

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 El Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Co. Lease San Juan 28-7 Unit Well No. 31
Unit H Sec. 1 Twp. 27 Rge. 7 Pay Zone: From 4435 To 5125
Casing: OD 5 1/2 WT. 15.5 Set At 5155 Tubing: OD 2 WT. 4.7 T. Perf. 5022
Produced Through: Casing _____ Tubing X Gas Gravity: Measured _____ Estimated .685
Date of Flow Test: From 12/23 To 12/31 * Date S.I.P. Measured 10/3/55
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 (7.70)² x sp. const. 10 _____ = 593 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 593 psia (h)
P_t = (h) + (f) _____ = 593 psia (i)
Wellhead casing shut-in pressure (Dwt) 1090 psig + 12 = 1102 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1084 psig + 12 = 1096 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1096 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 _____ = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 548 psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \underline{418}$ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 418 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{438}$ MCF/day
 $\frac{903,912}{846,154} \times \frac{1.0417}{1.0482}$

SUMMARY

P_c = 1096 psia
Q = 418 Mcf/day
P_w = 596 psia
P_d = 548 psia
D = 438 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 correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	(F _c Q) ² R ²	(1-e ^{-s})	P _t ² (Column 1)	P _t ² + R ²	P _w
<u>3440</u>	<u>.221</u>	<u>25.445</u>	<u>3.413</u>		<u>351.649</u>	<u>355.062</u>	<u>596</u>

D @ 500 = 451

OK

