

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

MAY 31 2016

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.

14491 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.

1.  
Operator: BP America Production Company OGRID #: 778  
Address: 200 Energy Court, Farmington, NM 87401  
Facility or well name: PUBCO FEDERALGAS COM 001  
API Number: 3004509439 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr M Section 14 Township 30N Range 11W County: San Juan  
Center of Proposed Design: Latitude 36.80748 Longitude -1087.96626 NAD:  1927  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2.  
 **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary:  Drilling  Workover  
 Permanent  Emergency  Cavitation  P&A  Multi-Well Fluid Management Low 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 \_\_\_\_\_

3.  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC TANK A  
Volume: 95 bbl Type of fluid: Produced water  
Tank Construction material: Steel  
 Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
 Visible sidewalls and liner  Visible sidewalls only  Other Double wall/ double bottom; no visible sidewalls  
Liner type: Thickness \_\_\_\_\_ mil  HDPE  PVC  Other \_\_\_\_\_

4.  
 **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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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 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

8.

**Variations 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 acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.*

**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
- NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (**Does not apply to below grade tanks**)

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

- Yes  No

Within the area overlying a subsurface mine. (**Does not apply to below grade tanks**)

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

- Yes  No

Within an unstable area. (**Does not apply to below grade tanks**)

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

- Yes  No

Within a 100-year floodplain. (**Does not apply to below grade tanks**)

- FEMA map

- Yes  No

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

- Yes  No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

- Yes  No

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

- Yes  No

<p>Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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.</p> <p>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 100 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><b><u>Temporary Pit Non-low chloride drilling fluid</u></b></p>	
<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).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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;</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><b><u>Permanent Pit or Multi-Well Fluid Management Pit</u></b></p>	
<p>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).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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.</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

10.

**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC

Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC

Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC

Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC

Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 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 documents are attached.*

Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC

Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC

A List of wells with approved application for permit to drill associated with the pit.

Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC

Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

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 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 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 Fluid Management Pit  
 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

14.

**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the 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
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

*Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

16. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, 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 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- 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

17. **Operator Application Certification:**

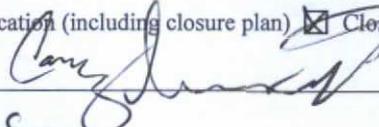
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18. **OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature:  Approval Date: 6/6/16

Title: Environmental Spec OCD Permit Number: \_\_\_\_\_

19. **Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC

*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

Closure Completion Date: 4/24/2015

20. **Closure Method:**

Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method  Waste Removal (Closed-loop systems only)

If different from approved plan, please explain.

21. **Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice (surface owner and division)
- Proof of Deed Notice (required for on-site closure for private land only)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure)
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude 36.80748 Longitude -107.96626 NAD:  1927  1983

22.

**Operator Closure Certification:**

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

Name (Print): Steve Moskal Title: Field Environmental Coordinator

Signature:  Date: May 16, 2016

e-mail address: steven.moskal@bp.com Telephone: (505) 326-9497

BP AMERICA PRODUCTION COMPANY  
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

Pubco Federal Gas Com 001  
API No. 3004509439  
Unit Letter M, Section 14, T30N, R11W

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 approved BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

General Closure Plan

1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.  
**Notice is attached.**
2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.  
**Notice was provided and is attached.**
3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
  - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
  - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
  - c. Basin Disposal, Permit NM-01-0005 (Liquids)
  - d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
  - e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)

- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

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

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

**The BGT was transported for recycling.**

- 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 <b>95 bbl BGT</b>	Release Verification (mg/Kg)	Sample results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	<0.080
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	<0.16
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<u>2,800</u>
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<30

**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 for TPH, BTEX and chloride. BTEX and chloride concentrations were below the stated limits. TPH exceeded the BGT closure standards. The site was excavated to follow and meet the spill and release guidelines. The field report and laboratory reports are 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 a release had occurred. BP followed the spill and release guidelines and fully remediated the site. Attached are laboratory reports. A field report and C-141 has already been submitted for closure approval.**
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  
**Sampling results indicate a release had occurred. BP followed the spill and release guidelines and fully remediated the site. Attached are laboratory reports. A field report and C-141 has already been submitted for closure approval. The location will be reclaimed once the well is plugged and abandoned.**
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 has been backfilled and will be reclaimed once the well has been plugged and abandoned.**
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 has been backfilled and will be reclaimed once the well has been plugged and abandoned.**
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 has been backfilled and will be reclaimed once the well has been plugged and abandoned.**

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.

