

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8512E-24 (L24 496)

Field: STORY GULCH

County: GARFIELD State: COLORADO

SLIM CEMENT MAPPING LOG  
CBL-VDL  
GR-CCL

County:	GARFIELD		
Field:	STORY GULCH		
Location:	SHL: 1566 FSL & 862 FWL		
Well:	SGU 8512E-24 (L24 496)		
Company:	ENCANA OIL & GAS (USA) INC		
	LOCATION		
	SHL: 1566 FSL & 862 FWL	Elev.:	K.B. 8210.00 ft
	BHL: 2285 FNL & 1815 FEL	G.L.	8180.00 ft
		D.F.	8209.00 ft
	Permanent Datum:	GROUND LEVEL	Elev.: 8180.00 ft
	Log Measured From:	KELLY BUSHING	30.00 ft above Perm. Datum
	Drilling Measured From:	KELLY BUSHING	
	API Serial No.	Section 24	Township 4S Range 96W
	05-045-21174-000C		

		Run 1	Run 2	Run
PVT DATA				
Oil Density				
Water Salinity				
Gas Gravity				
Bo				
Bw				
1/Bg				
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	14-Feb-2013		
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Logging Date			
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Run Number	1		
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Run Number			
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Depth Driller	12385 ft		
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Depth Driller			
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Schlumberger Depth	11995 ft		
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Schlumberger Depth			
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Bottom Log Interval	11986 ft		
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Bottom Log Interval			
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Top Log Interval	300 ft		
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Top Log Interval			
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Casing Fluid Type	FRESH WATER		
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Casing Fluid Type			
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Salinity			
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Salinity			
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Density	8.4 lbm/gal		
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Density			
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Fluid Level	300 ft		
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Fluid Level			
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BIT/CASING/TUBING STRING			
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BIT/CASING/TUBING STRING			
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Bit Size	7.875 in		
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Bit Size			
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From	8262 ft		
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From			
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To	12385 ft		
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To			
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Casing/Tubing Size	4.500 in		
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Casing/Tubing Size			
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Weight	13.5 lbm/ft		
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Weight			
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Grade	P-110		
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Grade			
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From	30 ft		
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From			
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To	12337 ft		
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To			
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Maximum Recorded Temperatures	279 degF		
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Maximum Recorded Temperatures			
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Logger On Bottom	14-Feb-2013	11:30	
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Logger On Bottom			
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Unit Number	391	GRAND JUNCTION	
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Unit Number			
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Recorded By	KIRSTIE BUNTING		
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Recorded By			
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Witnessed By	RYAN TOMPKINS		
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Witnessed By			
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## DEPTH SUMMARY LISTING

Date Created: 29-JAN-2013 10:07:01

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6214	Serial Number:	3421	Serial Number:	112136
Calibration Date:	24-APR-2012	Calibration Date:	29-JAN-2013	Length:	19500 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	Conveyance Method:	Wireline
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10	Rig Type:	LAND
Wheel Correction 1:	-3	Calibration RMS:	13		
Wheel Correction 2:	-4	Calibration Peak Error:	23		

## Depth Control Parameters

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

### Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES APPLIED
2. IDW USED AS PRIMARY DEPTH REFERENCE
3. SWPT DRUM COUNTER USED AS SECONDARY DEPTH REFERENCE
- 4.
- 5.
- 6.

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OTHER SERVICES1	OTHER SERVICES2
OS1: NONE	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWN LOG	
TOOL RAN AS PER TOOL SKETCH	
MAX RECORDED TEMP = 279 DEGF	
MAX RECORDED PRESSURE = 6526 PSIA	
SHORT JOINTS = 7633 FT & 10787 FT	



ENTRANCE TIME = 10:30	
LOGGER ON BOTTOM = 11:30	
EXIT TIME = 14:30	
MAIN PASS LOGGED WITH ZERO SURFACE PRESSURE	
CYCLE SKIPPING DUE TO GOOD BOND	
EXPECTED CBL AMPLITUDE OF FREE PIPE 80MV	
THANK YOU FOR CHOOSING E&P WIRELINE SERVICES	
YOUR CREW, K. BUNTING, J.BARRY, K.JOHNS, B.RANSBOTTOM	

RUN 1 SERVICE ORDER #: C920-00043 PROGRAM VERSION: 19C0-187 FLUID LEVEL: 300 ft			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT	DESCRIPTION

	RUN 1	RUN 2
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	1	1
25	1	1
26	1	1
27	1	1
28	1	1
29	1	1
30	1	1
31	1	1
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34	1	1
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56	1	1
57	1	1
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59	1	1
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86	1	1
87	1	1
88	1	1
89	1	1
90	1	1
91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

SURFACE EQUIPMENT	
WITM-A PSC_16MHZ	

DOWNHOLE EQUIPMENT			
MH-22			59.3
MH-22			
AH-38			57.7
EQF-43			57.5
EQF-43			
	Detail MT		
	TelStatus		
	CTEM	51.5	51.5
PSPT			
PSC-A			
PSPT-B 928			
PSTC-A	GR	47.8	
PBMS-B			
CQG_F_Mano	Well_Temp	44.7	
RTD_Thermometer	CQG Manom	44.4	
GR	CCL	44.0	
CCL	PBMS PSTC	43.2	
PBMS			
RST-C			43.2
RSCH-A			
RSC-E			
RSS-A			
RSXH-A			
RSX-E			
	RSC-A Far	34.1	
	RSC-A PNG		
	RSC-A Nea		
	RSX-A PNG	33.6	

SCMT-CB  
SCMC-CA 8120  
SECH-CA  
CMIR-AG  
SCMS-CB 8179  
SCMX-CA

20.2

DT 11.1  
CBL5 DTSC 9.6  
CBL3 8.6  
MAP 8.1  
AUX 7.1

AH-YYY

HV  
Tension SCMT 0.0  
TOOL ZERO

0.2

MAXIMUM STRING DIAMETER 1.72 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN FEET

Schlumberger

MAIN PASS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8512E-24 (L24 496)

Input DLIS Files

DEFAULT	SCMT_RST_PSP_033LUP	FN:32	PRODUCER	14-Feb-2013 11:31	12002.0 FT	222.5 FT
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Output DLIS Files

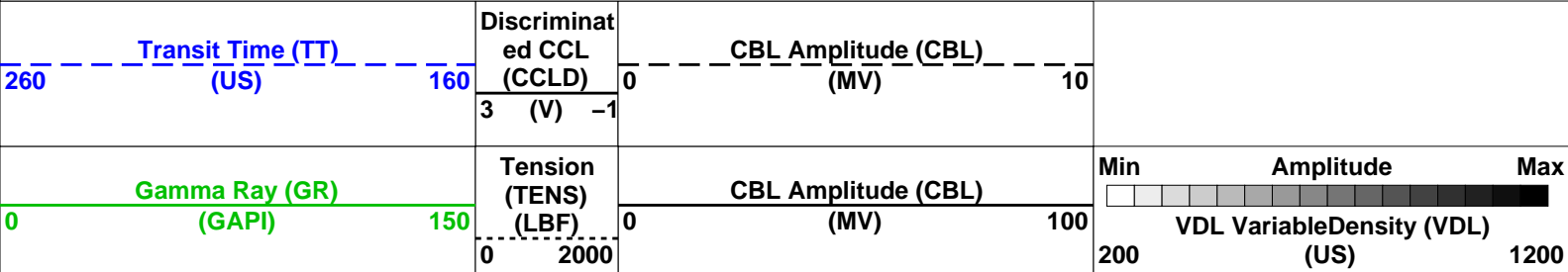
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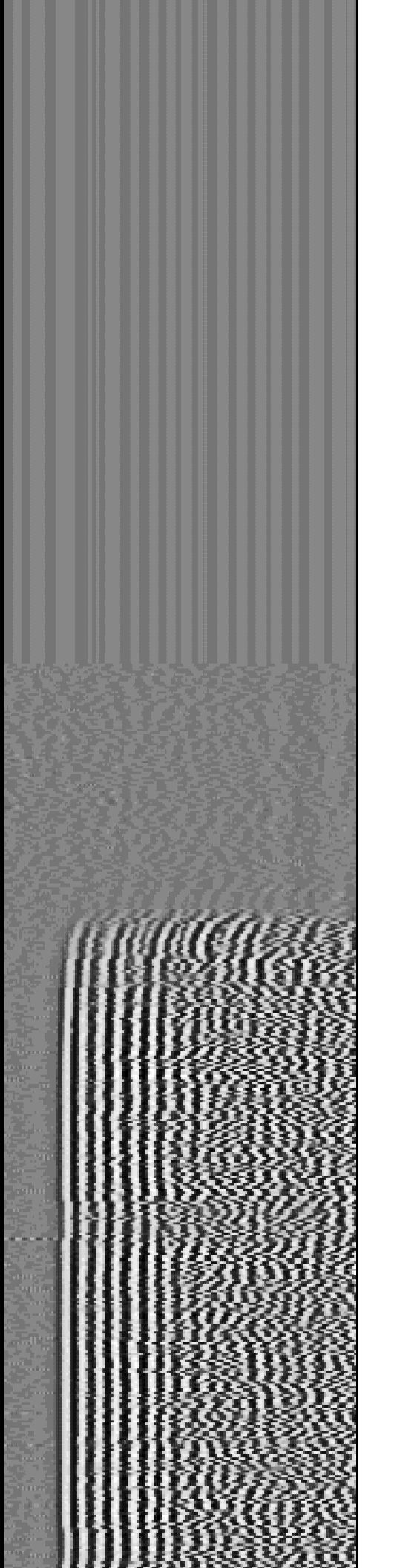
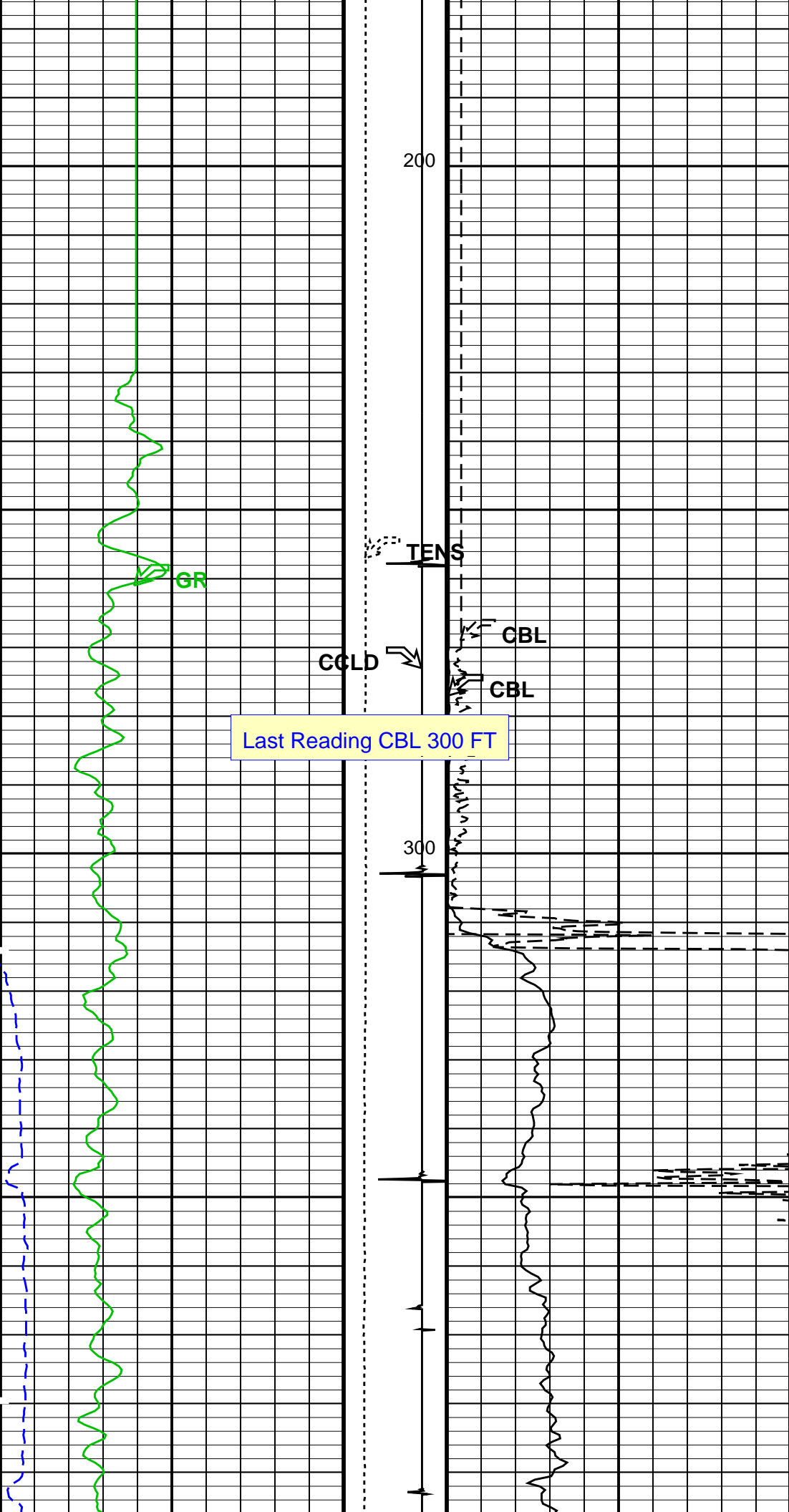
OP System Version: 19C0-187

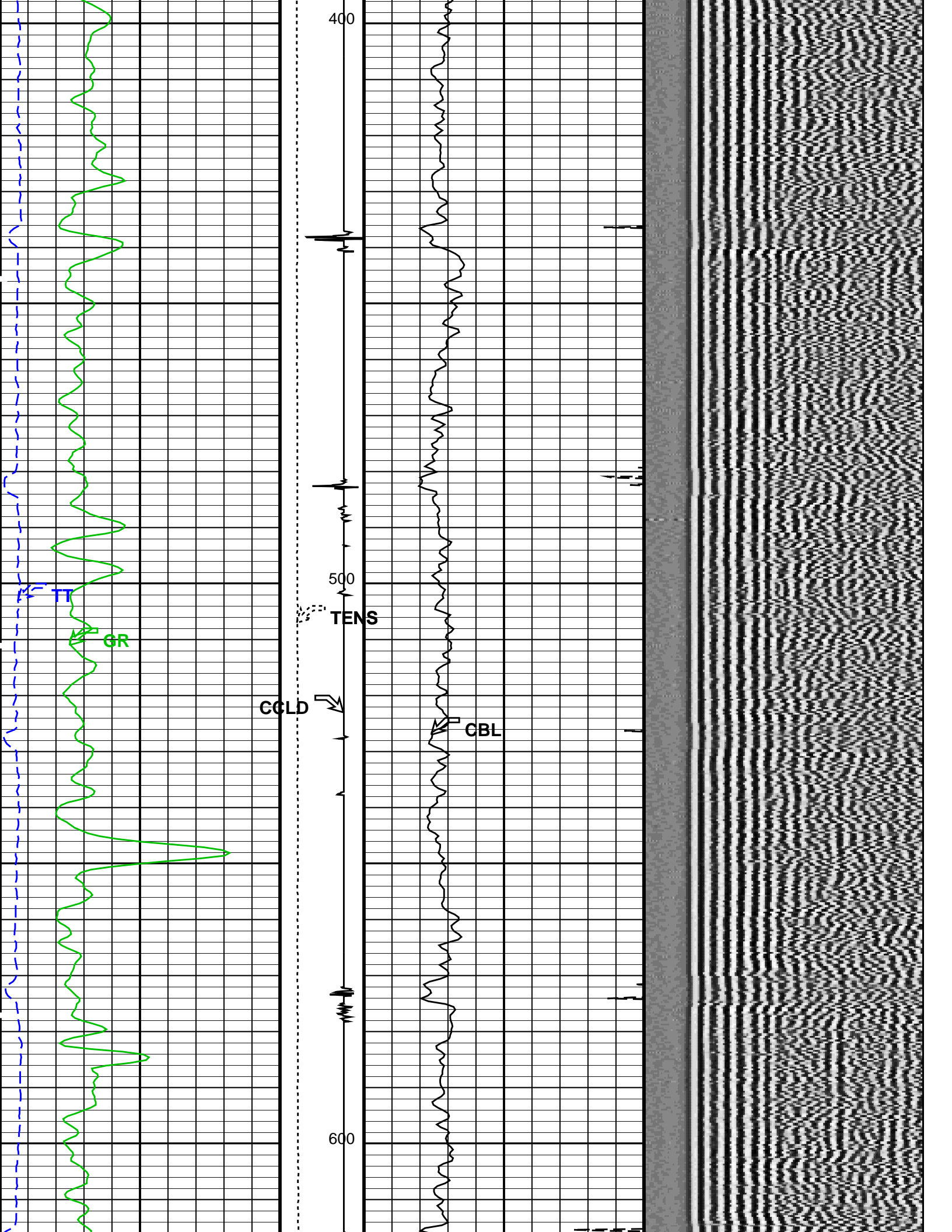
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PSPT	SRPC-5214-H2-2012-OP1		

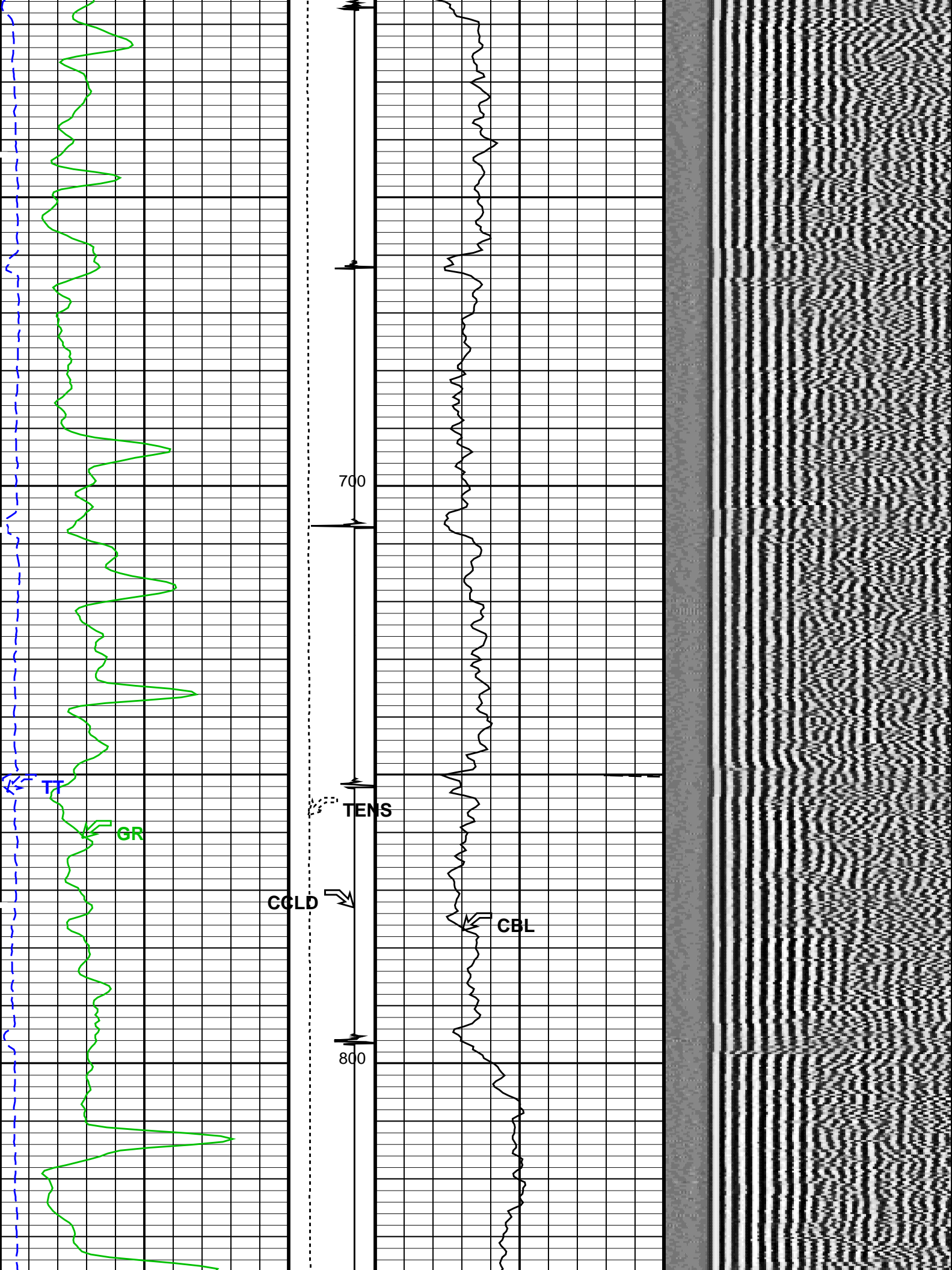
PIP SUMMARY

Time Mark Every 60 S

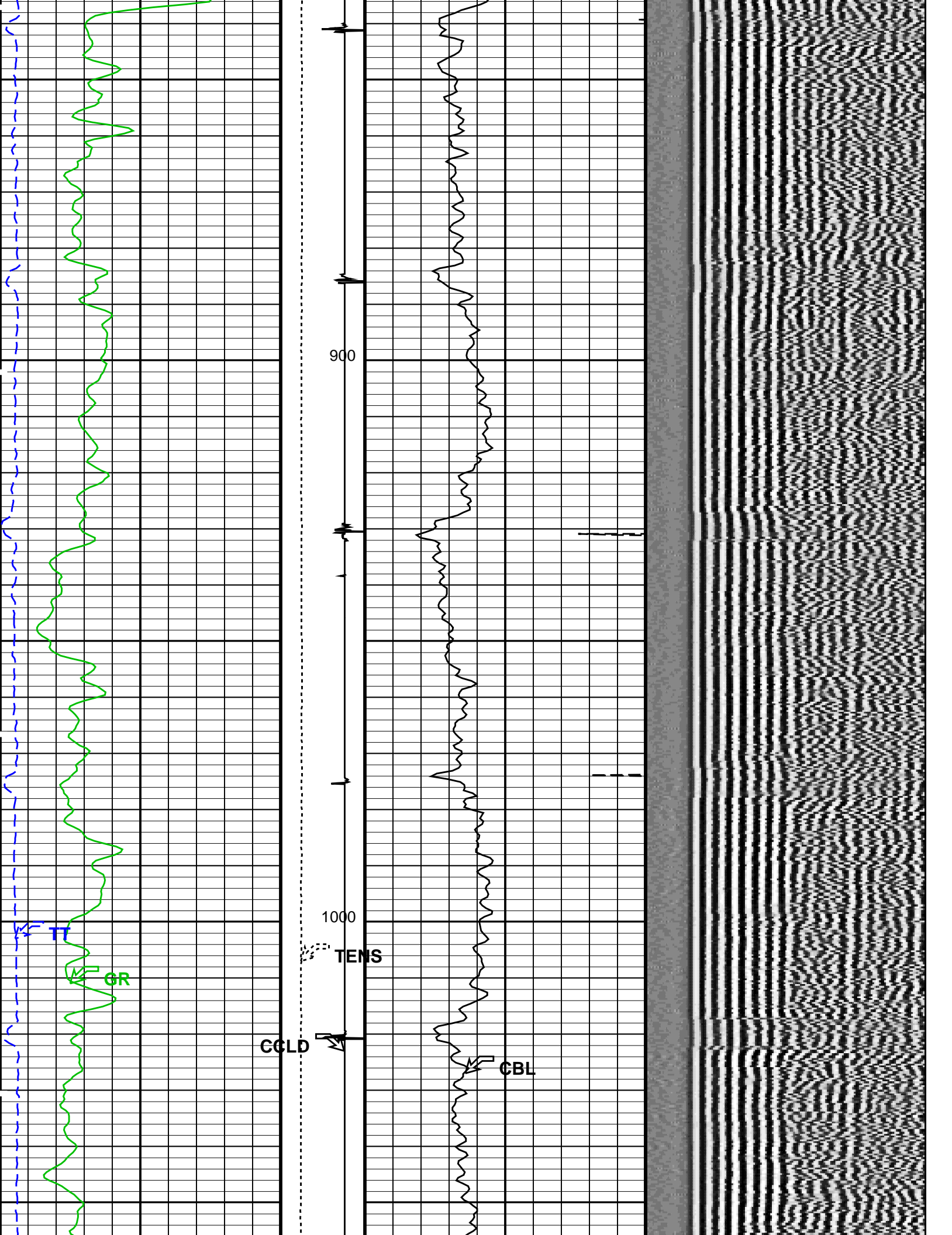


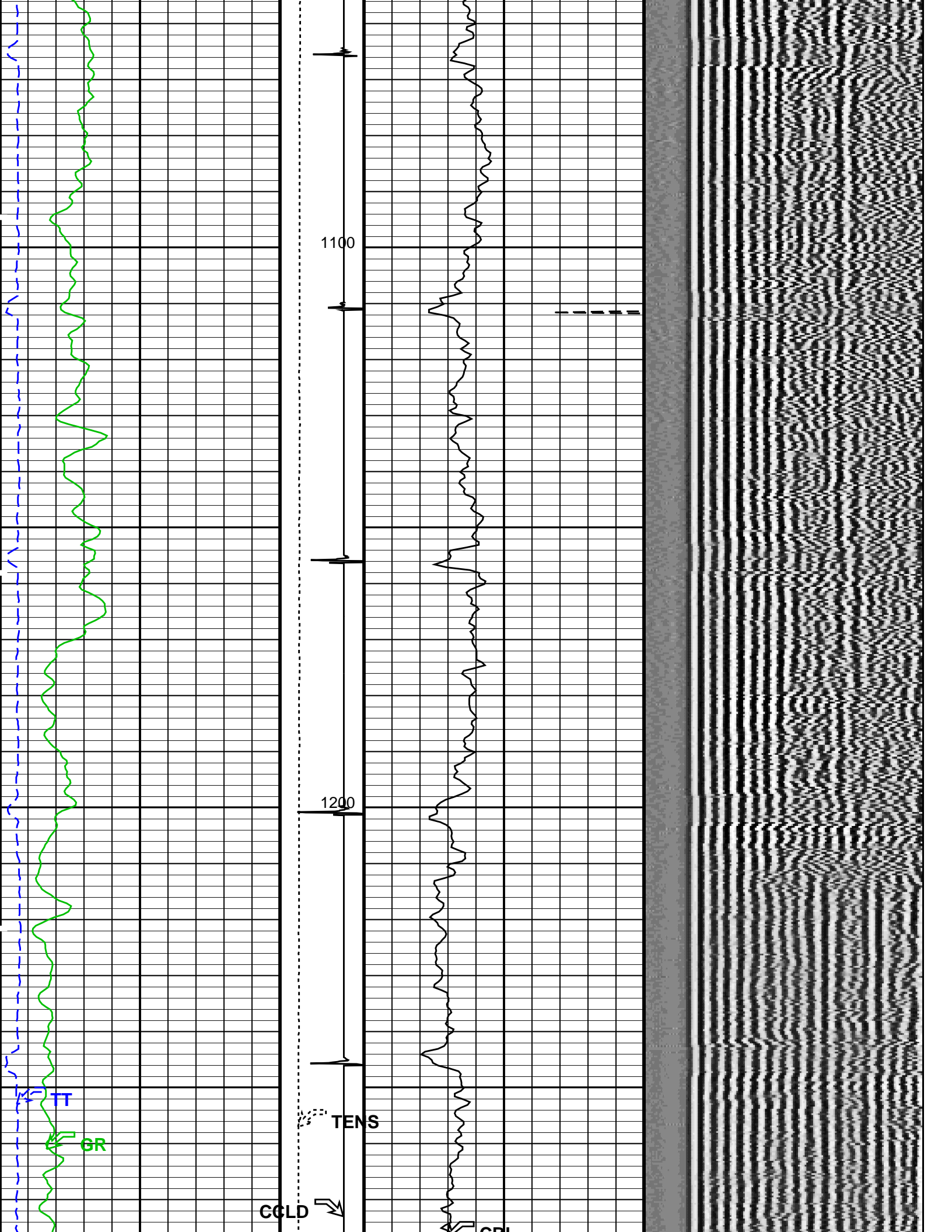


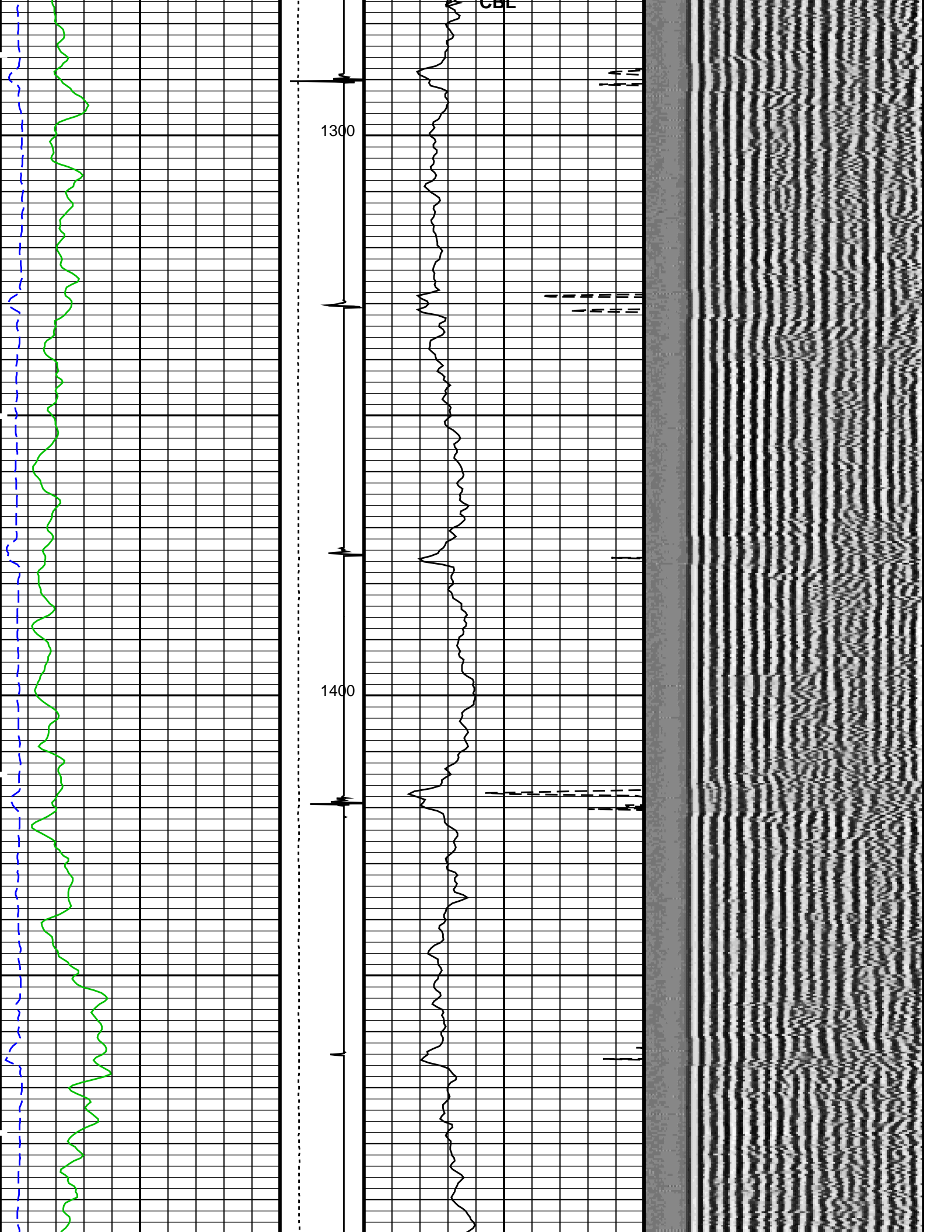




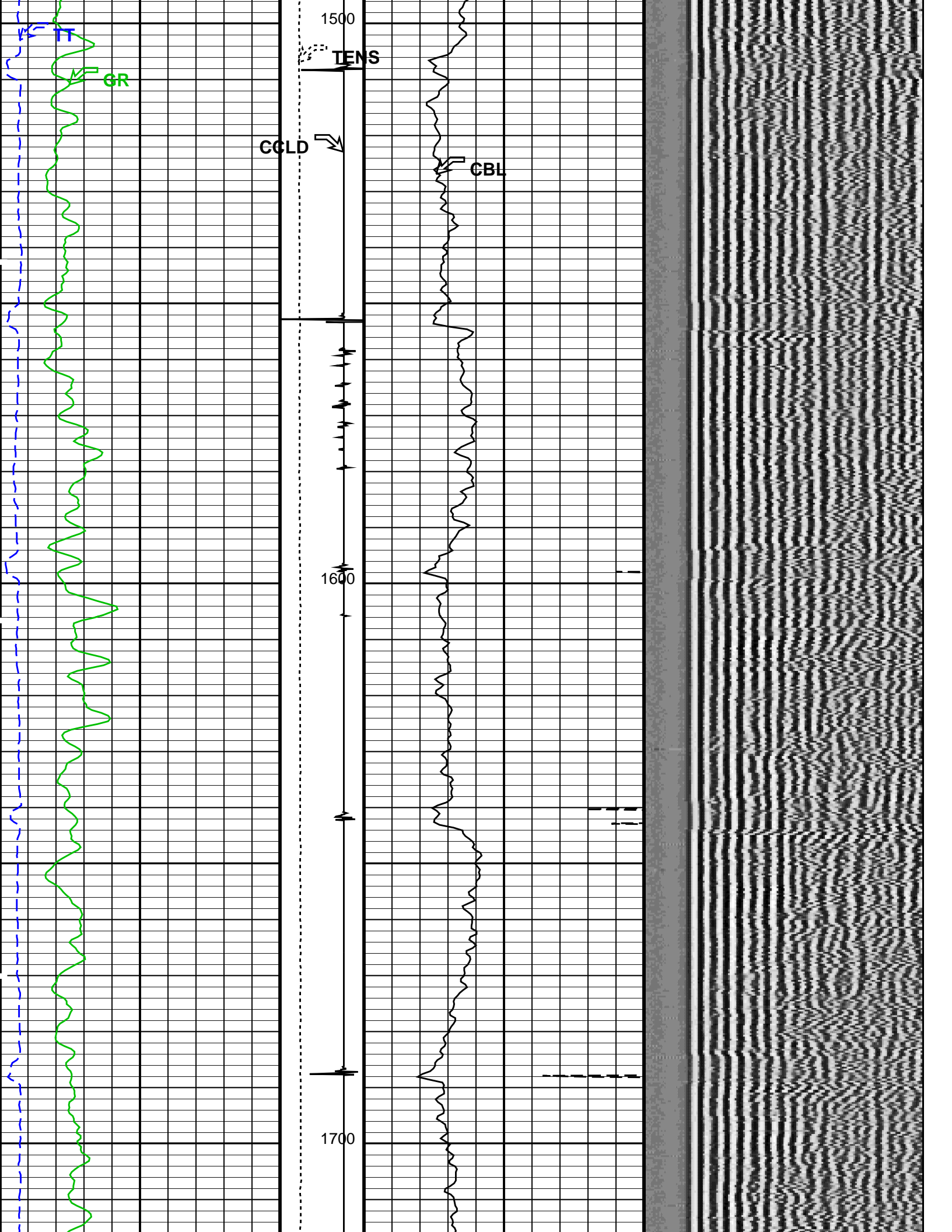


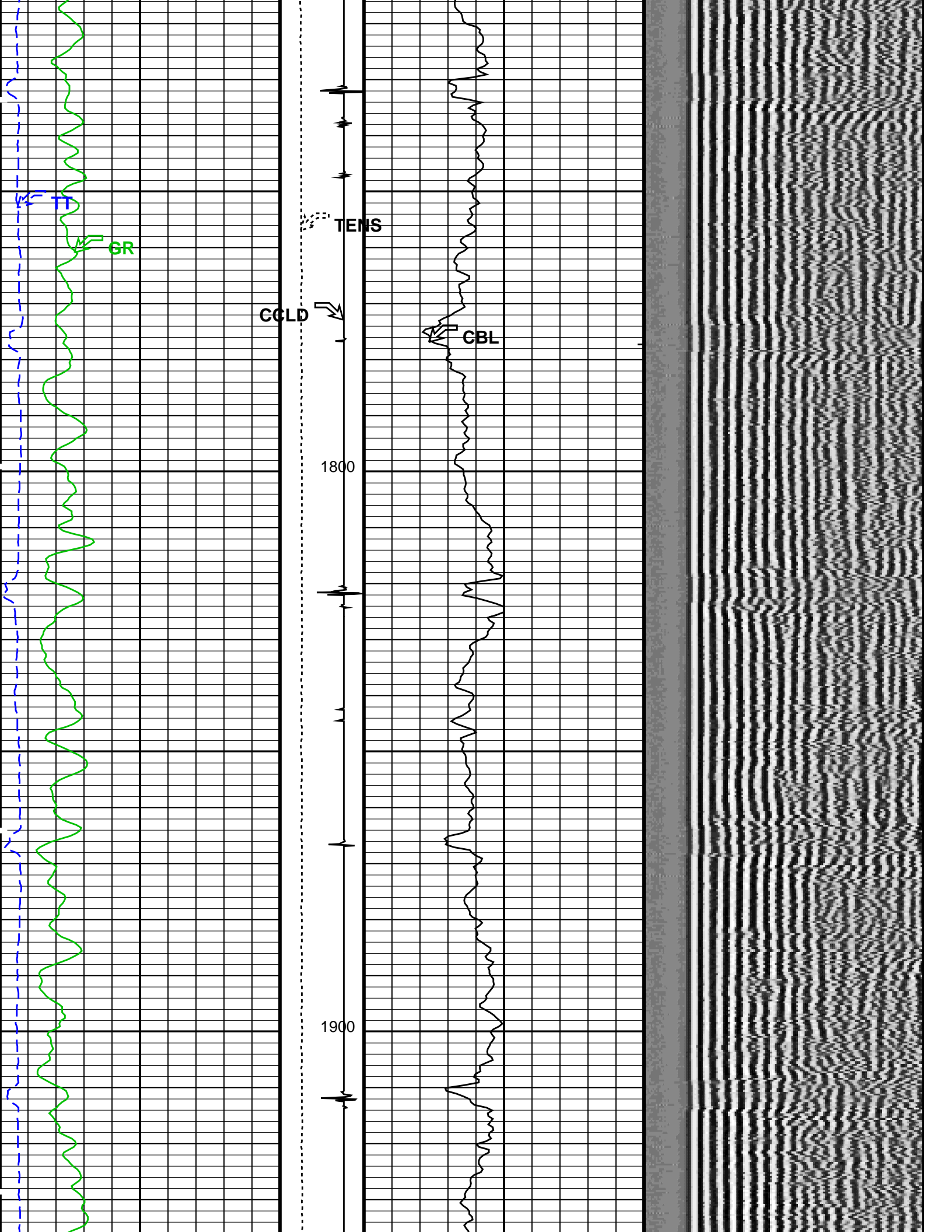


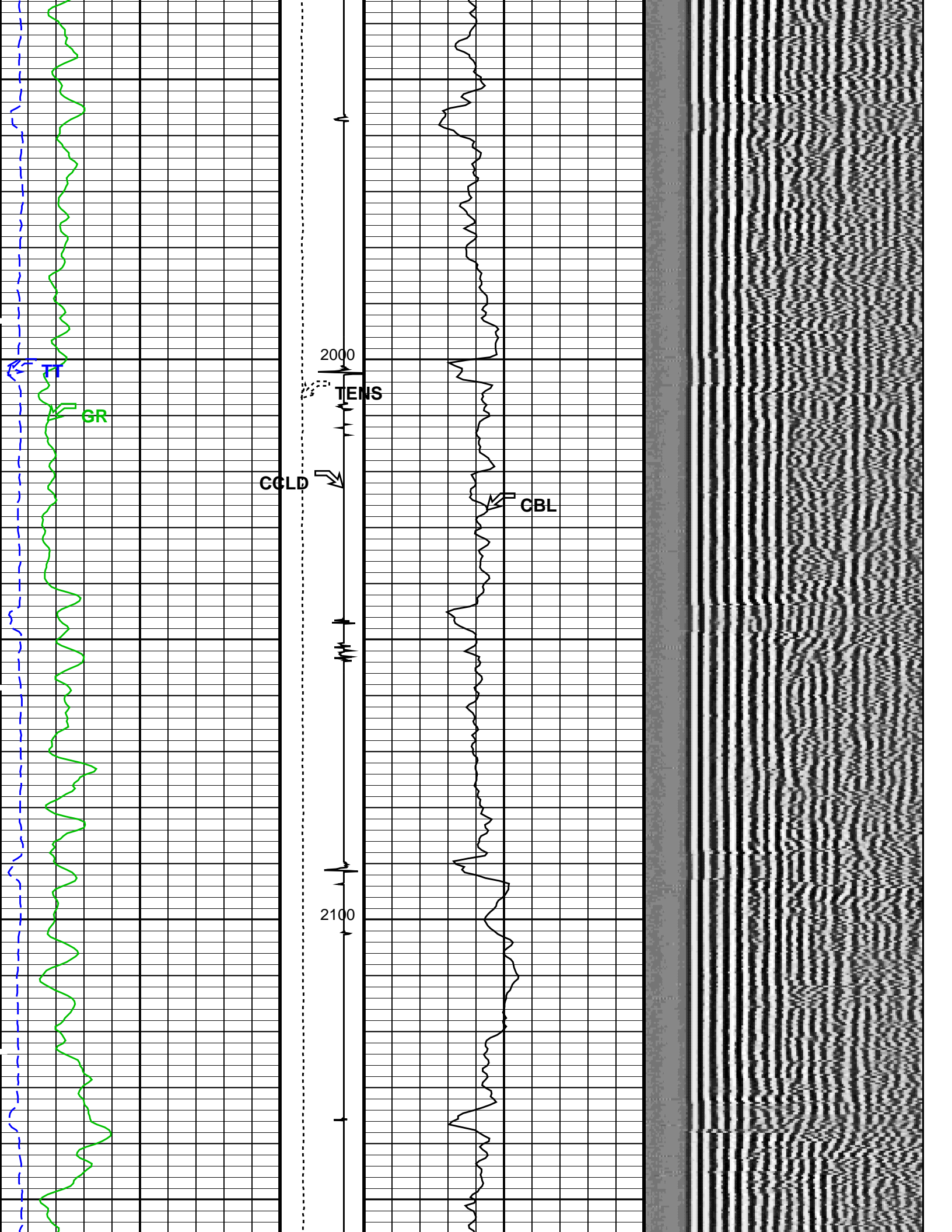


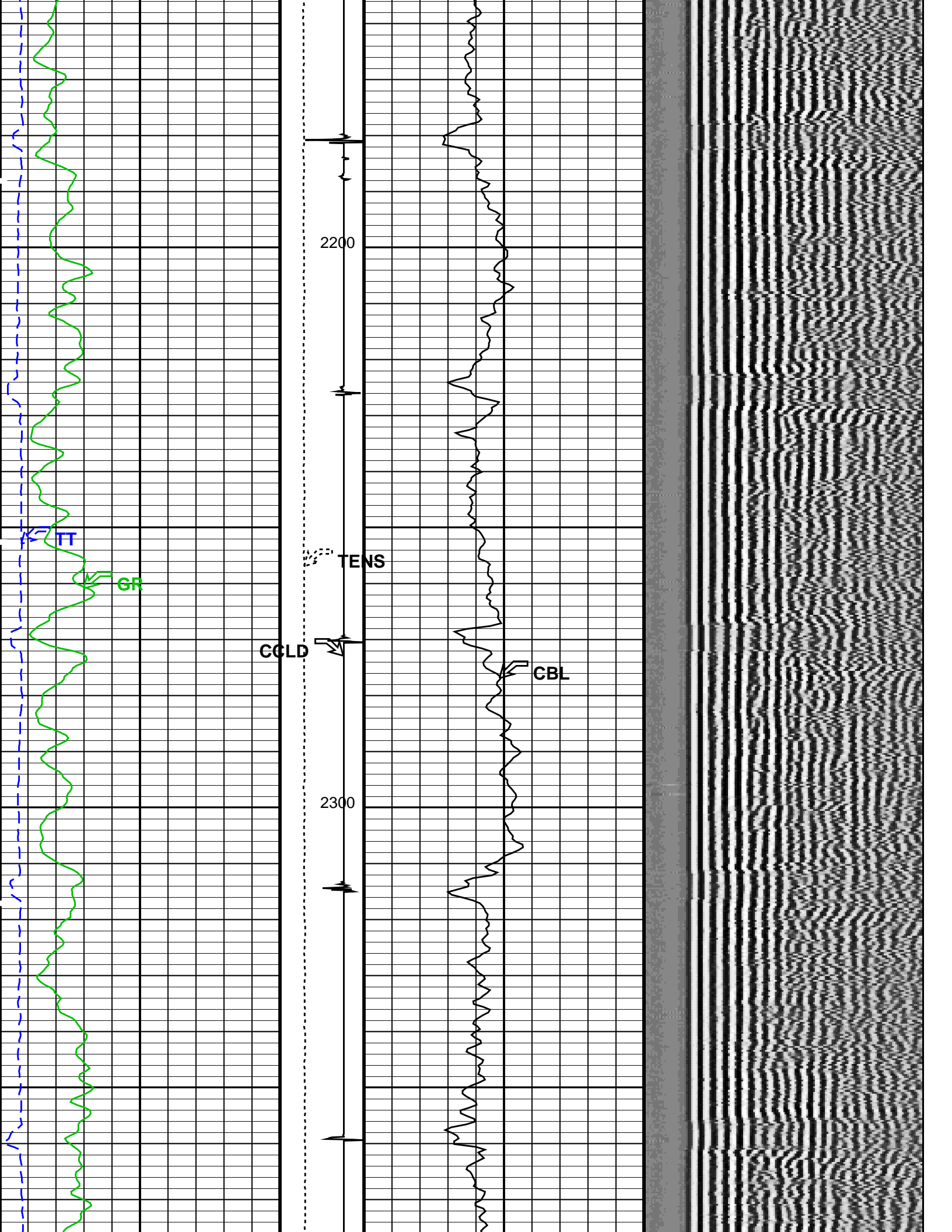




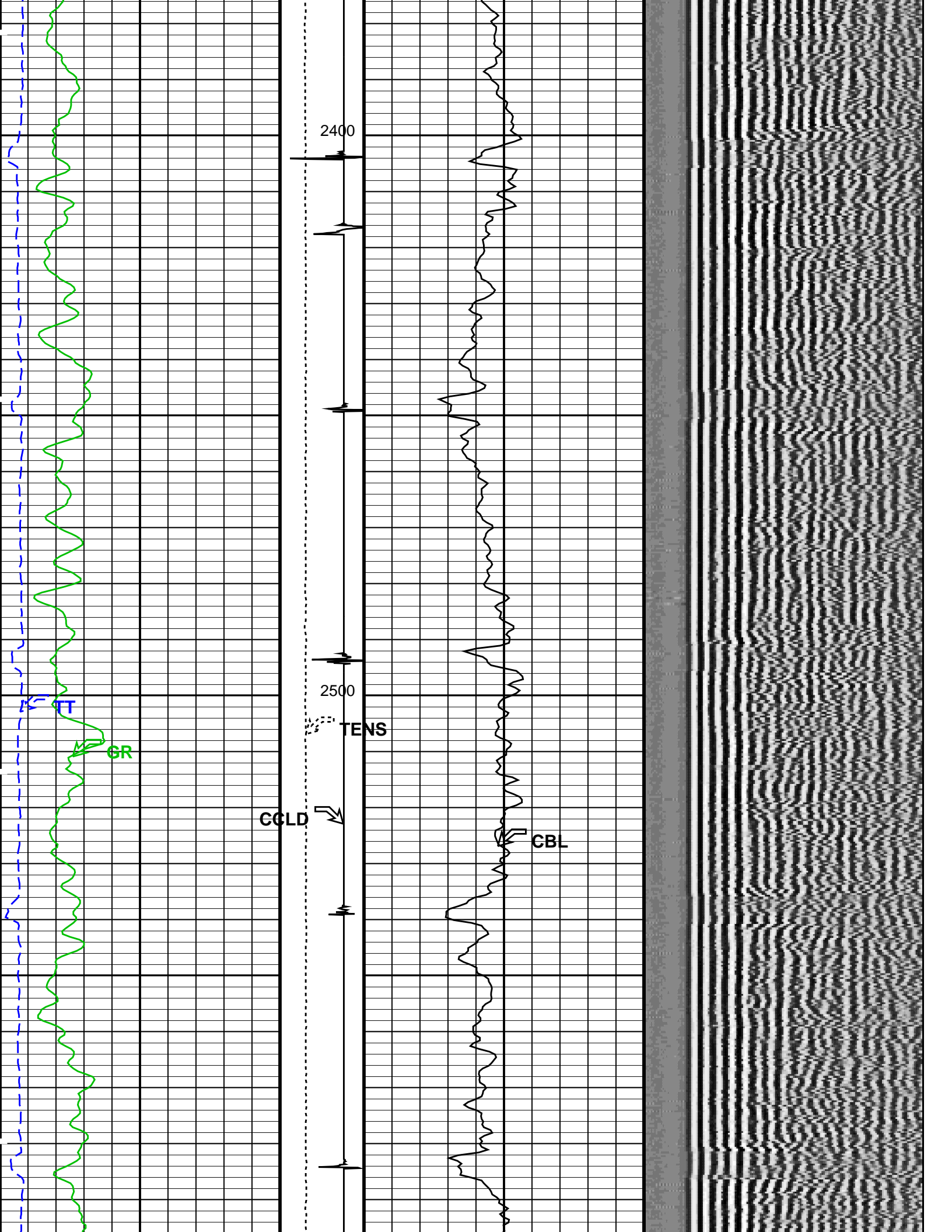


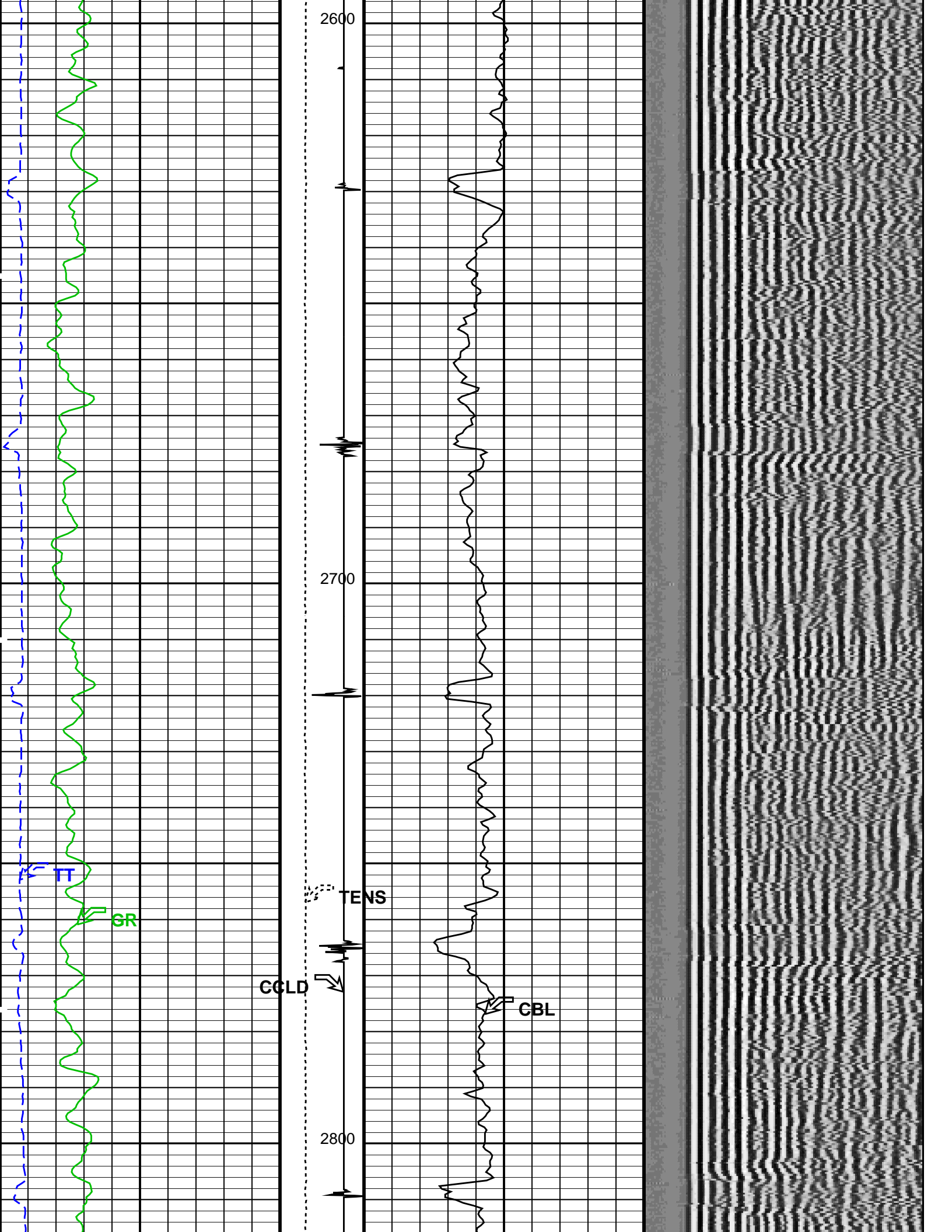


