

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 Newberry Well No. 8
Unit A Sec. 9 Twp. 31 Rge. 12 Pay Zone: From 4908 To 5050
Casing: OD 5-1/2 WT. 15.5 Set At 5117 Tubing: OD 2 WT. 4.7 T. Perf. 5007
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .710 Estimated _____
Date of Flow Test: From 8/8/57 To 8/16/57 * Date S.I.P. Measured 5/9/57 (12 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 (7.30) ² x sp. const. 10 = 533 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 533 psia (h)
P_t = (h) + (f) = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) - 1058 psig + 12 = 1070 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1058 psig + 12 = 1070 psia (k)
P_c = (j) or (k) whichever well flowed through = 1070 psia (l)
Flowing Temp. (Meter Run) 82 °F + 460 = 542 ° Abs (m)
P_d = ½ P_c = ½ (l) = 535 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{\sqrt{P_c}}{\sqrt{P_d}} \right)^* = \underline{1603} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \times \frac{1.0613}{1.0456} = \underline{1676} \text{ MCF/da.}$$

SUMMARY

P_c = 1070 psia
Q = 1603 Mcf/day
P_w = 580 psia
P_d = 535 psia
D = 1676 Mcf/day

Company El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
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
3555	.228	227.135	51,787	284,089	335,876	580

D at 500 = 1633

01C

