

ELI  
WIRELINE  
SERVICES

## DUAL INDUCTION LOG

Company MULL DRILLING CO.  
Well TEMPEL "A" #1-6  
Field QUIVER  
County KIOWA  
State COLORADO

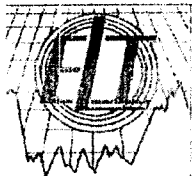
Company MULL DRILLING COMPANY, INC.  
Well TEMPEL "A" #1-6  
Field QUIVER  
County KIOWA State COLORADO  
Location SEC 8 TWP 17S RGE 47W  
SW/4 - NW/4  
2500' FNL & 660' FWL  
API#05-061-05778

Other Services  
CDL/CNL/PE  
MICPC

Permanent Datum GROUND LEVEL Elevation 4118  
Log Measured From KELLY BUSHING 1" A G L  
Drilling Measured From KELLY BUSHING

Elevation  
K.B. 4126  
D.F. 4127  
G.L. 4118

Date	7/2/01
Run Number	ONE
Depth Driller	5120
Depth Logger	5125
Bottom Logged Interval	5120
Top Log Interval	00
Casing Driller	437
Casing Logger	439
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD - CHLORIDES 300
Density / Viscosity	8.067
pH / Fluid Loss	10.5 / 2
Source of Sample	FLOWLINE
Rin @ Meas Temp	120@39F
Pmf @ Meas Temp	90@39F
Rmc @ Meas Temp	1.44@39F
Source of Rmf / Rmc	MEASUREMENT
Rin @ BHT	65@126F
Time Circulation Stopped	0 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	126F
Equipment Number	143
Location	HAYS KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	ROGER MARTIN



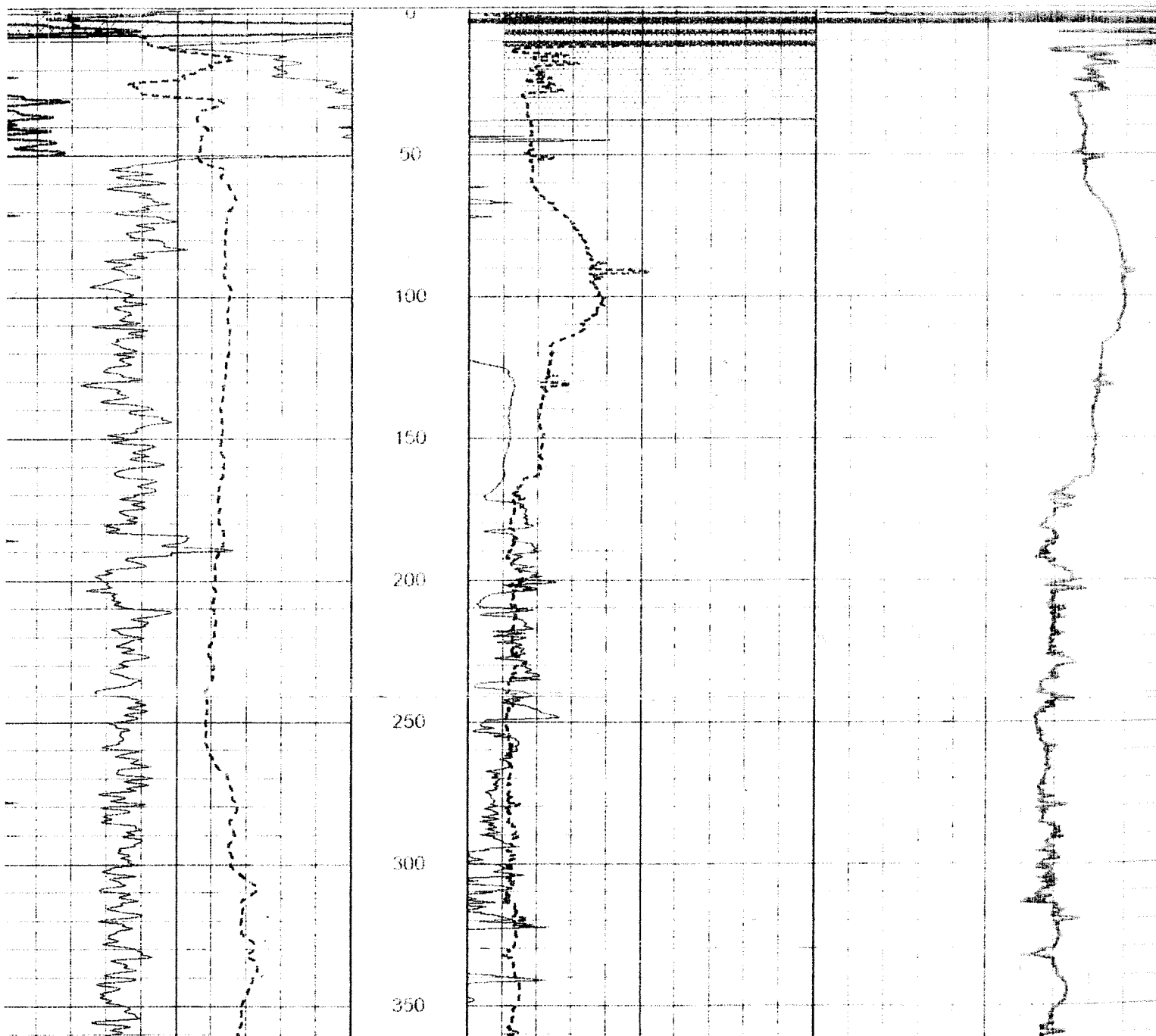
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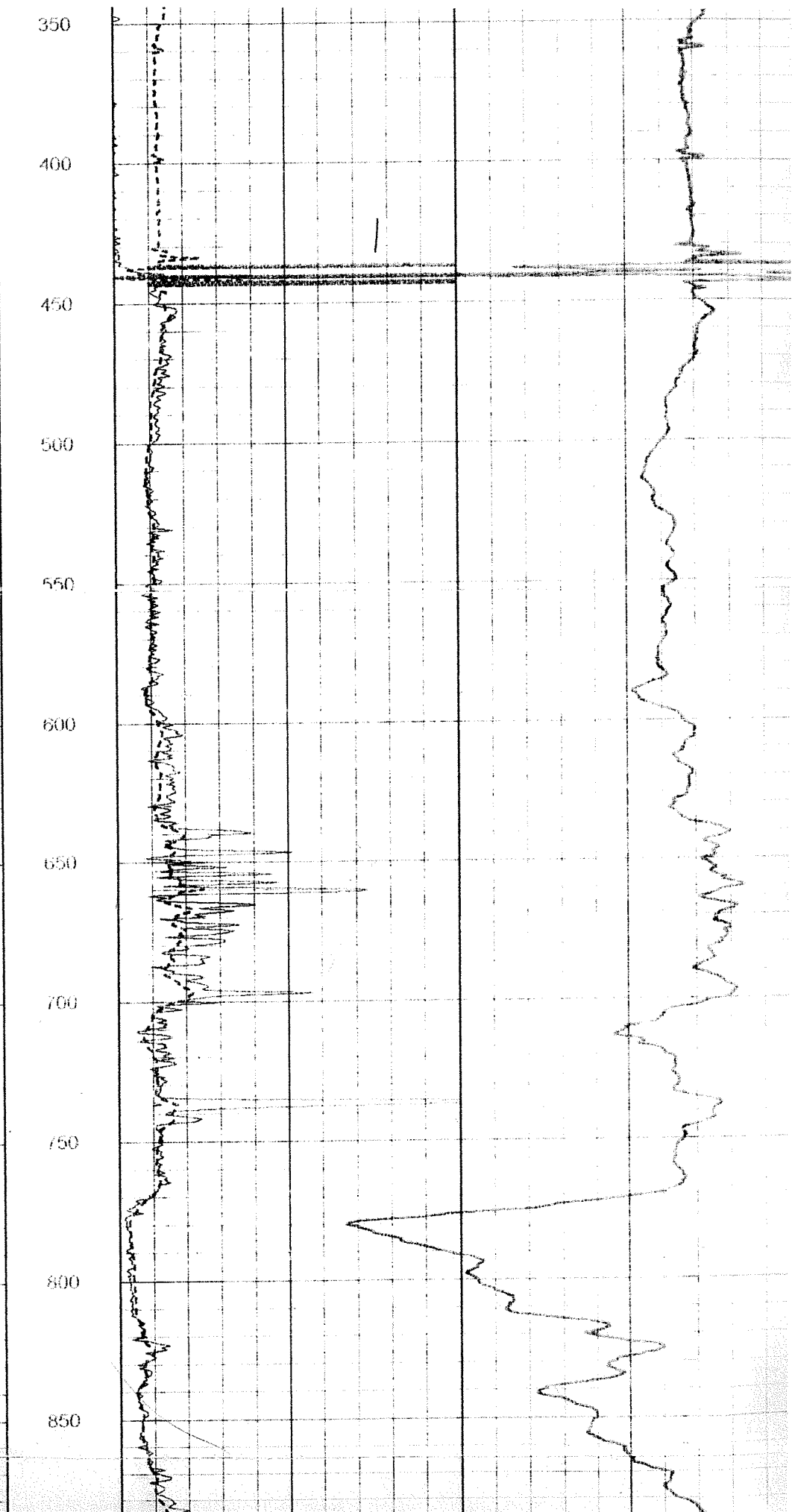
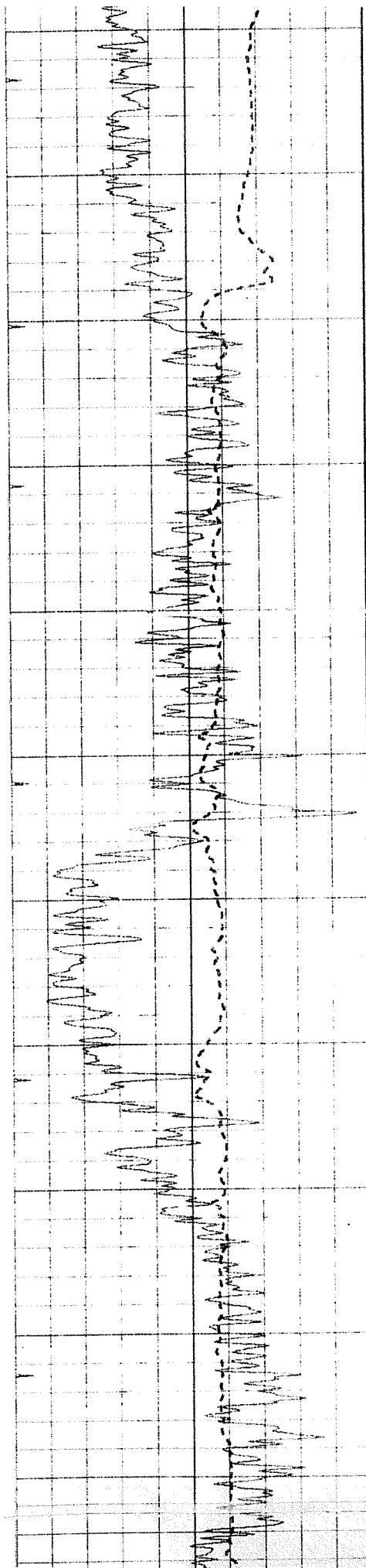
# MAIN PASS

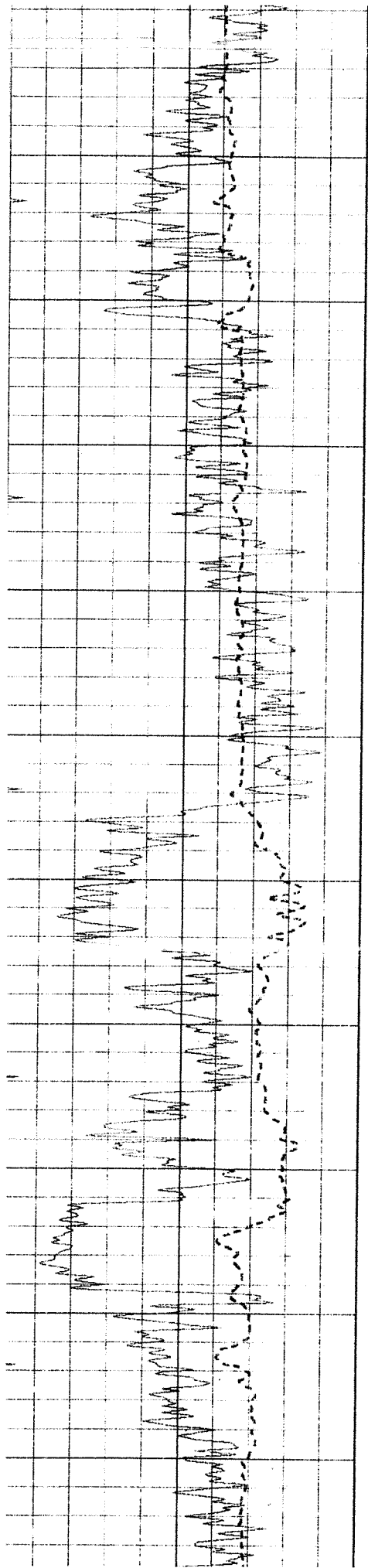
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Dataset Pathname: pass2.4  
Presentation Format: dil2.prs  
Dataset Creation: Sat Jul 03 04:26:43 1999 by Calc VER 5.0  
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-125	SP (mV)	75
0	MINMK	20

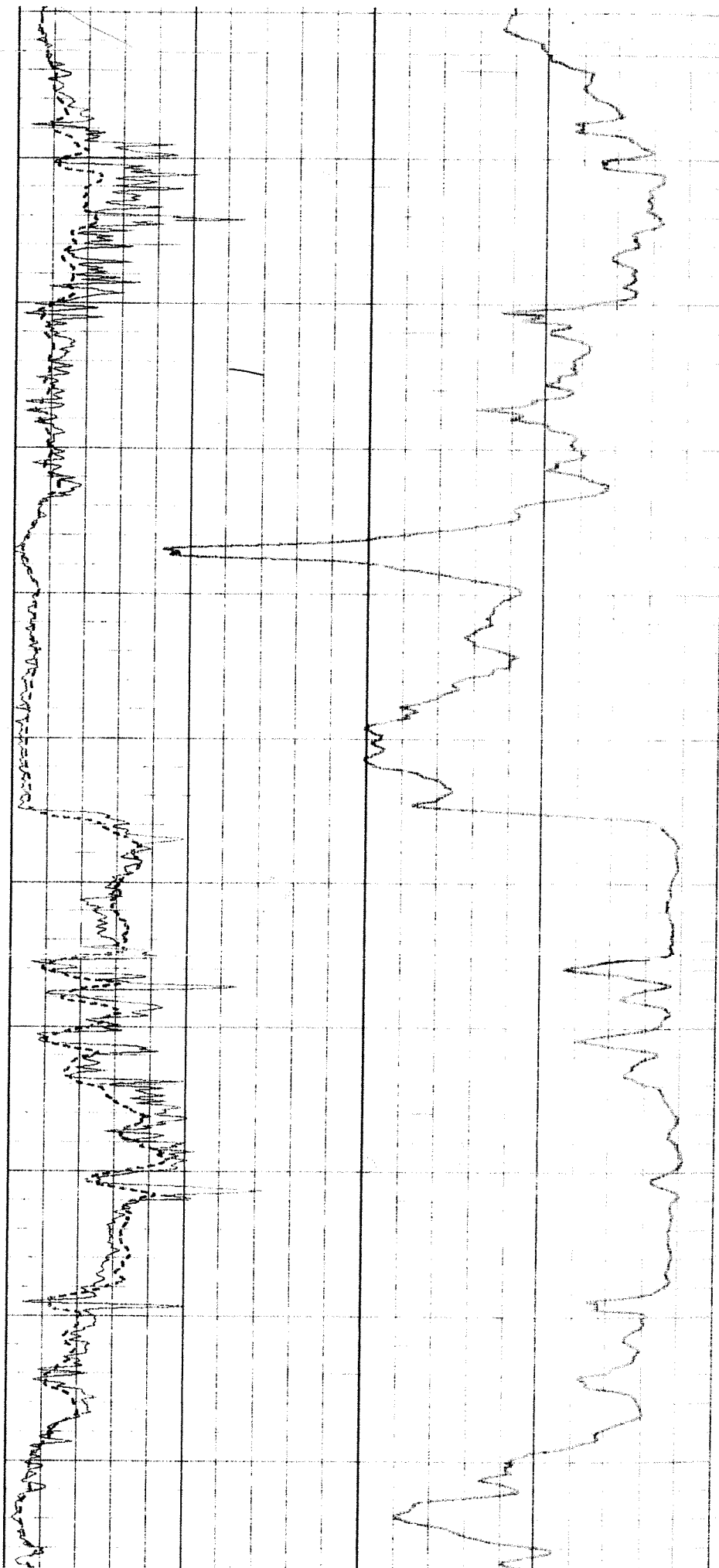
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
1000	CILD (mmho-m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500



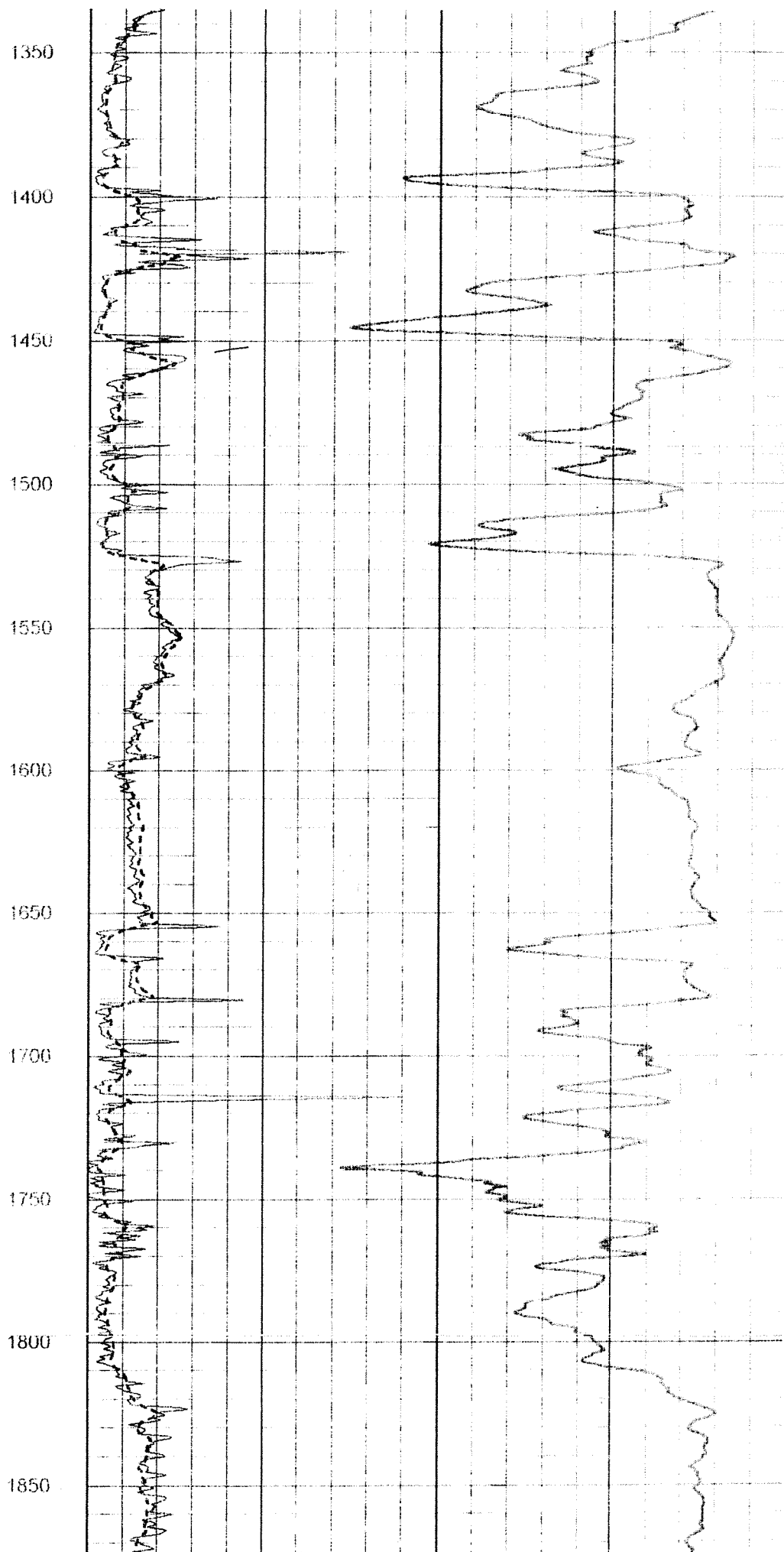
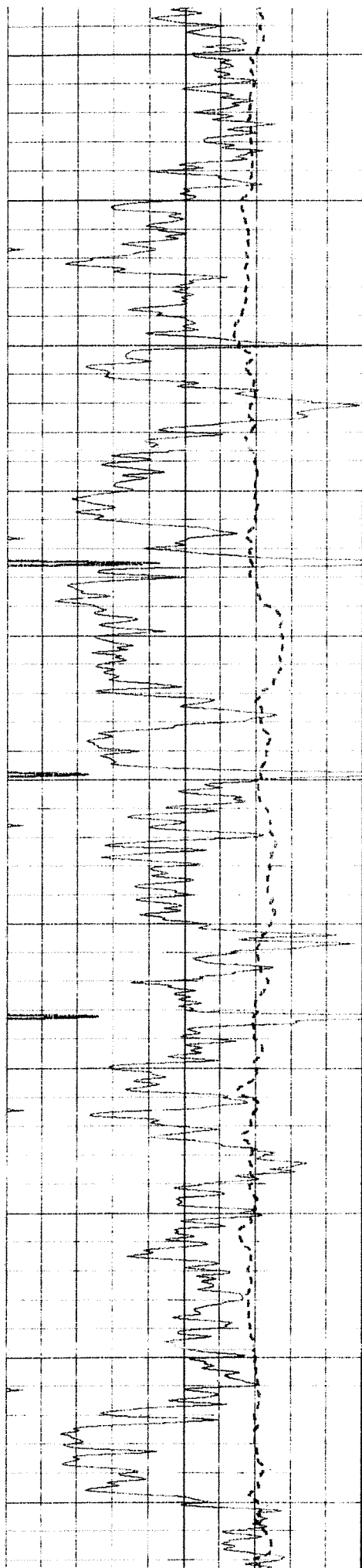


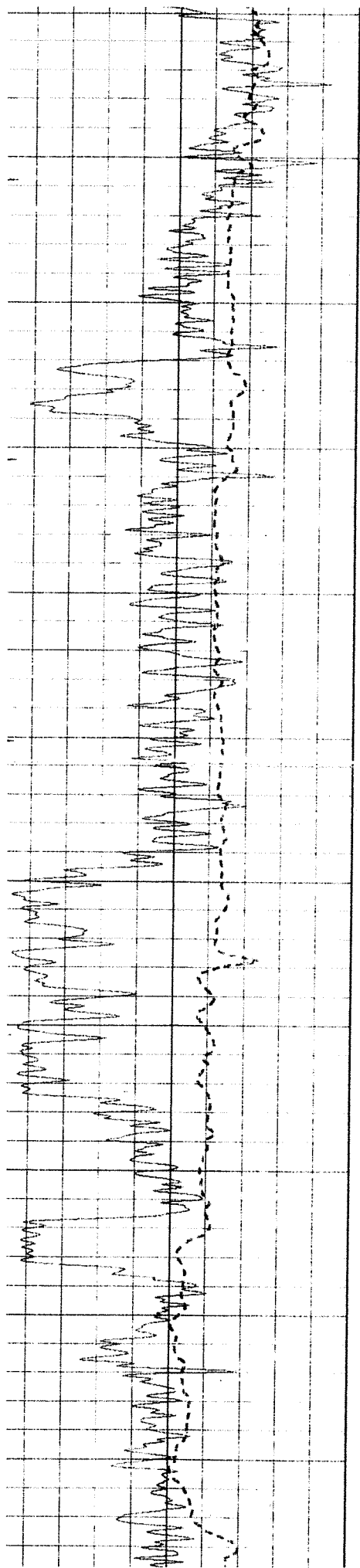


850  
900  
950  
1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350









1850

1900

1950

2000

2050

2100

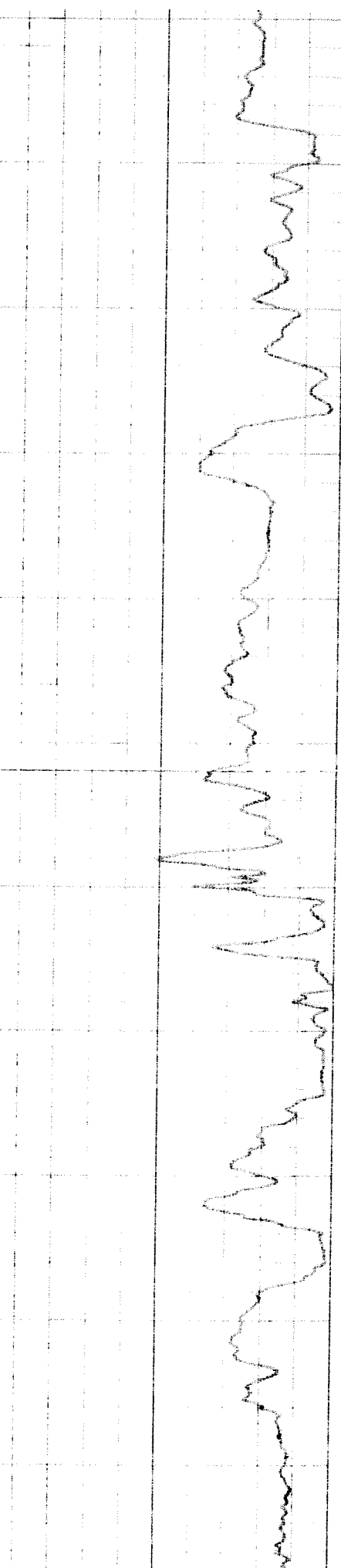
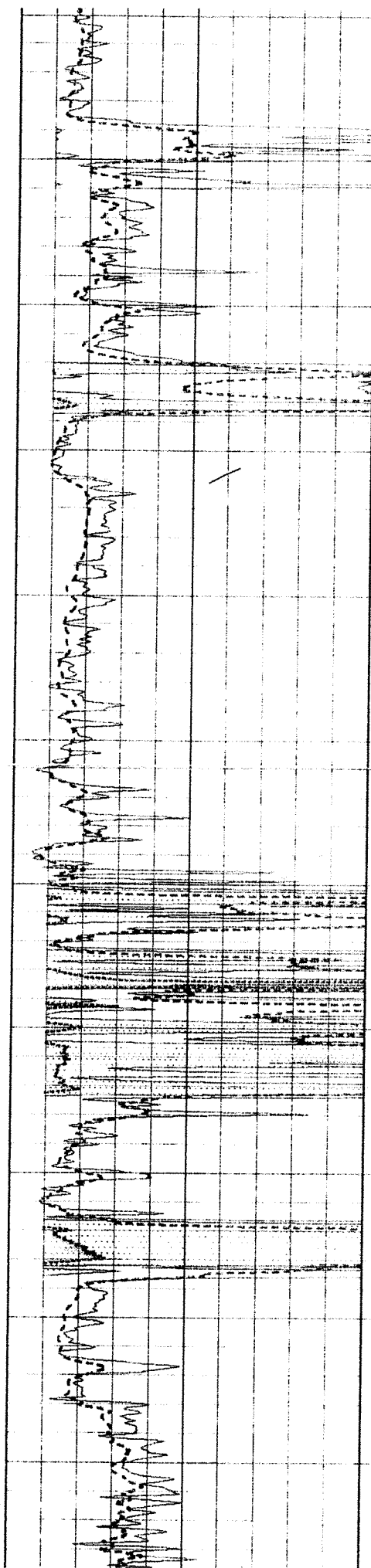
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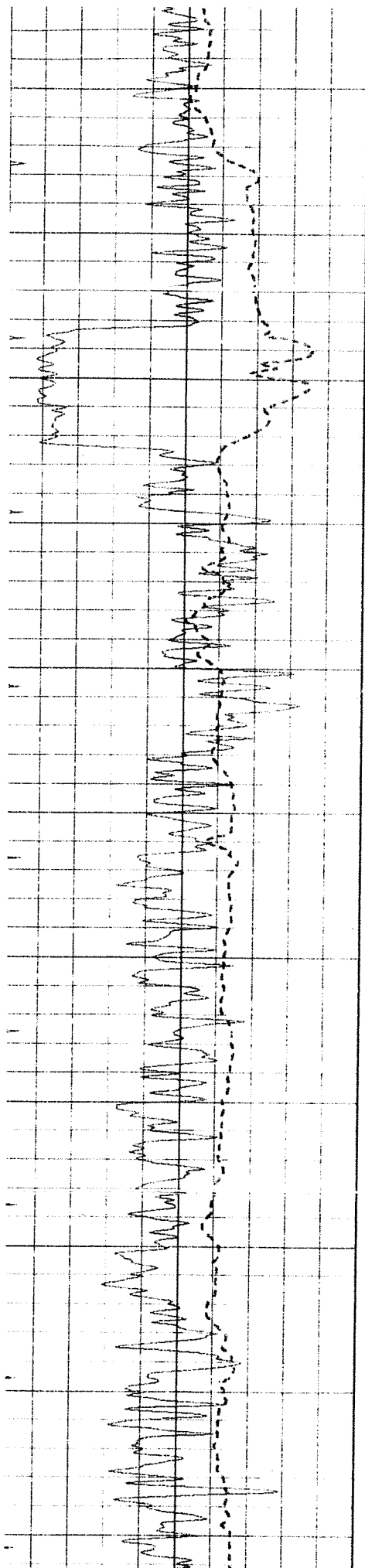
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2300

