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

Liner type: Thickness

Alternative Method:

State of New Mexico Energy Minerals and Natural Resources Department 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  |
|--|
| 14194 Proposed Alternative Method Permit or Closure Plan Application   |
| Type of action:  Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration 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   |
| ase 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  |
| vironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinance   |
| operator: BP America Production Company OGRID #: 778   |
| ddress: 200 Energy Court, Farmington, NM 87401   |
|  |
| acility or well name: Mudge LS 022M  |
| PI Number: 3004530757 OCD Permit Number:   |
| /L or Qtr/Qtr P Section 4 Township 31N Range 11W County: San Juan  |
| enter of Proposed Design: Latitude 36.922511 Longitude -107.98969 NAD: 1927 1983 urface Owner: Federal State Private Tribal Trust or Indian Allotment  |
| Pit:       Subsection F, G or J of 19.15.17.11 NMAC         emporary:       □ Drilling       □ Workover         □ Permanent       □ Emergency       □ Cavitation       □ P&A       □ Multi-Well Fluid Management       Low Chloride Drilling Fluid       □ yes       □ no         □ Lined       □ Unlined       Liner type:       Thickness        mil       □ LLDPE       □ HDPE       □ PVC       □ Other          □ String-Reinforced       iner Seams:       □ Welded       □ Factory       □ Other        Volume:        bbl       Dimensions:       L        x W |
|  |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC TANK A  |
| folume: 95 bbl Type of fluid: Produced water   |
| ank 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 bottom; no visible sidewalls   |



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

mil HDPE PVC Other

| 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   |               |
| 6.  |               |
| Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  |               |
| ☐ Screen ☐ Netting ☐ Other  ☐ Monthly inspections (If netting or screening is not physically feasible)  |               |
| Tronding inspections (if needing is not physically reastore)  |               |
| Signs: Subsection C of 19.15.17.11 NMAC   |               |
| ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers   |               |
| ☐ Signed in compliance with 19.15.16.8 NMAC   |               |
| 8.  Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  |               |
| Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.                            |               |
| 9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptance are provided below. 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.  - 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)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality | Yes No        |
| Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | ☐ Yes ☐ No    |
| Within an unstable area. (Does not apply to below grade tanks)  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map   | ☐ Yes ☐ No    |
| Within a 100-year floodplain. (Does not apply to below grade tanks)  - FEMA map   | ☐ Yes ☐ No    |
| Below Grade Tanks   |               |
| Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No    |
| Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No    |
| Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)  |               |
| Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site                         | ☐ Yes ☐ No    |

| Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial  | ☐ 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 |
| 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 docattached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC | 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 docattached.  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:   |            |

| 12.   |                     |
|---|---------------------|
| <u>Permanent Pits Permit Application Checklist</u> : Subsection B of 19.15.17.9 NMAC <u>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the application.</u>   | documents are       |
| attached.  ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  ☐ Climatological Factors Assessment  ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  ☐ Quality Control/Quality Assurance Construction and Installation Plan  ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan  ☐ Dil 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.   | PA IV               |
| Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.   |                     |
| Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method   | luid Management Pit |
| 14.   |                     |
| 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   |                     |
| 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. In 19.15.17.10 NMAC for guidance.   |                     |
| Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | Yes No              |
| Ground water is between 25-50 feet below the bottom of the buried waste  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | Yes No              |
| Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | Yes No              |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa 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   |                     |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance   | Yes No              |

| adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - 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 ☐ N  |                          |  |  |  |  |  |  |  |  |
| Within an unstable area.  |                          |  |  |  |  |  |  |  |  |
| <ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological<br/>Society; Topographic map</li> </ul>   |                          |  |  |  |  |  |  |  |  |
| Within a 100-year floodplain FEMA map   |                          |  |  |  |  |  |  |  |  |
| 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<br>15.17.11 NMAC |  |  |  |  |  |  |  |  |
| 17.   |                          |  |  |  |  |  |  |  |  |
| Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed.   | ef                       |  |  |  |  |  |  |  |  |
|   |                          |  |  |  |  |  |  |  |  |
| Name (Print): Title:  |                          |  |  |  |  |  |  |  |  |
| Signature: Date:  |                          |  |  |  |  |  |  |  |  |
| e-mail address:   |                          |  |  |  |  |  |  |  |  |
| OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature:  Approval Date: 3/24  Title: Environmental Soci  | /16                      |  |  |  |  |  |  |  |  |
| 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.   |                          |  |  |  |  |  |  |  |  |
|   |                          |  |  |  |  |  |  |  |  |
| 20.  Closure Method:  Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-location of the control of | op systems only)         |  |  |  |  |  |  |  |  |
| Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please into mark 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 □ Soil Backfilling and Cover Installation  | licate, by a check       |  |  |  |  |  |  |  |  |

