

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 Date Test Filed _____
Operator El Paso Natural Gas Lease Manning Well No. 1-A
Unit L Sec. 20 Twp. 30 Rge. 6 Pay Zone: From 5276 To 5500
Casing: OD 5-1/2 WT. 15.5 Set At 5610 Tubing: OD 2 WT. 4.7 T. Perf. 5500
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .600 Estimated _____
Date of Flow Test: From 5/9/58 To 5/17/58 * Date S.I.P. Measured 1/15/58
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 (7.12) ² x sp. const. 10 _____ = 504 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 504 psia (h)
P_t = (h) + (f) _____ = 504 psia (i)
Wellhead casing shut-in pressure (Dwt) 1099 psig + 12 = 1111 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1101 psig + 12 = 1113 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1113 psia (l)
Flowing Temp. (Meter Run) 68 °F + 460 _____ = 508 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 557 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right) = \text{2426 MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ 2426 } \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{923520}{832494} \times \frac{1.0765}{1.0569} = \text{2554 MCF/day}$$

SUMMARY

P_c = 1113 psia
Q = 2426 Mcf/day
P_w = 613 psia
P_d = 557 psia
D = 2554 Mcf/day

Company El Paso Natural Gas
By Paul D. Hendrich
Title _____
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>3084</u>	<u>.235</u>	<u>520.250</u>	<u>122,259</u>	<u>254,016</u>	<u>376,275</u>	<u>613</u>