

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE December 5, 1973

Operator El Paso Natural Gas Company		Lease San Juan 28-4 Unit #37	
Location 1335/N, 870/E, Sec. 29, T28N, R4W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8772'	Tubing: Diameter 1 1/2"	Set At: Feet 8710'
Pay Zone: From 8561	To 8728	Total Depth: 8772	Shut In 11-22-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

MR Casing Size, Inches 4"	Orifice 2.500	Orifice Constant: C 32.64	Well Tested thru 48/64 choke		
Shut-In Pressure, Casing, PSIG 2452	+ 12 = PSIA 2464	Days Shut-In 13	Shut-In Pressure, Tubing PSIG 2464	+ 12 = PSIA 2476	
Flowing Pressure: P PSIG WH 100 MR 35	+ 12 = PSIA WH 112 MR 47		Working Pressure: P _w PSIG 335	+ 12 = PSIA 347	
Temperature: T = 54 °F	F _t = 1.006	n = .75	F _{pv} (From Tables) 1.004	Gravity .650	F _g = .9608

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

$$Q = \text{Calculated from meter readings} = 1195 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6071296}{5950887} \right)^n = 1195(1.0202)^{.75} = 1195(1.0151)$$

$$Aof = 1213 \text{ MCF/D}$$

Note: Well produced 10 bbl. of water with a trace of oil.

TESTED BY Rhames & Norton

WITNESSED BY



William D. Welch
Well Test Engineer