

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8510D-23 (L24 496)

Field: STORY GULCH

County: GARFIELD

State: COLORADO

County: GARFIELD

Field: STORY GULCH

Location: SHL: 1585' FSL & 884' FWL

Well: SGU 8510D-23 (L24 496)

Company: ENCANA OIL & GAS (USA) INC

SLIM CEMENT MAPPING LOG

GAMMA RAY - CCL - TEMPERATUR

CBL - VDL

SHL: 1585' FSL & 884' FWL

BHL: 1790' FSL & 1814' FEL

Elev.: K.B. 8210.00 ft

G.L. 8180.00 ft

D.F. 8109.00 ft

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elev.: 8180.00 ft

30.00 ft above Perm. Datum

API Serial No. 05-045-21179-0000

Section 24

Township 4S

Range 96W

			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 18-Mar-2013

Run Number 1

Depth Driller 12600 ft

Schlumberger Depth 12485 ft

Bottom Log Interval 12477 ft

Top Log Interval 75 ft

Casing Fluid Type FRESH WATER

Salinity

Density 8.4 lbm/gal

Fluid Level 75 ft

BIT/CASING/TUBING STRING

Bit Size 7.875 in

From 9626 ft

To 12600 ft

Casing/Tubing Size 4.500 in

Weight 13.5 lbm/ft

Grade

From 30 ft

To 12540 ft

Maximum Recorded Temperatures 287 degF

Logger On Bottom 19-Mar-2013 0:00

Unit Number 391 Location GRAND JUNCTION

Recorded By JASON BARRY

Witnessed By JOHN MILLER

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					
Unit Number					
Recorded By					
Witnessed By					

DEPTH SUMMARY LISTING

Date Created: 14-MAR-2013 10:41:08

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:	20-FEB-2011	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:	4		
Wheel Correction 2:	-4	Calibration Peak Error:	8		

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

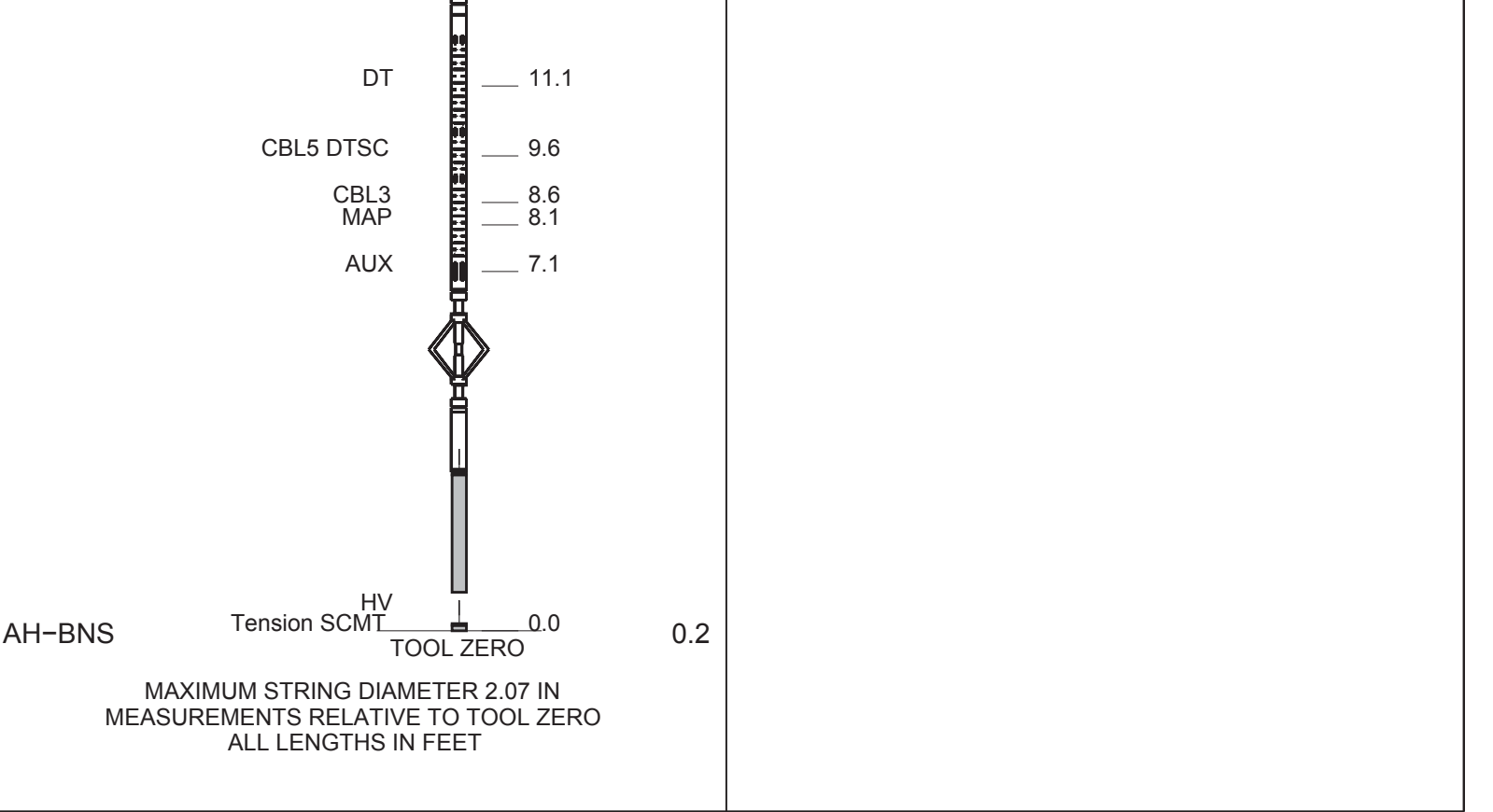
1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES APPLIED
2. IDW USED AS PRIMARY DEPTH REFERENCE
3. SWPT DRUM COUNTER USED AS SECONDARY DEPTH REFERENCE
- 4.
- 5.
- 6.

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 OS1: NONE OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE	
TOOL RAN AS PER TOOL SKETCH	
MAX RECORDED TEMPERATURE: 287 DEGF	
MAX RECORDED PRESSURE: 5088 PSI	
SHORT JOINTS: 11048 FT & 8062 FT	

ENTRANCE TIME: 23:15					
TIME ON BOTTOM: 00:00					
EXIT TIME: 3:15					
MAIN PASS LOGGED UNDER ZERO SURFACE PRESSURE					
EXPECTED CBL AMP IN FREE PIPE = 0 MV					
CREW: J BARRY, B CUPP, J MANN, W AZIZ, K JOHNS					
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY					
RUN 1			RUN 2		
SERVICE ORDER #: C920-00051			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL: 75 ft			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM-A PSC_16MHZ					
DOWNHOLE EQUIPMENT					
MH-22 MH-22		33.2			
Detail MT TelStatus CTEM					
AH-38		31.6			
HBMS-B		31.3			
PSC-A 2884					
HUDH-A 2884					
HSTC-A					
HBMC-A					
GR					
CCL					
HBMC					
HTPS-A 2884					
HCQG_E_Mano	GR	26.4			
RTD_Thermometer					
	CCL	24.0			
	HSTC Aux.				
	HBMC Aux.	22.5			
	CQG Manom				
	Well_Temp	21.1			
SCMT-CB		20.2			
SCMC-CA 8120					
SECH-CA					
CMIR-AG					
SCMS-CB 8179					
SCMX-CA					



