

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Penrose County Lea
Initial X Annual _____ Special _____ Date of Test April 6-7, 1961
Company TEXACO Inc. Lease C. H. Weir "B" Well No. 4UT
Unit I Sec. 11 Twp. 20 Rge. 37E Purchaser None
Casing 7-5/8 Wt. 24.0 I.D. 7.025 Set at 5475 Perf. _____ To _____
2-Strings
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5274 Perf. _____ To _____
Gas Pay: From 3620 To 3684 L 3620 xG .680 -GL 2462 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well Gas-Oil-Oil
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4-7-61 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

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								691	65	
1.	3	1.250	35	25	77			640	68	3
2.	3	1.250	52	72	79			570	65	3
3.	3	1.250	75	99	72			460	62	3
4.	3	2.000	43	29	52			302	60	3
5.	3	2.000	38	11.4	68			335	66	20

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.781	34.71	38.24	.9840	.9393		313.8
2.	9.781	68.51	85.21	.9822	"		614.2
3.	9.781	23.44	112.28	.9887	"		846.7
4.	27.52	40.37	42.23	1.0078	"		1051.6
5.	27.52	24.16	51.24	.9924	"		619.7

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s}) .156
Specific Gravity Separator Gas .680
Specific Gravity Flowing Fluid _____
P_c 704.2 P_c 495.9

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.	553.2	426.7				426.7	69.2		.9276
2.	583.2	340.1				340.1	155.8		.8282
3.	473.2	223.9		friction		223.9	272.0		.6720
4.	315.2	99.35		negligible		99.35	396.6		.4476
5.	348.2	121.2				121.2	374.7		.4945

Absolute Potential: 725 MCFPD; n .574
COMPANY TEXACO Inc.
ADDRESS P. O. Box 1270, Midland, Texas
AGENT and TITLE F. W. Moore, District Gas Foreman
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 .

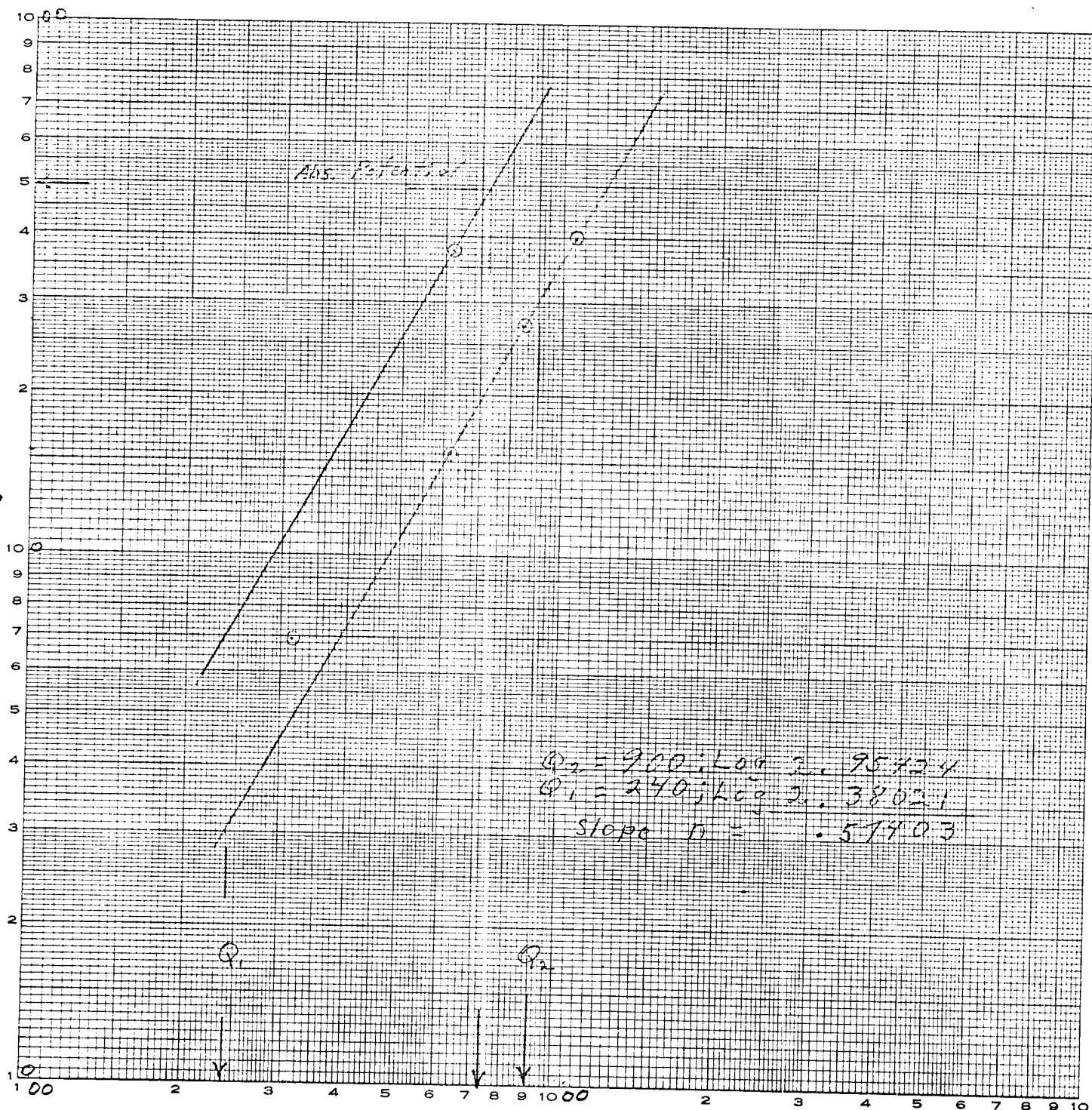
Company
Lease
Well No.
Location
Date of Test

Texaco Inc.
(Weir "B"
T (UT) Perfor Zone
I 11-295-37E
April 6-7, 1961

Lea County

NO. 340-L22 DIETZEN GRAPH PAPER
LOGARITHMIC - 2 CYCLES X 2 CYCLES
EUGENE DIETZEN CO.
MADE IN U.S.A.

$P_c^2 - P_w^2$



Q - MCFD - 15.025 PSIA

Abs. Potential 725 MCFD