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

# 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.

1220 S. St. Francis	s Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	to the appropriate NMOCD District Office.
12557		Pit, Below-Grade Tank, or	OCD Received
45-10462	Proposed Alterna	ative Method Permit or Closur	e Plan Application 1-15-15
	ype of action: ☐ Below gra☐ Permit of ☐ Closure of ☐ Modificati		native method
	Instructions: Please submit one a	pplication (Form C-144) per individual pit, be	clow-grade tank or alternative request
environment. Nor	that approval of this request does not rel does approval relieve the operator of its	lieve the operator of liability should operations re- s responsibility to comply with any other applicab	sult in pollution of surface water, ground water or the de governmental authority's rules, regulations or ordinances.
1. Operator: Burl	lington Resources	OGRID #: 14538	
		87499	
		OCD Permit Number:	
U/L or Qtr/Qtr	_M (SWSW) Section _21_	Township 31N Range 10W Coun	ty: <u>San Juan</u>
Center of Propo	sed Design: Latitude 36.87922000	<u>N</u> Longitude <u>-107.89224000 <u>W</u></u>	NAD: ⊠1927 □ 1983
	☐ Federal ☐ State ☐ Private ☐ T	with all Trust on Indian Allatment	ST NAD83
			968 W107.89284
2.			000 11 101.0020 1
	ection F, G or J of 19.15.17.11 NMAC	C	
processing and the second second second	Drilling Workover	_	
		A Multi-Well Fluid Management	
		mil	Other
String-Reinf			
Liner Seams:	Welded	Volume:	bbl Dimensions: Lx Wx D
3.  ⊠ Below-grad	le tank: Subsection I of 19.15.17.11	NMAC	
	120 bbl Type of		
	ion material: Metal		<del></del>
		Visible sidewalls, liner, 6-inch lift and automa	tic overflow shut-off
		s only  Other	
Liner type: Thi	ickness <u>45</u> mil	☐ HDPE ☐ PVC ☒ OtherLLDPE	1
4.			
Alternative	Method:		
Submittal of an	exception request is required. Excep	ptions must be submitted to the Santa Fe Envir	onmental Bureau office for consideration of approval.
5.			
2 27		lies to permanent pits, temporary pits, and belo	
Chain link, institution or cl		ed wire at top (Required if located within 1000	feet of a permanent residence, school, hospital,

☐ Alternate. Please specify

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

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, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	hospital,
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)	
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	
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 accept material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	otable source
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
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ 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	☐ Yes ☐ No
application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the do 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 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC	O NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
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 do 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 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:	

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 a 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 <sub>2</sub> S, 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	ocuments are				
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 Fl 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	uid Management Pit				
14.					
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a 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	ittached to the				
15.	3				
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P. 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  \[ \sum_{NA} \] \]  Yes \[ \sum_{NA} \]					
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					
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					
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					

- 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						
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					
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 19.15.17.13 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						
17. Operator Application Certification:	N 100					
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and bel	ief.					
Name (Print): Title:						
Signature: Date:	<del></del>					
e-mail address: Telephone:						
18.  OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)						
18.  OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	1/29/14					
18.  OCD Approval: ☐ Permit Application (including closure plan) ☑ Closure Plan (only) ☐ OCD Conditions (see attachment)						
18.  OCD Approval: ☐ Permit Application (including closure plan) ★ Closure Plan (only) ☐ OCD Conditions (see attachment)  OCD Representative Signature: Approval Date:	1/29/14 g the closure report.					
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature:  Title: Environmental Specialist  OCD Permit Number:  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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do no section of the form until an approved closure plan has been obtained and the closure activities have been completed.	1/29/14  g the closure report. t complete this					

report is true, accurate and complete to the best of my knowledge and
ements and conditions specified in the approved closure plan.
Title: Staff Regulatory Technician
Date: <u>12/5/14</u>
Telephone:505-599-4045

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

Lease Name: Lambe 1 API No.: 3004510462

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

#### General Plan:

- 1. BR shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.
- 2. The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.
- 3. BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

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

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

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

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

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

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



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

Components	Tests Method	Limit (mg/kg)	
Benzene	EPA SW-846 8021B or 8260B	0.2	
BTEX	EPA SW-846 8021B or 8260B	50	
TPH	EPA SW-846 418.1	100	
Chlorides	EPA 300.1	250	

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

A release was not determined for the above referenced well.

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

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

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

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

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

The closure process notification to the landowner not found. COPC was not aware that the original notification sent at the time of Permitting was not the only closure notification required.

ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

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

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

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

methods. BLM stipulated seed mixes will used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

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

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

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

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

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



July 24, 2012

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

www.animasenvironmental.com

624 E. Comanche Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3274

RE: Lambe #1 Below Grade Tank Closure Report San Juan 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 at ConocoPhillips (CoP) Lambe #1, located in San Juan County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

#### 1.0 Site Information

#### 1.1 Location

Site Name – Lambe #1
Legal Description - SW¼ SW¼, Section 21, T31N, R10W, San Juan County, New Mexico
Well Latitude/Longitude - N36.87963 and W107.89307, respectively
BGT Latitude/Longitude - N36.87969 and W107.89284, 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 a Cathodic Protection Report dated March 16, 1990, for the Lambe #1 indicated groundwater to be 145 feet below ground surface (bgs). Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells are located within 1,000 feet of the location. Once on site, AES personnel furthered 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 bgs, and the

Ashley Maxwell Lambe #1 BGT Closure Report July 24, 2012 Page 2 of 5

location is not within a well-head protection area. Distance to the nearest surface water, an unnamed ephemeral drainage, is located approximately 200 feet to the west. The site location has been assigned a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

#### 1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on May 24, 2012, and on the same day, Thomas Long of AES mobilized to the location.

AES personnel collected six soil samples from the below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

### 2.0 Soil Sampling

On May 24, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples S-1 through S-5 were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chlorides. Soil sample SC-1 was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

# 2.1 Field Screening

# 2.1.1 Volatile Organic Compounds

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

#### 2.1.2 Total Petroleum Hydrocarbons

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

#### 2.1.3 Chlorides

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

# 2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8260B;
- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B; and
- Chloride per USEPA Method 300.0.

# 2.3 Field and Laboratory Analytical Results

Field screening for VOCs via OVM showed readings ranging from 0.0 ppm (S-2 through S-5) up to 3.2 ppm (S-1). Field TPH concentrations ranged from 61.6 mg/kg in S-4 up to 135 mg/kg in S-5. Field chloride concentrations ranged from less than 20 mg/kg up to 40 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action I		15.17.13E)	gal see	100	250
S-1	05/24/12	0.5	3.2	62.9	40
S-2	05/24/12	0.5	0	62.9	40
S-3	05/24/12	0.5	0	119	40
S-4	05/24/12	0.5	0	61.6	<20
S-5	05/24/12	0.5	0	135	40

Laboratory analytical results showed that the benzene and total BTEX concentrations in SC-1 were less than 0.050 mg/kg and 0.25 mg/kg, respectively. TPH concentrations were reported at less than 5.0 mg/kg GRO and less than 9.9 mg/kg DRO. The laboratory chloride concentration was reported at 39 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results, Lambe #1 BGT Closure, May 2012

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13E)			0.2	50	1	00	250
SC-1	05/24/12	0.5	<0.050	<0.25	<5.0	<9.9	39

NA = not analyzed.

# 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene concentrations in SC-1 were below the laboratory detection limit of 0.050 mg/kg, and total BTEX concentrations were below the NMOCD action level of 50 mg/kg. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in two samples, S-3 (119 mg/kg) and S-5 (135 mg/kg). Laboratory TPH concentrations as GRO/DRO were reported below the NMOCD threshold of 100 mg/kg. Chloride concentrations for all samples were below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, BTEX, TPH, and chlorides, no further work is recommended.

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

Sincerely,

Heather Woods Staff Geologist

Elizabeth McNally, P.E.