**The area has been backfilled and will be reclaimed once the well has been 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 re-vegetation.

**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 including photos of reclamation completion.**

16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

**Certification section of C-144 has been completed.**

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

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

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

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Pubco Federal Gas Com 1	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004509439
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**LOCATION OF RELEASE**

Unit Letter M	Section 14	Township 30N	Range 11W	Feet from the 830	North/South Line South	Feet from the 925	East/West Line West	County: San Juan
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Latitude 36.80725° Longitude -107.96624°

**NATURE OF RELEASE**

Type of Release: oil/condensate	Volume of Release: unknown	Volume Recovered: none
Source of Release: below grade tank	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: April 23, 2015; 11:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* During construction operations to remove the below grade tank (BGT) soil samples under the tank were taken. Lab analyses showed TPH ranging from 180 ppm to 2,370 ppm by Method 8015D. Benzene, total BTEX and chloride were below the BGT standards. The lab results indicate a release occurred at some time.

Describe Area Affected and Cleanup Action Taken.\* BP excavated and removed impacted soil for offsite landfarm treatment. Confirmation samples were submitted a laboratory for analysis with results below closure standards for TPH, BTEX and chloride. Approximately 672 cubic yards of soil were removed from the site and replaced with clean backfill material.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Steve Moskal	Approved by Environmental Specialist:	
Title: Field Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: May 25, 2016 Phone: 505-326-9479		

\* Attach Additional Sheets If Necessary

# NCS 1517756 885

bp



BP America Production Company  
200 Energy Court  
Farmington, NM 87401  
Phone: (505) 326-9200

April 17, 2015

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

**VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

Re: Notification of plans to close/remove a below grade tank  
Well Name: PUBCO FEDERAL GAS COM 001  
API #: 3004509439

Dear Mr. Kelly,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about April 22, 2015. If there aren't any unforeseen problems, the work should be completed within 10 working days.

As a point of clarification, BP will be closing the below grade tank and either operating without one or replacing it with an above ground tank, the well site will continue to operate.

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

Sincerely,

A handwritten signature in black ink that reads "Jerry Van Riper".

Jerry Van Riper  
Surface Land Negotiator  
BP America Production Company

**Rodriguez, Edicia/DRG**

---

**From:** Rodriguez, Edicia/DRG  
**Sent:** Friday, April 17, 2015 1:55 PM  
**To:** 'Cory.Smith@State.NM.US'  
**Cc:** 'Peace, Jeffrey'; 'Railsback, Farrah (CH2M HILL)'  
**Subject:** Pubco Federal GC 001 Pit Close notice

SENT VIA E-MAIL TO: CORY.SMITH@STATE.NM.US

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

April 17, 2015

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

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

PUBCO FEDERAL GAS COM 001  
API 30-045-09439  
(M) Section 14 – T30N – R11W  
San Juan County, New Mexico

Dear Mr. Cory Smith:

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around April 22, 2015.

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

Sincerely,

Jeff Peace  
BP Field Environmental Advisor

(505) 326-9479

**FIELD REPORT:** (circle one):  BGT CONFIRMATION /  RELEASE INVESTIGATION / OTHER: \_\_\_\_\_  
 PAGE #: **1** of **1**

**SITE INFORMATION:** SITE NAME: **PUBCO FEDERAL GC # 1** DATE STARTED: **04/24/15**  
 QUAD/UNIT: **M SEC: 14 TWP: 30N RNG: 11W PM: NM CNTY: SJ ST: NM** DATE FINISHED: \_\_\_\_\_  
 1/4 -1/4 FOOTAGE: **830'S / 925'W SW/SW** LEASE TYPE:  FEDERAL / STATE / FEE / INDIAN  
 LEASE #: **NM029148** PROD. FORMATION: **DK** CONTRACTOR: **STRIKE MBF - S. GLYNN** ENVIRONMENTAL SPECIALIST(S): **NJV**

