

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 7-23-74

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #83	
Location 1600/S, 1650/E, Sec. 26, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2.875	Set At: Feet 4321'	Tubing: Diameter No Tubing	Set At: Feet -----
Pay Zone: From 4146'	To 4214'	Total Depth: PSTD 4321' 4310'	Shut in 7-9-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1000	+ 12 = PSIA 1012	Days Shut-In 14	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA -----	
Flowing Pressure: P PSIG 236	+ 12 = PSIA 248		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 334	
Temperature: T = 64 °F	n = Ft = .9962		Fpv (From Tables) 1.0270	Gravity .680	Fg = .9393

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

$$Q = 12.365 (248)(.9962)(.9393)(1.0270) = \underline{2947} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1024144}{912588} \right)^n = 2947(1.1222)^{.85} = 2947(1.1030)$$

$$Aof = \underline{3250} \text{ MCF/D}$$

Note: The well produced a dry gas flow.

TESTED BY C. Rhames

WITNESSED BY _____

Loren W. Fothergill
Loren W. Fothergill
Well Test Engineer
July 25, 1974

