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

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

Santa Fe, NM 87505

Form C-144 Revised June 6, 2013

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

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

# Pit, Below-Grade Tank, or

Proposed Alternative Method Permit or Closure Plan Application
Type of action:    Below grade tank registration   Permit of a pit or proposed alternative method   Closure of a pit, below-grade tank, or proposed alternative method   Modification to an existing permit/or registration   Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: BP America Production CompanyOGRID #:778
Address:200 Energy Court, Farmington, NM 87401
Facility or well name:Vandewart A 3A
API Number:3004522798OCD Permit Number:
U/L or Qtr/QtrC Section13 Township29N Range8W County:San Juan
Center of Proposed Design: Latitude36.73013 Longitude107.63101 NAD: ☐1927 ☒ 1983
Surface Owner:  Federal  State  Private 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 Drilling Fluid yes no Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other   String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
Secondary containment with leak detection   Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off   Visible sidewalls and liner   Visible sidewalls only   Other Single walled/double bottomed   Visible bottomed   Visible sidewalls   Visible sidewalls   Other Single walled/double bottomed   Visible sidewalls   Visible sidewalls   Visible sidewalls   Other Single walled/double bottomed   Visible sidewalls   Visible sidewalls   Other Single walled/double   Visible sidewalls   Visible sidewalls   Other Single walled/double   Visible sidewalls   Visible sidewalls   Visible sidewalls   Other Single walled/double   Visible sidewalls   Visible sidew
Liner type: Thickness mil
Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  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	
6.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other  Monthly ingrections (If patting or sourceins is not physically faceible)	
Monthly inspections (If netting or screening is not physically feasible)	
5. Signs: Subsection C of 19.15.17.11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.16.8 NMAC	
8.	
<u>Variances and Exceptions:</u> 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 acceptable acceptable and the application of the applicati	ntahle source
material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	pravic source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. ( <b>Does not apply to below grade tanks</b> )	☐ Yes ☐ No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	
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	☐ Yes ☐ No
Society; Topographic map	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Попи
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured	☐ Yes ☐ No
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	
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
<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	P
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	cuments are
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. and 19.15.17.13 NMAC	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
11.  Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached.	
<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. 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:	

Form C-144

12. 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
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 <sub>2</sub> S, 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	
13.  Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method	luid Management Pit
14.	
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	·
is. 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 sound 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 ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
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 ake (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.  JS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
Within a 100-year floodplain.	☐ Yes ☐ No
- FEMÁ 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 19.15.17.13 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 cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	II NMAC 15.17.11 NMAC
17. Operator Application Certification:	
l hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief	ef.
Name (Print):	
Signature: Date:	
e-mail address: Telephone:	
OCD Approval: Permit Application (including closure plan) Closure Plan (enly) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 4/2  Title: OCD Permit Number:	3/2015
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 at the closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not a section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date:3/19/2012	the closure report. complete this
20.  Closure Method:  Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loc ☐ If different from approved plan, please explain.	op systems only)
21.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please ind	licate, by a check

22. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure repbelief. I also certify that the closure complies with all applicable closure requirement	
Name (Print):Jeff Peace	Title: Field Environmental Coordinator
Signature: Signature:	Date:April 15, 2015
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

#### Vandewart A 3A API No. 3004522798 Unit Letter C, Section 13, T29N, 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**

- 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	(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 as part of final reclamation when the well is plugged and abandoned.

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 11 Bill S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410

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 accordance with 19.15.29 NMAC.

