

Blue test

Form C-122-A

Revised April 20, 1955

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 Pictured Cliffs County Rio Arriba
Purchasing Pipeline Southern Union Gas Co. Date Test Filed 1-14-58

Operator Caulkins Oil Company Lease Freech A Well No. PC 181
Unit L Sec. 10 Twp. 26N Rge. 6W Pay Zone: From 2971 To 3062
Casing: OD 5 1/2" WT. 15.5 Set At 2975 Tubing: OD 1" WT. 1.7 T. Perf. 2986
Produced Through: Casing Yes Tubing _____ Gas Gravity: Measured .710 Estimated _____
Date of Flow Test: From 12-23-57 To 12-31-57 * Date S.I.P. Measured 1-8-58
Meter Run Size 4 1/2" OD Orifice Size 1 1/4" Type Chart Normal Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 535 psig + 12 = 547 psia (a)
Flowing tubing pressure (Dwt) 535 psig + 12 = 547 psia (b)
Flowing meter pressure (Dwt) 530 psig + 12 = 542 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading 530 psig + 12 = 542 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 _____ = 5 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 573 psig + 12 = 585 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 585 psia (h)
P_t = (h) + (f) _____ = 590 psia (i)
Wellhead casing shut-in pressure (Dwt) 710 psig + 12 = 722 psia (j)
Wellhead tubing shut-in pressure (Dwt) 710 psig + 12 = 722 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 722 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 _____ = 523 °Abs (m)
P_d = 1/2 P_c = _____ = 361 psia (n)

$$Q = \frac{1123}{(\text{integrated})} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{542}{542} = 1.000} \right) = 1123 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1123}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{390,963}{173,184} \right]^n} \frac{(2.26)m}{1.9998} = 1123 \times 2.246 \text{ MCF/day}$$

SUMMARY

P_c = 722 psia
Q = 1123 Mcf/day
P_w = 590 psia
P_d = 361 psia
D = 2246 Mcf/day

Company Caulkins Oil Company
By Frank Gray
Title Field Superintendent
Witnessed by Ray Brown
Company Southern Union Gas 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
		Friction Negligible				

