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

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

Form C-144 Revised June 6, 2013

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

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

		elow-Grade Tank, or		
0 0	Proposed Alternative Me	thod Permit or Closure	e Plan Application	
2048	☐ Modification to an ex ☐ Closure plan only sub	oosed alternative method w-grade tank, or proposed alterr isting permit/or registration	native method  I or non-permitted pit, below-grade tan	k,
5-26787	or proposed alternative method			
Please be advised th	Instructions: Please submit one application (Final approval of this request does not relieve the operators approval relieve the operator of its responsibility.	ntor of liability should operations resu	ult in pollution of surface water, ground water	or the or ordinances.
Operator: BP A	merica Production Company	OGRID #:		
Address:200	Energy Court, Farmington, NM 87401_		OIL CONS. DIV DIST	<del>' 2 -</del>
Facility or well na	Energy Court, Farmington, NM 87401_ ame:Riddle C 6			. <b>U</b>
API Number:	3004526787	OCD Permit Number:	301 2 1 2014	
U/L or Qtr/Qtr _	KSection29Township	31N Range9W	County: San Juan	
Center of Propose	ed Design: Latitude36.866434	Longitude107.8056	88 NAD: 🔲 1927	7 🛛 1983
Surface Owner:	🛮 Federal 🔲 State 🔲 Private 🔲 Tribal Trust or	Indian Allotment		
	ion F, G or J of 19.15.17.11 NMAC			
, ,	Orilling Workover	V 11 72 - 2 1 1 4		
	Emergency  Cavitation P&A Multi-Vilined Liner type: Thicknessmil		<u> </u>	)
String-Reinfor				
	Welded  Factory  Other	Volume:	bbl Dimensions: Lx Wx I	D
3.				
Below-grade	tank: Subsection I of 19.15.17.11 NMAC	Tank A		
Volume:9	95.0bbl Type of fluid:P	roduced water		
Tank Construction	n material:Steel	· 		
☐ Secondary co	ntainment with leak detection   Visible sidew	alls, liner, 6-inch lift and automatic	overflow shut-off	
☐ Visible sidew	ralls and liner 🔲 Visible sidewalls only 🛛 Ot	her _Single walled/single bot	tomed, side walls not visible	
Liner type: Thick	tnessmil	PVC Other		

Alternative Method:

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	hospital,
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC  12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  Signed in compliance with 19.15.16.8 NMAC	
Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
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

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	
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.  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	11 NMAC 15.17.11 NMAC
Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believe	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:  OCD Permit Number:	12014
19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date:5/9/2014	
20.  Closure Method:  Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-lo ☐ If different from approved plan, please explain.	op systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please into mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)	dicate, by a check

Form C-144 Oil Conservation Division Page 5 of 6

# BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

### BELOW-GRADE TANK CLOSURE PLAN

# Riddle C 6, Tank A (95 bbl) API No. 3004526787 Unit Letter K, Section 29, T31N, R9W

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 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 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, Tank A	(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
TPH	US EPA Method SW-846 418.1	100	ND
Chlorides	US EPA Method 300.0 or 4500B	250 or background	ND

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 BTEX, TPH and chloride 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.

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

# State of New Mexico Energy Minerals and Natural Resources

Revised August 8, 2011

Form C-141

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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

