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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

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

Pit, Below-Grade Tank, or 12996 Proposed Alternative Method Permit or Closure Plan Applica	ation
Type of action: Below grade tank registration	OIL CONS. DIV DIST. 3
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 proposed alternative method	<b>.</b>
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alto	•
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surfactorionment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority.	
Operator: BP America Production CompanyOGRID #:778	
Address:200 Energy Court, Farmington, NM 87401	
Facility or well name:Mudge LS 8A	
API Number:3004523046OCD Permit Number:3330	
U/L or Qtr/QtrI Section12 Township31N Range11W County:San J	
Center of Proposed Design: Latitude36.91048 Longitude107.93695	NAD: □1927 ⊠ 983
Surface Owner:   Federal   State   Private   Tribal Trust or Indian Allotment	
2.          Pit:       Subsection F, G or J of 19.15.17.11 NMAC         Temporary: □ Drilling □ Workover         □ Permanent □ Emergency □ Cavitation □ P&A □ Multi-Well Fluid Management □ Low Chloride Drilline □ Lined □ Unlined □ Liner type: Thickness □ mil □ LLDPE □ HDPE □ PVC □ Other □ String-Reinforced         □ String-Reinforced □ Welded □ Factory □ Other □ Volume: □ bbl □ Dimensions: L□	
3.	
☑ Below-grade tank:       Subsection I of 19.15.17.11 NMAC       Tank A	
Volume:95.0bbl Type of fluid:Produced water	
Tank Construction material:Steel	
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other _Single walled/double bottomed; side wall	
Liner type: Thicknessmil	
4.  Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office	e for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)			
☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)	hospital,		
Four foot height, four strands of barbed wire evenly spaced between one and four feet			
Alternate. Please specify			
6. Nesting: Subsection E of 10.15.17.11 NIMAC (duality to prove the real property of the real property)			
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			
Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.			
Please check a box if one or more of the following is requested, if not leave blank:			
☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.			
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC			
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept	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		
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		
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)	☐ Yes ☐ No		
- 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		
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No		
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No		
Below Grade Tanks			
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes No		
Vithin 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			
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	}		
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No			
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site				
Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No			
Temporary Pit Non-low chloride drilling fluid				
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No			
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Permanent Pit or Multi-Well Fluid Management Pit				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No			
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
10.  Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc 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 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:				
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 doc 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	cuments are			
<ul> <li>☐ A List of wells with approved application for permit to drill associated with the pit.</li> <li>☐ 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</li> <li>☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> </ul>	15.17.9 NMAC			
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proviously Approved Design (attach copy of design). API Number:  or Permit Number:				
Previously Approved Design (attach copy of design) API Number: or Permit Number:				

Form C-144

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	uocuments are
☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC	
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC	
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan  Emergency Response Plan	
☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan	
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
13.  Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative	luid Management Pit
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 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	
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. F 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 ☐ 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 houndaries or within a defined municipal fresh water well field covered under a municipal ordinance	

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adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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.  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 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	11 NMAC 15.17.11 NMAC
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 believe to the least of my know	
Signature: Date:	
e-mail address:	
18.  OCD Approval: Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)	
OCD Representative Signature: Approval Date: 8/2	Ce/15
Title: ENUISO Spee 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 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: 4/3/2009	
20.  Closure Method:  Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loc ☐ If different from approved plan, please explain.	op systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please incommark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)  Proof of Deed Notice (required for on-site closure for private land only)  Plot Plan (for on-site closures and temporary pits)  Confirmation Sampling Analytical Results (if applicable)  Waste Material Sampling Analytical Results (required for on-site closure)  Disposal Facility Name and Permit Number	licate, by a check

Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requires	
Name (Print):Jeff Peace	Title: Field Environmental Coordinator
Name (Print):Jeff Peace	Date:July 6, 2015
e-mail address:peace.jeffrey@bp.com	Telephone:(505) 326-9479

### BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK CLOSURE PLAN

### Mudge LS 8A API No. 3004511057 Unit Letter G, Section 4, T31N, R11W

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does 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 after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the BP NMOCD approve BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

#### General Closure Plan

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
  - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
  - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
  - c. Basin Disposal, Permit NM-01-0005 (Liquids)

- d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
- e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

All liquids and sludge in the BGT were removed and sent to one of the above NMOCD approved facilities for disposal.