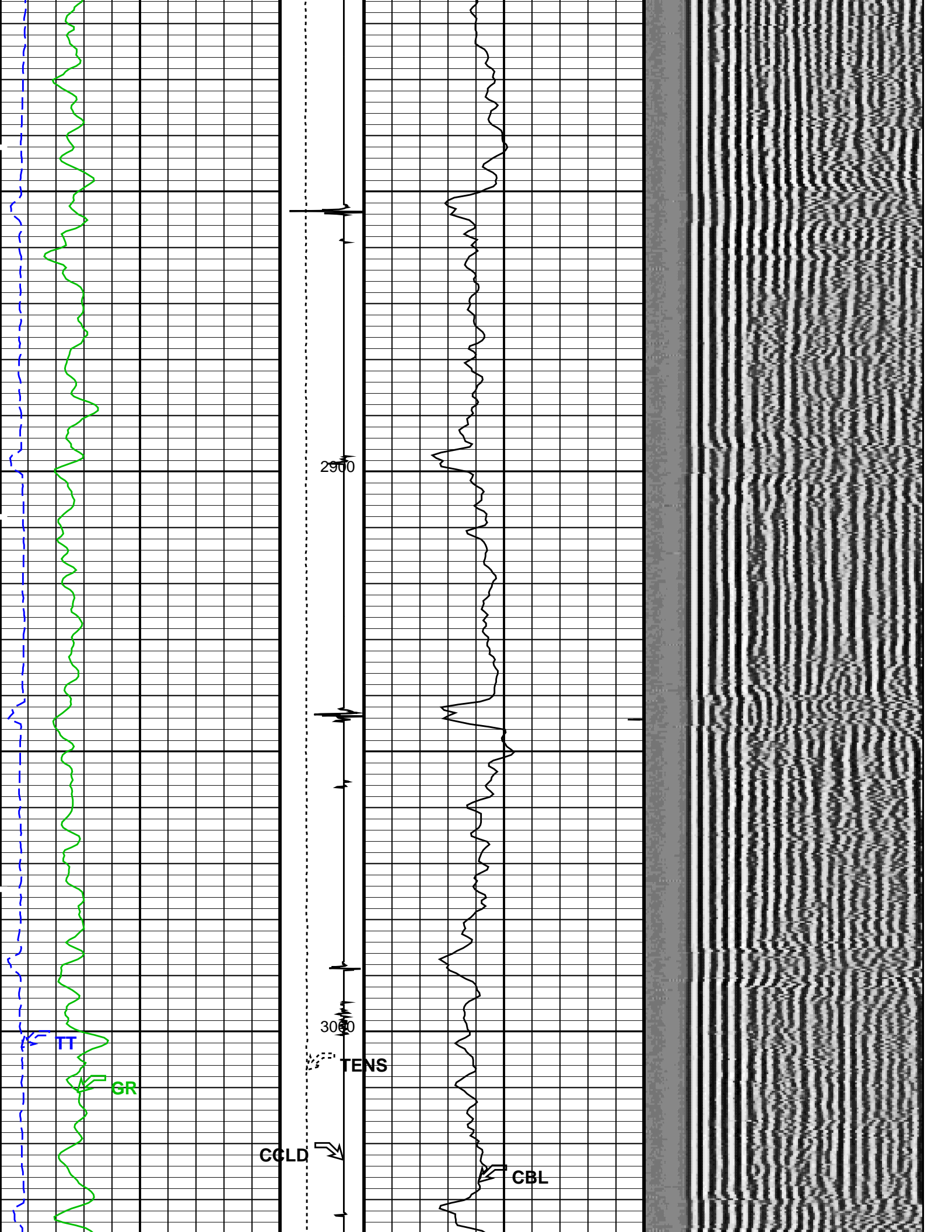


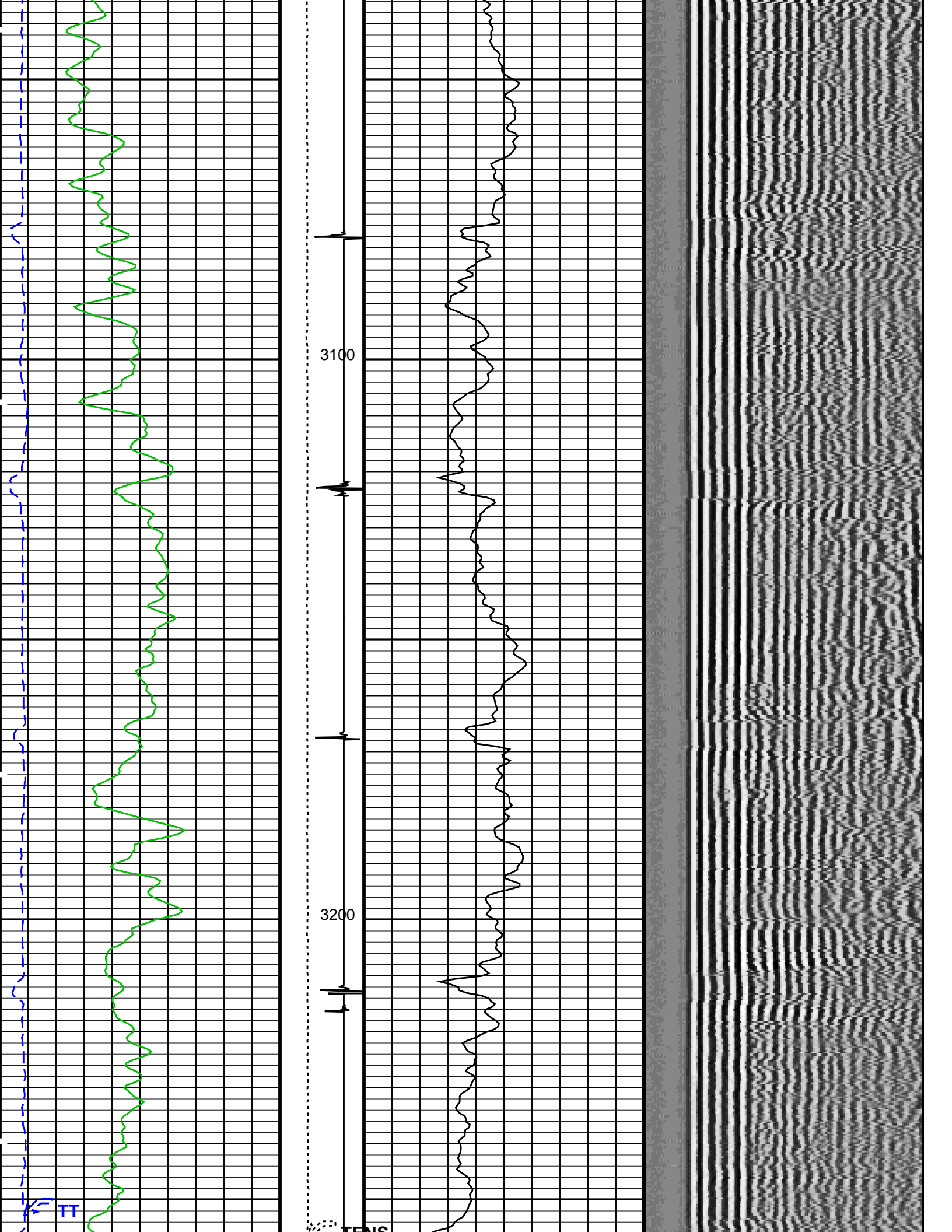




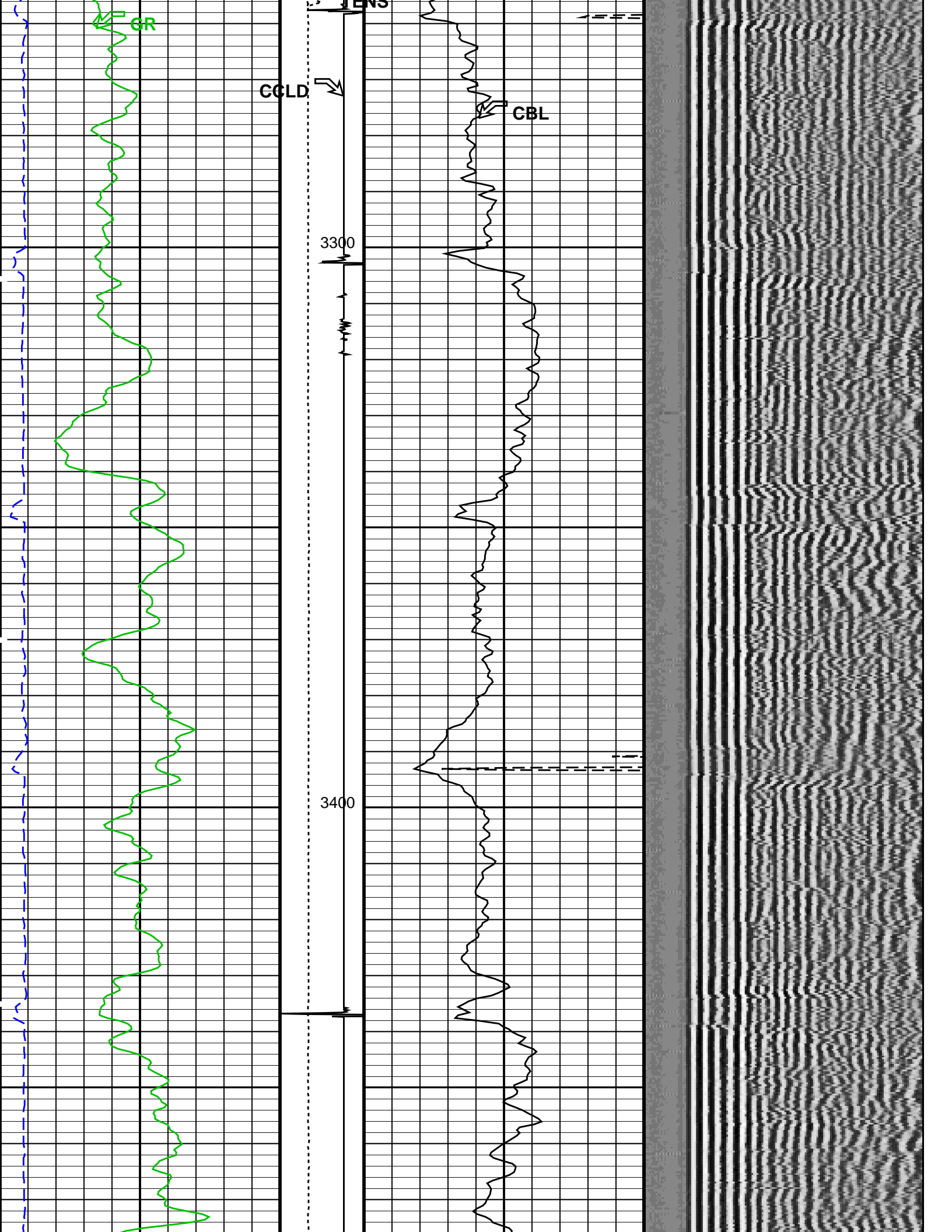


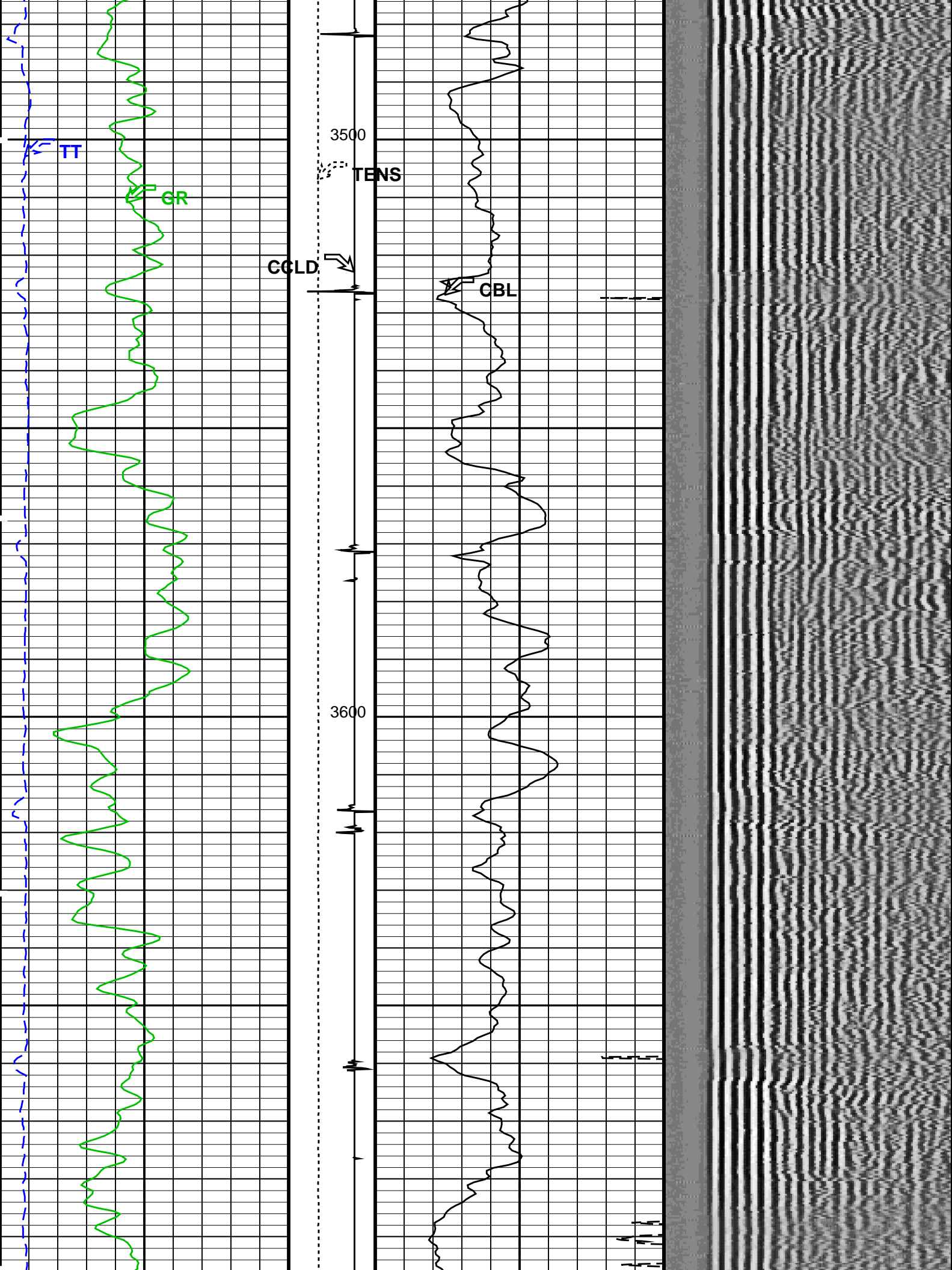


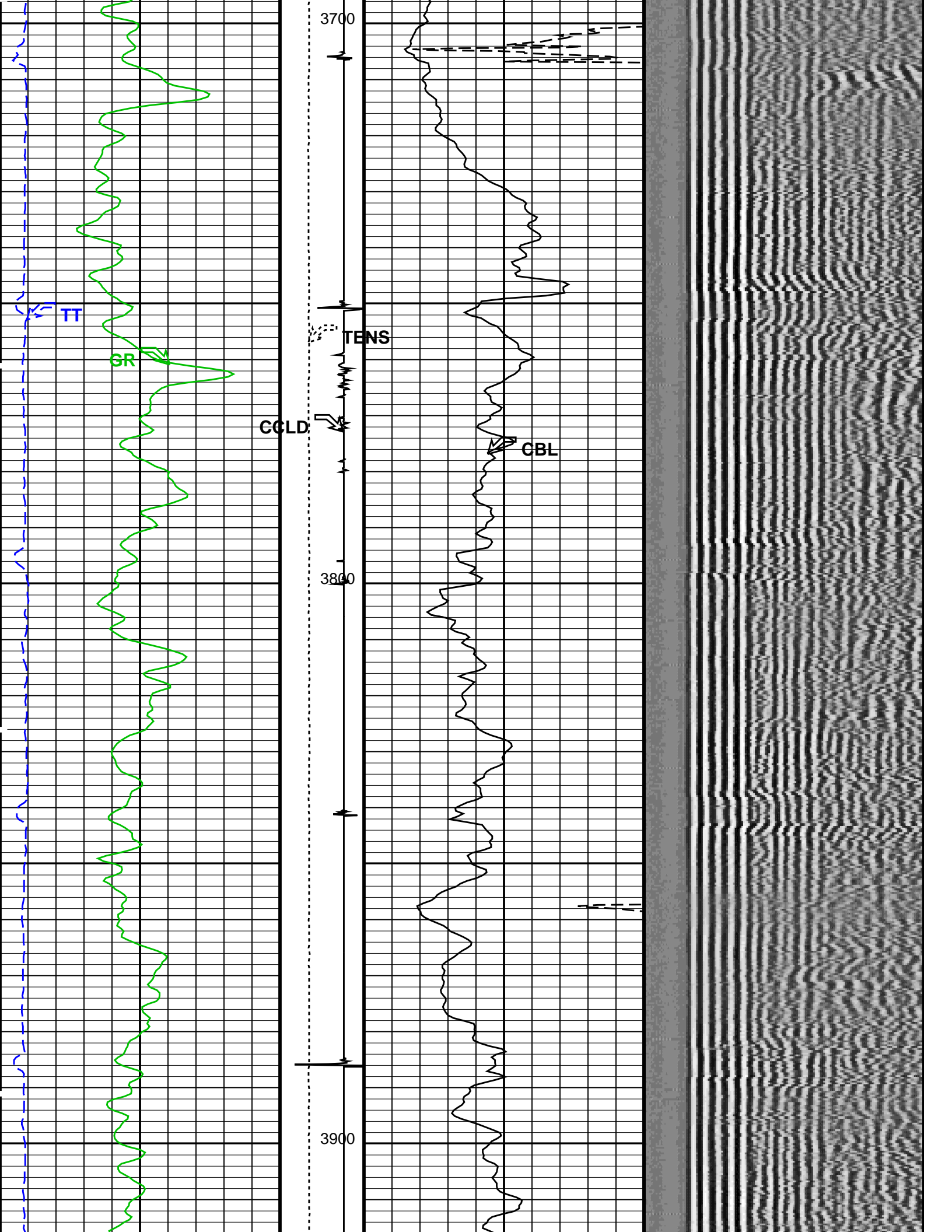


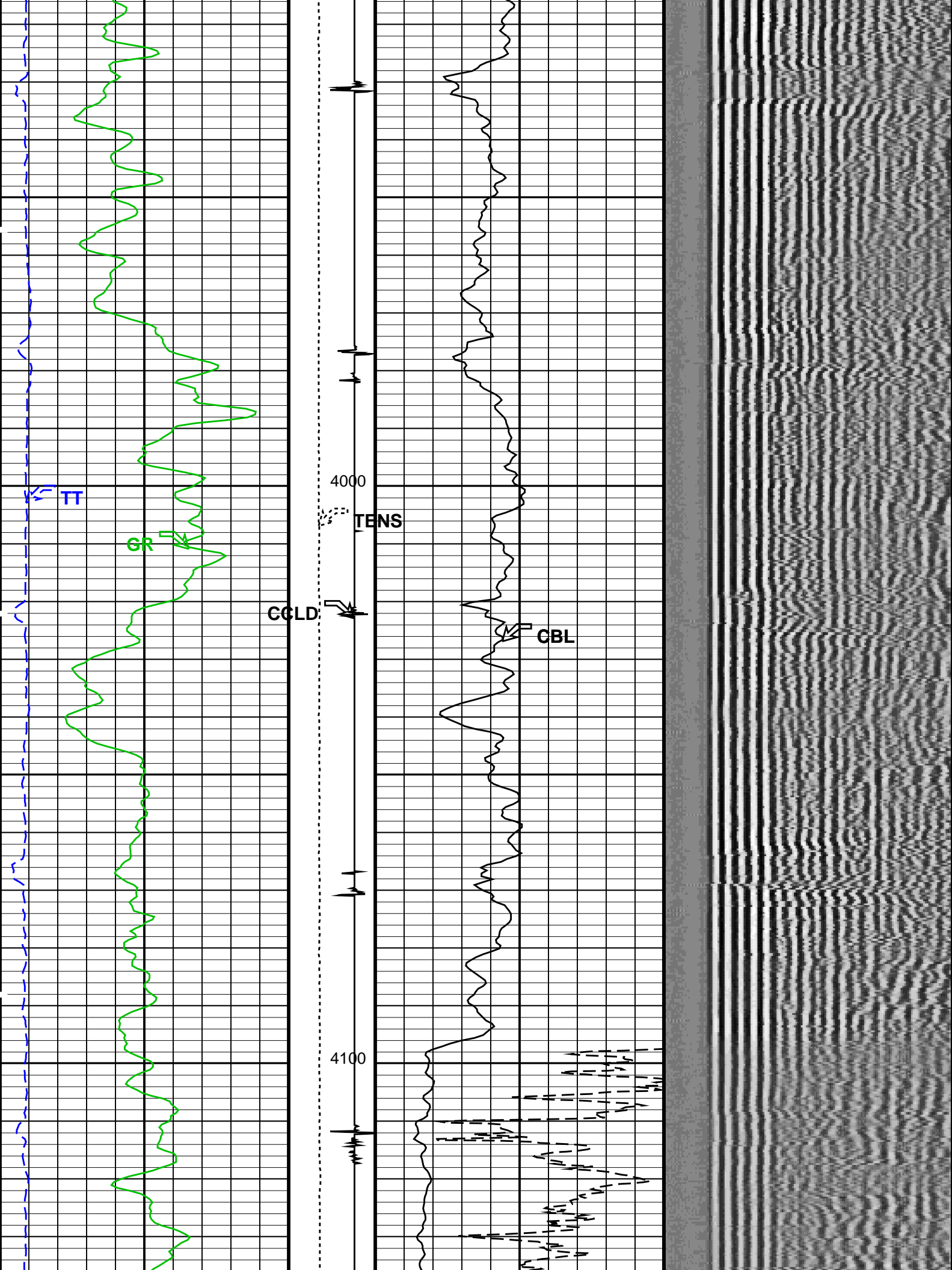




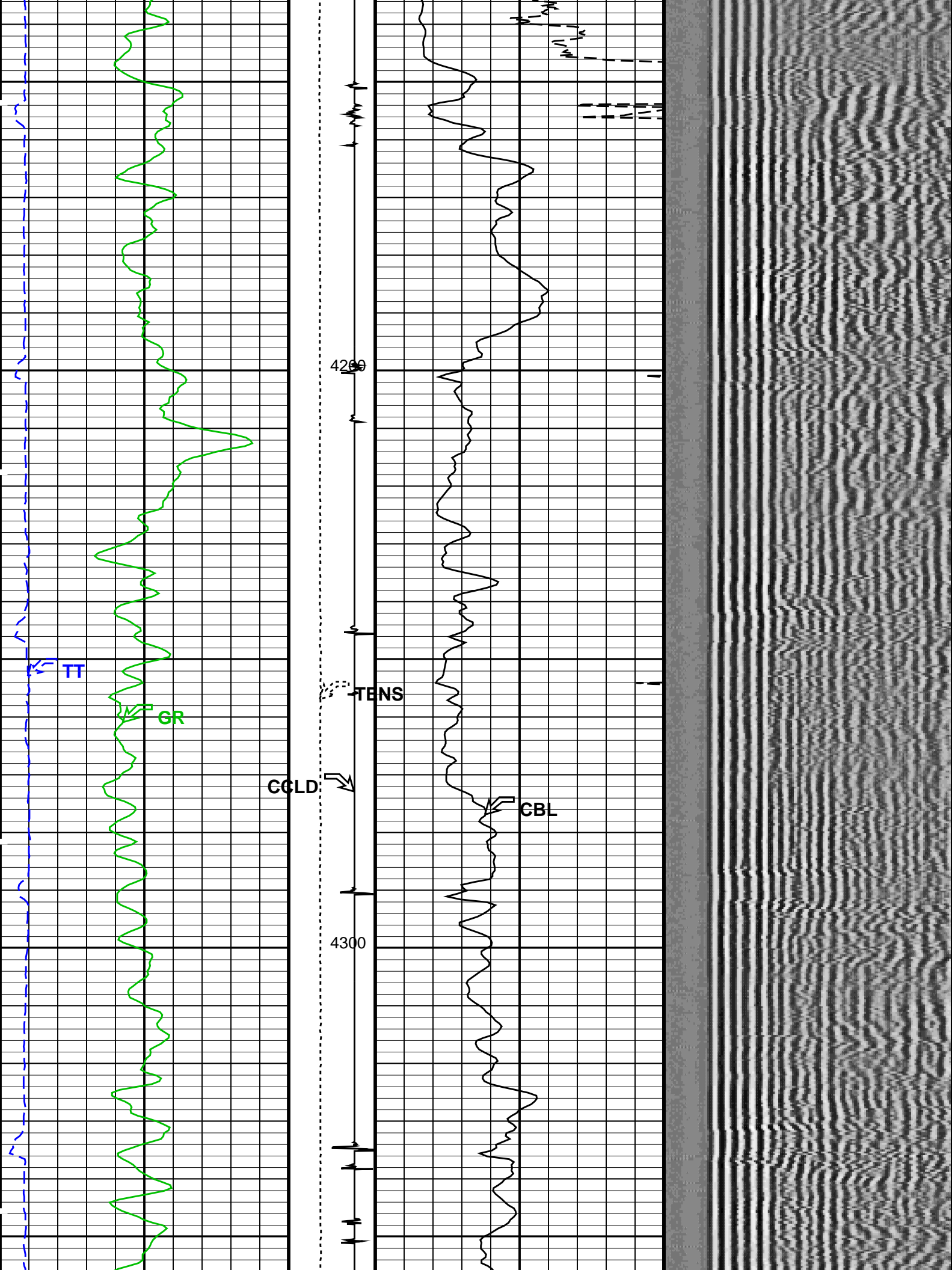


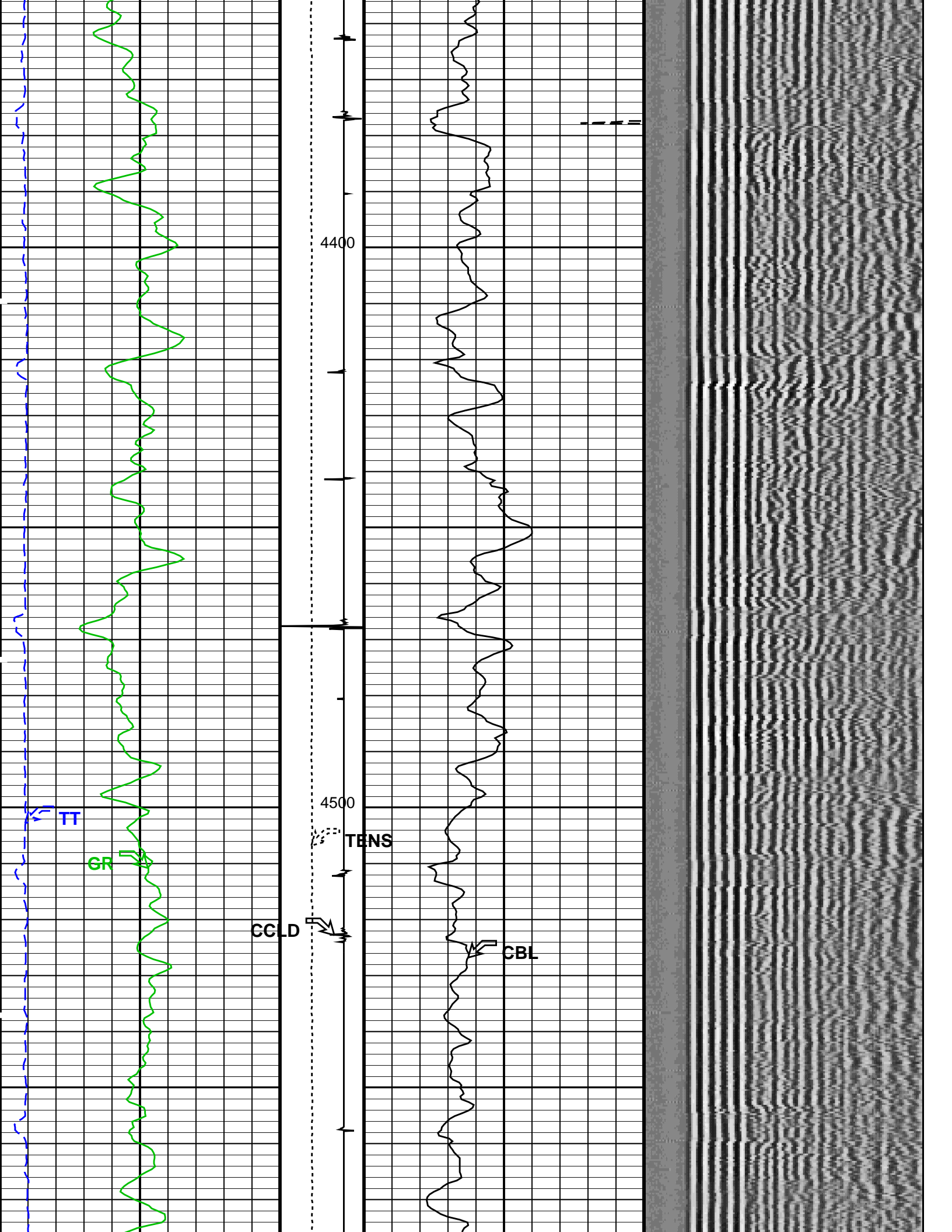


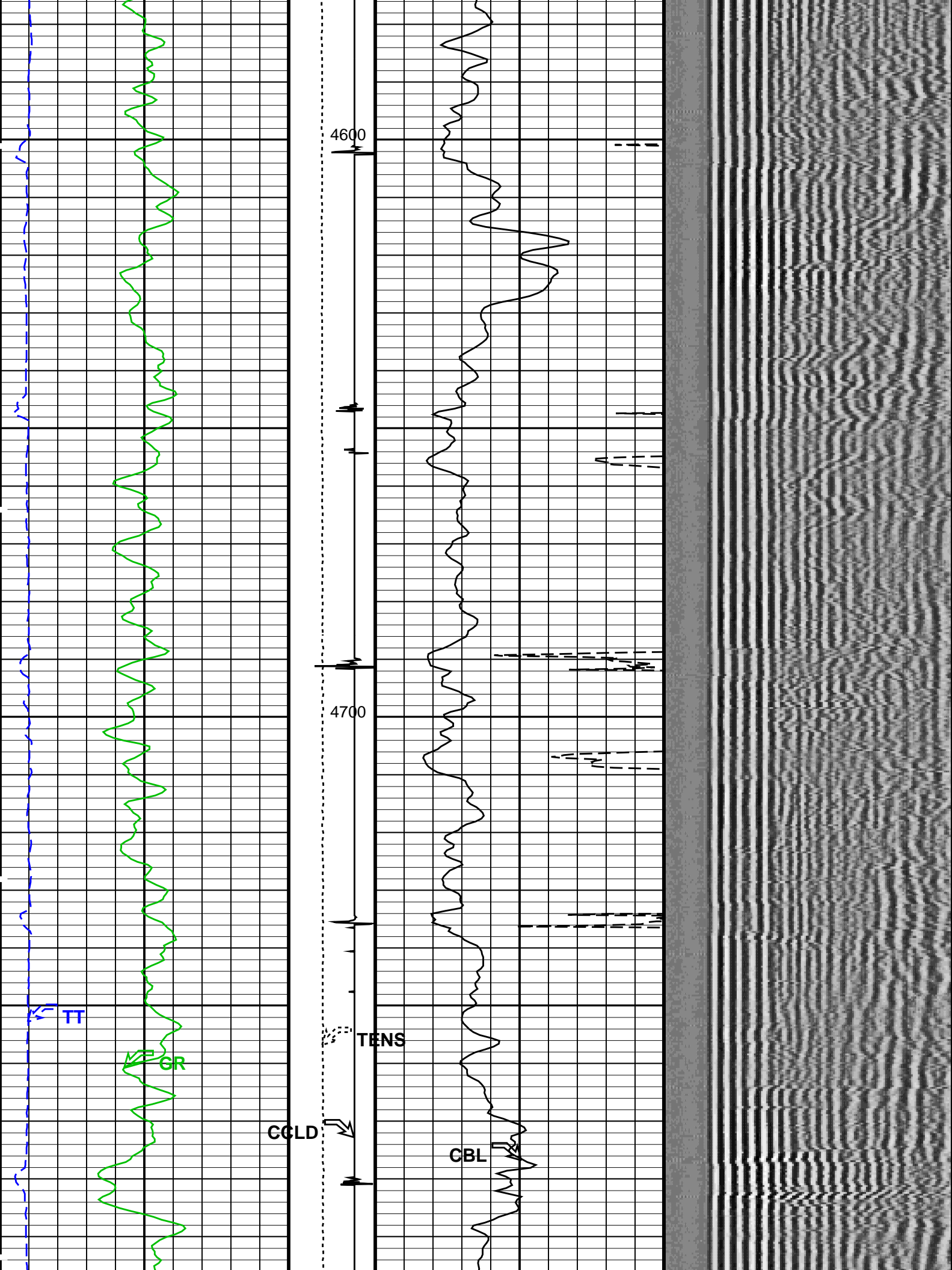


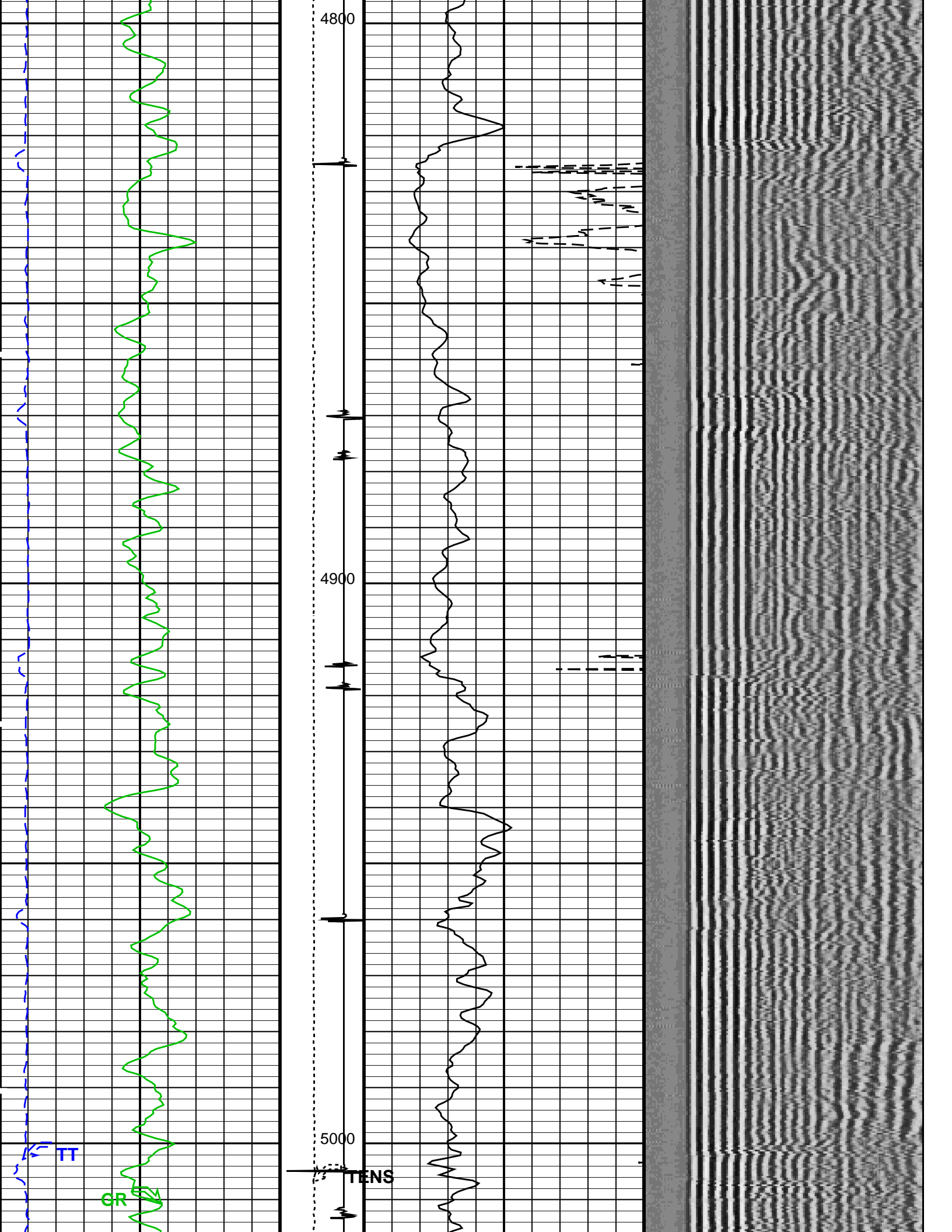




