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

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

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.

Page 1 of 6

16224	Pit, Below-Grade Tank, or
16000	Proposed Alternative Method Permit or Closure Plan Application Type of action: Below grade tank registration
	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
	<ul> <li>Permit of a pit or proposed alternative method</li> <li>Closure of a pit, below-grade tank, or proposed alternative method</li> </ul>
	Modification to an existing permit/or registration
	Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
	Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised th	hat 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 o	does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
	merica Production Company OGRID #: 778
Address: 200 E	nergy Court, Farmington, NM 87401
Facility or well n	ame: PRITCHARD A 002A
API Number: 30	OOd4522020         OCD Permit Number:           Section         01         Township         30N         Range         09W         County:         San Juan
U/L or Qtr/Qtr	Section 01 Township 30N Range 09W County: San Juan
Center of Propos	ed Design: Latitude <u>36.83780</u> Longitude <u>-107.727025</u> NAD83
Surface Owner:	Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment
Temporary: Permanent Lined Ur String-Reinfo Liner Seams: 3. Below-grade	tion F, G or J of 19.15.17.11 NMAC Drilling Workover Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no nlined Liner type: Thicknessmil LLDPE HDPE PVC Other rced Welded Factory OtherVolume:bbl Dimensions: L x W x D tank: Subsection I of 19.15.17.11 NMAC TANK Abbl Type of fluid: Produced Water
Tank Construction	n material: Steel
	ontainment with leak detection 🗌 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
	valls and liner Disible sidewalls only Other Single wall/ Double bottom; sidewalls not visible
Liner type: Thick	kness mil   HDPE   PVC   Other
4. Alternative M Submittal of an e	Method: xception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
5.	
	ction D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
Chain link, sin institution or chu	x feet in height, two strands of barbed wire at top ( <i>Required if located within 1000 feet of a permanent residence, school, hospital, rch</i> )
Four foot heig	ght, four strands of barbed wire evenly spaced between one and four feet
Alternate. Ple	ease specify

Oil Conservation Division

6. Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
7.	
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:	
<ul> <li>Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.</li> <li>Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul>	
Exception(s). Requests must be sublimited to the Santa re Environmental Dureau 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 acce	ptable source
material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	
Concerclaiting	
<u>General siting</u>	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	Yes No
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
<ul> <li>Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)</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. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗌 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	
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland 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 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
<ul> <li>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.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	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	
<ul> <li>Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🗋 No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No
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
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Permanent Pit or Multi-Well Fluid Management Pit	
<ul> <li>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗋 Yes 🗌 No
<ul> <li>Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🗍 No
10.         Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:       Subsection B of 19.15.17.9 N         Instructions:       Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot attached.         Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC         Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC         Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC         Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC         Previously Approved Design (attach copy of design)       API Number:       or Permit Number:	cuments are 9 NMAC 15.17.9 NMAC
II.         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. <ul> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>A List of wells with approved application for permit to drill associated with the pit.</li> <li>Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.</li> </ul> and 19.15.17.13 NMAC            Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.10 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

