OCD-ARTESIA

FORM APPROVED Form 3160-3 OMB No. 1004-0137 Expires March 31, 2007 (April 2004) UNITED STATES Lease Serial No. DEPARTMENT OF THE INTERIOR NMLC-0029395A BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. **V** DRILL REENTER la. Type of work: 8. Lease Name and Well No. TONY FEDERAL #035 <308738> Gas Well ✓ Single Zone Multiple Zone lb. Type of Well: ✓ Oil Well Name of Operator 9. API Well No. APACHE CORPORATION 30-015-3a. Address 303 VETERNAS AIRPARK LN #3000 Phone No. (include area code) 10. Field and Pool, or Explorator CEDAR LAKE; GLORIETA-YESO (96831) MIDLAND, TX 79705 432-818-1167 11. Sec., T. R. M. or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements *) 1810' FNL & 1650' FEL At surface UL: G SEC 19 T17S R31E At proposed prod. zone SAME 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* APPROX 4.5 MILES EAST OF LOCO HILLS, NM **EDDY** NM Distance from proposed* 17. Spacing Unit dedicated to this well 16. No. of acres in lease 1650 location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 609.33 40 ACRES 20. BLM/BIA Bond No. on file 18. Distance from proposed location* to nearest well, drilling, completed, 19. Proposed Depth BLM - CO - 1463 NATIONWIDE 6500' applied for, on this lease, ft. 22. Approximate date work will start* 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 03/31/2011 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. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 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). Such other site specific information and/or plans as may be required by the authorized officer. 25. Signature Name (Printed/Typed) Date SORINA L FLORES 03/22/2011 Title DRILLING TECH Date Approved by (Signature) Name (Printed/Typed) /s/ Don Peterson Title Office CARLSBAD FIELD OFFICE FIELD MANAGER 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. APPROVAL FOR TWO YEARS Conditions of approval, if any, are attached. 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

*(Instructions on page 2)

Roswell Controlled Water Basin

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

JUL 15 2011

NMOCD ARTESIA

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) TONY FEDERAL #35

Lease #: NMLC-0029395A Projected TD: 6500' GL: 3632' 1810' FNL & 1650' FEL, UL: G SEC: 19 T17S R31E EDDY-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	196'		
Salt Top	495'		
Salt Bottom	1230′		
Yates	1376′		
Seven Rivers	1676′	Oil	
Queen	2292′	Oil	
Grayburg	2643'	Oil	
San Andres	3046′	Oil	
Glorieta	4510′		
Yeso	4597′	Oil	
Blinebry	5148′		
Tubb	6133′		
TD	6500′		
Depth to Ground Water:	91′		

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. The surface fresh water sands will be protected by setting 13-3/8" csg @ 225' & circ cmt back to surface. All intervals will be isolated by setting 5-1/2" csg to TD & circ cmt above the base of 8-5/8" csg.

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

Sce COA

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
17-1/2"	0'-225'334	13-3/8"	48#	STC	H-40	1.125	1.0	1.8
11"	225'-1400'	8-5/8"	24#	STC	J-55	1.125	1.0	1.8
7-7/8"	1400'-6500'	5-1/2"	17#	LTC	J-55	1.125	1.0	1.8

4. CEMENT PROGRAM:

A. 13-3/8" Surface: Run & set 13-3/8" 48# H-40 STC csg to 225'. Cmt with:

<u>Lead</u>: 260 sx Class C w/ 1% CaCl2, 0.25% R38 (14.8 wt, 1.34 yld)

Compressive Strengths: 12 hr - 813 psi 24 hr - 1205 psi ***100% excess cmt; cmt to surface***

B. 8-5/8" Intermediate: Run & set 8-5/8" 24# J-55 STC cst to 1400'. Cmt with:

Lead: 160 sx (50:50) Poz C w/ 4% Bentonite, 1% caCl2, 0.25% R38 (12wt, 2.3 yld)

Compressive Strengths: 12 hr - 589 psi 24 hr - 947 psi

Tail: 160 sx Class C w/ 1% CaCl2, 0.25% R38 (14.8 wt, 1.34 yld)

Compressive Strengths: 12 hr - 813 psi 24 hr - 1205 psi ***100% excess cmt; cmt to surface***

C. 5-1/2" Production: Run & set 5-1/2" 17# J-55 LTC csg to 6500' (DV or Post tool w/ be set at @ 3500' if DV or Post is to be moved cement will be adjusted proportionately / TOC: 500') Cmt with:

1st Stage Lead: 530 sx (50:50) Poz C w/ 0.3% C12, 5% Salt, 0:25% R38 (14.2 wt, 1:26 yld)

Compressive Strengths: **12 hr** – 1379 psi **24 hr** – 2332 psi

2nd Stage Lead: 270 sx (50:50) Poz C w/ 5% Salt, 0.25% R38 (11.8 wt, 2.45 yld)