|                                      | h this closure report is true, accurate and complete to the best of my knowledge and osure requirements and conditions specified in the approved closure plan. |
|--------------------------------------|--|
| Name (Print): Steve Moskal           | Title: Field Environmental Coordinator   |
| Signature: Oten My                   | Date: March 2, 2016  |
| e-mail address: steven.moskal@bp.com | Telephone: (505) 326-9497  |

# BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK CLOSURE PLAN

### Mudge LS 022M API No. 3004530757 Unit Letter P, 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

- 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.
   Notice is attached.
- 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.

Notice was provided. NMOCD was on site during the removal of the BGT.

- 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 for recycling.

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 95 bbl BGT                   | Release Verification (mg/Kg) | Sample results |
|--------------|---|------------------------------|----------------|
| Benzene      | US EPA Method SW-846 8021B or 8260B         | 0.2                          | < 0.093        |
| Total BTEX   | US EPA Method SW-846 8021B or 8260B         | 50                           | < 0.047        |
| TPH          | US EPA Method SW-846 418.1 or 8015 extended | 100                          | <48            |
| 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 for TPH, BTEX and chloride. BTEX, TPH and chloride concentrations were below the stated limits. The field report and laboratory reports are 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 significant release has 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

Sampling results determine no significant release has occurred. Area was backfilled with clean, earthen material. A low profile tank was placed in the location of the former BGT.

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 has been backfilled and will be reclaimed once the well has been 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 has been backfilled and will be reclaimed once the well has been 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 has been backfilled and will be reclaimed once the well has been 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.

The area has been backfilled and will be reclaimed once 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 including photos of reclamation completion.
- 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