MAIN PASS CBL VDL

MAXIS Field Log

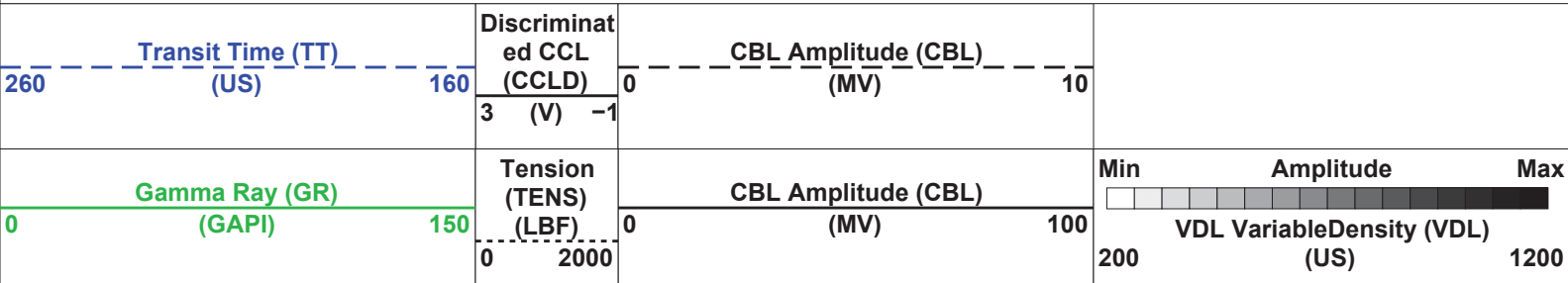
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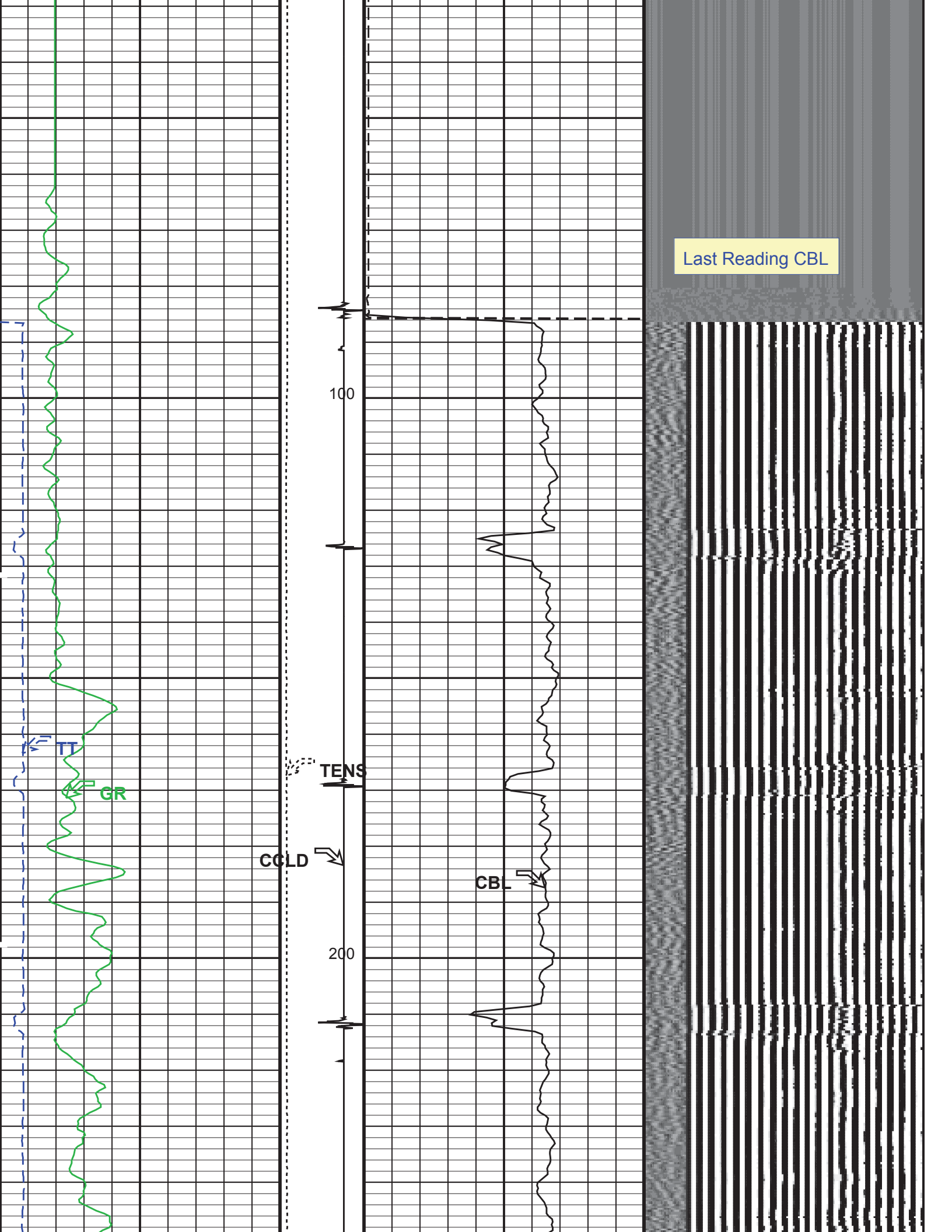
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Output DLIS Files						
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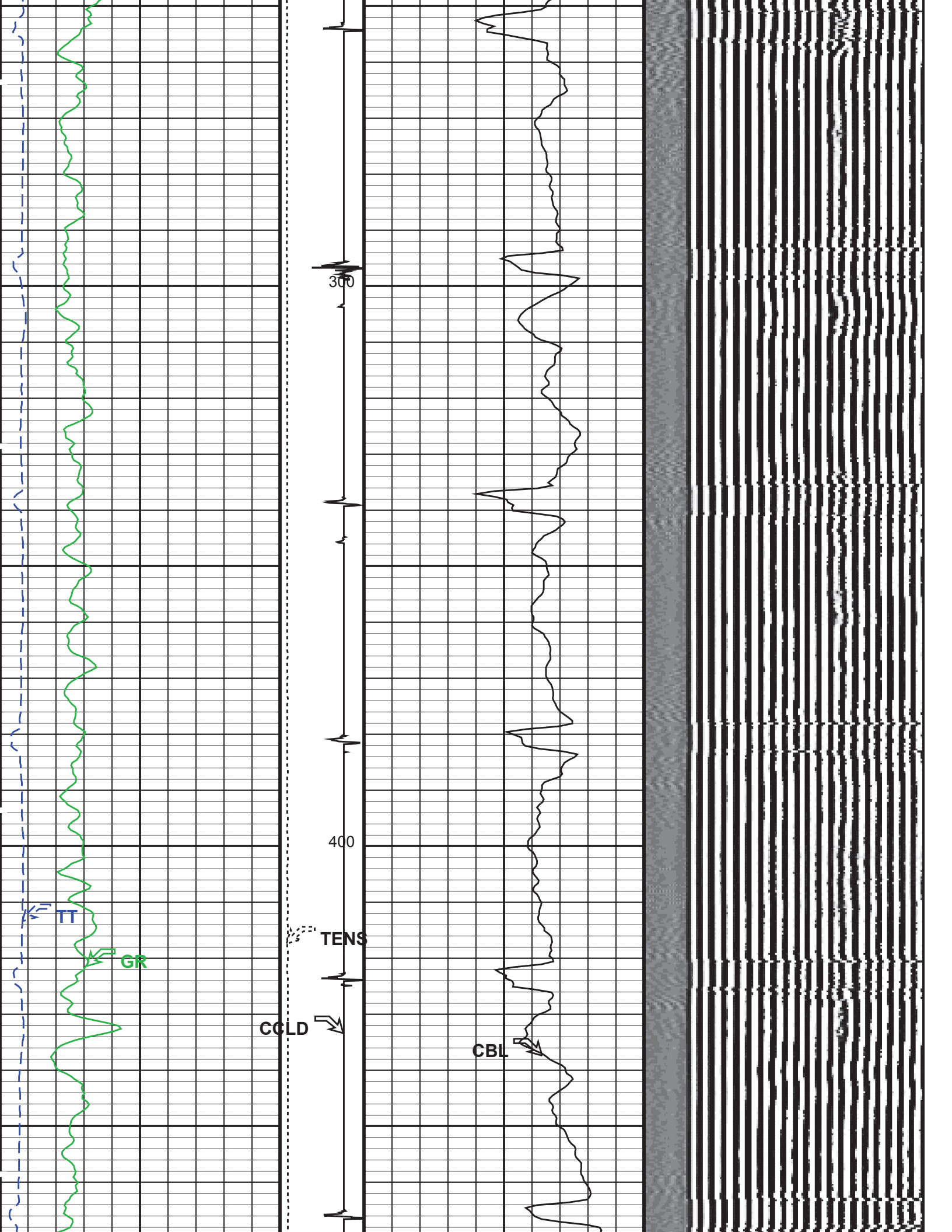
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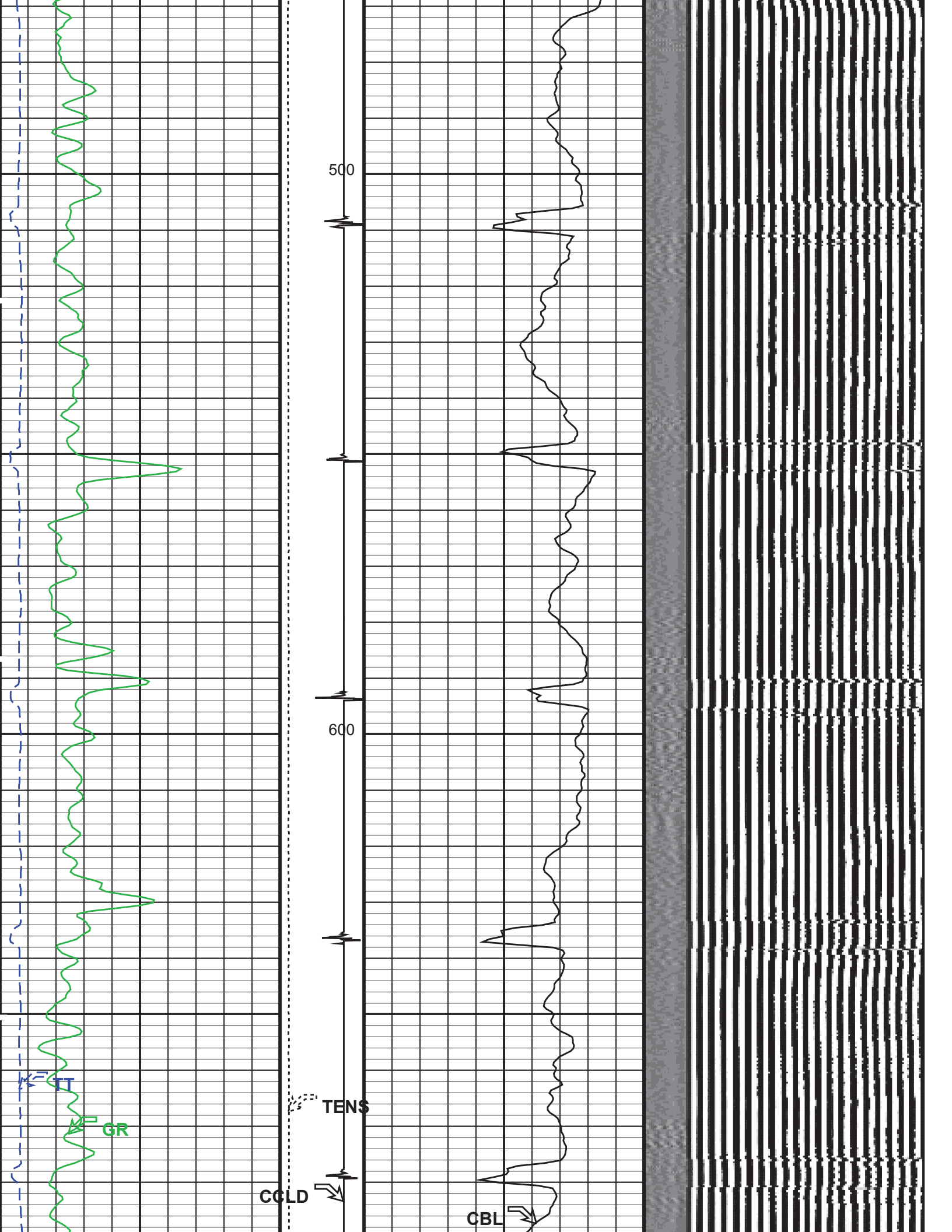
PIP SUMMARY

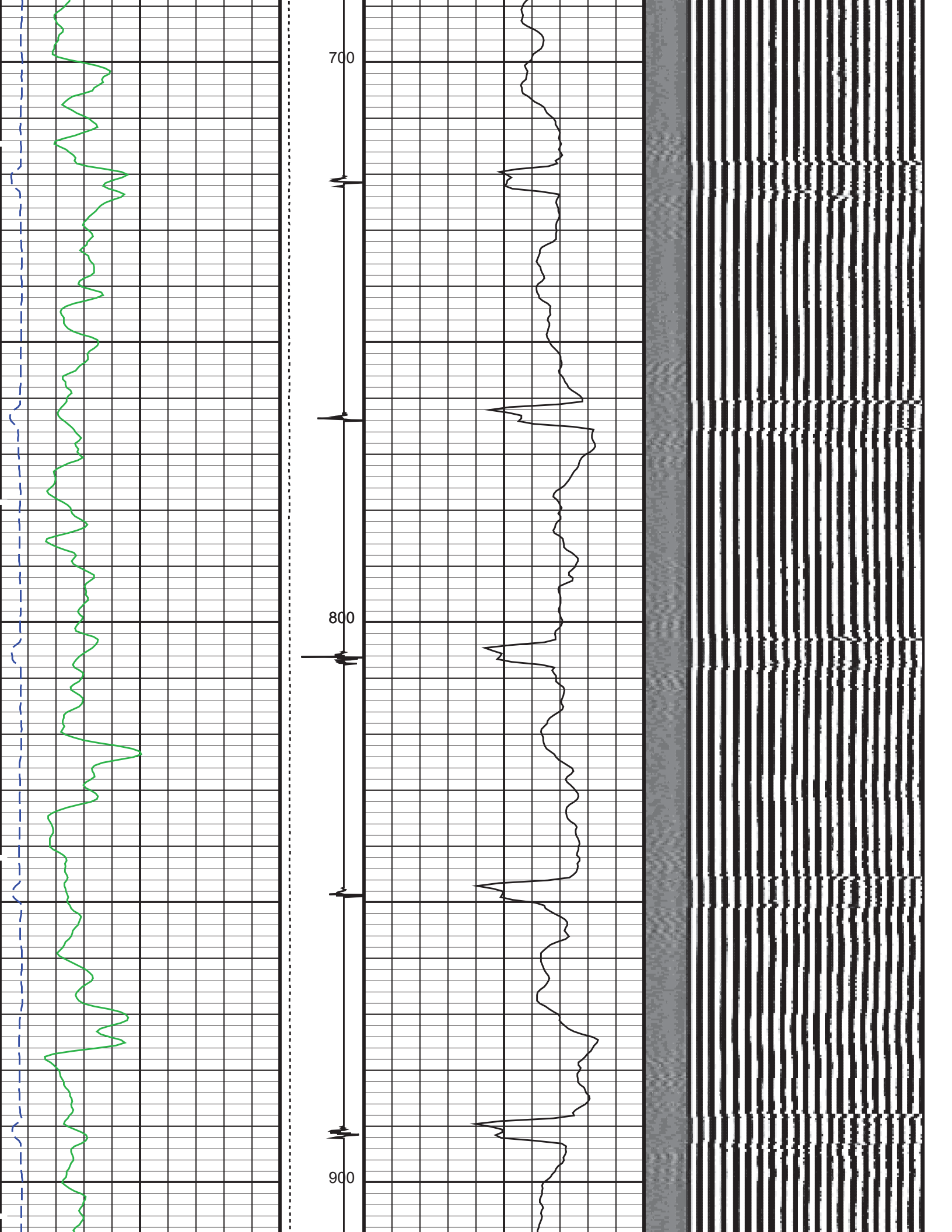
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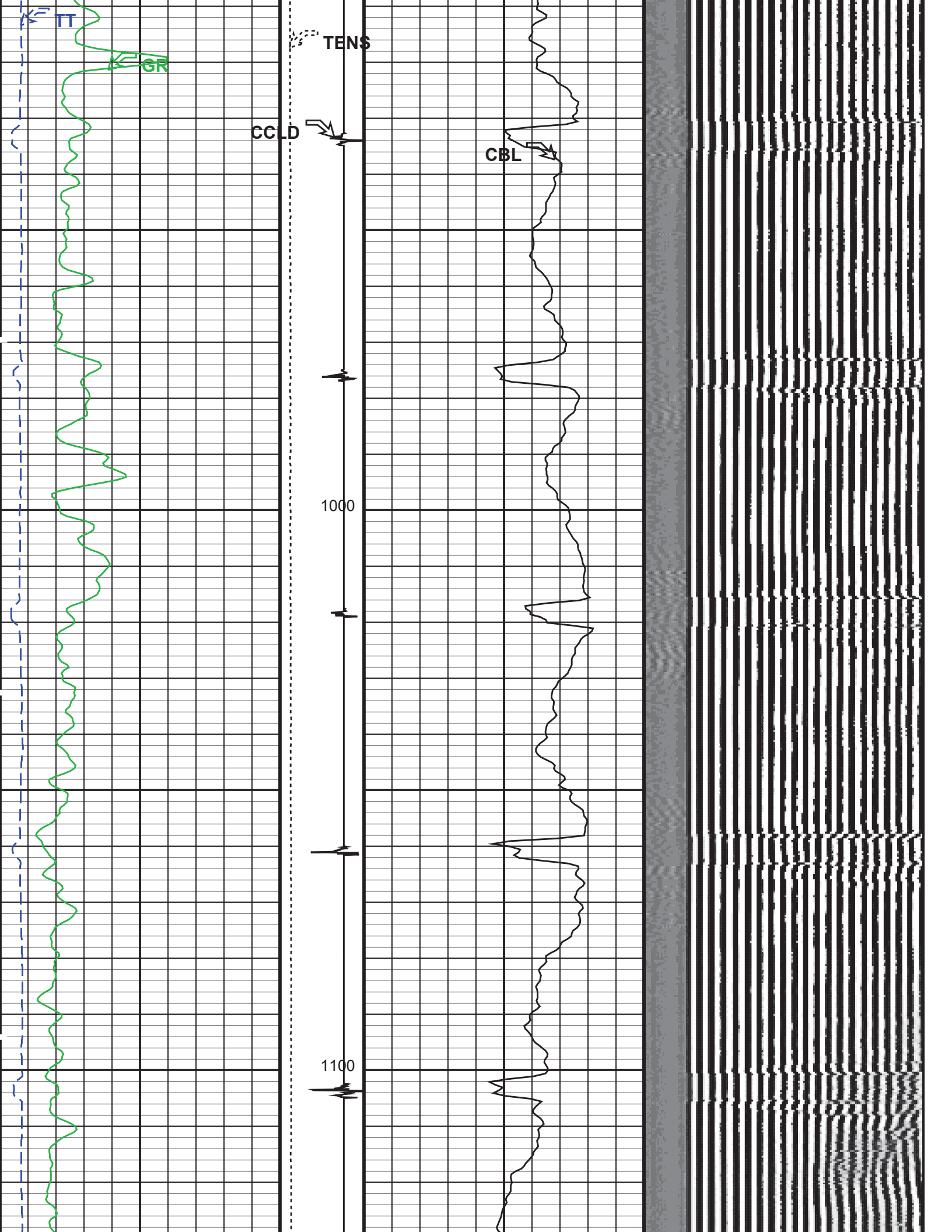


