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

Pit Below-Grade Tank or

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.

19374 Proposed Alternative Method Permit or Closure Plan Ann	lication
12374 Proposed Alternative Method Permit or Closure Plan App.	OIL CONS. DIV DIST. 3
Type of action: Below grade tank registration	oir 00143. DIV DIS1. 3
☐ Permit of a pit or proposed alternative method ☐ Closure of a pit, below-grade tank, or proposed alternative method ☐ Modification to an existing permit/or registration	NOV 2 1 2014
Closure plan only submitted for an existing permitted or non-permitt or proposed alternative method	ted pit, below-grade tank,
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank of	r alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of servironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental au	surface water, ground water or the thority's rules, regulations or ordinances.
Operator: BP America Production CompanyOGRID #:778	
Address:200 Energy Court, Farmington, NM 87401	
Facility or well name:Atlantic D Com D LS 5	
API Number:3004509857 OCD Permit Number:	
U/L or Qtr/Qtr $K$ Section 2 Township 30N Range 10W County:	San Juan
Center of Proposed Design: Latitude36.837751 Longitude107.855852	NAD: 🔲 1927 🖾 1983
Surface Owner:  Federal  State  Tribal Trust or Indian Allotment	
Pit: Subsection F, G or J of 19.15.17.11 NMAC  Temporary: Drilling Workover	
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride ☐	Arilling Eluid Dugg Dng
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	-
String-Reinforced	
Liner Seams: Welded Factory Other Volume: bbl Dimensions	:: Lx Wx D
3.	
Volume:21.0bbl Type of fluid:Produced water	
Tank Construction material:Steel	
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-or	ff
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Other _Single walled/double bottomed	
Liner type: Thicknessmil	
4.	
4.  Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau of	

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)	hospital,
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	
6.  Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
7. Signs: Subsection C of 19.15.17.11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
Signed in compliance with 19.15.16.8 NMAC	
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 accematerial 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 ☐ NA
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

Page 2 of 6

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.	
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.	uments are
<ul> <li>□ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>□ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>□ A List of wells with approved application for permit to drill associated with the pit.</li> <li>□ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.</li> <li>and 19.15.17.13 NMAC</li> <li>□ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> </ul>	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:	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
attached.  ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Quality Control/Quality Assurance Construction and Installation Plan ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial	fluid Management Pit
Alternative Closure Method	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
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 south provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 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	□ Ves □ Ne
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes No

<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	☐ 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
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   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
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 beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the best of my knowledge and beling the complete to the complete to the best of my knowledge and beling the complete to the complete to t	
Signature: Date:	
e-mail address: Telephone:	
18.  OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 12/0	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 12/0	the closure report.
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 12/0  Title: OCD Permit Number:  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.	1/2014 the closure report. complete this

22.	
Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure r belief. I also certify that the closure complies with all applicable closure requiren	
Name (Print):Jeff Peace	Title: Field Environmental Coordinator
Signature: Joff Posel	Date:November 25, 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

# Atlantic D Com D LS 5 BGT Tank B (21 bbl) API No. 3004509857 Unit Letter K, Section 2, T30N, R10W

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

#### General Closure Plan

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
  - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
  - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
  - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
  - c. Basin Disposal, Permit NM-01-0005 (Liquids)

- d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
- e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

All liquids and sludge in the BGT were removed and sent to one of the above NMOCD approved facilities for disposal.

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.

The BGT was transported to a storage area for sale and re-use.

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

All equipment associated with the BGT has been removed.

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

Constituents	Testing Method	Release Verification	Sample
	21 bbl BGT, Tank B	(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 TPH, BTEX and chloride levels were below the stated limits. Sampling data is attached.

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

Sampling results indicate no release occurred.

9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

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

10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.

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

11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.

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

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

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

13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover

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

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

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

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

Certification section of C-144 has been completed.

