

OCD-ARTESIA B-28
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
CMB No 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM29271
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BP AMERICA PRODUCTION CO Contact: AMY T. SPANG E-Mail: amy.t.spang@bp.com		7. If Unit or CA Agreement, Name and No. 30999
3a. Address 501 WESTLAKE PARK BLVD M C 5.172 HOUSTON, TX 77079	3b. Phone No. (include area code) Ph: 281.366.7655 Fx: 281.366.7688	8. Lease Name and Well No. HORSETAIL GAS COM FEDERAL 1
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface SESE 710FSL 660FEL At proposed prod. zone Scoggin Draw, Monmouth		9. API Well No. 30-015-32556
14. Distance in miles and direction from nearest town or post office		10. Field and Pool, or Exploratory UNKNOWN
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease 160.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 10 T18S R27E Mer NMP
18. Distance from proposed location to nearest well, drilling completed, applied for, on this lease, ft.	19. Proposed Depth 10700 MD	12. County or Parish EDDY
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3510 GL	22. Approximate date work will start 12/05/2002	13. State NM
23. Estimated duration		17. Spacing Unit Dedicated to this well 320.00
24. Attachments Newell Controlled Water Basin		20. BLM BIA Bond No. on file

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed Typed) AMY T. SPANG	Date 11/23/2002
Title REGULATORY COMPLIANCE ANALYST		
Approved by (Signature) /s/ LESLIE A. THEISS	Name (Printed Typed) /s/ LESLIE A. THEISS	Date DEC 20 2002
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would enable the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Electronic Submission #16305 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO, sent to the Carlsbad
committed to AFMSS for processing by Linda Askwig on 11/25/2002 (03LA0145AE)

** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED **

Additional Operator Remarks:

PLAN TO DRILL STRAIGHT HOLE TO 10700 TD.

COMMUNITIZATION AGREEMENT WILL BE FILED UPON WELL COMPLETION. CURRENT BP ACREAGE IS 160 AC & COMMUNITIZED ACREAGE IS 320 AC.

SURFACE USE PLAN

Attachment to BLM Form 3160-3
BP America Production Company
Well: Horsetail Gas Com Federal #1
710' FSL & 660' FEL
Section 10, T18S-R27E
Eddy County, New Mexico

1. Directions to location from Existing Roads

From Artesia, New Mexico go East 9.6 miles on Highway 82 to Eddy County Rd. 225 (Hilltop Road). Turn right on County Rd. 225 and go 2.4 miles to local road. Turn south on local road and go 2.7 miles. Exhibits "4" and "5" are the Vicinity Map and the Location Verification Map.

- A. The proposed development well site is staked as shown on the certified location plat attached.
- B. Most of the existing roads will not require improvement. Any existing sections of road that needs improvement or repair will be fixed to a condition equal to that of the good sections of the existing road. All roads will be maintained in a condition equal to that which existed prior to the start of the construction.

2. Planned Access Roads

- A. Approximately 1771' of new access road will be required.
- B. New access roads will have a 12' wide travel lane and be surfaced with 6" compacted caliche.
- C. Turnouts As needed
- D. Culverts: None
- E. Cuts and fills: No major road cuts or fill will be necessary.

3. Location of Existing Wells

- A. The existing wells within a one-mile radius of this location are shown on Exhibit "6".

4. Location of Existing or Proposed Facilities

- A. Existing Facilities – No facilities currently exist for this well.
- B. New Facilities Proposed – If a successful Morrow producer is completed, surface facilities will consist of a Stack Pack, collection tanks for oil and water and possible well head compression. The location site will on the existing well location.

5. Location and Type of Water Supply

Fresh and brine water used in drilling and completion operations will be purchased from independent trucking companies located in Loving or Carlsbad, New Mexico. The water will be hauled over existing and new roads to the location.

6. Source of Construction Materials

Caliche for the road and well pad construction will be from the designated caliche pit.

