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

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	
Proposed Alternative Method Permit or Closure Plan Application	NCT 3
Type of action: Below grade tank registration OIL CONS. DIV	7121. 2
Permit of a pit or proposed alternative method	
Closure of a pit, below-grade tank, or proposed alternative method  MAY 08 2	011
Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tan	k,
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 environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations of the comply with any other applicable governmental authority rules, regulations are required to the complex rules and rules are required to the complex rules are rules and rules are rules and rules are rules are rules and rules are rules	
Operator: BP America Production Company OGRID #: 778	
Address: 200 Energy Court, Farmington, NM 87401	
Facility or well name: COLDIRON COM A 001M	-
API Number: 3004524941 OCD Permit Number:	
U/L or Qtr/Qtr F Section 02 Township 30N Range 11W County: San Juan	
Center of Proposed Design: Latitude         36.843299         Longitude         -107.963537         NAD:         □1927	☑ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment	
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	
	D
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x I	
3. Subsection I of 19.15.17.11 NMAC TANK A	
Volume: 95 bbl Type of fluid: Produced water	
Tank Construction material: Steel	
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other <u>Single wall/ double bottom; no visible sidewalls</u>	
Liner type: Thicknessmil	
4. Alternative Method:	

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet							
Alternate. Please specify							
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)							
Signs: Subsection C of 19.15.17.11 NMAC  12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  Signed in compliance with 19.15.16.8 NMAC							
Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.							
9. <u>Siting Criteria (regarding permitting)</u> : 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						
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No						
Within a 100-year floodplain. (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							
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							
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								
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>									
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									
Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site									
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).									
<ul> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	☐ 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									
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									
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									
<ul> <li>initial application.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	☐ 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 document of the standard of the following items must be attached to the application.									
attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC									
and 19.15.17.13 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number:									
11.  Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC									
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are 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 19.15.17.9 NMAC 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:									

Deprivation   Deprivation	Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Climatological Factors Assessment  Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC								
Waste Excavation and Removal Closure Plan Checklist; (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.    Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC   Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection 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   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   Plan Plan Plan Plan Plan Plan Plan Plan	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 Fluid Management Pit 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								
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.  Ground water is less than 25 feet below the bottom of the buried waste.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Ground water is between 25-50 feet below the bottom of the buried waste.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Ground water is more than 100 feet below the bottom of the buried waste.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site  Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 300 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes \ No	Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection 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								
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Ground water is more than 100 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site  Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 300 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to								
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lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site  Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 300 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes No		The second secon							
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site  Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 300 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes □ No  Yes □ No  Yes □ No	lake (measured from the ordinary high-water mark).	☐ Yes ☐ No							
at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site  Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 300 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes No		☐ Yes ☐ No							
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  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.								
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site									
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site								

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality									
	☐ Yes ☐ No								
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division  Yes No.									
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map  □ Yes □ N									
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  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection 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 bell Name (Print):  Title:									
Signature: Date:									
e-mail address: Telephone:									
e-mail address:    Telephone:	166017								
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature:  Title: OCD Permit Number:  OCD Permit Number:  19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC	166017								
18.  OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 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 report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	g the closure report.								
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature:  Title: OCD Permit Number:  Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date: 3/8/2017	g the closure report.								
18.  OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 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 report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	g the closure report.								

22.									
Operator Closure Certification:									
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.									
Name (Print): Steve Moskal	Title: Field Environmental Coordinator								
Signature: Alaus Musc	Date: May 5, 2017								
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

# Coldiron Com A 001M API No. 3004524941 Unit Letter F, Section 2, T39N, R11W

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

#### General Closure Plan

- BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
   Notice is attached.
- 2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

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

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

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

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

The BGT was transported for recycling.

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

All equipment associated with the BGT has been removed.

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

Constituents	Testing Method	Release Verification	Sample
	95 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	< 0.018
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.071
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<u>&lt;49</u>
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<30

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

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

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

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.

Sampling results indicates no had occurred. Attached is a laboratory report and C-141.

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

Sampling results indicates no release had occurred. Attached is a laboratory report and field report. The location will be reclaimed when the well is plugged and abandoned.

