

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACKPRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates Date 1957 FEB 11 AM 9:48 County Lea

Initial X Annual _____ Special _____ Date of Test 12-27-56

Company A. R. Eppanauer Lease Stewart Well No. 2

Unit C Sec. 22 Twp. 25 S Rge. 37 E Purchaser None

Casing 5 1/2 Wt. 15 1/2 I.D. _____ Set at 3399 Perf. 2790 To 2960

Tubing 2 3/8 Wt. 4.7 1/2 I.D. _____ Set at 3397 Perf. _____ To _____

Gas Pay: From 2790 To 2960 L 2790 xG .650 -GL 1814 Bar.Press. 13.2

Producing Thru: Casing X Tubing _____ Type Well G.O. Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12-17-56 Packer 2963 Reservoir Temp. 90°F

OBSERVED DATA

Tested Through (Prover) (~~Stewart~~) (~~Stewart~~)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Stewart) Size	(Choke) (Stewart) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	2	.187	655		65			655		1 hr 25 min
2.	2	.250	646		67			646		1 hr 30 min
3.	2	.312	636		69			636		1 hr 30 min
4.	2	.500	647		69			647		3 hr
5.	2	.500	610		60			610		24 hr
8.								659		72 hr

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.	.7851		668.2	.9952	.9608	1.069	536
2.	1.4030		659.2	.9933	.9608	1.065	940
3.	2.1577		649.2	.9915	.9608	1.065	1,421
4.	5.5233		660.2	.9915	.9608	1.053	3,104
5.	5.5233		623.2	1.0000	.9608	1.055	2,989

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 1.758 (1-e^{-s}) .117

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 682.2 P_c 465.4

No.	XXX 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.	668.2	446.5	.94	.88	.10	446.6	18.8	668.3	.9796
2.	659.2	434.5	1.65	2.72	.32	434.8	30.6	659.4	.9826
3.	649.2	421.5	2.50	6.25	.73	432.2	43.2	649.8	.9825
4.	660.2	433.8	5.16	29.8	3.48	317.3	148.1	563.2	.8256
5.	623.2	273.7	5.15	26.5	3.1	276.8	188.6	526.1	.7771

Absolute Potential: 7,100 MCFPD; n 1.000

COMPANY A. R. Eppanauer
ADDRESS P. O. Box 273, Marfa, Texas
AGENT and TITLE H. H. Kirby - Gas Tester
WITNESSED A. R. Eppanauer
COMPANY El Paso Natural Gas 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.

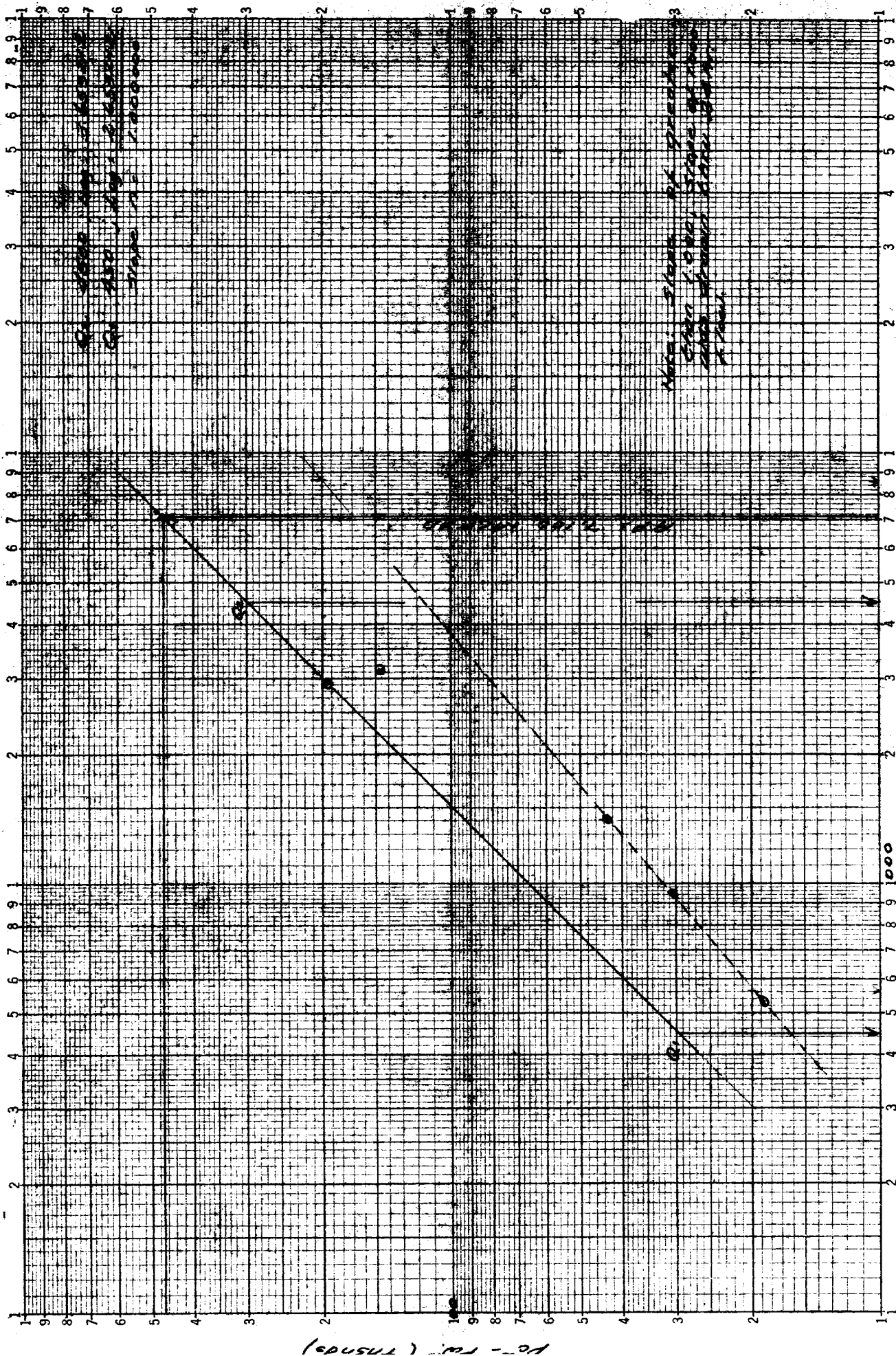
NOMENCLATURE

- 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} = 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 .

A. R. EPPENAUER
STEWART #2

UNIT - 22 - 255, R37E


$$Q = ACEDD$$

$8600 = 3,748,188$
 $560 = 1,180,311$