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

Type of action:

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

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 LX/F 1905641336

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.
Operator: BPX ENERGY (formerly BP AMERICA PROD. CO.)  Address: 1199 Main Ave., Suite 101, Durango, CO 81301
Facility or well name: FLORANCE L 019
API Number: 30045 <del>26804</del> 0916 OCD Permit Number:
U/L or Qtr/Qtr H Section 3.0 Township 30.0N Range 09W County: San Juan County  Center of Proposed Design: Latitude 36.842799 Longitude -107.761511 NAD: ☐1927 ▼ 1983
Surface Owner: X Federal State Tribal Trust or Indian Allotment
2.    Pit: Subsection For G of 19.15.17.11 NMAC  Temporary:   Drilling   Workover    Remediation   Required.   APR 16 2019
Temporary: Drilling Workover Regumed. APR 16 2019
Permanent L Emergency L Cavitation L P&A
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
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: Thicknessmil LLDPE HDPE PVC Other
Liner Seams: Welded Factory Other Other
4.    Below-grade tank: Subsection I of 19.15.17.11 NMAC   Tank ID:   B
☐ 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 SINGLE BOTTOMED SIDEWALLS NOT VISIBLE
Liner type: Thicknessmil
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.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	hospital,
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	
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 consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 acceptant material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approach office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval
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	☐ Yes ☐ 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	Yes 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	Yes No
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	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 search; 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
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No

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 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
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 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 (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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, of facilities are required.				
•	Disposal Facility Permit Number:			
	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 signalake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	nificant watercourse or lakebed, sinkhole, or playa	Yes No		
Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; Satellite		☐ Yes ☐ No		
Within 500 horizontal feet of a private, domestic fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less water well o	ring, in existence at the time of initial application.	Yes No		
Within incorporated municipal boundaries or within a defined municipal fresh water adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approve	·	Yes No		
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visua	I 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		
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology Society; Topographic map</li> </ul>	& Mineral Resources; USGS; NM Geological	Yes No		
Within a 100-year floodplain FEMA map	•	☐ Yes ☐ No		
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying protocols and Procedures - based upon the appropriate requirements of 19.15 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Confirmation Plan - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	irements of 19.15.17.10 NMAC Subsection F of 19.15.17.13 NMAC propriate requirements of 19.15.17.11 NMAC ad) - based upon the appropriate requirements of 19.17.13 NMAC irements of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC ill cuttings or in case on-site closure standards cannot of 19.15.17.13 NMAC of 19.15.17.13 NMAC	15.17.11 NMAC		

Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print): Title:
Signature: Date:
e-mail address:Telephone:
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Approval Date:
Title: OCD Permit Number:
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: 02\18\2019
Closure Completion Date: U2/18/2019
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
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 36.842799 Longitude -107.761511 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): Steve Moskal Title: Field Environmental Coordinator
Signature: Date: 4/15/2019
e-mail address: Steven.moskal@bpx.com Telephone: 505-330-9179

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:	i		
e-mail address:	Telephone:	-		

### BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

### BELOW-GRADE TANK CLOSURE PLAN

Florance L # 19 - Tank ID: B

API #: 3004509916

Unit Letter H, Section 3, T30N, R9W

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

### General Closure Plan

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 documented in the attached email.

- 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/or sludge within 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	Release Verification (mg/Kg)	Sample Results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	3.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	163.5
TPH	US EPA Method SW-846 418.1	100	10,200
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<60

Constituents	Testing Method	Release Verification  19.15.29 NMAC closure standards (mg/Kg)	Sample Results (Grab)
Benzene	US EPA Method SW-846 8021B or 8260B	10	0.35
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	198.55
TPH	US EPA Method SW-846 418.1	2,500	7,500
Chlorides	US EPA Method 300.0 or 4500B	20,000 or background	<59

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 beneath the BGT was sampled for TPH, BTEX, and chloride. All test parameters exceeded the stated limits for confirmation sample except chloride. Grab sample @ 10 feet below grade exceeded total TPH & BTEX 19.15.29 NMAC closure standards. A field 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.

Attached 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 BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area.

Sampling results reveal evidence of a release had occurred. BGT area remains open to conduct required site characterization &/or remediation.

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 BGT area will be reclaimed once site characterization &/or remediation has been completed and the well has been plugged & 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 BGT area will be reclaimed once site characterization &/or remediation has been completed and the well has been plugged & 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 BGT area will be reclaimed once site characterization &/or remediation has been completed and the well has been plugged & 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 BGT area will be reclaimed once site characterization &/or remediation has been completed and the well has been plugged & abandoned.

- 14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves re-vegetation.
  - BP will notify NMOCD when re-vegetation is successfully completed.
- 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 & contains a photo of the current condition.

