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 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
Proposed Alternative Method Permit or Closure Plan Application

Type of action:  Below grade tank registration  Permit of a pit or proposed alternative method  Closure of a pit, below-grade tank, or proposed alternative method  Modification to an existing permit/or registration	OIL CONS. DIV DIST. 3 MAR 2 4 2016
Closure plan only submitted for an existing permitted or non-permitted pit, or proposed alternative method	below-grade tank,
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative	ative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface venvironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's	water, ground water or the
I.	
Operator: BP America Production Company OGRID #: 778	ALL THE PARTY OF T
Address: 200 Energy Court, Farmington, NM 87401	
Facility or well name: Gallegos Canyon Unit #230E	
API Number: 3004526010 OCD Permit Number:	KT III
U/L or Qtr/Qtr O Section 23 Township 28N Range 12W County: San Ju	ıan
Center of Proposed Design: Latitude 36.64318 Longitude -108.07756 NAD:	□1927 ⊠ 1983
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment	
□ 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         □ Lined       □ Unlined       Liner type:       Thickness      mil       □ LLDPE       □ HDPE       □ PVC       □ Other         □ String-Reinforced	
Below-grade tank: Subsection I of 19.15.17.11 NMAC Tank B	
Volume: 95.0 bbl Type of fluid: Produced water	
Tank Construction material: Steel	APATA COLO
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	A Proposition of the Late of
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other ☐ Double walled/double bottomed; side walls	not visible
Liner type: Thicknessmil	
4.  Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for	consideration of approval.

Form C-144

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	l, hospital,
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.  Signs: Subsection C of 19.15.17.11 NMAC  □ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers □ Signed in compliance with 19.15.16.8 NMAC	
Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
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 access material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	eptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  -   NM Office of the State Engineer - iWATERS database search;   USGS;   Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks)  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks)  - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	196,22 F. A.
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								
Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site								
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								
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.								
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No							
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No							
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.1 and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:  or Permit Number:	NMAC 15.17.9 NMAC							
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC								
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Previously Approved Design (attach copy of design) API Number:	15.17.9 NMAC							

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the attached.	documents are
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	
<ul> <li>□ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>□ Quality Control/Quality Assurance Construction and Installation Plan</li> <li>□ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>□ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>□ Nuisance or Hazardous Odors, including H₂S, Prevention Plan</li> <li>□ Emergency Response Plan</li> <li>□ Oil Field Waste Stream Characterization</li> </ul>	
☐ 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	
Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F	luid Management Pit
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	
closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
15.  Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sout provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
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	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	
Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plants of the complete that the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannumly 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
17.  Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli	ef.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
OCD Approval: Permit Application (including closure plant) Closure Plan (only). OCD Conditions (see attachment)  Approval Date: OCD Permit Number:  OCD Permit Number:  19.  Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report.
☑ Closure Completion Date: 2/25/2016	
Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-lo If different from approved plan, please explain.	op systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please incommark 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 Re-vegetation Application Rates and Seeding Technique	dicate, by a check

22. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this belief. I also certify that the closure complies with all applicable closure	closure report is true, accurate and complete to the best of my knowledge and requirements and conditions specified in the approved closure plan.
Name (Print): Steve Moskal	Title: Field Environmental Coordinator
Signature: Hus May	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**

- 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 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)

- Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
- e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

All liquids and sludge in the BGT were removed and sent to one of the above NMOCD approved facilities for disposal.

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.

The BGT was transported to a storage area for sale and re-use.

5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.

All equipment associated with the BGT has been removed.

6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method  95 bbl BGT Tank B	Release Verification (mg/Kg)	Sample results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	< 0.039
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.077
TPH	US EPA Method SW-846 418.1/ 8015B	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 laboratory analysis of TPH, BTEX and chloride with results below the stated limits.

- 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.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

The area of the BGT was backfilled with clean soil and will be reclaimed when the well is 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 of the BGT was backfilled with clean soil and will be reclaimed when the well is plugged and abandoned.

