

August 21, 1978

Operations Plan
San Juan 27-5 Unit #61A

I. Location: 1530'S, 820'E, Section 5, T-27-N, R-5-W, Rio Arriba County, NM

Field: Blanco Mesa Verde

Elevation: 6681'GR

II. Geology:

A. Formation Tops:	Surface	San Jose	Lewis	3645'
	Ojo Alamo	2815'	Mesa Verde	5155'
	Kirtland	3015'	Menefee	5315'
	Fruitland	3260'	Point Lookout	5656'
	Pic.Cliffs	3500'	Total Depth	6105'

B. Logging Program: GR-Ind. and GR-Density at Total Depth.

C. Coring Program: none

D. Natural Gauges: 5145', 5305', 5645' and at Total Depth.
Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3845'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt.&Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	3845'	7"	20.0# K-55
	6 1/4"	3695-6105'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Pathfinder guide shoe (Part #2006-1-012).

7" intermediate casing - Pathfinder guide shoe (Part #1003-1-007) and Pathfinder self-fill insert float valve (Part #2010-6-007), 5 Pathfinder stabilizers (Part #107-10) every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Pathfinder geyser shoe (Part #2017-1-050) and Larkin flapper type float collar (fig. 404 M&F).

C. Tubing: 6105' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.