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.

<u>Pit, Below-Grade Tank, or</u> Proposed Alternative Method Permit or Closure Plan Application					
Type of action:       Below grade tank registration         Permit of a pit or proposed alternative method         Closure of a pit, below-grade tank, or proposed alternative method         Modification to an existing permit/or registration         Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method         Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request					
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 011					
API Number:         3004513354         OCD Permit Number:					
U/L or Qtr/Qtr <u>M</u> Section <u>34</u> Township <u>28N</u> Range <u>12W</u> County: <u>San Juan</u>					
Center of Proposed Design: Latitude <u>36.61342</u> Longitude <u>-108.10589</u> NAD: □1927 ⊠ 1983					
Surface Owner: 🛛 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment					
2. OIL CONS. DIV DIST. 3					
Pit:       Subsection F, G or J of 19.15.17.11 NMAC         Temporary:       Drilling         Workover       MAR 31 2017					
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no					
Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other					
String-Reinforced         Liner Seams:       Welded       Factory       Other       Volume:       bbl       Dimensions: Lx Wx D					
3. ⊠ Below-grade tank: Subsection I of 19.15.17.11 NMAC <u>TANK A</u>					
Volume: 21 bbl Type of fluid: Produced water					
Tank Construction material: <u>Steel</u>					
Secondary containment with leak detection D Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off					
Visible sidewalls and liner Visible sidewalls only Other Single wall/ Double bottom; visible sidewalls					
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.					

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)

Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)

Four foot height, four strands of barbed wire evenly spaced between one and four feet

Alternate. Please specify\_

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.16.8 NMAC

Variances and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks. **General siting** Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. Yes No NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells NA NA Yes No Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NA NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance Yes No adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) Written confirmation or verification from the municipality; Written approval obtained from the municipality Within the area overlying a subsurface mine. (Does not apply to below grade tanks) Yes No Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Within an unstable area. (Does not apply to below grade tanks) Yes No 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 **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 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 Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter) Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, Yes No or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site

<ul> <li>Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>					
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					
<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No				
Temporary Pit Non-low chloride drilling fluid					
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No				
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No				
<ul> <li>Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No				
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No				
Permanent Pit or Multi-Well Fluid Management Pit					
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No				
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>					
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No				
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No				
10.         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 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Design Plan - based upon the appropriate requirements of 19.15.17.10 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:	uments are NMAC 5.17.9 NMAC				
11. Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC					
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are 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 19.15.17.9 NMAC         and 19.15.17.13 NMAC         Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC					
Previously Approved Design (attach copy of design) API Number: or Permit Number:					

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12.				
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC         Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the attached.         Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Climatological Factors Assessment         Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC         Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC         Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC         Quality Control/Quality Assurance Construction and Installation Plan         Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC         Remergency Response Plan         Oil Field Waste Stream Characterization         Monitoring and Inspection Plan         Erosion Control Plan         Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are			
<sup>13.</sup> 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	uid Management Pit			
Alternative Proposed Closure Method: Waste Excavation and Removal				
Waste Removal (Closed-loop systems only)				
<ul> <li>On-site Closure Method (Only for temporary pits and closed-loop systems)</li> <li>In-place Burial</li> <li>On-site Trench Burial</li> </ul>				
Alternative Closure Method				
Waste Excavation and Removal Closure Plan Checklist:       (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.            Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC             Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC             Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)             Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC             Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC             Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
15.				
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P 19.15.17.10 NMAC for guidance.				
<ul> <li>Ground water is less than 25 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	□ Yes □ No □ 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 USGS; Data obtained from nearby wells				
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				
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				
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				
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				
Written confirmation or verification from the municipality; Written approval obtained from the municipality 1 Yes 🗌 No				
Within 300 feet of a wetland. JS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance				
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<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	Yes No
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	Yes No
Within an unstable area.	
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	Yes No
Within a 100-year floodplain. - FEMA map	Yes No
16.	
On-Site Closure Plan Checklist:       (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure planes of the second plane of 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 19.15.17.13 NMAC         Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.         Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC         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 canned 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         Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC         Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	11 NMAC 15.17.11 NMAC
17. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed and be	ef.
Name (Print):            Title:	
Signature: Date:	
Signature:       Date:         e-mail address:       Telephone:	
e-mail address: Telephone: <b>0CD Approval:</b> Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	
e-mail address: Telephone:	
e-mail address: Telephone:	the closure report.
e-mail address: Telephone:	the closure report.
e-mail address: Telephone:	the closure report. complete this
e-mail address: Telephone:	the closure report. complete this

