

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE June 6, 1967

Operator EL Paso Natural Gas Company		Lease Huerfano Unit No. 167	
Location 1825'N, 1650'W, Sec. 23, T-26-N, R-10-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 6865	Tubing: Diameter 2.375	Set At: Feet 6618
Pay Zone: From 6650	To 6810	Total Depth: 6865	Shut In 5-19-67
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

meter Choke Size, Inches 2 1/2" Plate; 4" M. R.		meter Choke Constant: C 33.2928		Tested through 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 1799	+ 12 = PSIA 1811	Days Shut-In 18	Shut-In Pressure, Tubing PSIG 1817	+ 12 = PSIA 1829	
Flowing Pressure: P meter 211; W. H. 476	+ 12 = PSIA 223; W. H. 488		Working Pressure: P _w PSIG 1102	+ 12 = PSIA 1114	
Temperature: T = 68 °F	F _t = .9924	n = .75	F _{pv} (From Tables) 1.025	Gravity 700	F _g = 1.1952

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

$$Q = \text{Calculated from orifice meter reading} = \underline{5552} \text{ MCF/D}$$

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

$$Aof = \left(\frac{3345241}{2104245} \right)^n = (5552)(1.5897)^{.75} = (5552)(1.4158)$$

$$Aof = \underline{7861} \text{ MCF/D}$$

NOTE: The well produced 33.1 bbls. on 46.6 API oil during the 3 hour test. The separator also carried over continually during the test due to the inability of the test unit to handle this volume.

TESTED BY R. F. HeadrickCHECKED BY T. B. Grant

R. F. Headrick
R. F. Headrick