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

## State of New Mexico Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in

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	eatio	n and Co	orrective A	ction		
						<b>OPERA</b>	ГOR		nitial Report	Final Report
Name of Co						Contact: Jef				
				M 87401						
Facility Na	me: Atlant	ic D Com D	LS 5			Facility Typ	e: Natural gas v	well		
Surface Ow	ner: State			Mineral C	)wner:	State		AP	No. 3004509	857
				LOCA	OITA	N OF REI	LEASE			
Unit Letter	Section	Township	Range	Feet from the			Feet from the	East/West Li	ne   County: S	San Juan
K	2	30N	10W	1,650	South	1	1,650	West		
L	I	Latit	ude36	.837751		Longitud	e107.855852			
				NAT	'URE	OF REL	EASE			
Type of Rele									ne Recovered:	
			21 bbl, T	ank B				e: Date	nd Hour of Dis	scovery:
Was Immedi	ate Notice (		Yes [	No 🛭 Not Re	equired		Whom?			
By Whom?										
Was a Water	course Reac		Yes 🛚	] No		If YES, Vo	olume Impacting t	he Watercours	-	
If a Watercou	ırse was Im	pacted, Descri	ibe Fully.*			<del>_</del>				
the BGT. So	il analysis r	esulted in TPI	H, BTEX a	and chloride below	w stand	lards. Analysi	s results are attacl	ned.		·
					moved	and the area u	nderneath the BG	T was sampled	The excavate	d area was
regulations a public health should their or or the environ	I operators or the envir operations h nment. In a	are required to ronment. The ave failed to a	o report an acceptance dequately CD accep	nd/or file certain re te of a C-141 repo investigate and re	elease r rt by th emedia	notifications ar ne NMOCD mate contaminati	nd perform correctarked as "Final Room that pose a thre	tive actions for eport" does not eat to ground w	releases which relieve the oper ater, surface wa	may endanger rator of liability ater, human health
		0				·	OIL CON:	SERVATIO	N DIVISIO	<u>DN</u>
Signature:	Jolk 1	esee								
	010					Approved by	Environmental S <sub>l</sub>	pecialist:		
Printed Name	. Jen Peace	ā						T		
Title: Field E	nvironment	al Coordinato	r			Approval Dat	e:	Expirat	on Date:	
E-mail Addre	ess: peace.je	effrey@bp.com	Mineral Owner: State			Attached				
Date: Noven	nber 18, 201	14	Pho	ne: <u>505-326-</u> 9479						

