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

14263

RECEIVED
By kcollins at 7:19 am, Mar 09, 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 6
API Number: 30-039-21371 OCD Permit Number:
U/L or Qtr/Qtr A Section 25 Township 24N Range 6W County: Rio Arriba
Center of Proposed Design: Latitude 36.28825 °N Longitude -10741547 °W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

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

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

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

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

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 Fuller **Approval Date:** 4-4-2016

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: 3/16/12**

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): Larissa Farrell Title: Regulatory Technician

Signature: Larissa Farrell Date: 1-7-16

e-mail address: Larissa.L.Farrell@cop.com Telephone: (505)326-9504

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

Lease Name: Canyon Largo Unit 6
API No.: 3003921371

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 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 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)**

ConocoPhillips Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name: JICARILLA K 17M
API No.: 30-039-25842

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, COPC 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. 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.

3. 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.

4. 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.

5. 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.

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

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

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 was not found.

9. 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 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. 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.

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
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

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 in 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 E. 30th St., Farmington, NM 87402**	Telephone No. **505-324-5169**
Facility Name Canyon Largo Unit #6	Facility Type Gas Well

Surface Owner Federal	Mineral Owner Federal	API No. 3003921371

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	25	24N	06W	965'	NORTH	1160'	EAST	Rio Arriba

Latitude 36.28839 **Longitude** -107.41461

NATURE OF RELEASE

Type of Release—Unknown	Volume of Release—Unknown	Volume Recovered
Source of Release—Below Grade Tank	Date and Hour of Occurrence – Unknown	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.*

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

Describe Area Affected and Cleanup Action Taken.*

The below grade tank sample results were above regulatory standard by USEPA method 418.1 for TPH @ 11,700 ppm, confirming a release. The regulatory standard for closure at this site was determined to be 5,000 ppm. Following release excavation, samples were then transported to the lab and analytical results for BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required.

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: **April 24, 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

April 17, 2012

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

RE: Canyon Largo #6 Below Grade Tank Closure, Release and Excavation Report
Rio Arriba County, New Mexico

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure, associated release assessment and excavation at ConocoPhillips (CoP) Canyon Largo #6, located in Rio Arriba County, New Mexico. Tank removal was completed by CoP contractors while AES was on site.

1.0 Site Information

1.1 Location

Site Name – Canyon Largo #6
Legal Description - NE¼ NE¼, Section 25, T24N, R6W, Rio Arriba County, New Mexico
Well Latitude/Longitude - N36.28856 and W107.41522, respectively
BGT Latitude/Longitude - N36.28825 and W107.41547, respectively
Land Jurisdiction - Bureau of Land Management (BLM)
Figure 1 - Topographic Site Location Map
Figure 2 - General Site Map, March 2012
Figure 3 – Release Assessment and Excavation Details

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report from August 1993 for the Canyon Largo #6 reported the depth to groundwater beneath the location as 120 feet below ground surface (bgs). No additional NMOCD records were located. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby private domestic water wells, and no registered water wells were reported to be located within 1,000 feet of the location.

Once on-site, AES personnel assessed the NMOCD ranking criteria using topographical interpretation, Global Position System (GPS) elevation readings, and visual reconnaissance. Canyon Largo Wash, the nearest surface water body, is located approximately 1,400 feet east of the location. The site location has been assigned a ranking score of zero per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 BGT Closure Assessment

AES was initially contacted by Doyle Clark, CoP representative, on March 16, 2012, and on the same day, Corwin Lameman and Deborah Watson of AES met with Doyle Clark at the location.

Following BGT removal, AES personnel visually confirmed that a release had occurred beneath the BGT. A 5-point composite sample (SC-1) of the BGT footprint was collected for field screening. On the same day, AES conducted an initial release assessment at the site.

1.4 Release Assessment

On March 16, 2012, an initial release assessment was conducted at the site following visual confirmation and field screening results from SC-1. The assessment included collecting a sample from seven test holes (TH-1 through TH-7). Samples were collected in and around the BGT footprint for field screening of volatile organics (VOCs) and total petroleum hydrocarbons (TPH).

