

NORTHWEST PRODUCTION CORPORATION
Operations Plan - Picarilla 123 C #25

I. Location: 1500'N, 1600'W, Section 8, T-25-N, R-4-W, Rio Arriba County, NM

Field: So. Blanco Pictured Cliffs

Elevation: 7339'GL

II. Geology:

A. Surface Formation: San Jose

Sub-surface Formation Tops:

Ojo Alamo	3270'	Pictured Cliffs	3760'
Kirtland	3425'	Lewis	3840'
Fruitland	3585'	Total Depth	3880'

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

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 surface to TD.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg. Size</u>	<u>Wt. & Grade</u>
	12 1/4"	120'	8 5/8"	24.0# J-55
	6 3/4"	3880'	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 sks. 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). WOC 12 hrs. Test casing wellhead and BOP to 600#/30 minutes.

2 7/8" production - 50 sks. 65/35 Class "B" Poz with 12% gel and 15.52 gallons water per sack followed by 50 sks. Class "B" neat cement (196 cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs.