District I 1625 N. French Dr., Hobbs, NM 88240 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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

For temporary pits, closed-loop systems, and NMOCD District Office.

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

District Office.
Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application
Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: BP AMERICA PRODUCTION COMPANY OGRID #: 778
Address: 200 ENERGY COURT, FARMINGTON, NM 87410
Facility or well name: Schwerdtfeger A 2E
API Number: 3004525498 OCD Permit Number:
U/L or Qtr/Qtr L Section 31 Township 28N Range 8W County: San Juan
Center of Proposed Design: Latitude 36.61563 Longitude -107.72768 NAD: □1927 ☒ 1983
Surface Owner: A Federal State Private Tribal Trust or Indian Allotment
2. ☑ Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: ☐ Drilling ☐ Workover
Permanent Emergency Cavitation P&A
☐ Lined ☐ Unlined Liner type: Thickness 20 mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: Welded Factory Other Volume: 900 bbl Dimensions: L 20 x W 20 x D 8
3.
Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
Drying Pad Above Ground Steel Tanks Haul-off Bins Other
intent) Drying Pad
4. Below-grade tank: Subsection I of 19.15.17.11 NMAC DIL CONS. DIV. DIST. 3 DIV. DIST. 3 DIL CONS. DIV. DIST. DIST. DIST. DIV. DIST. DIST
\C_

Liner type: Thickness

Tank Construction material:

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

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _

Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

mil HDPE PVC Other

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, it	hospital,
institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet	
✓ Alternate. Please specify Hogwire fencing as per Design Plan	
7.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
8.	
Signs: Subsection C of 19.15.17.11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
Signed in compliance with 19.15.3.103 NMAC	
9. Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:	
Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval. (Fencing in Design Plan)	office for
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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryitabove-grade tanks associated with a closed-loop system.	priate district pproval. ng pads or
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☑ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☑ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ☐ NA
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☑ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ 162 🖾 140
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	□ v ⊠ N
Within 500 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 the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	
Within the area overlying a subsurface mine.	☐, Yes ⊠ No

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 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 19.15.17.9 NMAC and 19.15.17.13 NMAC
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number:
Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
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 ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Erosion Control Plan Erosion Control 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
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Ste Instructions: Please indentify the facility or facilities for the disposal of liquids, drifacilities are required.		
Disposal Facility Name: D	isposal Facility Permit Number:	
	isposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur Yes (If yes, please provide the information below) No	ar on or in areas that will not be used for future services	vice and operations?
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate re Re-vegetation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection	equirements of Subsection H of 19.15.17.13 NMA(of 19.15.17.13 NMAC	С
17. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the clo provided below. Requests regarding changes to certain siting criteria may require a considered an exception which must be submitted to the Santa Fe Environmental B demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for	administrative approval from the appropriate disti Sureau office for consideration of approval. Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data of	btained from nearby wells	☐ Yes ☐ No ☑ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data of	obtained from nearby wells	☐ Yes ☐ No ☑ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data of	btained from nearby wells	⊠ Yes □ No □ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signifiake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	ficant watercourse or lakebed, sinkhole, or playa	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in - Visual inspection (certification) of the proposed site; Aerial photo; Satellite in		☐ Yes ☑ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less the watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less the watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less than the water wa	ing, in existence at the time of initial application.	☐ Yes ☑ No
Within incorporated municipal boundaries or within a defined municipal fresh water valopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval	•	☐ Yes ☑ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual i	inspection (certification) of the proposed site	☐ Yes ☑ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining at	nd Mineral Division	☐ Yes ⊠ No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Society; Topographic map 	Mineral Resources; USGS; NM Geological	☐ Yes ☒ No
Within a 100-year floodplain FEMA map		☐ Yes ☑ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the faby a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Such Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Such Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad Protocols and Procedures - based upon the appropriate requirements of 19.15.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Such Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill Soil Cover Design - based upon the appropriate requirements of Subsection Holling Re-vegetation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - Site Reclamation Plan - Site	rements of 19.15.17.10 NMAC subsection F of 19.15.17.13 NMAC repriate requirements of 19.15.17.11 NMAC operate requirements of 19.15.17.11 NMAC rements of Subsection F of 19.15.17.13 NMAC research F of 19.15.17.13 NMAC rements of 19.15.17.13 NMAC rements of 19.15.17.13 NMAC of 19.15.17.13 NMAC	15.17.11 NMAC

