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.

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

Santa Fe, NM 87505

Proposed Alternative Method Permit or Closure Plan Application OIL CONS. DIV DIST. 3
Type of action: Below grade tank registration
Permit of a pit or proposed alternative method 3 1 2015
23-23-395 \(\infty\) Closure of a pit, below-grade talk, of proposed alternative inclined
☐ 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: Pritchard #3A
API Number: 3004522345 OCD Permit Number:
U/L or Qtr/Qtr P Section 31 Township 29N Range 8W County: San Juan
Center of Proposed Design: Latitude
Surface Owner: 🖾 Federal 🗌 State 🔲 Private 🔲 Tribal Trust or Indian Allotment
Pit: Subsection F, G or J of 19.15.17.11 NMAC BLT Closed Prior to Closure Plan Approval for Temporary: Drilling Workover Workover Workover Temporary: Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no C-141 representation P&A Multi-Well Fluid Management P&A Multi-Well Fluid Management P&A Multi-Well Fluid Management P&A P&A Multi-Well Fluid Management P&A P
Temporary: Drilling Workover Lank Sample results indicate release occurred additiona
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no C-141 (ce
☐ 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.
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</u> ; side walls visible
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, hospital, institution or abuseh)			
institution or church) ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet			
Alternate. Please specify			
6.			
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) ☐ Screen ☐ Netting ☐ Other			
☐ Monthly inspections (If netting or screening is not physically feasible)			
7.			
Signs: Subsection C of 19.15.17.11 NMAC			
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers			
Signed in compliance with 19.15.16.8 NMAC			
8. Variances and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.			
Please check a box if one or more of the following is requested, if not leave blank:			
 □ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. □ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. 			
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 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 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 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 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. and 19.15.17.13 NMAC	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 doc attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality Within the area overlying a subsurface mine.				
Within the gree everlying a subsurface mine	☐ 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			
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Sioli Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and be	pelief.			
Name (Print):				
Signature: Date:				
Signature: Date: e-mail address: Telephone:				
	See front page			
e-mail address:	See front page			
e-mail address:	See front page 14/2015 Ing the closure report.			
e-mail address: Telephone:	See front page 14/2015 Ing the closure report.			
e-mail address: Telephone:	See front page 14/2015 Ing the closure report. Inot complete this			

Operator Closure Certification:				
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.				
Name (Print): Steve Moskal	Title: Field Environmental Coordinator			
Signature: And Man	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

Pritchard #3A API No. 3004522345 Unit Letter P, Section 31, T29N, R8W

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	0.0758
TPH	US EPA Method SW-846 418.1/ 8015B	100	162/5.0
Chlorides	US EPA Method 300.0 or 4500B	250 or background	60

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 BTEX and chloride with results below the stated limits. Sample was analyzed for TPH via Method 418.1 exceeded the stated limits however, the sample was

below limits via Method 8015B. 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 is still within the active well area.

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 is still within the active well area.

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 is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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 is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

- 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 will seed the area when the well is plugged and abandoned as part of final reclamation.
- 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.

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

Revised August 8, 2011

Form C-141

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action **OPERATOR** Initial Report Final Report Contact: Steve Moskal Name of Company: BP Address: 200 Energy Court, Farmington, NM 87401 Telephone No.: 505-326-9497 Facility Name: Pritchard #3A Facility Type: Natural gas well Surface Owner: Federal Mineral Owner: Federal API No. 3004522345 LOCATION OF RELEASE Feet from the North/South Line Feet from the Township East/West Line County: San Juan Unit Letter Section Range 8W 800 31 29N 1,000 South P Fast Latitude 36.67801 Longitude -107.71083 NATURE OF RELEASE Type of Release: none Volume of Release: N/A Volume Recovered: N/A Source of Release: below grade tank - 21 bbl Date and Hour of Occurrence: Date and Hour of Discovery: Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☒ Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Sampling of the soil beneath the BGT was done during removal to ensure no soil impacts from the BGT. Soil analysis resulted in TPH, BTEX and chloride below standards. Analysis results are attached. 418.1 Results exceed Pit Rule Closure Standard indicating release occurred, additional work may be required under Spill Rule and additional separate C-HI required. JK 9/H/2015

Describe Area Affected and Cleanup Action Taken.* BGT was removed and the area underneath the BGT was sampled. The area under the BGT was backfilled and compacted and is still within the active well area. backfilled and compacted and is still within the active well area. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by Environmental Specialist: Printed Name: Steve Moskal Title: Field Environmental Coordinator Approval Date: Expiration Date: E-mail Address: steven.moskal@bp.com Conditions of Approval: Attached

