

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE April 25, 1974

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Hubbell #10 (CH)</u>	
Location <u>1017/S, 990/E, Sec. 19, T29N, R10W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Chacra</u>		Pool <u>Undes</u>	
Casing: Diameter <u>2.875</u>	Set At: Feet <u>2876'</u>	Tubing: Diameter <u>No Tubing</u>	Set At: Feet <u>--</u>
Pay Zone: From <u>2812</u>	To <u>2824</u>	Total Depth: <u>2876' 2866'</u>	Shut In <u>4-18-74</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>XX</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>		Tubingless Completion	
Shut-In Pressure, Casing, PSIG <u>1046</u>	+ 12 = PSIA	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>No Tubing</u>	+ 12 = PSIA	
Flowing Pressure: P PSIG <u>77</u>	+ 12 = PSIA		Working Pressure: Pw PSIG <u>Calculated</u>	+ 12 = PSIA	
Temperature: T = <u>60</u> °F	n = <u>89</u>		Fpv (From Tables) <u>1.0090</u>	Gravity <u>.655</u>	Fg = <u>.9571</u>
Ft = <u>1.0000</u>	<u>.75</u>				

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = 12.365(89)(1.0000)(.9571)(1.0090) = \underline{1063} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{1119364}{1107043} \right)^n = 1063(1.0111)^{.75} = 1063(1.0083)$$

$$Aof = \underline{1072} \text{ MCF/D}$$

Note: The well produced a light mist of water throughout the test.

TESTED BY FothergillWITNESSED BY McAnally

Loren W Fothergill  
Loren W. Fothergill  
Well Test Engineer