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 87505State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505For 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
12743 Proposed Alternative Method Permit or Closure Plan Application LUIVED
Type of action: \Box Below grade tank registration \Box Permit of a pit or proposed alternative method \Box Closure of a pit, below-grade tank, or proposed alternative method \Box Modification to an existing permit/or registration \Box Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,
or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
I. Operator: BP America Production Company OGRID #:778
Address:200 Energy Court, Farmington, NM 87401
Facility or well name:Mudge A 40
API Number:
U/L or Qtr/QtrLSection10Township31NRange11WCounty:San Juan
Center of Proposed Design: Latitude36.91008 Longitude107.98401 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 Drilling Fluid yes no
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
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 _Double walled/double bottomed; side walls not visible
Liner type: Thickness mil HDPE PVC Other
4.

Alternative Method:

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

, . 5. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify_ Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other Monthly inspections (If netting or screening is not physically feasible) Signs: Subsection C of 19.15.17.11 NMAC 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers Signed in compliance with 19.15.16.8 NMAC 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. 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 acceptable 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 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 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 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 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 Within a 100-year floodplain. (Does not apply to below grade tanks)

FEMA map

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured Yes No from the ordinary high-water mark).

Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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

🗌 Yes 🗌 No

🗌 Yes 🗌 No

Yes No

Yes No

Yes No

Yes No

Yes No

□ NA

NA NA

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
 application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
 Within 100 feet of a wetland. 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.} <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 doc attached.</i>	
 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 	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 	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit 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 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 A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.	
and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number: _	

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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 Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Remergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC	documents are
 <u>Proposed Closure</u>: 19.15.17.13 NMAC <i>Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.</i> Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F 	luid Management Pit
Image: A liternative Proposed Closure Method: Image: Waste Excavation and Removal Image: Waste Removal (Closed-loop systems only) Image: On-site Closure Method (Only for temporary pits and closed-loop systems) Image: Imag	
 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 	attached to the
15. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P 19.15.17.10 NMAC for guidance.	ce material are lease refer to
 Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 	☐ Yes ☐ No ☐ 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 □ NA
 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 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
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	Yes No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No ☐ 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	lan. 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. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann 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	15.17.11 NMAC
17. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli	ief.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
e-mail address: Telephone:	
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	
18.	
 18. OCD Approval: Permit Application (including closure plan) (closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 4/14 Title: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. 	12015 the closure report.
 18. OCD Approval: Permit Application (including closure plan) (closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	12015 the closure report.
 18. OCD Approval: Permit Application (including closure plan) (closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 4/14 Title: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. 	2015 the closure report. complete this
18. OCD Approval: Permit Application (including closure plan) The Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	2015 the closure report. complete this
18. OCD Approval: Permit Application (including closure plan) Image: Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	2015 the closure report. complete this
18. OCD Approval: Permit Application (including closure plan) Image: Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	2015 the closure report. complete this
18. OCD Approval: Permit Application (including closure plan) Inclosure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	2015 the closure report. complete this
18. OCD Approval: Permit Application (including closure plan) Inclosure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:	2015 the closure report. complete this

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Operator Closure Certification:

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22.

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: Jeff Pose	Date:March 9, 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 A 40 API No. 3004521023 Unit Letter L, Section 10, 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

 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

No notice was made due to misunderstanding of the BGT notice requirements a 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	ND
TPH	US EPA Method SW-846 418.1	100	22.3
Chlorides	US EPA Method 300.0 or 4500B	250 or background	15

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 with the rest of the site 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 with the rest of the site 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 with the rest of the site 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 has been 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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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Form C-141 Revised August 8, 2011 Copy to appropriate District Office in

