EBA Engineering Consultants Ltd.

Granular Resource Investigation Geophysical Program

Unprocessed Geophysical Data

Northern Richards Island, N.W.T.

Prepared For

Indian and Northern
Affairs Canada

A-54968

EBA Engineering Consultants Ltd.

February 23, 1995 EBA File: 0101-94-11413

Geological Survey of Canada
Terrain Sciences Division
601 Booth Street
Ottawa, Ontario
K1A 0E8

Attention: Mr. S.R. Dallimore

Dear Scott:

Subject: 1994 Geophysical Survey
Richards Island, NWT

Pursuant to our agreement, regarding the provision of geophysical equipment to conduct the subject survey, enclosed is a copy of the unprocessed data collected. Any use of this data should acknowledge both the Northern Oil and Gas Action Program (NOGAP) Project A4 as well as the Natural Resources and Environmental Branch of Indian and Northern Affairs Canada (INAC).

The general location of the granular resource target areas investigated, located on northern Richards Island, are presented in Figure 1. Figures 2, 3, 4 and, 5 show the location and direction in which surveys were conducted at Targets Areas 1, 6C-1, 6C-2 and 4B-1, respectively. Table 1 summarizes the type of data collected at each site and the surveyed line lengths. Survey coordinates and elevation information were established during a post-mission survey using differential GPS techniques. The geophysical data collected is provided on diskettes in Appendix A.

The ground penetrating radar surveys (GPR) were conducted with a pulseEKKO™ IV system using 50 and 100 MHz antennas and 1000 and 400 V transmitters. Table 2 lists the system configuration used at each location. GPR data was collected in both step and continuous mode. In step mode operation, the transmitter and receiver antennae were spaced one metre apart and manually moved along the survey line at one metre increments. Measurements were recorded every metre. In continuous mode operation the antennae were placed at a one metre separation on a wooden sled that was towed behind a snowmobile. The sample rate and the snowmobile speed were set to result in approximately a one-metre per scan travel rate; however, due to variations in terrain conditions the actual horizontal scan rate varied from 0.6-scans per metre to 2-scans per metre. The exact scan rates for each line are noted on the GPR header file data sheets enclosed.

14535 - 118 Avenue, Edmonton, Alberta T5L 2M7
• Telephone (403) 451-2121 • FAX (403) 454-5688 •

The GPR data file header sheets and a hard copy print out for data collected at each of the subject target areas are presented in Appendix B though E inclusive.

Electromagnetic (EM-34) conductivity surveys were conducted at Target Areas 6C-1, and 6C-2. The EM-34 surveys were conducted with transmitter/receiver spacing of 10, 20 and 40 metres in conjunction with respective step spacing of 10, 10 and 20 metres. Vertical and magnetic dipole readings were taken for all EM-34 readings. Both the raw and interpreted data for the processed EM-34 profiles are presented in Appendix F. The EM-34 data was interpreted using a commercial software package called EMIX 34P.

EBA hopes that you find the data of use in relation to your on-going interest regarding Richards Island. In addition, we acknowledge the cooperation and assistance which you provided. Should you have any question regarding the material provided please contact the undersigned at your convenience.

Respectfully submitted,
EBA Engineering Consultants Ltd.

M.A. Valeriote, R.E.T.
Senior Engineering Technologist,
Frontier Division

D.C. Cathro, P.Eng.
Chief Engineer,
Frontier Division

MAV/tr

Encl.

cc: Mr. R.J. Gowan, P.Geol.
Indian and Northern Affairs Canada

TABLE 1
GEOPHYSICAL SURVEY SUMMARY

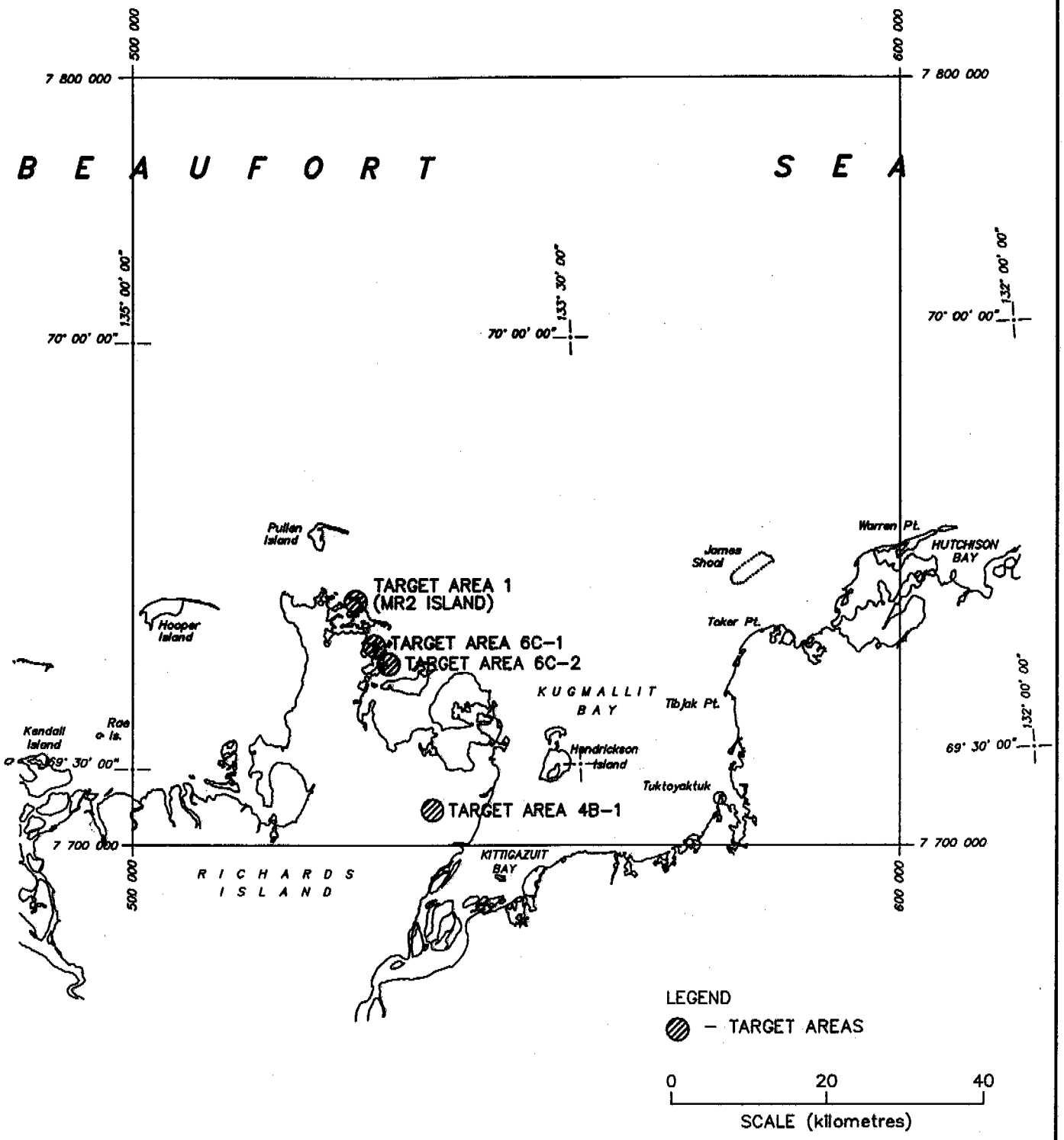
TARGET AREA	SURVEY RECORD DESIGNATION (Inst. Type/Target Area/Data Set)	LINE SEGMENT (Data File Name)	SURVEY LINE LENGTH (m)	STATION (m)	COMMENTS
1	GPR/1/Line 1	LN1-1	512	0+00 - 0+09	Terminated, Cable Problems
		LN1-2		0+00 - 0+72	Terminated, Cable Problems
		LN1-3		0+00 - 0+27	Change to 1000V tx, Terminated Cable Problems
		LN1-4		0+20 - 0+30	Terminated, Cable Problems
		LN1-5		0+00 - 1+70	Terminated, Cable Problems, Used in Report
		LN1-6		1+61 - 5+12	Used in Report
6C-2	GPR/6C-2/Line 1	LN6C-2-1	199	0+00 - 1+99	Used in Report
	GPR/6C-2/Line 2	LN6C-2-2	278	0+00 - 2+78	Used in Report
	GPR/6C-2/Line 3	LN6C-2-3	2243	0+00 - 3+88	Test Line Skidoo, Terminated Due to Poor Data Quality
		LN6C-2-4		0+00 - 22+56	Restart, Used in Report
	GPR/6C-2/CMP 1	CM6C-2-1	26		Mid-Point, 0+95, GPR/6C-2/Line 1
	GPR/6C-2/CMP 2	CM6C-2-2	24		Mid-Point, 1+27, GPR/6C-2/Line 2
	EM-31/6C-2/Line 1		190	0+00 - 1+90	Data not recorded as it was over-range
	EM-34/6C-2/Line 1	EM6C-2-1	225	0-10 - 2+30	Used in Report

TABLE 1, continued
GEOPHYSICAL SURVEY SUMMARY

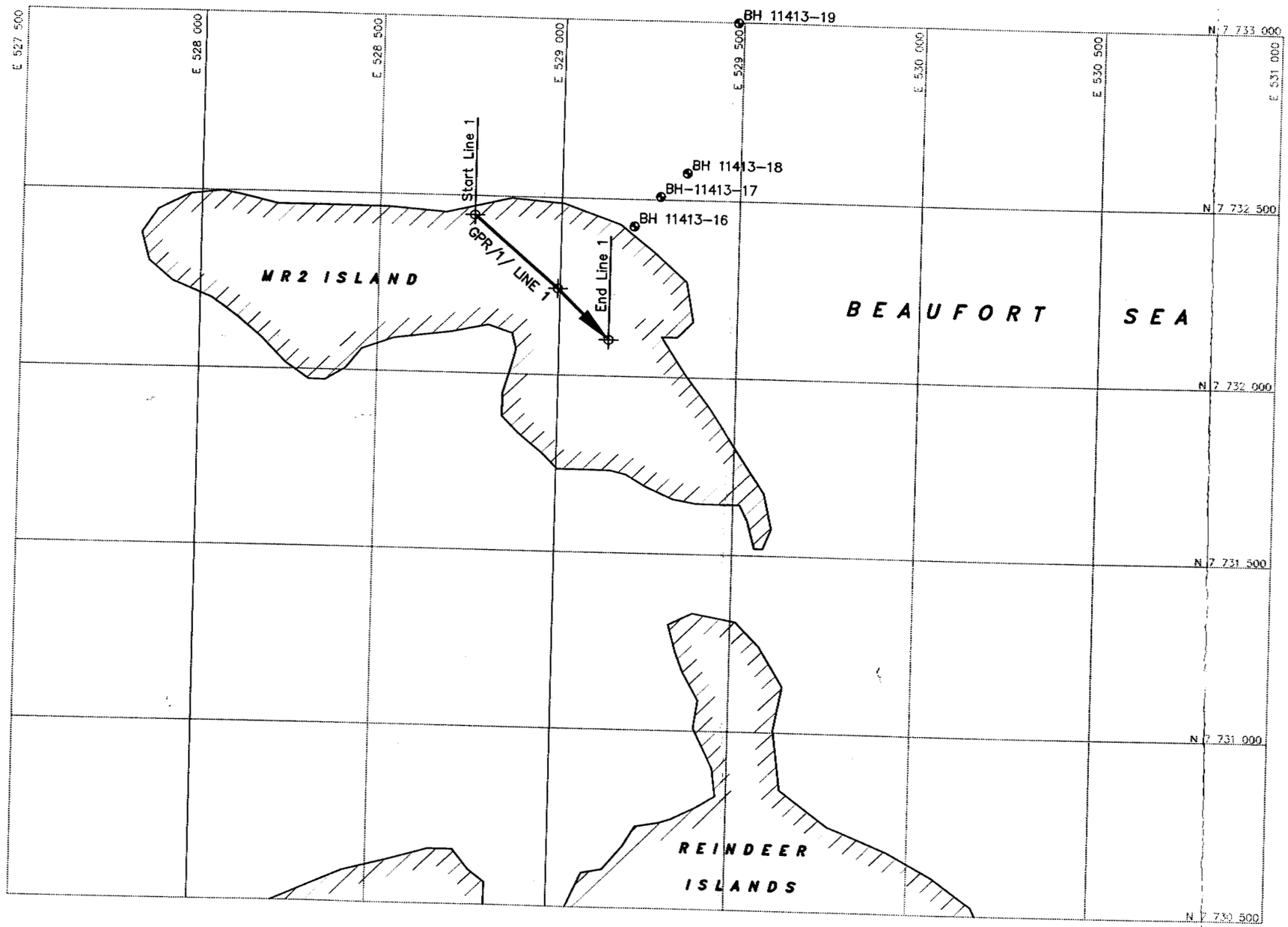
TARGET AREA	SURVEY RECORD DESIGNATION (Inst. Type/Target Area/Data Set)	LINE SEGMENT (Data File Name)	SURVEY LINE LENGTH (m)	STATION (m)	COMMENTS
6C-1	GPR/6C-1/Line 1	LN6C-1-1	580	0+00 - 5+80	Used in Report
	GPR/6C-1/Line 2	LN6C-1-2	2705	4+67 - 25+64	Used in Report
		LN6C-1-3		4+79 - 0+00	Used in Report
		LN6C-1-4		0+00 - 24+59	Used in Report, Line Terminated due to low batteries
		LN6C-1-5		13+18 - 25+89	Used in Report, Cable Problems, Intermittent data
		LN6C-1-6		25+89 - 27+05	Cable problems, intermittent data
	GPR/6C-1/Line 3	LN6C-1-7	535	0+00 - 5+35	Used in Report
	GPR/6C-1/Line 4	LN6C-1-8	718	0+00 - 7+18	Used in Report
	GPR/6C-1/CMP 1	CM6C-1-1	17		Mid-Point, BH-25, GPR/6C-1/Line 2, Terminated due to low batteries
		CM6C-1-2	27		Used in Report, Mid-Point, BH-25, GPR/6C-1/Line 2
	EM-34/6C-1/Line 1	EM6C-1-1	225	0+00 - 2+40	Used in Report
4B-1	GPR/4B-1/Line 1	LN4B-1-1	715	0+00 - 5+13	Used in Report, Terminated due to Cable Problems
		LN4B-1-2		5+13 - 7+15	Used in Report
	GPR/4B-1/Line 2	LN4B-1-3	1857	0+00 - 1+69	Used in Report, Terminated due to Cable Problems
		LN4B-1-4		1+69 - 18+57	Used in Report

TABLE 2
GPR ANTENNAE/TRANSMITTER CONFIGURATIONS

TARGET AREA	SURVEY RECORD DESIGNATION (Inst. Type/Target Area/Data Set)	LINE SEGMENT (Data File Name)	ANTENNA FREQUENCY (MHz)	TRANSMITTER VOLTAGE (V)
1	GPR/1/Line 1	LN1-1	100	1000
		LN1-2	100	400
		LN1-3	100	1000
		LN1-4	100	1000
		LN1-5	100	1000
		LN1-6	100	1000
6C-2	GPR/6C-2/Line 1	LN6C-2-1	100	1000
	GPR/6C-2/Line 2	LN6C-2-2	100	1000
	GPR/6C-2/Line 3	LN6C-2-3	100	1000
		LN6C-2-4	100	1000
	GPR/6C-2/CMP 1	CM6C-2-1	100	1000
	GPR/6C-2/CMP 2	CM6C-2-2	100	1000
6C-1	GPR/6C-1/Line 1	LN6C-1-1	100	400
	GPR/6C-1/Line 2	LN6C-1-2	100	1000
		LN6C-1-3	100	1000
		LN6C-1-4	50	1000
		LN6C-1-5	50	1000
		LN6C-1-6	50	400
	GPR/6C-1/Line 3	LN6C-1-7	50	1000
	GPR/6C-1/Line 4	LN6C-1-8	50	1000
	GPR/6C-1/CMP 1	CM6C-1-1	50	400
		CM6C-1-2	50	400
4B-1	GPR/4B-1/Line 1	LN4B-1-1	100	400
		LN4B-1-2	100	400
	GPR/4B-1/Line 2	LN4B-1-3	100	400
		LN4B-1-4	100	400



EBA Engineering Consultants Ltd.				PROJECT GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECTS, NORTHERN RICHARDS ISLAND, N.W.T.	
CLIENT INDIAN AND NORTHERN AFFAIRS CANADA				TITLE GENERAL LOCATION PLAN	
DATE 94-06-22	DWN. WMG	CHKD. NSP		FILE NO. 11413M09B	FIGURE 1



LEGEND

— RADAR TRACE LINES
⊕ – SURVEY POINT
● – BOREHOLE LOCATION

0 250 500
SCALE (metres)

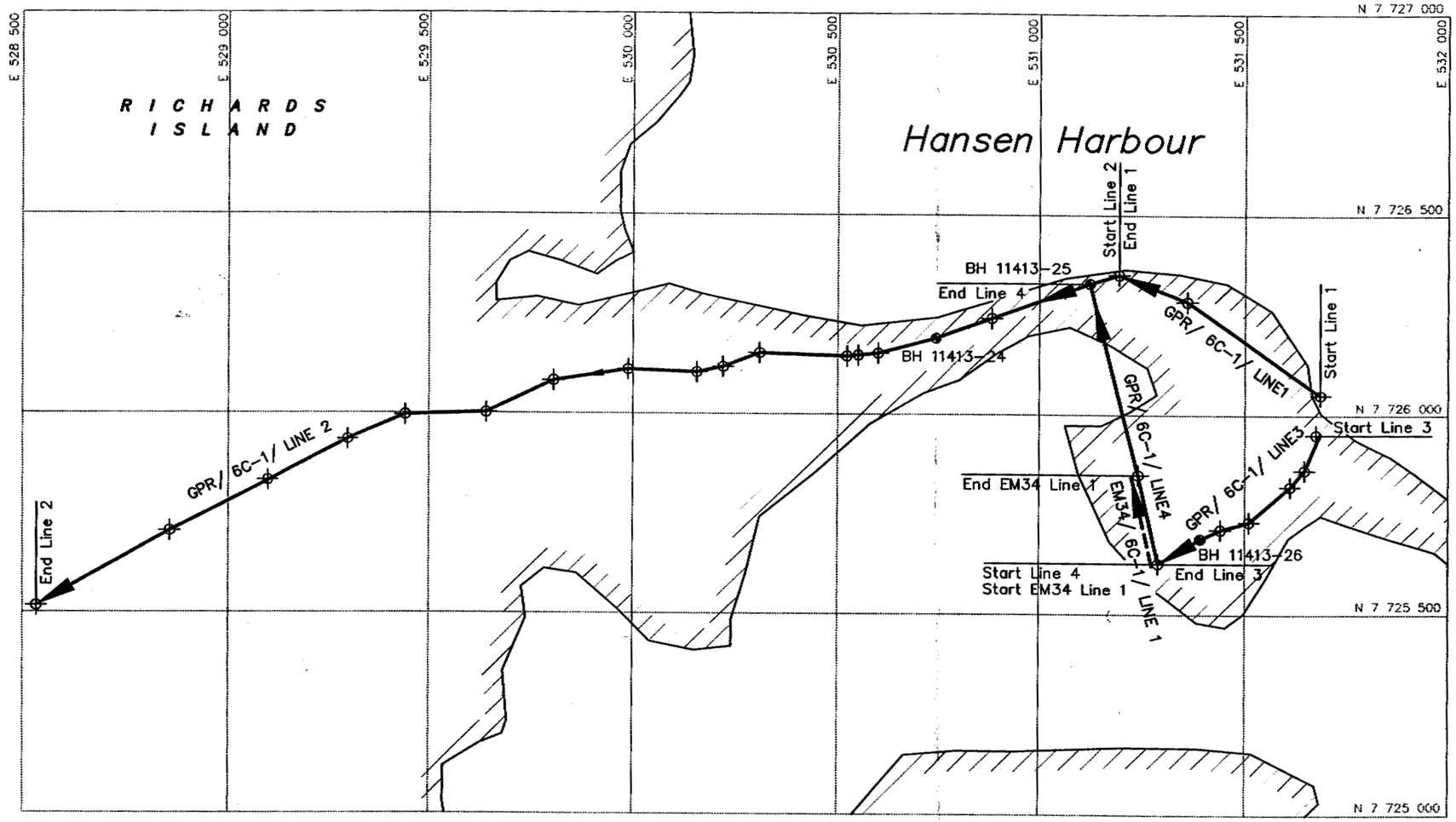
EBA Engineering Consultants Ltd.

CLIENT: INDIAN AND NORTHERN AFFAIRS CANADA

PROJECT: GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECT, NORTHERN RICHARDS ISLAND, N.W.T.

TITLE: SURVEY LINE LOCATIONS
TARGET AREA 1
MR2 ISLAND

DATE	DWN.	CHKD.	FILE NO.	
94–06–22	WMG	NSP	11413M11B	FIGURE 2



N

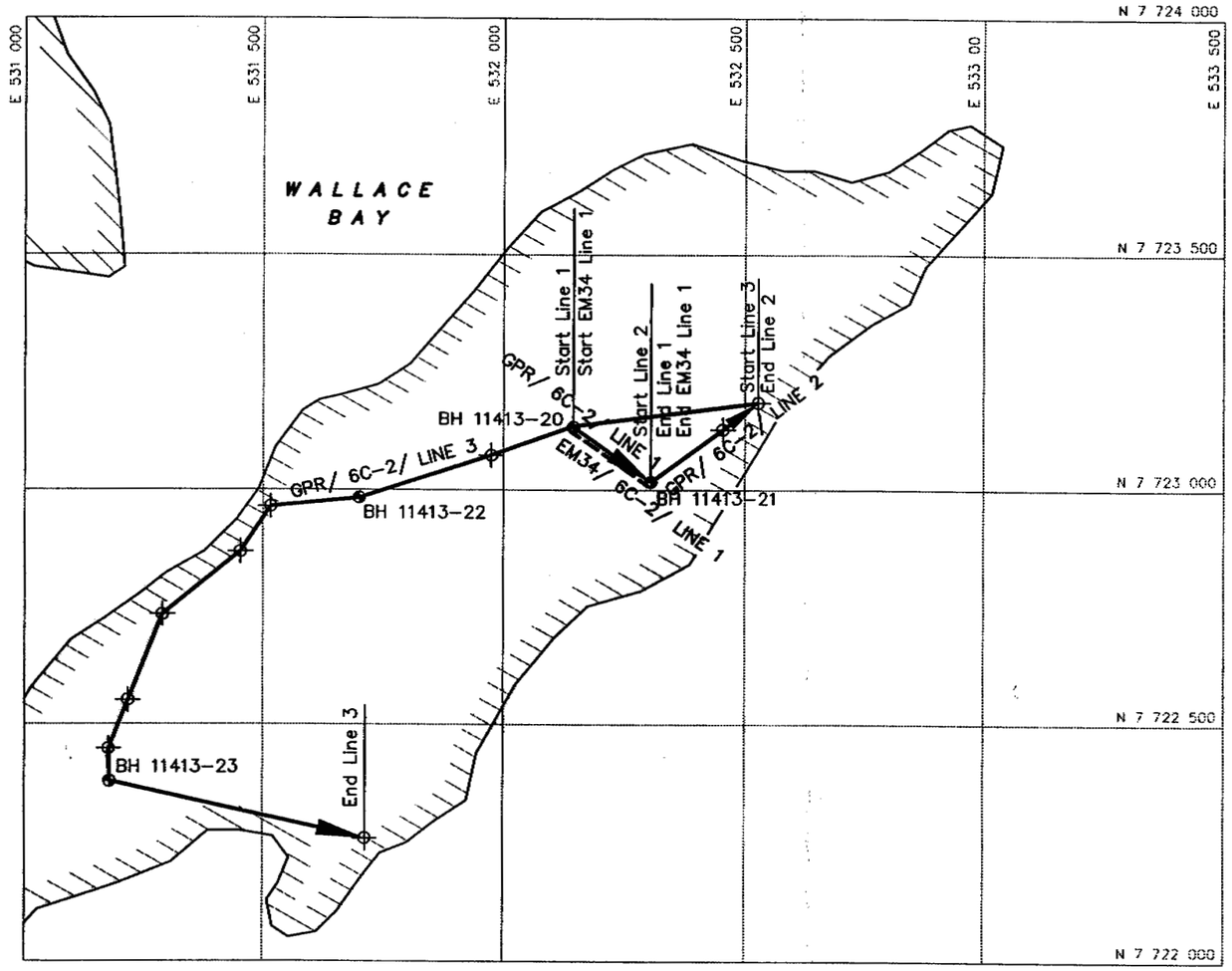
LEGEND

- RADAR TRACE LINES
- EM-34 TRACE LINES
- SURVEY POINT
- BOREHOLE LOCATION

0 250 500

SCALE (metres)

EBA Engineering Consultants Ltd.			PROJECT GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECT, NORTHERN RICHARDS ISLAND, N.W.T.
CLIENT INDIAN AND NORTHERN AFFAIRS CANADA			TITLE SURVEY LINE LOCATIONS TARGET AREA 6C-1
DATE 94-06-22	DWN. WMG	CHKD. NSP	FILE NO. 11413M13B / FIGURE 3



N

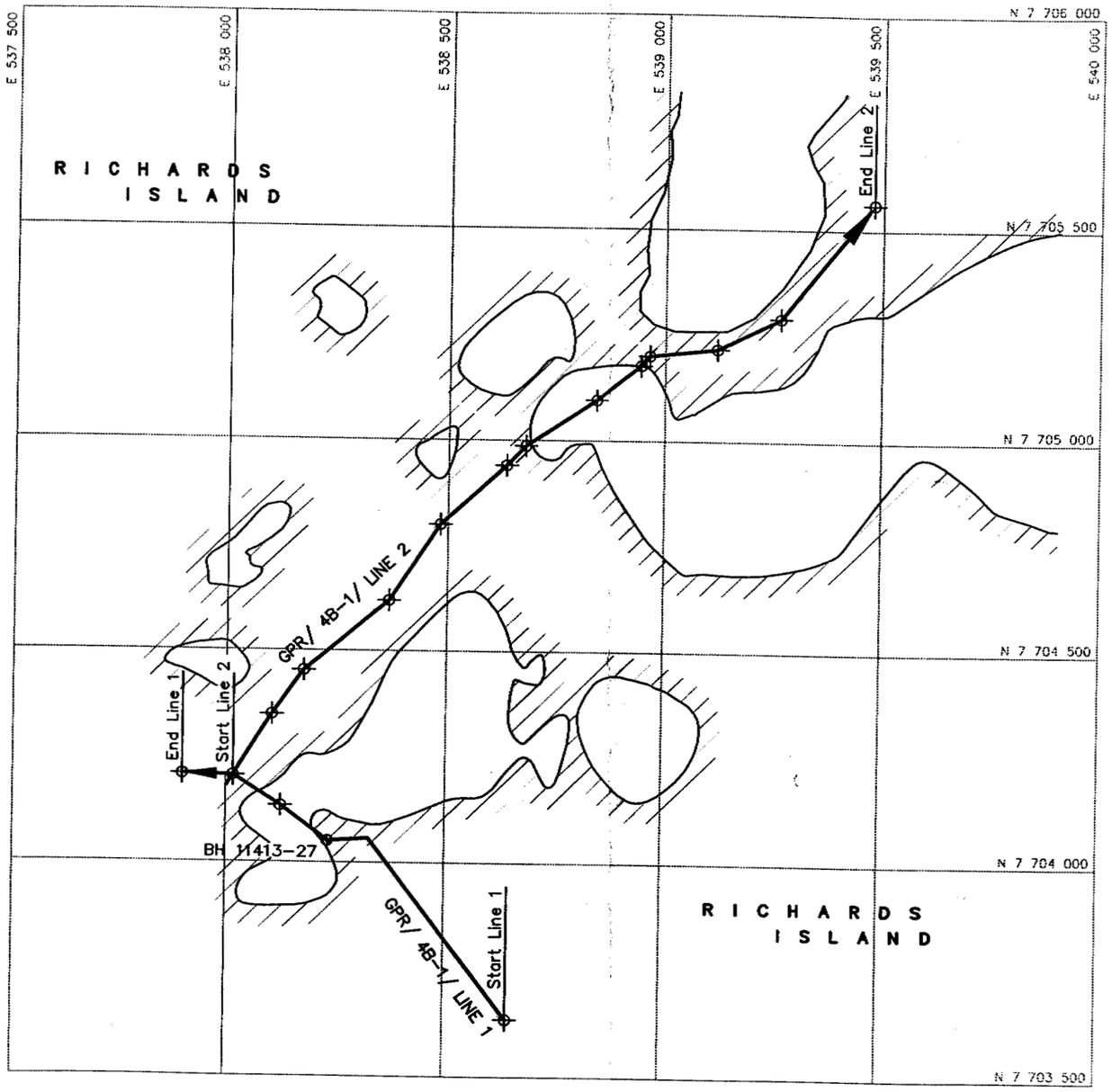
LEGEND

- RADAR TRACE LINES
- EM-31/EM-34 TRACE LINES
- SURVEY POINT
- BOREHOLE LOCATION

0 20 40

SCALE (metres)

EBA Engineering Consultants Ltd.		PROJECT	GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECT, NORTHERN RICHARDS ISLAND, N.W.T.
CLIENT	INDIAN AND NORTHERN AFFAIRS CANADA	TITLE	SURVEY LINE LOCATIONS TARGET AREA 6C-2
DATE 94-06-22	DWN. WMG CHKD. NSP	FILE NO.	11413M12B FIGURE 4



N

LEGEND

— RADAR TRACE LINES
⊕ – SURVEY POINT
⊕ – BOREHOLE LOCATION

0 250 500
SCALE (metres)

EBA Engineering Consultants Ltd.

CLIENT
INDIAN AND NORTHERN AFFAIRS CANADA

DATE	94-06-22	DWN.	WMG	CHKD.	NSP

PROJECT GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECT, NORTHERN RICHARDS ISLAND, N.W.T.

TITLE
SURVEY LINE LOCATIONS
TARGET AREA 4B-1

FILE NO.	11413M10B	FIGURE 5

APPENDIX A

DATA DISKS

Data Disk Directory

Disk #	Files
1	PKZIP.EXE PKUNZIP.EXE LN1-1.ZIP LN1-2.ZIP LN1-3.ZIP LN1-4.ZIP LN1-5.ZIP LN1-6.ZIP
2	CM6C-2-1.ZIP CM6C-2-2.ZIP LN6C-2-1.ZIP LN6C-2-2.ZIP LN6C-2-3.ZIP EM6C-2-1.MMX
3	LN6C-2-4.ZIP
4	LN6C-1-2.ZIP part 1
5	LN6C-1-2.ZIP part 2 CM6C-1-1.ZIP CM6C-1-2.ZIP LN6C-1-1.ZIP LN6C-1-3.ZIP LN6C-1-6.ZIP EM6C-1-1.MMX
6	LN6C-1-4.ZIP part 1
7	LN6C-1-4.ZIP part 2 LN6C-1-5.ZIP LN6C-1-7.ZIP
8	LN6C-1-8.ZIP
9	LN4B-1-1.ZIP LN4B-1-2.ZIP LN4B-1-3.ZIP LN4B-1-4.ZIP

Expanding compressed files (*.ZIP files):

To copy large files onto 3.5" diskettes the files were compressed using the software PKZIP (Version 2.04e). All compressed files are denoted by the .ZIP extension. Some files such as LN6C-1-2.ZIP and LN6C-1-4.ZIP, have been spanned over two diskettes as the compressed file is larger than the diskette capacity (1.44 MB). A copy of PKZIP.EXE and of PKUNZIP.EXE is provided on Diskette #1.

To exapnd the compressed files, follow these steps:

1. Create a temporary directory on the hard drive (e.g., C:\TEMP).

2. Copy files PKZIP.EXE and PKUNZIP.EXE onto the hard drive.

3. Insert 3.5" diskette containing compressed file into 3.5" drive.

4. From the temporary directory on the hard drive, type PKUNZIP [drive:\][filename]. For instance, to expand file LN6C-1-1.ZIP from diskette #3, and supposing the 3.5" drive is "B:", type: "PKUNZIP B:LN6C-1-1.ZIP" or "PKUNZIP B:LN6C-1-1". The original expanded file will appear in the temporary directory (in this case, LN6C-1-1.DT1 and LN6C-1-1.HD).

5. To expand a compressed file spanned over two diskettes, (e.g., file LN6C-1-2.ZIP on diskettes 4 and 5), insert the first part of the compressed file (in this case, diskette 4) into the 3.5" drive and repeat as above, i.e., from the hard drive, type: "PKUNZIP B:LN6C-1-2.ZIP". When the first part has been read (the computer will prompt when it is done), remove the first diskette and insert the diskette containing the second part (in this case, diskette 5). Then press any key. The data file (in this case, LN6C-1-2.DT1 and LN6C-1-2.HD) will then appear in the temporary directory in its original form.

APPENDIX B

TARGET AREA 1
UNPROCESSED GPR DATA

TARGET AREA 1

GPR HEADER FILE DATA SHEETS

Data File
101-11413

Line1-1.dt1

Target Area 1 High bluff to east hill
N. Parry, S. Traynor
19/03/94

Number of Traces	=	9
Number of pts/trc	=	750
Timezero at point	=	130
Total time window	=	600
Starting position	=	0.0000
Final position	=	8.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 9

Data File
101-11413

Line1-2.dt1

Target Area 1 High bluff to east hill, restarted, 400 V transmitter, change number of stacks
N. Parry, S. Traynor
19/03/94

Number of Traces	=	72
Number of pts/trc	=	750
Timezero at point	=	94
Total time window	=	600
Starting position	=	0.0000
Final position	=	71.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	16
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 72

Data File
101-11413

Line1-3.dt1

Target Area 1 High bluff to east hill, restarted 1000 V transmitter
N. Parry, S. Traynor
19/03/94

Number of Traces	=	27
Number of pts/trc	=	750
Timezero at point	=	128
Total time window	=	600
Starting position	=	0.0000
Final position	=	26.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	16
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 27

Data File
101-11413

Line1-4.dt1

Target Area 1 High bluff to east hill, continue Line 1-3.dt1
N. Parry, S. Traynor
19/03/94

Number of Traces	=	11
Number of pts/trc	=	750
Timezero at point	=	128
Total time window	=	600
Starting position	=	0.0000
Final position	=	10.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	16
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 11

Data File
101-11413

Line1-5.dt1

Target Area 1 High bluff to east hill, Restart Line at High Bluff, increase number of stacks
N. Parry, S. Traynor
20/03/94

Number of Traces	=	170
Number of pts/trc	=	750
Timezero at point	=	109
Total time window	=	600
Starting position	=	0.0000
Final position	=	169.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 170

Distance : scan ratio

0 to 170	:	1.0 m / scan

Data File Line1-6.dt1
101-11413

Target Area 1 High bluff to east hill, continue Line 1-5.dt1
N. Parry, S. Traynor
20/03/94

Number of Traces	=	351
Number of pts/trc	=	750
Timezero at point	=	145
Total time window	=	600
Starting position	=	0.0000
Final position	=	350.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 Maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 351

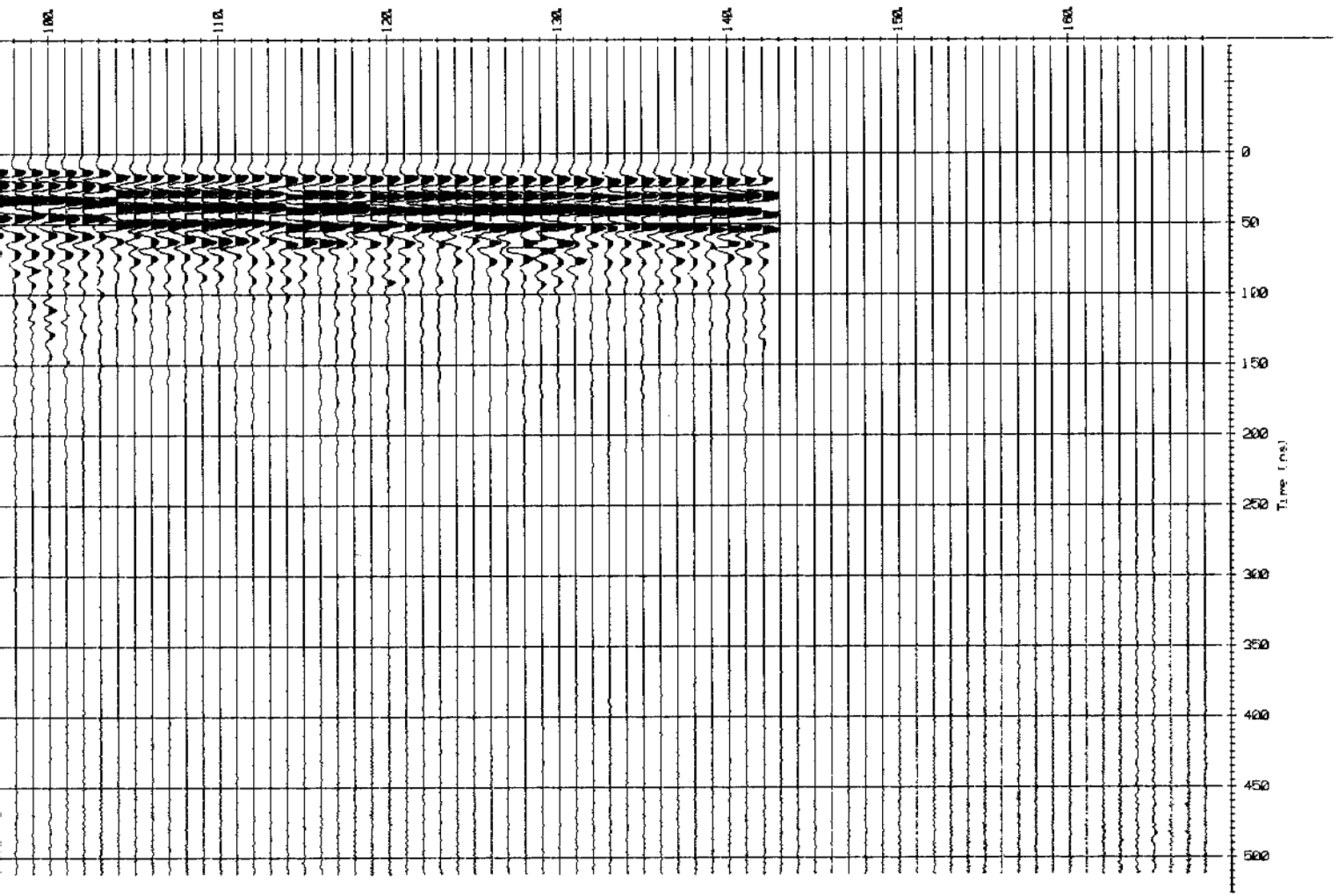
Distance : scan ratio
0 to 351 : 1.0 m / scan

TARGET AREA 1

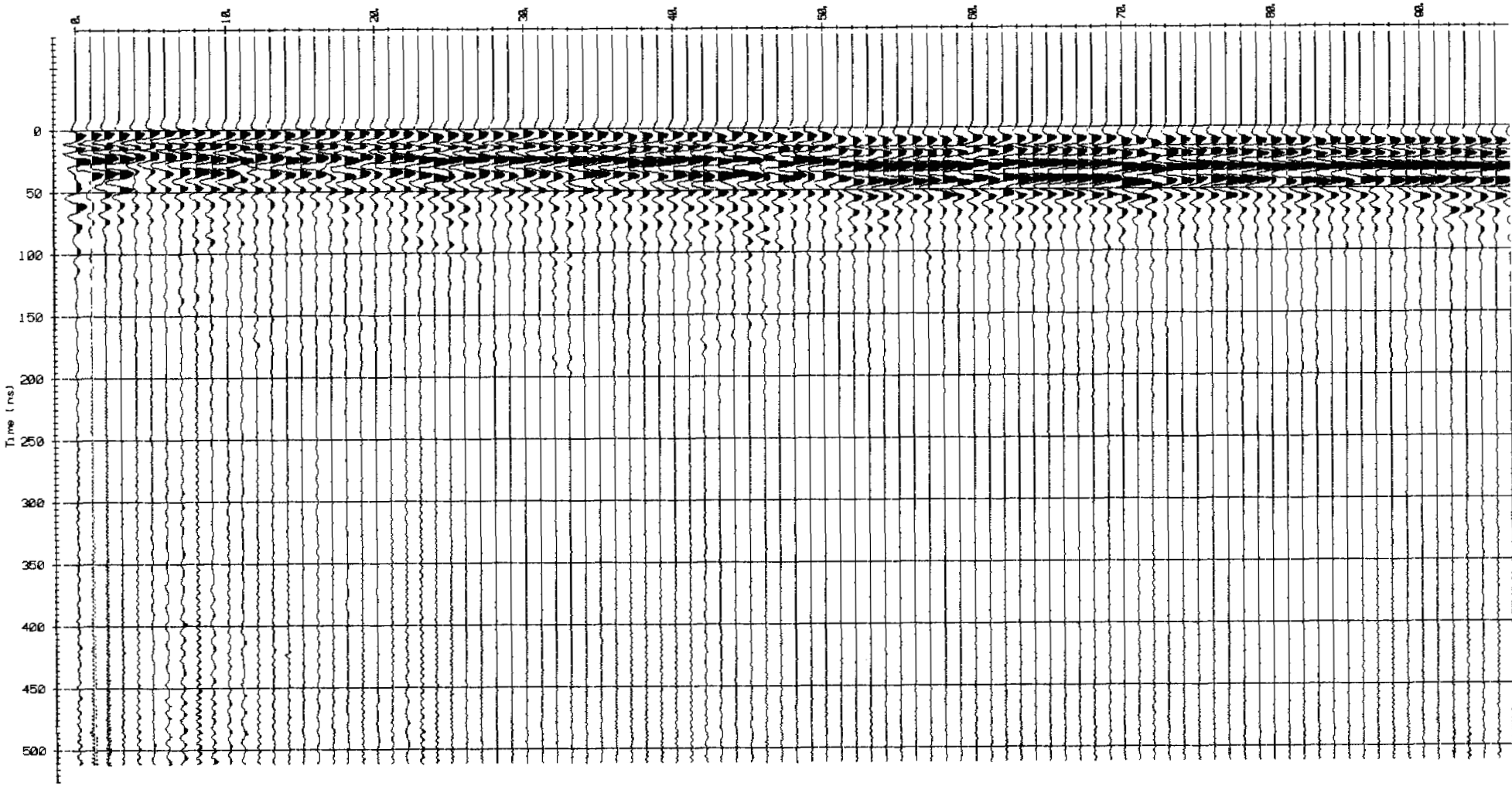
UNPROCESSED GPR DATA PLOTS

TABLE OF CONTENTS

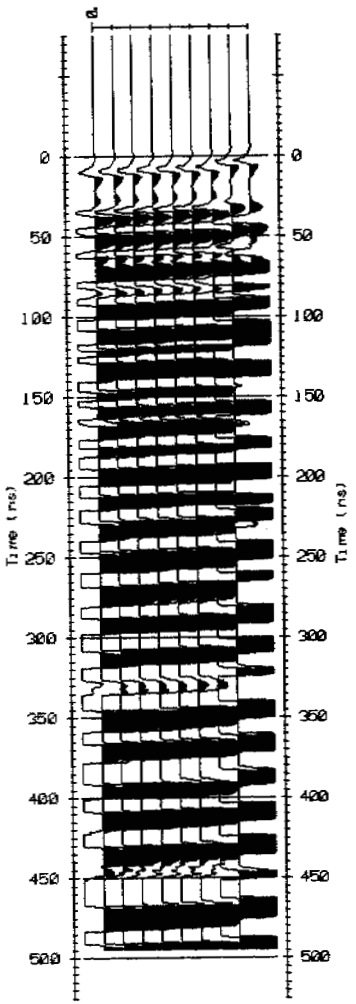
LN1-5


100
110
120
130
140
150
160
0
50
100
150
200
250
300
350
400
450
500
Time (ns)

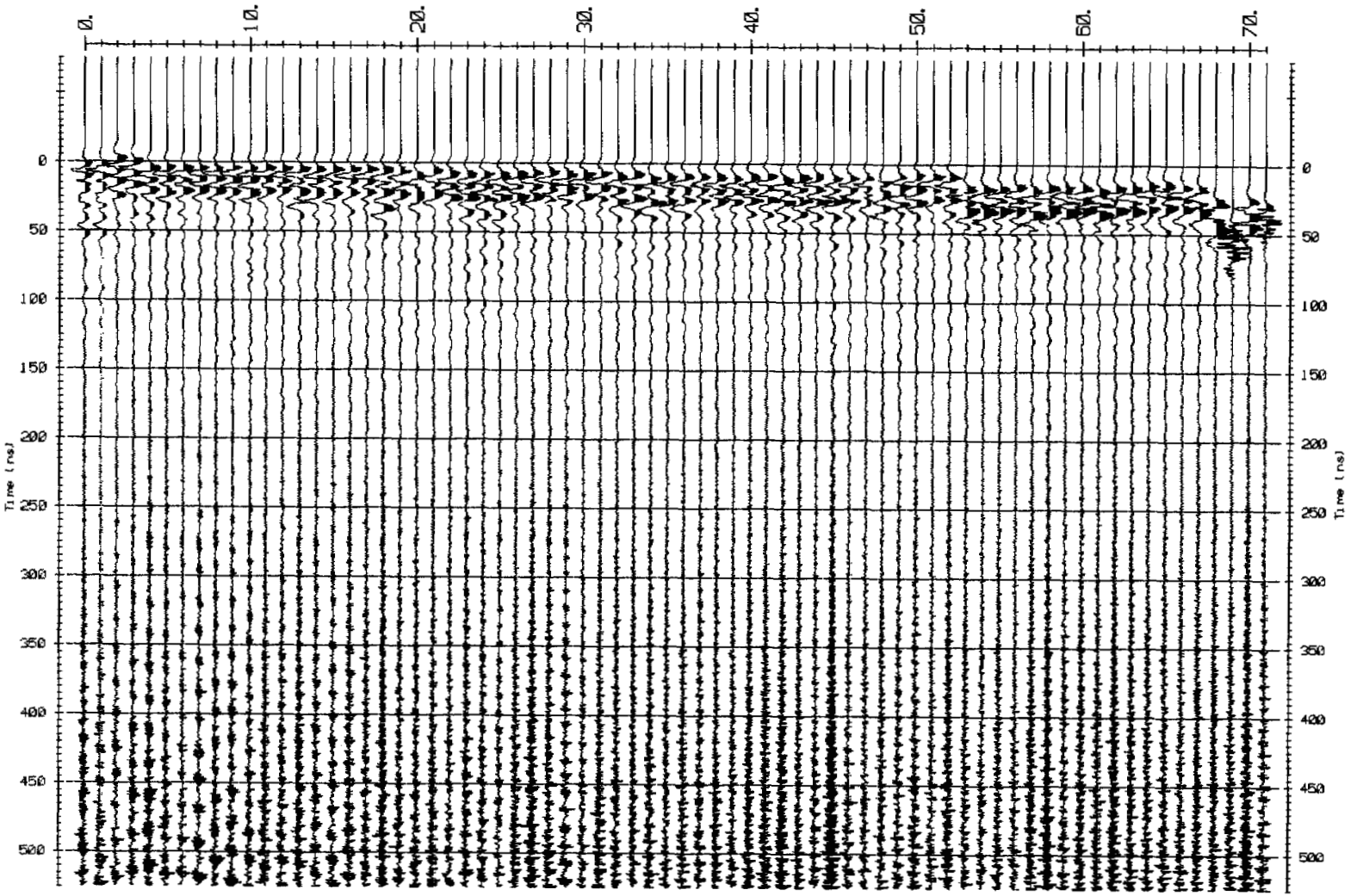
LN1-5

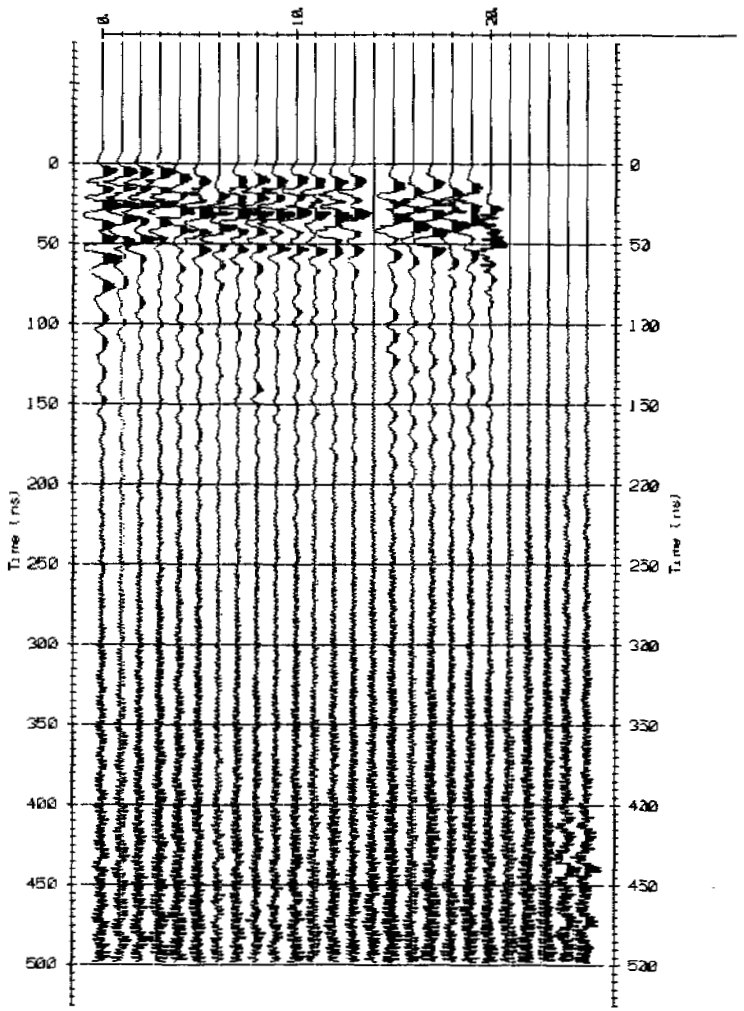

0.
10.
20.
30.
40.
50.
60.
70.
80.
90.
0
50
100
150
200
250
300
350
400
450
500
Time (ns)

LN1-1

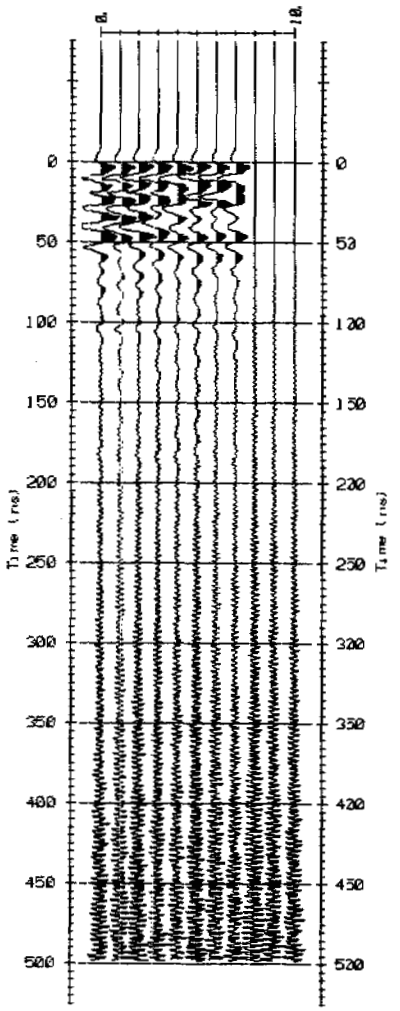


LN1-2


0.
10.
20.
30.
40.
50.
60.
70.
0
50
100
150
200
250
300
350
400
450
500
Time (ns)


0
50
100
150
200
250
300
350
400
450
500
Time (ns)

LN-1-4


0.
18.
0
50
100
150
200
250
300
350
400
450
500
Time (ns)
0
50
100
150
200
250
300
350
400
450
500
Time (ns)

APPENDIX C

TARGET AREA 6C-2
UNPROCESSED GPR DATA

TARGET AREA 6C-2

GPR HEADER FILE DATA SHEETS

Data File CMP6C-2-1.dt1
101-11413

CMP centred on station 95 Line 6C-2-1 Target Area 6C-2
N. Parry, S. Traynor
21/03/94

Number of Traces	=	26
Number of pts/trc	=	750
Timezero at point	=	69
Total time window	=	600
Starting position	=	0.0000
Final position	=	25.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	CMP/WARR

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	AGC
Window	=	1.000 pulse windows
Amount	=	1.000 of full window
Region	=	1 to 750 points
Selection Time	=	-75 to 525 ns
Trace	=	1 to 26

Data File CMP6C-2-2.dt1
101-11413

CMP centred on station 127 Line 6C-2-2 Target Area 6C-2
N. Parry, S. Traynor
21/03/94

Number of Traces	=	24
Number of pts/trc	=	750
Timezero at point	=	118
Total time window	=	600
Starting position	=	0.0000
Final position	=	23.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	CMP/WARR

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	AGC
Window	=	1.000 pulse windows
Amount	=	1.000 of full window
Region	=	1 to 750 points
Selection Time	=	-75 to 525 ns
Trace	=	1 to 24

Data File
101-11413

Line6C-2-1.dt1

Target Area 6C-2, Line 6C-2-1 from BH 20 to BH 21
N. Parry, S. Traynor
21/03/94

Number of Traces	=	190
Number of pts/trc	=	750
Timezero at point	=	131
Total time window	=	600
Starting position	=	0.0000
Final position	=	189.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 190

Distance : scan ratio

0 to 190	:	1.05

Data File
101-11413

Line6C-2-2.dt1

Target Area 6C-2, Line 6C-2-2 from BH 21 to west peak
N. Parry, S. Traynor
21/03/94

Number of Traces	=	254
Number of pts/trc	=	750
Timezero at point	=	147
Total time window	=	600
Starting position	=	0.0000
Final position	=	253.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	256
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 254

Distance : scan ratio

0 to 254	:	1.096 m / scan

Data File
101-11413

Line6C-2-3.dtl

Target Area 6C-2, Line 6C-2-3 from west peak to BH 20 and north ridge
N. Parry, S. Traynor
22/03/94

Number of Traces	=	199
Number of pts/trc	=	625
Timezero at point	=	59
Total time window	=	500
Starting position	=	0.0000
Final position	=	198.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 maximum
Selection Time	=	-75 to 525 ns
Trace	=	1 to 199

Distance : scan ratio

0 to 199	:	1.951 m / scan

Data File
101-11413

Line6C-2-4.dt1

Target Area 6C-2, Line 6C-2-3 from west peak to BH 20 and north ridge
N. Parry, S. Traynor
23/03/94

Number of Traces	=	1558
Number of pts/trc	=	625
Timezero at point	=	22
Total time window	=	500
Starting position	=	0.0000
Final position	=	1557.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 maximum
Selection	=	Time = -20 to 480 ns
Trace	=	1 to 1558

Distance : scan ratio

0 to 263	:	1.476 m / scan
263 to 564	:	1.554 m / scan
564 to 770	:	1.571 m / scan
770 to 896	:	1.580 m / scan
896 to 1151	:	1.207 m / scan
1151 to 1557	:	1.404 m / scan

TARGET AREA 6C-2

UNPROCESSED GPR DATA PLOTS

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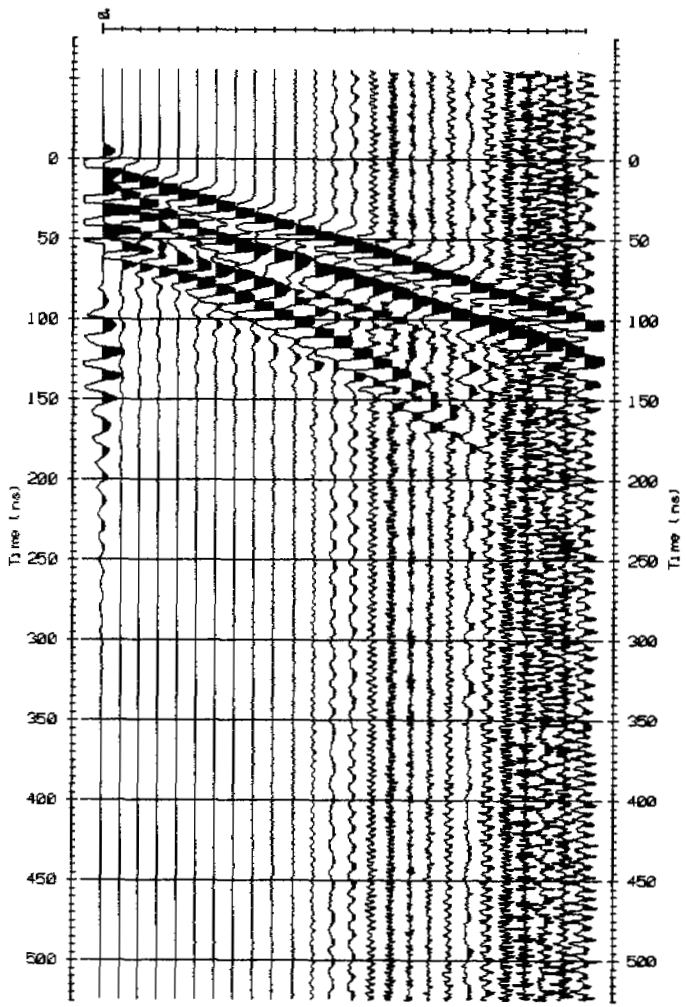
CMP6C-2-1



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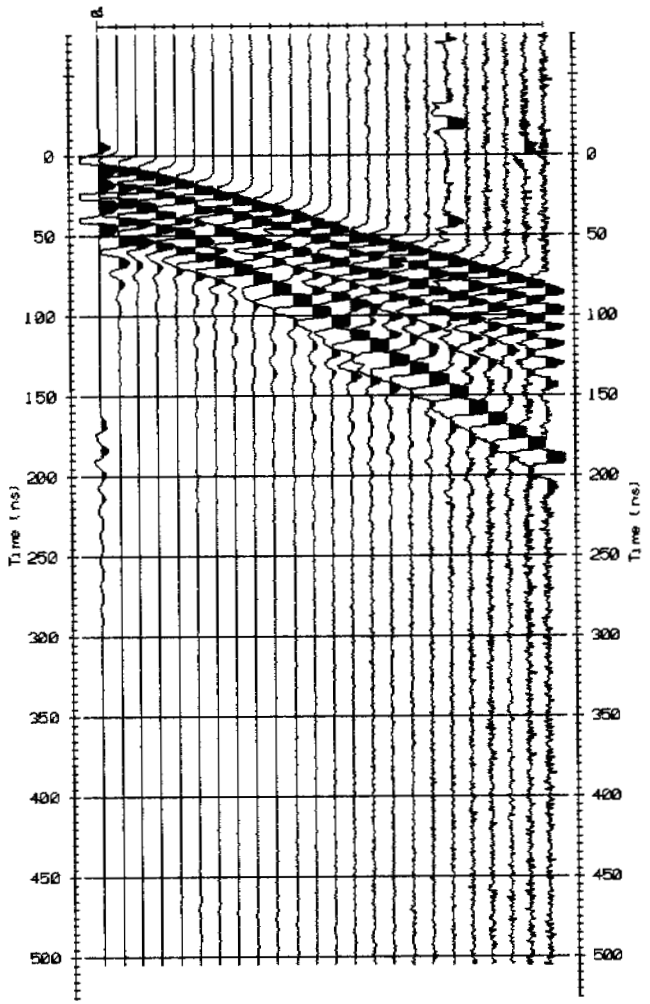

APPENDIX D

TARGET AREA 6C-1
UNPROCESSED GPR DATA

TARGET AREA 6C-1

GPR HEADER FILE DATA SHEETS

Data File
101-11413

CMP6C-1-1.dt1

CMP centred on BH 25 Target Area 6C-1
N. Parry, S. Traynor
25/03/94

Number of Traces	=	17
Number of pts/trc	=	750
Timezero at point	=	88
Total time window	=	600
Starting position	=	0.0000
Final position	=	16.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1
Survey mode	=	CMP/WARR

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	AGC
Window	=	1.000 pulse windows
Amount	=	1.000 of full window
Region	=	1 to 750 points
Selection Time	=	-140 to 460 ns
Trace	=	1 to 17

Data File
101-11413

CMP6C-1-2.dt1

CMP centred on BH 25 Target Area 6C-1, restarted cmp, increase number of stacks
N. Parry, S. Traynor
25/03/94

Number of Traces	=	27
Number of pts/trc	=	750
Timezero at point	=	86
Total time window	=	600
Starting position	=	0.0000
Final position	=	26.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1024
Survey mode	=	CMP/WARR

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	AGC
Window	=	1.000 pulse windows
Amount	=	1.000 of full window
Region	=	1 to 750 points
Selection Time	=	-140 to 460 ns
Trace	=	1 to 27

Data File
101-11413

Line6C-1-1.dt1

Target Area 6C-1, access road to end of Line 6C-1-2
N. Parry, S. Traynor
24/03/94

Number of Traces	=	699
Number of pts/trc	=	625
Timezero at point	=	34
Total time window	=	500
Starting position	=	0.0000
Final position	=	698.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Selection Time	=	-25 to 475 ns
Trace	=	1 to 699

Distance : scan ratio
0 to 699 : 0.83 m / scan

Data File
101-11413

Line6C-1-2.dt1

Target Area 6C-1, end of Line 6C-1-1 along north ridge
N. Parry, S. Traynor
24/03/94

Number of Traces	=	1729
Number of pts/trc	=	625
Timezero at point	=	52
Total time window	=	500
Starting position	=	0.0000
Final position	=	1728.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	-40 to 460 ns
Trace	=	1 to 1729

Distance : scan ratio

0 to 172	:	0.92 m / scan
172 to 384	:	1.35 m / scan
384 to 614	:	1.43 m / scan
614 to 789	:	2.08 m / scan
789 to 1068	:	1.26 m / scan
1068 to 1319	:	0.88 m / scan
1319 to 1515	:	1.38 m / scan
1515 to 1728	:	1.76 m / scan

Data File
101-11413

Line6C-1-3.dt1

Target Area 6C-1, BH 24 to end of Line6C-1-1
N. Parry, S. Traynor
24/03/94

Number of Traces	=	396
Number of pts/trc	=	625
Timezero at point	=	35
Total time window	=	500
Starting position	=	0.0000
Final position	=	395.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	-25 to 475 ns
Trace	=	1 to 396

Distance : scan ratio

0 to 396	:	1.21 m / scan

Data File
101-11413

Line6C-1-4.dt1

Target Area 6C-1, end of Line6C-1-1 along north ridge
N. Parry, S. Traynor
25/03/94

Number of Traces	=	3342
Number of pts/trc	=	375
Timezero at point	=	27
Total time window	=	600
Starting position	=	0.0000
Final position	=	3341.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	-50 to 550 ns
Trace	=	1 to 3342

Distance : scan ratio

0 to 478	:	0.75 m / scan
478 to 997	:	0.23 m / scan
997 to 1193	:	0.81 m / scan
1193 to 1503	:	0.92 m / scan
1503 to 1896	:	0.84 m / scan
1896 to 2134	:	0.75 m / scan
2134 to 2346	:	0.88 m / scan
2346 to 2637	:	0.69 m / scan
2637 to 3024	:	0.96 m / scan
3024 to 3341	:	0.85 m / scan

Data File
101-11413

Line6C-1-5.dt1

Target Area 6C-1, continue Line6C-1-2 along north ridge
N. Parry, S. Traynor
24/03/94

