District I
1625 N. French Dr , Hobbs, NM 88240
District II
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 below-grade tanks, submit to the appropriate 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.

#### <u>Pit, Closed-Loop System, Below-Grade Tank, or</u> Proposed Alternative Method Permit or Closure Plan Application

☐ Modification to an existin	op system, below-grade tank, o g permit ed for an existing permitted or	
Instructions: Please submit one application (Form C-144) pe	r individual pit, closed-loop syster	m, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of environment. Nor does approval relieve the operator of its responsibility to c	f liability should operations result in	pollution of surface water, ground water or the
Operator: BP AMERICA PRODUCTION COMPANY	OGRID #:	778
Address: 200 ENERGY COURT, FARMINGTON, NM 874	10	RCVD AUG 11 VB
Facility or well name: CASE A 004M		OIL CONS. DIV.
API Number: 3004533466	OCD Permit Number:	DIST. 3
U/L or Qtr/Qtr G Section 18 Township		
Center of Proposed Design: Latitude 36.89893		
Surface Owner: X Federal State Private Tribal Trust or India		
☑ 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       ☑ LL         ☐ String-Reinforced       Liner Seams:       ☑ Welded       ☐ Factory       ☐ Other         3.       ☐ Closed-loop System:       Subsection H of 19.15.17.11 NMAC         Type of Operation:       ☐ P&A       ☐ Drilling a new well       ☐ Workover or intent)         ☐ Drying Pad       ☐ Above Ground Steel Tanks       ☐ Haul-off Bins       ☐         ☐ Lined       ☐ Unlined       Liner type: Thickness       mil       ☐         Liner Seams:       ☐ Welded       ☐ Factory       ☐ Other	Volume: 900 bbl  Drilling (Applies to activities which Other HDPE PVC	Dimensions: L 35 x W 35 x D 8
Below-grade tank:       Subsection I of 19.15.17.11 NMAC         Volume.	liner, 6-inch lift and automatic over	erflow shut-off
Alternative Method: Submittal of an exception request is required. Exceptions must be sub-	mitted to the Santa Fe Environmen	ntal Bureau office for consideration of approval.

	<del></del>
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify  Hogwire fencing as per Design Plan	hospital,
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)	
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	
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)  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 accepmaterial are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
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 - 1WATERS 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)  - Visual inspection (certification) of the proposed site, Acrial photo; Satellite image	☐ Yes ☐ No ☑ NA
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	☐ 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.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
Within the area overlying a subsurface mine.  Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS, NM Geological Society; Topographic map	☐ Yes ☑ No
Within a 100-year floodplain FEMA map	☐ Yes ☑ No

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 19.15.17.11 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:
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 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  Luner 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
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 I of 19.15.17.13 NMAC  Site Reclamation 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, drill facilities are required.		
Disposal Facility Name: Dis	sposal Facility Permit Number:	
Disposal Facility Name: Dis	sposal 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	on or in areas that will not be used for future serv	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 requirements of Subsection I of  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of	19.15.17.13 NMAC	2
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the clos provided below. Requests regarding changes to certain siting criteria may require acconsidered an exception which must be submitted to the Santa Fe Environmental Budemonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for gas a considered to the Santa Fe Environmental Budemonstrations of equivalency are required.	lministrative approval from the appropriate disti reau 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 ob	tained 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 ob	tained 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 ob	tained from nearby wells	Xes    No     NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significal lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	cant watercourse or lakebed, sinkhole, or playa	☐ Yes ⊠ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in e - Visual inspection (certification) of the proposed site; Aerial photo; Satellite im		☐ Yes ⊠ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that watering purposes, or within 1000 horizontal feet of any other fresh water well or sprin - NM Office of the State Engineer - iWATERS database; Visual inspection (cert	g, in existence at the time of initial application.	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh water wadopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval of	·	☐ Yes ⊠ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual in	spection (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 and	l 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 forby a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Sultantic Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Sultantic Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad)  Protocols and Procedures - based upon the appropriate requirements of 19.15.17  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection I of Soil Cover Design - based upon the appropriate requirements of Subsection II of Re-vegetation Plan - based upon the appropriate requirements of Subsection I of	ments of 19.15.17.10 NMAC psection F of 19.15.17.13 NMAC priate requirements of 19.15.17.11 NMAC - based upon the appropriate requirements of 19.1 .13 NMAC ments of Subsection F of 19.15.17.13 NMAC section F of 19.15.17.13 NMAC cuttings or in case on-site closure standards cannot 19.15.17.13 NMAC 19.15.17.13 NMAC	15.17.11 NMAC

Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate	e and complete to th	e best of my knowledge and belief.
Name (Print): LARRY SCHLOTTERBACK	Title: ENV	IRONMENTAL COORDINATOR
Signature: Law Selfthbur	Date:	AUGUST 6, 2008
e-mail address: larry.schlotterback@bp.com	Telephone:	(505) 326-9200
OCD Approval:  Permit Application (including closure plan)  Closure Plan	o (only) OCD	Conditions (see attachment)
OCD Representative Signature: 33el 6		Approval Date: <u>8-15-08</u>
	OCD Permit Numb	per:
Closure Report (required within 60 days of closure completion): Subsection K Instructions: Operators are required to obtain an approved closure plan prior to 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	implementing any c completion of the c	losure activities and submitting the closure report. closure activities. Please do not complete this
	Closure Comp	letion Date:
22.  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternation  If different from approved plan, please explain.	ve Closure Method	☐ Waste Removal (Closed-loop systems only)
Closure Report Regarding Waste Removal Closure For Closed-loop Systems T Instructions: Please indentify the facility or facilities for where the liquids, drillin two facilities were utilized.  Disposal Facility Name:	ng fluids and drill ci	
Disposal Facility Name:	Disposal Facility Pe	rmit Number:
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) \( \subseteq \text{No} \)	areas that will not b	be used for future service and operations?
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	· · · · · · · · · · · · · · · · · · ·	
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)  On-site Closure Location: Latitude Longitude	es must be attached	
25 Operator Closure Certification:		
I hereby certify that the information and attachments submitted with this closure rep belief. I also certify that the closure complies with all applicable closure requirement		
Name (Print):	Title:	
Signature:	Date:	
e-mail address:	Telephone:	

#### 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. The pit will be constructed with a minimum 2:1 horizontal to vertical slope on all sidewalls. 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.
- 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.

#### 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.
- 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.

#### 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;

- 1. Removal of all liquids from the pit prior to closure and dispose of the liquids in a NMOCD division-approved 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
ТРН	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 300.1	1,000 (gw >100')

Notes:

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

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 300.1	1,000 (gw >100')

Notes:

mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, gw = groundwater, 50-100 or >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

