

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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 Co.** OGRID #: **778**
Address: **1199 Main Ave., Suite 101, Durango, CO 81301**
Facility or well name: **GALLEGOS CANYON UNIT 135**
API Number: **3004507885** OCD Permit Number: _____
U/L or Qtr/Qtr **F** Section **26.0** Township **29.0N** Range **13W** County: **San Juan County**
Center of Proposed Design: Latitude **36.70059** Longitude **-108.17689** NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ 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 _____

Release confirmed assigned
to Incident# NCS2005837120
additional C-141 required.

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC **Tank ID:** **A**
Volume: **95.0** 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 WALLED DOUBLE BOTTOMED SIDEWALLS NOT VISIBLE**
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

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 _____

7.

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

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

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

9.

Administrative Approvals 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:

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

10.

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
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	<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. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; 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. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

11.

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: _____

12.

Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: _____☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.

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 ☐ Closed-loop System
☐ AlternativeProposed 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Within 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 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 private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

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

☐ Yes ☐ No

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.

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

☐ 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

Within the area overlying a subsurface mine.

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

☐ Yes ☐ No

Within an unstable area.

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

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

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 F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

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: _____

20.

OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☒ OCD Conditions (see attachment) **FRONT**OCD Representative Signature:  Approval Date: _____

Title: Environmental Specialist OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: 10/15/2019

22.

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.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:*Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐
- Site Reclamation (Photo Documentation)
-
- ☐
- Soil Backfilling and Cover Installation
-
- ☐
- Re-vegetation Application Rates and Seeding Technique

24.

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)
-
- ☐
- 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 36.70059 Longitude -108.17689 NAD: ☐ 1927 ☒ 1983

25.

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): Steven Moskal Title: Field Environmental Coordinator

Signature:  2020.02.28 Date: 2/28/2020

e-mail address: Steven.moskal@bpx.com Telephone: 832-609-7048

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

BPX ENERGY
(formerly BP America Production Company)
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

Gallegos Canyon Unit # 135 – Tank ID: A

API #: 3004507885

Unit Letter F, Section 26, T29N, R13W

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BPX Energy (BPX) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BPX 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. BPX 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 BPX's NMOCD approved BGT design attached to the BPX Design and Construction Plan. BPX 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 BPX's NMOCD approved BGT Design attached to the BPX Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BPX 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. BPX 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. BPX 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 documented in the attached email.

3. BPX 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. BPX 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. BPX Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
- f. BPX Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BPX Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BPX Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BPX Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BPX Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BPX Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

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

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

Constituents	Testing Method	Release Verification (mg/Kg)	5pcs Results	Grab Results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	<0.016	<0.090
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	<0.064	2.95
TPH	US EPA Method SW-846 418.1	100	162	3,540
Chlorides	US EPA Method 300.0 or 4500B	250 or background	100	110

Notes: mg/Kg = milligram per kilogram, pcs = point composite sample, 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.

Soils beneath the BGT were sampled for TPH, BTEX, and chloride. Benzene, BTEX, & chloride test parameters were below the stated limits. TPH exceeded verification threshold. A field and laboratory reports are attached.

7. BPX 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 BPX will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

Sampling results reveal evidence of a release had occurred.

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

Sampling results reveal evidence of a release had occurred. BGT area will be backfilled with clean, earthen material after remedial activity has been completed.

10. BPX 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. BPX 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.

BGT area will be backfilled with clean, earthen material after remedial activity has been completed. Reclamation will be completed within the allowable timeframe and will meet the specified requirements of 19.15.17.13 NMAC.

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.
BGT area will be backfilled with clean, earthen material after remedial activity has been completed. Reclamation will be completed within the allowable timeframe and will meet the specified requirements of 19.15.17.13 NMAC.
12. BPX 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.
BGT area will be backfilled with clean, earthen material after remedial activity has been completed. Reclamation will be completed within the allowable timeframe and will meet the specified requirements of 19.15.17.13 NMAC.
13. BPX 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.
BGT area will be backfilled with clean, earthen material after remedial activity has been completed. Reclamation will be completed within the allowable timeframe and will meet the specified requirements of 19.15.17.13 NMAC.
14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BPX shall notify the NMOCD when it has seeded or planted and when it successfully achieves re-vegetation.
BPX will notify NMOCD when re-vegetation is successfully completed.
15. Within 60 days of closure completion, BPX 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 & contains a photo of the current reclamation requirements completed.**
16. BPX 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.

