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 1220 S. St. Francis Dr., Santa Fe, NM 87505

Alternative Method:

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

Form C-144 Revised June 6, 2013

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

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

Pit, Below-Grade Tank, or
13053 Proposed Alternative Method Permit or Closure Plan Application
Type of action: Below grade tank registration Permit of a pit or proposed alternative method Oll CONS. DIV DIST. 3
US - 23548 Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1.
Operator: BP America Production Company OGRID #: 778
Address: 200 Energy Court, Farmington, NM 87401
Facility or well name: Florance #57R
API Number: 3004523548 OCD Permit Number:
U/L or Qtr/Qtr B Section 22 Township 29N Range 9W County: San Juan
Center of Proposed Design: Latitude 36.71558 Longitude -107.76357 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: L x W x D
3.00
Below-grade tank: Subsection I of 19.15.17.11 NMAC Tank A
Volume: 21.0 bbl Type of fluid: Produced water
Tank Construction material: Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other <u>Single walled/double bottomed; side walls visible</u>
Liner type: Thicknessmil

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 and leave to	, hospital,
institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	
6.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
☐ Screen ☐ Netting ☐ Other ☐ Monthly inspections (If netting or screening is not physically feasible)	
institution inspections (it needing to selectining is not physically reasone)	
Signs: Subsection C of 19.15.17.11 NMAC	
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.16.8 NMAC	
8. Variances and Exceptions:	
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank: Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9.	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	eptable 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	☐ Yes ☐ No
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	
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)	☐ Yes ☐ No
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	
 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	☐ Yes ☐ No
from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	163 110
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 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole,	
or playa lake (measured from the ordinary high-water mark).	
- Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock	
watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa	
lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of	
initial application NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natural Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the do attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC	cuments are
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) NMAC
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
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
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 do 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.	15 17 0 3 3 4 4 6
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	.13.17.9 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 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 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 ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan	documents are
☐ 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	
Closure Plan - based upon the appropriate requirements of Subsection C of 19.13.17.9 NMAC and 19.13.17.13 NMAC	
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F 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	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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	
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 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	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ 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 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
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 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	☐ Yes ☐ No
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
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	L 103 L 140

Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Within a 100-year floodplain.	No. (Application of the Control of t	
Within a unstable area. - Inginering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Within a 100-year floodplain. - FEMA map Within a 100-year floodplain. - FEMA map On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indiciby a check mark in the box, that the documents are attached. Society: Topographic map Mining Criticria Compliance Demonstrations- based upon the appropriate requirements of 19.15.17.13 NMAC Disting Criticria Compliance Demonstrations- based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place build a daying mad) - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place build and sixtying mad) - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place build and sixtying mad) - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place build and sixtying mad) - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) Soli Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Soli Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solic Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solic Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solic Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solic Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Solic Cover Design - based upo		e municipality
Fingineering measures incorporated into the design, NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society. Topographic map Yes Ne Ne Ne Ne Ne Ne Ne		ion Yes No
Within a 100-year floodplain. FEMA map	- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resou	rces; USGS; NM Geological
FEMA map Yes No.		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indic by a check must in the box, that he documents are attached. go a check must in the box that he documents are attached. proof of Surface Owner Notice - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC confirmation Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the properties of 19.15.17.13 NMAC discount of the properties of the proper		☐ Yes ☐ No
Operator Application Certification: Thereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Print):	On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items in by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15. Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15. Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the 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 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in calcalation of the properties 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	17.10 NMAC 2.15.17.13 NMAC ents of Subsection K of 19.15.17.11 NMAC e appropriate requirements of 19.15.17.11 NMAC 17.13 NMAC ase on-site closure standards cannot be achieved) MAC MAC
Name (Print):	Operator Application Certification:	
Signature:	I hereby certify that the information submitted with this application is true, accurate and complete to t	ne best of my knowledge and belief.
Code Permit Application (including closure plan) Glosure Plan (only) OCD Conditions (see attachment)	Name (Print): Title:	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: O/35/2015 Title: OCD Permit Number: OCD Permit Number:	Signature: Date:	
OCD Approval: Permit Application (including closure plan) Glosure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: O/36/2015 Title: OCD Permit Number: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure repor 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: 11/19/2009 20. Closure Completion Date: 11/19/2009 21. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a checkmark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	e-mail address: Telephone:	
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 11/19/2009 20. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a checkmark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD OCD Representative Signature: OCD Permit Num	Approval Date: 10/30/2015
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. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a checkmark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	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 The closure report is required to be submitted to the division within 60 days of the completion of the section of the form until an approved closure plan has been obtained and the closure activities have	closure activities. Please do not complete this been completed.
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. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a checkmark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique		Section Date: 11/19/2009
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a checkmark in the box, that the documents are attached. □ Proof of Closure Notice (surface owner and division) □ Proof of Deed Notice (required for on-site closure for private land only) □ Plot Plan (for on-site closures and temporary pits) □ Confirmation Sampling Analytical Results (if applicable) □ Waste Material Sampling Analytical Results (required for on-site closure) □ Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique	Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method	☐ Waste Removal (Closed-loop systems only)
On-site Closure Location: Latitude 36.71558 Longitude -107.76357 NAD: ☐1927 ☑ 1983	Closure Report Attachment Checklist: Instructions: Each of the following items must be attached mark in the box, that the documents are attached. □ Proof of Closure Notice (surface owner and division) □ Proof of Deed Notice (required for on-site closure for private land only) □ Plot Plan (for on-site closures and temporary pits) □ Confirmation Sampling Analytical Results (if applicable) □ Waste Material Sampling Analytical Results (required for on-site closure) □ Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique □ Site Reclamation (Photo Documentation)	

Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure report	t 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	
C M 1 1	THE E' LIE ' ALC L' ALC
Name (Print): Steve Moskal	Title: Field Environmental Coordinator
Signature:	Date: July 30, 2015
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

Florance #57R API No. 3004523548 Unit Letter B, Section 22, T29N, 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

- 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.
 - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 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.
 - No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 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 to a storage area for sale and re-use.

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
	21 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	ND
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	ND
TPH	US EPA Method SW-846 418.1	100	14.0
Chlorides	US EPA Method 300.0 or 4500B	250 or background	50

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 laboratory analysis of TPH, BTEX and chloride with results below the stated limits. Sampling and laboratory results 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.

Laboratory results indicate no significant release has 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

The area under the BGT was backfilled with clean soil and has been reclaimed since the well was 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 over the BGT was backfilled with clean soil and has been reclaimed since the well was plugged and abandoned.

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

The area over the BGT was backfilled with clean soil and has been reclaimed since the well was plugged and abandoned.

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

The area over the BGT was backfilled with clean soil and has been reclaimed since the well was 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.

BP has seeded the area as part of final reclamation since the well has been plugged and abandoned.

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

BP will notify NMOCD when re-vegetation is successful.

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

 Closure report on C-144 form is included.
- 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.

<u>District I</u> 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

			Rel	ease Notifi	catio	n and Co	orrective A	ction	
						OPERA	TOR	_ Init	ial Report
Name of C	ompany: B	P				Contact: Ste	STONE AND DESCRIPTION OF THE PROPERTY OF THE P	25	
		Court, Farm	ington, N	M 87401			No.: 505-326-94		
Facility Na	me: Florar	ice #57R				Facility Typ	e: Natural gas	well	
Surface Ov	vner: Feder	ral		Mineral (Owner:	Federal		API N	o. 3004523548
				LOC	ATIO	N OF RE	LEASE		
Unit Letter	Section			/South Line	Feet from the	East/West Line	County: San Juan		
В	22	29N	9W	790	North		1,750	East	
	7.5	Tati	4	6.71550		Longitud	107.76257		
		Lati	tude_3				e107.76357_		
				NAT	TURE	OF REL			
Type of Rele			21111	2			Release: N/A		Recovered: N/A
		w grade tank -	- 21 bbl				Hour of Occurrence	ce: Date and	Hour of Discovery:
Was Immedi	iate Notice		Yes [No Not R	equired	If YES, To	whom?		
By Whom?						Date and I	Hour		
Was a Water	rcourse Read		V V	7 N.			olume Impacting	the Watercourse.	
			Yes 🗵	1 100					
Describe Car	use of Probl		dial Actio						to ensure no soil impacts from
				cen.* BGT was reactive well area.	moved	and the area u	nderneath the BC	oT was sampled.	The area under the BGT was
regulations a public health should their or the enviro	all operators or the envi operations honment. In a	are required to ronment. The nave failed to a	o report and acceptant acc	nd/or file certain in the of a C-141 report investigate and in	release rort by the remedia	notifications at ne NMOCD m te contaminati	nd perform correct arked as "Final R on that pose a thr	ctive actions for re deport" does not re reat to ground water	rsuant to NMOCD rules and leases which may endanger lieve the operator of liability er, surface water, human health compliance with any other
	A SECTION						OIL CON	SERVATION	DIVISION
Signature:	ala	Med							
Printed Name: Steve Moskal				Approved by Environmental Specialist:					
Title: Field I	Environmen	tal Coordinato	r	8.1		Approval Dat	te:	Expiration	Date:
E-mail Address: steven.moskal@bp.com			Conditions of Approval:						
Date: July 3	0. 2015		Phone: 50	5_326_0407					

