

Form 3160-3
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 20105. Lease Serial No.
NMLC-0549086. If Indian, Allottee or Tribe Name
N/A7. If Unit or CA Agreement, Name and No.
N/A8. Lease Name and Well No.
FAIR 18 FEDERAL #19. API Well No.
30-015- 3918910. Field and Pool, or Exploratory
CEDAR LAKE; GLORIETA-YESO11. Sec., T. R. M. or Blk. and Survey or Area
SENE 18-17S-31E NMPM1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator FAIR OIL, LTD.

3a. Address P. O. BOX 689
TYLER, TX 757103b. Phone No. (include area code)
903 592-3811

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 2310' FNL & 840' FEL

At proposed prod. zone SAME

14. Distance in miles and direction from nearest town or post office*

5 AIR MILES SW OF FARMINGTON, NM

12. County or Parish
EDDY13. State
NM15. 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
16017. Spacing Unit dedicated to this well
SENE18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

150' (Hudson 6)

19. Proposed Depth
6,600'20. BLM/BIA Bond No. on file
NMB00073321. Elevations (Show whether DF, KDB, RT, GL, etc.)
3,699' UNGRADED22. Approximate date work will start*
04/01/201123. Estimated duration
3 WEEKS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature

B. Wood

Name (Printed/Typed)

BRIAN WOOD (505 466-8120)

Date

02/12/2011

Title

CONSULTANT

(FAX 505 466-9682)

Approved by (Signature)

FOR

/S/ JEANETTE MARTINEZ

Name (Printed/Typed)

Date

JUN 08 2011

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

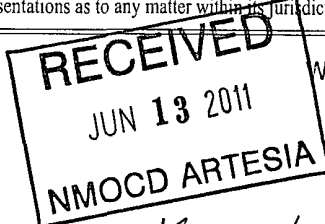
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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.

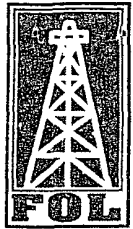
(Continued on page 2)

Roswell Center
Roswell Controlled Water Basin

Witness Surface Casing *(Instructions on page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHEDSEE ATTACHED FOR
CONDITIONS OF APPROVAL

KZ 07/06/11



FAIR OIL, LTD.

P.O. Box 689 • Tyler, Texas, 75710 • 225 South College • Tyler, Texas 75702 • (903) 592-3811 • FAX (903) 597-3587

DESIGNATION OF AGENT

November 18, 2010

Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Carlsbad NM 88220

Gentlemen:

Please be informed that Brain Wood with Permits West, Inc. is an Agent employed by Fair Oil, Ltd. He is authorized to prepare and submit APD's, Right of Way applications and other BLM required forms.

Permits West Inc. address is as follows:

37 Verano Loop
Sante Fe NM 87508

505-466-8120 Office
505-466-9682 Fax
505-699-2276 Cell

Should you have any questions or require any additional information, contact Rodney Thomson at 903-510-6527 or e-mail rodney.thomson@fairoil.com.

Sincerely
Fair Oil, Ltd.

Rodney K. Thomson

Rodney K. Thomson
Production Manager

Fair Oil, Ltd.
Fair 18 Federal #1
2310' FNL & 840' FEL
Sec. 18, T. 17 S., R. 31 E.
Eddy County, New Mexico

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Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Quaternary sand	0'	15'	+3,699'
Rustler anhydrite	290'	305'	+3,409'
Salado salt top	510'	525'	+3,189'
bottom Salado	1,270'	1,285'	+2,429'
Yates	1,430'	1,445'	+2,269'
Seven Rivers	1,815'	1,830'	+1,884'
Queen	2,355'	2,370'	+1,344'
Grayburg	2,720'	2,735'	+979'
San Andres	3,060'	3,075'	+639'
Glorieta	4,524'	4,539'	-825'
Paddock	4,579'	4,594'	-880'
Yeso	4,950'	4,965'	-1,251'
Total Depth	6,600'	6,615'	-2,901'

2. NOTABLE ZONES

<u>Gas or Oil Zones</u>	<u>Water Zone</u>	<u>Mineral Zone</u>
Grayburg	none	anhydrite
San Andres		salt
Paddock		
Yeso		

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded.

