NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool [illegible] Formation Queen County Lea

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

Company Continental Oil Company Lease Meyer B-17 Well No. 1

Unit I Sec. 17 Twp. 21S Rge. 36E Purchaser E. P. N. G.

Casing 5 1/2 Wt. 17 I.D. ____ Set at 3766 Perf. 3650 To 3682

Tubing 2 1/2 Wt. 6.5 I.D. ____ Set at 3903 Perf. ____ To ____

Gas Pay: From 3650 To 3682 L 3150 xG .665 =GL 2095 Bar.Press. 13.2

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

Date of Completion: 9-6-56 Packer 3717 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								808		72
1.	4	1.250	555	23.04	60			783		24
2.	4	1.250	527	38.44	62			728		24
3.	4	1.250	508	64.00	59			693		24
4.	4	1.250	545	75.69	64			685		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.	9.642	114.40		1.0000	.9408	1.062	1113
2.	9.642	144.08		.9981	"	1.059	1394
3.	9.642	182.60		1.0010	"	1.057	1769
4.	9.642	205.52		.9962	"	1.059	1986
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 2.507 $(1-e^{-s})$ 0.134

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1011.3 P_c^2 1022.5

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	756.2	571.9	2.79	7.78	1.04	634.9	387.6	796.8	.79
2.	742.2	550.9	3.49	12.18	1.63	552.5	470.0	743.3	.74
3.	706.2	498.7	4.61	19.62	2.63	502.1	523.2	708.0	.70
4.	698.2	487.5	5.15	26.49	3.32	490.8	532.7	700.5	.69
5.									

Absolute Potential: [illegible] MCFPD; n [illegible]
COMPANY Continental Oil Company
ADDRESS [illegible] Hobbs, New Mexico
AGENT and TITLE W. A. Howard, Gas Tester
WITNESSED ____
COMPANY ____

REMARKS

[illegible] Slope was greater than 1.000 & slope of 1.000 was drawn thru highest data point.

[illegible] NEW WELL TEST FOR GAS WELL

[illegible]

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.