			Rele	ease Notific	atio	n and Co	rrective A	ction									
						OPERA?	ГOR		Initia	al Report	$\boxtimes$	Final Report					
Name of Co						Contact: Jef											
		Court, Farmi	ngton, N	M 87401			No.: 505-326-94										
Facility Na	me: Riddle	C 6				Facility Typ	e: Natural gas v	vell			-						
Surface Ow	ner: Feder	al		Mineral C	wner:	Federal		. 3004526	787								
				LOCA	TIO	N OF REI	LEASE										
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/West	Line	County: S	an Juan						
K	29	31N	9W	1,535	South		2,015	West									
		Latit	ude36	.866434	l	Longitud	e107.805688										
				NAT	URE	OF RELI	EASE										
Type of Rele	ase: none						Release: N/A	Vo	lume R	Recovered: N	N/A						
Source of Re	lease: belov	v grade tank –	- 95 bbl, T	ank A		Date and H N/A	Iour of Occurrenc	e: Da	te and	Hour of Dis	covery	: N/A					
Was Immedi	ate Notice (		Yes [	] No 🛛 Not Re	equired	If YES, To	Whom?										
By Whom?		<del>-</del>				Date and F	lour										
Was a Water	Was a Watercourse Reached? ☐ Yes ☑ No						If YES, Volume Impacting the Watercourse.										
If a Watercourse was Impacted, Describe Fully.*							·	<del> </del>									
		<b>,</b>															
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.* Sampli	ng of th	e soil beneath	the BGT was do	ne during rer	moval t	o ensure no	soil im	pacts from					
the BGT. So	il analysis r	esulted in TPI	H, BTEX	and chlorides belo	w stanc	lards. Analys	is results are attac	ched.									
Describe Are	a Affected	and Cleanup 4	Action Tak	en.* BGT was re	moved	and the area u	nderneath the RG	T was samp	led Th	ne evcavate	l area v	vac					
				active well area.	moved	and the area t	nderneam the DO	i was samp	ica. 11	ic excavated	i aica v	vas					
				*													
				is true and comp													
				nd/or file certain re se of a C-141 repo													
should their of	perations h	ave failed to a	dequately	investigate and re	emediat	e contaminati	on that pose a thre	eat to ground	d water	, surface wa	ter, hu	man health					
				tance of a C-141	report d	oes not reliev	e the operator of i	responsibility	y for co	ompliance w	ith any	other					
federal, state,	or local lav	ws and/or regu	ilations.				OIL CONS	SERVAT	ION.	DIVISIO							
(	1000	Dane					OIL COIN	SLICVIII	1011	DIVIDIC	711						
Signature:	YHO	1 gave				A 11	D 1	· 10-4-			•						
Printed Name	e: Jeff Peace	<u> </u>				Approved by	Environmental Sp	pecialist:									
Title: Area E	nvironment	al Advisor				Approval Dat	e:	Expi	ration I	Date:							
E-mail Addre	ess: peace.je	effrey@bp.cor	m			Conditions of	Approval:			Attached							
Date: July 1	8, 2014		Phone: 50	)5-326-9479													

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

CLIENT: BP		NGINEERING, IN LOOMFIELD, NN			526787				
	(50	5) 632-1199		TANK ID (if applicble):	A & B				
FIELD REPORT:	(circle one): BGT CONFIRMATION	RELEASE INVESTIGATION / O	THER:	PAGE #: 1	of <b>1</b>				
SITE INFORMATION				DATE STARTED:	05/01/14				
	31N RNG: 9W PM:			DATE FINISHED:					
1/4-1/4/FOOTAGE: 1,535'S / 2,01 LEASE #: SF078319A	15'W NE/SW LEASE T PROD. FORMATION: PC CO	CTDIVE		ENVIRONMENTAL SPECIALIST(S):	JCB				
REFERENCE POINT				GL ELEV.:	6,276'				
1) <b>95 BGT (SW/SB) - A</b>	GPS COORD.: 36.				67', N20E				
2) <b>21-DOT (SWISD) - D</b>	GPS COORD.: <b>30</b> .	<del>800497 X 107.805907</del>	DI21ANCF1REA	KING FROM W.H	<del>80'; N94W</del>				
	GPS COORD.:	•		RING FROM W.H.:					
	GPS COORD.:			RING FROM W.H.:	OVM				
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # C			•	READING (ppm)				
1) SAMPLE ID: 95 BGT 5-pt. @					` '				
2) SAMPLE ID: <b>21 BGT 5-pt. (b</b> 3) SAMPLE ID:				3015B/3021B/308.	8:61) - 8:8				
	SAMPLE DATE:								
SOIL DESCRIPTION									
COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY CONSISTENCY (NON COHESIVE SOILS): LC MOISTURE: DRY SLIGHTLY MOIST MOIST / W SAMPLE TYPE: GRAB COMPOSITE # DISCOLORATION/STAINING OBSERVED: YES N	OSE/FIRM/DENSE/VERYDENSE ET/SATURATED/SUPER SATURATED  OF PTS.  S EXPLANATION -	DENSITY (COHESIVE CLAYS & S HC ODOR DETECTED: YES NO ANY AREAS DISPLAYING WETNES	EXPLANATION -		RD				
SITE OBSERVATION APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER:	D AND/OR OCCURRED : YES NO EXPL	Anation:	BGT POSITION.						
SOIL IMPACT DIMENSION ESTIMATION:	NA ft. X NA	ft. X NA ft.		IMATION (Cubic Yards)	): <u>NA</u>				
	EAREST WATER SOURCE: >1,000'	NEAREST SURFACE WATER: _	<200' NMOC	D TPH CLOSURE STD:	100 ppm				
SITE SKETCH	BGT Located : off on site	PLOT PLAN circl	OVM	CALIB. READ. = 51.9  CALIB. GAS = 100  : 6:30 amom DATE	ppm RF=1.00 ppm 05/01/14				
	COMPRESSOR	XXX	l w	/o: N1542030					
		(95)	I —	O#:					
	DEDM	PBGTL	PI		GT2				
	BERM	B.G.	_	J#: Z2-006Q0	214.414.0				
			—	CD Appr. date(s): 02					
	A4/11		A	BGT Sidewalls Visible:	: Y (N)				
	<b>W.H.</b> ⊕		- S.P.D.	<del></del>					
NOTES: BGT = BELOWGRADE TANK; E.D. = EXCAVATION T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELICAPPLICABLE OR NOT AVAILABLE; SW-SINGLE		OINT DESIGNATION; R.W. = RETAINING \	N.H. = WELL HEAD; WALL; NA - NOT <u>M</u>	BGT Sidewalls Visible: lagnetic declination					
NOTES:		ONSITE: 05/01	1/14						