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.

The BGT was transported to a storage area for sale and re-use.

5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.

All equipment associated with the BGT has been removed.

6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method	Release Verification	Sample
	95 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	ND
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	0.0104
TPH	US EPA Method SW-846 418.1	100	48.2
Chlorides	US EPA Method 300.0 or 4500B	250 or background	30

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

Soil under the BGT was sampled and TPH, BTEX and chloride levels were below the stated limits. Sampling data is attached.

- 7. BP shall notify the division District III office of its results on form C-141. C-141 is attached.
- 8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

Sampling results indicate no release occurred.

9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

The area under the BGT was backfilled with clean soil and is still within the active well area.

10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.

The area over the BGT is still within the active well area. This area will be reclaimed as part of final reclamation when the well is plugged and abandoned.

11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.

The area over the BGT is still within the active well area. This area will be reclaimed as part of final reclamation when the well is plugged and abandoned.

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

The area over the BGT is still within the active well area. This area will be reclaimed as part of final reclamation when the well is plugged and abandoned.

13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.

BP will seed the area as part of final reclamation when the well is plugged and abandoned.

14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.

### BP will notify NMOCD when re-vegetation is successful.

- 15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
  - a. proof of closure notification (surface owner and NMOCD)
  - b. sampling analytical reports; information required by 19.15.17 NMAC;
  - c. disposal facility name and permit number
  - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
  - e. site reclamation, photo documentation.

    Closure report on C-144 form is included.
- 16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

Certification section of C-144 has been completed.

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

Submit 1 Copy to appropriate District Office in 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									
			OPERA'	ГOR		Initia	al Report	$\boxtimes$	Final Report
			Contact: Jef						
Address: 200 Energy Court, Fa	rmington, NM 87401			No.: 505-326-94					
Facility Name: Mudge LS 8A			Facility Typ	e: Natural gas v	vell				
Surface Owner: Private	Mineral C	)wner: I	Private			API No	. 30045230	46	
	LOCA	ATION	OF RE	LEASE					
Unit Letter   Section   Townsh	ip Range Feet from the 11W 1,715	North/ South	South Line	Feet from the 1,180	East/W East	Vest Line	County: Sa	ın Juan	l
	<b>Latitude</b> 36.91048		_ Longitud	le107.93695_	<u>.</u> .				
	NAT	URE	OF REL	EASE					
Type of Release: none			Volume of	Release: N/A		Volume I	Recovered: N	I/A	
Source of Release: below grade tai	nk – 95 bbl			Iour of Occurrenc	e:	Date and	Hour of Dis	covery	·
Was Immediate Notice Given?	☐ Yes ☐ No ☒ Not Re	equired	If YES, To	Whom?					
By Whom?			Date and I-						
Was a Watercourse Reached?  ☐ Yes ☑ No  If YES, Volume Impacting the Watercourse.				l					
If a Watercourse was Impacted, De	escribe Fully.*								
	Describe Cause of Problem and Remedial Action Taken.* Sampling of the soil beneath the BGT was done during removal to ensure no soil impacts from the BGT. Soil analysis resulted in TPH, BTEX and chloride below standards. Analysis results are attached.								
Describe Area Affected and Cleanup Action Taken.* BGT was removed and the area underneath the BGT was sampled. The area under the BGT was backfilled and compacted and is still within the active well area.									
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.									
^				OIL CONS	SERV	ATION	DIVISIO	N	
Signature: Off osee									
Printed Name: Jeff Peace	Approved by Environmental Specialist								
Title: Field Environmental Coordin	nator	Approval Date: Expiration Date:							
E-mail Address: peace.jeffrey@bp	.com	Conditions of Approval:							
Date: July 6, 2015	Phone: 505-326-9479								

