District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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.

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| Pit, Below-Grade Tank, or |
| 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 MAR 2 4 2016 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 Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the |
| environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances. |
| Operator: BP America Production Company OGRID #: 778 |
| Address: 200 Energy Court, Farmington, NM 87401 |
| Facility or well name: Gallegos Canyon Unit #230E |
| API Number: 3004526010 OCD Permit Number: |
| U/L or Qtr/Qtr O Section 23 Township 28N Range 12W County: San Juan |
| Center of Proposed Design: Latitude 36.64318 Longitude108.07756 NAD: □1927 ☑ 1983 |
| Surface Owner: State Private Tribal Trust or Indian Allotment |
| 2. |
| Pit: Subsection F, G or J of 19.15.17.11 NMAC |
| Temporary: Drilling Workover |
| ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no |
| Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other |
| ☐ String-Reinforced |
| Liner Seams: Welded Factory Other Volume: bbl Dimensions: Lx Wx D |
| 3. |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC Tank A |
| Volume: 95.0 bbl Type of fluid: Produced water |
| Tank Construction material: Steel |
| ☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off |
| ☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other ☐ Double walled/double bottomed; side walls not visible |
| Liner type: Thicknessmil |
| |

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

| Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) | |
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| Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church) | hospital, |
| Four foot height, four strands of barbed wire evenly spaced between one and four feet | |
| Alternate. Please specify | |
| 6. Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) | |
| Screen Netting Other | |
| ☐ Monthly inspections (If netting or screening is not physically feasible) | |
| 7. Simus Subsection C of 10 15 17 11 NIMAC | |
| 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. | De se |
| 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 of the compliance of the complianc | ptable source |
| material are provided below. Siting criteria does not apply to drying pads or above-grade tanks. | |
| General siting | |
| Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | Yes No |
| Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. | ☐ Yes ☐ No |
| NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | □ NA |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) | ☐ Yes ☐ No |
| - Written confirmation or verification from the municipality; Written approval obtained from the municipality | |
| Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | ☐ Yes ☐ No |
| 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 | ☐ Yes ☐ No |
| from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | |
| Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. | ☐ Yes ☐ No |
| - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | |
| Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter) | |
| Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No |

| Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial | 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 Natructions: 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 19.15.17.12 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: | |
| | |

| Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the | 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 ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC | |
| 13. Proposed Closure: 19.15.17.13 NMAC | Tribation |
| 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 | |
| 15. | |
| Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance. | |
| Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | Yes No |
| 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 | ☐ Yes ☐ No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance | L ICS L NO |

| Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society. Topographic map Within a 100-year floodplain. FEMA map Within a 100-year floodplain. Within a 100-year floodplain. Within a 100-year floodplain. Within a 10 | | |
|--|---|--------------------------|
| Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Within a 100-year floodplain. FEMA map Within a 100-year floodplain. FEMA map Within a Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following Items must be attached to the closure plan. Please into the state in the box, that the documents are attached. Stilling Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.13 NMAC 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 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 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 Disposal Pacility Name and if (fapplicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Pacility Name and Permit Number (for liquids, drilling Itudis and drill cuttings or in case on-site closure standards cannot be achieved Site Reclamation 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 Proof of Station Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Date: Date: Date: Constructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure remained by the days of the completion of the closure activities. Please do not complete this section of the form until an approved plan please explain. Closure Report (required within 60 days of closure Completion) to imp | | ☐ Yes ☐ No |
| - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Within a 100-year floodplain. | | ☐ Yes ☐ No |
| Within a 100-year floodplain. FEMA map Yes | | |
| FEMA map Press | | ☐ Yes ☐ No |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please into by a check mark in the box. Mat the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.13 NMAC Prot 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 19.15.17.11 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Maste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solid Cover Design - based upon the appropriate requirements | | ☐ Yes ☐ No |
| 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 belief. Name (Print): Title: | 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 19.15.17.13 NMAC 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 | 11 NMAC 15.17.11 NMAC |
| I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Print): | | |
| Signature: Date: | | ef. |
| e-mail address: Telephone: | Name (Print): Title: | |
| e-mail address: Telephone: | Signature: Date: | |
| OCD Approval: | | |
| OCD Representative Signature: Approval Date: 03 300 3 | 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only). OCD Conditions (see attachment) | |
| Title: | | 212016 |
| 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 re The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 2/25/2016 Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems on If different from approved plan, please explain. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a chemark 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) | N. 15 | Ologia |
| 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 complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 2/25/2016 Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems on If different from approved plan, please explain. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a chemark 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) | | |
| Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems on ☐ If different from approved plan, please explain. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a chemark 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) | 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 a | |
| Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems on If different from approved plan, please explain. Instructions: Each of the following items must be attached to the closure report. Please indicate, by a chemark 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) | ☐ Closure Completion Date: 2/25/2016 | COLUMN TEN |
| Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a chemark 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) | Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loc | op systems only) |
| ☑ Disposal Facility Name and Permit Number ☑ Soil Backfilling and Cover Installation ☑ Re-vegetation Application Rates and Seeding Technique ☑ Site Reclamation (Photo Documentation) | 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 |
| On-site Closure Location: Latitude 36.64318 Longitude -108.07756 NAD: □1927 ⋈ 1983 | | |

| 22. | |
|--------------------------------------|--|
| Operator Closure Certification: | |
| | tted with this closure report is true, accurate and complete to the best of my knowledge and cable closure requirements and conditions specified in the approved closure plan. |
| Name (Print): Steve Moskal | Title: Field Environmental Coordinator |
| Signature: How Min | Date: March 24, 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

Gallegos Canyon Unit #230E API No. 3004526010 Unit Letter O, Section 23, T28N, R12W

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 was made to the BLM Farmington Field Office via email (attached) as requested by the BLM.
- 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 to the NMOCD District III office via email (attached) and the NMOCD witnessed the closure sampling 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 to a storage area for sale and re-use.