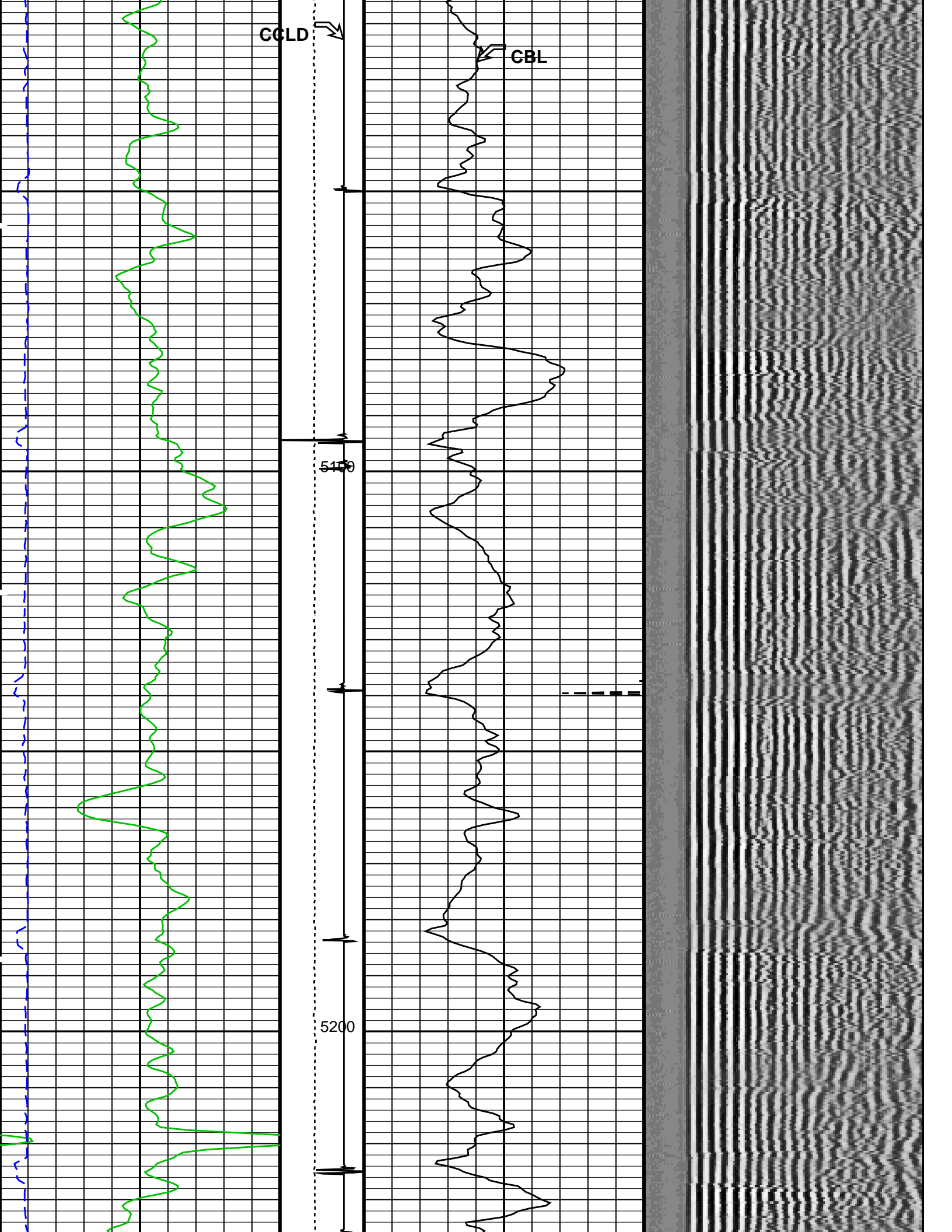


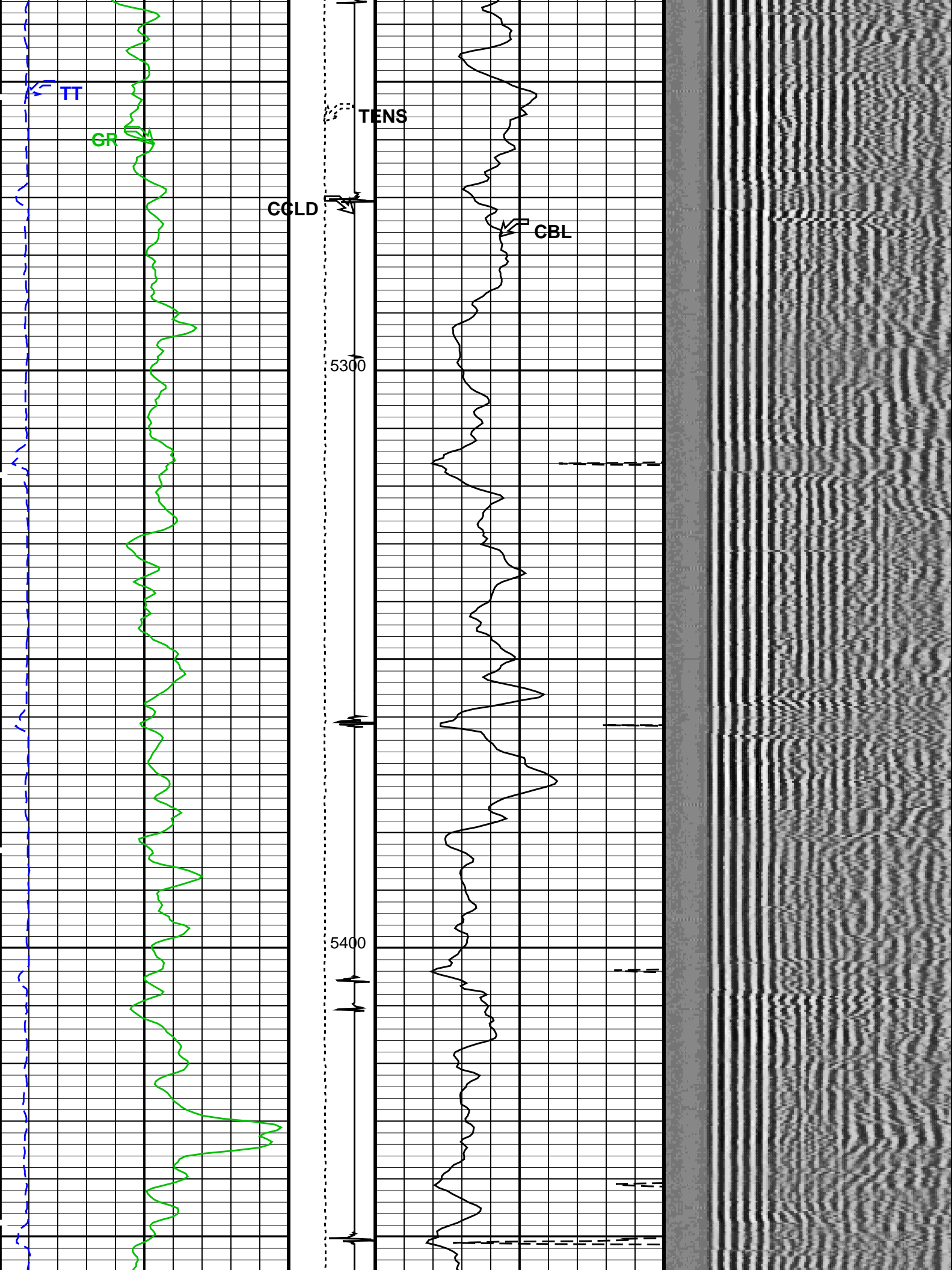


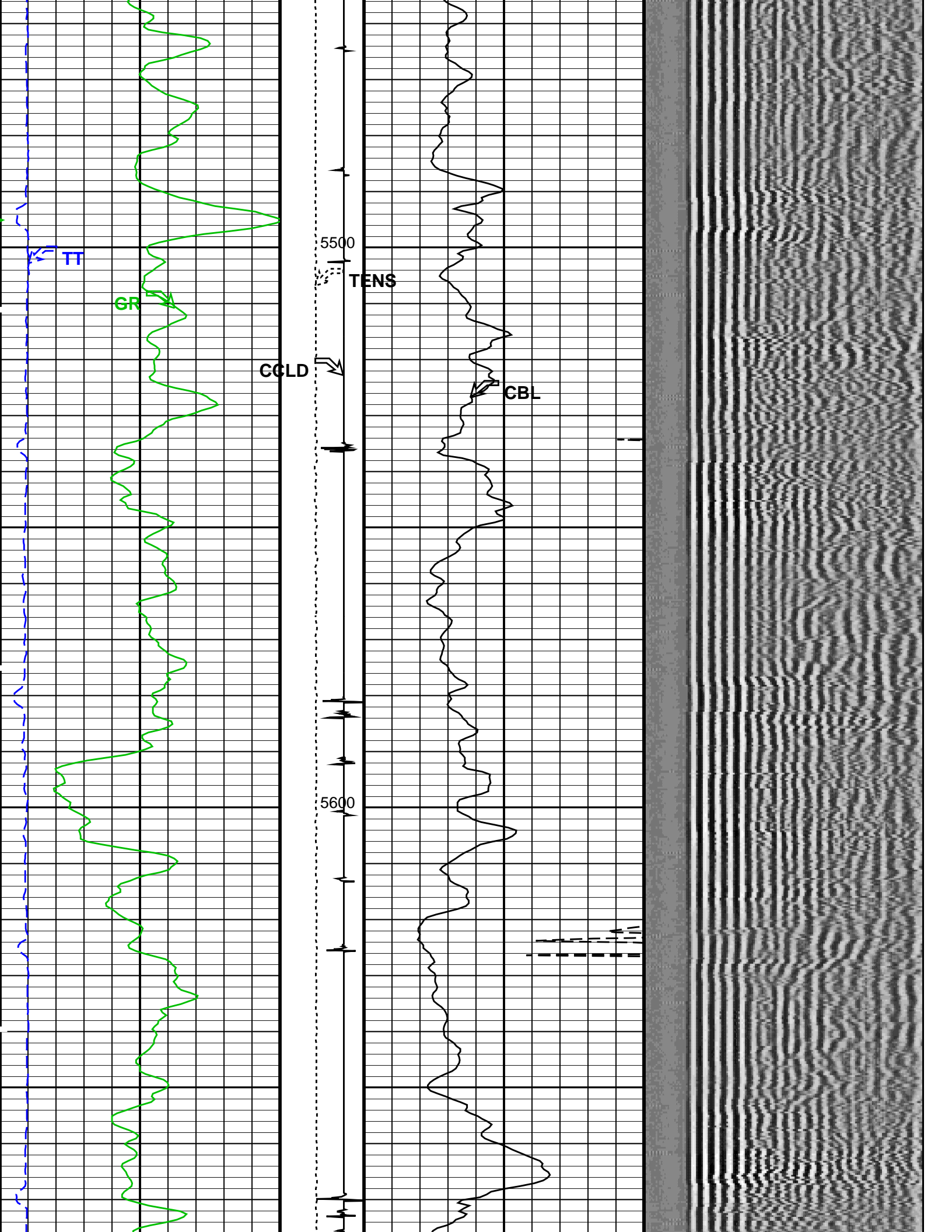


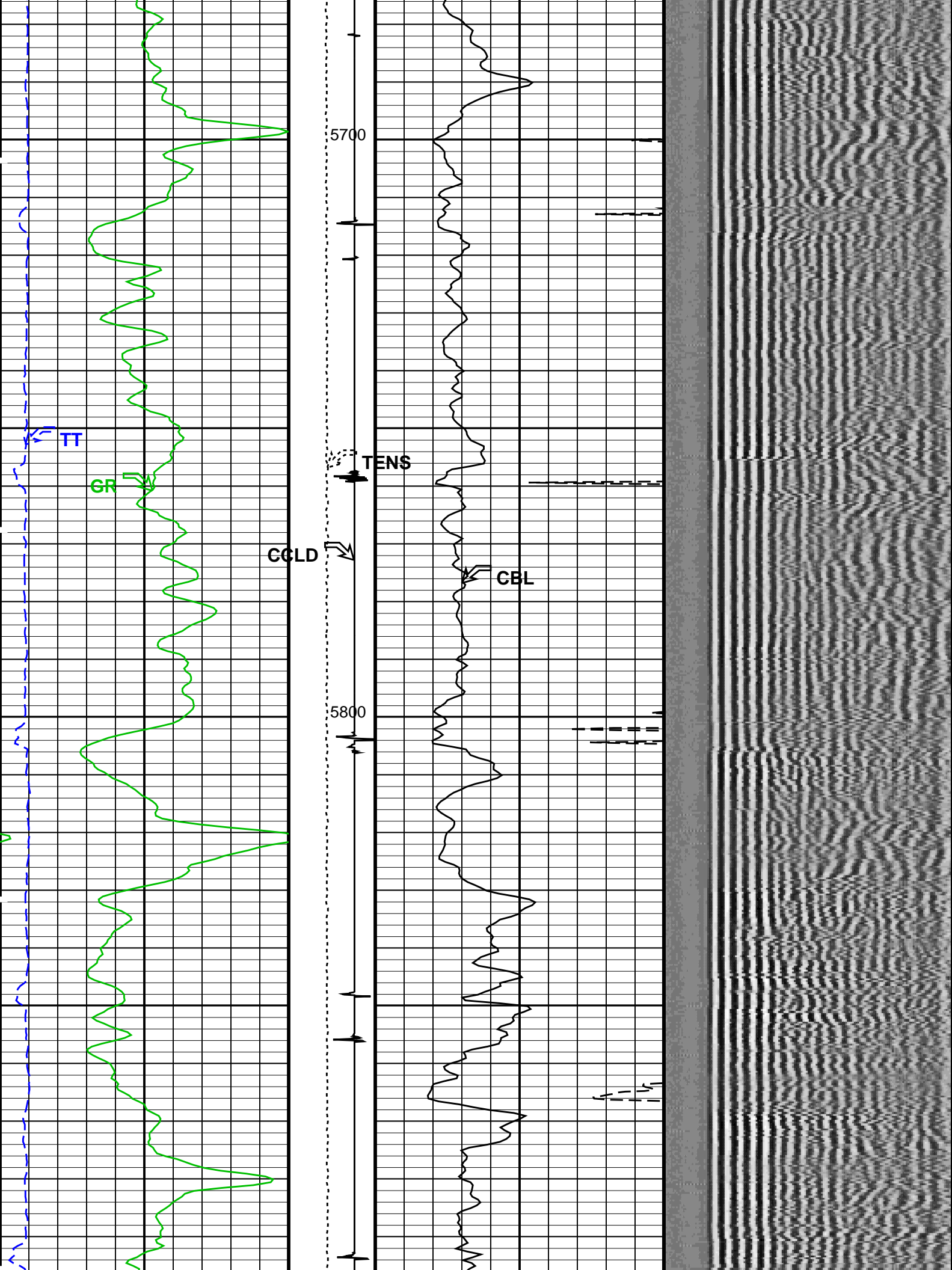




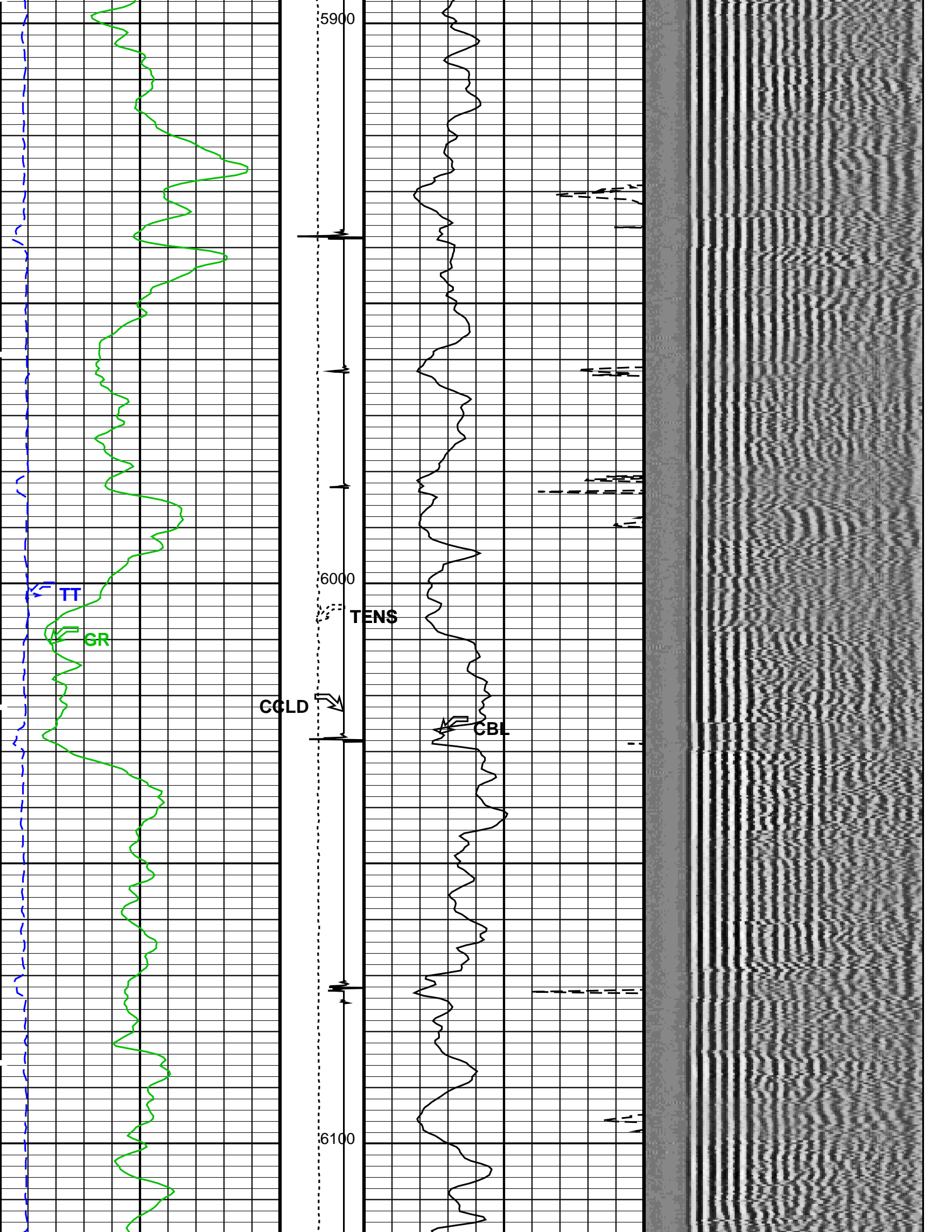


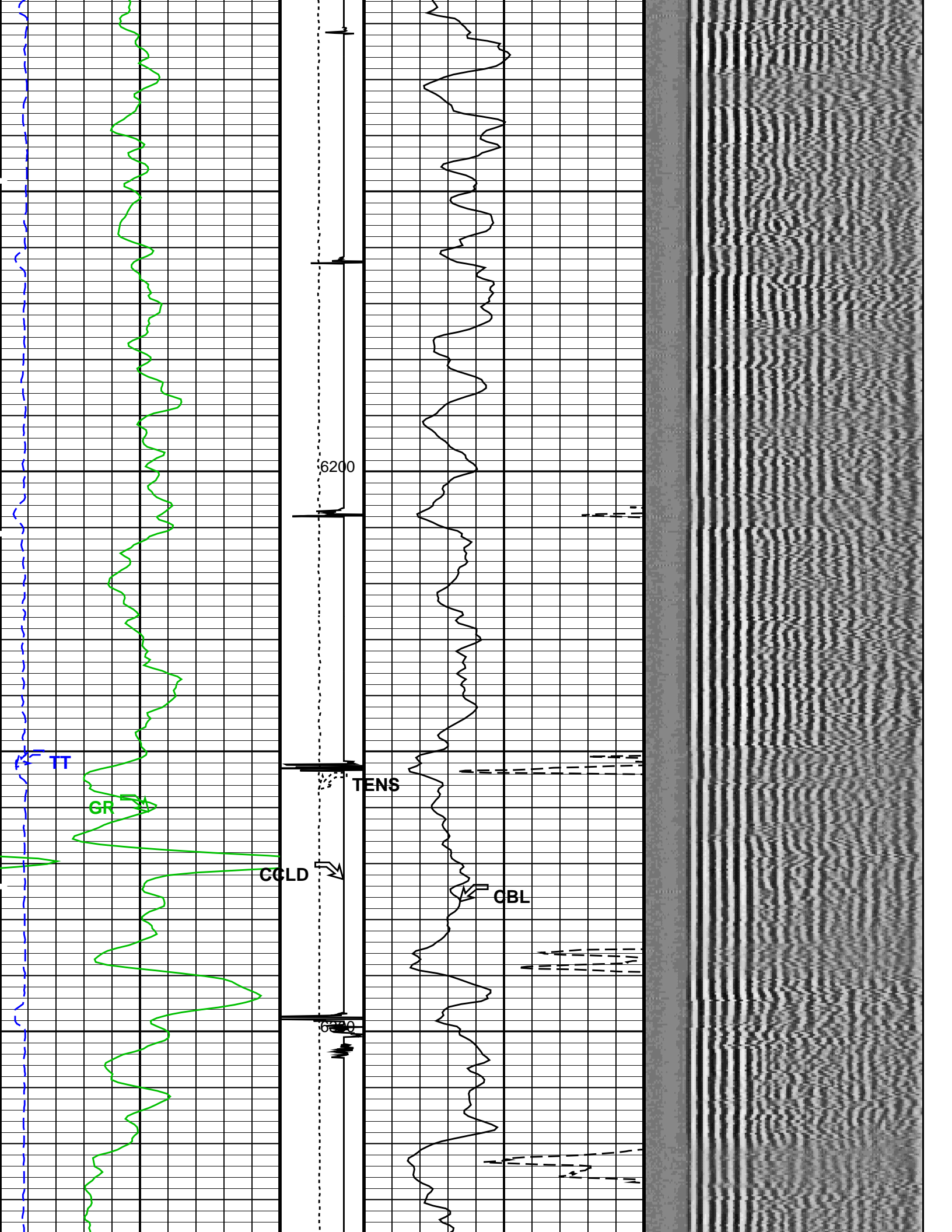


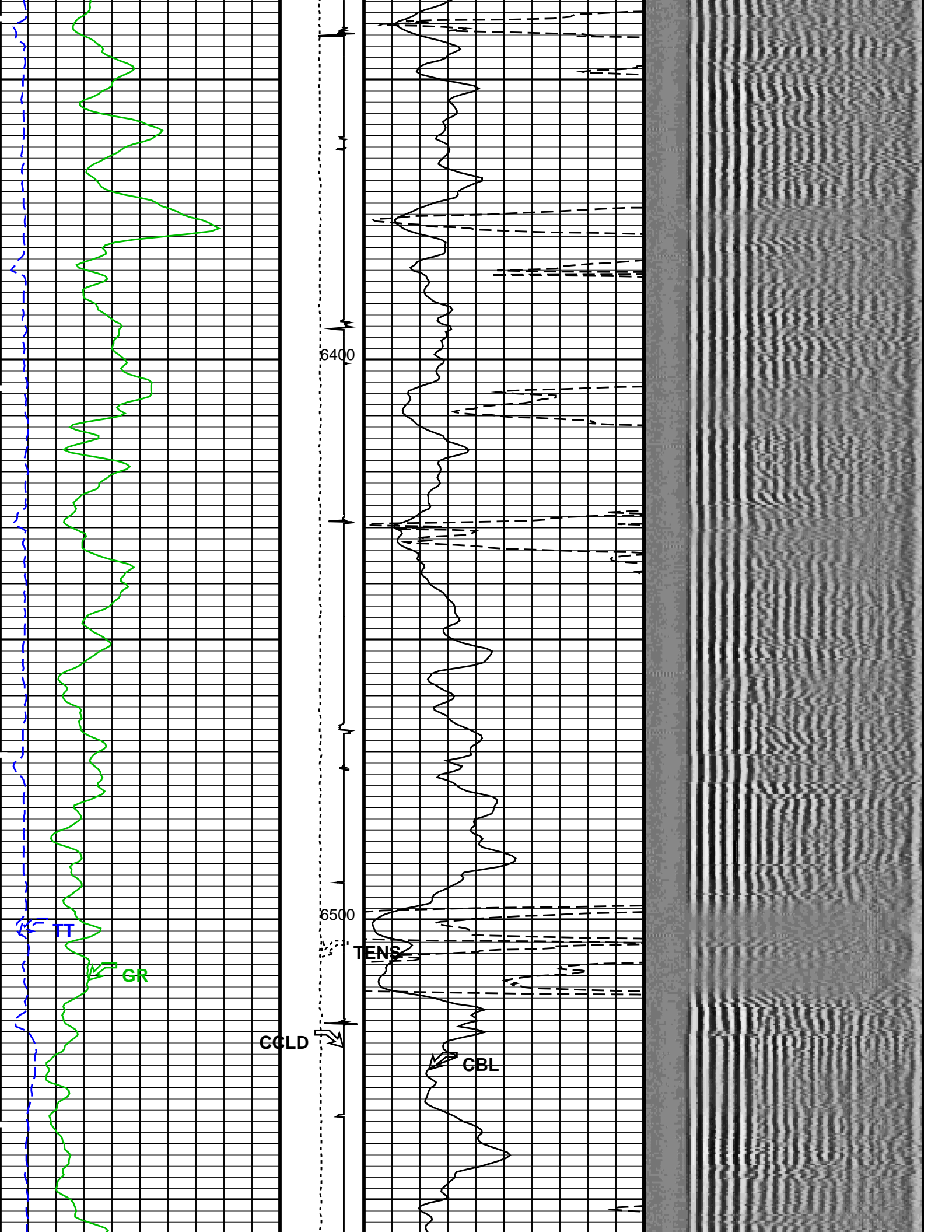


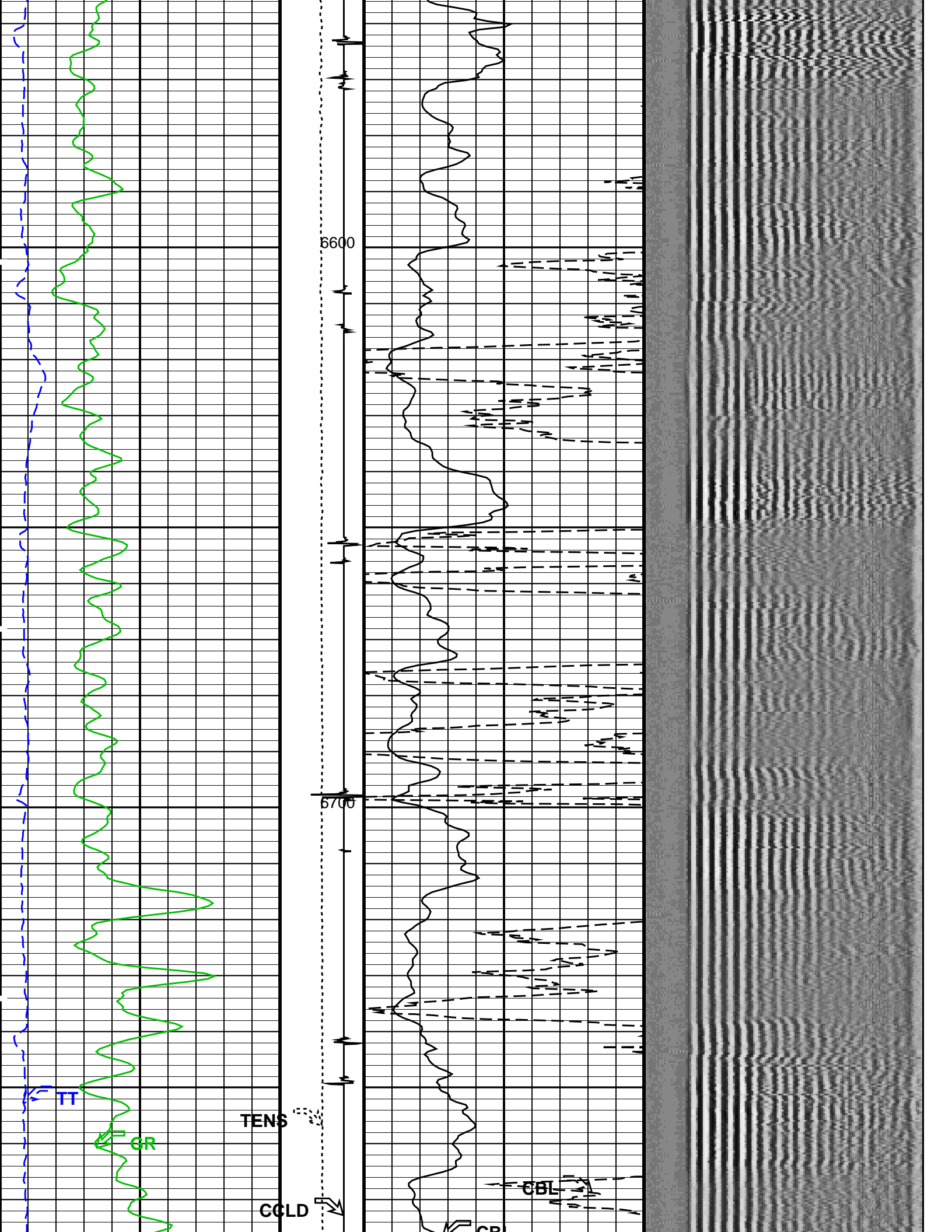




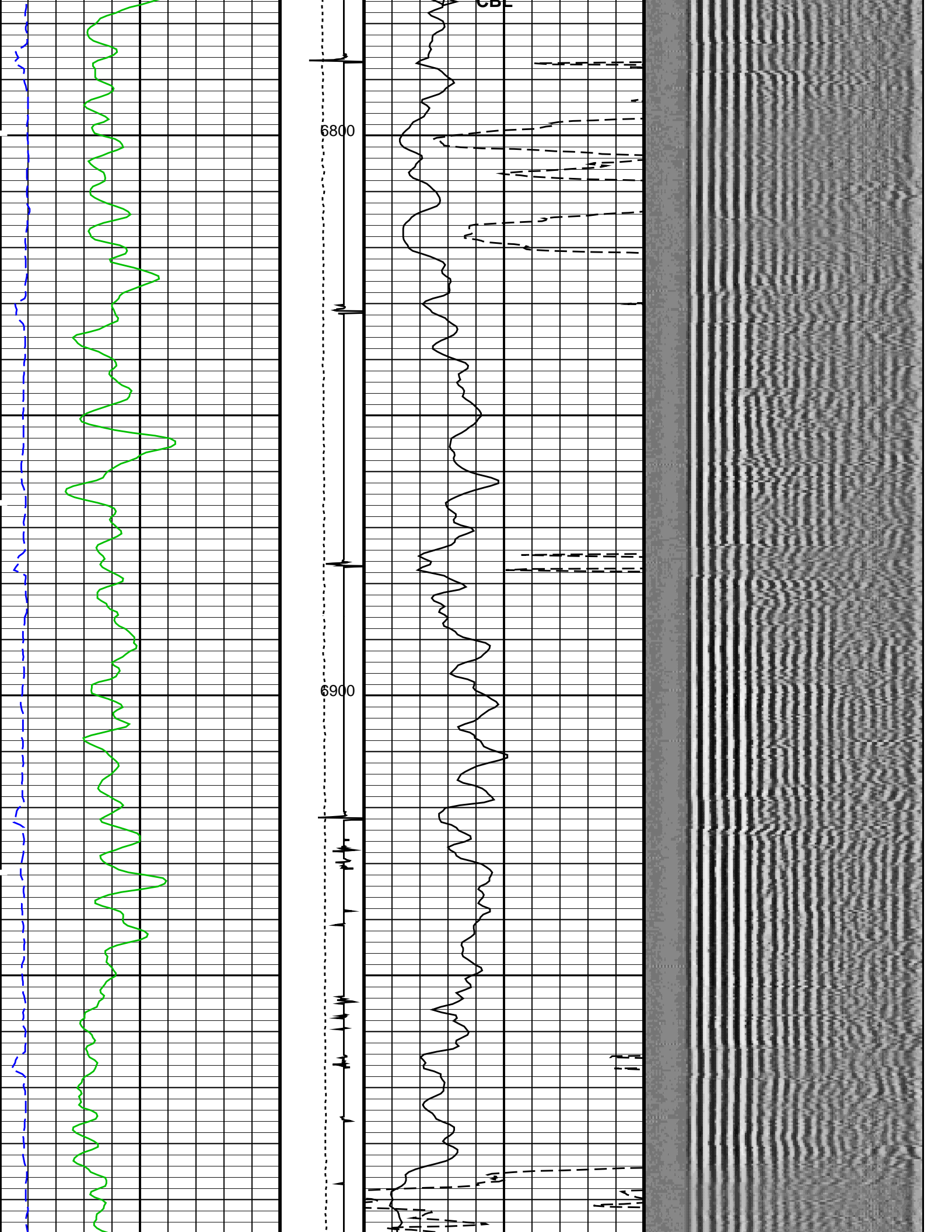


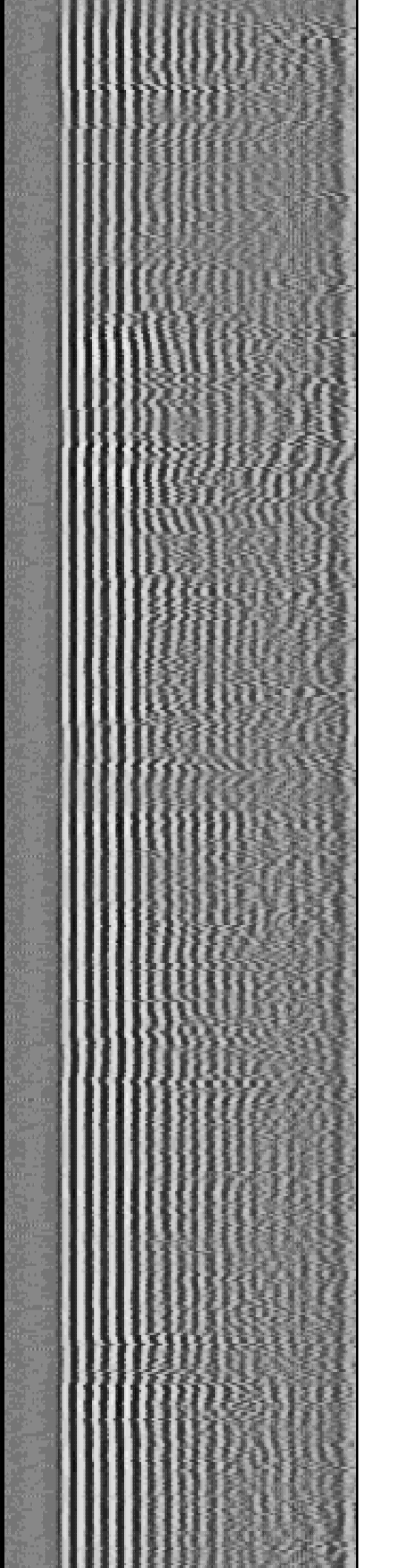
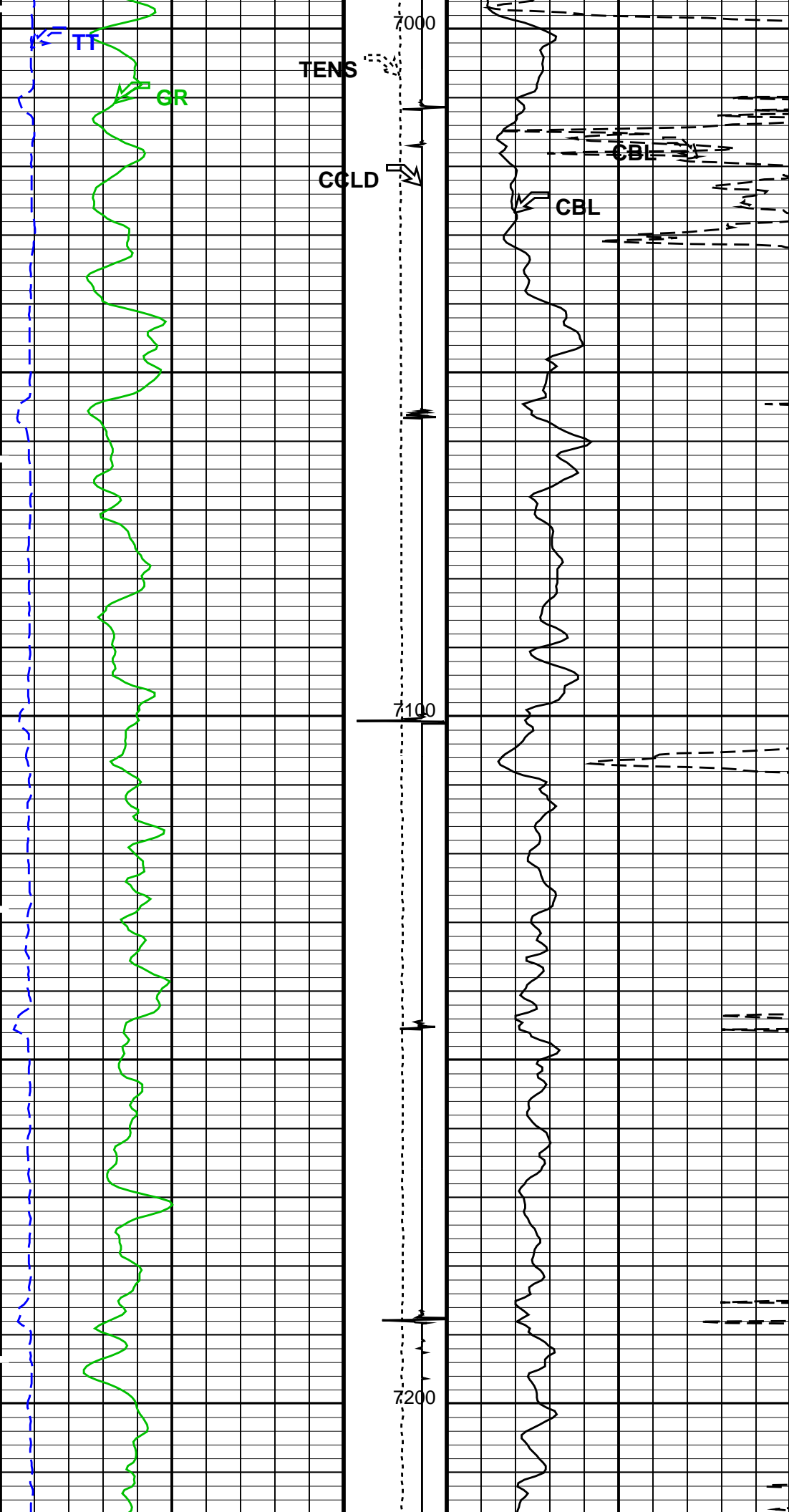