On March 19, 2012, AES was contacted by Doyle Clark of CoP, and on the same day, Corwin Lameman and Deborah Watson of AES met with Doyle Clark at the location to provide excavation oversight and continued field screening of the release excavation activities. CoP contractors excavated the former BGT location along the west wall and base to a total depth of 5 feet bgs, where competent sandstone was encountered. The final excavation measured approximately 15 feet by 12 feet by 5 feet in depth. An estimated 30 cubic yards of petroleum hydrocarbon contaminated soil were excavated from the release location. AES personnel collected 5-point composite samples from each wall and the base (SC-1 through SC-5).

2.0 BGT Soil Sampling

On March 16, 2012, AES personnel conducted field screening and collected a 5-point composite soil sample from below the BGT footprint. Soil sample BGT SC-1 was collected from approximately 6 inches below the former BGT for field screening of VOCs and TPH. Because of elevated VOC and TPH concentrations, a release was confirmed.

2.1 Soil Field Screening

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

The soil sample was also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.1.3 Chlorides

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 Soil Field Screening Results

Field screening for VOCs (via OVM) concentrations were reported at 946 ppm, and the field TPH concentration was 17,200 mg/kg. Field chlorides were reported at 60 mg/kg. Field screening VOC and TPH results are summarized in Table 1 and on Figure 2. The AES field screening report is attached.

Table 1. Soil Field Screening OVM, TPH, and Chloride Results
Canyon Largo #6 BGT Closure, March 16, 2012

Sample ID	*Date Sampled*	*Depth below BGT (ft)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*	*Field Chlorides (mg/kg)*
NMOCD Action Level (NMAC 19.15.17.13E)			*--*	***100***	***250***
BGT SC-1	3/16/12	Composite	946	**17,200**	60

3.0 Release Assessment Soil Sampling

On March 16, 2012, AES personnel conducted an initial release assessment from seven test holes located near the BGT footprint. Soil samples were field screened for VOCs and TPH to determine the extent of contamination associated with the BGT release. Soil sample locations are included on Figure 3.

Based on results from the assessment sampling on March 16, 2012, it was determined that excavation of the BGT release would occur along the base and west side of the former BGT location. On March 19, 2012, AES personnel conducted field screening and collected composite soil samples (SC-1 through SC-5) from the walls and base of the excavation in order to confirm the extents of the excavation and removal of petroleum hydrocarbon contaminated soils. Soil samples were field screened for VOCs and TPH. Because of elevated VOC concentrations, four 5-point composite samples (SC-1, SC-3, SC-4, and SC-5) were submitted for laboratory analysis. Soil sample locations are included on Figure 3.

3.1 Soil Field Screening

3.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a PID-OVM. Before beginning field screening, the PID-OVM was first calibrated with 100 ppm isobutylene gas.

3.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

3.2 Soil Laboratory Analyses

Four confirmation soil samples (SC-1, SC-3, SC-4, and SC-5) collected for laboratory analysis on March 19, 2012, 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 Hall. The soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021.

3.3 Soil Field and Laboratory Analytical Results

On March 16, 2012, field screening for VOCs via OVM showed readings ranging from 128 ppm in TH-7 up to 616 ppm in TH-2. Field TPH concentrations ranged from 1,260 mg/kg in TH-4 up to 11,700 mg/kg in TH-3. Field screening VOC and TPH results are summarized in Table 2 and on Figure 3. The AES field screening report is attached.

Table 2. Soil Field Screening OVM and TPH Results
Canyon Largo #6 Release Assessment, March 16, 2012

Sample ID	Date Sampled	Sample Location	Sample Depth below grade (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)
NMOCD Action Level*				***100***	***5,000***
TH-1	3/16/12	Base	0.6	**196**	**11,400**
TH-2	3/16/12	South	0.7	**616**	4,120
TH-3	3/16/12	West	1.3	**208**	**11,700**
TH-4	3/16/12	North	2.5	**296**	1,260
TH-5	3/16/12	East	1.3	**306**	4,310
TH-6	3/16/12	North	2.7	**188**	NA
TH-7	3/16/12	South	1.3	**128**	NA

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

On March 19, 2012, after additional excavation work had been completed, field screening of soil confirmation samples for VOCs via OVM showed readings ranging from 74.6 ppm in SC-3 up to 476 ppm in SC-5. Field TPH concentrations were reported at 787 mg/kg in SC-2 (west wall) and 1,770 mg/kg in SC-1 (base). Field screening VOC and TPH results are summarized in Table 3 and on Figure 3. The AES field screening report is attached.

