

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE April 24, 1974

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #177 (CH)	
Location 1460/S, 870/E, Sec. 30, T27N, R7W		County Rio Arriba	State New Mexico
Formation Chacra		Pool Undes	
Casing: Diameter 2.875	Set At: Feet 4031'	Tubing: Diameter No Tubing	Set At: Feet --
Pay Zone: From 3766	To 3980	Total Depth: PBD 4039 4020	Shut in 4-5-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1025	+ 12 = PSIA 1037	Days Shut-In 19	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 40	+ 12 = PSIA 52	Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 68		
Temperature: T = 57 °F	n = Ft = 1.0029 .75	Fpv (From Tables) 1.0040	Gravity .655	Fg = .9571	

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

$$Q = 12.365(52)(1.0029)(.9571)(1.0040) = \underline{\quad 620 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{1075369}{1070745} \right)^n = 620 (1.0043)^{.75} = 620(1.0032)$$

$$Aof = \underline{\quad 622 \quad} \text{ MCF/D}$$

Note: The well produced a heavy spray of water throughout the test.

TESTED BY Hardy

WITNESSED BY \_\_\_\_\_

Loren W. Fothergill  
Loren W. Fothergill  
Well Test Engineer