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

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

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

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

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

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

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

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

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

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

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

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

Certification section of C-144 has been completed.

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

### State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised August 8, 2011

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

		Release Notification and Corrective Action																		
						OPERATOR														
							Contact: Steve Moskal													
		Court, Farmi		M 87401			No.: 505-326-94													
Facility Nar	ne: Coldir	on Com A 0	01M			Facility Typ	e: Natural gas v	well												
Surface Ow	ner: State			Mineral (	)wner:	State			API No	. 30045249	941									
				LOCA	ATIO	N OF RE	LEASE													
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the		est Line	County: Sa	an Juan									
F	2	29N	30W	1,720	North		1,545	West												
			Lat	itude <u>36.843</u>	3299°	Longitu	de107.963	3537°												
				NAT	URE	OF REL														
Type of Rele						-	Release: unknow			ecovered: N										
Source of Re	lease: belov	v grade tank –	95 bbl			Date and I	Iour of Occurrence	ce:	Date and	Hour of Dis	covery	none								
Was Immedia	ate Notice (					If YES, To	Whom?													
D 1111 0			Yes 🗵	No Not R	equired		-													
By Whom? Was a Water	course Dage	shed?				Date and H		the Water	COURCE											
was a water	course Reac		Yes 🗵	No		If YES, Volume Impacting the Watercourse.														
If a Watercou	irse was Im	pacted, Descri	ibe Fully.	k																
							the BGT was do													
Describe Are	a Affected	and Cleanup A	Action Tak	en.* No action no	ecessary	. Final labora	tory analysis dete	ermined n	o remedia	l action is re	quired									
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.																				
Signature:	May SVI	nu				OIL CONSERVATION DIVISION														
Printed Name: Steve Moskal						Approved by	Environmental S	pecialist:												
Title: Field E	nvironment	al Coordinato	r			Approval Dat	e:	E	xpiration I	Date:	ite:									
E-mail Addre	ess: steven.r	noskal@bp.co	m			Conditions of	Approval:			Attached										
Date: May 5,	2017	Pl	hone: 505-	-326-9497																

<sup>\*</sup> Attach Additional Sheets If Necessary

# bp



BP America Production Company 200 Energy Court Farmington, NM 87401

March 1, 2017

State Land Office Brandon Foley PO Box 3170 Farmington, NM 87402

#### VIA EMAIL

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

Well Name: COLDIRON COM A 001M

API#: 3004524941

Dear Mr. Foley,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about March 6, 2017. If there aren't any unforeseen problems, the work should be completed within 10 working days.

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

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

Sincerely,

Steven Moskal

BP America Production Company

#### Moskal, Steven

From:

Moskal, Steven

Sent:

Monday, March 06, 2017 7:14 AM

To:

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

M. (bfoley@slo.state.nm.us)

Cc:

jeffcblagg@aol.com; blagg\_njv@yahoo.com; Powell, Ross L (MBF SERVICES)

Subject:

RE: BP Pit Close Notification - COLDIRON COM A 001M

The BGT is scheduled to be removed this morning at 9:00 AM.

Thank you,

#### Steve Moskal

BP Lower 48 – San Juan – Farmington Field Environmental Coordinator Office: (505) 326-9497



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From: Buckley, Farrah (CH2M HILL)

Sent: Wednesday, March 01, 2017 4:21 PM

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

Cc: jeffcblagg@aol.com; blagg njv@yahoo.com; Moskal, Steven Subject: RE: BP Pit Close Notification - COLDIRON COM A 001M

The work on this site has been rescheduled to start on March 6, 2017.

Thank you,

March 1, 2017

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

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

COLDIRON COM A 001M API 30-045-24941 (F) Section 02 – T30N – R11W San Juan County, New Mexico Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 21bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around March 6, 2017.

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

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

From: Railsback, Farrah (CH2M HILL) Sent: Friday, January 27, 2017 11:03 AM

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

**Cc:** 'jeffcblagg@aol.com'; 'blagg\_njv@yahoo.com'; Moskal, Steven **Subject:** BP Pit Close Notification - COLDIRON COM A 001M

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

January 27, 2017

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

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

COLDIRON COM A 001M API 30-045-24941 (F) Section 02 – T30N – R11W San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 21bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around February 2, 2017.

