Operations Plan Lawson #1A

I. Location: 1700'S, 1450'E, Section 11, T-31-N, R-11-W, San Juan County, NM

Field: Blanco Mesa Verde <u>Elevation:</u> 5900'DF

II. Geology:

A.	Formation	Tops:	Surface	Nacimiento	Lewis	2750'
		_	Ojo Alamo	885 '	Mesa Verde	4220'
			Kirtland	980'	Menefee	4420'
			Fruitland	2145'	Point Lookout	4815'
			Pic.Cliffs	s 2575 '	Total Depth	5215'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4210', 4410', 4805' 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 2950'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
	5 5	13 3/4"	200'	9 5/8"	32.3# H-40
		8 3/4"	2950'	7"	20.0 # K-55
		6 1/4"	2800-5215'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner T.I.W. liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 5215' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: $10" 900 \times 9 5/8"$ casing head. $10" 900 \times 6" 900 \times 10"$