DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

1950 FEB 10 AM 10 44

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Jalmat** Formation **Yates** County **Lea**

Initial ____ Annual **X** Special ____ Date of Test **4-21-58**

Company **Continental Oil Company** Lease **Stevens A-34** Well No. **1**

Unit **E** Sec. **34** Twp. **23** Rge. **36** Purchaser **El Paso Nat. Gas Company**

Casing **7"** Wt. **20#** I.D. **6.456** Set at **3309** Perf. ____ To ____

Tubing **2"** Wt. **4.7** I.D. **1.995** Set at **3268** Perf. ____ To ____

Gas Pay: From **3235** To **3260** L **3268** xG **.745** -GL **2435** Bar.Press. **13.2**

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

Date of Completion: **8-15-37** Packer **None** Reservoir Temp. **90°**

OBSERVED DATA

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

No.	Flow Data: ~~(Prover)~~ (Line) Size	Flow Data: ~~(Choke)~~ (Orifice) Size	Flow Data: Press. psig	Flow Data: Diff. h_w	Flow Data: Temp. °F.	Tubing Data: Press. psig	Tubing Data: Temp. °F.	Casing Data: Press. psig	Casing Data: Temp. °F.	Duration of Flow Hr.
SI						905				72
1.	4"	.500	277	42.90	44	284				24
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (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.	1.525	111.54		1.0157	.8974	1.043	162
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **Dry** cf/bbl. Specific Gravity Separator Gas **.745**

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

P_c **9.936** $(1-e^{-s})$ **.154** P_c **918.2** P_c^2 **843.0**

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.	297.2	88.3	1.61	2.59	.398	88.6	754.4	297.7	32.42
2.									
3.									
4.									
5.									

Absolute Potential: **178** MCFPD; n **.771**

COMPANY **Continental Oil Company**

ADDRESS **Box 68, Eunice, New Mexico**

AGENT and TITLE J. R. Parker

WITNESSED ____

COMPANY ____

REMARKS

Unable to obtain test data during the Multi-point test schedule. This data obtained from deliverability test of 3-21-58 and the average Jalmat slope of .771 drawn thru one point.

NMOCC-3 EWW HLJ RLA File-2

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.