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

			Rele	ease Notific	catior	and Co	rrective A	ction				
						<b>OPERA</b>	ГOR		☐ Initia	al Report	$\boxtimes$	Final Report
Name of Co						Contact: Jef						
Address: 20			ngton, N	M 87401		<del></del>	No.: 505-326-94					
Facility Nan	ne: Vande	wart A 3A				Facility Typ	e: Natural gas v	<u>vell</u>				. <u></u>
Surface Own	ner: Feder	al		Mineral (	Owner:	Federal			API No	. 30045227	98	
•				LOCA	ATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	,	South Line	Feet from the	East/W	est Line	County: Sa	n Juan	
C	13	29N	8W	800	North		1,650	West				
		Lat	itude 3	6.73013		Longitud	e 107.63101					
				NAT	TIRE	OF RELI						•
Type of Relea	ise: none	<del></del>		NAI	UKE		Release: N/A		Volume R	lecovered: N	/A	
Source of Rel		v grade tank –	21 bbl				lour of Occurrenc	e:		Hour of Disc		
Was Immedia	te Notice (					If YES, To	Whom?					
		L	Yes L	No Not R	equired							
By Whom?						Date and H						
Was a Watero	ourse Reac	,,,,,,,	V N	1 N.		If YES, Vo	lume Impacting t	the Water	course.			
			Yes 🗵	1 NO								
If a Watercou	rse was Im	pacted, Descr	ibe Fully.'	k								
							the BGT was don'ts results are attac		g removal t	o ensure no	soil imp	pacts from
				ten.* BGT was re active well area.	moved a	and the area u	nderneath the BG	T was sa	mpled. Th	ne area under	the BO	GT was
regulations al public health should their o	l operators or the envir perations h ment. In a	are required to comment. The ave failed to addition, NMC	o report ar acceptance dequately CD accep	nd/or file certain rece of a C-141 reporting and r	elease no ort by the emediate	otifications are NMOCD made contamination	knowledge and und perform corrections of the correction of the correction that pose a three the operator of the correction of the correcti	etive action eport" do eat to gro	ons for rele ses not reli ound water	eases which reve the opera , surface wat	nay end itor of l er, hum	danger liability nan health
		$\Omega$					OIL CONS	SERV	ATION	DIVISIO	N	
Signature:	all	Hazel										
Signature.	<del>YU 0</del> —	y and				Annroyed by	Environmental S <sub>1</sub>	nacialist				
Printed Name	: Jeff Peace	<u> </u>					Environmental 5	pocialist.		<del> </del>		
Title: Field E	nvironment	al Coordinato	r			Approval Dat	e:	Е	xpiration I	Date:		
E-mail Addre	ss: peace.je	ffrey@bp.cor	n			Conditions of	Approval:			Attached		
Date: April 1	5, 2015		Phone: 5	05-326-9479								

