

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

CCL

DATE 10/30/72

Operator El Paso Natural Gas Company		Lease San Juan 28-5 Unit # 4-Y	
Location 1505/N, 1750/E, Sec. 19-T28N-R5W		County Rio Arriba	State NM
Formation Mesaverde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5900	Tubing: Diameter 2.375	Set At: Feet 5848
Pay Zone: From 5616	To 5866	Total Depth: 5900	Shut In 10/21/72
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 966	PSIG	+ 12 = PSIA 978	Days Shut-In 9	Shut-In Pressure, Tubing 966	PSIG + 12 = PSIA 978
Flowing Pressure: P 155	PSIG	+ 12 = PSIA 167		Working Pressure: P <sub>w</sub> 504	PSIG + 12 = PSIA 516
Temperature: T = 62 °F	F <sub>t</sub> = .9981	n = .75		F <sub>pv</sub> (From Tables) 1.016	Gravity .670 F <sub>g</sub> = .9463

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

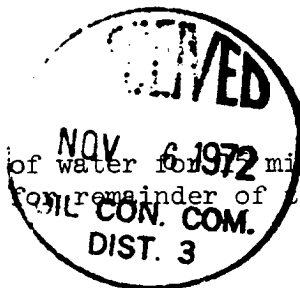
$$Q = (12.365)(167)(.9981)(.9463)(1.016) = 1982 \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{956484}{690228} \right)^n = (1982)(1.3858)^{.75} = (1982)(1.2772)$$

$$Aof = 2531 \text{ MCF/D}$$

NOTE: Blew heavy fog of water for 10 min.  
Then clear gas for remainder of test.



TESTED BY Goodwin and Norton

WITNESSED BY



William D. Welch

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Well Test Engineer