

MESA PETROLEUM COMPANY
OPEN FLOW TEST DATA

DATE August 17, 1978

Operator Mesa Petroleum Corp.		Lease State Com #13-A (PC)	
Location SE 36-29-08		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5654'	Tubing: Diameter 1 1/2	Set At: Feet 2972'
Pay Zone: From 3076	To 3114'	Total Depth: 5665'	Shut In 7-28-78
Stimulation Method Sandwater Frac		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 1046	PSIG	+ 12 = PSIA 1058	Days Shut-In 20	Shut-In Pressure, Tubing 1046	PSIG
Flowing Pressure: P 192	PSIG	+ 12 = PSIA 204		Working Pressure: P _w 195	PSIG
Temperature: T = 72 °F		n = .85		F _p v (From Tables) 1.020	Gravity .670
	F _t = .9887				F _g = .9463

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

$$Q = 12.365(204)(.9887)(.9463)(1.020) = \underline{\quad 2407 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1119364}{1076515} \right)^n = (1.0398)^{.85} = (2407) = (1.0337)(2407)$$

$$Aof = \underline{\quad 2488 \quad} \text{ MCF/D}$$

TESTED BY Jack Dunning

WITNESSED BY C. P. Wagner

C. P. Wagner
Well Test Engineer