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)

70-072-01

Pool_____**Blanco**_____Formation___**Mesa Verde**___County___**San Juan**_____

Purchasing Pipeline___**El Paso Natural Gas**_____Date Test Filed_____

Operator___**El Paso Natural Gas**_____Lease_____**Day**_____Well No.___**2**___

Unit__**M**___Sec.__**9**__Twp.__**29**__Rge.__**8**__Pay Zone: From__**4726**__To__**5522**__

Casing: OD__**6-5/8**__WT.__**20**__Set At__**4572**__Tubing: OD__**2**__WT.__**4.7**__T. Perf.__**4747**__

Produced Through: Casing_____Tubing__**X**__Gas Gravity: Measured__**.682**__Estimated_____

Date of Flow Test: From__**10/30/58**__To__**11/7/58**__*Date S.I.P. Measured__**5/22/58**__

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 (__**6.35**__) ^{2} x sp. const.__**10**__ = __**469**__ psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = __**469**__ psia (h)

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

Wellhead casing shut-in pressure (Dwt) __**798**__ psig + 12 = __**810**__ psia (j)

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

+ P_c = (j) or (k) whichever well flowed through = __**810**__ psia (l)

Flowing Temp. (Meter Run) __**61**__ °F + 460 = __**521**__ °Abs (m)

P_d = ½ P_c = ½ (l) = __**405**__ psia (n)

FLOW RATE CALCULATION

$$Q = \underline{\hspace{2cm}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \right)^* = \underline{\quad 689 \quad} \text{MCF/da}$$

(integrated)

DELIVERABILITY CALCULATION

$$D = Q\underline{\quad 689 \quad} \left[\frac{\left(P_c^2 - P_d^2\right) = \quad 492075}{\left(P_c^2 - P_w^2\right) = \quad 427327} \right]^n \frac{1.1515}{1.1115} = \underline{\quad 766 \quad} \text{MCF/da.}$$

SUMMARY

P_c = __**810**__ psia

Q = __**689**__ Mcf/day

P_w = __**478**__ psia

P_d = __**405**__ psia

D = __**766**__ Mcf/day

Company___**El Paso Natural Gas**___

By___*Original Signed*___

Title___*Harold L. Kendrick*___

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
3237	.210	41.964	8,812	219,961	228,773	478

+ Used highest SIP

D at 500 = 638