

Initial Deliverability Test
86105

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 Elanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 27-4 Well No. 24
Unit L Sec. 6 Twp. 27 Rge. 4 Pay Zone: From 6032 To 6154
Casing: OD 5-1/2 WT. 15.5 Set At 6256 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6113
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .678 Estimated _____
Date of Flow Test: From 5/29/61 To 6/6/61 * Date S.I.P. Measured 11/2/60 (11 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 = _____ psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = 1097 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 1097 psia (h)
P_t = (h) + (f) _____ = 1097 psia (i)
Wellhead casing shut-in pressure (Dwt) 1108 psig + 12 = 1120 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1090 psig + 12 = 1102 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1102 psia (l)
Flowing Temp. (Meter Run) 71 °F + 460 _____ = 531 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 551 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \underline{370} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 370 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{354} \text{ MCF/da.}$
910803 .9445
961236 .9581

SUMMARY

P_c = 1102 psia
Q = 370 Mcf/day
P_w = 500 psia
P_d = 551 psia
D = 354 Mcf/day

Company El Paso Natural Gas Co.
By _____
Title Original signed by
Witnessed by H. L. Kendrick
Company _____

* 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 (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4165</u>	<u>0.261</u>	<u>12103</u>	<u>3159</u>	<u>247009</u>	<u>250168</u>	<u>500</u>

D at 500 = 366