Form C-141 Revised August 8, 2011

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

### Release Notification and Corrective Action

|   |   |  |   |   |                                 | OPERA'                                    | ГOR   | Initi   | al Report  | $\boxtimes$                    | Final Repor                       |  |
|---|---|--|---|---|---------------------------------|---|---|---|--|--------------------------------|-----------------------------------|--|
| Name of Company: BP   |   |  |   |   |                                 | Contact: Ste                              | ve Moskal   |   |  |                                |                                   |  |
|   |   | Court, Farm  | ington, N   | M 87401   |                                 | Telephone No.: 505-326-9497               |   |   |  |                                |                                   |  |
| Facility Na   | me: Mudge   | e LS 022M  |   |   |                                 | Facility Type: Natural gas well           |   |   |  |                                |                                   |  |
| Surface Ow  | ner: Feder  | al   |   | Mineral O   | wner: l                         | Federal                                   |   | API No  | . 30045307   | 757                            |                                   |  |
|   |   |  |   | LOCA  | TION                            | OF RE                                     | LEASE   |   |  |                                |                                   |  |
| Unit Letter<br>P  | Section<br>4  | Township<br>31N                                    | Range<br>11W  |   |                                 | South Line                                | Feet from the 860   | East/West Line<br>East  | Charles and Control of the Control o |                                |                                   |  |
|   |   | Latit  | ude 36  | .922511   |                                 | _ Longitud                                | e107.98969  |   |  |                                |                                   |  |
|   |   |  |   | NAT   | URE                             | OF REL                                    | EASE  |   |  |                                |                                   |  |
| Type of Rele  |   |  |   |   |                                 | 150000000000000000000000000000000000000   | Release: unknow   | 1,000,000   | Recovered: N   |                                |                                   |  |
| Source of Re  | elease: belov   | v grade tank -                                     | 95 bbl  |   |                                 | Date and H                                | lour of Occurrence  | e: Date and   | Hour of Dis  | covery:                        | none                              |  |
| Was Immediate Notice Given?  ☐ Yes ☑ No ☐ Not Required              |   |  |   |   |                                 | If YES, To                                | Whom?   |   |  |                                |                                   |  |
| By Whom?  |   |  |   |   |                                 |   | lour  |   |  |                                |                                   |  |
| Was a Water   | course Read   |  | Yes 🛛   | No  |                                 | If YES, Vo                                | lume Impacting t  | he Watercourse.   |  |                                |                                   |  |
| Describe Cat  | ise of Proble   |  | dial Action   | n Taken.* Samplin<br>d reports and labor  |                                 |   |   | ne during removal.  | Soil analys  | is resul                       | ted for                           |  |
| Describe Are  | a Affected  | and Cleanup A                                      | Action Tak  | en.* No action nec  | essary.                         | Final labora                              | tory analysis supp  | ported closure of the   | e BGT locat  | ion.                           |                                   |  |
| regulations a<br>public health<br>should their or<br>or the environ | Il operators<br>or the envir<br>operations h<br>nment. In a | are required to<br>ronment. The<br>ave failed to a | acceptance<br>acceptance<br>adequately<br>OCD accep | is true and comple<br>id/or file certain rele<br>e of a C-141 repor<br>investigate and rel<br>tance of a C-141 re | lease no<br>t by the<br>mediate | otifications as<br>NMOCD m<br>contaminati | nd perform correct<br>arked as "Final R<br>on that pose a thr | tive actions for rel<br>eport" does not rel<br>eat to ground wate | eases which<br>ieve the oper<br>r, surface wa  | may en<br>rator of<br>ter, hur | danger<br>liability<br>nan health |  |
|   |   |  |   |   |                                 |   | OIL CON   | SERVATION   | DIVISIO  | N                              |                                   |  |
| Signature:  | Alos  | Corres   |   |   |                                 |   |   |   |  |                                |                                   |  |
| Printed Name  | e: Steve Mo   | skal   |   |   | 1                               | Approved by Environmental Specialist:     |   |   |  |                                |                                   |  |
| Title: Field E  | Environment   | al Coordinato                                      | r   |   | 1                               | Approval Dat                              | e:  | Expiration  | Date:  |                                |                                   |  |
| E-mail Addre  | ess: steven.r   | noskal@bp.co                                       | om  |   | (                               | Conditions of Approval:                   |   |   |  |                                |                                   |  |
| Date: March   | 2, 2016   |  | Phone: 50   | 05-326-9497   |                                 |   |   |   |  |                                |                                   |  |

