

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8504B-36 (D36 496)

Field: GRAND VALLEY

County: GARFIELD

State: COLORADO

SLIM CEMENT MAPPING LOG  
CBL-VDL  
GR-CCL

County:	GARFIELD		
Field:	GRAND VALLEY		
Location:	SHL: 1075 FWL & 340 FNL		
Well:	SG 8504B-36 (D36 496)		
Company:	ENCANA OIL & GAS (USA) INC		
	LOCATION		
	SHL: 1075 FWL & 340 FNL BHL: 675 FWL & 394 FNL	Elev.: K.B. 8320.00 ft G.L. 8290.00 ft D.F. 8319.00 ft	
	Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____	GROUND LEVEL _____ KELLY BUSHING _____ KELLY BUSHING _____	Elev.: 8290.00 ft 30.00 ft above Perm. Datum
	API Serial No. _____ 05-045-20919-0C	Section 36	Township 4S Range 96W

	Run 1	Run 2	Run 3
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	12-Feb-2013		
Run Number	1		
Depth Driller	12055 ft		
Schlumberger Depth	12003 ft		
Bottom Log Interval	11994 ft		
Top Log Interval	80 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	80 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From	9907 ft		
To	12035 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade	P-110		
From	30 ft		
To	12033 ft		
Maximum Recorded Temperatures	286 degF		
Logger On Bottom	12-Feb-2013	Time	10:15
Unit Number	391	Location	GRAND JUNCTION
Recorded By	JASON BARRY		
Witnessed By	RYAN TOMPKINS		

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: 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.

## DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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 = 286 DEGF	
MAX RECORDED PRESSURE = 5056 PSIA	
SHORT JOINTS = 7486 FT & 10528 FT	

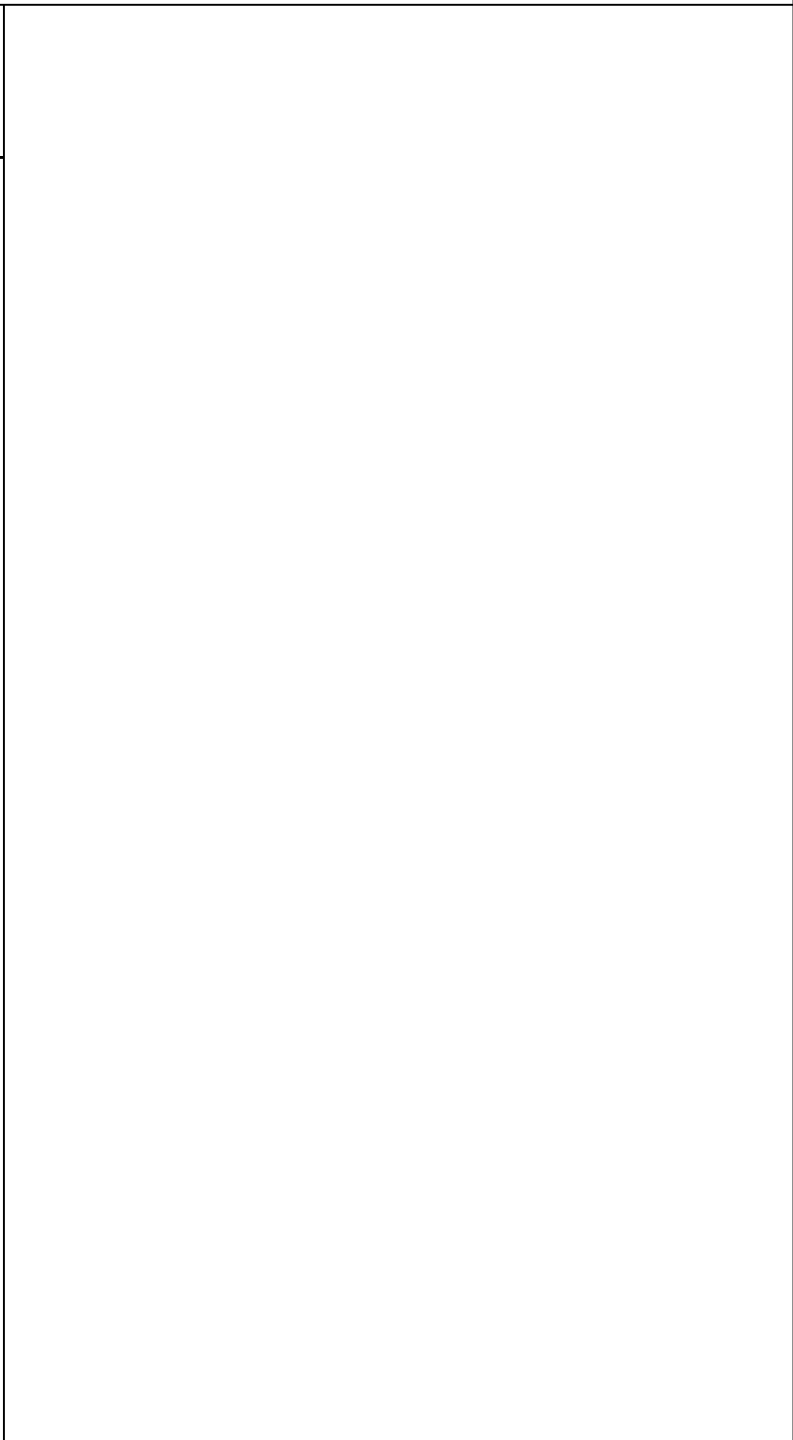
ENTRANCE TIME = 9:30	
LOGGER ON BOTTOM = 10:15	
EXIT TIME = 13:30	
MAIN PASS LOGGED WITH ZERO SURFACE PRESSURE	
CYCLE SKIPPING DUE TO GOOD BOND	
EXPECTED CBL AMPLITUDE OF FREE PIPE 80MV	
THANK YOU FOR CHOOSING E&P WIRELINE SERVICES	
YOUR CREW, K. BUNTING, J.BARRY, K.JOHNS, B.RANSBOTTOM	

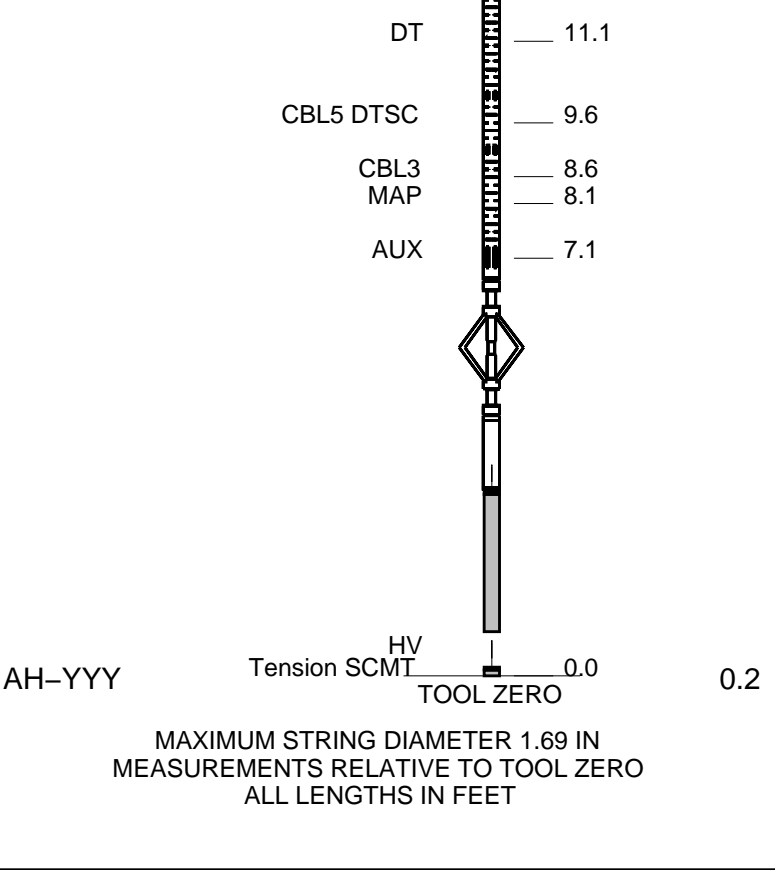
RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

SURFACE EQUIPMENT	
WITM-A PSC_16MHZ	

DOWNHOLE EQUIPMENT	
<div> <div> <div>MH-22</div> <div>MH-22</div> <div>30.3</div> </div> <div> <div>AH-38</div> <div>Detail MT</div> <div>TelStatus</div> <div>CTEM</div> <div>28.4</div> <div>28.7</div> </div> <div> <div>PSPT</div> <div>PSC-A</div> <div>PSPT-B 928</div> <div>PSTC-A</div> <div>PBMS-B</div> <div>CQG_F_Mano</div> <div>RTD_Thermometer</div> <div>GR</div> <div>CCL</div> <div>PBMS</div> <div>24.7</div> </div> <div> <div>Well_Temp</div> <div>CQG Manom</div> <div>CCL</div> <div>21.7</div> <div>21.3</div> <div>20.9</div> </div> <div> <div>PBMS PSTC</div> <div>20.2</div> </div> <div> <div>SCMT-CB</div> <div>SCMC-CA 8120</div> <div>SECH-CA</div> <div>CMIR-AG</div> <div>SCMS-CB 8179</div> <div>SCMX-CA</div> <div>20.2</div> </div> </div>	





# MAIN PASS CBL VDL

MAXIS Field Log

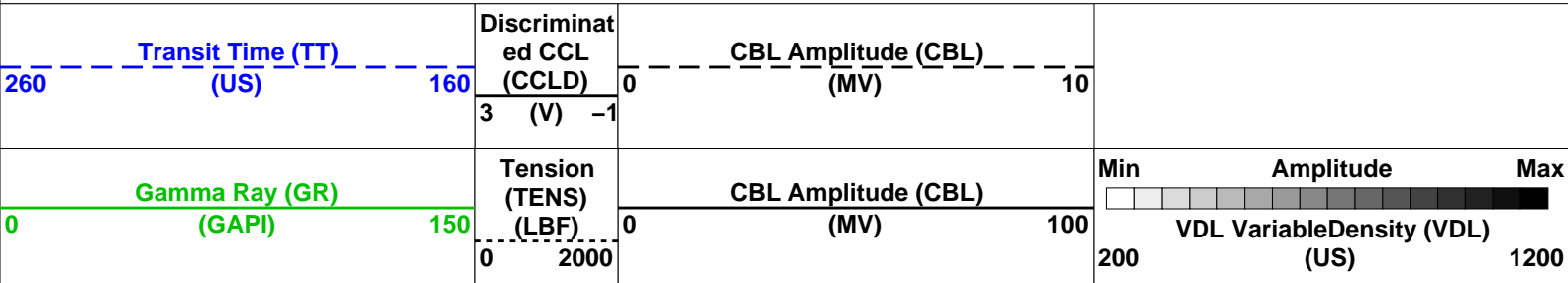
Company: ENCANA OIL & GAS (USA) INC Well: SG 8504B-36 (D36 496)

Input DLIS Files						
DEFAULT	SCMT_PSP_004LUP	FN:3	PRODUCER	12-Feb-2013 10:20	12012.0 FT	52.5 FT
Output DLIS Files						
DEFAULT	SCMT_PSP_007PUP	FN:6	PRODUCER	12-Feb-2013 13:28	12017.0 FT	57.5 FT

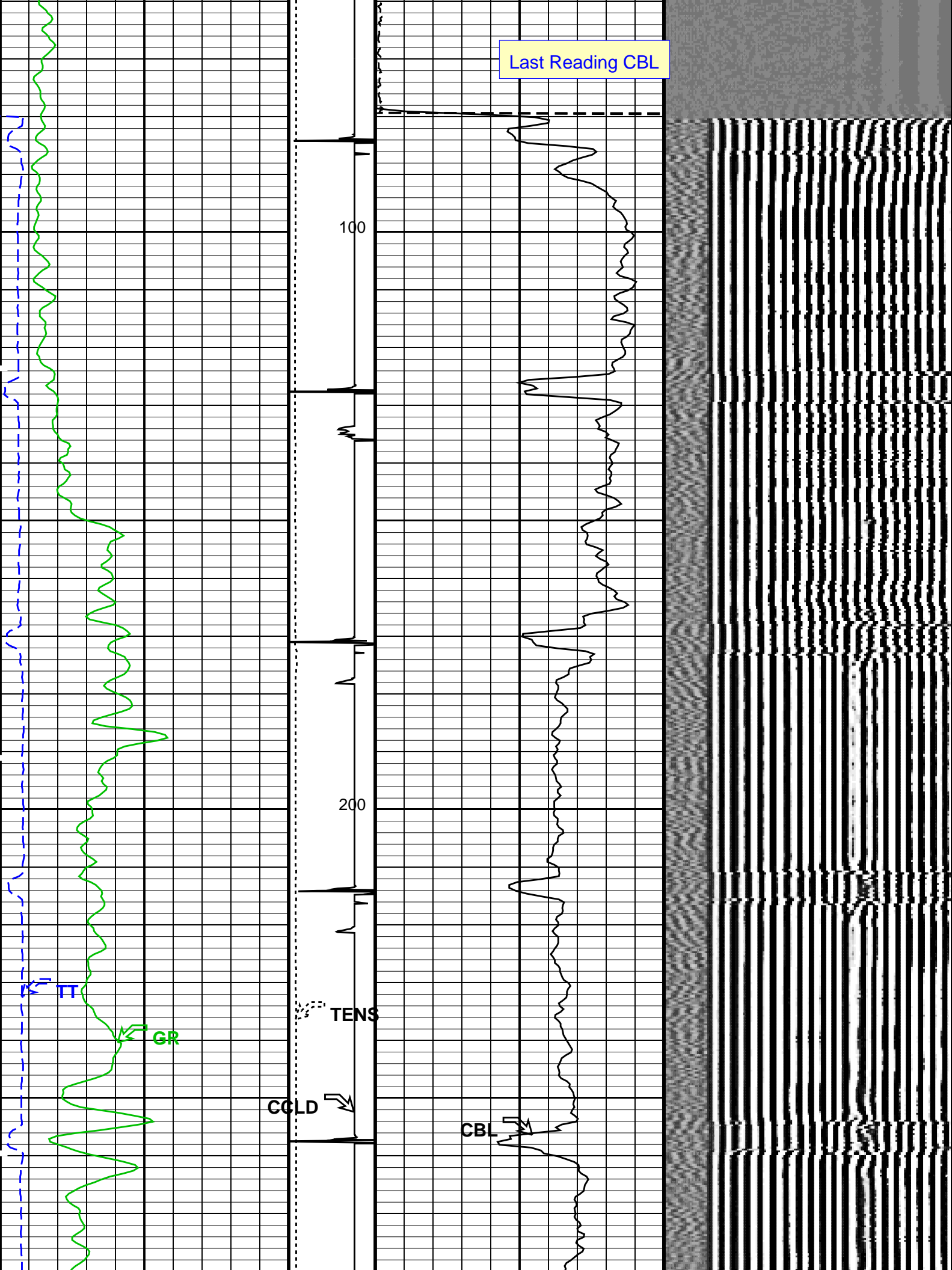
OP System Version: 19C0-187			
SCMT-CB	SRPC-5214-H2-2012-OP1	PSPT	SRPC-5214-H2-2012-OP1

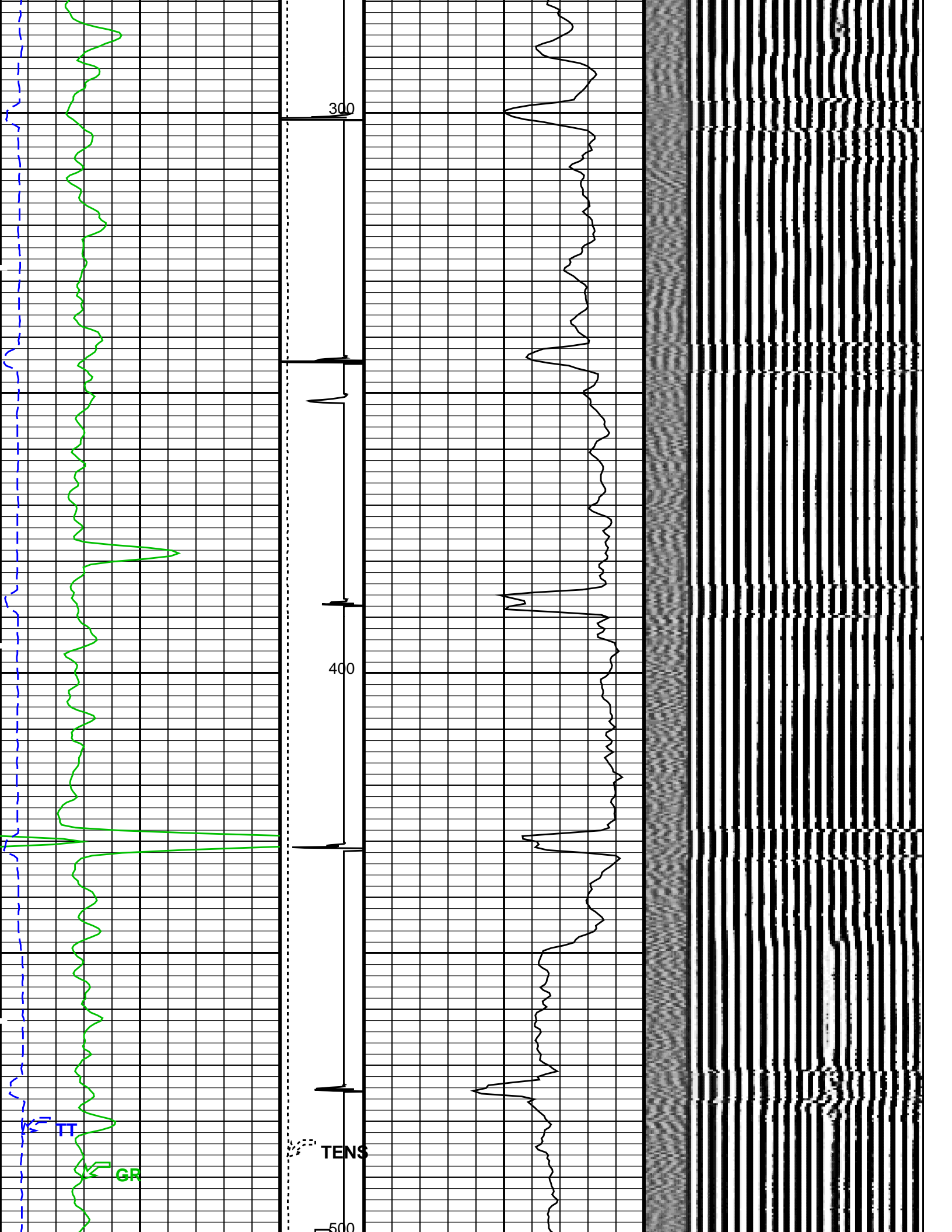
## PIP SUMMARY

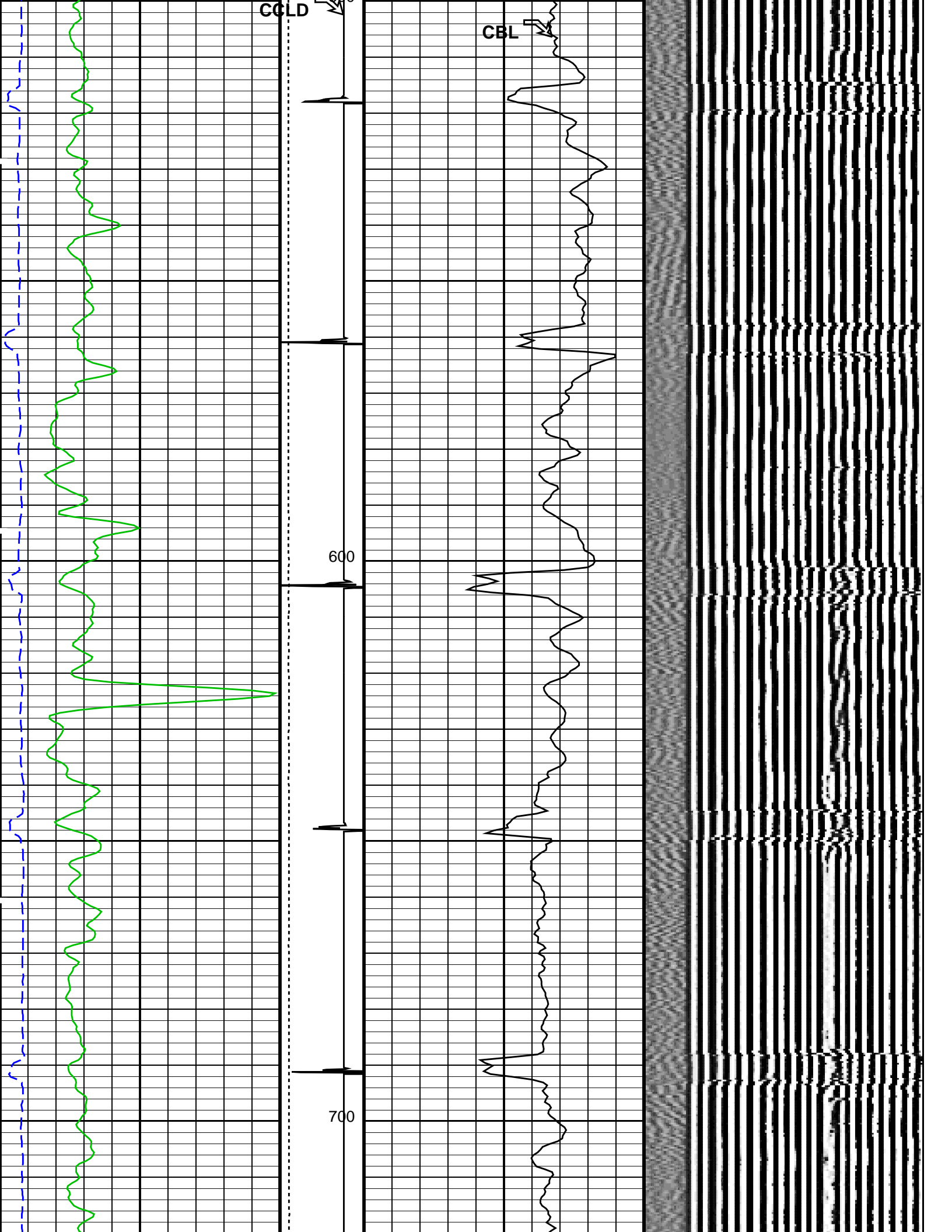
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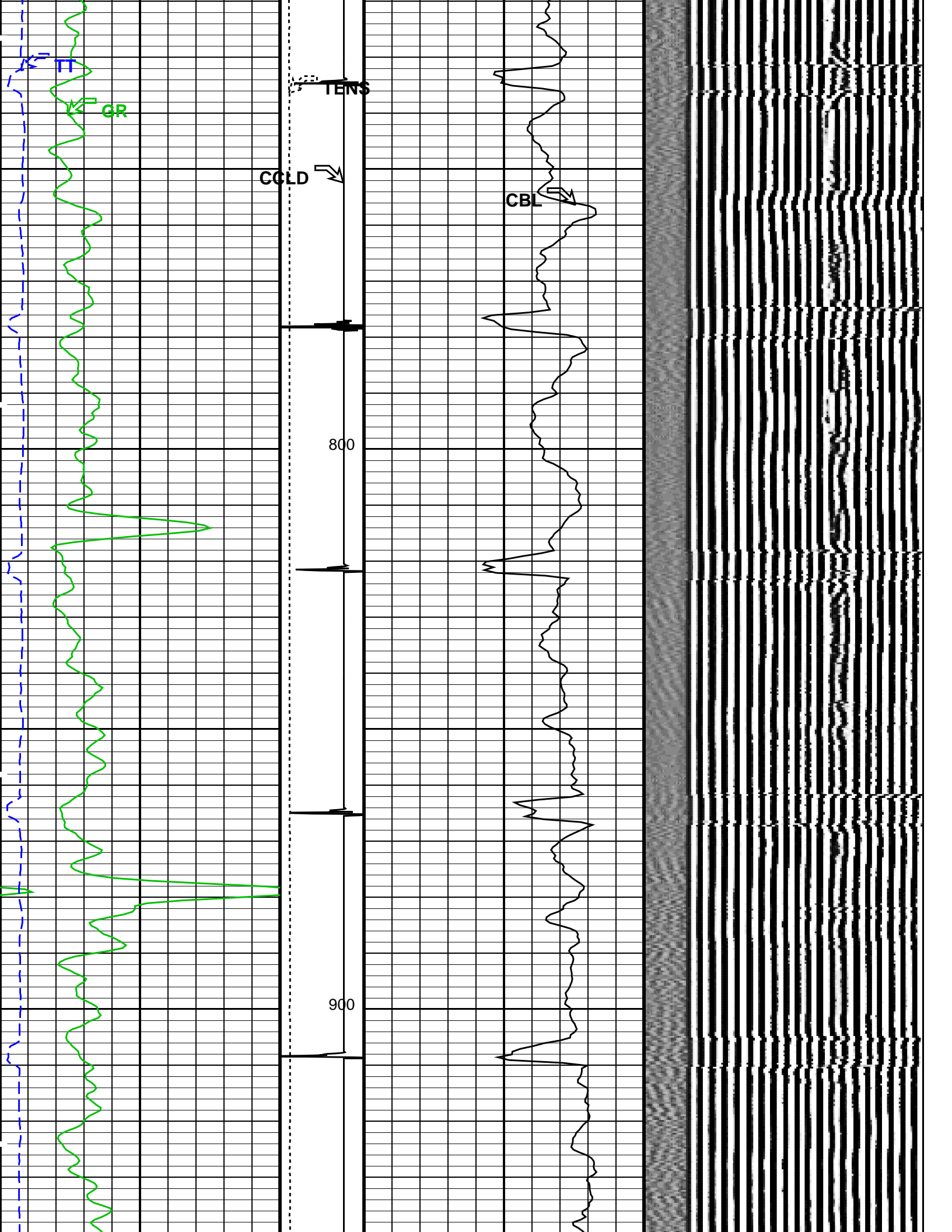


