

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 11, 1965

Operator <u>El Paso Natural Gas Company</u>		Lease <u>San Juan 28-6 Unit No. 114</u>	
Location <u>990'N, 990'E, Sec. 25, T-28-N, R-6-W</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>Delata</u>		Pool <u>Basin</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>7970</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>7816</u>
Pay Zone: From <u>7638</u>	To <u>7833</u>	Total Depth: <u>7970</u>	Shut in <u>10-21-65</u>
Stimulation Method <u>Sand Water Frac</u>		Flow Through Casing	Flow Through Tubing <u>X</u>

Choke Size, Inches <u>.75</u>		Choke Constant: C <u>12.365</u>	
Shut-in Pressure, Casing, <u>263</u>	PSIG + 12 = PSIA <u>2648</u>	Days Shut-In <u>21</u>	Shut-in Pressure, Tubing <u>2462</u> PSIG + 12 = PSIA <u>2474</u>
Flowing Pressure: P <u>143</u>	PSIG + 12 = PSIA <u>432</u>	Working Pressure: Pw <u>1403</u> PSIG + 12 = PSIA <u>1420</u>	
Temperature: T = <u>77</u> °F	n = <u>.75</u>	Fpv (From Tables) <u>1.039</u>	Gravity <u>.620</u> Fg = <u>.9608</u>

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

$$Q = (12.365) (432) (.9840) (.9608) (1.039) = 5,247 \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{4,612,804}{4,995,504} \right)^n = (1.4036)^{.75} (5,247) = (1.2894) (5,247) =$$

$$A_{of} = 6,765 \text{ MCF/D}$$

NOTE: Well unloaded water and distillate 4 minutes after being turned on. Well blew a heavy spray of water and distillate throughout the rest of the test.

TESTED BY David E. Johnson
CHECKED BY W. H. McAnally
WITNESSED BY W. H. McAnally



Lewis D. Calloway.