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

| CLIENT: BP  | BLAGG E<br>P.O. BOX 87, B                                     | 3   | API #: 3004530757  TANK ID (if applicable): A |  |                |  |  |  |  |  |
|---|---|---|---|--|----------------|--|--|--|--|--|
|   | (50   | (505) 632-1199  |   |  |                |  |  |  |  |  |
| FIELD REPORT:   | (circle one): BGT CONFIRMATION                                | / RELEASE INVESTIGATION / OTHER:  |   | PAGE #:1 o                                       | f _1           |  |  |  |  |  |
| SITE INFORMATION  | I: SITE NAME: MIUDG   | E LS # 22M  |   | DATE STARTED: 01/0                               | 08/16          |  |  |  |  |  |
| QUAD/UNIT: P SEC: 4 TWP:  | 31N RNG: 11W PM:  | NM CNTY: SJ ST:   | NM  | DATE FINISHED:                                   |                |  |  |  |  |  |
| 1/4-1/4/FOOTAGE: 1,120'S / 860<br>LEASE #: SF078051   |   | YPE: FEDERAL STATE / FEE / IND<br>STRIKE<br>ONTRACTOR: MBF - S. GLYNN                                   | DIAN  | ENVIRONMENTAL SPECIALIST(S): N                   | JV             |  |  |  |  |  |
| REFERENCE POINT   |   |   | 00000   | GL ELEV.: 6                                      | 075'           |  |  |  |  |  |
| 1) 95 BGT (DW/DB)   |   | 36,92279 X 107<br>922511 X 107,989758   |   |  | -              |  |  |  |  |  |
| 2)  |   |   |   | RING FROM WH.:                                   |                |  |  |  |  |  |
| 3)  | GPS COORD.:   |   |   | RING FROM WH.:                                   |                |  |  |  |  |  |
|   | GPS COORD.:   |   |   | RING FROM W.H.:                                  |                |  |  |  |  |  |
| SAMPLING DATA:  | CHAIN OF CUSTODY RECORD(S) # 0                                | OR LAB USED: HALL   |   | 7 1 1 1 1  | OVM<br>READING |  |  |  |  |  |
|   |   | /16 SAMPLETIME 1215 LAB ANALYSIS:   | 8015  | 5B/8021B/300.0 (CI)                              | (ppm)          |  |  |  |  |  |
|   |   | SAMPLETIME: LAB ANALYSIS:   |   |  |                |  |  |  |  |  |
|   |   | SAMPLE TIME: LAB ANALYSIS:  |   |  |                |  |  |  |  |  |
|   |   | SAMPLE TIME: LAB ANALYSIS:  |   |  |                |  |  |  |  |  |
| SOIL DESCRIPTION  | · CON TYPE CAND CHTY CAND                                     | CILT / CILTY CLAY / CLAY / CDAYEL / OTHER   |   |  |                |  |  |  |  |  |
| SOIL COLOR: DARK YELLON COHESION (ALL OTHERS): NON COHESIVE) SLIGHTL'   | MSH BROWN   | PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY I<br>DENSITY (COHESIVE CLAYS & SILTS): SOF                   |   |  | ILY PLASTIC    |  |  |  |  |  |
| CONSISTENCY (NON COHESIVE SOILS): LC  |   | HC ODOR DETECTED: YES NO EXPLANATIO   | ON-   |  |                |  |  |  |  |  |
| MOISTURE: DRY SLIGHTLY MOIST MOIST / W<br>SAMPLE TYPE: GRAB (COMPOSITE) #   |   | ANY AREAS DISPLAYING WETNESS: YES N   | O EVDI AN                                     | ATION  |                |  |  |  |  |  |
| DISCOLORATION/STAINING OBSERVED: YES  |   | ANTAREAS DISFERTING WETNESS. TES [N   | O CAPLAN                                      | Allon-   |                |  |  |  |  |  |
| SITE OBSERVATION  | S: LOST INTEGRITY OF EQUIPMENT                                | YES NO EXPLANATION -  |   |  |                |  |  |  |  |  |
| APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER:  | DAND/OR OCCURRED: YES NO EXPL<br>YES NO EXPLANATION - 105 BBL | ANATION:  | ADE TAN                                       | K TO BE SET ATOP BGT L                           | OCATION.       |  |  |  |  |  |
| SOIL IMPACT DIMENSION ESTIMATION:   | NA ft. X NA   | ft. X NA ft. EXCAVA   | TION EST                                      | IMATION (Cubic Yards) :                          | NA             |  |  |  |  |  |
| DEPTH TO GROUNDWATER: <100' N   | EAREST WATER SOURCE: >1,000                                   |   | NMOC  | TPH CLOSURE STD: 10                              | 0 ppm          |  |  |  |  |  |
| SITE SKETCH   | BGT Located : off on sit                                      | e PLOT PLAN circle: attach  | ed OM   | CALIB. READ, = NA ppr                            | m RF=0.52      |  |  |  |  |  |
| TO W.H.   | 1   |   |   | CALIB. GAS = NA PP                               | 14 -0.02       |  |  |  |  |  |
| PBGTL   | COMPRES   | SOR   | -   |  | NA             |  |  |  |  |  |
| T.B. ~ 5'<br>FENCE B.G.   |   |   | <b>*</b> I=                                   | MISCELL. NO                                      | TES            |  |  |  |  |  |
| 3.5.  | SEP   | ARATOR  | w   |  | LO             |  |  |  |  |  |
|   |   |   | -   | F#: P-258  |                |  |  |  |  |  |
|   | X X X SEPAR   | DATOR   | VI  |  |                |  |  |  |  |  |
|   | SEPAR   | CATOR   | P   | J#:  |                |  |  |  |  |  |
| PROD  | Pe  | Permit date(s): 06/14/10  |   |  |                |  |  |  |  |  |
|   |   |   | Ot  | CD Appr. date(s): 10/08  OVM = Organic Vapor Met | 3/15           |  |  |  |  |  |
| BERM  | то  |   | ID  | ppm = parts per million                          |                |  |  |  |  |  |
|   | WATERCOURSE   |   | _   A   | BGT Sidewalls Visible: Y /                       |                |  |  |  |  |  |
| MATER DOT DELAMAR THE TOTAL OF | <55'  | X - S.P.  |   | BGT Sidewalls Visible: Y /                       | ***            |  |  |  |  |  |
| NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL   |   | ELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL H<br>POINT DESIGNATION; R.W. = RETAINING WALL; NA - NO |   | agnetic declination: 10                          |                |  |  |  |  |  |
| APPLICABLE OR NOT AVAILABLE; SW - SINGL   | E WALL; DW - DOUBLE WALL; SB - SINGLE BOT                     | TOM; DB - DOUBLE BOTTOM.  | IVI   | agricus decimation. 10                           |                |  |  |  |  |  |
| NOTES: GOOGLE EARTH IMAG  | ERY DATE: 03/15/2015.   | ONSITE: 01/08/16  |   |  |                |  |  |  |  |  |



