

OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 20075. Lease Serial No.
LC-032096-B6. If Indian, Allottee or Tribe Name
-----1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone2. Name of Operator
APACHE CORPORATION (LANA WILLIAMS 918-491-4980) (00873)3a. Address 6120 SOUTH YALE
SUITE 1500 TULSA OKLA. 741363b. Phone No. (include area code)
918-491-49807. If Unit or CA Agreement, Name and No.
EAST BLINEBRY DRINKARD UNIT8. Lease Name and Well No.
EBDU # 619. API Well No.
30-028-10. Field and Pool, or Exploratory
EUNICE -BLINEBRY-TUBB-
DRINKARD-NORTH

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface 2370' FSL & 990' FEL SECTION 14 T21S-R37E

At proposed prod. zone SAME

11. Sec., T. R. M. or Blk. and Survey or Area

SECTION 14 T21S-R37E

14. Distance in miles and direction from nearest town or post office*

Approximately 4 miles Northeast of Eunice New Mexico

12. County or Parish
LEA CO.13. State
NM15. Distance from proposed*
location to nearest
property or lease line, ft. 990' ±
(Also to nearest drig. unit line, if any)16. No. of acres in lease
176017. Spacing Unit dedicated to this well
4018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 750±19. Proposed Depth
6875'20. BLM/BIA Bond No. on file
BLM CO-1463 NATION WIDE21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3413' GL22. Approximate date work will start*
WHEN APPROVED23. Estimated duration
18 DAYS

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Joe T. Janica*
Title AgentName (Printed/Typed)
Joe T. JanicaDate
11/14/06

Approved by (Signature)

/s/ James Stoval

Name (Printed/Typed)

Date
JAN 24 2007Title
ACTING FIELD MANAGEROffice
CARLSBAD FIELD OFFICE

APPROVAL FOR 1 YEAR

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

*(Instructions on page 2)

CAPTAN CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Witness Surface Casing

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
1625 N. FRENCH DR., BOBBS, NM 86240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 86210

DISTRICT III
1000 Rio Brazos Rd., 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, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
		22900	EUNICE BLINEBRY, TUBB, DRINKARD- NORTH
Property Code	Property Name		Well Number
35023	EBDU		61
OGRID No.	Operator Name		Elevation
873	APACHE CORPORATION		3413'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	14	21-S	37-E		2370	SOUTH	990	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code		Order No.				
40									

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

<div style="text-align: center;"><p>GEODETIC COORDINATES NAD 27 NME</p><p>Y=539743.1 N X=871725.9 E</p><p>LAT.=32°28'41.13" N LONG.=103°07'40.58" W</p></div> <div style="text-align: center;"><p>LC-032096-B</p></div>	OPERATOR CERTIFICATION <i>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <div style="display: flex; justify-content: space-between;"><div><i>Lara Williams</i> Signature</div><div>7/25/06 Date</div></div> <div><i>Lara Williams</i> Printed Name</div>	
	SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> <div style="text-align: right;">JUNE 05, 2006</div> <div>Date Surveyed _____ MR</div> <div>Signature & Seal of Professional Surveyor <i>Gary A. Eidson</i> 6/20/06 06.11.0935</div>	
	Certificate No. GARY EIDSON 12841 RONALD J. EIDSON 3239	

DISTRICT I
1625 N. FRENCH DR., BOBBS, NM 88240

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Energy, Minerals and Natural Resources Department

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DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
Property Code	Property Name EBDU		Well Number 61
OGRID No.	Operator Name APACHE CORPORATION		Elevation 3413'

