

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)

Pool Basin Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed 11-29-62

Operator Tenneco Oil Co. Lease H. O. Watson Well No. 6020
Unit G Sec. 22 Twp. 27N Rge. 12W Pay Zone: From 5922 To 5997
Casing: OD 5 1/2 WT. 6100 Set At 2 3/8 WT. 5889 T. Perf. 5889
Produced Through: Casing X Tubing X Gas Gravity: Measured .699 Estimated
Date of Flow Test: From 10-19-62 To 10-27-62 * Date S.I.P. Measured 5-8-61
Meter Run Size 4" Orifice Size 1.500 Type Chart SR Type Taps Flange

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 6.85 psig + 12 = 469 psia (g)
Square root chart average reading () ² x sp. const. 1000 = 469 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 469 psia (h)
P_t = (h) + (f) = 2017 psia (i)
Wellhead casing shut-in pressure (Dwt) 2017 psig + 12 = 2029 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2017 psig + 12 = 2029 psia (k)
P_c = (j) or (k) whichever well flowed through = 2029 psia (l)
Flowing Temp. (Meter Run) 93 °F + 460 = 553 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 1014 psia (n)

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

DELIVERABILITY CALCULATION

D = Q 907 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right] = \frac{3,088,645}{\quad} \times (.7964) .8430 = 765 \text{ MCF/da.}$

SUMMARY

P_c = 2029 psia
Q = 907 Mcf/day
P_w = 489 psia
P_d = 1014 psia
D = 765 Mcf/day

Company Tenneco Oil Co.
By Gelectric, Inc.
Title Agent
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 R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w
4116	.259	72.720	18,834		219,961	238,795	489

Pe=9.402

