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 South Blanco Mesa Verde Formation Mesa Verde County Rio Arriba

Purchasing Pipeline Southern Union Gas Company Date Test Filed December 31, 1958

Operator Honolulu Oil Corporation Lease Jicarilla Apache Well No. 6 M

Unit K Sec. 3 Twp. 26 N Rge. 4 W Pay Zone: From 5340 To 5950

Casing: OD 3 1/2 WT. 9.2 Set At 6075 Tubing: OD 2 WT. T. Perf. OK 5876

Produced Through: Casing Tubing X Gas Gravity: Measured .655 Estimated

Date of Flow Test: From 12-1-58 To 12-8-58 * Date S.I.P. Measured 12-15-58

Meter Run Size 4.000 Orifice Size .875 Type Chart Sq.Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)	562 psig + 12 =	574	psia	(a)
Flowing tubing pressure (Dwt)	-- psig + 12 =	--	psia	(b)
Flowing meter pressure (Dwt)	562 psig + 12 =	574	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken):				
Normal chart reading	psig + 12 =		psia	(d)
Square root chart reading (7.6)^2 x spring constant	=	577	psia	(d)
Meter error (c) - (d) or (d) - (c)	± =	+ 3	psi	(e)
Friction loss, Flowing column to meter:				
(b) - (c) Flow through tubing: (a) - (c) Flow through casing	=	-0-	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	558 psig + 12 =	562	psia	(g)
Square root chart average reading ( )^2 x sp. const.	=		psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	559	psia	(h)
P_t = (h) + (f)	=	559	psia	(i)
Wellhead casing shut-in pressure (Dwt)	987 psig + 12 =	999	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	-- psig + 12 =	--	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	999	psia	(l)
Flowing Temp. (Meter Run) 60 °F + 460	=	520	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	499	psia	(n)

FLOW RATE CALCULATION

$$Q = 360 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\sqrt{574}}{\sqrt{577}} = .9973 \right)^{*} = 359 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{749{,}000}{685{,}518} \right]^{n} = .75 \quad 1.0687 = 383 \text{ MCF/da.}$$

SUMMARY

P_c =	999	psia
Q =	359	Mcf/day
P_w =	559	psia
P_d =	499	psia
D =	383	Mcf/day

Company Honolulu Oil Corporation
By J. B. Evans
Title Division Gas Engineer
Witnessed by Judd Terrell
Company Southern Union Gas Company

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)^2$	$\frac{(FcQ)^2}{R^2}$ $(1-e^{-s})$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
3848	.244	11.390	2.779	312.481	312.483	559

F_c = 9.402
F_c x Q = 9.402 x .359 = 3.375

RECEIVED
JAN 7 1959
OIL CON. COM.
DIST. 3