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State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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>C</u> <u>Proposed Alternative Method Permit or Closure Plan Application</u>							
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 <i>Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request</i>							
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: BARRETT 001E							
API Number:         3004526085         OCD Permit Number:							
U/L or Qtr/Qtr       O       Section 20       Township 0114       Range 0004       County: 001100011         Center of Proposed Design: Latitude       36.889281       Longitude       -107.807247       NAD83         Surface Ourger       Federal       State       Driveto       Indian Allotment       000000000000000000000000000000000000							
Surface Owner: E Federal State Private Tribal Trust or Indian Allotment							
Permanent Emergency   Cavitation P&A   Multi-Well Fluid Management Low Chloride Dalling Fluid yes   Lined Unlined   Liner type: Thickness   mil LLDPE   HDPE PVC   Other Other   Liner Seams:   Welded Factory   Other Volume:   bbl Dimensions:   L x W							
3.       TANK B         Below-grade tank:       Subsection I of 19.15.17.11 NMAC         Volume:       21       bbl Type of fluid:         Produced Water         Tank Construction material:       Steel         Secondary containment with leak detection       Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off         Visible sidewalls and liner       Visible sidewalls only       Other         Liner type:       mil       HDPE       PVC							
<ul> <li>4.</li> <li><u>Alternative Method</u>:</li> <li>Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul>							
<ul> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)</li> <li>Four foot height, four strands of barbed wire evenly spaced between one and four feet</li> <li>Alternate. Please specify</li></ul>							



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 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 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 Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial Yes No application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes No

<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>									
<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>									
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No								
Permanent Pit or Multi-Well Fluid Management Pit									
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa									
<ul> <li>lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No								
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>									
<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>									
<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 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 (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 19.15.17.12 NMAC         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									
Previously Approved Design (attach copy of design) API Number: or Permit Number:									
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 dot 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 19.15.17.10 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 otatached.         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         Nuisance or Hazardous Odors, including H <sub>2</sub> S, 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 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are						
13.         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 Fl         Alternative         Proposed Closure Method:       Waste Excavation and Removal         Waste Removal (Closed-loop systems only)         On-site Closure Method (Only for temporary pits and closed-loop systems)         In-place Burial       On-site Trench Burial         Alternative Closure Method	luid Management Pit						
14.         Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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							
<sup>15.</sup> 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.							
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						
<ul> <li>Ground water is more than 100 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						
<ul> <li>Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>							
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No						
<ul> <li>Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>							
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							
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							
<ul> <li>16.</li> <li>On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC</li> <li>Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC</li> <li>Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Maste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)</li> <li>Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>								
17. Operator Application Certification:								
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli	ef.							
Name (Print):          Title:								
Signature: Date:								
e-mail address: Telephone:								
18. OCD Approval: Permit Application (including closure plan) A Closure Plan (only) OCD Conditions (see attachment)								
OCD Representative Signature: Approval Date:	18/18							
Title: Freinon mental Spec. OCD Permit Number:								
19.         Closure Report (required within 60 days of closure completion):       19.15.17.13 NMAC         Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report.         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Image: Closure Completion Date:       4/23/2018								
<ul> <li>20.</li> <li>Closure Method:</li> <li>Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-lo</li> <li>If different from approved plan, please explain.</li> </ul>	op systems only)							
<ul> <li>21.</li> <li><u>Closure Report Attachment Checklist</u>: Instructions: Each of the following items must be attached to the closure report. Please in mark in the box, that the documents are attached.</li> <li>Proof of Closure Notice (surface owner and division)</li> <li>Proof of Deed Notice (required for on-site closure for private land only)</li> <li>Plot Plan (for on-site closures and temporary pits)</li> <li>Confirmation Sampling Analytical Results (if applicable)</li> <li>Waste Material Sampling Analytical Results (required for on-site closure)</li> <li>Disposal Facility Name and Permit Number</li> <li>Soil Backfilling and Cover Installation</li> <li>Re-vegetation Application Rates and Seeding Technique</li> </ul>	dicate, by a check							

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<b>Operator Closure Certification:</b>	
I hereby certify that the information and attachmen	ts sub

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Erin Garifalos

22.

