FORM 23-75 (12-66)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE September 17, 1975

Operator: El Paso Natural Gas Company		Lease: Howell A #2-A	
Location: 900/N, 1650/W, Sec. 5, T30N, R8W		County: San Juan	State: New Mexico
Formation: Mesa Verde		Pool: Blanco	
Casing: Diameter: 4.500	Set At: Feet: 5734'	Tubing: Diameter: 2.375	Set At: Feet: 5648'
Pay Zone: From: 4875	To: 5651'	Total Depth: 5736' PBTD 5718'	Shut In: 8-26-75
Stimulation Method: Sandwater Frac		Flow Through Casing:	Flow Through Tubing: XX

Choke Size, Inches: Plate 2.500 M.R. 4"		Choke Constant: C: 32.64		Tested thru 3/4" variable choke	
Shut-In Pressure, Casing, PSIG: 543	+ 12 = PSIA: 555	Days Shut-In: 22	Shut-In Pressure, Tubing PSIG: 496	+ 12 = PSIA: 508	
Flowing Pressure: P PSIG: WH 161 M.R. 51	+ 12 = PSIA: WH 173 M.R. 63		Working Pressure: P_w PSIG: 498	+ 12 = PSIA: 510	
Temperature: T= 59 °F	Ft= 1.001	n = .75	Fpv (From Tables): 1.009	Gravity: .664	Fg = 1.227

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

Q = Calculated from orifice meter reading = 2071 MCF/D

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

$$\text{Aof} = Q \left(\frac{308025}{47925} \right)^n = 2071(6.427)^{.75} = 2071\ (4.037)$$

Aof = 8360 MCF/D

Note: This well made 9.31 Bbl of water throughout the test. Gas vented to the atmosphere was 241,54 MCF.

TESTED BY Johnson

WITNESSED BY Wagner

Well Test Engineer