

HOBBS OCD

OCD-HOBBS

12-87

Form 3160-3
(April 2004)

MAR 06 2012

RECEIVED UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Split Estate

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC-0032096B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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 APACHE CORPORATION		7. If Unit or CA Agreement, Name and No.
3a. Address 303 VETERANS AIRPARK LN #3000 MIDLAND, TX 79705	3b. Phone No. (include area code) 432-818-1167	8. Lease Name and Well No. LOCKART B 12 #013-241345
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1980' FNL & 660' FEL At proposed prod. zone SAME		9. API Well No. 30-025-40479
14. Distance in miles and direction from nearest town or post office* APPROX 4 MILES NORTHEAST OF EUNICE, NM		10. Field and Pool, or Exploratory Tubb 049(0) #60240 Drinkard #19190 Wantic, NBO #62700
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease 1920 ACRES	11. Sec., T. R. M. or Blk. and Survey or Area UL: H SEC: 12 T21S R37E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. ~ 1000'	19. Proposed Depth 7500'	12. County or Parish LEA
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3512'	22. Approximate date work will start* AS SOON AS APD APPROVED	13. State NM
23. Estimated duration 15 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Sorina L Flores</i>	Name (Printed/Typed) SORINA L. FLORES	Date 10/27/11
Title SUPV OF DRILLING SERVICES		

Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed) Name	Date MAR 01 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)

Capitan Controlled Water Basin

KB 03/07/12

Oil Conservation Division
Conditions of approval: Approval for drilling/workover ONLY-- CANNOT produce Downhole Commingled until DHC is approved in Santa Fe.

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

MAR 08 2012

DRILLING PLAN: BLM COMPLIANCE

(Supplement to BLM 3160-3)

APACHE CORPORATION (OGRID: 873) LOCHART B 12 #13

Lease #: NMLC-032096B Projected TD: 7500' GL: 3512'
1980' FNL & 660' FEL UL: H SEC: 12 T21S R37E LEA COUNTY, NM

- GEOLOGIC NAME OF SURFACE FORMATION:** Quaternary Aeolian Deposits
- ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

FORMATION	WELL DEPTH	WATER/OIL/GAS
Quaternary Aeolian	Surf	
Rustler	1542'	
Salt Top	1675'	
Salt Bottom	2690'	
Yates	2816'	
Queen	3646'	
Grayburg	4001'	
San Andres	4246'	
Glorieta	5459'	
Blinberry	5908'	Oil
Tubb	6409'	Oil
Drinkard	6732'	Oil
ABO	7002'	Oil
TD	7500'	
Depth to Ground Water:	~ 65'	

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.

- CASING PROGRAM:** All casing is new & API approved

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0' - 1545'	8-5/8"	24#	STC	J-55	1.125	1.0	1.8
7-7/8"	0' - 1000'	5-1/2"	17#	LTC	L-80	1.125	1.0	1.8
7-7/8"	1000' - 7500'	5-1/2"	17#	LTC	J-55	1.125	1.0	1.8

- CEMENT PROGRAM:**

A. 8-5/8" Surface: Run & set 8-5/8" 24# J-55 STC csg to 1545'. Cmt with:

Lead: 585 sx Class C w/ 2% CaCl₂, 0.25# CF, 3# LCM1, 0.005 gps FP-6L, 4% Bentonite
(13.5 ppg, 1.75 yld) Compressive Strengths : 12 hr - 755 psi 24 hr - 1347 psi

Tail: 200 sx Class C w/ 1% CaCl₂, 0.13 # CF, 0.005 gps FP-6L

(14.8 ppg, 1.34 yld) Compressive Strengths : 12 hr - 500 psi 24 hr - 782 psi ** 100% excess cmt to surf**

B. 5-1/2" Production: Run & set 5-1/2" 17# L-80/J-55 LTC csg to 7500'. Cmt with:

Lead: 600 sx (50:50) Poz Cl C w/ 5% Sodium Chloride, 0.13# CF, 3# LCM1, 0.5% FL52, 0.005 gps FP-6L, 6% Bentonite, 0.5% BA10A
(12.8 ppg, 1.90 yld) Compressive Strengths: 12 hr - 344 psi 24 hr - 835 psi

Tail: 300 sx (50:50) Poz Cl C w/ 5% Sodium Chloride, 0.13# CF, 0.2% CD32, 3# LCM-1, 0.45% FL-52, 0.005 gps FP-6L, 2% Bentonite, 0.1% Sodium Metasilicate

(14.2 ppg, 1.30 yld) Compressive Strengths: 12 hr - 869 psi 24 psi - 1768 psi ** 50% excess cmt**

** 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 5" shows a 900 series 11" 3M psi WP BOP consisting of an annular bag type preventer, middle blind rams, bottom pipe rams. The BOP will be nipped 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 3300 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 5" 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 or 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' - 1545 ¹⁶⁰⁰	8.3	28 - 32	NC	Fresh Water
1545 - 7100'	10	28 - 32	NC	Brine
7100' - TD	10.1 - 10.2	32 - 33	10 - 12	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:

- 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" blow down line

8. LOGGING, CORING & TESTING PROGRAM: *See COA*

- A. OH logs: Dual Laterolog, MSFL, CNL, Litho-Density, Spectral 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 or DST's are planned at this time. Mud log will be included on this well.
- D. Additional testing will be initiated subsequent to setting the 5-1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows & drill stem tests.