Table 3. Soil Field Screening OVM and TPH Results
Canyon Largo #6 Release Assessment, March 19, 2012

Sample ID	Date Sampled	Sample Location	VOCs OVM Reading (ppm)	Field TPH (mg/kg)
NMOCD Action Level*			***100***	***5,000***
SC-1	3/19/12	Base	**297**	1,770
SC-2	3/19/12	West	86.9	787
SC-3	3/19/12	North	74.6	NA
SC-4	3/19/12	East	**251**	NA
SC-5	3/19/12	South	**476**	NA

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

Laboratory analytical results for SC-1, and SC-3 through SC-5 showed that the benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. Laboratory analytical results are summarized in Table 4 and included on Figure 3. Laboratory analytical reports are attached.

Table 4. Soil Laboratory Analytical Results,
Canyon Largo #6 Release Assessment, March 19, 2012

Sample ID	Date	Sample Location	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOCD Action Level*			10	50	5,000	
SC-1	3/19/12	Base	<0.050	0.55	NA	NA
SC-3	3/19/12	North	<0.050	0.48	NA	NA
SC-4	3/19/12	East	<0.050	1.15	NA	NA
SC-5	3/19/12	South	<0.050	0.83	NA	NA

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

4.0 Conclusions and Recommendations

4.1 BGT Closure

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations on March 16, 2012, for BGT SC-1 were above the applicable NMOCD action level with a concentration of 17,200 mg/kg. Based on field screening results on March 16, 2012, a release was confirmed at the Canyon Largo #6.

4.2 Release Assessment

A release was confirmed during the BGT closure on March 16, 2012, and the same day, an initial release assessment was completed. During this assessment, field screening showed that concentrations along the north, south, and east walls were reported below the NMOCD action levels of 5,000 mg/kg for TPH. However, field screening for VOCs exceeded the NMOCD action level in all test holes, with the highest concentrations reported in TH-2 (616 ppm).

On March 19, 2012, additional excavation was completed along the base and west walls of the BGT footprint. Following release excavation, field TPH concentrations were reported below the NMOCD action level along the west wall and base of the excavation. However, field VOCs were reported above the NMOCD action level in SC-1, SC-4, and SC-

5. Soil laboratory analytical results showed that benzene and BTEX concentrations were below the NMOCD action levels for S-1, S-3, S-4, and S-5. Based on confirmation field screening and laboratory analytical results from March 16 and 19, 2012, no further work is recommended.

