

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE January 9, 1974

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-7 Unit #183</u>	
Location <u>1550/N, 1750/E, Sec. 1, T27N, R7W</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>Dakota</u>		Pool <u>Basin</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>7268'</u>	Tubing: Diameter <u>1 1/2</u>	Set At: Feet <u>7240'</u>
Pay Zone: From <u>7046</u>	To <u>7248</u>	Total Depth: <u>7268</u>	Shut In <u>12-30-73</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12,365</u>			
Shut-In Pressure, Casing, PSIG <u>2605</u>	+ 12 = PSIA <u>2617</u>	Days Shut-In <u>10</u>	Shut-In Pressure, Tubing PSIG <u>2127</u>	+ 12 = PSIA <u>2139</u>	
Flowing Pressure: P PSIG <u>325</u>	+ 12 = PSIA <u>337</u>		Working Pressure: P _w PSIG <u>591</u>	+ 12 = PSIA <u>603</u>	
Temperature: T = <u>72</u> °F	F _t = <u>.9887</u>	n = <u>.75</u>	F _{pv} (From Tables) <u>1.032</u>	Gravity <u>.650</u>	F _g = <u>.9608</u>

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

$$Q = 12.365 (337) (.9887) (.9608) (1.032) = \underline{\quad 4085 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6848689}{6485080} \right)^n = 4085(1.0561)^{.75} = 4085(1.0418)$$

$$Aof = \underline{4256} \text{ MCF/D}$$

Note: Medium mist of water and drip.

TESTED BY Fothergill

WITNESSED BY _____

Loren W. Fothergill
L. W. Fothergill
Well Test Engineer