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

March 02, 2016

Nelson Velez

**Blagg Engineering** 

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 320-3489

FAX

RE: MUDGE LS #22M

OrderNo.: 1601272

### Dear Nelson Velez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/9/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 12, 2016.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

### **Analytical Report**

#### Lab Order 1601272

Date Reported: 3/2/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: MUDGE LS #22M

Client Sample ID: 5PC-TB @ 5'(95)

Collection Date: 1/8/2016 12:15:00 PM

Lab ID: 1601272-001

Matrix: MEOH (SOIL) Received Date: 1/9/2016 9:15:00 AM

| Analyses                                | Result  | PQL (    | Qual | Units | DF | Date Analyzed         | Batch |
|---|---------|----------|------|-------|----|-----------------------|-------|
| EPA METHOD 300.0: ANIONS                |         |          |      |       |    | Analyst:              | LGT   |
| Chloride                                | ND      | 30       |      | mg/Kg | 20 | 1/11/2016 12:06:42 PM | 23146 |
| EPA METHOD 8015M/D: DIESEL RANGE        | ORGANIC | S        |      |       |    | Analyst:              | КЈН   |
| Diesel Range Organics (DRO)             | ND      | 9.6      |      | mg/Kg | 1  | 1/11/2016 10:59:05 AM | 23140 |
| Motor Oil Range Organics (MRO)          | ND      | 48       |      | mg/Kg | 1  | 1/11/2016 10:59:05 AM | 23140 |
| Surr: DNOP                              | 97.6    | 70-130   |      | %Rec  | 1  | 1/11/2016 10:59:05 AM | 23140 |
| <b>EPA METHOD 8015D: GASOLINE RANGE</b> |         |          |      |       |    | Analyst:              | NSB   |
| Gasoline Range Organics (GRO)           | ND      | 4.7      |      | mg/Kg | 1  | 1/11/2016 10:25:03 AM | 23132 |
| Surr: BFB                               | 89.1    | 66.2-112 |      | %Rec  | 1  | 1/11/2016 10:25:03 AM | 23132 |
| EPA METHOD 8021B: VOLATILES             |         |          |      |       |    | Analyst:              | NSB   |
| Benzene                                 | ND      | 0.047    |      | mg/Kg | 1  | 1/11/2016 10:25:03 AM | 23132 |
| Toluene                                 | ND      | 0.047    |      | mg/Kg | 1  | 1/11/2016 10:25:03 AM | 23132 |
| Ethylbenzene                            | ND      | 0.047    |      | mg/Kg | 1  | 1/11/2016 10:25:03 AM | 23132 |
| Xylenes, Total                          | ND      | 0.093    |      | mg/Kg | 1  | 1/11/2016 10:25:03 AM | 23132 |
| Surr: 4-Bromofluorobenzene              | 121     | 80-120   | S    | %Rec  | 1  | 1/11/2016 10:25:03 AM | 23132 |
|   |         |          |      |       |    |                       |       |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
  - W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1601272 02-Mar-16

Client:

Blagg Engineering

Project:

MUDGE LS #22M

Sample ID MB-23146

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 23146

PQL

RunNo: 31376

Prep Date: 1/11/2016 Analysis Date: 1/11/2016

SeqNo: 960460

Units: mg/Kg

HighLimit

%RPD **RPDLimit** 

Qual

Analyte Chloride

ND 1.5

Result

Sample ID LCS-23146

SampType: LCS

TestCode: EPA Method 300.0: Anions

LCSS Client ID:

Batch ID: 23146

RunNo: 31376

SeqNo: 960461

Units: mg/Kg

Prep Date: 1/11/2016

Analysis Date: 1/11/2016

HighLimit %RPD

Qual

Result PQL. 14

**RPDLimit** 

Chloride

1.5

SPK value SPK Ref Val %REC

94.8

110

Analyte

15.00

0

SPK value SPK Ref Val %REC LowLimit

LowLimit 90

Qualifiers:

D

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded H ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits Sample pH Not In Range P

J

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 2 of 5

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1601272

02-Mar-16

Client: Project: Blagg Engineering MUDGE LS #22M

Sample ID MB-23140 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 23140 RunNo: 31353 Prep Date: 1/11/2016 Analysis Date: 1/11/2016 SeqNo: 959934 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.2 10.00 91.7 70 130

| Sample ID LCS-23140         |                          |     |               | TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 31353 |      |              |           |      |          |      |
|-----------------------------|--------------------------|-----|---------------|--|------|--------------|-----------|------|----------|------|
| Client ID: LCSS             |                          |     |               |  |      |              |           |      |          |      |
| Prep Date: 1/11/2016        | Analysis Date: 1/11/2016 |     | SeqNo: 959935 |  |      | Units: mg/Kg |           |      |          |      |
| Analyte                     | Result                   | PQL | SPK value     | SPK Ref Val  | %REC | LowLimit     | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 44                       | 10  | 50.00         | 0  | 88.2 | 65.8         | 136       |      |          |      |
| Surr: DNOP                  | 4.4                      |     | 5.000         |  | 89.0 | 70           | 130       |      |          |      |

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 3 of 5

## **OC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1601272

02-Mar-16

Client: Project: Blagg Engineering

MUDGE LS #22M

Sample ID MB-23132

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS

Batch ID: 23132

5.0

RunNo: 31359

LowLimit

Prep Date: 1/8/2016 Analysis Date: 1/11/2016

SeqNo: 960303

Units: mg/Kg

Analyte

Result PQL

SPK value SPK Ref Val %REC

HighLimit

**RPDLimit** Qual

Gasoline Range Organics (GRO)

ND 840

1000

83.6

66.2

TestCode: EPA Method 8015D: Gasoline Range

%RPD

Surr: BFB

112

Sample ID LCS-23132 Client ID: LCSS

Prep Date: 1/8/2016

SampType: LCS

Batch ID: 23132

RunNo: 31359 SeqNo: 960304

%REC

Units: mg/Kg

HighLimit

**RPDLimit** 

Analyte Gasoline Range Organics (GRO) Analysis Date: 1/11/2016 Result PQL

SPK value SPK Ref Val 25.00

0 96.8 79.6

LowLimit

122

%RPD

Surr: BFB

24 5.0 950

1000

94.6

66.2

112

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

E Value above quantitation range

J Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

P

Page 4 of 5

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1601272

02-Mar-16

Client: Project:

Blagg Engineering MUDGE LS #22M

Sample ID MB-23132 TestCode: EPA Method 8021B: Volatiles SampType: MBLK Client ID: Batch ID: 23132 RunNo: 31359 Prep Date: 1/8/2016 Analysis Date: 1/11/2016 SeqNo: 960313 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit HighLimit Analyte Result PQL %RPD **RPDLimit** Qual 0.050 Benzene ND Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 1.000 80 120 Surr: 4-Bromofluorobenzene 1.1 113

| Sample ID LCS-23132        | Samp                     | SampType: LCS |           |               | TestCode: EPA Method 8021B: Volatiles |          |             |      |          |      |   |
|----------------------------|--------------------------|---------------|-----------|---------------|---------------------------------------|----------|-------------|------|----------|------|---|
| Client ID: LCSS            | Batc                     | h ID: 23      | 132       | F             | RunNo: 3                              |          |             |      |          |      |   |
| Prep Date: 1/8/2016        | Analysis Date: 1/11/2016 |               |           | SeqNo: 960314 |                                       |          | Units: mg/k | (g   |          |      |   |
| Analyte                    | Result                   | PQL           | SPK value | SPK Ref Val   | %REC                                  | LowLimit | HighLimit   | %RPD | RPDLimit | Qual |   |
| Benzene                    | 0.91                     | 0.050         | 1.000     | 0             | 91.3                                  | 80       | 120         |      |          |      | Т |
| Toluene                    | 0.95                     | 0.050         | 1.000     | 0             | 94.8                                  | 80       | 120         |      |          |      |   |
| Ethylbenzene               | 0.95                     | 0.050         | 1.000     | 0             | 95.1                                  | 80       | 120         |      |          |      |   |
| Xylenes, Total             | 2.9                      | 0.10          | 3.000     | 0             | 97.9                                  | 80       | 120         |      |          |      |   |
| Surr: 4-Bromofluorobenzene | 1.1                      |               | 1.000     |               | 114                                   | 80       | 120         |      |          |      |   |

