

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE January 24, 1975

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 27-4 Unit #98</u>	
Location <u>1180/S, 1840/W, Sec. 10, T27N, R4W</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>8174'</u>	Tubing: Diameter <u>1.990</u>	Set At: Feet <u>8059'</u>
Pay Zone: From <u>7886'</u>	To <u>8068'</u>	Total Depth: PBD <u>8174' 8157'</u>	Shut In <u>1-17-75</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>2500</u>	+ 12 = PSIA <u>2512</u>	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>2500</u>	+ 12 = PSIA <u>2512</u>	
Flowing Pressure: P PSIG <u>28</u>	+ 12 = PSIA <u>40</u>		Working Pressure: P _w PSIG <u>238</u>	+ 12 = PSIA <u>250</u>	
Temperature: T = <u>56</u> °F	n = <u>.75</u>		F _{pv} (From Tables) <u>1.004</u>	Gravity <u>0.655</u>	F _g = <u>.9571</u>
F _t = <u>1.0039</u>					

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

$$Q = 12.365(40)(1.0039)(.9571)(1.004) = \underline{\quad 477 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6310144}{6247644} \right)^n = 477(1.0100)^{.75} = 477(1.0075)$$

$$Aof = \underline{\quad 481 \quad} \text{ MCF/D}$$

Note: Medium mist of drip for 30 minutes-
2 1/2 hours. Dry gas.

TESTED BY Rhames

WITNESSED BY _____

H. E. M. Canally
Well Test Engineer

