

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE June 11, 1974

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 27-5 Unit #189</u>	
Location <u>1000/N, 1740/E, Sec. 32, T27N, R5W</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>7684'</u>	Tubing: Diameter <u>1.990</u>	Set At: Feet <u>7622'</u>
Pay Zone: From <u>7440'</u>	To <u>7632'</u>	Total Depth: <u>7684'</u> PBTD, <u>7675'</u>	Shut In <u>6-3-74</u>
Stimulation Method <u>Sandwater 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>2115</u>	+ 12 = PSIA <u>2127</u>	Days Shut-In <u>8</u>	Shut-In Pressure, Tubing PSIG <u>2115</u>	+ 12 = PSIA <u>2127</u>	
Flowing Pressure: P PSIG <u>48</u>	+ 12 = PSIA <u>60</u>		Working Pressure: P _w PSIG <u>Calculated</u>	+ 12 = PSIA <u>69</u>	
Temperature: T = <u>60</u> °F <u>F₁ = 1.0000</u>	n = <u>.75</u>		F _{pv} (From Tables) <u>1.0040</u>	Gravity <u>.655</u> <u>F_g = .9571</u>	

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

$$Q = 12.365(60)(1.0000)(.9571)(1.0040) = \underline{713} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{4473225}{4468464} \right)^n = 713(1.0011)^{.75} = 713(1.0008)$$

$$Aof = \underline{713} \text{ MCF/D}$$

Note: The well blew a light fog of water for the entire test.

TESTED BY J. E. Goodwin

WITNESSED BY _____

Loren W. Fothergill
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Well Test Engineer