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

CLIENT: BP		NEERING, INC. OMFIELD, NM 87413	API#: 3004522798
		32-1199	TANK ID (if applicble):
FIELD REPORT:	(circle one): BGT CONFIRMATION / RELEA	ASE INVESTIGATION / OTHER:	PAGE#: <b>1</b> of <b>1</b>
SITE INFORMATION	SITE NAME: VANDEWAR	RT A # 3A	DATE STARTED: 03/06/12
QUAD/UNIT: C SEC: 13 TWP:	29N RNG: 8W PM: NI	M CNTY: SJ ST: N	M DATE FINISHED:
1/4-1/4/F00TAGE: 800'N / 1,650	W NE/NW LEASE TYPE:	FEDERAL / STATE / FEE / INDIA	LITTICOMINEITIAL
LEASE #: <b>SF078502</b>	PROD. FORMATION: MV CONTRA	ELKHORN ACTOR: MBF - J. WILBORN	SPECIALIST(S): JCB
REFERENCE POINT			088 GLELEV: 6,340'
1) 21 BGT (SW/DB)	GPS COORD.: 36.730	113 X 107.63101 DISTA	NCE/BEARING FROM W.H.: 47', S70W
2)	GPS COORD.:	DISTAI	NCE/BEARING FROM W.H.:
3)	GPS COORD.:	DISTA	NCE/BEARING FROM W.H.:
,	GPS COORD.:	DISTAI	NCE/BEARING FROM W.H.:
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB I		READING (ppm)
· -	25' SAMPLE DATE: 03/06/12		
2) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME: LAB ANALYSIS:	
	SAMPLE DATE:		
	SAMPLE DATE:		· <u></u>
	SOIL TYPE: SAND SILTY SAND	SILT / SILTY CLAY / CLAY / GRAVE	L/OTHER
SOIL COLOR: DARK YELL  COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY	'	DI ACTICITY (CLAVC). MON DI ACTIC ( CLICUTI Y DI	ACTIC LOOLITOR & ANTOLINA DI ACTIC ALICUI VIDI ACTIC
CONSISTENCY (NON COHESIVE (SLIGHTL		,	ASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC  SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY/SLIGHTLYMOIST/MOIST/W		HC ODOR DETECTED: YES NO	EXPLANATION
SAMPLE TYPE: GRAB (COMPOSITE) # OF PTS. DISCOLORATION/STAINING OBSERVED		· -	
DISCOLORATION/STAINING OBSERVED	TES (NO) EXPENIATION -		
ANY AREAS DISPLAYING WETNESS: YES NO	EXPLANATION - MELTING SNOW WITHII	N ANNULAR OF WOODEN RETAINII	NG WALL.
ADDITIONAL COMMENTS: NO APPARE	NT EVIDENCE OF A RELEASE OBSERV	/ED FROM BGT.	
SOIL IMPACT DIMENSION ESTIMATION: DEPTH TO GROUNDWATER: >100' N			N ESTIMATION (Cubic Yards) : NA  NMOCD TPH CLOSURE STD: 1,000 ppm
SITE SKETCH		PLOT PLAN circle: attached	OVM CALIB. READ. = 53.3 ppm pr = 0.50
·		1 20112 11 0100	OVM CALIB. READ. = 53.3 ppm   RF = 0.52   OVM CALIB. GAS = 100 ppm
	TER UN →	N	TIME: 1:35 an(pm) DATE: 03/06/12
	WELL	I A	MISCELL. NOTES
	HEAD		WO - N1570658
	$\oplus$		PO - 79306
			PK - ZVALENOLAB
PBGTL T.B. ∼ 6'	→(xxx) BERM		
B.G.			
	PROD.		Permit Date: 06/09/10
// \	TANK		OCD Appr. Date: 02/28/12
FENCE	_ //	V ABB	A BGT Sidewalls Visible: Y / N / NA
NOTES: BOT - BELOW! ODADE TAME: ED - EVOA!	/ATION DEPRESSION; B.G. = BELOW GRADE; B = BE	X - S.P.D	BGT Sidewalls Visible: Y / N / NA
T.B. = TANK BOTTOM; PBGTL = PREVIOUS	BELOW-GRADE TANK LOCATION; SPD = SAMPLE P	OINT DESIGNATION; R.W. = RETAINING WALL	Magnetic declination: 10° E
NA-NOT APPLICABLE OR NOT AVAILABLE TRAVEL NOTES: CALLOUT:	; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SIN	GLE BOTTOM; DB - DOUBLE BOTTOM.  ONSITE: 03/06/12	Ш

#### **Analytical Report**

Lab Order 1203427

Date Reported: 3/19/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Vandewart A 3A

**Lab ID:** 1203427-001

Project:

Client Sample ID: 21 BGT 5-pt @5'

**Collection Date:** 3/6/2012 1:24:00 PM

Received Date: 3/13/2012 10:10:00 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	3/15/2012 9:36:39 AM
Surr: DNOP	84.9	77.4-131	%REC	1	3/15/2012 9:36:39 AM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	3/15/2012 3:58:02 PM
Surr: BFB	92.2	69.7-121	%REC	1	3/15/2012 3:58:02 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.049	mg/Kg	1	3/15/2012 3:58:02 PM
Toluene	ND	0.049	mg/Kg	1	3/15/2012 3:58:02 PM
Ethylbenzene	ND	0.049	mg/Kg	1	3/15/2012 3:58:02 PM
Xylenes, Total	ND	0.098	mg/Kg	1	3/15/2012 3:58:02 PM
Surr: 4-Bromofluorobenzene	98.9	85.3-139	%REC	1	3/15/2012 3:58:02 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>BRM</b>
Chloride	ND	1.5	mg/Kg	1	3/15/2012·3:32:30 PM
EPA METHOD 418.1: TPH					Analyst: <b>JMP</b>
Petroleum Hydrocarbons, TR	ND	19	mg/Kg	1	3/15/2012