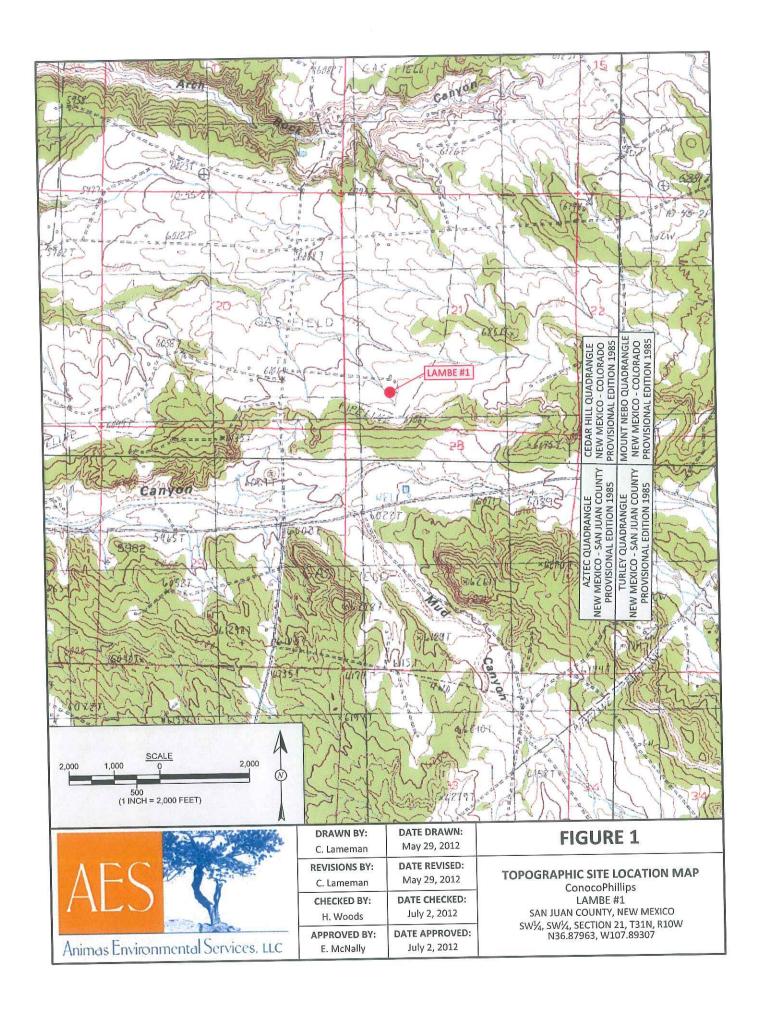
Heather M. Woods

Ashley Maxwell Lambe #1 BGT Closure Report July 24, 2012 Page 5 of 5

#### Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, May 2012 AES Field Screening Report 052412 Hall Analytical Report 1205A99

S:\Animas 2000\2012 Projects\Conoco Phillips\Lambe #1\BGT Assessment Report Lambe #1 072412.docx





SAMPLE LOCATIONS

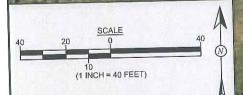
-		Field S	creenin	g Results	
	Sample ID	Date   Fib		TPH (mg/kg)	Chlorides (mg/kg)
	NMOC			100	250
	S-1 5/24/12		3.2	62.9	40
10	S-2	5/24/12	0.0	62.9	40
	S-3	5/24/12	0.0	119	40
W Si	S-4	5/24/12	0.0	61.6	20
ì	S-5	5/24/12	0.0	135	40

		Laborato	ry Analytica	l Results		
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		ION I EVEL 0.2 50	50	100		250
CC 1	5/24/12	<0.050	<0.25	<5.0	<9.9	39
SC-1	5/24/12	<0.050			70.0	1111

NOTE: THE SAMPLE WAS ANALYZED PER EPA METHOD 62005 SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5.



LAMBE #1 WELLHEAD



AP SOURCE: (c) 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL TAKEN: MARCH 14, 2011



Animas Environmental Services, LLC

C. Lameman	May 29, 2012		
REVISIONS BY:	DATE REVISED:		
C. Lameman	May 29, 2012		
CHECKED BY:	DATE CHECKED:		
H. Woods	July 2, 2012		
APPROVED BY:	DATE APPROVED:		
E. McNally	July 2, 2012		

# FIGURE 2

AERIAL SITE MAP BELOW GRADE TANK CLOSURE MAY 2012

ConocoPhillips LAMBE #1 SAN JUAN COUNTY, NEW MEXICO SW¼, SW¼, SECTION 21, T31N, R10W N36.87963, W107.89307

# **AES Field Screening Report**

Client: ConocoPhillips

624 E. Comanche Farmington, NM 87401 505-564-2281

Durango, Colorado 970-403-3274

Animas Environmental Services, LLC

www.animasenvironmental.com

Project Location: Lambe #1

Date: 5/24/2012

Matrix: Soil

_			_	Т	_	Т	_	T		Т		1	
	TPH Analysts	Initials	Ē	2			I		TI		TL		
		DF	κ-	-1	_	-1	-	-1	_	1	_	4	
	I CO FIGE	(mg/kg)	C	20.0	000	70.07	000	70.07	0.00	20.07	000	20.02	
	**************************************	(mg/kg)		62.9	0	67.3	0	TTA	7.5	O.TO	, T	135	
	Field TPH	Analysis		15:30		15:32		15:34	1	15:36	1	15:38	
	Field	Chloride (mg/kg)	00	40		40		40		<20		40	
		MVO (maa)	1	3.2		0.0		0.0		0.0		0.0	
		Sample	Location	North		South		East		West		Center	100 TO 10
	Time of	Sample	Collection	10.52	10.01	10.01	+C.O.	10.56	0	10.58	000	11.00	1
		Collection	Date	C100/10/13	2/54/5015	0,000	5/24/2012	C100/10/1	2/24/2012	171/2012	2/24/2012	C10C/VC/3	2/74/4014
			Sample ID		N-T-S		S-2	C	N-3	C	N-4	L	2.7

Practical Quantitation Limit PQL Not Detected at the Reporting Limit S

Dilution Factor DF

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1 Analyst: Thomas of Large with Silver Nitrate

Field Chloride - Quantab Chloride Titrators or Drop Count Titration





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

May 30, 2012

Ross Kennemer

Animas Environmental Services 624 East Comanche

Farmington, NM 87401

TEL: (505) 486-1776 FAX (505) 324-2022

RE: COP Lambe #1

OrderNo.: 1205A99

#### Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/26/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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

