

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE April 24, 1974

Operator El Paso Natural Gas Company		Lease Lackey A #7	
Location 850/S, 1550/E, Sec. 12, T29N, R10W		County San Juan	State New Mexico
Formation Chacra		Pool Undesignated	
Casing: Diameter 2.875	Set At: Feet 3527'	Tubing: Diameter No Tubing	Set At: Feet --
Pay Zone: From 3442'	To 3452	Total Depth: PBD 3527' 3516	Shut In 4-16-74
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 973	+ 12 = PSIA 985	Days Shut-In 8	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA --	
Flowing Pressure: P PSIG 13	+ 12 = PSIA 25		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 32	
Temperature: T = 60 °F	n = .75		Fpv (From Tables) 1.0030	Gravity .645	Fg = .9645

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

$$Q = 12.365(25)(1.0000)(.9645)(1.0030) = \underline{\quad 299 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{970225}{969201} \right)^n = 299 (1.0011)^{.75} = 299(1.0008)$$

$$Aof = \underline{\quad 299 \quad} \text{ MCF/D}$$

Note: The well produced a light mist of water throughout the test.

TESTED BY Hardy

WITNESSED BY _____

Loren W. Fothergill
Loren W. Fothergill
Well Test Engineer