

3 NMOCC-
5 Austral-
1 EPNG
1 File

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 Basin-Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 8/10/65

Operator Austral Oil Co. Lease Candalerio Well No. 1
Unit J Sec. 1 Twp. 27N Rge. 9W Pay Zone: From 6348 To 6576
Casing: OD 4 1/2 WT. 10.5# Set At 6640 Tubing: OD 2 1/16 WT. 3.25 T. Perf. 6400
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .654 Estimated _____
Date of Flow Test: From 7-6-65 To 7-14-65 * Date S.I.P. Measured 3-9-65
Meter Run Size 4" Orifice Size 1.500 Type Chart S.R. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 568 psig + 12 = 580 psia (a)
Flowing tubing pressure (Dwt) 516 psig + 12 = 528 psia (b)
Flowing meter pressure (Dwt) 505 psig + 12 = 517 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.05)² x spring constant 10 = 497 psia (d)
Meter error (c) - (d) or (d) - (c) ± = +20 psi (e)
Friction loss, Flowing column to meter: _____ = -11 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 (_____)² x sp. const. _____ = 497 psia (g)
Corrected seven day avge. meter press. (pf) (g) + (e) _____ = 517 psia (h)
P_t = (h) + (f) _____ = 528 psia (i)
Wellhead casing shut-in pressure (Dwt) 2190 psig + 12 = 2202 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2190 psig + 12 = 2202 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2202 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1101 psia (n)

FLOW RATE CALCULATION

Q = 739 x $\left(\frac{V(c)}{V(d)} = \frac{1.0402}{1.0199} = 1.0199 \right) = 754 MCF/day
(Integrated)$

DELIVERABILITY CALCULATION

D = Q 754 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} = \frac{3,636,603}{4,543,913}^{.75} \frac{8461}{(.8003)^{.75}} = 638 MCF/day$

SUMMARY

P_c = 2202 psia
Q = 754 Mcf/day
P_w = 552 psia
P_d = 1101 psia
D = 638 Mcf/day

Company Austral Oil Co.
By J. A. Dugan (J & J)
Title Consulting Engineer
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 1)	P _t ² + R ²	P _w
<u>4186</u>	<u>.262</u>	<u>99.644</u>	<u>26.107</u>	<u>278.784</u>	<u>304.891</u>	<u>552</u>

F_c = 13.239