Title: Field Environmental Coordinator

erin garibalas Signature:\_

Date: June 14, 2018

e-mail address: erin.garifalos@bpx.com

Telephone: (832) 609-7048

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

BELOW-GRADE TANK CLOSURE PLAN

## BARRETT 001E

### API No. 3004526085

#### Unit Letter C Section 20 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
	21 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	10	< 0.020
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.081
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<47
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.

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. 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 and BGT location's surface condition is clear, but within the site's operational area. 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 BGT location's surface condition is clear, but within the site's operational area. 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 BGT location's surface condition is clear, but within the site's operational area. 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 BGT location's surface condition is clear, but within the site's operational area. 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 BGT location's surface condition is clear, but within the site's operational area. 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.

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.

State of New Mexico Energy Minerals and Natural Resources

> 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														
<b>OPERATOR</b> Initial Report Final 1									Final Report						
						Contact Erin Garifalos									
		/ Court, Fa ETT 001E		n, NM 87401			No. (832) 609- pe: Natural Ga								
							. Natural Ga		00045	0000	-				
Surface Ow	ner: Fed	eral		Mineral C	)wner:	Federal		API	No. 30045	2608	0				
TT 's T		T 1'	D			N OF RE	1								
Unit Letter	Section	Township <b>O1N</b>	Range	Feet from the	100 100	/South Line	Feet from the	East/West Lin		Sar	u Juan				
С	20	31N	09W		No		1,460	West		Jai	Juan				
			Latitud	e 36.889281	L	longitude -1	07.807247	NAD83							
				NAT	URE	OF REL	EASE								
Type of Rele	ase:: none	9					Release: unkno		e Recovered:						
Source of Re	lease: belo	w grade ta	nk - 21	bbl		n/a	Hour of Occurrence	ce: Date a	nd Hour of Di	scovery	:				
Was Immedi		Given?		No 🗌 Not Re	anie 1	If YES, To	Whom?								
By Whom?			res 🗸		equirea	Date and H	Jour								
Was a Water	course Rea						olume Impacting t	the Watercourse							
			Yes 🗸	No											
If a Waterco	irse was Im	pacted, Descr	ibe Fully.*	c											
Describe Car	ise of Probl	em and Reme	dial Action	Taken.*	olina	of the soil	beneath the	BGT was	tone durir	na rer	noval				
					0		ed for Chloric			0					
					-		Field reports								
Describe Are	a Affected	and Cleanup	Action Tak	en.*			<b>E</b> ' 1	1 . 1 1							
				No furthe	er ac	tion neces	ssary. Final	laboratory	analysis a	ittach	ed.				
I hereby cert	fy that the	information g	iven above	is true and compl	lete to t	the best of my	knowledge and u	inderstand that p	ursuant to NN	10CD r	ules and				
regulations a	ll operators	are required t	o report ar	d/or file certain re	elease r	notifications a	nd perform correct	ctive actions for	eleases which	n may er	ndanger				
				e of a C-141 repo investigate and re											
		ddition, NMC		tance of a C-141	report o	loes not reliev	e the operator of	responsibility fo	compliance	with any	y other				
						OIL CONSERVATION DIVISION									
1	rin a	Wilfald	24												
Signature:						Approved by Environmental Specialist:									
Signature: Printed Name: Erin Garifalos															
		onmenta		rdinator		Approval Da	te:	Expiratio	n Date:						
E-mail Addr	ess: erin.	garifalos	@bpx	com	Conditions of Approval:										
Date: June				(832) 609-70	)48	Attached									

\* Attach Additional Sheets If Necessary



BP America Production Company 380 Airport Rd Durango, CO 81303 Phone: (970) 247 6800

April 13, 2018

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: BARRETT 001E API #: 3004526085

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 April 19, 2018. 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 (832)-609-7048.

