

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

CORRECTED COPY

DATE September 10, 1975

Operator El Paso Natural Gas Company		Lease Howell J No. 4-A	
Location 860 N, 1525 W, Section 3, T-30N, R-8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5698	Tubing: Diameter 2.375	Set At: Feet 5648
Pay Zone: From 4904	To 5669	Total Depth: PBD 5698 5681	Shut In 8/31/75
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing XX

Plate XXX Size, Inches 2.500 4" M.R.		Choke Constant: C 32.64		Tested Thru 3/4" Variable Choke	
Shut-In Pressure, Casing, PSIG 629	+ 12 = PSIA 641	Days Shut-In 19	Shut-In Pressure, Tubing PSIG 553	+ 12 = PSIA 565	
Flowing Pressure: P PSIG WH 163 MR. 51	+ 12 = PSIA WH 175 MR. 63		Working Pressure: Pw PSIG 558	+ 12 = PSIA 570	
Temperature: T = 47 °F F <sub>i</sub> = 1.013	n = .75		F <sub>pv</sub> (From Tables) 1.010	Gravity .643 F <sub>g</sub> = 1.247	

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

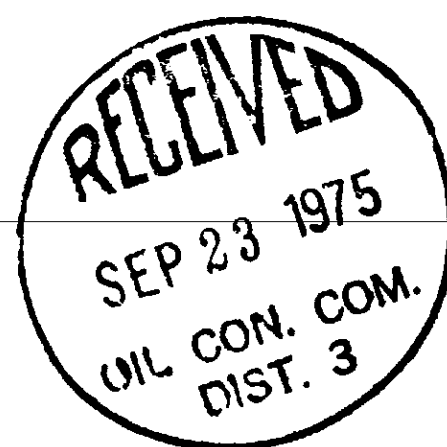
$$Q = \text{Calculated from orifice meter readings} = \underline{2145} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{410881}{85981} \right)^n = 2145 (4.779)^{.75} = 2145 (3.232)$$

$$Aof = \underline{6933} \text{ MCF/D}$$

Note: This well produced 4.14 Bbls. of water and .69 Bbls. 17° API gravity oil. During the test 261.9 MCF of gas was vented to atmosphere.

TESTED BY JohnsonWITNESSED BY Wagner

*[Signature]*