Form C-144 Revised June 6, 2013

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

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

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

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

Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: BP America Production Company OGRID #: 778
Address: 200 Energy Court, Farmington, NM 87401
Facility or well name: NEIL LS 001
Address: 200 Energy Court, Farmington, NM 87401 Facility or well name: NEIL LS 001 API Number: 3004510775 OCD Permit Number: 11W 60-14 Cons. DIV DIST.
U/L or Qtr/Qtr A Section 14 Township 31N Range 11W County: San Juan
Center of Proposed Design: Latitude 36.90273 Longitude -107.95405 NAD: □1927 ⋈ 1983
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment
2.
Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling Workover
□ Permanent □ Emergency □ Cavitation □ P&A □ Multi-Well Fluid Management □ Low Chloride Drilling Fluid □ yes □ no
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: Lx Wx D
3. Subsection I of 19.15.17.11 NMAC TANK B
Volume: 95 bbl Type of fluid: Produced water
Tank Construction material: Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other <u>Single wall/ Double bottom; visible sidewalls</u>
Liner type: Thicknessmil
4. Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.



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)	
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	
Variances and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptance are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300 feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa	
lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of	
initial application NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.	
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 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 19.15.17.12 NMAC	
and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number:	
11.	
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.	cuments are
 □ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC □ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC □ A List of wells with approved application for permit to drill associated with the pit. □ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC 	15.17.9 NMAC
 ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC 	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

Permanent Pis Permit Application Checklist: Subsection B of 19.15.179 NNAC	12.	
## Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Sting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrito 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 Climatological Design - based upon the appropriate requirements of 19.15.17.11 NMAC Climatological Comparison of Comparis	Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC	documents are
Proposed Closure: 19,15,17,13 NMAC Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit Alternative Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method: Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) Implace Burial On-site Trench Buria	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 ☐ Erosion Control Plan	
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit Mile Harmative Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) On-site Closure Method On-site Tench Burial On-site Tench Burial On-site Closure Method On-site Tench Burial On-site Tench Buri		
Waste Exeavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill utitings) Goil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Siting Criteria Institutions: Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is between 25-50 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site Yes No No No No No No No N	Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Falternative 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	luid Management Pit
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 91.91.51.71.31 MMAC Disposal Pacility 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 Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is between 25-50 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Yes No NA	14.	
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is between 25-50 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes \ No	closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is between 25-50 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency.	
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site NA Yes No		
lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality □ Yes □ No Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site □ Yes □ No	lake (measured from the ordinary high-water mark).	Yes No
at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes No		☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	at the time of initial application.	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
☐ Yes ☐ No	Within 300 feet of a wetland.	
		☐ Yes ☐ No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.	
 Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
16.	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15 Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards of Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	.17.11 NMAC 19.15.17.11 NMAC
Operator Application Certification:	haliaf
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and	
Name (Print): Title:	
1	
Signature: Date:	
Signature: Date:	
Signature: Date:	
Signature: e-mail address: Telephone:	ting the closure report.
Signature: e-mail address: Telephone: Date: COCD 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): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submit The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do	ting the closure report.
Signature: Comparison Date:	ting the closure report. not complete this

22.	
Operator Closure Certification:	
	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 clos	sure requirements and conditions specified in the approved closure plan.
Name (Print): Steve Moskal	Title: Field Environmental Coordinator
Signature: Aug Muy	
Signature:	Date: March 7, 2017
e-mail address: steven.moskal@bp.com	Telephone: (505) 326-9497
e-mail address: steven.moskal@bp.com	Telephone:(505) 326-9497

BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

Neil LS 001 API No. 3004510775 Unit Letter A, Section 14, T31N, R11W

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

General Closure Plan

- 1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.

 Notice is attached.
- 2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

 Notice was provided and is attached.
- 3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
 - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
 - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
 - c. Basin Disposal, Permit NM-01-0005 (Liquids)
 - d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
 - e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)

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

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

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

The BGT was transported for recycling.

5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.

All equipment associated with the BGT has been removed.

