

Operator El Paso Natural Gas Company		Lease Hardie No. 10	
Location T840'S, 1180'E, Section 26, T29N, R8W		County San Juan	State New Mexico
Formation Pictured Cliffs Ext.		Pool Blanco	
Casing: Diameter 2.875	Set At: Feet 3068	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 2928	To 2974	Total Depth: 3068	Shut In 5-3-73
Stimulation Method SWF		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, 1053	PSIG	+ 12 = PSIA 1065	Days Shut-In 14	Shut-In Pressure, Tubing No Tubing	PSIG + 12 = PSIA
Flowing Pressure: P 170	PSIG	+ 12 = PSIA 182		Working Pressure: Pw Calculated	PSIG + 12 = PSIA 228
Temperature: T = 66 °F	Ft = .9943	n = 85		Fpv (From Tables) 1.017	Gravity .645 Fg = .9645

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

$$Q = (12.365)(182)(.9943)(.9645)(1.017) = \underline{\quad 2195 \quad} \text{ MCF/D}$$

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

NOTE: Well produced dry gas.

$$Aof = Q \left(\frac{1134225}{1082241} \right)^n = (2195)(1.0480)^{.85} = (2195)(1.0407)$$

$$Aof = \underline{\quad 2285 \quad} \text{ MCF/D}$$

TESTED BY Bobby J. Broughton

WITNESSED BY _____



William D. Welch
William D. Welch, Well Test Engineer