

Initial Deliverability
TestForm C-122-A
Revised April 20, 1955NEW 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 Pine Lake Formation PC County Rio Arriba
Purchasing Pipeline E. P. N. G. Date Test Filed _____
Operator Mountain States Pet. Co. Lease Federal Well No. 30-F
Unit 4 P Sec. 30 Twp. 26N Rge. 2W Pay Zone: From 3950 To 4002
Casing: OD 4 1/2 WT. 9.5 Set At 4023 Tubing: OD 1 1/2 WT. 2.4 T. Perf. 3950
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .685 Estimated _____
Date of Flow Test: From _____ To _____ * Date S.I.P. Measured 2/6/60
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

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: _____ = _____ 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 (7.35) ² x sp. const. 500 = 270 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 270 psia (h)
P_t = (h) + (f) = 270 psia (i)
Wellhead casing shut-in pressure (Dwt) 1037 psig + 12 = 1049 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (k)
P_c = (j) or (k) whichever well flowed through = 1049 psia (l)
Flowing Temp. (Meter Run) 66 °F + 460 = 526 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 525 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{1746}{(\text{Integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^n = 1746 \text{ Mcf/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1746}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{824,776}{4,024,523} \times \frac{.8050^{.85}}{.8318} = 1452 \text{ Mcf/day}$$

SUMMARY

P_c = 1049 psia
Q = 1746 Mcf/day
P_w = 275 psia
P_d = 525 psia
D = 1452 Mcf/day

Company Mountain States Pet. Co.
By Jack A. Cole
Title Geologist
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}) R ²	P _t ² (Column l)	P _t ² + R ²	P _w
2706	.179	16.638	2978	72,900	75,878	275