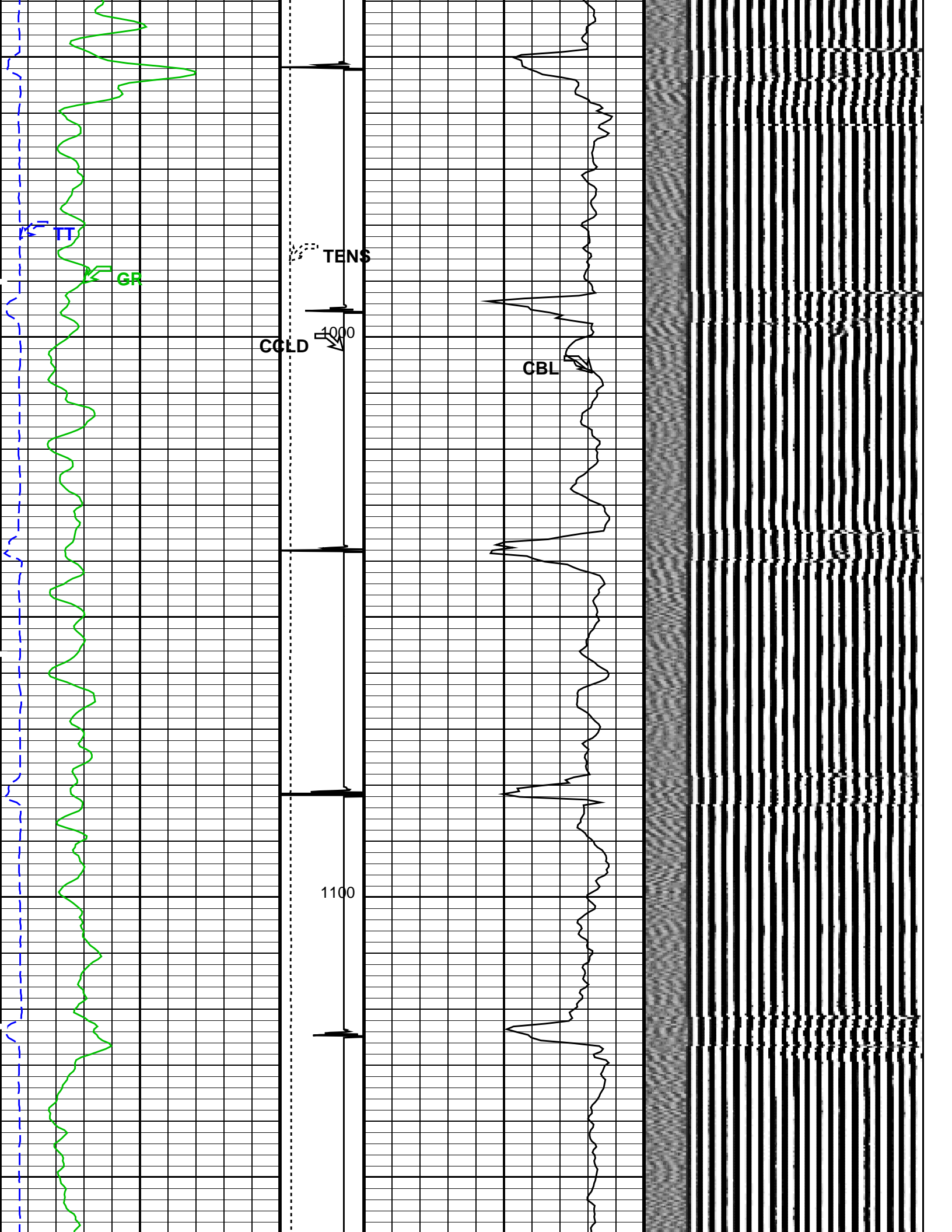




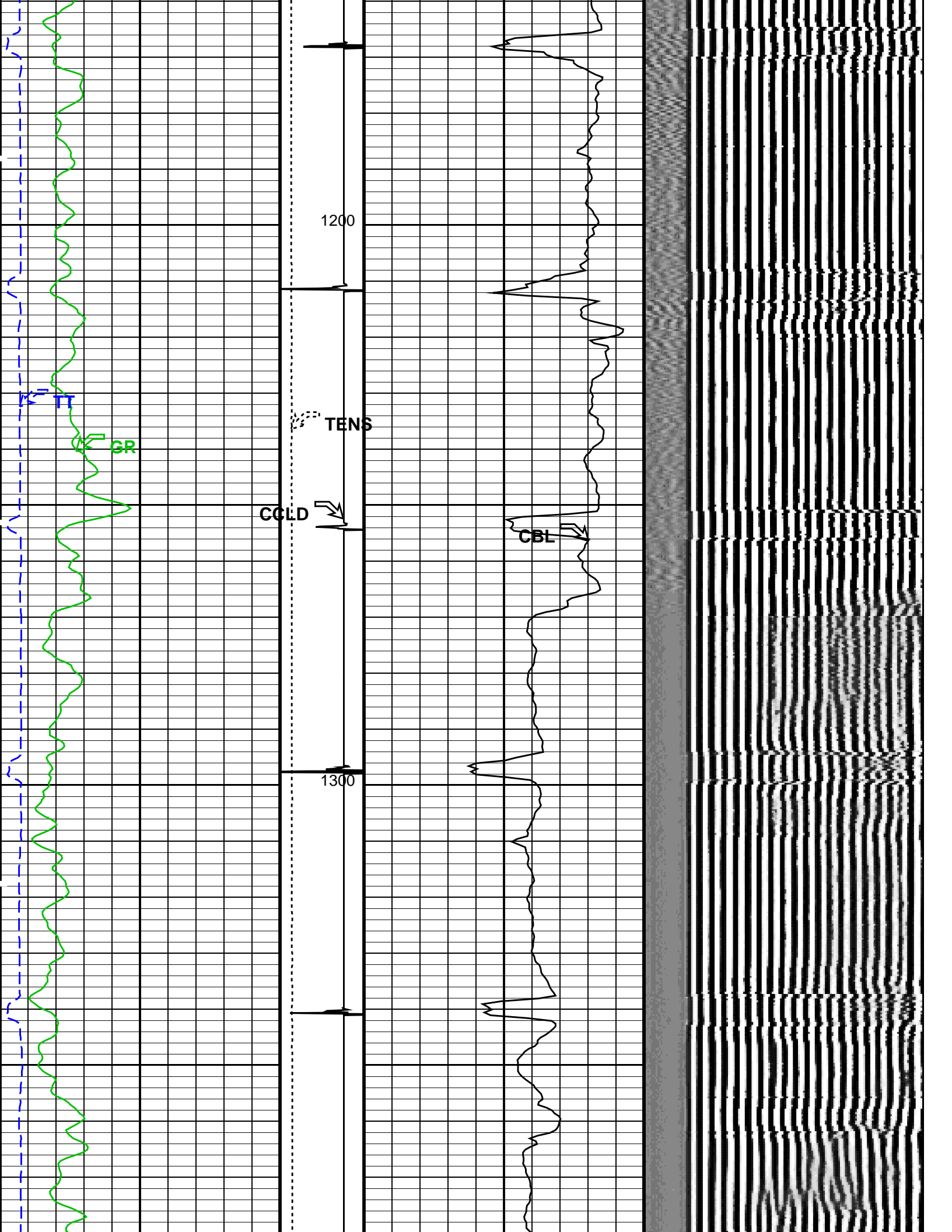


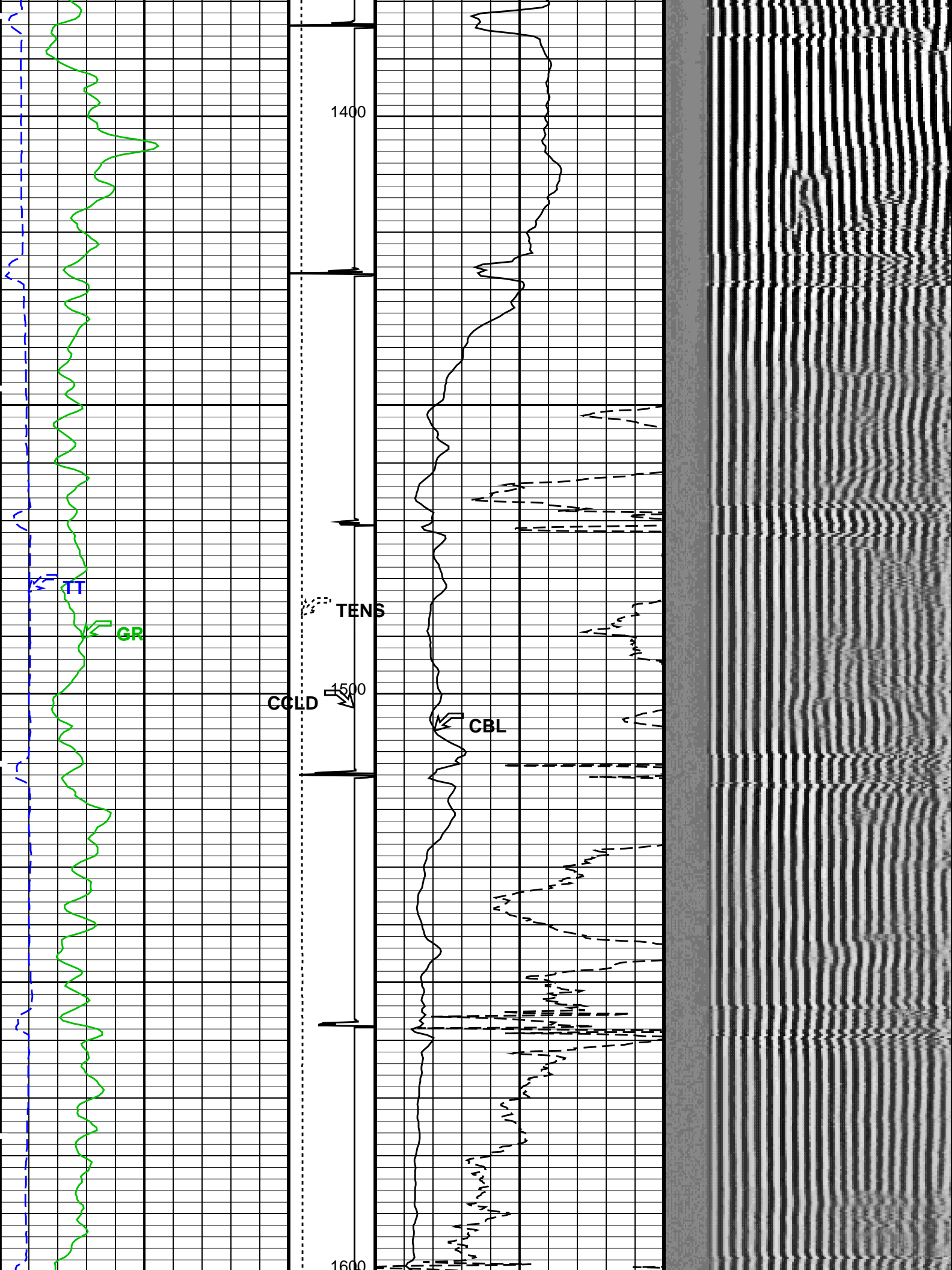


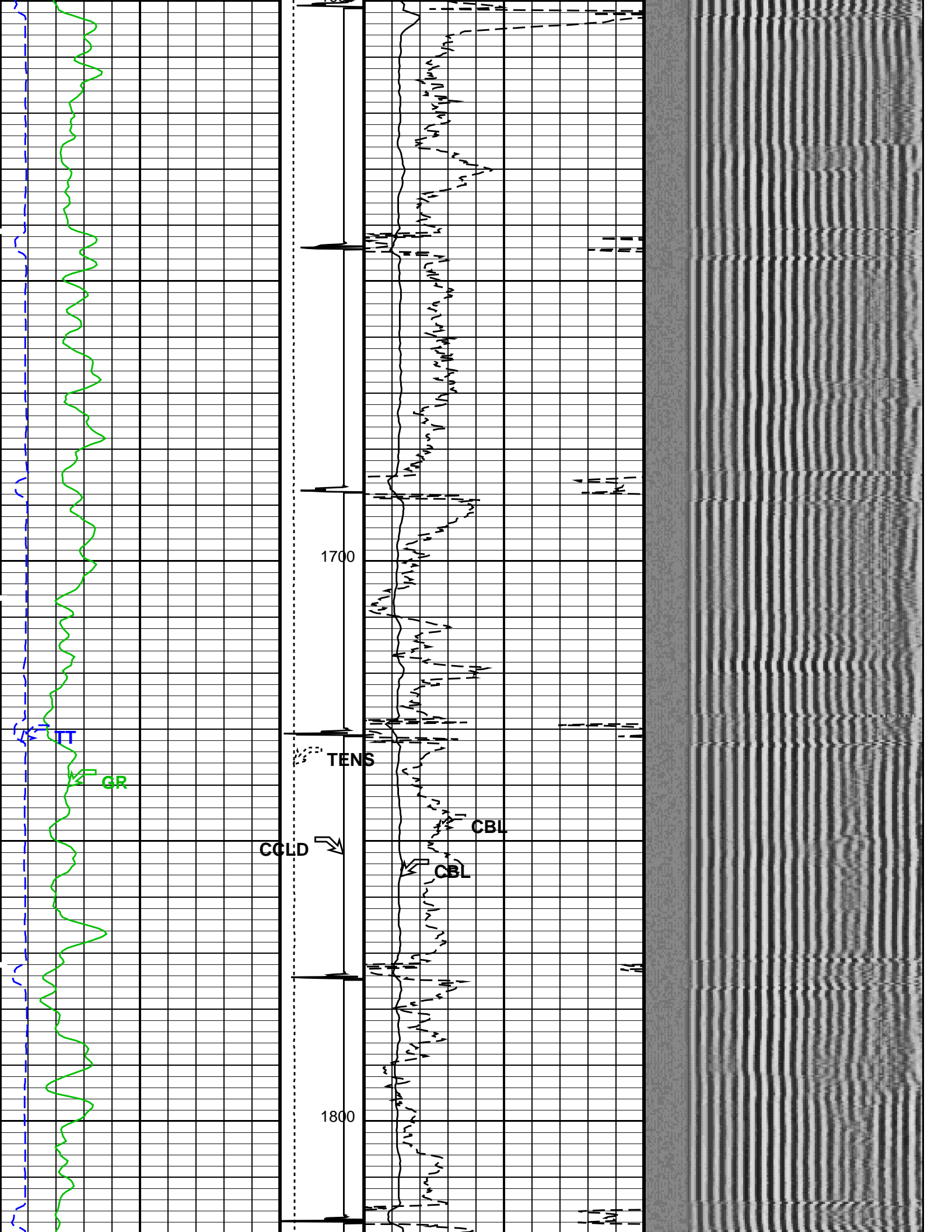




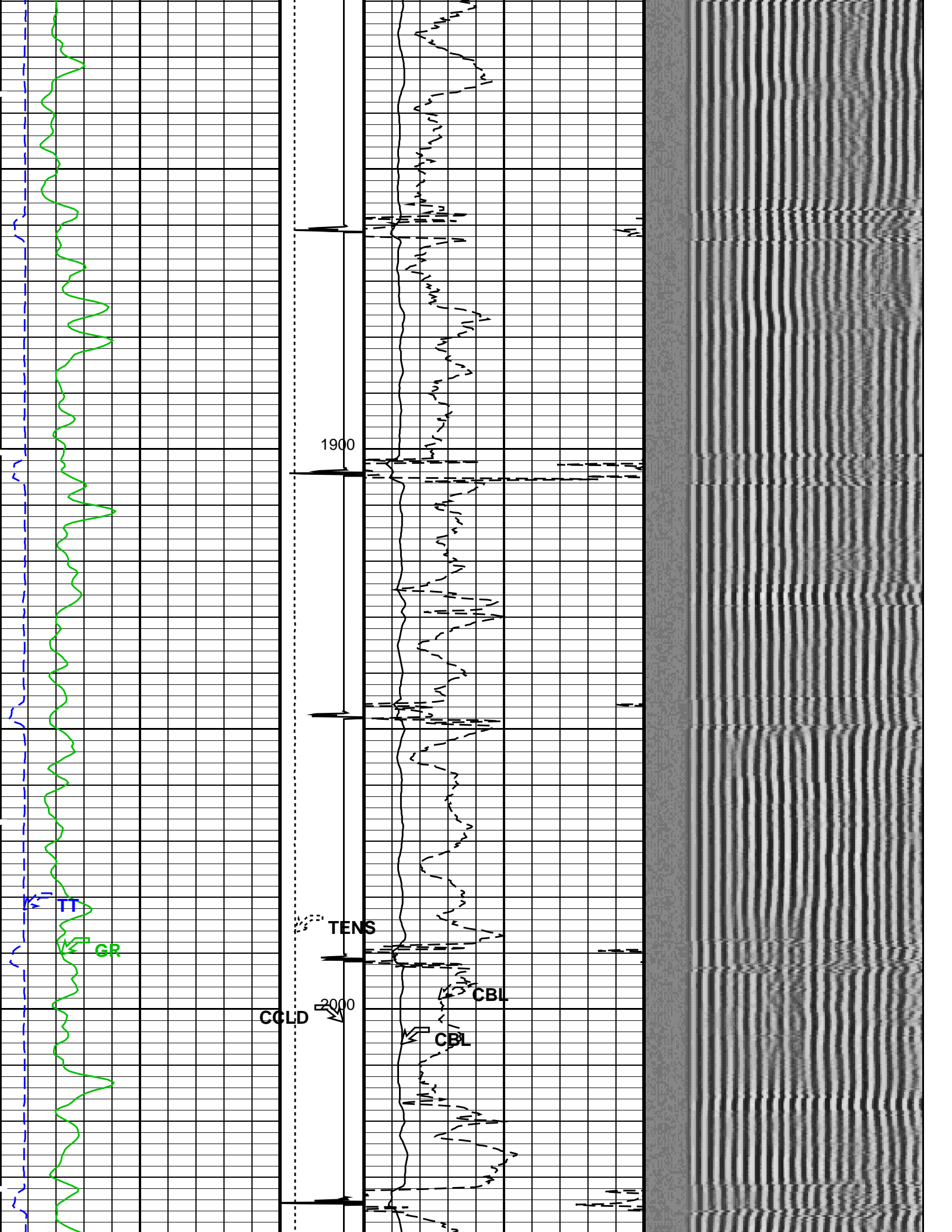


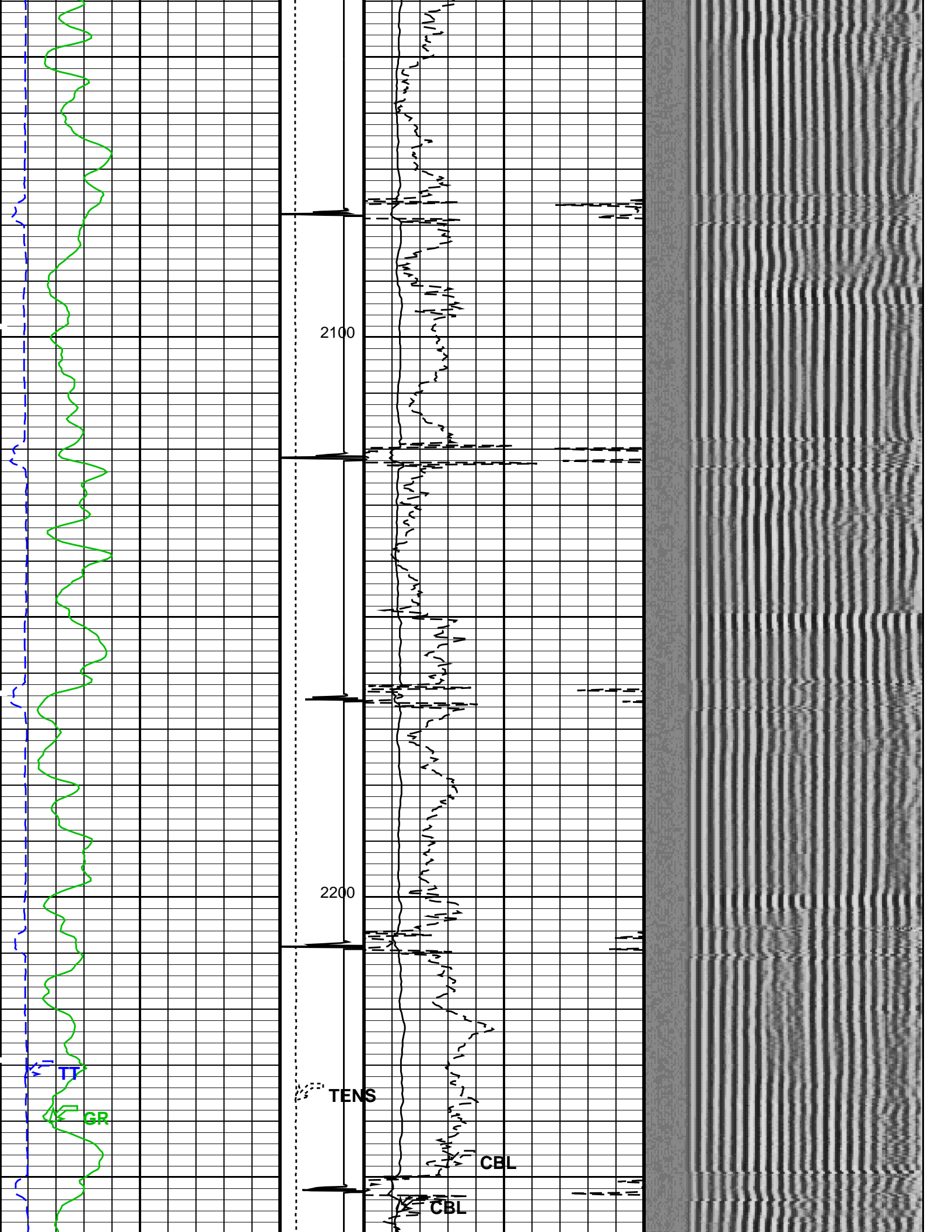


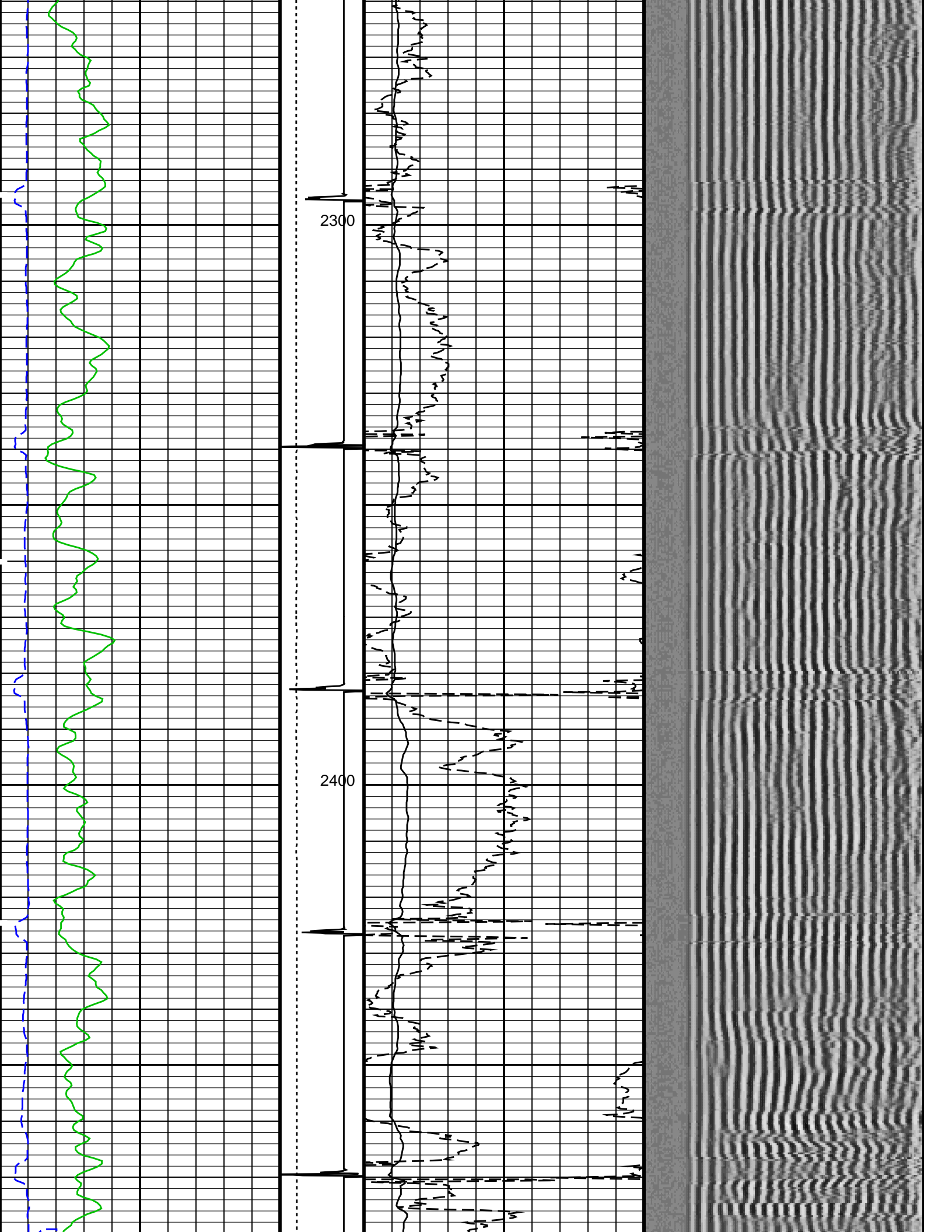


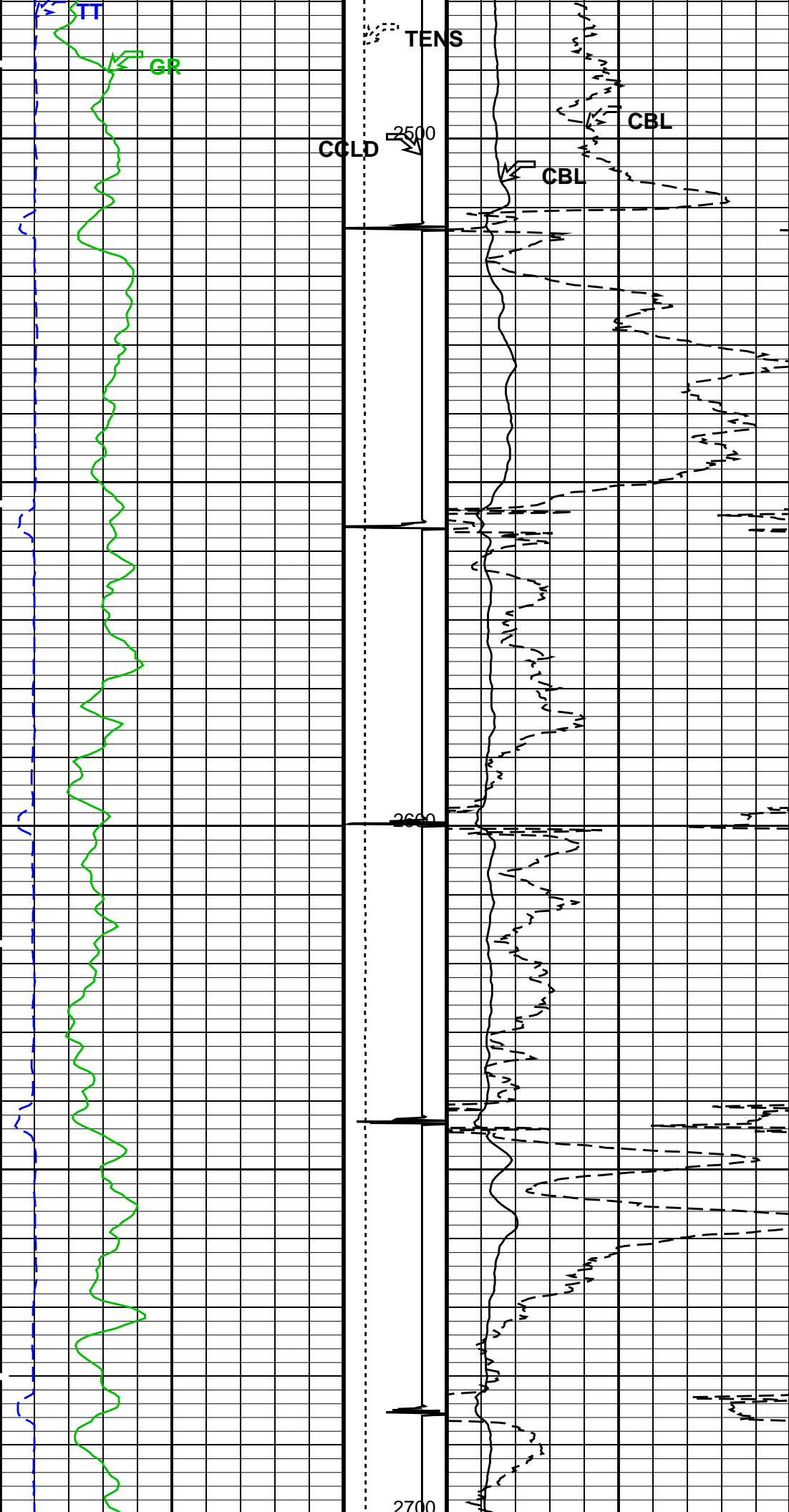