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

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

# Farrah Railsback BGT Project Support 970-946-9199 -cell

This email and any attachments are intended only for the addressee(s) listed above and may contain confidential, proprietary, and/or privileged information. If you are not an intended recipient, please immediately advise the sender by return email, delete this email and any attachments, and destroy any copies of same. Any unauthorized review, use, copying disclosure or distribution of this email and any attachments is prohibited.

CLIENT: BP	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199  API #:							
FIELD REPORT:	(circle one): BGT CONFIRMATION /	RELEASE INVESTIGATION / C	OTHER:	PAGE #: <b>1</b>	of			
SITE INFORMATION	: SITE NAME: COLDIF	RON COM A #1N	1	DATE STARTED: 03	/06/17			
QUAD/UNIT: F SEC: 2 TWP:	30N RNG: 11W PM:	NM CNTY: SJ	ST: NM	DATE FINISHED:				
1/4 -1/4/FOOTAGE: 1,720'N / 1,5	45'W SE/NW LEASE T		FEE / INDIAN	ENVIRONMENTAL				
LEASE #:	PROD. FORMATION: MV CC	STRIKE ONTRACTOR: MBF - R. F	POWELL	SPECIALIST(S):	NJV			
REFERENCE POINT		COORD.: 36.8431		GL ELEV.:	5,800'			
95 BGT (SW/DB)	GPS COORD.: 36.8			RING FROM W.H.: 87', N				
2)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:				
3)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:				
4)	GPS COORD.:		DISTANCE/BEA	RING FROM W.H.:				
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # C				OVM READING (ppm)			
1) SAMPLE ID: <b>5PC - TB @ 5'</b>	(95) SAMPLE DATE: 03/06/	17 SAMPLETIME: 0915	LAB ANALYSIS: 801	5B/8021B/300.0 (CI)	NA			
2) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:					
3) SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:					
4) SAMPLE ID:								
SOIL DESCRIPTION  SOIL COLOR: DARK YEL  COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY  CONSISTENCY (NON COHESIVE SOILS): LC  MOISTURE: DRY/SLIGHTLY MOIST MOIST / M  SAMPLE TYPE: GRAB (COMPOSITE - #  DISCOLORATION/STAINING OBSERVED: YES M	COMSH ORANGE  COHESIVE / COHESIVE / HIGHLY COHESIVE OSE FIRM DENSE / VERY DENSE T / SATURATED / SUPER SATURATED OF PTS. 5	PLASTICITY (CLAYS): NON PLASTIC DENSITY (COHESIVE CLAYS & HC ODOR DETECTED: YES NO	C / SLIGHTLY PLASTIC / C SILTS): SOFT / FIRM / EXPLANATION -	STIFF / VERY STIFF / HARD				
SITE OBSERVATION APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER: NMOCD REP. PRESENT TO WIT	S: LOST INTEGRITY OF EQUIPMENTS D AND/OR OCCURRED: YES NO EXPLANATION - 105 BBI	ANATION:			LOCATION.			
SOIL IMPACT DIMENSION ESTIMATION:	NA ft. X NA	ft. X NA ft.	EXCAVATION EST	ΠΜΑΤΙΟΝ (Cubic Yards) :	NA			
DEPTH TO GROUNDWATER: <100' N	EAREST WATER SOURCE: <1,000	NEAREST SURFACE WATER:	<1,000' NMOC	CD TPH CLOSURE STD:	100 ppm			
	PROD.	PLOT PLAN circ	N TIME	CALIB. READ. = NA CALIB. GAS = NA :: NA am/pm DATE: _  MISCELL. NO	ppm RF=0.52 PA			
TO METER RUN	PBGTL T.B. ~ 5' B.G.	FENCE	R	/O: EF. #: P - 684 ID: VHIXONEVE J #:				
<b>w.</b> h		SEPARATOR Y	O Tar	CD Appr. date(s): 04/	/(N)			
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELAPPLICABLE OR NOT AVAILABLE; SW-SINGLE	DW-GRADE TANK LOCATION; SPD = SAMPLE P	ELOW; T.H. = TEST HOLE; ~ = APPROX.; OINT DESIGNATION; R.W. = RETAINING	W.H. = WELL HEAD;	BGT Sidewalls Visible: Y lagnetic declination: 1	/ N  0° E			
NOTES: GOOGLE EARTH IMAGE	RY DATE: 3/15/2015.	ONSITE: 03/06/	17					