Number of Traces	=	722
Number of pts/trc	=	375
Timezero at point	=	1
Total time window	=	600
Starting position	=	0.0000
Final position	=	721.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	0 to 600 ns
Trace	=	1 to 722

Distance : scan ratio

0 to 350	:	-
350 to 494	:	1.76 m / scan
494 to 648	:	1.76 m / scan
648 to 722	:	1.76 m / scan

Data File
101-11413

Line6C-1-6.dtl

Target Area 6C-1, continue Line6C-1-4 along north ridge
N. Parry, S. Traynor
25/03/94

Number of Traces	=	177
Number of pts/trc	=	375
Timezero at point	=	80
Total time window	=	600
Starting position	=	0.0000
Final position	=	176.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	-130 to 470 ns
Trace	=	1 to 177

Data File
101-11413

Line6C-1-7.dt1

Target Area 6C-1, Line 6C-1-2 from access road to end of south ridge
N. Parry, S. Traynor
24/03/94

Number of Traces	=	901
Number of pts/trc	=	375
Timezero at point	=	1
Total time window	=	600
Starting position	=	0.0000
Final position	=	900.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	0 to 600 ns
Trace	=	1 to 901

Distance : scan ratio

0 to 184	:	0.53 m / scan
184 to 354	:	0.35 m / scan
354 to 463	:	1.22 m / scan
463 to 612	:	0.48 m / scan
612 to 763	:	0.35 m / scan
763 to 900	:	0.88 m / scan

Data File
101-11413

Line6C-1-8.dt1

Target Area 6C-1, Line 6C-1-3 from south ridge to BH 25
N. Parry, S. Traynor
24/03/94

Number of Traces	=	764
Number of pts/trc	=	375
Timezero at point	=	43
Total time window	=	600
Starting position	=	0.0000
Final position	=	763.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	50.00
Antenna separation	=	1.0000
Pulsar voltage	=	1000
Number of Stacks	=	4
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.000 of full window
Region	=	1 to 750
Selection Time	=	-25 to 475 ns
Trace	=	1 to 764

Distance : scan ratio

0 to 764	:	0.94 m / scan

TARGET AREA 6C-1

UNPROCESSED GPR DATA PLOTS

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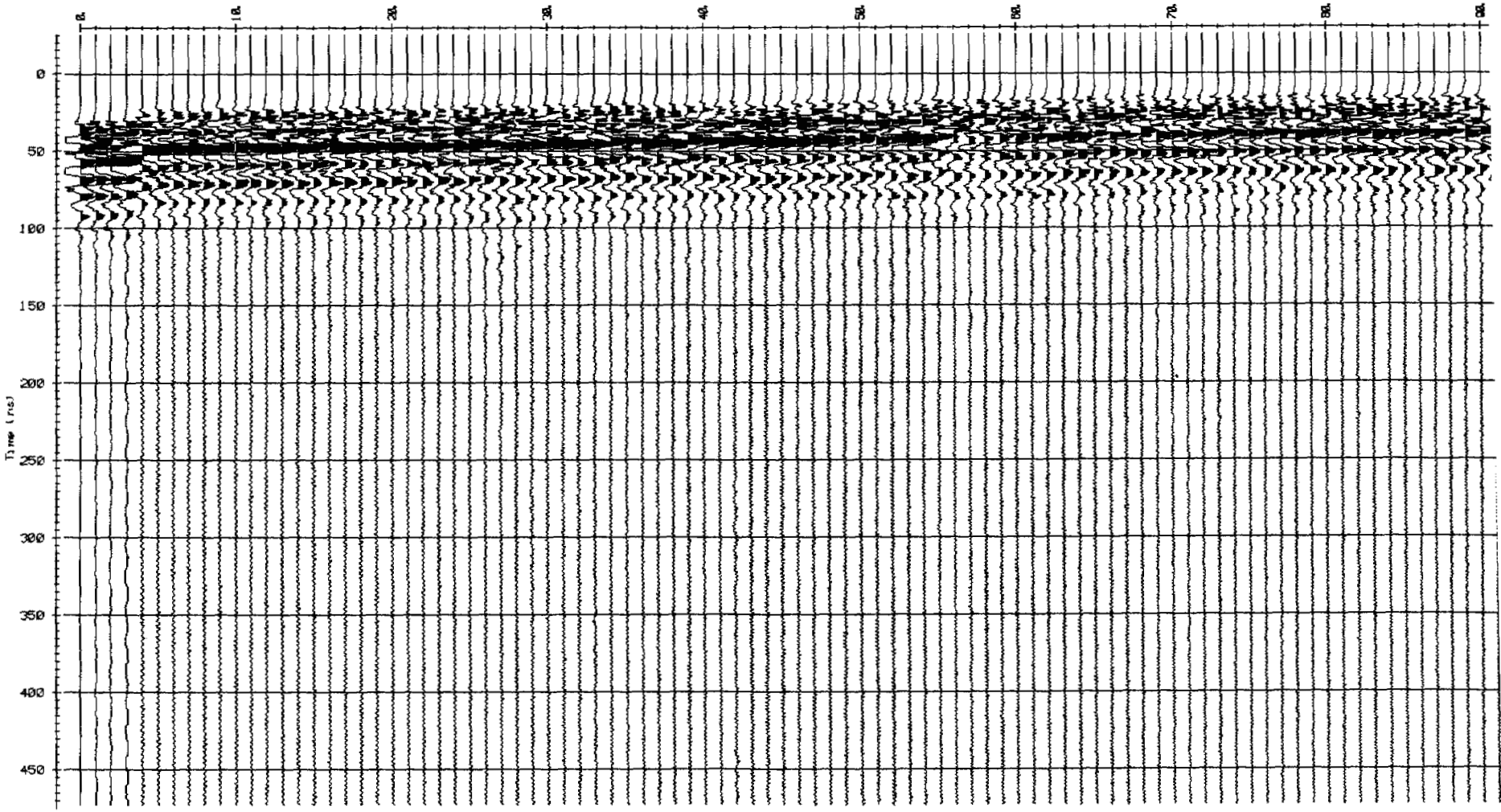
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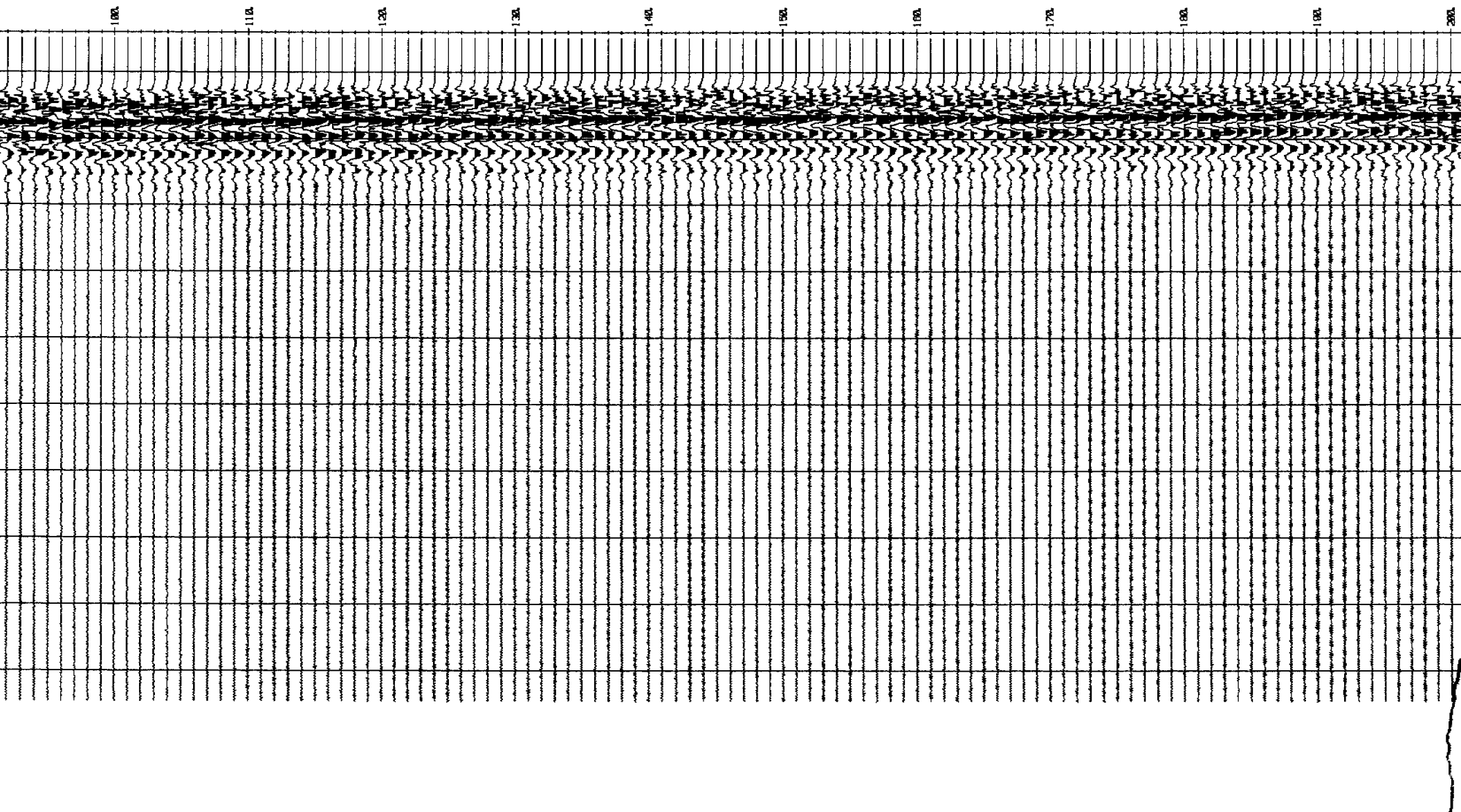
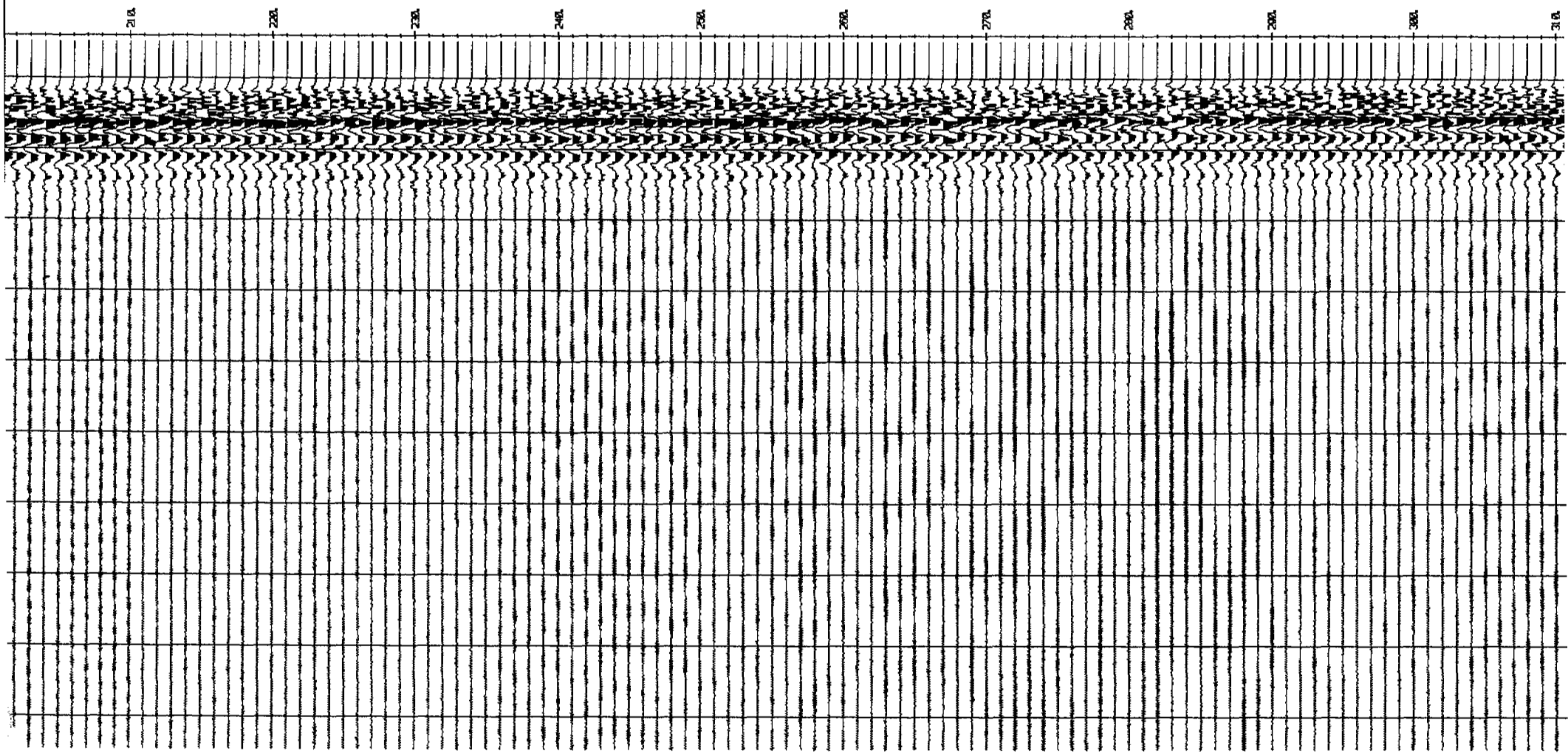
LN6C-1-1

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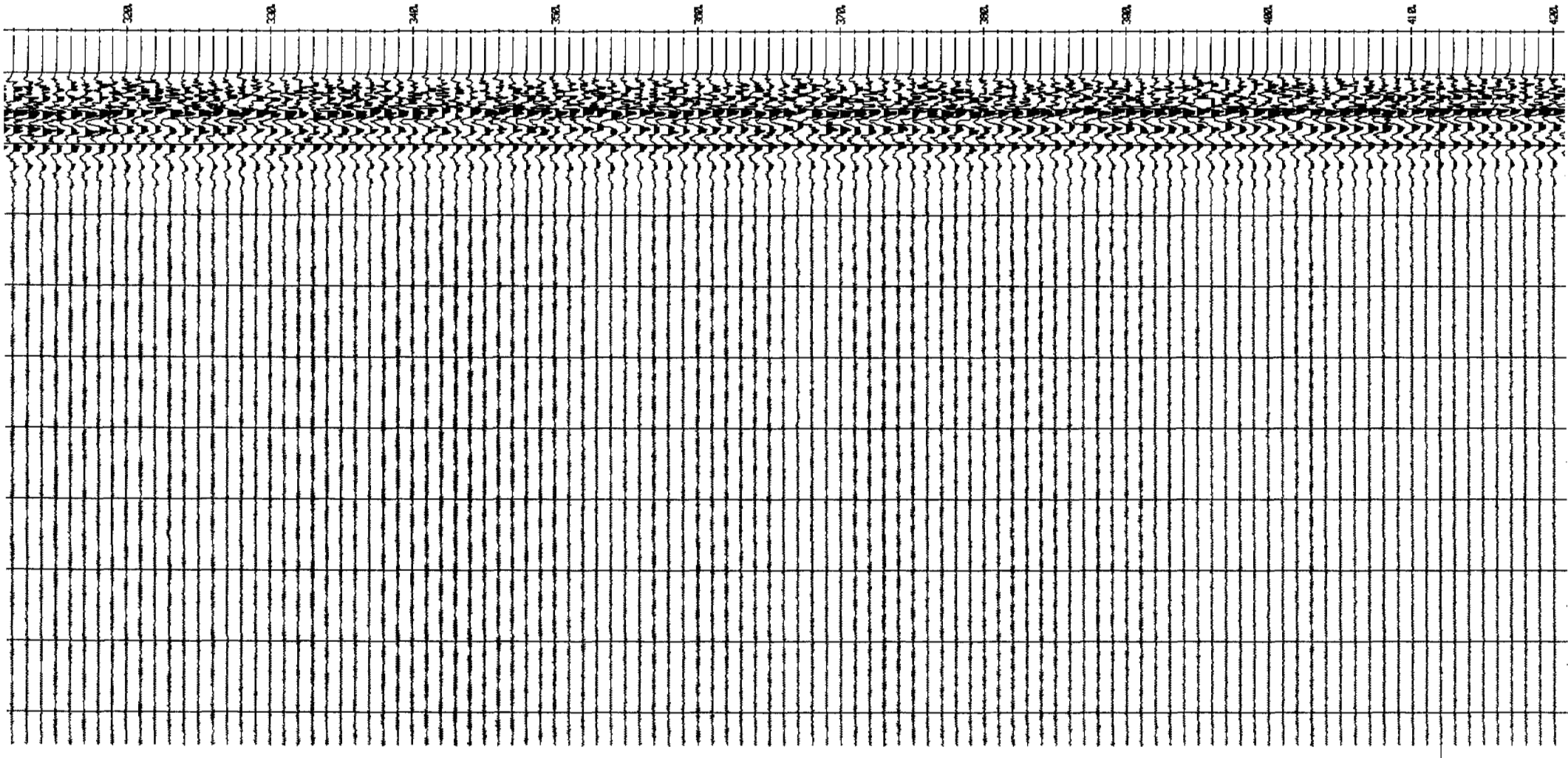
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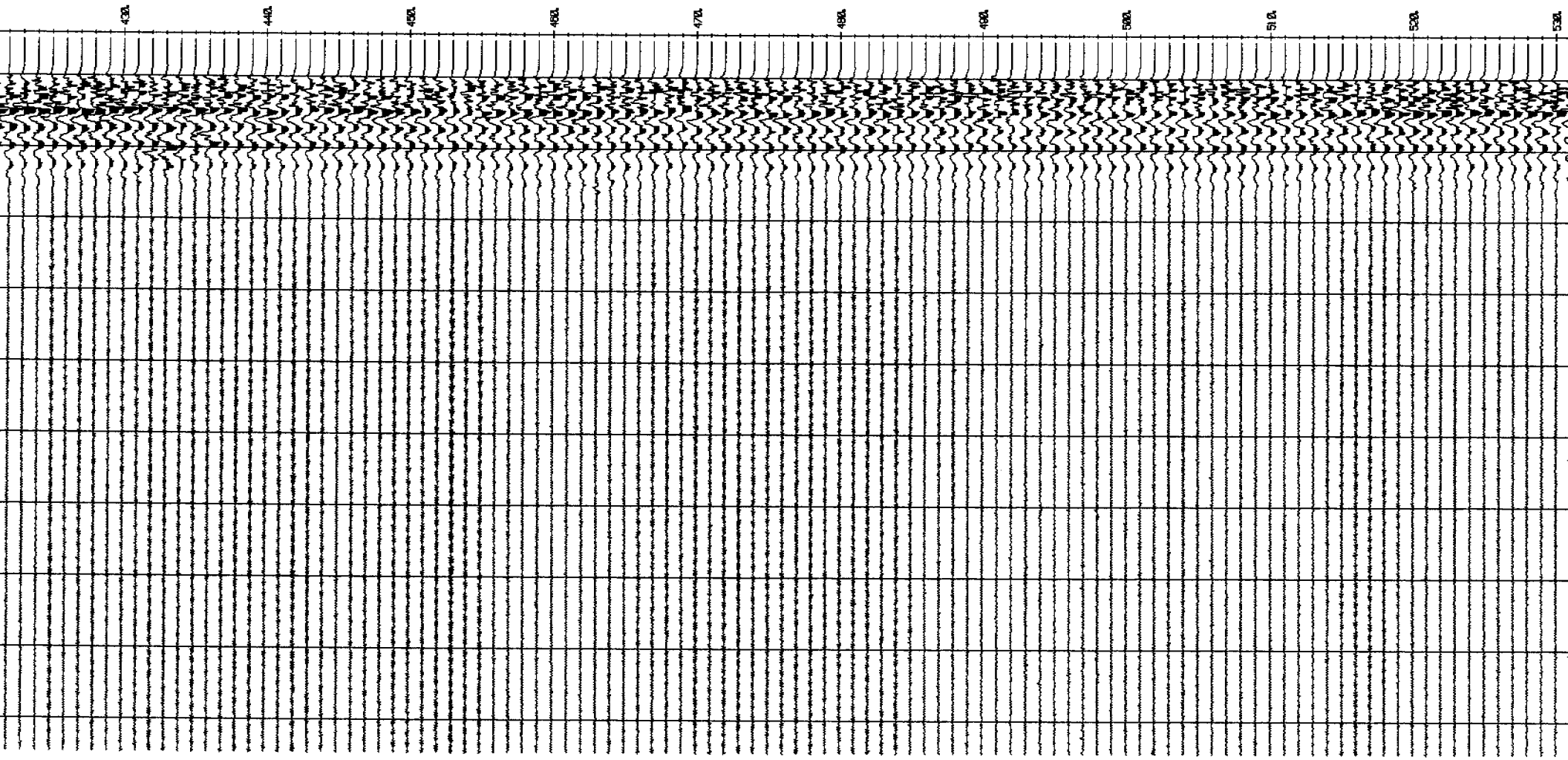
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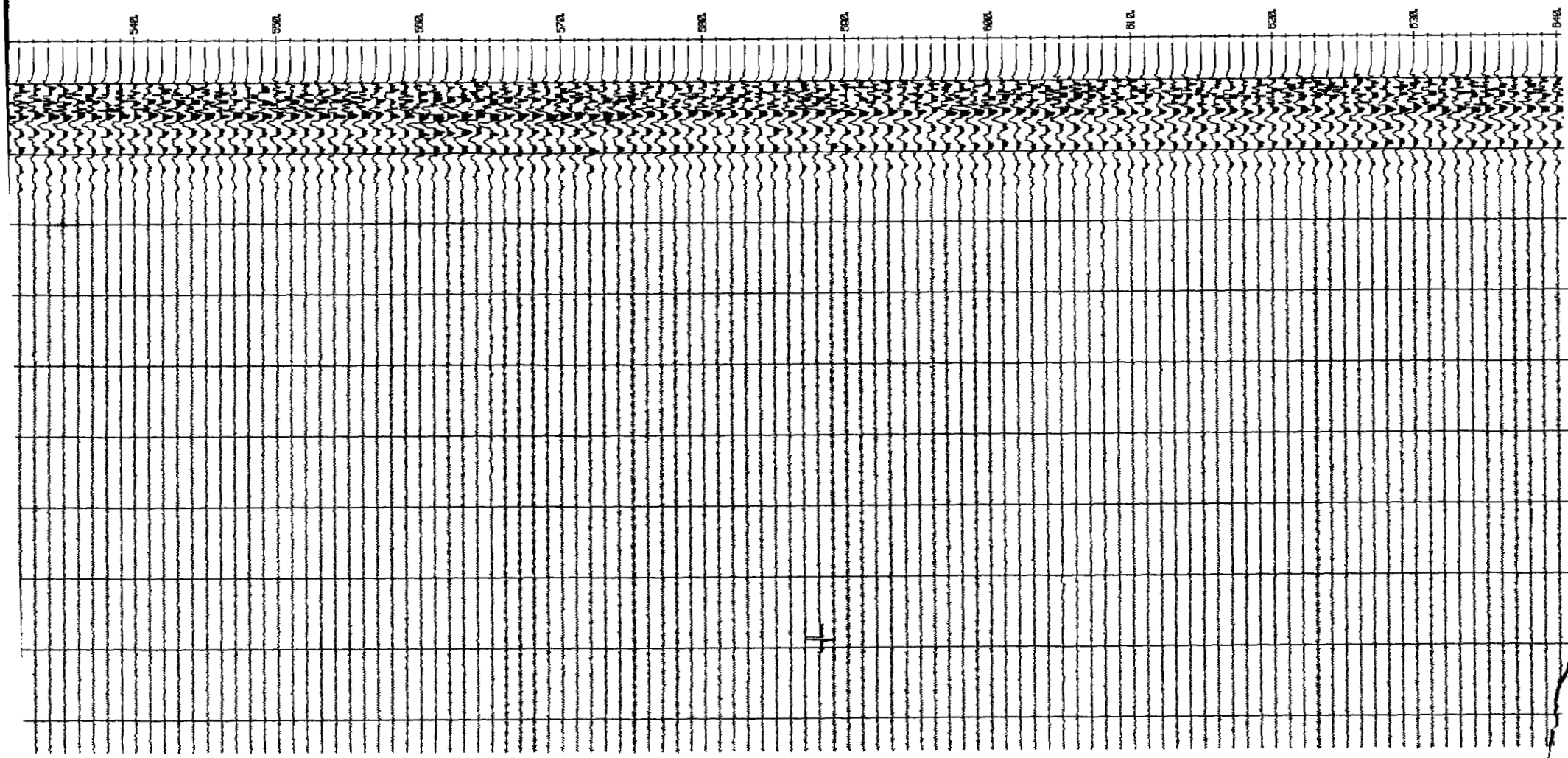

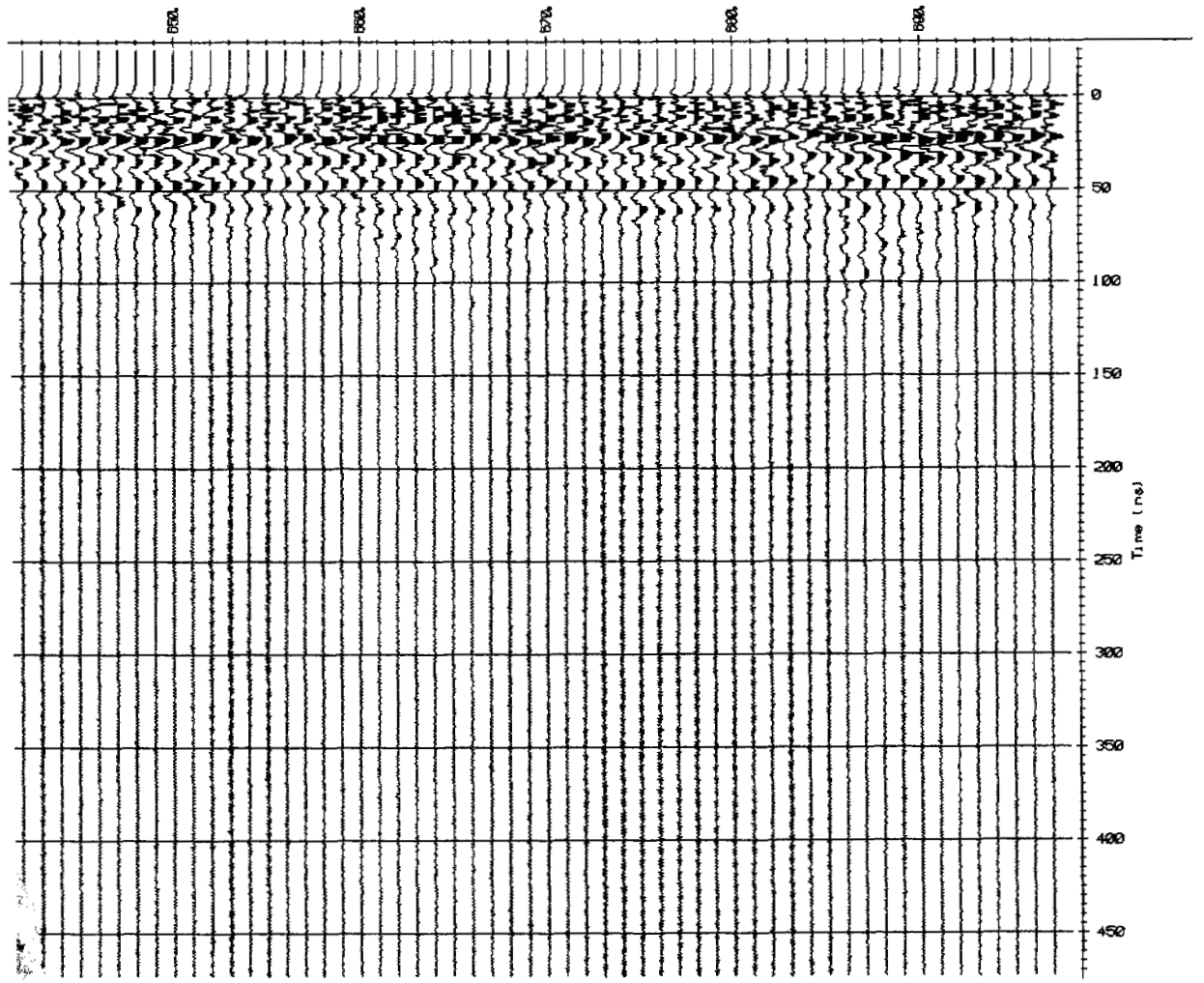
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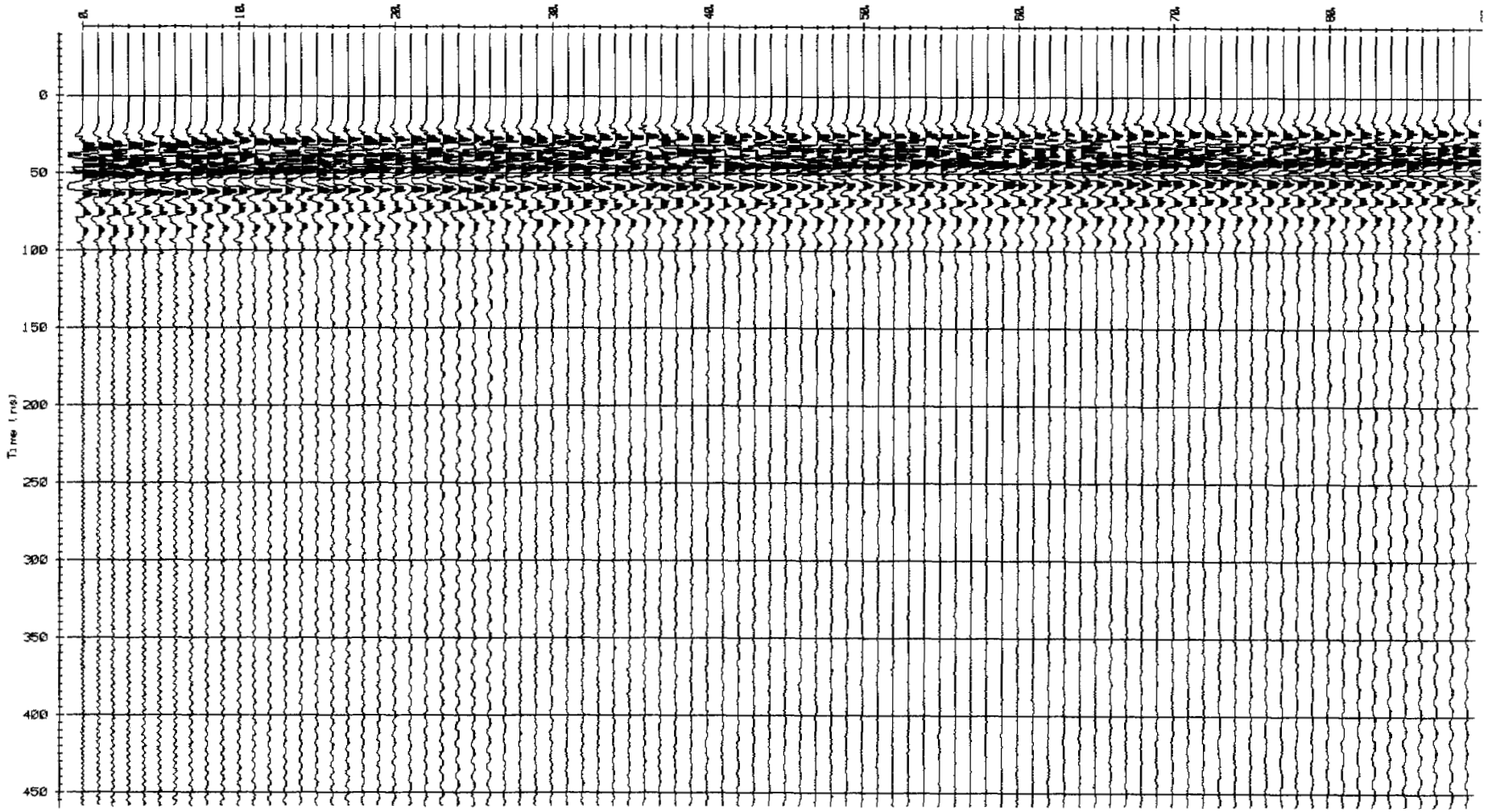
Time (ns)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Time (ns)

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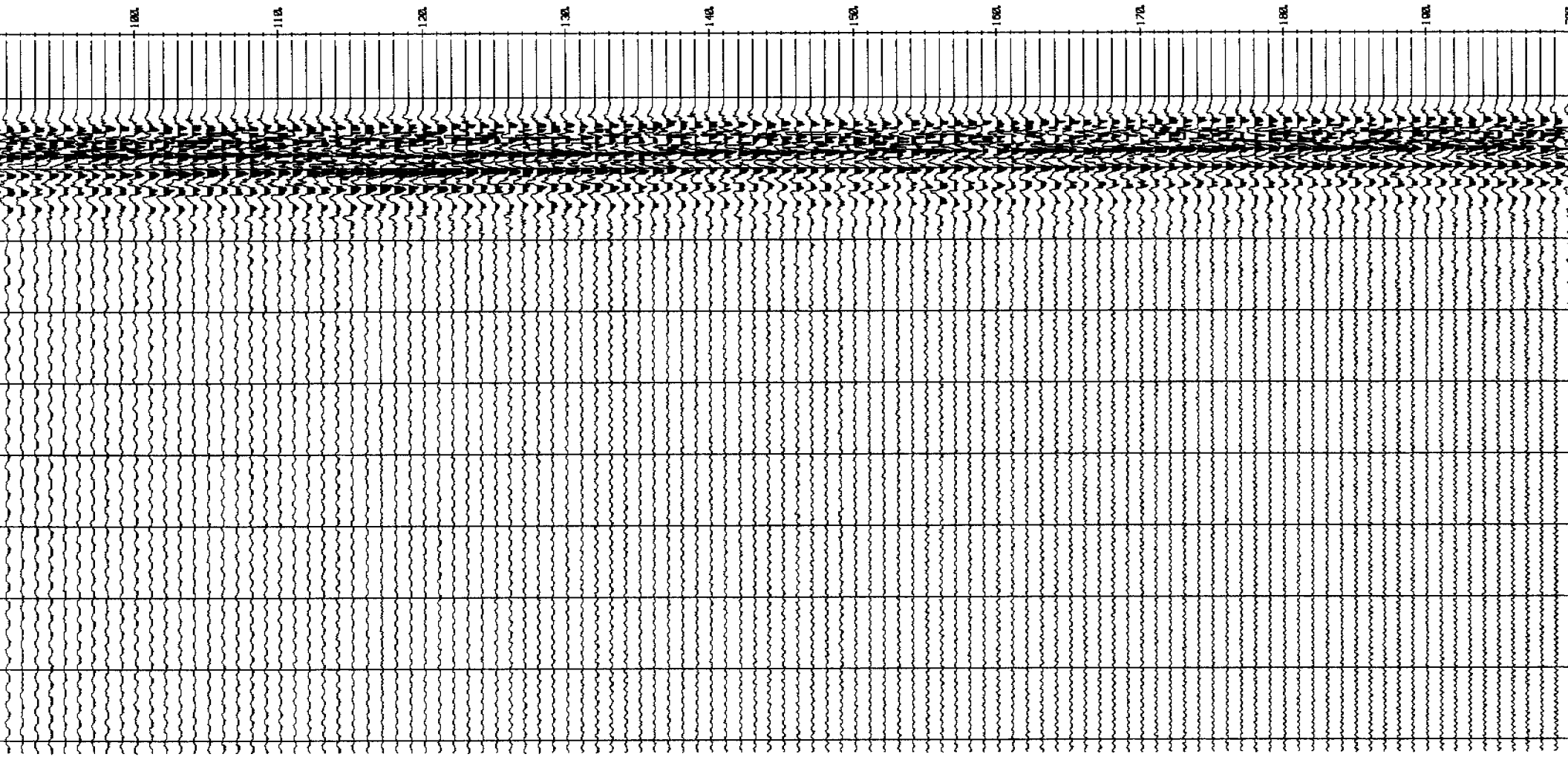

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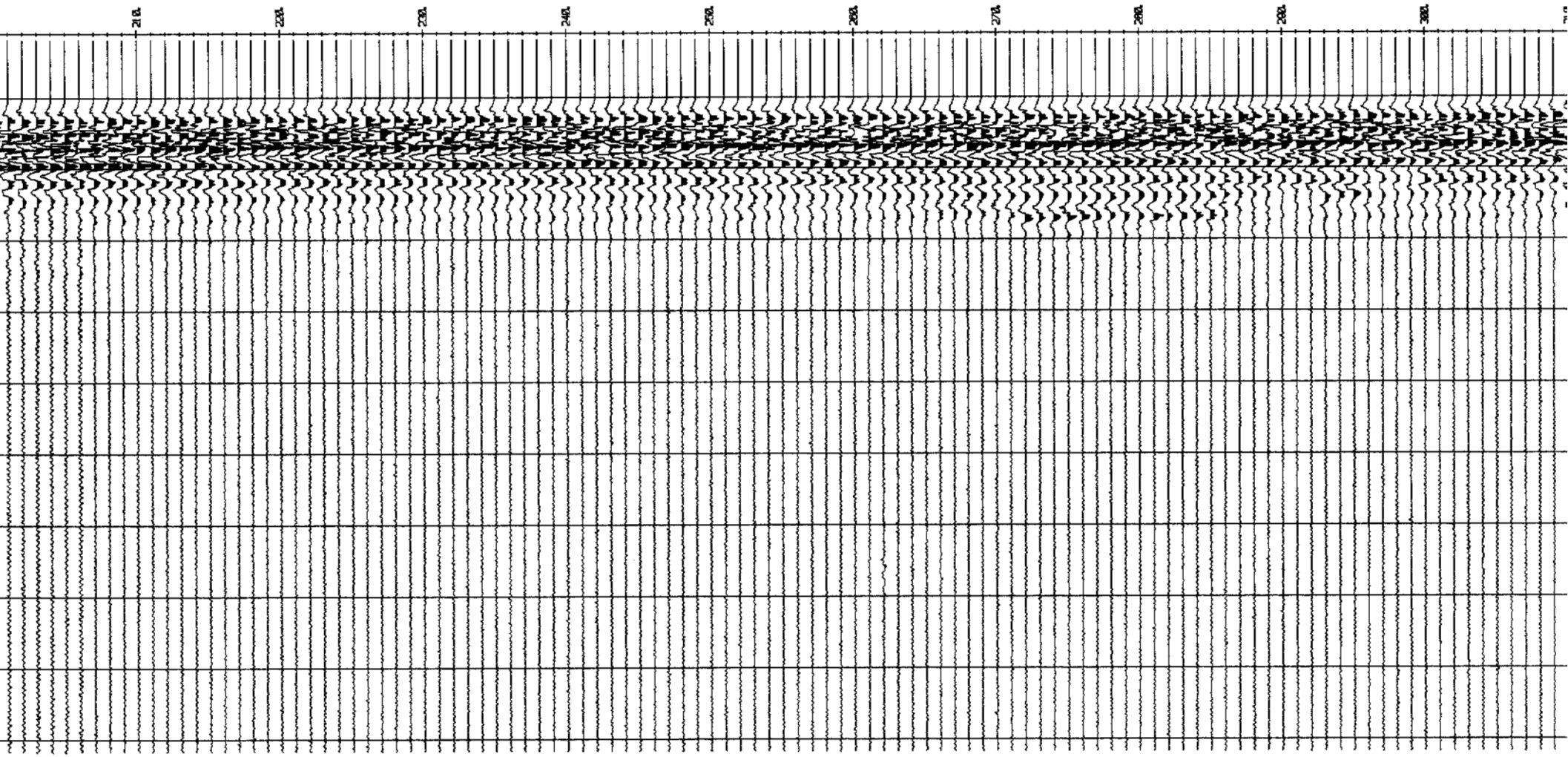

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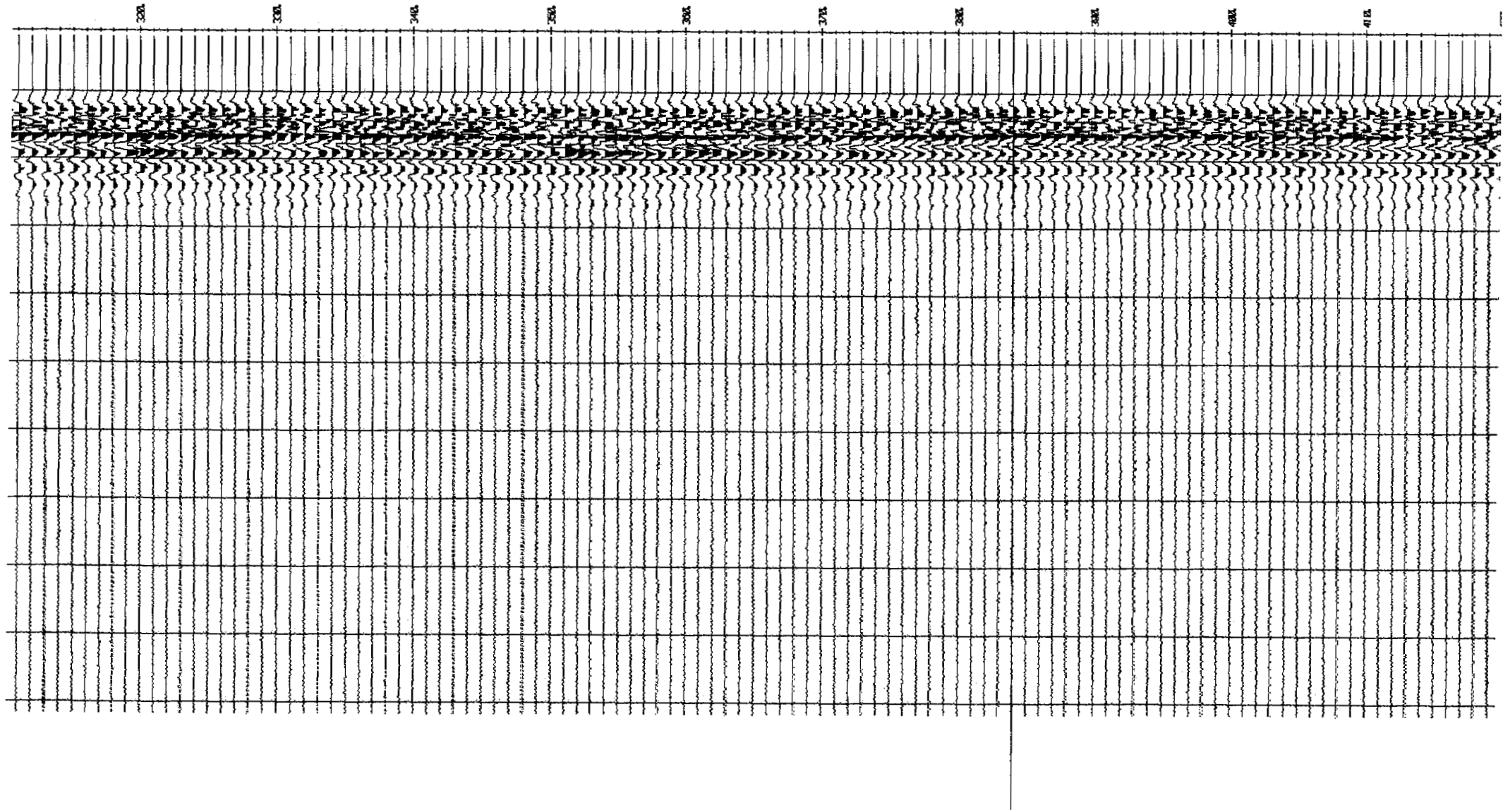

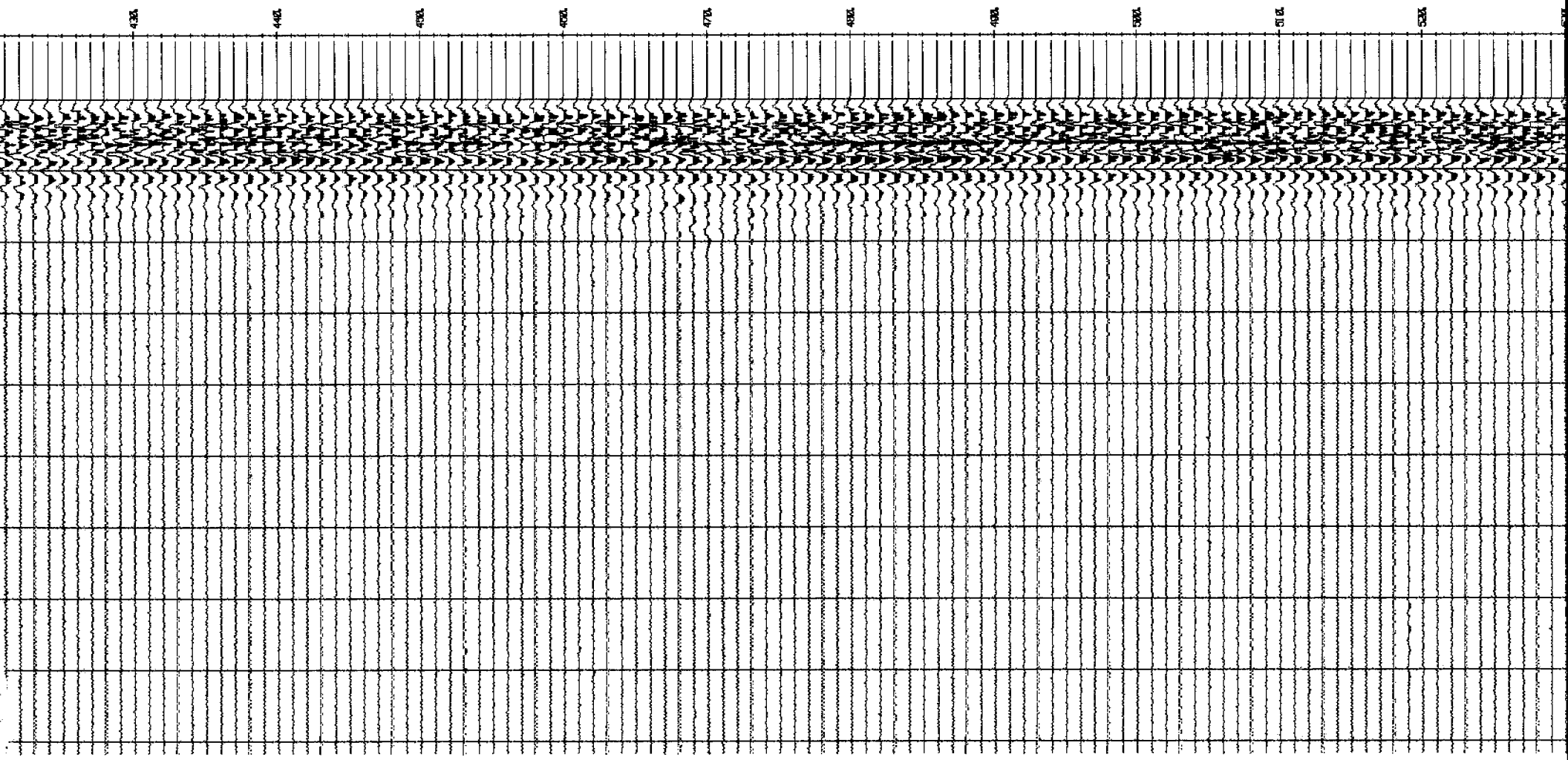

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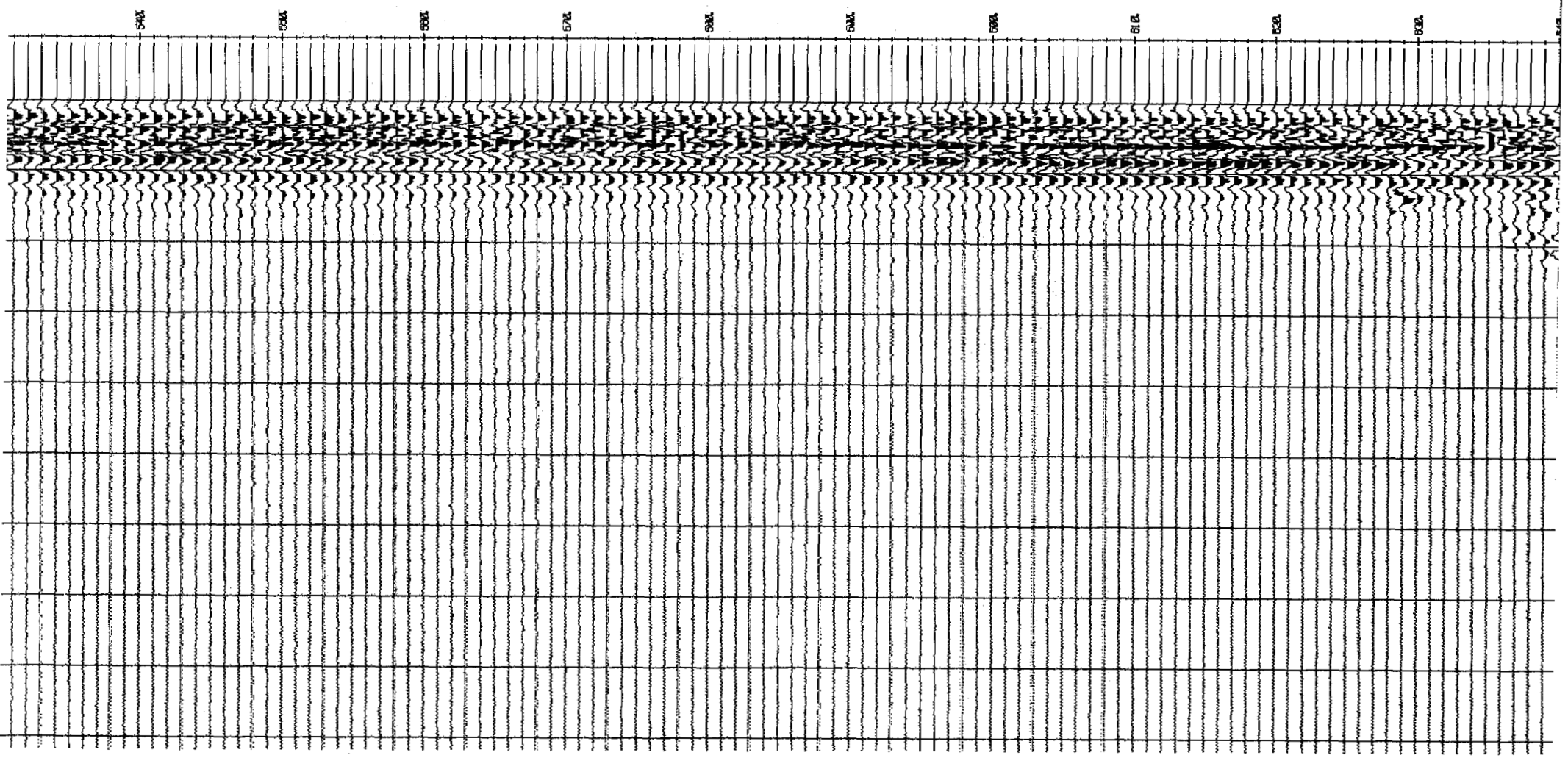

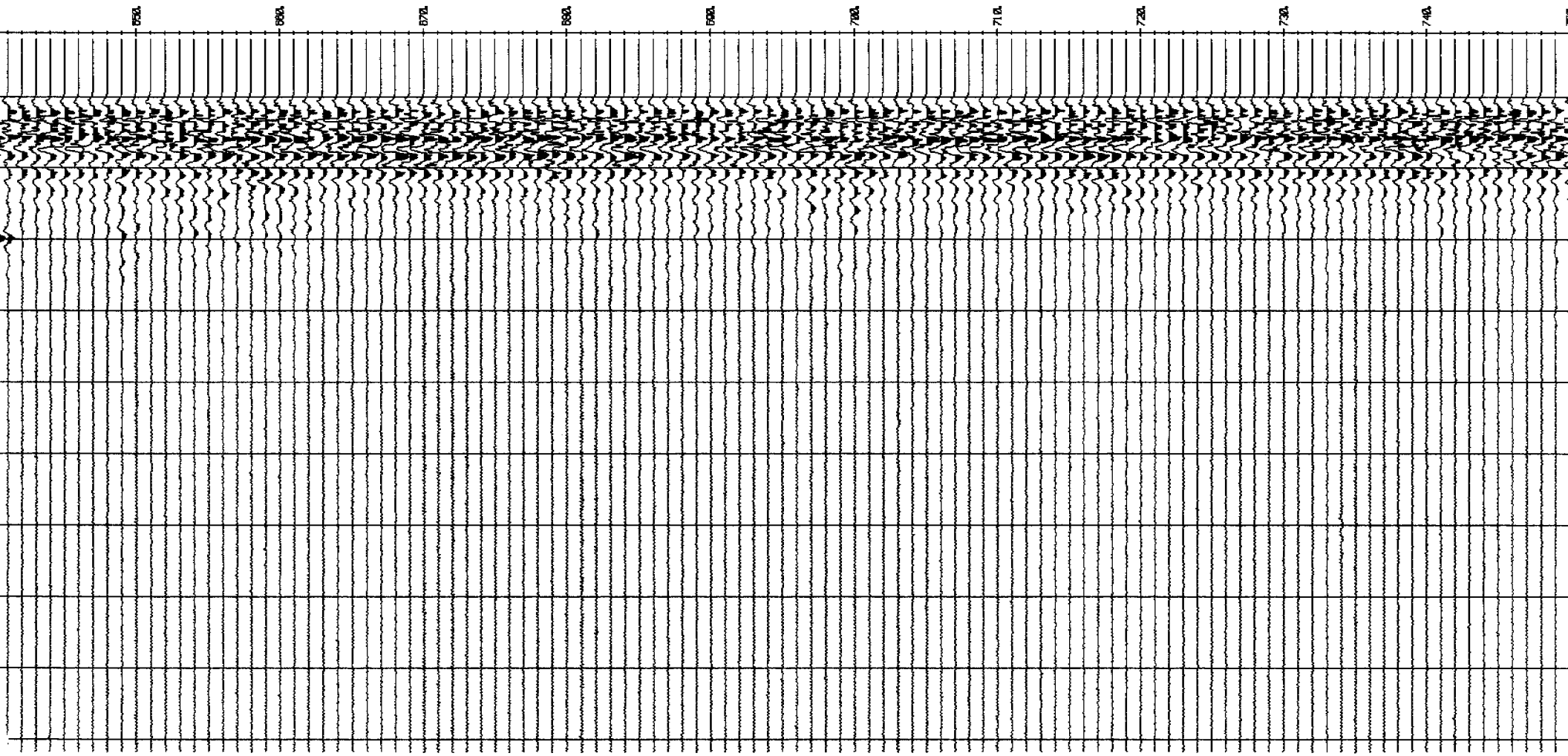
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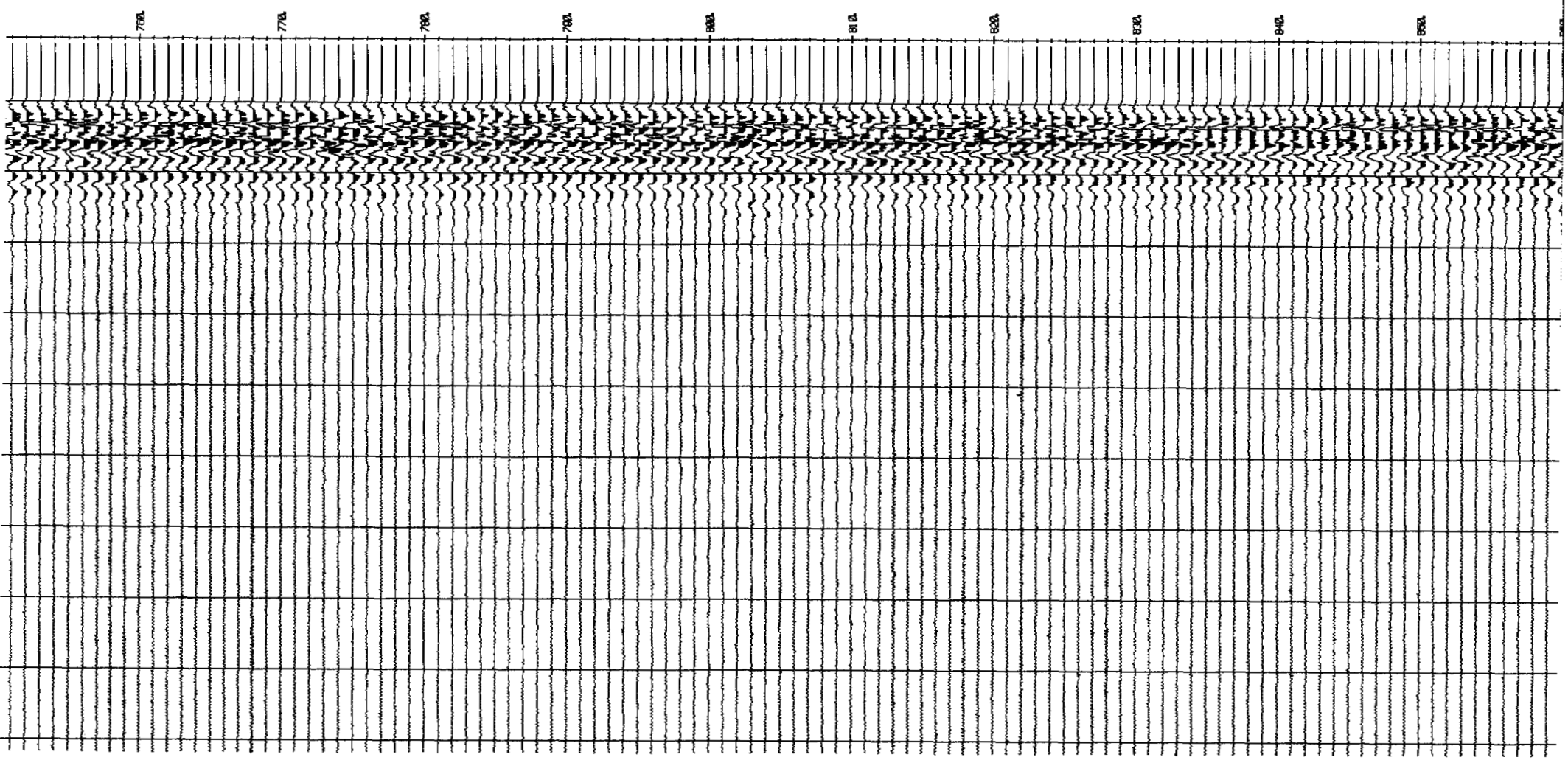
LN6C-1-2



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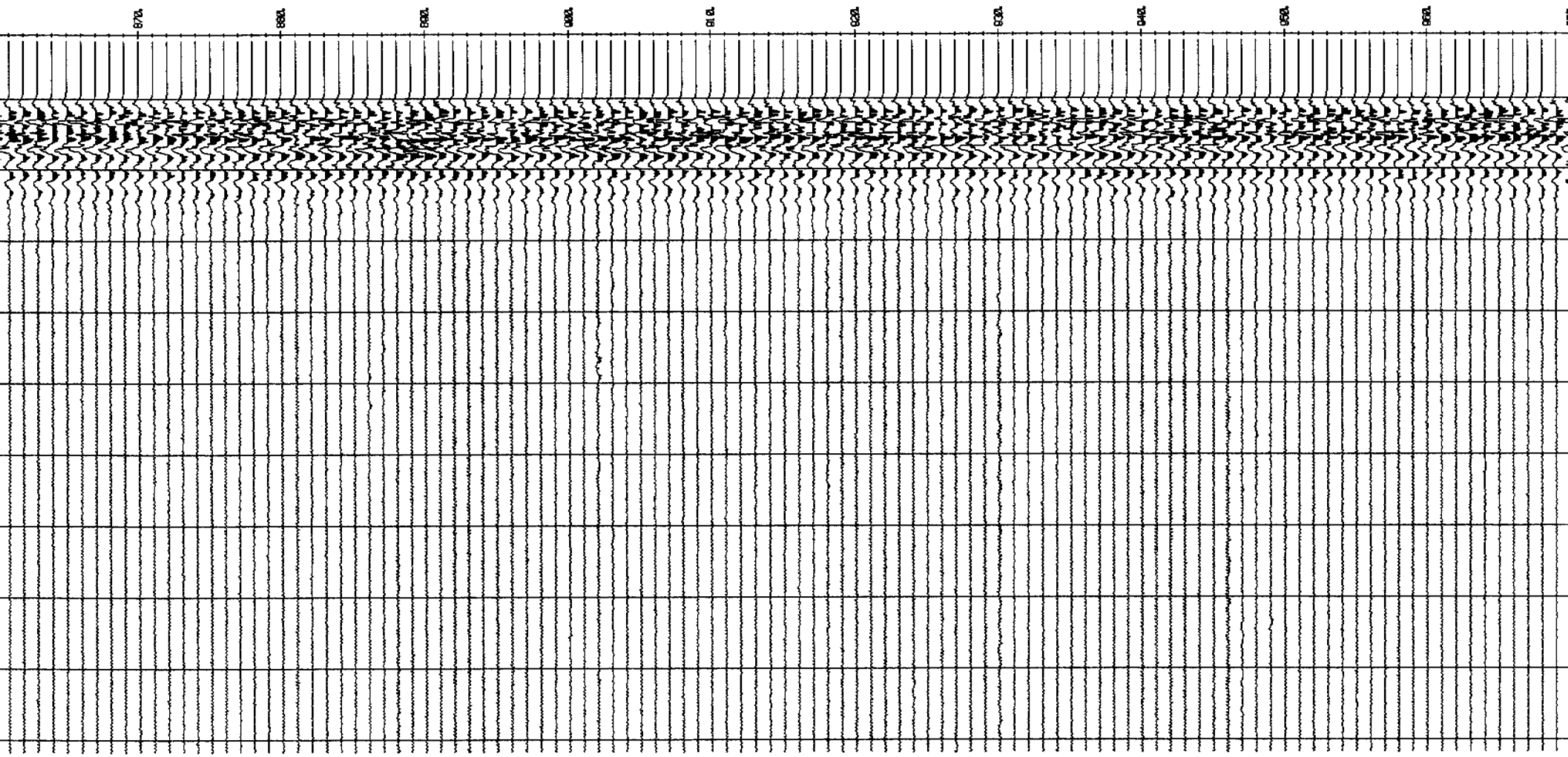

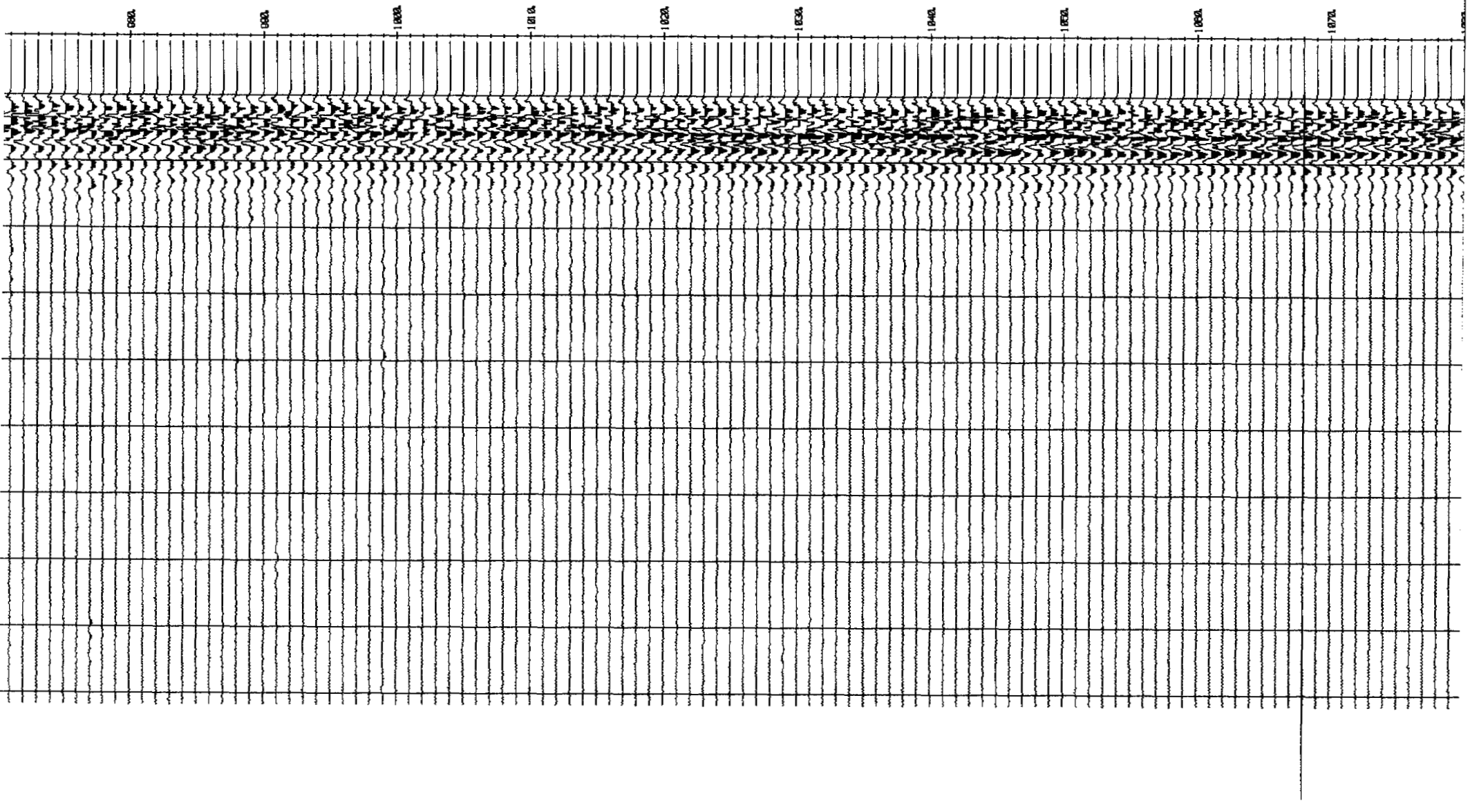

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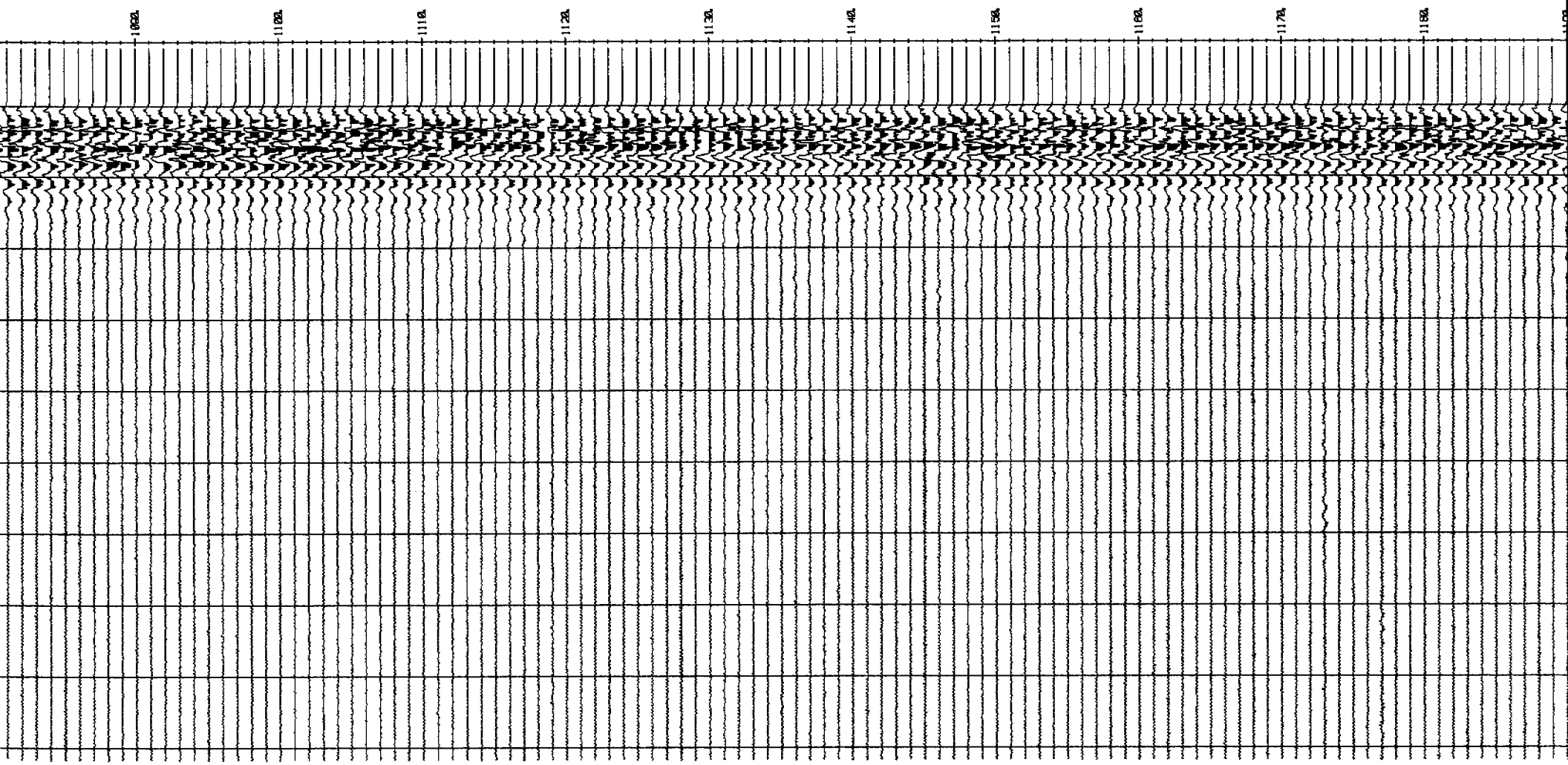

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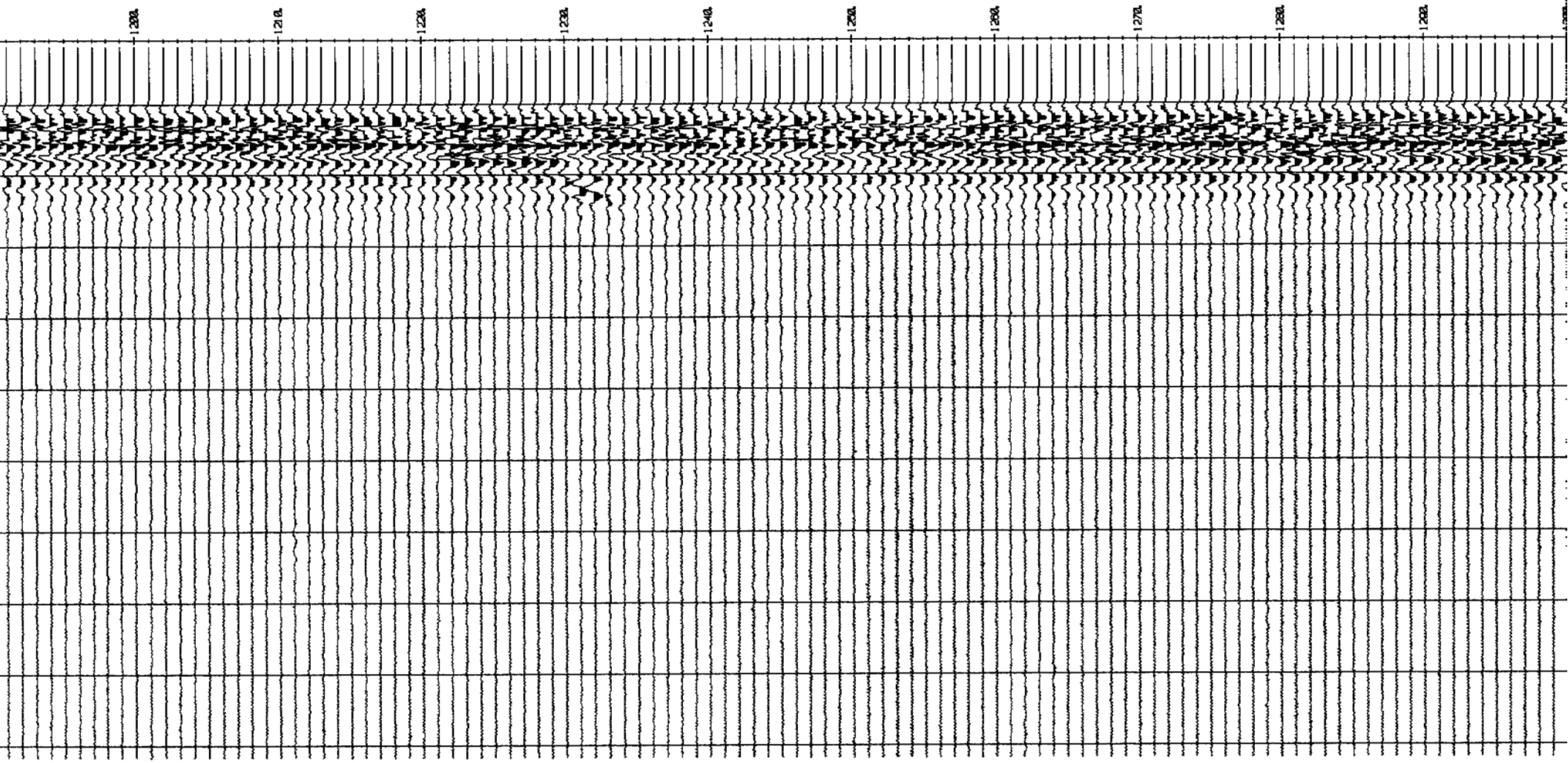

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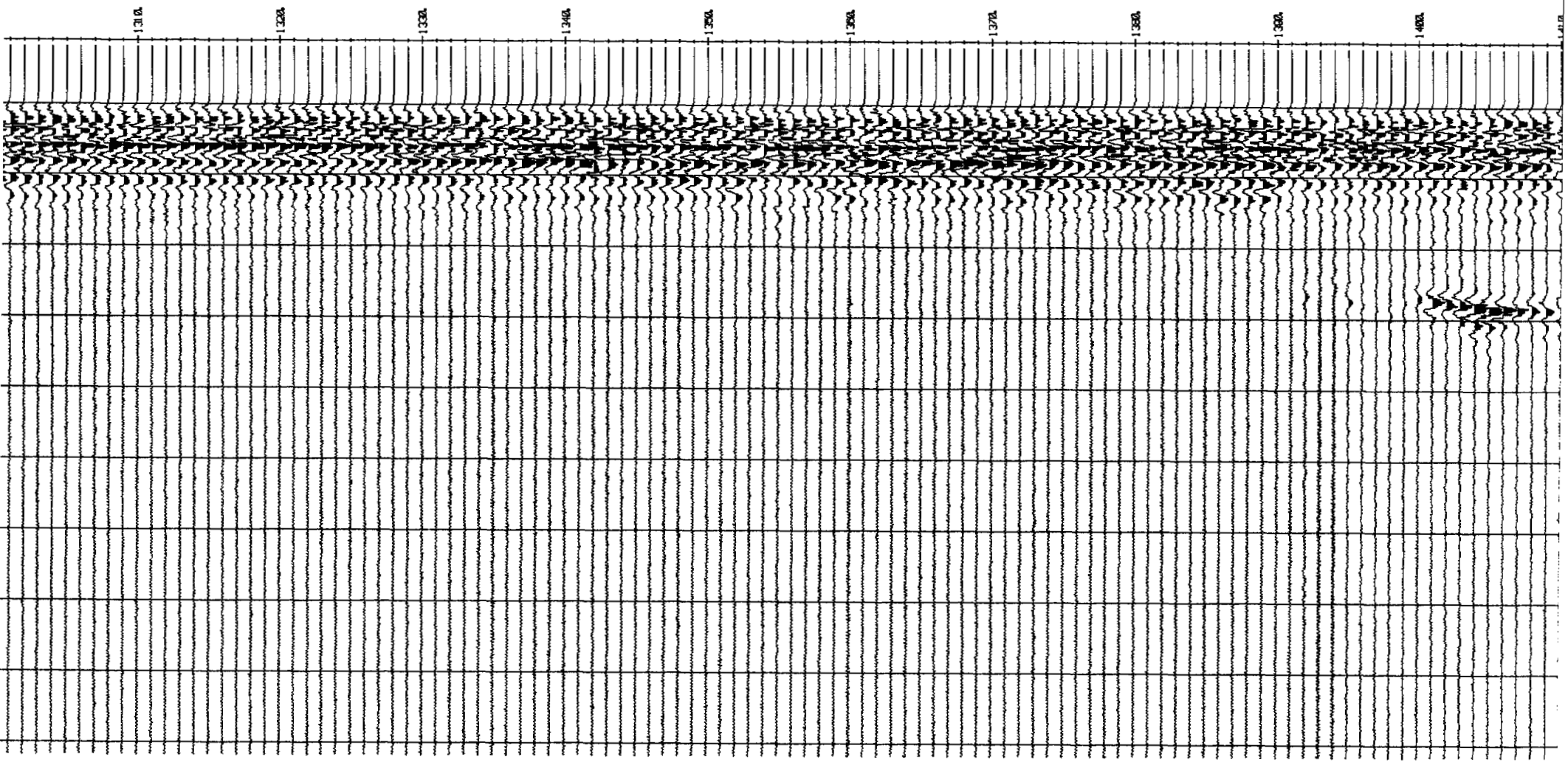

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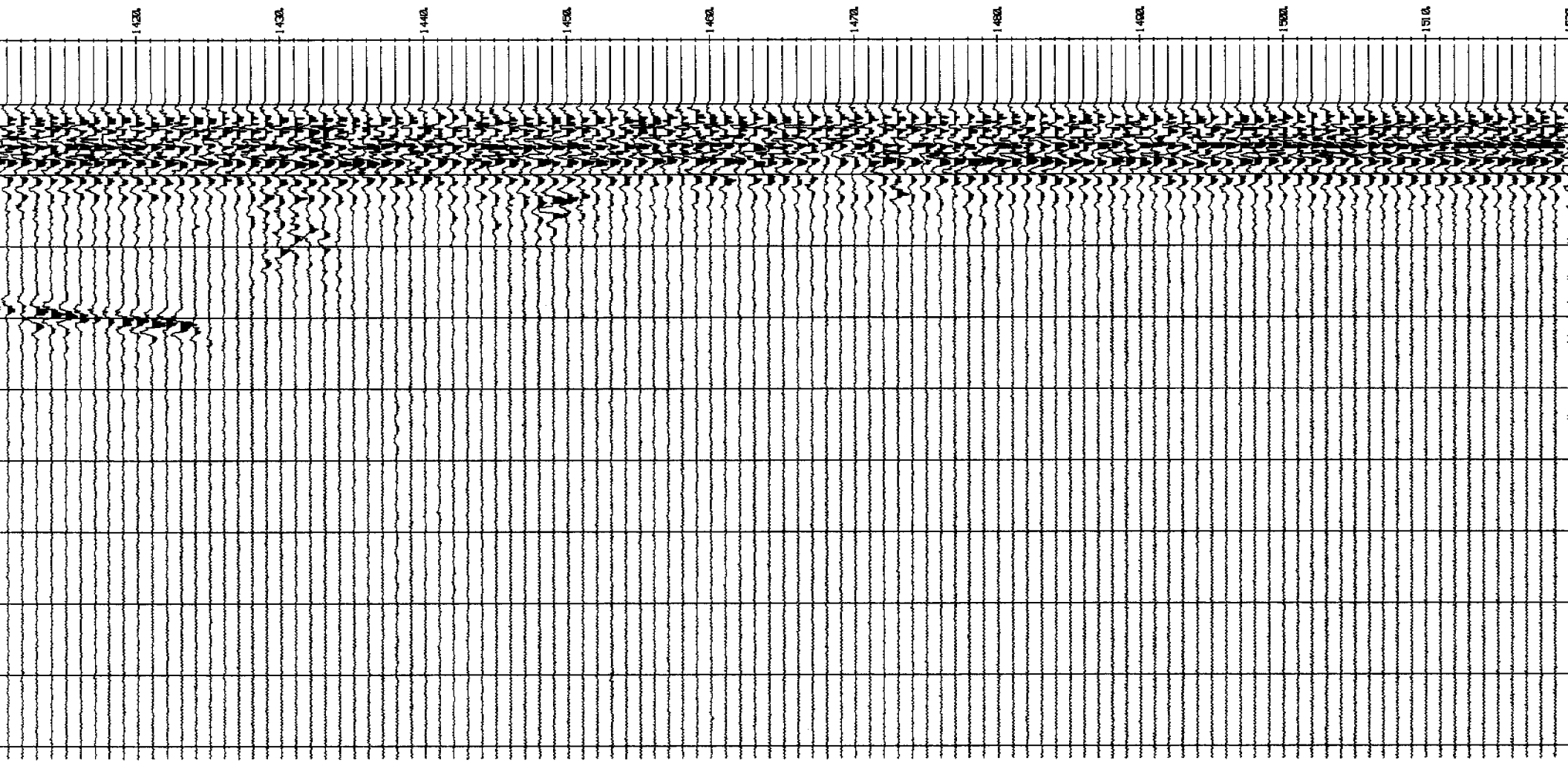

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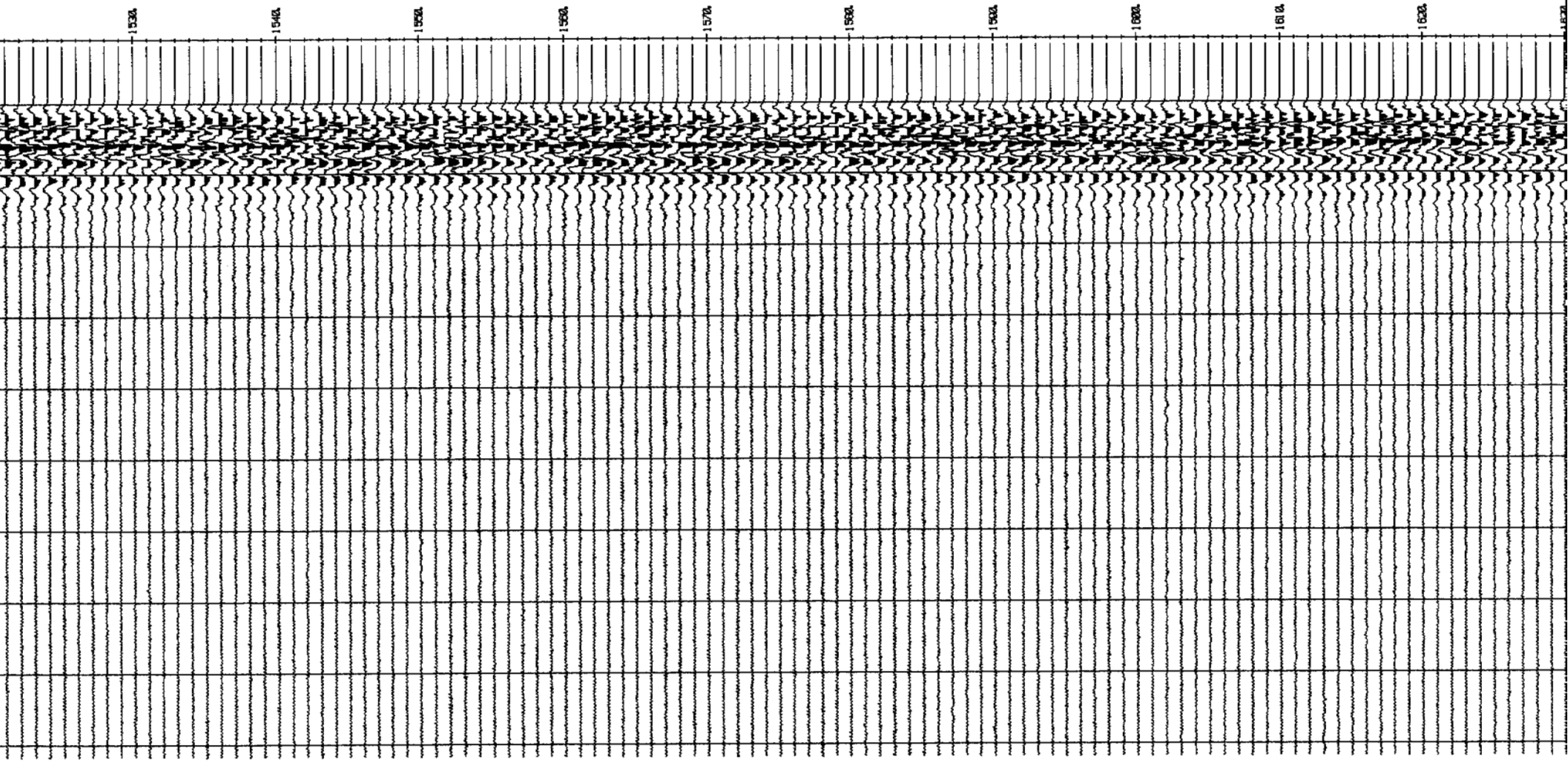

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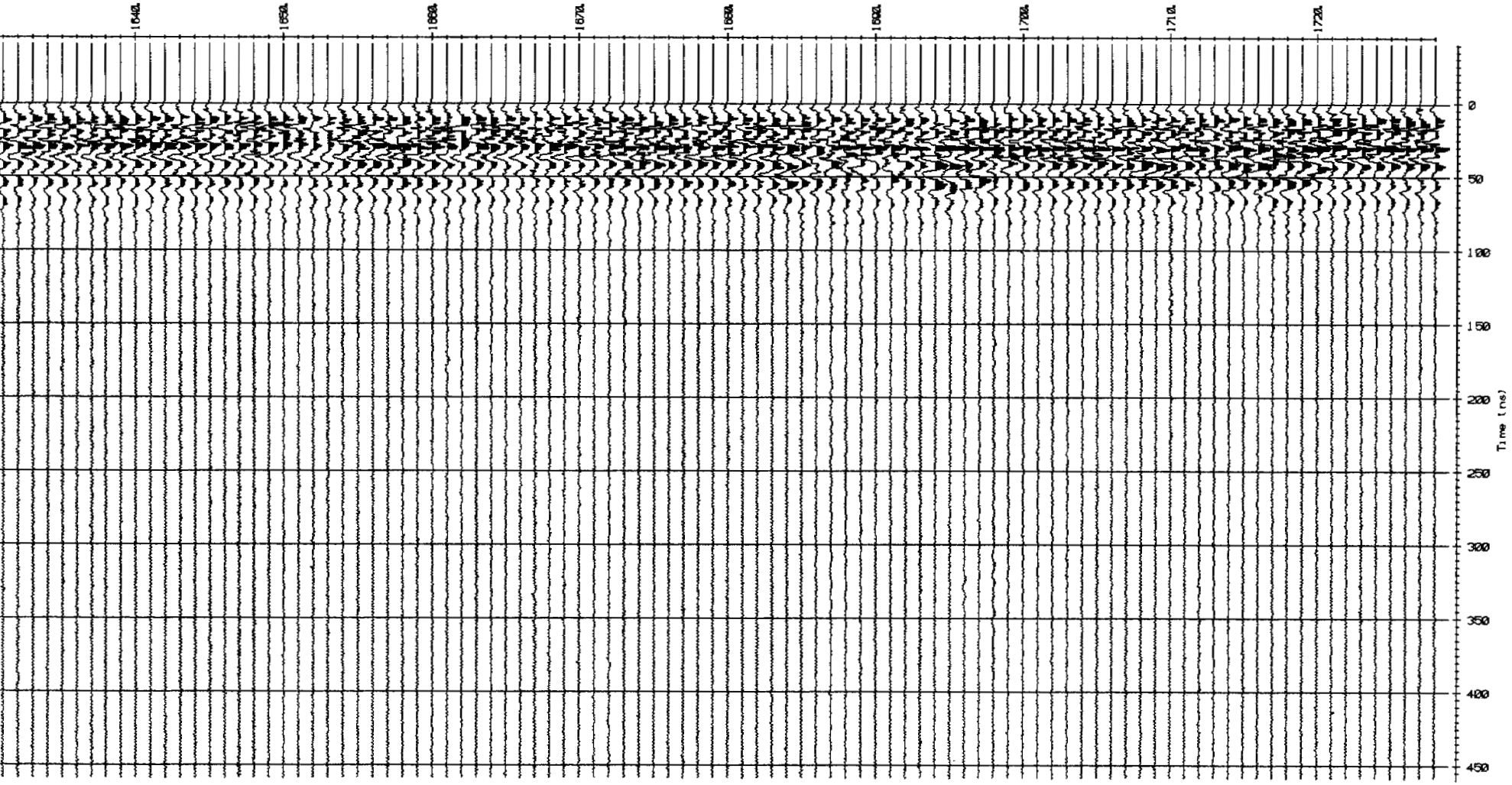
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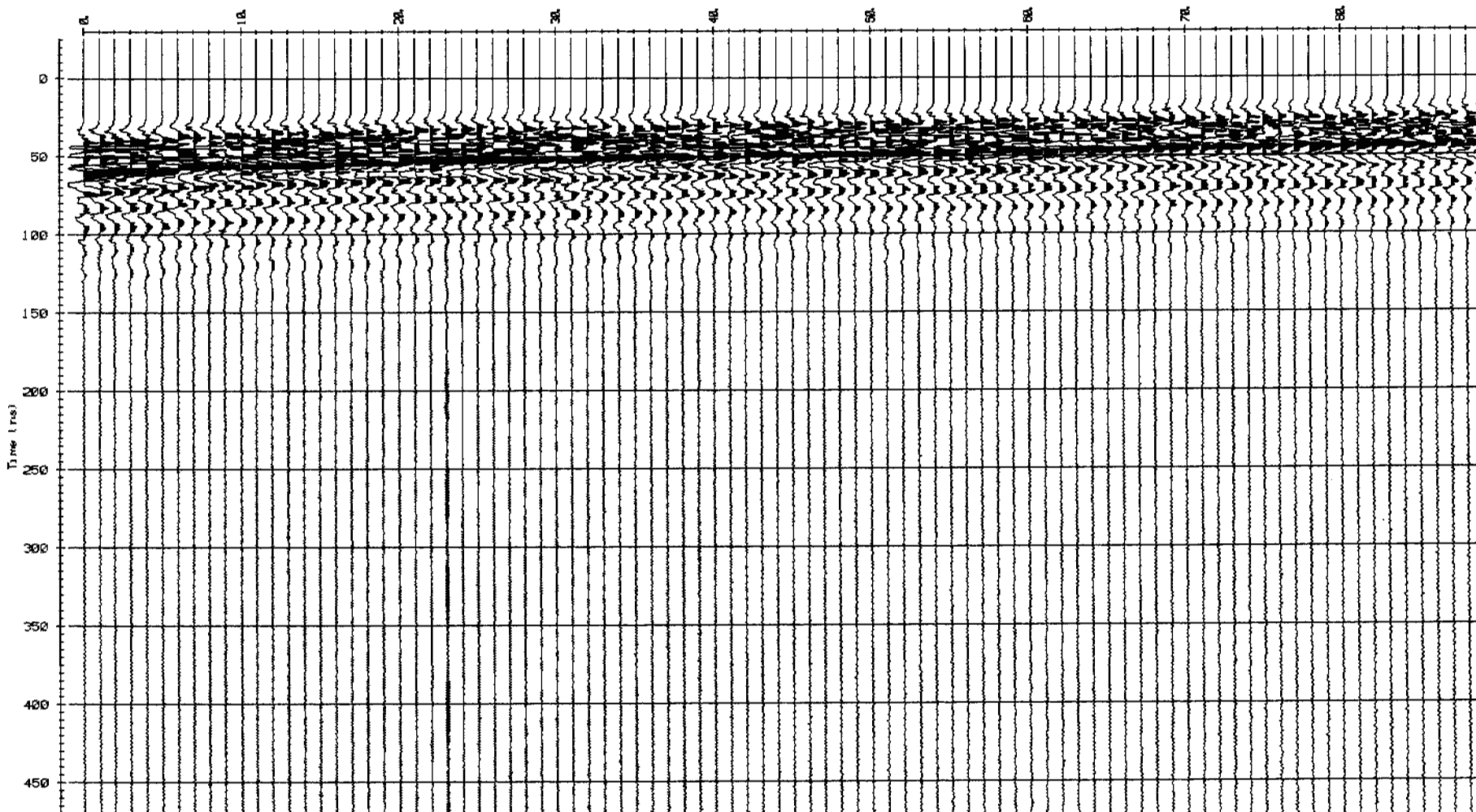
LN6C-1-3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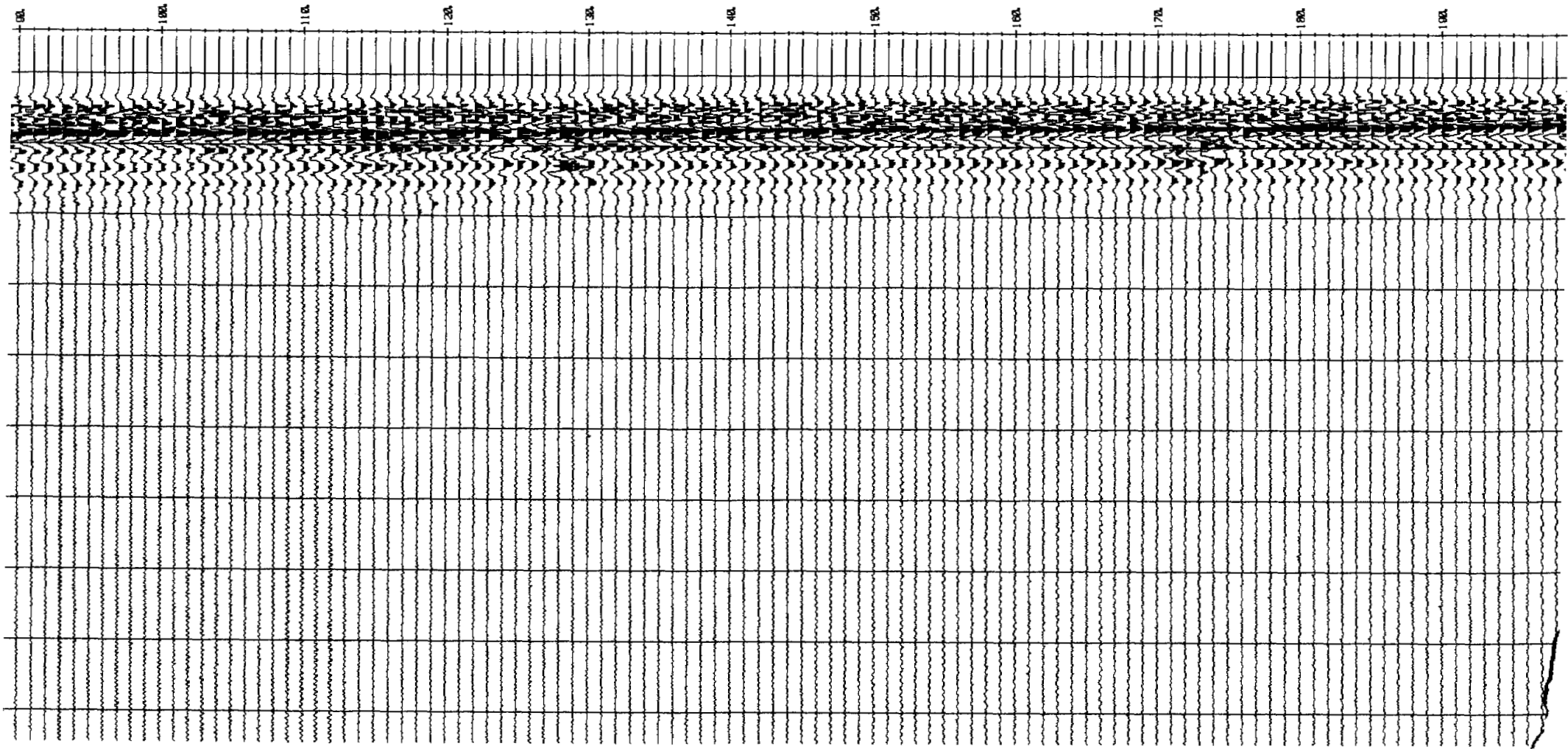

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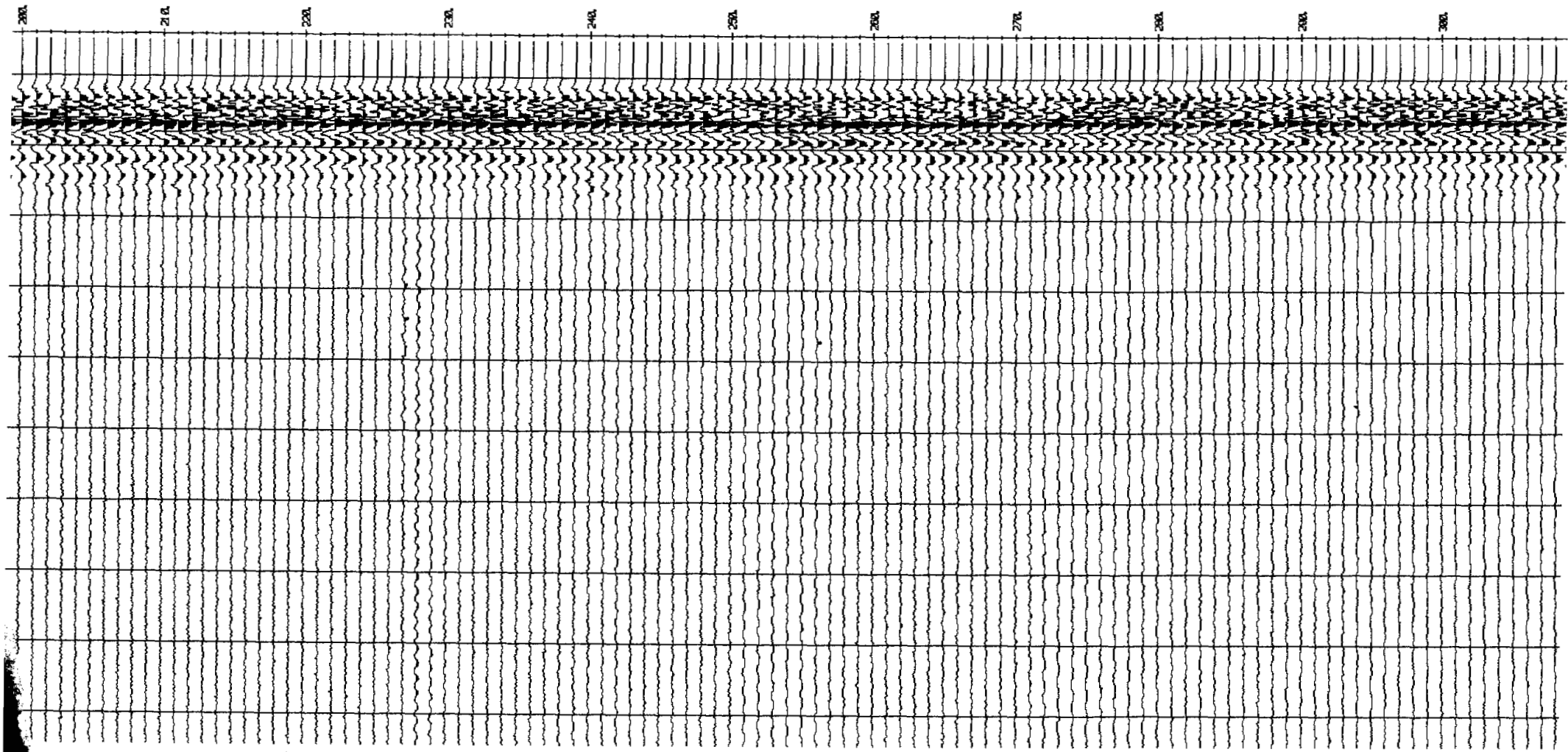

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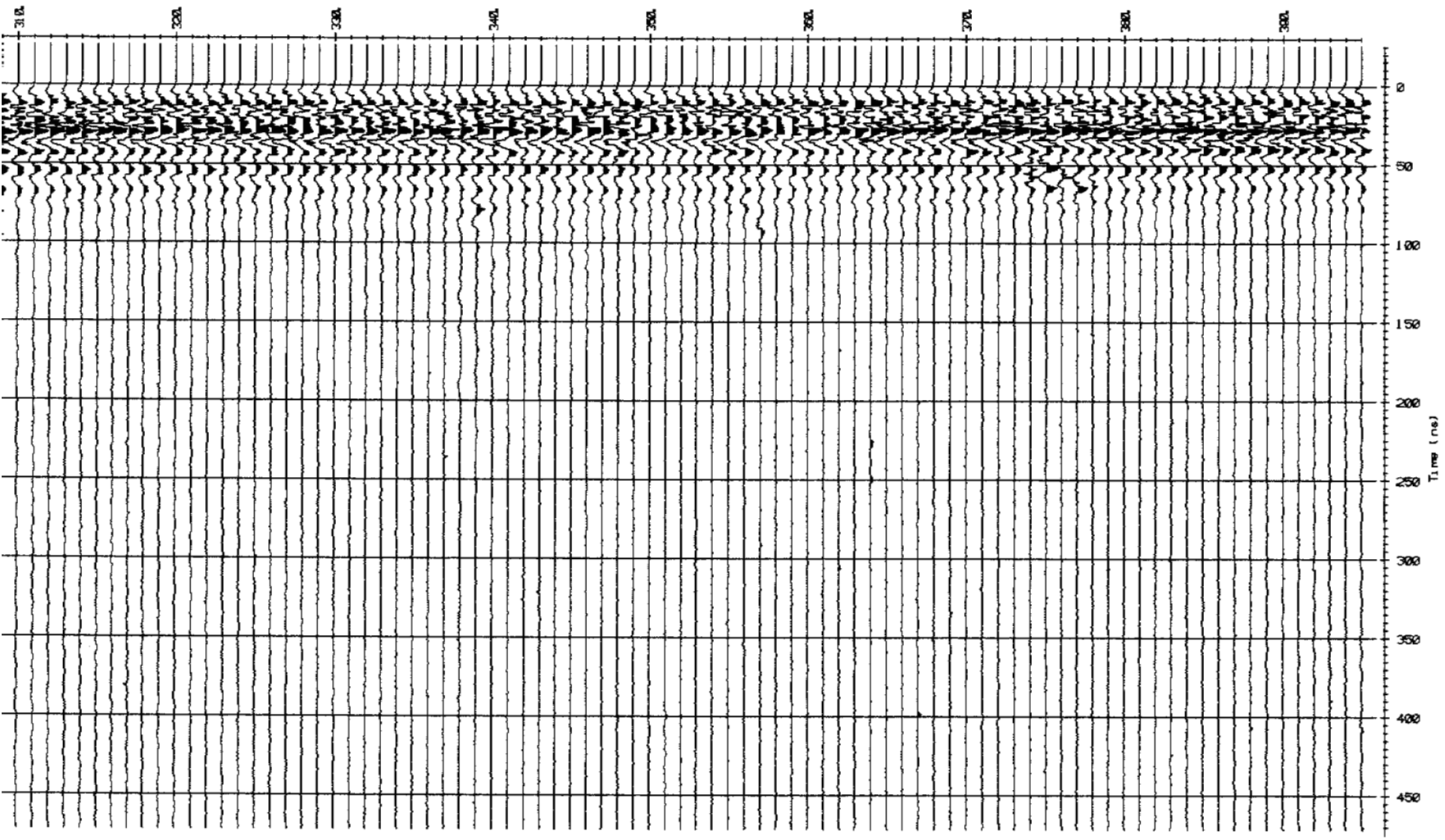
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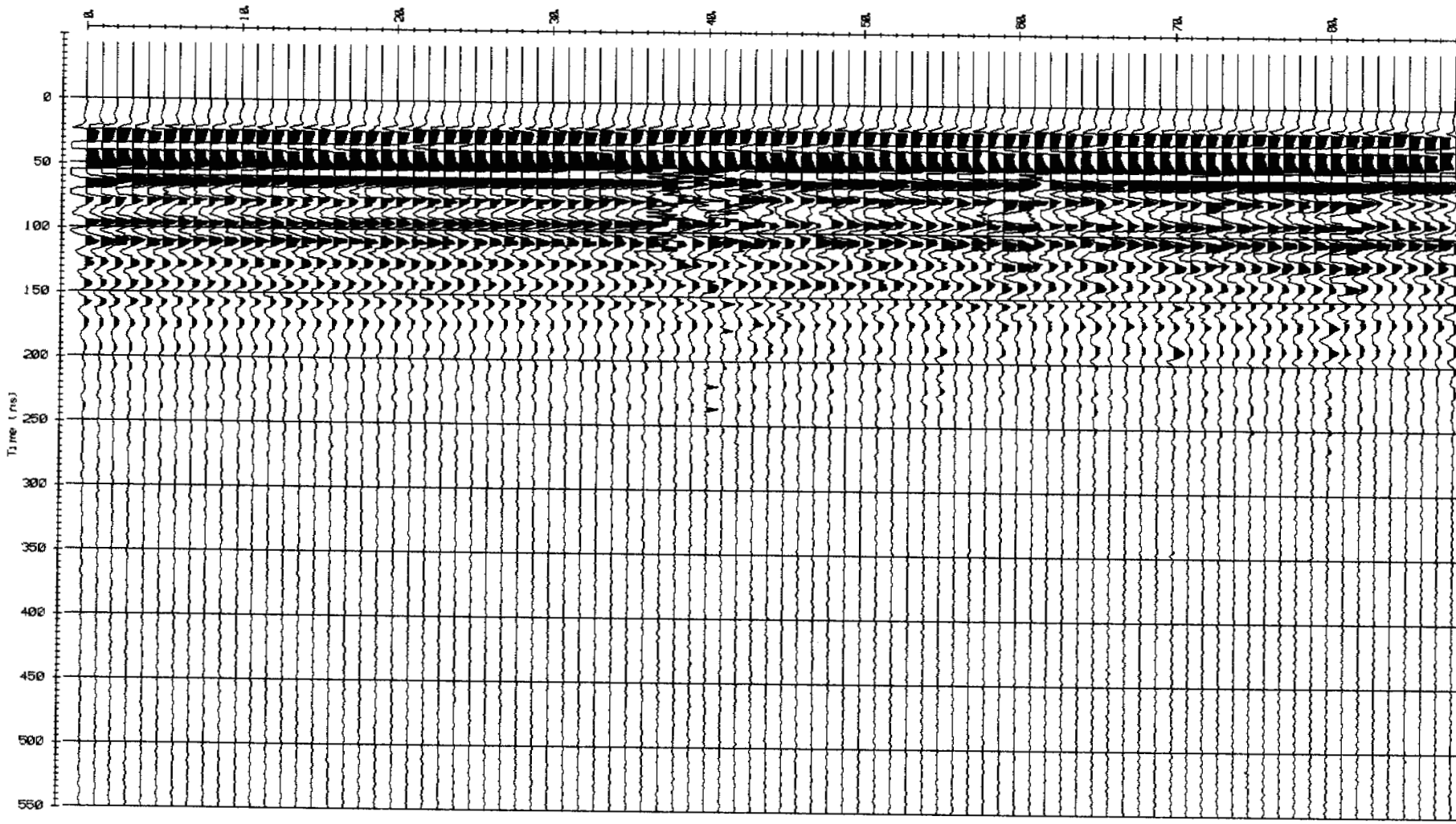
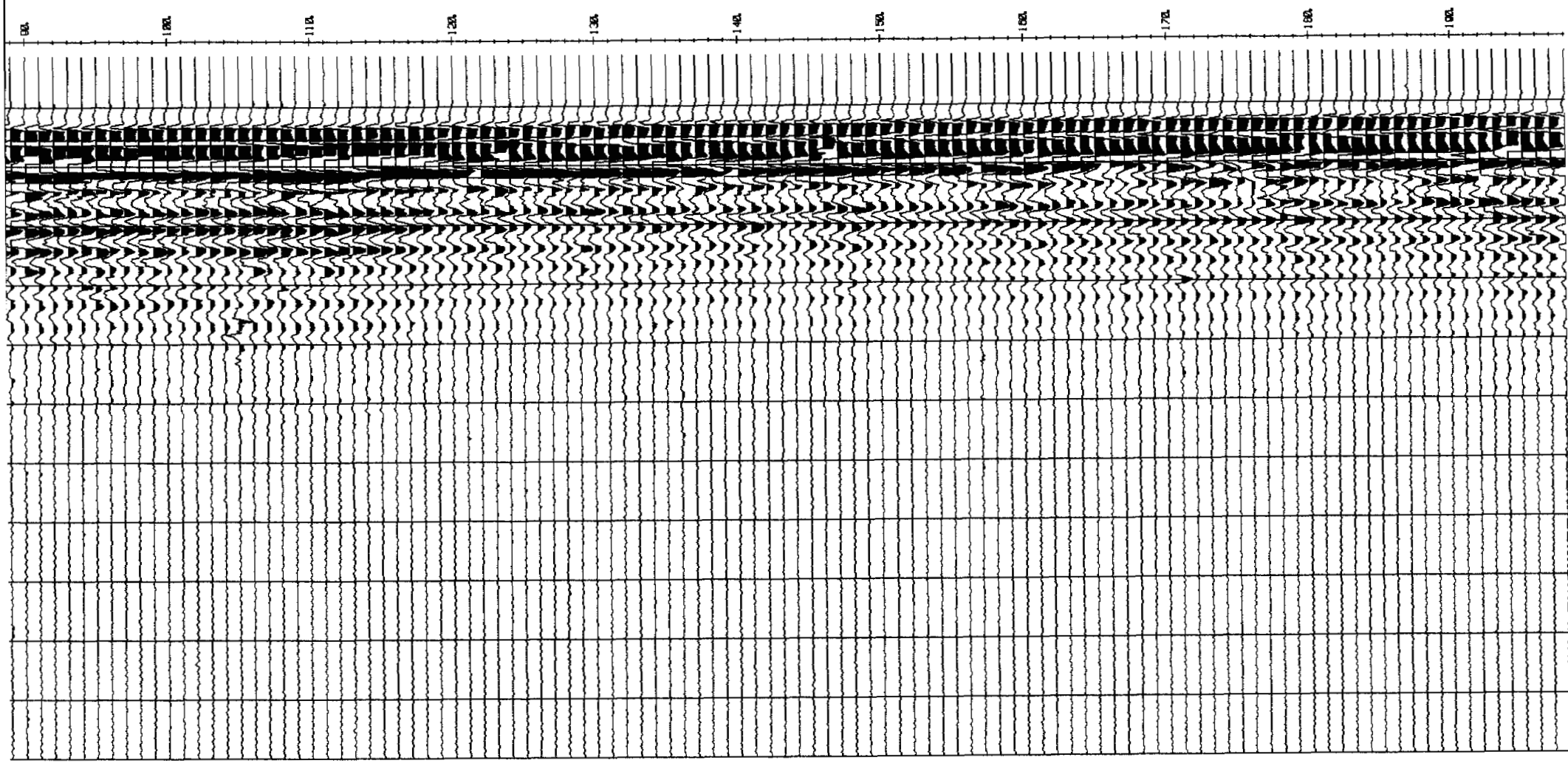
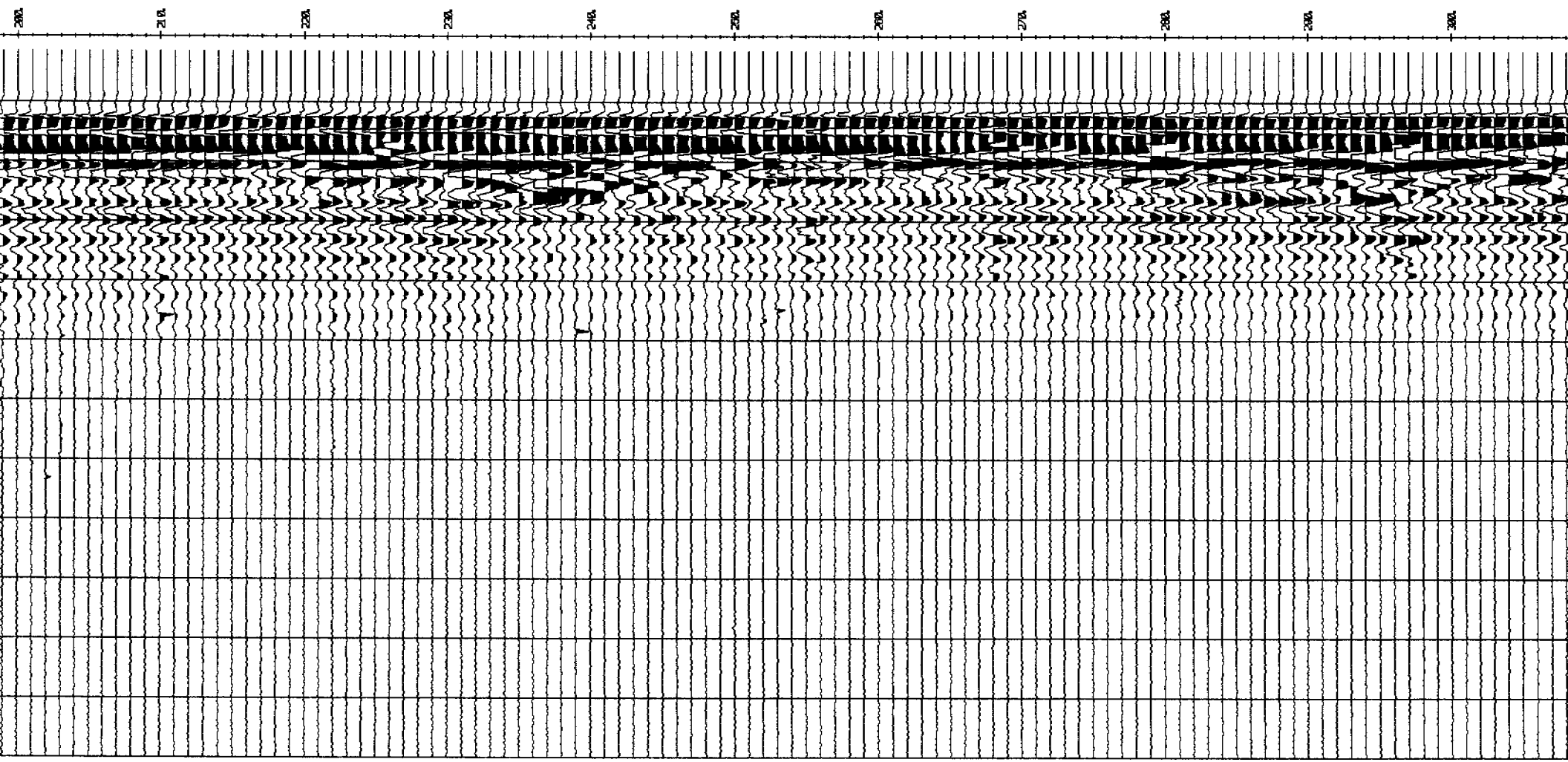
LN6C-1-4







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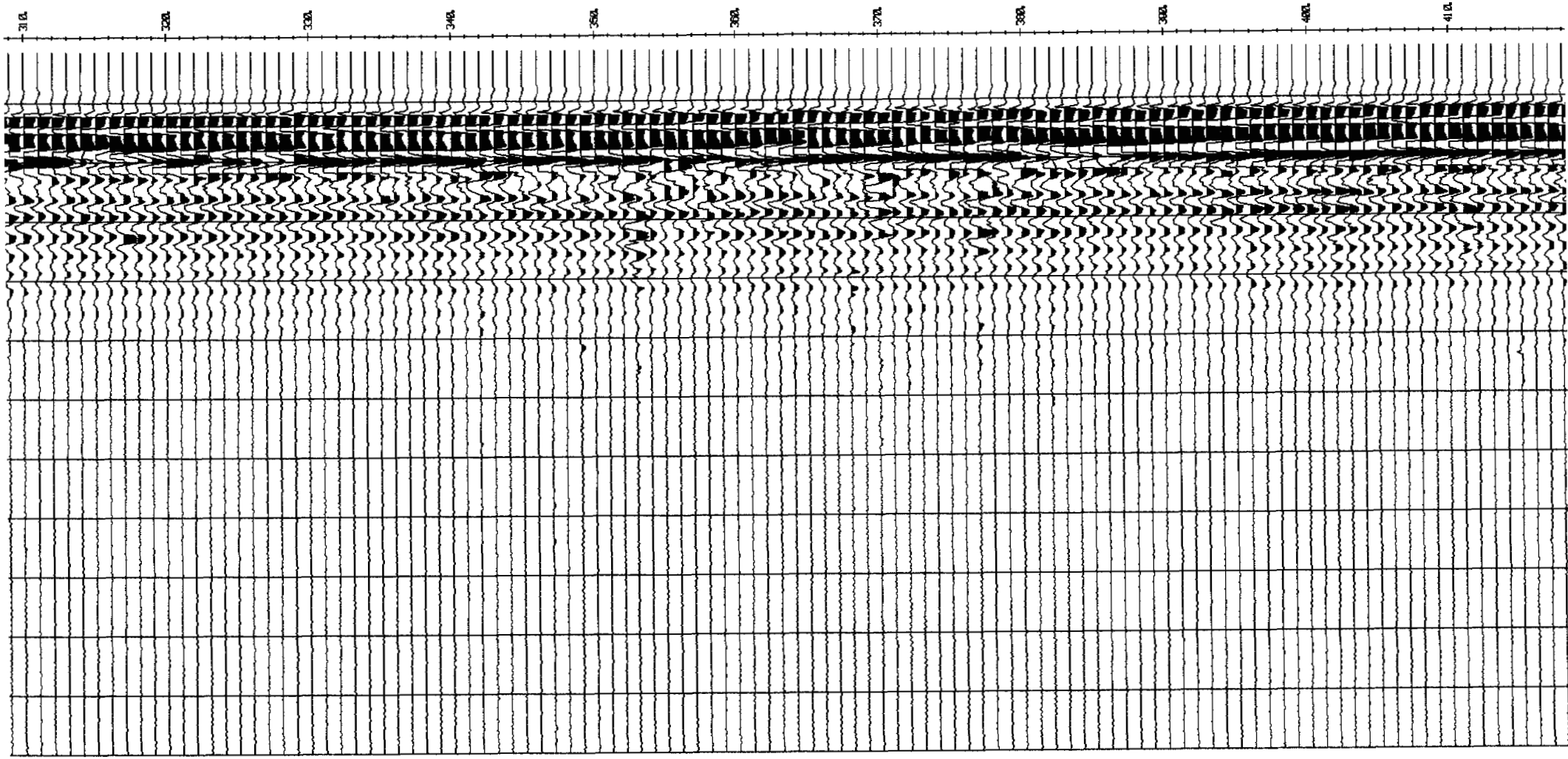

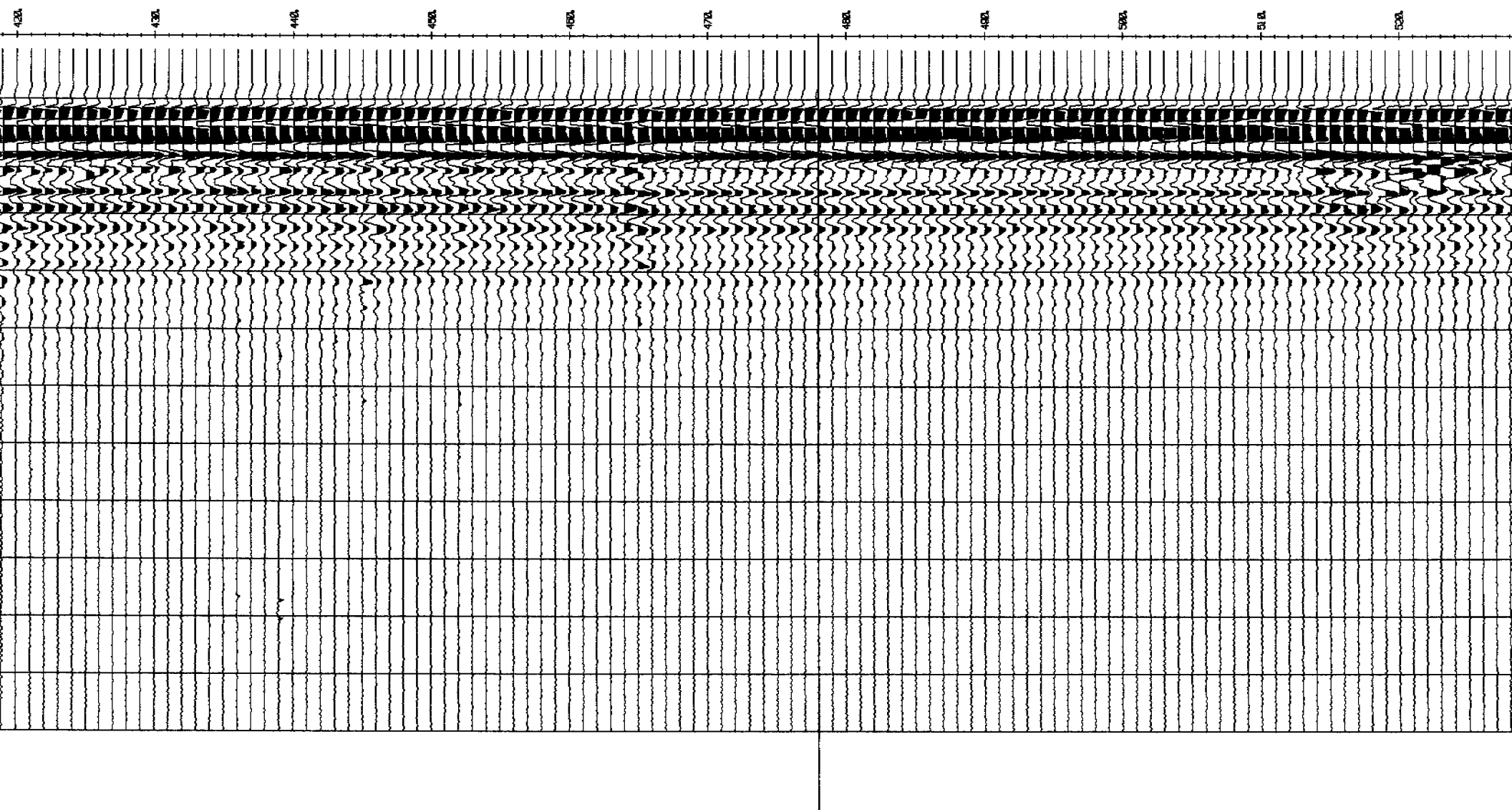

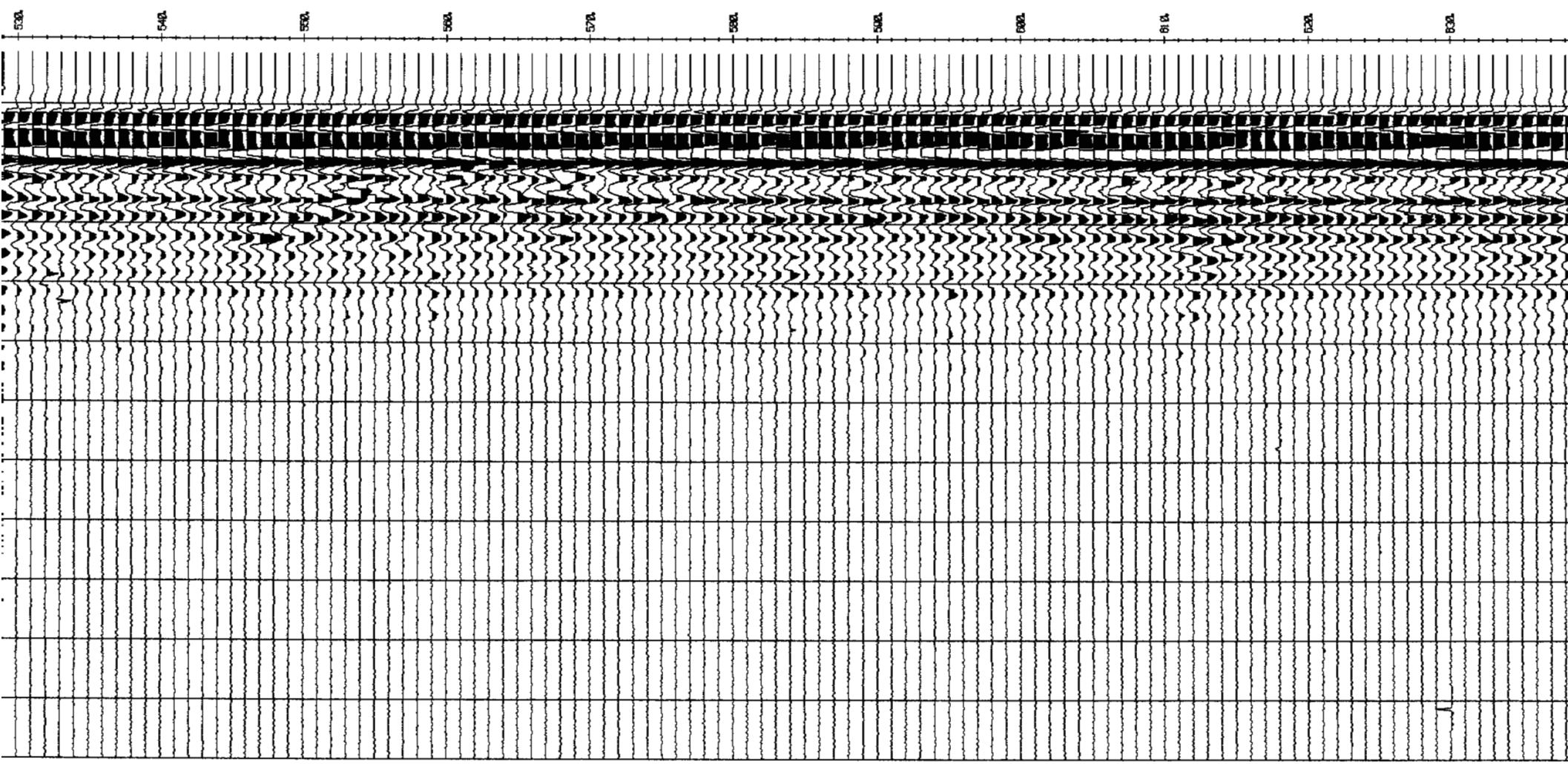

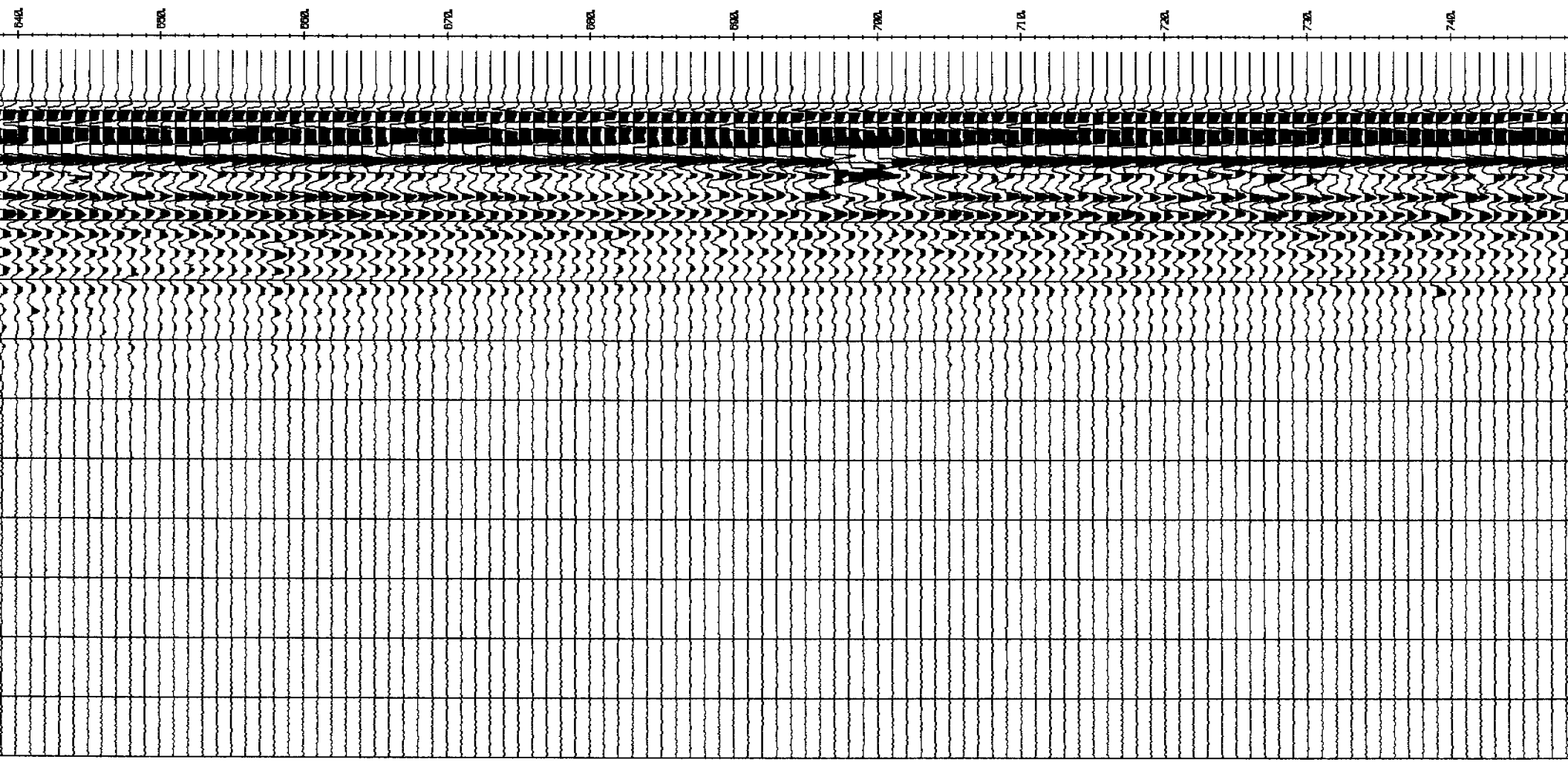
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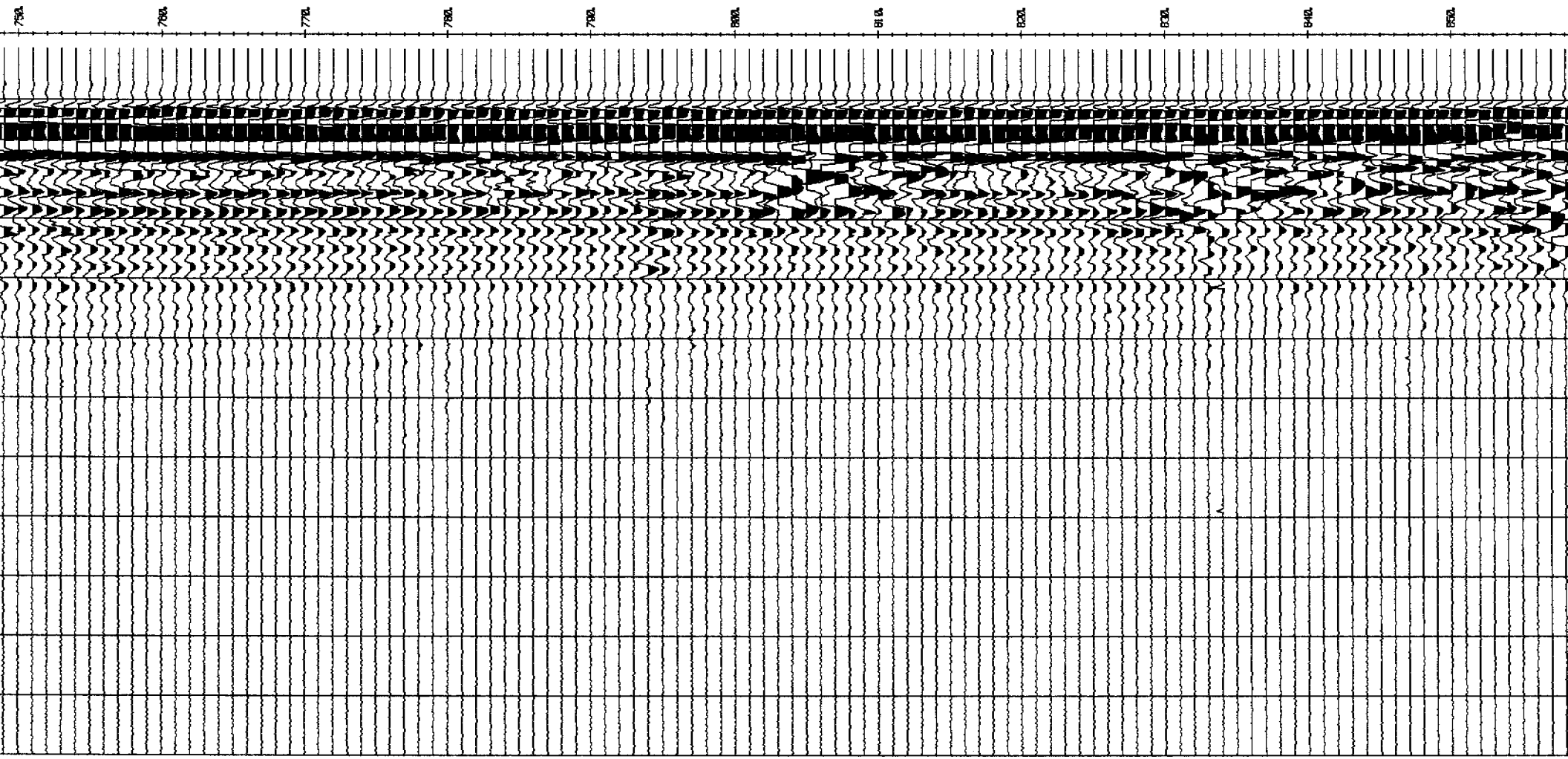

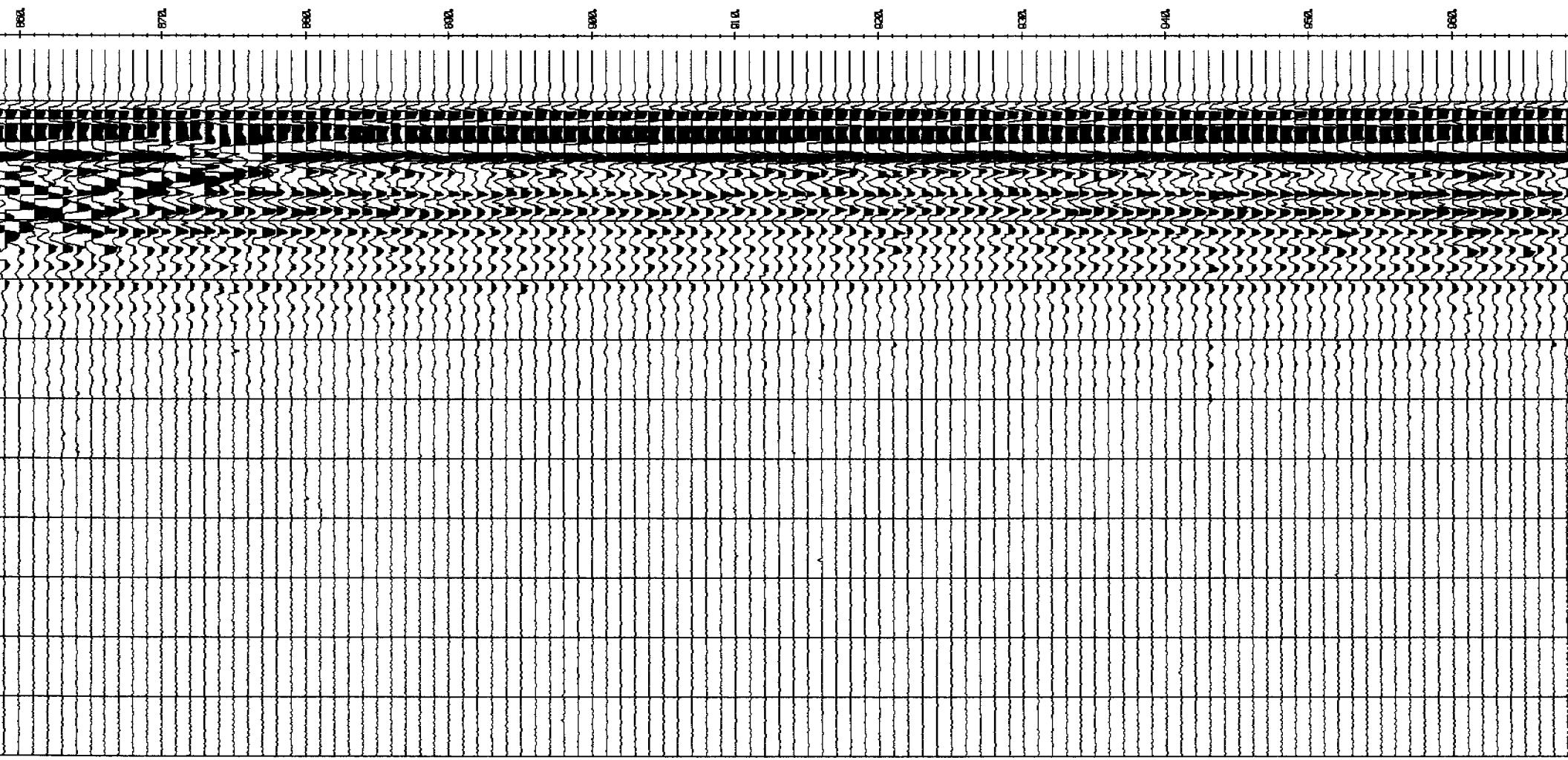

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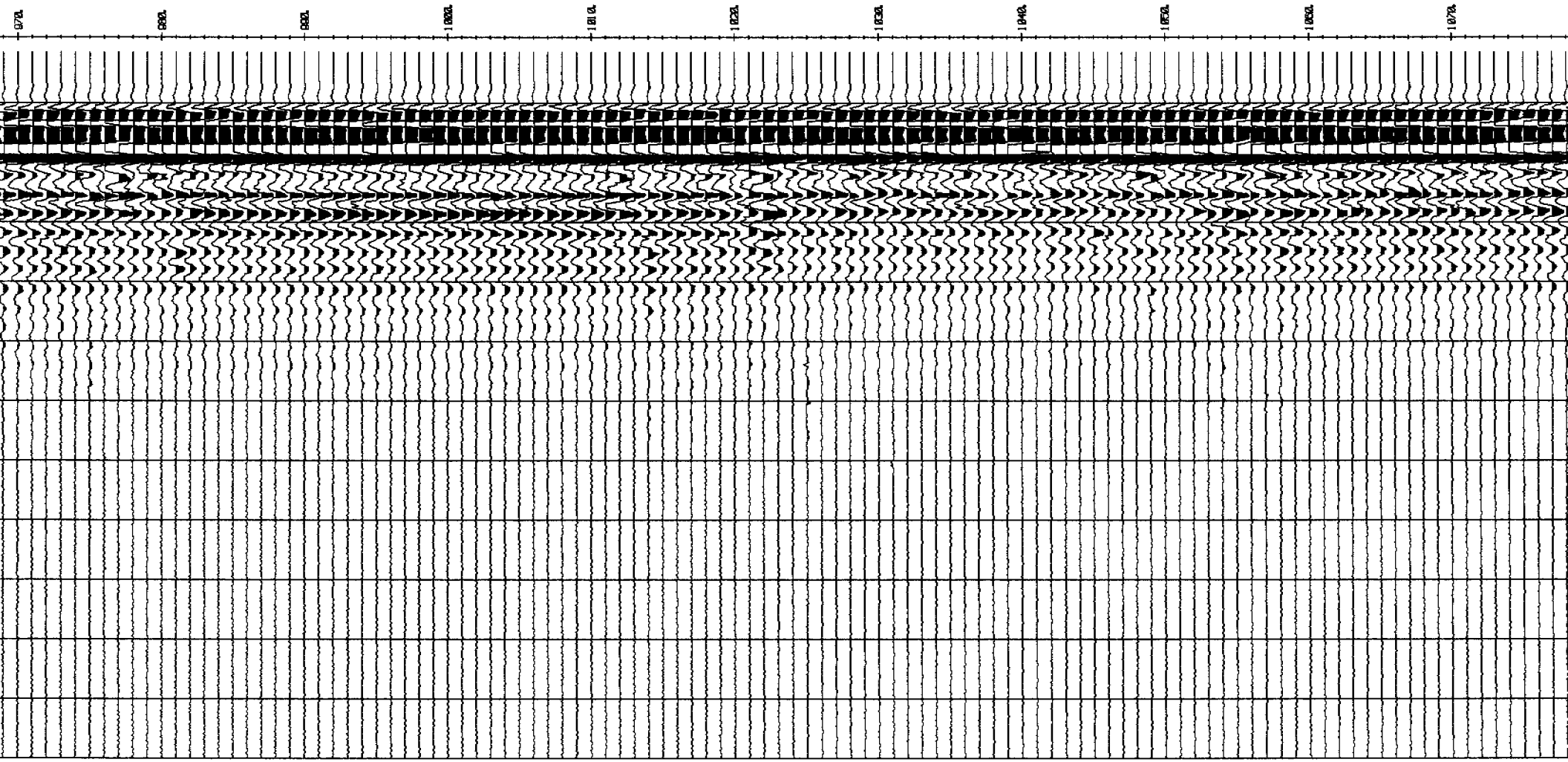

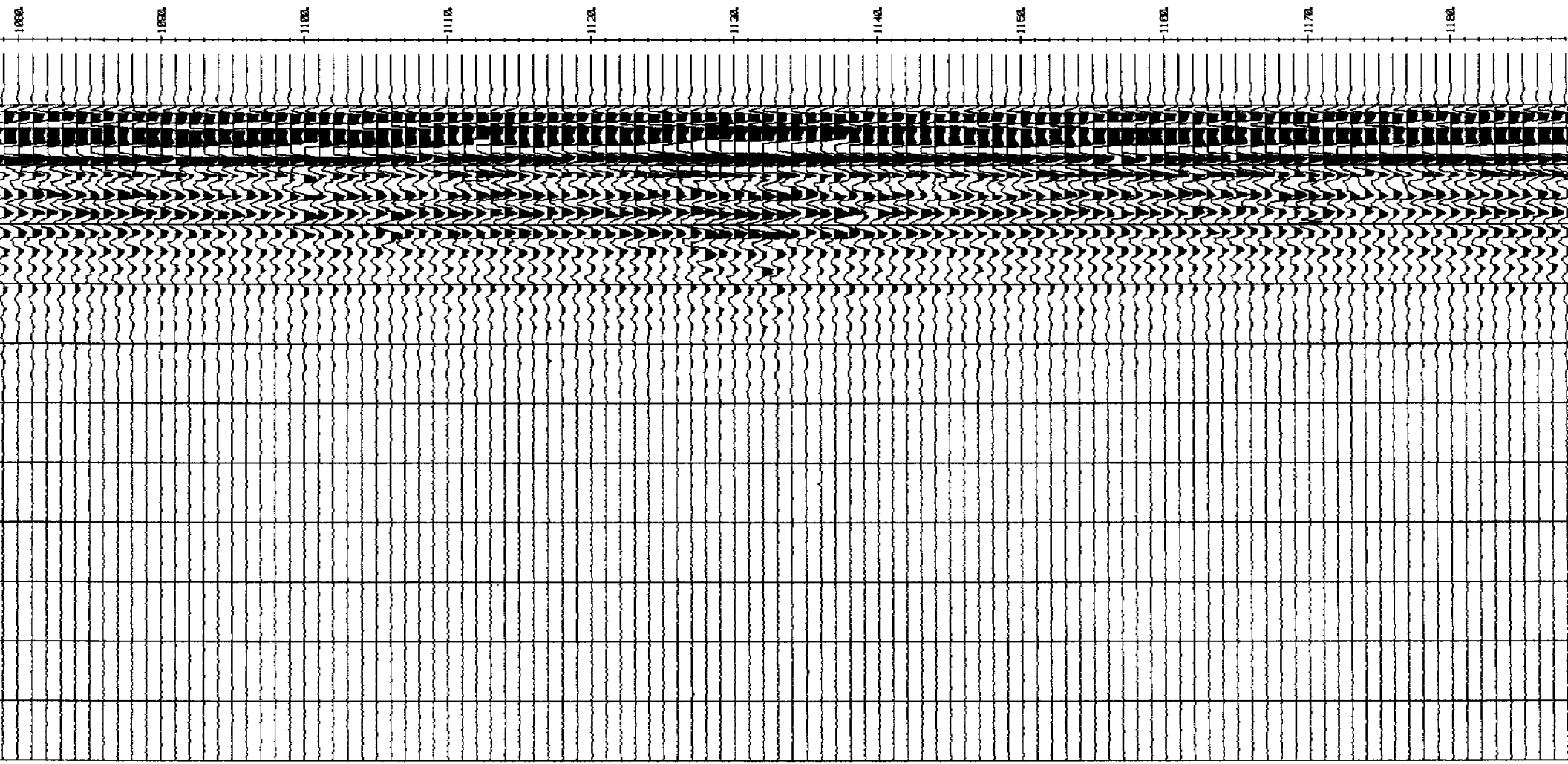
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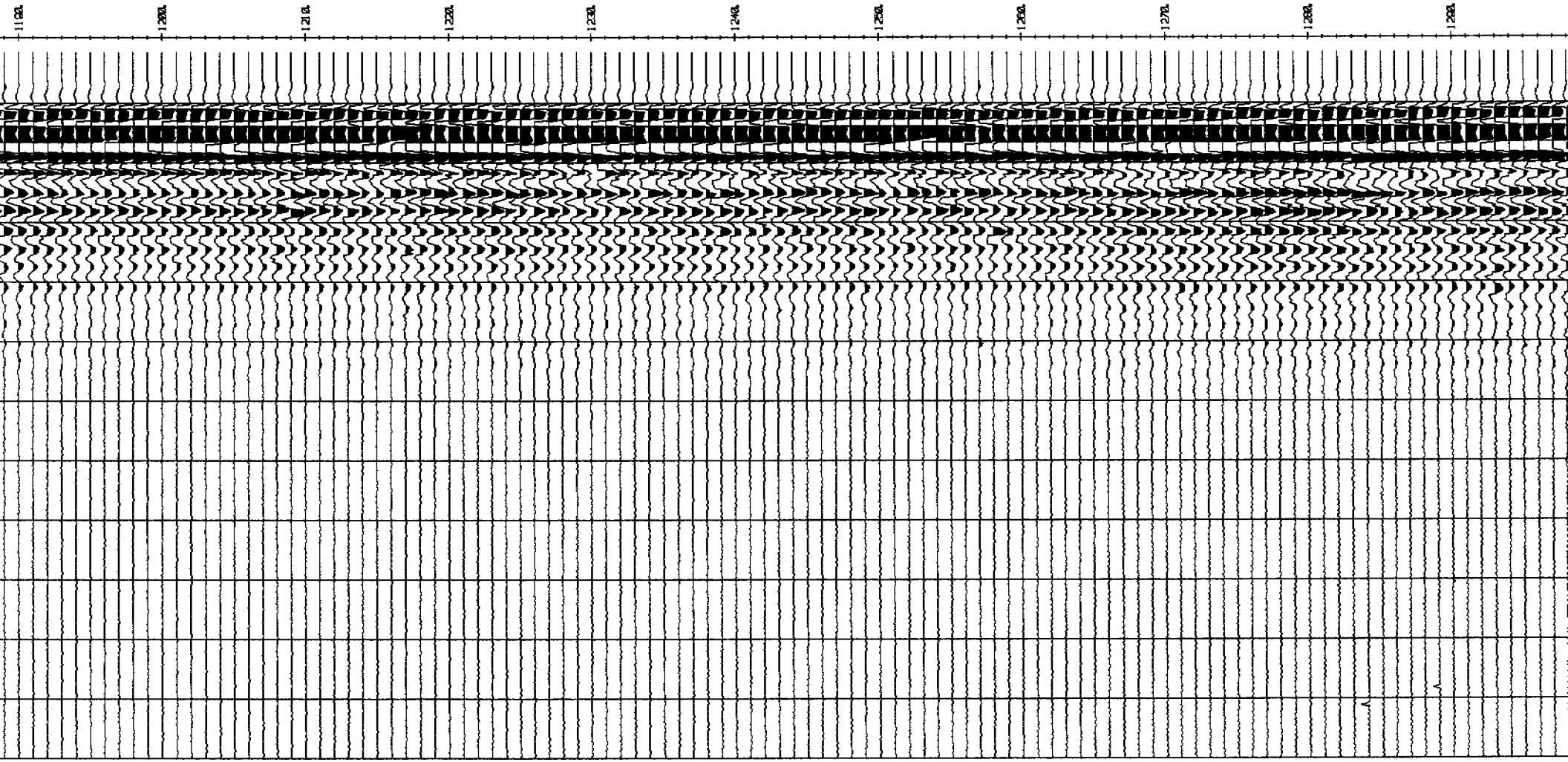

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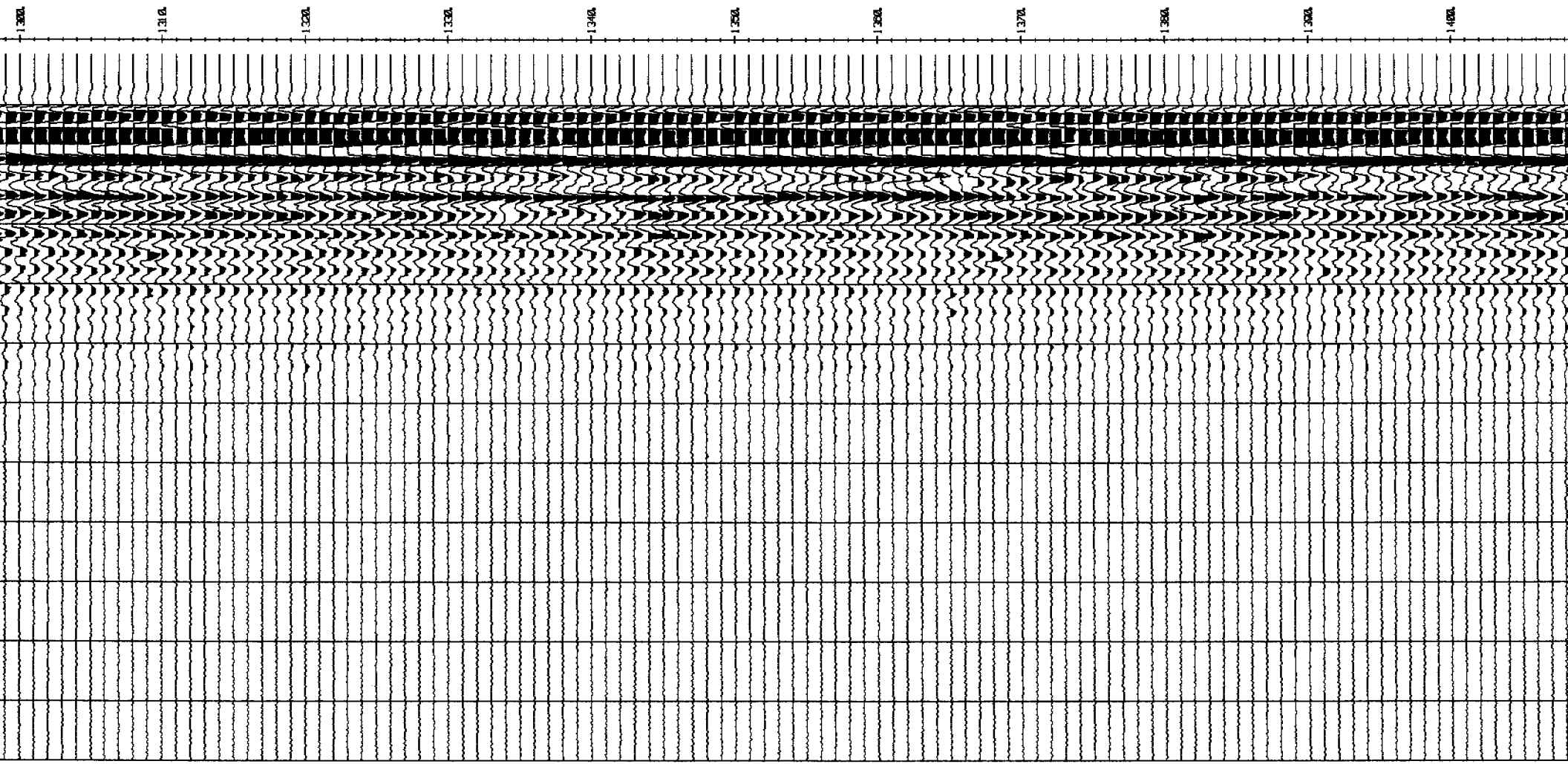

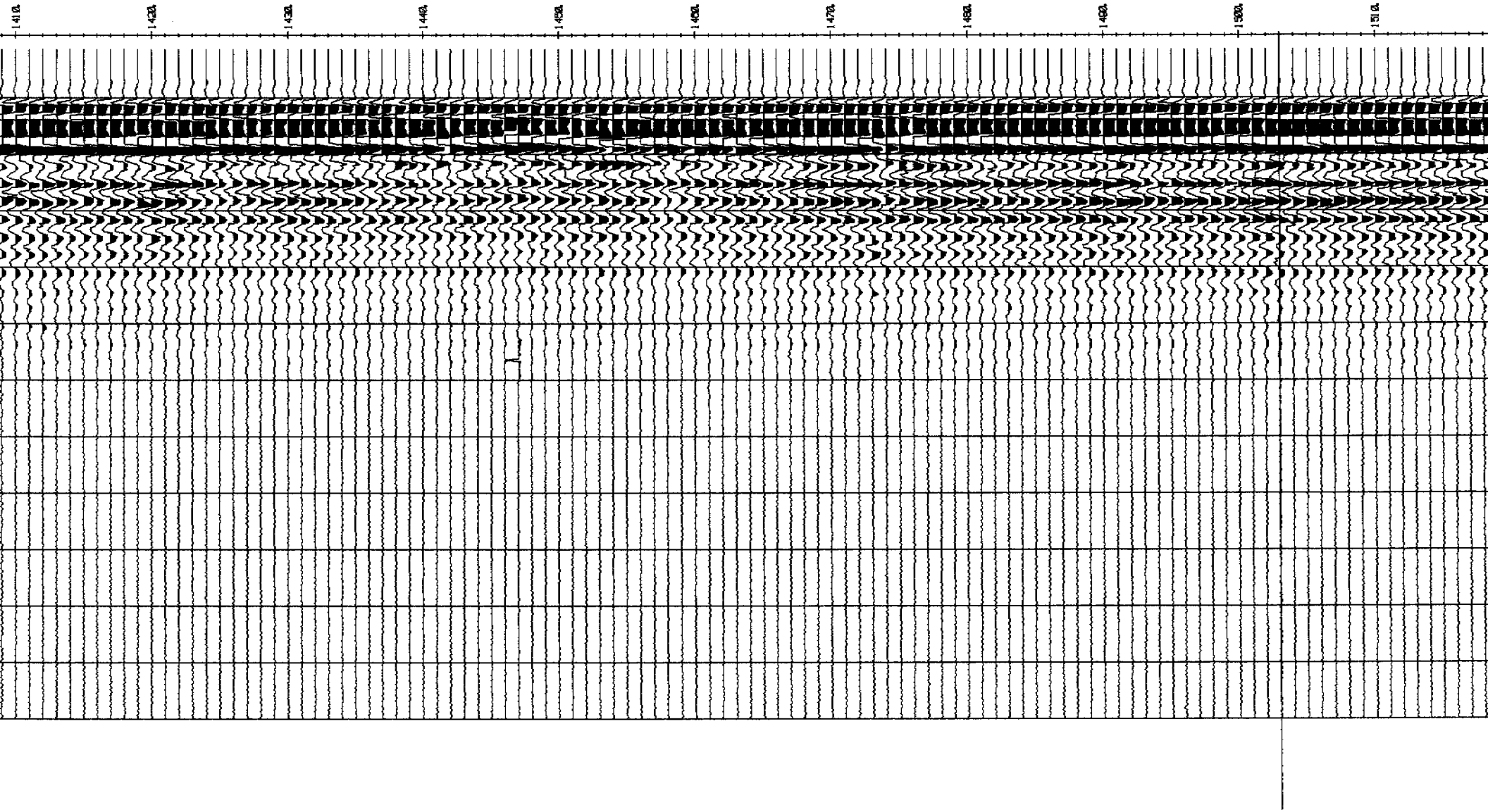

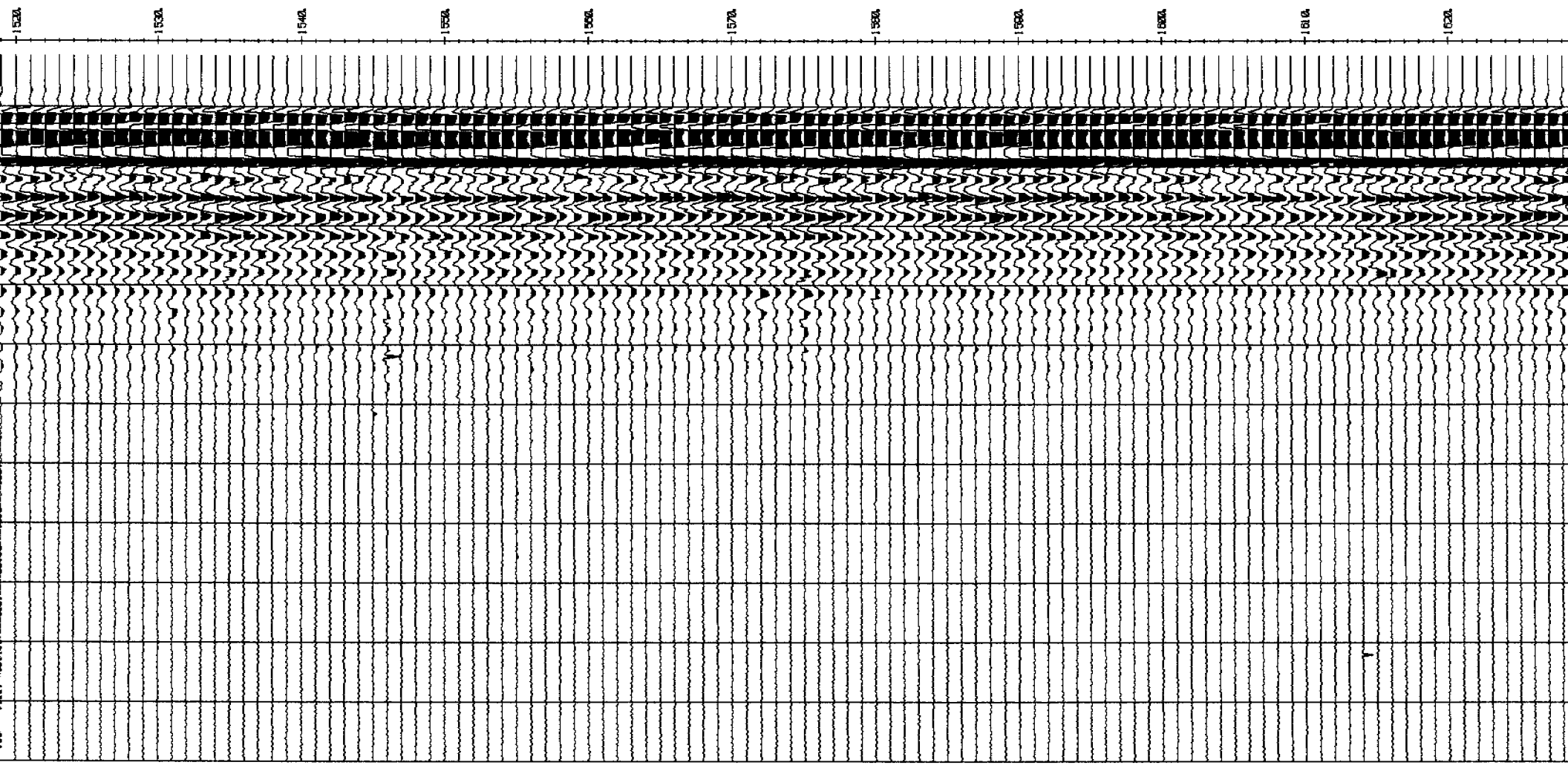
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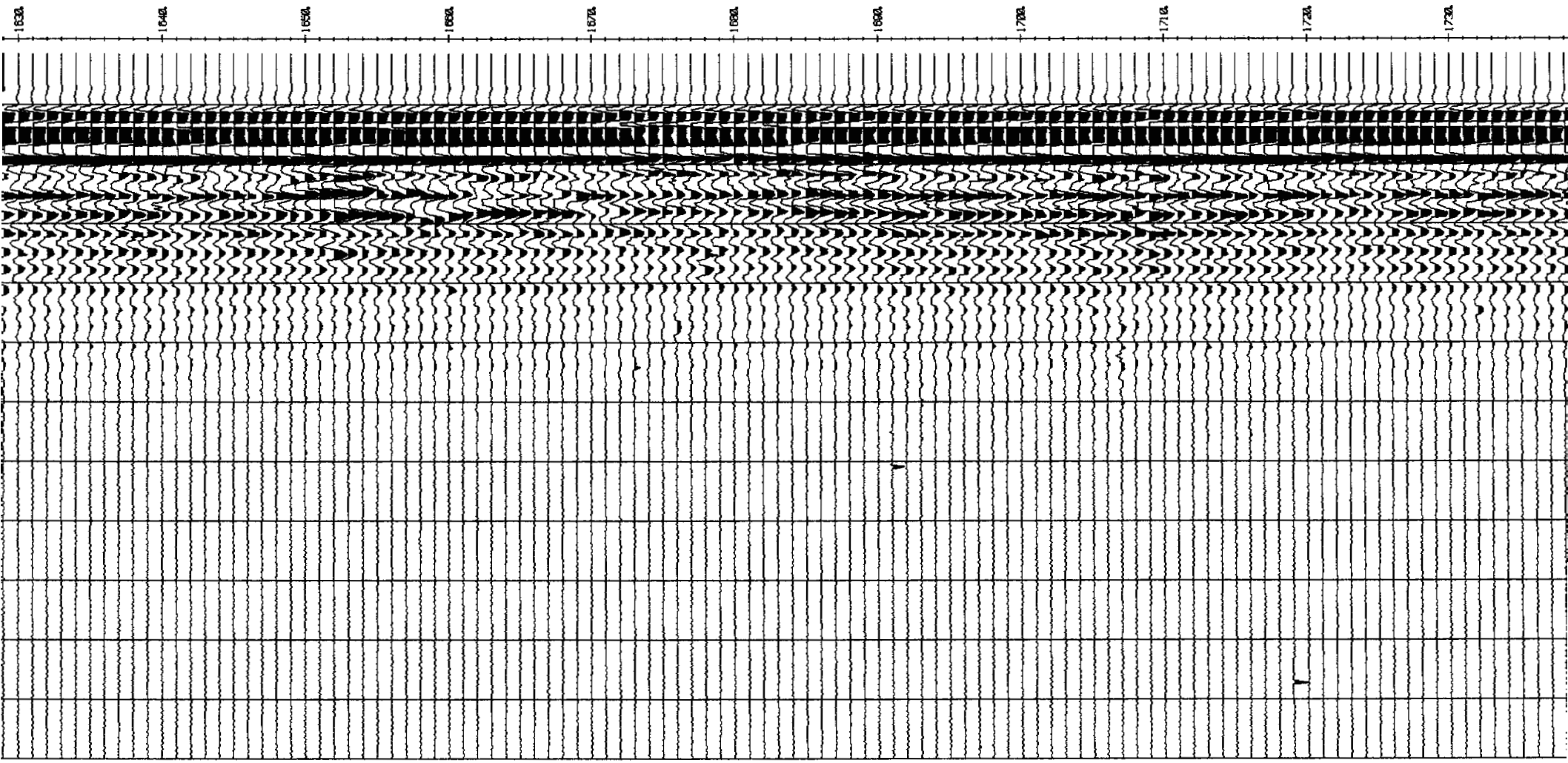
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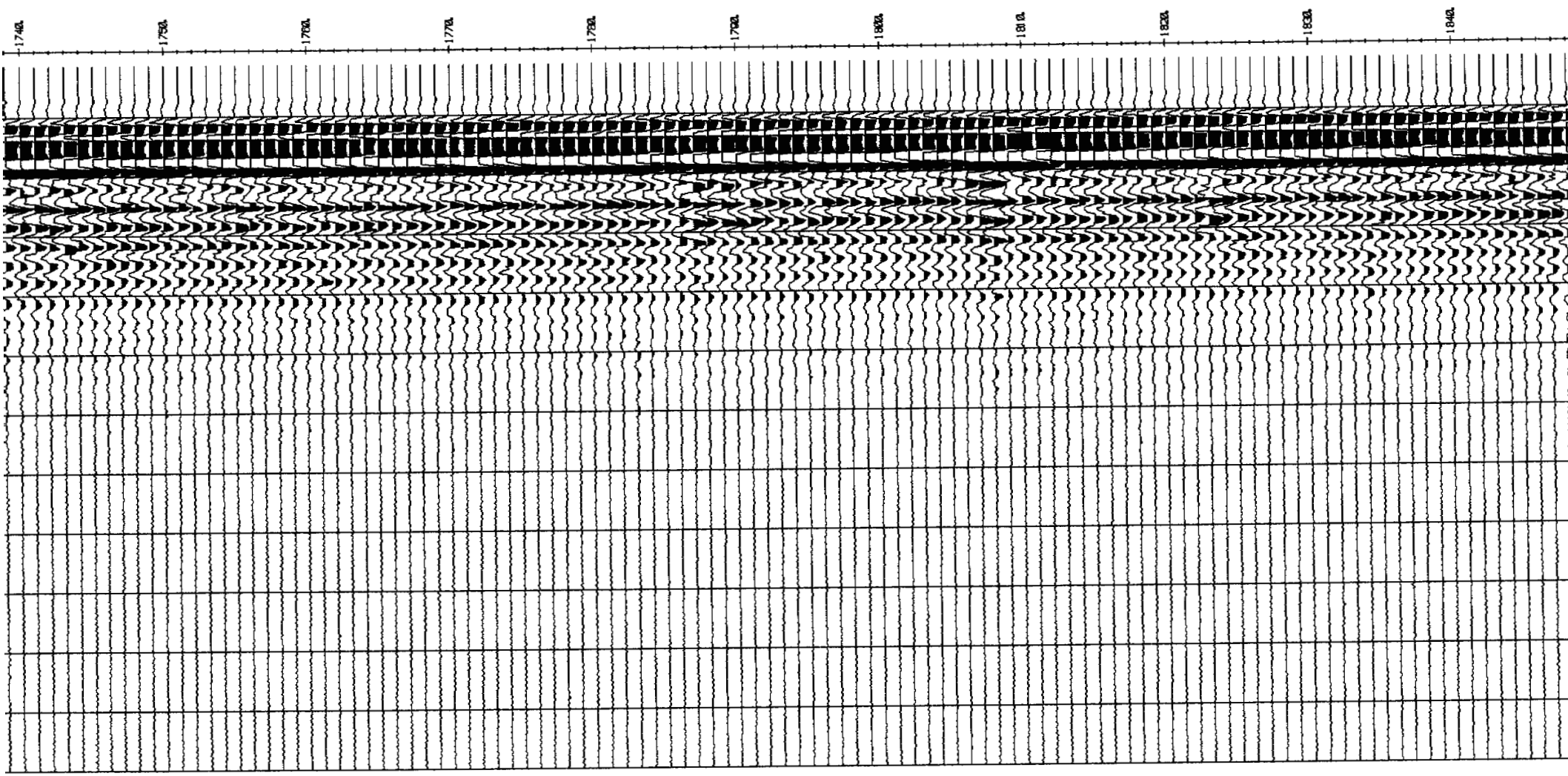

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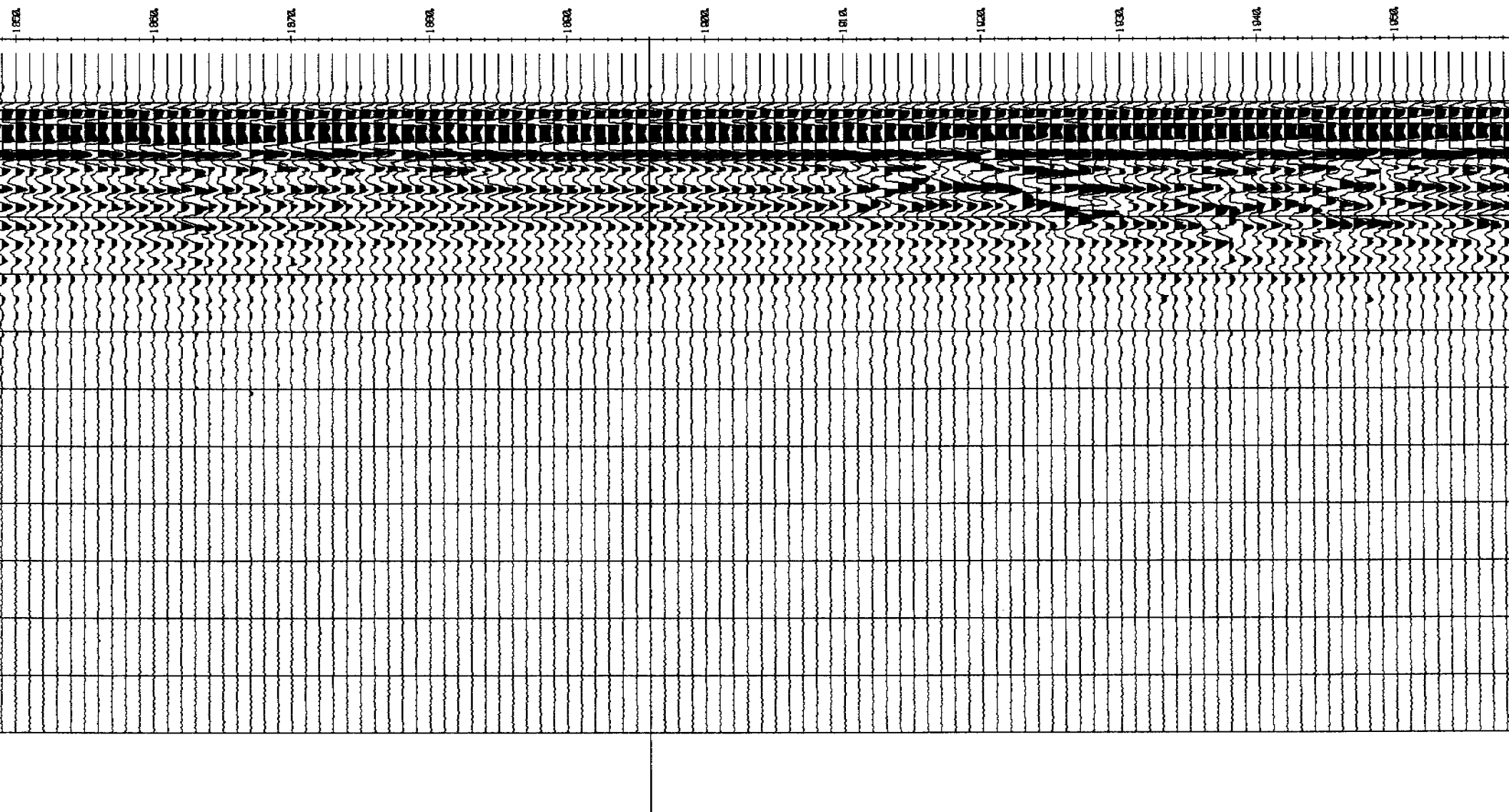

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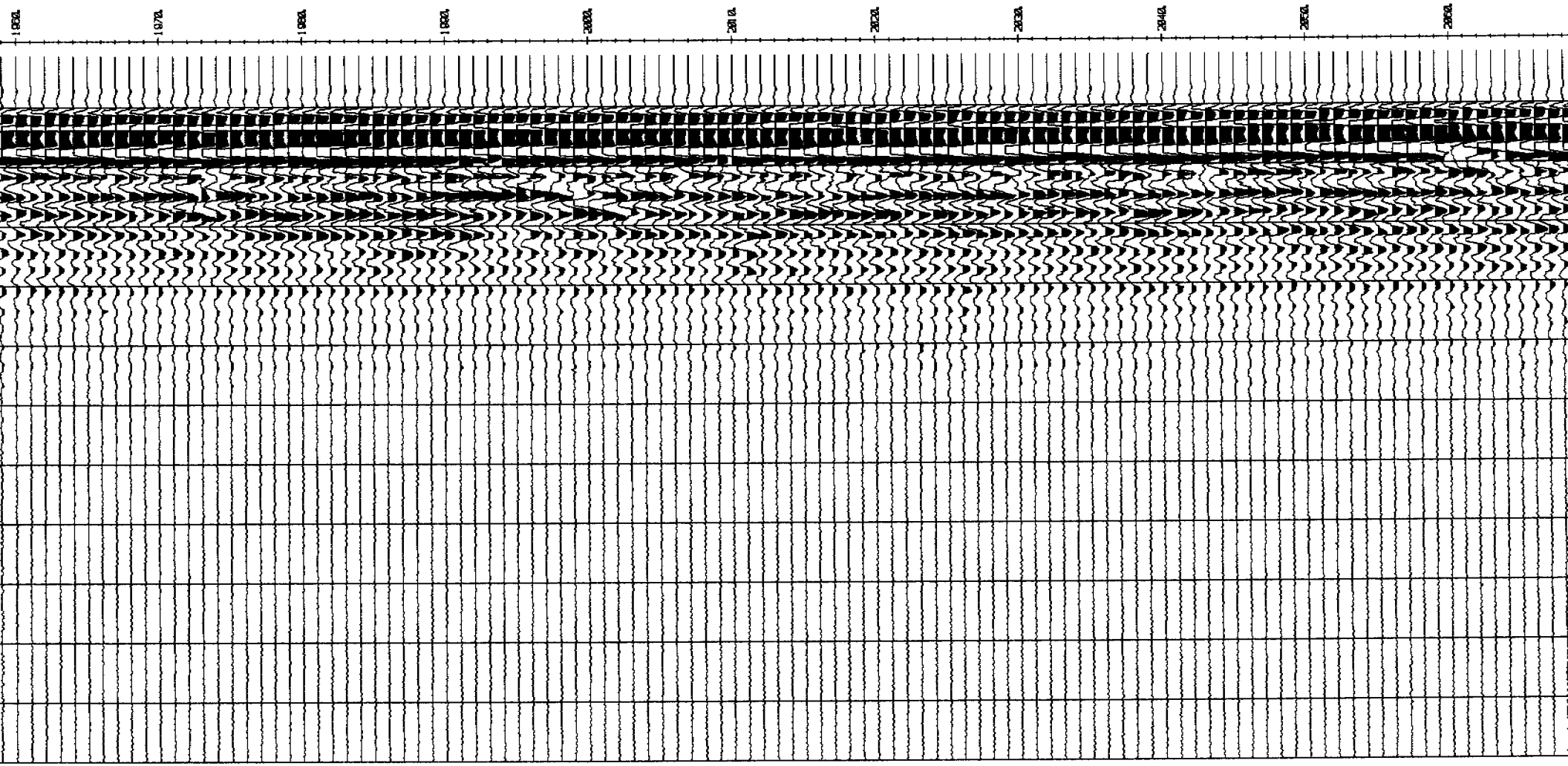

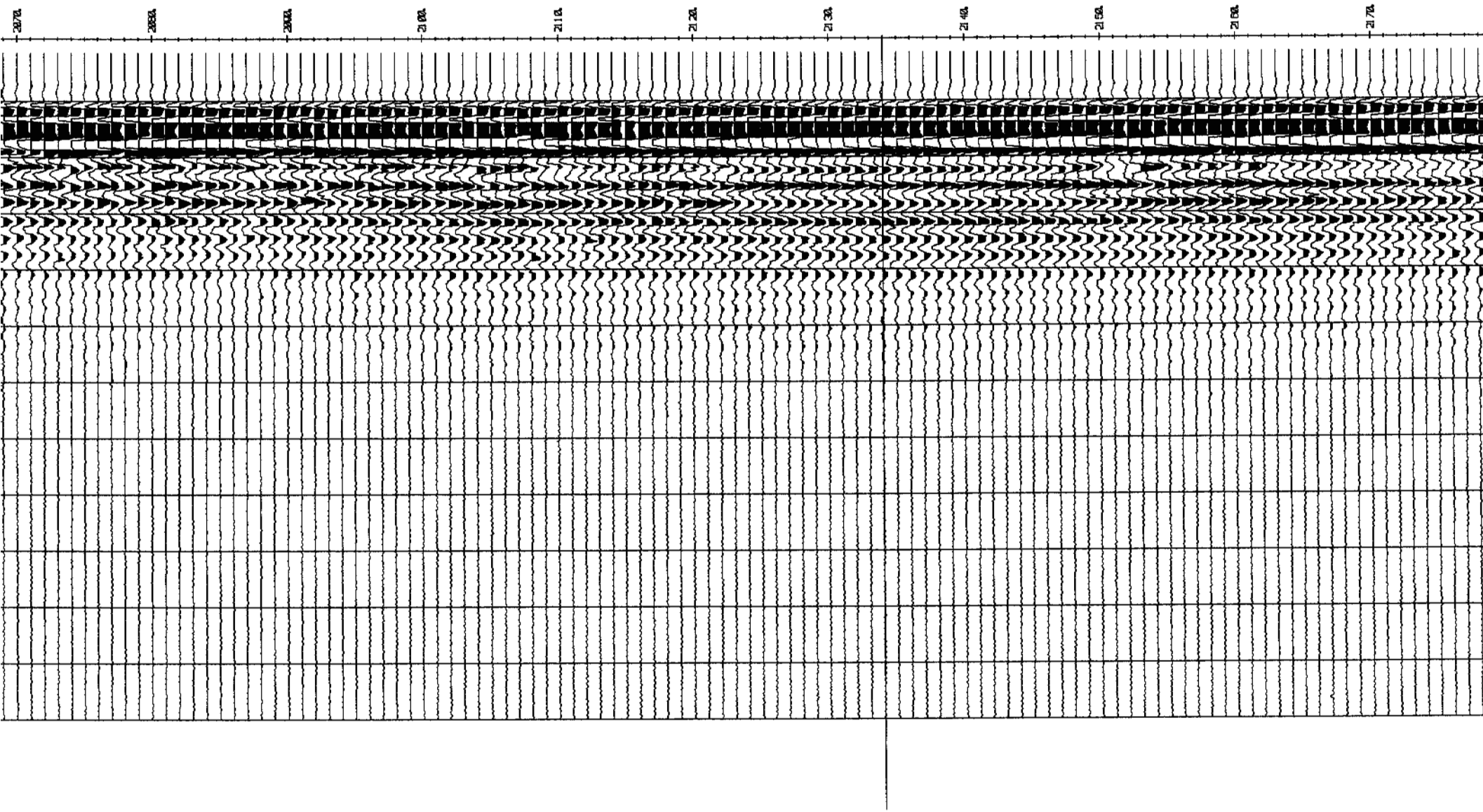
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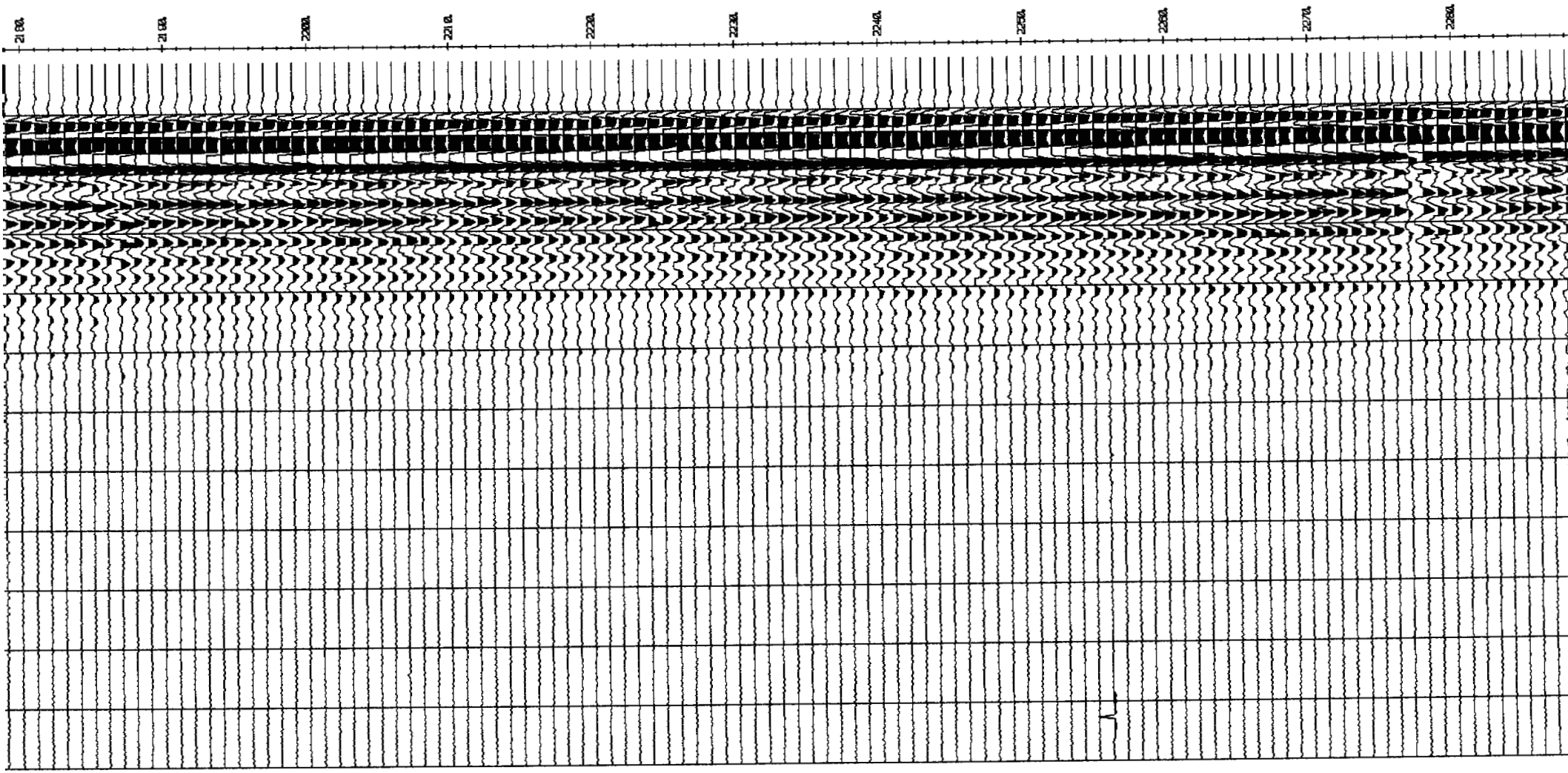

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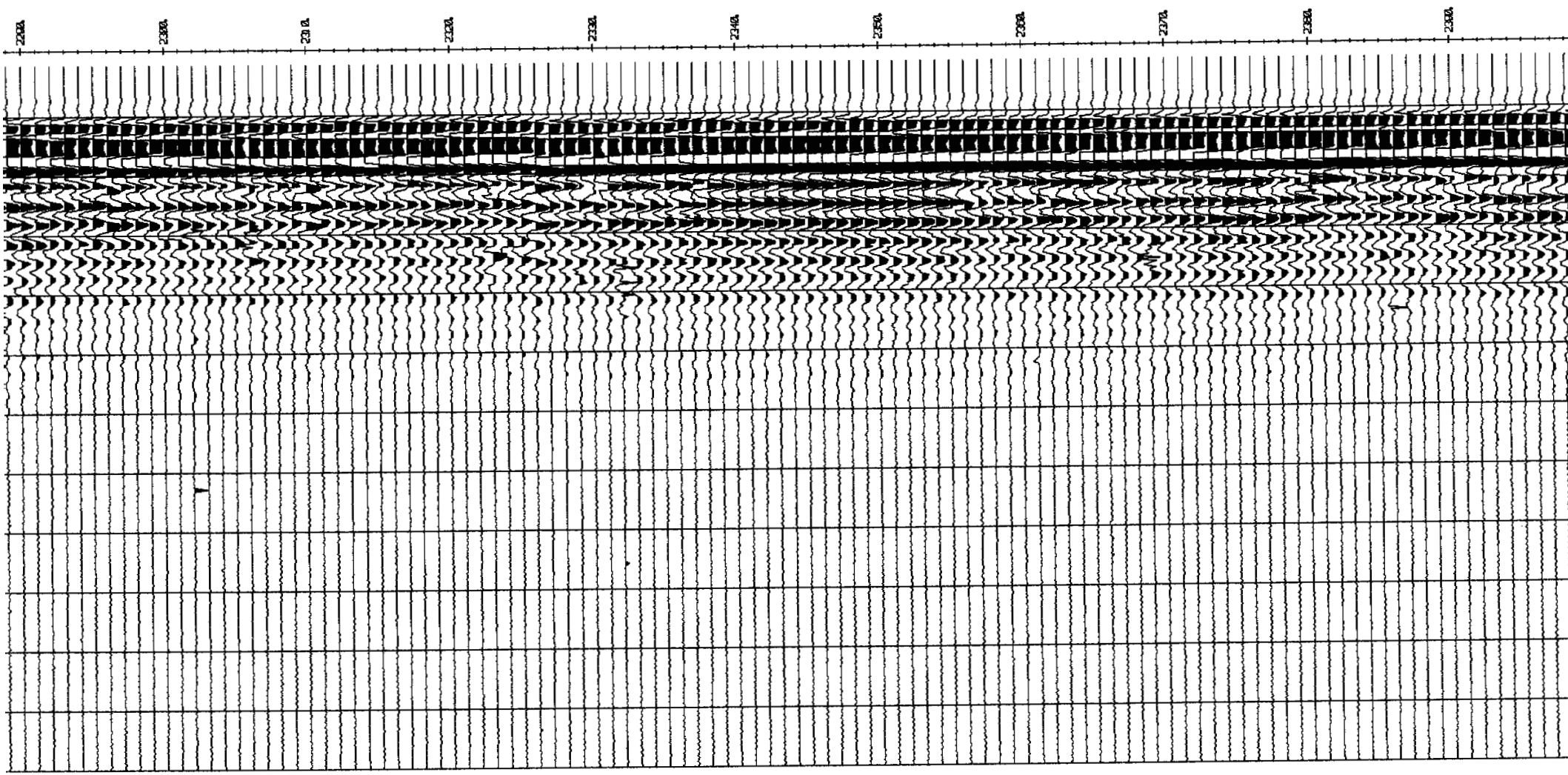