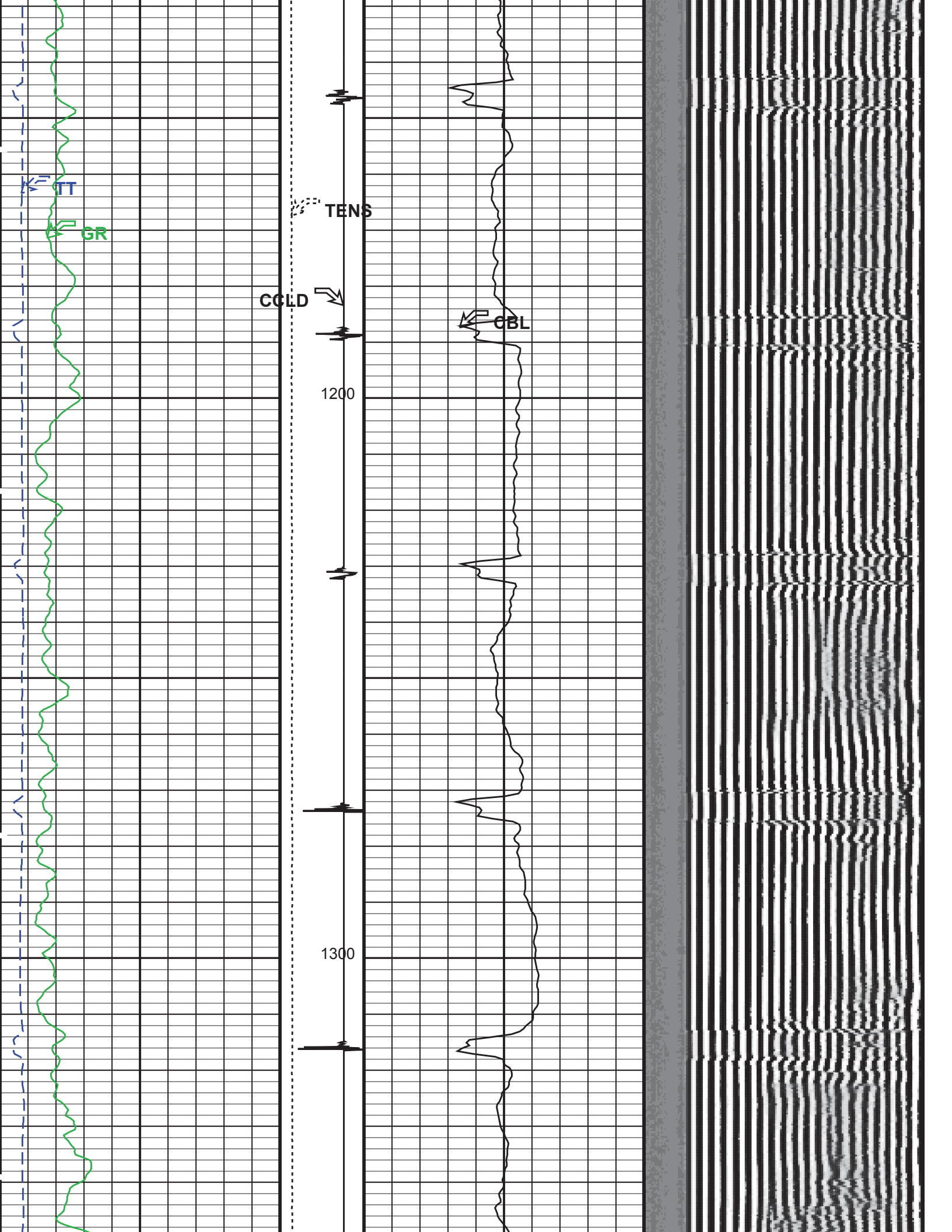


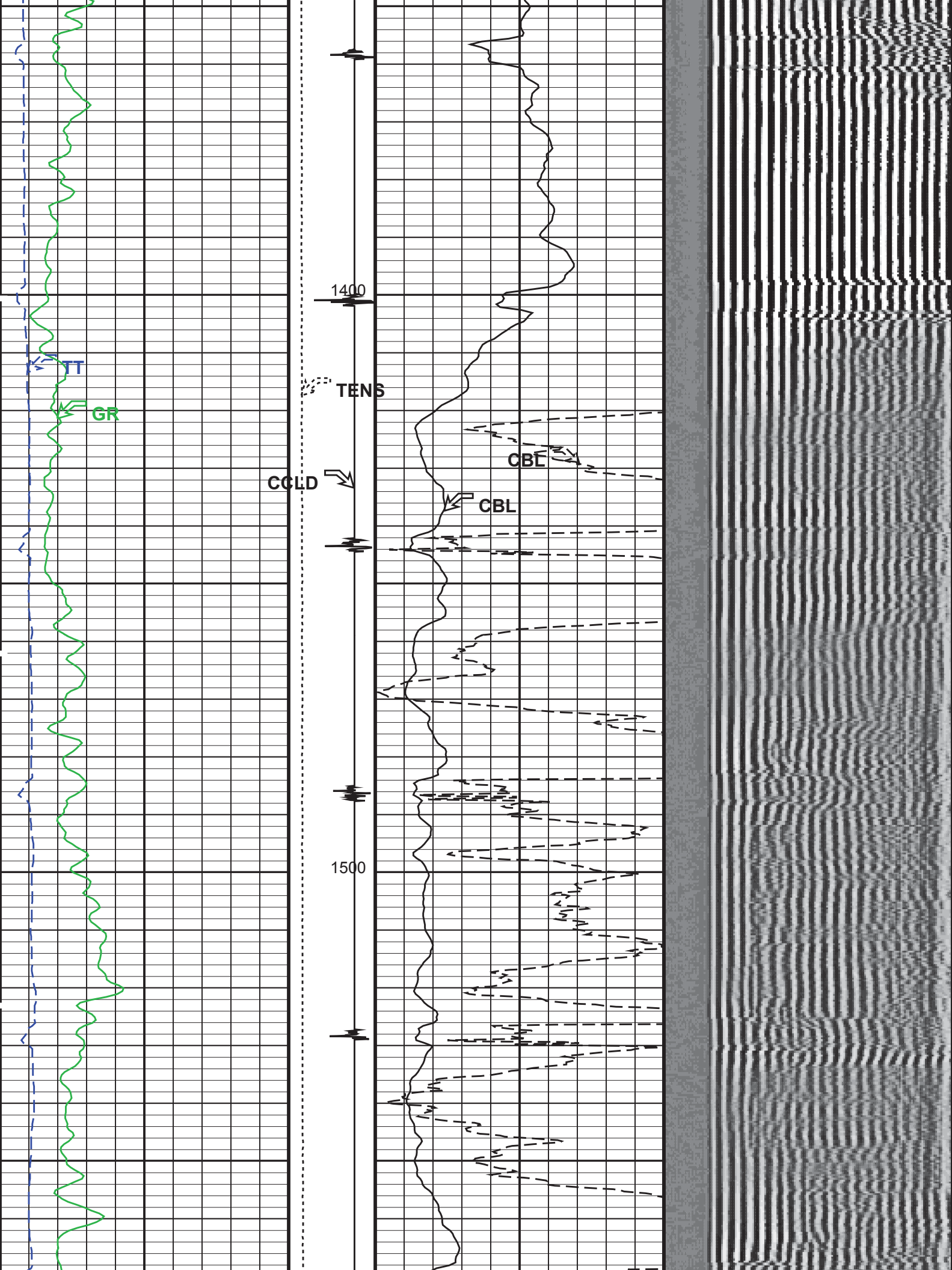


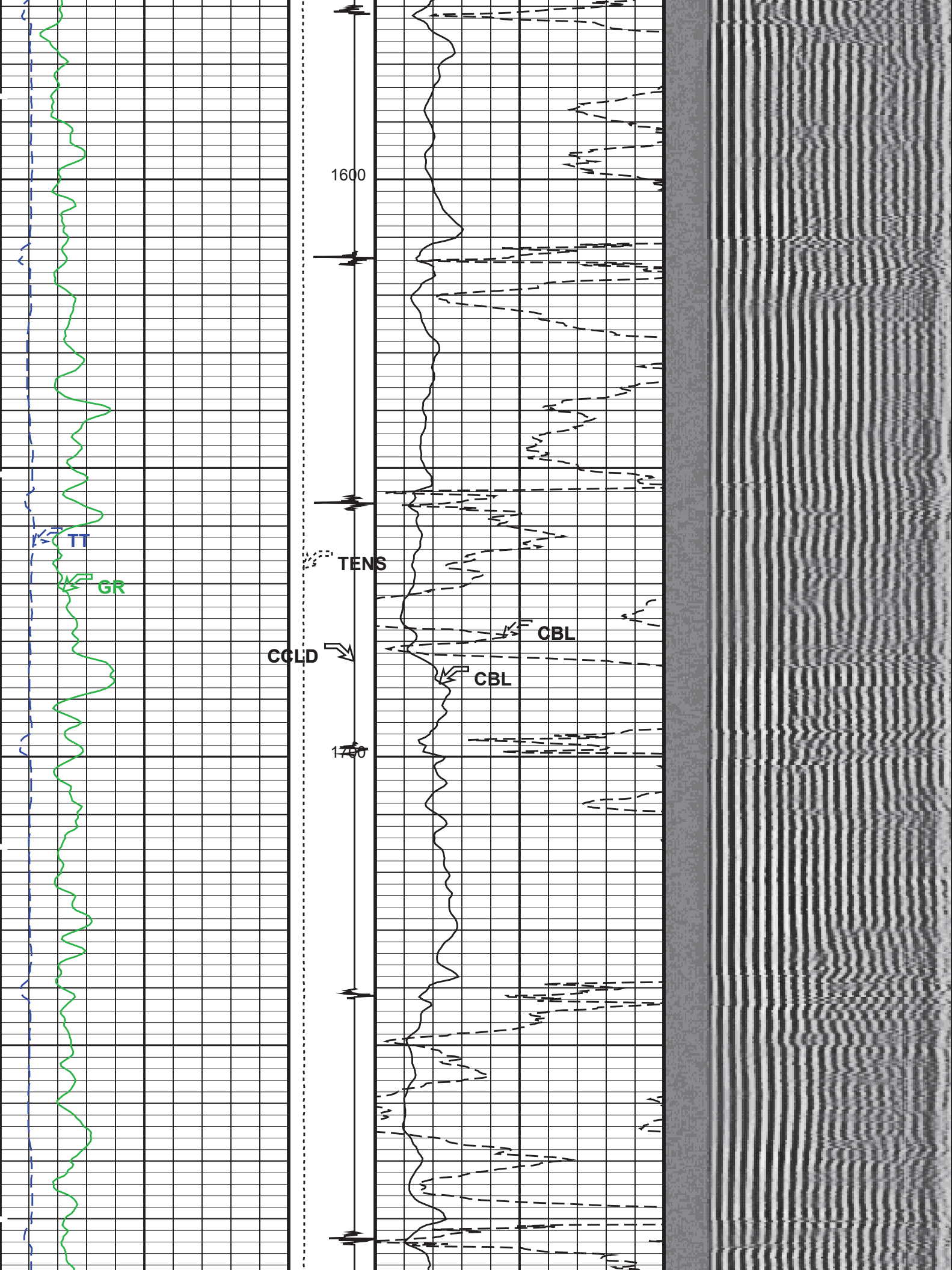


