NEW MEXICO OIL CONSERVATION COMMISS

Form C-122
Revised 12-1-55

HOBBS OFFICE
1960 SEP 15 PM 2 58

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Undesignated-Atoka** Formation **Atoka** County **Lea**

Initial **x** Annual _____ Special _____ Date of Test **May 2, 1960**

Company **TEXACO Inc.** Lease **St. of N. M. "CH"** Well No. **1UT**

Unit **H** Sec. **36** Twp. **20-S** Rge. **32-E** Purchaser **Southern Union Gas Company**

Casing **7** Wt. **29** I.D. _____ Set at **11,422** Perf. **12,640** To **12,654**

Tubing **2-3/8** Wt. **4.7** I.D. **1.995** Set at **11,276** Perf. _____ To _____

Gas Pay: From **12,640** To **12,654** L **11,276** xG **.809.5** -GL **9128** Bar.Press. **13.2**

Producing Thru: Casing _____ Tubing **x** Type Well **Gas-Gas Dual**
11,276 Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: **4-11-60** Packer **12,999** 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						6189				72
1.	2	1.250	456	4.1	92	5492	74			4
2.	2	1.250	505	18	88	4425	72			4
3.	2	1.250	565	43	90	2905	69			4
4.	2	1.250	775	54	100	1840	69			4
5.	2	1.250	770	32	108	2059	69			28

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.	10.48	43.86	469.2	.9706	.9571	1.038	443.2
2.	10.48	96.58	518.2	.9741	.9571	1.045	986.1
3.	10.48	157.68	578.2	.9723	.9571	1.051	1616.2
4.	10.48	206.31	788.2	.9636	.9571	1.059	2111.7
5.	10.48	156.31	783.2	.9568	.9571	1.059	1608.9

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **17,950** cf/bbl.
Gravity of Liquid Hydrocarbons **51.0** deg.
F_c **9.936** $(1-e^{-s})$ **.466**

Specific Gravity Separator Gas **.655**
Specific Gravity Flowing Fluid **.802**
P_c **6202.2** P_c^2 **38467**

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.	5505.2	30305	4.401	19.37	8.949	30314	8153	5505.8	.8878
2.	4438.2	19696	9.798	96.00	44.35	19740	18725	4443.0	.7164
3.	2918.2	8515	16.06	257.9	119.1	8634	29833	2938.4	.4737
4.	1853.2	3434	20.96	439.3	202.9	3636	34831	1907.9	.3075
5.	2072.2	4293	15.98	255.4	118.0	4411	34056	2100.2	.3386

Absolute Potential: **1850** MCFPD; n **.987**

COMPANY **TEXACO Inc.**
ADDRESS **P. O. Box 1270, Midland, Texas**
AGENT and TITLE **F. W. Moore, District Gas Foreman** F. W. Moore
WITNESSED _____
COMPANY _____

REMARKS

CORRECTED COPY

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.