Only

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1205A99

Date Reported: 5/30/2012

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Project: COP Lambe #1

Lab ID: 1205A99-001

Client Sample ID: SC-1

Collection Date: 5/24/2012 11:05:00 AM

Received Date: 5/26/2012

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/29/2012 10:40:49 AM
Surr: DNOP	106	82.1-121	%REC	1	5/29/2012 10:40:49 AM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	39	30	mg/Kg	20	5/29/2012 11:07:09 AM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: BDH
Benzene	ND	0.050	mg/Kg	1	5/29/2012 11:03:37 AM
Toluene	ND	0.050	mg/Kg	1	5/29/2012 11:03:37 AM
Ethylbenzene	ND	0.050	mg/Kg	1	5/29/2012 11:03:37 AM
Xylenes, Total	ND	0.10	mg/Kg	1	5/29/2012 11:03:37 AM
Surr: 1,2-Dichloroethane-d4	84.3	70-130	%REC	1	5/29/2012 11:03:37 AM
Surr: 4-Bromofluorobenzene	89.6	70-130	%REC	1	5/29/2012 11:03:37 AM
Surr: Dibromofluoromethane	85.8	71.7-132	%REC	1	5/29/2012 11:03:37 AM
Surr: Toluene-d8	91.2	70-130	%REC	1	5/29/2012 11:03:37 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/29/2012 11:03:37 AM
Surr: BFB	89.6	70-130	%REC	1	5/29/2012 11:03:37 AM

Matrix: SOIL

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

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

Client:

Animas Environmental Services

Project:

COP Lambe #1

Sample ID MB-2130

SampType: MBLK

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

PBS

Batch ID: 2130

RunNo: 3074

Prep Date: 5/29/2012 Analysis Date: 5/29/2012

SeqNo: 84997

Units: mg/Kg

HighLimit

**RPDLimit** Qual

Analyte Chloride

1.5

Result

Result

31

Sample ID LCS-2130

SampType: LCS Client ID: LCSS

Batch ID: 2130

RunNo: 3074

SPK value SPK Ref Val

15.00

15.00

15.00

SPK value SPK Ref Val %REC LowLimit

Prep Date: Analyte

Chloride

5/29/2012

Analysis Date: 5/29/2012

PQL

1.5

SeqNo: 84998 %REC

97.5

Units: mg/Kg

HighLimit 110 Qual

%RPD

%RPD

%RPD

**RPDLimit** 

Sample ID 1205A98-001AMS

BatchQC

SampType: MS

Batch ID: 2130

TestCode: EPA Method 300.0: Anions

RunNo: 3074

Units: mg/Kg

118

Analyte

Client ID:

Prep Date: 5/29/2012

Analysis Date: 5/29/2012

SeqNo: 85000 SPK value SPK Ref Val %REC LowLimit

HighLimit

**RPDLimit** 

Qual

Chloride

30 32

79.6 TestCode: EPA Method 300.0: Anions

SampType: MSD Batch ID: 2130

PQL

RunNo: 3074

74.6

Client ID: Prep Date:

BatchQC 5/29/2012

Sample ID 1205A98-001AMSD

Analysis Date: 5/29/2012

SeqNo: 85001

Units: mg/Kg

Analyte

%REC LowLimit HighLimit

%RPD **RPDLimit** 4.43 20

Qual S

Chloride

SPK value SPK Ref Val PQL 30

20.09

20.09

70.3

74.6

118

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits J

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Η

Not Detected at the Reporting Limit ND

Page 2 of 1

RPD outside accepted recovery limits

Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1205A99

30-May-12

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	IIICIII.

