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.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Proposed Alternative Method Permit or	Closure Plan App	lication
Type of action: Permit of a pit, closed-loop system, below Closure of a pit, closed-loop system, below Modification to an existing permit Closure plan only submitted for an existing below-grade tank, or proposed alternative method	v-grade tank, or proposed	alternative method
Instructions: Please submit one application (Form C-144) per individual pit, c	losed-loop system, below-gro	ade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should op- nivironment. Nor does approval relieve the operator of its responsibility to comply with any other		
Operator: BP AMERICA PRODUCTION COMPANY	OGRID #:	778
Address: 200 ENERGY COURT, FARMINGTON, NM 87410		
Facility or well name: HUGHES B 004A		
API Number: 3004522717 OCD Permit N	umber:	
U/L or Qtr/Qtr C Section 20 Township 290N Rang		
Center of Proposed Design: Latitude 36.71512 Longitude	-107.70183	NAD: □1927 ⊠ 1983
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment		
Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil LLDPE HDPE String-Reinforced Liner Seams: Welded Factory Other Volume:		
☐ <u>Closed-loop System</u> : Subsection H of 19.15.17.11 NMAC Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies	o activities which require pr	mor approval of a parmit or nation of
intent)	o activities which require pr	for approvar of a permit of notice of
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other		1010
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDI	E PVC Other	910111213141576
Liner Seams: Welded Factory Other		
4.		50 RECEIVED 6 2008 2008 2008 2008 2008 2008 2008 20
Below-grade tank: Subsection I of 19.15.17.11 NMAC Double wall/Double bott		m A09 2008
Volume: 95 bbl Type of fluid: Produced water		OIL CONS. DIV. DIST. 3
Tank Construction material: Steel		40
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift an		off Co. 62827282.3000
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other		68515.36
Liner type: Thicknessmil		
5. Alternative Method:		
Submittal of an exception request is required. Exceptions must be submitted to the Santa	. Fe Environmental Bureau o	office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school institution 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,
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)	
s. 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. (Hogwire Fencing in Design Plan) Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
10. 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 accumaterial are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approfice 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 drabove-grade tanks associated with a closed-loop system.	opriate district approval.
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
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; Aerial photo; Satellite image	☐ Yes ☐ No 図 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
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 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 Onl Field Waste Stream Characterization Monitoring and Inspection 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 Method - Confirmation sampling only - Protocols and Procedures included in attached Closure Plan 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 Steel Tanks or Haul-off Bins Only: (19.15.17.13.I Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.						
Disposal Facility Name: Disposal Facility Permit Number:						
Disposal Facility Name: Disposal Facility Permit Number						
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operation Yes (If yes, please provide the information below) No						
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 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	C					
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disting considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justi demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	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 obtained 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 obtained from nearby wells	☐ Yes ☐ No ☐ NA					
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA					
Within 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. - 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; 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 floodplam FEMA map	☐ Yes ☐ No					
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. 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 Waste Material Sampling Plan - 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 or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	15.17.11 NMAC					

Operator Application Certification:		
I hereby certify that the information submitted with this application is true, accura	-	-
Name (Print): LARRY SCHLOTTERBACK	Title: ENVIRONMENTAL C	COORDINATOR
Signature: Kauy Sellilulu	Date:AUGUST 12 2008	3
e-mail address: larry.schlotterback@bp.com	Telephone: (505) 326-9200	
OCD Approval: Permit Application (including closure plan) Closure Plan		
OCD Representative Signature: Brandon Found	Approval Date:	8-25-08
Title: Emino Spec	OCD Permit Number:	
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subsection 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 clo	implementing any closure activities and a completion of the closure activities. Ple ure activities have been completed.	
	Closure Completion Date:	
22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternat If different from approved plan, please explain.	ve Closure Method Waste Removal	(Closed-loop systems only)
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems</u> <i>Instructions: Please indentify the facility or facilities for where the liquids, drill two facilities were utilized.</i>		
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:	Disposal Facility Permit Number:	
Were the closed-loop system operations and associated activities performed on or Yes (If yes, please demonstrate compliance to the items below) No	areas that will not be used for future serv	ice 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	rs .	
Closure Report Attachment Checklist: Instructions: Each of the following ite	is must be attached to the closure report.	Please indicate, by a check
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 Longitu	eNAI	D: 1927 1983
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure rebelief. I also certify that the closure complies with all applicable closure requirements.		
Name (Print):	Title:	
Signature:	Date:	
e-mail address:	Telephone:	