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

CLIENT: BP	<b>5</b>		•	413	T				
		(505) 632-119	9	**	(if applicble):	<del>A &amp;</del> E	3		
FIELD REPORT:	· · · · · · · · · · · · · · · · · · ·		<u></u>		PAGE#:	<b>1</b> of	_1_		
		SITE NAME: ATLANTIC D COM D LS # 5  RING: 10W PM: NM CNTY: SJ ST: NM  NW/SW LEASE TYPE: FEDERAL (STATE) FEE / INDIAN  ORMATION: MV CONTRACTOR MBF - G, CLEAVER  WELL HEAD (W.H.) GPS COORD: 36.83802 X 107.85570 GL ELEV: 10 SPS COORD: 36.837959 X 187.956006 DISTANCEBEARING FROM WH: 122*  SPS COORD: 36.837751 X 107.855852 DISTANCEBEARING FROM WH: 104*, SPS COORD: DIST	04/03	3/12					
QUAD/UNIT: K SEC: 2 TWP:					DATE FINISHED:				
		F	KHORN			NJ	V		
	-				GLFL	FV: 64	20'		
	GPS COORD.:								
2) 21 BGT (SW/DB) - B									
3)	GPS COORD.:			DISTANCE/BE/	ARING FROM W.H.:				
4)	GPS COORD.:			DISTANCE/BE/	ARING FROM W.H.:	·			
SAMPLING DATA:	CHAIN OF CUSTODY RECORD	(S) # OR LAB USED:	HALL						
1) SAMPLE ID: 5PC-TB@4' (21	BGT) SAMPLE DATE: 04/	03/12 SAMPLE TIME:	1315 LABANAL	ysis: <b>418.1/8</b>	015B/8021/B/3	00.0 (CI)	(ppm)		
2) SAMPLEID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANAL	YSIS:					
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANAL	YSIS:					
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANAL	YSIS:					
SOIL DESCRIPTION	SOIL TYPE: SAND /	SILTY SAND SILT / SILT	TY CLAY / CLAY / I	GRAVEL / OTI	HER				
			•						
				•			RD		
		HC ODOR	DETECTED: YES	NO EXPL	ANATION				
DISCOLORATION/STAINING OBSERVED	: YES NO EXPLANATION -								
ANY AREAS DISPLAYING WETNESS: YES NO	TEXPLANATION -			<del></del>	<u></u>				
<del></del>		SE FROM EITHER BGT	OBSERVED.						
						<del></del> .			
SOIL IMPACT DIMENSION ESTIMATION:		IA ft. X NA	ft. EXC	AVATION EST	IMATION (Cubic Ya	ards):	NA		
DEPTH TO GROUNDWATER: >100' N			CE WATER: _<1,	000' NMOC	D TPH CLOSURE ST		ppm		
SITE SKETCH		PLOT PL	AN circle: at	tached OVM	CALIB READ =	VA ppm			
							RF = 0.52		
SITE INFORMATION:  SITEMBLE SAMPLE REPLACED WITH 95 DWORD  STEEL INFORMATION:  SITEMBLE ATLANTIC D COM D LS # 5  DWARD 10W PM NM ONTM SJ ST NM  4-1440FOOTAGE 1650'S / 1050'W  NWISW JEAST TYPE FEDERAL STATE FEET/INDIAN  ELLHOUNT K SEC 2 1949 30N RNB 10W PM NM ONTM SJ ST NM  AND PROD FORMATION MV CONTRACTOR MEET-G. CLEAVER  PROD FORMATION MV CONTRACTOR MEET-G. CLEAVER  SPECIALISTS  SPECIALISTS  WELLHEAD (WH) GPS COORD  36.832751 X 107.85500  GLEEV 6.420'  39.8327151 X 107.85505  GLEEV 6.420'  105.83327151									
				'' =	MISCELL	NOTE	-S		
				١,					
			1 70						
	<u> </u>	PJ - Z2-00690-C							
DDOD /				=		<del>(95)</del>			
				=		C!			
	T.B. ~ 4'				k	<del>.o</del>			
			V			oilale. Y/ N	<del>/ NA</del>		
NOTES: BGT = BELOW-GRADE TANK: E.D. = FXCAN	/ATION DEPRESSION; B.G. = BELOW	GRADE; B = BELOW: T.H. = TE			BGT Sidewalls Vis	sible:Y/ N	/ NA		
T.B. = TANK BOTTOM; PBGTL = PREVIOUS	BELOW-GRADE TANK LOCATION; SF	PD = SAMPLE POINT DESIGNA	TION; R.W. = RETAININ	IGWALL; 📗 📈	lagnetic declina	ition: 10°	E		
					1) 04/04/12				

#### **Analytical Report**

#### Lab Order 1204151

Date Reported: 4/12/2012

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Atlantic D Com D LS #5

Project: Lab ID:

1204151-001

Client Sample ID: 5PC-TB@4' (21 BGT)

Collection Date: 4/3/2012 1:15:00 PM

Received Date: 4/4/2012 9:49:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/6/2012 11:30:27 AM
Surr: DNOP	104	77.4-131	%REC	1	4/6/2012 11:30:27 AM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/9/2012 6:50:15 PM
Surr: BFB	100	69.7-121	%REC	· 1	4/9/2012 6:50:15 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>
Benzene	ND	0.048	mg/Kg	1	4/9/2012 6:50:15 PM
Toluene	ND	0.048	mg/Kg	1	4/9/2012 6:50:15 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/9/2012 6:50:15 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/9/2012 6:50:15 PM
Surr: 4-Bromofluorobenzene	97.1	80-120	%REC	1	4/9/2012 6:50:15 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>BRM</b>
Chloride	ND	15	mg/Kg	10	4/9/2012 3:23:11 PM
EPA METHOD 418.1: TPH					Analyst: <b>JMP</b>
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	4/6/2012

