

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 East Antelope-Pictured Cliffs FORMATION Pictured Cliffs COUNTY San Juan
PURCHASING PIPELINE El Paso Natural Gas Company DATE TEST FILED 4-9-56

OPERATOR STANGLIND OIL & GAS COMPANY LEASE Calleguas Canyon Unit WELL NO. 73
UNIT K SEC. 20 TWP. 29N RGE. 12W PAY ZONE: From 1372 To 1398
CASING: OD 5 1/2" WT. 17 1/2 SET AT 1435 TUBING: OD 1 1/2" WT. 1.7 T.Perf.
PRODUCED THROUGH: CASING X TUBING GAS GRAVITY: MEASURED 0.635 ESTIMATED
DATE OF FLOW TEST: From 3-17-56 To 3-24-56 *Date S.I.P. MEASURED 3-21-56
METER RUN SIZE 4" ORIFICE SIZE 1.5" TYPE CHART Sq. Ed. TYPE TAPS P

OBSERVED DATA

Flowing casing pressure (Dwt) 221 psig + 12 = 233 psia (a)
Flowing tubing pressure (Dwt) psig + 12 = psia (b)
Flowing meter pressure (Dwt) 230 psig + 12 = 242 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading. psig + 12 = psia (d)
Square root chart reading (7.00) ²x spring constant 0.5 = 245 psia (d)
Meter error (c) - (d) or (d) - (c). ± = -3 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing... = 1 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading. psig + 12 = psia (g)
Square root chart average reading (7.05) ²x sp. const. 5 = 248 psia (g)
Corrected seven day ave. meter press. (pf) (g) + (e) = 245 psia (h)
P_t = (h) + (f) = 246 psia (i)
Wellhead casing shut-in pressure (Dwt) 391 psig + 12 = 403 psia (j)
Wellhead tubing shut-in pressure (Dwt) 391 psig + 12 = 403 psia (k)
P_c = (j) or (k) whichever well flowed through. = 403 psia (l)
Flowing Temp. (Meter Run). 60 °F + 460 = 520 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 201.5 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{403}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{15.2315}{15.6525} = 0.9731 \right)^* = 394 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{394}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{1/2} = \frac{121,807}{106,713} = 1.1390} = 441 \text{ MCF/da.}$$

SUMMARY

P_c = 403 psia Company STANGLIND OIL & GAS COMPANY
Q = 394 Mcf/day By J. M. Clark
P_w = 201.5 psia Title FIELD ENGINEER
P_d = 201.5 psia Witnessed by
D = 441 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	(F _c Q) ² R ²	(1-e ^{-s})	P _t ² (Column i)	P _t ² + R ²	P _w
	Friction loss is negligible.						

OIL CONSERVATION COMMISSION	
ACTING DIRECTOR	
C. C. C. 3	
DISPATCH	
TO:	
FROM:	
DATE:	
LOCATION:	
OFFICE:	
BY:	
TRANSPORT:	
FILE:	