

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

Dual Completion

DATE November 23, 1956

Operator El Paso Natural Gas Company		Lease Ludwick #13	
Location 1750'N, 1720'E, Sec. 5-29-10		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Aztec	
Casing: Diameter 7"	Set At: Feet 4200	Tubing: Diameter 2"	Set At: Feet 4642
Pay Zone: From 2308	To 2331	Total Depth 4894 c/o 4680	
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 14.1605		Packer set at 2460'	
Shut-In Pressure, Casing, PSIG 1176 (MV)	12 - PSIA 1188	Days Shut-In 14	Shut-In Pressure, Tubing, PSIG 642	12 - PSIA 654	
Flowing Pressure: P, PSIG 147	12 - PSIA 159		Working Pressure: Pw, PSIG Calculated	12 - PSIA 160	
Temperature: T, F 55	F, in .85		Fpv (From Tables) 1.015	Gravity .670	

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

$$Q = 14.1605 \times 159 \times 1.0048 \times .9463 \times 1.015 = 2173 \text{ MCF/D}$$

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

$$Aof = \left(\frac{427,716}{402,116} \right)^n (1.0636)^{.85} \times 2173 = 1.0538 \times 2173$$

$$Aof = 2290 \text{ MCF/D}$$

TESTED BY: K. C. McBride

WITNESSED BY:

cc: (6) E. J. Coel, Jr.
(1) E. C. Arnold, Oil Conservation Commission

L. D. Galloway
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