

## DRILLING PROGRAM

COLLINS & WARE, INC.

SPIKE FEDERAL WELL NO. 1

1980' FEL & 1650' FNL Sec. 24, T20S, R28E, Eddy County, NM

The following information is filed in accordance with New Mexico Oil Conservation Rules and Regulations:

1. SURFACE FORMATION: Quaternary

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler	190'
Yates	775'
Seven Rivers	1042'
Delaware	3060'
Bone Springs	5300'

3. ESTIMATED DEPTH TO FRESH WATER:

Possible fresh water 100'-300'.

ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware (below 3000')	Oil
Bone Springs	Oil

No other formations are anticipated to give up commercial quantities of hydrocarbons.

The fresh water sands will be protected by setting 13.375" casing at 400' and circulating cement back to surface. The intermediate 8.625" casing will be set at 3000' and cement circulated back to surface. A 5.5" production string will be run to 5800' and cemented to tie back to the 8.625" casing.

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing:

Hole Size	Interval	Casing OD	Weight, Grade, Joint, Condition
17.5"	0-400'	13.375"	48-68#, K-55, ST&C, Used
12.25"	0-3000'	8.625"	24#, J/S-55/95, LT&C, Used
6.125"	0-5800'	5.5"	15.5-17#, J-55, ST&C, Used

Cement:

13.375" Surface Csg: Cemented with 400 sacks of Class "C" with 2% CaCl. Circulate cement.

8.625" Intermediate: Cemented with 1200 sacks of Class "C". Cement to circulate.

5.5" Production Casing: Cement with 420 sacks of Class "C" cement to tieback to 8.625" and protect all oil, gas and water zones.