Form C-144 Revised June 6, 2013

District I 1625 N. Fr District II 811 S. Firs District III 1000 Rio F District IV 1220 S. St.

State of New Mexico

or temporary pits, below-grade tanks, and ulti-well fluid management pits, submit to the propriate NMOCD District Office.

or permanent pits submit to the Santa Fe avironmental Bureau office and provide a copy the appropriate NMOCD District Office.

20 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505 Pit, Below-Grade Tank, or	to
strict III 00 Rio Brazos Road, Aztec, NM 87410 strict IV	Oil Conservation Division 1220 South St. Francis Dr.	app Fo En
strict II 1 S. First St., Artesia, NM 88210	Department	Fo

Proposed Alternative Method Permit or Closur	e Plan Application
Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alter Modification to an existing permit/or registration Closure plan only submitted for an existing permitte or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, be	olovograda tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations resenvironment. Nor does approval relieve the operator of its responsibility to comply with any other applicab	sult in pollution of surface water, ground water or the le governmental authority's rules, regulations or ordinances.
Operator: Burlington Resources Oil & Gas Company, LP OGRID #: 14538	OIL CONS. DIV DIST. 3
Address: PO BOX 4289, Farmington, NM 87499	IIIN 9 0 2047
Facility or well name: State Com 31-8 1	JUN 3 0 2017
API Number: _30-045-25040 OCD Permit Number:	
U/L or Qtr/Qtr M Section 2 Township 31 N Range 8 W	County: San Juan
Center of Proposed Design: Latitude _36.536452 <u>•N</u> Longitude107.841349 <u>•W</u> NAD	: □1927 ⊠ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment	
2.	18-1-2
Ditte Submitting F. Coast of 10 15 17 11 DMAC	Otheran
Temporary: Drilling Workover	CleCl
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management	Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Oth	ner
☐ String-Reinforced	
Liner Seams: Welded Factory Other Volume: bbl	Dimensions: Lx Wx D
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 automa	ntic 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 Envir	onmental Bureau office for consideration of approval.
5,	
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below	
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 institution or church)	feet of a permanent residence, school, hospital,
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 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 accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	eptable 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			
Within an unstable area. (Does not apply to below grade tanks) - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No			
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No			
Below Grade Tanks				
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No			
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No			
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)				
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	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 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:					
11. Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC					
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC					
Previously Approved Design (attach copy of design) API Number: or Permit Number:					

12. Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the 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 ₂ 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	documents 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 F 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	luid Management Pit			
Waste 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				
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. In 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			
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				
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				
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				
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.				
Within incorporated municipal houndaries 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. - 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					
16.						
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 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: Library contification continue and policy continue and control to the best of any least address and believe to the best of any least address and the best of address and the best of any least address and the best	of					
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli Name (Print): Title:						
Signature: Date:						
Signature:Date:						
e-mail address: Telephone:						
e-mail address:	the closure report.					
e-mail address: Telephone:	the closure report.					
e-mail address: Telephone:	the closure report.					

22.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and
belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Larissa Farrell Title: Regulatory Technician
Signature: Ranna Famul Date: 3-8-16
e-mail address: <u>Larissa.L.Farrell@cop.com</u> Telephone: (505) 326-9504

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

Lease Name: State Com 31-8 1

API No.: 30-045-2504

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

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

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

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
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

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

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

Form C-141 Revised August 8, 2011

Release Notification and Corrective Action												
					OPERATOR Initial Report Final F			Final Repor				
				Contact Crystal Walker								
			gton, NM	[No.(505) 326-98	837				
Facility Nat	ne: State	Com 31-8 1				Facility Typ	e: Gas Well					
Surface Ow	ner State			Mineral C	wner				API No	.30-045-25	5040	
				LOCA	ATIO	N OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	Nort	h/South Line	Feet from the		West Line	County		
M	02	31N	8W	905		South	790		West	San Juan		
						1 Longitud E OF REL	e <u>-107.651152</u> E A S E					
Type of Rele	ase			IVAI	UKI	Volume of	According to the second		Volume F	Recovered		
Source of Re							Hour of Occurrence	ce		Hour of Dis	covery	
Was Immedia	ate Notice (Fiven?				If YES, To	Whom?					
Was Innieur	no moneo c		Yes	No Not Re	equired		WHOM:					
By Whom?						Date and I						
Was a Water	course Reac		Yes 🛛 1	No		If YES, Vo	olume Impacting	the Wat	ercourse.			
If a Watercou N/A	irse was Im	pacted, Descri	ibe Fully.*									
		em and Remed ered during t										
Describe Are N/A	a Affected a	and Cleanup A	Action Tak	en.*								
regulations all public health should their of or the environ	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.											
Signature: Januara OIL CONSERVATION DIVISION												
				Approved by Environmental Specialist:								
Title: Regula	tory Techi	nician				Approval Dat	e:]	Expiration l	Date:		
E-mail Addre		L.Farrell@cop	o.com			Conditions of	Approval:			Attached		
Date: 2-17-1	6	Phone: (50)5) 326-95	04								

