

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATAWELL NAME W-10DATE September 9, 1964

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Johnson Unit No. 16 (DK) (OWHO)</u>	
Location <u>Spokane, Blaine, 12 miles N.E.</u>		County <u>Blaine</u>	State <u>New Mexico</u>
Formation <u>Tuff</u>		Type <u>Test</u>	
Shut-In Pressure <u>1085</u>	Test Air Pressure <u>1085</u>	Test Air Flow <u>0.00</u>	Test Air Feet <u>0.00</u>
Pay Zone: From <u>8320</u>	To <u>8430</u>	Total Depth <u>8490</u>	Shut In <u>8-18-64</u>
Simulation Method <u>Sand Water Test</u>		Flow Through Casing	Flow Through Tubing <u>X</u>

Choke Size, inches <u>0.750</u>	Choke Constant: C <u>12.365</u>		Filter Model "D" Packer at 8011	
Shut-In Pressure, Casing, PSIG <u>1085 (DK)</u>	+ 12 = PSIA <u>1097</u>	Days Shut-In <u>22</u>	Shut-In Pressure, Tubing, PSIG <u>1025 (DK)</u>	+ 12 = PSIA <u>1035</u>
Flowing Pressure: P, PSIG <u>132</u>	+ 12 = PSIA <u>144</u>		Working Pressure: P _w , PSIG <u>0.000000</u>	+ 12 = PSIA <u>494</u>
Temperature: T = <u>55 °F</u>	F _g = <u>1.0040</u>	a = <u>.75</u>	F _{pv} (From Tables) <u>1.010</u>	Gravity <u>.605</u> F _g = <u>.9958</u>

Initial SIEP (IW) = 1085 psig

Final SIEP (IW) = 1088 psig

CHOKE VOLUME = Q = C × P_t × F_t × F_g × F_{pv}

$$Q = (12.365) (132) (1.0040) (.9958) (1.010) = \underline{1649} \text{ MCF/D}$$

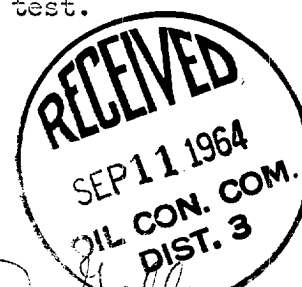
$$\text{OPEN FLOW} = A_{of} = Q \left(\frac{\frac{1}{P_s}}{\frac{1}{P_c} - \frac{1}{P_w}} \right)^a$$

$$A_{of} = \left(\frac{3,367,225}{3,123,169} \right)^{.75} = (1.049) (1.0701)^{.75} = (1.049) (1.0581)$$

$$A_{of} = \underline{1745} \text{ MCF/D}$$

NOTE: Blew small amount of water vapor throughout test.

TESTED BY J. B. Goodwin
 CALCULATED BY E. L. Kendrick
 WITNESSED BY _____



Lewis D. Galloway
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