

Mesa Petroleum Company
OPEN FLOW TEST DATA

DATE January 10, 1978

Operator Mesa Petroleum Company		Lease Otero Fed. #5	
Location NW 23-24-06		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4 1/2	Set At: Feet 6731'	Tubing: Diameter 2 3/8	Set At: Feet 6641'
Pay Zone: From 6450	To 6675	Total Depth: PBTD 6703' 6731	Shut In 1-3-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XXX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2370	+ 12 = PSIA 2382	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 2361	+ 12 = PSIA 2373	
Flowing Pressure: P PSIG 230	+ 12 = PSIA 242		Working Pressure: P _w PSIG 810	+ 12 = PSIA 822	
Temperature: T = 80 °F	n = .75		F _{pv} (From Tables) 1.022	Gravity .650	F _g = .9608

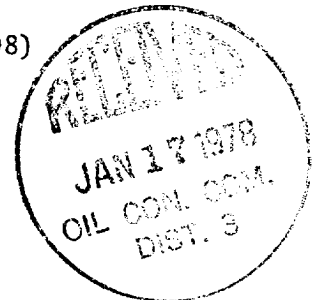
$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365(242)(.9813)(.9608)(1.022) = \underline{\quad 2883 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{5673924}{4998240} \right)^n = 2883(1.1352)^{.75} = 2883(1.0998)$$

$$Aof = \underline{\quad 3171 \quad} \text{ MCF/D}$$

TESTED BY James Archer (Mesa Pet. Co.)WITNESSED BY C. Brock (EPNG)

C. R. Wagner
Well Test Engineer