2350





2350

2400

2450

2500

2550

2600

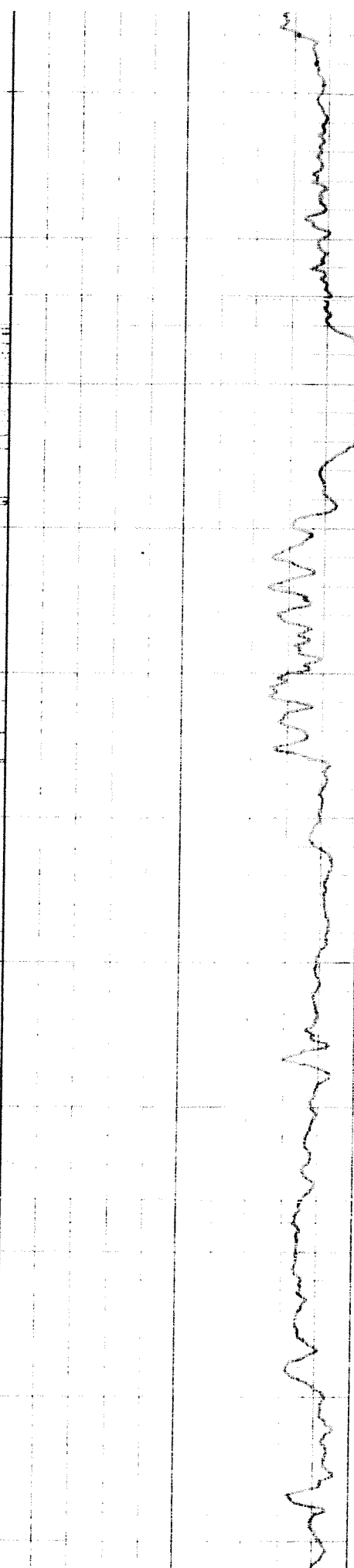
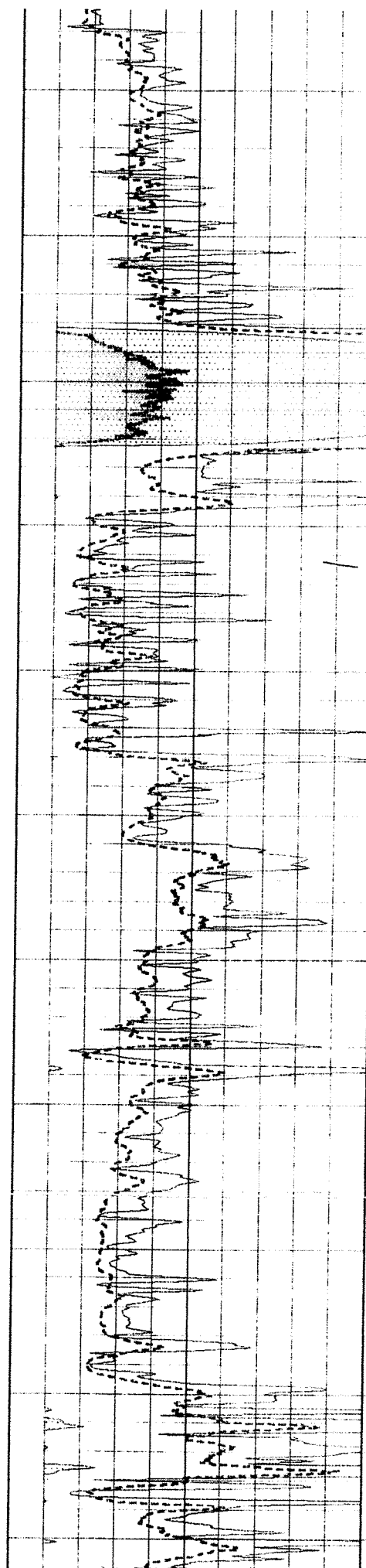
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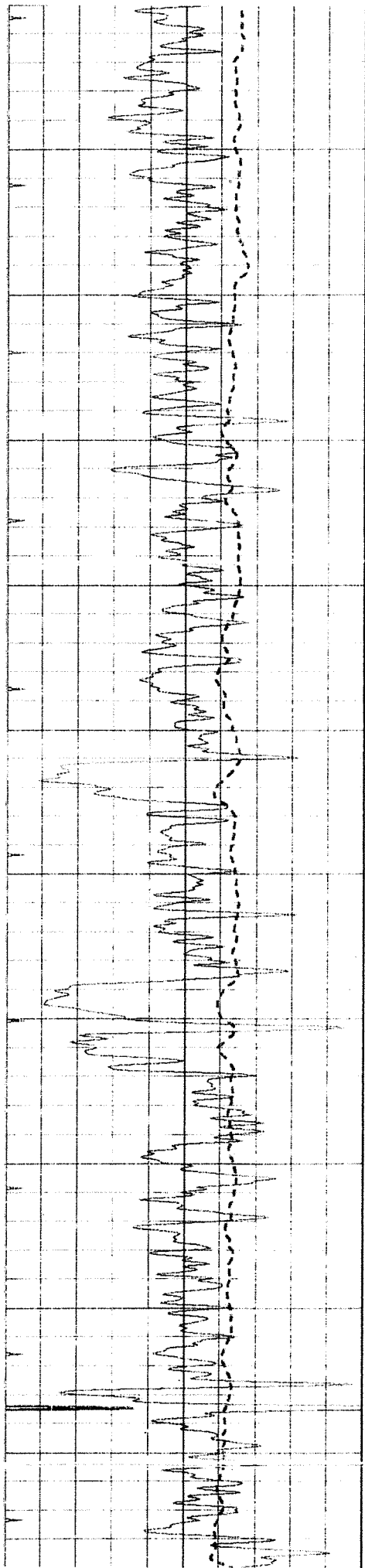
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2750

2800

2850





2900

2950

3000

3050

3100

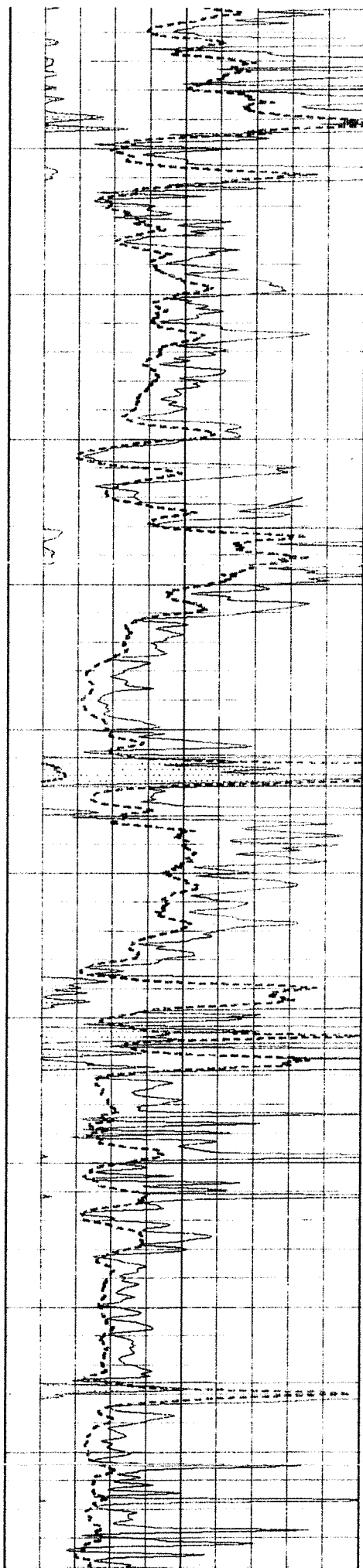
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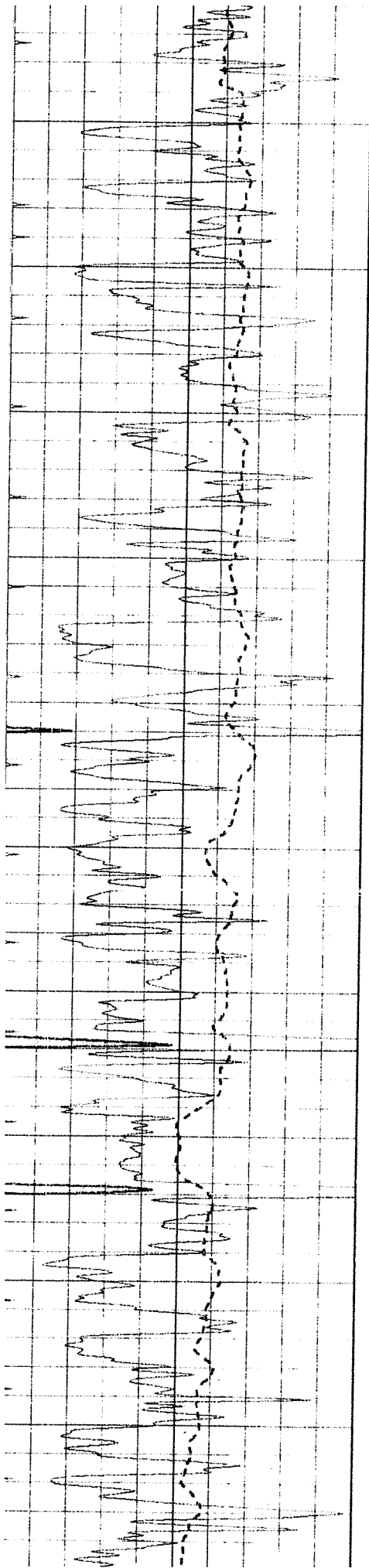
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3300

3350



Hand-drawn waveform on grid paper.



3400

3450

3500

3550

3600

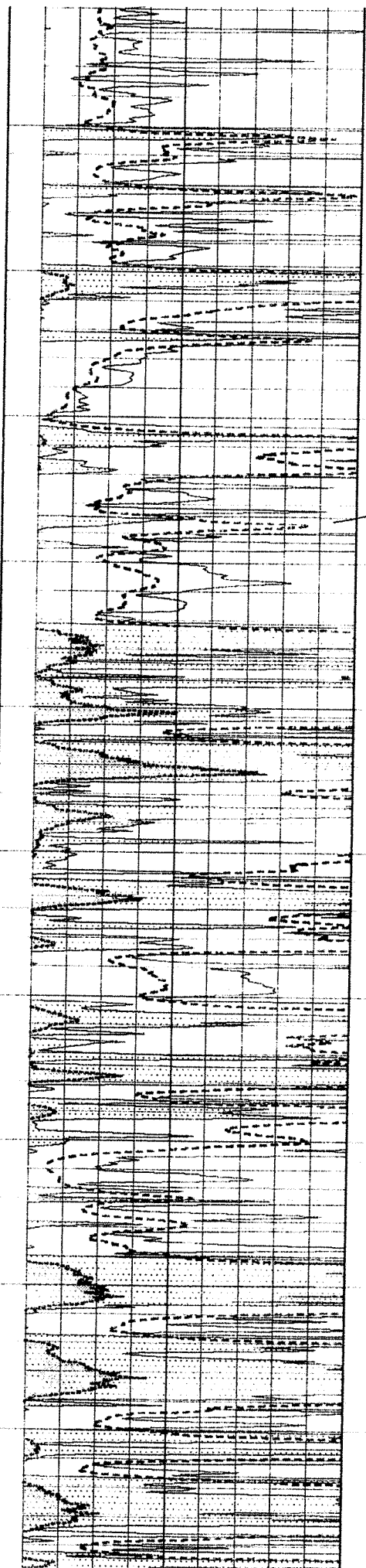
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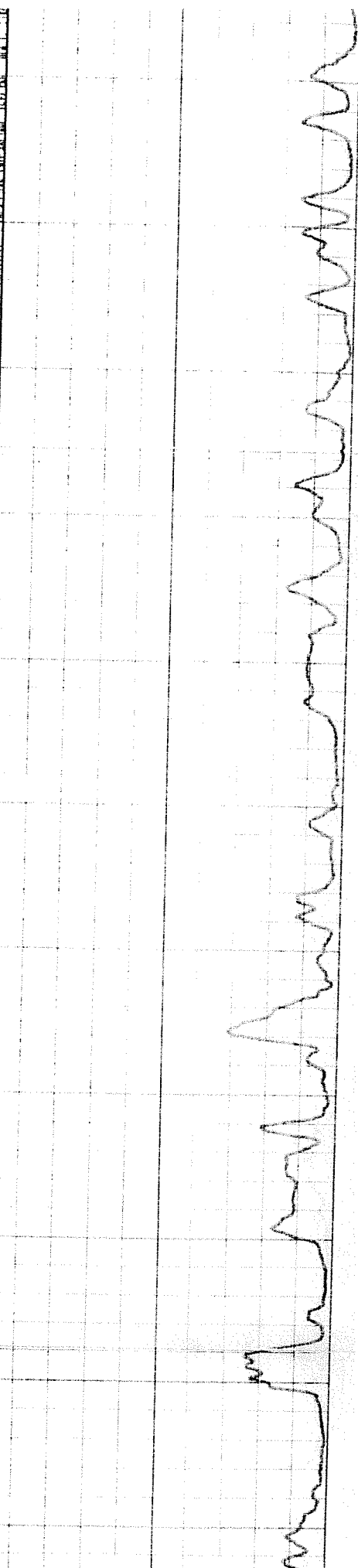
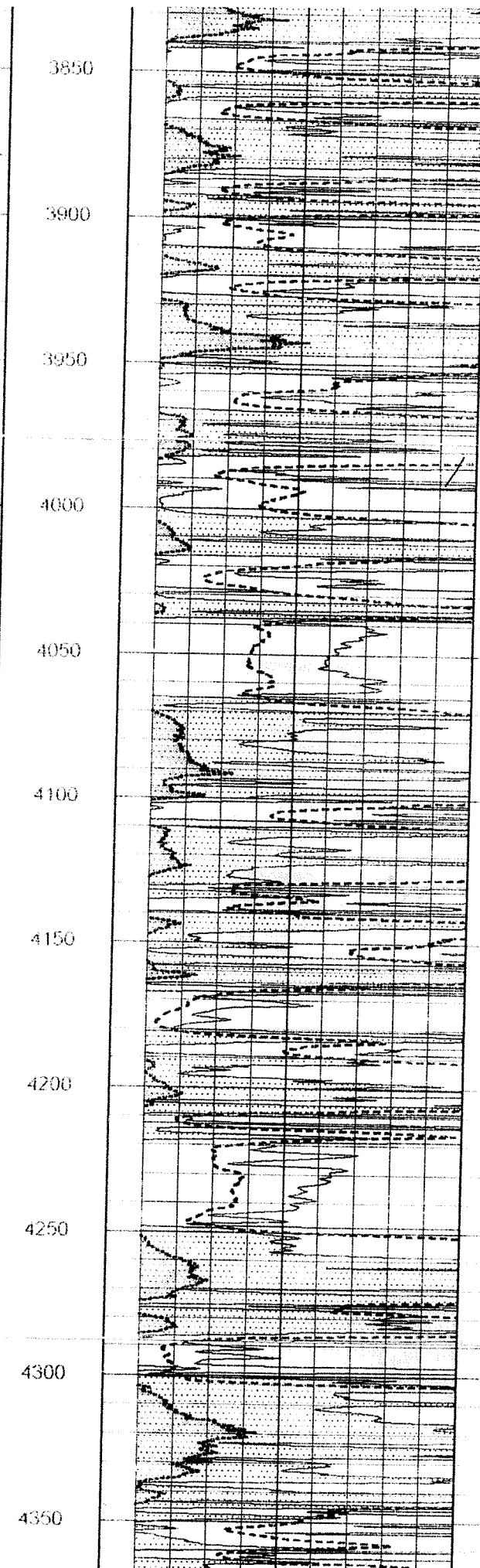
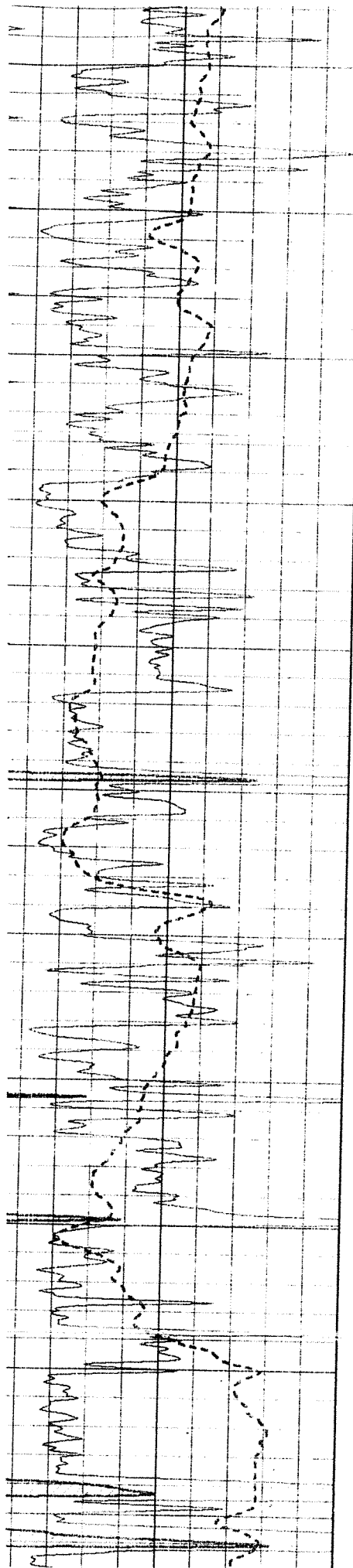
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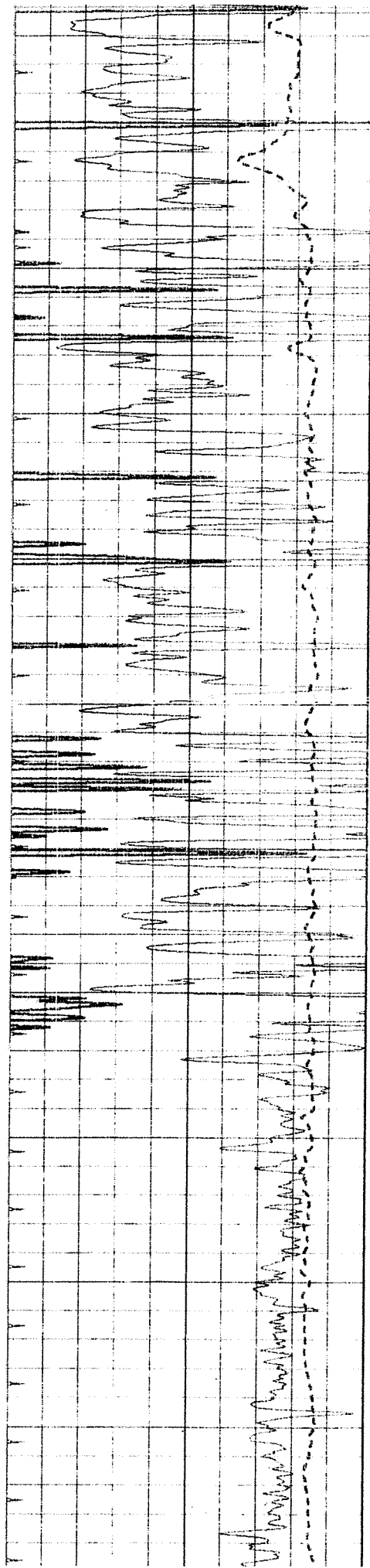
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3850









4400

4450

4500

4550

4600

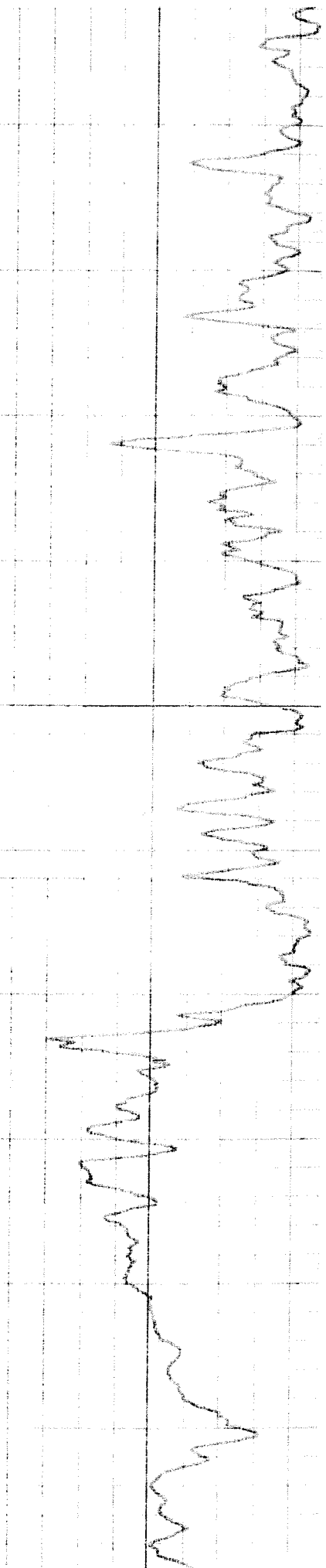
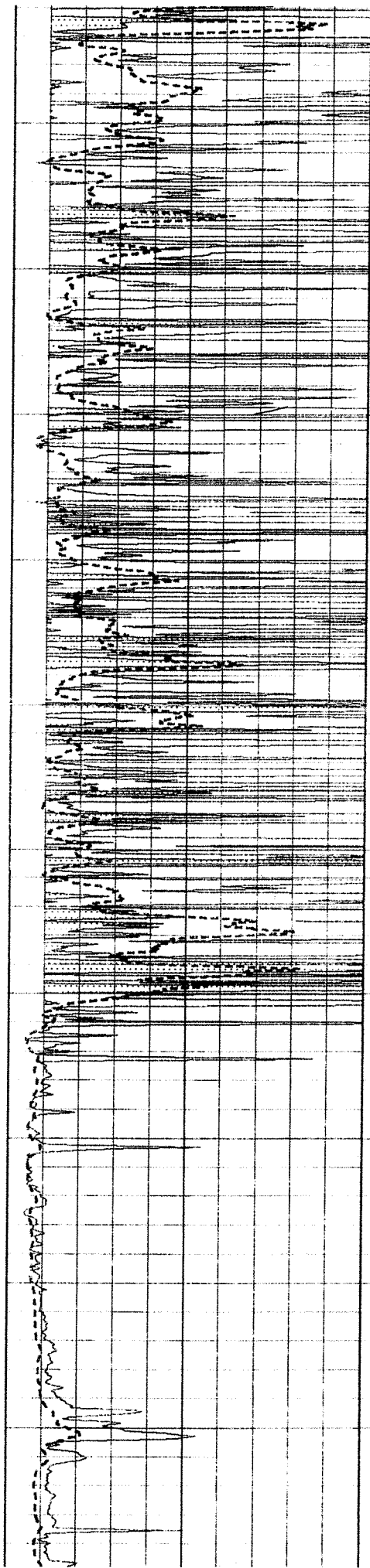
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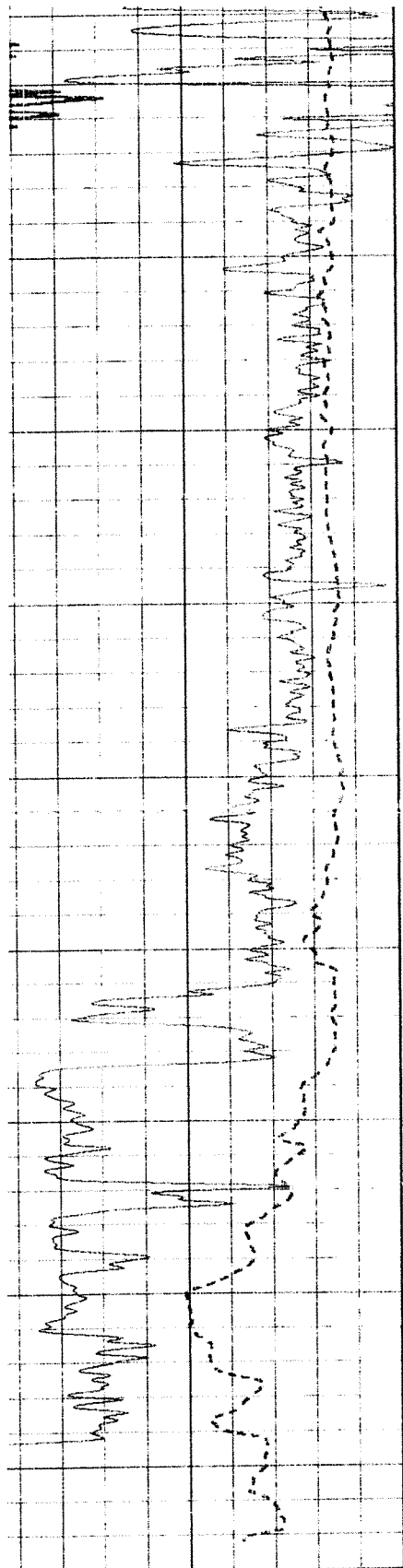
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4750

4800

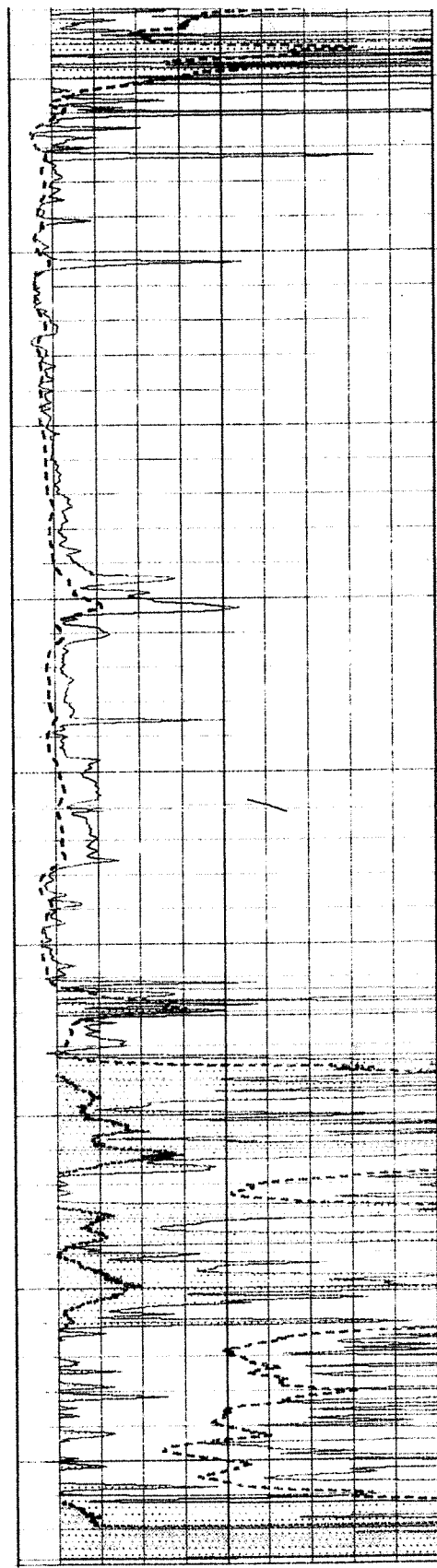
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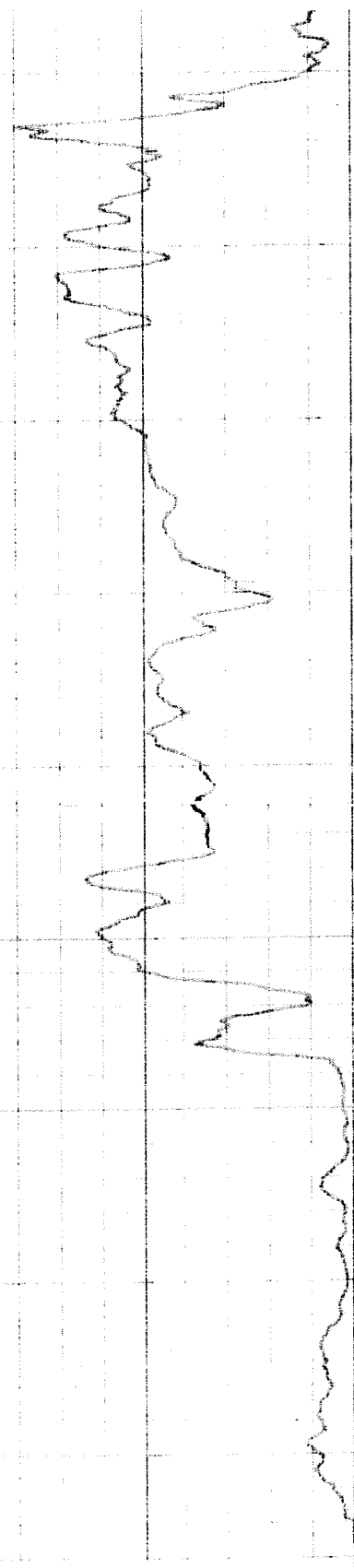


	Gamma Ray (GAPI)	150
25	SP (mV)	75
	MINMK	20

4700  
4750  
4800  
4850  
4900  
4950  
5000  
5050  
5100



0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
1000	CILD (mho-m)	
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





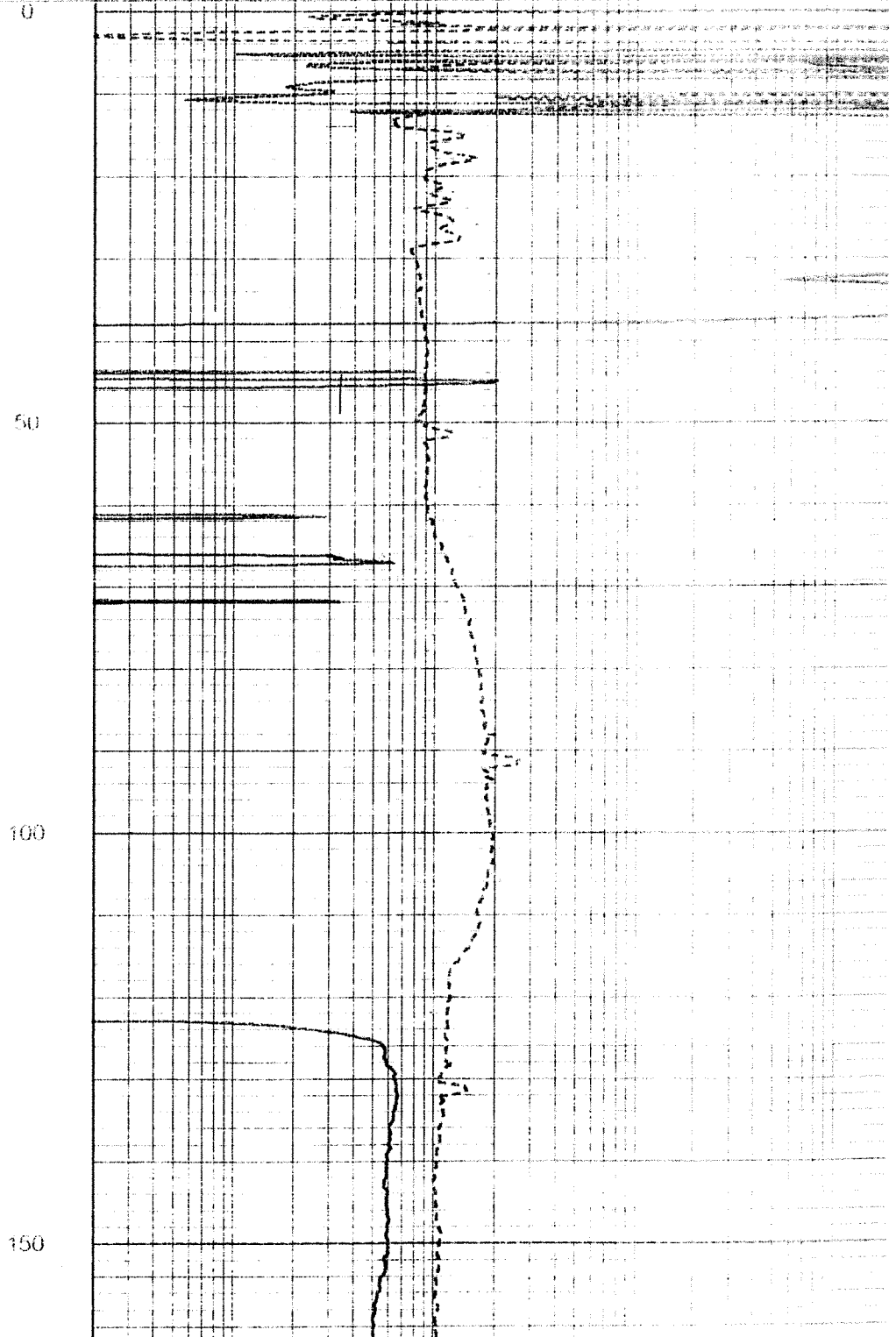
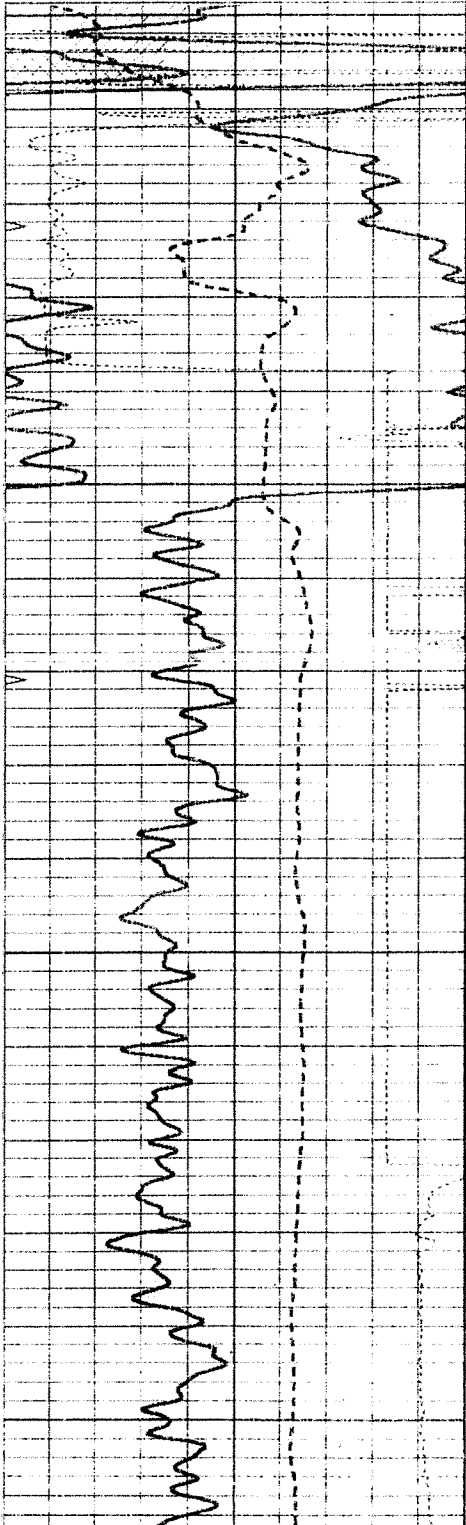
ELL  
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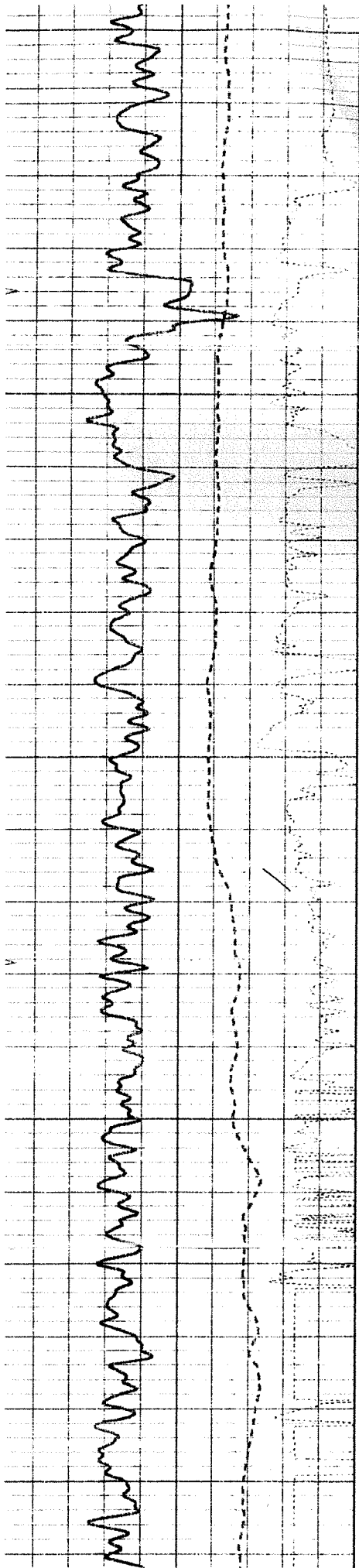
# MAIN PASS

Database File: 19451pc.db  
Dataset Pathname: pass2 4  
Presentation Format: dit prs  
Dataset Creation: Sat Jul 03 04:26:43 1999 by Calc VER\_5.0  
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-125	SP (mV)	75
-250	RXO/RT	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	Deep Induction (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000





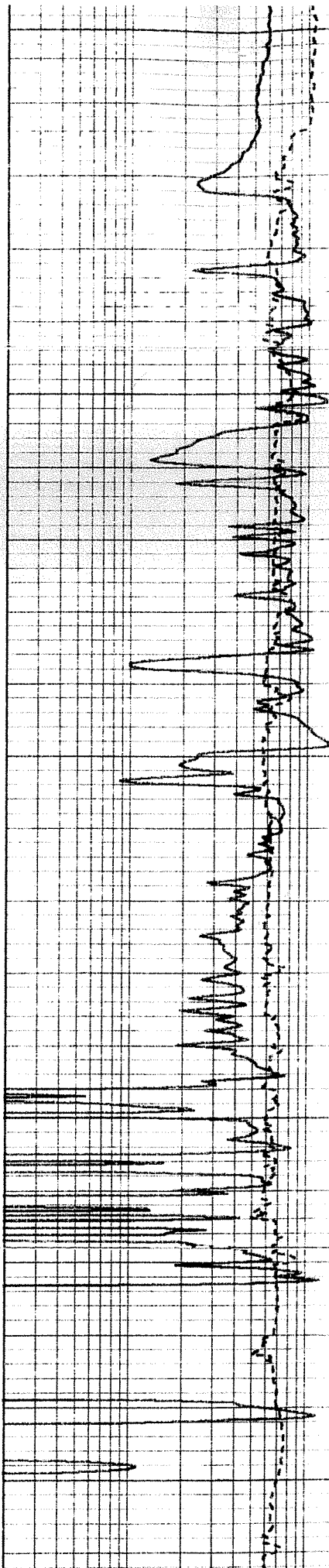
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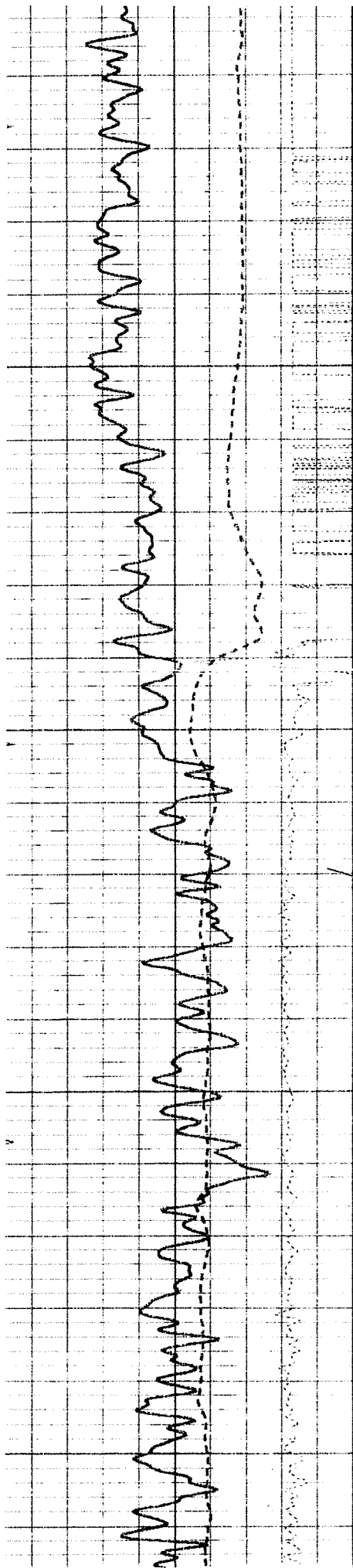
200