Matrix: SOIL

#### Qualifiers:

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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1204151 12-Apr-12

Client:

Blagg Engineering

Project:

Atlantic D Com D LS #5

Sample ID MB-1412

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 1412

RunNo: 2004

Prep Date: 4/6/2012 Analysis Date: 4/9/2012

SeqNo: 55785

Units: mg/Kg

Analyte

Result PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

**RPDLimit** 

Qual

Chloride

Sample ID LCS-1412

SampType: LCS Batch ID: 1412 TestCode: EPA Method 300.0: Anions RunNo: 2004

Prep Date: 4/6/2012

Client ID: LCSS

15

ND

SeqNo: 55786

Units: mg/Kg

110

Analyte

Analysis Date: 4/9/2012

**RPDLimit** 

Qual

Chloride

Client ID:

PQL Result

1.5

SPK value SPK Ref Val

0.5140

SPK value SPK Ref Val %REC

0.5140

15.00

15.00

15.00

SPK value SPK Ref Val

%REC LowLimit 97.0

HighLimit 90

%RPD

%RPD

Sample ID 1204093-001AMS

BatchQC

SampType: MS Batch ID: 1412

Result

Result

14

TestCode: EPA Method 300.0: Anions RunNo: 2004

LowLimit

118

HighLimit

Analyte

Prep Date: 4/6/2012

Analysis Date: 4/9/2012

PQL

SeqNo: 55792

%REC

87.7

Units: mg/Kg

**RPDLimit** 

Qual

Chloride

14 1.5

TestCode: EPA Method 300.0: Anions

Sample ID 1204093-001AMSD Client ID:

Prep Date:

BatchQC

SampType: MSD Batch ID: 1412

RunNo: 2004

88.4

74.6

74.6

Units: mg/Kg

118

0.788

Qual

Analyte Chloride

4/6/2012

Analysis Date: 4/9/2012

1.5

SeqNo: 55793

LowLimit HighLimit

%RPD

**RPDLimit** 

20

Qualifiers:

R

Value exceeds Maximum Contaminant Level. \*/X

E Value above quantitation range

Analyte detected below quantitation limits RPD outside accepted recovery limits

ND

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Reporting Detection Limit

Page 2 of 1

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1204151 12-Apr-12

Client:

Blagg Engineering

Project:	-	c D Com D LS	#5								
Sample ID	MB-1398	SampTyp	e: ME	BLK	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	PBS	Batch II	D: <b>13</b> 9	98	F	RunNo: 1	945				
Prep Date:	4/5/2012	Analysis Date	e: <b>4/</b>	6/2012	9	SeqNo: 5	4175	Units: mg/k	ζg		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	rocarbons, TR	ND	20								
Sample ID	LCS-1398	SampTyp	e: LC	s	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	LCSS	Batch II	D: <b>13</b> 9	98	F	RunNo: 1	945				•
Prep Date:	4/5/2012	Analysis Date	e: <b>4/</b> 0	6/2012	S	SeqNo: 5	4176	Units: mg/K	(g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	rocarbons, TR	100	20	100.0	0	100	87.8	115			
Sample ID	LCSD-1398	SampTyp	e: LC	SD	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	LCSS02	Batch II	): <b>13</b> 9	98	F	RunNo: 1	945				
Prep Date:	4/5/2012	Analysis Date	e: <b>4/</b> 0	6/2012	S	SeqNo: <b>5</b>	4178	Units: mg/K	ίg		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	rocarbons, TR	97	20	100.0	0	97.4	87.8	115	2.78	8.04	

#### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Page 3 of 1

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1204151

12-Apr-12

Client:

Blagg Engineering

Project:	Atlantic I	O Com D I	LS #5								
Sample ID	MB-1397	SampT	уре: МЕ	BLK	TestCode: EPA Method 8015B: Diesel Range Organics						
Client ID:	PBS	Batch ID: 1397			F	RunNo: 1	949				
Prep Date:	4/5/2012	Analysis D	ate: 4/	6/2012	S	SeqNo: 5	4287	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	ND	10							-	
Surr: DNOP	<u> </u>	10		10.00		100	77.4	131			
Sample ID	LCS-1397	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (	Organics	
Client ID:	LCSS	Batch	1D: <b>13</b>	97	F	RunNo: 1	949				
Prep Date:	4/5/2012	Analysis D	ate: 4/	6/2012	S	SeqNo: 5	4449	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	50	10	50.00	0	100	62.7	139			
Surr: DNOP		4.7		5.000		94.1	77.4	131			
Sample ID	1204093-001AMS	SampT	уре: М	3	Tes	tCode: El	PA Method	8015B: Dies	el Range (	Organics	
Client ID:	BatchQC	Batch	ID: <b>13</b>	97	RunNo: 1949						
Prep Date:	4/5/2012	Analysis D	ate: 4/	6/2012	S	SeqNo: 5	4714	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	55	9.9	49.60	0	110	57.2	146			
Surr: DNOP		4.9		4.960		99.6	77.4	131			
Sample ID	1204093-001AMSE	<b>)</b> SampT	ype: <b>M</b> S	SD	Tes	tCode: El	PA Method	8015B: Dies	el Range (	Organics	
Client ID:	BatchQC	Batch	1D: <b>13</b>	97	F	lunNo: 1	949				
Prep Date:	4/5/2012	Analysis D	ate: 4/	6/2012	S	SeqNo: 5	4718	Units: mg/h	(g		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	53	9.8	49.12	0	108	57.2	146	2.82	26.7	
Surr: DNOP		4.9		4.912		98.9	77.4	131	0	0	

#### Qualifiers:

RL Reporting Detection Limit

<sup>\*/</sup>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

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1204151

12-Apr-12

Client:

Blagg Engineering

Project: Atlantic	D Com D I	LS #5													
Sample ID MB-1381	SampT	уре: М	3LK	TestCode: EPA Method 8015B: Gasoline Range											
Client ID: PBS	Batch	Batch ID: <b>1381</b> RunNo: <b>1936</b>													
Prep Date: 4/4/2012	Analysis D	ate: 4/	5/2012	SeqNo: <b>54559</b> U			Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	ND	5.0													
Surr: BFB	940		1,000		94.1	69.7	121								
Sample ID LCS-1381	SampT	s	Tes	tCode: El	PA Method	8015B: Gas	oline Rang	e							
Client ID: LCSS	Batch	Batch ID: 1381 RunNo: 1													
Prep Date: 4/4/2012	Analysis D	Analysis Date: 4/5/2012 SeqNo: 54561				Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	98.5	133								
Surr: BFB	1,000		1,000		104	69.7	121								
Sample ID 1204091-012AMS	SampT	уре: <b>М</b> .	3	TestCode: EPA Method 8015B: Gasoline Range											
Client ID: BatchQC	Batch	1D: <b>13</b>	81	RunNo: 1973											
Prep Date: 4/4/2012	Analysis D	ate: 4/	7/2012	S	SeqNo: 5	5021	Units: mg/l	≺g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	27	4.9	24.56	0	109	85.4	147								
Surr: BFB	1,000		982.3		101	69.7	121								
Sample ID 1204091-012AMS	<b>D</b> SampT	уре: МS	SD	Tes	Code: El	PA Method	8015B: Gas	oline Rang	e						
Client ID: BatchQC	Batch	ID: <b>13</b>	81	F	tunNo: 1	973									
Prep Date: 4/4/2012	Analysis D	ate: 4/	7/2012	S	SeqNo: <b>55022</b>			<b>K</b> g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	28	5.0	24.75	0	113	85.4	147	4.55	19.2						
Surr: BFB	1,000		990.1		102	69.7	121	0	0						

#### Qualifiers:

Page 5 of 1

RL Reporting Detection Limit

<sup>\*/</sup>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

# Hall Environmental Analysis Laboratory, Inc.

0.050

0.10

0.96

2.9

0.94

1.000

3.000

1.000

WO#: 1204151

12-Apr-12

Client: Project:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Blagg Engineering

.....

