12-20

HOBBS OCD

OCD-HOBBS

Form 3160-3
(April 2004) MAR 0 6 2012

Split Estate

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMLC-0031741A

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
WBDU NM120042X

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. <37346>
WEST BLINEBRY DRINKARD UNIT #107

2. Name of Operator
APACHE CORPORATION

9. API Well No.
30-025-40481

3a. Address **303 VETERANS AIRPARK LN #3000**
MIDLAND, TX 79705

3b. Phone No. *(include area code)*
432-818-1167

10. Field and Pool, or Exploratory
EUNICE; BLI-TU-DRI, N. <22900>

4. Location of Well *(Report location clearly and in accordance with any State requirements *)*
At surface **330' FNL & 1650' FWL**
At proposed prod. zone **SAME**

11. Sec., T. R. M. or Blk. and Survey or Area
UL: C SEC: 8 T21S R37E

14. Distance in miles and direction from nearest town or post office*
APPROX 3 MILES NORTH OF EUNICE, NM

12. County or Parish
LEA COUNTY

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
330'

16. No. of acres in lease
958 ACRES

17. Spacing Unit dedicated to this well
40 ACRES

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft
~ 660'

19. Proposed Depth
7200'

20. BLM/BIA Bond No. on file
BLM - CO - 1463 NATIONWIDE / NMB000736

21. Elevations (Show whether DF, KDB, RT, GL, etc)
3524'

22. Approximate date work will start*
As soon as approved

23. Estimated duration
8 - 10 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 Sorina L Flores — Name *(Printed/Typed)* **SORINA L. FLORES** — Date 9/28/11

Title **SUPV. DRILLING SERVICES**

Approved by *(Signature)* /s/ Don Peterson — Name *(Printed/Typed)* — Date MAR 0 1 2012

Title FIELD MANAGER — Office CARLSBAD FIELD OFFICE

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.

APPROVAL FOR TWO YEARS

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)

KA 03/07/12

Capitan Controlled Water Basin

dm

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

MAR 0 8 2012

DRILLING PLAN: BLM COMPLIANCE

(Supplement to BLM 3160-3)

APACHE CORPORATION (OGRID: 873)

West Blinebry Drinkard Unit #107 Lease #: NMLC-0031741A Projected TD: 7200' GL: 3524'
330' FNL & 1650' FWL, UL: C 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 DEPTH	WATER/OIL/GAS
Quaternary Alluvials	Surf	
Rustler	1298'	
Salt Top	1340'	
Salt Bottom	2550'	
Yates	2690'	
Queen	3492'	
Grayburg	3788'	
San Andres	4095'	
Glorieta	5240'	
Blinebry	5708'	Oil
Tubb	6232'	Oil
Drinkard	6562'	Oil
ABO	6832'	
TD	7200'	
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 casing is new & API approved

See COA

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0' – ~~1325'~~ 380'	8-5/8"	24#	STC	J-55	2.4	5.0	7.7
7-7/8"	0' – 1000'	5-1/2"	17#	LTC	L-80	12.1	3.2	2.8
7-7/8"	1000' – 7200'	5-1/2"	17#	LTC	J-55	1.3	1.4	2.3

4. **CEMENT PROGRAM:**

A. **8-5/8" Surface:** Run & set 8-5/8" 24# J-55 STC csg to ~~1325~~'. Cement with:

Lead: 450 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** – 417 psi **24 hr** – 700 psi **72 hr** – 1278 psi*

Tail: 300 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** – 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 7200'. Cement with:

Lead: 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 yld)
*Compressive Strengths: **12 hr** – 100 psi **24 hr** – 200 psi **72 hr** – 550 psi*

Tail: 360 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** – 500 psi **24 hr** –1600 psi **72hr**—2250 psi*

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

*** The above cmt volumes could be revised pending caliper measurement from open hole logs. TOC is designed to reach surface on Surface and Production. The above slurry design may change, but will meet BLM specifications.* *All slurries will be tested prior to loading to confirm thickening times & a lab report furnished to Apache. Fluid loss will be tested & reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.*

5. PROPOSED CONTROL EQUIPMENT

"EXHIBIT 3" shows an 11" 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 3124 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 3/3A"* 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' – 1325' 1380	8.4 – 8.6	28 – 30	NC	Water
1325' to 5600'	10	29 – 32	NC	Brine
5600' – TD	10	29 – 32	NC	Cut Brine

*** 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:

11" x 3000 psi Double BOP/Blind & pipe ram (2M BOP if available)
4-1/2" x 3000 psi Kelly valve
11" 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_2S in this area. If H_2S 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: 3124 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.

