

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE July 20, 1965

Operator El Paso Natural Gas Company		Lease Lawson Pool Unit No. 1 (ORWO)	
Location T-31-N, R-11-W, Section 11, T-31-N, R-11-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 4959	Tubing: Diameter 2.375	Set At: Feet 4880
Pay Zone: From 4294	To 4917	Total Depth: 4959	Shut In 7-10-65
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 957 PSIG	+ 12 = PSIA 969	Days Shut-In 10	Shut-In Pressure, Tubing 956 PSIG	+ 12 = PSIA 968	
Flowing Pressure: P 402 PSIG	+ 12 = PSIA 414		Working Pressure: P _w 822 PSIG	+ 12 = PSIA 834	
Temperature: T = 75 °F	n = .75		F _{pv} (From Tables) 1.037	Gravity .653	F _g = .9608

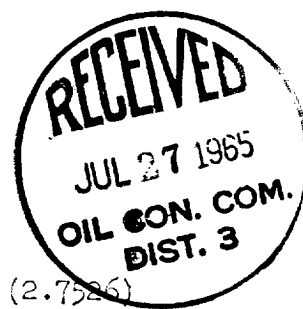
$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

$$Q = (12.365) (414) (.9859) (.9608) (1.037) = \underline{5,029} \text{ MCF/D}$$

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

$$Aof = \left(\frac{938,961}{243,405} \right)^n = (5029) (3.8576)^{.75} = (5029) (2.7526)$$

$$Aof = \underline{13,843} \text{ MCF/D}$$



NOTE: Well started producing a light fog of distillate and water after 3 minutes which reduced to clear gas by the end of the test.

TESTED BY H. E. McAnally
 OBSERVED BY T. B. Grant
 WITNESSED BY _____

L. D. Galloway
 L. D. Galloway by J. H. H.