

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 Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Co. Lease San Juan 28-6 Unit Well No. 54
Unit M Sec. 7 Twp. 27 Rge. 6 Pay Zone: From 4880 To 5536
Casing: OD 5 1/2 WT. 15.5 Set At 5600 Tubing: OD 2 WT. 4.7 T. Perf. 5480
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 700 Estimated _____
Date of Flow Test: From 11/8/56 To 11/16/56 * Date S.I.P. Measured 6/5/56
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 (7.75) ² x sp. const. 10 _____ = 601 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 601 psia (h)
P_t = (h) + (f) _____ = 601 psia (i)
Wellhead casing shut-in pressure (Dwt) 1063 psig + 12 = 1075 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1063 psig + 12 = 1075 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1075 psia (l)
Flowing Temp. (Meter Run) 74 °F + 460 _____ = 534 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 538 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \underline{1575} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \underline{1575} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{1.1687^{.75}}{1.1239} = \underline{1770} \text{ MCF/day}$$

SUMMARY

P_c = 1075 psia
Q = 1575 Mcf/day
P_w = 644 psia
P_d = 538 psia
D = 1770 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 + P _w ²	P _w
<u>3836</u>	<u>.243</u>	<u>219.277</u>	<u>53,284</u>	<u>361,201</u>	<u>414,485</u>	<u>644</u>

D @ 500 = 1720

