

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE 8-11-73

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 29-7 Unit 105</u>	
Location <u>825/N, 1145/E, Sec. 36, T-29N, R7W</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>DAKOTA</u>		Pool <u>Basin</u>	
Casing: Diameter <u>4 1/2"</u>	Set At: Feet <u>7777'</u>	Tubing: Diameter <u>1 1/2"</u>	Set At: Feet <u>7732'</u>
Pay Zone: From <u>7526'</u>	To <u>7758'</u>	Total Depth: <u>7777'</u>	Shut In <u>8-3-73</u>
Stimulation Method <u>Sand Water 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>2715</u>	+ 12 = PSIA <u>2727</u>	Days Shut-In <u>8</u>	Shut-In Pressure, Tubing PSIG <u>1834</u>	+ 12 = PSIA <u>1846</u>	
Flowing Pressure: P PSIG <u>267</u>	+ 12 = PSIA <u>279</u>		Working Pressure: P _w PSIG <u>566</u>	+ 12 = PSIA <u>578</u>	
Temperature: T = <u>67°F</u>	F _t = <u>.9933</u>	n = <u>.75</u>	F _{pv} (From Tables) <u>1.020</u>	Gravity <u>.595</u>	F _g = <u>1.0041</u>

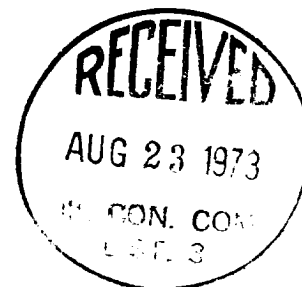
$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365) (279) (.9933) (1.0041) (1.020) = \underline{3510} \text{ MCF/D}$$

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

$$Aof = \left(\frac{7436529}{7102445} \right)^n = 3510 (1.0470) (1.0351)$$

$$Aof = \underline{3633} \text{ MCF/D}$$

TESTED BY Carl Rhames

WITNESSED BY _____

William D. Welch
Well Test Engineer