

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE August 28, 1975

Operator El Paso Natural Gas Company		Lease Howell D #2-A	
Location 1500'N, 1660'W, Sec. 29, T31N, R8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 6048'	Tubing: Diameter 2.375	Set At: Feet 5997'
Pay Zone: From 5261	To 5992	Total Depth: PBT 6048' 6032'	Shut In 8-7-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Plate Choke Size, Inches 4" M.R. 2.500" plate		Plate Choke Constant: C 32.64		Well tested through 3/4" variable choke.	
Shut-In Pressure, Casing, PSIG 464	+ 12 = PSIA 476	Days Shut-In 21	Shut-In Pressure, Tubing PSIG 647	+ 12 = PSIA 659	
Flowing Pressure: P M.R. 52 W.H. 173 PSIG	+ 12 = PSIA M.R. 64 W.H. 185		Working Pressure: P <sub>w</sub> 581 PSIG	+ 12 = PSIA 593	
Temperature: T = 60 °F F <sub>t</sub> = 1.000	n = 0.75		F <sub>pv</sub> (From Tables) 1.009	Gravity .660 F <sub>g</sub> = 1.231	

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

Q = Calculated from meter readings.

= 2105 MCF/D

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

$$Aof = Q \left( \frac{434281}{82632} \right)^n = (2105)(5.2556)^{.75} = (2105)(3.4711)$$

Aof = 7307 MCF/D

Note: Well flared 256.95 MCF of gas during test and produced 4.48 Bbl of water.

TESTED BY R. Hardy & F. Johnson

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

*Charles W. Davis*  
Well Test Engineer

