

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

CORRECTED COPY

DATE June 3, 1975

Operator El Paso Natural Gas Company		Lease Mansfield #9-A	
Location 1700'S, 1050'E, Sec. 29, T30N, R9W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5160'	Tubing: Diameter 2.375	Set At: Feet 5062'
Pay Zone: From 4162	To 5104	Total Depth: 4340' - PBTD	Shut In 5-27-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Plate Choke Size, Inches 2.500" Plate, 4" M.R.		Plate Choke Constant: C 32.64		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 662	+ 12 = PSIA 674	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 598	+ 12 = PSIA 610	
Flowing Pressure: P PSIG 68 M.R.; 177 W.H.	+ 12 = PSIA 80 M.R. 189 W.H.		Working Pressure: P _w PSIG 568	+ 12 = PSIA 580	
Temperature: T= 72 °F	n = .75		F _{pv} (From Tables) 1.010	Gravity .700	F _g = 1.195

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

$$Q = \text{Calculated from orifice meter readings} = 2144 \text{ MCF/D}$$

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

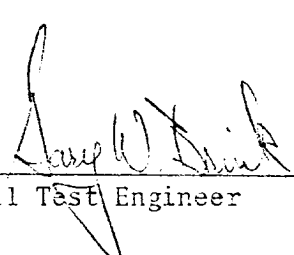
$$Aof = Q \left(\frac{454276}{117876} \right)^n = 2144(3.8538)^{.75} = 2144(2.7506)$$

$$Aof = 5897 \text{ MCF/D}$$

Note: The well produced 13.39 bbls of 45.0° API gravity oil during the test. The well produced 269 MCF of gas during the test.

TESTED BY Roger Hardy

WITNESSED BY


Well Test Engineer