11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.

The area of the BGT was backfilled with clean soil and will be reclaimed when the well is plugged and abandoned.

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

The area of the BGT was backfilled with clean soil and will be reclaimed when 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.

The area of the BGT was backfilled with clean soil and will be reclaimed when the well is plugged and abandoned.

 Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.

BP will notify NMOCD when re-vegetation is successful.

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

Certification section of C-144 has been completed.

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1000 Rio Brazos Road, Aztec, NM 87410
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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**

		OPE	RA	TOR										
Name of Co	ompany: BP			Contac	: Ste	eve Moskal								
	00 Energy Court, Farr	Teleph	Telephone No.: 505-326-9497											
Facility Na	me: Gallegos Canyon	Unit 230I	3	Facility	Facility Type: Natural gas well									
Surface Ow	vner: Federal		Mineral Ov	vner: Federal				API No	. 3004526	010				
			LOCA	TION OF	D IF	FASE								
Unit Letter O	Section Township 23 28N	Range 12W	Feet from the		Orth/South Line   Feet from the   East/West Line   County: San Juan   East   County: San Juan   County: San									
	Lati	tude36.	64367°	Long	tud	e108.07756°								
			NATU	RE OF R	EL	EASE								
Type of Rele	ease: none			Volum	ne of	Release: unknov	vn '	Volume F	Recovered: A	Approx	. none			
Source of Re	elease: 95 bbl BGT – Ta	nk B		Date :		Hour of Occurrence			Hour of Dis					
Was Immedi	ate Notice Given?	Yes [	No Not Req		S, To	Whom?								
By Whom?				Date	nd F	Hour:								
	course Reached?	] Yes ⊠	No			olume Impacting	the Watero	course.						
	use of Problem and Rem						osure activ	vities. NM	IOCD obser	ved sar	mpling. The			
	ea Affected and Cleanup ignificant release had oc						from the sa	ample col	llected from	beneat	h the BGT			
regulations a public health should their or or the enviro	ify that the information all operators are required or the environment. The operations have failed to mment. In addition, NM, or local laws and/or res	to report and acceptant adequately OCD accep	nd/or file certain rele ce of a C-141 report investigate and ren	ease notification by the NMOC mediate contain	ns a D m inati	nd perform correct arked as "Final R on that pose a thr	etive action eport" does reat to grou	ns for rele es not reli and water	eases which eve the oper , surface wa	may en rator of iter, hui	danger liability man health			
Signature:	Mo Man	ר				OIL CON	SERVA	TION	DIVISIO	N				
	e: Steve Moskal			Approved by Environmental Specialist:										
Title: Field E	Environmental Coordinate	tor		Approva	l Dat	te:	Ex	piration l	Date:	N/				
E-mail Addre	ess: steven.moskal@bp.	com		Conditions of Approval:										
Date: March	24, 2016	Phone: 5	505-326-9497											