#### BLAGG ENGINEERING, INC.

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

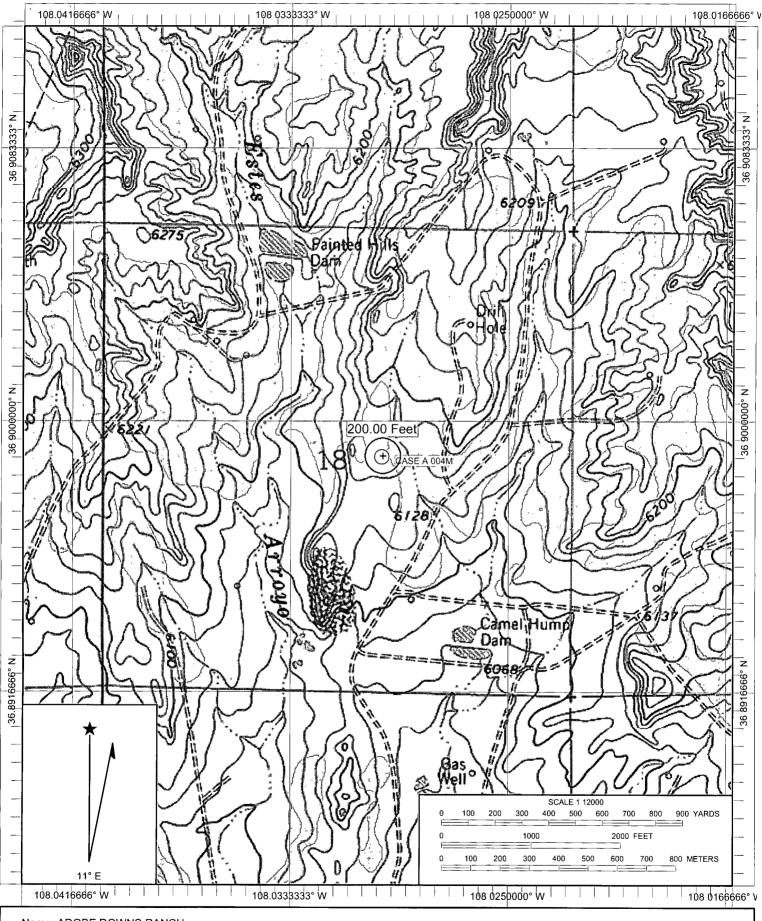
August 6, 2008

BP America Production Company Case A # 4M API #: 30-045-33466 (G) Section 18 – T31N – R11W San Juan County, New Mexico

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

- 1) <u>Topography</u>: The well site is located east of Estes Arroyo and approximately 5 ½ miles northwest of Aztec, New Mexico. The proposed temporary (wash) pit is located on a flat portion, west of the well head position. The site surroundings consist of exposed sandstone with a varying thickness of coarse grained sand.
- 2) <u>Soils</u>: Surface soil at the proposed pit site is comprised primarily of a coarse grained sand. The thickness of this soil is unknown but likely extends vertically to sandstone at an unknown depth (see Geology, below).
- 3) <u>Geology</u>: Review of geologic maps published by the New Mexico Bureau of Geology and Mineral Resources, 2003, indicates the outcrop at the site is the Nacimiento Formation of Paleocene age. This formation is described as a gray and brown shale and tan, medium grained and conglomeratic sandstone with a thickness as much as 240 meters. Its origin developed from fluvial and lacustrine type environments.
- 4) <u>Surface Hydrology</u>: Drainage from the proposed pit site is towards the south, 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. Characteristics of the aquifer, including parameters such as transmissivity, porosity or permeability, are not pertinent to this data inquiry. In addition, no new manmade ponds, ditches, or any other surface depressions for surface water accumulation purposes were observed in the immediate vicinity.
- 5) Groundwater Hydrology: Information researched in the New Mexico State Engineer's well database did not report any water wells within one (1) mile of the site. Based on topographic data, it appears that groundwater is well in excess of 50 feet below surface grade. With bedrock sandstone being exposed around the site's perimeter, any possible uncontrolled release from the pit in all likelihood would not impact groundwater.
- 6) <u>Ground Stability</u>: The well pad and proposed 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.

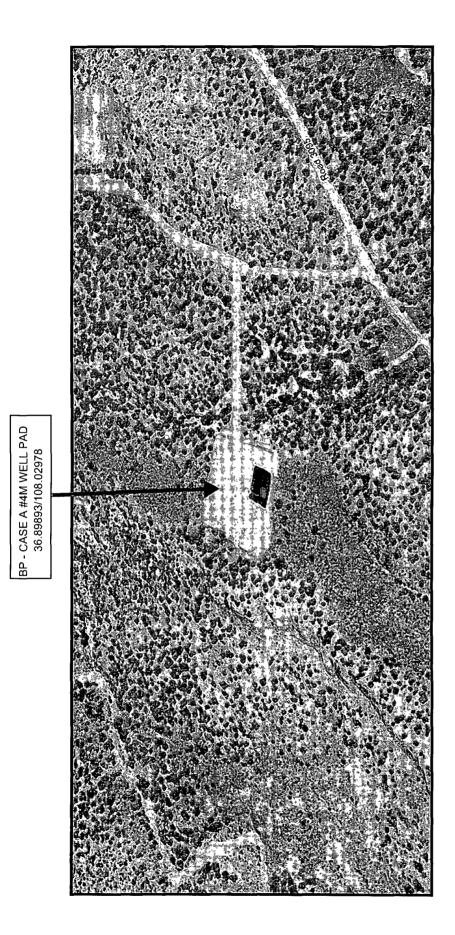
- 7) Wetlands, FEMA Flood Zones, and Mines: U.S. Fish and Wildlife Wetlands Maps, FEMA FIRM Flood Zone Maps and New Mexico Office of Mines, Mills and Quarry maps were reviewed to identify any such zones in the area of the proposed pit. No such wetlands, flood zones or mines/mills/quarry's were identified within the NMOCD stipulated distances from the site. Maps of the data search are attached.
- 8) <u>Private residences, wells, springs, schools, hospitals, institutions, churches</u>: The site was inspected for evidences of buildings, wells, etc. and no such structures were evident within a one (1) mile of the site. The NM Office of State Engineer records were reviewed for well data. No such data was found within one (1) mile of the site (records search attached).