BEI1005E-6.SKF

revised: 11/26/13

# **Analytical Report**

## Lab Order 1405108

Date Reported: 5/9/2014

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Project:

Lab ID:

Riddle C 6

1405108-002

Matrix: SOIL

Client Sample ID: 95 BGT 5-pt @ 5'

**Collection Date:** 5/1/2014 2:15:00 PM

Received Date: 5/3/2014 10:20:00 AM

Result	RL Qual Units		DF	Date Analyzed	Batch
ORGANICS				Analys	t: BCN
ND	10	mg/Kg	1	5/6/2014 5:51:57 PM	12995
79.7	57.9-140	%REC	1	5/6/2014 5:51:57 PM	12995
NGE				Analys	t: NSB
ND	4.8	mg/Kg	1	5/7/2014 11:38:59 PM	12999
88.3	74.5-129	%REC	1	5/7/2014 11:38:59 PM	12999
,				Analys	t: NSB
ND	0.048	mg/Kg	1	5/7/2014 11:38:59 PM	12999
ND	0:048	mg/Kg	1	5/7/2014 11:38:59 PM	12999
ND	0.048	mg/Kg	1	5/7/2014 11:38:59 PM	12999
ND	0.097	mg/Kg	1	5/7/2014 11:38:59 PM	12999
104	80-120	%REC	1	5/7/2014 11:38:59 PM	12999
				Analyst	: JRR
ND	30	mg/Kg	20	5/7/2014 3:07:02 PM	13053
				Analyst	BCN
ND	20	mg/Kg	1	5/6/2014	12981
	ND 79.7 NGE ND 88.3 ND ND ND ND ND ND ND ND 104	ND 10 79.7 57.9-140  NGE  ND 4.8 88.3 74.5-129  ND 0.048 ND 0.048 ND 0.048 ND 0.048 ND 0.097 104 80-120  ND 30	ND 10 mg/Kg 79.7 57.9-140 %REC  NGE  ND 4.8 mg/Kg 88.3 74.5-129 %REC  ND 0.048 mg/Kg ND 0.097 mg/Kg 104 80-120 %REC	ND 10 mg/Kg 1 79.7 57.9-140 %REC 1  NGE  ND 4.8 mg/Kg 1 88.3 74.5-129 %REC 1  ND 0.048 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.097 mg/Kg 1 104 80-120 %REC 1	Ralys  ND 10 mg/Kg 1 5/6/2014 5:51:57 PM  79.7 57.9-140 %REC 1 5/6/2014 5:51:57 PM  NGE  ND 4.8 mg/Kg 1 5/7/2014 11:38:59 PM  88.3 74.5-129 %REC 1 5/7/2014 11:38:59 PM  ND 0.048 mg/Kg 1 5/7/2014 11:38:59 PM  ND 0.097 mg/Kg 20 5/7/2014 11:38:59 PM  Analysi  ND 30 mg/Kg 20 5/7/2014 3:07:02 PM  Analysi

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

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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

Page 2 of 7

- P Sample pH greater than 2.
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1405108

09-May-14

Client:

Blagg Engineering

Project:

Riddle C 6

Sample ID MB-13053

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 13053

RunNo: 18482

Prep Date: 5/7/2014 Analysis Date: 5/7/2014

PQL

SeqNo: 533533

Units: mg/Kg

HighLimit

**RPDLimit** Qual

Analyte Chloride

ND 1.5

Sample ID LCS-13053

5/7/2014

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 13053

RunNo: 18482

SeqNo: 533534

Units: mg/Kg

Prep Date: Analyte

Analysis Date: 5/7/2014

SPK value SPK Ref Val %REC

HighLimit

15.00

LowLimit

14

90

110

Chloride

1.5

%RPD

%RPD

Page 3 of 7

0

SPK value SPK Ref Val %REC LowLimit

91.7

**RPDLimit** Qual

Qualifiers:

Value above quantitation range

Analyte detected below quantitation limits 1

RPD outside accepted recovery limits R

Not Detected at the Reporting Limit

P Sample pH greater than 2.

