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

12384

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

Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit,	Below-Grade Ta	nk, or		
Proposed Alternative M	Method Permit or	Closure Plan A	pplication, co	Ne DIV DIST 3
			UIL GO	MO. DIA DIO 19 6

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   Modification to an existing permit/or registration   Closure plan only submitted for an existing permitted or resisting permitted per	
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, below-g Please be advised that approval of this request does not relieve the operator of liability should operations result in environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable gove	pollution of surface water, ground water or the
Operator: RP America Production Company	18
Operator: BP America Production Company OGRID #: OGRID #: 77	
Address:200 Energy Court, Farmington, NM 87401	
Facility or well name:Gallegos Canyon Unit Com B 143	
API Number:3004507857 OCD Permit Number:	
U/L or Qtr/Qtr $_{F}$ Section $_{25}$ Township $_{29N}$ Range $_{12W}$ C	county:San Juan
Center of Proposed Design: Latitude36.69921 Longitude108.05496	NAD: □1927 ⊠ 1983
Surface Owner:   Federal  State  Private  Tribal Trust or Indian Allotment	
2.	
Pit: Subsection F, G or J of 19.15.17.11 NMAC	
Temporary:  Drilling  Workover	
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low	= -
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	er
String-Reinforced	D:
Liner Seams: Welded Factory Other Volume: bbl	Dimensions: Lx Wx D
3.	
Below-grade tank: Subsection I of 19.15.17.11 NMAC Tank A	,
Volume:95.0bbl Type of fluid:Produced water	
Tank Construction material:Steel	
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic over	rflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other _Double walled/double botto	med; side walls not visible
Liner type: Thicknessmil	
4.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environment	al Bureau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school,	hospital,
institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	
Alternate. Flease specify	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
☐ Screen ☐ Netting ☐ Other	
Monthly inspections (If netting or screening is not physically feasible)	
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	
s. Variances and Exceptions:	
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptant material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells	Yes No
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks)  - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site    Yes   No	Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
watering purposes, or 300fect of fav other fresh water well or spring, in existence at the time of the initial application.  Moffice of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any takehed, sinkhole, or playa lake (measured from the endinary high-water mark).  - Topographic map, Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Acrief ploto; Satellite image  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of the initial application.  - Visual inspection (certification) of the proposed site water well not pring, in the evidence of the initial application.  - Visual inspection (certification) of the proposed site water well used by the proposed site water well used by the proposed site water well used to the site of the initial application.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site    Wetland 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site within 300 feet of any primare in a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site, Aerial plotos, Sacilite image  Within 300 feet of water and will be subject to the proposed site will be subject to the proposed site will be subjected by the proposed site will be subjected by the proposed site wille		
US Fish and Wildlife Wetland Identification map: Topographic map: Visual inspection (certification) of the proposed site   Ves   No   No   Office of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (meansemed from the entiringsy high-water mark).   Topographic map; Visual inspection (certification) of the proposed site   Ves   No   Wikhin 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.   Visual inspection (certification) of the proposed site, Aerial photo, Satellite image   Ves   No   Wikhin 300 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stuck watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;   No   No   No   No   No   No   No   N	watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or plays lake (measured from the ordinary high-water mark).  Visual inspection (certification) of the proposed site, Aerial photo; Satellite image  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site, Aerial photo; Satellite image  Within 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  Permanent Pit or Multi-Well Fluid Management Pit  Within 300 feet of a eweland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Permanent Pit or Multi-Well Fluid Management Pit  Within 1000 feet from a permanent residence, school, hospital, institution, or clurch in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  No Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  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.  Us Fish and Wildlife Welland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  Us Fish and Wildlife Welland Identification map; Topographic map; Visual inspection (certification)		Yes No
or playa lake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site.  Within 300 feet from a permanent residence, school, hospitul, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site, Aerial photo; Satellite image.  Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less tima five households for domestic or stock, watering purposes, or 1000 feet of any other fitsh 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.  Permanent Pit or Multi-Well Fluid Management Pit  Within 300 feet of a westand.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site.  Permanent Pit or Multi-Well Fluid Management Pit  Within 300 feet of a continuously flowing waterourse, or 200 feet of any other significant waterourse, or lakebed, sinkhole, or playa lake (measured from the ordinery) high-water mark).  Jopographic map; Visual inspection (certification) of the proposed site.  Within 500 feet from a permanent residence, school, hospital, institution, or clutuch in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual insp	Temporary Pit Non-low chloride drilling fluid	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site, Aerial photo; Satellite image    ves   No	or playa lake (measured from the ordinary high-water mark).	
