

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Delaware County Lea
Initial X Annual _____ Special _____ Date of Test Aug. 15-19, 1962
Company TEXACO Inc. Lease Cotton Draw Well No. 61
Unit D Sec. 27 Twp. 22 Rge. 32 Purchaser None
Casing 4 1/2 Wt. 9.5 I.D. _____ Set at 4693 Perf. 4647 and 4654
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 4513 Perf. _____ To _____
Gas Pay: From 4647 To 4654 L 4513 xG .772 -GL 3484 Bar. Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single - Gas
Date of Completion: April 6, 1962 Packer 4450 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(LINE) (Line) Size	(ORIFICE) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						927				96
1.	3.000	0.750	50	4	103	706				24
2.	3.000	0.750	49	7	91	618				24
3.	3.000	0.750	49	21	95	416				24
4.	3.000	0.750	49	25	95	190				24
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.	3.449	15.87	63.2	.9610	.8885		46.72
2.	3.449	20.86	62.2	.9715	.8885		62.10
3.	3.449	36.14	62.2	.9680	.8885		107.2
4.	3.449	39.43	62.2	.9680	.8885		116.9
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 238,000 cf/bbl.
Gravity of Liquid Hydrocarbons 40.5 deg.
P_c 9.936 (1-e^{-S}) .213

Specific Gravity Separator Gas .760
Specific Gravity Flowing Fluid .772
P_c 940.2 P_c 884.0

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.	719.2	517.2	.4642	.2155	.0459	517.2	366.8		.765
2.	631.2	398.4	.6170	.3807	.0811	398.4	485.6		.671
3.	429.2	184.2	1.065	1.134	.2415	184.2	699.8		.456
4.	203.2	41.29	1.161	1.348	.2871	41.29	842.7		.216
5.									

Absolute Potential: 122 MCFPD; n 1.00

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

Friction Negligible

REMARKS

During test well produced 333 MCF gas, 1.4 barrels condensate, 7.7 barrels water.

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.

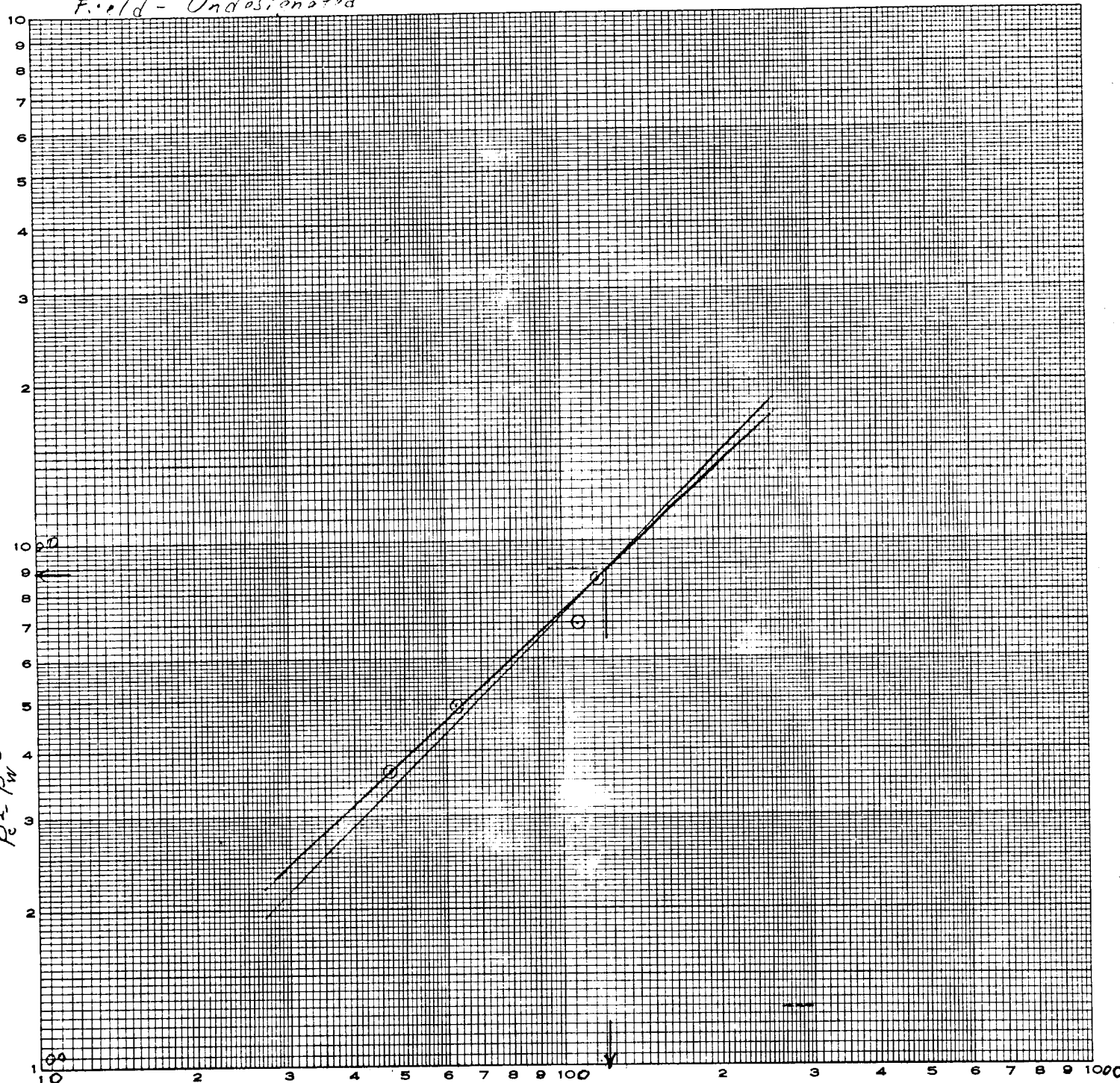
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

Texaco Inc.
 Cotton Draw We #61
 330 FNL, 330 FWL S-27, T-22, R-32
 Lea County, New Mexico
 August 15-19, 1962

Field - Undesignated

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

NO. 340-L22 DIETZGEN GRAPH PAPER
 LOGARITHMIC-2 CYCLES X 2 CYCLES
 P_e^2/P_w^2



Q - MCFD - 15.025 Psi

$n = 1.00$

Absolute Potential 122 MCFD