Animas Environmental Services

Project:	COP Lamb	ne #1									
		0 T	MDIV		Tost	Code: ED	A Method 8	3015B: Diesel	Range Or	rganics	
Sample ID		SampType:				unNo: 30		JO TOD. DICSCI	rungo o	3	
Client ID:		Batch ID:				egNo: 84		Units: %REC			- 1
Prep Date:	5/25/2012	Analysis Date:				Ď			%RPD	RPDLimit	Qual
Analyte		Result P		alue :	SPK Ref Val	%REC 111	LowLimit 82.1	HighLimit 121	MKFD	TA DEITHE	Quui
Surr: DNOP		11.		3.00			(SAMAZIA)			-	
Sample ID	LCS-2116	SampType	LCS					8015B: Diesel	Range O	rganics	
Client ID:	LCSS	Batch ID	2116			unNo: 30					
Prep Date:	5/25/2012	Analysis Date	5/29/2012	2	S	SeqNo: 84	1500	Units: %REC			
Analyte		Result P	QL SPK v	alue	SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.7	5	.000		94.3	82.1	121			
Sample ID	MB-2112	SampType	: MBLK		Tes	tCode: EF	PA Method	8015B: Diesel	Range O	rganics	
Client ID:		Batch ID	: 2112		Б	RunNo: 30	051				
1 155 E C	5/25/2012	Analysis Date	: 5/29/201	2	5	SeqNo: 8	4501	Units: %REC			
Analyte		Result F	QL SPK v	/alue	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOF		11		0.00		109	82.1	121			
0 1 10	1.00.0440	SampType	a. I.Cs		Tes	tCode: El	PA Method	8015B: Diese	Range C	Organics	
	LCS-2112	Batch IE				RunNo: 3					
Client ID:		Analysis Date		2		SeqNo: 8		Units: %REC	;		
Prep Date	5/25/2012	Fig.						HighLimit	%RPD	RPDLimit	Qual
Analyte		Result I		value 5.000	SPK Ref Val	96.4	82.1	121	701 KI D	THE DELINIT	
Surr: DNO		4.0		5,000					LD		
Sample IE	1205A10-001AMS	SampTyp	e: MS					8015B: Diese	i Range (	organics	
Client ID:	BatchQC		D: 2112			RunNo: 3		11.11. 0/DE/			
Prep Date	5/25/2012	Analysis Dat	e: <b>5/29/20</b> 1	2		SeqNo: 8	84661	Units: %RE0			-
Analyte		Result			SPK Ref Val				%RPD	RPDLimit	Qual
Surr: DNO	P	4.6		4.878		94.2	82.1	121			
Sample II	1205A10-001AMS	D SampTyp	e: MSD		Te	stCode: E	PA Method	1 8015B: Diese	Range	Organics	
Client ID:			D: 2112			RunNo: 3	3051				
Prep Date	: 5/25/2012	Analysis Dat	e: 5/29/20	12		SeqNo: 8	84744	Units: %RE	С		
Analyte		Result	PQL SPK	value	SPK Ref Va	I %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNC	P	4.8	10 1255 OF A 1000	4.854		98.5	82.1	121	0	0	
Commis	NID 2420	SamnTvi	oe: MBLK		Te	stCode: I	EPA Metho	d 8015B: Dies	el Range	Organics	
	PBS		D: 2129			RunNo:				0.000	
Client ID:		Analysis Da		12		SegNo:		Units: mg/k	(g		
Prep Dat	e: 5/29/2012				CDV Dof Vo				%RPD	RPDLimit	Qual
Analyte Dissal Band	o Organico (DDO)	Result ND	PQL SPK	value	SPK Ref Va	II /0REC	LOWLIIII	riightiint	7011111		10 East 500
Diesel Rang	e Organics (DRO)	ND	10								

\*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits J

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

Reporting Detection Limit

Page 3 of 1

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

01	iamt.	
	lent.	

Animas Environmental Services

Project:	COP Lamb	ne #1									
Sample ID	MB-2129	SampType	: MBLK		Test	Code: EP	A Method 8	015B: Diese	l Range Or	ganics	
Client ID:	PBS	Batch ID:	2129		R	unNo: 30	51				
Prep Date:	5/29/2012	Analysis Date:	5/29/2012		S	eqNo: 84	746	Units: mg/K	9		
Analyte		Result P	QL SPK val	ue S	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		11	10.	.00		105	82.1	121			
Sample ID	LCS-2129	SampType	: LCS		Test	Code: EF	A Method	3015B: Diese	I Range O	rganics	
Client ID:		Batch ID	: 2129		R	unNo: 30	)51				
		Analysis Date	5/29/2012		S	eqNo: 84	1867	Units: mg/K	g		
Analyte		Result F	QL SPK va	lue (	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	38	07070	.00	0	76.4	52.6	130			
Surr: DNOF		4.6	5.0	000		91.2	82.1	121			
Sample ID	1205A59-001AMS	SampType	e: MS		Tes	tCode: El	PA Method	8015B: Diese	el Range O	rganics	1
1990000	BatchQC	Batch ID	2116		F	RunNo: 3	064				1
Prep Date	5/25/2012	Analysis Date	e: 5/29/2012		5	SeqNo: 8	5124	Units: %RE	С		
Analyte		Result F	PQL SPK va	alue	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNO	)	4.5	5.	005		90.2	82.1	121			
Sample II	1205A59-001AMS	D SampTyp	e: MSD		Tes	tCode: E	PA Method	8015B: Dies	el Range C	Organics	
Client ID:			D: <b>2116</b>		F	RunNo: 3	064				
	: 5/25/2012	Analysis Dat	e: <b>5/29/2012</b>		;	SeqNo: 8	5125	Units: %RE	C		
	to 1818-11-11				SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Surr: DNO	P	5.3		.025		105	82.1	121	0	0	
Cample	MB-2136	SamnTvr	e: MBLK		Tes	stCode: E	PA Method	8015B: Dies	el Range (	Organics	
Client ID:			D: 2136			RunNo: \$					
	e: 5/29/2012		te: 5/30/2012	2		SeqNo: 8	35154	Units: %RI	EC		
	c. 3/23/2012				SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Analyte Surr: DNC	)P	Result 11		0.00	Of Terror van	106		121			
***************************************		O-man Tur	-0:100		Te	stCode: I	PA Method	1 8015B: Dies	sel Range	Organics	
	D LCS-2136	SampTy <sub> </sub>	D: 2136		16	RunNo:				erous <del>T</del> emperat (1901)	
Client ID:			te: 5/30/201	2		SeqNo:		Units: %R	EC		
	e: <b>5/29/2012</b>				CDV Dof Vo	•X			%RPD	RPDLimit	Qual
Analyte Surr: DN	)P	Result 4.6		7.000	SPK Ref Va	91.9			20131	A. 22 SARTISTANIA	180-70-0-3500
								4 0045D: Dia	eal Ranga	Organics	
Sample	D 1205A68-001AM		후 10년 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1		Te			d 8015B: Die	sei Nange	O I yannoo	
Client ID	BatchQC		ID: 2136	•		RunNo:		Units: %R	EC:		
Prep Dat	e: 5/29/2012	Analysis Da	ite: 5/30/201			SeqNo:				DDDI imit	Qual
Analyte		Result	PQL SPK	value	SPK Ref Va	I %REC	LowLimi	t HighLimit	%RPD	RPDLimit	Qual