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 Tank A | Release Verification (mg/Kg) | Sample results |
|--------------|-------------------------------------|------------------------------|----------------|
| Benzene | US EPA Method SW-846 8021B or 8260B | 0.2 | < 0.049 |
| Total BTEX | US EPA Method SW-846 8021B or 8260B | 50 | 0.52 |
| TPH | US EPA Method SW-846 418.1/ 8015B | 100 | 2,237 |
| Chlorides | US EPA Method 300.0 or 4500B | 250 or background | 64 |

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 laboratory analysis of BTEX and chloride with results below the stated limits. Sample was analyzed for TPH via 8015 extended range exceeded the stated limits. The area below the BGT is believed to be the location of a former earthen

pit. The earthen pit was remediated via excavation. Sampling and laboratory results are attached. Remedial activities were documented and submitted to the NMOCD on March 14, 2016.

- 7. 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.
 Laboratory results indicate no significant release has occurred from the BGT. However the BGT was located in the area of a historic earthen pit. The earthen pit was remediated via excavation.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

The BGT was located in the area of a historic earthen pit. The earthen pit was remediated via excavation. The area under the BGT was backfilled with clean soil and has been reclaimed since the well was plugged and abandoned.

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

The area over the BGT was backfilled with clean soil. A low profile tank was placed in the location of the BGT.

- 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 BGT was located in the area of a historic earthen pit. The earthen pit was remediated via excavation. The area over the BGT was backfilled with clean soil. A low profile tank was placed in the location of the BGT.
- 12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that

cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

The area over the BGT was backfilled with clean soil. A low profile tank was placed in the location of the BGT. The area will be reclaimed once the well is plugged and abandoned.

- 13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
 - A low profile tank was placed in the location of the BGT. The area will be reclaimed once the well is plugged and abandoned.
- 14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.

BP will notify NMOCD when re-vegetation is successful.

- 15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
 - a. proof of closure notification (surface owner and NMOCD)
 - b. sampling analytical reports; information required by 19.15.17 NMAC;
 - c. disposal facility name and permit number
 - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
 - e. site reclamation, photo documentation.
 Closure report on C-144 form is included.
- 16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

Certification section of C-144 has been completed.

<u>District I</u> 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

Revised August 8, 2011

Form C-141

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.

| | | | Kel | ease Notifi | catio | on and Co | | ction | Initi | al Report Final Repo |
|--|---|---|---|--|------------------------------------|--|---|--|--|--|
| Name of C | ompany. B | P | | | | Contact: Ste | | | 111111 | ai Report I'lliai Repo |
| | | Court, Farm | ington. N | M 87401 | | | No.: 505-326-94 | 197 | | |
| | | gos Canyon l | | | | | e: Natural gas | | | |
| | | | | | | | | | | |
| Surface Ov | vner: Feder | ral | | Mineral (| Owner: | Federal | | 1 | API No | 0. 3004526010 |
| | | | | LOC | ATIO | N OF RE | LEASE | | | |
| Unit Letter O | Section 23 | Township 28N | Range 12W | Feet from the 1,070 | North South | n/South Line | Feet from the 1,630 | East/Wes | t Line | County: San Juan |
| | | Latitu | ide 36. | 64318° | | _ Longitude | -108.07756 | | | |
| | | | | NAT | FURE | OF REL | EASE | | | |
| | | nsate/oil and p | | vater | | | Release: unknov | | | Recovered: Approx. none |
| Source of R | elease: 95 bl | bl BGT – Tan | k A | | | Date and F unknown | Iour of Occurrent | ce: Da | ate and | Hour of Discovery: 2/12/2016 |
| Was Immed | iate Notice (| | Yes [| No Not R | equired | If YES, To | Whom? | | | |
| By Whom? | | | | | | Date and H | | | | |
| Was a Water | rcourse Rea | |] Yes ⊠ | No | | If YES, Vo | olume Impacting | the Waterco | urse. | |
| BGT appear Describe Are excavation r | ed to have g ea Affected neasured ap | and Cleanup approximately 2 | and the im Action Tal 5'x 25'x 1 | pacts are likely recent the impact of the pact of the impact of the pact of th | elated to ed soils tal of 18 | were excavate 30 cubic yards | ed and removed from the | on of a form rom the site e site. Conf | for land | MOCD observed sampling. The then pit. dfarm treatment. The area of on closure samples were ratory reports are attached. |
| I hereby cert regulations a public health should their or the enviro | tify that the all operators or the envi operations h | information g are required t ronment. The nave failed to | iven above to report and acceptant adequately OCD accep | e is true and comp nd/or file certain ce of a C-141 rep investigate and | olete to release rort by the | the best of my notifications and ne NMOCD me te contaminati | knowledge and und perform correct arked as "Final Roon that pose a thr | inderstand the ctive actions deport" does reat to groun | hat purs for rel not rel ad water | suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other |
| | | | | | 1 | | OIL CON | SERVAT | ΓΙΟΝ | DIVISION |
| Signature: | Aus | new | | | | | | | | |
| Printed Nam | e: Steve Mo | oskal | | | | Approved by | Environmental S | pecialist: | | |
| Title: Field I | Environmen | tal Coordinate | or | | | Approval Dat | e: | Exp | iration | Date: |
| E-mail Addr Date: March | 2.4 | moskal@bp.co | | 505-326-9497 | | Conditions of | Approval: | | | Attached |

^{*} Attach Additional Sheets If Necessary

bp



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

February 4, 2016

Bureau of Land Management Katherina Diemer 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: GCU 230E API #: 3004526010

Dear Mrs. Diemer,

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 two below grade tanks on its well pad located on your surface. BP plans to commence this work on or about February 9, 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.