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

1220 S. St. Eropais Dr. Sonto Eo. NM 97505	a Fe, NM 87505		
Release Notificat	ion and Corrective Ac	etion	
	OPERATOR	Initial R	eport 🛛 Final Repo
Name of Company: BP	Contact: Jeff Peace		
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-947	9	
Facility Name: Mudge A 40	Facility Type: Natural gas w	ell	
Surface Owner: Federal Mineral Own	er: Federal	API No. 30	004521023
LOCAT	ION OF RELEASE		
Unit Letter Section Township Range Feet from the No	orth/South Line Feet from the	East/West Line Co West	ounty: San Juan
Latitude 36.91008	Longitude 107.98401		
NATU	RE OF RELEASE		
Type of Release: none	Volume of Release: N/A	Volume Reco	overed: N/A
Source of Release: below grade tank – 95 bbl	Date and Hour of Occurrence		r of Discovery:
Was Immediate Notice Given?	If YES, To Whom?	1	5
By Whom?	Date and Hour		
Was a Watercourse Reached?	If YES, Volume Impacting th	e Watercourse.	
the BGT. Soil analysis resulted in TPH, BTEX and chloride below sta Describe Area Affected and Cleanup Action Taken.* BGT was remov			regunder the BGT was
I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remer or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	to the best of my knowledge and un se notifications and perform correcti y the NMOCD marked as "Final Rep diate contamination that pose a threa	derstand that pursuant ve actions for release port" does not relieve at to ground water, su	t to NMOCD rules and s which may endanger the operator of liability rface water, human health
ederal, state, or rocar laws and or regarations.	OIL CONS	ERVATION DI	VISION
Signature: off Peace			
Printed Name: Jeff Peace	Approved by Environmental Spe	ecialist:	
Title: Field Environmental Coordinator	Approval Date:	Expiration Date	
Title: Field Environmental Coordinator E-mail Address: peace.jeffrey@bp.com	Approval Date: Conditions of Approval:		xttached

CLIENT: BP	BLAGG ENGIN P.O. BOX 87, BLOOD (505) 632	WFIELD, NM 87413	API#: 300	4521023
FIELD REPORT:	BGT CONFIRMATION TEMP. PIT CLO	DSURE / RELEASE INVESTIGATION	PAGE No: 1	of1
SITE INFORMATION QUAD/UNIT: L SEC: 10 TW	: <u>SITE NAME:</u> MUDGE A P: 31N RNG: 11W PM: NM		DATE STARTED:	05/14/10
	800'W NW/SW LEASE TYPE:		DATE FINISHED:	
	PROD. FORMATION: PC	CONTRACTOR: ELKHORN	SPECIALIST:	JCB
REFERENCE POINT		OORD.: 36.91012 X	107.98397 GL ELEV	
2) 3) 4)	GPS COORD.:	C	ISTANCE/BEARING FROM W.H.: ISTANCE/BEARING FROM W.H.: ISTANCE/BEARING FROM W.H.: ISTANCE/BEARING FROM W.H.:	24', S42W
LAB INFORMATION:	CHAIN OF CUSTODY RECO	DRD(S): ENVIROTECH		OVM READING
1) SAMPLE ID: 95 BGT 5-pt. @ 2) SAMPLE ID:	6' SAMPLE DATE: 05/14/10 SAMPLE DATE:	SAMPLE TIME: 1510 LAB ANALYSIS		B (CI) NA
MOISTURE: DRY SLIGHTLY MOIST / MOIST / WALL COMMENTS: GAS WE	NET / SATURATED / SUPER SATURATED	SAMPLE TYPE: GRAB COMPOS	SITE + # OF PTS. 5	
EXCAVATION DIMENSIONS (if applicable)): <u>NA</u> ft. X <u>NA</u>	ft. X NA ft.	cubic yards excavated (if applicable	
SITE SKETCH		OVM CAMB. READ. =ppm OVM CALIB. GAS =ppm TMME: am/pmPATE:		T PLAN Attached
	WELL HEAD ⊕	1	DW - DOUBLE WA	
BERM	PBGTL (x x x x) x B.G.			
	WATION DEPRESSION; B.G. = BELOW GRADE; E <u>S BELOW-GRADE TANK LOCATION; SPD = SAMF</u> 05/12/10 - MORN.			NATION @ 10°E

