

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE December 2, 1971

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit No. 152	
Location 1840'S - 1850'W, S 21, T27N, RTW		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7544	Tubing: Diameter 2.375	Set At: Feet 7469
Pay Zone: From 7264	To 7484	Total Depth: 7544	Shut In 11-15-71
Stimulation Method S W F		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 4" MR 2.750" Plate		Choke Constant: C 41.9208		Well tested thru 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2302	+ 12 = PSIA 2314	Days Shut-In 17	Shut-In Pressure, Tubing PSIG 2407	+ 12 = PSIA 2419	
Flowing Pressure: P PSIG 387 W.H. 89 M.R.	+ 12 = PSIA 399 W.H. 101 M.R.		Working Pressure: Pw PSIG 770	+ 12 = PSIA 782	
Temperature: T = 66 °F	Ft = 0.9943	n = 0.75	Fpv (From Tables) 1.009	Gravity 0.650	Fg = 1.2403

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_t \times F_g \times F_{pv}$$

$$Q = \text{Calculated from orifice meter readings} = 3109 \text{ MCF/D}$$

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

NOTE: The well produced 29 bbls. of 51° gravity oil during the test.

$$Aof = \left( \frac{5851561}{5240037} \right)^n = (3109)(1.1167)^{0.75} = (3109)(1.0863)$$

$$Aof = 3377 \text{ MCF/D}$$

TESTED BY Bobby Broughton

WITNESSED BY

*L. E. Mabe, Jr.*  
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