

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE 086m C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

1962 APR 18 AM 9:51

Pool Blinebry Gas Formation Blinebry County Lea
Initial X Annual _____ Special _____ Date of Test April 9-10, 1962
Company TEXACO Inc. Lease J. C. Estlack Well No. 1UT
Unit L Sec. 3 Twp. 21 Rge. 37 Purchaser None
Casing 5-1/2 Wt. _____ I.D. _____ Set at 6620 Perf. 5742 To 5839
Tubing 2-1/16 Wt. 3.40 I.D. 1.700 Set at 5693 Perf. None To _____
Gas Pay: From 5742 To 5839 L 5693 xG .768 -GL 4372 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Dual G. G.
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: April 10, 1962 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~(Brown)~~ ~~(Coke)~~ (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Brown) (Line) Size	(Coke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1656				72
1.	4.00	2.000	25	8	80	1514	75			3-1/2
2.	4.00	2.000	29	32	72	1375	76			3-1/2
3.	4.00	3.000	26	14	52	1260	76			3-1/2
4.	4.00	3.000	27	26	34	1020	76			3-1/2
5.	4.00	3.000	32	27	52	1025	76			16

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.	25.58	17.49	38.2	.9813	.9380		411.7
2.	25.58	36.74	42.2	.9887	.9380		871.5
3.	66.67	23.43	39.2	1.0078	.9380		1476
4.	66.67	32.33	40.2	1.0260	.9380		2074
5.	66.67	34.93	45.2	1.0078	.9380		2201

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 33490 cf/bbl.
Gravity of Liquid Hydrocarbons 42.4 deg.
T_c 13.97 (1-e^{-s}) .260

Specific Gravity Separator Gas .682
Specific Gravity Flowing Fluid .768
P_c 1669.2 P_c 2786

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.	1527.2	2332	5.751	33.07	8.598	2340	446	1530	.9166
2.	1388.2	1927	12.17	148.1	38.51	1965	821	1402	.8399
3.	1273.2	1621	20.62	425.2	110.5	1731	1055	1316	.7884
4.	1033.2	1067	28.97	839.3	218.2	1285	1501	1133	.6788
5.	1038.2	1078	30.75	945.6	245.8	1324	1462	1151	.6895

Absolute Potential: 3850 MCFPD; n 1.00COMPANY TEXACO Inc.ADDRESS P. O. Box 1270, Midland, TexasAGENT and TITLE F. W. Moore, District Gas Foreman

WITNESSED _____

COMPANY _____

REMARKS

No.	Oil Produced	Gas	GOR	
1	0	60		
2	1	127	127,000	Liquid produced
3	9.2	215	23,370	during test was
4	9.3	303	32,600	frac Oil. 5th
5	45.5	1472	31,400	point continuati of 4th point.

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.

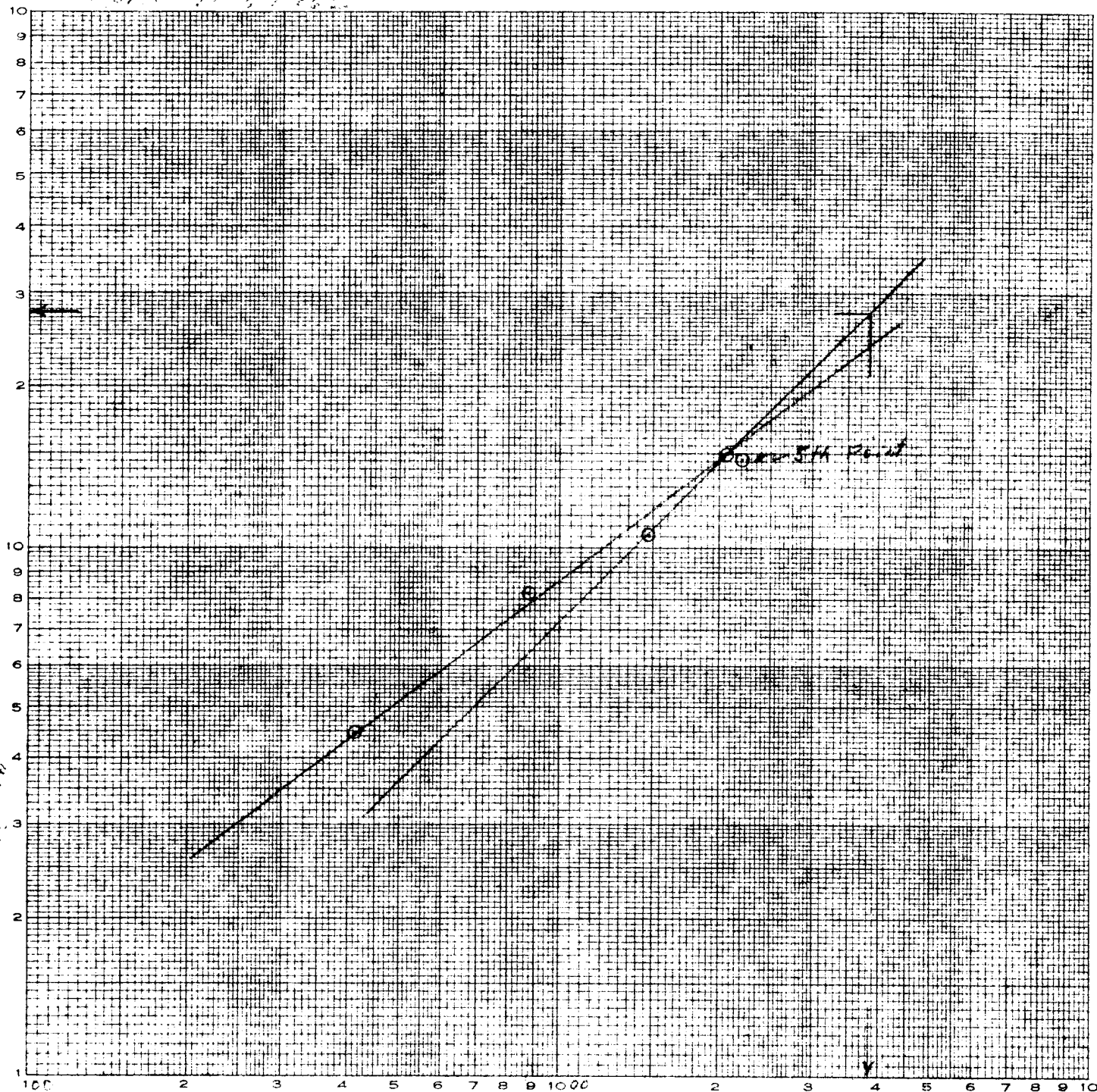
n = Slope of back pressure curve.

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.
 J.C. Estlack Lease
 Well No 1 UT
 Blending Zone
 1-2-21-1-2-1
 LEO, Texas, New Mexico
 Date 1-2-1962

EUGENE DIETZEN CO.
MAIL 700 A

NO. 340-L2-2 DIETZEN GRAPH PAPER
 LOGARITHMIC-2 CYCLES X 2 CYCLES
 100 10 1



Q - 17000 15,000 PSIA

Absolute Potential 3850 AN FD

17 6.70