

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool North Skaggs Formation Drinkard County Lea
Initial x Annual _____ Special _____ Date of Test 9-19-61
Company Wolfson Oil Company Lease McCallister Well No. 1
Unit M Sec. 5 Twp. 20S Rge. 38E Purchaser El Paso
Casing 4 1/2" Wt. 11.6 I.D. _____ Set at 6999 Perf. 6914 To 6953
Tubing 2" Wt. 4.7 I.D. _____ Set at 6885 Perf. open end To _____
Gas Pay: From 6914 To 6953 L 6885 xG_{vis} 679 -GL 4675 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing x Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-1-61 Packer 6885 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps _____

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	2"	.750	88			2001				72
1.	2"	.750	80		60	1481				3
2.	2"	.750	100		69	1260				3
3.	2"	.750	120		61	1100				3
4.	2"	.750	150		58	835				3
5.	2"	.750	96		62	1294				20

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\frac{1}{F_c Q}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.2023	93.2		1.0000	.9527	neg.	1,083
2.	12.023	113.2		.9915	.9527	1.011	1,318
3.	12.2023	133.2		.9990	.9527	1.013	1,566
4.	12.2023	163.2		1.0019	.9527	1.016	1,931
5.	12.2023	299.2	109.2	.9981	.9527	neg.	1,266

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 138.8 cf/bbl.
Gravity of Liquid Hydrocarbons 62.9 @ 60° deg.
F_c 9.936 (1-e^{-s}) 0.275

Specific Gravity Separator Gas .661
Specific Gravity Flowing Fluid .7279
P_c 2014.2 P_c 4057.0

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	$\frac{P_w}{P_c}$	
1.	1494.2	2232.6	2824.4	10.761	115.80	31.8	2264.4	1792.6	1504.78	.749
2.	1273.2	1621.0	2486.0	13.096	171.50	47.2	1668.2	2388.8	1291.5	.642
3.	1113.2	1239.2	2237.6	15.560	242.11	66.6	1305.8	2751.2	1142.7	.568
4.	848.2	719.4	2237.6	19.186	368.10	101.2	820.6	3236.4	905.89	.449
5.	1307.2	1708.8	2348.2	12.579	158.23	43.5	1752.3	2304.7	1323.7	.647

Absolute Potential: 2,230 MCFPD; n 1.000COMPANY Wolfson Oil CompanyADDRESS 504 Midland National Bank Bldg. Midland, TexasAGENT and TITLE H.G. Freedman Prod., Engr.WITNESSED J.B. MurrayCOMPANY El Paso Natural Gas Co.

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.

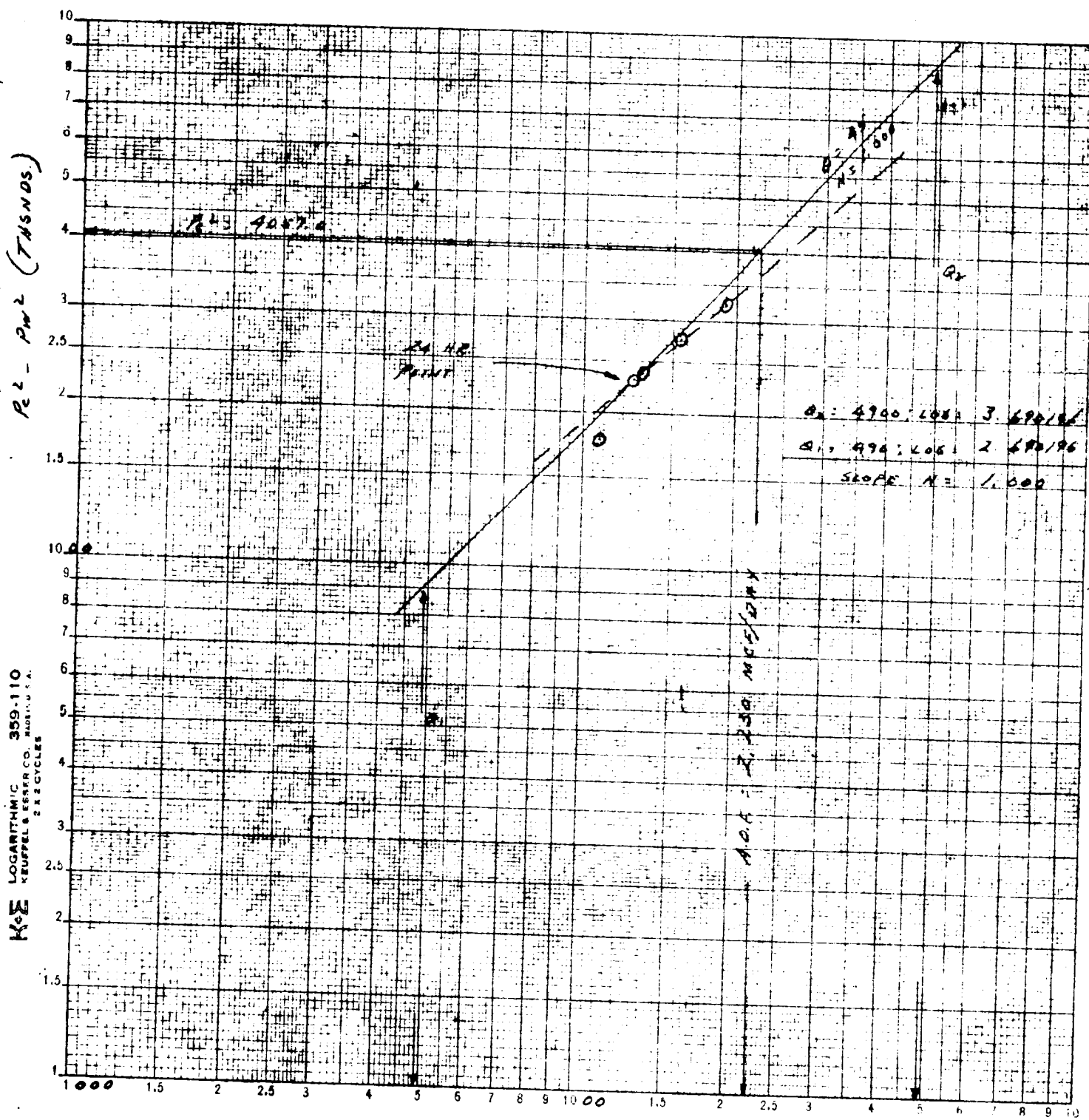
The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

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 .

WOLFSON OIL COMPANY
 M³ ALLISTER #1
 M-5-20-30
 LEA COUNTY, NEW MEXICO
 9-19-61



ILLEGIBLE

Q - MCF/DAY