OCD Hobbs

		HOBBS	OCD				
Form 3160-3 (April 2004) UNITED STATES		FEB 27 2012		FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007			
DEPARTMENT OF THE I	NTERIOR			5. Lease Serial No NM-90161			
BUREAU OF LAND MAN APPLICATION FOR PERMIT TO		RECE REENTER	IVED	6. If Indian, Allote	e or Tribe N	łame	
Ia. Type of work: PRILL REENTE	R			7 If Unit or CA Ag	rcement, Na	me and No.	
lb. Type of Wéll: Oil Well, Gas Well Other	Sing	le ZoneMulti	ple Zone	8. Lease Name and Hawk Fede		244 B	۲٦ أ
2. Name of Operator APACHE CORPORATION				9. API Well No. 30-025-	NUI	<u> </u>	•
3a. Address 303 VETERANS AIRPARK LN #3000 MIDLAND, TX 79705	3b. Phone No. (432-818-	include area code) 1167		10. Field and Pool, or WANTZ; AB			>
4. Location of Well (Report location clearly and in accordance with any At surface 2480 FSL & 1805 FEL	State requirement	HODOX		11. Sec., T. R. M. or	Blk.and Surv	ey or Area	
At surface 2480 FSL & 1805 FEL At proposed prod. zone SAME		TION	١	UL: J SEC:	8 T21S F	R37E	
14. Distance in miles and direction from nearest town or post office*	LOCA	HIOIN .		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)	16. No. of acre			g Unit dedicated to this	well		
		640		ACRES		-	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. ~225'	19. Proposed D 7600'	epth	-	BIA Bond No. on file - CO - 1463 NATIO	ONWIDE		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		te date work will sta	_	23. Estimated duration		,	
	24. Attachr	as Approv	ea				
The following, completed in accordance with the requirements of Onshore	Oil and Gas Or	der No.1, shall be a	tached to thi	s form:	··· ··· ···		
 Well plat certified by a registered surveyor. A Drilling Plan. 	1	Item 20 above).	ne operation	is unless covered by ag	existing bo	nd on file (sec	
3. A Surface Use Plan (if the location is on National Forest System L SUPO shall be filed with the appropriate Forest Service Office).	ands, the	 Operator certific Such other site authorized offic 	specific info	rmatiòn and/or plans a	s may be rêq	uired by the	
25. Signature Sorina L. Horen		inted/Typed) RINA L. FLORE	es		Date / // 2	30/11	
Title SUPV OF DRILLING SERVICES							
Approved by (Signature) /s/ Don Peterson	-Name (Pi	rinted/Týped)		***************************************	Date EB	2 12012	i'
Title FIELD MANAGER	Office			CARLSBA	D FIELD	OFFICE	
Application approval does not warrant or certify that the applicant holds	legal or equitabl	e title to those right	s in the subj	ect lease which would e	entitle the app	olicantto	
conduct operations thereon. Conditions of approval, if any, are attached.				APPROV	AL FO	R TWO	YEA
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crir States any false, fictitious or fraudulent statements or representations as to	ne for any perso any matter with	n knowingly and w	illfully to ma	kë to any department o	r agency of	the United	

Kzzhs/r

*(Instructions on page 2)

Capitan Controlled Water Basin

NSL 6504

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

APACHE CORPORATION (OGRID: 873) Hawk Federal B-1 Com #69

Lease #: NM-90161 Projected TD: 7600' GL: 3531'

2480' FSL & 1805' FEL UL: J SEC: 8 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	1320′	
Salt Top	1405′	
Salt Bottom	2560'	•
Queen	3501"	
Grayburg	3787'	Oil
San Andres	4071'	Oil
Glorieta	5232′	
Blinebry	5675'	Oil
Tubb	6137'	Oil
Drinkard	6586'	Oil
АВО	6848'	Oil
TD	7.600′	
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.