* Attach Additional Sheets If Necessary

Phone: 505-326-9497

nJK 1526731951

FIELD REPORT: Bot Confrimation Temp. Pit Closure / Release investigation Page No: 1 of 1
SITE INFORMATION: SITENAME: PRITCHARD # 3A QUADAJUNIT: P Sec: 31 TMP: 29N RNG: 8W PM: NM CNTY: SJ ST. NM OTR-OTR/FOOTAGE: 1,000°S / 800°E SE/SE LEASE TYPE: FEDERAL STATE / FEE / INDIAN LEASE #: SF078487A PROD. FORMATION: FT/PC/MV CONTRACTOR: KEYSTONE REFERENCE POINT: 121 BGT (SW/DB) GPS COORD: 36.67801 X 107.71083 DISTANCE/BEARING FROM WH. 60°, \$12E 39. GPS COORD: 30.67801 X 107.71117 DISTANCE/BEARING FROM WH. 60°, \$12E 40. GPS COORD: 30.887795 X 107.71117 DISTANCE/BEARING FROM WH. 99°, \$12E 41. GPS COORD: 421 BGT (SW/DB) GPS COORD: 30.887795 X 107.71117 DISTANCE/BEARING FROM WH. 99°, \$50W 30. GPS COORD: 44. GPS COORD: 45. GPS COORD: 46. GPS COORD: 47. GPS COORD: 48. HARD TO STANCE/BEARING FROM WH. 10°, \$12E 49. SAMPLE ID: 40. SAMPLE ID: 50. DARK YELLOWISH ORANGE CONSISTENCY (NON COHESIVE SOLIS): COOSE FIRM / DENSE / CORESIVE INGINY COHESIVE CHARKS & SUITS; SOPT / FIRM / STIFF / JERDS WITH
QUADIUNITE P SEC: 31 TWP: 29N RNG: 8W PM: NM CNTY: SJ ST: NM OTR-QTR/FOOTAGE: 1,000'S / 800'E SE/SE LEASE TYPE: FEDERAL STATE / FEE / INDIAN LEASE #: SF078487A PROD_FORMATION: FT/PC/MV CONTRACTOR: KEYSTONE REFERENCE POINT: WELL HEAD (W.H.) GPS COORD: 36,67814 X 107.71096 GL ELEV: 5,853' 1) 21 BGT (SW/DB) GPS COORD: 36,67801 X 107.71083 DISTANCE/BEARING FROM WH: 60', S12E 2) 95 BGT (SW/DB) GPS COORD: 30.67795 X 107.71117 DISTANCE/BEARING FROM WH: 99', 956W 3) GPS COORD: DISTANCE/BEARING FROM WH: 99', 956W 4) GPS COORD: DISTANCE/BEARING FROM WH: 10.5TANCE/BEARING FROM WH: 10.5T
DITALLED TO TAGE: 1,000'S / 800'E SE/SE LEASE TYPE: FEDERAL STATE / FEE / INDIAN LEASE #: SF078487A PROD. FORMATION: FT/PC/MV CONTRACTOR: KEYSTONE REFERENCE POINT: WELL HEAD (W.H.), GPS COORD: 36.67814 X 107.71096 GL ELEV: 5,853' 1) 21 BGT (SW/DB) GPS COORD: 36.67801 X 107.711083 DISTANCESPERATING FROM WH: 60', S12E 2) 95 BGT (SW/DB) GPS COORD: GPS CO
LEASE #: SF078487A PROD FORMATION: FT/PC/MV CONTRACTOR KEYSTONE SPECIALIST: JCB
1) 21 BGT (SW/DB) GPS COORD: 36.67801 X 107.71083 DISTANCE/BEARING FROM WH: 60', S12E 2) 95 BGT (SW/DB) GPS COORD: 36.67795 X 107.71117 DISTANCE/BEARING FROM WH: 99', S56W 3) GPS COORD: DISTANCE/BEARING FROM WH: 99', S56W 4) GPS COORD: DISTANCE/BEARING FROM WH: DISTANCE/BEARI
2) 95 BGT (SW/DB) GPS COORD: 30.67795 X 107.71117 DISTANCE/BEARING FROM WH: 39', \$50W 3) GPS COORD: DISTANCE/BEARING FROM WH: DISTANCE/BEARING FROM
3) GPS COORD.: DISTANCE/BEARING FROM WH: 4) GPS COORD.: DISTANCE/BEARING FROM WH: 5) GPS COORD.: DISTANCE/BEARING FROM WH: 5) GPS COORD.: DISTANCE/BEARING FROM WH: 6) DISTANCE/BEARING FROM W
4) GPS COORD.: DISTANCE/BEARING FROM WH.: 5) GPS COORD.: DISTANCE/BEARING FROM WH.: LAB INFORMATION: CHAIN OF CUSTODY RECORD(S): ENVIROTECH 1) SAMPLE ID: 21 BGT 5 pt. @ 6' SAMPLEDATE 02/12/09 SAMPLETIME 1400 LAB ANALYSIS 418.1/8015B/8021B/300.0 (CI) 2) SAMPLE ID: 35 BGT 5 pt. @ 6' SAMPLEDATE SAMPLETIME 1330 LAB ANALYSIS 418.1/8045B/8021B/300.0 (CI) 3) SAMPLE ID: SAMPLE ID: SAMPLEDATE SAMPLETIME LAB ANALYSIS 4) SAMPLE ID: SAMPLEDATE SAMPLETIME LAB ANALYSIS 5) SAMPLE ID: SAMPLEDATE SAMPLETIME LAB ANALYSIS 5) SAMPLE ID: SAMPLEDATE SAMPLETIME LAB ANALYSIS SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESIVE / SIGHTLY COHESIVE / COHESIVE SOILS): LOOSE FIRM / DENSE / VERY DENSE PLASTICTY (CLAYS; NON COHESIVE SOILS): LOOSE FIRM / DENSE / VERY DENSE PLASTICTY (CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY SIGHTLY MOIST MOIST / WET / SATURATED / SUPER SATURATED SAMPLE TYPE: GRAB COMPOSITE # 0F PTS. 5