Visual inspection (certification) of the proposed site, Aerial photo; Satellite image    Yes   No Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;   No Moffice of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site   Yes   No Within 300 feet of a wetland.   US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   Yes   No Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).   Topographic map; Visual inspection (certification) of the proposed site   Yes   No Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.   Visual inspection (certification) of the proposed site; Aerial photo; Sactllite image   Yes   No Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.   No Within 500 feet of a wetland.   US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   Yes   No Within 500 feet of a wetland.   US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   Yes   No Within 500 feet of a wetland.   Us Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   Yes   No Within 500 feet of a wetland.   Within 5		Yes No
watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site    Yes   No	Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  USF ish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  USF ish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  USF ish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  USF ish 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 (3) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate propriate requirements of 19.15.17.10 NMAC  Previously Approved Design (attach copy of design) API Number:  Operating and Maintenance Plan - based u	watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;	Yes No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  Topographic map, Visual inspection (certification) of the proposed site  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Ves \  No  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes \  No  Instructions: Each of the following Items must be attached to the application. Pleuse indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the appropriate requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Chesting Plan - based upon the appropriate requirements of 19.15.17.1 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.1 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number:  III.  Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number:  Hydrogeologic Data complete Boxe		☐ Yes ☐ No
lake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within 500 feet of a wetland.  USF Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  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 Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  String Criteria Compliance Demonstrations - based upon the appropriate requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Previously Approved Design (attach copy of design) API Number:  or Permit Number:  multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.19 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.18 NMAC  Previously Approved Design (attach copy of design) API Number:  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.19 NMAC  Operating and Maintenance Plan - based up	Permanent Pit or Multi-Well Fluid Management Pit	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image    Yes   No	lake (measured from the ordinary high-water mark).	□ Yes□ No
Visual inspection (certification) of the proposed site; Aerial photo; Satellite image    Yes   No		
initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site    Yes   No		
OS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site    Yes No  No  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  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 19.15.17.9 NMAC and 19.15.17.13 NMAC  Previously Approved Design (attach copy of design) API Number:  or Permit Number:  multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.10 NMAC		Yes No
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 19.15.17.11 NMAC   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC   Previously Approved Design (attach copy of design)	Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
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 19.15.17.11 NMAC   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC   Previously Approved Design (attach copy of design)   API Number:		
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.5 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC	
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	☐ Previously Approved Design (attach copy of design) API Number: or Permit Number:	
<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 19.15.17.9 NMAC</li> <li>and 19.15.17.13 NMAC</li> <li>□ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>□ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	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 do	cuments are
Previously Approved Design (attach copy of design) API Number: or Permit Number:	attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
attached.  ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Quality Control/Quality Assurance Construction and Installation Plan ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F. Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	attached to the
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. 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
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	<ul><li>☐ Yes ☐ No</li><li>☐ NA</li></ul>
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
Within a 100-year floodplain.	☐ Yes ☐ No
- FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	11 NMAC 15.17.11 NMAC
Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed.	ef.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature:  Approval Date: 12/1/5  OCD Permit Number:	2014
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.    Closure Completion Date: 4/25/2012	
20.  Closure Method:  Waste Excavation and Removal □ On-Site Closure Method □ Alternative Closure Method □ Waste Removal (Closed-loc □ If different from approved plan, please explain.	pp systems only)
21. <u>Closure Report Attachment Checklist</u> : Instructions: Each of the following items must be attached to the closure report. Please indimark in the box, that the documents are attached.	licate. by a check

Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure rebelief. I also certify that the closure complies with all applicable closure requirements.	
Name (Print):Jeff Peace	Title: Field Environmental Coordinator
Signature: If Passe	Date:November 20, 2014
e-mail address:peace.jeffrey@bp.com	Telephone:(505) 326-9479

#### BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK CLOSURE PLAN

# Gallegos Canyon Unit Com B 143 API No. 3004507857 Unit Letter F, Section 25, T29N, R12W

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

#### General Closure Plan

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 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.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 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 to a storage area for sale and re-use.