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Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate	and complete to the best of my knowledge and belief.
Name (Print): LARRY SCHLOTTERBACK	Title: ENVIRONMENTAL COORDINATOR
Signature: Pay Schlittels	Date: OCTOBER 31, 2008
e-mail address: larry.schlotterback@bp.com	Telephone:(505) 326-9200
OCD Approval: Permit Application (including closure plan) Closure Plan	,
	Approval Date:
Title: Envirokpec (OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K Instructions: Operators are required to obtain an approved closure plan prior to it. The closure report is required to be submitted to the division within 60 days of the section of the form until an approved closure plan has been obtained and the closure plan has bear obtained and the closure plan has been obtained and the closur	mplementing any closure activities and submitting the closure report. completion of the closure activities. Please do not complete this
22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative If different from approved plan, please explain.	e Closure Method Waste Removal (Closed-loop systems only)
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems To Instructions: Please indentify the facility or facilities for where the liquids, drilling two facilities were utilized.</u>	
Disposal Facility Name: I	Disposal Facility Permit Number:
	noposar i domo i cimie cimie i cimie cim
	Disposal Facility Permit Number:
Disposal Facility Name: I Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) \[No	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in	Disposal Facility Permit Number: areas that will not be used for future service and operations?
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) No Required for impacted areas which will not be used for future service and operation. Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 24. Closure Report Attachment Checklist: Instructions: Each of the following item mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)	Disposal Facility Permit Number:areas that will not be used for future service and operations?
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) No Required for impacted areas which will not be used for future service and operation. Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 24. Closure Report Attachment Checklist: Instructions: Each of the following items mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude Longitude	Disposal Facility Permit Number: areas that will not be used for future service and operations? s: service and operations? service and operations? service and operations? service and operations?
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) No No No No No No	Disposal Facility Permit Number: areas that will not be used for future service and operations? S: S must be attached to the closure report. Please indicate, by a check Disposal Facility Permit Number: NAD: 1983 Ort is true, accurate and complete to the best of my knowledge and
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) No No No No No No	Disposal Facility Permit Number:areas that will not be used for future service and operations? s:

Telephone: ___

e-mail address:

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Temporary Pit General Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production (BP) shall construct a temporary pit with the following guidelines. Any deviations from this plan will be addressed with the submittal of Form C-144 at the time of the pit permit application.

- A). The pit will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
- B) Prior to constructing a pit, top soil will be stripped for use as a final cover or fill at the time of closure.
- C) An upright sign, not less than 12" x 24" with lettering not less than 2" height will be placed on the fence surrounding the pit. Alternatively, a well sign in compliance with 19.15.3.103 NMAC will be posted at the well site. The sign will give BP's name, location by quarter-quarter or unit letter, section, township and range, and emergency phone numbers.
- D) A fence will be constructed in a manner that prevents unauthorized access and kept in good repair. During well rig operations the fencing adjacent to the rig may be opened.
- E) The pit will be designed to ensure the confinement of liquids and prevent unauthorized releases. The base will be firm and unyielding, smooth and free of rocks, debris, sharp edges or irregularities. If the ground conditions and soil type are adequate for a small workover pit, ninety degree side slopes will be constructed. Adequate soil will be used to hold the anchor trench, prevent water run-on and prevent sidewall failure. Pit lining will be installed in a manner that avoids excessive stress-strain. A ladder will be installed in the pit and firmly attached to a fixed surface structure (ie, t-post) to allow escape. Otherwise, a 2:1 horizontal to vertical slope will be constructed.
- F) The pit will be lined with a 20-mil string reinforced LLDPE or equivalent liner, composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner shall be resistant to ultraviolet light and comply with EPA-846 Method 9090A.
- G) Liner orientation shall be placed to minimize seams and up and down, not across, slope. Factory welded seams will be used where possible. Prior to field seaming, liners will be overlapped by four to six inches and oriented parallel to the line of maximum slope. Only qualified personnel will perform field seaming.
- H) Construction will avoid excessive stress-strain on the liner.
- I) If protuberances or localized stress-strain may be present, a geotextile will be placed below the liner to protect it's integrity.
- J) An anchor trench of at least 18" depth, filled with compacted dirt, will be used to hold the liner edges.
- K) Operations will be conducted to protect the liner from any fluid force into and suction out of the pit that could result in mechanical damage.
- L) The pit will be designed with a small surface berm to prevent surface water run-on. During well rig operations a certain area of the pit may allow run-on of fluid from circulation or flow of the well.
- M) The pit volume shall not exceed 10 acre-feet, including freeboard.
- N) Certain parts of the pit may remain unlined, pursuant to Rule 19.15.17.11 F 11 NMAC, to allow well venting, flairing or blowing.
- O) Freestanding liquids will not be allowed to remain on any unlined portion of the temporary pit.

Version: 10/31/08

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Temporary Pit General Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, BP America Production shall maintain and operate a temporary pit with the following guidelines. Any deviations from this plan will be addressed with the submittal of Form C-144 at the time of the pit permit application.