- Compressive Strengths:-**12 hr -** 540 psi---**-24 hr** -- 866 psi-----

Stage Tail: 90 sx (50:50) Poz C w/ 5% Salt, 0.25% R38 (14.2 wt, 1.28 yld)

Compressive Strengths: 12 hr - 1031 psi 24 psi - 1876 psi ***30% excess cmt***

Sec \{* COA \{

The above cmt volumes could be revised pending caliper measurement from open hole logs. For Surface csg: If cmt´ does not circ to surface, the appropriate BLM office shall be notified & a tag with 1" will be performed at four positions 90 degrees apart to verify cmt depth. If depth is greater than 100' or water is standing in the annulus, remedial cementing will be done. If no water & TOC tag is less than 100', when 100% excess cmt of the annulus volume is run on the primary job, ready-mix will be used to bring cmt to surface.

5. PROPOSED CONTROL EQUIPMENT

Exhibit "1" 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 13-3/8" surface csg and tested to 70% of casing burst. After the intermediate casing is set & cemented the 13 3/8" casing head will be removed and a 11" 3M head will be installed on the 8 5/8" casing 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 2662 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 "1" also shows a 3M psi choke manifold with a 3" blow down 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'-225' 330	8.4	29	NC	Fresh Water
225' to 1400'	9.8 – 10.0	29	NC	Brine
1400′ – 6500′	8.9 – 9.0	29	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 - 3" blow down line

8. LOGGING, CORING & TESTING PROGRAM: \mathcal{L} \mathcal{L} \mathcal{L} \mathcal{L} \mathcal{L} \mathcal{L}

- A. OH 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.
- **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:

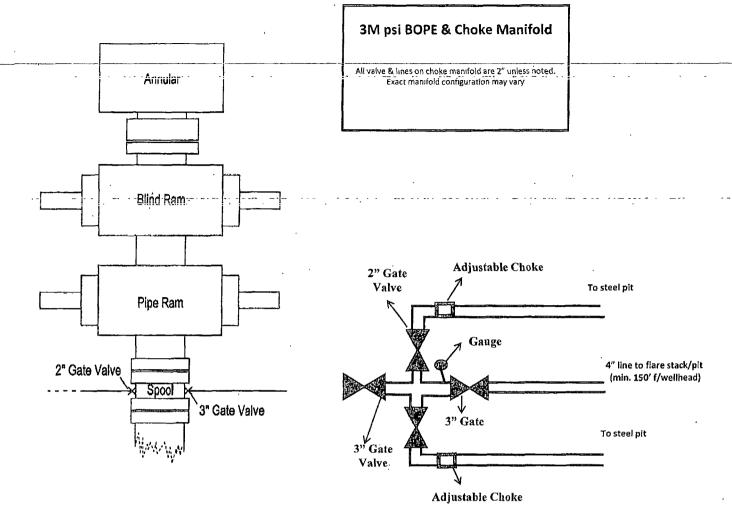
No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of *Onshore Oil & Gas.Order No. 6*. 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: 2662 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 14 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 Cedar Lake; Glorieta-Yeso formation will be perforated and stimulated in order to establish production. The well will be swab tested & potentialed as an oil well.



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
-	epts all applicable terms, conditions, stipulations, and restrictions s conducted on the leased land or portion thereof, as described
Lease No: NML	C-0029395A TONY FEDERAL #035
Legal Description of	Land: 1810' FNL & 1650' FEL
UL: <u>G</u> Section:	19 Township: <u>17S</u> Range: <u>31E</u>
County: EDDY	State: <u>NM</u>
Bond Coverage:	\$150,000
Statewide Oil and Ga	s Surety Bond, APACHE CORPORATION.
BLM Bond File No.:	BLM-CO-1463 NATIONWIDE
	My L Smith Printed Name: BOBBY L. SMITH
Title: DRIL I	LING MANAGER, PERMIAN REGION
Date: <u>1/31/2</u>	011

Apache Corporation Responsibility Letter DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator _	APACHE COR	OGRID #	873
308738 Well Name Location: L	& # <i>TONY FED</i> JL 6. Sect 19, Twnship 17 s, RNG	Surfac Sub-surfac	e Type (F) (S) (P) e Type (F) (S) (P)
	Date C101 rec'd	# wells #, SIGNATURE # wells: Operator, to Santa Fe ds addition bonding: to-Operator, To-Santa-Fe ell list and Financial Assurance:	ells_ 6
c.	c. Well shares acreage, No, Signature 2. 2 nd . Operator in same acreage, Yes Agreement Letter, Disagreement 3. Intent to Directional Drill Yes, No a. Dedicated acreage, Who b. Bottomhole Location Standard	t Units	(83) 15-33000 15-33000 15-34654
E. F.	4. Downhole Commingle: Yes, No, No, No, Pool #2, No, Pool #4, No, No, No, No, No, No, No, No, No	,Code,,Code,,Code,,Code,,NSL#	Acres
	3 Simultaneous Dedication: Yes, No	No, SD # or WFX #; SWD #; Holding	