Sincerely,

Erin Garifalos

BP America Production Company

From:Buckley, Farrah (CH2M HILL)To:Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa, Fields@state.nm.us)Cc:jeffcblagg@aol.com; blagg\_njv@yahoo.com; Garifalos, ErinSubject:BP Pit Close Notification - BARRETT 001EDate:Friday, April 13, 2018 12:29:10 PM

BP America Production Company 380 Airport Rd Durango, CO 81303 Phone: (970) 247 6800

#### SENT VIA E-MAIL TO: <u>CORY.SMITH@STATE.NM.US;</u> <u>VANESSA.FIELDS@STATE.NM.US</u>

April 13, 2018

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

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

BARRETT 001E API 30-045-26085 (C) Section 20 – T31N – R09W San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around April 19, 2018.

Should you have any questions, please feel free to contact BP at our Durango office.

Sincerely,

Erin Garifalos

Field Environmental Coordinator – San Juan Cell: 832-609-7048

Farrah Buckley 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.

	BP         BLAGG ENGINEERING, INC.         API #: 3004526085           DIENT:         P.O. BOX 87, BLOOMFIELD, NM 87413         TANK ID           (505) 632-1199         (if applicble): B									
FIELD REPORT:	(circle one): BGT CONFIRMATION	ON / RELEASE INVESTIGATIO	ON / OTHER:	PAGE #: 1	of _ <b>1</b>					
SITE INFORMATION		RETT #1E PM: NM CNTY:	SJ ST: NM	DATE STARTED: <b>04</b> /	19/18					
1/4 -1/4/FOOTAGE: 500'N / 1,46		SE TYPE: FEDERAL S	TATE / FEE / INDIAN	ENVIRONMENTAL	JV					
REFERENCE POINT				GL ELEV.:						
1) <b>21 BGT (SW/SB)</b>		36.889281 X 107.807								
	GPS COORD.:	0.0002017(107.007		ARING FROM W.H.:						
2)	GPS COORD.:			ARING FROM W.H.:						
	GPS COORD.:		DISTANCE/BE							
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S				OVM READING					
	1)- B SAMPLE DATE:		HALL 80	015B/8021B/300.0 (CI)	(ppm)					
	SAMPLE DATE:		LAB ANALYSIS:		101					
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:							
			LAB ANALYSIS:							
5) SAMPLE ID:	SAMPLE DATE:		LAB ANALYSIS:							
SOIL DESCRIPTION										
SOIL COLOR: MODE COHESION (ALL OTHERS): NON COHESIVE (SLIGHTL'		, ,		COHESIVE / MEDIUM PLASTIC / HIG	HLY PLASTIC					
CONSISTENCY (NON COHESIVE <u>SLIGHTE</u> CONSISTENCY (NON COHESIVE SOILS): LC			S NO EXPLANATION -	/ STIFF / VERY STIFF / HARD						
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / W	ET / SATURATED / SUPER SATURATE									
SAMPLE TYPE: GRAB COMPOSITE +		ANY AREAS DISPLAYING	WETNESS: YES NO EXPLA	ANATION -						
DISCOLORATION/STAINING OBSERVED: YES	Spine Internet and a second									
SITE OBSERVATION			-							
APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA:		EXPLANATION:								
OTHER: MMOCD OR BLM REPS. NOT PR		MATION SAMPLING.								
EXCAVATION DIMENSION ESTIMATION:	NA ft. X N	A ft. X NA	ft. EXCAVATION ES	TIMATION (Cubic Yards) :	NA					
		000' NEAREST SURFACE V			000 ppm					
SITE SKETCH		-			ppm					
×	BOT LOCALED. OIL / OIL	site PLOT PLAN			RF = 1.00					
TO W.H.	SEPARATOR				NA					
	1 A		N							
	FEI	NCE		MISCELL. NO	TES					
BE	RM (95)-A		-	NO:						
	BGT		F	REF #: P-951						
	WOODEN R.W.	FENCE		ID: VHIXONEVB	2					
		FENCE		PJ #:	0//0					
		(21)-E PBGT			02/10					
	BERM	T.B. ~		DCD Appr. date(s): 03/0 ank OVM = Organic Vapor M	02/18					
		B.G.		BGT Sidewalls Visible:						
				BGT Sidewalls Visible: Y						
			X - 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	DW-GRADE TANK LOCATION; SPD = SAM	PLE POINT DESIGNATION; R.W. = RE		Magnetic declination: 1						
NOTES: GOOGLE EARTH IMAGE	RY DATE: 10/5/2016.	ONSITE: 0	4/19/18							

