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 Date Test Filed 5-24-63

Operator British-American Oil Prod.Co. Lease Scott Well No. 11

Unit M Sec. 25 Twp. 27N Rge. 11W Pay Zone: From 6663 To 6736

Casing: OD 4½" WT. 11.6 Set At 6799 Tubing: OD None WT. - T. Perf. -

Produced Through: Casing X Tubing - Gas Gravity: Measured 0.700 Estimated -

Date of Flow Test: From 4-27-63 To 5-4-63 * Date S.I.P. Measured 5-11-63

Meter Run Size 4" Orifice Size 1.375 Type Chart L-10 Type Taps Flanged

OBSERVED DATA

Flowing casing pressure (Dwt)	334 psig + 12 =	346	psia	(a)
Flowing tubing pressure (Dwt)	Tubingless completion psig + 12 =	-	psia	(b)
Flowing meter pressure (Dwt)	178 psig + 12 =	190	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken):				
Normal chart reading	psig + 12 =		psia	(d)
Square root chart reading (4.25)^2 x spring constant 10	=	181	psia	(d)
Meter error (c) - (d) or (d) - (c) ±	=	9	psi	(e)
Friction loss, Flowing column to meter:				
(b) - (c) Flow through tubing: (a) - (c) Flow through casing	=	156	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	psig + 12 =		psia	(g)
Square root chart average reading (4.2)^2 x sp. const. 10	=	176	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	185	psia	(h)
P_t = (h) + (f)	=	341	psia	(i)
Wellhead casing shut-in pressure (Dwt) 1574	psig + 12 =	1586	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	psig + 12 =	-	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	1586	psia	(l)
Flowing Temp. (Meter Run) 75 °F + 460	=	535	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	793	psia	(n)

FLOW RATE CALCULATION

$$Q = 414 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{13.78405}{13.45362} = 1.02456 \right)^{*} = 424.2 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{1,886,547}{2,399,115} \right]^{n} (0.78635) = 0.83504 = 354.2 \text{ MCF/da.}$$

SUMMARY

P_c =	1586 psia	Company	The British-American Oil Prod. Co.
Q =	424.2 Mcf/day	By	
P_w =	341 psia	Title	Field Superintendent
P_d =	793 psia	Witnessed by	Frank Renard
D =	354 Mcf/day	Company	British-American Oil Prod. Co.

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS **Friction Negligible**

GL	$(1-e^{-s})$	$(F_cQ)^2$	$\frac{(FcQ)^2 \quad (1-e^{-s})}{R^2}$	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
4664	0.288	0.420	0.121	116.281	116,402	341

Separator inlet = 306 psia
" " = 194 psia = Critical flow does not exist

OK

INITIAL AND ANNUAL DELIVERABILITY TEST