Surface Location

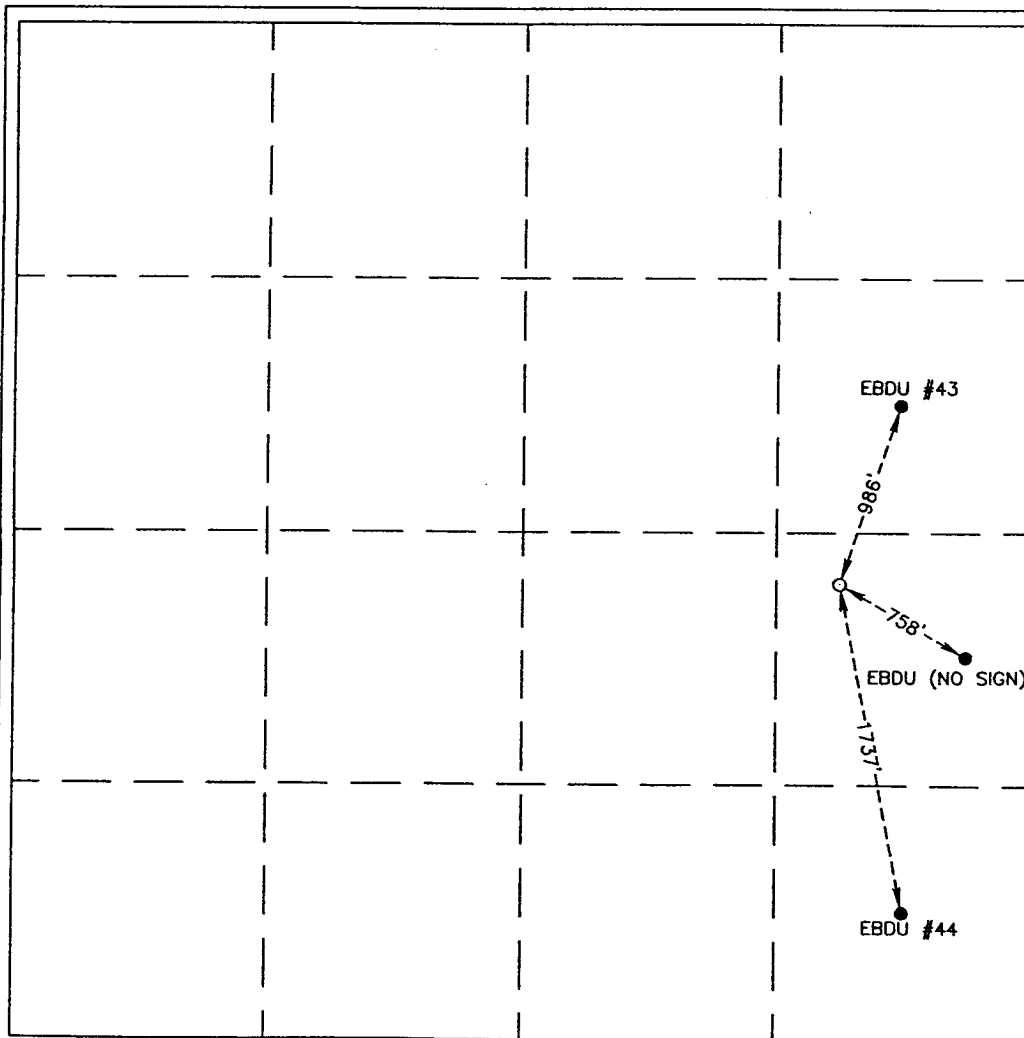
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	14	21-S	37-E		2370	SOUTH	990	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE 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 herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Lana Williams 7/25/06
Signature Date
Lana Williams
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 05, 2006

Date Surveyed MR
Signature & Seal of Professional Surveyor

06.11.0935

Certificate No. GARY EIDSON 12541
RONALD J. EIDSON 3239

EXHIBIT "A"
EAST BLINEBRY DRINKARD UNIT # 61
DRILLING PROGRAM

- I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.
II. Estimated Tops of Geological Markers:

<u>FORMATION</u>	<u>DEPTH</u>
Quaternary alluvials	Surface
Rustler	1319'
Yates	2618'
Queen	3421'
Grayburg	3765'
San Andres	3999'
Glorieta	5223'
Blinebry	5662'
Tubb	6129'
Drinkard	6482'
Abo	6718'
TD	6875'

- III. Estimated depths at which water, oil, gas, or other mineral-bearing formations are expected to be encountered:

<u>SUBSTANCE</u>	<u>DEPTH</u>
Oil	Blinebry@5662' Tubb@6129' Drinkard@ 6482'
Gas	None anticipated
Fresh Water	None anticipated

All fresh water and prospectively valuable minerals (as described by BLM) encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows within zones of correlative rights will be tested to determine commercial potential.