250

300

350



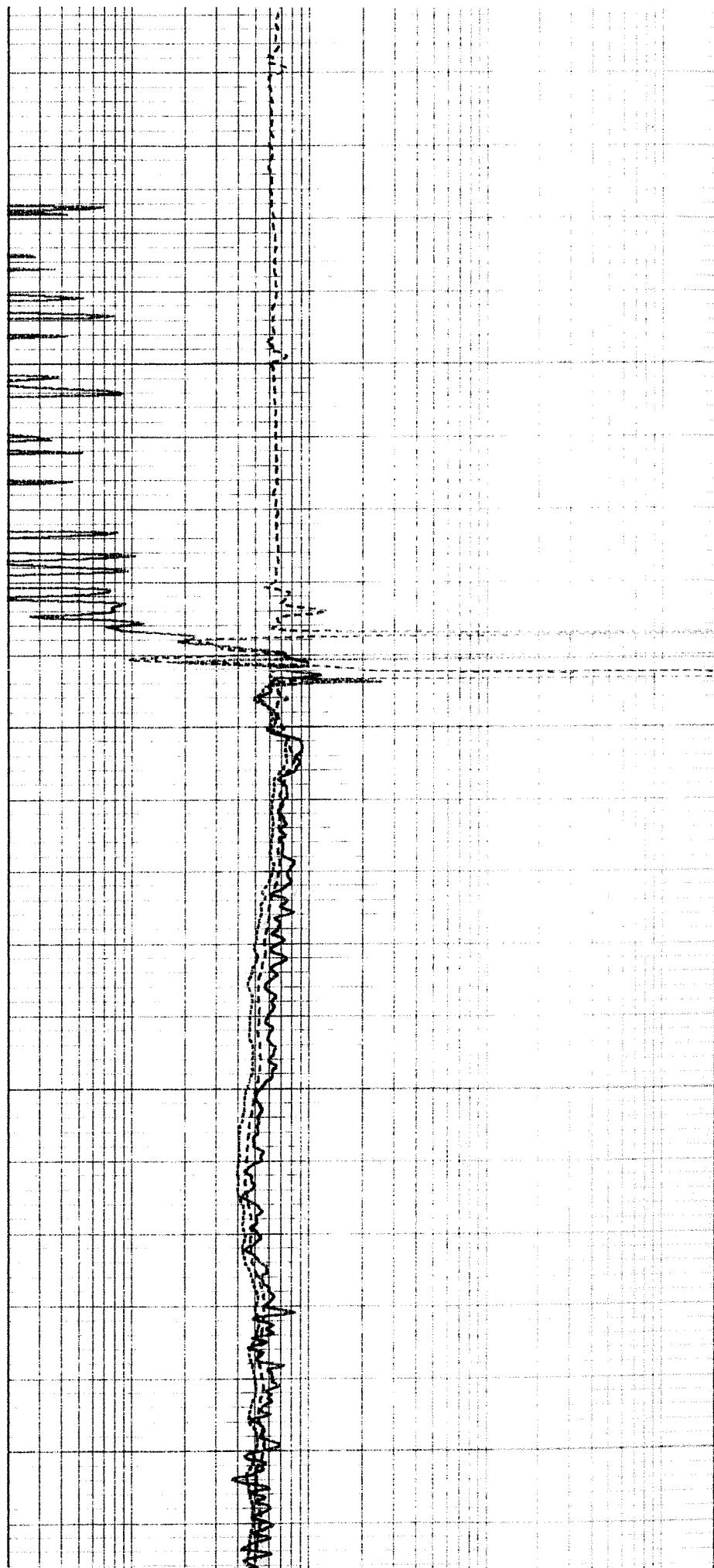


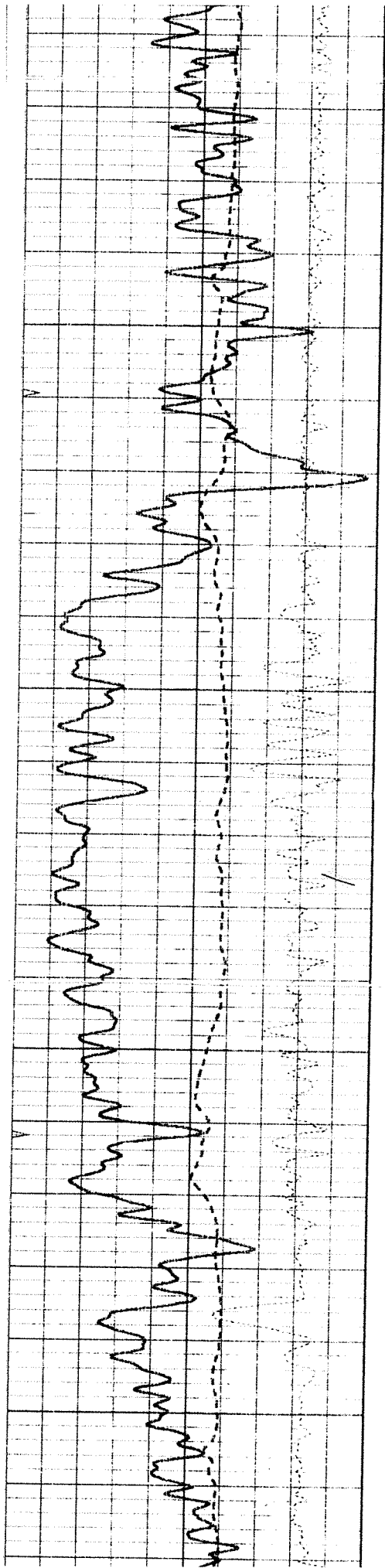
400

450

500

550



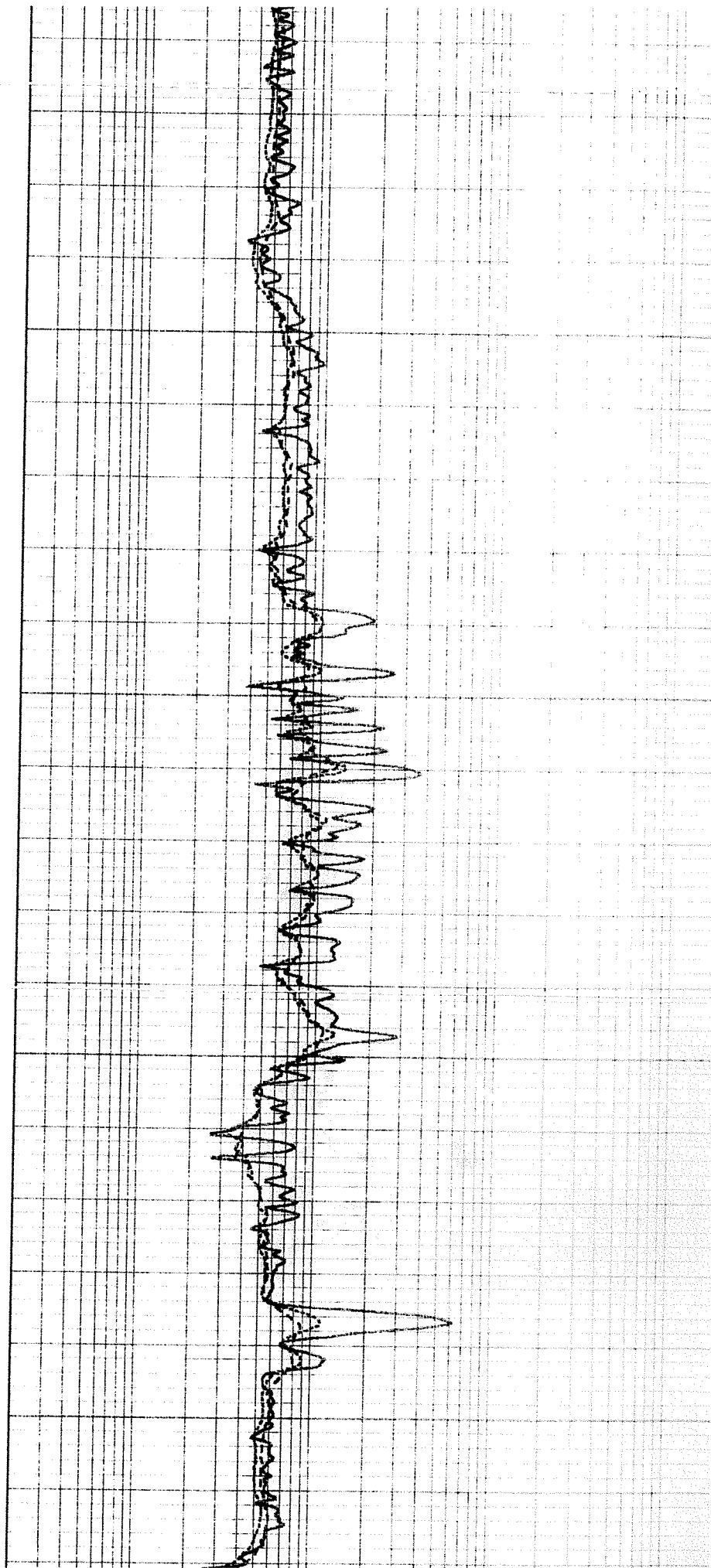


600

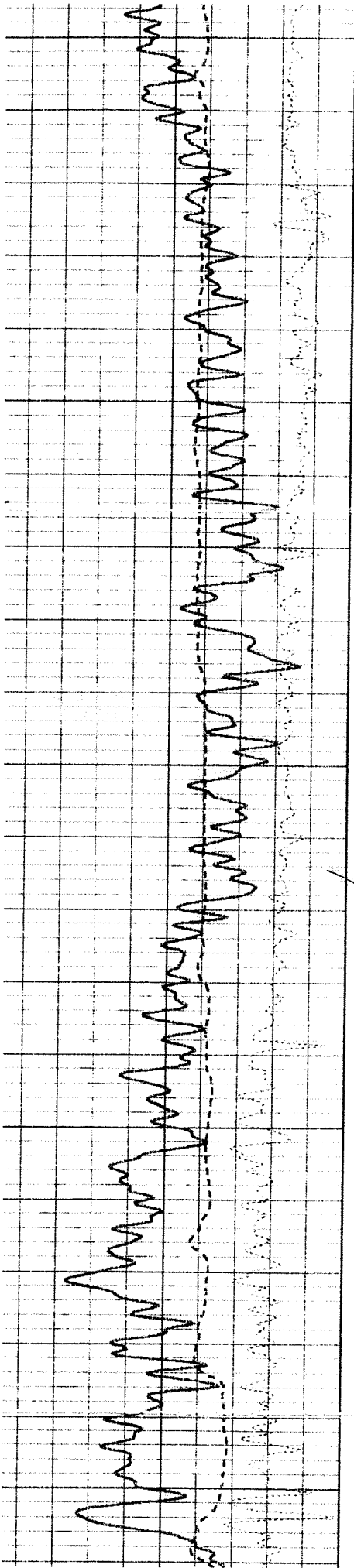
650

700

750







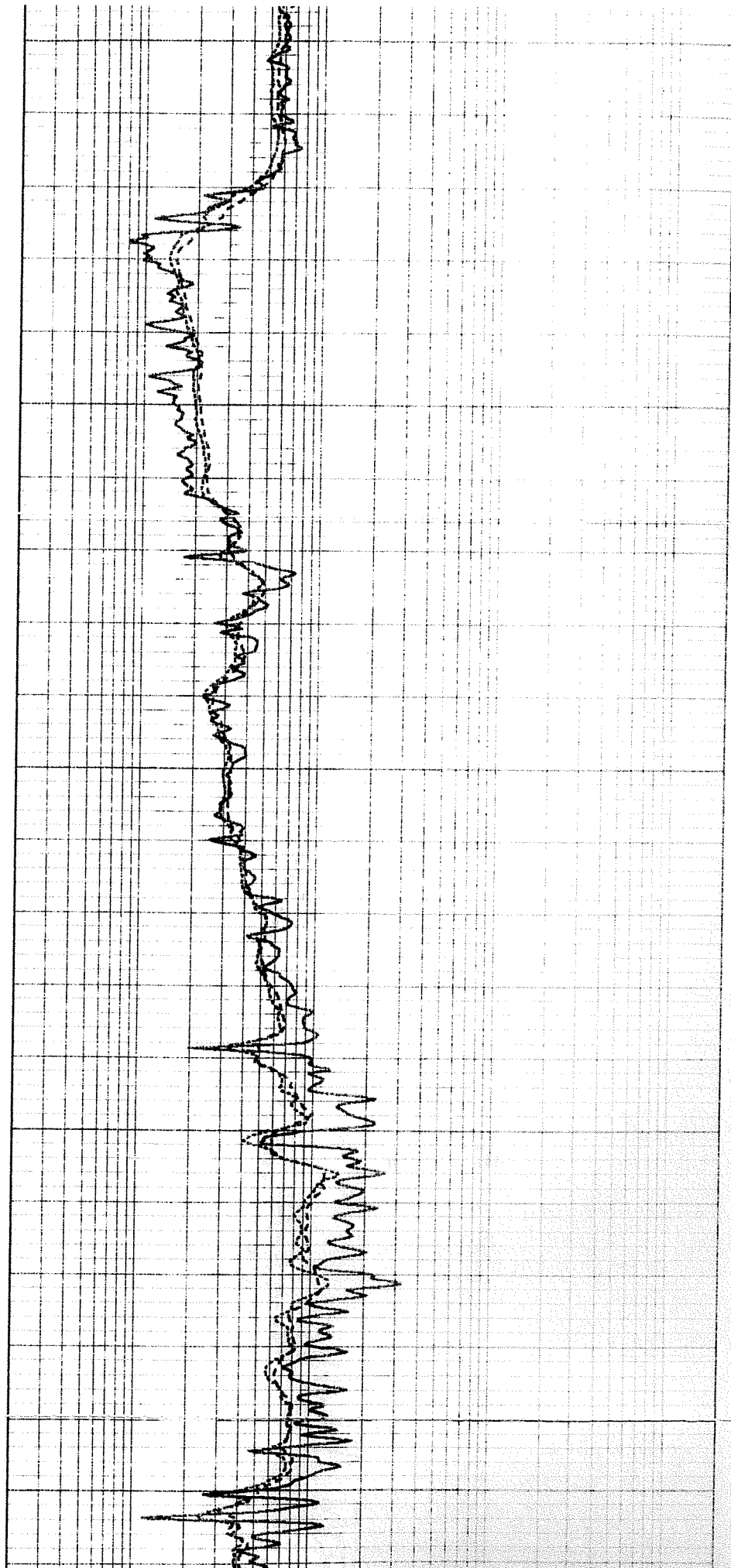
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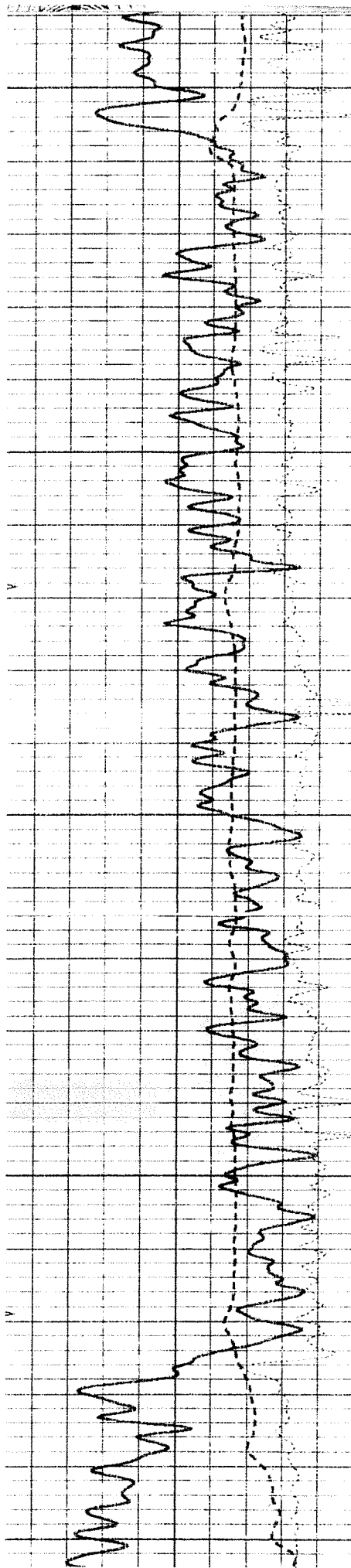
800

850

900

950





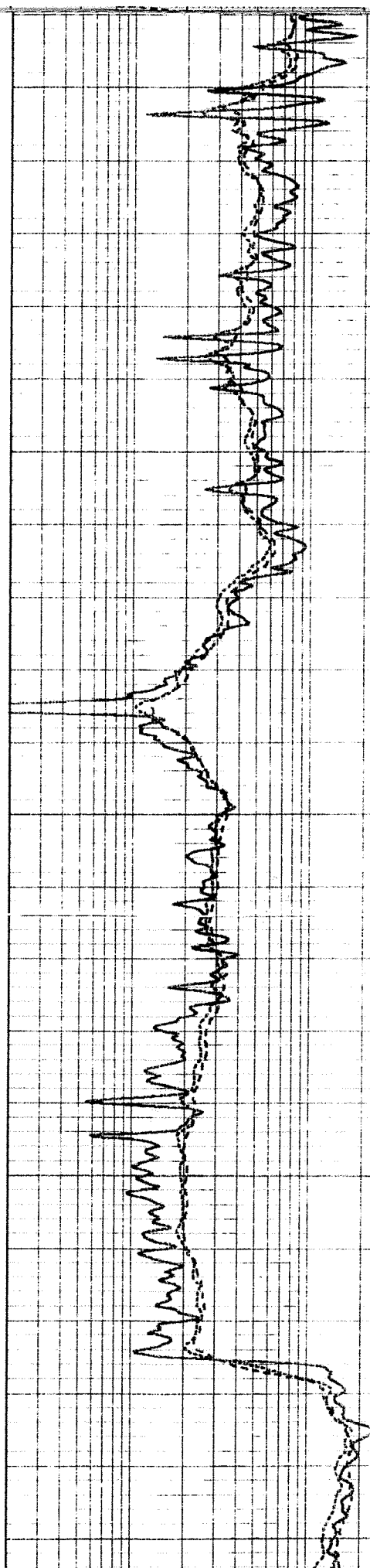
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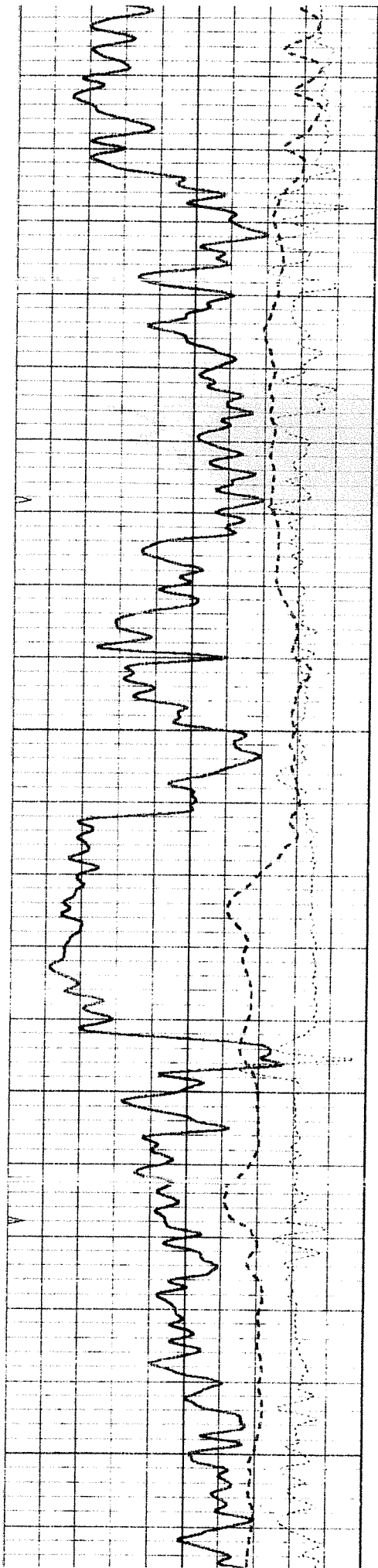
1000

1050

1100

1150





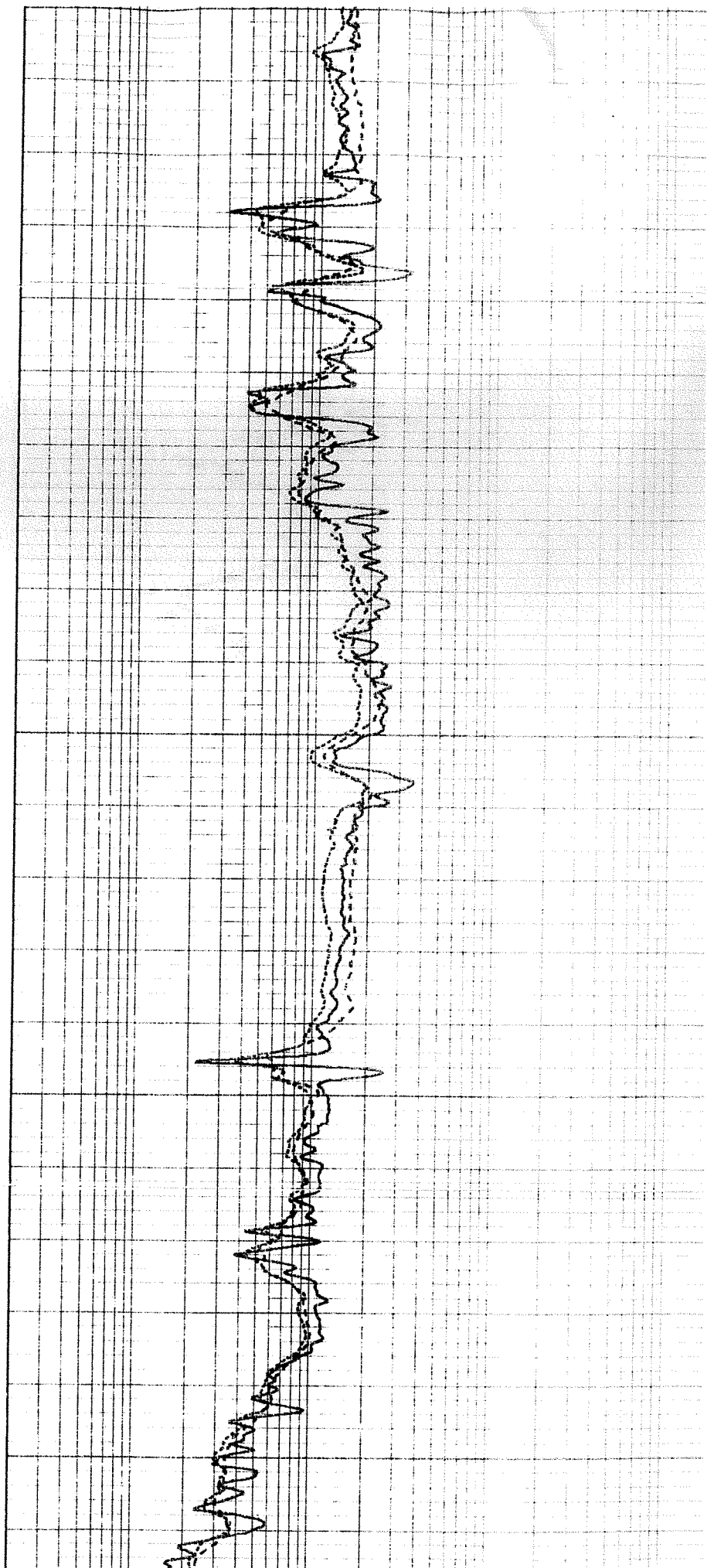
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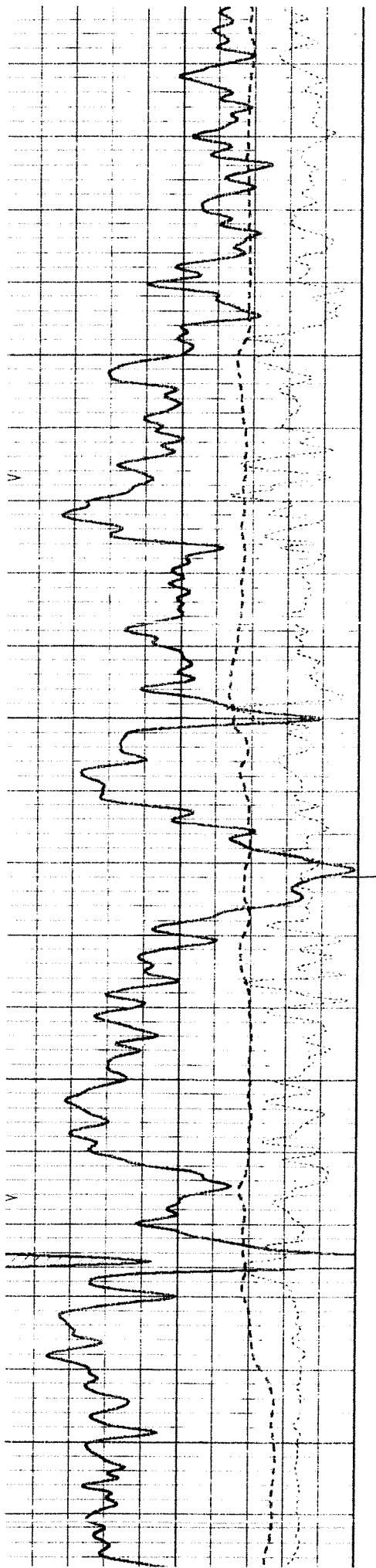
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1250

1300

1350



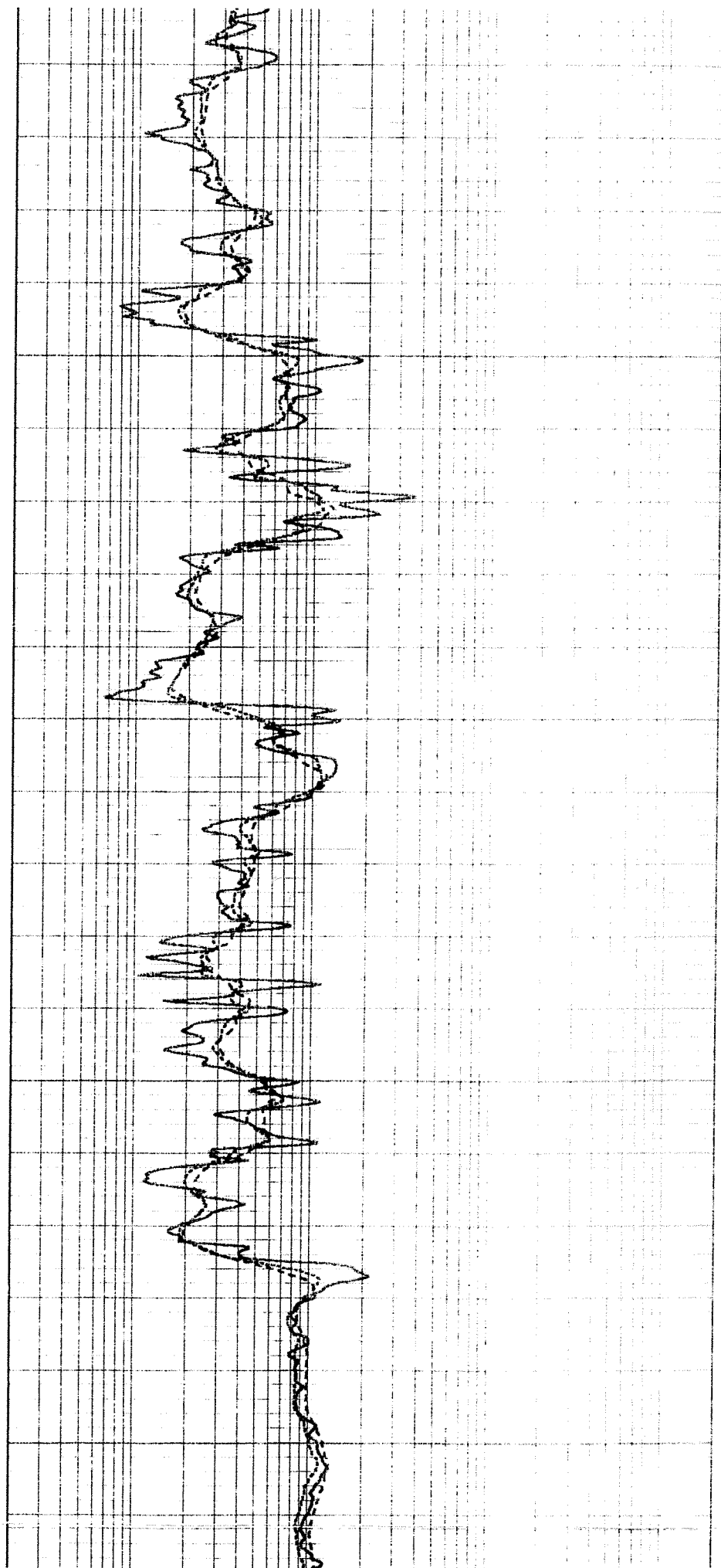


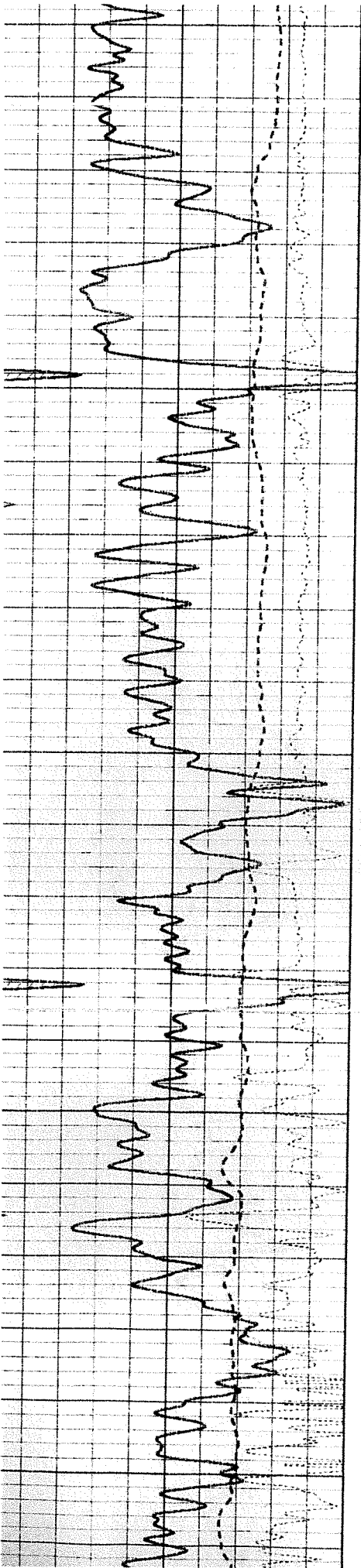
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1450

1500

1550





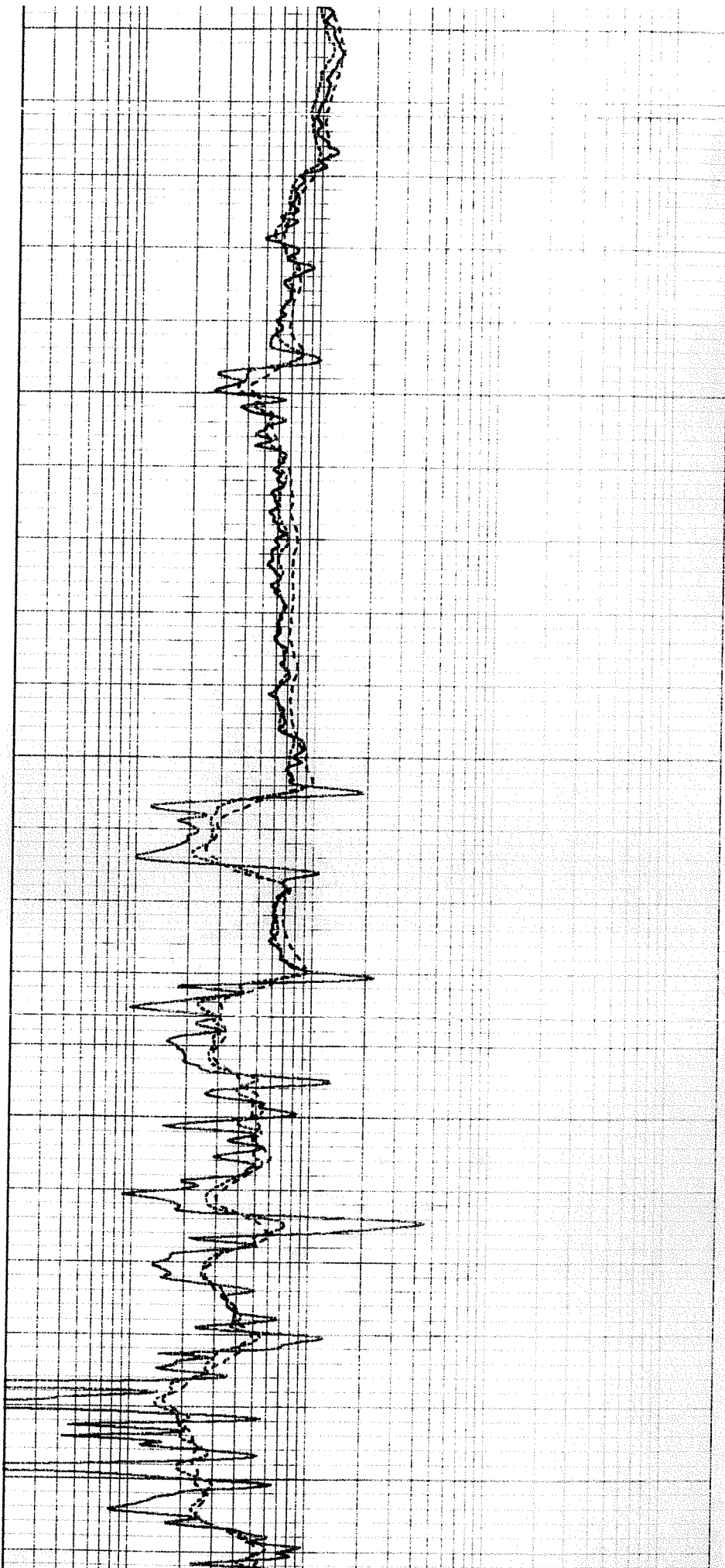
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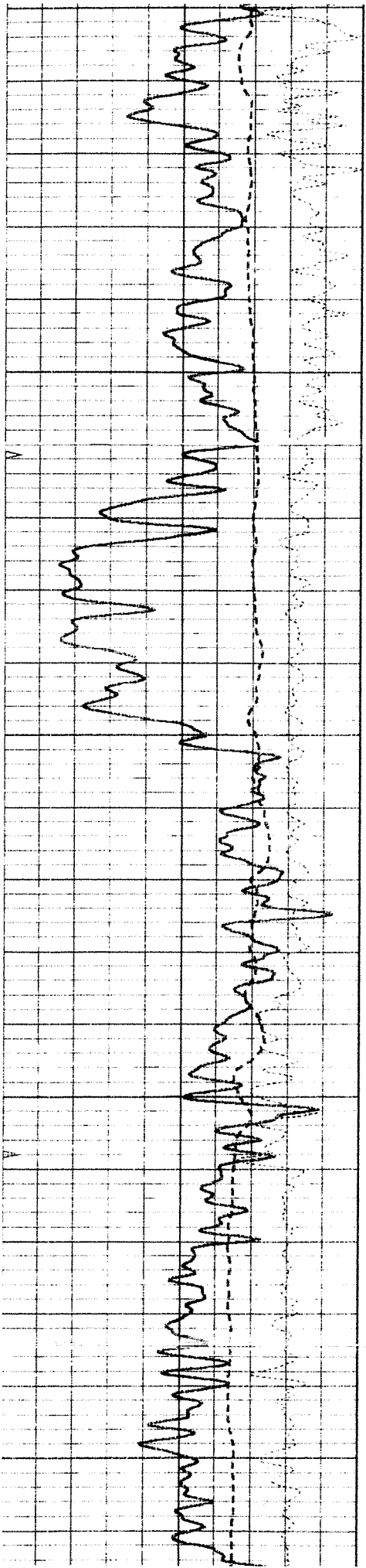
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1650