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

Contact Name Steve Moskal

Contact email Steven.Moskal@bpx.com

Responsible Party BPX Energy (formerly BP America Production Co.)

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**

**OGRID 778** 

Contact Telephone (505) 330-9179

Incident # (assigned by OCD) cJK192925838

			Location	of Release S	ource	
Latitude			Longitude		07.761511	
<del></del>			(NAD 83 In aeci	mal degrees to 5 deci	· · · · · · · · · · · · · · · · · · ·	, <u></u>
Site Name Florance L 019			Site Type	Natural Ga	s Well	
Date Release	Discovered	February 18,	2019	API# (if ap	plicable) 30-04	5-09916
Unit Letter	Section	Township	Range	Cou	nty	٦
H	3	30N	9W	San J	<del> </del>	_
	Materia	l(s) Released (Select all		Volume of	c justification for th	ne volumes provided below)
	запс	KA ι.eπειαι □ 11	•		Release	
Crude Oil	Materia I	l(s) Released (Select all Volume Released	Nature and  I that apply and attach of (bbls)	Volume of	volume Rec	overed (bbls)
	Materia I	l(s) Released (Select all Volume Released Volume Released	Nature and that apply and attach c d (bbls) d (bbls) Unknow	Volume of	volume Rec	overed (bbls) overed (bbls) None
☐ Crude Oil ☑ Produced	Materia I Water	Volume Released Volume Released Volume Released Is the concentration produced water >	Nature and  that apply and attach of (bbls)  d (bbls) Unknow ion of dissolved ch >10,000 mg/l?	Volume of alculations or specific n loride in the	Volume Rec	overed (bbls) overed (bbls) <b>None</b> No
☐ Crude Oil ☑ Produced ☑ Condensa	Materia I Water	Volume Released Is the concentration produced water > Volume Released	Nature and that apply and attach c d (bbls) d (bbls) Unknow ion of dissolved ch >10,000 mg/l? d (bbls) Unknow	Volume of alculations or specific n loride in the	volume Rec Volume Rec Volume Rec Volume Rec Volume Rec	overed (bbls)  overed (bbls) None  No  overed (bbls) None
☐ Crude Oil	Materia I Water	Volume Released Volume Released Volume Released Is the concentration produced water >	Nature and that apply and attach c d (bbls) d (bbls) Unknow ion of dissolved ch >10,000 mg/l? d (bbls) Unknow	Volume of alculations or specific n loride in the	volume Rec Volume Rec Volume Rec Volume Rec Volume Rec	overed (bbls) overed (bbls) <b>None</b> No
☐ Crude Oil ☑ Produced ☑ Condensa	Materia I Water  ute	Volume Released Is the concentrate produced water > Volume Released Volume Released	Nature and that apply and attach c d (bbls) d (bbls) Unknow ion of dissolved ch >10,000 mg/l? d (bbls) Unknow	Volume of alculations or specifications or speci	volume Rec	overed (bbls)  overed (bbls) None  No  overed (bbls) None
☐ Crude Oil ☐ Produced ☐ Condensa ☐ Natural G	Materia I Water  ite ias scribe)	Volume Released Is the concentration produced water > Volume Released Volume Released Volume Released Volume Released Volume Released	Nature and that apply and attach c d (bbls) d (bbls) Unknow ion of dissolved ch >10,000 mg/l? d (bbls) Unknow d (Mcf) Released (provide	Volume of alculations or specific noloride in the noloride in the units)	volume Rec	overed (bbls) overed (bbls) None No overed (bbls) None overed (bbls) None
☐ Crude Oil ☐ Produced ☐ Condensa ☐ Natural G ☐ Other (de	Materia I Water ate ias scribe) ease Origi	I(s) Released (Select all Volume Released Volume Released Is the concentration produced water > Volume Released Volume Released Volume/Weight	Nature and that apply and attach c d (bbls) d (bbls) Unknow ion of dissolved ch >10,000 mg/1? d (bbls) Unknow d (Mcf) Released (provide	Volume of  alculations or specific  n loride in the  n units)  andstone iden	Volume Rec	overed (bbls)  overed (bbls) None  No  overed (bbls) None  overed (Mcf)  ight Recovered (provide units)

