

Initial Deliverability
Test

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 Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed October 25, 1961
Operator Skelly Oil Company Lease Marshall "A" Well No. 6
Unit B Sec. 14 Twp. 27N Rge. 9W Pay Zone: From 4327' To 4424'
Casing: OD 4 1/2" WT. 9.54 Set At 4487' Tubing: OD 2 3/8" WT. 4.78 T. Perf. 4484'
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .738 Estimated _____
Date of Flow Test: From 9-28-61 To 10-6-61 * Date S.I.P. Measured 5-24-61
Meter Run Size 4.024" I.D. Orifice Size 1.750 Type Chart S.R. Type Taps Flanged

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 498 psig + 12 = 502 psia (b)
Flowing meter pressure (Dwt) 477 psig + 12 = 489 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.01)² x spring constant 10.00 = 491 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 _____ = 13 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.95)² x sp. const. 10.00 = 483 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 481 psia (h)
P_t = (h) + (f) _____ = 494 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1065 psig + 12 = 1077 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1077 psia (l)
Flowing Temp. (Meter Run) 77 °F + 460 _____ = 537 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 539 psia (n)

FLOW RATE CALCULATION

Q = 1186 X $\left(\frac{\sqrt{(c)} = 22.11334 = .9980}{\sqrt{(d)} = 22.15852} \right) = 1186$ MCF/day
(Integrated)

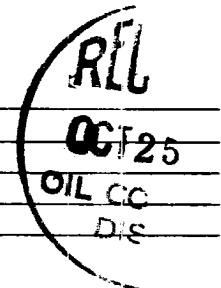
DELIVERABILITY CALCULATION

D = Q 1186 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.9771 \cdot 75} = 1166$ MCF/day
 $\frac{869,408}{889,762}$

SUMMARY

P_c = 1077 psia
Q = 1186 Mcf/day
P_w = 520 psia
P_d = 539 psia
D = 1166 Mcf/day

Company Skelly Oil Company
By B. L. Helling
Title District Foreman
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 i)	P _t ² + R ²	P _w
<u>3250</u>	<u>0.210</u>	<u>124.340</u>	<u>26.111</u>	<u>244.036</u>	<u>270.147</u>	<u>520</u>