

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE December 3, 1973

Operator El Paso Natural Gas Company		Lease San Juan 32-7 Unit #41	
Location 1090/N, 2820/E, Sec. 7, T32N, R7W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5903'	Tubing: Diameter 2 3/8"	Set At: Feet 5831'
Pay Zone: From 5300	To 5520	Total Depth: 5903	Shut In 11-16-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1200	+ 12 = PSIA 1212	Days Shut-In 16	Shut-In Pressure, Tubing PSIG 905	+ 12 = PSIA 917	
Flowing Pressure: P PSIG 248	+ 12 = PSIA 260		Working Pressure: P _w PSIG 668	+ 12 = PSIA 680	
Temperature: T = 70°F	F _t = .9905	n = .75	F _{pv} (From Tables) 1.017	Gravity .585	F _g = 1.0127

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

$$Q = (12.365)(260)(.9905)(1.0127)(1.017) = \underline{\hspace{2cm}} 3280 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1468944}{1006544} \right)^n = 3280(1.4594)^{.75} = 3280(1.3278)$$

$$Aof = \underline{\hspace{2cm}} 4355 \text{ MCF/D}$$

Note: Blew a light mist throughout test.

TESTED BY C. Rhames

WITNESSED BY _____

William D Welch

William D. Welch
Well Test Engineer

