

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 BLANCO MESA VERDE Formation Mesa Verde County S J
Purchasing Pipeline El Paso Natural Gas Co Date Test Filed Dec. 14, 1961
Operator Blanchard - Nichols Lease H E Blanco Unit Well No. 60-7
Unit A Sec. 7 Twp. 31N Rge. 6W Pay Zone: From 9330 To 9706
Casing: OD 5 1/2 WT. Set At 9044 Tubing: OD 2 WT. T. Perf. 9700
Produced Through: Casing Tubing X Gas Gravity: Measured .619 Estimated
Date of Flow Test: From 11-10-61 To 11-18-61 * Date S.I.P. Measured 11-24-61
Meter Run Size 4" Orifice Size 1.250 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 (6.95) ² x sp. const. 1000 = 403 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 403 psia (h)
P_t = (h) + (f) = 403 psia (i)
Wellhead casing shut-in pressure (Dwt) 1190 psig + 12 = 1202 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1190 psig + 12 = 1202 psia (k)
P_c = (j) or (k) whichever well flowed through = 1202 psia (l)
Flowing Temp. (Meter Run) 91 °F + 460 = 551 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 601 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{ } \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ } \frac{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.921}}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.921}} = \text{ } \text{ MCF/day}$$

SUMMARY

P_c = 1202 psia
Q = 545 Mcf/day
P_w = 403 psia
P_d = 601 psia
D = 503 Mcf/day

Company GEOLITHIC INC
By [Signature]
Title Geologist
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
3570	.229	26.256	6.013	232,209	232,302	403