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

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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<br>Proposed Alternative Method Permit or Closure Plan Application  | DIV DIST. 3     |
|--|-----------------|
| Type of action:<br>Below grade tank registration<br>Permit of a pit or proposed alternative method<br>Closure of a pit, below-grade tank, or proposed alternative method<br>Modification to an existing permit/or registration<br>Closure plan only submitted for an existing permitted or non-permitted pit, below-grade<br>or proposed alternative method<br>Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative reques |                 |
| Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regular  |                 |
| Operator: BP America Production Company OGRID #: 778   |                 |
| Address: 200 Energy Court, Farmington, NM 87401  |                 |
| Facility or well name:GALLEGOS CANYON UNIT 262E  |                 |
| API Number: <u>3004511681</u> 3004 52059 OCD Permit Number:  | _               |
| U/L or Qtr/Qtr P Section 24 Township 29N Range 13W County: San Juan  |                 |
| Center of Proposed Design: Latitude <u>36.70801</u> Longitude <u>-108.15234</u> NAD:   | 927 🛛 1983      |
| Surface Owner: 🔲 Federal 🗋 State 🖾 Private 🗋 Tribal Trust or Indian Allotment  |                 |
| 2.<br>□ <u>Pit</u> : Subsection F, G or J of 19.15.17.11 NMAC<br>Temporary: □ Drilling □ Workover  |                 |
| Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yet   |                 |
| Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other  |                 |
| String-Reinforced         Liner Seams:       Welded         Factory       Other         Volume:      bbl         Dimensions:       Lx  | x D             |
| Below-grade tank:     Subsection I of 19.15.17.11 NMAC     TANK A       Volume:     95     bbl Type of fluid:     Produced water   |                 |
| Tank Construction material: <u>Steel</u>   |                 |
| 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 wall/ Double bottom; no visible sidewalls  |                 |
| Liner type: Thickness mil HDPE PVC Other   |                 |
| <ul> <li>4.</li> <li>Alternative Method:</li> <li>Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration</li> </ul>   | on of approval. |

| <ul> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)</li> </ul>   | hospital,          |
|--|--------------------|
| <ul> <li>Four foot height, four strands of barbed wire evenly spaced between one and four feet</li> <li>Alternate. Please specify</li></ul>  |                    |
| <ul> <li>6.</li> <li><u>Netting</u>: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)</li> <li>Screen Netting Other</li> <li>Monthly inspections (If netting or screening is not physically feasible)</li> </ul>  |                    |
| <ul> <li>7.</li> <li>Subsection C of 19.15.17.11 NMAC</li> <li>12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers</li> <li>Signed in compliance with 19.15.16.8 NMAC</li> </ul>   |                    |
| <ul> <li>8. <u>Variances and Exceptions:</u><br/>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</li> <li><i>Please check a box if one or more of the following is requested, if not leave blank:</i></li> <li>Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.</li> <li>Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul> |                    |
| 9.<br><u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC<br>Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept<br>material 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   | □ Yes □ No<br>□ NA |
| Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.<br>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | □ Yes □ No<br>□ NA |
| <ul> <li>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)</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>  | 🗋 Yes 🗌 No         |
| <ul> <li>Within the area overlying a subsurface mine. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>  | 🗋 Yes 🗌 No         |
| <ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>  | 🗋 Yes 🗌 No         |
| Within a 100-year floodplain. (Does not apply to below grade tanks)<br>- FEMA map  | Yes 🗍 No           |
| Below Grade Tanks  |                    |
| <ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | 🗋 Yes 🗌 No         |
| <ul> <li>Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>   | . 🗌 Yes 🗌 No       |
| Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)   |                    |
| <ul> <li>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.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>  | 🗌 Yes 🗍 No         |

| Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.  | Yes No         |
|---|----------------|
| <ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>   |                |
| Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site                                    | 🗋 Yes 🗌 No     |
| <ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | 🗌 Yes 🗌 No     |
| Temporary Pit Non-low chloride drilling fluid   |                |
| 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).   |                |
| <ul> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | Yes No         |
| <ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>  | Yes No         |
| <ul> <li>Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul> | 🗋 Yes 🗌 No     |
| <ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | Yes No         |
| Permanent Pit or Multi-Well Fluid Management Pit  |                |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa   |                |
| <ul> <li>lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | Yes No         |
| <ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>   | Yes No         |
| Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.   |                |
| <ul> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>   | Yes No         |
| <ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | Yes No         |
| 10.<br><u>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist</u> : 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 de attached.   | ocuments are   |
| <ul> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.</li> </ul>   | 9 NMAC         |
| Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   | y MMAC         |
| <ul> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> </ul>   |                |
| 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.<br>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 de   | ocuments are   |
| attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   |                |
| <ul> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>A List of wells with approved application for permit to drill associated with the pit.</li> </ul>  |                |
| Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 1  | 9.15.17.9 NMAC |
| and 19.15.17.13 NMAC <ul> <li>Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>  |                |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:  |                |
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Oil Conservation Division