Form C-144

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Oil Conservation Division

Page 5 of 6

22.	
<b>Operator Closure Certification:</b>	
	this closure report is true, accurate and complete to the best of my knowledge and soure requirements and conditions specified in the approved closure plan.
Name (Print): Steve Moskal	Title: Field Environmental Coordinator
Signature: Mars Mun D	Date:March 31, 2017
e-mail address: <u>steven.moskal@bp.com</u>	Telephone:(505) 326-9497

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# BP AMERICA PRODUCTION COMPANY SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK CLOSURE PLAN

## <u>Gallegos Canyon Unit 011</u> <u>API No. 3004513354</u> <u>Unit Letter M, Section 34, T28N, R12W</u>

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

## **General Closure Plan**

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement. **Notice is attached.**
- 2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number. **Notice was provided and is attached.**
- 3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
  - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
  - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
  - c. Basin Disposal, Permit NM-01-0005 (Liquids)
  - d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
  - e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)

- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

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

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

The BGT was transported for recycling.

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

All equipment associated with the BGT has been removed.

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

Constituents	Testing Method	Release Verification	Sample	
	21 bbl BGT	21 bbl BGT (mg/Kg)		
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	< 0.017	
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.068	
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<46	
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<30	

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

> Soil under the BGT was sampled for TPH, BTEX and chloride with all concentrations below the stated limits. The field report and laboratory reports are attached.

BP shall notify the division District III office of its results on form C-141.
 C-141 is attached.

BP BGT Closure Plan 04-01-2010

- If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
   Sampling results indicate a release has not occurred. Attached is a laboratory report and C-141.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

Sampling results indicate a release has not occurred. Attached is a laboratory report and field report. The location 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 has been backfilled. The location 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 location 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 location 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 location will be reclaimed when 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 BGT Closure Plan 04-01-2010

## The location will be reclaimed when the well is plugged and abandoned.

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

Certification section of C-144 has been completed.

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# State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

# Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company: BP	Contact: Steve Moskal		
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497		
Facility Name: Gallegos Canyon Unit 011	Facility Type: Natural gas well		
r denney r danier Ganeges can jon child or r	A denney A jper Planara gas new		

Surface Owner: Federal

Mineral Owner: Federal

API No. 3004513354

LOCATION OF RELEASE									
	Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
	M	34	28N	12W	660	South	660	West	

Latitude <u>36.61342°</u> Longitude <u>-108.10589°</u>

## NATURE OF RELEASE

Type of Release: none	Volume of Release: unknown	Volume R	ecovered: N/A
Source of Release: below grade tank – 21 bbl	Date and Hour of Occurrence: Date and Hour of Discovery: non none		Hour of Discovery: none
Was Immediate Notice Given?	If YES, To Whom?		
Yes X No Not Required	n res, ro whom:		
By Whom?	Date and Hour		
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse	
Yes X No	IT TES, volume impacting the wa	licicourse.	
If a Watercourse was Impacted, Describe Fully.*			
Describe Cause of Problem and Remedial Action Taken.* Sampling of the		ing removal.	Soil analysis resulted for
BTEX, TPH and chloride below BGT closure standards. Field reports an	d laboratory results are attached.		
Describe Area Affected and Cleanup Action Taken * No action recorder	Final laboratory analysis datarmina	t no romodial	action is required
Describe Area Affected and Cleanup Action Taken.* No action necessary. Final laboratory analysis determined no remedial action is required			
I hereby certify that the information given above is true and complete to the	he best of my knowledge and understa	and that pursu	ant to NMOCD rules and
regulations all operators are required to report and/or file certain release ne			
public health or the environment. The acceptance of a C-141 report by the			
should their operations have failed to adequately investigate and remediate			
or the environment. In addition, NMOCD acceptance of a C-141 report de	oes not relieve the operator of respon	sibility for co	mpliance with any other
federal, state, or local laws and/or regulations.		IL TROLL	
20 200	OIL CONSERV	VATION	DIVISION
Signature: Altres Min			
	Approved by Environmental Speciali	at.	
Printed Name: Steve Moskal	Approved by Environmental Special	st.	
Title: Field Environmental Coordinator	America Deter	E	
Title: Field Environmental Coordinator	Approval Date:	Expiration D	Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:		
	Attached		Attached
Date: March 31, 2017 Phone: 505-326-9497			