12.		
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. attached.	Please indicate, by a check mark in the box, that the	documents are
<ul> <li>Hydrogeologic Report - based upon the requirements of Paragraph (1) of</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate a</li> <li>Climatological Factors Assessment</li> </ul>	requirements of 19.15.17.10 NMAC	
<ul> <li>Certified Engineering Design Plans - based upon the appropriate requiren</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.1</li> <li>Leak Detection Design - based upon the appropriate requirements of 19.1</li> <li>Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of the appropriate requirement of the approprise requirement of the appropriste requirement of the appropriat</li></ul>	ate requirements of 19.15.17.11 NMAC 5.17.11 NMAC	
<ul> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirement</li> <li>Freeboard and Overtopping Prevention Plan - based upon the appropriate</li> <li>Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> </ul>		
<ul> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> </ul>		
<ul> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of Subsection C</li> </ul>	of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
<sup>13.</sup> <u>Proposed Closure</u> : 19.15.17.13 NMAC <i>Instructions: Please complete the applicable boxes, Boxes 14 through 18, in r</i>	egards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Alternative Proposed Closure Method: Waste Excavation and Removal	Permanent Pit 🗌 Below-grade Tank 🗌 Multi-well F	luid Management Pit
Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pit In-place Burial On-site Trench Alternative Closure Method		
Waste Excavation and Removal Closure Plan Checklist:       (19.15.17.13 NMA         closure plan. Please indicate, by a check mark in the box, that the documents         Protocols and Procedures - based upon the appropriate requirements of 19         Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19         Disposal Facility Name and Permit Number (for liquids, drilling fluids an         Soil Backfill and Cover Design Specifications - based upon the appropriate         Re-vegetation Plan - based upon the appropriate requirements of Subsecti         Site Reclamation Plan - based upon the appropriate requirements of Subsecti	<i>are attached.</i> .15.17.13 NMAC equirements of Subsection C of 19.15.17.13 NMAC d drill cuttings) e requirements of Subsection H of 19.15.17.13 NMAC on H of 19.15.17.13 NMAC	
15.		
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria require y 19.15.17.10 NMAC for guidance.	he closure plan. Recommendations of acceptable sour	
Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; D	ata 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; E	ata 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; E	ata obtained from nearby wells	□ Yes □ No □ NA
<ul> <li>Within 100 feet of a continuously flowing watercourse, or 200 feet of any other slake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	significant watercourse, lakebed, sinkhole, or playa	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or chur - Visual inspection (certification) of the proposed site; Aerial photo; Satel		Yes No
Within 300 horizontal feet of a private, domestic fresh water well or spring used at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspectio		Yes No
Written confirmation or verification from the municipality; Written approval obt	ained from the municipality	Yes No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual insp		Yes No
Within incorporated municipal boundaries or within a defined municipal fresh w	ater well field covered under a municipal ordinance	
Form C-144 Oil Conservatio		f 6

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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
<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
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological</li> </ul>	
Society; Topographic map Within a 100-year floodplain.	Yes No
- 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 play 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 19.15.17.13 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>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Waste 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 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> </ul>	11 NMAC 5.17.11 NMAC
17.     Operator Application Certification:     I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belie     Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (onty)       OCD Conditions (see attachment)         OCD Representative Signature:	/18
Title: <u>Environ mentral Spec</u> OCD Permit Number:	
<sup>19.</sup> <u>Closure Report (required within 60 days of closure completion)</u> : 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: 11/29/2017	
<ul> <li>20.</li> <li>Closure Method:</li> <li>Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loo If different from approved plan, please explain.</li> </ul>	op systems only)
<ul> <li>21.</li> <li>Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indemark 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> </ul>	licate, by a check

Form C-144

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Oil Conservation Division

Page 5 of 6

#### 22. Operator Closure Certification:

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

Signature:\_

Title: Field Environmental Coordinator

erin garifalas

Date: January 22, 2018

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**

#### PRITCHARD A 002A API No. 3004522020

#### Unit Letter I Section 01 T 30N 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
	95 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	278
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 except TPH below the stated limits. The release will be address following the spill and release guidelines. The field report and laboratory reports are attached.

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

BP BGT Closure Plan 04-01-2010

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 occurred and will be addressed following the spill and release guidelines. 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 occurred and will be addressed following the spill and release guidelines. 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 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.

**BP BGT Closure Plan 04-01-2010** 

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.

# 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.

BP BGT Closure Plan 04-01-2010

(and the second

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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

