1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 8750	DepartmentFor temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.1220 South St. Francis Dr. Santa Fe, NM 87505For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.
No cos Propos	Pit, Below-Grade Tank, or ed Alternative Method Permit or Closure Plan Application RECEIVED
I ype of action: 45 - 21036 or proposed alterr <i>Instructions: Please</i> Please be advised that approval of this req environment. Nor does approval relieve th	<ul> <li>Below grade tank registration</li> <li>Permit of a pit or proposed alternative method</li> <li>Closure of a pit, below-grade tank, or proposed alternative method</li> <li>Modification to an existing permit/or registration</li> <li>Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,</li> </ul>
<sup>1.</sup> Operator: BP America Production	Company OGRID #:778
Address:200 Energy Court, Fa	mington, NM 87401
Facility or well name:Hughes L	18
API Number:3004521036	OCD Permit Number:6313
	20Township29NRange8WCounty:San Juan
Center of Proposed Design: Latitude	
Lined Unlined Liner type: T	
3.	
Below-grade tank: Subsection I	
Volume:95.0	_bbl Type of fluid:Produced water
	etection 🗌 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
Visible sidewalls and liner V	ible sidewalls only 🛛 Other _Double walled/double bottomed; side walls not visible
Liner type: Thickness	mil HDPE PVC Other

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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<ul> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>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)</li> <li>Four foot height, four strands of barbed wire evenly spaced between one and four feet</li> <li>Alternate. Please specify</li></ul>	hospital,			
<ul> <li>6.</li> <li><u>Netting</u>: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)</li> <li>Screen Netting Other</li> <li>Monthly inspections (If netting or screening is not physically feasible)</li> </ul>				
<ul> <li><u>Signs:</u> Subsection C of 19.15.17.11 NMAC</li> <li>12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers</li> <li>Signed in compliance with 19.15.16.8 NMAC</li> </ul>				
<ul> <li>8. <u>Variances and Exceptions:</u> Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</li> <li><i>Please check a box if one or more of the following is requested, if not leave blank:</i> <ul> <li>Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.</li> <li>Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul> </li> </ul>				
<sup>9.</sup> <u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC <i>Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below.</i> Siting criteria does not apply to drying pads or above-grade tanks.	ptable source			
General siting				
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	□ 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				
<ul> <li>Within the area overlying a subsurface mine. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗌 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</li> </ul>				
Society; Topographic map Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map				
Below Grade Tanks				
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No			
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.       Image: Yest 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,	□ Yes□ No			

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

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Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
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
<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Temporary Pit Non-low chloride drilling fluid	
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No
<ul> <li>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;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Permanent Pit or Multi-Well Fluid Management Pit	
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 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
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li><sup>10.</sup></li> <li><u>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist</u>: Subsection B of 19.15.17.9 N <i>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.</i></li> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</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>Previously Approved Design (attach copy of design) API Number: or Permit Number:</li></ul>	ouments are 9 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. <ul> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <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> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

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I2.         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 statached. <ul> <li>Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Climatological Factors Assessment</li> <li>Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC</li> </ul>	documents are
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 FI         Alternative         Proposed Closure Method:       Waste Excavation and Removal         Waste Removal (Closed-loop systems only)         On-site Closure Method (Only for temporary pits and closed-loop systems)         In-place Burial       On-site Trench Burial         Alternative Closure Method	uid Management Pit
<ul> <li><sup>14.</sup></li> <li>Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a closure plan. Please indicate, by a check mark in the box, that the documents are attached.</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)</li> </ul>	nttached to the
<ul> <li>Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>	).
15. <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC <i>Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour</i> provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
<ul> <li>Ground water is more than 100 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	Yes No
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

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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					
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	Yes No					
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>						
Within a 100-year floodplain.	Yes No					
- 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						
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 bel	ief.					
Name (Print): Title:						
Signature: Date:						
e-mail address: Telephone:						
18. OCD Approval: Permit Application (including closure plan) K Closure Plan (only) OCD Conditions (see attachment)						
OCD Approval:  Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)						
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       OCD Representative Signature:       OCD Representative Signature:       Approval Date: 3/19/						
OCD Approval:       Permit Application (including closure plan)       Image: Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         OCD Representative Signature:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         Title:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         OCD Representative Signature:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         Title:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         OCD Representative Signature:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         OCD Representative Signature:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         Title:       Image: Closure Plan (only)       Image: OCD Conditions (see attachment)         OCD Permit Number:       Image: Closure Plan (only)       Image: Closure Plan (only)	2015 the closure report.					
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       OCD Permit Number:       Approval Date: 3/19/         Title:       Omplicance       Office       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	2015 the closure report.					
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 3/19/ Title: On figure Office Offi	2015 the closure report. complete this					

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#### 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):Jeff Peace	Title: Field Environmental Coordinator				
Signature: Joff Porce	Date:February 17, 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

### Hughes LS 18 API No. 3004521036 Unit Letter F, Section 20, T29N, R8W

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**

- 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.
- 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

No notice was made due to misunderstanding of the BGT notice requirement 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	ND
TPH	US EPA Method SW-846 418.1	100	88.9
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<1

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.