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

Constituents	Testing Method	Release Verification	Sample
	45 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	< 0.015
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.058
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<u><48</u>
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<30

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

Soil under the BGT was sampled for TPH, BTEX and chloride with all concentrations below the stated limits. The field report and laboratory reports are attached.

7. BP shall notify the division District III office of its results on form C-141. **C-141 is attached.**

- If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
 Sampling results indicate a release has not occurred. Attached is a laboratory report and C-141.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area

Sampling results indicate a release has not occurred. Attached is a laboratory report and field report. The location will be reclaimed when the well is plugged and abandoned.

10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.

The area has been backfilled. The location will be reclaimed when the well is plugged and abandoned.

11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.

The location will be reclaimed when the well is plugged and abandoned.

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

The location will be reclaimed when the well is plugged and abandoned.

13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.

The location will be reclaimed when the well is plugged and abandoned.

14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.

The location will be reclaimed when the well is plugged and abandoned.

- 15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
 - a. proof of closure notification (surface owner and NMOCD)
 - b. sampling analytical reports; information required by 19.15.17 NMAC;
 - c. disposal facility name and permit number
 - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
 - e. site reclamation, photo documentation.

 Closure report on C-144 form is included including photos of reclamation completion.
- 16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

Certification section of C-144 has been completed.

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

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised August 8, 2011

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

			Rele	ase Notific	atior	and Co	orrective A	ction					
						OPERA	ГOR	Initi	al Report	∑ Fiı	nal Report		
Name of Co	ompany: BP					Contact: Steve Moskal							
Address: 20	00 Energy Cou	urt, Farmir	ngton, NI	M 87401		Telephone No.: 505-326-9497							
Facility Na	me: Neil LS 0	01				Facility Typ	e: Natural gas v	vell					
Surface Ow	ner: Federal			Mineral C	wner:	Federal		API No	. 3004510775				
	LOCA						LEASE						
Unit Letter A		ownship 1N	Range 11W	Feet from the 1,050		South Line	Feet from the 890	East/West Line East	County: San .	uan			
			La	titude36.90	<u>273°</u>	Longitue	de107.954	<u>05°</u>					
				NAT	URE	OF REL							
Type of Rele						-	Release: unknow		Recovered: N/A				
Source of Re	lease: below gr	rade tank –	95 bbl			Date and H	lour of Occurrence	e: Date and	Hour of Discov	ery: no	ne		
Was Immedi	ate Notice Give		Yes 🛛	No Not Re	quired	If YES, To	Whom?						
By Whom?						Date and H							
Was a Water	Was a Watercourse Reached? ☐ Yes ☑ No						If YES, Volume Impacting the Watercourse.						
If a Watercon	urse was Impact	ted, Describ	e Fully.*										
							the BGT was don results are attached	ne during removal. d.	Soil analysis r	esulted	for		
Describe Are	ea Affected and	Cleanup A	ction Tak	en.* No action ne	ecessary	Final labora	tory analysis deter	rmined no remedia	l action is requi	red.			
regulations a public health should their or or the environ	Il operators are or the environmoperations have	required to ment. The a failed to action, NMOO	report an acceptance dequately CD accept	d/or file certain re e of a C-141 repo investigate and re	elease no ort by the emediate	otifications are NMOCD made contamination	nd perform correct arked as "Final Re on that pose a thre e the operator of r	nderstand that pursitive actions for releport" does not releat to ground water esponsibility for c	eases which ma ieve the operator, surface water, ompliance with	y endan r of liab human	nger bility n health		
Signature:	Alex Mi	W					OIL CONS	SERVATION	DIVISION				
Printed Name	e: Steve Moskal	1				Approved by	Environmental Sp	pecialist:					
Title: Field E	Environmental C	Coordinator				Approval Date: Expiration			Date:				
	ess: steven.mosk			5 226 0407		Conditions of	Approval:		Attached []			
Date: March	7, 2017	h	none: 50	5-326-9497									

^{*} Attach Additional Sheets If Necessary

bp



BP America Production Company 200 Energy Court Farmington, NM 87401

January 6, 2017

Bureau of Land Management Whitney Thomas 6251 College Suite A Farmington, NM 87402

VIA EMAIL

Re: Notification of plans to close/remove a below grade tank

Well Name: NEIL LS 001 API #: 3004510775

Dear Mrs. Thomas,

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 January 10, 2017. If there aren't any unforeseen problems, the work should be completed within 10 working days.