7. Methods of Handling Waste Disposal

- A. Drill cuttings will be handled in the reserve pit and buried during reclamation operations.
- B. Trash, waste paper, garbage and junk will be contained in a fenced trash trailer to prevent scattering by the wind and hauled to a municipal sanitary landfill. The supplier will pick up all sacked drilling mud. The drilling contractor will haul away any chemicals that they used while drilling.
- C. Toilet facilities will be provided for human waste. Sewage disposal facilities will be in accordance with State and Local Regulations.
- D. Drilling fluids will be handled as follows: The free water will be either hauled to the reserve pit of the next drilling well for re-use or hauled to a permitted SWD. If any mud is hauled away it will be disposed of at an approved mud disposal site. Remaining drilling fluids will be allowed to evaporate in the reserve pit until dry enough for reclamation.
- E. Any fluids produced during swab testing the well while the pulling unit is on location will be collected in a test tank. Produced water will be hauled to a permitted SWD. Oil produced will remain in the test tank until sold and hauled from the site.

8. Auxiliary Facilities

No new facilities will be built during drilling of this well. A trailer will be used as an office and temporary living quarters for well site supervision.

9. Well site Layout

- A. Exhibit "7" shows the proposed well site layout and dimensions. Major rig components and reserve pits are shown.
- B. No significant cuts or fills will be required.
- C. The reserve pits will be plastic lined with minimum 6 mil double x laminated plastic. The liner will overlap the pit dikes and be anchored down. The reserve pit will be fenced on three sides during drilling operations. After drilling operations have ceased the fourth side of the pit will be fenced.

10. Plans for Reclamation of the Surface

- A. In a timely manner, after finishing the drilling and/or completion operations all equipment and other material not needed for production operations will be removed. The location will be cleared of all trash and debris then any ruts, etc. will be filled. The cellar will be filled around the wellhead.

- B. Any pits containing fluids will be fenced until they are filled. The NMOCD pit netting rules will be followed. The reserve pits will be reclaimed by deep burying the drill cuttings. The pit area will be leveled and contoured to conform to the surrounding area. A stockpile of topsoil from the location construction will be evenly distributed over the disturbed area. Re-vegetation procedures will comply with BLM standards.
- C. Upon abandonment of the well, surface restoration will be in accordance with the surface owner requirements and will be accomplished as expediently as possible.

11. Surface Ownership

The surface owner for the well site locations is Louis Derrick, Bogel Farms, P.O. Box 441, Artesia, NM 88210. Surface owner approval was obtained. The minerals are administered by the BLM.

12. Additional Information

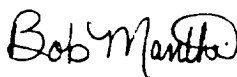
- A. Topography: Gently rolling grassland with caprock mesa formations.
- B. Vegetation includes Honey mesquite, creosote, broom snakeweed, various cacti, sand sage, various yucca, and mixed grasses.
- C. Soils are of the Reeves-Gypsum land-Cottonwood association as defined by the Soil Conservation Service of the U.S. Department of Agriculture.
- D. Primary use of the land is livestock grazing and accessing producing wells.
- E. There are no dwellings in the vicinity.
- F. An archaeological survey was performed by Donald Clifton, report # .
- G. The selected dirt contractor will be furnished with an approved copy of the Surface Use Plan and any additional stipulations prior to beginning any work.

13. Operator's Representatives

Bob Manthei
Operations Supervisor
P.O. Box 1089
Eunice, NM 88231
(505) 394-1602

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct. BP America Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved will perform the work associated with the operations proposed herein. This statement is subject to the provisions of 18 U.S.C. 1001 for filing of a false statement.



Bob Manthei
Operations Supervisor

____ November 22, 2002
Date

DISTRICT I
P.O. Box 1000, Santa Fe, NM 87501-1000

DISTRICT II
P.O. Box 1000, Santa Fe, NM 87501-1000

DISTRICT III
P.O. Box 1000, Santa Fe, NM 87501-1000

DISTRICT IV
P.O. Box 1000, Santa Fe, NM 87501-1000

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2000
Santa Fe, New Mexico 87504-2000

Form OC-100
Revised February 10, 1984
Submitting to Appropriate District Office
State Lease - 4 Copies
For Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

