NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool East, Weir Tubb Formation Tubb County Lea

Initial X Annual _____ Special _____ Date of Test December 11, 1964

Company TEXACO Inc. Lease C. H. Weir "A" Well No. 11

Unit G Sec. 12 Twp. 20S Rge. 37E Purchaser None

Casing 2-7/8 Wt. 6.5 I.D. 2.441 Set at 6886 Perf. 6535 To 6652

Tubing None Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____

Gas Pay: From 6535 To 6652 L 6535 xG .683 -GL 4463 Bar.Press. 13.2

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

Date of Completion: 11-8-64 Packer _____ 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								2110		72 hrs.
1.	3.068	2.000	72	18	88			2068	66	1
2.	"	"	72	33	76			2019	67	1
3.	"	"	93	60	60			1909	67	1
4.	"	"	117	98	40			1729	67	1
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.	27.52	39.17	85.2	.9741	.9535	-	1001
2.	27.52	53.03	85.2	.9850	.9535	-	1371
3.	27.52	79.82	106.2	1.000	.9535	-	2094
4.	27.52	113.0	130.2	1.0198	.9535	1.013	3063
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 113,600 cf/bbl.
Gravity of Liquid Hydrocarbons 57.0 deg.
F_c 5.866 $(1-e^{-s})$ 0.264

Specific Gravity Separator Gas .660
Specific Gravity Flowing Fluid .683
P_c 2123.2 P_c^2 4508.0

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.	2081.2	4330	5.872	34.48	9.103	4339	169	2083	.9810
2.	2032.2	4129	8.042	64.67	17.07	4146	362	2036	.9589
3.	1922.2	3694	12.28	150.8	29.81	3734	774	1932	.9099
4.	1742.2	3034	17.97	322.9	85.24	3119	1389	1766	.8318
5.									

Absolute Potential: 4100 MCFPD; n .640

COMPANY TEXACO Inc.
ADDRESS Box 1270, Midland, Texas
AGENT and TITLE F. W. Moore, District Supervisor (Gas)
WITNESSED _____
COMPANY _____

REMARKS

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.