If witnessing of the tank removal is required please contact me for a specific time (505)-326-9497.

Sincerely,

Steven Moskal

BP America Production Company

Moskal, Steven

From:

Moskal, Steven

Sent:

Monday, February 08, 2016 2:13 PM

To:

Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us); kdiemer@blm.gov

Cc:

jeffcblagg@aol.com; blagg_njv@yahoo.com; mflanike@blm.gov

Subject:

RE: BP Pit Close Notification - GCU 230E

All-

The BGT is scheduled to be removed at 8:00AM tomorrow morning.

Thank you,

Steve Moskal

BP Lower 48 – San Juan – Farmington Field Environmental Coordinator Office: (505) 326-9497 Cell: (505) 330-9179



From: Railsback, Farrah (CH2M HILL)
Sent: Thursday, February 04, 2016 2:22 PM

To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)

Cc: jeffcblagg@aol.com; blagg_njv@yahoo.com; Moskal, Steven

Subject: BP Pit Close Notification - GCU 230E

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

February 4, 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 230E API 30-045-26010 (O) Section 23 – T28N – R12W 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 two 95 bbl BGT's that will no longer be operational at this well site. We anticipate this work to start on or around February 9, 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

| DD | BLAGG ENGINEERING, INC. | API# 3004526010 |
|--|--|--|
| CLIENT: BP | P.O. BOX 87, BLOOMFIELD, NM 87413 | TANK ID A |
| | (505) 632-1199 | (if applicble): |
| FIELD REPORT: | (circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER: | PAGE#: 1 of 1 |
| SITE INFORMATION | | DATE STARTED: 02/09/16 |
| QUAD/UNIT: 0 SEC: 23 TWP: | 28N RNG: 12W PM: NM CNTY: SJ ST: NM | DATE FINISHED: |
| 1/4-1/4/FOOTAGE: 1,070'S / 1,6 | CTDIKE | ENVIRONMENTAL |
| LEASE #. SF078904 | PROD. FORMATION: DK/GP CONTRACTOR: MBF - J. POWELL | SPECIALIST(S): NJV |
| REFERENCE POINT | : WELL HEAD (W.H.) GPS COORD.: 36.64349 X 108.07760 | GL ELEV.: 5,771' |
| 95 BGT (A) (DW/DB) | GPS COORD.: 36.64318 X 108.07756 DISTANCE/BEA | RING FROM W.H.: 120', S11E |
| 2) | GPS COORD.: DISTANCE/BEA | RING FROM W.H.: |
| 3) | GPS COORD.: DISTANCE/BEAR | RING FROM W.H.: |
| 4) | GPS COORD.: DISTANCE/BEA | RING FROM W.H.: |
| SAMPLING DATA: | CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL | READING (ppm) |
| 1) SAMPLE ID: 5PC - TB @ 5' | | 5B/8021B/300.0 (CI) NA |
| 2) SAMPLE ID: 5PC - TB @ 6'-6.5 | 5' (95) - A SAMPLE DATE: 02/12/16 SAMPLE TIME: 1045 LAB ANALYSIS: 801 | 5B/8021B/300.0 (CI) NA |
| 3) SAMPLE ID: | SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: | |
| 4) SAMPLE ID: | SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: | |
| | SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL / OTHER | |
| | YELLOWSH ORANGE PLASTIC/C(CLAYS): NON PLASTIC/SLIGHTLY PLASTIC/C | |
| COHESION (ALL OTHERS): NON COHESIVE (SLIGHTLY CONSISTENCY (NON COHESIVE SOILS): LC | | STIFF / VERY STIFF / HARD |
| MOISTURE: DRY/SLIGHTLYMOIST MOIST/W | ET / SATURATED / SUPER SATURATED | |
| SAMPLE TYPE: GRAB COMPOSITE # | | IATION - |
| DISCOLORATION/STAINING OBSERVED: YES | | |
| APPARENT EVIDENCE OF A RELEASE OBSERVE | LOST INTEGRITY OF EQUIPMENT: YES NO EXPLANATION - D AND/OR OCCURRED: YES NO EXPLANATION: YES NO EXPLANATION - 105 BBL SHALLOW LOW PROFILE ABOVE-GRADE TAN | IK TO BE SET ATOP BGT POSITION. |
| SOIL IMPACT DIMENSION ESTIMATION: | ? ft. X ? ft. X ? ft. EXCAVATION EST | TMATION (Cubic Yards) : ? |
| | | D TPH CLOSURE STD: 1,000 ppm |
| SITE SKETCH | DOT! | |
| | | CALIB. READ. = NA ppm RF = 0.52 CALIB. GAS = NA ppm |
| | ⊕ w.h. | |
| | | MISCELL. NOTES |
| PUMP JACK | W | 10: |
| | | EF#: P-273 |
| | | D: VHIXONEVB2 |
| The state of | | J#: |
| | COMPRESSOR | ermit date(s): 06/15/11 |
| | | CD Appr. date(s): 08/09/15 |
| | PBGTL X X | ppm = parts per million |
| | B.G. | BGT Sidewalls Visible: Y / N BGT Sidewalls Visible: Y / N |
| | X - S.P.D. | BGT Sidewalls Visible: Y / N |
| T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL | ON DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; OW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT | lagnetic declination: 10° E |
| APPLICABLE OR NOT AVAILABLE; SW - SINGLE | WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM. | agnotio documentori, TV L |
| NOTES: GOOGLE EARTH IMAGE | ERY DATE: 3/15/2015 ONSITE: 02/09/16 | |