- BP shall notify the division District III office of its results on form C-141.
   C-141 is attached.
- 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 has been reclaimed since the well was plugged and abandoned.

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 has been reclaimed since the well was 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 has been reclaimed since the well was 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 has been reclaimed since the well was 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 since the well was 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.

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## State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141

Revised August 8, 2011

			Rele	ease Notifi	cation	and Co	orrective A	ction			
						<b>OPERA</b>	ГOR	🗌 Initi	al Report	X I	Final Report
Name of C	ompany: BP					Contact: Jef	f Peace				
Address: 200 Energy Court, Farmington, NM 87401 T			Telephone 1	No.: 505-326-94	179						
Facility Na	me: Hughes I	LS 18			]	Facility Typ	e: Natural gas	well			
Surface Ov	vner: Federal			Mineral (	Owner: I	Federal		API No	0. 30045210	036	
				LOC	ATION		FASE				
LOCATIONUnit LetterSectionTownshipRangeFeet from theNorth/F2029N8W1.600North			South Line	Feet from the 1.770	East/West Line West	County: S	an Juan				
						Longitud	e_107.70160_				
			_		TIPE	OF REL					
ype of Rela	ease: none				UNL		Release: N/A	Volume 1	Recovered: N	V/A	
	elease: below g		95 bbl				Iour of Occurrent	ce: Date and	Hour of Dis	covery:	
Vas Immed	iate Notice Giv		Yes 🗌	] No 🛛 Not R	equired	If YES, To	Whom?				
y Whom?						Date and Hour					
Vas a Water	rcourse Reache		Yes 🗵	No		If YES, Vo	olume Impacting	the Watercourse.			
Describe Ca		and Remed	lial Actio	n Taken.* Sampli			the BGT was do is results are attac	ne during removal ched.	to ensure no	soil imp	acts from
				ten.* BGT was re d since the well w				T was sampled. T	'he area unde	er the BG	T was
egulations a public health hould their or the enviro	all operators are n or the environ operations have	e required to ment. The e failed to a lition, NMO	o report an acceptance dequately CD accept	nd/or file certain in the of a C-141 report investigate and in	release no ort by the remediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	inderstand that purs ctive actions for rel eport" does not rel eat to ground wate responsibility for c	eases which ieve the oper r, surface wa	may end rator of li iter, hum	langer iability an health
							OIL CON	SERVATION	DIVISIO	DN	
Signature: Jff Peace					1	Approved by	Environmental S	pecialist:			

Finited Name. Jen Feace				
Title: Field Environmental Coord	inator	Approval Date:	Expiration I	Date:
E-mail Address: peace.jeffrey@bp.com		Conditions of Approval:		Attached
Date: February 17, 2015	Phone: 505-326-9479			