Form C-141 Page 2

# State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?		
release as defined by 19.15.29.7(A) NMAC?	Undetermined at present tim			
	Undetermined at present tim	IG.		
Yes No				
TC1700				
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?				
Not required.		•		
	Initial Re	esponse		
The responsible	party must undertake the following actions immediately	unless they could create a safety hazard that would result in injury		
☐ The source of the rele	ease has been stopped.			
The impacted area ha	as been secured to protect human health and	the environment.		
Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.		
All free liquids and re	ecoverable materials have been removed and	l managed appropriately.		
If all the actions describe	ed above have <u>not</u> been undertaken, explain v	vhy:		
Soils/bedrock sar	ndstone impacted only. Latera	al & vertical extent delineation required.		
has begun, please attach	a narrative of actions to date. If remedial e	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.		
		est of my knowledge and understand that pursuant to OCD rules and		
public health or the environ	ment. The acceptance of a C-141 report by the O	ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have		
failed to adequately investig addition. OCD acceptance of	gate and remediate contamination that pose a three of a C-141 report does not relieve the operator of a	at 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: Steve	e Moskal	Title: Environmental Coordinator		
Signature:		Date:		
email: <u>Steven.Mos</u>	skal@bpx.com	Telephone: (505) 330-9179		
OCD Only				
· · · · · · · · · · · · · · · · · · ·				
Received by:	· · · · · · · · · · · · · · · · · · ·	Date:		

### BP Pit Closure Notification - Florence L 019

From: Naomi Azulai < Naomi. Azulai @BPX.COM >

To: Smith Cory, EMNRD, Fields Vanessa, EMNRD, Adeloye Abiodun (aadeloye@blm.gov), I1thomas@blm.gov

Cc: Blagg Jefferey, blagg njv@yahoo.com, Patti Campbell, Jody Gonzales, Steven Moskal

February 8, 2019 at 1:01 PM

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

February 8, 2019

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

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

Florence L 019 API 30-045-09916 (H) Section 3 – T30N – R9W 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 February 12, 2019.

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

Sincerely,

Naomi Azulai Regulatory Analyst

Tel: 970-232-1439 <u>Naomi.Azulai@bpx.com</u> 1199 Main Ave., Suite 101 Durango, CO 81301

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:	BPX		ENGINEERI , BLOOMFIEI		2	API#: 3004	509916
CLIENT,			(505) 632-119		3	TANK ID (if applicble):	В
FIELD REP	ORT:	(circle one): BGT CONFIRMAT	ION / RELEASE INVESTIG	GATION / OTHER:		PAGE#: 1	_ of <b>1</b> _
SITE INFOR	RMATION	I: SITE NAME: FLO	RANCE L #1	9		DATE STARTED:	02/13/19
QUAD/UNIT: H SEC	c: <b>3</b> TWP:	30N RNG: 9W	PM: NM CNT	Y: <b>SJ</b> ST:	NM	DATE FINISHED:	
1/4 -1/4/FOOTAGE:	I.650'N / 79	O'E SE/NE LE	ASE TYPE: FEDERAL	STATE / FEE / IND	IAN	ENVIRONMENTAL	
	31098A	PROD. FORMATION: MV/D		TOIVE		SPECIALIST(S):	NJV
REFERENC	E POIN	T: WELL HEAD (W.H.)	GPS COORD.:	86.842996 X 107.	761930	GL ELEV.:	6.142'
1) 120 BGT	(SW/SB)		36.842799 X 107.	And the second s		RING FROM W.H.: 142	
2)						RING FROM W.H.:	
3)						RING FROM W.H.:	
4)		GPS COORD.:		DIS			
CANADI INIC					TANCEBEA	ANO PROM VIII.	OVM
SAMPLING		CHAIN OF CUSTODY RECORD		HALL	904	45D/0024D/200 0 (CI)	READING (ppm)
		(120) SAMPLE DATE: (120) SAMPLE DATE: (120)		1325 LAB ANALYSIS:	200	15B/8021B/300.0 (CI) 15B/8021B/300.0 (CI)	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PE
		SAMPLE DATE:		LAB ANALYSIS:		TOD/OUZ TD/OUGO (OI)	1,002
		SAMPLE DATE:		LAB ANALYSIS:			
5) SAMPLE ID:		SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:			
SOIL DESC	RIPTION	SOIL TYPE: SAND SILTY SA	ND / SILT / SILTY CLAY / C	LAY / GRAVEL TOTHER	BEDRO	CK (SANDSTONE)	
SOIL COLOR:		GRAY TO BLACK				OHESIVE / MEDIUM PLASTIC	/HIGHLY PLASTIC
COHESION (ALL OTHERS): NON		Y COHESIVE / COHESIVE / HIGHLY COH					
		OOSE / FIRM / DENSE / VERY DE		D: YES NO EXPLANATIO	N- DISC	COLORED SOILS/BEDI	ROCK
	STATE OF THE OWNER, WHEN PERSON NAMED IN	VET / SATURATED / SUPER SATURAT			_		
SAMPLE TYPE: GRAB		# OF PTS. 5  NO EXPLANATION - OLIVE GRA		YING WETNESS: YES N			
	the same of the sa				Laboratory description of the labora		
		LOST INTEGRITY OF EQUIPED AND/OR OCCURRED YES NO		SOUTHEAST C	CORNER	OF BGT	
		YES / NO EXPLANATION - UN		TIME.		**************************************	
OTHER: NMOCD OR BLI	M REPS. NOT P	RESENT TO WITNESS CONFI	RMATION SAMPLING.				
EXCAVATION DIMENSION	ONIECTIMATION	t ft. X	ft. X	ft. EXCAVAT	TION EST	TIMATION (Cubic Yards)	
DEPTH TO GROUNDWATER		NEAREST WATER SOURCE: >				, ,	
SITE SKETC							
SITE SKETC	*	BGT Located: off on	site PLOT P	LAN circle: attach	ed OVM	CALIB. READ. = 100.4	11 -1.00
	ТО			_	- 1 1	CALIB. GAS = 100	ppm
	W.H.	FENCE	PBGTL		TIME	1:35 am(pm) DATE	02/13/19
			T.B. ~5' B.G.		'[	MISCELL. N	OTES
		X X X			s	IO#:	
		BERM X X	X		R	EF #:	
			GRAB (E. SIDE	E)	V	ID: VHIXONE	<b>VRM</b>
					P	J#:	
					P	ermit date(s):	1/31/19
			STEEL		0		2/07/19
	PROD.		CONTAINMENT RING		Tai	OVM = Organic Var ppm = parts per mi	
	TANK		Tutto		E	BGT Sidewalls Visible:	
				X - S.P.	D	BGT Sidewalls Visible:	Y/N
NOTES: BGT = BELOW-GRADE T	TANK; E.D. = EXCAVAT	ON DEPRESSION; B.G. = BELOW GRADE	; B = BELOW; T.H. = TEST HOLE	The same of the sa	management of the	BGT Sidewalls Visible:	Y/N
T.B. = TANK BOTTOM; P	BGTL = PREVIOUS BE	LOW-GRADE TANK LOCATION; SPD = SAI	MPLE POINT DESIGNATION; R.V	N. = RETAINING WALL; NA - NO		Magnetic declination:	10°E
The same of the sa		E WALL; DW-DOUBLE WALL; SB-SINGI ERY DATE: 10/5/2016.	The second secon	The state of the s			management of the second
NOTES: GOUGLE	_AITH HVAC	LINI DAIL. 10/3/2010.	ONSITE	02/13/19			

