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** Date Test Filed ___

Operator **El Paso Natural Gas** Lease **San Juan 32-9 Unit** Well No. **56**

Unit **K** Sec. **12** Twp. **32** Rge. **10** Pay Zone: From **5770** To **5992**

Casing: OD **5-1/2** WT. **15.5** Set At **6071** Tubing: OD **2** WT. **4.7** T. Perf. **5954**

Produced Through: Casing ___ Tubing **X** Gas Gravity: Measured **.605** Estimated ___

Date of Flow Test: From **1-8-58** To **1-16-58** *Date S.I.P. Measured **10-31-57 (18 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 = **504** psia (g)

Square root chart average reading (**7.10**)^2 x sp. const. **10** = **504** psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = **504** psia (h)

P_t = (h) + (f) = **504** psia (i)

Wellhead casing shut-in pressure (Dwt) **960** psig + 12 = **972** 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) **63** °F + 460 = **523** °Abs (m)

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

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{\rule{2cm}{0.4pt}} \times \left(\frac{\sqrt{(c)} = \rule{1cm}{0.4pt} = \rule{1cm}{0.4pt}}{\sqrt{(d)} \quad \rule{1cm}{0.4pt}} \right) = \textbf{381}\ \text{MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\ \textbf{381} \left[\frac{\left(P_c^2 - P_d^2\right)=\ \textbf{708,588}}{\left(P_c^2 - P_w^2\right)=\ \textbf{687,817}} \right]^n\ \frac{\textbf{1.0301}}{\textbf{1.0225}} = \textbf{390}\ \text{MCF/da.}$$

SUMMARY

P_c = **972** psia

Q = **381** Mcf/day

P_w = **507** psia

P_d = **486** psia

D = **390** Mcf/day

Company **El Paso Natural Gas**

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	$(1-e^{-s})$	$(F_cQ)2$	$(F_cQ)^2$ $(1-e^{-s})$ / R^2	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
3602	.230	12.831	2,951	254,016	256,967	507

D at 500 = 378