

Initial Deliverability
TestNEW 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 EPNG Date Test Filed 5-7-63

Operator Tenneco Oil Co. Lease R. E. McKinzie B Well No. 1
Unit K Sec. 9 Twp. 30N Rge. 12W Pay Zone: From 6509 To 6651
Casing: OD 4 1/2 WT. Set At 6700 Tubing: OD 2 3/8 WT. T. Perf. 6477
Produced Through: Casing Tubing X Gas Gravity: Measured .685 Estimated .690
Date of Flow Test: From 12-20-62 To 12-28-62 Date S.I.P. Measured 4-30-63
Meter Run Size 4" Orifice Size 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 psig + 12 = psia (g)
Square root chart average reading (7.05)² x sp. const. 10 = 497 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 497 psia (h)
P_t = (h) + (f) = 497 psia (i)
Wellhead casing shut-in pressure (Dwt) 1955 psig + 12 = 1967 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1955 psig + 12 = 1967 psia (k)
P_c = (j) or (k) whichever well flowed through = 1967 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 983 psia (n)

$$Q = \underset{\text{(integrated)}}{597} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{ }}{\text{ }} = \text{ } \right) = \underset{\text{MCF/da}}{597}$$

DELIVERABILITY CALCULATION

$$D = Q \underset{\text{597}}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} \underset{\text{2,902,800}}{\left(\frac{2,902,800}{3,613,384} \right)^n} \underset{\text{(.8033) .8484}}{(.8033) .8484} = \underset{\text{MCF/da.}}{506}$$

SUMMARY

P_c = 1967 psia
Q = 597 Mcf/day
P_w = 506 psia
P_d = 983 psia
D = 506 Mcf/day

Company Geleotrie, Inc.
By D. H. Reys
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 (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
4437	.276	31.506	8.696	247,009	255,705	506