Analytical Report

Lab Order 1602365

Hall Environmental Analysis Laboratory, Inc. Date Reported: 2/11/2016

CLIENT: Blagg Engineering

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

Project: GCU #230E Collection Date: 2/9/2016 10:05:00 AM

Lab ID: 1602365-001

Matrix: SOIL

Received Date: 2/10/2016 7:40:00 AM

| Analyses | Result | PQL Qua | l Units | DF | Date Analyzed | Batch |
|------------------------------------|-------------|----------|---------|----|-----------------------|--------|
| EPA METHOD 300.0: ANIONS | | | | | Analyst: | LGT |
| Chloride | ND | 30 | mg/Kg | 20 | 2/10/2016 11:15:59 AM | 23664 |
| EPA METHOD 8015M/D: DIESEL RAN | IGE ORGANIC | S | | | Analyst: | KJH |
| Diesel Range Organics (DRO) | 97 | 9.5 | mg/Kg | 1 | 2/10/2016 12:19:25 PM | 23655 |
| Motor Oil Range Organics (MRO) | 200 | 48 | mg/Kg | 1 | 2/10/2016 12:19:25 PM | 23655 |
| Surr: DNOP | 96.6 | 70-130 | %Rec | 1 | 2/10/2016 12:19:25 PM | 23655 |
| EPA METHOD 8015D: GASOLINE RA | NGE | | | | Analyst: | NSB |
| Gasoline Range Organics (GRO) | ND | 4.2 | mg/Kg | 1 | 2/10/2016 9:55:22 AM | A32054 |
| Surr: BFB | 94.2 | 66.2-112 | %Rec | 1 | 2/10/2016 9:55:22 AM | A32054 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | NSB |
| Benzene | ND | 0.042 | mg/Kg | 1 | 2/10/2016 9:55:22 AM | B32054 |
| Toluene | ND | 0.042 | mg/Kg | 1 | 2/10/2016 9:55:22 AM | B32054 |
| Ethylbenzene | ND | 0.042 | mg/Kg | 1 | 2/10/2016 9:55:22 AM | B32054 |
| Xylenes, Total | ND | 0.084 | mg/Kg | 1 | 2/10/2016 9:55:22 AM | B32054 |
| Surr: 4-Bromofluorobenzene | 115 | 80-120 | %Rec | 1 | 2/10/2016 9:55:22 AM | B32054 |

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % 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 Page 1 of 6
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1602566

Date Reported: 2/16/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB@6'-6.5' (95)-A

Project: GCU #230E

Collection Date: 2/12/2016 10:45:00 AM

Lab ID: 1602566-001

Matrix: MEOH (SOIL) Received Date: 2/13/2016 9:00:00 AM

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed | Batch |
|---------------------------------|------------|----------|------|-------|----|-----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | | Analyst | LGT |
| Chloride | 64 | 30 | | mg/Kg | 20 | 2/15/2016 2:29:38 PM | 23726 |
| EPA METHOD 8015M/D: DIESEL RANG | SE ORGANIC | S | | | | Analyst | : KJH |
| Diesel Range Organics (DRO) | 1300 | 97 | | mg/Kg | 10 | 2/15/2016 10:26:46 AM | 23717 |
| Motor Oil Range Organics (MRO) | 870 | 480 | | mg/Kg | 10 | 2/15/2016 10:26:46 AM | 23717 |
| Surr: DNOP | 0 | 70-130 | S | %Rec | 10 | 2/15/2016 10:26:46 AM | 23717 |
| EPA METHOD 8015D: GASOLINE RAN | GE | | | | | Analyst | NSB |
| Gasoline Range Organics (GRO) | 67 | 4.9 | | mg/Kg | 1 | 2/15/2016 9:51:21 AM | 23710 |
| Surr: BFB | 698 | 66.2-112 | S | %Rec | 1 | 2/15/2016 9:51:21 AM | 23710 |
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst | NSB |
| Benzene | ND | 0.049 | | mg/Kg | 1 | 2/15/2016 9:51:21 AM | 23710 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 2/15/2016 9:51:21 AM | 23710 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 2/15/2016 9:51:21 AM | 23710 |
| Xylenes, Total | 0.52 | 0.097 | | mg/Kg | 1 | 2/15/2016 9:51:21 AM | 23710 |
| Surr: 4-Bromofluorobenzene | 114 | 80-120 | | %Rec | 1 | 2/15/2016 9:51:21 AM | 23710 |