### **Analytical Report**

### Lab Order 1902608

Date Reported: 2/15/2019

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: 5 PC-TB@5' (120)

Project: Florance L #19

Collection Date: 2/13/2019 1:25:00 PM

Lab ID: 1902608-001

Matrix: MEOH (SOIL) Received Date: 2/14/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	2/14/2019 11:00:47 AM	43159
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	2300	98		mg/Kg	10	2/14/2019 11:03:45 AM	43157
Motor Oil Range Organics (MRO)	6100	490		mg/Kg	10	2/14/2019 11:03:45 AM	43157
Surr: DNOP	0	50.6-138	S	%Rec	10	2/14/2019 11:03:45 AM	43157
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	1800	69		mg/Kg	20	2/14/2019 9:37:11 AM	43133
Surr. BFB	457	73.8-119	s	%Rec	20	2/14/2019 9:37:11 AM	43133
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	3.2	0.34		mg/Kg	20	2/14/2019 9:37:11 AM	43133
Toluene	1.3	0.69		mg/Kg	20	2/14/2019 9:37:11 AM	43133
Ethylbenzene	9.0	0.69		mg/Kg	20	2/14/2019 9:37:11 AM	43133
Xylenes, Total	150	1.4		mg/Kg	20	2/14/2019 9:37:11 AM	43133
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	20	2/14/2019 9:37:11 AM	43133

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

### 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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### **Analytical Report**

### Lab Order 1902610

Date Reported: 2/15/2019

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: GRAB (E. SIDE) @ 6' (120)

Project: Florance L #19

Collection Date: 2/13/2019 1:50:00 PM

Lab ID: 1902610-001

Matrix: MEOH (SOIL) Received Date: 2/14/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	59		mg/Kg	20	2/14/2019 11:13:13 AM	43159
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS					Analyst:	lm
Diesel Range Organics (DRO)	1500	96		mg/Kg	10	2/14/2019 12:16:28 PM	43157
Motor Oil Range Organics (MRO)	3800	480		mg/Kg	10	2/14/2019 12:16:28 PM	43157
Surr: DNOP	0	50.6-138	S	%Rec	10	2/14/2019 12:16:28 PM	43157
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	2200	70		mg/Kg	20	2/14/2019 10:00:46 AM	43133
Surr. BFB	759	73.8-119	S	%Rec	20	2/14/2019 10:00:46 AM	43133
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	0.55	0.35		mg/Kg	20	2/14/2019 10:00:46 AM	43133
Toluene	17	0.70		mg/Kg	20	2/14/2019 10:00:46 AM	43133
Ethylbenzene	11	0.70		mg/Kg	20	2/14/2019 10:00:46 AM	43133
Xylenes, Total	170	1.4		mg/Kg	20	2/14/2019 10:00:46 AM	43133
Surr: 4-Bromofluorobenzene	128	80-120	S	%Rec	20	2/14/2019 10:00:46 AM	43133

