

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE November 16, 1964

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Right No. 3-C (GWO)</u>	
Location <u>1016, 197th, Section 29, T-31-N, R-9-W</u>		County <u>Sandoval</u>	State <u>New Mexico</u>
Formation <u>Mesa Verde</u>		Pool <u>1016</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>5485</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>5415</u>
Pay Zone: From <u>4360</u>	To <u>5440</u>	Total Depth: <u>5485</u>	Shut In <u>11-8-64</u>
Stimulation Method <u>Sand Water Frac</u>		Flow Through Casing	Flow Through Tubing <u>X</u>

Choke Size, Inches <u>.75</u>	Choke Constant: C <u>12.365</u>		
Shut-in Pressure, Casing, PSIG <u>874</u>	+ 12 = PSIA <u>886</u>	Days Shut-In <u>8</u>	Shut-in Pressure, Tubing PSIG <u>874</u>
Flowing Pressure: P PSIG <u>392</u>	+ 12 = PSIA <u>334</u>		Working Pressure: Pw PSIG <u>771</u>
Temperature: T = <u>91</u> °F	n = <u>.75</u>	Fpv (From Tables) <u>1.025</u>	Gravity <u>.615</u>
Ft = <u>.9715</u>			Fg = <u>.9645</u>

CHOKE VOLUME = Q = C x P<sub>t</sub> x F<sub>t</sub> x F<sub>g</sub> x F<sub>pv</sub>

Q = (12.365) (334) (.9715) (.9645) (1.025) = 3,967 MCF/D

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

Aof =  $\left( \frac{784,996}{171,907} \right)^n = (3967) (4.5663)^{.75} = (3967) (3.1237)$

Aof = 12,392 MCF/D



NOTE: Light fog of water and distillate throughout the test.

TESTED BY C. R. Wagner

WITNESSED BY H. E. McManally

Lewis D. Galloway  
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