

## OPEN FLOW TEST DATA

DATE October 17, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 32-7 Unit #43</u>	
Location <u>1060/N, 1660/E, Sec. 21, T32N, R7W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Dakota</u>		Pool <u>Basin</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>7993'</u>	Tubing: Diameter <u>1 1/2</u>	Set At: Feet <u>7949'</u>
Pay Zone: From <u>7827</u>	To <u>7952</u>	Total Depth: <u>7993</u>	Shut In <u>10-7-73</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>X</u>	Flow Through Tubing

Choke Size, inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2760</u>	+ 12 = PSIA <u>2772</u>	Days Shut-In <u>10</u>	Shut-In Pressure, Tubing PSIG <u>1372</u>	+ 12 = PSIA <u>1384</u>	
Flowing Pressure: P PSIG <u>70</u>	+ 12 = PSIA <u>82</u>		Working Pressure: P <sub>w</sub> PSIG <u>364</u>	+ 12 = PSIA <u>376</u>	
Temperature: T = <u>66 °F</u>	n = <u>.9943</u>		F <sub>pv</sub> (From Tables) <u>1.009</u>	Gravity <u>.655</u>	F <sub>g</sub> = <u>.9571</u>

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

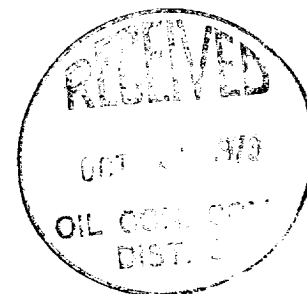
$$Q = (12.365) (82) (.9943) (.9571) (1.009) = \underline{974} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{7683984}{7542608} \right)^n = 974 (1.0187)^{.75} = 974 (1.0140)$$

$$Aof = \underline{987} \text{ MCF/D}$$

Note: Light mist of drip and water throughout test.

TESTED BY Rhames

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

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