\* Attach Additional Sheets If Necessary



BP America Production Company 200 Energy Court Farmington, NM 87401

January 17, 2017

bp

Bureau of Land Management Whitney Thomas 6251 College Suite A Farmington, NM 87402

## VIA EMAIL

Re: Notification of plans to close/remove a below grade tank Well Name: GALLEGOS CANYON UNIT 011 API #: 3004513354

Dear Mrs. Thomas,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about January 20, 2017. 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:	Thursday, January 19, 2017 7:10 AM
То:	Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us);
	l1thomas@blm.gov
Cc:	jeffcblagg@aol.com; blagg_njv@yahoo.com; cparks@mbfservices.com
Subject:	RE: BP Pit Close Notification - GCU 011

The BGT is scheduled to be removed tomorrow morning at 11:00 AM.

Thank you,

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



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

From: Railsback, Farrah (CH2M HILL)
Sent: Tuesday, January 17, 2017 10:22 AM
To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>)
Cc: jeffcblagg@aol.com; blagg\_njv@yahoo.com; Moskal, Steven
Subject: BP Pit Close Notification - GCU 011

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

January 17, 2017

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 011 API 30-045-13354 (M) Section 34 – 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 a 21bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around January 20, 2017.

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

Farrah Railsback BGT Project Support 970-946-9199 -cell

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

DD	BLAGG	ENGINEERI	NG, INC.		API# 3004513	354
CLIENT: DT						
		(if applicble):				
FIELD REPORT:	(circle one): BGT CONFIRMAT	ION / RELEASE INVESTIG	ATION / OTHER:		PAGE #: _1_ c	of <b>1</b>
SITE INFORMATION	SITE NAME: GCU	l # 11			DATE STARTED: 01/	20/17
QUAD/UNIT: M SEC: 34 TWP:	28N RNG: 12W	PM: NM CNT	r: <b>SJ</b> st	T: NM	DATE FINISHED:	
1/4 -1/4/FOOTAGE: 660'S / 660'	N SW/SW LE/		STATE / FEE	/ INDIAN	ENVIRONMENTAL	
LEASE #: SF078903A	PROD. FORMATION: PC	CONTRACTOR: M	BF - B. SCHL	JRMAN	SPECIALIST(S):	JV
REFERENCE POINT	WELL HEAD (W.H.)	GPS COORD .:	36.61327 X 1	108.10581	GL ELEV.:	5,829'
1) 21 BGT (SW/DB)	GPS COORD .:				RING FROM W.H.: 57.5', 1	
2)	GPS COORD.:			DISTANCE/BEAR	RING FROM W.H.:	
3)	GPS COORD.:			DISTANCE/BEAR	RING FROM W.H.:	
4)	GPS COORD.:			DISTANCE/BEAR	RING FROM W.H.:	
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(	S) # OR LAB USED:	HALL			OVM READING (ppm)
1) SAMPLE ID: 5PC - TB@6'	(21) SAMPLE DATE: 01	1/20/17 SAMPLE TIME:	1015 LAB ANA	ALYSIS: 8015	5B/8021B/300.0 (CI)	NA
2) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANA	ALYSIS:		
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANA	ALYSIS:		
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANA	ALYSIS:		
SOIL DESCRIPTION	SOIL TYPE: SAND SILTY SA	ND SILT / SILTY CLAY / CL	AY GRAVEL OT	HER		