Matrix: SOIL

Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1203427 19-Mar-12

**Client:** 

Blagg Engineering

Project:

Vandewart A 3A

Sample ID MB-1091

SampType: MBLK

Result

Result

14

**PQL** 

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 1091

RunNo: 1500

Prep Date: 3/14/2012

Analysis Date: 3/15/2012

SeqNo: 42129

Units: mg/Kg

HighLimit

%RPD **RPDLimit** 

Qual

Qual

Analyte Chloride

ND 1.5

Sample ID LCS-1091

SampType: LCS

TestCode: EPA Method 300.0: Anions

%REC LowLimit

Client ID: LCSS

Batch ID: 1091

**PQL** 

1.5

RunNo: 1500

LowLimit

LowLimit

TestCode: EPA Method 300.0: Anions

110

Prep Date: 3/14/2012

Analysis Date: 3/15/2012

SPK value SPK Ref Val

SPK value SPK Ref Val

15.00

15.00

SeqNo: 42130 %REC

92.6

Units: mg/Kg HighLimit

**RPDLimit** Qual

Analyte Chloride

Sample ID 1203427-001AMS

SampType: MS

TestCode: EPA Method 300.0: Anions

Client ID: 21 BGT 5-pt @5'

RunNo: 1500

Batch ID: 1091

Units: mg/Kg

Prep Date: 3/14/2012 Analysis Date: 3/15/2012

SeqNo: 42134

Analyte

Result PQL SPK value SPK Ref Val

%REC

HighLimit

Chloride

14 1.5 0.7259 89.9 74.6 118

Sample ID 1203427-001AMSD Client ID: 21 BGT 5-pt @5'

SampType: MSD Batch ID: 1091

RunNo: 1500

Prep Date:

3/14/2012

Analyte

Analysis Date: 3/15/2012 POL

1.5

SeqNo: 42135

Units: mg/Kg

HighLimit %RPD

**RPDLimit** Qual

Chloride

Result 14 SPK value SPK Ref Val 15.00

0.7259

%REC 87.6 LowLimit 74.6

118

2.43

%RPD

%RPD

20

**RPDLimit** 

Qualifiers:

R

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

J Analyte detected below quantitation limits RPD outside accepted recovery limits

Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Page 2 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1203427

19-Mar-12

Client:

Blagg Engineering

Project:

Vandewart A 3A

Sample ID MB-1080

SampType: MBLK

PQL

20

TestCode: EPA Method 418.1: TPH

Client 1D:

PBS

Batch ID: 1080

RunNo: 1485

Prep Date: 3/14/2012 Analysis Date: 3/15/2012 Result

ND

SeqNo: 41745

Units: mg/Kg HighLimit

%RPD **RPDLimit** 

Qual

Analyte Petroleum Hydrocarbons, TR

SampType: LCS

TestCode: EPA Method 418.1: TPH

Client ID: LCSS

Sample ID LCS-1080

Prep Date: 3/14/2012

Batch ID: 1080 Analysis Date: 3/15/2012

RunNo: 1485

0

0

SPK value SPK Ref Val %REC LowLimit

SeqNo: 41746

102

Units: mg/Kg

115

Analyte Petroleum Hydrocarbons, TR Result PQL 100

SPK value

SPK Ref Val %REC LowLimit HighLimit

**RPDLimit** Qual

Sample ID LCSD-1080

SampType: LCSD

20

20

TestCode: EPA Method 418.1: TPH

Client ID: LCSS02

Petroleum Hydrocarbons, TR

Batch ID: 1080

100.0

100.0

RunNo: 1485 SeqNo: 41748

Units: mg/Kg

Analyte

Prep Date: 3/14/2012

Analysis Date: 3/15/2012

100

SPK value SPK Ref Val

%REC 100

LowLimit 87.8

87.8

HighLimit

115

%RPD

%RPD

**RPDLimit** Qual

2.02 8.04

#### Qualifiers:

R

\*/X Value exceeds Maximum Contaminant Level

Value above quantitation range Е

J Analyte detected below quantitation limits RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit Reporting Detection Limit

