

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE April 3, 1975

Operator El Paso Natural Gas Company		Lease Howell K #3-A	
Location 1630/S, 1030/E, Sec. 15, T30N, R8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5828'	Tubing: Diameter 2.375	Set At: Feet 5770'
Pay Zone: From 5073'	To 5791'	Total Depth: PBD 5828' 5811'	Shut In 3-11-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Plate		Choke Constant: C		Tested through a 3/4" variable choke.	
Choke Size, Inches					
2.500" Plate, 4" M.R.		32.64			
Shut-In Pressure, Casing,	PSIG	+ 12 = PSIA	Days Shut-In	Shut-In Pressure, Tubing	PSIG + 12 = PSIA
621		633	23	597	609
Flowing Pressure: P	PSIG	+ 12 = PSIA		Working Pressure: P <sub>w</sub>	PSIG + 12 = PSIA
223 W.H., 75 M.R.		235 W.H., 87 M.R.		568	580
Temperature:		n =		F <sub>pv</sub> (From Tables)	Gravity
T = 53 °F	F <sub>t</sub> = 1.0068	.75		1.009	.656 F <sub>g</sub> = 1.235

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

Q = Calculated from orifice meter readings = 2941 MCF/D

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

$$Aof = Q \left( \frac{400689}{64289} \right)^n = 2941(6.2326)^{.75} = 2941(3.9446)$$

Aof = 11,601 MCF/D

Note: The well did not produce enough liquid to dump to the tank. The well produced 371 MCF gas during the test.

TESTED BY H. E. McAnally & C. Rhames

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

Loren W. Fothergill  
Well Test Engineer