^{*} Attach Additional Sheets If Necessary

CLIENT: BP	BLAGG ENGINE P.O. BOX 87, BLOOMF (505) 632-11	TELD, NM 87413		API#: 3004523548
FIELD REPORT:	BGT CONFIRMATION TEMP. PIT CLOSUS (other)	RE / RELEASE INVESTIGATION		PAGE No:1 of1_
SITE INFORMATION	SITE NAME: FLORANCE	# 57R	4	DATE STARTED: 11/11/09
QUAD/UNIT: B SEC: 22 TWE	29N RNG: 9W PM: NM C		P. K. S.	DATE FINISHED:
QTR-QTR/FOOTAGE: 790'N / 1,	750'E NW/NE LEASE TYPE: F	EDERAL STATE / FEE /	INDIAN	ENVIRONMENTAL
0.000010		RACTOR: ELKHORN		SPECIALIST: JCB
REFERENCE POINT			X 107.76	334 GLELEV.: 5,809'
	GPS COORD.: 36.71558	the state of the s		EARING FROM WH.: 65', S54W
		# 9 7 7 P	100	EARING FROM W.H.:
	GPS COORD.:			EARING FROM W.H.:
	GPS COORD.:			EARING FROM W.H.:
	GPS COORD.:			EARING FROM W.H.:
LAB INFORMATION:		ENV/BOT		EARING PROW VV.FI
1) SAMPLE ID: 21 BGT 5 pt. @	CHAIN OF CUSTODY RECORD 6' SAMPLEDATE: 11/11/09			418.1/8015B/8021B/300.0 (CI)
	SAMPLE DATE:			
	SAMPLE DATE:			
	SAMPLE DATE:			
5) SAMPLE ID:SOIL DESCRIPTION	SAMPLEDATE: SOIL TYPE: SAND SILTY SAND			
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / C DENSITY (COHESIVE CLAYS & SILTS): SOFT MOISTURE: DRY SLIGHTLY MOIST MOIST / WE ADDITIONAL COMMENTS: GAS WEI	/ FIRM / STIFF / VERY STIFF / HARD ET / SATURATED / SUPER SATURATED	HC ODOR DETECTED: YES SAMPLE TYPE: GRAB CON APPARENT EVIDENCE CON	OMPOSITE -	# OF PTS 5
	ALA			
EXCAVATION DIMENSIONS (if applicable)	: <u>NA</u> ft. X <u>NA</u> ft.	X NA ft.	cubic yards e	excavated (if applicable):
SITE SKETCH	⊕ WELL		NT _	PLOT PLAN circle: Attached MISCELL. NOTES
	TEAU		ALC: NO STATE OF THE PARTY OF T	SW - SINGLE WALLED DB - DOUBLE BOTTOM
WOODEN R.W.	PBGTL. T.B. ~ 6' B.G. BERM		- - - -	SIDEWALLS VISIBLE
	VATION DEPRESSION; B.G. = BELOW GRADE; B = B	BELOW; T.H. = TEST HOLE; ~= APPR		MAGNETIC DECLINATION @ 13.5°E
TRAVEL NOTES: CALLOUT:	S BELOW-GRADE TANK LOCATION; SPD = SAMPLE F	ONSITE: 11/11/09	IING WALLI	

revised: 11/21/08

BEI1005E.SKF

EPA METHOD 418.1 TOTAL PETROLEUM **HYDROCARBONS**

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	21 BGT 5-pt @ 6'	Date Reported:	11-19-09
Laboratory Number:	52460	Date Sampled:	11-11-09
Chain of Custody No:	8425	Date Received:	11-16-09
Sample Matrix:	Soil	Date Extracted:	11-17-09
Preservative:	Cool	Date Analyzed:	11-17-09
Condition:	Intact	Analysis Needed:	TPH-418.1
		The state of the s	

	Det.
Concentration	Limit
(mg/kg)	(mg/kg)
	Concentration

Total Petroleum Hydrocarbons

14.0

11.2

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Florance 57R.

Analyst

Christine on Whotew



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	21 BGT 5-pt @ 6'	Date Reported:	11-18-09
Laboratory Number:	52460	Date Sampled:	11-11-09
Chain of Custody:	8425	Date Received:	11-16-09
Sample Matrix:	Soil	Date Analyzed:	11-17-09
Preservative:	Cool	Date Extracted:	11-16-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Florance 57R

Analyst



Chloride

Client: Blagg.
Sample ID: 21 BG
Lab ID#: 52460
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Blagg/BP 21 BGT 5-pt @ 6' 52460 Soil Cool Project #:
Date Reported:
Date Sampled:
Date Received:
Date Analyzed:
Chain of Custody:

11-11-09 11-16-09 11-18-09 8425

11-19-09

94034-0010

Parameter

Concentration (mg/Kg)

Total Chloride

50

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Florance 57R.