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

| Project #: |
|--|
| Tel. 505-345-3977 |
| ON VELEZ ON VELEZ |
| ON VELEZ |
| N VELEZ NO VELEZ |
| Date Time Reference #: Parker, 2013 Parker, 1740 Reference #: Parker Moskal, 200 Energy Court, Farmington, NM 87401 Parker, VHXONEVB2 Parke |
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| Time Steve Moskal, 200 Energy Court, Farmington, N Reference #: P-273 Pavkev: |
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| 2 | L | | 6 | | | | | | | | | | | | | | | | | | | IM 87401 VHIXONEVB2 |
| Σ | R | ε | 4901 Hawkins NE - Albuquerque, NM 87109 | 70 | | (1.0 | ter - 300 | | | Chloride (soil | - | | | | | | | | | | | Steve Moskal, 200 Energy Court, Farmington, NM 87401 Reference #: P-273 Paykey: VHIXONE |
| Z | BC | www.hallenvironmental.com | ΣZ | Fax 505-345-4107 | st | | | (| | /-imə2) 0\\ S | - | | | | | | | | | | | on, N |
| 8 | 4 | enta | ine, | -345 | due | | | | _ | (AOV) 809S8 | - | | | L | | | _ | _ | | _ | | armingto Paykey: |
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| | | | Hav | 505 | 10 | | (ONIN) | | | TPH 8015B (G | > | - | - | | | - | + | + | + | - | CI. | skal, e#: |
| | | 職 | 4901 | Tel. | | - | | | | BTEX + MTBE | - | | | | | | + | - | | - | Irks: | Steve Moska Reference #: |
| | | | 1 | | | | | | | BTEX + MTBE | - | | | | | + | + | | | \dashv | Remarks: BILL DIRE | Refe |
| - | | | _ | | | | 10700 | T U IS | | | - | | 7 | | _ | | + | | | | ~ \ | |
| SAME | DAY | - Contraction of the Contraction | E . | | | | ZEZ | ILEZ 97 Y | | HEAL NO. | 100- | | | | | | | | | | 2/2/14 124 r | to locate Time |
| ime: | 区 Rush | | GCU # 230E | | | jer: | NELSON VELEZ | NELSON VELEZ | So - | Preservative Type | Cool | | | | | | | | | | Waeler | A mala |
| I um-Around Lime. | ☐ Standard | Project Name: | | Project #: | | Project Manager: | | Sampler: | Committee Transport | Container Type and # | 4 02 1 | | | | | | | | | | Millothu | Received by: |
| Chain-of-Custody Record | BLAGG ENGR. / BP AMERICA | | (87 | BLOOMFIELD, NM 87413 | 2-1199 | | ☐ Level 4 (Full Validation) | | | Sample Request ID | SPC-TBE6-65 | A-(54) | | | | | | | | | the first | y y y y y y y |
| f-Cus | G ENGR. | | P.O. BOX 87 | BLOOMF | (505) 632-1199 | 16 | | - | | Matrix | SOIL | | | | | | | | 193 | | Relinquished by | Relinquished by: |
| nain-c | BLAG | | ddress: | | | -ax#: | ard ard | tion: | Lines | Time | 1045 | | | | | | | | | | 1245 | Time: |
| ਹ | lient: | | Aailing Address: | | hone #: | mail or Fax#: | 2A/QC Package: ☐ Standard | vccreditation: | L EDD (Tuno) | Date | 2/12/16 | | | | | | | | | | 2/12/16 |) ate: |

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602365

11-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

Sample ID MB-23664

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 23664

1.5

RunNo: 32050

Prep Date:

Units: mg/Kg

Analyte

2/10/2016

Analysis Date: 2/10/2016 PQL

SeqNo: 980368

HighLimit

RPDLimit

Qual

Qual

Chloride

ND

Result

Sample ID LCS-23664

SampType: LCS

TestCode: EPA Method 300.0: Anions

SPK value SPK Ref Val %REC LowLimit

Client ID: LCSS

2/10/2016

Batch ID: 23664

RunNo: 32050

Analysis Date: 2/10/2016

SeqNo: 980369

Units: mg/Kg

HighLimit %RPD **RPDLimit**

%RPD

Analyte

Prep Date:

110

SPK value SPK Ref Val %REC Chloride 15 1.5 15.00 0 97.2 90

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits

S % 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

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602365

11-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

| Sample | ID | MB-23655 |
|--------|----|----------|
|--------|----|----------|

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 23655

RunNo: 32031

Prep Date: 2/10/2016

Analysis Date: 2/10/2016

SeqNo: 979589

Units: mg/Kg

%RPD

HighLimit

RPDLimit Qual

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit |
|--------------------------------|--------|-----|-----------|-------------|----------|----------|
| Diesel Range Organics (DRO) | ND | 10 | | I I I | J. A. S. | 7 |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | |

Surr: DNOP

9.2

10.00

91.9

70

130

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

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

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602365

11-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: A32054

RunNo: 32054

Prep Date:

PQL

Units: mg/Kg

Analyte

Analysis Date: 2/10/2016

SeqNo: 980098

HighLimit

Gasoline Range Organics (GRO)

Result

5.0

SPK value SPK Ref Val %REC

LowLimit

66.2

%RPD

%RPD

RPDLimit

Page 5 of 6

RPDLimit Qual

Qual

Surr: BFB

ND 930

93.1

112

Sample ID 2.5UG GRO LCS

SampType: LCS Batch ID: A32054

1000

TestCode: EPA Method 8015D: Gasoline Range RunNo: 32054

Prep Date:

Analyte

Client ID: LCSS

Analysis Date: 2/10/2016

SeqNo: 980099

Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 23 5.0 25.00 0 79.6 122 Gasoline Range Organics (GRO) 93.5

Surr: BFB

990

1000

98.7

66.2

112

Qualifiers:

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

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

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602365

11-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

| Sample ID 5ML RB | | | | Tes | | | | | | |
|----------------------------|---|-------|-----------|---------------|--------------|----------|-------------|------|----------|------|
| Client ID: PBS | Batch ID: B32054 Analysis Date: 2/10/2016 | | | F | RunNo: 32054 | | | | | |
| Prep Date: | | | | SeqNo: 980109 | | | Units: mg/K | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | ND | 0.050 | | 100 | C FIE | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

| Sample ID 100NG BTEX LO | Type: LC | | | | | 8021B: Vola | tiles | | | |
|---------------------------|--------------------------|----------|------------|-------------|----------|-------------|-------------|------|----------|------|
| Client ID: LCSS | | h ID: B3 | XXXXXXXXXX | | RunNo: 3 | | | | | |
| Prep Date: | Analysis Date: 2/10/2016 | | | | SeqNo: 9 | 80110 | Units: mg/h | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 107 | 80 | 120 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 109 | 80 | 120 | | | |
| Ethylbenzene | 1.1 | 0.050 | 1.000 | 0 | 108 | 80 | 120 | | | |
| Xylenes, Total | 3.2 | 0.10 | 3.000 | 0 | 108 | 80 | 120 | | | |
| Surr 4-Bromofluorobenzene | 12 | | 1 000 | | 123 | 80 | 120 | | | S |

