

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE November 29, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #70	
Location 1550/S, 990/W, Sec. 4, T27N, R4W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8535'	Tubing: Diameter 1 1/2"	Set At: Feet 8448'
Pay Zone: From 8300	To 8478	Total Depth: 8535	Shut In 10-25-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches 4"	Orifice 2.500	Choke Constant: C 32.64	Well Tested thru 48/64 choke		
Shut-In Pressure, Casing, PSIG 2540	+ 12 = PSIA 2552	Days Shut-In 34	Shut-In Pressure, Tubing PSIG 2579	+ 12 = PSIA 2591	
Flowing Pressure: P _w PSIG WH 132 MR 51	+ 12 = PSIA WH 144 MR 63		Working Pressure: P _w PSIG 449	+ 12 = PSIA 461	
Temperature: T = 60 °F	F _t = 1.000	n = .75	F _{pv} (From Tables) 1.009	Gravity .655	F _g = .9571

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

$$Q = \text{Calculated from meter readings} = 1846 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6512704}{6300183} \right)^n = 1846 (1.0337)^{.75} = 1846 (1.0252)$$

$$Aof = 1893 \text{ MCF/D}$$

Note: Well produced 11 bbls. of total liquid with 6 bbls. of 60 gravity oil.

TESTED BY B.J.B. & C.R.W.

WITNESSED BY _____



William D. Welch
William D. Welch
Well Test Engineer