^{*} Attach Additional Sheets If Necessary



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Burlington	Project #:	92115-0001
Sample ID:	5-pt Comp @ 5'	Date Reported:	11-17-09
Laboratory Number:	52447	Date Sampled:	11-12-09
Chain of Custody No:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Extracted:	11-13-09
Preservative:	Cool	Date Analyzed:	11-16-09
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

State Com 31-8 #1

Analyst

Review

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



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Burlington	Project #:	92115-0001
Sample ID:	4-Wall Comp @ 4'	Date Reported:	11-17-09
Laboratory Number:	52448	Date Sampled:	11-12-09
Chain of Custody No:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Extracted:	11-13-09
Preservative:	Cool	Date Analyzed:	11-16-09
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	
Gasoline Range (C5 - C10)	ND	0.2	
Diesel Range (C10 - C28)	ND	0.1	
Total Petroleum Hydrocarbons	ND	0.2	

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

State Com 31-8 #1

Analyst

Muster of Weller Review

5796 US Highway 64, Farmington, NM 87401

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



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

The state of the s		ALL THE RESERVE TO SERVE TO SE			
Client:	QA/QC		Project #:		N/A
Sample ID:	11-16-09 QA/	QC	Date Reported:		11-17-09
Laboratory Number:	52438		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		11-16-09
Condition:	N/A		Analysis Reques	sted:	TPH
	- Hoal Oale	Hoal RF	C-CallRISO	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.1472E+002	9.1508E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.5441E+002	9.5479E+002	0.04%	0 - 15%
falank Conc. (mg/L = mg/kg).		Gencentration	100	Beleetten	
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.2	
Duplicate Conc. (mg/Kg)	Sample	Duplicate :	% Difference	Accept Range	
Gasoline Range C5 - C10	10.8	10.5	2.8%	0 - 30%	
Diesel Range C10 - C28	27.1	30.3	11.8%	0 - 30%	
Spike Cenc. (mg/Kg)	Samule	/ Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	10.8	250	250	95.8%	75 - 125%
Diesel Range C10 - C28	27.1	250	271	97.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 52436, 52438 - 52439, 52446 - 52448, 52450 - 52451, 52454 and 52457.

Analyst

Mistle Muceller Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Burlington	Project #:	92115-0001
Sample ID:	5-pt Comp @ 5'	Date Reported:	11-17-09
Laboratory Number:	52447	Date Sampled:	11-12-09
Chain of Custody:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Analyzed:	11-16-09
Preservative:	Cool	Date Extracted:	11-13-09
Condition:	Intact	Analysis Requested:	BTEX

		Det.		
	Concentration	Limit		
Parameter	(ug/Kg)	(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	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

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:

State Com 31-8 #1

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Burlington	Project #:	92115-0001
Sample ID:	4-Wall Comp @ 4'	Date Reported:	11-17-09
Laboratory Number:	52448	Date Sampled:	11-12-09
Chain of Custody:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Analyzed:	11-16-09
Preservative:	Cool	Date Extracted:	11-13-09
Condition:	Intact	Analysis Requested:	BTEX

	Concentration	Det. Limit	
Parameter	(ug/Kg)	(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	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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:

State Com 31-8 #1

Analyst

Review Mlacker



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	11-16-BT QA/QC	Date Reported:	11-17-09
Laboratory Number:	52438	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-16-09
Condition:	N/A	Analysis:	BTEX

Galibration and Detection times (og/L)	in Call Hit	C-GallRh. Accopt Ran	.%D)ff je 0/. 16%	Gend Gend	Detect
Benzene	7.4643E+005	7.4793E+005	0.2%	ND	0.1
Toluene	6.8965E+005	6.9103E+005	0.2%	ND	0.1
Ethylbenzene	6.2458E+005	6.2583E+005	0.2%	ND	0.1
p,m-Xylene	1.5067E+006	1.5097E+006	0.2%	ND	0.1
o-Xylene	5.6741E+005	5.6855E+005	0.2%	ND	0.1

Diplicate Conje. (mil/o)	Sample Salight	plicate 1	WDIT	Accept Range	Delegat I mile
Benzene	1.2	1.0	16.7%	0 - 30%	0.9
Toluene	28.7	32.1	11.8%	0 - 30%	1.0
Ethylbenzene	8.6	8.9	3.5%	0 - 30%	1.0
p,m-Xylene	41.8	38.7	7.4%	0 - 30%	1.2
o-Xylene	14.6	14.5	0.7%	0 - 30%	0.9

Sample Anic	in Salter Sol	red Sample	% Recovery	Accept Range
1.2	50.0	50.0	97.7%	39 - 150
28.7	50.0	76.2	96.8%	46 - 148
8.6	50.0	57.5	98.1%	32 - 160
41.8	100	139	97.7%	46 - 148
14.6	50.0	63.5	98.3%	46 - 148
	1.2 28.7 8.6 41.8	1.2 50.0 28.7 50.0 8.6 50.0 41.8 100	1.2 50.0 50.0 28.7 50.0 76.2 8.6 50.0 57.5 41.8 100 139	1.2 50.0 50.0 97.7% 28.7 50.0 76.2 96.8% 8.6 50.0 57.5 98.1% 41.8 100 139 97.7%

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 Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 52438 - 52439, 52446 - 52448, 52450 - 52451, and 52454.