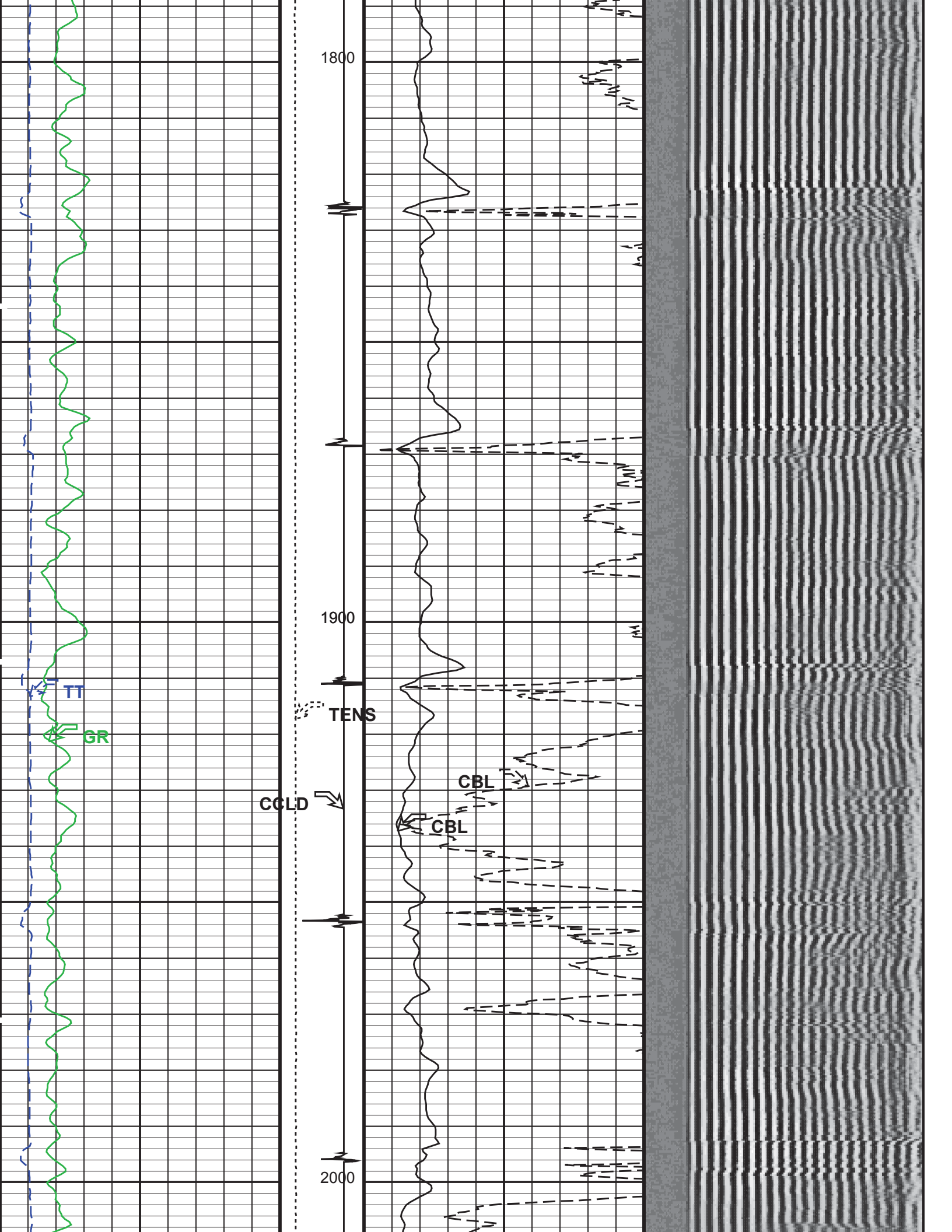


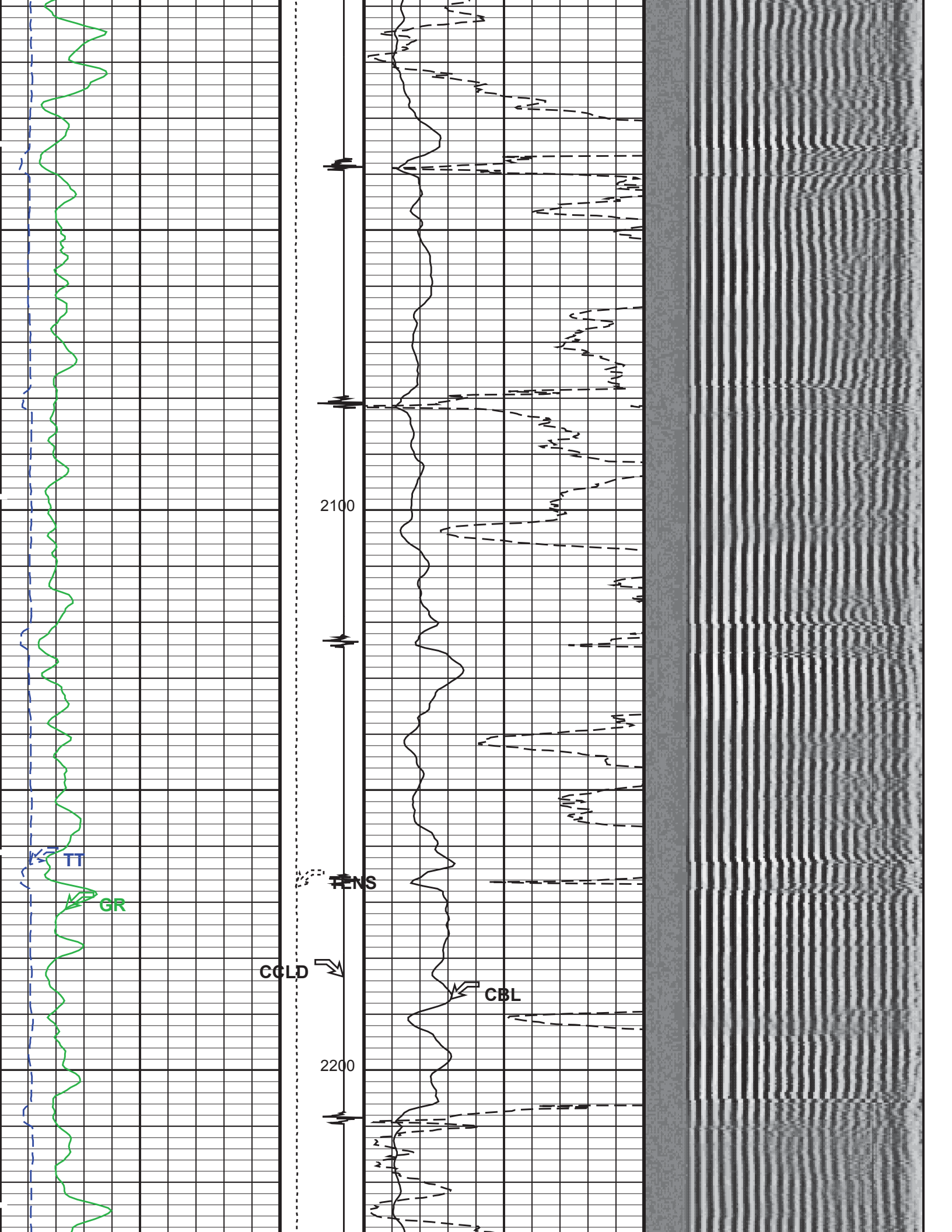


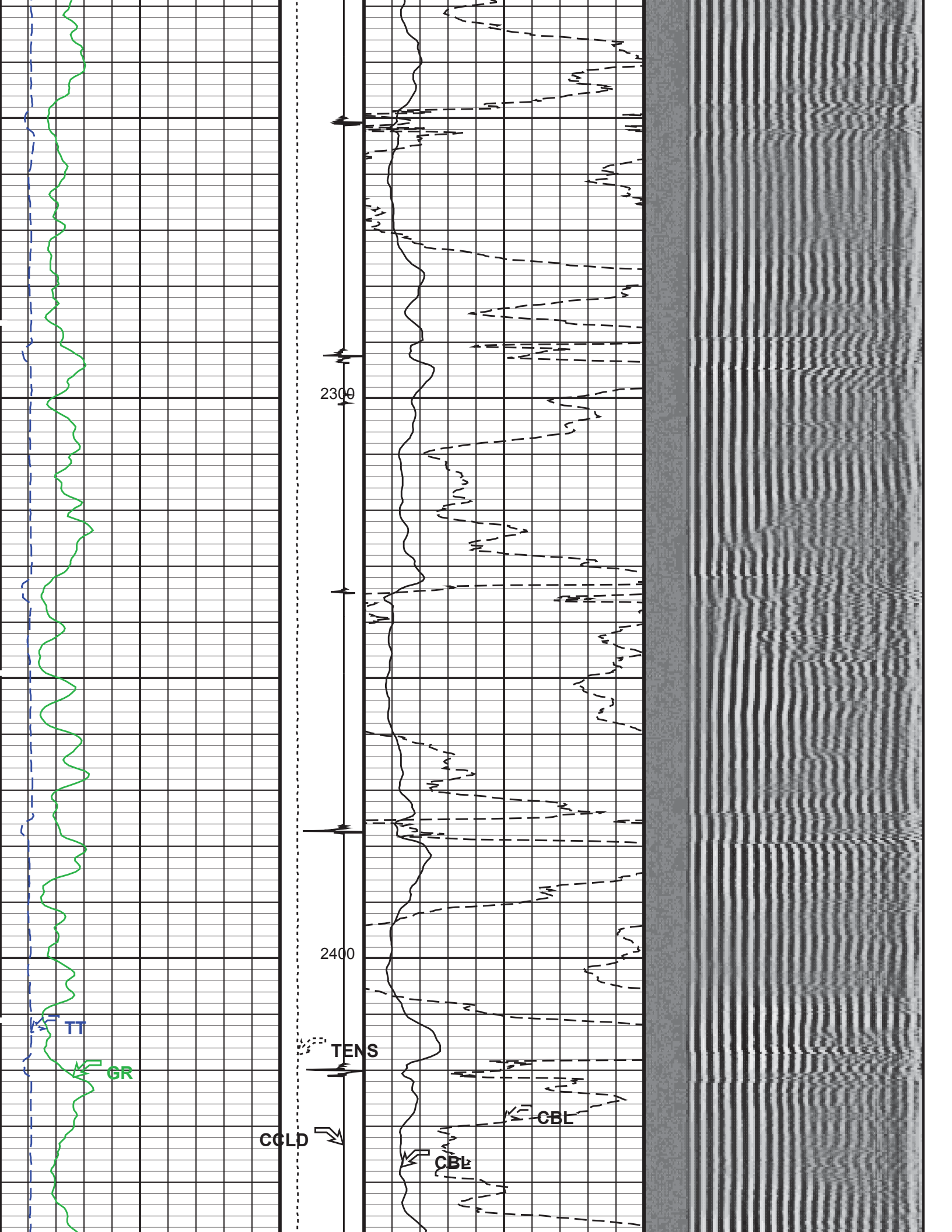


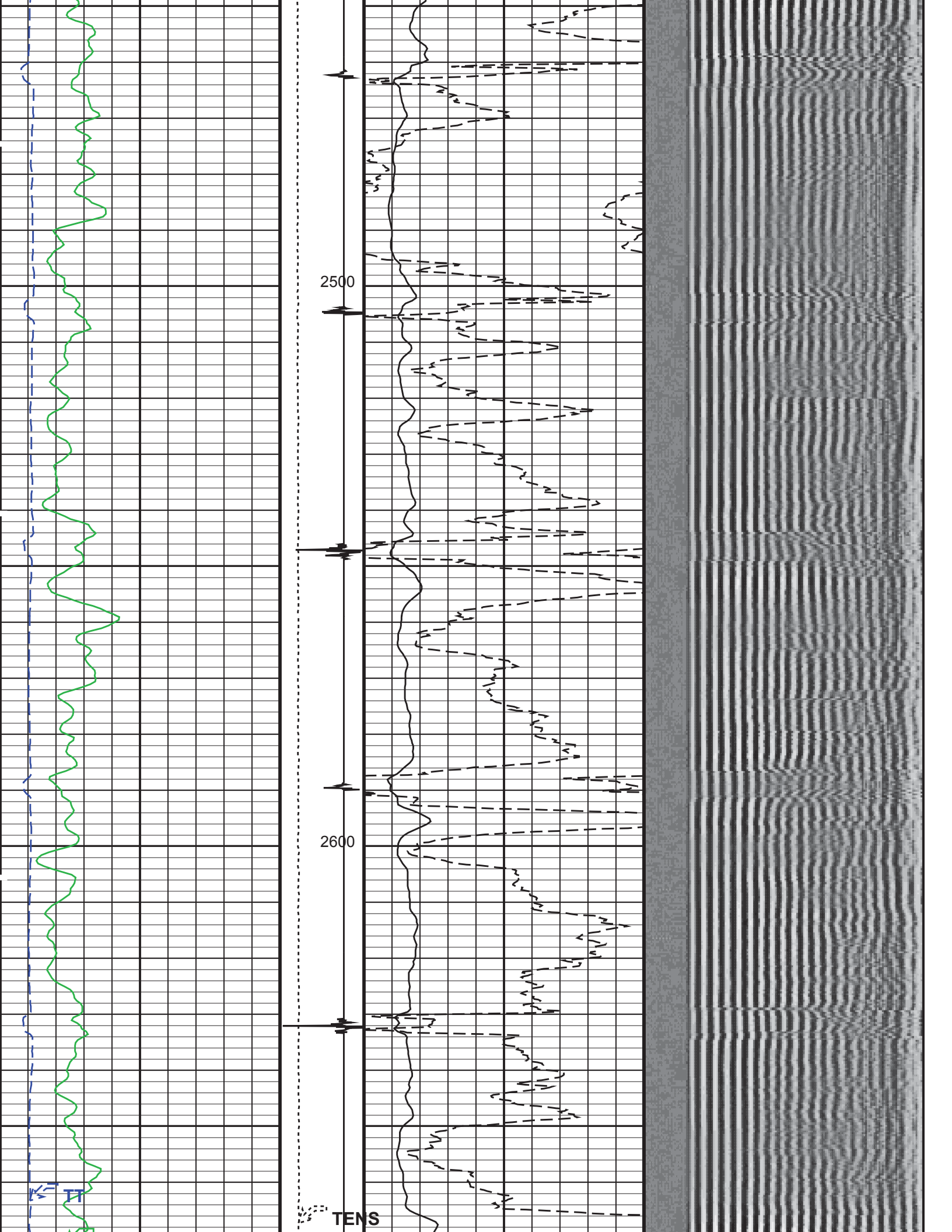


