

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE November 24, 1971

Operator El Paso Natural Gas Company		Lease Vaughn No. 13	
Location 990' N - 1190' E, S 27, T26N, R6W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7569	Tubing: Diameter 2.375	Set At: Feet 7501
Pay Zone: From 7218	To 7522	Total Depth: 7569	Shut In 11-17-71
Stimulation Method S W F		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 4" IR 2.750" Plate		Choke Constant: C 41.9208		Well Tested thru 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2212	+ 12 = PSIA 2224	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1584	+ 12 = PSIA 1596	
Flowing Pressure: P PSIG 151 W.H. - 28 M.P.	+ 12 = PSIA 163 W.H. - 40 M.P.	Working Pressure: Pw PSIG 545	+ 12 = PSIA 557		
Temperature: T = 81 °F	Ft = .9804	n = 0.75	Fpv (From Tables) 1.003	Gravity .700	Fg = 1.1952

CHOKE VOLUME = Q = C x P_i x F_i x F_g x F_{pv}

Q = Calculated from orifice meter readings = 1161 MCF/D

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

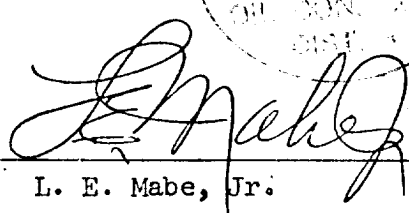
NOTE: The well produced 44.17 bbls. of 44.39 gravity oil during the test.

$$Aof = \left(\frac{4946176}{4635927} \right)^n = (1.0669)^{.75} (1161) = (1.0498)(1161) =$$

Aof = 1219 MCF/D

TESTED BY DRR-TDN

WITNESSED BY _____


L. E. Mabe, Jr.