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

If witnessing of the tank removal is required please contact me for a specific time (505)-326-9497.

Sincerely,

Steven Moskal

BP America Production Company

Moskal, Steven

From:

Railsback, Farrah (CH2M HILL)

Sent:

Friday, January 06, 2017 11:13 AM

To:

'Smith, Cory, EMNRD'; 'Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)'

Cc:

'jeffcblagg@aol.com'; 'blagg_njv@yahoo.com'; Moskal, Steven

Subject:

BP Pit Close Notification - NEIL LS 001

BP America Production Company

200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

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

January 6, 2017

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

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

NEIL LS 001 API 30-045-10775 (A) Section 14 – T31N – R11W 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 January 10, 2017.

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

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

Farrah Railsback

BGT Project Support 970-946-9199 -cell

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: BP		G ENGINEER 37, BLOOMFII			API#: 3004510)775
		(505) 632-11			TANK ID (if applicble):	}
FIELD REPORT:	(circle one): BGT CONFIRM	MATION / RELEASE INVES	TIGATION / OTHE	R:	PAGE#: 1	of 1
SITE INFORMATION	J: SITE NAME: NE	IL LS #1			DATE STARTED: 01/	10/17
QUAD/UNIT: A SEC: 14 TWP:	31N RNG: 11W	PM: NM C	NTY: SJ :	ST: NM	DATE FINISHED:	
1/4 -1/4/FOOTAGE: 1,050'N / 89	0'E NE/NE	LEASE TYPE: FEDER	AL/STATE/FE	E / INDIAN	ENVIRONMENTAL	
LEASE #: SF078040	PROD. FORMATION: N	V CONTRACTOR:	STRIKE MBF - C. PAR	RKS	SPECIALIST(S):	JV
REFERENCE POINT	: WELL HEAD (W.	H.) GPS COORD.:	36.90256 X	(107.95384	GL ELEV.:	5,917'
1) 95 BGT (SW/DB) - B	GPS COORD.:				RING FROM W.H.: 76.5', N	
2)	GPS COORD.:			DISTANCE/BEAR	RING FROM W.H.:	
3)	GPS COORD.:			DISTANCE/BEAR	RING FROM W.H.:	
4)	GPS COORD.:			DISTANCE/BEAF	RING FROM W.H.:	
SAMPLING DATA:	CHAIN OF CUSTODY RECO	RD(S) # OR LAB USED:	HALL			OVM READING
1) SAMPLE ID: 5PC - TB @ 5' (9	95) - B SAMPLE DATE:	01/10/17 SAMPLE TIM	E 1245 LAB	ANALYSIS: 801	5B/8021B/300.0 (CI)	(ppm)
2) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIM	E: LAB A	ANALYSIS:	4.000	
3) SAMPLE ID:						
4) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIM	E: LAB A	ANALYSIS:		
SOIL DESCRIPTION	SOIL TYPE: SAND SILTY	SAND SILT SILTY CLAY	CLAY / GRAVEL / C	OTHER		
	ROWN TO OLIVE GRAY	1			OHESIVE MEDIUM PLASTIC HIGI	HLY PLASTIC
COHESION (ALL OTHERS): NON COHESIVE (SLIGHTL)		OHESIVE DENSITY (COHE	SIVE CLAYS & SILTS	S): SOFT FIRM	STIFF VERY STIFF / HARD	
CONSISTENCY (NON COHESIVE SOILS): LO			TED: YES NO EXP	LANATION -		
SAMPLE TYPE: GRAB (COMPOSITE) #			AYING WETNESS: 5	YES / NO EXPLAN	IATION - FROM SNOW MEL	T &
DISCOLORATION/STAINING OBSERVED: YES					RECENT PRECIPI	
SITE OBSERVATION						
APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA:		NO EXPLANATION:				
OTHER: NMOCD OR BLM REPS. NOT PR	RESENT TO WITNESS CO	NFIRMATION SAMPLIN	G. USED NMOC	D WELL FILE 30	004510775_22_WF.PDF FO	R
PERMIT INFORMATION (states 45 bbl	BGT).					
SOIL IMPACT DIMENSION ESTIMATION: DEPTH TO GROUNDWATER: >100' N					TIMATION (Cubic Yards) :	NA 000 ppm
DEPTH TO GROUNDWATER: >100' N						DOO ppm
SITE SKETCH	BGT Located: off	on site PLOT	PLAN circle:		-	RF =0.52
EARTHEN BER	M .		\			om
USED TO MITIGA RUN ON	ATE	NCE NCE	\	N TIME	: NA am/pm DATE:	NA
(95)-B		BERM	95 bbl		MISCELL. NO	IES
PBGTL BERM			BGT (Tank ID: A)		o: N15739180	
T.B. ~ 5' B.G.			7	1 -	EF. #:	
	PROD. TANK	1		_	ID: J #:	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		SEPARATOR \		ermit date(s): 07/2	9/08
WOODEN R.W.		COMPRESSOR	/		CD Appr. date(s): 08/0	
				Tan	ok OVM = Organic Vapor Me	
ТО	FENCE STEEL	NT			BGT Sidewalls Visible: Y/	N
W.H.	CONTAINME RING	IN I	Χ -	S.P.D.	BGT Sidewalls Visible: Y /	N
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION			LE; ~ = APPROX.; W.H. =	= WELL HEAD;	BGT Sidewalls Visible: Y /	
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL APPLICABLE OR NOT AVAILABLE; SW - SINGLI				L; NA - NOT M	lagnetic declination: 10) E
NOTES: GOOGLE EARTH IMAG			TE: 01/10/17			