#### Analytical Report Lab Order 1804A89 Date Reported: 4/23/2018

## Hall Environmental Analysis Laboratory, Inc.

х, б

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CLIENT: Blagg EngineeringClient Sample ID: 5PC-TB @ 5' (21)-BProject: BARRETT 1ECollection Date: 4/19/2018 1:00:00 PMLab ID: 1804A89-001Matrix: SOILReceived Date: 4/20/2018 7:55:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	30	mg/Kg	20	4/20/2018 11:13:42 AM	37711
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/20/2018 9:53:25 AM	37708
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/20/2018 9:53:25 AM	37708
Surr: DNOP	96.6	70-130	%Rec	1	4/20/2018 9:53:25 AM	37708
EPA METHOD 8015D: GASOLINE RANG	ε				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	4/20/2018 11:24:59 AM	G50729
Surr: BFB	90.0	15-316	%Rec	1	4/20/2018 11:24:59 AM	G50729
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	4/20/2018 11:24:59 AM	B50729
Toluene	ND	0.041	mg/Kg	1	4/20/2018 11:24:59 AM	B50729
Ethylbenzene	ND	0.041	mg/Kg	1	4/20/2018 11:24:59 AM	B50729
Xylenes, Total	ND	0.081	mg/Kg	1	4/20/2018 11:24:59 AM	B50729
Surr: 4-Bromofluorobenzene	99.5	80-120	%Rec	1	4/20/2018 11:24:59 AM	B50729

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	Е	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
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