- A). The pit will be operated and maintained to contain liquids and prevent contamination of fresh water, protect public health and the environment.
- B) Well workover fluids will be re-used, recycled or disposed in a manner to protect fresh water, public health and the environment. Disposal is addressed in the "Closure Plan" for the site.
- C) No hazardous waste will be discharged or stored in the temporary pit. Only fluids generated during the well work process will be placed in the pit. The pit will remain free of solid waste or debris.
- D) If the pit develops a leak or if the liner is penetrated, including the freeboard portion of the pit, all liquids above the failure will be removed within 48 hours. The NMOCD Aztec District office will be notified within 48 hours and the liner will be either repaired or replaced. If the pit develops a leak or is penetrated anywhere above the freeboard portion of the pit, the NMOCD Aztec District office will be notified within 48 hours and the liner will be repaired.
- E) The pit liner will be protected from damage during fluid placement into or removal from by use of mud pit slides, headers or a manifold system.
- F) The pit will be operated with a small surface berm to prevent surface water run-on. During well rig operations a certain area of the pit may allow run-on of fluid from circulation or flow of the well.
- G) An oil absorbent boom will be maintained on site for removal of any oil from the pit surface.
- H) A minimum of 2 feet of freeboard will be maintained in the pit.
- The pit will be inspected at least daily while the rig is on site. Thereafter, the pit will be inspected at least weekly as long as fluids remain in the pit. An inspection log will be maintained, and will be submitted to the NMOCD Aztec District office when the pit is closed.
- J) All free liquids will be removed from the pit within 30 days from the date that the rig is released. The date of the rig release will be noted on Form C-103 or Form C-105.
- K) Free liquids will be removed from a pit used for cavitation within 48 hours after completing cavitation. BP may request additional time to remove liquids if it is not feasible to access the location for 48 hours.

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Version 10/31/08

BP AMERCIA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

TEMPORARY PIT GENERAL CLOSURE PLAN

As stipulated in Rule 19.15.17.13 NMAC, the following information adheres to the requirements established in closing temporary pits (drilling and workover pits) on BP America Production Company (BP) well sites. This plan will address the standard protocols and procedures for closure of temporary pits. If deviations from this plan are necessary, any specific changes will be included with NMOCD Form C-144.

BP shall close its temporary pit(s) 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 or the environment. BP shall close any other permitted temporary pit within six months from the date that BP releases the drilling or workover rig. The date of the drilling or workover rig's release will be noted on either form C-105 or C-103 upon well or workover completion. It is understood that the division District III office in Aztec, New Mexico may grant an extension not to exceed three months. All necessary documentation to achieve closure will be as directed on NMOCD's form C-144.

The following outline addresses all requirements for closure of BP's temporary pits;

- Removal of all liquids from the pit prior to closure and dispose of the liquids in a NMOCD divisionapproved facility or recycle, reuse or reclaim the liquids in a manner that the division District III office approves. A list of proposed, authorized and permitted disposal sites is included at the end of this plan.
- 2. BP's first option for closure will be on-site burial. BP shall demonstrate and comply with the siting requirements in Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC. If the site requirements dictate otherwise, waste excavation and removal (See item 7, below) will be implemented. Otherwise, an alternative method (presented to the environmental bureau in Santa Fe) may be presented to NMOCD for approval.
- 3. Notification to the surface owner by certified mail, with return receipt request, will be given prior to BP's intent on conducting, with NMOCD's pre-approval, on-site closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is understood to demonstrate compliance with this requirement.
- 4. In addition, notification will also be given to 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 well name and number to be closed, legal description utilizing unit letter, section, township, range, and API number.
- 5. Prior to in place closing an existing temporary pit, stabilization or solidification of its contents to a bearing capacity sufficient to support the pit's final cover will be completed. A mixture with soil or other material will not exceed a mixing ratio of 3:1, soil or other material to contents.
- 6. The pit content will be sampled by collecting, at a minimum, a five (5) point composite and adhering to 19.15.17.13F (2c or 2d). Based on the site criteria applied to the pit location, the following constituents will be analyzed by a qualified laboratory.

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	2,500
TPH	US EPA Method SW-846 8015M	500
	(GRO + DRO Combined Fraction)	
Chlorides	US EPA Method 300.0	500 (gw 50-100')

Notes:

mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, gw = groundwater, (gw 50-100') = depths (in feet) below the bottom of the buried waste.

It is understood that BP has the option to collect a 5 point composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed the closure limits. If however the pit contents collected prior to treatment or stabilization exceed the specified concentrations limits, then a second 5 point composite sample of the contents after treatment or stabilization will be collected to demonstrate that the contents do not exceed those limits.

