

Drilling Program  
Morexco, Inc.  
Oso Federal #1  
Lea County, New Mexico

1. Geologic Name of Surface Formation: Permian

2. Estimated Tops of Important Geologic Makers:

Top of Salt	1100'
Yates	2290'
Queen	3700'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	100'	fresh water
Queen	3700'	oil

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 8 5/8" casing at 400' and circulating cement to the surface. Any shallower zones above T. D. which contain commercial quantities of oil and/or gas will have cement circulated across them.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight Grade
12 1/4"	0 - 400'	8 5/8"	24#, J-55
7 7/8"	0 - 4,000'	5 1/2"	15.5#, J-55

5. Cement Program:

A. 8 5/8" surface casing: Cemented to surface with 400 sxs. "C" with 4% gel with 2% cacl and 1/2#/sx Flocele.

B. 5 1/2" production casing: Cemented with 75 sxs. "C" 3% SMS with 1/4#/sx. Flocele, plus 700 sxs. "H" 0.3% FL-62 with .2% CD32 and .2% SMS.

6. Minimum Specifications for Pressure Control: The B. O. P. shown on Exhibit 1 will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both will be operated hydraulically and the ram-type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both B. O. P.s will be nipped up on the 8 5/8" surface casing and used continuously until T. D. is reached. The B. O. P.s and accessory equipment will be tested to 1000 psi before drilling out surface casing. Before drilling out intermediate casing, the ram-type B. O. P. and accessory equipment will be tested to 3000 psi and the hydril to 70% (2100 psi) of rated working pressure.