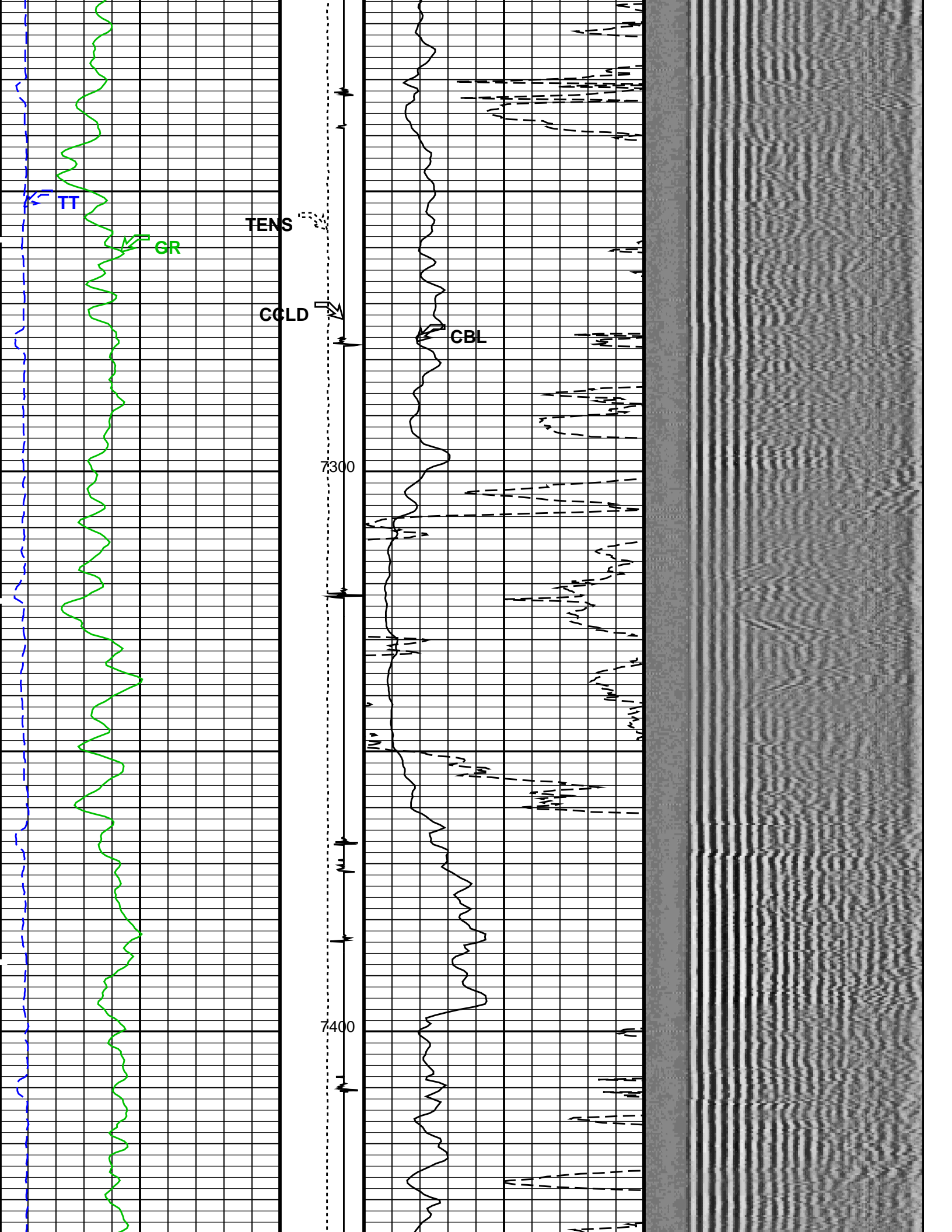


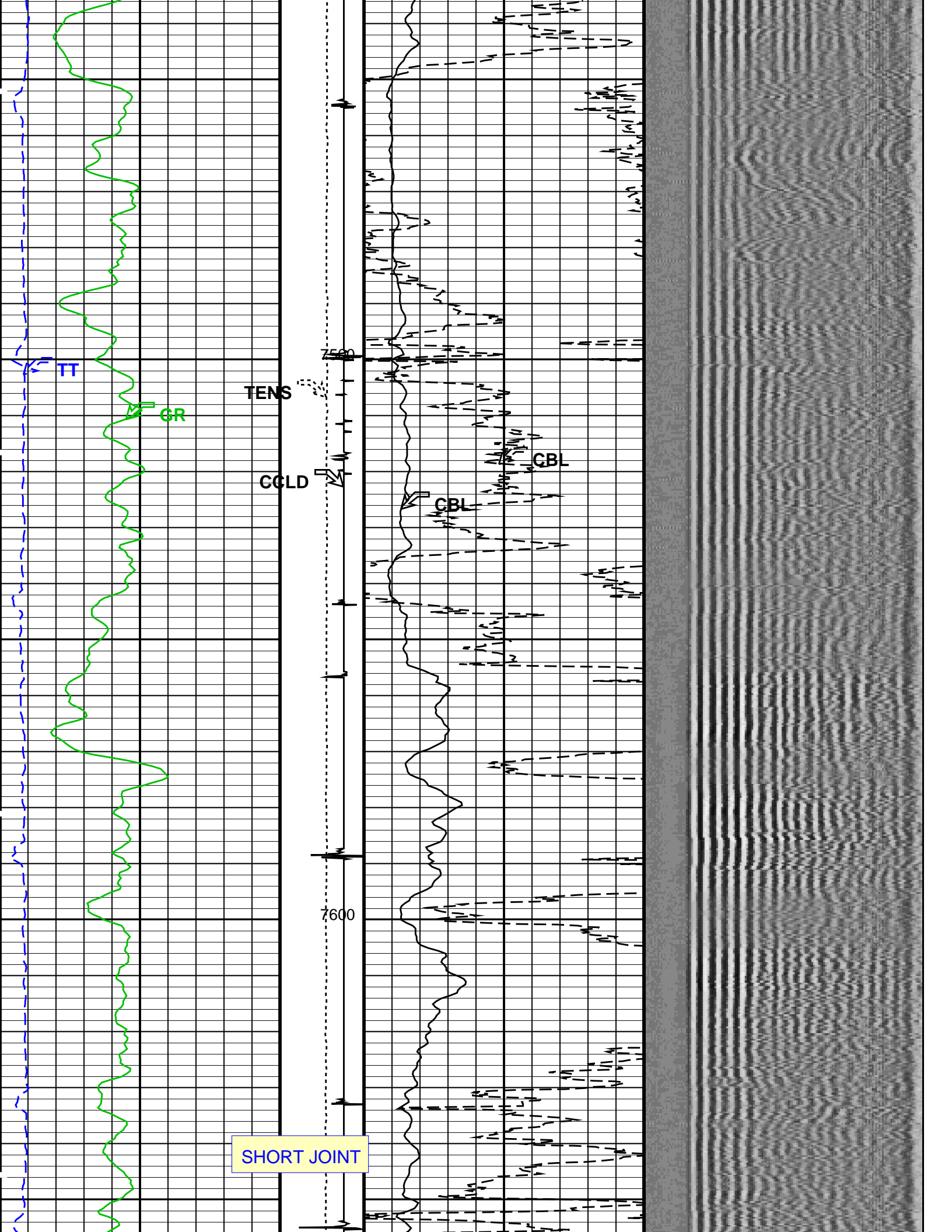




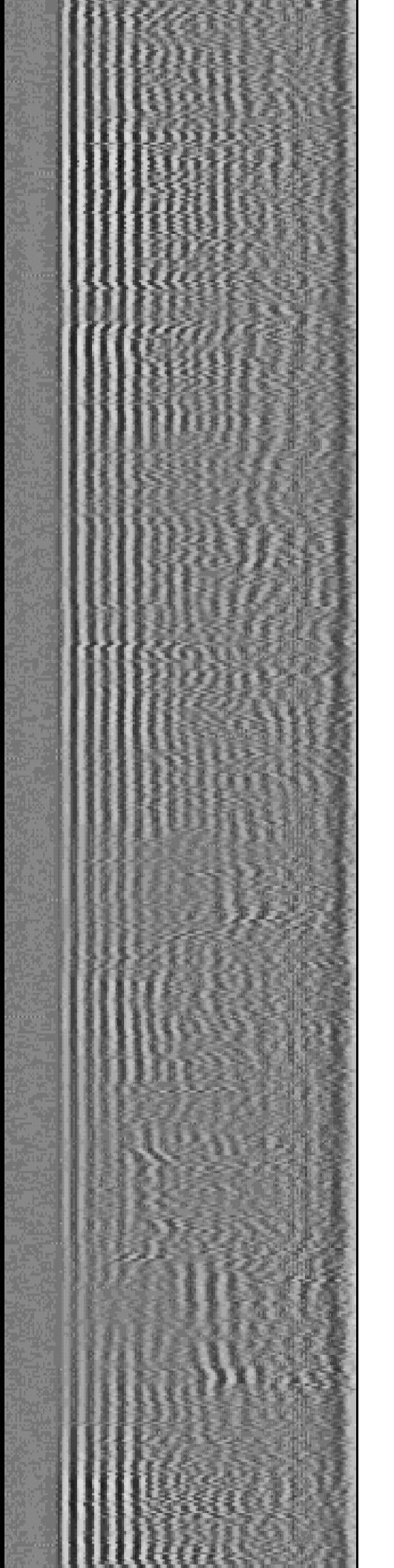
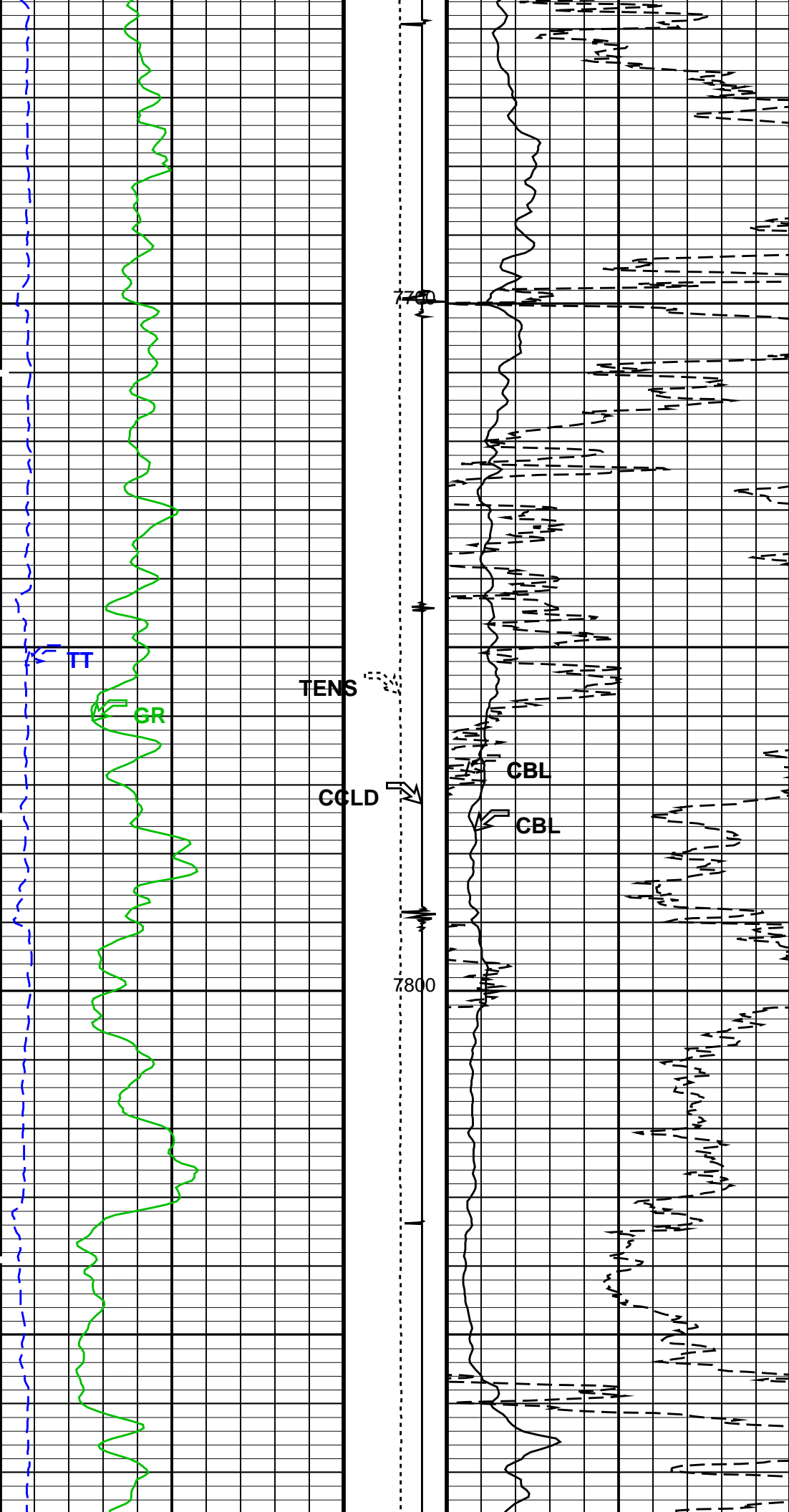




