

Flow Time	1st 15	Min.	2nd 45	Min.	Date	9-6-68	Ticket Number	539814
Closed In Press. Time	1st 30	Min.	2nd 30	Min.	Kind of Job	OPEN HOLE	Halliburton District	HAYS
Pressure Readings	Field		Office Corrected		Tester	MR. BRACK	Witness	MR. DOUGLASS
Depth Top Gauge	3959	Ft.	Blanked Off		Drilling Contractor	RED TIGER DRILLING COMPANY	IC	
BT. P.R.D. No.	533		12	Hour Clock	Elevation	2126' K.B.	Top Packer	-
Initial Hydro Mud Pressure	2179		2142		Total Depth	3983'	Bottom Packer	3970'
Initial Closed in Pres.	549		544		Interval Tested	3970'-3983'	Formation Tested	CHEROKEE SAND
Initial Flow Pres.	9	1	13		Casing or Hole Size	7 7/8"	Casing Perfs. { Top	-
Final Flow Pres.	14	2	21		Surface Choke	1/4"	Bottom Choke	5/8"
Final Closed in Pres.	379		353		Size & Kind Drill Pipe	4 1/2" F.H.	Drill Collars Above Tester	-
Final Hydro Mud Pressure	2122		2134		Mud Weight	10.1	Mud Viscosity	41
Depth Cen. Gauge		Ft.	Blanked Off		Temperature	3978' @ 107 °F Actual	Anchor Size & Length	ID 4" OD 5" X 13'
BT. P.R.D. No.				Hour Clock	Depths Mea. From	KELLY BUSHINGS	Depth of Tester Valve	3958' Ft.
Initial Hydro Mud Pres.					Cushion	-	Depth Back Pres. Valve	-
Initial Closed in Pres.					Recovered	10	Feet of Drilling mud	
Initial Flow Pres.		1			Recovered		Feet of	
Final Flow Pres.		2			Recovered		Feet of	
Final Closed in Pres.		1			Recovered		Feet of	
Final Hydro Mud Pres.		2			Oil A.P.I. Gravity		Water Spec. Gravity	-
Depth Bot. Gauge	3980	Ft.	Blanked Off		Gas Gravity	-	Surface Pressure	psi
BT. P.R.D. No.	534		12	Hour Clock	Tool Opened	8:46 PM	Tool Closed	10:46 PM
Initial Hydro Mud Pres.	2197		2150		Remarks	Opened tool for 15 minute 1st flow with a		
Initial Closed in Pres.	556		550			very weak blow. Closed tool for 30 minute initial		
Initial Flow Pres.	19	1	19			closed in pressure. Reopened tool for 45 minute		
Final Flow Pres.	23	2	27			2nd flow with no blow; flushed tool and reopened		
Final Closed in Pres.	368		361			with very weak blow for one minute. Closed tool		
Final Hydro Mud Pres.	2168		2143			for 30 minute final closed in pressure.		

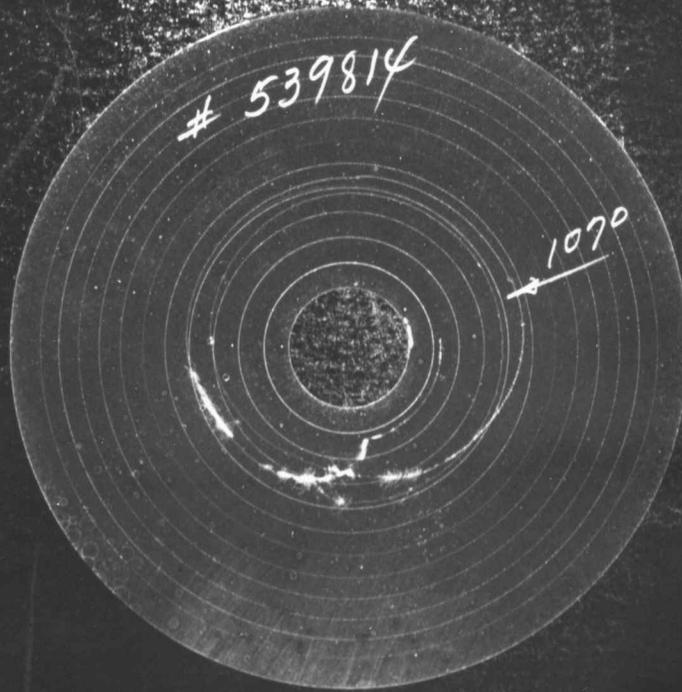
FORMATION TEST DATA

6

Fresh water corrected to 100 °F.

