

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 No. 10000 Pictured Cliffs Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Co Date Test Filed 1/14/58

Operator The Ohio Oil Company Lease Huerfalia Apache Well No. 5
Unit D Sec. 22 Twp. 33N Rge. 2E Pay Zone: From 2844 To 2852
Casing: OD 7" WT. 204 Set At 2850 Tubing: OD 2-1/8 WT. 4.7 T. Perf. 2872-2882
Produced Through: Casing Tubing I Gas Gravity: Measured .715 Estimated
Date of Flow Test: From To * Date S.I.P. Measured 1/10/56
Meter Run Size Orifice Size Type Chart Type Taps

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 (7.30)² x sp. const. 5 = 232 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 232 psia (h)
P_t = (h) + (f) = 232 psia (i)
Wellhead casing shut-in pressure (Dwt) 925 psig + 12 = 937 psia (j)
Wellhead tubing shut-in pressure (Dwt) 925 psig + 12 = 937 psia (k)
P_c = (j) or (k) whichever well flowed through = 937 psia (l)
Flowing Temp. (Meter Run) 58 °F + 460 = 518 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 468 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{232 MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = 232 \times .838 = 198 \text{ MCF/da.}$$

SUMMARY

P_c = 937 psia Company The Ohio Oil Company
Q = 232 Mcf/day By W. A. Pae
P_w = 232 psia Title Production Foreman
P_d = 468 psia Witnessed by
D = 198 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
2853	0.139	4.924	.899	87.081	67,700	230.3



