NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Undesignated** Formation **San Andres** County **Lea**

Initial **X** Annual _____ Special _____ Date of Test **10/19/64**

Company **TEXAS PACIFIC OIL COMPANY** Lease **T. P. State** Well No. **1**

Unit **A** Sec. **6** Twp. **10-S** Rge. **37-E** Purchaser **Vented**

Casing **4 1/2"** Wt. **9.5#** I.D. _____ Set at **4975** Perf. **4870** To **4919**

Tubing **2 3/8"** Wt. **4.7#** I.D. _____ Set at **5084'** Perf. **4905** To **4920**

Gas Pay: From **4870** To **4919** L **4894** xG **0.60** -GL **2936** Bar.Press. **13.2**

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

Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) ~~(Choke) (Orifice)~~ Type Taps _____

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. ~~XXXX~~	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI	2"					1378	48	1373		110
1.	2"	3/4"	56"			1253	50	1256		2.0
2.	2"	1 1/4"	13"			1101	56	1016		2.0
3.	2"	1 1/4"	25"			783	62	819		1.5
4.	2"	1 1/4"	44"			310	69	513		2.0
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.			57"Hg				497
2.			13"				622
3.			25"				903
4.			43"				1289
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **None** cf/bbl. Specific Gravity Separator Gas **0.60**

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

F_c **9.936** $(1-e^{-s})$ **0.183** P_c **1378** P_c^2 **1899 x 103**

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2 x 103	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	1269					1610	289		0.9208
2.	1029					1059	840		0.7467
3.	832					692	1207		0.6038
4.	526					277	1622		0.3817
5.									

Absolute Potential: **1500** MCFPD; n _____

COMPANY **TEXAS PACIFIC OIL COMPANY**

ADDRESS **Box 1069, Hobbs, New Mexico**

AGENT and TITLE **John Hendrix - District Engineer** John H. Hendrix

WITNESSED _____

COMPANY _____

REMARKS

Another test will be run on this well when a pipeline connection is made.

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.