

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blinebry Formation Blinebry County Lea
Initial X Annual _____ Special X Date of Test Oct. 5-6, 1962
Company TEXACO Inc. Lease V. M. Henderson Well No. 2
Unit A Sec. 30 Twp. 21 S Rge. 37 E Purchaser Northern Natural Gas Co.
Casing 5-1/2 Wt. 17.00 I.D. _____ Set at 6050 Perf. 5528 To 5992
Tubing 2-7/8 Wt. 6.50 I.D. 2.441 Set at 5458 Perf. _____ To _____
Gas Pay: From 5528 To 5992 L 5458 xG .781 -GL 4263 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-22-59 Packer 5435 Reservoir Temp. _____

OBSERVED DATA

Tested Through XXXXXX (XXXXXX) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1078	76			72
1.	3.000	1.500	45	29	81	994	74			3
2.	3.000	1.500	49	35	88	860	74			3
3.	3.000	1.500	82	88	64	770	75			3
4.	3.000	1.500	112	98	58	702	75			3
5.	3.000	1.500	100	72	64	684	71			21

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.	14.36	41.08	58.2	.9804	.9265		535.7
2.	14.36	46.66	62.2	.9741	.9265		604.2
3.	14.36	91.53	95.2	.9962	.9265		1213
4.	14.36	110.7	125.2	1.0019	.9265		1474
5.	14.36	90.28	113.2	.9962	.9265		1196

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 35,800 scf/bbl.
Gravity of Liquid Hydrocarbons 39.2 @ 60°F deg.
P_c 5.866 (1-e^{-s}) 0.254

Specific Gravity Separator Gas .699
Specific Gravity Flowing Fluid .781
P_c 109.2 P_c 1191

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	P _w P _c
1.	1007.2	1014	3.142	9.872	2.507	1016	175	1008	.924
2.	873.2	762.5	3.544	12.56	3.190	765.7	425	875	.802
3.	783.2	613.4	7.115	50.62	12.86	626.3	565	791	.725
4.	715.2	511.5	8.646	74.75	18.97	530.5	661	728	.667
5.	697.2	486.1	7.016	49.22	12.50	498.6	692	706	.647

Absolute Potential: 1800MCFPD; n .713COMPANY TEXACO Inc.ADDRESS Box 1270, Midland, TexasAGENT and TITLE F. W. Moore, District Supervisor (Gas)

WITNESSED _____

COMPANY _____

REMARKS _____

See Reverse Side

No.	Gas		water	GOR	
1	66.9	0	0	-	No fluid produced until last 1/2 of 2nd point causing volume to decrease
2	75.5	2.4	.3	31,458	
3	151.6	9.0	.6	16,844	
4	184.2	10.1	.8	18,238	
5	<u>1046.4</u>	<u>21.1</u>	<u>1.9</u>	<u>49,592</u>	
Total	1524.6	42.6	3.6	35,800	

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} = Supercompressibility 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 .

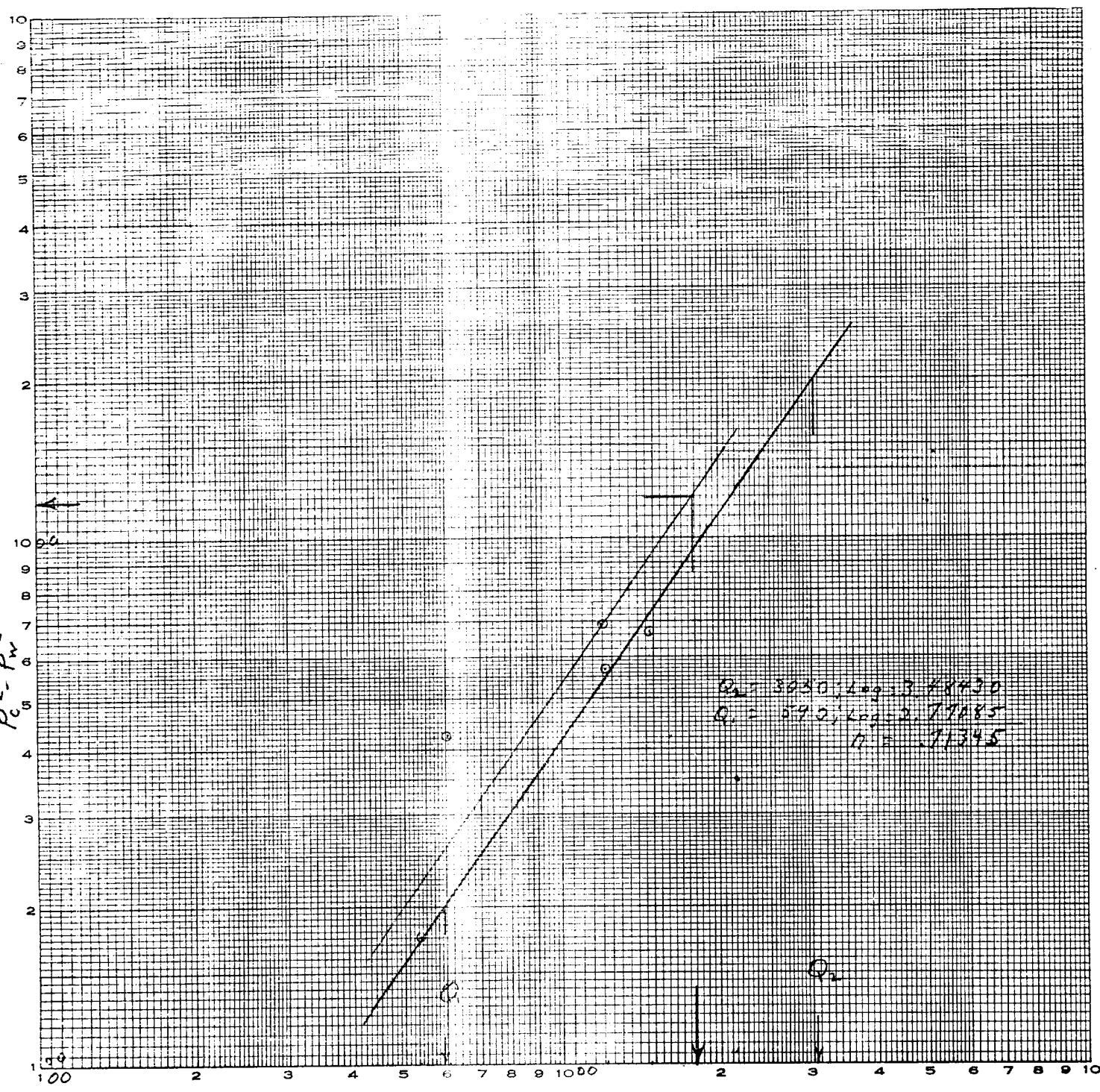
CC 2 10 11 100784

100784

TIVOL INC.
 M. Anderson
 A 30-215-37E
 Lee County,
 October 5-6, 1962

EUGENE DIETZGEN CO.
 MADE IN U.S.A.

NO. 340-L22 DIETZGEN GRAPH PAPER
 LOGARITHMIC - 2 CYCLES X 2 CYCLES
 $P_c^2 - P_w^2$



Q - MCFD - 15.025 PSIA

Absolute Potential 1800 MCFD