Analytical Report

Lab Order 1701383

Date Reported: 1/12/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

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

Project: NEIL LS #1

Collection Date: 1/10/2017 12:45:00 PM

Lab ID: 1701383-001

Matrix: MEOH (SOIL) Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	1/11/2017 11:20:17 AM	29648
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	1/11/2017 10:42:05 AM	G39956
Surr: BFB	94.5	70-130	%Rec	1	1/11/2017 10:42:05 AM	G39956
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/11/2017 10:15:39 AM	29630
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/11/2017 10:15:39 AM	29630
Surr: DNOP	96.1	70-130	%Rec	1	1/11/2017 10:15:39 AM	29630
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst:	DJF
Benzene	ND	0.015	mg/Kg	1	1/11/2017 10:42:05 AM	S39956
Toluene	ND	0.029	mg/Kg	1	1/11/2017 10:42:05 AM	S39956
Ethylbenzene	ND	0.029	mg/Kg	1	1/11/2017 10:42:05 AM	S39956
Xylenes, Total	ND	0.058	mg/Kg	1	1/11/2017 10:42:05 AM	S39956
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	1/11/2017 10:42:05 AM	S39956
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	1/11/2017 10:42:05 AM	S39956
Surr: Dibromofluoromethane	105	70-130	%Rec	1	1/11/2017 10:42:05 AM	S39956
Surr: Toluene-d8	96.7	70-130	%Rec	1	1/11/2017 10:42:05 AM	S39956

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 6
- 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#:

1701383 12-Jan-17

Client:

Blagg Engineering

Project:

NEIL LS #1

Sample ID MB-29648 SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

PBS

Batch ID: 29648

RunNo: 39971

Prep Date: 1/11/2017

Units: mg/Kg

HighLimit

Analysis Date: 1/11/2017

SegNo: 1252629

%RPD **RPDLimit** Qual

Qual

Analyte Chloride

PQL Result ND 1.5

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Prep Date: 1/11/2017

Sample ID LCS-29648

Batch ID: 29648

RunNo: 39971

Analysis Date: 1/11/2017 PQL

1.5

SeqNo: 1252630

Units: mg/Kg

HighLimit

Analyte

96.5

90

Chloride

15.00

0

%RPD **RPDLimit**

14

SPK value SPK Ref Val

SPK value SPK Ref Val %REC

%REC

110

Qualifiers:

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

Page 2 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1701383

12-Jan-17

Client:

Blagg Engineering

Project:	NEIL LS	#1									
Sample ID	LCS-29630	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	iesel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 29	630	F	RunNo: 3	9953				
Prep Date:	1/11/2017	Analysis D)ate: 1/	/11/2017		SeqNo: 1	251908	Units: mg/l	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	48	10	50.00	0	96.3	63.8	116			
Surr: DNOP		4.4		5.000		88.9	70	130			
Sample ID	MB-29630	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	n ID: 29	630	F	RunNo: 3	9953				
Prep Date:	1/11/2017	Analysis D	ate: 1/	11/2017	5	SeqNo: 1	251909	Units: mg/l	⟨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.0		10.00		90.4	70	130			
Sample ID	1701383-001AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	5PC TB @ 5' (95)-	B Batch	1D: 29	630	F	RunNo: 3	9953				
Prep Date:	1/11/2017	Analysis D	ate: 1/	11/2017	5	SeqNo: 1	252024	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	47	9.7	48.26	0	98.0	51.6	130			
Surr: DNOP		4.7		4.826		96.4	70	130			
Sample ID	1701383-001AMSE	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	5PC TB @ 5' (95)-	B Batch	ID: 29	630	F	RunNo: 3	9953				
Prep Date:	1/11/2017	Analysis D	ate: 1/	11/2017	8	SeqNo: 1	252025	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
D: I D (Pragation (DDO)	49	40	49.95	0	000	F4 C	130	4.30	20	
Diesel Range (Surr: DNOP	organics (DRO)	4.8	10	4.995	U	98.9 96.7	51.6 70	130	4.30	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 3 of 6

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#:

1701383

12-Jan-17

Client:

Blagg Engineering

Project:

NEIL LS #1

Sample ID rb	SampT	уре: МЕ	BLK	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batch	Batch ID: \$39956 RunNo: 39956								
Prep Date:	Analysis D	Analysis Date: 1/11/2017 SeqNo: 1252582 U			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	0.48		0.5000		96.5	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.9	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID 100ng Ics	SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List												
Client ID: LCSS	Batch	Batch ID: S39956 RunNo: 39956											
Prep Date:	Analysis D	ate: 1/	11/2017	8	SeqNo: 1252583			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	1.0	0.025	1.000	0	102	70	130						
Toluene	1.1	0.050	1.000	0	107	70	130						
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.7	70	130						
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.2	70	130						
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130						
Surr: Toluene-d8	0.50		0.5000		100	70	130						

Sample ID 1701383-001ams	SampTy	pe: MS	6	Test	tCode: El	PA Method	8260B: Volat	iles Short	List		
Client ID: 5PC TB @ 5' (95)	ient ID: 5PC TB @ 5' (95)-B Batch ID: \$39956 RunNo: 39956										
Prep Date: Analysis Date: 1/11/2017 SeqNo: 1252584 Units: mg/Kg											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.63	0.015	0.5817	0	109	61.9	146				
Toluene	0.58	0.029	0.5817	0	99.3	70	130				
Surr: 1,2-Dichloroethane-d4	0.33		0.2908		113	70	130				
Surr: 4-Bromofluorobenzene	0.29		0.2908		100	70	130				
Surr: Dibromofluoromethane	0.31		0.2908		106	70	130				
Surr: Toluene-d8	0.28		0.2908		97.6	70	130				

Sample ID	1701383-001amsd	SampTy	oe: MS	SD	Tes	tCode: El	PA Method	8260B: Vola	iles Short	List		
Client ID:	5PC TB @ 5' (95)-B Batch ID: \$39956 RunNo: 39956											
Prep Date:	e: Analysis Date: 1/11/2017					SeqNo: 1	252585	Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		0.63	0.015	0.5817	0	108	61.9	146	0.623	20		
Toluene		0.56	0.029	0.5817	0	96.7	70	130	2.63	20		

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 4 of 6

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#:

1701383

12-Jan-17

Client:

Blagg Engineering

Project:

NEIL LS #1

Sample	ID	1701383-001amed

TestCode: EPA Method 8260B: Volatiles Short List

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

SampType: MSD

Batch ID: S39956

RunNo: 39956

Prep Date:	Analysis Date: 1/11/2017			S	SeqNo: 1	252585	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.34		0.2908		116	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.29		0.2908		99.9	70	130	0	0	
Surr: Dibromofluoromethane	0.33		0.2908		113	70	130	0	0	
Surr: Toluene-d8	0.28		0.2908		96.2	70	130	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 6

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#:

1701383 12-Jan-17

Client:

Blagg Engineering

Project:

NEIL LS #1

0
Ì

SampType: MBLK

TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID:

PBS

Batch ID: G39956

RunNo: 39956

Prep Date:

Analysis Date: 1/11/2017

5.0

SeqNo: 1252588

Units: mg/Kg

Analyte

Result PQL ND

HighLimit

130

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

460

500.0

SPK value SPK Ref Val %REC

91.2

70

LowLimit

Sample ID 2.5ug gro lcs

TestCode: EPA Method 8015D Mod: Gasoline Range

%RPD

Prep Date:

Client ID: LCSS Batch ID: G39956

SampType: LCS

RunNo: 39956

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Analysis Date: 1/11/2017 Result PQL

25

440

SeqNo: 1252591

HighLimit

RPDLimit Qual

Surr: BFB

5.0 25.00 500.0

SPK value SPK Ref Val %REC LowLimit 101 88.9

62.9 70 %RPD

Sample ID 1701383-001ams g

SampType: MS

TestCode: EPA Method 8015D Mod: Gasoline Range

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

Batch ID: G39956

RunNo: 39956

Units: mg/Kg

132

130

130

Analyte

Prep Date:

Analysis Date: 1/11/2017

SeqNo: 1252592 SPK value SPK Ref Val %REC

0

0

LowLimit HighLimit

52.3

52 3

70

70

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

Result PQL 14 2.9 14.54 270 290.8

93.9

99.2

TestCode: EPA Method 8015D Mod: Gasoline Range

%RPD

Sample ID 1701383-001amsd g 5PC TB @ 5' (95)-B Client ID:

SampType: MSD Batch ID: G39956

RunNo: 39956

132

130

Prep Date:

Analysis Date: 1/11/2017

14

270

SeqNo: 1252593

95.8

94.0

Units: mg/Kg

Analyte Gasoline Range Organics (GRO)

Surr: BFB

Result PQL SPK value SPK Ref Val 2.9

14.54

290.8

%REC

HighLimit LowLimit

%RPD **RPDLimit** 3.45

0

20 0 Qual

Qualifiers:

S

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Analyte detected in the associated Method Blank B
- E Value above quantitation range
- Analyte detected below quantitation limits J
- Page 6 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Ch	nain-c	f-Cus	tody Record	Lum-Around	Ime:	SAME		1	I I	Н	ALL	E	NV	/IF	10	NI	4E	NT	AL	
ient:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	☑ Rush _	DAY					150							ATC		
				Project Name						W	ww.h	aller	nviro	mn	enta	l.con	n			
lailing A	ddress:	P.O. BO	x 87	1	NEIL LS #	1	4901 Hawkins NE - Albuquerque, NM 87109													
		BLOOM	FIELD, NM 87413	Project #:			Tel. 505-345-3975 Fax 505-345-4107													
hone #:		(505) 63	2-1199					Analysis Request												
mail or Fax#			Project Mana	ger:						*		-4				300.1)				
	A/QC Package: I Standard				NELSON VI	ELEZ	30218)	s only)	/ MRO)		(S)		PO4,SC	PCB's			water - 30		3	<u>u</u>
ccredital	careditation;			Sampler:	NELSON VI	ELEZ TIV	PS ((Ga	DRO	Ŧ.	USIN		NO2,	808			/ w		1	N)
NELAP Other			On ice:	Yes	■ No	#	효	10	418	827	S	S	/ Se		(AC	300.07		3	N LO	
EDD (1	ype)			Sample Temp	efature: 3,4	100F=7.4	1	8E +	(GR	pou	20	etal	S. S.	icide	8	λ-i-V	<u>- io</u>		pie	5 (7)
Date	Time	Matrix	Sample Request (D	Container Type and #	Preservative Type	HEALNO.	BTEX +MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	PAH (8310 or 82705IMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil -			Air Bubbles (Y or N)
10/17	1245	SOIL	5PC-TB@ ≤ '(95)-B	4 oz 1	Cool	-001	٧		٧								٧		-	/
													_							
												-	_						_	
		-									-	-	_	_				\perp		
		1									-	-	-	_	-			-	-	
										+	+	-	-	-				\dashv	-	_
										+	+	+	+	-	-			+	+	
											+				-			+	+	
										12,147 8	+	+	+		\vdash			+	+	+
											+	<u> </u>						\forall	+	
nte;	Time:	Relinquishe	ed by:/	Received by:		Date Time	Ren	narks	:	BILL DIE						ACTV	VITH C	ORRES	ONDI	NG VID
10/17	1456	70	My	/this	alla	10/17 1456		0	ONTA	& REFE						ніхо	N			
tte:	Time:	Relinquishe	ed by:	Received by:	V	Date Time	W			ER: N			- 41 - 480 /	- 1-44			*.T			
0/17	1817	1	nf Williams miles of the suite		N/2 01	11117 0843	<u> </u>	eren		_	NA	_						analytic		



