

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 8-31-78

Operator El Paso Natural Gas Company		Lease S.J. 27-4 Unit #121 (OMWQ)	
Location NE 18-27-4		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 6104'	Tubing: Diameter 2.375	Set At: Feet 6029'
Pay Zone: From 5416'	To 6074'	Total Depth: 6074'	Shut In 8-15-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Meter Choke Size, Inches plate 4" 2.500		Meter Choke Constant: C 32.64		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG --	+ 12 = PSIA --	Days Shut-In 16	Shut-In Pressure, Tubing PSIG 603	+ 12 = PSIA 615	
Flowing Pressure: P PSIG W.H. 195 Meter 38	+ 12 = PSIA W.H. 207 Meter 50		Working Pressure: P _w PSIG Calculated	+ 12 = PSIA 343	
Temperature: T = 52 °F F _t = 1.0078	n = 0.75		F _{pv} (From Tables) 1.004	Gravity 0.710 F _g = 1.187	

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

$$Q = \text{Calculated from orifice meter readings} = \underline{1777} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{378225}{260576} \right)^n = (1777)(1.4515)^{.75} = (1777)(1.3224)$$

$$Aof = \underline{2350} \text{ MCF/D}$$

Note: The well produced no liquids during the test and produced 293 MCF of gas.

TESTED BY Don Norton & Mel Wileman

WITNESSED BY _____

H. E. McNally
Well Test Engineer