

MESA PETROLEUM COMPANY
OPEN FLOW TEST DATA

DATE June 28, 1978

Operator Mesa Petroleum Corp.		Lease Johns Federal #2-A (PC)	
Location SE 18-32-11		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4.500 7.000	Set At: Feet 3326-5826'	Tubing: Diameter 1 1/4	Set At: Feet 3317'
Pay Zone: From 3248	To 3317'	Total Depth: 5826'	Shut In 6-14-78
Stimulation Method Sandwater Frac		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1040	+ 12 = PSIA 1052	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 1040	+ 12 = PSIA 1052	
Flowing Pressure: P PSIG 145	+ 12 = PSIA 157		Working Pressure: P _w PSIG 160	+ 12 = PSIA 172	
Temperature: T = 63 °F	F _t = .9971	n = .85	F _p v (From Tables) 1.015	Gravity .670	F _g = .9463

CHOKE VOLUME = Q = C × P_t × F_t × F_g × F_pv

Q = 12.365(157)(.9971)(.9463)(1.015) = 1859 MCF/D

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

Aof = Q $\left(\frac{1081600}{1052016} \right)^n = (1.0281)^{.85} = (1.0239)(1859)$

Aof = 1903 MCF/D



TESTED BY D. Green- Mesa Petroleum Corp.

WITNESSED BY C. R. Wagner

C. R. Wagner
Well Test Engineer