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

All equipment associated with the BGT has been removed.

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

Constituents	Testing Method	Release Verification	Sample
	95 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	ND
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	ND
ТРН	US EPA Method SW-846 418.1	100	43
Chlorides	US EPA Method 300.0 or 4500B	250 or background	26

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 and TPH, BTEX and chloride levels were below the stated limits. Sampling data is attached.

- 7. BP shall notify the division District III office of its results on form C-141. C-141 is attached.
- 8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

  Sampling results indicate no release occurred.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

The area under the BGT was backfilled with clean soil and is still within the active well area.

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 over the BGT is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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 over the BGT is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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 over the BGT is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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.

BP will seed the area when the well is plugged and abandoned as part of final reclamation.

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

#### BP will notify NMOCD when re-vegetation is successful.

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

Certification section of C-144 has been completed.

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

Form C-141 Revised August 8, 2011

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

			Rele	ease Notifi	catio	n	and Co	orrective A	Action	n	
						(	OPERA	ГOR		Initia	al Report 🛛 Final Repor
Name of Co						_	Contact: Jef				
		Court, Farmi						No.: 505-326-9			
Facility Na	ne: Galleg	gos Canyon U	Jnit Com	B 143		F	acility Typ	e: Natural gas	well		
Surface Ow	ner: Priva	te		Mineral (	Owner:	P	rivate			API No	. 3004507857
				LOCA	ATIO	N	OF REI	LEASE			
Unit Letter	Section	Township	Range	Feet from the			outh Line	Feet from the	,	West Line	County: San Juan
F	25	29N	12W	1,926	North	h		1,450	West		
		Lati	itude3	6.69921			Longitud	e108.05496			
				NAT	ΓURE	C (	OF RELI	EASE			
Type of Rele								Release: N/A		Volume F	Recovered: N/A
Source of Re	lease: belov	v grade tank –	95 bbl				Date and H N/A	lour of Occurrer	ice:	Date and	Hour of Discovery: N/A
Was Immedia	ate Notice (	Given?		· · · · · · · · · · · · · · · · · · ·		+	If YES, To	Whom?			
			Yes	] No 🛛 Not R	equired	۱					
By Whom?							Date and H				
Was a Water	course Read		Yes 🗵	] No			If YES, Vo	lume Impacting	the Wat	ercourse.	
If a Watercou	ırse was Im	pacted, Descri	ibe Fully.*	k						****	
		•	•								
Describe Cau	se of Probl	em and Remed	dial Action	n Taken * Sampli	no of th	ne i	soil beneath	the RGT was d	one duri	no removal i	to ensure no soil impacts from
the BGT. So	il analysis r	esulted in TPI	H, BTEX	and chloride belo	w stand	lar	ds. Analysi	is results are atta	iched.	ig removar	to choure no son impacts from
Describe Are	a Affected	and Cleanup A	Action Tak	ten.* BGT was re	moved	an	d the area u	nderneath the B	GT was	sampled. Ti	ne area under the BGT was
backfilled and	d compacte	d and is still w	ithin the a	active well area.							
	6 (1 (1 )			· · · · · · · · · · · · · · · · · · ·	1	.1	1	1 1 1 1		1.1	NR (OCD 1 1
											uant to NMOCD rules and cases which may endanger
public health	or the envi	ronment. The	acceptance	ce of a C-141 repo	ort by th	he Ì	NMOCD ma	arked as "Final I	Report"	does not reli	eve the operator of liability
should their o	perations h	ave failed to a	dequately	investigate and r	emedia	te	contamination	on that pose a th	reat to g	round water	, surface water, human health
		ws and/or regu		tance of a C-141	report o	aoe	es not renev	e the operator of	respons	of the state of th	ompliance with any other
	0.00	^					· · · - · · · · · · · · · · · · ·	OIL CON	ISERV	ATION	DIVISION
Signature:	Jeff 1	soil						•		•	
Signature.	XIT "	900				Α	nnroved hy	Environmental	Snecialis	ıt.	
Printed Name	: Jeff Peace	<u>e</u>				<i>,</i> ,			Specialic		
Title: Field E	nvironment	tal Coordinato	r			A	pproval Dat	e:		Expiration 1	Date:
F-mail Addre	ess neace is	effrey@bp.cor	n			C	onditions of	`Annroval·			
D-man Addre	ss. peace.je	лису адор.сог					onditions 01	ripprovai.			Attached
Date: Novem	nber 20, 20	14	Pho	ne: 505-326-947	9						