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Below-Grade Tank Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) shall construct a below-grade tank (BGT) with the following guidelines. Any deviations from this plan will be addressed with the submittal of the New Mexico Oil Conservation Division's (NMCOD) form C-144 at the time of the pit permit application.

- The BGT will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
- 2) Prior to constructing a BGT, top soil will be stripped for use as a final cover or fill at the time of closure.
- 3) An upright sign, not less than 12" x 24" with lettering not less than 2" height will be placed on the fence surrounding the BGT. 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, range, and emergency phone numbers.
- 4) BP will fence its BGTs (and possibly associated surface equipment, i.e. separator units, production tanks, etc.) utilizing 48" steel mesh field-fence (hogwire) with a ½ inch diameter metal top rail (sucker rod). Perimeter T-post will be installed roughly every 10 feet. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including a BGT.
- 5) BP will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church with a chain link security fence, at least six (6) feet in height with at least two (2) strands of barbed wire at the top. BP will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
- 6) It is understood that the NMOCD District III office may approve an alternative to this requirement if BP can demonstrate that an alternative provides equivalent or better protection. BP also recognizes that the NMOCD District III office may impose additional fencing requirements for protection of wildlife in particular areas.
- 7) The following requirements adhere to Subsection I of 19.15.17.11 NMAC.
 - a. BP will ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight.
 - b. A BGT system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.
 - c. The BGT will be constructed to prevent overflow and the collection of surface water run-on by using earthen berms and/or diversion dikes.
 - d. Construction and usage of a BGT that does not have double walls provided that the BGT's side walls are open for visual inspection for leaks, the BGT's bottom is elevated a minimum of six (6) inches above the underlying ground surface and the BGT is underlain with a geomembrane liner, which may be covered with gravel, to divert leaked liquid to a location that can be visually inspected. BP will equip BGTs designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the NMOCD District III office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility will comply with EPA SW-846 method 9090A..
 - e. Any other BGT, in which the side walls are not open for visible inspection for leaks shall be double

- walled with leak detection capability.
- f. It is understood BP may construct a BGT according to an alternative system that the NMOCD District III office approves based upon the demonstration that the alternative provides equivalent or better protection.
- g. BP's BGTs constructed and installed prior to June 16, 2008 that have the side walls open for visual inspection and are placed upon a geomembrane liner but does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC are not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as the BGTs demonstrate integrity. If the existing BGTs do not demonstrate integrity, then BP will promptly remove those BGT and install a BGT that do comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- h. BP's BGTs constructed and installed prior to June 16, 2008 that do not comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC or do not comply with Paragraph (5) of Subsection I of 19.15.17.11 NMAC will equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, within five (5) years after June 16, 2008. If existing BGTs do not demonstrate integrity, BP will promptly remove those BGTs and install a BGT that do comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Below-Grade Tank General Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following guidelines. Any deviations from this plan will be addressed with the submittal to the New Mexico Oil Conservation Division's (NMOCD) form C-144 at the time of the BGT permit application.

- 1) The BGT will be operated and maintained to contain liquids and prevent contamination of fresh water, protect public health and the environment.
- 2) The fluids contents 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.
- 3) No hazardous waste will be discharged or stored in a BGT.
- 4) If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then BP will notify the NMOCD's District III office within 48 hours of the discovery and repair the damage or replace the liner.
- 5) If a BGT develops a leak, or if any penetration of the pit liner or BGT occurs below the liquid's surface, then BP will remove all liquid above the damage or leak line within 48 hours, notify the NMOCD's District III office within 48 hours of the discovery and repair the damage or replace the pit liner and/or BGT.
- 6) BP will install a BGT to prevent the collection of surface water run-on.
- 7) The following requirements adhere to Subsection D of 19.15.17.12 NMAC.
 - a. BP will not allow its BGTs to overflow or allow surface water run-on to enter into its BGTs.
 - b. BP will remove any visible or measurable layer of oil from the fluid surface of any of its BGTs.
 - c. BP will inspect BGTs at least monthly and maintain a written record of each inspection for five (5) years.
 - d. BP will maintain adequate freeboard to prevent overtopping of its BGT.

BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

As stipulated in Rule 19.15.17.13 NMAC, the following information adheres to the requirements established in closing below-grade tanks (BGTs) on BP America Production Company (BP) well sites. This plan will address the standard protocols and procedures for closure of below grade tanks. If deviations from this plan are necessary, any specific changes will be included with New Mexico Oil Conservation Division (NMOCD) form C-144.

BP shall close its existing BGTs that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five (5) years after June 16, 2008, if not retrofitted to comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC. BP shall close its permitted BGTs within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC in accordance with this closure plan after receiving NMOCD's division District III office approval.

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

- 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, confirmation sampling for 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.
- 2. 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.
- 3. Remove liquids and sludge from the BGTs prior to implementing a closure method (confirmation sampling) and dispose of the liquids and sludge in a NMOCD's division-approved facility. A list of BP approved disposal facilities are included at the end of this document.
- 4. Remove the BGTs and dispose of it in a NMOCD's division-approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD's division District III office approves.
- Remove any on-site equipment associated with a BGTs unless the equipment is required for some other purpose.
- 6. BP will test the soils beneath the BGTs to determine whether a release has occurred. At a minimum, a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release will be analyzed for BTEX, TPH and chlorides. The testing methods and closure standards for those constituents are 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	100
Chlorides	US EPA Method 300.0	250 or background

Notes:

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

- 7. BP will notify the division District III office of its results on form C-141. It is understood that the NMOCD may require additional delineation upon review of the results.
- 8. If it is determined that a release has occurred, then BP will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
- 9. If the confirmation sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP will backfill the excavation, with NMOCD's preapproval, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The NMOCD prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

- 10. 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
- 11. Reclamation will follow 19.15.17.13G (1) and (2).
 - a. Once the BGT has been approved for closure by NMOCD, the BGT location and all areas associated with the BGT including associated access roads will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. It is understood that BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, 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.
- 12. Soil cover will follow 19.15.17.13H (1) and (3).
 - a. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
 - b. 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.
- 13. 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.

