

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE June 10, 1978

Operator Manana Gas Inc.		Lease Clarence #1	
Location NW/4 Sec. 24, T29N, R11W		County San Juan	State New Mexico
Formation Farmington		Pool Bloomfield	
Casing: Diameter 3.500	Set At: Feet 840'	Tubing: Diameter 1.049	Set At: Feet 750'
Pay Zone: From 704	To 748'	Total Depth: 840	Shut In 6-3-78
Stimulation Method 500 gal. 15% HCL		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 0.250		Choke Constant: C 1.436			
Shut-In Pressure, Casing, PSIG 359	+ 12 = PSIA 371	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 364	+ 12 = PSIA 376	
Flowing Pressure: P PSIG 16	+ 12 = PSIA 28		Working Pressure: Pw PSIG 50	+ 12 = PSIA 62	
Temperature: T = 52 °F	n = 0.85		Fpv (From Tables) 1.003	Gravity 0.625	Fg = 0.9798

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

$$Q = (1.436)(28)(1.0078)(0.9798)(1.003) = \underline{40} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{141376}{137532} \right)^n = (40)(1.0279) = (40)(1.0237)$$

$$Aof = \underline{41} \text{ MCF/D}$$

Note: The well produced a light spray of water throughout.

TESTED BY Curtis Little (Manana)

WITNESSED BY H. E. McAnally (EPNG)

H. E. McAnally