

Initial Deliverability
TestForm C-129-A
Revised April 20, 1955NEW 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 Basin Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 1/10/64
Operator Recovery Model Oil Co., Inc. Lease Hearilla Store Well No. 32-28
Unit 6 Sec. 28 Twp. 24N Rge. 5W Pay Zone: From 6696' To 6700'
Casing: OD 4 1/2" WT. 10.94 Set At 6851' Tubing: OD 2-3/8" WT. 4.74 T. Perf. 6995'
Produced Through: Casing Tubing X Gas Gravity: Measured .700 Estimated
Date of Flow Test: From 12/18/63 To 12/26/63 Date S.I.P. Measured 7/16/63
Meter Run Size 4" Orifice Size 1.000 Type Chart Eq. Rt. Type Taps Flg.

OBSERVED DATA

Flowing casing pressure (Dwt) 654 psig + 12 = 666 psia (a)
Flowing tubing pressure (Dwt) 500 psig + 12 = 512 psia (b)
Flowing meter pressure (Dwt) psig + 12 = psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading 7.2 psig + 12 = 518 psia (d)
Square root chart reading (7.2)² x spring constant 10 = 518 psia (d)
Meter error (c) - (d) or (d) - (c) = -6 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = + 154 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (7.2)² x sp. const. 10 = 518 psia (g)
Corrected seven day avgs. meter press. (p_f) (g) + (e) = 512 psia (h)
P_t = (h) + (f) = 666 psia (i)
Wellhead casing shut-in pressure (Dwt) 2036 psig + 12 = 2048 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2036 psig + 12 = 2048 psia (k)
P_c = (j) or (k) whichever well flowed through = 2048 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 1024 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{900}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} \ 512 = .9804}{\sqrt{(d)} \ 518} = .9948 \right) = 497 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{497}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75}} = 497 \frac{3.108,972}{3.695,538} = 497 \text{ MCF/da.}$$

SUMMARY

P_c = 2048 psia
Q = 497 Mcf/day
P_w = 671 psia
P_d = 1024 psia
D = 497 Mcf/day

Company Recovery Model Oil Co., Inc.
By R. V. Hensley
Title Prod. Manager
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
<u>497</u>	<u>0.284</u>	<u>21.837</u>	<u>6.202</u>	<u>443.566</u>	<u>449.758</u>	<u>671</u>

Distribution: 3 3 1 1
HUCS Autos 3
HUCS Pkgts 2
Springs 1
File 1

