District I 1625 W. 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

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.

Form C-144

Revised June 6, 2013

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

Dit Palayy Grada Tonk on

15774	Proposed Alternative Method Permit or Closure Plan Application							
	Type of action: [[[[[or proposed alterna Instructions: Please nat approval of this requ	Below grade tank reging Permit of a pit or propical Closure of a pit, below Modification to an exit Closure plan only substative method Esubmit one application (Finest does not relieve the operation)	istration posed alternative method w-grade tank, or proposed a isting permit/or registration mitted for an existing permit form C-144) per individual pit attor of liability should operations	Iternative method itted or non-permitted pit, below-grade below-grade tank or alternative request result in pollution of surface water, ground	water or the			
Operator: Bur	••	& Gas Company, LP OGRI		OIL CONS. DIV				
	name: <u>SAN JUAN 28</u> 30-039-20673		mit Number:	JAN 1 0	2017			
U/L or Qtr/Qtr Center of Propo	H Section osed Design: Latitude	Township	28N Range 4W titude -107.267189 °W	County: Rio Arriba				
	ection F, G or J of 19.		*Closed Approv	Prior to Closuc	Plan			
	□ Permanent □ Emergency □ Cavitation □ P&A □ Multi-Well Fluid Management Low Chloride Drilling Fluid □ yes □ no □ Lined □ Unlined Liner type: Thickness mil □ LLDPE □ HDPE □ PVC □ Other							
String-Reint		/	b	bl Dimensions: Lx Wx D				
Volume: Tank Construct Secondary Visible side	ion material: containment with leak ewalls and liner V	Metal detection ☑ Visible side /isible sidewalls only ☐ C	Produced Water walls, liner, 6-inch lift and auto Other PVC OtherUNSPE	omatic overflow shut-off	,			
4. Alternative Submittal of an		equired. Exceptions must b	pe submitted to the Santa Fe Er	nvironmental Bureau office for considerat	ion of approval.			
Chain link, sinstitution or ch	six feet in height, two surch) eight, four strands of ba			below-grade tanks) 000 feet of a permanent residence, school	, hospital,			

6. Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
☐ Monthly inspections (If netting or screening is not physically feasible)	
7.	
Signs: Subsection C of 19.15.17.11 NMAC	
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.16.8 NMAC	
8.	
Variances and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:	
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9.	-
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acce	ptable source
material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - □ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells	Yes No
	☐ Yes ☐ No
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	NA NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No
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	
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks) - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured	☐ Yes ☒ No
from the ordinary high-water mark).	163 🖾 140
- 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	☐ 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. 2 U9 Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site						
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					
ithin 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						
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						
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						
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						
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 docattached. 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 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:	NMAC 15.17.9 NMAC					
11.						
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot 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: or Permit Number:	.15.17.9 NMAC					

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are					
### Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.19 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 H₂S, 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 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 F	luid Management Pit					
☐ Alternative Proposed Closure Method: ☐ Waste Excavation and Removal ☐ Waste Removal (Closed-loop systems only) ☐ On-site Closure Method (Only for temporary pits and closed-loop systems) ☐ In-place Burial ☐ On-site Trench Burial ☐ Alternative Closure Method						
Maste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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	attached to the					
15. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. It 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					
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No					
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa ake (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						

1 1 NM (CA 1070 C							
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No						
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No						
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map							
Within a 100-year floodplain. - FEMA map Yes N							
·	☐ Fes ☐ No						
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plants 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 19.15.17.13 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 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	11 NMAC 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 believed to the best of my	ef.						
Name (Print): Title:							
Signature: Date:							
e-mail address:Telephone:							
OCD Approval: Permit Application (including closure plan) Closure Flat (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 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 not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 8/24/2010							
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 not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 8/24/2010							
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 not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	complete this						

22.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and
belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print) Crystal Walker Title: Regulatory Coordinator
Signature: Date: 162017
e-mail address:crystal.walker@cop.com Telephone: (505)326-9837

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

Lease Name: San Juan 28-4 Unit 37

API No.: 30-039-20673

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 within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.

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

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

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

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

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

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

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

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

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

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

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

A release was not determined for the above referenced well.

