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MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
 (Deliverability)

Form C-122-C
4-1-54

Pool Eumont Formation Yates-Seven Rivers County Lea
 Initial X Annual _____ Special _____ Date of test 7-14-58
 Company _____ Lease _____ Well No. _____
 Unit _____ Sec. 34 Twp. 20-S Rge. 36-E Purchaser Phillips Petroleum Company
 Casing 5 1/2" Wt. 11.7# I.D. 5.012" Set at 3883' Perf. 3814' To 3850'
 Tubing 2" Wt. 4.7# I.D. 2" Set at 3793' Perf. _____ To _____
 Gas Pay: From 3814' To 3850' L 3814' x G 0.685 = GL 2613 Bar. Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well Single
 Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started		Taken		Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	time	Date	time							
7-17-58	10 AM	7-18-58	10 AM	24 hrs.	Flange	3"	1.25"	21 psig	21" H ₂ O	105°F
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _f	Differ- ential h _w	Meter Extension √P _f h _w	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ability F _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
34.2 psia	21"	26.80	9.781	0.9359	0.9592	1.005	236.49

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
7-11-58	10 AM	7-11-58	10 AM	72 hrs.	523.2 psia	-0-	235.2 psia	
	PM		PM					

FRICITION CALCULATIONS (if necessary)

$$P_w = (P_t^2 + (F_c Q)^2 (1 - e^{-S}))^{1/2}$$

$$P_w = (54.382 + 5.518 \times 0.165)^{1/2} = 235 \text{ psia}$$

DELIVERABILITY CALCULATIONS

$$P_w = 235 \quad P_c = 523.2 \quad P_w + P_c = 0.1491$$

$$1 - \frac{P_w}{P_c} = \frac{0.5509}{0.1508} \quad 1 + \frac{P_w}{P_c} = \frac{1.1491}{0.1508} \quad \left(1 - \frac{P_w}{P_c}\right) \left(1 + \frac{P_w}{P_c}\right) = M = 0.7985$$

$$0.36 + M = 0.1508 \quad \text{Log } -0.31602 \quad x(n) = 0.771$$

SUMMARY

P_c = 523.2 psia

Q = 236.49 MCF/Da.

P_w = 235.0 psia

P_d = 418.56 psia

D = 127.95 MCF/Da.

= -0.266781 +

COMPANY The Atlantic Refining Company
 ADDRESS Box 1033, Denver City, Texas
 AGENT and TITLE W. A. Carr, Dist. Superintendent
 WITNESSED _____
 COMPANY _____

Log Q = 2.373830
 Log D = 2.107049
 Antilog = 127.95 = D

REMARKS