BP Pit Closure Notification – Gallegos Canyon Unit 135

From: Patti Campbell (BPX)
To: Smith, Cory, EMNRD
Cc: Sabre Beebe (BPX), Erin Dunman (BPX), Steven Moskal (BPX), Adeloye, Abiodun (BLM), Nelson Velez, Jeffrey Blagg
Date: Tuesday, October 8, 2019 09:00 AM MDT

SENT VIA E-MAIL TO: CORY.SMITH@STATE.NM.US; ~~VANESSA.FIELD@STATE.NM.US~~

nv (11/15/2019)

October 8, 2019

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 135
API 30-045-07885
(F) Section 26 – T29N – R13W
San Juan County, New Mexico

Dear Mr. Cory Smith,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around October 11, 2019.

Should you have any questions, please feel free to contact BP.

Sincerely,

Patti Campbell
Regulatory Analyst
BP America Production Company
BPX Energy Inc.
(970) 712-5997
patti.campbell@bpx.com





BP America Production Company
1199 Main Ave., Suite 101
Durango, CO 81303

October 8, 2019

B Square Ranch LLC
Tom Bolack
3901 Bloomfield Highway
Farmington, NM 87401

VIA CERTIFIED MAIL

Re: Notification of plans to close/remove a below grade tank
Well Name: GALLEGOS CANYON UNIT 135
API# - 3004507785

Dear Mr. Bolack,

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 October 11, 2019. Barring any unforeseen issues, the work should be completed within 10 working days.

This site has been plugged and abandoned and BP is decommissioning the well site.

If witnessing of the tank removal is required, please contact Steve Moskal on (505)-330-9179 or Erin Dunman on (281) 810-2578 for a specific time.

Sincerely,

Patti Campbell

Patti Campbell
BPX – San Juan
Regulatory Analyst

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

Initial Report

Responsible Party

Responsible Party BPX Energy (formerly BP America Production Co.)	OGRID 778
Contact Name Erin Dunman	Contact Telephone (832) 609-7048
Contact email Erin.Dunman@bpx.com	Incident # (assigned by OCD)
Contact mailing address 1199 Main Ave., Suite 101, Durango, CO 81301	

Location of Release Source

Latitude **36.70059** Longitude **-108.17689**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name GALLEGOS CANYON UNIT 135	Site Type Natural Gas Well
Date Release Discovered	API# (if applicable) 30-045-07885

Unit Letter	Section	Township	Range	County
F	26	29N	13W	San Juan

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: **Bolack Ranch**)

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 checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls) None
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) Unknown	Volume Recovered (bbls) None
<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 **Unknown – below-grade tank (bgt) appeared in good condition.**

Benzene, toluene, ethylbenzene, total xylenes (BTEX), benzene, & chloride all below below-grade tank (BGT) registration closure standards. Total Petroleum Hydrocarbons (TPH) exceeded both BGT registration and 19.15.29 NMAC closure standard requirements (100 mg/Kg - exceeding setback requirement per paragraph 1 of subsection D, 19.15.29 NMAC) for one (1) composite & one (1) grab samples. Remedial activity required.

Incident ID	
District RP	
Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p> <p>Not required.</p>	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" 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: <u>Erin Dunman</u>	Title: <u>Field Environmental Coordinator</u>
Signature: _____	Date: _____
email: <u>Erin.Dunman@bpx.com</u>	Telephone: <u>(832) 609-7048</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

