

Operator El Paso Natural Gas Company		Lease Hardie No. 1 (OWWO)	
Location 990'N, 1650'E, Sec. 26 T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5383	Tubing: Diameter 2.375	Set At: Feet 5252
Pay Zone: From 4610	To 5310	Total Depth: 5383	Shut In 10-11-65
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365	
Shut-In Pressure, Casing, PSIG 887	+ 12 = PSIA 899	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 887
Flowing Pressure: P PSIG 297	+ 12 = PSIA 309	Working Pressure: Pw PSIG 703	+ 12 = PSIA 715
Temperature: T = 80 °F	F _t = .9813	F _{pv} (From Tables) 1.030	Gravity .690
	.75		F _g = .9325

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

$$Q = (12.365) (309) (.9813) (.9325) (1.030) = 3,601 \quad \text{MCF/D}$$

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

$$Aof = \left(\frac{808,201}{296,976} \right)^n = (3,601) (2.7214)^{.75} = (3,601) (2.1188)$$

NOTE: Well produced a very heavy fog of distillate and water throughout the test.

$$Aof = 7,630 \quad \text{MCF/D}$$

TESTED BY **Clarence R. Wagner**
 CALCULATED BY: **Herman E. McAnally**
 CHECKED BY: **Clarence R. Wagner**



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