	ARK YELLOWISH BROWN		NON PLASTIC / SLIG	HTLY PLASTIC / CO	DHESIVE / MEDIUM PLASTIC / HIGI	HLY PLASTIC
COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY					STIFF / VERY STIFF / HARD	
CONSISTENCY (NON COHESIVE SOILS): LC MOISTURE: DRY/SLIGHTLY MOIST (MOIST) W			EXPLA	NATION -		
SAMPLE TYPE: GRAB (COMPOSITE) #			ING WETNESS: YE	S NO EXPLAN	ATION -	
DISCOLORATION/STAINING OBSERVED: YES						
SITE OBSERVATION			10N -			
APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA:				GRADE TANK	TO BE SET PARTIALLY ATO	PBGT
OTHER: MMOCD OR BLM REPS. PRESE	NT TO WITNESS CONFIRMA	TION SAMPLING				OCATION.
SOIL IMPACT DIMENSION ESTIMATION:	NA ft. X N	A ft. X NA	ft. EXC		IMATION (Cubic Yards) :	NA
		,000' NEAREST SURFAC			· · · · =	0 ppm
SITE SKETCH		site PLOT PL				
		TEOTTE				0 <sup>m</sup> RF =0.52
					NA am/pm DATE:	NA
	WOODEN	- COMPRESSOR				
	R.W.				MISCELL. NO	IES
		- SEPAI	RATOR	W	0: EF. #: <b>P - 723</b>	
FENCE —	PBGTL					,
	x x x T.B. ~ 6' B.G.					-
BERM					ermit date(s): 06/1	4/10
				00	CD Appr. date(s): 09/1	2/16
	то			Tan ID	ppm = parts per million	
	w.н. 🔪			A	V	
			X - S	S.P.D.	BGT Sidewalls Visible: Y /	
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATIO				VELL HEAD;	BGT Sidewalls Visible: Y /	
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL APPLICABLE OR NOT AVAILABLE; SW- SINGLE				Ma	agnetic declination: 10	E
NOTES: GOOGLE EARTH IMAGE	RY DATE: 3/15/2015.	ONSITE:	01/20/17			

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Analytical	Report
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Lab Order 1701929

Date Reported: 1/24/2017

# Hall Environmental Analysis Laboratory, Inc.

# CLIENT: Blagg Engineering Client Sample ID: 5PC-TB @ 6' (21) Project: GCU 11 Collection Date: 1/20/2017 10:15:00 AM Lab ID: 1701929-001 Matrix: MEOH (SOIL) Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	1/23/2017 12:12:30 PM	29834
EPA METHOD 8015D MOD: GASOLINE I	RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	1/22/2017 6:18:52 AM	D40186
Surr: BFB	96.2	70-130	%Rec	1	1/22/2017 6:18:52 AM	D40186
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	5			Analyst	MAB
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/23/2017 10:51:55 AM	29818
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/23/2017 10:51:55 AM	29818
Surr: DNOP	115	70-130	%Rec	1	1/23/2017 10:51:55 AM	29818
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst	DJF
Benzene	ND	0.017	mg/Kg	1	1/22/2017 6:18:52 AM	B40186
Toluene	ND	0.034	mg/Kg	1	1/22/2017 6:18:52 AM	B40186
Ethylbenzene	ND	0.034	mg/Kg	1	1/22/2017 6:18:52 AM	B40186
Xylenes, Total	ND	0.068	mg/Kg	1	1/22/2017 6:18:52 AM	B40186
Surr: 1,2-Dichloroethane-d4	84.6	70-130	%Rec	1	1/22/2017 6:18:52 AM	B40186
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	1/22/2017 6:18:52 AM	B40186
Surr: Dibromofluoromethane	89.2	70-130	%Rec	1	1/22/2017 6:18:52 AM	B40186
Surr: Toluene-d8	99.2	70-130	%Rec	1	1/22/2017 6:18:52 AM	B40186

