

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE 8-19-71

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Grambling A No. 4</u>	
Location <u>1700' S, 800' E, S 22, T28N, R8W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>Aztec</u>	
Casing: Diameter <u>2.875</u>	Set At: Feet <u>2448</u>	Tubing: Diameter <u>no tubing</u>	Set At: Feet
Pay Zone: From <u>2280</u>	To <u>2334</u>	Total Depth: <u>2455</u>	Shut In <u>8-6-71</u>
Stimulation Method <u>S W F</u>		Flow Through Casing <u>XXX</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>		tubingless completion	
Shut-In Pressure, Casing, PSIG <u>1000</u>	+ 12 = PSIA <u>1012</u>	Days Shut-In <u>13</u>	Shut-In Pressure, Tubing PSIG <u>no tubing</u>	+ 12 = PSIA	
Flowing Pressure: P PSIG <u>234</u>	+ 12 = PSIA <u>246</u>		Working Pressure: Pw PSIG <u>calculated</u>	+ 12 = PSIA <u>297</u>	
Temperature: T = <u>70</u> °F	Ft = <u>.9905</u>	n = <u>.85</u>	Fpv (From Tables) <u>1.021</u>	Gravity <u>.630</u>	Fg = <u>.9759</u>

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

$$Q = 12.365 \times 246 \times .9905 \times .9759 \times 1.021 = \underline{3002} \text{ MCF/D}$$

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

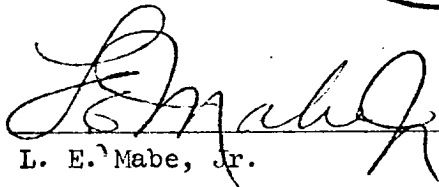
Note: Well blew dry gas throughout test.

$$Aof = \left(\frac{1024114}{935935} \right)^n = 3002(1.0942)^{.85} = 3002(1.0795)$$

$$Aof = \underline{3241} \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY _____



 L. E. Mabe, Jr.