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

# State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

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.

Form C-144 Revised April 3, 2017

1220 South St. Francis Dr. Santa Fe, NM 87505

Proposed Alternative Method Permit or Closure Plan Applica	ntion
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 por proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alteral Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority.	ce water, ground water or the
Operator: BP America Production Company  Address: 200 Energy Court, Farmington, NM 87401	DUIDIOT O
Address: 200 Energy Court, Farmington, NM 87401	OIL CONS. DIV DIST. 3
Facility or well name: BARRETT LS 001C	NOV 0 7 2017
	MOA o 1 For
API Number: 3004531037 OCD Permit Number:	Juan
Center of Proposed Design: Latitude 36.87669 Longitude -107.82433	NAD83
Surface Owner: 🔳 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment	
Temporary: Drilling Workover  Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilli Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other  String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions: L	
3.	
Below-grade tank: Subsection I of 19.15.17.11 NMAC  Volume: 45	isible
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.
5.  Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent resinstitution or church)	

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	
8.  Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  □ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  □ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptate are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells	☐ Yes ☐ No ☐ 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 ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. ( <b>Does not apply to below grade tanks</b> )  - 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
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No

Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natural Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:	NMAC 15.17.9 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 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:  or Permit Number:	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
### Attached.  Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Climatological Factors Assessment  Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H₂S, Prevention Plan  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	Lil Manager Pie
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	attached to the
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. Fig. 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 ☐ NA
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 ☐ NA
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
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain 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 plan by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	11 NMAC 15.17.11 NMAC
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 believe to the least of my know	
e-mail address: Date:  Telephone:	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature:  Approval Date: OCD Permit Number:	[[30]]
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.  Closure Completion Date: 9/7/2017	
20. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loc 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 incomark 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	licate, by a check

22.	
Operator Closure Certification:	
	nitted with this closure report is true, accurate and complete to the best of my knowledge and blicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Erin Garifalos	Title: Field Environmental Coordinator
Signature: Win gwifalos	Date: November 3, 2017
e-mail address: erin.garifalos@bp.com	Telephone: (832) 609-7048

# BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### **BELOW-GRADE TANK CLOSURE PLAN**

# BARRETT LS 001C

API No. 3004531037

Unit Letter C Section 30 T 31N R 09W

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
	45 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	10	< 0.018
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.072
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	< 50
Chlorides	US EPA Method 300.0 or 4500B	620	<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 chloride, TPH and BTEX with all concentrations below the stated limits. The field report and laboratory reports are attached.

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

C-141 is attached.

8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

Sampling results indicate 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.

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

The area has been backfilled and a 105 BBL shallow low profile above-grade tank set atop BGT location. The location will be reclaimed once 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 has been backfilled and a 105 BBL shallow low profile above-grade tank set atop BGT location. The location will be reclaimed once 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 has been backfilled and a 105 BBL shallow low profile above-grade tank set atop BGT location. The location will be reclaimed once the well is plugged and abandoned.

13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.

The area has been backfilled and a 105 BBL shallow low profile above-grade tank set atop BGT location. The location will be reclaimed once the well is plugged and abandoned.

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

The area has been backfilled and a 105 BBL shallow low profile above-grade tank set atop BGT location. The location will be reclaimed once 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.

BP did not meet the 60 closure completion requirement due to an error in internal tracking. 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.

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

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

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.

