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District I1625 N. French Dr., Hobbs, NM 88240District II811 S. First St., Artesia, NM 88210District III1000 Rio Brazos Road, Aztec, NM 87410District IV1220 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.
	Pit, Below-Grade Tank, or	
12375 Proposed Alterna	tive Method Permit or Closure F	Plan Application
Type of action: 🗌 Below grad		OIL CONS. DIV DIST. 3
$\frac{45}{22971} \qquad \boxed{2}$ Closure of $\boxed{1}$ Modification	pit or proposed alternative method a pit, below-grade tank, or proposed alternation to an existing permit/or registration on only submitted for an existing permitted or	х х
or proposed alternative method		, , , , , , , , , , , , , , , , , , , ,
Instructions: Please submit one ap Please be advised that approval of this request does not relie environment. Nor does approval relieve the operator of its	<i>plication (Form C-144) per individual pit, below-</i> eve the operator of liability should operations result in responsibility to comply with any other applicable go	n pollution of surface water, ground water or the
Operator: BP America Production Company	OGRID #: 7	778
Address:200 Energy Court, Farmington, NN		
Facility or well name:Bolack 1		
API Number:3004522871		
U/L or Qtr/Qtr KSection 29		
Center of Proposed Design: Latitude36.62891 Surface Owner: 🛛 Federal 🗌 State 🗌 Private 🔲 Tri	Longitude107.70451	
		· · · · · · · · · · · · · · · · · · ·
Pit: Subsection F, G or J of 19.15.17.11 NMAC Temporary: Drilling Workover		
Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness String-Reinforced	-	ow Chloride Drilling Fluid 🗌 yes 🗌 no
Liner Seams: 🗌 Welded 🗌 Factory 🗍 Other	Volume:bbl	Dimensions: L x W x D
3.		
Below-grade tank: Subsection I of 19.15.17.11 N	MAC Tank A	
Volume:21.0bbl Type of f	fluid:Produced water	
Tank Construction material:Steel		
Secondary containment with leak detection D V	isible sidewalls, liner, 6-inch lift and automatic ov	verflow shut-off
□ Visible sidewalls and liner ⊠ Visible sidewalls of	only D Other _Single walled/single botton	med
Liner type: Thicknessmil	HDPE PVC Other	
A. <u>Alternative Method</u> : Submittal of an exception request is required. Excepti	ons must be submitted to the Santa Fe Environme	ntal Bureau office for consideration of approval.

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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

5

7

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

Screen 🗌 Netting 🗌 Other

Monthly inspections (If netting or screening is not physically feasible)

Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.16.8 NMAC

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

	1.000.0011						
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							
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							
 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						
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	🗌 Yes 🗌 No						
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	🗌 Yes 🗌 No						
Below Grade Tanks							
 Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No						
 Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No						
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)							
 Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No						

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
 application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
 Within 100 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole,	
or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	
 Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	🗌 Yes 🗌 No
 Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗋 Yes 🗌 No
 Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗍 Yes 🗌 No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa	
 lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
 Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	🗌 Yes 🗍 No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of	
 initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗋 Yes 🗌 No
10. Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N	IMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc	
<i>attached.</i> Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC	
 Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC 	NMAC
 Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC 	
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
11.	
<u>Multi-Well Fluid Management Pit Checklist</u> : Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot attached.	cuments are
 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	.15.17.9 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:	

12. <u>Permanent Pits Permit Application Checklist</u> : 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 attached.	documents are
 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 H_2S , 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	
<i>Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.</i> Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F	luid Management Dit
Alternative	luid Management Pit
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	
 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC 	
^{15.} Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the 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	☐ Yes ☐ No ☐ NA
 Ground water is more than 100 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 	☐ Yes ☐ No ☐ NA
 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🔲 Yes 🛄 No
 Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	📋 Yes 🗌 No
 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	🗌 Yes 🗌 No
Within 300 feet of a wetland.	
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	
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adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	🗋 Yes 🗌 No						
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 	🗌 Yes 🗌 No						
Within a 100-year floodplain. - FEMA map	Yes No						
 ^{16.} On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure ple by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann 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						
17. Operator Application Certification:							
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli Name (Print): Title:							
Signature: Date:							
e-mail address: Telephone:							
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Image: Closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Image: Closure plan) Closure Plan (only) OCD Conditions (see attachment) Title: Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) OCD Representative Signature: Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Title: Image: Closure plan) OCD Representative Signature: Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Title: Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Image: Closure plan) Im	2014						
^{19.} <u>Closure Report (required within 60 days of closure completion)</u> : 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: <u>4/4/2012</u>							
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)						
 21. <u>Closure Report Attachment Checklist</u>: <i>Instructions: Each of the following items must be attached to the closure report. Please in mark in the box, that the documents are attached.</i> Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) 	dicate, by a check						

- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (Ir applicable)
 Waste Material Sampling Analytical Results (required for on-site closure)
 Disposal Facility Name and Permit Number
 Soil Backfilling and Cover Installation
 Re-vegetation Application Rates and Seeding Technique
 Optimized Seeding Technique

36.62891

- Site Reclamation (Photo Documentation)
 - On-site Closure Location: Latitude

Longitude ____-107.70451_

22. Operator Closure Certification:

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

Name (Print):Jeff Peace	Title: Field Environmental Coordinator
Signature: Jaff Peace	Date:November 18, 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

Bolack 1BGT Tank A (21 bbl) <u>API No. 3004522871</u> Unit Letter K, Section 29, T28N, R8W

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

- 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 BCT notice requirements at

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)

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- 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
	21 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	37
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 TPH, BTEX and chloride levels were below the stated limits. Sampling data is attached.

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

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.

Name of Company: BP						OPERATOR Initial Report Final Rep					
			noton M	NA 97401		Contact: Jeff Peace Telephone No.: 505-326-9479					
Address: 20 Facility Na		Court, Farmi	ngton, N	11 8/401			No.: 505-326-94 be: Natural gas				
Facinty Na	Dolaci					racinty Typ	e: Natural gas	wen			
Surface Ow	ner: Feder	al		Mineral C	wner: I	Federal			API No	0. 3004522871	
				LOCA	TION	N OF REI	LEASE				
Unit Letter K	Section 29	Township 28N	Range 8W	Feet from the 1,450		South Line	Feet from the 2,510	East/W West	est Line	County: San Juan	
		Lat	itude3	5.62891		_ Longitude	e_107.70451_	· · · · · · · · · · · · · · · · · · ·		J	
				NAT	URE	OF RELI	EASE				
Type of Rele	ase: none					Volume of	Release: N/A		Volume I	Recovered: N/A	
Source of Re	lease: below	v grade tank –	21 bbl, Ta	ank A			lour of Occurrent	ce:	Date and	Hour of Discovery:	
Was Immedi	ate Notice (., –			If YES, To	Whom?				
			Yes 🔟	No 🛛 Not Re	equired						
By Whom?			· · · · · · · · · · · · · · · · · · ·			Date and H					
Was a Water	course Read		Yes 🖂	No		If YES, Vo	lume Impacting	the Water	course.		
If a Waterco											
Describe Ca	ise of Probl		dial Actior						; removal	to ensure no soil impacts	from
Describe Car the BGT. So Describe Are	ise of Probl il analysis r a Affected a	em and Reme esulted in TP and Cleanup 4	dial Actior H, BTEX a Action Tak	n Taken.* Samplin and chloride belov	w standa	rds. Analysis	s results are attac	hed.		to ensure no soil impacts he excavated area was	from
Describe Car the BGT. So Describe Are backfilled an I hereby cert regulations a public health should their or the enviro	ise of Probl- il analysis r a Affected a d compacted fy that the i ll operators or the envir operations h nment. In a	em and Reme esulted in TP and Cleanup A d and is still w nformation gi are required to ronment. The ave failed to a	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately OCD accep	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	w standa moved a lete to th elease no rt by the emediate	rds. Analysis nd the area un e best of my otifications ar NMOCD ma e contaminatio	s results are attac nderneath the BC knowledge and u nd perform correc arked as "Final R on that pose a thu e the operator of	hed. T was sa inderstand ctive actio leport" do responsib	mpled. T d that purs ons for releves not relives ound water pund water pility for c	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other	id er ity ealth
Describe Car the BGT. So Describe Are backfilled an I hereby cert regulations a public health should their or the enviro	ise of Probl- il analysis r a Affected a d compacted fy that the i ll operators or the envir operations h nment. In a	em and Reme esulted in TP and Cleanup A d and is still v nformation gi are required to ronment. The ave failed to a ddition, NMC	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately OCD accep	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	w standa moved a lete to th elease no rt by the emediate	rds. Analysis nd the area un e best of my otifications ar NMOCD ma e contaminatio	s results are attac nderneath the BC knowledge and u nd perform correc arked as "Final R on that pose a thu e the operator of	hed. T was sa inderstand ctive actio leport" do responsib	mpled. T d that purs ons for releves not relives ound water pund water	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he	id er ity ealth
Describe Car the BGT. So Describe Arc backfilled an hereby cert regulations a bublic health should their or the enviro rederal, state	ise of Probl- il analysis r a Affected a d compacted fy that the i ll operators or the envir operations h nment. In a	em and Reme esulted in TP and Cleanup A d and is still v nformation gi are required to ronment. The ave failed to a ddition, NMC	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately OCD accep	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	w standa moved a lete to th elease no rt by the emediate	rds. Analysis nd the area un e best of my otifications ar NMOCD ma e contaminatio	s results are attac nderneath the BC knowledge and u nd perform correc arked as "Final R on that pose a thu e the operator of	hed. T was sa inderstand ctive actio leport" do responsib	mpled. T d that purs ons for releves not relives ound water pund water	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other	id er ity ealth
