Form C-144 Revised June 6, 2013

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

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.

12602 <u>Pit, Below-Grade Tank, or</u>	OCD Received
39-20174 Proposed Alternative Method Permit or Closure Plan Application	<u>n</u> 1-21-13
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, or proposed alternative method  Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative method please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface we environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's	below-grade tank,  ative request
1. Operator:Burlington Resources OGRID #:14538	
Address: PO BOX 4289, Farmington, NM 87499	
Facility or well name: San Juan 28-4 Unit 32	
API Number: 3003920174 OCD Permit Number:	
LI/I or Otr/Otr H (SENE) Section 32 Township 28N Range 4W County: Rio Arriba	
Center of Proposed Design: Latitude 36.61959000 °N Longitude -107.26717000 °W NAD: \(\simeg\) 1927 \(\simeg\)	1983
Surface Owner:  ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment	
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         □ Lined       □ Unlined       Liner type:       Thickness      mil       □ LLDPE       □ HDPE       □ PVC       □ Other         □ String-Reinforced      bbl       Dimensions:       Lbbl       Dimensions:       L	Fluid  yes no
3.    Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume: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 the Sant	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 resident institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	Y
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	
Nariances 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.	table 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).	☐ Yes ⊠ No
- Topographic map; Visual inspection (certification) of the proposed site  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.	Yes No
- 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 Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the deattached.  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 19.15.17.19 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 Previously Approved Design (attach copy of design)  API Number:  or Permit Number:	.9 NMAC 9.15.17.9 NMAC
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 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 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: or Permit Number:	19.15.17.9 NMAC
□ Tieriodoly rippitated Decibi (dimentally)	

o. 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 doc Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc	uments are
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 ☐ Erosion Control 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.	'125
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Flu	id Management Fit
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	
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	ttached to the
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.	ce material are lease refer to
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
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 ☐ Yes ☐ No
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	□ 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	-67

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within the area overlying a subsurface mine.	A A
Within the area overlying a subsurface mine	☐ Yes ☐ No
- 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
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure points 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 19.15.1     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 can     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	7.11 NMAC 9.15.17.11 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 be	elief.
Name (Print): Title:	
Signature: Date:	
e-mail address:	
18. Decrease of the property o	
OCD Approval: Permit Application (including closure plan) X Closure Plan (only)	
18. OCD Approval: Permit Application (including closure plan) X Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date:	Feb 24, 2015
	Feb 24, 2015
OCD Representative Signature: Approval Date:    Title: Environmental Specialst    OCD Permit Number:	Feb 24, 2015
OCD Representative Signature: Approval Date:	ing the closure report.
OCD Representative Signature:  Title: Environmental Specialst  OCD Permit Number:  OCD Permit Number:  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 submits The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date: 5/13/11	ing the closure report.
OCD Representative Signature:  Title: Environmental Specialst  OCD Permit Number:  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 submitt The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do section of the form until an approved closure plan has been obtained and the closure activities have been completed.	ting the closure report. not complete this

Form C-144

Operator Closure Certification:  I hereby certify that the information and attachments submitted with the belief. I also certify that the closure complies with all applicable closure.	this closure report is true, accurate and complete to the best of my knowledge and sure requirements and conditions specified in the approved closure plan.
Name (Print): Kenny Davis	Title: _Staff Regulatory Technician
Signature:	Date:12/3/14
e-mail address: kenny.r.davis@conocophillips.com	Telephone:505-599-4045

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

Lease Name: SJ 28-4 Unit 32

API No.: 3003920174

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.
- 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 18, 2011

Project Number 92115-1696

Phone: (505) 599-3403

Ms. Kelsi Harrington ConocoPhillips 3401 East 30<sup>th</sup> Street Farmington, New Mexico 87401

RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE SAN JUAN 28-4 #32 (HBR) WELL SITE, RIO ARRIBA COUNTY, NEW MEXICO

Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities conducted at the San Juan 28-4 #32 (hBr) well site located in Section 32, Township 28 North, Range 4 West, Rio Arriba County, New Mexico. Upon Envirotech personnel's arrival on May 13, 2011, two (2) five (5)-point composite samples were collected, one (1) sample from directly beneath the former BGT and one (1) sample from all four (4) walls; see attached *Field Notes*. The samples were analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID) and for chlorides. Additionally, the samples were placed into four (4)-ounce glass jars, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for benzene and total BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500. Both samples returned results below the regulatory limits for all constituents analyzed, confirming a release did not occur; see attached *Analytical Results*. Envirotech, Inc. recommends no further action in regards to this incident.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted, **ENVIROTECH, INC.** 

