

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 Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Company Lease Shaw Well No. 2
Unit 1 Sec. 35 Twp. 28 Rge. 8 Pay Zone: From 1470 To 1444
Casing: OD 9 1/2 WT. 15.5 Set At 5000 Tubing: OD 2 WT. 4.7 T. Perf. 1099
Produced Through: Casing _____ Tubing 1 Gas Gravity: Measured 7.85 Estimated _____
Date of Flow Test: From 10/9/56 To 10/17/56 Date S.I.P. Measured 1/31/56 (10 days)
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 (_____) ² x sp. const. 10 _____ = 511 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 511 psia (h)
P_t = (h) + (f) _____ = 511 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 1044 psig + 12 = 1096 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 1043 psig + 12 = 1097 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1097 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 549 psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \underline{406} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 406 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{400} \text{ MCF/da.}$
0.37, 400 .9819
0.32, 425 .9864

SUMMARY

P_c = 1097 psia
Q = 406 Mcf/day
P_w = 511 psia
P_d = 549 psia
D = 400 Mcf/day

Company El Paso Natural Gas Company
By J. B. Holloway
Title _____
Witnessed by _____
Company _____

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(FcQ) ² (1-e ^{-S})	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>3525</u>	<u>.006</u>	<u>21.90</u>	<u>3093</u>	<u>261,121</u>	<u>262,404</u>	<u>511</u>

D = 400 = 406