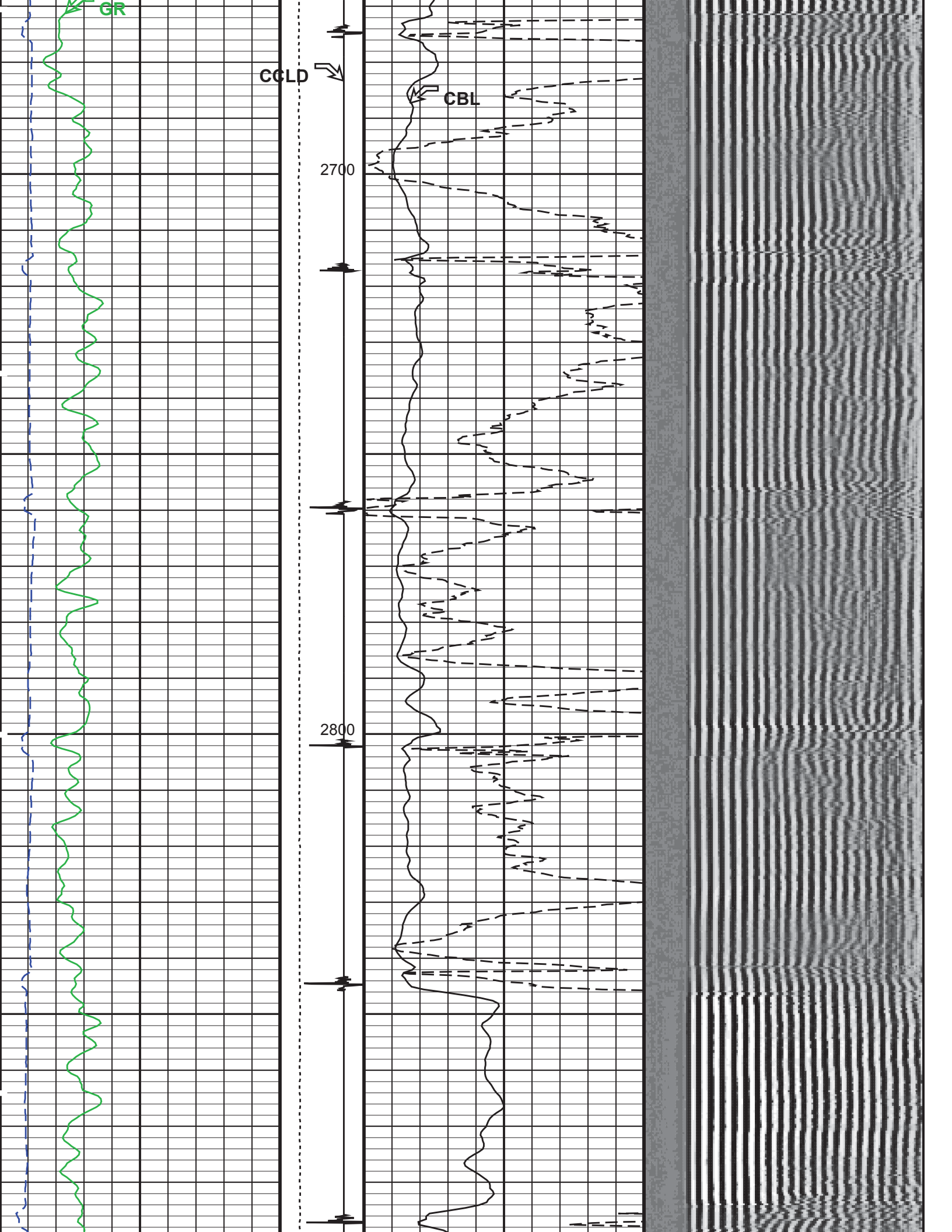


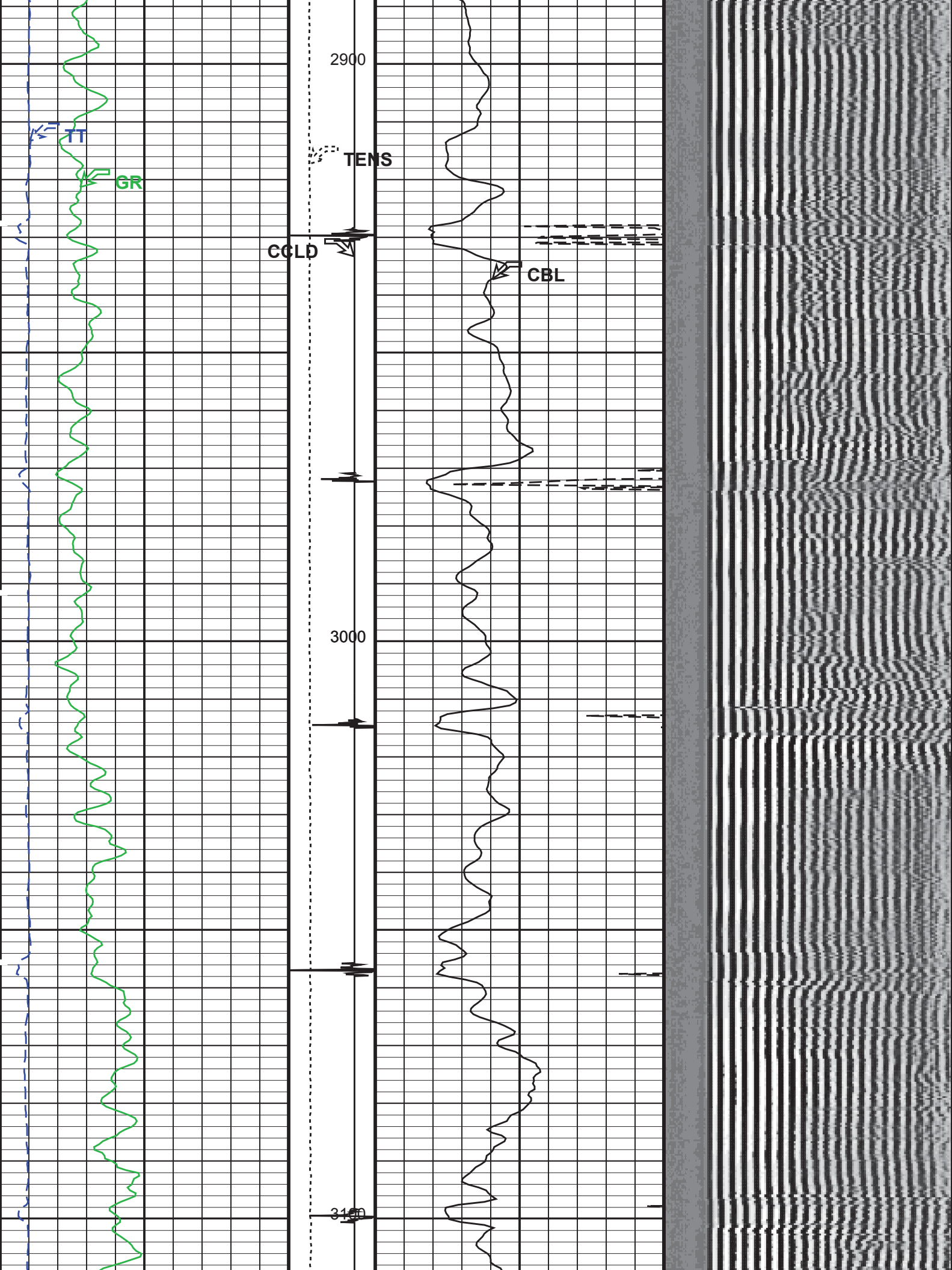


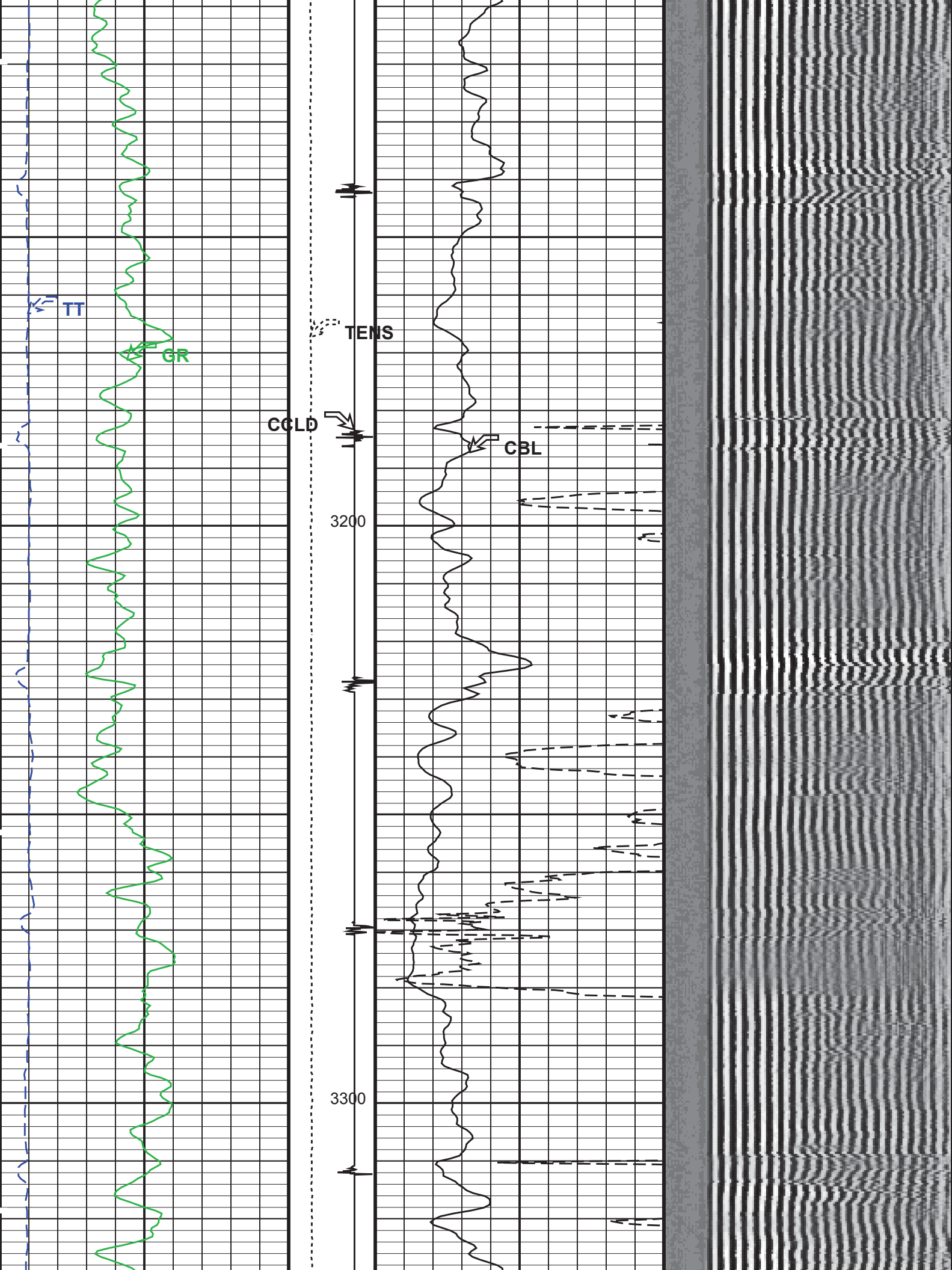