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3. PRESSURE CONTROL

The drilling contract has not yet been awarded. Thus, the exact BOP model to be used is not yet known. A typical 5,000 psi model is on PAGE 3. If equipment changes, then a Sundry Notice will be filed. System will meet Onshore Orders 2 (BOP) and 6 (H2S) requirements.

BOP and choke manifold will be installed and pressure tested before drilling out of the surface casing. Subsequent pressure tests will be performed whenever the pressure seals are broken. BOP and manifold mechanical operating conditions will be checked daily. BOP will be tested at least once every 30 days.

Ram type preventers and related pressure control equipment will be pressure tested to the working pressure of the stack if a test plug is used.

*See
COA*

[If a plug is not used, then the stack will be tested to the rated working pressure of the stack or 70% of the minimum internal yield of the casing, whichever is less. Annular type preventers will be pressure tested to 50% of their working pressure. All casing strings will be pressure tested to 0.22 psi/foot or 1,500 psi, whichever is greater, not to exceed 70% of the internal yield. The casing shoe will be tested by drilling 5' to 20' out from under the shoe and pressure tested to a maximum expected mud weight equivalent as shown in the mud program.

A manual locking device (e. g., hand wheels) or automatic locking devices will be installed on the BOP stack. Remote controls capable of both opening and closing all preventers will be readily accessible to the driller.

Choke manifold and accumulator will meet or exceed BLM standards. BOP equipment will be tested after any repairs. Pipe and blind rams and annular preventer will be activated on each trip. Weekly BOP drills will be conducted with each crew. All tests, maintenance, and BOP drills will be recorded on the rig tower sheets.

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Auxiliary equipment will include:

- upper kelly cock, lower kelly cock will be installed while drilling
- inside BOP or stabbing valve with handle available on rig floor
- safety valve(s) and subs to fit all string connections in use
- electronic/mechanical mud monitor will with a minimum pit volume totalizer; stroke counter; flow sensor

4. CASING & CEMENT (casing design specifications on next page)

Hole Size	O. D.	Weight (lb/ft)	Grade	Age	Connection	Set Depth
17.5"	13.375"	48	H-40	New	ST & C	350' 375'
12.25"	8.625"	32	J-55	New	ST & C	3,600'
7.875"	5.5"	15.5	N-80	New	ST & C	6,600'

Surface casing will be cemented to the surface with >100% excess. Cement with ≈ 522 cubic feet Class C + 1/4 pound per sack cello flake + 2% CaCl_2 . Weight = 14.8 pounds per gallon. Yield = 1.35 cubic feet/sack. Centralizers will be installed on the middle of the shoe joint and on every fourth joint to the surface.

See
COA
&
Onshore
Order
2,

Intermediate casing will be cemented to the surface with >90% excess. Lead with 2,596 cubic feet 35/65 poz & Class C + 5% NaCl + 1/4 pound per sack cello flake + 4% bentonite + 1% sodium metasilicate + 5% MPA-5. Weight = 12.8 pounds per gallon. Yield = 1.97 cubic feet per sack. Tail with ≈ 200 sacks (267 cubic feet) Class C + 1% CaCl_2 . Weight = 14.8 pounds per gallon. Yield = 1.34 cubic feet per sack.