Describe Car the BGT. So Describe Arc backfilled an hereby cert regulations a bublic health should their or the enviro rederal, state	ise of Probl- il analysis r a Affected a d compacted fy that the i ll operators or the envir operations h nment. In a	em and Reme esulted in TP and Cleanup A d and is still v nformation gi are required to ronment. The ave failed to a ddition, NMC	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately OCD accep	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	v standa moved a lete to the elease no rt by the emediate report do	rds. Analysis nd the area un otifications ar NMOCD ma contamination pes not relieve	s results are attac nderneath the BC knowledge and u and perform correc arked as "Final R on that pose a thu e the operator of OIL CON	hed. T was sa inderstand ctive actio leport" do reat to gro responsib SERVA	mpled. T d that purs ons for rele- bound water oility for c ATION	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other	id er ity ealth
Describe Car the BGT. So Describe Arc backfilled an hereby cert regulations a bublic health should their or the enviro federal, state Signature:	ise of Proble il analysis r a Affected a d compacted fy that the i ll operators or the enviro operations h ment. In a or local law	em and Reme esulted in TPl and Cleanup A d and is still v nformation gi are required to onment. The ave failed to a ddition, NMC vs and/or regu	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately OCD accep	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	v standa moved a lete to the elease no rt by the emediate report do	rds. Analysis nd the area un otifications ar NMOCD ma contamination pes not relieve	s results are attac nderneath the BC knowledge and u nd perform correc arked as "Final R on that pose a thu e the operator of	hed. T was sa inderstand ctive actio leport" do reat to gro responsib SERVA	mpled. T d that purs ons for rele- bound water oility for c ATION	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other	id er ity ealth
Describe Car the BGT. So Describe Are backfilled an I hereby cert regulations a public health should their or the enviro federal, state Signature: Printed Nam	ise of Probli il analysis r a Affected a d compacted fy that the i ll operators or the envir operations h nment. In a or local law	em and Reme esulted in TPl and Cleanup A d and is still v nformation gi are required to onment. The ave failed to a ddition, NMC vs and/or regu	dial Actior H, BTEX a Action Tak vithin the a ven above o report an acceptanc adequately DCD accep alations.	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	v standa moved a lete to the elease no rt by the emediate report do	rds. Analysis nd the area un otifications ar NMOCD ma contamination pes not relieve	s results are attac nderneath the BC knowledge and u nd perform correc arked as "Final R on that pose a thu e the operator of <u>OIL CON</u> Environmental S	hed. T was sa inderstand ctive actio deport" do reat to gro responsib SERVA	mpled. T d that purs ons for rele- bound water oility for c ATION	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other DIVISION	id er ity ealth
Describe Ca the BGT. So Describe Are backfilled an I hereby cert regulations a public health should their or the enviro federal, state Signature: Printed Nam Title: Field E	ise of Probli il analysis r a Affected a d compacted fy that the i ll operators or the enviro perations h nment. In a or local law	em and Reme esulted in TP and Cleanup A d and is still w nformation gi are required to ave failed to a ddition, NMC vs and/or regu	dial Actior H, BTEX a Action Tak vithin the s ven above o report an acceptanc acceptanc dequately DCD accep solutions.	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	v standa moved a lete to the elease no rt by the emediate report do	rds. Analysis nd the area un e best of my otifications ar NMOCD ma contamination pes not relieve Approved by	s results are attac nderneath the BC knowledge and u ad perform correc arked as "Final R on that pose a thu e the operator of <u>OIL CON</u> Environmental S e:	hed. T was sa inderstand ctive actio deport" do reat to gro responsib SERVA	mpled. T d that purs ons for rele- ound water oility for c	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other DIVISION	id er ity ealth
Describe Car he BGT. So Describe Are backfilled an hereby cert regulations a bublic health should their or the enviro rederal, state Signature: Printed Nam	ise of Probl- il analysis r a Affected a d compacted fy that the i ll operators or the enviro perations h nment. In a or local law	em and Reme esulted in TP and Cleanup A d and is still w nformation gi are required t ronment. The ave failed to a ddition, NMC vs and/or regu bace al Coordinato	dial Actior H, BTEX a Action Tak /ithin the : ven above o report an acceptanc idequately DCD accep ilations.	n Taken.* Samplin and chloride below en.* BGT was rea active well area. is true and comp d/or file certain re e of a C-141 repo investigate and re	v standa moved a lete to the elease no rt by the emediate report do	rds. Analysis nd the area un e best of my otifications ar NMOCD ma contamination contamination opes not relieved Approved by	s results are attac nderneath the BC knowledge and u ad perform correc arked as "Final R on that pose a thu e the operator of <u>OIL CON</u> Environmental S e:	hed. T was sa inderstand ctive actio deport" do reat to gro responsib SERVA	mpled. T d that purs ons for rele- ound water oility for c	he excavated area was suant to NMOCD rules an eases which may endange ieve the operator of liabili r, surface water, human he ompliance with any other <u>DIVISION</u> Date:	id er ity ealth