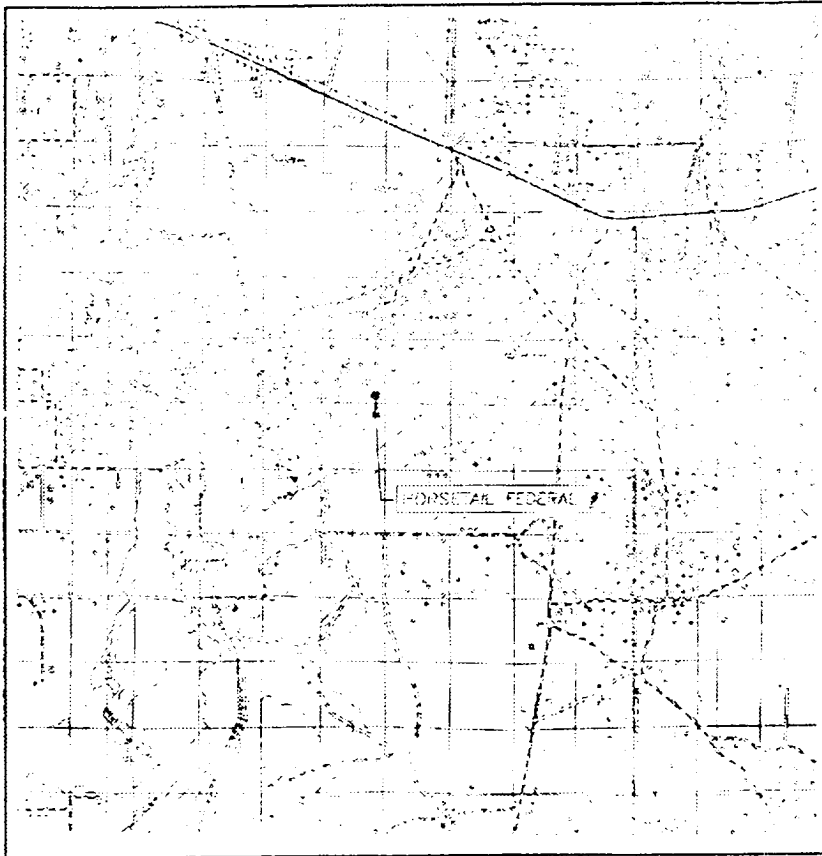
Well Number		76400		Well Name		Empire / Morrow South (Gas)			
Property Code		HORSETAIL Gas Co. Federal		Well Number					
Operator No.		BP AMERICA Production Company		Elevation		5,100'			
Surface Location									
Section No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West line	County
	10	14 N	27 E	11	100	South	100	100	San Juan
Bottom Hole Location If Different From Surface									
Section No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West line	County
Dedicated Acre		320		Section No.					

NO ACREAGE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				OPERATOR CERTIFICATION I hereby certify that the information furnished herein is true and correct to the best of my knowledge and belief. Signature: <i>James I. Spring</i> Printed Name: James I. Spring Title: Regulatory Analyst Date: 10/1/84	
				SURVEYOR CERTIFICATION I hereby certify that the data furnished herein is true and correct to the best of my knowledge and belief. Signature: <i>Donald J. Eason</i> Printed Name: Donald J. Eason Title: Professional Surveyor Date: 10/1/84 Certificate No. DONALD J. EASON 3204 DATE EXPIRES 12/31	

