

Initial Deliverability
Test

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 Basin Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Lease Barfano Well No. 188
Unit C Sec. 25 Twp. 26 Rge. 10 Pay Zone: From 6646 To 6650
Casing: OD 7 WT. 23 Set At 6882 Tubing: OD 2 WT. 4.7 T. Perf. 6882
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .706 Estimated _____
Date of Flow Test: From 2/26/61 To 3/6/61 * Date S.I.P. Measured 11/10/60
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. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (k)
P_c = (j) or (k) whichever well flowed through _____ = _____ psia (l)
Flowing Temp. (Meter Run) 81 °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = _____ psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \underline{1897} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 1897 $\left[\frac{(P_c^2 - P_d^2) = \underline{2,726,533}}{(P_c^2 - P_w^2) = \underline{3,304,293}} \right]^n \frac{.8251}{.8659} = \underline{1643} \text{ MCF/da.}$

SUMMARY

P_c = 1907 psia
Q = 1897 Mcf/day
P_w = 271 psia
P_d = 954 psia
D = 1643 Mcf/day

Company El Paso Natural Gas Company
By R. L. Bontrick Sr. Gas Engineer
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>4708</u>	<u>.290</u>	<u>318.123</u>	<u>92,256</u>	<u>240,100</u>	<u>332,356</u>	<u>577</u>

D at 500 = 1888



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