

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 Mesa Verde Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Lease Atlantic Well No. 9-1
Unit N Sec. 27 Twp. 34N Rge. 10W Pay Zone: From 4586 To 5362
Casing: OD 7 5/8 WT. 26.4 Set At 3345 Tubing: OD 2 WT. 4.7 T. Perf. 5235
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .675 Estimated _____
Date of Flow Test: From 7/8 To 7/16 * Date S.I.P. Measured 5-7-56
Meter Run Size 4 Orifice Size _____ Type Chart Sq. Rt. 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 (7.50)² x sp. const. 10 = 563 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 563 psia (h)
P_t = (h) + (f) = 563 psia (i)
Wellhead casing shut-in pressure (Dwt) 1016 psig + 12 = 1018 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1019 psig + 12 = 1012 psia (k)
P_c = (j) or (k) whichever well flowed through = 1012 psia (l)
Flowing Temp. (Meter Run) 98 °F + 460 = 558 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 506 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{ } }{\sqrt{(d)}} \right) = \frac{2437}{\text{MCF/da}}$
(integrated)

DELIVERABILITY CALCULATION
D = Q 2437 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{812,240}{647,536} \times \frac{1.2543}{1.1853} = \frac{2809}{\text{MCF/da.}}$

SUMMARY

P_c = 1012 psia
Q = 2437 Mcf/day
P_w = 660 psia
P_d = 506 psia
D = 2809 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title Lewis D. Galloway
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>3534</u>	<u>.827</u>	<u>535.006</u>	<u>119,176</u>	<u>336,969</u>		<u>660</u>

D = 500 = 2566

