NEW MEXICO OIL CONSERVATION COMMISSION

MAY 16 1966

Form C-122

Revised 12-1-55

C. C. MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

ARTESIA, OFFICE

7 21

Pool **Wildcat**   Formation **Pennsylvanian**   County **Eddy**

Initial **X**   Annual_____   Special_____   Date of Test **11/28/58**

Company **Tennessee Gas Transmission Co.** Lease **State John M. Kelly "B"** Well No. **1**

Unit **N** Sec. **27** Twp. **24-S** Rge. **27-E** Purchaser **None**

Casing **7 7/8** Wt. **47.0** I.D. **3 3/8** Set at **10,652'** Perf. **None** To_____

Tubing **2 7/8** Wt. **4.7** I.D. **2 3/8** Set at **11,550** Perf._____ To_____

Gas Pay: From **10,652** To **12,655** L **11,550'** xG **.635** GL **7334** Bar.Press. **13.2**

Producing Thru: Casing_____ Tubing **X** Type Well **Single**

Date of Completion: **11/4/58** Packer **10,550** Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. **192° F**

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)   Type Taps_____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						4400	60			78
1.	2"	8/64"	590		60	590	60			8
2.	2"	11/64"	315		60	315	60			14
3.										
4.										
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.	.3261		603.2	1.000	.9721	1.059	202.5
2.	.6224		328.2	1.000	.9721	1.029	204.3
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____--____ cf/bbl.   Specific Gravity Separator Gas **.635**

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

F_c **9.936** $(1-e^{-s})$ **.396** P_c **4413** P_c^2 **19,475**

No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2$ $(1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	603.2	364	2012	4048	1603	1967	17,908	1402	.316
2.	328.2	108	2030	4121	1632	1740	17,733	1319	.297
3.					Point 1	3656	19,109.4	1642	.137
4.					Point 2	1676	19,765.4	3311	.075
5.									

Absolute Potential: **2.8 2,18** MCFPD; n **0.72**

COMPANY **Tennessee Gas Transmission Company**

ADDRESS **Box 307, Hobbs, New Mexico**

AGENT and TITLE _____ **J. F. Carnes, District Engineer**

WITNESSED _____

COMPANY _____

REMARKS

Shut-in gas well - no pipe line connection.

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.