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

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

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

Notification was not found.

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

The closure process notification to the landowner was not found.

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

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

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

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

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

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

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

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

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

			Rele	ase Notifi	catio	on	and Co	rrective A	ction	1			
						OPERATOR Initia				al Report	\boxtimes	Final Repo	
Name of Company Burlington Resources O&G Company, LP						Contact Crystal Walker							
Address 3401 East 30 th St, Farmington, NM Facility Name: San Juan 28-4 Unit 37						Telephone No.(505) 326-9837 Facility Type: Gas Well							
								e. das well					
Surface Ow	ner FEDE	ERAL		Mineral	Owner	F	EDERAL			API No	o. 30-039-2	20673	
				LOC	ATIC	N	OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	Nort		outh Line	Feet from the		West Line	County		
Н	29	28N	4W	1335		No	orth	870		East	Rio Arril	oa	
		1	Latitude	36.633918		_	Longitud	e <u>-107.26718</u>	9				
				NA	ΓURΙ	E C	OF REL						
Type of Rele Source of Re						+	Volume of	Release Iour of Occurrence			Recovered	20011081	
Source of Re	lease						Date and F	iour of Occurrenc	e	Date and	Hour of Dis	scovery	
Was Immedia	ate Notice (Yes [No Not R	Required	d	If YES, To	Whom?					
By Whom?						1	Date and H	Iour					
Was a Water	course Read		v 🖂 .	T .			If YES, Vo	lume Impacting t	the Wat	ercourse.			
			Yes 🛛 1										
If a Watercou	irse was Im	pacted, Descr	ibe Fully.*										
1772													
		em and Reme ered during											
Describe Are	a Affected a	and Cleanup A	Action Tak	en.*									
regulations at public health should their or or the environ	I operators or the environment operations hament. In a	are required to ronment. The lave failed to a	o report ar acceptance adequately OCD accep	d/or file certain e of a C-141 rep investigate and	release ort by t remedia	not the late of	ifications as NMOCD m contaminati	knowledge and und perform correct arked as "Final Roon that pose a three the operator of the correct arked as "Final Roon that pose a three the operator of the correct arked	etive act eport" of eat to g respons	ions for rel loes not rel round water ibility for c	eases which ieve the ope r, surface wa ompliance v	may enterator of ater, hu	ndanger f liability man health
Signature:	Signature: Strl Walker					OIL CONSERVATION DIVISION							
Printed Name	Printed Name: Crystal Walker						Approved by Environmental Specialist:				75.		
Title: Regula	atory Coord	inator				Aj	pproval Dat	val Date: Expiration Date:					
E-mail Addre	E-mail Address: crystal.walker@cop.com Date: 1/6/17 Phone: (505) 326-9837					Conditions of Approval:							
Attach Addi	tional Shee					-							



September 28, 2010

Project Number 92115-1387

Phone: (505) 599-3403

Ms. Kelsi Harrington ConocoPhillips 3401 East 30th Street Farmington, New Mexico 87401

RE: BELOW GRADE TANK CLOSURE DOCUMENTATION FOR THE SAN JUAN 28-4 #37 (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 #37 (hBr) well site located in Section 29, Township 28N, Range 4W, Rio Arriba County, New Mexico.

On August 24, 2010, a five (5)-point composite sample was collected from directly beneath the BGT; see attached *Field Notes*. The sample was screened in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and for chlorides. The sample returned results below regulatory standards for all constituents analyzed. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for benzene and BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500. The sample 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.

