

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Emmet Formation Queen County Lea
Initial _____ Annual X Special _____ Date of Test 1-3/12-57
Company Stally Oil Co. Lease State WV Well No. 1
Unit R Sec. 25 Twp. 208 Rge 36E Purchaser Northern Natural
Casing 7" Wt. 22# I.D. 6.398 Set at 3740 Perf. 3481' To 3576'
Tubing 2-3/8" Wt. 4.7# I.D. 1.995 Set at 3851 Perf. _____ To _____
Gas Pay: From 3481 To 3576 L 3481 xG 0.670 -GL 2332 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well 0-0 Dual
Date of Completion: 12-24-56 Packer 371/2 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

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

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										
1.	4"	2.00"	440.8	1.8	73			912.3		67-3/4
2.	"	"	429.6	4.1	76			814.3		22-1/4
3.	"	"	431.2	7.5	80			737.9		24
4.	"	"	422.6	14.0	79			643.2		24-1/4
5.								519.5		24

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.	29.92	28.58	454.0	0.9877	0.9463	1.047	837
2.	"	42.60	442.8	0.9850	"	1.043	1239
3.	"	57.73	444.4	0.9813	"	1.043	1673
4.	"	78.11	435.8	0.9822	"	1.043	2265
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.728 (1-e^{-S}) 0.148

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 925.5 P_c² 856.6

No.	$\frac{P}{P_t}$ P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-S})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.	827.5	684.8	0.609	0.371	0.055	684.9	171.7	827.6	0.89
2.	747.1	558.2	0.902	0.814	0.120	564.3	293.8	747.2	0.81
3.	655.1	429.9	1.218	1.484	0.230	431.1	427.5	655.6	0.71
4.	532.7	283.8	1.649	2.719	0.402	284.2	572.4	533.1	0.58
5.									

Absolute Potential: 2870 MCFPD; n 0.7649COMPANY Stally Oil Co.ADDRESS Box 38, Hobbs, N. M.AGENT and TITLE (SIGNED) H. E. HobbsWITNESSED None

COMPANY _____

Dist. Supt. _____

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.

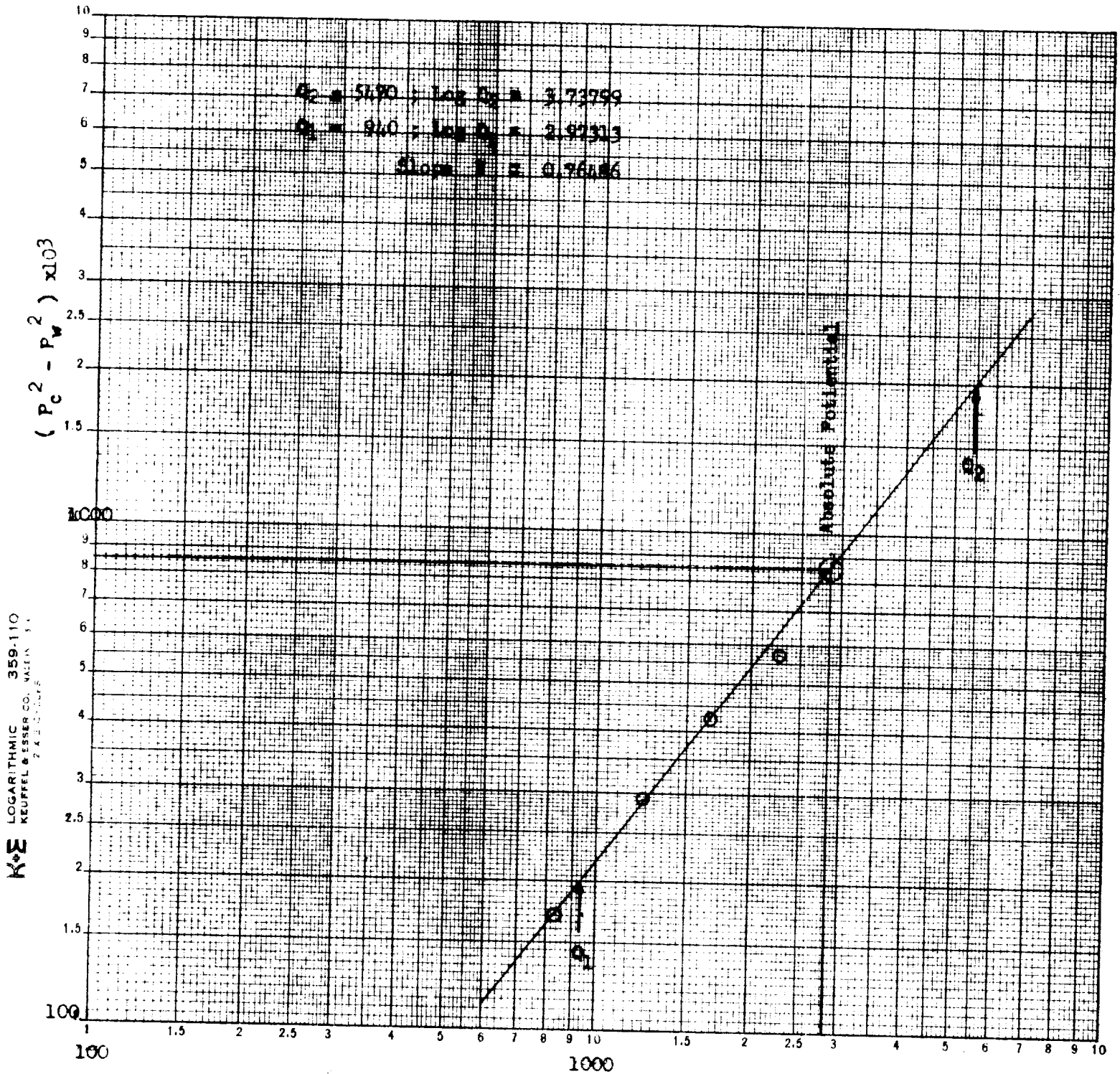
F_t = Flowing temperature correction factor.

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 .

SKELLY OIL COMPANY
 State "H" No. 1
 Sec. 25-T20S-R36E
 Lea County, New Mexico



5800 3.579784
 630 2.799340
 780444

Q - MCFPD- 15.025 psia