

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

CORRECTED COPY

DATE 9-18-74

Operator El Paso Natural Gas Company		Lease Huerfano Unit #257	
Location 1840/N, 1840/W, Sec. 36, T27N, R10W		County San Juan	State New Mexico
Formation Gallup		Pool Angel Peak Ext.	
Casing: Diameter 4.500	Set At: Feet 6183'	Tubing: Diameter 2.375	Set At: Feet 6130'
Pay Zone: From 5844	To 6106'	Total Depth: PBD 6183' 6164	Shut In 9-5-74
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Meter Choke Size, Inches 4" MR	Orifice 2.750	Orifice Choke Constant: C 41.10	Well tested thru a 3/4" variable choke.	
Shut-In Pressure, Casing, 615	PSIG	+ 12 = PSIA 627	Days Shut-In 13	Shut-In Pressure, Tubing 440
Flowing Pressure: P 3	PSIG	+ 12 = PSIA 15	Working Pressure: P <sub>w</sub> 212	PSIG
Temperature: T = 72 °F		n = .75	Fpv (From Tables) 1.004	Gravity .720
	Ft = 0.9887			Fg = 1.179

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

$$Q = \text{Calculated from orifice meter readings} = 274 \text{ MCF/D}$$

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

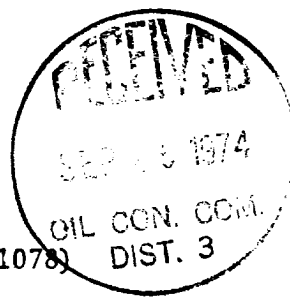
$$Aof = Q \left( \frac{393129}{342953} \right)^n = 274(1.1463)^{.75} = 274(1.1078)$$

$$Aof = 303 \text{ MCF/D}$$

Note: The well produced 1.50 BBLS of water and a trace of oil.

TESTED BY F. C. Johnson, Goodwin

WITNESSED BY \_\_\_\_\_



*E. E. McAnally*  
Well Test Engineer