\* Attach Additional Sheets If Necessary

CLIENT: BP	BLAGG ENGINE P.O. BOX 87, BLOOM (505) 632-1	FIELD, NM 87413	3	API #: 30	04521036
FIELD REPORT:	BGT CONFIRMATION TEMP. PIT CLOS (other)	URE / RELEASE INVESTIGATION		PAGE No:	<b>1</b> of
SITE INFORMATION	SITE NAME: HUGHES L	.S #18		DATE STARTED:	06/24/09
QUAD/UNIT: F SEC: 20 TW	P: 29N RNG: 8W PM: NM	CNTY: SJ ST: NM		DATE FINISHED:	
	<b>1,770'W SE/NW</b> LEASE TYPE:		INDIAN	ENVIRONMENTAL SPECIALIST:	JCB
REFERENCE POINT			X 107 70	154 CLEU	V.: <b>6,549'</b>
		4 X 107.70160		ARING FROM W.H.:	27', NORTH
2)				ARING FROM W.H.:	
4)				_	
5)				ARING FROM W.H.:	
LAB INFORMATION:		7362			
1) SAMPLE ID: 95 BGT 5-pt. @	CHAIN OF COSTODT RECOR	1005	LAB ANALYSIS:	TPH/B1	EX/CL
2) SAMPLE ID:					
3) SAMPLE ID:			LAB ANALYSIS:		
4) SAMPLE ID:					
	SAMPLE DATE:				
SOIL DESCRIPTION					(@6'
COHESION (ALL OTHERS): NON COHESIVE (SLIGHTLY CONSISTENCY (NON COHESIVE SOILS): LO PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / C DENSITY (COHESIVE CLAYS & SILTS): SOFT MOISTURE: [DRY] SLIGHTLY MOIST / MOIST / WE	SOIL COLOR:       DARK YELLOWISH ORANGE       Discoloration/staining observed: Yes No explanation -         COHESION (ALL OTHERS): NON COHESIVE (SLIGHTLY COHESIVE) COHESIVE / HIGHLY COHESIVE       Discoloration/staining observed: Yes No explanation -         CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE       HC ODOR DETECTED: YES NO EXPLANATION -         PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC / HIGHLY PLASTIC / OHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC       HC ODOR DETECTED: YES NO EXPLANATION -         DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD       SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS.       5         ADDITIONAL COMMENTS:       95 STEEL DOUBLE / DOUBLE SET @ 6' BELOW GRADE.       6' BELOW GRADE.       5				
GAS WELL PLUGGED & ABANDO	New York Commence of Commence	. X NA ft.	cubic vards ex	cavated (if applicable):	NA
SITE SKETCH			N		
Т	$ \begin{array}{c} \text{BGTL} \\ \text{B} \sim 6' \\ \text{B.G.} \end{array} \rightarrow \begin{pmatrix} x \\ x \\ x \\ x \end{pmatrix} $			DB - DOUBLE BOT	том
	HEAD	X - S			
	ION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; LOW-GRADE TANK LOCATION; SPD = SAMPLE POINT [	T.H. = TEST HOLE; ~ = APPROX.;			
TRAVEL NOTES: CALLOUT:		ONSITE: 06/24/09			

.



### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Parameter	Conce (mg	entration /kg)	Det. Limit (mg/kg)
Condition.	intact	Analysis Needed.	
Condition:	Intact	Analysis Needed:	TPH-418.1
Preservative:	Cool	Date Analyzed:	06-29-09
Sample Matrix:	Soil	Date Extracted:	06-29-09
Chain of Custody No:	7362	Date Received:	06-26-09
Laboratory Number:	50698	Date Sampled:	06-25-09
Sample ID:	95 BGT 5-pt @ 6'	Date Reported:	07-02-09
Client:	Blagg / BP	Project #:	94034-0010

Total Petroleum Hydrocarbons	88.9	11.9
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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: Hughes LS #18.

Analyst

Mesthe muceters



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

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	95 BGT 5-pt @ 6'	Date Reported:	07-01-09
Laboratory Number:	50698	Date Sampled:	06-25-09
Chain of Custody No:	7362	Date Received:	06-26-09
Sample Matrix:	Soil	Date Extracted:	06-29-09
Preservative:	Cool	Date Analyzed:	06-30-09
Condition:	Intact	Analysis Requested:	8015 TPH
		~	Det.
Parameter		Concentration (mg/Kg)	Limit (mg/Kg)
Gasoline Range (C5	- C10)	ND	0.2
Diesel Range (C10 -	C28)	ND	0.1
ample ID: 95 BGT 5-pt @ 6' aboratory Number: 50698 chain of Custody No: 7362 sample Matrix: Soil reservative: Cool condition: Intact			

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: Hughes LS #18.

**Total Petroleum Hydrocarbons** 

Analyst

hristen Weller Review

ND



## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	95 BGT 5-pt @ 6'	Date Reported:	07-01-09
Laboratory Number:	50698	Date Sampled:	06-25-09
Chain of Custody:	7362	Date Received:	06-26-09
Sample Matrix:	Soil	Date Analyzed:	06-30-09
Preservative:	Cool	Date Extracted:	06-29-09
Condition:	Intact	Analysis Requested:	BTEX

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	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: Hughes LS #18.

Analyst

hristle Walters Review



#### Chloride

Client:	Blagg / BP	Project #:	92115-0001
Sample ID:	95 BGT 5-pt @ 6'	Date Reported:	07-02-09
Lab ID#:	50698	Date Sampled:	06-25-09
Sample Matrix:	Soil	Date Received:	06-26-09
Preservative:	Cool	Date Analyzed:	06-30-09
Condition:	Intact	Chain of Custody:	7362

Parameter

## Concentration (mg/Kg)

**Total Chloride** 

<1

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:

Hughes LS #18.

