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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

NOBOS OFFICE, P.O.C.

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmit Formation WADCO 13 Yates County Lea

Initial Annual Special X Date of Test 4-29-57

Company Ralph Lowe Lease Coates "A" Well No. 2

Unit E Sec. 31 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 7 Wt. 20 I.D. 6.456 Set at 2728 Perf. Open Hole To

Tubing None Wt. I.D. Set at Perf. To

Gas Pay: From 2850 To 2900 L 2728 xG 0.670 -GL 1827 Bar.Press. 13.2

Producing Thru: Casing X Tubing Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12-24-46 Packer None Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (1155) (1155) Type Taps None

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (1155) Size	(Choke) (1155) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI								
1.	2.000	1/16	224		60	269-286-287	224	24-48-72
2.	2.000	3/32	148		63		148	3
3.	2.000	1/8	67		60		67	3
4.	2.000	3/16	24		60		24	3
5.	2.000	3/16	5		65		5	24

FLOW CALCULATIONS

No.	Coefficient Prover (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	.0827		237.2	1.0000	0.9463	1.024	19
2.	.1820		161.2	0.9971	0.9463	1.015	28
3.	.3418		80.2	1.0000	0.9463	1.000	26
4.	.7851		37.2	1.0000	0.9463	1.000	28
5.	.7702*		18.2	0.9463	0.9463	1.000	13

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl. Specific Gravity Separator Gas 0.670

Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid

P_c 0.4682 (1-e^{-S}) 0.118 P_c 300.2 P_c 90.1

No.	P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-S})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	237.2	56.3				56.3	33.9	237.2	1.000
2.	161.2	26.0				26.0	64.2	161.2	1.000
3.	80.2	6.4	Neg.	Neg.	Neg.	6.4	83.8	80.2	1.000
4.	37.2	1.4				1.4	88.8	37.2	1.000
5.	17.2	0.3				0.3	89.9	17.2	1.000

Absolute Potential: 12.8 MCFPD; n 1.0000

COMPANY Ralph Lowe

ADDRESS P. O. Box 832, Midland, Texas

AGENT and TITLE Archie P. Farr, Petroleum Engineer

WITNESSED

COMPANY

REMARKS

* Non-critical coefficient calculated.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those in which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressibility factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .