

DRILLING PROGRAM

WELL: Shafer Federal #1 (Redrill)

FIELD: Wilocal

STATE: New Mexico

COUNTY: Eddy

LOCATION: Surface: 1327' FSL & 1143' FWL

B.H.L. : 2500' FEL & 900' FSL, Sec. 25, T21S, R24E

OBJECTIVE: Cisco Reef

ELEVATION: B.L. - 3842', K.B. - 3857'

ESTIMATED FORMATION TOPS: (True Vertical Depth)

Bone Springs - Old Carbonate	6510'
Bone Springs - Old Carbonate	5660'
Wolfcamp Shale	4830'
Cisco Reef	7760' (3175 MD)

ESTIMATE TIME TO DRILL & EVALUATE:

12-22 Days

POSSIBLE DRILLING PROBLEMS:

Lost circulation at 3100', 7760' (Cisco Reef Porosity).
Plugging back at 3900' - May take 2 or more plugs.

HOLE SIZE:

2500' - 3900' ----- 8 3/4"
3900' (KOP) - 30' ----- 7 7/8"

CASING PROGRAM:

Surface Casing

0 - 367' --- 13 3/8", 54# (Set)

Intermediate Casing:

0 - 2439' --- 9 5/8", 36# (Set)

Production Casing:

0 - 8173' --- 5 1/2", 17#/ft, J55, L120.