#### **Analytical Report**

Lab Order 1703253

Date Reported: 3/8/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

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

Project: COLDIRON COM A #1M Collection Date: 3/6/2017 9:15:00 AM

Lab ID: 1703253-001

Matrix: SOIL

Received Date: 3/7/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/7/2017 10:51:30 AM	30561
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/7/2017 10:10:12 AM	30556
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/7/2017 10:10:12 AM	30556
Surr: DNOP	105	70-130	%Rec	1	3/7/2017 10:10:12 AM	30556
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/7/2017 11:57:19 AM	30545
Surr: BFB	80.7	54-150	%Rec	1	3/7/2017 11:57:19 AM	30545
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.018	mg/Kg	1	3/7/2017 11:57:19 AM	30545
Toluene	ND	0.035	mg/Kg	1	3/7/2017 11:57:19 AM	30545
Ethylbenzene	ND	0.035	mg/Kg	1	3/7/2017 11:57:19 AM	30545
Xylenes, Total	ND	0.071	mg/Kg	1	3/7/2017 11:57:19 AM	30545
Surr: 4-Bromofluorobenzene	89.2	66.6-132	%Rec	1	3/7/2017 11:57:19 AM	30545

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 5 J
- Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

CI	Chain-of-Custody Record					HALL ENVIRONMENTAL															
Client:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	Rush _	DAY )					IAN										
		•		Project Name:							ww.h										
Mailing A	ddress:	P.O. BO	X 87	COLD	IRON COM	I A # 1M		490	)1 H							e, NM 87109					
		BLOOM	FIELD, NM 87413	Project #:						5-345			Fax !	-							
Phone #:		(505) 63	32-1199										ysis			_					
email or F	ax#:			Project Manag	ger:												न				
QA/QC Pa	-		Level 4 (Full Validation)		NELSON V	ELEZ	(80218)	+ TPH (Gas only)	/ MRO)		S)		04,504	PCB's			ter - 300.1)			a)	
Accredita	tion:			Sampler:	NELSON V	ELEZ 977	£ (8	(Gas	/ DRO	7	8270SIMS)		102,	/ 8082			/ water			sample	
□ NELAF	•	□ Other	•	On Joe	Mer(es		1	TP	70	418.1)	8270SI	,,	8	3 / S		(A)	300.0				N
	Гуре)				eratigies a l		4	3E +	(GR	po	9 5	stals	N,	cide	F	-YC	1		e	osit	۷
Date	Time	Matrix	Sample Request ID	Ar 03 10 7 17 Container Type and # MOHKE	Preservative Type	HEAL No	BTEX +-MTH	BTEX + MTBE	TPH 8015B (GRO	TPH (Method	PAH (8310	RCRA 8 Metals	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil		Grab sample	5 pt. composite	Air Bubbles (Y or
3/6/17	0915	SOIL	5PC - TB @ 5 '(95)	4 oz 1	Cool	701	٧		٧								٧		_	٧	_
																				1	
										$\top$								$\dashv$	$\top$	$\top$	
											+								$\dashv$	$\dashv$	
									+	+	+								$\dashv$	+	
										+	+	-	-	-				$\dashv$	+	+	
								$\dashv$	$\dashv$		+	-	-	_			-1	$\dashv$	+	+	_
											+	-						$\dashv$	-	-	
							Н	-		_	+	_						_	$\dashv$	_	
									$\dashv$		_							_		$\dashv$	
						100000000000000000000000000000000000000					_	_							_	_	
											_						Ш		$\dashv$	_	
Date: 3/6/17	Time: 1535	Relinquishe	her Vf	Received by:	1 Jost	Date Time 3/4/1/535		arks		BILL DIF & REFER STEVE	ENCE#	WHE	N APP	LICAE	BLE;		/ITH C	ORRES	PONI	DING	VID
Date:	Time:	Relinquishe		Received by:		Date Time	1 ~			VHIXO		-	470	-uL I							
3/4/7 /844 Mounter Walle (19m 103/67/17 07/ Reference # P-684																					
1	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.																				