**REFERENCE POINT:** WELL HEAD (W.H.) GPS COORD.: **36.80737 X 107.96644** GL ELEV.: **5,971'**  
 1) **95 BGT (DW/DB)** GPS COORD.: **36.80748 X 107.96626** DISTANCE/BEARING FROM W.H.: **79', N54.5E**  
 2) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_  
 3) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_  
 4) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_

**SAMPLING DATA:** CHAIN OF CUSTODY RECORD(S) # OR LAB USED: **HALL**

SAMPLE ID	TH-N @ 6.5'	TH-E @ 5'	TH-S @ 6'	TH-W @ 7.5'	SAMPLE DATE	SAMPLE TIME	LAB ANALYSIS	OVN READING (ppm)
1)	TH-N @ 6.5'	TH-E @ 5'	TH-S @ 6'	TH-W @ 7.5'	04/23/15	1123	8015B/8021B/300.0 (CI)	16.0
2)	TH-E @ 5'	TH-E @ 5'	TH-S @ 6'	TH-W @ 7.5'	04/23/15	1133	8015B/8021B/300.0 (CI)	756
3)	TH-S @ 6'	TH-E @ 5'	TH-S @ 6'	TH-W @ 7.5'	04/23/15	1110	8015B/8021B/300.0 (CI)	16.2
4)	TH-W @ 7.5'	TH-E @ 5'	TH-S @ 6'	TH-W @ 7.5'	04/23/15	1128	8015B/8021B/300.0 (CI)	22.5

**SOIL DESCRIPTION:** SOIL TYPE:  SAND /  SILTY SAND /  SILT /  SILTY CLAY /  CLAY /  GRAVEL /  OTHER **BEDROCK (SANDSTONE)**  
 SOIL COLOR: **DARK YELLOWISH ORANGE** PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC  
 COHESION (ALL OTHERS):  NON COHESIVE /  SLIGHTLY COHESIVE /  COHESIVE /  HIGHLY COHESIVE DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD  
 CONSISTENCY (NON COHESIVE SOILS):  LOOSE /  FIRM /  DENSE /  VERY DENSE HC ODOR DETECTED:  YES /  NO EXPLANATION - **DISCOLORED SOILS & DISCOLORED BEDROCK SURFACE AT TH-CTR & TH-E ONLY.**  
 MOISTURE:  DRY /  SLIGHTLY MOIST /  MOIST /  WET /  SATURATED /  SUPER SATURATED ANY AREAS DISPLAYING WETNESS: YES  NO  EXPLANATION - \_\_\_\_\_  
 SAMPLE TYPE:  GRAB /  COMPOSITE - # OF PTS. **NA**  
 DISCOLORATION/STAINING OBSERVED:  YES /  NO EXPLANATION - **LIGHT GRAY (TH-E) & LIGHT GRAY TO BLACK DIRECTLY BENEATH BGT ONLY.**

**SITE OBSERVATIONS:** LOST INTEGRITY OF EQUIPMENT: YES  NO  EXPLANATION - \_\_\_\_\_  
 APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED:  YES /  NO EXPLANATION: **NOT FROM BGT. APPEARS HISTORICAL IN ORIGIN BASED ON DISCOLORATION.**  
 EQUIPMENT SET OVER RECLAIMED AREA:  YES /  NO EXPLANATION - **95 LOW PROFILE ABOVE-GRADE TANK TO BE SET ATOP BGT LOCATION.**  
 OTHER: **SANDSTONE TOP SURFACES BETWEEN 3' - 7.5' BELOW GRADE. BOTH TH-CTR SAMPLES SUBMITTED FOR LAB ANALYSIS SIMILAR TO THOSE NOTED ABOVE. ALL SAMPLES COLLECTED FROM BEDROCK SURFACE EXCEPT TH-CTR @ 4.5'.**  
 SOIL IMPACT DIMENSION ESTIMATION: **16** ft. X **18** ft. X **2** ft. EXCAVATION ESTIMATION (Cubic Yards): **30 +/-**  
 DEPTH TO GROUNDWATER: **>100'** NEAREST WATER SOURCE: **>1,000'** NEAREST SURFACE WATER: **<200'** NMOCD TPH CLOSURE STD: **100** ppm

**SITE SKETCH** BGT Located:  off /  on site PLOT PLAN circle:  attached

SAMPLE ID	OVN (ppm)	TIME
TH-CTR @ 4.5'	864	1100
TH-CTR @ 5'	886	1150

OVN CALIB. READ. = **52.5** ppm RF=0.52  
 OVN CALIB. GAS = **100** ppm  
 TIME: **11:56** (am/pm) DATE: **04/23/15**

**MISCELL. NOTES**  
 WO: **N15502071**  
 PO #: \_\_\_\_\_  
 PK: **ZEVH01BGT2**  
 PJ #: **Z2-006Q0**  
 Permit date(s): **06/14/10**  
 OCD Appr. date(s): **01/12/15**  
 Tank ID: **A** OVM = Organic Vapor Meter ppm = parts per million  
 BGT Sidewalls Visible: **Y / (N)**  
 BGT Sidewalls Visible: **Y / N**  
 BGT Sidewalls Visible: **Y / N**  
 Magnetic declination: **10° E**

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

Analytical Report

Lab Order 1504A60

Date Reported: 5/16/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-N @ 6.5' (95)

Project: PUBCO FEDERAL GC #1

Collection Date: 4/23/2015 11:23:00 AM

Lab ID: 1504A60-001

Matrix: SOIL

Received Date: 4/24/2015 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	4/24/2015 11:14:00 AM	18874
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/24/2015 10:50:00 AM	18870
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/24/2015 10:50:00 AM	18870
Surr: DNOP	91.7	70-130		%Rec	1	4/24/2015 10:50:00 AM	18870
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	4/24/2015 12:02:57 PM	18852
Surr: BFB	93.2	80-120		%Rec	1	4/24/2015 12:02:57 PM	18852
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.043		mg/Kg	1	4/24/2015 12:02:57 PM	18852
Toluene	ND	0.043		mg/Kg	1	4/24/2015 12:02:57 PM	18852
Ethylbenzene	ND	0.043		mg/Kg	1	4/24/2015 12:02:57 PM	18852
Xylenes, Total	ND	0.086		mg/Kg	1	4/24/2015 12:02:57 PM	18852
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	4/24/2015 12:02:57 PM	18852

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

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1504A60

Date Reported: 5/16/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH-E @ 5' (95)

Project: PUBCO FEDERAL GC #1

Collection Date: 4/23/2015 11:33:00 AM

Lab ID: 1504A60-002

Matrix: SOIL

Received Date: 4/24/2015 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LGT
Chloride	35	30		mg/Kg	20	4/24/2015 11:26:24 AM	18874
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: KJH
Diesel Range Organics (DRO)	380	9.9		mg/Kg	1	4/24/2015 11:14:41 AM	18870
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/24/2015 11:14:41 AM	18870
Surr: DNOP	93.2	70-130		%Rec	1	4/24/2015 11:14:41 AM	18870
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	120	5.0		mg/Kg	1	4/24/2015 12:31:43 PM	18852
Surr: BFB	531	80-120	S	%Rec	1	4/24/2015 12:31:43 PM	18852
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	4/24/2015 12:31:43 PM	18852
Toluene	0.082	0.050		mg/Kg	1	4/24/2015 12:31:43 PM	18852
Ethylbenzene	ND	0.050		mg/Kg	1	4/24/2015 12:31:43 PM	18852
Xylenes, Total	5.2	0.099		mg/Kg	1	4/24/2015 12:31:43 PM	18852
Surr: 4-Bromofluorobenzene	154	80-120	S	%Rec	1	4/24/2015 12:31:43 PM	18852

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

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order 1504A60  
 Date Reported: 5/16/2016

