

OPEN FLOW TEST DATA

DATE January 21, 1976

Operator Koch Industries		Lease Lamb #5	
Location NE 20-31-10		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco Extension	
Casing: Diameter 4 1/2"	Set At: Feet 3004'	Tubing: Diameter 2 3/8"	Set At: Feet 2803'
Pay Zone: From 2834'	To 2895'	Total Depth: 2953	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 977	+ 12 = PSIA 989	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 959	+ 12 = PSIA 971
Flowing Pressure: P PSIG 69	+ 12 = PSIA 81		Working Pressure: Pw PSIG 136	+ 12 = PSIA 148
Temperature: T = 64 °F	F _i = .9962	n = .85	F _{pv} (From Tables) 1.009	Gravity .670 F _g = .9463

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

$$Q = 12.365(81)(.9962)(.9463)(1.009)$$

$$= \underline{953} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{978121}{956217} \right)^n = 953 (1.0229)^{.85} = 953(1.0194)$$

$$Aof = \underline{972} \text{ MCF/D}$$

Note: This well blew dry gas throughout test.

TESTED BY _____

WITNESSED BY Norton

Ray W. Bink
Well Test Engineer

