

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 11-14-73

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #163	
Location 1650/S, 1190/W, Sec. 18, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7677'	Tubing: Diameter 1 1/2	Set At: Feet 7621'
Pay Zone: From 7430	To 7646	Total Depth: 7677	Shut In 10-25-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches 2.750" Plate, 4" Meter	Plate Choke Constant: C 41.10	Tested through a 3/4" Variable choke	
Shut-In Pressure, Casing, PSIG 2648	+ 12 = PSIA 2660	Days Shut-In 20	Shut-In Pressure, Tubing PSIG 1255
Flowing Pressure: P PSIG 282 W.H.; 91 M.R.	+ 12 = PSIA 294 W.H.; 103 M.R.	Working Pressure: Pw PSIG 551	+ 12 = PSIA 563
Temperature: T = 68 °F	n = .75	Fpv (From Tables) 1.008	Gravity .655
Ft = .9924			Fg = 1.236

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

$$Q = \text{Calculated from orifice meter readings} = 3415 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{7075600}{6758631} \right)^n = (3415)(1.0469)^{.75} = (3415)(1.0350)$$

$$Aof = 3535 \text{ MCF/D}$$

Note: The well produced 23.31 bbls of water during the test.

TESTED BY Don Norton

WITNESSED BY

H. E. M. Analyst
Well Test Engineer