1700

1750



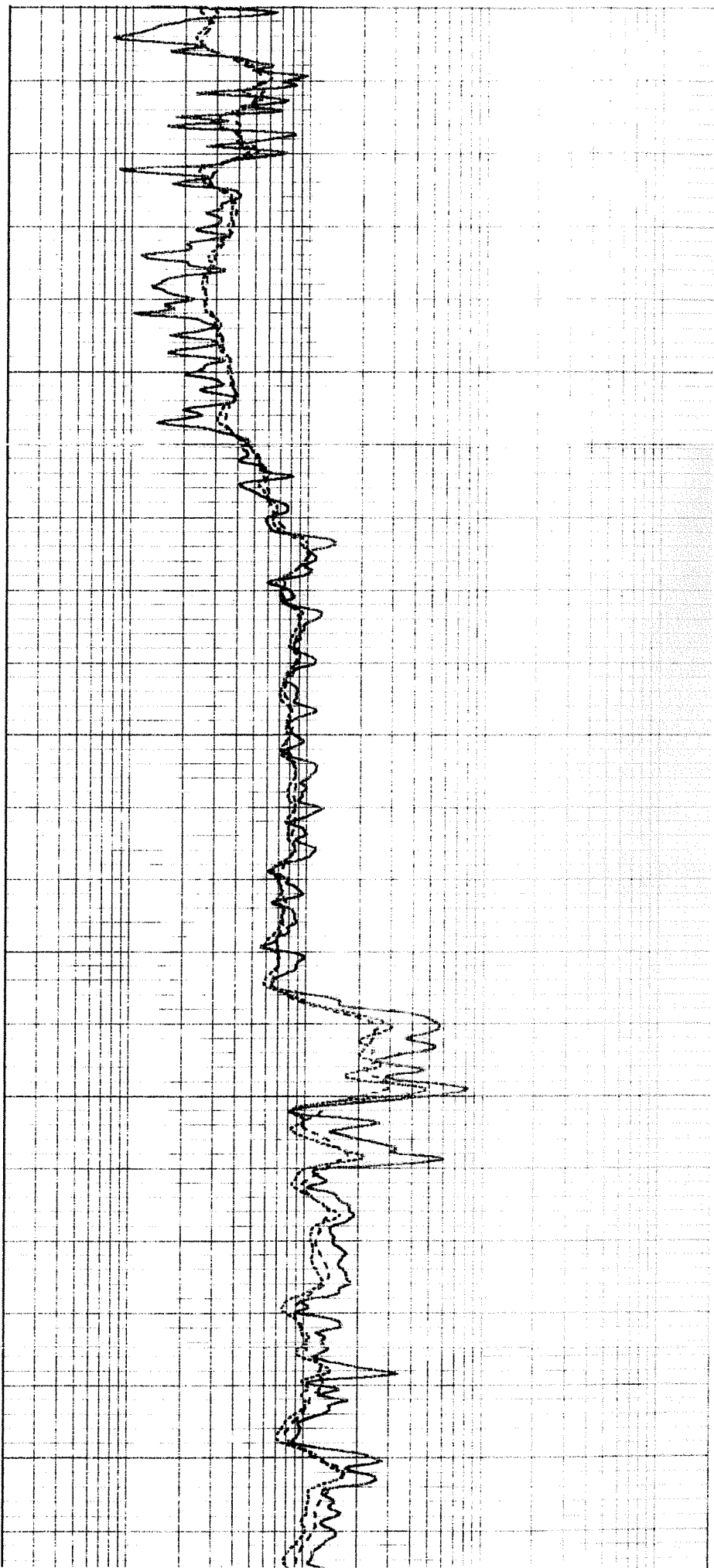


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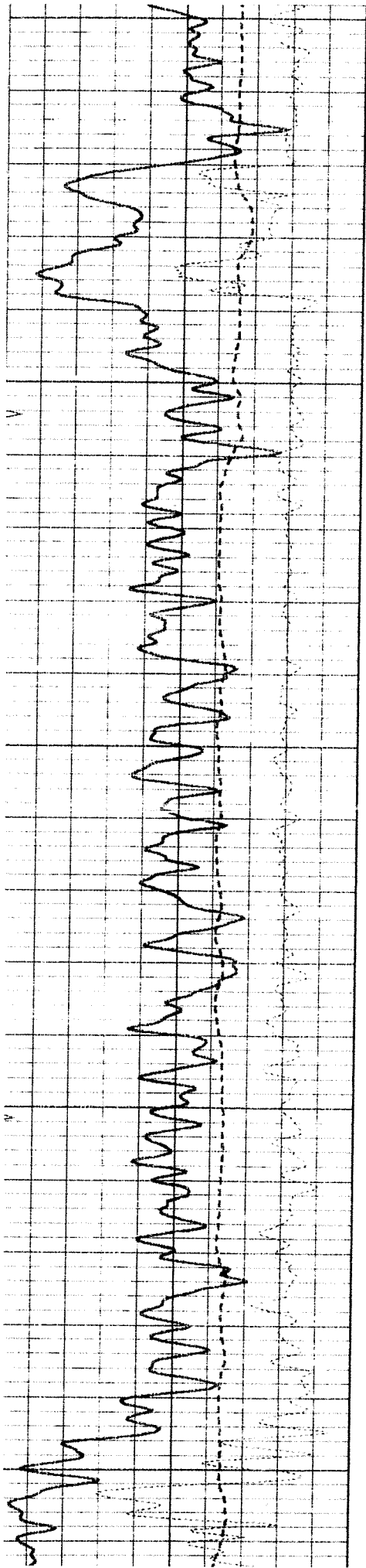
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1900

1950







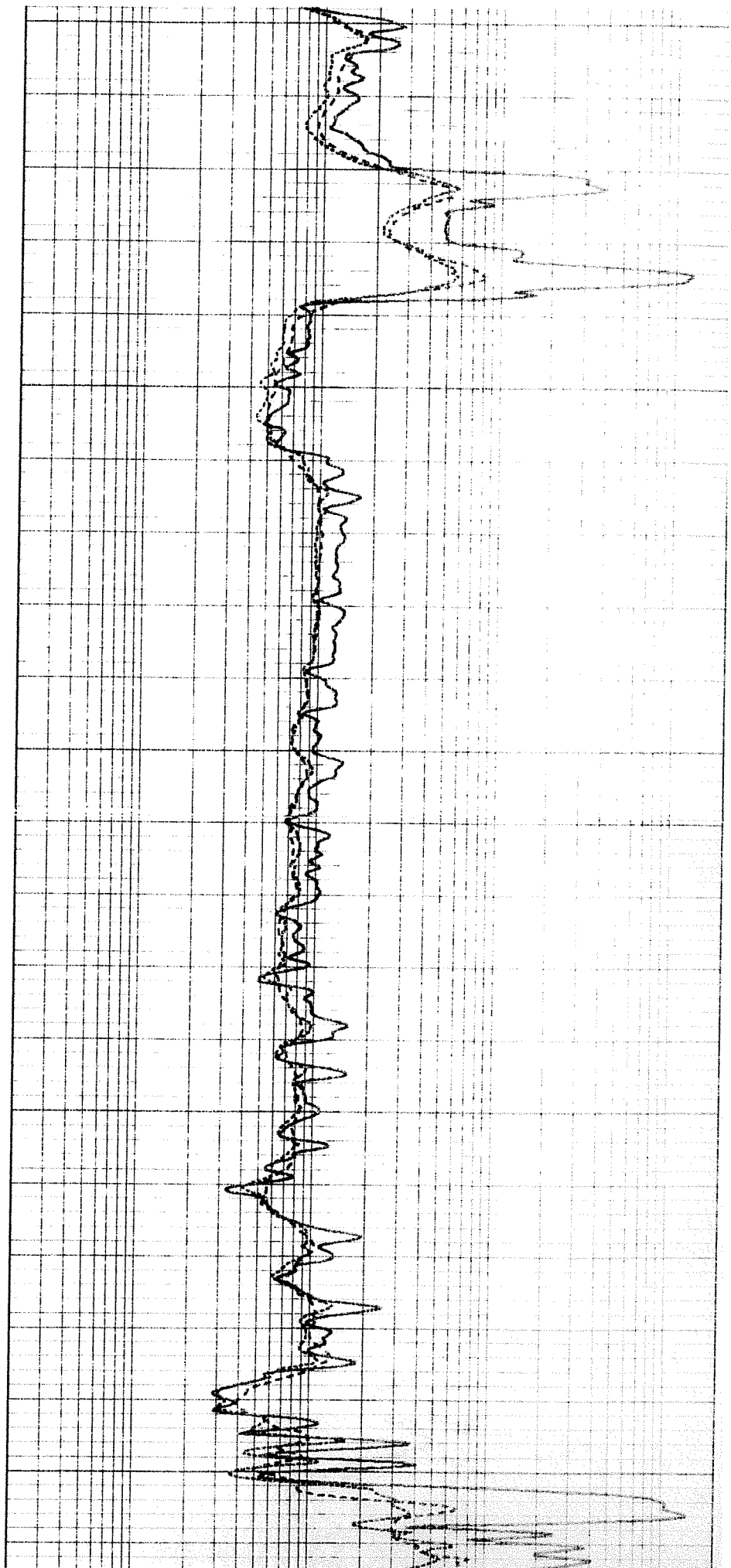
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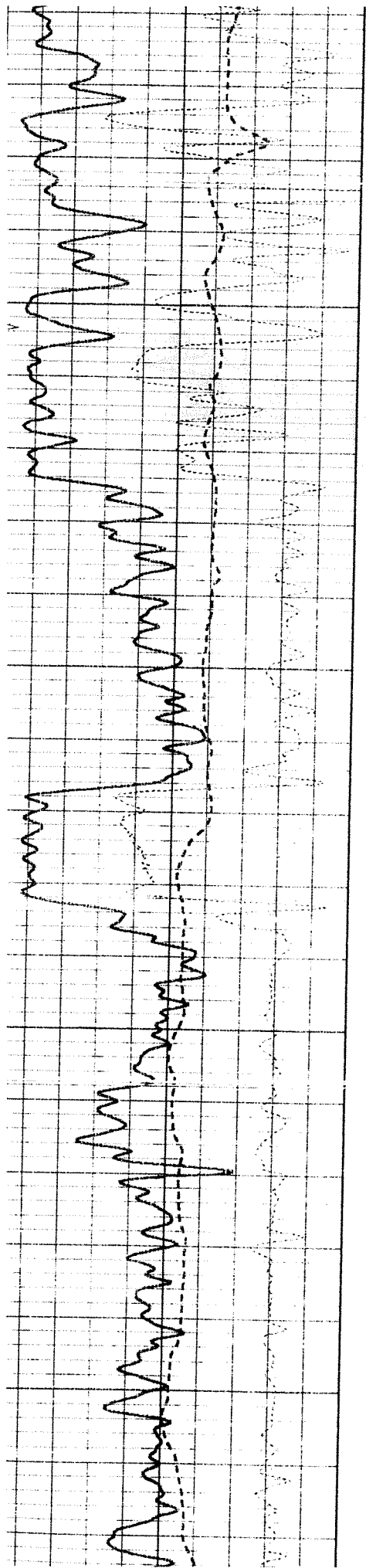
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2050

2100

2150



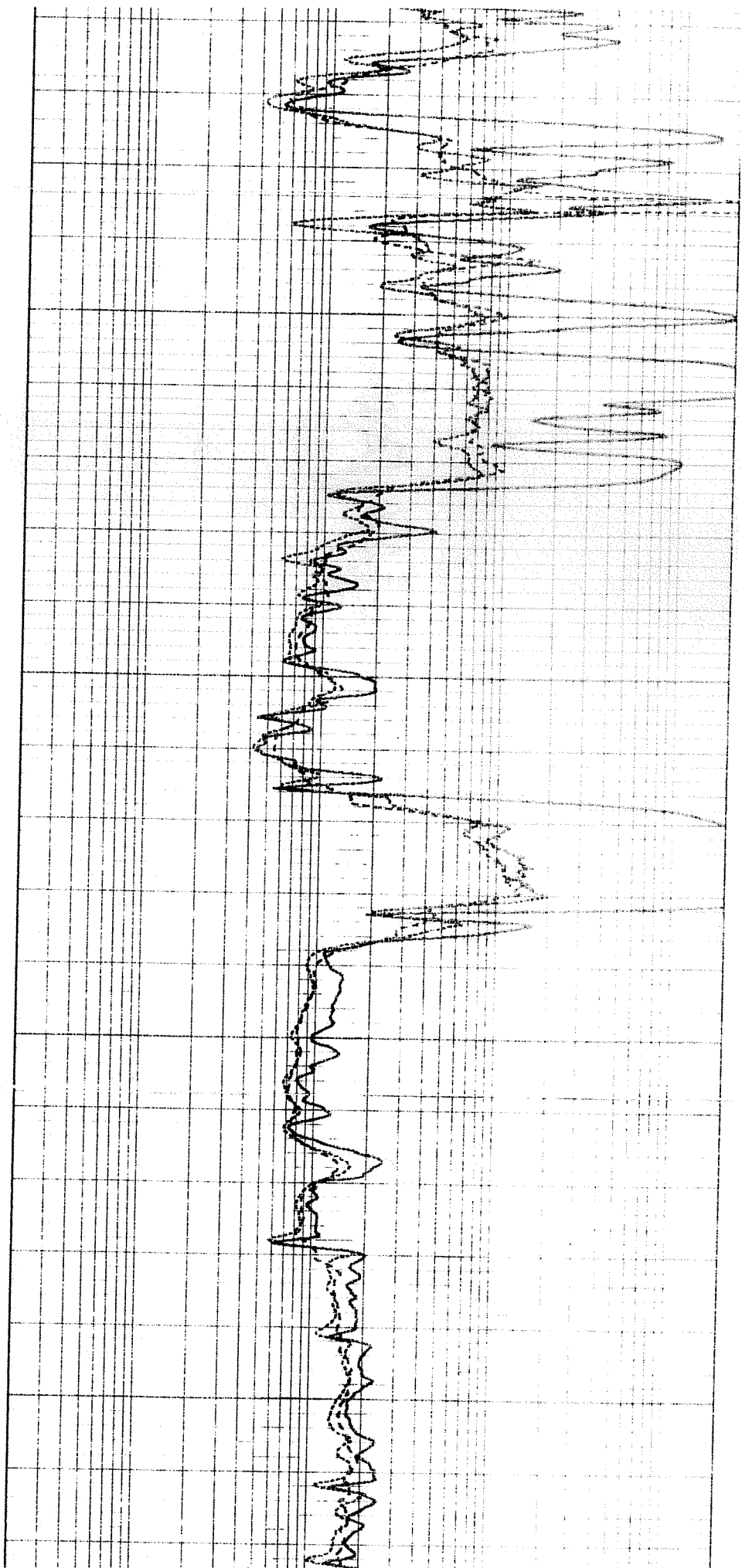


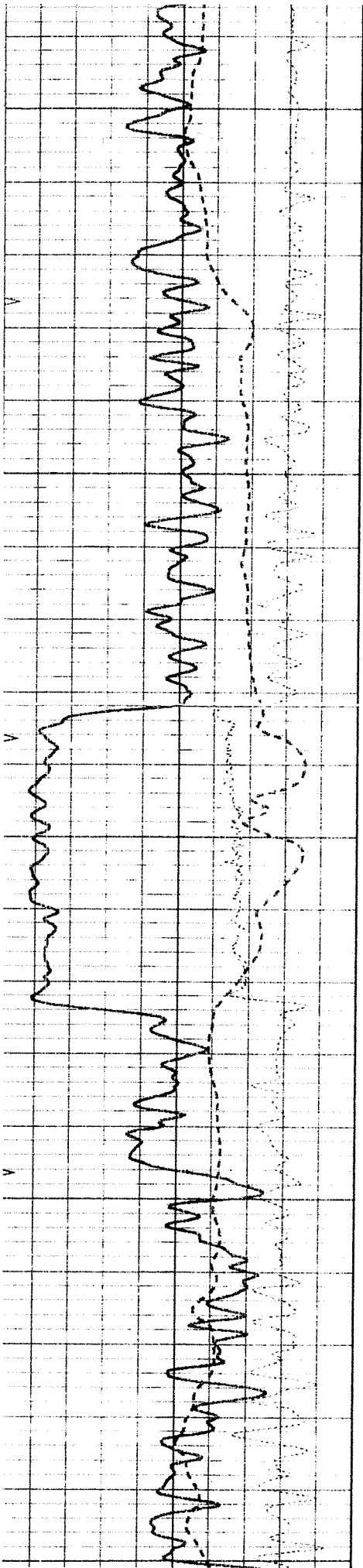
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2250

2300

2350





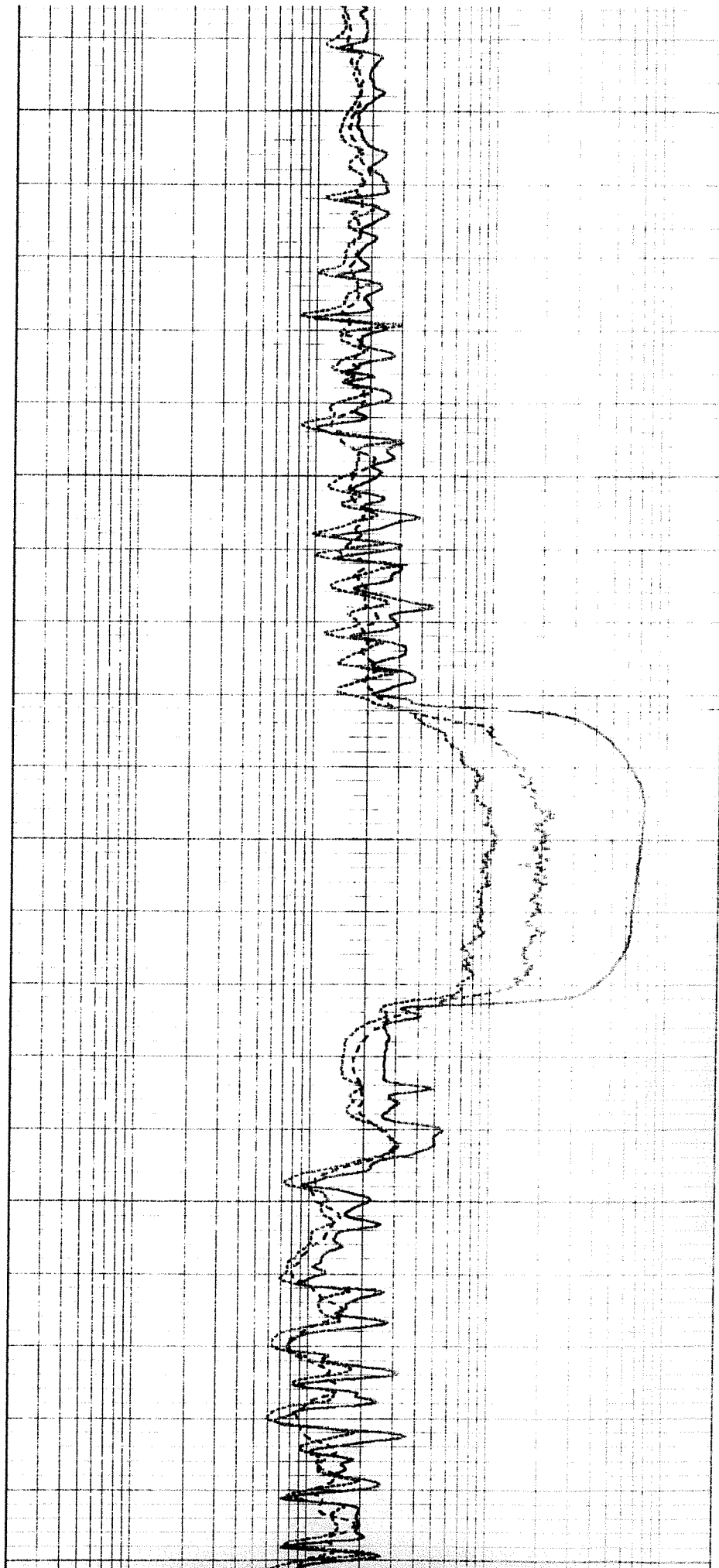
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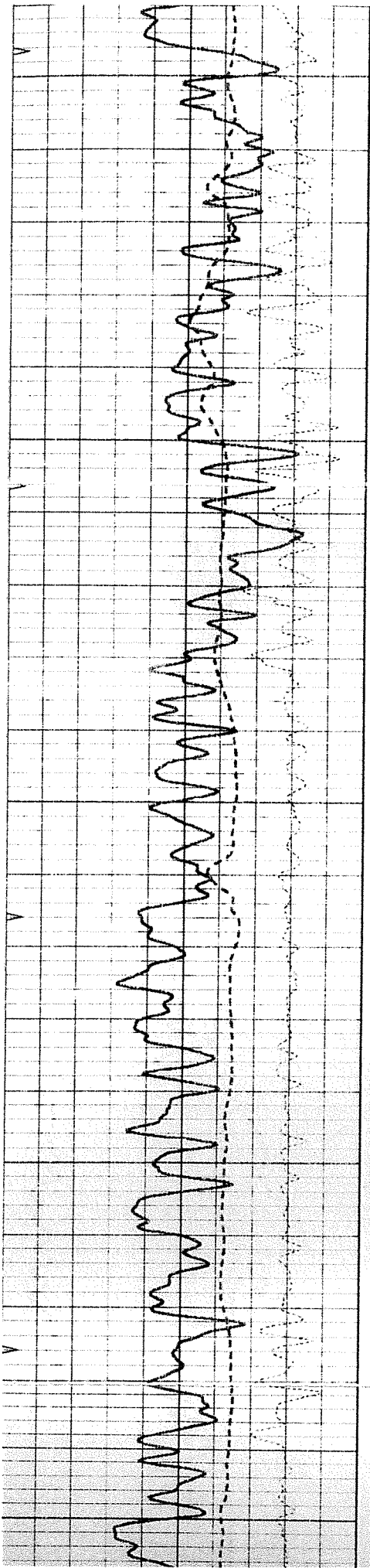
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2450

2500

2550





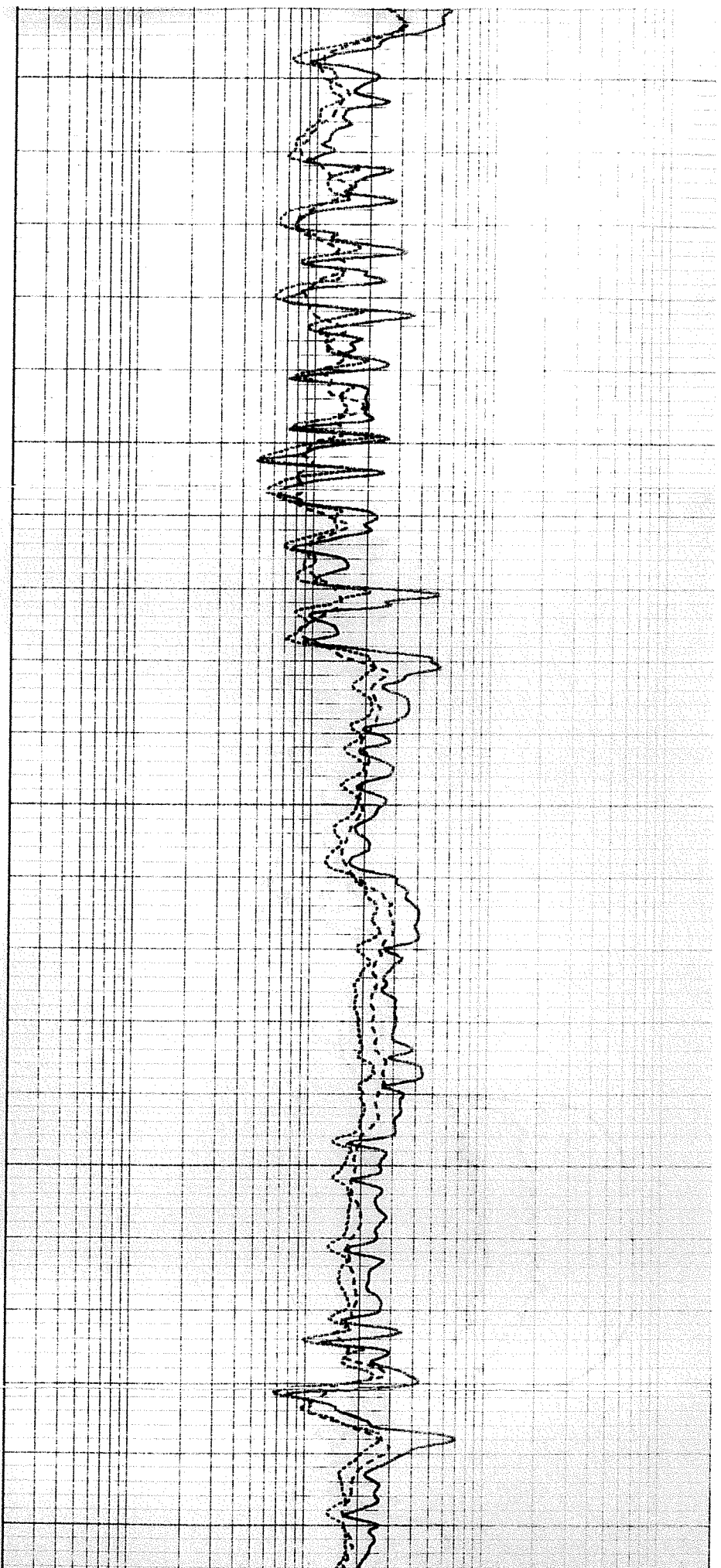
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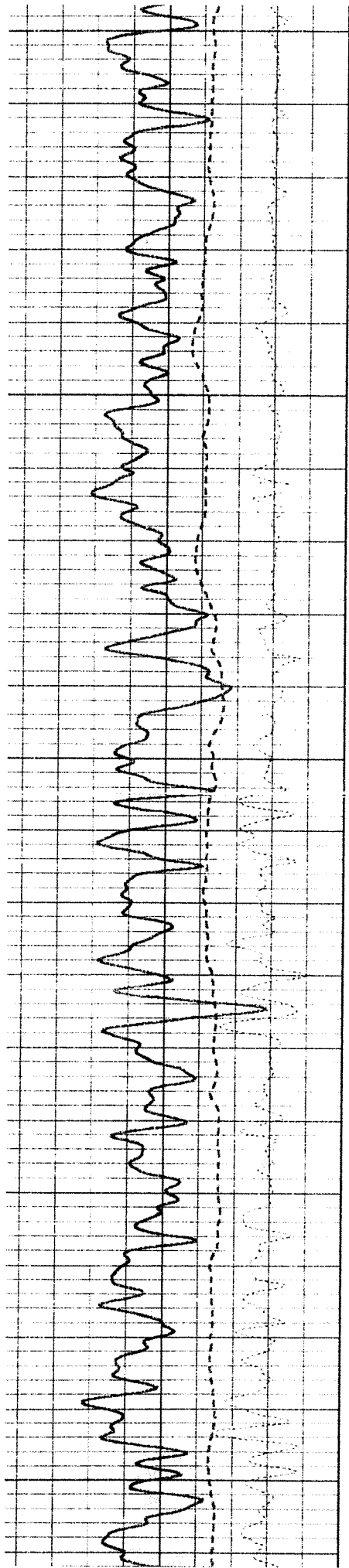
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2600

