#### HOBBS OCD

SEP 02 2011

**OCD Hobbs** 

Form 3160-3 (April 2004)

Snlit Estate RECEIVED

UNITED STATES DEPARTMENT OF THE I BUREAU OF LAND MAN APPLICATION FOR PERMIT TO	5. Lease Serial No. NMNM - 125057  6. If Indian, Allotee or Tribe Name			-				
la. Type of work: DRILL REENTE	7 If Unit or CA Agreement, Name and No. EBDU			•				
1b. Type of Well: Oil Well Gas Well Other	Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone					8. Lease Name and Well No. (35023) EAST BLINEBRY DRINKARD UNIT		
2. Name of Operator  APACHE CORPORATION	9. API Well No. 30-025- 40268			_				
3a. Address 303 VETERNAS AIRPARK LN #3000 MIDLAND, TX 79705	3b. Phone No. 432-81	o. (include area code) 18-1167		10. Field and Pool, or Exploratory  EUNICE; BLI-TU-DRI, NORTH L 22900			22900>	
4. Location of Well (Report location clearly and in accordance with any At surface 3630' FSL & 1760' FEL At proposed prod. zone SAME	11. Sec., T. R. M. or Blk. and Survey or Area  LOT: 15 SEC 1 T21S R37E							
14. Distance in miles and direction from nearest town or post office* APPROX 5 MILES NORTHEAST OF EUNICE, NM		-		12. County or Parish LEA		13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	est 1700  bline, ft. drig. unit line, if any) 1920  roposed location* 19. Proposed Depth 20. BLM				ng Unit dedicated to this well  40 ACRES /BIA Bond No. on file  1 - CO - 1463 NATIONWIDE 7			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3549'	22. Approximate date work will start* 03/31/2011			23. Estimated duration 10 - 12 DAYS			112-	
The following, completed in accordance with the requirements of Onshore	24. Attac		tached to thi	e form:				
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System L SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		4. Bond to cover the Item 20 above).  5. Operator certification.	e operation ation	is unless covered by an	Ü	`		
25. Signature Savena Slave		Name (Printed/Typed) SORINA L FLORES			Date 03/22	2/2011		
Approved by (Signature)  /s/ Don Peterson  /s/ Don Peterson  /s/ Don Peterson			o <b>n</b>	r@€P	- 2 2011			
Title FIELD MANAGER	Office	CARLS	BAD	EIFID OF	FICE			
Application approval does not warrant or certify that the applicant holds conduct operations thereon.  Conditions of approval, if any, are attached.	iegai or equita	adie title to those right	-	OVAL FOR I	*nti#i <b>&amp;±h&amp;</b> .ap			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crim States any false, fictitious or fraudulent statements or representations as to	ne for any pe any matter wi	rson knowingly and within its jurisdiction.						

\*(Instructions on page 2)

Capitan Controlled Water Basin

SEE ATTACHED FOR

Ka ogloblu APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 

CONDITIONS OF APPROVAL

SEP 0 2 2011

# **PRIVATE SURFACE OWNER AGREEMENT**

RECEIVED

OPERATOR: APACHE CORPORATION
WELL NAME: EAST BLINEBRY DRINKARD UNIT #116
UL: 15 SECTION: 1 TOWNSHIP: 21S RANGE: 37E
LOCATION: 3630' FSL & 1760' FEL COUNTY: LEA STATE: NM
LEASE NUMBER: NMNM - 125057
STATEMENT OF SURFACE USE
The surface to the subject land is owned by WILLIAM O. STEPHENS, PO BOX 115, EUNICE, NM 88231
The surface owner has been contacted regarding the drilling of the subject well, and an agreement for surface use has been negotiated.
CERTIFICATION: I hereby certify that the statements made in this statement are to the best of my knowledge, true and correct.
Jerem ()
Signature
NAME: JEREMY-WARD
DATE: 1/21/2011
TITLE: DRILLING ENGINEER
To expedite your Application to Drill please fax the completed form to the Bureau of Land Management (575) 234-5927 or (575) 885-9264 Attention: Legal Instruments Examiner 620 E. Green Street Carlsbad, NM 88220

The original document with signature should be mailed as soon as possible.

# DRILLING PLAN: BLM COMPLIANCE (Supplement to BLM 3160-3)

#### **APACHE CORPORATION (OGRID: 873)**

East Blinebry Drinkard Unit #116

Lease #: NMNM-125057

Projected TD: 7300' GL: 3549'

3630' FSL & 1760' FEL, UL: 15 SEC: 1 T21S R37E LEA COUNTY, NM

1. GEOLOGIC NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits

#### 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

FORMATION	WELL DEPTH	WATER/OIL/GAS
Quaternary Aeolian .	Surf .	•
Rustler	1600′	
Salt Top	1650'	
Salt Bottom	2785'	
Yates	2885'	
Seven Rivers	3130′	
Queen	3700′	
Grayburg	4050′	
San Andres	4320'	
Glorietta	5485′	
Blinebry	5890′	Oil
Tubb	6475'	· Oil
Drinkard	6780'	Oil
ABO	7050′	
TD	7300′	
Avg Depth to Ground Water	~74′	

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

#### 3. CASING PROGRAM: All casing is new & API approved

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0' – 1650'	8-5/8"	24#	STC	J-55	1.901	4.093	6.162
7-7/8"	0' - 1000'	5-1/2"	17#	LTC	L-80	12.096	3.076	2.724
7-7/8"	1000′ – 7300′	5-1/2'	17#	LTC	J-55	1.293	1.401	2.306

