

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE October 11, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit No. 71	
Location 1650/N, 1754/E, Sec. 16, T-27N, R4W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8532'	Tubing: Diameter 1 1/2"	Set At: Feet 8504'
Pay Zone: From 8312	To 8502'	Total Depth: 8532'	Shut In 10-1-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

MR Choke Size, Inches 4"	Orifice 2.500	Orifice 32.64	Well tested thru 48/64 Choke	
Shut-In Pressure, Casing, PSIG 2560	+ 12 = PSIA 2572	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 1122	+ 12 = PSIA 1134
Flowing Pressure: P WH 120 MR 27	PSIG + 12 = PSIA WH 132 MR 39		Working Pressure: P <sub>w</sub> 562	PSIG + 12 = PSIA 574
Temperature: T = 58°F	F <sub>t</sub> = 1.002	n = .75	F <sub>p</sub> v (From Tables) 1.004	Gravity .655 F <sub>g</sub> = .9571

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

$$Q = \text{Calculated from meter readings} = \underline{1210} \text{ MCF/D}$$

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

$$A_{of} = Q \left( \frac{6615184}{6285708} \right)^n = 1210 (1.0524)^{.75} = 1210 \times 1.0399 = 1258$$

$$A_{of} = \underline{1258} \text{ MCF/D}$$

Note: Well produced 6' total liquid with 1' oil.

TESTED BY Norton & Hardy

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

William D. Welch  
William D. Welch

Well Test Engineer

