

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE September 20, 1973

Operator El Paso Natural Gas Company		Lease Huerfano Unit #237	
Location 1090/N, 1550/W, Sec. 17, T-26N, R9W		County San Juan	State New Mexico
Formation Gallup		Pool Angel Peak	
Casing: Diameter 4 1/2	Set At: Feet 6037'	Tubing: Diameter 2 3/8	Set At: Feet 5978'
Pay Zone: From 5688	To 5978	Total Depth: 6037	Shut In 9-12-73
Stimulation Method Sandwater Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365		Well Tested thru 48/64 choke	
Shut-In Pressure, Casing, PSIG 637	+ 12 = PSIA 649	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 447	+ 12 = PSIA 459	
Flowing Pressure: P PSIG 6	+ 12 = PSIA 18		Working Pressure: P _w PSIG 358	+ 12 = PSIA 370	
Temperature: T = 102 °F	n = .75		F _{pv} (From Tables) 1.003	Gravity .720	F _g = .9129

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

$$Q = (12.365)(18)(.9619)(.9129)(1.003) = \underline{\quad 196 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{421201}{284301} \right)^n = 196 (1.4815)^{.75} = 196 (1.3429)$$

$$Aof = \underline{\quad 263 \quad} \text{ MCF/D}$$

Note: Well produced 8 bbl of 37° Oil.

TESTED BY S. Sack and C.R.W.

WITNESSED BY _____



William D. Welch
 William D. Welch
 Well Test Engineer