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

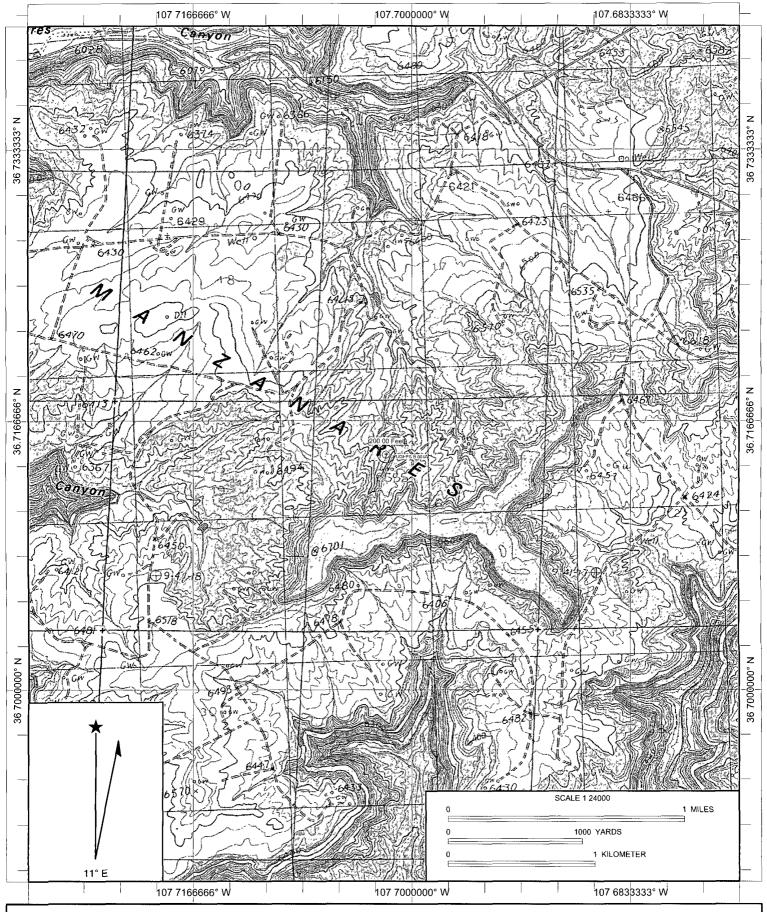
August 12, 2008

BP America Production Company Hughes B #4A (C) Section 20 – T29N – R8W API #: 30-045-22717 San Juan County, New Mexico

Hydrogeology Report (Pursuant to NMAC 19.15.17.9, Subsection B, Paragraph 4)

- 1) <u>Topography</u>: The well site is located approximately seven and one quarter (7 1/4) miles east-southeast of Blanco, New Mexico. Regionally the site is located atop of Manzanares Mesa and approximately 224 lateral feet from the nearest surface drainage trending north-south. The proposed below-grade tank (BGT) is located on a flat portion on the east side of the well pad. The site surroundings consist of exposed sandstone with a varying thickness of coarse grained sand to silty sand.
- 2) <u>Soils</u>: Surface soils at the proposed BGT site are comprised of a coarse grained sand with imported crushed gravel (road based). The thickness of this sand to silty sand at the site is approximately five (5) feet. Recent pit closures conducted at the site detail a silty clay was exposed between five (5) to eight (8) feet below grade prior to shale bedrock being encountered at approximately eight (8) feet.
- 3) Geology: Review of the geologic map 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 a dense interbedded sequence of sandstones, siltstones and variegated shales, formed in a fluvial type environment.
- 4) <u>Groundwater Hydrology</u>: 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 shale bedrock being recorded at eight (8) feet below grade from a 2004 pit closure document, any possible uncontrolled release from the BGT would in all likelihood, not impact groundwater.
- 5) <u>Surface Hydrology</u>: Surface run-off at the center of the well pad is towards the west. 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. No new manmade ponds, ditches, or any other surface depressions for surface water accumulation purposes were observed in the immediate vicinity. In addition, topographic or visual inspection of the site did not present evidence that any continuously flowing watercourse or any other significant watercourse or lakebed, sinkhole or playa lake were within 200 lateral feet from the proposed BGT location.

- 6) Private residences, wells, springs, schools, hospitals, institutions, churches: The site was inspected for evidences of buildings, wells, etc. and no such structures were evident within 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).
- 7) Wetlands, FEMA Flood Zones, and Mines: U.S. Fish and Wildlife Wetlands, FEMA FIRM Flood Zone, and New Mexico Office of Mines, Mills and Quarries maps were reviewed to identify any such zones in the area of the proposed BGT. All of the specified areas exceed the required distances cited in 19.15.17.10 NMAC relative to the proposed BGT location. Maps of the data search are attached.
- 8) <u>Ground Stability</u>: The BGT is positioned on a flat grade and within the eastern most half of the well pad. Visual inspection of the site did not show any faulting, fracturing, sink holes or erosional features that would indicate an unstable area.

