

OPEN FLOW TEST DATA

DATE October 17, 1977

Operator El Paso Natural Gas Company		Lease Gartner #4-A	
Location SE 33-30-08		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5743'	Tubing: Diameter 2 3/8	Set At: Feet 5633'
Pay Zone: From 4705	To 5698	Total Depth: 5743'	Shut In 10-10-77
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	
	148	160	629	641	
Flowing Pressure: P PSIG	+ 12 = PSIA	Working Pressure: P _w PSIG	+ 12 = PSIA		
	148	Calc.	319		
Temperature: T = 61 °F	n =	F _{pv} (From Tables)	Gravity		
F _t = .9990	.75	1.015	.670	F _g = .9463	

CHOKE VOLUME = Q = C x P_i x F_t x F_g x F_{pv}

$$Q = 12.365(160)(.9990)(.9463)(1.015) = \underline{1898} \text{ MCF/D}$$

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

$$A_{of} = Q \left(\frac{410881}{309120} \right)^n = 1898(1.3292)^{.75} = 1898(1.2379)$$

$$A_{of} = \underline{2350} \text{ MCF/D}$$



Note: Well blew light fog of water and distillate throughout test. Well vented 268 MCF of gas to the atmosphere during the test.

TESTED BY R. Headrick

WITNESSED BY _____

C. R. Wagner
Well Test Engineer