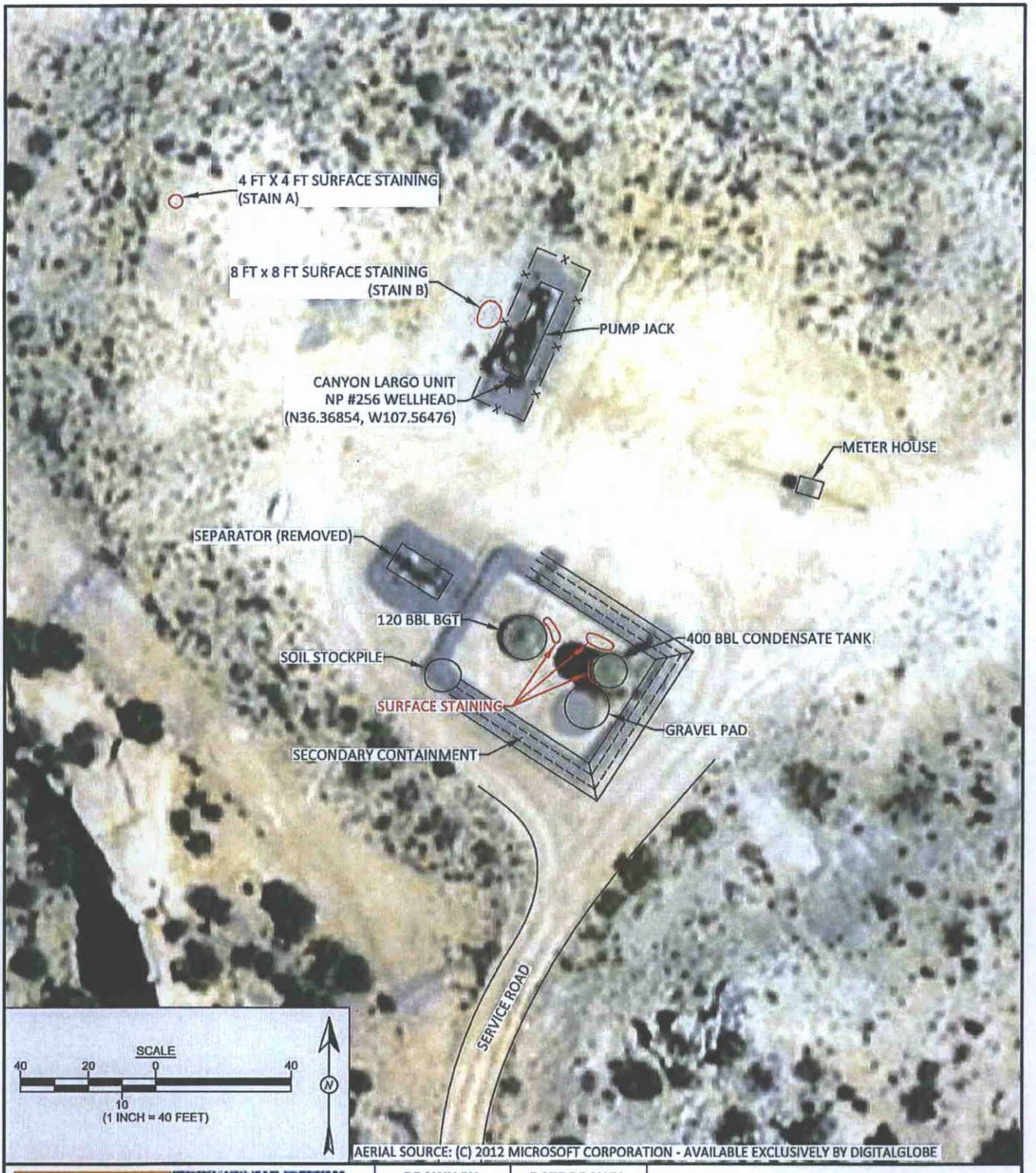


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: May 2, 2012
REVISIONS BY: C. Lameman	DATE REVISED: November 6, 2012
CHECKED BY: D. Watson	DATE CHECKED: November 6, 2012
APPROVED BY: E. McNally	DATE APPROVED: November 6, 2012

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
CANYON LARGO UNIT NP #256
RIO ARRIBA COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 27, T25N, R7W
N36.36854, W107.56476