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

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0'-1370'	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'-7600'	5-1/2"	17#	LTC	J-55	1.125	1.0	1.8

4. CEMENT PROGRAM:

A. <u>8-5/8" Surface:</u> Run & set 8-5/8" 24# J-55 STC csg to 1370'. Cmt with:

<u>Lead</u>: 495 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 7600'. Cmt with:

<u>Léad</u>: 690 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

(12.8ppg, 1.90 yld) Compressive Strengths: 12 hr - 344 psi 24 hr - 835 psi

<u>Tail:</u> 200 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 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 3344 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 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' -1370	8.3	28 – 32	NC	Fresh Water
1370 – 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 valvé

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 CDA

- 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:

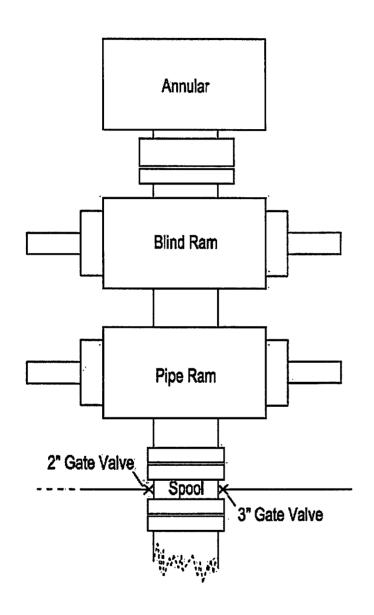
No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of *Onshore 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: 3344 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:

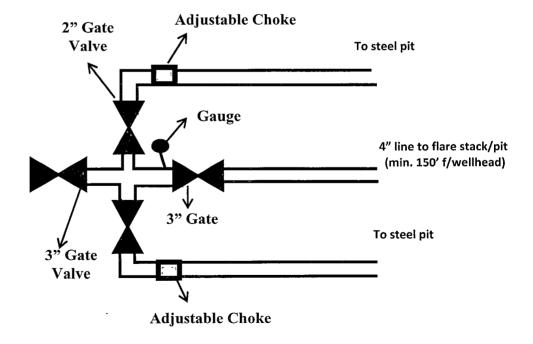
After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Wantz; ABO formations will be perforated and stimulated in order to establish production. The well will be swab tested & potentialed as an oil well.

