

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 Basin Dakota Formation Dakota County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-14-64

Operator PAN AMERICAN PETROLEUM CORP. Lease Jicarilla Apache 103 Well No. 7
Unit 6 Sec. 3 Twp. 26N Rge. 4W Pay Zone: From 8100 To 8122

* Casing: OD 7-3/8 WT. 240 Set At 1934 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 8038
Produced Through: Casing _____ Tubing 1 Gas Gravity: Measured _____ Estimated 6.89
Date of Flow Test: From 12-23-63 To 12-31-63 * Date S.I.P. Measured _____
Meter Run Size 4" Orifice Size 1.250 Type Chart Sq. Rt. Type Taps Flange

4 1/2" - 10.5 liner set @ 3871-8192

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 (7.75) ² x sp. const. 10 _____ = 601 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 601 psia (h)
P_t = (h) + (f) _____ = 601 psia (i)
Wellhead casing shut-in pressure (Dwt) 2427 psig + 12 = 2439 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2416 psig + 12 = 2428 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2439 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1220 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{_____ MCF/da}$$

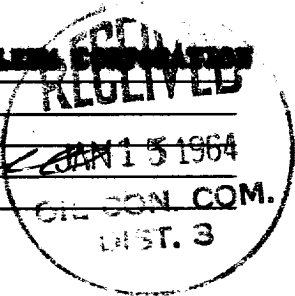
DELIVERABILITY CALCULATION

$$D = Q \text{ } \underline{659} \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{4,460,321}{5,574,775} \right]^n \text{ } \underline{.8460} = \underline{558} \text{ MCF/da.}$$

SUMMARY

P_c = 2439 psia
Q = 659 Mcf/day
P_w = 611 psia
P_d = 1220 psia
D = 558 Mcf/day

Company PAN AMERICAN PETROLEUM CORPORATION
By F. L. Nabors
Title District Engineer
Witnessed by F. W. Poell
Company _____



* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
5552	.332	30,389	12,745	361,201	373,946	611

OK