

THE SUPERIOR OIL COMPANY
SUPPLEMENTAL DRILLING DATA
DUNCAN FEDERAL NO. 1
SECTION 14, T25S, R32E
LEA COUNTY, NEW MEXICO

1. SURFACE FORMATION: Quaternary
2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler	790'
Castile	3,080'
Base Castile Salt	4,430'
Bell Canyon	4,700'
Cherry Canyon	5,800'
Bone springs	8,580'
Wolfcamp	11,800'
Strawn	13,750'
Atoka	13,950'
Morrow, Upper	14,500'
Morrow, Middle	15,050'
Morrow, Lower	15,500'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Wolfcamp	11,800'	Gas
Morrow	14,500'	Gas

4. PROPOSED CASING AND CEMENTING PROGRAM:

See Form 9-331C

5. PRESSURE CONTROL EQUIPMENT:

A 20" Hydril with a 3,000 psi working pressure will be used to 5,000' (13-3/8" casing point).

While drilling from 5,000' to 12,400' (9-5/8" casing point) a 5,000' psi double ram preventer and choke manifold will be used along with a 5,000 psi annular type preventer.

A 10,000 psi double ram and a single ram preventer and choke manifold along with a 5,000 psi annular type preventer will be used below the 9-5/8" casing shoe.

Equipment will be pressure tested in accordance with USGS regulations and operational checks will be made daily and recorded on tour sheets.

6. CIRCULATING MEDIUM:

<u>Interval</u>	<u>Mud Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Water Loss</u>
0' to 650'	Fresh Water	8.4 - 8.8#	32-36	-
650' to 3000'	Fresh Water	8.6 - 9.2#	28	-
3000' to 12400'	Brine	9.2 - 10.0#	28	-
5000' to 13850'	Fresh Water	8.6 - 8.8#	28	-
12400' to 13850'	Brine	9.2 - 16.0#	34-38	17-20
13850' to TD	Brine	10.0 - 12.0#	34-38	10-12

7. AUXILIARY EQUIPMENT:

A kelly cock and all required safety valves will be utilized and tested in accordance with USGS regulations.

Mud logging equipment will be in use while drilling below 4,200'.

8. TESTING, LOGGING AND CORING PROGRAMS:

One drill stem test is planned for the Upper Morrow. If shows warrant, other DST's may be run at the discretion of the wellsite geologist.

Electric logs will include BHC/GRS, FDC/CNL, DLL/Rxo, Dipmeter and velocity survey.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

Anticipate possible abnormally high pressure in the Atoka and will be prepared to weight mud to 16#/gal. to control.

No H₂S is anticipated.

10. ANTICIPATED STARTING DATE:

Prior to July 1, 1982

RECEIVED

JUN 21 1982

G.C.D.
HOBBS OFFICE