

NEW MEXICO OIL CONSERVATION COMMISSION

HOODS OFFICE 000

HOODS OFFICE 000 Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Yates County Lea
Initial Annual Special X Date of Test 11-2 to 11-16-56
Company Continental Oil Company Lease Meyer A-18 Well No. 4
Unit G Sec. 18 Twp. 21S Rge. 36E Purchaser E. P. M. G.
Casing 5 1/2 Wt. 17 I.D. 4.892 Set at 3801 Perf. 3057 To 3192
Tubing None Wt. I.D. Set at Perf. To
Gas Pay: From 3057 To 3192 L 3057 xG .665 -GL 2033 Bar.Press. 13.2
Producing Thru: Casing X Tubing Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 3-20-56 Packer None Reservoir Temp. 90°

OBSERVED DATA

Tested Through (XXXX) (XXXX) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(XXXX) (Line) Size	(XXXX) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								930		72
1.	4	1.000	590	7.29	100			895		24
2.	4	1.000	601	16.00	73			858		24
3.	4	1.000	621	26.01	61			819		24
4.	4	1.000	633	39.69	61			742 *		24
5.										

FLOW CALCULATIONS

No.	Coefficient (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.	6.135	66.30	603.2	.9636	.9498	1.048	390
2.	6.135	99.12	614.2	.9877	.9498	1.061	606
3.	6.135	128.41	634.2	.9990	.9498	1.069	799
4.	6.135	160.13	646.2	.9990	.9498	1.069	996
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c .9583 (1-e^{-s}) .131
Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 943.2 P_c 889.6

No.	XX 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.	908.2	824.8	.37	.01	.001	824.8	64.8	908.2	.96
2.	871.2	758.9	.53	.03	.004	758.9	130.7	871.2	.92
3.	832.2	692.6	.77	.06	.008	692.6	197.0	832.2	.88
4.	755.2	570.3	.95	.09	.012	570.3	319.3	755.2	.80
5.									*

Absolute Potential: 2,100 MCFPD; n .64

COMPANY Continental Oil Company
ADDRESS Box 427, Hobbs, New Mexico
AGENT and TITLE W. D. Howard, Gas Tester
WITNESSED
COMPANY

REMARKS

* Insufficient drawdown due to choke restriction.

NMOCC-3 EHW HLJ RLA FTE EVB WDH
Attach.

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} = Supercompressability 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 .