\*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits J

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

Page 4 of 1

Not Detected at the Reporting Limit ND

Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

Client:

Animas Environmental Services

Project:

COP Lambe #1

Sample ID 1205A68-001AMS

SampType: MS

TestCode: EPA Method 8015B: Diesel Range Organics

Client ID: BatchQC

Batch ID: 2136

PQL

RunNo: 3082

Prep Date: 5/29/2012

Analysis Date: 5/30/2012

SegNo: 85232

Units: %REC

121

Analyte

Result

SPK value SPK Ref Val %REC

LowLimit 82.1 96.7

%RPD HighLimit

**RPDLimit** 

Qual

Qual

Surr: DNOP

4.7

4.912

TestCode: EPA Method 8015B: Diesel Range Organics

Client ID: BatchQC

Sample ID 1205A68-001AMSD

SampType: MSD Batch ID: 2136

RunNo: 3082

Prep Date:

Analysis Date: 5/30/2012 5/29/2012

SeqNo: 85347

Units: %REC

Analyte

PQL Result

SPK value SPK Ref Val 4.907

%REC LowLimit 97.6

%RPD HighLimit

**RPDLimit** 

Surr: DNOP

4.8

82.1

#### Qualifiers:

R

\*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits RPD outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

Reporting Detection Limit

Page 5 of 1

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

Client:

Animas Environmental Services

Project: COP La	mbe #1									
Sample ID 5mL rb	SampTy	pe: MB	LK	Test	Code: EP	A Method	8260B: Volati	iles Short	List	
Client ID: PBS	Batch	ID: R30	)72	R	unNo: 30	72				
Prep Date:	Analysis Da	ate: 5/2	29/2012	S	eqNo: 84	877	Units: mg/K	g		
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			_ 0 0	252	100			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.7	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.7	71.7	132			
Surr: Toluene-d8	0.45		0.5000		90.9	70	130			
Sample ID 100ng Ics	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8260B: Volat	iles Short	List	
Client ID: LCSS	Batch	ID: R3	072	E	RunNo: 30	072				
Prep Date:	Analysis D	ate: 5/	29/2012	8	SeqNo: 84	4878	Units: mg/K	(g		
Analyte	Result	PQL	EASTER TOTAL CONTRACTOR	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	103	70.7	123			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.3	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.4	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.3	71.7	132			
Surr: Toluene-d8	0.43		0.5000		85.9	70	130			
Sample ID mb-2131	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Vola	tiles Shor	t List	
Client ID: PBS	Batch	n ID: 21	31	F	RunNo: 3	072				
Prep Date: 5/25/2012	Analysis D	ate: 5	/29/2012	;	SeqNo: 8	5197	Units: %RE	C		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.7	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.2	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.4	71.7	132			
Surr: Toluene-d8	0.47		0.5000		95.0	70	130			
Sample ID Ics-2131	SampT	ype: LC	CS	Tes	stCode: E	PA Method	l 8260B: Vola	tiles Shor	t List	
Client ID: LCSS	Batcl	h ID: 21	131		RunNo: 3	3072				
Prep Date: 5/25/2012	Analysis [	Date: 5	/29/2012		SeqNo: 8	5198	Units: %RE	EC		
Analyte	Result	PQL	SPK value	SPK Ref Val				%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.0	70				
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.7	70				
Surr: Dibromofluoromethane	0.45		0.5000		89.6	71.7				
Surr: Toluene-d8	0.45		0.5000		89.6	70	130			