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

### 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 Quanitative 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 Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

C	hain	-of-Cı	ustody Record	Turn-Around	Time:	5AME	]				<b>1</b> A			MZ	m F			
Client:	BUNG	6 EN6	FR BPX	☐ Standard		JAME ORY	]		K									1EI RA
				Project Name	9:		]									al.co		
Mailing	Address	3:		FLOR	ance l	_ 719		49	01 H							е, NN		109
				Project #:	<del></del> <del></del>		1			)5-34				-	-	345-		
Phone :	#: 50	55.3Z	0.3489	Ī								А	naly	/sis	Req	uest		
email o	r Fax#:			Project Mana	iger:			(YI	(0)					)4)				
QA/QC I	Package: dard		☐ Level 4 (Full Validation)		ive mos		TMB/5-(8021)	+ TPH (Gas only)	(GRO / DRO / MRO)			SIMS)		2O4,S(	/ 8082 PCB's			
Accredi	itation	□ Oth	er	Sampler: N	ELSON V	EEZ W		TPH (	) / DR	.1	(+,1)	8270 S		,5 NO2,	8082			
□ EDD			JI	Sample Tem	A 189	□ No ~,Z, <b>L</b>  ~,1,5%	14	<b>#</b>	GR	418	ଛି	or 8	sls	င္ခ်			δ	¥
Date	Time	Matrix	Sample Request ID		Preservative Type	3.6	BTEX +-MTBE	BTEX + MTBE	трн 8015В (	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE
2/3/19	1350	SOIL	GRAB (E. SIDE) C 6'	40z - 1	COOL	-001	1		1									<b>√</b>
			(170)			<u> </u>												
						`·												
		<u> </u>					<u> </u>											
Date: 2/13/19	Time:	Relinquish	payby:	Received by:	Hhu	Date Time 2/13/19 /8/9	Rer	nark	S:	Bir	 _lu ,	B	ρ	01	REG			And
Date: 2/3/9	Time: 2616	Relinquish	102	Received by:		Date Time 0810 2/14/19	<u> </u>											
-1- / H	f necessary	semples sub	mitted to Hall Environmental may be sub	contracted to other a	ccredited laboratori	es. This serves as notice of th	s possi	bility.	Апу за	np-cou	tracted	d data	will be	dear	ly nota	ited on	the a	nalytical

SAMPLE
Air Bubbles (Y or N)

report.

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1902608

15-Feb-19

Client:

**Blagg Engineering** 

Project:

Florance L #19

Sample ID MB-43159

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 43159

RunNo: 57701

Prep Date: 2/14/2019

SeqNo: 1932360

HighLimit

Analysis Date: 2/14/2019

Units: mg/Kg

%RPD **RPDLimit** 

**RPDLimit** 

Qual

Analyte Chloride

PQL ND 1.5

Sample ID LCS-43159

SampType: Ics

Batch ID: 43159

1.5

TestCode: EPA Method 300.0: Anions RunNo: 57701

SPK value SPK Ref Val %REC LowLimit

0

Client ID: LCSS Prep Date: 2/14/2019

SeqNo: 1932361

Units: mg/Kg

Analyte

Analysis Date: 2/14/2019

SPK value SPK Ref Val

%REC LowLimit

**HighLimit** 

%RPD

Qual

Chloride

Result **PQL** 15

15.00

97.1

110

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Ε Value above quantitation range

J Analyte detected below quantitation limits

Sample pH Not In Range

RI. Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 2 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902608 15-Feb-19

Client:

**Blagg Engineering** 

Project:

Florance L #19

Sample ID LCS-43157 Client ID: LCSS

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Batch ID: 43157

RunNo: 57693

%REC

86.8

95.5

HighLimit

Prep Date: 2/14/2019

Analysis Date: 2/14/2019

SeqNo: 1930939

Units: mg/Kg

**Analyte** Diesel Range Organics (DRO)

Sur: DNOP

Analyte

Surr: DNOP

Result **PQL** 43 4.8

SPK value SPK Ref Val 50.00

SPK value SPK Ref Val

5.000

LowLimit

63.9

50.6

124

138

%RPD **RPDLimit**  Qual

Sample ID MB-43157

Client ID: PBS

SampType: MBLK Batch ID: 43157

Analysis Date: 2/14/2019

10

TestCode: EPA Method 8015M/D: Diesel Range Organics

RunNo: 57693 SeqNo: 1930940

Units: mg/Kg

**HighLimit** 

%RPD

**RPDLimit** Qual

Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)

