

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 2, 1971

Operator El Paso Natural Gas Company		Lease San Juan 30-6 Unit No. 77 (OWWO)	
Location 1850'S, 1850'W, Sec. 24, T-30-N, R-7-W		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5619	Tubing: Diameter 2.375	Set At: Feet 5584
Pay Zone: From 4942	To 5582	Total Depth: 5620	Shut In 7-16-71
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing XXX

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 858	PSIG	+ 12 = PSIA 870	Days Shut-In 16	Shut-In Pressure, Tubing 706	PSIG + 12 = PSIA 718
Flowing Pressure: P 248	PSIG	+ 12 = PSIA 260		Working Pressure: P _w 708	PSIG + 12 = PSIA 720
Temperature: T = 70 °F		n = 0.75		F _{pv} (From Tables) 1.022	Gravity 0.642 F _g = .9667

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

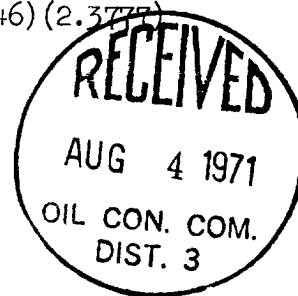
$$Q = (12.365)(260)(.9905)(.9667)(1.022) = \underline{\quad 3146 \quad} \text{ MCF/D}$$

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

Note: Blew light fog of water throughout test.

$$A_{of} = \left(\frac{756900}{238500} \right)^n = (3146)(3.1735)^{.75} = (3146)(2.3777)$$

$$A_{of} = \underline{\quad 7480 \quad} \text{ MCF/D}$$



TESTED BY Jesse B. Goodwin

WITNESSED BY

L. E. Mabe, Jr.