Atlantic D Com D LS #5

Sample ID MB-1381	Samp	ype: ME	зьк	Tes	PA Method	d 8021B: Volatiles									
Client ID: PBS	Batc	Batch ID: 1381 RunNo: 1937													
Prep Date: 4/4/2012	Analysis [	Date: 4/	5/2012	SeqNo: <b>54588</b> U			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-Bromofluorobenzene	0.89		1.000		89.3	80	120								
Sample ID LCS-1381	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8021B: Vola	tiles							
Client ID: LCSS	Batch	n ID: <b>13</b> 8	81	F	lunNo: 19	337									
Prep Date: 4/4/2012	Analysis D	Date: 4/	5/2012	S	SeqNo: 54	1591	Units: mg/k	(g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene	0.94	0.050	1.000	0	93.7	83.3	107								
Toluene	0.96	0.050	1.000	0	96.4	74.3	115								

Sample ID 1204096-001AMS	SampT	Гуре: М	3	Tes	TestCode: EPA Method 8021B: Volatiles											
Client ID: BatchQC	Batch	Batch ID: 1381 RunNo: 1974														
Prep Date: 4/4/2012	Analysis E	Date: 4/	7/2012	SeqNo: <b>55048</b>			Units: mg/h									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Benzene	0.92	0.048	0.9634	0	95.0	67.2	113									
Toluene	0.95	0.048	0.9634	0	99.1	62.1	116									
Ethylbenzene	0.95	0.048	0.9634	0	98.9	67.9	127									
Xylenes, Total	2.9	0.096	2.890	0	100	60.6	134									
Surr: 4-Bromofluorobenzene	0.90		0.9634		93.0	80	120									

0

0

95.6

96.7

93.8

80.9

85.2

80

122

123

120

Sample ID 1204096-001AM	<b>SD</b> SampT	SampType: MSD  Batch ID: 1381  Analysis Date: 4/7/2012			TestCode: EPA Method 8021B: Volatiles									
Client ID: BatchQC	Batch				RunNo: 1	974								
Prep Date: 4/4/2012	Analysis D				SeqNo: <b>5</b>	5049	Units: mg/k	(g						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	0.90	0.048	0.9551	0	94.7	67.2	113	1.17	14.3					
Toluene	0.94	0.048	0.9551	0	98.5	62.1	116	1.48	15.9					
Ethylbenzene	0.95	0.048	0.9551	0	99.5	67.9	127	0.241	14.4					
Xylenes, Total	2.8	0.096	2.865	0	99.1	60.6	134	1.87	12.6					
Surr: 4-Bromofluorobenzene	0.89		0.9551		93.0	80	120	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

