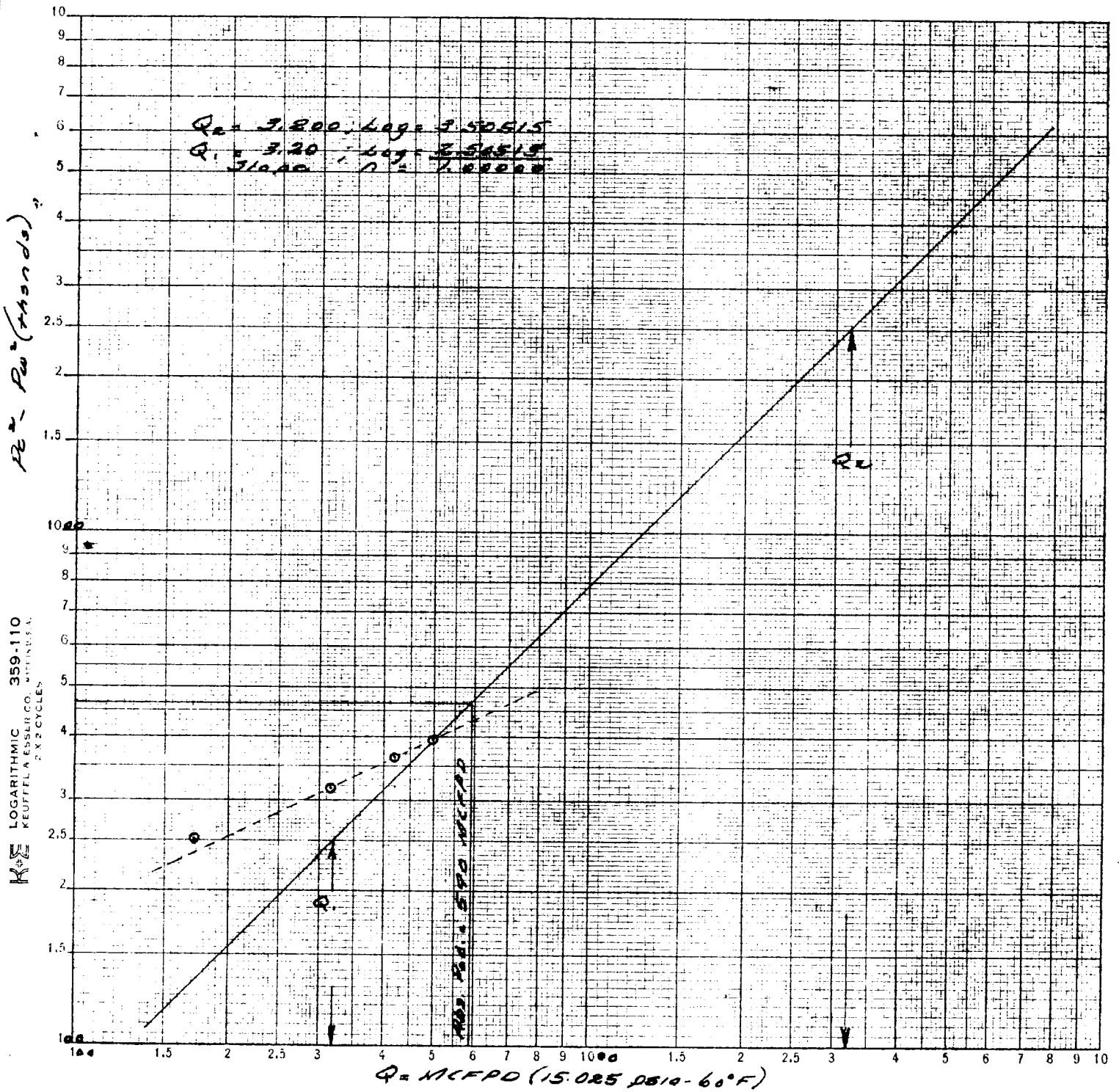


WEIR DRUG CO.
 WOOLWORTH #4
 L-28-24-37; LRA CO., N.M.
 5-31-1957



MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

JAN 9 1956

Pool Jalnet Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 5-31-57
Company Weiler Drig. Co. Lease Poolworth Well No. 4
Unit L Sec. 28 Twp. 24 Rge. 37 Purchaser EPNC
Casing 7 X 7 Wt. 84.0 I.D. _____ Set at 3251 Perf. 3100 To 3170
Tubing 0 Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3100 To 3170 L 3100 xG .655 -GL 2031 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead G. G. or G.O. Dual
Date of Completion: 1949 Packer 0 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										
1.	<u>4 x 1,000</u>		<u>218</u>	<u>1.92/</u>	<u>74</u>			<u>670</u>		<u>72</u>
2.	"		<u>219</u>	<u>3.52/</u>	<u>72</u>			<u>452</u>		<u>24</u>
3.	"		<u>215</u>	<u>4.72/</u>	<u>73</u>			<u>372</u>		<u>24</u>
4.	"		<u>220</u>	<u>5.52/</u>	<u>73</u>			<u>305</u>		<u>24</u>
5.								<u>257</u>		<u>24</u>

FLOW CALCULATIONS

No.	Coefficient Flang (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.	<u>6.135</u>	<u>28.88</u>		<u>.9868</u>	<u>.9571</u>	<u>1.021</u>	<u>171</u>
2.	"	<u>53.31</u>		<u>.9887</u>	"	"	<u>316</u>
3.	"	<u>70.97</u>		<u>.9877</u>	"	"	<u>420</u>
4.	"	<u>83.95</u>		<u>.9877</u>	"	<u>1.022</u>	<u>498</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.4915 (1-e^{-s}) 0.130
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 683.2 P_c 466.8

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.	<u>465.2</u>	<u>216.4</u>	<u>.084</u>	<u>.007</u>	<u>.001</u>	<u>216.4</u>	<u>250.4</u>		<u>250.4</u>
2.	<u>385.2</u>	<u>148.4</u>	<u>.155</u>	<u>.024</u>	<u>.003</u>	<u>148.4</u>	<u>318.4</u>		<u>318.4</u>
3.	<u>318.2</u>	<u>101.3</u>	<u>.206</u>	<u>.042</u>	<u>.005</u>	<u>101.3</u>	<u>365.5</u>		<u>365.5</u>
4.	<u>270.2</u>	<u>73.0</u>	<u>.245</u>	<u>.060</u>	<u>.008</u>	<u>73.0</u>	<u>393.8</u>		<u>393.8</u>
5.									

Absolute Potential: 390 MCFPD; n 1,000

COMPANY _____

ADDRESS _____

AGENT and TITLE _____

WITNESSED _____

COMPANY Weiler Drilling Co. By A. D. Weiler Jr. Sec. - Treas.

REMARKS

1st Test - Slope greater than 1,000

2nd Test - Slope greater than 1,000-Slope of 1,000 drawn thru highest rate.

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 .