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

CLIENT: BP	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413	API #: 3004507857
	(505) 632-1199	(if applicble):
FIELD REPORT:	(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:	PAGE #:1 of1_
SITE INFORMATION	: SITE NAME: GCU COM B # 143	DATE STARTED: <b>04/17/12</b>
QUAD/UNIT: F SEC: 25 TWP:	29N RNG: 12W PM: NM CNTY: SJ ST: NM	DATE FINISHED:
1/4-1/4/FOOTAGE: 1926'N / 1450		- ENVIRONMENTAL
LEASE#: -	PROD. FORMATION: DK CONTRACTOR: MBF - J. POWELL	SPECIALIST(S): NJV
REFERENCE POINT	<u> </u>	GL ELEV.: <b>5,497'</b>
•		EARING FROM W.H.: 101.5', S3W
2) 400 BBL PROD. TANK	GPS COORD.: 36.699126 X 108.055136 DISTANCE/E	EARING FROM W.H.: 144', S26W
3)	GPS COORD.: DISTANCE/E	EARING FROM W.H.:
		EARING FROM W.H.:
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL	READING (ppm)
•	BGT) SAMPLE DATE: 04/17/12 SAMPLE TIME: 1201 LAB ANALYSIS: 418.1	
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
SOIL DESCRIPTION		THER
SOIL COLOR: DARK YELL  COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY		/ COHESINE / MEDITIM PLASTIC / HIGHLY PLASTIC
CONSISTENCY (NON COHESIVE SOILS): LC	OSE FIRM DENSE / VERY DENSE DENSITY (COHESIVE CLAYS & SILTS): SOF	
MOISTURE: DRY SLIGHTLY MOIST / WOIST / WO	110 00011 01 120 110 121	LANATION
SAMPLE TYPE: GRAB COMPOSITE # OF PTS.  DISCOLORATION/STAINING OBSERVED:		
ANY AREAS DISPLAYING WETNESS: YES NO		
ADDITIONAL COMMENTS: NO APPARE	NT EVIDENCE OF A RELEASE FROM BGT OBSERVED.	
	NA V NA V NA	
		CTIMATION (Cubic Yards) : NA COUNTRY THE CLOSURE STD: 100 ppm
SITE SKETCH	TO A PLOT PLAN circle: attached OV	M CALIB. READ. = NA ppm RF = 0.52
	WELL OV	M CALIB. GAS = NA ppm
	PERIMETER SECURITY N	E: NA am/pm DATE: NA
	FENCE	MISCELL. NOTES
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>\</b>	WO - N1535725
C	PBGTL	PO - 75695
5 PROD. 2 TANK X	T.B. ~ 6' X COMMERICAL BERM B.G. PROPERTY	PK - ZSCHWLLBGT PJ # - Z2-00690-C
9	YARD	PJ # - Z2-00030-C
	*	Permit date(s): 06/14/10
		OCD Appr. date(s): 02/01/12
		nk D
	X - S.P.D.	
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAV	ATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL;	BGT Sidewalls Visible: Y / N / NA
NA - NOT APPLICABLE OR NOT AVAILABLE	SW-SINGLE WALL; DW-DOUBLE WALL; SB-SINGLE BOTTOM; DB-DOUBLE BOTTOM.	Magnetic declination: 10° E
TRAVEL NOTES: CALLOUT:	04/17/12 - Morn. ONSITE: 04/17/12 - Morn. (Sch	ed.)

