

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE AUGUST 3, 1973

Operator EL PASO NATURAL GAS COMPANY		Lease HUERFANO UNIT 239	
Location 890/N, 1750/W, SEC 18, T-26-N, R-9-W		County SAN JUAN	State NEW MEXICO
Formation GALLUP EXT.		Pool ANGEL PEAK	
Casing: Diameter 4 1/2	Set At: Feet 6031	Tubing: Diameter 2 3/8	Set At: Feet 5981
Pay Zone: From 5626	To 5978	Total Depth: 6031	Shut In 7-27-73
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing XX

Orifice Size, Inches MR 4"	Orifice Constant: C 2.750	Orifice 41.10	WELL TESTED THRU 48/64 CHOKE		
Shut-In Pressure, Casing, PSIG 775	+ 12 = PSIA 787	Days Shut-In 13	Shut-In Pressure, Tubing PSIG 226	+ 12 = PSIA 238	
Flowing Pressure: P WH 3 MR 1 PSIG	+ 12 = PSIA WH 15 MR 13		Working Pressure: P <sub>w</sub> PSIG 376	+ 12 = PSIA 388	
Temperature: T=112 °F F <sub>t</sub> = .9535	n = .75		F <sub>pv</sub> (From Tables) 1.00	Gravity .720 F <sub>g</sub> = .9129	

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

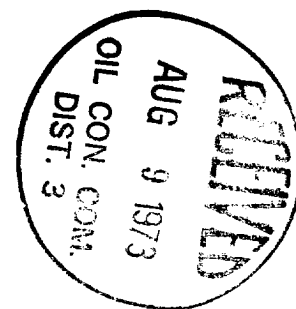
Q = CALCULATED FROM METER READINGS

= 61 MCF/D

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

NOTE: Well produced 10.6 bbl of 32 gravity oil.

$$Aof = Q \left( \frac{619369}{468825} \right)^n = 61 (1.3211)^{.75} = 61 (1.2322)$$

Aof = 75 MCF/DTESTED BY NORTON

WITNESSED BY \_\_\_\_\_

*William D. Welch*  
WILLIAM D. WELCH, Well Test Engineer