- IV. A. Proposed Casing Program:

<u>HOLE</u>	<u>CASING</u>		<u>WEIGHT</u>		<u>SACKS</u>	<u>ESTIMATED TOC -</u>
<u>SIZE</u>	<u>OD / ID</u>	<u>GRADE</u>	<u>PER</u>	<u>DEPTH</u>	<u>CEMENT</u>	<u>REMARKS</u>
12 ¼"	8 5/8" 8.097"	J55 STC	24#	1300'	600	TOC - Surface 8.9 ppg Water-based Mud; 89 ° F Est. Static Temp; 83 ° F Est. Circ. Temp.
7 7/8"	5 ½" 4.892"	J55 LTC	17#	6875'	1,400	TOC - Surface Float Collar set @ 6830"/ 10.10 ppg Brine Mud; 141 ° F Est. Static Temp; 117 ° F Est. Circ. Temp.

B. Proposed Cement Program:

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
8 5/8"	400 sacks 35:65 Poz:Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite gel 752 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 12.7 Slurry Yield (cf/sack) 1.88 Amount of Mix Water (gps) 10.7; <u>Estimated Pumping Time</u> - 70 BC (HH:MM)-4:00;	200 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water 270 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 14.8 Slurry Yield (cf/sack) 1.35 Amount of Mix Water (gps) 6.35 Estimated Pumping Time - 70 BC (HH:MM)-3:00;	79.8 bbls Fresh Water @ 8.33 ppg

8 5/8" Casing: Volume Calculations:

1260 ft	x	0.4127 cf/ft	with 100% excess	=	1040.0 cf
40 ft		x 0.8214 cf/ft	with 0% excess	=	32.8 cf
40 ft	x	0.3576 cf/ft	with 0% excess	=	14.3 cf (inside pipe)
TOTAL SLURRY VOLUME					= 1087.1 cf
					= 193.6 bbls

Spacer 20.0 bbls Water @ 8.33 ppg

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
5 1/2"	950 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.003 gps FP-6L + 10% bwoc Bentonite 2318 Vol. Cu Ft 2.66 Vol. Factor Slurry Weight (ppg) 11.8 Slurry Yield (cf/sack) 2.44 Amount of Mix Water (gps) 14.07; Amount of Mix Fluid (gps) 14.07 <u>Estimated Pumping Time - 70</u> BC (HH:MM)-4:00;	450 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.003 gps FP-6L 581 Vol. Cu Ft 1.84 Vol. Factor Slurry Weight (ppg) 14.2 Slurry Yield (cf/sack) 1.29 Amount of Mix Water (gps) 5.91; Amount of Mix Fluid (gps) 5.91; Estimated Pumping Time - 70 BC (HH:MM)-3:00;	171 bbls 2% Kcl Water @ 8.43 ppg

5 1/2" Casing: Volume Calculations:

1300 ft	x	0.1926 cf/ft	with 0% excess	=	250.4 cf
3225 ft	x	0.1733 cf/ft	with 159% excess	=	1447.5 cf
2350 ft	x	0.1733 cf/ft	with 85% excess	=	577.0 cf
40 ft	x	0.1305 cf/ft	with 0% excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME					= 2280.1 cf
					= 406 bbls