Analyst

Nus IIve ~



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	21 BGT 5-pt @ 6'	Date Reported:	11-18-09
Laboratory Number:	52460	Date Sampled:	11-11-09
Chain of Custody No:	8425	Date Received:	11-16-09
Sample Matrix:	Soil	Date Extracted:	11-16-09
Preservative:	Cool	Date Analyzed:	11-17-09
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)		
Gasoline Range (C5 - C10)	ND	0.2		
Diesel Range (C10 - C28)	ND	0.1		
Total Petroleum Hydrocarbons	ND	0.2		

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Florance 57R

Analyst

Mister Mucheters

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

8425

Client: Project Name / Location: SLAGE / BP FLORANCE 57R Client Address: Sampler Name: JEFF BLAGE Client Phone No.: 94034-0010									ANAL	YSIS	/ PAR	AME	TERS									
Client Address.		5	Sampler Name:	BUAR	66				8015)	(18051)	8260)	w										
Client Phone No.;		(Olient No.: 94034	4-06	010				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	RIDE			Sample Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sa	mple atrix	No./Volume of Containers	Preser	vative	TPH	BTEX	VOC (I	HCRA	Cation	RCI	TCLP	PAH	TPH (CHLORIDE			Sampl	Samp
21 BGT -	1/1/09	1321	52460	Solid Solid	Sludge Aqueous	1-406			×	×							×	×			X	Х
				Soil Solid	Sludge Aqueous												3.					
				Soil Solid	Sludge Aqueous										- Tale							
				Solid Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous	100								344								
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soll Solid	Sludge Aqueous			27									1-1-1-1					
Relinquished by: (Sign					Date U/10/59	Time 1337	, !	ceived											u	Date s/19		ime
tellinguished by: (Sign	nature)/						Re	ceived	DY:	Signa	ature)	0										
Relinquished by: (Sign	nature)						Re	ceived	by: (Signa	ature)											



5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com



EPA METHOD 418.1 TOTAL PETROLEUM **HYROCARBONS QUALITY ASSURANCE REPORT**

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	11-19-09
Laboratory Number:	11-17-TPH.QA/QC 52458	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	11-17-09
Preservative:	N/A	Date Extracted:	11-17-09
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	11-02-09	11-17-09	1,750	1,820	4.0%	+/- 10%

Blank Conc. (mg/Kg)		Concentration		Detection Lim	it
TPH		ND		11.2	
Duplicate Conc. (mg/Kg) TPH		Sample 19.5	Duplicate 15.4	% Difference 21.0%	Accept. Range
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	19.5	2,000	1,880	93.1%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 52458, 52460 and 52468 - 52469.



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	11-17-BT QA/QC	Date Reported:	11-18-09
Laboratory Number:	52400	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-17-09
Condition:	N/A	Analysis:	BTEX

Calibration and	- FCall RFs	G-GaliRe:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept Rang	je Q - 15%	Cone	Limit
Benzene	6.1098E+004	6.1220E+004	0.2%	ND	0.1
Toluene	5.9802E+004	5.9922E+004	0.2%	ND	0.1
Ethylbenzene	5.5949E+004	5.6061E+004	0.2%	ND	0.1
p,m-Xylene	1.1947E+005	1.1971E+005	0.2%	ND	0,1
o-Xylene	4 6307E+004	4 6400E+004	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	MDIR.	Accept Range	Defect Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND .	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

Spike Gone. (ug/Kg)	Sample Amo	ount Spiked Spi	ked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.6	99.2%	39 - 150
Toluene	ND	50.0	48.6	97.2%	46 - 148
Ethylbenzene	ND	50.0	48.7	97.4%	32 - 160
p,m-Xylene	ND	100	96.9	96.9%	46 - 148
o-Xylene	ND	50.0	48.8	97.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 52400 - 52402, 52458, 52460, 52463, and 52468.

Analyst

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



EPA Method 8015 Modified Nonhalogenated Volatile Organics **Total Petroleum Hydrocarbons**

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-17-09 QA/QC	Date Reported:	11-18-09
Laboratory Number:	52458	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-17-09
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	1.0546E+003	1.0550E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.1241E+003	1.1246E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/kg)	Sample	Duplicate	% Difference	Accept, Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Resulf	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	245	98.0%	75 - 125%
Diesel Range C10 - C28	ND	250	244	97.6%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 52400 - 52402, 52458, 52460 - 52462, and 52468.

Aristum Weeters



