

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE

December 14, 1959

Operator El Paso Natural Gas	Lease San Juan 29-5 Unit No. 13-30 (D)
Location 1650N, 800E; 30-29-5	County Rio Arriba State New Mexico
Formation Dakota	Pool Undesignated
Casing Diameter 5 Set At Feet 8199	Tubing Diameter 2 Set At Feet 8043
Flow Line From 7980 To 8076	Total Depth 8214 c/o 8130 Shut In 12/6/59
Stratigraphic Marker Sand Water Frac.	Flow Through Casing X

Shrinkage Factor .75	Gravimetric Constant C 12.365	7" at 7852 5" liner 7732-8199
Shrinkage Pressure, P _{sh} (MV) 1031	Days Since 1043	Shrinkage Pressure, P _{sh} 1579 (D)
Flowing Pressure, P _w (D) 79	Flowing Pressure, P _w 91	Working Pressure, P _w Calc. 203
Temperature 72	Temperature .9887	Flow From Tables 1.006
		Gravity .583 Fg 1.017

Initial SIPT (MV) = 1029 psig
Final SIPC (MV) = 1041 psig

Packer at 7740, Baker "D"

$$Q = C \times R \times E \times F_g \times F_v$$

$$Q = 12.365 \times 91 \times .9887 \times 1.017 \times 1.006$$

1138

MCF D

$$Q = \left(\frac{P_1^2 - P_2^2}{P_1^2} \right)^n$$

$$Q = \left(\frac{2531281}{2490072} \right)^n$$

$$1.0165^{.75} \times 1138 = 1.0123 \times 1138$$

1152

MCF D

W. D. Dawson



L. D. Galloway
L. D. Galloway
[Signature]

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE January 12, 1960

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit No. 13-30 (D)	
Location 1650N, 800E; 30-29-5		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 5	Set At: Feet 8199	Tubing: Diameter 2	Set At: Feet 8043
Pay Zone: From 7980	To 8076	Total Depth: 8214 c/o 8130	Shut In 12/14/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		7" at 7852; 5" liner 7732-8199	
Shut-In Pressure, Casing (MV) 1066	PSIG · 12 PSIA 1078	Days Shut-In 7	Shut-In Pressure, Tubing (D) 2368	PSIG · 12 PSIA 2380	
Flowing Pressure, P (D Tbg.) 60	PSIG · 12 PSIA 72		Working Pressure P _w Calc.	PSIG · 12 PSIA 161	
Temperature: T 67 F	F _i .9933		F _{pv} (From Tables) 1.006	Gravity .583	F _g 1.017

Initial SIPT (MV) = 1073 psig

Packer at 7740

Final SIPC (MV) = 1074 psig

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

$$Q = 12.365 \times 72 \times .9933 \times 1.017 \times 1.006$$

905

MCF/D

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

$$A_{of} = \left(\frac{566400}{563849} \right)^n = 1.0045^{.75} \times 905 = 1.0034 \times 905$$

A_{of} 908 MCF/DTESTED BY W. D. DawsonWITNESSED BY W. B. Smith (Phillips)

Lewis D. Galloway
L. D. Galloway