Page 6 of 1



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

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

# Sample Log-In Check List

Clie	nt Name:	We	ork Or	der I											
Rec	eived by/date	AG		04/04/12											
Log	ged By:	Michelle G		4/4/2012 9:49	MA 00:	Mirell Garia									
Con	npleted By:	Michelle G	1:48 AM				Mich								
Rev	Reviewed By 04/04/12								·	,					
Cha	in of Cust	ody		, -,											
	Were seals in					Yes		No		Not F	Present				
2.			plete?				<b>V</b>	No			Present				
	3. How was the sample delivered?							UNI	)						
									_						
<u>Log</u>	<u>ın</u>														
4.	Coolers are p	oresent? (se	e 19. for cooler s	pecific informatio	n)	Yes	✓.	No	:		NA				
5.	Was an atter	npt made to	cool the samples	s?		Yes	V	No			NA				
6.	Were all sam	iples receive	ed at a temperatu	re of >0° C to 6.	o.c	Yes	~	No			NA				
7.	Sample(s) in	proper cont	ainer(s)?			Yes	~	No	;						
8.	Sufficient sar	nple volume	for indicated tes	t(s)?		Yes	: <b>V</b>	No	٠.						
			A and ONG) prop			Yes		No							
10.	Was preserva	ative added	to bottles?			Yes		No	~		NA				
11	VOA vials ha	ve zero hea	dspace?			Yes	:	No	1	No VO	A Vials	<b>✓</b>			
			ners received broi	ken?		Yes	į	No							
13.	Does paperw	ork match b	ottle labels?			Yes	V	No			# of pres				
			hain of custody)						,	:	for pH:				
			entified on Chain	of Custody?		Yes				!	۸		or >12 unl	ess noted)	
			were requested?			Yes					A	djusted?			
		_	ole to be met? authorization.)			Yes.	ν.	NO		:	Ch	ecked by:			
Spe	cial Handli	ing (if apı	olicable)								0.1	conce by.			
			discrepancies with	h this order?		Yes	٠.	No	٠.		NA	<b>~</b>			
	Person	Notified:			Date:				promote selection.	dumme to contide					
	By Who	ļ		MINING I SEE BOTH SEE THE SEE HE SEE THE SEE SEE	Via:	eMai	il	Ph	ione .	Fax	In	Person			
	Regardi	1						-49:29:2749		**************************************			1.00.00°		
	-	structions:			***********	- C-55-12			******	**************************************	-				
18.	Additional rer	narks:											:		
19	Cooler Infor	mation													

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

Chain-of-Custody Record				Turn-Around Time:				HALL ENVIRONMENTAL														
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard	Rush					_							<b>3</b> 0					
				Project Name:				www.hallenvironmental.com														
Mailing Ad	dress:	P.O. BO	X 87	ATLANTIC D COM D LS #5				4901 Hawkins NE - Albuquerque, NM 87109														
		BLOOM	FIELD, NM 87413	Project #:				Tel. 505-345-3975 Fax 505-345-4107  Analysis Request												_		
Phone #:		(505) 63	32-1199			•						Α	nal	ysis	Rec	lues	t 🐬					
email or F	ax#:			Project Manag	jer:									504)					П	$\neg$	$\Box$	
QA/QC Package:  Standard Level 4 (Full Validation)			NEUTON	VELEZ		(80218)	(Ajuo s	s/Diesel					PO4, S(	/ 8082 PCB's			!			e		
Accreditation:			Sampler: N	ELSON VE	1EZ 92V	-8 -	(Gas	(Gas					102,	82 P						ω		
□ NELAP □ Other			Onice: Yes □ No				PH	15B	8.1)	504.1)	Î		3, 1	/ 80		احا	.			e sa	Ę.	
□ EDD (T				Sample Temp			E	[+ H	80.	d 41	d 50	r P/	als	, N	des		Š	0.0		بو	Sit	٥
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX +•WITB	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4,	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
4/3/12.	1315	SOIL	SPC-TBEH'(ZIBET)	407 - 2	Cook	-001	1		V	$\checkmark$								V				
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Date:	Time:	ne: Relinquished by:		Received by:	L	Date Time	Ren	nark	S:	TPI	1 (8	015	B) -	GRC	8	DRC	ON	ILY.				
Date: 4/3/12	3/12/505 Weln J			Mita	· la la la tora	4/3/12 15/5			IREC										_			
Date:	Time:	Relinquish	ned by:	Received by:	- · · · · · · · · · · · · · · · · · · ·	Date Time	Jeff Peace, 200 Energy Court, Farmington, NM 87401										:					
4/3/12	1627	Tho	with Woller &	1775	04/04	112094	DUF Work Order: N1540207 Paykey: ZSCHWULBGT															
	If necessar	y samples si	ubmitted to Hall Environmental may be si	ubcontracted to other	accredited laboratorie	t. This serves as notice	of this	possil	oility. A	Any su	b-con	tracted	d data	will be	clea	rly not	ated or	n the a	ınalytir	al rep	ort.	



