

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE November 15, 1974

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Huerfano Unit #253</u>	
Location <u>1050/S, 1090/E, Sec. 11, T26N, R10W</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Gallup</u>		Pool <u>Angel Peak</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>6178'</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>6118'</u>
Pay Zone: From <u>5836</u>	To <u>6108</u>	Total Depth: <u>PBTD</u> <u>6178' 6153'</u>	Shut In <u>11-8-74</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing	Flow Through Tubing <u>XX</u>

Choke Size, Inches <u>4" MR</u>	Orifice <u>2.50</u>	Choke Constant: C <u>32.64</u>		Well tested thru a 3/4" variable choke.		
Shut-In Pressure, Casing, <u>560</u>	PSIG	+ 12 = PSIA <u>572</u>	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing <u>455</u>	PSIG	+ 12 = PSIA <u>467</u>
Flowing Pressure: P <u>M.R. 1 WH 4</u>	PSIG	+ 12 = PSIA <u>MR 13 WH 16</u>		Working Pressure: P _w <u>247</u>	PSIG	+ 12 = PSIA <u>259</u>
Temperature: <u>T = 54 °F</u>		n = <u>F_t = 1.0058 .75</u>		F _{pv} (From Tables) <u>1.004</u>		Gravity <u>.720 F_g = 1.179</u>

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

Q = Calculated from meter run.

= 135 MCF/D

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

$$Aof = Q \left(\frac{327184}{260103} \right)^n = 135(1.2579)^{.75} = 135(1.1878)$$

Aof = 161 MCF/D

Note: The produced 13.5 Bbl. of an emulsion of oil and water with a API gravity of 24.

TESTED BY Goodwin & Johnson

WITNESSED BY _____

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