

OPEN FLOW TEST DATA

DATE October 7, 1976

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #105	
Location NE 19-27N-4W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 4.500	Set At: Feet 6348'	Tubing: Diameter 1 1/4	Set At: Feet 3788'
Pay Zone: From 3715'	To 3794'	Total Depth: PBD 6348 6331'	Shut In 9-20-76
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750	Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1025	+ 12 = PSIA 1037	Days Shut-In 17	Shut-In Pressure, Tubing PSIG 1025	+ 12 = PSIA 1037
Flowing Pressure: P PSIG 134	+ 12 = PSIA 146		Working Pressure: P _w PSIG 140	+ 12 = PSIA 152
Temperature: T = 60 °F Ft = 1.000	n = .85		F _{pv} (From Tables) 1.014	Gravity .670 F _g = .9463

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

$$Q = 12.365(146)(1.000)(.9463)(1.014) = \underline{1732} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1075369}{1052265} \right)^n = (1.0220)^{.85} (1732)(1.0186)(1732)$$

$$Aof = \underline{1764} \text{ MCF/D}$$

Note: Well blew dry gas throughout test. Well vented 282 MCF/D gas to atmosphere.

TESTED BY Hardy

WITNESSED BY _____

C. R. Wagner
Well Test Engineer