

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE 3/16/73

Operator: El Paso Natural Gas Company		Lease Nageezi #1	
Location 1500/N, 1500/E, Sec. 12 T25N, R9W		County San Juan	State NM
Formation Gallup		Pool Undesignated	
Casing: Diameter 4.500	Set At: Feet 6639	Tubing: Diameter 2.375	Set At: Feet 5961
Pay Zone: From 5450	To 5658	Total Depth: 6100	Shut In 3/7/73
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing X

orifice Choke size, Inches 2.750		Choke Constant: C 41.10			
Shut-In Pressure, Casing, PSIG 472	+ 12 = PSIA 484	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 1062	+ 12 = PSIA 1074	
Flowing Pressure: P mr 15 wh 93 PSIG	+ 12 = PSIA mr 27 wh 105		Working Pressure: Pw 473 PSIG	+ 12 = PSIA 485	
Temperature: T = 81 °F	F <sub>t</sub> = .9804	n = .75	F <sub>pv</sub> (From Tables) 1.008	Gravity .650	F <sub>g</sub> = .9608

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

$$Q = \text{Calculated from meter readings} = \underline{379} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{1153476}{918251} \right)^n = 379 (1.2562)^{.75} = 379 (1.1866)$$

$$Aof = \underline{450} \text{ MCF/D}$$

NOTE: Well produced 122 bbl oil, corrected gravity 39.1 @ 60 degrees.  $Q = 41.10 \times 1.23 \times 3.162 \times .9804 \times .9608 \times 1.008 = 379$ .

TESTED BY BJB and CR

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



*William D. Welch*  
William D. Welch  
Well Test Engineer