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 6 of 6



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

EL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

| Client Name: BLAGG Work Order Nu | mber: 1602365 | | RcptNo: 1 |
|---|---------------|--|---------------------------------|
| Received by/date: AT 02/10/16 | | | |
| Logged By: Anne Thorne 2/10/2016 7:40:00 | 0 AM | anne Am | |
| Completed By: Anne Thorne 2/10/2016 | | aone Am | |
| Reviewed By: 02/10/16 | | Une Jim | |
| 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 | | |
| <u>Log In</u> | | | |
| 4. Was an attempt made to cool the samples? | Yes 🗹 | No 🗆 | NA 🗆 |
| 5. Were all samples received at a temperature of >0° C to 6.0°C | Yes 🗸 | No 🗆 | NA 🗆 |
| 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) properly 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 broken? | Yes | No 🗹 | # of preserved |
| | | | bottles checked |
| 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) | Yes 🗹 | No 🗆 | for pH: (<2 or >12 unless noted |
| 13. Are matrices correctly identified on Chain of Custody? | Yes 🗸 | No 🗆 | Adjusted? |
| 14. Is it clear what analyses were requested? | Yes 🗹 | No 🗆 | |
| 15. Were all holding times able to be met? (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 🗹 |
| | | | |
| | ate | Phone Fax | ☐ In Person |
| By Whom: Via | a: eMail F | Tione Fax | III reison |
| Client Instructions: | Trace Park to | 11 to 11 11 11 11 11 11 11 11 11 11 11 11 11 | |
| 17. Additional remarks: | - K14 | 94.98 | |
| | | | |
| 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No | Seal Date | Signed By | |
| 1 1.0 Good Yes | Jean Date | Oigiled by | |

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602566

16-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

Sample ID MB-23726

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

Batch ID: 23726

RunNo: 32168

Analysis Date: 2/15/2016

SegNo: 983408

Units: mg/Kg

HighLimit

Prep Date: 2/15/2016 Analyte

PQL

%RPD **RPDLimit**

Qual

Chloride

ND 1.5

Result

Sample ID LCS-23726

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 23726

RunNo: 32168

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

Prep Date: 2/15/2016

Analysis Date: 2/15/2016

SeqNo: 983409

RPDLimit Qual

Analyte

PQL 14

15.00

Chloride

1.5

0

SPK value SPK Ref Val %REC LowLimit

93.2

110

%RPD

HighLimit

Qualifiers:

D

Value exceeds Maximum Contaminant Level.

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

S % 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

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602566

16-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

| Sample ID MB-23717 | SampType: MBLK | | | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | | |
|--------------------------------|--------------------------|-----------------|-----------|---|-----------|-----------|--------------|-----------|------------|------|--|--|--|
| Client ID: PBS | Batc | Batch ID: 23717 | | | RunNo: 3 | 2137 | | | | | | | |
| Prep Date: 2/15/2016 | Analysis Date: 2/15/2016 | | | SeqNo: 982446 | | | Units: mg/Kg | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | | |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | 0.30 | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | | | | |
| Surr: DNOP | 9.6 | | 10.00 | Market | 95.6 | 70 | 130 | | | | | | |
| Sample ID LCS-23717 | SampT | ype: LC | s | Tes | tCode: El | PA Method | 8015M/D: Die | esel Rang | e Organics | | | | |
| Client ID: LCSS | Batcl | h ID: 23 | 717 | F | RunNo: 3 | 2137 | | | | | | | |
| | | | | | | 44.00 | | | | | | | |

| Sample ID LCS-23717 | SampT | ype: LC | S | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | |
|-----------------------------|------------|----------|-----------|---|----------|----------|-------------|------------|----------|------|--|--|
| Client ID: LCSS | Batcl | n ID: 23 | 717 | F | RunNo: 3 | 2137 | | | | | | |
| Prep Date: 2/15/2016 | Analysis D |)ate: 2/ | 15/2016 | 8 | SeqNo: 9 | 82447 | Units: mg/h | ⟨ g | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | |
| Diesel Range Organics (DRO) | 41 | 10 | 50.00 | 0 | 81.6 | 65.8 | 136 | | PERMI | | | |
| Surr: DNOP | | | 5.000 | | 78.6 | 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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602566

16-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

Sample ID MB-23710

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: 23710

RunNo: 32139

Prep Date: 2/12/2016

Analysis Date: 2/15/2016

PQL

SeqNo: 982929

66.2

LowLimit

Units: mg/Kg

Gasoline Range Organics (GRO)

LCSS

ND

5.0

SPK value SPK Ref Val %REC LowLimit HighLimit

RPDLimit Qual

Client ID:

Result

94.0

Analyte Surr: BFB

940

1000

TestCode: EPA Method 8015D: Gasoline Range

112

Sample ID LCS-23710

SampType: LCS Batch ID: 23710

RunNo: 32139

Analyte

Prep Date: 2/12/2016 Result

Analysis Date: 2/15/2016

SeqNo: 982930

Units: mg/Kg

HighLimit %RPD **RPDLimit** Qual

%RPD

SPK value SPK Ref Val %REC Gasoline Range Organics (GRO) 25 5.0 25.00 0 Surr: BFB 1000 1000