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

CLIENT: BP	BLAGG ENGINE P.O. BOX 87, BLOOM	FIELD, NM 87413		API#:	)4 <u>52</u> 3046
	(505) 632-1	199			
FIELD REPORT:	BGT CONFIRMATION TEMP. PIT CLOSE (other)	JRE / RELEASE INVESTIGATION		PAGE No: 1	of1
SITE INFORMATION	I: <u>Sitename</u> : <b>MUDGE LS</b>	5 #8A		DATE STARTED:	03/26/09
	P: 31N RNG: 11W PM: NM	·		DATE FINISHED: _	
QTR-QTR/FOOTAGE: 1,715'S/1	,180'E NE/SE LEASE TYPE:	FEDERAL / STATE FEE IN	DIAN	ENVIRONMENTAL	
LEASE#: -	PROD. FORMATION: MV CON	TRACTOR: <b>ELKHORN</b>		SPECIALIST:	NJV
REFERENCE POINT	: WELL HEAD (W.H.) GPS COO	RD.: <b>36.91035</b> X	(107.93	709 GLELEV	/: <b>5,915'</b>
95 BGT (SW/DB)	GPS COORD.: 36.9104	8 X 107.93695	DISTANCE/BE	ARING FROM W.H.:	54', N55E
2)	GPS COORD.:		DISTANCE/BE	ARING FROM W.H.:	
3)	GPS COORD.:		DISTANCE/BE	ARING FROM W.H.:	
4)	GPS COORD.:		DISTANCE/BE	ARING FROM W.H.:	
5)	GPS COORD.:		DISTANCE/BE	ARING FROM W.H.:	
LAB INFORMATION:	CHAIN OF CUSTODY RECOR	D(S): ENVIROTE	CH		
1) SAMPLE ID: 5PC-TB @ 7' 95 BB	LBGT SAMPLE DATE: 03/26/09			418.1/8015B/802	21B/300.0 (CI)
2) SAMPLE ID:	SAMPLE DATE:	SAMPLETIME:	ABANALYSIS: _		
3) SAMPLE ID:	SAMPLE DATE:	SAMPLETIME:U	AB ANALYSIS: _		
4) SAMPLE ID:	SAMPLE DATE:	SAMPLETIME: L	AB ANALYSIS: _		
5) SAMPLEID:	SAMPLE DATE:	SAMPLETIME: L	ABANALYSIS:		
SOIL DESCRIPTION	SOIL TYPE: SAND SILTY SANI	SILT / SILTY CLAY / CLAY / GF	RAVEL / OT	HER	
SOIL COLOR: MO COHESION (ALL OTHERS): NON COHESIVE SLIGHTLE CONSISTENCY (NON COHESIVE SOILS): LC PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / DENSITY (COHESIVE CLAYS & SILTS): SOFT MOISTURE: DRY SLIGHTLY MOIST MOIST WA ADDITIONAL COMMENTS:	DOSE FIRM DENSE / VERY DENSE COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC T / FIRM / STIFF / VERY STIFF / HARD	HC ODOR DETECTED: YES SAMPLE TYPE: GRAB COM	NO EXPL	ANATION -	NATION -
	NA NA	ALA			ALA
EXCAVATION DIMENSIONS (if applicable	e): <u>NA</u> ft. X <u>NA</u> ft	. X <u>NA</u> ft. c	cubic yards ex	cavated (if applicable):	<u>NA</u>
SITE SKETCH			A		PLAN
	PROD.	N	<b>1</b>	circle: A	Attached
	TANK		· _	MISCELL.	NOTES
			<u>s</u>	SW - SINGLE WALI	LED
STEEL			<u> </u>	B - DOUBLE BOT	TOM
CONTAINN RING	IENT $(x \stackrel{x}{x} \stackrel{x}{x})$	PROTI	<u>s</u>	SIDEWALLS NOT V	ISIBLE
		PBGTL T.B. ~ 7'			
		B.G.	] -		
			-		
WELL			Ì -		
WELL HEAD ⊕					
		v o	DD   -		
HOTEL DOT DE CAMODADE TANK ED DIO	MATION DEDDECOION DO - DE CANODARE S	X - S.			
	AVATION DEPRESSION; B.G. = BELOW GRADE; B = IS BELOW-GRADE TANK LOCATION; SPD = SAMPLE			MAGNETIC DECLI	<u>VATION @ 13.5 E</u>
TRAVEL NOTES: CALLOUT:	03/25/09 - After.	ONSITE: 03/26/09 - I		iched.)	



### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Blagg / BP	Project #:	94034-0010
Śample ID:	5 PC-TB @ 7' 95 BGT	Date Reported:	04-03-09
Laboratory Number:	49486	Date Sampled:	03-26-09
Chain of Custody No:	5951	Date Received:	03-26-09
Sample Matrix:	Soil	Date Extracted.	03-30-09
Preservative:	Cool	Date Analyzed	03:30-09
Condition:	Intact	Analysis Needed:	TPH-418:1

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

Total	Petroleum	Hvdroc	arbons
777 - 7,727 7			

48.2

6.4

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:

Mudge LS #8A 5 Pt Composite Sample.

Analyst

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### EPA METHOD:8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg/BP	Project:#:	94034-0010
Sample ID:	5PC-TB@7'-95 BGT	Date Reported:	04-07-09
Laboratory Number:	49486	Date Sampled:	03-26-09
Chain of Custody:	5951	Date Received:	03-26-09
Sample Matrix:	Soil:	Date Analyzed:	04-05-09
Preservative:	Cool	Date Extracted:	04-03-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0:9	
Toluene	2.8	.1.0	
Ethylbenzene	2.2	1.0	
p,m-Xylene	2:5	1.2	
o-Xylene	2.9	0.9	
Total BTEX	10:4		

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:

Mudge LS #8A, 5 PT Composite Sample.

Analyst

Allisther (
Review



#### Chloride

Client: Sample ID:

Blagg / BP 5PC-TB @ 7' 95 BGT Project #: Date Reported: 94034-0010 04-03-09

Lab ID#: Sample Matrix: 49486 Soil Cool

Date Sampled: Date Received:

03-26-09 03-26-09 03-31-09

Preservative: Condition:

Intact

Date Analyzed: Chain of Custody:

5951

Parameter

Concentration (mg/Kg)

**Total Chloride** 

30

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:

Mudge LS #8A 5 Pt. Composite Sample.

Musthern Weelers.



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

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

04-03-09

Laboratory Number:

03-30-TPH.QA/QC 49465

Date Sampled:

N/A

Sample Matrix,

Freon-113

Date Analyzed:

03-30-09

Preservative: Condition:

N/A N/A

Date Extracted: Analysis Needed: 03-30-09 TPH

Calibration

I-Cal Date:

C-Cal Date

I-Cal RF

C-Cal RF:

% Difference

Accept. Range

03-23-09

03-30-09

1,340

1,450

8.2%

Blank Conc. (mg/Kg)

+/- 10%

Concentration Detection Limit

TPH

ND

6.4

Duplicate Conc. (mg/Kg)

TPH

Sample. 20.3

Duplicate 21.4

5.4%

% Difference Accept. Range +/- 30%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result & Recovery Accept Range

TPH

20.3

2,000

1,660

82.2%

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 49465 - 49469, 49485 - 49488 and 49495.



## EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

### **Quality Assurance Report**

Client:	QA/QC		Project#:	N/A			
Sample ID:	04-05-09 QA/0	QΘ	Date Reported:	04-07-09			
Laboratory Number;	49465		Date Sampled:		Ν/Ą		
Sample Matrix:	Methylene Chlo	ride	Date Received:	N/A			
Preservative:	Ņ/A		Date Analyzed:		04-05-09		
Condition:	N/A		Analysis Request	TPH			
	ে বা-Cal Date	Cal RF	C.Cai.RF	% Difference	Accept Rang		
Gasoline Range C5 - C10	05-07-07	9,9960E+002	1.0000E+003	0.04%	0 - 15%		
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%		
Blank Conc. (mg/L = mg/Kg)		(Concentration)		Detection Lin	<u>āĽ</u>		
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	Ccept Range			
Gasoline Range C5 - C10	7.8	7.4	5.1%	0 - 30%			
Diesel Range C10 - C28	3,6	3.4	5.6%	0 - 30%			
Spike Conc (mg/kg) 😂 🛂	Sample	Spike Added	≢Spike Result ≝	% Recovery	Accept Rang		
Gasoline Range C5 - C10	7.8	250	256	99.2%	75 - 125%		
Diesel Range C10 - C28	3.6	250	248	97.6%	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 49465, 49469, 49470, 49485, 49487, 49488, 49495, 49500, 49506,

and 49507.

