Initial Deliverability Test

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 __South Blanco__ Formation __Pictured Cliffs__ County __Rio Arriba__

Purchasing Pipeline __El Paso Natural Gas__ Date Test Filed _____

Operator __El Paso Natural Gas__ Lease __Rincon Unit__ Well No. __61__

Unit __A__ Sec. __30__ Twp. __27__ Rge. __6__ Pay Zone: From __3091__ To __3150__

Casing: OD __5-1/2__ WT. __15.5__ Set At __3204__ Tubing: OD __1-1/4__ WT. __2.3__ T. Perf. __3124__

Produced Through: Casing __X__ Tubing _____ Gas Gravity: Measured __.680__ Estimated _____

Date of Flow Test: From __10/16__ To __10/24/57*__ Date S.I.P. Measured __12/18/56__

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 (__7.10__)^2 x sp. const. __.5__ = __252__ psia (g)

    Corrected seven day avge. meter press. (p_f) (g) + (e) = __252__ psia (h)

P_t = (h) + (f) = __252__ psia (i)

Wellhead casing shut-in pressure (Dwt) __1012__ psig + 12 = __1024__ psia (j)

Wellhead tubing shut-in pressure (Dwt) __1012__ psig + 12 = __1024__ psia (k)

P_c = (j) or (k) whichever well flowed through = __1024__ psia (l)

Flowing Temp. (Meter Run) __54__ °F + 460 = __514__ °Abs (m)

P_d = ½ P_c = ½ (l) = __512__ psia (n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{_____} \times \left(\frac{\sqrt{(c)} = \_\_\_\_ = \_\_\_\_}{\sqrt{(d)} _____} \right)^{*} = \underline{271} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \underline{271} \left[\begin{array}{l} \left(P_c^2 - P_d^2\right) = \underline{186,432} \\ \left(P_c^2 - P_w^2\right) = \underline{985,072} \end{array} \right]^{n} \begin{array}{l} .7983 \\ .8258 \end{array} = \underline{224} \text{ MCF/da.}$$

SUMMARY

P_c = __1024__ psia

Q = __271__ Mcf/day

P_w = __252__ psia

P_d = __512__ psia

D = __224__ Mcf/day

Company __El Paso Natural Gas__

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	$(1-e^{-S})$	$(F_cQ)2$	$\dfrac{(F_cQ)^2 \quad (1-e^{-S})}{R^2}$	$\dfrac{P_t^2}{\text{(Column i)}}$	$P_t^2 + R^2$	P_w
			FRICTION NEGLIGIBLE			

D at 250 = 270

OK