

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Eumont Formation Queen County Lea 1958 SEP 22 AM 9:56
Initial I Annual _____ Special _____ Date of Test 8-3/8-7-59
Company Continental Oil Company Lease Lockhart A-17 Well No. 2
Unit I Sec. 17 Twp. 21S Rge. 37E Purchaser El Paso Nat. Gas Co.
Casing 5 1/2" Wt. 17# I.D. 4.892 Set at 6629 Perf. 3525 To 3565
Tubing 2" EUE Wt. 4.7# I.D. 1.995 Set at 6581 Perf. _____ To _____
Gas Pay: From 3525 To 3565 L 3525 xG .660 -GL 2326 Bar.Press. 13.2
Producing Thru: Casing I Tubing _____ Type Well G. O. Dual
Date of Completion: 4-5-59 Packer 6479' Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 90°

OBSERVED DATA

Tested Through (Pressure) (Orifice) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4"	1.250	174	12.96	62			510		72
2.	4"	1.250	133	25.50	60			482		24
3.	4"	1.250	165	25.50	62			452		24
4.	4"	1.250	126	46.92	60			420		24
5.								326		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.	9.643	49.26	187.2	0.9981	.9535	1.018	460
2.	9.643	61.47	148.2	1.0000	.9535	1.014	573
3.	9.643	67.41	178.2	0.9981	.9535	1.017	629
4.	9.643	80.82	139.2	1.0000	.9535	1.013	753
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 1.812 (1-e^{-s}) 0.148

Specific Gravity Separator Gas .660
Specific Gravity Flowing Fluid _____
P_c 523.2 P_c² 273.7

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.	495.2	245.2	.834	.696	.103	245.3	28.4	495.3	.947
2.	465.2	216.4	1.038	1.077	.16	216.6	57.1	465.4	.889
3.	433.2	187.7	1.140	1.300	.19	187.9	85.8	433.5	.828
4.	339.2	115.0	1.364	1.860	.27	115.3	158.4	339.6	.649
5.									

Absolute Potential: 1.430 MCFPD; n .499COMPANY Continental Oil CompanyADDRESS Box 68, Eunice, New MexicoAGENT and TITLE Dist. Supt.

WITNESSED

COMPANY

REMARKS

NMOCC-3 WEG HLJ WAM File-2

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.

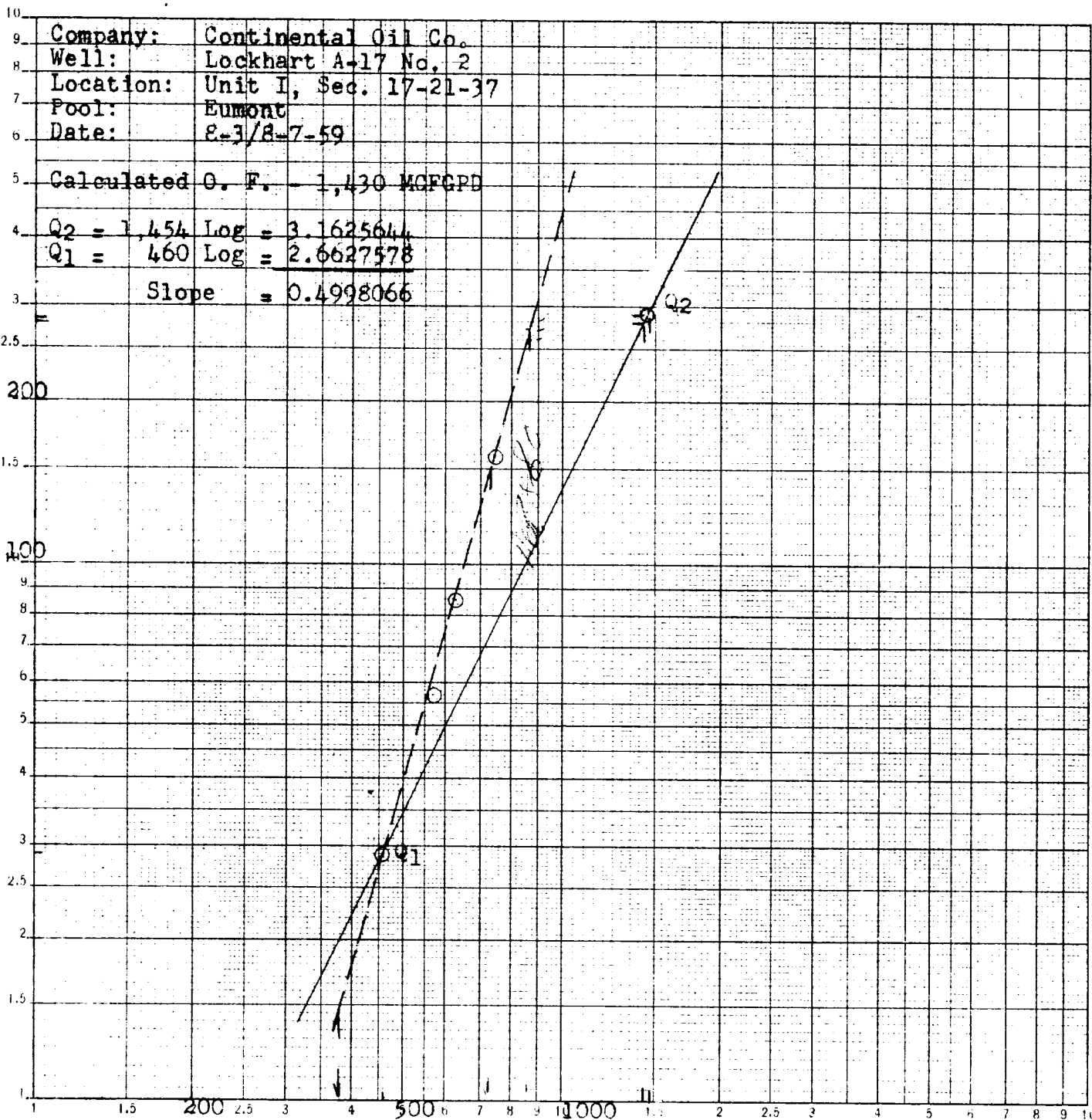
The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

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 .

Pc2-Pw2 (Thsnds)



Q = 460 2.6627578
Q = 1,454 3.162564
Slope = 0.4998066

Q = MCFPD
