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([redacted] [redacted])** County **San Juan**

Purchasing Pipeline **El Paso Natural Gas Company** Date Test Filed **3-16-62**

Operator **ADOBE OIL COMPANY** Lease **Nickels** Well No. **1**

Unit **K** Sec. **11** Twp. **31N** Rge. **13W** Pay Zone: From **6525** To **6651**

Casing: OD **5-1/2** WT. **15.50** Set At **6700** Tubing: OD **1-1/2"** WT. **2.75** T. Perf. **6530**

Produced Through: Casing ____ Tubing **X** Gas Gravity: Measured → Estimated **.70**

Date of Flow Test: From **2-26-62** To **3-6-62** * Date S.I.P. Measured **2-13-62**

Meter Run Size **4.027** Orifice Size **1.00** Type Chart **SR 10** Type Taps **Flge.**

OBSERVED DATA

Flowing casing pressure (Dwt)	Packer 482	psig + 12 =	494	psia	(a)
Flowing tubing pressure (Dwt)	481	psig + 12 =	493	psia	(b)
Flowing meter pressure (Dwt)		psig + 12 =		psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:					
Normal chart reading	7 10	psig + 12 =	490	psia	(d)
Square root chart reading ( ) ^{2} x spring constant		=	3	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		=	1	psi	(f)
Seven day average static meter pressure (from meter chart):					
Normal chart average reading	7 10	psig + 12 =	490	psia	(g)
Square root chart average reading ( ) ^{2} x sp. const.		=	493	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)		=	494	psia	(h)
P_t = (h) + (f)		=		psia	(i)
Wellhead casing shut-in pressure (Dwt)	Packer 1391	psig + 12 =	1403	psia	(j)
Wellhead tubing shut-in pressure (Dwt)		psig + 12 =	1403	psia	(k)
P_c = (j) or (k) whichever well flowed through		=		psia	(l)
Flowing Temp. (Meter Run)	°F + 460	=		°Abs	(m)
$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (1)		=	701	psia	(n)

FLOW RATE CALCULATION

Q = **176** (integrated) X $\left(\frac{\sqrt{(c)}\ 493\quad 22.20}{\sqrt{(d)}\ 490\quad 22.14} = 1.037 \right)$ * = ~~183~~ 177 MCF/da

DELIVERABILITY CALCULATION

D = Q ~~183~~ 177 $\left[\frac{\left(P_c^2 - P_d^2\right) = 1,477,000}{\left(P_c^2 - P_w^2\right) = 1,721,400} \right]^n$ .8915 = 163 MCF/da.

SUMMARY

P_c = 1403 psia
Q = ~~183~~ 177 Mcf/day
P_w = ~~497~~ 496 psia
P_d = 701 psia
D = 163 Mcf/day

Company **ADOBE OIL COMPANY**
By
Title **H. D. Rogers, Engineer**
Witnessed by **Lonnie Kramer**
Company **ADOBE OIL COMPANY**

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)2$	$\frac{(F_cQ)^2 \quad (1-e^{-s})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
4643	.287	9.07	2.60	244	246.60	~~497~~ 496