\*/X Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

RL Reporting Detection Limit

Page 6 of 1

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

Client:

Animas Environmental Services

Project:

COP Lambe #1

Sample ID 1205a88-001ams	SampT	ype: MS	3	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: BatchQC	Batch	Batch ID: 2131			unNo: 30	072							
Prep Date: 5/25/2012	ep Date: 5/25/2012 Analysis Date: 5/29/2012				SeqNo: 85201 Units				: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: 1,2-Dichloroethane-d4	4.7		5.171		91.3	70	130						
Surr: 4-Bromofluorobenzene	5.4		5.171		105	70	130						
Surr: Dibromofluoromethane	4.8		5.171		93.6	71.7	132						
Surr: Toluene-d8	4.9		5.171		94.1	70	130						

Sample ID 1205a88-001ams	mple ID 1205a88-001amsd SampType: MSD			TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: BatchQC	ient ID: BatchQC Batch ID: 2131		31	F	RunNo: 3072						
Prep Date: 5/25/2012	Analysis D	ate: 5/	/29/2012	5	SeqNo: 8	5202	Units: %RE	С			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	4.9		5.274		92.7	70	130	0	0		
Surr: 4-Bromofluorobenzene	5.1		5.274		96.8	70	130	0	0		
Surr: Dibromofluoromethane	4.2		5.274		79.5	71.7	132	0	0		
Surr: Toluene-d8	4.9		5.274		93.6	70	130	0	0		

#### 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

Page 7 of 1

RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1205A99

30-May-12

Client:

Animas Environmental Services

450

Project:

COP Lambe #1

rroject: COI Lan	100 #1									
Sample ID 5mL rb	SampTyp	oe: MB	LK	Test	Code: EF	PA Method	8015B Mod:	Gasoline I	Range	
Client ID: PBS	Batch I	D: R30	072	R	unNo: 30	072				
Prep Date:	Analysis Da	te: <i>5/1</i>	29/2012	S	eqNo: 8	4881	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.7	70	130			
Sample ID 2.5gro Ics	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8015B Mod:	Gasoline	Range	
Client ID: LCSS	Batch	ID: R3	072	F	RunNo: 3	072				
Prep Date:	Analysis Da	te: 5/	29/2012	5	SeqNo: 8	4882	Units: mg/M	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	85	115			
Surr: BFB	470		500.0		93.6	70	130			
Sample ID 1205a99-001ams	SampTy	rpe: MS	3	Tes	tCode: E	PA Method	8015B Mod:	Gasoline	Range	
Client ID: SC-1	Batch	ID: R3	3072	F	RunNo: 3	072				
Prep Date:	Analysis Da	ate: 5/	/29/2012	;	SeqNo: 8	5203	Units: mg/l	<b>≺</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	5.0	25.00	0	130	70	130			
					1000000000000	-	400			

Sample ID	1205a99-001amsd	SampT	ype: MS	D	Test	Code: El	PA Method	8015B Mod:	Gasoline l	Range	
Client ID:	SC-1	Batch	ID: R3	072	R	unNo: 3	072				
Prep Date:		Analysis D	ate: 5/	29/2012	S	eqNo: 8	5204	Units: mg/K	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
The board of the second of the	e Organics (GRO)	28	5.0	25.00	0	113	70	130	13.6	20	
Surr BFB		530		500.0		105	70	130	0	0	

90.0

500.0

#### Qualifiers:

Surr: BFB

\*/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

130

70

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting LimitRL Reporting Detection Limit

Page 8 of 1



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Animas Environmental	Work Order Number: 1205A99
Received by/date: HT 0.5/26//2	<del>jin i</del> yli. Bayya efilendekale a dak
Logged By: Andy Freeman 5/26/2012	and Iha
Completed By: Anne Thorne 5/29/2012	ame Ihm
Reviewed By: 4- 15/29//2	
Chain of Custody	Yes ☐ No ☐ Not Present ☑
1. Were seals intact?	Yes ✓ No □ Not Present □
2. Is Chain of Custody complete?	Courier
3. How was the sample delivered?	Courter
<u>-og In</u>	
4. Coolers are present? (see 19. for cooler specific information)	Yes ☑ No □ NA □
	무슨 가게 있었는데 보고 있는데 얼마나 되었다.
5. Was an attempt made to cool the samples?	Yes 🗹 No 🗆 NA 🗆
	등에 되었다. 그 사람이 하나 이번 모
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 W NA
	Yes ☐ No ☐ No VOA Vials ☑
11. VOA vials have zero headspace?	Yes ☑ No ☐
12. Were any sample containers received broken?	# of preserved
Does paperwork match bottle labels? (Note discrepancies on chain of custody)	for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ✓ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ☑ No ☐ Adjusted?
16. Were all holding times able to be met?	Yes ☑ No □
(If no, notify customer for authorization.)	Checked by:
Special Handling (if applicable)	
17. Was client notified of all discrepancies with this order?	Yes □ No ☑ NA □
Person Notified: Da	nte .
By Whom: Vis	
Regarding:	
Client Instructions:	
18. Additional remarks:	
19. Cooler Information	명절에서 열등시간이 하면요 하다니다. 나는 나는 나는 것이다.
Cooler No Temp °C Condition Seal Intact Seal No	o Seal Date Signed By
1 1.0 Good Yes	

