

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 Alamos Pictured Cliffs Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 4-24-57

Operator The Superior Oil Company Lease Johnston-Rucker Well No. 1-24
Unit P Sec. 24 Twp. 25N Rge. 6W Pay Zone: From 2472 To 2490
Casing: OD 24 WT. 15.5 Set At 2352 Tubing: OD 14 WT. 2.27 T. Perf. 2472
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .600 Estimated _____
Date of Flow Test: From 3-23-57 To 3-31-57 Date S.I.P. Measured 3-13-56
Meter Run Size 4.036 Orifice Size 0.750 Type Chart 12-10 Type Taps Flange
5 day

OBSERVED DATA

Flowing casing pressure (Dwt) 316 psig + 12 = 328 psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = _____ psia (b)
Flowing meter pressure (Dwt) 316 psig + 12 = 328 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken: _____
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (8.10)² x spring constant 5 = 328 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± = 0 psi (e)
Friction loss, Flowing column to meter: _____ = 0 psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____
Seven day average static meter pressure (from meter chart): _____
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (8.10)² x sp. const. 5 = 328 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 328 psia (h)
P_t = (h) + (f) _____ = 328 psia (i)
Wellhead casing shut-in pressure (Dwt) 783 psig + 12 = 797 psia (j)
Wellhead tubing shut-in pressure (Dwt) 739 psig + 12 = 751 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 797 psia (l)
Flowing Temp. (Meter Run) 43 °F + 460 _____ = 503 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 398 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{93}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} = 18.11}{\sqrt{(d)} = 18.11} = 1.00 \right) = 93 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{93}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{476,008}{527,625} \right]^n \cdot 0.9162} = 85 \text{ MCF/da.}$$

SUMMARY

P_c = 797 psia
Q = 93 Mcf/day
P_w = 328 psia
P_d = 398 psia
D = 85 Mcf/day

Company The Superior Oil Company
By M.C. Rushing
Title Gas Engineer
Witnessed by _____
Company _____

- This is date of completion test, 3-23-57
- Meter error-correction factor _____

REMARKS OR FRICTION CALCULATIONS

GL	$S (1-e^{-S})$	$(FQ)^2$	$(FQ)^2 (1-e^{-S})$	P_t^2	$P_t^2 + R^2$	P_w
			R^2	(Column 1)		
1705.7	0.117	0.01367	0.001599	167.504	167.504	328



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