			Rele	ease Notific	cation	and Co	orrective A	ctio	1	
						<b>OPERA</b>	ГOR		Initia	al Report Final Report
Name of Co	ompany BP	America Produc	tion Compa	ny		ContactErin	Garifalos			1
Address 200	Energy Cour	t, Farmington, N	M 87401			Telephone 1	Vo. (832) 609-7048			
Facility Na	ne BARRET	T LS 001C				Facility Typ	e: Natural Gas We	II		
Surface Ow	ner · Federa	ı		Mineral C	)wner	Federal			API No	.3004531037
Duriue O H	IIOI Oddid								7111110	,000-1001
** ** **		m	n			V OF RE		- 1		
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the		West Line	Con Luca
C	30	31N	09W	190	Nor	th	810	We	est	San Juan
			Latitud	le 36.87669	L	ongitude -1	07.82433	NAD	83	
						OF REL				
Type of Rele	ase:: none	9			CICE		Release: unkno	own	Volume R	Recovered:: N/A
Source of Re	lease:	w grade ta	nk - 45	hhl		Date and H	lour of Occurrence		Date and	Hour of Discovery:
Was Immedi			IK -45	DDI		n/a	33710		n/a	
was immedi	ate Notice (		Yes [	No Not Re	equired	If YES, To	wnom?			
By Whom?						Date and H				
Was a Water	course Read	ched?		1 27		If YES, Vo	lume Impacting t	the Wat	ercourse.	
			Yes _	] No						
If a Watercou	irse was Im	pacted, Descr	be Fully.*	k						
Describe Cau	se of Probl	em and Reme	dial Action	n Taken.*						
				Samp	_					ne during removal.
										d TPH below BGT
				closu	re sta	ndards. F	Field reports	and	aborator	ry results are attached.
Describe Are	a Affected	and Cleanup A	Action Tak	en.*			" l loberet			lata was in a slura
						_		ory a	naiysis d	letermined no
				remediai	actio	n is requ	irea.			
regulations a public health should their or or the environ	Il operators or the envir operations hament. In a	are required to ronment. The lave failed to a	report an acceptance dequately CD accep	d/or file certain re e of a C-141 repo investigate and re	elease no rt by the emediate	otifications are NMOCD made contamination	nd perform correct arked as "Final Roon that pose a three	etive act eport" of eat to g	ions for rele loes not reli- round water	uant to NMOCD rules and cases which may endanger eve the operator of liability, surface water, human health ompliance with any other
		^					OIL CONS	SERV	ATION	DIVISION
l	run g	wifalo	4							
Signature:	0	U				Approved by	Environmental S	pecialis	t:	
Printed Name	Erin G	arifalos								
Title: Field	Enviro	onmenta	l Coo	rdinator	1	Approval Dat	e:		Expiration I	Date:
E-mail Addre	erin.	garifalos	@bp.	com	(	Conditions of	Approval:			
Date: Noven	nber 3, 20	17	Phone:	(832) 609-7048						Attached

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

# bp



BP America Production Company 200 Energy Court Farmington, NM 87401

September 1, 2017

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: BARRETT LS 001C

API#: 3004531037

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 September 5, 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

#### Garifalos, Erin

From:

Nelson Velez <br/>
<br/>
v@yahoo.com>

Sent:

Saturday, September 02, 2017 7:37 AM Smith Cory EMNRD; Fields Vanessa EMNRD

To: Cc:

Powell Brandon EMNRD; Whitney Thomas; Moskal, Steven; Garifalos, Erin; Hixon, Vance

E; Gonzales, Jody J; Buckley, Farrah (CH2M HILL); Powell, Ross L (MBF SERVICES); Jeff

Blagg

Subject:

BP Pit Close Notification - BARRETT LS 001C

**Categories:** 

CAUTION: External email - increased risk of phishing

**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

September 2, 2017

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

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

BARRETT LS 001C API 30-045-31037 (C) Section 30 – T31N – R09W San Juan County, New Mexico

Dear Mr. Cory Smith & Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around September 5, 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

Nelson J. Velez Blagg Engr.

cell: (505) 320-3489

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.

CLIENT: BP	P.O. BOX 87, B	NGINEERING, IN LOOMFIELD, NW		API #: 3004531	
		5) 632-1199		(if applicble):	
FIELD REPORT:	(circle one): BGT CONFIRMATION	RELEASE INVESTIGATION / O	THER:	PAGE#: <b>1</b> c	of
SITE INFORMATION	I: SITE NAME: BARRE	TT LS #1C		DATE STARTED: 09/0	05/17
QUAD/UNIT: C SEC: 30 TWP:	31N RNG: 9W PM:	NM CNTY: SJ	ST: NM	DATE FINISHED:	
1/4-1/4/FOOTAGE: 190'N / 810'\ LEASE #: SF078319A		YPE: FEDERAL STATE / STRIKE ONTRACTOR: BP - J. GO		ENVIRONMENTAL SPECIALIST(S):	JV
REFERENCE POINT		S COORD.: 36.87614			
	GPS COORD.: 36			RING FROM W.H.: 205', N	
	GPS COORD.:	.07003 X 107.02400		RING FROM W.H.:	
3)	GPS COORD.:			RING FROM W.H.:	
4)	GPS COORD.:			RING FROM W.H.:	
CAMPING DATA:	CHAIN OF CUSTODY RECORD(S) # 0	DRIABIISED: LIAIL	DISTANCEBEA	KING PROM W.H	OVM
SAMPLING DATA:			801	5B/8021B/300.0 (CI)	READING (ppm)
1) SAMPLE ID: <b>5PC - TB @ 6'</b> 2) SAMPLE ID:			LAB ANALYSIS:	13B/8021B/300.0 (CI)	IVA
3) SAMPLE ID:			LAB ANALYSIS:		
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		
5) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		
SOIL DESCRIPTION  SOIL COLOR: DARK YEL  COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY  CONSISTENCY (NON COHESIVE SOILS): LC  MOISTURE: DRY / SLIGHTLY MOIST MOIST / MI  SAMPLE TYPE: GRAB (COMPOSITE - #  DISCOLORATION/STAINING OBSERVED: YES   MI	COMSH BROWN  Y COHESIVE / COHESIVE / HIGHLY COHESIVE  OOSE FIRM DENSE / VERY DENSE  ET / SATURATED / SUPER SATURATED  OF PTS.  5	PLASTICITY (CLAYS): NON PLASTIC DENSITY (COHESIVE CLAYS & S HC ODOR DETECTED: YES NO I	/SLIGHTLY PLASTIC / CO SILTS): SOFT / FIRM / EXPLANATION -	OHESIVE / MEDIUM PLASTIC / HIGH STIFF / VERY STIFF / HARD	
SITE OBSERVATION		YES NO EXPLANATION -			
APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER: NMOCD OR BLM NOT PRESENT	D AND/OR OCCURRED : YES NO EXPL YES NO EXPLANATION - 105 BB	ANATION:	ABOVE-GRADE TAI	NK TO BE SET ATOP BGT I	OCATION.
EXCAVATION DIMENSION ESTIMATION:	NA ft. X NA	ft. X NA ft.	EXCAVATION EST	IMATION (Cubic Yards) :	NA
DEPTH TO GROUNDWATER: >100' N	EAREST WATER SOURCE: >1,000	NEAREST SURFACE WATER: _	<1,000' NMOO	D TPH CLOSURE STD: 1,0	00 ppm
SITE SKETCH	BGT Located: off on sit	e PLOT PLAN circl	A	CALIB. READ. = <b>NA</b> pp  CALIB. GAS = <b>NA</b> pp  : <b>NA</b> am/pm DATE:	111 -1.00
BERM →	1.0.	FENCE	1	MISCELL. NO	ΓES
	B.G.	BERM	R	EF #: P-681	
		≪ SEPARATOR	V	D: VHIXONEVB2	
PROP	L	SEPARATOR	<u>P.</u>	J #:	
PROD. TANK			O Tan ID	ppm = parts per million	2/16 ter
	√ To √ W.		В		
	<b>,</b>	Х	- S.P.D.	BGT Sidewalls Visible: Y /	
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATIO T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL APPLICABLE OR NOT AVAILABLE; SW - SINGLE	OW-GRADE TANK LOCATION; SPD = SAMPLE F	POINT DESIGNATION; R.W. = RETAINING V		BGT Sidewalls Visible: Y / lagnetic declination: 10	
NOTES: GOOGLE EARTH IMAGE		ONSITE: 09/05/1	7		

#### **Analytical Report**

### Lab Order 1709157

Date Reported: 9/7/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: 5PC-TB @ 6' (45)

Project: BARRETT LS #1C

**Collection Date:** 9/5/2017 1:05:00 PM

Lab ID: 1709157-001

Matrix: SOIL

Received Date: 9/6/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	9/6/2017 11:15:03 AM	33723
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/6/2017 9:36:43 AM	33720
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/6/2017 9:36:43 AM	33720
Surr: DNOP	104	70-130	%Rec	1	9/6/2017 9:36:43 AM	33720
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	9/6/2017 9:59:11 AM	33710
Surr: BFB	89.2	54-150	%Rec	1	9/6/2017 9:59:11 AM	33710
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.018	mg/Kg	1	9/6/2017 9:59:11 AM	33710
Toluene	ND	0.036	mg/Kg	1	9/6/2017 9:59:11 AM	33710
Ethylbenzene	ND	0.036	mg/Kg	1	9/6/2017 9:59:11 AM	33710
Xylenes, Total	ND	0.072	mg/Kg	1	9/6/2017 9:59:11 AM	33710
Surr: 4-Bromofluorobenzene	96.6	66.6-132	%Rec	1	9/6/2017 9:59:11 AM	33710

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
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

CI	nain-c	of-Cus	stody Record	Turn-Around	line.	SAME	١,		. 1	L	AL	11		MEN	/T 6	20	NI	ME	N	ГА		
Client:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	Rush _	DAY )	-		K										AT(			c
				Project Name								w.ha							411		P. H.	
Mailing A	ddress:	P.O. BO	X 87	B	ARRETT LS	# 1C		10	01 L									'' 8710	10			
-			FIELD, NM 87413	Project #:						05-34							-410		9			
Phone #:		(505) 63						16	1. 50	J3-34	40-5	THE REAL PROPERTY.		ysis				/	1000	35	7.0	
email or l	ax#:	(505) 05	2 2200	Project Manag	per:				NE SE				iiiai					ਜ਼				
QA/QC Pa	ckage:		Level 4 (Full Validation)	, , , , , , , , , , , , , , , , , , , ,	NELSON V	ELEZ	(8021B)	+ TPH (Gas only)	/ MRO)			(5		04,504	PCB's			ter - 300.1)			0)	
Accredita	tion:			Sampler:	NELSON V	ELEZ ny	15 (8	(Gas	RO,	17	1)	SIM		02,1	8082			/ water			sample	
□ NELAF		□ Other		On Ices	X Yes	EJ No.	1	TPH	(GRO / DRO	418.1)	504.	8270SIMS)		O3,N	_		(AC	300.0 /				N N
□ EDD (	Type)			Sample Temp	erature. A	5	4	BE +	(GR	por	pou		etal	C,N	cide	F	i-Vc	1		e	osit	70
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO 1709157	BTEX +-MFF	BTEX + MTBE	TPH 8015B	TPH (Method	EDB (Method 504.1)	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soll		Grab sample	5 pt. composite	Air Bubbles (Y or N)
9/5/17	1305	SOIL	5PC - TB @ 6 '(45)	4 oz 1	Cool	-001	٧		٧									٧	П		٧	
													-							-		
																		$\vdash$			-	
																					$\dashv$	
									_							_		H				
								-			_											
							-		-	-	_								$\blacksquare$	-	$\dashv$	_
															-			$\vdash$	H		$\dashv$	
									-		_	-			_			$\vdash$			-	_
									_		_		_					$\vdash$			$\dashv$	_
													_		_	-	_				_	<u> </u>
Date:	Time:	Relinquishe	ad hu	Received by:		Date Time	Ren	narks		BILL	DIREC	TIVI	ORD	ISING	THE	CONT	ACTV	MITH (	CORRE	SPON	DING	VID
9/5/17	1510	HI	ny	Rhut	Dalle	9/5/17 1516		ONT	ACT:	& RE	FEREN	ICE# \	WHE	APP	LICA	BLE;		minc	ORKE	SPON	DING	VID
Date:	700 (	Relinguishe	ustulvalli	Received by:	n M	Date Time 09/66/7 07/60	Ref	eren		VHI:		681	_									

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1709157

07-Sep-17

Client:

Blagg Engineering

Project:

BARRETT LS #1C

Sample ID MB-33723

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

**PBS** 

Batch ID: 33723

PQL

RunNo: 45442

Prep Date:

9/6/2017

Analysis Date: 9/6/2017

SeqNo: 1441364

Units: mg/Kg

**RPDLimit** 

Qual

Analyte Chloride

Result ND SPK value SPK Ref Val %REC LowLimit

HighLimit %RPD

**RPDLimit** 

TestCode: EPA Method 300.0: Anions

Sample ID LCS-33723 LCSS

SampType: Ics

Batch ID: 33723

1.5

RunNo: 45442

Units: mg/Kg

Prep Date:

Client ID:

9/6/2017

Analysis Date: 9/6/2017

SPK value SPK Ref Val %REC

97.3

SeqNo: 1441365

HighLimit %RPD Qual

Chloride

15

15.00

110

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- 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

Page 2 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1709157

07-Sep-17

Client:

Blagg Engineering

Project:

BARRETT LS #1C

Sample ID LCS-33720	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: 33	720	R	RunNo: 4	5426				
Prep Date: 9/6/2017	Analysis Da	ate: 9/	6/2017	SeqNo: 1439200 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	<b>RPDLimit</b>	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.7	73.2	114			
Surr: DNOP	4.4		5.000		88.7	70	130			

Sample ID MB-33720	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	ID: 33	720	R	RunNo: 4	5426				
Prep Date: 9/6/2017	Analysis D	ate: 9/	6/2017	SeqNo: 1439201 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	<b>RPDLimit</b>	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	70	130			