**CLIENT:** Blagg Engineering **Client Sample ID:** TH-S @ 6' (95)  
**Project:** PUBCO FEDERAL GC #1 **Collection Date:** 4/23/2015 11:10:00 AM  
**Lab ID:** 1504A60-003 **Matrix:** SOIL **Received Date:** 4/24/2015 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	4/24/2015 11:38:49 AM	18874
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	180	10		mg/Kg	1	4/24/2015 11:36:30 AM	18870
Motor Oil Range Organics (MRO)	230	50		mg/Kg	1	4/24/2015 11:36:30 AM	18870
Surr: DNOP	99.4	70-130		%Rec	1	4/24/2015 11:36:30 AM	18870
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/24/2015 1:29:08 PM	18852
Surr: BFB	93.3	80-120		%Rec	1	4/24/2015 1:29:08 PM	18852
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.040		mg/Kg	1	4/24/2015 1:29:08 PM	18852
Toluene	ND	0.040		mg/Kg	1	4/24/2015 1:29:08 PM	18852
Ethylbenzene	ND	0.040		mg/Kg	1	4/24/2015 1:29:08 PM	18852
Xylenes, Total	ND	0.081		mg/Kg	1	4/24/2015 1:29:08 PM	18852
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	4/24/2015 1:29:08 PM	18852

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Blagg Engineering

Client Sample ID: TH-W @ 7.5' (95)

Project: PUBCO FEDERAL GC #1

Collection Date: 4/23/2015 11:28:00 AM

Lab ID: 1504A60-004

Matrix: SOIL

Received Date: 4/24/2015 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	4/24/2015 11:51:13 AM	18874
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/24/2015 11:57:57 AM	18870
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/24/2015 11:57:57 AM	18870
Surr: DNOP	92.3	70-130		%Rec	1	4/24/2015 11:57:57 AM	18870
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	4/24/2015 1:57:50 PM	18852
Surr: BFB	92.4	80-120		%Rec	1	4/24/2015 1:57:50 PM	18852
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.044		mg/Kg	1	4/24/2015 1:57:50 PM	18852
Toluene	ND	0.044		mg/Kg	1	4/24/2015 1:57:50 PM	18852
Ethylbenzene	ND	0.044		mg/Kg	1	4/24/2015 1:57:50 PM	18852
Xylenes, Total	ND	0.088		mg/Kg	1	4/24/2015 1:57:50 PM	18852
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	4/24/2015 1:57:50 PM	18852

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified





# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504A60

16-May-16

**Client:** Blagg Engineering  
**Project:** PUBCO FEDERAL GC #1

Sample ID	<b>MB-18874</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>18874</b>	RunNo:	<b>25767</b>					
Prep Date:	<b>4/24/2015</b>	Analysis Date:	<b>4/24/2015</b>	SeqNo:	<b>763679</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-18874</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>18874</b>	RunNo:	<b>25767</b>					
Prep Date:	<b>4/24/2015</b>	Analysis Date:	<b>4/24/2015</b>	SeqNo:	<b>763680</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	110			

Sample ID	<b>MB-18874</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>18874</b>	RunNo:	<b>25794</b>					
Prep Date:	<b>4/24/2015</b>	Analysis Date:	<b>4/27/2015</b>	SeqNo:	<b>764328</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-18874</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>18874</b>	RunNo:	<b>25794</b>					
Prep Date:	<b>4/24/2015</b>	Analysis Date:	<b>4/27/2015</b>	SeqNo:	<b>764329</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1504A60  
 16-May-16

**Client:** Blagg Engineering  
**Project:** PUBCO FEDERAL GC #1

Sample ID <b>MB-18870</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>18870</b>		RunNo: <b>25727</b>							
Prep Date: <b>4/24/2015</b>	Analysis Date: <b>4/24/2015</b>		SeqNo: <b>762681</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.5	57.9	140			

Sample ID <b>LCS-18870</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>18870</b>		RunNo: <b>25727</b>							
Prep Date: <b>4/24/2015</b>	Analysis Date: <b>4/24/2015</b>		SeqNo: <b>762682</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.9	67.8	130			
Surr: DNOP	4.8		5.000		96.3	57.9	140			

**Qualifiers:**

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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504A60

16-May-16

Client: Blagg Engineering  
Project: PUBCO FEDERAL GC #1

Sample ID	MB-18852	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	18852	RunNo:	25724					
Prep Date:	4/23/2015	Analysis Date:	4/24/2015	SeqNo:	763338	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	900		1000		90.2	80	120			

Sample ID	LCS-18852	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	18852	RunNo:	25724					
Prep Date:	4/23/2015	Analysis Date:	4/24/2015	SeqNo:	763339	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	64	130			
Surr: BFB	1200		1000		121	80	120			S

