

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

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

Form C-144  
Revised April 3, 2017

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.

1.  
Operator: BP America Production Company OGRID #: 778  
Address: 380 North Airport Road, Durango, CO 81303  
Facility or well name: GCU 211E  
API Number: 3004524173 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr C Section 32 Township 29N Range 12W County: San Juan  
Center of Proposed Design: Latitude 36.68816 Longitude -108.12501 NAD83  
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 Single wall/ Double bottom; sidewalls not visible  
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.

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.  
**Variances and Exceptions:**

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

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

- ☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  
☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.  
**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of 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

Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

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

☐ Yes ☐ No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

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

☐ Yes ☐ No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Permanent Pit or Multi-Well Fluid Management Pit**

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☐ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

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

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

10.

#### **Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><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).<br>- 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.<br>- 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.<br>- 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.<br>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   |   |

|   |  |
|---|--|
| adopted pursuant to NMSA 1978, Section 3-27-3, as amended.<br>- 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.<br>- 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.<br>- 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.<br>- 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: 11/30/2018

Title: Environmental Specialist 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: 7/1/2018

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 36.68816 Longitude -108.12501 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): Erin Dunman Title: Field Environmental Coordinator

Signature: *Erin Dunman* Date: August 29, 2018

e-mail address: erin.dunman@bpx.com Telephone: (832) 609-7048

**BP AMERICA PRODUCTION COMPANY**  
**SAN JUAN BASIN, NORTHWEST NEW MEXICO**

BELOW-GRADE TANK CLOSURE PLAN

**GCU 211E**

**API No. 3004524173**

**Unit Letter C Section 32 T 29N R 12W**

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<br>95 bbl BGT                | Release Verification<br>(mg/Kg) | Sample results |
|--------------|---|---------------------------------|----------------|
| Benzene      | US EPA Method SW-846 8021B or 8260B         | 10                              | <0.017         |
| Total BTEX   | US EPA Method SW-846 8021B or 8260B         | 50                              | <0.068         |
| TPH          | US EPA Method SW-846 418.1 or 8015 extended | 100                             | 480            |
| Chlorides    | US EPA Method 300.0 or 4500B                | 620                             | 39             |

**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 chloride, TPH and BTEX with all concentrations below the stated limits, except TPH. The release will be addressed following 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 has occurred. The release will be addressed following the spill and release guidelines. Attached is a laboratory report and C-141.**

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 within the active process area

**Sampling results indicate a release has occurred. The release will be addressed following the spill and release guidelines. Attached is a laboratory report and field report. The location has been reclaimed as the well has been 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 BGT location's surface condition is clear. The location has been reclaimed as 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 BGT location's surface condition is clear. The location has been reclaimed as 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 BGT location's surface condition is clear. The location has been reclaimed as 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 BGT location's surface condition is clear. The location has been reclaimed as 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.

**The area has been backfilled and BGT location's surface condition is clear. The location has been reclaimed as the well has been plugged and abandoned.**

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 Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Release Notification

### Responsible Party

|   |                                  |
|---|----------------------------------|
| Responsible Party BP America Production Company                   | OGRID 778                        |
| Contact Name Erin Dunman  | Contact Telephone (832) 609-7048 |
| Contact email erin.dunman@bpx.com                                 | Incident # (assigned by OCD)     |
| Contact mailing address 380 North Airport Road, Durango, CO 81303 |                                  |

### Location of Release Source

Latitude 36.68816 Longitude -108.12501  
(NAD 83 in decimal degrees to 5 decimal places)

|                         |                                 |
|-------------------------|---------------------------------|
| Site Name GCU 211E      | Site Type Natural Gas Well Site |
| Date Release Discovered | API# (if applicable) 3004524173 |

| Unit Letter | Section | Township | Range | County   |
|-------------|---------|----------|-------|----------|
| C           | 32      | 29N      | 12W   | San Juan |

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

|   |  |  |
|---|--|--|
| <input type="checkbox"/> Crude Oil        | Volume Released (bbls)   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Produced Water   | Volume Released (bbls)   | Volume Recovered (bbls)                                  |
|   | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate       | Volume Released (bbls)   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Natural Gas      | Volume Released (Mcf)  | Volume Recovered (Mcf)                                   |
| <input type="checkbox"/> Other (describe) | Volume/Weight Released (provide units)   | Volume/Weight Recovered (provide units)                  |

#### Cause of Release

Sampling of the soil beneath the BGT was done during removal. Soil analysis resulted for Chlorides, BTEX, and TPH below BGT closure standards, except TPH. Groundwater depth is >100' at this location thus giving it a closure standard of 2,500 mg/kg of TPH. Since the TPH concentration was 480 mg/kg, no further action necessary. Field reports and laboratory results are attached.

State of New Mexico  
Oil Conservation Division

|                |  |
|----------------|--|
| Incident ID    |  |
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| Application ID |  |

|   |  |
|---|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?                          |  |

**Initial Response**

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

|  |                  |
|--|------------------|
| <input type="checkbox"/> The source of the release has been stopped.   |                  |
| <input type="checkbox"/> The impacted area has been secured to protect human health and the environment.   |                  |
| <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.   |                  |
| <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.   |                  |
| If all the actions described above have <u>not</u> been undertaken, explain why:   |                  |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  |                  |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. |                  |
| Printed Name: _____  | Title: _____     |
| Signature: _____   | Date: _____      |
| email: _____   | Telephone: _____ |
| <b><u>OCD Only</u></b>   |                  |
| Received by: _____   | Date: _____      |

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

|   |  |
|---|--|
| What is the shallowest depth to groundwater beneath the area affected by the release?   | _____ (ft bgs)   |
| Did this release impact groundwater or surface water?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

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

|                |  |
|----------------|--|
| Incident ID    |  |
| District RP    |  |
| Facility ID    |  |
| Application ID |  |

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Erin Dunman Title: Field Environmental Coordinator  
Signature: Erin Dunman Date: August 29, 2018  
email: erin.dunman@bpx.com Telephone: (832) 609-7048

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



**BP America Production Company**  
380 Airport Road  
Durango, CO 81303

June 15, 2018

B Square Ranch LLC  
3901 Bloomfield Highway  
Farmington, NM 87401

Re: Notification of plans to close/remove a below grade tank  
Well Name: GALLEGOS CANYON UNIT 211E

To Whom it May Concern,

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 June 27, 2018. If there aren't any unforeseen problems, the work should be completed within 10 working days.

Sincerely,

Erin Garifalos

BP America Production Company

**Erin Dunman**

---

**From:** Farrah Buckley  
**Sent:** Friday, June 22, 2018 12:38 PM  
**To:** Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)  
**Cc:** jeffcblagg@aol.com; blagg\_njv@yahoo.com; Erin Garifalos  
**Subject:** RE: BP Pit Close Notification - GCU 211E

**external-email:** 0

BP America Production Company  
380 Airport Rd  
Durango, CO 81303  
Phone: (970) 247 6800

SENT VIA E-MAIL TO: [CORY.SMITH@STATE.NM.US](mailto:CORY.SMITH@STATE.NM.US); [VANESSA.FIELDS@STATE.NM.US](mailto:VANESSA.FIELDS@STATE.NM.US)

June 22, 2018

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

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

GALLEGOS CANYON UNIT 211E  
API# 30-045-24173  
(C) Section 32 – T29N – R12W  
San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around June 27, 2018.

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

Sincerely,

Erin Garifalos

Field Environmental Coordinator – San Juan  
Cell: 832-609-7048

***Farrah Buckley***  
**BGT Project Support**  
**970-946-9199 -cell**

**Note new email address – [Farrah.buckley@bpx.com](mailto:Farrah.buckley@bpx.com)**

*This email and any attachments are intended only for the addressee(s) listed above and may contain confidential, proprietary, and/or privileged information. If you are not an intended recipient, please immediately advise the sender by return email, delete this email and any attachments, and destroy any copies of same. Any unauthorized review, use, copying disclosure or distribution of this email and any attachments is prohibited.*