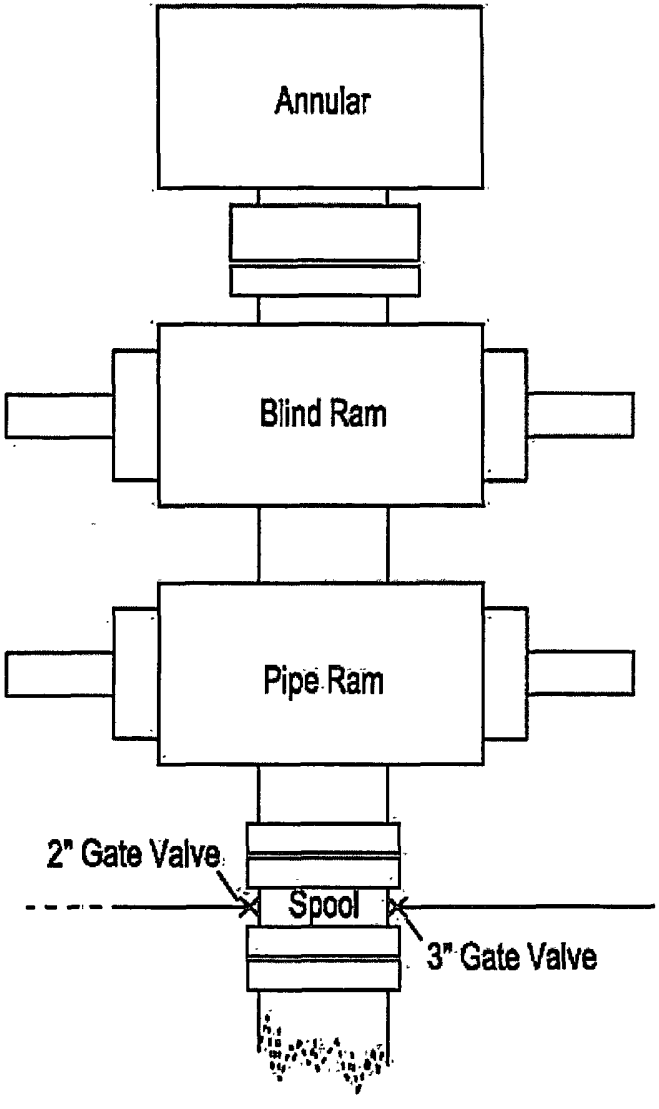
11. OTHER FACETS OF OPERATION:

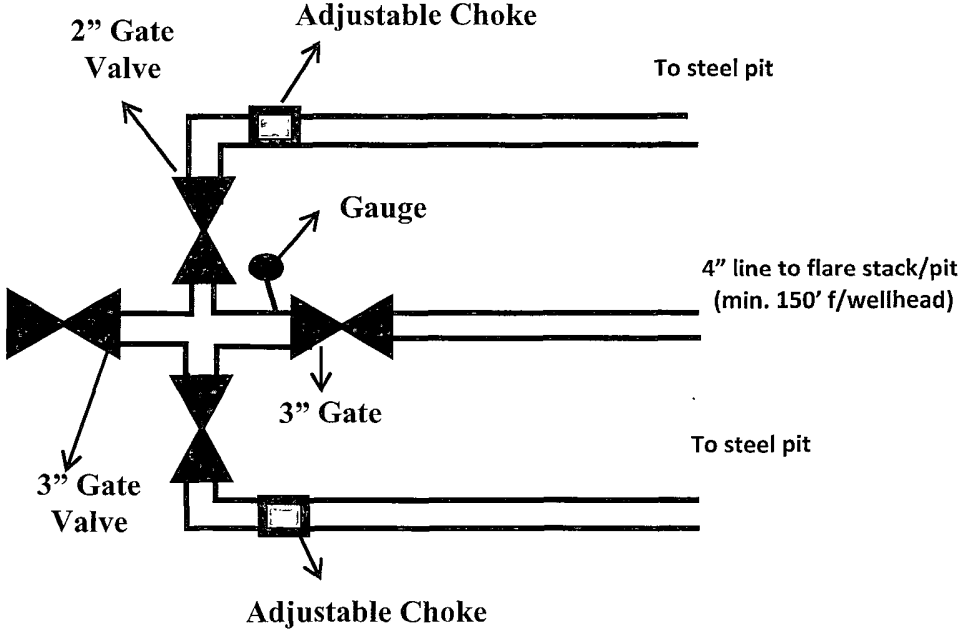
After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Eunice; Blin-Tu-Dri, North formation will be perforated and stimulated in order to establish production. The well will be swab tested & potentialed as an oil well.

3M psi BOPE & Choke Manifold

Exhibit 3

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





INTERIM RECLAMATION LAYOUT
WBDU #107
EXHIBIT #5