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: May 11, 2012	**FIGURE 2**
REVISIONS BY: C. Lameman	DATE REVISED: November 6, 2012	**AERIAL SITE MAP MAY 2012**
CHECKED BY: D. Watson	DATE CHECKED: November 6, 2012	ConocoPhillips CANYON LARGO UNIT NP #256 RIO ARRIBA COUNTY, NEW MEXICO
APPROVED BY: E. McNally	DATE APPROVED: November 6, 2012	NE¼ SW¼, SECTION 27, T25N, R7W N36.36854, W107.56476

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
MAY 2012
ConocoPhillips
CANYON LARGO UNIT NP #256
RIO ARRIBA COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 27, T25N, R7W
N36.36854, W107.56476

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	May 11, 2012
REVISIONS BY:	**DATE REVISED:**
C. Lameman	November 6, 2012
CHECKED BY:	**DATE CHECKED:**
D. Watson	November 6, 2012
APPROVED BY:	**DATE APPROVED:**
E. McNally	November 6, 2012

LEGEND

● TEST HOLE LOCATIONS

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	5/3/12	0.5	3,911	22,900
		2.2	1,278	3,380
TH-2	5/3/12	0.5	462	5,330
		2	36.4	300
TH-3	5/3/12	1	8.4	838
		2	7.8	61.4
TH-4	5/3/12	0.5	123	3,640
		2	2,822	NA
TH-5	5/3/12	0.5	172	2,670
		2	2,258	8,180
TH-6	5/3/12	0.5	243	3,750
		2	1,904	10,500
TH-7	5/3/12	0.5	12.6	NA
		2	6.5	126
TH-8	5/3/12	0.5	13.0	NA
		2	1,685	8,270
TH-9	5/3/12	0.5	147	NA
		1	1,217	3,870
TH-10	5/3/12	0.5	1,522	NA
		1.5	2,594	8,130
TH-11	5/3/12	1	1,652	3,120
TH-12	5/3/12	0.7	13.7	57.4
TH-13	5/3/12	1	3,489	NA
TH-14	5/3/12	2	2,155	NA
TH-15	5/3/12	2	2,272	NA
TH-16	5/3/12	2	1,824	NA
TH-17	5/3/12	1.7	2,882	NA
TH-18	5/3/12	1	7.5	97.7
TH-19	5/3/12	1.5	7.5	82.9
TH-20	5/3/12	1	4.6	80.2
TH-21	5/3/12	1	313	2,520
TH-22	5/3/12	2	6.0	1,070
TH-23	5/3/12	1	6.3	>3,000
TH-24	5/3/12	1	3.7	35.8
TH-25	5/3/12	1	2.1	312
TH-26	5/3/12	1	46.3	81.8
STAIN A	5/3/12	0.5	NA	10,100
		2.0	NA	33,100
STAIN B	5/3/12	2.0	NA	241
NA - NOT ANALYZED				