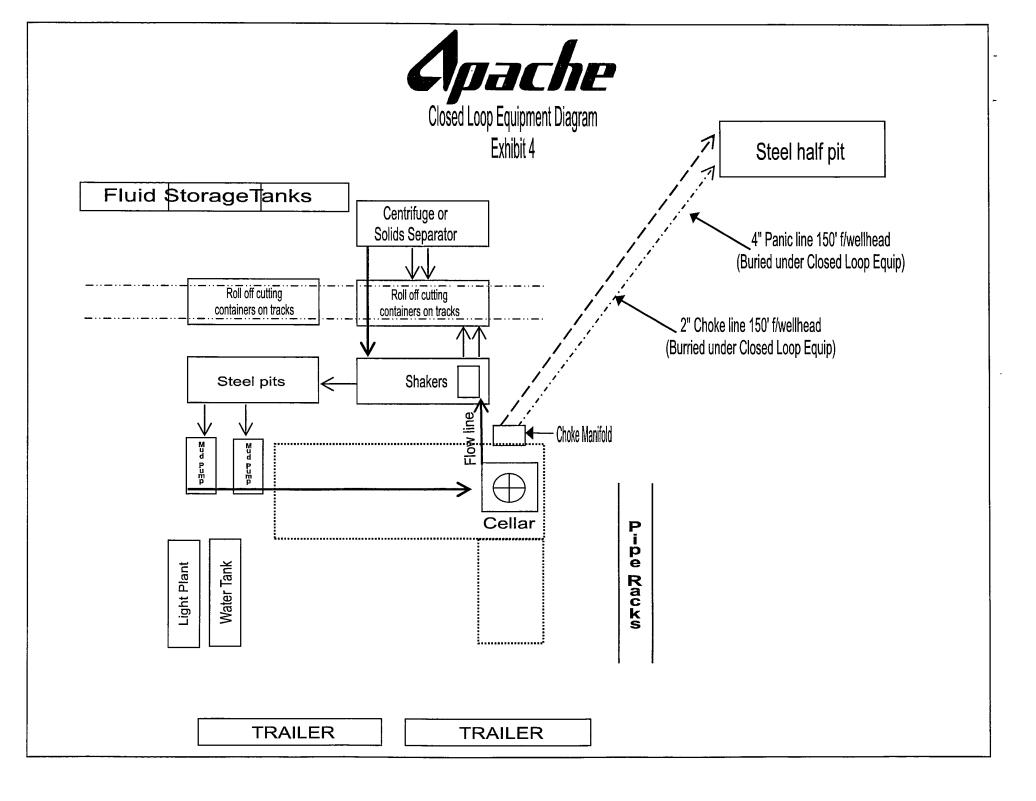


3M psi BOPE & Choke Manifold Exhibit 3

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

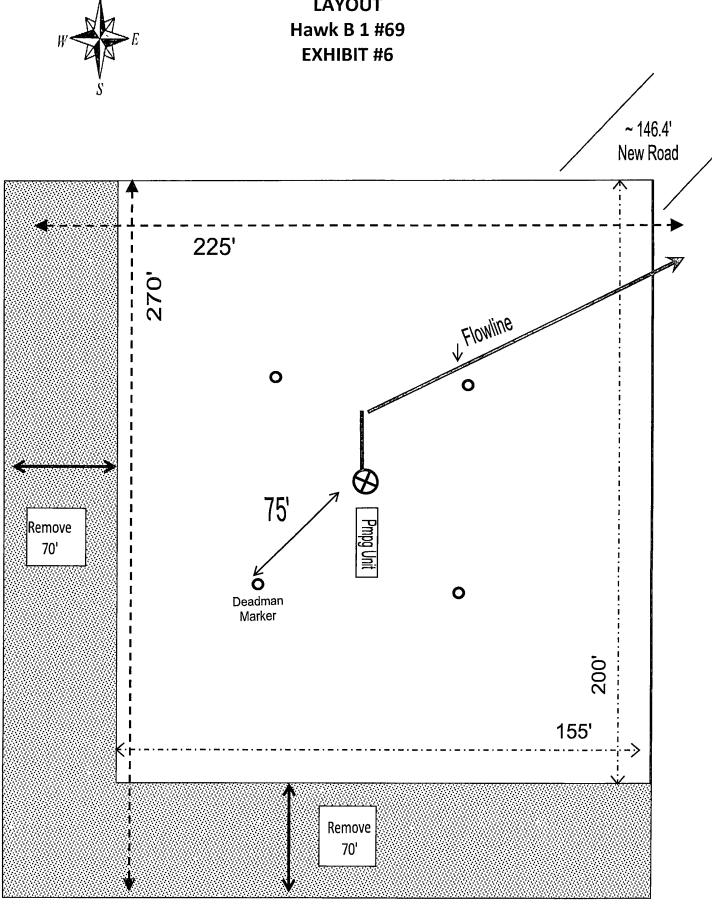
Exact manifold configuration may vary







INTERIM RECLAMATION LAYOUT Hawk B 1 #69



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220

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
_	cepts all applicable terms, conditions, stipulations, and restrictions concerning ed on the leased land or portion thereof, as described below:
Lease No: NN	I-90161 HAWK FEDERAL B-1 #69
Legal Description	of Land:
UL: J Section	n: <u>8</u> Township: <u>21\$</u> Range: <u>37E</u>
County: LEA	State: NM <
Bond Coverage: _	\$150,000
Statewide Oil and	Gas Surety Bond, APACHE CORPORATION.
BLM Bond File No.	: BLM-CO-1463 NATIONWIDE
Signature:	obly L Smith Printed Name: BOBBY L. SMITH
Title: <u>DRI</u>	LLING MANAGER, PERMIAN REGION
Date: <u>1</u> :	1/8/11

Apache Corporation Responsibility Letter