NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

ELVIS A. UTZ GAS ENGINEER

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1956 OCT 8 PM 2 29

Pool Eumont Formation Yates & Seven Rivers County Lea

Initial ____ Annual X Special ____ Date of Test 6-29-56

Company Continental Oil Company Lease Meyer B-4 Well No. 6

Unit H Sec. 4 Twp. 21 Rge. 36 Purchaser El Paso Natural Gas Company

Casing 7 5/8" Wt. 26.40 I.D. ____ Set at 2582 Perf. ____ To ____
5 1/2" 17.0 3782

Tubing 7 1/2" Wt. 6.5 I.D. ____ Set at 3840 Perf. ____ To ____

Gas Pay: From Approx To 3500 L 2582 xG .665 -GL 1717 Bar.Press. ____

Producing Thru: Casing 7 5/8 Tubing ____ Type Well Bradenhead
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 4-16-36 Packer ____ 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								973		72
1.	4	1.250	580	16.8	112			896		24
2.	4	1.250	582	31.9	76			840		24
3.	4	1.250	582	51.8	76			288		24
4.	4	1.250	584	73.1	78			742		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	99.7	593.2	.9534	.9498	1.045	910
2.	9.643	137.8	595.2	.9850	.9498	1.059	1312
3.	9.643	175.8	595.2	.9850	.9498	1.059	1675
4.	9.643	208.5	597.2	.9831	.9498	1.059	1983
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.

Gravity of Liquid Hydrocarbons - deg.

F_c .3843 $(1-e^{-s})$ 0.112

Specific Gravity Separator Gas .665

Specific Gravity Flowing Fluid -

P_c 986.2 P_c^2 973. (thousands)

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.	909.2	826	.350	.1225	.0137	826.0137	147	910	.921
2.	853.2	728	.505	.255	.0286	728.0286	245	853	.873
3.	801.2	642	.645	.416	.0466	642.0466	331	802	.813
4.	755.2	511	.763	.583	.0654	571.0654	402	756	.767
5.									

Absolute Potential: 4,200 MCFPD; n .85

COMPANY Continental Oil Company

ADDRESS Box 427-Hobbs, N.M.

AGENT and TITLE W. D. Howard, Gas Tester

WITNESSED ____

COMPANY ____

REMARKS

Well would not draw down 30% producing into line.

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.