

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE June 13, 1973

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-7 Unit 194</u>	
Location <u>1013/N, 1070/E, Section 21, T-28-N, R-7W</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>7313</u>	Tubing: Diameter <u>1.900</u>	Set At: Feet <u>7263</u>
Pay Zone: From <u>7073</u>	To <u>7298</u>	Total Depth: <u>7314</u>	Shut In <u>6-4-73</u>
Stimulation Method <u>SWF</u>		Flow Through Casing <u>X</u>	Flow Through Tubing

Choke Size, Inches <u>0.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>2512</u>	+ 12 = PSIA <u>2524</u>	Days Shut-In <u>9</u>	Shut-In Pressure, Tubing PSIG <u>1594</u>	+ 12 = PSIA <u>1606</u>	
Flowing Pressure: P PSIG <u>212</u>	+ 12 = PSIA <u>224</u>		Working Pressure: P _w PSIG <u>403</u>	+ 12 = PSIA <u>415</u>	
Temperature: T = <u>74</u> °F	n = <u>.75</u>		F _{pv} (From Tables) <u>1.021</u>	Gravity <u>.650</u>	F _g = <u>.9608</u>

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

$$Q = (12.365)(224)(0.9868)(0.9608)(1.021) = \underline{2681} \text{ MCF/D}$$

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

NOTE: The well produced a medium to heavy mist of distillate and water throughout the test.

$$A_{of} = \left(\frac{6370576}{6198315} \right)^n = (2681)(1.0278)^{.75} = (2681)(1.0208)$$

$$A_{of} = \underline{2737} \text{ MCF/D}$$

TESTED BY B. J. Broughton

WITNESSED BY _____

William D. Welch
William D. Welch, Well Test Engineer

