

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE January 23, 1976

Operator Koch Industries		Lease Lamb #6	
Location SW 20-31-10		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 2980'	Tubing: Diameter 2.375	Set At: Feet 2799'
Pay Zone: From 2515	To 2854'	Total Depth: 2980'	Shut In 1-14-76
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 976	+ 12 = PSIA 988	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 975	+ 12 = PSIA 987	
Flowing Pressure: P PSIG 85	+ 12 = PSIA 97		Working Pressure: Pw PSIG 150	+ 12 = PSIA 162	
Temperature: T = 65 °F	F _t = 9952	n = .85	F _{pv} (From Tables) 1.009	Gravity .670	F _g = .9463

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365(97)(.9952)(.9463)(1.009) = \underline{1140} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{976144}{949900} \right)^{.85} = 1140(1.0276)^{.85} = (1140)(1.0234)$$

$$Aof = \underline{1167} \text{ MCF/D}$$

Note: Blew dry gas throughout test.

TESTED BY Jackson- (Koch Ind)WITNESSED BY Jesse B. Goodwin (EPNG)

Charles W. Deine
Well Test Engineer