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envirotech Analytical Laboratory

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

21.6

Parameter	Concentration (mg/kg)		Det. Limit (mg/kg)
Condition:	Intact	Analysis Needed:	TPH-418.1
Preservative:	Cool	Date Analyzed:	05-20-10
Sample Matrix:	Soil	Date Extracted:	05-20-10
Chain of Custody No:	9390	Date Received:	05-19-10
_aboratory Number:	54304	Date Sampled:	05-14-10
Sample ID:	95 BGT 5-pt@6'	Date Reported:	05-24-10
Client:	Blagg/BP	Project #:	94034-0011

22.3

Total Petroleum Hydrocarbons

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 A #40

Analys

Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg/BP	Project #:	94034-011
Sample ID:	95 BGT 5-pt @ 6'	Date Reported:	05-21-10
Laboratory Number:	54304	Date Sampled:	05-14-10
Chain of Custody No:	9390	Date Received:	05-19-10
Sample Matrix:	Soil	Date Extracted:	05-19-10
Preservative:	Cool	Date Analyzed:	05-20-10
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: Mudge A #40

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Biagg/BP		Project #:		94034-0011
Sample ID:	95 BGT 5-pt @6'		Date Reported:		05-21-10
Laboratory Number:	54304		Date Sampled:		05-14-10
Chain of Custody:	9390		Date Received:		05-19-10
Sample Matrix.	Suil		Date Analyzed:		05-20-10
Preservative:	Cool		Date Extracted:		05-19-10
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	111 %					
	1,4-difluorobenzene	115 %					
	Bromochlorobenzene	106 %					

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: M

Mudge A #40

Analyst

Review



Chloride

Client:	Blagg/BP	Project #:	94034-0011
Sample ID:	95 BGT 5-pt @6'	Date Reported:	05-24-10
Lab ID#:	54304	Date Sampled:	05-14-10
Sample Matrix:	Soil	Date Received:	05-19-10
Preservative:	Cool	Date Analyzed:	05-21-10
Condition:	Intact	Chain of Custody:	9390
Parameter		Concentration (mg	/Kg)
Total Chloride		15	
Reference:		ods for Chemical Analysis of Water a	
	Standard Methods For The	e Examination of Water And Waste V	Vater", 18th ed., 1992.
Comments:	Mudge A #40		

Analyst

Review



EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS QUALITY ASSURANCE REPORT

Client:		QA/QC		Project #:		N/A		
Sample ID:		QA/QC		Date Reported:		05-24-10		
Laboratory Number:		05-20-TPH.QA/Q	C 54251	Date Sampled:		N/A		
Sample Matrix:		Freon-113		Date Analyzed:		05-20-10		
Preservative:		N/A		Date Extracted		05-20-10		
Condition:		N/A		Analysis Neede	ed:	TPH		
Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range		
	04/22/2010	05-20-10	1,690	1,770	4.7%	+/- 10%		
Blank Conc. (mg	j/Kg)		Concentration		Detection Lim	it.		
TPH			ND		21.6			
Duplicate Conc. TPH	(mg/Kg)		Sample 473	Duplicate 392	% Difference 17.1%	Accept. Range +/- 30%		
Spike Conc. (mg	/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range		
TPH		473	2,000	2,430	98.2%	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 54251-54254, 54304, 54308.

