

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 11, 1963

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Hudson No. 1</u>	
Location <u>1750'N, 1090'E, Sec. 8-29N-12W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Dakota</u>		Pool <u>Basin</u>	
Casing: Diameter <u>1.500</u>	Set At: Feet <u>6399</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>6320</u>
Pay Zone: From <u>6121</u>	To <u>6290</u>	Total Depth: <u>6111</u>	Shut In <u>9-29-63</u>
Stimulation Method <u>Sand Water Frac.</u>		Flow Through Casing	Flow Through Tubing <u>X</u>

Choke Size, Inches <u>0.75</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2008</u>	+ 12 = PSIA <u>2020</u>	Days Shut-In <u>12</u>	Shut-In Pressure, Tubing PSIG <u>2059</u>	+ 12 = PSIA <u>2071</u>	
Flowing Pressure: P PSIG <u>375</u>	+ 12 = PSIA <u>387</u>		Working Pressure: P _w PSIG <u>998</u>	+ 12 = PSIA <u>1010</u>	
Temperature: T = <u>81</u> °F	n = <u>.75</u>		F _{pv} (From Tables) <u>1.038</u>	Gravity <u>.685</u>	F _g = <u>.9359</u>
	F _t = <u>.9804</u>				

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

$$Q = (12.365)(387)(.9804)(.9359)(1.038) = \underline{4558} \text{ MCF/D}$$

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

$$Aof = \left(\frac{4289041}{3268941} \right)^n = (4558)(1.3120)^{.75} = (4558)(1.2260)$$

NOTE: Heavy spray of oil & water throughout test.

$$Aof = \underline{5588} \text{ MCF/D}$$

TESTED BY Herman E. McArelly
 Checked _____
 WITNESSED BY W. D. Dawson



Lewis D. Galloway
 Lewis D. Galloway