

Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

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 Mesaverde County San Juan
Purchasing Pipeline Southern Union Gas Co. Date Test Filed November 6, 1961
Operator Consolidated Oil & Gas, Inc. Lease O'Shea Well No. 1-3
Unit K Sec. 3 Twp. 31N Rge. 13W Pay Zone: From 6670 To 6875
Casing: OD 5 1/2 WT. 15.5 & 17 Set At 6900 Tubing: OD 1.315 WT. 1.80 T. Perf. 4433
Produced Through: Casing Tubing X Gas Gravity: Measured .684 Estimated
Date of Flow Test: From 10-16-61 To 10-24-61 * Date S.I.P. Measured 10-31-61
Meter Run Size 4.000 Orifice Size 0.750 Type Chart L-10 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 665 psig + 12 = 677 psia (a)
Flowing tubing pressure (Dwt) 504 psig + 12 = 516 psia (b)
Flowing meter pressure (Dwt) 502 psig + 12 = 514 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (7.19)² x spring constant 10 = 517 psia (d)
Meter error (c) - (d) or (d) - (c) ± = - 3 psi (e)
Friction loss, Flowing column to meter: = 2 psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (7.2)² x sp. const. = 518 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 515 psia (h)
 = 517 psia (i)
P_t = (h) + (f)
Wellhead casing shut-in pressure (Dwt) 953 psig + 12 = 965 psia (j)
Wellhead tubing shut-in pressure (Dwt) 951 psig + 12 = 963 psia (k)
P_c = (j) or (k) whichever well flowed through = 963 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 481 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{417}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} = 22.67157}{\sqrt{(d)} = 22.73763} = 0.9971 \right) = 416 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{416}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{696008}{572041} \right]^n \cdot 1.158} = 482 \text{ MCF/day}$$

SUMMARY

P_c = 963 psia
Q = 416 Mcf/day
P_w = 596 psia
P_d = 481 psia
D = 482 Mcf/day

Company Consolidated Oil & Gas, Inc.
By
Title Chief Engineer
Witnessed by
Company

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(FcQ) ²	(FcQ) ² (1-e ^{-s}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
3032	0.198	439.590	87.039	267.289	355.328	596