Oil Conservation Division

			Rele			and $\mathbf{C}_{\mathbf{C}}$	orrective A	ctio	n			
						OPERA'				al Report		Final Report
Name of Co	ompany BR	<sup>&gt;</sup> America	Product	ion Compar		Contact Eri	n Garifalos			urreport		- mar report
				n, NM 8740		Telephone No. (832) 609-7048						
Facility Na	mePRIIC	CHARD A	J02A			Facility Typ	e: Natural G	as we	Ell			
Surface Ow	mer: Fed	eral		Mineral	Owner:	Federal			API No	.300452	2020	
				LOC	ATION	OF RE			West Line			
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	County	`~~	luon		
I	01	30N	09W	1,710	Sou	ith	1,090	Ea	st	3	an	Juan
Latitude 36.83780 Longitude -107.727025 NAD83												
				NA		OF REL						
Type of Rele	ase:: none	)			I UILL		Release: : unkn	own	Volume I	Recovered: :	N/A	
Source of Re	lease: belo	w grade ta	nk - 95 b	bl			Iour of Occurrent	ce:		Hour of Dis	covery:	
Was Immedi						n/a If YES, To	Whom?		n/a			
			Yes 🗸	No 🗌 Not R	lequired							
By Whom?						Date and H						
Was a Water	course Read		Yes 🗸	No		If YES, Vo	olume Impacting	the Wat	ercourse.			
If a Watercou	Irse was Im	pacted, Descr										
Describe Cau	ise of Probl	em and Reme	dial Action	for Ch will be	lorides,	BTEX, and sed followin	ath the BGT wa TPH below BG g spill and relea	T closu	re standar	ds except T	PH. Th	ne release
Describe Are	a Affected	and Cleanup A	Action Take	en.* The role		ill bo ode	traceed fells	wing	the epil	l and rol		
							lressed follo atory analys	-			ease	
regulations a public health should their o or the enviro	ll operators or the envir operations h nment. In a	are required to ronment. The nave failed to a	acceptance acceptance adequately OCD accept	d/or file certain e of a C-141 rep investigate and	release no ort by the remediate	otifications as NMOCD m contaminati	knowledge and u nd perform correc arked as "Final R on that pose a thr e the operator of	ctive ac eport" reat to g	tions for rele does not rele round water	eases which ieve the oper r, surface wa	may end ator of l ter, hum	danger liability nan health
	12 i	and a					OIL CON	SERV	ATION	DIVISIC	N	
Signature	run g	allale	4									
Printed Name	Erin G	<i>wrifalc</i> Garifalos				Approved by	Environmental S	pecialis	st:			
		onmenta		dinator		Approval Dat	e:		Expiration	Date:		
		garifalos				Conditions of						
Date: Janu				(832) 609-7						Attached		
Attach Addi	tional Shee	ets If Necess	ary 7	FACS 18	033	3 52 0	5					

# bp



**BP America Production Company** 200 Energy Court Farmington, NM 87401

November 22, 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: PRITCHARD A 002A API #: 3004522020

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 November 27, 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 (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\_niv@yahoo.com; Garifalos, ErinSubject:RE: BP Pit Close Notification - PRITCHARD A 002A - RESCHEDULEDDate:Wednesday, November 22, 2017 10:15:02 AM

200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

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

November 22, 2017

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

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

PRITCHARD A 002A API 30-045-22020 (I) Section 1– T30N – 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 and a 30bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around November 27, 2017

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

	BLAGG EN P.O. BOX 87, BL	GINEERING, IN		API #: 300	)45220	)20
		632-1199	107413	TANK ID (if applicble):	Α	
FIELD REPORT:	(circle one): BGT CONFIRMATION /	RELEASE INVESTIGATION / C	)THER:	PAGE #:	<b>1</b> of	_1
SITE INFORMATION				DATE STARTED:	11/27	//17
QUAD/UNIT: SEC: 1 TWF		NM CNTY: SJ	ST: NM	DATE FINISHED:		
<u>1/4 -1/4/FOOTAGE:</u> <b>1,710'S / 1,</b> LEASE #: <b>NM013686</b>	provide the second s	PE: FEDERAL/STATE/ STRIKE NTRACTOR: MBF - R. F		ENVIRONMENTAL SPECIALIST(S):	JC	В
REFERENCE POIN	I.		7 X 107.72700	GLEU	EV.: 6,3	RAA'
1) 95 BGT (SW/DB)		3780 X 107.727025		RING FROM W.H.:	113', N	
2)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:		
3)	GPS COORD .:		DISTANCE/BEA	RING FROM W.H.:		
4)	GPS COORD .:		DISTANCE/BEA	RING FROM W.H.:		
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR	LAB USED: HALL				OVM READING
1) SAMPLE ID: 95 BGT 5-pt.	@ 5' SAMPLE DATE: 11/27/1	7 SAMPLE TIME: 1234	LAB ANALYSIS: 80'	15B/8021B/300.0	(CI)	(ppm) 0.0
2) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:			
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:			
4) SAMPLE ID:      5) SAMPLE ID:	SAMPLE DATE: SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:			
SOIL DESCRIPTION						
COHESION (ALL OTHERS): NON COHESIVE SUIGHT CONSISTENCY (NON COHESIVE SOILS): MOISTURE: DRY (SLIGHTLY MOIST) MOIST // SAMPLE TYPE: GRAB (COMPOSITE) DISCOLORATION/STAINING OBSERVED: YES SITE OBSERVATIO APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER:	LOOSE       FIRM / DENSE / VERY DENSE       H         WET / SATURATED / SUPER SATURATED       #         # OF PTS.       5         NO       EXPLANATION -         NS:       LOST INTEGRITY OF EQUIPMENT: Y         //ED AND/OR OCCURRED : YES       NO	VATION:	EXPLANATION	NATION		
EXCAVATION DIMENSION ESTIMATION		ft. X <u>NA</u> ft.		TIMATION (Cubic Ya		NA
DEPTH TO GROUNDWATER: >100'	NEAREST WATER SOURCE: >1,000'	NEAREST SURFACE WATER:	>1,000' NMOC	CD TPH CLOSURE STE	5,000	) ppm
SITE SKETCH	BGT Located : off / on site	PLOT PLAN circ	e: attached OVM	CALIB. READ. = 10	0.2 ppm	RF =1.00
	PBGTL T.B. ~ 5' B.G.	FENCE				27/17
SOUND WALLS		PROD. TANK	V P	EF #: P-874 ID: VHIXON J #: ermit date(s): CD Appr. date(s):	IEVB2 06/02/ 09/18/	
	то			0 OVM = Organie 0 ppm = parts pe	c Vapor Meter er million ible: Y /N	
	₩ W.H. TION DEPRESSION; B.G. = BELOW GRADE; B = BELC ELOW-GRADE TANK LOCATION; SPD = SAMPLE POI & E WALL: DW - DOUBLE WALL: SB - SINGLE BOTTO	DW; T.H. = TEST HOLE; ~ = APPROX.; NT DESIGNATION; R.W. = RETAINING		BGT Sidewalls Visi lagnetic declinat	ible: Y / N	E
NOTES: GOOGLE EARTH IMAC		ONSITE: 11/27/	17			