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

Sincerely,

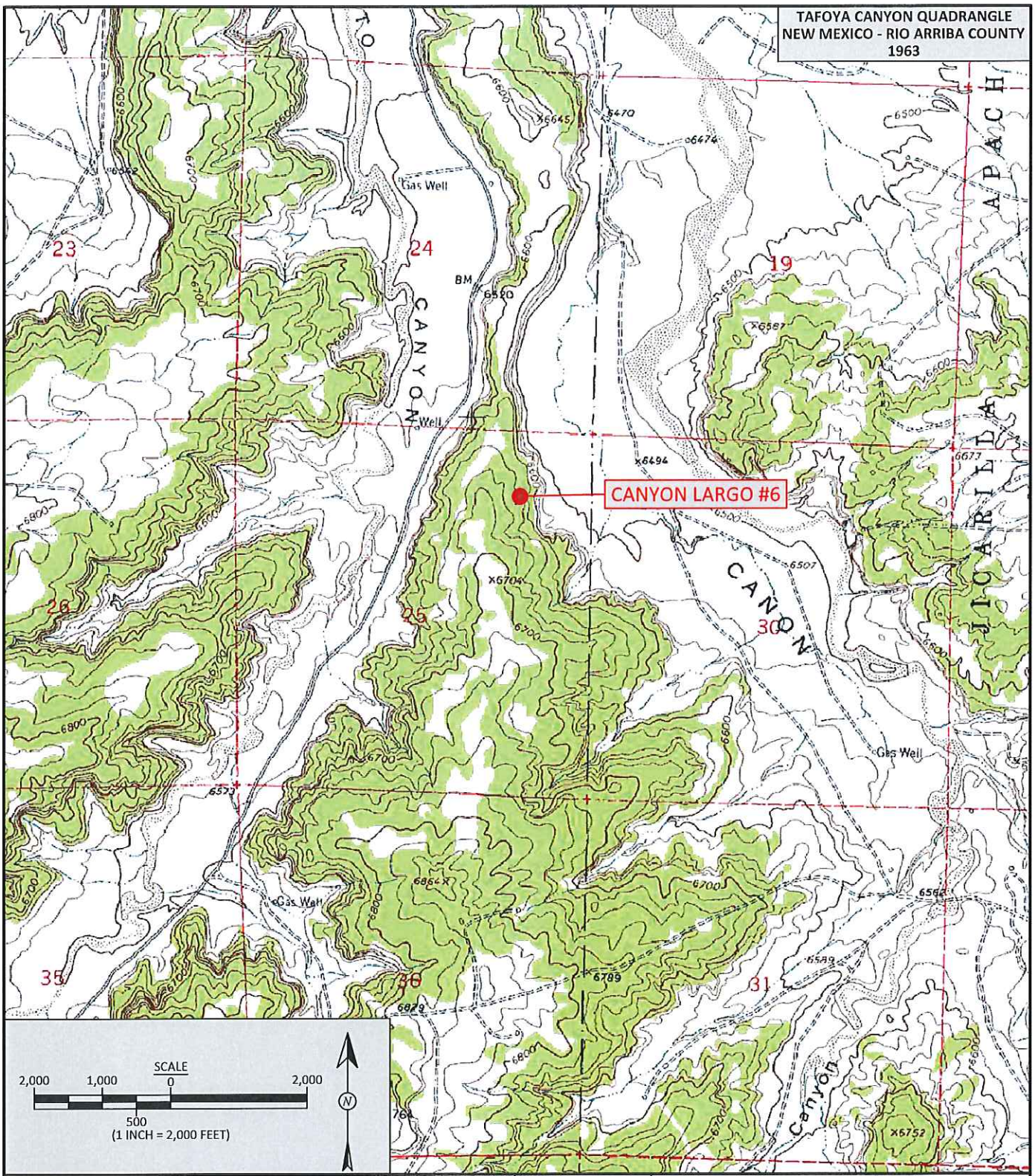
Deborah Watson, Geologist
Project Manager

Elizabeth McNally, P.E.