| 12.<br><u>Permanent Pits Permit Application Checklist</u> : Subsection B of 19.15.17.9 NMAC<br>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the  | documents are       |
|--|---------------------|
| <ul> <li>attached.</li> <li>Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Climatological Factors Assessment</li> </ul>  |                     |
| <ul> <li>Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> </ul>  |                     |
| <ul> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> </ul>  |                     |
| <ul> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC</li> </ul>   |                     |
| <sup>13.</sup><br><u>Proposed Closure</u> : 19.15.17.13 NMAC<br>Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  |                     |
| Type:  Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative  | luid Management Pit |
| Proposed Closure Method: Waste Excavation and Removal<br>Waste Removal (Closed-loop systems only)<br>On-site Closure Method (Only for temporary pits and closed-loop systems)<br>In-place Burial On-site Trench Burial<br>Alternative Closure Method   |                     |
| Waste Excavation and Removal Closure Plan Checklist:       (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.            Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC             Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC             Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)             Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC             Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC             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<br>Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour<br>provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. I<br>19.15.17.10 NMAC for guidance.  |                     |
| <ul> <li>Ground water is less than 25 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>  | □ Yes □ No<br>□ NA  |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | □ Yes □ No<br>□ NA  |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | □ Yes □ No<br>□ NA  |
| <ul> <li>Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | 🗋 Yes 🗌 No          |
| <ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>   | Yes No              |
| <ul> <li>Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>  | 🗋 Yes 🗌 No          |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality  | Yes No              |
| Within 300 feet of a wetland.<br>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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| <ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>   |                          |
|---|--------------------------|
|   | Yes No                   |
| <ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>   | Yes No                   |
| 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>   | Yes No                   |
| Within a 100-year floodplain.<br>- FEMA map   |                          |
|   |                          |
| <ul> <li>16.</li> <li>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.</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC</li> <li>Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.</li> <li>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</li> <li>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</li> <li>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</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannual Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul> | 11 NMAC<br>15.17.11 NMAC |
| 17.<br>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   | ef.                      |
| Name (Print): Title:  |                          |
| Signature: Date:  |                          |
| e-mail address: Telephone:  |                          |
| 18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:   | 12017                    |
| 19.<br>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<br>The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not<br>section of the form until an approved closure plan has been obtained and the closure activities have been completed.   |                          |
| Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting<br>The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not<br>section of the form until an approved closure plan has been obtained and the closure activities have been completed.<br>Closure Completion Date: 10/30/2016  |                          |
| Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting<br>The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not<br>section of the form until an approved closure plan has been obtained and the closure activities have been completed.   | complete this            |

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Oil Conservation Division

| 22.<br>Operator Closure Certification:  |  |
|---|--|
| I hereby certify that the information and attachments submitted with this closure repu-<br>belief. I also certify that the closure complies with all applicable closure requirement |  |
| Name (Print): Steve Moskal  | Title: Field Environmental Coordinator |
| Signature: Mars Mun   | Date: January 6, 2017                  |
| 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**

## <u>Gallegos Canyon Unit 262E</u> <u>API No. 3004526159</u> <u>Unit Letter P, Section 24, T29N, R13W</u>

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. if not previously retrofitted to comply with the BP NMOCD approve BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

## **General Closure Plan**

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement. 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 and is attached.
- 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.

 BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.
 All equipment associated with the BCT has been removed

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               | < 0.035 |
| Total BTEX   | US EPA Method SW-846 8021B or 8260B         | 50                | < 0.070 |
| TPH          | US EPA Method SW-846 418.1 or 8015 extended | 100               | <49     |
| 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 with all concentrations below the stated limits. The field report and laboratory reports are 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 a release has not occurred. Attached is a laboratory report and C-141.
- 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 indicate a release has not occurred. Attached is a laboratory report and field report. The location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

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. The location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

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 location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

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 location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

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 location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

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.

The location has been reclaimed and the well is plugged and abandoned. Per the landowner request, a mock-BGT was placed in the same location to represent a well site for display.

- 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**

|   | OPERATOR                        | Initial Report | Final Report |
|---|---------------------------------|----------------|--------------|
| Name of Company: BP                             | Contact: Steve Moskal           |                |              |
| Address: 200 Energy Court, Farmington, NM 87401 | Telephone No.: 505-326-9497     |                |              |
| Facility Name: Gallegos Canyon Unit 262E        | Facility Type: Natural gas well |                |              |
|   |                                 |                |              |

Surface Owner: Fee

Mineral Owner: Fee

API No. 3004526159

#### LOCATION OF RELEASE Range Unit Letter Section Township Feet from the North/South Line Feet from the East/West Line County: San Juan Р 24 29N 13W 1,040 South 1,020 East

Latitude <u>36.70801°</u> Longitude <u>-108.15234°</u>

### NATURE OF RELEASE

| Type of Release: none   | Volume of Release: unknown  | Volume Recovered: N/A   |
|---|---|---|
| Source of Release: below grade tank – 95 bbl  | Date and Hour of Occurrence:<br>none  | Date and Hour of Discovery: none  |
| Was Immediate Notice Given?   | If YES, To Whom?  |   |
| By Whom?  | Date and Hour   |   |
| Was a Watercourse Reached?  | If YES, Volume Impacting the Wa   | tercourse.  |
| If a Watercourse was Impacted, Describe Fully.*   |   |   |
| Describe Cause of Problem and Remedial Action Taken.* Sampling of the BTEX, TPH and chloride below BGT closure standards. Field reports an  |   | ng removal. Soil analysis resulted for  |
| Describe Area Affected and Cleanup Action Taken.* No action necessary   | . Final laboratory analysis determined  | no remedial action is required.   |
| I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release multiplic health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate or the environment. In addition, NMOCD acceptance of a C-141 report defederal, state, or local laws and/or regulations. | otifications and perform corrective ac<br>e NMOCD marked as "Final Report"<br>e contamination that pose a threat to g | tions for releases which may endanger<br>does not relieve the operator of liability<br>round water, surface water, human health |
| Signature: Alter Mun  | OIL CONSERV   | VATION DIVISION   |
| Printed Name: Steve Moskal  | Approved by Environmental Specialis   | st:   |
| Title: Field Environmental Coordinator  | Approval Date:  | Expiration Date:  |
|   | Attached  |   |
| Date: January 6, 2017 Phone: 505-326-9497   |   |   |

\* Attach Additional Sheets If Necessary

bp



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

October 26, 2016

B Square Ranch, LLC 3901 Bloomfield HWY Farmington, NM 84701

## VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re: Notification of plans to close/remove a below grade tank Well Name: GALLEGOS CANYON UNIT 262E

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 October 26, 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) 326-9497.