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1703253

08-Mar-17

Client:

Blagg Engineering

Project:

COLDIRON COM A #1M

Sample ID MB-30561

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Prep Date:

3/7/2017

Batch ID: 30561 Analysis Date: 3/7/2017 RunNo: 41187

SeqNo: 1291367

Units: mg/Kg

HighLimit

%RPD **RPDLimit** 

Qual

Analyte Chloride

Result PQL ND 1.5

TestCode: EPA Method 300.0: Anions

%RPD

Sample ID LCS-30561

SampType: LCS

RunNo: 41187

Client ID: LCSS Prep Date: 3/7/2017

Batch ID: 30561 Analysis Date: 3/7/2017

1.5

SeqNo: 1291368

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg HighLimit

Qual

Analyte

Result PQL

SPK value SPK Ref Val 15.00

95.5

90

LowLimit

110

Chloride

14

%REC

**RPDLimit** 

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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

E Value above quantitation range

Analyte detected below quantitation limits J

Page 2 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1703253

08-Mar-17

Client:

Blagg Engineering

Project:

COLDIRON COM A #1M

Sample ID	LCS-30556
Cumpic ID	LOO-00000

SampType: LCS

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

Client ID:

LCSS

Batch ID: 30556

RunNo: 41180

Prep Date: 3/7/2017 Analysis Date: 3/7/2017

SeqNo: 1289972

Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit Diesel Range Organics (DRO) 48 10 50.00 96.3 63.8 4.9 5.000 97.2 70

Surr: DNOP

Sample ID MB-30556

PBS

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

Batch ID: 30556

SampType: MBLK

RunNo: 41180

Analysis Date: 3/7/2017 Prep Date: 3/7/2017

SegNo: 1289973

Units: mg/Kg

HighLimit

HighLimit

116

130

%RPD

**RPDLimit** 

Analyte

Surr: DNOP

Client ID:

Result PQL

SPK value SPK Ref Val %REC LowLimit

%RPD

**RPDLimit** 

Qual

Diesel Range Organics (DRO) ND 10 ND Motor Oil Range Organics (MRO)

50 11

111

70 130

Qual

Sample ID LCS-30530

LCSS

3/6/2017

SampType: LCS

Batch ID: 30530

TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 41180

LowLimit

LowLimit

Units: %Rec

Analyte Surr: DNOP

Client ID: Prep Date:

Client ID:

Prep Date:

Result

Analysis Date: 3/7/2017 PQL SPK value SPK Ref Val

SeqNo: 1290704 %REC

HighLimit

%RPD **RPDLimit** Qual

Sample ID MB-30530

SampType: MBLK Batch ID: 30530

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

RunNo: 41180

3/6/2017

PBS

Analysis Date: 3/7/2017

PQL

SeqNo: 1290705

Units: %Rec HighLimit

130

%RPD **RPDLimit** Qual

Analyte Surr: DNOP

9.4

Result

10.00

10.00

5.000

SPK value SPK Ref Val %REC

93.7

70

## Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 3 of 5

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703253

08-Mar-17

Client:

Blagg Engineering

Project:

COLDIRON COM A #1M

Sample ID MB-30545

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Batch ID: 30545

RunNo: 41188

Prep Date: 3/6/2017 Analysis Date: 3/7/2017

SeqNo: 1290708

Units: mg/Kg

Analyte

Result PQL

Gasoline Range Organics (GRO)

ND 5.0 SPK value SPK Ref Val %REC LowLimit

Sample ID LCS-30545

LCSS

3/6/2017

980

HighLimit %RPD

150

**RPDLimit** 

Qual

1000

98.2

54

TestCode: EPA Method 8015D: Gasoline Range

Surr: BFB

Client ID:

Prep Date:

SampType: LCS Batch ID: 30545

**PQL** 

Analysis Date: 3/7/2017

RunNo: 41188

Units: mg/Kg

HighLimit

%REC SPK value SPK Ref Val LowLimit

%RPD **RPDLimit** 

Analyte

Result

25.00 1000

106 113

SeqNo: 1290709

76.4

Qual

Gasoline Range Organics (GRO) Surr: BFB

1100

5.0

54

150

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit RL Sample container temperature is out of limit as specified
- Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703253

08-Mar-17

Client:

Blagg Engineering

**Project:** 

COLDIRON COM A #1M

Sample ID MB-30545 SampType: MBLK				TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	ent ID: PBS Batch ID: 30545			RunNo: 41188						
Prep Date: 3/6/2017	Analysis Date: 3/7/2017			8	SeqNo: 1	290714	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	66.6	132			

Sample ID LCS-30545	-30545 SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch	h ID: 30	545	F						
Prep Date: 3/6/2017	Analysis D	Analysis Date: 3/7/2017			SeqNo: 1	290715	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	75.2	115			
Toluene	0.96	0.050	1.000	0	96.5	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.6	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	102	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	66.6	132			

#### Qualifiers:

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

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

Clie	ent Name:	Name: BLAGG Work Order Number:						RcptNo: 1				
Received by/date: 03/ 07/17												
Logg	ged By:	Anne Tho	rne	3/7/2017	7:15:00 AI	M		anne A	_			
Com	pleted By: Anne Thorne 3/7/2017 7:38:42 AM				М		anne Il	,				
Revi	ewed By:	at		03/07	17			0,114 %		i i		
Cha	in of Cus	stody	*									
Custody seals intact on sample bottles?								No 🗆	Not Present			
2. Is Chain of Custody complete?						Yes	<b>V</b>	No 🗆	Not Present			
3. How was the sample delivered?						Cou	ier					
Log In												
4. Was an attempt made to cool the samples?						Yes	V	No 🗆	NA 🗆			
5. \	Were all sar	mples receive	d at a tempera	ture of >0° C to	o 6.0°C	Yes	<b>✓</b>	No 🗆	NA 🗆			
6. Sample(s) in proper container(s)?							<b>~</b>	No 🗆				
7. Sufficient sample volume for indicated test(s)?							V	No 🗆				
8. /	Are samples	s (except VOA	and ONG) pro	perly preserve	d?	Yes	<b>✓</b>	No 🗆				
9. Was preservative added to bottles?						Yes		No 🗹	NA 🗆			
10.	/OA vials h	ave zero head	space?			Yes		No 🗆	No VOA Vials	·		
			ners received b	roken?		Yes		No 🗹				
		·							# of preserved bottles checked			
		work match be				Yes	<b>V</b>	No 🗆	for pH:			
(Note discrepancies on chain of custody)						V		No 🗆	Adjusted?	or >12 unless noted)		
	13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested?					Yes Yes		No 🗆				
	5. Were all holding times able to be met?					Yes	V	No 🗆	Checked by:			
		_	authorization.)									
0	-1-111	W (16	- (f <b>k</b> ( - )									
		lling (if app							🖼			
16. V	Vas client n	otified of all d	iscrepancies w	rith this order?		Yes		No 🗆	NA 🗹	_		
	Person	n Notified:		dio	Date							
	By Wh		Executation of the Control of the Co	A Barroom arrangement	Via:	eMa	ıil 🗌	Phone Fax	☐ In Person			
	Regar				maryuru sermanan arra da							
15		Instructions:	THE BALL WITH DATE	- 1764	COLUMN APPLE FOR THE	NTI-						
17.	Additional re	emarks:										
18.	Cooler Info	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T	i e en al lon k	Seal Mac	Sallin of	Seal D	() r	enes enes eve.	8			
	1	1.0		Yes		abata Bash	median	PH- 11-17-17-17-17-17-17-17-17-17-17-17-17-1				