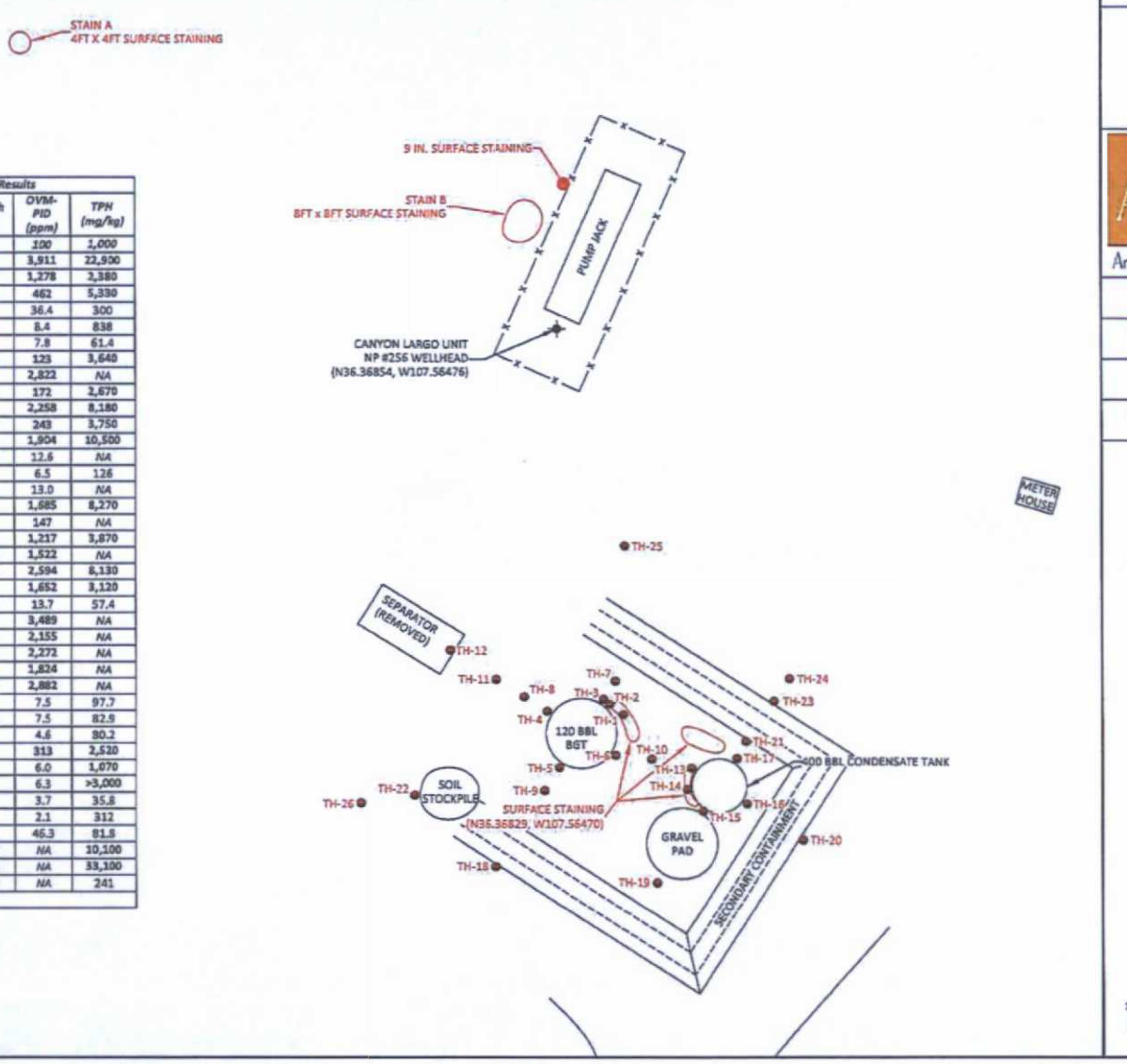
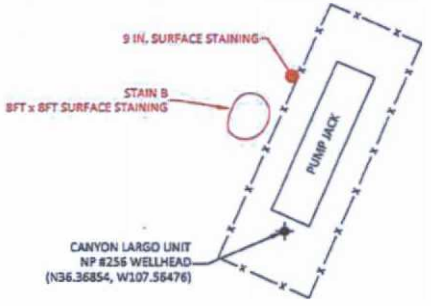


FIGURE 4

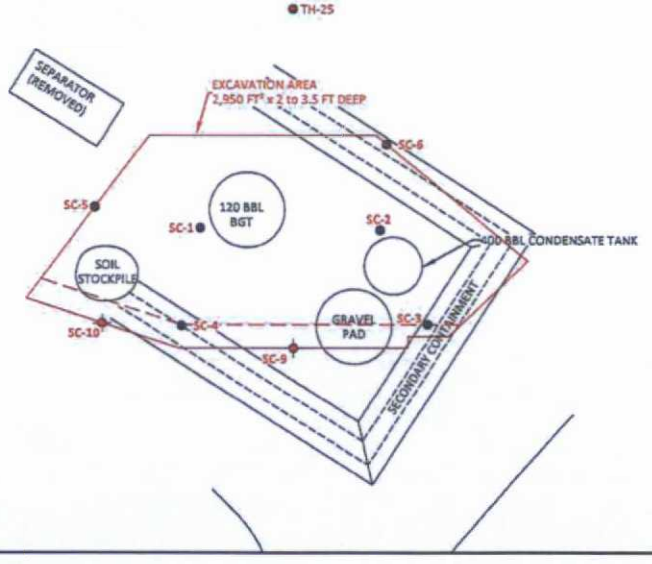
FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
AUGUST 2012
ConocoPhillips
CANYON LARGO UNIT NP #256
RIO ARRIBA COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 27, T25N, R7W
N36.36854, W107.56476