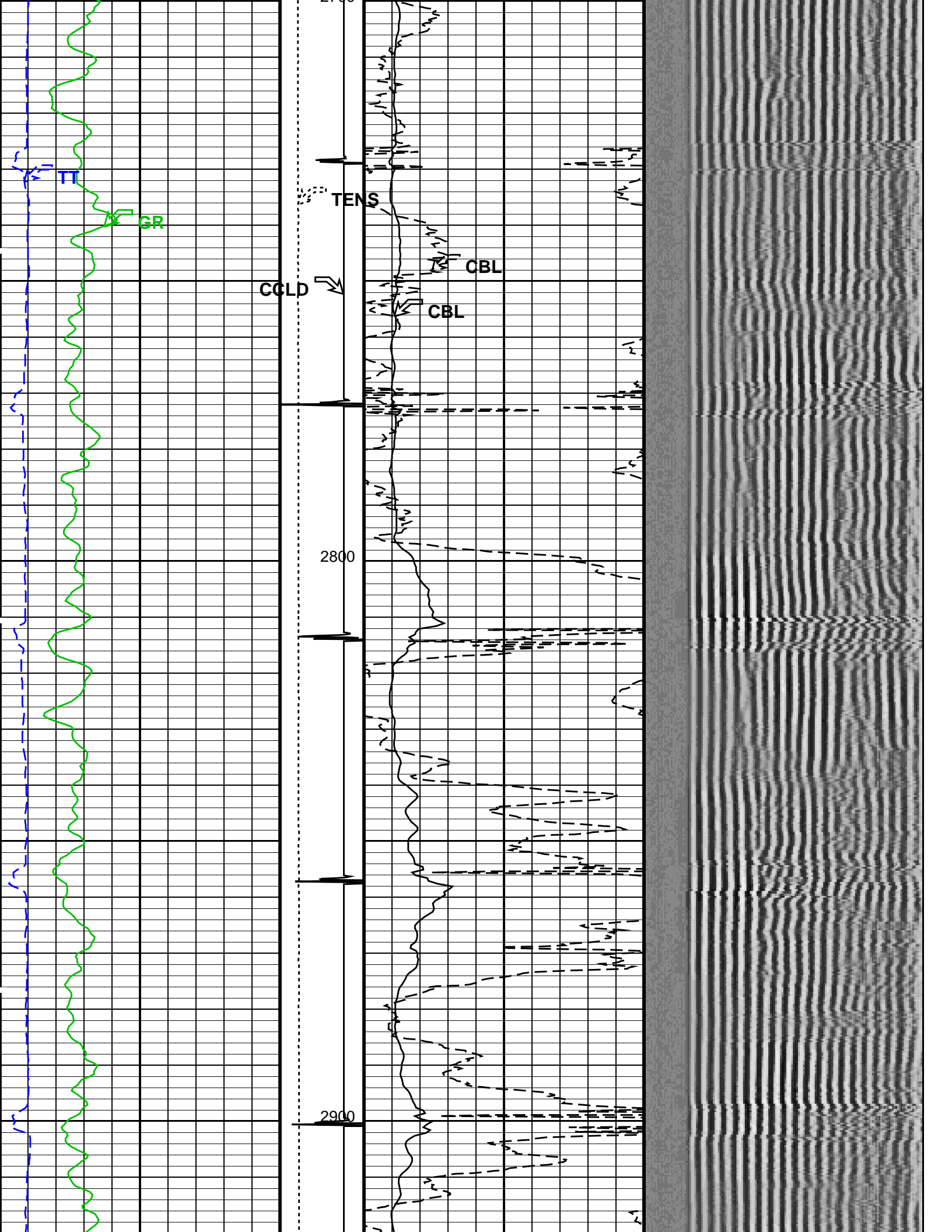


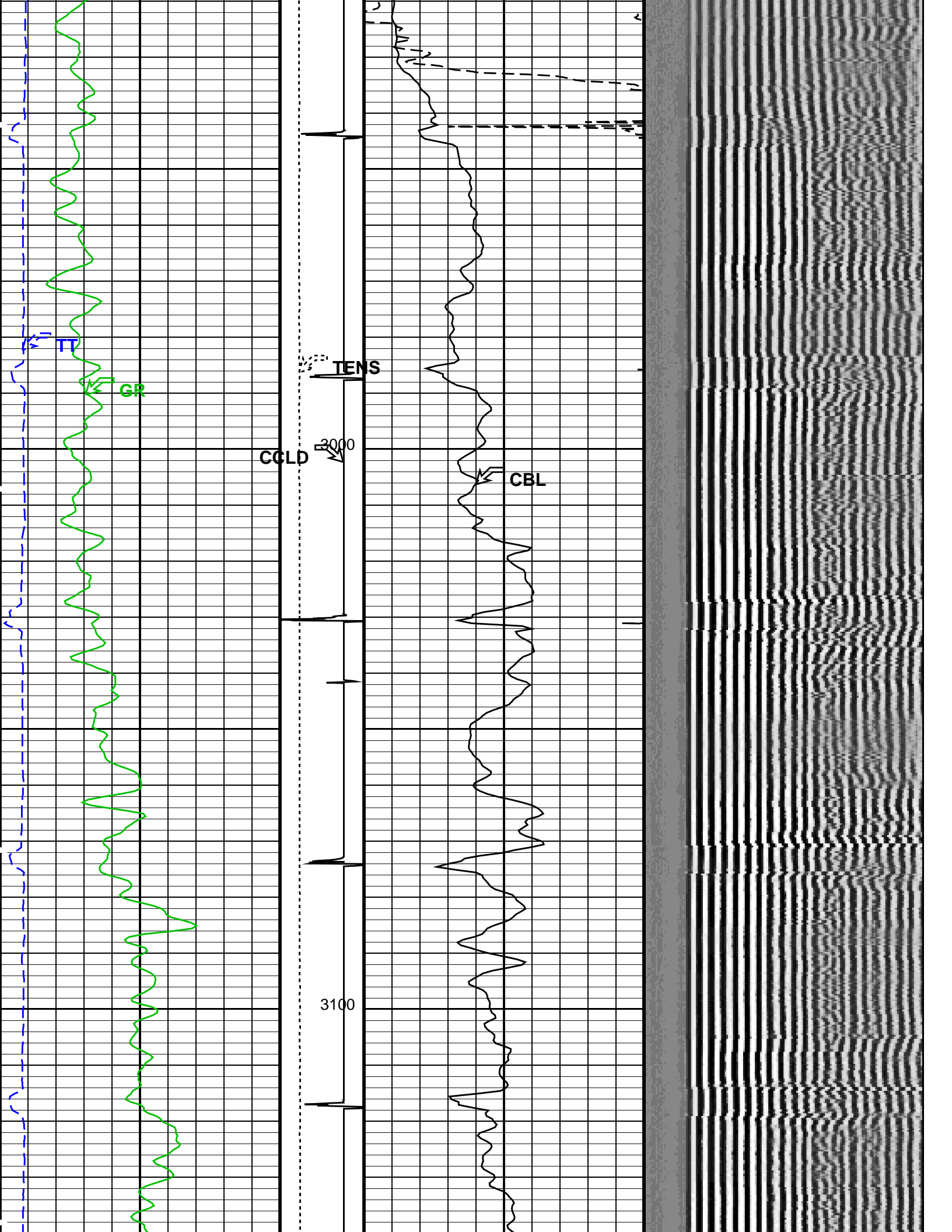


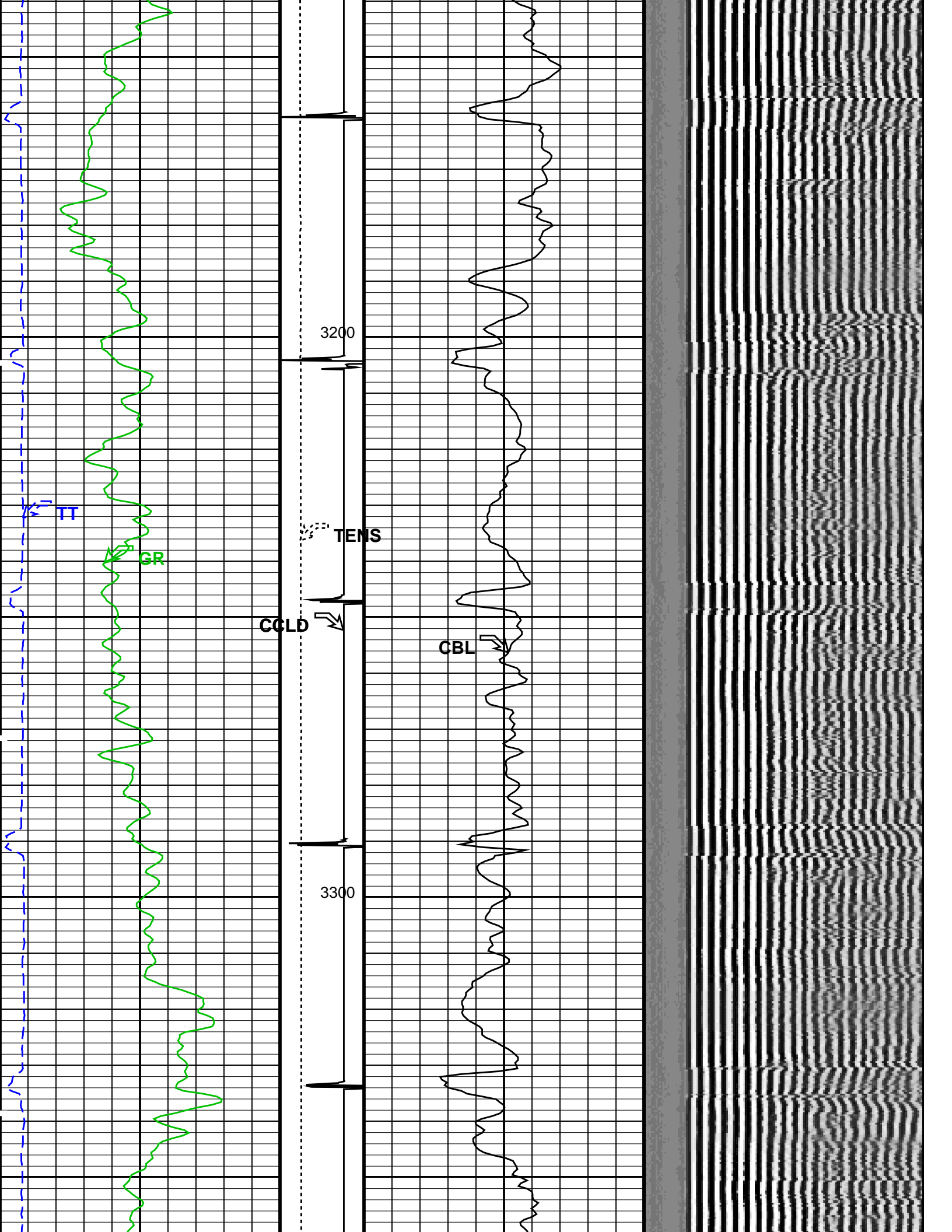


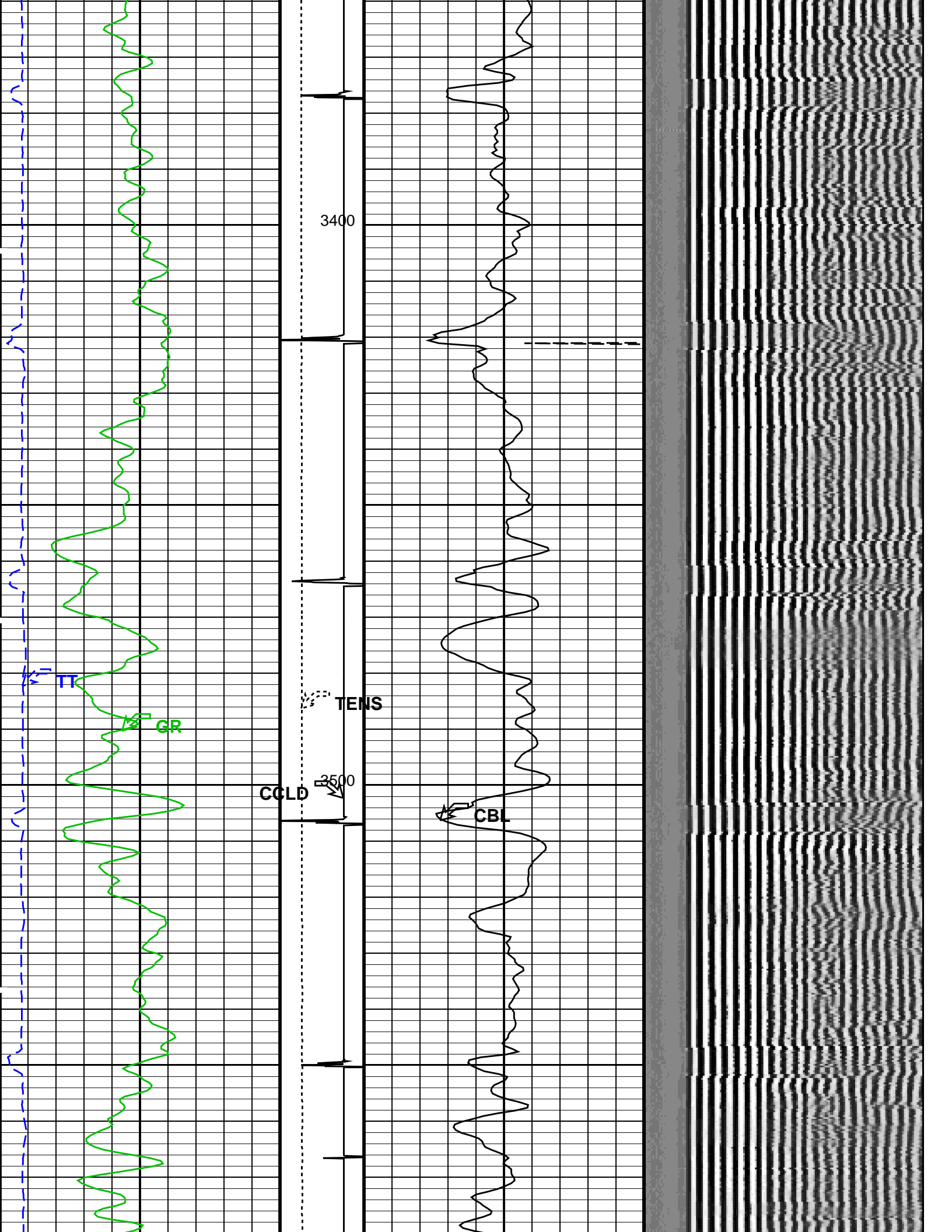




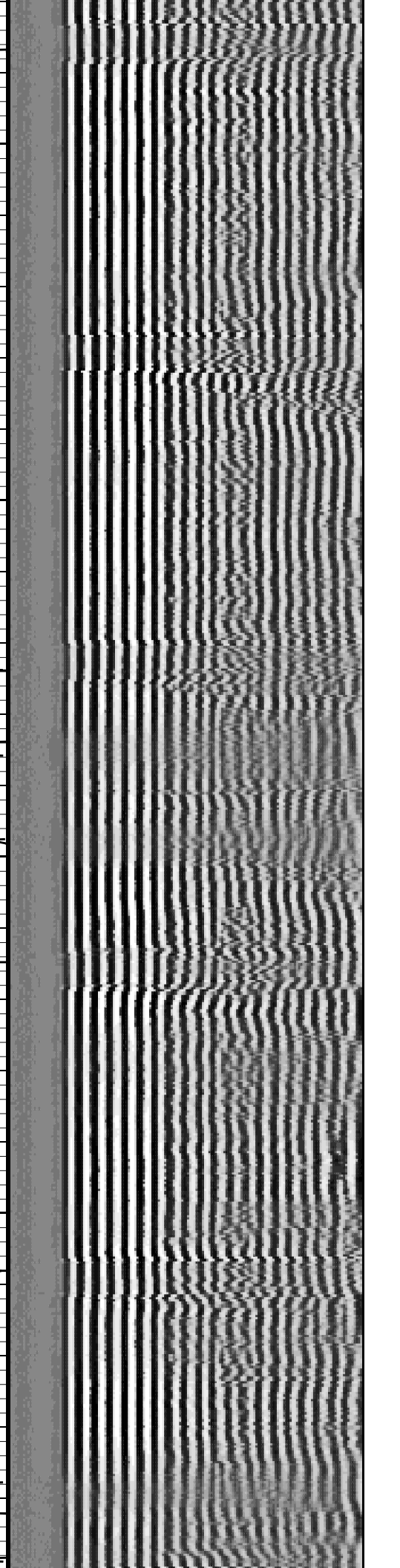
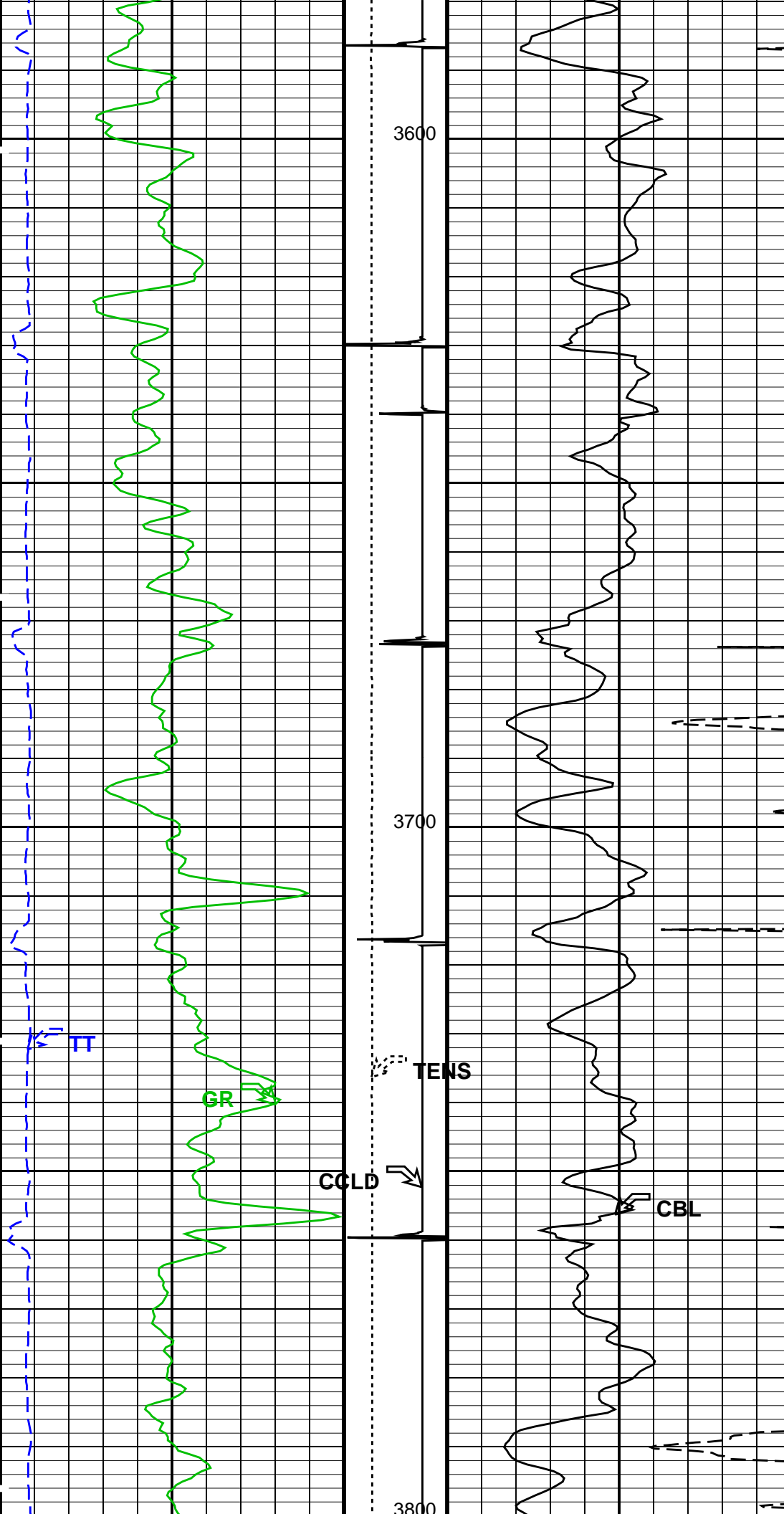


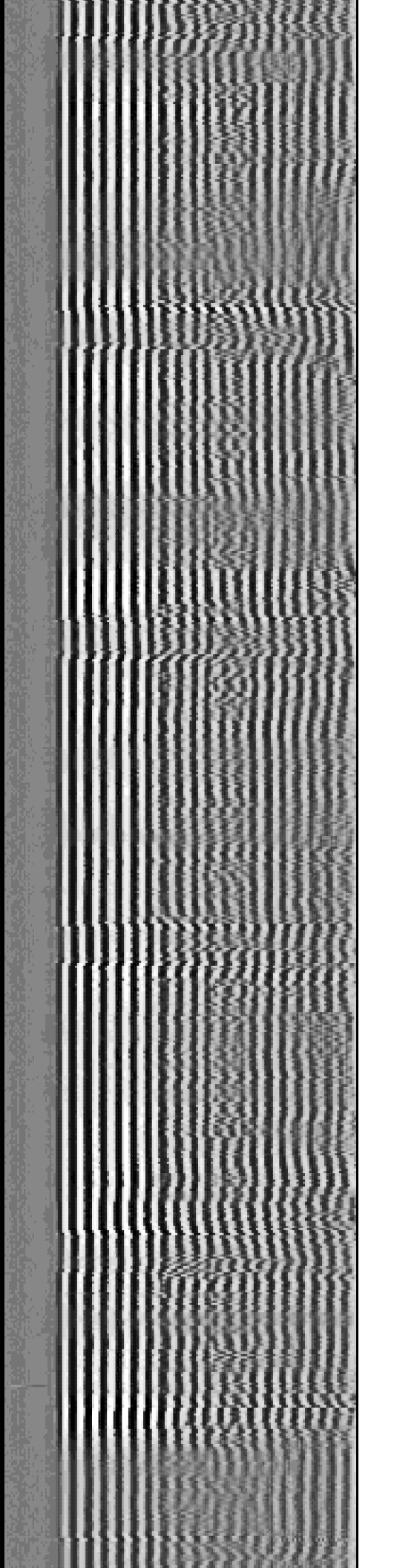
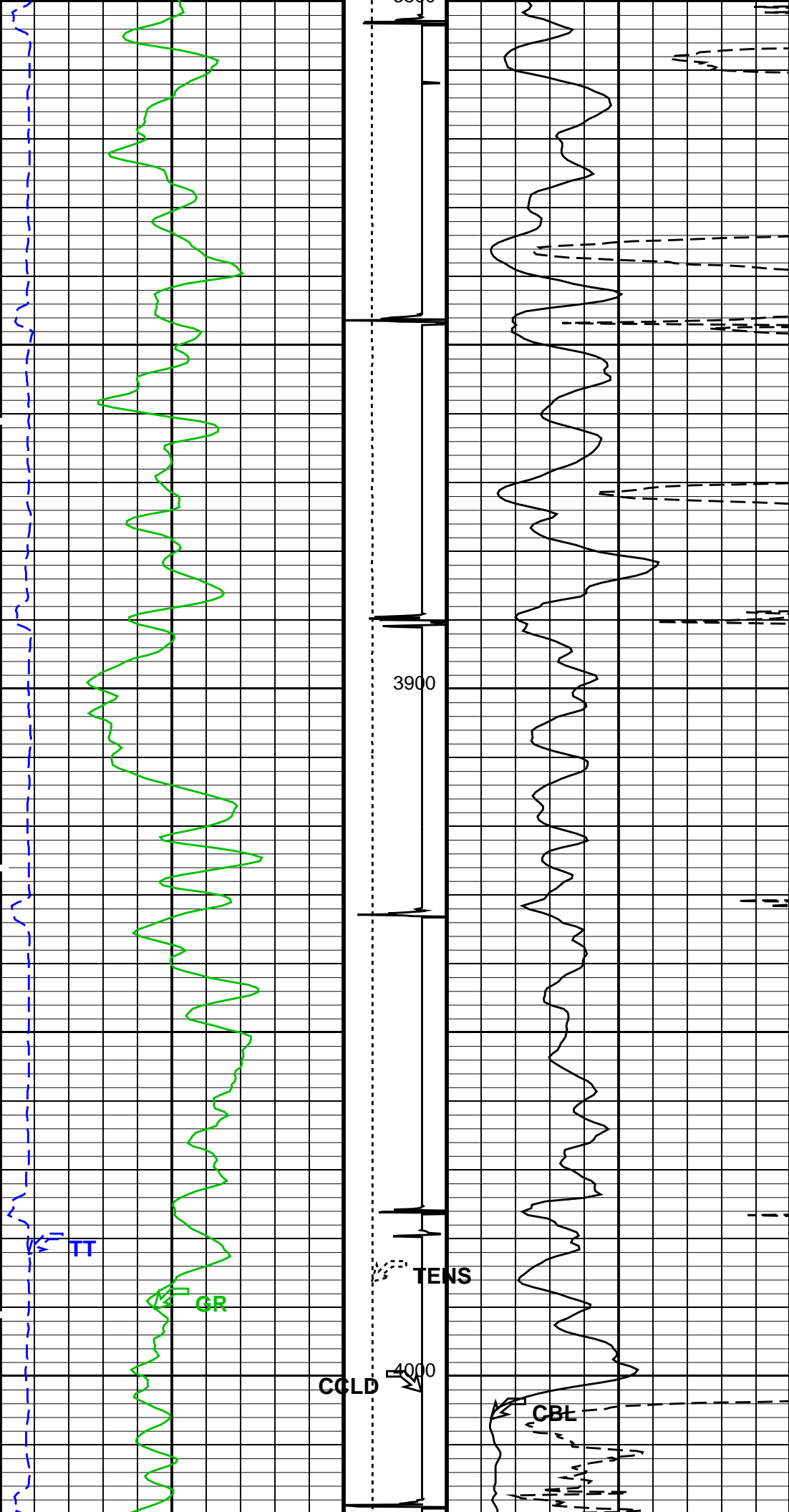