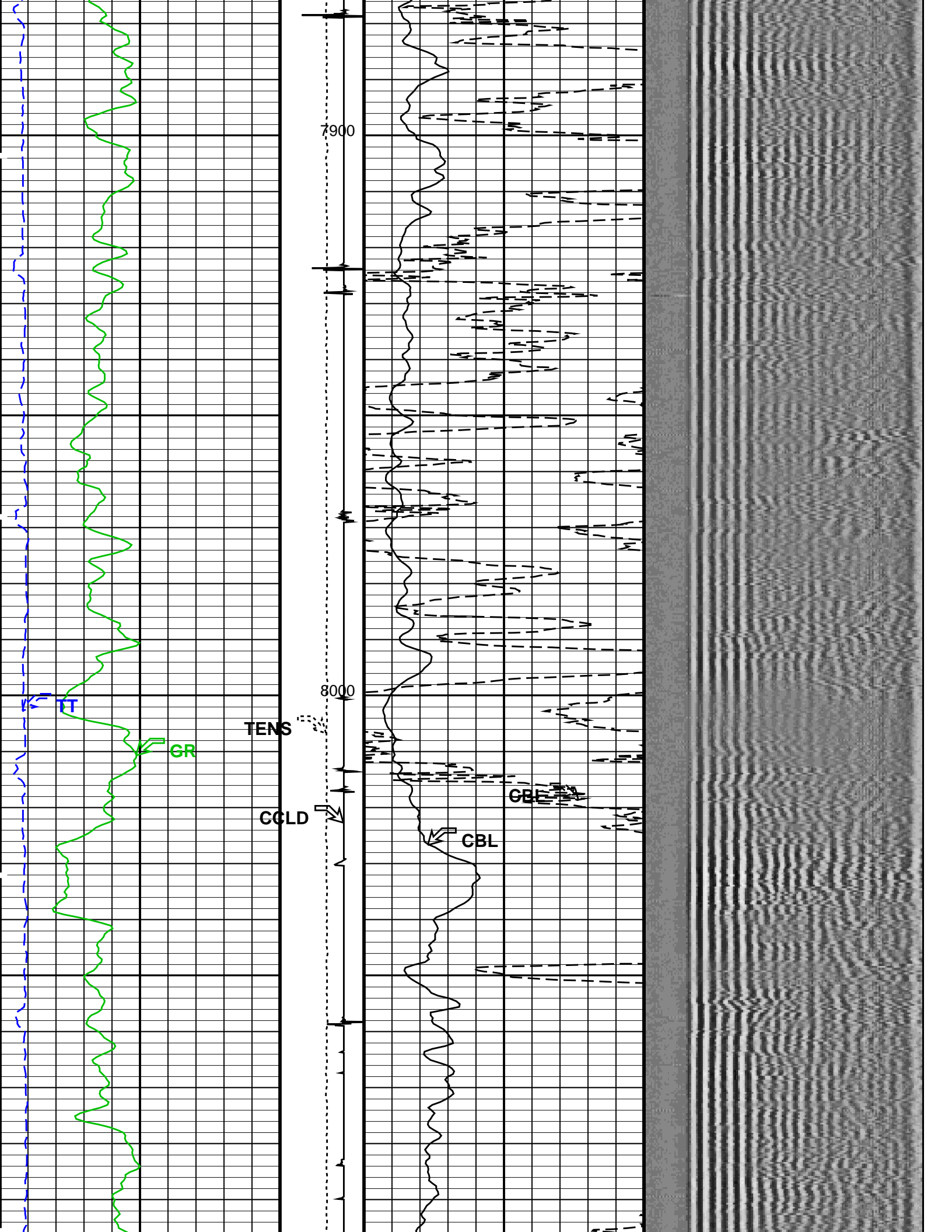


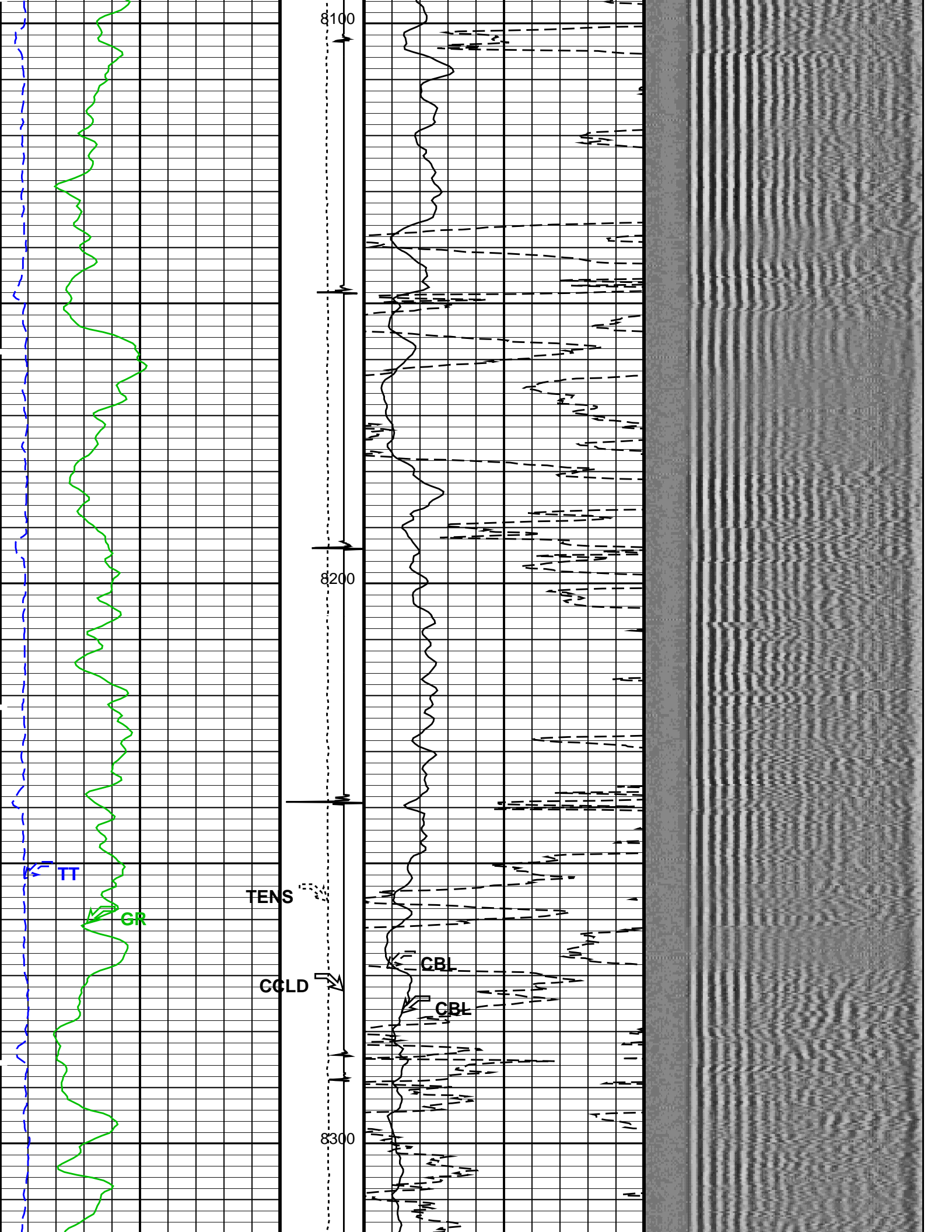


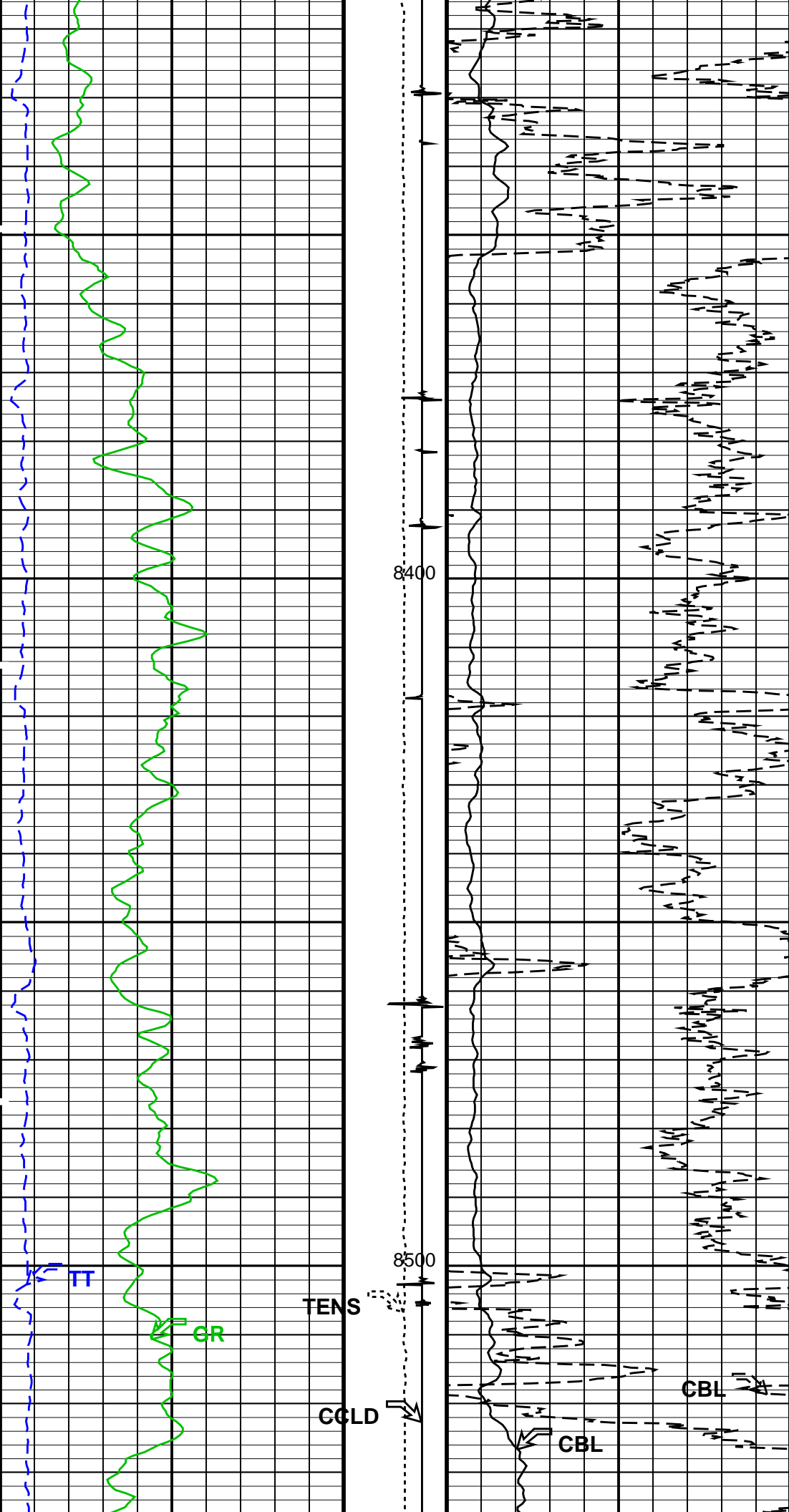


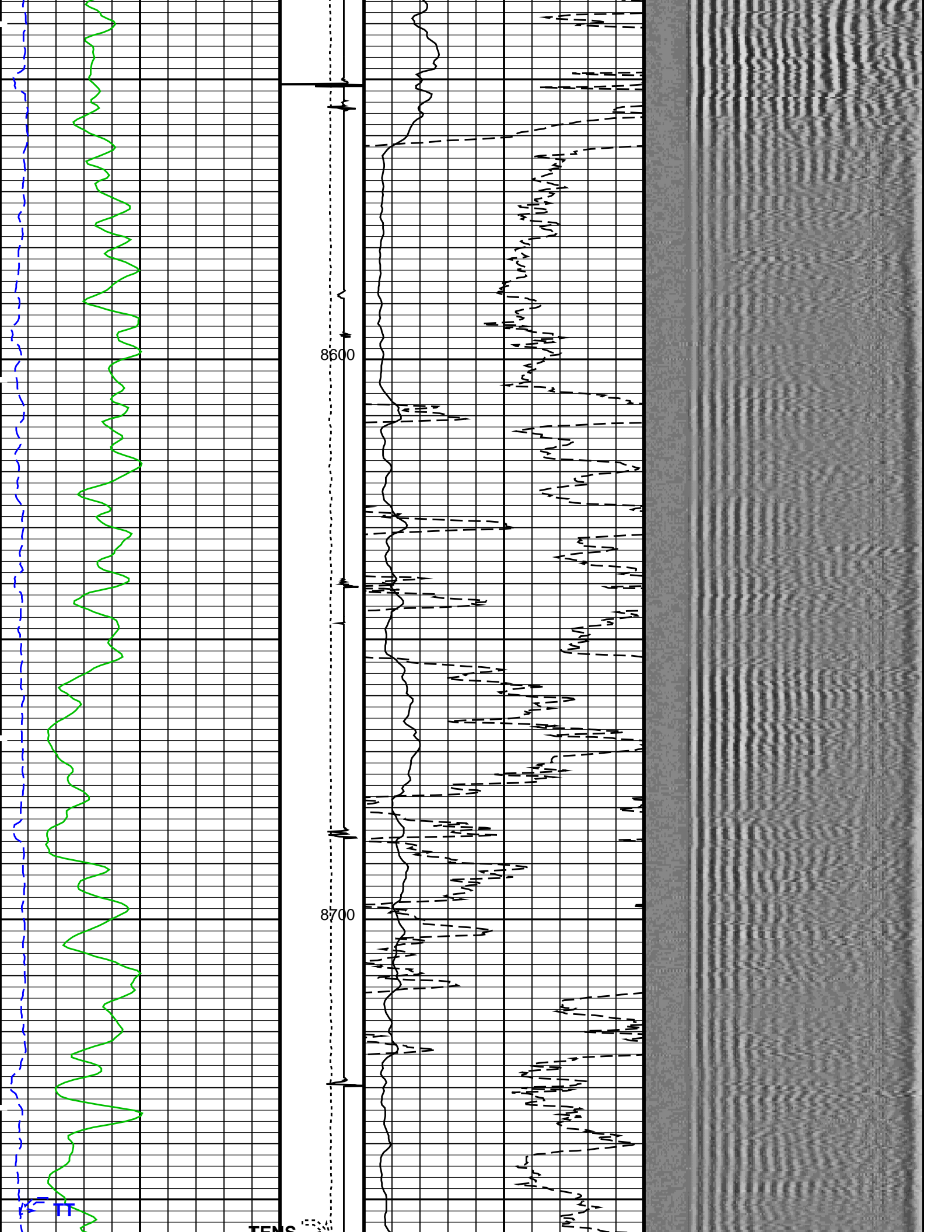




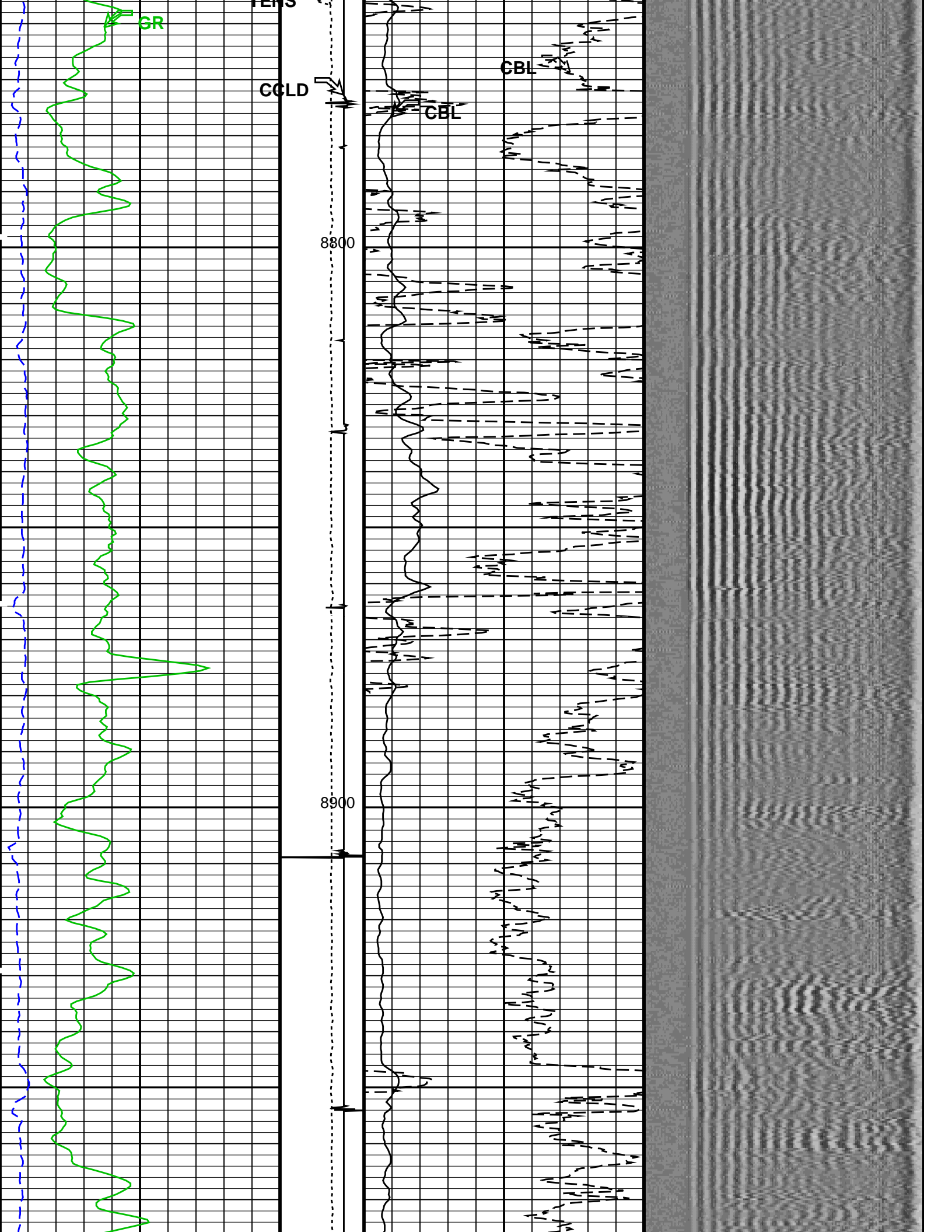


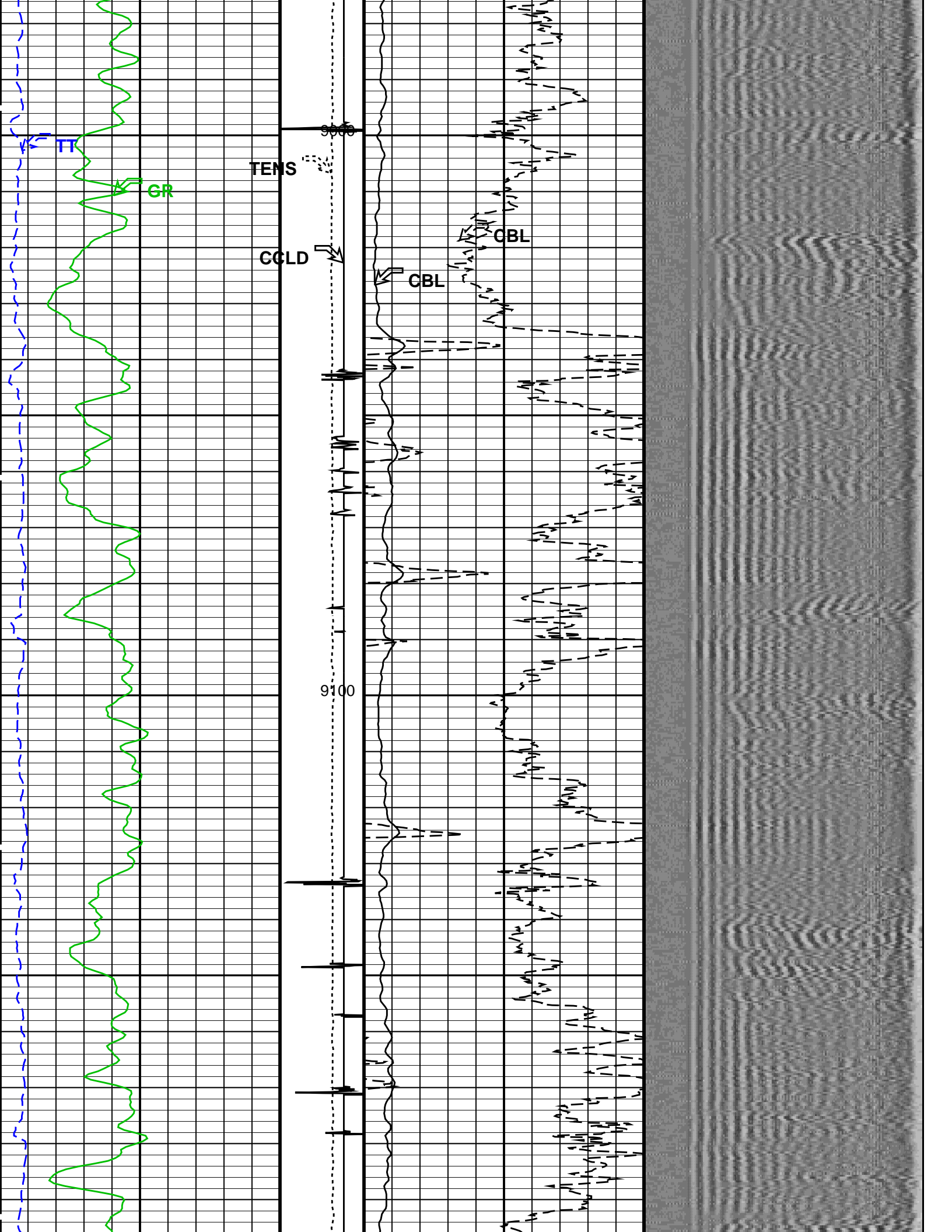


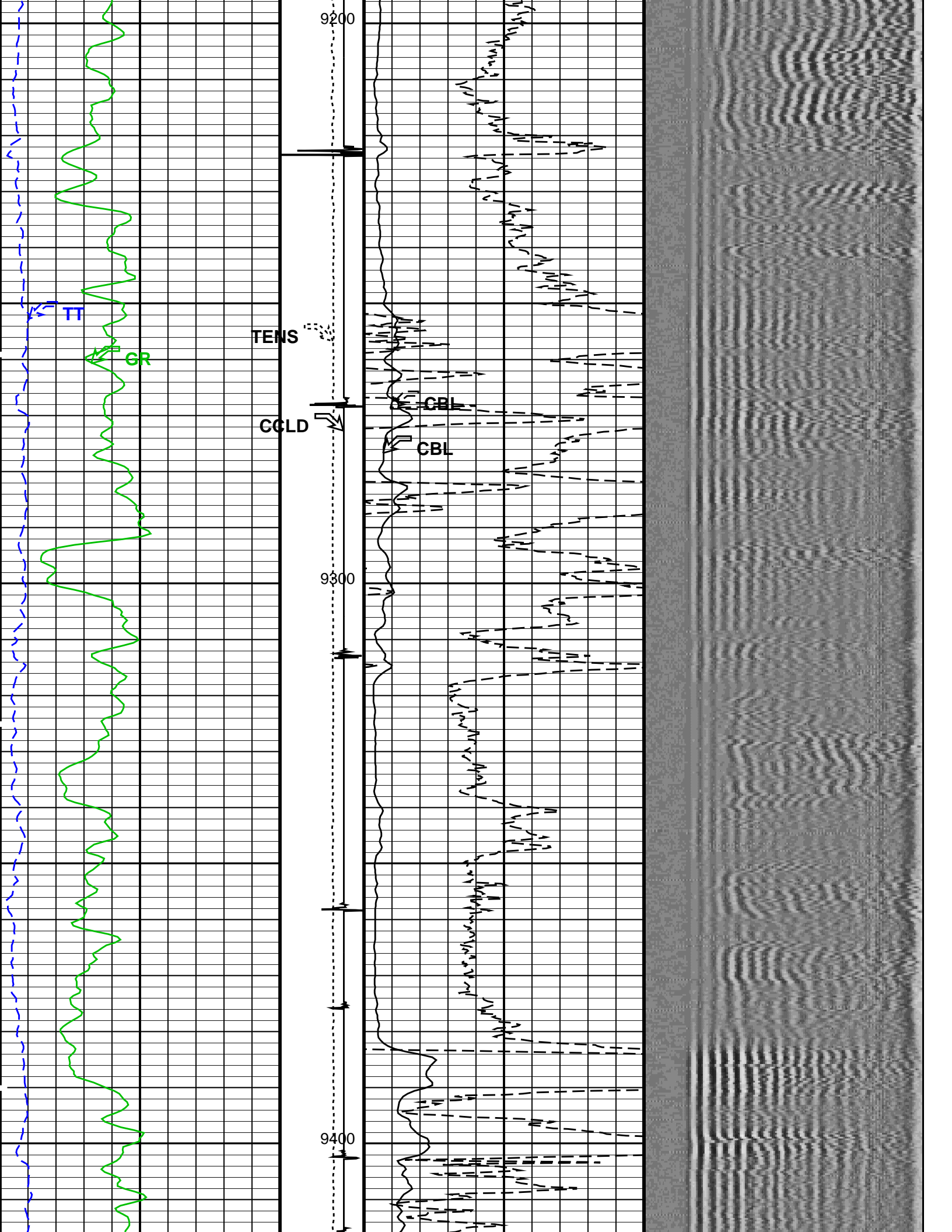


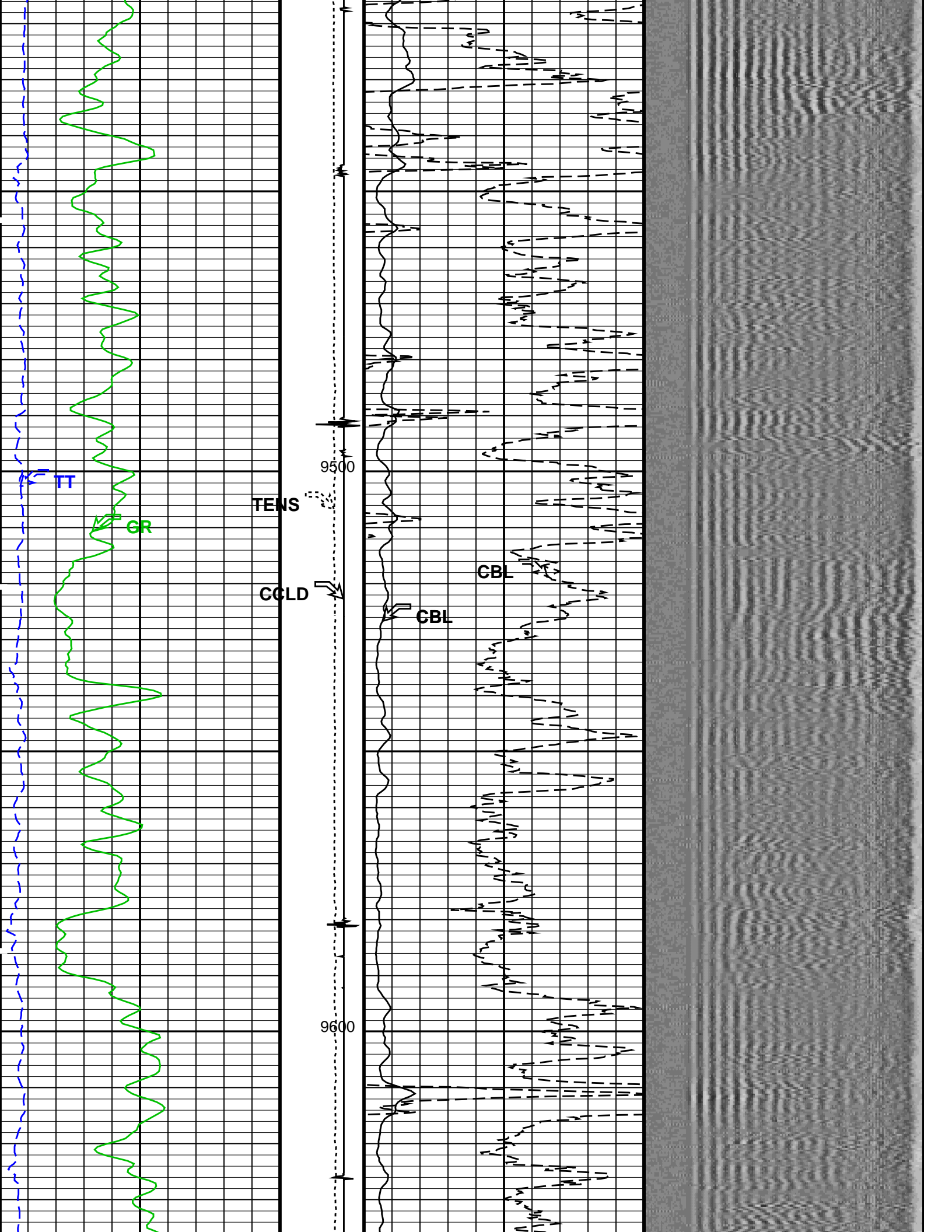




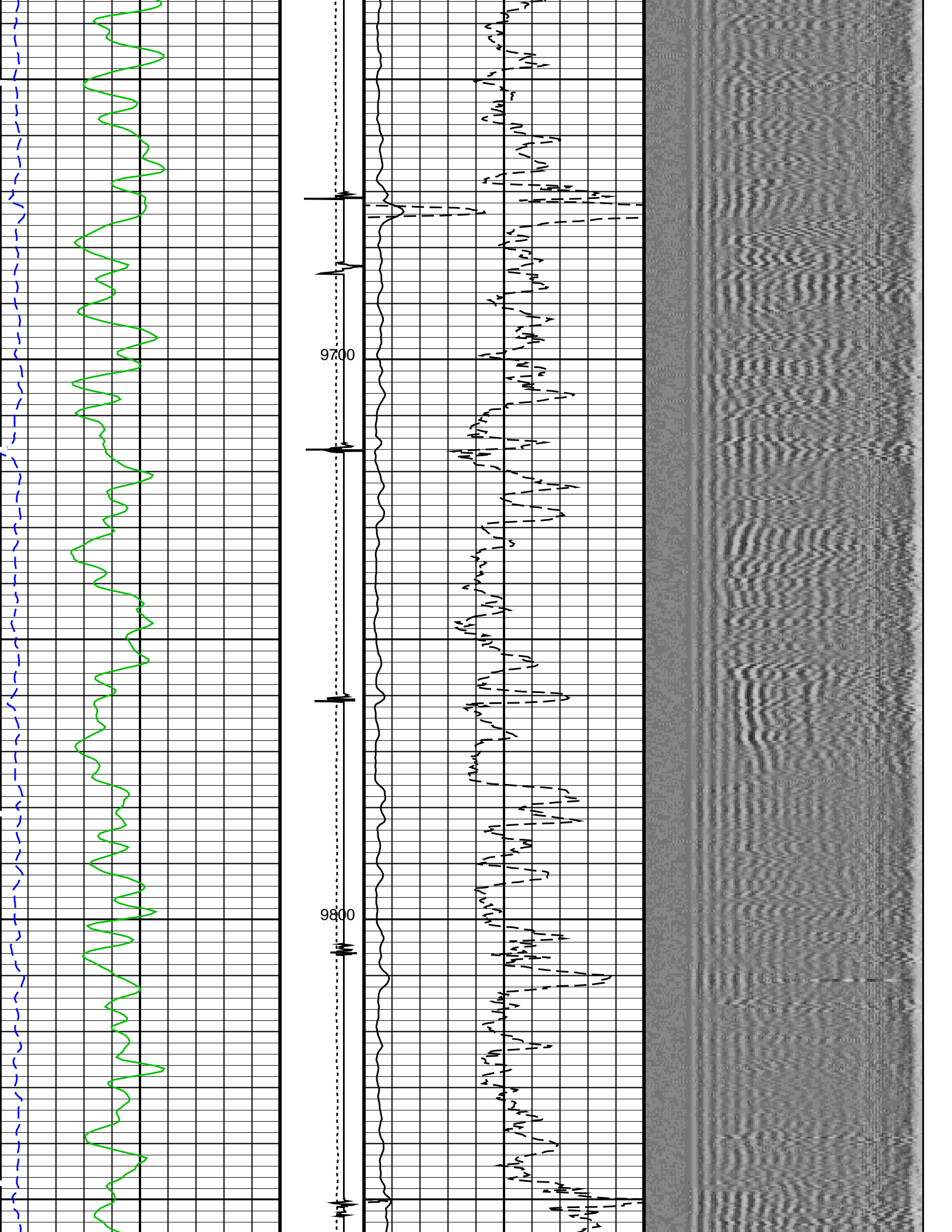


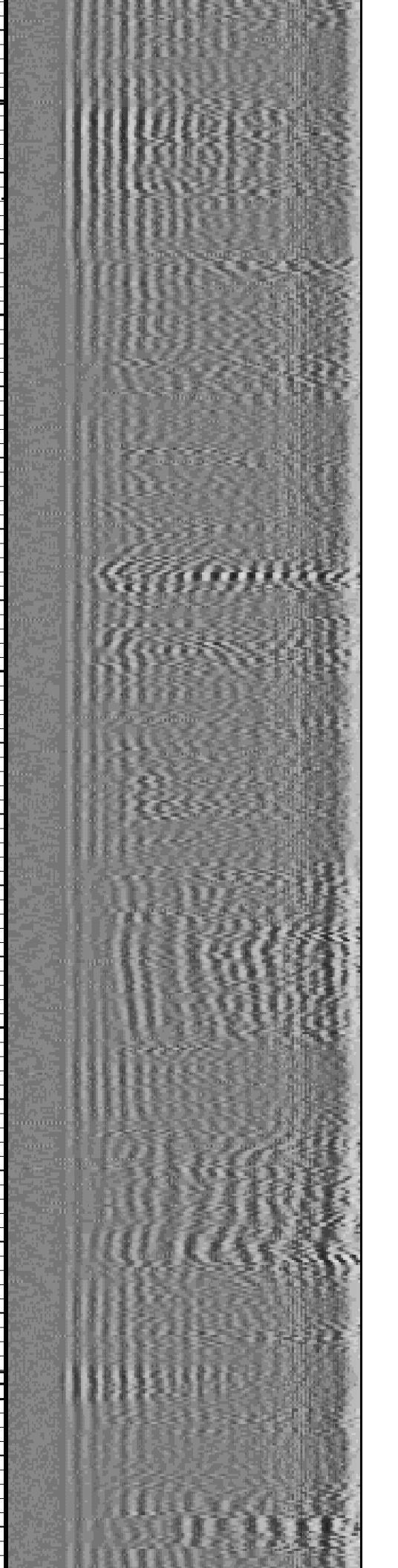
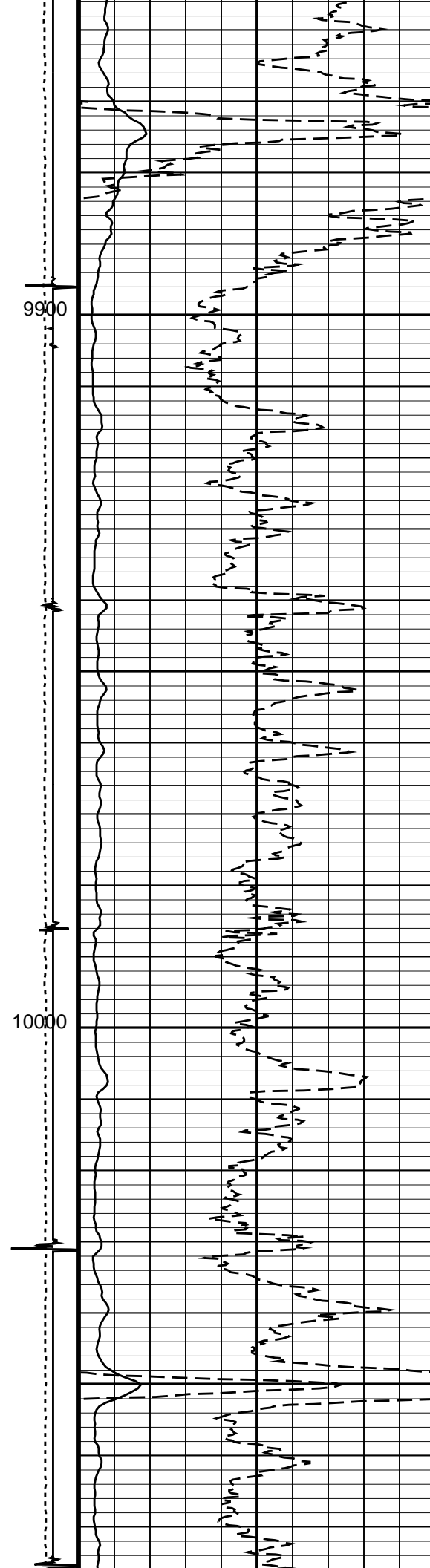
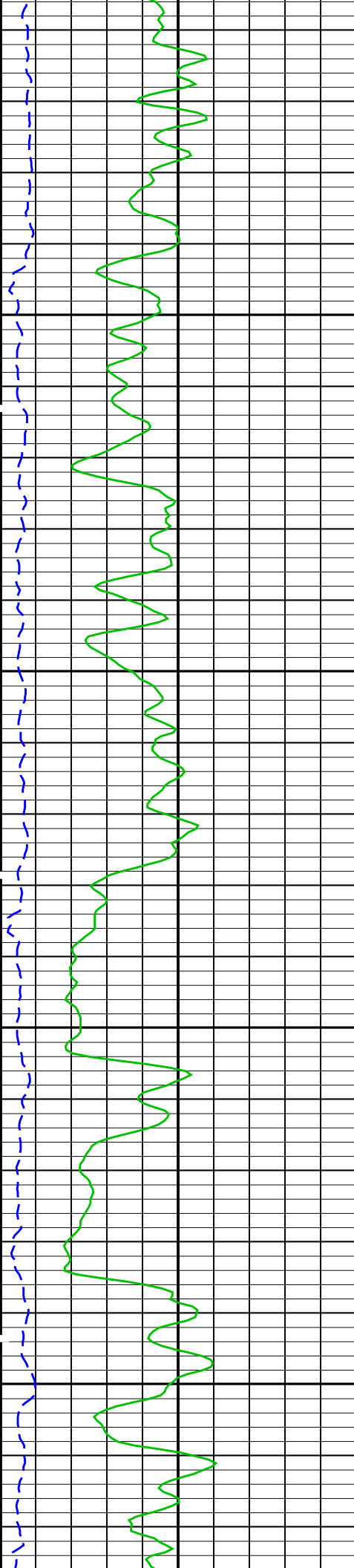