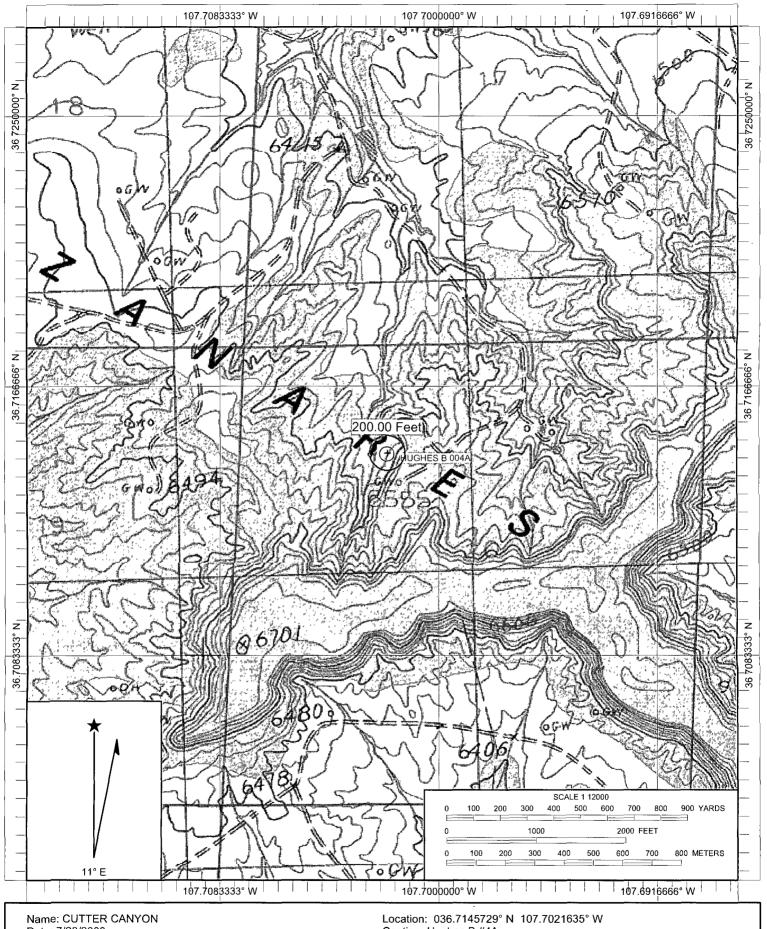


Name: CUTTER CANYON

Date: 7/28/2008

Scale: 1 inch equals 2000 feet

Location: 036.7145729° N 107.7021635° W Caption: Hughes B #4A Unit C, Sec. 20, T29N, R8W



Date: 7/28/2008

Scale: 1 inch equals 1000 feet

Caption: Hughes B #4A Unit C, Sec. 20, T29N, R8W

Live Search Maps

Page 1 of 1

BP - HUGHES B #4A WELL PAD 36.71480/107.70208



New Mexico Office of the State Engineer POD Reports and Downloads

Township: 29N	29N Range: 08W Sections: 16,17,18,19,20,21,28,29,30							
NAD27 X:	Y: (Zone:	Sea	arch Radius:	•			
County:	Basin:		Nı	ımber:	Suffix:			
Owner Name: (First)	(La	ast) ◉All	ON	Ion-Domestic	ODomestic			
POD / Su		Avg. er-Column Report		ater-Report				
(Clear-Form—]	iWATERS,Mer	ıu	0				

AVERAGE DEPTH OF WATER REPORT 08/11/2008

								(Depth	Water in	Feet)
Bsn	Tws	Rng	Sec	Zone	x	Y	Wells	Min	Max	Avg
SJ	29N	08W	18				1	70	70	70
SJ	29N	08W	21				2	406	406	406