CLIENT: BPX	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	API #: 3004507885 TANK ID (if applicable): A								
FIELD REPORT: (circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:		PAGE #: 1 of 1								
SITE INFORMATION: SITE NAME: GCU # 135 QUAD/UNIT: F SEC: 26 TWP: 29N RNG: 13W PM: NM CNTY: SJ ST: NM 1/4 -1/4/FOOTAGE: 1,545'N / 2,070'W SE/NW LEASE TYPE: FEDERAL / STATE / FEE / INDIAN LEASE #: SF078926A PROD. FORMATION: DK CONTRACTOR: KELLEY O.F.S. BPX - S. BEEBE		DATE STARTED: 10/11/19 DATE FINISHED: ENVIRONMENTAL SPECIALIST(S): JCB								
REFERENCE POINT: WELL HEAD (W.H.) GPS COORD.: 36.70046 X 108.17743 GL ELEV.: 5,728' 1) 95 BGT (DW/DB) GPS COORD.: 36.70059 X 108.17689 DISTANCE/BEARING FROM W.H.: 166', N76.5E 2) GPS COORD.: DISTANCE/BEARING FROM W.H.: 3) GPS COORD.: DISTANCE/BEARING FROM W.H.: 4) GPS COORD.: DISTANCE/BEARING FROM W.H.:										
SAMPLING DATA: CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL 1) SAMPLE ID: 95 BGT 5-pt. @ 5' SAMPLE DATE: 10/11/19 SAMPLE TIME: 0910 LAB ANALYSIS: 8015B/8021B/300.0 (CI) OVM READING (ppm): 0.2 2) SAMPLE ID: Impact Grab @ 3' SAMPLE DATE: 10/11/19 SAMPLE TIME: 0915 LAB ANALYSIS: 8015B/8021B/300.0 (CI) OVM READING (ppm): 357 3) SAMPLE ID: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: 4) SAMPLE ID: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: 5) SAMPLE ID: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:										
SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL OTHER SANDSTONE SOUTH OF BGT SOIL COLOR: DARK YELLOWISH ORANGE PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY COHESIVE COHESIVE / HIGHLY COHESIVE DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD CONSISTENCY (NON COHESIVE SOILS): LOOSE FIRM DENSE / VERY DENSE HC ODOR DETECTED: YES NO EXPLANATION - ON SANDSTONE RAMP MOISTURE: DRY SLIGHTLY MOIST MOIST / WET / SATURATED / SUPER SATURATED SAMPLE TYPE: GRAB COMPOSITE # OF PTS. 5 ANY AREAS DISPLAYING WETNESS: YES NO EXPLANATION - DISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION - ON SANDSTONE RAMP @ SOUTH SIDE OF BGT										
SITE OBSERVATIONS: LOST INTEGRITY OF EQUIPMENT: YES / NO EXPLANATION - UNKNOWN - BGT APPEARS IN GOOD CONDITION APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES NO EXPLANATION: GRAY STAIN ON BGT RAMP EQUIPMENT SET OVER RECLAIMED AREA: YES NO EXPLANATION - OTHER: SW/DB BGT WITH NO VISIBLE SIDEWALLS REPLACED IN DECEMBER 2016. NMOC D OR BLM REPS. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING. GAS WELL IS PLUGGED & ABANDONED (P&A). SITE LOCATED WITHIN BOLACK RANCH PROPERTY. EXCAVATION DIMENSION ESTIMATION: ft. X ft. X ft. EXCAVATION ESTIMATION (Cubic Yards): DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: < 300' NMOC D TPH CLOSURE STD: 100 ppm										
SITE SKETCH BGT Located : off on site PLOT PLAN circle: attached 										
OVM CALIB. READ. = 100.2 ppm RF=1.00 OVM CALIB. GAS = 100 ppm TIME: 6:30 (am/pm) DATE: 10/11/19		MISCELL. NOTES PO #: AFE #: SIO #: 190040007672 GL #: 745277 Permit date(s): 06/08/10 OCD Appr. date(s): 03/07/17 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Tank ID</td> <td>OVM = Organic Vapor Meter ppm = parts per million</td> </tr> <tr> <td>A</td> <td>BGT Sidewalls Visible: Y / (N)</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: 10° E	Tank ID	OVM = Organic Vapor Meter ppm = parts per million	A	BGT Sidewalls Visible: Y / (N)		BGT Sidewalls Visible: Y / N		BGT Sidewalls Visible: Y / N
Tank ID	OVM = Organic Vapor Meter ppm = parts per million									
A	BGT Sidewalls Visible: Y / (N)									
	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: GOOGLE EARTH IMAGERY DATE: 4/6/2019. ONSITE: 10/11/19										