2650

2700





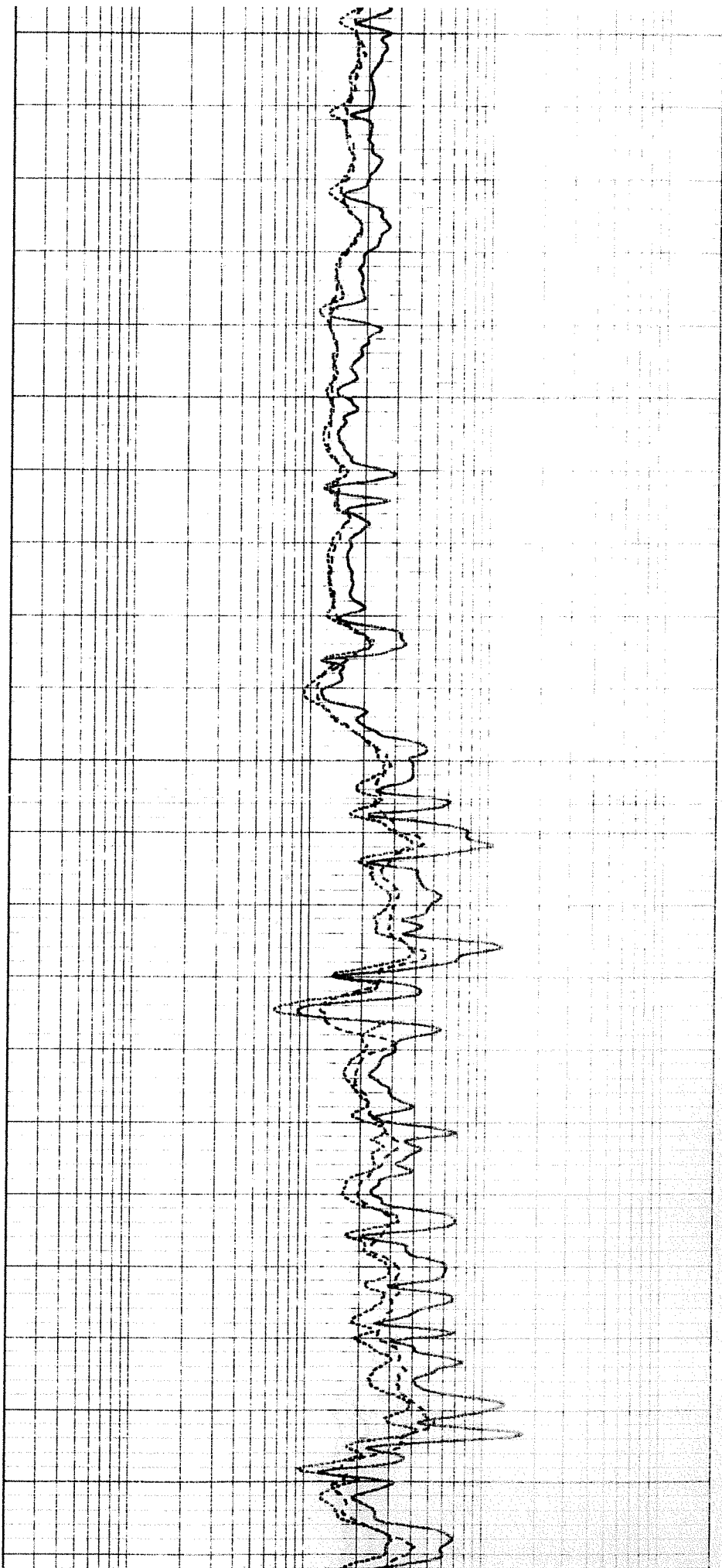
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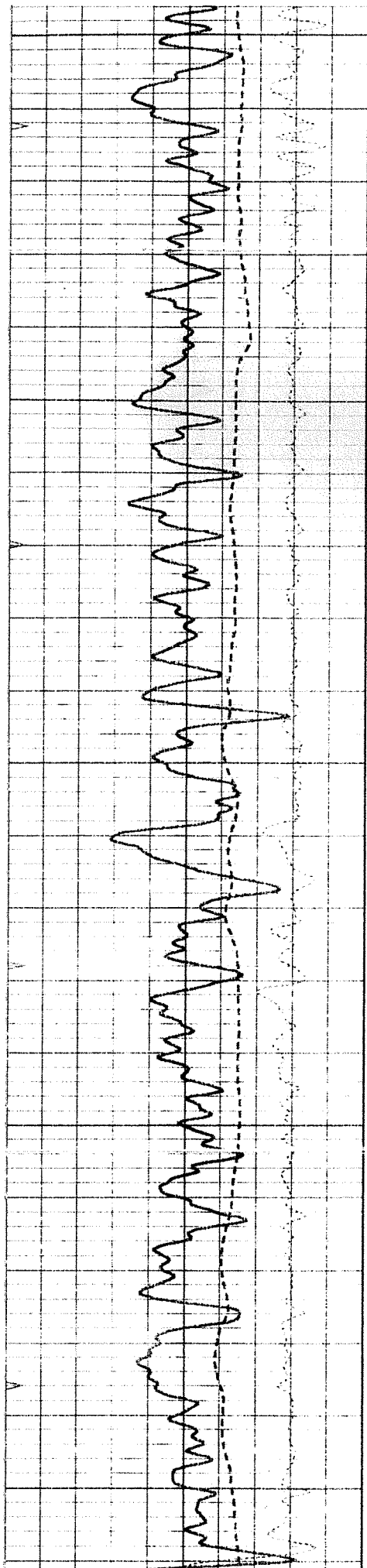
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2800

2850

2900





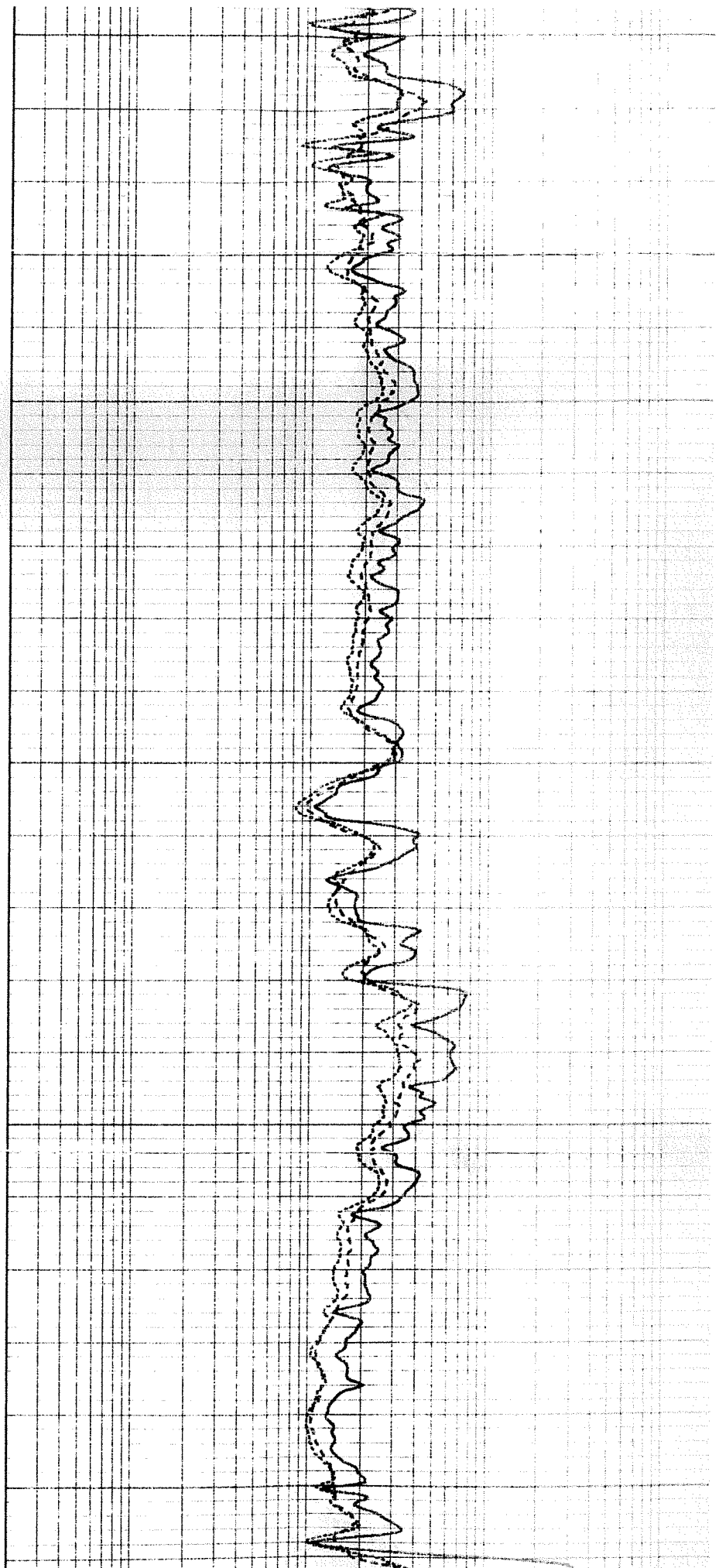
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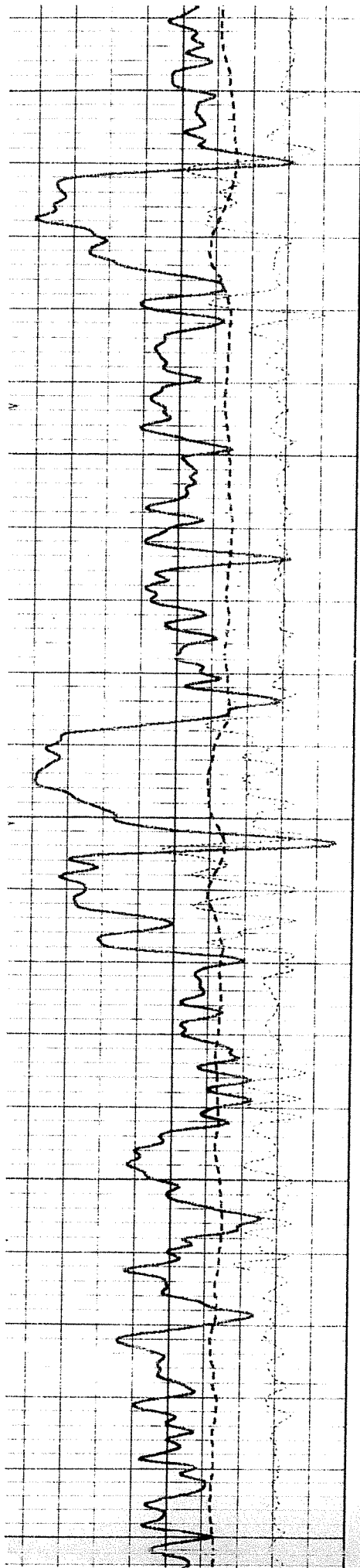
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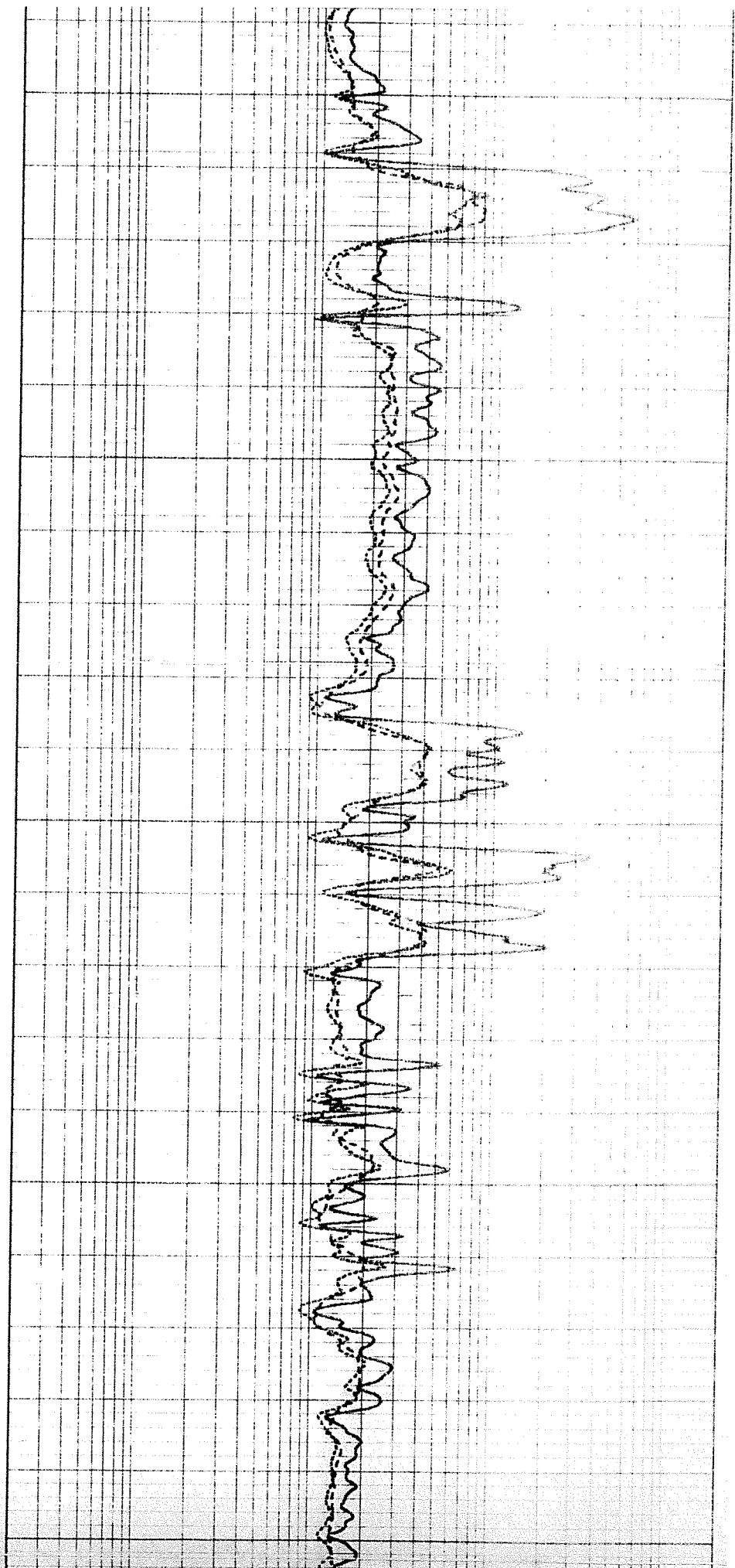
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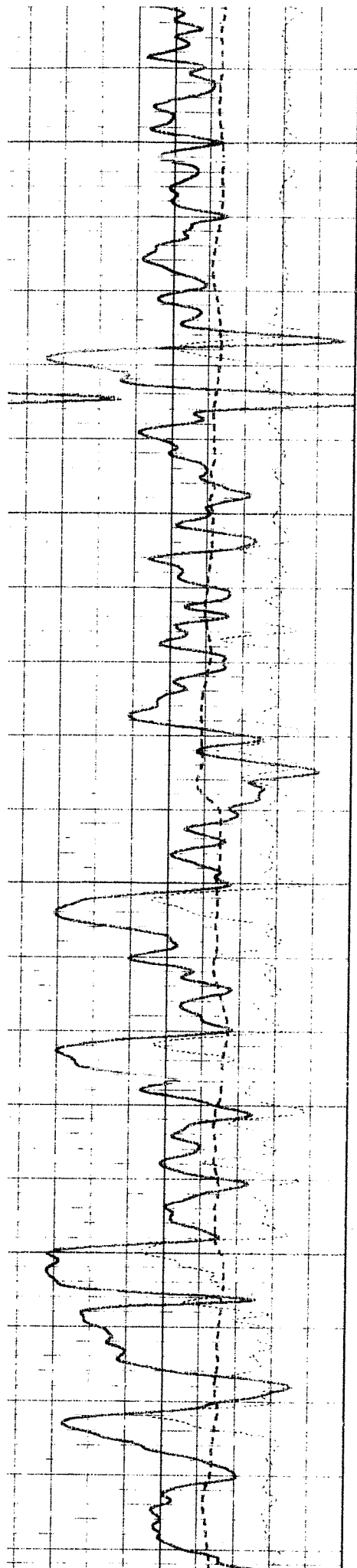
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3200

3250

3300



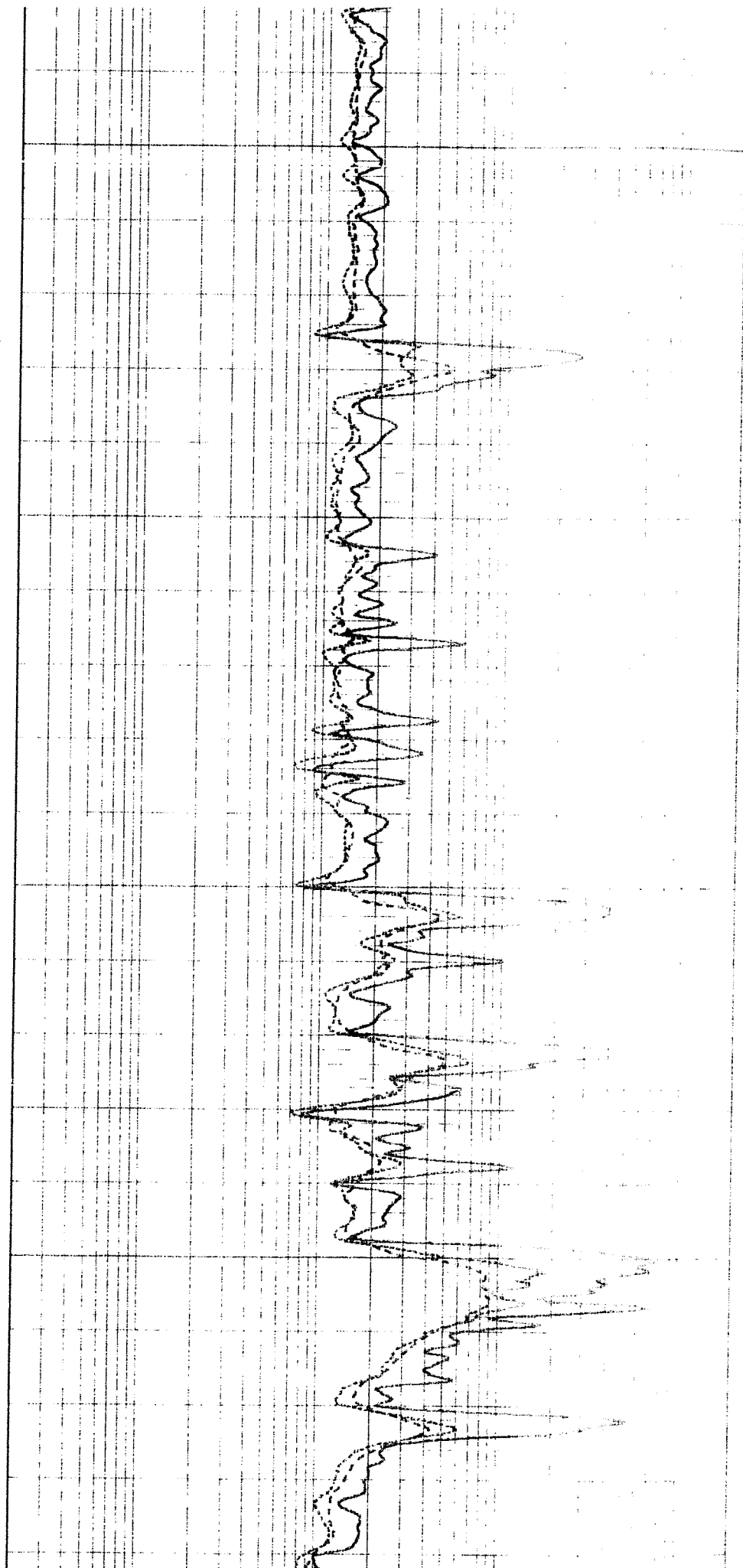


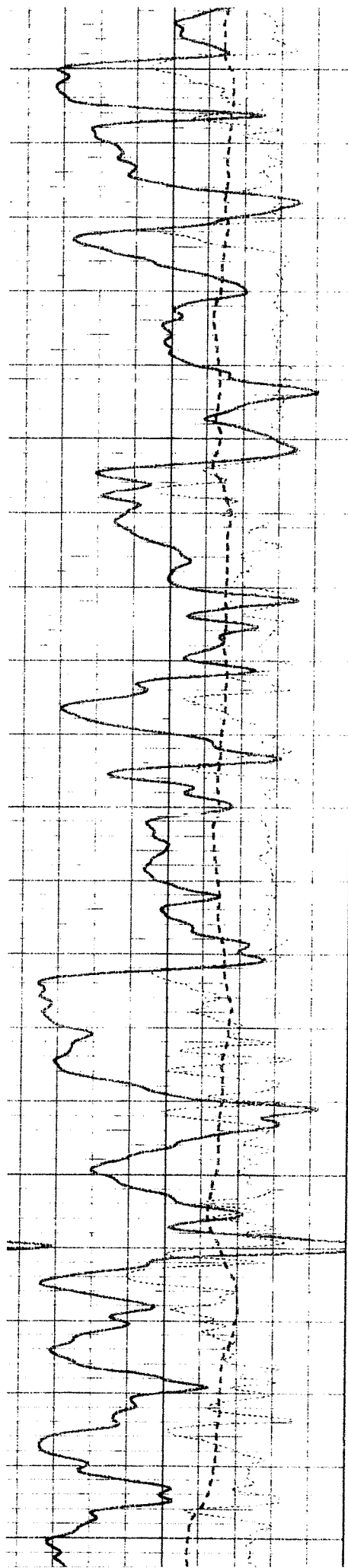
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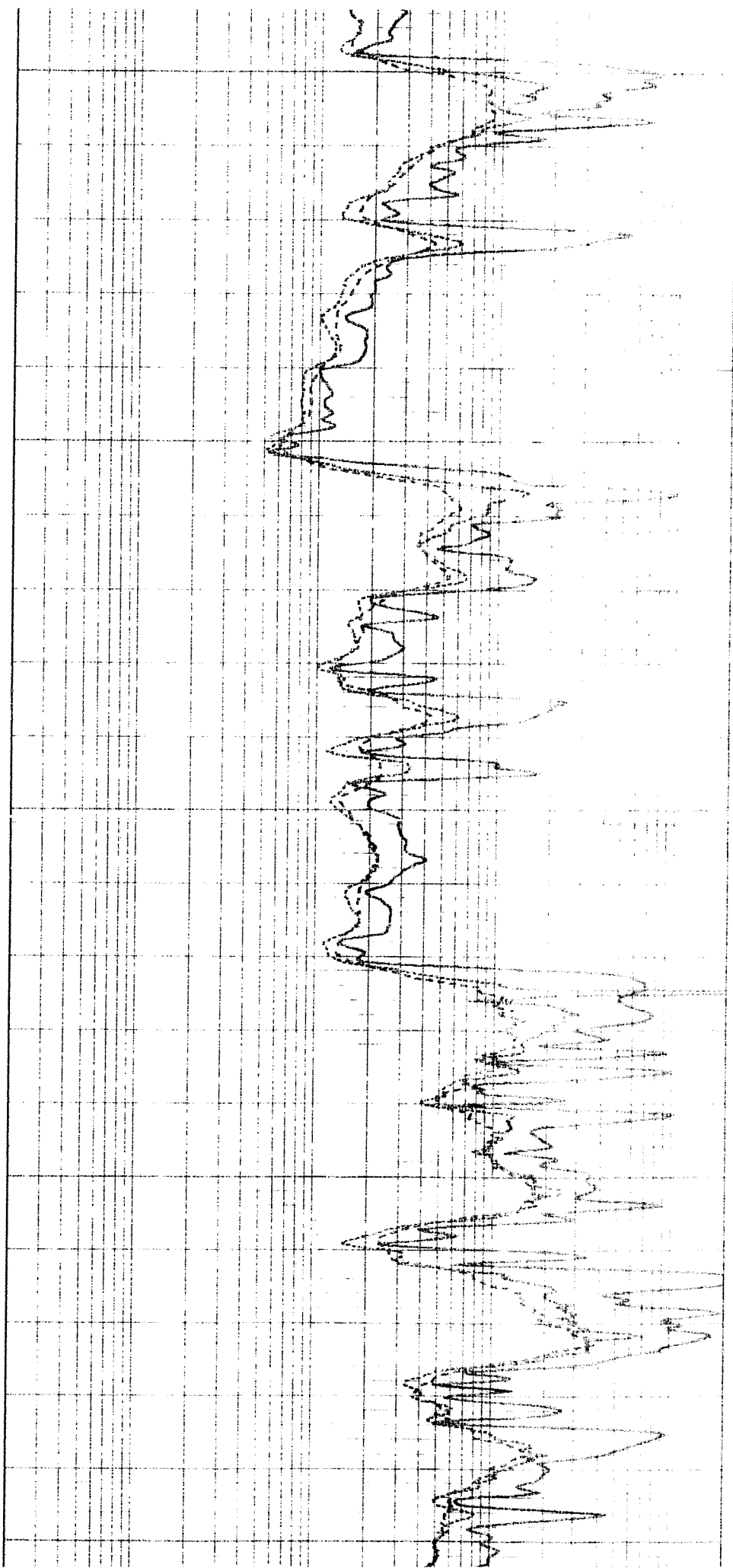
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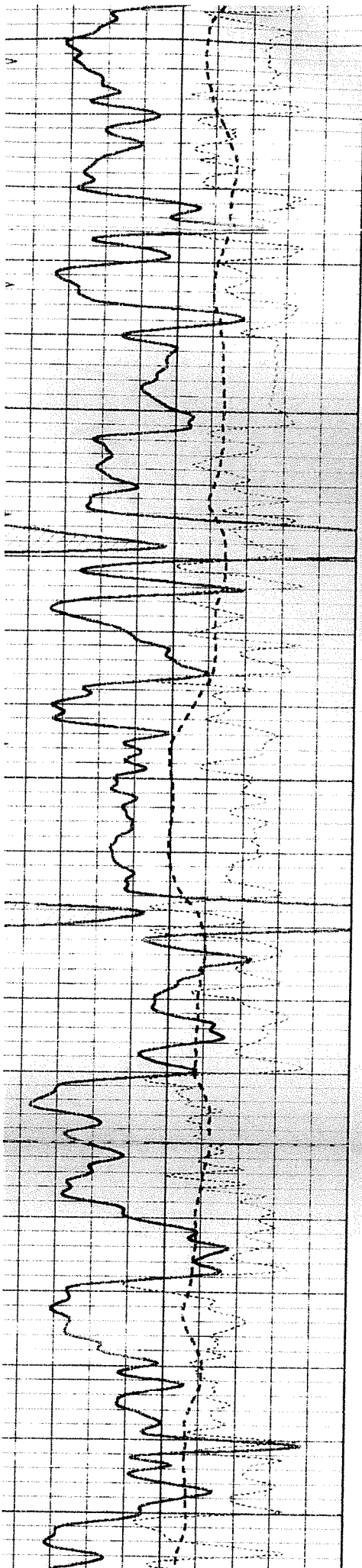
3450