Record Count: 3

New Mexico Office of the State Engineer POD Reports and Downloads

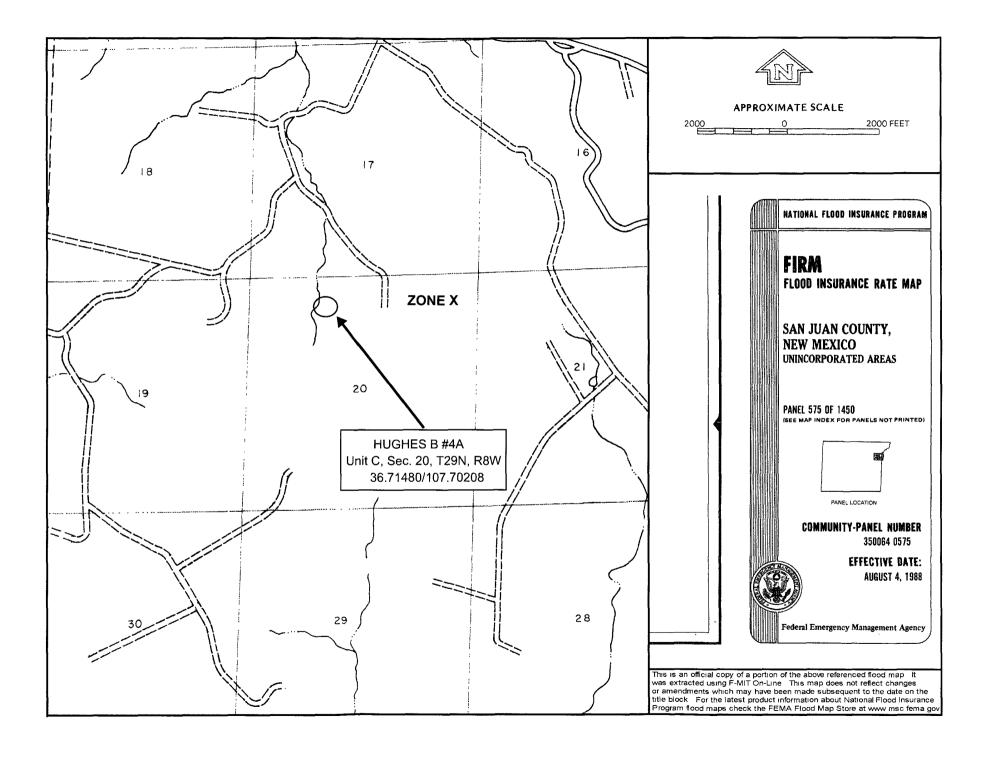
Township: 29	N Range: 08W	Sections: 16,1	7,18,19,20,21,28,2	9,30	
NAD27 X:	Y:	Zone:	Search Ra	dius:	
County:	Basin: 1	Ser.	Number:	Suffix:	.
Owner Name: (First)	(Last)		○ Non-Dome	stic O Domesti	c All
POD://Surface;Data;R	eport Av	g.Depth.to.Water.F	Report	Water Column Rep	ont
	Clear Form	iWATERS Men	uHelp.		
	·			788 Date of the second	

WATER COLUMN REPORT 08/11/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)

	(quarter	s are	e bi	gge	st	. to	smalles	t)		Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column		
SJ 00003	29N	08W	18	1						525				
SJ 00004	29N	W80	18	1						591	70	521		
SJ 03050	29N	W80	18	2	3	2				600				
SJ 00019	29N	W80	21	2						502				
SJ 00005	29N	08W	21	3						606	406	200		
SJ 00025	29N	08W	21	3						606	406	200		

Record Count: 6



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.	