9. POTENTIAL HAZARDS:

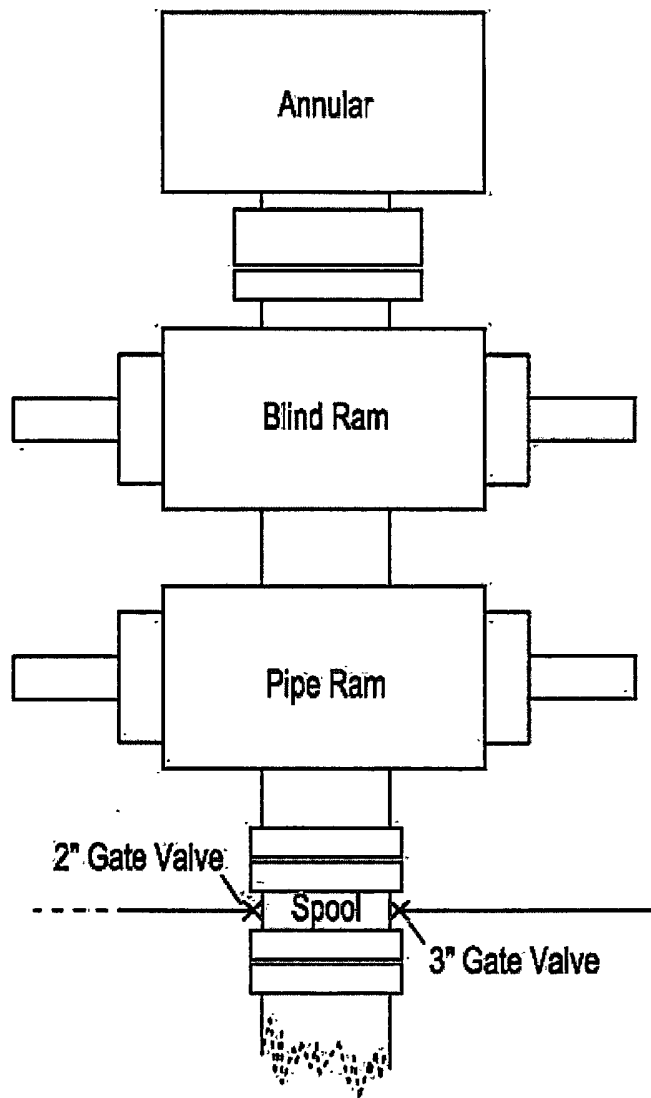
No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of *Onshore Oil & Gas Order No. 6 (SEE EXHIBIT 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: 3300 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 15 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:

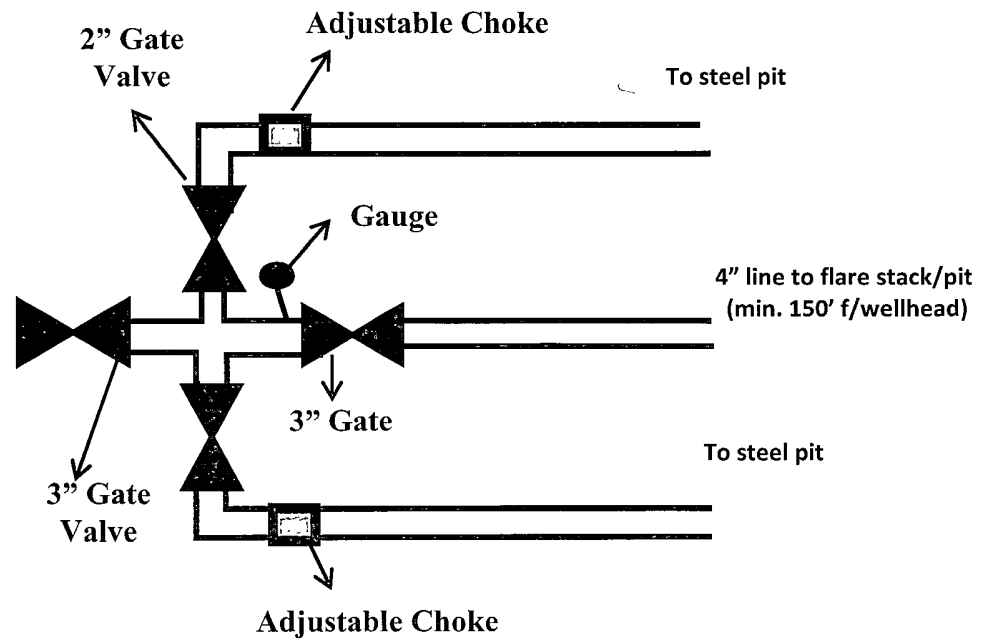
After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Blinbry, Tubb, Drinkard & Wantz/ABO formations will be perforated and stimulated in order to establish production. The well will be swab tested & potentialized as an oil well.



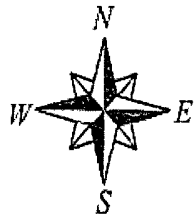
3M psi BOPE & Choke Manifold

Exhibit 3

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



WELLSITE / RIG LAYOUT
LOCKHART B 12 #13
EXHIBIT # 5



347.7'
Proposed
Road

V DOOR