3450  
3500  
3550  
3600  
3650





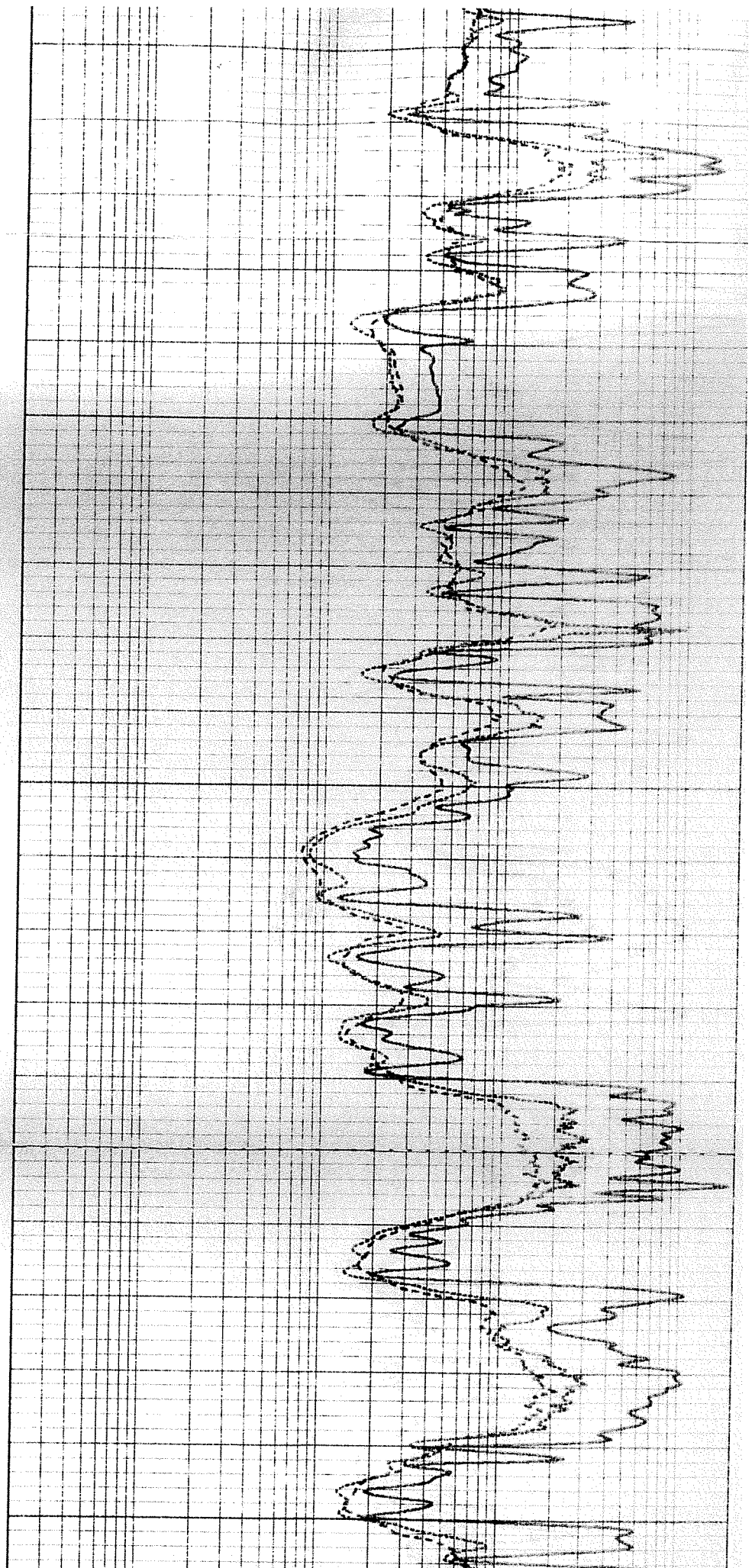
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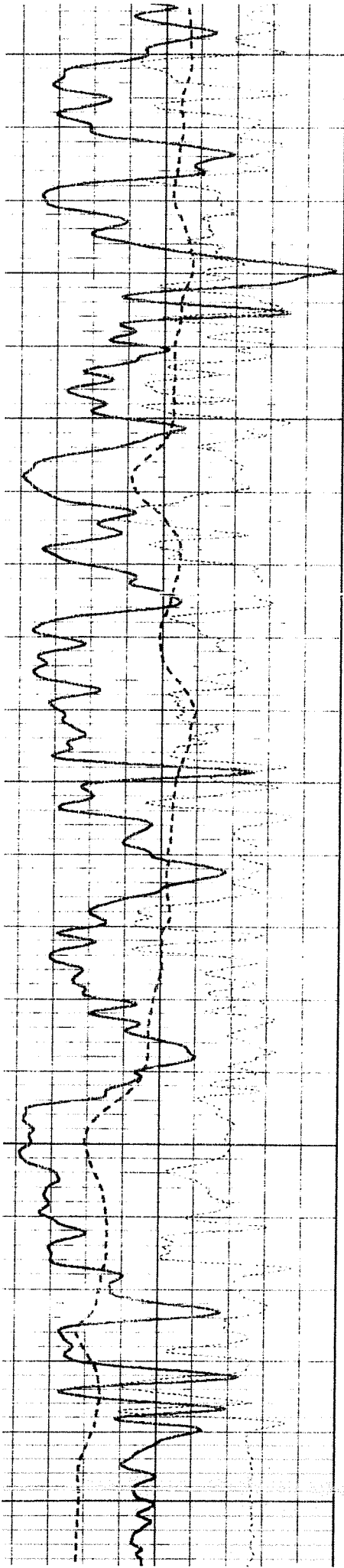
3700

3750

3800

3850





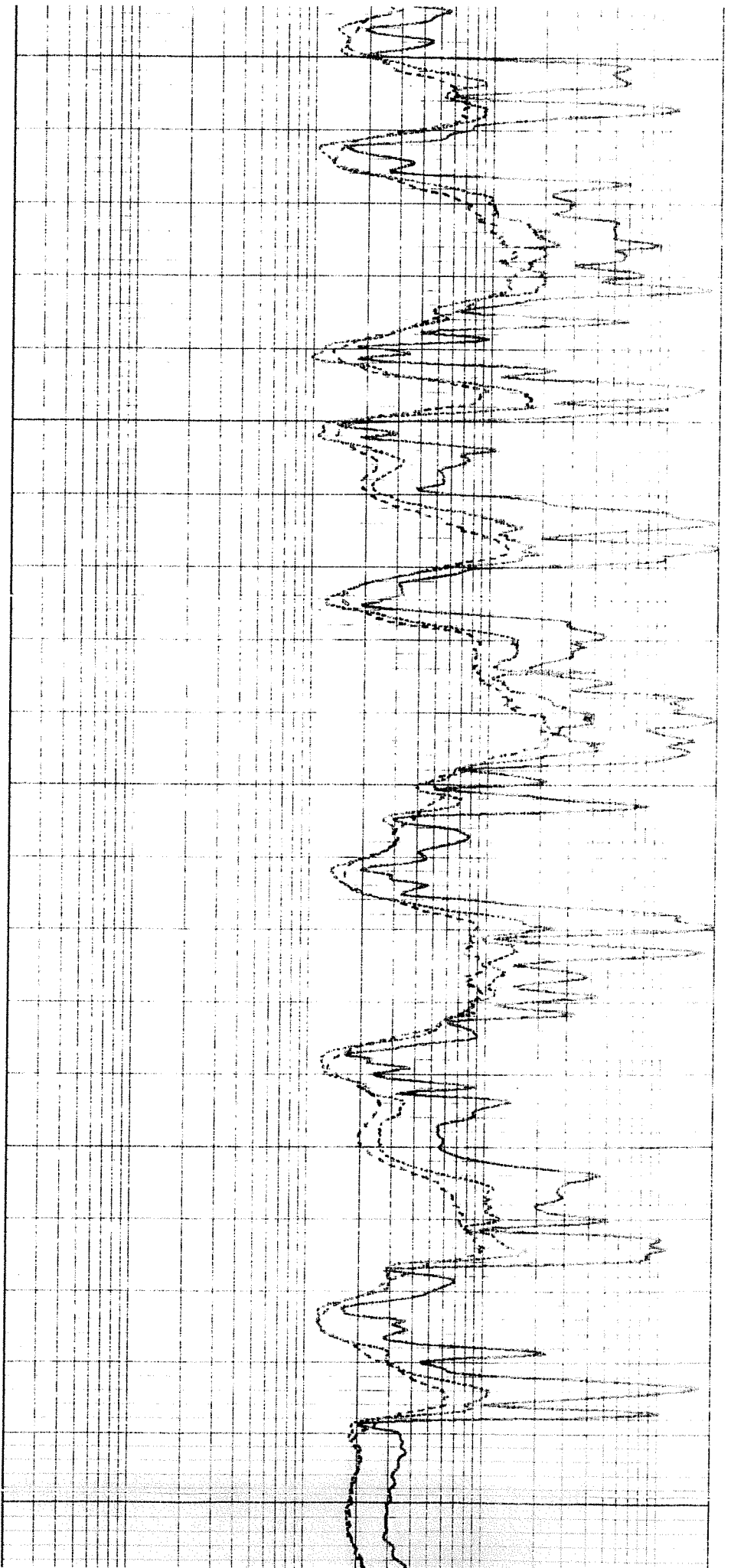
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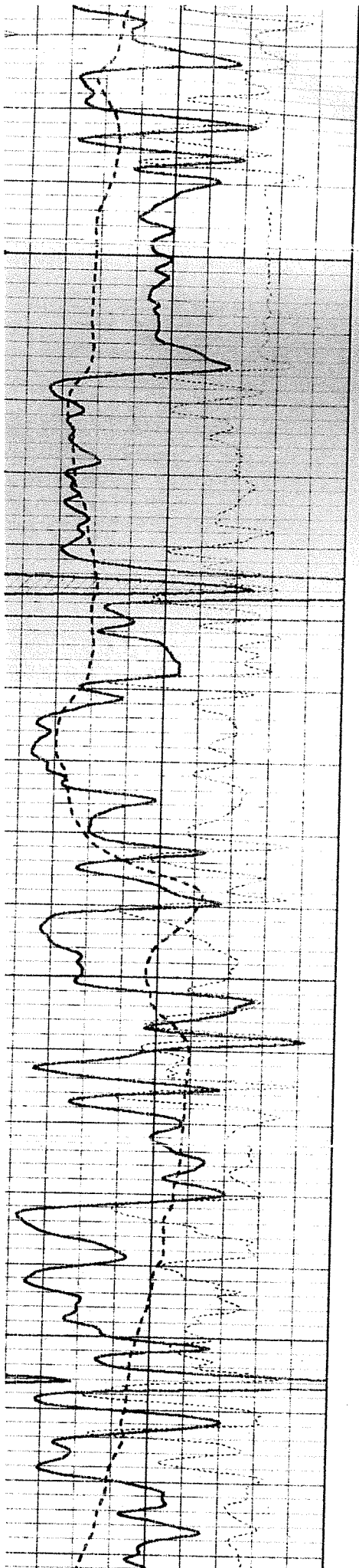
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4000

4050





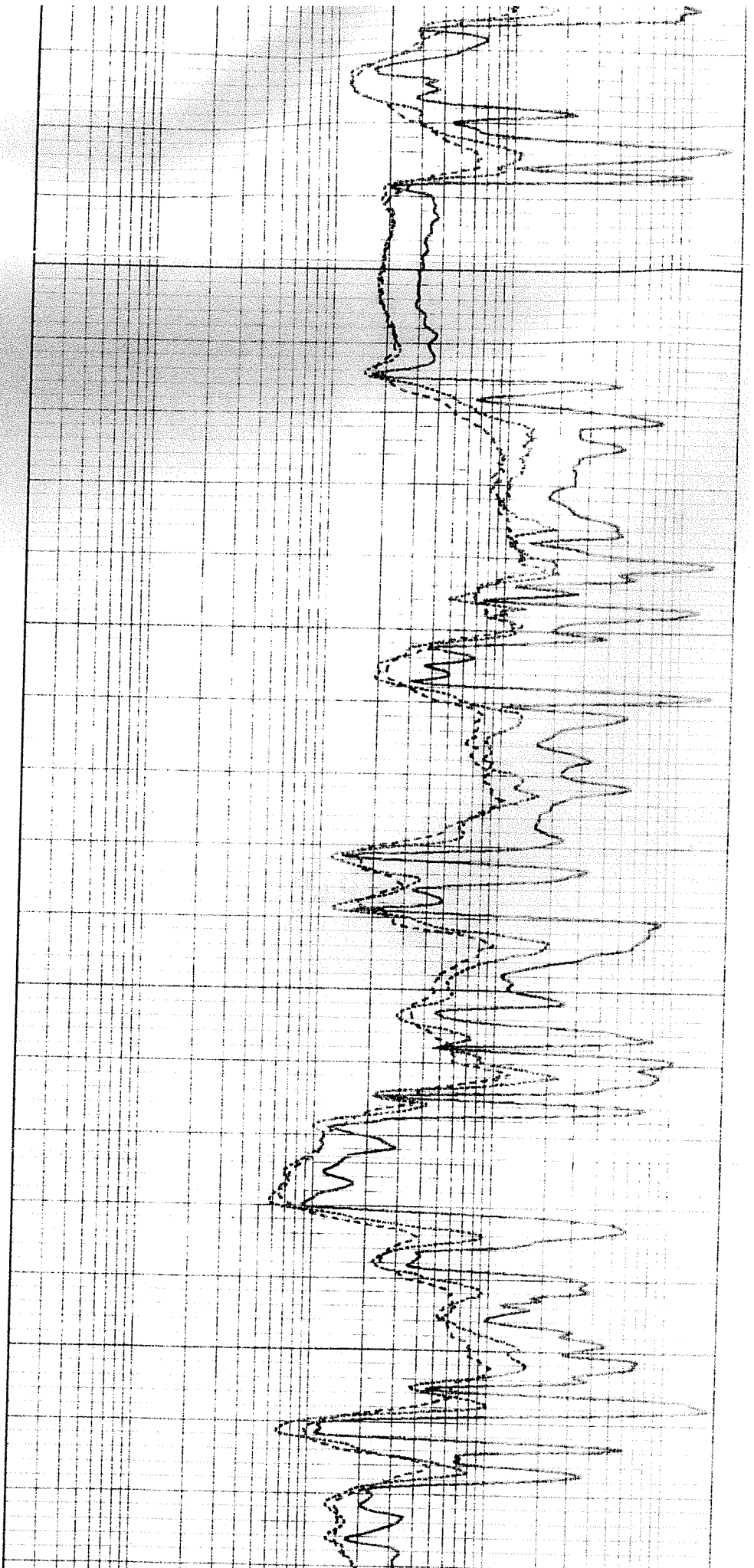


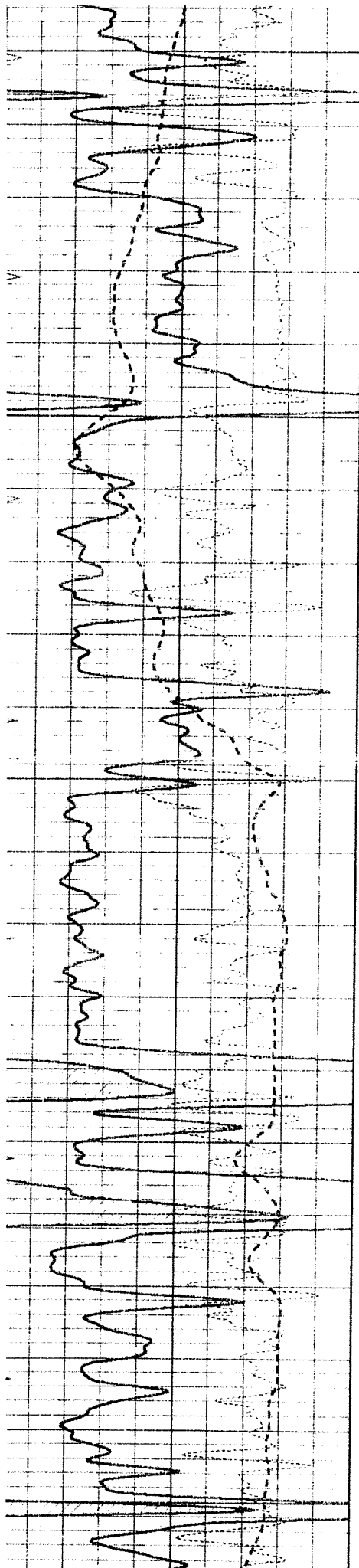
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4100

4150

4200





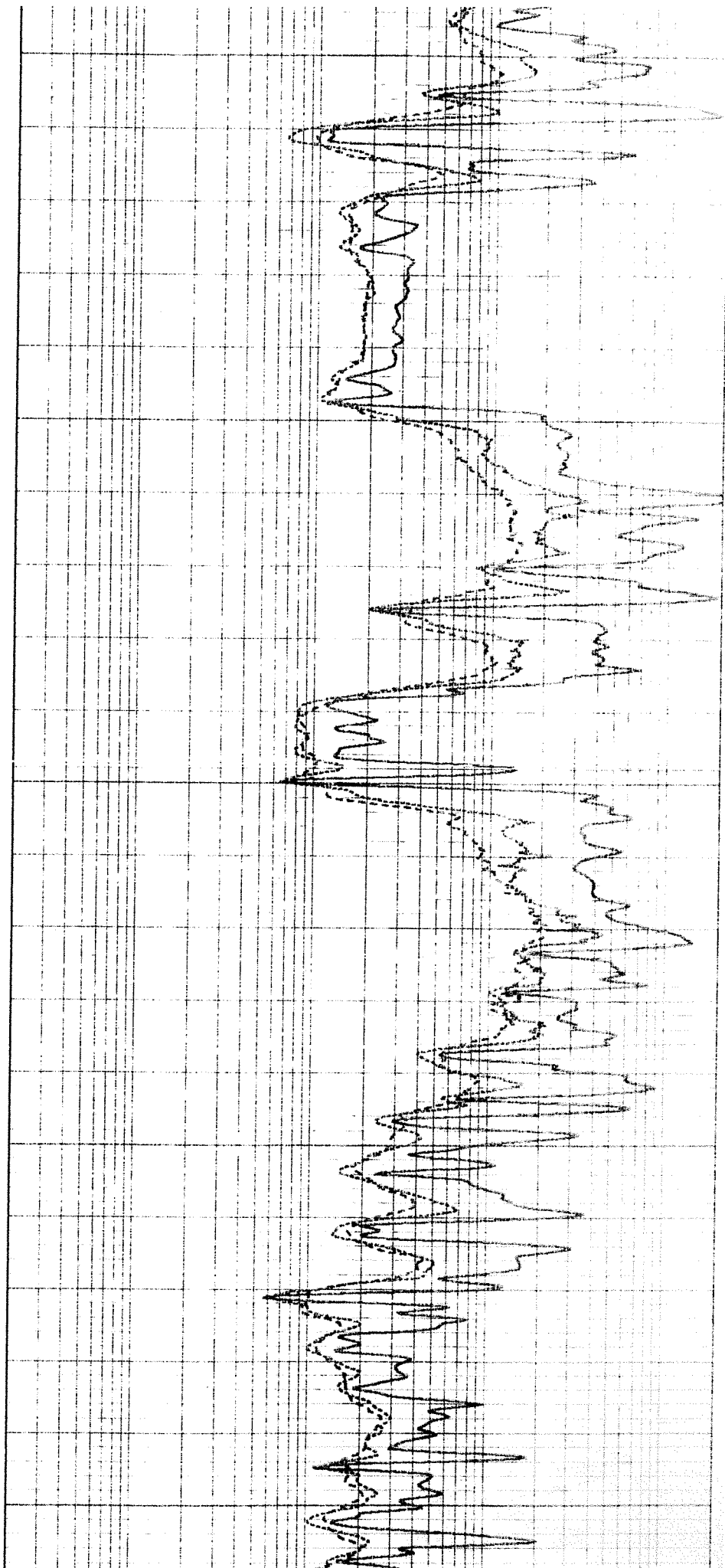
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4250

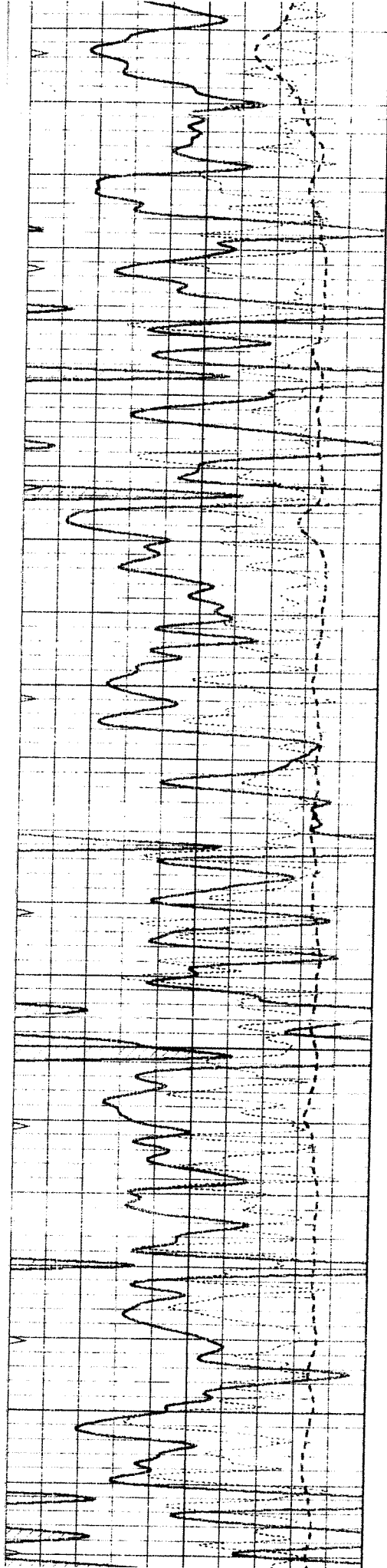
4300

4350

4400





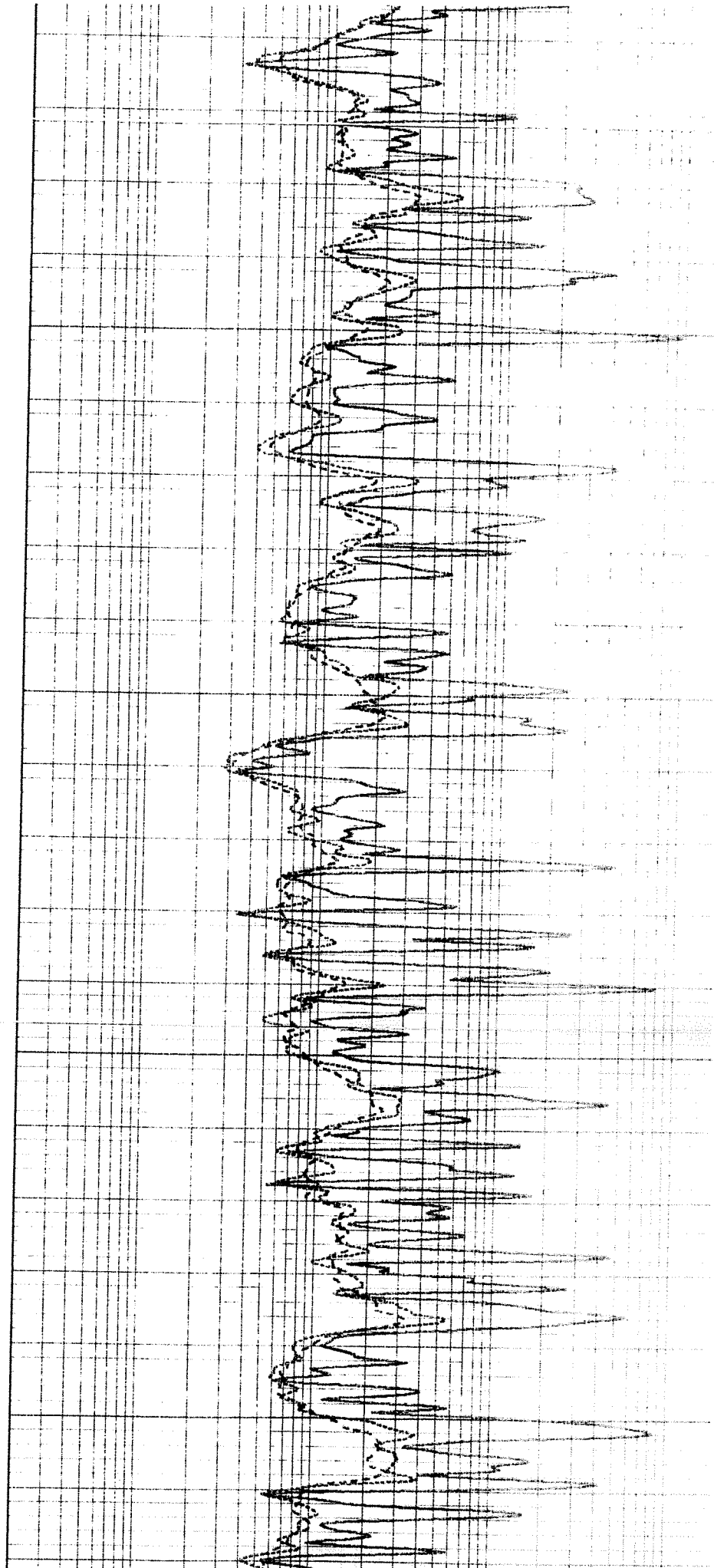


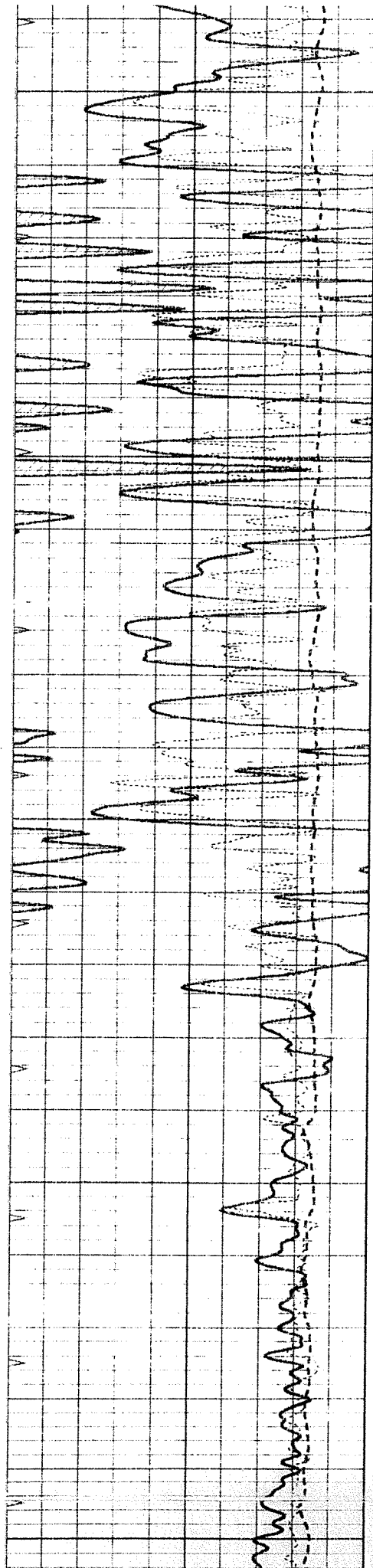
4400

4500

4550

4600





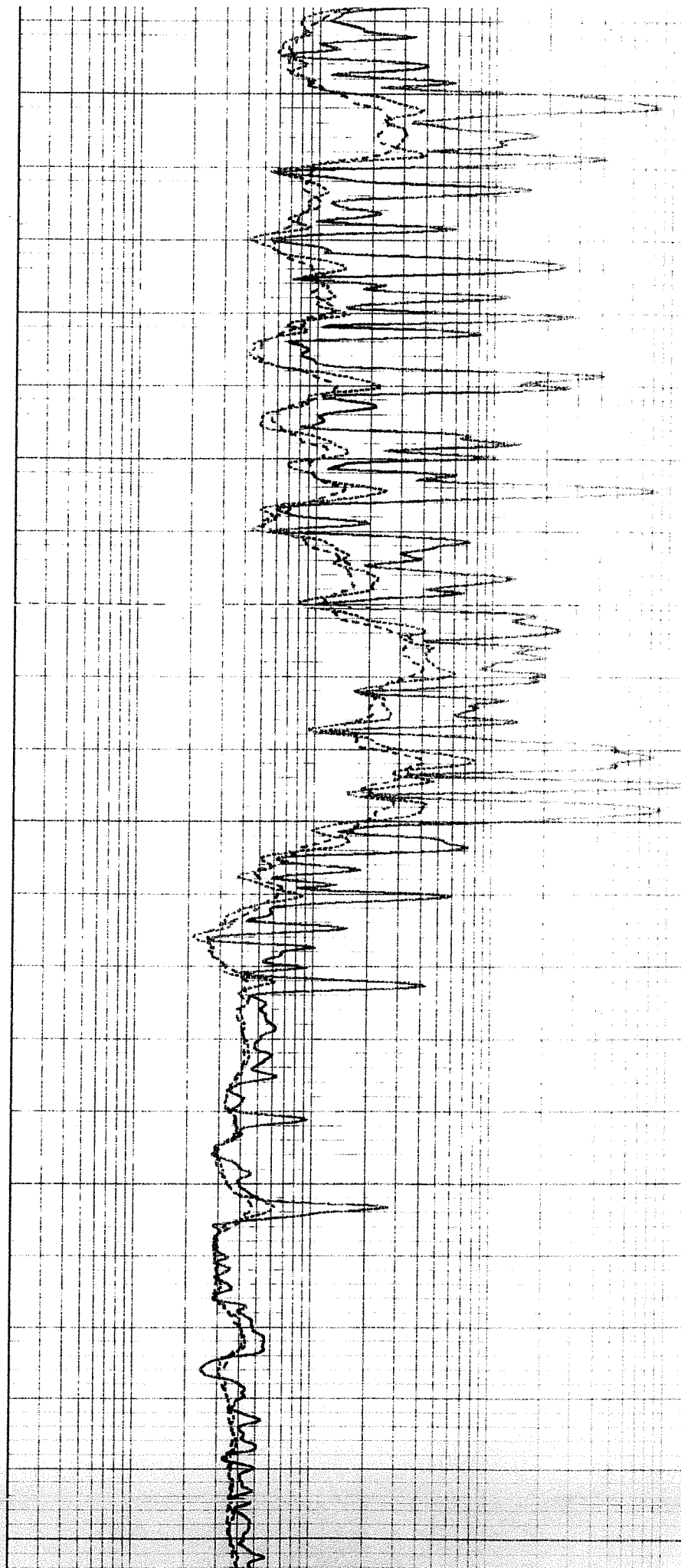
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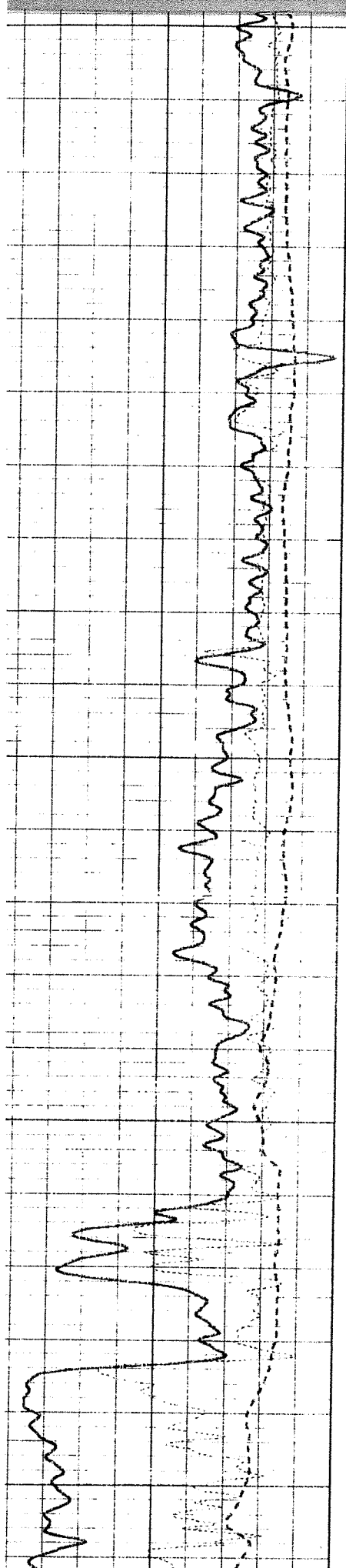
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4700