Value exceeds Maximum Contaminant Level.

RSD is greater than RSDlimit О

Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1405108

09-May-14

Client:

Blagg Engineering

Project:

Analyte

Riddle C 6

Sample ID MB-12981

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID:

PBS

Batch ID: 12981

RunNo: 18411

Prep Date: 5/2/2014 Analysis Date: 5/6/2014

PQL

20

SeqNo: 531748

Units: mg/Kg

HighLimit

%RPD

**RPDLimit** Qual

Petroleum Hydrocarbons, TR

Sample ID LCS-12981

ND

Result

SampType: LCS

TestCode: EPA Method 418.1: TPH

**LCSS** 

Batch ID: 12981

RunNo: 18411

Prep Date: 5/2/2014

Analysis Date: 5/6/2014

Batch ID: 12981

SegNo: 531749

Units: mg/Kg

Analyte

Result 100

100.0

HighLimit

%RPD

Client ID:

Client ID:

**PQL** 20

SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC LowLimit

LowLimit

120

**RPDLimit** 

Qual

Qual

Petroleum Hydrocarbons, TR

Sample ID LCSD-12981

SampType: LCSD

TestCode: EPA Method 418.1: TPH

RunNo: 18411

Units: mg/Kg

120

Prep Date: Analyte

LCSS02 5/2/2014

Analysis Date: 5/6/2014

SeqNo: 531751

%REC LowLimit

HighLimit

%RPD

**RPDLimit** 

Petroleum Hydrocarbons, TR

Result SPK value SPK Ref Val 99 20

100.0

98.6

5.72

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Spike Recovery outside accepted recovery limits

Е Value above quantitation range

Analyte detected below quantitation limits J

0 RSD is greater than RSDlimit

RPD outside accepted recovery limits R

Analyte detected in the associated Method Blank

P Sample pH greater than 2.

Reporting Detection Limit

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

Page 4 of 7

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1405108

09-May-14

Client:

Blagg Engineering

Project: Rie	idle C 6											
Sample ID MB-12995	SampTyp	e: ME	BLK	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics			
Client ID: PBS	Batch I	D: <b>12</b>	995	F	RunNo: 1	8374						
Prep Date: 5/5/2014	Analysis Dat	e: <b>5/</b>	5/2014	SeqNo: <b>530743</b>			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO	) ND	10										
Surr: DNOP	8.2		10.00		81.9	57.9	140					
Sample ID LCS-12995	SampTyp	e: LC	s	Tes	tCode: EF	PA Method	8015D: Dies	el Range (	Organics			
Client ID: LCSS	Batch II	D: <b>12</b> !	995	F	RunNo: 1	8374						
Prep Date: 5/5/2014	Analysis Dat	e: <b>5/</b>	5/2014	SeqNo: <b>530744</b>			Units: mg/F	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO	44	10	50.00	0	88.0	60.8	145					
Surr: DNOP	3.9		5.000		78.0	57.9	140					

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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
- P Sample pH greater than 2.

RL Reporting Detection Limit

Page 5 of 7

# Hall Environmental Analysis Laboratory, Inc.

990

1000

WO#:

1405108

09-May-14

Client:

Blagg Engineering

Project: Riddle	C 6		
Sample ID MB-12999 MK	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline	e Range
Client ID: PBS	Batch ID: R18443	RunNo: 18443	
Prep Date:	Analysis Date: 5/6/2014	SeqNo: 532561 Units: %REC	
Analyte	Result PQL SPK va	ue SPK Ref Val %REC LowLimit HighLimit %	6RPD RPDLimit Qual
Surr: BFB	880 10	00 88.4 74.5 129	
Sample ID LCS-12999 MK	SampType: LCS	TestCode: EPA Method 8015D: Gasoline	e Range
Client ID: LCSS	Batch ID: R18443	RunNo: <b>18443</b>	
Prep Date:	Analysis Date: 5/6/2014	SeqNo: 532562 Units: %REC	
Analyte	Result PQL SPK va	ue SPK Ref Val %REC LowLimit HighLimit %	6RPD RPDLimit Qual
Surr: BFB	990 10	00 98.5 74.5 129	
Sample ID MB-12999	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline	e Range
Client ID: PBS	Batch ID: 12999	RunNo: 18443	
Prep Date: 5/5/2014	Analysis Date: 5/6/2014	SeqNo: 532566 Units: mg/Kg	
Analyte	Result PQL SPK val	ue SPK Ref Val %REC LowLimit HighLimit %	6RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND 5.0		
Surr: BFB	880 10	00 88.4 74.5 129	
Sample ID LCS-12999	SampType: LCS	TestCode: EPA Method 8015D: Gasoline	e Range
Client ID: LCSS	Batch ID: 12999	RunNo: <b>18443</b>	
Prep Date: 5/5/2014	Analysis Date: 5/6/2014	SeqNo: 532567 Units: mg/Kg	
Analyte	Result PQL SPK val	ue SPK Ref Val %REC LowLimit HighLimit %	GRPD RPDLimit Qual
Gasoline Range Organics (GRO)	23 5.0 25.	00 0 91.0 71.7 134	

### Qualifiers:

Surr: BFB

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- 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

98.5

74.5

129

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Page 6 of 7

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1405108

09-May-14

Client:

Blagg Engineering

Project.

Riddle C.6

Project: Riddle	C 6									
Sample ID MB-12999	Samp1	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EI	PA Method	8021B: Vola	tiles		<u> </u>
Client ID: PBS	Batcl	h ID: 12	999	F	RunNo: 1	8443				
Prep Date: 5/5/2014	Analysis [	Date: <b>5/</b>	6/2014	SeqNo: <b>532595</b>			Units: mg/F			
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								
Kylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			
Sample ID LCS-12999	SampT	Гуре: LC	s	Tes	tCode: EI	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	h ID: <b>12</b> !	999	F	RunNo: 1	8443				
Prep Date: 5/5/2014	Analysis D	Date: <b>5/</b>	6/2014	S	SeqNo: 5	32596	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	114	. 80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Kylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1,1		1.000		113	80	120			

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range Е
- Analyte detected below quantitation limits
- RSD is greater than RSDlimit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Sample pH greater than 2.

Page 7 of 7

Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name:	BLAGG	Work Order Number	: 1405	08		tNo: 1						
Received by/dat	e: AT	05/03/14										
Logged By:	Lindsay Mangin	5/3/2014 10:20:00 AM			Josephy Harpe							
Completed By:	Lindsay Mangin	5/5/2014 7:35:50 AM			The state of the s							
	Lindsay mangin	5/5/2014 7.35.30 AIVI			Change Library Co							
Reviewed By:	ing	05/05/14										
Chain of Cus	tody ~					•						
1. Custody sea	ils intact on sample botti	es?			No 🛄	Not Present						
2. Is Chain of C	Custody complete?		Yes	✓	No 📋	Not Present	Ll					
3. How was the	e sample delivered?	•	Cour	<u>er</u>								
<u>Log In</u>												
4. Was an atte	empt made to cool the sa	amples?	Yes	V	No . "	NA						
5. Were all sar	mples received at a temp	perature of >0° C to 6.0°C	Yes	<b>V</b>	No .	NA ·	· :					
6. Sample(s) in	n proper container(s)?		Yes	<b>Y</b>	No 🗍							
7. Sufficient sa	mple volume for indicate	ed test(s)?	Yes	<b>✓</b>	No 🗔							
8. Are samples	(except VOA and ONG)	properly preserved?	Yes	V	No 🗔							
9. Was preserv	vative added to bottles?		Yes	(")	No 🐼	NA	 					
10.VOA vials ha	ave zero headspace?		Yes		No	No VOA Vials	<b></b>					
	ample containers receive	ed broken?	Yes	j	No 🗸							
	•				,	# of preserved bottles checked	d					
	work match bottle labels?		Yes	Y	No 🛄 🎚	for pH: .	(10 140laber					
	pancies on chain of cust		V		No 🗀	) Adjusteď	< or >12 unless noted					
	s correctly identified on C nat analyses were reques	•	Yes Yes	. <u>v</u> [ <b>y</b> ]	No []	•						
	ding times able to be me		Yes		No 🗔	Checked I	by:					
	customer for authorization						-					
Special Hand	lling (if applicable)											
	otified of all discrepance	es with this order?	Yes		No 🚶	NA <sup>1</sup>	· <b>v</b>					
1					FOR MANAGEMENT AND ADDRESS OF THE PARTY OF T		:					
By Wh	n Notified:	Date:   Via:		1 77	Phone [] Fax	In Person	* :					
Regard	***************************************	VIA.	GIVICE	· · · · · ·	TOTAL LAK	I; HII GIOUR	· ;					
;   -	Instructions:			*****								
17. Additional re	<b>y</b>	······································					<b>'</b>					
18. Cooler Info	armation											
Cooler N	The State of the State of	on   Seal Intact   Seal No	Seal Da	te	Signed By							
1	1.0 Good	Yes										