revised: 11/26/13

tion of the local division of the local divi

BEI1005E-6.SKF

Hall Environmental Analys	is Laborat	tory, Inc.			Analytical Report Lab Order 1711C57 Date Reported: 11/29/20	)17
CLIENT:Blagg EngineeringProject:PRITCHARD A 2ALab ID:1711C57-001	Matrix: S		Collection 1	Date: 11/	BGT 5-pt @ 5' 27/2017 12:34:00 PM 28/2017 7:00:00 AM	
Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	11/28/2017 2:11:36 PM	35186
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst:	том
Diesel Range Organics (DRO)	58	10	mg/Kg	1	11/28/2017 2:16:04 PM	35180
Motor Oil Range Organics (MRO)	220	50	mg/Kg	1	11/28/2017 2:16:04 PM	35180
Surr: DNOP	85.1	70-130	%Rec	1	11/28/2017 2:16:04 PM	35180
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	11/28/2017 2:04:42 PM	G47368
Surr: BFB	87.8	15-316	%Rec	1	11/28/2017 2:04:42 PM	G47368
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.020	mg/Kg	1	11/28/2017 2:04:42 PM	B47368
Toluene	ND	0.040	mg/Kg	1	11/28/2017 2:04:42 PM	B47368
Ethylbenzene	ND	0.040	mg/Kg	1	11/28/2017 2:04:42 PM	B47368
Xylenes, Total	ND	0.081	mg/Kg	1	11/28/2017 2:04:42 PM	B47368
Surr: 4-Bromofluorobenzene	85.5	80-120	%Rec	1	11/28/2017 2:04:42 PM	B47368