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	8/1/12	2	282	2,200
SC-2	8/1/12	3.5	191	2,760
SC-3	8/1/12	1 to 3.5	588	2,290
SC-4	8/1/12	1 to 2	624	2,790
SC-5	8/1/12	1 to 2	16.5	239
SC-6	8/1/12	1 to 3.5	11.7	310
SC-7	8/1/12	STAIN A (SURFACE)	7.8	6,410
SC-8	8/1/12	STAIN B (SURFACE)	93.6	8,400
SC-9	8/9/12	1 to 3.5	23.7	322
SC-10	8/9/12	1 to 3.5	27.9	996

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SC-1	8/1/12	2	<0.25	<1.25	97	780
SC-2	8/1/12	3.5	<0.50	<2.50	94	1,100
SC-3	8/1/12	1 to 3.5	<0.25	<1.25	230	1,400
SC-4	8/1/12	1 to 2	<0.25	<1.25	90	1,000
SC-7	8/1/12	STAIN A (SURFACE)	<0.050	<0.25	<5.0	1,400
SC-8	8/1/12	STAIN B (SURFACE)	<0.050	<0.25	<5.0	2,500
SC-10	8/9/12	1 to 3.5	NA	NA	1.4	330

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND 8015B.
NA - NOT ANALYZED.

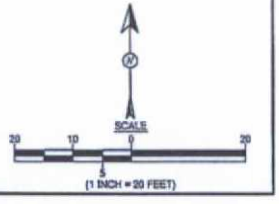


Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	May 11, 2012
REVISIONS BY:	DATE REVISED:
C. Lameman	November 6, 2012
CHECKED BY:	DATE CHECKED:
D. Watson	November 6, 2012
APPROVED BY:	DATE APPROVED:
E. McNally	November 6, 2012

LEGEND

- TEST HOLE SAMPLE LOCATIONS MAY 2012
- 5-POINT COMPOSITE SAMPLE LOCATIONS
- 3-POINT COMPOSITE SAMPLE LOCATIONS



AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Canyon Largo Unit NP #256

Date: 5/3/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1@0.5'	5/3/2012	9:53	3,911	10:48	22,900	200	10	DAW
TH-1@2.2'	5/3/2012	10:03	1,278	10:53	2,380	20.0	1	DAW
TH-2@0.5'	5/3/2012	10:08	462	10:58	5,330	200	10	DAW
TH-2@2'	5/3/2012	10:17	36.4	11:01	300	20.0	1	DAW
TH-3@1'	5/3/2012	10:25	8.4	11:50	838	20.0	1	DAW
TH-3@2'	5/3/2012	10:35	7.8	11:53	61.4	20.0	1	DAW
TH-4@0.5'	5/3/2012	10:45	123	12:08	3,640	200	10	DAW
TH-4@2'	5/3/2012	10:50	2,822	*Not Analyzed for TPH*				
TH-5@0.5'	5/3/2012	10:55	172	12:13	2,670	20.0	1	DAW
TH-5@2'	5/3/2012	10:58	2,258	12:20	8,180	200	10	DAW
TH-6@0.5'	5/3/2012	11:10	243	12:26	3,750	200	10	DAW
TH-6@2'	5/3/2012	11:14	1,904	12:35	10,500	200	10	DAW
TH-7@0.5'	5/3/2012	11:53	12.6	*Not Analyzed for TPH*				
TH-7@2	5/3/2012	11:58	6.5	13:03	126	20.0	1	DAW
TH-8@0.5'	5/3/2012	12:05	13.0	*Not Analyzed for TPH*				
TH-8@2	5/3/2012	12:10	1,685	13:09	8,270	200	10	DAW
TH-9@0.5'	5/3/2012	12:39	147	*Not Analyzed for TPH*				
TH-9@1'	5/3/2012	12:42	1,217	13:15	3,870	200	10	DAW
TH-10@0.5'	5/3/2012	12:23	1,522	*Not Analyzed for TPH*				
TH-10@1.5'	5/3/2012	12:27	2,594	13:22	8,130	200	10	DAW
TH-11@1	5/3/2012	13:26	1,652	13:44	3,120	200	10	DAW
TH-12@0.7'	5/3/2012	13:36	13.7	13:56	57.4	20.0	1	DAW

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-13@1'	5/3/2012	13:40	3,489	*Not Analyzed for TPH*				
TH-14@2'	5/3/2012	14:08	2,155	*Not Analyzed for TPH*				
TH-15@2'	5/3/2012	14:09	2,272	*Not Analyzed for TPH*				
TH-16@2'	5/3/2012	14:12	1,824	*Not Analyzed for TPH*				
TH-17@1.7'	5/3/2012	14:14	2,882	*Not Analyzed for TPH*				
TH-18@1'	5/3/2012	14:17	7.5	15:19	97.7	20.0	1	DAW
TH-19@1.5'	5/3/2012	14:20	7.5	15:26	82.9	20.0	1	DAW
TH-20@1'	5/3/2012	14:25	4.6	15:30	80.2	20.0	1	DAW
TH-21@1'	5/3/2012	14:30	313	15:23	2,520	20.0	1	DAW
TH-22@2'	5/3/2012	14:45	6.0	15:33	1,070	20.0	1	DAW
TH-23@1'	5/3/2012	15:20	6.3	*Not Analyzed for TPH*				
TH-24@1'	5/3/2012	15:50	3.7	16:25	35.8	20.0	1	DAW
TH-25@1'	5/3/2012	15:52	2.1	16:30	312	20.0	1	DAW
TH-26@1'	5/3/2012	15:57	46.3	16:35	81.8	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

Analyst: Deborah Watts

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Canyon Largo Unit NP #256

Date: 8/1/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	8/1/2012	12:32	West Base	282.0	13:55	2,200	200	10	HMW
SC-2	8/1/2012	12:34	East Base	191.0	14:03	2,760	200	10	HMW
SC-3	8/1/2012	12:36	Southeast Wall	588.0	14:10	2,290	200	10	HMW
SC-4	8/1/2012	12:39	Southwest Wall	624.0	14:17	2,790	200	10	HMW
SC-5	8/1/2012	12:42	Northeast Wall	16.5	14:21	239	20.0	1	HMW
SC-6	8/1/2012	12:44	Northwest Wall	11.7	14:24	310	20.0	1	HMW
SC-7	8/1/2012	13:26	Stain A	7.8	14:51	6,410	200	10	HMW
SC-8	8/1/2012	13:30	Stain B	93.6	14:57	8,400	200	10	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

Report Finalized: 08/01/12

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Canyon Largo Unit NP #256

Date: 8/9/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-9	8/9/2012	12:28	Southeast Wall	23.7	12:46	332	20.0	1	HMW
SC-10	8/9/2012	11:36	Southwest Wall	27.9	11:53	996	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