	API# 3004522871						
	P.O. BOX 87, BLO		113	TANK ID (if applicble): A&B			
		(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:					
FIELD REPORT:	PAGE #: <u>1</u> of <u>1</u>						
SITE INFORMATION		DATE STARTED: 03/19/12					
QUAD/UNIT: K SEC: 29 TWP:	NM	DATE FINISHED:					
	O'W NE/SW LEASE TYPE: PROD. FORMATION: DK CONTR			ENVIRONMENTAL SPECIALIST(S): NJV			
REFERENCE POINT				GL ELEV.: 5,954'			
1) 21 BGT_SW/DB (A)	GPS COORD.: 36.62	891 X 107.70451		ARING FROM W.H.: 81', S39E			
2) 21 BCT_SW/DB (B)	GPS COORD .: 36.629	140 X 107.704216	DISTANCE/BE/	ARING FROM W.H.:			
3)	GPS COORD.:		DISTANCE/BE/	ARING FROM W.H.:			
4)	GPS COORD.:		DISTANCE/BEA	ARING FROM W.H.:			
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAE	USED: HALL		OVM READING (ppm)			
1) SAMPLE ID: 21 BGT 5-pt. @ 6' (015B/8021/B/300.0 (CI) 0.0			
2) SAMPLE ID: <u>21-BOT-5-pt. @ 5'</u>							
3) SAMPLE ID:							
4) SAMPLE ID:		SAMPLE TIME: LAB ANALY	'SIS:				
SOIL DESCRIPTION		DY SILT / SILTY CLAY / CLAY / G	GRAVEL / OTI	HER			
SOIL COLOR: DARK YELL COHESION (ALL OTHERS): NON COHESIVE SLIGHTL'		PLASTICITY (CLAYS): NON PLASTIC / SLI		COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC			
CONSISTENCY (NON COHESIVE SOILS)	DOSE FIRM / DENSE / VERY DENSE			/ FIRM / STIFF / VERY STIFF / HARD			
MOISTURE: DRY SLIGHTLY MOIST MOIST / W		HC ODOR DETECTED: YES	NO EXPL	ANATION			
SAMPLE TYPE: GRAB COMPOSITE # OF PTS. DISCOLORATION/STAINING OBSERVED				·			
ADDITIONAL COMMENTS: NO APPARE (A) 21 BGT IN 8'X8'X51/2' - DEEP WO		ETTHER BGT OBSERVED.		· · · · · · · · · · · · · · · · · · ·			
-(B)-21-BOT IN 10'X10'X4' DEEP WOO	D LINED GELLAR.						
SOIL IMPACT DIMENSION ESTIMATION: DEPTH TO GROUNDWATER: >100' N				IMATION (Cubic Yards) : <u>NA</u> D TPH CLOSURE STD: 1,000 ppm			
SITE SKETCH		······································					
SHESKEICH		PLOT PLAN circle: att		CALIB. READ. = <u>54.2</u> ppm <u>RF = 0.52</u>			
				CALIB. GAS = <u>100</u> ppm 			
				MISCELL. NOTES			
				VO - N1545509			
HEAD				PO - 76487 PK - ZEGJO1RIGS			
	WOODEN						
(21)-A	R.W.						
$\begin{array}{c c} PBGTL & \longrightarrow (\mathbf{x} \ \hat{\mathbf{x}} \ \mathbf{x}) \\ T.B. \sim 5^{\circ} & \longrightarrow (\mathbf{x} \ \hat{\mathbf{x}} \ \mathbf{x}) \end{array}$			Tan	k			
B.G.							
Notes: Bgt = Below-grade Tank; E.D. = Excan			.P.U. —	BOT Sidewalls Visible (Y)/ N / NA			
T.B. = TANK BOTTOM; PBGTL = PREMOUS	ATION DEPRESSION; B.G. = BELOW GRADE; B = E BELOW-GRADE TANK LOCATION; SPD = SAMPLE ;; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SI	POINT DESIGNATION; R.W. = RETAININ	, G WALL; 📔 📊	lagnetic declination: 10° E			
TRAVEL NOTES: CALLOUT:		ONSITE: 03/19/12					

