

EL PASO NATURAL GAS COMPANY OPEN FLOW TEST DATA

DATE September 27, 1974

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #190	
Location 1180/N, 1080/E, Sec. 25, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7935'	Tubing: Diameter 1.990	Set At: Feet 7875'
Pay Zone: From 7690	To 7898	Total Depth: PBTD 7935' 7919'	Shut In 6-7-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 3075	+ 12 = PSIA 3087	Days Shut-In 105	Shut-In Pressure, Tubing PSIG 2050	+ 12 = PSIA 2062	
Flowing Pressure: P PSIG 425	+ 12 = PSIA 437		Working Pressure: P _w PSIG 745	+ 12 = PSIA 757	
Temperature: T = 79 °F	F _t = .9822	n = .75	F _{pv} (From Tables) 1.035	Gravity .620	F _g = .9837

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

$$Q = 12.365(437)(.9822)(.9837)(1.035) = \underline{5404} \text{ MCF/D}$$

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

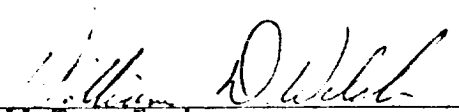
$$Aof = Q \left(\frac{9529569}{8956520} \right)^n = 5404(1.0640)^{.75} = 5404(1.0476)$$

$$Aof = \underline{5661} \text{ MCF/D}$$

Note: Heavy fog of oil and water.

TESTED BY Frank Johnson

WITNESSED BY _____


 Well Test Engineer