Production casing will be cemented to $\approx 3,400'$ with $\approx 80\%$ excess. Cement with ≈ 750 sacks (976 cubic feet) 50/50 poz (fly ash & Class C) + 5% sodium chloride + 1/4 pound per sack cello flake + 0.3% CD-32 + 3 pounds per sack LCM-1 + 0.5% FL-25 + 2% bentonite + 0.5% FL52A. Weight = 14.2 pounds per gallon. Yield = 1.30 cubic feet per sack.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2	SURFACE CSG: 13 3/8" H-40 ST&C SET @ ± 350' IN 17 1/2" HOLE FILLED WITH FRESH WATER												
3	INTERVAL	LENGTH	WEIGHT	GRADE	CPLG	COLLAPSE RATING (PSI)	BURST RATING (PSI)	JOINT STRENGTH (M-LBS)	ID (IN)	DRIFT (IN)	SF COLL1	SF BURST2	SF TEN3
4	0-350'	350'	48#	H-40	ST&C	740	1730	352	12.715	12.559	4.59	10.74	16.9
5	375	375											
6													
7	INTERMEDIATE CSG: 8 5/8" J-55 ST&C @ ± 3600' IN 12 1/4" HOLE FILLED WITH 9.0# BRINE WATER												
8	INTERVAL	LENGTH	WEIGHT	GRADE	CPLG	COLLAPSE RATING (PSI)	BURST RATING (PSI)	JOINT STRENGTH (M-LBS)	ID (IN)	DRIFT (IN)	SF COLL1	SF BURST2	SF TEN3
9	0-3600'	3600'	32#	J-55	ST&C	2740	3930	393	7.921	7.796	1.65	2.37	3.41
10													
11													
12	PRODUCTION CSG: 5 1/2" N-80 LT&C SET @ ± 6600' IN 7 7/8" HOLE FILLED WITH 9.0# BRINE WATER												
13	INTERVAL	LENGTH	WEIGHT	GRADE	CPLG	COLLAPSE RATING (PSI)	BURST RATING (PSI)	JOINT STRENGTH (M-LBS)	ID (IN)	DRIFT (IN)	SF COLL1	SF BURST2	SF TEN3
14	0-6600'	6600'	17#	N-80	LT&C	5890	7740	320	4.892	4.767	1.94	2.54	2.85
15													
16	1 COLLAPSE SF IS BASED ON EVACUATED ANNULUS AND HYDROSTATIC AT TVD.												
17	2 BURST SF IS BASED ON EVACUATED CASING AND HYDROSTATIC AT TVD.												
18	3 TENSILE SF IS BASED ON HANGING AIR WEIGHT OF CASING IN A VERTICAL HOLE AT MEASURED DEPTH.												
19	PSI - POUNDS PER SQUARE INCH												
20	M-LBS - THOUSANDS OF POUNDS												
21	IN - INCHES												
22													
23													
24													
25													

10# required to not dissolve soft.

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5. MUD PROGRAM

Will drill surface hole with fresh ^{8.4 ppg} water and intermediate hole with ^{10.0 ppg} brine water. Will drill production hole with 9 pound brine water with gel sweeps. Enough mud material will be on site to maintain mud properties and control lost circulation or a kick. There will be no change in mud weight (i.e., 9 pound will be used for each well bore).

6. CORES, TESTS, & LOGS

See COA - required logs.

No cores or drill stem tests are planned. A mud logging unit will be on location from 3,600' to TD. Spectral density and dual spaced neutron spectral gamma logs will be run from TD to $\approx 4,000'$.

7. DOWN HOLE CONDITIONS

No abnormal pressures or temperatures are expected. No hydrogen sulfide is expected. However, H₂S monitoring equipment will be on the rig floor and air packs will be available. An H₂S contingency plan is attached. Maximum expected bottom hole pressure will be $\approx 2,838$ psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈ 12 days to drill and 5 days to complete the well.

The proposed pad overlaps LINN's existing Hudson Federal 6 (30-015-28790) water injection well pad. LINN (Allan Rambur) has no objection.

System Will Meet Onshore Orders 2 (BOP) & 6 (H2S) Requirements

5-M WP BOPE WITH 5-M WP ANNULAR

5" M CHOKES MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY

