

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Well No. 67 Location Lea County Lea Formation Queen Elevation 5000
Initial Annual Special X Date of Test 1-27-61
Company Continental Oil Company Lease SE 1/4 E 1/4 Well No. 67
Unit K Sec. 24 Twp. 20S Rge. 37E Purchaser E.P.M.G.
Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 3900 Perf. 3608 To 3736
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3610 Perf. - To -
Gas Pay: From 3608 To 3736 L 3608 xG .671 -GL 2421 Bar.Press. 13.2
Producing Thru: Casing - Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5-31-57 Packer None Reservoir Temp. 90°

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						519		519		72
1.	4	.750	203	27.04	42	430		504		24
2.	4	.750	212	39.69	52	435		495		24
3.	4	.750	291	44.89	52	439		489		24
4.	4	.750	270	79.21	53	433		472		24
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.	3.435	76.46	216.2	1.0178	.9427	1.024	258.0
2.	3.435	91.54	225.2	1.0078	.9427	1.025	336.9
3.	3.435	116.86	304.2	1.0078	.9427	1.033	393.9
4.	3.435	149.77	283.2	1.0068	.9427	1.030	502.9
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
P_c 532.2 (1-e^{-s}) 0.153
Specific Gravity Separator Gas -
Specific Gravity Flowing Fluid -
P_c 532.2 P_c 283.2

No.	P _w 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.	517.2					267.5	15.7	517.2	.97
2.	508.2					258.3	24.9	508.2	.95
3.	502.2					252.2	31.0	502.2	.94
4.	485.2					235.4	47.8	485.2	.91
5.									

Absolute Potential: 1,500 MCFPD; n .603COMPANY Continental Oil Company
ADDRESS Box 427, Hobbs, New MexicoAGENT and TITLE M. D. Howard, Test EngineerWITNESSED E. B. MurrayCOMPANY El Paso Natural Gas Company

REMARKS

Winefficient drawdown due to tendency to freeze off at chokes.

INSTRUCTIONS

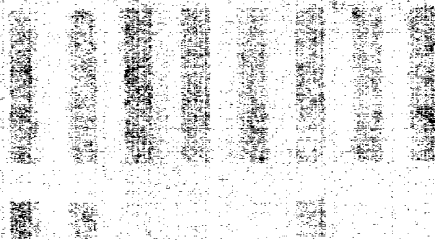
This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

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 .



1951 10 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100