

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 9, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #169	
Location 900/S, 840/W, Sec. 33, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7653'	Tubing: Diameter 1 1/2	Set At: Feet 7582'
Pay Zone: From 7398	To 7582	Total Depth: 7653	Shut In 10-16-73
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches 2.500" Plate; 4" Meter run		Plate Choke Constant: C 32.64		Tested through a 3/4" Variable choke.	
Shut-In Pressure, Casing, PSIG 2539	+ 12 = PSIA 2551	Days Shut-In 24	Shut-In Pressure, Tubing PSIG 1295	+ 12 = PSIA 1307	
Flowing Pressure: P PSIG 53 Meter; 195 Wellhead	+ 12 = PSIA 65 meter; 207 wellhead	Working Pressure: P _w PSIG 539		+ 12 = PSIA 551	
Temperature: T = 72°F	F _t = .9887	n = .75	F _{pv} (From Tables) 1.008	Gravity .655	F _g = 1.236

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = \text{Calculated from orifice meter readings} = \underline{\quad 2269 \quad} \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = Q \left(\frac{6507601}{6204000} \right)^n = (2269)(1.0489)^{.75} = (2269)(1.0365)$$

$$Aof = \underline{\quad 2352 \quad} \text{ MCF/D}$$

Note: The well produced 12.3 bbls of 54.9° API Gravity Oil and 60.4 bbls of water during the test.

TESTED BY Don Norton

WITNESSED BY _____

H. E. McAnally
Well Test Engineer