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1504A60  
 16-May-16

**Client:** Blagg Engineering  
**Project:** PUBCO FEDERAL GC #1

Sample ID	<b>MB-18852</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>18852</b>	RunNo:	<b>25724</b>					
Prep Date:	<b>4/23/2015</b>	Analysis Date:	<b>4/24/2015</b>	SeqNo:	<b>763427</b>	Units:	<b>mg/Kg</b>			
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	1.0		1.000		103	80	120			

Sample ID	<b>LCS-18852</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>18852</b>	RunNo:	<b>25724</b>					
Prep Date:	<b>4/23/2015</b>	Analysis Date:	<b>4/24/2015</b>	SeqNo:	<b>763433</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	76.6	128			
Toluene	1.1	0.050	1.000	0	106	75	124			
Ethylbenzene	1.1	0.050	1.000	0	110	79.5	126			
Xylenes, Total	3.3	0.10	3.000	0	108	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**Sample Log-In Check List**

Client Name: **BLAGG**

Work Order Number: **1504A60**

RcptNo: **1**

Received by/date: AT 04/24/15

Logged By: **Anne Thorne** 4/24/2015 7:30:00 AM *Anne Thorne*

Completed By: **Anne Thorne** 4/24/2015 *Anne Thorne*

Reviewed By:

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No   
(Note discrepancies on chain of custody)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No   
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

# Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**  
**BLOOMFIELD, NM 87413**

Phone #: **(505) 632-1199**

Email or Fax#: \_\_\_\_\_

QA/QC Package:  
 Standard  Level 4 (Full Validation)

Accreditation:  
 NELAP  Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush **SAME DAY**

Project Name:  
**PUBCO FEDERAL GC # 1**

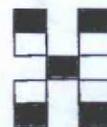
Project #:  
 \_\_\_\_\_

Project Manager:  
**NELSON VELEZ**

Sampler: **NELSON VELEZ** *NV*

On Ice:  Yes  No

Sample Temperature: *10*



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	As of 4/23/15 Container Type and # <i>Medialts</i>	Preservative Type	HEAL No. <i>1504A10</i>	BTEX + MTBE + THMs (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / <del>THMs</del> )	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water - 300.1)	Grab sample	5 pt. composite sample	Air Bubbler (Y or N)
4/23/15	1123	SOIL	TH-N @ 6.5' (95)	4oz.-1	COOL	-001	✓	✓										✓	✓		
4/23/15	1133	SOIL	TH-E @ 5' (95)	4oz.-1	COOL	-002	✓	✓										✓	✓		
4/23/15	1110	SOIL	TH-S @ 6' (95)	4oz.-1	COOL	-003	✓	✓										✓	✓		
4/23/15	1128	SOIL	TH-W @ 7.5' (95)	4oz.-1	COOL	-004	✓	✓										✓	✓		
4/23/15	1100	SOIL	TH-CR @ 4.5' (95)	4oz.-1	COOL	-005	✓	✓										✓	✓		
4/23/15	1150	SOIL	TH-CR @ 5' (95)	4oz.-1	COOL	-006	✓	✓										✓	✓		

Date: *4/23/15* Time: *1403* Relinquished by: *[Signature]*

Date: *4/23/15* Time: *1810* Relinquished by: *Christi Webb*

Received by: *[Signature]* Date: *4/23/15* Time: *1403*

Received by: *[Signature]* Date: *04/24/15* Time: *0730*

Remarks:  
**BILL DIRECTLY TO BP:**  
 Jeff Peace, 200 Energy Court, Farmington, NM 87401  
 WORK ORDER  
 Reference #: N15502071 Paykey: ZEVH01BGT2  
*92V*

505-947-9900

**BP AMERICA PRODUCTION COMPANY**  
**PUBCO FEDERAL GAS COM 001**  
**API 3004509439 LEASE NMNM029148**  
**830 FSL 925 FWL (M) SEC 14 T30N R11W**  
**SAN JUAN COUNTY ELEV 5971**  
**LAT 36° 48' 26.568"**  
**LONG 107° 57' 59.364"**

