

OPEN FLOW TEST DATA

DATE August 30, 1963

Operator Consolidated Oil & Gas, Inc.		Lease Jicarilla No. 3-8	
Location 1055' FNL & 1850' FEL, Sec. 8-26N-5W		County Rio Arriba	State New Mexico
Formation Dakota		Basin	
Casing Diameter 4-1/2"	Set At: Feet 7931	Tubing Diameter 1-1/2"	Set At: Feet 7648
Pay Zone From 7756'	To 7812'	Total Depth 7932'	
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.75		Choke Constant: C 14,1605	
Shut-in Pressure, Casing, PSIG 110	- 12 = PSIA 122	Days Shut-in 7	Shut-in Pressure, Tubing, PSIG 1674
Flowing Pressure: P 110	- 12 = PSIA 122	Working Pressure: P _w 1674	- 12 = PSIA 1686
Temperature: T 53 °F	n =	F _{ps} (From Tables) 1.016	Gravity 0.700 (est.)

CHOKE VOLUME : Q = C x P_i x F_i x F_B x F_{ps}

$$Q = 14,1605 \times 122 \times 1.0068 \times .9258 \times 1.016 = 1636 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1636}{1.0068} \right)^n$$

$$Aof = 8497 \text{ MCF/D}$$

TESTED BY John Walker

WITNESSED BY Clyde Phillips

W. H. Williams
Chief Engineer

OPEN FLOW TEST DATA

DATE September 6, 1963

Operator Consolidated Oil & Gas, Inc.		Lease Jicarilla No. 3-8	
Location 1055' FNL & 1850' FEL, Sec 8-26N-5W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Basin Tapicito	
Casing Diameter 8-5/8"	Set At: Feet 3999'	Tubing Diameter 1"	Set At: Feet 3417'
Pay Zone From 3536'	To 3596'	Total Depth 7932'	
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.75		Choke Constant: C 14,1605	
Shut-in Pressure, Casing, PSIG 989	- 12 = PSIA 1001	Days Shut-in 14	Shut-in Pressure, Tubing, PSIG 989
Flowing Pressure: P 97	- 12 = PSIA 109	Working Pressure: P _w 923	- 12 = PSIA 935
Temperature: T 44 °F	n =	F _{ps} (From Tables) 1.013	Gravity 0.70 (est.)

CHOKE VOLUME : Q = C x P_i x F_i x F_B x F_{ps}

$$Q = 14,1605 \times 109 \times 1.0158 \times .9258 \times 1.013 = 1470 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1,002,001}{127,776} \right)^n = 5.78$$

$$Aof = 8497 \text{ MCF/D}$$

TESTED BY John Walker

WITNESSED BY Clyde Phillips

W. H. Williams