John Rollins

Environmental Field Technician irollins@envirotech-inc.com

Enclosures:

Field Notes

Analytical Results

Cc:

Client File 92115

PAGE NO:			ONMENTA 5796 U.S. ARMINGTO	HIGHWAY	STS & ENGIR 7 64 - 3014 EXICO 8740		ENVIRONI SPECIALIS LAT: LONG:	
	FIELD RI	EPORT: E	GT / P	IT CLOS	URE VE	RIFICA'	TION	
			WELL#:		TEMP PIT:			BGT: 2
LOCATION: NAME: 5. LEGAL ADD: UNIT: 14		8-4 SEC: 32				RNG: 4		PM: NA
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EXCAVATION APPROX:	The second second second second	FT. X	NA	FT. X	Ho	FT. DEEP	CUBIC YA	RDAGE:
DISPOSAL FACILITY:	NÃo				ITON METH	The second secon	LOVYD ED	7.7
LAND OWNER:	1/L			A WALLED 1	WITH LEAK	BGT / PIT		
CONSTRUCTION MATERI	and the same of					THE RESERVE OF THE PARTY OF THE	V. ), 7, 12	7,00
LOCATION APPROXIMAT		40	FT. N	E	FROM WELI	HEAD		
DEPTH TO GROUNDWATI		TOD 50 100 D	CEM DEED					
TEMPORARY PIT - G BENZENE ≤ 0.2 mg/kg, BI					A melles TOU	(410 1) ~ 250	mallea CHI	OPINES < 500 mg/kg
		7		OC 5 (C109) N	o mg/kg, i Pri	(410.1) ≥ 2300	nigkę, cm	SORDES 2 300 mg/kg
TEMPORARY PIT - G					r Process			ODTDDD 4666
BENZENE ≤ 0.2 mg/kg, BT	EX ≤ 50 mg/kg	g, GRO & DRO	FRACTION	N (8015) ≤ 50	0 mg/kg, TPH (	$418.1) \le 2500$	mg/kg, CHL	ORIDES ≤ 1000 mg/kg
PERMANENT PIT OR	BGT							
BENZENE ≤ 0.2 mg/kg, ]	BTEX ≤ 50 mg	/kg, TPH (418.)	1) ≤ 100 mg/	kg, CHLORII	DES ≤ 250 mg/l	kg		
			A. A. 184 A.	FIEL	D 418.1 ANAL			. 3.
	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g	mL FREON	DILUTION	READING	CALC, (mg/kg)
	13:35	STD		-		-	208	92
	13:55	BTM	2				20	86
	1000	WR(1)	3		7/10		20	80
			4					
			5					
			6					
PERIM	ETER		FIELD C	HLORIDE	S RESULTS		PRO	FILE
							. 1 . 1 . 1	
			SAMPLE	READING	CALC.			
and the second	ull .		D	110	(mg/kg)	-		, F
			BTA	NP		1	-1	O
/ ×	/	11					-	*
/ *	1	/www					Ùχ	X
	t	197		-		1 , 2	11	/.
				PID RESU	TS	12	* 5.	X
		1			RESULTS	1	1 Note	cf x
		1		PLE ID	(mg/kg)		/	
			BTM		19,6			
Roll	9	ite)	MUS		15.1	-		
Kord	1					-		
						1		
	)	1						
LAB SAMPLE		NOTES:						
SAMPLE ID ANALYSIS BENZENE	RESULTS	-						
BENZENE	-	-						
GRO & DR								
CHLORIDE								
		4			WILLO OF T			
		WORKORDI	ER#		WHO ORDE	RED		



## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

ConocoPhillips

Sample No.:

Sample ID:

Bottom Composite (BTM)

Sample Matrix: Preservative: Soil

Condition:

Cool

Cool and Intact

Project #:

92115-1696

Date Reported:

5/25/2011

Date Sampled:

5/13/2011

Date Analyzed:

5/13/2011

Analysis Needed: TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

92

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

San Juan 28-4 #32 (hBr)

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

John Rollins

Printed

Review

Toni McKnight, EIT



### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

ConocoPhillips

92115-1696

Sample No.:

2

721

Project #:

Date Reported:

Date Sampled:

Analysis Needed:

Sample ID:

Walls Composite (Walls)

5/25/2011

TPH-418.1

Sample Matrix:

Soil

5/13/2011

Preservative:

Cool

Date Analyzed: 5/13/2011

Condition:

Cool and Intact

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

80

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

San Juan 28-4 #32 (hBr)

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

John Rollins

Printed

Toni McKnight, EIT



# CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

13-May-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
TPH	100		
	200 500	208	
	1000		

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

1211	5/25/2011
Analyst	Date
John Rollins	
Print Name	
Toni Milmost	5/25/2011
Review	Date

**Print Name** 



### Field Chloride

Client:

ConocoPhillips

Sample No .:

1

Sample ID:

Bottom Composite (BTM)

Sample Matrix:

Soil

Preservative:

Condition:

Cool

Cool and Intact

Project #:

92115-1696

Date Reported:

5/25/2011

Date Sampled:

5/13/2011

Date Analyzed: Analysis Needed: 5/13/2011 Chloride

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Field Chloride** 

ND

33.0

ND = Parameter not detected at the stated detection limit.

References:

"Standard Methods for the Examination of Water and Wastewater", 18th ed., 1992

Hach Company Quantab Titrators for Chloride

Comments:

San Juan 28-4 #32 (hBr)

John Rollins

Printed

Review

Toni McKnight, EIT



#### **Field Chloride**

Client:

ConocoPhillips

2

Sample No .: Sample ID:

Sample Matrix:

Soil

Preservative:

Cool

Condition:

Walls Composite (Walls)

Cool and Intact

Project #:

92115-1696

Date Reported:

5/25/2011

Date Sampled: Date Analyzed: 5/13/2011

5/13/2011

Analysis Needed:

Chloride

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Field Chloride** 

ND

33.0

ND = Parameter not detected at the stated detection limit.

References:

"Standard Methods for the Examination of Water and Wastewater", 18th ed., 1992

Hach Company Quantab Titrators for Chloride

Comments:

San Juan 28-4 #32 (hBr)

Analyst

John Rollins

Printed

Review

Toni McKnight, EIT



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project#:	92115-1696
Sample ID:	BTM	Date Reported:	05-16-11
Laboratory Number:	58199	Date Sampled:	05-13-11
Chain of Custody:	11736	Date Received:	05-13-11
Sample Matrix:	Soil	Date Analyzed:	05-16-11
Preservative:	Cool	Date Extracted:	05-16-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	1.5	0.9	
Total BTEX	1.5		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.8 %
	1,4-difluorobenzene	82.2 %
	Bromochlorobenzene	88.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

San Juan 28-4 #32

Analyst

Ph (505)632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1696
Sample ID:	Walls	Date Reported:	05-16-11
Laboratory Number:	58200	Date Sampled:	05-13-11
Chain of Custody:	11736	Date Received:	05-13-11
Sample Matrix:	Soil	Date Analyzed:	05-16-11
Preservative:	Cool	Date Extracted:	05-16-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)		
Benzene	ND	0.9		
Toluene	ND	1.0		
Ethylbenzene	ND	1.0		
p,m-Xylene	ND	1.2		
o-Xylene	ND	0.9		
Total BTEX	ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.1 %
	1,4-difluorobenzene	85.5 %
	Bromochlorobenzene	98.3 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

San Juan 28-4 #32

Analyst

Review



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 0516BBLK QA/QC 58199 Soil N/A N/A		Project #: Date Reported: Date Sampled; Date Received: Date Analyzed: Analysis: Dilution:		N/A 05-16-11 N/A N/A 05-16-11 BTEX
Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF: Accept. Ra	%Diff. nge 0 - 15%	Blank Conc	Detect. Limit
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	1.1959E+005 1.3668E+005 1.1722E+005 2.6749E+005 1.1421E+005	1.1983E+005 1.3695E+005 1.1746E+005 2.6802E+005 1.1444E+005	0.2% 0.2% 0.2% 0.2% 0.2%	ND ND ND ND	0.1 0.1 0.1 0.1 0.1

Duplicate Conc. (ug/Kg)	Sample Du	plicate	%Diff.	Accept Range	Detect, Limit	
Benzene	ND	ND	0.0%	0 - 30%	0.9	
Toluene	ND	ND	0.0%	0 - 30%	1.0	
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0	
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2	
o-Xylene	1.5	1.9	26.7%	0 - 30%	0.9	

