#### HOBBS OCD

## OCD-HOBBS

Form 3160-3 (April 2004)	FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007							
UNITED STATES RECEIVED PARTMENT OF THE INTERIOR RUBEAU OF LAND MANAGEMENT				5. Lease Serial No. NMNM-090161				
BUREAU OF LAND MANAGEMENT  APPLICATION FOR PERMIT TO DRILL OR REENTER				6. If Indian, Allotee or Tribe Name				
la. Type of work: DRILL REENTER				7. If Unit or CA Agr WBDU	eement, N	ame and	ام. ک <i>ا 100</i>	ł2x
1b. Type of Well: ✓ Oil Well ☐ Gas Well ☐ Other	<b>✓</b> Si	ngle ZoneMultip	ole Zone	8. Lease Name and WEST BLIN	-	KUVAA	Ko u N	17 <del>3</del> 46
2. Name of Operator APACHE CORPORATION		473>		9. API Well No. 30-025-	02	73	•	
3a. Address 303 VETERNAS AIRPARK LN #3000 MIDLAND, TX 79705  3b. Phone No. (mclude area code) 432-818-1167				10. Field and Pool, or Exploratory  EUNICE; BLI-TU-DRI, NORTH 422				22900
4. Location of Well (Report location clearly and in accordance with an At surface 1330' FSL & 1650' FWL At proposed prod. zone SAME	y State requirem	Split E	sta	UL: K SEC	31k. and Su 8 <b>T21</b> S	rvey or A	Area	•
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	,	13. Sta		
APPROX 3 MILES NORTH OF EUNICE, NM	l			LEA	11	<u> </u>	NM	
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 17. Spacin			ng Unit dedicated to this well  40 ACRES				
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth 20. BLM/E			BIA Bond No. on file				
to nearest well, drilling, completed, applied for, on this lease, ft.	7150' BLM			- CO - 1463 NATIONWIDE				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3510'	22. Approximate date work will start* 03/31/2011			23. Estimated duration <b>8-10</b> DAYS				
	24. Attac	chments			•			
The following, completed in accordance with the requirements of Onshor	e Oil and Gas	Order No.1, shall be at	tached to thi	s form:				
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover the Item 20 above).	ne operation	s unless covered by an	existing l	bond on	file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the	Operator certific     Such other site authorized offic	specific info	rmation and/or plans a	s may be r	equired	by the	
25. Signature ( , Q / )	I	Name (Printed/Typed)			Date			
Title Sorina of Hory		SORINA L FLORES 03/22/2011						
DRILLING TECH								
Approved by (Signature) /s/ Don Peterson		Name (Printed/Typed)			3FP	0 2	2 201	11
Title FIELD MANAGER	Office	CARLSBA	D FIELD	OFFICE	,			
Application approval does not warrant or certify that the applicant holds conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equit							\RS
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as to	ime for any pe o any matter w	erson knowingly and within its jurisdiction.	villfully to ma					
*(Instructions on page 2)		<u>, , , , , , , , , , , , , , , , , , , </u>	<del></del>					

K2 09/06/11

Capitan Controlled Water Basin

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE 620 E. GREENE STREET CARLSBAD, NM 88220

SEP 02 2011

RECEIVED

### STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Operator Name:	APACHE CORPORATION
Street or Box:	303 VETERANS AIRPARK LANE, STE. 3000
City, State:	Midland, TX
Zip Code:	79705
	ccepts all applicable terms, conditions, stipulations, and restrictions ons conducted on the leased land or portion thereof, as described
Lease No: NM	INM-090161
Legal Description	of Land: 1330' FSL & 1650' FWL WBDU # 108
UL: K Section	n: 8 Township: 21S Range: 37E
County: LEA	State: <u>NM</u>
Bond Coverage: _	\$150,000
Statewide Oil and	Gas Surety Bond, APACHE CORPORATION.
BLM Bond File N	o.: BLM-CO-1463 NATIONWIDE
Signature:	Printed Name: BOBBY L. SMITH
Title: DR	ILLING MANAGER, PERMIAN REGION
Date: <b>1/1</b>	7/2011

Apache Corporation Responsibility Letter

# **PRIVATE SURFACE OWNER AGREEMENT**

SEP 02 2011

RECEIVED

OPERATOR: APACHE CORPORATION						
WELL NAME: WEST BLINEBRY DRINKARD UNIT #108						
UL: K SECTION: 8 TOWNSHIP: 21S RANGE: 37E						
LOCATION: 1330' FSL & 1650' FWL COUNTY: LEA STATE: NM						
LEASE NUMBER: NMNM-090161						
STATEMENT OF SURFACE USE						
The surface to the subject land is owned by <u>THE MILLARD DECK ESTATE</u> , c/o BANK OF AMERICA, N.A., TRUSTEE of the MILLARD DECK TESTAMENTARY TRUST under the LAST						
WILL and TESTAMENT of MILLARD DECK.						
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.						
Derenny Wand						
Signature						
NAME: JEREMY WARD						
DATE: <u>1/17/2011</u>						
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)

SEP 02 2011

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

West Blinebry Drinkard Unit #108 Lease #: NMNM-090161 Projected TD: 7150REC@WE3510' 1330' FSL & 1650' FWL, UL: K SEC: 8 T21S R37E LEA COUNTY, NM

- 1. GEOLOGIC NAME OF SURFACE FORMATION: Permian w/quaternary alluvium & other superficial deposits.
- 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