EXPENDITURE

VICINITY MAP



NAME JOHN W. BROWN
 ADDRESS 8541 N. 10th
 CITY ALBUQUERQUE
 STATE N.M.
 ZIP 87113
 PHONE 505-263-1144
 FAX 505-263-1144

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

Exhibit 1
5M BOP

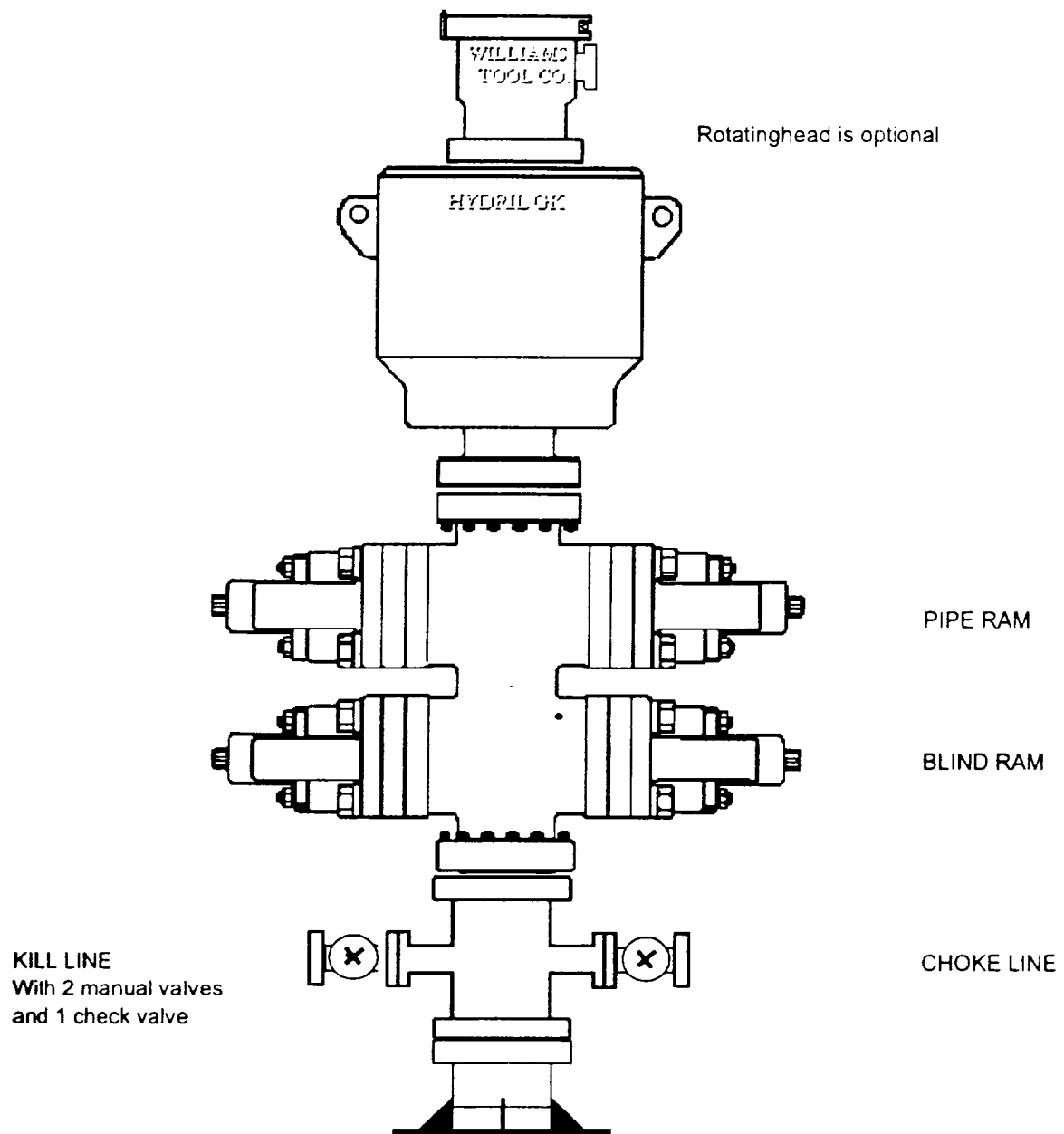


Exhibit 2
5M Choke

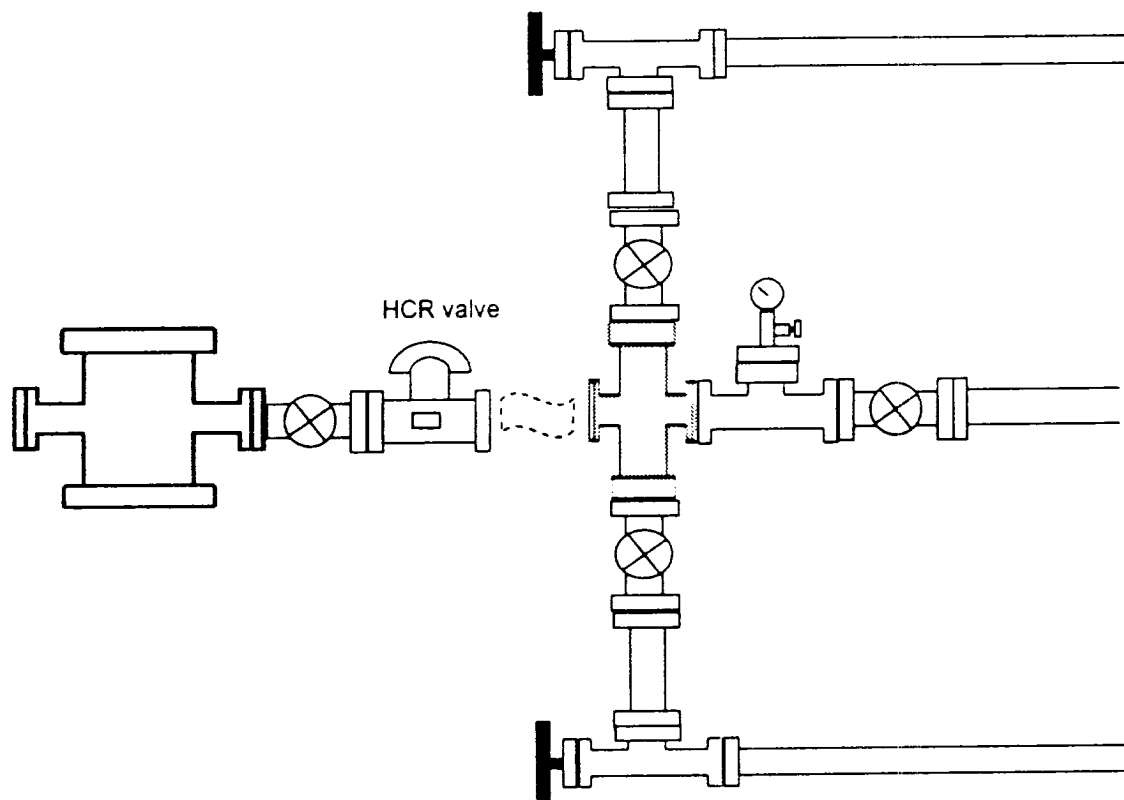
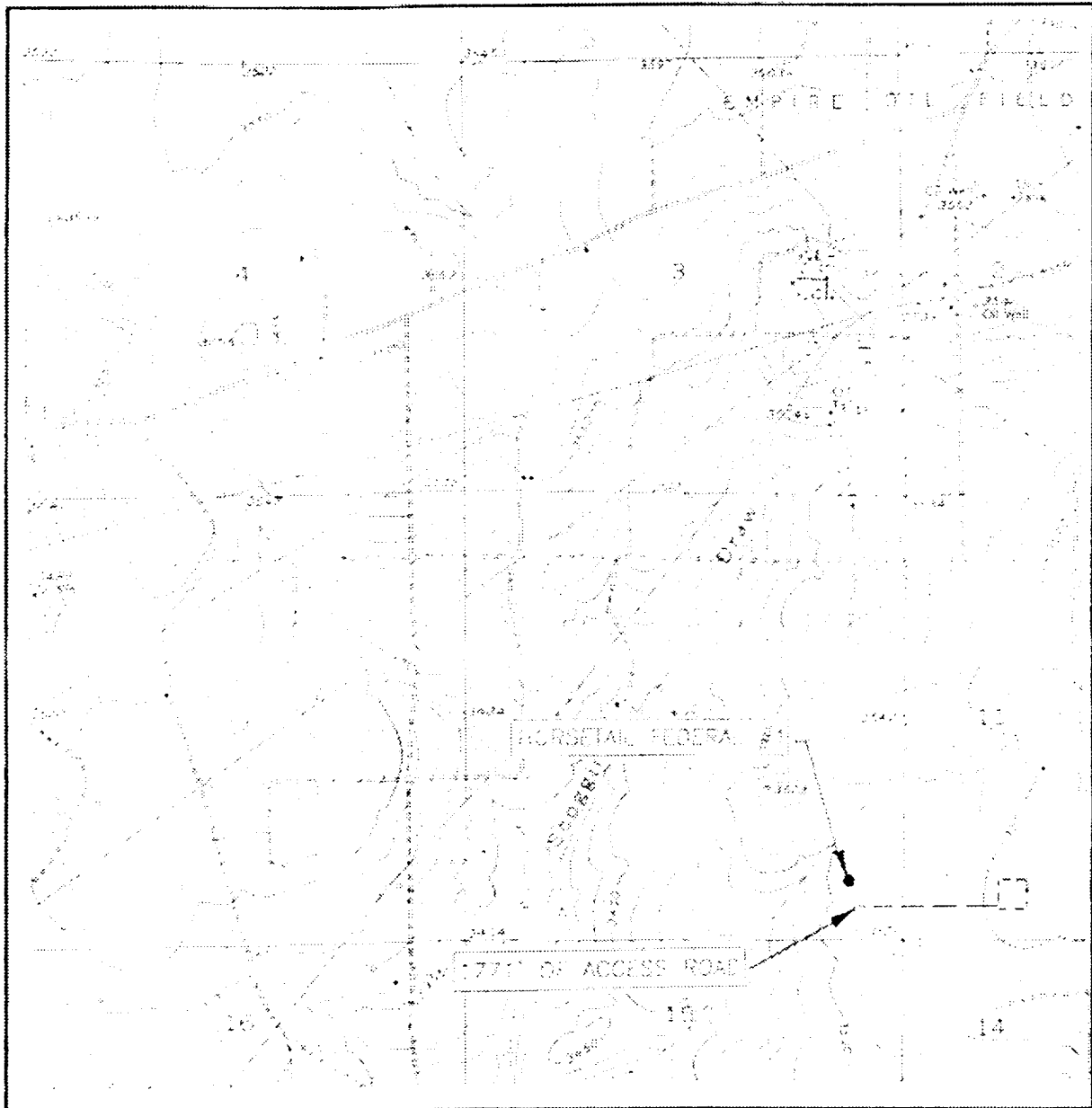


EXHIBIT 3
BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

LOCATION VERIFICATION MAP



SCALE 1" = 200'

CONTOUR INTERVAL 10'

SPRING LAKE, N.M.

SECTION 12-5-100-17

SURVEYED BY J. WEST

DATE 1980

DESCRIPTION (1) 151.8 100' 17'

ELEVATION 3000

CORRECTION 50' AMERICA

DATE 1980

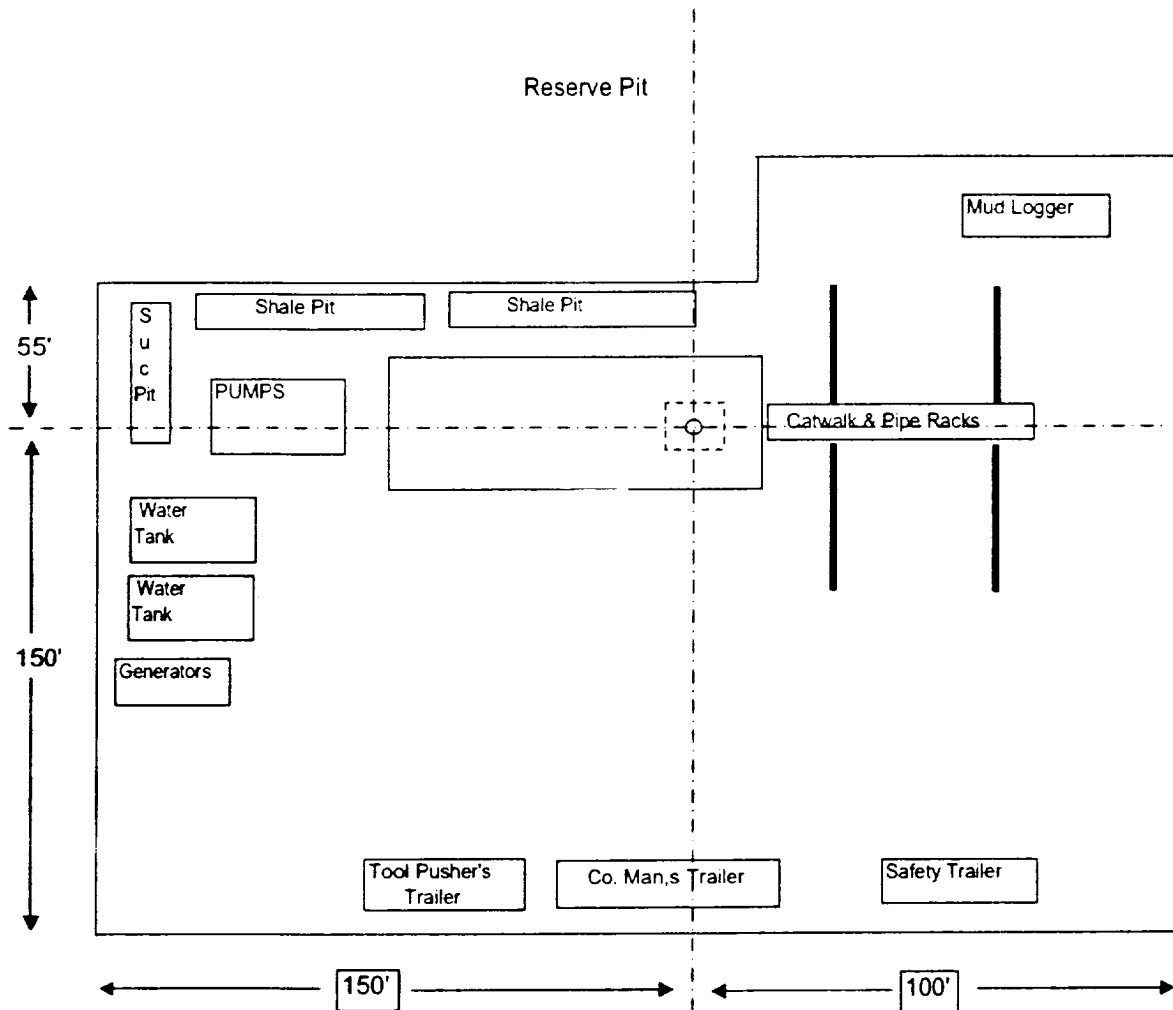
151.8 100' 17'