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

P Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 5 of 5



### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: 1601272 RcptNo: 1 Received by/date: Logged By: Joe Archuleta 1/9/2016 9:15:00 AM Completed By: Joe Archuleta 1/9/2016 10:03:30 AM Reviewed By: Chain of Custody No 🗌 Not Present ▼ 1 Custody seals intact on sample bottles? Yes Yes V No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 🗌 4. Was an attempt made to cool the samples? Yes V No 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Yes V NA 🗌 Yes V No 🗌 Sample(s) in proper container(s)? No Yes V 7. Sufficient sample volume for indicated test(s)? No 🗌 Yes V 8. Are samples (except VOA and ONG) properly preserved? No V NA 🗌 Yes 🗌 9. Was preservative added to bottles? Yes No 🗌 No VOA Vials 10. VOA vials have zero headspace? Yes -No V 11. Were any sample containers received broken? # of preserved bottles checked for pH: Yes V No 🗌 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Yes V No . Yes V No 14. Is it clear what analyses were requested? Yes V No 🗌 Checked by: 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes NA V No 🗌 Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Good Not Present

| Chain-of-Custody Record   |          |                             |   | Tum-Around   | Time:                | SAME     |           |   |                | н                  | IAI                |           | EN            | VI              | D          | ON              | ME             | NT     | AI          |         |  |
|---|----------|-----------------------------|---|--|----------------------|----------|-----------|---|----------------|--------------------|--------------------|-----------|---------------|-----------------|------------|-----------------|----------------|--------|-------------|---------|--|
| Client:   | BLAG     | ig ENGR.                    | / BP AMERICA  | Standard Rush DAY Project Name:  ANALYSIS LABORATORY             |                      |          |           |   |                |                    |                    |           |               |                 |            |                 |                |        |             |         |  |
| Mailing Address: P.O. BOX 87  BLOOMFIELD, NM 87413  Phone #: (505) 632-1199  email or Fax#:   |          |                             |   | MUDGE LS # 22M   |                      |          |           | www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 |                |                    |                    |           |               |                 |            |                 |                |        |             |         |  |
|   |          |                             |   | Project #:   |                      |          |           | Tel. 505-345-3975 Fax 505-345-4107                                |                |                    |                    |           |               |                 |            |                 |                |        |             |         |  |
|   |          |                             |   |  |                      |          |           | IF  |                | 100                |                    | Ar        | alys          | is R            | equ        | est             | 4              |        | TE          |         |  |
|   |          |                             |   | Project Manager:   |                      |          |           |   |                |                    |                    |           | -             | 4               |            |                 | 300.1)         |        |             |         |  |
| QA/QC Package:<br>Standard  |          | ☐ Level 4 (Full Validation) |   | NELSON VELEZ   |                      |          | (80218)   | (kluo si  | / MRO)         |                    |                    | (SV       | 00            | 102,r04,30      | Z PCB S    |                 | water - 300    |        |             | ااد     |  |
| Accreditation:  |          |                             | Sampler: NELSON VELEZ 977   |  |                      |          | H (Ga     | / DRO   | F              | 7                  | or 8270SIMS)       | 9         | 22            | 000             |            | / w             |                | cample |             |         |  |
| □ NELAP □ Other   |          |                             | On Ice: Yes 🖂 No  |  |                      |          | TPF       | 10  | 418            | 504                | 827                | S         | 8             | -1              | (A)        | 300.0 /         |                | 0      |             |         |  |
| □ EDD (Type)  |          |                             |   | Sample Temp  | erature: 3, (        |          | 1         | BE +  | (GR            | por                | Poc                | OL        | etal          | 2 2             | 5 3        | E   5           | 1 1            |        | ocit        | اخ ا    |  |
| Date  | Time     | Matrix                      | Sample Request ID   | Container<br>Type and #  | Preservative<br>Type | HEAL No. | BTEX +-MF | BTEX + MTBE + TPH (Gas only)                                      | TPH 8015B (GRO | TPH (Method 418.1) | EDB (Method 504.1) | PAH (8310 | RCRA 8 Metals | Amons (r,ci,lvo | onor Leson | 8270 (Semi-VOA) | Chloride (soil |        | Grab sample |         |  |
| 1/8/16  | 1215     | SOIL                        | 5PC - TB @ 5' (95)  | 4 oz 1   | Cool                 | -001     | ٧         |   | ٧              |                    |                    |           |               |                 |            |                 | ٧              |        | V           |         |  |
|   |          |                             | IN INC.   |  |                      |          |           |   |                |                    | -                  | -         | 1             | -               | 1          |                 |                |        | 1           |         |  |
|   |          |                             |   |  |                      |          |           |   |                | -                  | +                  | +         | +             | +               | +          | +               | $\vdash$       | +      | +           | +-      |  |
|   |          |                             |   |  | -                    |          |           |   |                | +                  | +                  | +         | +             | +               | +          | +               |                | 1      |             | +       |  |
|   |          |                             |   |  |                      |          |           |   |                |                    |                    |           |               | 1               | I          |                 |                |        |             |         |  |
|   |          |                             |   |  |                      |          |           |   |                |                    | 1                  | -         | +             | +               | +          | +               |                |        | +           | $\perp$ |  |
|   |          |                             |   |  |                      |          |           |   |                | -                  | +                  |           | +             | +               | +          | +               | -              | -      | +           | +       |  |
|   |          | - 3                         |   |  |                      |          |           |   |                |                    |                    | 1         |               | +               | +          |                 |                | 1      | +           | +       |  |
| 1000  |          |                             |   |  |                      |          |           |   |                |                    |                    |           |               |                 | 1          |                 |                |        |             |         |  |
|   |          |                             | Market Line   |  |                      |          |           |   |                |                    |                    |           |               |                 |            |                 |                |        |             |         |  |
| Date: 1/8/16  | 1 2/1 11 |                             |   | Received by:  Date Time Remarks:  Remarks:  BILL DIRECTLY TO BP: |                      |          |           |   |                |                    |                    |           | 9740          | 1               |            |                 |                |        |             |         |  |
| Date: Time: Relinquished by:  If necessary, samples submitted to Hall Environmental may be su |          |                             | Received by:  Date Time Steph Musical Reference #: P-258 Paykey: VHIXONEVB2 |  |                      |          |           |   |                |                    |                    |           | -             |                 |            |                 |                |        |             |         |  |





