

NEW MEXICO OIL CONSERVATION COMMISSION

1957 FEB 11 AM 9:43

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Sumont Formation Queen County Lea
Initial Annual x Special Date of Test 6-13-56
Company Me-TeX Lease allacre tate Well No. 2
Unit 1 Sec. 3 Twp. 21 Rge. 36 Purchaser Southern Union Gas Company
Casing 5 1/2" Wt. 17# I.D. Set at 3685 Perf. To
Tubing None Wt. I.D. Set at Perf. To
Gas Pay: From 3685 To 3331 L 3685 xG 0.668 -GL 2061.6 Bar.Press. 13.2
Producing Thru: Casing x Tubing Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Packer Reservoir Temp.

OBSERVED DATA

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

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	Temp. °F.	
SI								289		72 hr.
1.	1"	2.000	510	2"	65			290		24 hr.
2.	1"	2.000	520	13"	58			284		24 hr.
3.	1"	2.000	515	14"	60			293		24 hr.
4.	1"	2.000	530	83"	63			283		24 hr.
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure (13.2) psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	25.58	32.3424	523.2	0.9952	0.9477	1.055	123.2
2.	25.58	33.2661	533.2	1.0039	0.9477	1.061	2150.0
3.	25.58	32.4396	528.2	1.0000	0.9477	1.059	3013.5
4.	25.58	32.3177	543.2	0.971	0.9477	1.050	5422.8
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons one deg.
F_c measured (1-e^{-s})
Specific Gravity Separator Gas .668
Specific Gravity Flowing Fluid
P_c 1002.2 P_c² 1004.4

No.	P _w 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.	253.2					6411.6	95.8		25.1
2.	277.2					7685.0	197.4		29.5
3.	286.2					8180.0	354.4		30.4
4.	266.2					7085.1	417.3		26.5
5.									

Absolute Potential: 18000 / 10,400 MCFPD; n 1.30 6.0

COMPANY Me-TeX Supply Co.
ADDRESS Box 207, M. L. L. Co. 22 N.
AGENT and TITLE Dr. J. L. L. Co. 22 N.
WITNESSED
COMPANY Me-TeX Supply Co.

REMARKS

RECEIVED
210 & 515

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 .