

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 Blanco Formation Mesaverde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Company Lease Bonds Pool Unit Well No. 1
Unit M Sec. 15 Twp. 32 Rge. 10 Pay Zone: From 4904 To 5140
Casing: OD 5 1/2 WT. 15.5 Set At 5320 Tubing: OD 2 WT. 4.7 T. Perf. 5159
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 610 Estimated _____
Date of Flow Test: From 11/8/56 To 11/16/56 * Date S.I.P. Measured 8/21/56
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

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 avge. meter press. (p_f) (g) + (e) = 533 psia (h)
P_f = (h) + (f) = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) 1051 psig + 12 = 1063 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1025 psig + 12 = 1037 psia (k)
P_c = (j) or (k) whichever well flowed through = 1037 psia (l)
Flowing Temp. (Meter Run) 72 °F + 460 = 532 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 519 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{V(c)}{V(d)} \right)^* = \underline{799} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \underline{799} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{1.0337^{.75}}{1.0252} = \underline{819} \text{ MCF/da.}$$

SUMMARY

P_c = 1037 psia
Q = 799 Mcf/day
P_w = 514 psia
P_d = 519 psia
D = 819 Mcf/day

Company El Paso Natural Gas Company
By L.D. Galloway
Title Sr. Gas Engineer
Witnessed by _____
Company _____

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	(F _c Q) ² (1-e ^{-s}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>3147</u>	<u>.205</u>	<u>56.430</u>	<u>11,568</u>	<u>284,089</u>	<u>295,657</u>	<u>514</u>

D @ 500 = 816

OK



