30-025-40442

Drilling Program
Mewbourne Oil Company
Red Hills West "8" Fed Com #3H
150' FSL & 890' FWL (SHL)
Sec 8-T26S-R32E
Lea County, New Mexico

1. The estimated tops of geological markers are as follows:

Rustler	1100'
Top Salt	1700'
Base Salt	4150'
Lamar	4386'
*Delaware	4416'
*Bone Springs	8350'

2. Estimated depths of anticipated fresh water, oil, or gas:

Water	Fresh water is anticipated at 50' and will be protected by setting surface casing at 1125' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

2000# WP Annular will be installed after running 13 ⅜" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 ⅝" & 7" casing strings. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOPE will be inspected and operated as recommended in Onshore Order #2. A kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.
Will test the 7" & 9 ⅝" BOPE to 3000# and both Annular BOPs to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 8284' & kick off to horizontal @ 8857' TVD. The well will be drilled to 13477' MD (8832' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

See COA

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 ½"	13 ⅜" (new)	48#	H40	0'-~~1125'~~ 1095	ST&C
12 ¼"	9 ⅝" (new)	36#	J55	0'-3240'	ST&C
12 ¼"	9 ⅝" (new)	40#	J55	3240'-4240'	LT&C
12 ¼"	9 ⅝" (new)	40#	N80	4240'-4390'	LT&C
8 ¾"	7" (new)	26#	P110	0'-8284' MD	LT&C
8 ¾"	7" (new)	26#	P110	8284'-9187' MD	BT&C
6 1/8"	4 ½" (new)	11.6#	P110	8987'-13477' MD	LT&C

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.
*Subject to availability of casing.

B. Cementing Program:

i. Surface Casing: 600 sks Class "C" light (35:65:4) cement w/ salt and LCM additives. Yield at 2.15 cuft/sk. 200 sks Class "C" cement w/ 2% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.

ii. Intermediate Casing: 600 sks Class "C" light (35:65:4) cement w/ LCM & Cello Flake additives. Yield at 2.03 cuft/sk. 400 sacks Class "C" cement. Yield at 1.33 cuft/sk. Cmt circulated to surface w/25% excess.

iii Production Casing: 500 sks Class "H" light (35:65:4) cement w/ FL & MPA5 additives. Yield at 2.11 cuft/sk. 400 sks Class "H" cement w/ Salt & FL additives. Yield at 1.19 cuft/sk. Cmt calc to tieback 200' inside Intermediate csg w/25% excess.

iv. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

*Referring to above blends of light cement: (wt% fly ash : wt% cement : wt% bentonite of the total of first two numbers). Generic names of additives are used since the availability of specific company and products are unknown at this time.

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 1125'	FW spud mud	8.6-9.0	32-34	NA
1125' - 4390'	Brine water	10.0-10.2	28-30	NA
4390' - 8284' (KOP)	FW	8.3-8.6	28-30	NA
8284' - TD	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program:

Samples:	10' samples from surface casing to TD
Logging:	GR/N & Gyro from KOP -100' (8184') to surface. GR from 8184' to TD.

8. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	120 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 10 days involved in completion operations on the project.