

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 15, 1977

Operator El Paso Natural Gas Company		Lease Barnes #6-A	
Location SE 23-32-11		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2"	Set At: Feet 5952'	Tubing: Diameter 2 3/8"	Set At: Feet 5786'
Pay Zone: From 4728	To 5896	Total Depth: 5952	Shut In 8-7-77
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG	+ 12 = PSIA	Days Shut-In 8	Shut-In Pressure, Tubing PSIG	+ 12 = PSIA	
			780	792	
Flowing Pressure: P PSIG	+ 12 = PSIA	Working Pressure: P _w PSIG	+ 12 = PSIA		
235	247	Calc.	497		
Temperature: T = 72 °F	n =	F _{pv} (From Tables)	Gravity		
F _t = .9887	.75	1.022	.650	F _g = .9608	

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

$$Q = 12.365(247)(.9887)(.9608)(1.022) = \underline{\quad 2965 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{627264}{380255} \right)^n = 2965(1.6496)^{.75} = 2965(1.4556)$$

$$Aof = \underline{\quad 4316 \quad} \text{ MCF/D}$$

Note: Well blew 405 MCF of dry gas to atmosphere during test.

TESTED BY D. Wright

WITNESSED BY _____

C. R. Wagner
Well Test Engineer

