

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE May 2, 1978

Operator <b>El Paso Natural Gas Company</b>		Lease <b>Hutchins #1-A</b>	
Location <b>SE 7-31-10</b>		County <b>San Juan</b>	State <b>New Mexico</b>
Formation <b>Pictured Cliffs</b>		Pool <b>Blanco</b>	
Casing: Diameter <b>4 1/2</b>	Set At: Feet <b>5058'</b>	Tubing: Diameter <b>1 1/4</b>	Set At: Feet <b>2549'</b>
Pay Zone: From <b>2524</b>	To <b>4640'</b>	Total Depth: <b>5058'</b>	Shut In <b>4-17-78</b>
Stimulation Method <b>Sandwater Frac</b>		Flow Through Casing <b>XXX</b>	Flow Through Tubing

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.365</b>			
Shut-In Pressure, Casing, PSIG <b>754</b>	+ 12 = PSIA <b>766</b>	Days Shut-In <b>8</b>	Shut-In Pressure, Tubing PSIG <b>754</b>	+ 12 = PSIA <b>766</b>	
Flowing Pressure: P PSIG <b>87</b>	+ 12 = PSIA <b>99</b>		Working Pressure: P <sub>w</sub> PSIG <b>90</b>	+ 12 = PSIA <b>102</b>	
Temperature: T = <b>55 °F</b>	F <sub>t</sub> = <b>1.005</b>	n = <b>.85</b>	F <sub>pv</sub> (From Tables) <b>1.009</b>	Gravity <b>.670</b>	F <sub>g</sub> = <b>.9463</b>

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

$$Q = 12.365(99)(1.005)(.9463)(1.009) = \underline{\quad 1175 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{586756}{576352} \right)^n = (1.0181)^{.85} = (1175) = (1.0153)(1175)$$

$$Aof = \underline{\quad 1193 \quad} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.  
Well vented 134 MCF to the atmosphere during test.

TESTED BY J. Thurstonson- C. R. Wagner

WITNESSED BY \_\_\_\_\_

*C. R. Wagner*  
Well Test Engineer

