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____**BALNCO MV**____Formation__**MV**____County_**SJ**_

Purchasing Pipeline____**EL PASO NATURAL GAS CO**____Date Test Filed____**Nov. 4, 1958**____

Operator__**R & G DRILLING CO**____Lease____**HAMMOND**____Well No.__**41 —**__

Unit____**H**____Sec.__**25**__Twp.__**27N**__Rge.__**8W**__Pay Zone: From__**2" 3890**__To__**4568**__

Casing: OD____**4½**__WT.____Set At__**4680**__Tubing: OD__**2"**__WT.__**4.7**__T. Perf.____

Produced Through: Casing____Tubing__**X**__Gas Gravity: Measured____**.700**__Estimated____

Date of Flow Test: From____To____*Date S.I.P. Measured____**JUNE 4, 1958**____

Meter Run Size____**4"**____Orifice Size____**.750**____Type Chart____**SR**__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 (__**6.85**__)^2 x sp. const.__**1000**__ = __**469**__ psia (g)
  Corrected seven day avge. meter press. (p_f) (g) + (e)   = ____ psia (h)

P_t = (h) + (f)   = __**469**__ psia (i)

Wellhead casing shut-in pressure (Dwt) __**1017**__ psig + 12 = __**1029**__ psia (j)

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

P_c = (j) or (k) whichever well flowed through   = __**1029**__ psia (l)

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

$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (l)   = __**515**__ psia (n)

FLOW RATE CALCULATION

$$Q = \underbrace{\quad\quad}_{\text{(integrated)}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \_\_\_\_ = \_\_\_\_ \right) = _____ \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \,\underline{\quad 348 \quad} \left[\frac{P_c^2 - P_d^2 = \underline{793,616}}{P_c^2 - P_w^2 = \underline{836,953}} \right]^n \underline{\quad .9609 \quad} = \underline{\quad 334 \quad} \text{ MCF/da.}$$

SUMMARY

P_c = __**1029**__ psia
Q = __**348**__ Mcf/day
P_w = __**471**__ psia
P_d = __**515**__ psia
D = __**334**__ Mcf/day

Company__**GEOLECTRIC, INC**__
By____
Title____**AGENT**____
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
2723	.180	10.706	1.927	219,961	221,888	471