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

C	hain-o	of-Cus	stody Record	Turn-Around	Time:	SAME															
Client:	and the second s	the second se	/ BP AMERICA	Standard	Rush _	DAY )													NT/		r
			Terribility Add	Project Name							www										
Mailing A	ddress:	P.O. BO	X 87	PR	ITCHARD	A # 2A		490	01 Ha									37109	9		
		BLOOM	FIELD, NM 87413	Project #:					1. 50							-345					
Phone #:		(505) 63	2-1199	1								A	naly	ysis	Red	ques	st				
email or I	Fax#:			Project Mana	ger:									4)				300.1)		T	
QA/QC Pa	-		Level 4 (Full Validation)		JEFFREY C	. BLAGG	FMB <sup>I</sup> s (8021B)	s only)	/ MRO)			(S)		PO4,SO	PCB's			ter - 30(			
Accredita	tion:			Sampler:	JEFFREY C	BLAGG	₩8	(Ga:	SRO	<del>,</del>	F	SIN		10 <sub>2</sub> ,	3082			/wa		du	
	and the second se	Other			X Yes		Ŧ	HdT	1/0	418.	504.	827(	5	O3, N	3 / Se		(VC	300.0		e sa	N N
	Туре)	1			erature:/.	O sais		BE +	(GR	por	poc	o	etal	CI,N	icide	A)	1-VC	-il	4	osit	N o
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	X + MTBE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	<b>RCRA 8 Metals</b>	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water -	Grab cample	t. composite sample	Air Bubbles (Y or N)
			A 11/28/17	Meat Kit	Type	THC ST	BTEX	BTE	TPH	Ē	ā	PAI	Ŝ	Ani	808	826	827	B	L L	5 pt.	Air
11/27/17	1234	SOIL	95 BGT 0.75'	4 oz 1	Cool	105-	V		V									V		V	
																				T	
Date:	Time:	Relinquish	Blagg	Received by:	àu	Date Time		arks	-	REF	EREN	CE#V	VHEN	APP	LICAL	BLE;		VITH CO	ORRESPO	NDING	3 VID
Date:	Time:	Relinquishe		Received by:	A	Date Time /// 28//7			VID: 1					/ VA	INCE		UN				
11/27/17	1910	1 Dra	Hallo	(III	hm R	0706	Refe	erend	ce #	_	P - 8	374									

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

### QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1711C57

29-Nov-17

Client: Project:	22	Engineering CHARD A 2A									
Sample ID	MB-35186	SampTy	pe: ml	blk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 35	35186 RunNo: 47367							
Prep Date:	11/28/2017	Analysis Da	ate: 1'	1/28/2017	5	SeqNo: 1	512196	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-35186	SampTy	pe: Ics	5	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 35	186	F	RunNo: 4	7367				
Prep Date:	11/28/2017	Analysis Da	ate: 11	1/28/2017	5	SeqNo: 1	5 <mark>121</mark> 97	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.6	90	110			

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 2 of 5

**Project:** 

### QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

PRITCHARD A 2A

Client: Blagg Engineering

Sample ID LCS-35180	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 35180	RunNo: 47354	
Prep Date: 11/28/2017	Analysis Date: 11/28/2017	SeqNo: 1510950	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	49 10 50.00	0 98.1 73.2	114
Surr: DNOP	3.9 5.000	78.6 70	130
Sample ID MB-35180	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 35180	RunNo: 47354	
Prep Date: 11/28/2017	Analysis Date: 11/28/2017	SeqNo: 1510951	Units: mg/Kg
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	8.5 10.00	85.5 70	130
Sample ID LCS-35150	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 35150	RunNo: 47354	
Prep Date: 11/27/2017	Analysis Date: 11/28/2017	SeqNo: 1512100	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	94.1 70	130
Sample ID MB-35150	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 35150	RunNo: 47354	
Prep Date: 11/27/2017	Analysis Date: 11/28/2017	SeqNo: 1512101	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	10 10.00	103 70	130

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- PQL Practical Quanitative Limit
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- W Sample container temperature is out of limit as specified

Page 3 of 5

WO#: 1711C57

29-Nov-17

### QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1711C57

29-Nov-17

Client: Project:		gineering ARD A 2A	A								
Sample ID	RB	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	ine Rang	е	
Client ID:	PBS	Batch	n ID: G4	7368	F	RunNo: 4	7368				
Prep Date:		Analysis D	ate: 1	1/28/2017	5	SeqNo: 1	511580	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 890	5.0	1000		89.4	15	316			
Sample ID	2.5UG GRO LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	ine Rang	е	
Client ID:	LCSS	Batch	n ID: G4	7368	F	RunNo: 4	7368				
Prep Date:		Analysis D	ate: 1	1/28/2017	S	SeqNo: 1	511581	Units: mg/Kg	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	22	5.0	25.00	0	88.7	75.9	131			
Surr: BFB		1000		1000		100	15	316			
Sample ID	MB-35154	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015D: Gasol	ine Rang	e	
Client ID:	PBS	Batch	n ID: 35	154	F	unNo: 4	7368				
Prep Date:	11/27/2017	Analysis D	ate: 11	1/28/2017	S	eqNo: 1	511588	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		880		1000		88.1	15	316			
Sample ID	LCS-35154	SampT	ype: LC	S	Tes	Code: E	PA Method	8015D: Gasol	ine Rang	e	
Client ID:	LCSS	Batch	n ID: 35	154	F	unNo: 4	7368				
Prep Date:	11/27/2017	Analysis D	ate: 11	1/28/2017	S	eqNo: 1	511589	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000		1000		102	15	316			