Sincerely,

Steven Moskal BP Field Environmental Coordinator

#### Moskal, Steven

| From:    | Moskal, Steven   |
|----------|--|
| Sent:    | Wednesday, October 26, 2016 7:51 AM  |
| То:      | Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)                  |
| Cc:      | jeffcblagg@aol.com; blagg_njv@yahoo.com; Gonzales, Jody J; Hixon, Vance E; Beebe, Sabre; |
|          | Railsback, Farrah (CH2M HILL)  |
| Subject: | RE: BP Pit Close Notification - GCU 262E   |

The BGT is scheduled to be closed today at 2:00 PM.

Thank you.

From: Moskal, Steven
Sent: Wednesday, October 26, 2016 7:37 AM
To: 'Smith, Cory, EMNRD'; 'Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>)'
Cc: 'jeffcblagg@aol.com'; 'blagg\_njv@yahoo.com'; Gonzales, Jody J; Hixon, Vance E; Beebe, Sabre; Railsback, Farrah (CH2M HILL)
Subject: RE: BP Pit Close Notification - GCU 262E

I did not correct the legal location info prior to sending. Please accept this revised version.

Thank you,

Steve Moskal L48 FEC - San Juan South

This email and any attachments are intended only for the addressee(s) listed above and may contain confidential, proprietary, and/or privileged information. If you are not an intended recipient, please immediately advise the sender by return email, delete this email and any attachments, and destroy any copies of same. Any unauthorized review, use, copying disclosure or distribution of this email and any attachments is prohibited.

From: Moskal, Steven Sent: Wednesday, October 26, 2016 7:30 AM To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>) Cc: jeffcblagg@aol.com; blagg\_njv@yahoo.com; Gonzales, Jody J; Hixon, Vance E; Beebe, Sabre; Railsback, Farrah (CH2M HILL)

Subject: BP Pit Close Notification - GCU 262E

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

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

October 26, 2016

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

# RE: Notice of Proposed Below-Grade Tank (BGT) Closure

GALLEGOS CANYON UNIT 262E API 30-045-26159 (P) Section 24 – T29N – R13W San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95BBL BGT that will no longer be operational at this well site. We anticipate this work to start on or around October 26, 2016. I am requesting a variance of the 72 hour notification as this BGT is located on private land and an agreement with the landowner has determined that this work be completed as soon as possible. The landowner is aware of the closure. I apologize for the abrupt notice.

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

|   |  |                | l  |
|---|--|----------------|--|
|   | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 8   | 7413           | API #: 3004526159  |
|   | (505) 632-1199   |                | TANK ID (if applicble):  |
| FIELD REPORT:   | (circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER   | 2:             | PAGE #: _1_ of _1_   |
| SITE INFORMATION  | : SITE NAME: GCU # 262E  |                | DATE STARTED: 10/28/16   |
| QUAD/UNIT: P SEC: 24 TWP:   |  | ST: NM         | DATE FINISHED:   |
| 1/4-1/4/FOOTAGE: 1,040'S / 1,0  | 20'E SE/SE LEASE TYPE: FEDERAL / STATE FE  | / INDIAN       | ENVIRONMENTAL  |
| LEASE #   | PROD. FORMATION: DK CONTRACTOR: MBF - C. PAR   |                | SPECIALIST(S): NJV   |
| REFERENCE POINT   | WELL HEAD (W.H.) GPS COORD.: 36.70785 X  | 108.15196      | GL ELEV.: 5,296'   |
|   | GPS COORD.: 36.70801 X 108.15234   |                |  |
| 2)  | GPS COORD.:  | DISTANCE/BEARI | NG FROM W.H.:  |
| 3)  | GPS COORD.:  | DISTANCE/BEARI | NG FROM W.H.:  |
|   | GPS COORD.:  | DISTANCE/BEARI |  |
| SAMPLING DATA:  | CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL   |                | READING<br>(ppm)   |
|   | (95) SAMPLE DATE: 10/28/16 SAMPLE TIME: 0944 LAB A   |                |  |
| **************************************  | SAMPLE DATE: SAMPLE TIME: LAB A  |                |  |
|   | SAMPLE DATE: SAMPLE TIME: LAB A  |                |  |
|   | SAMPLE DATE:SAMPLE TIME: LAB A   |                |  |
| SOIL DESCRIPTION  | SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL O   |                |  |
| COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY                                  |  |                | HESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC<br>TIFF / VERY STIFF / HARD |
| CONSISTENCY (NON COHESIVE SOILS): LO  | OSE FIRM / DENSE / VERY DENSE HC ODOR DETECTED: YES / NO EXPL  | •              |  |
| MOISTURE: DRY /SLIGHTLY MOIST / MOIST / WE<br>SAMPLE TYPE: GRAB (COMPOSITE) # |  |                | TION   |
| DISCOLORATION/STAINING OBSERVED: YES  |  |                | ANON   |
|   | S: LOST INTEGRITY OF EQUIPMENT: YES NO EXPLANATION -   |                |  |
| APPARENT EVIDENCE OF A RELEASE OBSERVE<br>EQUIPMENT SET OVER RECLAIMED AREA:  |  |                | · · · · · · · · · · · · · · · · · · ·                                |
|   | & ABANDONED (P&A). NMOCD REP. NOT PRESENT TO WITNESS (   | ONFIRMATION S  | AMPLING.   |
| SOIL IMPACT DIMENSION ESTIMATION:   | NAft.XNAft.XNAft. E  | CAVATION ESTI  | MATION (Cubic Yards) : NA  |
|   |  |                | TPH CLOSURE STD: 100 ppm   |
| SITE SKETCH   | BGT Located : off I on site PLOT PLAN circle:  | attached OVM C | ALIB. READ. = NA ppm RF =0.52  |
|   | <b>↑</b>   |                | ALIB. GAS = NA ppm   |
| PBGTL   | SEPARATOR  |                | NA am/pm DATE: NA  |
| T.B. ~ 5'<br>B.G.   | TO<br>SAN JUAN   |                | MISCELL. NOTES   |
|   | RIVER  | wo             | D:   |
| PROD.   |  | AF             | E#: X7-006NK-E:REST  |
|   |  | VID            |  |
| X   | РИМР   | PJ             |  |
| FENCE   | JACK   |                | mit date(s): 06/14/10<br>D Appr. date(s): 05/02/16                   |
|   |  | Tank           |  |
|   | ₩.H. ⊕   | Α              | BGT Sidewalls Visible: Y /N  |
| BERM  | X -  | 3.P.U. I⊢      | BGT Sidewalls Visible: Y / N   |
| T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELC                                     | n Depression; B.G. = Below Grade; B = Below; T.H. = Test Hole; ~ = Approx.; W.H. =<br>W-Grade Tank Location; SPD = Sample Point Designation; R.W. = Retaining Wall;<br>Wall; DW - Double Wall; SB - Single Bottom; DB - Double Bottom. |                | BGT Sidewalls Visible: Y / N<br>agnetic declination: <b>10°</b> E    |
| NOTES: GOOGLE EARTH IMAGE   |  |                |  |
| roviced: 11/26/13   |  |                | DEI1005E 6 SKE   |

