

DATE August 12, 1975

Operator Koch Industries		Lease Cain #2 (PC)	
Location 790/N, 790/W, Sec. 20, T31N, R10W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 2930'	Tubing: Diameter 2.375	Set At: Feet 2698'
Pay Zone: From 2726'	To 2770	Total Depth: 2788'	Shut In 7-15-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 0.75		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1003	+ 12 = PSIA 1015	Days Shut-In 28	Shut-In Pressure, Tubing 1003	PSIG + 12 = PSIA 1015	
Flowing Pressure: P 126	PSIG + 12 = PSIA 138		Working Pressure: Pw 234	PSIG + 12 = PSIA 246	
Temperature: T = 72 °F	n = 0.85		Fpv (From Tables) 1.011	Gravity 0.635	Fg = .9721
Fr = .9887					

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

$$Q = (12.365)(138)(.9887)(.9721)(1.011) = \underline{1,658} \text{ MCF/D}$$

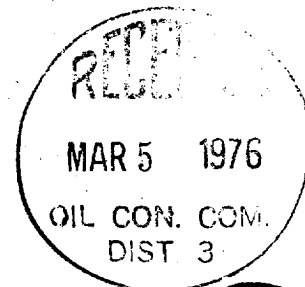
$$\text{OPEN FLOW} = Aof = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = Q \left( \frac{1030225}{969709} \right)^n = (1658)(1.0624)^{.85} = (1658)(1.0528)$$

$$Aof = \underline{1,746} \text{ MCF/D}$$

TESTED BY Norton

WITNESSED BY \_\_\_\_\_



*Charles W. Dean*

Well Test Engineer