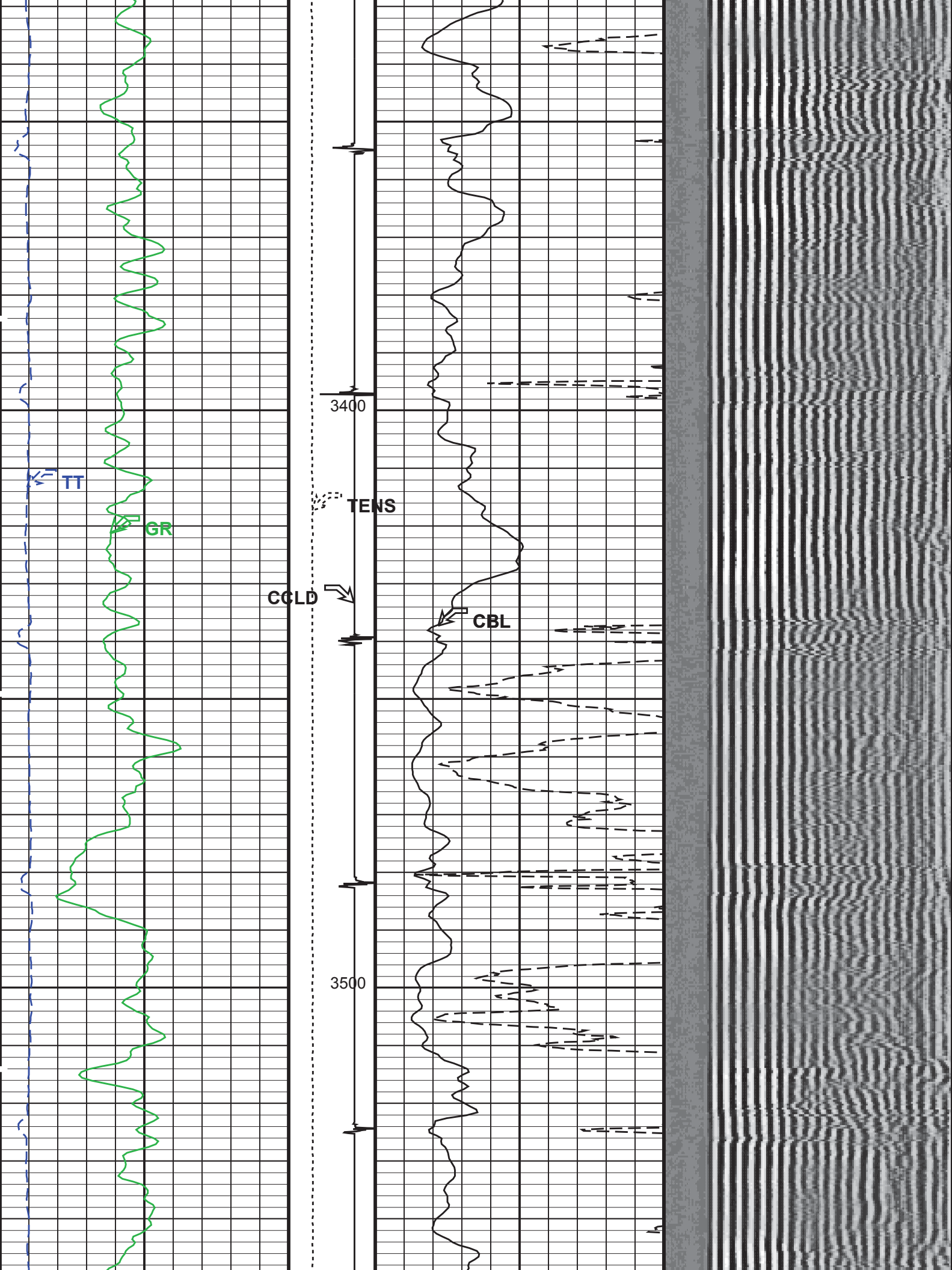


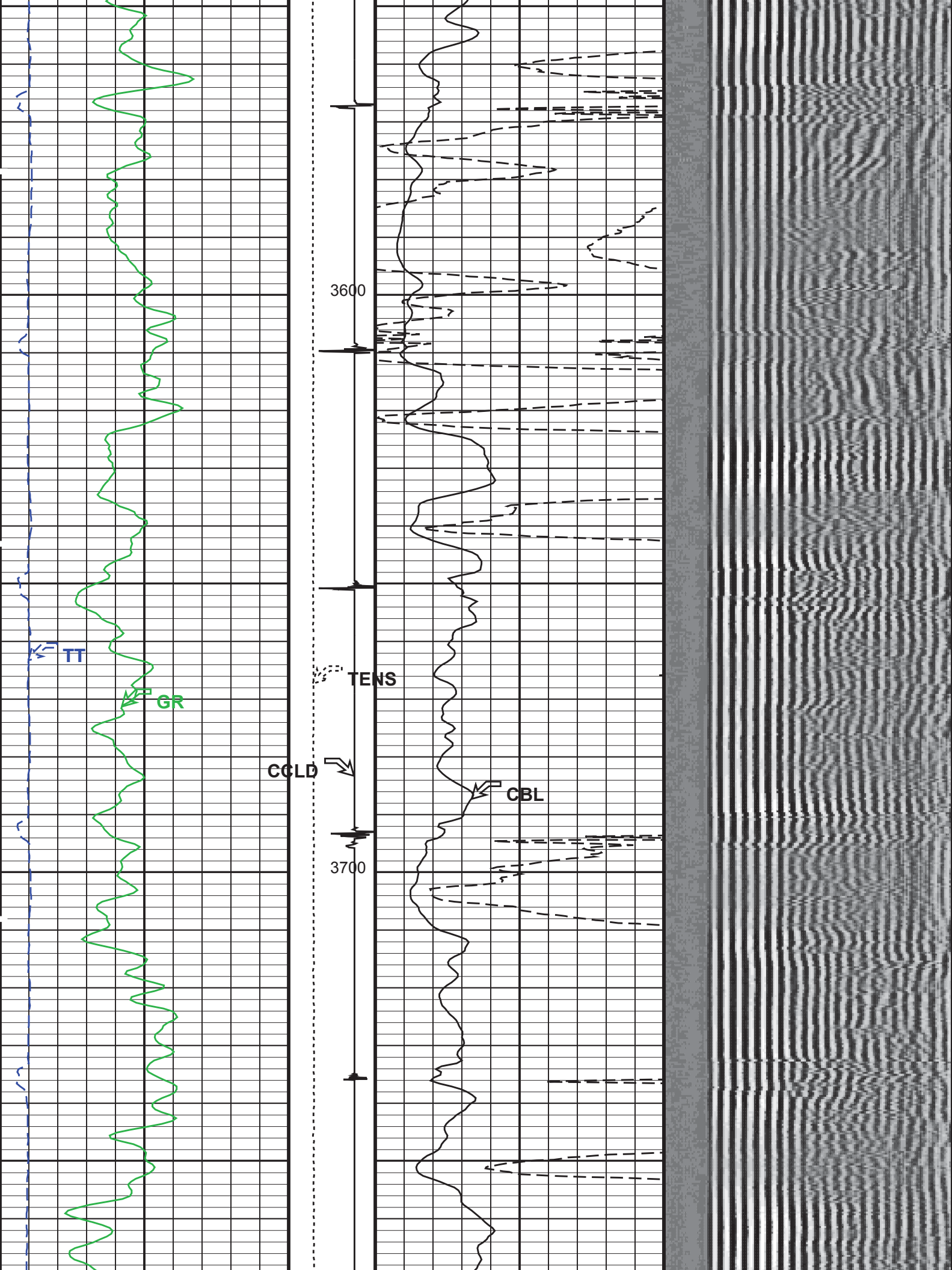


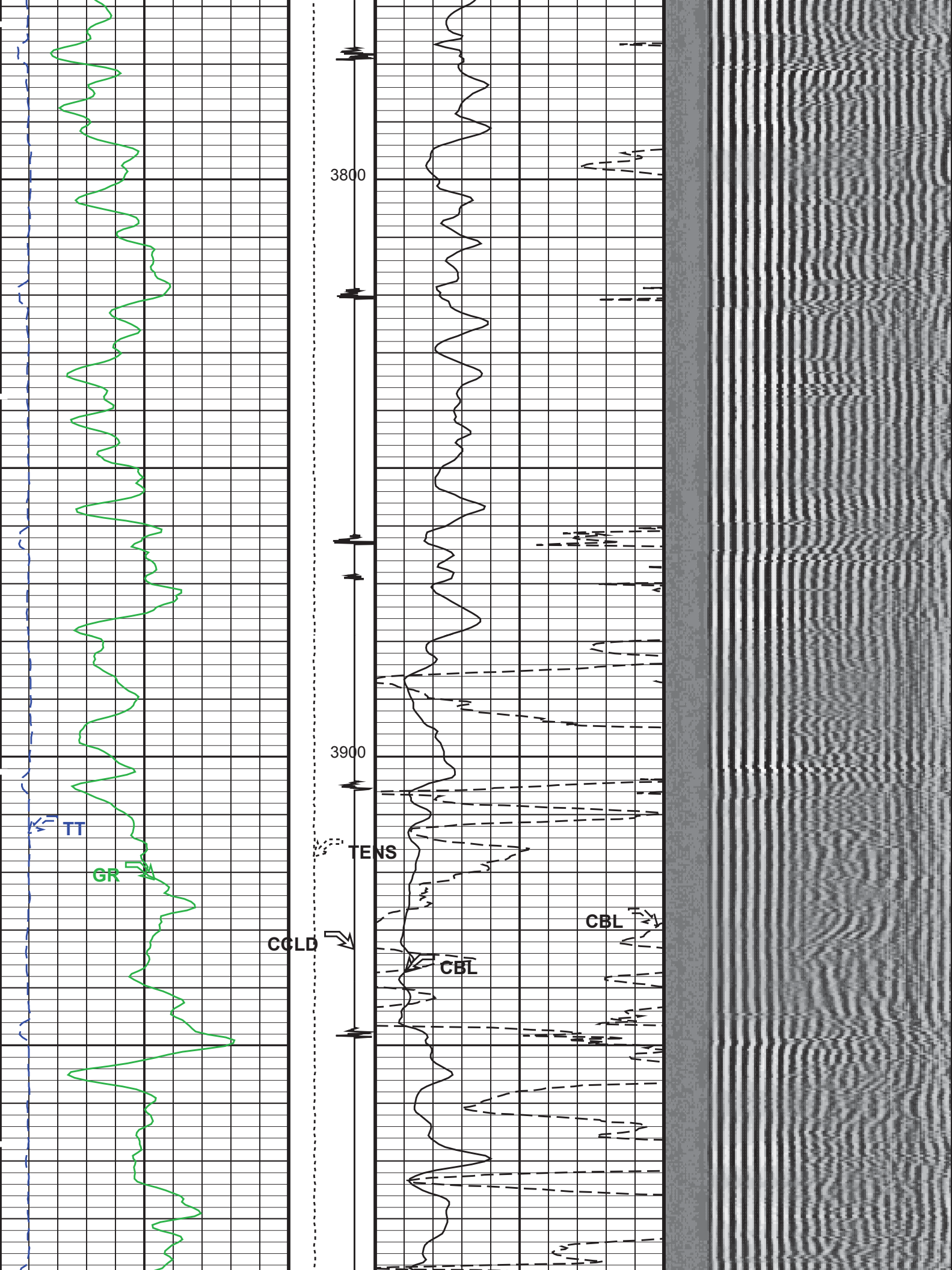


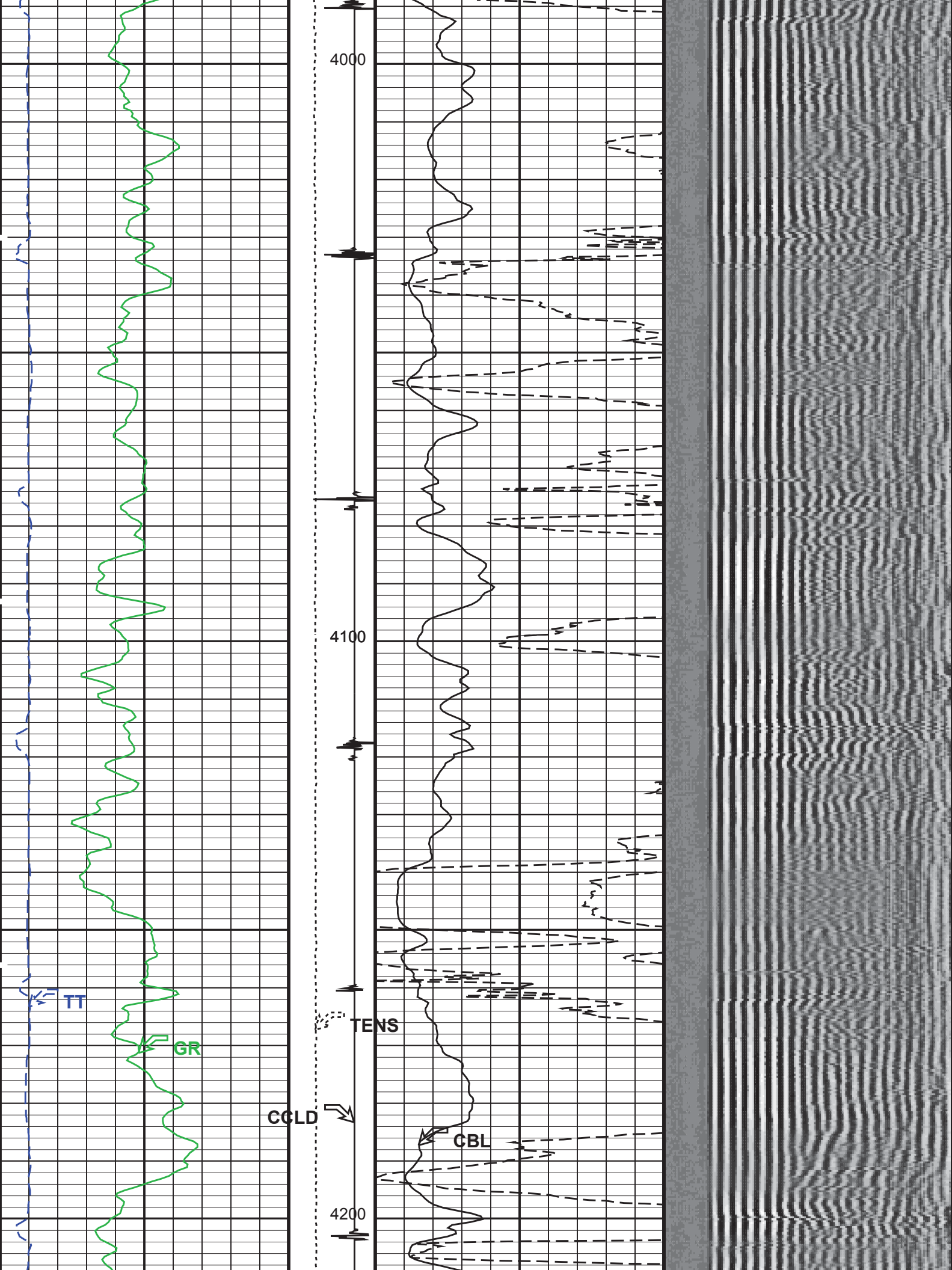


