Operations Plan - Canyon Largo Unit #290

I. Location: 900'N, 1550'W Sec. 33, T-25-N, R-7-W, Rio Arriba County, New Mexico

Field: Ballard Pictured Cliffs Elevation: 6638' DF

II. Geology:

A. Surface Formation: San Jose

Sub-surface Formation Tops:	Ojo Alamo	1528'	Pictured Cliffs	2210'
	Kirtland	1670'	Lewis	2310'
	Fruitland	2060'	Total Depth	2350'

B. Logging Program: Induction Electric and Gamma Ray Density at Total Depth.

C. Coring: None

D. Testing: None

III. Drilling:

A. Anticipated Starting Date and Duration of the Project:

1977 Drilling Program - Approximately 4 days to complete.

B. Circulating Medium: Treated water and a low solids gel base mud will be used from surfact to total depth.

IV. Materials:

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
12 1/4"	120'	8 5/8"	24.0# J-55
6 3/4"	2350'	2 7/8"	6.4# J-55

B. Float Equipment: 8 5/8" Surface casing - cement guide shoe.

2 7/8" Production Casing - 10' shoe joint with notched collar for guide shoe and 2 7/8" latch down baffle on top. Two 3 1/16" balls and one 2 7/8" latch down plug.

C. Tubing: None

D. Wellhead Equipment: Larkin wellhead (fig. 75).

V. Cementing

8 5/8" surface Casing - 90 sacks of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (106 cu. ft. of slurry, 100% excess to circulate to surface). W. O. C. 12 hours. Test casing, wellhead, and BOP to 600#/30 Minutes.

2 7/8" Production = 72 Sks. 65/35 Class "B" Poz with 12% gel and 15.52 gallons of water per sack followed by 50 sks. Class "B" neat cement (250 cu. ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hours.