### 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1709157

07-Sep-17

Client:

Blagg Engineering

Project:

BARRETT LS #1C

Sample ID LCS-33710

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

LCSS

Batch ID: 33710

PQL

5.0

RunNo: 45446

Prep Date:

Analysis Date: 9/6/2017

104

99.3

9/5/2017

SeqNo: 1441257

Units: mg/Kg HighLimit

Analyte Gasoline Range Organics (GRO) Surr: BFB

Result 26 990

Result

ND

890

25.00 1000

SPK value SPK Ref Val %REC LowLimit

76.4

LowLimit

54

54

125

150

Qual

Sample ID MB-33710

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

%RPD

%RPD

Client ID: PBS

Batch ID: 33710

RunNo: 45446

Prep Date: 9/5/2017

Surr: BFB

Analysis Date: 9/6/2017

SeqNo: 1441258

Units: mg/Kg

HighLimit

**RPDLimit** 

**RPDLimit** Qual

Analyte Gasoline Range Organics (GRO)

5.0

PQL

1000

SPK value SPK Ref Val

89.0

%REC

150

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

Practical Quanitative Limit **PQL** 

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Page 4 of 5

# Hall Environmental Analysis Laboratory, Inc.

0.050

0.10

1.000

ND

ND

0.98

WO#:

1709157

07-Sep-17

Client:

Blagg Engineering

Project:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

BARRETT LS #1C

Sample ID LCS-33710	SampType: LCS	TestCode: EPA Method				
Client ID: LCSS	Batch ID: 33710	RunNo: 45446				
Prep Date: 9/5/2017	Analysis Date: 9/6/2017 SeqNo: 1441264		Units: mg/Kg			
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual		
Benzene	0.84 0.025 1.000	0 83.5 80	120			
Toluene	0.86 0.050 1.000	0 85.8 80	120			
Ethylbenzene	0.88 0.050 1.000	0 88.2 80	120			
Xylenes, Total	2.7 0.10 3.000	0 88.4 80	120			
Surr: 4-Bromofluorobenzene	0.99 1.000	99.4 66.6	132			
Sample ID MB-33710	SampType: MBLK TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 33710	Batch ID: <b>33710</b> RunNo: <b>45446</b>				
Prep Date: 9/5/2017	Analysis Date: 9/6/2017	SeqNo: 1441265	Units: mg/Kg			
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual		
Benzene	ND 0.025					
Toluene	ND 0.050					

97.5

66.6

132

#### 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

PQL Practical Quanitative Limit

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 5 of 5



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

# Sample Log-In Check List

Client Name:	BLAGG	Work Order Numbe	r: 1709157		RcptNo:	1
Received By:	Anne Thorne	9/6/2017 7:00:00 AM		anne Man	_	
Completed By:	Anne Thorne	9/6/2017 7:39:13 AM		aone Am		
Reviewed By:	ENM	9/6/17		Uma Jim		
Chain of Cus	tody					
1. Custody sea	ls intact on sample bottles?		Yes	No 🗆	Not Present	
2. Is Chain of Custody complete?			Yes 🗸	No 🗆	Not Present	
3. How was the sample delivered?			Courier			
Log In						
4. Was an attempt made to cool the samples?			Yes 🗹	No 🗆	NA 🗆	
5. Were all san	nples received at a tempera	ture 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 ha	ave zero headspace?		Yes	No 🗆	No VOA Vials	
11. Were any sample containers received broken?			Yes	No 🗹	# of presented	
					# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)			Yes 🗹	No 🗀	for pH: (<2 o	r >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?			Yes 🗹	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?			Yes 🗹	No 🗆		
15. Were all holding times able to be met? (If no, notify customer for authorization.)			Yes 🗹	No 🗆	Checked by:	
(II no, notily	customer for authorization.)					
Special Hand	ling (if applicable)					
16. Was client no	otified of all discrepancies w	ith this order?	Yes	No 🗆	NA 🗹	
Person	Notified:	Date				
By Wh	om:	Via:	eMail	Phone  Fax	In Person	
Regard	fing:				CONTRACTOR	
Client I	nstructions:			3-C POCCES EMILEO ÉS DA SON ÉN ARAMANTA ATRACTICA NO MÍNIMA	_	
17. Additional re	marks:					
18. Cooler Info	rmation					
Cooler No			Seal Date	Signed By		
1	1.3 Good	Yes				



