

OCC

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 1/8/73

Operator EL PASO NATURAL GAS COMPANY		Lease Huerfano Unit #232	
Location 970/S, 1150/E, Sec. 8, T26N, R9W		County San Juan	State NM
Formation Gallup <i>Ext.</i>		Pool Angels Peak	
Casing: Diameter 4.500	Set At: Feet 6100	Tubing: Diameter 2.375	Set At: Feet 6004
Pay Zone: From 5654	To 6020	Total Depth: 6100	Shut In 12/20/72
Stimulation Method SWP		Flow Through Casing	Flow Through Tubing X

Plate Size, Inches 4" mr. 2.750" plate		Choke Constant: C 41.10		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 982	+ 12 = PSIA 994	Days Shut-In 19	Shut-In Pressure, Tubing PSIG 960	+ 12 = PSIA 972	
Flowing Pressure: P PSIG 41b MR; 20 WH	+ 12 = PSIA 161b MR; 32 lb WH		Working Pressure: Pw PSIG 278	+ 12 = PSIA 290	
Temperature: T = 93 °F	Ft = .9697	n = .75	Fpv (From Tables) 1.004	Gravity .755	Fg = 1.1509

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

$$Q = \text{Calculated from orifice meter readings} = \underline{275} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{988036}{903936} \right)^n = (275)(1.0930)^{.75} = (275)(1.0690)$$

$$Aof = \underline{294} \text{ MCF/D}$$

NOTE: The well produced 20 bbls of 34.1 API gravity oil during the test.

TESTED BY John Jones & B. J. Broughton

WITNESSED BY _____

William D. Welch
William D. Welch
Well Test Engineer