

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 San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Stewart Well No. 2-A
Unit M Sec. 32 Twp. 30 Rge. 10 Pay Zone: From 4468 To 4704
Casing: OD 5-1/2 WT. 15.5 Set At 4904 Tubing: OD 2 WT. 4.7 T. Perf. 4691
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .735 Estimated _____
Date of Flow Test: From 7/16 To 7/24/57 * Date S.I.P. Measured 3/27/57 (11 days)
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 (6.65) ² x sp. const. 10 = 442 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) = 442 psia (h)
P_t = (h) + (f) = 442 psia (i)
Wellhead casing shut-in pressure (Dwt) 1042 psig + 12 = 1054 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1045 psig + 12 = 1057 psia (k)
P_c = (j) or (k) whichever well flowed through = 1057 psia (l)
Flowing Temp. (Meter Run) 104 °F + 460 = 564 °Abs (m)
P_d = ½ P_c = ½ (l) = 529 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \underline{293} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 293 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{.9100}{.9317} = \underline{273} \text{ MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{837,408}{920,200}$

SUMMARY

P_c = 1057 psia
Q = 293 Mcf/day
P_w = 444 psia
P_d = 529 psia
D = 273 Mcf/day

Company El Paso Natural Gas Company
By _____
Title Original Signed
Witnessed by Lewis D. Galloway
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 (Col in R ²)	P _w
<u>3448</u>	<u>.222</u>	<u>7.590</u>	<u>1.685</u>		<u>196,364</u>	<u>444</u>

D at 500 = 277

OK