Prep Date: 2/14/2019

Result PQL ND 10 ND

9.9

50

10.00

98.8

%REC

50.6

LowLimit

138

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

F Value above quantitation range

j Analyte detected below quantitation limits Page 3 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1902608

15-Feb-19

Client:

Blagg Engineering

Project:

Florance L #19

Sample ID RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

73.8

73.8

LowLimit

73.8

Client ID:

Batch ID: **R57709** 

RunNo: 57709

Prep Date:

Analysis Date: 2/14/2019

SeqNo: 1931552

Units: %Rec

Analyte

Result **PQL** 

SPK value SPK Ref Val

**HighLimit** 

Sum BF8

970

1000

%REC LowLimit

119

**RPDLimit** 

Qual

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

%RPD

%RPD

%RPD

%RPD

Client ID:

LCSS

Batch ID: R57709

PQL

RunNo: 57709

96.8

Prep Date:

Analysis Date: 2/14/2019

SeqNo: 1931553

Units: %Rec

Analyte Surr: BFB Result 1100 SPK value SPK Ref Val

1000

%REC LowLimit 114

**HighLimit** 

**RPDLimit** 

Qual

Sample ID. MB-43133

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS

Batch ID: 43133

RunNo: 57708

%REC

119

Sur: BFB

Prep Date: 2/13/2019

Analysis Date: 2/14/2019

**PQL** 

5.0

SeqNo: 1931578

Units: mg/Kg

**HighLimit** 

Qual

**RPDLimit** 

Gasoline Range Organics (GRO)

Result ND 1000

1000

SPK value SPK Ref Val

102

119

Sample ID LCS-43133

Client ID: LCSS

SampType: LCS

**PQL** 

5.0

TestCode: EPA Method 8015D: Gasoline Range RunNo: 57708

Prep Date: 2/13/2019

Batch ID: 43133

Analysis Date: 2/14/2019

SeqNo: 1931579 %REC

Units: ma/Ka

**RPDLimit** 

Qual

Analyte Gasoline Range Organics (GRO) Sur: BFB

26 1100

Result

SPK value SPK Ref Val 25.00 1000

0

105 113 80.1 73.8

LowLimit

**HighLimit** 123 119

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

PQL **Practical Quanitative Limit** 

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

E Value above quantitation range

j Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Detection Limit Sample container temperature is out of limit as specified Page 4 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902608

15-Feb-19

Client:

**Blagg Engineering** 

Project:

Florance L #19

Sample ID MB-43133	Samp	Гуре: Мі	3LK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 43	133	F	RunNo: 5	7708				
Prep Date: 2/13/2019	Analysis (	Date: 2/	14/2019	8	SeqNo: 1	931588	Units: mg/k	(g		
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	0.98		1.000		98.4	80	120			

Sample ID LCS-43133	Samp1	ype: LC	S	Tes	tCode: E	PA Method	8021B: Vola	tiles	· -	
Client ID: LCSS	Batcl	h ID: 43	133	F	RunNo: 5	7708				
Prep Date: 2/13/2019	Analysis D	)ate: <b>2/</b>	14/2019	. 8	SeqNo: 1	931589	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.9	80	120			
Toluene	0.93	0.050	1.000	0	93.1	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Ε Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Detection Limit Sample container temperature is out of limit as specified Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerqus, NM 87109