|   |   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
|---|---|--|---|--|---|---|---------------------|-------------------------------------|--------------------|-------------------------------------|--------------------------|---------------------|--------------------|--------------------|---------------------|--------------------------|---------------------|--------------------|--------------------|---------------------|--------------------------|---------------------|--------------------|--------------------|---------------------|--------------------------|--|
| CLIENT: <b>BP</b>   | <b>BLAGG ENGINEERING, INC.</b><br><b>P.O. BOX 87, BLOOMFIELD, NM 87413</b><br><b>(505) 632-1199</b> | API #: <b>3004524173</b><br>TANK ID (if applicable): <b>A</b>  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>FIELD REPORT:</b> (circle one) <input checked="" type="checkbox"/> <b>BGT CONFIRMATION</b> / <input type="checkbox"/> <b>RELEASE INVESTIGATION</b> / <input type="checkbox"/> <b>OTHER:</b>  |   | PAGE #: <b>1</b> of <b>1</b>   |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>SITE INFORMATION:</b> SITE NAME: <b>GCU # 211E</b><br>QUAD/UNIT: <b>C</b> SEC: <b>32</b> TWP: <b>29N</b> RNG: <b>12W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b><br>1/4 -1/4/FOOTAGE: <b>990'N / 1,740'W</b> <b>NE/NW</b> LEASE TYPE: <b>FEDERAL / STATE</b> <input checked="" type="checkbox"/> <b>FEE</b> / <input type="checkbox"/> <b>INDIAN</b><br>LEASE #: <b>-</b> PROD. FORMATION: <b>DK</b> CONTRACTOR: <b>STRIKE BP - J. GONZALES</b>  |   | DATE STARTED: <b>06/27/18</b><br>DATE FINISHED: _____<br>ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>   |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>REFERENCE POINT:</b> WELL HEAD (W.H.) GPS COORD.: <b>36.68780 X 108.12539</b> GL ELEV.: <b>5,441'</b><br>1) <b>95 BGT (SW/DB)</b> GPS COORD.: <b>36.68816 X 108.12501</b> DISTANCE/BEARING FROM W.H.: <b>161', N33.5E</b><br>2) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____<br>3) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____<br>4) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____  |   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>SAMPLING DATA:</b> CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <b>HALL</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">1) SAMPLE ID: <b>5PC - TB @ 5' (95)</b></td> <td style="width:20%;">SAMPLE DATE: <b>06/27/18</b></td> <td style="width:20%;">SAMPLE TIME: <b>1445</b></td> <td style="width:20%;">LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b></td> <td style="width:10%;">OVM READING (ppm): <b>NA</b></td> </tr> <tr> <td>2) SAMPLE ID: _____</td> <td>SAMPLE DATE: _____</td> <td>SAMPLE TIME: _____</td> <td>LAB ANALYSIS: _____</td> <td>OVM READING (ppm): _____</td> </tr> <tr> <td>3) SAMPLE ID: _____</td> <td>SAMPLE DATE: _____</td> <td>SAMPLE TIME: _____</td> <td>LAB ANALYSIS: _____</td> <td>OVM READING (ppm): _____</td> </tr> <tr> <td>4) SAMPLE ID: _____</td> <td>SAMPLE DATE: _____</td> <td>SAMPLE TIME: _____</td> <td>LAB ANALYSIS: _____</td> <td>OVM READING (ppm): _____</td> </tr> <tr> <td>5) SAMPLE ID: _____</td> <td>SAMPLE DATE: _____</td> <td>SAMPLE TIME: _____</td> <td>LAB ANALYSIS: _____</td> <td>OVM READING (ppm): _____</td> </tr> </table>   |   | 1) SAMPLE ID: <b>5PC - TB @ 5' (95)</b>  | SAMPLE DATE: <b>06/27/18</b>                | SAMPLE TIME: <b>1445</b>                             | LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b> | OVM READING (ppm): <b>NA</b>  | 2) SAMPLE ID: _____ | SAMPLE DATE: _____                  | SAMPLE TIME: _____ | LAB ANALYSIS: _____                 | OVM READING (ppm): _____ | 3) SAMPLE ID: _____ | SAMPLE DATE: _____ | SAMPLE TIME: _____ | LAB ANALYSIS: _____ | OVM READING (ppm): _____ | 4) SAMPLE ID: _____ | SAMPLE DATE: _____ | SAMPLE TIME: _____ | LAB ANALYSIS: _____ | OVM READING (ppm): _____ | 5) SAMPLE ID: _____ | SAMPLE DATE: _____ | SAMPLE TIME: _____ | LAB ANALYSIS: _____ | OVM READING (ppm): _____ |  |
| 1) SAMPLE ID: <b>5PC - TB @ 5' (95)</b>   | SAMPLE DATE: <b>06/27/18</b>  | SAMPLE TIME: <b>1445</b>   | LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b> | OVM READING (ppm): <b>NA</b>                         |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| 2) SAMPLE ID: _____   | SAMPLE DATE: _____  | SAMPLE TIME: _____   | LAB ANALYSIS: _____                         | OVM READING (ppm): _____                             |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| 3) SAMPLE ID: _____   | SAMPLE DATE: _____  | SAMPLE TIME: _____   | LAB ANALYSIS: _____                         | OVM READING (ppm): _____                             |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| 4) SAMPLE ID: _____   | SAMPLE DATE: _____  | SAMPLE TIME: _____   | LAB ANALYSIS: _____                         | OVM READING (ppm): _____                             |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| 5) SAMPLE ID: _____   | SAMPLE DATE: _____  | SAMPLE TIME: _____   | LAB ANALYSIS: _____                         | OVM READING (ppm): _____                             |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>SOIL DESCRIPTION:</b> SOIL TYPE: <input checked="" type="checkbox"/> <b>SAND</b> <input checked="" type="checkbox"/> <b>SILTY SAND</b> <input type="checkbox"/> <b>SILT</b> / <input type="checkbox"/> <b>SILTY CLAY</b> / <input type="checkbox"/> <b>CLAY</b> / <input type="checkbox"/> <b>GRAVEL</b> / <input type="checkbox"/> <b>OTHER</b> _____<br>SOIL COLOR: <b>MOSTLY DARK YELLOWISH ORANGE</b><br>COHESION (ALL OTHERS): <input checked="" type="checkbox"/> <b>NON COHESIVE</b> / <input type="checkbox"/> <b>SLIGHTLY COHESIVE</b> / <input type="checkbox"/> <b>COHESIVE</b> / <input type="checkbox"/> <b>HIGHLY COHESIVE</b><br>CONSISTENCY (NON COHESIVE SOILS): <input checked="" type="checkbox"/> <b>LOOSE</b> / <input checked="" type="checkbox"/> <b>FIRM</b> / <input type="checkbox"/> <b>DENSE</b> / <input type="checkbox"/> <b>VERY DENSE</b><br>MOISTURE: <b>DRY</b> / <input checked="" type="checkbox"/> <b>SLIGHTLY MOIST</b> / <input type="checkbox"/> <b>MOIST</b> / <input type="checkbox"/> <b>WET</b> / <input type="checkbox"/> <b>SATURATED</b> / <input type="checkbox"/> <b>SUPER SATURATED</b><br>SAMPLE TYPE: GRAB <input checked="" type="checkbox"/> <b>COMPOSITE</b> # OF PTS. <b>5</b><br>DISCOLORATION/STAINING OBSERVED: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION - _____<br>PLASTICITY (CLAYS): <input type="checkbox"/> <b>NON PLASTIC</b> / <input type="checkbox"/> <b>SLIGHTLY PLASTIC</b> / <input type="checkbox"/> <b>COHESIVE</b> / <input type="checkbox"/> <b>MEDIUM PLASTIC</b> / <input type="checkbox"/> <b>HIGHLY PLASTIC</b><br>DENSITY (COHESIVE CLAYS & SILTS): <input type="checkbox"/> <b>SOFT</b> / <input type="checkbox"/> <b>FIRM</b> / <input type="checkbox"/> <b>STIFF</b> / <input type="checkbox"/> <b>VERY STIFF</b> / <input type="checkbox"/> <b>HARD</b><br>HC ODOR DETECTED: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION - _____<br>ANY AREAS DISPLAYING WETNESS: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION - _____ |   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>SITE OBSERVATIONS:</b> LOST INTEGRITY OF EQUIPMENT: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION - _____<br>APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION: _____<br>EQUIPMENT SET OVER RECLAIMED AREA: YES <input checked="" type="checkbox"/> <b>NO</b> EXPLANATION - _____<br>OTHER: <b>NMOCED REP. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING. GAS WELL TO BE PLUGGED &amp; ABANDONED.</b>  |   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| EXCAVATION DIMENSION ESTIMATION: <b>NA</b> ft. X <b>NA</b> ft. X <b>NA</b> ft. EXCAVATION ESTIMATION (Cubic Yards): <b>NA</b><br>DEPTH TO GROUNDWATER: <b>&gt;100'</b> NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&gt;300' / &lt;1,000'</b> NMOCED TPH CLOSURE STD: <b>2,500</b> ppm   |   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>SITE SKETCH</b> BGT Located: off <input checked="" type="checkbox"/> <b>on</b> site PLOT PLAN circle: <input checked="" type="checkbox"/> <b>attached</b><br>  |   | OVM CALIB. READ: = <b>NA</b> ppm RF=1.00<br>OVM CALIB. GAS = <b>NA</b> ppm<br>TIME: <b>NA</b> am/pm DATE: <b>NA</b>  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| 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.<br>NOTES: <b>GOOGLE EARTH IMAGERY DATE: 2018 GOOGLE.</b> ONSITE: <b>06/27/18</b>  |   | <b>MISCELL. NOTES</b><br>WO:<br>REF #: <b>P-988</b><br>VID: <b>VHIXONEVB2</b><br>PJ #:<br>Permit date(s): <b>06/14/10</b><br>OCD Appr. date(s): <b>02/26/18</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Tank ID</td> <td>OVM = Organic Vapor Meter<br/>ppm = parts per million</td> </tr> <tr> <td><b>A</b></td> <td>BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> <b>(N)</b></td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / <b>N</b></td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / <b>N</b></td> </tr> </table> Magnetic declination: <b>10° E</b> | Tank ID                                     | OVM = Organic Vapor Meter<br>ppm = parts per million | <b>A</b>                                    | BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> <b>(N)</b> |                     | BGT Sidewalls Visible: Y / <b>N</b> |                    | BGT Sidewalls Visible: Y / <b>N</b> |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| Tank ID   | OVM = Organic Vapor Meter<br>ppm = parts per million  |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
| <b>A</b>  | BGT Sidewalls Visible: Y / <input checked="" type="checkbox"/> <b>(N)</b>                           |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
|   | BGT Sidewalls Visible: Y / <b>N</b>   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |
|   | BGT Sidewalls Visible: Y / <b>N</b>   |  |   |  |   |   |                     |                                     |                    |                                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |                     |                    |                    |                     |                          |  |