<sup>\*</sup> 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

CLIENT: BP	BLAGG EN P.O. BOX 87, BL	GINEERING, IN		API#: 3004526	010
CLIENT.		6) 632-1199	107410	TANK ID (if applicble):	
FIELD REPORT:	(circle one): BGT CONFIRMATION /	RELEASE INVESTIGATION / C	OTHER:	PAGE#:1 o	of 1
SITE INFORMATION	: SITE NAME: GCU # 2	30E		DATE STARTED: 02/0	09/16
QUAD/UNIT: O SEC: 23 TWP:	28N RNG: 12W PM:	NM CNTY: SJ	ST: NM	DATE FINISHED:	
1/4-1/4/FOOTAGE: 1,070'S / 1,6	30'E SW/SE LEASE TY	PE: FEDERAL STATE	FEE / INDIAN	ENVIRONMENTAL	
LEASE #: SF078904	PROD. FORMATION: DK/GP CO	STRIKE NTRACTOR: MBF - J. P	POWELL	SPECIALIST(S):	JV
REFERENCE POINT	WELL HEAD (W.H.) GPS (	COORD.: 36.6434	9 X 108.07760	GL ELEV.: 5	,771'
1) 95 BGT (B) (DW/DB)	GPS COORD.: 36.6	the later than the second of t		RING FROM W.H.: 73', N	17E
2)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:	
3)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:	
4)	GPS COORD.:	Jedikar se	DISTANCE/BEA	RING FROM W.H.:	
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR	LAB USED: HALL		THE SHAPE	READING (ppm)
1) SAMPLE ID: 5PC - TB @ 5' (9	5) - B SAMPLE DATE: 02/09/1	6 SAMPLETIME 0935	LAB ANALYSIS: 801	5B/8021B/300.0 (CI)	NA
2) SAMPLE ID:	SAMPLE DATE:	SAMPLETIME:	LAB ANALYSIS:		
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		-
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		
SOIL DESCRIPTION	SOIL TYPE: SAND SILTY SAND SI	T / SILTY CLAY / CLAY / GRAVE	L/OTHER		
SOIL COLOR: MOSTLY DARK				OHESIVE / MEDIUM PLASTIC / HIGH	ILY PLASTIC
COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY		DENSITY (COHESIVE CLAYS &		STIFF / VERY STIFF / HARD	
CONSISTENCY (NON COHESIVE SOILS): LC MOISTURE: DRY/SLIGHTLY MOIST/MOIST/W		HC ODOR DETECTED: YES NO	EXPLANATION -		
SAMPLE TYPE: GRAB (COMPOSITE) #		ANY AREAS DISPLAYING WETNES	SS: YES THO EXPLAN	IATION -	
DISCOLORATION/STAINING OBSERVED: YES N		TTTT TO DIGITAL THE TELL			
SITE OBSERVATION	S: LOST INTEGRITY OF EQUIPMENT:	ES NO EXPLANATION -			
APPARENT EVIDENCE OF A RELEASE OBSERVE	DAND/OR OCCURRED : YES NO EXPLA		7		
EQUIPMENT SET OVER RECLAIMED AREA: OTHER:	YES NO EXPLANATION -				
				1200 0000	
SOIL IMPACT DIMENSION ESTIMATION:	NA ft. X NA	ft. X NA ft.		TMATION (Cubic Yards) :	NA
	EAREST WATER SOURCE: >1,000'	NEAREST SURFACE WATER:	<1,000' NMOC	D TPH CLOSURE STD: 1,0	00 ppm
SITE SKETCH	BGT Located: off on site	PLOT PLAN circ	ele: attached OVM	CALIB. READ. = NA pp	m RF =0.52
	(95) B			CALIB. GAS = NA PP	
	PBGTL X X X X		N TIME	NA am/pm DATE:	NA
	B.G.	FENCE		MISCELL. NO	ΓES
			W	10:	
	BERM		R	EF#: P - 273	
			V	D: VHIXONEVB2	
			P	J#:	
			Pe	ermit date(s): 06/1	A THE RESERVE OF THE PARTY OF T
	<b>→</b> ₩.H.		O	CD Appr. date(s): 08/09  OVM = Organic Vapor Me	9/11 ter
Note that the second	The state		ID		
PUMP			D	BGT Sidewalls Visible: Y /	<u>~</u>
	N DEDDECCION, D.O DELOWADARE, D. DEL		- 3.P.D.	BGT Sidewalls Visible: Y /	
	DW-GRADE TANK LOCATION; SPD = SAMPLE PO	NT DESIGNATION; R.W. = RETAINING		agnetic declination: 10	-
	WALL; DW - DOUBLE WALL; SB - SINGLE BOTTO			and acomination. To	
NOTES: GOOGLE EARTH IMAGE	KY DATE: 03/15/2015	ONSITE: 02/09/	16		E CLUSS

