

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 Pictured Cliff Formation Pictured Cliff County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 4-2-57

Operator The Superior Oil Company Lease Home Government Well No. 1-1
Unit P Sec. 1 Twp. 25N Rge. 6W Pay Zone: From 2867 To 2876
Casing: OD 5 1/2 WT. 14# Set At 2955 Tubing: OD 2" WT. 4.7 T. Perf. 2877
Produced Through: Casing X Tubing _____ Gas Gravity: Measured 0.660 Estimated _____
Date of Flow Test: From 2-20-57 To 2-28-57 * Date S.I.P. Measured 8-13-56
Meter Run Size 4.026 Orifice Size 0.750 Type Chart 88-10 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 269 psig + 12 = 281 psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = _____ psia (b)
Flowing meter pressure (Dwt) 269 psig + 12 = 281 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.50)² x spring constant 5 = 281 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 0 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing; (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.50)² x sp. const. 5 = 281 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 281 psia (h)
P_t = (h) + (f) = 281 psia (i)
Wellhead casing shut-in pressure (Dwt) 889 psig + 12 = 901 psia (j)
Wellhead tubing shut-in pressure (Dwt) 889 psig + 12 = 901 psia (k)
P_c = (j) or (k) whichever well flowed through = 901 psia (l)
Flowing Temp. (Meter Run) 32°F + 460 = 492 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 451 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{144}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{16.76}{16.76} = 1.00 \right) = 144 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{144}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{608,400}{732,840} \right]^n} = 0.8537 = 123 \text{ MCF/da.}$$

SUMMARY

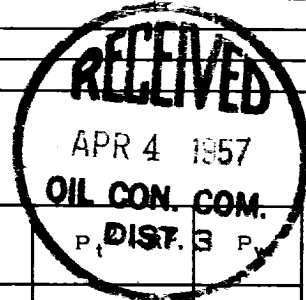
P_c = 901 psia
Q = 144 Mcf/day
P_w = 281 psia
P_d = 451 psia
D = 123 Mcf/day

Company The Superior Oil Company
By [Signature]
Title Gas Engineer
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})	P _t ²	P _t DIST. 3 P.	
		<u>.144 MMCF</u>	R ²	(Column i)		
<u>1892</u>	<u>0.129</u>	<u>.052831</u>	<u>.006815</u>	<u>78.961</u>	<u>78.968</u>	<u>281</u>



OK

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