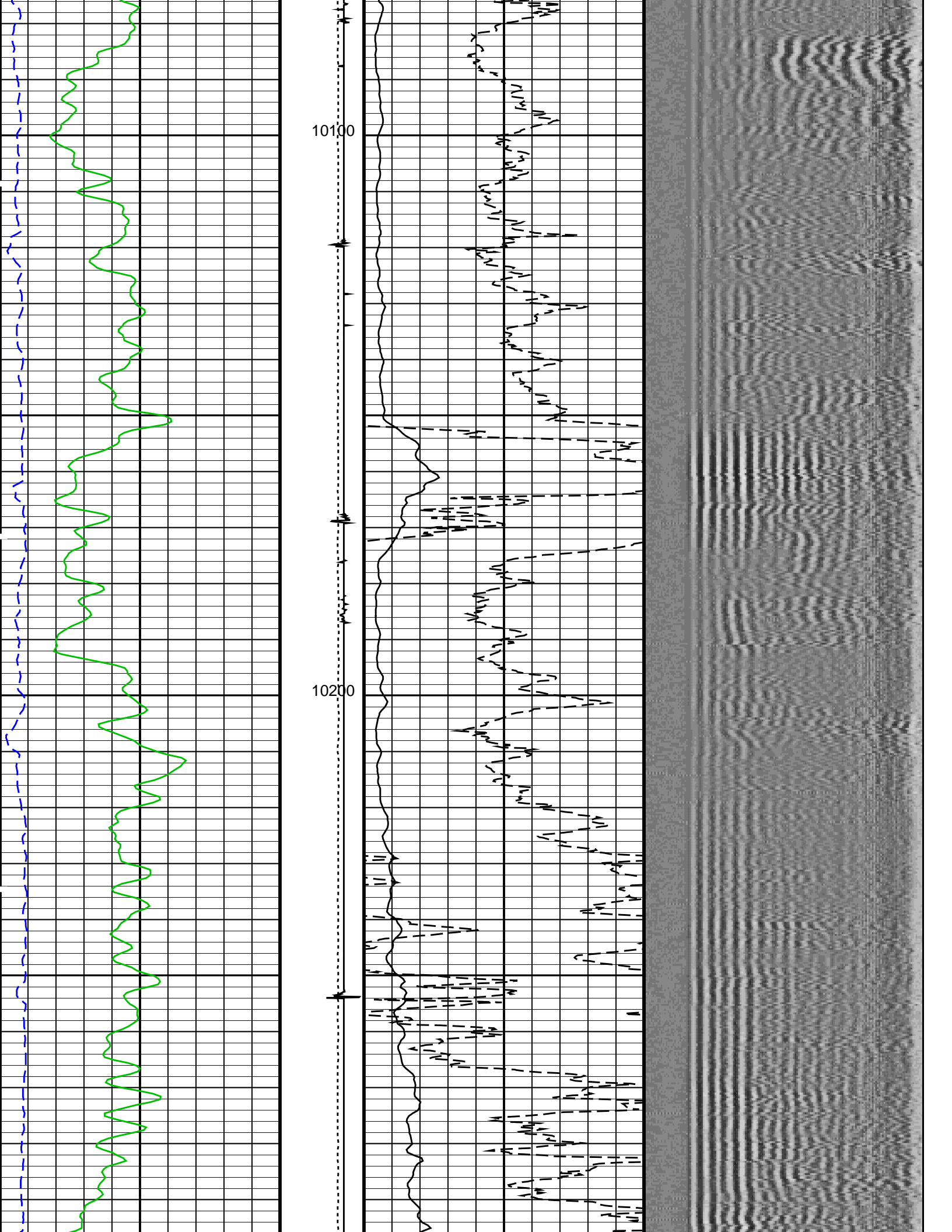


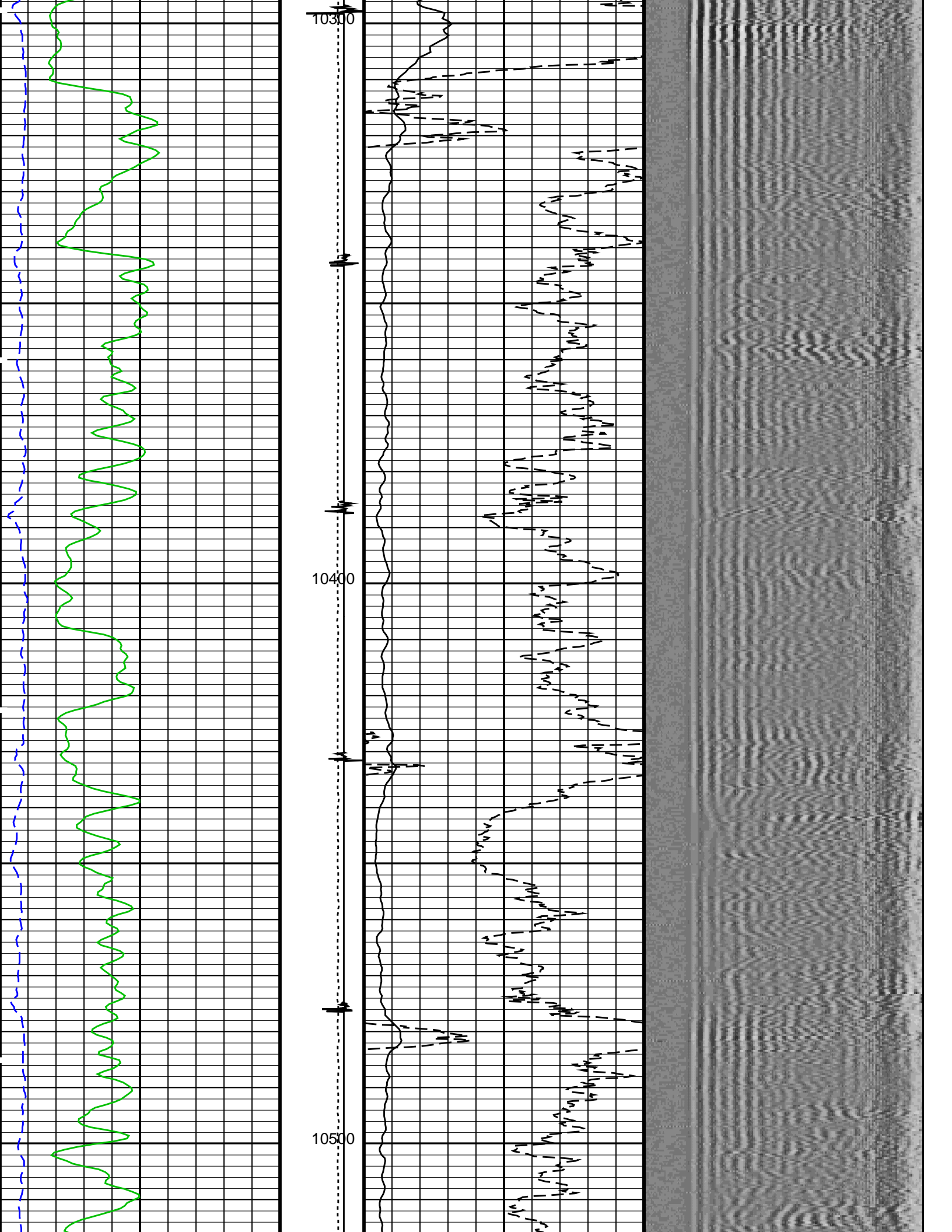




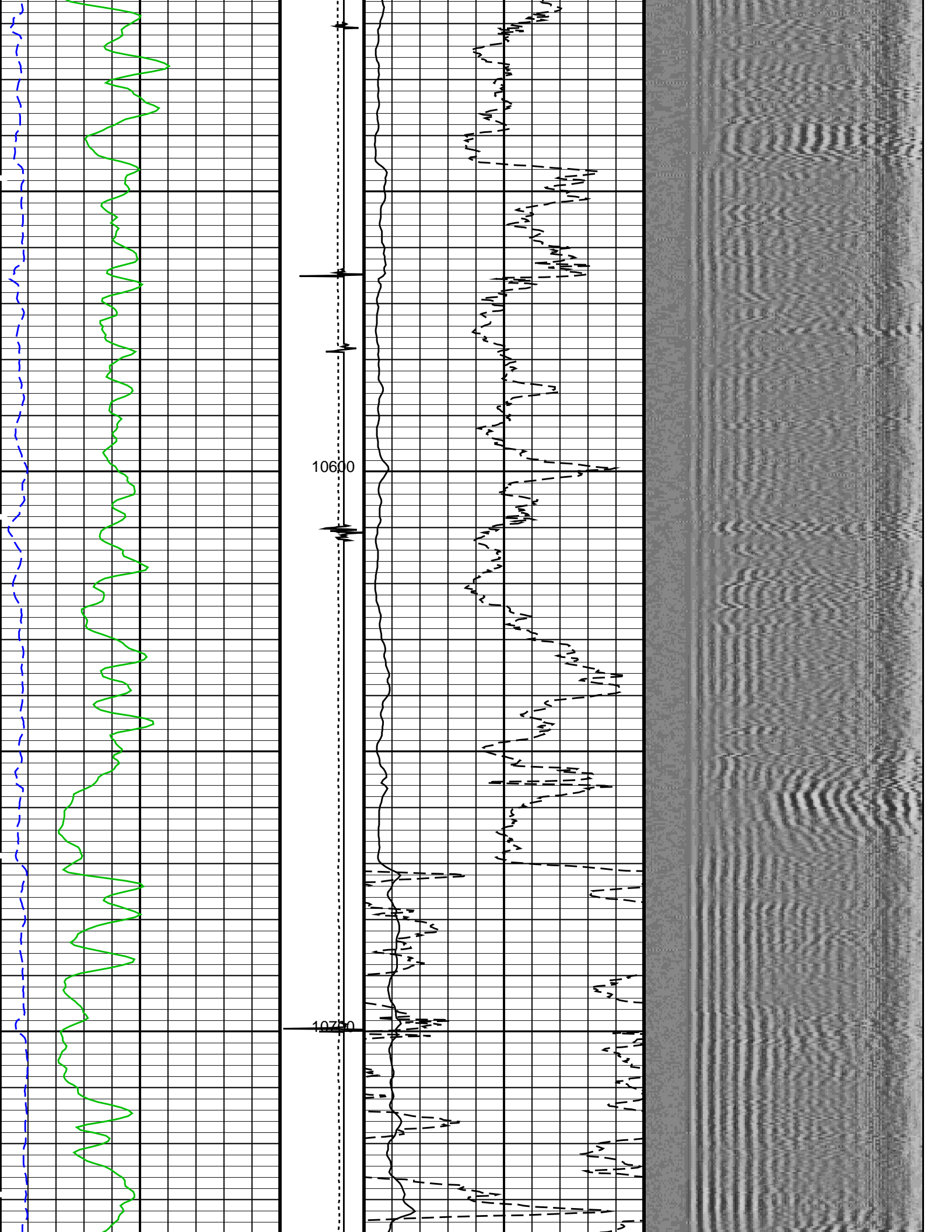


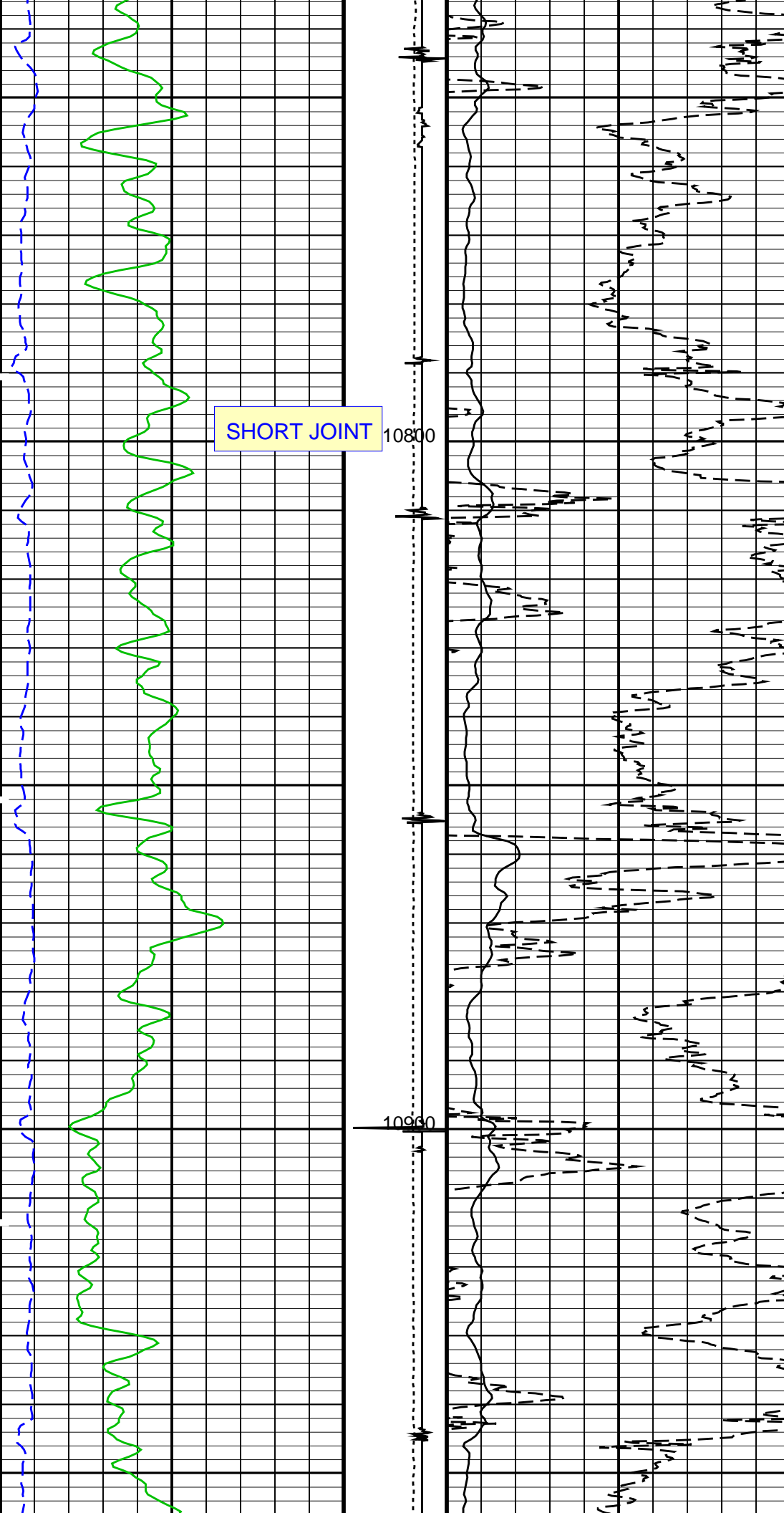


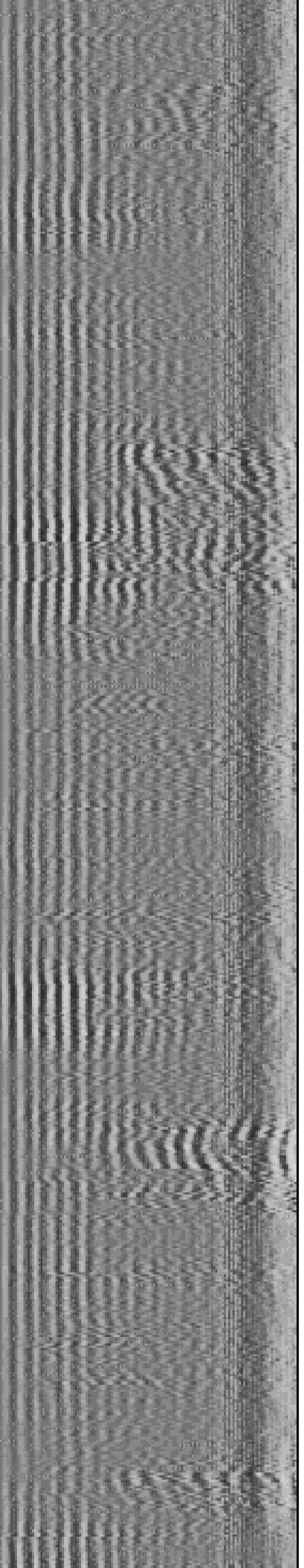
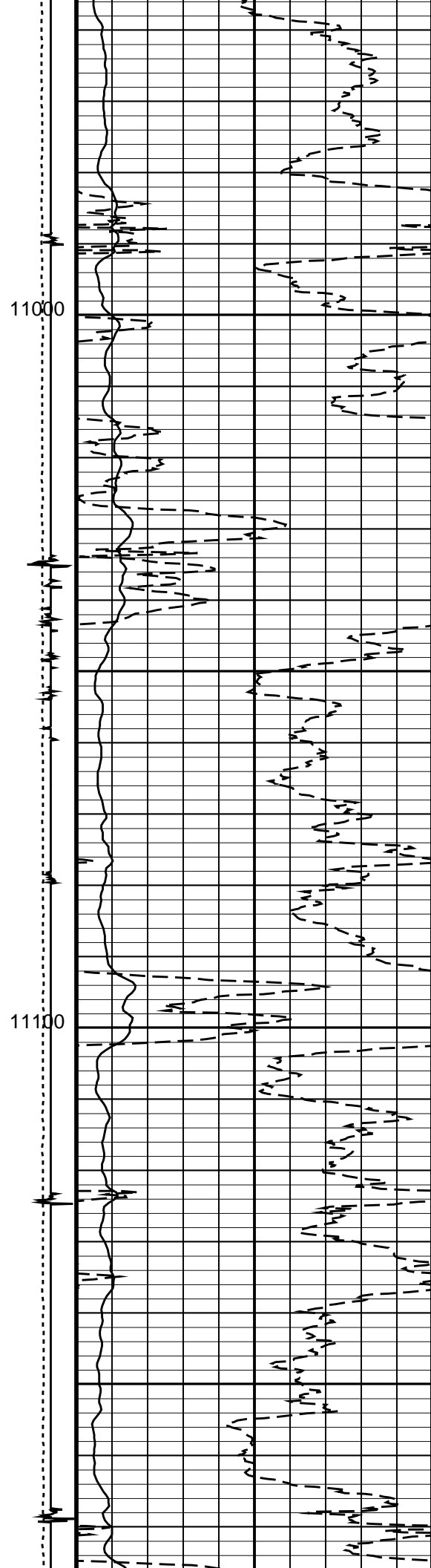
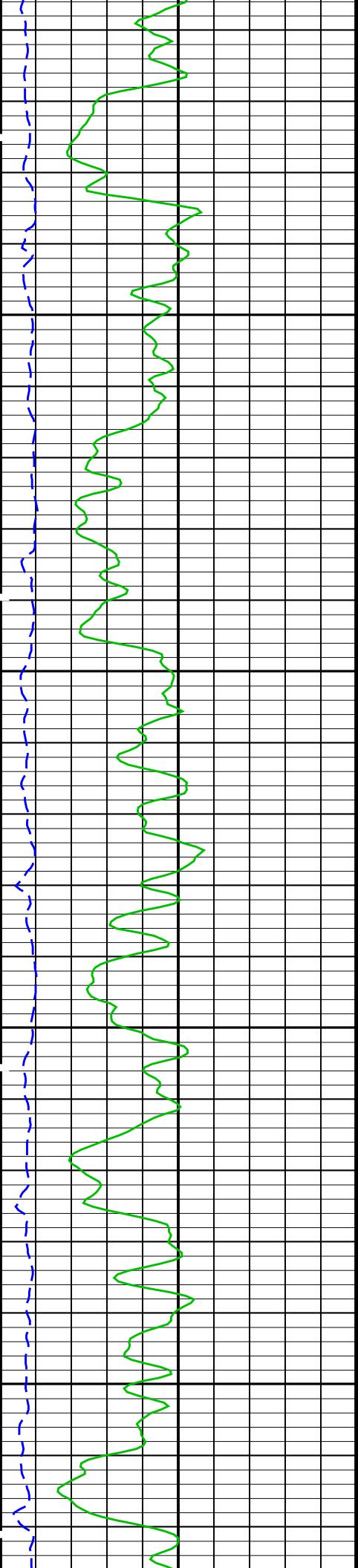


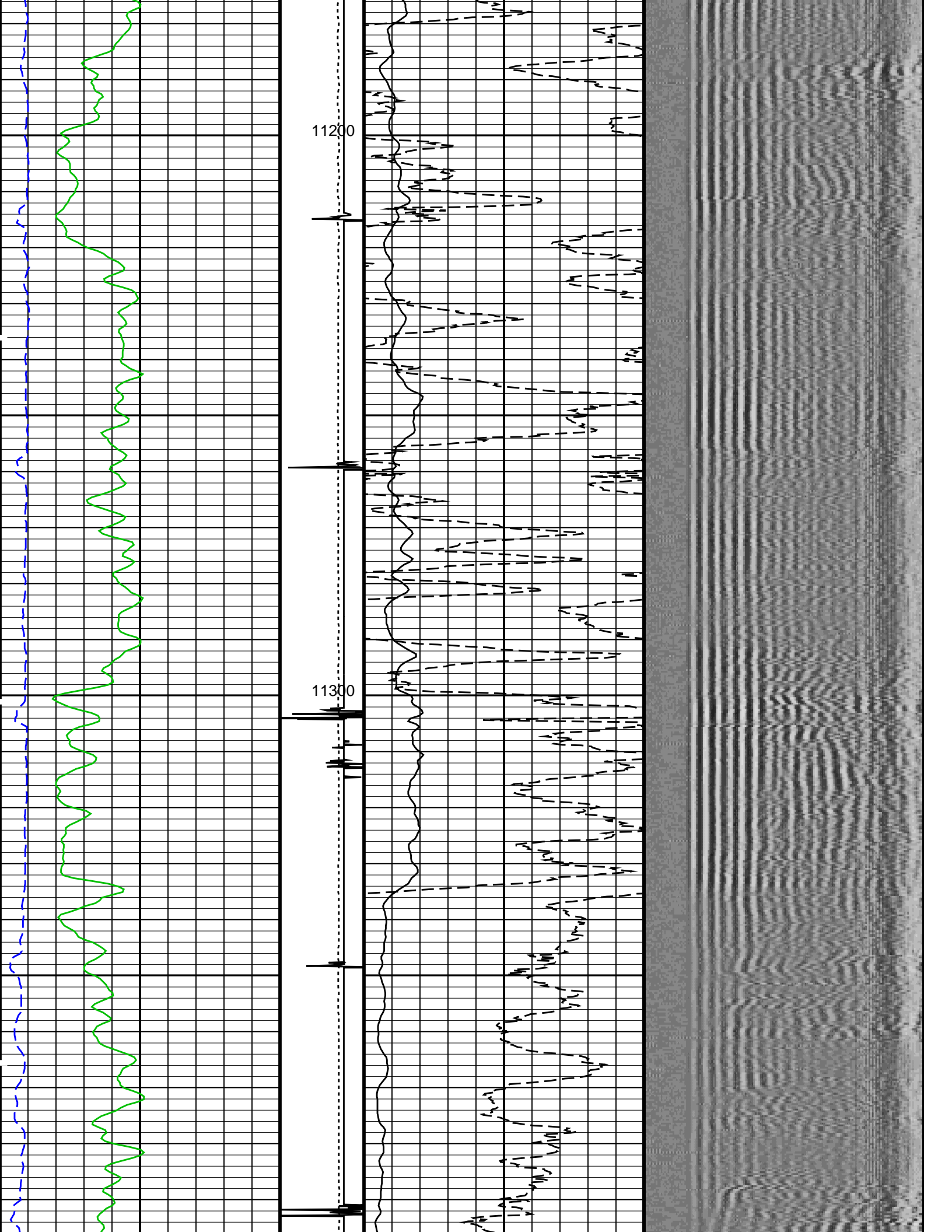




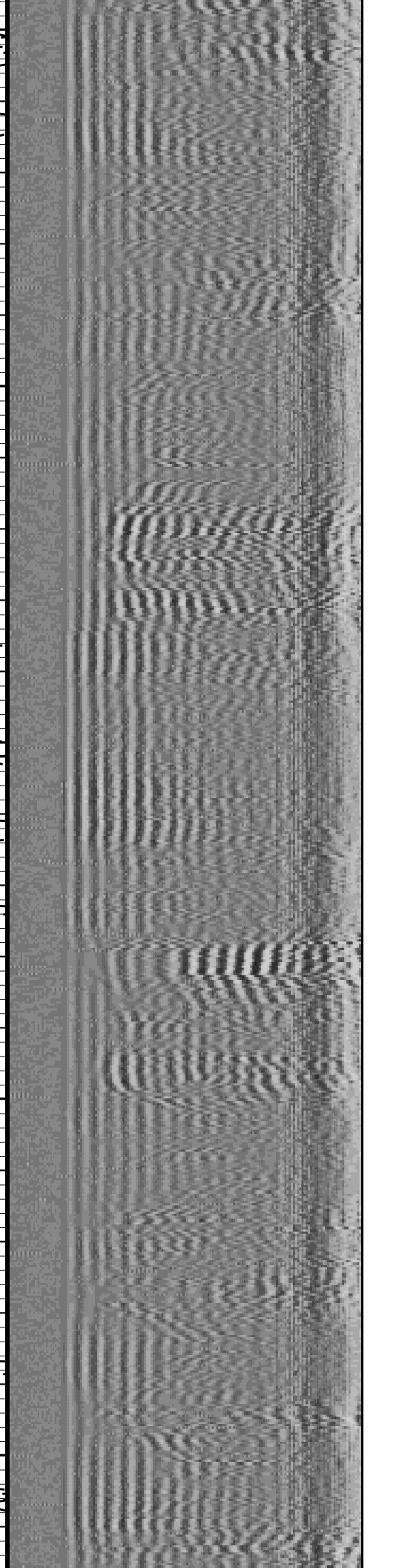
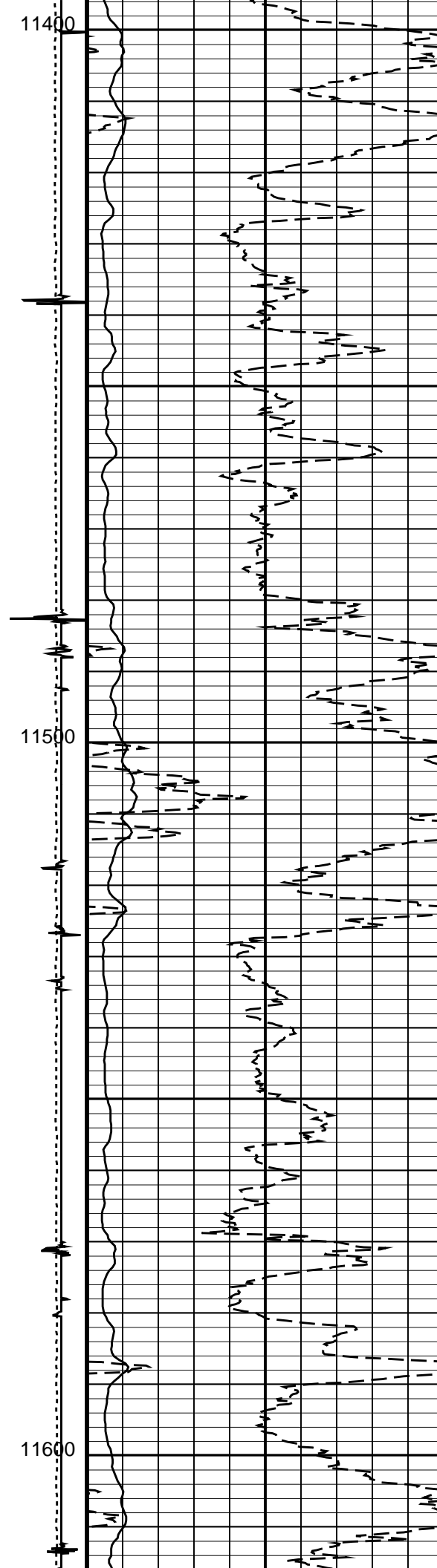
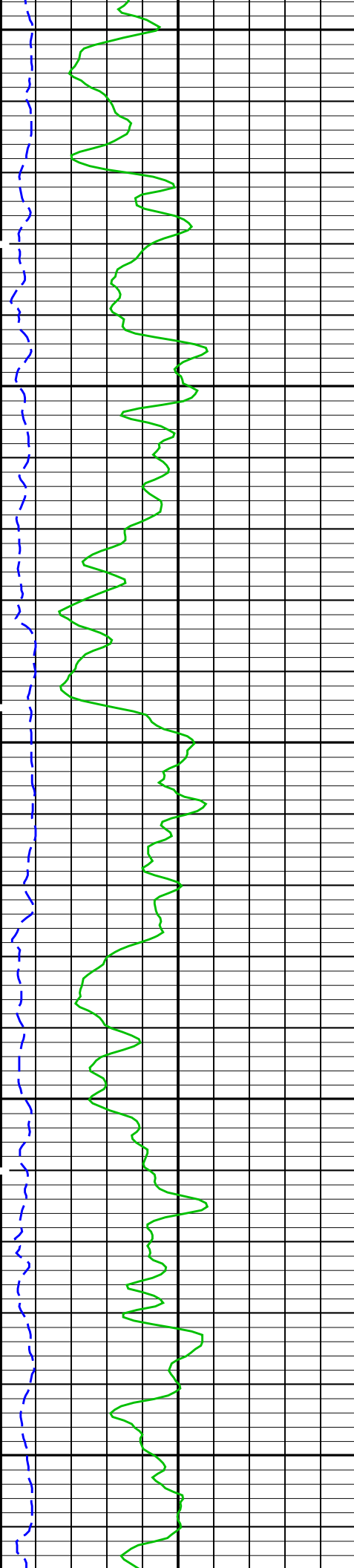


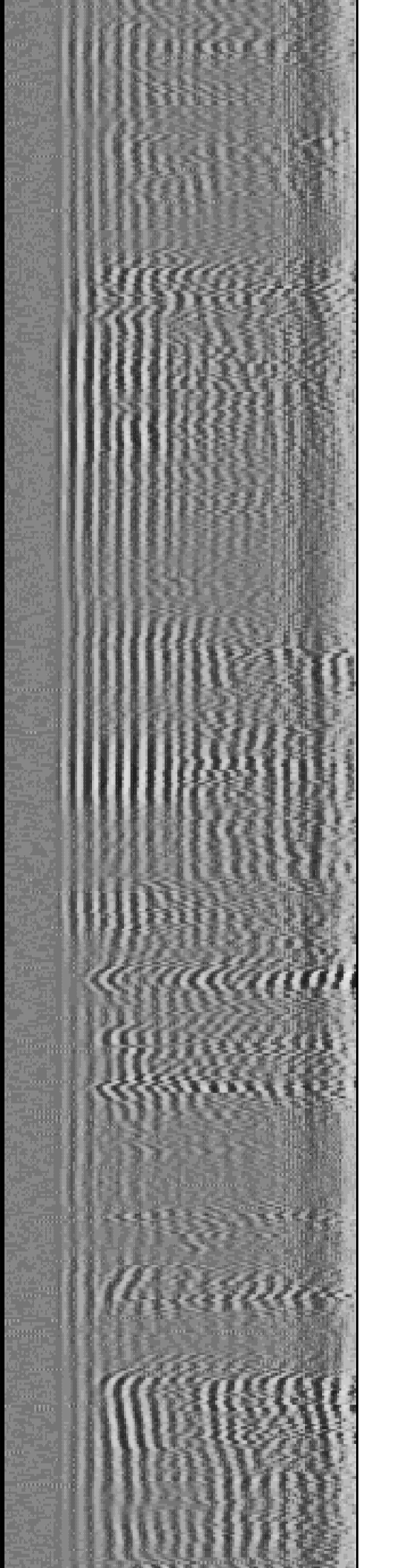
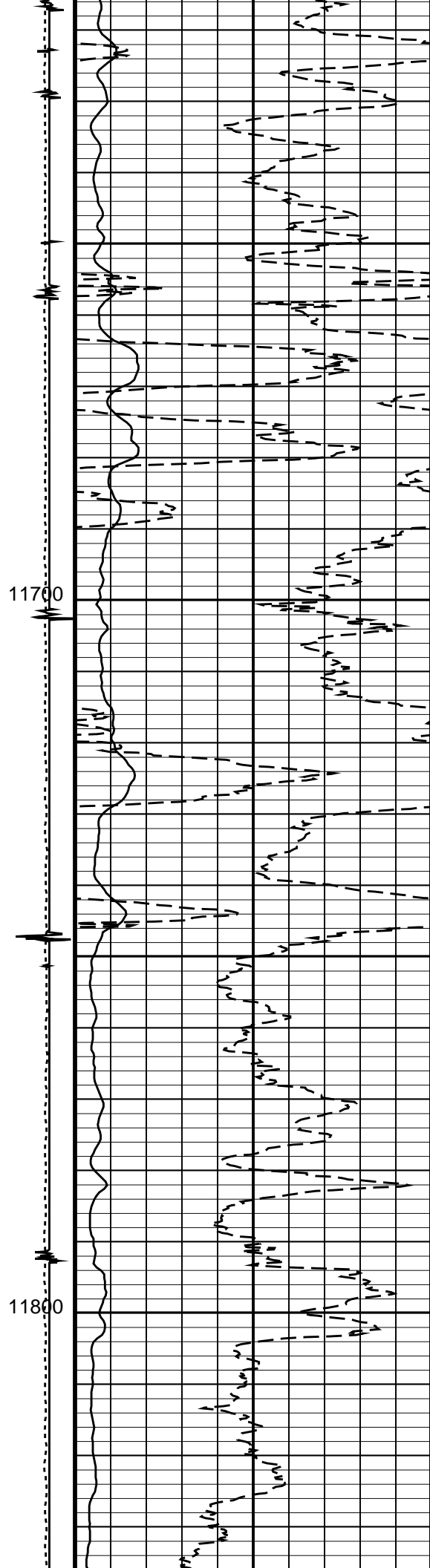
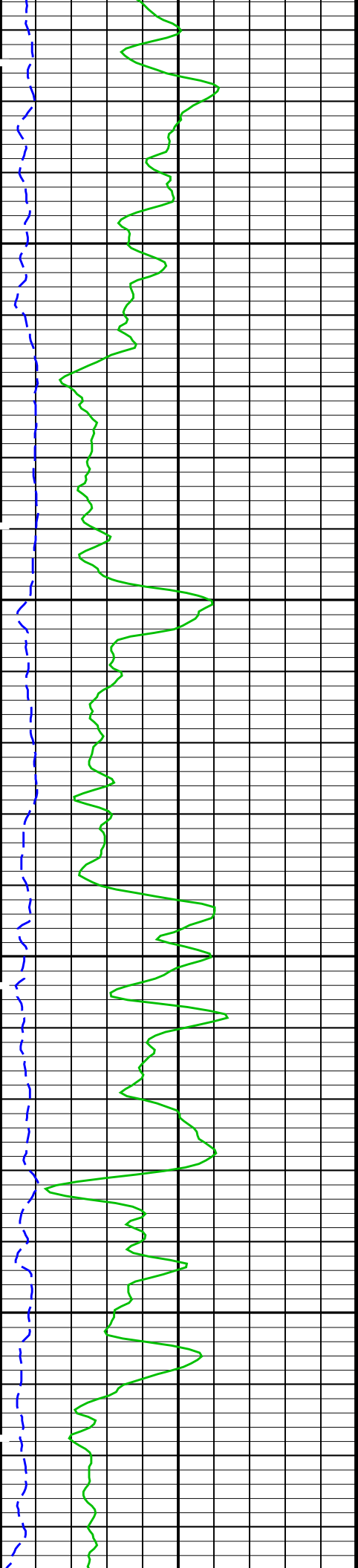


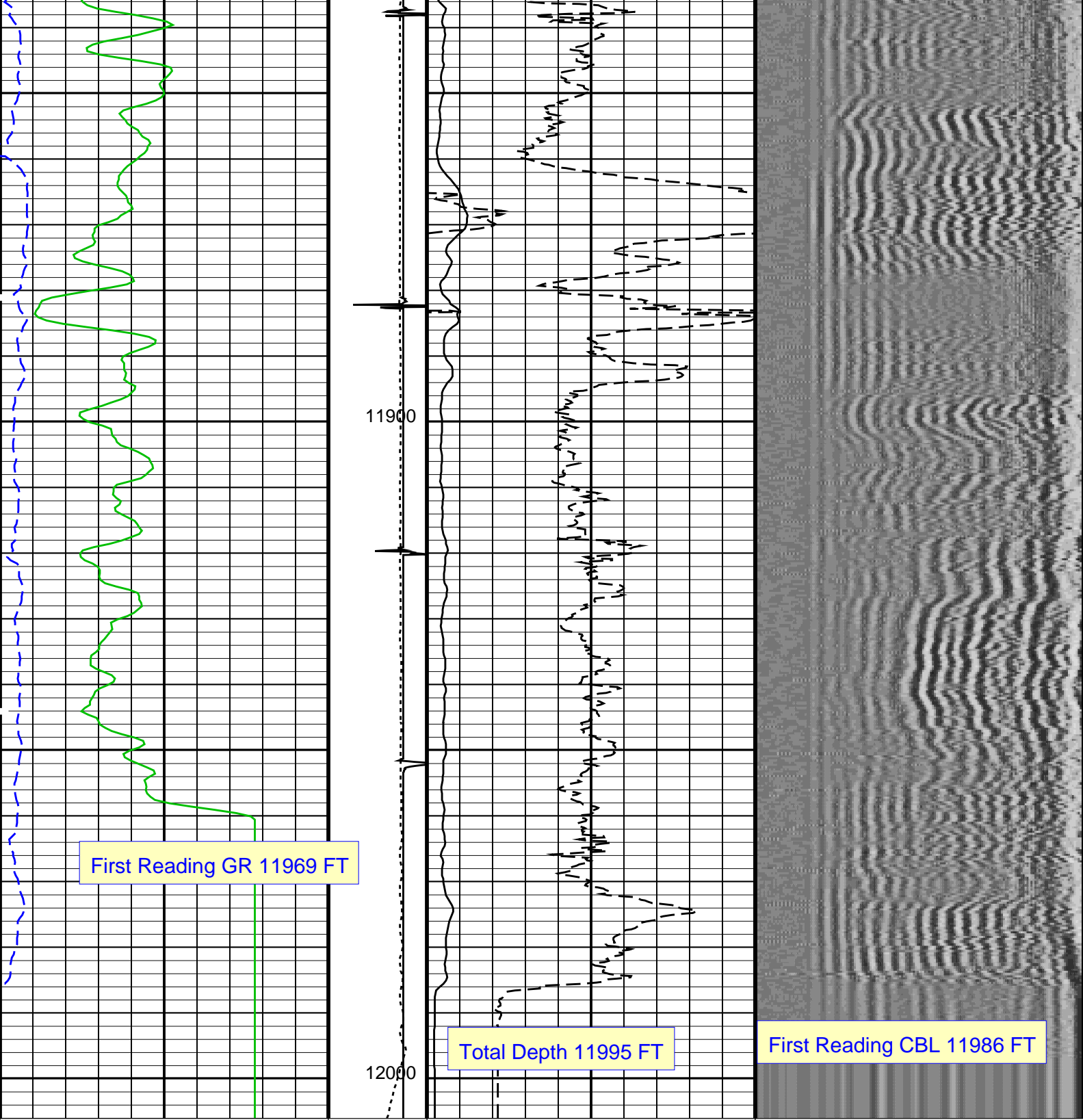












<p>Gamma Ray (GR) (GAPI)</p> <p>0 150</p>	<p>Tension (TENS) (LBF)</p> <p>0 2000</p>	<p>CBL Amplitude (CBL) (MV)</p> <p>0 100</p>	<p>Min Amplitude Max</p> <p>VDL VariableDensity (VDL) (US)</p> <p>200 1200</p>
<p>Transit Time (TT) (US)</p> <p>260 160</p>	<p>Discriminat ed CCL (CCLD) (V)</p> <p>3 -1</p>	<p>CBL Amplitude (CBL) (MV)</p> <p>0 10</p>	