FORMATION	WELL DEDTH	WATER/OIL/GAS
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Quaternary Alluvials	Surf	
Rustler	1280′	
Salt Top	1330′	
Salt Bottom	2512'	
Yates	2695'	
Queen	3470′	
Grayburg	3728'	
San Andres	4005′	
Glorietta	5220′	
Blinebry	5690'	Oil
Tubb	6215'	Oil
Drinkard	6530'	Oil
ABO	6825' ·	
TD	7150′	
Avg Depth to Ground Water:	~75′	

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 ca

All casing is new & API approved

re coA

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0' - 1230'1365	8-5/8"	24#	· STC	J-55	2.3	5.1	7.6
7-7/8"	0' - 1000'	5-1/2"	17#	LTC	L-80	12.1	3.2	2.8
7-7/8"	1000' - 7150'	5-1/2"	17#	LTC	J-55	1.3	1.4	2.4

#### 4. CEMENT PROGRAM:

A. 8-5/8" Surface: Run & set 8-5/8" 24# J-55 STC csg to 1330. Cement with:

Lead: 430 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 cuft/sx, 8.86 gps) Comp Strengths: 12 hr - 417 psi 24 hr - 700 psi 72 hr - 1278 psi

Tail: 280 sx Class C w/1% CaCl, 0.13 #/sx CF, 0.005 gps FP-6L

(14.8 ppg, 1.34 cuft/sx, 6.33 gps) Compressive Strengths: 12 hr - 875psi 72hr - 1466 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 7150'. Cement with:

<u>Lead</u>: 650 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 cuft/sx, 13.78 gps) Compressive Strengths: 12 hr - 100 psi 24 hr - 200 psi 72 hr - 550 psi

<u>Tail:</u> 370 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 cuft/sx, 5.57 gps) Compressive Strengths: **12** hr – 500 psi **24** hr –1600 psi **72**hr—2250 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 3146 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'-1330' 1365	8.4 – 8.6	28 – 30	NC	Water
1330' to 5600'	10	29 – 32	NC	Brine
5600' – TD	10	29 – 32	NC	Cu't 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: See COA

- A. Open hole logs: Dual Laterolog, MSFL, CNL, Litho-Density, Gamma Ray, Caliper & Sonic from TD back to 8-5/8" csg shoe.
- 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:

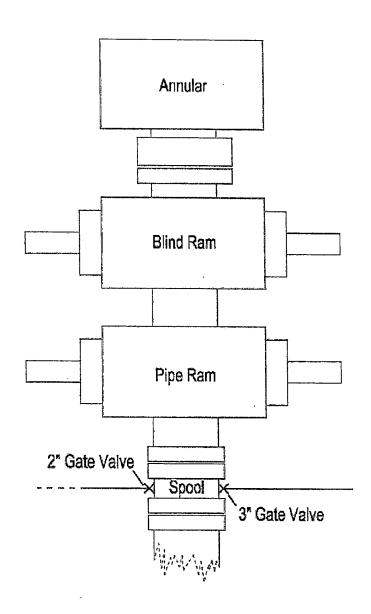
No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with 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: 3146 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 8 - 10 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.

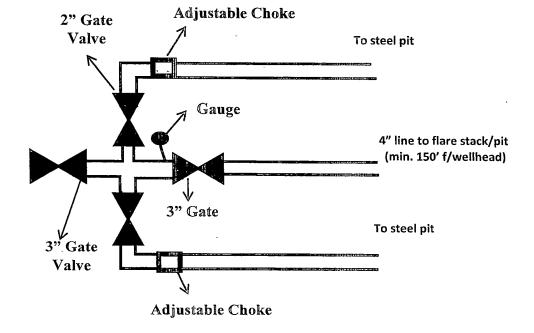


# 3M psi BOPE & Choke Manifold WBDU #108

All valve & lines on choke manifold are 2" unless noted.

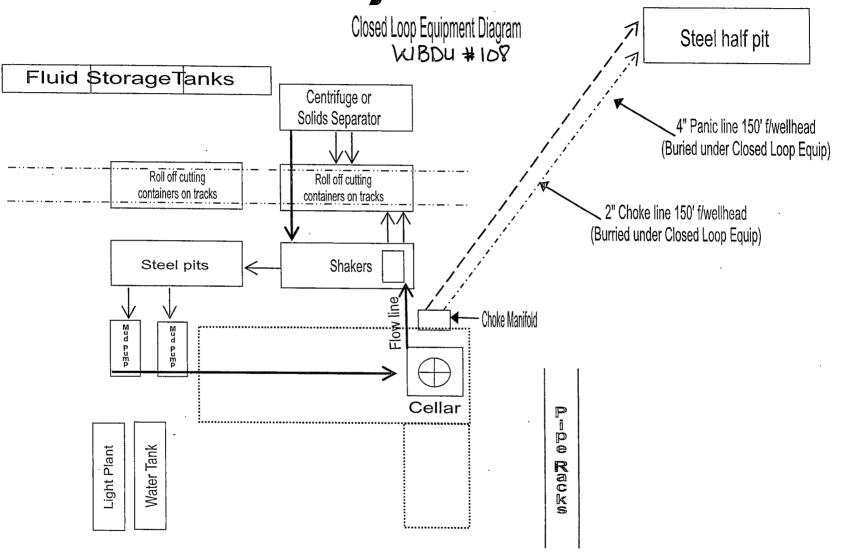
Exact manifold configuration may vary

Exhibit#7



Apache

Fixhibit #5



**TRAILER** 

**TRAILER** 

# WELLSITE / RIG LAYOUT WBDU #108

Exhibit #3

