

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Glorieta County Lea
Initial X Annual 1962 Special 2 Date of Test 7-23-24-1962
Company TEXACO Inc. Lease G. L. Erwin "B" NCT-2 Well No. 2
Unit J Sec. 35 Twp. 24 Rge. 37 Purchaser None
Casing 2 3/8 Wt. 4.6 I.D. 1.995 Set at 6196 Perf. 4798 To 4806
Tubing Wt. I.D. Set at Perf. To
Gas Pay: From 4798 To 4806 L 4798 xG .690 -GL 3311 Bar.Press. 13.2
Producing Thru: Casing X Tubing Type Well Oil - Oil - Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4-6-62 Packer Reservoir Temp.

OBSERVED DATA

Tested Through (~~2.000~~ ~~2.000~~) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(2.000) (Line) Size	(2.000) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								1642		72
1.	3.000	1.500	45	43	75			1512		3
2.	"	2.000	55	22	77			1432		3
3.	"	2.000	54	44	78			1278		3
4.	"	2.000	53	72	76			1088		3
5.	"	2.000	48	18	75			1423		15

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	50.03	58.2	.9859	.9484		671.9
2.	27.52	38.73	68.2	.9840	"		994.6
3.	27.52	54.38	67.2	.9831	"		1395
4.	27.52	69.04	66.2	.9850	"		1775
5.	27.52	33.20	61.2	.9859	"		854.2

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 117.320 cf/bbl.
Gravity of Liquid Hydrocarbons 57.0 deg.
P_c 9.93 (1-e^{-s}) .204

Specific Gravity Separator Gas 667
Specific Gravity Flowing Fluid 690
P_c 1655.2 P_c 2740

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.	1525.2	2326	6.676	44.57	9.092	2335	405	1528	.923
2.	1445.2	2089	9.882	97.65	19.92	2109	631	1452	.879
3.	1291.2	1667	13.86	192.1	39.19	1706	1034	1306	.789
4.	1101.2	1213	17.64	311.2	63.48	1276	1464	1130	.683
5.	1436.2	2063	8.487	72.03	14.69	2078	662	1441	.870

Absolute Potential: 2520 2310 MCFPD; n .759 .709

COMPANY TEXACO Inc.

ADDRESS Box 1270 Midland, Texas

AGENT and TITLE F. W. Moore District Gas Foreman F. W. Moore

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

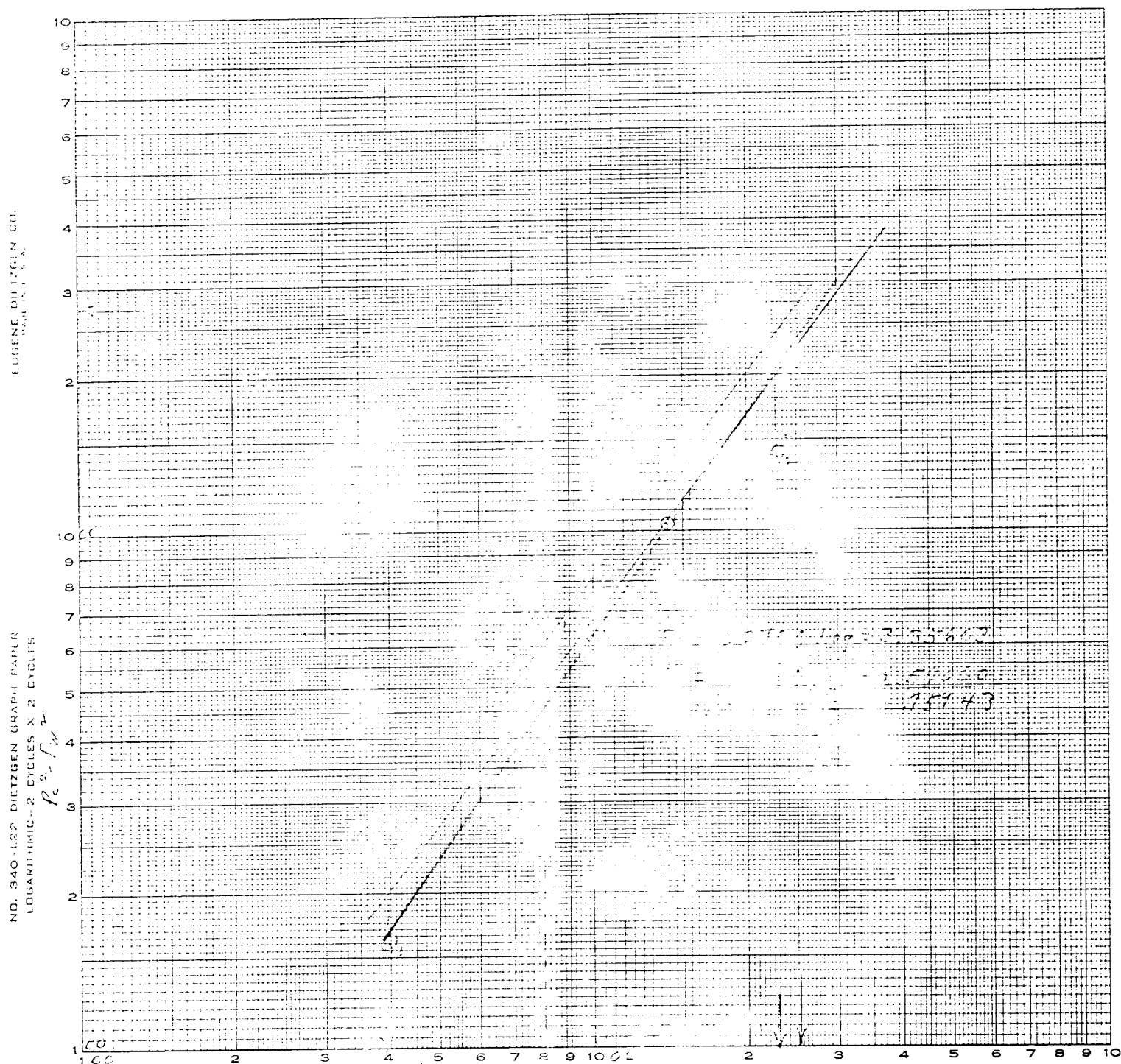
- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing 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 .

G.L. Erwin "B" No. 2 Well No. 2

Unit J, S-35, T-24, R-37 Lebo County

July 23-24, 1962



Q - 10 FD - 15.12 PS1 cl

9. 1374 6000 solus Central 2520 MCFD