Name: ADOBE DOWNS RANCH

Date: 8/6/2008

Caption: Case A #4M Unit G, Sec. 18, T31N, R11W 36.89893/108.02978



## New Mexico Office of the State Engineer POD Reports and Downloads

Township: 31N	Range: 11W	Sections: 7,8	8,17,18,19,20	
NAD27 X:	Y:	Zone:	Search Radius:	
County:	Basin:		Number: Suffix:	
Owner Name: (First)	(La	est) <b>⊚</b> All	ONon-Domestic ODomestic	
POD/-Sur		er-Column-Report	g Depth to Water-Report	
	Clear Form.	, iWATERS Me	enu—— Help	

#### AVERAGE DEPTH OF WATER REPORT 08/06/2008

No Records found, try again

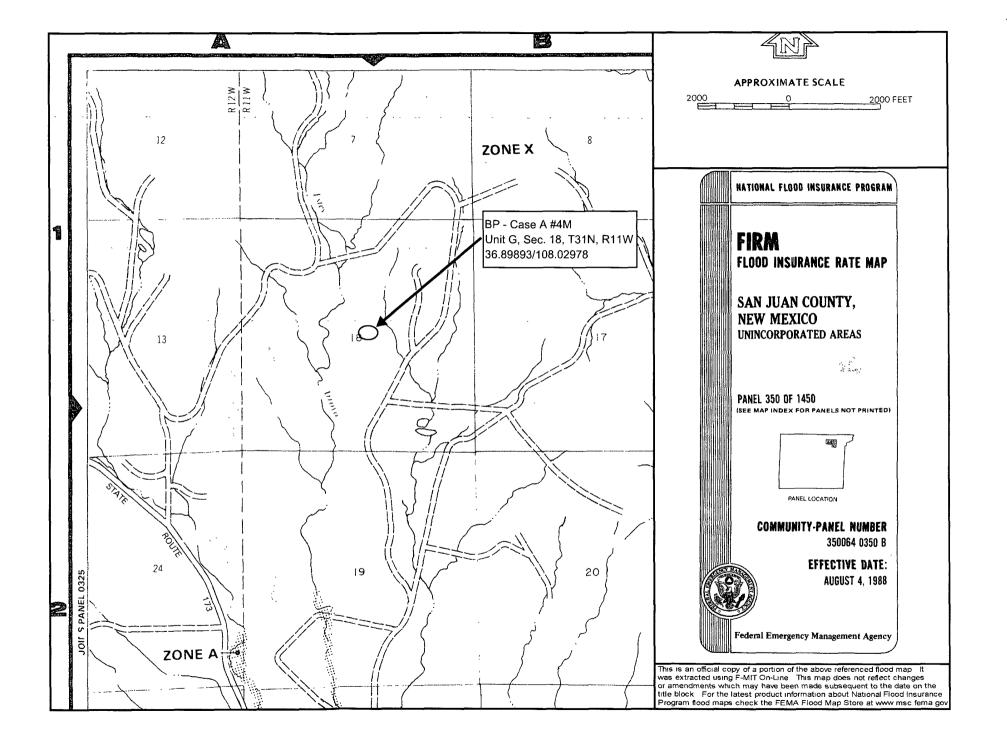
## New Mexico Office of the State Engineer POD Reports and Downloads

