

ACOUSTIC
CEMENT BOND
LOG

COMPANY ANTERO RESOURCE		WELL VALLEY FARMS F-5		FIELD MAMM CREEK		CNTY GARFIELD STATE CO	
COMPANY ANTERO RESOURCES		WELL VALLEY FARMS F-5		FIELD MAMM CREEK		COUNTY GARFIELD STATE COLORADO	
LOCATION:		2123' FSL & 322' FWL		API: #05-045-14286-00		OTHER SERVICES: NONE	
SEC. 14		TWP. 06S		RGE. 92W			
PERM. DATUM GROUND LEVEL		ELEV. 5613'		ELEV. K.B. 5630'		D.F. 5629'	
LOG MEASURED FROM K.B. 17 FT. ABOVE PERMANENT DATUM						G.L. 5613'	
DRILLING MEASURED FROM KELLY BUSHING							
DATE		05-JUL-2008					
RUN NO.		ONE					
DEPTH DRILLER		8455'					
DEPTH LOGGER		8383' PBTD					
BTM. LOG INTERVAL		8377'					
TOP LOG INTERVAL		SURFACE					
OPEN HOLE SIZE		7.875"					
TYPE FLUID		WATER					
DENS.		VISC.		N/A			
MAX. REC. TEMP. F		N/A					
EST. CEMENT TOP		3861'					
TIME WELL READY		ROA					
TIME LOGGER ON BTM.		13:38					
EQUIP. NO.		14102					
LOCATION		GRAND JUNCTION					
RECORDED BY		MIKE NIX					
WITNESSED BY		MARCUS DAVIS					
BOREHOLE RECORD							
RUN NO.		BIT FROM		TO		SIZE	
1		24" SURF		50'		WGT. FROM	
2		12.25		1530'			
3		7.875 1530'		8455'			
Casing Record		SIZE		WT/FT		GRADE	
SURFACE STRING		16"		55.0		TYPE JOINT	
PROT. STRING		8.625"		24.0		SURF	
PROD. STRING		5.500"		17.0		J-55	
LINER						SURF	
MARKER JTS. @		7810-		7828		& 3850-3869	

All interpretations of log data are opinions based on inferences from electrical or other measurements. We do not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

REMARKS		Rig: CRANE #15045		Service Order # 146313	
LOG RAN ON WIRELINE DEPTHS W/17' KB				BHT N/A °F	
LOGGED W/O PST. @ SURFACE					
INDICATED CHANGE IN FLUID BEHIND 5.5 IN CASING @ 170'				Prints: 4	
YOUR CREW TODAY IS: M. COBO, J. REID					
THANK YOU FOR CHOOSING WEATHERFORD WIRELINE SERVICES FARMINGTON, NM (505)564-9131					
		EQUIPMENT DATA			
Bit Size		7.875	Run No.	Tool Type	Tool No.
Well Status		NEW DRILL	ONE	CENA	401
Surface Pressure			ONE	CTBA	228
Shut In		Flowing	ONE	GRBA	229
0 PSI.			ONE	CENB	159
			ONE	SBTA	283
			ONE	CENA	402

DEPTH SCALE: 5":100'

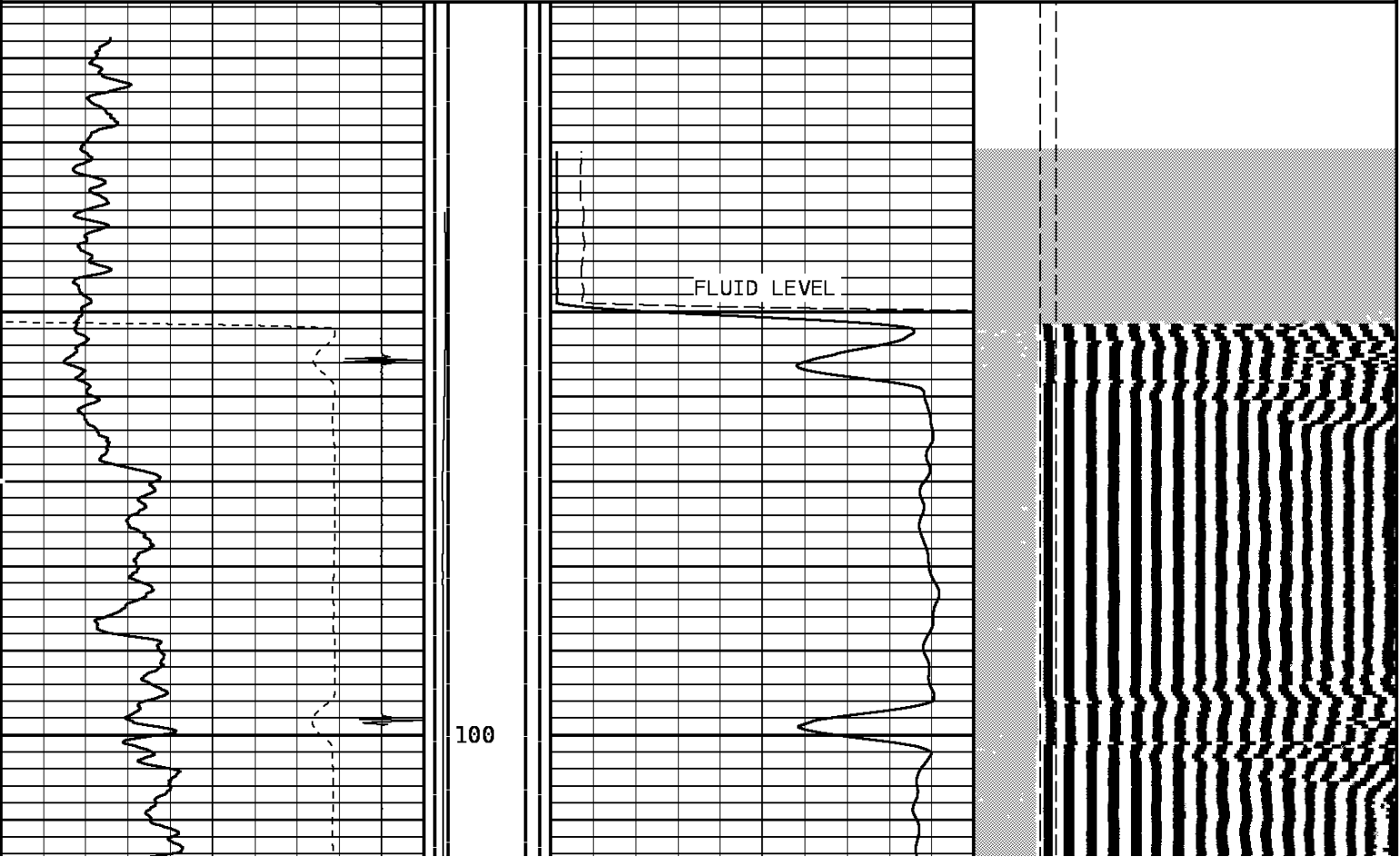
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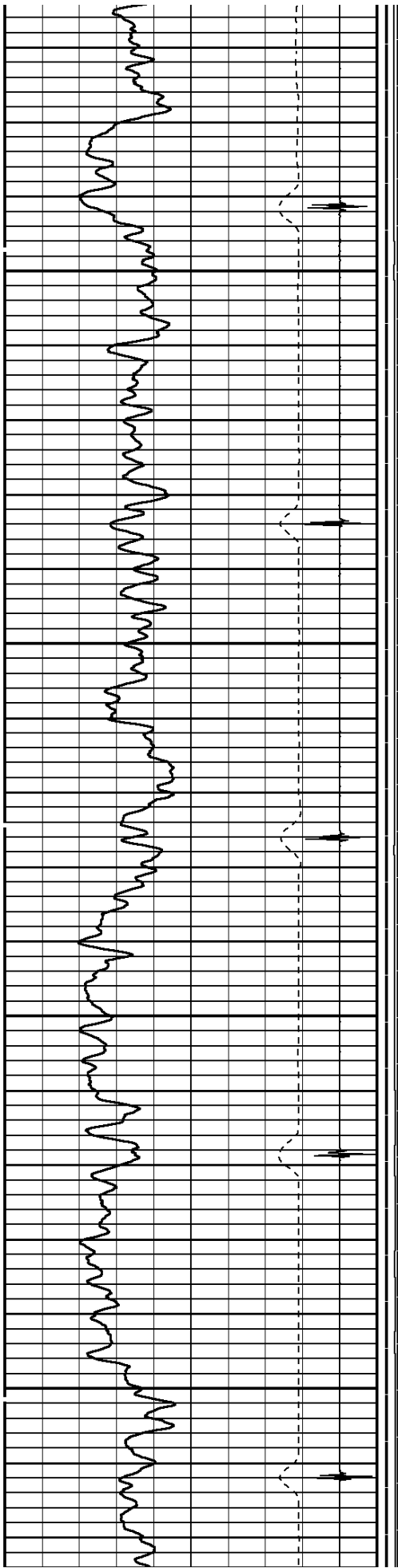
MAIN PASS W/0 PSI.

146313 sbt4

FINISH DEPTH: 0.0 Feet DIRECTION: UP DATE: TIME: MODE: ORIGINAL

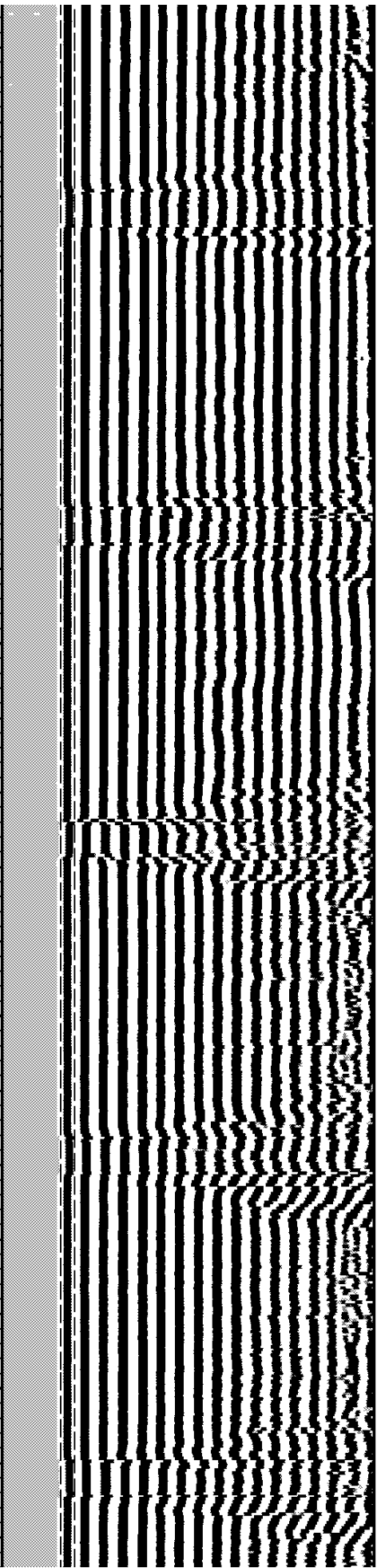
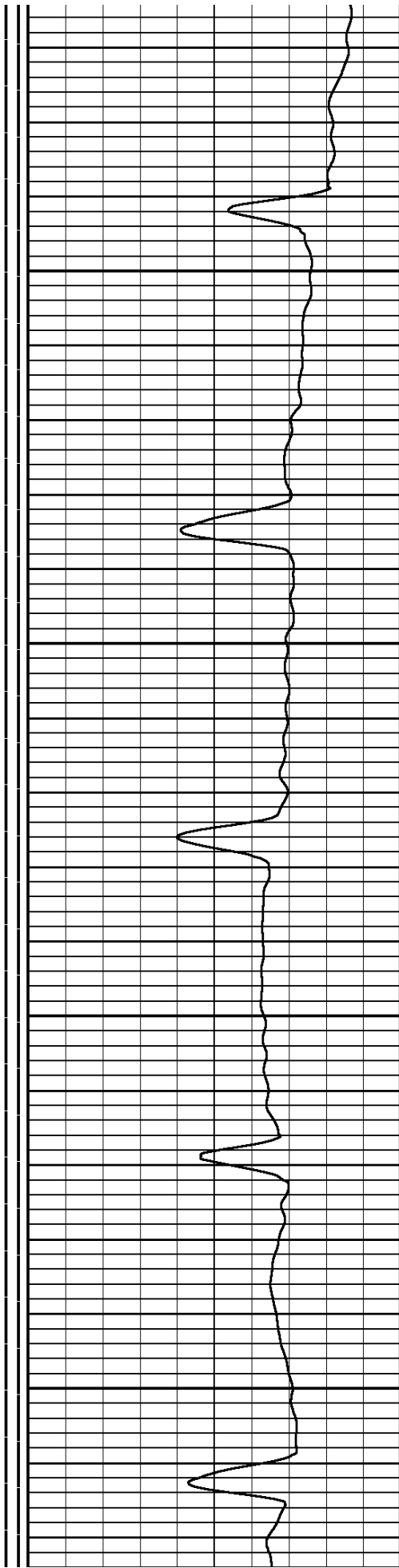
TRAVEL TIME 3FT						FREE PIPE GATE		
330	Microseconds	230				200	Microseconds	1200
Gamma Ray						FREE PIPE GATE		
0	API	150				200	Microseconds	1200
Collar Locator			Tension	AMPLITUDE 3FT		VARIABLE DENSITY 5FT		
-10000	Millivolts	1100	0 2200	0	Millivolts 100	200	Microseconds	1200

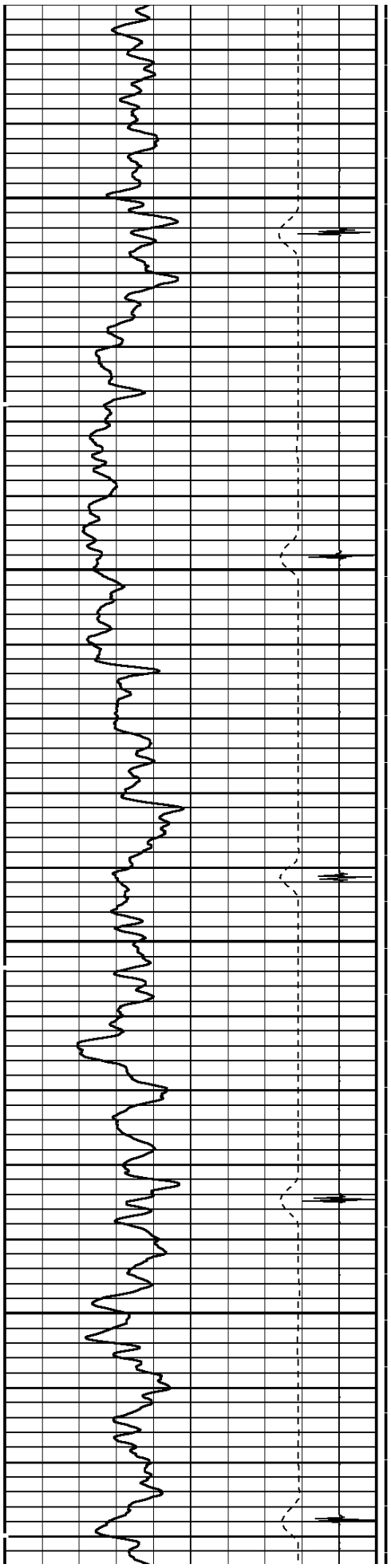




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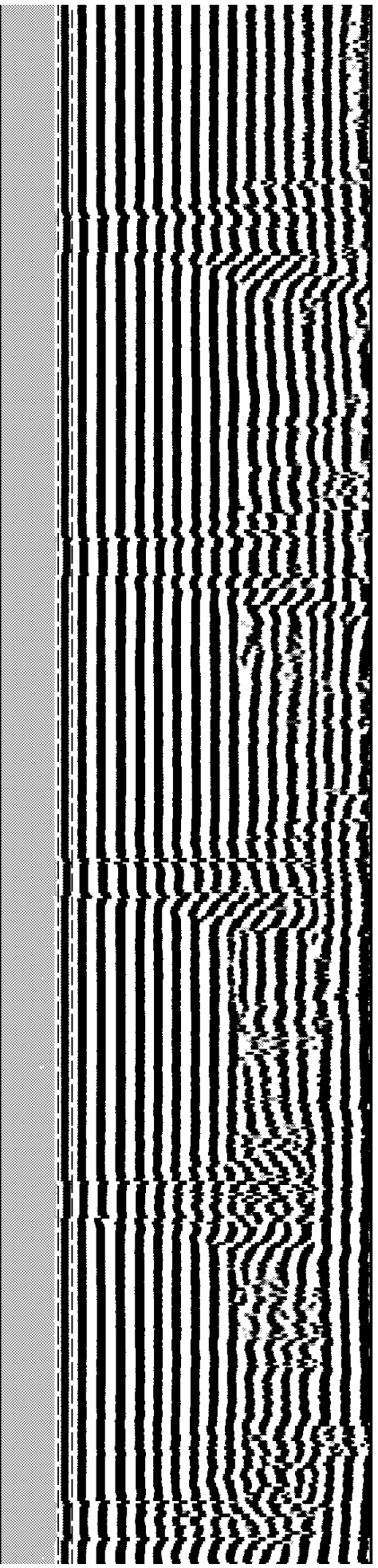
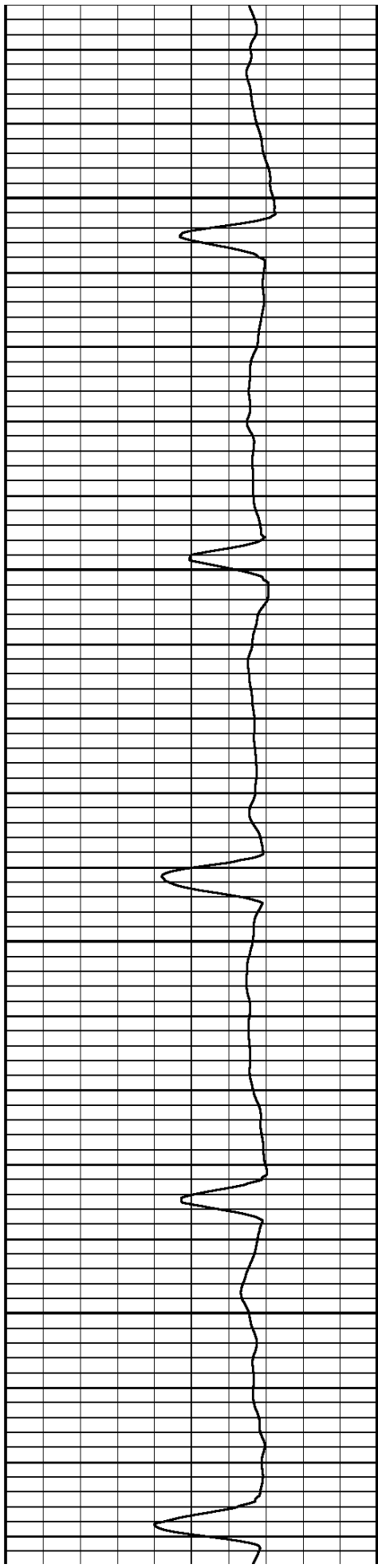
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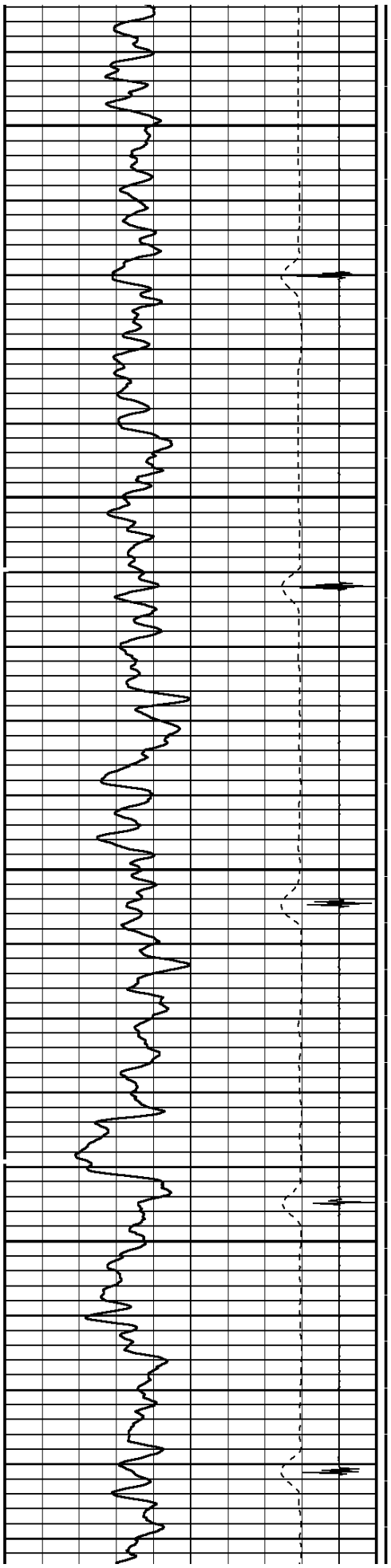




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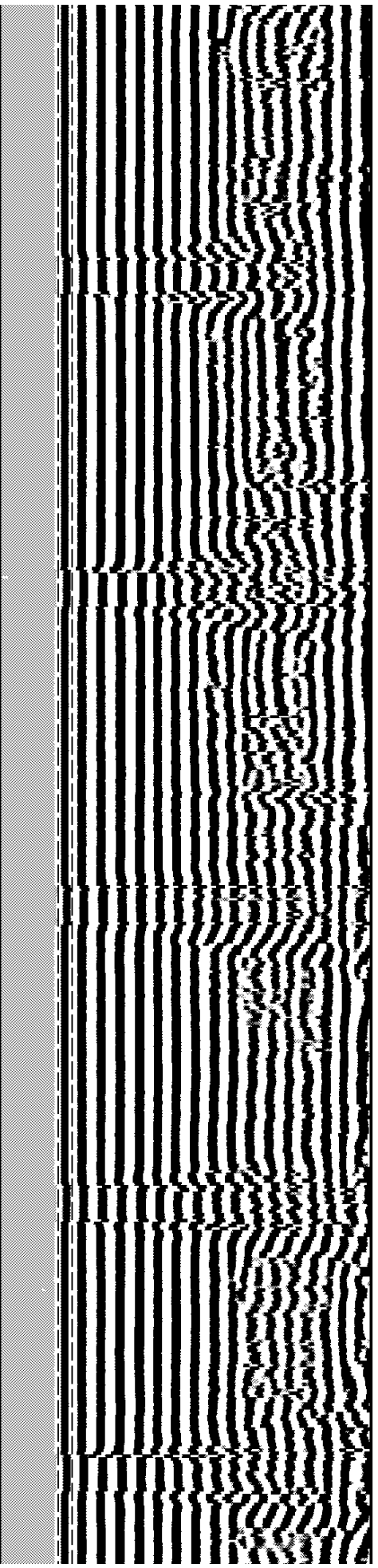
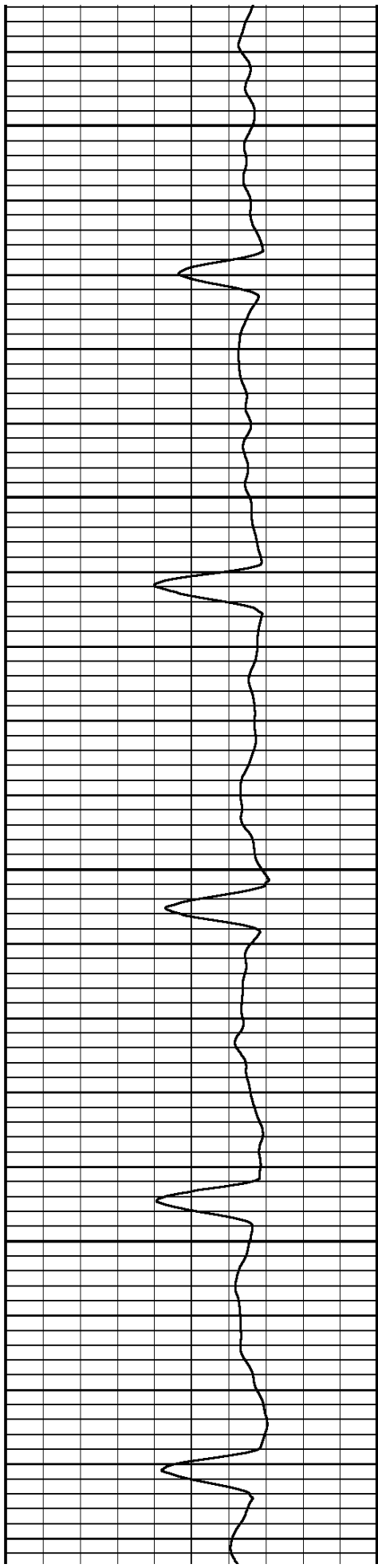
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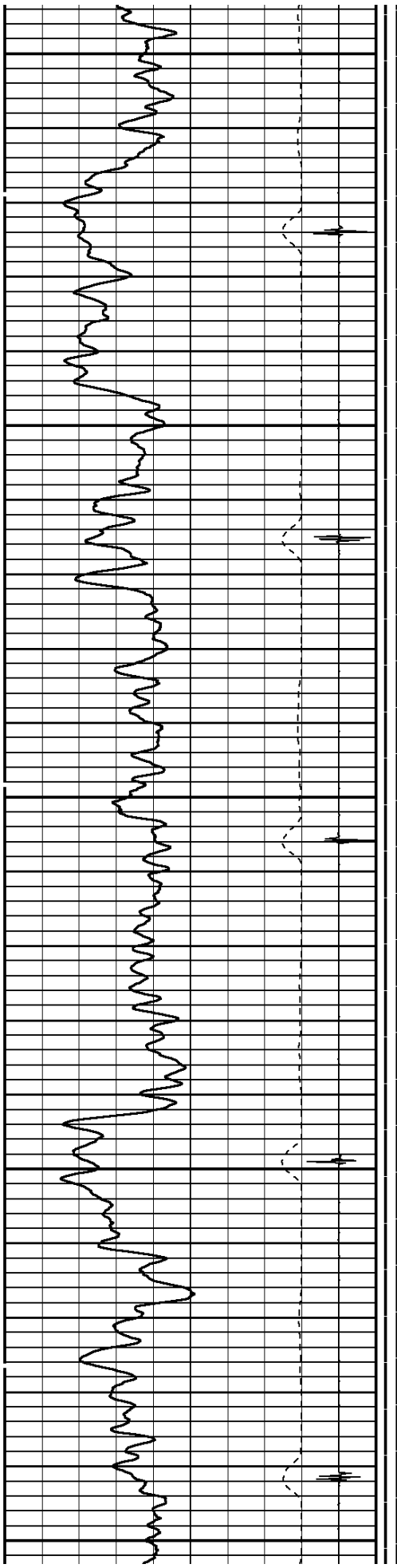




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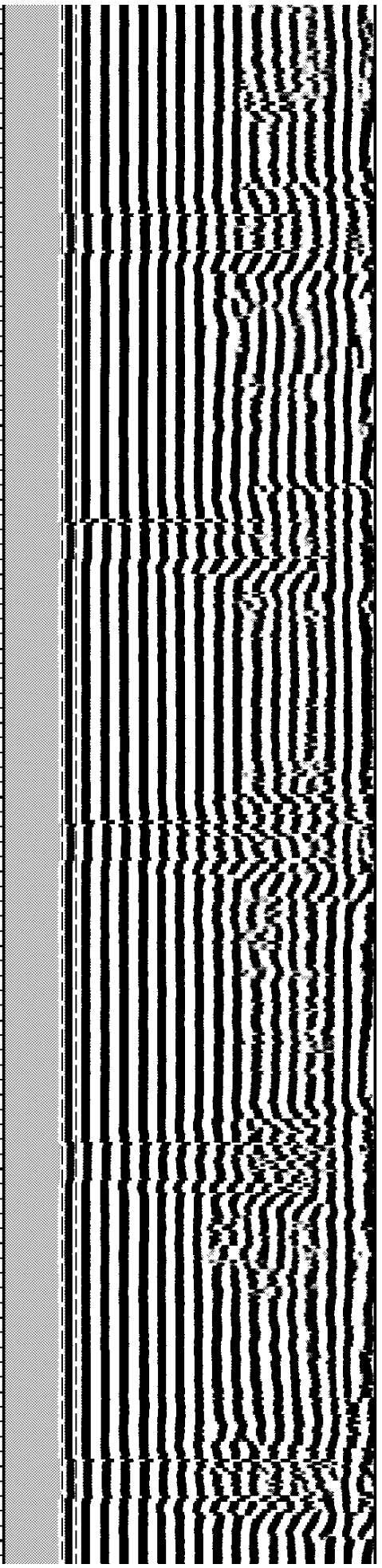
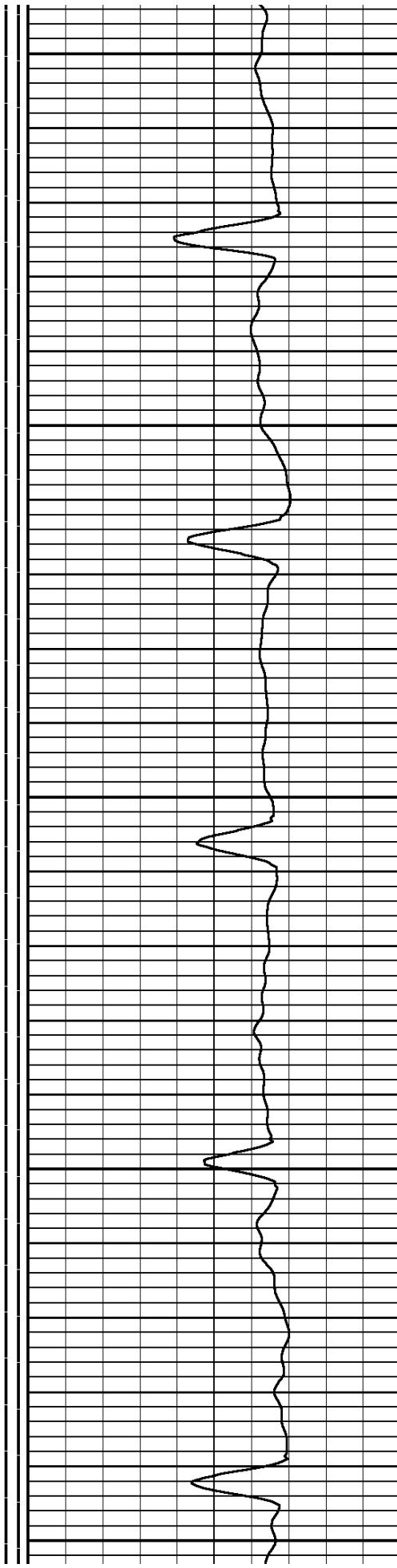
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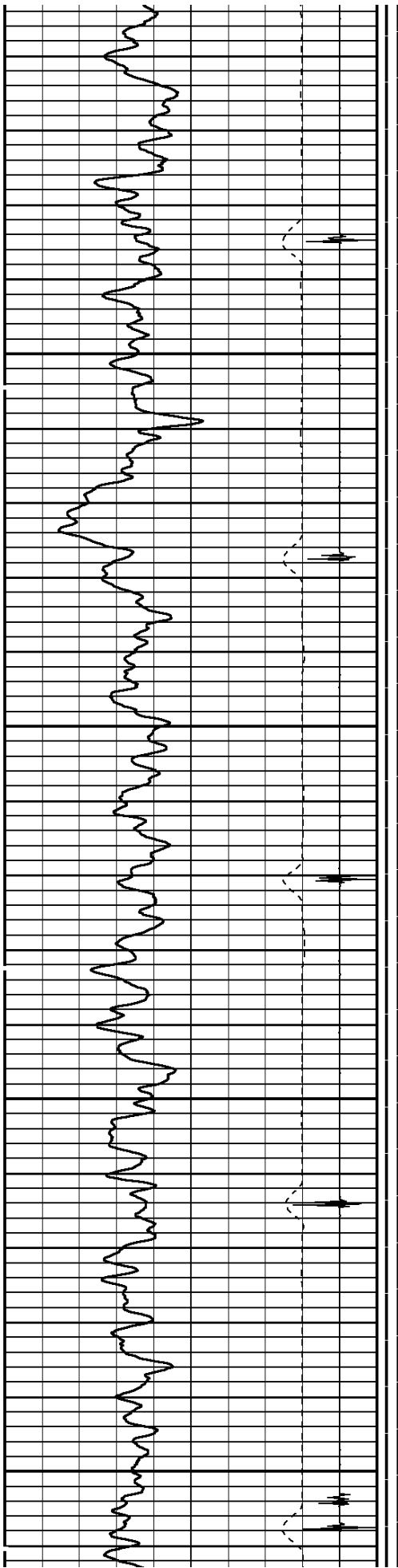




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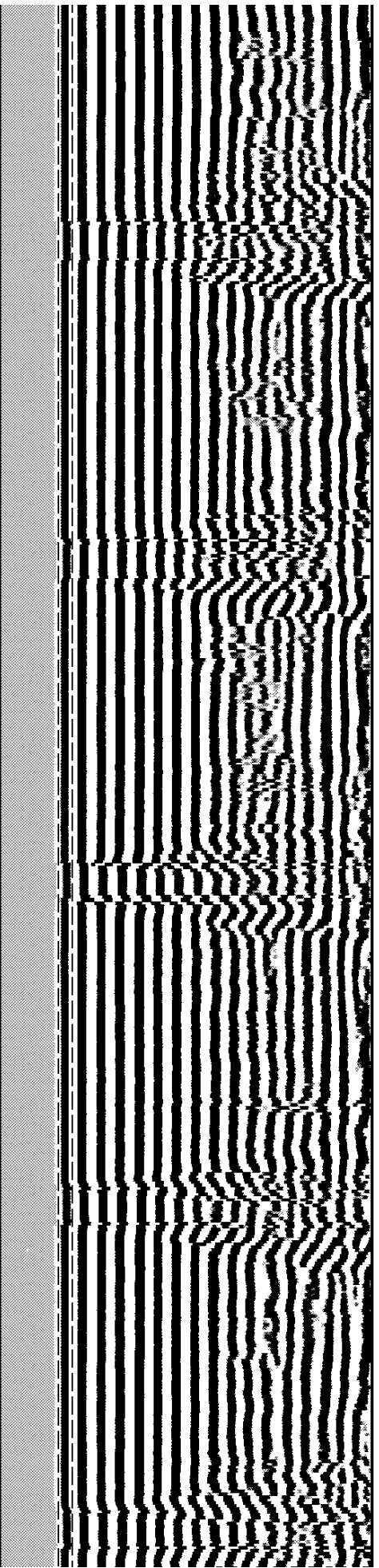
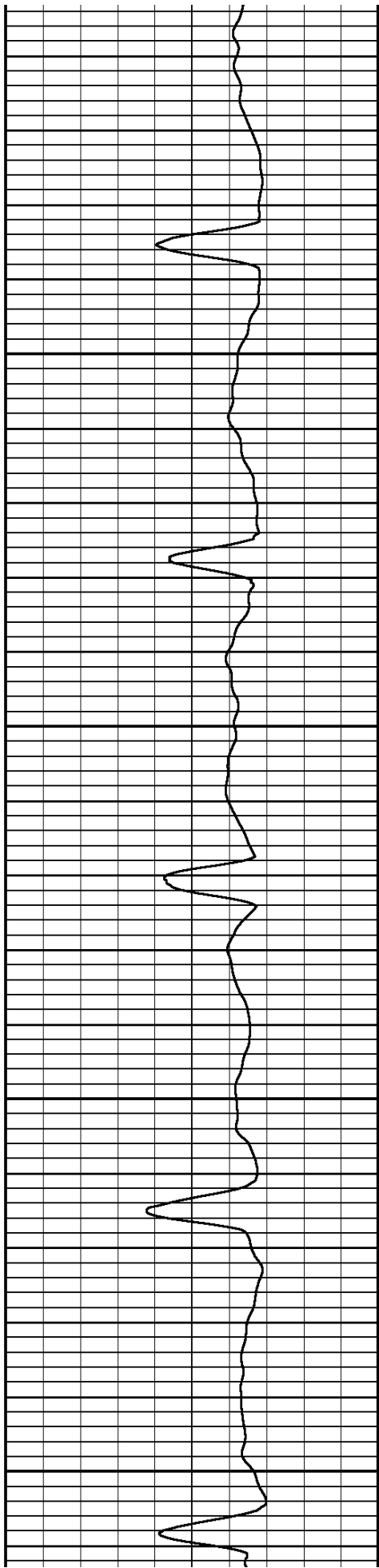
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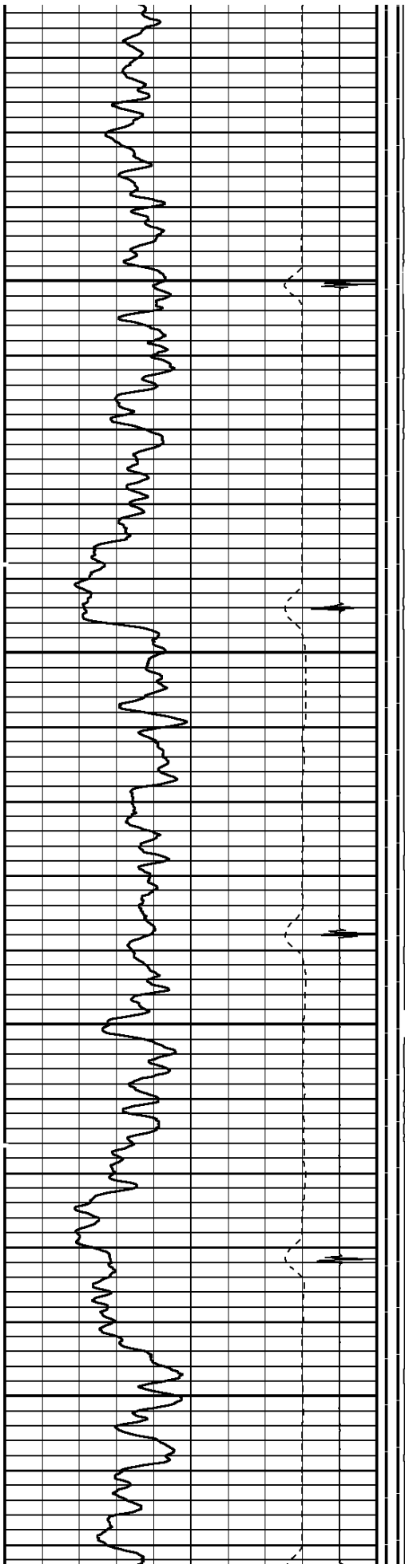




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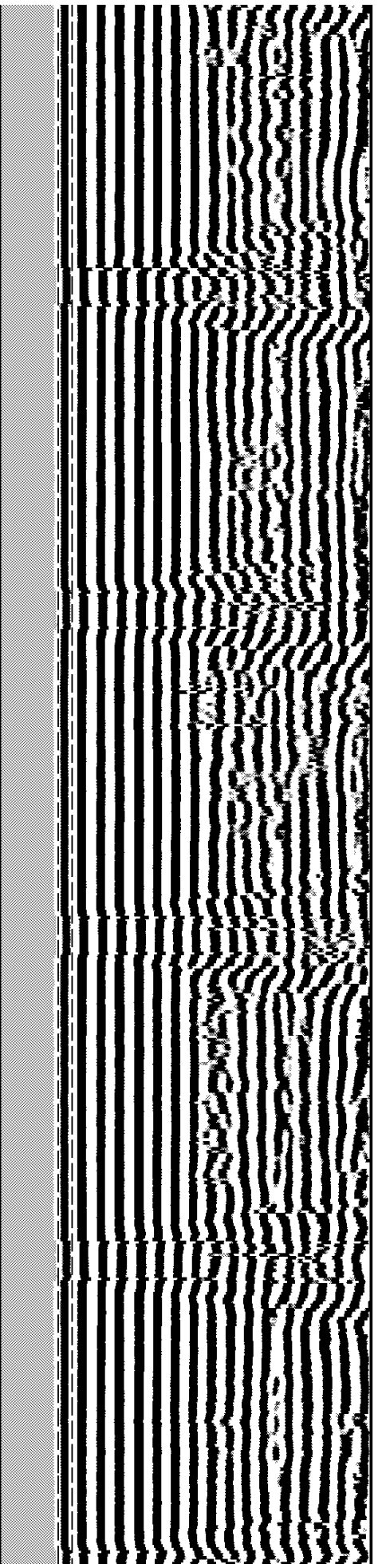
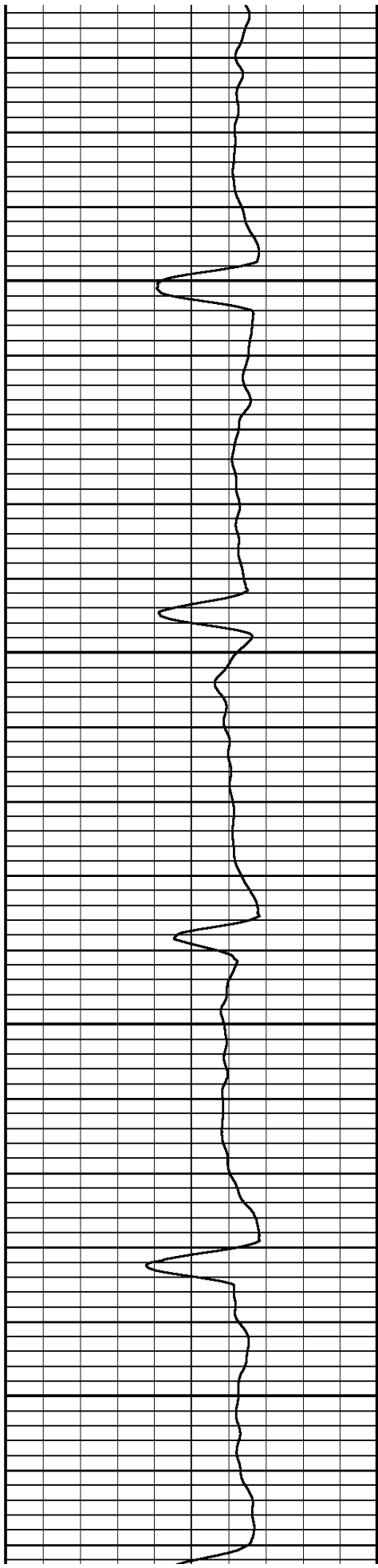
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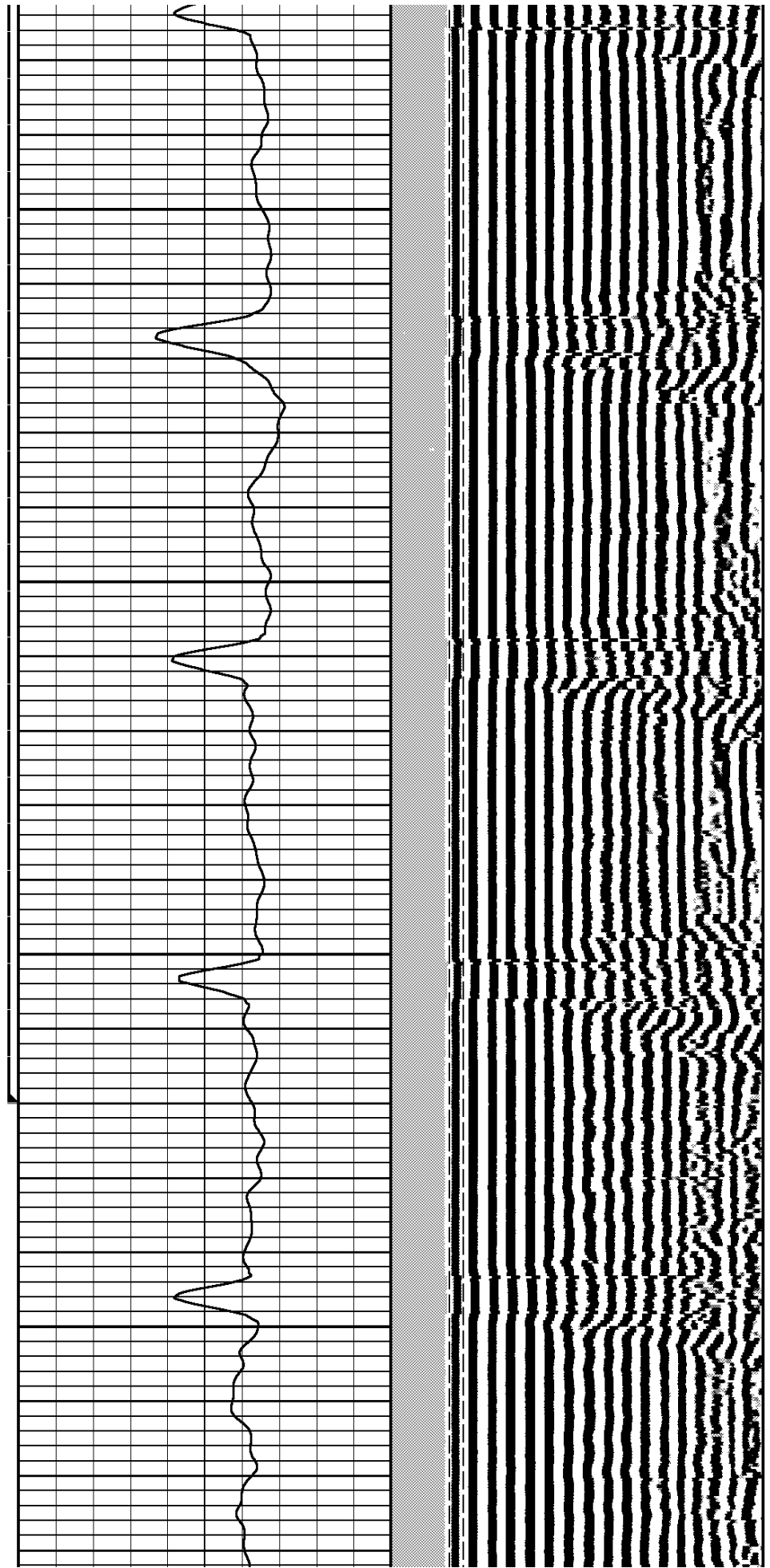
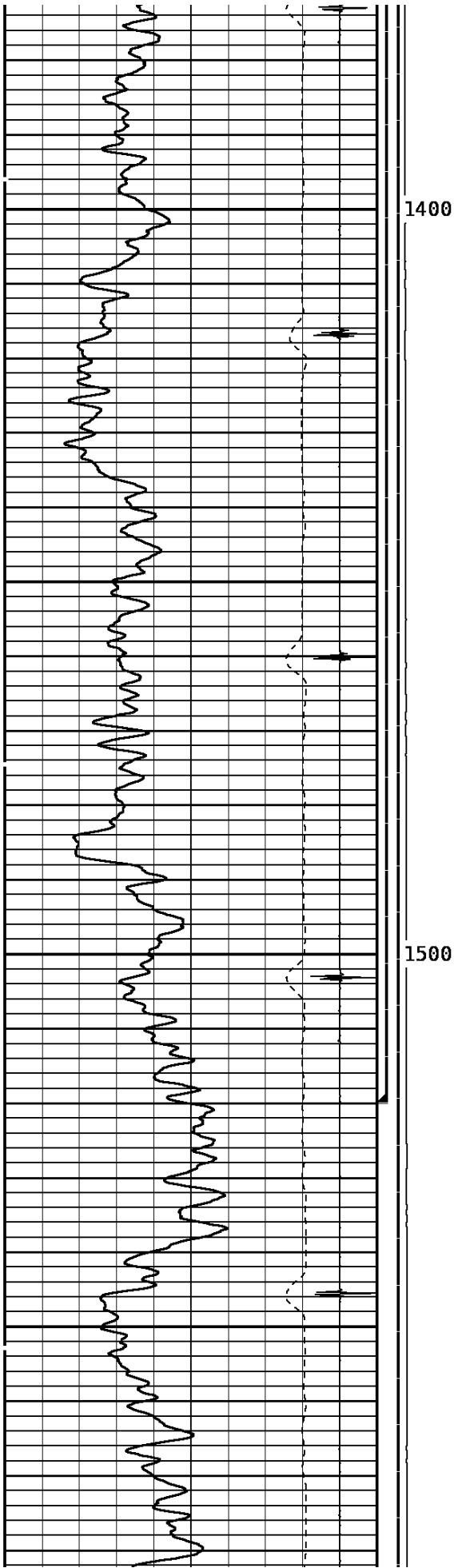


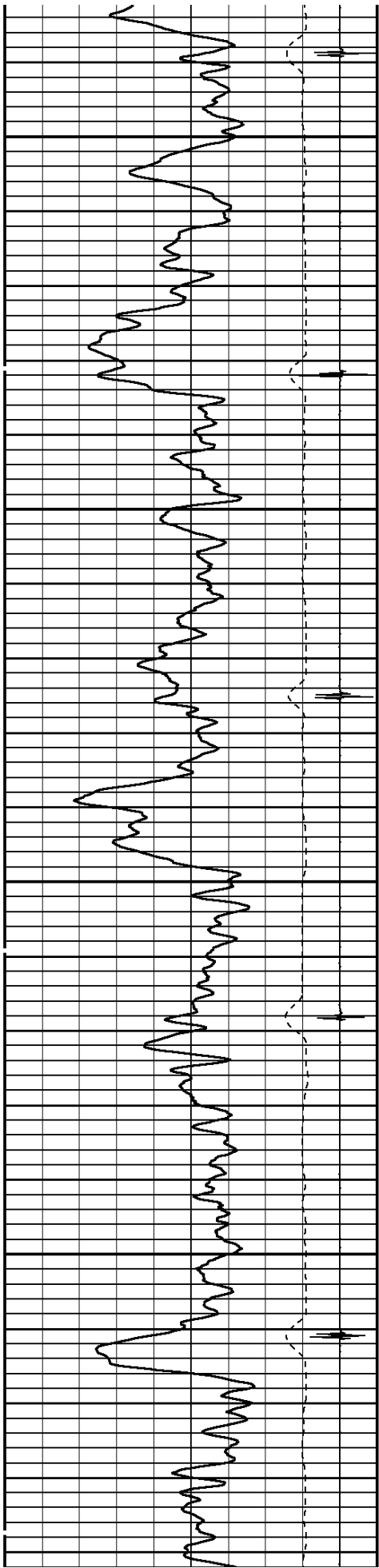


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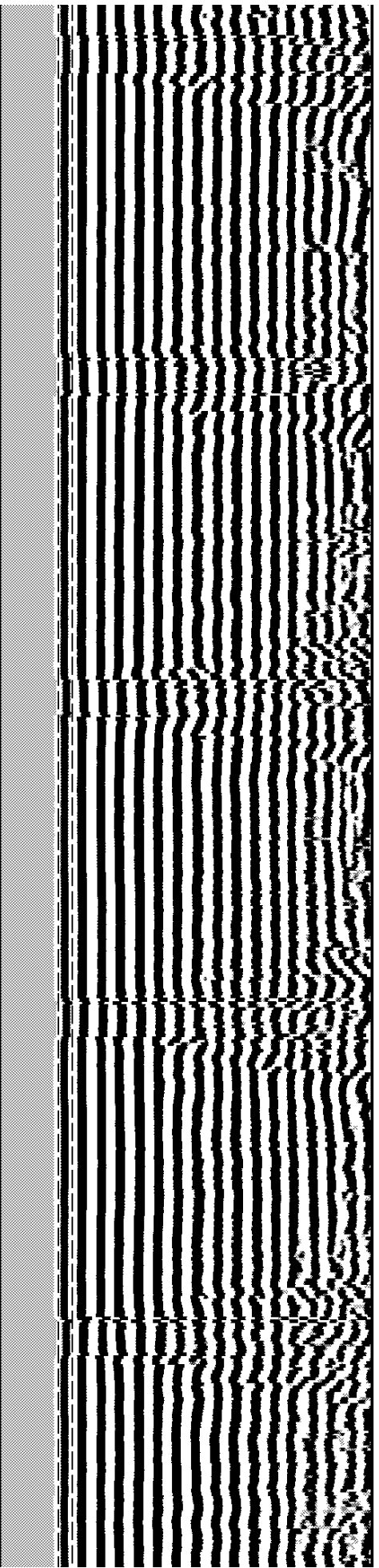
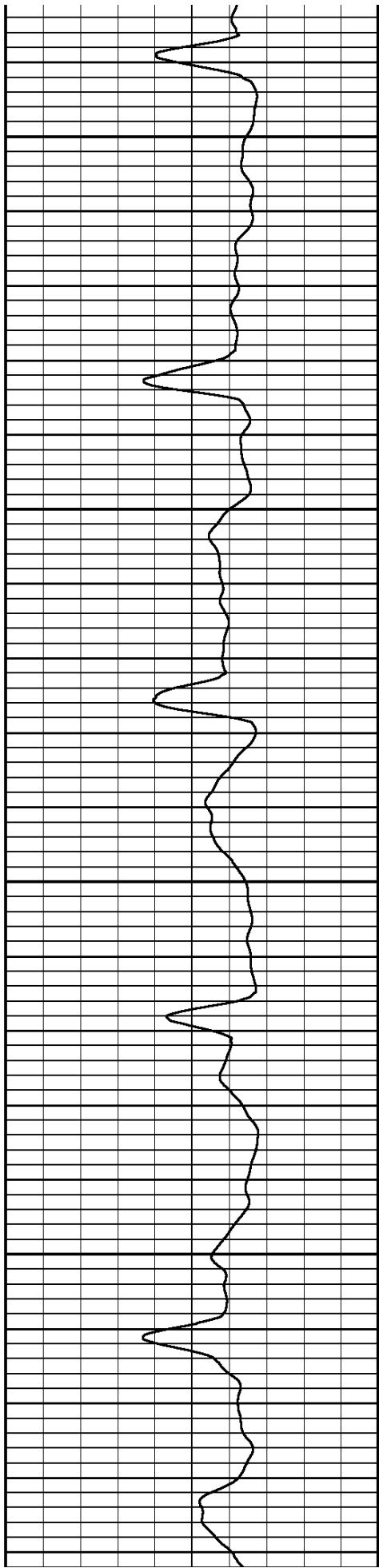


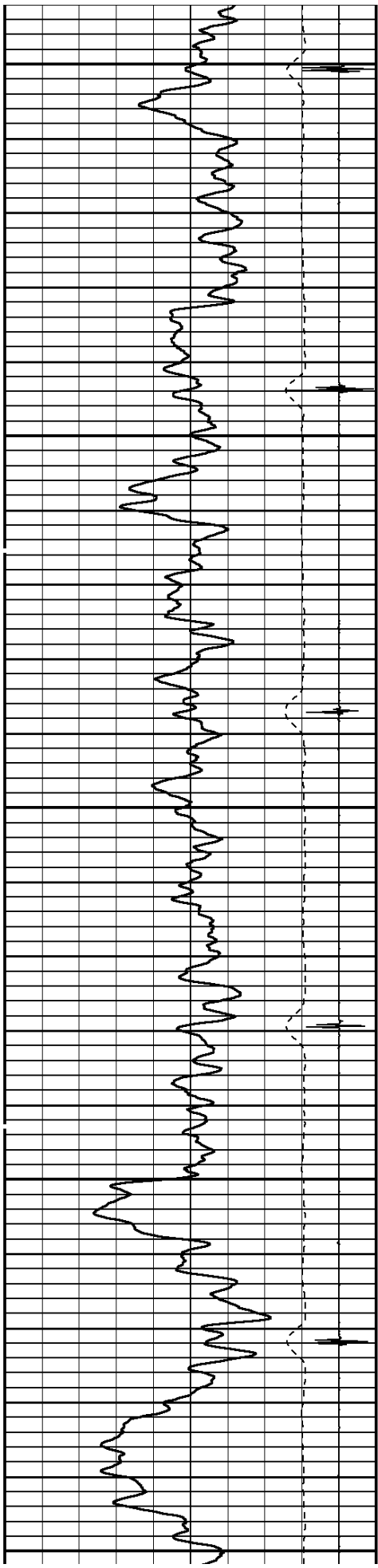




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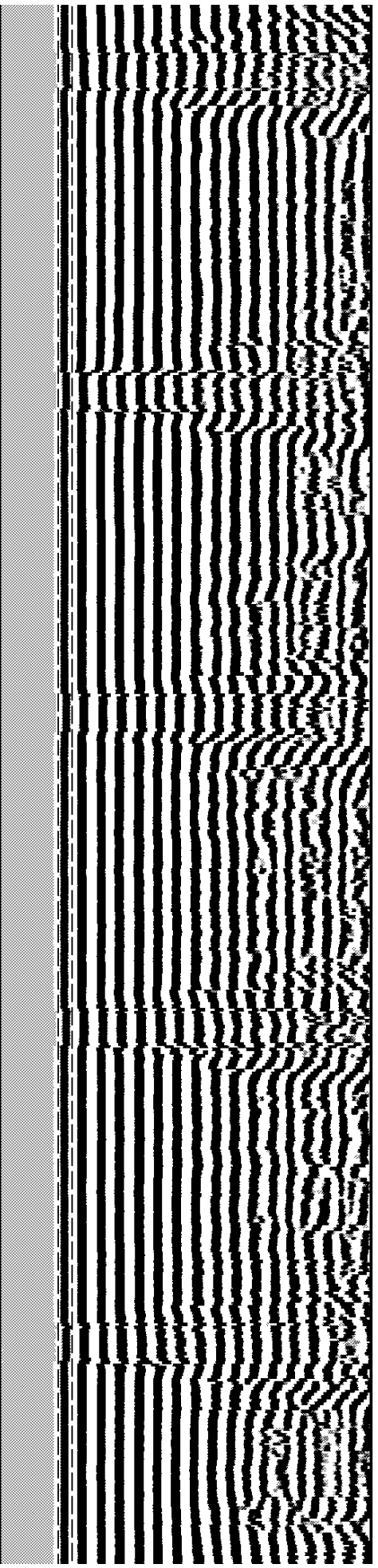
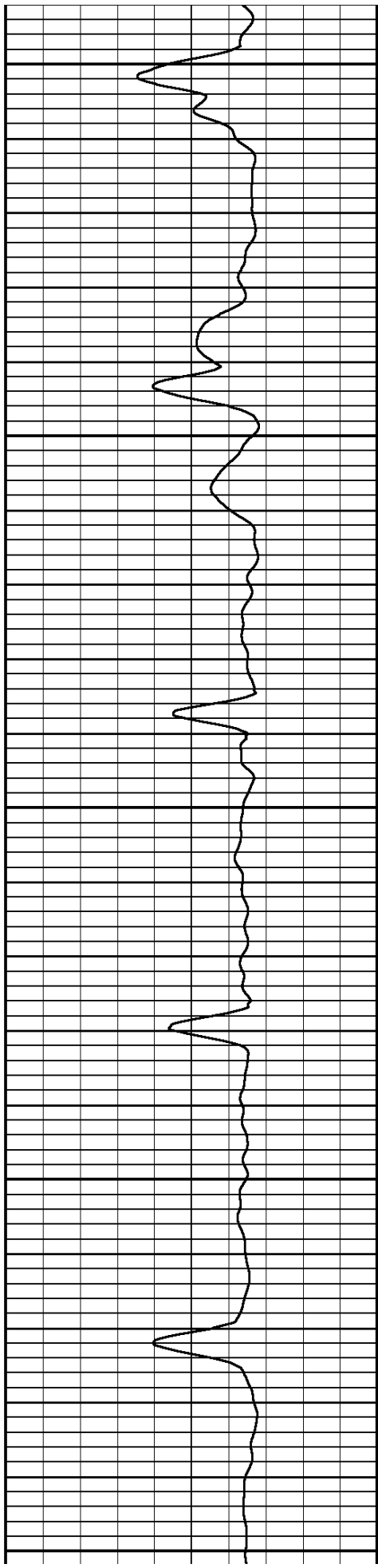


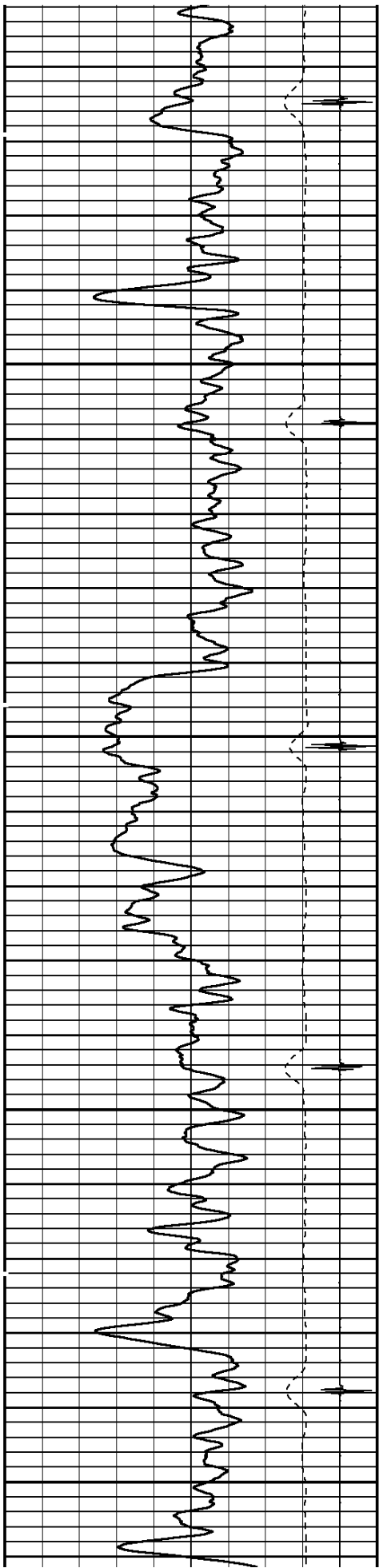


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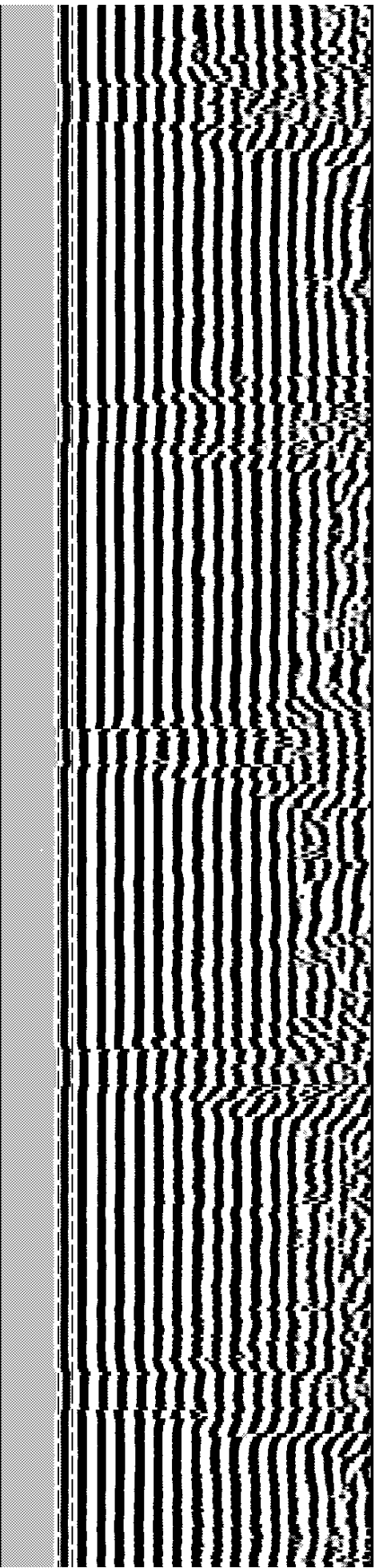
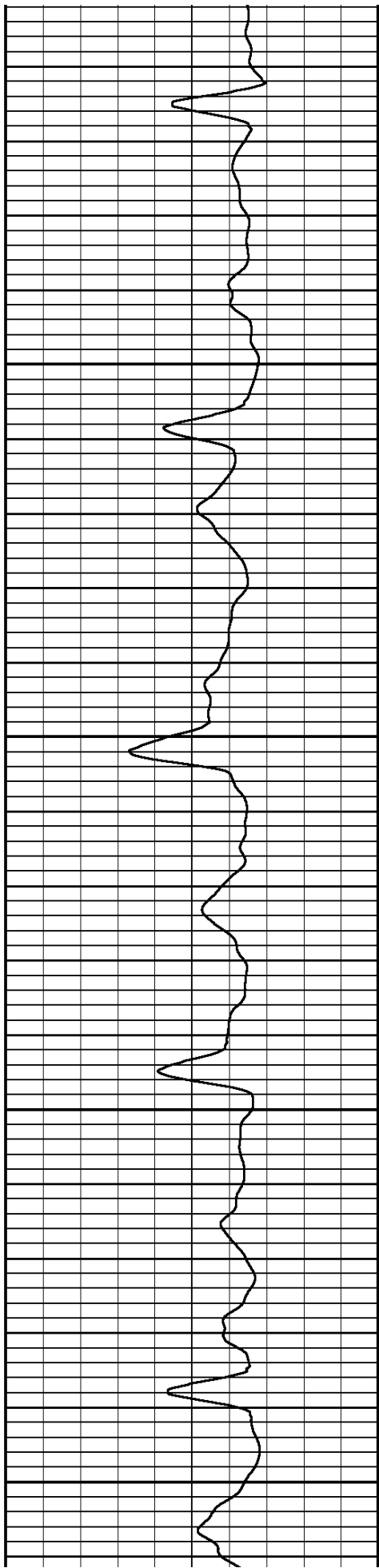
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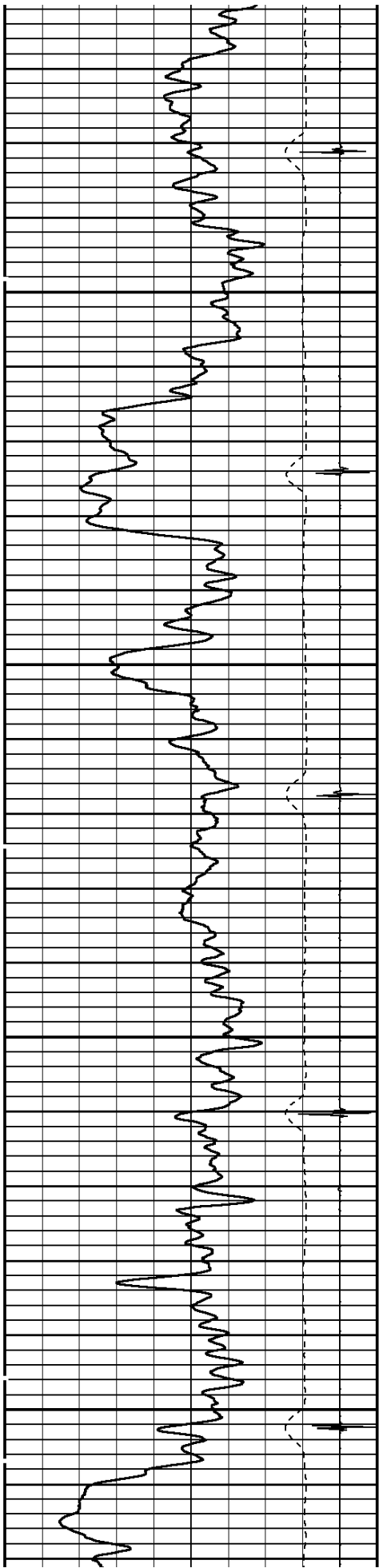




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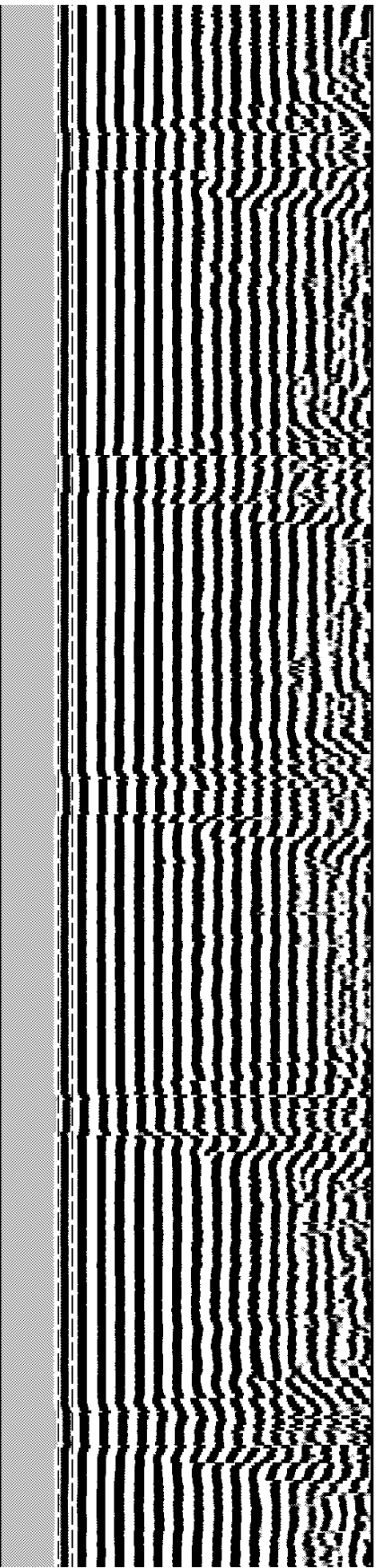
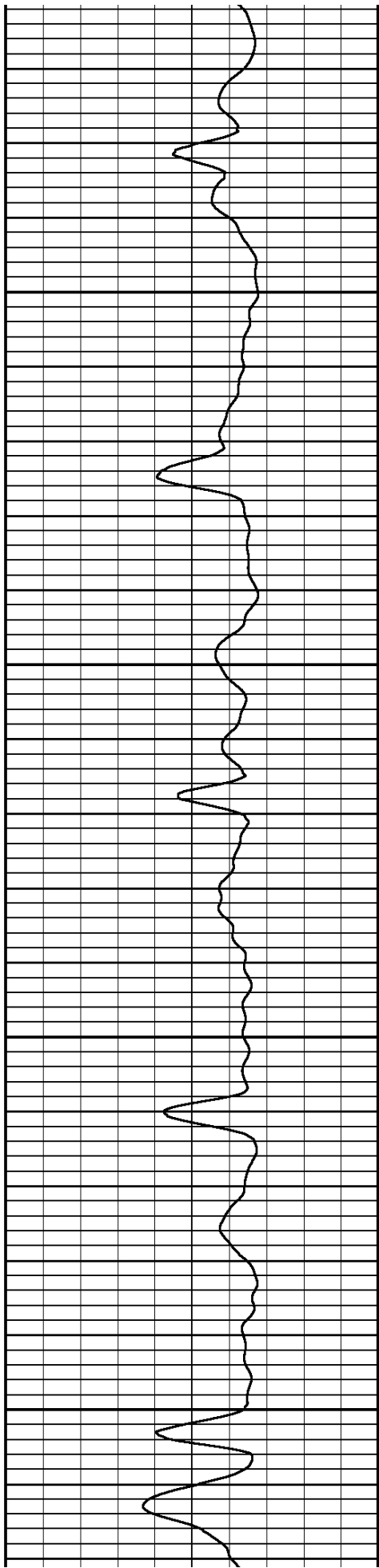
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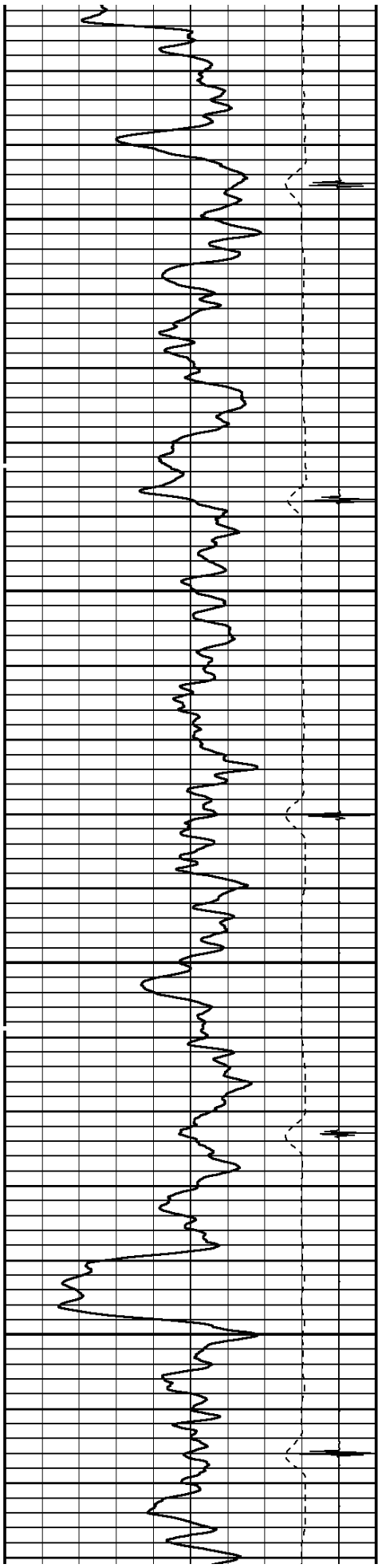




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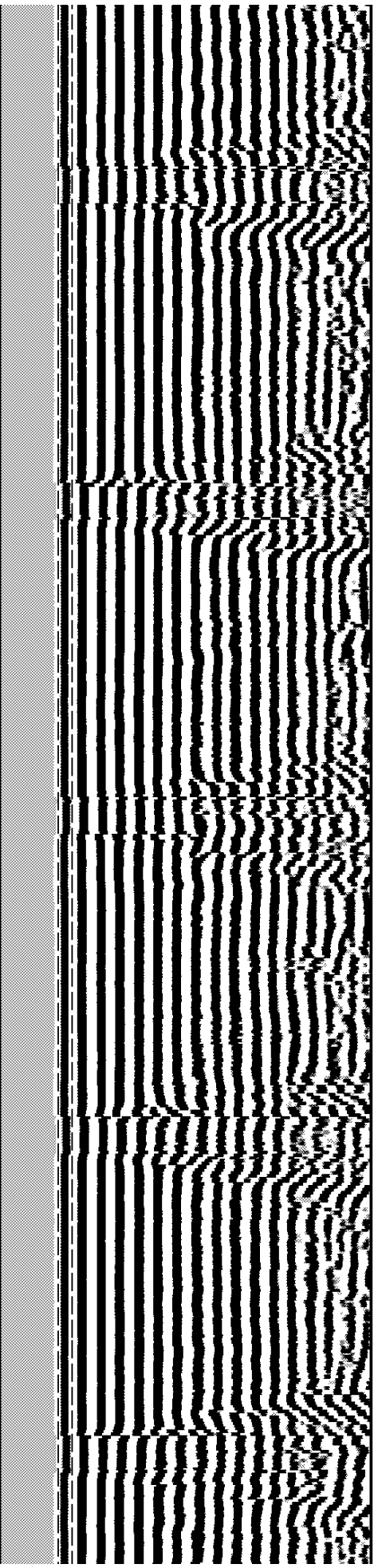
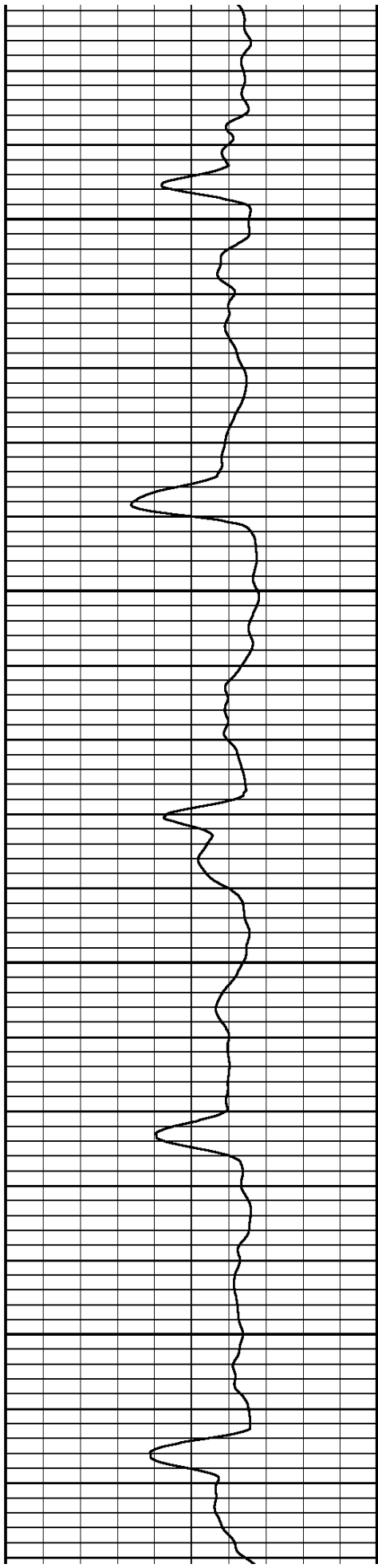
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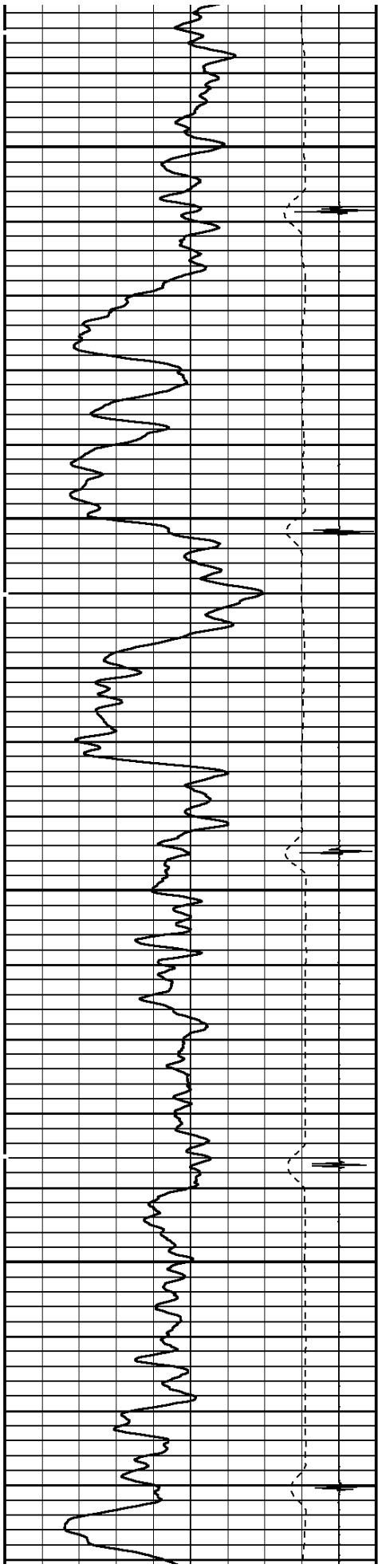




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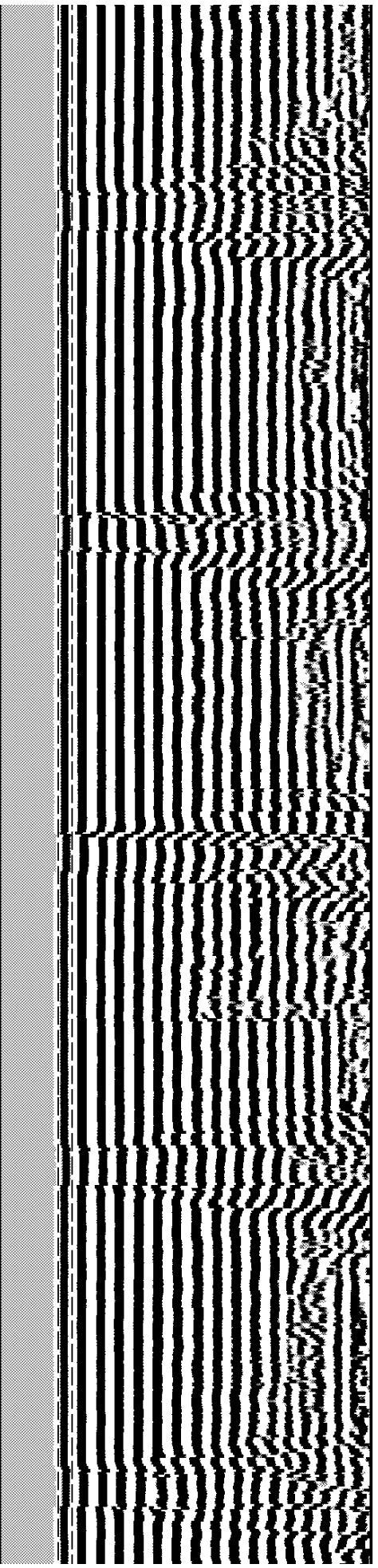
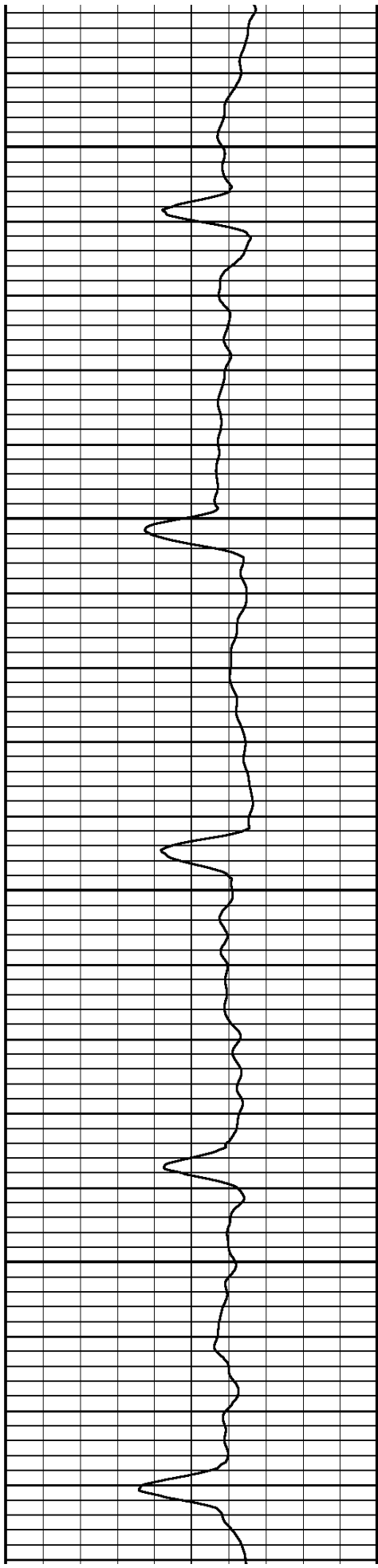
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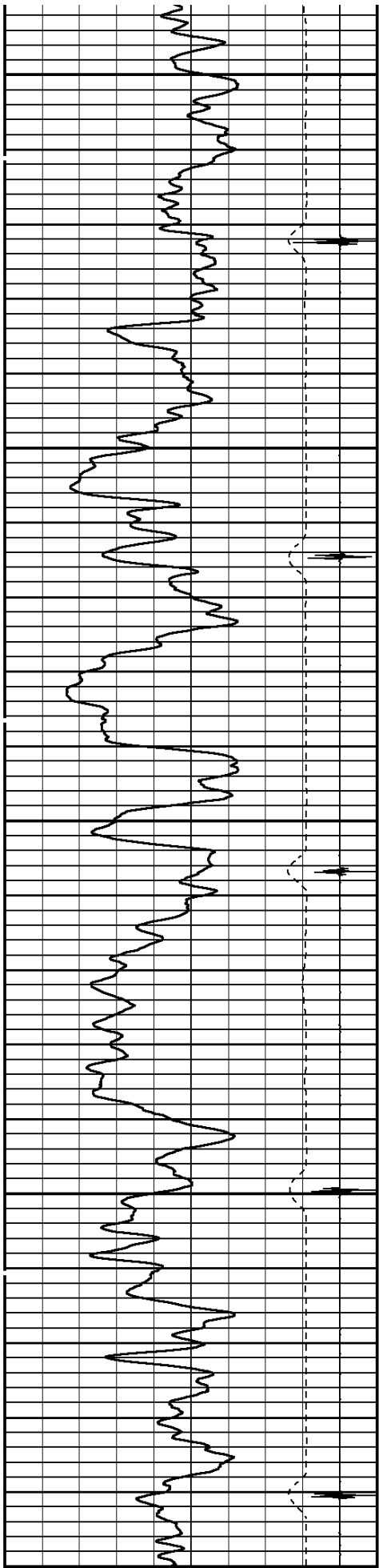




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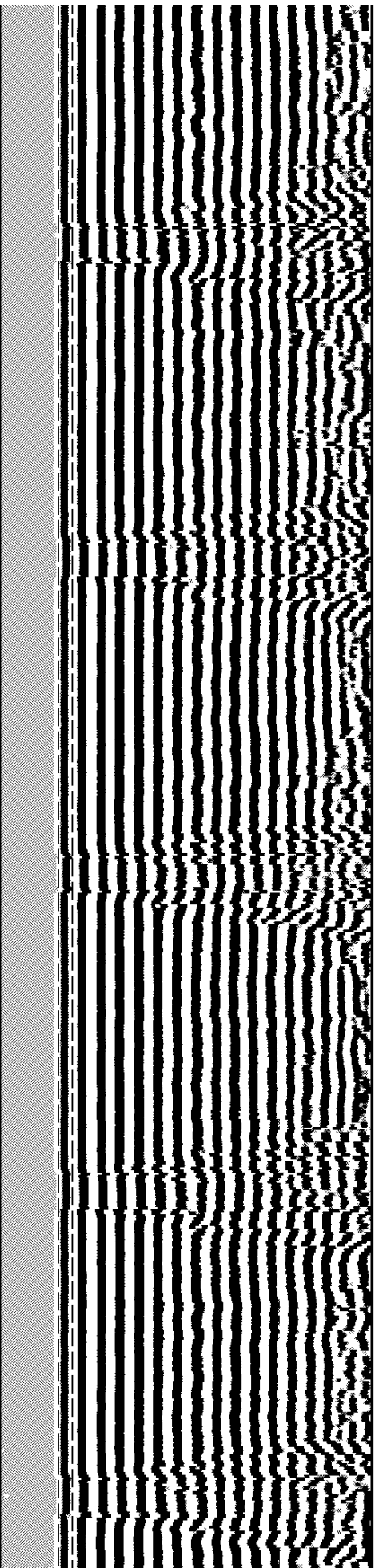
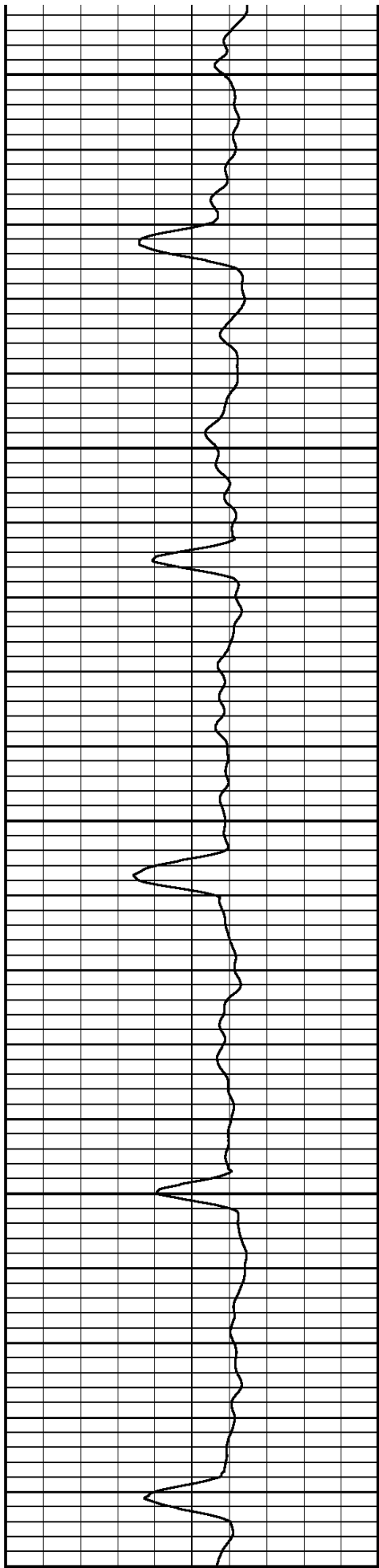
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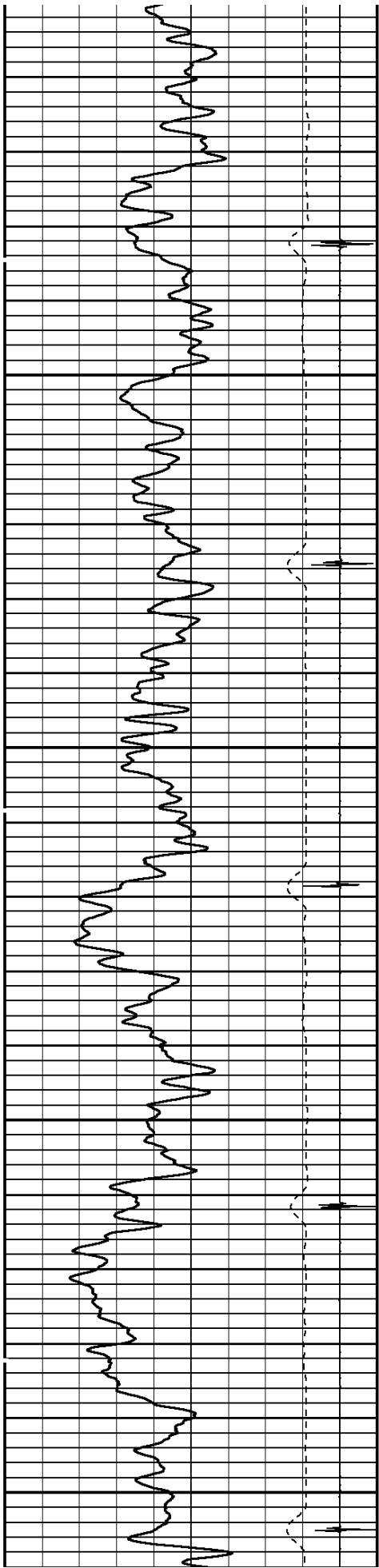




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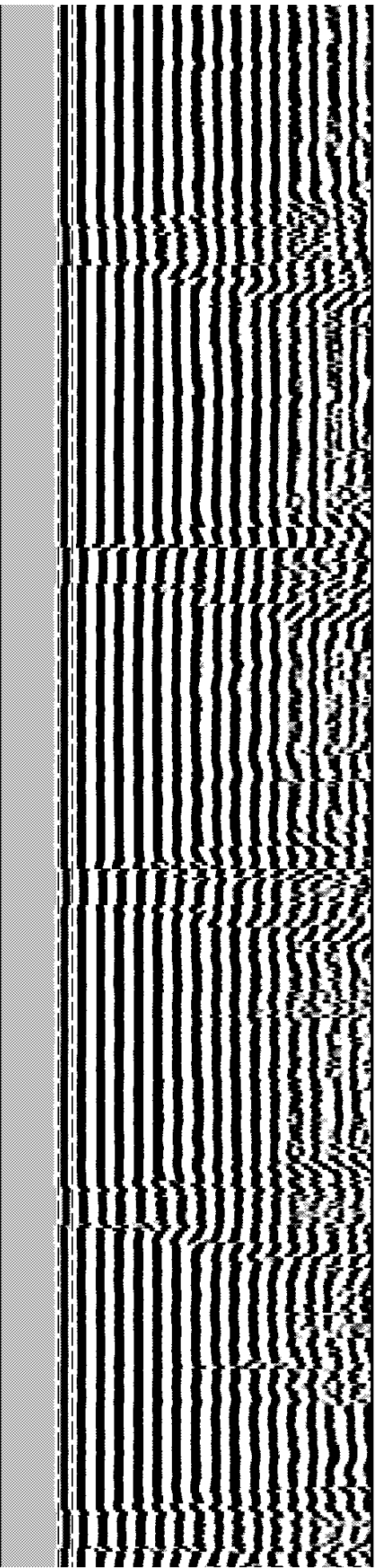
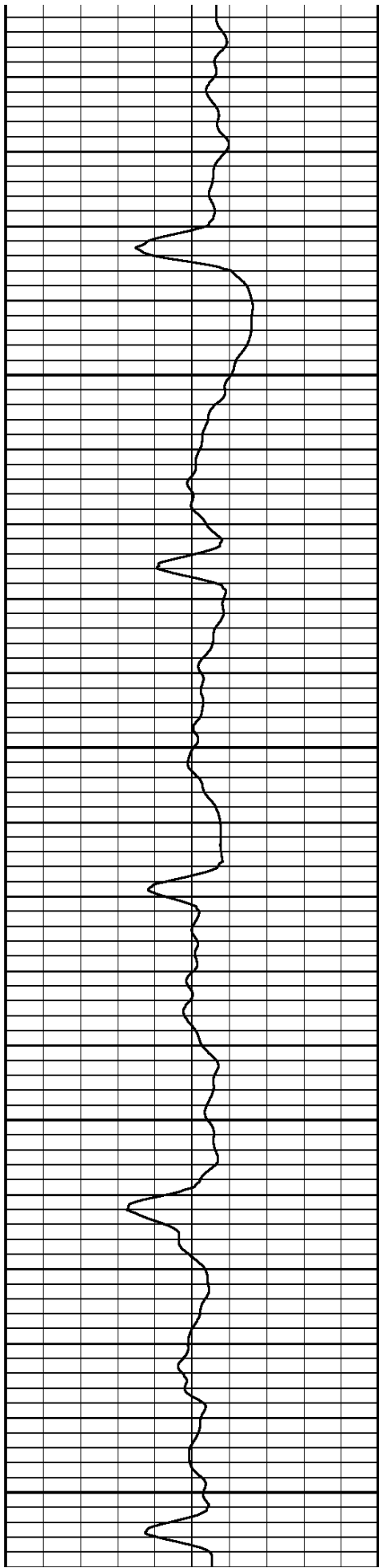
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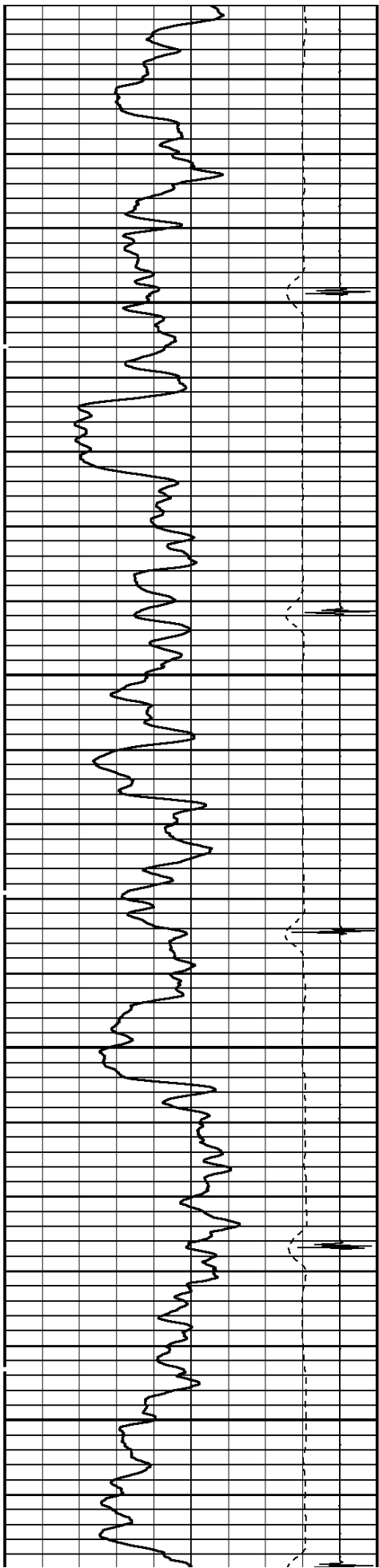




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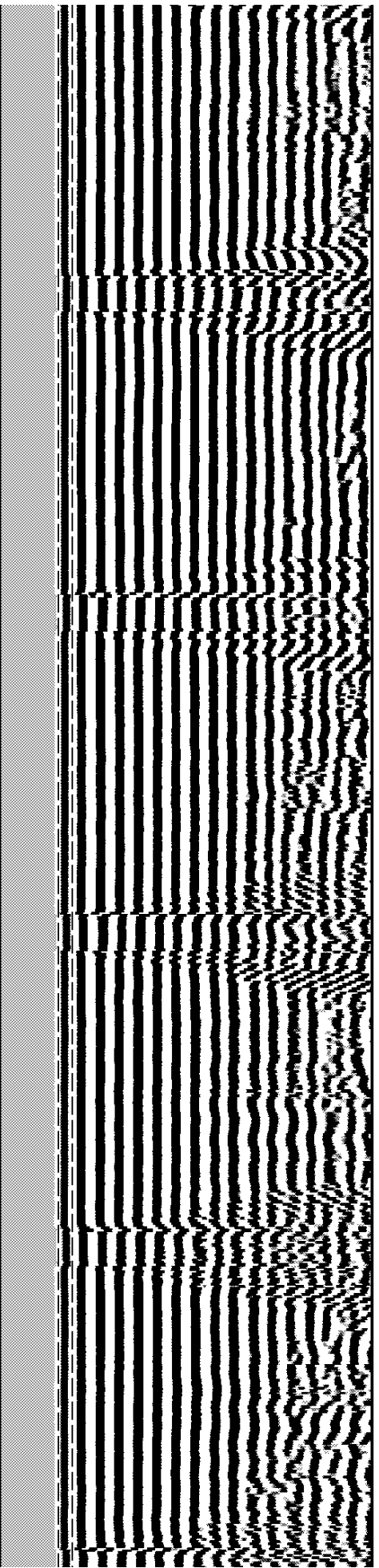
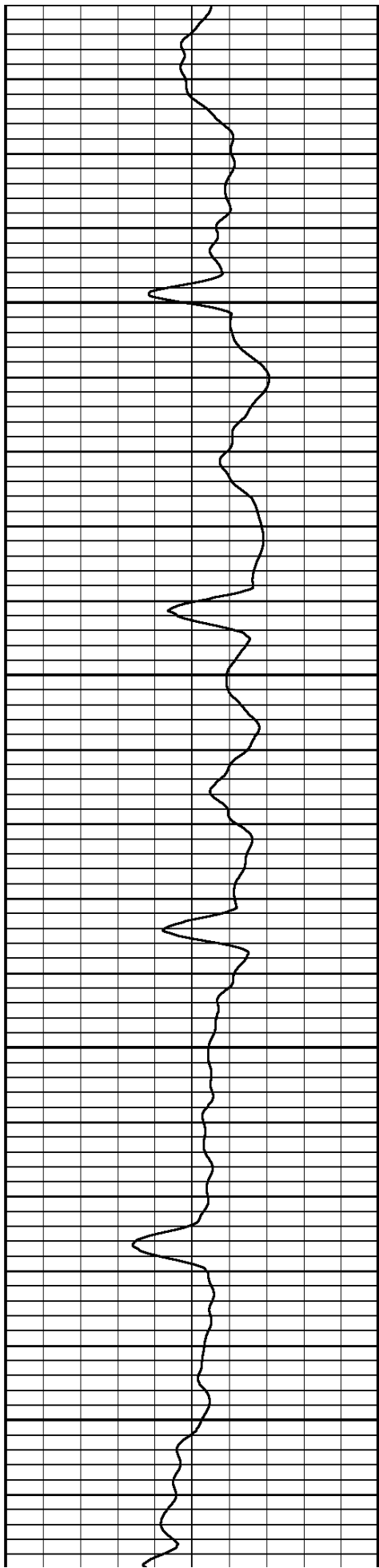
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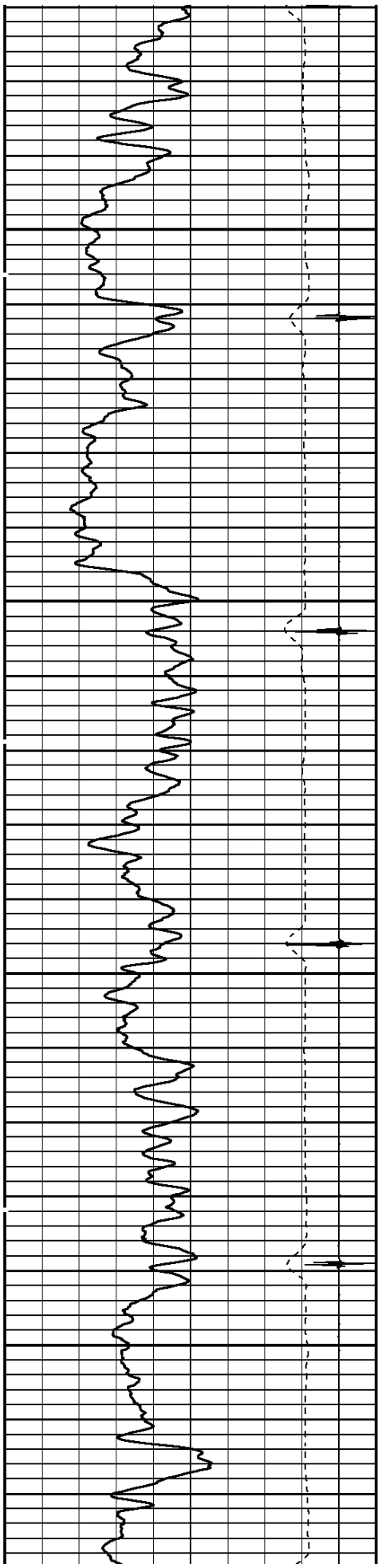




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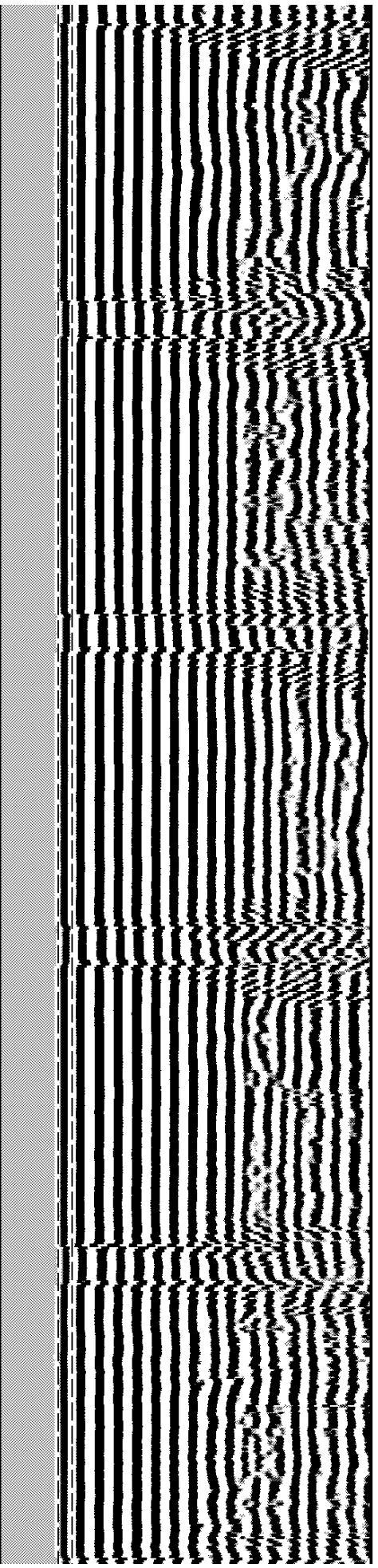
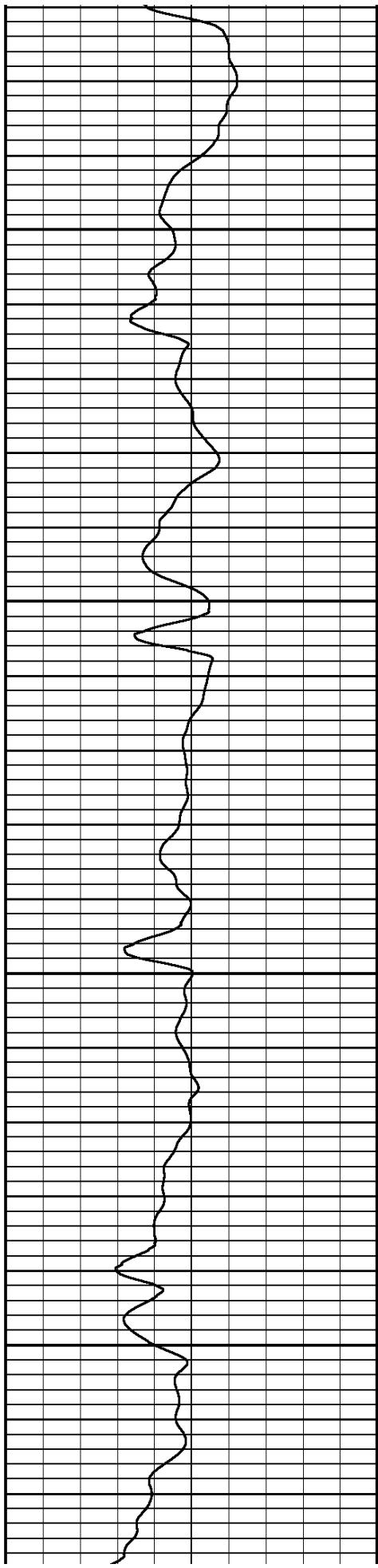
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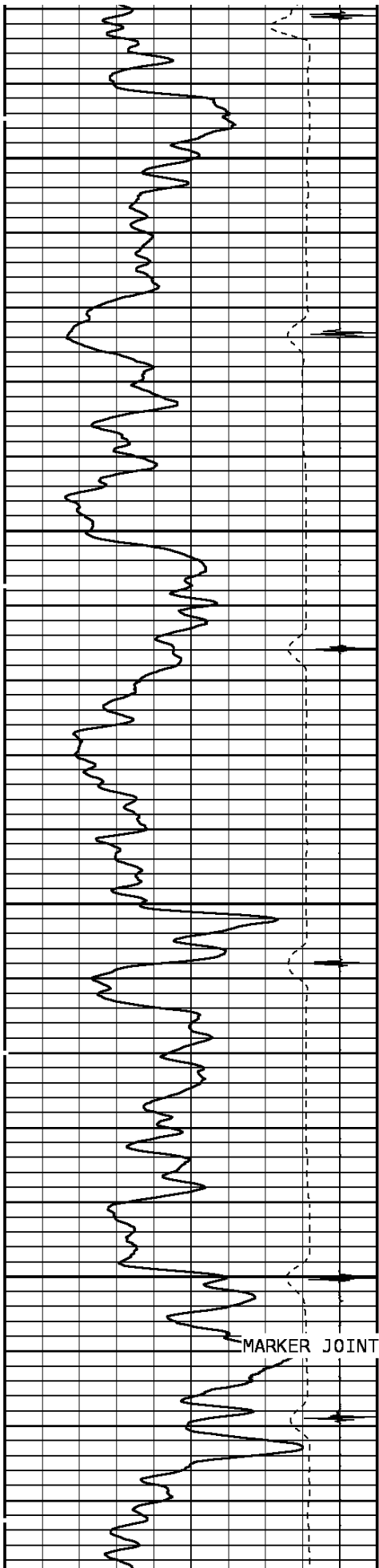




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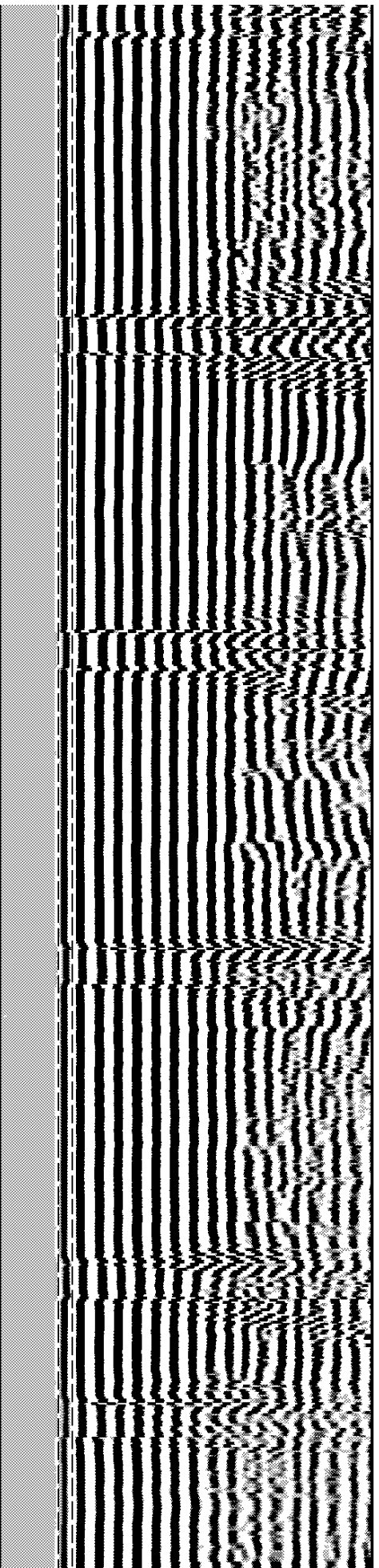
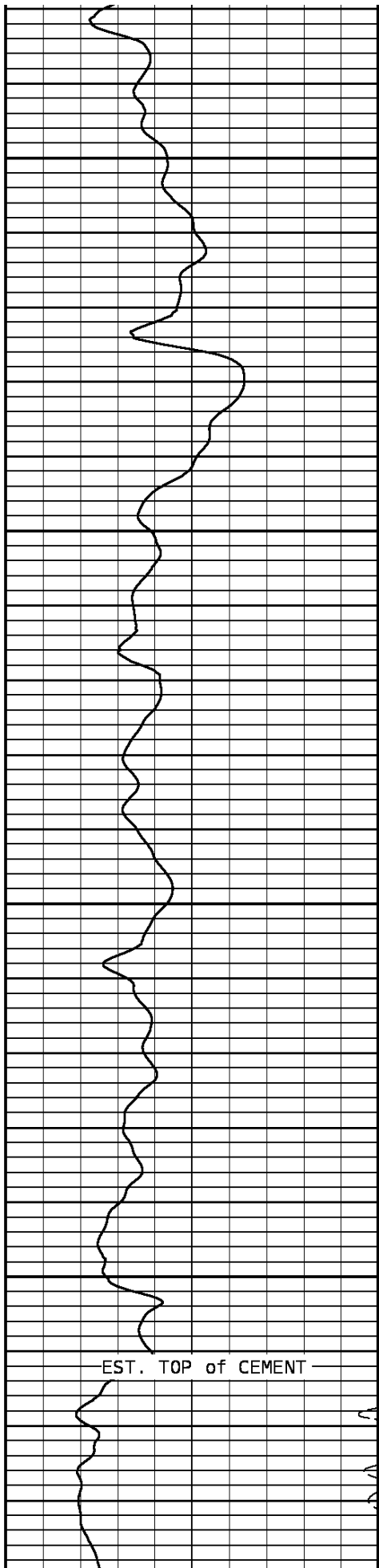
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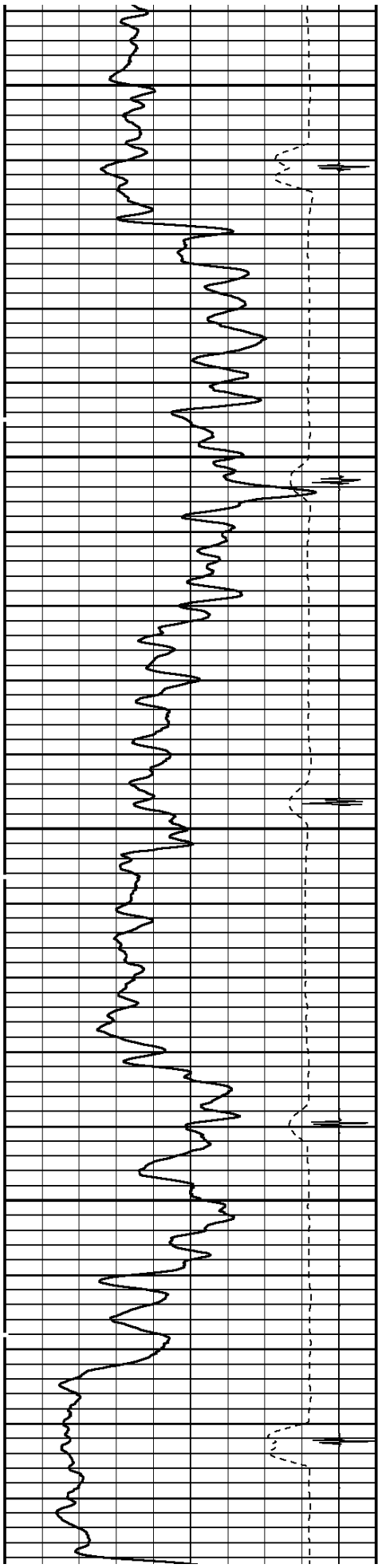




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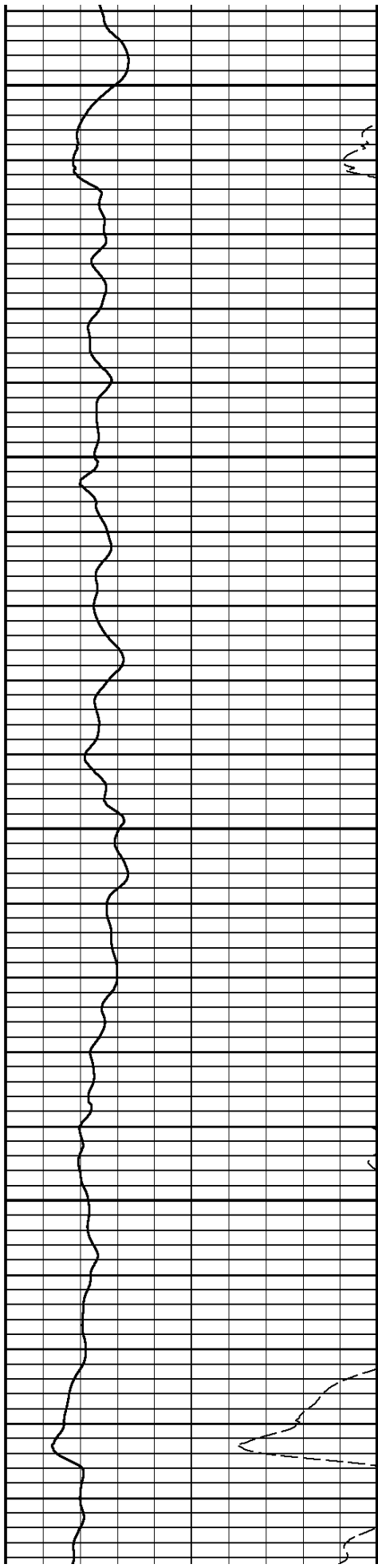
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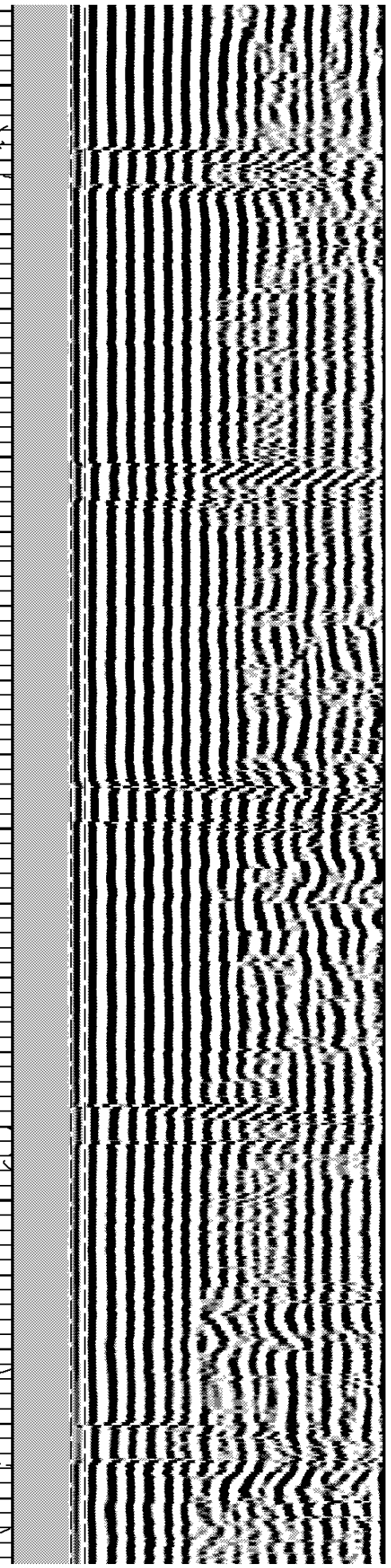


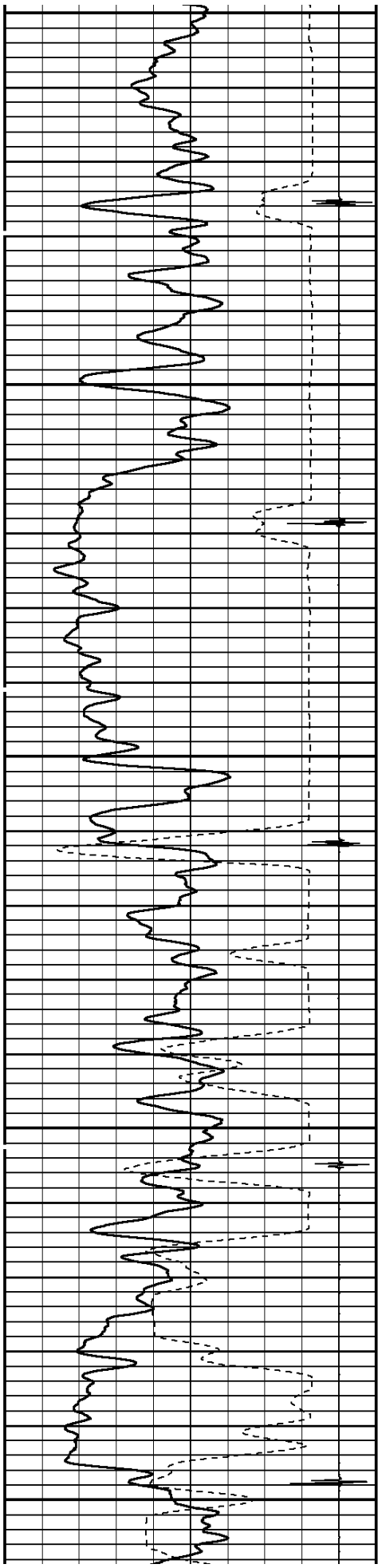
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W 2.2

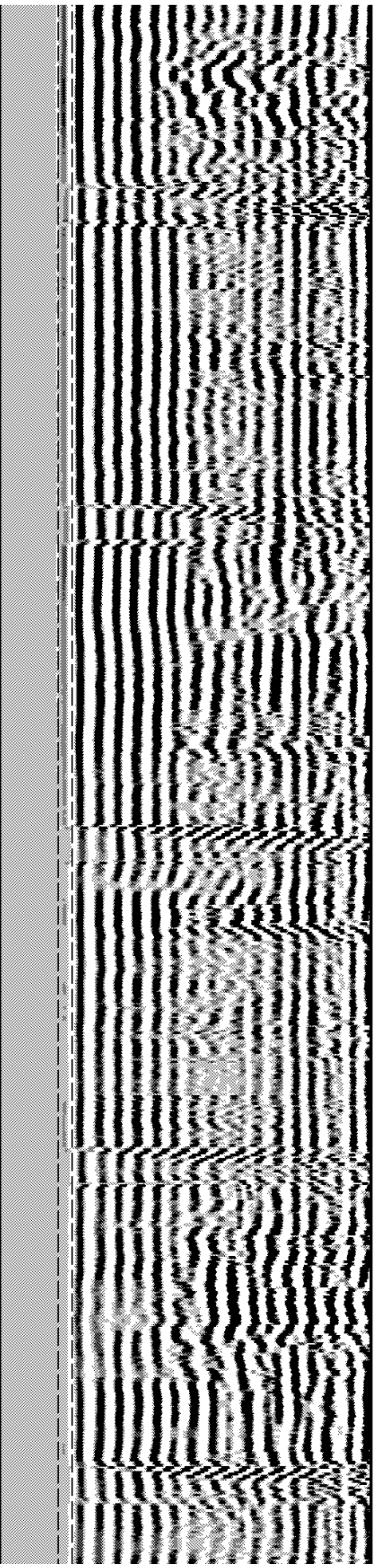
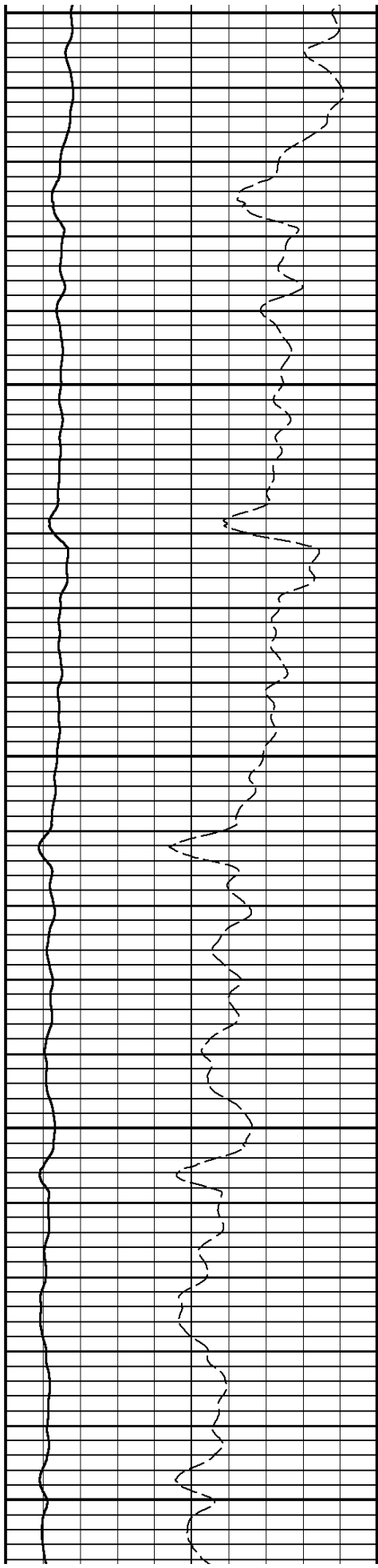


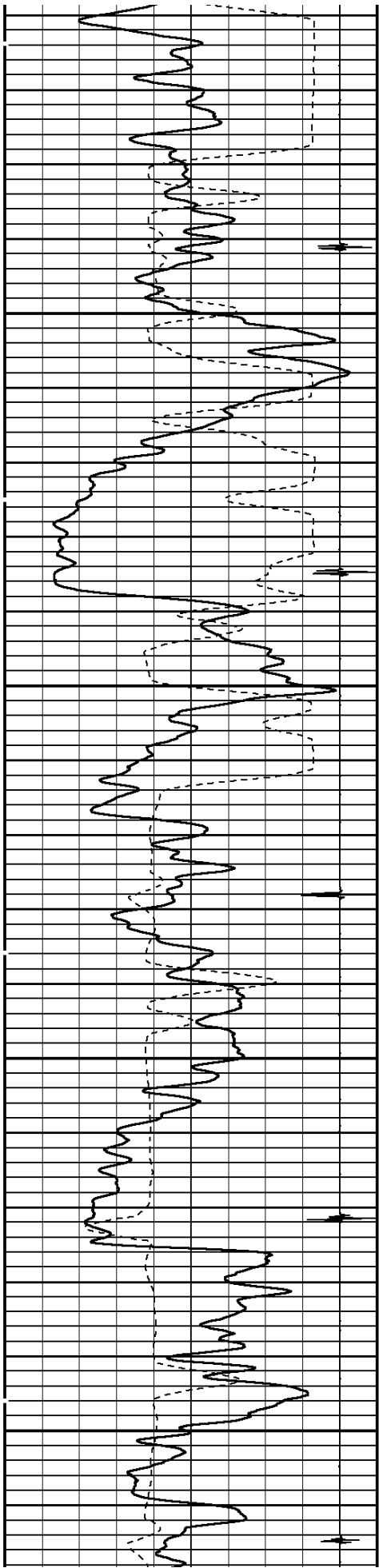


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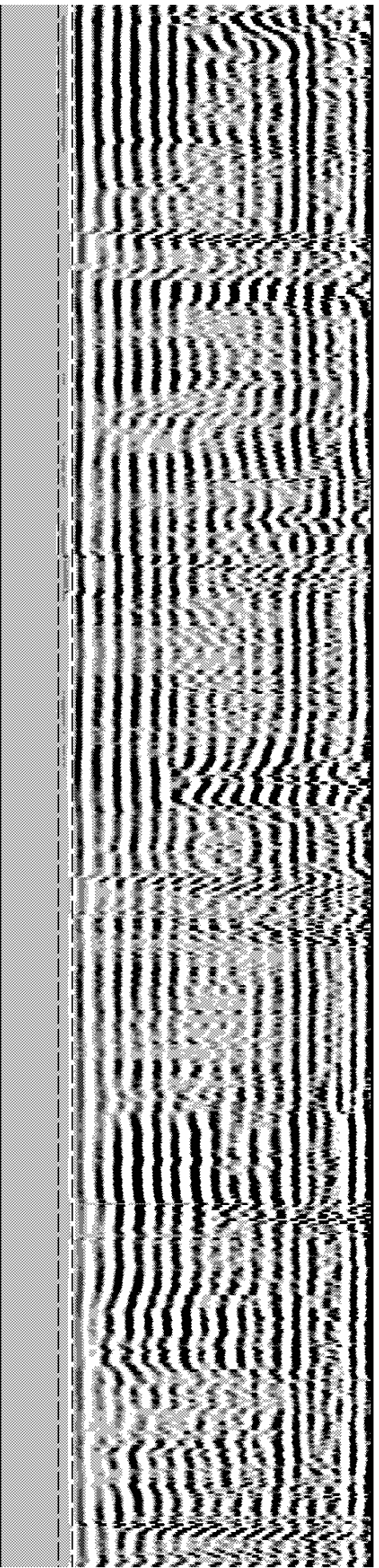
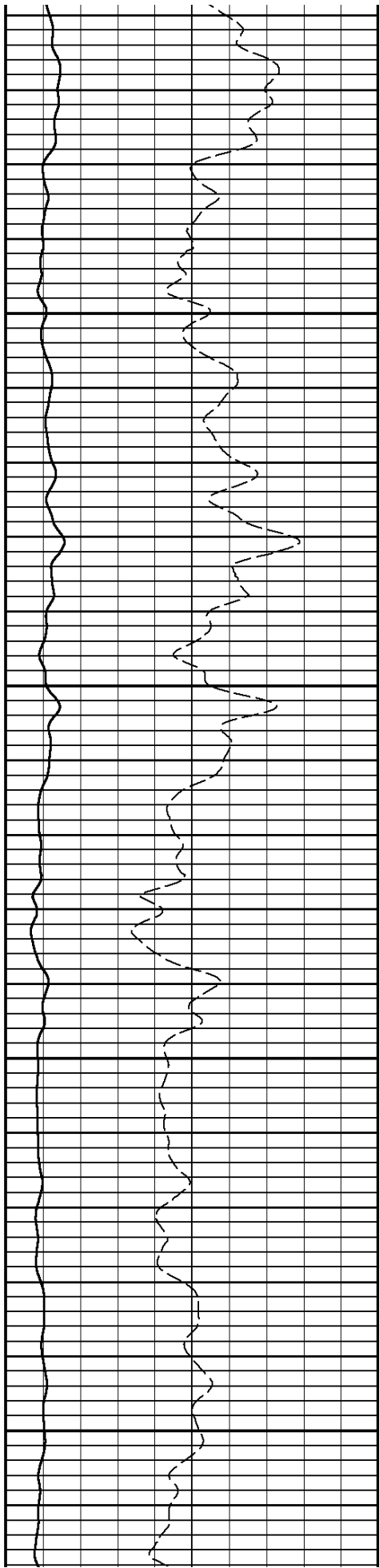
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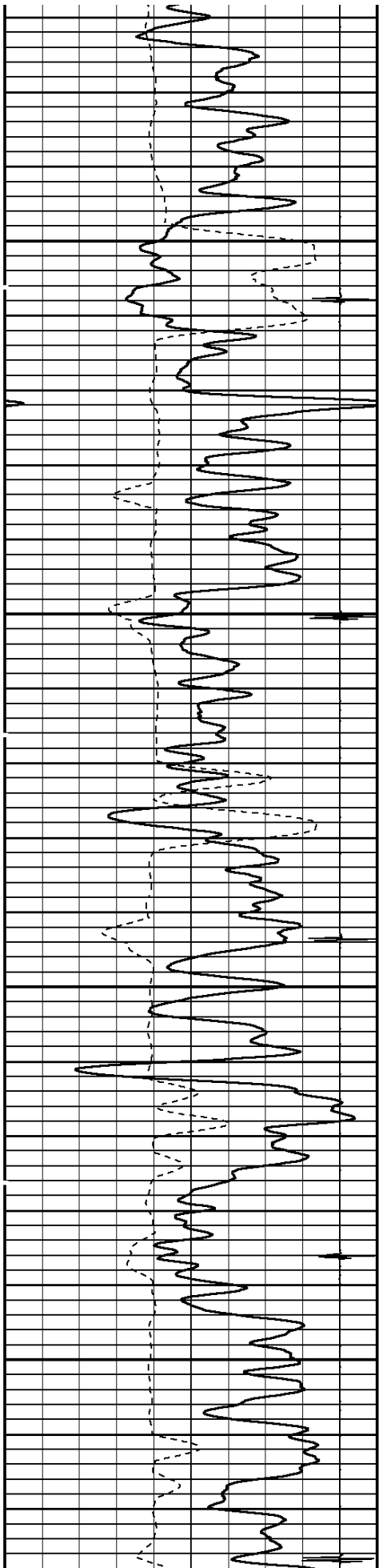




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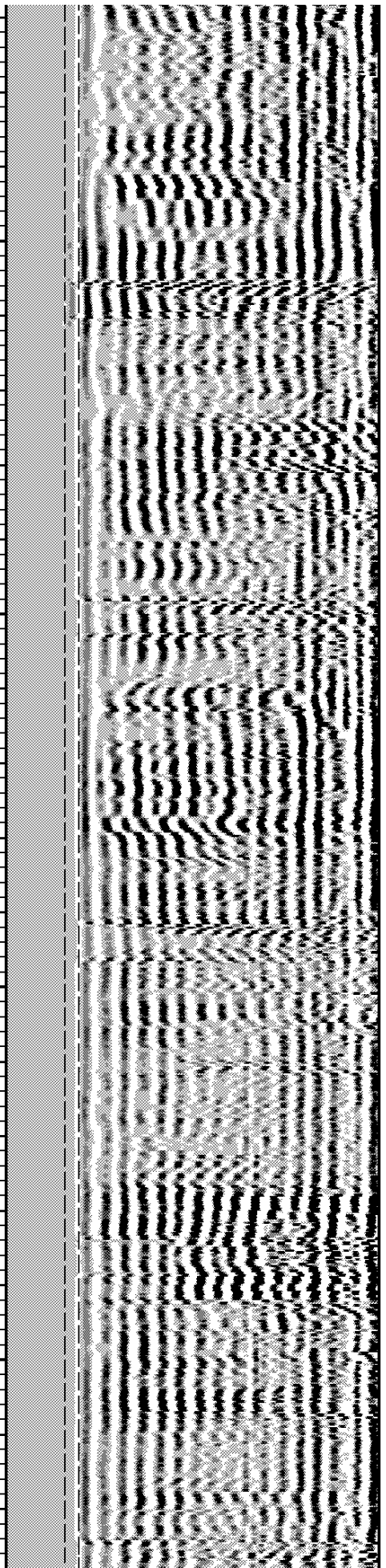
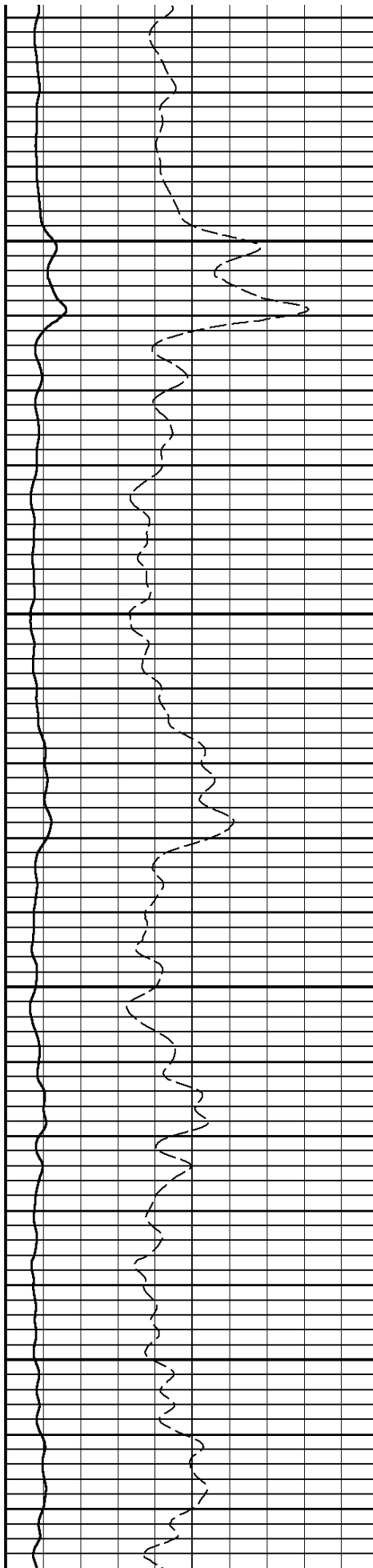
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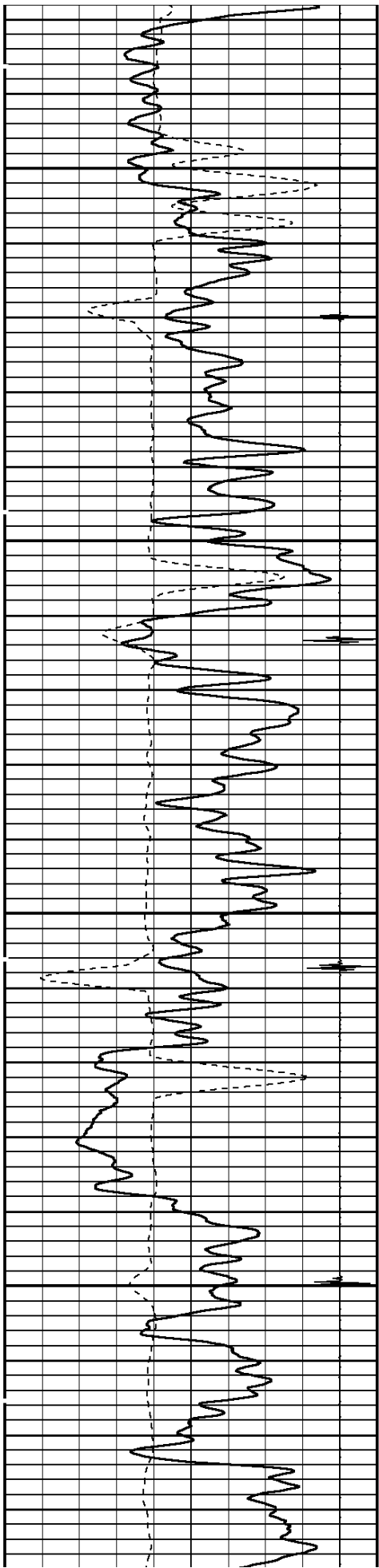




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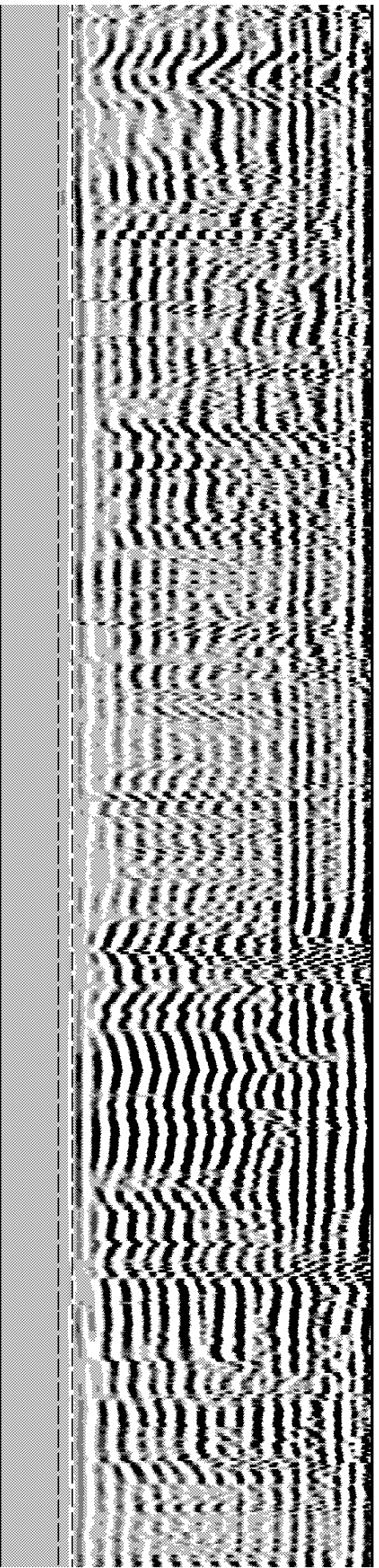
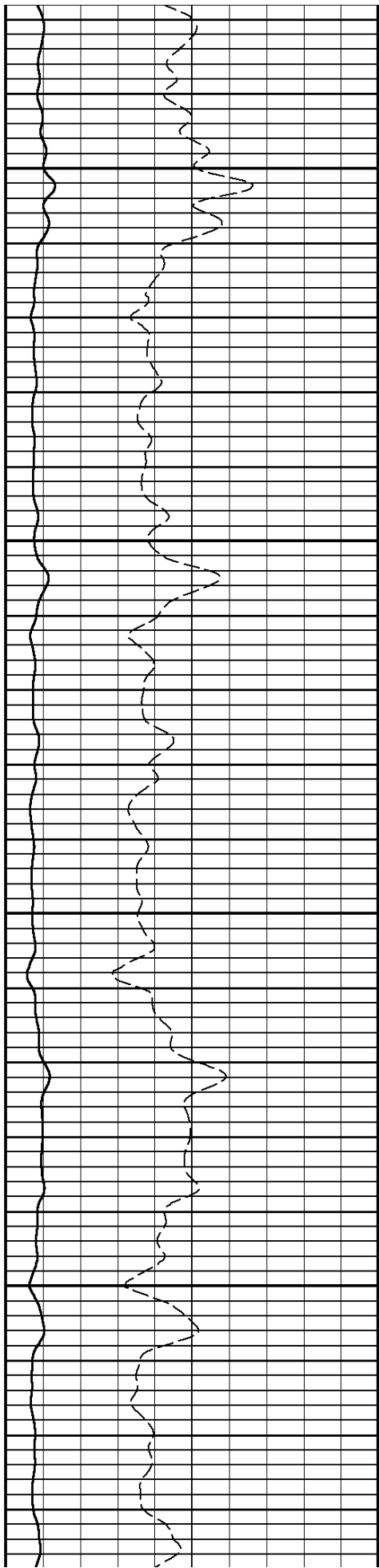
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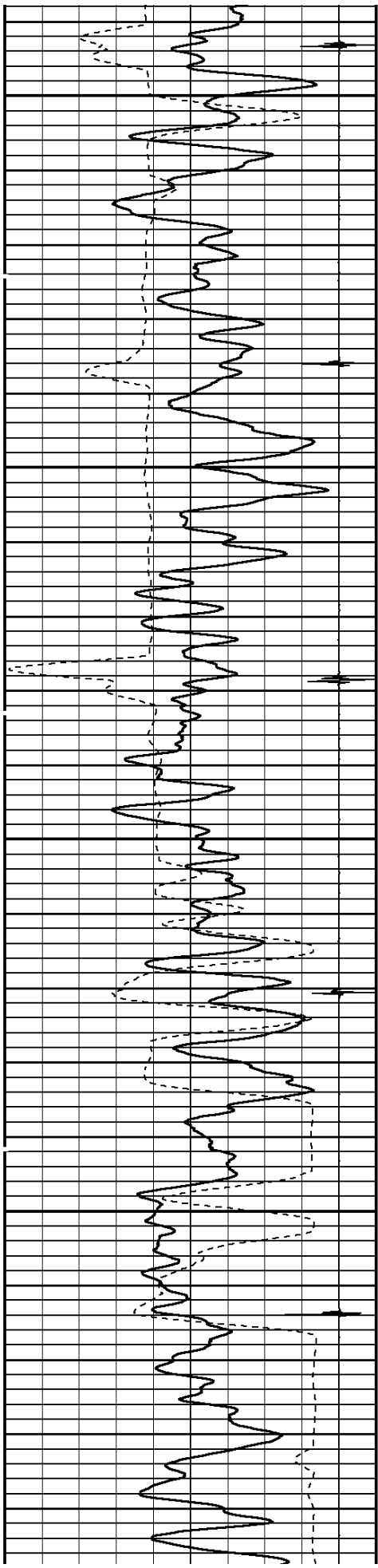




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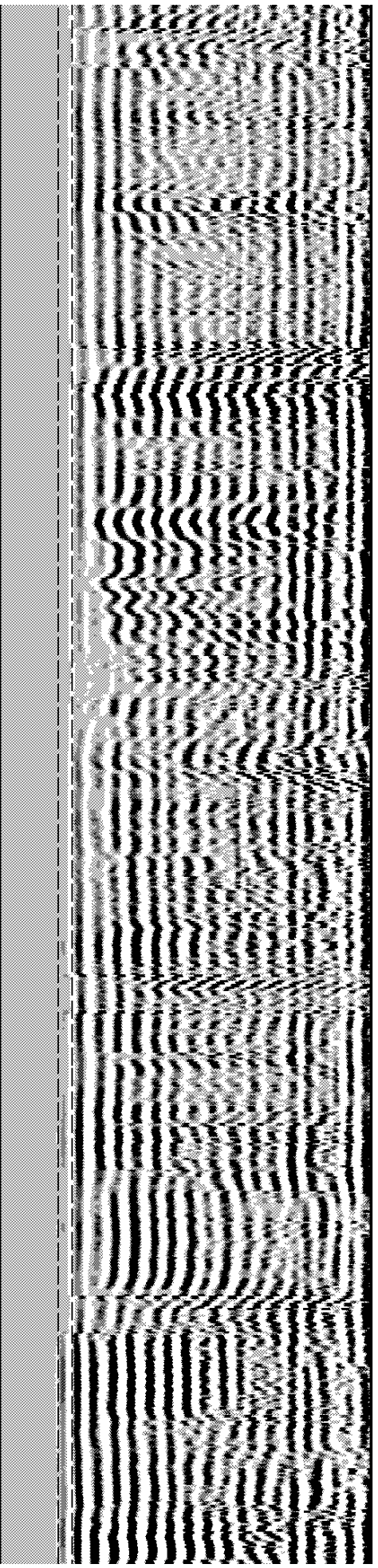
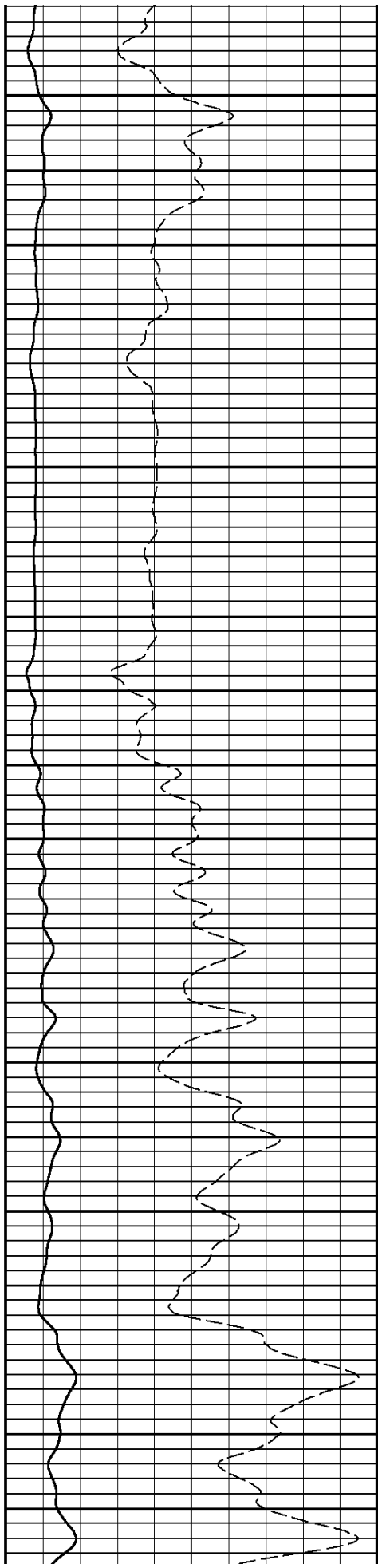
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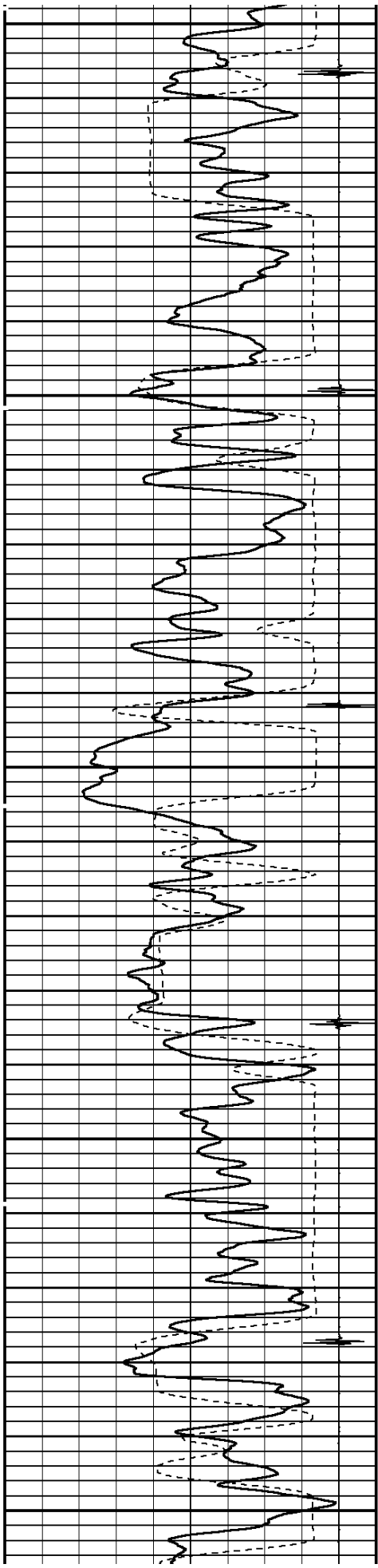




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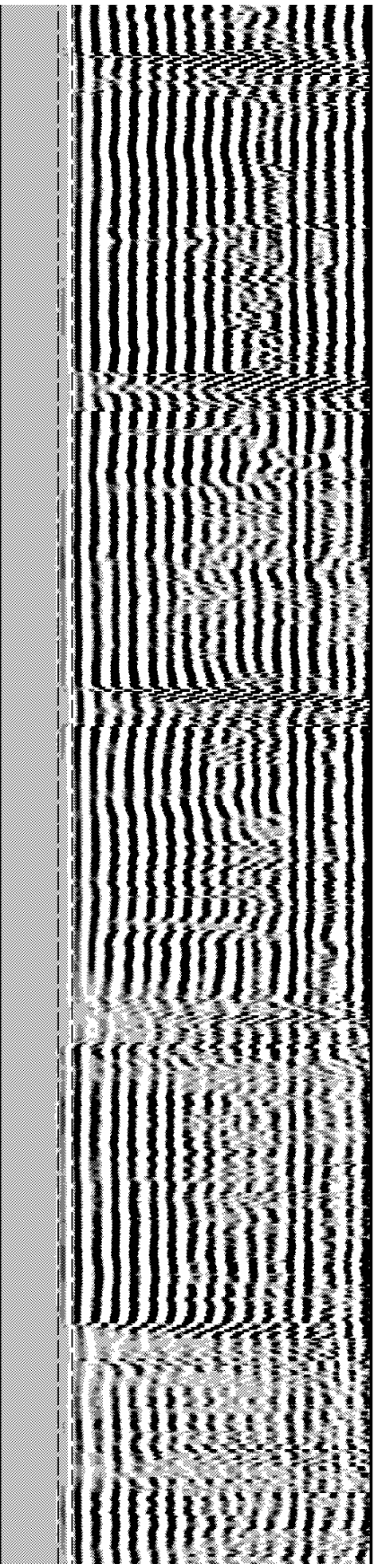
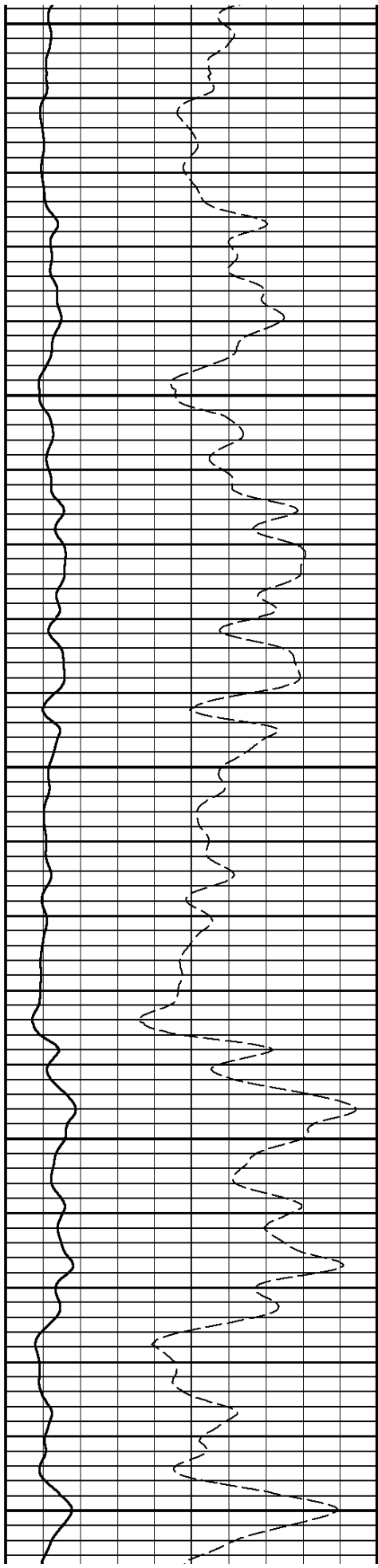
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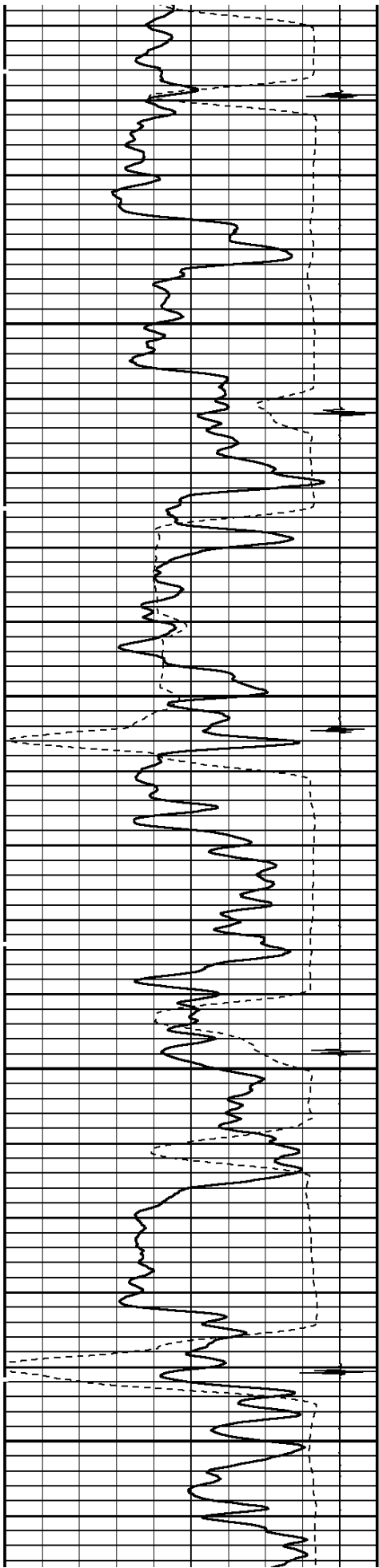




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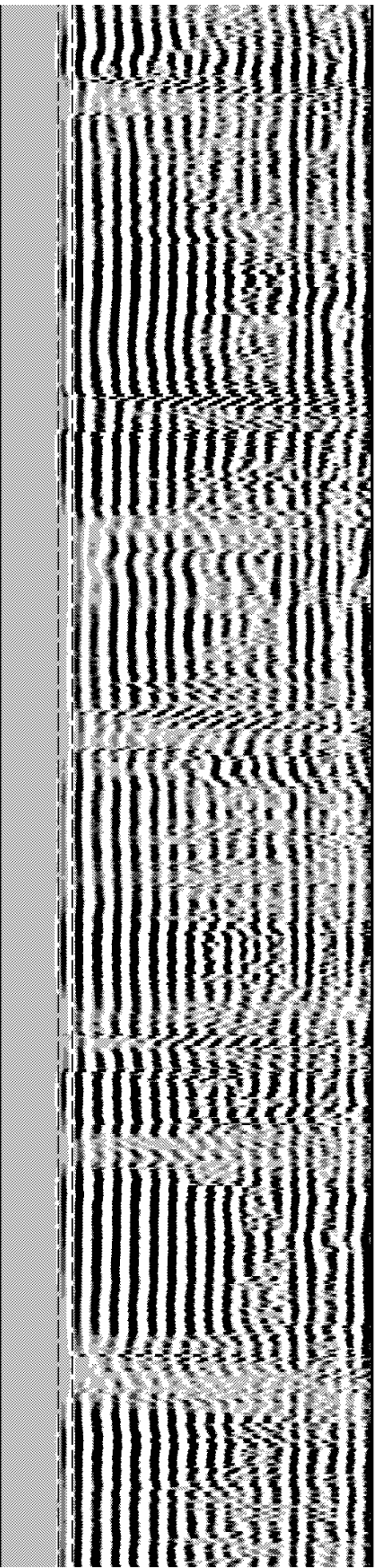
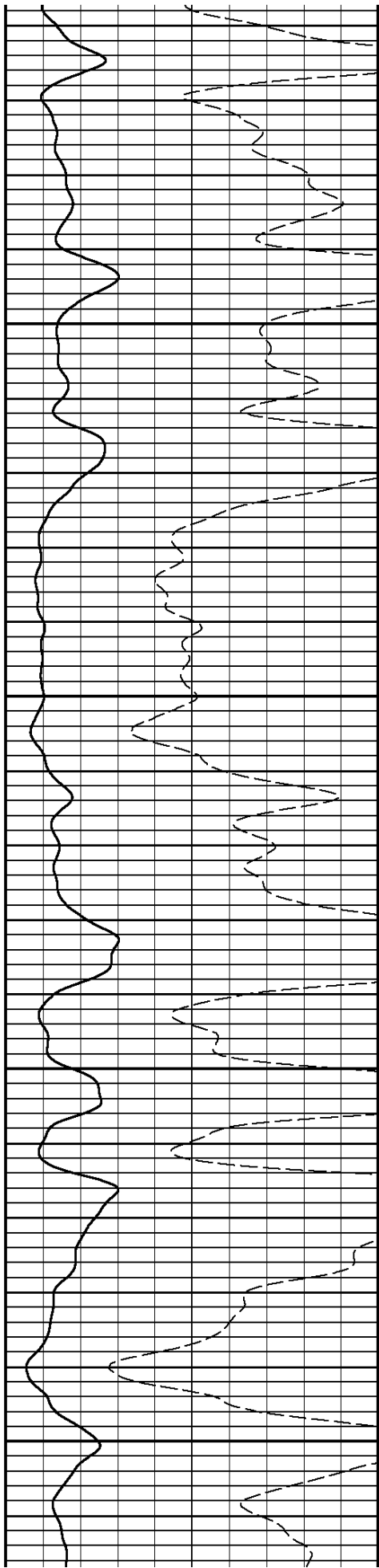
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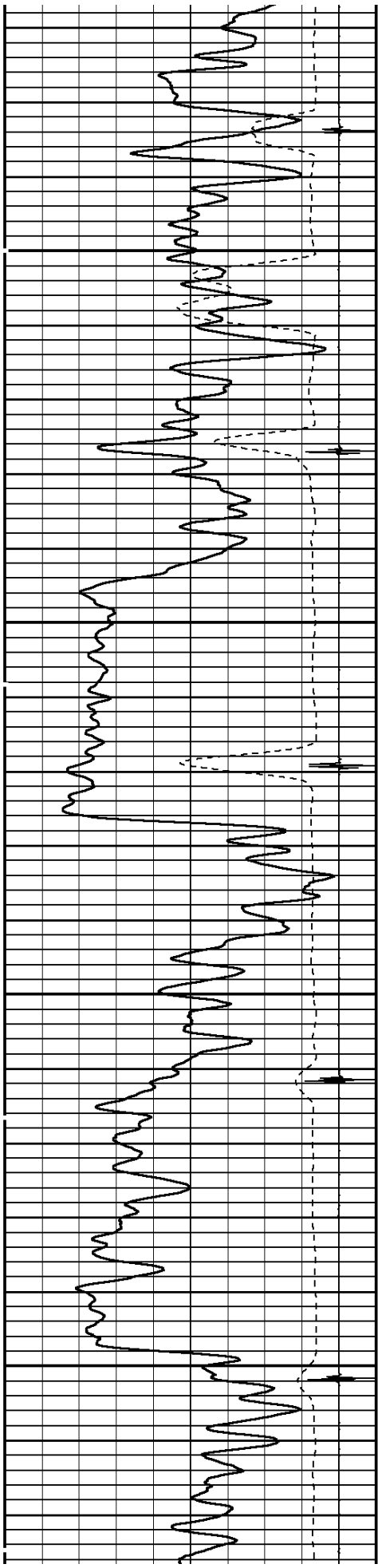




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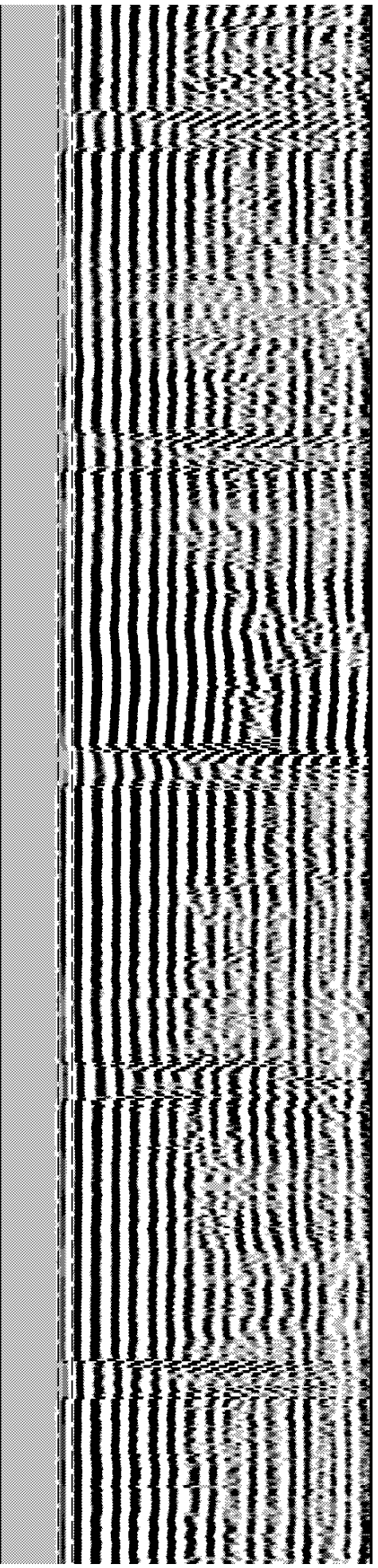
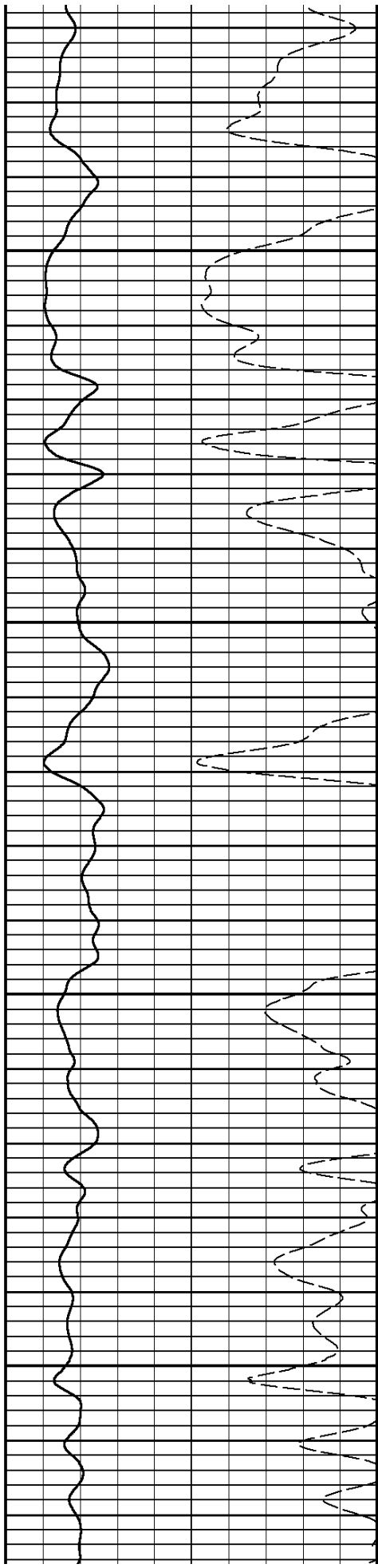
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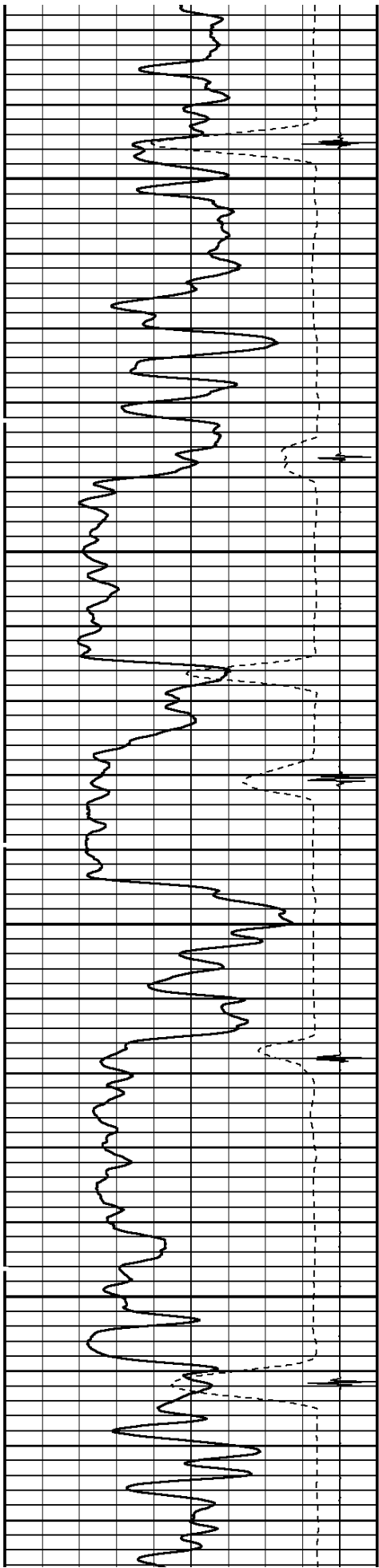




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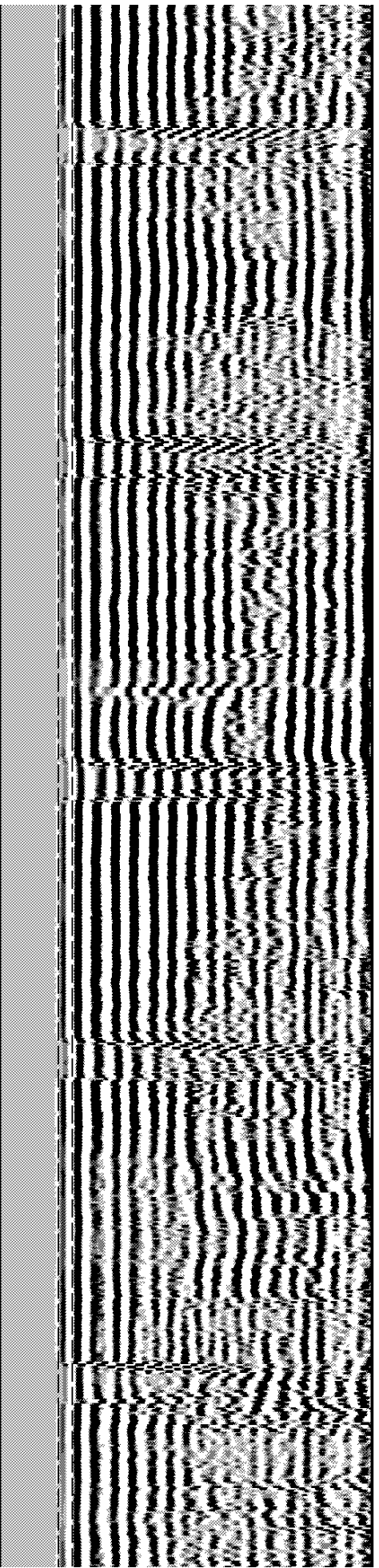
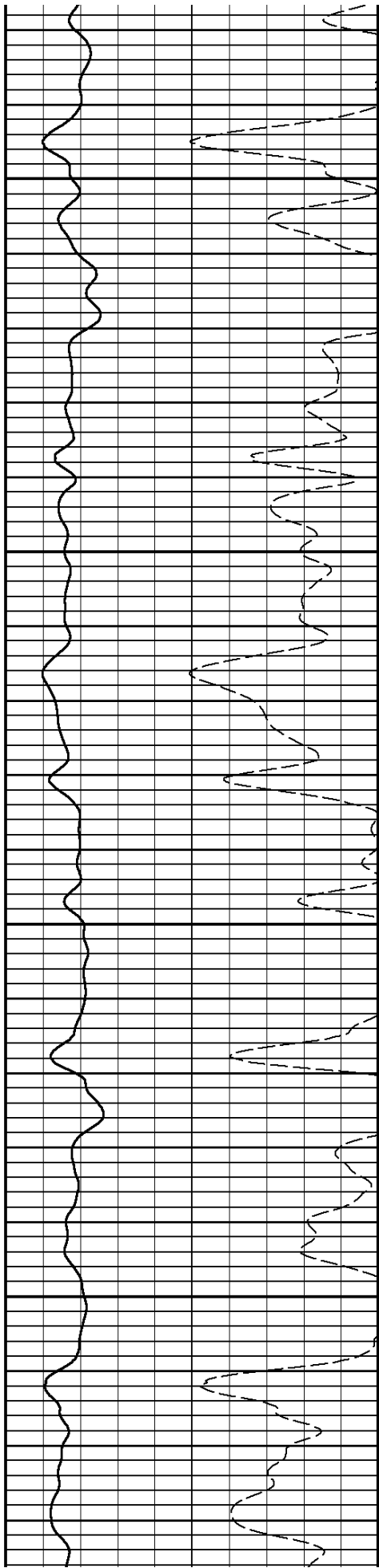
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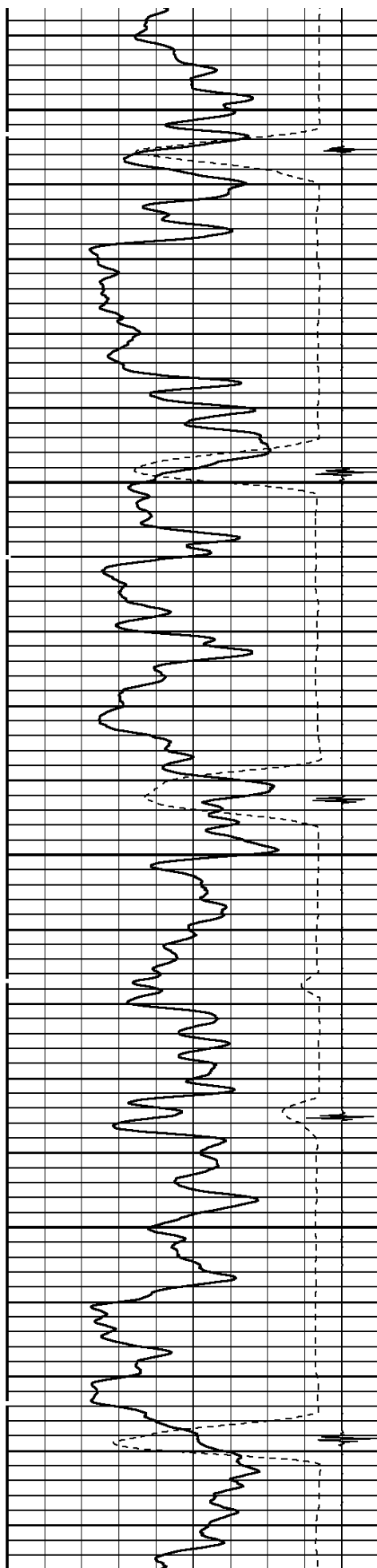




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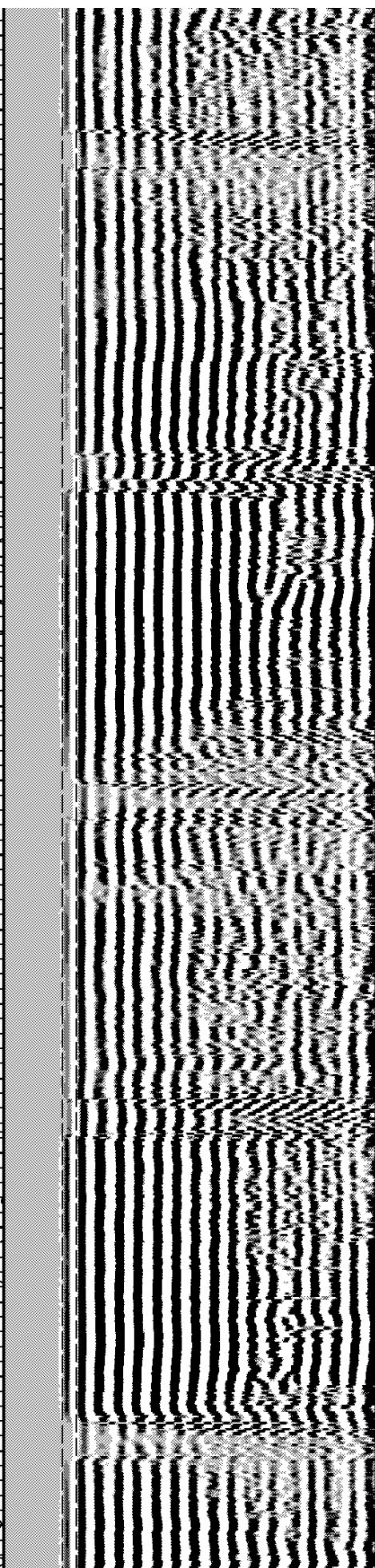
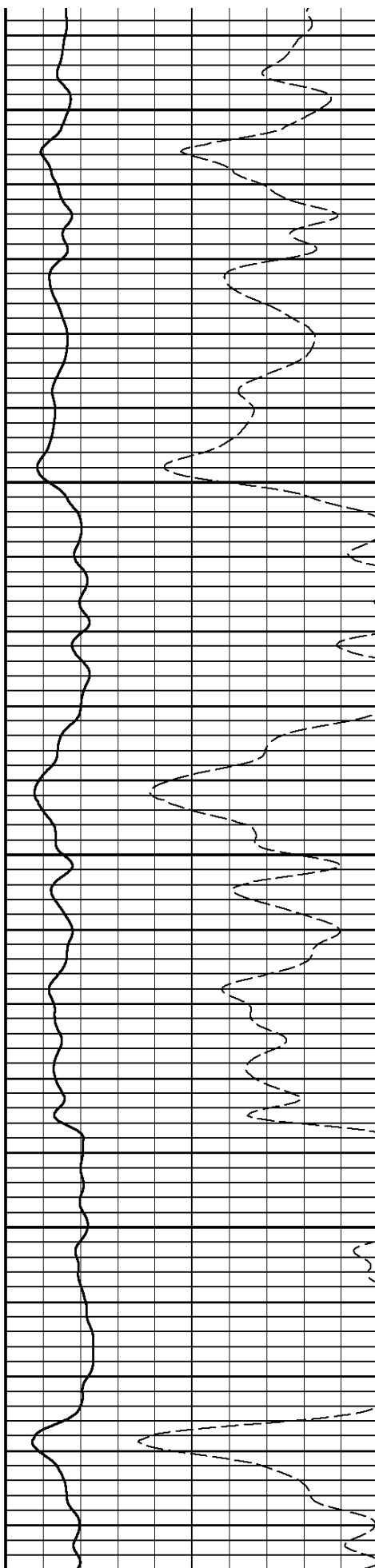
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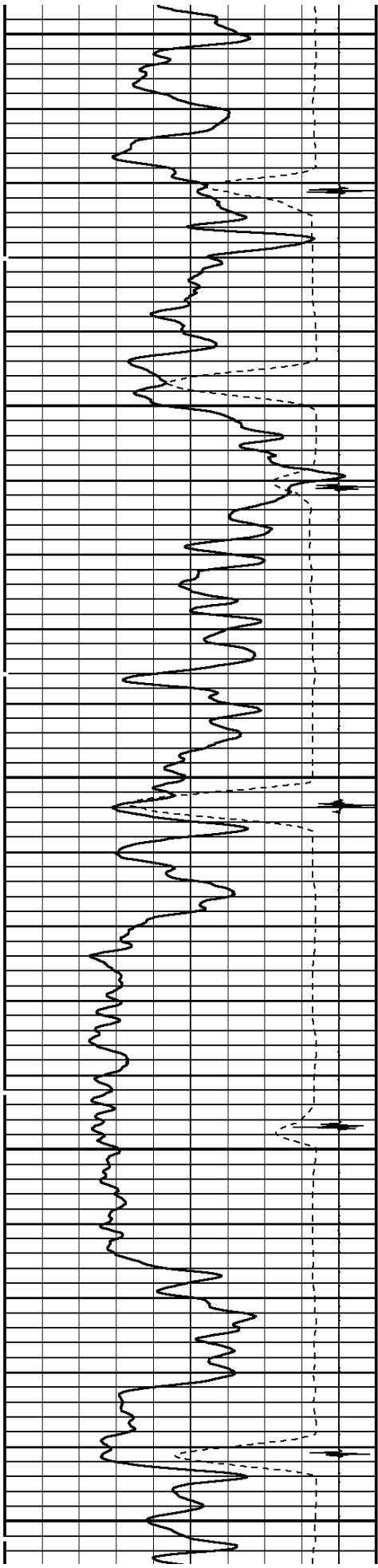




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6100

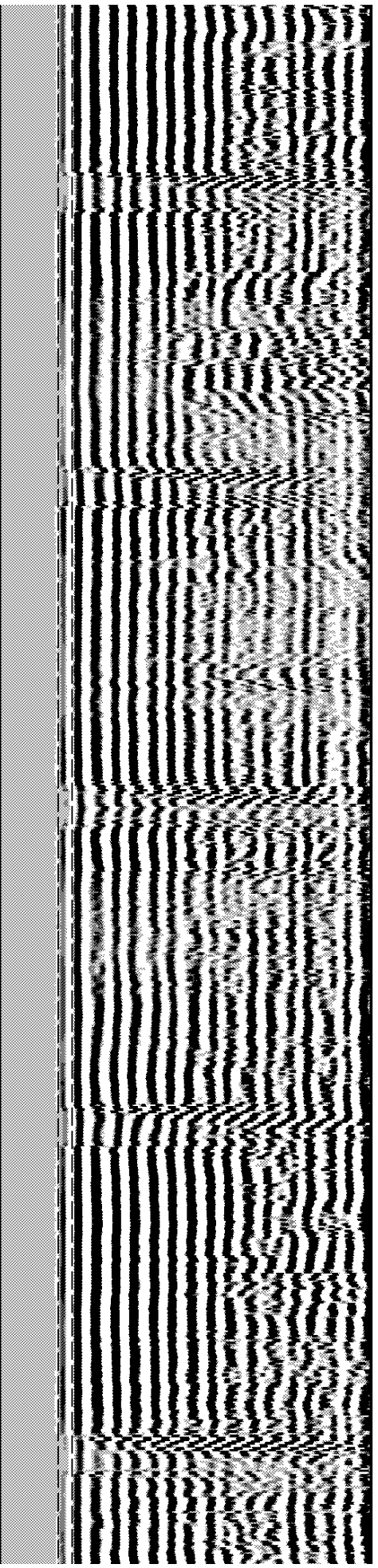
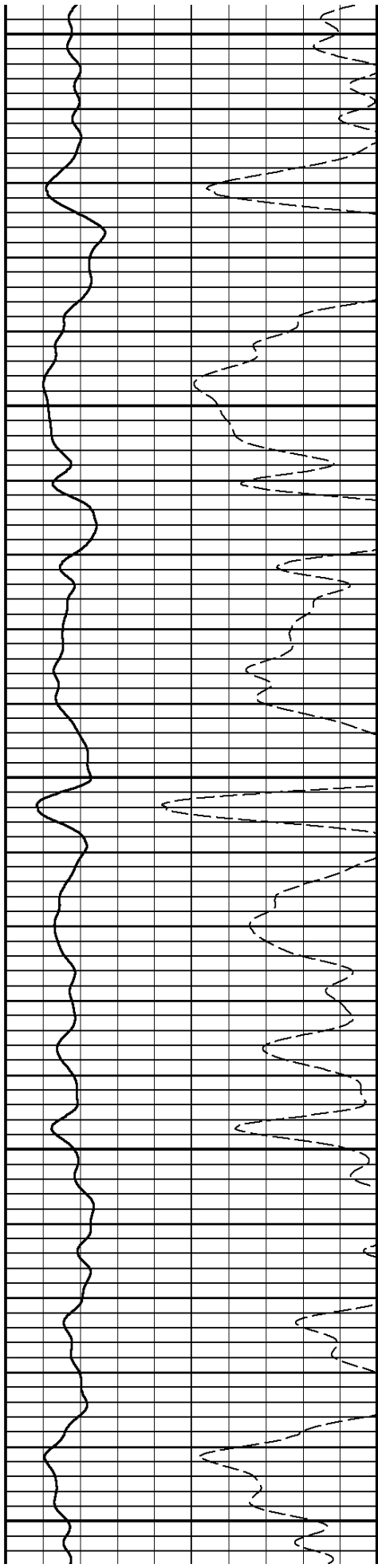


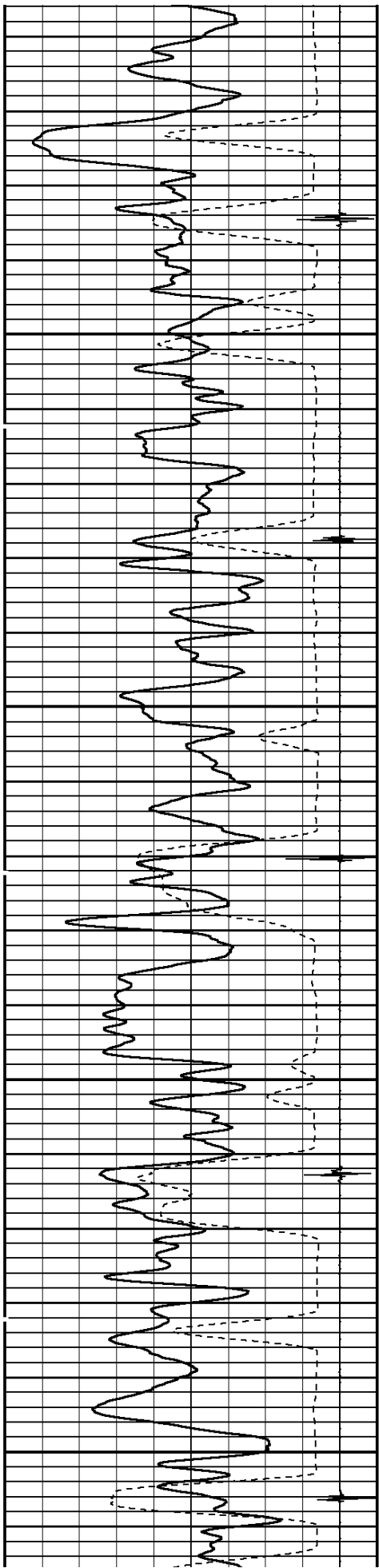


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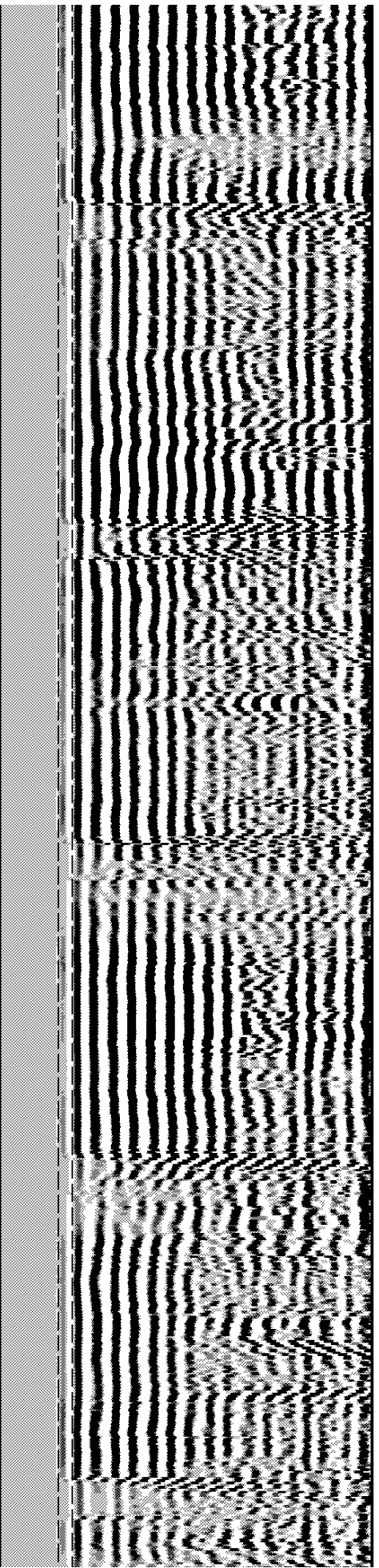
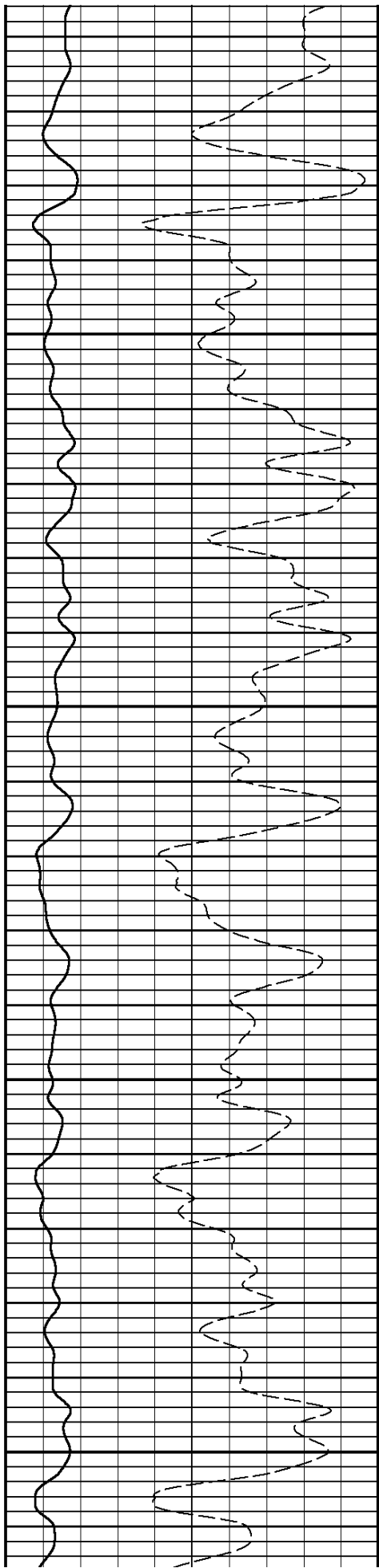
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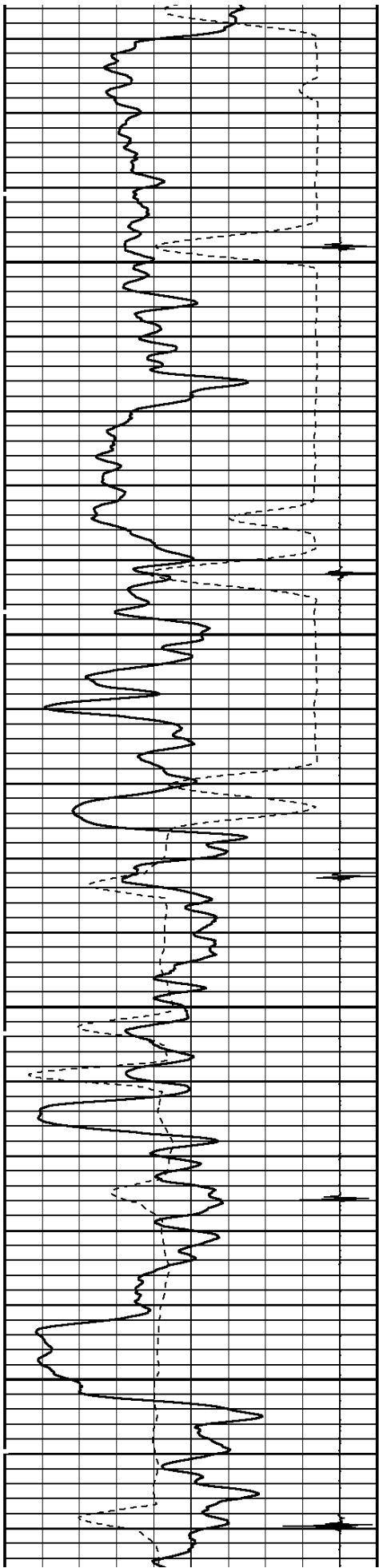




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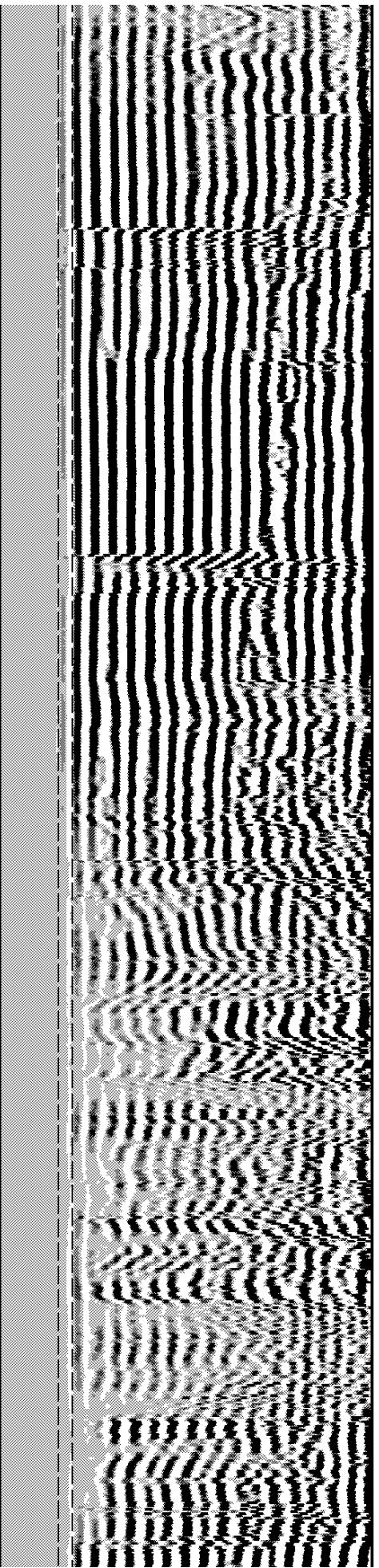
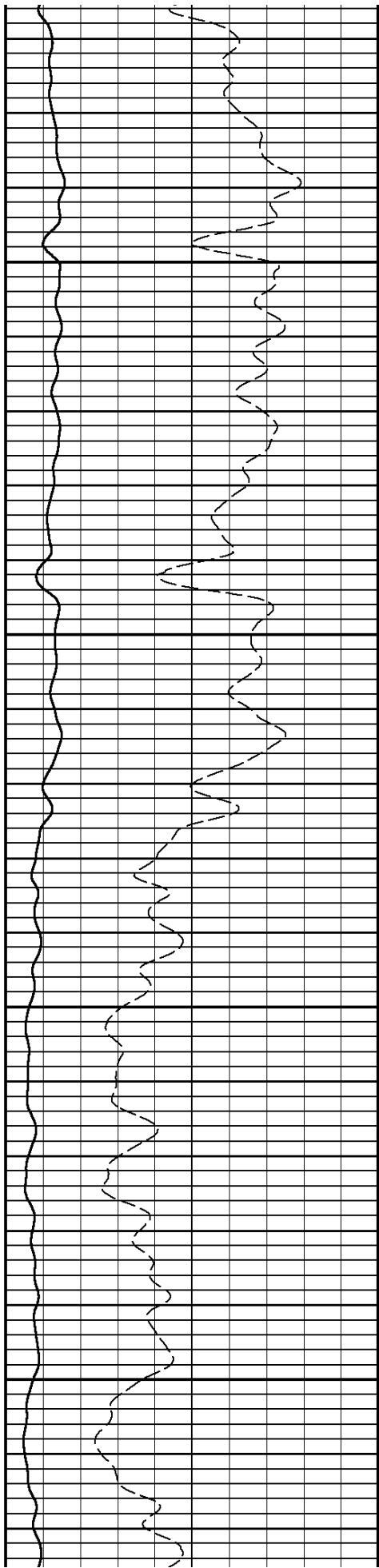
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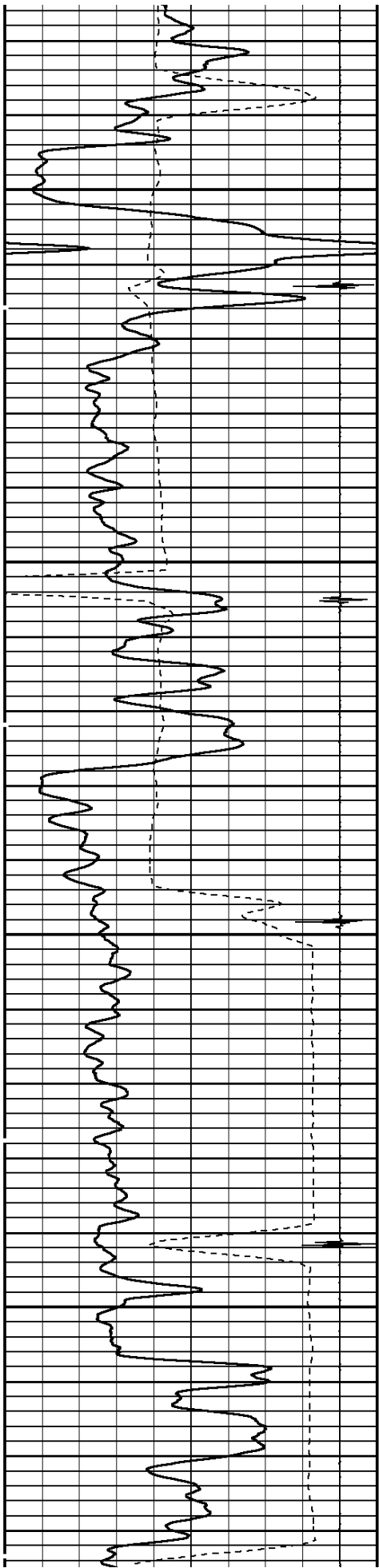




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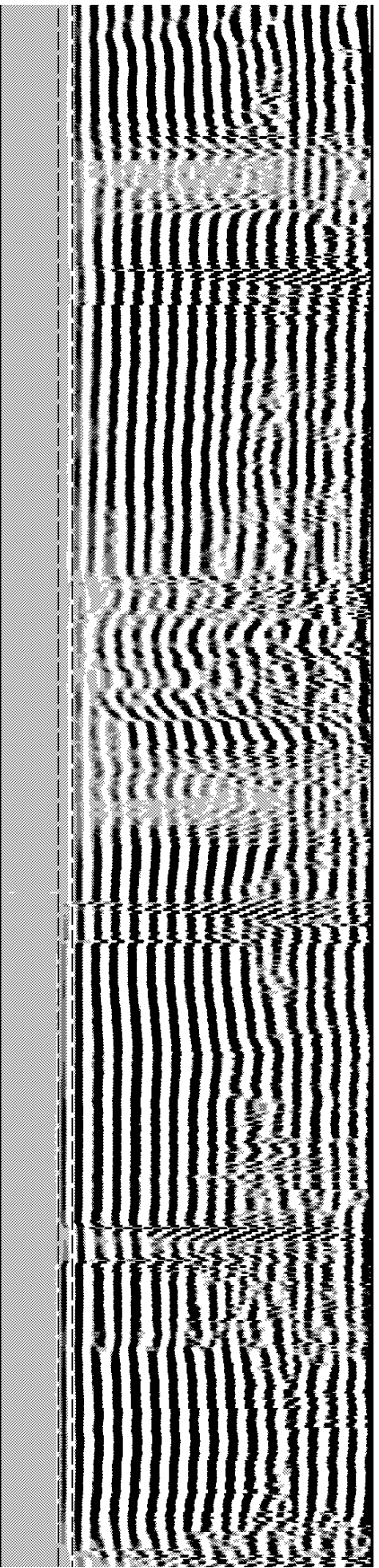
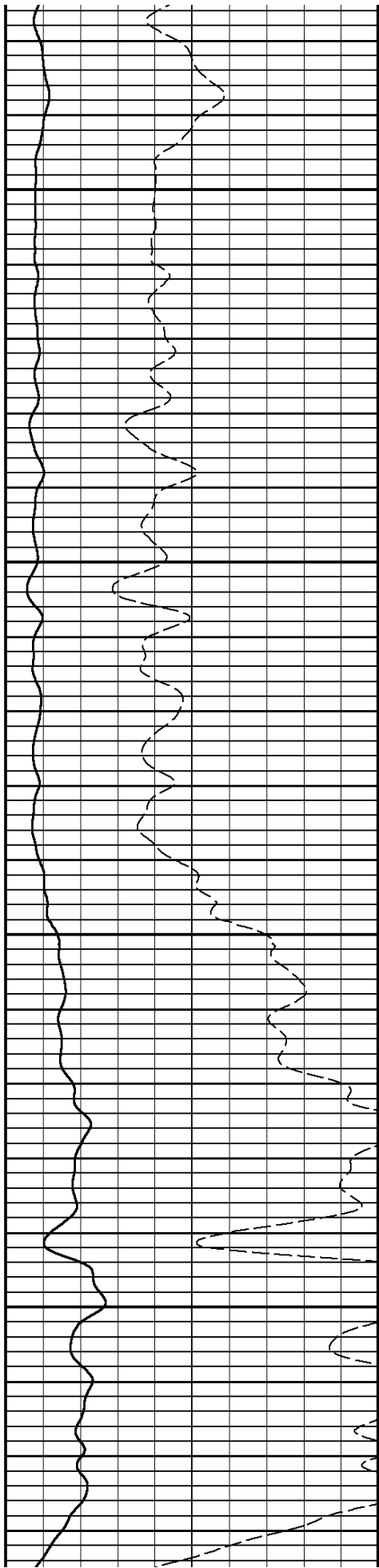
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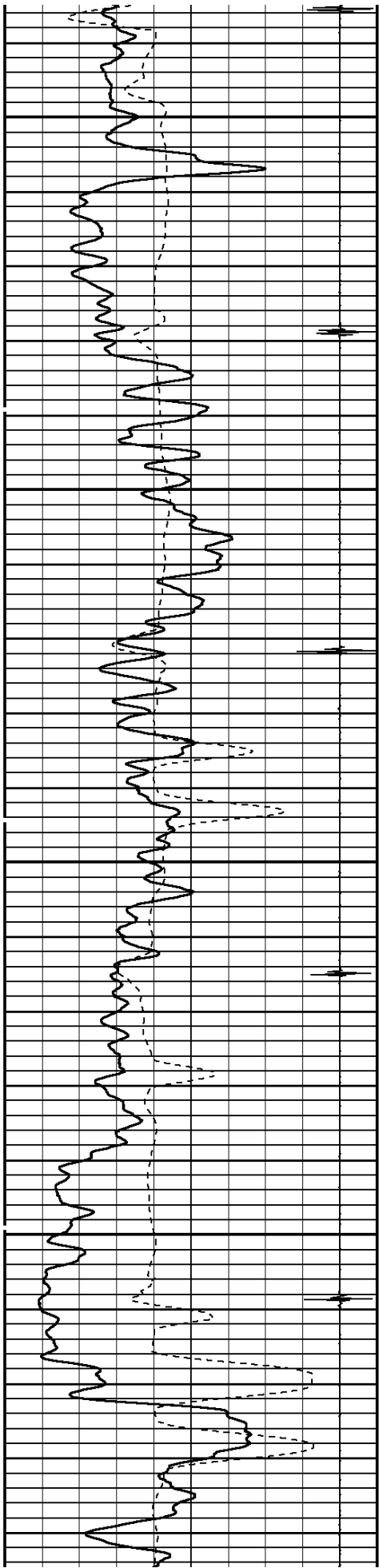




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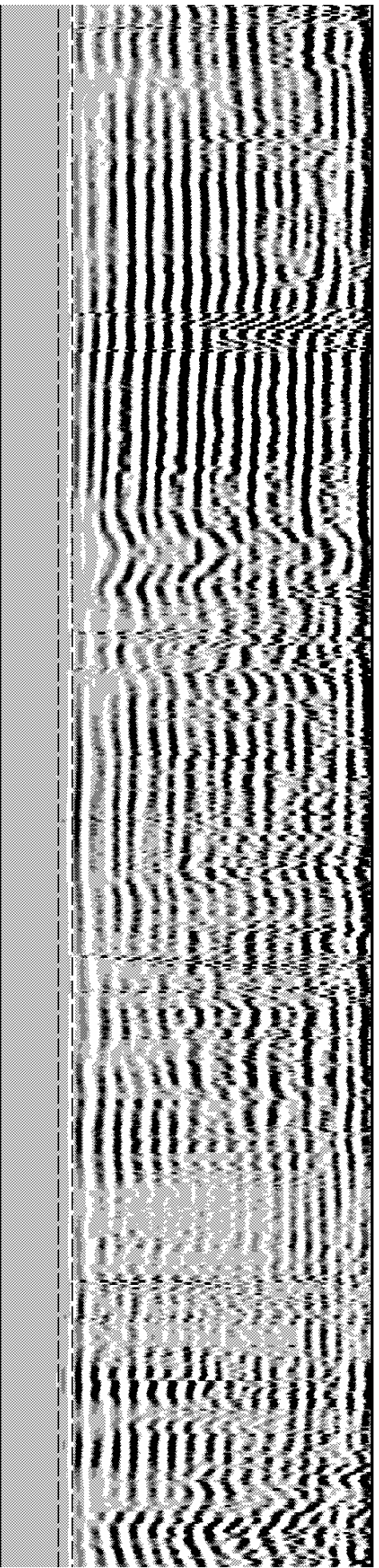
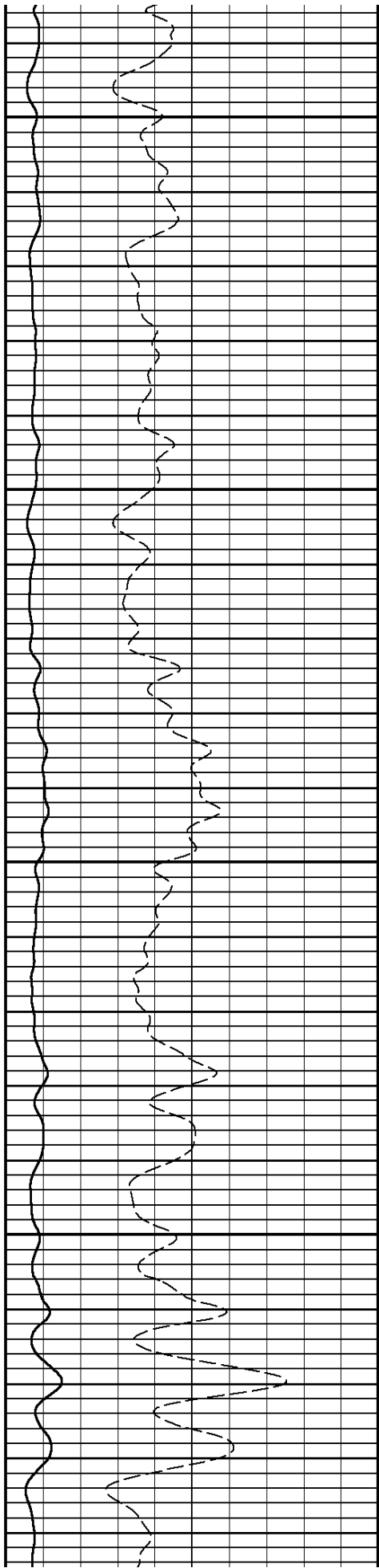
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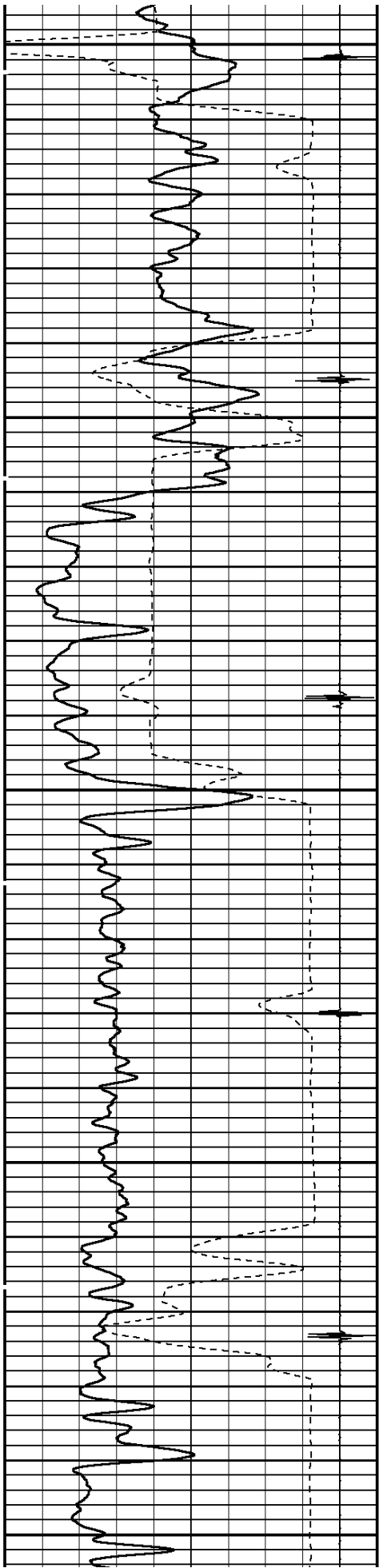




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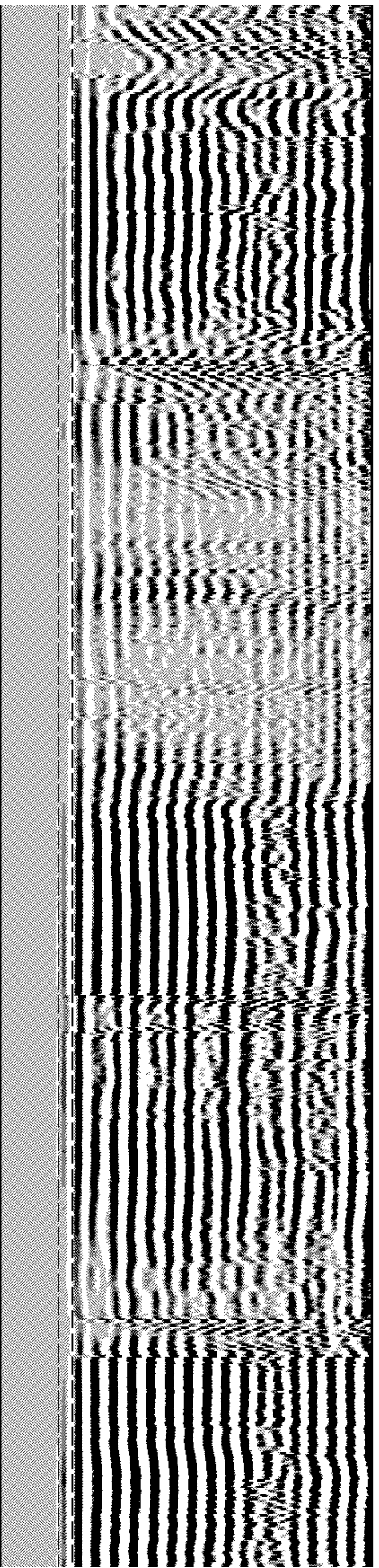
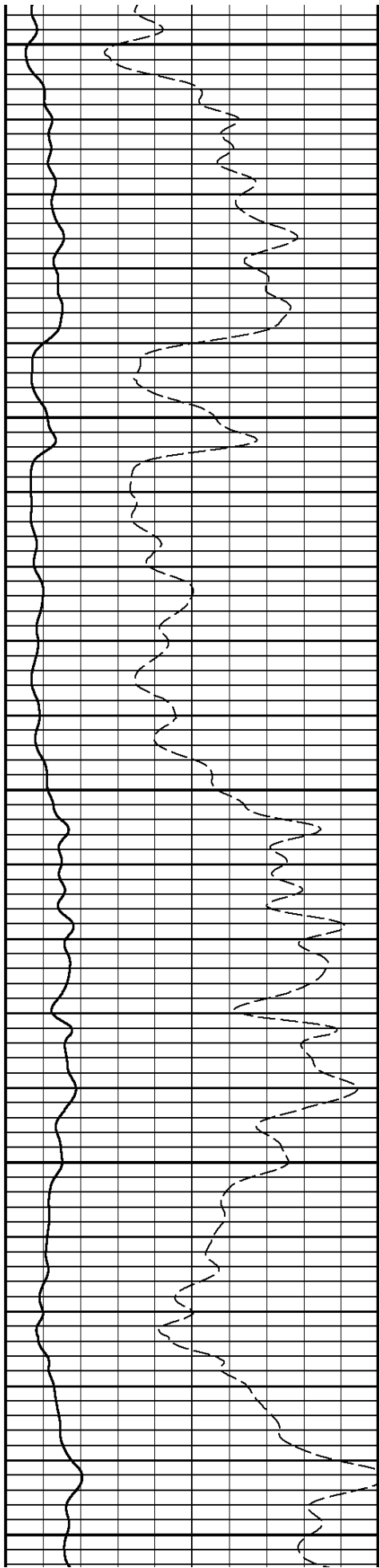
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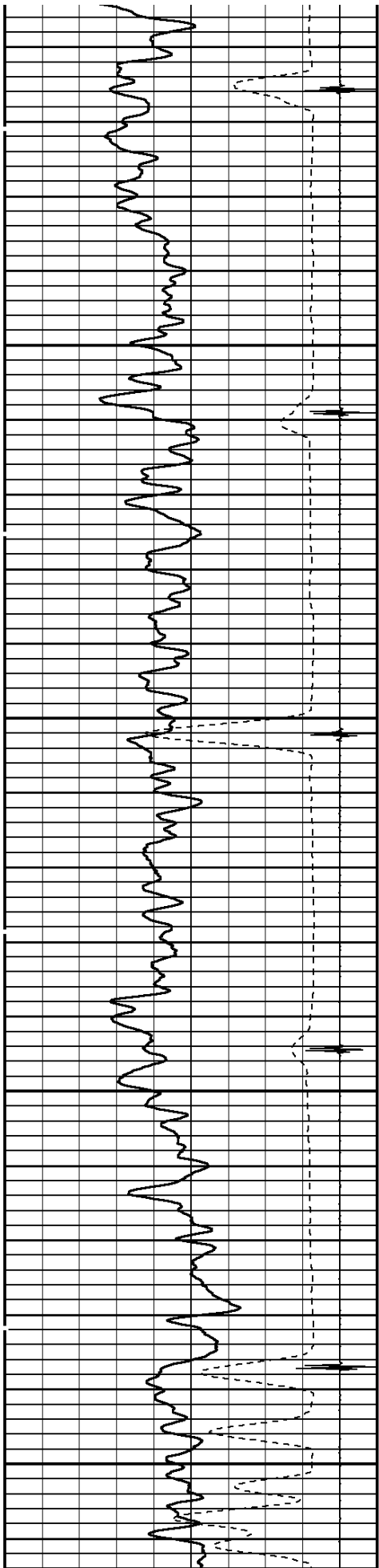




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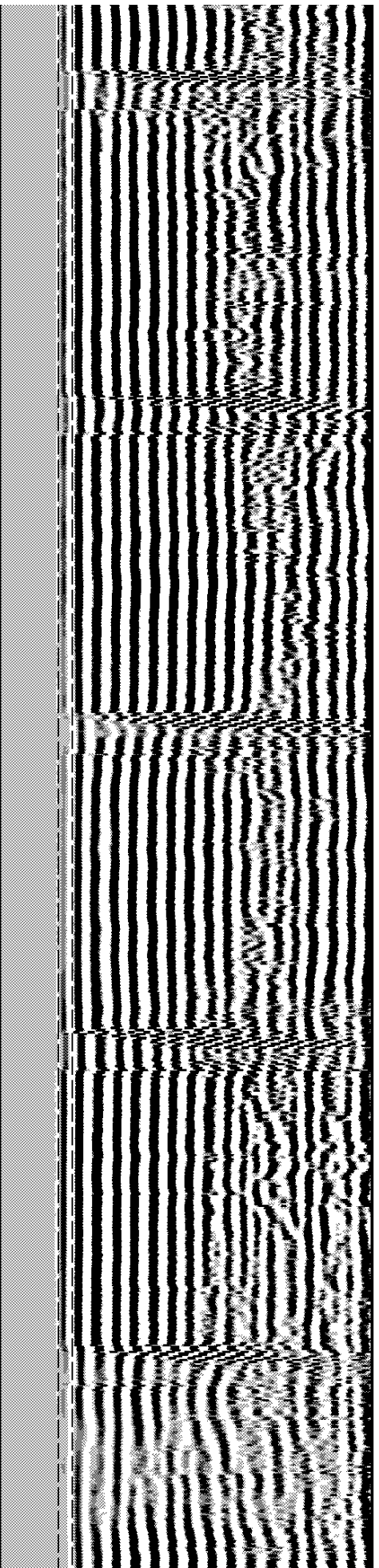
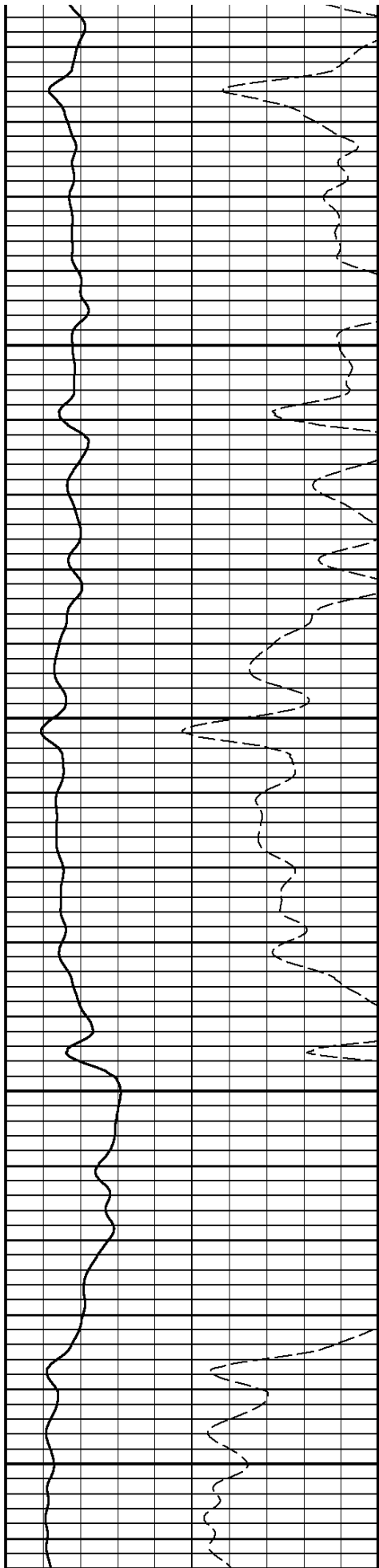
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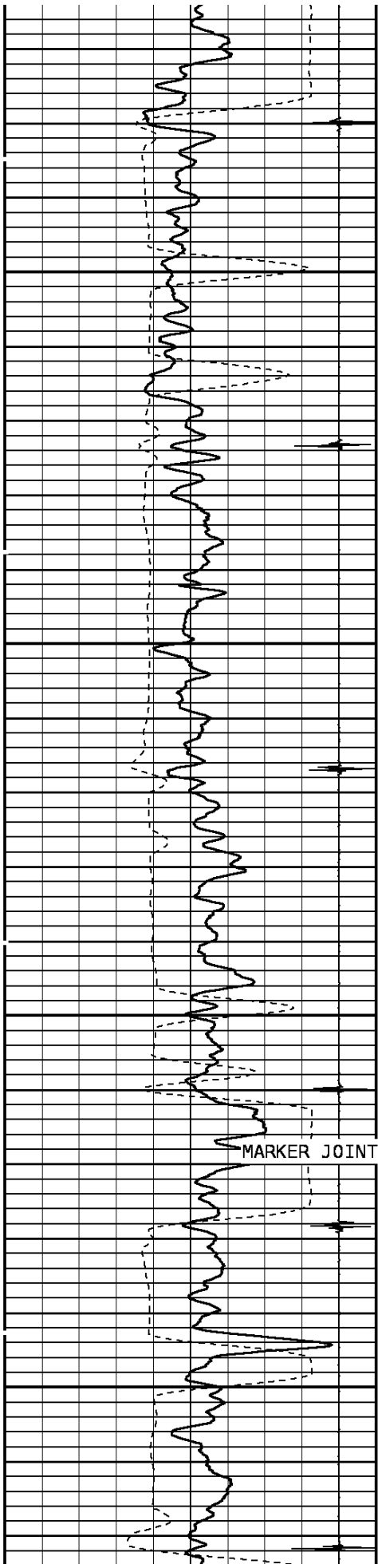




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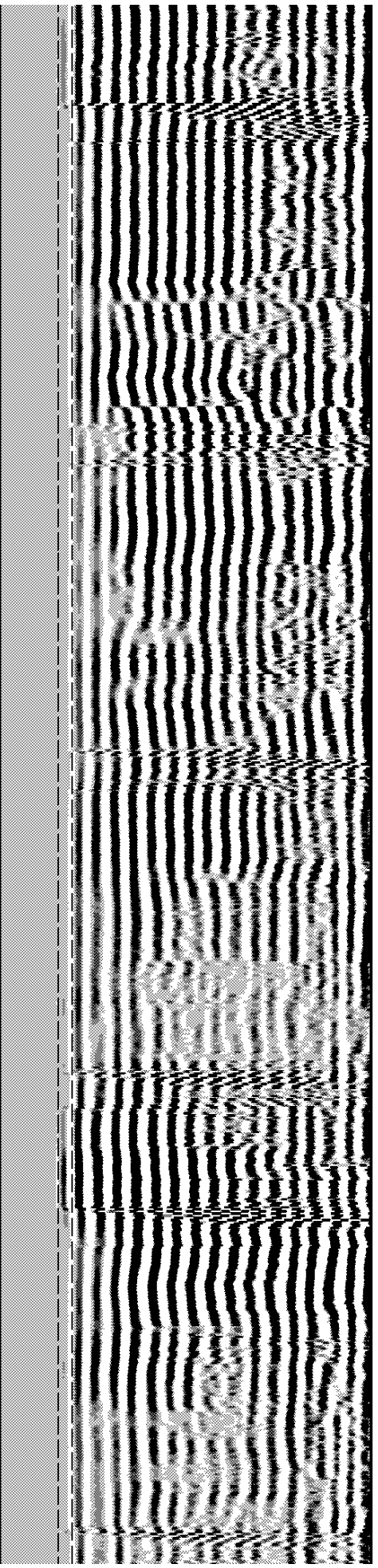
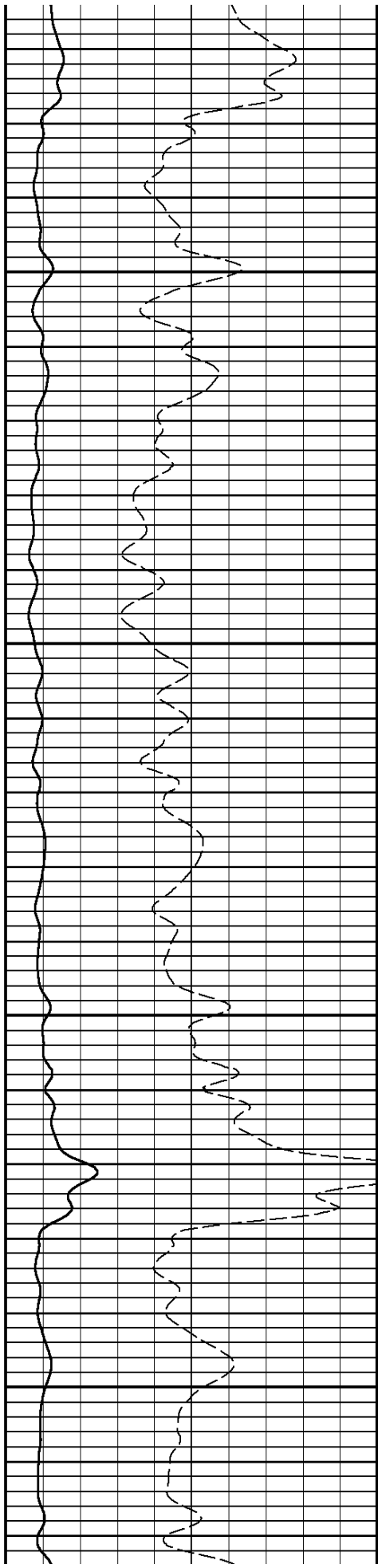
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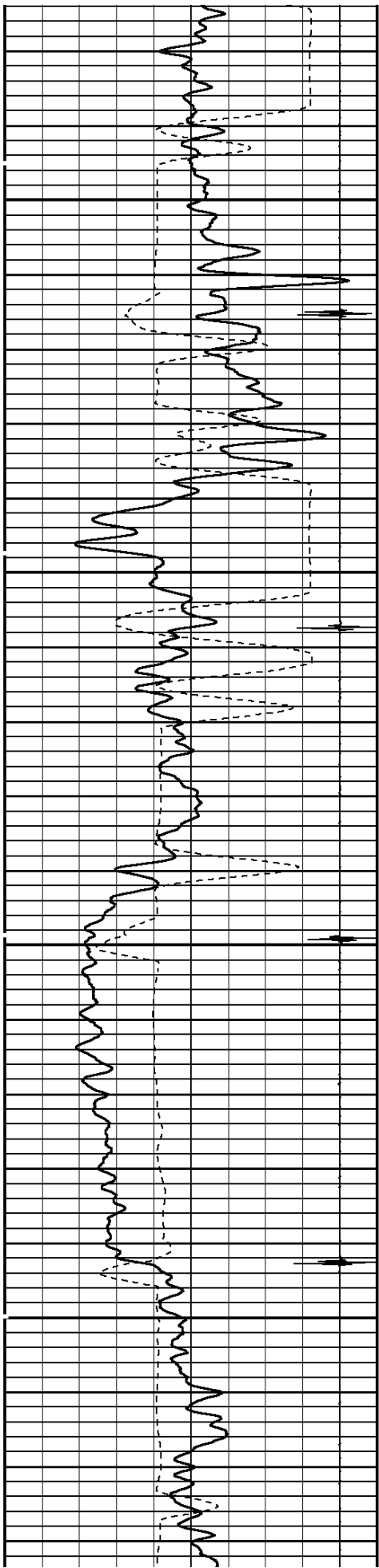




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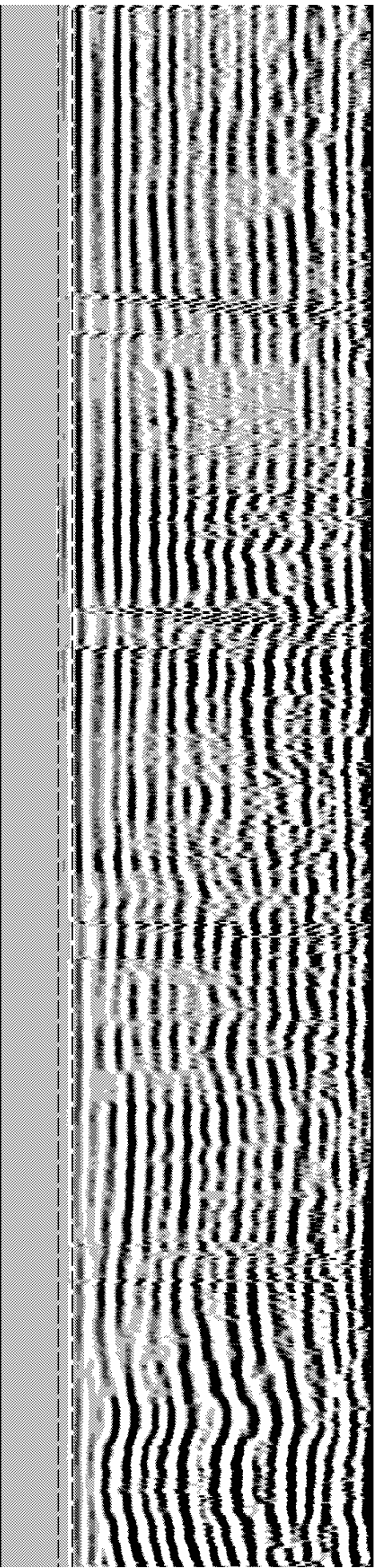
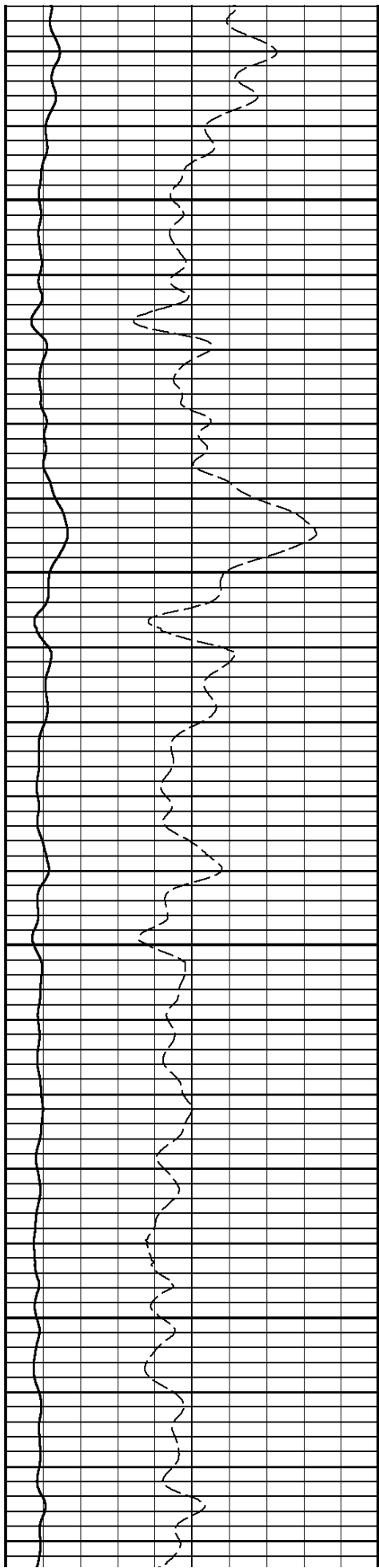
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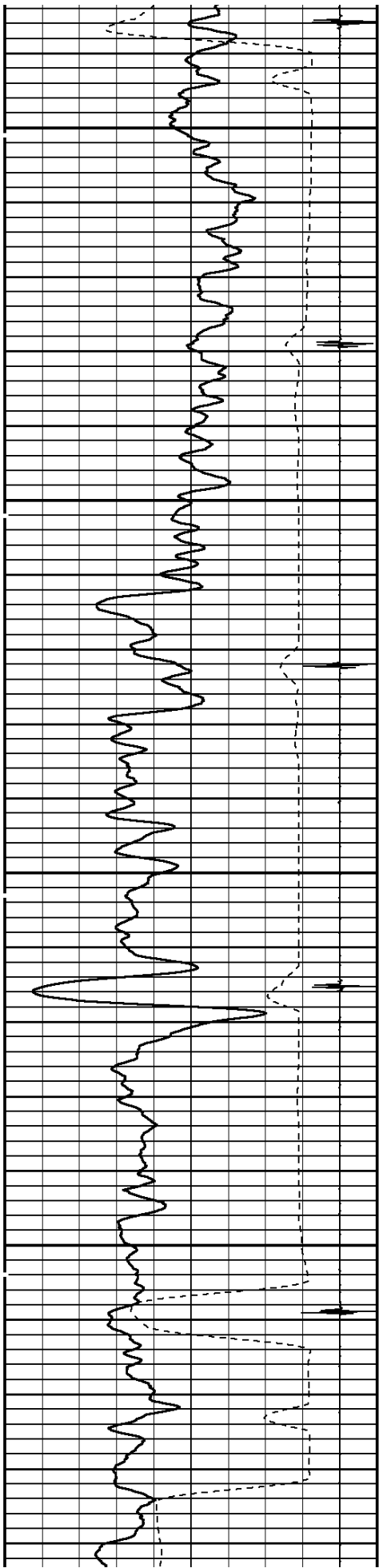




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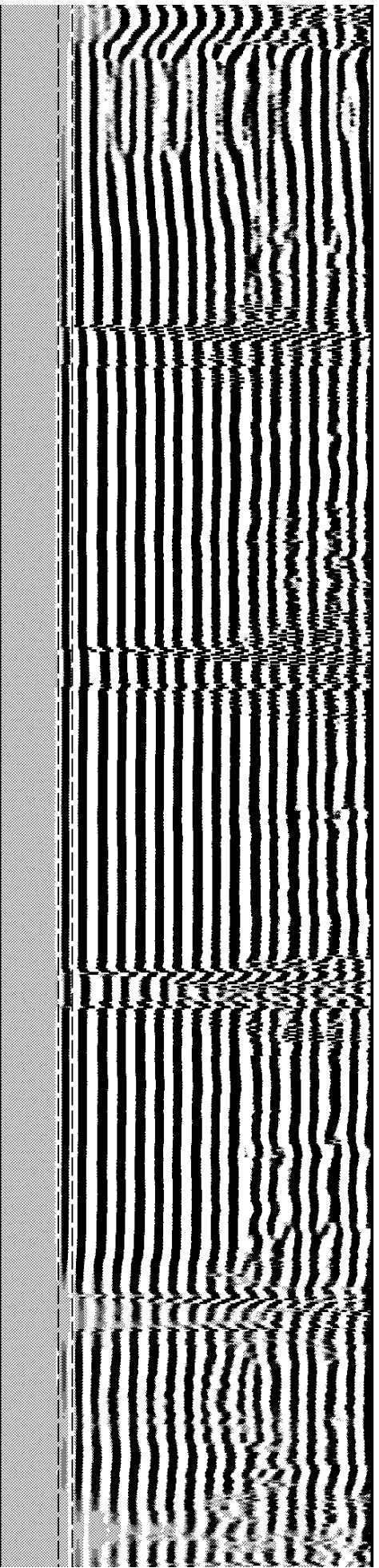
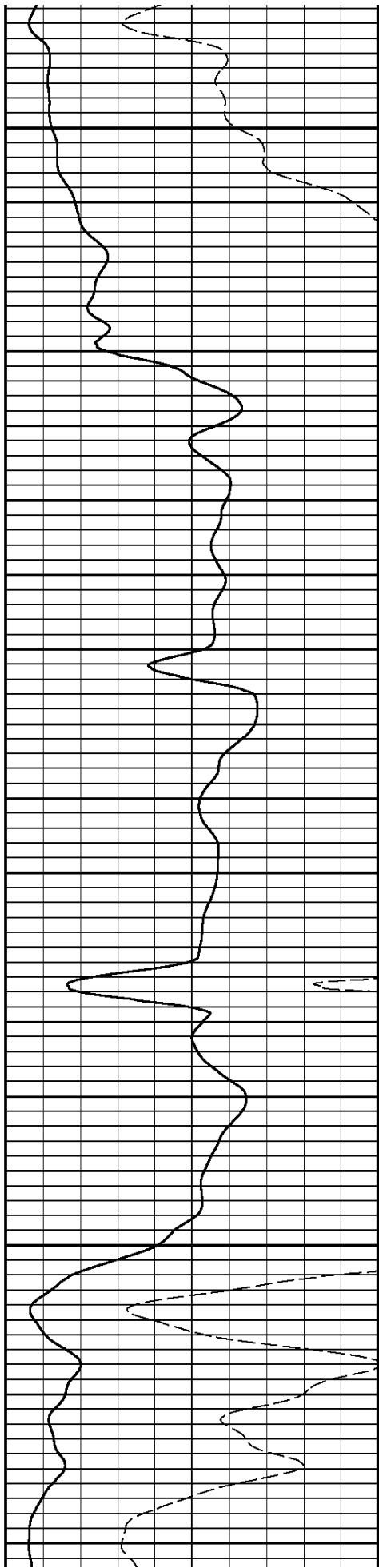
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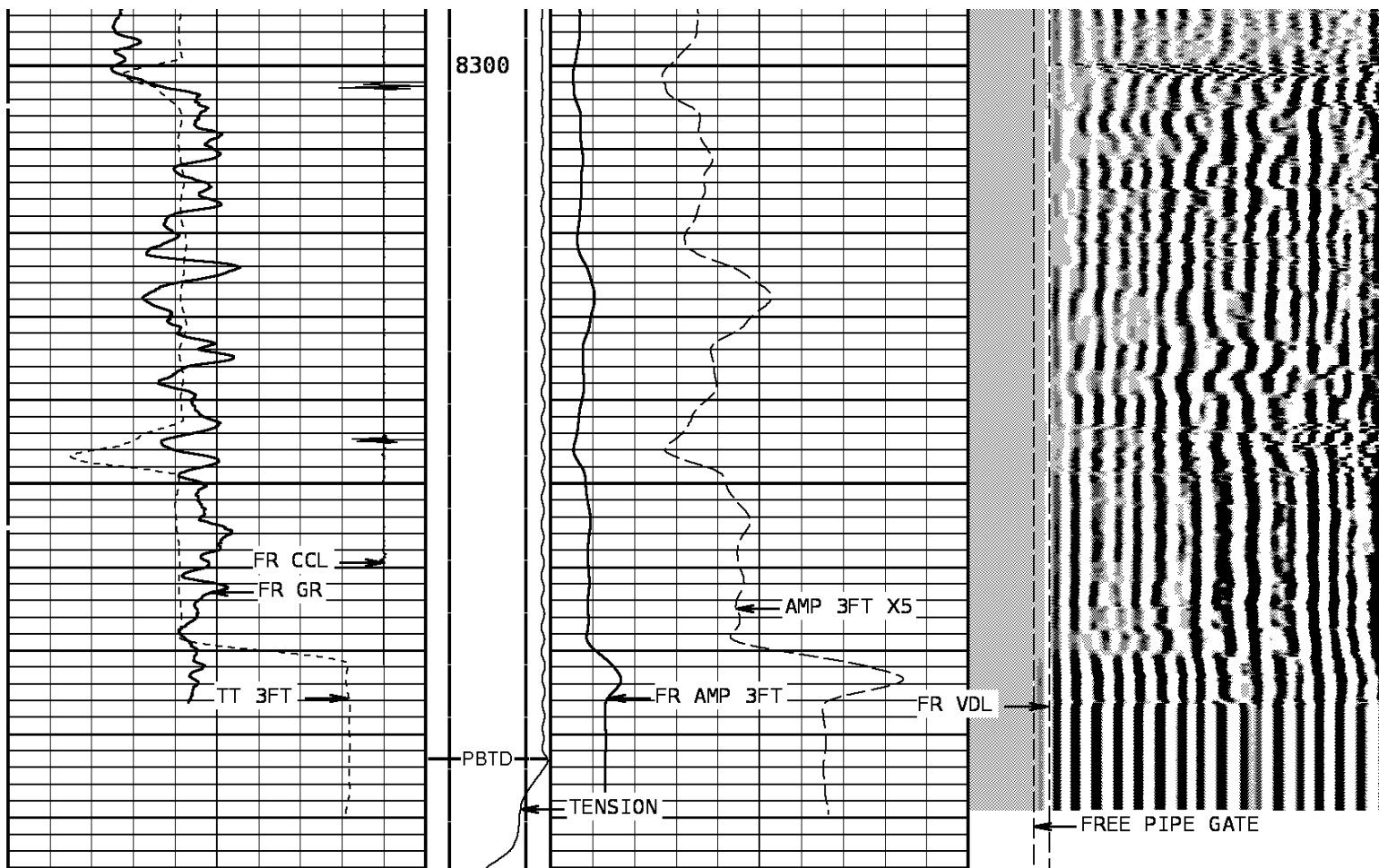




8100

8200





Collar Locator			Tension	AMPLITUDE 3FT		VARIABLE DENSITY 5FT			
-10000	Millivolts	1100		0	2200	0	200	Microseconds	1200
Gamma Ray				AMPLITUDE 3FT X5		FREE PIPE GATE			
0	API	150		0	20	200	200	Microseconds	1200
TRAVEL TIME 3FT					FREE PIPE GATE				
330	Microseconds	230				200	200	Microseconds	1200

START DEPTH: 8396.8 DIRECTION: UP DATE: 07/05/2008 TIME: 17:15 MODE: ORIGINAL

146313 sbt4

MAIN PASS W/0 PSI.

DEPTH SCALE: 5":100'

VERSION: 80214133R"

SYSTEM CONSTANTS

NAME	DESCRIPTION	VALUE	UNITS
CSIZ	Casing Size	5.500	Inches
CWEI	Casing Weight	17.00	Pounds/Foot
AMNS	Min Ampl 100% Bond	1	Millivolts

AMXS	Max Ampl 0% Bond	71	Millivolts
CCLO	Ccl Offset	0	
CCS	Cement Cmpr Strength	1200.0	PSI
CVEL	Casing Velocity	56.5	Microsec/Foot
DTF	DT Fluid	200.0	Microsec/Foot
MATT	Maximum Attenuation	12.00	Decibels/Foot
SWAN	Sheave Wheel Angle	0.00	Degrees
TTC	TT Correction	0	Microseconds
TTFF	Fast Formation TT	43.5	Microsec/Foot

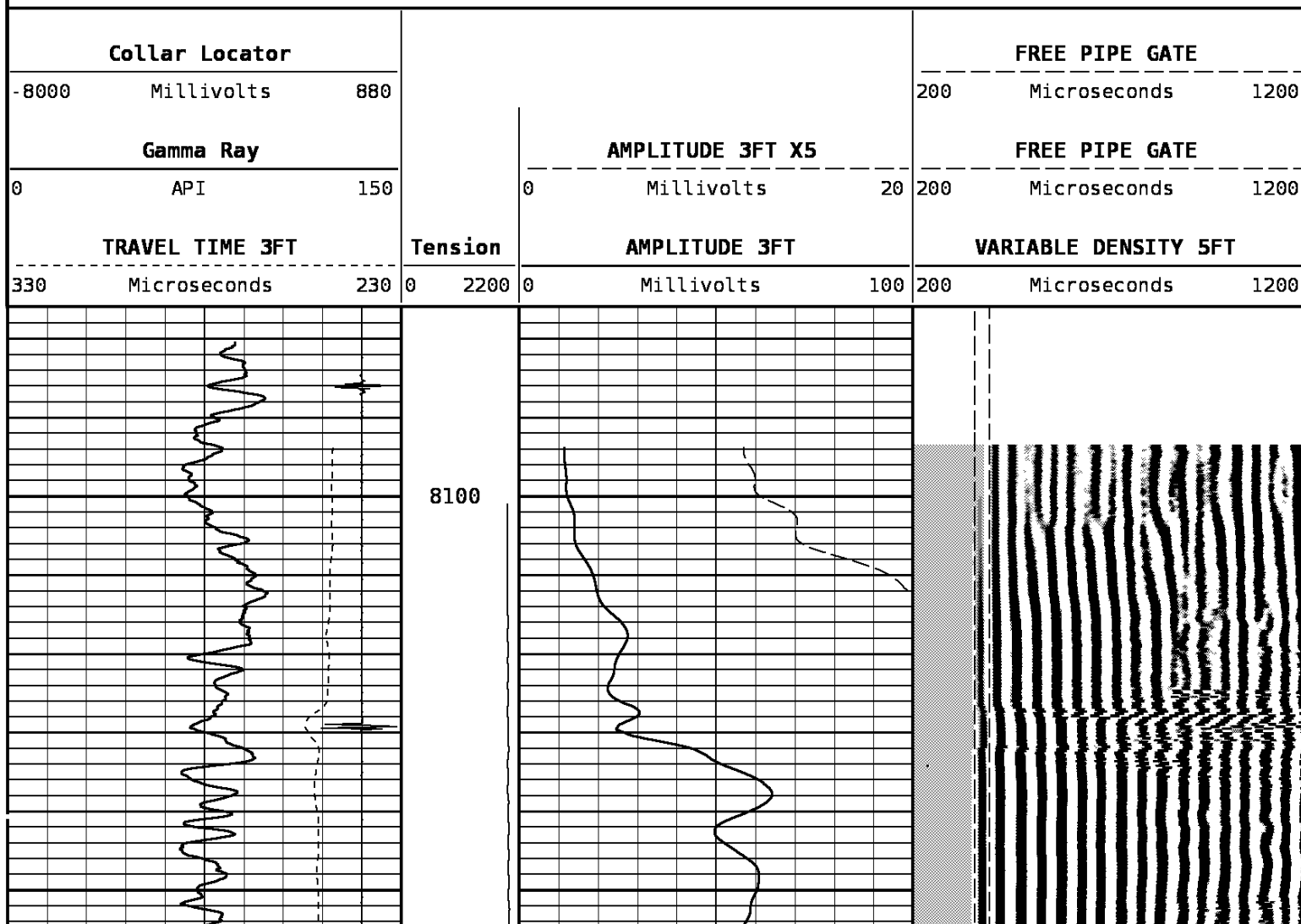
DEPTH SCALE: 5":100'

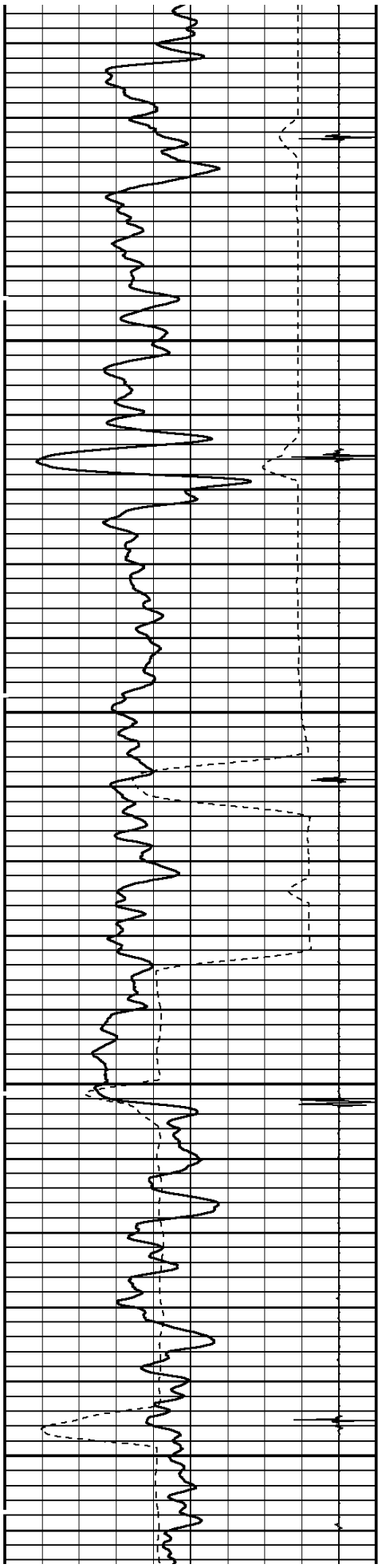
VERSION: 80214133R"

REPEAT PASS W/O PSI.

146313 sbl1

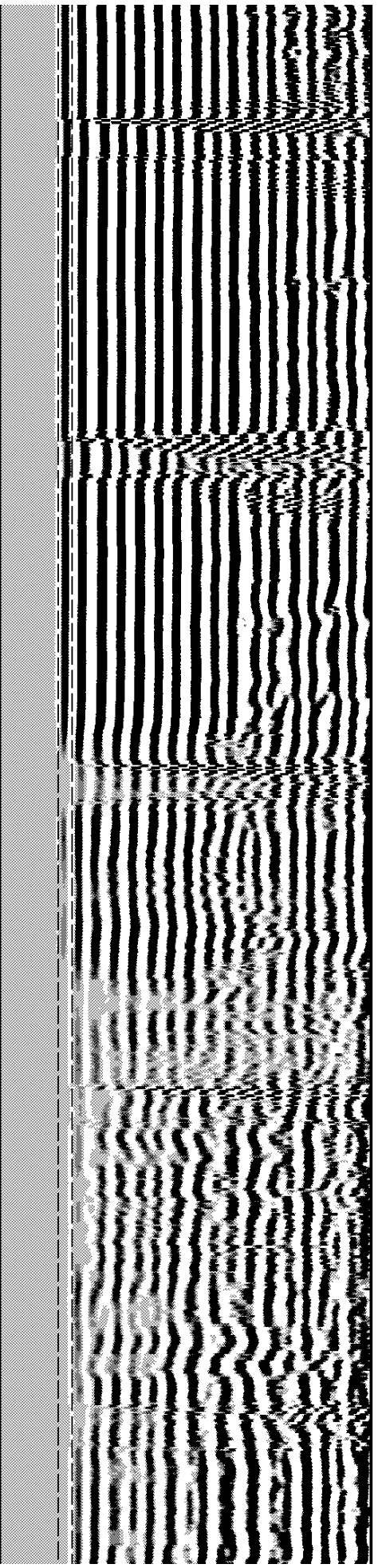
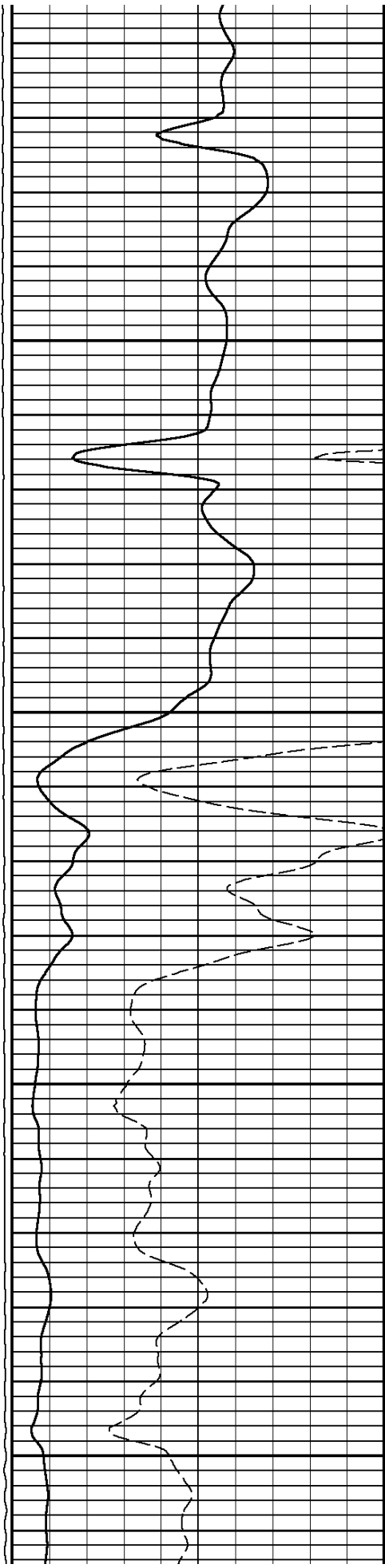
FINISH DEPTH: 8099.7 Feet DIRECTION: UP DATE: 07/05/2008 TIME: 13:44 MODE: ORIGINAL





8200

8300





TRAVEL TIME 3FT			Tension		AMPLITUDE 3FT		VARIABLE DENSITY 5FT			
330	Microseconds	230			0	2200	0	200	Microseconds	1200
Gamma Ray					AMPLITUDE 3FT X5		FREE PIPE GATE			
0	API	150			0	Millivolts	20	200	Microseconds	1200
Collar Locator							FREE PIPE GATE			
-8000	Millivolts	880					200	Microseconds	1200	

START DEPTH: 8395.2 DIRECTION: UP DATE: 07/05/2008 TIME: 13:38 MODE: ORIGINAL

146313 sbl1

REPEAT PASS W/O PSI.

DEPTH SCALE: 5":100'

VERSION: 80214133R"

SYSTEM CONSTANTS

NAME	DESCRIPTION	VALUE	UNITS
CSIZ	Casing Size	5.500	Inches
CWEI	Casing Weight	17.00	Pounds/Foot
AMNS	Min Ampl 100% Bond	1	Millivolts
AMXS	Max Ampl 0% Bond	71	Millivolts
CCL0	Ccl Offset	0	
CCS	Cement Cmpr Strength	1200.0	PSI
CVEL	Casing Velocity	56.5	Microsec/Foot
DTF	DT Fluid	200.0	Microsec/Foot
MATT	Maximum Attenuation	12.00	Decibels/Foot
SWAN	Sheave Wheel Angle	0.00	Degrees
TTC	TT Correction	0	Microseconds
TTFF	Fast Formation TT	43.5	Microsec/Foot

1 7/16 Adapter Head

Weight 2.2 LB.
Length 12 IN.
Max. Diameter 1.44 IN.

Total Stack Weight 223.0 LBS. in air
Total Stack Length 27.83 FT.

Slim Hole Centralizer

Weight 15 lbs
Length 2.49 FT.
Max. Diameter 2.750 IN.

Collar Locator

Weight 39.8 LBS.
Length 3.40 FT.
Max. Diameter 2.75 IN.

Slim Hole Gamma Ray

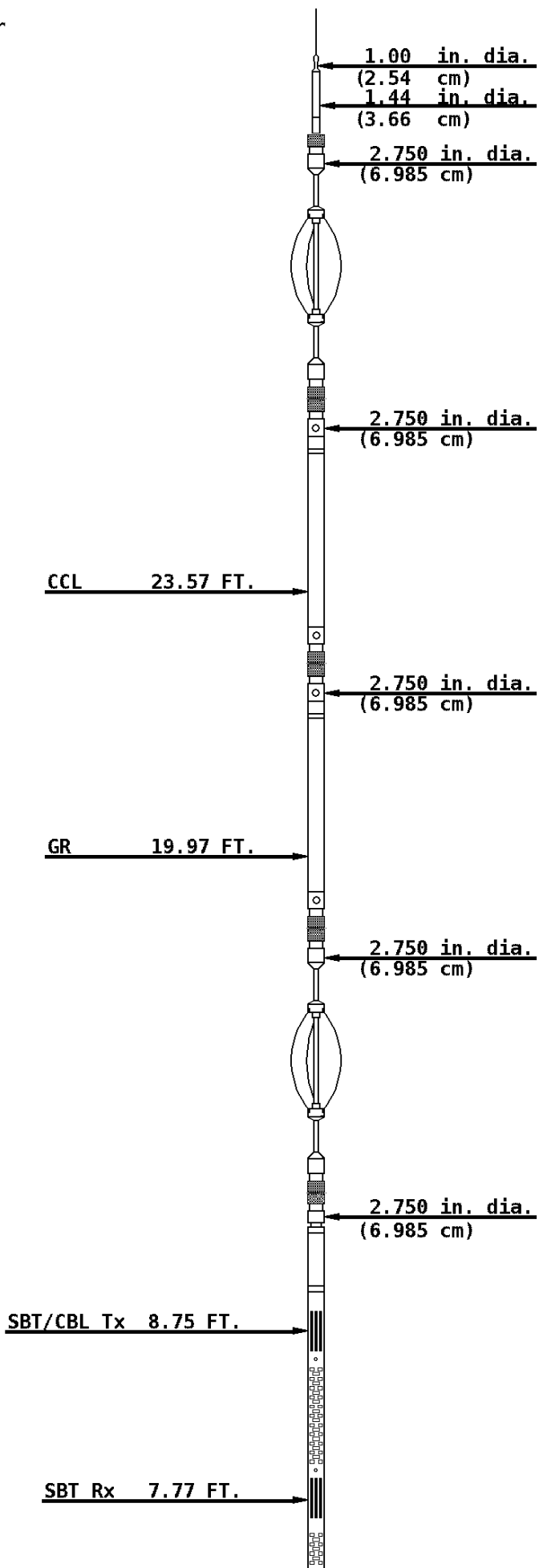
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Length 4.71 FT.
Max. Diameter 2.750 IN.

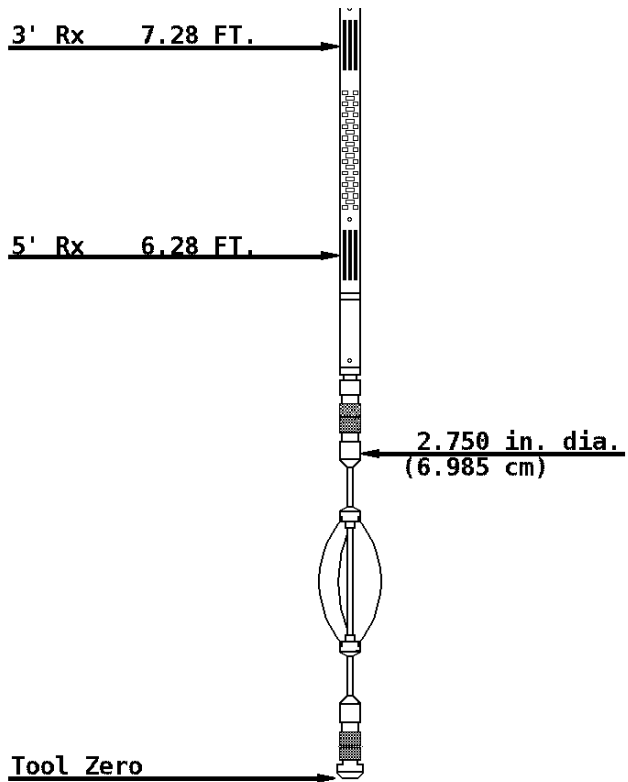
Slim Hole Centralizer

Weight 22 LBS.
Length 3.08 FT.
Max. Diameter 2.750 IN.

Sector Bond

Weight 89.2 LBS>
Length 10.32 FT.
Max. Diameter 2.750 IN.





Slim Hole Centralizer

Weight 15.0 LBS.
Length 2.82 FT.
Max. Diameter 2.750 IN.

COMPANY ANTERO RESOURCES

WELL VALLEY FARMS F-5

FIELD MAMM CREEK

COUNTY GARFIELD

STATE COLORADO



Weatherford®