

ILLEGIBLE

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55
APR 10 1956

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Formation County

Initial Annual Special Date of Test

Company Lease Well No.

Unit Sec. Twp. Rge. Purchaser

Casing I.D. Set at Perf. To

Tubing I.D. Set at Perf. To

Gas Pay: From To L xG -GL Bar.Press.

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

Date of Completion: Packer Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	
SI									
1.	4	1.000	561	19.04	59			561	
2.	4	1.000	555	27.04	62			555	
3.	4	1.000	550	37.21	104			550	
4.	4	1.000	547	44.89	110			545	
5.									

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	6.395	135.42		1.0000	0.9996	1.0000	655
2.	6.335	134.02		0.9998	0.9996	1.0000	740
3.	6.255	131.71		0.9992	0.9996	1.0000	840
4.	6.135	128.55		0.9981	0.9996	1.0000	915
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
 Gravity of Liquid Hydrocarbons deg.
 $F_c = \frac{0.0008}{(1-e^{-S})} = 0.137$
 $P_c = \frac{0.0008}{(1-e^{-S})} = 0.0008$

No.	P_w Pt (psia)	P_c^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.	561.2	400.8	63	4	0.5	314.8	400.8 - 314.8	561.2	314.8
2.	555.2	390.5	77	6	0.7	308.7	390.5 - 308.7	555.2	308.7
3.	550.2	340.5	91	8	1.0	302.7	340.5 - 302.7	550.2	302.7
4.	547.2	330.3	105	11	1.3	296.7	330.3 - 296.7	547.2	296.7
5.									

Absolute Potential: MCFPD; n

COMPANY
 ADDRESS
 AGENT and TITLE
 WITNESSED
 COMPANY

REMARKS

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on 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 .