BEI1005E-6.SKF

| Hall Environmental Analy                        | sis Labora | tory, Inc. |           |          | Date Reported: 11/2/2                 | 2016     |
|---|------------|------------|-----------|----------|---------------------------------------|----------|
| CLIENT: Blagg Engineering<br>Project: GCU #262E |            |            | -         |          | C-TB @ 5' (95)<br>/28/2016 9:44:00 AM | Л        |
| Lab ID: 1610E53-001                             | Matrix:    | SOIL       | Received  | Date: 10 | /29/2016 8:20:00 AN                   | Л        |
| Analyses  | Result     | PQL Q      | ual Units | DF       | Date Analyzed                         | Batch    |
| EPA METHOD 300.0: ANIONS                        |            |            |           |          | Analy                                 | st: LGT  |
| Chloride  | ND         | 30         | mg/Kg     | 20       | 10/31/2016 10:29:23                   | AM 28379 |
| EPA METHOD 8015M/D: DIESEL RAN                  | GE ORGANIC | S          |           |          | Analy                                 | st: TOM  |
| Diesel Range Organics (DRO)                     | ND         | 9.7        | mg/Kg     | 1        | 10/31/2016 10:05:43                   | AM 28368 |
| Motor Oil Range Organics (MRO)                  | ND         | 49         | mg/Kg     | 1        | 10/31/2016 10:05:43                   | AM 28368 |
| Surr: DNOP                                      | 87.2       | 70-130     | %Rec      | 1        | 10/31/2016 10:05:43                   | AM 28368 |
| EPA METHOD 8015D: GASOLINE RA                   | NGE        |            |           |          | Analy                                 | st: NSB  |
| Gasoline Range Organics (GRO)                   | ND         | 3.5        | mg/Kg     | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| Surr: BFB                                       | 87.3       | 68.3-144   | %Rec      | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| EPA METHOD 8021B: VOLATILES                     |            |            |           |          | Analy                                 | st: NSB  |
| Benzene   | ND         | 0.035      | mg/Kg     | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| Toluene   | ND         | 0.035      | mg/Kg     | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| Ethylbenzene                                    | ND         | 0.035      | mg/Kg     | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| Xylenes, Total                                  | ND         | 0.070      | mg/Kg     | 1        | 10/31/2016 9:04:58 A                  | M 28358  |
| Surr: 4-Bromofluorobenzene                      | 103        | 80-120     | %Rec      | 1        | 10/31/2016 9:04:58 A                  | M 28358  |

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

| Qualifiers: | *  | Value exceeds Maximum Contaminant Level.               | В  | Analyte detected in the associated Method Blank           |
|-------------|----|--|----|---|
|             | D  | Sample Diluted Due to Matrix                           | E  | Value above quantitation range                            |
|             | Н  | Holding times for preparation or analysis exceeded     | J  | Analyte detected below quantitation limits Page 1 of 5    |
|             | ND | Not Detected at the Reporting Limit                    | Р  | Sample pH Not In Range                                    |
|             | R  | RPD outside accepted recovery limits                   | RL | Reporting Detection Limit                                 |
|             | S  | % Recovery outside of range due to dilution or matrix  | w  | Sample container temperature is out of limit as specified |
|             | 3  | 76 Recovery outside of range due to dilution of matrix | vv | Sample container temperature is out of minit as specified |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 1610E53

