

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE September 7, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #165	
Location 835/S, 810/W, Sec. 29, T-27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7564'	Tubing: Diameter 1 1/2	Set At: Feet 7509'
Pay Zone: From 7330	To 7532'	Total Depth: 7564	Shut In 8-27-73
Stimulation Method Sandwater Frac.		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2653	+ 12 = PSIA 2665	Days Shut-In 17	Shut-In Pressure, Tubing PSIG 1377	+ 12 = PSIA 1389	
Flowing Pressure: P PSIG 191	+ 12 = PSIA 203		Working Pressure: P _w PSIG 454	+ 12 = PSIA 466	
Temperature: T = 82 °F	n = Ft = .9795		F _{pv} (From Tables) 1.018	Gravity .655	F _g = .9571

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

$$Q = (12.365) (203) (.9795) (.9571) (1.018) = 2396 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{7102225}{7061016} \right)^n = 2396 (1.0058)^{.75} = 2396 (1.0044)$$

$$Aof = 2406 \text{ MCF/D}$$

TESTED BY B.J.B.

WITNESSED BY



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Well Test Engineer