

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE May 3, 1979

Operator <b>El Paso Natural Gas Company</b>		Lease <b>Roelofs A 2A (PC)</b>	
Location <b>NW 14-29-8</b>		County <b>San Juan</b>	State <b>New Mexico</b>
Formation <b>Picture Cliff</b>		Pool <b>Blanco</b>	
Casing: Diameter <b>4.500</b>	Set At: Feet <b>5696</b>	Tubing: Diameter <b>1 1/4</b>	Set At: Feet <b>3176</b>
Pay Zone: From <b>3036</b>	To <b>3164</b>	Total Depth: <b>5696</b>	Shut In <b>4-19-79</b>
Stimulation Method <b>Sand Water Frac</b>		Flow Through Casing <b>X X</b>	Flow Through Tubing

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.365</b>			
Shut-In Pressure, Casing, PSIG <b>682</b>	+ 12 = PSIA <b>694</b>	Days Shut-In <b>14</b>	Shut-In Pressure, Tubing PSIG <b>680</b>	+ 12 = PSIA <b>692</b>	
Flowing Pressure: P PSIG <b>54</b>	+ 12 = PSIA <b>66</b>		Working Pressure: P <sub>w</sub> PSIG <b>302</b>	+ 12 = PSIA <b>314</b>	
Temperature: T = <b>49</b> °F	F <sub>t</sub> = <b>1.011</b>	n = <b>.85</b>	F <sub>pv</sub> (From Tables) <b>1.010</b>	Gravity <b>.670</b>	F <sub>g</sub> = <b>.9463</b>

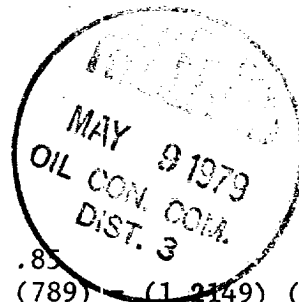
$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365 \times 66 \times 1.011 \times .9463 \times 1.010 = \underline{789} \text{ MCF/D}$$

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

$$Aof = \left( \frac{481636}{383040} \right)^n Q =$$

$$Aof = \underline{959} \text{ MCF/D}$$



$$(1.2574) (789) = (1.2149) (789)$$

NOTE: Well blew dry gas throughout test and vented 92 MCF to the atmosphere.

TESTED BY N. Wagoner

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

*C.R. Wagoner*  
Well Test Engineer