

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Todd (San Andres) Formation San Andres County Roosevelt
 Initial X Annual _____ Special _____ Date of Test 11-2-64
 Company TEXACO Inc. Lease State of New Mexico Well No. /
 Unit A Sec. 35 Twp. 7-S Rge. 35-E Purchaser None
 Casing 2-7/8 Wt. 6.50 I.D. 2.441 Set at 4399 Perf. 4104 To 4243
 Tubing None Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
 Gas Pay: From 4104 To 4243 L 4104 xG .775 -GL 3181 Bar.Press. 13.2
 Producing Thru: Casing X Tubing _____ Type Well Single
 Date of Completion: October 7, 1964 Packer _____ Reservoir Temp. Single

OBSERVED DATA

Tested Through (ROVER) (CHECK) (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
SI								1116	72
1.	2.067	1.000	78	6.0	70			987	1
2.	"	"	80	15.0	75			819	1
3.	"	"	80	36.0	60			717	1
4.	"	"	80	54.0	57			570	1
5.									

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor Ft	Gravity Factor Fg	Compress. Factor Fpv	Rate of Flow Q-MCFPD @ 15.025 psia
1.	6.386	23.39	91.2	.9905	.8944	-	132.3
2.	"	37.39	93.2	.9859	"	-	210.5
3.	"	57.92	93.2	1.000	"	-	330.8
4.	"	70.94	93.2	1.0029	"	-	406.3
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 125,000 cf/bbl.
 Gravity of Liquid Hydrocarbons 31.0 deg.
 F_c 5.866 (1-e^{-s}) .197
 Specific Gravity Separator Gas .750
 Specific Gravity Flowing Fluid .775
 P_c 1129.2 P_c² 1275

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.	1000.2	1000	.7761	.6023	.1186	1000	275	1000	.8856
2.	832.2	692.5	1.235	1.525	.3004	692.8	582	832	.7368
3.	730.2	533.2	1.940	3.764	.7415	533.9	741	731	.6474
4.	583.2	340.1	2.383	5.679	1.119	341.2	934	584	.5172
5.									

Absolute Potential: 540 MCFPD; n .921
 COMPANY TEXACO Inc.
 ADDRESS Box 1270, Midland, Texas
 AGENT and TITLE F. W. Moore, District Supervisor (gas)
 WITNESSED None
 COMPANY _____

REMARKS

Produced .4 barrel of heavy oil during test.

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

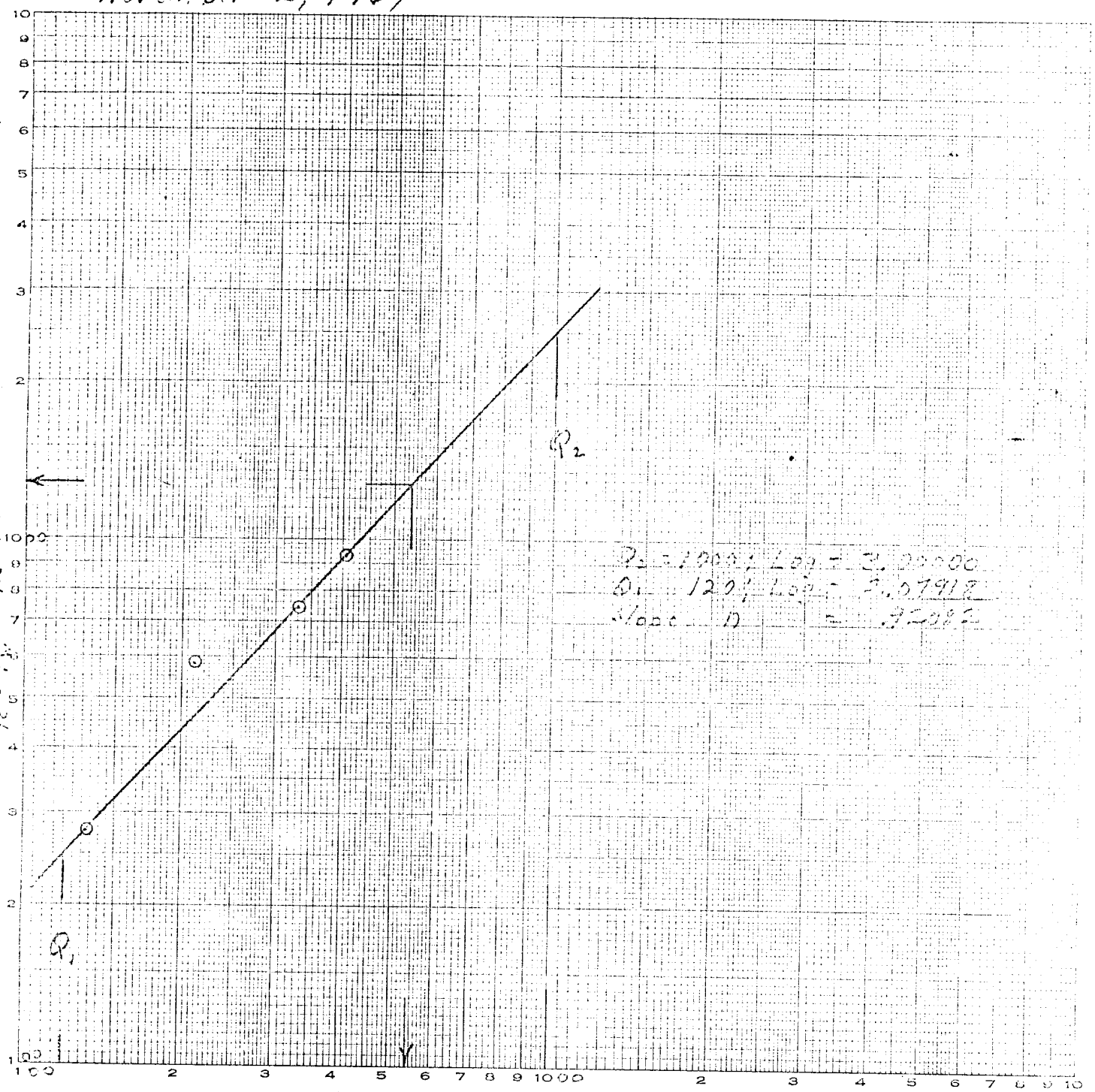
- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing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

TONGER, INC.
 State of New Mexico "CT"
 Well No. 1 (San Andres)
 A - 35 - 75 - 35E
 Roosevelt County
 New Mexico
 November 2, 1964

EDGETT BROTHERS CO.
 MADE IN U.S.A.

LOG SCALE
 2 CYCLES X 20 ALLEYS
 Ticks



$Q_2 = 10.0$; $\log = 2.00000$
 $Q_1 = 1.2$; $\log = 0.07918$
 Slope $D = 9.2282$

Q - MCFD - 15.025 PSIA