

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 6, 1969

Operator: El Paso Natural Gas Company		Lease Hardie "A" No. 4	
Location 1615S, 990W, S 26 - T 29 N, R 8 W		County San Juan	State New Mexico
Formation Undesignated		Pool Pictured Cliffs	
Casing: Diameter 2.375	Set At: Feet 3235	Tubing: Diameter No tubing	Set At: Feet ---
Pay Zone: From 3210	To 3239	Total Depth: 3310	Shut In 7-22-69
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless completion	
Shut-In Pressure, Casing, PSIG 670	+ 12 = PSIA 682	Days Shut-In 15	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA	
Flowing Pressure: P _w PSIG 74	+ 12 = PSIA 86		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 110	
Temperature: T = 60 °F	n = 0.85		F _{pv} (From Tables) 1.011	Gravity .700	F _g = .9258

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

$$Q = 12.365 \times 86 \times 1.00 \times 1.011 \times .9258 = \underline{995} \text{ MCF/D}$$

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

$$Aof = \left(\frac{465124}{455024} \right)^n = (1.0267)^{.85} 995 = 1.0226 (995)$$

Note: Making light spray of water.

$$Aof = \underline{1017} \text{ MCF/D}$$

TESTED BY RFH
 Calculated
 WITNESSED BY RES



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