

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE March 6, 1975

Operator El Paso Natural Gas Company		Lease Howell C #2-A	
Location 1535/S, 1550/E, Sec. 3, T29N, R8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5521'	Tubing: Diameter 2.375	Set At: Feet 5457'
Pay Zone: From 4642'	To 5468'	Total Depth: PBD 5521' 5504	Shut In 2-23-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Plate Choke Size, Inches 2.500" 4" MR		Plate Choke Constant: C 32.64		Well tested thru a 3/4" variable choke.	
Shut-In Pressure, Casing, PSIG 620	+ 12 = PSIA 632	Days Shut-In 11	Shut-In Pressure, Tubing PSIG 620	+ 12 = PSIA 632	
Flowing Pressure: P PSIG WH 238 MR 70	+ 12 = PSIA WH 250 MR 82		Working Pressure: Pw PSIG 571	+ 12 = PSIA 583	
Temperature: T = 50 °F	Ft = 1.0098	n = .75	Fpv (From Tables) 1.0290	Gravity .680	Fg = 1.213

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

$$Q = \text{Calculated from orifice reading} = \underline{\quad 3159 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{399424}{59535} \right)^n = 3159(6.709)^{.75} = 3159(4.1687)$$

$$Aof = \underline{\quad 13168 \quad} \text{ MCF/D}$$

Note: The well produced a dry flow of gas.

TESTED BY Goodwin & Johnson

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

*John W. Foster*  
Well Test Engineer