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

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

Cł	in-c	of-Cus	stody Record	Tum-Around	IIIII .	SAME				н		ii.	E	MV	TE	20	NP	MF	N	<b>FA</b>		
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard	Rush _	DAY													AT			
				Project Name		and the second se											l.cor					
Vailing A	ddress:	P.O. BO	X 87	1	GCU #1	1		490	01 H	awk	ins l	NE -	Alb	buqu	erq	ue, l	NM 8	8710	9			
		BLOOM	FIELD, NM 87413	Project #:						5-34							-410					
hone #:		(505) 63	2-1199	1						Analysis Request												
email or F	ax#:			Project Manag	ger:									4)				300.1)				
QA/QC Pa √ Standa			Level 4 (Full Validation)		NELSON V	ELEZ	(8021B)	s only)	/ MRO)			IS)		PO4,SO	PCB's			1 1			a	
Accreditat	tion:			Sampler:	NELSON V	ELEZ nr	\$ 8	(Ga:	RO	11	<del>,</del>	8270SIMS)		102,1	3082			/ water			sample	
	>	Other		On Ice:	Yes	.⊡ No	1	TPH	1/0	418.	504.	8270		03, 1	s / 8		(Y	300.0			e sa	r N)
	Type)		<u> </u>	Sample Temp	erature: 7	O	1	85 +	(GR	pol	pol	5	etal	CI'N	cide	(Y	i-VC			le	osit	(Y o
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. DO 1975	BTEX + MTBI	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310	<b>RCRA 8 Metals</b>	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082 PCB <sup>1</sup> s	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		Grab sample	5 pt. composite	Air Bubbles (Y or N)
120/17	1015	SOIL	5PC - TB @ 🗟 '(21)	4 oz 1	Cool	-001	V		V									V			V	
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)ate:	Time:	Relinquishe	edrby:	Received by:	,	Date Time	Rem	arks	:	BILL D	IREC	TLY TO	BP	JSING	THE	CONT	ACT V	VITH	CORRE	SPON	DING	
70/17	1720	9/1	nf	Min	Val	1/20/7 1720	co	ONTA		& REF	EREN	ICE # \	NHEN	APP	LICAL	BLE;						
ate:	Time:	Relinquishe	LWar	Received by:	to A	Pate Time	Refe			VHD	ONI P-7		2									
001.	1101	4			V	X01/2/17 095																

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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report,

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 11

Sample ID MB-29834	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 29834	RunNo: 40216		
Prep Date: 1/23/2017	Analysis Date: 1/23/2017	SeqNo: 1260604	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-29834	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-29834 Client ID: LCSS	SampType: Ics Batch ID: 29834	TestCode: EPA Method RunNo: 40216	300.0: Anions	
	1 51		300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: 29834 Analysis Date: 1/23/2017	RunNo: 40216		RPDLimit Qual

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 2 of 5

WO#: 1701929

24-Jan-17

# QC SUMMARY REPORT

Hall	Environmental	Analysis	Laboratory.	Inc.
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Client: Blagg Engineering Project: GCU 11

Sample ID MB-29818	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Rang	e Organics
Client ID: PBS	Batch ID: 29818	RunNo: 40201		
Prep Date: 1/21/2017	Analysis Date: 1/23/2017	SeqNo: 1260286	Units: mg/Kg	
Analyte	Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	ND 10			
Motor Oil Range Organics (MRO)	ND 50			
Surr: DNOP	11 10.00	) 112 70	130	
Sample ID LCS-29818	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Rang	e Organics
Client ID: LCSS	Batch ID: 29818	RunNo: 40201		
Prep Date: 1/21/2017	Analysis Date: 1/23/2017	SeqNo: 1260291	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	48 10 50.00	0 95.5 63.8	116	
Surr: DNOP	6.0 5.000	119 70	130	
Sample ID LCS-29802	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Rang	e Organics
Client ID: LCSS	Batch ID: 29802	RunNo: 40200		
Prep Date: 1/20/2017	Analysis Date: 1/23/2017	SeqNo: 1261137	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.9 5.000	97.2 70	130	
Sample ID MB-29802	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: PBS	Batch ID: 29802	RunNo: 40200		
Prep Date: 1/20/2017	Analysis Date: 1/23/2017	SeqNo: 1261138	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	11 10.00	106 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