Legal Location: SEC. 8 - 17S - 20W
 Lease Name: ELMORE
 Well No.: 1
 Test No.: 1
 Field Area: MC GRACKEN N.E.
 County: RUSH
 State: KANSAS
 Owner's District: KANSAS
 Lease Owner/Company Name: MC CLURE OIL COMPANY

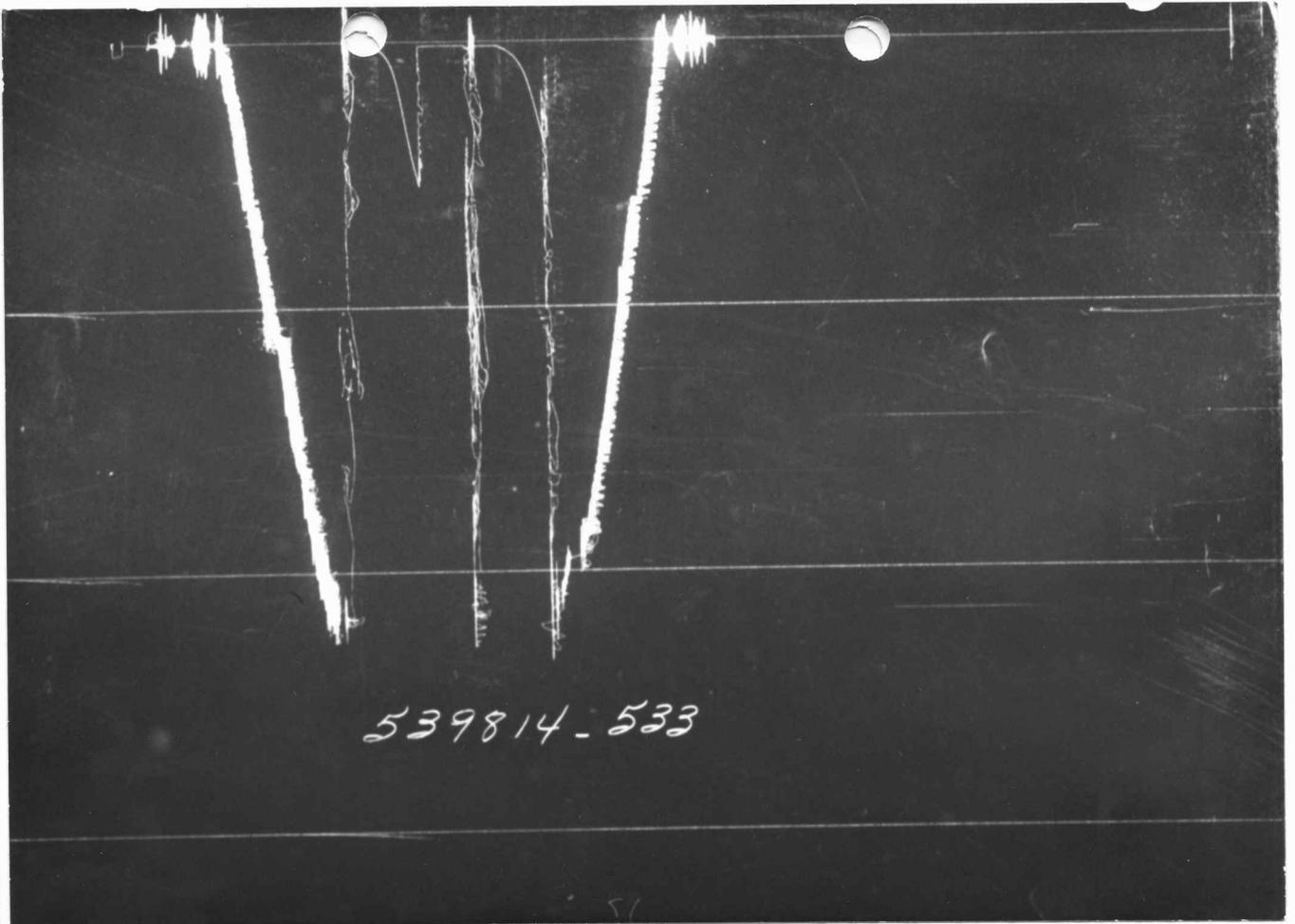
TEMPERATURE RECORDER CHART



10° each circle

- OF₃ = Theoretical Open Flow Potential with/Damage Removed Max. . . . MCF/D
- OF₄ = Theoretical Open Flow Potential with/Damage Removed Min. . . . MCF/D
- P_S = Extrapolated Static Pressure Psig.
- P_F = Final Flow Pressure Psig.