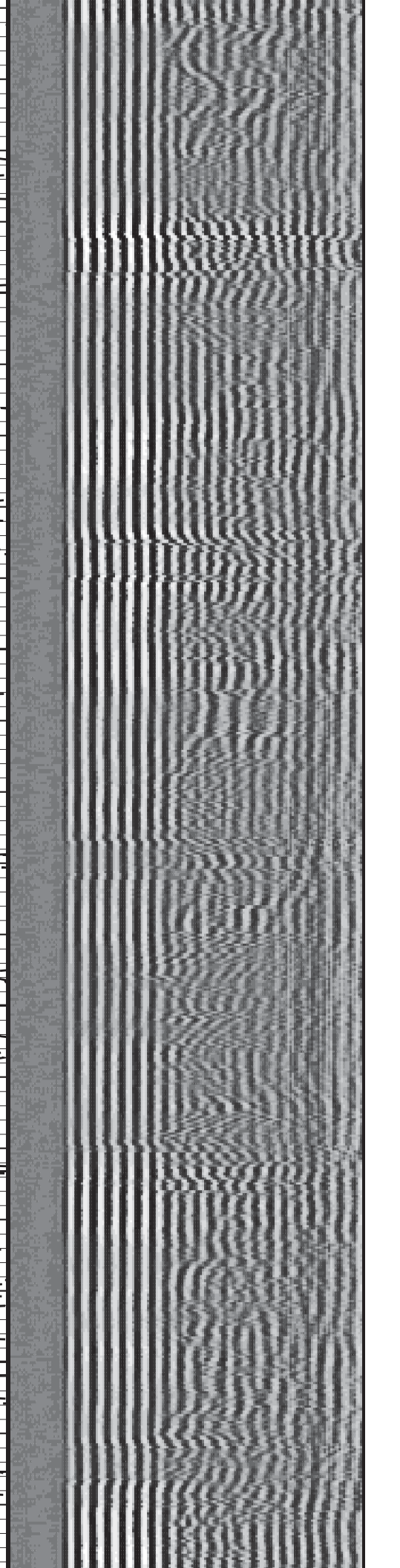
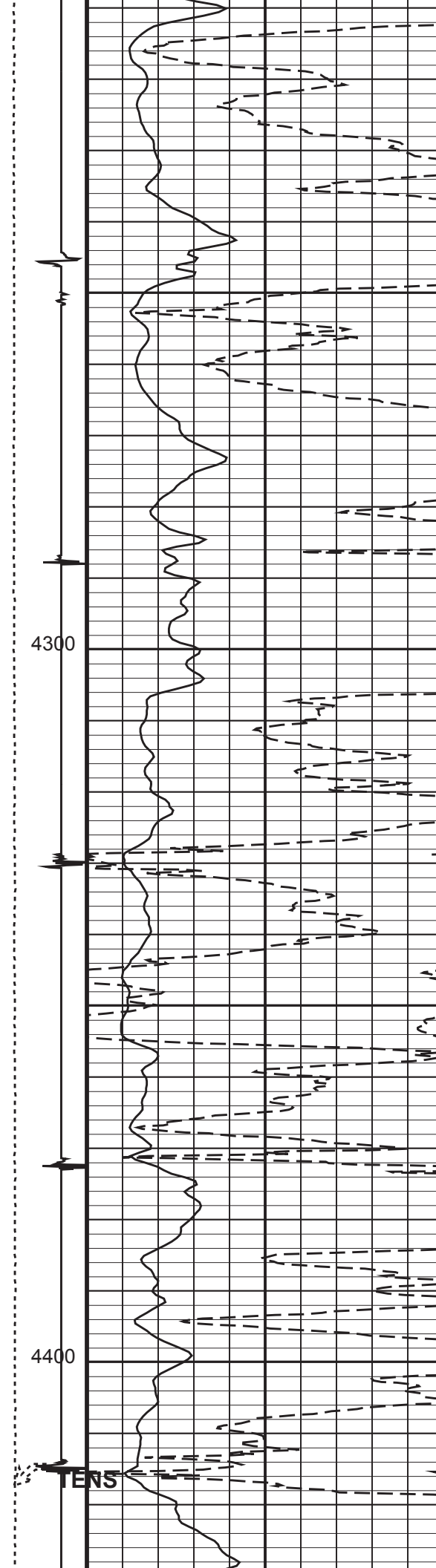
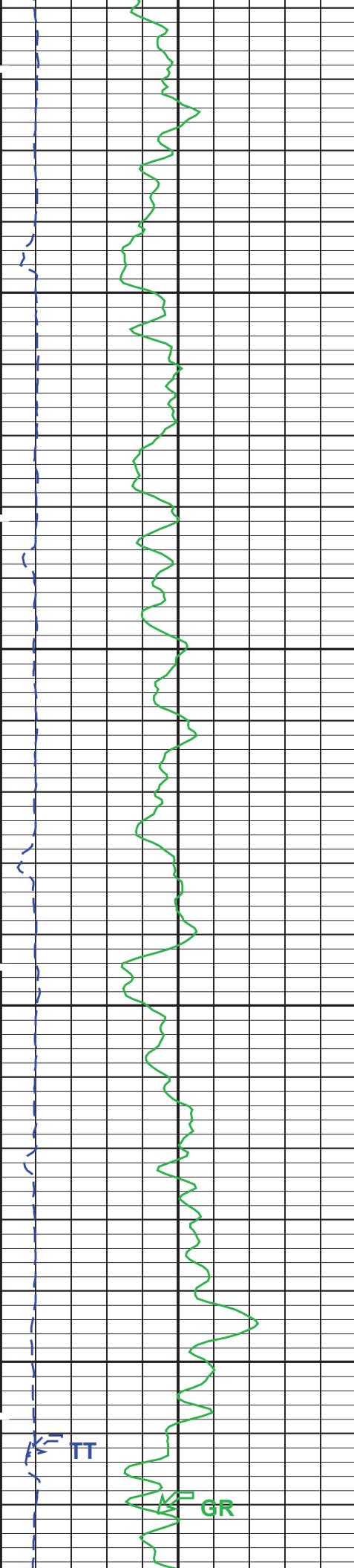