Qualifiers:

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- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 4 of 5
- 1 uge
- etection Limit

## QC SUMMARY REPORT

Hall	Environmental	Analysis	Laboratory, Inc.	
-				

Client:Blagg EngineeringProject:PRITCHARD A 2A

								_		
Sample ID RB	Samp	Туре: МЕ	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch ID: B47368			RunNo: 47368						
Prep Date:	Analysis Date: 11/28/2017		SeqNo: 1511605			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								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	80	120			
Sample ID 100NG BTEX LCS	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: B4	7368	F	RunNo: 4	7368				
Prep Date:	Analysis [	Date: 11	/28/2017	S	SeqNo: 1	511606	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	77.3	128			
Toluene	0.93	0.050	1.000	0	92.6	79.2	125			
Ethylbenzene	0.92	0.050	1.000	0	92.0	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	92.6	81.6	129			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	80	120			
Sample ID MB-35154	Samp	Туре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batc	h ID: 35	154	F	RunNo: 4	7368				
Prep Date: 11/27/2017	Analysis [	Date: 11	/28/2017	5	SeqNo: 1	511613	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	80	120			
Sample ID LCS-35154	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: LCSS	Batc	h ID: 35	154	F	RunNo: 4	7368				
Prep Date: 11/27/2017	Analysis [	Date: 11	/28/2017	S	SeqNo: 1	511614	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.1	80	120			

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

WO#: 1711C57 29-Nov-17

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albuq TEL: 505-345-3975 I Website: www.hali	4901 Hawkins N guerque, NM 8710 FAX: 505-345-410	<sup>E</sup> 9 Sam	ple Log-In Check	List
Client Name: BLAGG	Work Order Number:	1711C57		RcptNo: 1	
Received By: Anne Thorne	11/28/2017 7:00:00 AM		Anne Home	-	
Completed By: Anne Thorne	11/28/2017 8:56:50 AM		am Im	-	
Reviewed By: ENM	11/28/17				
Chain of Custody					
1. Custody seals intact on sample bottles?		Yes	No 🗌	Not Present 🗹	
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the samples?		Yes 🗹	No 🗌		
5. Were all samples received at a temperature	of >0° C to 6.0°C	Yes 🗹	No 🗌		
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) proper	y preserved?	Yes 🗹	No 🗌		
9. Was preservative added to bottles?		Yes	No 🗹	NA 🗆	
10.VOA vials have zero headspace?		Yes	No	No VOA Vials 🗹	
11. Were any sample containers received broke	n?	Yes	No 🗹	# of preserved	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	for pH: (<2 or >12 unle	ss noted)
13. Are matrices correctly identified on Chain of	Custody?	Yes 🖌	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?		Yes 🗹	No 🗌		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗌	Checked by:	
Special Handling (if applicable)					
16. Was client notified of all discrepancies with the	nis order?	Yes 🔀	No 🗌	NA	
Person Notified	Date	*****	Charles (2 State / Lands States)		

Person N	lotified:	JB	#BM-0449N0604070220	Date		AND INCOMENDATION AND AND AND AND AND AND AND AND AND AN	
By Whor	n:	AT		Via:	eMail X	Phone 🗌 Fax	In Person
Regardin	g:	Ser	nolo TI	)			
Client Ins	structions:						
Additional rem	arks:	per J	B Sar	yok ID	15 95	BGT SP	
Cooler Inform	nation						AT 11/28/17
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By	
1	1.0	Good	Yes				1
	By Whor Regardin Client Ins Additional rem <u>Cooler Inform</u>		By Whom: Regarding: Client Instructions: Additional remarks: Cooler Information Cooler No Temp °C Condition	By Whom: Regarding: Client Instructions: Additional remarks: Cooler Information Cooler No Temp °C Condition Seal Intact	By Whom:     AT     Via:       Regarding:     Scemple TD       Client Instructions:     Sce below       Additional remarks:     Dev JB Sample TD       Cooler Information     Cooler No       Cooler No     Temp ℃	By Whom: Regarding: Client Instructions: At Via: eMail X Scemple TD Sce below Additional remarks: Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date	By Whom: Regarding: Client Instructions: AT Via:  eMail Phone Fax See below Client Instructions: See below At Via:  eMail Phone Fax See below Client Instructions: See below Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By

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