

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE December 11, 1964

Operator La Plata Gathering System		Lease Navajo No. 2-25 (DK)	
Location 2310'N, 1650'E, Sec. 25, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 5.500	Set At: Feet 6763	Tubing: Diameter 2.0625	Set At: Feet 6348
Pay Zone: From 6164	To 6654	Total Depth: 6763	Shut In 11-27-64
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		Packer set at 6346'	
Shut-In Pressure, Casing, PSIG 1068 (MW)	+ 12 = PSIA 1080	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 2095 (DK)	+ 12 = PSIA 2107	
Flowing Pressure: P PSIG 313	+ 12 = PSIA 325		Working Pressure: Pw PSIG Calc.	+ 12 = PSIA 899	
Temperature: T = 71 °F	n = .75		Fpv (From Tables) 1.037	Gravity .710	Fg = .9193

ISIPT (MW) = 1068 psig

FSIPT (MW) = 1078 psig

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

$$Q = (12.365)(325)(.9896)(.9193)(1.037) = 3791 \text{ MCF/D}$$

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

$$Aof = \left(\frac{4,439,449}{3,631,248} \right)^n = (3791)(1.2225)^{.75} = (3791)(1.1626)$$

NOTE: Blew heavy spray of distillate throughout test.

$$Aof = 4408 \text{ MCF/D}$$

TESTED BY Don Mortensen (EPNG)

WITNESSED BY Oliver Towell (La Plata)

CALCULATED BY H. L. Kendrick

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