

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE December 6, 1974

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #231	
Location 1495/N, 875/W, Sec. 16, T28N, R7W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7421'	Tubing: Diameter 1.900	Set At: Feet 7361'
Pay Zone: From 7212'	To 7370'	Total Depth: PBSD 7421' 7412'	Shut In 11-13-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Meter Choke Size, Inches 4" MR		Orifice 2.500		Meter Choke Constant: C 32.64		Well tested thru a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2685		+ 12 = PSIA 2697		Days Shut-In 23		Shut-In Pressure, Tubing PSIG 2115	
Flowing Pressure: P PSIG MR 22 WH 78		+ 12 = PSIA MR 34 WH 90		Working Pressure: Pw PSIG 325		+ 12 = PSIA 337	
Temperature: T= 85 °F		n = Ft=0.9768 .75		Fpv (From Tables) 1.008		Gravity .650 Fg = 1.240	

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

$$Q = \text{Calculated from orifice meter readings} = \underline{\hspace{2cm}} 869 \underline{\hspace{2cm}} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{7273809}{7160240} \right)^n = 869(1.0159)^{.75} = 869(1.0119)$$

$$Aof = \underline{\hspace{2cm}} 879 \underline{\hspace{2cm}} \text{ MCF/D}$$

Note: The well produced 11.50 Bbls of water and a trace of drip during the three hour test.

TESTED BY F. Johnson & J. B. GoodwinWITNESSED BY L. W. Fothergill

Loren W. Fothergill  
Well Test Engineer