

2 IMOCG
1 Austral
1 El Paso
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 Blanco Formation Mesaverde County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 11/23/65
Operator Austral Oil Co. Lease Marshall Well No. 4
Unit A Sec. 15 Twp. 27N Rge. 9W Pay Zone: From 4410 To 4494
Casing: OD 2 7/8" WT. 6.5# Set At 4669 Tubing: OD WT. T. Perf.
Produced Through: Casing X Tubing Gas Gravity: Measured .737 Estimated
Date of Flow Test: From To * Date S.I.P. Measured 4-14-65
Meter Run Size 4" Orifice Size Type Chart S.R. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 484 psig + 12 = 496 psia (a)
Flowing tubing pressure (Dwt) psig + 12 = psia (b)
Flowing meter pressure (Dwt) 481 psig + 12 = 493 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) ± = -4 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = +3 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 x sp. const. = 490 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 486 psia (h)
P_t = (h) + (f) = 489 psia (i)
Wellhead casing shut-in pressure (Dwt) 993 psig + 12 = 1005 psia (j)
Wellhead tubing shut-in pressure (Dwt) psig + 12 = psia (k)
P_c = (j) or (k) whichever well flowed through = 1005 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) 809 = 804 psia (n)

Q = 363 x $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\sqrt{.9920}}{\sqrt{(d)}} = .9960 \right) = \underline{362} \text{ MCF/day}$
(Integrated)

D = Q 362 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{363,609}{770,056} \right]^n \cdot \frac{.75}{(.4722) \cdot .75} = \underline{206} \text{ MCF/day}$

SUMMARY

P_c = 1005 psia
Q = 362 Mcf/day
P_w = 490 psia
P_d = 804 psia
D = 206 Mcf/day

Company Austral Oil Co.
By 2. J. Hugg
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 i)	P _t ² + R ²	P _w
3250	.210	4.038	.848	239.121	239.969	490

RECEIVED
NOV 24 1965
OIL CON. COM.
DIST. 3