

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE December 6, 1973

Operator <b>El Paso Natural Gas Company</b>		Lease <b>Canyon Largo Unit #215</b>	
Location <b>1710/N, 1640/E, Sec. 9, T24N, R6W</b>		County <b>Rio Arriba</b>	State <b>New Mexico</b>
Formation <b>Pictured Cliffs</b>		Pool <b>Ballard</b>	
Casing: Diameter <b>2.875</b>	Set At: Feet <b>2414'</b>	Tubing: Diameter <b>No Tubing</b>	Set At: Feet
Pay Zone: From <b>2306</b>	To <b>2372</b>	Total Depth: <b>2425</b>	Shut In <b>11-26-73</b>
Stimulation Method <b>Sandwater Frac</b>		Flow Through Casing <b>X</b>	Flow Through Tubing

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.365</b>		Tubingless Completion	
Shut-In Pressure, Casing, PSIG <b>500</b>	+ 12 = PSIA <b>512</b>	Days Shut-In <b>10</b>	Shut-In Pressure, Tubing PSIG <b>No Tubing</b>	+ 12 = PSIA	
Flowing Pressure: P PSIG <b>38</b>	+ 12 = PSIA <b>50</b>		Working Pressure: P <sub>w</sub> PSIG <b>Calculated</b>	+ 12 = PSIA	
Temperature: T = <b>54</b> °F	n = <b>.85</b>		F <sub>pv</sub> (From Tables) <b>1.004</b>	Gravity <b>.700</b>	F <sub>g</sub> = <b>.9258</b>

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

$$Q = (12.365) (50) (1.0058) (.9258) (1.004) = \underline{\quad 578 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{262144}{258544} \right)^n = 578 (1.0139)^{.85} = (1.0118) (578)$$

$$Aof = \underline{\quad 585 \quad} \text{ MCF/D}$$

Note: Unloaded heavy vapor for 5 minutes and then blew clear gas for remainder of test.

TESTED BY Jesse B. Goodwin

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

*William D. Welch*  
William D. Welch  
Well Test Engineer