4750

4800





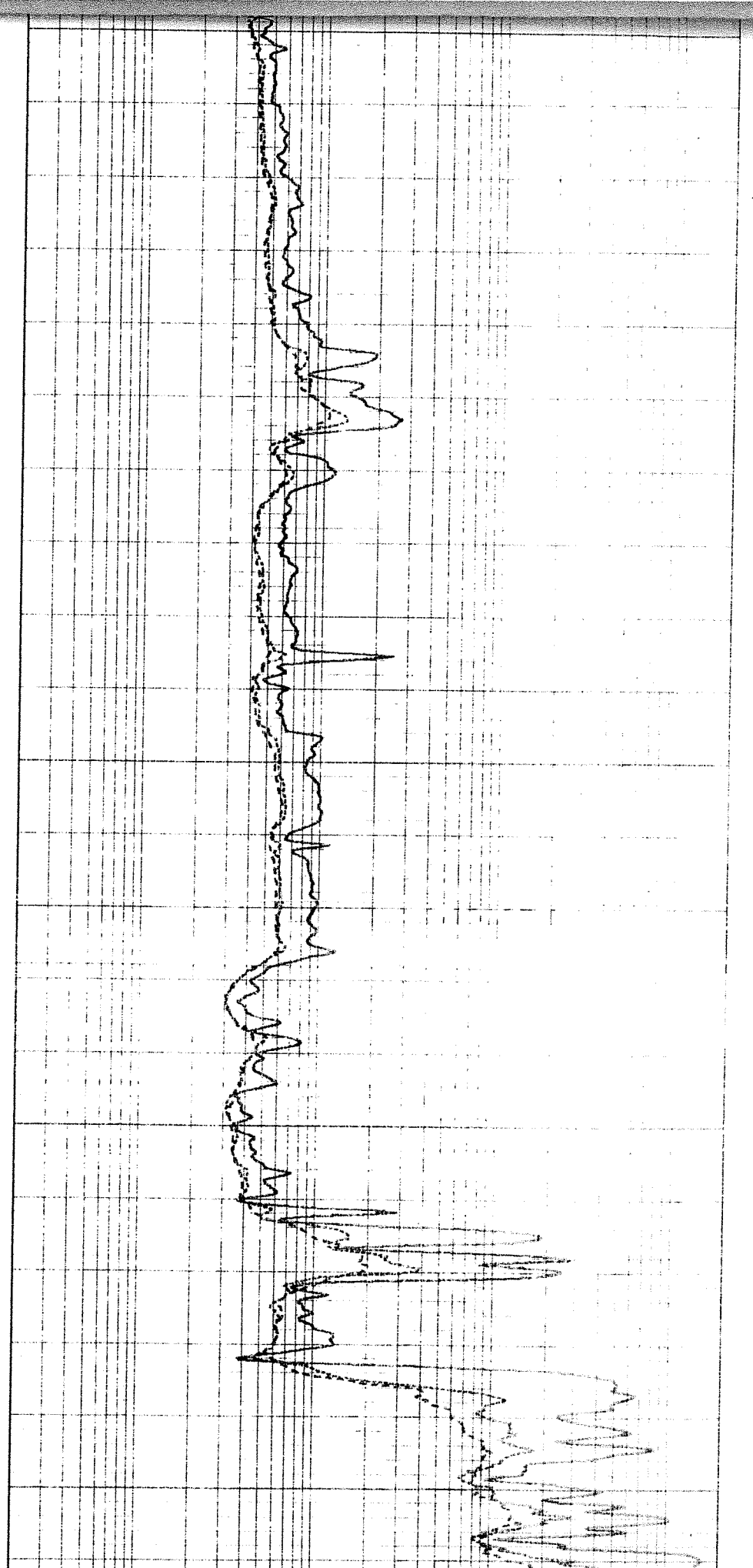
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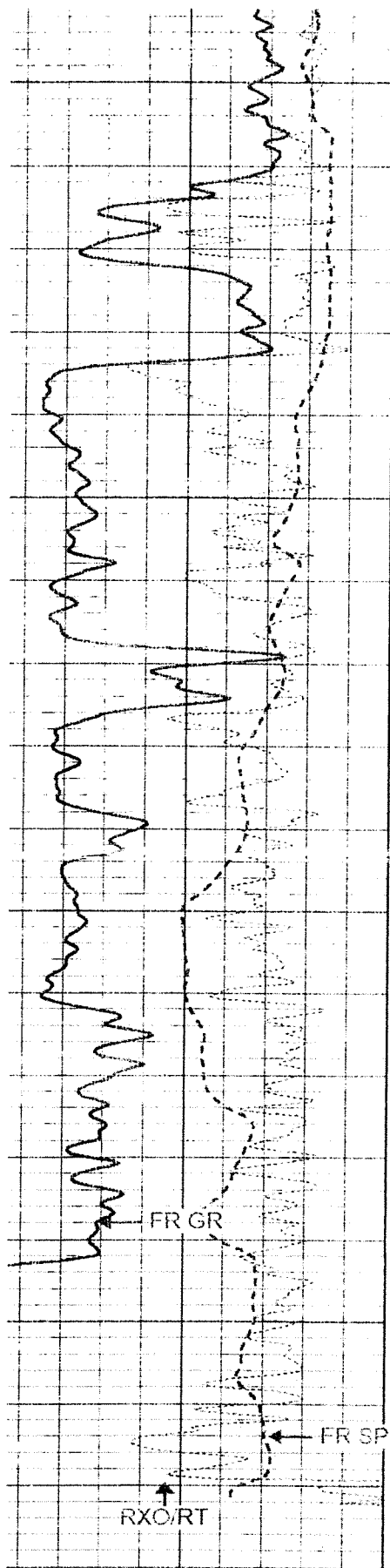
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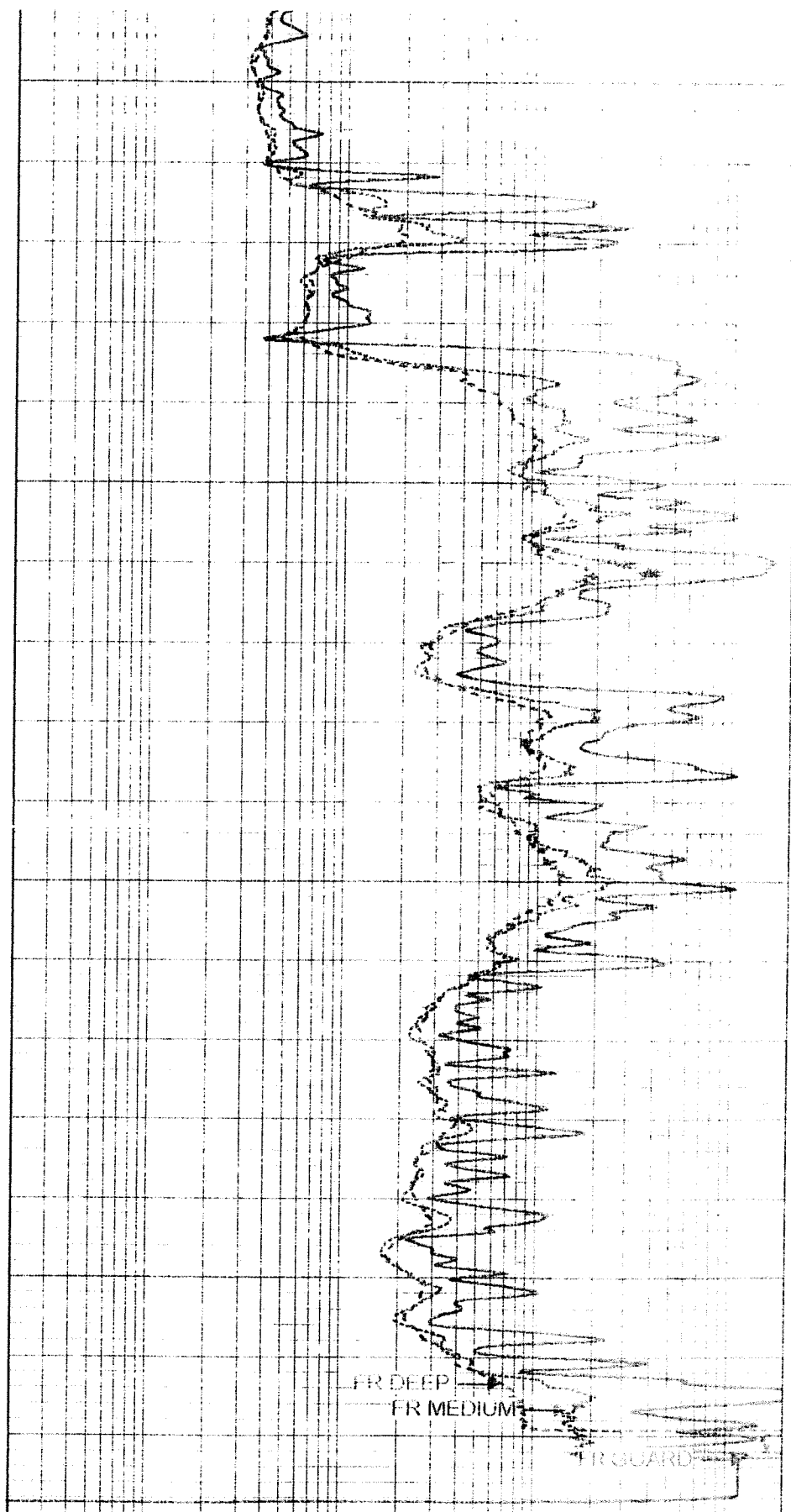
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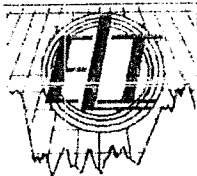


	Gamma Ray (GAPI)	150
25	SP (mV)	75
50	RXO/RT	50
	MINMK	20

4950  
5000  
5050  
5100  
TD 5125



0.2	RLL3 (Ohm-m)	2000
0.2	Deep Induction (Ohm-m)	2000
0.2	RIL M (Ohm-m)	2000



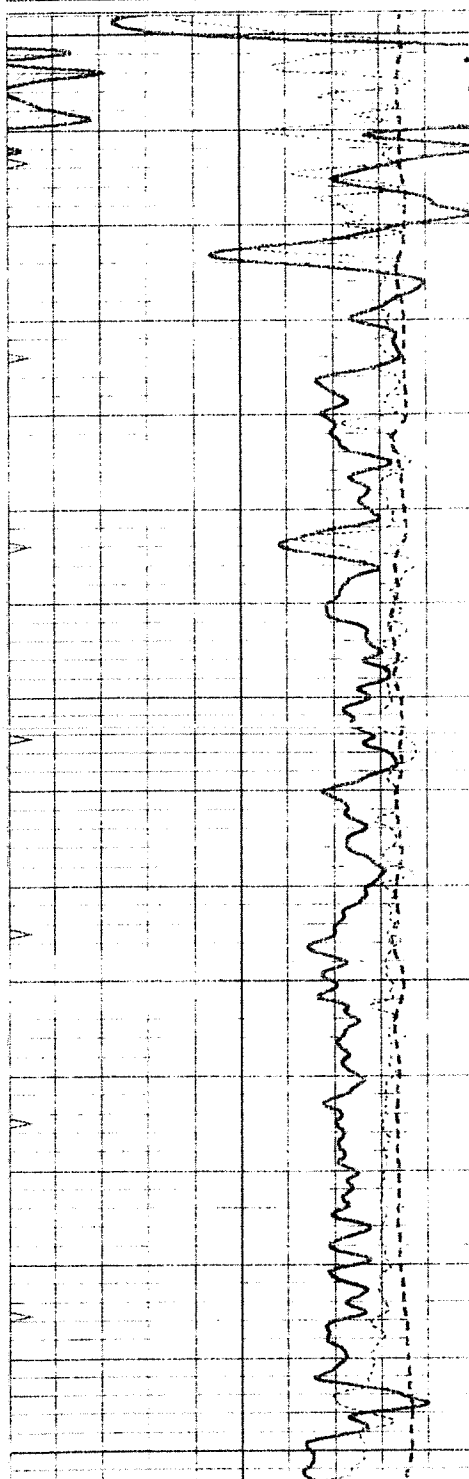
ELI  
WIRELINE  
SERVICES

# REPEAT SECTION

Database File: 19451pe.db  
Dataset Pathname: pass1.5  
Presentation Format: dil.prs  
Dataset Creation: Sat Jul 03 04:53:46 1999  
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-125	SP (mV)	75
-250	RXO/RT	50
0	MINMK	20

0.2	RI 1.3 (Ohm-ft)	70
0.2	Deep Induction (Ohm-ft)	70
0.2	RI 1.0 (Ohm-ft)	70

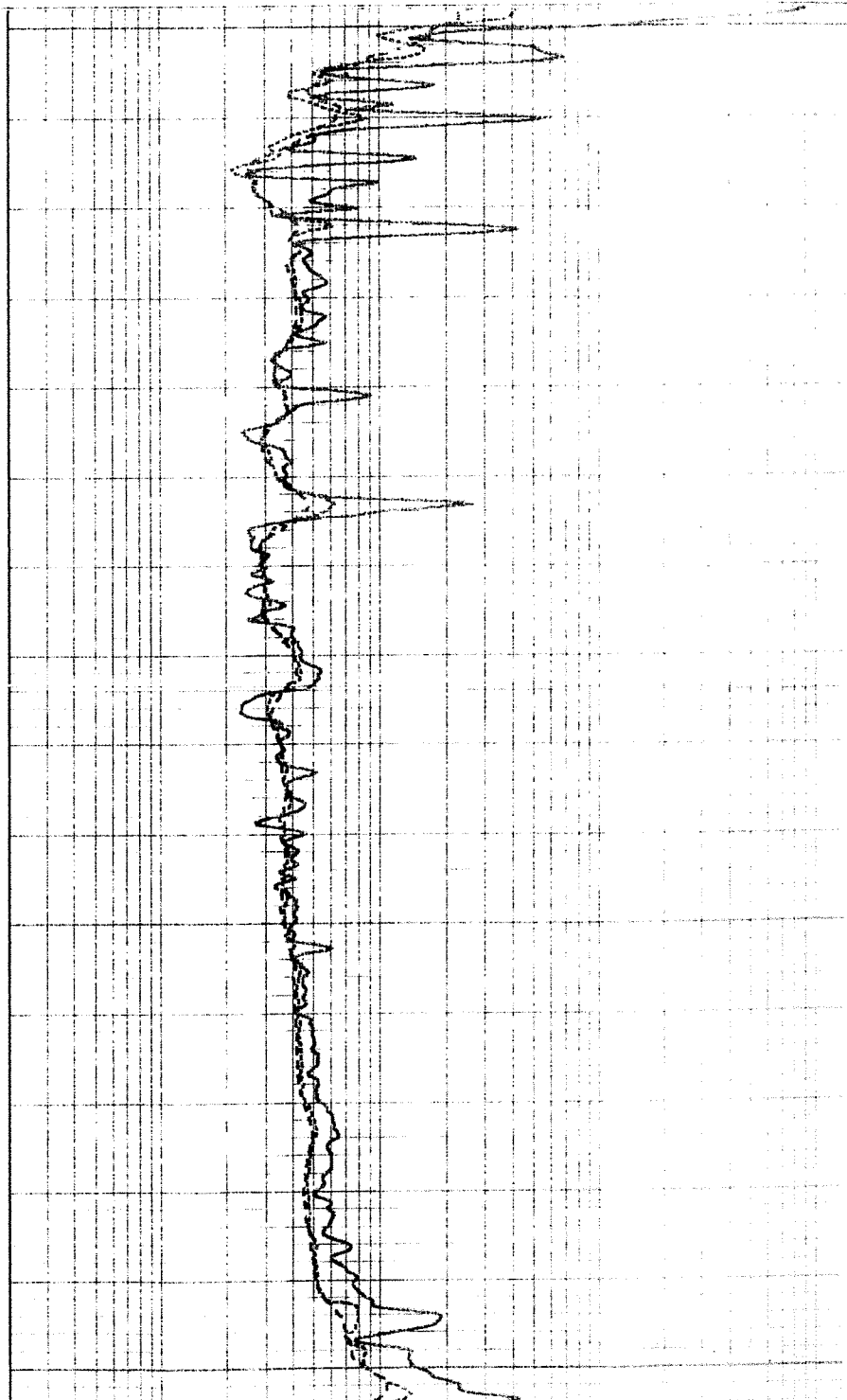


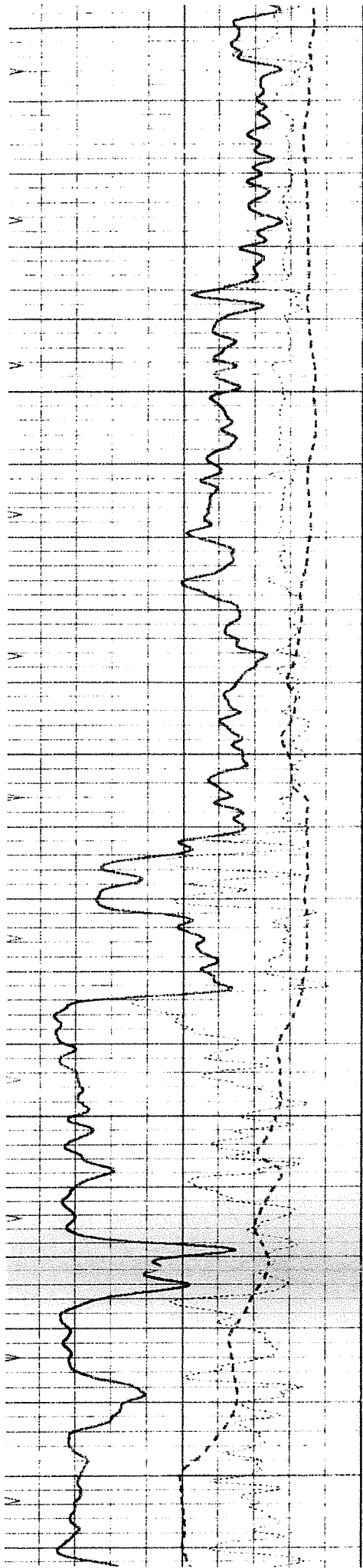
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4850





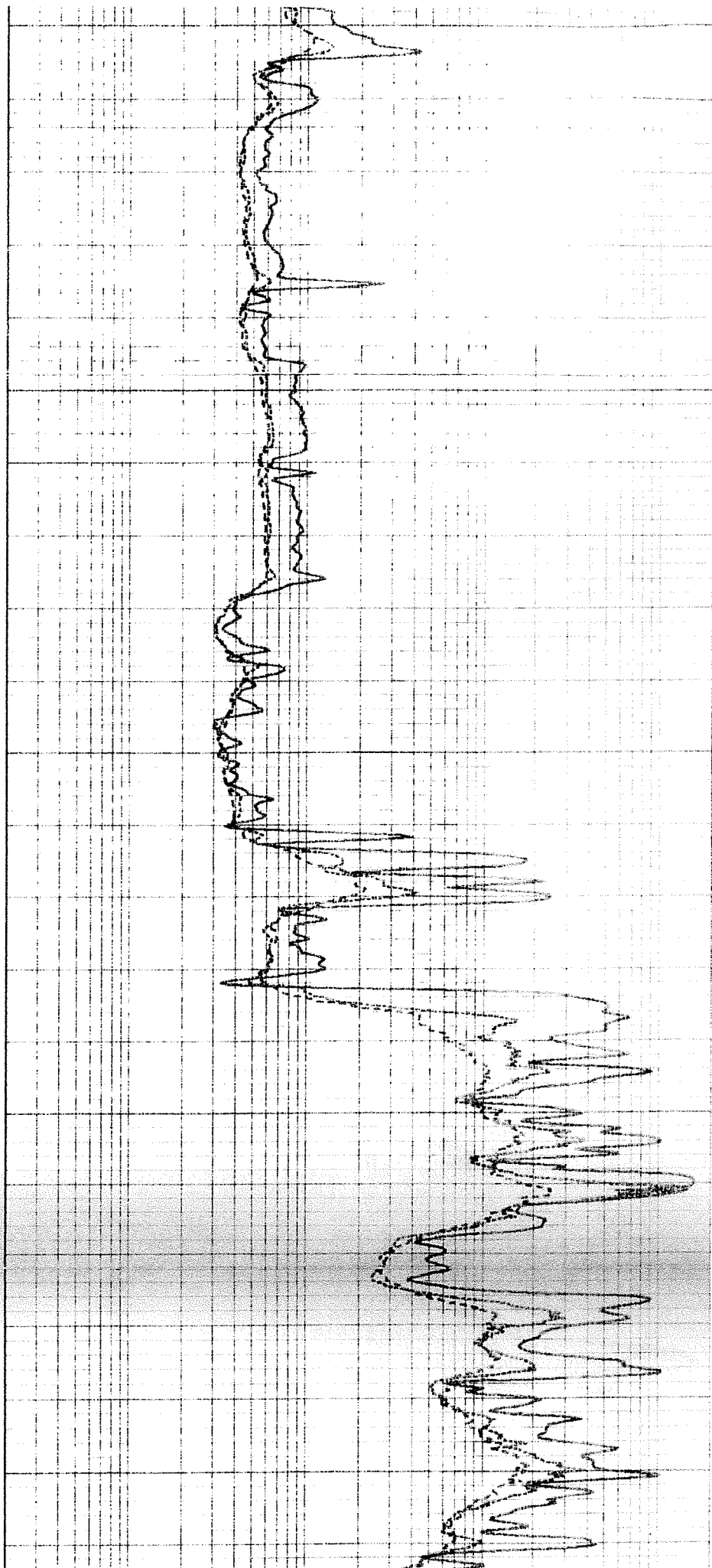
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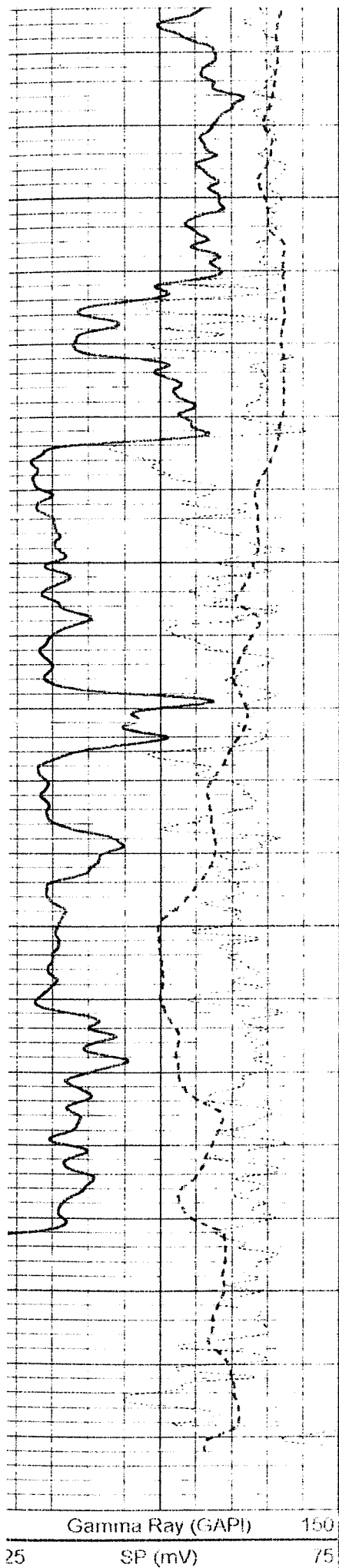
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5000

5050







4950

5000

5050

5100