#### **Analytical Report**

Lab Order 1204778

Date Reported: 4/25/2012

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: GCU Com B #143

Lab ID: 1204778-001

Client Sample ID: 5PC-TB @ 6' (95 BGT)

Collection Date: 4/17/2012 12:01:00 PM

Received Date: 4/19/2012 9:53:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE	ORGANICS				Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/23/2012 11:40:05 AM
Surr: DNOP	91.4	77.4-131	%REC	1	4/23/2012 11:40:05 AM
EPA METHOD 8015B: GASOLINE RAN	IGE				Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/23/2012 2:25:07 PM
Surr: BFB	99.4	69.7-121	%REC	1	4/23/2012 2:25:07 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>
Benzene	ND	0.048	mg/Kg	1	4/23/2012 2:25:07 PM
Toluene	ND	0.048	mg/Kg	1	4/23/2012 2:25:07 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/23/2012 2:25:07 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/23/2012 2:25:07 PM
Surr: 4-Bromofluorobenzene	89.1	80-120	%REC	1	4/23/2012 2:25:07 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>BRM</b>
Chloride	26	7.5	mg/Kg	5	4/23/2012 10:18:41 AM
EPA METHOD 418.1: TPH					Analyst: <b>JMP</b>
Petroleum Hydrocarbons, TR	43	20	mg/Kg	1	4/23/2012

Matrix: SOIL

#### Qualifiers:

- \*/X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1204778 25-Apr-12

Client:

Blagg Engineering

Project:

GCU Com B #143

Sample ID MB-1642

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

**PBS** 

Batch ID: 1642

RunNo: 2311

Prep Date: 4/23/2012 Analysis Date: 4/23/2012

SeqNo: 64104

Analyte

Units: mg/Kg HighLimit

**RPDLimit** 

Qual

Chloride

**PQL** ND 1.5

Sample ID LCS-1642

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

4/23/2012

Batch ID: 1642 Analysis Date: 4/23/2012

RunNo: 2311

Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit

SeqNo: 64105

Analyte

PQL

15.00

0

%REC

110

Qual

Chloride

14

%RPD

Prep Date:

Result

1.5

SPK value SPK Ref Val

95.1

90

HighLimit

%RPD

**RPDLimit** 

R

Qualifiers: Value exceeds Maximum Contaminant Level. \*/X

Ε Value above quantitation range

Analyte detected below quantitation limits RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

> Н Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit

Page 2 of 6

Reporting Detection Limit RL

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1204778

25-Apr-12

Client:

Blagg Engineering

Project:

GCU Com B #143

Sample ID MB-1625

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID:

Prep Date:

PBS

4/20/2012

Batch ID: 1625

RunNo: 2292

Analysis Date: 4/23/2012

PQL

20

SegNo: 63555

Units: mg/Kg

%RPD **RPDLimit** 

Qual

Analyte Petroleum Hydrocarbons, TR Result ND

Sample ID LCS-1625

Prep Date: 4/20/2012

Petroleum Hydrocarbons, TR

SampType: LCS

TestCode: EPA Method 418.1: TPH

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Client ID:

LCSS

Batch ID: 1625

Analysis Date: 4/23/2012

**PQL** 

20

20

RunNo: 2292

%REC

97.9

SeqNo: 63556

87.8

LowLimit

Units: mg/Kg

HighLimit

115

**RPDLimit** Qual

Sample ID LCSD-1625

Analyte

Analyte

SampType: LCSD

0

0

TestCode: EPA Method 418.1: TPH

Prep Date: 4/20/2012

Petroleum Hydrocarbons, TR

Client ID: LCSS02

Batch ID: 1625 Analysis Date: 4/23/2012

98

98

RunNo: 2292 SeqNo: 63558

Units: mg/Kg HighLimit LowLimit

%RPD

Qual

**RPDLimit** 

8.04

SPK value SPK Ref Val %REC

100.0

100.0

SPK value SPK Ref Val

97.9

87.8

115

#### Qualifiers:

Value exceeds Maximum Contaminant Level. \*/X

Value above quantitation range

Analyte detected below quantitation limits J

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit

Reporting Detection Limit

Н

Page 3 of 6

RPD outside accepted recovery limits R

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1204778

25-Apr-12

Client:

Blagg Engineering

Project:

GCU Com B #143

Sample ID MB-1632	Samp	Туре: МІ	BLK	TestCode: EPA Method 8015B: Diesel Range Organics						
Client ID: PBS	Batc	Batch ID: 1632			RunNo: 2	293				
Prep Date: 4/20/2012	Analysis [	Date: 4	/23/2012	5	SeqNo: 6	3573	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.9		10.00		89.2	77.4	131			
Sample ID LCS-1632	Samp	Туре: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (	Organics	
Client ID: LCSS	Batc	h ID: <b>16</b>	32	F	RunNo: 2	293				
Prep Date: 4/20/2012	Analysis [	Date: 4/	23/2012	S	SeqNo: 6	3951	Units: mg/F	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.7	62.7	139			
Surr: DNOP	3.9		5.000		78.0	77.4	131			

#### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Page 4 of 6

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1204778

25-Apr-12

Client:

Blagg Engineering

Project:

GCU Com B #143

Sample ID MB-1617 SampType: MBLK TestCode: EPA Method 8015B: Gasoline Range Client ID: **PBS** Batch ID: 1617 RunNo: 2269 Prep Date: 4/19/2012 Analysis Date: 4/20/2012 SeqNo: 63904 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 990 1,000 99.3 69.7 121

Sample ID LCS-1617	TestCode: EPA Method 8015B: Gasoline Range									
Client ID: LCSS Batch ID: 1617				RunNo: <b>2269</b>						
Prep Date: 4/19/2012	Analysis Date: 4/20/2012			SeqNo: <b>63905</b>			Units: mg/k			
Analyte .	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	98.5	.133			
Surr: BER	1 100		1 000		107	69.7	121			

#### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **1204778** 

25-Apr-12

Client: Project:

Blagg Engineering GCU Com B #143

Sample ID MB-1617	Samp	Гуре: МЕ	BLK	Tes						
Client ID: PBS	Batch ID: <b>1617</b> Analysis Date: <b>4/20/2012</b>			F	RunNo: 2	269				
Prep Date: 4/19/2012				SeqNo: <b>63944</b>			Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	80	120			

Sample ID LCS-1617	SampType: LCS			TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batc	h ID: 16	17	F	RunNo: 2	269							
Prep Date: 4/19/2012	M19/2012 Analysis Date: 4/20/2012 SeqNo: 63945		3945	Units: mg/k									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit %RF		RPDLimit	Qual			
Benzene	0.94	0.050	1.000	0	93.5	83.3	107			- "			
Toluene	0.97	0.050	1.000	0	97.5	74.3	115						
Ethylbenzene	0.97	0.050	1.000	0	96.6	80.9	122						
Xylenes, Total	2.9	0.10	3.000	0	96.4	85.2	123						
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120						

#### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Page 6 of 6

RL Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

# Sample Log-In Check List

Clie	nt Name:	BLAGG			Work	Order	Num	ber:	1204778	3			
Rec	eived by/date	:.15_	0	14/19/12		_							
Log	ged By:								irulo Gani irulo Gani	ښ			
Con	1/10/12							mi	ihille Gana	ښ			
Rev	viewed By:		_ 04	19/12					•				
<u>Cha</u>	in of Cust	ody	7				,						
1.	Were seals i	ntact?			Y	s 🗌	No		Not F	resent 🗹			
2.	Is Chain of C	Custody compl	ete?		Y	es 🗹	No		Not F	Present 🗌			
3.	How was the	sample delive	ered?		<u>G</u> i	eyhou	<u>nd</u>						
<u>Log</u>	<u>In</u>												
4.	Coolers are p	present? (see	19. for cooler spe	ecific information)	Ye	es 🔽	No			na 🗆			
<b>5</b> .	Was an atter	npt made to c	ool the samples?	•	Ye	s 🗹	No			NA $\square$			
6.	Were all sam	nples received	at a temperature	e of >0° C to 6.0°C	; Ye	s 🗹	No			NA 🗌			
7.	Sample(s) in	proper contail	ner(s)?		Ye	s 🗸	No						
			or indicated test(s	Υe	s 🗹	No							
9.	Are samples	(except VOA	and ONG) proper	rly preserved?	Υe	s 🗹	No						
10.	Was preserva	ative added to	bottles?		Ye	s 🗆	No	V		NA 🗆			
11.	VOA vials ha	ve zero heads	space?		Υe	s 🗆	No		No VOA	∖ Vials 🗹			
12.	Were any sai	mple containe	rs received broke	en?	Υe	s $\square$	No	V					
	• •	ork match bot pancies on cha			Υe	s 🗹	No		þ	of preserventies of the control of t			
14.	Are matrices	correctly ident	tified on Chain of	Custody?	Ye	s 🛂	No				(<2 or >	12 unless noted	)
15.	Is it clear wha	at analyses we	ere requested?		Ye					Adjus	ted?		
_		ling times able customer for a			Ye	s 🔽	Νo	Ш		Check	ed bv:		
Spec	cial Handli	ing (if appl	icable)										
17.	Was client no	otified of all dis	crepancies with t	this order?	Ye	s 🗌	No			NA 🗹			
	By Who Regardi	Essera		Da Vi	ate:	lail [	] Ph	one	☐ Fax	☐ In Per	son		
18.	Additional rer	marks:						-				_	
19. :	Cooler Information Cooler No.	Temp ºC	Condition Se	eal Intact   Seal No	Seal I	Date	<sup> </sup> . 8	Signe	d By				

Chain-of-Custody Record		Turn-Around Time;					1 1	<b>-</b>	I A I		F	NV	TE		M »	4EN	JT#	L E			
Client: BLAGG ENGR. / BP AMERICA		☑ Standard			H												r				
		✓ Standard ☐ Rush Project Name:				ANALYSIS LABORATORY															
Malling Address: P.O. BOX 87  BLOOMFIELD, NM 87413  Phone #: (505) 632-1199  email or Fax#:		GCU Com B # 143					www.hallenvironmental.com														
		Project #:				4901 Hawkins NE - Albuquerque, NM 87109  Tel. 505-345-3975 Fax 505-345-4107															
																	State of		بر بر		
		Project Manag	jer:	<del></del>					) -				1.1			-10.00		7	T		
QA/QC Package:  Standard Level 4 (Full Validation)		NELSON VELEZ				only)	(Gas/Diesel)					204, 504)	B's		ļ						
Accreditat				Sampler:	NELSON VI	ELEZ 92V	s (8021B)	(Gas	Gas/				1	02,1	/ 8082 PCB's					] ğ	
□ NELAP	)	☐ Other		On Ice	α <b>ζ</b> (Yes	⊡.No	1	PH (		8.1)	4.1)	Ξ	ŀ	Ž,	808					Sar	Ì
□ EDD (Type)		Sample Temp	er <b>at</b> ure:	1.5		E + T	1801	d 41	d 50	Y.	SE	8	S		Q	0:0	<u>a</u>	osite	1		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO.	BTEX +************************************	BTEX + MTBE	TPH Method 8015B	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4,	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)	Grab sample	5 pt. composite sample	
4/17/12	1201	SOIL	5PC-TB @ 6' (95 BGT)	4 oz 2	Cool	-001	V		٧	V		-		$\dashv$				V	1	V	$\overline{}$
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Date:	Time:	Relinquishe	ed by:	Received by:	١.	Date Time	Ren	nark	S:	TPH	(80	15B	) - G	RO	& D	ORO	ON	LY.			
4/18/12	1340	11/1	an vj	/ Moster	Walter	4/18/12 1346				LY TO					·						
Date:	Time:	Relinquishe	ed by:	Received by: Date Time				Jen Peace, 200 Energy Court, Farmington, NW 87401													
1/18/12	1711	Christini Welle			04/19	112 0953	Work Order: N1535725 Paykey: ZSCHWLLBGT														
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