Analyst

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



EPA METHOD 418.1 TOTAL PETROLEUM **HYDROCARBONS**

Client:	Burlington	Project #:	92115-0001
Sample ID:	5-pt Comp @ 5'	Date Reported:	11-17-09
Laboratory Number:	52447	Date Sampled:	11-12-09
Chain of Custody No:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Extracted:	11-13-09
Preservative:	Cool	Date Analyzed:	11-13-09
Condition:	Intact	Analysis Needed:	TPH-418.1

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

Total Petroleum Hydrocarbons

27.9

9.8

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:

State Com 31-8 #1.

Analyst

'hristin mucetles Review



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Burlington	Project #:	92115-0001
Sample ID:	5-Wall Comp @ 4'	Date Reported:	11-17-09
Laboratory Number:	52448	Date Sampled:	11-12-09
Chain of Custody No:	8415	Date Received:	11-12-09
Sample Matrix:	Soil	Date Extracted:	11-13-09
Preservative:	Cool	Date Analyzed:	11-13-09
Condition:	Intact	Analysis Needed:	TPH-418.1

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

Total Petroleum Hydrocarbons

122

9.8

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:

State Com 31-8 #1.

Analyst

Review



EPA METHOD 418.1 TOTAL PETROLEUM **HYROCARBONS** QUALITY ASSURANCE REPORT

Client: Sample ID: QA/QC QA/QC Project #:

N/A

Date Reported:

11-17-09

Laboratory Number:

11-13-TPH.QA/QC 52426

Date Sampled: Date Analyzed: N/A

Sample Matrix: Preservative:

Freon-113 N/A

Date Extracted:

11-13-09 11-13-09

Condition:

N/A

Analysis Needed:

TPH

Calibration I-Cal Date C-Cal Date I-Gal RF: C-Cal RF: % Difference Accept Range 11-02-09 11-13-09

1,750

1,830

4.6%

+/- 10%

Blank Conc. (mg/Kg)

Concentration

Detection Limit 9.8

TPH

Duplicate Conc. (mg/Kg)

Sample

Duplicate % Difference Accept. Range

TPH

558

489

12.5%

+/- 30%

Spike Conc. (mg/Kg) TPH

Sample 558

2,000

Spike Added . Spike Result 2,510

% Recovery 98.1%

Accept Range 80 - 120%

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:

QA/QC for Samples 52426 - 52429 and 52446 - 52448.

Analyst

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Chloride

Client: Burlington Project #: 92115-0001 Sample ID: 5-pt Comp @ 5' Date Reported: 11-17-09 Lab ID#: 52447 Date Sampled: 11-12-09 Sample Matrix: Soil Date Received: 11-12-09 Preservative: Cool Date Analyzed: 11-13-09 Condition: Intact Chain of Custody: 8415

Parameter

Concentration (mg/Kg)

Total Chloride

10

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:

State Com 31-8 #1.

Analyst

/ Misth of Waters Review



Chloride

Client:	Burlington	Project #:	92115-0001
Sample ID:	5-Wall Comp @ 4'	Date Reported:	11-17-09
Lab ID#:	52448	Date Sampled:	11-12-09
Sample Matrix:	Soil	Date Received:	11-12-09
Preservative:	Cool	Date Analyzed:	11-13-09
Condition:	Intact	Chain of Custody:	8415

Parameter

Concentration (mg/Kg)

Total Chloride

13

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:

State Com 31-8 #1.

Analyst

Review

CHAIN OF CUSTODY RECORD 8415

Client: Project Name / Location: State Com Client Address: Sampler-Name:					:	力验	1		ANALYSIS / PARAMETERS													
Client Address:	u 31-	8	_		-			1				1										
Sample Prame:					wald				8015)	3015)		S										
Client Phone No.:			Client No.:			- 000 l				TPH (Method 8015) BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		18.1)	IDE			Sample Cool	Sample Intact
Sample No./	Sample	Sample		S	Sample	No./Volume	Pre	servative	M) Hc	LEX (DC (N	CRA 8	ation /	RCI	SLP W	PAH	TPH (418.1)	CHLORIDE			ample	ample
Identification	Date	Time		-	Matrix	of Containers	HgCl	HCI	F	m	>	Ĭ.	Ö	ŭ	F	4	F	Ö			ഗ്	Š
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