

EL PASO NATURAL GAS COMPANY
 OPEN FLOW TEST DATA

WELL IDENTIFICATION

DATE August 19, 1964

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 21 (PC) (OWWO)	
Location Ogallala, 1800'D, Sec. 30, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dishwater Shale		Rock Sandstone	
Casing Diameter 2.625	Set Ann F. 3890	Well Depth 6122	Shut In 7-30-64
Pay Zone: From 3890	To 3890	Total Depth 6122	Shut In 7-30-64
Stimulation Method Sand Water Free		Flow Through Casing II	Flow Through Tubing

Choke Size, inches 0.750		Choke Constant: C 12.365		Well Test Data: Packer set at 3913 ft.	
Shut-In Pressure, Casing, (PC) 593	PSIG	+ 12 = PSIA 605	Days Shut-in	Shut-in Pressure, Tubing (PC) 594	PSIG
				+ 12 = PSIA 606	
Flowing Pressure: P 59	PSIG	+ 12 = PSIA 71		Working Pressure: P _w 63	PSIG
				+ 12 = PSIA 75	
Temperature: T = 59 °F	F = 1.0010	n = .85		Fpv (From Tables) 1.009	Gravity .688
					Fg = .9359

ISIPT (W) = 525 psig

PSIPT (W) = 526 psig

 CHOKE VOLUME = Q = C × P_t × F_t × F_g × F_{pv}

$$Q = (12.365) (71) (1.0010) (.9359) (1.009) = 830 \text{ MCF/D}$$

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

$$Aof = \left(\frac{387.236}{361,811} \right)^{.85} = (830) (1.0155)^{.85} = (830) (1.0132)$$

$$Aof = 842 \text{ MCF/D}$$

 TESTED BY Danilo R. Roberts

CALCULATED

 APPROVED BY W. D. Dawson


Lewis D. Galloway
 Lewis D. Galloway

By H.H.H.