

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 5-21-71

Operator El Paso Natural Gas Company		Lease Hardie No. 4 (OWWO)	
Location 1775'N, 800'E, S 23, T29N, R8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5626	Tubing: Diameter 2.375	Set At: Feet 5533
Pay Zone: From 5361	To 5526	Total Depth: 5630	Shut In 5-11-71
Stimulation Method S W F		Flow Through Casing	Flow Through Tubing XXX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 664	+ 12 = PSIA 676	Days Shut-In 10	Shut-In Pressure, Tubing PSIG 657	+ 12 = PSIA 669	
Flowing Pressure: P PSIG 210	+ 12 = PSIA 222		Working Pressure: Pw PSIG 585	+ 12 = PSIA 597	
Temperature: T = 70 °F	Ft = .9905	n = .75	Fpv (From Tables) 1.022	Gravity .688 Fg = .9339	

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_f \times F_g \times F_{pv}$$

$$Q = 12.365 \times 222 \times .9905 \times .9339 \times 1.022 = 2595 \text{ MCF/D}$$

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

Note: Unloaded slugs of oil and water in approximately 3 minutes. Medium to heavy fog of water and distillate throughout rest of test.

$$Aof = \left(\frac{447561}{91152} \right)^n = (4.9100)(2595)^{.75} = (3.2985)(2595)$$

$$Aof = 8560 \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY



 H. L. Kendrick