PIP SUMMARY

<<<SCMT Cement Evaluation Information Summary>>>			
Sonde Serial Number	SCMS-CB 8179		
Current Casing Size	4.50000 IN		
Casing Weight	13.5000 LB/F		
Expected CBL Amplitude in Free Pipe Section	81 MV	Minimum Sonic Amplitude	1.28673 MV (100% Cement) 2.94636 MV (80% Cement)
		MAP Minimum Sonic Amplitude	7.12449 MV (100% Cement) 12.0838 MV (80% Cement)
Master Calibration (Normalization)	Before Calibration (Adjustment)		
Date of Master Calibration	2-JAN-2013		
CBL Correction Factor	0.0710826	CBL Adjustment Factor (CBAF)	1.20000
MAP 1 Correction Factor	0.103584	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0974321		
MAP 3 Correction Factor	0.0970306		
MAP 4 Correction Factor	0.107300		
MAP 5 Correction Factor	0.113090		
MAP 6 Correction Factor	0.0923740		
MAP 7 Correction Factor	0.0954019		
MAP 8 Correction Factor	0.0947290		

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	223.206	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	337.206	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	48	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	81	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.300677	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	2.94636	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	166.206	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	14.0905	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	7.12449	MV
MSA	Minimum Sonic Amplitude	1.28673	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CWEI	Casing Weight	13.50	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	4.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	11995	FT

Input DLIS Files						
DEFAULT	SCMT_RST_PSP_033LUP	FN:32	PRODUCER	14-Feb-2013 11:31	12002.0 FT	222.5 FT



# Output DLIS Files

DEFAULT

SCMT\_RST\_PSP\_035PUP

FN:34

PRODUCER

14-Feb-2013 14:39

**Schlumberger**

## REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8512E-24 (L24 496)

### Input DLIS Files

DEFAULT	SCMT_RST_PSP_030LUP	FN:29	PRODUCER	14-Feb-2013 11:04	7765.0 FT	7428.0 FT
DEFAULT	SCMT_RST_PSP_035PUP	FN:34	PRODUCER	14-Feb-2013 14:39	12006.0 FT	175.0 FT

### Output DLIS Files

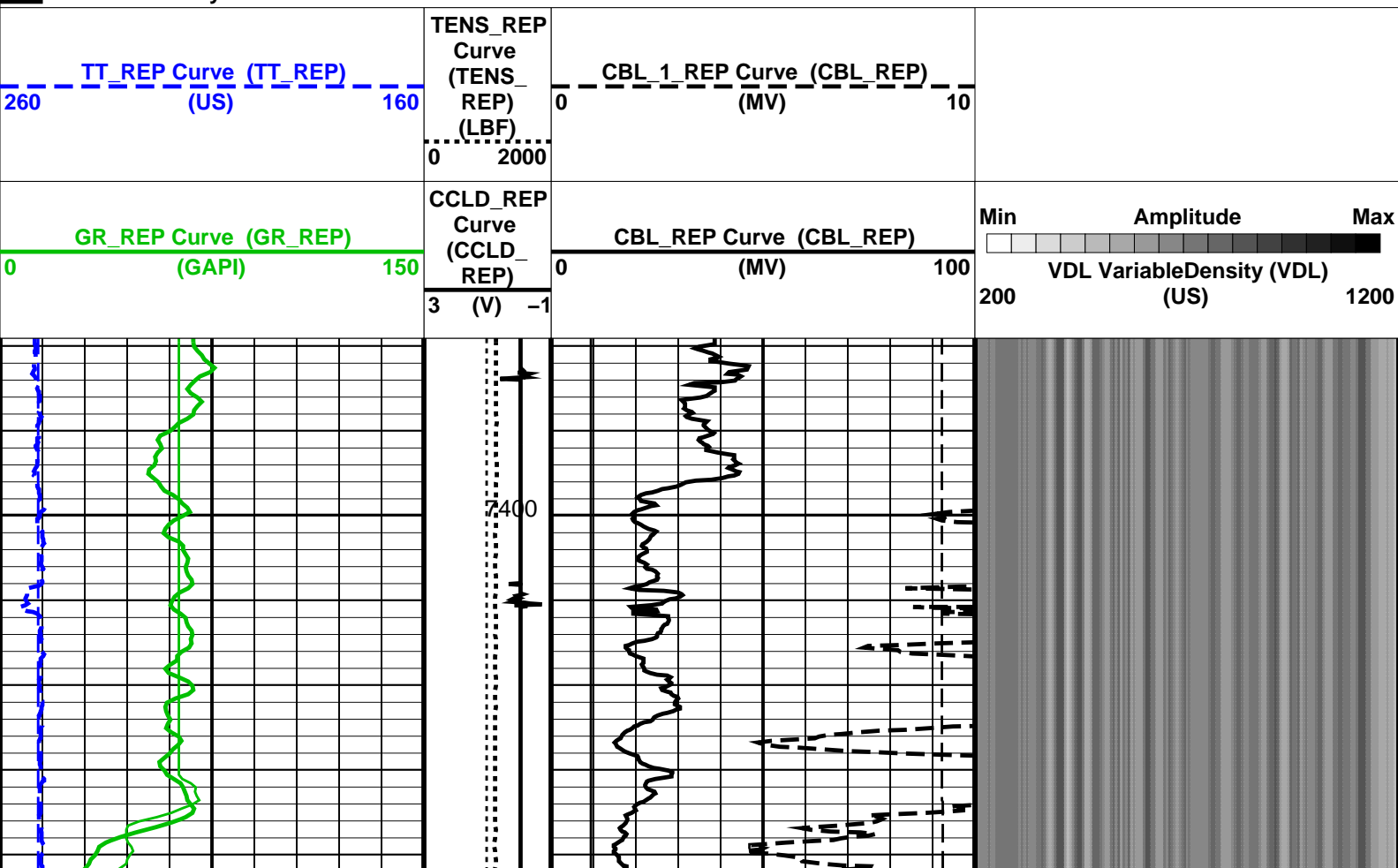
DEFAULT	SCMT_RST_PSP_038PUP	FN:37	PRODUCER	14-Feb-2013 14:53	7767.0 FT	7378.5 FT
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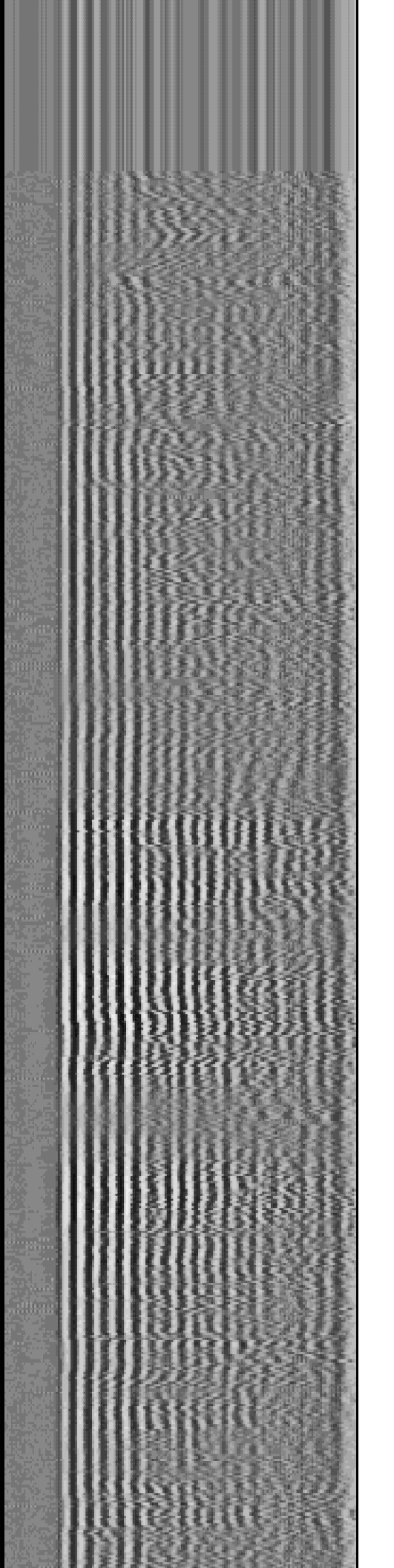
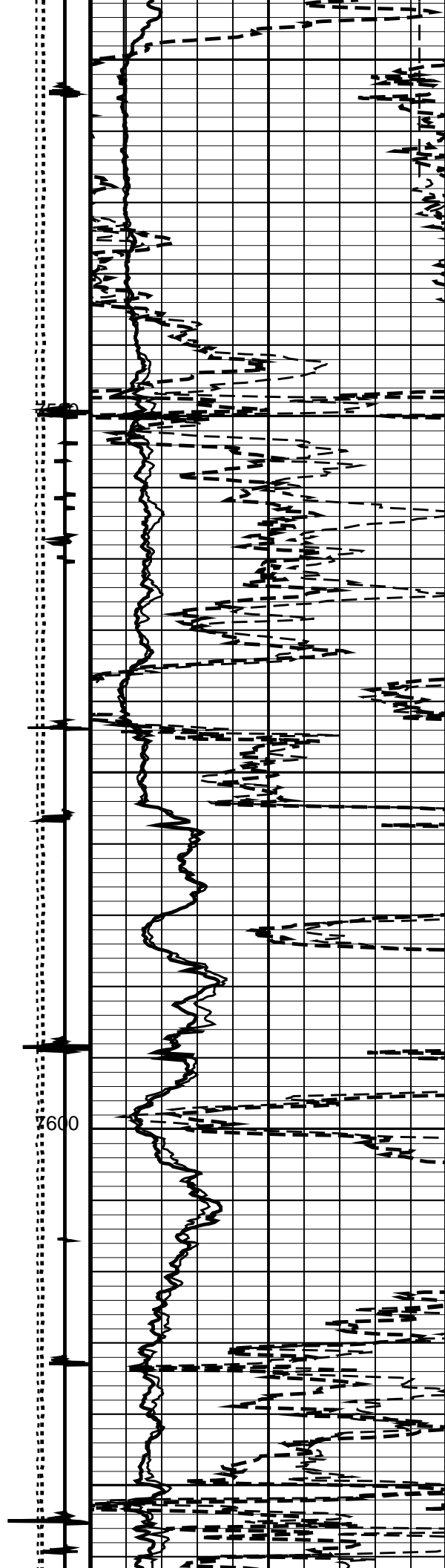
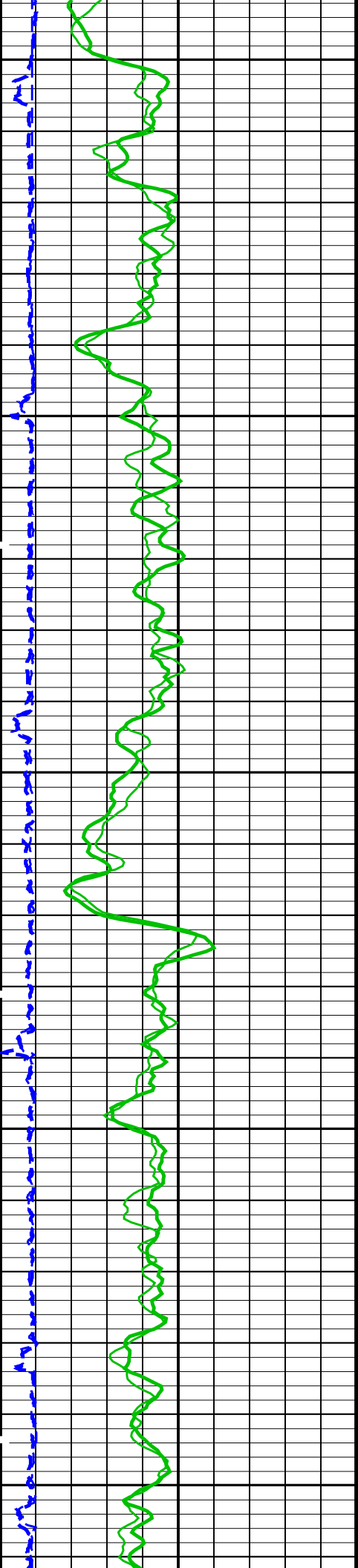
### OP System Version: 19C0-187

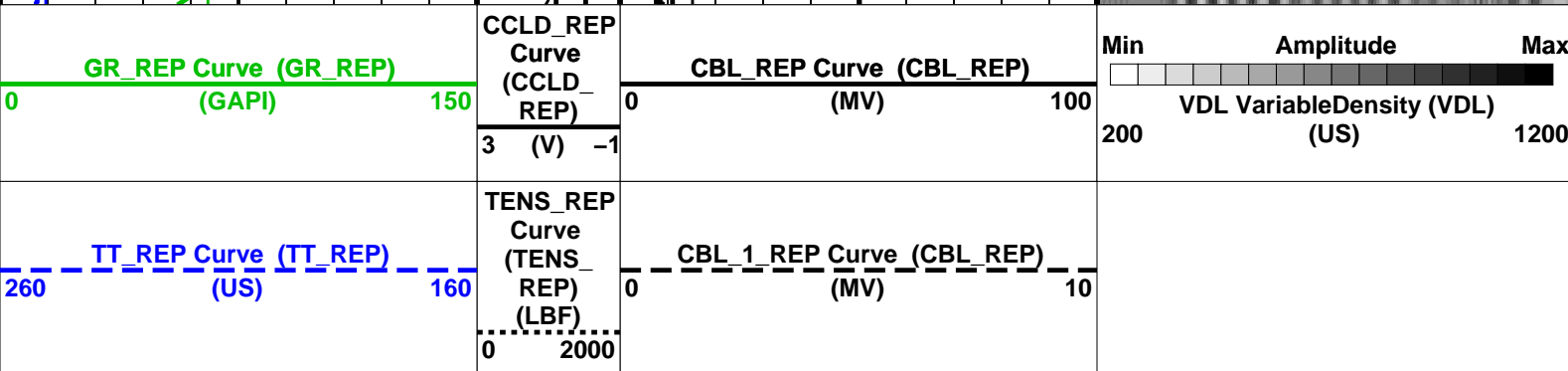
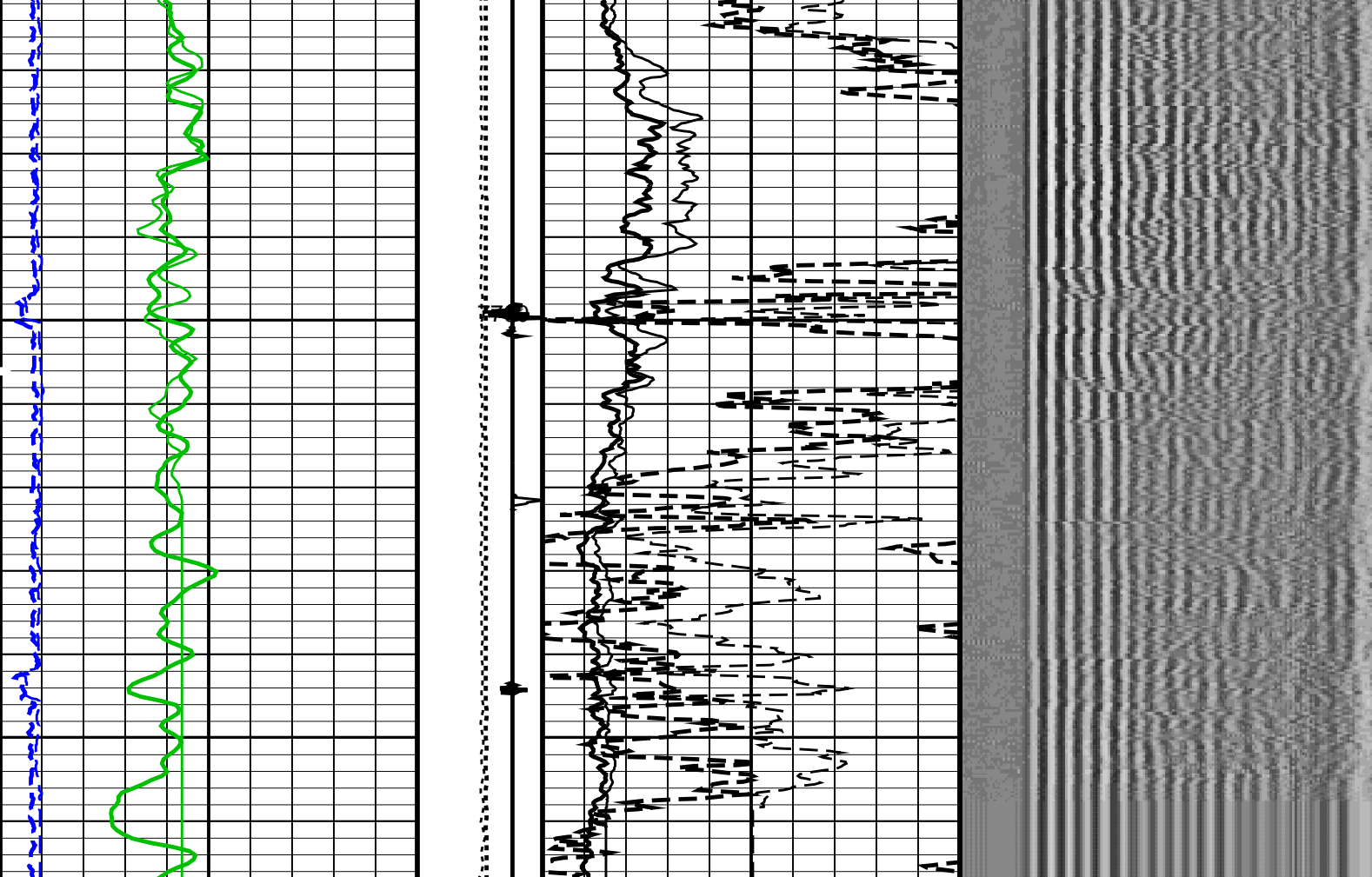
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

### PIP SUMMARY

Time Mark Every 60 S







### PIP SUMMARY

Time Mark Every 60 S

Format: CBL\_VDL\_REP Vertical Scale: 5" per 100'

Graphics File Created: 14-Feb-2013 14:53

## OP System Version: 19C0-187

SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

### <<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number SCMS-CB 8179

Current Casing Size 4.5000 IN

Casing Weight 13.5000 LB/F

Expected CBL Amplitude  
in Free Pipe Section 81 MV

Minimum Sonic Amplitude

MAP Minimum Sonic Amplitude

1.28673 MV (100% Cement)

2.94636 MV (80% Cement)

7.12449 MV (100% Cement)

12.0838 MV (80% Cement)

Master Calibration (Normalization)

Before Calibration (Adjustment)

Date of Master Calibration 2--JAN--2013

CBL Correction Factor	0.0710826	CBL Adjustment Factor (CBAF)	1.20000
MAP 1 Correction Factor	0.103584	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0974321		
MAP 3 Correction Factor	0.0970306		
MAP 4 Correction Factor	0.107300		
MAP 5 Correction Factor	0.113090		
MAP 6 Correction Factor	0.0923740		
MAP 7 Correction Factor	0.0954019		
MAP 8 Correction Factor	0.0947290		

## 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	223.206	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	337.206	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	48	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	81	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.300677	IN
DTF	Delta–T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	2.94636	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	166.206	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	14.0905	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	7.12449	MV
MSA	Minimum Sonic Amplitude	1.28673	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CWEI	Casing Weight	13.50	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	2.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	11995	FT

## Input DLIS Files

DEFAULT	SCMT_RST_PSP_030LUP	FN:29	PRODUCER	14-Feb-2013 11:04	7765.0 FT	7428.0 FT
DEFAULT	SCMT_RST_PSP_035PUP	FN:34	PRODUCER	14-Feb-2013 14:39	12006.0 FT	175.0 FT

## Output DLIS Files

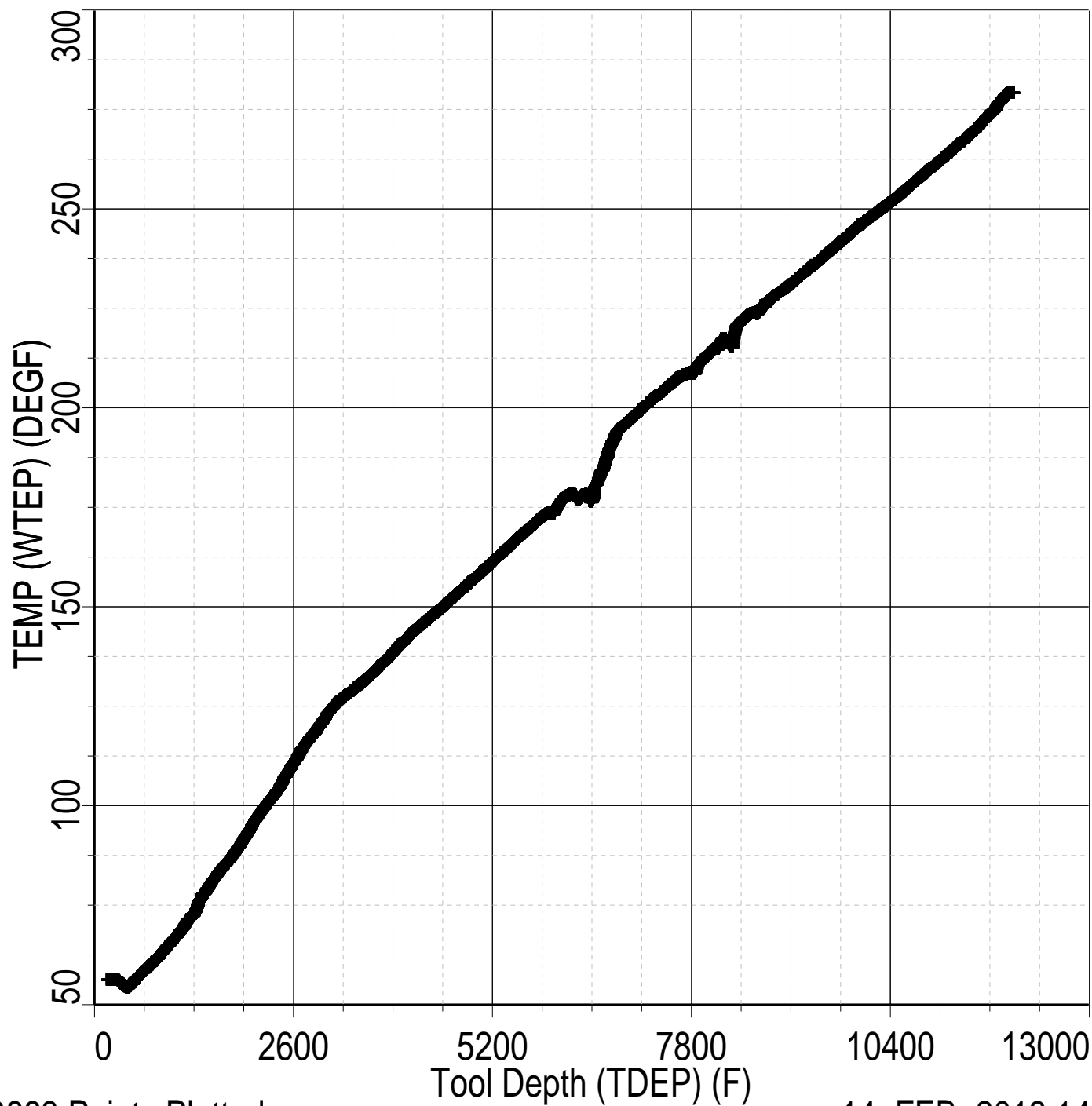
DEFAULT	SCMT_RST_PSP_038PUP	FN:37	PRODUCER	14-Feb-2013 14:53
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**Schlumberger**

**TEMPERATURE PLOT**



Index: 12006.0 – 175.0 FT



23663 Points Plotted

14-FEB-2013 14:45

**Schlumberger**

**PBMS COEFFICIENTS**

MAXIS Field Log

Field: STORY GULCH

Well: SGU 8512E-24 (L24 496)

Run date: 14-Feb-2013

Sub Type: PBMS

Sensor: GR

PBMS Gamma Ray

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

RESISTORS FOR GR SENSOR N.33223,TOOL PBMS-BA0928. SENSOR S/N:

33223

090800

12

CFE2

GR HV Rt

	Rt**0	Rt**1
Rt**0	+.182000000000e+04	+.332000000000e+04

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SGU 8512E-24 (L24 496)

Run date: 14-Feb-2013

Tool: PSP

Sub Type: PBMS

Sensor: WellTemp RTD

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR RTD THERMOMETER PBMS-B.928 S/N:

928

280612

16

A24E

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	-.391987973189E+03	+.191346892512E+03	-.440920753451E+02
	Tt**3	Tt**4	Tt**5
Tt**0	+.957191300908E+01	-.711421725686E+00	0.0

Client: ENCANA OIL & GAS (USA) INC  
Field: STORY GULCH  
Well: SGU 8512E-24 (L24 496)  
Run date: 14-Feb-2013

Tool: PSP  
Sub Type: PBMS  
Sensor: CQG

PBMS Quartz Gauge type F

Sonde Serial NB                      COEFFICIENTS FOR CQG PBMS-B.928 S/N:  
Sensor Serial NB                      928  
Calib Date ddmmyy                    280612  
Matrix Size                            66  
Coeff CRC                              9DC3

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.714463802232E+04	+.183434658655E-01	-.156620073569E-06
Fc**1	-.100638308957E+01	-.119899563644E-04	-.912155899025E-10
Fc**2	+.936268101283E-06	+.423898071451E-10	+.958076371919E-15
Fc**3	+.185123362373E-11	+.203107925433E-15	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

	Fb**3	Fb**4	Fb**5
Fc**0	-.746577997611E-10	-.588773826860E-15	-.622250441458E-19
Fc**1	-.120636521092E-15	+.400325894750E-19	0.0
Fc**2	0.0	0.0	0.0
Fc**3	0.0	0.0	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :  
Sensor Serial NB 928  
Calib Date ddmmyy 280612  
Matrix Size 66

Coeff CRC	283B		
Temp Coeff			
	Fc**0	Fc**1	Fc**2
Fb**0	+.117016867873E+03	−.284359629614E−03	+.604391180345E−08
Fb**1	−.598309140812E−02	+.182731130848E−07	+.160166486172E−12
Fb**2	−.307621454576E−07	+.300601550309E−12	+.311233548560E−17
Fb**3	−.419658736767E−12	+.117473708647E−16	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0
	Fc**3	Fc**4	Fc**5
Fb**0	+.114322792679E−12	+.153807711176E−17	−.736714260866E−21
Fb**1	−.528037875456E−18	−.220337637519E−21	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

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PBMS Quartz Gauge type F

Sonde Serial NB

:

Sensor Serial NB

928

Calib Date ddmmyy

280612

Matrix Size

16

Coeff CRC

093F

Clock Freq Coeff

	(Fb'−Fc')**0	(Fb'−Fc')**1	(Fb'−Fc')**2
(Fb'−Fc')**0	+.310874009898E+05	+.288920923041E−02	+.697940727038E−06
	(Fb'−Fc')**3	(Fb'−Fc')**4	(Fb'−Fc')**5
(Fb'−Fc')**0	−.657432344763E−10	−.412920638782E−15	+.213369826099E−20

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PBMS Quartz Gauge type F

Sonde Serial NB

:

Sensor Serial NB

928

Calib Date ddmmyy

280612

Matrix Size

16

Coeff CRC

8419

Clock Temp Coeff

	(Fb'−Fc')**0	(Fb'−Fc')**1	(Fb'−Fc')**2
(Fb'−Fc')**0	+.115369519827E+03	−.565338877075E−02	−.333717531829E−07



	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.124387135327E-12	+.713102327208E-16	-.316084316842E-20



MASTER CALIBRATION

MAXIS Field Log

Slim Cement Mapping Tool, 1-11/16 OD / Equipment Identification

Primary Equipment:		
Slim Cement Mapping Xmitter Electronics	SCMX – CA	
Slim Cement Mapping Sonde	SCMS – CB	8179
Slim Cement Mapping Cartridge	SCMC – CA	8120
Auxiliary Equipment:		
Slim Electronics Cartridge Housing	SECH – CA	

Slim Cement Mapping Tool, 1-11/16 OD Master Calibration							
SCMT CBL and MAP Amplitude Normalization in SFT-155/-255							
Phase	MAP 1 Amplitude Plus MV		Value	Phase	MAP 2 Amplitude Plus MV		Value
Master			1158	Master			1232
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 3 Amplitude Plus MV		Value	Phase	MAP 4 Amplitude Plus MV		Value
Master			1237	Master			1118
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 5 Amplitude Plus MV		Value	Phase	MAP 6 Amplitude Plus MV		Value
Master			1061	Master			1299
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 7 Amplitude Plus MV		Value	Phase	MAP 8 Amplitude Plus MV		Value
Master			1258	Master			1267
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	CBL Amplitude Plus MV		Value				
Master			1351				
	1000 (Minimum)	1350 (Nominal)	1700 (Maximum)				
Master: 2-Jan-2013 15:55							

Company: **ENCANA OIL & GAS (USA) INC**

**Schlumberger**

Well: **SGU 8512E-24 (L24 496)**

Field: **STORY GULCH**

County: **GARFIELD**

State: **COLORADO**

SLIM CEMENT MAPPING LOG

CBL-VDL

GR-CCL