NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS 7 28 Revised 12-1-55

Pool Jalmat Formation Yates County Lea

Initial X Annual Special Date of Test 3-5-57

Company Bealer & Sheldon Lease Stehler Well No. 1

Unit "L" Sec. 20 Twp. 23S Rge. 37E Purchaser El Paso Natural Gas

Casing 7 Wt. 20# I.D. Set at 3668 Perf. 3000 To 3037

Tubing 2 3/8 Wt. 4.7 I.D. Set at Perf. 3040 To 3098

Gas Pay: From 3000 To 3098 L 3000 xG 0.67 =GL 2010 Bar.Press. 13.2

Producing Thru: Casing X Tubing Type Well Gas-Oil Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 2-15-57 Packer 3120 Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) ~~(Choke)(Orifice)~~ Type Taps

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								909		
1.	2X .218	868			68			868		3
2.	2X .250	847			66			847		3
3.	2X .312	792			66			792		3
4.	2X .375	701			64			701		3
5.										

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.	1.0834		881.2	.9924	.9463	1.098	985
2.	1.4030		860.2	.9943	.9463	1.094	1242
3.	2.1577		805.2	.9943	.9463	1.091	1703
4.	3.0691		714.2	.9962	.9463	1.089	2231
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c 0.707 $(1-e^{-s})$ 0.129

Specific Gravity Separator Gas .670
Specific Gravity Flowing Fluid
P_c 922.2 P_c^2 850.5

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	881.2	776.5	.70	.49	.06	776.6	73.9		
2.	860.2	739.9	.88	.77	.10	740.0	110.5		
3.	805.2	648.3	1.26	1.59	.21	648.5	202.0		
4.	714.2	510.1	1.58	2.50	.32	510.4	340.1		
5.									

Absolute Potential: 4,200 MCFPD; n .599
COMPANY Bealer & Sheldon
ADDRESS 302 Carper Bldg., Artesia, N.M.
AGENT and TITLE Viles P. Sheldon, Partner
WITNESSED John H. Drew
COMPANY El Paso Natural Gas Company

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.

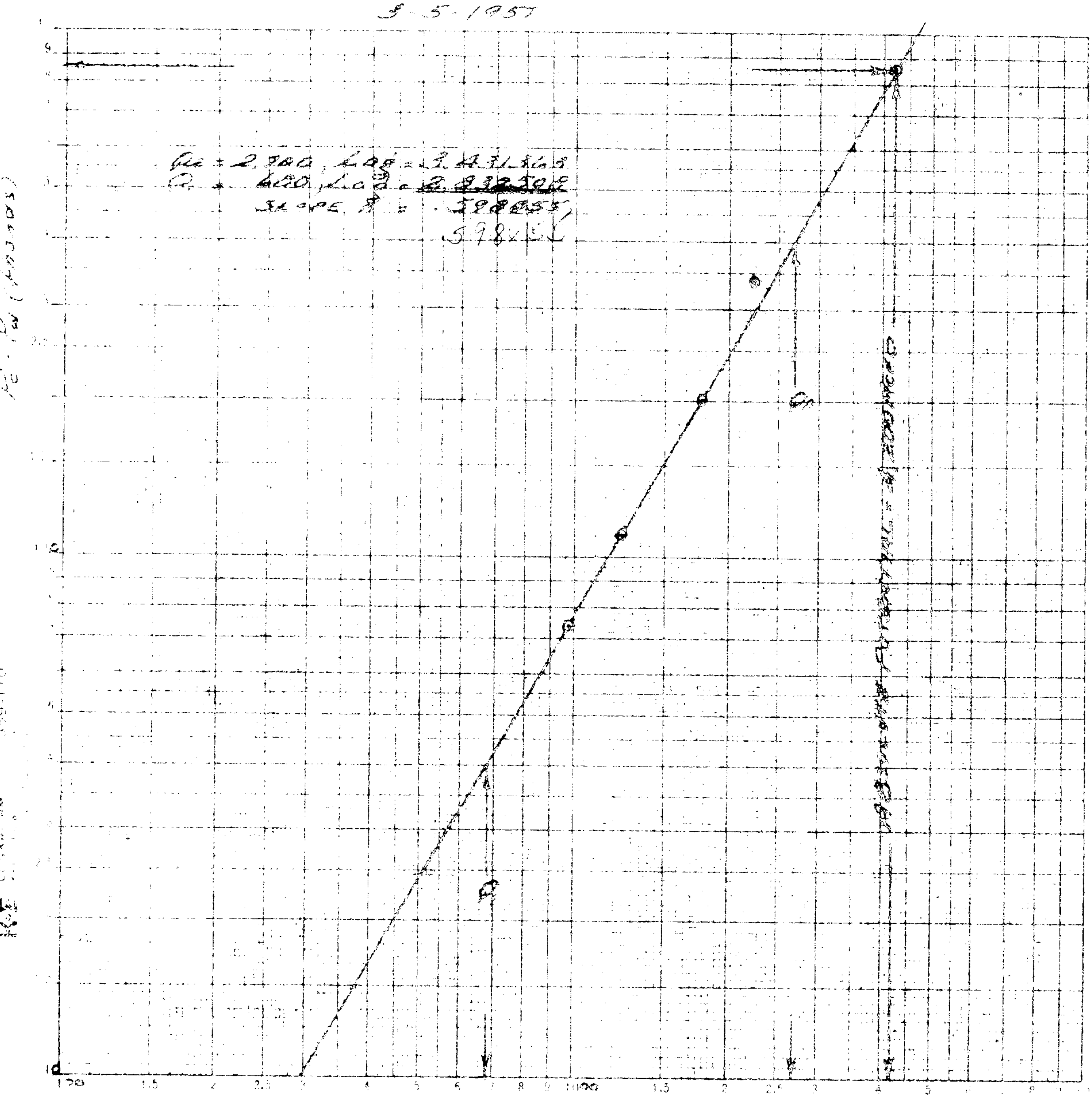
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.

Resler & Sheldon

Steeler No. 1

E-20-23-37 LEA NM.

3-5-1957



Q MCFD - 15.025 PSIA 60°F

ILLEGIBLE