

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 14, 1969

Operator <u>El Paso Natural Gas Co.</u>		Lease <u>San Juan 28-7 Unit No. 147</u>	
Location <u>1560 N-1060 E S 9-T27N-R7W</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>7909</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>7780</u>
Pay Zone: From <u>7664</u>	To <u>7812</u>	Total Depth: <u>7909</u>	Shut In <u>9-22-69</u>
Stimulation Method <u>SIF</u>		Flow Through Casing	Flow Through Tubing <u>NO</u>

Choke Size, Inches <u>0.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>1660</u>	+ 12 = PSIA <u>1672</u>	Days Shut-In <u>10</u>	Shut-In Pressure, Tubing PSIG <u>2443</u>	+ 12 = PSIA <u>2455</u>	
Flowing Pressure: P PSIG <u>162</u>	+ 12 = PSIA <u>204</u>		Working Pressure: Pw PSIG <u>700</u>	+ 12 = PSIA <u>712</u>	
Temperature: T = <u>66</u> °F	n = <u>0.750</u>		Fpv (From Tables) <u>1.021</u>	Gravity <u>.680</u>	Fg = <u>.9393</u>

CHOKE VOLUME = Q = C x P_i x F_i x F_g x F_{pv}

$$Q = 12.365 \times 204 \times .9943 \times .9393 \times 1.021 = \underline{2405} \text{ MCF/D}$$

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

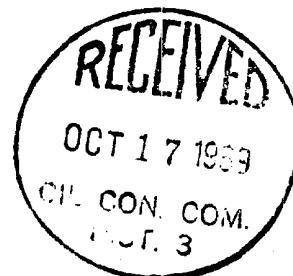
Note: Well unloaded 3/4" stream of water and distillate for 10 sec. Blew Medium to heavy fog of water & distillate with surging of water & distillate throughout test.

$$Aof = \left(\frac{6027025}{5520081} \right)^n = (1.0918)^{.75} 2405 = 1.0680 (2405)$$

$$Aof = \underline{2569} \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY _____



E. R. Keedwell

