

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 10-22-68

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 51	
Location 1450'N, 800'E, Sec. 29, T-27-N, R-4-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8173	Tubing: Diameter 2.375	Set At: Feet 7921
Pay Zone: From 7945	To 8167	Total Depth: 8173	Shut In 10-12-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Plate & Meter Choke Size, Inches 2.750" Plate, 4" M.R.		Meter Choke Constant: C 41.9208		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2550	+ 12 = PSIA 2562	Days Shut-In 10	Shut-In Pressure, Tubing PSIG 2561	+ 12 = PSIA 2573	
Flowing Pressure: P PSIG 161 M.R.; 380 W.H.	+ 12 = PSIA 173 M.R.; 392 W.H.		Working Pressure: Pw PSIG 997	+ 12 = PSIA 1009	
Temperature: T = 76 °F	n = .75		Fpv (From Tables) 1.018	Gravity .700 Fg = 1.1952	

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

$$Q = \text{Calculated from orifice meter reading} = 4762 \text{ MCF/D}$$

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

$$Aof = \left(\frac{6620329}{5602248} \right)^n = (4594)(1.1817)^{.75} = (4594)(1.1333)$$

Note: The well produced 30.58 bbls of 53° API Gravity oil and 13.43 bbls. of water into the tank during the three hour test.

$$Aof = 5397 \text{ MCF/D}$$

TESTED BY C.R. Wagner & B. J. Broughton
Checked
WITNESSED BY T. B. Grant



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