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

# Sample Log-In Check List

Client	Name:	BLAGG	-	Work O	rder Number:	1902	808			RoptNo	p: 1
Receiv	red By:	Erin Mele	endrez	2/14/2019	8:10:00 AM			un	uz	<i>7</i>	
Compl	leted By:	Leah Bac	а	2/14/2019	8:27:41 AM			Lah	Pro-		
•	•	VVZ 2						Look	) Luca		
Labe	eled of Cu	•••	0 7	14/19							
		Custody comp	olete?			Yes	$\square$	. No		Not Present	
2. Hov	www.the	sample deliv	vered?			Cour	<u>ier</u>				
<u>Log</u>	<u>In</u>										
3. Was	s an atte	mpt made to	cool the sample	98?		Yes	¥	No		NA 🗆	
4. Wer	ne all sam	nples received	i at a temperat	ure of >0° C to	6.0°C	Yes	$\square$	No		NA 🗆	•
5. San	nple(s) ln	proper conta	iner(s)?			Yes	<b>?</b>	No			
6. Suff	iclent sa	mple volume i	for indicated te	st(s)?		Yes	<b>V</b>	No			
7. Are	samples	(except VOA	and ONG) pro	perly preserved	?	Yes	$\checkmark$	No			
8. Was	s preserv	stive added to	o bottles?			Yes		No	$\mathbf{Z}$	NA 🗌	
9. VOA	vials ha	ive zero head	space?			Yes		No		No VOA Vials 🗹	. 70
10. We	re any sa	imple contain	ers received br	oken?		Yes		No	2	# of preserved	14.1-
		vork match bo	ottle labels? ain of custody)			Yes	V	No		bottles checked for pH:	or >12 unless noted)
			ntified on Chain			Yes	$\mathbf{Z}$	No		Adjusted?	
			rere requested?			Yes	<u>-</u>	No		_	
14. Wer	re all hold	ding times abl	e to be met?	·		Yes	$\square$	No		Checked by:	
			authorization.)			-			,		
		lling (if ap)	<u>plicable)</u> Ilscrepancies w	rith this order?		Yes		No		na 🗹	
		n Notified:			Date						٦
	By WI		A A CAMERO CONTRACTOR OF STREET		Via: [	□ eM	ail 🗀 f	Phone [	7 Fax	☐ In Person	
	Regar			Control of the Contro							
	Client	Instructions:									
16. Ad	Iditional r	emarks:									<b></b>
17. <u>C</u> g	ooler Info	ormation .									
崖	Cooler N	o Temp %	والمناورين المناورة والمناورة والمناورة	Seal intact	Seal No.	seal D	<b>ero</b>	Signed	By		
1		3.7	Good	Yes						-	
3		2.4 1.5	Good Good	Yes Yes						4	
4		3.1	Good	Yes			<u></u>			<u> </u>	

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902610

15-Feb-19

Client:

**Blagg Engineering** 

**Project:** 

Florance L #19

Sample ID MB-43159

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 43159

RunNo: 57701

Prep Date: 2/14/2019

Analysis Date: 2/14/2019

SeqNo: 1932360

Units: mg/Kg

Qual

Analyte Chloride

ND

PQL 1.5

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** 

SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 43159

1.5

RunNo: 57701

Prep Date: 2/14/2019

Sample ID LCS-43159

Analysis Date: 2/14/2019

SeqNo: 1932361

Units: mg/Kg

**HighLimit** 

%RPD **RPDLimit** 

Qual

Analyte

Result **PQL** 

LowLimit

Analyte detected in the associated Method Blank

Sample container temperature is out of limit as specified

Analyte detected below quantitation limits

Value above quantitation range

Sample pH Not In Range

Reporting Detection Limit

90

110

Chloride

0

97.1

15

SPK value SPK Ref Val %REC

15.00

В

Е

J

P

RL

Page 2 of 5

Qualifiers: Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded н

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902610

15-Feb-19

Client:

**Blagg Engineering** 

**Project:** 

Florance L #19

Sample ID LCS-43157	SampT	ype: LC	S	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: 43	157	F	RunNo: 5	7693				
Prep Date: 2/14/2019	Analysis D	ate: 2/	14/2019	8	SeqNo: 1	930939	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.8	63.9	124			
Surr: DNOP	4.8		5.000		95.5	50.6	138			

Sample ID MB-43157	SampT	ype: Mi	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client iD: PBS	Batch	1D: 43	157	F	RunNo: 5	7693				
Prep Date: 2/14/2019	Analysis D	ate: 2	14/2019	8	SeqNo: 1	930940	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10		Ť .					-	
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	50.6	138			

### 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 Quanitative 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

Page 3 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902610

15-Feb-19

Client:

Blagg Engineering

Project:

Florance L #19

Sample ID RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

LowLimit

73.8

73.8

Client ID: PBS Batch ID: R57709

RunNo: 57709

Prep Date:

Analysis Date: 2/14/2019

SeqNo: 1931552

Units: %Rec

Analyte

Result

SPK value SPK Ref Val

%RPD

Qual

Surr: BFB

970

1000

96.8

HighLimit 119 **RPDLimit** 

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

%REC

Client ID:

LCSS

Batch ID: **R57709** 

RunNo: 57709

Prep Date:

Analysis Date: 2/14/2019

SeqNo: 1931553

Units: %Rec

Qual

Analyte Sur: BFB Result 1100 SPK value SPK Ref Val

1000

%REC LowLimit **HighLimit** 

119

**RPDLimit** 

SampType: MBLK

Analysis Date: 2/14/2019

TestCode: EPA Method 8015D: Gasoline Range

%RPD

%RPD

Client ID: PBS

Sample ID MB-43133

Batch ID: 43133

RunNo: 57708 SeqNo: 1931578

114

Units: ma/Ka

Analyte

Prep Date: 2/13/2019

Result

**PQL** SPK value SPK Ref Val %REC

LowLimit **HighLimit**  %RPD **RPDLimit** 

Qual

Gasoline Range Organics (GRO)