## **Analytical Report**

## Lab Order 1602365

Date Reported: 2/11/2016

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

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

Project: GCU #230E

Collection Date: 2/9/2016 9:35:00 AM

Lab ID: 1602365-002

Matrix: SOIL

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

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/10/2016 11:28:24 AM	1 23664
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: KJH
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	2/10/2016 11:57:35 AM	1 23655
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/10/2016 11:57:35 AM	1 23655
Surr: DNOP	93.8	70-130	%Rec	1	2/10/2016 11:57:35 AM	1 23655
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/10/2016 10:18:52 AM	A32054
Surr: BFB	92.2	66.2-112	%Rec	1	2/10/2016 10:18:52 AM	A32054
<b>EPA METHOD 8021B: VOLATILES</b>					Analys	t: NSB
Benzene	ND	0.039	mg/Kg	1	2/10/2016 10:18:52 AN	B32054
Toluene	ND	0.039	mg/Kg	1	2/10/2016 10:18:52 AM	B32054
Ethylbenzene	ND	0.039	mg/Kg	1	2/10/2016 10:18:52 AN	B32054
Xylenes, Total	ND	0.077	mg/Kg	1	2/10/2016 10:18:52 AN	B32054
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	2/10/2016 10:18:52 AM	1 B32054

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 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

CI	hain-c	of-Cus	tody Record	Turn-Around	Time:	SAME		ı		н	AI	L	EN	V	IR	OI	NI	1EI	ATE	L	
lient:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	☑ Rush _	DAY )							14						TO		
				Project Name			128	200		1	www	v.hal	lenv	iron	mer	ntal.	com	1			
Mailing Address: P.O. BOX 87  BLOOMFIELD, NM 87413			X 87		GCU # 230	DE	4901 Hawkins NE - Albuquerque, NM 87109														
			FIELD, NM 87413	Project #:				Tel. 505-345-3975 Fax 505-345-4107												90	
hone #:		(505) 63	2-1199							-		Ar	alys	sis F	Requ	uest	t				
mail or	Fax#:			Project Mana	ger:								1	04)				300.1)			
QA/QC Pa ✓ Stand	-		Level 4 (Full Validation)		NELSON V	ELEZ	(8021B)	(kjuo si	/ MRO)			(SV		PO4,50	2 PCB's			water - 30		e	
ccredita	ition:			Sampler:	NELSON V	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I	\$	1 (Ga	/ DRO	F	न	8270SIMS)	1	NO <sub>2</sub>	808					sample	
NELA		□ Other		THE RESIDENCE AND ADDRESS OF THE PARTY OF TH	Yes	□ No	1	TPI	10	418	204	827	5	Š,	es/		OA	300.0		te s	or N
EDD (	Type)			Sample Temp	erature: i	0	#	LBE +	3 (GF	hod	hod	0 or	leta	בָּי	icid	(A)	Ni-V	- 100	ple	posi	SK
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX +	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or	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 -	Grab sample	5 pt. composite	Air Bubbles (Y or N)
2/3/10	1005	SOIL	5FC-7D@ 5 (95)-A	4021	Cool	-cct	٧		4									4		V	-
2/9/16	0935	SOIL	5PC-TB@ 5'(95)-B	4 oz 1	Cool	702	٧		٧			1		+	-			٧		٧	
												1	-	4	_	1					
										-	-	+	+	+	+	-	-	+	+	$\vdash$	
										+	+	+	+	+	+	+	+	+	+		
															+			$\dagger$	+		
Dell.	1												+	1	-			1	-		
_		1								-	+	+	+	+	+	+	$\dashv$	+	+	-	_
ate:	Time:	Relinquishe	ed by	Received by:	5-0	Date Time	Ren	nark	s:												
2/9/16	1740	7	In V	Mus	hate	2/1/16 1740				LY TO									0.4		
rate: 2/9/11.	Time:	Relinquishe	otiv Valle	Received by	Ma	Date Time 2/16/16						1000						M 874 HIXO	NEVB2		
	If necessary	samples sub	mitted to Hall Environmental may be su	bcontracted to other	accredited laboratorie		of this	possil	oility. A	Any sul	o-contr	racted	data v	vill be	clear	ly note	ated o	n the a	nalytical	report.	

