

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE June 7, 1978

Operator <b>El Paso Natural Gas Company</b>		Lease <b>Barnes #4-A</b>	
Location <b>NW 26-32-11</b>		County <b>San Juan</b>	State <b>New Mexico</b>
Formation <b>Pictured Cliffs</b>		Pool <b>Blanco Ext.</b>	
Casing: Diameter <b>4.500</b>	Set At: Feet <b>9590'</b>	Tubing: Diameter <b>1 1/4</b>	Set At: Feet <b>3300'</b>
Pay Zone: From <b>3256'</b>	To <b>3290'</b>	Total Depth: <b>9590'</b>	Shut In <b>5-20-78</b>
Stimulation Method <b>Sandwater Frac</b>		Flow Through Casing <b>XX</b>	Flow Through Tubing

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.365</b>			
Shut-In Pressure, Casing, <b>715</b>	PSIG	+ 12 = PSIA <b>727</b>	Days Shut-In <b>18</b>	Shut-In Pressure, Tubing <b>719</b>	PSIG + 12 = PSIA <b>731</b>
Flowing Pressure: P <b>155</b>	PSIG	+ 12 = PSIA <b>167</b>		Working Pressure: P <sub>w</sub> <b>155</b>	PSIG + 12 = PSIA <b>167</b>
Temperature: T = <b>60 °F</b>		n = <b>.85</b>		F <sub>pv</sub> (From Tables) <b>1.016</b>	Gravity <b>.670</b> F <sub>g</sub> = <b>.9463</b>

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

$$Q = 12.365(167)(1.000)(.9463)(1.016) = \underline{1985} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{534361}{506472} \right)^n = (1.0551)^{.85}(1985) = (1.0466)(1985)$$

$$Aof = \underline{2078} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.  
Well vented 201 MCF to the atmosphere during the test.

TESTED BY D. Wright

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

*L. R. Wagner*  
Well Test Engineer

