

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 17, 1971

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 131	
Location 810' N. 1460' E, S 20 T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7700	Tubing: Diameter 1.990	Set At: Feet 7671
Pay Zone: From 7433	To 7666	Total Depth: 7700	Shut In 7-31-71
Stimulation Method S W F		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2622	+ 12 = PSIA 2634	Days Shut-In 17	Shut-In Pressure, Tubing PSIG 2359	+ 12 = PSIA 2371	
Flowing Pressure: P PSIG 251	+ 12 = PSIA 263		Working Pressure: P _w PSIG 447	+ 12 = PSIA 459	
Temperature: T = 63 °F	F _t = .9971	n = .75	F _{pv} (From Tables) 1.026	Gravity .655	F _g = .9571

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

$$Q = 12.365 \times 263 \times .9971 \times .9571 \times 1.026 = \underline{3184} \text{ MCF/D}$$

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

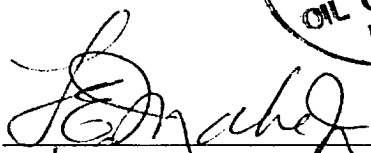
Note: Blew heavy fog of water and distillate for 3 hours.

$$A_{of} = \left(\frac{6937956}{6727275} \right)^n = 3184(1.0313)^{.75} = 3184(1.0233)$$

$$A_{of} = \underline{3258} \text{ MCF/D}$$

TESTED BY J. B. Goodwin

WITNESSED BY _____


 L. E. Mabe, Jr.
