

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)

72-397

Pool Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 29-9 (MV) Well No. 1
Unit K Sec. 35 Twp. 29 Rge. 9 Pay Zone: From 3800 To 4546
Casing: OD 5 WT. 11.5 Set At 4614 Tubing: OD 2 WT. 4.7 T. Perf. 4511
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .677 Estimated _____
Date of Flow Test: From 7/7/59 To 7/15/59 * Date S.I.P. Measured 7/24/58
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 (7.00) ² x sp. const. 10 = _____ 490 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ 490 psia (h)
P_t = (h) + (f) _____ = _____ 490 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1028 psig + 12 = _____ 1040 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = _____ 1040 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ 520 ° Abs (m)
P_d = ½ P_c = ½ (l) _____ = _____ 520 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{2226}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 2226 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{811200}{754333} \right]^n \frac{1.0753}{1.0559} = \text{2350}$ MCF/da.

SUMMARY

P_c = 1040 psia
Q = 2226 Mcf/day
P_w = 572 psia
P_d = 520 psia
D = 2350 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 _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>3054</u>	<u>.199</u>	<u>438.023</u>	<u>87,167</u>	<u>240,100</u>	<u>327,267</u>	<u>572</u>

D at 500 = 2182

OK

