

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 So Blanco Formation Pictured Cliffs County SJ
Purchasing Pipeline El Paso Natural Gas Co Date Test Filed 1/31/57
Operator Skelly Oil Co Lease Marshall Well No. 5-A
Unit I Sec. 15 Twp. 27 Rge. 9W Pay Zone: From _____ To _____
Casing: OD _____ WT. _____ Set At _____ Tubing: OD _____ WT. _____ T. Perf. _____
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .650 Estimated _____
Date of Flow Test: From 12/31/56 To 1/8/57 * Date S.I.P. Measured _____
Meter Run Size 4" Orifice Size _____ Type Chart Sq Rt 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 (7.05)² x sp. const. 5.00 = 249 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 249 psia (i)
Wellhead casing shut-in pressure (Dwt) 625 psig + 12 = 637 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 637 psia (l)
Flowing Temp. (Meter Run) 49 °F + 460 _____ = 509 ° Abs (m)
P_d = ½ P_c = ½ (l) _____ = 318 psia (n)

FLOW RATE CALCULATION

Q = 276 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* =$ _____ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 276 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 249 MCF/da.
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{304,645}{343,768}$ n .9023

SUMMARY

P_c = 637 psia
Q = 276 Mcf/day
P_w = 249 psia
P_d = 318 psia
D = 249 Mcf/day

Company Geoelectric, Inc
By W.J. McConathy *W. J. McConathy*
Title Agent
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

OK