Analyst

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### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

ND

ND:

0.2%

0.2%

0.1

0.1

:Client:	*Ň/A.		Project #:		N/A				
Sample ID:	04±05-B∓ QA/QC	:	Date Reported:		04-07-09				
Laboratory Number:	49465		Date Sampled:		N/A				
Sample Matrix:	Soil		Date Received:		N/A				
Preservative:	.N/A		Date Analyzed:		04-05-09				
.Condition:	N/A	٠,	Änalysis:		BTEX				
Calibration and Detection/Limits (ug/L)		C-Cal RF Accept⊪Ran							
Benzene	7:2698E+006	7:2844E+006	0.2%	*ND	0.1				
Toluëne	6.6597E+006	6.6730E+006	0.2%	ND	0.1				
Ethylbenzene	5.7486E+006	5:7601E±006	0.2%	NĎ	0.4				
THE PROPERTY OF A			21.22	41	1-0.4				

1,4586E+007

75.4860E+006

(Duplicate Conc. (ug/Kg)	Sample: C. J. Di	plicate	%Diff. (2)	Accept Range	Deject Limit
Benzene	4.1	1.0.	9.1%	0 - 30%	0.9
Toluene	3.8	3.6	5.3%	0 30%	10
Ethylbenzene	5.9	5.8	1.7%	0 - 30%	1.0
p,m-Xylene	21.1	20.7	1.9%	0 - 30%	1.2
o-Xylene	3.9	3.8	2:6%	0 - 30%	0.9

1.4616E+007

5.4970E+006

Spike Conc. (ug/Kg)	Gample & Amo	ount Spiked Spi	ded Samples	% Recovery	Accept Range
Benzene	<b>1.1</b>	50:0	50.6	99.0%	39 - 150
Toluene	.3.8	50.0	51.8	96.3%	46 - 148
Ethylbenzene	.5.9	50.0	*53.9	96.4%	32 - 160
p,m-Xylene.	21.1	100	116	95.9%	46 - 148
o-Xylene	3.9	50.0	49.9	92.6%	46 - 148
			,		

ND - Parameter not detected at the stated detection limit.

References;

p,m-Xylene

o-Xylene

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 49465, 49469, 49485 - 49488, 49495, 49500, 49506, and 49507.

Analyst

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

Review

### CHAIN OF CUSTODY RECORD

			<u> </u>				<u> </u>	3 😊				- <del></del>				<u></u>			<u> </u>				
Client: Project Name / Location:  BLAGE   BP   MUDGE LS					-S #8	3 A	•						,	ANAL	YSIS	/ PAR	AMET	ERS					
Client:Address:		Sampler Name:  NELSON VELEZ  Client No.:  GLO34 - CO16  Sample Lab No. Sample No./Volume Preservative of Containers Hotel Hill Market Containers				8015)	1 8021)	8260)	S			ń		Nig	(5005)		J. J.	RS TR					
Client Phone No.:		C	lient No.:	1034	- 0016				Method	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE (45068)	-	3 STAMPLE	M. ComPastre SAMPLE	Sample Cool	Sample Intact
Sample No./	Sample Date	Sample Time	Lab No.	1 .	ample Matrix	No./Volume of Containers	Pres	ervativ	) HAI	втех	VOC (	RCRA	Cation	P.C.	TCLP	PAH	TPH.(	CHLO		6.698	2 2	Samp	Samp
5PC-76C7- 95 BGT	3/20/09	1138	49486	Solid Solid	Sludge Aqueous	1-402		7								b	1	/.			$\checkmark$	V	/
				Soil Solid	Sludge Aqueous																		
De9'-	3/26/09	1132	49487	Solid Solid	Sludge Aqueous	1-40z		~	1 /	<b>V</b>							$\sqrt{}$	$\checkmark$		/		<b>✓</b>	$\checkmark$
				Soil Solid	Sludge Aqueous							i .											
			···	Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
<u></u>				Solid	Sludgë Aquéous										,								
				Soil Solid	Sludge Aqueous		-		<u> </u>				<u></u>										
B. II				Soil Solid	Sludge Aqueous																	1	
Relinquished by (Sign Relinquished by: (Sign	ature)	, -			3/26/09	Time 1337	/		ved by				C_0	+0	ريا					1 1	ate 25/05	1	me 33.7
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Relinquished by: (Sign	ature)		· · · · · · · · · · · · · · · · · · ·				F	Recei	ved by	: (Sigr	ature	)	····			·····							
	· · · · · · · · · · · · · · · · · · ·		<del></del>		ENV	IRO	TE	C		M	C.										-		

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505-632-0615