## 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 2/10/2016 Batch ID: 23664

PQL

RunNo: 32050

Analysis Date: 2/10/2016

SeqNo: 980368

Units: mg/Kg

**RPDLimit** 

Qual

Analyte

Prep Date:

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Chloride

ND 1.5

Sample ID LCS-23664

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 23664

RunNo: 32050

Prep Date: 2/10/2016 Analysis Date: 2/10/2016 SeqNo: 980369

Units: mg/Kg

Analyte

SPK value SPK Ref Val %REC LowLimit

0 97.2

90

HighLimit 110 **RPDLimit** 

%RPD

Chloride

15.00

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix S

Analyte detected in the associated Method Blank

Sample container temperature is out of limit as specified

Value above quantitation range

J Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Detection Limit RL

Page 3 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

**RPDLimit** 

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

9.2

RunNo: 32031

Prep Date: 2/10/2016

Surr: DNOP

Analysis Date: 2/10/2016

SPK value SPK Ref Val %REC

SegNo: 979589

Units: mg/Kg

HighLimit

%RPD

Qual

Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Result PQL ND 10 ND 50

10.00

91.9

70

LowLimit

130

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- 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
- % Recovery outside of range due to dilution or matrix S
- 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

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

PQL

5.0

RunNo: 32054

Analysis Date: 2/10/2016

ND

Prep Date:

SeqNo: 980098

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val %REC

LowLimit

**HighLimit** 

Qual

Gasoline Range Organics (GRO) Surr: BFB

930

93.1

66.2

LowLimit

112

%RPD **RPDLimit** 

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 32054

Prep Date:

Client ID: LCSS Batch ID: A32054

Analysis Date: 2/10/2016

1000

SeqNo: 980099

Units: mg/Kg

HighLimit

%RPD

**RPDLimit** Qual

Gasoline Range Organics (GRO)

Result 23 PQL SPK value SPK Ref Val 5.0 25.00

93.5 98.7

%REC

79.6

122

Surr: BFB

Analyte

990

1000

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
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix S
- B
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1602365

11-Feb-16

Client:

Blagg Engineering

Project:

GCU #230E

Sample ID 5ML RB

Surr: 4-Bromofluorobenzene

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Client ID: PBS

Batch ID: B32054

RunNo: 32054

Prep Date:

Analysis Date: 2/10/2016

PQL

SeqNo: 980109

Units: mg/Kg

HighLimit

%RPD

**RPDLimit** Qual

Analyte
Benzene
Toluene
Ethylbenzene
Xylenes, Total

ND 0.050 ND 0.050 0.050 ND 0.10 ND

Result

1.1

1.000

113

80

120

Sample ID 100NG BTEX LC	EX LCS SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS Batch ID: B32054			RunNo: 32054							
Prep Date:	Analysis Date: 2/10/2016			SeqNo: 980110			Units: mg/Kg			
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	1.2		1.000		123	80	120			S

SPK value SPK Ref Val %REC LowLimit

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix S

Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits

P Sample pH Not In Range

Reporting Detection Limit

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 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: BLAGG Work Order Number:	1602365		RcptNo: 1
Received by/date: AT 02/10/16			
Logged By: Anne Thorne 2/10/2016 7:40:00 AM		anne Hom	_
Completed By: Anne Thorne 2/10/2016		an Ilm	
Reviewed By: 02/10/16		Ware Ji	
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 Viais 🗹
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved
42.5	Yes 🗸	No 🗆	bottles checked for pH:
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	res 🖭	NO L	(<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 🗆	L 3778 F 2
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 🗹
Person Notified: Date By Whom: Via:	eMail	Phone  Fax	☐ In Person
Regarding: Client Instructions:		Service of sections	
17. Additional remarks:		14 - 17	
18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No 3	Seal Date	Signed By	
1 1.0 Good Yes			