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1806G71

Date Reported: 7/1/2018

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 5' (95)

Project: GCU 211E

Collection Date: 6/27/2018 2:45:00 PM

Lab ID: 1806G71-001

Matrix: SOIL

Received Date: 6/28/2018 7:00:00 AM

| Analyses   | Result | PQL    | Qual | Units | DF | Date Analyzed         | Batch               |
|--|--------|--------|------|-------|----|-----------------------|---------------------|
| <b>EPA METHOD 300.0: ANIONS</b>                  |        |        |      |       |    |                       | Analyst: <b>smb</b> |
| Chloride   | 39     | 30     |      | mg/Kg | 20 | 6/28/2018 11:40:56 AM | 38944               |
| <b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>      |        |        |      |       |    |                       | Analyst: <b>AG</b>  |
| Gasoline Range Organics (GRO)                    | ND     | 3.4    |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | A52327              |
| Surr: BFB  | 118    | 70-130 |      | %Rec  | 1  | 6/28/2018 12:07:52 PM | A52327              |
| <b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b> |        |        |      |       |    |                       | Analyst: <b>lrm</b> |
| Diesel Range Organics (DRO)                      | 150    | 10     |      | mg/Kg | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| Motor Oil Range Organics (MRO)                   | 330    | 50     |      | mg/Kg | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| Surr: DNOP                                       | 70.1   | 70-130 |      | %Rec  | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| <b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>    |        |        |      |       |    |                       | Analyst: <b>AG</b>  |
| Benzene  | ND     | 0.017  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Toluene  | ND     | 0.034  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Ethylbenzene                                     | ND     | 0.034  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Xylenes, Total                                   | ND     | 0.068  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Surr: 4-Bromofluorobenzene                       | 132    | 70-130 | S    | %Rec  | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Surr: Toluene-d8                                 | 97.3   | 70-130 |      | %Rec  | 1  | 6/28/2018 12:07:52 PM | R52327              |

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                                    |
|             | PQL | Practical Quantitative Limit                          | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |

# Chain-of-Custody Record

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

Turn-Around Time:

☐ Standard

☒ Rush

**SAME DAY**

Project Name:

**GCU # 211E**

Mailing Address: **P.O. BOX 87**

**BLOOMFIELD, NM 87413**

Project #:

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

email or Fax#:

Project Manager:

**ERIN GARIFALOS**

QA/QC Package:

☒ Standard

☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP

☐ Other

☐ EDD (Type)

Sampler:

**NELSON VELEZ**

On Ice:

☒ Yes

☐ No

Sample Temperature: **28.2 F / 1.8 C**

| Date    | Time | Matrix | Sample Request ID  |
|---------|------|--------|--------------------|
| 6/27/18 | 1445 | SOIL   | SPC - TB @ 5' (95) |

| Container Type and # | Preservative Type | HEAL No  |
|----------------------|-------------------|----------|
| 4 oz. - 1            | Cool              | 18066-71 |

## Analysis Request

|                                     |                                     |                                     |                                     |                                     |                                     |                                     |  |                                     |                                     |                                     |   |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------------|-------------------------------------|-------------------------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|
| BTEX (Method 8021B)                 | BTEX + MTBE + TPH (Gas only)        | TPH 8015B (GRO / DRO / MRO)         | 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 Bubbles (Y or N)                |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Date:

Time:

Relinquished by:

Received by:

Date Time

Date:

Time:

Relinquished by:

Received by:

Date Time

Remarks:

**BILL DIRECTLY TO BP USING THE CONTACT WITH CORRESPONDING VID & REFERENCE # WHEN APPLICABLE;**

**CONTACT: ERIN GARIFALOS / VANCE HIXON**

**VID: VHIXONEVB2**

Reference # **P - 988**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806G71

01-Jul-18

Client: Blagg Engineering

Project: GCU 211E

|            |           |                |           |             |                          |          |           |      |          |      |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID  | MB-38944  | SampType:      | MBLK      | TestCode:   | EPA Method 300.0: Anions |          |           |      |          |      |
| Client ID: | PBS       | Batch ID:      | 38944     | RunNo:      | 52323                    |          |           |      |          |      |
| Prep Date: | 6/28/2018 | Analysis Date: | 6/28/2018 | SeqNo:      | 1716138                  | Units:   | mg/Kg     |      |          |      |
| Analyte    | Result    | PQL            | SPK value | SPK Ref Val | %REC                     | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride   | ND        | 1.5            |           |             |                          |          |           |      |          |      |

|            |           |                |           |             |                          |          |           |      |          |      |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID  | LCS-38944 | SampType:      | LCS       | TestCode:   | EPA Method 300.0: Anions |          |           |      |          |      |
| Client ID: | LCSS      | Batch ID:      | 38944     | RunNo:      | 52323                    |          |           |      |          |      |
| Prep Date: | 6/28/2018 | Analysis Date: | 6/28/2018 | SeqNo:      | 1716139                  | Units:   | mg/Kg     |      |          |      |
| Analyte    | Result    | PQL            | SPK value | SPK Ref Val | %REC                     | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride   | 15        | 1.5            | 15.00     | 0           | 98.1                     | 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  
PQL Practical Quantitative Limit  
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#: 1806G71

01-Jul-18

Client: Blagg Engineering

Project: GCU 211E

|                                |           |                |           |             |   |          |           |      |          |      |
|--------------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID                      | MB-38939  | SampType:      | MBLK      | TestCode:   | EPA Method 8015M/D: Diesel Range Organics |          |           |      |          |      |
| Client ID:                     | PBS       | Batch ID:      | 38939     | RunNo:      | 52311                                     |          |           |      |          |      |
| Prep Date:                     | 6/28/2018 | Analysis Date: | 6/28/2018 | SeqNo:      | 1714246                                   | Units:   | mg/Kg     |      |          |      |
| 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                     | 9.1       |                | 10.00     |             | 91.2                                      | 70       | 130       |      |          |      |

|                             |           |                |           |             |   |          |           |      |          |      |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID                   | LCS-38939 | SampType:      | LCS       | TestCode:   | EPA Method 8015M/D: Diesel Range Organics |          |           |      |          |      |
| Client ID:                  | LCSS      | Batch ID:      | 38939     | RunNo:      | 52311                                     |          |           |      |          |      |
| Prep Date:                  | 6/28/2018 | Analysis Date: | 6/28/2018 | SeqNo:      | 1714477                                   | Units:   | mg/Kg     |      |          |      |
| Analyte                     | Result    | PQL            | SPK value | SPK Ref Val | %REC                                      | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50        | 10             | 50.00     | 0           | 101                                       | 70       | 130       |      |          |      |
| Surr: DNOP                  | 4.3       |                | 5.000     |             | 86.3                                      | 70       | 130       |      |          |      |

### Qualifiers:

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D Sample Diluted Due to Matrix  
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ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
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#: 1806G71