Date Reported: 11/2/2016

| Ch<br>Client:              |                        |             | / BP AMERICA                           | Turn-Around  |   | SAME<br>DAY                       |   |                        |                      | A                  | N                  | AL                     | YS            | IS  | 5 L                          | AE          | 30              | RA               | NT/         |                        | ſ                    |
|----------------------------|------------------------|-------------|--|--|---|-----------------------------------|---|------------------------|----------------------|--------------------|--------------------|------------------------|---------------|---|------------------------------|-------------|-----------------|------------------|-------------|------------------------|----------------------|
| Mailing A                  | ddress:                | P.O. BO     | X 87                                   |  | GCU # 262                                 | 2E                                | www.hallenvironmental.com<br>4901 Hawkins NE - Albuquerque, NM 87109  |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             | FIELD, NM 87413                        | Project #:   |   |                                   | Tel. 505-345-3975 Fax 505-345-4107  |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
| Phone #:                   |                        | (505) 63    | 2-1199                                 |  |   |                                   | Analysis Request  |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
| email or F                 | ax#:                   | -           |  | Project Mana   | ger:                                      |                                   |   |                        |                      |                    |                    |                        |               | (4)   |                              |             | 1               | 300.1)           |             |                        |                      |
| QA/QC Pa                   | -                      |             | Level 4 (Full Validation)              |  | NELSON V                                  | ELEZ                              | FMB <sup>4</sup> s (8021B)  | s only)                | / MRO)               |                    |                    | (S)                    |               | PO4,SO  | 2 PCB's                      |             |                 | 1                |             | e                      |                      |
| Accreditat                 | tion:                  |             |  | Sampler: NELSON VELEZ nV   |   |                                   | - Second  | H (Ga                  | DRO                  | $\widehat{\tau}$   | न                  | OSIN                   |               | NO <sub>2</sub> ,   | 808                          |             |                 | 300.0 / water    |             | dme                    |                      |
|                            |                        |             |  | On Ice:  | ZYes .                                    |                                   | ł   | đ                      | 0                    | 418                | 504                | 827                    | s             | °°  | es/                          |             | (YO             | 300.(            |             | tesi                   | or N                 |
| Date                       | Time                   | Matrix      | Sample Request ID                      | Sample Temp<br>Ac id 31114<br>Container<br>Type and #<br>Men#Lat | erature: <u>/</u><br>Preservative<br>Type | Ariolaniu                         | BTEX + MTBE   | BTEX + MTBE + TPH (Gas | TPH 8015B (GRO / DRO | TPH (Method 418.1) | EDB (Method 504.1) | PAH (8310 or 8270SIMS) | RCRA 8 Metals | Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | Chloride (soil - | Grah campla | 5 pt. composite sample | Air Bubbles (Y or N) |
| 10/28/16                   | 0944                   | SOIL        | 5PC - TB @ 🛫 ' (95)                    | 4 oz 1   | Cool                                      | -001                              | V   |                        | ٧                    |                    |                    |                        |               | 1   |                              |             |                 | V                |             | V                      |                      |
|                            |                        | and Para    |  |  |   |                                   |   |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   | 9 X -                  |                      |                    |                    |                        |               |   |                              |             |                 |                  | -           |                        | 1.1                  |
|                            |                        |             |  |  |   |                                   |   |                        |                      |                    | 19.<br>12          |                        |               |   |                              | A. 1.       | r (fi           |                  | * <u>-</u>  |                        |                      |
| 1997 - Z.                  | 5.4                    |             |  |  |   |                                   |   |                        |                      |                    |                    | 12                     |               |   |                              |             |                 | ·                |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        | -230                 |                    |                    |                        |               | 1   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        | 1.154                |                    | -                  |                        |               |   |                              |             |                 |                  |             |                        |                      |
|                            |                        |             |  |  |   | le <sub>n</sub> e le <sub>n</sub> |   |                        |                      | 2                  |                    |                        |               |   |                              | No.         | n               |                  | · .         |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        |                      |                    |                    |                        |               |   |                              |             | 10 - 12<br>212  |                  |             |                        |                      |
|                            |                        |             |  |  |   |                                   |   |                        |                      |                    |                    |                        |               |   |                              |             |                 |                  |             |                        |                      |
| Date:<br>10/28/16<br>Date: | Time:<br>1574<br>Time: | Relinquishe | In J                                   | Received by:<br>Received by:                                     | last                                      | Date Time                         | Remarks:       BILL DIRECTLY TO BP USING THE CIRCLED CONTACT WITH<br>CORRESPONDING VID & REFERENCE # WHEN APPLICAB         Vance Hixon       Steve Moskal         VID:       VHIXONEVB2         VBENESSØPLE |                        |                      | ICABL              | <u>E;</u><br>oskal |                        |               |   |                              |             |                 |                  |             |                        |                      |
| 128/14                     | 1904                   | 1300        | witted to Hall Environmental may be so | Y W  | 5 10/2                                    | 29/16080                          |   | eren                   | -                    |                    |                    |                        | . \           | -   |                              | _           | -               | ′ _              |             |                        |                      |

