

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE July 6, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 153	
Location 1460'N, 1680'W, Section 21, T27N, R5W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2-7/8	Set At: Feet 3480	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3354	To 3374	Total Depth: 3480	Shut In 6-27-73
Stimulation Method SWF		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, 712	PSIG	+ 12 = PSIA 724	Days Shut-In 8	Shut-In Pressure, Tubing No Tubing	PSIG
Flowing Pressure: P 72	PSIG	+ 12 = PSIA 84		Working Pressure: P _w Calculated	PSIG
Temperature: T=63 °F		n = .85		F _{pv} (From Tables) 1.009	Gravity .655 F _g = .9571

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = (12.365)(84)(.9971)(.9571)(1.009) = \underline{1000} \text{ MCF/D}$$

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

NOTE: Well produced dry gas.

$$Aof = Q \left(\frac{524176}{512512} \right)^n = 1000 (1.0228)^{.85} = 1000 (1.0193)$$

$$Aof = \underline{1019} \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY _____



William D. Welch
William D. Welch, Well Test Engineer