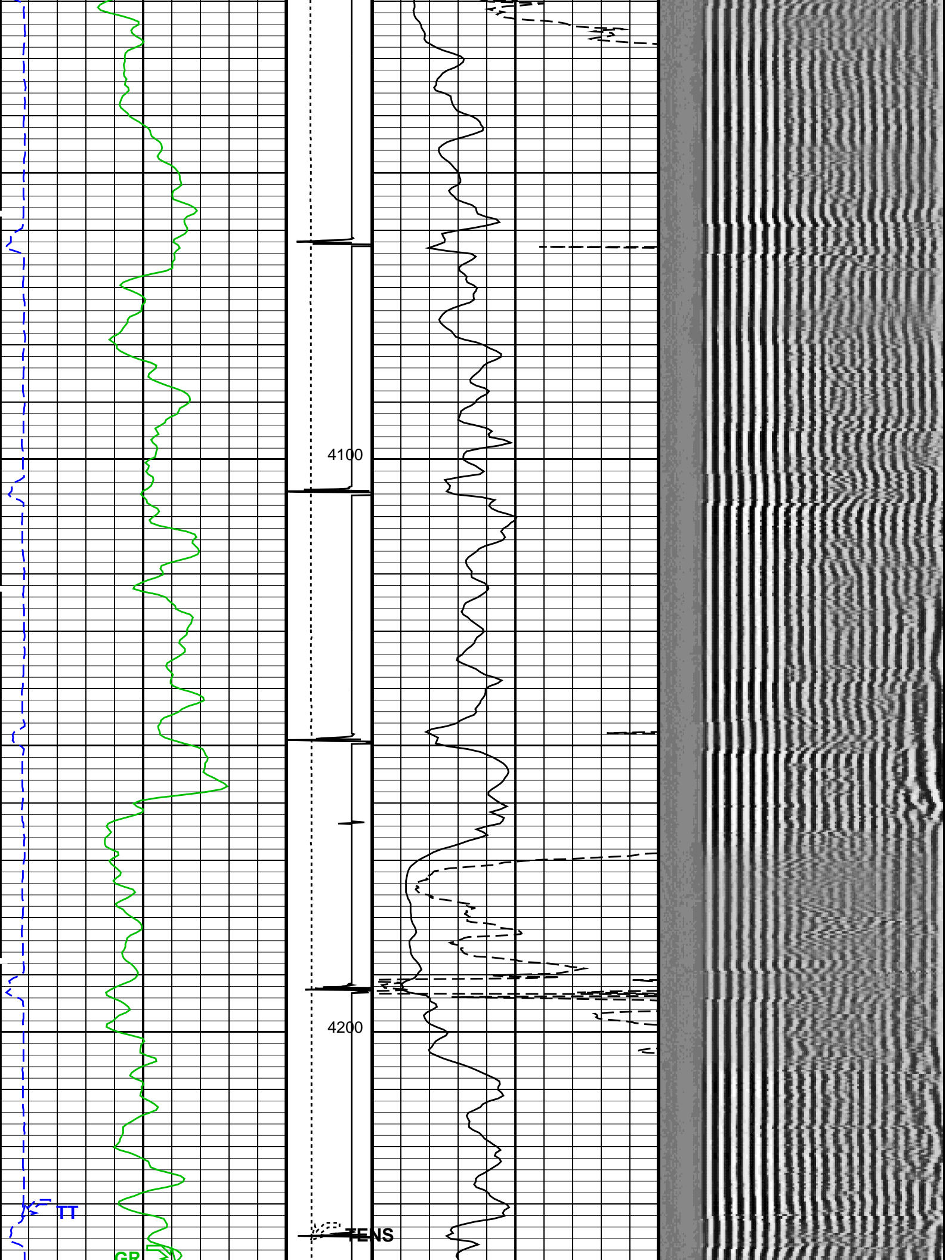


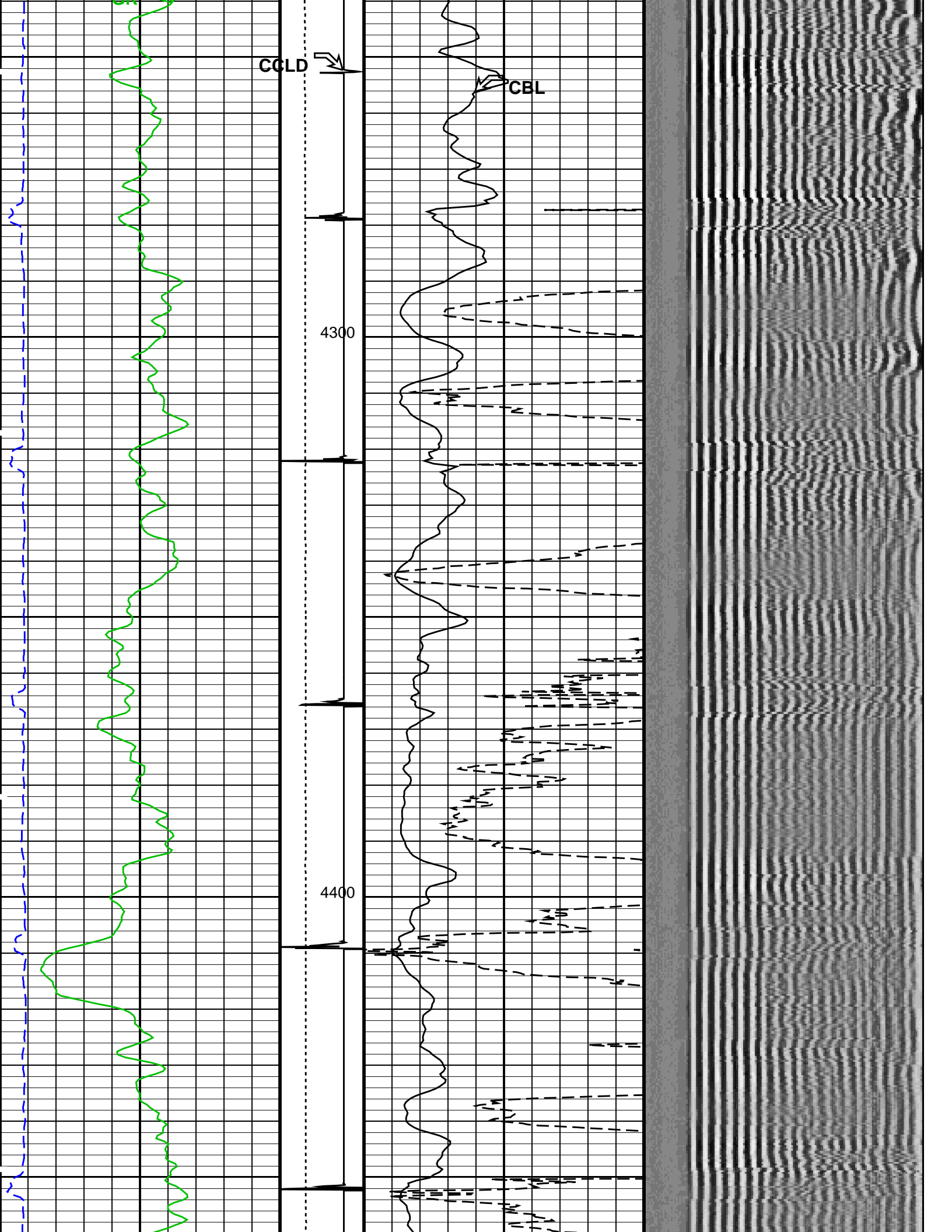




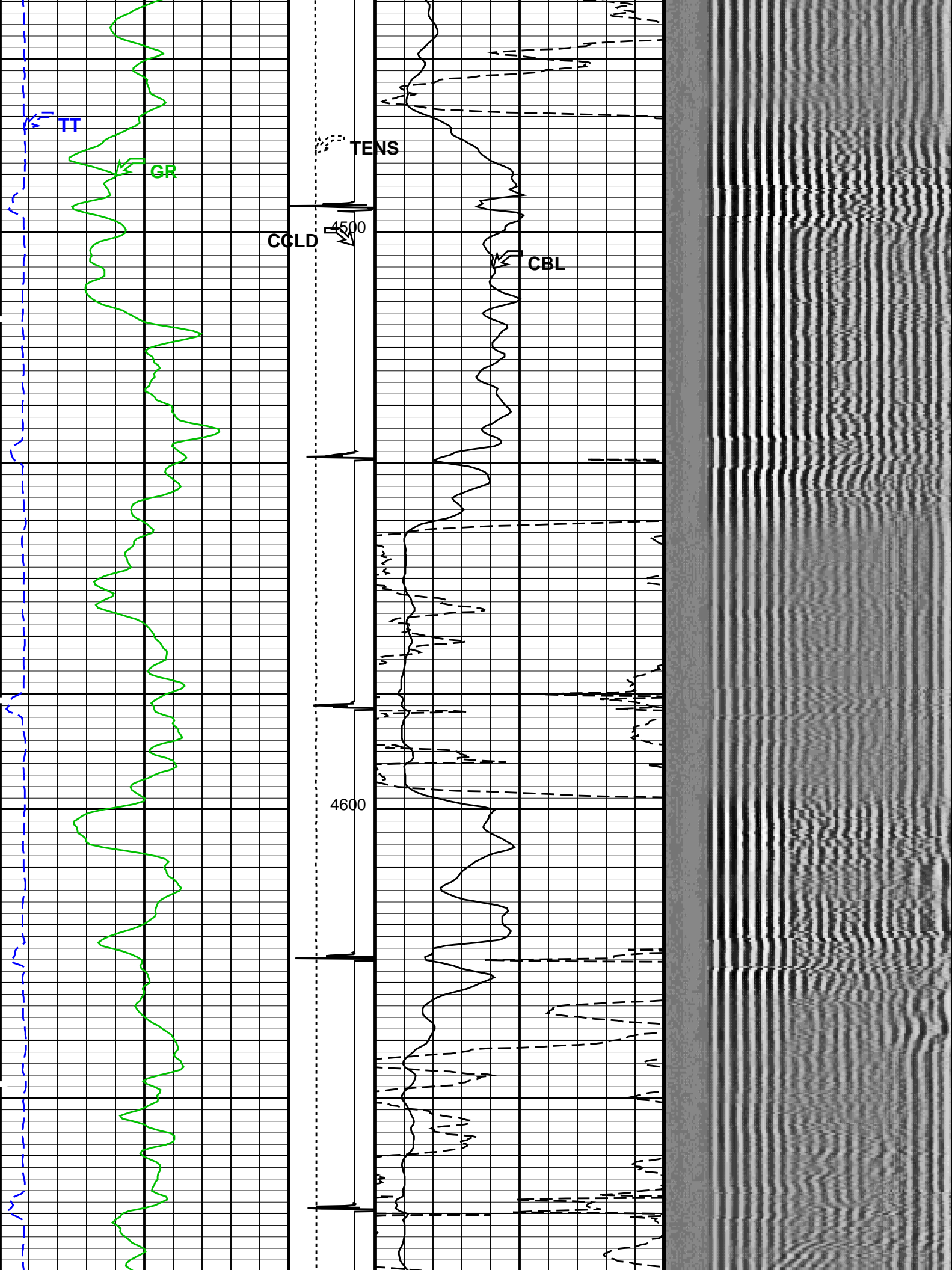


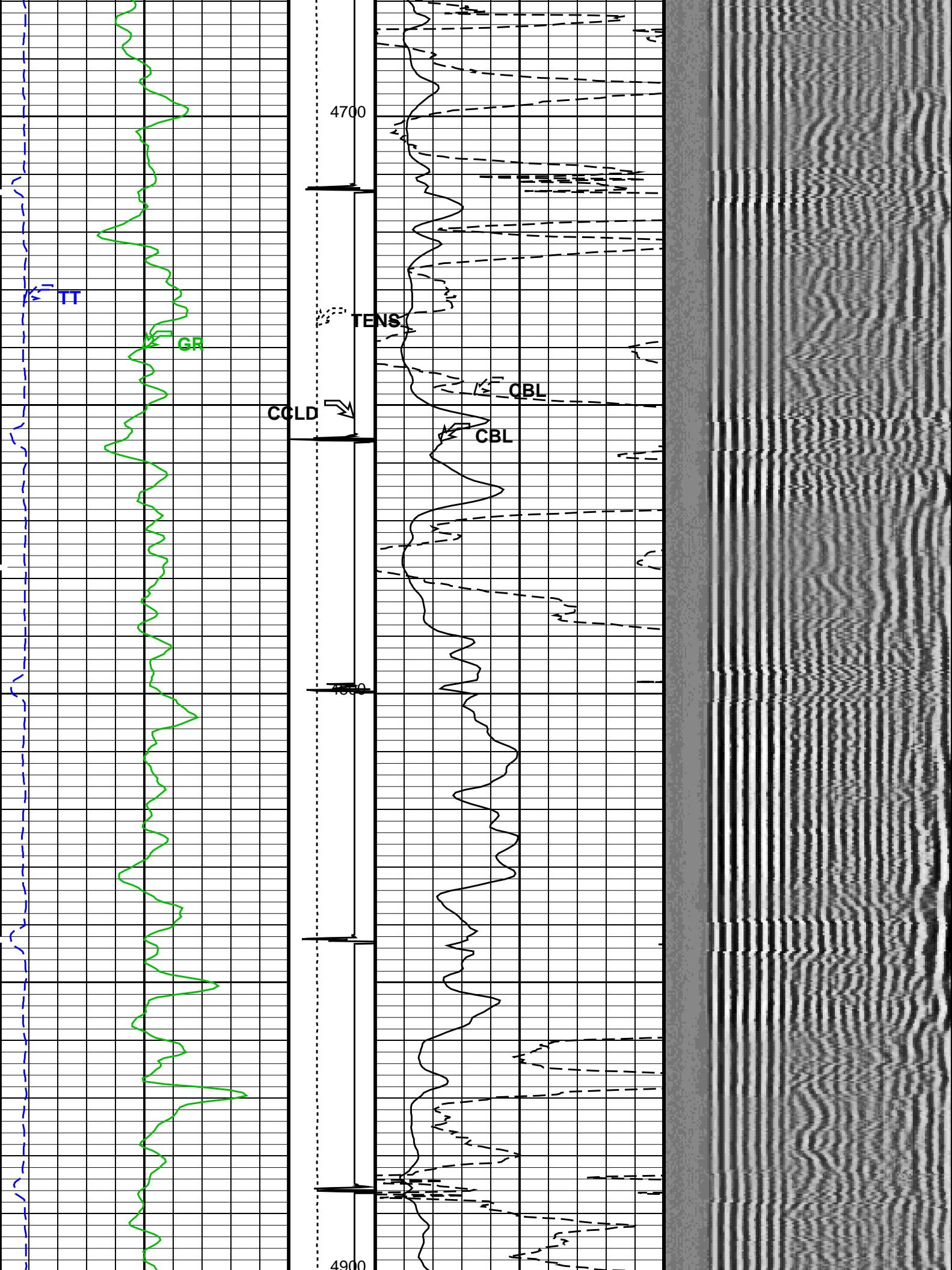


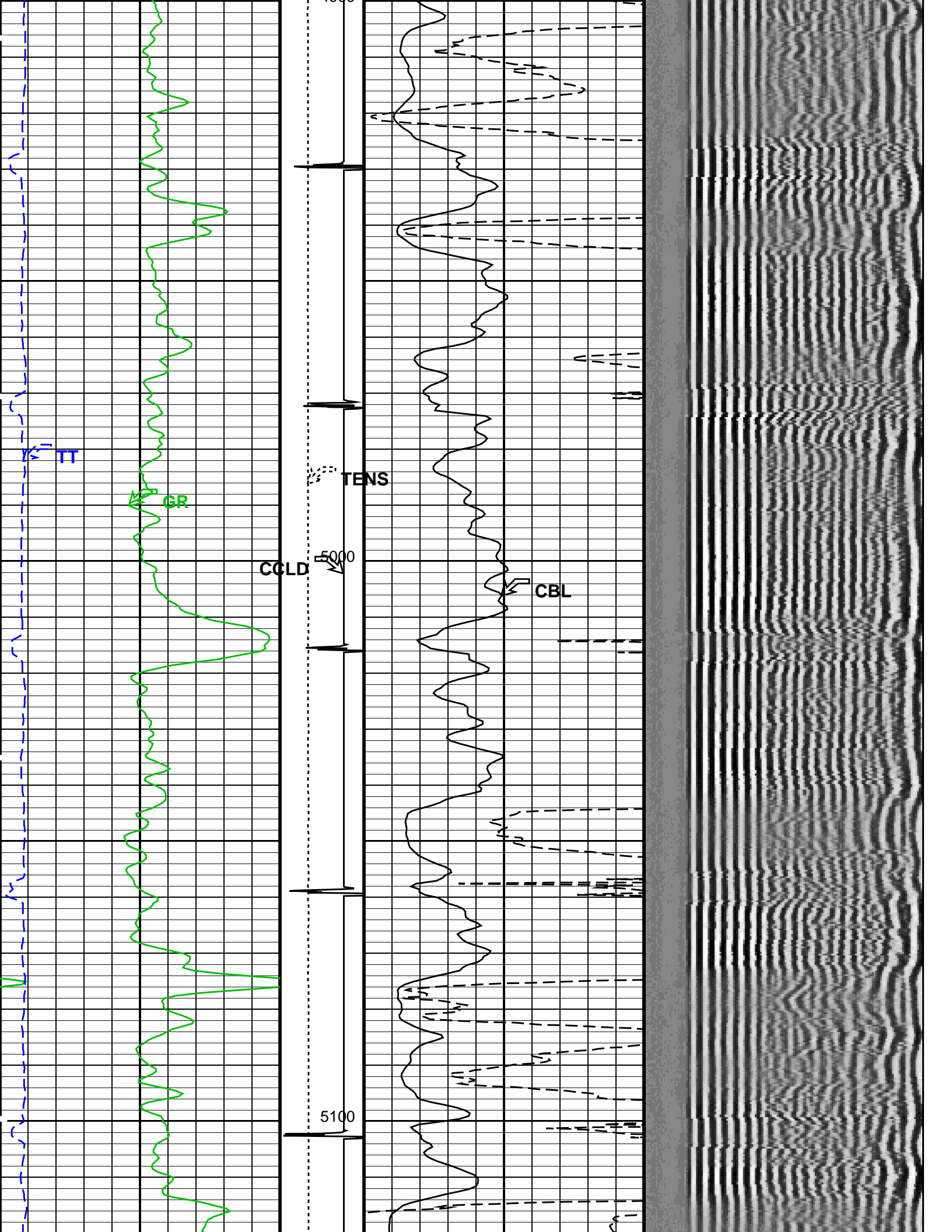


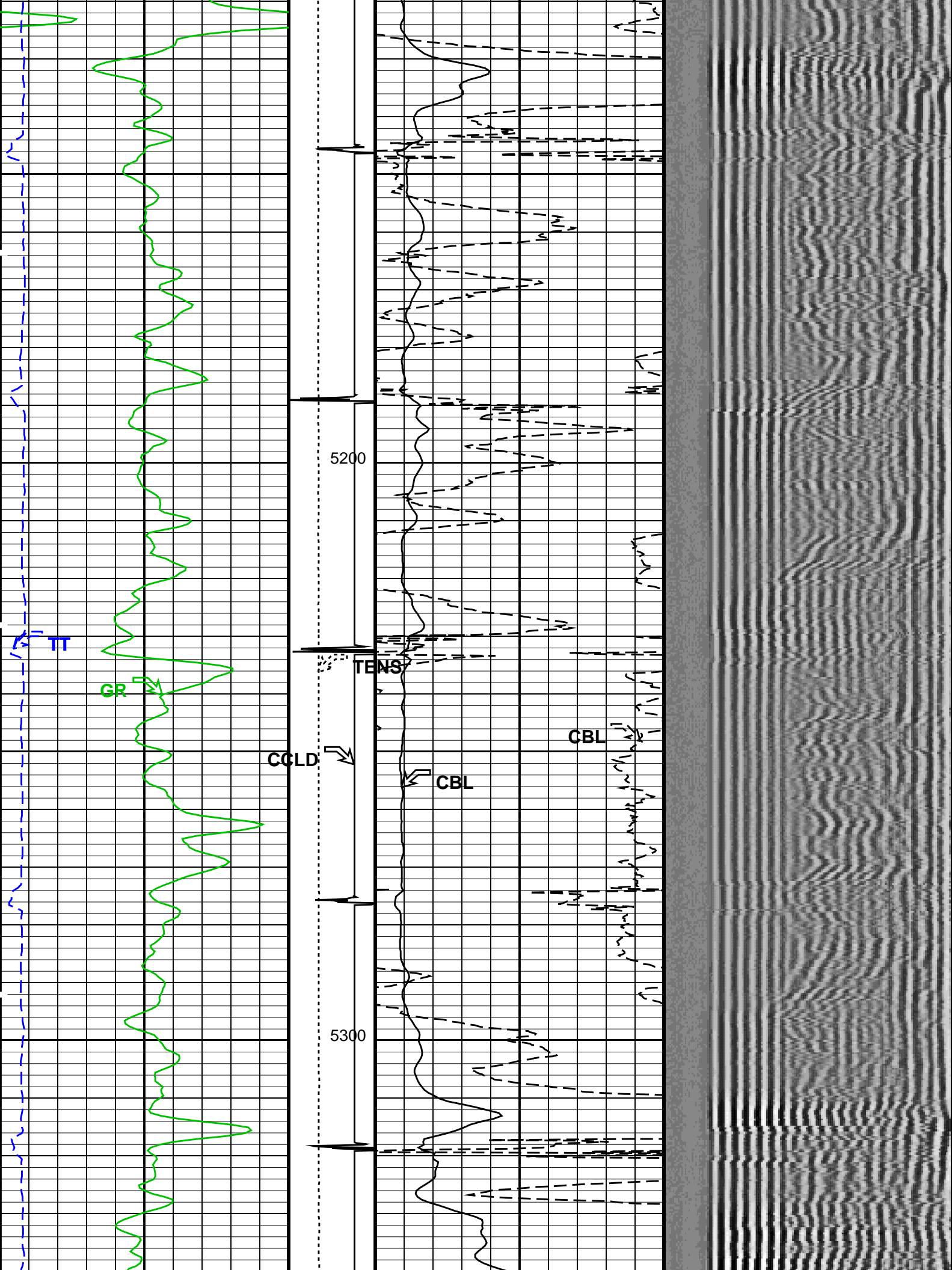




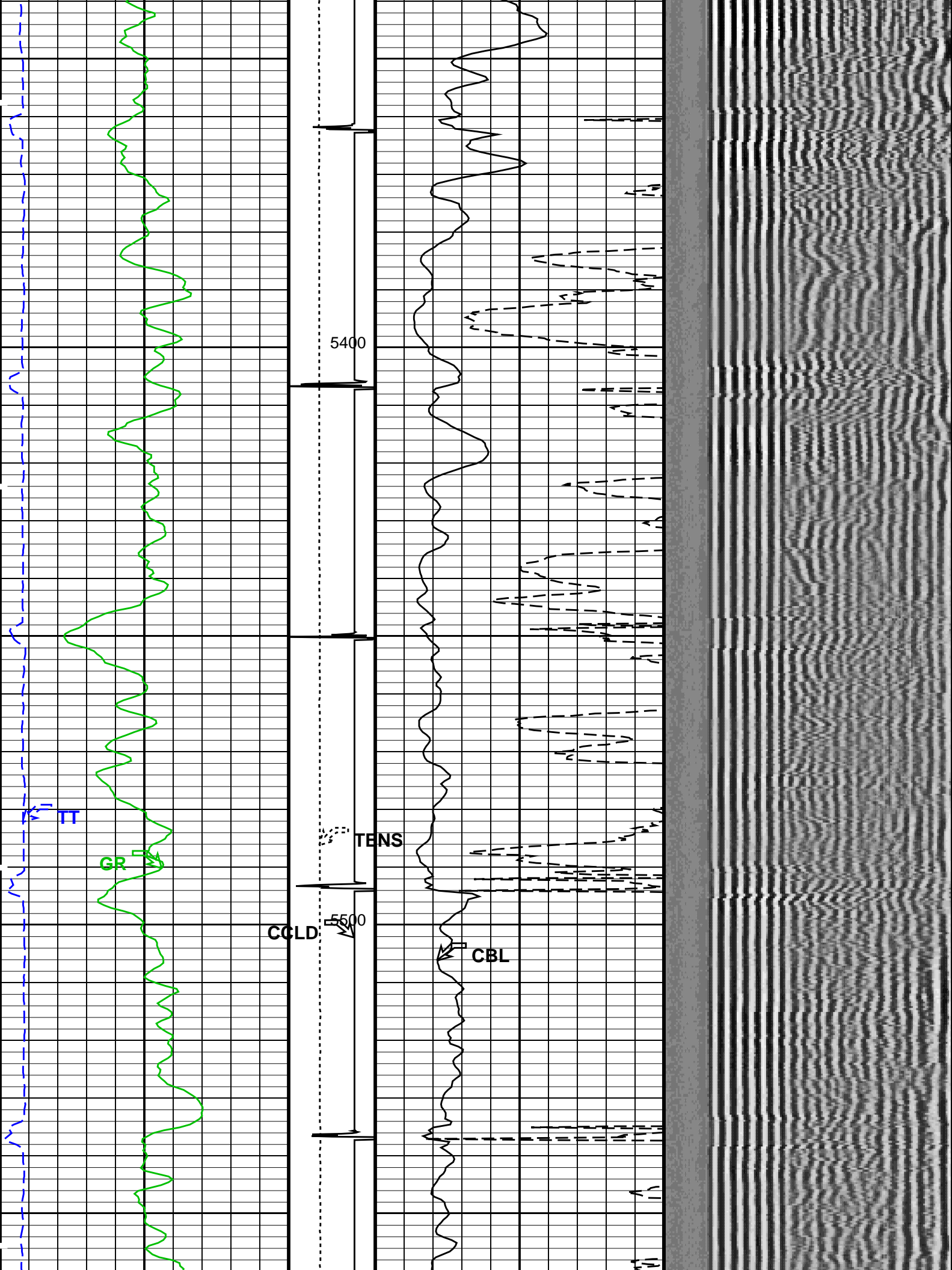


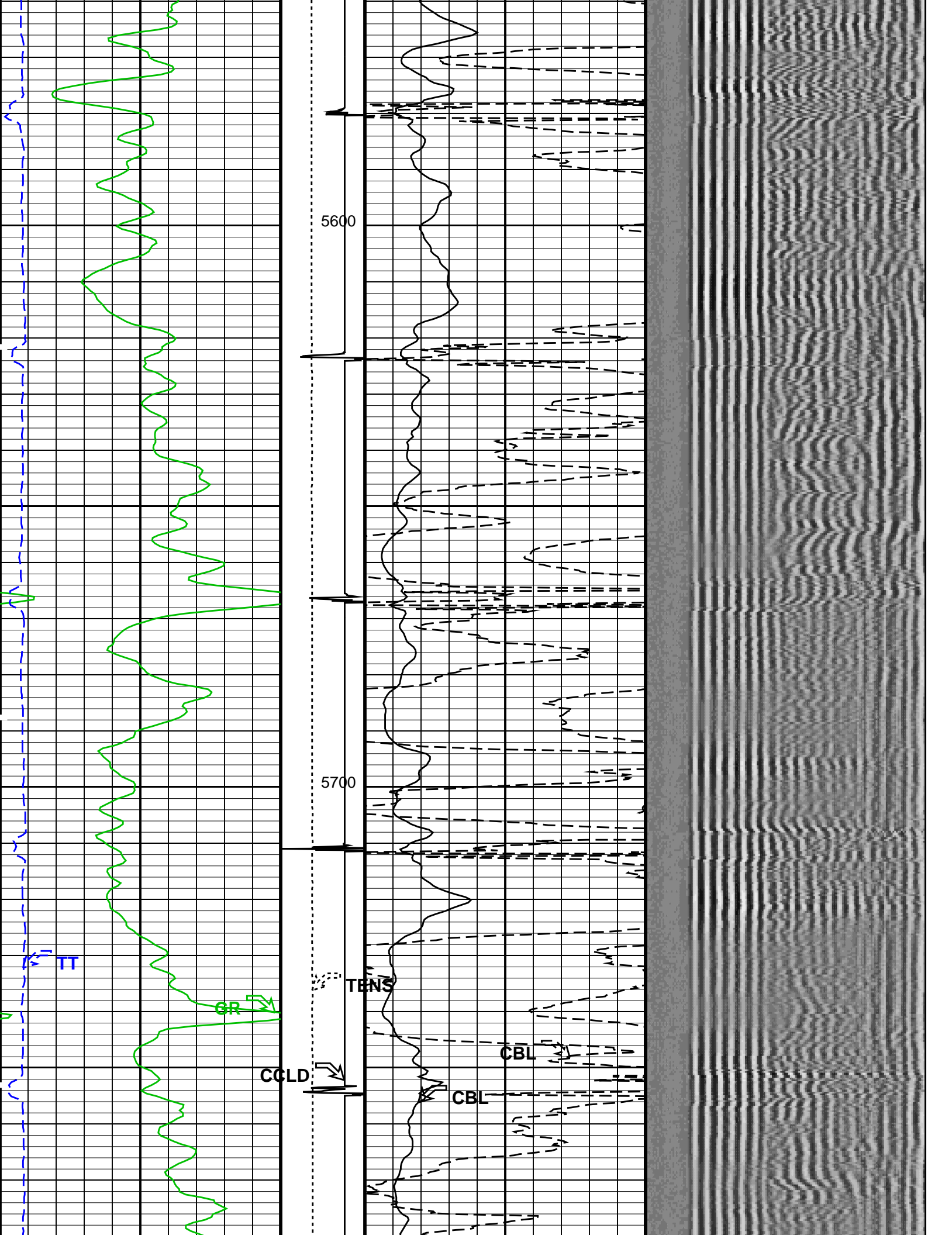


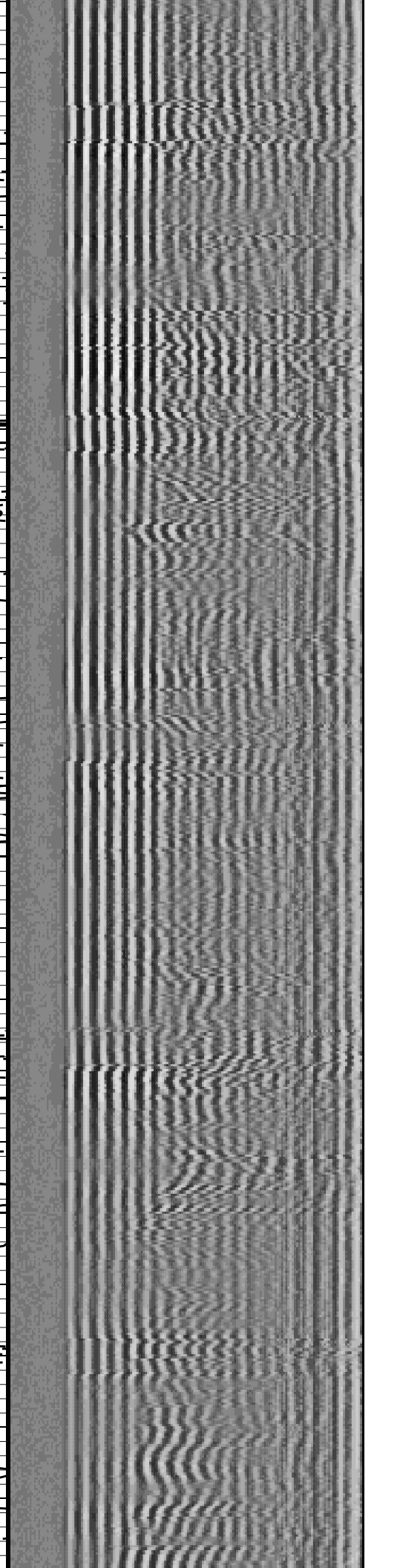
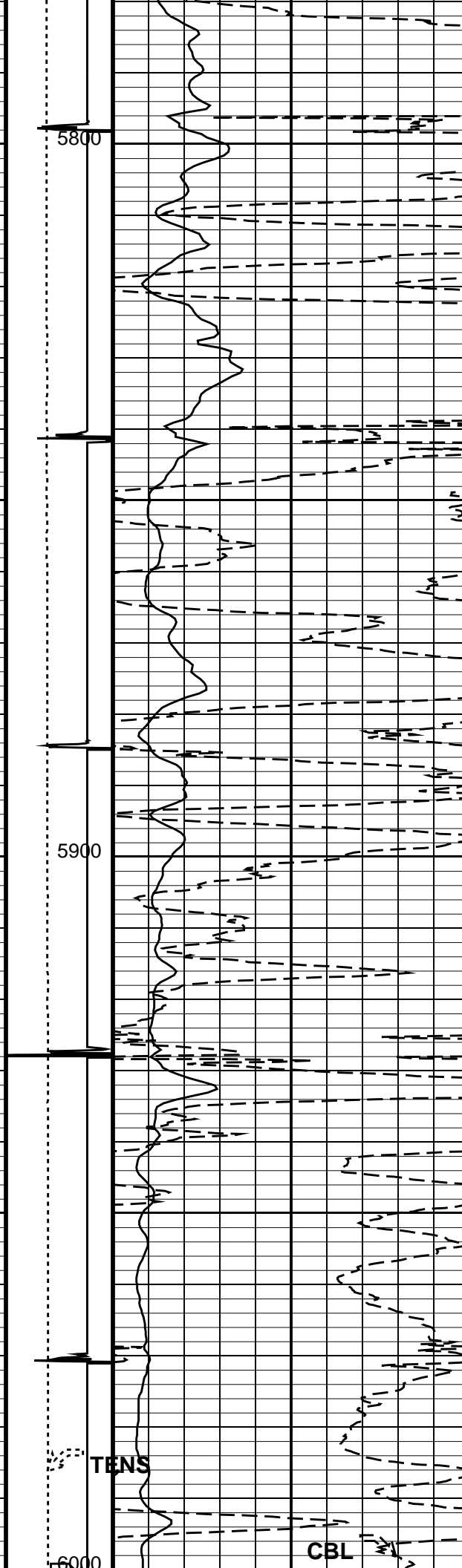
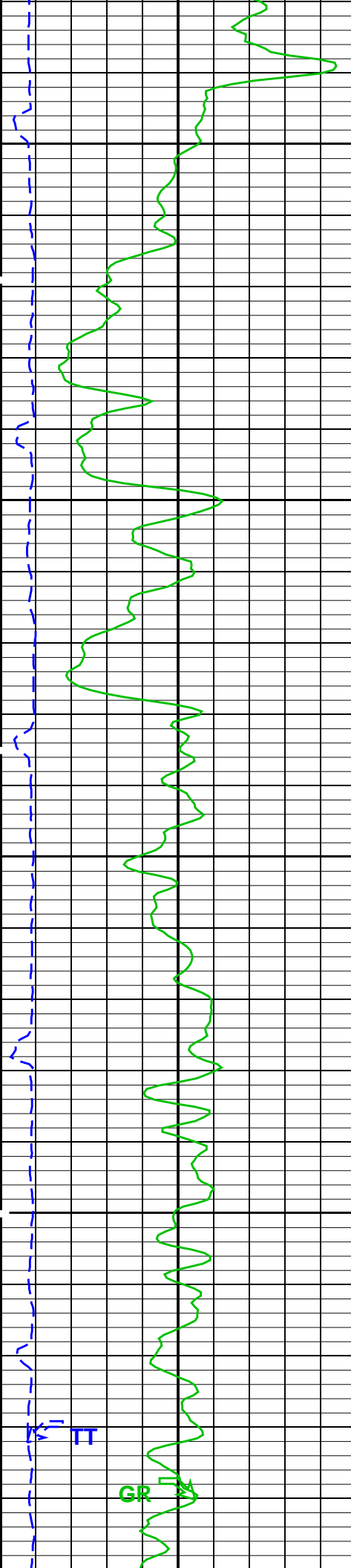