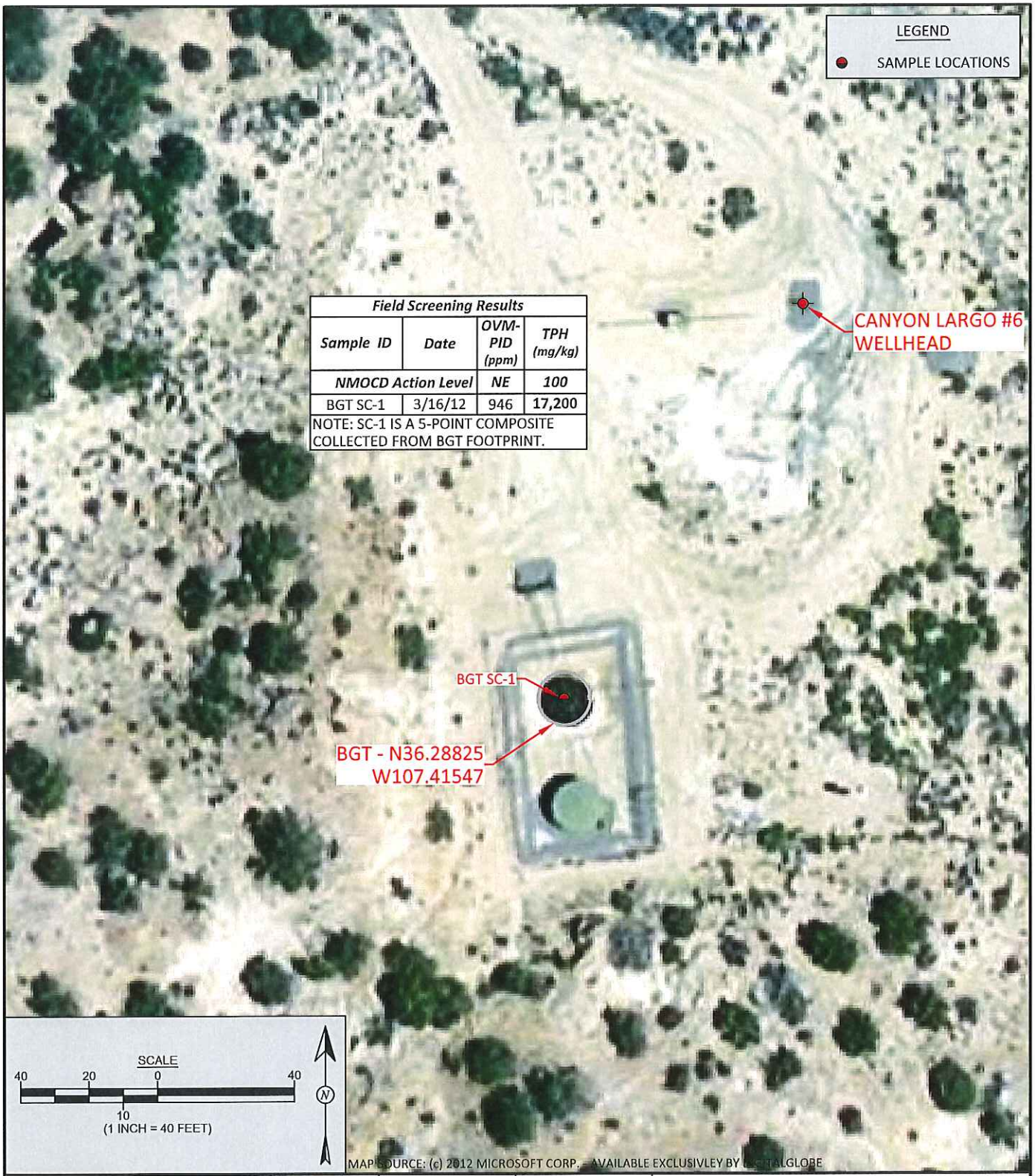
Attachments:

Figure 1. Topographic Site Location Map
Figure 2. General Site Map, March 2012
Figure 3. Release Assessment and Excavation Details
AES Field Screening Reports 031612 and 031912
Hall Analytical Reports 1203687

S:\Animas 2000\2012 Projects\Conoco Phillips\Canyon Largo #6\Reports\Canyon Largo #6 BGT Closure Report 041712.docx



AES Animas Environmental Services, LLC	DRAWN BY: C. Lameman	DATE DRAWN: March 19, 2012	**FIGURE 1**
	REVISIONS BY: C. Lameman	DATE REVISED: March 19, 2012	**TOPOGRAPHIC SITE LOCATION MAP** ConocoPhillips CANYON LARGO #6 RIO ARRIBA COUNTY, NEW MEXICO NE¼, NE¼, SECTION 25, T24N, R6W N36.28856, W107.41522
	CHECKED BY: D. Watson	DATE CHECKED: March 19, 2012	
	APPROVED BY: E. McNally	DATE APPROVED: April 17, 2012	



Field Screening Results			
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)
NMOCD Action Level		NE	100
BGT SC-1	3/16/12	946	17,200
NOTE: SC-1 IS A 5-POINT COMPOSITE COLLECTED FROM BGT FOOTPRINT.			