01-Jul-18

Client: Blagg Engineering

Project: GCU 211E

|                            |                |                |           |             |  |          |           |      |          |      |
|----------------------------|----------------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID                  | 100ng btex lcs | SampType:      | LCS4      | TestCode:   | EPA Method 8260B: Volatiles Short List |          |           |      |          |      |
| Client ID:                 | BatchQC        | Batch ID:      | R52327    | RunNo:      | 52327                                  |          |           |      |          |      |
| Prep Date:                 |                | Analysis Date: | 6/28/2018 | SeqNo:      | 1714706                                | Units:   | mg/Kg     |      |          |      |
| Analyte                    | Result         | PQL            | SPK value | SPK Ref Val | %REC                                   | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene                    | 0.99           | 0.025          | 1.000     | 0           | 99.3                                   | 80       | 120       |      |          |      |
| Toluene                    | 1.0            | 0.050          | 1.000     | 0           | 103                                    | 80       | 120       |      |          |      |
| Ethylbenzene               | 1.0            | 0.050          | 1.000     | 0           | 103                                    | 80       | 120       |      |          |      |
| Xylenes, Total             | 2.8            | 0.10           | 3.000     | 0           | 94.7                                   | 80       | 120       |      |          |      |
| Surr: 4-Bromofluorobenzene | 0.49           |                | 0.5000    |             | 98.1                                   | 70       | 130       |      |          |      |
| Surr: Toluene-d8           | 0.49           |                | 0.5000    |             | 98.5                                   | 70       | 130       |      |          |      |

|                            |        |                |           |             |  |          |           |      |          |      |
|----------------------------|--------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID                  | rb     | SampType:      | MBLK      | TestCode:   | EPA Method 8260B: Volatiles Short List |          |           |      |          |      |
| Client ID:                 | PBS    | Batch ID:      | R52327    | RunNo:      | 52327                                  |          |           |      |          |      |
| Prep Date:                 |        | Analysis Date: | 6/28/2018 | SeqNo:      | 1714714                                | Units:   | mg/Kg     |      |          |      |
| Analyte                    | Result | PQL            | SPK value | SPK Ref Val | %REC                                   | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene                    | ND     | 0.025          |           |             |  |          |           |      |          |      |
| Toluene                    | ND     | 0.050          |           |             |  |          |           |      |          |      |
| Ethylbenzene               | ND     | 0.050          |           |             |  |          |           |      |          |      |
| Xylenes, Total             | ND     | 0.10           |           |             |  |          |           |      |          |      |
| Surr: 4-Bromofluorobenzene | 0.57   |                | 0.5000    |             | 114                                    | 70       | 130       |      |          |      |
| Surr: Toluene-d8           | 0.50   |                | 0.5000    |             | 99.7                                   | 70       | 130       |      |          |      |

### Qualifiers:

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H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
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#: 1806G71

01-Jul-18

Client: Blagg Engineering

Project: GCU 211E

|                               |               |                |           |             |                                      |          |           |      |          |      |
|-------------------------------|---------------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID                     | 2.5ug gro lcs | SampType:      | LCS       | TestCode:   | EPA Method 8015D Mod: Gasoline Range |          |           |      |          |      |
| Client ID:                    | LCSS          | Batch ID:      | A52327    | RunNo:      | 52327                                |          |           |      |          |      |
| Prep Date:                    |               | Analysis Date: | 6/28/2018 | SeqNo:      | 1714696                              | 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                                  | 70       | 130       |      |          |      |
| Surr: BFB                     | 470           |                | 500.0     |             | 94.4                                 | 70       | 130       |      |          |      |

|                               |        |                |           |             |                                      |          |           |      |          |      |
|-------------------------------|--------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID                     | rb     | SampType:      | MBLK      | TestCode:   | EPA Method 8015D Mod: Gasoline Range |          |           |      |          |      |
| Client ID:                    | PBS    | Batch ID:      | A52327    | RunNo:      | 52327                                |          |           |      |          |      |
| Prep Date:                    |        | Analysis Date: | 6/28/2018 | SeqNo:      | 1714697                              | 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                     | 510    |                | 500.0     |             | 102                                  | 70       | 130       |      |          |      |

## 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                                    |
| PQL | Practical Quantitative Limit                          | 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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: BLAGG

Work Order Number: 1806G71

RcptNo: 1

Received By: Anne Thorne 6/27/2018 7:00:00 AM

Completed By: Anne Thorne 6/28/2018 7:35:11 AM

Reviewed By: *TO* 6/28/18

Labeled by: *AT 06/28/18*

*Anne Thorne*  
*Anne Thorne*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

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

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

### Special Handling (If applicable)

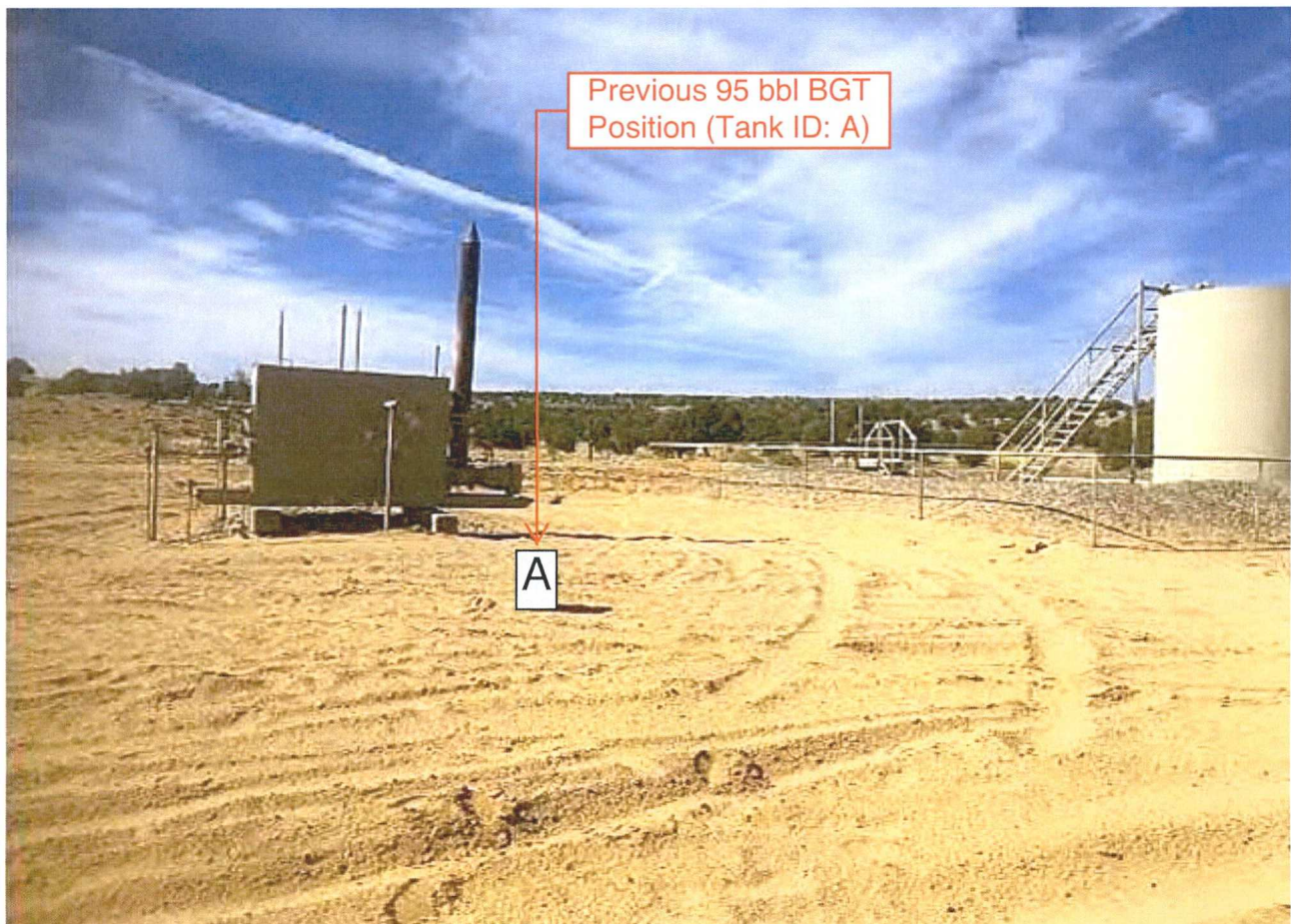
15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

|                      |  |       |   |
|----------------------|--|-------|---|
| Person Notified:     |  | Date: |   |
| By Whom:             |  | Via:  | <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           |  |       |   |
| Client Instructions: |  |       |   |

16. Additional remarks:

### 17. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 1.8     | Good      | Yes         |         |           |           |





**BP America Production Company**

380 Airport Road  
Durango, CO 81303

October 23, 2018

Vanessa Fields  
Environmental Specialist  
New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, NM 87410

Re: Gallegos Canyon Unit 211E BGT Closure  
(C) Sec. 32, T29N, R12W, San Juan County  
API #30-045-24173  
GPS: 36.68816, -108.12501

Dear Mrs. Fields:

BP America closed a 95 bbl below grade tank on the subject site on June 27, 2018. During the closure sampling of this tank, hydrocarbon impacts were identified during laboratory analysis. During a records review of this location, it was determined that this tank sat in the location of a formerly closed earthen pit. This earthen pit was approved for closure by NMOCD on January 17, 2003.

