

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 12/19/72

Operator EL PASO NATURAL GAS COMPANY		Lease Huerfano Unit #231	
Location 1050/N, 800/N, Sec. 6, T26N, R9W		County San Juan	State NM
Formation Gallup		Pool Angels Peak	
Casing: Diameter 4.500	Set At: Feet 6189	Tubing: Diameter 2.375	Set At: Feet 6114
Pay Zone: From 5758	To 6124	Total Depth: 6189	Shut In 12/5/72
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing X

plate Casing Size, Inches 4" MR, 2.750 plate		Choke Constant: C 41.10		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 680	+ 12 = PSIA 692	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 420	+ 12 = PSIA 432	
Flowing Pressure: P PSIG 58 WH, 12 meter	+ 12 = PSIA 70 WH, 24 meter		Working Pressure: Pw PSIG 302	+ 12 = PSIA 314	
Temperature: T = .83 °F	Ft = .9786	n = .75	Fpv (From Tables) 1.004	Gravity .755	Fg = 1.1509

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

$$Q = \text{Calculated from orifice meter readings} = \underline{843} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{478864}{380268} \right)^n = (843)(1.2593)^{.75} = (843)(1.1888)$$

$$Aof = \underline{1002} \text{ MCF/D}$$

NOTE: The well produced 15 bbls of 37.0 API gravity oil during the test.

TESTED BY Bobby J. Broughton

WITNESSED BY _____

William D. Welch
William D. Welch
Well Test Engineer