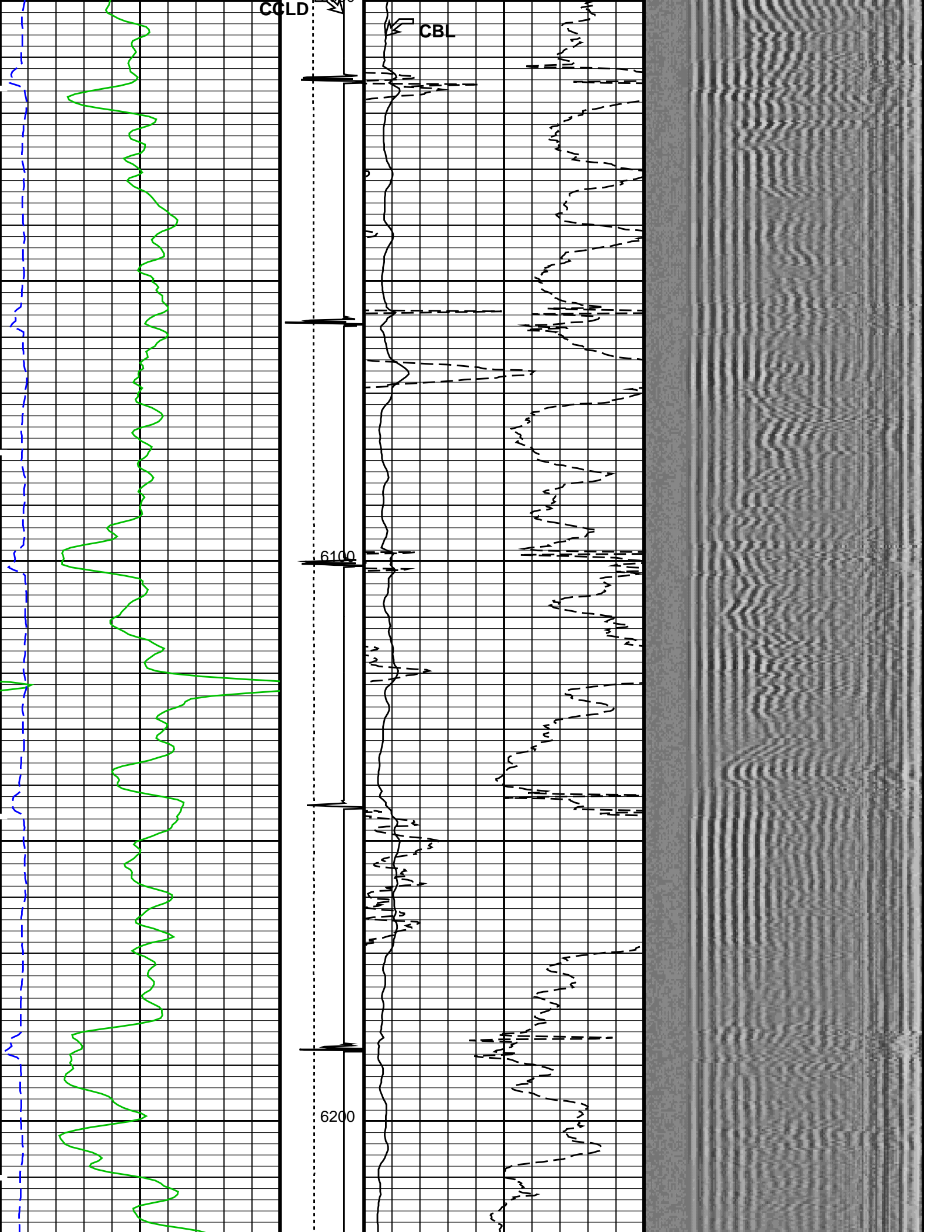




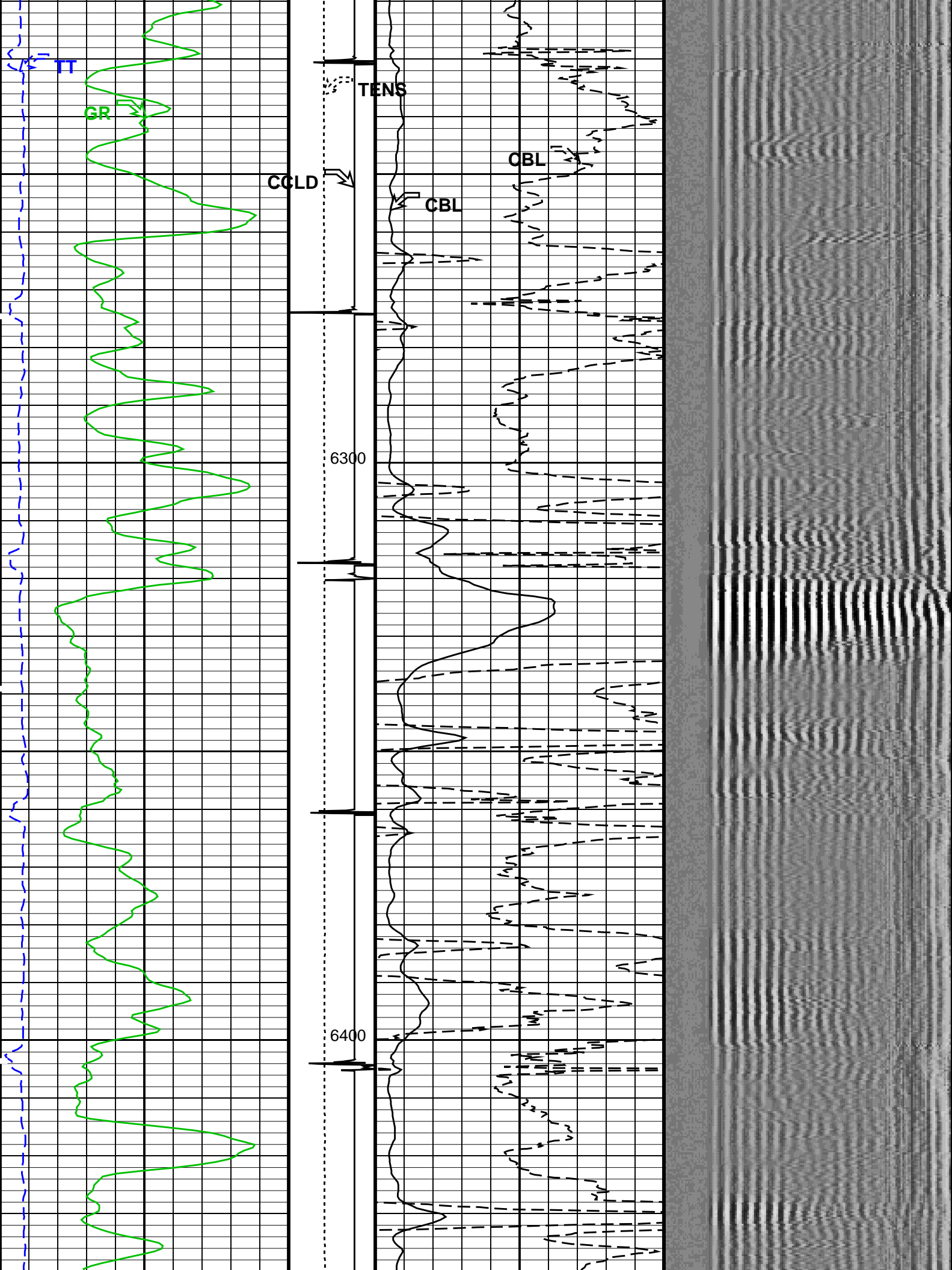


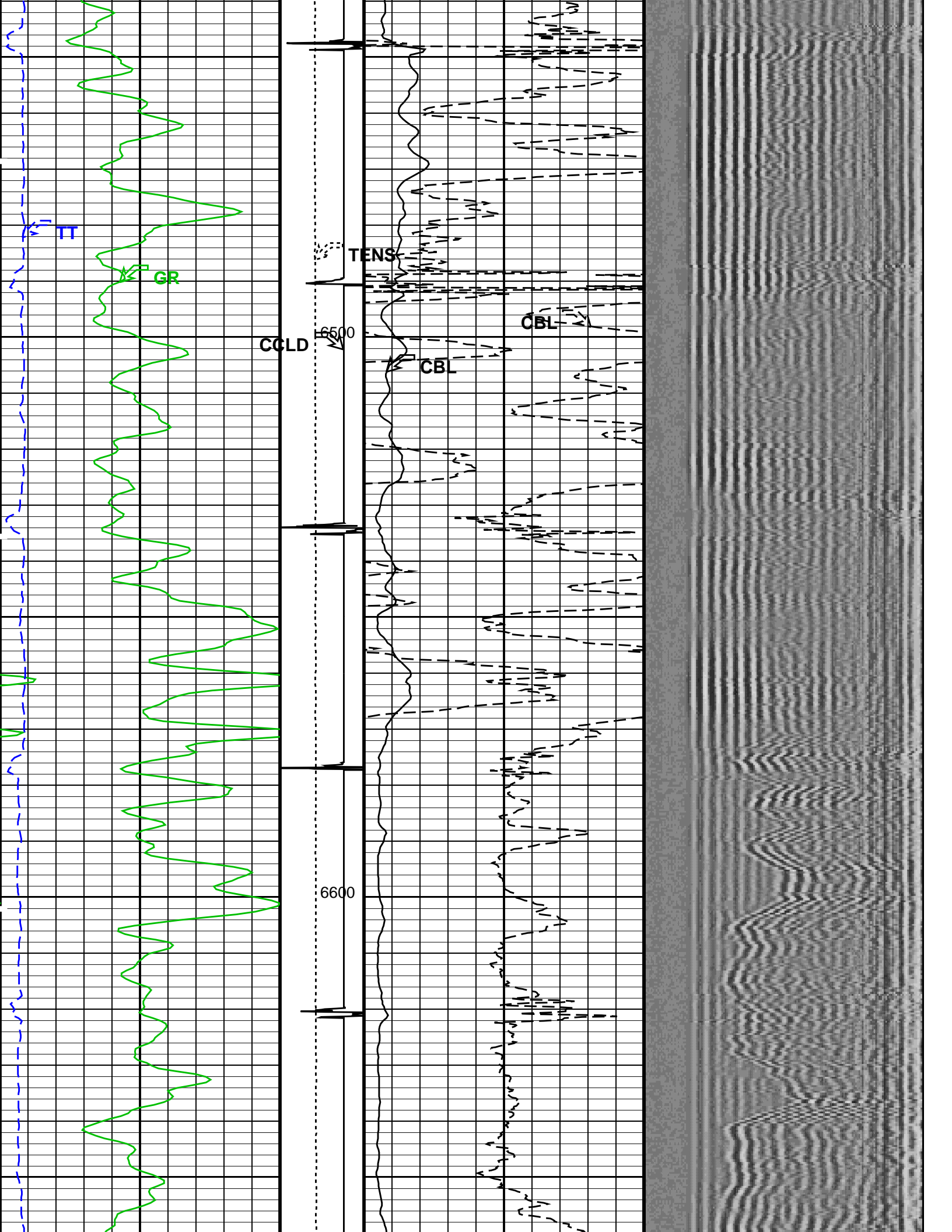


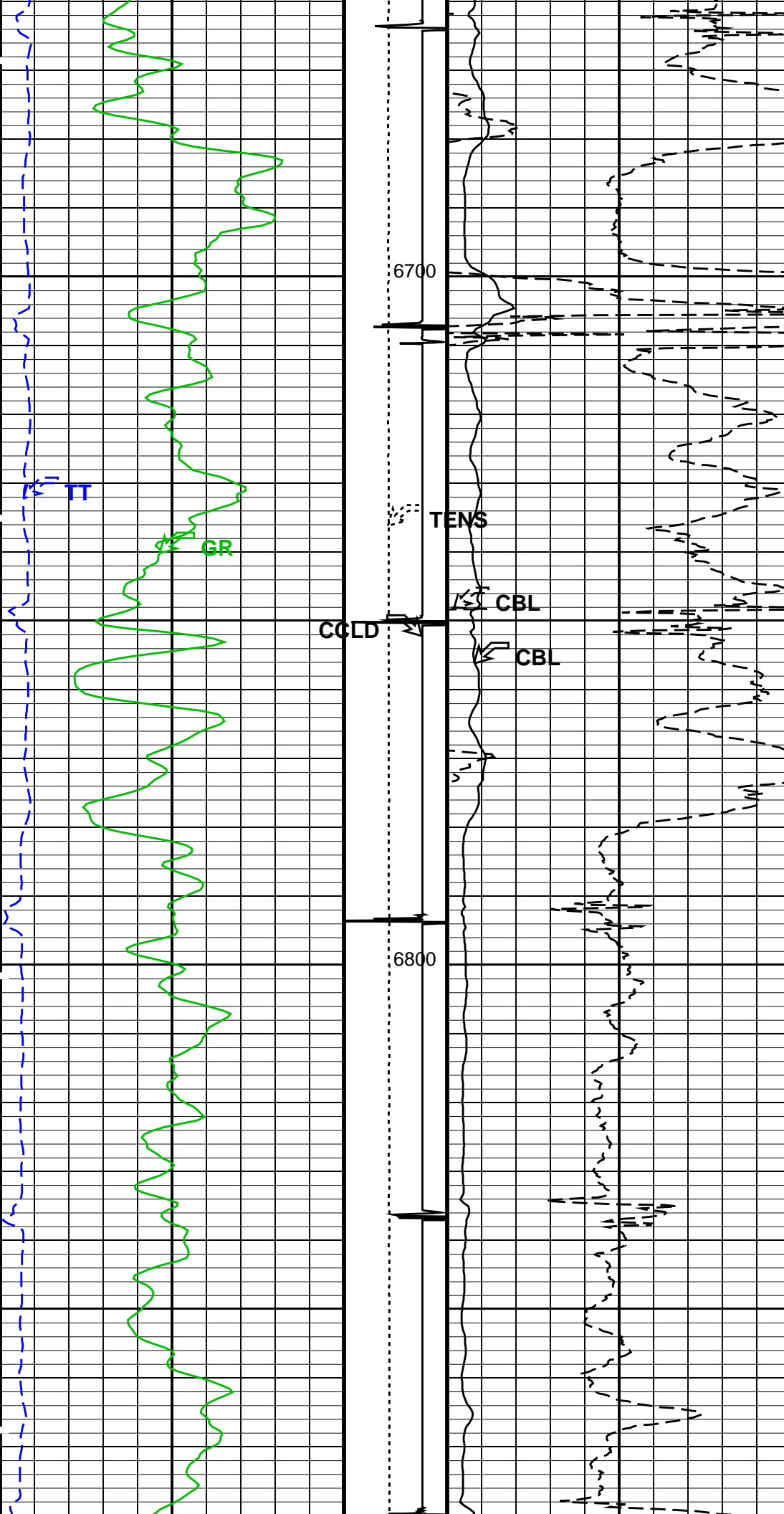


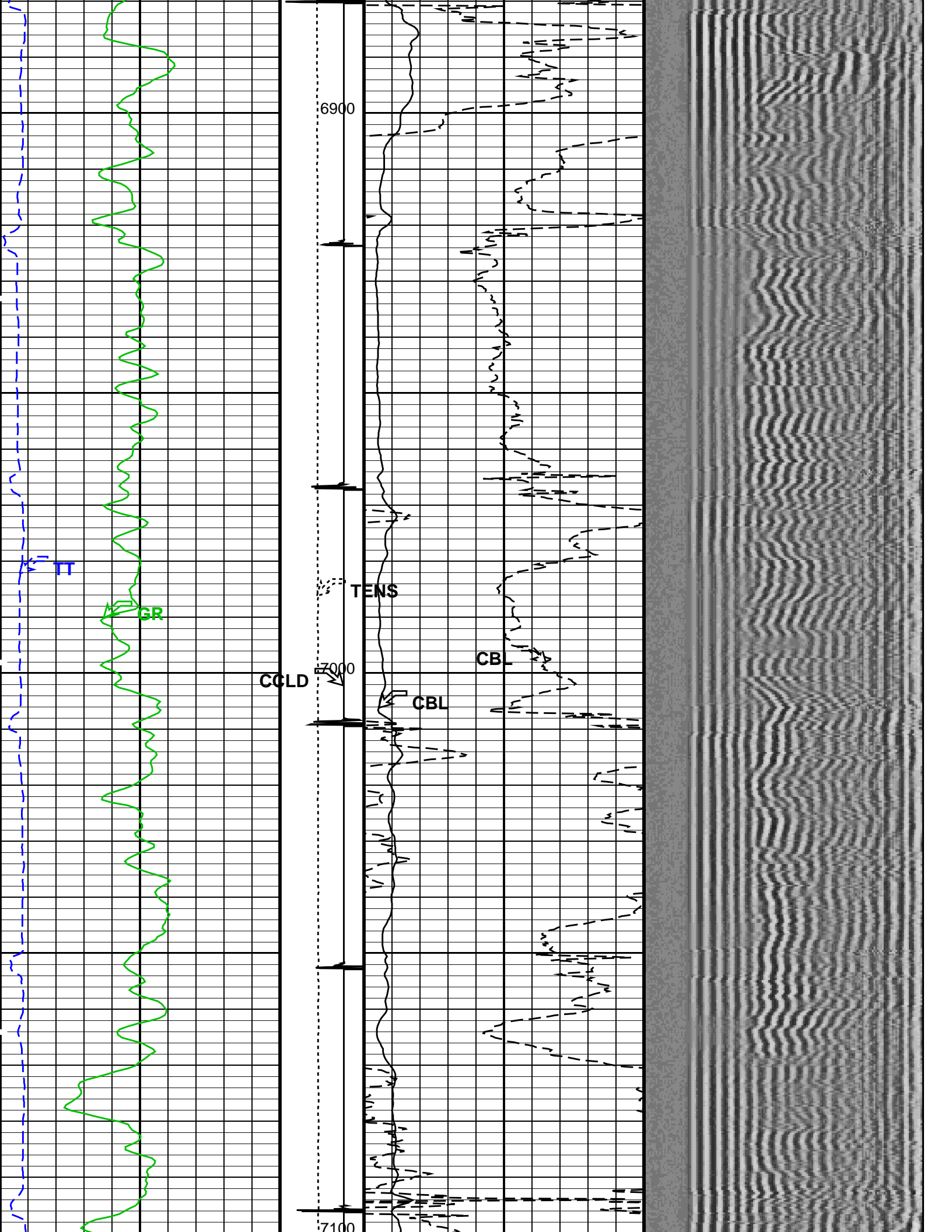




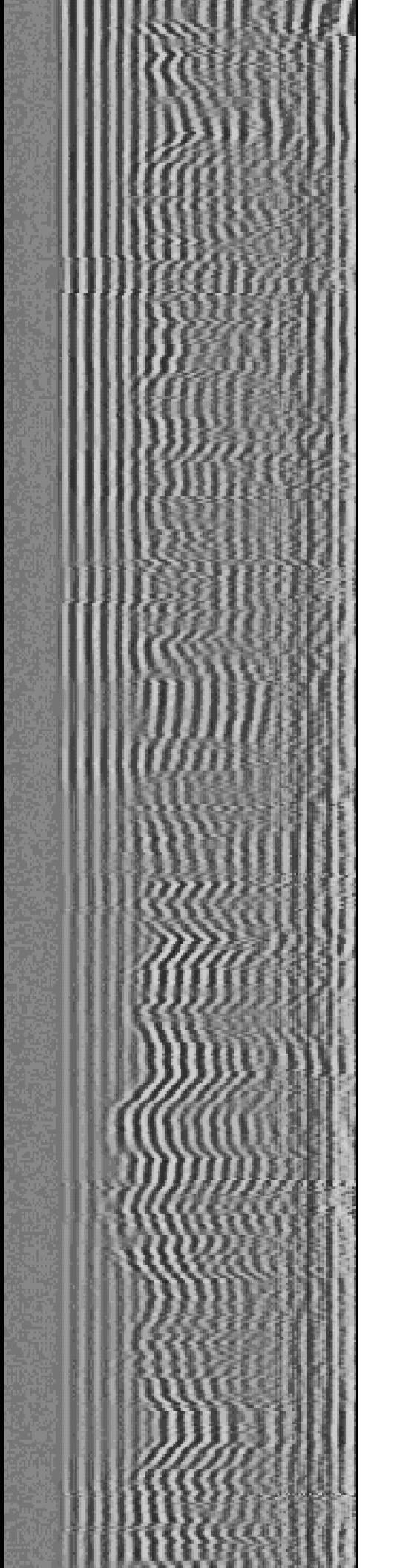
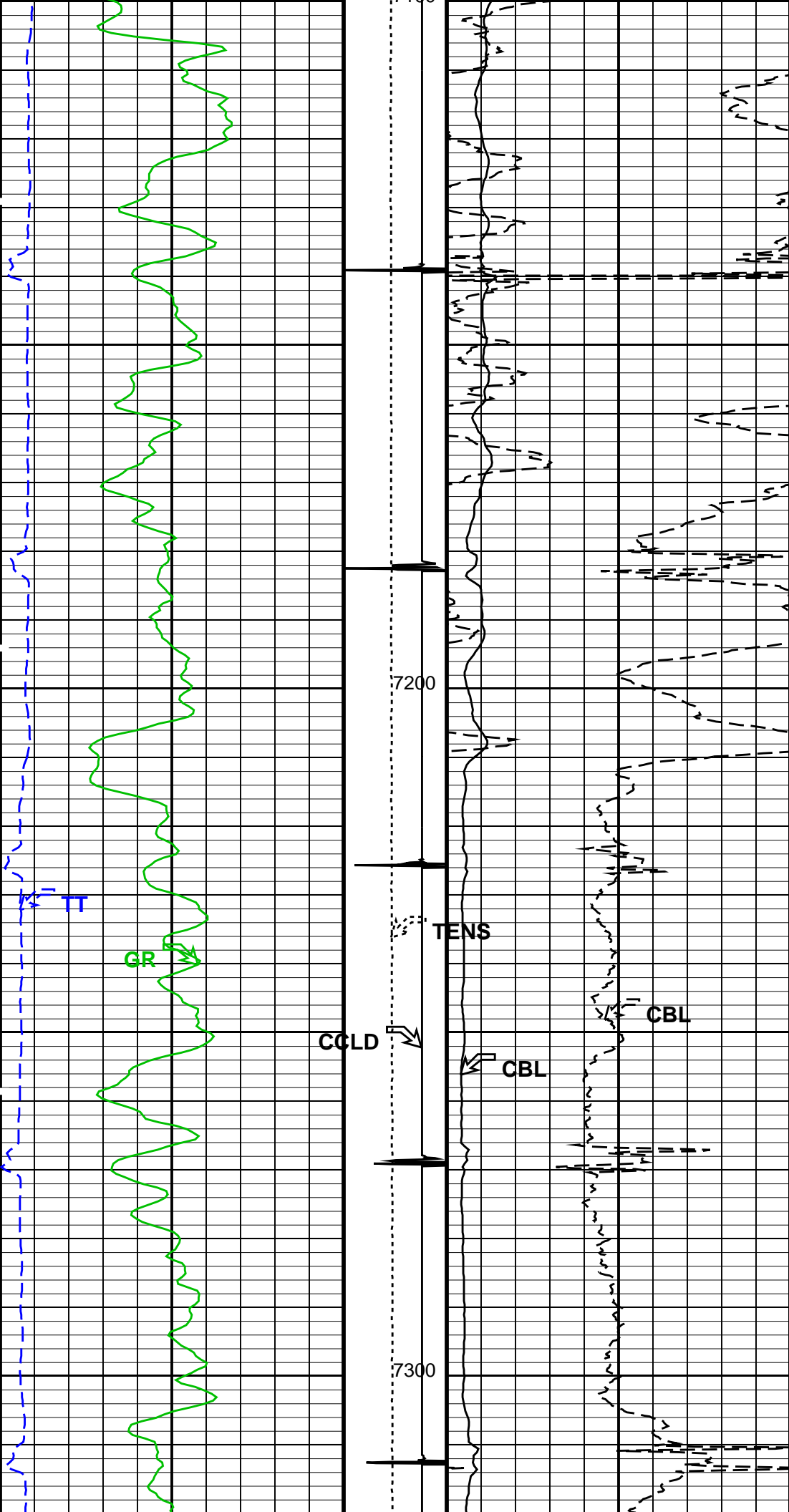


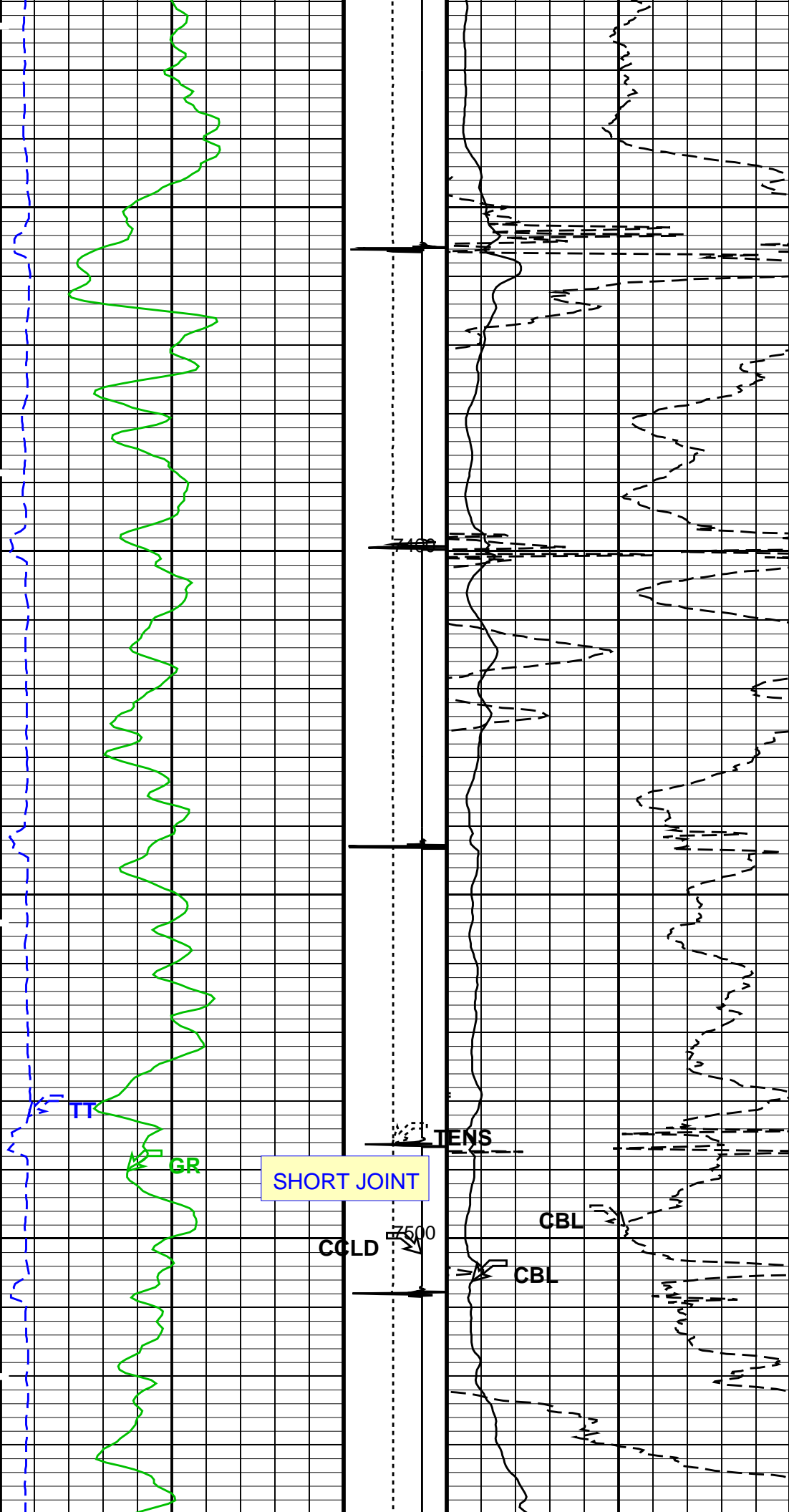


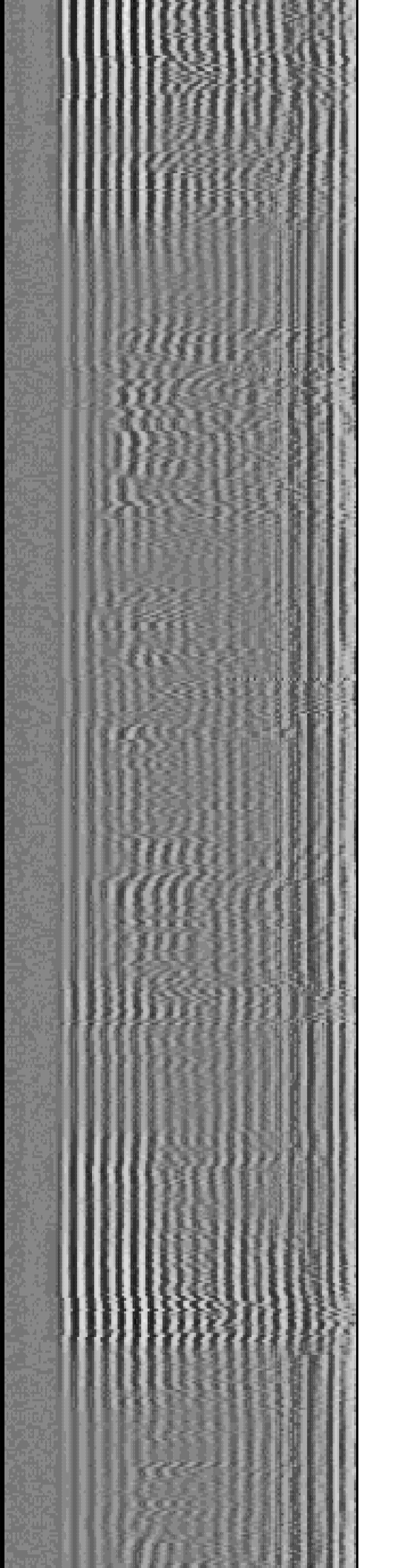
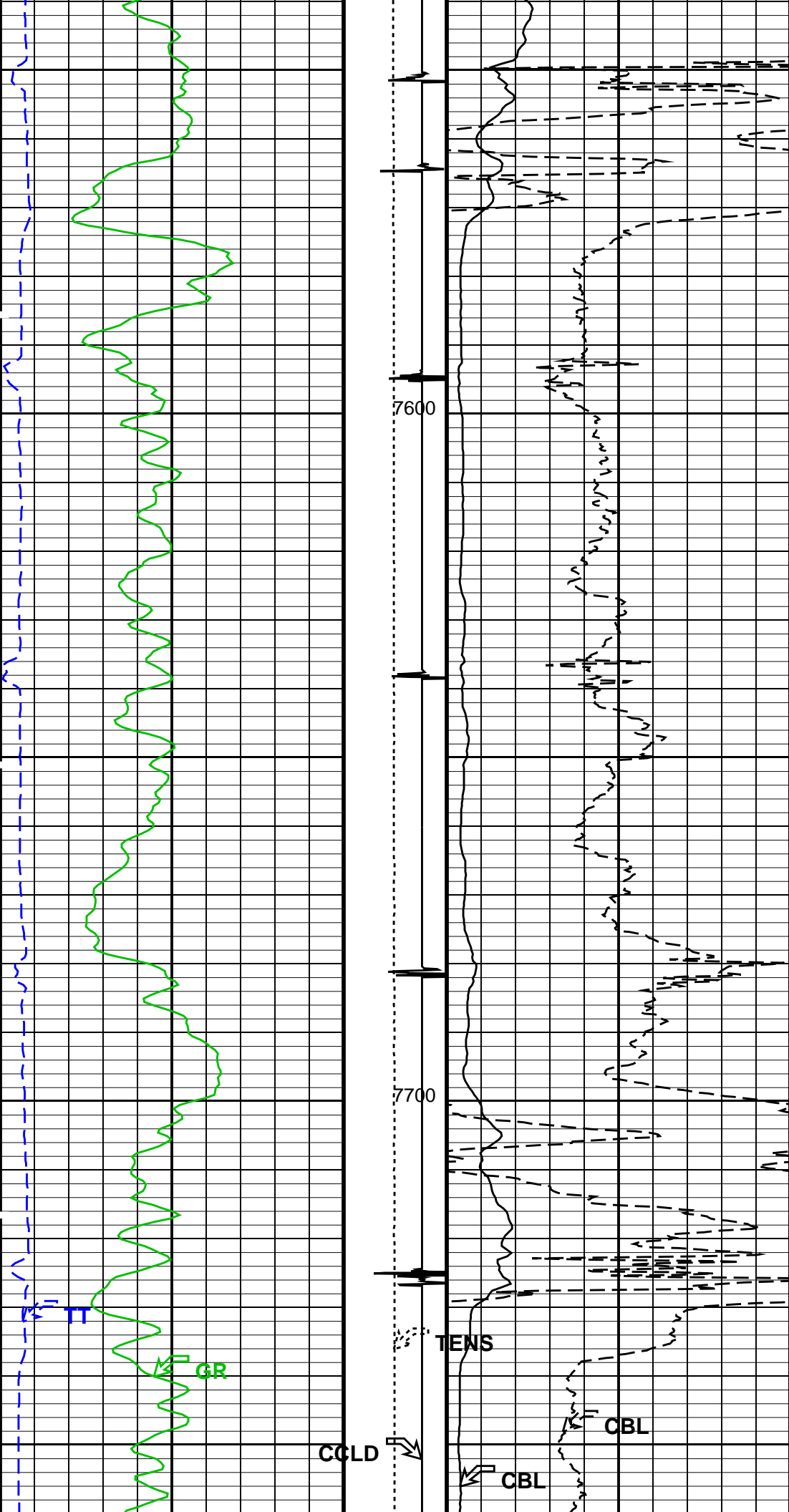


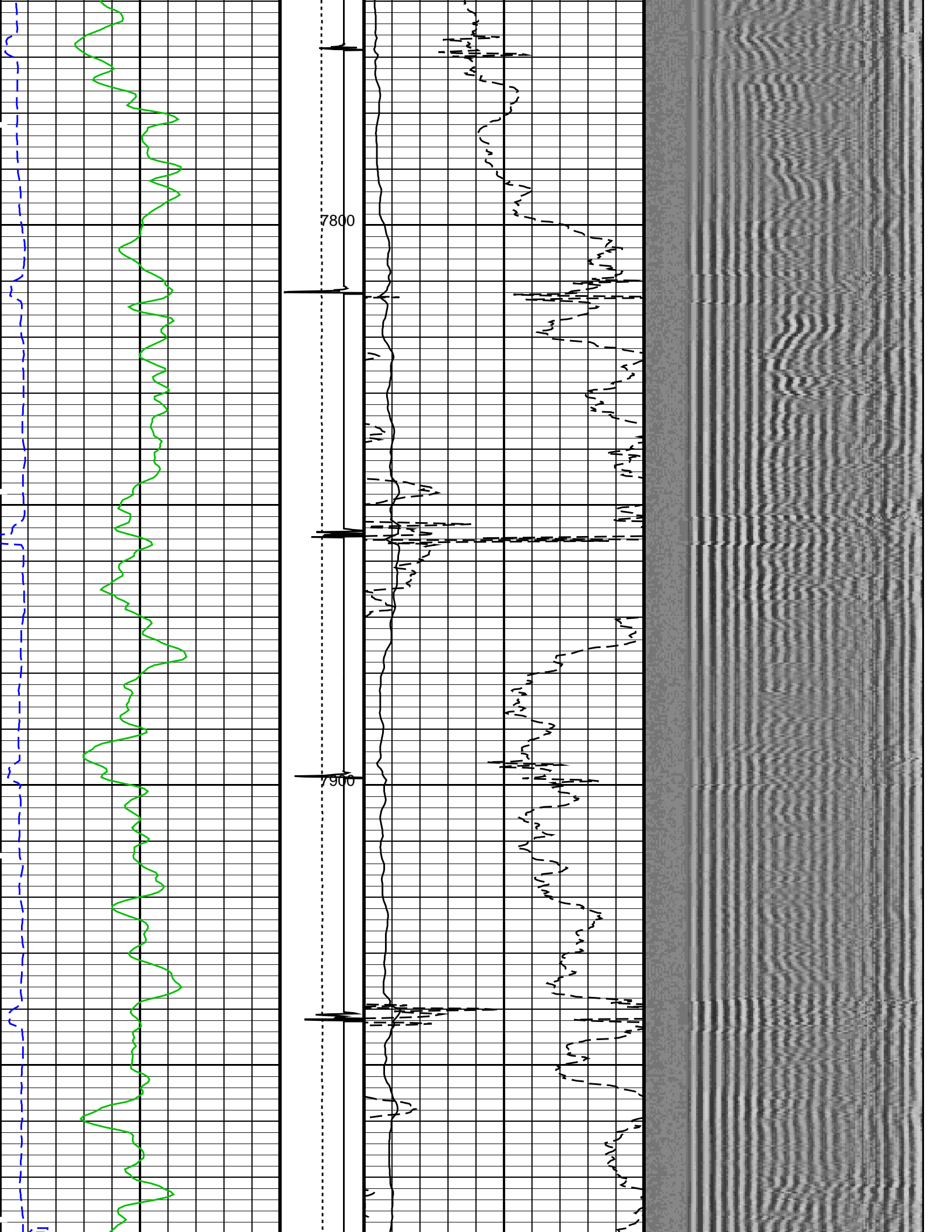




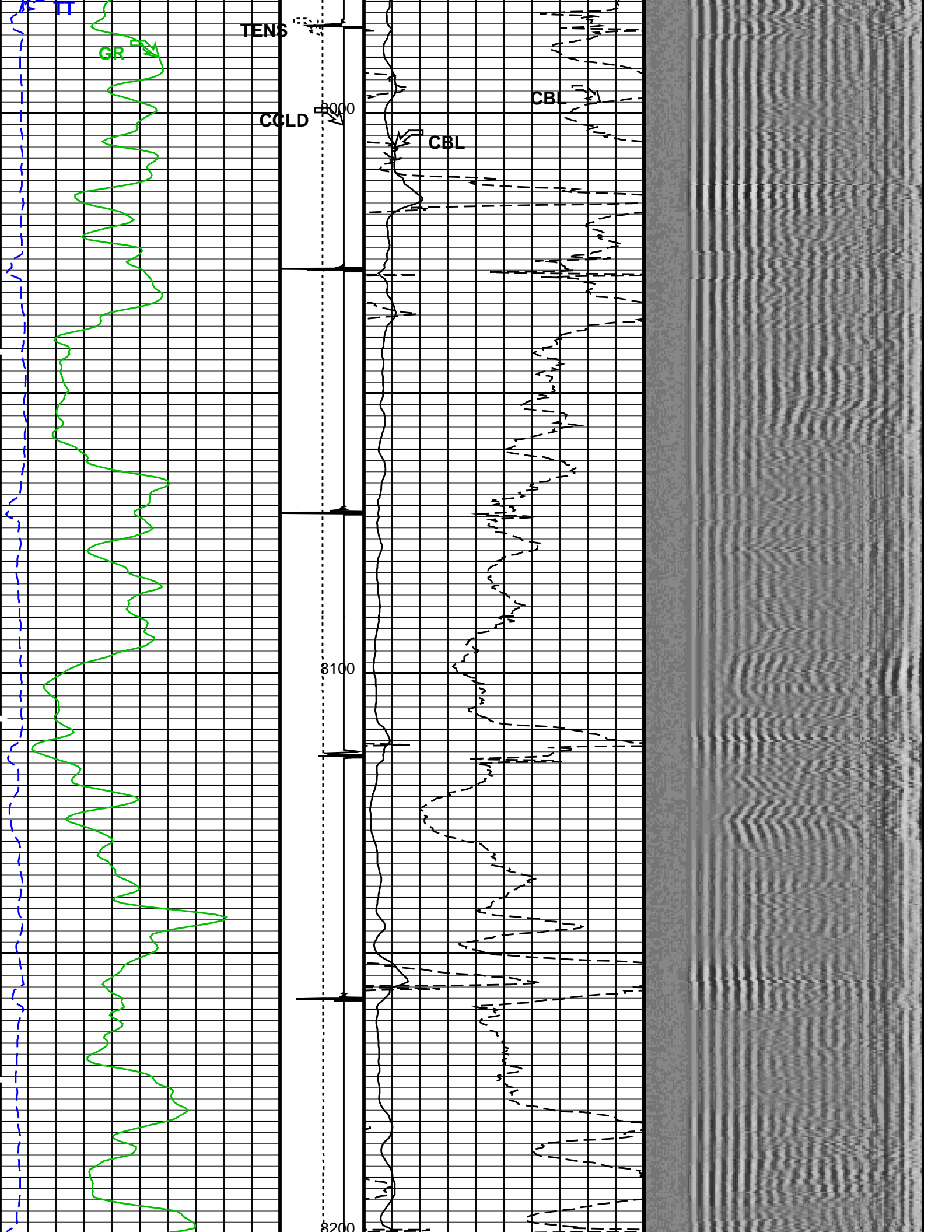




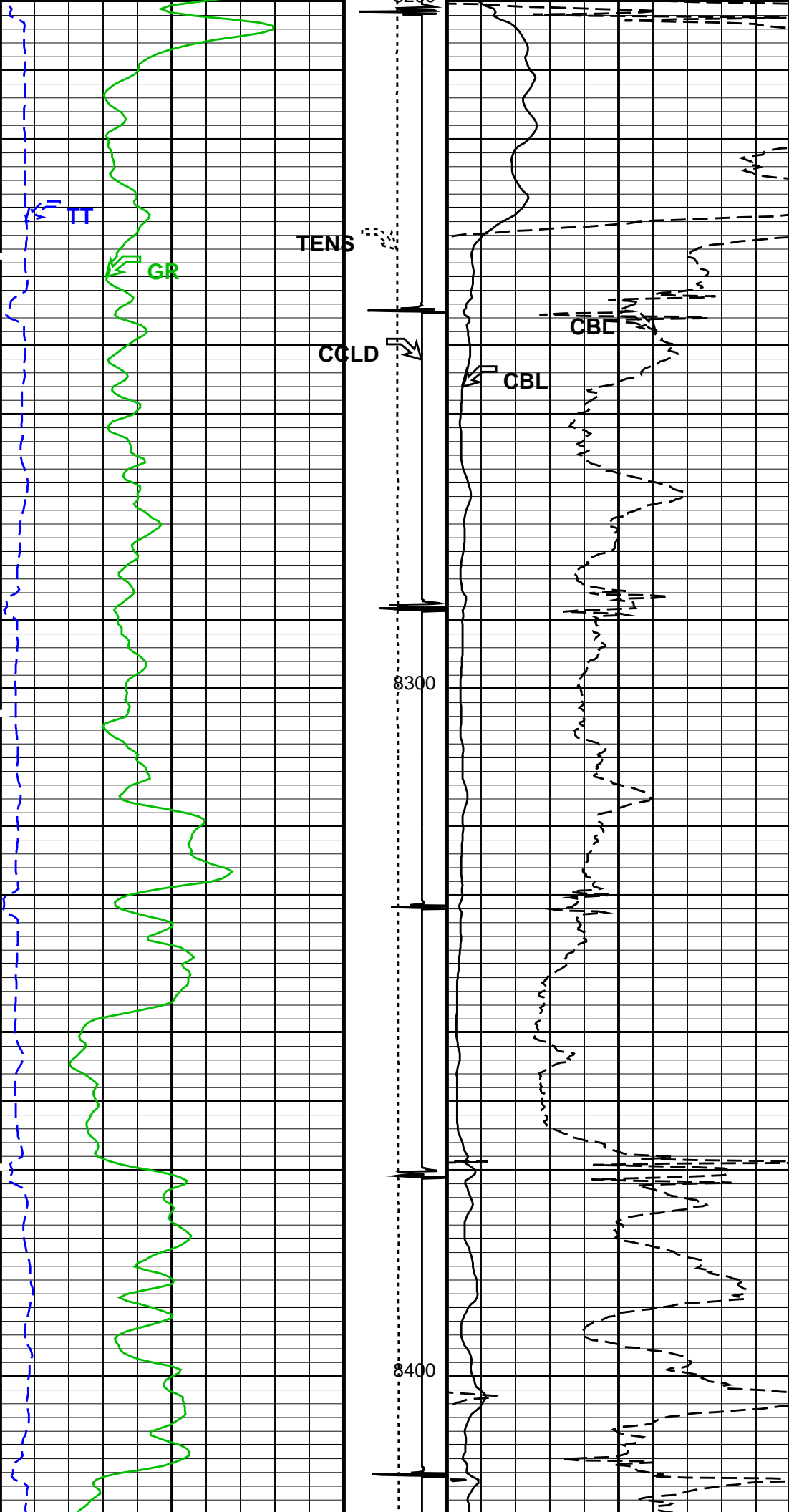


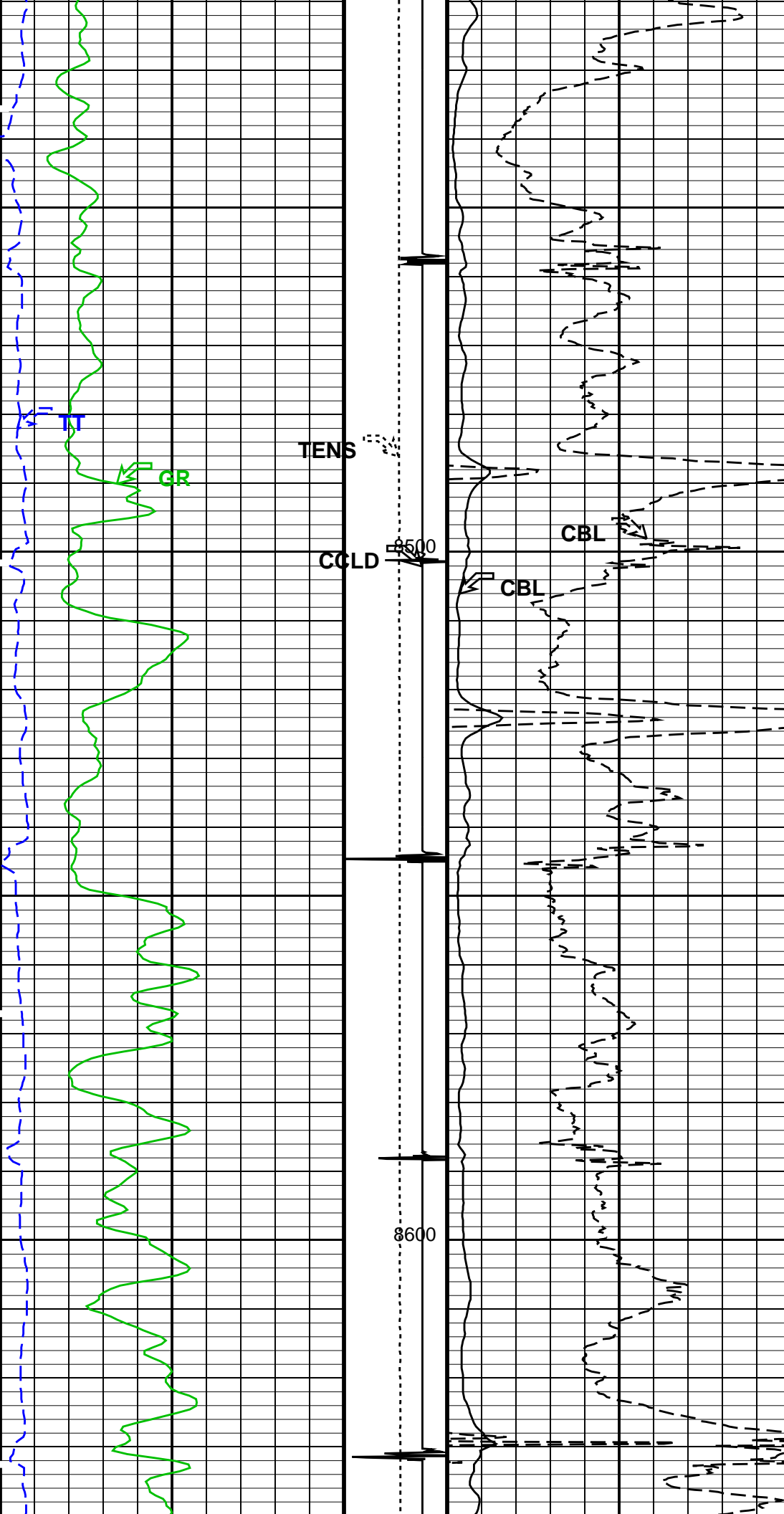


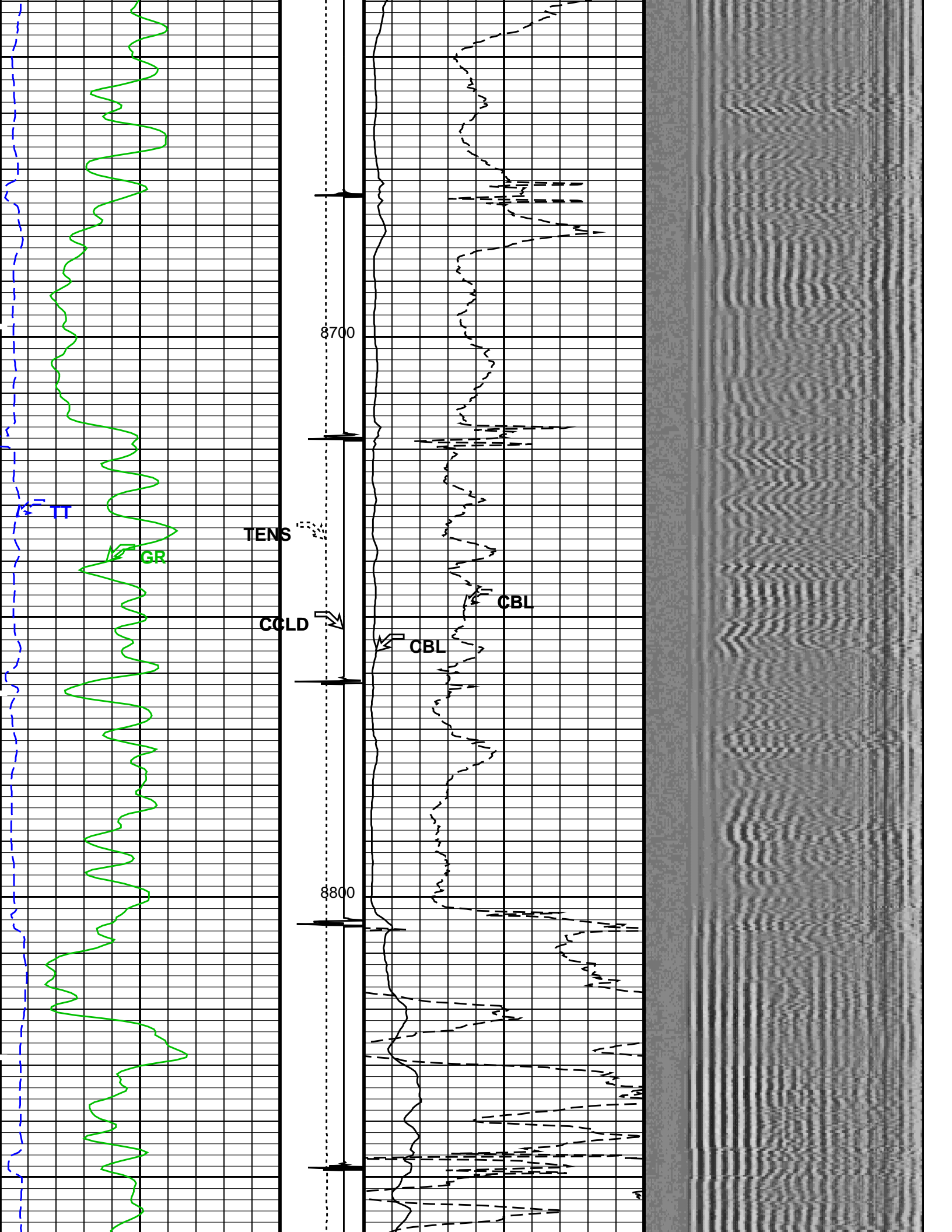


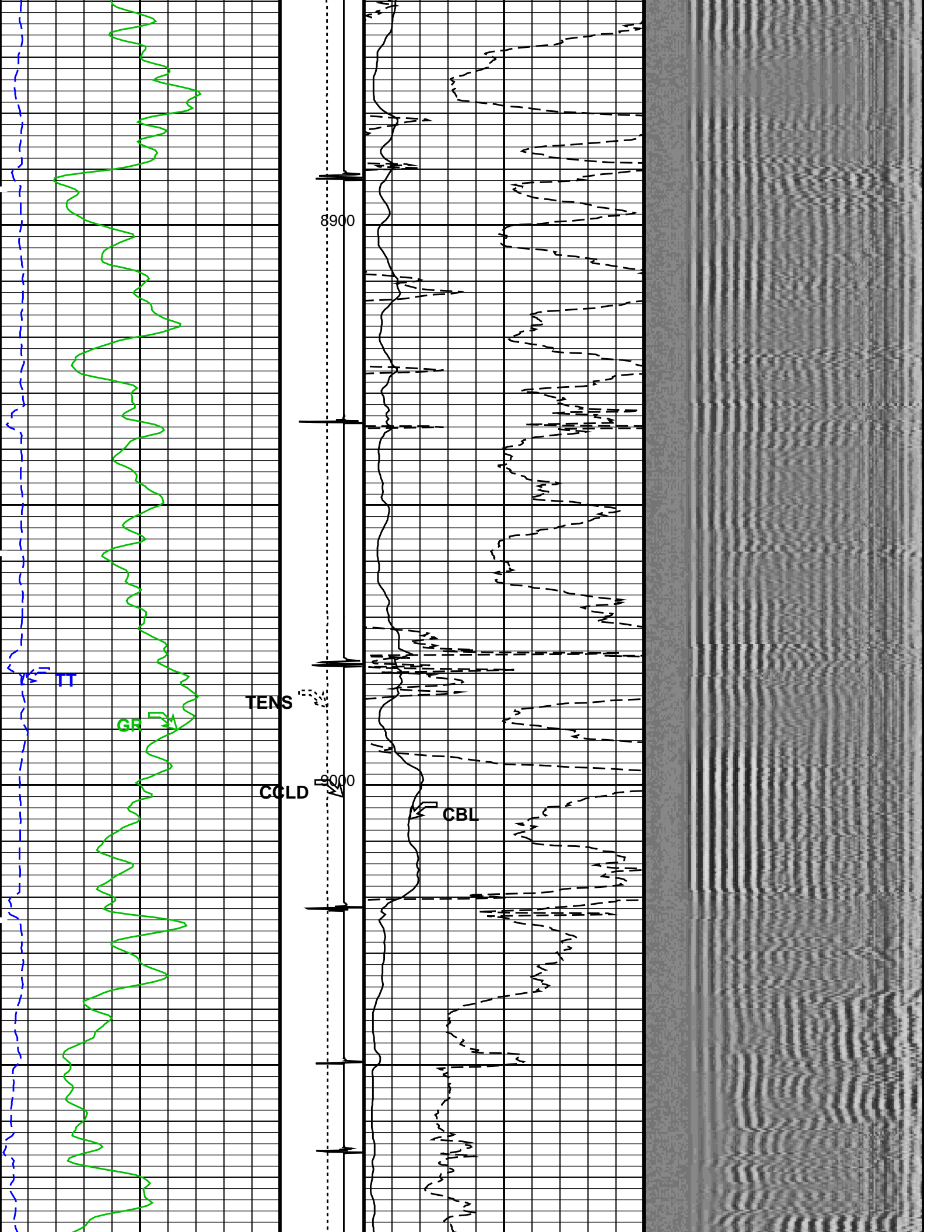




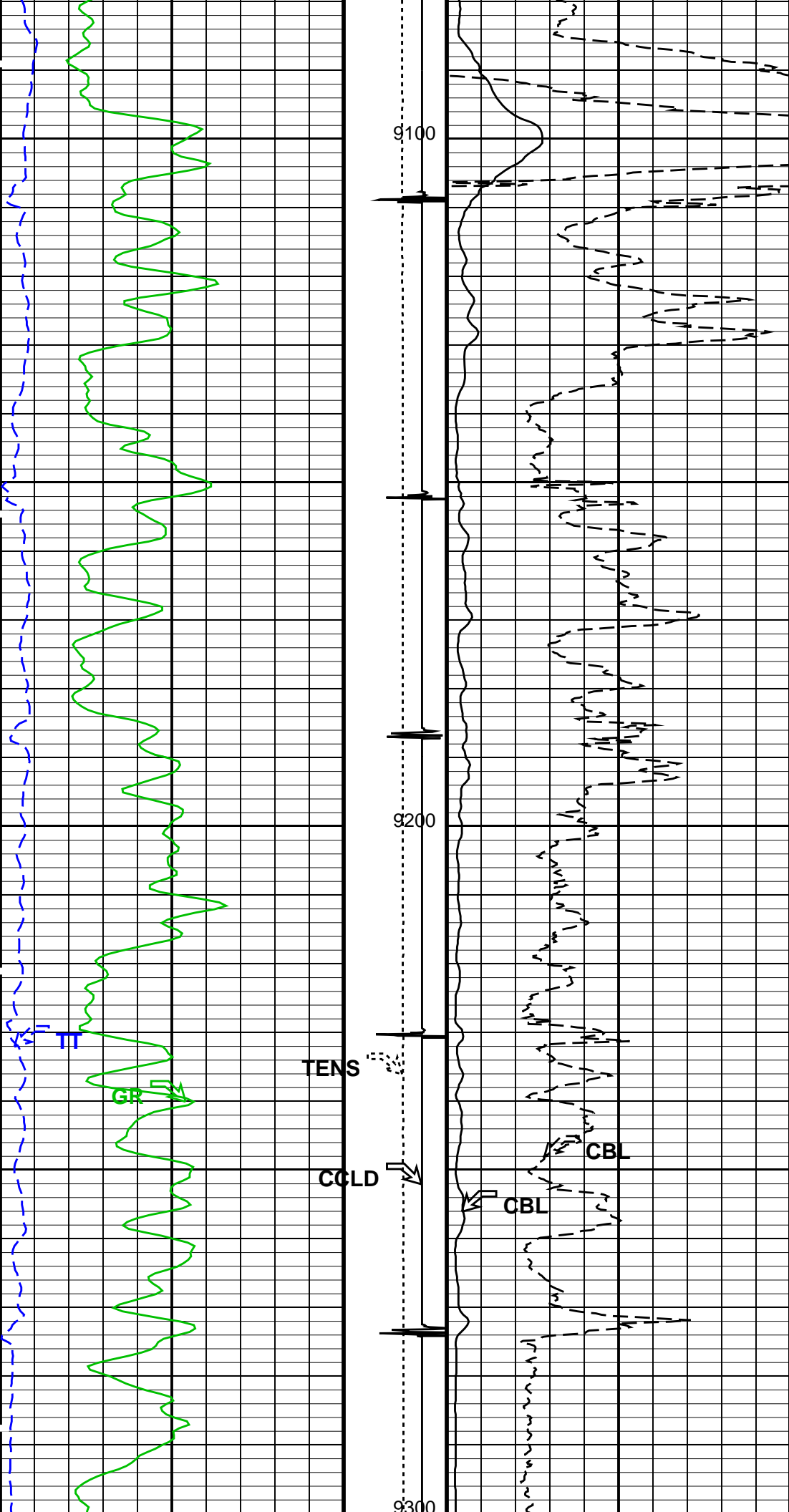




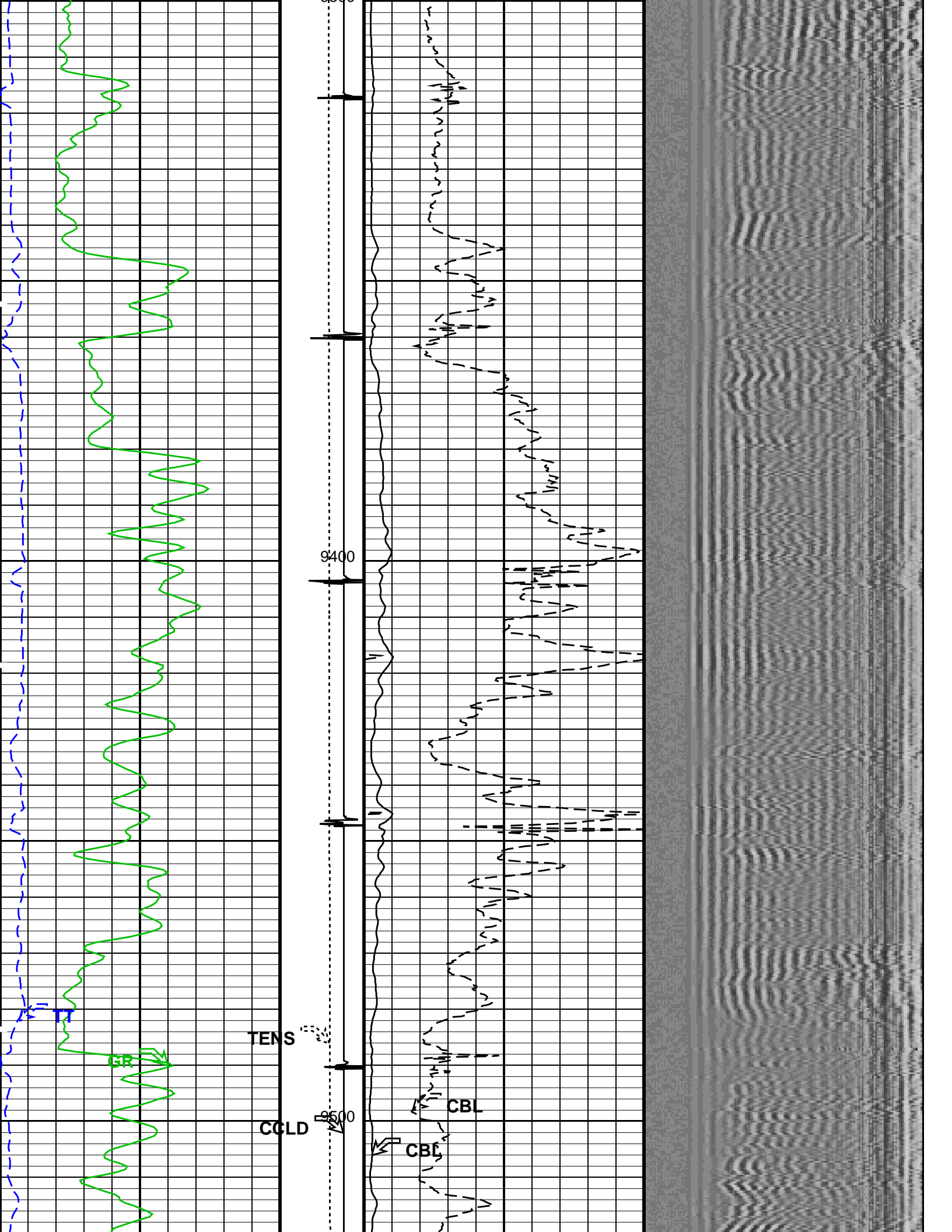


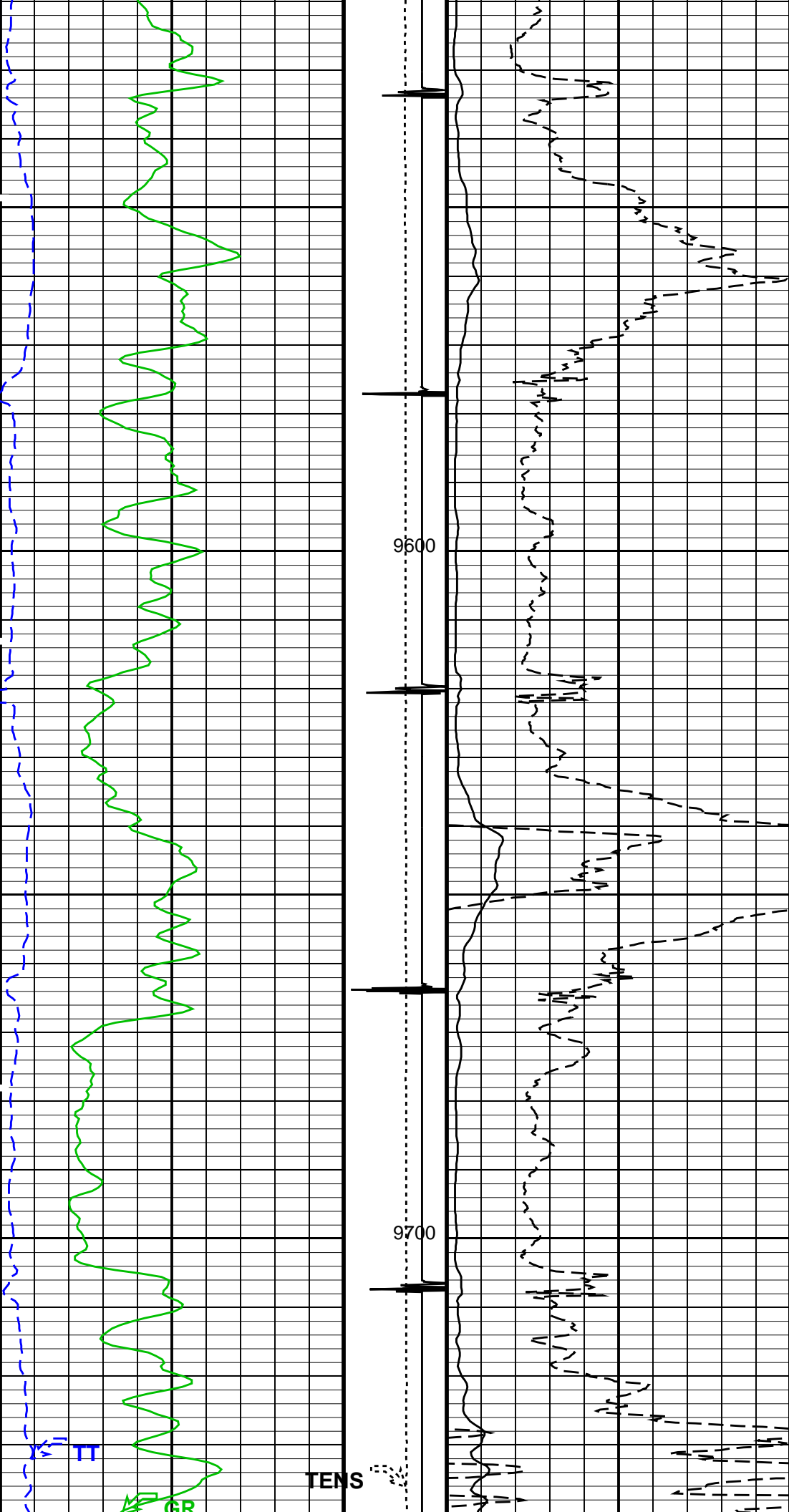


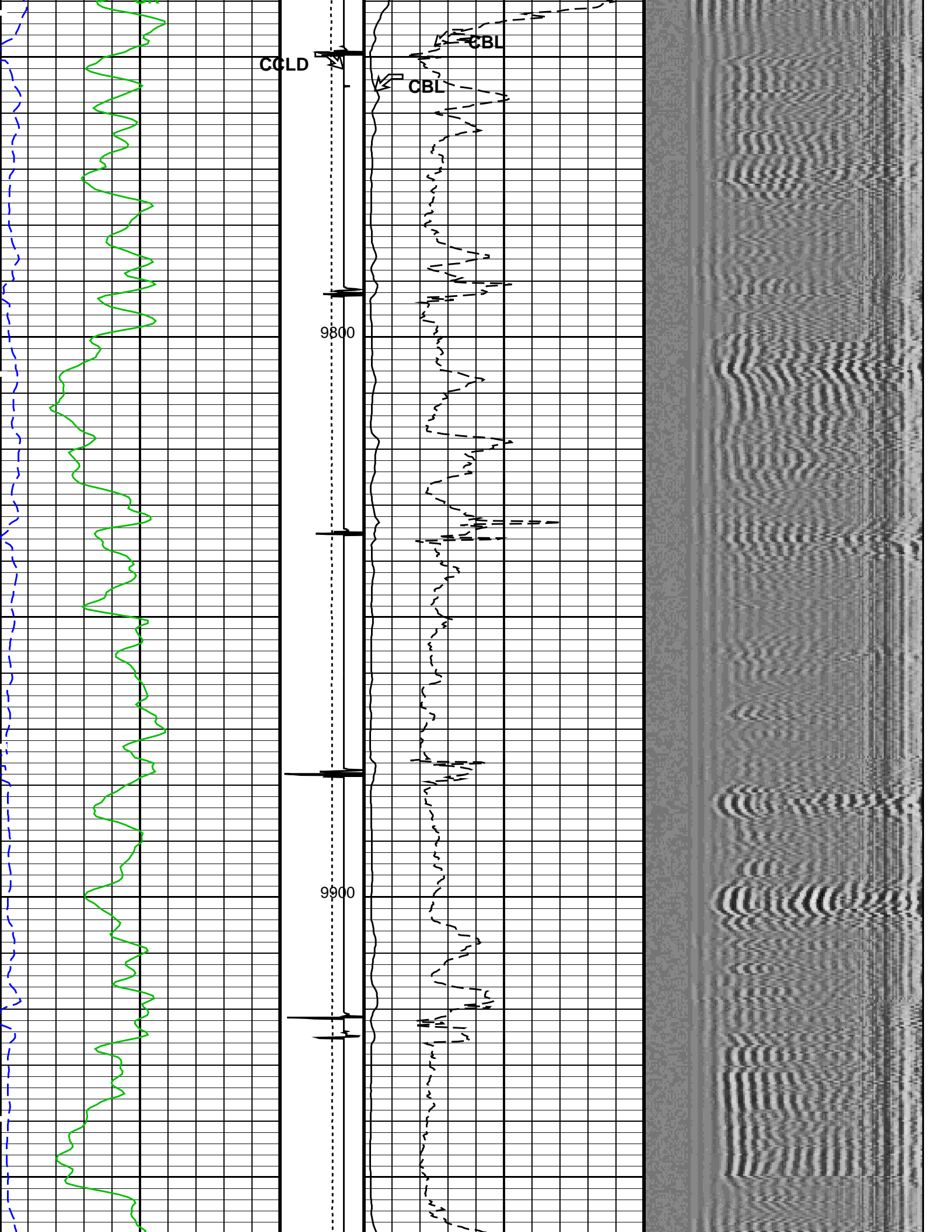


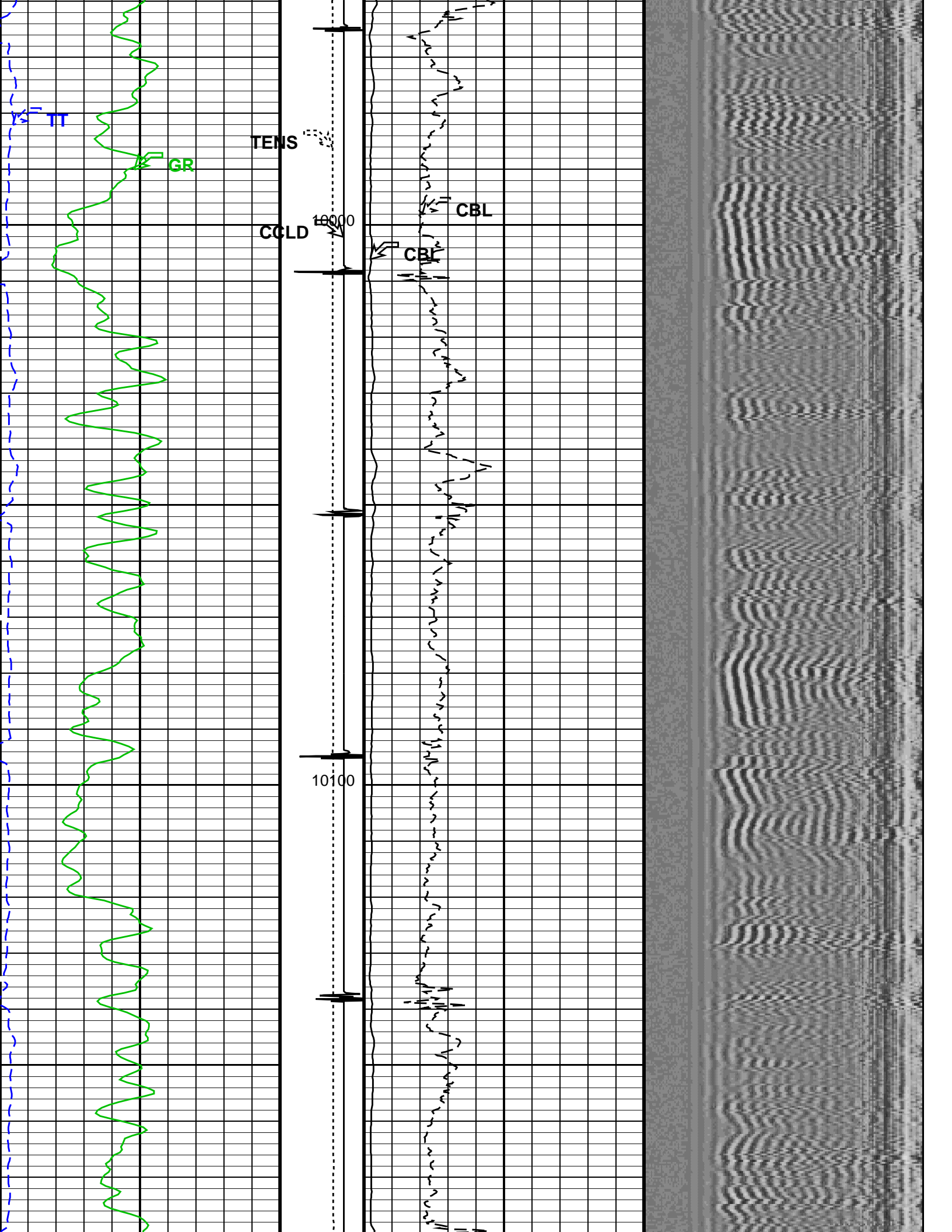




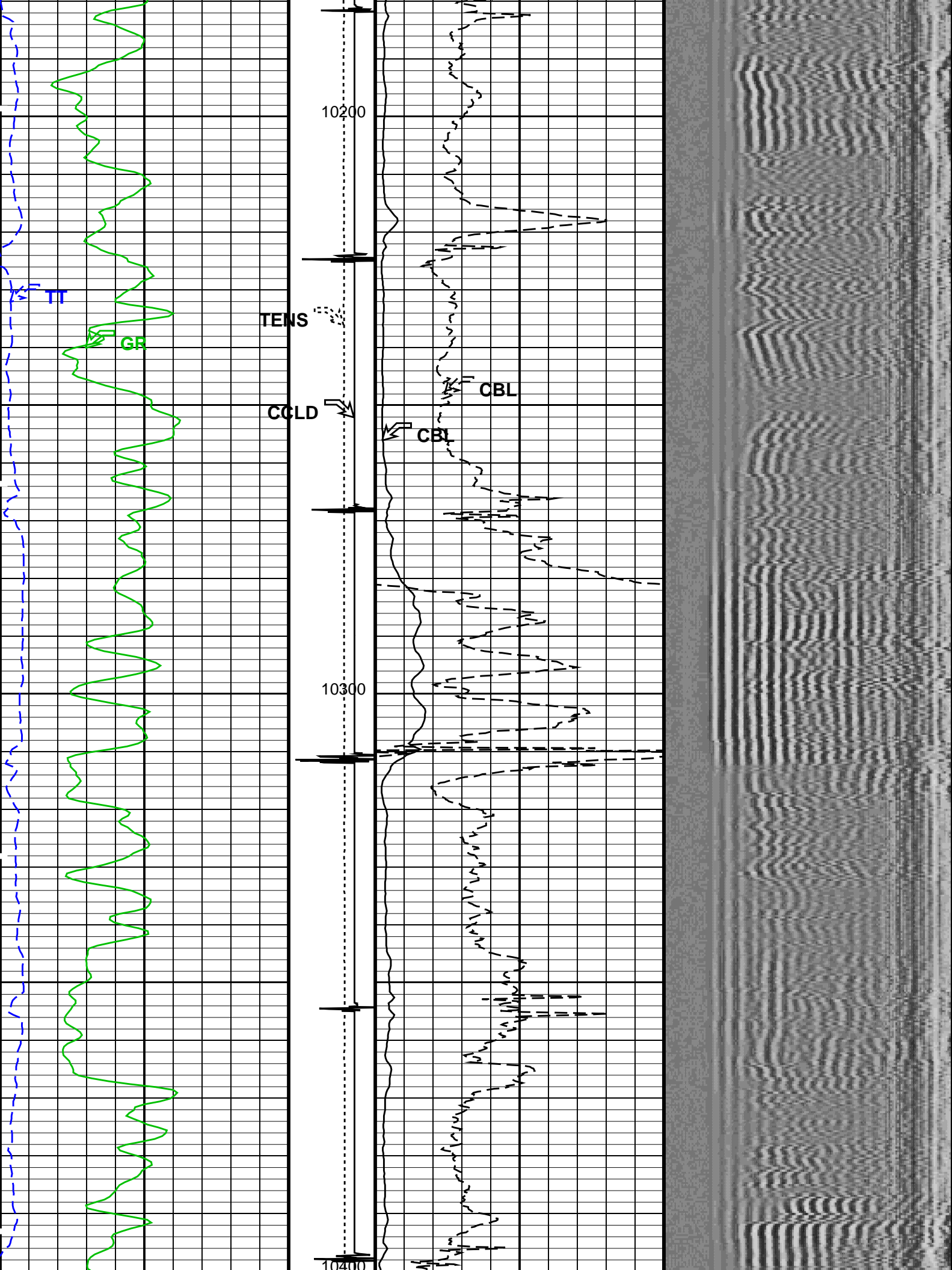




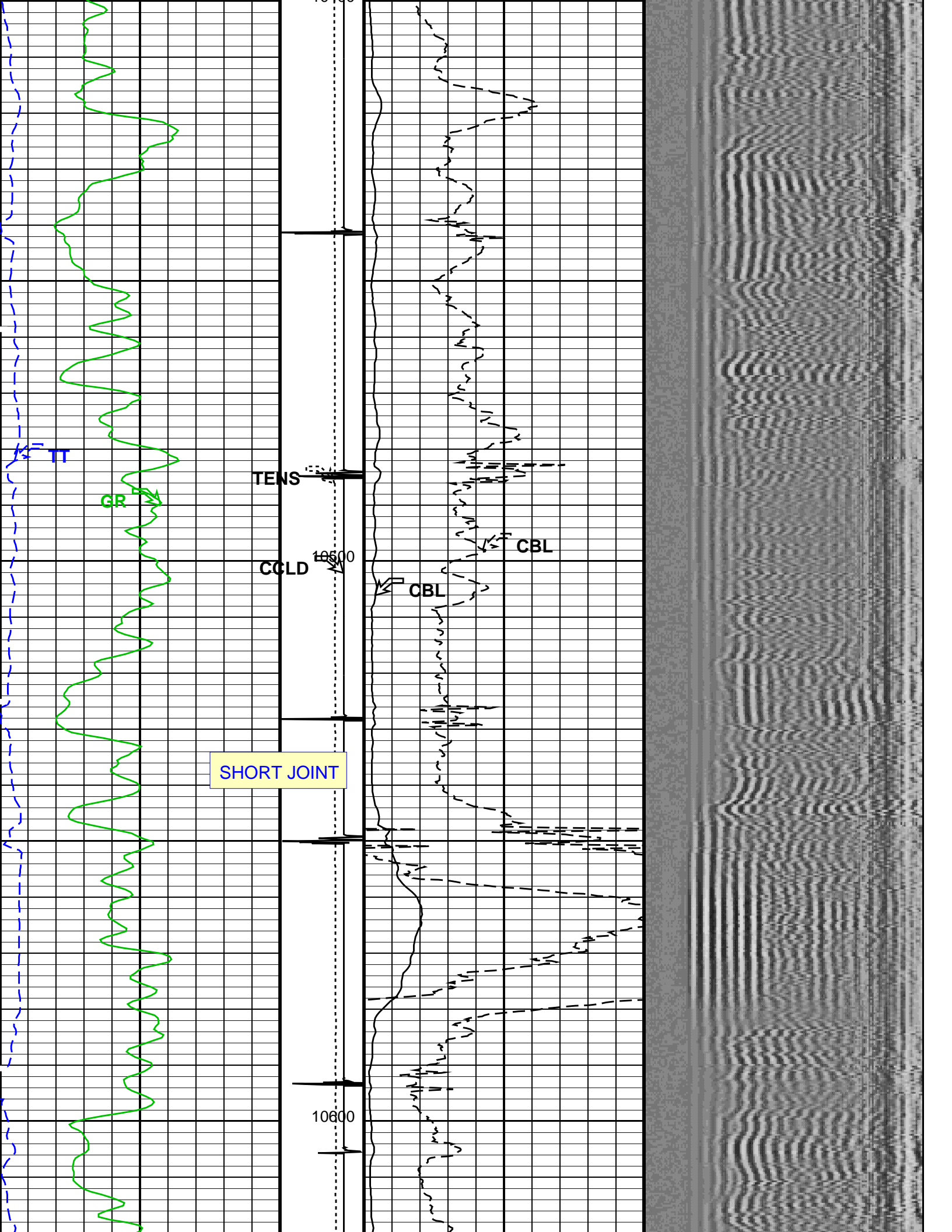


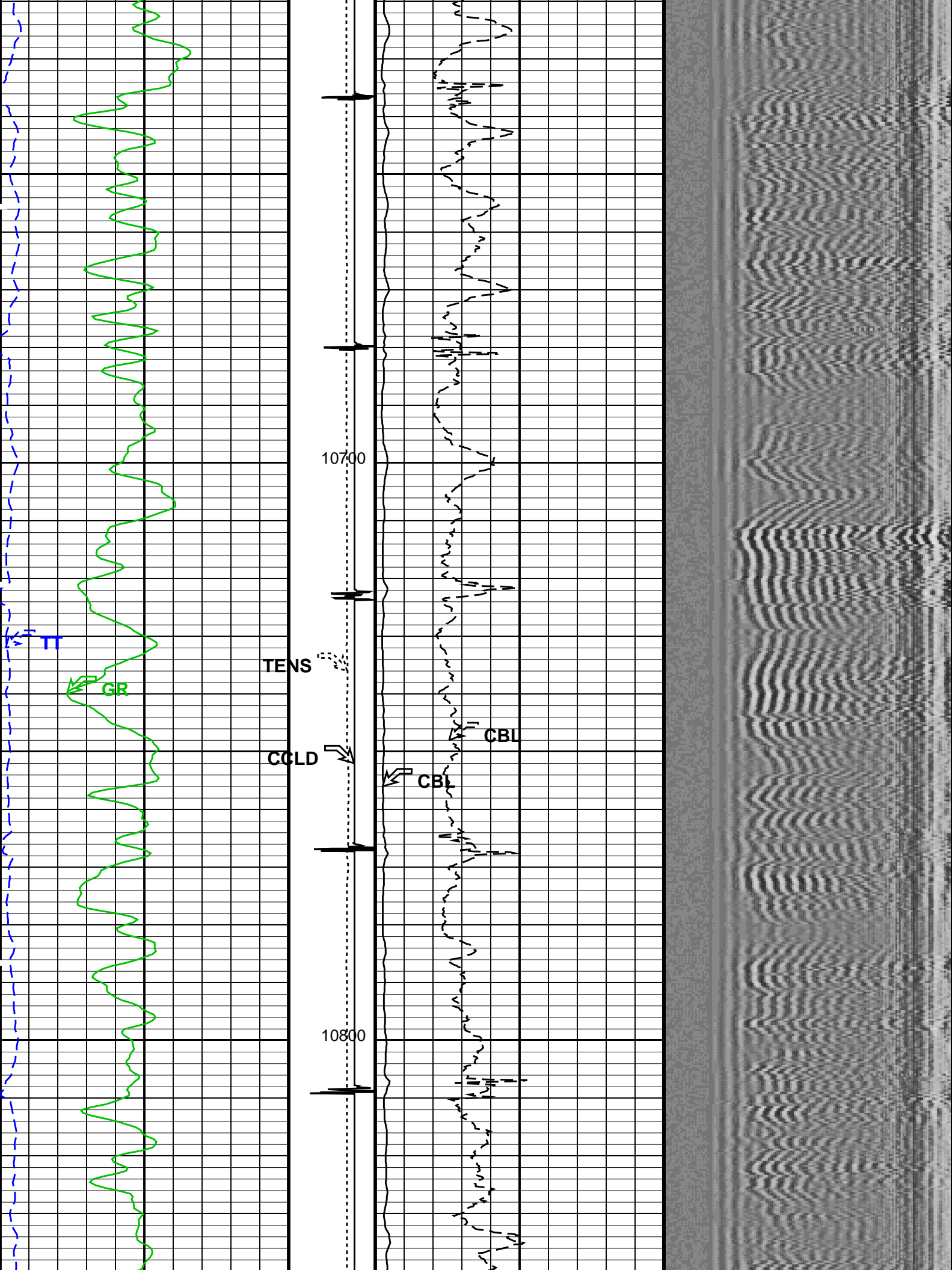


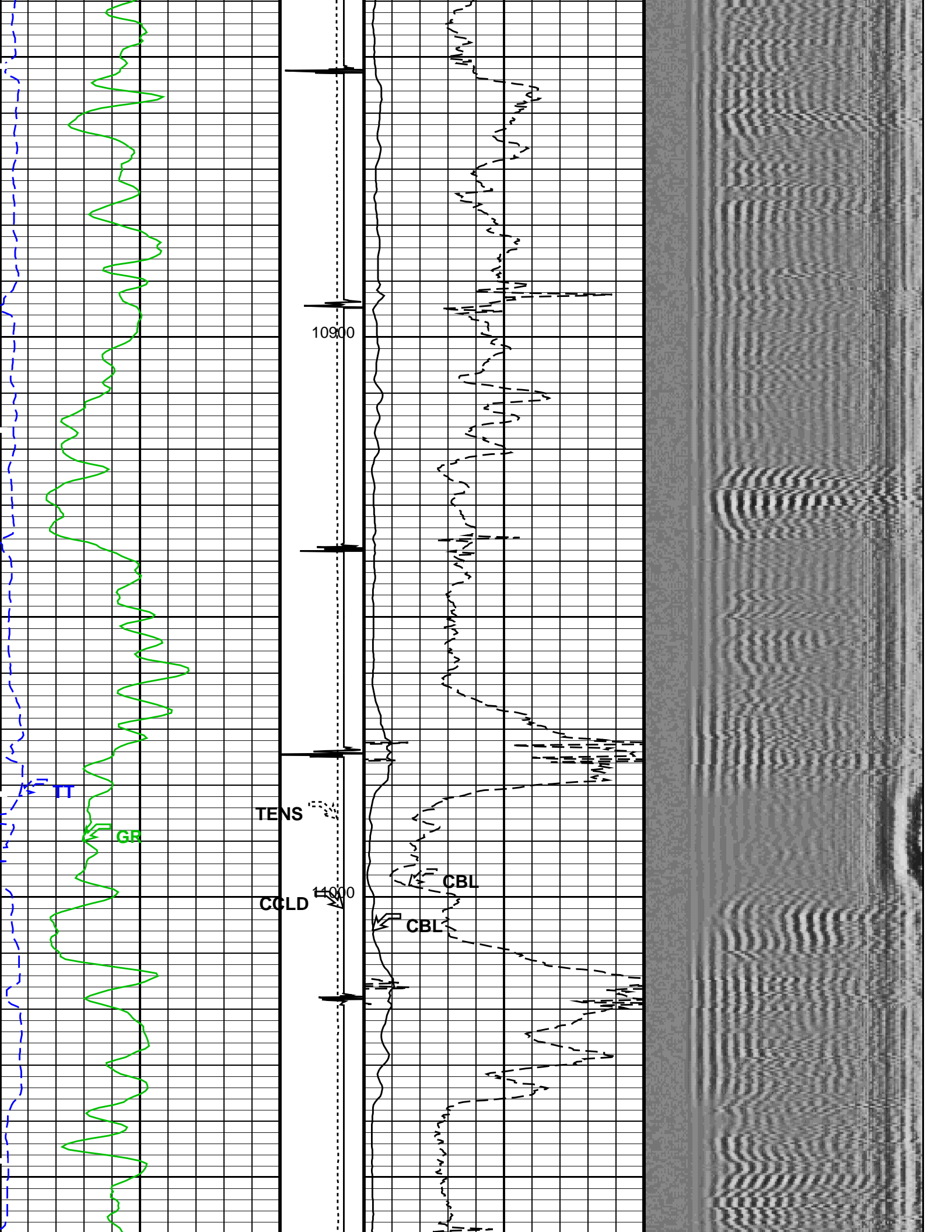


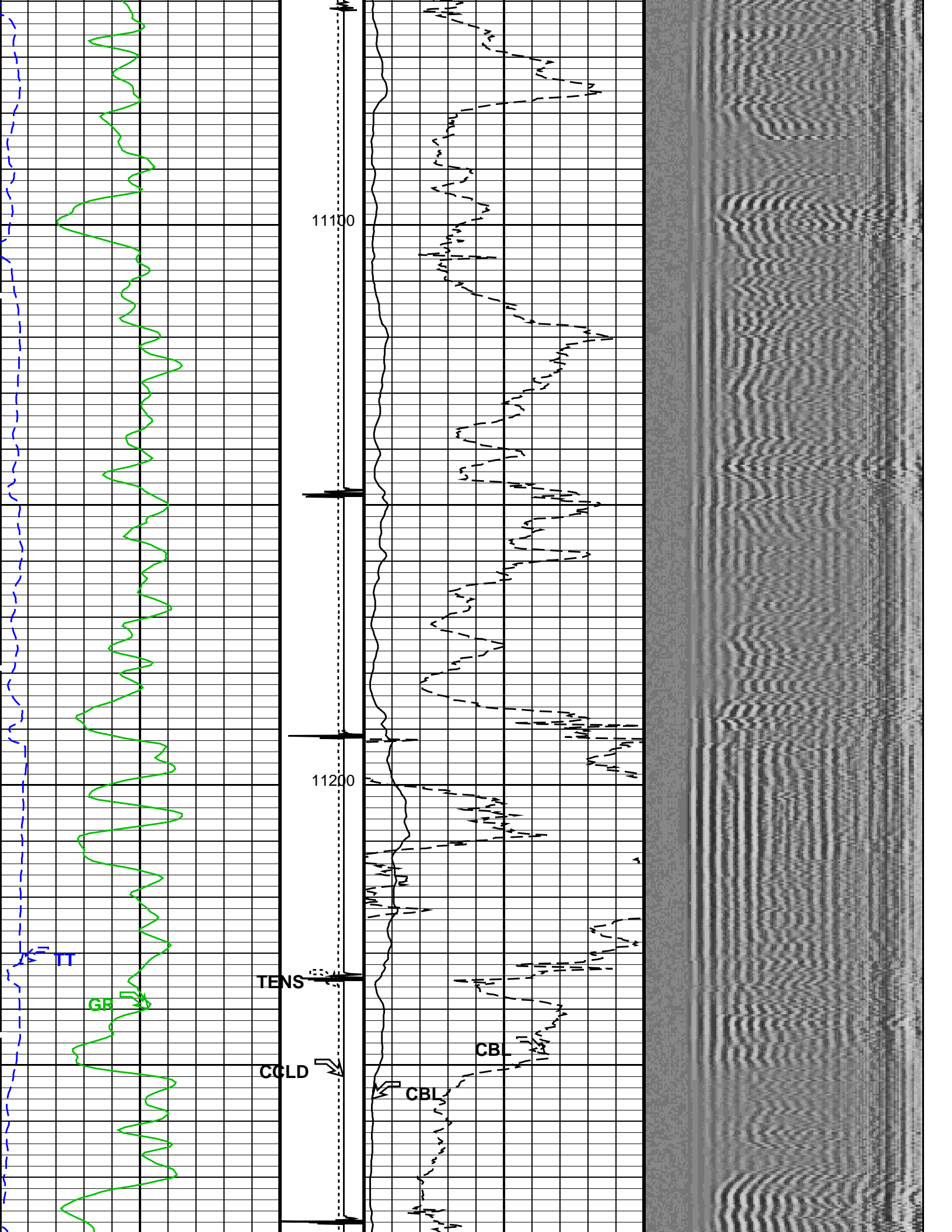




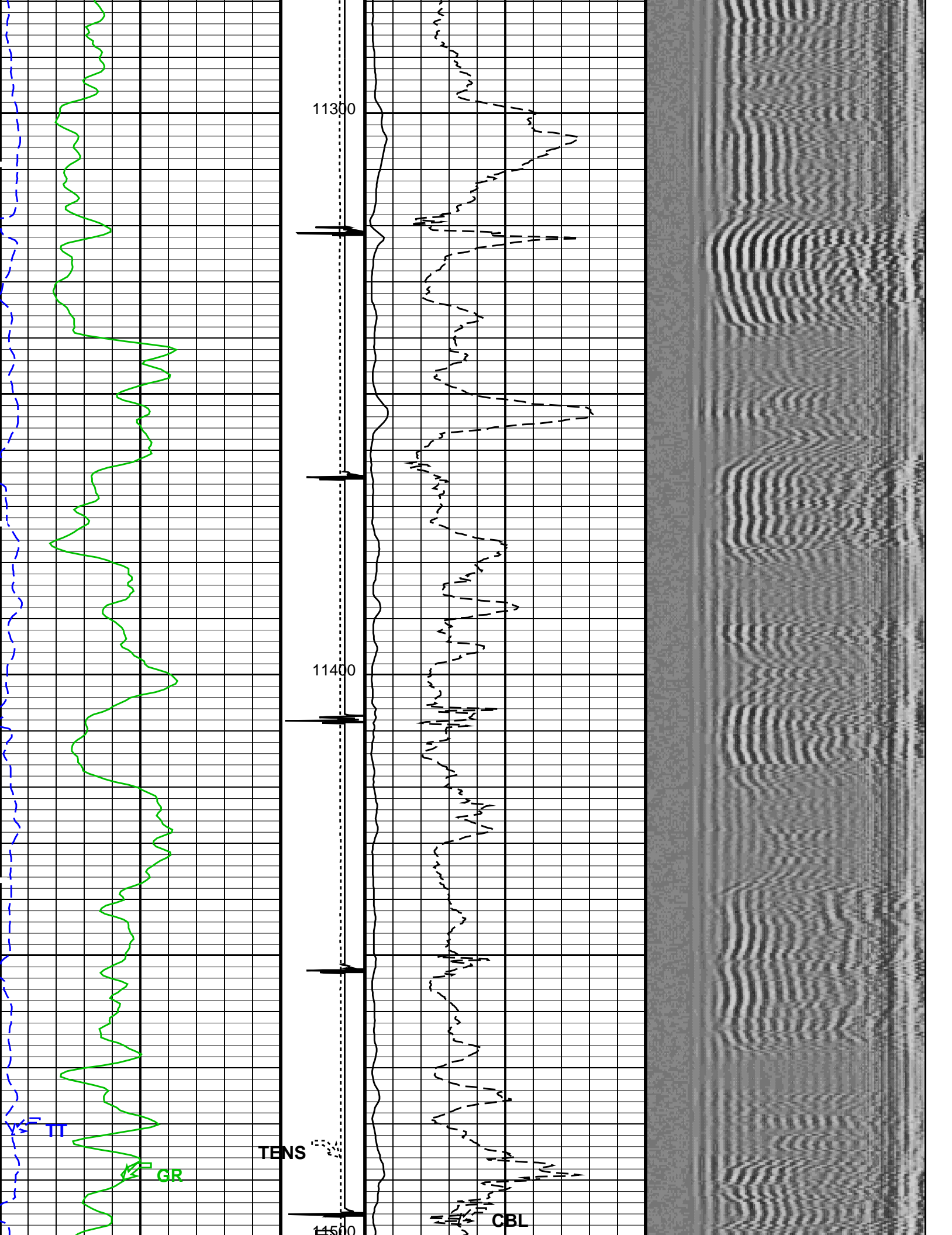


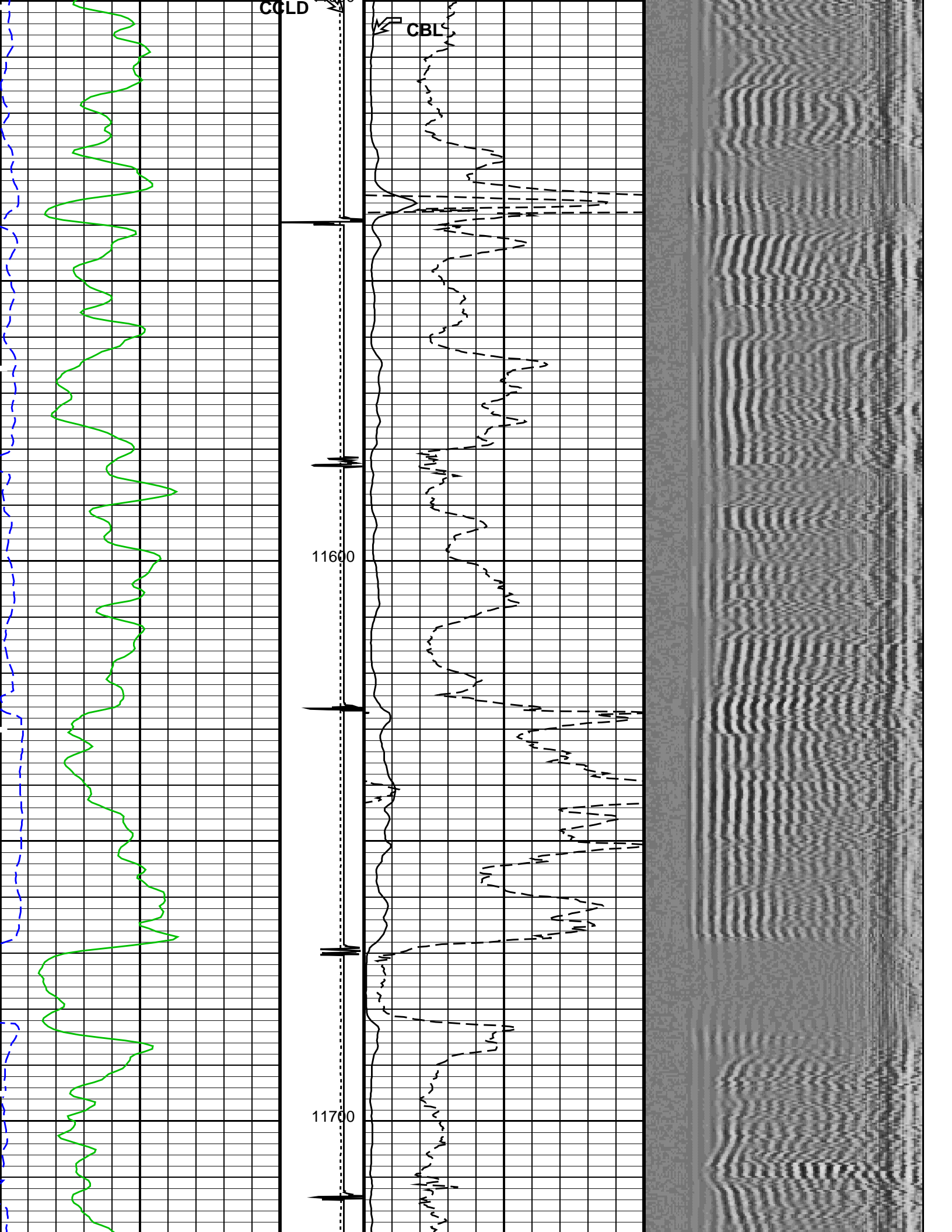


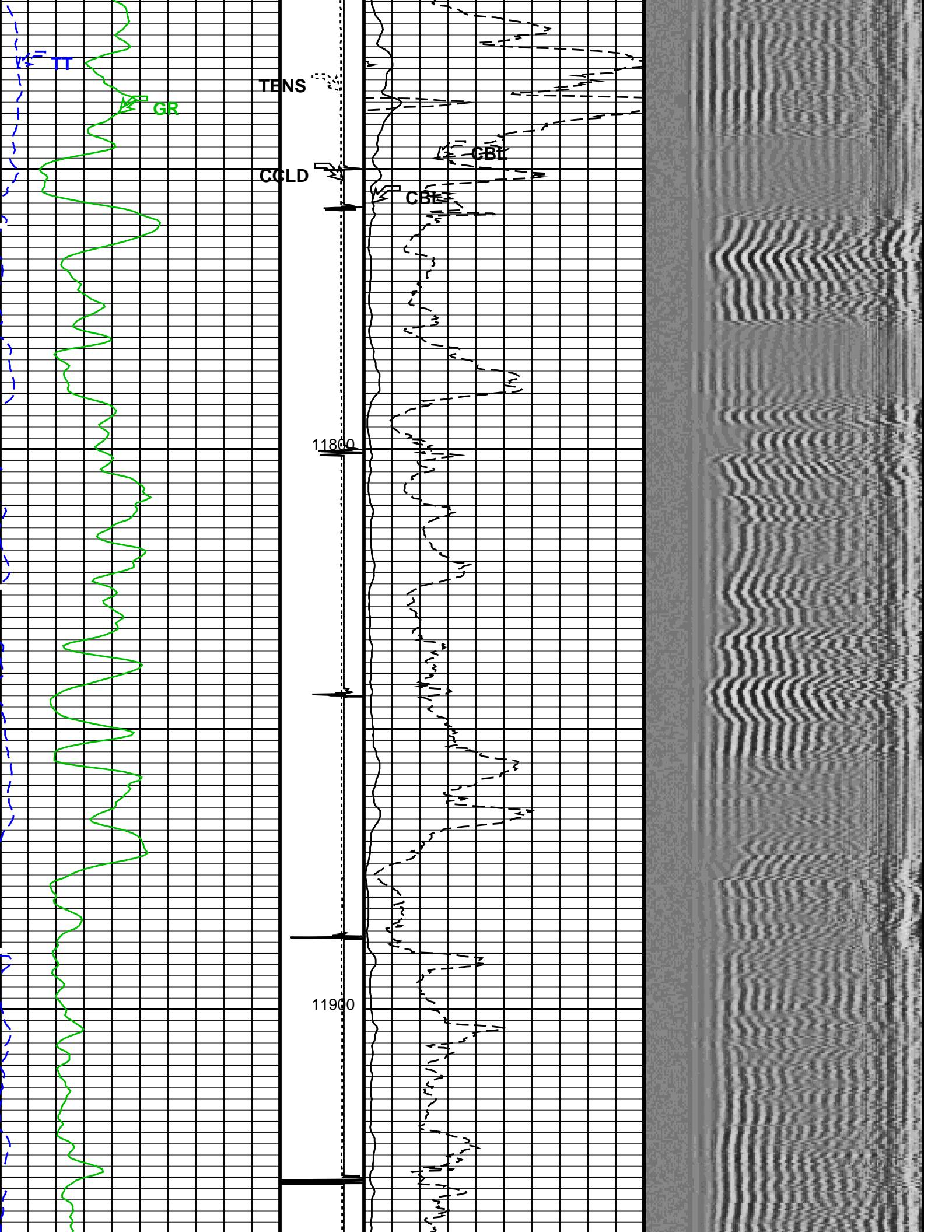


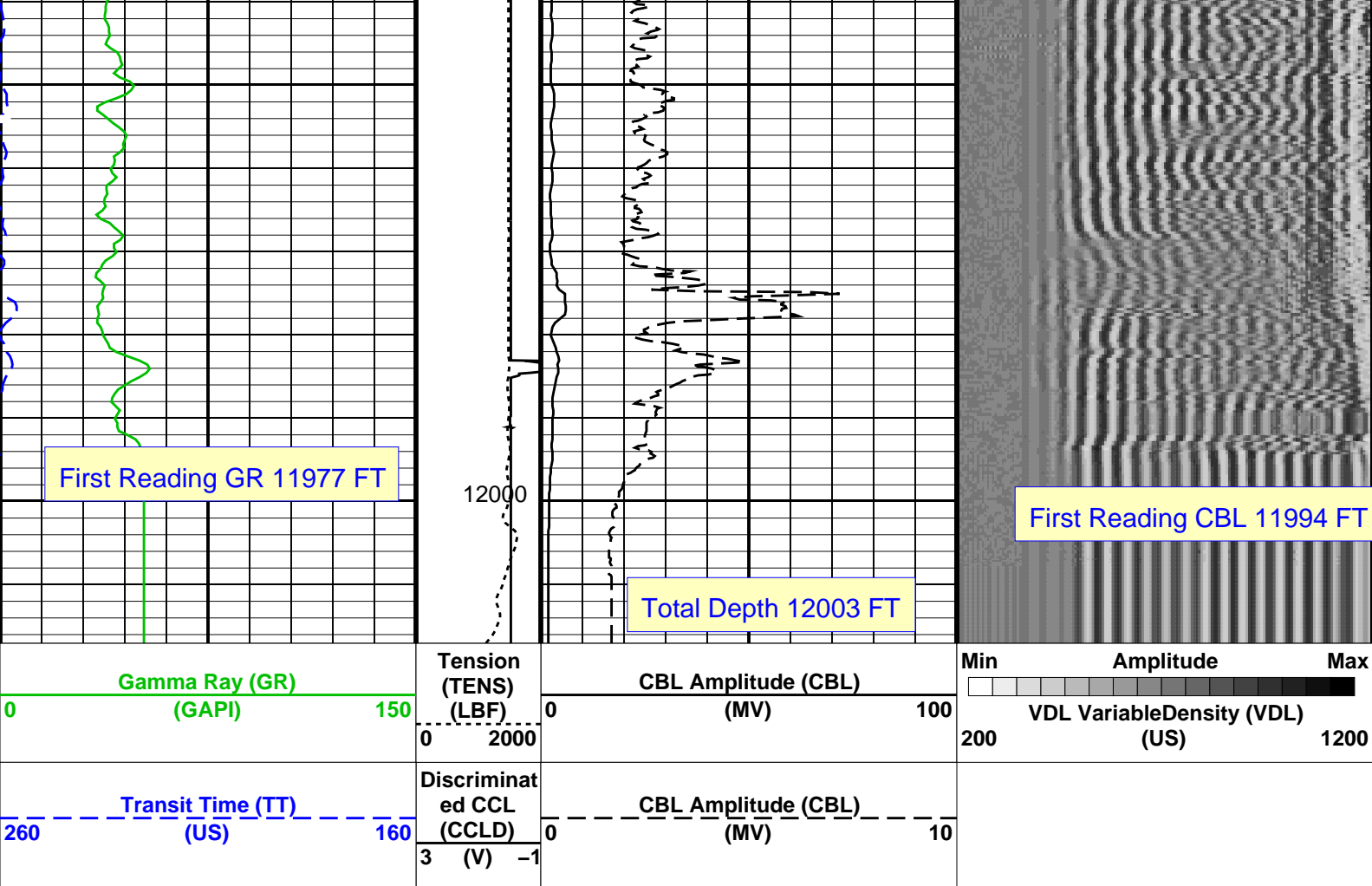












### PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 12-Feb-2013 13:28

## OP System Version: 19C0-187

SCMT-CB 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	4.50000 IN		
Casing Weight	11.6000 LB/F		
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement) 1.55185 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement) 8.10244 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	6-MAR-2012		
CBL Correction Factor	0.0704263	CBL Adjustment Factor (CBAF)	0.800000
MAP 1 Correction Factor	0.0993191	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0941329		
MAP 3 Correction Factor	0.101552		
MAP 4 Correction Factor	0.114415		
MAP 5 Correction Factor	0.127992		
MAP 6 Correction Factor	0.121190		
MAP 7 Correction Factor	0.112867		
MAP 8 Correction Factor	0.102912		



## 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	224.559	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	338.559	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	45	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	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	0.255617	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	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	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	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	5.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12003	FT

## Input DLIS Files

DEFAULT	SCMT_PSP_004LUP	FN:3	PRODUCER	12-Feb-2013 10:20	12012.0 FT	52.5 FT
