NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Lumont Formation Tansill-Seven Rivers-Queen County Lea

Initial ____ Annual X Special ____ Date of Test July 23, 1956

Company Warren Petroleum Corp.-Oil Div. Lease Evans State Well No. 3

Unit P Sec. 3 Twp. 21-S Rge. 36-E Purchaser Permain Basin Pipeline Co.

Casing 5½" Wt. 15.5# I.D. 4.950" Set at 3566' Perf. 2666' To 3560'

Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 3560' Perf. ____ To ____

Gas Pay: From 2666' To 3560' L 2560 xG 0.670 -GL 2385 Bar.Press. 13.2

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

Date of Completion: October 5, 1953 Packer None Reservoir Temp. ____

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						904.0		907.0		72 3/4 Hrs.
1.	4"	1.50	475.2	3.2	73	814.9	75	824.5	75	24 1/4
2.	4"	1.50	473.1	15.0	68	762.8	70	778.7	75	24
3.	4"	1.50	479.9	24.3	74	696.6	73	722.6	75	24
4.	4"	1.50	490.0	35.0	73	599.2	72	646.3	75	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.	15.26	63.29	488.4	0.9877	0.9463	1.044	948
2.	- -	85.41	486.3	0.9924	0.9463	1.046	1280
3.	- -	109.46	493.1	0.9868	0.9463	1.044	1628
4.	- -	132.7	503.2	0.9877	0.9463	1.044	1976
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 920.2 P_c^2 846.8

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.	837.7	685.7				701.7	145.1	837.7	.91
2.	791.9	602.2				518.3	219.7	291.9	.86
3.	735.8	502.4				541.4	305.4	235.8	.80
4.	659.5	375.0				434.9	411.9	659.5	.72
5.									

Absolute Potential: 3499 MCFPD; n 0.75
COMPANY Warren Petroleum Corp.-Oil Div.
ADDRESS Drawer H, Seminole, Texas
AGENT and TITLE [signature] Ass't Regional Manager
WITNESSED W.J. Brown
COMPANY Permain Basin Pipeline Company

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.