Operations Plan San Juan 27-4 Unit #134

I. Location: 1190'S, 1850'W, Section 9, T-27-N, R-4-W, Rio Arriba County, NM

Field: Blanco Mesa Verde Elevation: 6715'GR

II. Geology:

Α.	Formation	Tops:	Surface	San	Jose '	Lewis		3740'
			Ojo Alamo		2995 '	Mesa Verde		5295'
			Kirtland		3155'	Menefee	Ţ	5420 '
		F	Fruitland		3340'	Point Lookout		5740 '
			Pic.Cliffs		3595 '	Total Depth	(5190'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5285', 5410', 5730' 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 3940'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
		13 3/4"	200'	9 5/8"	32.3 # H-40
		8 3/4"	3940 '	7"	20.0# K-55
		6 1/4"	3790-6190 '	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: 6190' 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: $10"900 \times 95/8"$ casing head. $10"900 \times 6"900 \times 10"$