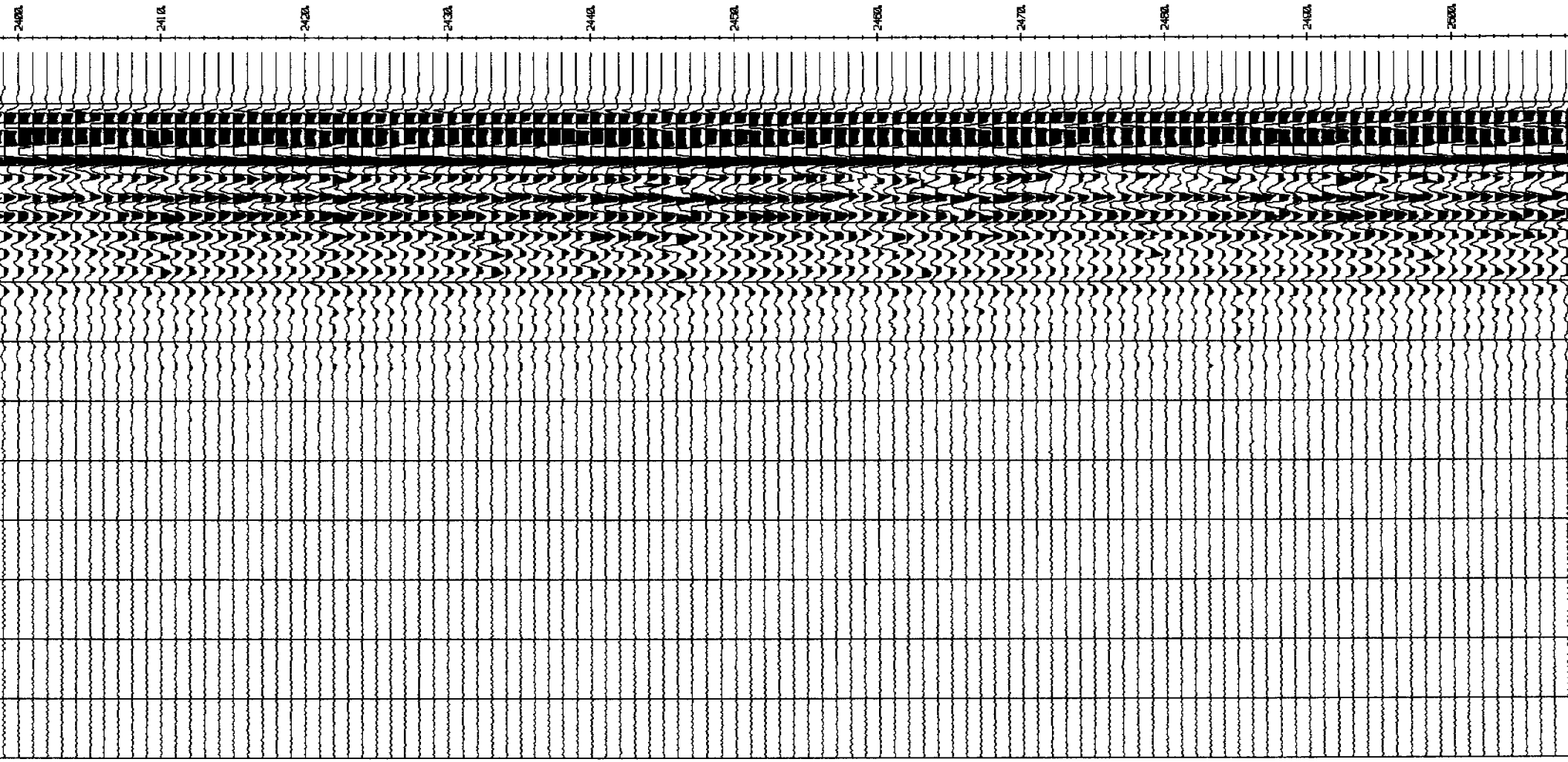
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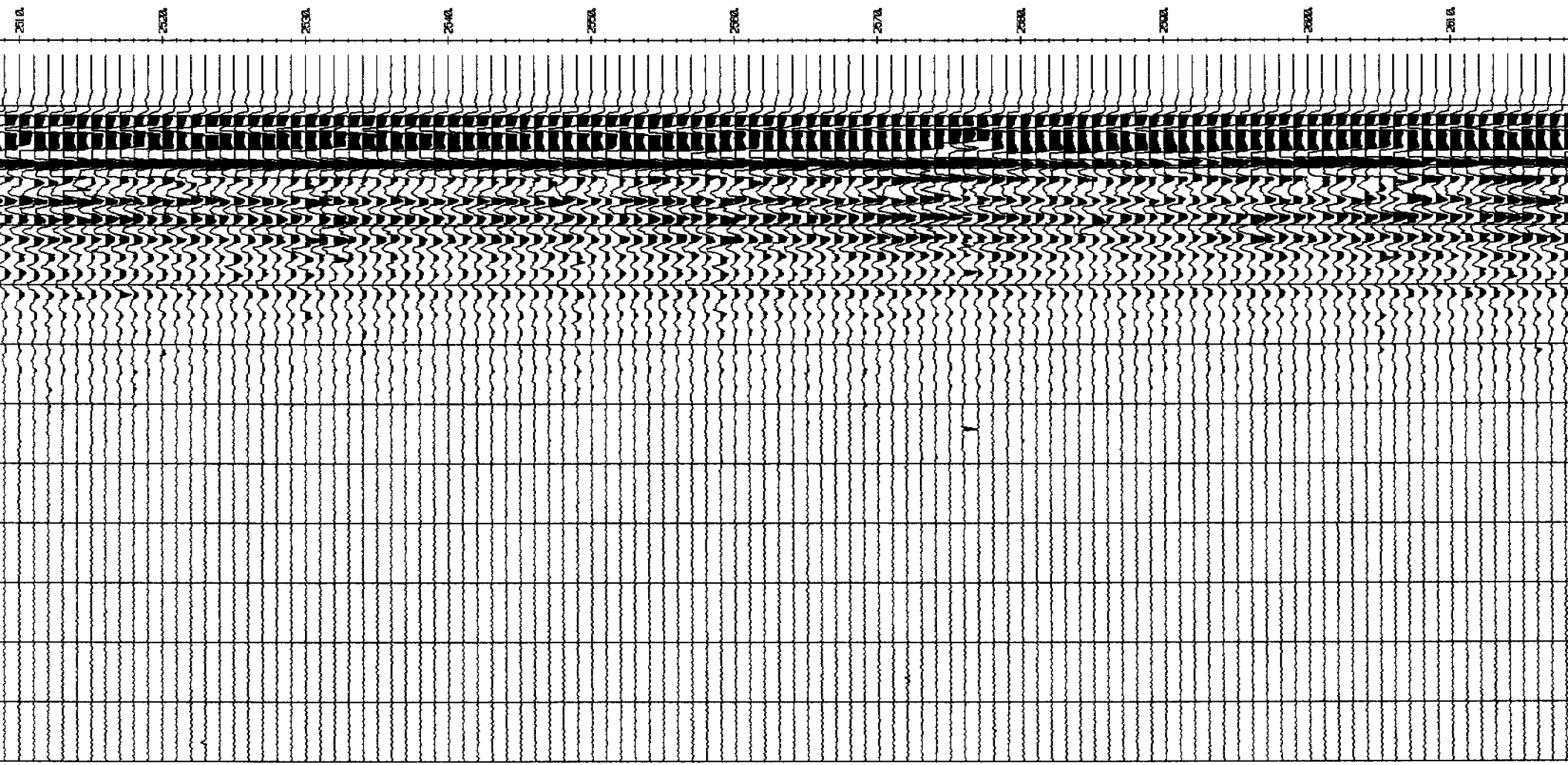
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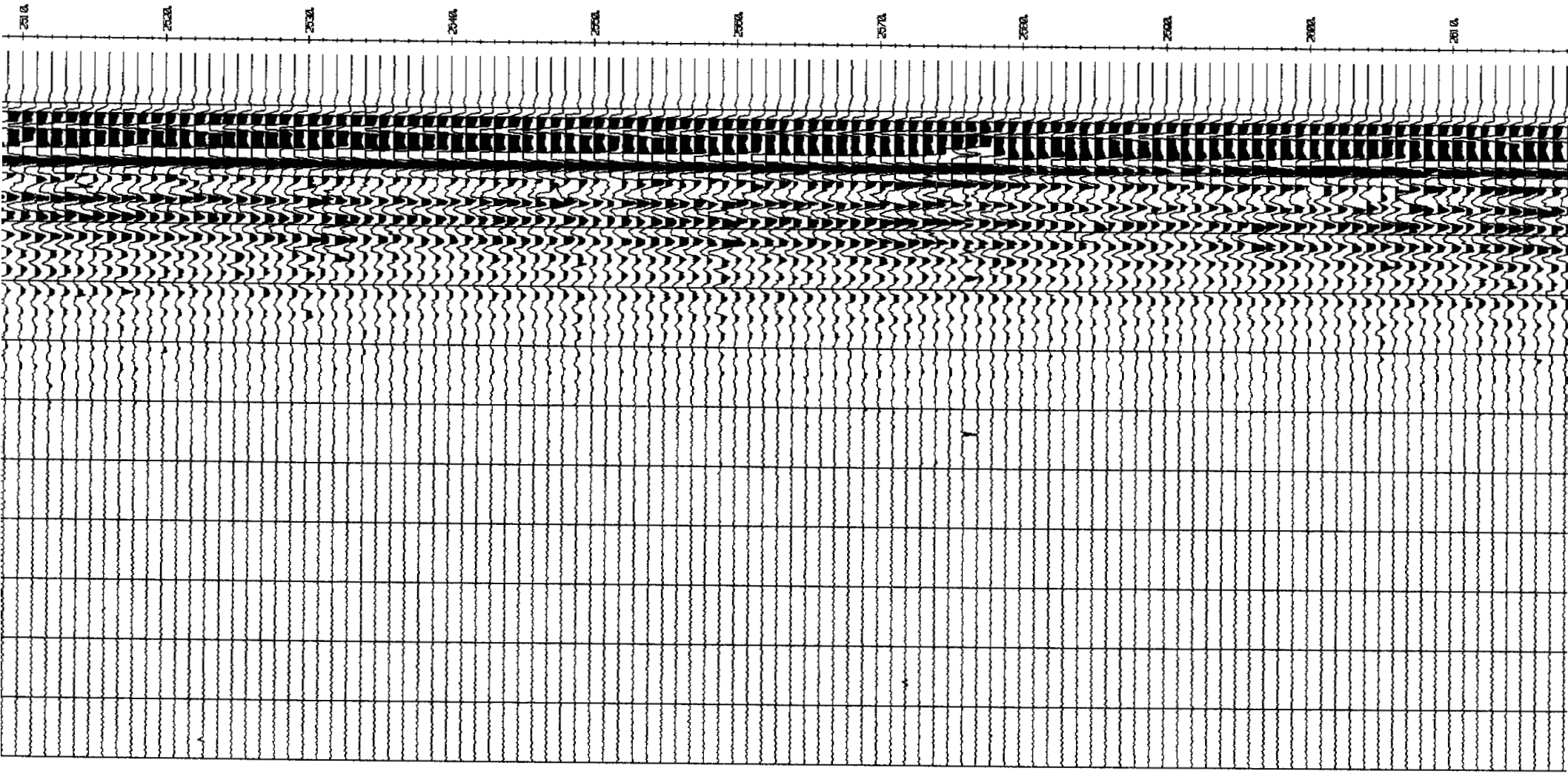

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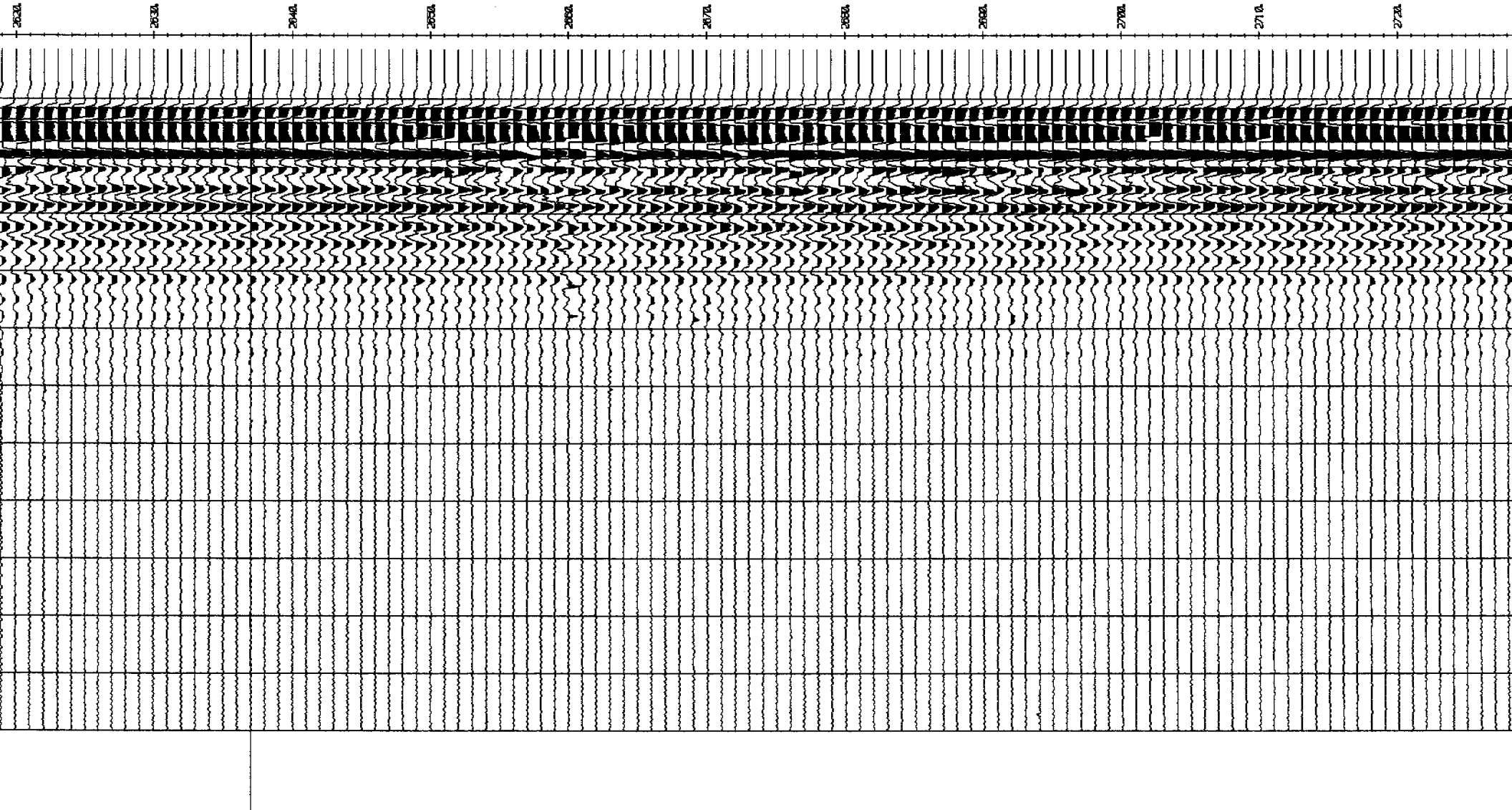
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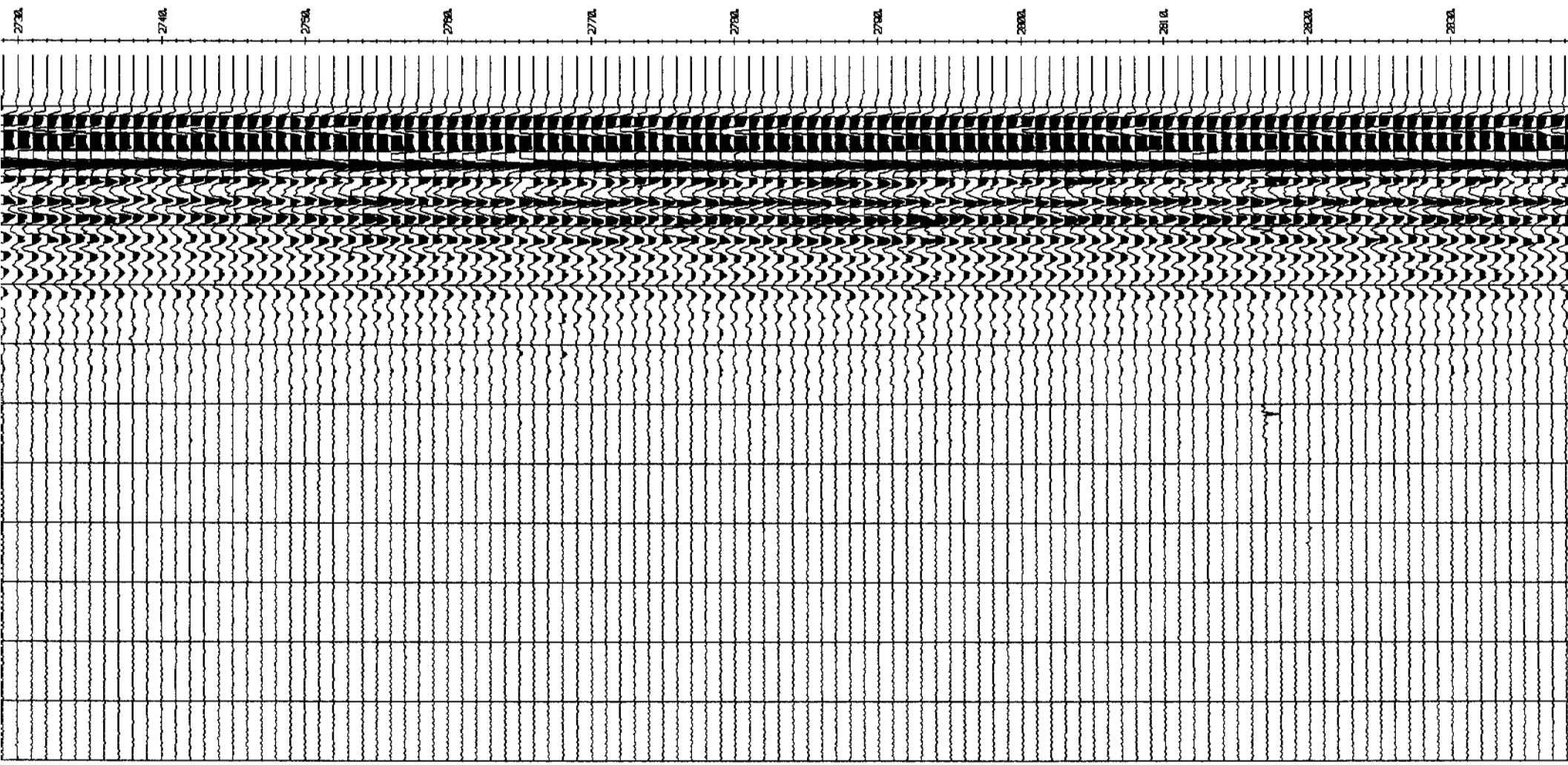
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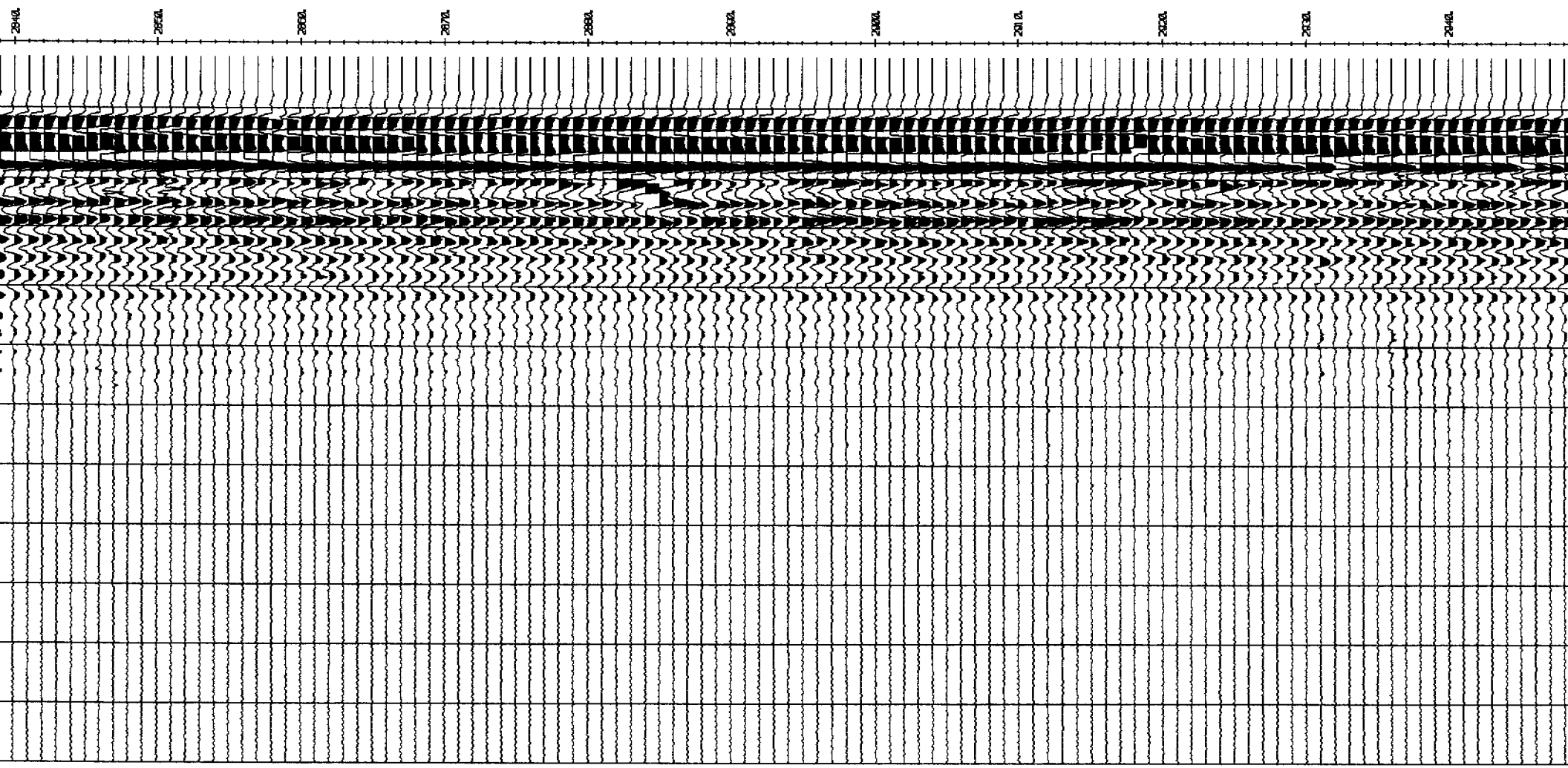

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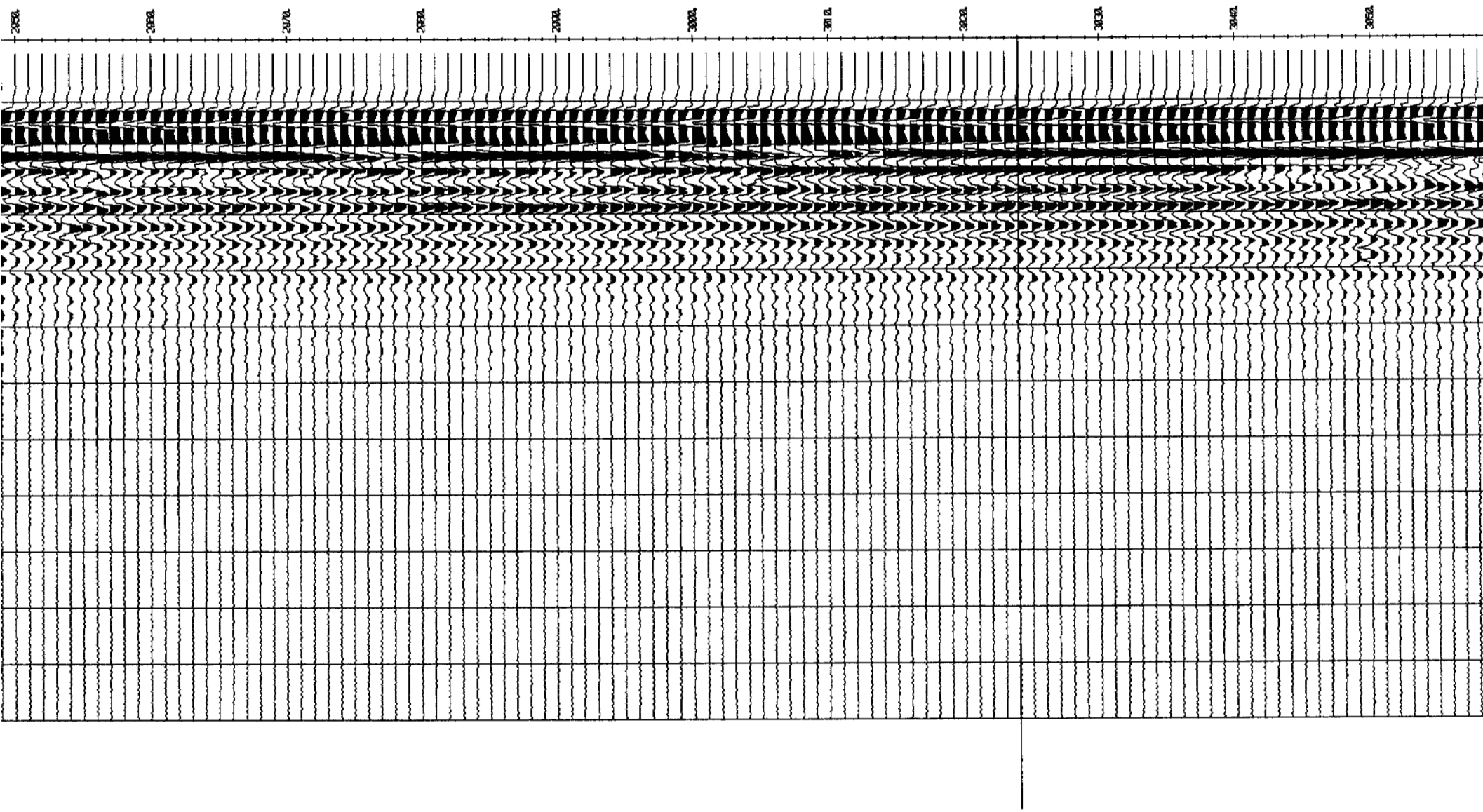

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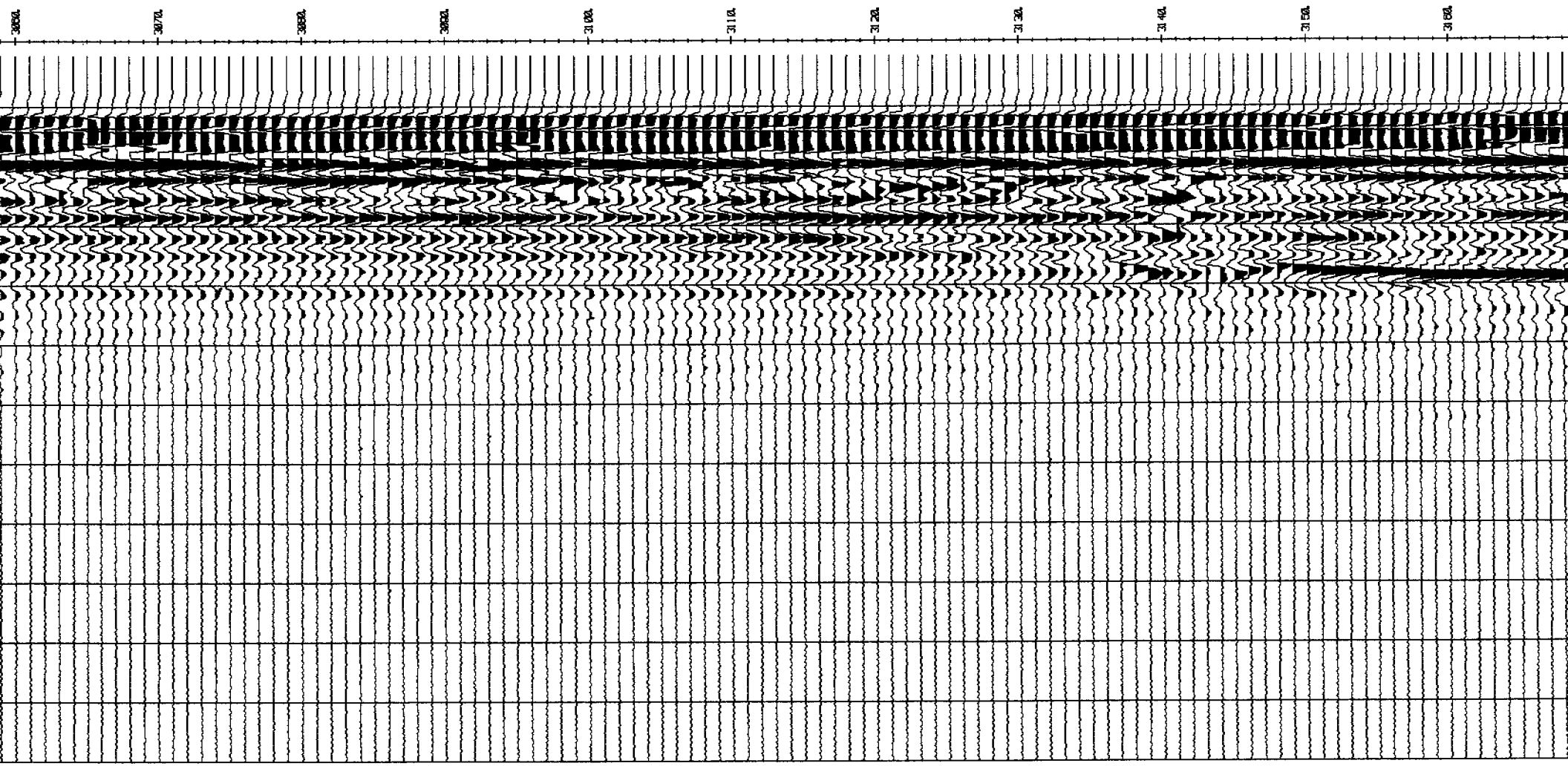

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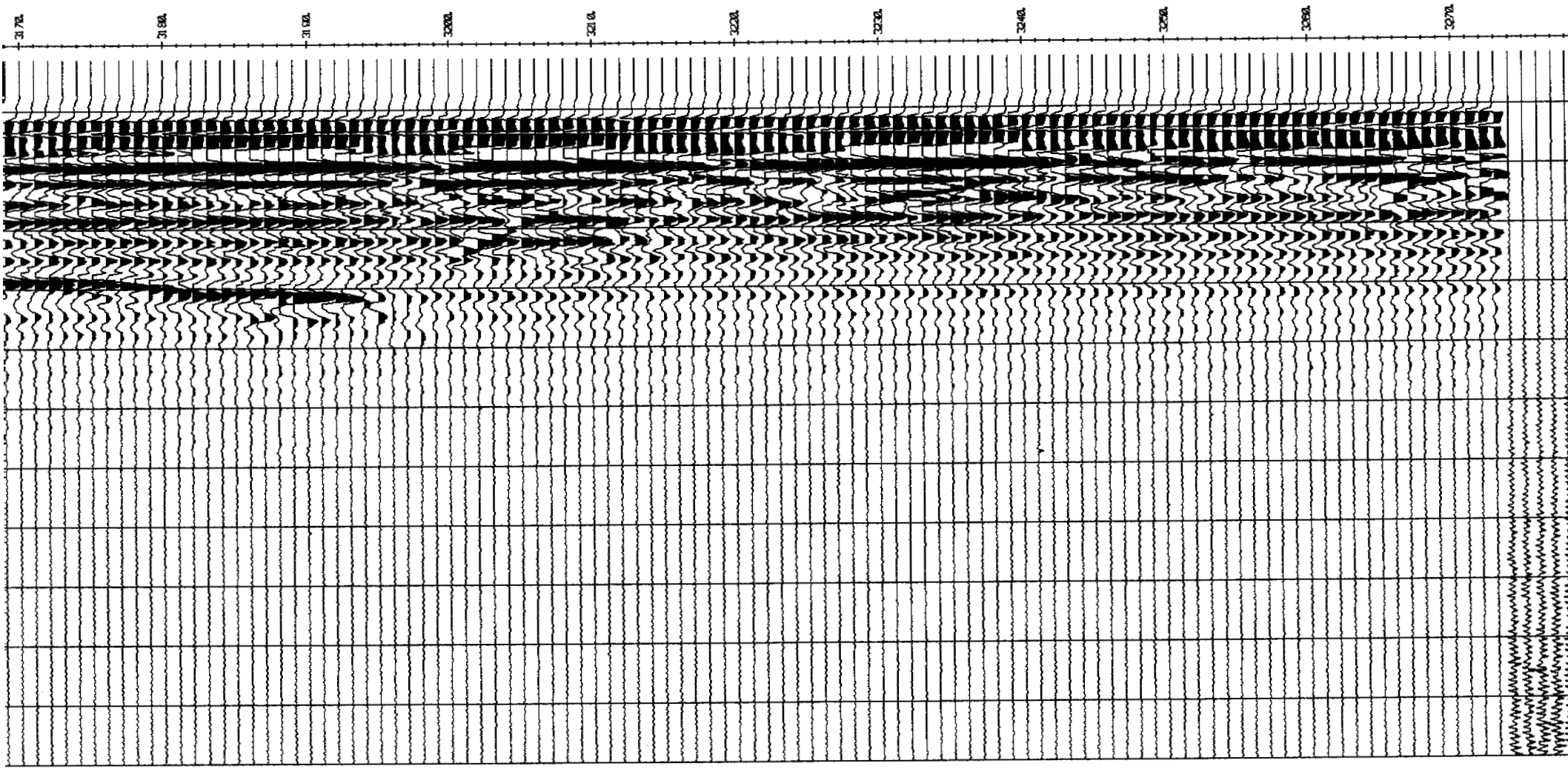

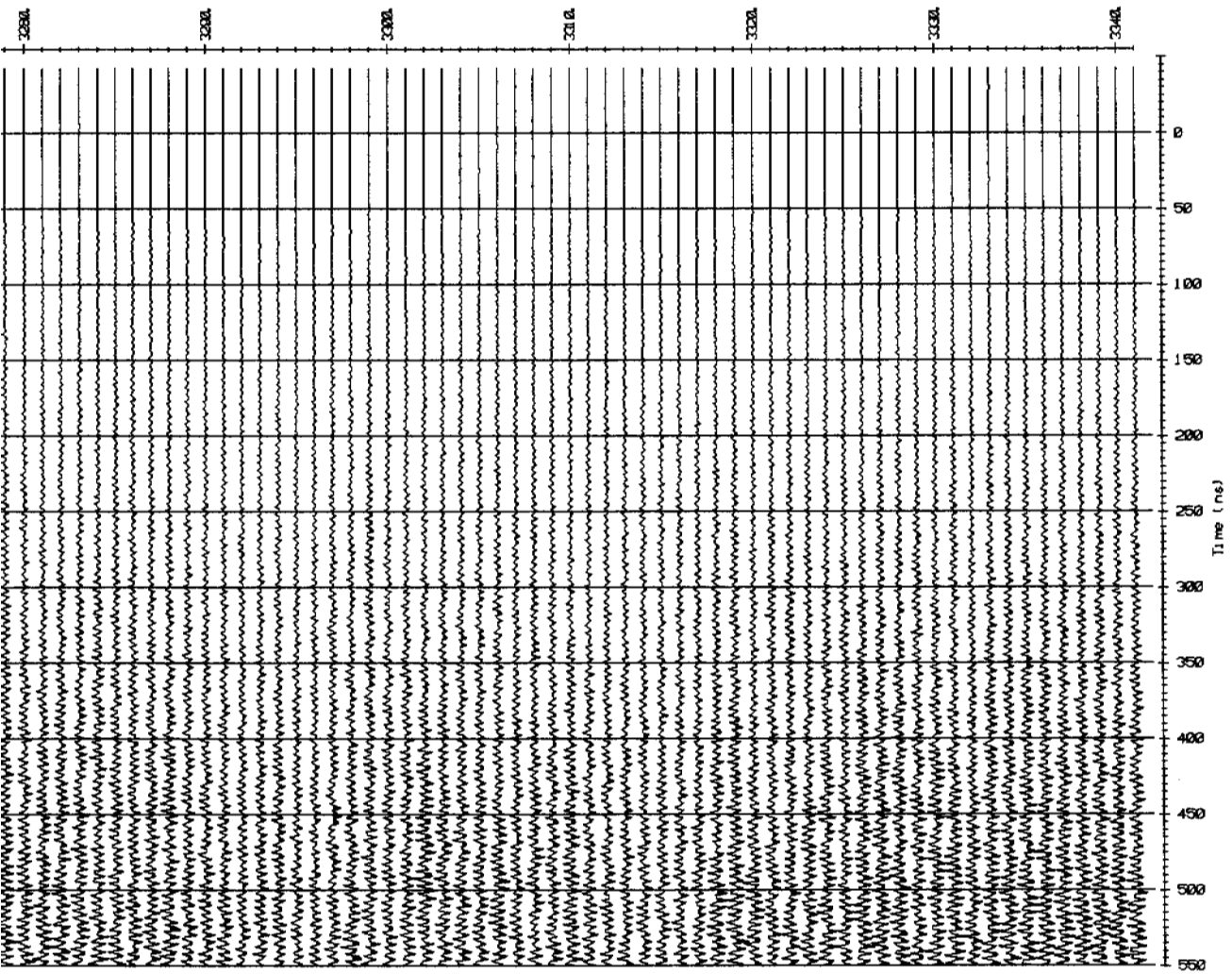
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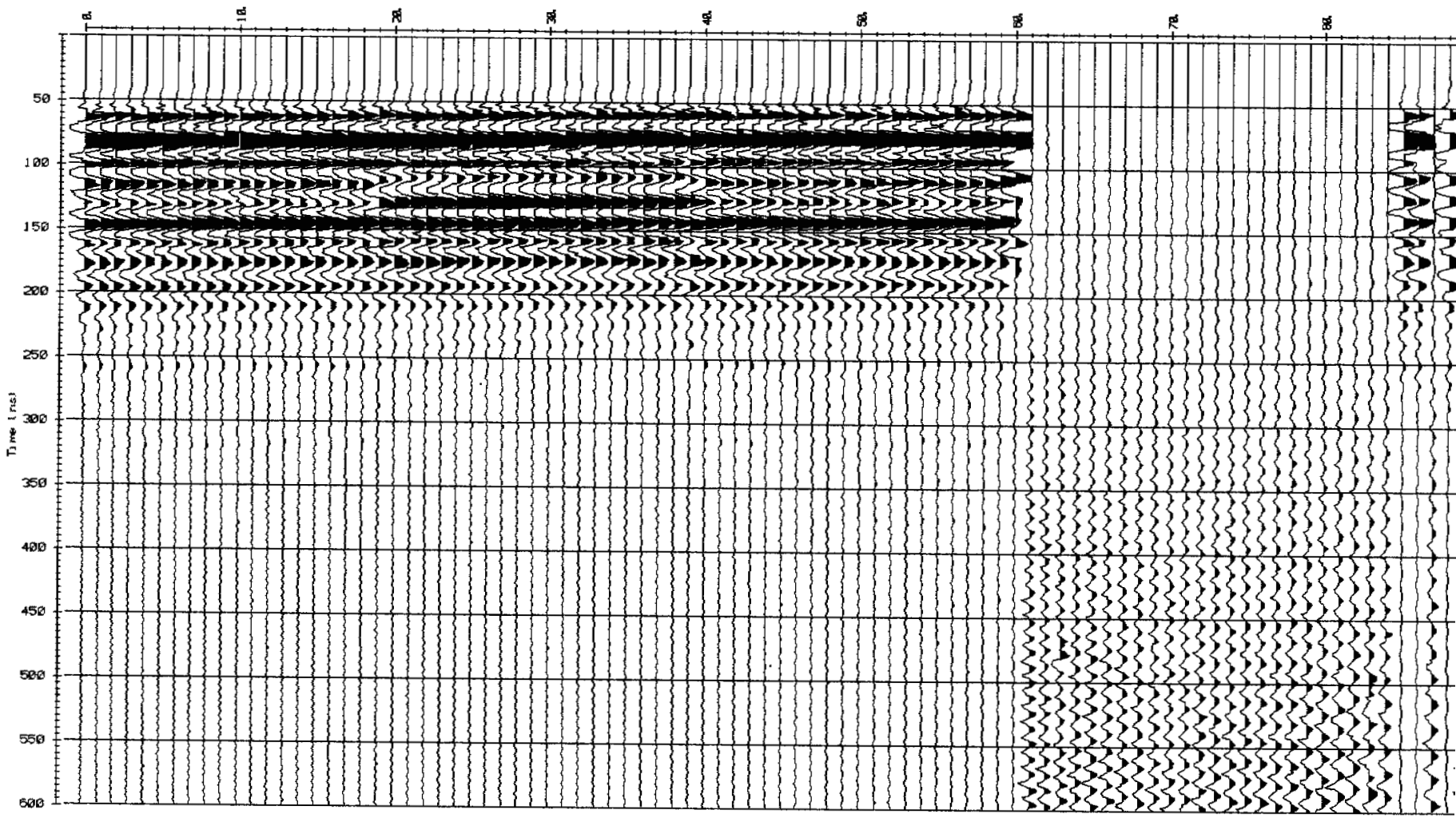
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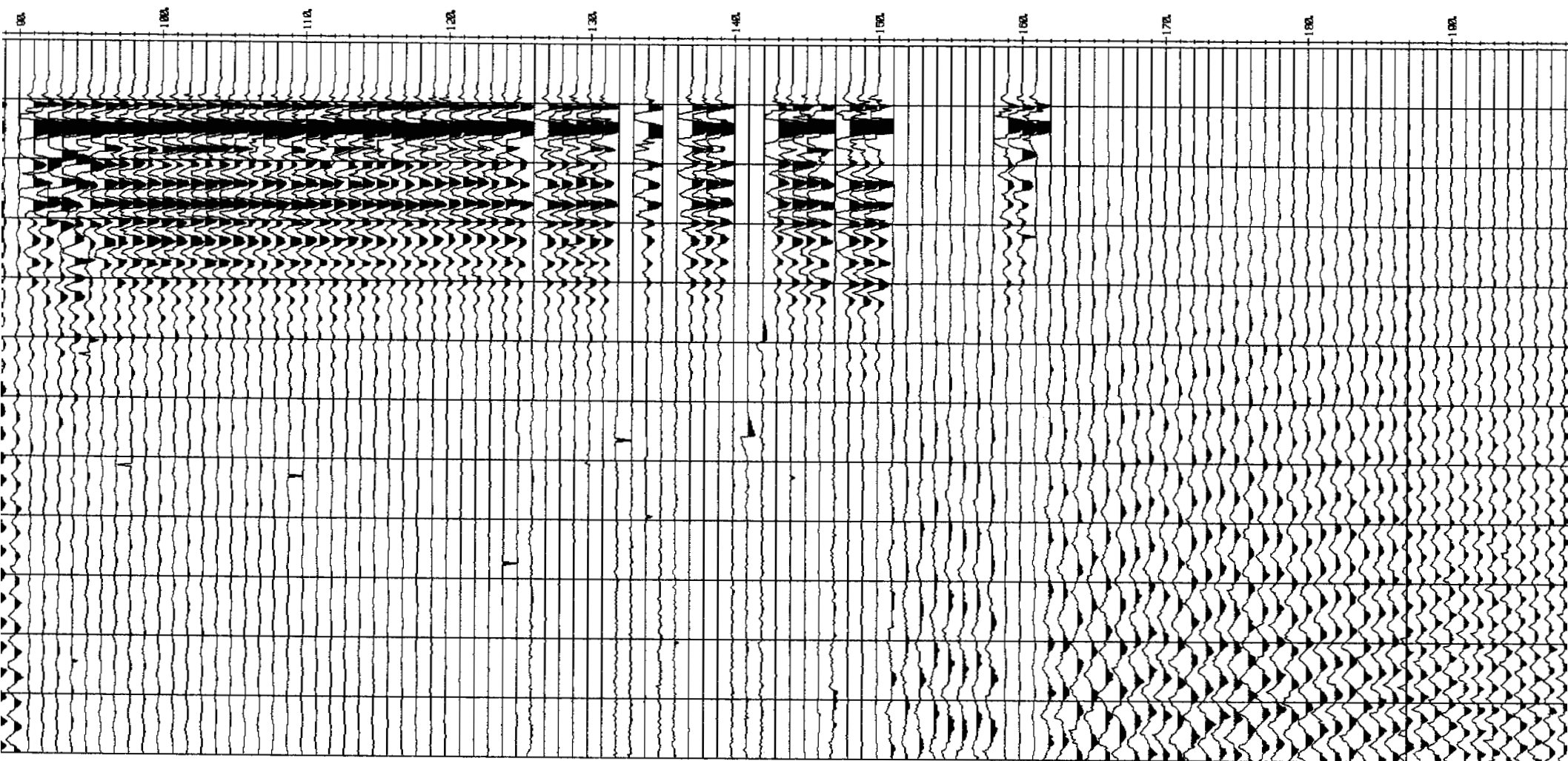
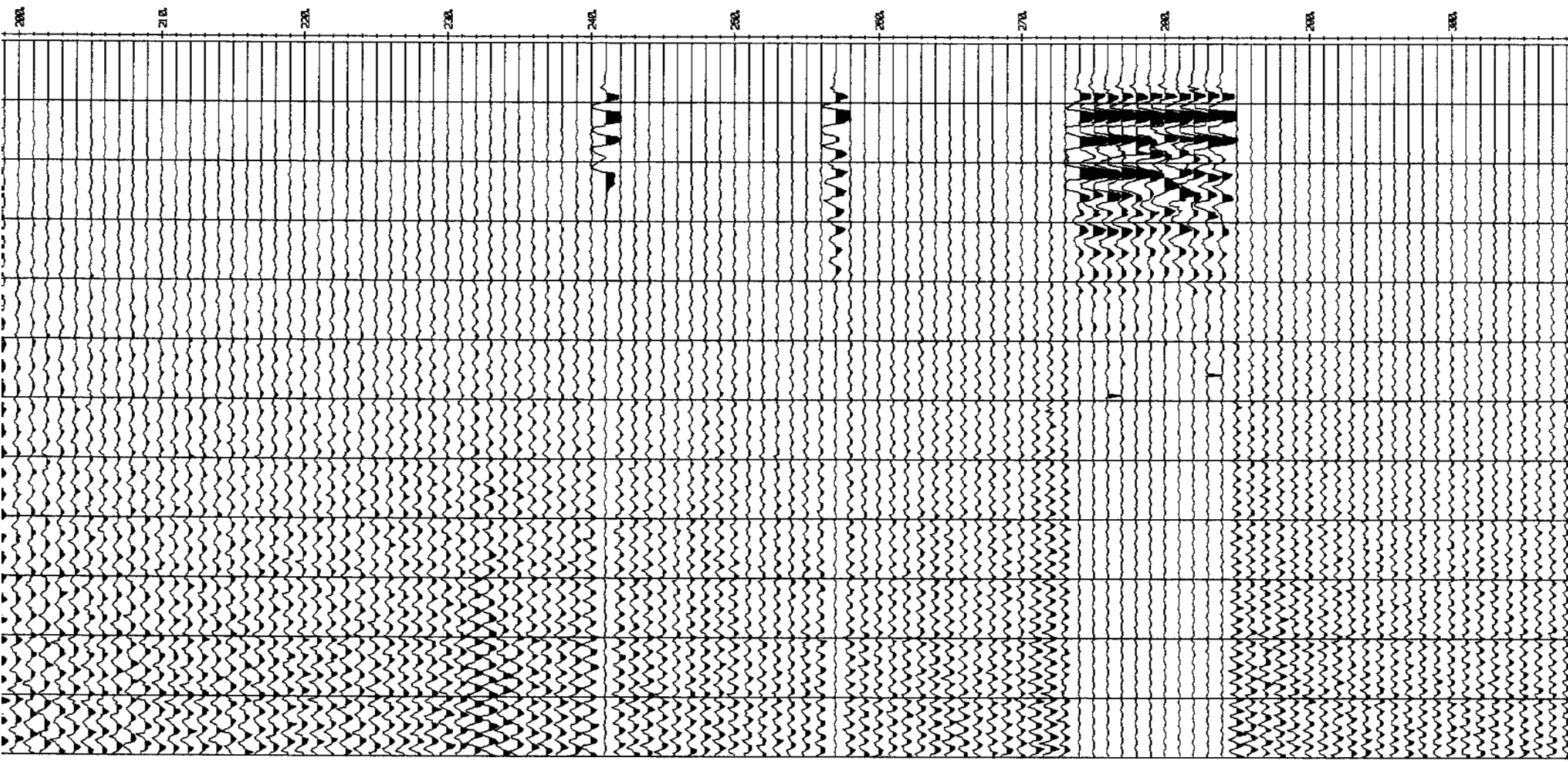
LN6C-1-5

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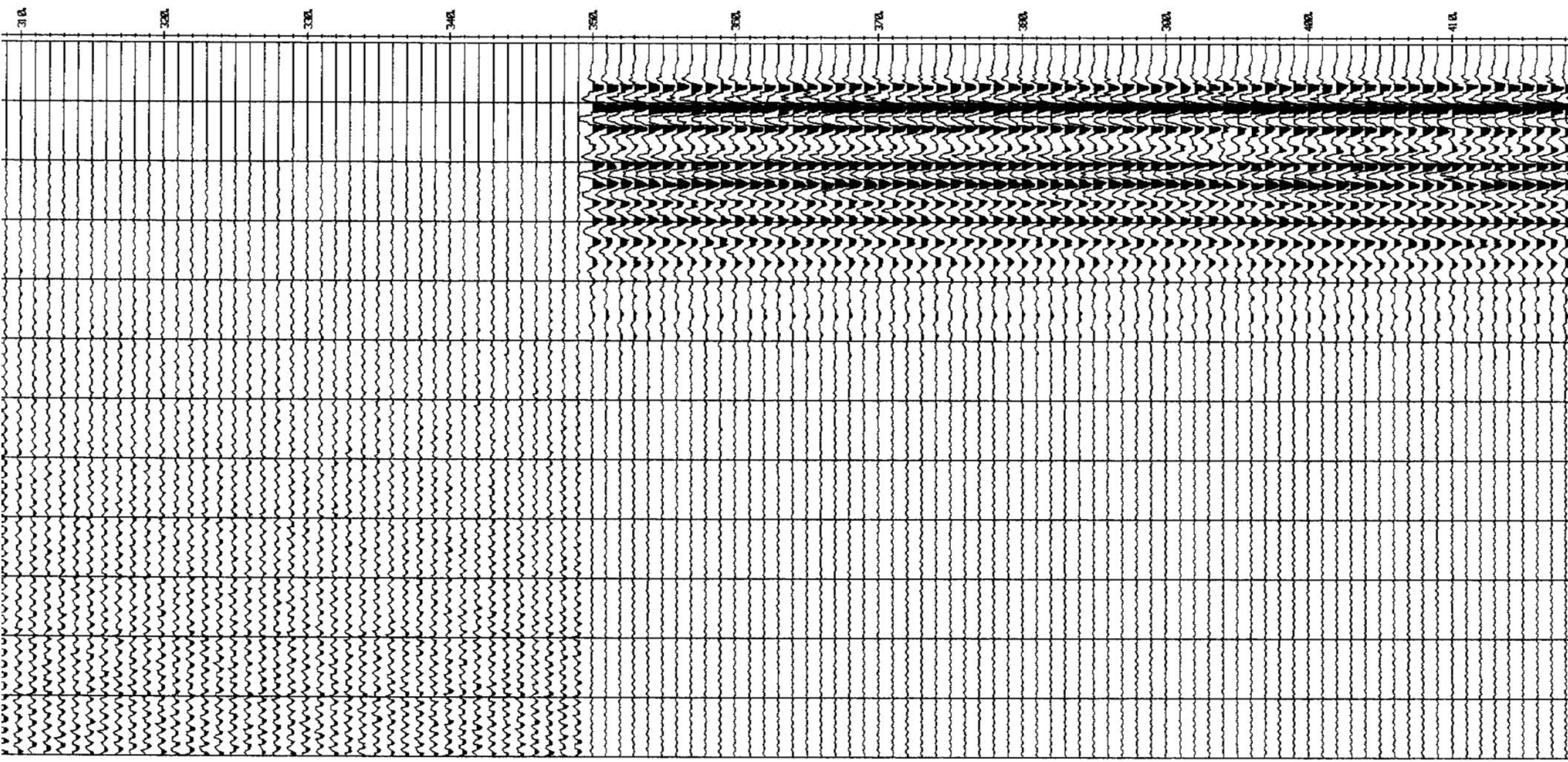

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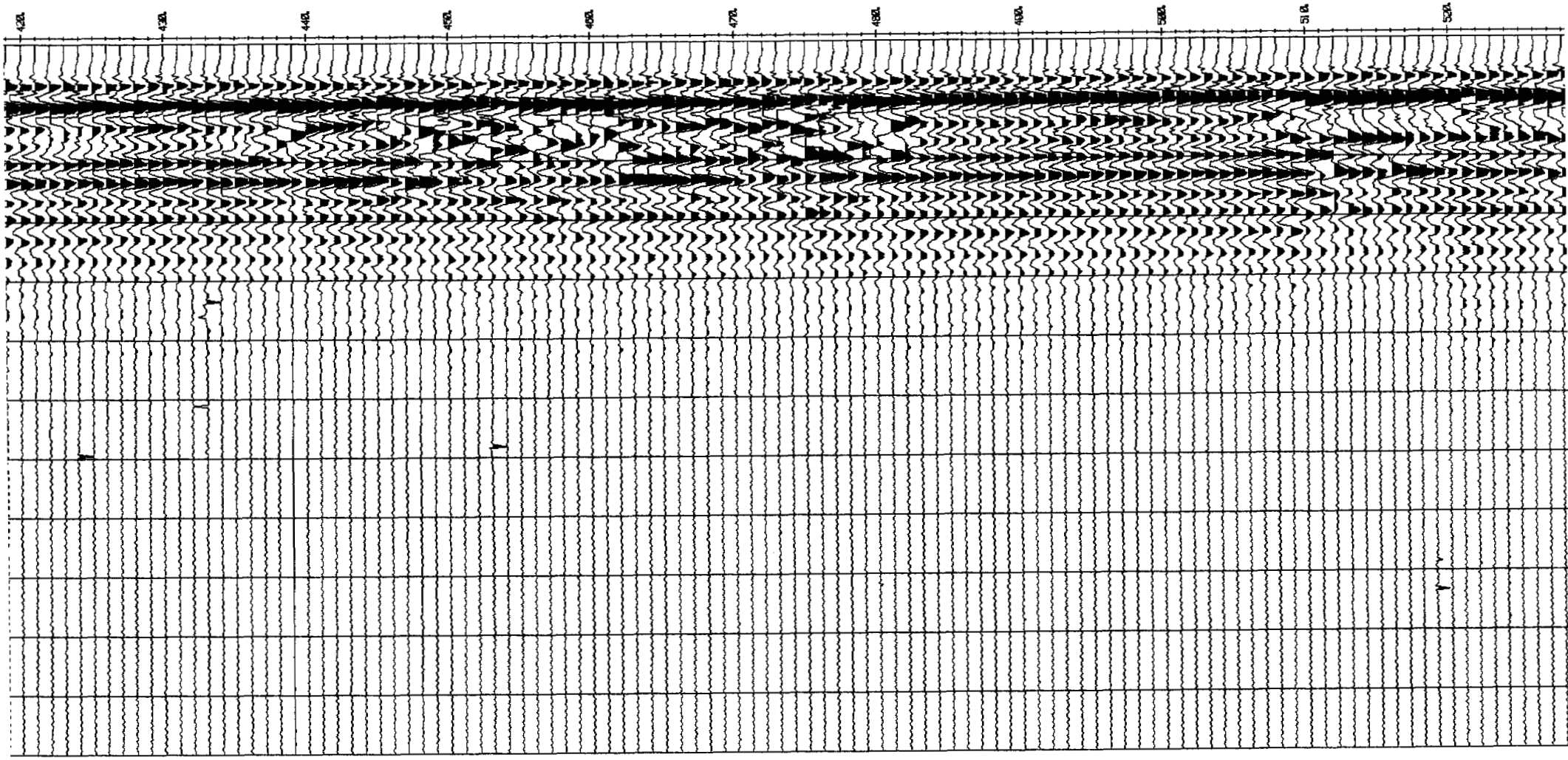

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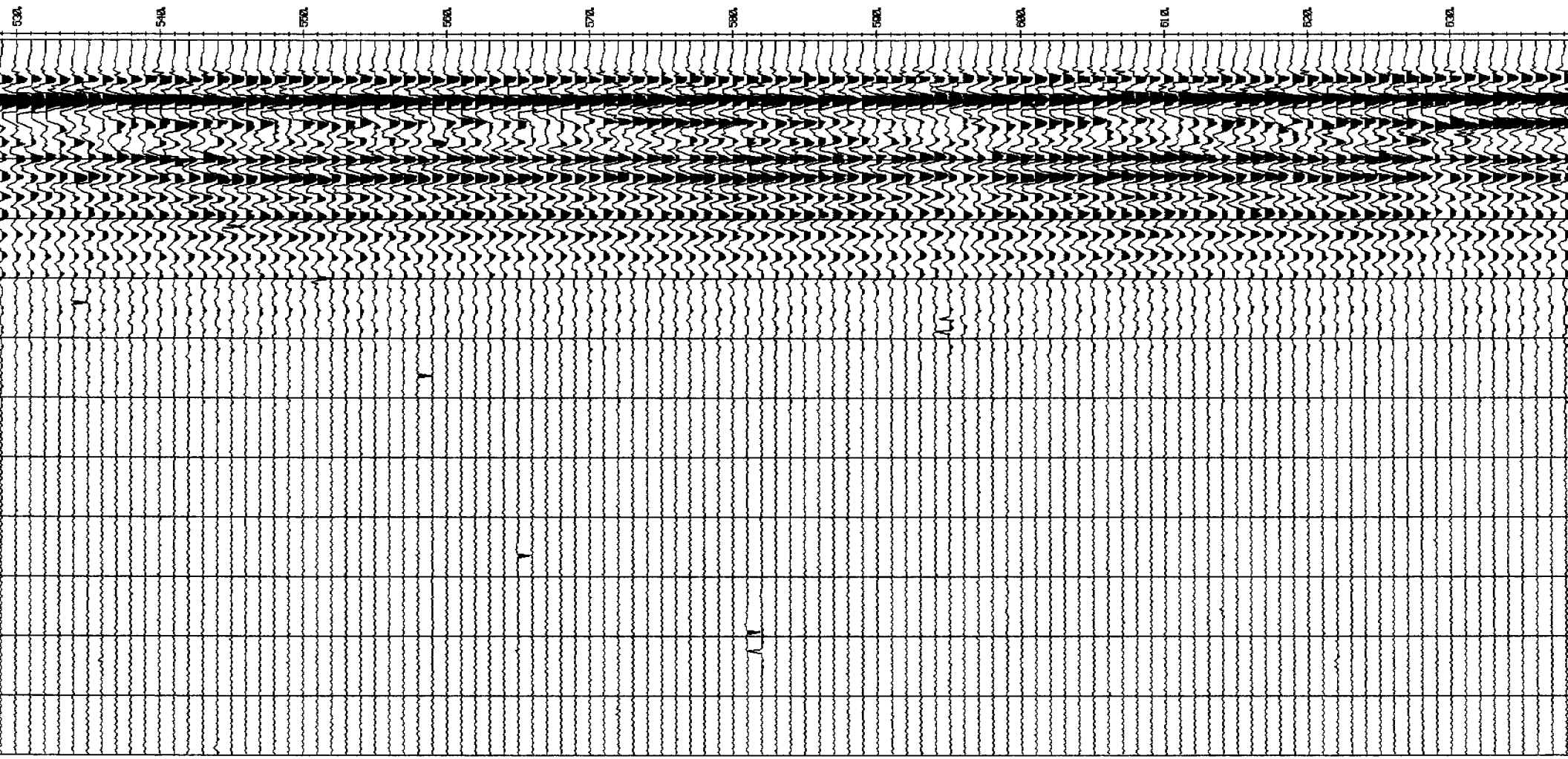

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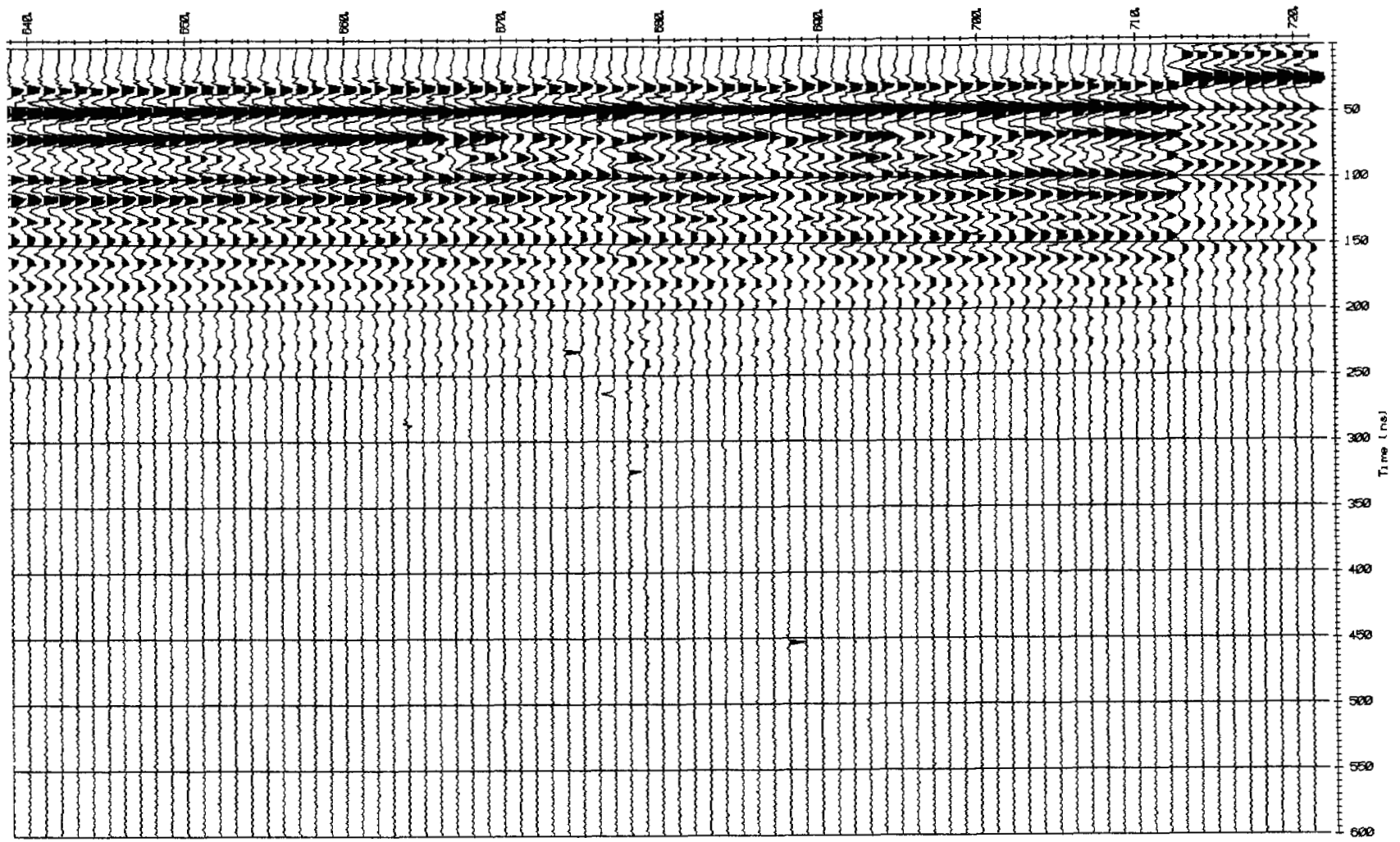
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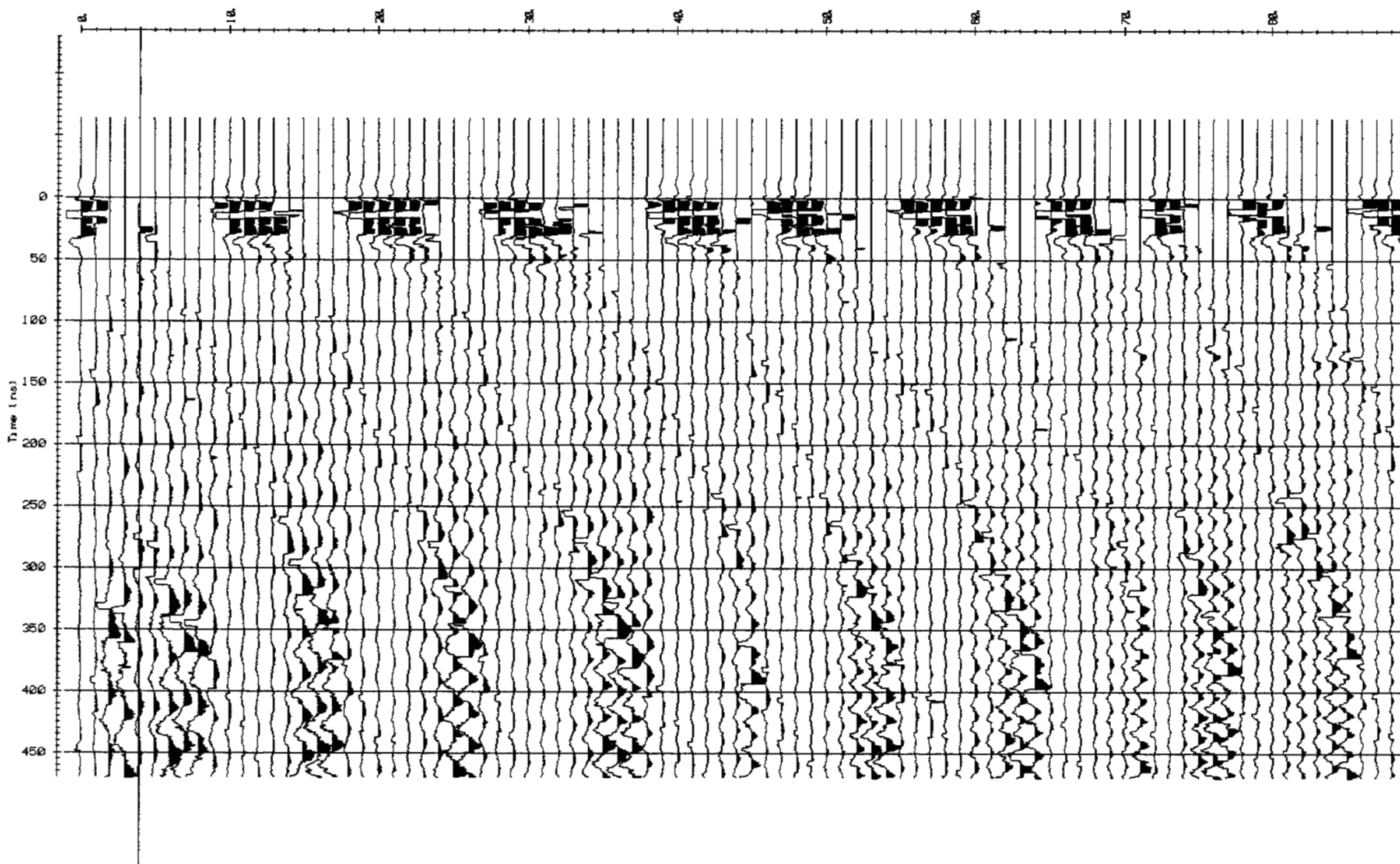
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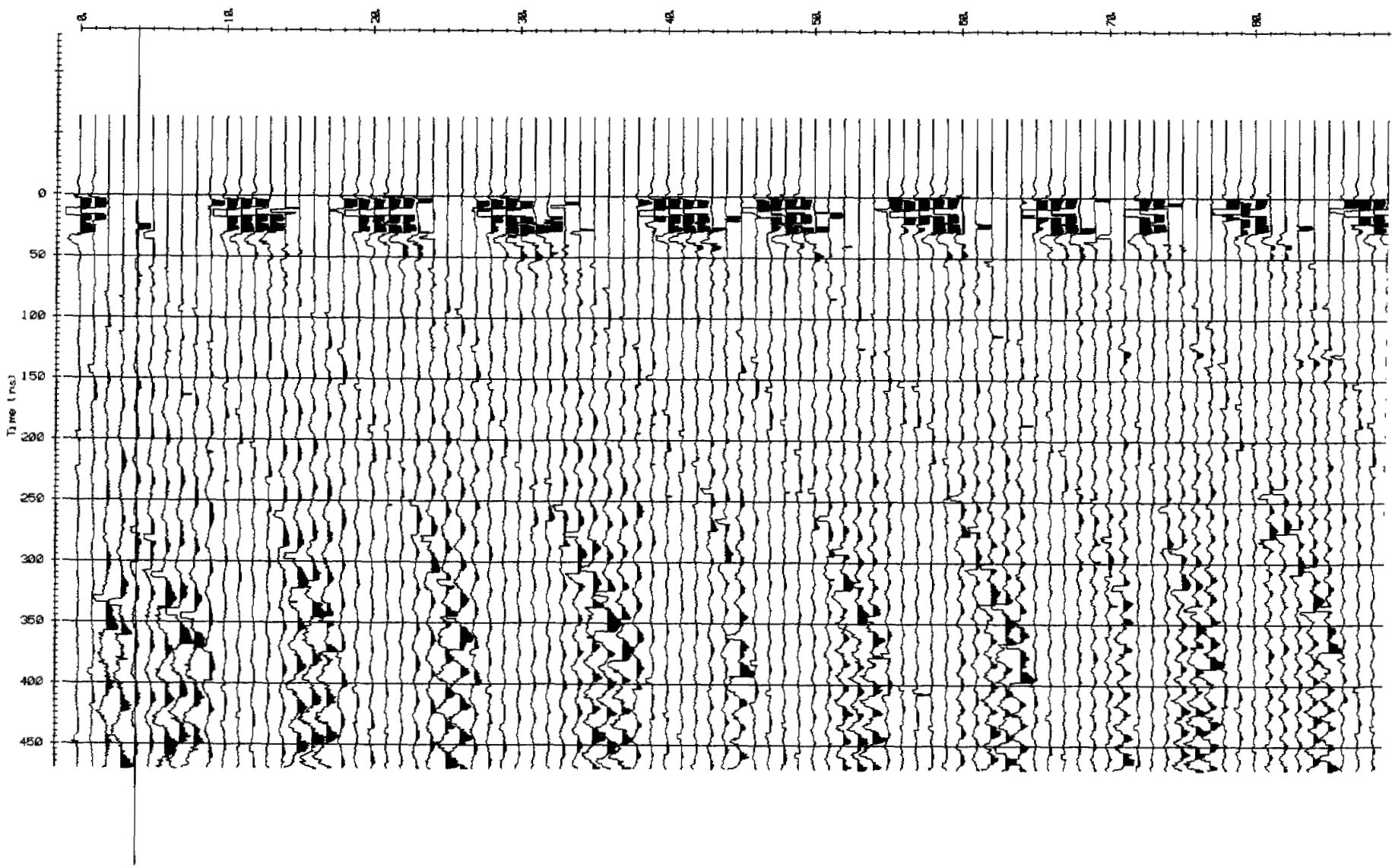
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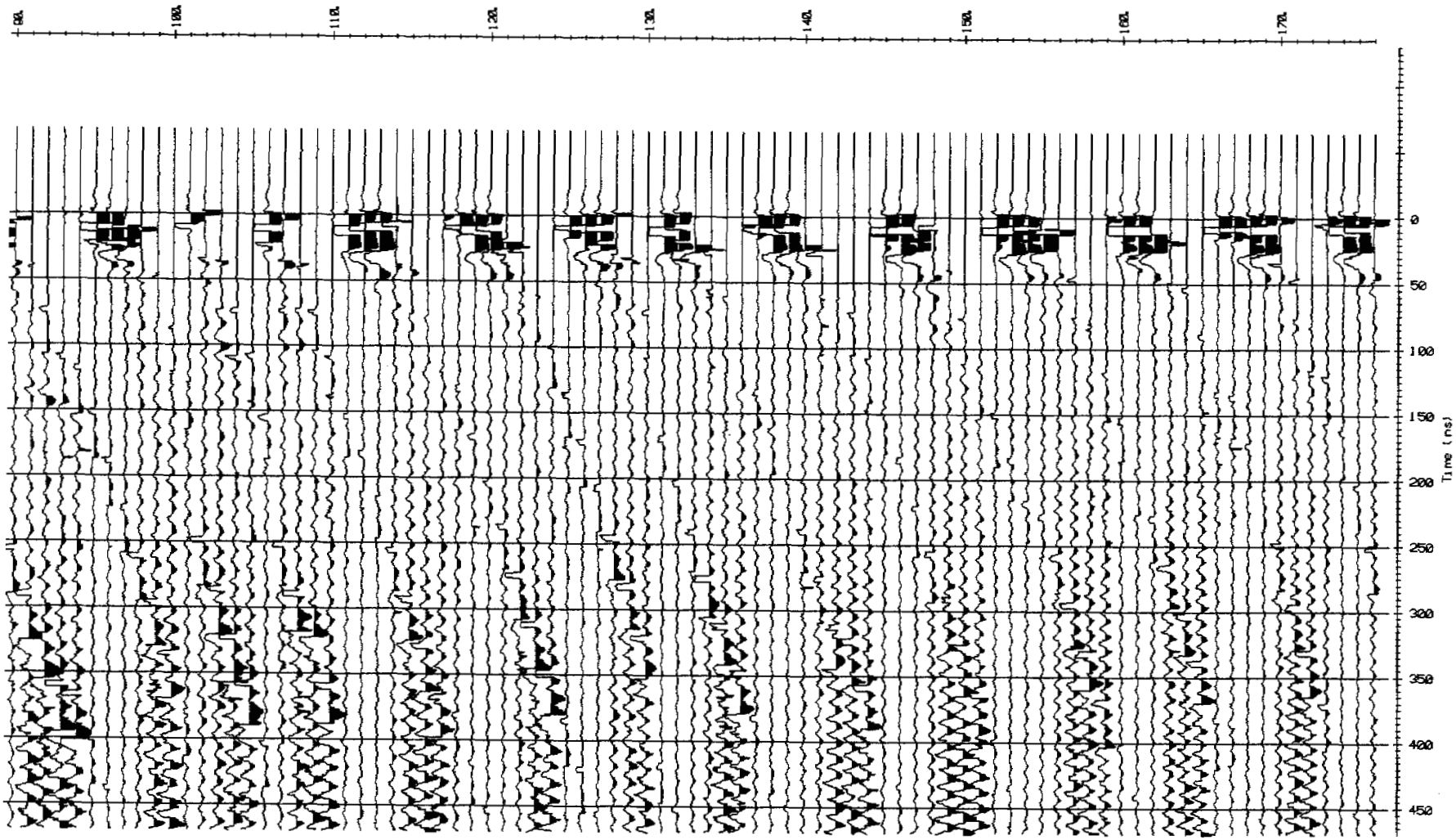
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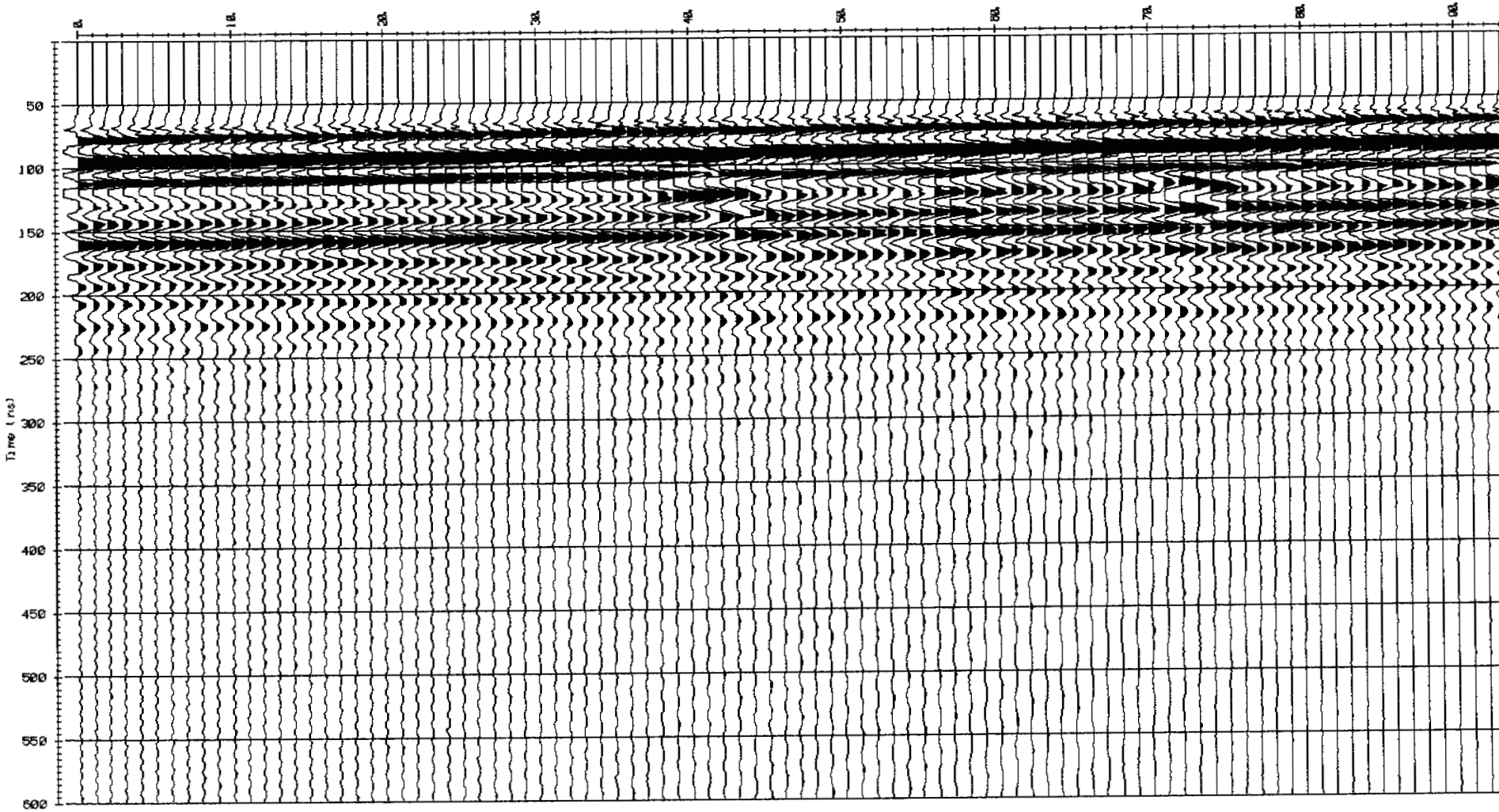
LN6C-1-7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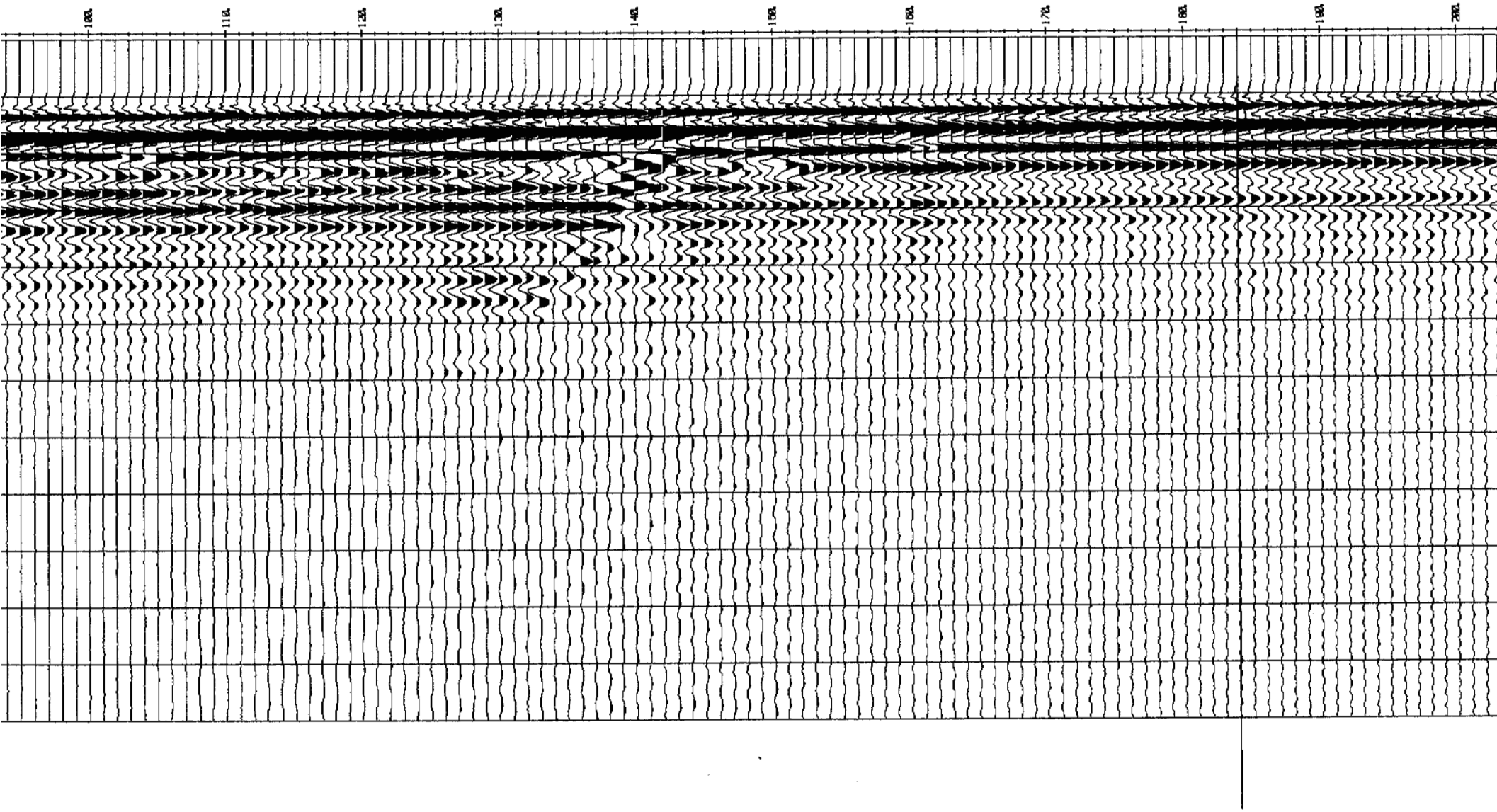
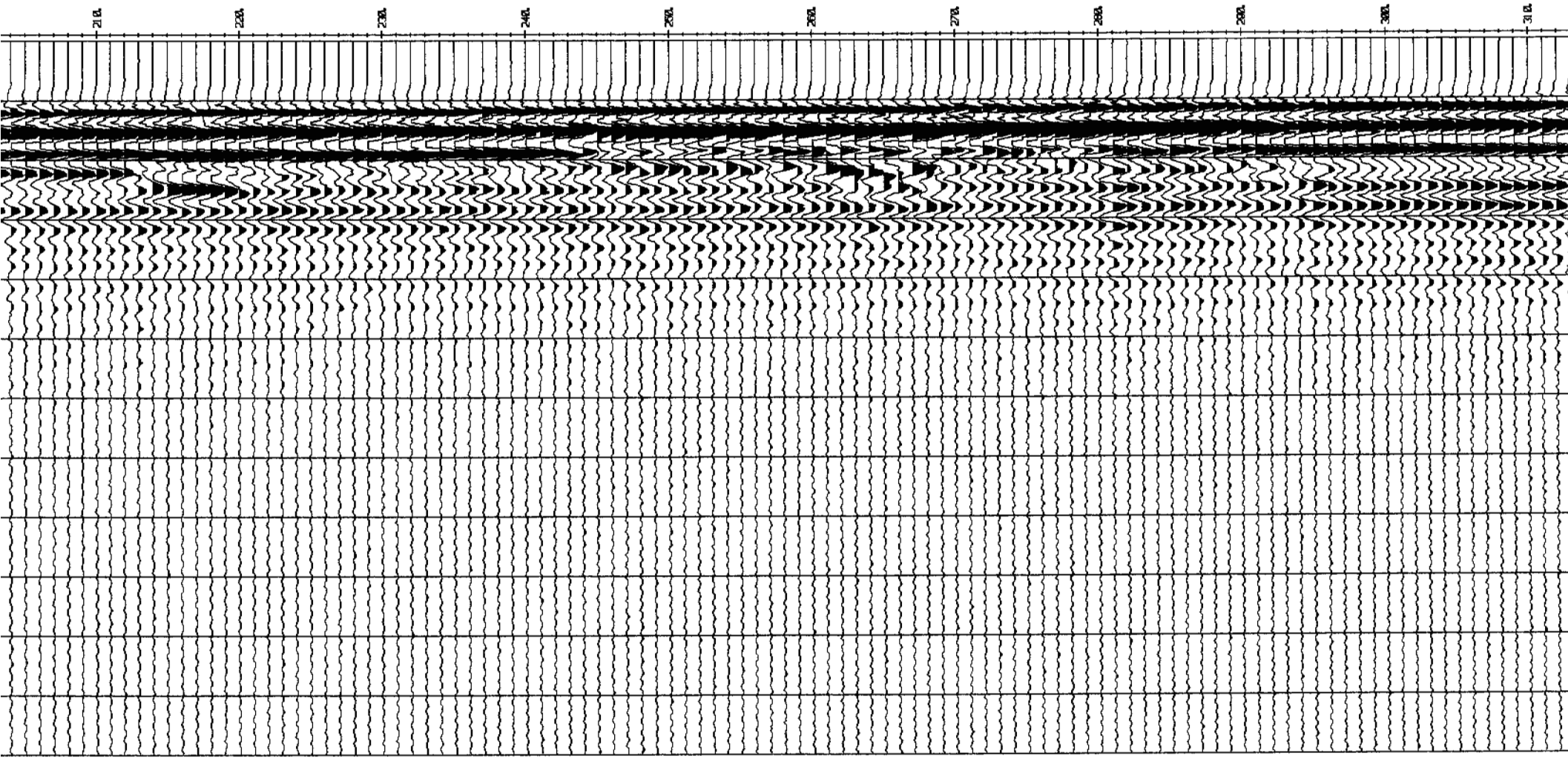
LN6C-1-7

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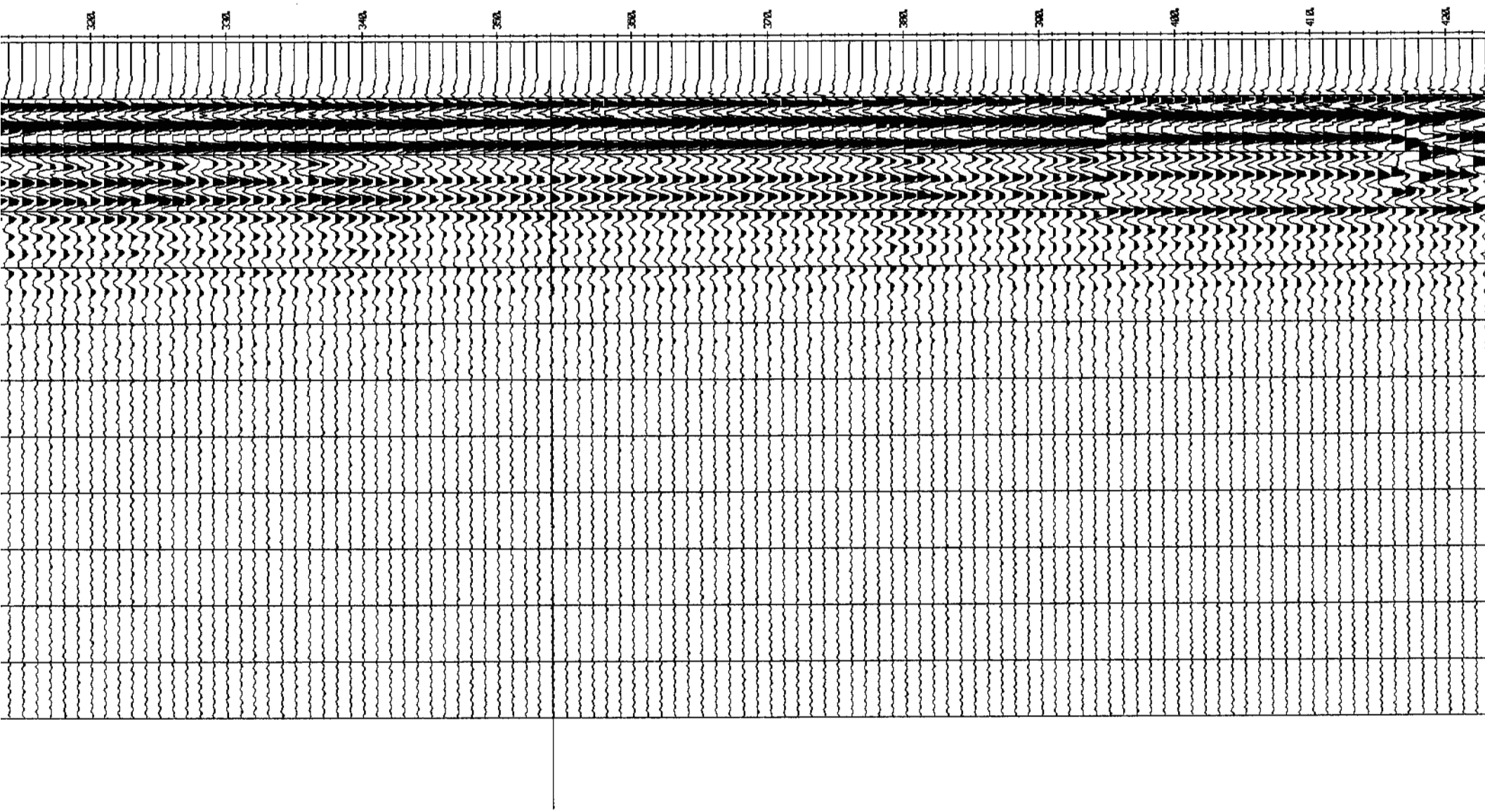
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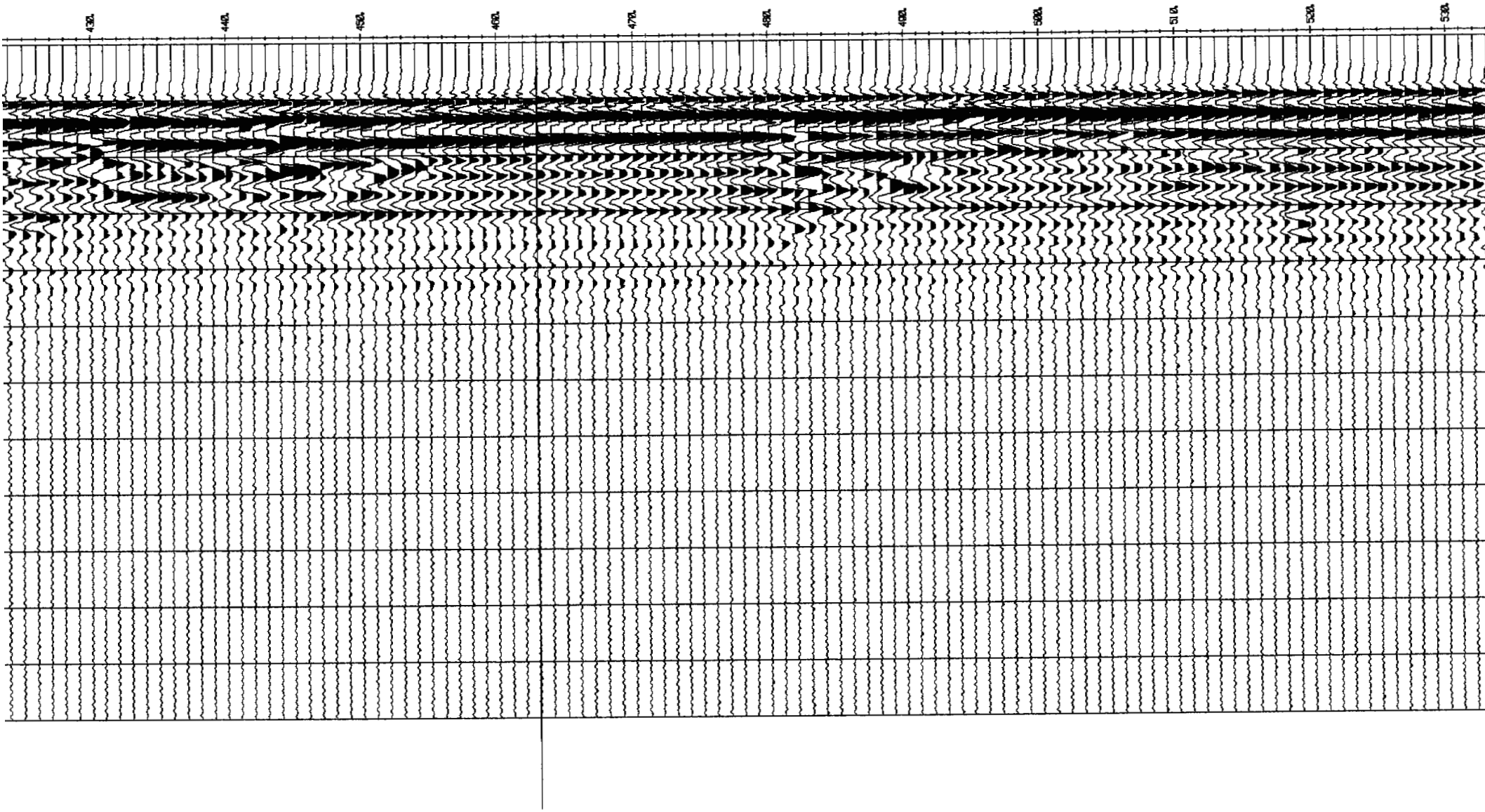
LN6C-1-7



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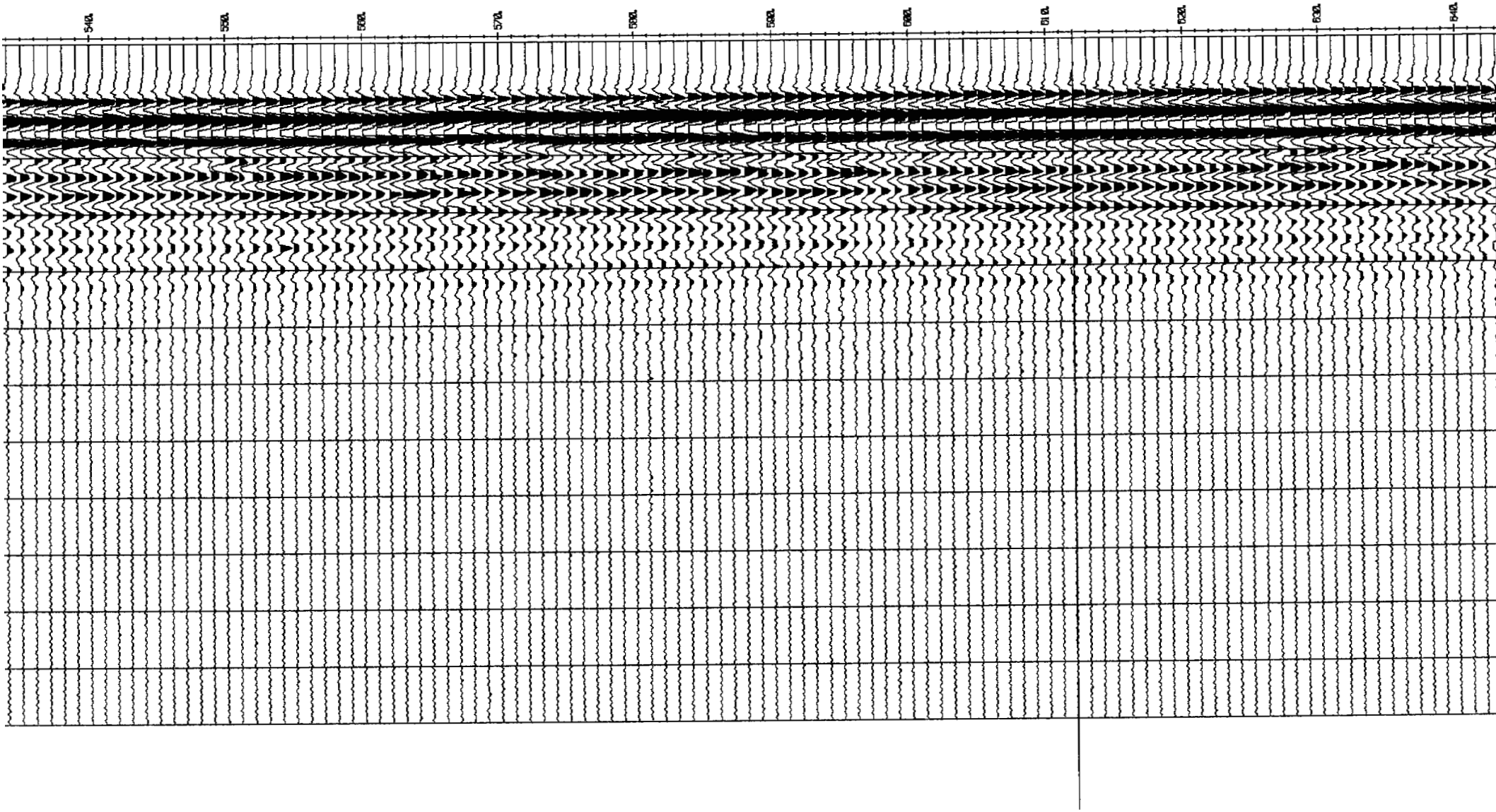

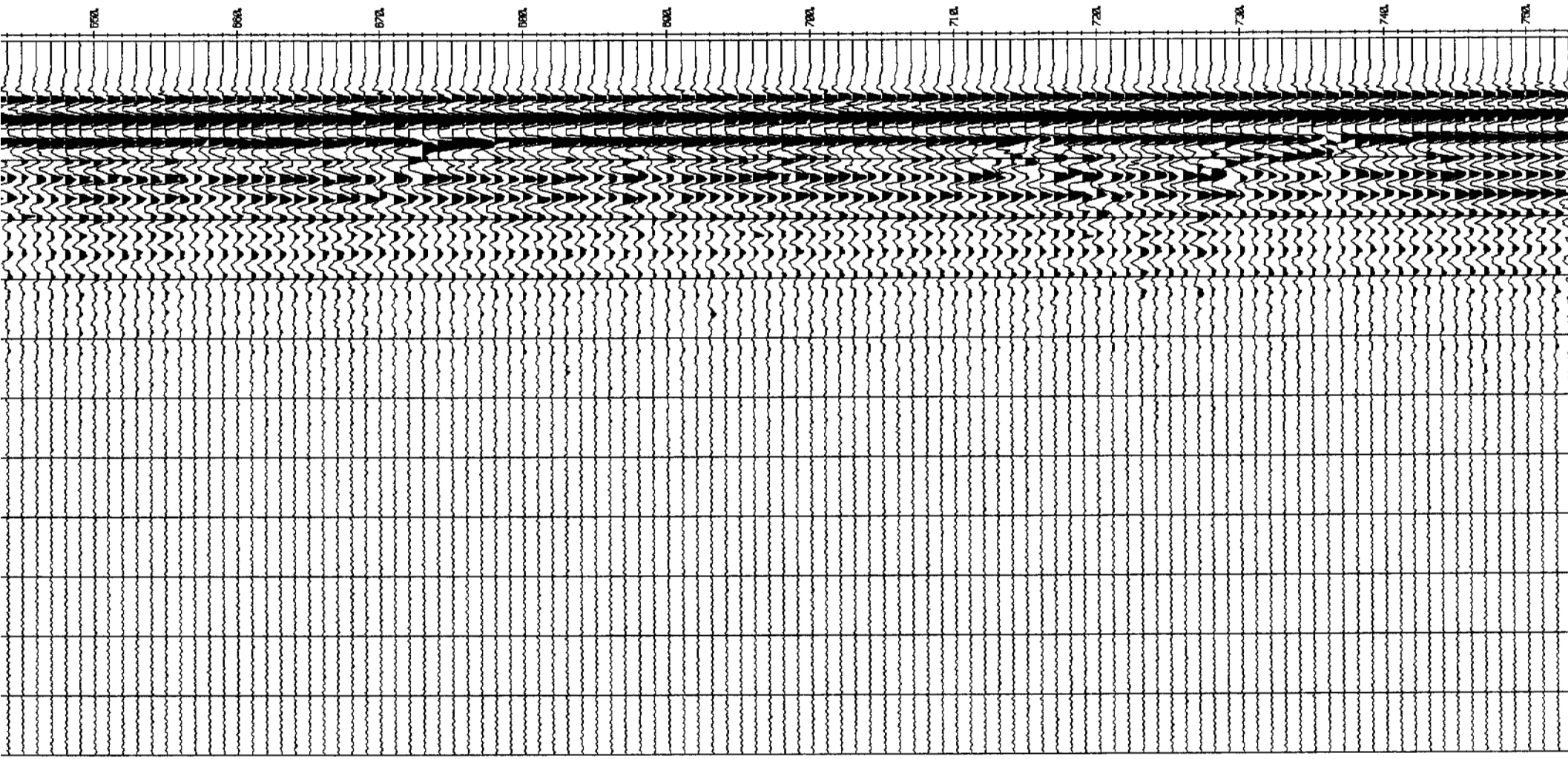
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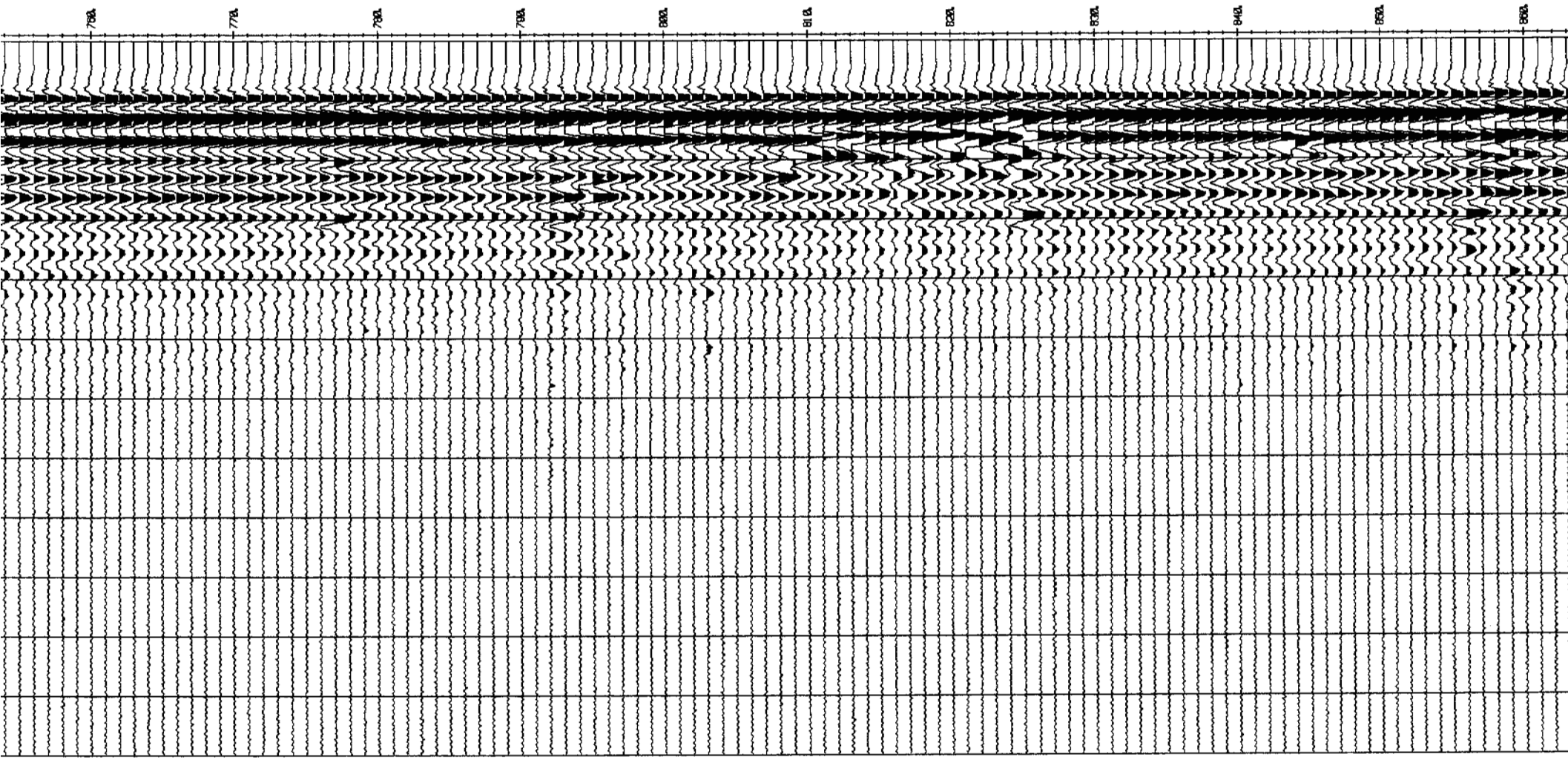
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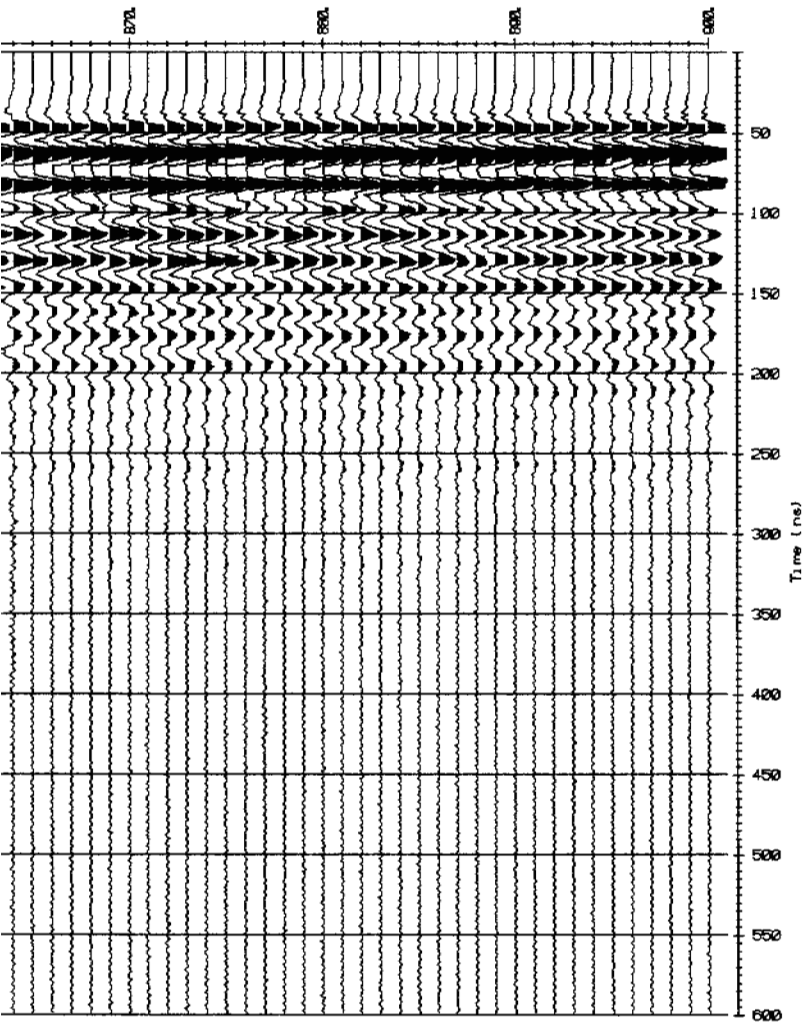
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100
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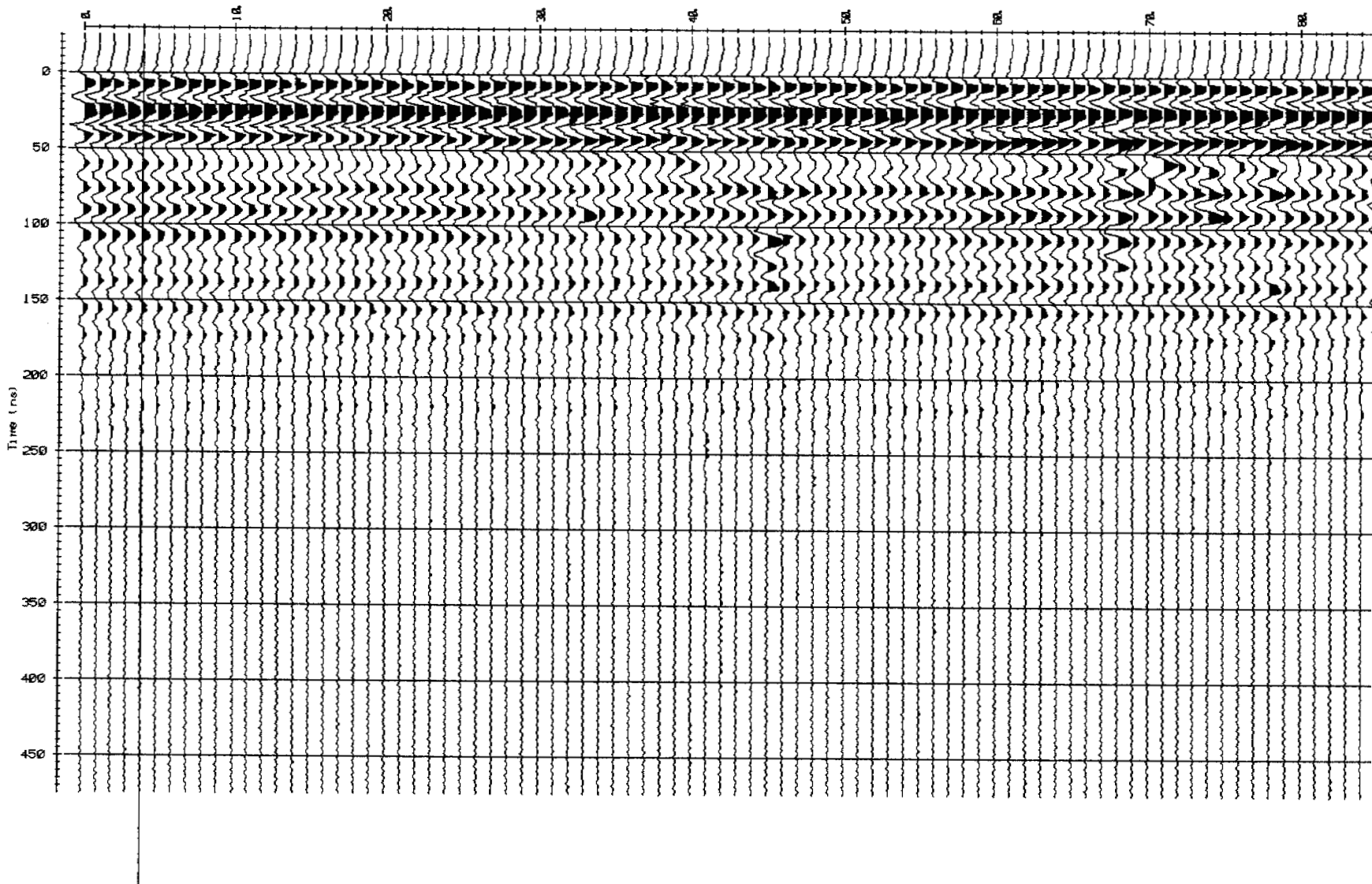
400
450
500
550
600
Time (ns)

LN6C-1-8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10
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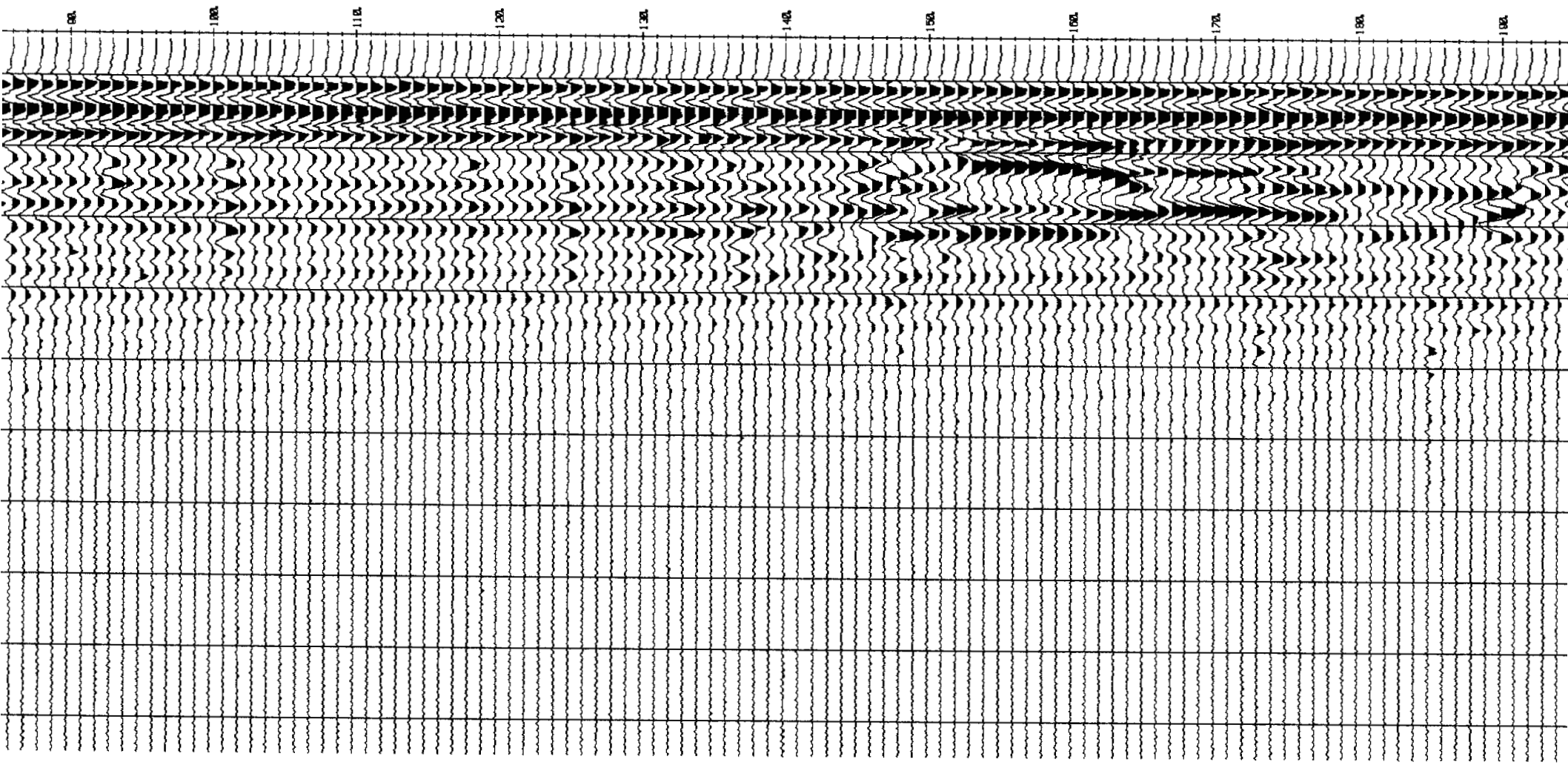
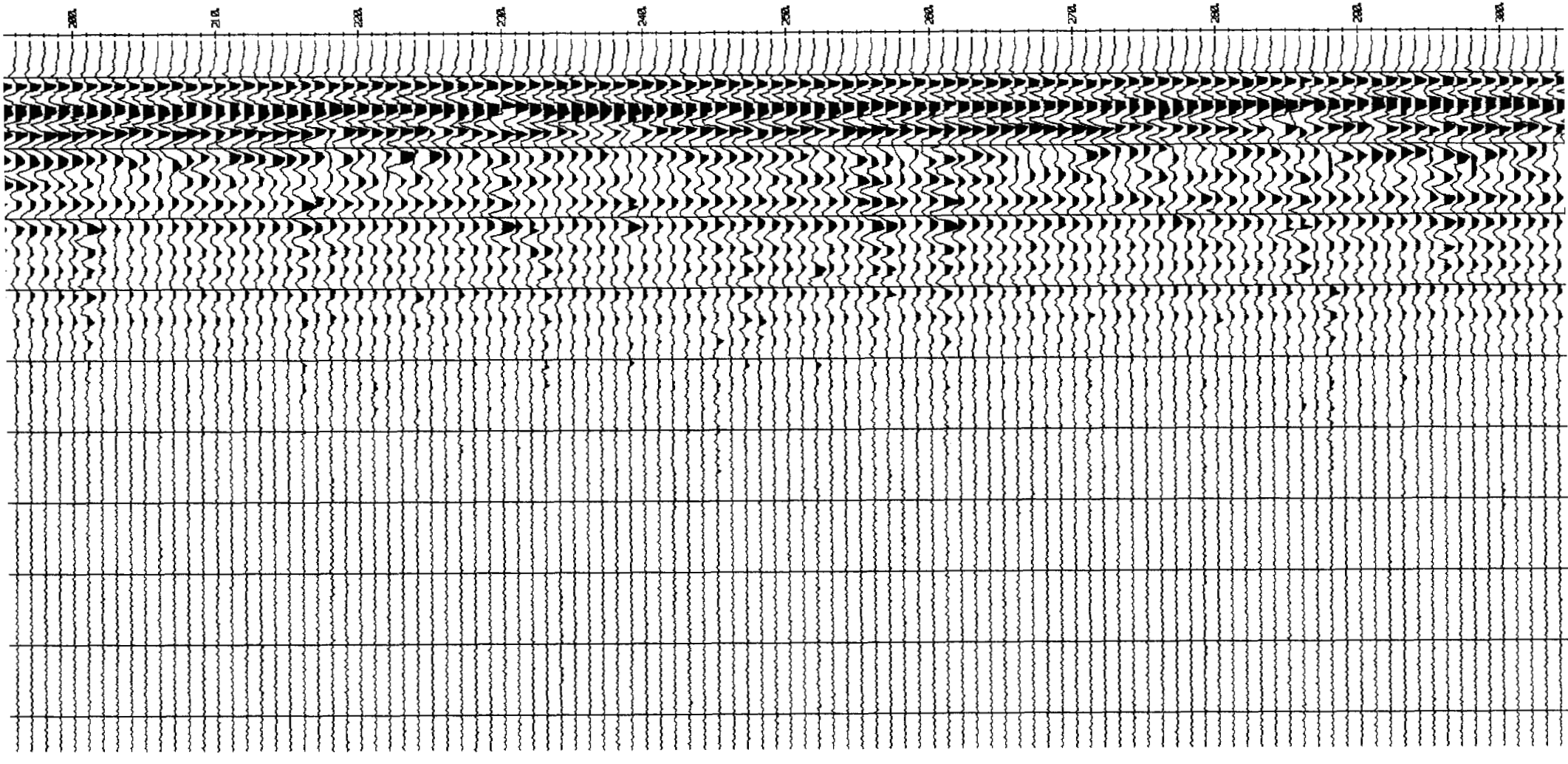
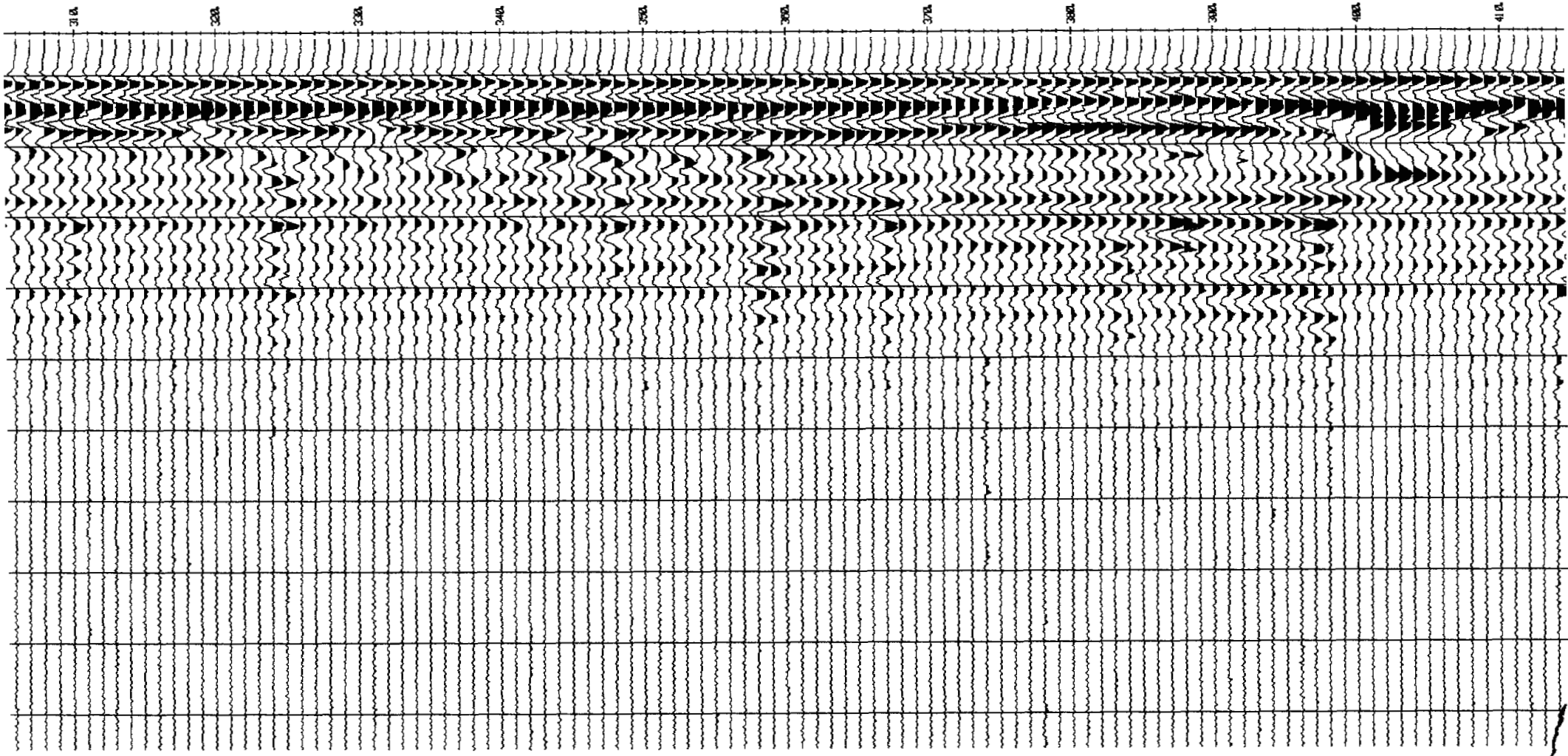
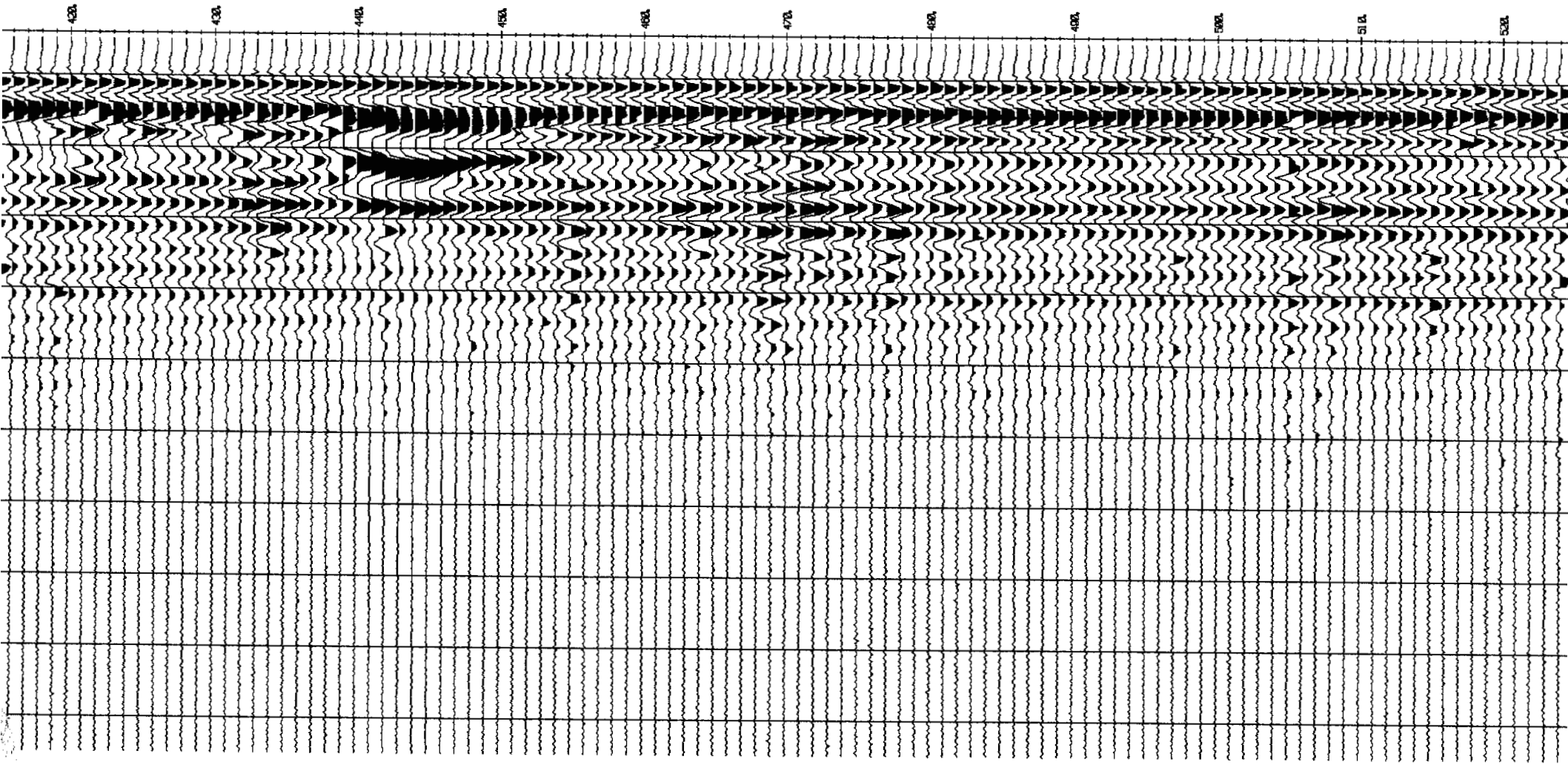
300
350
400
450
Time (ns)

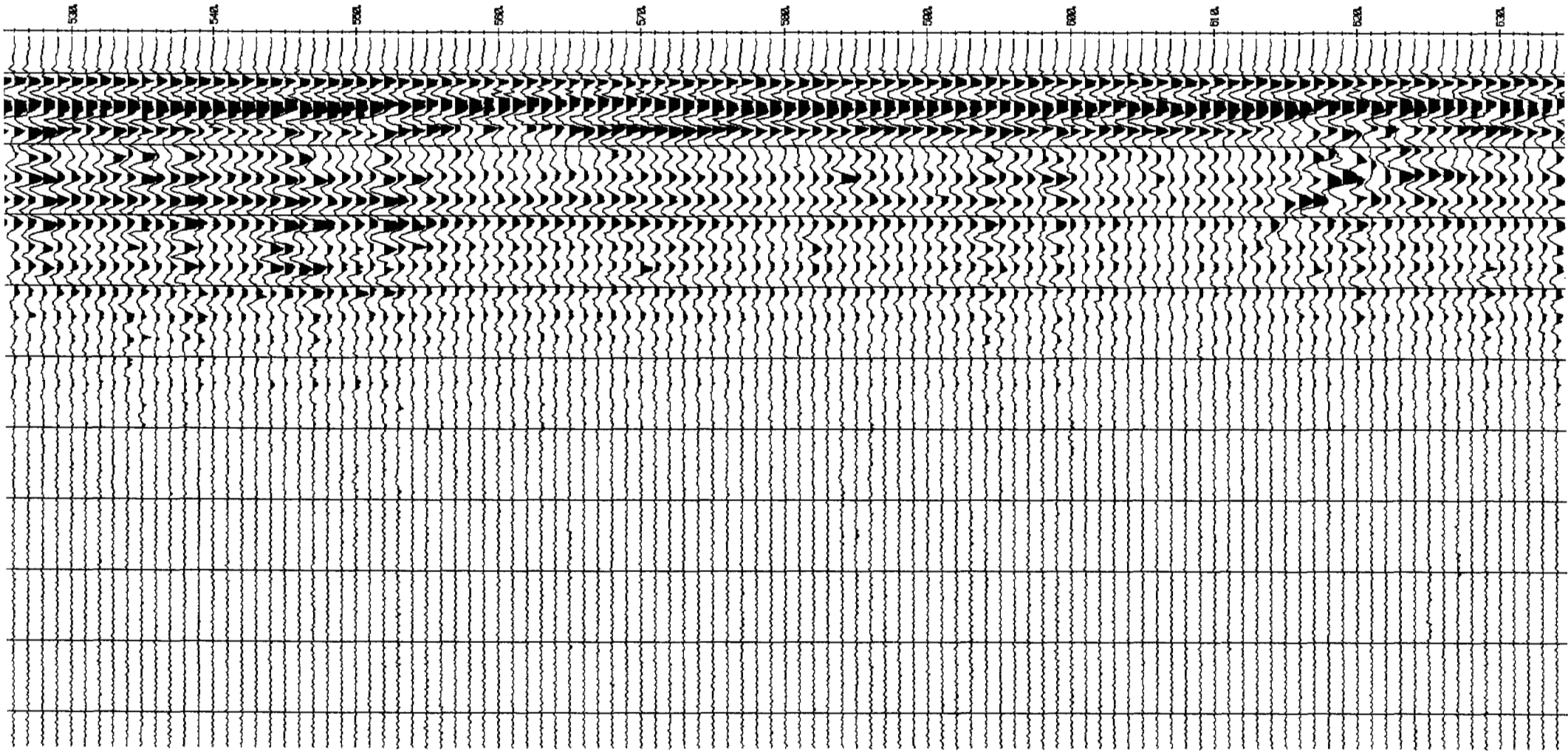




LN6C-1-8







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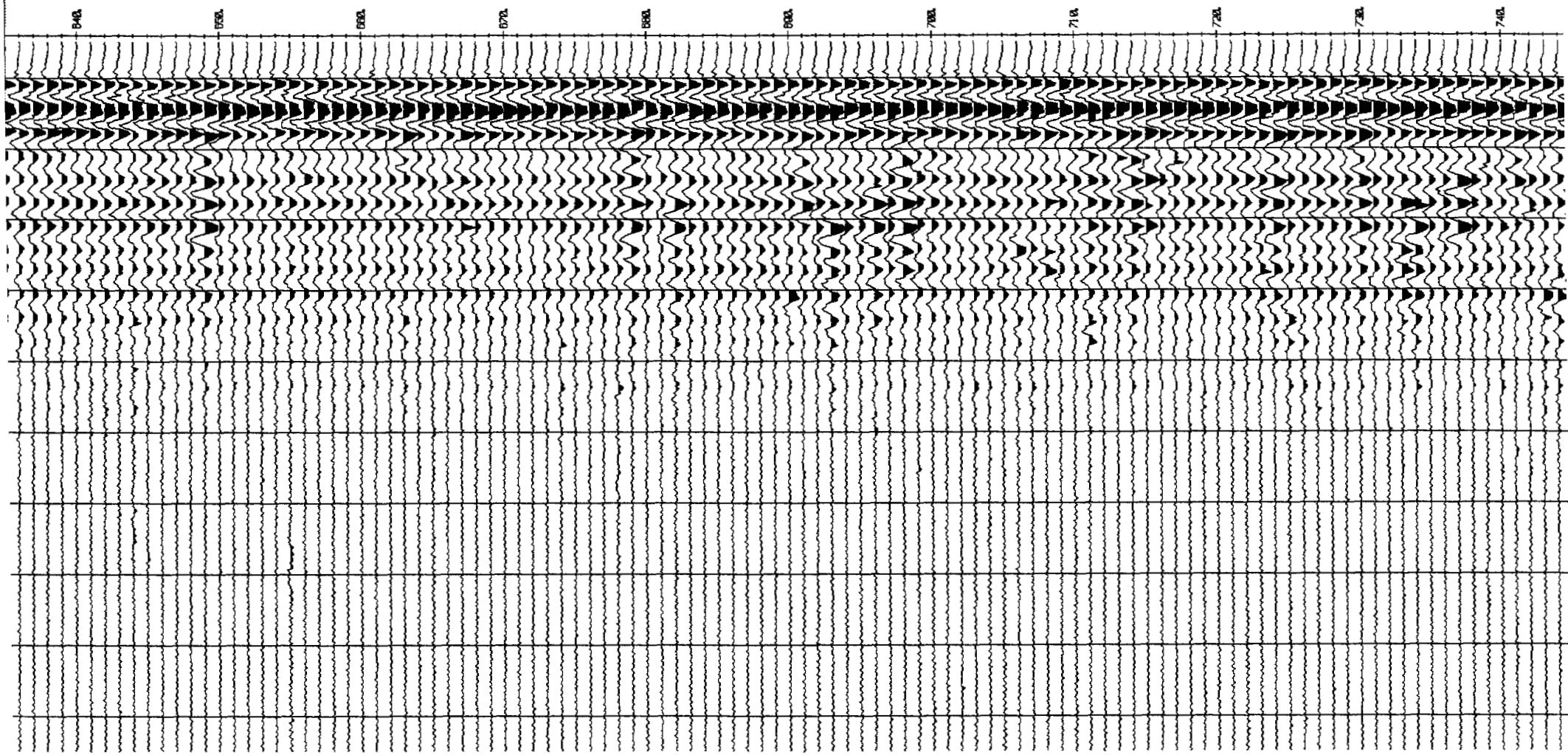