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Analytical Report Lab Order 1203756

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

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Date Reported: 4/4/2012 Client Sample ID: 21 BGT 5-pt @6' Collection Date: 3/19/2012 10:45:00 AM

Project: Bolak 1			Collection D	ate: 3/19/2	012 10:45:00 AM	
Lab ID: 1203756-001	Matrix: SOIL		Received Date: 3/21/2012 9:59:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP	
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	3/24/2012 1:14:40 AM	
Surr: DNOP	96.8	77.4-131	%REC	1	3/24/2012 1:14:40 AM	
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	3/27/2012 2:41:06 PM	
Surr: BFB	105	69.7-121	%REC	1	3/27/2012 2:41:06 PM	
EPA METHOD 8021B: VOLATILES					Analyst: NSB	
Benzene	ND	0.048	mg/Kg	1	3/27/2012 2:41:06 PM	
Toluene	ND	0.048	mg/Kg	1	3/27/2012 2:41:06 PM	
Ethylbenzene	ND	0.048	mg/Kg	1	3/27/2012 2:41:06 PM	
Xylenes, Total	ND	0.096	mg/Kg	1	3/27/2012 2:41:06 PM	
Surr: 4-Bromofluorobenzene	93.3	80-120	%REC	1	3/27/2012 2:41:06 PM	
EPA METHOD 300.0: ANIONS					Analyst: BRM	
Chloride	ND	7.5	mg/Kg	5	3/23/2012 2:33:00 PM	
EPA METHOD 418.1: TPH					Analyst: JMP	
Petroleum Hydrocarbons, TR	37	20	mg/Kg	1	3/26/2012	

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

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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WO#: 1203756

04-Apr-12

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Client:	Blagg En	gineering									
Project:	Bolak 1										
Sample ID	MB-1216	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	300.0: Anion			
Client ID:	PBS	Batch	ID: 12	16	F	RunNo: 1	638				
Prep Date:	3/23/2012	Analysis D	ate: 3	/23/2012	·	SeqNo: 4	6406	Units: mg/K	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5			_	. <u></u>				
Sample ID	LCS-1216	SampT	ype: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 12	16	F	RunNo: 1	638				
Prep Date:	3/23/2012	Analysis D	ate: 3/	/23/2012	5	SeqNo: 4	6407	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	92.6	90	110			
Sample ID	1203870-001BMS	SampT	ype: MS	S	Tes	tCode: El	PA Method	300.0: Anion	s	<u></u>	
Client ID:	BatchQC	Batch	ID: 12	16	F	RunNo: 1	638				
Prep Date:	3/23/2012	Analysis D	ate: 3/	23/2012	S	SeqNo: 4	6409	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	30	15.00	0	124	74.6	118			S
Sample ID	1203870-001BMS) SampT	 /pe: M \$	SD	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch	ID: 12	16	F	RunNo: 1	638				
Prep Date:	3/23/2012	Analysis D	ate: 3/	23/2012	S	SeqNo: 4	6410	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	30	15.00	0	121	74.6	118	0	20	S

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

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

nalysis D	ate: 3/	26/2012	S	SeqNo: 4	7663	Units: mg/K	g
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%
100	20	100.0	0	102	87.8	115	

Qualifiers:

Petroleum Hydrocarbons, TR

- Value exceeds Maximum Contaminant Level. */X
- Value above quantitation range Ε
- Analyte detected below quantitation limits 3
- R 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 ND
- RL Reporting Detection Limit

Client: Blagg Engineering **Project:** Bolak 1 Sample ID MB-1194 SampType: MBLK TestCode: EPA Method 418.1: TPH PBS Client ID: Batch ID: 1194 RunNo: 1685 Prep Date: Analysis Date: 3/26/2012 3/22/2012 SeqNo: 47661 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Petroleum Hydrocarbons, TR ND 20 Sample ID LCS-1194 SampType: LCS TestCode: EPA Method 418.1: TPH Client ID: LCSS Batch ID: 1194 RunNo: 1685 Prep Date: 3/22/2012 Analysis Date: 3/26/2012 SeqNo: 47662 Units: mg/Kg SPK value SPK Ref Val %RPD RPDLimit Analyte Result PQL %REC LowLimit HighLimit Qual 99 20 100.0 0 87.8 Petroleum Hydrocarbons, TR 98.6 115 SampType: LCSD TestCode: EPA Method 418.1: TPH Sample ID LCSD-1194 Client ID: LCSS02 Batch ID: 1194 RunNo: 1685 Prep Date: 3/22/2012 A Analyte %RPD RPDLimit Qual

1203756

WO#:

3.00

8.04

04-Apr-12

QC SUMMARY REPORT

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Hall Environmental	Analysis	Laboratory	Inc.