101 79.6 122 66.2 112 100

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits S % 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

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602566

16-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

| Sample ID MB-23710 | Sample ID MB-23710 SampType: MBLK | | | | TestCode: EPA Method 8021B: Volatiles | | | | | | | | |
|----------------------------|---|-------|-----------|---------------|---------------------------------------|----------|-------------|------|-----------|------|--|--|--|
| Client ID: PBS | Batch ID: 23710 Analysis Date: 2/15/2016 | | | F | RunNo: 3 | 2139 | | | | | | | |
| Prep Date: 2/12/2016 | | | | SeqNo: 982953 | | | Units: mg/k | g | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | | |
| Benzene | ND | 0.050 | | | | | | | 1-10 1.19 | | | | |
| Toluene | ND | 0.050 | | | | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 112 | 80 | 120 | | | | | | |

| Sample ID LCS-23710 | Samp | Type: LC | S | Tes | tCode: E | PA Method | 8021B: Vola | tiles | | |
|----------------------------|--------------------------|----------|-----------|-------------|----------|-----------|-------------|-------|----------|------|
| Client ID: LCSS | Batc | h ID: 23 | 710 | F | | | | | | |
| Prep Date: 2/12/2016 | Analysis Date: 2/15/2016 | | | 5 | SeqNo: 9 | 82954 | Units: mg/F | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 110 | 80 | 120 | | | |
| Toluene | 1.2 | 0.050 | 1.000 | 0 | 119 | 80 | 120 | | | |
| Ethylbenzene | 1.2 | 0.050 | 1.000 | 0 | 117 | 80 | 120 | | | |
| Xylenes, Total | 3.5 | 0.10 | 3.000 | 0 | 118 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 1.2 | | 1.000 | | 123 | 80 | 120 | | | S |

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 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



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: | 1602566 | | RcptNo: 1 | |
|---|--------------------------------|--|---|--|-------------------|
| Received by/date: [M | 02/13/16 | | | | |
| Logged By: Joe Archuleta | 2/13/2016 9:00:00 AM | | DEast | | |
| Completed By: Joe Archuleta | 2/13/2016 9:44:02 AM | | JEAST- | | |
| Reviewed By: | 02/15/16 | | 70.00 | | |
| Chain of Custody | طا داای | | | | I. |
| 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 samp | oles? | Yes 🖃 | No 🗆 | NA 🗆 | |
| 5. Were all samples received at a tempera | ature of >0° C to 6.0°C | Yes 🐼 | No 🗆 | NA 🗆 | |
| 6. Sample(s) in proper container(s)? | | Yes 🗷 | No 🗆 | | |
| 7. Sufficient sample volume for indicated to | est(s)? | Yes 🖈 | No 🗆 | | |
| 8. Are samples (except VOA and ONG) pr | operly 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 by | proken? | Yes 🗆 | No 🐼 | # | |
| | | | | # of preserved bottles checked | |
| 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody | 0 | Yes 🖈 | No 🗆 | for pH: (<2 or | >12 unless noted) |
| 13. Are matrices correctly identified on Chair | | Yes 🖈 | No 🗆 | Adjusted? | |
| 14. Is it clear what analyses were requested | | Yes 🐼 | No 🗆 | | |
| 15. Were all holding times able to be met? (If no, notify customer for authorization.) | | Yes 🖃 | No 🗆 | Checked by: | |
| | | | | | |
| Special Handling (if applicable) | | | | [7] | |
| 16. Was client notified of all discrepancies v | with this order? | Yes L | No 🗆 | NA 🕷 | |
| Person Notified: | Date | CONTRACTOR STATE OF THE STATE O | AND CHEST COME CAN'T MODEL BY AND COME. | | |
| By Whom: | Via: | eMail [| Phone Fax | ☐ In Person | |
| Regarding: | MARKET STORY STORY STORY STORY | | | C A SAN COMMISSION OF THE PARTY | |
| Client Instructions: | | | | | |
| 17. Additional remarks: | | | | | |
| 18. Cooler Information | I amount of | | | | |
| Cooler No Temp °C Condition | Seal Intact Seal No S | Seal Date | Signed By | | |





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

Date: March 14, 2016

* Attach Additional Sheets If Necessary

Phone: 505-326-9497

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Revised August 8, 2011 Submit 1 Copy to appropriate District Office in

Form C-141

accordance with 19.15.29 NMAC.

Release Notification and Corrective Action **OPERATOR** 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 230E Facility Type: Natural gas well API No. 3004526010 Surface Owner: Federal Mineral Owner: Federal LOCATION OF RELEASE North/South Line Feet from the Unit Letter Section Feet from the East/West Line Township Range County: San Juan 0 23 28N 12W 1,070 South 1,630 East Latitude 36.64318° Longitude -108.07756° NATURE OF RELEASE Type of Release: condensate/oil and produced water Volume of Release: unknown Volume Recovered: Approx. none Source of Release: 95 bbl BGT - Tank A Date and Hour of Occurrence: Date and Hour of Discovery: 2/12/2016 unknown Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☒ Not Required By Whom? Date and Hour: Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Soils below the BGT were sampled during closure activities, NMOCD observed sampling. The BGT appeared to have good integrity and the impacts are likely related to historical releases or the location of a former earthen pit, Describe Area Affected and Cleanup Action Taken.* The impacted soils were excavated and removed from the site for landfarm treatment. The area of excavation measured approximately 25'x 25'x 11' deep with a total of 180 cubic yards removed from the site. Confirmation closure samples were collected under the observation of the NMOCD with results below the spill and release guidelines. A field report and laboratory reports are attached. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by Environmental Specialist: Printed Name: Steve Moskal Title: Field Environmental Coordinator Approval Date: **Expiration Date:** E-mail Address: steven.moskal@bp.com Conditions of Approval: Attached

BP America: GCU 230E

(O) Sec 23 – T28N – R12W San Juan County, New Mexico API: 30-045-26010

Summary Record of Impact Remediation

<u>February 12, 2016</u> Initial sampling of 95 BGT for permanent closure. No visual staining or other indication that the BGT had any prior release or integrity issues. Sampling witnessed by NMOCD.