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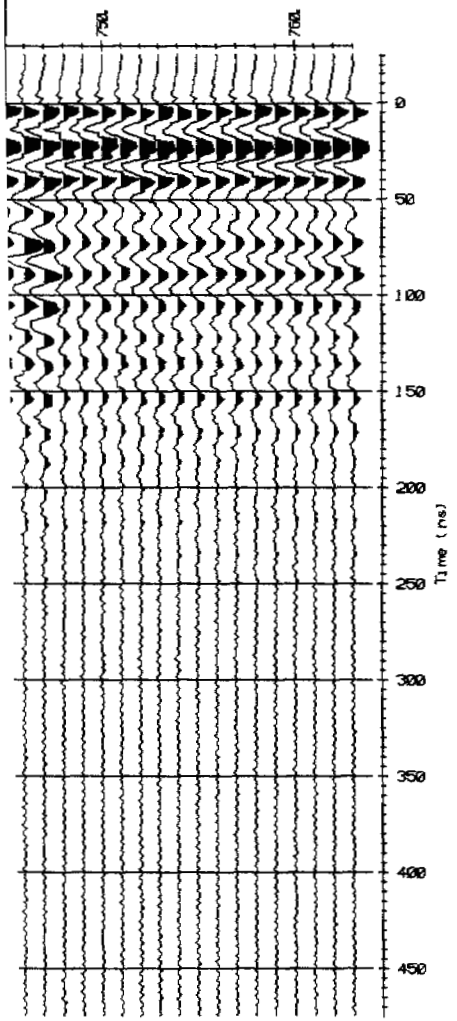

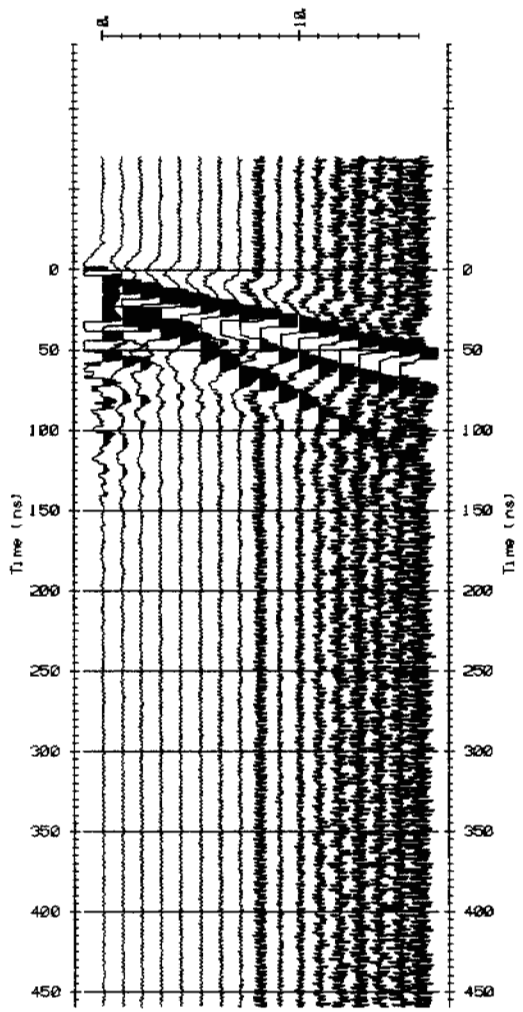
0
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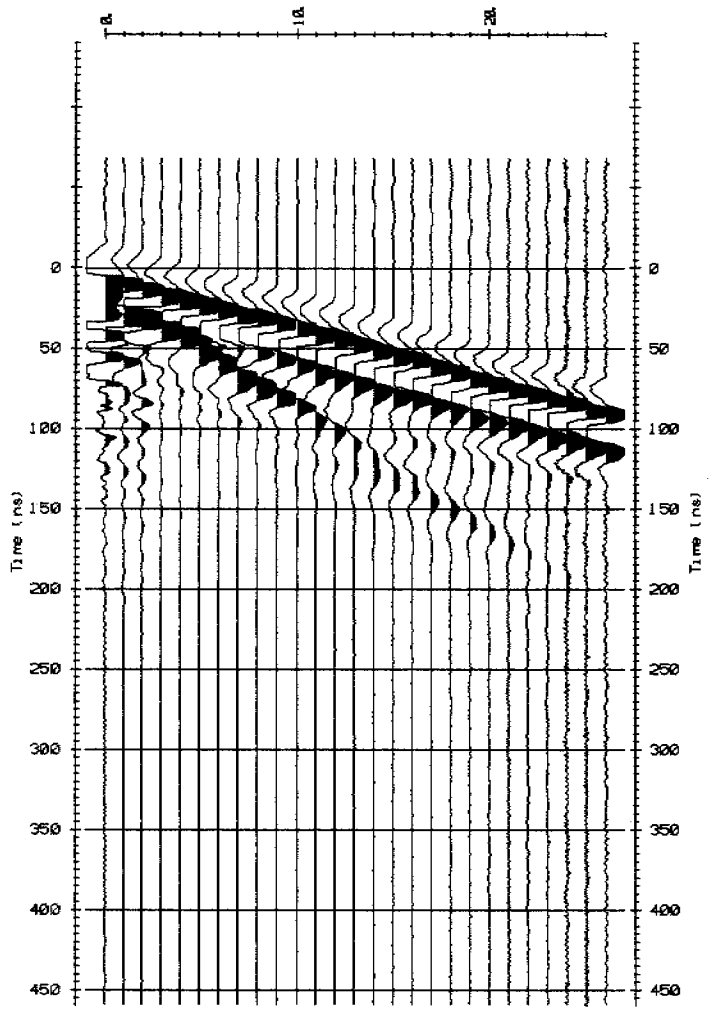
100
150
200
250
300
350
400
450
Time (ns)


0
10
20
0
50
100
150
200
250
300
350
400
450
Time (ns)

APPENDIX E

TARGET AREA 4B-1
UNPROCESSED GPR DATA

TARGET AREA 4B-1

GPR HEADER FILE DATA SHEETS

TARGET AREA 4B-1

GPR HEADER FILE DATA SHEETS

Data File
101-11413

Line4B-1-1.dtl

Target Area 4B-1, Line 4B-1-1
N. Parry, S. Traynor
27/03/94

Number of Traces	=	293
Number of pts/trc	=	500
Timezero at point	=	60
Total time window	=	400
Starting position	=	0.0000
Final position	=	292.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	100 maximum
Selection Time	=	-50 to 350 ns
Trace	=	1 to 293

Distance : scan ratio
0 to 293 : 1.75 m / scan

Data File
101-11413

Line4B-1-2.dt1

Target Area 4B-1, Line 4B-1-1 continued
N. Parry, S. Traynor
27/03/94

Number of Traces	=	515
Number of pts/trc	=	500
Timezero at point	=	34
Total time window	=	400
Starting position	=	0.0000
Final position	=	514.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.00 of full window
Region	=	1 to 750
Selection Time	=	-50 to 350 ns
Trace	=	1 to 515

Distance : scan ratio

0 to 87	:	1.05 m / scan
87 to 401	:	0.74 m / scan
401 to 514	:	0.98 m / scan

Data File
101-11413

Line4B-1-3.dt1

Target Area 4B-1, Line 4B-1-2
N. Parry, S. Traynor
27/03/94

Number of Traces	=	176
Number of pts/trc	=	500
Timezero at point	=	37
Total time window	=	400
Starting position	=	0.0000
Final position	=	175.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	1
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.00 of full window
Region	=	1 to 750
Selection Time	=	-50 to 350 ns
Trace	=	1 to 176

Distance : scan ratio

0 to 176	:	0.96 m / scan

Data File
101-11413

Line4B-1-4.dt1

Target Area 4B-1, Line 4B-1-2 continued
N. Parry, S. Traynor
27/03/94

Number of Traces	=	893
Number of pts/trc	=	500
Timezero at point	=	1
Total time window	=	400
Starting position	=	0.0000
Final position	=	892.0000
Step size used	=	1.0000
Position units	=	metres
Nominal frequency	=	100.00
Antenna separation	=	1.0000
Pulsar voltage	=	400
Number of Stacks	=	8
Survey mode	=	Reflection

Processing Selected

Trace stacking	=	1
Points stacking	=	1
Trace differencing	=	N
Gain type	=	SEC
Velocity	=	0.150 m/ns
Attenuation	=	0.100 dB/m
Amount	=	1.00 of full window
Region	=	1 to 750
Selection Time	=	-50 to 350 ns
Trace	=	1 to 893

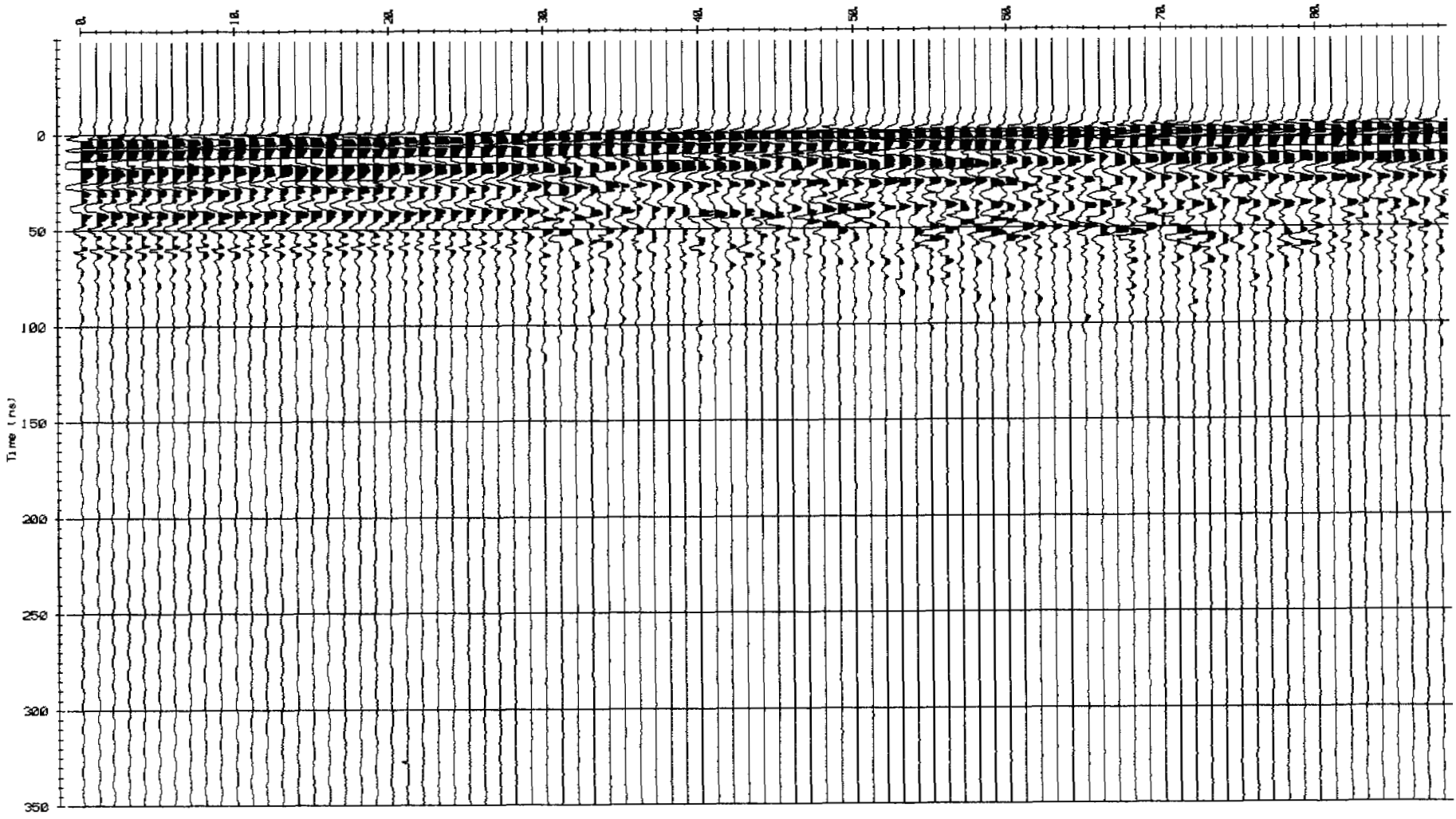
Distance : scan ratio

0 to 128	:	2.96 m / scan
128 to 448	:	0.67 m / scan
448 to 531	:	2.46 m / scan
531 to 893	:	2.46 m / scan

TARGET AREA 4B-1

UNPROCESSED GPR DATA PLOTS

TABLE OF CONTENTS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20.
30.
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50.
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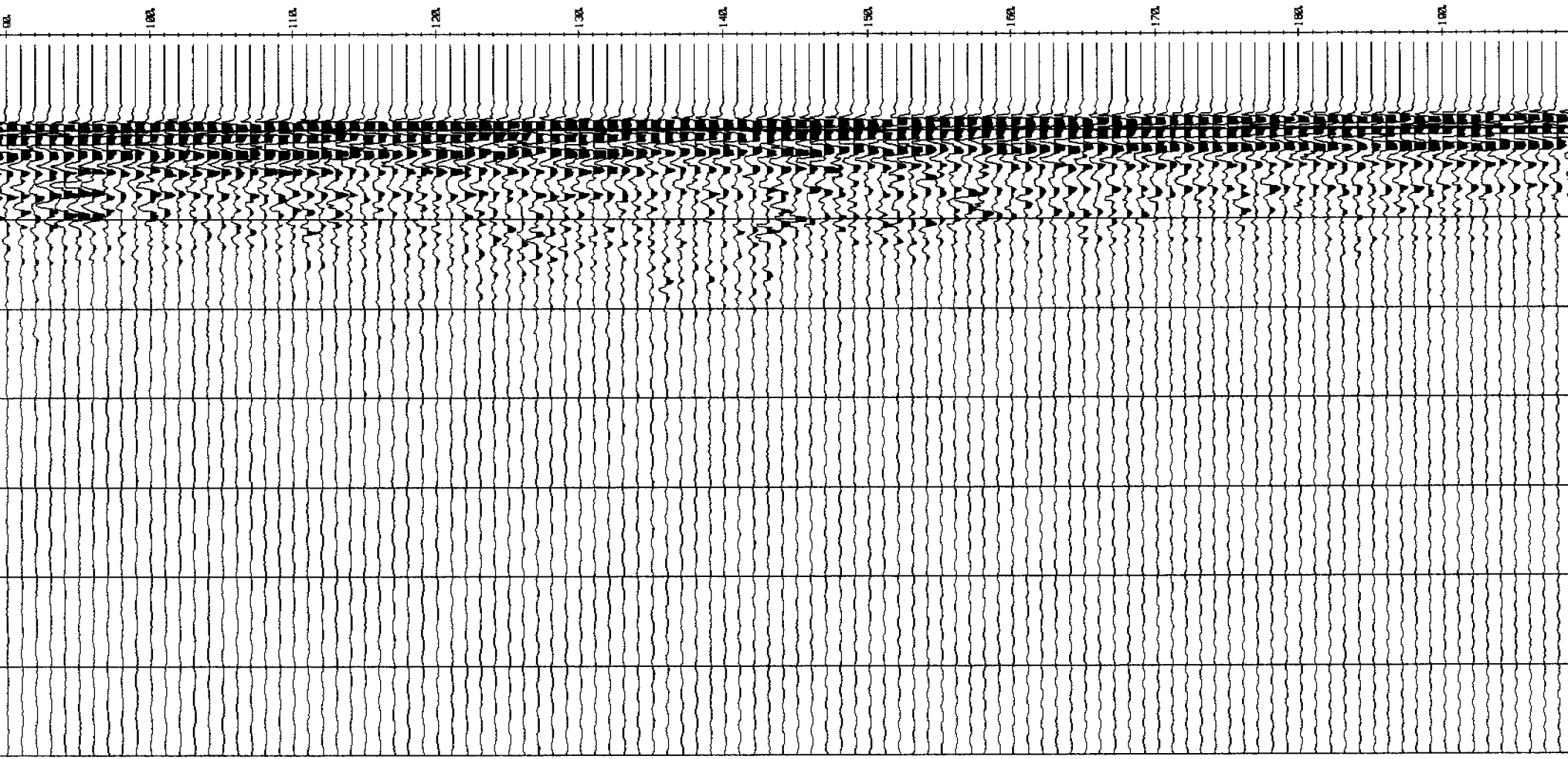
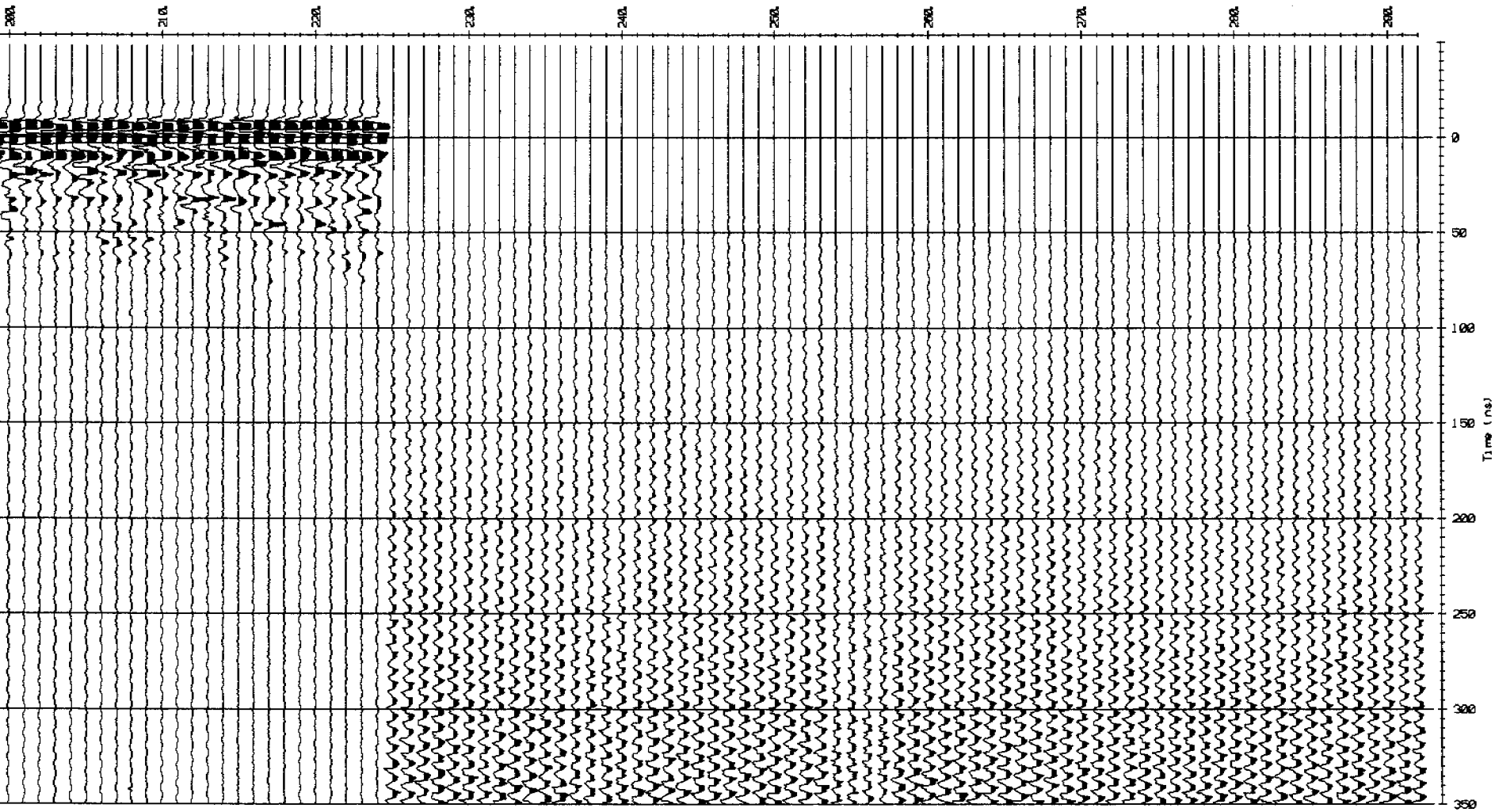
70.
80.
0
50
100
150
200
250
300
350
Time (ns)

LN4B-1-1

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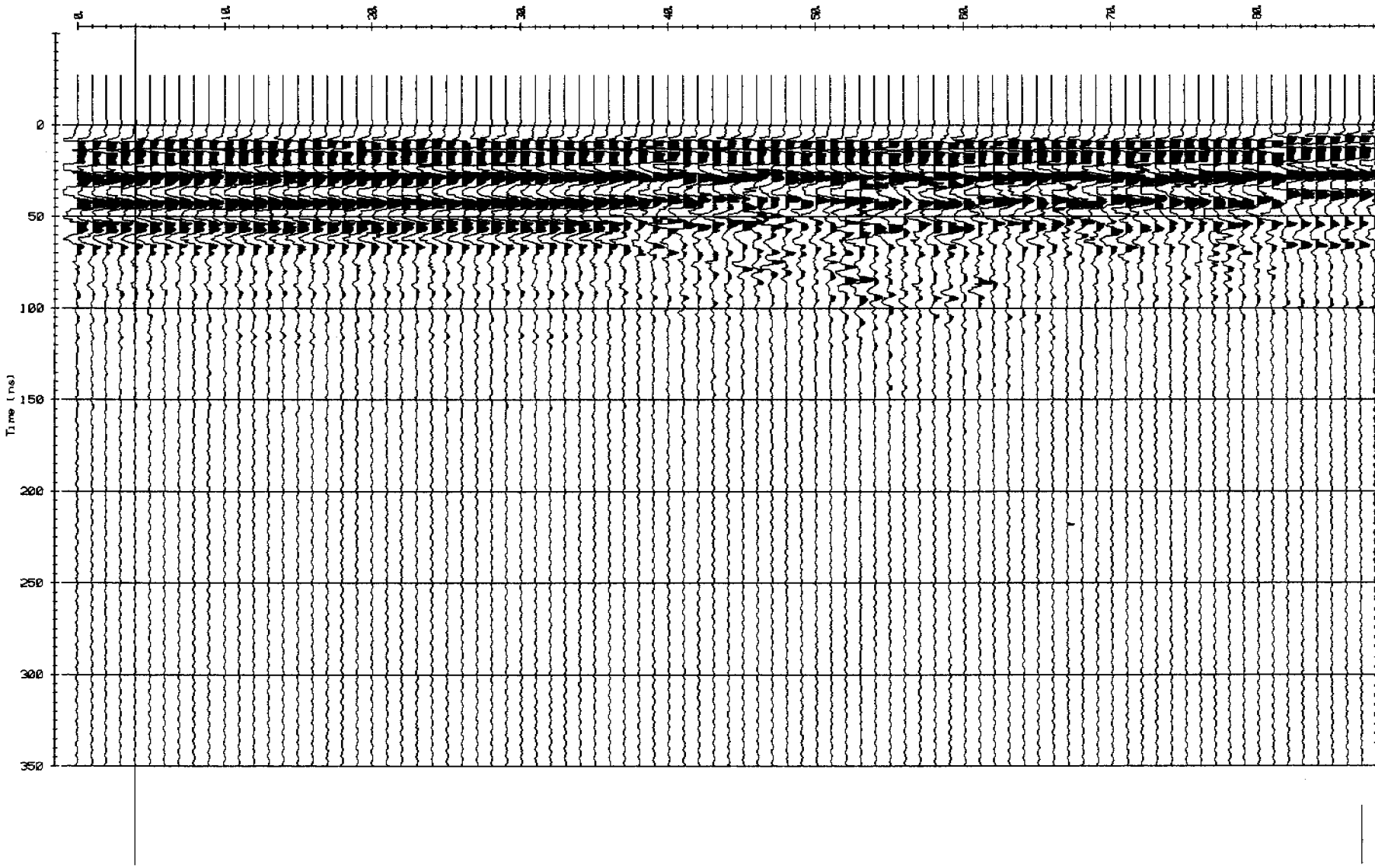
300
350
Time (ns)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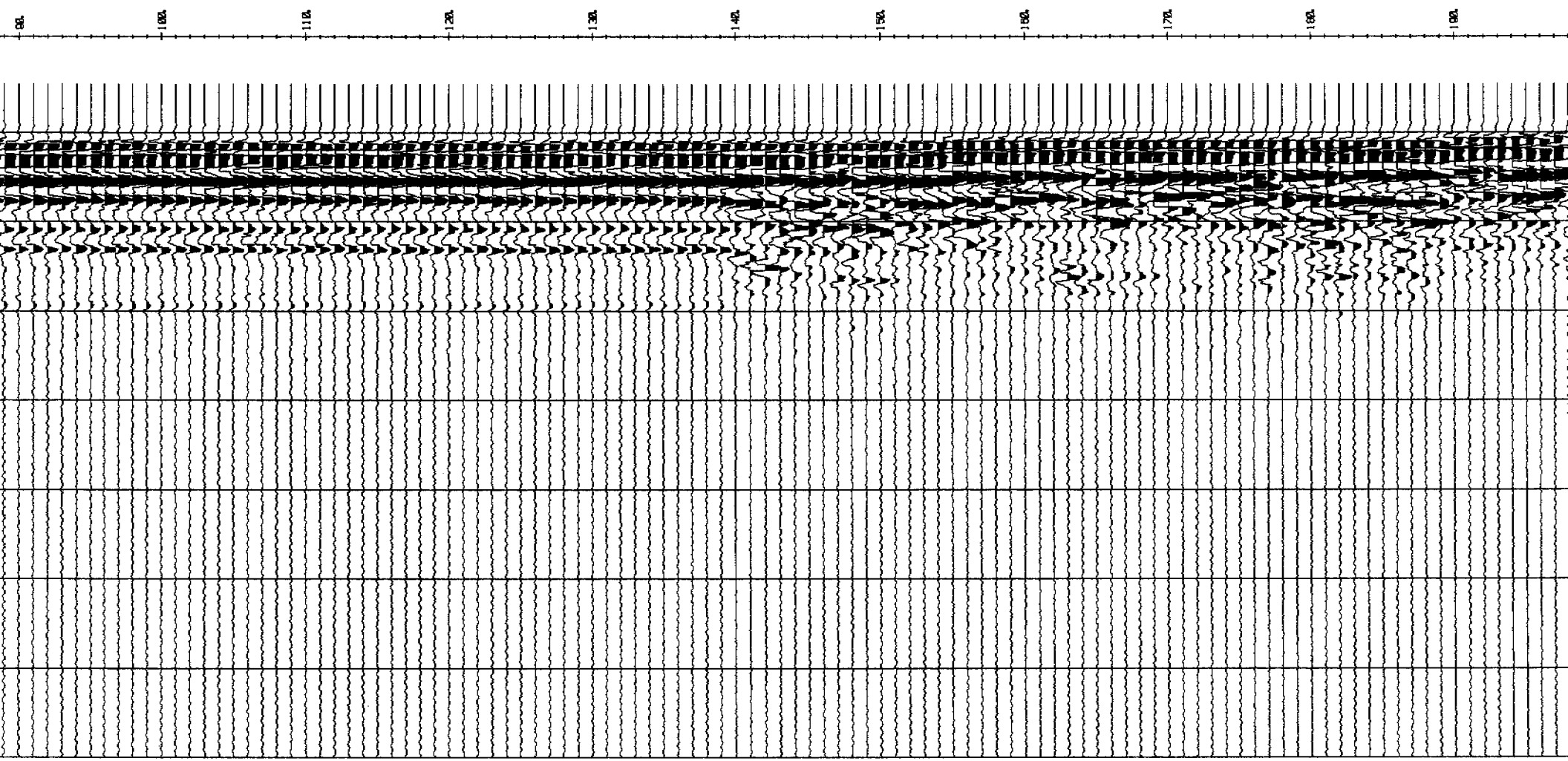
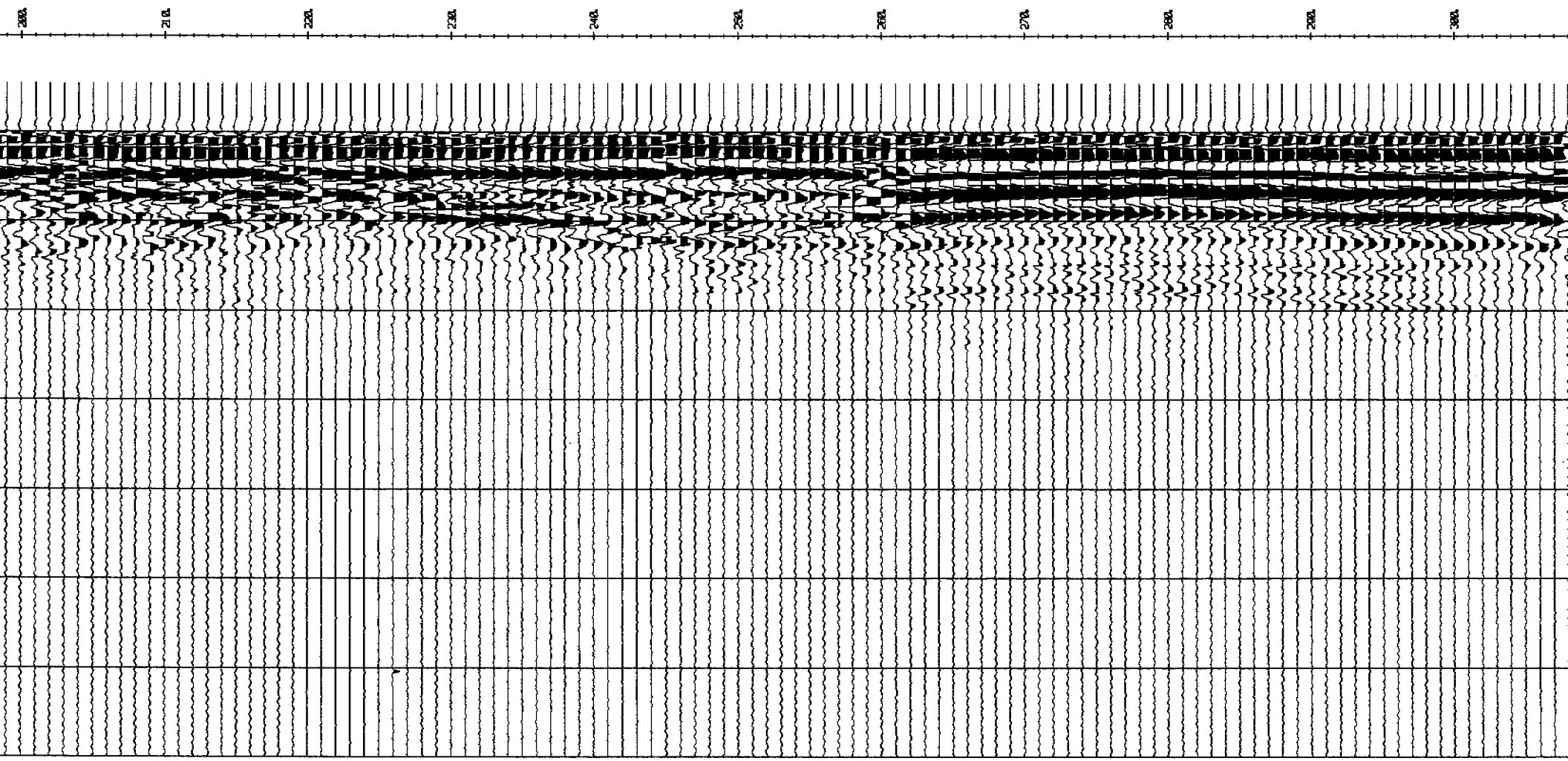
Time (ns)

LN4B-1-2

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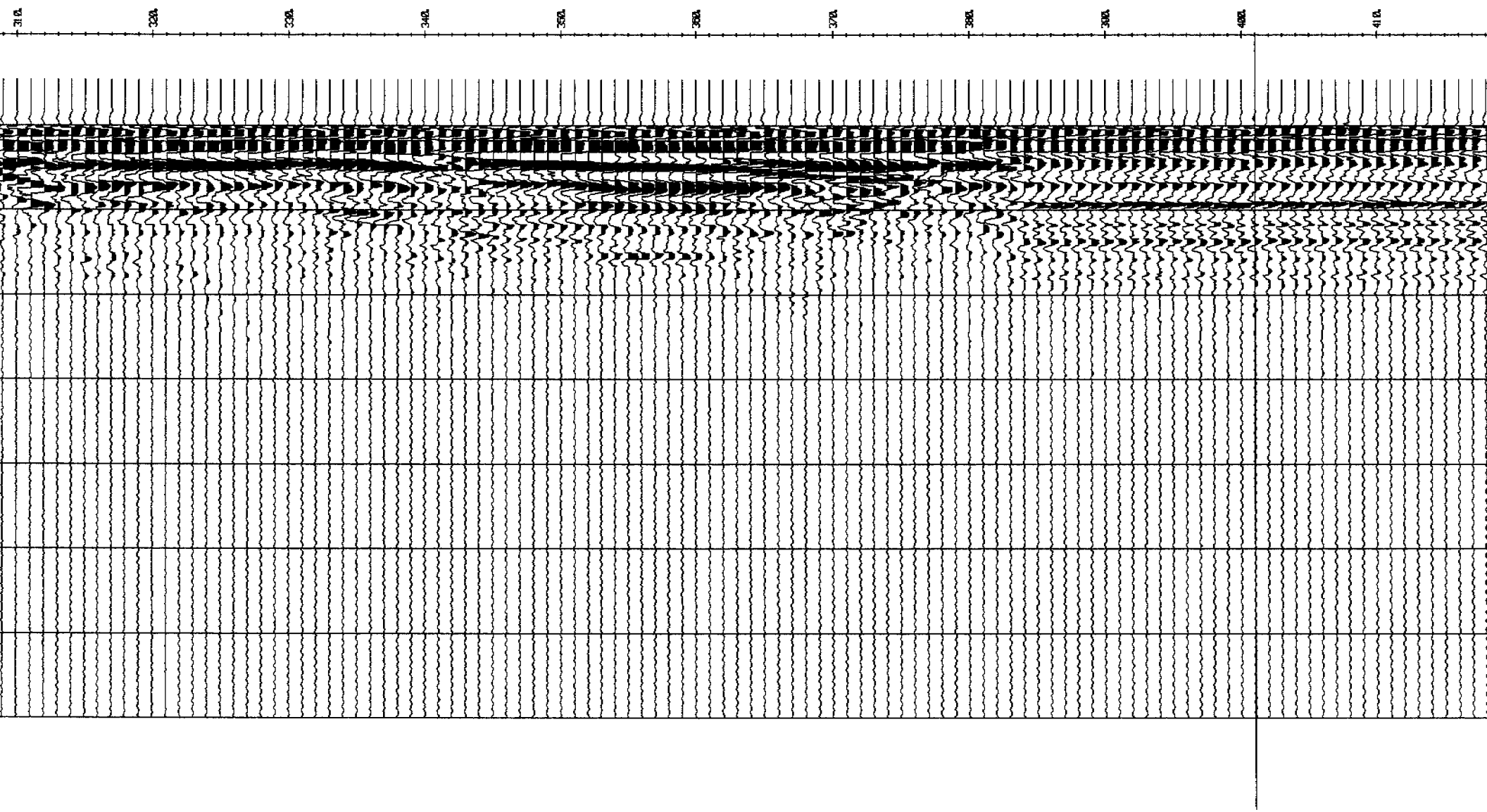
300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410

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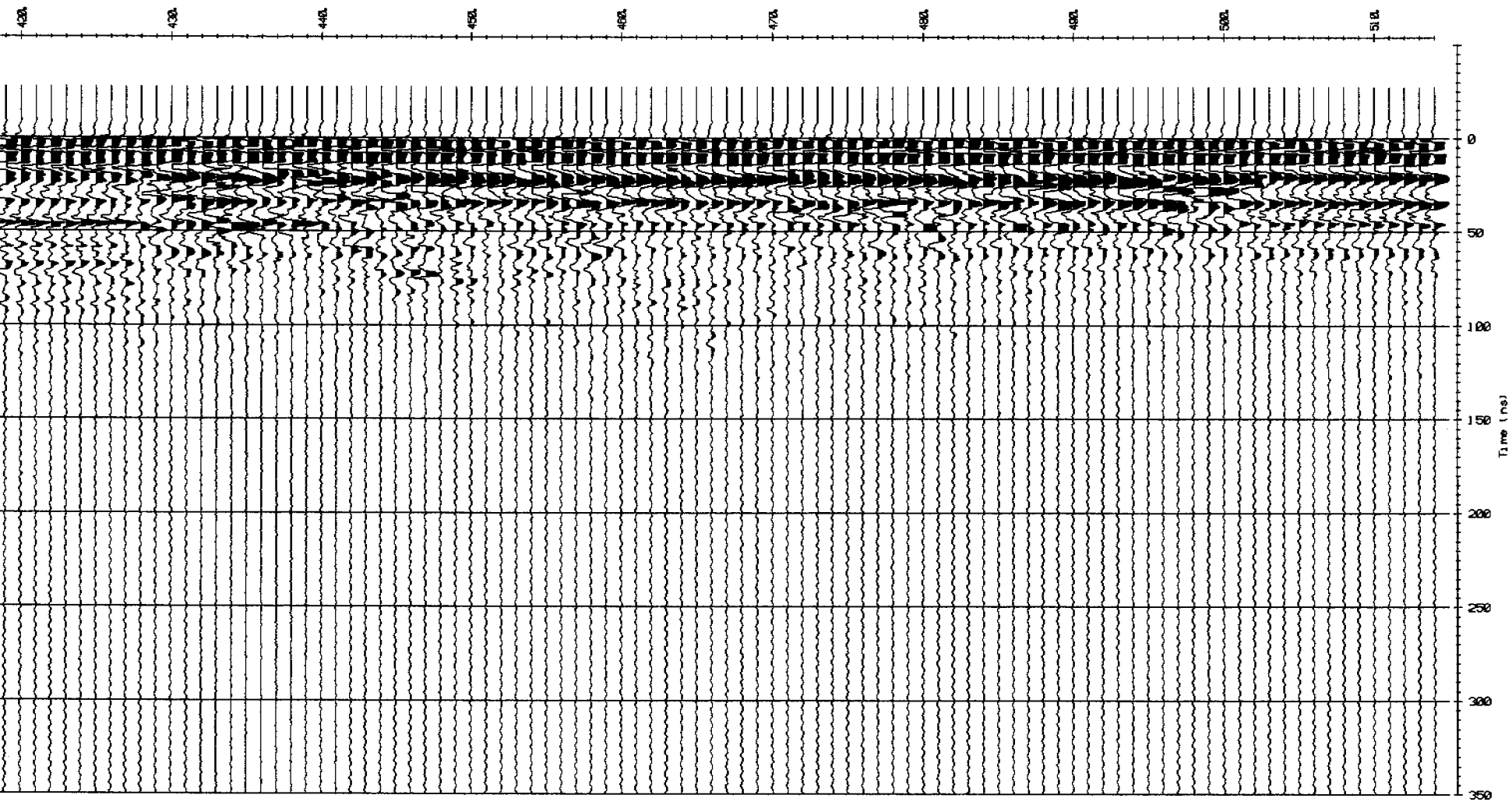
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300
350
Time (ns)

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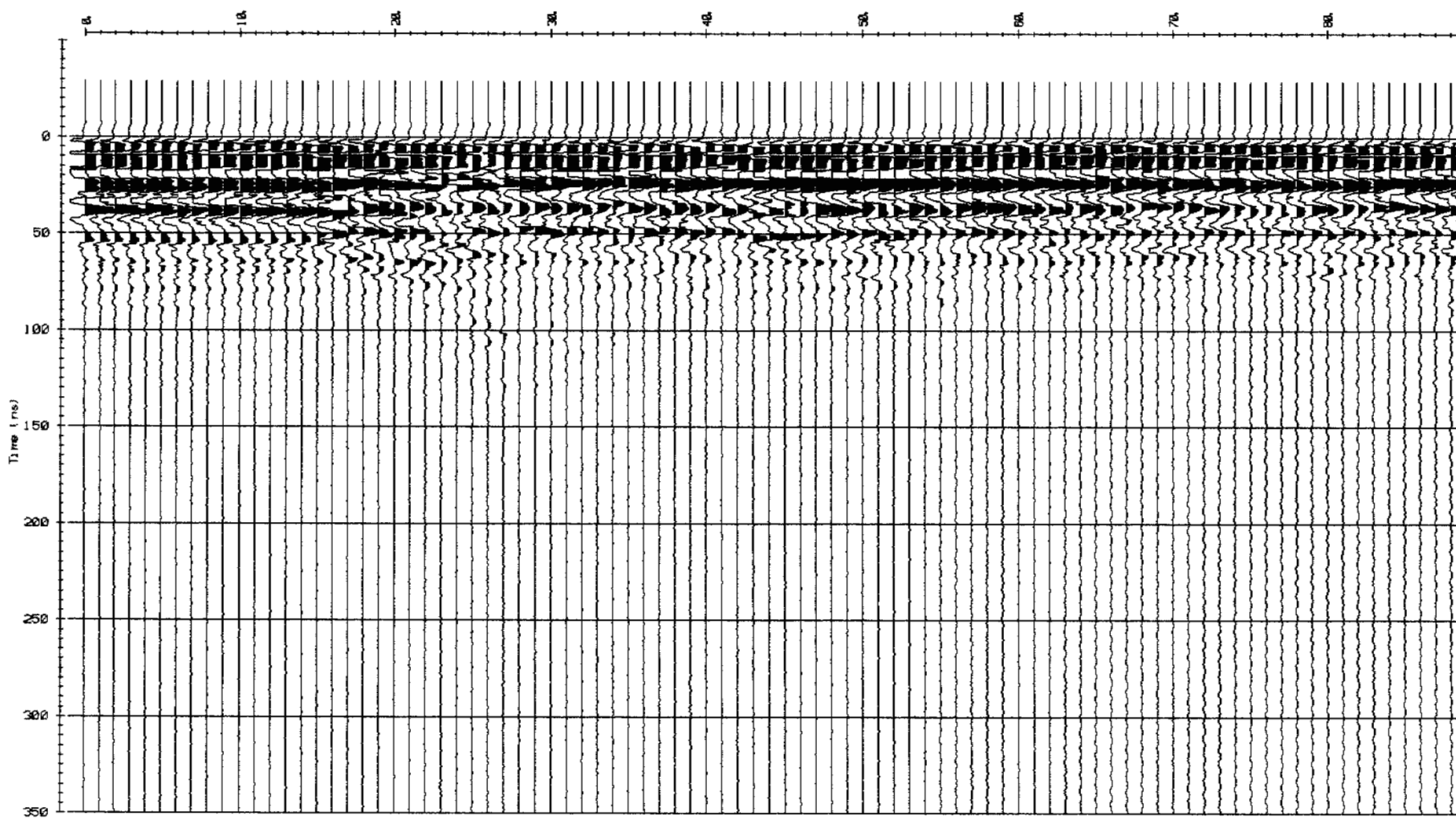

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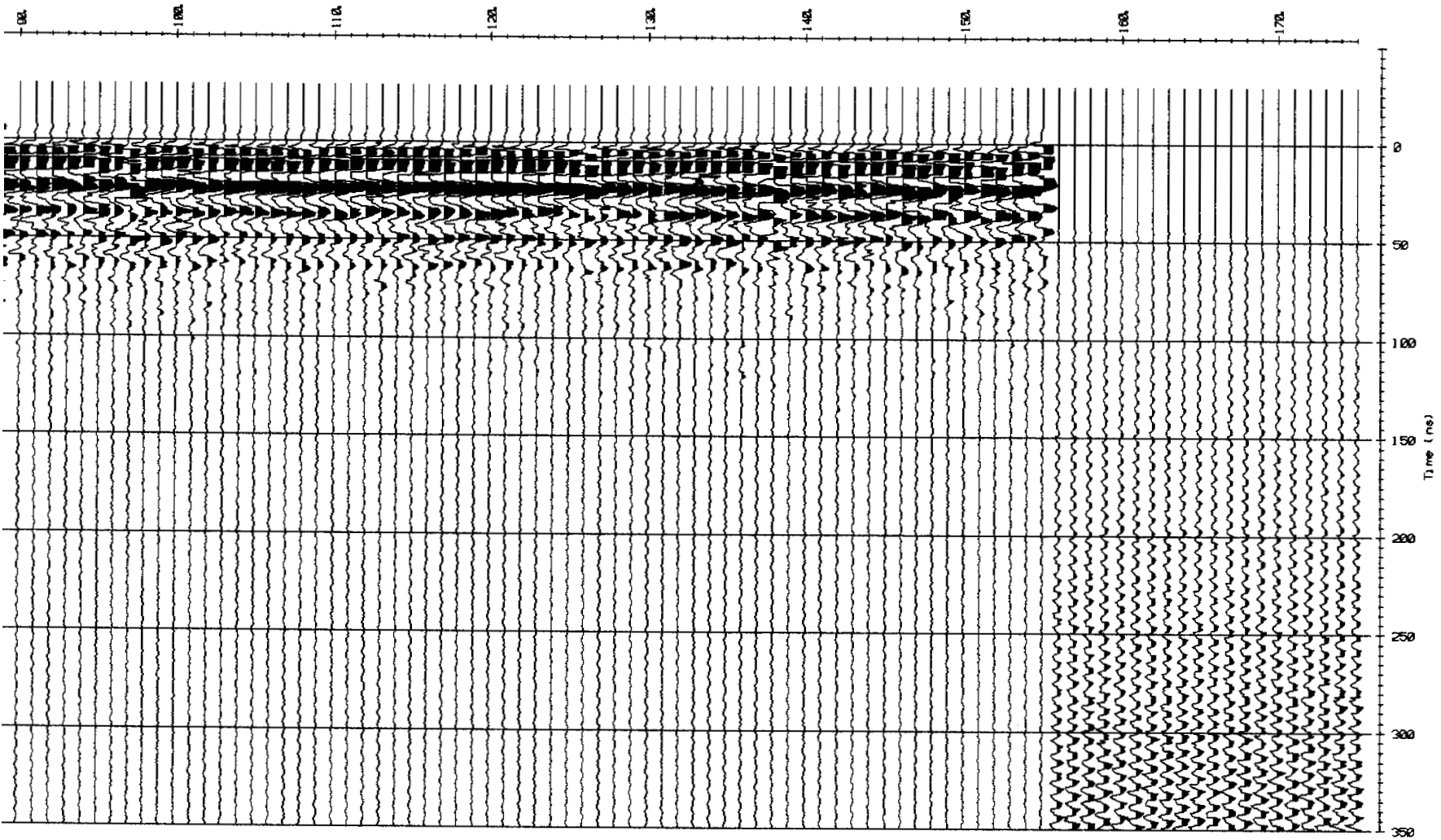

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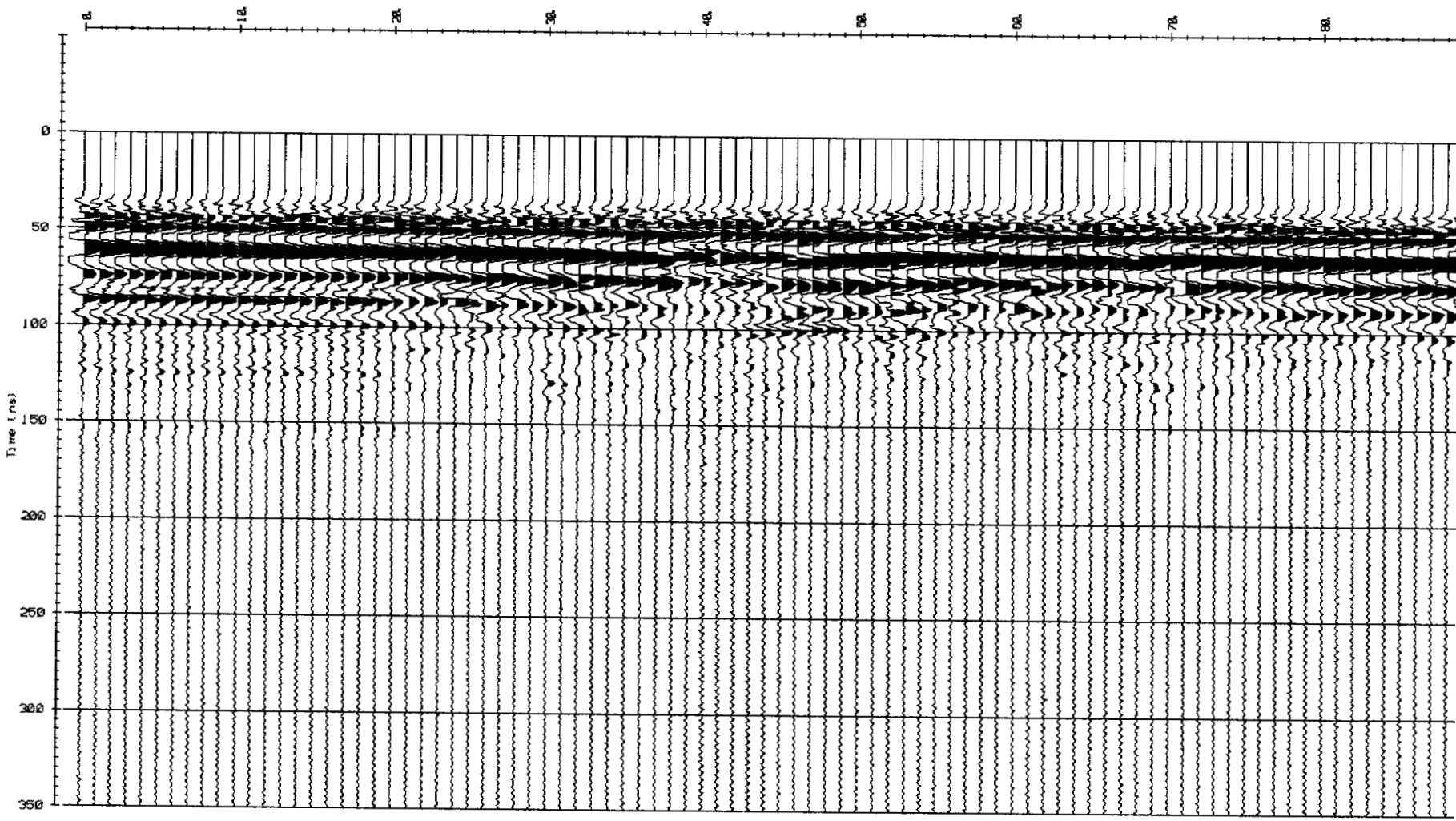

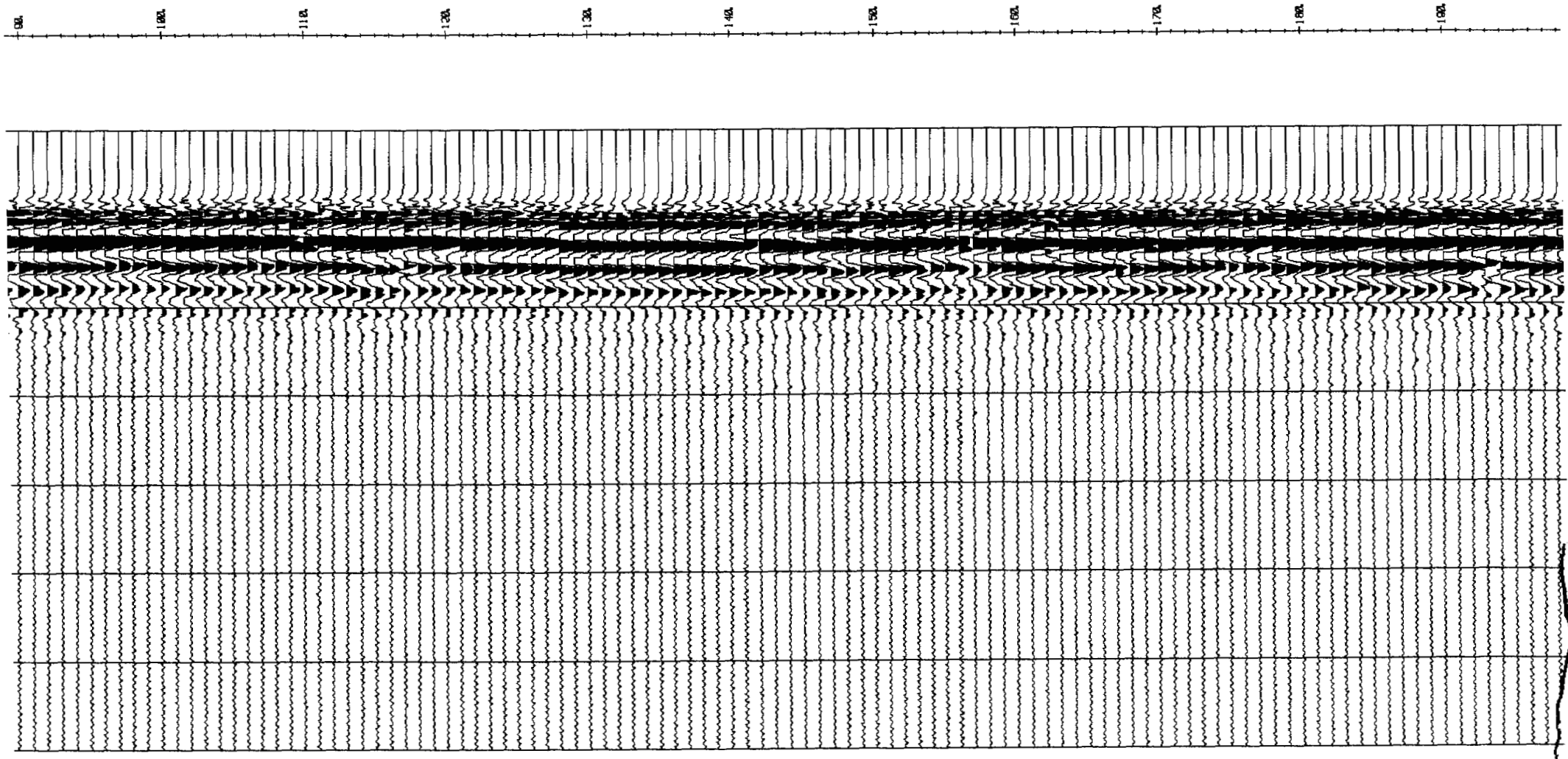

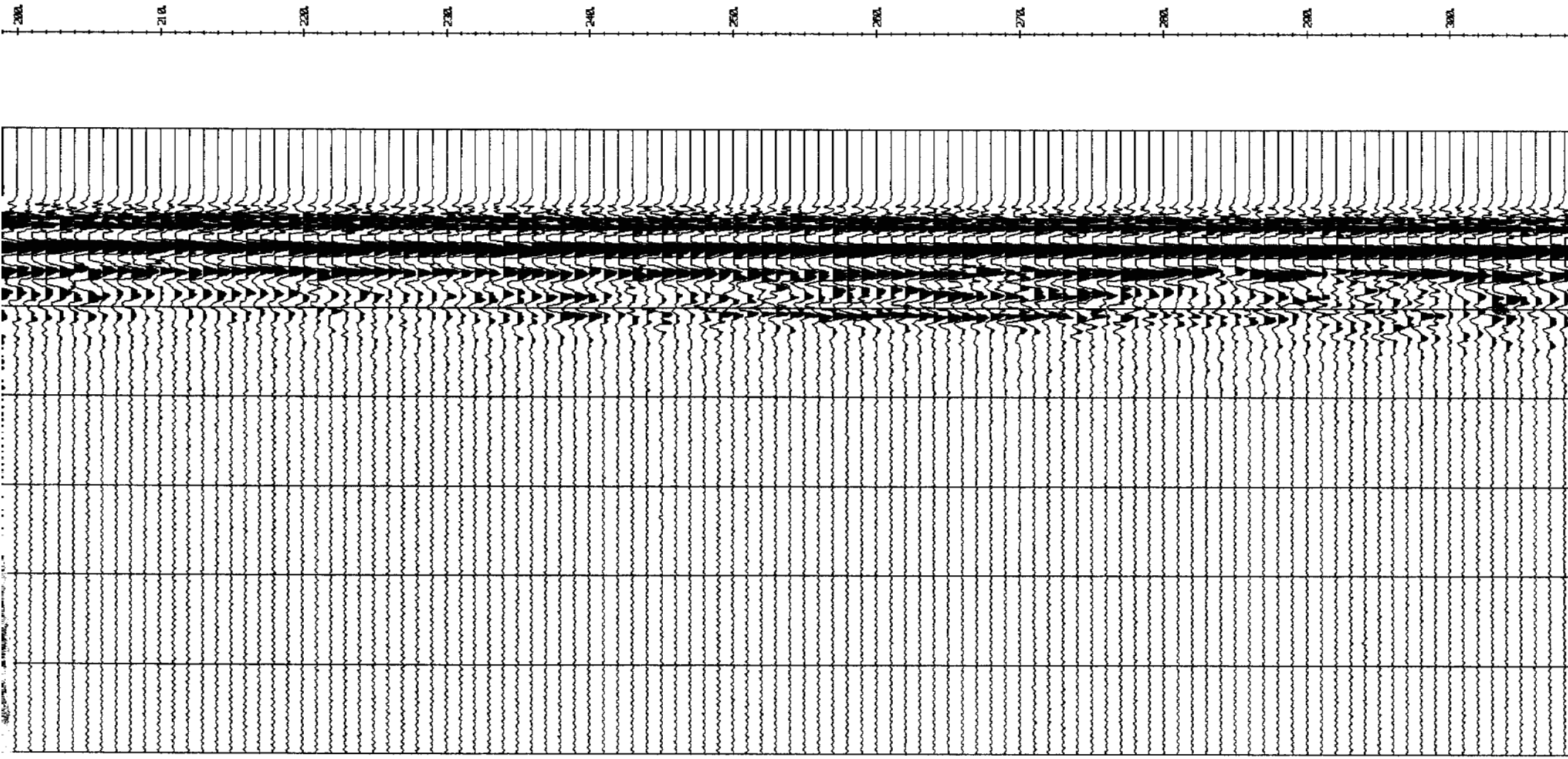
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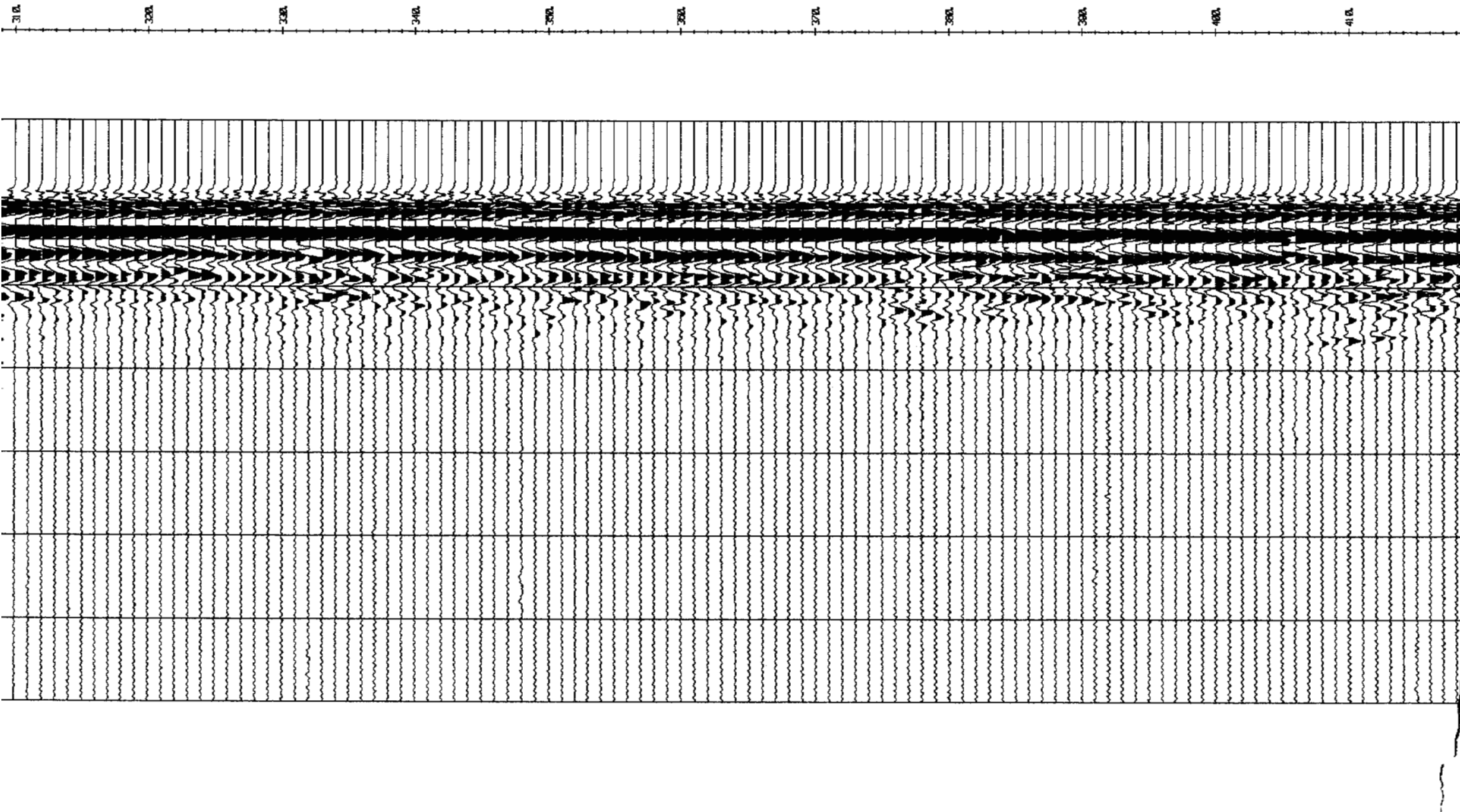