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## Output DLIS Files

DEFAULT	SCMT_PSP_007PUP	FN:6	PRODUCER	12-Feb-2013 13:28		
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REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL &amp; GAS (USA) INC

Well: SG 8504B-36 (D36 496)

## Input DLIS Files

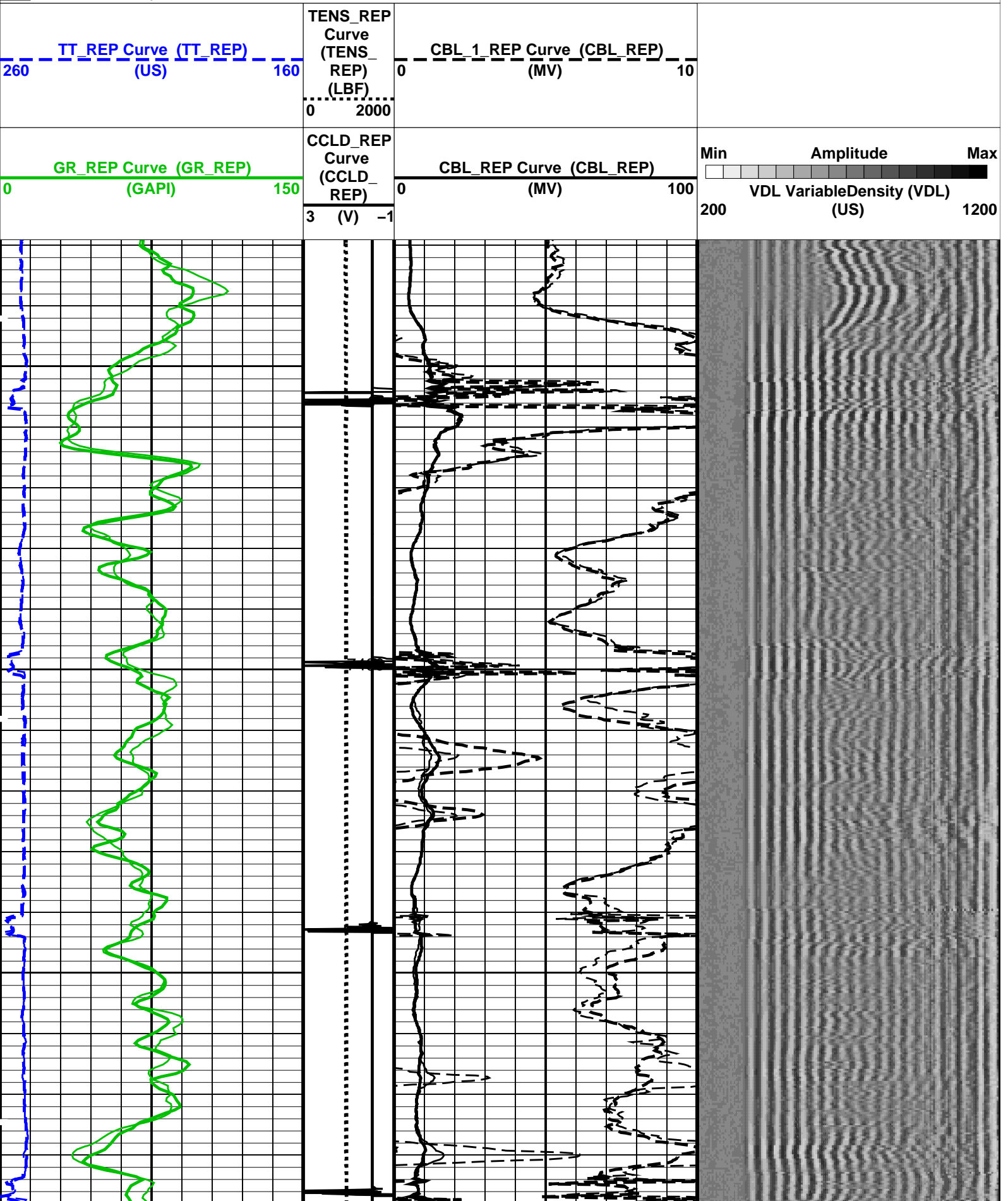
DEFAULT	SCMT_PSP_002LUP	FN:1	PRODUCER	12-Feb-2013 09:55	7600.0 FT	7325.5 FT
DEFAULT	SCMT_PSP_007PUP	FN:6	PRODUCER	12-Feb-2013 13:28	12017.0 FT	57.5 FT

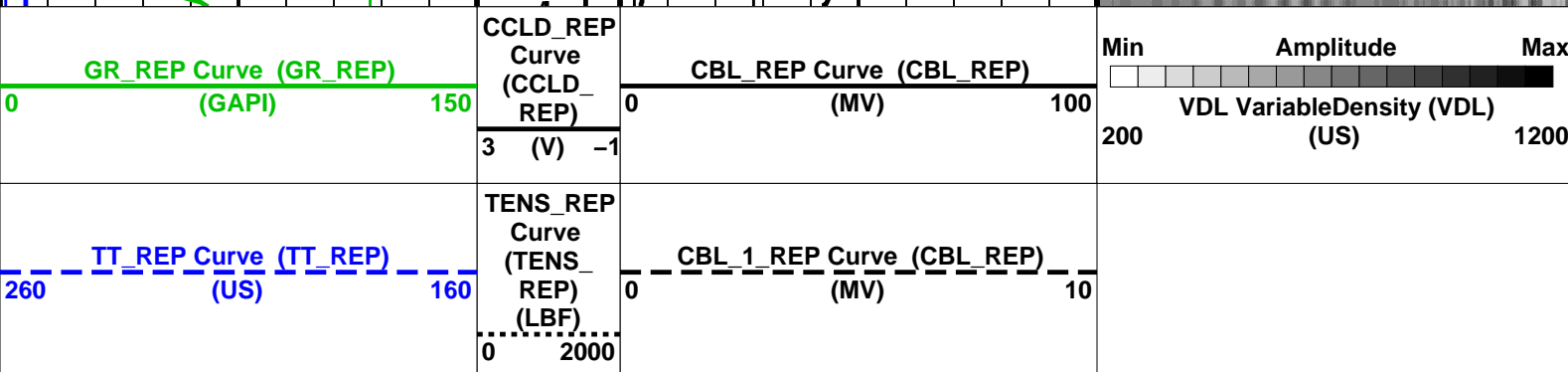
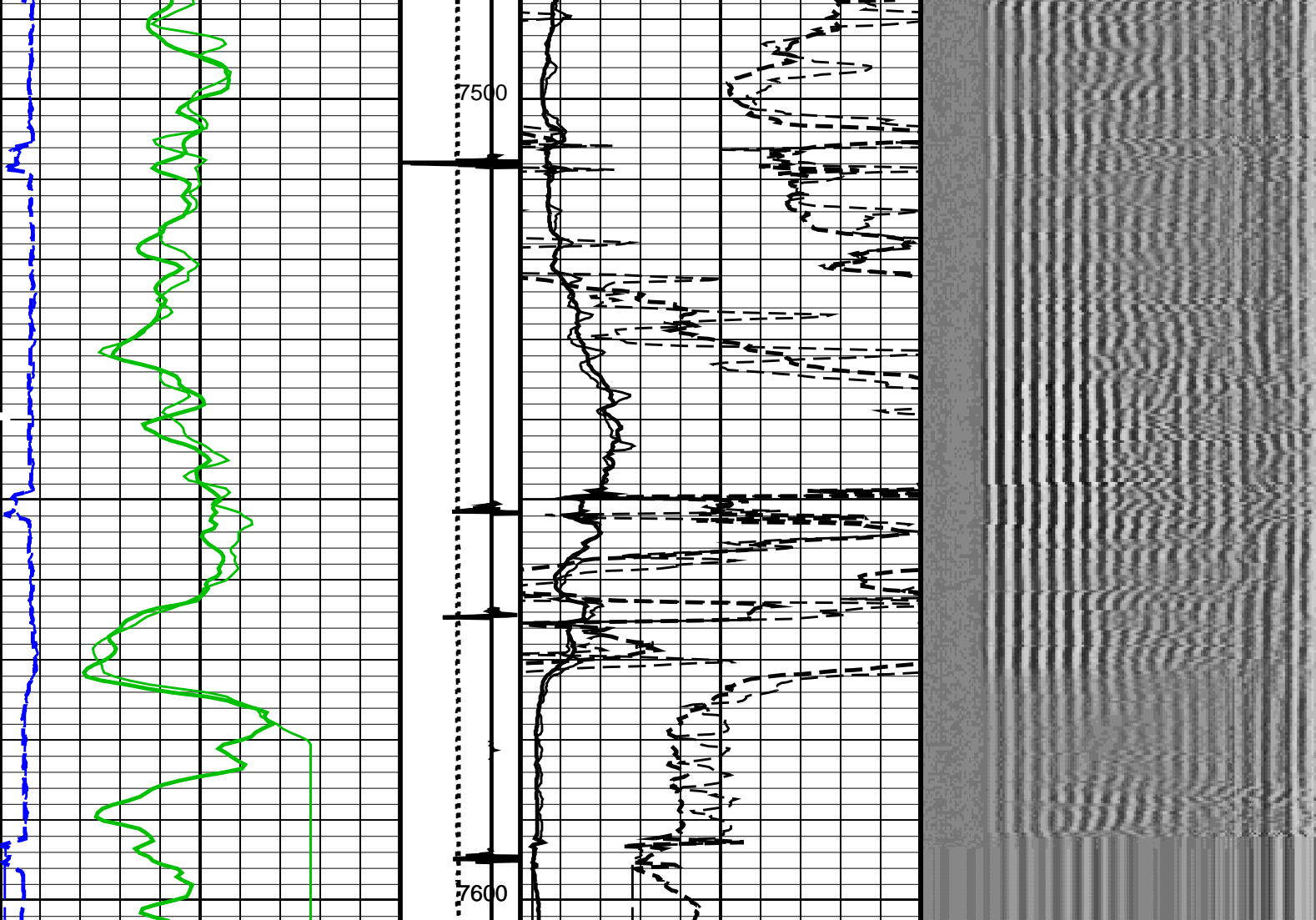
## Output DLIS Files

DEFAULT	SCMT_PSP_008PUP	FN:7	PRODUCER	12-Feb-2013 13:39	7603.0 FT	7328.5 FT
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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: 12-Feb-2013 13:39

## OP System Version: 19C0-187

SCMT-CB 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	11.6000 LB/F		
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement)
			1.55185 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement)
			8.10244 MV (80% Cement)

## Master Calibration (Normalization)

Date of Master Calibration 6-MAR-2012

CBL Correction Factor 0.0704263

MAP 1 Correction Factor 0.0993191

MAP 2 Correction Factor 0.0941329

MAP 3 Correction Factor 0.101552

MAP 4 Correction Factor 0.114415

MAP 5 Correction Factor 0.127992

MAP 6 Correction Factor 0.121190

MAP 7 Correction Factor 0.112867

MAP 8 Correction Factor 0.102913

## Before Calibration (Adjustment)

CBL Adjustment Factor (CBAF) 0.800000

MAP Adjustment Factor (MPAF) 1.0

## 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	224.559	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	338.559	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	45	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	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	0.255617	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	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	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	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	3.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12003	FT

## Input DLIS Files

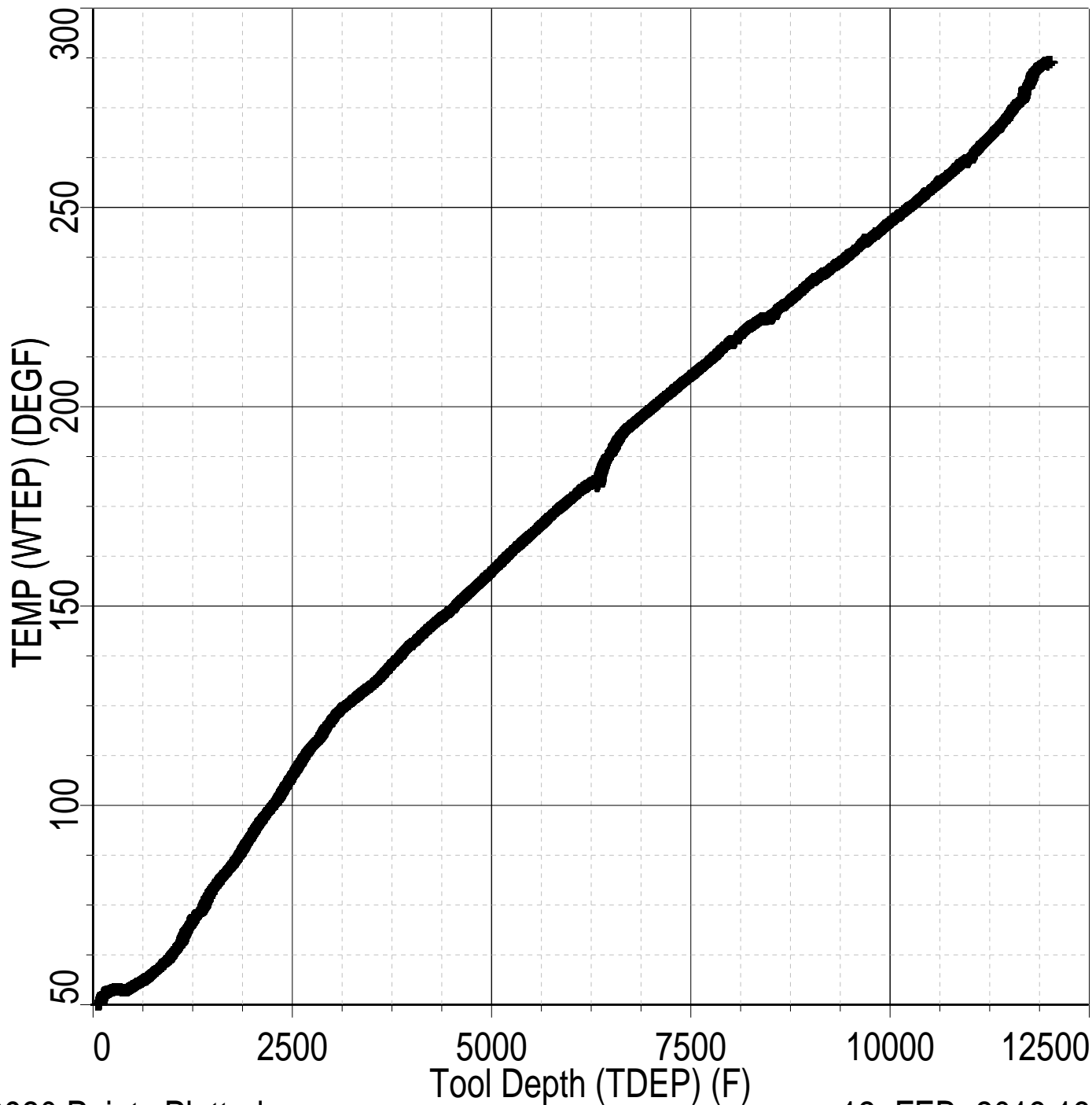