Analyst

Mustu Muceters Review



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

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:		QA/QC QA/QC 06-29-TPH.QA/ Freon-113 N/A N/A	QC 50688	Project #: Date Reported Date Sampled Date Analyzed Date Extracted Analysis Need	: : :	N/A 06-30-09 N/A 06-29-09 06-29-09 TPH
Calibration	I-Cal Date 06-26-09	C-Cal Date 06-29-09	I-Cal RF: <b>1,480</b>	C-Cal RF: <b>1,490</b>	% Difference 0.7%	Accept. Range +/- 10%
Blank Conc. (mg TPH	g/Kg)		Concentration ND		Detection Lim 11.9	it
Duplicate Conc. TPH	(mg/Kg)		Sample 44.5	Duplicate 38.5	% Difference 13.5%	Accept. Range +/- 30%

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 50688 - 50690, 50698 - 50699, 50702 and 50705.

Analyst

Mester mucela



.

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

## **Quality Assurance Report**

Client	QA/QC		Project #:	N/A	
Sample ID:	06-30-09 QA/0	20	Date Reported:		07-01-09
Laboratory Number:	50688		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received		N/A
Preservative:	N/A		Date Analyzed:		06-30-09
Condition:	N/A		Analysis Reque	ested:	ТРН
	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	1.0632E+003	1.0637E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0655E+003	1.0659E+003	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)	the second	Concentration	The mark side	Detection Limit	
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	ND	ND	0.0%	0 - 30%	
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%	
		and the second se			
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	249	99.6%	75 - 125%
Diesel Range C10 - C28	ND	250	244	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 50687 - 50690, 50698, 50699, 50701, and 50705.

Analyst

huster Waters



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A		Project #:		N/A
Sample ID	06-30-BT QA/QC		Date Reported:		07-01-09
Laboratory Number:	50688		Date Sampled		N/A
Sample Matrix:	Soil		Date Received		N/A
Preservative:	N/A		Date Analyzed:		06-30-09
Condition	N/A		Analysis:		BTEX
Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept. Ran	nge 0 - 15%	Conc	Limit
Benzene	5.7807E+006	5 7923E+006	0.2%	ND	0.1
Toluene	5 3686E+006	5.3793E+006	0.2%	ND	0.1
Ethylbenzene	4 7281E+006	4.7375E+006	0.2%	ND	0.1
p,m-Xylene	1.2320E+007	1.2345E+007	0.2%	ND	0.1
o-Xylene	4 5546E+006	4.5637E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.8	2.8	0.0%	0 - 30%	0.9
Toluene	2.4	2.3	4.2%	0 - 30%	1.0
Ethylbenzene	2.9	2.8	3.4%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

Spike Conc, (ug/Kg)	Sample A	mount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.8	50.0	52.3	99.1%	39 - 150
Toluene	2.4	50.0	49.4	94.3%	46 - 148
Ethylbenzene	2.9	50.0	50.9	96.2%	32 - 160
p,m-Xylene	ND	100	98.8	98.8%	46 - 148
o-Xylene	ND	50.0	47.3	94.6%	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 50687 - 50690, 50698 - 50701, and 50705. hristle m Walter Analyst Review

## **CHAIN OF CUSTODY RECORD**

Client: Project Name / Location:						ANALYSIS / PARAMETERS																	
SLAGE / BP     HUGHES LS # 18       Client Address:     Sampler Name:											11 17 16	10107											
Client Address:			Sampler Name:						2	21)	(0												
			J. BL	466					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	S			0								
Client Phone No .:		C	lient No.:						pot	thou	pou	leta	noir		H/F		(1)	ш					taci
			94034	-0010	0				Meth	(Me	Meth	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			0		Sample Intact
Sample No./	Sample	Sample	Lab No.	S	ample	No./Volume of			H	EX	C (	RA	tion	5	LP	I	H	TLO				du	Idua
Identification	Date	Time		1000	latrix	Containers	HgCl <sub>2</sub>	HCI	L L	BT	2	R	Ca	RCI	10	PAH	Ĕ.	5			G	0	20
95 BGT	6/25/	1030	50678	Solid	Sludge Aqueous	1-402			×	×							×	2			ł		
5-pt 06	- 104		WOULD	Soil	Sludge	1 106	-																-
				Solid	Aqueous																		
				Soil Solid	Sludge																		
				Soil	Aqueous Sludge		-		1											-			-
				Solid	Aqueous																		
				Soil Solid	Sludge Aqueous														·				
				Soil	Sludge		-					-											
				Solid	Aqueous																		
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
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				Solid	Aqueous																		
Relinquished by: (Signa	ature)				Date 6/26/09	Time	F	Receive	ed by:	(Sign	ature				R					Da	1e 6/09	Tim	e
Steff Stee	- G				126/09	0940	>			(	$\nearrow$	ez-			12	-		-		6/2	6109	9.	AC
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## HUGHES LS # 18