Sarah Rowland, EIT

Staff Engineer

srowland@envirotech-inc.com

Enclosures:

Field Notes

Analytical Results

Cc:

Client File 92115

		ENVI	ROTE	ENVIRONMENTAL					
PAGE NO: OF	ENVIR		AL SCIENT	SPECIALIST: 5, Rowland					
DATE COLUMNIED. C. /-	/ -				Y 64 - 3014		7.470	O, NOWING	
DATE STARTED: 9/24/	110	FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615						2.63544203	
	Carlotte Miles	EDODT, I				THICA		10 1, =6 17037	
FIELD REPORT: BGT / PIT CLOSURE VERIFICATION									
	an Juar		WELL #:		TEMP PIT:		NENT PIT:	7.1.	
LEGAL ADD: UNIT: NOTR/FOOTAGE: 870 F	1 1231	SEC: 29	CNITY D	TWP: 29		RNG: 4	W	PM: NM	
QINTONIAGE. 10 1- 11				O ACC.	29		1		
EXCAVATION APPROX:		FT. X	19	FT. X	4	FT. DEEP	CUBIC YA	ARDAGE:	
	AM		ADL 2 ma		TION METH		VOLIBÆ.		
CONSTRUCTION MATERIAL	Vational 1	reka's T	DOUBLE-	WALLED.	WITH LEAK	BGT / PIT			
LOCATION APPROXIMATE					FROM WELL		"VV		
DEPTH TO GROUNDWATER		30	II. H	nd.	THOMA WALL	ЛИМ	`		
TEMPORARY PIT - GRO	OUNDWAT								
BENZENE ≤ 0,2 mg/kg, BTE	$X \le 50 \text{ mg/kg}$	g, GRO & DRO) FRACTIO	$N(8015) \le 50$	00 mg/kg, TPH	$(418.1) \le 250$	0 mg/kg, CH	LORIDES ≤ 500 mg/kg	
TEMPORARY PIT - GRO	OUNDWAT	ΓER ≥100 FEI	ET DEEP						
BENZENE ≤ 0.2 mg/kg, BTEX	X ≤ 50 mg/kg	, GRO & DRO	FRACTION	$V(8015) \le 50$	0 mg/kg, TPH (418.1) ≤ 2500	mg/kg, CHI	ORIDES ≤ 1000 mg/kg	
X PERMANENT PIT OR B	GT								
BENZENE ≤ 0.2 mg/kg, BT		/kg, TPH (418.	1) ≤ 100 mg/	kg, CHLORI	DES ≤ 250 mg/l	cg			
				FIEL	D 418.1 ANAL	YSIS			
i F	TIME		LAB NO.		mL FREON			CALC. (mg/kg)	
. –	15:30 15:45	204 STD	1	-	20	-4	204	20	
l t	100000		2		20	7	-5		
,			3						
			4					Section 1 Access to 1 Access t	
			6						
PERIMET	TER		FIELD C	HLORIDE	S RESULTS		PRO	OFILE	
							1130,000,000,750,000		
		1	SAMPLE	READING	CALC.	X = Sang	le point		
(50)		\ \ \ \ \	ID 1	ND	(mg/kg)	,	,		
(Sep)		/ "					1.		
(BG-	T)						Dignet.	ec	
+						+	10		
1	ı			DECLU	TC	6		11.	
MH	l			PID RESUI	RESULTS	1	-X	4	
			SAMP	PLE ID	(mg/kg)	·	X X	- X) J	
		/	1		0.7				
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	1			-					
	1 /		2			batto -	+ 1	(0.0)	
LAB SAMPLES		NOTES:			G.	- COILOW	ا اعلى	IMIN	
SAMPLE ID ANALYSIS		5W: 200		FT	24	BLIDGE VIEW	TOVI TIEND	(rain)	
BENZENE		Well: N			1	RCT:	Late: N	36.63530	
GRO & DRO		CM < 20	भ्र (इड -	28-4#17	IR A	1 000	Lucia 1	1107.26653	
CHLORIDES		Rankin	3>20		1.6		manga m	101.400000	
	/	Left me	255000	w/res	JITS	PD.			
V		WORKORDE	K#		WHO ORDER	ED			



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

ConocoPhillips

Project #:

92115-1387

Sample No.:

Date Reported:

8/31/2010

Sample ID:

Beneath BGT Composite

Sample Matrix:

Soil

Date Sampled:

8/24/2010

Preservative:

Cool

Date Analyzed: Analysis Needed: 8/24/2010 TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

20

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 #37 (hBr)

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Sarah Rowland, EIT

Printed

Barian Williamson

Printed

Julin.



