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 **San Juan 32-9 Unit** Well No. **57**

Unit **H** Sec. **2** Twp. **31** Rge. **9** Pay Zone: From **5678** To **5736**

Casing: OD **5-1/2** WT. **15.5** Set At **5930** Tubing: OD **2** WT. **4.7** T. Perf. **5836**

Produced Through: Casing _____ Tubing **X** Gas Gravity: Measured **.600** Estimated _____

Date of Flow Test: From **9/29/58** To **10/7/58** *Date S.I.P. Measured **6/13/58**

Meter Run Size _____ Orifice Size **1.250** 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 (**6.80**)^2 x sp. const. **10** = **462** psia (g)

  Corrected seven day avge. meter press. (p$_f$) (g) + (e)   = **462** psia (h)

P_t = (h) + (f)   = **462** psia (i)

Wellhead casing shut-in pressure (Dwt) **1039** psig + 12 = **1051** psia (j)

Wellhead tubing shut-in pressure (Dwt) **960** psig + 12 = **972** psia (k)

P_c = (j) or (k) whichever well flowed through   = **972** psia (l)

Flowing Temp. (Meter Run) **81** °F + 460   = **541** °Abs (m)

$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (l)   = **486** psia (n)

FLOW RATE CALCULATION

$$Q = \underline{\hspace{2cm}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \right)^* = \mathbf{479} \text{ MCF/da}$$

(integrated)

DELIVERABILITY CALCULATION

$$D = Q \; \mathbf{479} \; \left[\begin{array}{c} (P_c^2 - P_d^2) = \mathbf{708588} \\ (P_c^2 - P_w^2) = \mathbf{726776} \end{array} \right]^n \; \frac{\mathbf{.9749}}{\mathbf{.9811}} = \mathbf{470} \text{ MCF/da.}$$

SUMMARY

P_c = **972** psia

Q = **479** Mcf/day

P_w = **467** psia

P_d = **486** psia

D = **470** Mcf/day

Company **El Paso Natural Gas**

By _____

Title _____ Original Signed

Witnessed by _____ Harold L. Kendrick

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
3502	.225	20.286	4,564	213444	218008	467

D at 500 = 455