#### 4. CEMENT PROGRAM:

#### A. <u>8-5/8" Surface:</u> Run & set 8-5/8" 24# J-55 STC csg to 1650'. Cement with:

<u>Lead</u>: 470 sx Class C w/2% CaCl, 0.25% CF, 3#/sx LCM-1, 0.005 gps FP-6L, 4% Bentonite (13.5 ppg, 1.75 yld) Comp Strengths: **12** hr - 402 psi **24** hr - 608 psi **72** hr - 1340 psi

<u>Tail:</u> 200 sx Class C w/1% CaCl, 0.13 #/sx CF, 0.005 gps FP-6L

(14.8 ppg, 1.34 yld)

Compressive Strengths: 12 hr – 859 psi

r – 859 psi **24 hr** – 1427 psi

\*\*\*100% excess cmt; Cmt to surf\*\*\*

#### B. 5-1/2" Production: Run & set 5-1/2" 17# L-80/J-55 LTC csg to 7300'. Cement with:

<u>Lead</u>: 530 sx (50:50) Poz (Fly ash): Class C w/5% NaCl, 0.13 #/sx CF, 3 #/sx LCM-1, 0.5% FL-52, 0.005 gps FP-6L, 10% Bentonite, 0.2% Sodium Metasilicate (11.8 ppg, 2.46 yld)

Compressive Strengths: **12 hr** – 259 psi **24 hr** – 798 psi **72 hr** – 1405 psi

<u>Tail:</u> 400 sx (50:50) Poz (Fly ash): Class C w/5% NaCl, 0.13#/sx CF, 0.2% CD-32, 3 #/sx LCM-1, 0.45% FL-52, 0.005 gps FP-6L, 2% Bentonite, 0.1% Sodium Metasilicate (14.2 ppg, 1.3 yld)

Compressive Strengths: 12 hr - 450 psi

**24 psi** – 1875 psi

\*\*\*55% excess cmt; Cmt to surf\*\*\*

<sup>\*\*</sup> The above cmt volumes could be revised pending caliper measurement from open hole logs. TOC is designed to reach surface.

#### 5. PROPOSED CONTROL EQUIPMENT

"EXHIBIT 7" shows a 900 series 3M psi WP BOP consisting of an annular bag type preventer, middle blind rams, bottom pipe rams. The BOP will be nippled up on the 8-5/8" csg and utilized continuously until total depth is reached. The BOP will be tested at 2000 psi, maximum surface pressure is not expected to exceed 2M psi, BHP is calculated to be approximately 3212 psi. \*All BOP's and associated equipment will be tested as per BLM Drilling Operations Order #2. The BOP will be operated and checked each 24 hr period & the blind rams will be operated & checked when the drill pipe is out of the hole. Functional tests will be documented on the daily driller's log. "EXHIBIT 6" also shows a 3M psi choke manifold with a 4" panic line. Full opening stabbing valve & Kelly cock will be on derrick floor in case of need. No abnormal pressures of temperatures are expected in this well. No nearby wells have encountered any problems.

#### 6. PROPOSED MUD CIRCULATION SYSTEM: (Closed Loop System)

INTERVAL	MW (ppg)	VISC (sec/qt)	FLUID LOSS (cc)	MUD TYPE
0' - 1650'	8.4 – 8.6	28 – 30	NC	Water
1650' to 5600'	10	29 – 32	NC	Brine
5600' – TD	10	29 – 32	NC	· Cut Brine

<sup>\*\*</sup> The necessary mud products for weight addition and fluid loss control will be on location at all times. In order to run open hole logs & casing, the above mud properties may have to be altered to meet these needs.

## 7. AUXILIARY WELL CONTROL EQUIPMENT / MONITORING EQUIPMENT:

9" x 3000 psi Double BOP/Blind & pipe ram (2M BOP if available)

4-1/2" x 3000 psi Kelly valve

9" x 3000 psi mud cross - H2S detector on production hole

Gate-type safety valve 3" choke line from BOP to manifold

2" adjustable chokes - 4" panic line

#### 8. LOGGING, CORING & TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, MSFL, CNL, Litho-Density, Gamma Ray, Caliper & Sonic from TD back to 8-5/8" csg
- B. Run CNL, Gamma Ray from 8-5/8" csg shoe back to surface.
- C. No cores, DST's or mud logger are planned at this time.

#### 9. POTENTIAL HAZARDS:

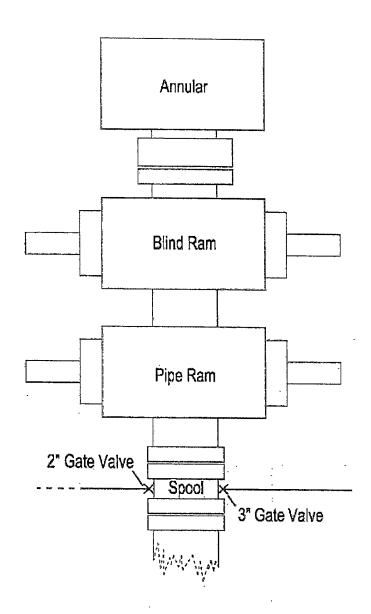
No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with the provisions of *Onshore Oil & Gas Order No. 6*. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP: 3212 psi and estimated BHT: 115°.

### 10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after Santa Fe & BLM has approved APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as rig will be available. Move in operations and drilling is expected to take 10-12 days. If production casing is run then an additional 90 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

#### 11. OTHER FACETS OF OPERATION:

After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Eunice; Blin-Tu-Dri, North formation will be perforated and stimulated in order to establish production. The well will be swab tested & potentialed as an oil well.



# 3M psi BOPE & Choke Manifold ₹BDU # 116

All valve & lines on choke manifold are 2" unless noted. Exact manifold configuration may vary

Exhibit#7