- P_{ot} = Potentiometric Surface (Fresh Water*) Feet
- Q = Average Adjusted Production Rate During Test bbls/day
- Q₁ = Theoretical Production w/Damage Removed bbls/day
- Q_g = Measured Gas Production Rate MCF/D
- R = Corrected Recovery bbls
- r_w = Radius of Well Bore Feet
- t = Flow Time Minutes
- t_o = Total Flow Time Minutes
- T = Temperature Rankine °R
- Z = Compressibility Factor _____
- μ = Viscosity Gas or Liquid CP
- Log = Common Log

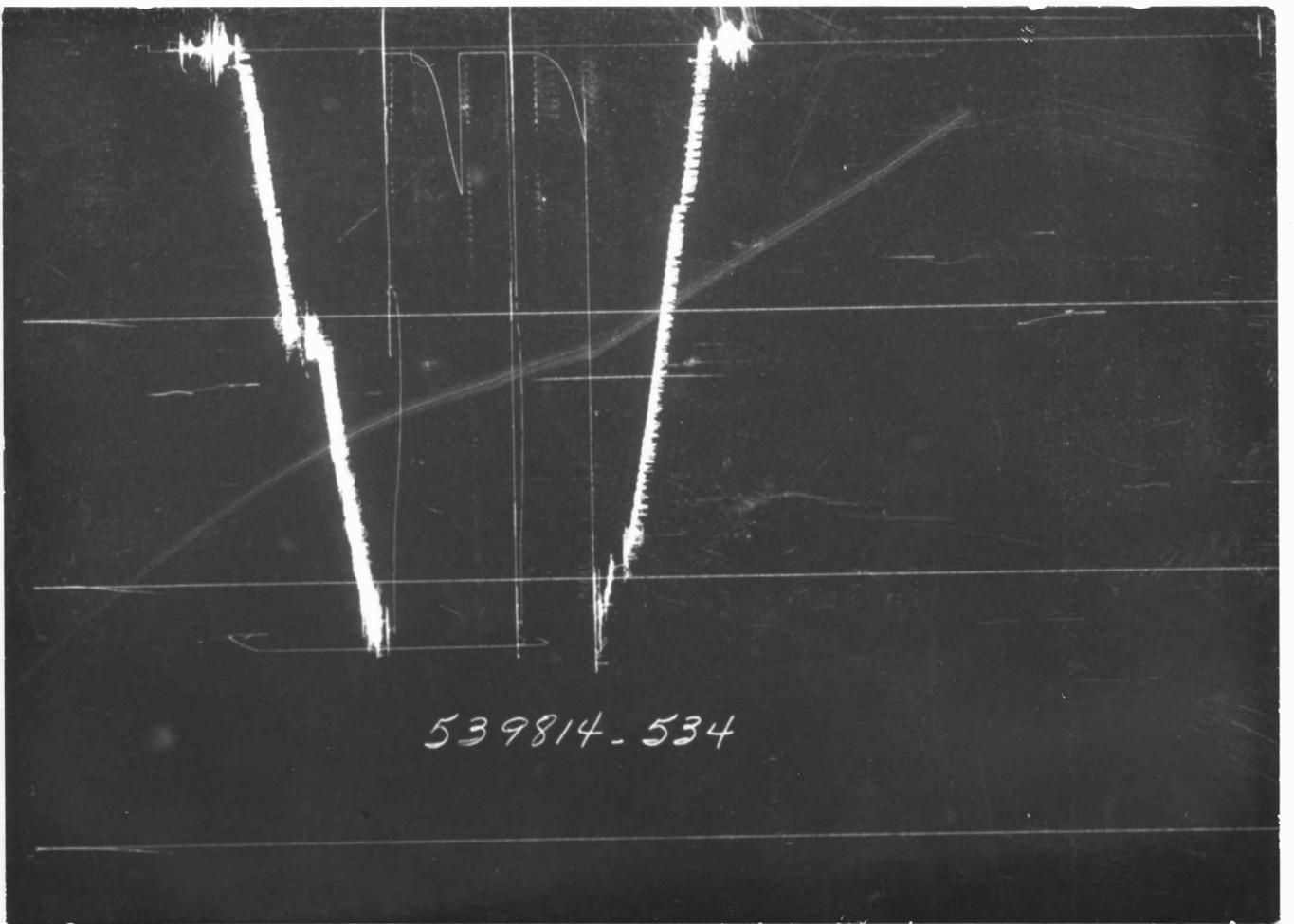
* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.



