

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE May 23, 1973

Operator El Paso Natural Gas Company		Lease Barnes No. 12	
Location <del>1800</del> 820' N, 1736' W, Section 27, T32N, R11W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Undesignated	
Casing: Diameter 2.875	Set At: Feet 3423	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3244	To 3264	Total Depth: 3423	Shut In 5-14-73
Stimulation Method SWF		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, 920	PSIG	+ 12 = PSIA 932	Days Shut-In 9	Shut-In Pressure, Tubing	PSIG + 12 = PSIA
Flowing Pressure: P 149	PSIG	+ 12 = PSIA 161		Working Pressure: P <sub>w</sub> Calculated	PSIG + 12 = PSIA 206
Temperature: T = 59 °F		n = F <sub>t</sub> = 1.0010		F <sub>pv</sub> (From Tables) 1.014	Gravity .635 F <sub>g</sub> = .9721

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

$$Q = (12.365)(161)(1.0010)(.9721)(1.014) = \underline{1964} \text{ MCF/D}$$

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

NOTE: Well produced dry gas throughout test.

$$Aof = Q \left( \frac{868624}{826188} \right)^n = (1964)(1.0514)^{.85} = (1964)(1.0435)$$

$$Aof = \underline{2051} \text{ MCF/D}$$

TESTED BY Bobby Broughton

WITNESSED BY \_\_\_\_\_



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