

OPEN FLOW TEST DATA

DATE June 13, 1977

Operator Northwest Production Corp.		Well Jicarilla 119N #8-A	
Location NW 8-26-4		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco Mesa Verde	
Casing: Diameter 4 1/2	Set At: Feet 6428'	Tubing: Diameter 2 3/8	Set At: Feet 6351'
Pay Zone: From 5535	To 6378	Total Depth: 6428	Shut In 5-25-77
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 2.500		Choke Constant: C 32.64		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 1120	+ 12 = PSIA 1132	Days Shut-In 19	Shut-In Pressure, Tubing PSIG 670	+ 12 = PSIA 682	
Flowing Pressure: P PSIG MR 52 WH 236	+ 12 = PSIA MR 64 WH 248		Working Pressure: P _w PSIG 498	+ 12 = PSIA 510	
Temperature: T = 52 °F F _r = 1.008	n = .75		F _{pv} (From Tables) 1.010	Gravity .687	F _g = .9346

CHOKE VOLUME = Q = C x P_i x F_r x F_g x F_{pv}

Q = Calculated from meter readings = 1534 MCF/D

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

$$Aof = Q \left(\frac{1281424}{1021324} \right)^n = 1534(1.2547)^{.75} = 1534(1.1855)$$

Aof = 1819 MCF/D

Note: Well produced 21.6 Bbl. of 63° API oil and vented to atmosphere 275 MCF/D of dry gas.

TESTED BY Johnson-Howell-Wagner

WITNESSED BY _____

C.R. Wagner
Well Test Engineer