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1610E53

02-Nov-16

| Client:<br>Project: | Blagg ]<br>GCU # | Engineering<br>262E                                       |          |           | -           |           | 5.        |              |      | ž        |      |
|---------------------|------------------|---|----------|-----------|-------------|-----------|-----------|--------------|------|----------|------|
| Sample ID           | MB-28379         | 3-28379 SampType: MBLK TestCode: EPA Method 300.0: Anions |          |           |             |           |           |              | s    |          |      |
| Client ID:          | PBS              | Batch   | n ID: 28 | 379       | F           | RunNo: 3  | 8358      |              |      |          |      |
| Prep Date:          | 10/31/2016       | Analysis D  | ate: 1   | 0/31/2016 | 5           | SeqNo: 1  | 197670    | Units: mg/K  | g    |          |      |
| Analyte             |                  | Result  | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD | RPDLimit | Qual |
| Chloride            |                  | ND  | 1.5      |           |             |           |           |              |      |          |      |
| Sample ID           | LCS-28379        | SampT   | ype: LC  | s         | Tes         | tCode: El | PA Method | 300.0: Anion | S    |          |      |
| Client ID:          | LCSS             | Batch   | n ID: 28 | 379       | F           | RunNo: 3  | 8358      |              |      |          |      |
| Prep Date:          | 10/31/2016       | Analysis D  | ate: 10  | 0/31/2016 | 5           | SeqNo: 1  | 197671    | Units: mg/K  | g    |          |      |
| Analyte             |                  | Result  | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD | RPDLimit | Qual |
| Chloride            |                  | 14  | 1.5      | 15.00     | 0           | 92.1      | 90        | 110          |      |          |      |
|                     |                  |   |          |           |             |           |           |              |      |          |      |

#### Qualifiers:

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

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# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:GCU #262E

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| Sample ID LCS-28368  | SampT                                  | ype: LC            | s                       | TestCode: EPA Method 8015M/D: Diesel Range Organics |                                   |                             |                             |            |            |            |
|--|--|--------------------|-------------------------|---|-----------------------------------|-----------------------------|-----------------------------|------------|------------|------------|
| Client ID: LCSS  | Batch ID: 28368 RunNo: 38325           |                    |                         |   |                                   |                             |                             |            |            |            |
| Prep Date: 10/31/2016  | Analysis D                             | ate: 10            | 0/31/2016               | 5   | SeqNo: 1                          | 196271                      | Units: mg/K                 | g          |            |            |
| Analyte  | Result                                 | PQL                | SPK value               | SPK Ref Val   | %REC                              | LowLimit                    | HighLimit                   | %RPD       | RPDLimit   | Qual       |
| Diesel Range Organics (DRO)  | 46                                     | 10                 | 50.00                   | 0   | 92.4                              | 62.6                        | 124                         |            |            |            |
| Surr: DNOP   | 4.2                                    |                    | 5.000                   |   | 84.2                              | 70                          | 130                         |            |            |            |
|  |  | Mar Mr             |                         | Tea   |                                   |                             |                             | and Dama   | Organica   |            |
| Sample ID MB-28368<br>Client ID: PBS                                     | SampT                                  | ype: ME            | BLK                     |   |                                   | PA Method                   | 8015M/D: Die                | esel Range | e Organics | 5.<br>5.   |
| Sample ID MB-28368   | SampT                                  | ID: 28             | BLK                     | F   | tCode: El                         | PA Method<br>8325           |                             |            | e Organics | - <u>-</u> |
| Sample ID MB-28368<br>Client ID: PBS                                     | SampT<br>Batch                         | ID: 28             | 3LK<br>368<br>0/31/2016 | F   | tCode: El                         | PA Method<br>8325           | 8015M/D: Die                |            | e Organics | Qual       |
| Sample ID MB-28368<br>Client ID: PBS<br>Prep Date: 10/31/2016<br>Analyte | SampT<br>Batch<br>Analysis D           | ID: 28:<br>ate: 10 | 3LK<br>368<br>0/31/2016 | F   | tCode: El<br>RunNo: 3<br>SeqNo: 1 | PA Method<br>8325<br>196272 | 8015M/D: Die<br>Units: mg/K | g          |            | Qual       |
| Sample ID MB-28368<br>Client ID: PBS<br>Prep Date: 10/31/2016            | SampT<br>Batch<br>Analysis D<br>Result | ate: 10<br>PQL     | 3LK<br>368<br>0/31/2016 | F   | tCode: El<br>RunNo: 3<br>SeqNo: 1 | PA Method<br>8325<br>196272 | 8015M/D: Die<br>Units: mg/K | g          |            | Qual       |

**Qualifiers:** 

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- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#: 1610E53

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# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