7. If waste excavation and removal is performed, BP will follow 19.15.17.13B (1). This will include (a) excavation of all pit contents and, if applicable, synthetic liners and transferring those materials to a NMOCD approved facility, and (b) testing the soils below the temporary pit to determine whether a release has occurred. At a minimum, a 5 point composite soil sample will be collected and tested as follows:

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	2,500
TPH	US EPA Method SW-846 8015M	500
	(GRO + DRO Combined Fraction)	
Chlorides	US EPA Method 300.0	500 (gw 50-100')

Notes:

mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, gw = groundwater, (gw 50-100') = depths (in feet) below the bottom of the buried waste.

It is understood that BP has the option to collect a 5 point composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed the closure limits. If however the pit contents collected prior to treatment or stabilization exceed the specified concentrations limits, then a second 5 point composite sample of the contents after treatment or stabilization will be collected to demonstrate that the contents do not exceed those limits.

- 8. Within 60 days of closure completion, submittal of a closure report on NMOCD's form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where and if applicable, will be furnished. BP will 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. BP will also provide a plat of the pit location on form C-105 within 60 days of closing the pit.
- 9. Upon closure of a temporary pit, BP shall cover the geomembrane lined, filled, temporary pit with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
- 10. Reclamation will follow 19.15.17.13G (1) and (2).
 - a. Once closure has been achieved for the temporary pit, the pit location and any associated access road(s) will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. The impacted surface area will be substantially restored to the condition that existed prior to operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, recontour 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.
- 11. Soil cover will follow 19.15.17.13H(1), (2), and (3).
 - a. The soil cover for closures where the pit contents has been removed or remediated to the division'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.
 - b. The soil cover for burial-in-place shall consist of a minimum of four feet of compacted, non-waste containing, earthen material. The soil cover shall include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. In addition, the soil cover will be constructed to the site's existing grade and all possible efforts will be conducted to prevent ponding of water and erosion of the cover material.
- 12. Revegetation will follow 19.15.17.13I (1), (2), (3), (4) and (5).
 - a. Revegetation of the pit location and any associated access road(s) will be attempted during the first growing season after closure of the pit with seeding or planting of the disturbed areas. Seeding will be accomplished by tilling/plowing 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.
 - b. Seeding or planting will be repeated until it successfully achieves the required vegetative cover.

- c. When conditions are not favorable for the establishment of vegetation, such as periods of drought, it is understood that the division may allow sufficient time to delay seeding or planting until soil moisture conditions become favorable. In addition, the division may require BP to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices.
- d. Notification will be given to the division District III office when seeding or planting has been successfully achieved.
- 13. The temporary pit will be located with a steel marker, no less than four (4) inches in diameter, cemented in a hole three (3) feet deep at the center of the on-site burial location at the time of abandonment of all wells on the well pad. The marker will be flush with the ground surface to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will include a welded steel 12-inch square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four (4) foot steel riser will be threaded into the top of the collar marker and welded around the base with BP's name, well name and number, legal designation with unit letter, section, township range, and on-site burial label (i.e. temporary pit marker). The marker designation and label will be welded, stamped or otherwise permanently engraved into the metal of the steel marker. Permanent structures over the on-site burial will be prohibited without the division District III office's written approval. No person shall remove the on-site burial marker without the division's written permission.
 - a. The exact location of the on-site burial will be reported on NMOCD's form C-105.
 - b. A deed notice identifying the exact location of the on-site burial will be filed with the county clerk, located in Aztec, NM.
 - c. BP may request a modification to the marker, if, necessary activities and/or safety concerns develop in future efforts to increase production or during final plug and abandonment of the well itself. BP will adhere to the requirements of such a request as specified within 19.15.17.15A (1) NMAC.

Proposed waste disposal sites:

BP Crouch Mesa Landfarm, Permit NM-02-003

JFJ Landfarm, Permit NM-01-010(B)