The attached data packet demonstrates that this BGT closure is in the same location of the earthen pit closure conducted in 2002 and approved for closure in 2003. BP requests no further action of this pit location.

If you have any questions or concerns, please contact me at (505) 330-9179 or at [Steven.Moskal@bpx.com](mailto:Steven.Moskal@bpx.com).

Sincerely,

Steve Moskal  
Field Environmental Coordinator

**NMOCD**  
**OCT 30 2018**  
**DISTRICT III**

**BP America**  
**GCU 211E**  
**Separator Pit History**  
(C) Sec 32 – T29N – R12W  
San Juan County, New Mexico  
API: 30-045-24173

Outlined below is a summary history of all known activities associated with the separator pit at the BP operated GCU 211E:

Attachment 1: 1997 - imagery available on Google Earth that indicates the outline of an unlined earthen pit immediately north of the separator unit on the GCU 211E wellpad.

Attachment 2: July 28, 1998 - pit inventory diagram prepared by Blagg Engineering, Inc. The unlined separator pit was reported as 18' x 18' x 4' deep, located immediately north of the separator. This dimension was probably the top perimeter of the pit berm, and the depth was probably from the top of the berm.

Attachment 3: August 12, 2002 - unlined pit closure field report. The unlined separator pit was reported as 15' x 15' x 3' deep, located 156' N33E from the wellhead. The pit dimension was probably the bottom perimeter of the pit and the depth was likely from the original surrounding ground surface. A test trench was dug to 5' below the bottom of the pit (8' below original surface grade) for sampling. The purpose of such a deep sampling trench was likely to find a potential base to the impacts or a bedrock surface, neither of which were encountered. Obvious strong hydrocarbon impacts were noted.

Attachment 4 (a and b): August 14, 2002 - laboratory report on soil sample collected on August 12, 2002. Laboratory reported TPH (via US EPA Method 8015) at 1,720 mg/Kg. This was for GRO+DRO only, MRO was not analyzed. Benzene was reported at 0.273 mg/Kg and total BTEX was reported at 5.53 mg/Kg. The site closure standard was 5,000 mg/Kg TPH, 10 mg/Kg benzene and 50 mg/Kg BTEX and no further action was required.

Attachment 5: 2018 - imagery available on Google Earth that indicates the exact position of the 95 barrel BGT just north of the separator unit. This position appears to correspond directly with the 1997 imagery, the July 28, 1998 pit inventory and the August 12, 2002 unlined pit closure field report as discussed above.

Attachment 6: June 27, 2018 - 95 barrel BGT closure field report. The position of the BGT is reported to correspond with all prior reports concerning the separator unit pit location. Inspection of the BGT did not reveal any integrity issues and there was no indication of prior overflow. A 5-point composite of soil was collected immediately below the BGT at a depth of 5 feet below the original wellpad surface grade.

Attachment 7: July 1, 2018 - laboratory report on the soil sample collected on June 27, 2018. Laboratory reported TPH (via US EPA Method 8015) at 480 mg/Kg. This was for GRO+DRO+MRO. Benzene and total BTEX were reported at non-detect.

Attachment 8: October 19, 2018 - photograph of current site conditions at the separator. The relative positions of the previous unlined pit closed out in August 2002 and the 95 BGT closed out in June 2018 are indicated. It is evident that the 95 BGT was placed in the depression of the previous unlined pit.

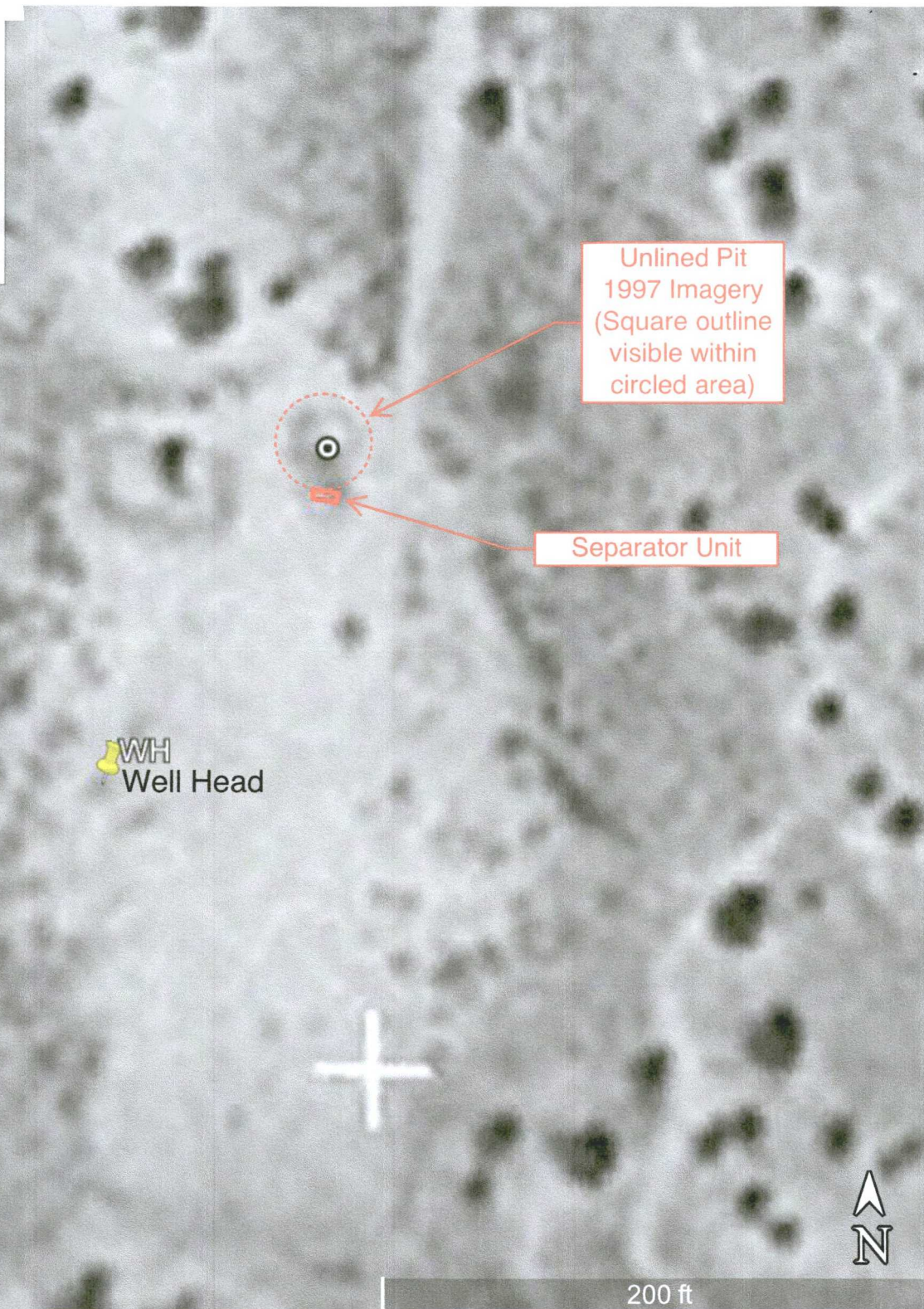
Attachment 9: October 19, 2018 - close-up photo showing the relative positions of the prior unlined pit and the 95 BGT, with centers only 5' apart.