DISTANCE/BEARING FROM WH.: LAB INFORMATION: CHAIN OF CUSTODY RECORD(S): ENVIROTECH 1) SAMPLE ID: 21 BGT 5 pt. @ 6' SAMPLEDTE: 02/12/09 SAMPLETIME: 1400 LAB ANALYSIS: 418.1/8015B/8021B/300.0 (CI) 2) SAMPLE ID:
LAB INFORMATION: 1) SAMPLE ID: 21 BGT 5 pt. @ 6' SAMPLEDATE: 02/12/09 SAMPLETIME: 1400 LAB ANALYSIS: 418.1/8015B/8021B/300.0 (CI) 2) SAMPLE ID: 35 BGT 5 pt. @ 6' SAMPLEDATE: SAMPLEDATE: SAMPLETIME: SAMPLETIME: LAB ANALYSIS: 4) SAMPLE ID: SAMPLE ID: SAMPLEDATE: SAMPLETIME: LAB ANALYSIS: 5) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LAB ANALYSIS: SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE SILGHTLY CHESIVE / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS): LOSE FIRM / DENSE / VERY DENSE PLASTICITY (CLAYS: NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED CHAIN OF CUSTODY RECORD(S): ENVIROTECH 1400 LAB ANALYSIS: SAMPLETIME: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: SAMPLETIME: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: SOIL COLOR LAB ANALYSIS: LAB ANALYSIS
1) SAMPLE ID: 21 BGT 5 pt. @ 6' SAMPLEDATE: 02/12/09 SAMPLETIME: 1400 LABANALYSIS: 418.1/8015B/8021B/300.0 (CI) 2) SAMPLE ID: 95 BGT 5 pt. @ C' SAMPLEDATE: 92/12/09 SAMPLETIME: 1330 LABANALYSIS: 418.1/8015B/8021B/300.0 (CI) 3) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 4) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 5) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 5) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 5) SAMPLETIME: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: SOIL COLOR: DARK YELLOWISH ORANGE: SAMPLETIME: LABANALYSIS: LABANALYS
2) SAMPLE ID: 95 BCT 5 pt. @ 6' SAMPLEURIE: 92/12/09 SAMPLETIME: 1330 DABANALYSIS: 418.1/8015B/8021B/300.0 (CI) 3) SAMPLE ID: SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 4) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: 5) SAMPLE ID: SAMPLEDATE: SAMPLETIME: LABANALYSIS: SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILTY SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS): LOOSE FIRM / DENSE / VERY DENSE PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY SLIGHTLY MOIST MOIST / WET / SATURATED / SUPER SATURATED SAMPLETIME: LABANALYSIS LABAN
3) SAMPLE ID: SAMPLEDATE SAMPLETIME LABANALYSIS 4) SAMPLE ID: SAMPLEDATE SAMPLETIME LABANALYSIS 5) SAMPLE ID: SAMPLEDATE SAMPLETIME LABANALYSIS SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILTY SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY COHESIVE / COHESI
4) SAMPLE ID: SAMPLE DATE: SAMPLETIME: LABANALYSIS: 5) SAMPLE ID: SAMPLE DATE: SAMPLETIME: LABANALYSIS: SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC / DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED SAMPLETIME: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LABANALYSIS: LOBOR OF CLAY / CLAY / GRAVEL / OTHER DISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION - HC ODOR DETECTED: YES NO EXPLANATION - HC ODOR DETECTED: YES NO EXPLANATION - SAMPLE TYPE: GRAB COMPOSITE # OF PTS. 5
SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / C
SOIL DESCRIPTION: SOIL TYPE: SAND SILTY SAND SILT / SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHE
SOIL COLOR: DARK YELLOWISH ORANGE COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHES
EXCAVATION DIMENSIONS (if applicable): NA ft. X NA ft. X NA ft. Cubic yards excavated (if applicable): NA
SITE SKETCH WELL WELL Circle: Attached
HEAD N
MISCELL. NOTES
SW - SINGLE WALLED DB - DOUBLE BOTTOM
WOODEN CA DOT, CIDERANALI S VACIDI E
R.W. 21 BGT - SIDEWALLS VISIBLE
PBGTL PBGTL
BERM T.B. ~ 6' B.G.
FENCE
X - S.P.D.
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW-GRADE; B = BELOW, T.H. = TEST HOLE; ~= APPROX.;
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL. TRAVEL NOTES: CALLOUT: ONSITE: 02/12/09