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

V. A. Proposed Mud Program

<u>DEPTH</u>	<u>MUD PROPERTIES</u>	<u>REMARKS</u>
0 – 1,300'	Weight: 8.6 – 9.6 ppg Viscosity: 34 – 36 sec/qt pH: NC Filtrate: NC	Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean. Mix Paper one-two sacks every 100 feet drilled to minimize wall cake build up on water sands and to control seepage loss. At TD of interval, mix in pre-mix pit, 100 barrels of system fluid, NewGel viscosity of 60 sec/100cc, add 0.25 ppb of Super Sweep.
1300' – 5600'	Weight: 9.9 – 10.1 ppg Viscosity: 28 – 29 sec/qt pH: 9-10 Filtrate: NC	Drill out from under the surface casing with Brine Water. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at 9-10. Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 5-ppb of Super Sweep every 500 feet.
5600' – TD	Weight: 9.9 – 10.1 ppg Viscosity: 30 – 40 sec/qt pH: 9-10 Filtrate: 8-15 cm/30 min	From 5600' to Total Depth, it is recommended the system be restricted to the working pits. Adjust and maintain pH with Caustic Soda. Treat system with Newcide to prevent dacterial degradation of organic materials. Mix Starch (yellow) to control API filtrate at <15cc.

VI. Proposed Control Equipment:

Will install on the 8 5/8" surface casing a 9" x 3000 psi WP Double Ram BOP and will test before drilling out of surface casing. As expected pressures will not exceed 2000 psi, we request a waiver of the remote control requirement on the accumulator of the 3M BOP and a variance to run a 2M BOP, if available. See Exhibit "H" for BOP layout.