# BP - GCU 211E

## Attachment 1

(C) Section 32, T29N, R12W  
API #: 3004524173

Imagery date: 1997 Historical  
WH GPS Coord.: 36.687799,-108.125342 - 2018 Google  
BGT GPS Coord.: 36.688163,-108.125036 - 2018 Google



|                      |  |                      |
|----------------------|--|----------------------|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | DATE: <u>7 28 98</u> |
|----------------------|--|----------------------|

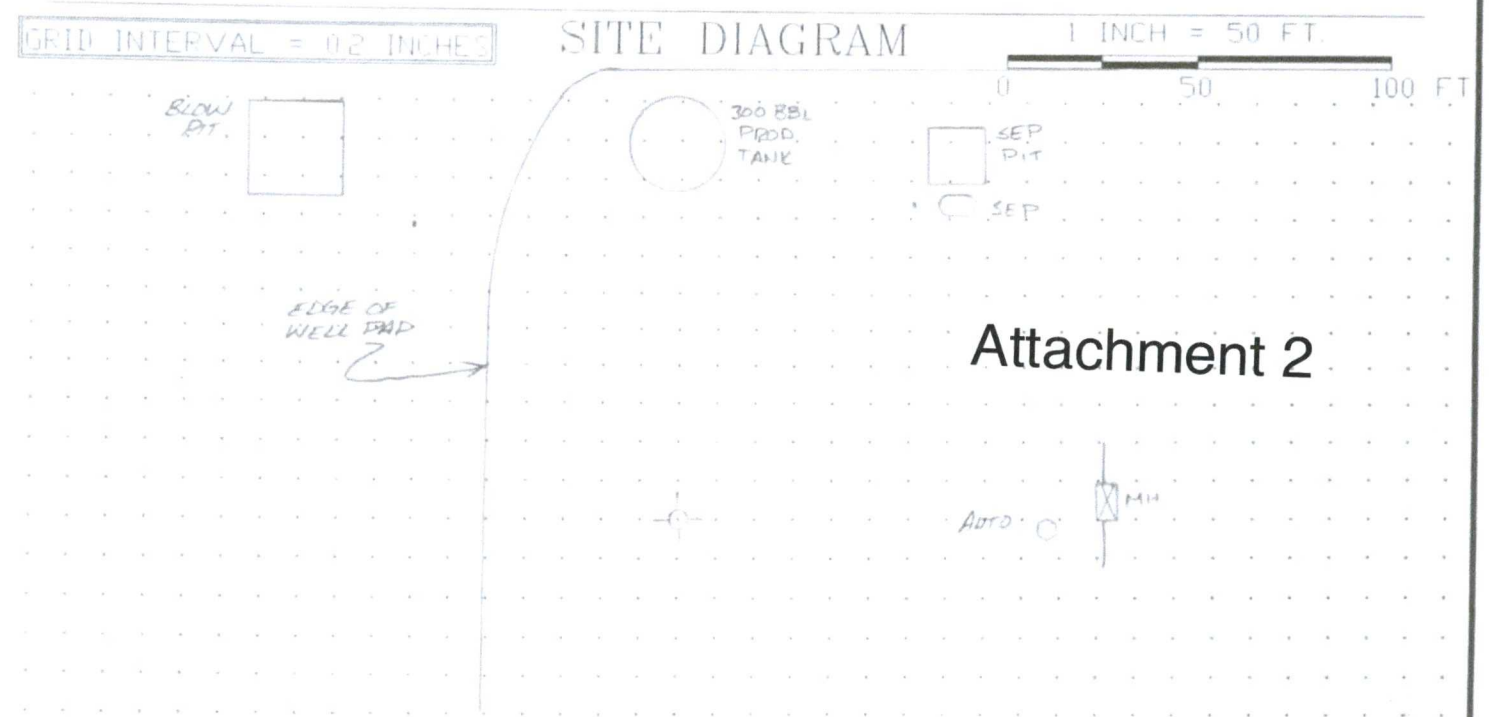
|   |  |   |
|---|--|---|
| FIELD REPORT: PIT INVENTORY & SITE MAP  |  | PAGE No. <u>1</u> of <u>1</u>                                       |
| LOCATION NAME: <u>GALLEGOS CANYON UNIT 211E</u><br>UNIT <u>C</u> SEC <u>32</u> TWP <u>29N</u> RNG <u>12W</u> CTY <u>SS</u> PM <u>NM</u> |  | DATE DRILLED: <u>4 18 80</u><br>ENVIRONMENTAL SPECIALIST: <u>EP</u> |

| PREVIOUS OPERATOR(S): <u>NONE</u>      |            |                           |                            |            |            |
|--|------------|---------------------------|----------------------------|------------|------------|
|  | DEHYDRATOR | SEPARATOR                 | FLOW                       |            |            |
| Type of containment                    | E / F / ST | ⊗ / F / ST                | ⊙ / F / ST                 | E / F / ST | E / F / ST |
| Pit fenced                             | Y / N      | ⊗ / N                     | ⊙ / N                      | Y / N      | Y / N      |
| Pit netted                             | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Bermed adequately                      | Y / N      | ⊙ / N                     | ⊙ / N                      | Y / N      | Y / N      |
| Weeds in pit area                      | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Lined                                  | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Type of liner                          |            |                           |                            |            |            |
| Spills or leaks                        | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Piping leaks                           | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Fluid present in pit                   | Y / N      | ⊙ / N                     | Y / ⊙                      | Y / N      | Y / N      |
| Daily volume (< 5 bbl/day)             | Y / N      | ⊙ / N                     | ⊗ / N                      | Y / N      | Y / N      |
| Leak detection present                 | Y / N      | Y / ⊗                     | Y / ⊙                      | Y / N      | Y / N      |
| Waste Non-exempt                       | Y / N      | ⊗ / N                     | ⊙ / N                      | Y / N      | Y / N      |
| Utilized by one operator               | Y / N      | ⊙ / N                     | ⊙ / N                      | Y / N      | Y / N      |
| Other operator(s) name                 |            |                           |                            |            |            |
| Dimension (L x W x D) ft               |            | <u>18x18x4</u>            | <u>60x50x5</u>             |            |            |
| Distance (ft) - Bearing from well head |            | <u>160'</u><br><u>36°</u> | <u>171'</u><br><u>317°</u> |            |            |

| INSPECTION CHECKLIST        |          |
|-----------------------------|----------|
| Storage tank(s) on-site     | ⊗ / N    |
| 1) # of tanks               | <u>1</u> |
| 2) bermed adequately        | ⊙ / N    |
| 3) tank overflow observed   | Y / ⊗    |
| 4) piping leaks observed    | Y / ⊗    |
| Automation observed         | ⊗ / N    |
| cathodic protection leaking | Y / ⊗    |
| Well head leaking           | Y / ⊗    |
| Surface equipment leaking   | Y / ⊗    |
| 1) Unit type                |          |
| Well pad level              | ⊙ / N    |
| Chemical drums              | Y / ⊗    |
| 1) labeled                  | Y / N    |
| 2) leaking                  | Y / N    |

NOTE: Type of containment symbols:  
 E = Earthen Pit  
 F = Fiberglass tank Pit  
 ST = Steel tank Pit

COMMENTS: \_\_\_\_\_



Attachment 2

WEATHER/SITE CONDITIONS: SUNNY / PARTLY SUNNY / CLOUDY / FOG / COLD / WARM / HOT /  
RAINING / SNOWING / DRY / WET / MUDDY / VERY MUDDY / SNOW PACKED / ROUGH / SMOOTH.

CLIENT: BP BLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199

LOCATION NO: 81037  
C.O.C. NO: 10192

# Attachment 3

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: GCU WELL #: 211E TYPE: SEP

QUAD/UNIT: C SEC: 32 TWP: 29N RNG: 12W PM: NM CNTY: SJ ST: NM

QTR/FOOTAGE: 900'N/1740'W NE/NW CONTRACTOR: FLINT (BEN)

EXCAVATION APPROX. 15 FT. x 15 FT. x 3 FT. DEEP. CUBIC YARDAGE: 0

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: CLOSE AS IS

LAND USE: RANGE LEASE: FLINT (BEN) FORMATION: DK

ENVIRONMENTAL SPECIALIST: ICB

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 156 FT. N33°E FROM WELLHEAD.

DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000

NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: GRAY

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - GRAY

HC ODOR DETECTED: YES / NO EXPLANATION - MODERATE

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. 1

ADDITIONAL COMMENTS: USE BACKHOE TO DIG TEST TRENCH + SAMPLE

FIELD 418.1 CALCULATIONS

| SAMP. TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------------|-------------|---------|------------|-----------|----------|---------|-----------|
|            |             |         |            |           |          |         |           |
|            |             |         |            |           |          |         |           |
|            |             |         |            |           |          |         |           |

SCALE: 0 15 FT

PIT PERIMETER: 15' x 15'

PIT PROFILE: NOT APPLICABLE

OVM RESULTS:

| SAMPLE ID | FIELD HEADSPACE P10 (ppm) |
|-----------|---------------------------|
| 1 @ 8'    | 286                       |
| 2 @       |                           |
| 3 @       |                           |
| 4 @       |                           |
| 5 @       |                           |

LAB SAMPLES:

| SAMPLE ID          | ANALYSIS | TIME |
|--------------------|----------|------|
| C88'               | TPH/BTEX | 1108 |
| <u>BOTH PASSED</u> |          |      |

TRAVEL NOTES: CALLOUT: 8/12/02 @ 0900 ONSITE: 8/12/02 @ 1045

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Attachment 4a

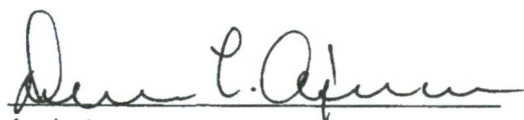
|                      |                  |                     |           |
|----------------------|------------------|---------------------|-----------|
| Client:              | Blagg / BP       | Project #:          | 94034-010 |
| Sample ID:           | Separator C @ 8' | Date Reported:      | 08-14-02  |
| Laboratory Number:   | 23576            | Date Sampled:       | 08-12-02  |
| Chain of Custody No: | 10177            | Date Received:      | 08-13-02  |
| Sample Matrix:       | Soil             | Date Extracted:     | 08-13-02  |
| Preservative:        | Cool             | Date Analyzed:      | 08-14-02  |
| Condition:           | Cool and Intact  | Analysis Requested: | 8015 TPH  |

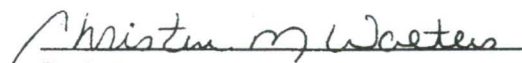
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 428                      | 0.2                      |
| Diesel Range (C10 - C28)     | 1,290                    | 0.1                      |
| Total Petroleum Hydrocarbons | 1,720                    | 0.2                      |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: GCU 211E.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

## Attachment 4b

|                    |                  |                     |           |
|--------------------|------------------|---------------------|-----------|
| Client:            | Blagg / BP       | Project #:          | 94034-010 |
| Sample ID:         | Separator C @ 8' | Date Reported:      | 08-14-02  |
| Laboratory Number: | 23576            | Date Sampled:       | 08-12-02  |
| Chain of Custody:  | 10177            | Date Received:      | 08-13-02  |
| Sample Matrix:     | Soil             | Date Analyzed:      | 08-14-02  |
| Preservative:      | Cool             | Date Extracted:     | 08-13-02  |
| Condition:         | Cool & Intact    | Analysis Requested: | BTEX      |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 273 (0.273 mg/Kg)        | 1.8                      |
| Toluene      | 689                      | 1.7                      |
| Ethylbenzene | 813                      | 1.5                      |
| p,m-Xylene   | 2,380                    | 2.2                      |
| o-Xylene     | 1,370                    | 1.0                      |
| Total BTEX   | 5,530 (5.53 mg/Kg)       |                          |

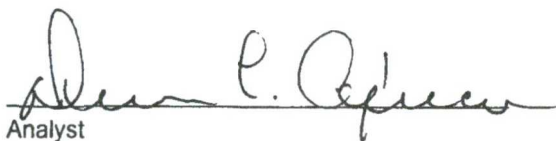
ND - Parameter not detected at the stated detection limit.

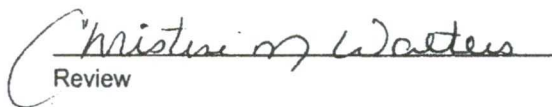
| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 97 %             |
|                       | 1,4-difluorobenzene | 97 %             |
|                       | Bromochlorobenzene  | 97 %             |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: GCU 211E.

  
Analyst

  
Review

# BP - GCU 211E

(C) Section 32, T29N, R12W  
API #: 3004524173

## Attachment 5

Imagery date: 2018 Google  
WH GPS Coord.: 36.687799,-108.125342  
BGT GPS Coord.: 36.688163,-108.125036

95 bbl BGT  
(2018 Imagery)

Separator Unit

WH  
Well Head

Google Earth

© 2018 Google

200 ft



|   |   |   |         |  |          |                                       |  |                              |  |                              |
|---|---|---|---------|--|----------|---------------------------------------|--|------------------------------|--|------------------------------|
| CLIENT: <b>BP</b>   | <b>BLAGG ENGINEERING, INC.</b><br><b>P.O. BOX 87, BLOOMFIELD, NM 87413</b><br><b>(505) 632-1199</b> | API #: <b>3004524173</b><br>TANK ID (if applicable): <b>A</b>   |         |  |          |                                       |  |                              |  |                              |
| <b>FIELD REPORT:</b> (circle one): <b>BGT CONFIRMATION</b> / RELEASE INVESTIGATION / OTHER:   |   | PAGE #: <b>1</b> of <b>1</b>  |         |  |          |                                       |  |                              |  |                              |
| <b>SITE INFORMATION:</b><br>QUAD/UNIT: <b>C</b> SEC: <b>32</b> TWP: <b>29N</b> RNG: <b>12W</b> PM: <b>NM</b> CNTY: <b>SJ</b> ST: <b>NM</b><br>1/4 - 1/4/FOOTAGE: <b>990'N / 1,740'W</b> <b>NE/NW</b> LEASE TYPE: FEDERAL / STATE <b>[FEE]</b> INDIAN<br>LEASE #: <b>-</b> PROD. FORMATION: <b>DK</b> CONTRACTOR: <b>BP - J. GONZALES</b>  |   | DATE STARTED: <b>06/27/18</b><br>DATE FINISHED: _____<br>ENVIRONMENTAL SPECIALIST(S): <b>NJV</b>  |         |  |          |                                       |  |                              |  |                              |
| <b>REFERENCE POINT:</b><br>1) <b>95 BGT (SW/DB)</b> GPS COORD.: <b>36.68816 X 108.12501</b> DISTANCE/BEARING FROM W.H.: <b>161', N33.5E</b><br>2) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____<br>3) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____<br>4) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____   |   | WELL HEAD (W.H.) GPS COORD.: <b>36.68780 X 108.12539</b> GL ELEV.: <b>5,441'</b>  |         |  |          |                                       |  |                              |  |                              |
| <b>SAMPLING DATA:</b><br>1) SAMPLE ID: <b>5PC - TB @ 5' (95)</b> SAMPLE DATE: <b>06/27/18</b> SAMPLE TIME: <b>1445</b> LAB ANALYSIS: <b>8015B/8021B/300.0 (CI)</b><br>2) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____<br>3) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____<br>4) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____<br>5) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____  |   | CHAIN OF CUSTODY RECORD(S) # OR LAB USED: <b>HALL</b><br>OVM READING (ppm) <b>NA</b>  |         |  |          |                                       |  |                              |  |                              |
| <b>SOIL DESCRIPTION:</b><br>SOIL TYPE: <b>[SAND] [SILTY SAND]</b> SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____<br>SOIL COLOR: <b>MOSTLY DARK YELLOWISH ORANGE</b><br>COHESION (ALL OTHERS): <b>[NON COHESIVE]</b> SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE<br>CONSISTENCY (NON COHESIVE SOILS): <b>[LOOSE] [FIRM]</b> DENSE / VERY DENSE<br>MOISTURE: DRY / <b>[SLIGHTLY MOIST]</b> MOIST / WET / SATURATED / SUPER SATURATED<br>SAMPLE TYPE: GRAB <b>[COMPOSITE]</b> # OF PTS. <b>5</b><br>DISCOLORATION/STAINING OBSERVED: YES <b>[NO]</b> EXPLANATION - _____<br>PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC<br>DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD<br>HC ODOR DETECTED: YES <b>[NO]</b> EXPLANATION - _____<br>ANY AREAS DISPLAYING WETNESS: YES <b>[NO]</b> EXPLANATION - _____ |   |   |         |  |          |                                       |  |                              |  |                              |
| <b>SITE OBSERVATIONS:</b><br>LOST INTEGRITY OF EQUIPMENT: YES <b>[NO]</b> EXPLANATION - _____<br>APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES <b>[NO]</b> EXPLANATION: _____<br>EQUIPMENT SET OVER RECLAIMED AREA: YES <b>[NO]</b> EXPLANATION - _____<br>OTHER: <b>NMOCED REP. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING. GAS WELL TO BE PLUGGED &amp; ABANDONED.</b>   |   |   |         |  |          |                                       |  |                              |  |                              |
| EXCAVATION DIMENSION ESTIMATION: <b>NA</b> ft. X <b>NA</b> ft. X <b>NA</b> ft. EXCAVATION ESTIMATION (Cubic Yards): <b>NA</b><br>DEPTH TO GROUNDWATER: <b>&gt;100'</b> NEAREST WATER SOURCE: <b>&gt;1,000'</b> NEAREST SURFACE WATER: <b>&gt;300' / &lt;1,000'</b> NMOCED TPH CLOSURE STD: <b>2,500</b> ppm   |   |   |         |  |          |                                       |  |                              |  |                              |
| <b>SITE SKETCH</b><br>BGT Located: off <b>[on]</b> site PLOT PLAN circle: <b>attached</b><br><div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Attachment 6</p> </div> <div style="text-align: center;"> <p>PLOT PLAN</p> </div> </div> <div style="text-align: right; margin-top: 20px;"> <b>N</b> ↑       </div>  |   |   |         |  |          |                                       |  |                              |  |                              |
| OVM CALIB. READ. = <b>NA</b> ppm<br>OVM CALIB. GAS = <b>NA</b> ppm<br>TIME: <b>NA</b> am/pm DATE: <b>NA</b>   |   | <b>MISCELL. NOTES</b><br>WO: _____<br>REF #: <b>P-988</b><br>VID: <b>VHIXONEVB2</b><br>PJ #: _____<br>Permit date(s): <b>06/14/10</b><br>OCD Appr. date(s): <b>02/26/18</b><br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Tank ID</td> <td>OVM = Organic Vapor Meter<br/>ppm = parts per million</td> </tr> <tr> <td><b>A</b></td> <td>BGT Sidewalls Visible: Y / <b>(N)</b></td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> <tr> <td></td> <td>BGT Sidewalls Visible: Y / N</td> </tr> </table> Magnetic declination: <b>10° E</b> | Tank ID | OVM = Organic Vapor Meter<br>ppm = parts per million | <b>A</b> | BGT Sidewalls Visible: Y / <b>(N)</b> |  | BGT Sidewalls Visible: Y / N |  | BGT Sidewalls Visible: Y / N |
| Tank ID   | OVM = Organic Vapor Meter<br>ppm = parts per million  |   |         |  |          |                                       |  |                              |  |                              |
| <b>A</b>  | BGT Sidewalls Visible: Y / <b>(N)</b>   |   |         |  |          |                                       |  |                              |  |                              |
|   | BGT Sidewalls Visible: Y / N  |   |         |  |          |                                       |  |                              |  |                              |
|   | BGT Sidewalls Visible: Y / N  |   |         |  |          |                                       |  |                              |  |                              |
| 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; PBGT = 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.  |   |   |         |  |          |                                       |  |                              |  |                              |
| NOTES: <b>GOOGLE EARTH IMAGERY DATE: 2018 GOOGLE.</b> ONSITE: <b>06/27/18</b>   |   |   |         |  |          |                                       |  |                              |  |                              |