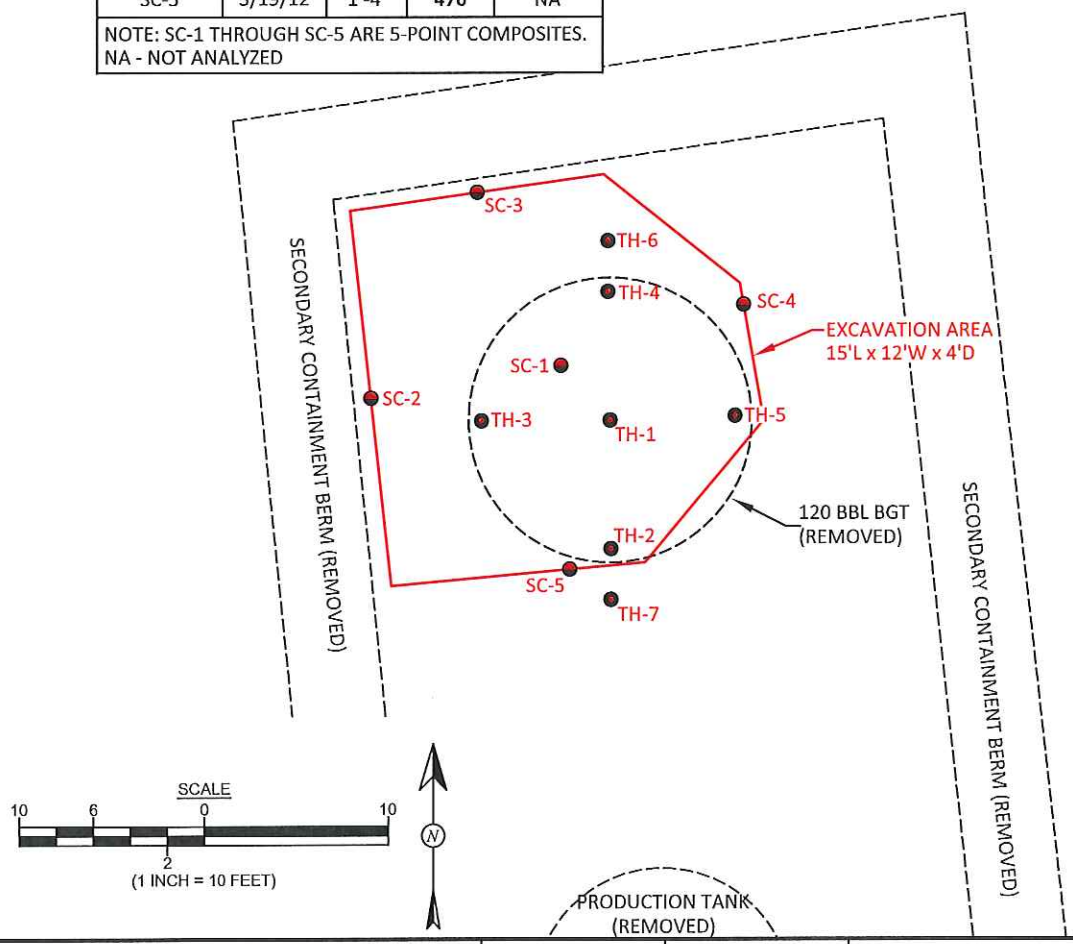
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: March 19, 2012	**FIGURE 2**
REVISIONS BY: C. Lameman	DATE REVISED: April 10, 2012	**GENERAL SITE MAP** **BELOW GRADE TANK CLOSURE** **MARCH 2012**
CHECKED BY: D. Watson	DATE CHECKED: April 10, 2012	ConocoPhillips CANYON LARGO #6
APPROVED BY: E. McNally	DATE APPROVED: April 17, 2012	RIO ARRIBA COUNTY, NEW MEXICO NE¼, NE¼, SECTION 25, T24N, R6W N36.28856, W107.41522

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD Action Level			100	5,000
TH-1	3/16/12	0.6'	**196**	**11,400**
TH-2	3/16/12	0.7'	**616**	4,120
TH-3	3/16/12	1.3'	**208**	**11,700**
TH-4	3/16/12	2.5'	**296**	1,260
TH-5	3/16/12	1.3'	**306**	4,310
TH-6	3/16/12	2.7'	**188**	NA
TH-7	3/16/12	1.3'	**128**	NA
SC-1	3/19/12	4'	**297**	1,770
SC-2	3/19/12	1'-4'	86.9	787
SC-3	3/19/12	1'-4'	74.6	NA
SC-4	3/19/12	1'-4'	**251**	NA
SC-5	3/19/12	1'-4'	**476**	NA
NOTE: SC-1 THROUGH SC-5 ARE 5-POINT COMPOSITES. NA - NOT ANALYZED				

Laboratory Analytical Results			
Sample ID	Date	Benzene (mg/kg)	BTEX (mg/kg)
NMOCD Action Level		10	50
SC-1	3/19/12	<0.050	0.55
SC-3	3/19/12	<0.050	0.48
SC-4	3/19/12	<0.050	1.15
SC-5	3/19/12	<0.050	0.83
NOTE: ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B.			