Analys

Review

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EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	QA/QC 05-20-10 QA/C 54289 Methylene Chlori N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis Reques	N/A 05-21-10 N/A N/A 05-20-10 TPH			
	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept Range		
Gasoline Range C5 - C10	05-07-07	9.8932E+002	9.8972E+002	0.04%	0 - 15%		
Diesel Range C10 - C28	05-07-07	1.0141E+003	1.0145E+003	0.04%	0 - 15%		
Blank Conc. (mg/L - mg/Kg)		Concentration		Detection Limi			
Gasoline Range C5 - C10		ND		0.2	are:		
Diesel Range C10 - C28		ND		0.1			
Total Petroleum Hydrocarbons		ND		0.2			
Duplicate Conc. (mg/Kg)	Şample	Duplicate	% Difference	Accept. Range			
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%			
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%			
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range		
Gasoline Range C5 - C10	ND	250	299	120%	75 - 125%		
Diesel Range C10 - C28	ND	250	305	122%	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 54289, 54290, 54337, 54034-54038, 54253, 54254.

VIN

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Sample ID: Laboratory Number: Sample Matrix: Preservative:	N/A 0520BBLK QA/QC 54289 Soil N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:		N/A 05-21-10 N/A N/A 05-20-10 BTEX
Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF: Accept. Rar	%Diff. ige 0 - 15%	Blank Conc	Detect. Limit
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	2.0527E+006 1.4129E+006 1.0477E+006 1.2790E+005 3.8315E+005	2.0568E+006 1.4157E+006 1.0498E+006 1.2815E+005 3.8392E+005	0.2% 0.2% 0.2% 0.2% 0.2%	ND ND ND ND	0.1 0.1 0.1 0.1 0.1
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	ND ND ND ND	ND ND ND ND	0.0% 0.0% 0.0% 0.0% 0.0%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	ND ND ND ND	50.0 50.0 50.0 100 50.0	69.3 66.7 58.9 114 54.3	139% 133% 118% 114% 109%	39 - 150 46 - 148 32 - 160 46 - 148 46 - 148
ND - Parameter not detected at the stated	detection limit.				
December 1996. Method 8021B, Arom	e-and-Trap, Test Metho atic and Halogenated V r Electrolytic Conducti	/olatiles by Gas Ch	romatography Using		
Comments: QA/QC for Sa Analyst	mples 54253, 4	6	9, 54290, 5430 KODMA Review	3-54308.	1

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

CHAIN OF CUSTODY RECORD 09390

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Client:	ient: Project Name / Location:												ANAL	YSIS	PAR	AME	TERS	 				
BLAGE /B	0		MUDGE A #40										/ 11 1/ 12	1010			LIIO					
Client Address			Sampler Name:				5) 21)															
			J. BLA	Ku					TPH (Method 8015)	BTEX (Method 8021)	826	s	Cation / Anion		0							
Client Phone Nc.			Client No :		211				pou	thoc			nion		H/H		(1)	ш			00	tact
			94034	- 0	011				Metl	(Me	Met	8	A/I		TCLP with H/P		TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Sample No./	Sample		Lab No.		ample	No./Volume of	Pres	ervative) Hd	LEX	00	CRA	atior	RCI	CLP	PAH	He	FO			amp	dure
Identification	Date	Time			Matrix	of Containers	HCCI	HCI	Ë	'n	×	Ĕ	Ö	ŭ	Ĕ	đ	F	ō	 		ű	ű
95 BGT 5-p=0.6	1/14/10	1510	(54304	Solid	Sludge Aqueous	1-407			\times	×							\times	×			1	~
/				Soil	Sludge							1										-
				Solid	Aqueous			-						-					 	-		
				Solid Solid	Sludge Aqueous																	
				Sold	Sludge Aqueous																	
				Solid	Sludge Aqueous								1									
				Soil	Sludge			-				-	-									
				Solid Soil	Aqueous Sludge			_		-			-									
				Solid	Aqueous																	
				Scil Solid	Sludge Aqueous																	
				Sail Salid	Sludge Aqueous																	
				Soil	Sludge				-			-				-			 			
				Solid	Aqueous																	
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Relinquished by: (Signa	ature)						R	leceive	d by:	(Sign	ature))										_
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