EPA METHOD 418.1 TOTAL PETROLEUM **HYDROCARBONS**

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg/BP 21 BGT 5-pt @ 6' 48979 6346 Soil Cool	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed:	94034-0010 02-17-09 02-12-09 02-13-09 02-16-09
Condition:	Intact	Analysis Needed:	TPH-418.1

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

Total Petroleum Hydrocarbons

162

5.0

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:

Pritchard 3A.

Mister mucelles



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:	02-17-09
Laboratory Number:	48979	Date Sampled	02-12-09
Chain of Custody No:	6346	Date Received:	02-13-09
Sample Matrix:	Soil	Date Extracted	02-13-09
Preservative:	Cool	Date Analyzed:	02-16-09
Condition	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.3	0.2
Diesel Range (C10 - C28)	4.7	0.1
Total Petroleum Hydrocarbons	5.0	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:

Pritchard 3A.



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg/BP	Project #:	94034-0010
Sample ID:	21 BGT 5-pt @ 6'	Date Reported:	02-17-09
Laboratory Number:	48979	Date Sampled:	02-12-09
Chain of Custody:	6346	Date Received:	02-13-09
Sample Matrix:	Soil	Date Analyzed:	02-16-09
Preservative:	Cool	Date Extracted:	02-13-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	30.1	1.0	
Ethylbenzene	5.9	1.0	
p,m-Xylene	28.9	1.2	
o-Xylene	10.9	0.9	
Total BTEX	75.8		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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:

Pritchard 3A.

Analyst



Chloride

Client: Sample ID: Blagg/BP 21 BGT 5-pt @ 6' Project #: Date Reported: 94034-0010 02-17-09

Lab ID#: Sample Matrix:

48979 Soil Cool

Date Sampled: Date Received: Date Analyzed:

02-12-09 02-13-09 02-16-09

Preservative: Condition:

Intact

Chain of Custody:

6346

Parameter

Concentration (mg/Kg)

Total Chloride

60

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:

Pritchard 3A.

