Initial Deliverability Test

Form C-122-A
Revised April 20, 1955

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 Formation Dakota County San Juan

Purchasing Pipeline El Paso Natural Gas Company Date Test Filed November 24, 1961

Operator Skelly Oil Company Lease Mexico-Fed "L" Well No. 1

Unit M Sec. 10 Twp. 30N Rge. 13W Pay Zone: From 6225' To 6386'

Casing: OD 4½" WT. 9.5 & 11.6 Set At 6500' Tubing: OD 2-3/8" WT. 4.7# T. Perf. 6120'

Produced Through: Casing ____ Tubing X Gas Gravity: Measured .690 Estimated ____

Date of Flow Test: From 10-31-61 To 11-7-61 * Date S.I.P. Measured 11-1-61

Meter Run Size 4.027" I.D. Orifice Size 0.625 Type Chart M.R. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)	____ psig + 12 =	____	psia	(a)
Flowing tubing pressure (Dwt)	487 psig + 12 =	499	psia	(b)
Flowing meter pressure (Dwt)	472 psig + 12 =	484	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken):				
Normal chart reading	____ psig + 12 =	____	psia	(d)
Square root chart reading (6.97)² x spring constant 10.00	=	486	psia	(d)
Meter error (c) - (d) or (d) - (c) ±	=	-2	psi	(e)
Friction loss, Flowing column to meter:				
(b) - (c) Flow through tubing: (a) - (c) Flow through casing	=	15	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	____ psig + 12 =	____	psia	(g)
Square root chart average reading (6.95)² x sp. const. 10.00	=	483	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	481	psia	(h)
P_t = (h) + (f)	=	496	psia	(i)
Wellhead casing shut-in pressure (Dwt)	____ psig + 12 =	____	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	1697 psig + 12 =	1709	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	1709	psia	(l)
Flowing Temp. (Meter Run) 59 °F + 460	=	519	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	855	psia	(n)

FLOW RATE CALCULATION

$$Q = 225 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{22.00000}{22.04541} = .9979 \right)^{*} = 225 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\,225 \left[\frac{P_c^2 - P_d^2 = 2,189,656}{P_c^2 - P_w^2 = 2,673,470} \right]^{n} 8190^{-.75} = .8609 = 194 \text{ MCF/da.}$$

SUMMARY

P_c =	1709	psia
Q =	225	Mcf/day
P_w =	497	psia
P_d =	855	psia
D =	194	Mcf/day

Company SKELLY OIL COMPANY
By William Ling Hall
Title PRODUCTION ENGINEER
Witnessed by ____
Company ____

RECEIVED
NOV 27 1961
OIL CON. COM.
DIST. 3

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)^2$	$\frac{(FcQ)^2}{R^2}$ $(1-e^{-S})$	Pt (Column i)	$P_t^2 + R^2$	P_w
4272	0.267	4.475	1.195	246.0[illegible]	247.211	497