151.8 100' 17'

SPRING LAKE, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

EXHIBIT 7: RIG LAYOUT



DRILLING PLAN

Attachment to BLM Form 3160-3
 BP America Production Company
 Well: Horsetail Gas Com Federal #1
 710' FSL & 660' FEL
 Section 10, T18S-R27E
 Eddy County, New Mexico

1. Surface Geological Formation

Yates Formation (Sand and Anhydrite)

2. Estimated Tops of Geological Markers

<u>Formation</u>	<u>TVD</u>
Queen	1000'
Top San Andres	1800'
Abo	5200'
Wolfcamp	6500'
Atoka	8250'
Morrow	9650'

3. Estimated Tops of Possible Water, Oil, Gas or Mineral:

Abo Formation	Oil or Gas
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4. Pressure Control Equipment

<u>Interval, TVD</u>	<u>Pressure Control Equipment</u>
0' - 400'	No pressure control required
400' - TD	5M psi double ram preventer, and 5M psi annular preventer

Exhibits 1, 2 and 3 show the BOP stack arrangement, the choke manifold arrangements and the BOP specifications, respectively. The BOPE will be hydraulically tested per BLM requirements outlined by Onshore Oil and Gas Order No. 2. Pipe rams and blind rams, if a double ram preventer is used, will be functioned on each trip out of the hole. All BOPE checks and tests will be witnessed by BP's representative and will be noted on the daily drilling report. Accessories to BOPE will include an upper kelly cock, lower kelly cock, and floor safety valve; all with pressure rating equivalent to the BOP stack.

5. Proposed Casing and Cementing Program

	<u>Hole Size</u>	<u>Interval M.D.</u>	<u>Casing Size</u>	<u>Weight & Grade</u>	
WITNESS					WITNESS
Surface	10 1/2"	0'-400'	13-3/8"	48.0# J-55	
Intermediate	12 1/4"	400'-3000'	8 5/8"	32.0# J-55	
Production	7 7/8"	3000'-10700'	5-1/2"	17.0# L-80	

Cement Program: (Actual volumes will be based on caliper log when available)

Surface – 500 sxs Class "C"

Intermediate – Lead: 700 sxs; Tail: 300 sxs

Production – 1200 sxs 50/50 POZ:H

6. **Mud Program**

<u>Depth</u>	<u>Mud Type</u>	<u>Weight ppg</u>	<u>Funnel Viscosity</u>	<u>Water Loss</u>
0'-400'	Spud Mud	8.4-8.9	29-34	NC
400-3000'	Brine	10.0	28-30	NC
3000'-9600'	Fresh Water	8.3-8.4	28-29	NC
9600'-10700'	Cut Brine	10.0	34-44	8-10 cc

7. **Auxiliary Equipment**

Upper Kelly Cock, Lower Kelly Cock, and Full Opening Stabbing Valve

8. **Testing, Coring and Logging Program**

- A. Drill Stem Tests – None planned
- B. Coring – None planned
- C. Logging – Mud logging planned from 4500' to TD
- D. Electric Logs
 - Open Hole: GR, DLL/MLL, CNL/LDT TD to Casing point '
 - Cased Hole: GR/CCL TD to surface'

9. **Anticipated Abnormal Temperature, Pressure, or Hazards**

No anticipated abnormal temperature or pressure

10. **Anticipated Starting Date and Duration of Operations**

Pending favorable weather and permit approval, construction work on this location is planned to begin in December, 2002. Construction work will require 3 days, move-in and rig up rotary tools, 1 day, drill and complete, 26 days. It is planned to spud the well in January, 2003.