DEFAULT	SCMT_PSP_002LUP	FN:1	PRODUCER	12-Feb-2013 09:55	7600.0 FT	7325.5 FT
DEFAULT	SCMT_PSP_007PUP	FN:6	PRODUCER	12-Feb-2013 13:28	12017.0 FT	57.5 FT

## Output DLIS Files

DEFAULT	SCMT_PSP_008PUP	FN:7	PRODUCER	12-Feb-2013 13:39
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Index: 12017.0 – 57.5 FT



23920 Points Plotted

12-FEB-2013 13:38



PBMS COEFFICIENTS

<b>Tool:</b>	<b>PSP</b>
<b>Sub Type:</b>	<b>PBMS</b>
<b>Sensor:</b>	<b>GR</b>

## PBMS Gamma Ray

Sonde Serial NB	RESISTORS FOR GR SENSOR N.33223,TOOL PBMS-BA0928. SENSOR S/N:
Sensor Serial NB	33223
Calib Date ddmmyy	090800
Matrix Size	12
Coeff CRC	CFE2

GR HV Rt

**Rt\*\*0**

**Rt\*\*1**

**Rt\*\*0**

+.182000000000e+04

**+.332000000000e+04**

<b>Tool:</b>	<b>PSP</b>
<b>Sub Type:</b>	<b>PBMS</b>
<b>Sensor:</b>	<b>WellTemp RTD</b>

## PBMS RTD Well Thermometer

<b>Sonde Serial NB</b>	<b>COEFFICIENTS FOR RTD THERMOMETER PBMS-B.928 S/N:</b>
<b>Sensor Serial NB</b>	<b>928</b>
<b>Calib Date ddmmyy</b>	<b>280612</b>
<b>Matrix Size</b>	<b>16</b>
<b>Coeff CRC</b>	<b>A24E</b>

**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	Tool:	PSP
Field:	GRAND VALLEY	Sub Type:	PBMS
Well:	SG 8504B-36 (D36 496)	Sensor:	CQG
Run date:	12-Feb-2013		

PBMS Quartz Gauge type F

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR CQG PBMS-B.928 S/N:

928

280612

66

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

Sensor Serial NB  
Calib Date ddmmyy  
Matrix Size  
Coeff CRC

280612  
66  
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

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

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

Schlumberger

## MASTER CALIBRATION

MAXIS Field Log

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

Primary Equipment:

Slim Cement Mapping Xmitter Electronics

Slim Cement Mapping Sonde

Slim Cement Mapping Cartridge

SCMX - CA

SCMS - CB

8179

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



Well: SG 8504B–36 (D36 496)

Field: GRAND VALLEY

County: GARFIELD

State: COLORADO

SLIM CEMENT MAPPING LOG  
CBL–VDL  
GR–CCL