

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE September 20, 1968

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 40	
Location 1775'N, 1474'E, Sec. 6, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8301	Tubing: Diameter 2.375	Set At: Feet 8058
Pay Zone: From 8072	To 8268	Total Depth: 8301	Shut In 9-13-68
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 2446	PSIG	+ 12 = PSIA 2458	Days Shut-In 7	Shut-In Pressure, Tubing 2484	PSIG
				+ 12 = PSIA 2496	
Flowing Pressure: P 203	PSIG	+ 12 = PSIA 215		Working Pressure: P _w 840	PSIG
				+ 12 = PSIA 852	
Temperature: T = 88 °F		n = .75		F _{pv} (From Tables) 1.019	Gravity .670 F _g = .9463

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

$$Q = (12.365)(215)(.9741)(.9463)(1.019) = \underline{2497} \text{ MCF/D}$$

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

$$Aof = \left(\frac{6230016}{5504112} \right)^n = (2497)(1.1318)^{.75} = (2497)(1.0973)$$

$$Aof = \underline{2740} \text{ MCF/D}$$

NOTE: This well produced a heavy mist of water and drip throughout the three hour test.

TESTED BY Bobby J. Broughton
 Calculated by:
 WITNESSED BY Bobby J. Broughton
 CHECKED BY: George Lipman

H. L. Kendrick
 H. L. Kendrick

RECEIVED
 SEP 24 1968
 OIL CON. COM.
 DIST. 3