LEGEND
- TEST HOLE LOCATIONS
- SAMPLE LOCATIONS



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: April 5, 2012
REVISIONS BY: C. Lameman	DATE REVISED: April 10, 2012
CHECKED BY: D. Watson	DATE CHECKED: April 10, 2012
APPROVED BY: E. McNally	DATE APPROVED: April 17, 2012

FIGURE 3

RELEASE ASSESSMENT AND EXCAVATION DETAILS
ConocoPhillips
CANYON LARGO #6
RIO ARRIBA COUNTY, NEW MEXICO
NE¼, NE¼, SECTION 25, T24N, R6W
N36.28856, W107.41522

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 #6

Date: 3/16/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Depth (ft)	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
BGT SC-1	3/16/2012	15:16	Composite	946.0	60	15:30	17,200	200	10	DAW
TH-1	3/16/2012	13:40	0.6	196	NA	17:10	11,400	200	10	DAW
TH-2	3/16/2012	13:48	0.7	616	NA	17:20	4,120	200	10	DAW
TH-3	3/16/2012	13:55	1.3	208	NA	17:29	11,700	200	10	DAW
TH-4	3/16/2012	14:02	2.5	296	NA	17:32	1,260	20.0	1	DAW
TH-5	3/16/2012	14:05	1.3	306	NA	17:38	4,310	200	10	DAW
TH-6	3/16/2012	14:08	2.7	188	NA	*Not Analyzed for TPH*				
TH-7	3/16/2012	17:10	1.3	128	NA	*Not Analyzed for TPH*				

PQL Practical Quantitation Limit
ND Not Detected at the Reporting Limit
DF Dilution Factor
NA Not Analyzed
Total Petroleum Hydrocarbons - USEPA 418.1
Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

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

Analyst: Deborah Watson

Report Finalized: 03/20/12

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

Date: 3/19/2012

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
SC-1	3/19/2012	14:15	297	14:05	1,770	20.0	1	DAW
SC-2	3/19/2012	13:15	86.9	14:45	787	20.0	1	DAW
SC-3	3/19/2012	14:35	74.6	*Not Analyzed for TPH*				
SC-4	3/19/2012	14:40	251	*Not Analyzed for TPH*				
SC-5	3/19/2012	14:45	476	*Not Analyzed for TPH*				

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 Watson

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 22, 2012

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

RE: Canyon Largo 6 OrderNo.: 1203687

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/20/2012 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.

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 **1203687**
Date Reported: **3/22/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-1
Project: Canyon Largo 6
Collection Date: 3/19/2012 2:15:00 PM
Lab ID: 1203687-001
Matrix: MEOH (SOIL)
Received Date: 3/20/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	3/20/2012 5:58:16 PM
Toluene	ND	0.050		mg/Kg	1	3/20/2012 5:58:16 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2012 5:58:16 PM
Xylenes, Total	0.40	0.10		mg/Kg	1	3/20/2012 5:58:16 PM
Surr: 4-Bromofluorobenzene	137	80-120	S	%REC	1	3/20/2012 5:58:16 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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-3
Project: Canyon Largo 6
Collection Date: 3/19/2012 2:35:00 PM
Lab ID: 1203687-002
Matrix: MEOH (SOIL)
Received Date: 3/20/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	3/20/2012 2:26:49 PM
Toluene	ND	0.050		mg/Kg	1	3/20/2012 2:26:49 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2012 2:26:49 PM
Xylenes, Total	0.33	0.10		mg/Kg	1	3/20/2012 2:26:49 PM
Surr: 4-Bromofluorobenzene	118	80-120		%REC	1	3/20/2012 2:26:49 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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-4
Project: Canyon Largo 6
Collection Date: 3/19/2012 2:40:00 PM
Lab ID: 1203687-003
Matrix: MEOH (SOIL)
Received Date: 3/20/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	3/20/2012 2:57:10 PM
Toluene	ND	0.050		mg/Kg	1	3/20/2012 2:57:10 PM
Ethylbenzene	0.094	0.050		mg/Kg	1	3/20/2012 2:57:10 PM
Xylenes, Total	0.96	0.10		mg/Kg	1	3/20/2012 2:57:10 PM
Surr: 4-Bromofluorobenzene	132	80-120	S	%REC	1	3/20/2012 2:57:10 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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-5
Project: Canyon Largo 6
Collection Date: 3/19/2012 2:45:00 PM
Lab ID: 1203687-004
Matrix: MEOH (SOIL)
Received Date: 3/20/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	3/20/2012 3:27:23 PM
Toluene	ND	0.050		mg/Kg	1	3/20/2012 3:27:23 PM
Ethylbenzene	0.33	0.050		mg/Kg	1	3/20/2012 3:27:23 PM
Xylenes, Total	2.4	0.10		mg/Kg	1	3/20/2012 3:27:23 PM
Surr: 4-Bromofluorobenzene	128	80-120	S	%REC	1	3/20/2012 3:27:23 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
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
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203687**

