

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 1, 1959

Operator El Paso Natural Gas		Lease San Juan 31-6 No. 16-33 (D)	
Location 8508, 1840W; 33-31-6		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing Diameter 9-5/8	Set At: Feet 3572	Tubing Diameter 2"	Set At: Feet 8011
Pay Zone: From 7901	To 8054	Total Length 8182	Shut in: 8/24/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant, C 12.1605		7" at 7736, 5" liner 7661-8178	
Shut-in Pressure, Casing, PSIG (MV) 820	- 12 - PSIA 832	Days Shut-In 8	Shut-in Pressure, Tubing PSIG (Dak) 2268	- 12 - PSIA 2280	
Flowing Pressure: P PSIG 112	- 12 - PSIA 124		Working Pressure: Pw PSIG Calc.	- 12 - PSIA 309	
Temperature: T F 70			Fov (From Tables) 1.008	Gravity .581	

Initial SIPT (MV) = 821 psig

Packer at 7297

Final SIPC (MV) = 827 psig

CHOKE VOLUME = $Q = C \times P_r \times F_r \times F_g \times F_{pv}$

$$Q = 12.1605 \times 124 \times .9905 \times 1.017 \times 1.008 = 1783 \text{ MCF/D}$$

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

SIPT (D) = 1184 psig originally. Well was blown 10 minutes and re-shut-in. Then SIPT = 2268 psig after unloading slug of water.

$$Aof = \left(\frac{5198400}{5102919} \right)^n \cdot 1.0187^{.75} \times 1783 = 1.0140 \times 1783$$

$$Aof = 1808 \text{ MCF/D}$$

TESTED BY W. D. DawsonWITNESSED BY W. B. Smith (Phillips) C. Wagner (PNW)

Lewis D. Galloway
L. D. Galloway

AZTEC DISTRICT OFFICE

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