

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 South Blanco Formation FC County SJ
Purchasing Pipeline El Paso Natural Gas Date Test Filed January 27, 1958
Operator R & G Drilling Co. Lease Graham Well No. 35
Unit 0 Sec. 3 Twp. 27N Rge. 8W Pay Zone: From 2160 To 2230
Casing: OD 5 1/2 WT. Set At 2295 Tubing: OD 3/4 WT. T. Perf. 2200
Produced Through: Casing I Tubing Gas Gravity: Measured .655 Estimated
Date of Flow Test: From 12/17/57 To 12/24/57 * Date S.I.P. Measured 8/1/57
Meter Run Size Orifice Size .750 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 (7.35)² x sp. const. 1000 = 540 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)
P_t = (h) + (f) = 540 psia (i)
Wellhead casing shut-in pressure (Dwt) 892 psig + 12 = 904 psia (j)
Wellhead tubing shut-in pressure (Dwt) 890 psig + 12 = 902 psia (k)
P_c = (j) or (k) whichever well flowed through = 904 psia (l)
Flowing Temp. (Meter Run) 45 °F + 460 = 505 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 452 psia (n)

Q = 205 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{ }}{\sqrt{(d)}} = \text{ }} \right)^* = \text{ }$ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 205 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{612,912}{525,616}^n = 1.1394 = 234$ MCF/day.

SUMMARY

P _c =	<u>904</u>	psia	Company	<u>Geoelectric, Inc.</u>
Q =	<u>205</u>	Mcf/day	By	<u> </u>
P _w =	<u>540</u>	psia	Title	<u>Agent D W Stiles</u>
P _d =	<u>452</u>	psia	Witnessed by	<u> </u>
D =	<u>234</u>	Mcf/day	Company	<u> </u>

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w

Negligible