| Client:<br>Project:         | Blagg E<br>GCU #2 | ngineering<br>262E |         |           | *<br>                                      |              |           | 3 - 2<br>3  |           | 8        |      |  |
|-----------------------------|-------------------|--------------------|---------|-----------|--|--------------|-----------|-------------|-----------|----------|------|--|
| Sample ID                   | MB-28358          | SampT              | ype: M  | BLK       | TestCode: EPA Method 8015D: Gasoline Range |              |           |             |           |          |      |  |
| Client ID:                  | PBS               | Batch              | ID: 28  | 3358      | F  | RunNo: 38338 |           |             |           |          |      |  |
| Prep Date:                  | 10/28/2016        | Analysis D         | ate: 1  | 0/31/2016 | 5  | SeqNo: 1     | 196955    | Units: mg/K | g         |          |      |  |
| Analyte                     |                   | Result             | PQL     | SPK value | SPK Ref Val                                | %REC         | LowLimit  | HighLimit   | %RPD      | RPDLimit | Qual |  |
| Gasoline Range<br>Surr: BFB | e Organics (GRO)  | ND<br>860          | 5.0     | 1000      |  | 86.3         | 68.3      | 144         |           |          |      |  |
| Sample ID                   | LCS-28358         | SampT              | ype: LC | cs        | Tes  | tCode: El    | PA Method | 8015D: Gaso | line Rang | e        |      |  |
| Client ID:                  | LCSS              | Batch              | ID: 28  | 358       | F  | RunNo: 3     | 8338      |             |           |          |      |  |
| Prep Date:                  | 10/28/2016        | Analysis D         | ate: 1  | 0/31/2016 | S  | SeqNo: 1     | 196956    | Units: mg/K | g         |          |      |  |
| Analyte                     |                   | Result             | PQL     | SPK value | SPK Ref Val                                | %REC         | LowLimit  | HighLimit   | %RPD      | RPDLimit | Qual |  |
| Gasoline Range              | e Organics (GRO)  | 23                 | 5.0     | 25.00     | 0  | 91.4         | 74.6      | 123         |           |          |      |  |
| Surr: BFB                   | *:                | 970                |         | 1000      | 1  | 96.8         | 68.3      | 144         |           |          |      |  |
| Sample ID                   | MB-28350          | SampT              | ype: MI | BLK       | Tes  | tCode: EF    | PA Method | 8015D: Gaso | line Rang | e        | 2    |  |
| Client ID:                  | PBS               | Batch              | ID: 28  | 350       | F  | RunNo: 38    | 8338      |             |           |          |      |  |
| Prep Date:                  | 10/28/2016        | Analysis Da        | ate: 1  | 0/31/2016 | 5  | SeqNo: 1     | 196963    | Units: %Rec | :         |          |      |  |
| Analyte                     |                   | Result             | PQL     | SPK value | SPK Ref Val                                | %REC         | LowLimit  | HighLimit   | %RPD      | RPDLimit | Qual |  |

Surr: BFB 920 1000 91.5 68.3 144 SampType: LCS Sample ID LCS-28350 TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 28350 RunNo: 38338 Prep Date: 10/28/2016 Analysis Date: 10/31/2016 SeqNo: 1196964 Units: %Rec Result SPK value SPK Ref Val %REC HighLimit %RPD RPDLimit Qual Analyte PQL LowLimit Surr: BFB 960 1000 96.1 68.3 144

Qualifiers:

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- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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# QC SUMMARY REPORT

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| Client:<br>Project: | Blagg I<br>GCU # | Engineering<br>262E |         |           |             |           |                      |              |      |          |      |
|---------------------|------------------|---------------------|---------|-----------|-------------|-----------|----------------------|--------------|------|----------|------|
| Sample ID           | MB-28358         | SampT               | ype: ME | BLK       | Tes         | tCode: E  | PA Method            | 8021B: Volat | iles |          |      |
| Client ID:          | PBS              | Batch               | ID: 28  | 358       | F           | RunNo: 3  | 8338                 |              |      |          |      |
| Prep Date:          | 10/28/2016       | Analysis D          | ate: 10 | 0/31/2016 | S           | SeqNo: 1  | 196988               | Units: mg/K  | g    |          |      |
| Analyte             |                  | Result              | PQL     | SPK value | SPK Ref Val | %REC      | LowLimit             | HighLimit    | %RPD | RPDLimit | Qual |
| Benzene             |                  | ND                  | 0.025   |           |             |           |                      |              | κ.   |          |      |
| Toluene             |                  | ND                  | 0.050   |           |             |           |                      |              |      |          |      |
| Ethylbenzene        |                  | ND                  | 0.050   |           |             |           |                      |              |      |          |      |
| Xylenes, Total      |                  | ND                  | 0.10    |           |             |           |                      |              |      |          |      |
| Surr: 4-Brome       | ofluorobenzene   | 1.0                 | _       | 1.000     | ан р.       | 103       | 80                   | 120          | яя   |          |      |
| Sample ID           | LCS-28358        | SampT               | ype: LC | S         | Tes         | tCode: El | PA Method            | 8021B: Volat | iles |          |      |
| Client ID:          | LCSS             | Batch               | ID: 28  | 358       | F           | RunNo: 3  | 8338                 |              |      |          |      |
| Prep Date:          | 10/28/2016       | Analysis D          | ate: 10 | 0/31/2016 | s           | SeqNo: 1  | 196989               | Units: mg/K  | g    |          |      |
| Analyte             |                  | Result              | PQL     | SPK value | SPK Ref Val | %REC      | LowLimit             | HighLimit    | %RPD | RPDLimit | Qual |
| Benzene             |                  | 0.94                | 0.025   | 1.000     | 0           | 93.5      | 75.2                 | 115          |      |          |      |
| Toluene             |                  | 0.94                | 0.050   | 1.000     | 0           | 94.0      | 80.7                 | 112          |      |          |      |
| Ethylbenzene        |                  | 0.97                | 0.050   | 1.000     | 0           | 97.2      | 78.9                 | 117          |      |          |      |
| Xylenes, Total      |                  | 2.9                 | 0.10    | 3.000     | 0           | 95.3      | 79.2                 | 115          |      |          |      |
| Surr: 4-Bromo       | ofluorobenzene   | 1.1                 |         | 1.000     | 21 22       | 108       | 80                   | 120          |      |          | 5    |
| Sample ID           | MB-28350         | SampT               | ype: ME | BLK       | Tes         | tCode: El | PA Method            | 8021B: Volat | iles |          |      |
| Client ID:          | PBS              | Batch               | ID: 28  | 350       | F           | RunNo: 3  | 8338                 |              |      |          |      |
| Prep Date:          | 10/28/2016       | Analysis D          | ate: 10 | /31/2016  | s           | SeqNo: 1  | 196997               | Units: %Red  | ;    |          |      |
| Analyte             |                  | Result              | PQL     | SPK value | SPK Ref Val | %REC      | LowLimit             | HighLimit    | %RPD | RPDLimit | Qual |
| Surr: 4-Bromo       | ofluorobenzene   | 1.1                 |         | 1.000     | 10          | 108       | 80                   | 120          |      |          |      |
| Sample ID           | LCS-28350        | SampT               | ype: LC | s         | Tes         | tCode: El | PA Method            | 8021B: Volat | iles |          |      |
| Client ID:          | LCSS             | Batch               | ID: 28  | 350       | F           | RunNo: 3  | 8338                 |              |      |          |      |
| Prep Date:          | 10/28/2016       | Analysis D          | ate: 10 | /31/2016  | S           | SeqNo: 1  | 1 <mark>96998</mark> | Units: %Red  | ;    |          |      |
| Analyte             | a                | Result              | PQL     |           | SPK Ref Val | %REC      | LowLimit             | HighLimit    | %RPD | RPDLimit | Qual |
| Surr: 4-Bromo       | ofluorobenzene   | 1.1                 |         | 1.000     |             | 109       | 80                   | 120          |      |          |      |

