

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 Fulcher Kuts-Pictured Cliffs FORMATION Pictured Cliffs COUNTY San Juan
PURCHASING PIPELINE Southern Union Gas Company DATE TEST FILED 5-19-55

OPERATOR STANOLIND OIL AND GAS COMPANY LEASE J. F. Day "B" WELL NO 1
UNIT M SEC. 17 TWP. 28N RGE. 10W PAL. ZONE: From 2024 To 2134 CL
CASING: OD 5 1/2 WT. 15.5 SET AT 2024 CL TUBING: OD 1" WT. 1.7 T.Perf. 2105
PRODUCED THROUGH: CASING X TUBING GAS GRAVITY: MEASURED ESTIMATED .646
DATE OF FLOW TEST: From 4-23 To 4-30 *Date S.I.P. MEASURED 5-7
METER RUN SIZE 4" ORIFICE SIZE 0.625 TYPE CHART Normal TYPE TAPS Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 166 psig + 12 = 178 psia (a)
Flowing tubing pressure (Dwt) 166 psig + 12 = 178 psia (b)
Flowing meter pressure (Dwt) 166 psig + 12 = 178 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading. 164 psig + 12 = 176 psia (d)
Square root chart reading () ²x spring constant = psia (d)
Meter error (c) - (d) or (d) - (c). ± = + 2 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. 188 psig + 12 = 200 psia (g)
Square root chart average reading () ²x sp. const. = psia (g)
Corrected seven day avge. meter press. (Pf) (g) + (e) = 202 psia (h)
P_t = (h) + (f) = 202 psia (i)
Wellhead casing shut-in pressure (Dwt) 387 psig + 12 = 399 psia (j)
Wellhead tubing shut-in pressure (Dwt) 387 psig + 12 = 399 psia (k)
P_c = (j) or (k) whichever well flowed through. = 399 psia (l)
Flowing Temp. (Meter Run). 60 °F + 460 = 520 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 199.5 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{178}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{13.34}{13.27} = 1.005 \right)^* = 175.9 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{175.9}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{1/n} = \frac{119,401}{118,377}^{1/1.0072} = 177.2 \text{ MCF/da.}}$$

SUMMARY

P_c = 399 psia Company STANOLIND OIL AND GAS COMPANY
Q = 175.9 Mcf/day By C. C. Fuller, Jr.
P_w = 202 psia Title Field Engr.
P_d = 199.5 psia Witnessed by
D = 177.2 Mcf/day Company

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	(FcQ) ² R ²	(1-e ^{-s})	P _t ² (Column i)	P _t ² + R ²	P _w
Friction loss is negligible.							

