

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE November 1, 1967

Operator El Paso Natural Gas Company		Lease Sunray E No. 1 (OWHO)	
Location 990'N, 990'E, Sec. 9, T-30-N, R-10-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5833	Tubing: Diameter 2.375	Set At: Feet 5713
Pay Zone: From 4780	To 5740	Total Depth: 5833	Shut In 10-22-67
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 2 1/2" Plate 4" Meter Run		meter Choke Constant: C 33293		Tested through a 3/4" variable choke			
Shut-In Pressure, Casing, 798	PSIG	+ 12 = PSIA 810	Days Shut-In 10	Shut-In Pressure, Tubing 509	PSIG	+ 12 = PSIA 521	
Flowing Pressure: P meter 60	PSIG	+ 12 = PSIA Meter 72	WH 215	Working Pressure: P _w 675	PSIG	+ 12 = PSIA 687	
Temperature: T = 67 °F		n =		F _{pv} (From Tables) 1.009		Gravity .688	F _g = 1.2056
	F _t = .9933		.75				

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

$$Q = (\text{Calculated from orifice meter reading}) = 1845 \text{ MCF/D}$$

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

$$Aof = \left(\frac{656100}{184131} \right)^n = (1845)(3.5632)^{.75} = (1845)(2.5935)$$

NOTE: The well slugged oil throughout the test. The well produced 76 bbls. 39° API gravity oil during the test.

$$Aof = 4785 \text{ MCF/D}$$

TESTED BY J. B. Goodwin & R. F. HeadrickChecked
WITNESSED BY T. B. Grant

H. L. Kendrick
H. L. Kendrick