Report Finalized: 08/09/12

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

August 07, 2012

Debbie Watson

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

RE: Canyon Largo Unit NP #256 OrderNo.: 1208103

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/2/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1208103**
Date Reported: **8/7/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Canyon Largo Unit NP #256
Lab ID: 1208103-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 8/1/2012 12:32:00 PM
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	780	98		mg/Kg	10	8/2/2012 11:49:59 AM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 11:49:59 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.25		mg/Kg	5	8/2/2012 1:58:10 PM
Toluene	ND	0.25		mg/Kg	5	8/2/2012 1:58:10 PM
Ethylbenzene	ND	0.25		mg/Kg	5	8/2/2012 1:58:10 PM
Xylenes, Total	ND	0.50		mg/Kg	5	8/2/2012 1:58:10 PM
Surr: 1,2-Dichloroethane-d4	85.0	70-130		%REC	5	8/2/2012 1:58:10 PM
Surr: 4-Bromofluorobenzene	78.2	70-130		%REC	5	8/2/2012 1:58:10 PM
Surr: Dibromofluoromethane	76.8	70-130		%REC	5	8/2/2012 1:58:10 PM
Surr: Toluene-d8	81.4	70-130		%REC	5	8/2/2012 1:58:10 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	97	25		mg/Kg	5	8/2/2012 1:58:10 PM
Surr: BFB	78.2	70-130		%REC	5	8/2/2012 1:58:10 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-2
Project: Canyon Largo Unit NP #256
Collection Date: 8/1/2012 12:34:00 PM
Lab ID: 1208103-002
Matrix: SOIL
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	8/2/2012 12:12:27 PM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 12:12:27 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.50		mg/Kg	10	8/2/2012 3:22:00 PM
Toluene	ND	0.50		mg/Kg	10	8/2/2012 3:22:00 PM
Ethylbenzene	ND	0.50		mg/Kg	10	8/2/2012 3:22:00 PM
Xylenes, Total	ND	1.0		mg/Kg	10	8/2/2012 3:22:00 PM
Surr: 1,2-Dichloroethane-d4	82.3	70-130		%REC	10	8/2/2012 3:22:00 PM
Surr: 4-Bromofluorobenzene	84.7	70-130		%REC	10	8/2/2012 3:22:00 PM
Surr: Dibromofluoromethane	75.5	70-130		%REC	10	8/2/2012 3:22:00 PM
Surr: Toluene-d8	80.8	70-130		%REC	10	8/2/2012 3:22:00 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	94	50		mg/Kg	10	8/2/2012 3:22:00 PM
Surr: BFB	84.7	70-130		%REC	10	8/2/2012 3:22:00 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-3
Project: Canyon Largo Unit NP #256
Collection Date: 8/1/2012 12:36:00 PM
Lab ID: 1208103-003
Matrix: SOIL
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1400	100		mg/Kg	10	8/2/2012 12:19:29 PM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 12:19:29 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.25		mg/Kg	5	8/2/2012 2:26:05 PM
Toluene	ND	0.25		mg/Kg	5	8/2/2012 2:26:05 PM
Ethylbenzene	ND	0.25		mg/Kg	5	8/2/2012 2:26:05 PM
Xylenes, Total	ND	0.50		mg/Kg	5	8/2/2012 2:26:05 PM
Surr: 1,2-Dichloroethane-d4	84.4	70-130		%REC	5	8/2/2012 2:26:05 PM
Surr: 4-Bromofluorobenzene	109	70-130		%REC	5	8/2/2012 2:26:05 PM
Surr: Dibromofluoromethane	77.8	70-130		%REC	5	8/2/2012 2:26:05 PM
Surr: Toluene-d8	84.3	70-130		%REC	5	8/2/2012 2:26:05 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	230	25		mg/Kg	5	8/2/2012 2:26:05 PM
Surr: BFB	109	70-130		%REC	5	8/2/2012 2:26:05 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-4
Project: Canyon Largo Unit NP #256
Collection Date: 8/1/2012 12:39:00 PM
Lab ID: 1208103-004
Matrix: SOIL
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1000	97		mg/Kg	10	8/2/2012 12:34:28 PM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 12:34:28 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.25		mg/Kg	5	8/2/2012 2:54:01 PM
Toluene	ND	0.25		mg/Kg	5	8/2/2012 2:54:01 PM
Ethylbenzene	ND	0.25		mg/Kg	5	8/2/2012 2:54:01 PM
Xylenes, Total	ND	0.50		mg/Kg	5	8/2/2012 2:54:01 PM
Surr: 1,2-Dichloroethane-d4	82.1	70-130		%REC	5	8/2/2012 2:54:01 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	5	8/2/2012 2:54:01 PM
Surr: Dibromofluoromethane	79.6	70-130		%REC	5	8/2/2012 2:54:01 PM
Surr: Toluene-d8	84.6	70-130		%REC	5	8/2/2012 2:54:01 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	90	25		mg/Kg	5	8/2/2012 2:54:01 PM
Surr: BFB	98.5	70-130		%REC	5	8/2/2012 2:54:01 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-7
Project: Canyon Largo Unit NP #256
Collection Date: 8/1/2012 1:26:00 PM
Lab ID: 1208103-005
Matrix: SOIL
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1400	97		mg/Kg	10	8/2/2012 12:45:35 PM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 12:45:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	8/2/2012 1:02:22 PM
Toluene	ND	0.050		mg/Kg	1	8/2/2012 1:02:22 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2012 1:02:22 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2012 1:02:22 PM
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%REC	1	8/2/2012 1:02:22 PM
Surr: 4-Bromofluorobenzene	71.9	70-130		%REC	1	8/2/2012 1:02:22 PM
Surr: Dibromofluoromethane	75.2	70-130		%REC	1	8/2/2012 1:02:22 PM
Surr: Toluene-d8	85.6	70-130		%REC	1	8/2/2012 1:02:22 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2012 1:02:22 PM
Surr: BFB	71.9	70-130		%REC	1	8/2/2012 1:02:22 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-8
Project: Canyon Largo Unit NP #256
Collection Date: 8/1/2012 1:30:00 PM
Lab ID: 1208103-006
Matrix: SOIL
Received Date: 8/2/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2500	100		mg/Kg	10	8/2/2012 1:11:24 PM
Surr: DNOP	0	77.6-140	S	%REC	10	8/2/2012 1:11:24 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	8/2/2012 1:30:17 PM
Toluene	ND	0.050		mg/Kg	1	8/2/2012 1:30:17 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2012 1:30:17 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2012 1:30:17 PM
Surr: 1,2-Dichloroethane-d4	86.2	70-130		%REC	1	8/2/2012 1:30:17 PM
Surr: 4-Bromofluorobenzene	118	70-130		%REC	1	8/2/2012 1:30:17 PM
Surr: Dibromofluoromethane	79.8	70-130		%REC	1	8/2/2012 1:30:17 PM
Surr: Toluene-d8	81.9	70-130		%REC	1	8/2/2012 1:30:17 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	22	5.0		mg/Kg	1	8/2/2012 1:30:17 PM
Surr: BFB	118	70-130		%REC	1	8/2/2012 1:30:17 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208103**

