

MESA PETROLEUM CO.

OPEN FLOW TEST DATA

COMPANY DISTRIBUTION ONLY

DATE May 18, 1978

Operator Mesa Petroleum Co.		Lease State Com S #15-A (F-PM)	
Location NW 36-32-12		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5586'	Tubing: Diameter 2 3/8	Set At: Feet 5406'
Pay Zone: From 4492'	To 5498'	Total Depth: 5586'	Shut In 5-11-78
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	+ 12 = PSIA --	Days Shut-In 7	Shut-In Pressure, Tubing 872	PSIG + 12 = PSIA 884
Flowing Pressure: P 220	PSIG	+ 12 = PSIA 232		Working Pressure: P _w Calc.	PSIG + 12 = PSIA 453
Temperature: T = 82 °F	F _t = .9795	n = .75		F _{pv} (From Tables) 1.020	Gravity .650 F _g = .9608

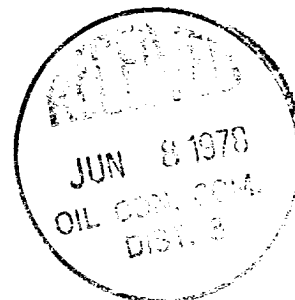
$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_t \times F_g \times F_{pv}$$

$$Q = 12.365(232)(.9795)(.9608)(1.020) = \underline{2754} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{781456}{576247} \right)^n = (1.3561)^{.75} = (2754) = (1.2567)(2754)$$

$$Aof = \underline{3461} \text{ MCF/D}$$

TESTED BY Dave Green- Mesa PetroleumWITNESSED BY C.R. Wagner- EPNG Co.

C.R. Wagner
Well Test Engineer