C	hain-o	of-Cus	stody Red	cord	Turn-Around	Time:	SAME								AIL	/T E	20		ME	817		
Client:	BLAG	G ENGR.	/ BP AMERIC	A	Standard	Rush_	DAY )			H									RA			
					Project Name							www									30	
Mailing A	ddress:	P.O. BO	X 87			BARRETT #	# 1E		40	01 L												
			FIELD, NM 874	13	Project #:			1				45-3							37109	,		
Phone #:		(505) 63						-	16	:1. DU	J <u></u> 5-54	45-5					jues	-410				1
email or F	ax#:	(202) 00			Project Manag	der:											1000				T	
QA/QC Pa				and at an			FALOS		5	6					SO4)	B's			300.1)			
Stand	-		Level 4 (Full	Validation)		ERIN GARI	FALOS	021B	only	(MRO)			IS)		04,	PCB's						a
Accreditat	tion:				Sampler:	NELSON VI	ELEZ	<b>MB-</b> 5 (8021B)	+ TPH (Gas only)	DRO /	1)	F	PAH (8310 or 8270SIMS)		Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8082			Chloride (soil - 300.0 / water			5 pt. composite sample
	0	D Other			On Ice:	X Yes	🖻 No 👘 🖓 🕅		H	-	418.	504	827(	0	O <sub>3</sub> ,N	s / 8		A)	0.00			e sa
	Гуре)	т			Sample Temp	erature: //0			H H	(GR(	poc	por	or (	etal	CI,N	icide	A)	i-VC	oil - 3		e	osit
	_				Hotzall <sup>2</sup> Container	Preservative		Ŧ	+ MTBE -	TPH 8015B (GRO	TPH (Method 418.1)	EDB (Method 504.1)	3310	RCRA 8 Metals	s (F,	8081 Pesticides /	8260B (VOA)	8270 (Semi-VOA)	e (so		sample	dwo
Date	Time	Matrix	Sample Re	equest ID	Type and #	Туре	HEAL No.	BTEX +	BTEX +	H 80	U) H	<b>B</b> (	H (S	RA	ion	81 F	60B	70 (	lorid		Grab s	ot. c
				<u></u>	Monket		1X14A89		81		F		PA	R	Ar	80	82	82			-	
4/19/18	1300	SOIL	5PC - TB @	5' (21)-6	4 oz 1	Cool	-201	V	-	۷									V	-	-+	V
																				1	-	1
																				-	-	1
																				+		+
								1					-							+	-+	+
Date:	Time:	Relinquish	ed by:		Received by:		Date Time	Ren	harks	:	BILL	DIREC	TLY TO	OBPI	JSING	THE	CONT	ACT V	VITH C	ORRES	SPON	DING
4/19/18	13V)	9	Mult	- 1	Christie	hala	4/Alic ISID		ONT			FEREN										
Date:	Time:	Relinquish	ed by:		Received by:				CONTACT: ERIN GARIFALOS / VANCE HIXON VID: VHIXONEVB2													
4/19/14	4/19/10 1851 / Mustre Walter			1/10-	n-ho	4/20/18	Re	feren	ce #	_	P - 9	951	_									

**Client: Project:** BARRETT 1E

Blagg	Engineering

_				
Sample ID MB-37711	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 37711	RunNo: 50728		
Prep Date: 4/20/2018	Analysis Date: 4/20/2018	SeqNo: 1646561	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-37711	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Client ID: LCSS	Batch ID: 37711	RunNo: 50728		
Prep Date: 4/20/2018	Analysis Date: 4/20/2018	SeqNo: 1646562	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	14 1.5 15.00	0 96.2 90	110	

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Η 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
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

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Client:Blagg EProject:BARRE	Engineering ETT 1E									
Sample ID LCS-37708	SampTy	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: 37	708	F	RunNo: 5	0717				
Prep Date: 4/20/2018	Analysis Da	ate: 4/	20/2018	S	SeqNo: 1	645291	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.1	70	130			
Surr: DNOP	4.0		5.000		80.9	70	130			
Sample ID MB-37708	SampTy	pe: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 37	708	F	RunNo: 5	0717				
Prep Date: 4/20/2018	Analysis Da	ate: 4/	20/2018	S	SeqNo: 1	645292	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		92.7	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
- 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

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Client: Blagg En Project: BARRET	gineering T 1E									
Sample ID RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	ID: G5	0729	F	RunNo: 5	0729				
Prep Date:	Analysis D	ate: 4/	20/2018	S	SeqNo: 1	645977	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.5	15	316			
Sample ID 2.5UG GRO LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: G5	0729	R	unNo: 5	0729				
Prep Date:	Analysis D	ate: 4/	20/2018	S	eqNo: 1	645978	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	75.9	131			
Surr: BFB	1000		1000		100	15	316			