Basin Disposal, Permit NM-01-0005

BP Operated E.E. Elliott SWD #1, API 30-045-27799

BP Operated 13 GCU SWD #1, API 30-045-28601

BP Operated GCU 259 SWD, API 30-045-20006

BP Operated GCU 306 SWD, API 30-045-24286

BP Operated GCU 307 SWD, API 30-045-24248

BP Operated GCU 328 SWD, API 30-045-24735

BP Operated Pritchard SWD #1, API 30-045-28351

Version: 10/31/08

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

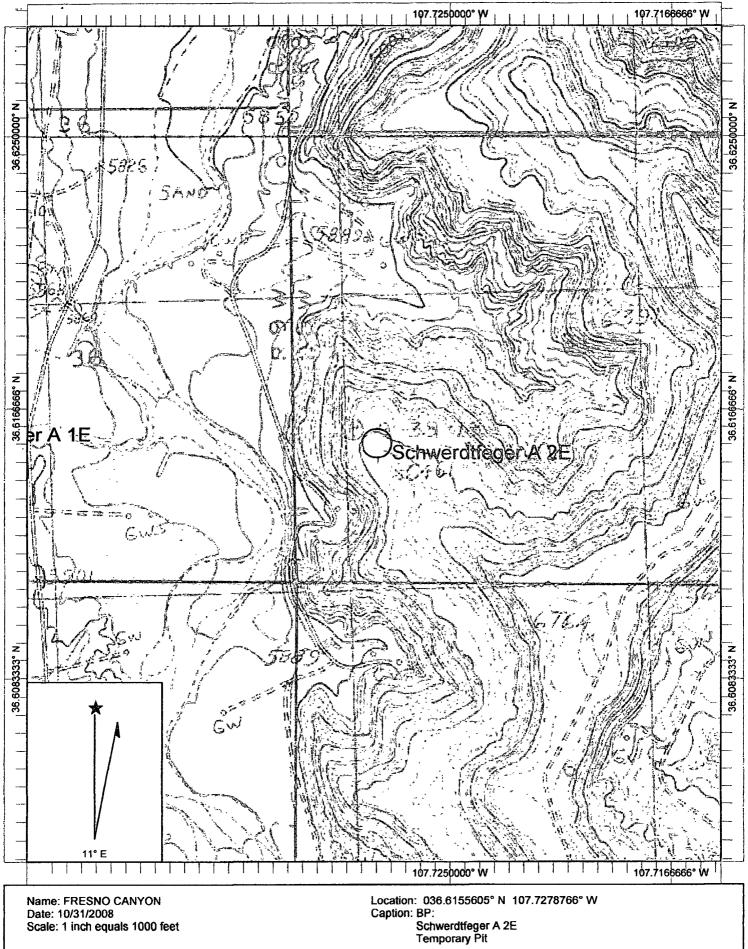
October 31, 2008

BP America Production Company Schwerdtfeger A 2E API 30-045-25498 (L) Section 31 – T28N – R8W San Juan County, New Mexico

Hydrogeologic Data (Pursuant to NMAC 19.15.17.9, Subsection B, Paragraph 4)

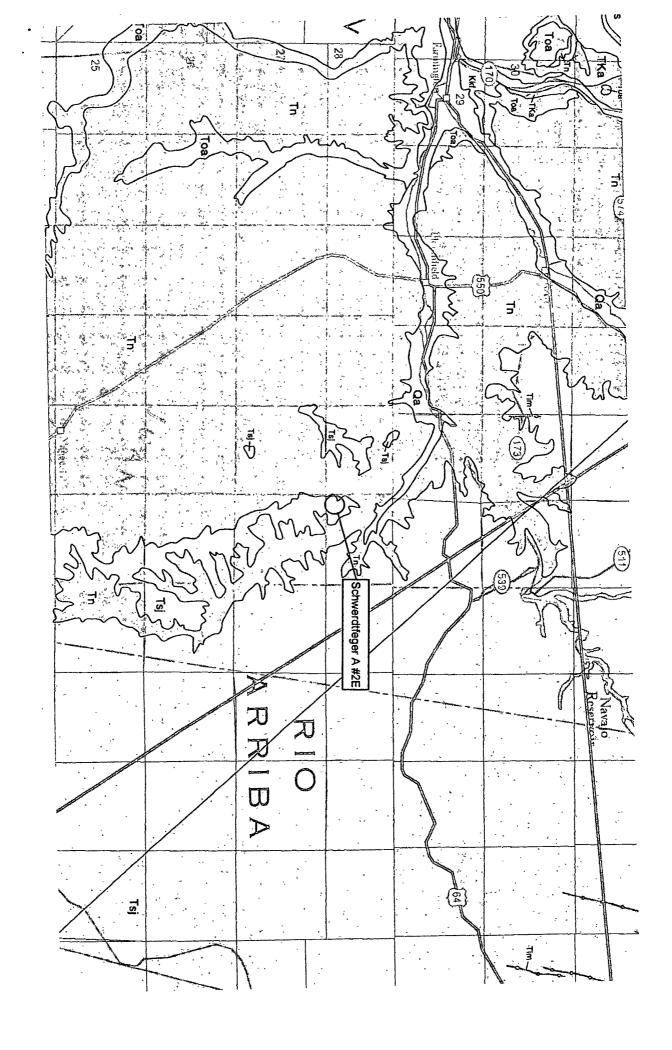
- 1) Soils: Surface soils at the proposed pit site are comprised of a coarse grained sand that was leveled and placed during well pad construction. The thickness of this sand is not presently known but is believed to be approximately 9 feet based on information from an unlined pit closure investigation conducted on June 2, 2004 (attached). Site inspection indicates this overlies a dense sandstone surface that outcrops throughout the region and in all directions surrounding the well pad (see Geology, below.)
- 2) Topography: The proposed pit site is located on a flat portion on the northwest side of the well pad. Surface drainage from this area of the well pad is towards the north. Regionally the site is located on a sandstone bench about 500 hundred feet above the Blanco wash, with the wash located about 1/4 mile west of the site.
- 3) Geology: Review of geologic maps published by the New Mexico Bureau of Geology and Mineral Resources, 2003, indicates the outcrop sandstone at the site is the San Jose Formation of Eocene age. This formation is described by this source as a dense interbedded sequence of sandstones, siltstones and variegated shales, formed in a fluvial type environment. This formation outcrops in all directions surrounding the well pad.
- 4) Surface Hydrology: Drainage from the proposed pit site is towards the north, based on surface topography. Visual inspection of the site did not present evidence that historical precipitation had made erosional channels that would harm the integrity of the pit site should a storm event occur while the pit is in use.
- 5) Groundwater Hydrology: Information researched in the New Mexico State Engineer's database did not report any water wells within 1 mile of the site. Based on topographic data and estimated groundwater depth maps published by the New Mexico Oil Conservation Division the depth to groundwater is estimated at greater than 500 feet from the proposed temporary pit bottom.
- 6) Ground Stability: The well pad and temporary pit site is located on a coarse grained sand. Visual inspection of the site did not show any faulting, fracturing, sink holes or erosional features that would indicate an unstable area. The site appears to be stable.
- 7) Wetlands, FEMA Flood Zones, and Mines: US Fish and Wildlife Wetlands Maps, FEMA FIRM Flood Zone Maps and New Mexico Office of Mines, Mills and Quarry maps were reviewed to identify any such zones in the area of the proposed pit. No flood zones, wetlands or mines/mills/quarries were identified within the NMOCD stipulated distances from the site. Data maps from the inquiry's are attached.
- 8) Private Residences, Wells, Springs, Schools, Hospitals, Institutions, Churches: The site was inspected for the evidence of these type structures and none were evident within 1 mile of the site. The NM Office of the State Engineer data base did not record any wells within 1 mile of the site.

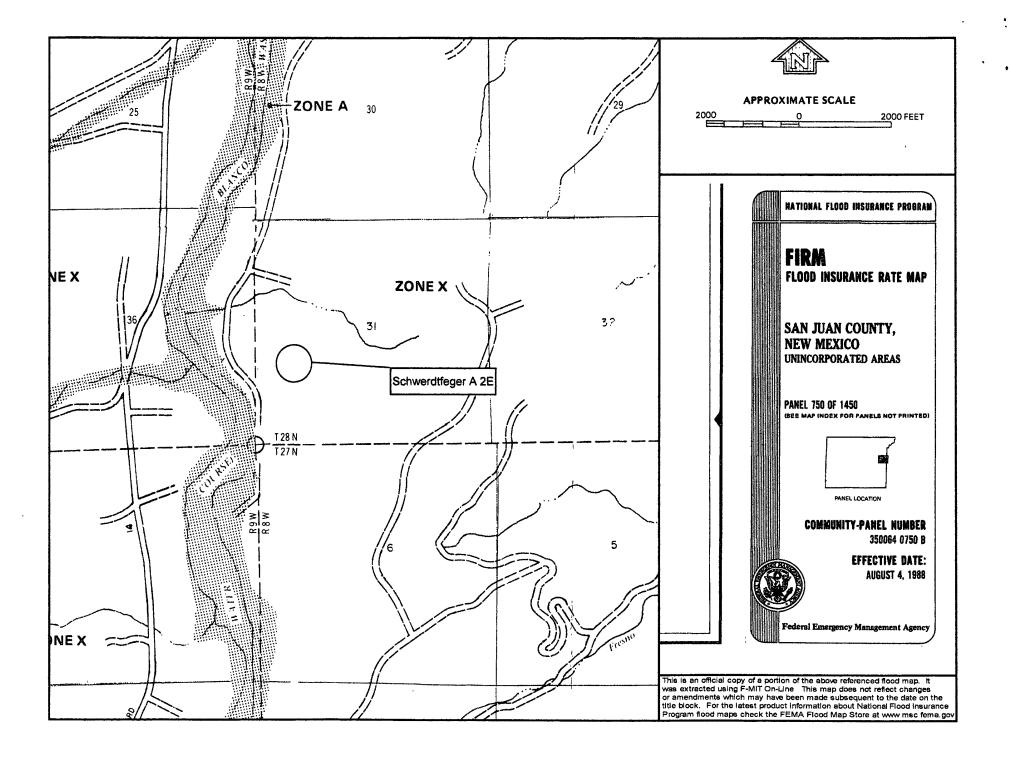
BLAGG ENGINEERING, INC. CLIENT: BP P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8/409</u>			
FIELD REPORT: PIT CLOSURE VERIFICATION	PAGE No:			
LOCATION: NAME: SCHWERDTFEGG A WELL#: 2E TYPE: SEP QUADJUNIT: L SEC: 31 TWP: 28N RNG: BW PM: NM CNTY: SJ ST: NM	DATE STARTED. 6-2-04 DATE FINISHED: 6-2-04			
QTR/FOOTAGE: 1520 5/1025 W NU/SW CONTRACTOR: HD (JU AGYM)	ENVIRONMENTAL JCS			
EXCAVATION APPROX. 15 FT. x 15 FT. x 9 FT. DEEP. CUBIC				
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD:	L.F.			
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 75 FT. NO				
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >100 NEAREST SURFACE NMOCD RANKING SCORE: O NMOCD TPH CLOSURE STD: SUCCO PPM	E WATER: _>/ou			
COLL AND EVEN AVAILAND DESCRIPTION. OVM CALIB. READ.	= <u>52,6</u> ppm			
OVM CALIB. GAS -				
SOIL TYPE: SAND SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER BEDRICK	0 9°B6			
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 DISCOLORATION/STAINING OBSERVED: (YES) NO EXPLANATION - GRAC - BLACK	(RISK ASSESSED)			
HC ODOR DETECTED: YES IND EXPLANATION - MODELATE				
SAMPLE TYPE: GRABICOMPOSITE - # OF PTS. ADDITIONAL COMMENTS: 15 x 15 x 3 Deld EARTHEN PIT. EXCAVATE BEDROXX W/ BACKHUE HIT FIRM BEDROXX SANDSTONE	TO 9'BG			
Bottom				
SCALE SAMP. TIME SAMP. ID LAB NO. WEIGHT (g) mL FREON DILU	TIONREADING CALC. (ppm)			
O FT				
	IT PROFILE			
MVO OVM	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
SAMPLE FIELD HEADSPACE				
1D (ppm) 1 @ 9 224 2 @	_15' >			
3 @ A	A´			
A 8 15 A 5 B				
a'				
LAB SAMPLES) _			
SAMPLE ANALYSIS TIME				
wen Grey				
D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW (HIDE CHLORIDUE) (H. = TEST HOLE; ~= APPROX; T.B. = TANK BOTTOM	K SANDSTUME			
TRAVEL NOTES: CALLOUT: 6-2-04 ONSITE: 6-2-04				
revised: 09/04/02	bei1005C.skf			

