

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE October 30, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-6 Unit #181</u>	
Location <u>1700/N, 1180/E, Sec. 14, T27N, 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>7707'</u>	Tubing: Diameter <u>1 1/2</u>	Set At: Feet <u>7575'</u>
Pay Zone: From <u>7450</u>	To <u>7658'</u>	Total Depth: <u>7707</u>	Shut In <u>10-22-73</u>
Stimulation Method <u>SWF</u>		Flow Through Casing <u>X</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2592</u>	+ 12 = PSIA <u>2604</u>	Days Shut-In <u>8</u>	Shut-In Pressure, Tubing PSIG <u>2556</u>	+ 12 = PSIA <u>2568</u>	
Flowing Pressure: P PSIG <u>369</u>	+ 12 = PSIA <u>381</u>		Working Pressure: Pw PSIG <u>665</u>	+ 12 = PSIA <u>677</u>	
Temperature: T = <u>58</u> °F	n = <u>.75</u>		Fpv (From Tables) <u>1.034</u>	Gravity <u>.620</u>	Fg = <u>.9837</u>
Ft = <u>1.0019</u>					

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

$$Q = (12.365 \times 381 \times 1.0019 \times .9837 \times 1.034) = \underline{4800} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6780816}{6322487} \right)^n = (4800) (1.0725)^{.75} = (4800) (1.0539)$$

$$Aof = \underline{5060} \text{ MCF/D}$$

Note: Blew heavy fog of water and light Hydrocarbons for entire test.

TESTED BY Jesse Goodwin

WITNESSED BY _____

A. E. McAnally
Well Test Engineer

