

Schlumberger

Company: Bayswater Exploration and Production

Well: MSH Farms 12-15

Field: Wattenberg

County: Weld State: Colorado

CEMENT BOND
GAMMA RAY
CASING COLLAR LOG

County: Weld
Field: Wattenberg
Location: SHL: 206 FSL & 1041' FWL SW/8
Well: MSH Farms 12-15
Company: Bayswater Exploration and Production

LOCATION

SHL: 206 FSL & 1041' FWL SW/8W
BHL: 1974' FSL & 614' FWL NW/8W
Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Elev.: K.B. 5067.00 ft
G.L. 5054.00 ft
D.F.
Elev.: 13.00 ft above Perm. Datum

API Serial No. 05-123-37591
Section 15
Township 7N
Range 67W

Logging Date	18-Nov-2013			
Run Number	1			
Depth Driller	7655 ft			
Schlumberger Depth	7622 ft			
Bottom Log Interval	7612 ft			
Top Log Interval	25 ft			
Casing Fluid Type	WATER			
Salinity				
Density	8.4 lbm/gal			
Fluid Level				
BIT/CASING/TUBING STRING				
Bit Size	7.875 in			
From				
To				
Casing/Tubing Size	4.500 in			
Weight	11.6 lbm/ft			
Grade				
From				
To				
Maximum Recorded Temperatures	223 degF			
Logger On Bottom	18-Nov-2013	Time	13:30	
Unit Number	354	Location	FORT MORGAN	
Recorded By	S LANGFORD			
Witnessed By	RICK OHLEMEIER			

PVT DATA				
Oil Density		Run 1	Run 2	Run
Water Salinity				
Gas Gravity				
Bo				
Bw				
1/Bq				
Bubble Point Pressure				
Bubble Point Temperature				
Solution GOR				
Maximum Deviation				
CEMENTING DATA				
Primary/Squeeze	Primary			
Casing String No				
Lead Cement Type				
Volume				
Density				
Water Loss				
Additives				
Tail Cement Type				
Volume				
Density				
Water Loss				
Additives				
Expected Cement Top				
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Fluid Type				
Salinity				
Density				
Fluid Level				
BIT/CASING/TUBING STRING				
Bit Size				
From				
To				
Casing/Tubing Size				
Weight				
Grade				
From				
To				
Maximum Recorded Temperatures				
Logger On Bottom		Time		
Unit Number		Location		
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 18-NOV-2013 14:05:31

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CM TD-B/A	Type:	1-25P
Serial Number:	6220	Serial Number:	1163	Serial Number:	354
Calibration Date:	27-MAR-2013	Calibration Date:	15-OCT-2013	Length:	17000 FT
Calibrator Serial Number:	1	Calibrator Serial Number:	78135	<hr/> Conveyance Method: Wireline Rig Type: LAND	
Calibration Cable Type:	1-25P	Number of Calibration Points:	0		
Wheel Correction 1:	-4				
Wheel Correction 2:	-2				

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 FT
Rig Up Length At Bottom:	0.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	
Tool Zero Check At Surface:	

Depth Control Remarks

- | |
|---|
| 1. IDW WHEELS PRIMARY DEPTH CONTROL |
| 2. DRUM COUNTER USED AS SECONDARY DEPTH CONTROL |
| 3. |
| 4. |
| 5. |
| 6. |

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OTHER SERVICES1	OTHER SERVICES2
OS1: PERF	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

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OS1:  PERF
OS2:
OS3:
OS4:
OS5:
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OS1:
OS2:
OS3:
OS4:
OS5:

CORRELATED TO OH LOG RAN ON 5-NOV-2013 BY PIONEER

REPEAT RAN UNDER 0 PSI	
MAIN PASS RAN UNDER 1000 PSI	
CREW: HOFFMAN, KOLMAN	
THANK YOU	

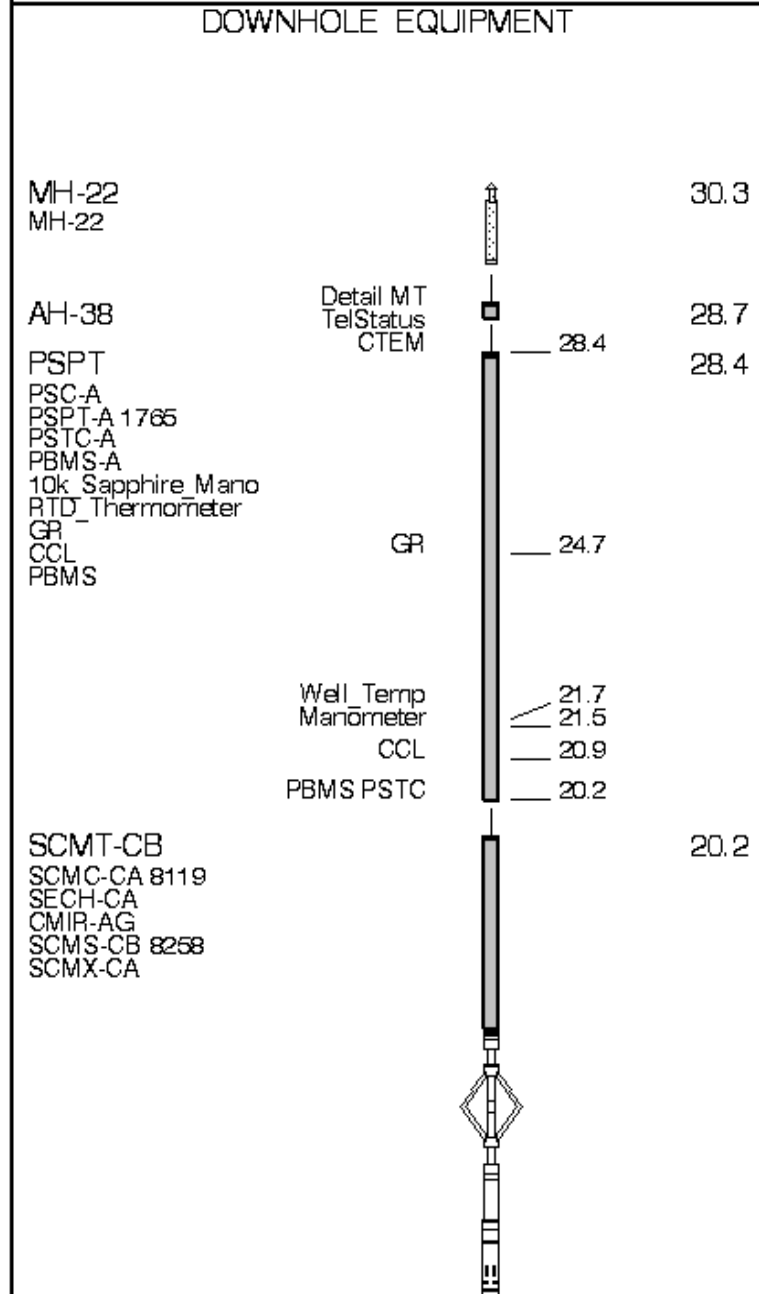
RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

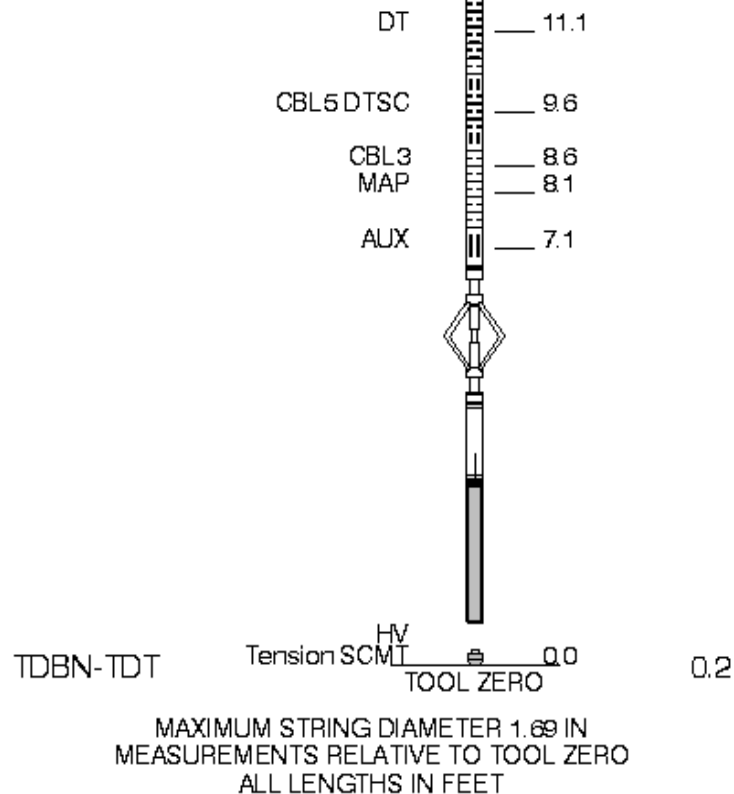
EQUIPMENT DESCRIPTION		
RUN 1	RUN 2	

SURFACE EQUIPMENT

WITM-A

PSC_16MHZ





Schlumberger

**MAIN PASS
1000 PSI**

MAXIS Field Log

Company: Bayswater Exploration and Production

Well: MSH Farms 12-15

Input DLIS Files

DEFAULT	SCMT_PSP_006LUP	FN:5	PRODUCER	18-Nov-2013 13:54	7630.0 FT	24.5 FT
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Output DLIS Files

DEFAULT	SCMT_PSP_010PUP	FN:9	PRODUCER	18-Nov-2013 15:59	7633.5 FT	28.0 FT
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OP System Version: 19C2-270

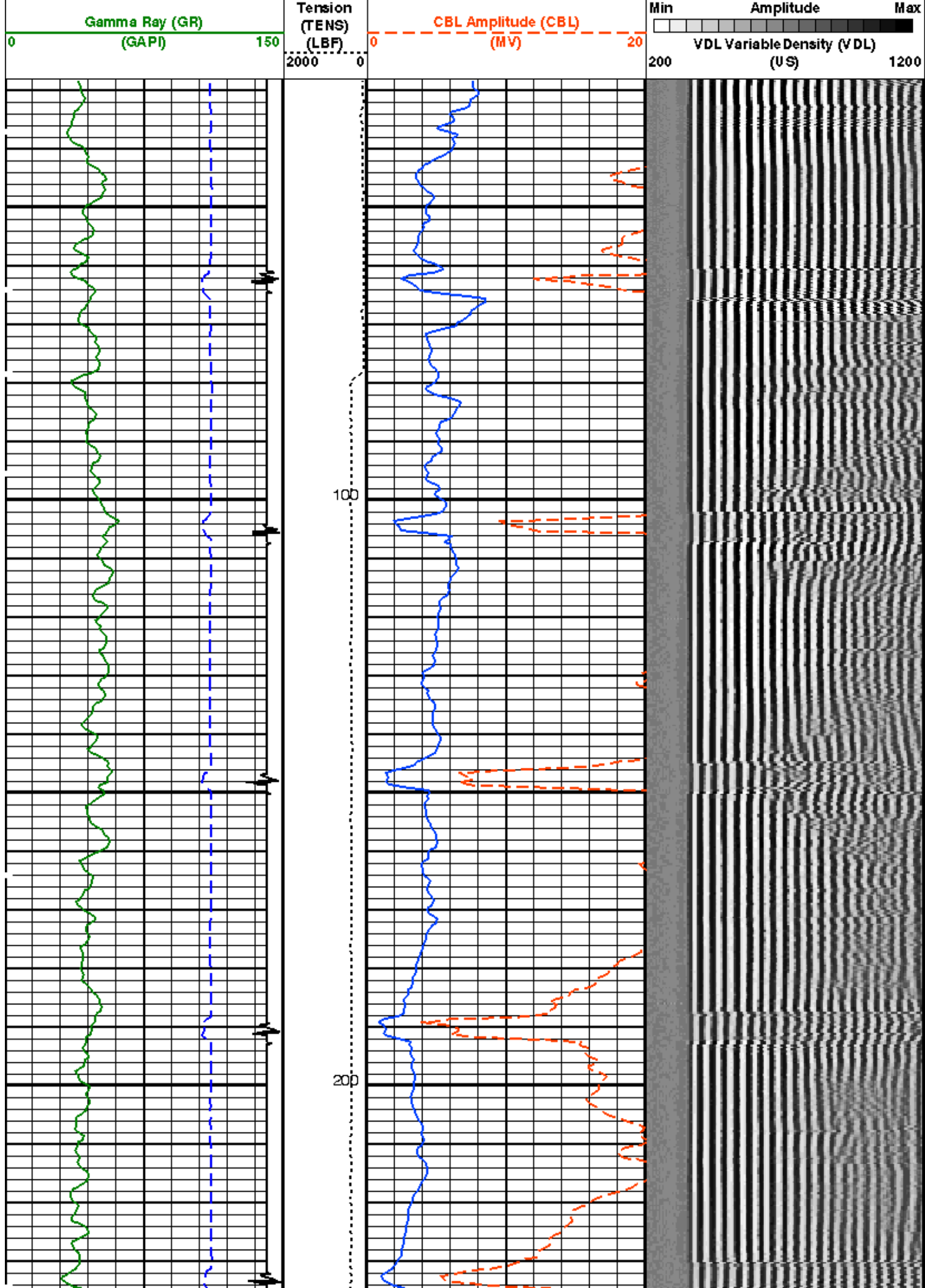
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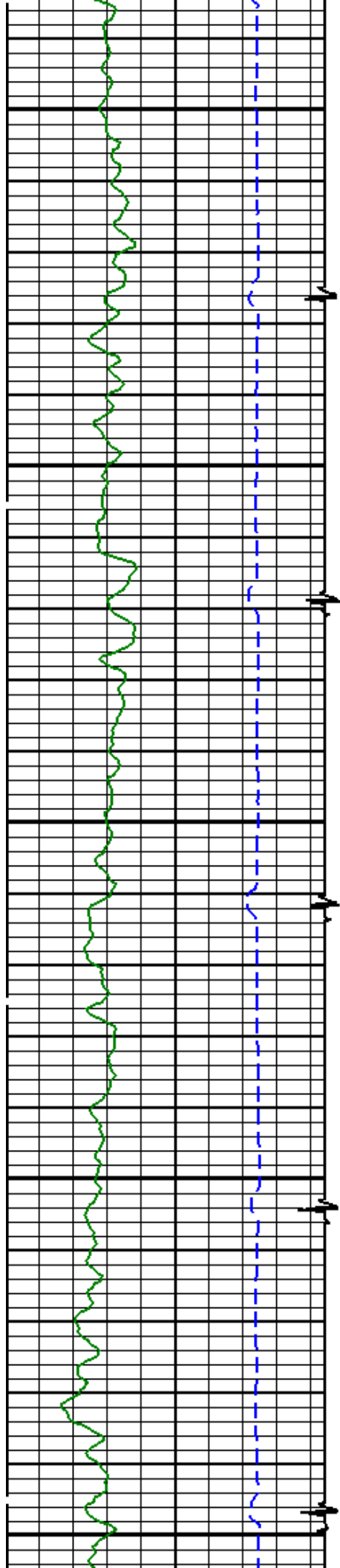
PIP SUMMARY

☒ Time Mark Every 60 S

	Discriminated CCL (CCLD)	
	-3.5 (V)	0.5
COLLARS From CCLD to T1		
Transit Time (TT)		
400	(US)	200

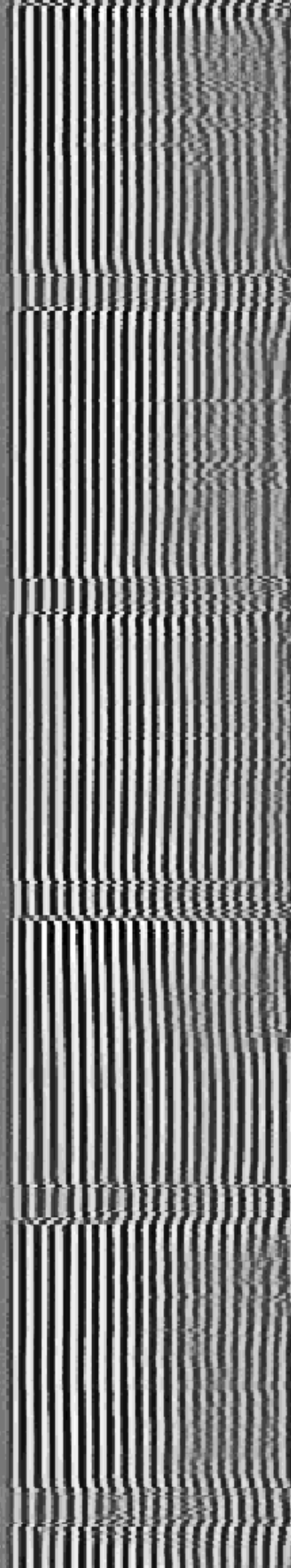
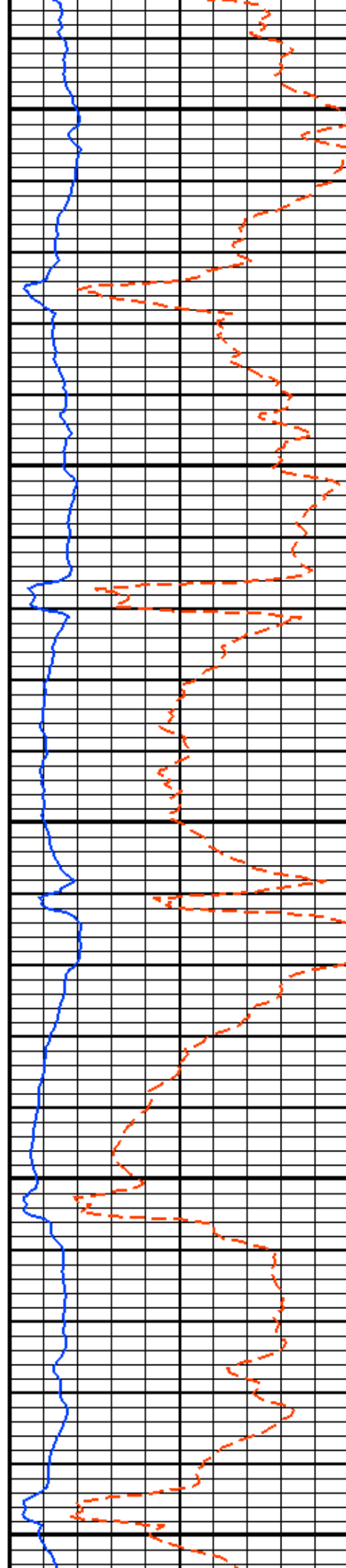
GOOD BOND From ACBL to GOBO		
CBL Amplitude (CBL)		
0	(MV)	100

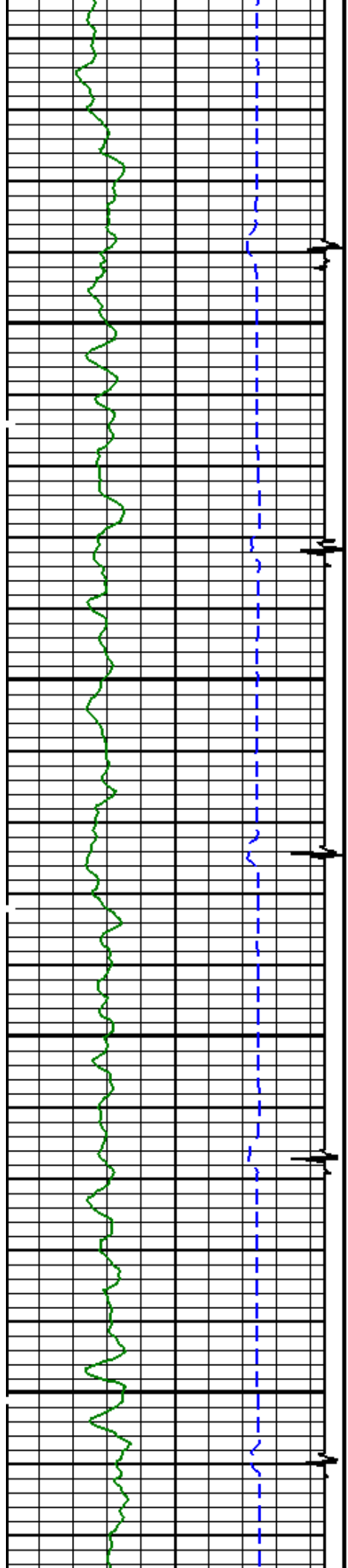




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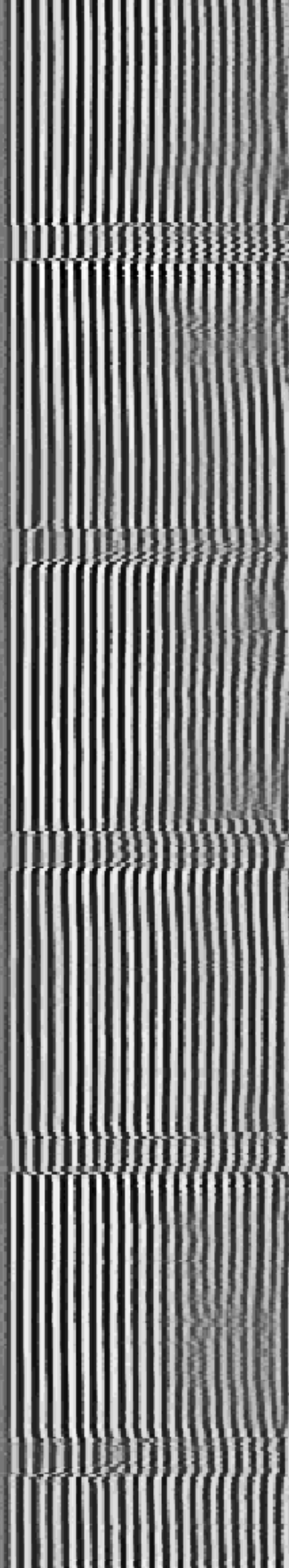
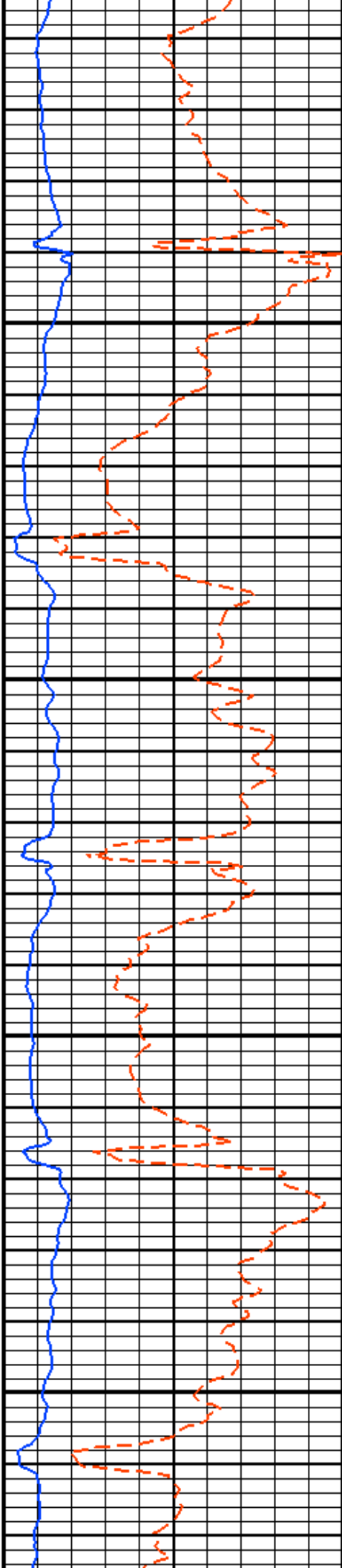
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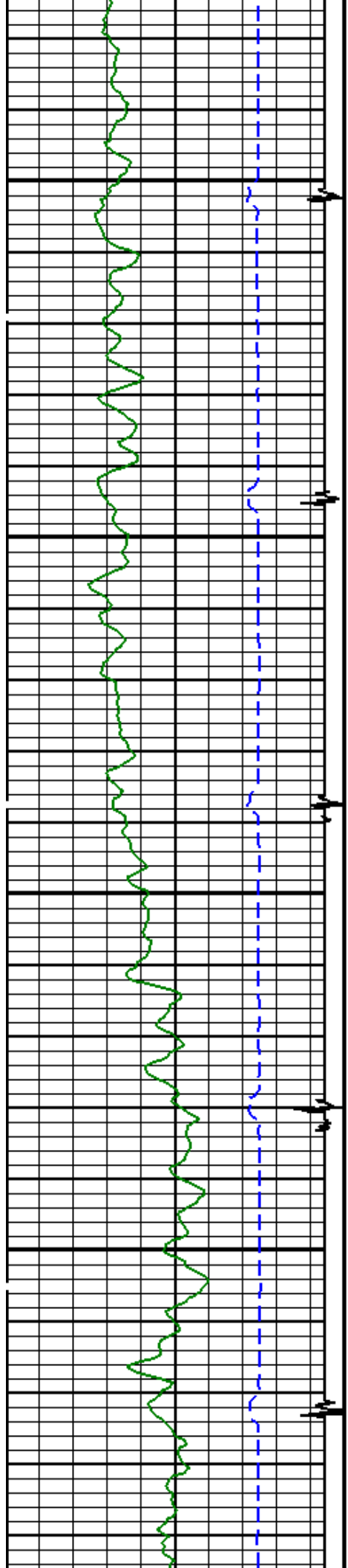




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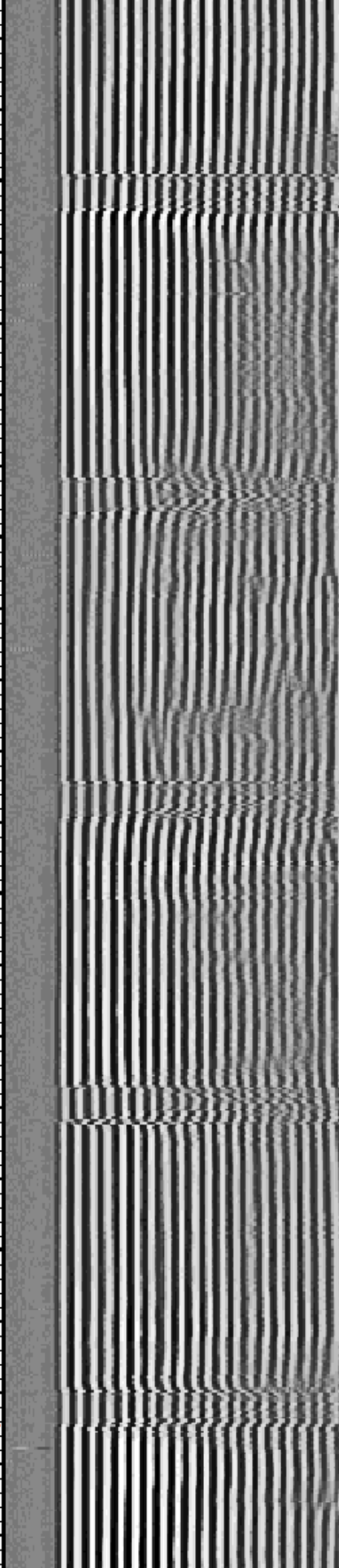
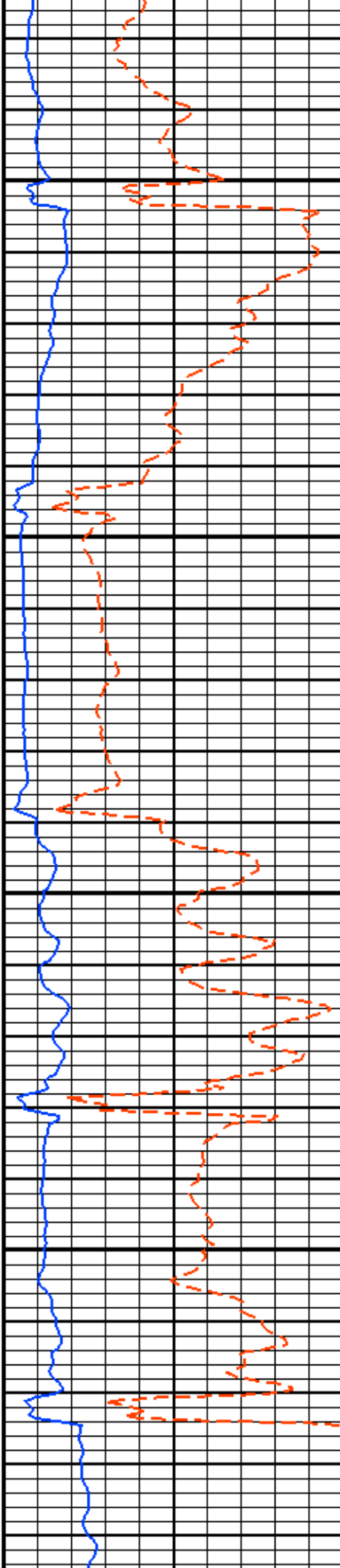
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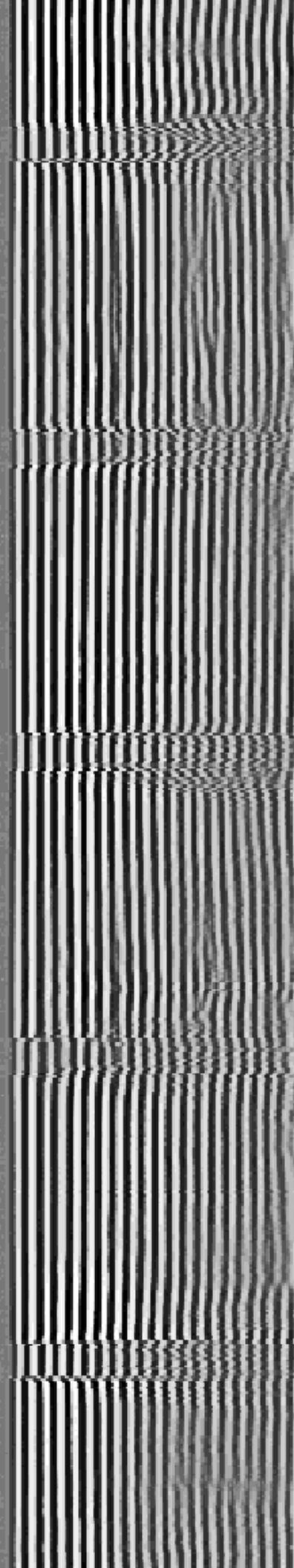
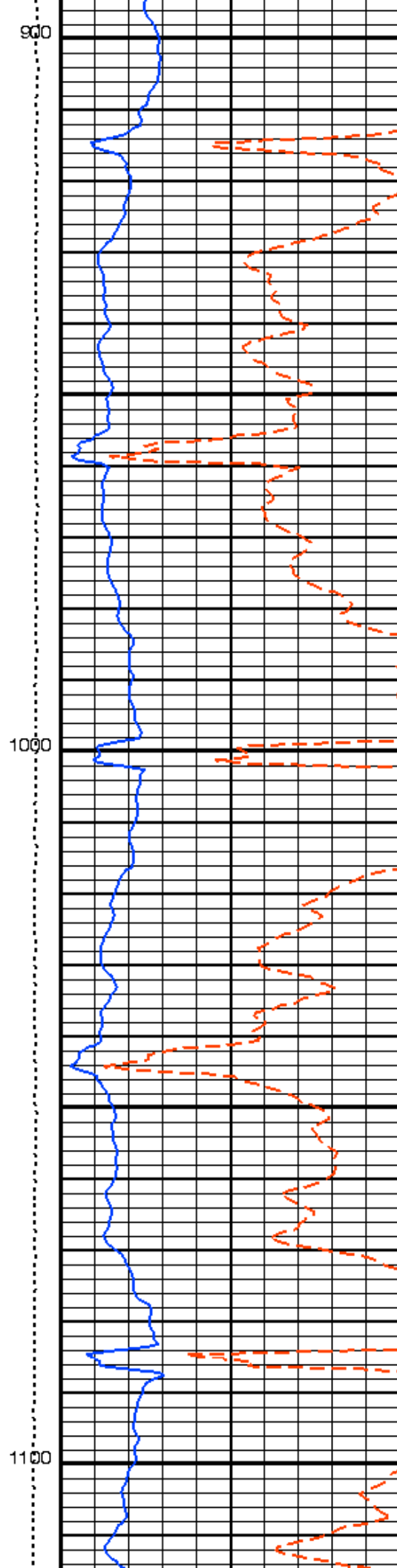
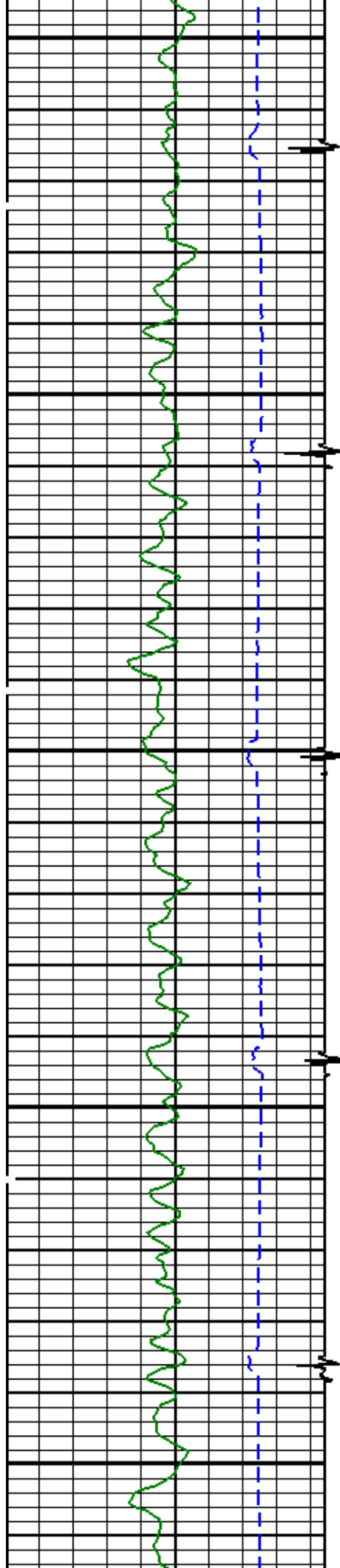


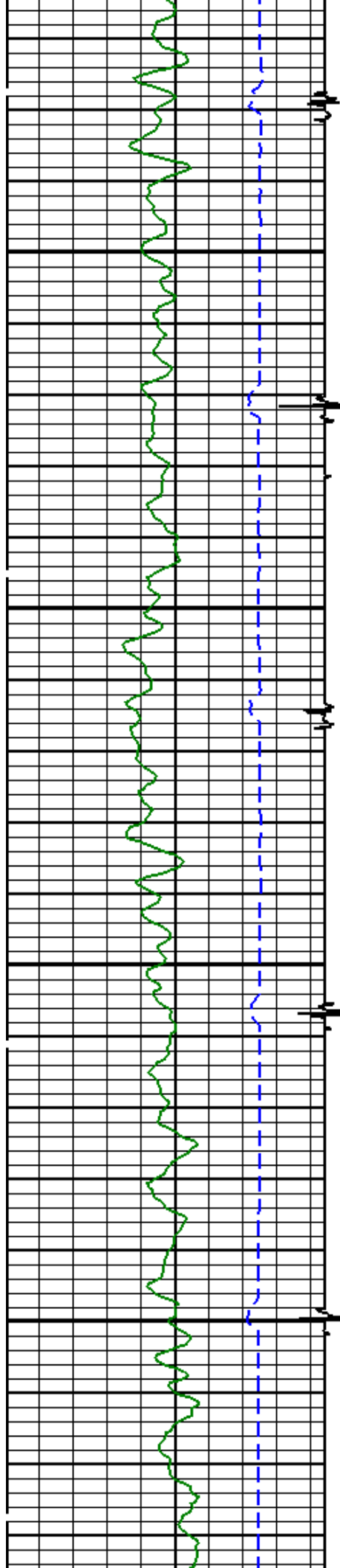


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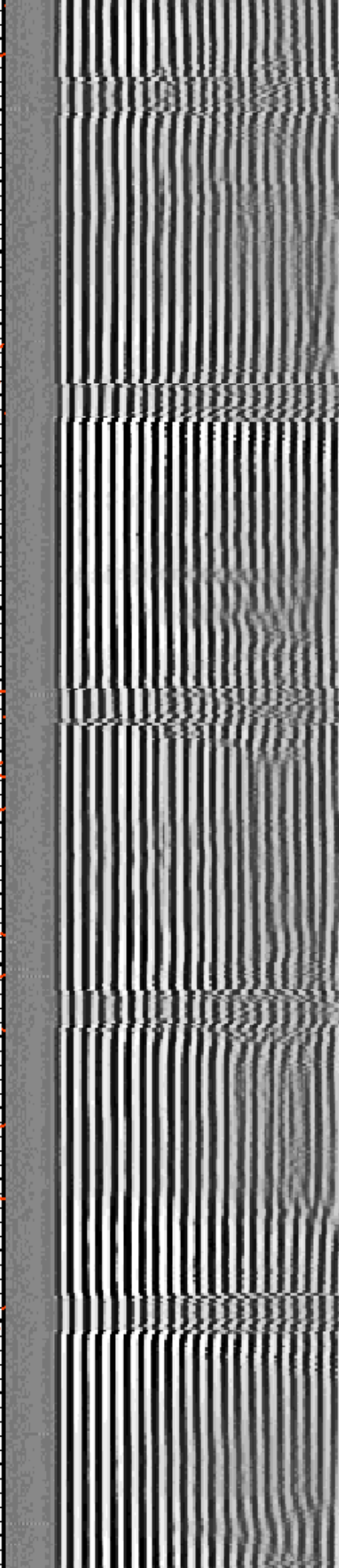
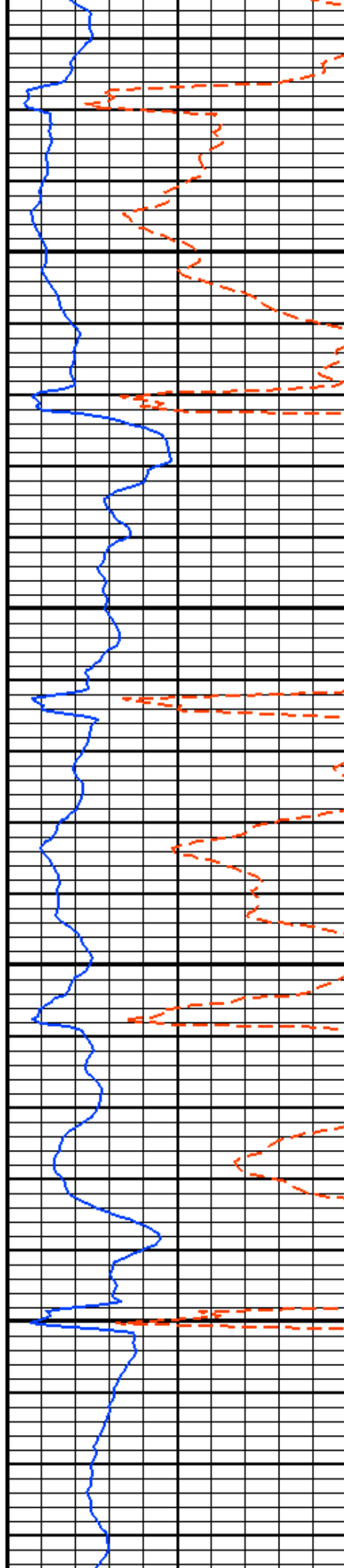


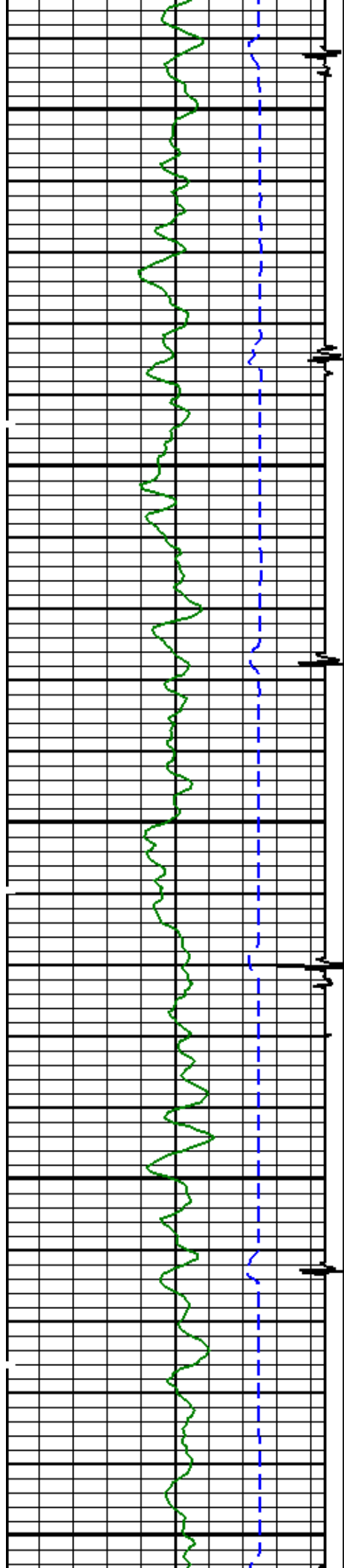




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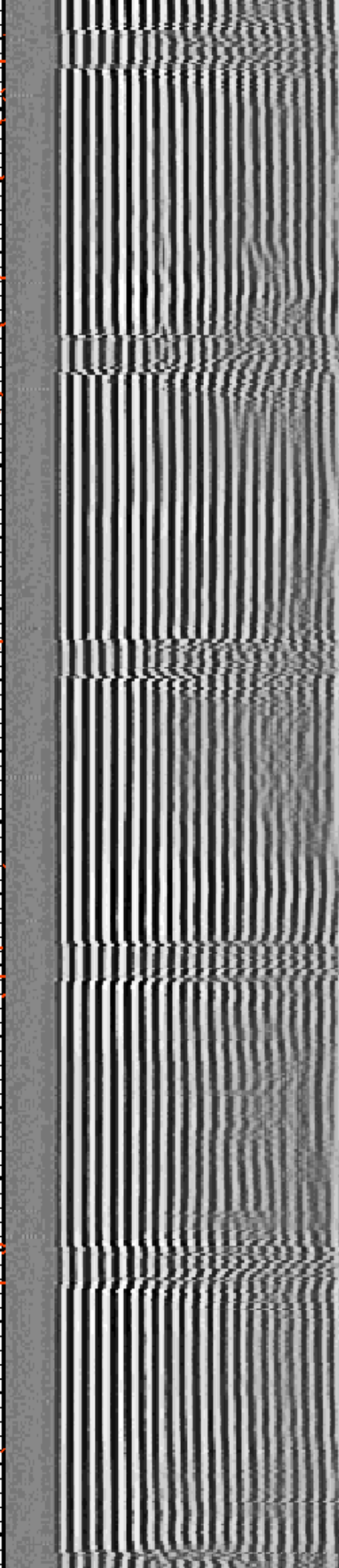
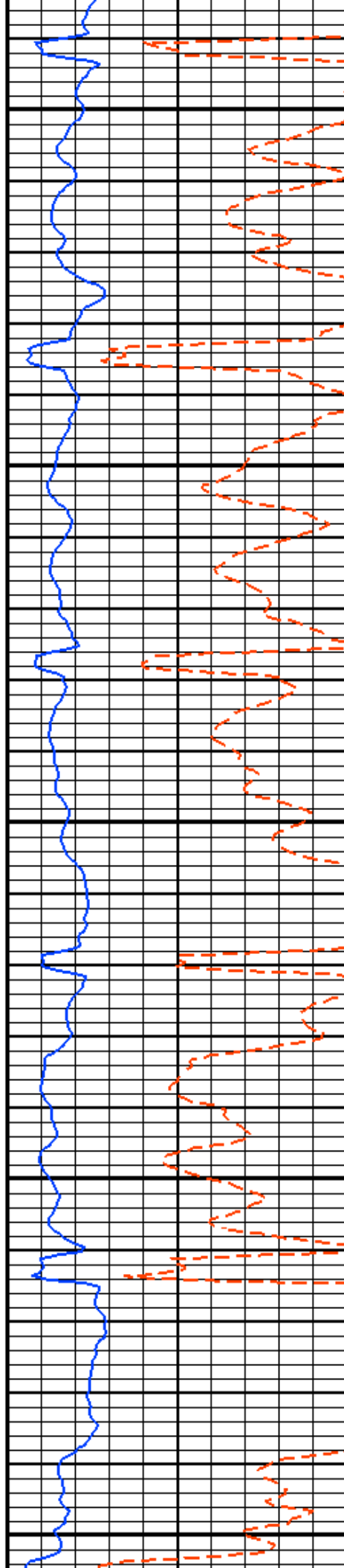
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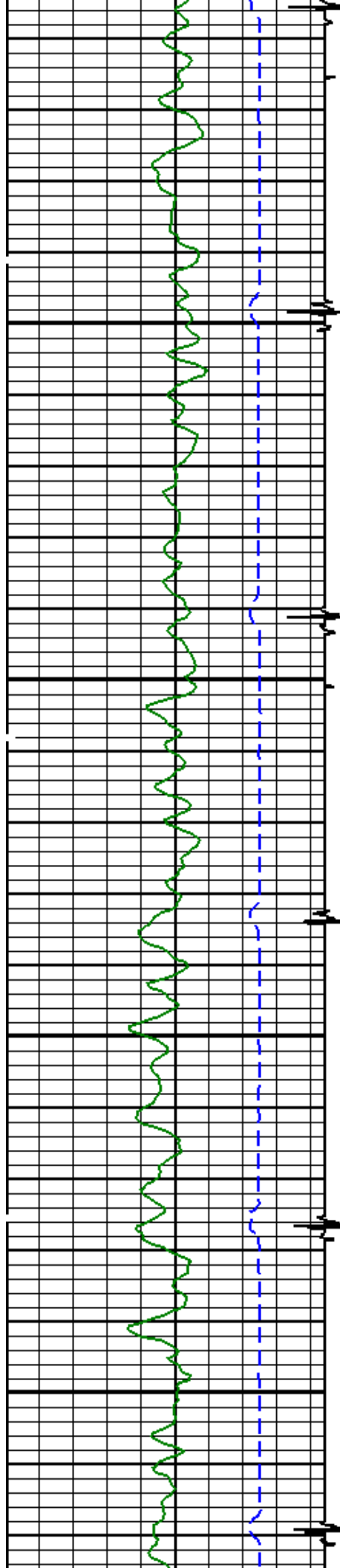




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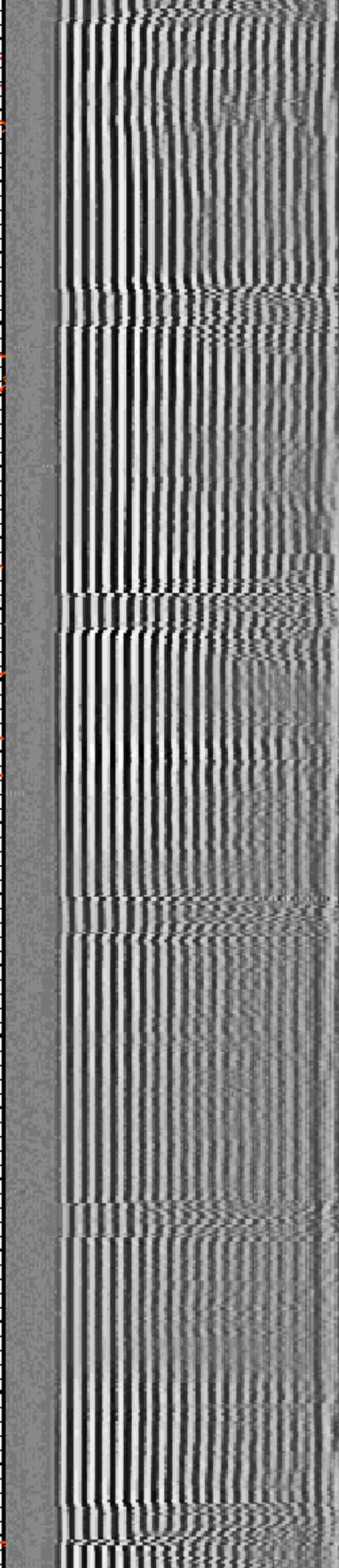
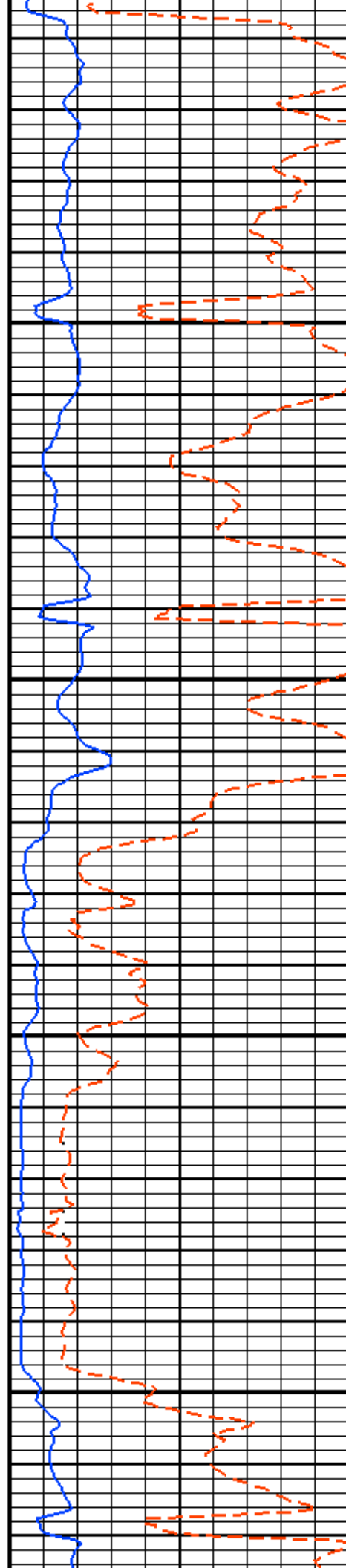
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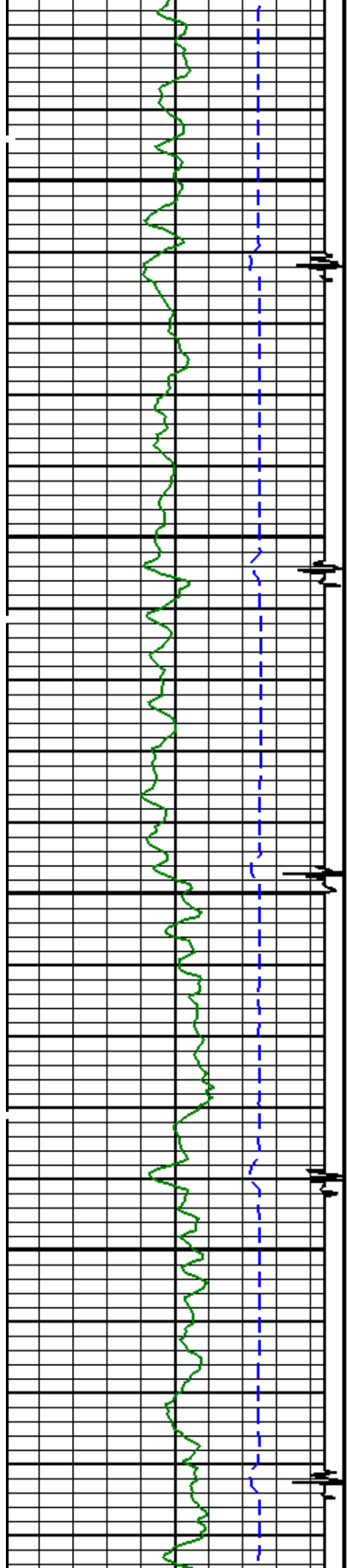




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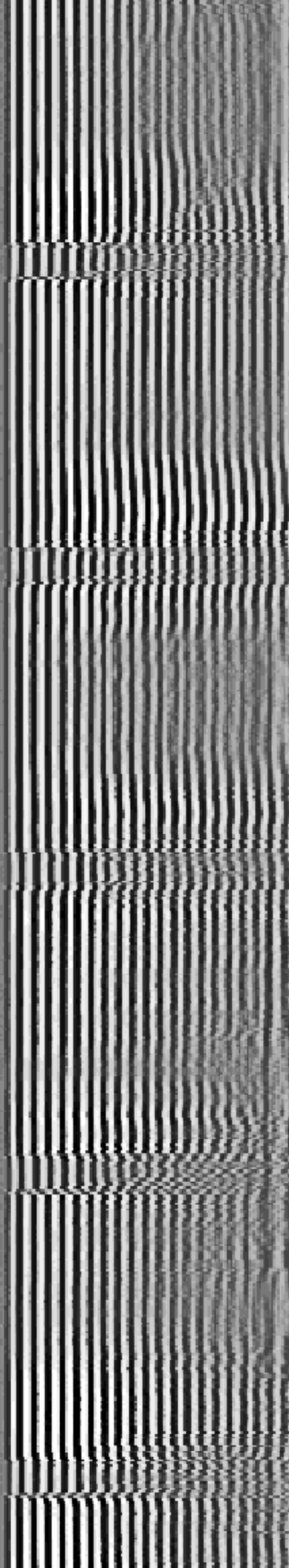
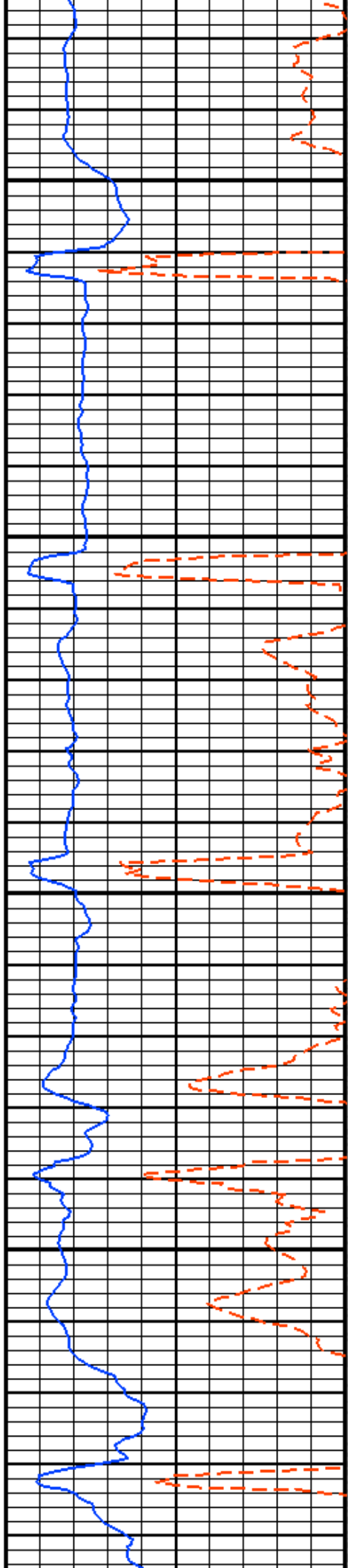
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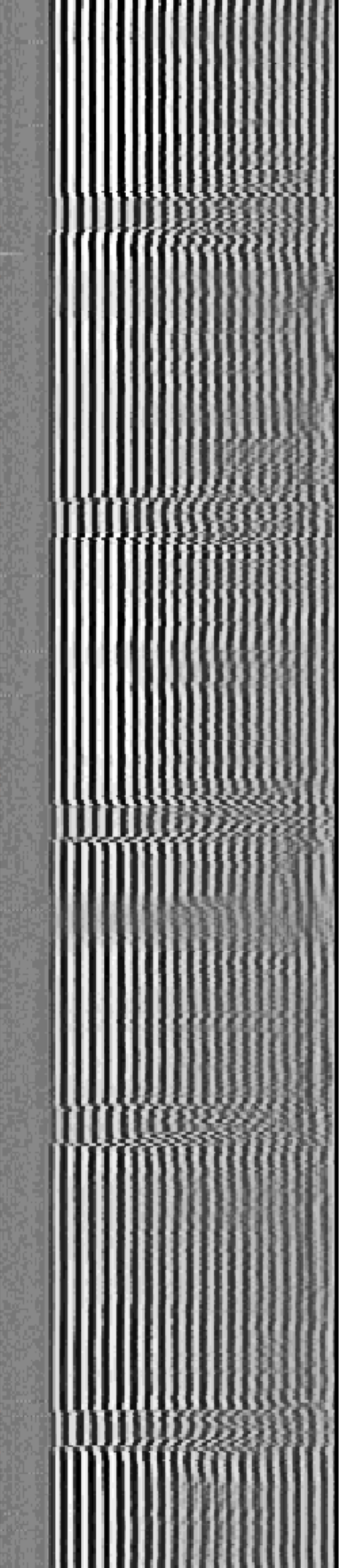
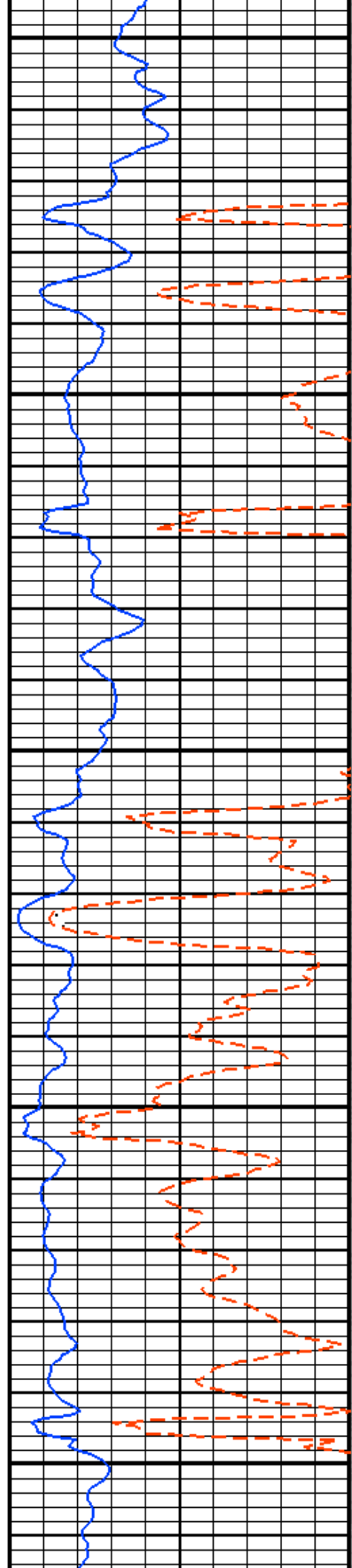
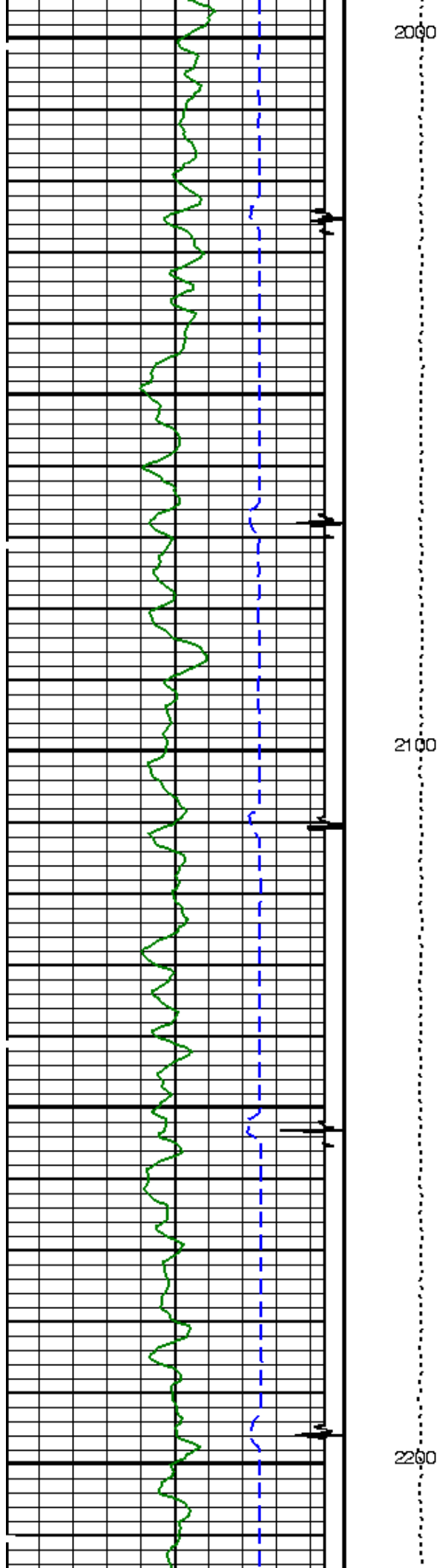


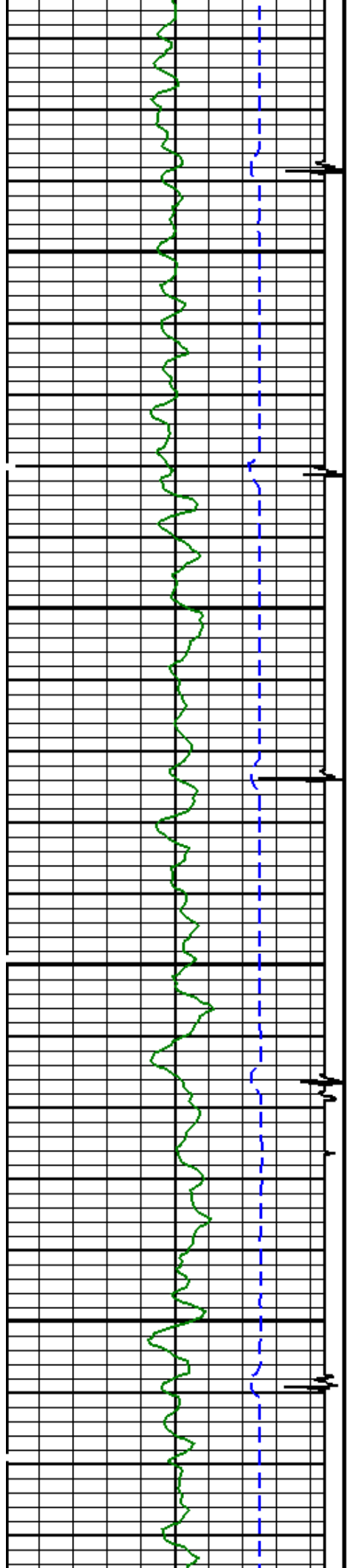


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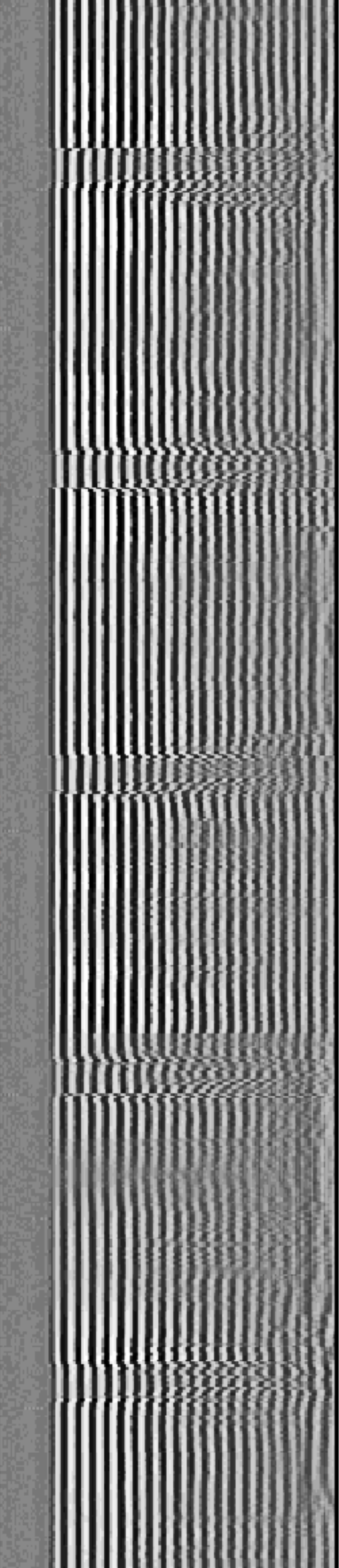
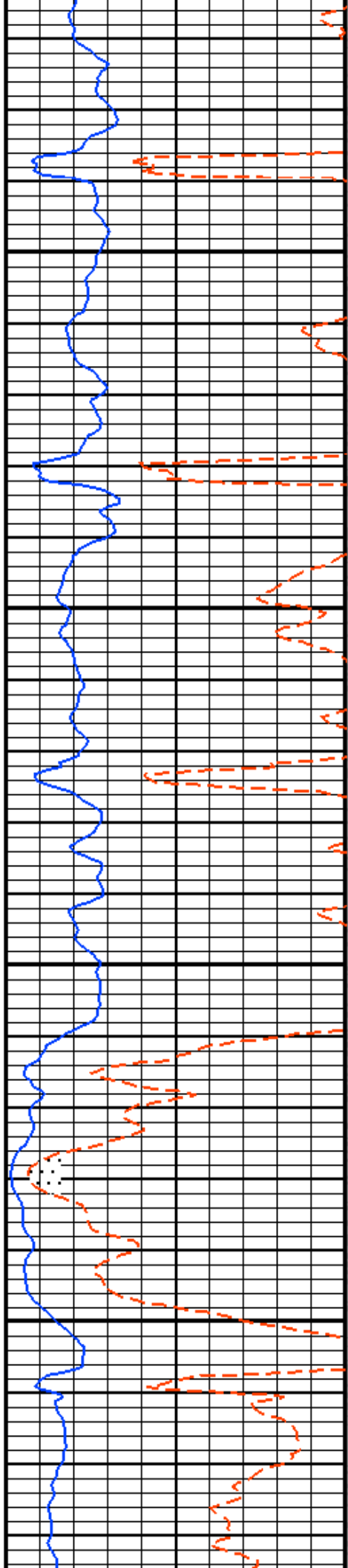


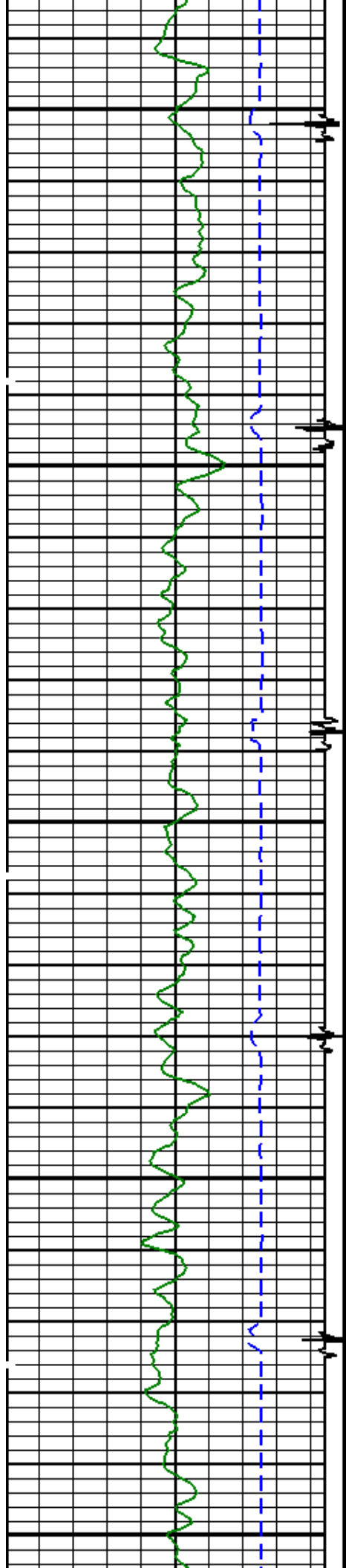




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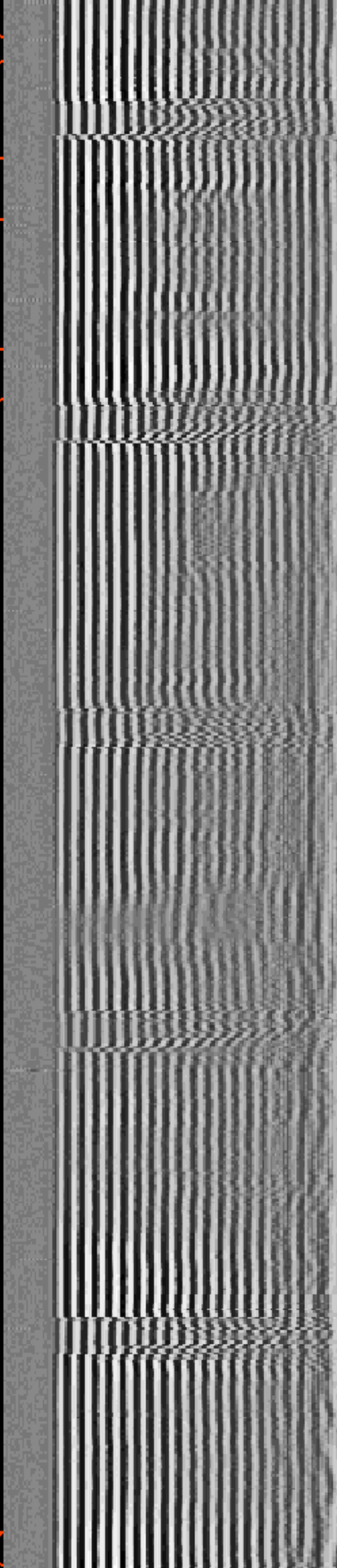
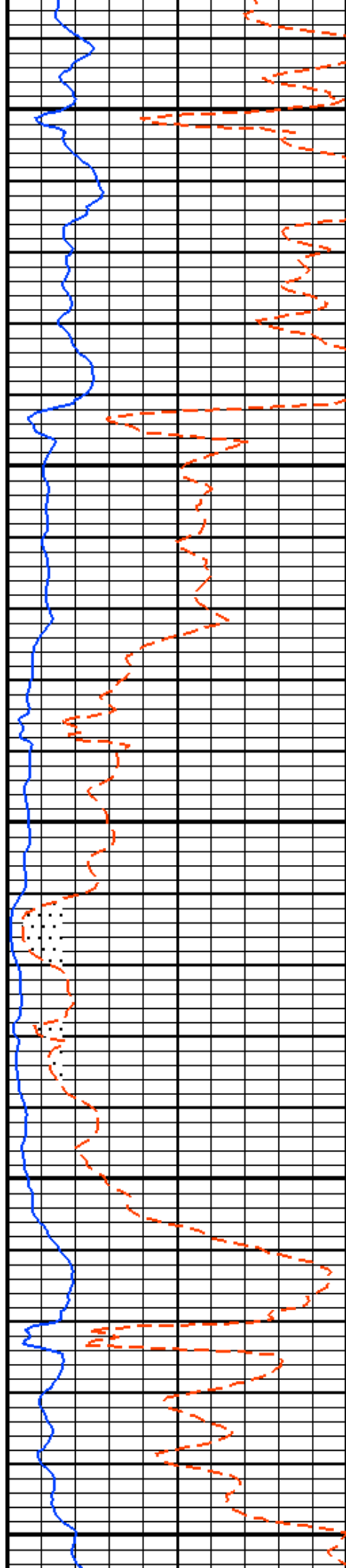
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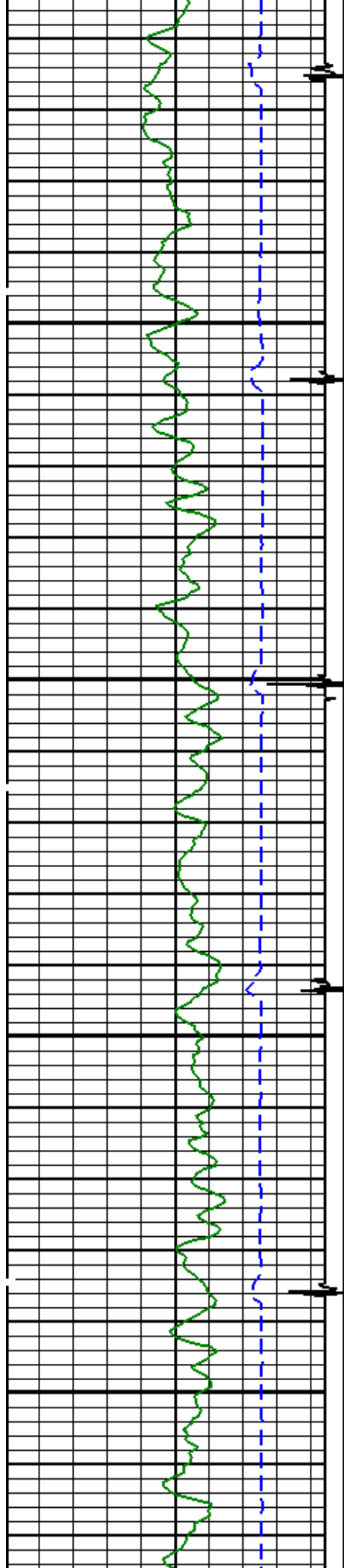




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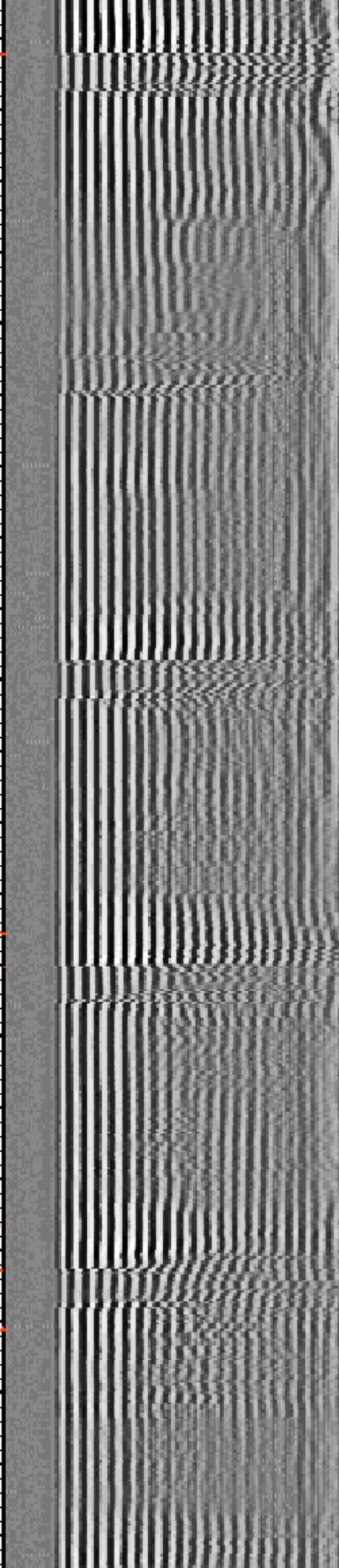
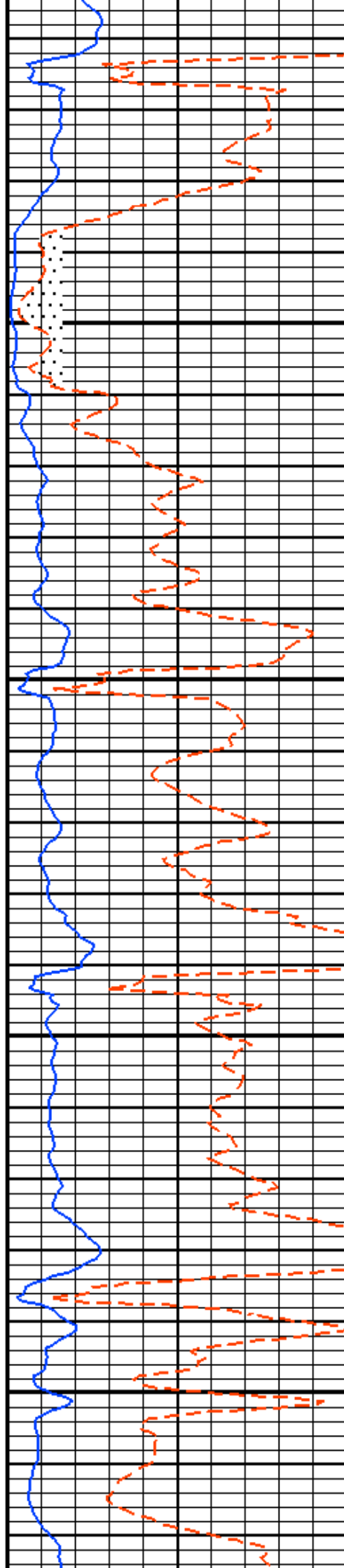
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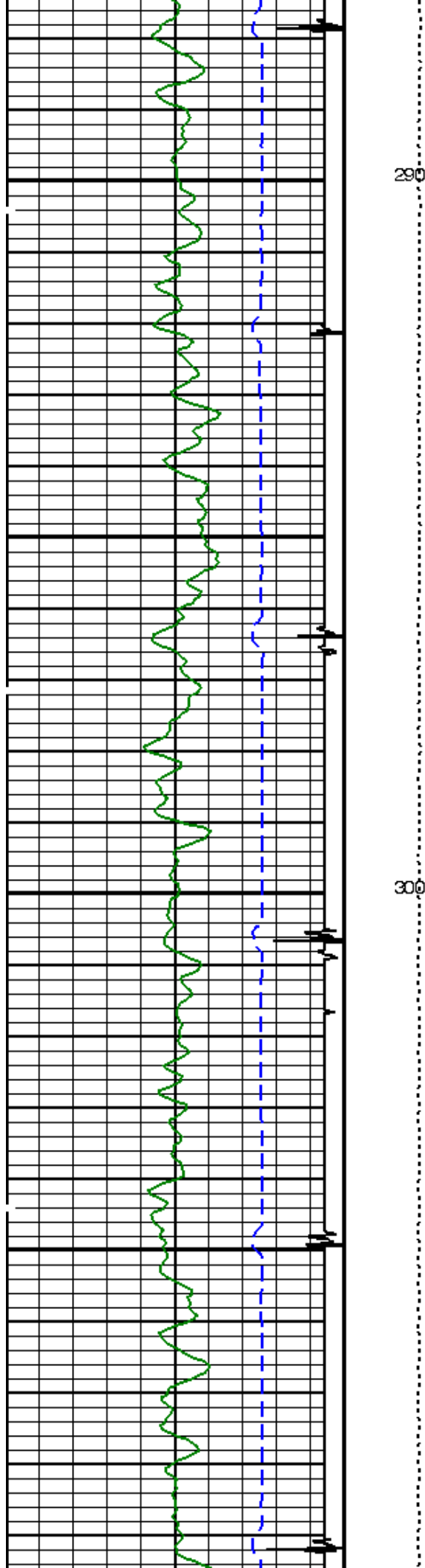




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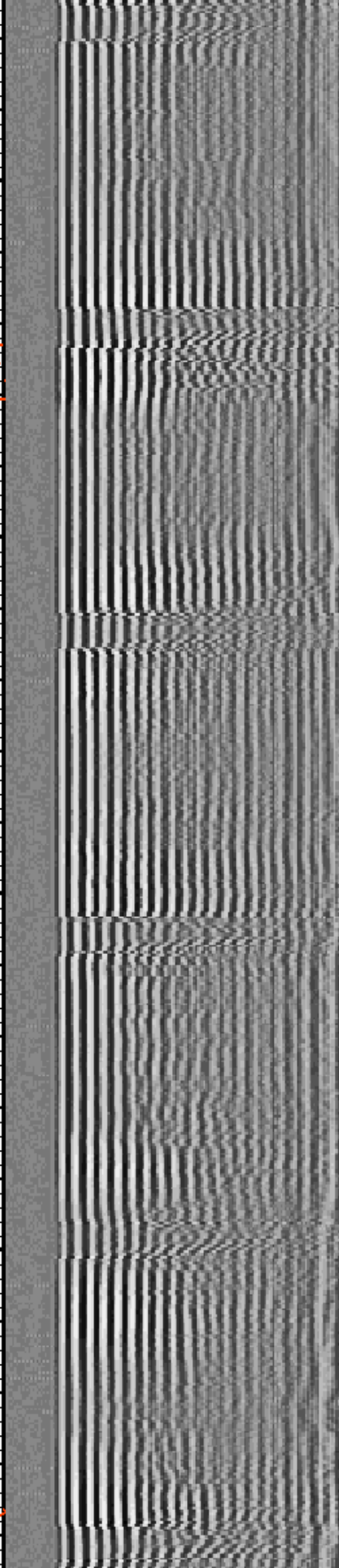
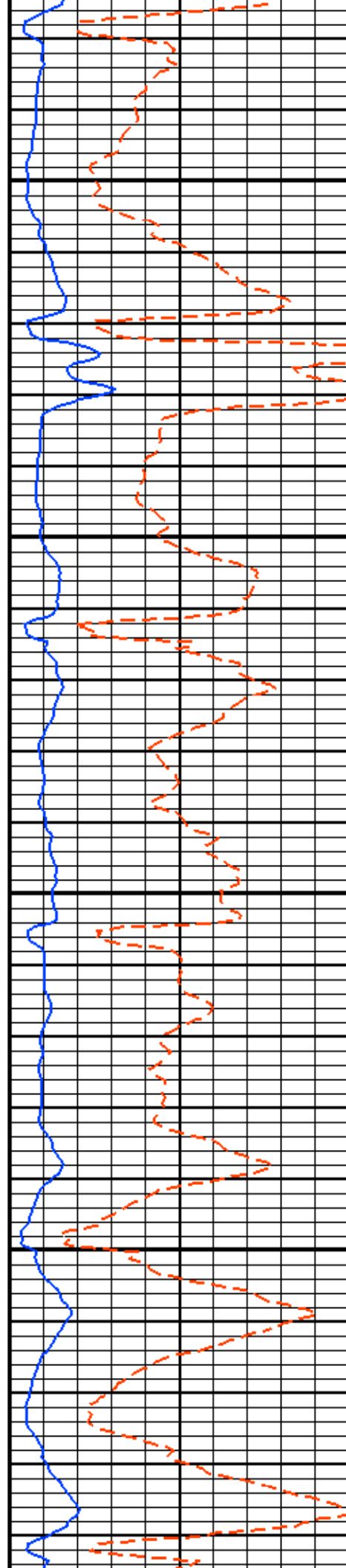
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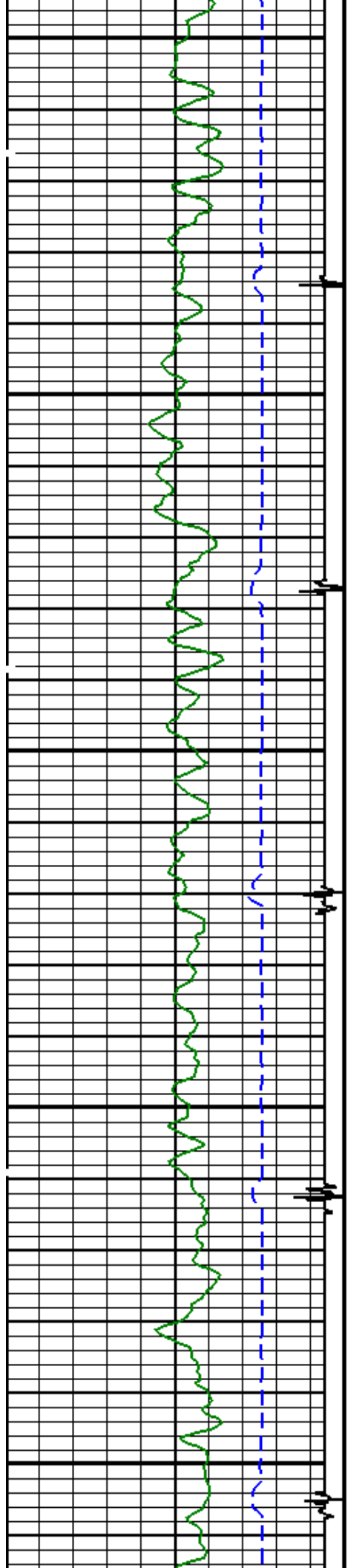




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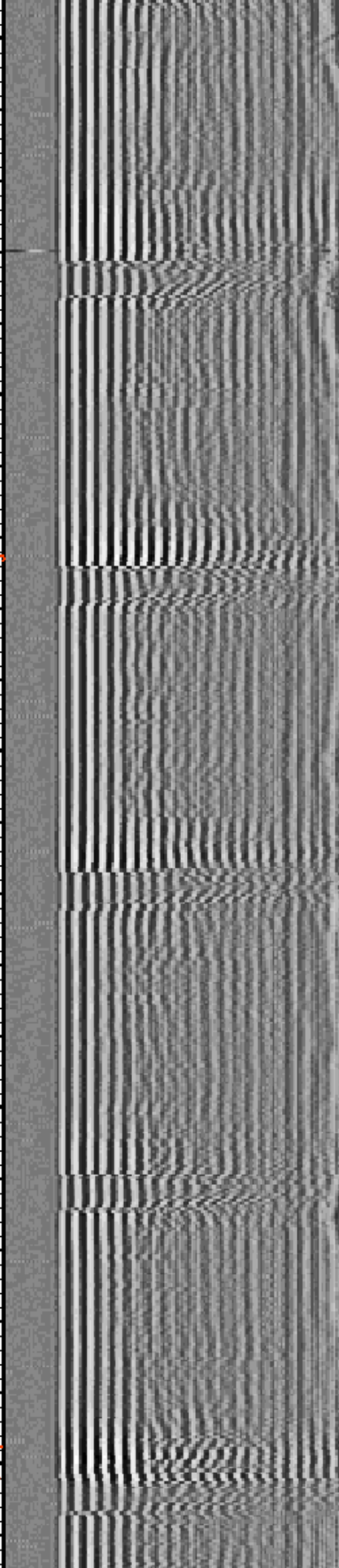
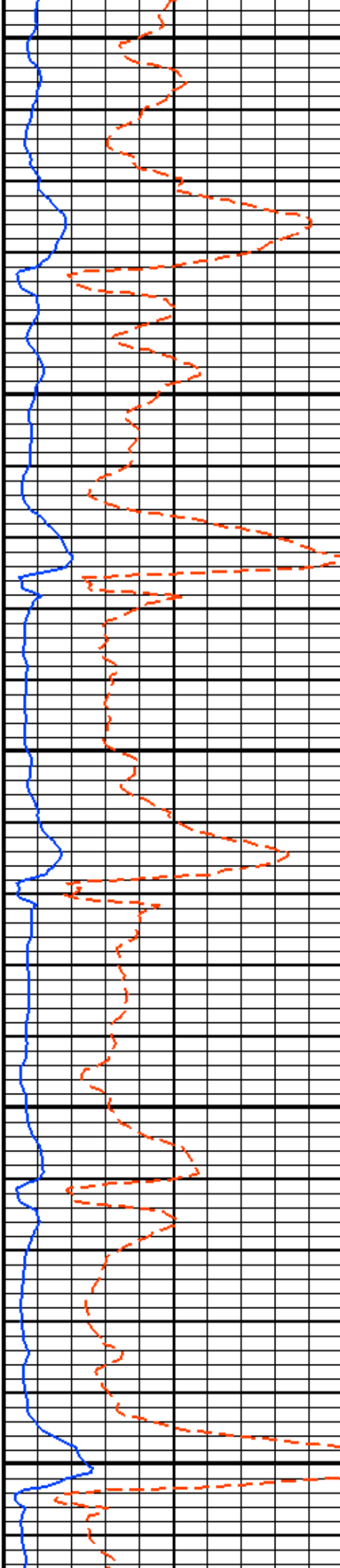


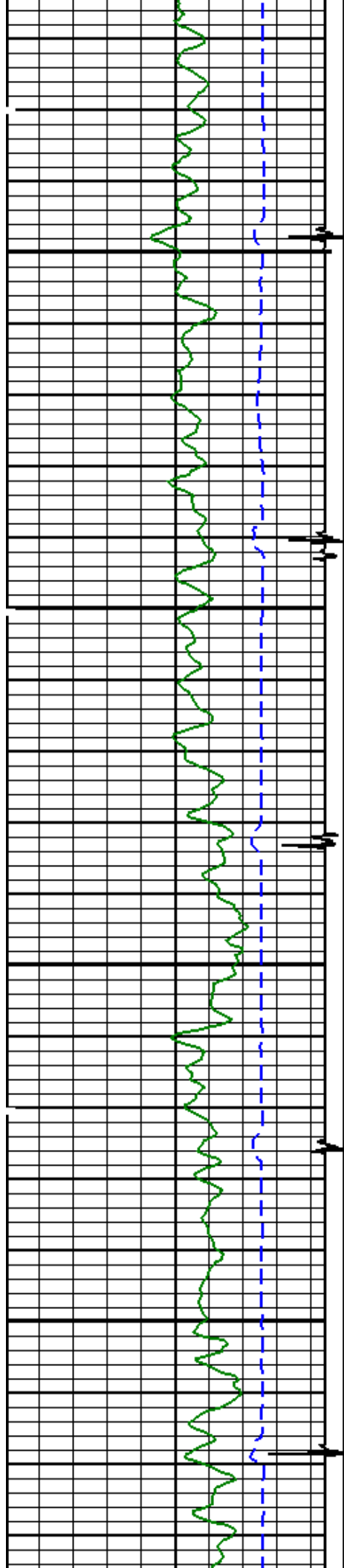


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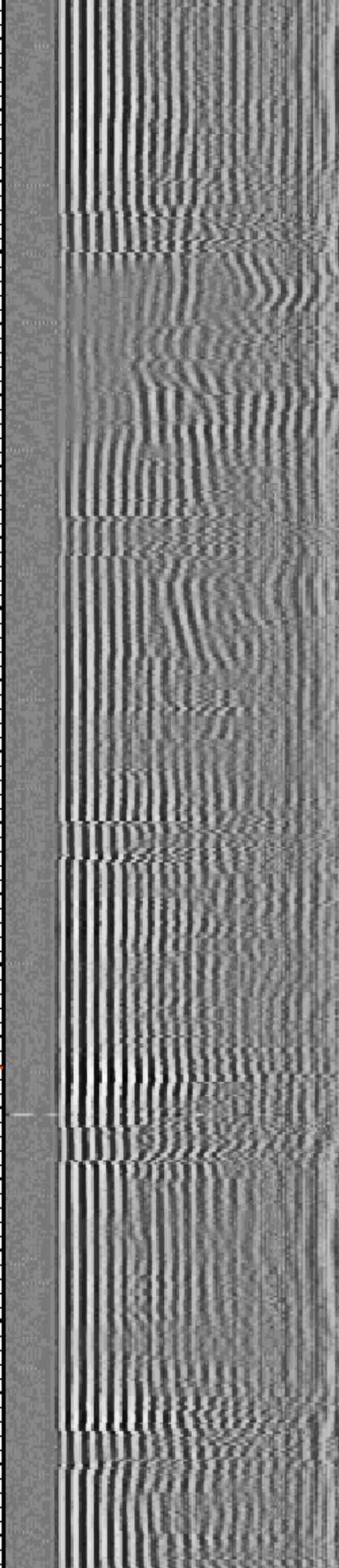
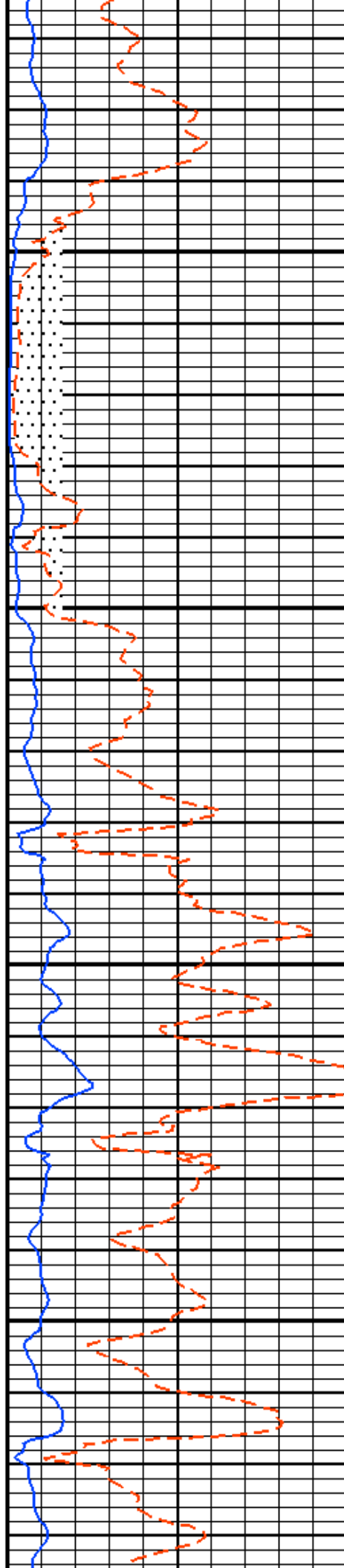
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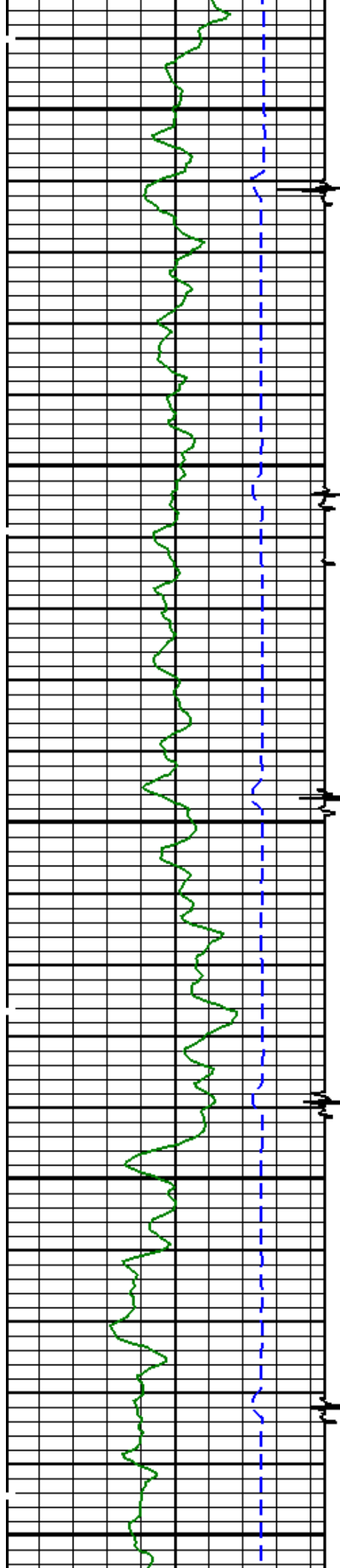




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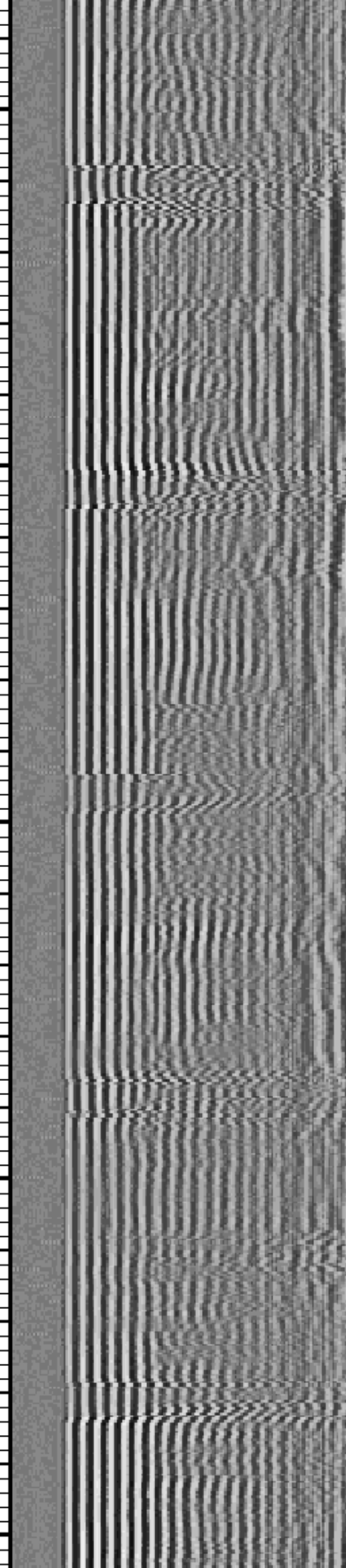
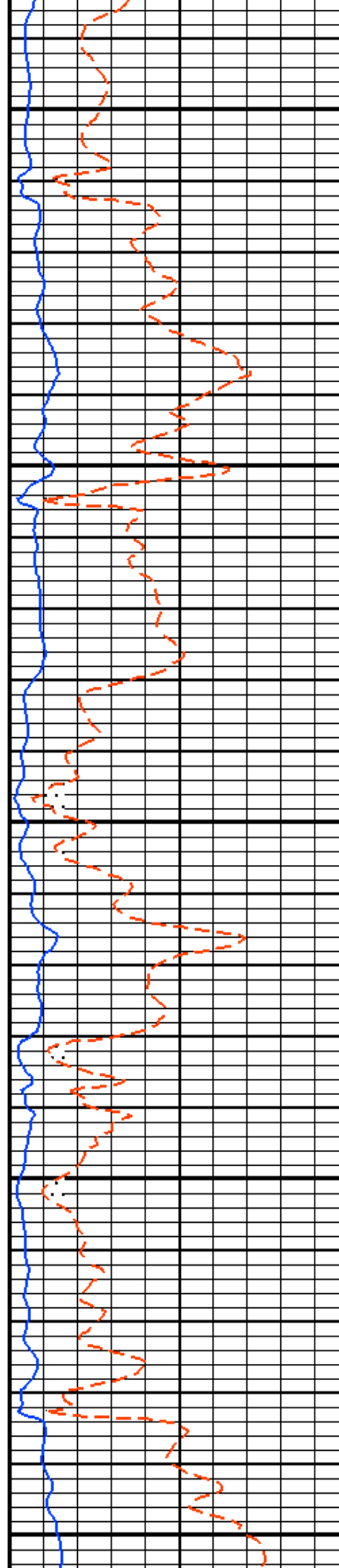
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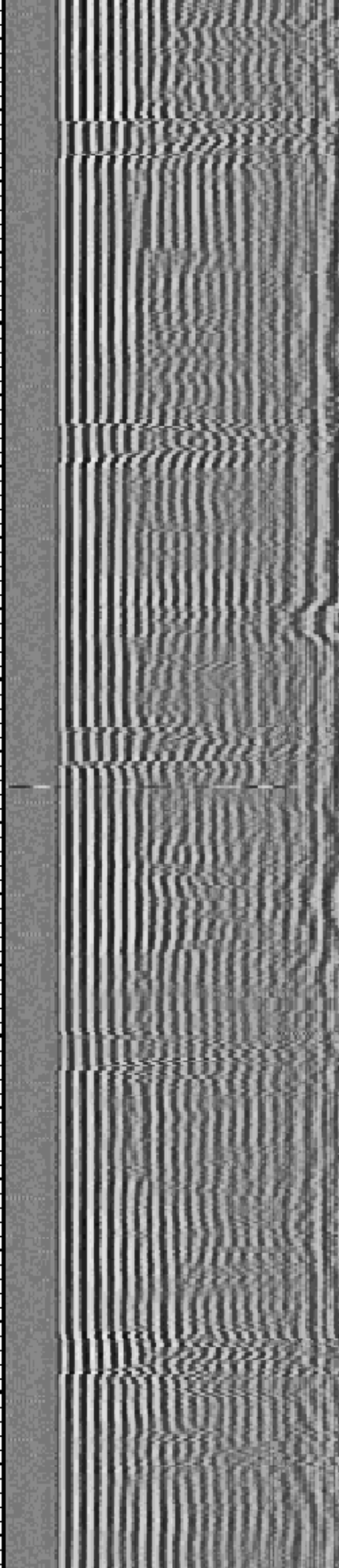
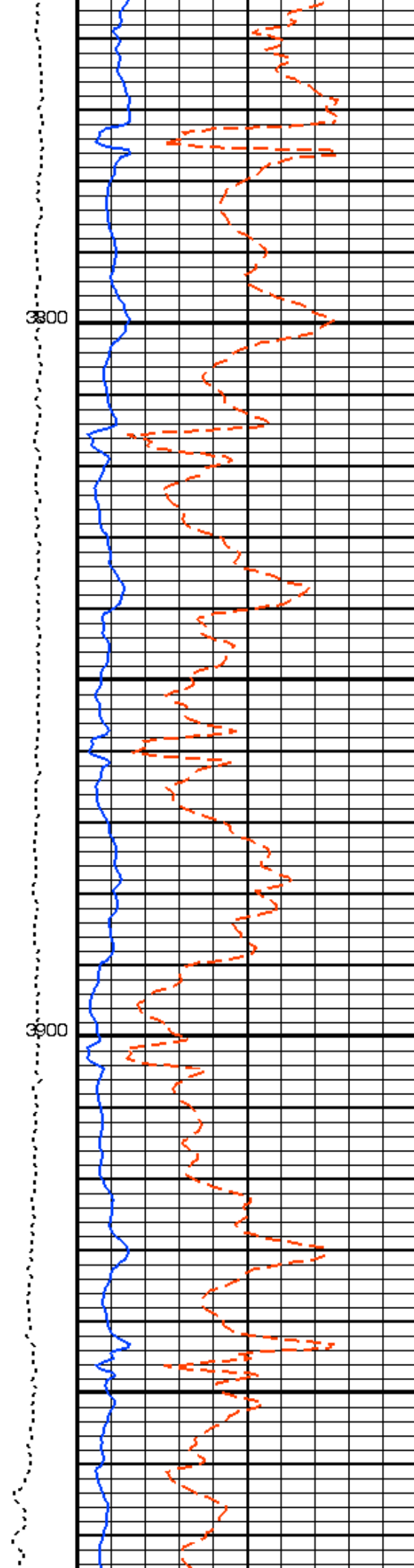
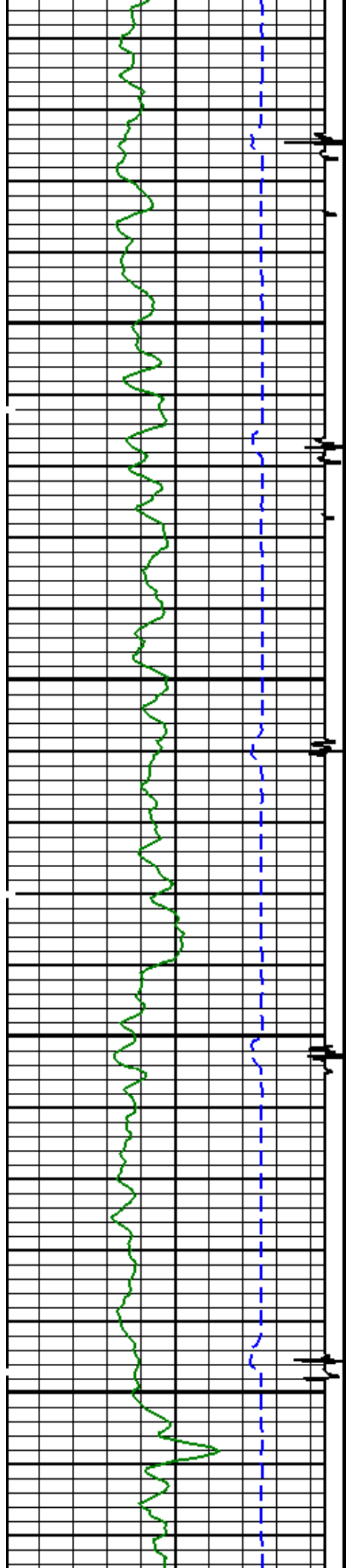


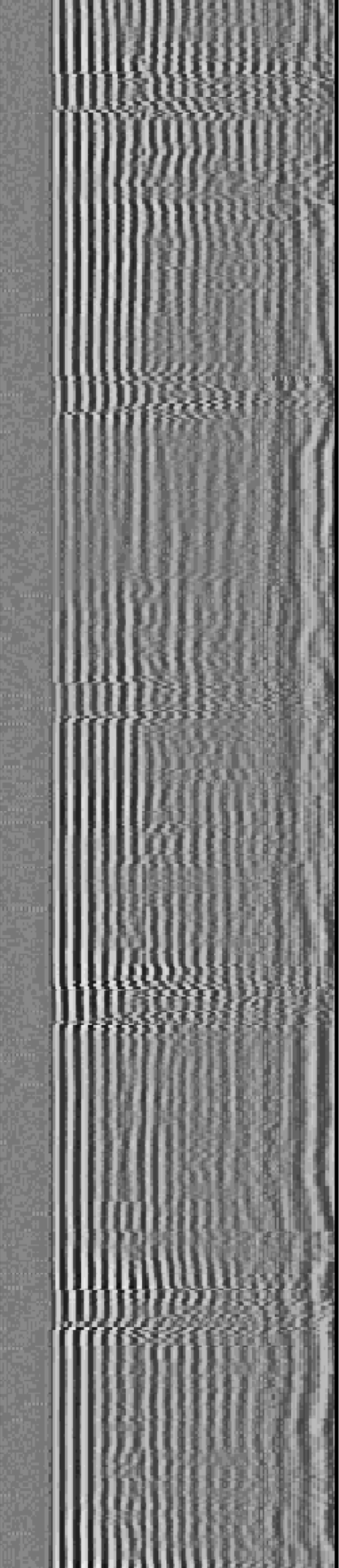
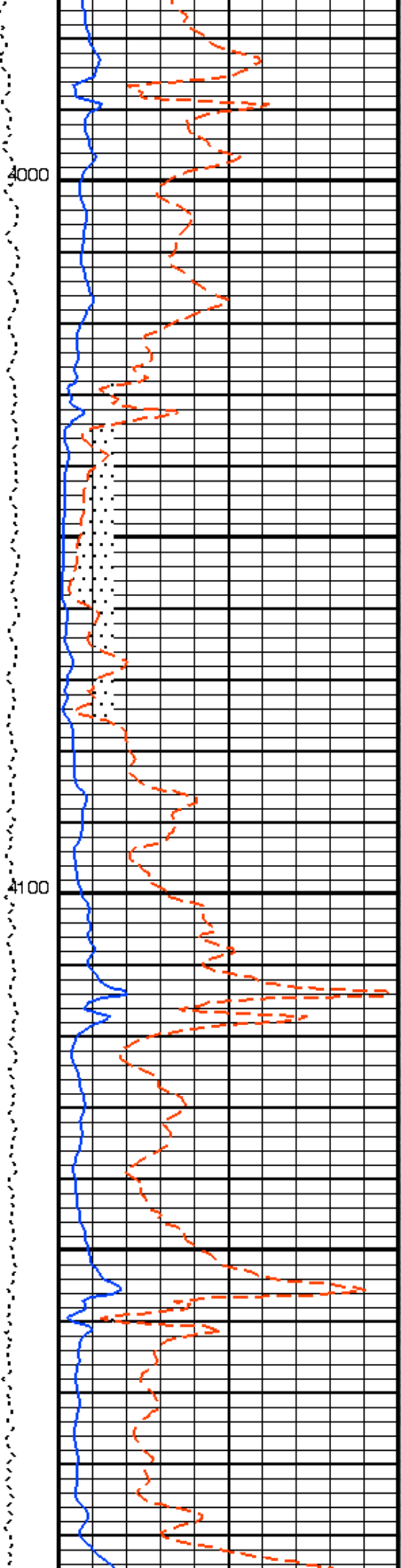
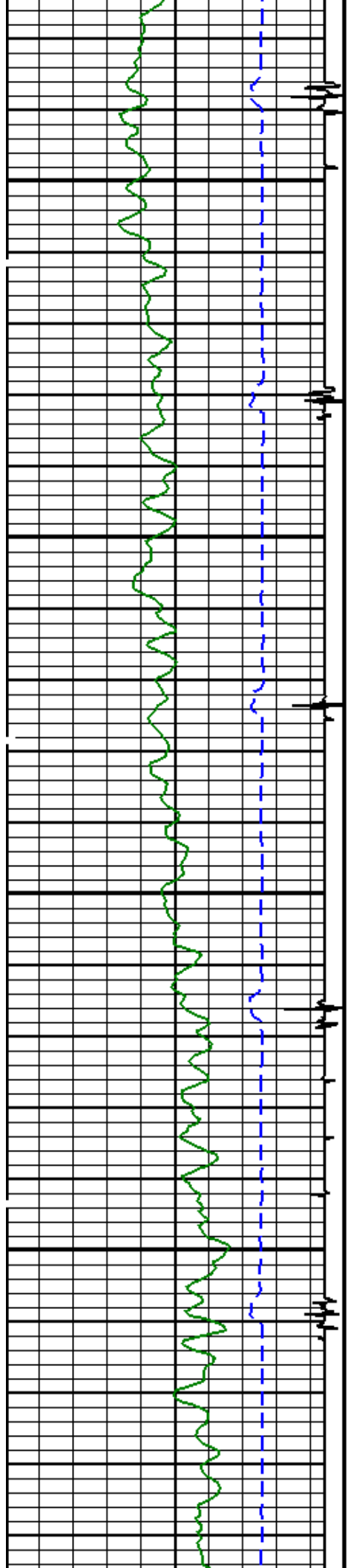


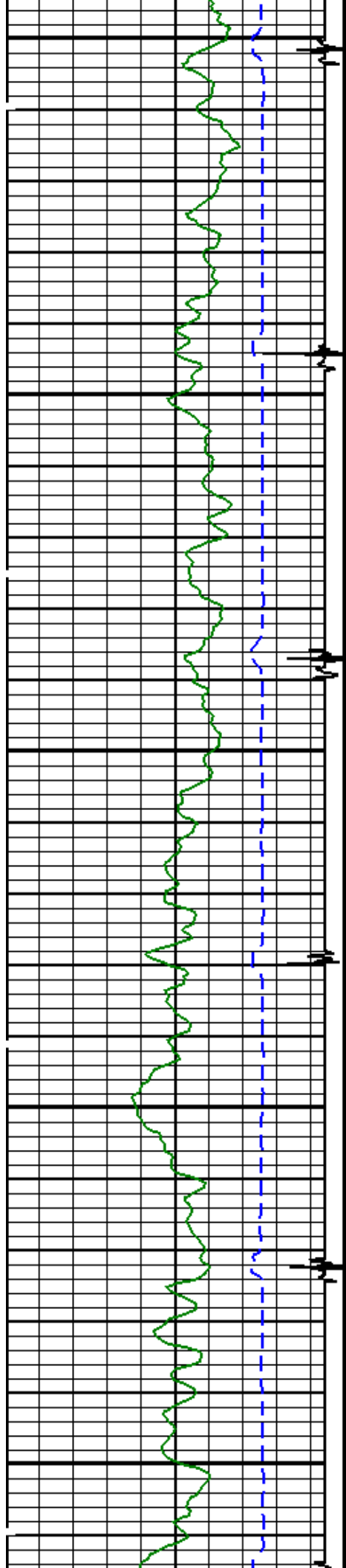
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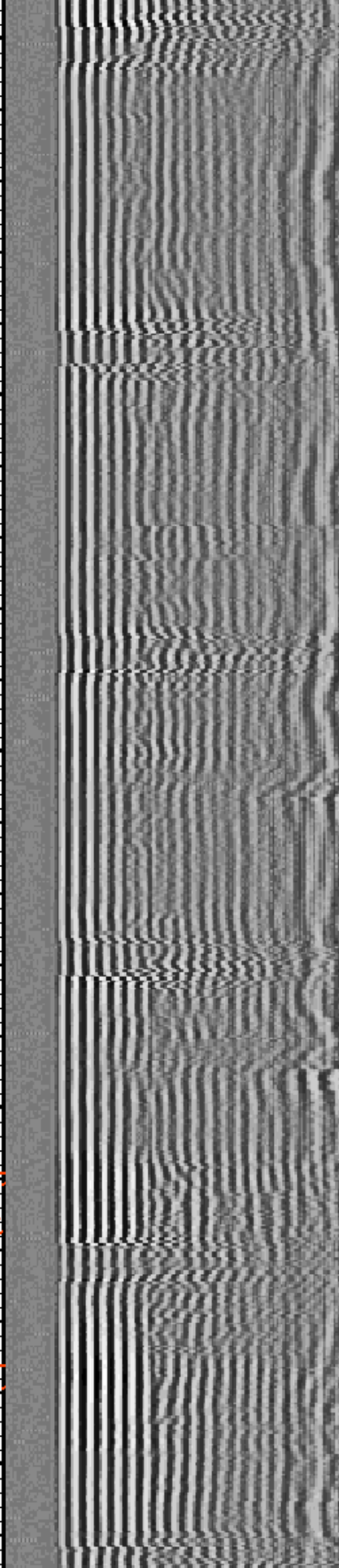
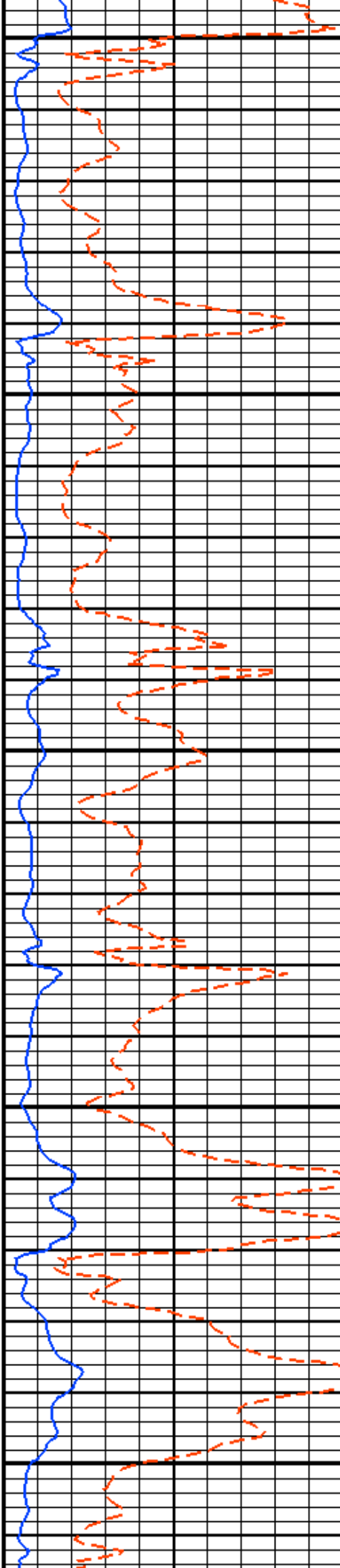


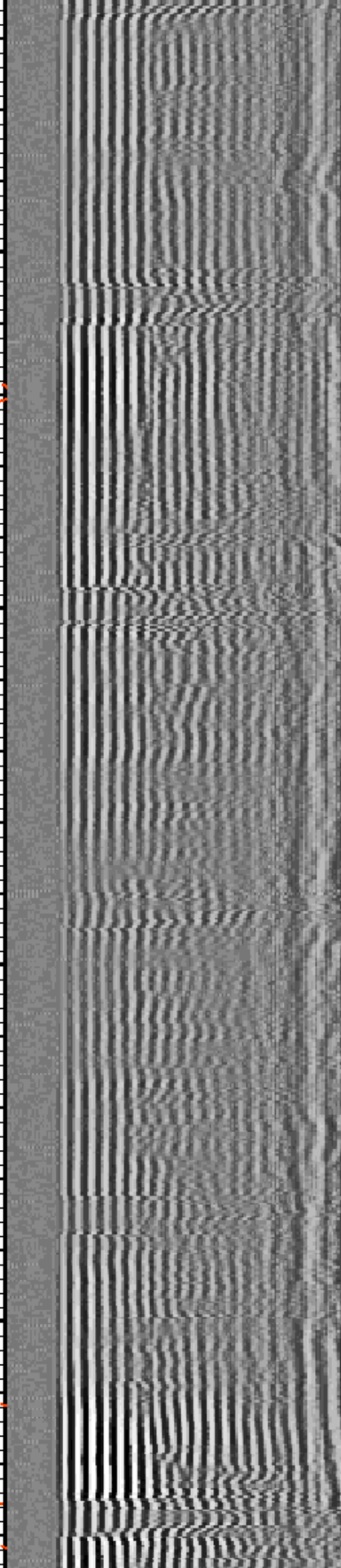
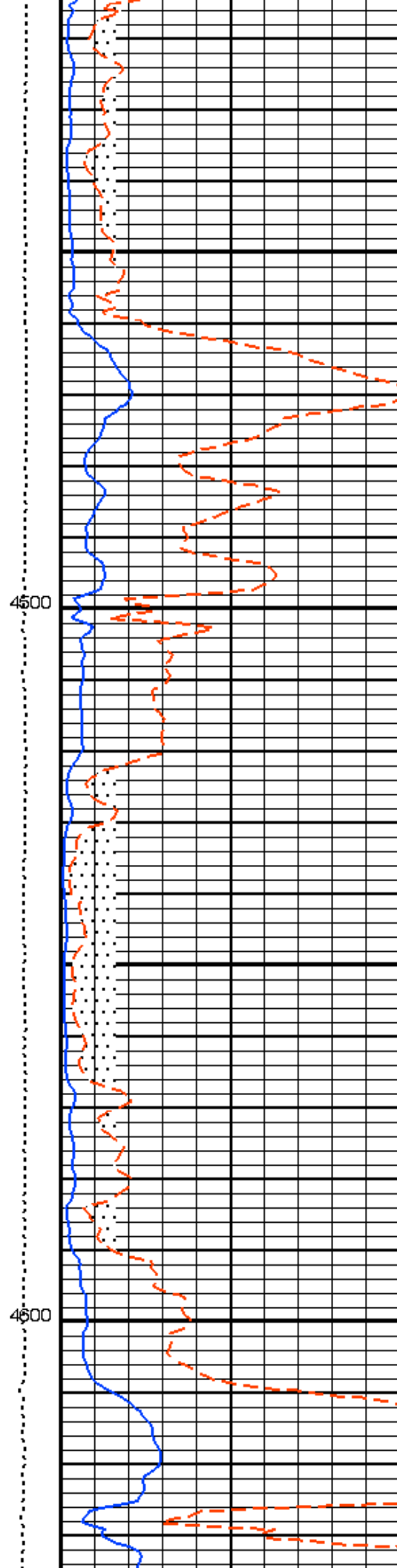
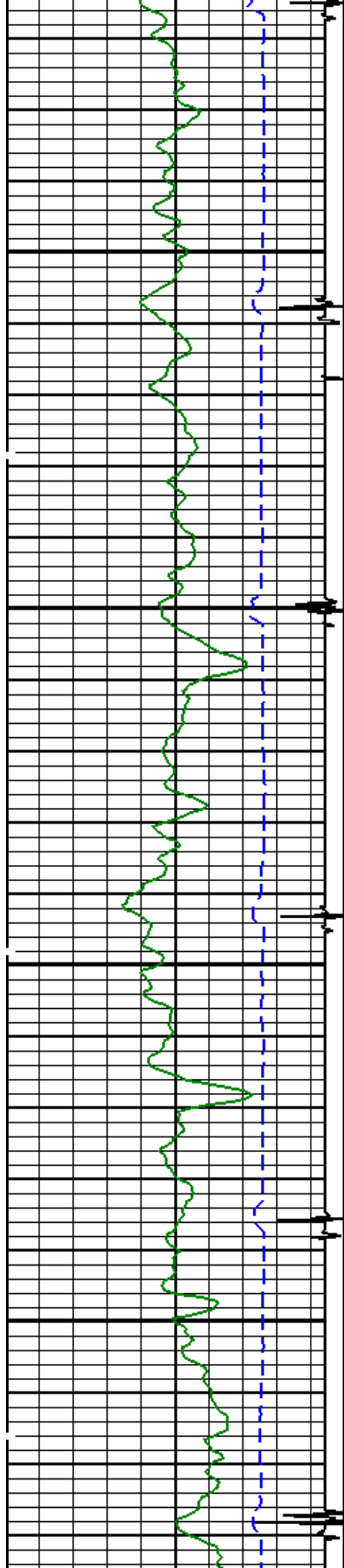


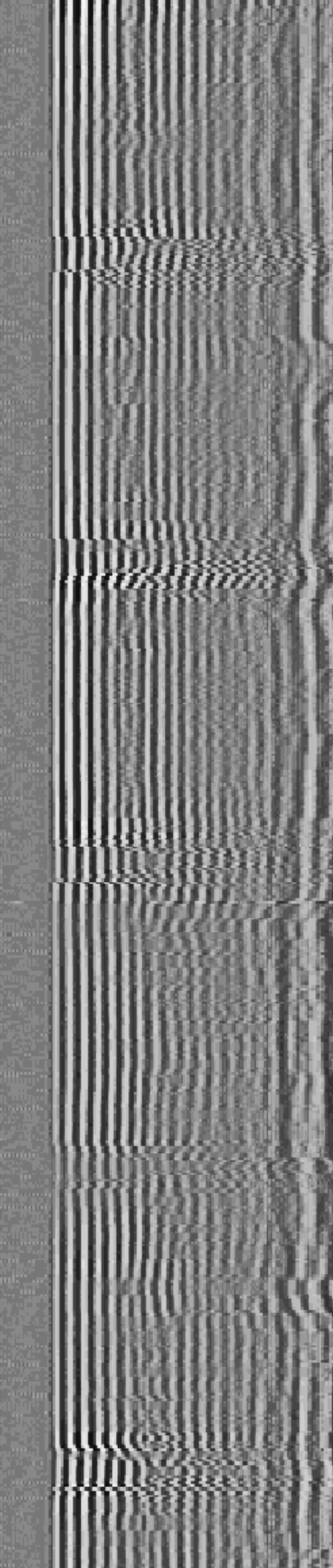
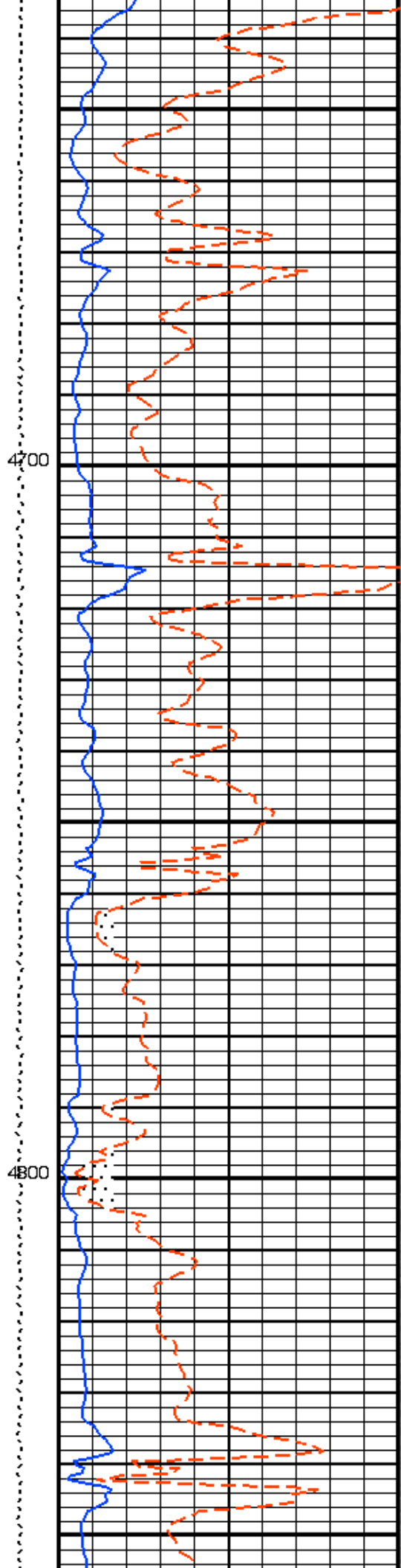
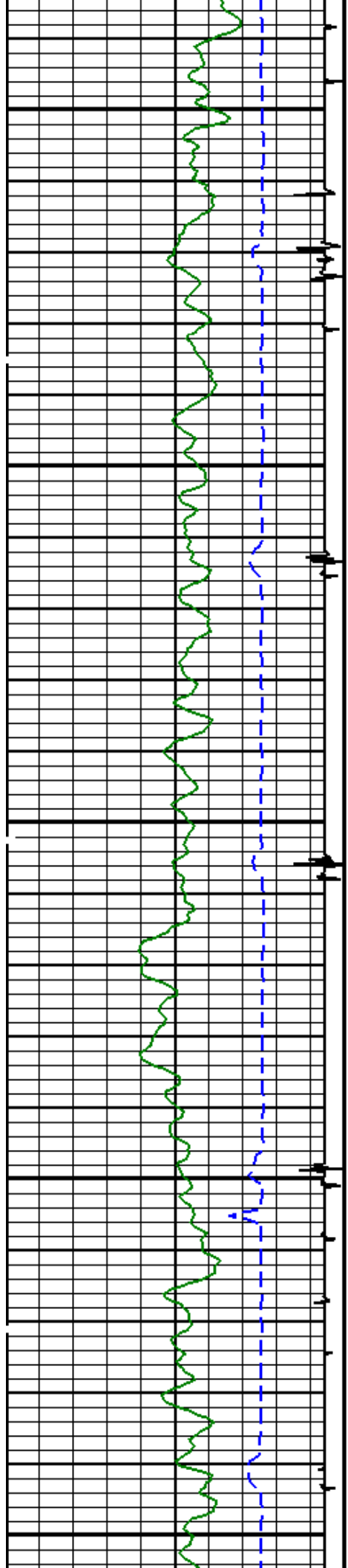
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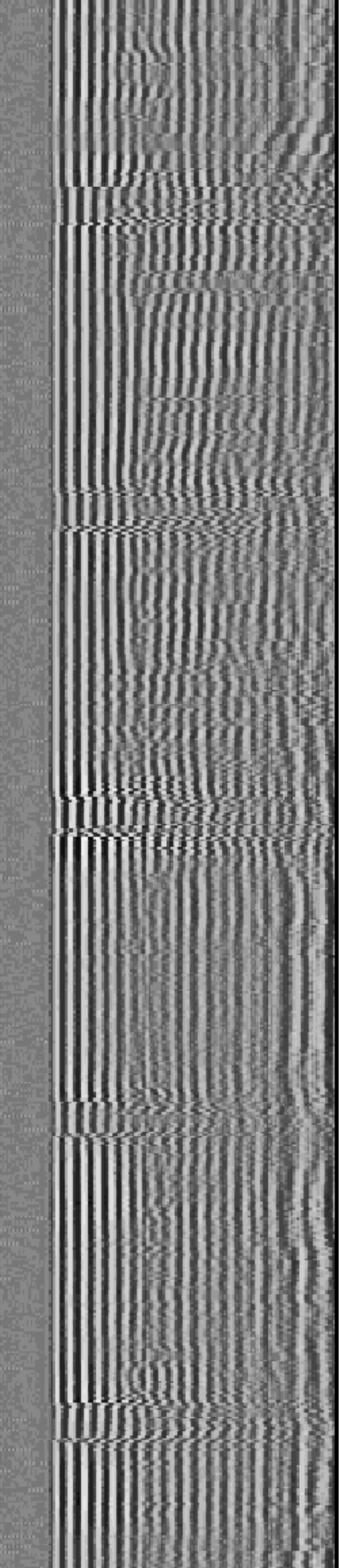
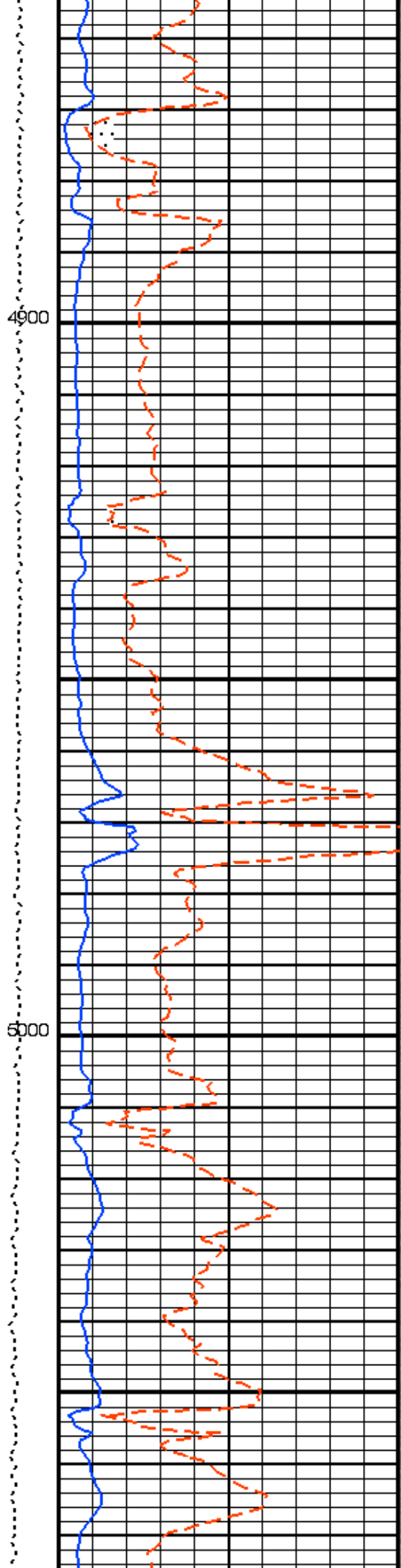
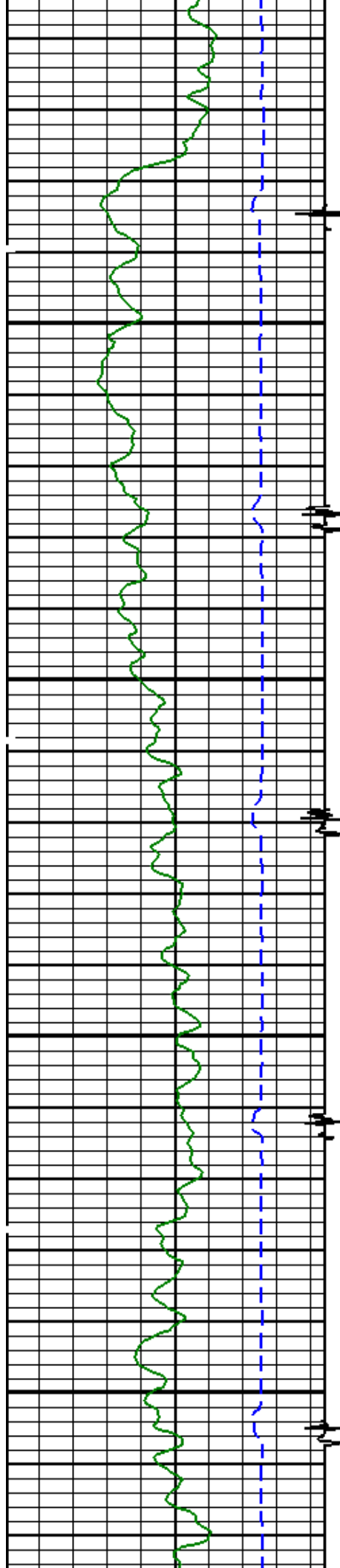
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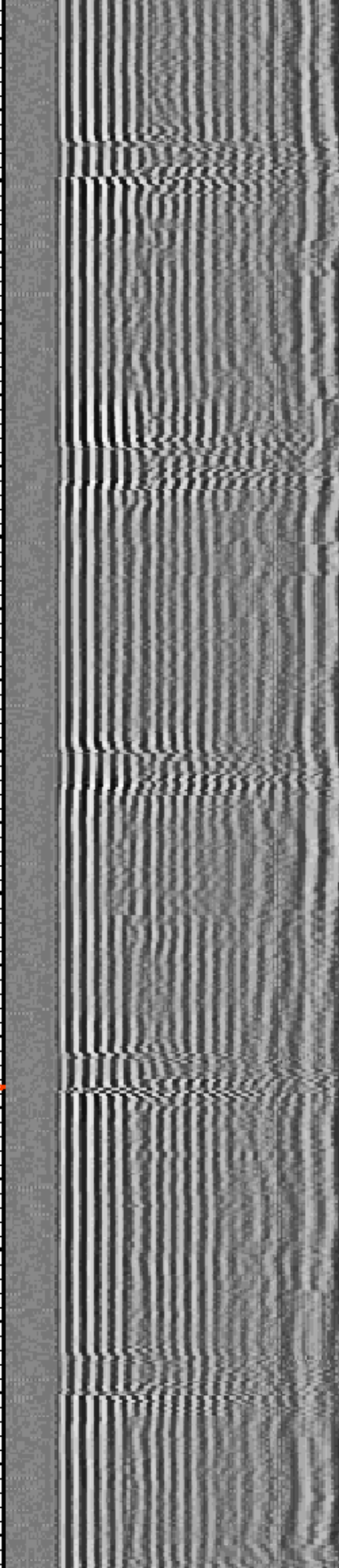
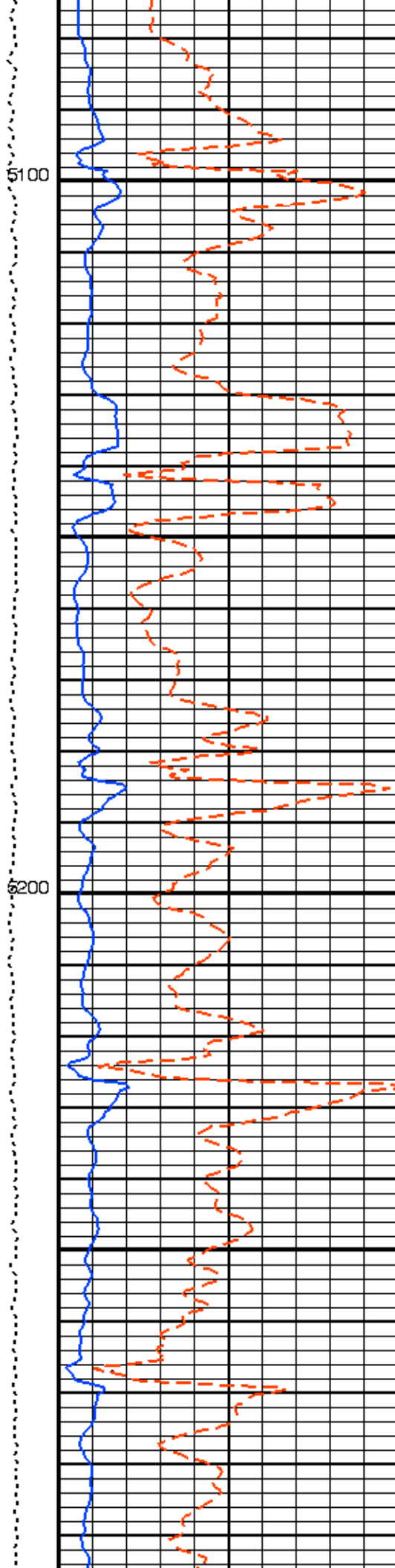
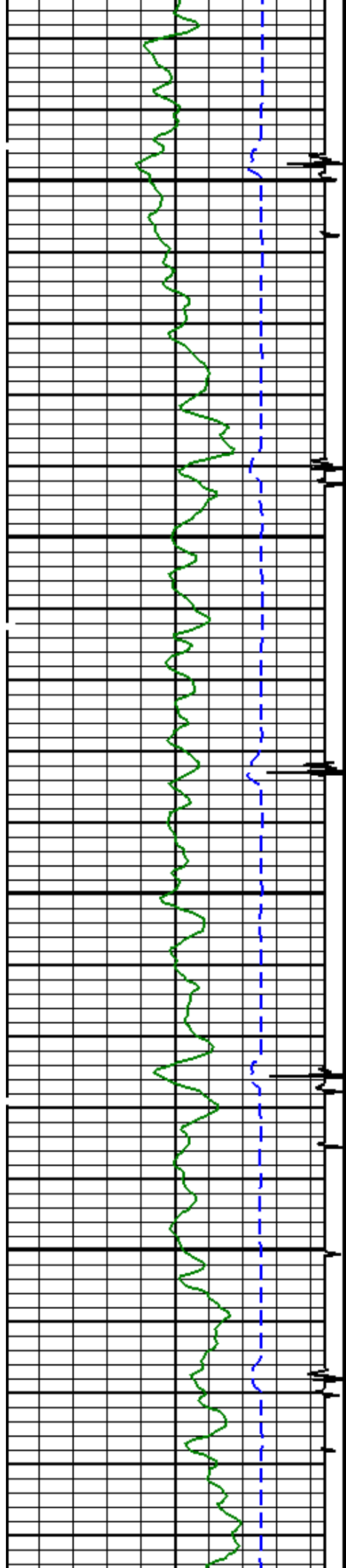
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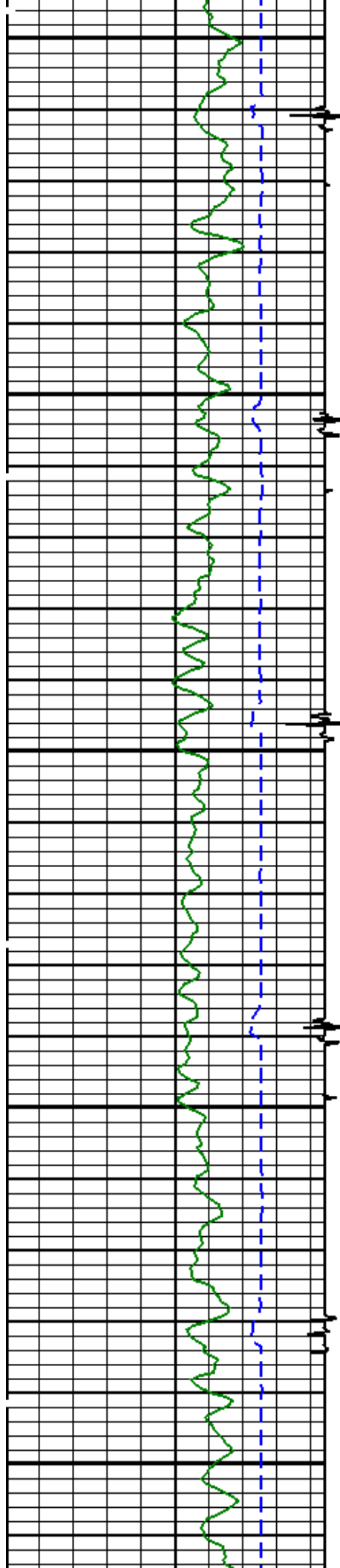








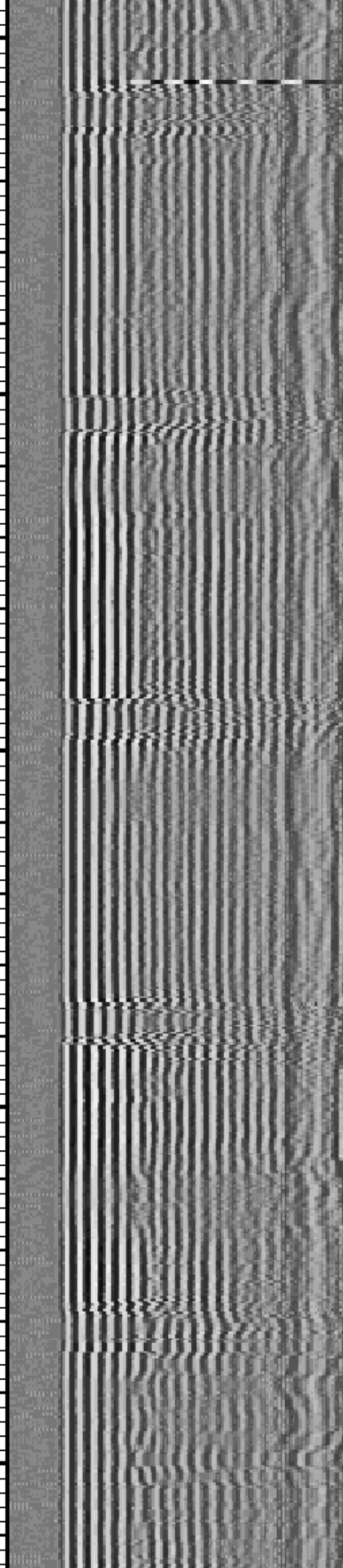
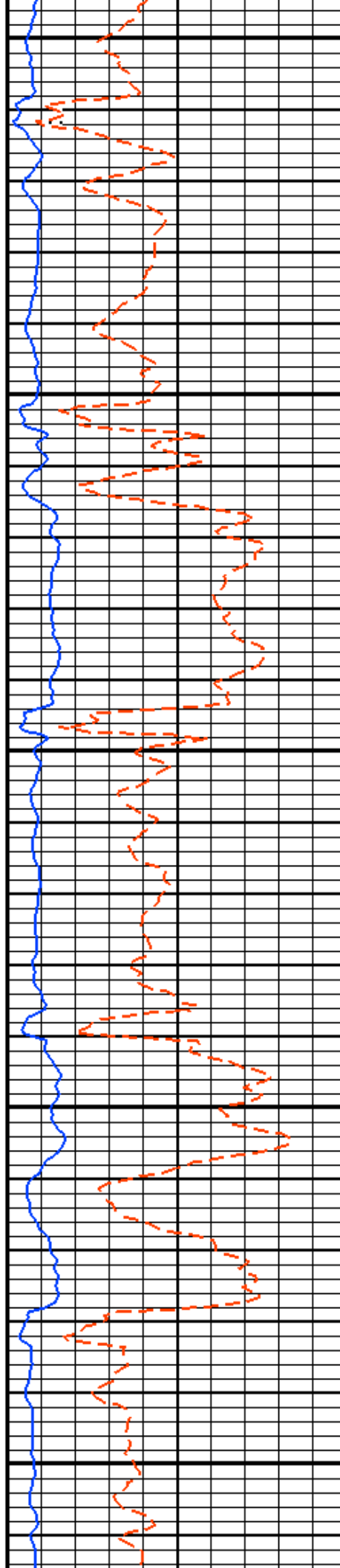


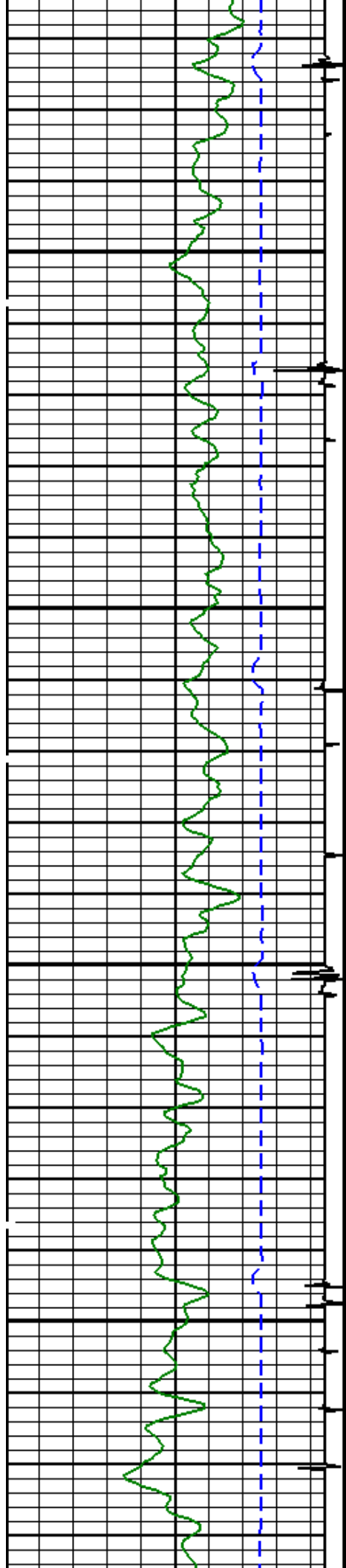


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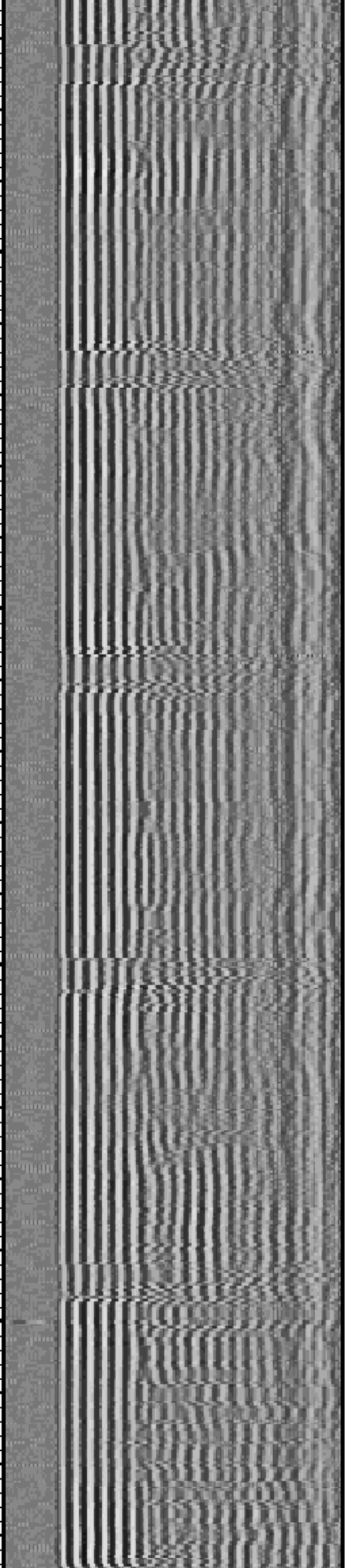
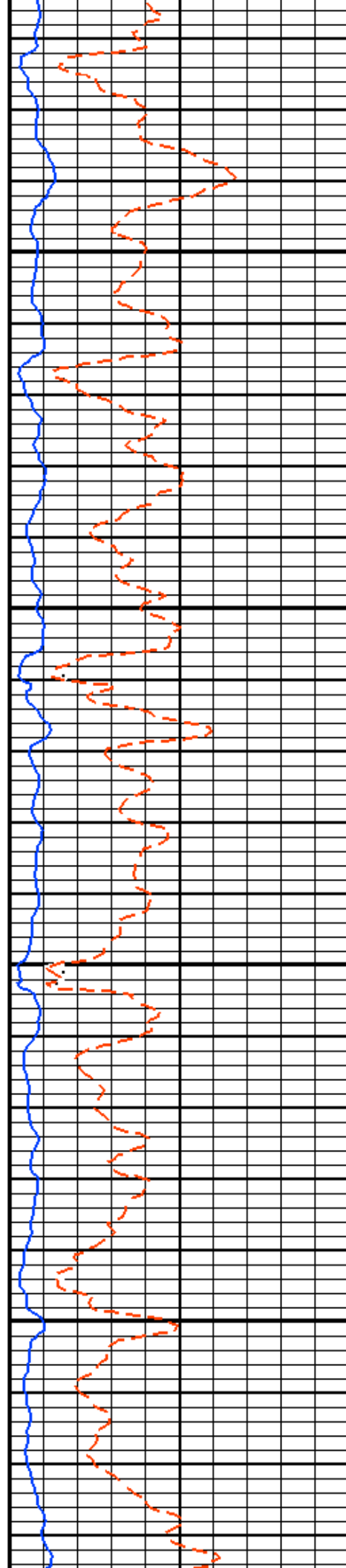
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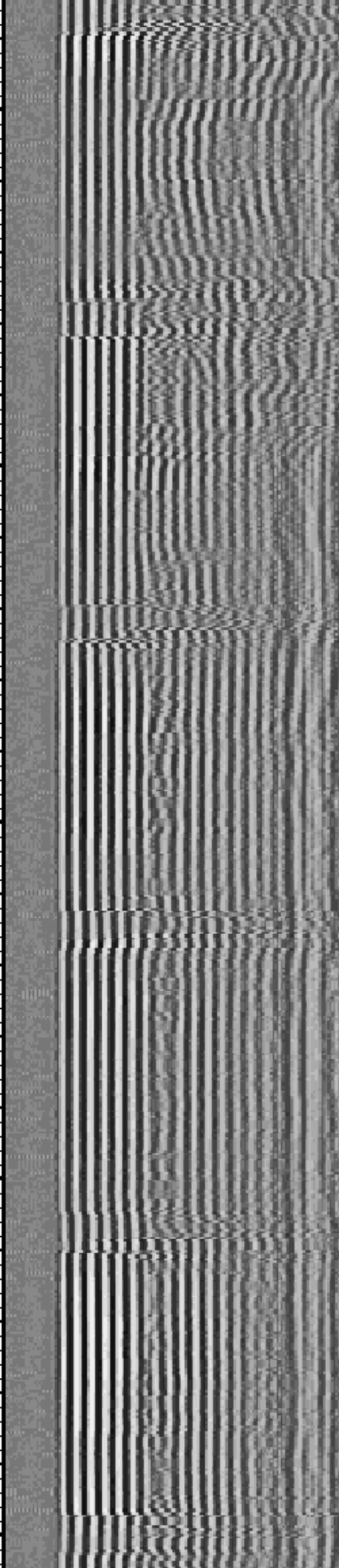
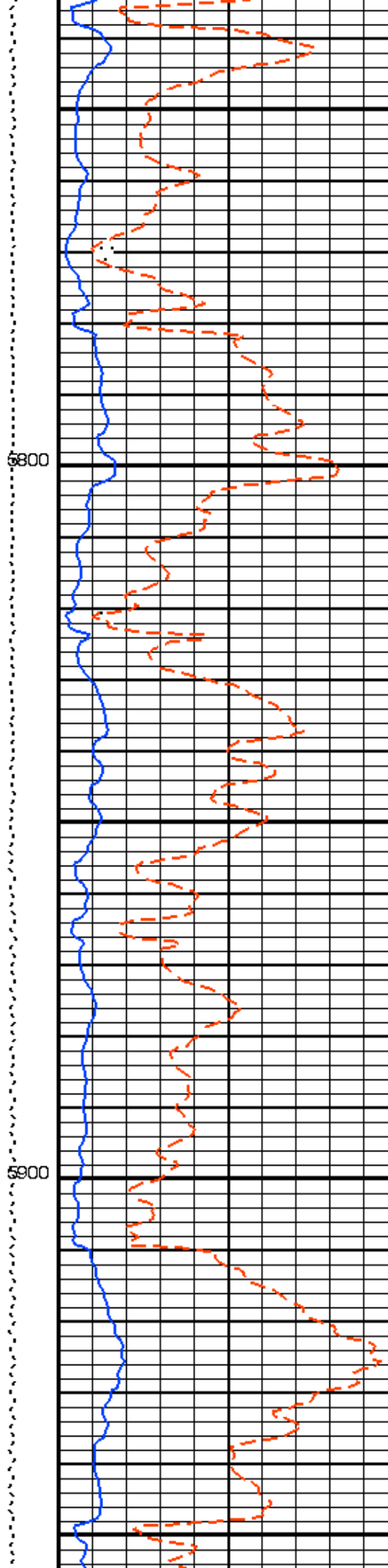
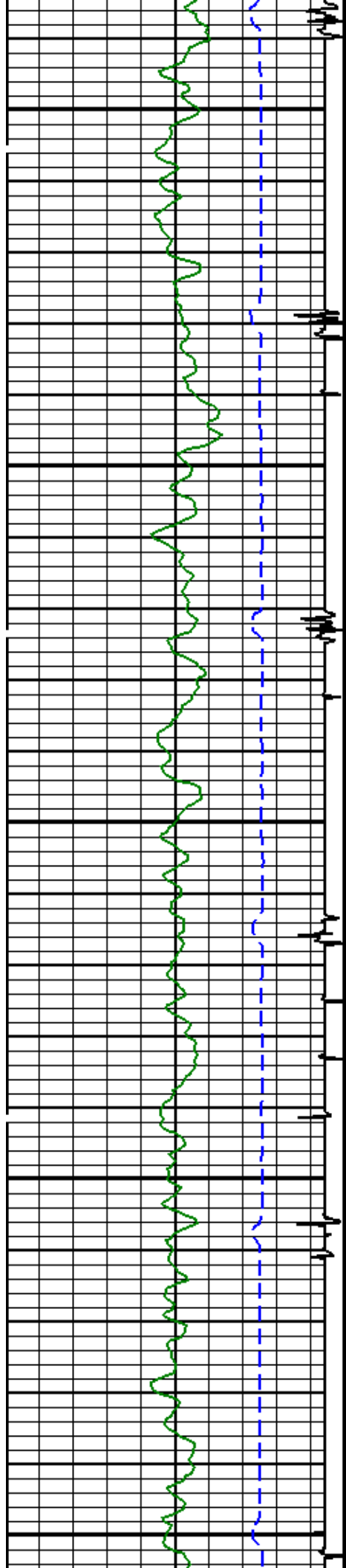


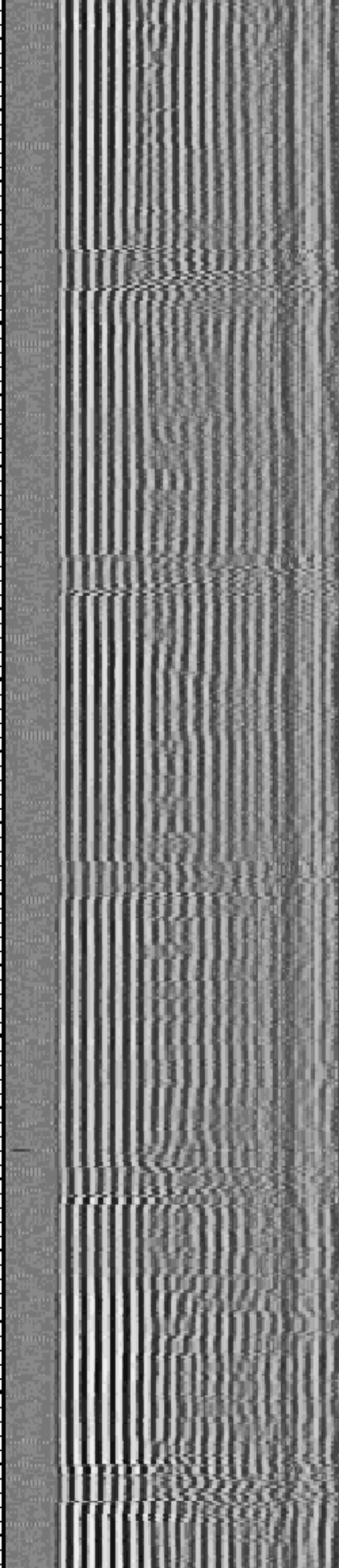
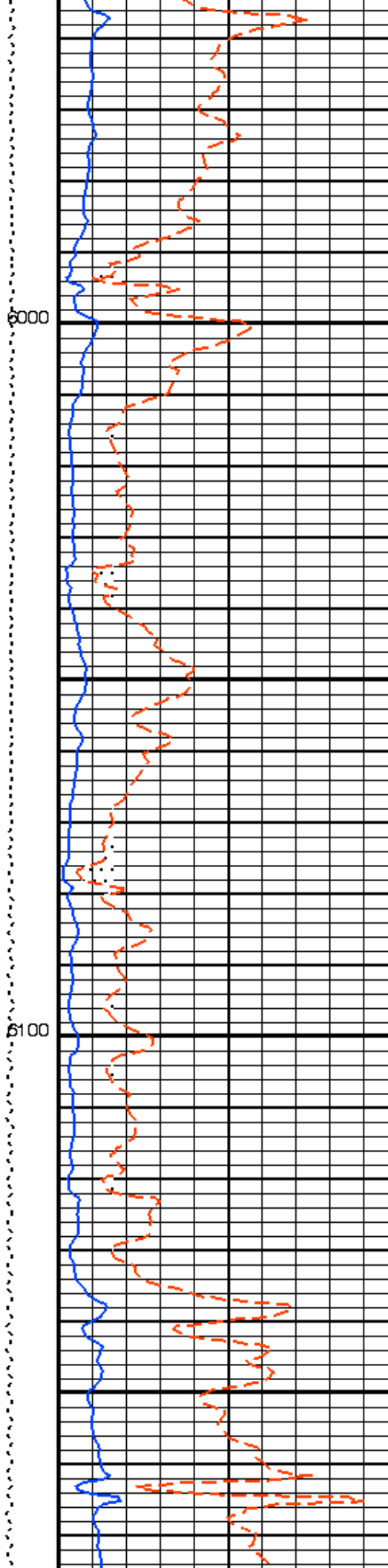
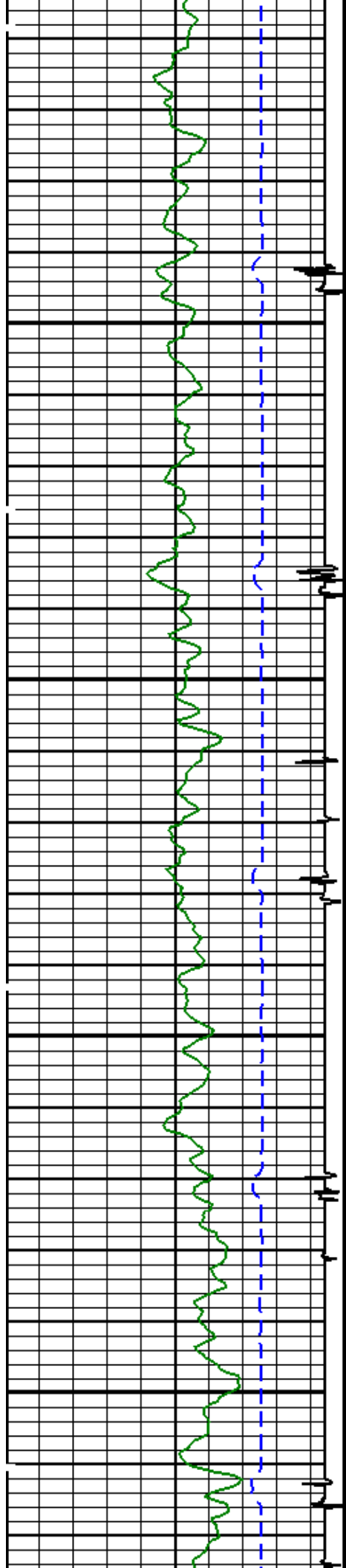


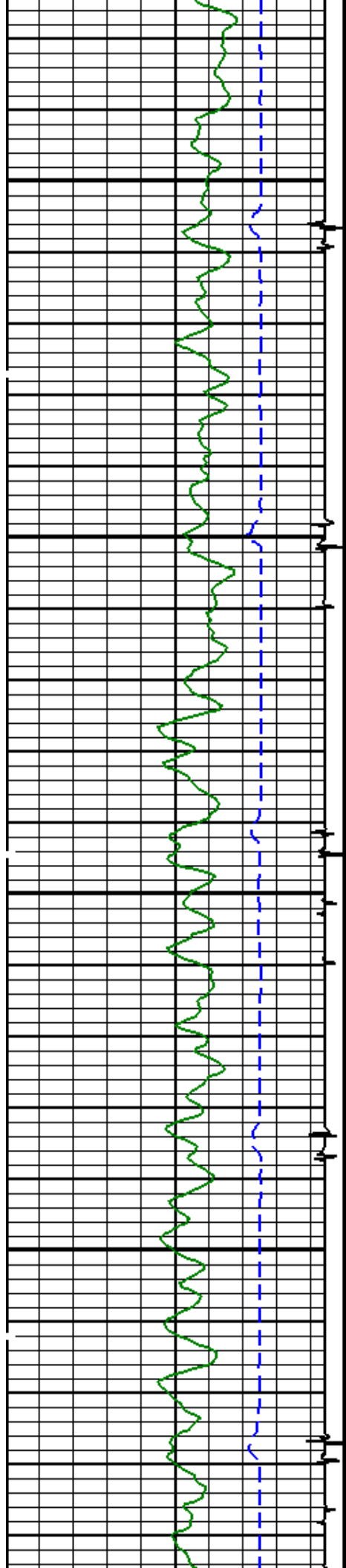
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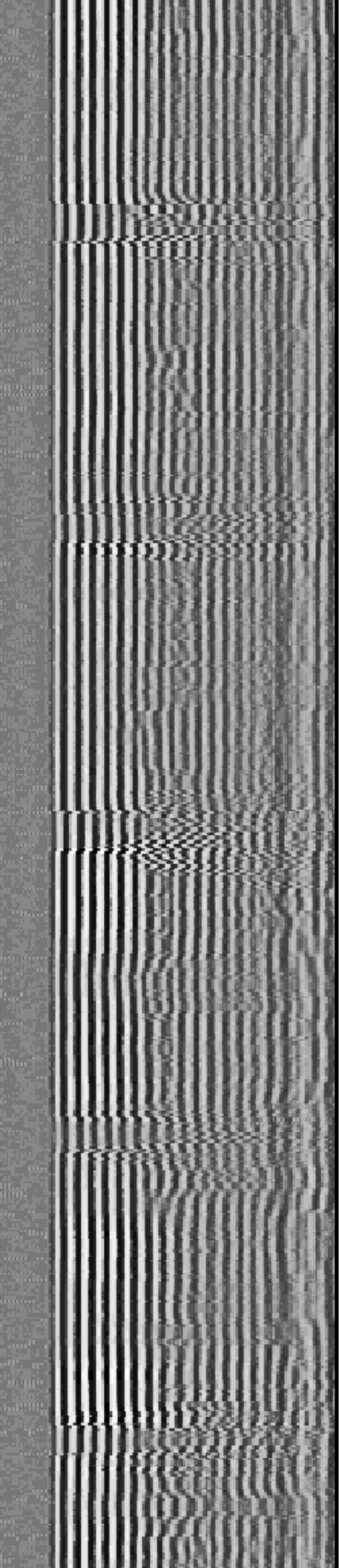
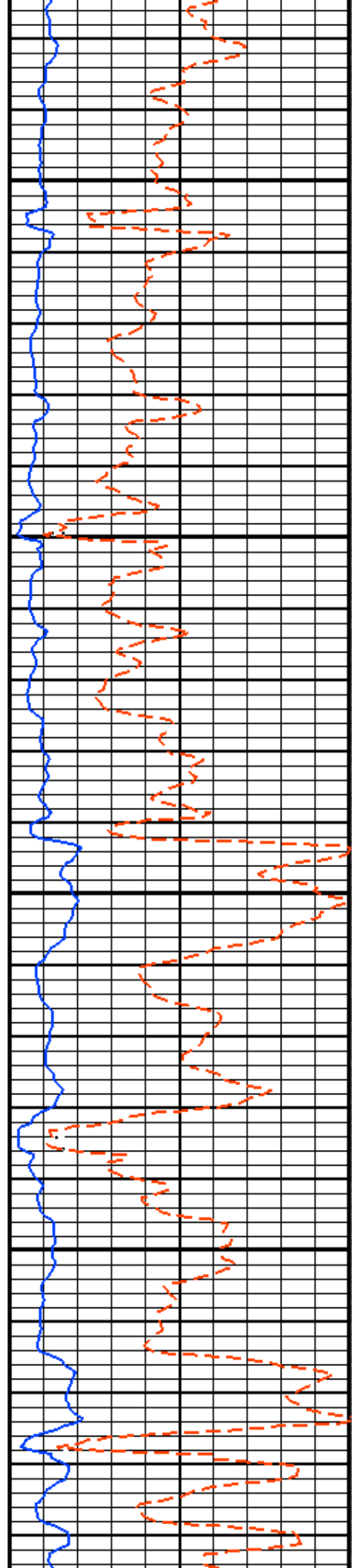


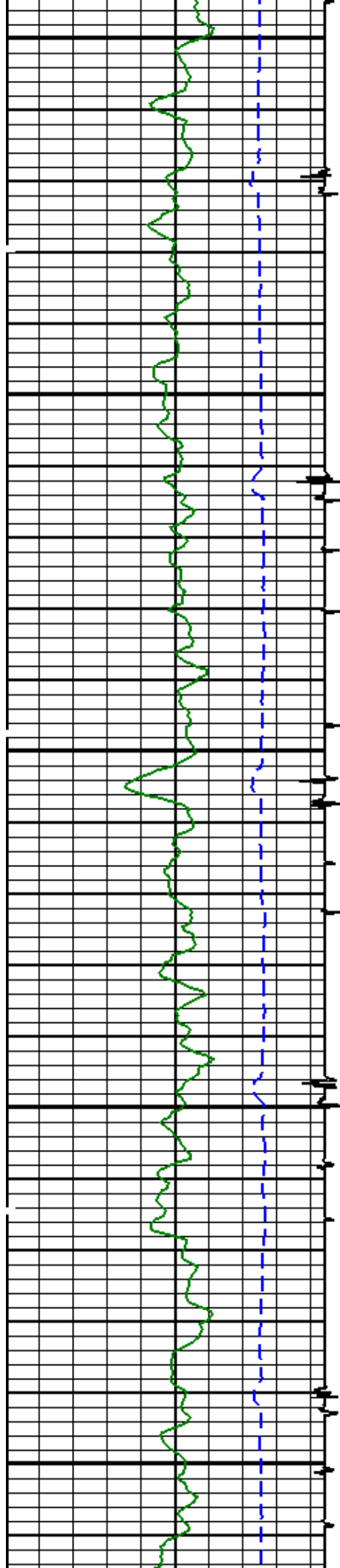




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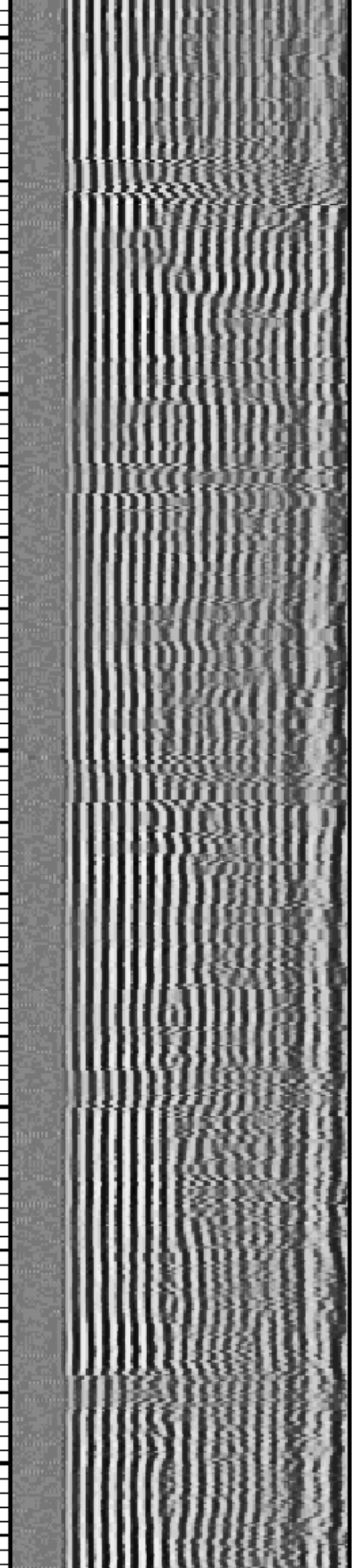
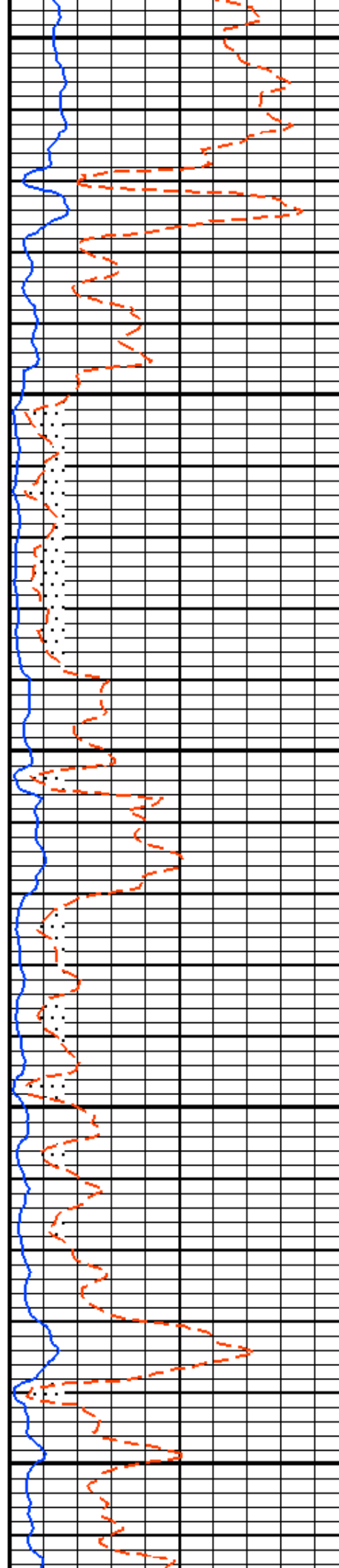


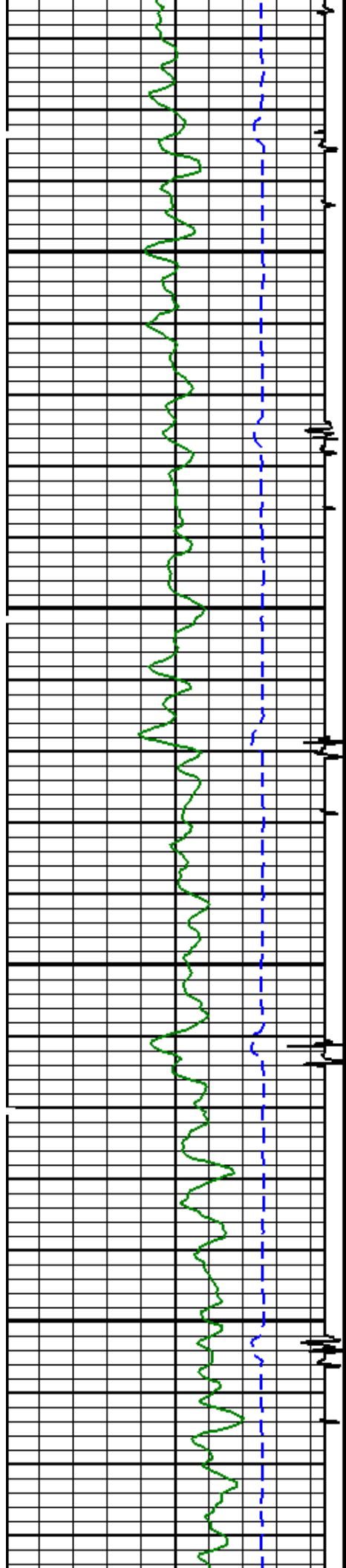


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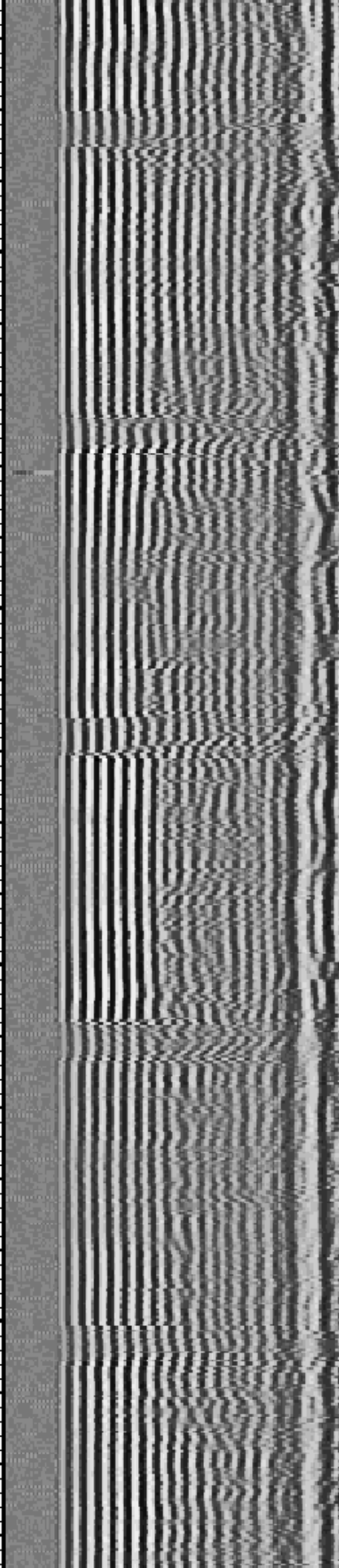
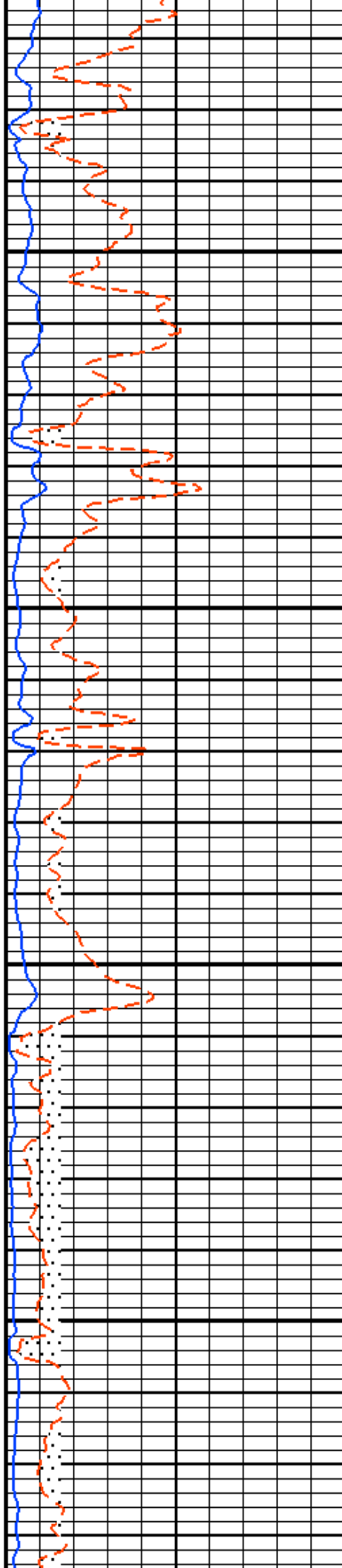
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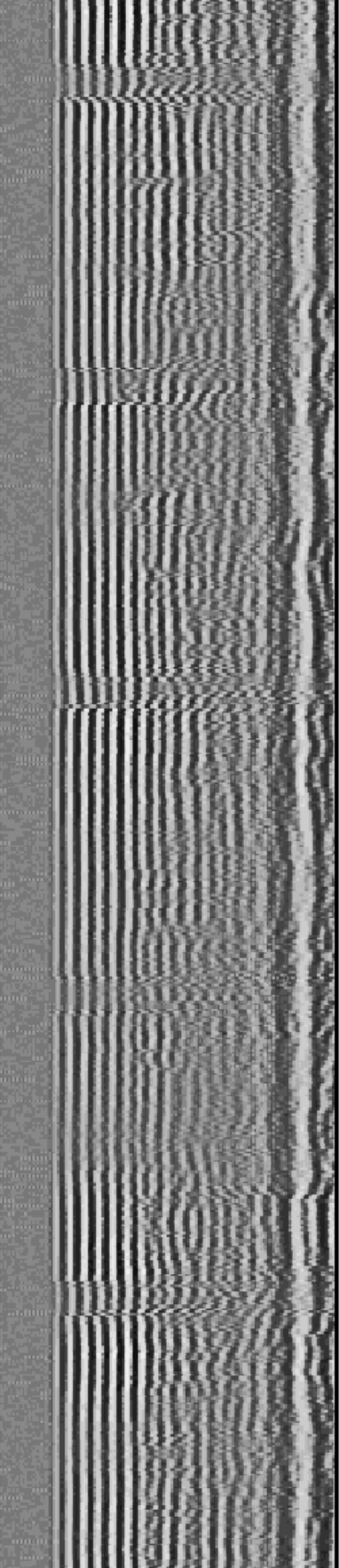
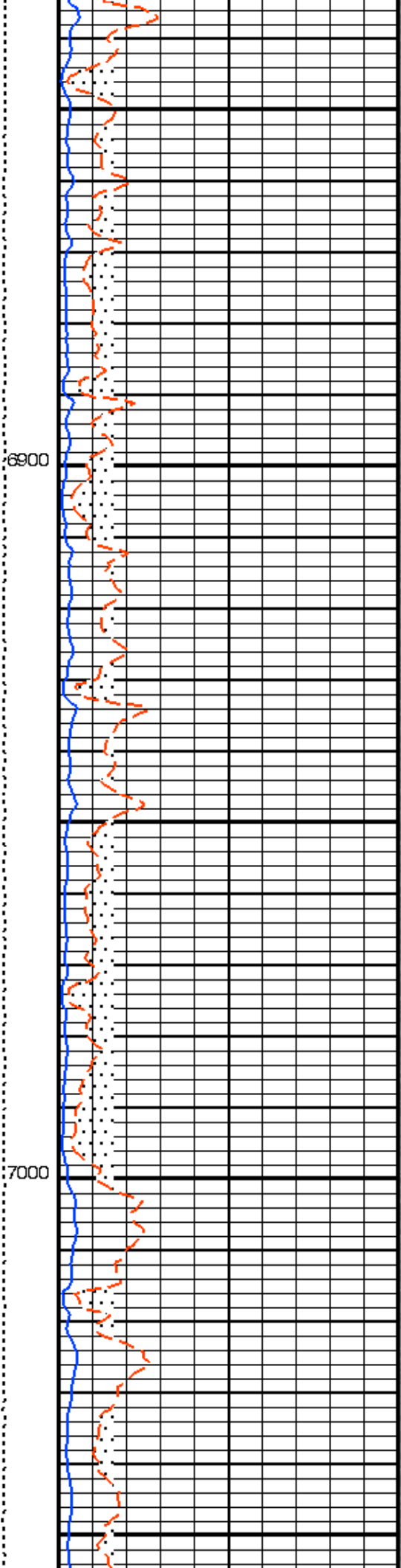
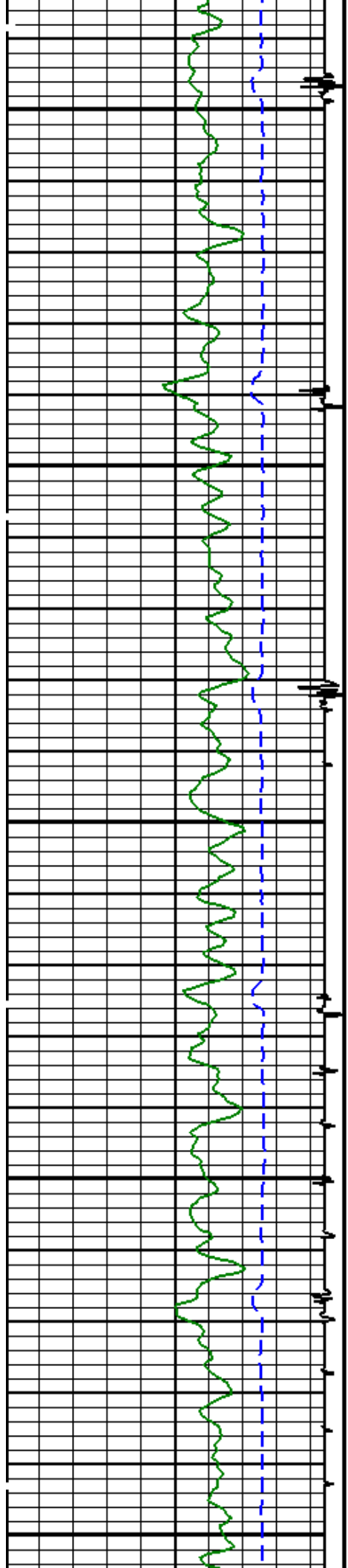


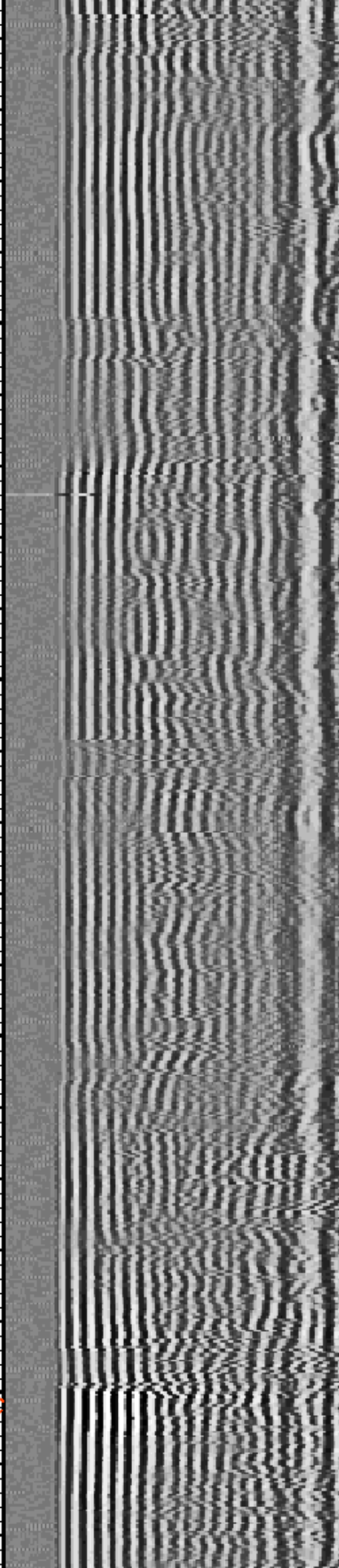
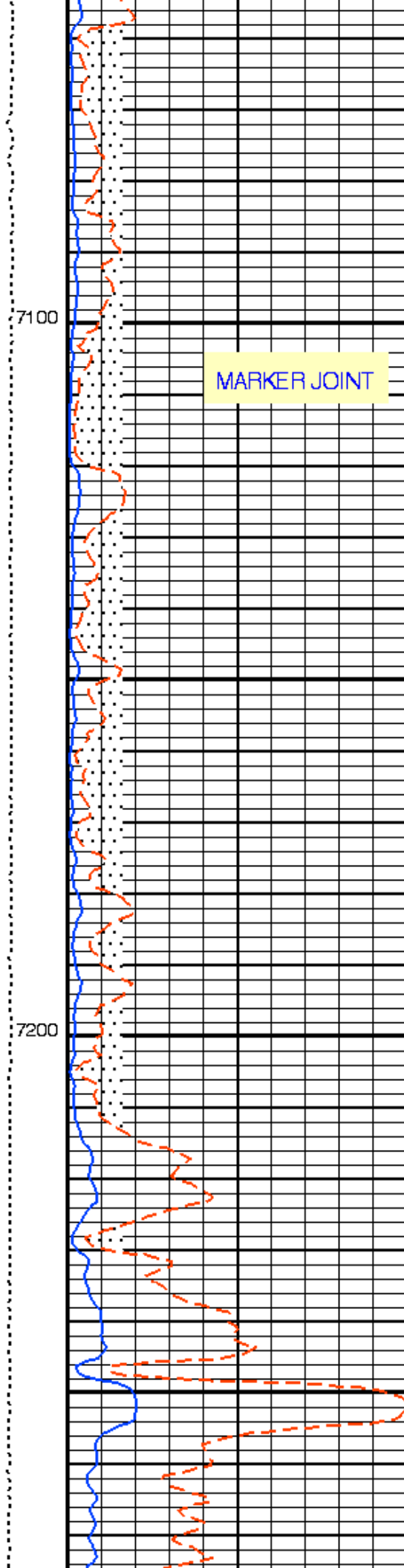
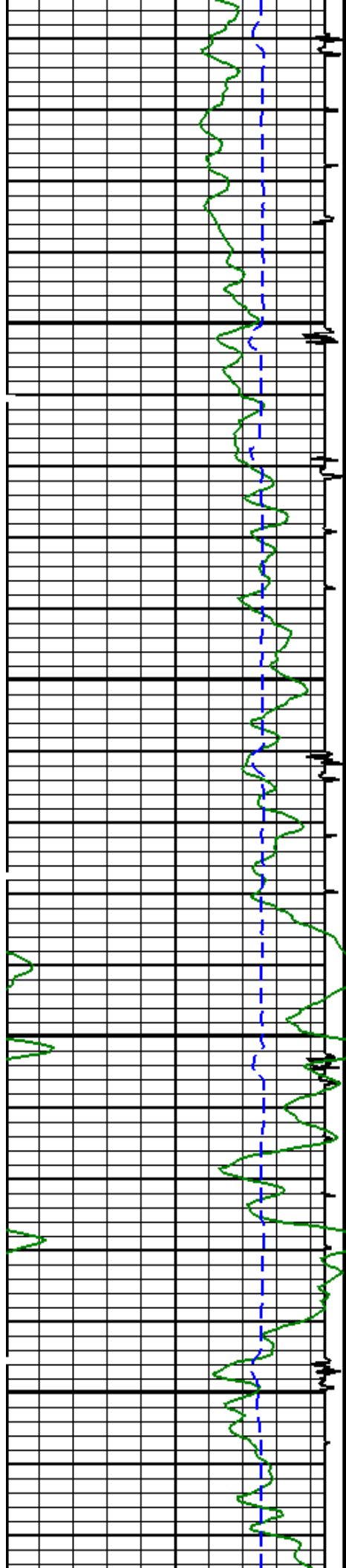


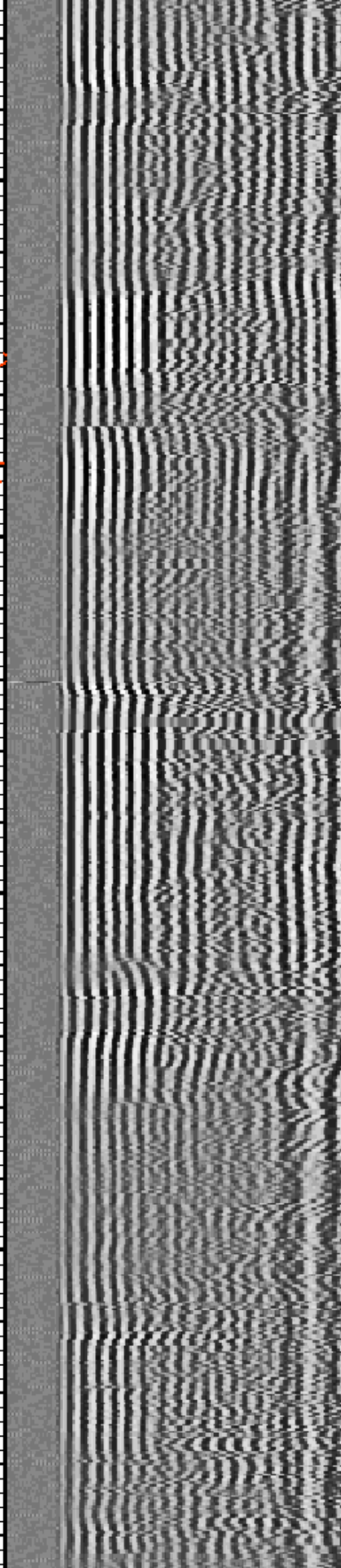
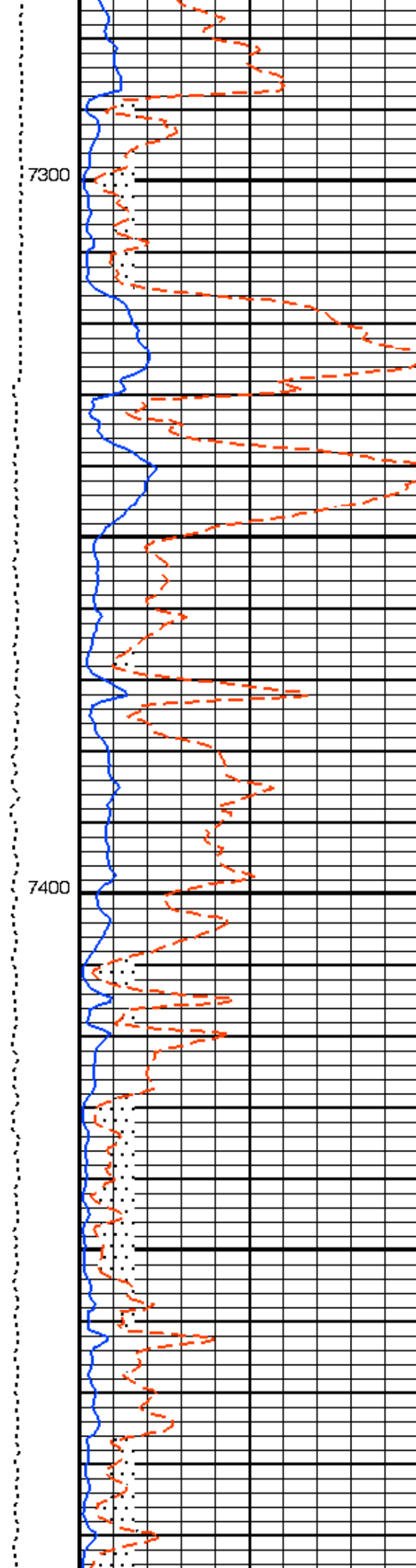
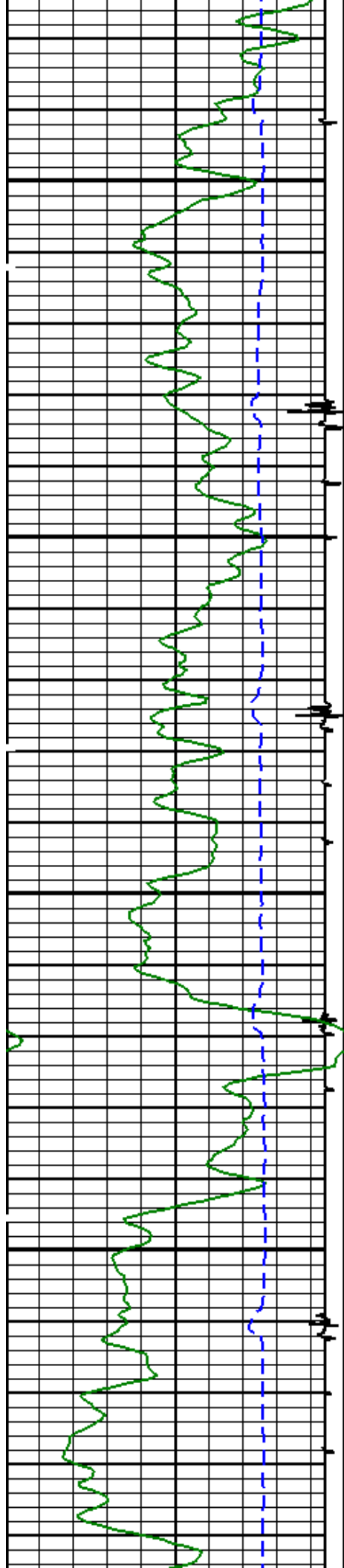
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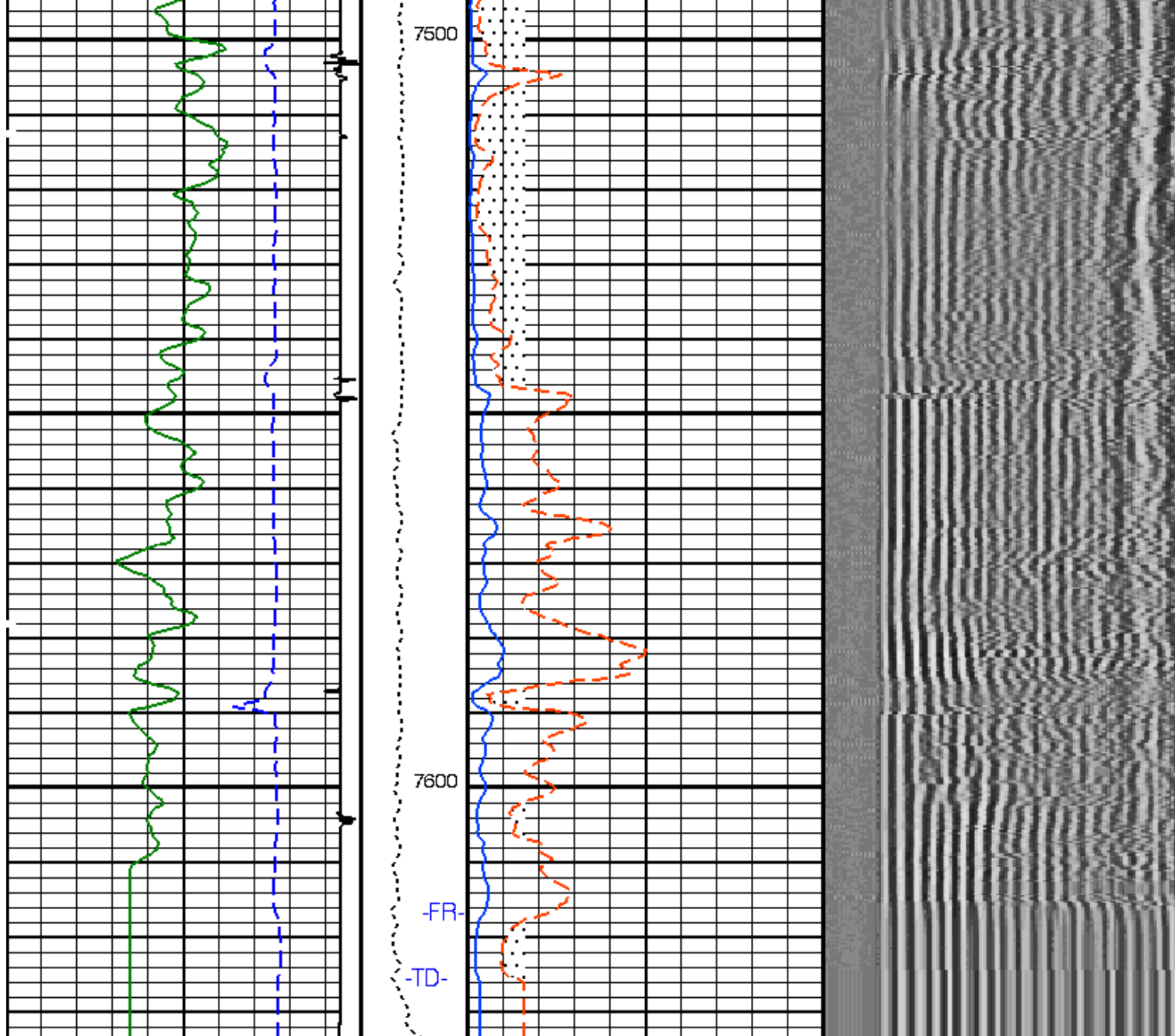
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Gamma Ray (GR) (GAPI)		Tension (TENS) (LBF)	CBL Amplitude (CBL) (MV)		Min Amplitude Max VDL Variable Density (VDL) (US)
0	150		0	20	
Transit Time (TT) (US)		GOOD BOND From ACBL to GOBO	CBL Amplitude (CBL) (MV)		
400	200		0	100	
COLLARS From CCLD to T1 Discriminated CCL (CCLD) -3.5 (V) 0.5					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD		
BILI	Bond Index Level for Zone Isolation	0.8
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK
CB3G	SCMT CBL 3 ft Peak Detection T0 Delay and Noise Gate	228.424 US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20 MV

CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0 Delay and Noise Gate	342.424	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	40	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	0.103771	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	204.5	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1	
GOBO	Good Bond	1.53811	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0 Delay and Noise Gate	171.424	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	9.4256	DB/F
MCCF	MAP Cement Type Compensation Factor	0.235528	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.27504	MV
MSA	Minimum Sonic Amplitude	0.572744	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	3.2	MRAY
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	3.7	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	-50000	FT

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 18-Nov-2013 15:59

OP System Version: 19C2-270

SCMT-CB 19C2-270 PSPT 19C2-270

Input DLIS Files

DEFAULT SCMT_PSP_006LUP FN:5 PRODUCER 18-Nov-2013 13:54 7630.0 FT 24.5 FT

Output DLIS Files

DEFAULT SCMT_PSP_010PUP FN:9 PRODUCER 18-Nov-2013 15:59

Schlumberger

**REPEAT PASS
0 PSI**

MAXIS Field Log

Company: Bayswater Exploration and Production

Well: MSH Farms 12-15

Input DLIS Files

DEFAULT SCMT_PSP_003LUP FN:2 PRODUCER 18-Nov-2013 12:32 7624.0 FT 7346.0 FT

Output DLIS Files

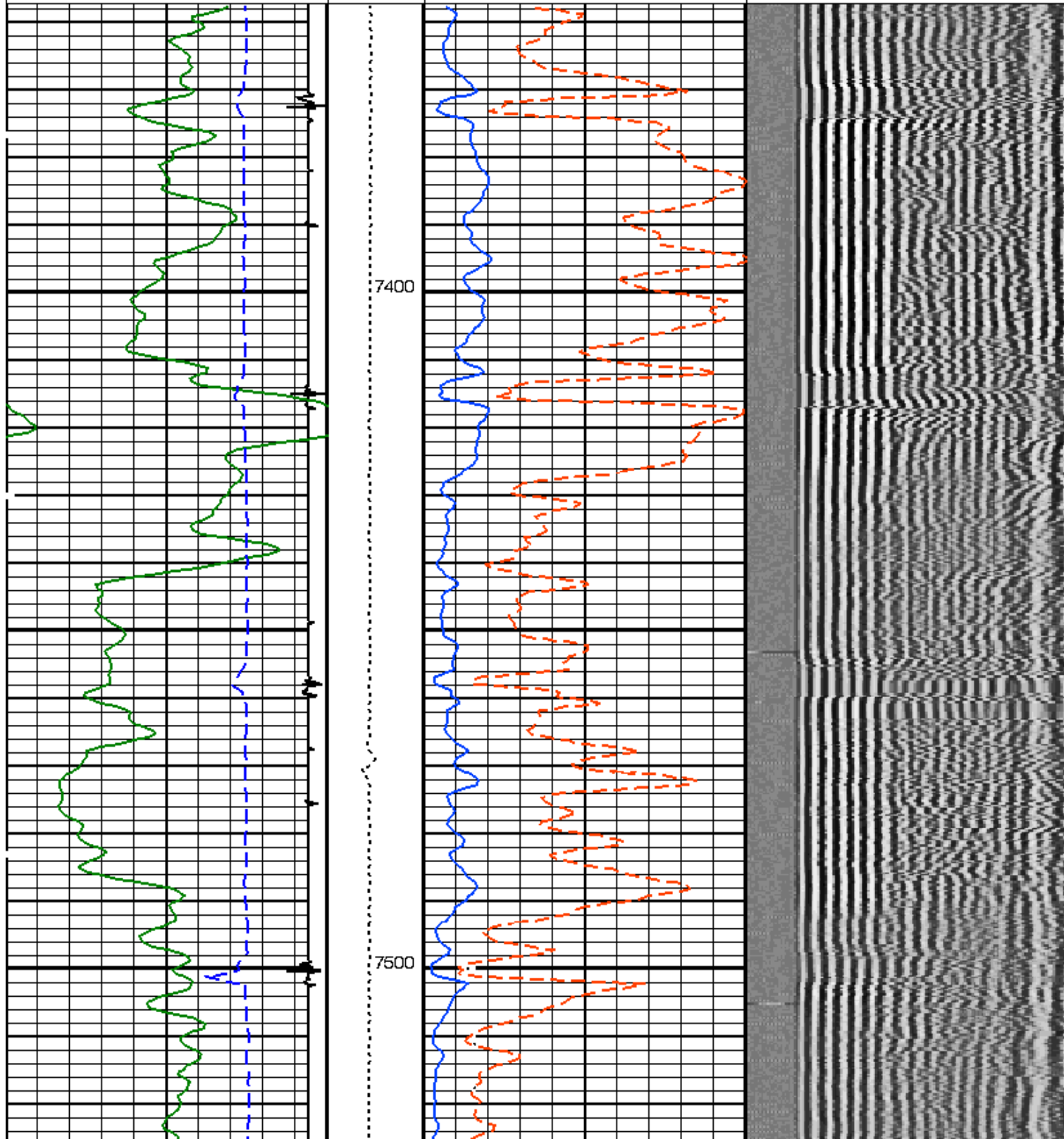
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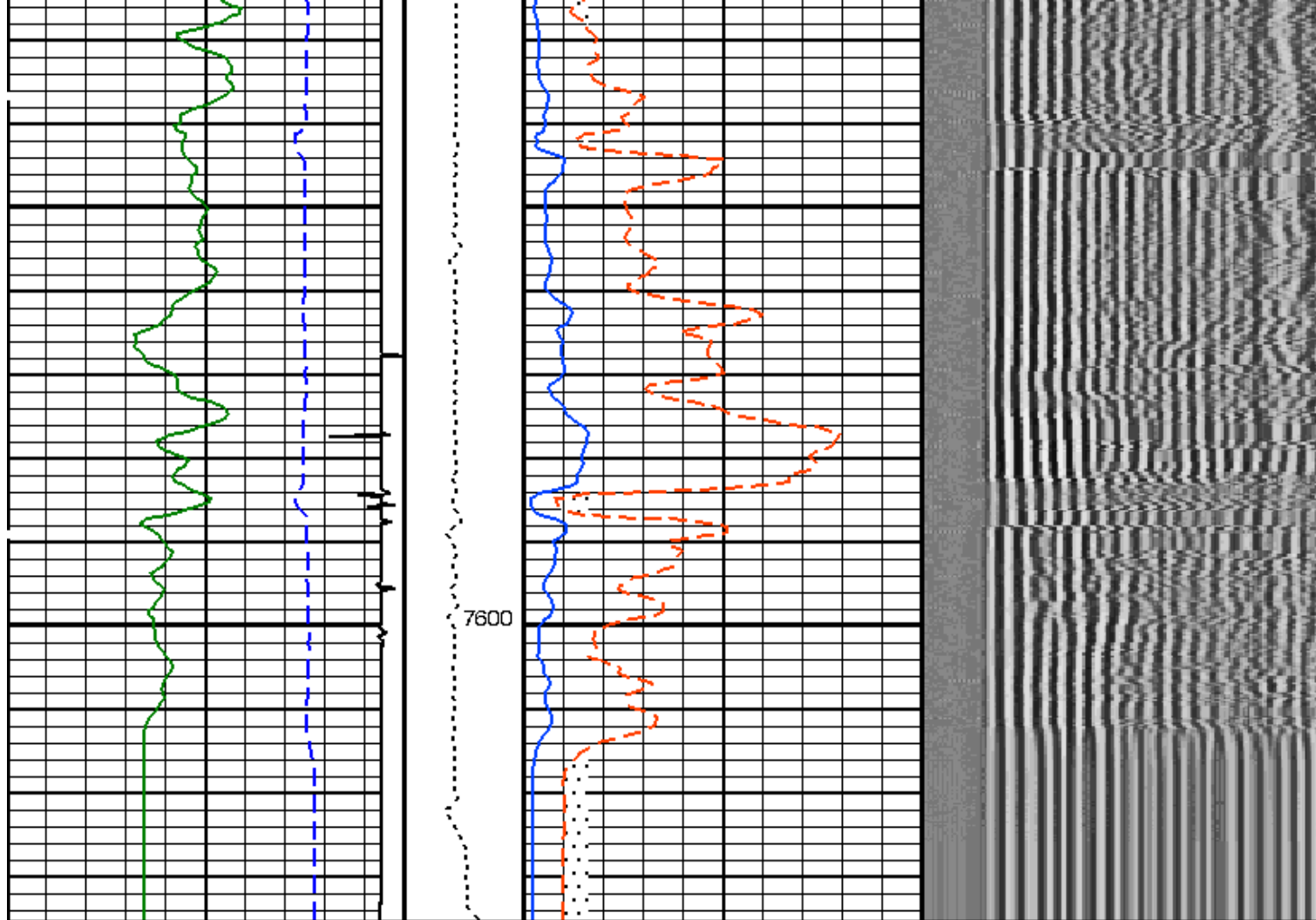
OP System Version: 19C2-270

SCMT-CB 19C2-270 PSPT 19C2-270

Time Mark Every 60 S

	<div>Discriminated CCL (CCLD)</div> <div>-3.5 (V) 0.5</div> <div>COLLARS From CCLD to T1</div>		<div>GOOD BOND From ACBL to GOBO</div>	
<div>Transit Time (TT)</div> <div>400 (US) 200</div>		<div>CBL Amplitude (CBL)</div> <div>0 (MV) 100</div>		
<div>Gamma Ray (GR)</div> <div>0 (GAPI) 150</div>	<div>Tension (TENS) (LBF)</div> <div>2000 0</div>	<div>CBL Amplitude (CBL)</div> <div>0 (MV) 20</div>	<div>Min Amplitude Max</div> <div>200 VDL Variable Density (VDL) (US) 1200</div>	





COLLARS
From CCLD to T1

Discriminated CCL
(CCLD)

-3.5 (V) 0.5

GOOD BOND
From ACBL to GOBO

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD			
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0 Delay and Noise Gate	228.424	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0 Delay and Noise Gate	342.424	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	40	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	0.103771	
CMTc	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	204.5	US/F

FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1	
GOBO	Good Bond	1.53811	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	171.424	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	9.4256	DB/F
MCCF	MAP Cement Type Compensation Factor	0.235528	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.27504	MV
MSA	Minimum Sonic Amplitude	0.572744	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	3.2	MRAY
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
DO	Depth Offset for Playback	11.2	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	-50000	FT

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 18-Nov-2013 15:58

OP System Version: 19C2-270

SCMT-CB 19C2-270 PSPT 19C2-270

Input DLIS Files

DEFAULT SCMT_PSP_003LUP FN:2 PRODUCER 18-Nov-2013 12:32 7624.0 FT 7346.0 FT

Output DLIS Files

DEFAULT SCMT_PSP_009PUP FN:8 PRODUCER 18-Nov-2013 15:58

Company: **Bayswater Exploration and Production**

Schlumberger

Well: **MSH Farms 12-15**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

CEMENT BOND

GAMMA RAY

CASING COLLAR LOG