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 ____ Annual ____ Special X Date of Test 1/7 - 11/57

Company Continental Oil Company Lease SEMU Eumont Well No. 66

Unit L Sec. 14 Twp. 20S Rge. 37E Purchaser E. P. N. G.

Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 3799 Perf. 3548 To 3707

Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3463 Perf. ____ To ____

Gas Pay: From 3548 To 3707 L 3463 xG .670 -GL 2320 Bar.Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 6-20-56 Packer None Reservoir Temp. 90

OBSERVED DATA

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

No.	~~XXXXX~~ (Prover) (Line) Size	~~XXXXX~~ (Choke) (Orifice) Size	Flow Data 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	4	1.250	648	6.25	85	1030		1030		72
1.	4	1.250	603	20.25	79	997		1002		24
2.	4	1.250	612	47.61	75	971		979		24
3.	4	1.250	619	64.00	76	920		944		24
4.						872 *		911 *		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
	9.643	64.28		.9768	.9469	1.061	608
1.	9.643	111.69		.9822	"	1.061	1062
2.	9.643	172.50		.9859	"	1.064	1651
3.	9.643	201.12		.9850	"	1.064	1923
4.							
5.							

PRESSURE CALCULATIONS

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

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

F_c Pw Measured $(1-e^{-s})$ ____ P_c 1043.2 P_c^2 1088.3

No.	P_w XX 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	$\frac{P_w}{P_c}$
	1015.2					1030.6	57.7		.97 *
1.	992.2					984.5	103.8		.95
2.	957.2					916.2	172.1		.92
3.	924.2					854.1	234.2		.89
4.									
5.									

Absolute Potential: 8,600 MCFPD; n .90

COMPANY Continental Oil Company

ADDRESS Box 427, Hobbs, New Mexico

AGENT and TITLE W. D. Howard, Gas Tester

WITNESSED ____

COMPANY ____

REMARKS

* Insufficient drawdown - choke restriction.

NMOCC-3 EWW 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.