

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 Callegos Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed July 26, 1960
Operator Monsanto Chemical Company Lease State "J" Well No. 1
Unit D Sec. 16 Twp. 26N Rge. 11W Pay Zone: From 6090 To 6164
Casing: OD 7" WT. 23 & 26 Set At 6380 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 6090
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.684 Estimated _____
Date of Flow Test: From 5-22-60 To 5-30-60 * Date S.I.P. Measured 6-6-60
Meter Run Size 4" Orifice Size 0.750 Type Chart SR Type Flaps flange

OBSERVED DATA

Flowing casing pressure (Dwt) _____ 495 psig + 12 = _____ 507 psia (a)
Flowing tubing pressure (Dwt) _____ 478 psig + 12 = _____ 490 psia (b)
Flowing meter pressure (Dwt) _____ 472 psig + 12 = _____ 484 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.0)² x spring constant 10 = _____ 490 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = _____ - 6 psi (e)
Friction loss, Flowing column to meter: _____ = _____ 6 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 (7.15)² x sp. const. 10 = _____ 511 psia (g)
Corrected seven day avge. meter press. (pf) (g) + (e) _____ = _____ 505 psia (h)
P_t = (h) + (f) _____ = _____ 511 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 1494 psig + 12 = _____ 1506 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = _____ 1506 psia (l)
Flowing Temp. (Meter Run) _____ 89 °F + 460 _____ = _____ 549 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = _____ 753 psia (n)

Q = 890.0 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{975}{21.909} = 0.9897 \right) = \frac{975}{22.136} = \underline{880.8}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION
D = Q 880.8 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1,701,025}{1,989,000}^{0.75} (0.8552) = 0.8892 = \underline{783.2}$ MCF/da.

SUMMARY

P_c = _____ 1506 psia
Q = _____ 975 880.8 Mcf/day
P_w = _____ 539 528 psia
P_d = _____ 753 psia
D = _____ 783.2 Mcf/day

Company Monsanto Chemical Company
By M. Mungst
Title District Production Supt.
Witnessed by Paul Marsh
Company Bal-Mar Engineering, Inc.

- * 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
<u>4166</u>	<u>0.261</u>	<u>67.6</u>	<u>17.6</u>	<u>261.1</u>	<u>278.7</u>	<u>529</u> <u>528</u>

