Operations Plan Johnston #7A

I. Location: 1010'S, 1770'E, Section 11, T-28-N, R-9-W, San Juan County, NM Field: Blanco Mesa Verde Elevation: 5859'GL

II. Geology:

Α.	Formation	Tops:	Surface	Nacimiento	Lewis	2409'
		•	Ojo Alamo	1219'	Mesa Verde	3872 '
			Kirtland	1301'	Menefee	3920 '
			Fruitland	1909'	Point Lookout	4489'
			Pic.Cliffs	2219'	Total Depth	4940'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 3865', 3910', 4480' 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 2610'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program	m: Hole Size		Casing Size	Wt.&Grade
	, ,	13 3/4"	200'	9 5/8"	36.0 # K - 55
		8 3/4"	2610'	7"	20.0# K-55
		6 1/4"	2460-4940'	4 1/2"	10.5# K-55

- B. Float Equipment: 9 5/8" surface casing cement guide shoe.
 - 7" intermediate casing cement guide shoe and self-fill insert float valve, 5 stabilizers every other joint above shoe. Run float two joints above shoe.
 - 4 1/2" liner 4 1/2" liner hanger with neoprene packoff. Geyser shoe and flapper type float collar
- C. Tubing: 4940' 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" $2000 \times 9 \times 5/8$ " casing head. 10" 2000×6 " 2000×6 "