

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)

70-020

Pool Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease Grubling Well No. 1-A
Unit H Sec. 21 Twp. 28 Rge. 8 Pay Zone: From 3891 To 4691
Casing: OD 7 WT. 23 Set At 3850 Tubing: OD 2 WT. 4.7 T. Perf. 4233
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .698 Estimated _____
Date of Flow Test: From 12/7/59 To 12/15/59 * Date S.I.P. Measured 8/22/59
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 (7.25)² x sp. const. 10 = 526 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) = 526 psia (h)
P_t = (h) + (f) = 526 psia (i)
Wellhead casing shut-in pressure (Dwt) 891 psig + 12 = 903 psia (j)
Wellhead tubing shut-in pressure (Dwt) 712 psig + 12 = 724 psia (k)
P_c = (j) or (k) whichever well flowed through = 724 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 = 520 °Abs (m)
P_d = ½ P_c = ½ (l) = 362 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{160} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 160 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{395132}{247500} \right]^n \frac{1.5884}{1.4150} = \text{226} \text{ MCF/da.}$

SUMMARY

P_c = 724 psia Company El Paso Natural Gas
Q = 160 Mcf/day By Original Signed
P_w = 526 psia Title Harold L. Kendrick
P_d = 362 psia Witnessed by _____
D = 226 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	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
			Friction Negligible			

D at 500 = 167