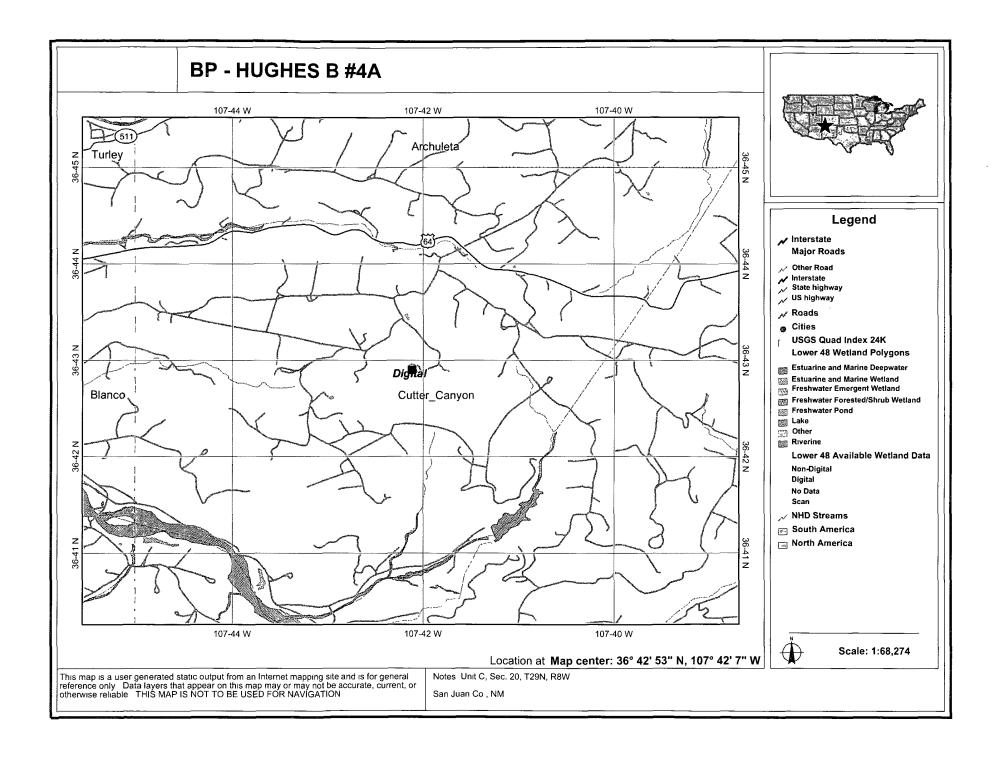
High Risk - Coastal Areas

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

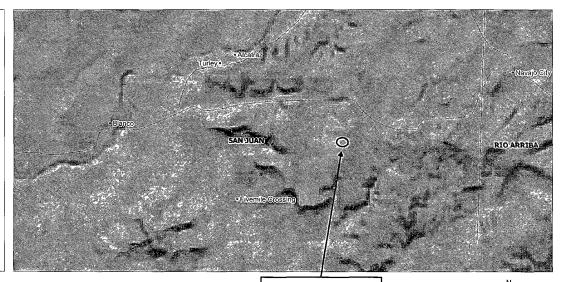
Undetermined Risk Areas

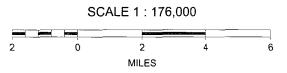
ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted Flood insurance rates are commensurate with the uncertainty of the flood risk

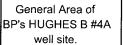


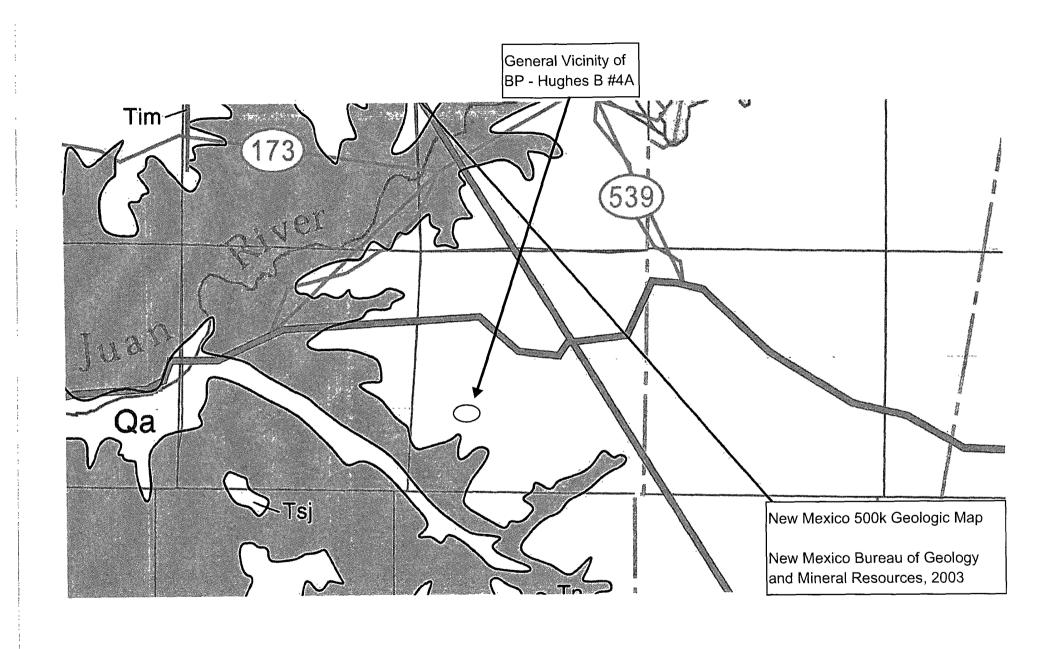
BP - HUGHES B #4A Mines, Mills, Quarries Web Map

