

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE June 30, 1969

Operator El Paso Natural Gas		Lease Pierce No. 9	
Location 1737'N; 990'W; S-7; T-30N; R-9W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 2.875	Set At: Feet 3294	Tubing: Diameter No tubing	Set At: Feet ----
Pay Zone: From 3222	To 3242	Total Depth: 3330	Shut In 6-16-69
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches 0.750		Choke Constant: C 12.365		Tubingless completion	
Shut-In Pressure, Casing, PSIG 841	+ 12 = PSIA 853	Days Shut-In 14	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA ----	
Flowing Pressure: P PSIG 273	+ 12 = PSIA 285		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 294	
Temperature: T = 64 °F	F _t = .9962	n = .85	F _p v (From Tables) 1.031	Gravity .67	F _g = .9463

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

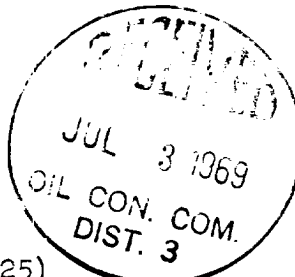
$$Q = (12.365)(285)(.9962)(.9463)(1.031) = \underline{3425} \text{ MCF/D}$$

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

$$Aof = \left(\frac{727609}{641173} \right)^n = 3425 (1.1348)^{.85} = 1.1133 (3425)$$

Note: Dry gas for entire test.

$$Aof = \underline{3813} \text{ MCF/D}$$

TESTED BY RFH & RF
Calc.WITNESSED BY RF & RES


H. L. Kendrick
H. L. Kendrick