

1-HLKendrick, 1-Hurvy
1-Lambe, 1-Rock Island
Initial Deliverability
Test

Form C-125-A
Revised April 20, 1955

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 Basin Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 9-18-65
Operator Beta Development Co. Lease Rock Island Federal Well No. 1
Unit # Sec. 9 Twp. 29 Rge. 10 Pay Zone: From 6626 To 6703
Casing: OD 4" WT 10.5 Set At 6820 Tubing: OD 2-3/8 WT 4.7 T. Perf. 6681
Produced Through: Casing ^ Tubing X Gas Gravity: Measured .671 Estimated
Date of Flow Test: From 4-23-65 To 5-1-65 * Date S.I.P. Measured Orig. Is. date
Meter Run Size Orifice Size Type Chart Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt) 526 psig + 12 = 538 psia (a)
Flowing tubing pressure (Dwt) 486 psig + 12 = 498 psia (b)
Flowing meter pressure (Dwt) 437 psig + 12 = 449 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (6.70)² x spring constant 1000 = 449 psia (d)
Meter error (c) - (d) or (d) - (c) ± = -0- psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 19 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (6.73)² x sp. const. 1000 = 456 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 456 psia (h)
= 475 psia (i)
P_t = (h) + (f) = 1894 psia (j)
Wellhead casing shut-in pressure (Dwt) 1882 psig + 12 = 1894 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1882 psig + 12 = 1894 psia (k)
P_c = (j) or (k) whichever well flowed through = 1894 psia (l)
Flowing Temp. (Meter Run) °F + 460 = -0- °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 947 psia (n)

FLOW RATE CALCULATION

Q = 996 X $\left(\frac{\sqrt{(c)} = 1.000}{\sqrt{(d)} = 1.0000} \right)^2 = \underline{996}$ MCF/day
(Integrated)

DELIVERABILITY CALCULATION

D = Q 996 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{1/n} = \underline{847}$ MCF/day
 $\left[\frac{2,690,430}{3,337,235} \right]^{1/n} = \frac{(8507)}{(8061)}$

SUMMARY

P_c = 1894 psia
Q = 996 Mcf/day
P_w = 300 psia
P_d = 947 psia
D = 847 Mcf/day

Company Beta Development Co.
By G.L. Hoffman
Title Prod. Engr.
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	(FQ) ² (1-e ^{-s}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
4483/	.278	87,685	24,376	225,625	250,001	300