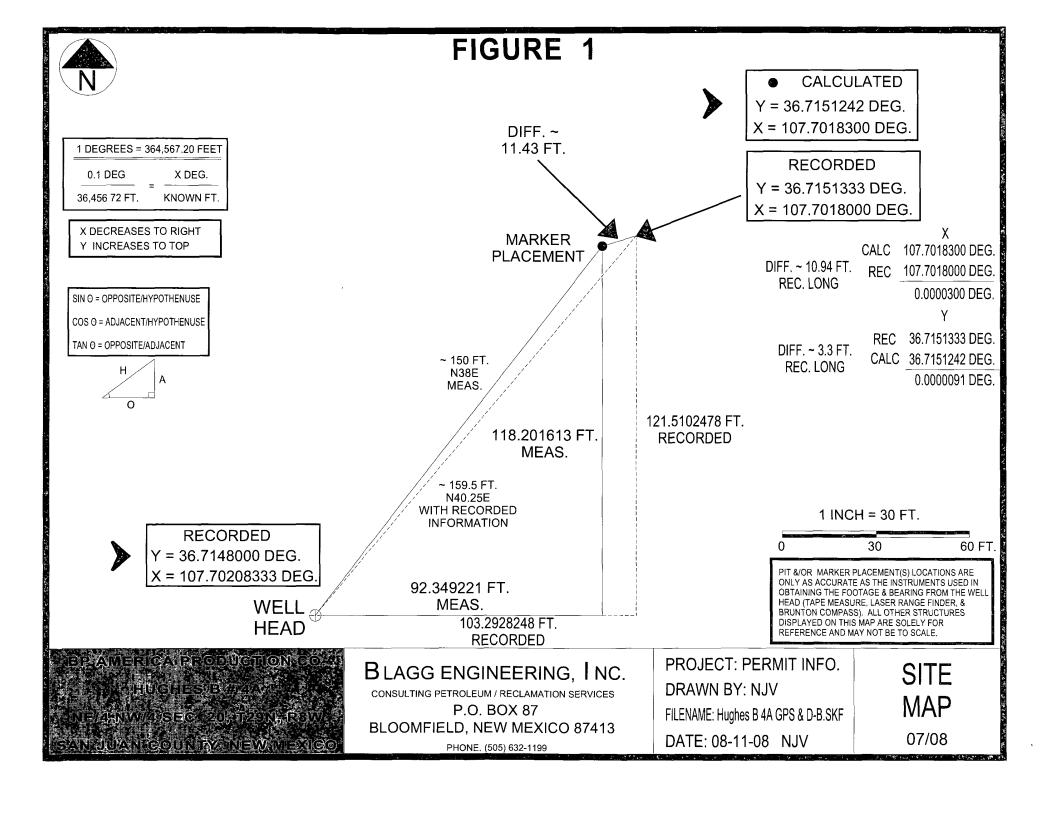
Mines, Mil	lls & Quarries Commodity Groups	
Δ	Aggregate & Stone Mines	
♦	Coal Mines	
*	Industrial Minerals Mines	
•	Industrial Minerals Mills	
	Metal Mines and Mill Concentrate	
	Potash Mines & Refineries	
	Smelters & Refinery Ops.	
*	Uranium Mines	
•	Uranium Mills	
Mines, Mil	lls & Quarries Status	
×	Active Mining	











BP-HUGHES B #4A

Section Schematic gas well / water well locations

T29N, R8W	18	17	16
	19	20	21 ×
	30	29	28

NOTES: 9 - SECTION NUMBER

X - WELL SITE LOCATION

- WATER WELL LOCATION

- Water well locations estimated from N. M. Office of the State Engineer's POD Reports & Downloads.



BP America Production Company

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

August 12, 2008

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

RE:

Notice of Proposed Below Grade Tank Construction

Hughes B 004A

Unit Letter C, Section 20, Township 29N, 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 install a Below Grade Tank (BGT) that will be used for daily 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