Page 3 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1203427

19-Mar-12

Client:

Blagg Engineering

Project:

Vandewart A 3A

Sample ID MB-1079

SampType: MBLK

Result

Result

8.6

TestCode: EPA Method 8015B: Diesel Range Organics

Client ID:

Analyte

PBS

Batch ID: 1079

RunNo: 1473

Prep Date:

3/14/2012

Analysis Date: 3/15/2012

**PQL** 

10

SeqNo: 41291 %REC

Units: mg/Kg

Qual

Diesel Range Organics (DRO) Surr: DNOP

ND

10.00

SPK value SPK Ref Val

SPK value SPK Ref Val

85.5

77.4

HighLimit LowLimit

**RPDLimit** 

Sample ID LCS-1079

SampType: LCS

TestCode: EPA Method 8015B: Diesel Range Organics

%RPD

Client ID: LCSS Batch ID: 1079

RunNo: 1473

131

Prep Date: 3/14/2012 Analysis Date: 3/15/2012

SeqNo: 41292 %REC

Units: mg/Kg

%RPD HighLimit **RPDLimit** Qual

Analyte Diesel Range Organics (DRO) Surr: DNOP

44 10 50.00 4.2 5.000

**PQL** 

87.1 62.7 84.5 77.4

LowLimit

139 131

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range Ε

Analyte detected below quantitation limits J

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Page 4 of 6

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1203427

19-Mar-12

Client:

Blagg Engineering

Project: Vandewa	art A 3A	· <del></del> ·								
Sample ID MB-1070	SampType: M	BLK	Tes	tCode: El	PA Method	8015B: Gas	oline Rang	je		
Client ID: PBS	Batch ID: 10	Batch ID: 1070			RunNo: 1478					
Prep Date: 3/13/2012	Analysis Date: 3	/14/2012	8	SeqNo: 4	1520	Units: mg/h	<b>(</b> g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 900	1,000		90.0	69.7	121				
Sample ID LCS-1070	SampType: L0	cs	Tes	tCode: <b>E</b> F	PA Method	8015B: Gaso	oline Rang	е	=	
Client ID: LCSS	Batch ID: 10	70	F	lunNo: 14	478					
Prep Date: 3/13/2012	Analysis Date: 3	/14/2012	8	SeqNo: 4	1521	Units: mg/h	<b>(</b> g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	28 5.0	25.00	0	112	98.5	133				
Surr: BFB	980	1,000		98.0	69.7	121				
Sample iD 1203406-001AMS	SampType: <b>M</b>	s	Tes	tCode: EF	PA Method	8015B: Gaso	oline Rang	е		
Client ID: BatchQC	Batch ID: 10	70	RunNo: 1478							
Prep Date: 3/13/2012	Analysis Date: 3	/14/2012	S	SeqNo: 4	1525	Units: mg/h	<b>(</b> g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	31 24	119.8	0	25.7	85.4	147			S	
Surr: BFB	4,400	4,794		92.2	69.7	121				
Sample ID 1203406-001AMS	D SampType: M	SD	Tes	Code: EF	PA Method	8015B: Gaso	oline Rang	е		
Client ID: BatchQC	Batch ID: 10	70	F	lunNo: 14	<b>478</b>					
Prep Date: 3/13/2012	Analysis Date: 3	/14/2012	S	eqNo: 4	1526	Units: mg/k	(g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	35 24	122.2	0	28.5	85.4	147	12.4	19.2	S	
Surr: BFB	4,600	4,888		93.3	69.7	121	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 5 of 6

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1203427

19-Mar-12

Client:

Blagg Engineering

Project:

Vandewart A 3A

SampT	Tuno: ME	DI 1/	Ton	tCodo: El	DA Mathad	9024D. Volo	·Iloo		
Sampi	ype. wie	DLN	resicode. EPA Wethod			ouzīb. voia	uies		
Batch	h ID: <b>10</b>	70	F	RunNo: 1	478				
Prep Date: 3/13/2012 Analysis Date: 3/14/2012 SeqN				SeqNo: 4	1531	Units: mg/h	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ND	0.050							,	
ND	0.050								
ND	0.050								
ND	0.10								
0.97		1.000		97.1	85.3	139			
	Batcl Analysis E Result ND ND ND ND ND ND	Batch ID: 10  Analysis Date: 3/  Result PQL  ND 0.050  ND 0.050  ND 0.050  ND 0.10	Result         PQL         SPK value           ND         0.050           ND         0.050           ND         0.050           ND         0.10	Batch ID: 1070 F  Analysis Date: 3/14/2012 S  Result PQL SPK value SPK Ref Val  ND 0.050  ND 0.050  ND 0.050  ND 0.050  ND 0.10	Batch ID: 1070       RunNo: 1         Analysis Date:       3/14/2012       SeqNo: 4         Result       PQL       SPK value       SPK Ref Val       %REC         ND       0.050         ND       0.050         ND       0.050         ND       0.10	Batch ID: 1070       RunNo: 1478         Analysis Date: 3/14/2012       SeqNo: 41531         Result PQL SPK value SPK Ref Val %REC LowLimit         ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050	Batch ID: 1070       RunNo: 1478         Analysis Date:       3/14/2012       SeqNo: 41531       Units: mg/K         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit         ND       0.050         ND       0.050         ND       0.050         ND       0.10	Batch ID: 1070       RunNo: 1478         Analysis Date: 3/14/2012       SeqNo: 41531       Units: mg/Ky         Result PQL SPK value SPK Ref Val %REC LowLimit ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050	Batch ID: 1070       RunNo: 1478         Analysis Date: 3/14/2012       SeqNo: 41531       Units: mg/Kg         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit         ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050         ND 0.050       ND 0.050

Sample ID LCS-1070	SampT	TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	Batcl	h ID: <b>10</b>	70	F	RunNo: 1	478						
Prep Date: 3/13/2012	Analysis [	Date: 3/	14/2012	5	SeqNo: 4	1532	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.96	0.050	1.000	0	95.7	83.3	107					
Toluene	1.0	0.050	1.000	0	99.7	74.3	115					
Ethylbenzene	1.0	0.050	1.000	0	100	80.9	122					
Xylenes, Total	3.0	0.10	3.000	0	100	85.2	123					
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	85.3	139					

#### 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 6



Hall Environmental Analysis Laborator) 4901 Hawkins NE Albuquerque, NM 8710!

