

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 20, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-4 Unit #36</u>	
Location <u>700/S, 1470/W, Sec. 29, T28N, R4W</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>8710'</u>	Tubing: Diameter <u>1 1/2</u>	Set At: Feet <u>8691'</u>
Pay Zone: From <u>8502</u>	To <u>8672'</u>	Total Depth: <u>8710</u>	Shut In <u>10-29-73</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>X</u>	Flow Through Tubing

MR Choke Size, Inches <u>4"</u>	Orifice <u>2.750</u>	Orifice Choke Constant: C <u>41.10</u>	Well tested thru 48/64 choke	
Shut-In Pressure, Casing, PSIG <u>2205</u>	+ 12 = PSIA <u>2217</u>	Days Shut-In <u>22</u>	Shut-In Pressure, Tubing PSIG <u>1264</u>	+ 12 = PSIA <u>1276</u>
Flowing Pressure: P WH 96 MR 27 PSIG	+ 12 = PSIA WH 108 MR 39		Working Pressure: P _w PSIG <u>547</u>	+ 12 = PSIA <u>559</u>
Temperature: T = <u>72°F</u> F _t = <u>.9887</u>	n = <u>.75</u>		F _{pv} (From Tables) <u>1.003</u>	Gravity <u>.610</u> F _g = <u>.9918</u>

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

$$Q' = \text{Calculated from meter readings} = \underline{\hspace{2cm}} 1000 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{4915089}{4602608} \right)^n = 1000 (1.0679)^{.75} = 1000 (1.0505)$$

$$Aof = \underline{\hspace{2cm}} 1050 \text{ MCF/D}$$

Note: Well produced 17 bbl. of water.

TESTED BY Rhames & Norton

WITNESSED BY _____



William D. Welch
 William D. Welch
 Well Test Engineer