

EL PASO NATURAL GAS COMPANY OPEN FLOW TEST DATA

DATE June 14, 1977

Operator El Paso Natural Gas Company		Well Vanderwart A #5-A	
Location SE 14-29-08		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 6213'	Tubing: Diameter 2 3/8	Set At: Feet 6165'
Pay Zone: From 5260	To 6176	Total Depth: 6213	Shut In 6-7-77
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 7	Shut-In Pressure, Tubing PSIG 474	+ 12 = PSIA 486	
Flowing Pressure: P PSIG 197	+ 12 = PSIA 207		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 426	
Temperature: T = 68 °F	F _t = .9924	n = .75	F _{pv} (From Tables) 1.019	Gravity .650	F _g = .9608

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

$$Q = 12.365(207)(.9924)(.9608)(1.019) = \underline{2487} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{236196}{54720} \right)^n = 2487 (4.3164)^{.75} = 2487(2.9944)$$

$$Aof = \underline{7447} \text{ MCF/D}$$

Note: Blew heavy fog of water & distillate throughout test. Vented 382 MCF of gas to atmosphere.

TESTED BY Easley- Wagner

WITNESSED BY Mabe- Wagner

C. R. Wagner
Well Test Engineer