539814-533

PRESSURE

TIME



539814-534

Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st	Min.	2nd	Min.	Date	Ticket Number
16			30		9-7-68	539815
Closed In Press. Time	1st	Min.	2nd	Min.	Kind of Job	Halliburton District
30			31		OPEN HOLE	HAYS
Pressure Readings	Field		Office Corrected		Tester	Witness
					BRACK	DOUGLAS
Depth Top Gauge	3973	Ft.	-	Blanked Off	Drilling Contractor	RED TIGER DRILLING COMPANY DH
BT. P.R.D. No.	533		12	Hour Clock	Elevation	2126' KB
Initial Hydro Mud Pressure	2141		2124		Total Depth	3995'
Initial Closed in Pres.	492		492		Interval Tested	3971'-3995'
Initial Flow Pres.	19		1	23	Casing or Hole Size	7 7/8"
	23		2	30		
Final Flow Pres.	23		1	23	Surface Choke	1/4"
	28		2	35		
Final Closed in Pres.	294		287		Size & Kind Drill Pipe	4 1/2" FH Flex wt.
Final Hydro Mud Pressure	2083		2076		Mud Weight	10.1
Depth Cen. Gauge		Ft.		Blanked Off	Temperature	3990' - 109°F Actual
BT. P.R.D. No.				Hour Clock	Anchor Size & Length	ID 4" X 24" OD 5"
Initial Hydro Mud Pres.					Depths Mea. From	Kelly Bushing
Initial Closed in Pres.					Cushion	- Ft.
Initial Flow Pres.					Recovered	15' Feet of drilling mud
Final Flow Pres.					Recovered	Feet of
Final Closed in Pres.					Recovered	Feet of
Final Hydro Mud Pres.					Oil A.P.I. Gravity	
Depth Bot. Gauge	3992	Ft.	Yes	Blanked Off	Gas Gravity	
BT. P.R.D. No.	534		12	Hour Clock	Surface Pressure	psi
Initial Hydro Mud Pres.	2140		2126		Tool Opened	9:08 AM
Initial Closed in Pres.	491		495		Tool Closed	10:55 AM
Initial Flow Pres.	23		1	24	Remarks	
Final Flow Pres.	28		2	34	Opened tool for 16 minute first flow with a weak blow. Closed tool for 30 minute initial closed in pressure. Reopened tool for 30 minute second flow with no blow, flushed after 15 minute very weak blow. Closed tool for 31 minute final closed in pressure.	
Final Closed in Pres.	273		288			
Final Hydro Mud Pres.	2101		2080			

FORMATION TEST DATA

Formation surface reference to rotary table when Elevation Not Given,
Fresh Water Corrected to 100° F.

Legal Location
Sec. - Twp. - Rng. SE-SE-8-17S-20W

ELMORE

Lease Name

Well No.

Test No.

