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 Mesa Verde** Formation **Mesa Verde** County **San Juan**

Purchasing Pipeline **El Paso Natural Gas Company** Date Test Filed _____

Operator **El Paso Natural Gas** Lease **Newberry** Well No. **5**

Unit **G** Sec. **5** Twp. **31N** Rge. **12W** Pay Zone: From **4680** To **4836**

Casing: OD **7 5/8** 51 4510 26.4 4900 WT. **26.4** Set At **4610** Tubing: OD **2** WT. **4.7** T. Perf. **4781**

Produced Through: Casing _____ Tubing **X** Gas Gravity: Measured **.700** Estimated _____

Date of Flow Test: From **7/8** To **7/16** * Date S.I.P. Measured **5/28/56**

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 (**7.50**) ^{2} x sp. const. **10** = **563** psia (g)

  Corrected seven day avge. meter press. (p_f) (g) + (e) = **563** psia (h)

P_t = (h) + (f)   = **563** psia (i)

Wellhead casing shut-in pressure (Dwt) **1063** psig + 12 = **1075** psia (j)

Wellhead tubing shut-in pressure (Dwt) **1060** psig + 12 = **1072** psia (k)

P_c = (j) or (k) whichever well flowed through   = **1072** psia (l)

Flowing Temp. (Meter Run) **87** °F + 460 = **547** °Abs (m)

$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (l)   = **536** psia (n)

FLOW RATE CALCULATION

$$Q = \underline{\hspace{3cm}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \right) = \mathbf{982} \text{ MCF/da}$$

(integrated)

DELIVERABILITY CALCULATION

$$D = Q\ \mathbf{982} \left[\frac{\left(P_c^2 - P_d^2\right) = \mathbf{861,888}}{\left(P_c^2 - P_w^2\right) = \mathbf{813,801}} \right]^n \frac{\mathbf{1.0590}}{\mathbf{1.0440}} = \mathbf{1025} \text{ MCF/da.}$$

SUMMARY

P_c = **1072** psia

Q = **982** Mcf/day

P_w = **579** psia

P_d = **536** psia

D = **1025** Mcf/day

Company **El Paso Natural Gas Company**

By Original Signed

Title

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	$\dfrac{(F_cQ)^2 \quad (1-e^{-S})}{R^2}$	$\dfrac{P_t^2}{\text{(Column i)}}$	$P_t^2 + R^2$	P_w
3347	.216	85.248	18,414	316,969		579

D @ 500 = 1030