

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE January 28, 1974

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-7 Unit #184</u>	
Location <u>1525/S, 1720/W, Sec. 9, 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>7803'</u>	Tubing: Diameter <u>1.900</u>	Set At: Feet <u>7719'</u>
Pay Zone: From <u>7507</u>	To <u>7728</u>	Total Depth: <u>PBTD</u> <u>7803 7795</u>	Shut In <u>1-20-74</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>XX</u>	Flow Through Tubing

Choke Size, inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2395</u>	+ 12 = PSIA <u>2407</u>	Days Shut-In <u>8</u>	Shut-In Pressure, Tubing PSIG <u>1411</u>	+ 12 = PSIA <u>1423</u>	
Flowing Pressure: P PSIG <u>182</u>	+ 12 = PSIA <u>194</u>		Working Pressure: P _w PSIG <u>364</u>	+ 12 = PSIA <u>376</u>	
Temperature: T = <u>62°F</u>	n = F _t = <u>.9981</u>		F _{pv} (From Tables) <u>1.019</u>	Gravity <u>.650</u>	F _g = <u>.9608</u>

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

$$Q = 12.365(194)(.9981)(.9608)(1.019) = \underline{\hspace{2cm}} 2344 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{5793649}{5652273} \right)^n = 2344(1.0250)^{.75} = 2344(1.0187) = \underline{\hspace{2cm}} 2388 \text{ MCF/D}$$

$$Aof = \underline{\hspace{2cm}} 2388 \text{ MCF/D}$$

Note: Well blew a medium to heavy fog of distillate and water throughout test.

TESTED BY Norton

WITNESSED BY _____

Loren W. Fothergill
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Well Test Engineer