Analytical Report

Lab Order 1910773

Date Reported: 10/15/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 95 BGT-5 PC @ 5'

Project: GCU 135

Collection Date: 10/11/2019 9:10:00 AM

Lab ID: 1910773-001

Matrix: SOIL

Received Date: 10/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	100	60		mg/Kg	20	10/14/2019 12:30:53 PM	48121
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	10/14/2019 11:29:04 AM	G63641
Surr: BFB	97.5	70-130		%Rec	1	10/14/2019 11:29:04 AM	G63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	52	9.5		mg/Kg	1	10/14/2019 10:19:59 AM	48116
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	10/14/2019 10:19:59 AM	48116
Surr: DNOP	109	70-130		%Rec	1	10/14/2019 10:19:59 AM	48116
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.016		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Toluene	ND	0.032		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Ethylbenzene	ND	0.032		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Xylenes, Total	ND	0.064		mg/Kg	1	10/14/2019 11:29:04 AM	S63641
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641
Surr: Toluene-d8	104	70-130		%Rec	1	10/14/2019 11:29:04 AM	S63641

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 Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 1910777

Date Reported: 10/15/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: Impact Grab @ 3'

Project: GCU 135

Collection Date: 10/11/2019 9:15:00 AM

Lab ID: 1910777-001

Matrix: SOIL

Received Date: 10/12/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	110	60		mg/Kg	20	10/14/2019 12:43:17 PM	48121
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	340	18		mg/Kg	5	10/14/2019 11:58:34 AM	G63641
Surr: BFB	128	70-130		%Rec	5	10/14/2019 11:58:34 AM	G63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	2100	92		mg/Kg	10	10/14/2019 11:04:06 AM	48116
Motor Oil Range Organics (MRO)	1100	460		mg/Kg	10	10/14/2019 11:04:06 AM	48116
Surr: DNOP	0	70-130	S	%Rec	10	10/14/2019 11:04:06 AM	48116
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.090		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Toluene	ND	0.18		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Ethylbenzene	0.25	0.18		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Xylenes, Total	2.7	0.36		mg/Kg	5	10/14/2019 11:58:34 AM	S63641
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: Dibromofluoromethane	91.1	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641
Surr: Toluene-d8	96.9	70-130		%Rec	5	10/14/2019 11:58:34 AM	S63641

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 Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1910773

15-Oct-19

Client:

Blagg Engineering

Project:

GCU 135

Sample ID: MB-48121		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 48121		RunNo: 63657						
Prep Date: 10/14/2019		Analysis Date: 10/14/2019		SeqNo: 2176026			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-48121	SampType: lcs			TestCode: EPA Method 300.0: Anions						
Client ID: LCSS	Batch ID: 48121			RunNo: 63657						
Prep Date: 10/14/2019	Analysis Date: 10/14/2019			SeqNo: 2176027			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.2	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 Limit

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

WO#: 1910773

15-Oct-19

Client: Blagg Engineering**Project:** GCU 135

Sample ID: LCS-48116	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 48116			RunNo: 63647						
Prep Date: 10/14/2019	Analysis Date: 10/14/2019			SeqNo: 2174624		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	4.9		5.000		97.4	70	130			

Sample ID: MB-48116	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 48116			RunNo: 63647						
Prep Date: 10/14/2019	Analysis Date: 10/14/2019			SeqNo: 2174625		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	10		10.00		103	70	130			

Sample ID: LCS-48112	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 48112			RunNo: 63647						
Prep Date: 10/11/2019	Analysis Date: 10/14/2019			SeqNo: 2175390		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: MB-48112	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 48112			RunNo: 63647						
Prep Date: 10/11/2019	Analysis Date: 10/14/2019			SeqNo: 2175391		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	70	130			