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:	1701	383			RcptNo	: 1
Received by/dat	te: AM	01/11/17			,			
Logged By:	Ashley Gallegos	1/11/2017 8:43:00 AM			SAZ			
Completed By:	Ashley Gallegos	1/11/2017 8:47:38 AM			AF			
Reviewed By:	as	111117			V			
Chain of Cus	stody							
1. Custody sea	als intact on sample bottle	s?	Yes		No		Not Present ✓	
2. Is Chain of C	Custody complete?		Yes	~	No		Not Present	
3. How was the	e sample delivered?		Cour	ier				
Log In								
	empt made to cool the sa	mples?	Yes	v	No		NA	
5. Were all sar	mples received at a temp	erature of >0° C to 6.0°C	Yes	~	No		NA	
6. Sample(s) is	n proper container(s)?		Yes	~	No			
7. Sufficient sa	ample volume for indicate	d test(s)?	Yes	~	No			
8. Are samples	s (except VOA and ONG)	properly preserved?	Yes	~	No			
9. Was preserv	vative added to bottles?		Yes		No	V	NA	
10.VOA vials ha	ave zero headspace?		Yes		No		No VOA Vials ✓	
11. Were any sa	ample containers receive	d broken?	Yes		No	~	# of preserved	
							bottles checked	
	work match bottle labels? pancies on chain of custo		Yes	V	No		for pH: (<2	or >12 unless noted)
•	s correctly identified on Ci		Yes	~	No		Adjusted?	
	nat analyses were reques		Yes	~	No			
	ding times able to be met customer for authorizatio		Yes	~	No		Checked by:	
Special Hand	lling (if applicable)							
	notified of all discrepancie	s with this order?	Yes		No		NA 🗸	
Person	n Notified:	Date I	na na hair Canal ni na n	181 in fal star A.;	indi k. dodanacentu bil setimbe	horasishi		
By Wh	nom:	webserver-hands represented to a superior and Via;	eMa	ii	Phone F	Fax	In Person	
Regard	ding:	Challe and hadronic multicas hill hadrings where a green or used to be the about a facility of the salar	DA. HARMANIA L. P.S.	para de la decida de la constanta de la consta	da dir dili ayar dar da mada. da ilim adaga talifarin d	angliniki.	met vallen millenlikkling de eldtrikterek aptear ne hete un and	
Client	Instructions:	ki Bibliok kirkurka kunar inaramani ili yare ngeunara ya , gayeng goje ngepiri shejahi golehi, adeshake dibibli	a404943437672334	lini rima a	iname place in managements in the management		ri kur som mermindriss av under delli sestimen deut se skriver til kvec	
17. Additional re	emarks:							-
18. Cooler Info	ormation							
Cooler No	1	n Seal Intact Seal No S Yes	eal Da	te	Signed By	4		