Field Area

MC CRACKEN
NORTHEAST

County

RUSH

State

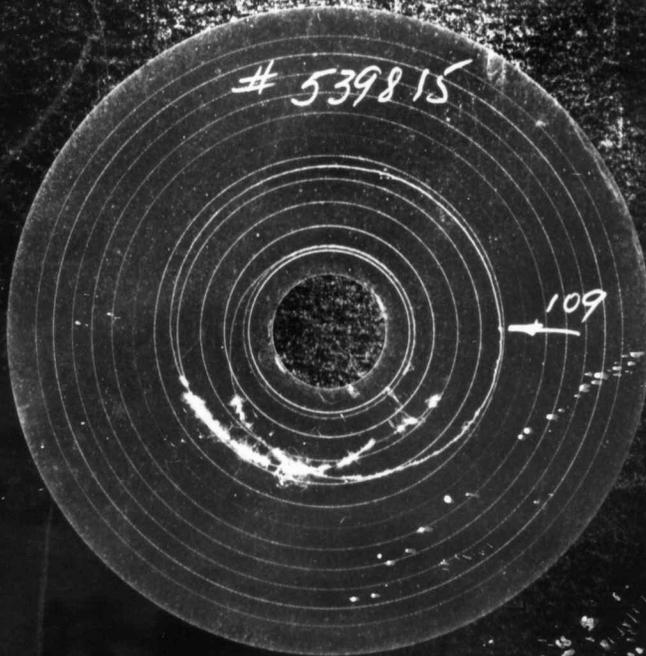
KANSAS

MC CLURE OIL COMPANY
Lease Owner/Company Name

KANSAS
Owner's District

6

**TEMPERATURE
RECORDER
CHART**

