

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 22, 1977

Operator El Paso Natural Gas Company		Lease Vanderwart A #1-A	
Location SE 11-29-8		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5708'	Tubing: Diameter 2 3/8	Set At: Feet 5595'
Pay Zone: From 4737	To 5665'	Total Depth: 5708'	Shut In 8-15-77
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 7	Shut-In Pressure, Tubing PSIG	+ 12 = PSIA	
			608	620	
Flowing Pressure: P PSIG	+ 12 = PSIA		Working Pressure: P _w PSIG	+ 12 = PSIA	
233	245		Calc.	490	
Temperature: T = 68 °F	n = .75		F _{pv} (From Tables) 1.025	Gravity .670	F _g = .9463
F _t = .9924					

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

$$Q = 12.3650(245)(.9924)(.9463)(1.025) = 2916 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{384400}{144300} \right)^n = 2916(2.6639)^{.75} = 2916(2.0851)$$

$$Aof = 6080 \text{ MCF/D}$$

Note: Well vented 349 MCF of dry gas to the atmosphere during test.

TESTED BY D. Wright

WITNESSED BY

C. R. Wagner
Well Test Engineer