Township: 31N	Range: 12W	Sections: 12,	13,24
NAD27 X:	) Y:	Zone:	Search Radius:
County:	Basin:		Number: Suffix:
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	Clear-Form	ŢŴĄŢĘŖS-Me	nu Help

### AVERAGE DEPTH OF WATER REPORT 08/06/2008

							(Depth	Water in	Feet)
Bsn	Tws	Rng Sec	Zone	X	Y	Wells	Min	Max	Avg
SJ	31N	12W 24				1	85	85	85

Record Count: 1



#### **Definitions of FEMA Flood Zone Designations**

Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map

Each zone reflects the severity or type of flooding in the area

#### **Moderate to Low Risk Areas**

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
B, C, and X	Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.

#### **High Risk Areas**

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
А	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones
AE, A1-A30	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
АН	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones

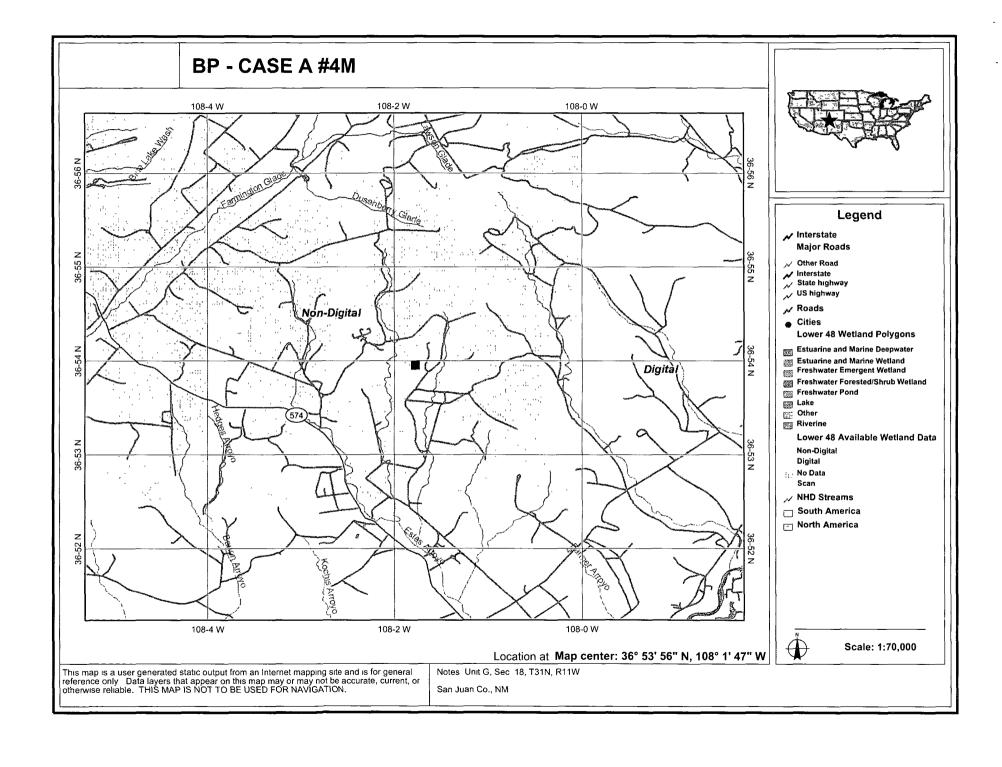
#### **High Risk - Coastal Areas**

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION			
v	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones			
VE, V1 - 30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.			

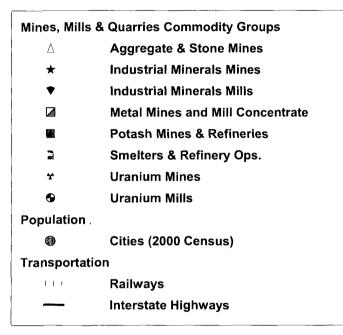
#### **Undetermined Risk Areas**

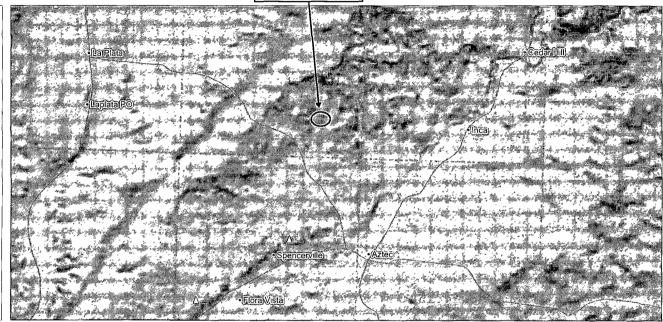
ZONE	DESCRIPTION
	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.



