

MESA PETROLEUM COMPANY  
OPEN FLOW TEST DATA

DATE August 2, 1978

Operator Mesa Petroleum Corp.		Lease Sutter #2-A (PC)	
Location SE 12-32N-11W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Undesignated	
Casing: Diameter 4.500	Set At: Feet 5791'	Tubing: Diameter 1 1/4	Set At: Feet
Pay Zone: From 3168'	To 3190'	Total Depth: 5791'	Shut In 7-17-78
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 1071	+ 12 = PSIA	Days Shut-In 16	Shut-In Pressure, Tubing PSIG 1071	+ 12 = PSIA	1083
Flowing Pressure: P PSIG 52	+ 12 = PSIA		Working Pressure: P <sub>w</sub> PSIG 282	- 12 = PSIA	294
Temperature: T = 74 °F	F <sub>t</sub> = .9868	n = .85	F <sub>pv</sub> (From Tables) 1.008	Gravity .670	F <sub>g</sub> = .9463

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

$$Q = 12.365(64)(.9868)(.9463)(1.008) = \underline{\quad 745 \quad} \text{MCF/D}$$

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

$$A_{of} = Q \left( \frac{1172889}{1086453} \right)^n = (1.0796)^{.85} = (745) = (1.0672)(745)$$

$$A_{of} = \underline{\quad 795 \quad} \text{MCF/D}$$

TESTED BY Bill Toller

WITNESSED BY C. R. Wagner- EPNG

*C.R. Wagner*  
Well Test Engineer