ORETIL.				Standard			ANALYSIS LABORATORY											
	BP America	9		Pròject Name	<b>9</b> :				P.				nviron					
Mailing Add	ess:	P.O. Box	x 87		Riddle C 6		ŀ	490	01 H	 lawkin							09	
		Bloomfie	eld, NM 87413	Project #:			7			)5-345			•	•	-	4107		
Phone #:	· · · · · · · · · · · · · · · · · · ·	(505)320	D-1183				4										1 ( A ) A )	4 88
email or Fax	<b>c#</b> :			Project Mana	iger;													T
QA/QC Packs Standard	•		☐ Level 4 (Full Validation	) }			<b>(</b> 0											
☐ Other				Sampler:	Jeff Blagg		7		DR.			1	1		ł	İ	- }	
	oe)			On Ice:	\v∕Yes	□ No			(GRO / DRO)					1		}	}	S io
				Sample Tem	perature:	1.0								1			]	ځ
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405/108	BTEX (8021)		<b>TPH 8015B</b>	TPH 418.1							Chloride	Air Bubbles (Y
-05/01/2014	44:05	- Coil-	24 DCT 5 pt @ 7'	1×40=		-001	- X		. X	×								$\top$
05/01/2014	14:15	Soil	95 BGT 5-pt @ 5'	1x 4oz	cool	-007_	×		x	x	+	1	1-		_	+	×	+
							_				1	+	1			$\neg$	+	+
<del></del>		<del> </del>					-				+	+	+	-	-+	-	+-	+
		<del> </del>					+				+-	╅	+-	-		$\dashv$	┪-	+
		<del> </del>					+				+-	╁	-	$\vdash$		+		+
	<u>                                     </u>	-								-+	╁	+	┼		$\dashv$	-	+	+-
		<del> </del>		<del> </del>			+				+	+	+-		-+	-	+-	+
		<del>                                     </del>					+			-	+-	+	+		-	+		+
		<del> </del>					_			_	+	+-	+				+-	+-
<del></del>		<del> </del>					+				+-	+-			-+		+	+-
	<i>,</i>	<del> </del>			<u> </u>		+-	-			+	+-	+-		}	十	+	+-
Date:	Time:	Relinquish		Received by:	<u> </u>	Date Time	Rer	narks	 s: B	ili BP				<u> </u>				
12/2014	815	Jul	11 Blagg	Ministra	House	5/2/14 815	- Pay	key:	ZEV	/H01E Jeff P			Pleas	se cor	ov re.	sults i	ta:	
Date: 5 2 14	Time:	Refinquish	tu Waller	Received by:		Date Time	pea			@bp.c			. ,	r				

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.





**BP America Production Company** 200 Energy Court

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

April 7, 2014

**Bureau of Land Management** Mark Kelly 6251 College Blvd Suite A Farmington, NM 87402

### VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Re: Notification of plans to close/remove a below grade tank

Well Name: RIDDLE C 006

API#: 300452687

Dear Mr. Kelly,

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 May 29, 2014. 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.

Unless you have questions about this notice, there is no need to respond to this letter. If you do have any questions or concerns, please contact me at 505-326-9214

Sincerely,

Jerry Van Riper Surface Land Negotiator

9D Va Per

**BP America Production Company** 

# BP America Production Company

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

### SENT VIA E-MAIL TO: BRANDON.POWELL@STATE.NM.US

April 10, 2014

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

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

RIDDLE C 006 API 30-045-26787 (G) Section 29 - T31N - R09W San Juan County, New Mexico

Dear Mr. Brandon Powell:

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95 bbl BGT that will no longer be operational at this well site.

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

Sincerely,

Jeff Peace

BP Field Environmental Advisor

floor

(505) 326-9479



