

August 21, 1978

Operations Plan  
San Juan 20-5 Unit #103

I. Location: 1840'N, 1190'E, Section 23, T-28-N, R-5-W, Rio Arriba County, N

Field: Basin Dakota

Elevation: 7462'GR

II. Geology:

A. Formation Tops:	Surface	San Jose	Menefee	6270'
	Ojo Alamo	3755'	Point Lookout	6570'
	Kirtland	3885'	Gallup	7620'
	Fruitland	4115'	Greenhorn	8546'
	Pic.Cliffs	4420'	Graneros	8602'
	Lewis	4550'	Dakota	8710'
	Mesa Verde	6195'	Total Depth	8827'

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

C. Coring Program: none

D. Natural Gauges: 6570', 7620', 8602', 8710' 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 4750'. 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.&amp;Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	4750'	7"	20.0# K-55
	6 1/4"	6500'	4 1/2"	10.5# K-55
	6 1/4"	8000'	4 1/2"	11.6# K-55
	6 1/4"	8827'	4 1/2"	11.6# N-80

B. Float Equipment: 9 5/8" surface casing - Pathfinder guide shoe (Part No. 2006-1-012).

7" intermediate casing - Pathfinder guide shoe (Part No. 1003-1-007) and Pathfinder self-fill insert float valve (Part No. 2010-6-007), 5 Pathfinder stabilizers (Part No. 107-10) every other joint above shoe. Run float two joints above shoe.

4 1/2" production casing - Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F)

C. Tubing: 8827' of 1 1/2", 2.9#, J-55 10rd EUE tubing with an expendable check on bottom and a common pump seating nipple one joint above bottom.

D. Wellhead Equipment: 3000 psi test tree. Wellhead representative to set all slips and cut off casing.