

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE September 21, 1965

Operator Southern Union Production Co.		Lease Angel Peak "B" No. 25	
Location 800'S, 1700'W, Sec. 24, T-28-N, R-11-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 6511	Tubing: Diameter 1.900	Set At: Feet 6340
Pay Zone: From 6230	To 6420	Total Depth: 6511	Shut In 9-13-65
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750	Choke Constant: C 12.365		Company Distribution Only	
Shut-In Pressure, Casing, PSIG 1689	+ 12 = PSIA 1701	Days Shut-In 8	Shut-In Pressure, Tubing PSIG 1708	+ 12 = PSIA 1720
Flowing Pressure: P PSIG 327	+ 12 = PSIA 339		Working Pressure: P _w PSIG 1172	+ 12 = PSIA 1184
Temperature: T = 79 °F	F _t = .9822	n = .75	F _{pv} (From Tables) 1.036	Gravity .700 F _g = .9258

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365) (339) (.9822) (.9258) (1.036) = \underline{3,949} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{2,958,400}{1,556,544} \right)^n = (3949) (1.9006)^{.75} = (3949) (1.6187)$$

$$A_{of} = \underline{6,392} \text{ MCF/D}$$



NOTE: Well started producing large slugs of oil after 5 minutes and reduced to a heavy spray by the end of the test.

This test was conducted through the tubing by Southern Union Production Company. NMOCC Order R-333-C & D states "Any well completed with tubing smaller than two inch nominal shall be tested through the casing".

TESTED BY Benny Bechtel (SUPO)WITNESSED BY Hermon E. McAnally (EPNG)

L. D. Galloway
Lewis D. Galloway. *by H.E.H.*