Analyst

Mustum Weeters Review

CHAIN OF CUSTODY RECORD

Client.			roject Name / L											ANAL	YSIS	PAR	AME	TERS				
BLAGG/B	100		PRITCHAR	D 3	SA																	
Client Address:		S	ampler Name:						2	21)	0											
			J. BLAG	- 1					801	80	826	S			0							
Client Phone No.:			lient No.:						pou	thod	pou	eta	noir		当		-	ш			20	tact
			94034-6	010					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Sample No./	Sample	Sample	Lab No.	S	ample	No./Volume	Pres	ervati	ve I	\cong	0	RA	tion	-	5	I	I	2			G E	mp
Identification	Date	Time	Lab No.	l l	/latrix	of Containers	HgCl,	HCI	1	B	9	BG	Ca	BC!	7	PAH	1	공			Sa	Sa
95 367	7/12/	-1.79	48978	Soil	Sludge												×					1
5 PECO	704	1330	70110	Solid	Aqueous	1-406		+	-	.^		-						X		-	-	
				Soil Solid	Sludge																	
21 BGT ,	11		0-0-01	Soil	Sludge																	11
5- pe@6		1400	48979	Solid	Aqueous	- 11			×	×							×	×				
				Soil Solid	Sludge Aqueous																	
				Soil	Sludge																	
				Solid	Aqueous					-												
				Solid	Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
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				Solid	Aqueous			ĺ														
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Relinquished by: (Signa	durei			Solid	Aqueous	Time	I	local	ved by:	(Sign	aturo								1	ate	T	me
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ENVIROTECH INC.

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

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	02-17-09
Laboratory Number:	02-16-TPH.QA/QC 48978	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	02-16-09
Preservative:	N/A	Date Extracted:	02-16-09
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	02-13-09	02-16-09	1,500	1,610	7.3%	+/- 10%

Blank Conc. (mg/Kg) TPH		Concentration ND		Detection Lim	it
Duplicate Conc. (mg/Kg) TPH		Sample 120	Duplicate 132	% Difference 10.0%	Accept. Range +/- 30%
Spike Conc. (mg/Kg)	Sample 120	Spike Added 2,000	Spike Result 1,800	% Recovery 84.9%	Accept Range 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.

QA/QC for Samples 48978, 48979, 48981 and 48982. Comments:



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

% Recovery

102%

103%

Accept Range

75 - 125%

75 - 125%

Client:	QA/QC		Project #:		N/A
Sample ID:	02-16-09 Q	A/QC	Date Reported:		02-17-09
Laboratory Number:	48976		Date Sampled:		N/A
Sample Matrix:	Methylene Ch	nloride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		02-16-09
Condition:	N/A		Analysis Reque	sted:	TPH
	I-Cal Date	I-Cal RF:	C-Cal RF.	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9844E+002	9.9884E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.8626E+002	9 8665E+002	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration	Superior Section	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	13.8	12.6	8.7%	0 - 30%	
Diesel Range C10 - C28	29.5	30.3	2.7%	0 - 30%	

ND - Parameter not detected at the stated detection limit.

References:

Spike Conc. (mg/Kg)

Gasoline Range C5 - C10

Diesel Range C10 - C28

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

Spike Added 250

250

Spike Result

269

287

SW-846, USEPA, December 1996.

Comments:

QA/QC for Sample 48976 - 48980.

Sample

13.8

29.5

Analyst

Review Musel



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Ctient:	N/A	Project #:	N/A
Sample ID:	02-16-BTX QA/QC	Date Reported:	02-17-09
Laboratory Number:	48976	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-16-09
Condition:	N/A	Analysis:	BTEX

Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect
Detection Limits (ug/L)		Accept. Rang	je 0 - 15%	Conc	Limit
Benzene	1.8656E+005	1.8694E+005	0.2%	ND	0.1
Toluene	1.6936E+005	1.6970E+005	0.2%	ND	0.1
Ethylbenzene	1.5865E+005	1.5897E+005	0.2%	ND	0.1
p,m-Xylene	4.0561E+005	4.0643E+005	0.2%	ND	0.1
o-Xylene	1,7966E+005	1.8003E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect, Limit
Benzene	21.3	21.2	0.5%	0 - 30%	0.9
Toluene	53.4	53.0	0.7%	0 - 30%	1.0
Ethylbenzene	27.2	27.2	0.0%	0 - 30%	1.0
p,m-Xylene	201	201	0.0%	0 - 30%	1.2
o-Xylene	70.5	70.1	0.6%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	21.3	50.0	70.8	99.3%	39 - 150
Toluene	53.4	50.0	100	97.0%	46 - 148
Ethylbenzene	27.2	50.0	76.3	98.8%	32 - 160
p,m-Xylene	201	100	296	98.2%	46 - 148
o-Xylene	70.5	50.0	118	98.3%	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 48976 - 48982.

Analyst