Chain-of-Custody Record  Turn-Around Time:  Skyllas LL  Sandard Grush Sulve day  Favor Lakylor House LL  Cop Lakylor H  Favor	HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Anal	(†O	9iO/s 9iO/s 0 set	(Gass) H	8210; (1.814) (1.403; (HA9) (HA9) (HA9) (A0) (A0)	TBE Oct. Oct. Oct. Oct. Oct. Oct. Oct. Oct.	BTEX + META TPH Methoractions (F, 8081 Pestons (F, 8081 P	72 72 72 72 72 72 72 72 72 72 72 72 72 7						Remarks: Pall to Conocolablicos	33	area: 4 supernan	. 1231 / Motta N. M. Las M. M. Las M. M. M. M. M. Serves as notice of this possibility. Any sub-contracted data will be dearly notated on the analytical report. 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 dearly notated on the analytical report.
ain-of-Custody Record  Nuivas Environmental  Indiana LLC  Idress: 624 E (brasuche  Rage:  Skage:  Skag	Turn-Around Time:			Lambe	Project #:		Project Manager:		4	一篇	Sambledieliaure.	A	1						by: Date	ather Weeler Faster	of Mills	contracted to other accredited laboratories. This serves as notice of this
Client: A Mailing Ad Mailing Ad Mailing Ad Mailing Ad Accreditation Figure #:  Date		Animas Environmental	77	N F	0110	nustan NM often					□ EDD (Type)	Matrix	1105 201	110/						770 -	T	125 12 11237 / Albatto hind the

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District III

District III

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

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Form C-141 Revised October 10, 2003

1220 South St. Francis Dr. Santa Fe, NM 87505

Release Notification and Corrective Action																
						OPERATOR ☐ Initial Report ☐ Final Report										
Name of Co						Contact Kenny Davis										
		<sup>h</sup> St, Farmin	gton, NM			Telephone No.(505) 599-4045										
Facility Nar	ne: Lamb	e 1			ŀ	Facility Type: Gas Well										
Surface Ow	ner Feder	al		Mineral O	wner F	Tederal			Lease N	lo. NM-03	187					
				LOCA	TION	OF REI	LEASE									
Unit Letter	Section	South Line	Feet from the	7.000.07	est Line	County	,									
M	21	31N	10W	990	South		990	West		San Juan						
Latitude 36.87922000 Longitude 107.89224000																
				NAT	URE	OF REL										
		losure Summa	ary				Release N/A			Recovered N		27/4				
Source of Re						If YES, To	lour of Occurrence	e N/A	Date and	Hour of Dis	covery	N/A				
Was Immedi	ate Notice (		Yes [	No Not Re	quired	N/A	wnom?									
By Whom? N	V/A		**-			Date and I	Iour N/A									
Was a Water		ched?		N			olume Impacting	the Water	course.							
. N/.				s 🛛 No		N/A										
N/A	urse was in	pacted, Descr	ioc i uny.													
Describe Car N/A	use of Probl	em and Reme	dial Actio	n Taken.*												
		and Cleanup A		ken.* <mark>N REMOVAL</mark>								s				
regulations a public health should their or the enviro	all operators or the envious loperations lonment. In	are required to ronment. The nave failed to	o report a acceptan adequatel OCD acce	e is true and compl nd/or file certain re ce of a C-141 repo y investigate and re ptance of a C-141 r	elease nort by the emediate	otifications a e NMOCD m e contaminat	nd perform corre larked as "Final Fion that pose a the re the operator of	ctive action Report" do reat to gro responsib	ons for rel oes not rel ound wate oility for o	leases which lieve the ope er, surface w compliance	may extrator of ater, hu	ndanger f liability ıman health				
OIL CONSERVATION DIVISION Signature:																
Printed Name: Kenny Davis  Approved by District Supervisor:																
Title: Staff Regulatory Technician Approval Date: Expiration Date:																
E-mail Address: Kenny.r.davis@conocophillips.com  Conditions of Approval:  Attached									1 🗆							
Date: 12/5/	14 Phone	: (505) 599-40	)45													

\* Attach Additional Sheets If Necessary



