3 MMOCC
1 McKay
1 Reese
1 Empire States
1 MWP
1 File

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 Aztec Ext. Formation Pictured Cliffs County San Juan

Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed

Operator McKay, Payne & Zachry Lease Maxwell Well No. #1

Unit F Sec. 1 Twp. 30N Rge. 12W Pay Zone: From 2206 To 2220

Casing: OD 5-1/2" WT. 14# Set At 2303 Tubing: OD 1" WT. 1.70 T. Perf. 2215

Produced Through: Casing ^ Tubing X Gas Gravity: Measured .683 Estimated

Date of Flow Test: From To * Date S.I.P. Measured 6-29-58

Meter Run Size 4" Orifice Size .750 Type Chart SR Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)	psig + 12 =	psia	(a)
Flowing tubing pressure (Dwt)	psig + 12 =	psia	(b)
Flowing meter pressure (Dwt)	psig + 12 =	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken):			
Normal chart reading	psig + 12 =	psia	(d)
Square root chart reading ( ) ^{2} x spring constant	=	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	=	psi	(f)
Seven day average static meter pressure (from meter chart):			
Normal chart average reading	psig + 12 =	psia	(g)
Square root chart average reading (7.05) ^{2} x sp. const. 5	= 249	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	= 249	psia	(h)
P_t = (h) + (f)	= 249	psia	(i)
Wellhead casing shut-in pressure (Dwt) 665	psig + 12 = 677	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 665	psig + 12 = 677	psia	(k)
P_c = (j) or (k) whichever well flowed through	= 677	psia	(l)
Flowing Temp. (Meter Run) 61 °F + 460	= 521	°Abs	(m)
P_d = ½ P_c = ½ (l)	= 338	psia	(n)

FLOW RATE CALCULATION

$$Q = 298 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \quad = \quad \right)^{*} = 298 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 298 \left[\frac{344,085}{372,868} \right]^{\frac{.85}{(.92278)^{.85}}} = 298 \left[.93398 \right]^{.93398} = 278 \text{ MCF/da.}$$

SUMMARY

P_c =	677	psia
Q =	298	Mcf/day
P_w =	292	psia
P_d =	338	psia
D =	278	Mcf/day

Company McKay, Payne & Zachry
By Original signed by T. A. Dugan
Title Consulting Engineer
Witnessed by
Company

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)2$	$\frac{(FcQ)^2 (1-e^{-S})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
1513	.104	225.6	23.46	62,041	87,461	292

RECEIVED
NOV 12 1958
OIL CON. COM.