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

# Sample Log-In Check List

Clie	ent Name:	BLAGG		1	Wo	ork Ord	der N	lumb	oer:	1203	427				
Red	ceived by/date	A.	21.	03  3  12	·										
Log	ged By:	Ashley Gall	egos	<i>I I</i> 3/13/2012 10:10:0	00 AM				A	7					
Con	npleted By:	Ashley Galle	egos	3/13/2012 10:45:	56 AM				Æ	⊋.					
Rev	riewed By: 🗀	tO 03/1	(3/12						•	a					
	in of Cust		-/1-												
1.	Were seals i	intact?				Yes		No		No	t Present	$\checkmark$			
2.	is Chain of C	Custody comp	lete?			Yes	<b>V</b>	No		No	t Present				
3.	How was the	sample deliv	ered?		•	Clien	<u>t</u>								
Log	ı İn														
		present? (see	19. for cooler	specific information)		Yes	<b>V</b>	No			NA				
5.	Was an atter	mpt made to c	cool the sample	es?		Yes	<b>V</b>	No			NA				
	Were all sam	noles received	at a temperat	ure of >0° C to 6.0°C		Yes		No			NA			·	
O.	VVOIC EN SEN	inpies received	at a temperar	uie 01 20 0 to 0.0 0	•	163		•••			N/A	_			•
7.	Sample(s) in	proper contai	iner(s)?			Yes	<b>V</b>	No							
8.	Sufficient sai	mple volume f	for indicated te	st(s)?		Yes	V	No							
9.	Are samples	(except VOA	and ONG) pro	perly preserved?		Yes	<b>V</b>	No							-
10,	Was preserv	vative added to	bottles?			Yes		No	V		NA				
11	VOA vials ha	ave zero head:	space?			Yes		No		No V	OA Vials	<b>✓</b>			
			ers received br	oken?		Yes	<b>V</b>	No		1		-		<del></del>	
		vork match bo				Yes	✓	No			# of pre				
	(Note discrep	cancies on ch	ain of custody)						_		for pH:	JIECKEU			
14.	Are matrices	correctly iden	itified on Chair	of Custody?		Yes			_				<2 or >12	unless n	oted)
			ere requested	<b>}</b>		Yes			_		A	djusted?			-
		ling times able customer for a				Yes	<b>Y</b>	No	L		Ch	ecked b	v: .		
Spe	cial Handi	ing (if appl	licable)							į					
			screpancies w	ith this order?		Yes		No			NA	<b>✓</b>			
	Person	Notified:		Da	te:										
	By Who	om: 🖺		Via	a:	eMail		] Ph	one	<u></u> F.	ax 🔲 In	Person			
	Regardi	ing:										·		1	
	Client Ir	nstructions:				<u>-</u>							<del></del>		
18.	Additional re	marks:				•						· · · · · · · · · · · · · · · · · · ·		•	
	-														
19.	Cooler Infor		Condition	Seal Intact   Seal No	,   .e.	al Dat	o.	ء ا	Zion-	A Du	ļ				
	Cooler No			es Searmact   Searmo	, se	ai Däl	<u>e</u>		oigne	ed By	-			•	
	•		·	·····											

Chain-of-Custody Record			Turn-Around Time:				B B LAIL CHATDONIS CATA															
Client: BLAGG ENGINEERING INC.			X Standard □ Rush				HALL ENVIRONMENTAL ANALYSIS LABORATORY															
BP AMERICA			Project Name:																			
Mailing Address: P.O. Box 87			VANDEWART A 3A					www.hallenvironmental.com														
			Project #:				4901 Hawkins NE - Albuquerque, NM 87109  Tel. 505-345-3975 Fax 505-345-4107															
BLOOMFIELD NM 97413			•				ماريخ														******	
Phone #: 505-632-1199 email or Fax#:			Project Manager:				Analysis Request															
			J. BLAGE				21)	only)	iese					SO <sub>4</sub> )	3,8							
QA/QC Package:  ☐ Level 4 (Full Validation)							(80	Gas	(Gas/Dies					δţ	PCB'							
Accred				Sampler: J	- BLA66			₩.	+ TPH (Gas	Ö					02,1	082				,		
□ NELAP □ Other			Onlice and Mes strate North at 1					± +	15E	18.	4.	AH)		3,N	7 8		₹				Z	
□ EDD (Type)			Sample Tem	erature	X(200.571)	50 E		BE	)8 p	yd 4	8	P.	stals	Ň	ides	8	0^-	w		1		
Date	Time	Matrix	Sample Request ID			HEAUNG		BTEX + <del>WTBE + TMB's</del> (8021)	BTEX + MTBE	TPH Method 8015B	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	CHWRIDE	!		Air Bubbles (Y or N)
3/6/12	1324	SOIL	21 BGT 5-pt e5'	40221	COOL	-06	7	X		X	X	$\exists$				-			X		$\top$	+
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3/12/12	1033	1-	H Begg	Mast	N 1570658 ZVALENOLAB																	
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3/12/12 1601 / Menter Wasters !			7 0	3/3/2/0	010		-	4 کرستدا														