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range	
Benzene	ND	500	499	100%	39 - 150	
Toluene	ND	500	525	105%	46 - 148	
Ethylbenzene	ND	500	530	106%	32 - 160	
p,m-Xylene	ND	1000	983	98.3%	46 - 148	
o-Xylene	1.5	500	495	98.7%	46 - 148	

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 58199-58200, 58203-58205

Analyst



### Chloride

Client:

ConocoPhillips

Project #:

92115-1696

Sample ID:

BTM

Date Reported:

05/16/11

Lab ID#:

58199

Date Sampled:

05/13/11

Sample Matrix:

Soil

Date Received:

05/13/11

Preservative:

Cool

Date Analyzed:

05/16/11

Condition:

Intact

Chain of Custody:

11736

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

120

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 28-4 #32

Analyst

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



### Chloride

Client:

ConocoPhillips

Project #:

92115-1696

Sample ID:

Walls

Date Reported:

05/16/11

Lab ID#:

58200

Date Sampled:

05/13/11

Sample Matrix:

Soil

Date Received:

05/13/11

Preservative:

Cool

Date Analyzed:

05/16/11

Condition:

Intact

Chain of Custody:

11736

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

60

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 28-4 #32

Analyst

Review

CHAIN OF CUSTODY RECORD

11736

4:50 Sample Intact Time Sample Cool 5/13/11 Date ANALYSIS / PARAMETERS CHLORIDE (1.814) H9T HA9 TCLP with H/P HCI Received by: (Signature) Cation / Anion RCRA 8 Metals Received by: (Signature) Beceived by: (Signature) VOC (Method 8260) BTEX (Method 8021) 1 (2108 boriteM) H9T No.Nolume Preservative HIG. HG CO. 7 1 Containers 16,50 Time 3 205 92115-169 Sludge Aqueous Sludge Aqueous Sludge Aqueous Sludge Aqueous Sludge Sludge Aqueous Aqueous Aqueous Aqueous Aqueous Date 1/3/1/ Sludge Sludge Sludge Sludge So Jun 289#32 Matrix Project Name / Location: 58200 Solid Soli Solid Soil Soil Soll Solid Solid Soil 58199 Soll 85 Sampler Name: Lab No. Client No.: Slight my Sample Sample Time 14:03 1118/11 Date Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Client Phone No.: Identification Sample No./ Client Address: SIM

envirotech Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

District I 1625 N. French Dr., Hobbs, NM 88240 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

## 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 October 10, 2003

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

#### 1220 S. St. Francis Dr., Santa Fe, NM 87505 **Release Notification and Corrective Action OPERATOR** Initial Report Final Report Contact Kenny Davis Name of Company Burlington Resources Telephone No.(505) 599-4045 Address 3401 East 30th St, Farmington, NM Facility Name: San Juan 28-4 Unit 32 Facility Type: Gas Well Lease No. SF-079731 Surface Owner Federal Mineral Owner Federal LOCATION OF RELEASE Range Feet from the North/South Line Feet from the East/WestLine County Section Township Unit Letter 870 Rio Arriba 32 28N 4W 1617 North East H Latitude36.61959000 Longitude-107.26717000 NATURE OF RELEASE Volume of Release N/A Volume Recovered N/A Type of Release BGT Closure Summary Date and Hour of Discovery N/A Source of Release: NONE Date and Hour of Occurrence N/A If YES, To Whom? Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required N/A Date and Hour N/A By Whom? N/A If YES, Volume Impacting the Watercourse. Was a Watercourse Reached? ☐ Yes 🛛 No N/A N/A If a Watercourse was Impacted, Describe Fully.\* N/A

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 repshould their operations have failed to adequately investigate and or the environment. In addition, NMOCD acceptance of a C-141	remediate contamination that pose a three	eat to ground water	r, surface water, human health
federal, state, or local laws and/or regulations.	OIL CONS	SERVATION	DIVISION
Signature:  Printed Name: Kenny Davis	Approved by District Superviso		
Title: Staff Regulatory Technician	Approval Date:	Expiration	Date:
E-mail Address: Kenny.r.davis@conocophillips.com	Conditions of Approval:		Attached
Date: 12/3/14 Phone: (505) 599-4045			

Describe Cause of Problem and Remedial Action Taken.\*

Describe Area Affected and Cleanup Action Taken.\*

BGT Closure: NO RELEASE FOUND UPON REMOVAL

N/A



<sup>\*</sup> Attach Additional Sheets If Necessary





