NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea

Initial X Annual Special Date of Test 9/6 - 13/57

Company Continental Oil Company Lease Meyer B-9 Well No. 2

Unit F Sec. 9 Twp. 21S Rge. 36E Purchaser E. P. N. G.

Casing 5 1/2 Wt. 17 I.D. Set at 3673 Perf. 3385 To 3570

Tubing 2 Wt. 4.7 I.D. Set at 3868 Perf. 3745 To 3784

Gas Pay: From 3385 To 3570 L 3385 xG .665 -GL 2251 Bar.Press. 13.2

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

Date of Completion: 11-4-55 Packer 3582 Reservoir Temp. 90°

OBSERVED DATA

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

No.	Flow Data ~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								958		72
1.	4	1.250	553	6.25	90			890		24
2.	4	1.250	528	21.62	80			764		24
3.	4	1.250	508	30.25	77			695		24
4.	4	1.250	545	32.21	78			611		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.	9.643	59.48		.9723	.9498	1.051	557
2.	9.643	108.15		.9813	"	1.050	1,021
3.	9.643	125.54		.9840	"	1.049	1,187
4.	9.643	144.09		.9831	"	1.053	1,366
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____

Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____

F_c 1.812 $(1-e^{-s})$ 0.143 P_c 971.2 P_c^2 943.2

No.	~~P_w~~ P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	903.2	815.8	1.01	1.02	.19	816.0	127.2	903.3	.93
2.	777.2	604.0	1.85	3.42	.49	604.5	338.7	777.5	.80
3.	708.2	501.5	2.15	4.62	.66	502.2	441.0	708.7	.73
4.	624.2	389.6	2.48	6.15	.83	390.5	552.7	624.9	.64
5.									

Absolute Potential: 1,925 MCFPD; n .63 | 17

COMPANY Continental Oil Company

ADDRESS Box 427, Hobbs, New Mexico

AGENT and TITLE W. D. Howard, Gas Tester

WITNESSED _____

COMPANY _____

REMARKS

NMOCC(3) EMW HLJ RLA FTS BVB 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.