

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 So Blanco FORMATION Pictured Cliffs COUNTY San Juan
PURCHASING PIPELINE El Paso Natural Gas DATE TEST FILED _____

OPERATOR John A. Egan LEASE Marren WELL NO. 3
UNIT D SEC. NW24 TWP. 27 RGE. 8 PAY ZONE: From 2255 To 2335
CASING: OD 5 1/4 WT. 15.5 SET AT 2255 TUBING: OD 2 3/8 WT. 4.7 T.Perf. 2270
PRODUCED THROUGH: CASING TUBING X GAS GRAVITY: MEASURED 640 ESTIMATED _____
DATE OF FLOW TEST: From 12-9 To 12-16 *Date S.I.P. MEASURED 12-23-55
METER RUN SIZE 4" ORIFICE SIZE 2.000 TYPE CHART _____ TYPE TAPS Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 262 psig + 12 = 274 psia (a)
Flowing tubing pressure (Dwt) 244 psig + 12 = 256 psia (b)
Flowing meter pressure (Dwt) 243 psig + 12 = 255 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading. psig + 12 = _____ psia (d)
Square root chart reading (7.15) ²x spring constant 5 = 256 psia (d)
Meter error (c) - (d) or (d) - (c). ± = -1 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing... = 1 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading. psig + 12 = _____ psia (g)
Square root chart average reading (7.20) ²x sp. const. 5 = 259 psia (g)
Corrected seven day ave. meter press. (Pf) (g) + (e) = 259 psia (h)
P_t = (h) + (f) = 259 psia (i)
Wellhead casing shut-in pressure (Dwt) 394 psig + 12 = 506 psia (j)
Wellhead tubing shut-in pressure (Dwt) 594 psig + 12 = 606 psia (k)
P_c = (j) or (k) whichever well flowed through. = 606 psia (l)
Flowing Temp. (Meter Run). 60 °F + 460 = 520 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 303 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{1037}{(\text{integrated})} \times \left(\frac{\sqrt{V(c)}}{\sqrt{V(d)}} \right) = \frac{\sqrt{255/256} \times 1037}{.9980} = 1035 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1035}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.85} \left[\frac{275.427}{290.686} \right]^{.85}} = 9552-989 \text{ MCF/da.}$$

SUMMARY

P_c = 606 psia Company John A. Egan
Q = 1035 Mcf/day By John A Egan
P_w = 277 psia Title _____
P_d = 303 psia Witnessed by Jack Jones
D = 989 Mcf/day Company El Paso Natural Gas Co.

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w
<u>1453</u>	<u>0.100</u>	<u>94.692</u>	<u>9.469</u>		<u>67.081</u>	<u>76.550</u>	<u>277</u>



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AZTEC DISTRICT OFFICE

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