

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 Undesignated Formation Dakota County S.J.
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed August 24, 1960
Operator Skelly Oil Co. Lease O. H. Randel Well No. 1
Unit F Sec. 14 Twp. 26N Rge. 11W Pay Zone: From 6400 To 6416
Casing: OD 7" WT. 20 & 23# Set At 6593 Tubing: OD 2 3/8" WT. 4.7 T. Perf. 6361
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .700 Estimated _____
Date of Flow Test: From 7-22-60 To 7-30-60 * Date S.I.P. Measured 8-3-59
Meter Run Size 4" Orifice Size 1.250 Type Chart SR Type Taps Flange

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:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.80)² x sp. const. 10.00 _____ = 462 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 462 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1237 psig + 12 = 1249 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1249 psia (l)
Flowing Temp. (Meter Run) 81 °F + 460 _____ = 541 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 625 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^{.75}$ = _____ MCF/da
(Integrated)

DELIVERABILITY CALCULATION

D = Q 453 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1,169,376}{1,341,912}^{.8714 \cdot .75} = \frac{.9019}{.8714} = \text{_____}$ MCF/da.

SUMMARY

P_c = 1249 psia Company Skelly Oil Company
Q = 453 Mcf/day By P. E. Cooper
P_w = 467 psia Title District Superintendent
P_d = 625 psia Witnessed by _____
D = 409 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 (1-e ^{-s}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4453</u>	<u>.277</u>	<u>18.140</u>	<u>5.025</u>	<u>213.444</u>	<u>218.469</u>	<u>467</u>