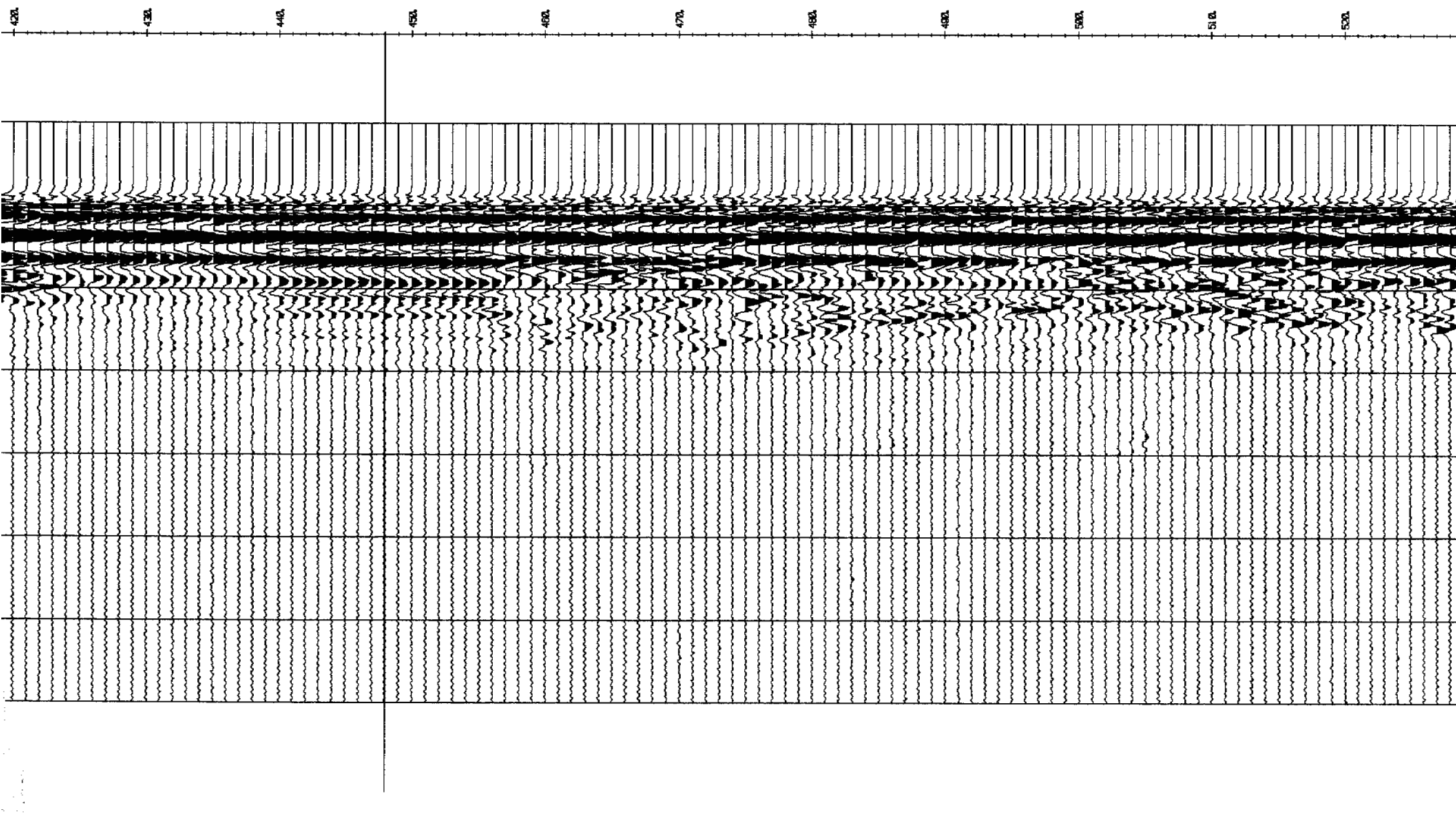
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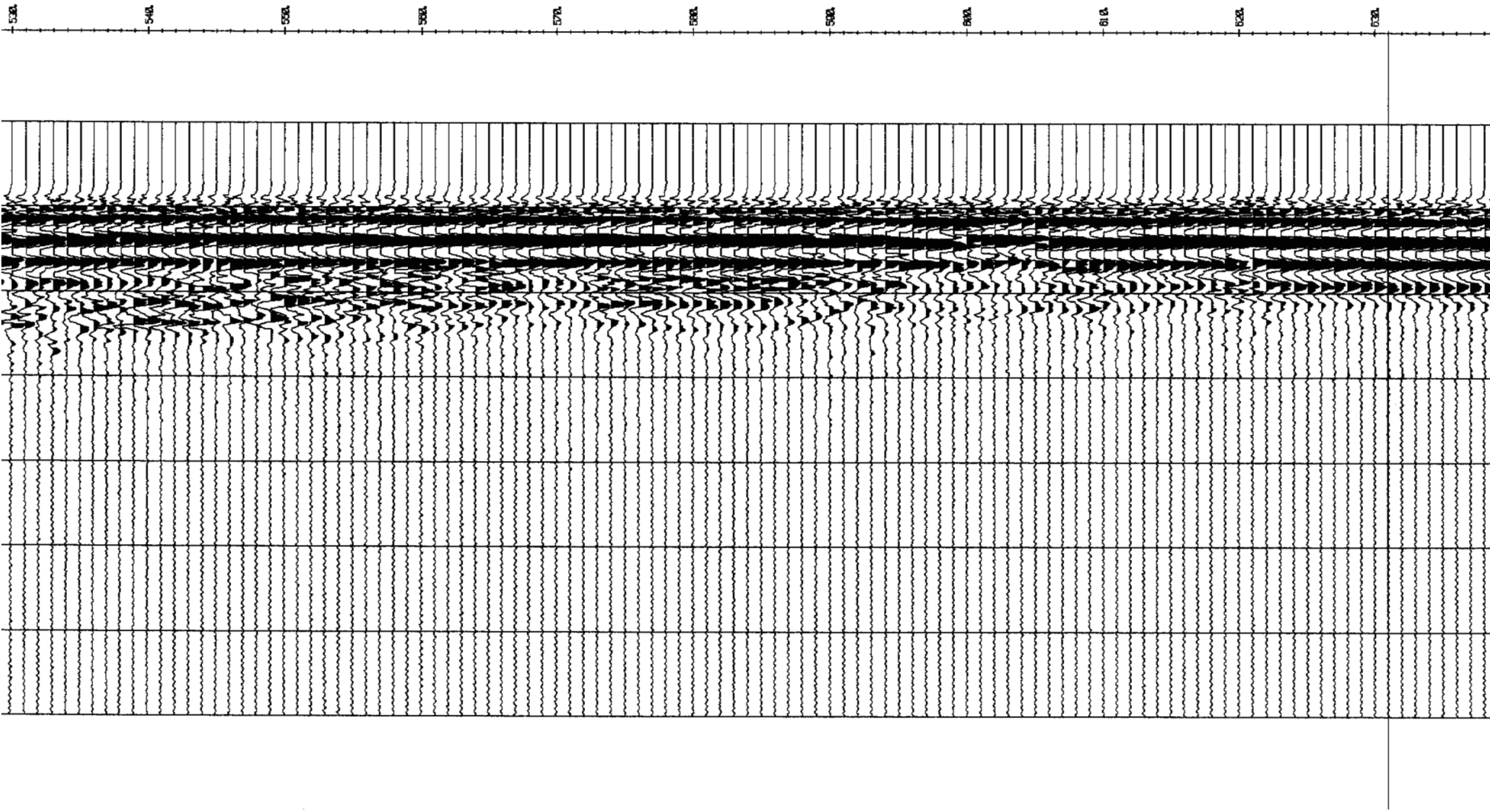
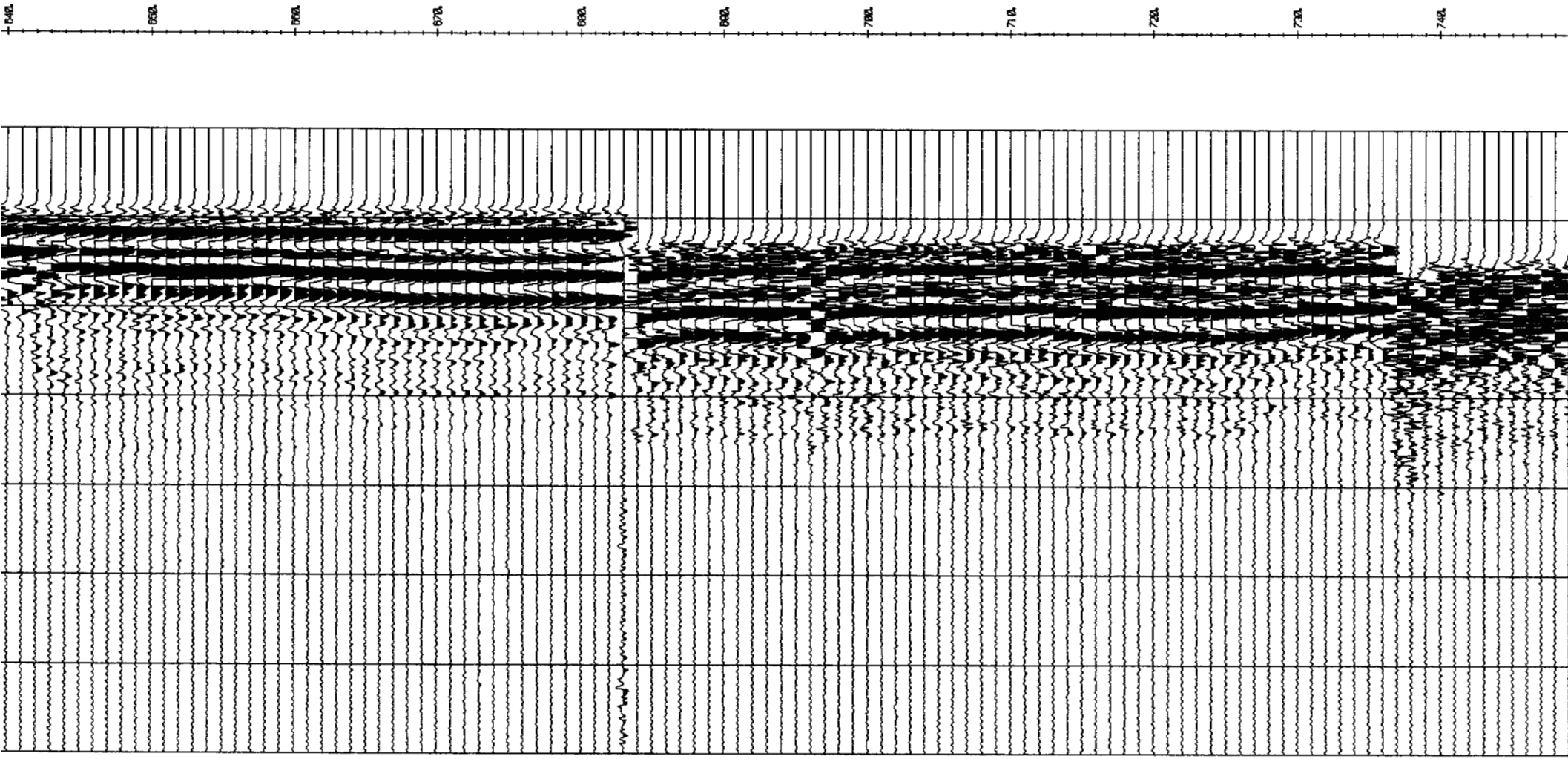
LN4B-1-4

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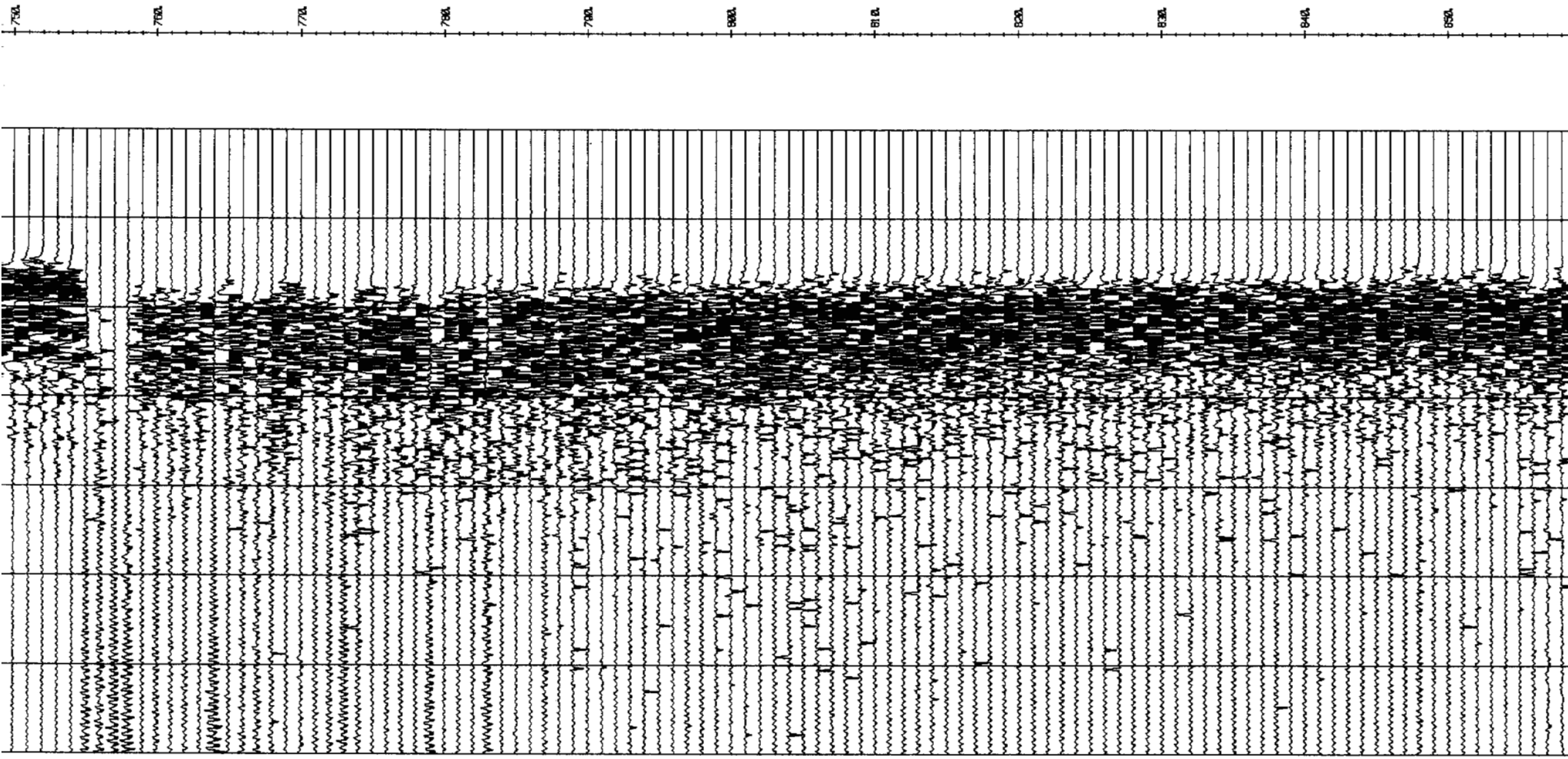
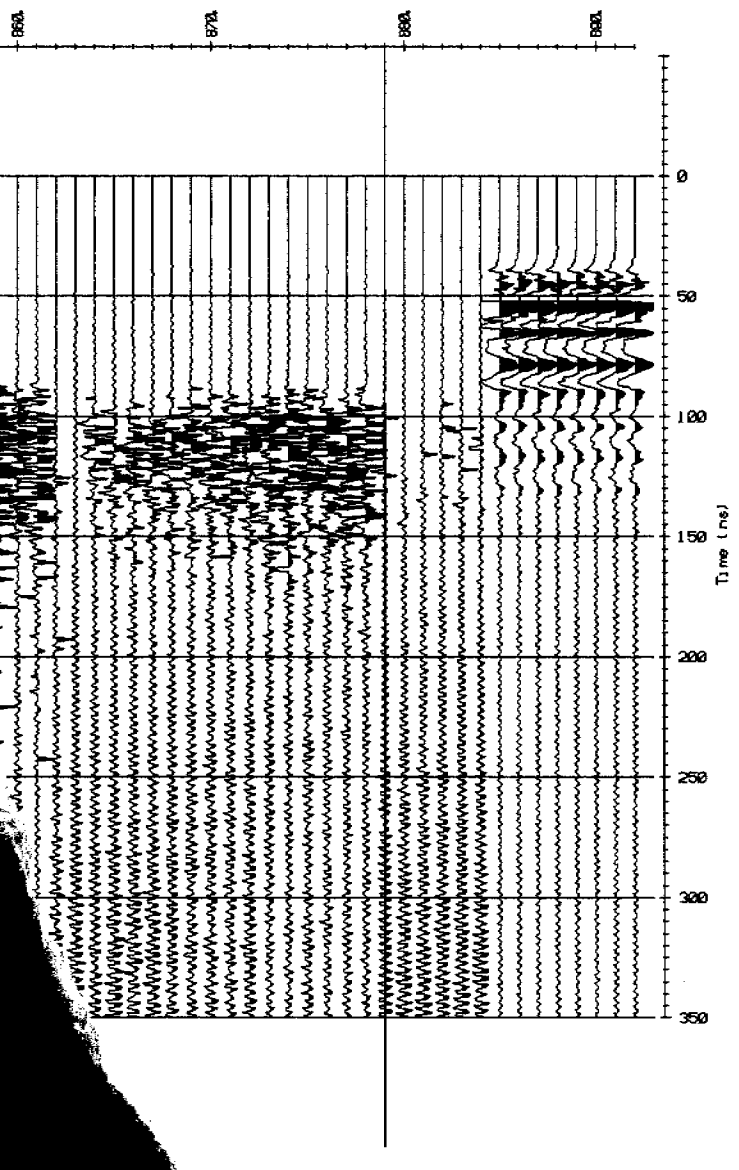
LN4B-1-4




0
50
100
150
200
250
300
350
Time (ns)

APPENDIX F

EM-34 DATA

TARGET AREA 6C-1

FIELD DATA AND PROCESSED MODEL DATA EM-34

SURVEY RECORD DESIGNATION: EM-34/6C-1/Line 1
ELECTRONIC DATA FILE: EM6C-1-1

DATA SET: DIAND

CLIENT:	Indian & Northern Affairs	DATE:	March 25, 1994
LOCATION:	Hansen Harbour	LINE:	6
COUNTY:	Richards Island, NWT	AZIMUTH:	North - South
PROJECT:	0101-94-11413	EQUIPMENT:	GEONICS EM-34

THERE ARE 46 STATIONS WITH DATA

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	5.0	1.7	NONE	NONE
HMD DATA:	5.0	NONE	NONE	NONE
VMD DATA:	10.0	NONE	4.7	9.3
HMD DATA:	10.0	NONE	1.0	NONE
VMD DATA:	15.0	1.5	NONE	NONE
HMD DATA:	15.0	1.3	NONE	NONE
VMD DATA:	20.0	NONE	6.1	NONE
HMD DATA:	20.0	NONE	1.2	NONE
VMD DATA:	25.0	1.3	NONE	NONE
HMD DATA:	25.0	1.1	NONE	NONE
VMD DATA:	30.0	NONE	NONE	NONE
HMD DATA:	30.0	NONE	NONE	6.7
VMD DATA:	35.0	1.6	NONE	NONE
HMD DATA:	35.0	1.1	NONE	NONE
VMD DATA:	40.0	NONE	5.8	NONE
HMD DATA:	40.0	NONE	2.4	NONE
VMD DATA:	45.0	1.8	NONE	NONE
HMD DATA:	45.0	1.1	NONE	NONE
VMD DATA:	50.0	NONE	4.9	9.4
HMD DATA:	50.0	NONE	1.5	7.0
VMD DATA:	55.0	1.9	NONE	NONE
HMD DATA:	55.0	1.2	NONE	NONE

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	60.0	NONE	NONE	NONE
HMD DATA:	60.0	NONE	NONE	NONE
VMD DATA:	65.0	1.6	NONE	NONE
HMD DATA:	65.0	1.0	NONE	NONE
VMD DATA:	70.0	NONE	5.5	9.4
HMD DATA:	70.0	NONE	2.4	NONE
VMD DATA:	75.0	1.7	NONE	NONE
HMD DATA:	75.0	0.8	NONE	NONE
VMD DATA:	80.0	NONE	6.3	NONE
HMD DATA:	80.0	NONE	1.7	NONE
VMD DATA:	85.0	1.7	NONE	NONE
HMD DATA:	85.0	1.0	NONE	NONE
VMD DATA:	90.0	NONE	NONE	NONE
HMD DATA:	90.0	NONE	NONE	7.7
VMD DATA:	95.0	1.7	NONE	NONE
HMD DATA:	95.0	1.1	NONE	NONE
VMD DATA:	100.0	NONE	6.5	NONE
HMD DATA:	100.0	NONE	1.8	NONE
VMD DATA:	105.0	1.7	NONE	NONE
HMD DATA:	105.0	1.1	NONE	NONE
VMD DATA:	110.0	NONE	6.1	9.4
HMD DATA:	110.0	NONE	2.6	7.4
VMD DATA:	115.0	1.7	NONE	NONE
HMD DATA:	115.0	1.2	NONE	NONE
VMD DATA:	120.0	NONE	NONE	NONE
HMD DATA:	120.0	NONE	NONE	NONE
VMD DATA:	125.0	1.8	NONE	NONE
HMD DATA:	125.0	1.2	NONE	NONE
VMD DATA:	130.0	NONE	6.2	9.1
HMD DATA:	130.0	NONE	3.1	NONE

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	135.0	1.7	NONE	NONE
HMD DATA:	135.0	1.2	NONE	NONE
VMD DATA:	140.0	NONE	7.2	NONE
HMD DATA:	140.0	NONE	3.1	NONE
VMD DATA:	145.0	1.6	NONE	NONE
HMD DATA:	145.0	1.0	NONE	NONE
VMD DATA:	150.0	NONE	NONE	NONE
HMD DATA:	150.0	NONE	NONE	7.3
VMD DATA:	155.0	1.5	NONE	NONE
HMD DATA:	155.0	1.1	NONE	NONE
VMD DATA:	160.0	NONE	6.9	NONE
HMD DATA:	160.0	NONE	3.6	NONE
VMD DATA:	165.0	1.7	NONE	NONE
HMD DATA:	165.0	1.1	NONE	NONE
VMD DATA:	170.0	NONE	8.2	9.6
HMD DATA:	170.0	NONE	2.8	7.6
VMD DATA:	175.0	1.9	NONE	NONE
HMD DATA:	175.0	1.3	NONE	NONE
VMD DATA:	180.0	NONE	NONE	NONE
HMD DATA:	180.0	NONE	NONE	NONE
VMD DATA:	185.0	1.8	NONE	NONE
HMD DATA:	185.0	1.3	NONE	NONE
VMD DATA:	190.0	NONE	8.0	10.1
HMD DATA:	190.0	NONE	4.0	NONE
VMD DATA:	195.0	1.9	NONE	NONE
HMD DATA:	195.0	1.3	NONE	NONE
VMD DATA:	200.0	NONE	7.5	NONE
HMD DATA:	200.0	NONE	4.0	NONE
VMD DATA:	205.0	2.0	NONE	NONE
HMD DATA:	205.0	1.3	NONE	NONE

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	210.0	NONE	NONE	NONE
HMD DATA:	210.0	NONE	NONE	6.5
VMD DATA:	215.0	1.6	NONE	NONE
HMD DATA:	215.0	NONE	NONE	NONE
VMD DATA:	220.0	NONE	7.8	NONE
HMD DATA:	220.0	NONE	NONE	NONE
VMD DATA:	225.0	NONE	NONE	NONE
HMD DATA:	225.0	NONE	NONE	NONE
VMD DATA:	230.0	NONE	NONE	10.0
HMD DATA:	230.0	NONE	NONE	8.6

THERE ARE 46 LAYERED INTERPRETATIONS

LOCATION (m)	SIG-1 (mmho/m)	SIG-2 (mmho/m)	SIG-3 (mmho/m)	H-1 (m)	H-2 (m)	FIT (%)
5.00	2.12	30030.	1.00	28.0	6.96	.000113
10.00	1.96	29838.	1.00	27.9	6.96	.0158
15.00	1.67	26031.	1.00	26.8	6.91	.0439
20.00	1.35	22937.	1.00	25.8	6.85	.00421
25.00	1.20	23012.	1.00	25.9	6.90	.0764
30.00	1.51	23449.	1.00	26.0	6.87	.106
35.00	1.80	23934.	1.00	26.2	6.87	.0139
40.00	1.97	24357.	1.00	26.4	6.88	.150
45.00	2.21	26379.	1.00	27.0	6.92	.116
50.00	2.42	28584.	1.00	27.8	6.94	.0152
55.00	2.55	28097.	1.00	27.7	6.93	.0389
60.00	2.27	27223.	1.00	27.3	6.92	.0420
65.00	1.98	26396.	1.00	27.0	6.91	.0458
70.00	1.99	25843.	1.00	26.8	6.89	.0506
75.00	1.94	24062.	1.00	26.3	6.82	.0713
80.00	1.87	22517.	1.00	25.7	6.74	.0229
85.00	1.89	22317.	1.00	25.6	6.73	.0236
90.00	1.90	22110.	1.00	25.6	6.72	.0223
95.00	1.90	21914.	1.00	25.5	6.71	.0444
100.00	1.86	21662.	1.00	25.4	6.69	.0723
105.00	1.90	22389.	1.00	25.7	6.73	.121
110.00	1.93	23220.	1.00	25.9	6.77	.0259
115.00	1.91	23201.	1.00	25.9	6.77	.0459
120.00	1.96	23282.	1.00	25.9	6.73	.0361
125.00	2.01	23360.	1.00	25.8	6.70	.0279

LOCATION (m)	SIG-1 (mmho/m)	SIG-2 (mmho/m)	SIG-3 (mmho/m)	H-1 (m)	H-2 (m)	FIT (%)
130.00	1.92	23257.	1.00	25.8	6.77	.0503
135.00	1.70	21197.	1.00	25.2	6.82	.0934
140.00	1.46	19488.	1.00	24.7	6.87	.0541
145.00	1.39	19520.	1.00	24.8	6.94	.115
150.00	1.31	19577.	1.00	24.9	7.03	.126
155.00	1.24	19688.	1.00	25.0	7.12	.137
160.00	1.45	19989.	1.00	25.0	6.93	.107
165.00	1.45	18260.	1.00	24.3	6.74	.0133
170.00	1.43	16813.	1.00	23.6	6.59	.00110
175.00	1.65	17057.	1.00	23.7	6.42	.0247
180.00	1.58	17075.	1.00	23.7	6.47	.0280
185.00	1.52	17037.	1.00	23.8	6.51	.270
190.00	1.67	17251.	1.00	23.9	6.43	.0153
195.00	1.88	17875.	1.00	24.1	6.38	.000619
200.00	2.08	18537.	1.00	24.4	6.34	.00405
205.00	2.18	18435.	1.00	24.3	6.27	.00703
210.00	1.74	17926.	1.00	24.2	6.47	.00935
215.00	1.30	17399.	1.00	24.1	6.73	.0198
220.00	1.27	17226.	1.00	24.0	6.73	.0821
225.00	1.27	17233.	1.00	24.0	6.73	.0818
230.00	1.27	17226.	1.00	24.0	6.73	.0109

TARGET AREA 6C-2

FIELD DATA AND PROCESSED MODEL DATA EM-34

SURVEY RECORD DESIGNATION: EM-34/6C-2/Line 1
ELECTRONIC DATA FILE: EM6C-2-1

DATA SET: DIAND

CLIENT:	Indian & Northern Affairs	DATE:	March 23, 1994
LOCATION:	Wallace Bay	LINE:	1
COUNTY:	Richards Island, North Head	AZIMUTH:	North - South
PROJECT:	0101-94-11413	EQUIPMENT:	GEONICS EM-34

THERE ARE 46 STATIONS WITH DATA

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	0.0	NONE	1.5	NONE
HMD DATA:	0.0	NONE	0.5	NONE
VMD DATA:	5.0	-0.3	NONE	NONE
HMD DATA:	5.0	2.1	NONE	NONE
VMD DATA:	10.0	NONE	1.4	9.2
HMD DATA:	10.0	NONE	0.7	6.7
VMD DATA:	15.0	2.0	NONE	NONE
HMD DATA:	15.0	-0.3	NONE	NONE
VMD DATA:	20.0	NONE	1.7	NONE
HMD DATA:	20.0	NONE	0.3	NONE
VMD DATA:	25.0	0.4	NONE	NONE
HMD DATA:	25.0	1.9	NONE	NONE
VMD DATA:	30.0	NONE	1.5	9.7
HMD DATA:	30.0	NONE	0.6	5.8
VMD DATA:	35.0	1.8	NONE	NONE
HMD DATA:	35.0	1.4	NONE	NONE
VMD DATA:	40.0	NONE	1.5	NONE
HMD DATA:	40.0	NONE	1.0	NONE
VMD DATA:	45.0	2.1	NONE	NONE
HMD DATA:	45.0	1.4	NONE	NONE
VMD DATA:	50.0	NONE	1.4	8.7
HMD DATA:	50.0	NONE	0.9	7.7

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	55.0	2.1	NONE	NONE
HMD DATA:	55.0	1.7	NONE	NONE
VMD DATA:	60.0	NONE	1.5	NONE
HMD DATA:	60.0	NONE	1.0	NONE
VMD DATA:	65.0	2.2	NONE	NONE
HMD DATA:	65.0	1.7	NONE	NONE
VMD DATA:	70.0	NONE	1.6	8.7
HMD DATA:	70.0	NONE	1.0	7.9
VMD DATA:	75.0	2.1	NONE	NONE
HMD DATA:	75.0	0.9	NONE	NONE
VMD DATA:	80.0	NONE	1.4	NONE
HMD DATA:	80.0	NONE	1.0	NONE
VMD DATA:	85.0	2.0	NONE	NONE
HMD DATA:	85.0	1.4	NONE	NONE
VMD DATA:	90.0	NONE	1.6	9.3
HMD DATA:	90.0	NONE	0.6	7.3
VMD DATA:	95.0	2.1	NONE	NONE
HMD DATA:	95.0	1.4	NONE	NONE
VMD DATA:	100.0	NONE	1.7	NONE
HMD DATA:	100.0	NONE	0.8	NONE
VMD DATA:	105.0	2.3	NONE	NONE
HMD DATA:	105.0	1.4	NONE	NONE
VMD DATA:	110.0	NONE	1.8	9.1
HMD DATA:	110.0	NONE	1.0	6.5
VMD DATA:	115.0	2.1	NONE	NONE
HMD DATA:	115.0	1.2	NONE	NONE
VMD DATA:	120.0	NONE	1.8	NONE
HMD DATA:	120.0	NONE	0.7	NONE
VMD DATA:	125.0	2.0	NONE	NONE
HMD DATA:	125.0	1.2	NONE	NONE

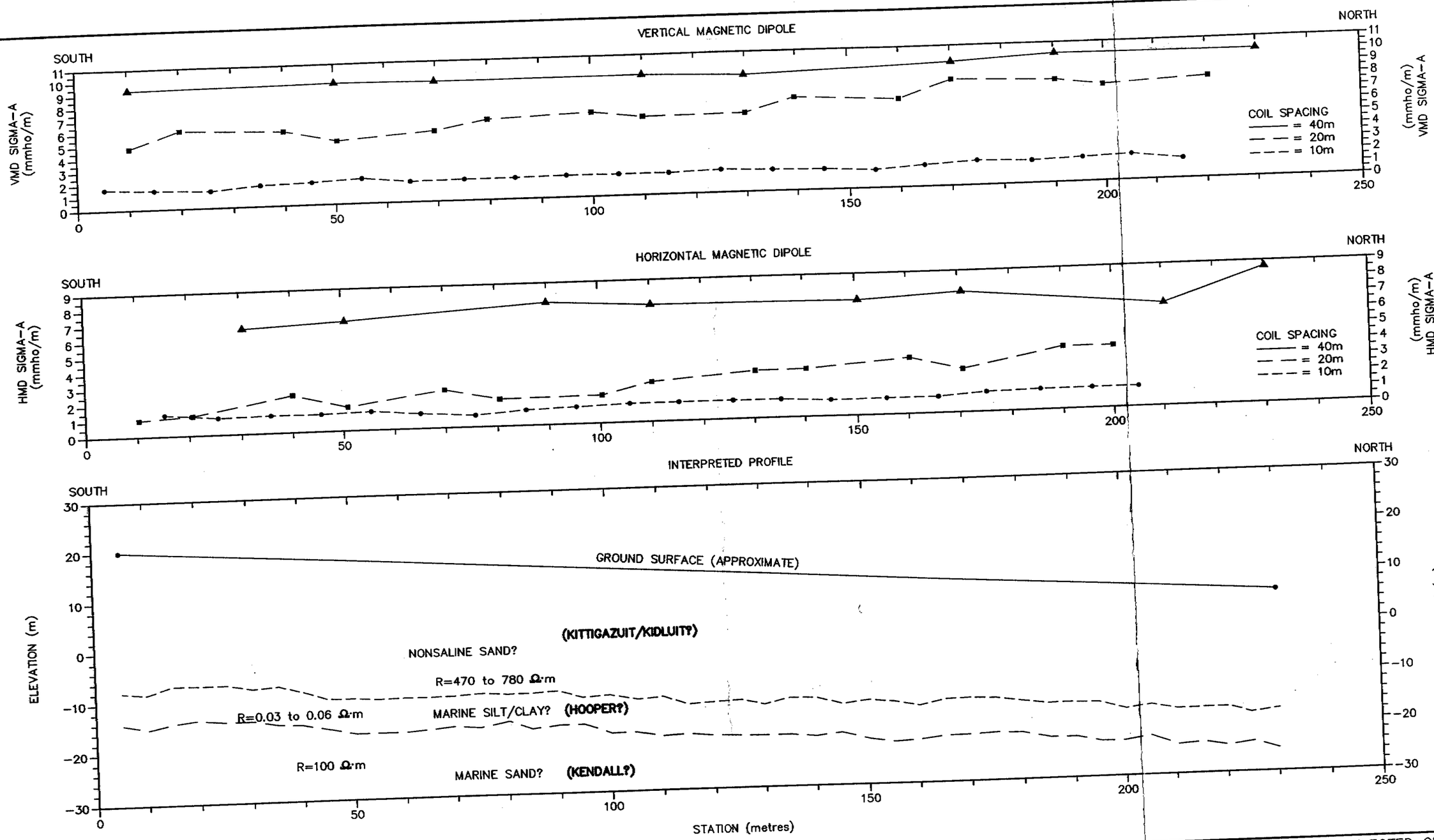
COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	130.0	NONE	1.5	9.4
HMD DATA:	130.0	NONE	-0.3	8.2
VMD DATA:	135.0	2.1	NONE	NONE
HMD DATA:	135.0	1.5	NONE	NONE
VMD DATA:	140.0	NONE	1.6	NONE
HMD DATA:	140.0	NONE	1.2	NONE
VMD DATA:	145.0	2.1	NONE	NONE
HMD DATA:	145.0	1.7	NONE	NONE
VMD DATA:	150.0	NONE	1.6	9.2
HMD DATA:	150.0	NONE	1.1	7.0
VMD DATA:	155.0	2.1	NONE	NONE
HMD DATA:	155.0	1.8	NONE	NONE
VMD DATA:	160.0	NONE	1.7	NONE
HMD DATA:	160.0	NONE	4.9	NONE
VMD DATA:	165.0	2.2	NONE	NONE
HMD DATA:	165.0	1.6	NONE	NONE
VMD DATA:	170.0	NONE	1.9	10.5
HMD DATA:	170.0	NONE	3.8	7.1
VMD DATA:	175.0	2.1	NONE	NONE
HMD DATA:	175.0	1.2	NONE	NONE
VMD DATA:	180.0	NONE	4.9	NONE
HMD DATA:	180.0	NONE	4.7	NONE
VMD DATA:	185.0	1.7	NONE	NONE
HMD DATA:	185.0	1.4	NONE	NONE
VMD DATA:	190.0	NONE	4.8	8.7
HMD DATA:	190.0	NONE	5.1	8.3
VMD DATA:	195.0	2.1	NONE	NONE
HMD DATA:	195.0	1.6	NONE	NONE
VMD DATA:	200.0	NONE	4.9	NONE
HMD DATA:	200.0	NONE	4.8	NONE

COMP.	LOCATION	DATA AT SPACING (m)		
		10.00	20.00	40.00
VMD DATA:	205.0	1.9	NONE	NONE
HMD DATA:	205.0	1.1	NONE	NONE
VMD DATA:	210.0	NONE	4.9	9.1
HMD DATA:	210.0	NONE	4.9	5.8
VMD DATA:	215.0	1.6	NONE	NONE
HMD DATA:	215.0	0.6	NONE	NONE
VMD DATA:	220.0	NONE	1.7	NONE
HMD DATA:	220.0	NONE	5.0	NONE
VMD DATA:	225.0	2.1	NONE	NONE
HMD DATA:	225.0	1.2	NONE	NONE

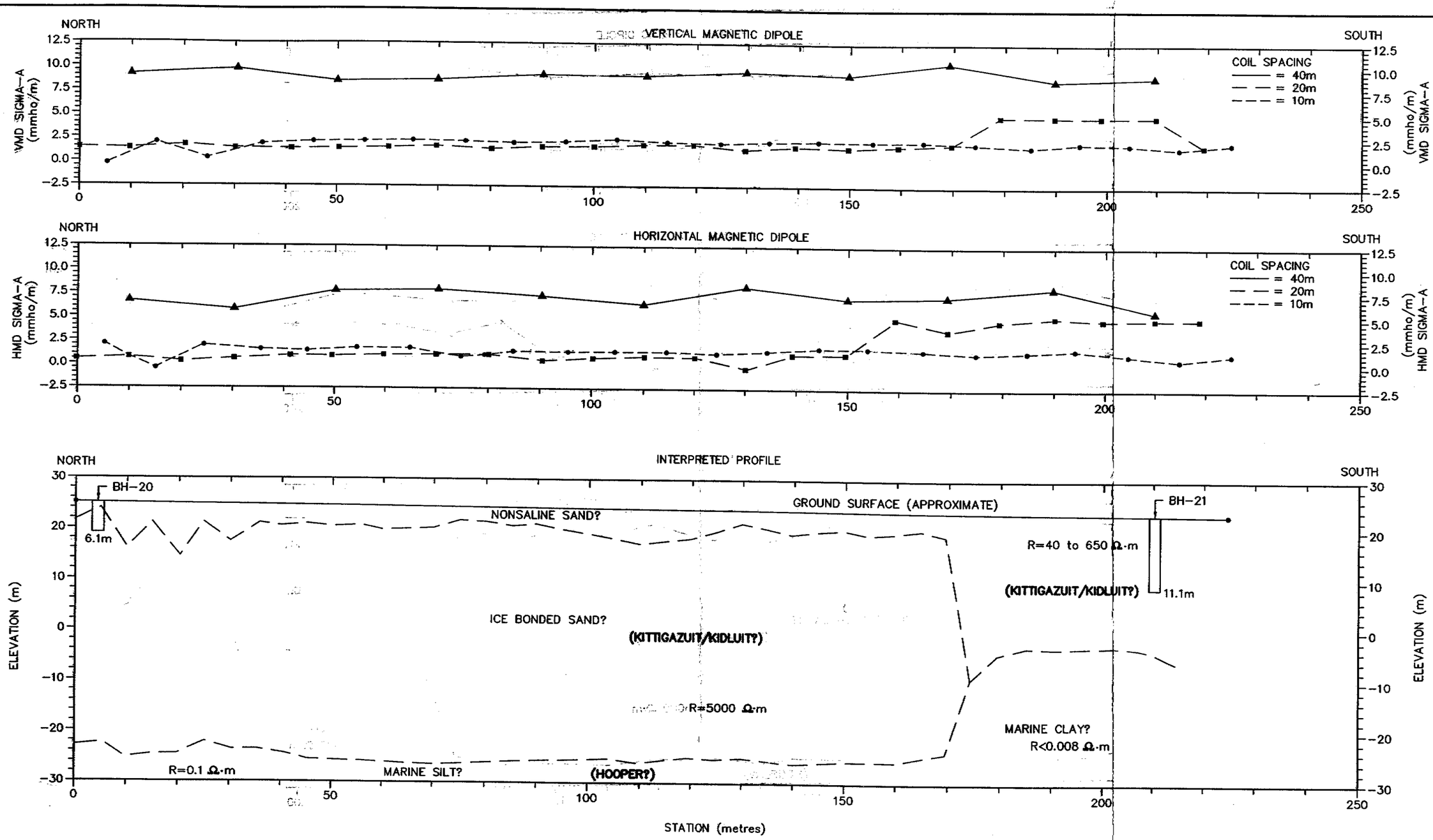
THERE ARE 46 LAYERED INTERPRETATIONS

LOCATION (m)	SIG-1 (mmho/m)	SIG-2 (mmho/m)	SIG-3 (mmho/m)	H-1 (m)	H-2 (m)	FIT (%)
0.00	1.53	.00200	9260.	2.66	44.6	7.25
5.00	4.74	.00200	9260.	1.37	45.9	6.70
10.00	1.56	.00200	9260.	9.21	41.0	.407
15.00	10.9	.00200	9260.	3.52	45.8	.359
20.00	1.96	.00200	9260.	11.2	38.3	.0877
25.00	2.48	.00200	9260.	2.75	43.8	6.56
30.00	2.58	.00200	9260.	6.83	42.1	.244
35.00	10.5	.00200	9260.	3.87	45.7	.419
40.00	11.8	.00200	9260.	3.29	46.2	.369
45.00	13.9	.00200	9260.	3.12	46.9	.356
50.00	13.7	.00200	9260.	3.18	47.4	.315
55.00	12.2	.00200	9260.	3.47	47.1	.0836
60.00	10.5	.00200	9260.	3.86	46.8	.188
65.00	9.89	.00200	9260.	4.07	46.5	.0414
70.00	8.14	.00200	9260.	4.61	46.1	.386
75.00	12.3	.00200	9260.	3.39	46.8	.276
80.00	23.0	.00200	9260.	2.31	47.3	.0558
85.00	13.6	.00200	9260.	3.07	46.5	.413
90.00	10.9	.00200	9260.	3.61	45.8	.270
95.00	9.40	.00200	9260.	4.10	45.4	.0632
100.00	8.49	.00200	9260.	4.56	45.1	.430
105.00	7.31	.00200	9260.	5.37	44.4	.223
110.00	5.42	.00200	9260.	6.95	43.0	.0863
115.00	5.29	.00200	9260.	6.83	43.0	.0969
120.00	5.29	.00200	9260.	6.63	43.0	.120

LOCATION (m)	SIG-1 (mmho/m)	SIG-2 (mmho/m)	SIG-3 (mmho/m)	H-1 (m)	H-2 (m)	FIT (%)
125.00	8.05	.00200	9260.	4.43	44.9	.487
130.00	25.1	.00200	9260.	2.21	46.4	.0538
135.00	13.5	.00200	9260.	3.18	45.8	.364
140.00	8.75	.00200	9260.	4.32	45.0	.490
145.00	10.0	.00200	9260.	3.98	45.4	.0689
150.00	10.0	.00200	9260.	3.92	45.5	.0725
155.00	8.28	.00200	9260.	4.41	44.5	.488
160.00	8.69	.00200	9260.	4.38	43.8	.494
165.00	8.54	.00200	9260.	4.61	42.9	5.81E-6
170.00	6.58	.00200	9260.	5.53	41.5	.0174
175.00	2.81	9260.	37345.	32.6	.816	.000511
180.00	2.50	9260.	31809.	27.3	.170	.00144
185.00	2.21	9260.	33128.	27.1	.109	.0132
190.00	2.57	9260.	35449.	27.1	.0567	.00663
195.00	2.91	9260.	35325.	27.2	.0559	.00168
200.00	2.73	9260.	34437.	27.1	.0563	.00495
205.00	2.70	9260.	1.20E5	19.7	.0570	.0202
210.00	2.29	9260.	33269.	27.1	.0550	.00301
215.00	2.23	9260.	44338.	30.9	.0554	.000197
220.00	2.08	.00200	9260.	53.0	.144	8.90
225.00	2.27	.00200	9260.	53.3	.182	11.2



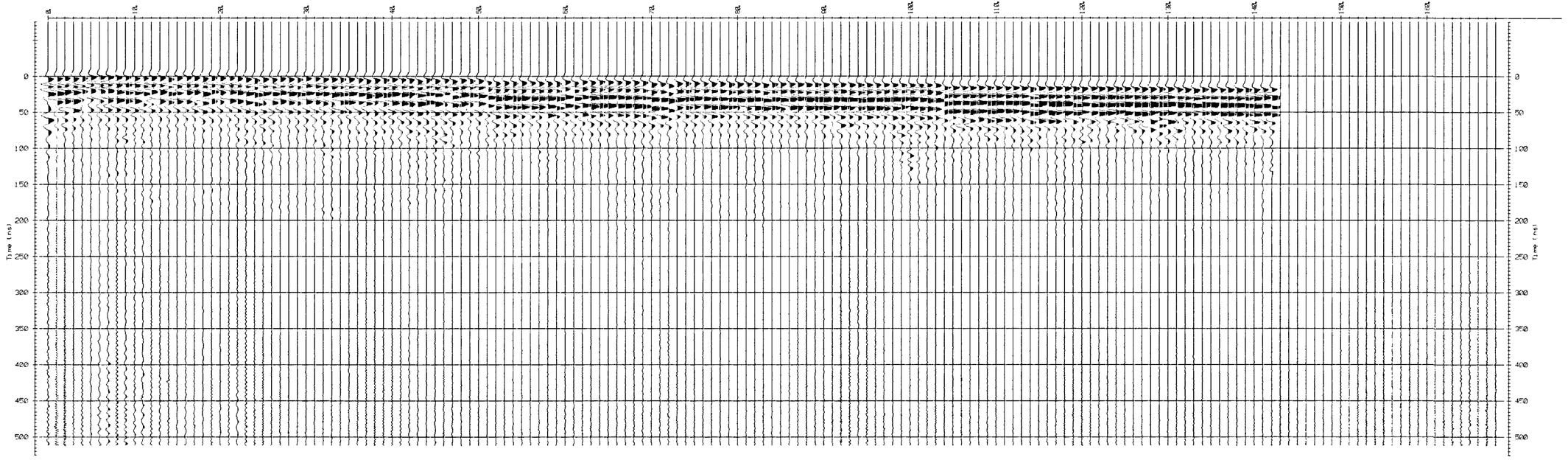
EBA Engineering Consultants Ltd.		PROJECT	GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECTS, NORTHERN RICHARDS ISLAND, N.W.T.
CLIENT	INDIAN AND NORTHERN AFFAIRS CANADA	TITLE	INTERPRETED PROFILE, EM-34 DATA TARGET AREA 6C-1 EM34/ 6C-1/ LINE 1
DATE 94-06-20	DWN. AJH CHKD. NSP	FILE NO.	11413A02B
			FIGURE F.1



EBA Engineering Consultants Ltd.		PROJECT	GEOPHYSICAL INVESTIGATION OF SELECTED GRANULAR RESOURCE PROSPECTS, NORTHERN RICHARDS ISLAND, N.W.T.
CLIENT	INDIAN AND NORTHERN AFFAIRS CANADA	TITLE	INTERPRETED PROFILE, EM-34 DATA TARGET AREA 6C-2 EM34/ 6C-2/ LINE 1
DATE 94-06-20	DWN. AJH CHKD. NSP	FILE NO.	11413A01B FIGURE F.2

LN1-5

LN1-5


0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
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160
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50
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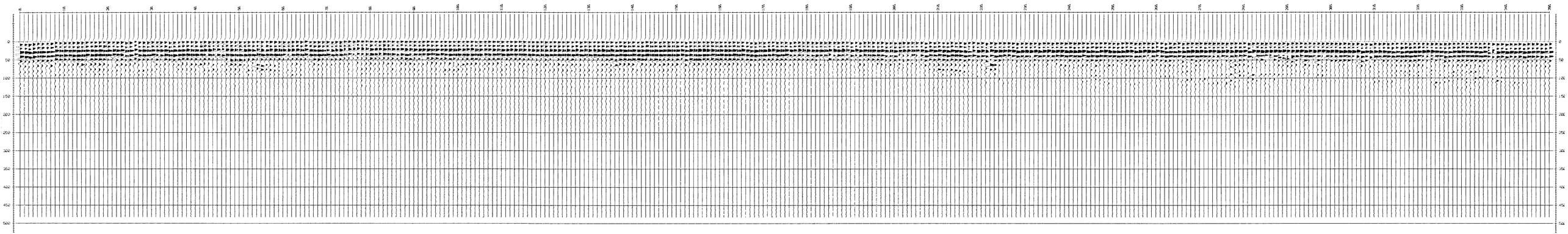
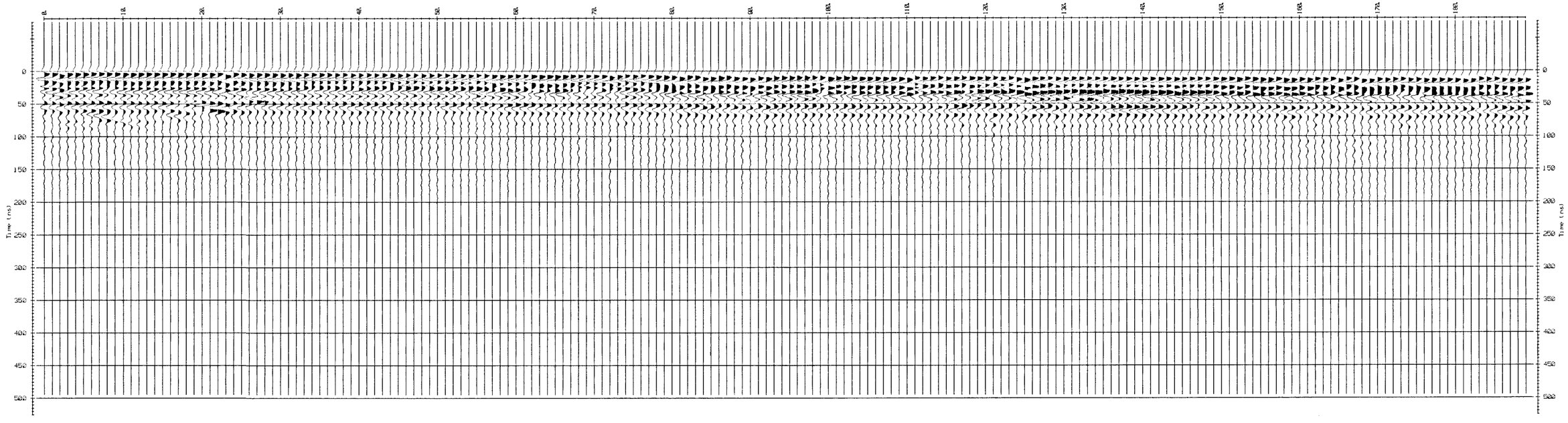
200
250
300
350
400
450
500
Time (ns)



LN6C-2-1

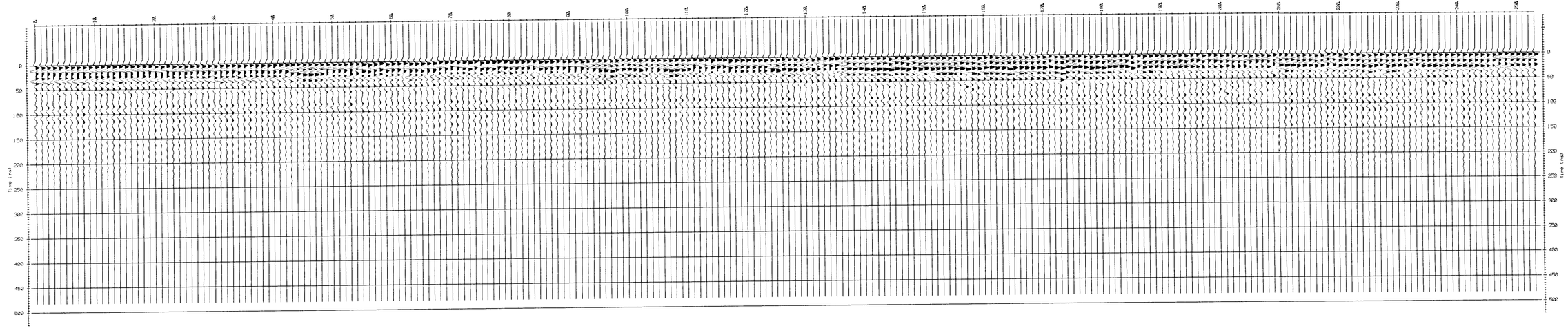
LN6C-2-1



LN6C-2-2

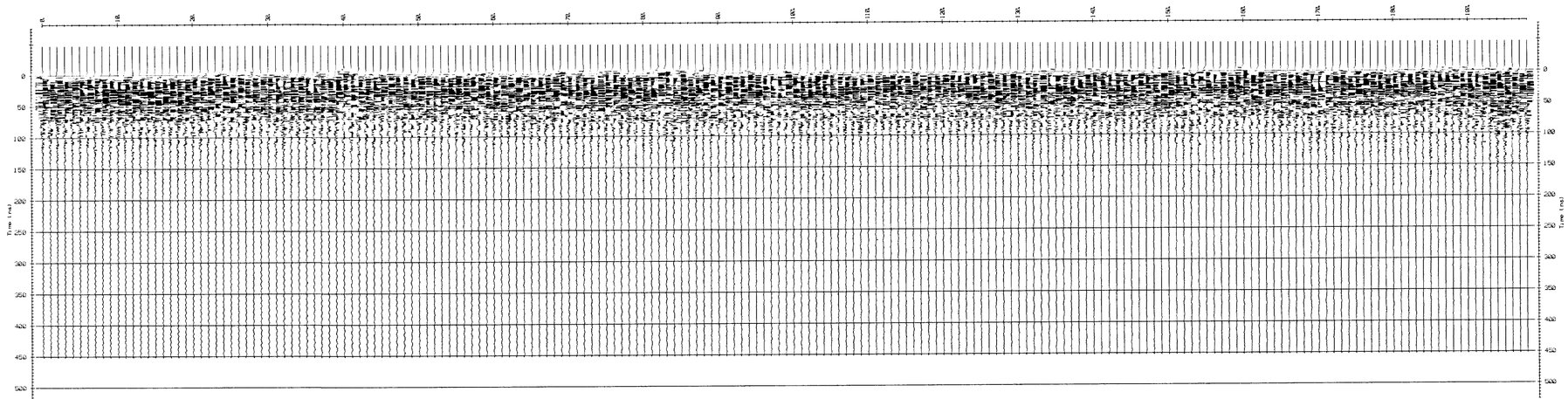
LN6C-2-2

LN6C-2-2



LN6C-2-3

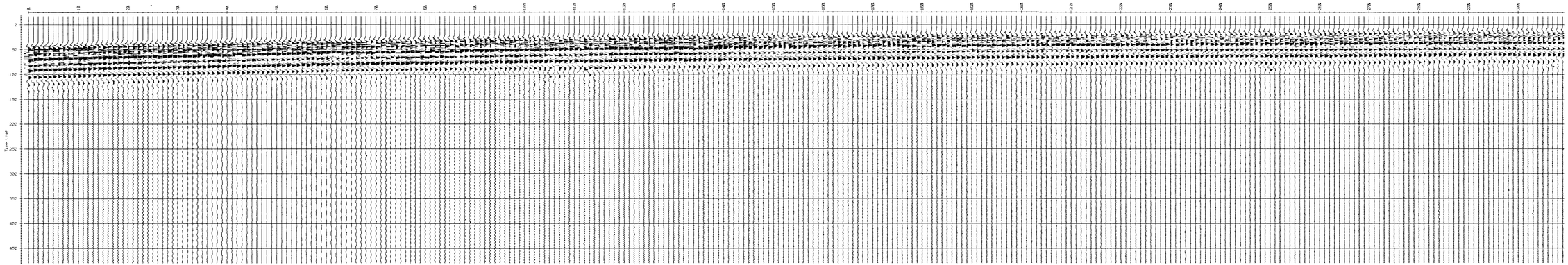
LN6C-2-3

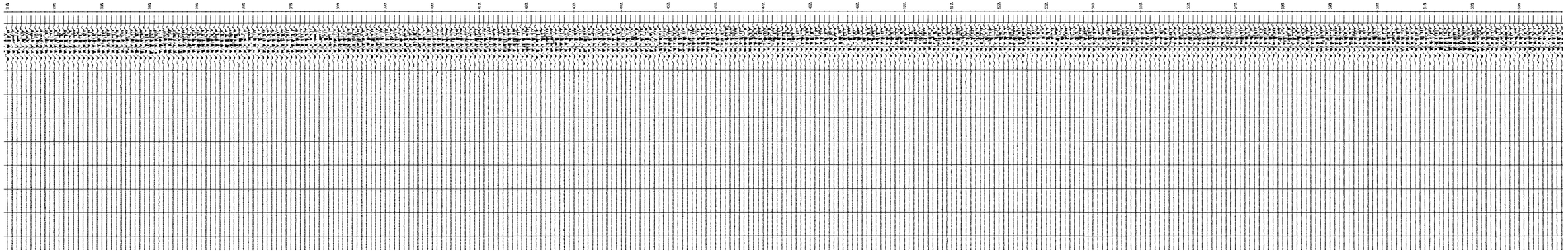


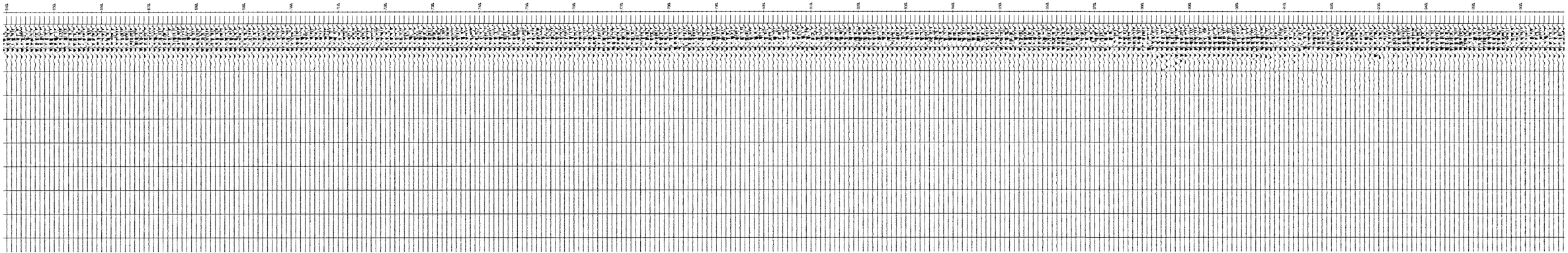
LN6C-2-4

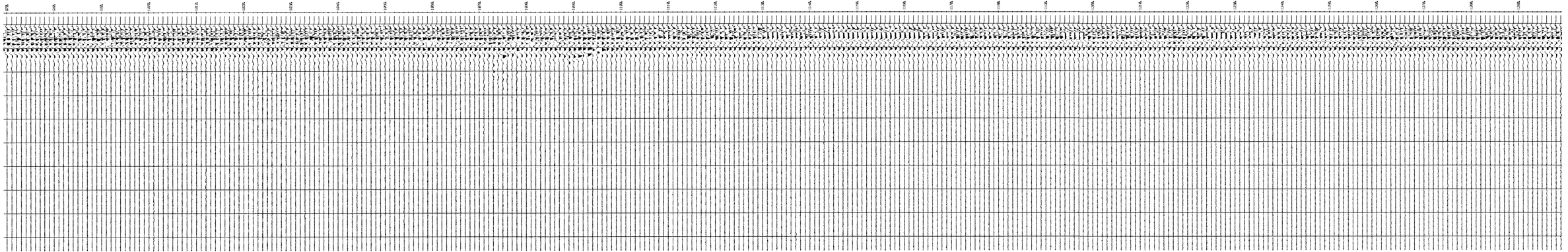
LN6C-2-4

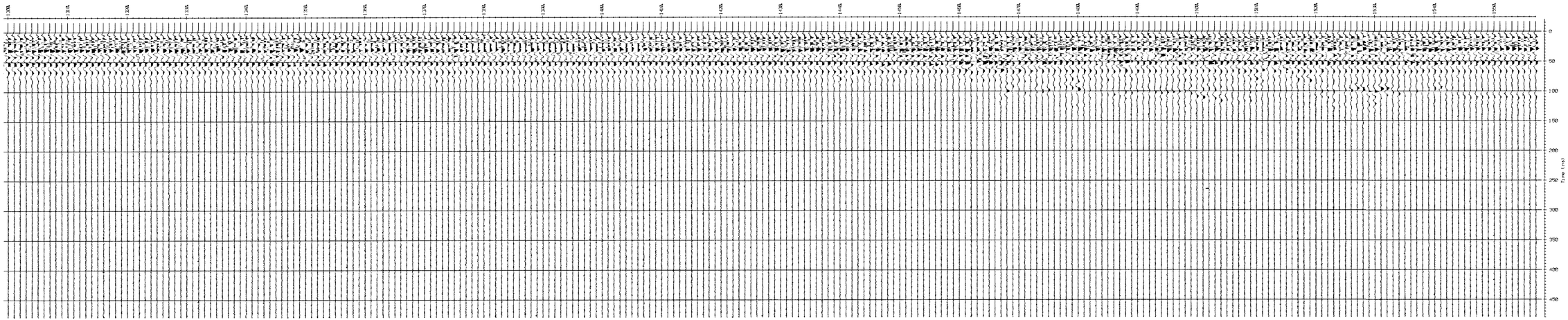
LN6C-2-4










0
50
100
150
200
250
300
350
400
450
Time (ns)