#### Moskal, Steven

From:

Railsback, Farrah (CH2M HILL)

Sent:

Tuesday, December 29, 2015 10:58 AM

To:

Smith, Cory, EMNRD (Cory.Smith@state.nm.us)

Cc:

Moskal, Steven; 'blagg\_njv@yahoo.com'; jeffcblagg@aol.com

Subject:

RE: BP Pit Close Notification - Mudge LS 022M

**BP America Production Company** 

200 Energy Court Farmington, NM 87401

Phone: (505) 326-9200

SENT VIA E-MAIL TO: CORY.SMITH@STATE.NM.US

December 29, 2015

New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

RE:

Notice of Proposed Below-Grade Tank (BGT) Closure

MUDGE LS 022M API 30-045-30757 (P) Section 04 - T31N - R11W San Juan County, New Mexico

Dear Mr. Cory Smith:

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around January 4, 2016.

Should you have any questions, please feel free to contact BP at our Farmington office.

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

bp



BP America Production Company 200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

December 29, 2015

Bureau of Land Management Acting Supervisor of Environmental Protection 6251 College Suite A Farmington, NM 87402

### VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Re: Notification of plans to close/remove a below grade tank

Well Name: MUDGE LS 22M

API#: 3004530757

To Whom It May Concern,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about January 4, 2016. If there aren't any unforeseen problems, the work should be completed within 10 working days.

As a point of clarification, BP will be closing the below grade tank and either operating without one or replacing it with an above ground tank, the well site will continue to operate.

Unless you have questions about this notice, there is no need to respond to this letter. If you do have any questions or concerns, please contact me at (505)-326-9214.

Sincerely,

Charlie Davis

BP America Production Company