Form C-122-A

Revised April 20, 1955

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: San Juan

Purchasing Pipeline: Southern Union Gas Company Date Test Filed: April 17, 1963

Operator: TEXACO Inc. Lease: H. J. Lee Fed. "B" Well No.: 3

Unit: M Sec.: 23 Twp.: 29-N Rge.: 12-W Pay Zone: From: 5970 To: 6068

Casing: OD: 4½ WT.: 9.5 Set At: 6219 Tubing: OD: 2-3/8 WT.: 4.7 T. Perf.: 6077

Produced Through: Casing: ____ Tubing: X Gas Gravity: Measured: .700 Estimated: ____

Date of Flow Test: From: 3-24-63 To: 3-29-63 * Date S.I.P. Measured: 4-5-63

Meter Run Size: 4.0 Orifice Size: 2.00 Type Chart: Sq Rt Type Taps: Flg

OBSERVED DATA

Flowing casing pressure (Dwt)	1805	psig + 12 =	1817	psia	(a)
Flowing tubing pressure (Dwt)	1778	psig + 12 =	1790	psia	(b)
Flowing meter pressure (Dwt)	762	psig + 12 =	774	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:					
Normal chart reading		psig + 12 =		psia	(d)
Square root chart reading (8.8)² x spring constant 1.000		=	774	psia	(d)
Meter error (c) - (d) or (d) - (c)	±	=	0	psi	(e)
Friction loss, Flowing column to meter:					
(b) - (c) Flow through tubing: (a) - (c) Flow through casing		=	1016	psi	(f)
Seven day average static meter pressure (from meter chart):					
Normal chart average reading		psig + 12 =		psia	(g)
Square root chart average reading (9.1)² x sp. const. 1.000		=	828	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)		=	828	psia	(h)
P_t = (h) + (f)		=	1790	psia	(i)
Wellhead casing shut-in pressure (Dwt)	2046	psig + 12 =	2058	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	2044	psig + 12 =	2056	psia	(k)
P_c = (j) or (k) whichever well flowed through		=	2058	psia	(l)
Flowing Temp. (Meter Run)	69 °F + 460	=	529	°Abs	(m)
P_d = ½ P_c = ½ (l)		=	1029	psia	(n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{2700} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = 1.000 \right)^{n} = 2700 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\ 2700 \left[\begin{matrix} (P_c^2 - P_d^2) = 3{,}176{,}523 \\ \hline (P_c^2 - P_w^2) = 856854 \end{matrix} \right]^{n\ .75} 3.707 \quad 2.6698 = 7{,}208 \text{ MCF/da.}$$

SUMMARY

P_c =	2058	psia
Q =	2700	Mcf/day
P_w =	1837 ~~1838~~	psia
P_d =	1029	psia
D =	7,208	Mcf/day

Company: TEXACO Inc.

By: [signature]

Title: District Superintendent

Witnessed by: ____

Company: ____

RECEIVED APR 17 1963 OIL CON. COM. DIST. 3

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)^2$	$\frac{(F_cQ)^2 (1-e^{-S})}{R^2}$	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
4254	.266	644,398	171,410	3,204,100	3,375,510	~~1838~~ 1837