07-Aug-12

Client: Animas Environmental Services

Project: Canyon Largo Unit NP #256

Sample ID: **MB-3156**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3156**	RunNo: **4554**
Prep Date: **8/2/2012**	Analysis Date: **8/2/2012**	SeqNo: **128991** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		106	77.6	140			

Sample ID: **LCS-3156**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3156**	RunNo: **4554**
Prep Date: **8/2/2012**	Analysis Date: **8/2/2012**	SeqNo: **129140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.0	52.6	130			
Surr: DNOP	4.3		5.000		85.3	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208103**

07-Aug-12

Client: Animas Environmental Services
Project: Canyon Largo Unit NP #256

Sample ID: **5ml-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R4612**	RunNo: **4612**
Prep Date:	Analysis Date: **8/2/2012**	SeqNo: **130187** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.41		0.5000		81.1	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		83.2	70	130			
Surr: Dibromofluoromethane	0.37		0.5000		75.0	70	130			
Surr: Toluene-d8	0.40		0.5000		79.1	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **R4612**	RunNo: **4612**
Prep Date:	Analysis Date: **8/2/2012**	SeqNo: **130189** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	92.4	70	130			
Toluene	0.95	0.050	1.000	0	95.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.3	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		84.3	70	130			
Surr: Dibromofluoromethane	0.36		0.5000		71.7	70	130			
Surr: Toluene-d8	0.40		0.5000		79.3	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1208103

07-Aug-12

Client: Animas Environmental Services

Project: Canyon Largo Unit NP #256

Sample ID: 5ml-rb	SampType: MBLK	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: PBS	Batch ID: R4612	RunNo: 4612
Prep Date:	Analysis Date: 8/2/2012	SeqNo: 130165 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	420		500.0		83.2	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: LCSS	Batch ID: R4612	RunNo: 4612
Prep Date:	Analysis Date: 8/2/2012	SeqNo: 130170 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.4	85	115			
Surr: BFB	400		500.0		80.2	70	130			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- 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: 1208103

Received by/date: AG 08/02/12

Logged By: Anne Thorne 8/2/2012 9:55:00 AM Anne Thorne

Completed By: Anne Thorne 8/2/2012 Anne Thorne

Reviewed By: MG 08/02/12

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche
Farmington, NM 87401

Phone #: 505-516V-2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name: Canyon Largo Unit NP #256

Project #:

Project Manager: D. Watson

Sampler: Heather Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 0

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. 1208103	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel) 8260/8270	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
8/1/12	1232	Soil	SC-1	MeOH Kit & 2 40z jars	MeOH	-001	X		X									
8/1/12	1234	Soil	SC-2	"		-002	X		X									
8/1/12	1236	Soil	SC-3	"	"	-003	X		X									
8/1/12	1239	Soil	SC-4			-004	X		X									
8/1/12	1326	Soil	SC-7			-005	X		X									
8/1/12	1330	Soil	SC-8			-006	X		X									
							X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/1/12	1804	Heather M. Woods	Christine Walters	8/1/12	1804
8/1/12	1804	Christine Walters		08/02/12	0955

Remarks: Bill to ConocoPhillips

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

August 13, 2012

Debbie Watson

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

RE: Canyon Largo Unit NP #256 OrderNo.: 1208475

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/10/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1208475**
Date Reported: **8/13/2012**