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WO#: 1701929

24-Jan-17

# QC SUMMARY REPORT

	Hall	Environmental	Analysis	Lal	oorat	ory,	Inc.
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Client: Blagg Engineering Project: GCU 11

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Sample ID rb1	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8260B: Vola	tiles Shor	t List	
Client ID: PBS	Batc	h ID: <b>B4</b>	0186	F	RunNo: 4	40186				
Prep Date:	Analysis E	Date: 1/	22/2017	5	SeqNo: 1	1259878	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.1	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.6	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			
Sample ID 100ng Ics2	SampT	Type: LC	s	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	t List	
Client ID: LCSS	Batch	h ID: <b>B4</b>	0186	F	RunNo: 4	0186				
Prep Date:	Analysis D	Date: 1/	21/2017	S	SeqNo: 1	259879	Units: mg/M	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.8	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.9	70	130			
Surr: Toluene-d8	0.49		0.5000		97.7	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

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WO#: 1701929 24-Jan-17

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:GCU 11

.

Sample ID rb1	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch	n ID: <b>D4</b>	0186	F	RunNo: 4	0186				
Prep Date:	Analysis D	ate: 1/	22/2017	5	SeqNo: 1	259935	Units: mg/k	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	400		500.0		00.0	70	100			
SUIT: BFB	480		500.0		96.2	70	130			
Sample ID 2.5ug gro Ics2		ype: LC		Tes			8015D Mod:	Gasoline	Range	
	SampT	ype: LC	S			PA Method		Gasoline	Range	
Sample ID 2.5ug gro lcs2	SampT	n ID: <b>D4</b>	S 0186	F	tCode: El	PA Method 0186			Range	
Sample ID 2.5ug gro lcs2 Client ID: LCSS	SampT Batch	n ID: <b>D4</b>	S 0186 22/2017	F	tCode: El RunNo: 4	PA Method 0186	8015D Mod:		Range RPDLimit	Qual
Sample ID 2.5ug gro lcs2 Client ID: LCSS Prep Date:	SampT Batch Analysis D	n ID: D4 pate: 1/	S 0186 22/2017	F	tCode: El RunNo: 4 SeqNo: 1	PA Method 0186 259936	8015D Mod: Units: mg/K	g		Qual

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

1701929

24-Jan-17

WO#:

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albı TEL: 505-345-3975 Website: www.ha	4901 Iquerqu FAX: 5	Hawkins 1e, NM 871 505-345-41	NE 105 St 107	am	ple Log-In Check List
Client Name: BLAGG	Work Order Number:	1701	929			RcptNo: 1
Received by/date:						
Logged By: Lindsay Mangin	1/21/2017 9:15:00 AM			Junahig H.	llego	
Completed By: Lindsay Mangin Reviewed By: TF 1/21/2017	1/21/2017 10:05:37 AM	1		Strucksytt	HarringsD	
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes	[]]	No	[_]	Not Present
2. Is Chain of Custody complete?		Yes	V	No		Not Present
3. How was the sample delivered?		Cou	rier			
Log In						
4. Was an attempt made to cool the sample	es?	Yes		No		NA
5. Were all samples received at a temperatu	ure of >0° C to 6.0°C	Yes		No		
6. Sample(s) in proper container(s)?		Yes		No		
7. Sufficient sample volume for indicated tes	st(s)?	Yes		No		
8. Are samples (except VOA and ONG) prop	perly preserved?	Yes		No		
9. Was preservative added to bottles?		Yes		No	$\checkmark$	NA
10.VOA vials have zero headspace?		Yes		No		No VOA Vials
11. Were any sample containers received bro	oken?	Yes		No		# of preserved
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No		bottles checked for pH: (<2 or >12 unless noted
13. Are matrices correctly identified on Chain	of Custody?	Yes	1	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	$\checkmark$	No		Checked by:

# Special Handling (if applicable)

-			
eMa	ail [	Phone Fax	[] In Person
			eMail [] Phone [] Fax

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17. Additional remarks:

4

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			