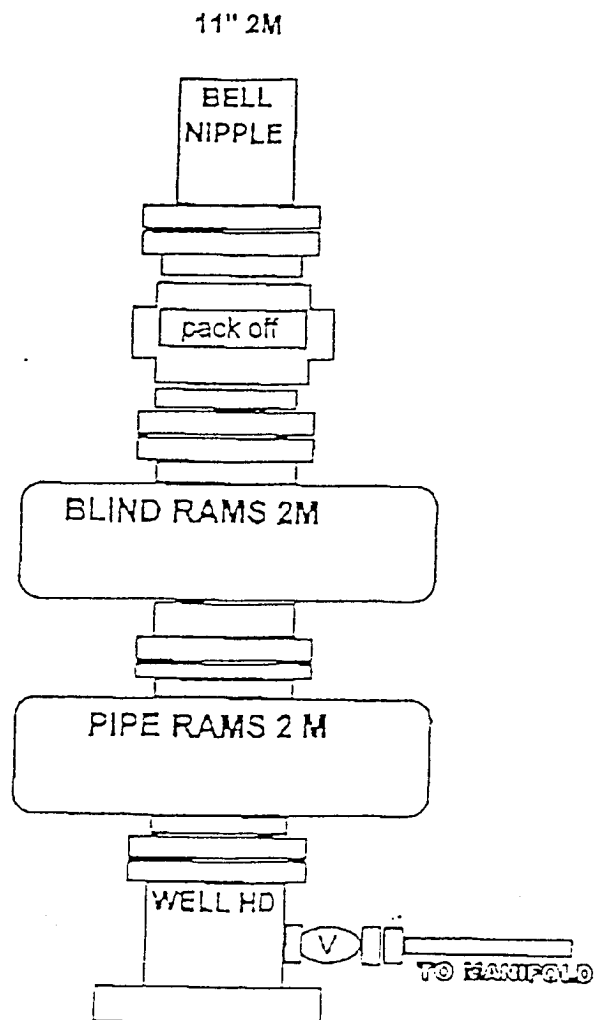


EXHIBIT "H"
SKETCH OF B.O.P. TO BE USED ON

APACHE CORPORATION
EAST BLINEBRY DRINKARD UNIT # 61
UNIT "I" SECTION 14
T21S-R37E LEA CO. NM

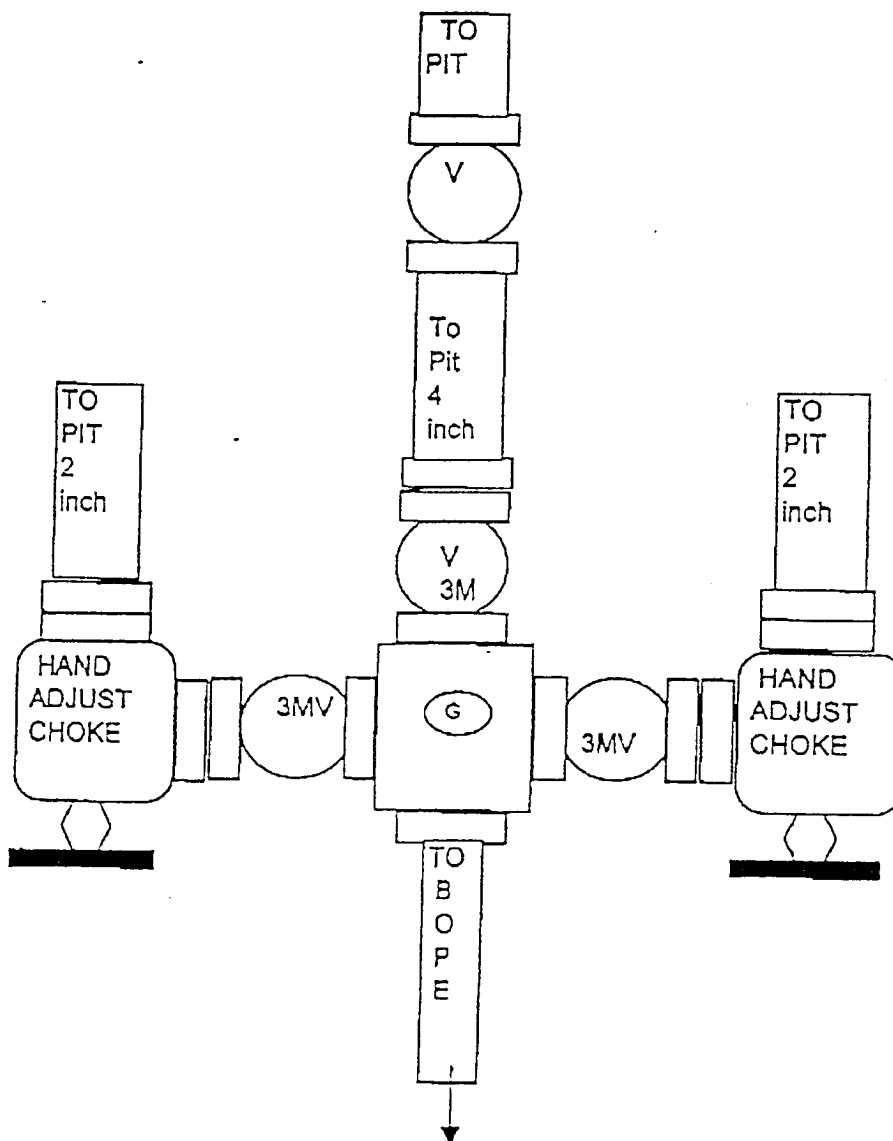


EXHIBIT "H-1"
CHOKE MANIFOLD

APACHE CORPORATION
EAST BLINEBRY DRINKARD UNIT # 61
UNIT "I" SECTION 14
T21S-R37E LEA CO. NM

EXHIBIT "B"
EAST BLINEBRY DRINKARD UNIT # 61

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

? maybe

CONDITIONS OF APPROVAL - DRILLING

Well Name & No. 61-East Blinebry Drinkard Unit
Operator's Name: Apache Corporation
Location: 2370FSL, 0990FEL, Section 14, T-21-S, R-37-E
Lease: NMLC-032096-B

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5972 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 8-5/8 inch 5-1/2 inch.

C. BOP tests

2. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling into the Glorieta Formation. A copy of the plan shall be posted at the drilling site. **Hydrogen Sulfide has been reported in wells in section 3 and 10 in amounts from 200-800 ppm in gas streams and 400-130,000 in STVs.**

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The 8-5/8 inch surface casing shall be set below usable water **a minimum of 25 feet into the Rustler Anhydrite approximately 1300 feet and above the salt** and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

Possible lost circulation in the Glorieta.

2. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall circulate to surface.**

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8-5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi. **2M BOP can be used if available.**
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

Engineer on call phone: 505-706-2779

WWI 011907