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

V-1	
0-1	Date.
	I JAIR

24-Aug-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	-
ТРН	100		
	204 500 1000	204	

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

Sol Rall	8/31/2010
Analyst	Date
Sarah Rowland, EIT Print Name	8/31/2010
Review	Date

Barian Williamson

Print Name



Field Chloride

Client:

ConocoPhillips

Soil

Cool

Sample ID: Sample Matrix:

Preservative:

Sample No .:

Condition:

Cool and Intact

Beneath BGT Composite

Project #:

92115-1387

Date Reported:

9/3/2010

Date Sampled:

8/24/2010

Date Analyzed:

8/24/2010

Analysis Needed:

Chloride

Concentration (mg/kg)

Limit (mg/kg)

Det.

Field Chloride

Parameter

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 #37 (hBr)

Sarah Rowland, EIT

Printed

Barian Williamson

Double.



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips (hBr)	Project #:	92115-1387
Sample ID:	BGT Composite	Date Reported:	08-26-10
Laboratory Number:	55651	Date Sampled:	08-24-10
Chain of Custody:	10254	Date Received:	08-24-10
Sample Matrix:	Soil	Date Analyzed:	08-26-10
Preservative:	Cool	Date Extracted:	08-25-10
Condition:	Intact	Analysis Requested:	BTEX

no contra come el esperio no el comerción de contra de las casas comerciales el electros sectos se especiencia

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	96.3 %						
	1,4-difluorobenzene	97.7 %						
	Bromochlorobenzene	100 %						

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 #37



Chloride

Client:	ConocoPhillips (hBr)	Project #:	92115-1387
Sample ID:	BGT Composite	Date Reported:	08-26-10
Lab ID#:	55651	Date Sampled:	08-24-10
Sample Matrix:	Soil	Date Received:	08-24-10
Preservative:	Cool	Date Analyzed:	08-26-10
Condition:	Intact	Chain of Custody:	10254

Parameter

Concentration (mg/Kg)

Total Chloride

50

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 #37



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0826BBLK QA/QC	Date Reported:	08-26-10
Laboratory Number:	55648	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-26-10
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept. Rang	10 0 - 15%	Conc	Limit
Benzene	9.2863E+005	9.3049E+005	0.2%	ND	0.1
Toluene	1.0519E+006	1.0540E+006	0.2%	ND	0.1
Ethylbenzene	9.6800E+005	9.6994E+005	0.2%	ND	0.1
o,m-Xylene	2.3929E+006	2.3977E+006	0.2%	ND	0.1
p-Xylene	8.8434E+005	8.8611E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	1.2	1.3	8.3%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	2.0	2.0	0.0%	0 - 30%	1.2
o-Xylene	ND	1.0	10.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	50.0	100%	39 - 150
Toluene	1.2	50.0	50.3	100%	46 - 148
Ethylbenzene	ND	50.0	50.2	100%	32 - 160
p,m-Xylene	2.0	100	101	100%	46 - 148
o-Xylene	ND	50.0	50.2	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

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 55648-55654

Analyst

Review

CHAIN OF CUSTODY RECORD

10254

COPC (hB			Project Name / L			7								ANAL	YSIS	/ PAR	AME	TERS				
Client Address:	(7)		Sampler Name: 5. Rowland				3015)	8021)	8260)	S						1						
Client Phone No.:		(Client No.: 92115-13						TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	RIDE			Sample Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time		S	ample Matrix	No./Volume of Containers		_	TPH	BTEX	VOC (HCRA	Cation	PG.	TCLP	PAH	TPH (CHLORIDE			Samp	Samp
BGT Composite	8/24/10	15:00	55651	Solid Solid	Sludge Aqueous	1/402				X								X			Χ	X
,				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Słudge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
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Relinquished by: (Signated Supplies of Supplies Supplies of Suppli	2L	P			Date 8/24/10	Time 17:00		_		(Sign (Sign		1 .	NN	Q				1		ate 4/10	1	ime
Relinquished by: (Signa	ature)						Re	ceive	ed by:	(Sigň	ature)) .		•								
Relinquished by: (Signa	ature)						Re	ceive	ed by:	(Sign	ature)										
DIT		11			3		•		_													



envirotech
Analytical Laboratory

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