

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE January 2, 1970

Operator El Paso Natural Gas Company		Lease Hardie "A" No. 2-Y	
Location 1850 S, 1850 W, S 24 T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5516	Tubing: Diameter 2.375	Set At: Feet 5455
Pay Zone: From 4680	To 5456	Total Depth: 5516	Shut In 12-23-69
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 900	+ 12 = PSIA 920	Days Shut-In 10	Shut-In Pressure, Tubing, PSIG 908	+ 12 = PSIA 920	
Flowing Pressure: P, PSIG 364	+ 12 = PSIA 376		Working Pressure: P _w , PSIG 800	+ 12 = PSIA 812	
Temperature: T = 74 °F	n = .75		F _{pv} (From Tables) 1.040	Gravity .685	F _g = .9359

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

$$Q = (12.365)(376)(.9868)(.9359)(1.040) = 4466 \text{ MCF/D}$$

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

Note: Blew large volume of oil and water throughout test.

$$Aof = \left(\frac{846400}{187056} \right)^n = (4466)(4.5248)^{.75} = (4466)(3.1024)$$

$$Aof = 13,855 \text{ MCF/D}$$

TESTED BY Jesse B. Goodwin

WITNESSED BY _____



R.E. Stauffer