WO#: 1203756

04-Apr-12

Client:	Blagg Er	ngineering												
Project:	Bolak 1													
Sample ID	MB-1193	SampTy	pe: M	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range (Drganics				
Client ID:	PBS	Batch	ID: 11	93	F	RunNo: 1	634							
Prep Date:	3/22/2012	Analysis Da	te: 3	/23/2012	S	6879	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		9.2		10.00		91.6	77.4	131	<u>,</u>					
Sample ID	LCS-1193	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8015B: Dies	el Range (Drganics				
Client ID:	LCSS	Batch I	ID: 11	93	F	RunNo: 1	634							
Prep Date:	3/22/2012	Analysis Da	te: 3	/23/2012	S	SeqNo: 4	6880	Units: mg/k	٢g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range (Organics (DRO)	46	10	50.00	0	91.2	62.7	139						
Surr: DNOP		4.4		5.000		87.5	77.4	131	t data -					
Sample ID	1203751-001AMS	SampTy	pe: M	S	Tes	tCode: El	PA Method	8015B: Dies	el Range (Drganics				
Client ID:	BatchQC	Batch I	D: 11	93	F	RunNo: 1	634							
Prep Date:	3/22/2012	Analysis Da	te: 3/	/23/2012	5	SeqNo: 4	6882	Units: mg/H	٢g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range (Organics (DRO)	43	10	49.90	0	85.9	57.2	146						
Surr: DNOP		4.3		4.990		86.6	77.4	131						
Sample ID	1203751-001AMSI	D SampTy	pe: MS	SD	Tes	tCode: EF	PA Method	8015B: Dies	el Range (Drganics				
Client ID:	BatchQC	Batch I	D: 11	93	F	RunNo: 16	534							
Prep Date:	3/22/2012	Analysis Dat	te: 3/	23/2012	S	eqNo: 4	5883	Units: mg/M	٢g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range (Drganics (DRO)	44	9.7	48.69	0	89.8	57.2	146	1.93	26.7				
Surr: DNOP		4.1		4.869		85.0	77.4	131	0	0				

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

QC SUMMARY REPORT

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WO#: 1203756

04-Apr-12

Client: Project:	Blagg Engineerin Bolak 1	g											
Sample ID MB-11	82 Sam	рТуре: МВ	LK	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e				
Client ID: PBS	Bat	tch ID: 118	2	F	RunNo: 1	710							
Prep Date: 3/21/	2012 Analysis	Date: 3/2	26/2012	S	SeqNo: 4	8158	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Range Organi Surr: BFB	xs (GRO) ND 940	5.0	1,000		93.9	69.7	121						
Sample ID LCS-1	182 Sam	oType: LCS	3	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e				
Client ID: LCSS	Bat	ch ID: 118	2	F	RunNo: 1	710							
Prep Date: 3/21/	2012 Analysis	Date: 3/2	6/2012	ç	SeqNo: 4	8159	Units: mg/K	g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Range Organi	cs (GRO) 27	5.0	25.00	0	106	98.5	133						
Surr: BFB	990		1,000		98.9	69.7	121						
Sample ID 12037	51-001AMS Samp	oType: MS		Tes	tCode: El	PA Method	8015B: Gaso	line Rang	e				
Client ID: Batch	QC Bat	ch ID: 118	2	F	RunNo: 1	710							
Prep Date: 3/21/2	2012 Analysis	Date: 3/2	7/2012	S	SeqNo: 4	8179	Units: mg/K	g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Range Organi	s (GRO) 26	4.9	24.53	3.539	92.5	85.4	147			· · · · · · · · · · · · · · · · · · ·			
Surr: BFB	1,100		981.4		112	69.7	121						
Sample ID 12037	1-001AMSD Samp	Type: MS	D	Tes	tCode: El	PA Method	8015B: Gasol	line Rang	e				
Client ID: Batch	QC Bat	ch ID: 118	2	F	RunNo: 1	710							
Prep Date: 3/21/2	012 Analysis	Date: 3/2	7/2012	S	SeqNo: 4	8180	Units: mg/Kg	9					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Range Organio	s (GRO) 30	4.8	24.04	3.539	109	85.4	147	12.2	19.2				
Surr: BFB	1,200		961.5		128	69.7	121	0	0	S			
Sample ID MB-12	28 Samp	туре: МВ	LK	Tes	tCode: El	PA Method	8015B: Gasol	ine Rang	e				
Client ID: PBS	Bat	ch ID: 122	8	R	RunNo: 1	739							
Prep Date: 3/25/2	012 Analysis	Date: 3/2	7/2012	S	SeqNo: 4	9002	Units: %REC	;					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: BFB	950		1,000		95.3	69.7	121						
Sample ID LCS-1:	228 Samp	Type: LCS	3	Tes	tCode: El	PA Method	8015B: Gasol	line Rang	e				
Client ID: LCSS		ch ID: 122			RunNo: 1			J					
Prep Date: 3/25/2	012 Analysis	Date: 3/2	7/2012		SeqNo: 4		Units: %REC	;					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: BFB	1,000		1,000		100	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