# Attachment 7

Analytical Report

Lab Order 1806G71

Date Reported: 7/1/2018

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 5' (95)

Project: GCU 211E

Collection Date: 6/27/2018 2:45:00 PM

Lab ID: 1806G71-001

Matrix: SOIL

Received Date: 6/28/2018 7:00:00 AM

| Analyses   | Result | PQL    | Qual | Units | DF | Date Analyzed         | Batch               |
|--|--------|--------|------|-------|----|-----------------------|---------------------|
| <b>EPA METHOD 300.0: ANIONS</b>                  |        |        |      |       |    |                       | Analyst: <b>smb</b> |
| Chloride   | 39     | 30     |      | mg/Kg | 20 | 6/28/2018 11:40:56 AM | 38944               |
| <b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>      |        |        |      |       |    |                       | Analyst: <b>AG</b>  |
| Gasoline Range Organics (GRO)                    | ND     | 3.4    |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | A52327              |
| Surr: BFB  | 118    | 70-130 |      | %Rec  | 1  | 6/28/2018 12:07:52 PM | A52327              |
| <b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b> |        |        |      |       |    |                       | Analyst: <b>Irm</b> |
| Diesel Range Organics (DRO)                      | 150    | 10     |      | mg/Kg | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| Motor Oil Range Organics (MRO)                   | 330    | 50     |      | mg/Kg | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| Surr: DNOP                                       | 70.1   | 70-130 |      | %Rec  | 1  | 6/28/2018 1:06:14 PM  | 38939               |
| <b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>    |        |        |      |       |    |                       | Analyst: <b>AG</b>  |
| Benzene  | ND     | 0.017  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Toluene  | ND     | 0.034  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Ethylbenzene                                     | ND     | 0.034  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Xylenes, Total                                   | ND     | 0.068  |      | mg/Kg | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Surr: 4-Bromofluorobenzene                       | 132    | 70-130 | S    | %Rec  | 1  | 6/28/2018 12:07:52 PM | R52327              |
| Surr: Toluene-d8                                 | 97.3   | 70-130 |      | %Rec  | 1  | 6/28/2018 12:07:52 PM | R52327              |

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                                    |
|                    | PQL | Practical Quantitative Limit                          | RL | Reporting Detection Limit                                 |
|                    | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |

GCU 211E  
Oct 19, 2018

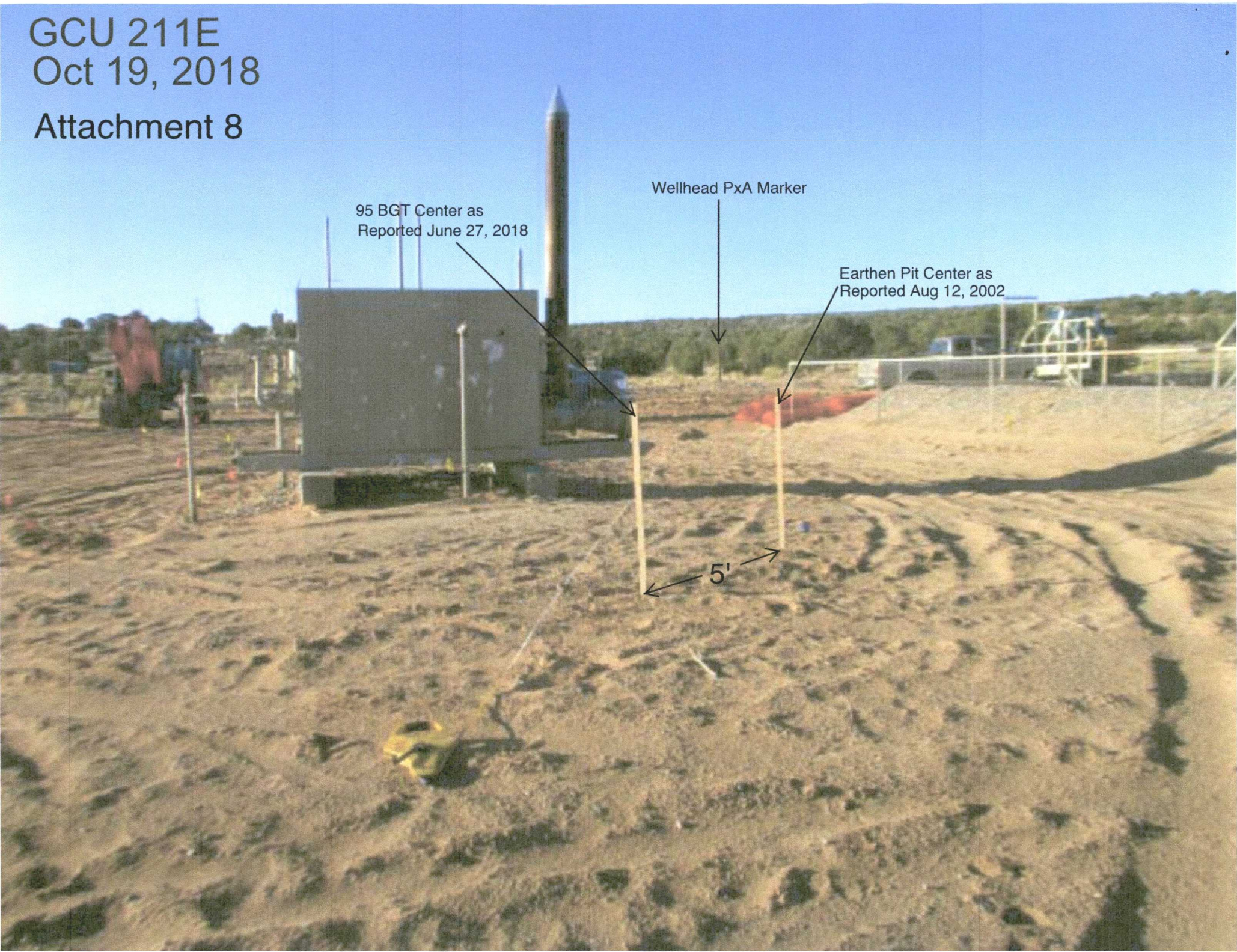
Attachment 8

95 BGT Center as  
Reported June 27, 2018

Wellhead PxA Marker

Earthen Pit Center as  
Reported Aug 12, 2002

5'



95 BGT Center as  
Reported June 27, 2018

Earthen Pit Center as  
Reported Aug 12, 2002

5'