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

Client:Blagg EngineeringProject:BARRETT 1E

Sample ID RB	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batcl	h ID: <b>B5</b>	0729	F	RunNo: 5	0729				
Prep Date:	Analysis E	Date: 4/	20/2018	S	SeqNo: 1	646002	Units: mg/K	g		
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: 4-Bromofluorobenzene			4 000		07.0	00	100			
Sull. 4-bromoliu0robenzene	0.97		1.000		97.3	80	120			
Sample ID 100NG BTEX LCS		ype: LC		Tes			8021B: Volat	iles		
	Samp1	ype: LC	S			PA Method		iles		
Sample ID 100NG BTEX LCS	Samp1	n ID: B5	S 0729	F	tCode: El	PA Method 0729				
Sample ID 100NG BTEX LCS Client ID: LCSS	Samp1 Batcl	n ID: B5	S 0729 20/2018	F	tCode: El RunNo: 5	PA Method 0729	8021B: Volat		RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date:	Samp1 Batcl Analysis D	n ID: <b>B5</b> Date: <b>4</b> /	S 0729 20/2018	F	tCode: El RunNo: 5 GeqNo: 1	PA Method 0729 646003	8021B: Volat Units: mg/K	g	RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte	Samp1 Batcl Analysis D Result	n ID: <b>B5</b> Date: <b>4</b> / PQL	S 0729 20/2018 SPK value	R S SPK Ref Val	tCode: El tunNo: 5 GeqNo: 1 %REC	PA Method 0729 646003 LowLimit	8021B: Volat Units: mg/K HighLimit	g	RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte Benzene	SampT Batcl Analysis D Result 0.97	n ID: <b>B5</b> Date: <b>4</b> / PQL 0.025	S 0729 20/2018 SPK value 1.000	R S SPK Ref Val 0	tCode: El tunNo: 5 GeqNo: 1 %REC 96.7	PA Method 0729 646003 LowLimit 77.3	8021B: Volat Units: mg/K HighLimit 128	g	RPDLimit	Qual
Sample ID 100NG BTEX LCS Client ID: LCSS Prep Date: Analyte Benzene Toluene	SampT Batcl Analysis D Result 0.97 0.98	n ID: <b>B5</b> Date: <b>4</b> / PQL 0.025 0.050	<b>S</b> 0729 20/2018 SPK value 1.000 1.000	R S SPK Ref Val 0 0	tCode: <b>El</b> RunNo: <b>5</b> GeqNo: <b>1</b> %REC 96.7 98.4	PA Method 0729 646003 LowLimit 77.3 79.2	8021B: Volat Units: mg/K HighLimit 128 125	g	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
- 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

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4	2
201	HALL
	ENVIRONMENTAL
	ANALYSIS
	LABORATORY

#### 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 Wor	rk Order Number: 1804A89	RcptNo: 1	
		ter en	
Received By: Anne Thorne 4/20/2	018 7:55:00 AM	anne Him	
Completed By: Anne Thorne 4/20/2	018 8:35:48 AM	am the	
Reviewed By: 70 4/20 LB'ENM	)/18		
Chain of Custody			
1. Is Chain of Custody complete?	Yes 🗹	No Not Present	
2. How was the sample delivered?	Courier	for a second second Second second second Second second	
Log In	· · · · · · · · · · · · · · · · · · ·		
3. Was an attempt made to cool the samples?	Yes 🗹	No 🖵 💦 NA 🖵	
4. Were all samples received at a temperature of >0° C	C to 6.0°C Yes 🗹		
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗌	
6. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌	2
7. Are samples (except VOA and ONG) properly presen	ved? Yes 🗹	No 🗌	
8. Was preservative added to bottles?	Yes	No 🗹 NA 🗌	
9. VOA vials have zero headspace?	Yes 🗌	No 🗌 No VOA Vials 🗹	/
10. Were any sample containers received broken?	Yes	No V	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🔽	# of preserved bottles checked for pH: (12 of 12 unless noted)	
12. Are matrices correctly identified on Chain of Custody	? Yes 🗹	No Adjustada	
13. Is it clear what analyses were requested?	Yes 🗹	No 🗆 🖌	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No Checked by:	
Special Handling (if applicable)			
15. Was client notified of all discrepancies with this order	r? Yes	No 🗌 NA 🗹	•
Person Notified: By Whom: Regarding:	Date Via: eMail P	Phone Fax In Person	
Client Instructions:			
16. Additional remarks:			
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact 1 1.0 Good Yes	Seal No Seal Date	Signed By	