# Hall Environmental Analysis Laboratory, Inc.

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WO#: 1610E53

02-Nov-16

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | TEL: 505-345-39   | 4901 Hawkin<br>Ibuquerque, NM 8                          | ns NE<br>87109 Sam<br>-4107 | ple Log-In Cl                                | neck List         |
|---|---|--|-----------------------------|--|-------------------|
| Client Name: BLAGG  | Work Order Numb   | er: 1610E53  |                             | RcptNo:                                      | 1 *               |
| Received by/date: Cm 10/2   | ally  |  |                             | 8444-0-1-1-0-1-0                             |                   |
| Logged By: Anne Thorne  | 10/29/2016 8:20:00  | AM   | Anne Arm                    | -  |                   |
| Completed By: Anne Thorne   | 10/31/2016  |  | anne Hom                    |  |                   |
| Reviewed By: A / WS   | 16/3/1/10   |  |                             |  |                   |
| Chain of Custody  |   |  |                             |  |                   |
| 1. Custody seals intact on sample bottles?  |   | Yes  | No 🗆                        | Not Present                                  |                   |
| 2. Is Chain of Custody complete?  |   | Yes 🗹  | No 🗌                        | Not Present                                  |                   |
| 3. How was the sample delivered?  |   | Courier  |                             |  |                   |
| Log In  |   |  |                             |  |                   |
| 4. Was an attempt made to cool the samples  | 37  | Yes 🗹  | No 🗆                        |  |                   |
| •   |   |  |                             |  |                   |
| 5. Were all samples received at a temperature   | re of >0° C to 6.0°C  | Yes 🗹  | No 🗌                        |  |                   |
| 6. Sample(s) in proper container(s)?  | ÷.  | Yes 🗹  | No 🗌                        |  |                   |
| 7. Sufficient sample volume for indicated test  | (s)?  | Yes 🗹  | No 🗌                        |  |                   |
| 8. Are samples (except VOA and ONG) prope   | erly preserved?   | Yes 🗹  | No 🗌                        |  |                   |
| 9. Was preservative added to bottles?   |   | Yes  | No 🗹                        | NA 🗆   |                   |
| 10.VOA vials have zero headspace?   |   | Yes  | No 🗌                        | No VOA Vials                                 |                   |
| 11. Were any sample containers received brol  | ken?  | Yes  | No 🗹                        |  |                   |
| 12. Does paperwork match bottle labels?   |   | Yes 🗹  | No 🗆                        | # of preserved<br>bottles checked<br>for pH: |                   |
| (Note discrepancies on chain of custody)  |   |  |                             |  | >12 unless noted) |
| 13. Are matrices correctly identified on Chain of   | of Custody?   | Yes 🗹  | No 🗌                        | Adjusted?                                    |                   |
| 14. Is it clear what analyses were requested?   |   | Yes 🗹  | No 🛄                        | Checked by:                                  |                   |
| 15. Were all holding times able to be met?<br>(If no, notify customer for authorization.) |   | Yes 🗹  | No 🗌 🏻                      | Checked by.                                  |                   |
|   |   |  |                             |  |                   |
| Special Handling (if applicable)  |   | _  |                             |  |                   |
| 16. Was client notified of all discrepancies with   | this order?   | Yes 🗌  | No                          | NA 🗹   |                   |
| Person Notified:  | Date  |  | 1964                        |  |                   |
| By Whom:  | Via:  | eMail  | Phone 🗌 Fax                 | In Person                                    |                   |
| Regarding:<br>Client Instructions:  | A construct of the second s | an an an Walandar an |                             |  |                   |
| 17. Additional remarks:   |   | · ·  | · · · · · · · · · · · ·     | an <mark>alan san ka</mark> nad              |                   |
|   |   |  |                             |  |                   |
| 18. <u>Cooler Information</u><br>Cooler No Temp °C Condition                              | Seal Intact   Seal No   | Seal Date  | Signed By                   |  |                   |
| 1 4.1 Good Ye   |   | Jour Date  | i olgiloù by                |  |                   |

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BP AMERICA PRODUCTION COMPANY GALLEGOS CANYON UNIT 262E API 3004526159 LEASE NMNM78391C 1040 FSL 1020 FEL (P) SEC 24 T29N R13W San Juan County ELEV 5296 LAT 36° 42' 28.188" JONG 108° 9' 7.056"