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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WO#: 1203756

04-Apr-12

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Client: Project:	Blagg En Bolak 1	gineering												
Sample ID	1203863-001AMS	SampTy	pe: M	S	TestCode: EPA Method 8015B: Gasoline Range									
Client ID:	BatchQC	Batch	ID: 12	228										
Prep Date:	3/25/2012	Analysis Da	te: 3	/27/2012	SeqNo: 49017 Units: %REC									
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: BFB		1,000		996.0		103	69.7	121						
Sample ID	1203863-001AMS) SampTy	pe: M	SD	Tes	Code: E	PA Method	8015B: Gaso	oline Rang	e				
Client ID:	BatchQC	Batch	D: 12	228	RunNo: 1739									
Prep Date:	3/25/2012	Analysis Da	te: 3	/27/2012	S	eqNo: 4	9018	Units: %RE	c					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: BFB		1,000		1,000		102	69.7	121	0	0				

Qualifiers:

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- R RPD outside accepted recovery limits

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- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental	Analysis	Laboratory	, Inc.

Client: Blagg Engineering

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Project:	Bolak I														
Sample ID N	/B-1182	SampTy	pe: MI	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles						
Client ID: P	BS	Batch	ID: 11	82	F	RunNo: 1	711								
Prep Date:	3/21/2012	Analysis Da	ite: 3/	26/2012	SeqNo: 48204 Uni			Units: mg/ł	Units: mg/Kg						
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-Bromofi		0.94		1.000		93.5	80	120							
Sample ID	CS-1182	SampTy	pe: LC	S	Tes	tCode: E	PA Method	8021B: Vola	tiles .						
Client ID: L	CSS	Batch	ID: 11	82	F	RunNo: 1	711								
Prep Date:	3/21/2012	Analysis Da	lysis Date: 3/26/2012 Se				8206	Units: mg/h	٢g						
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene		0.89	0.050	1.000	0	88.8	83.3	107							
Toluene		0.92	0.050	1.000	0	91.7	74.3	115							
Ethylbenzene		0.93	0.050	1.000	0	93.4	80.9	122							
Xylenes, Total		2.8	0.10	3.000	0	94.1	85.2	123							
Surr: 4-Bromofi	luorobenzene	0.95		1.000		95.4	80	120							
Sample ID M	IB-1228	SampTy	pe: MB	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles						
Client ID: P	BS	Batch	ID: 12	28	RunNo: 1740										
Prep Date:	3/25/2012	Analysis Da	ite: 3/	27/2012	S	SeqNo: 4	9023	Units: %RE	С						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: 4-Bromofl	luorobenzene	0.95		1.000		95.5	80	120							
Sample ID L	CS-1228	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles						
Client ID: L	CSS	Batch	ID: 12	28	F	RunNo: 1	740								
Prep Date:	3/25/2012	Analysis Da	te: 3/	27/2012	S	SeqNo: 4	9024	Units: %RE	С						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: 4-Bromofi	luorobenzene	0.98		1.000		97.7	80	120							
Sample ID 1:	203888-001AMS	SampTy	pe: MS		Tes	tCode: El	PA Method	8021B: Vola	tiles						
Client ID: B	latchQC	Batch	ID: 12	28	F	RunNo: 1	740								
Prep Date:	3/25/2012	Analysis Da	ite: 3/	27/2012	5	SeqNo: 4	9045	Units: %RE	с						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: 4-Bromofi	luorobenzene	0.93		0.9615		96.7	80	120							

Qualifiers:

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E Value above quantitation range

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- RL Reporting Detection Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:Bolak 1

Sample ID 1203888-001AM	SD Samp	SampType: MSD				PA Method	8021B: Vola	tiles		
Client ID: BatchQC	Batc	ch ID: 1228 RunNo: 1740								
Prep Date: 3/25/2012	Analysis [Date: 3/27/2012			SeqNo: 4	9046	Units: %RE	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		0.9690		95.5	80	120	0	0	

