

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 Elance Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Lease Brydon Well No. 3(M)
Unit M Sec. 21 Twp. 28 Rge. 8 Pay Zone: From 3818 To 4600
Casing: OD 5-1/2 WT. 15.5 Set At 4633 Tubing: OD 2 WT. 4.7 T. Perf. 4522
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .685 Estimated _____
Date of Flow Test: From 10/1 To 10/9 * Date S.I.P. Measured 6/4/57
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 (7.30)² x sp. const. 1.0 = 533 psia (g)
Corrected seven day ave. meter press. (p_f) (g) + (e) = 533 psia (h)
P_t = (h) + (f) = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1076 psig + 12 = 1088 psia (k)
P_c = (j) or (k) whichever well flowed through = 1088 psia (l)
Flowing Temp. (Meter Run) 74 °F + 460 = 531 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 544 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{V(c)}{V(d)}} \right)^* = \underline{1207} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 1207 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{1222} \text{ MCF/da.}$
 $\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{1088^2 - 544^2}{1088^2 - 537^2} = \frac{887,808}{873,495}$
 $n = \frac{1.0163}{1.01213}$

SUMMARY

P_c = 1088 psia Company El Paso Natural Gas
Q = 1207 Mcf/day By _____
P_w = 537 psia Title Original Signed
P_d = 544 psia Witnessed by Louis D. Galloway
D = 1222 Mcf/day Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	$\frac{(F_c Q)^2}{R^2} (1-e^{-s})$	P _t ² (Column i)	P _t ² + R ²	P _w
3098	.202	128.782	26.014	284,089	310,103	537

D at 500 = 1229

OK