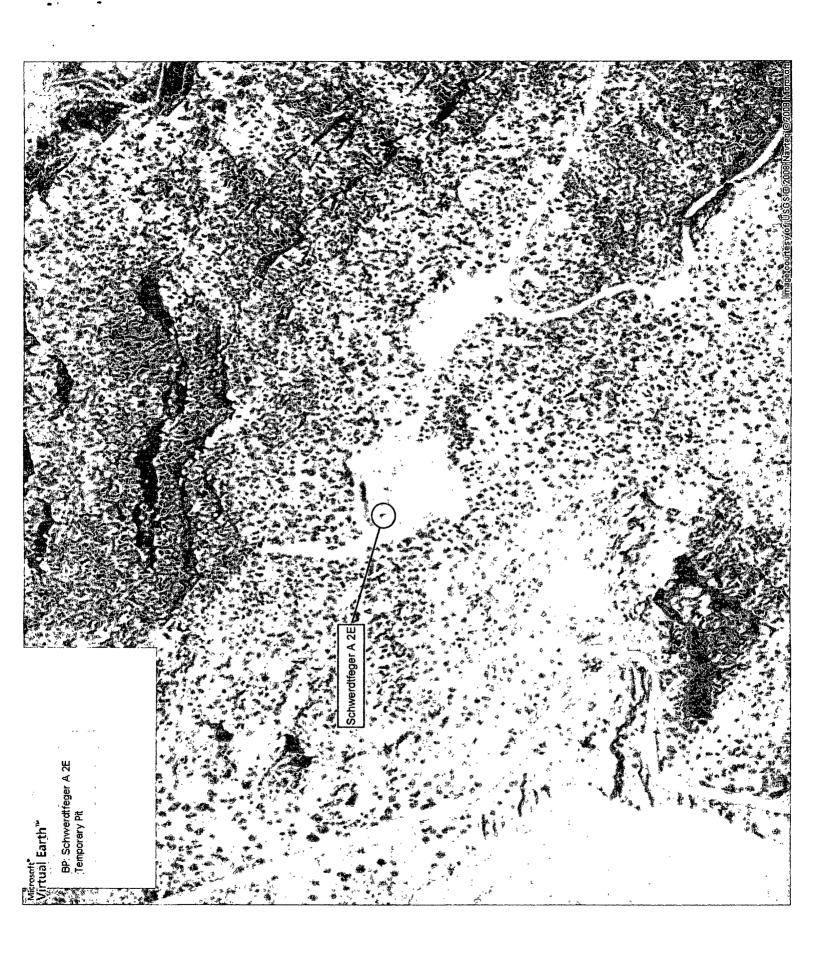


Scale: 1 inch equals 1000 feet

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New Mexico Office of the State Engineer POD Reports and Downloads