Surr: BFB

ND 1000

1000

102

73.8

119

Sample ID LCS-43133

Client ID: LCSS

SampType: LCS

5.0

0

TestCode: EPA Method 8015D: Gasoline Range RunNo: 57708

Analyte

Prep Date: 2/13/2019

Batch ID: 43133

PQL

5.0

Analysis Date: 2/14/2019

SeqNo: 1931579

Units: mg/Kg

**RPDLimit** 

Page 4 of 5

Qual

Gasoline Range Organics (GRO) Sur: BFB

26 1100

Result

25.00

SPK value SPK Ref Val 1000

%REC 105 113

80.1 73.8

LowLimit

HighLimit 123 119

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- Practical Quanitative Limit PQL % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range

Reporting Detection Limit

- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1902610

15-Feb-19

Client:

**Blagg Engineering** 

**Project:** 

Florance L #19

Sample ID MB-43133	Sampi	ype: Mi	BLK	Tes	Code: El	PA Method	8021B: Volat	iles	-	
Client ID: PBS	Batch	h ID: 43	133	F	RunNo: 5	7708				
Prep Date: 2/13/2019	Analysis E	Date: 2/	14/2019	8	SeqNo: 1	931588	Units: mg/K	g		
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	0.98		1.000		98.4	80	120			

Sample ID LCS-43133	Samp	Гуре: LC	:8	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 43	133	F	RunNo: 5	7708				
Prep Date: 2/13/2019	Analysis [	Date: 2/	14/2019	5	SeqNo: 1	931589	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.9	80	120			
Toluene	0.93	0.050	1.000	0	93.1	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120		•	
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

### 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 Quanitative 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

Page 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109

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

# Sample Log-In Check List

Client No	ame:	BLAGG		Work (	Order Numb	er: 190	2610			RcptNo:	1
Received	l By:	Erin Mele	ndrez	2/14/201	9 8:10:00 <i>A</i>	W		Un.	uz	7	
Complete	-	Leah Bac	-		9 8:37:28 <i>A</i>			Lah	no -		
				21421	6 6.31 .20 F	4141		Lach	Dres	· ·	
Reviewe		WZ2/		,							
Labe Chain o		by -	10 Z/F	4/19				•		,	
1. Is Cha	ain of Cu	stody comp	lete?			Yes	$\checkmark$	No		Not Present	
2. How w	vas the s	sample deliv	ered?			Cou	rier				
Log In 3. Was a		pt made to (	ool the sample	es?		Yes	V	No		NA 🗆	
4. Were	all samp	iles received	at a temperati	ıre of ≻0°C to	6.0°C	Yes	Ø	No	. 🗆	NA 🗆	
5. Sampl	le(s) in p	oroper conta	iner(s)?			Yes	$\checkmark$	No			
6. Sufficie	ent sam	pie volume i	or indicated tes	st(s)?		Yes	<b>7</b>	No			
7. Are sa	mples (e	except VOA	and ONG) proj	certy preserve	đ?	Yes	$\mathbf{V}$	No		•	
8. Was p	reservat	tive added to	bottles?			Yes		No	Y	NA 🗆	
9. VOA v	ials hav	e zero head	space?			Yes		No		No VOA Vials 🗹	10
10. Were	any san	nple contain	ers received br	oken?		Yes		No	R	# of preserved	
	-	ork match bo				Yes	$\mathbf{Z}$	No		bottles checked for pH:	7/14/19 >12 unless noted)
-	-		ain of custody)	of Custosh A		Yes		No		Adjusted?	>12 diliess noted)
			itified on Chain ere requested?			Yes					
			e to be met?		•	Yes	$\mathbf{Z}$			Checked by:	$\sim$
		-	authorization.)								
Special .	Handi	ing (If ap	olicable)	•							
15. Was	client no	tifled of all d	Iscrepancies w	ith this order?	. <u>-</u>	Yes		No		NA 🗹	
	Person	Notified:			Date						
	By Who	om:			Via:	☐ et/	lail 🔲	Phone [	] Fax	in Person	
- 1	Regardi	-	en haj adapter e de en angle en aprija e e e	· · · · · · · · · · · · · · · · · · ·	e em tunna tras e -				F-10-71-01-14-0	(Charles & Const. Married on Const. Const. Const. Const.	
l	Client Ir	nstructions:	1								]
16. Addit	tional re	marks:									
17. <u>Cool</u>			(Millian or the property of the Control	Parki, po vegypou menos bakan	1444		two market seems		mendatulan Na	:.1	
Ç.	oler No		Condition	THE PERSON NAMED IN COLUMN	Seal No.	Seal	and 1	Signed	By		
1		3.7 2.4	Good	Yes Yes	<del> </del>		<del></del> -}			4	
3		1.5	Good	Yes	<del> </del>					4	
4		3.1	Good	Yes	<del>  </del>					-	
			<del></del>	<b></b>	<u></u>					<b></b>	



