

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE March 23, 1978

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Neil #2-A</u>	
Location <u>SE 15-31-11</u>		County <u>San Juan</u>	State <u>New Mexico</u> ✓
Formation <u>Pictured Cliffs</u>		Pool <u>Blanco PC Ext.</u>	
Casing: Diameter <u>4 1/2</u>	Set At: Feet <u>5207'</u>	Tubing: Diameter <u>1 1/4</u>	Set At: Feet <u>2576'</u>
Pay Zone: From <u>2564</u>	To <u>2634'</u>	Total Depth: <u>5207'</u>	Shut In <u>3-5-78</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>XXX</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>827</u>	+ 12 = PSIA <u>839</u>	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>828</u>	+ 12 = PSIA <u>840</u>	
Flowing Pressure: P PSIG <u>117</u>	+ 12 = PSIA <u>129</u>		Working Pressure: P _w PSIG <u>119</u>	+ 12 = PSIA <u>131</u>	
Temperature: T = <u>60</u> °F	F _t = <u>1.000</u>	n = <u>.85</u>	F _p v (From Tables) <u>1.012</u>	Gravity <u>.670</u>	F _g = <u>.9463</u>

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

$$Q = 12.365 (129) (1.000) (.9463) (1.012) = \underline{1528} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{705600}{688439} \right)^n = (1.0249)^{.85} (1528) = (1528) (1.0211)$$

$$Aof = \underline{1560} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Well vented 174 MCF to the atmosphere during test.

TESTED BY J. Thurstonson

WITNESSED BY _____

C. R. Wagner
Well Test Engineer