

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 San Blanco-M.V. Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 12-5-59

Operator Texaco, Inc. Lease New Mexico Gas Unit Well No. 1 C
Unit K Sec. 36 Twp. 30N Range 10W Pay Zone: From 4064 To 4774
Casing: OD 4 1/2 WT. 9.50 Set At 2436-4845 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 4800
Produced Through: Casing X Tubing X Gas Gravity: Measured .696 Estimated
Date of Flow Test: From 11-21-59 To 11-28-59 * Date S.I.P. Measured 12-3-59
Meter Run Size 4" Orifice Size 1.500 Type Chart Sq. Rt. Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt) 545 psig + 12 = 557 psia (a)
Flowing tubing pressure (Dwt) 490 psig + 12 = 502 psia (b)
Flowing meter pressure (Dwt) 465 psig + 12 = 477 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading 6.9 1000 psig + 12 = 476 psia (d)
Square root chart reading () ² x spring constant = 1 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 = 25 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 6.85 1000 psig + 12 = 469 psia (g)
Square root chart average reading () ² x sp. const. = 470 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 495 psia (h)
P_t = (h) + (f) = 840 psia (i)
Wellhead casing shut-in pressure (Dwt) 828 psig + 12 = 840 psia (j)
Wellhead tubing shut-in pressure (Dwt) 840 psig + 12 = 840 psia (k)
P_c = (j) or (k) whichever well flowed through = 840 psia (l)
Flowing Temp. (Meter Run) 72 °F + 460 = 532 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 420 psia (n)

FLOW RATE CALCULATION

Q = 1041 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{21.84}{21.82} = 1.001 \right)^* = \underline{1042} MCF/day
(Integrated)$

DELIVERABILITY CALCULATION

D = Q 1042 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{1197} MCF/day
529200 ^{.75} 1.203 439843$

SUMMARY

P_c = 840 psia
Q = 1042 Mcf/day
P_w = 516 psia
P_d = 420 psia
D = 1197 Mcf/day

Company Well Production Co.
By N.A. Neely
Title Agent
Witnessed by [Signature]
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
3341	.216	95.981	20.732	245.025	265.757	516

RECEIVED
DEC 7 1959
OIL CON. COM.
DIST. 3