

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 16, 1958

Operator El Paso Natural Gas		Lease Rincon 107 (P)	
Location 15508, 1550W; 19-27-6		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool South Blanco	
Casing: Diameter 7-5/8	Set At: Feet	Tubing: Diameter 1-1/4	Set At: Feet 3177
Pay Zone: From 3100	To 3160	Total Depth: 5566	Shut in 7/22/58
Stimulation Method Sand Water Frac.		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .75		Choke Constant: C 12.365		5-1/2" liner 3260 - 5561	
Shut-In Pressure, Casing, PSIG 967	+ 12 = PSIA 979	Days Shut-In 56	Shut-In Pressure, Tubing, PSIG 967	+ 12 = PSIA 979	
Flowing Pressure: P, PSIG 155	- 12 = PSIA 167		Working Pressure: P _w , PSIG 157	+ 12 = PSIA 169	
Temperature: T, °F 62	n = 85		F _{pv} (From Tables) 1.014	Gravity .631	

Initial SIPT (MV) = 1089 PSIG

Packer at 3289

Final SIPT (MV) = 1091 PSIG

CHOKE VOLUME = Q = C × P_i × F_i × F_g × F_{pv}

$$Q = 12.365 \times 167 \times .9981 \times .9759 \times 1.014 = 2040 \text{ MCF/D}$$

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

$$Aof = \left(\frac{958441}{929880} \right)^n = (1.0307)^{.85} = 1.0260 \times 2040$$

$$Aof = 2093 \text{ MCF/D}$$

TESTED BY Jesse B. Goodwin

WITNESSED BY _____

Checked By S. V. Roberts

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY

P. O. Box 997
Farmington, New Mexico

September 16, 1958



Mr. E. C. Arnold
Oil Conservation Commission
1900 Rio Brazos Road
Aztec, New Mexico

Re: Packer Leakage Test on the El Paso Natural Gas
Company Well, Rincon 107 (PM), 1550S, 1550W;
19-27-6, Rio Arriba County, New Mexico
(Name - Location - Company)

Dear Mr. Arnold:

The subject well was dully completed in the Pictured Cliffs and Mesa Verde zones and a packer was set at 3289 feet. The Mesa Verde zone was tested through a $3/4$ " choke for three hours Sept. 5, 1958 with the following data obtained:

PC SIPC 963 psig; Shut-in 45 days
PC SIPT 963 psig;
MV SIPT 1103 psig; Shut-in 45 days

Time Minutes	(MV) Flowing Pressure Tubing Psig	(PC) SIP (C) Psig	(MV) Working Pressure, Psig	Temp ° F
15	402	965		62
30	369	966		63
45	333	966		63
60	317	968		64
120	266	968		64
180	228	966	Calc. 462	65

The choke volume for the Mesa Verde was 2803 MCF/D with an AOF of 3256 MCF/D.

The Pictured Cliffs zone was tested Sept. 16, 1958 with a $3/4$ " choke for 3 hours with the following data obtained:

PC SIPC 967 psig; Shut-in 56 days
PC SIPT 967 psig;
MV SIPT 1089 psig; Shut-in 11 days