NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1956 FEB 11 AM 10 10

Pool Eumont Formation Yates - 7 Rivers County Lea

Initial ____ Annual ____ Special X Date of Test 7-6-56

Company Tidewater Oil Company Lease O. L. Coleman Well No. 3

Unit A Sec. 17 Twp. 21S Rge. 36E Purchaser El Paso Natural Gas Co.

Casing 7" Wt. 24 I.D. 6.336 Set at 3789 Perf. 3125 3210 To 3178 3238

Tubing 2 7/8 Wt. 6.50 I.D. 2.441 Set at 3885 Perf. - To -

Gas Pay: From 3125 To 3238 L 3125 xG .680 -GL 2125 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: Dual: 9-10-52 Packer 3694 Reservoir Temp. 93° F.

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps Flange

	Flow Data					Tubing Data		Casing Data		
No.	~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI								1066		72
1.	4"	1.25	545	3.2	52			1002		24
2.	4"	1.25	530	4.5	53			963		24
3.	4"	1.25	552	6.0	54			905		24
4.	4"	1.25	552	8.55	59			812		24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure $\sqrt{psia}$	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	75.59	23.6	1.0078	.9393	1.070	738
2.	9.643	104.86	23.3	1.0068	.9393	1.070	1023
3.	9.643	142.62	23.8	1.0058	.9393	1.077	1399
4.	9.643	203.23	23.8	1.001	.9393	1.070	1972
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c .865 $(1-e^{-s})$ 0.136

Specific Gravity Separator Gas 0.680
Specific Gravity Flowing Fluid ____
P_c 1079.2 P_c^2 1164.7

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	1015.2	1030.6	0.64	0.41	.06	1030.7	134.0	1014	94.0
2.	976.2	953.0	0.88	0.77	.10	953.1	211.6	977	90.5
3.	918.2	843.1	1.18	1.46	.20	843.3	321.4	919	85.2
4.	825.2	681.0	1.71	2.92	.40	681.4	483.3	825	76.6
5.									

Absolute Potential: 3,750 MCFPD; n 0.760

COMPANY Tidewater Oil Company

ADDRESS Box 547 Hobbs, New Mexico

AGENT and TITLE E. W. Hogue, Acting Area Superintendent E W Hogue

WITNESSED E. G. Smith

COMPANY EPNG 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.

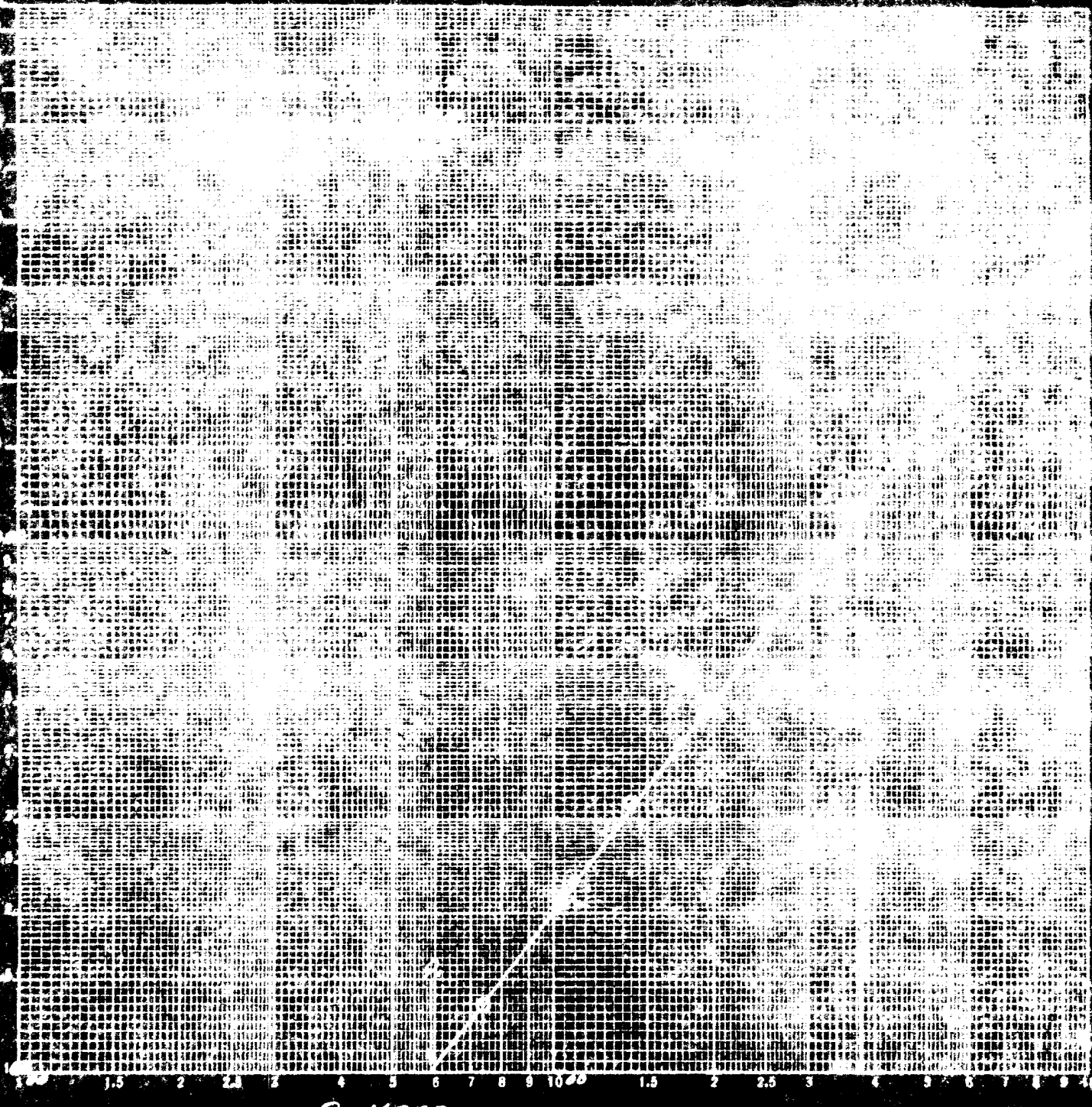
F_t = Flowing temperature correction factor.

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.

TIDEWATER OIL CO.
COLEMAN NO 3
A-17-21-36, LEA N.M.
7-6-1956



Q - MCFD - 15.025 PSIA