## BP - Case A #4M Mines, Mills, Quarries Web Map

General Area of BP's Case A #4M well site.









# N

### FIGURE 1

1 DEGREES = 364,567,20 FEET

0.0001 DEG. X /

X/Y DEG.

36.45672 FT. KNOWN FT.

X INCREASES TO LEFT Y INCREASES TO TOP

SIN 0 = OPPOSITE/HYPOTHENUSE

COS 0 = ADJACENT/HYPOTHENUSE

TAN Θ = OPPOSITE/ADJACENT



PIT & MARKER PLACEMENT(S) LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (GPS, TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS) ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE

RECORDED

X = 108.02997 DEG.

Y = 36.89893 DEG.

CALCULATED

X = 108.02991 DEG.

Y = 36.89893 DEG.

WELL 48.970151 FT. HEAD

⊕ 1.710075 FT.

PROPOSED WASH PIT LOC. ~ 49 FT., N88W



RECORDED

X = 108.02978 DEG.

Y = 36.89893 DEG.

NMOCD DATA

X = 108.02983 DEG.

Y = 36.89889 DEG.

1 INCH = 30 FT.

30

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87

60 FT.

**BLOOMFIELD, NEW MEXICO 87413** 

PHONE (505) 632-1199

PROJECT: PERMIT INFO.

DRAWN BY: NJV

FILENAME: Case A 4M GPS & D-B.SKF

DATE: 08-06-08 NJV

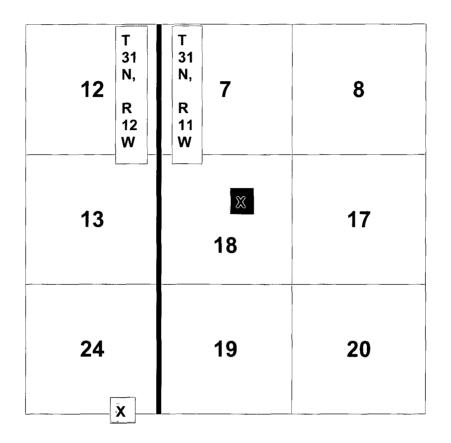
SITE MAP

08/08

DP AMERICA FRODUCTION 60...
CASE AND AM
SWILLIA SEC. 10. TE1N, R11W
SAN JUAN COUNTY, NEW MEXICO

## BP - CASE A #4M

# Section Schematic gas well / water well locations



### NOTES:

- Water well locations estimated from N. M. Office of the State Engineer's POD Reports & Downloads.
- 9 SECTION NUMBER
- x WATER WELL LOCATION



**BP America Production Company** 

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

August 6, 2008

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

RE: Notice of Proposed Temporary Pit Construction & Subsequent Closure

Case A 004M

Unit Letter G, Section 18, Township 31N, Range 11W

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 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

PO Box 1980, Hobbs NM 88241-1980 District II PO Drawer KK, Artesia, NM 87211-0719 District III. 1000 Rio Brazos Rd., Aziec, NM 87410

#### State of New Mexico Energy, Minerals & Natural Resources Department

Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe NM 87504 2009

Form C-102

District IV	Sama re, r	1W 875U4-2088		Fee Lease -	3 Copie
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		perty Nanic	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* Well Number	3,6 °C
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BLM Record

ne zakima

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# PAD LAYOUT PLAN & PROFILE BP AMERICA PRODUCTION COMPANY Case A # 4M

2580' F/NL 2105' F/EL SEC. 18, T31N, R11W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO Lat: 36.89899 Long: 108.02979

Lat: 36°53'56" Long: 108°01'47"

