

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 6-16-71

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Vaughn No. 12</u>	
Location <u>1500' S, 1800' W, S 26, T26N, R6W</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>7544</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>7442</u>
Pay Zone: From <u>7128</u>	To <u>7448</u>	Total Depth: <u>7544</u>	Shut In <u>5-23-71</u>
Stimulation Method <u>S W F</u>		Flow Through Casing	Flow Through Tubing <u>XXX</u>

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2398</u>	+ 12 = PSIA <u>2410</u>	Days Shut-In <u>24</u>	Shut-In Pressure, Tubing PSIG <u>2398</u>	+ 12 = PSIA <u>2410</u>	
Flowing Pressure: P PSIG <u>289</u>	+ 12 = PSIA <u>301</u>		Working Pressure: P _w PSIG <u>1049</u>	+ 12 = PSIA <u>1061</u>	
Temperature: T = <u>76</u> °F	F _t = <u>.9850</u>	n = <u>.75</u>	F _{pv} (From Tables) <u>1.030</u>	Gravity <u>.700</u>	F _g = <u>.9258</u>

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

$$Q = 12.365 \times 301 \times .9850 \times .9258 \times 1.030 = \underline{3496} \text{ MCF/D}$$

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

Note: Well blew medium spray of water and distillate throughout test.

$$Aof = \left(\frac{5808100}{4682379} \right)^n = 3496(1.2404)^{.75} = 3496(1.1753)$$

$$Aof = \underline{4109} \text{ MCF/D}$$

TESTED BY R. R. Hardy

WITNESSED BY _____



H. L. Kendrick
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