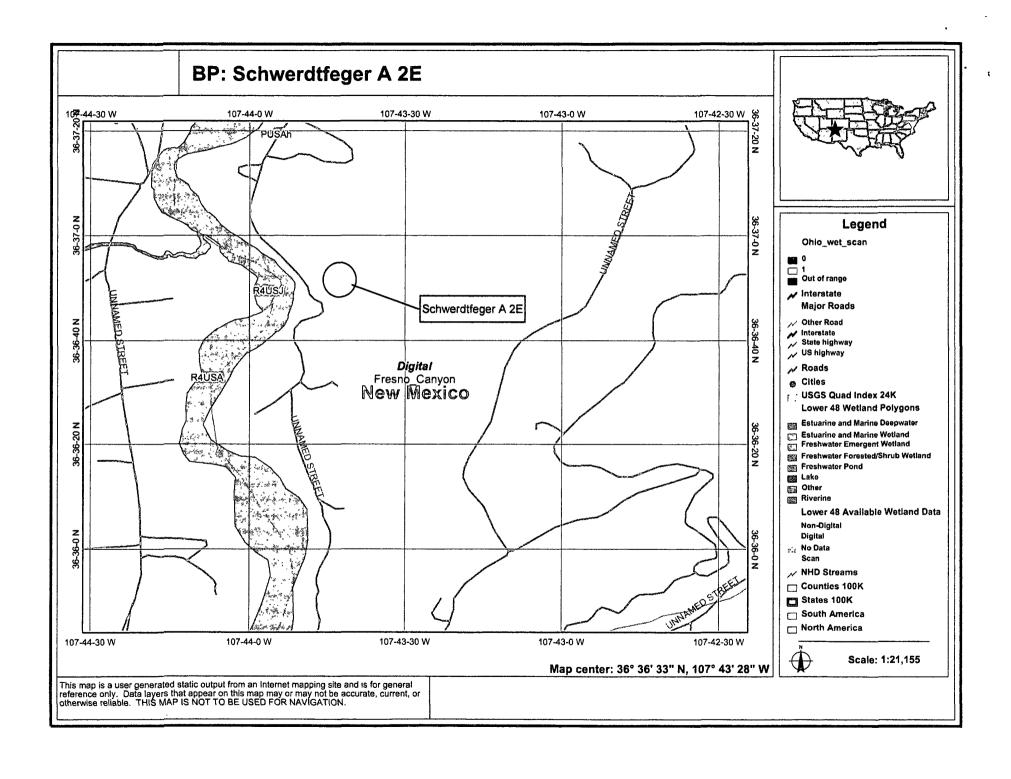
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New Mexico Office of the State Engineer POD Reports and Downloads

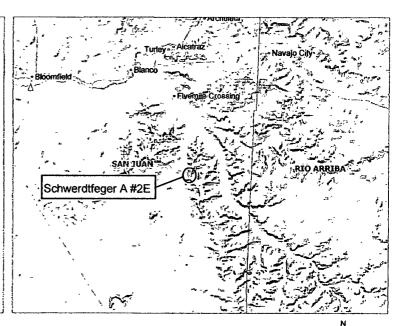
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MMQonline Public Version

Mines, Mills	& Quarries Commodity Groups
<u></u> Δ	Aggregate & Stone Mines
•	Coal Mines
¥	Industrial Minerals Mines
♥	Industrial Minerals Mills
Ø	Metal Mines and Mill Concentrate
Q	Potash Mines & Refineries
634 405	Smelters & Refinery Ops.
*	Uranium Mines
⊕	Uranium Mills
Population	
0	Cities (2000 Census)
Transportation	on









BP America Production Company

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

CERTIFIED MAIL RECEIPT

7007 1490 0005 0858 7803

November 4, 2008

Bureau of Land Management 1235 La Plata Highway Farmington, NM 87401

RE: Notice of Proposed Temporary Pit Construction & Subsequent Closure

Schwerdtfeger A 1E

Unit Letter L, Section 31, Township 28N, Range 8W

Dear Mr. Mark Kelly:

In regards to the captioned subject and requirements of the new NMOCD pit rule, this letter is notification that BP America Production Company is planning to construct and subsequently close the proposed temporary pit that will be used for workover operations on this location.

Should you have any questions, please feel free to contact me at 326-9425 in our Farmington office.

Sincerely,

Larry Schlotterback

Field Environmental Coordinator