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 Limit

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

WO#: 1910773

15-Oct-19

Client: Blagg Engineering**Project:** GCU 135

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: S63641	RunNo: 63641								
Prep Date:	Analysis Date: 10/14/2019	SeqNo: 2175836	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: 1,2-Dichloroethane-d4	0.47		0.5000		94.5	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: LCSS	Batch ID: S63641	RunNo: 63641								
Prep Date:	Analysis Date: 10/14/2019	SeqNo: 2175837	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	68	135			
Toluene	0.95	0.050	1.000	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.0	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1910773
15-Oct-19

Client: Blagg Engineering
Project: GCU 135

Sample ID: rb	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: G63641			RunNo: 63641						
Prep Date:	Analysis Date: 10/14/2019			SeqNo: 2175888		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	490		500.0		97.6	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: G63641			RunNo: 63641						
Prep Date:	Analysis Date: 10/14/2019			SeqNo: 2175889		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	70	130			
Surr: BFB	450		500.0		90.1	70	130			

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

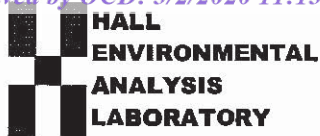
Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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: **1910773**RcptNo: **1**Received By: **Isaiah Ortiz**

10/12/2019 8:00:00 AM

*I-Ox*Completed By: **Anne Thorne**

10/14/2019 7:49:33 AM

Anne Thorne

Reviewed By:

DM 10/14/19

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°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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *AT 10/14/19*

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1910777

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: MB-48121		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 48121		RunNo: 63657						
Prep Date: 10/14/2019		Analysis Date: 10/14/2019		SeqNo: 2176026			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-48121		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 48121		RunNo: 63657						
Prep Date: 10/14/2019		Analysis Date: 10/14/2019		SeqNo: 2176027			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.2	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 Limit

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

WO#: 1910777

15-Oct-19

Client: Blagg Engineering**Project:** GCU 135

Sample ID: LCS-48116	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 48116			RunNo: 63647						
Prep Date: 10/14/2019	Analysis Date: 10/14/2019			SeqNo: 2174624		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	4.9		5.000		97.4	70	130			

Sample ID: MB-48116	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 48116			RunNo: 63647						
Prep Date: 10/14/2019	Analysis Date: 10/14/2019			SeqNo: 2174625		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	10		10.00		103	70	130			

Sample ID: LCS-48112	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 48112			RunNo: 63647						
Prep Date: 10/11/2019	Analysis Date: 10/14/2019			SeqNo: 2175390		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: MB-48112	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 48112			RunNo: 63647						
Prep Date: 10/11/2019	Analysis Date: 10/14/2019			SeqNo: 2175391		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	70	130			

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 Limit

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

WO#: 1910777

15-Oct-19

Client: Blagg Engineering**Project:** GCU 135

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: S63641	RunNo: 63641								
Prep Date:	Analysis Date: 10/14/2019	SeqNo: 2175836	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: 1,2-Dichloroethane-d4	0.47		0.5000		94.5	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: LCSS	Batch ID: S63641	RunNo: 63641								
Prep Date:	Analysis Date: 10/14/2019	SeqNo: 2175837	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	68	135			
Toluene	0.95	0.050	1.000	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.0	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1910777

15-Oct-19

Client: Blagg Engineering

Project: GCU 135

Sample ID: rb	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: G63641			RunNo: 63641						
Prep Date:	Analysis Date: 10/14/2019			SeqNo: 2175888		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	490		500.0		97.6	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: G63641			RunNo: 63641						
Prep Date:	Analysis Date: 10/14/2019			SeqNo: 2175889		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	70	130			
Surr: BFB	450		500.0		90.1	70	130			

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

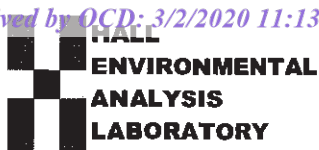
S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit



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: 1910777

RcptNo: 1

Received By: **Isaiah Ortiz**

10/12/2019 8:00:00 AM

I-Ox

Completed By: **Anne Thorne**

10/14/2019 8:00:45 AM

Anne Thorne

Reviewed By: **DM 10/14/19**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°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: **AT 10/14/19**

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Yes			