

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 NV Formation NV County SI
Purchasing Pipeline El Paso Natural Gas Date Test Filed February 19, 1958
Operator Blackwood-Nichols Lease NE Blanco Unit Well No. 42-19
Unit M Sec. 19 Twp. 31N Rge. 7W Pay Zone: From 5234 To 5700
Casing: OD 5 1/2 WT. Set At 5786 Tubing: OD 2 WT. T. Perf. 5633
Produced Through: Casing Tubing X Gas Gravity: Measured .655 Estimated
Date of Flow Test: From To * Date S.I.P. Measured 11/11/57
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 psig + 12 = psia (g)
Square root chart average reading (7.05) ² x sp. const. 1000 = 497 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)
P_t = (h) + (f) = 497 psia (i)
Wellhead casing shut-in pressure (Dwt) 1124 psig + 12 = 1136 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1124 psig + 12 = 1136 psia (k)
P_c = (j) or (k) whichever well flowed through = 1136 psia (l)
Flowing Temp. (Meter Run) °F + 460 = 540 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 568 psia (n)

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

DELIVERABILITY CALCULATION

D = Q 750 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{967,872}{1,032,432} \right]^n$.9528 = 715 MCF/day.

SUMMARY

P_c = 1136 psia Company Gas Petro, Inc.
Q = 750 Mcf/day By B. B. Kasper
P_w = 508 psia Title Agent
P_d = 568 psia Witnessed by
D = 715 Mcf/day 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
3690	.235	49.724	11.685	247,009	258,694	508

OK