

Initial Deliverability Test

Form CO-1 (2-55)
Revised April 28, 1964

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 OIL STORAGE AREA)

Pool San Juan Formation SAN JUAN County SAN JUAN
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 12-30-64
Operator THE AMERICAN PETROLEUM COMPANY Lease E. L. Nelson Well No. 1
Unit 1 Sec. 16 Twp. 37N Rge. 12E Pay Zone: From 6334 To 6334
Casing: OD 4-1/2 WT. 12.5 Set At 6334 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6334
Produced Through: Casing Tubing Gas Gravity: Measured 0.66 Estimated
Date of Flow Test: From 12-18-64 To 12-21-64 * Date S.I.P. Measured 6-27-64
Meter Run Size 6" Orifice Size 1.500 Type Chart Eq. 12 Type Taps 1/2"

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

FLOW RATE CALCULATION

$$Q = \frac{V(c)}{V(d)} \times \left(\frac{V(c)}{V(d)} \right)^n = \text{MCF/day}$$

(Integrated)

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{MCF/day}$$

SUMMARY

P_c = psia
Q = Mcf/day
P_w = psia
P_d = psia
D = Mcf/day

Company THE AMERICAN PETROLEUM COMPANY
By E. L. Nelson
Title Reservoir Engineer
Witnessed by ORIGINAL SIGNED BY
Company F. W. Foul



* 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 1)	P _t ² + R ²	P _w
<u>0.00</u>	<u>0.174</u>	<u>304,316</u>	<u>130,147</u>	<u>240,100</u>	<u>240,100</u>	<u>6334</u>

OK