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

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WO#: 1203756

04-Apr-12

HALL ENVIRONMENTAL ANALYSIS LABORATORY

> Hall Environmental Analysis Laboratory 4901 Hawkins NI: Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	BLAGG	We	ork Ord	ier I	Numl	per: 1	203756		
Received by/date	e: KG	03 21 2012							
Logged By:	Lindsay Mangin	3/21/2012 9:59:00 AM				Of the	Hlugo		
Completed By:	Lindşay Mangin	3/21/2012 10:33:30 AM				رس رسم	Humo		
Reviewed By:	ANT	orlain				0.	0		•
Chain of Cus	tody								
1 Were seals	V		Yes		No		Not Pres	ent 🗸	
••	Custody complete?		Yes		No		Not Pres		
	e sample delivered?		Cour	• ior			10011103	ion in	
3, 110W W43 UK			0001						
<u>Log In</u>									
4. Coolers are	present? (see 19. for cool	er specific information)	Yes	~	No			NA	
- •••									
5. VVas an atte	mpt made to cool the sam	ples?	Yes	V	No			NA	
6. Were all sar	nples received at a tempe	rature of >0° C to 6.0°C	Yes	~	No			NA	
7 Sample(s) ir	n proper container(s)?		Yes	~	No				
.,	imple volume for indicated	test(s)?	Yes	~	No				
	s (except VOA and ONG)	•	Yes	~	No				
10. Was preserv	vative added to bottles?		Yes		No	~	l	NA	
	ave zero boodeneeo?		Vaa		No		No VOA V	iala 🖌	
	ave zero headspace? ample containers received	hroken?	Yes Yes		No				
	work match bottle labels?	bioken:	Yes	~	No			preserved	
	pancies on chain of custo	dy)	100	•		·	bott for j	iles checked oH:	
14. Are matrices	s correctly identified on Ch	ain of Custody?	Yes	V	No		·		or >12 unless noted
15. Is it clear wh	nat analyses were requeste	ed?	Yes	~	No			Adjusted?	
	ding times able to be met		Yes	~	No				
	customer for authorization	3.)						Checked by:	
	ling (if applicable)							A	
17. Was client n	notified of all discrepancies	s with this order?	Yes		No			NA 🗸	
Person	Notified:	Date:			74.77	<u> </u>	- Pr & UMARY - Y- E &		
By Wh	AND A DESCRIPTION OF A	Via:	eMa	il	P	hone	Fax	In Person	
Regard									
Client I	Instructions:								
18. Additional re	emarks:								
19. Cooler Info	rmation								

 Cooler No
 Temp °C
 Condition
 Seal Intact
 Seal No
 Seal Date
 Signed By

 1
 1.3
 Good
 Yes

Page 1 of 1

Chain-of-Custody Record			Turn-Around	Time:										<i></i>			.			
Client:	BLAG	6 ENG	SINEERINE INC,	Standard	□ Rush] 								1EN RA1		
	RP	AME	ur A	Project Name	:					4 T								RA		ik t
Mailing	Address	Po.	исл Вох 87	BOLA	ick 1			www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109												
	Bear	AFIELD	NM 87413	Project #:				Tel. 505-345-3975 Fax 505-345-4107												
			=32-1199	1				Analysis Request												
email o				Project Manager:					only)					7	T					
QA/QC⊺ j⊄Stan	Package: dard		□ Level 4 (Full Validation)	J. BLAGG				TME's (8021)	(Gas ol	(Gas/Diesel)				PO4,SC	PCB's					
Accredi		□ Othe	r	J. BLAGG Sampler: J. BLAGG DTISE					HdT +	8015B (G	418.1)	04.1) AH)		3,NO2,	/ 8082		(A)			
	(Type)			Sample Tem	erature	600		H	Ш		4 p	0 2 2	tals	NC NC	ides	7) N	DE		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALING		BTEX + MIBE	BTEX + MTBE	TPH Method	TPH (Method	EDB (Method 504.1) 8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	CHLOCIDE		
3/19/12	1045	Soll	21 BGT 5-Pt @ 6	402×1	CEUL	-001		X		-	X					Ĩ		x	1	
	1055		45 B67 5-P6(0.5	<u>i\</u>	(2	X		\times	×							$\overline{+}$		
			• •																	
			·																	
														·						
<u>D-100</u>	T	Delleswich		Deschardle																
Date:	Time: 1145	Relinquishe	Blegg 1	Received by:	Inho to.	Date Time					R0 509	-4 D	RO	01	ノ鬯	015	-			
Date:	Time:	Relinquishe	ed by:	Received by:	VVCCVA	Date Time		ZI	ΞG	ΓØ	1R1									
2/21/12	645	/m	ister Haller		Z OE	5/2/12.09	\sim				AeE	- -				<u> </u>				

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