

Initial Deliverability
Test

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Pool El Paso Formation Permian County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 5/1/57
Operator El Paso Natural Gas Lease Brown Well No. 1
Unit 1 Sec. 9 Twp. 32 Rge. 10 Pay Zone: From 5168 To 5923
Casing: OD 5 1/2 WT. 15.5 Set At 6050 Tubing: OD 2 WT. 4.7 T. Perf. 5940
Produced Through: Casing Tubing X Gas Gravity: Measured .615 Estimated
Date of Flow Test: From 4/30/57 To 5/1/57 * Date S.I.P. Measured 12/5/56 (12 days)
Meter Run Size 4 Orifice Size 1.250 Type Chart Sp. Rln Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) psig + 12 = psia (a)
Flowing tubing pressure (Dwt) psig + 12 = psia (b)
Flowing meter pressure (Dwt) psig + 12 = psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading ()² x spring constant = psia (d)
Meter error (c) - (d) or (d) - (c) ± = psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (7.30)² x sp. const. 10 = 533 psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) = 533 psia (h)
P_t = (h) + (f) = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) 970 psig + 12 = 982 psia (j)
Wellhead tubing shut-in pressure (Dwt) 955 psig + 12 = 967 psia (k)
P_c = (j) or (k) whichever well flowed through = 967 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 484 psia (n)

FLOW RATE CALCULATION

Q = X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \underline{560}$ MCF/da
(Integrated)

DELIVERABILITY CALCULATION

D = Q 560 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{596}$ MCF/da.
700,833 644,541 1.0873 1.0647

SUMMARY

P_c = 967 psia
Q = 560 Mcf/day
P_w = 955 psia
P_d = 484 psia
D = 596 Mcf/day

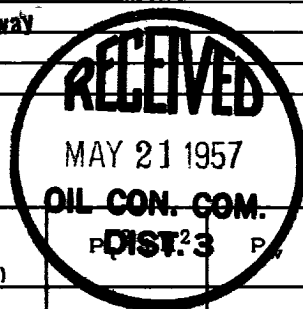
Company El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
Witnessed by
Company

- * This is date of completion test.
- * Meter error corrected.

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_{CO})^2$	$(F_{CO})^2 (1-e^{-S})$	P_t^2	P_c^2	P_d^2
			R ²	(Column i)		
363	0.233	27.720	6.59	284,089	290,518	539

D = 560 = 574



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