

OPEN FLOW TEST DATA

DATE July 30, 1979

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Kelly B 1A (PC)</u>	
Location <u>NW 8-30-10</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliff</u>		Pool <u>Blanco Ext.</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>5599</u>	Tubing: Diameter <u>1 1/4</u>	Set At: Feet <u>3049</u>
Pay Zone: From <u>2940</u>	To <u>3054</u>	Total Depth: <u>5599</u>	Shut In <u>7-15-79</u>
Stimulation Method <u>Sand Water 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, <u>850</u> PSIG	+ 12 = PSIA <u>862</u>	Days Shut-In <u>15</u>	Shut-In Pressure, Tubing <u>849</u> PSIG
			+ 12 = PSIA <u>861</u>
Flowing Pressure: P <u>237</u> PSIG	+ 12 = PSIA <u>249</u>		Working Pressure: P _w <u>250</u> PSIG
			+ 12 = PSIA <u>262</u>
Temperature: <u>T = .65 °F</u>	F _t = <u>9962</u>	n = <u>.85</u>	F _{pv} (From Tables) <u>1.025</u>
			Gravity <u>.670</u> F _g = <u>.9463</u>

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

$$Q = 12.365 \times 249 \times .9962 \times .9463 \times 1.025 = \underline{2975} \text{ MCF/D}$$

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

$$Aof = \left(\frac{743044}{674400} \right)^n = (1.1018)^{.85} (2975) = (1.0859) (2975)$$

NOTE: Well Blew Dry Gas Through out Test and Vented 154 MCF.

$$Aof = \underline{3230} \text{ MCF/D}$$

TESTED BY J. Thurstonson

WITNESSED BY _____

C.R. Wagner
Well Test Engineer