

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE May 7, 1979

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Hughes A 5A (PC)</u>	
Location <u>29</u> <u>Se 28-28-8</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Picture Cliff</u>		Pool <u>Blanco</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>5630</u>	Tubing: Diameter <u>1 1/4</u>	Set At: Feet <u>3089</u>
Pay Zone: From <u>2966</u>	To <u>3070</u>	Total Depth: <u>5630</u>	Shut In <u>4-23-79</u>
Stimulation Method <u>Sand Water 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>924</u>	+ 12 = PSIA <u>936</u>	Days Shut-In <u>14</u>	Shut-In Pressure, Tubing PSIG <u>862</u>	+ 12 = PSIA <u>874</u>	
Flowing Pressure: P PSIG <u>194</u>	+ 12 = PSIA <u>206</u>		Working Pressure: P _w PSIG <u>199</u>	+ 12 = PSIA <u>211</u>	
Temperature: T = <u>63</u> °F	F _t = <u>.9971</u>	n = <u>.85</u>	F _{pv} (From Tables) <u>1.021</u>	Gravity <u>.670</u>	F _g = <u>.9463</u>

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

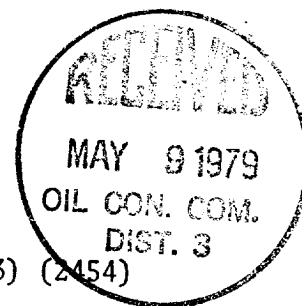
$$Q = 12.365 \times 206 \times .9971 \times .9463 \times 1.021 = \underline{2454} \text{ MCF/D}$$

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

$$Aof = \left(\frac{876096}{831575} \right)^n Q =$$

$$Aof = \underline{2565} \text{ MCF/D}$$

$$(1.0535)^{.85} (2454) = (1.0453) (2454)$$



NOTE: Well blew dry gas throughout test and vented 280 MCF to the atmosphere.

TESTED BY N. Wagoner

WITNESSED BY _____

C. R. Wagoner
Well Test Engineer