

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE July 11, 1975

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Duff #4</u>	
Location <u>1750/N, 1460/E, Sec 5, T 29 N, R 11 W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>Aztec</u>	
Casing: Diameter <u>2.875</u>	Set At: Feet <u>2093'</u>	Tubing: Diameter <u>No tubing</u>	Set At: Feet <u>---</u>
Pay Zone: From <u>2000</u>	To <u>2024</u>	Total Depth: <u>PETD</u> <u>2093</u> <u>2082</u>	Shut In <u>6-24-75</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>		Tubingless Completion	
Shut-In Pressure, Casing, PSIG <u>339</u>	+ 12 = PSIA <u>351</u>	Days Shut-In <u>17</u>	Shut-In Pressure, Tubing PSIG <u>No tubing</u>	+ 12 = PSIA <u>---</u>	
Flowing Pressure: P PSIG <u>58</u>	+ 12 = PSIA <u>70</u>		Working Pressure: P <sub>w</sub> PSIG <u>Calculated</u>	+ 12 = PSIA <u>83</u>	
Temperature: T = <u>60</u> °F	F <sub>t</sub> = <u>1.000</u>	n = <u>.85</u>	F <sub>pv</sub> (From Tables) <u>1.009</u>	Gravity <u>.670</u>	F <sub>g</sub> = <u>.9463</u>

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

$$Q = 12.365(70)(1.000)(.9463)(1.009) = \underline{826} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{123201}{116312} \right)^n = 826(1.059)^{.85} = 826(1.050)$$

$$Aof = \underline{867} \text{ MCF/D}$$

Note: The well blew a light mist of water throughout test. During the test 122.27 MCF of gas was vented to the atmosphere.

TESTED BY C. Rhames

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

Ray W. Bink  
Well Test Engineer