February 13, 2016 Receipt of rush laboratory test reports. BGT failed on TPH only (at 2,237 mg/Kg, primarily diesel and motor oil range organics). Failed lab results reported to NMOCD.

Site NMOCD/BLM closure standard determined at 100 ppm TPH based on:

Horizontal Distance to Dry Wash < 1,000 feet (10 points) Nearest Water Well > 1,000 feet (0 points) Depth to Groundwater < 100 feet (10 points)

<u>February 16, 2016</u> Begin investigation of impact area using backhoe. Test holes dug to approximately 11' deep in center and at perimeter edges of prior BGT location. Soft sandstone encountered at approximately 5' – 6' below grade. Base samples collected from each test hole, and composite sidewall samples collected from perimeter edge test holes for laboratory testing.

February 17, 2016 Receive rush lab results. All passed except south sidewall composite.

February 18, 2016 Hydrovac along Enterprise sales line on south side of impact area to allow excavation closer to that line. No evidence of hydrocarbon impacts along or below Enterprise line.

<u>February 24, 2016</u> Excavate source area to approximately 25' x 25' x 11' deep using trackhoe. Remove all impacted soils on south sidewall, with final excavation about 4' – 5' north of Enterprise line. Sample south sidewall for closure, witnessed by NMOCD

February 25, 2016 Receive rush lab results from prior days sampling. Samples pass.

| Sample ID | Date/Time | Field OVM | TPH 8015B (DRO+GRO+MRO) | BTEX 8021 | Chloride | Comments |
|---------------------------------------|----------------------|--------------|----------------------------|--------------|----------|----------|
| TH-1 @ 11' (@BGT location) | 2/16/2016 @ 12:36 | 2.3 ppm | ND | ND | ND | Passed |
| TH-2 @ 11' (North Base) | 2/16/2016 @ 12:23 | 1.3 ppm | ND | ND | 38 mg/Kg | Passed |
| TH-2 @ (6'8'9.5') (North Sidewall) | 2/16/2016 @ 10:04 | 1.3 ppm | ND | ND | NA | Passed |
| TH-3 @ 11' (West Base) | 2/16/2016 @ 12:12 | 1.1 ppm | ND | ND | 35 mg/Kg | Passed |
| TH-3 @ (6'8'11') (West Sidewall) | 2/16/2016 @ 12:12 | 29.9 ppm | ND | ND | NA | Passed |

| NMOCD/BLM | Closure Standard: | NA | 100 mg/Kg | 50 mg/Kg | 100 mg/Kg | |
|--------------------------------------|----------------------|-----------|-------------|---------------|-----------|----------------------------------|
| South Wall 3-pt (6'-8'-11') | 2/24/2016 @ 14:37 | 0.5 ppm | ND | ND | ND | Passed |
| TH-5 @ (6'8'10') (East Sidewall) | 2/16/2016 @ 13:37 | 2.0 ppm | ND | ND | NA | Passed |
| TH-5 @ 11.5' (East Base) | 2/16/2016 @ 13:41 | 0.7 ppm | ND | ND | ND | Passed |
| TH-4 @ (6'8'10') (South Sidewall) | 2/16/2016 @ 13:06 | 2,504 ppm | 1,920 mg/Kg | 0.71 mg/Kg | NA | Failed & subsequently excavated. |
| TH-4 @ 11.5' (South Base) | 2/16/2016 @ 13:13 | 1,8 ppm | ND | ND | ND | Passed |

<u>February 26, 2016</u> Complete backfilling operations. Total volume transported to JFJ Crouch Mesa Landfarm = 180 cubic yards (Form C-138 Attached).

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

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

Form C-138 Revised August 1, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

REQUEST FOR APPROVAL TO ACCI 1. Generator Name and Address: BP America Production Co. 200 Energy Ct. Farmington, NM 87401 **Originating Site:** Gallegos Canyon Unit 230E Paykey: VHIXONEVRM Location of Material (Street Address, City, State or ULSTR): ORT/ORT: SW/SE Unit: O Section: 23 T28N R12W Source and Description of Waste: Excavated hydrocarbon impacted soil/hydroexcavated impacted soil Estimated Volume 100/30 yd3 / bbls Known Volume (to be entered by the operator at the end of the haul) yd3 bbls GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS **BP America Production Company** Steve Moskal , representative or authorized agent for do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with nonexempt waste. Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load RCRA Non-Exempt; Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS BP America Production Company authorize IEI to complete the required testing/sign the Generator Waste Testing Certification. , representative for IEI do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. 5. Transporter: Strike OCD Permitted Surface Waste Management Facility Name and Facility Permit #: #: Industrial Ecosystems Inc., JFJ Waste Management Facility (JFJ), Permit NM-01-0010B Address of Facility: #49 CR 3150 Aztec, NM. 87410 Method of Treatment and/or Disposal: ☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record) E: Clert DATE: TELEPHONE NO.: 505-632-1782-DATE: 2-24-16 PRINT NAME: Tamera Beer SIGNATURE:

Surface Waste Management Facility Authorized Agent