22-Mar-12

Client: Animas Environmental Services

Project: Canyon Largo 6

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **R1568** RunNo: **1568**

Prep Date: Analysis Date: **3/20/2012** SeqNo: **44011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	80	120			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **R1568** RunNo: **1568**

Prep Date: Analysis Date: **3/20/2012** SeqNo: **44012** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	83.3	107			
Toluene	1.1	0.050	1.000	0	113	74.3	115			
Ethylbenzene	1.1	0.050	1.000	0	113	80.9	122			
Xylenes, Total	3.4	0.10	3.000	0	113	85.2	123			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **1203687-001A MS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **SC-1** Batch ID: **R1568** RunNo: **1568**

Prep Date: Analysis Date: **3/20/2012** SeqNo: **44527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.050	0.7342	0	102	67.2	113			
Toluene	0.83	0.050	0.7342	0.03825	108	62.1	116			
Ethylbenzene	0.94	0.050	0.7342	0.03561	123	67.9	127			
Xylenes, Total	3.2	0.10	2.203	0.3965	125	60.6	134			
Surr: 4-Bromofluorobenzene	1.1		0.7342		144	80	120			S

Sample ID **1203687-001A MSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **SC-1** Batch ID: **R1568** RunNo: **1568**

Prep Date: Analysis Date: **3/20/2012** SeqNo: **44529** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.050	0.7342	0	97.7	67.2	113	4.05	14.3	
Toluene	0.79	0.050	0.7342	0.03825	102	62.1	116	5.39	15.9	
Ethylbenzene	0.89	0.050	0.7342	0.03561	116	67.9	127	5.24	14.4	
Xylenes, Total	3.0	0.10	2.203	0.3965	120	60.6	134	3.54	12.6	
Surr: 4-Bromofluorobenzene	1.1		0.7342		146	80	120	0	0	S

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

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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:	1203687
Received by/date:	AG 03/20/12		
Logged By:	**Michelle Garcia**	3/20/2012 9:55:00 AM	Michelle Garcia
Completed By:	**Michelle Garcia**	3/20/2012 10:04:48 AM	Michelle Garcia
Reviewed By:		3/30/12	

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	1.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: Canyon Largo 6

Project #:

Project Manager: R. Kennemer

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	~~Time~~ Matrix	~~Matrix~~ Time	Sample Request ID wj31	Container Type and #	Preservative Type	HEAL No 1203687	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3-19-12	Soil	1415	SC-1	4oz glass	—	-001	X															
		1330	SC-2			DUP	X															
		1435	SC-3			-002	X															
		1440	SC-4			-003	X															
		1445	SC-5			-004	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
3-19-12	1744	Dennis Watson	Christine Walters	3/19/12	1744
3/19/12	1758	Christine Walters		03/20/12	0955

Remarks: Bill to COP
Lead Mick Ferrari
network# 10319665
User ID Benale
sup. Doyle Clark
AFE Code T110

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.