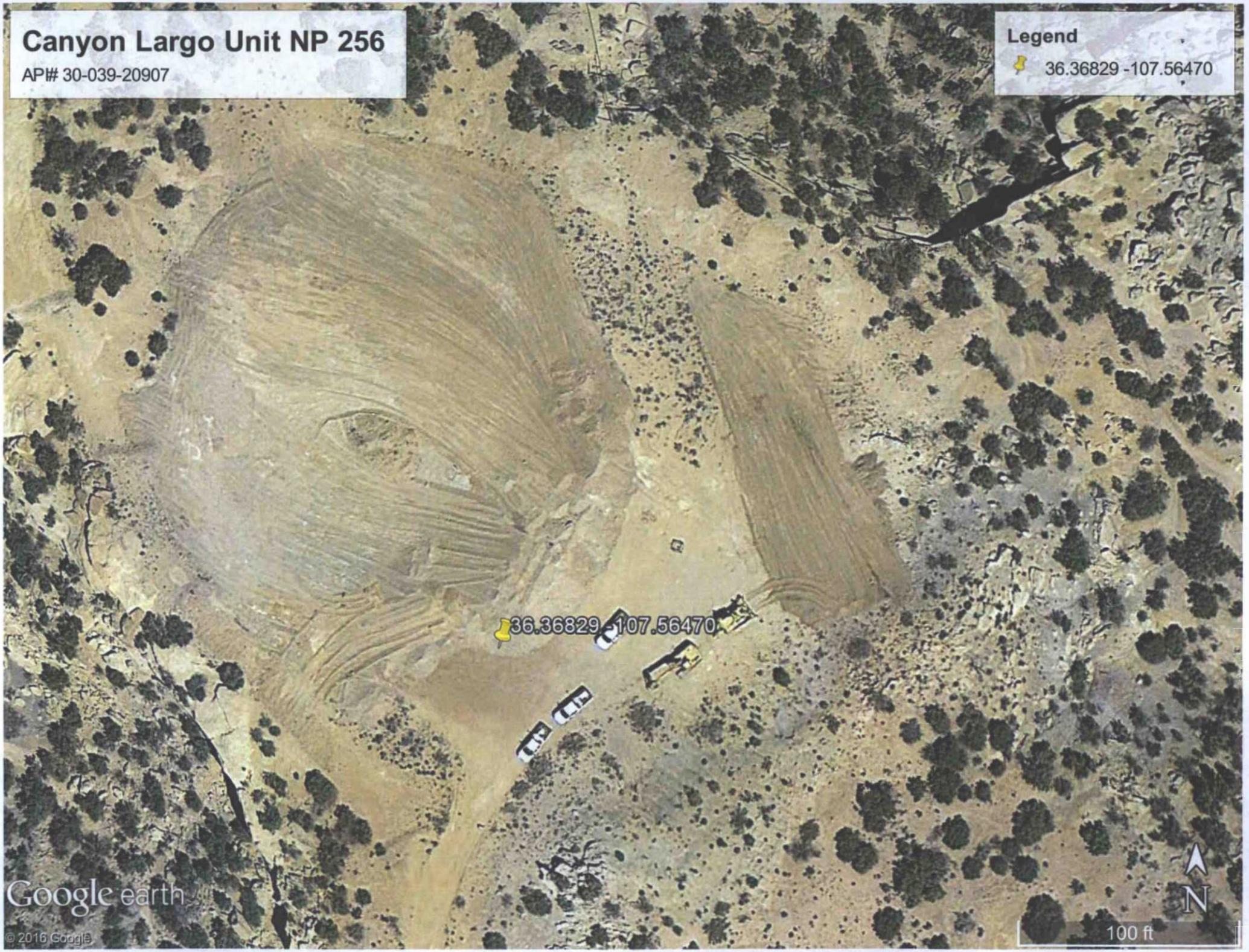
Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-8
Project: Canyon Largo Unit NP #256
Collection Date: 8/9/2012 11:36:00 AM
Lab ID: 1208475-001
Matrix: MEOH (SOIL)
Received Date: 8/10/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	330	100		mg/Kg	10	8/10/2012 11:05:36 AM
Surr: DNOP	0	77.6-140	S	%REC	10	8/10/2012 11:05:36 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/10/2012 12:40:38 PM
Surr: BFB	85.0	84-116		%REC	1	8/10/2012 12:40:38 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL


Canyon Largo Unit NP 256
AP# 30-039-20907
Legend
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