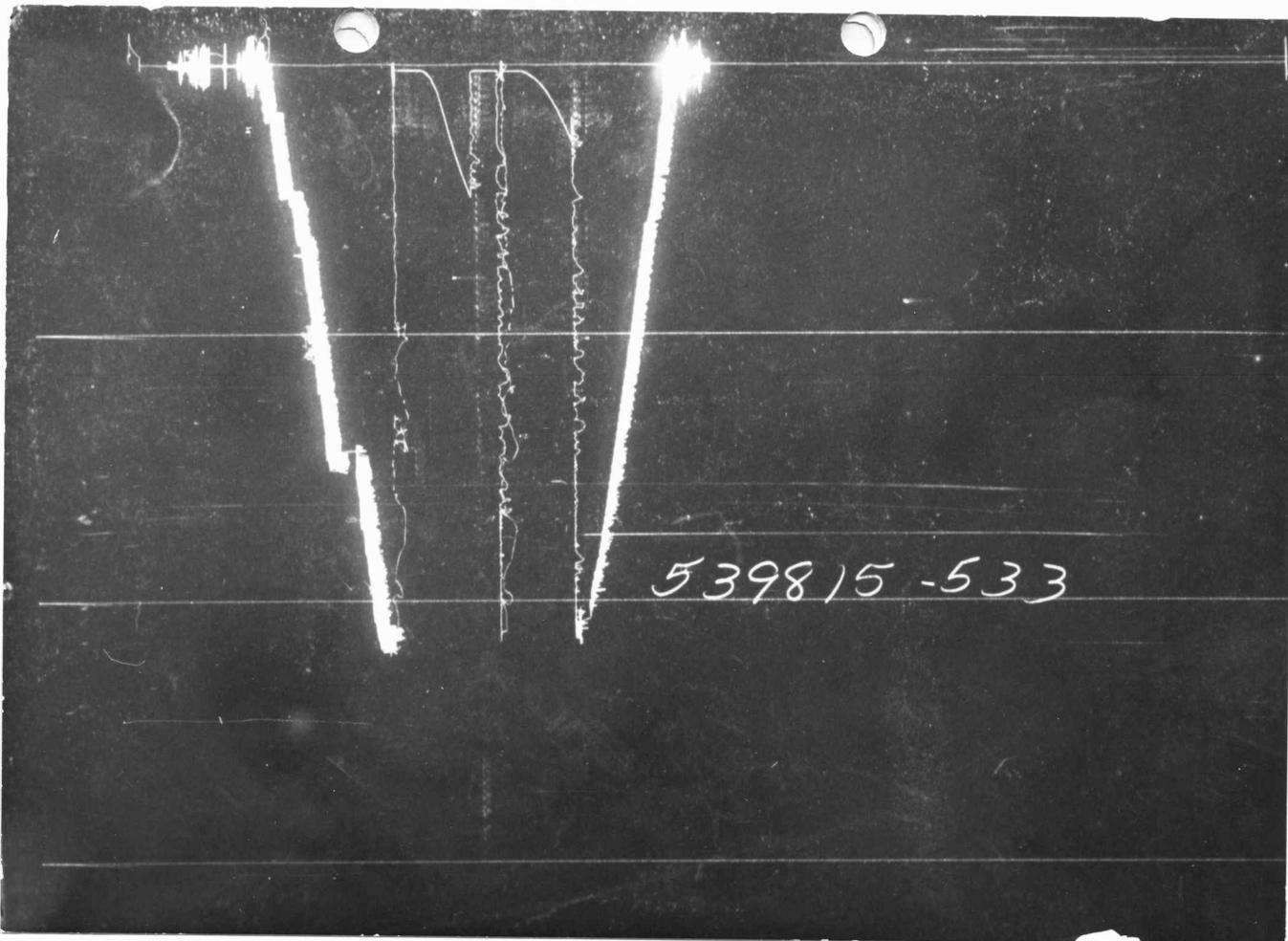


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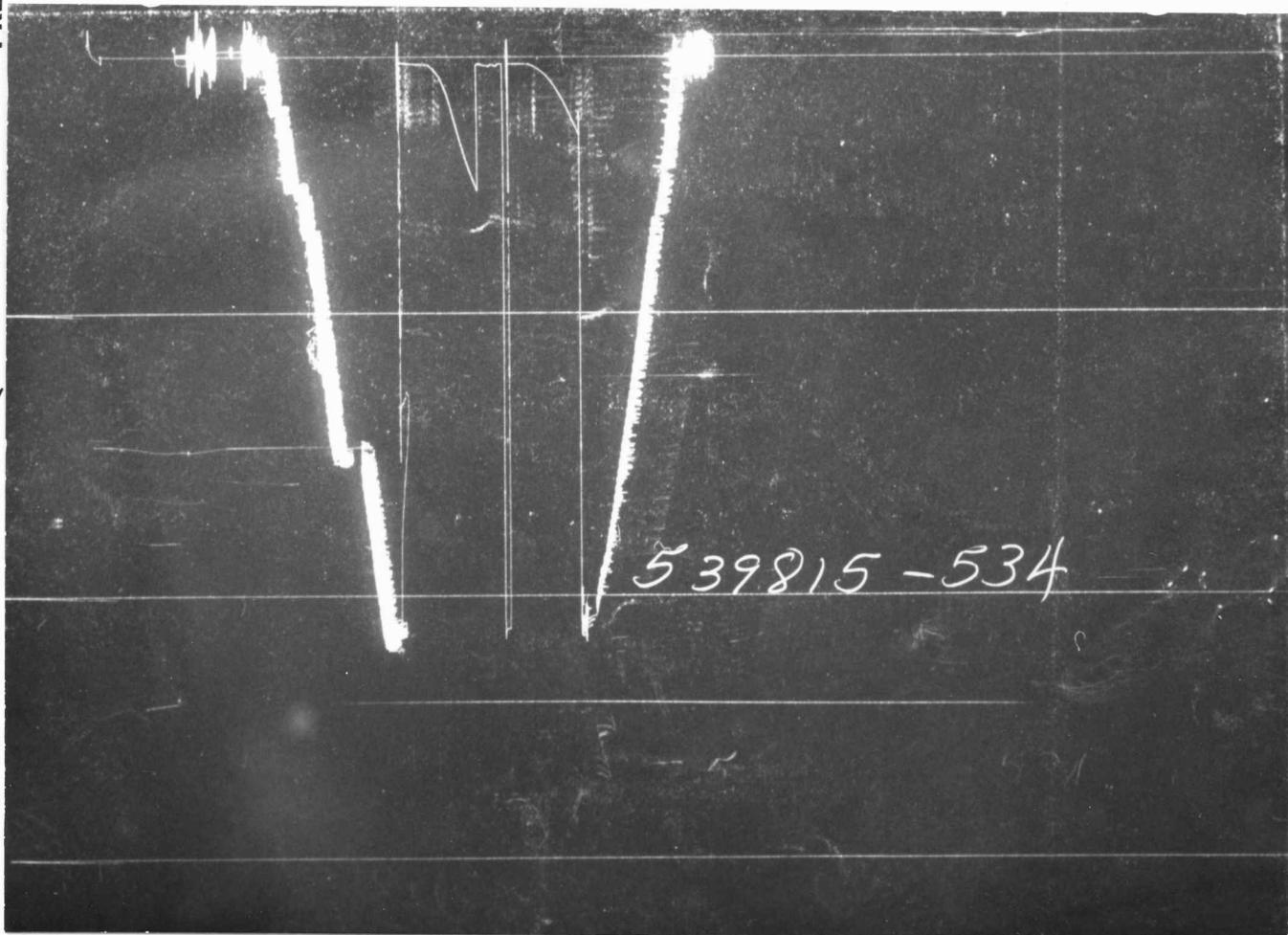
PRESSURE



539815 -533

TIME

PRESSURE



539815 -534

Each Horizontal Line Equal to 1000 p.s.i.