

NEW MEXICO OIL CONSERVATION COMMISSION

OCT 21 3 09 PM '63

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Langlie Mattix Formation Queen County Lea
Initial _____ Annual _____ Special X Date of Test 7-18/7-26-63
Company Tidewater Oil Co. Lease Coates "D" Well No. 1
Unit N Sec. 24 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 6 5/8" Wt. 29 I.D. _____ Set at 2960 Perf. _____ To _____
Tubing 2" Wt. 4.7 I.D. _____ Set at 3287 Perf. _____ To _____
Gas Pay: From 2960 To 3300 L 3287 xG .670 -GL 2202 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well Single
Date of Completion: July 3, 1952 Packer None Single-Bradenhead-G. G. or G.O. Dual
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								414		72
1.	4	.500	243	1.96	88			343		24
2.	4	.500	258	4.84	89			293		24
3.	4	.500	248	10.24	88			262		24
4.	4	.500	246	14.44	96			247		24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	1.525	22.40		.9741	.9463	1.023	32.20
2.	1.525	36.23		.9732	.9463	1.023	52.03
3.	1.525	51.73		.9741	.9463	1.023	74.39
4.	1.525	61.18		.9671	.9463	1.021	87.17
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas .670
Specific Gravity Flowing Fluid _____
P_c 427.2 P_c² 182.5

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.	356.2	126.9	Negligible			126.9	55.6		
2.	308.2	95.0				95.0	87.5		
3.	275.2	75.7				75.7	106.8		
4.	260.2	67.7				67.7	114.8		
5.									

Absolute Potential: 140 MCFPD; n 1.000
COMPANY Tidewater Oil Co.
ADDRESS Box 249, Hobbs, N. Mex.
AGENT and TITLE C. L. Wade, Area Supt.
WITNESSED Jack T. Littlefield
COMPANY El Paso Natural Gas Co.

REMARKS

ILLEGIBLE

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.

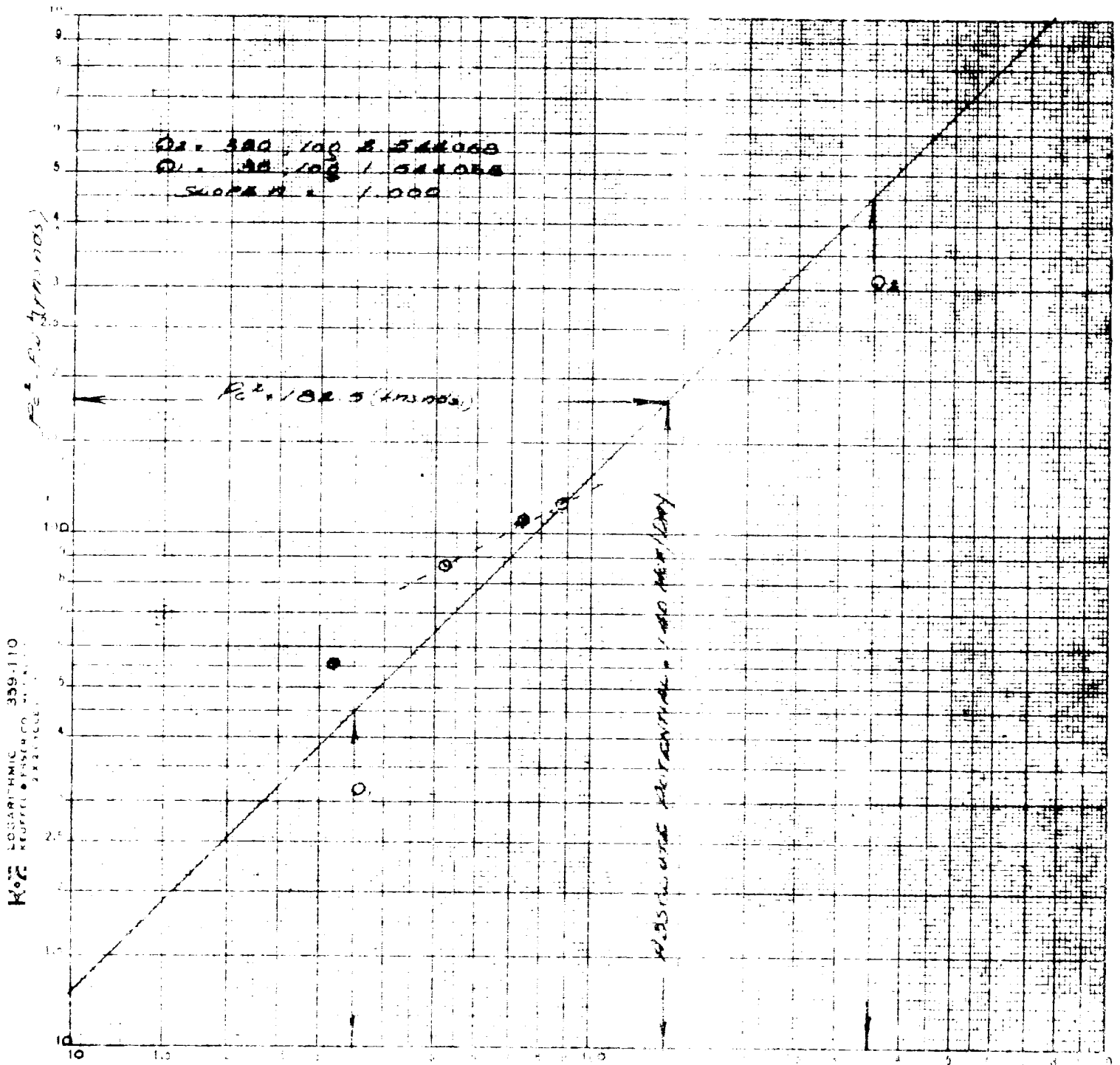
The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

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 .

TIDE WATER CO.
 COATES D N91 & N. DIBEN
 H-24-25-37264 N.M.
 H 45.0, T = 1000
 RES PCF = 140 PCF/DAY
 T = 26.63



Q = 1000 DAY 1000