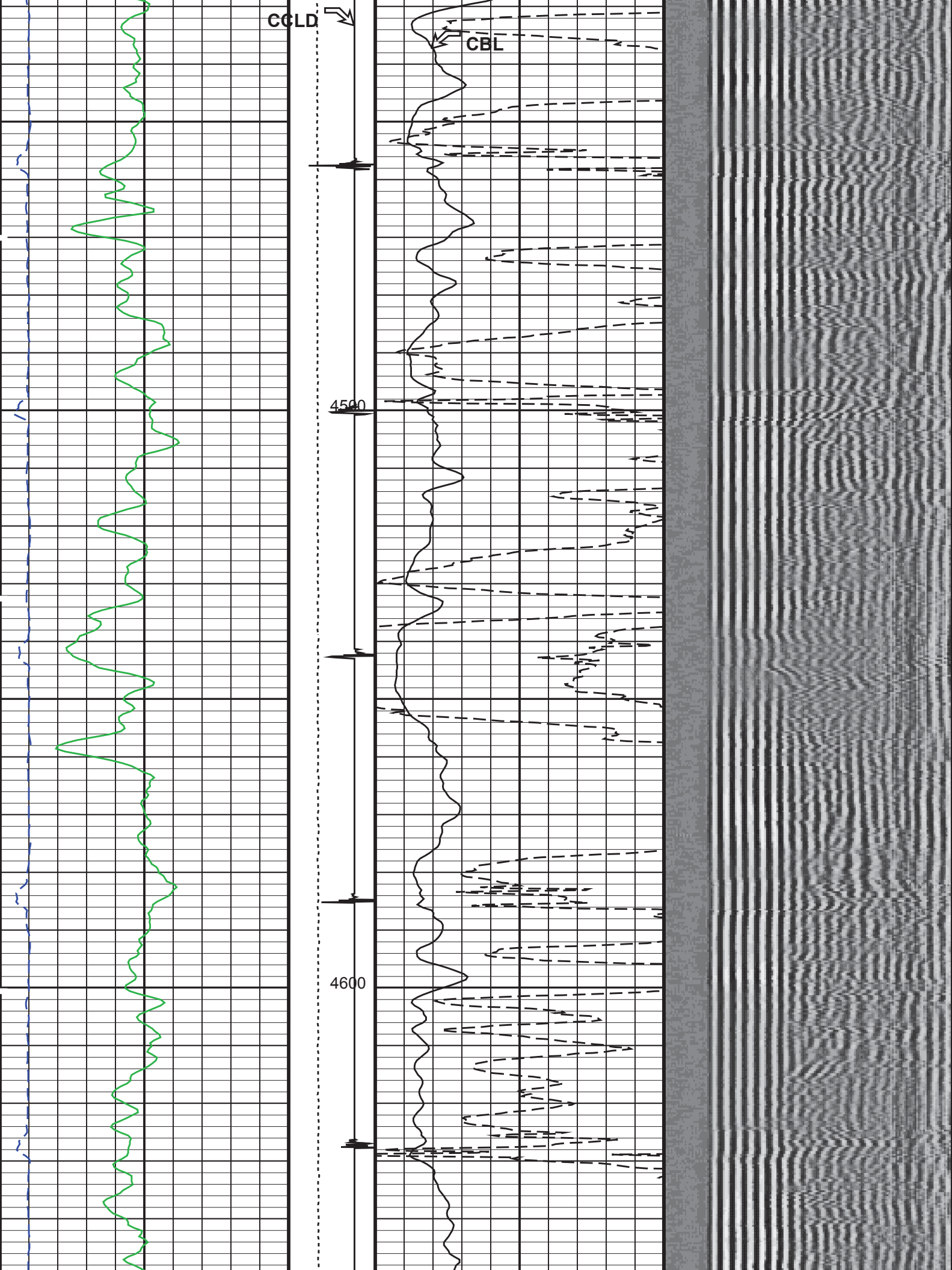


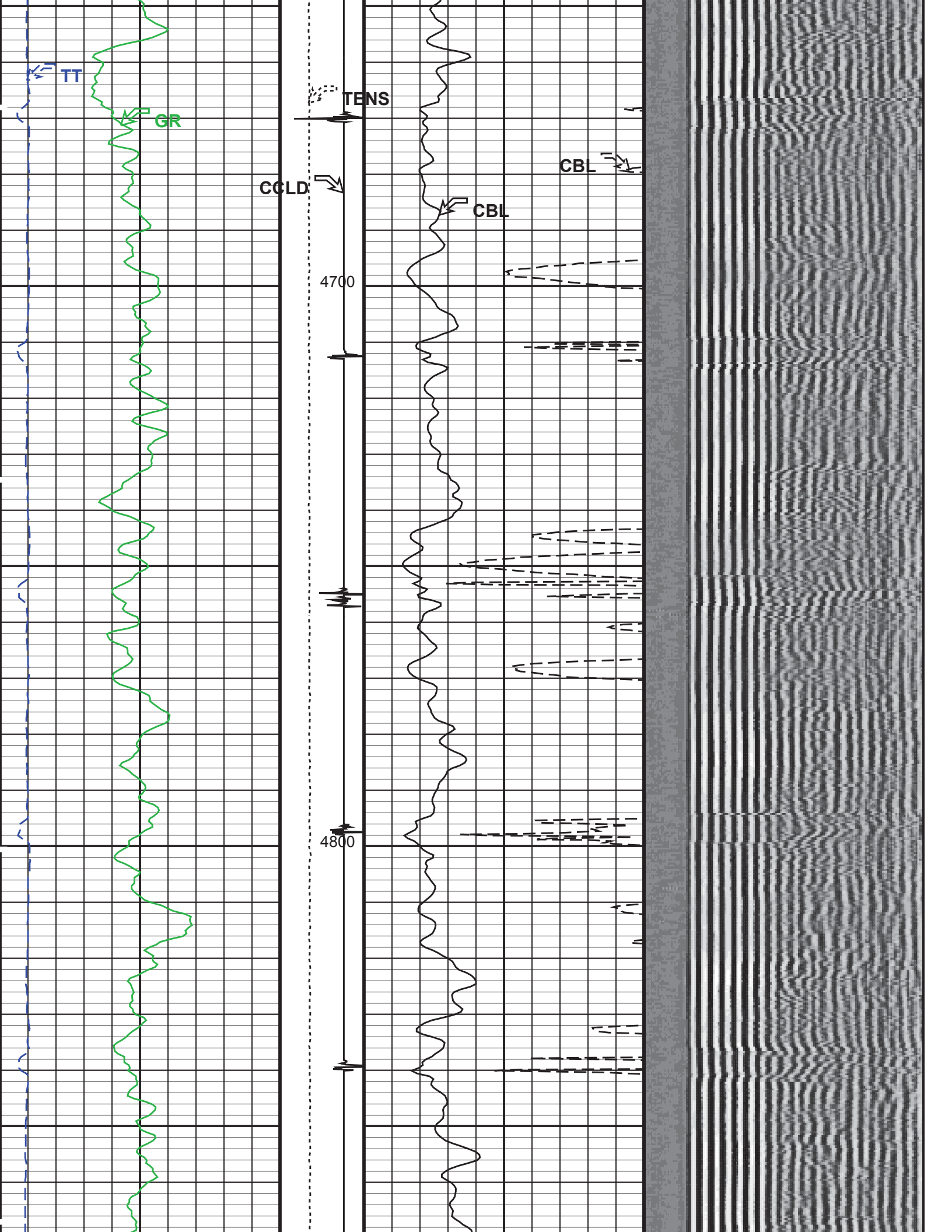


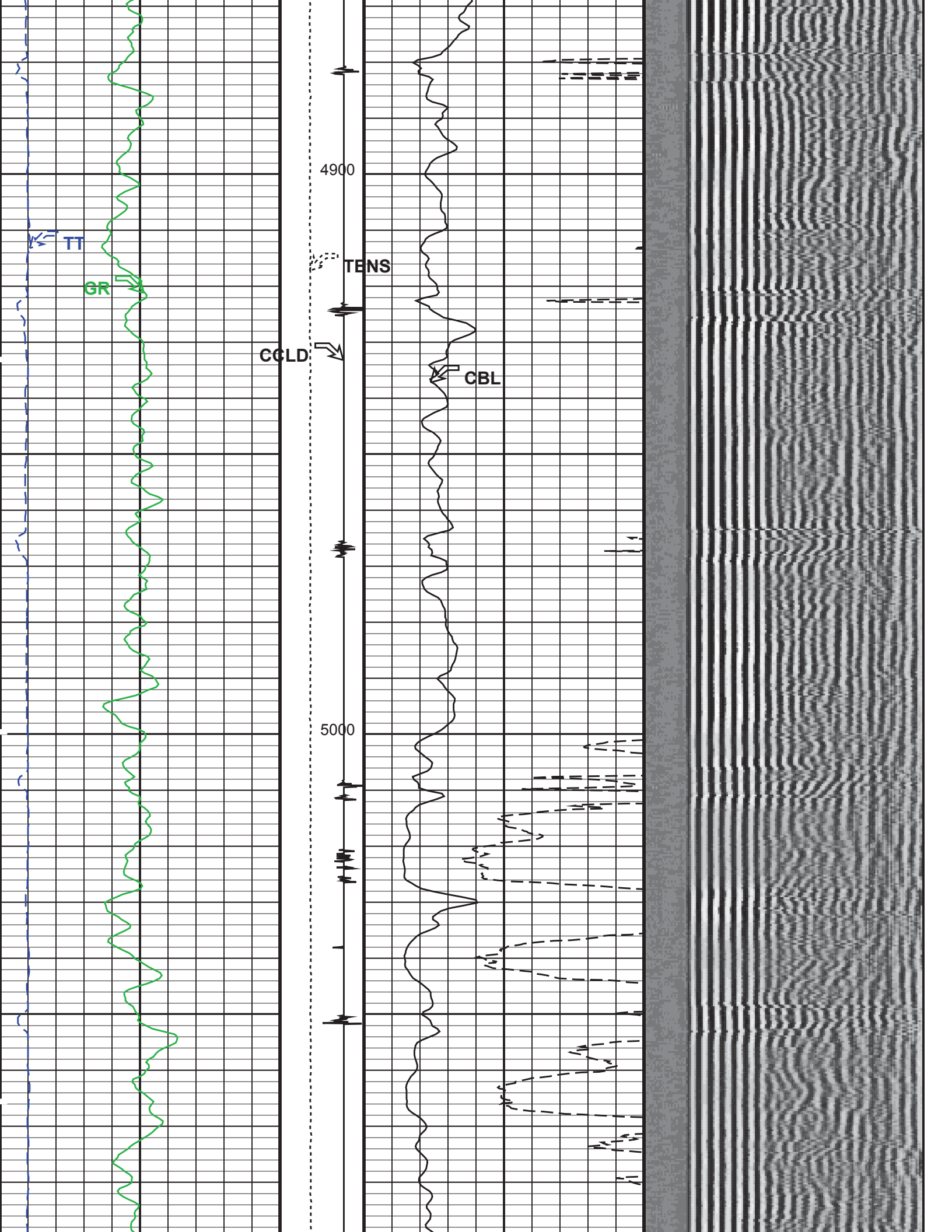


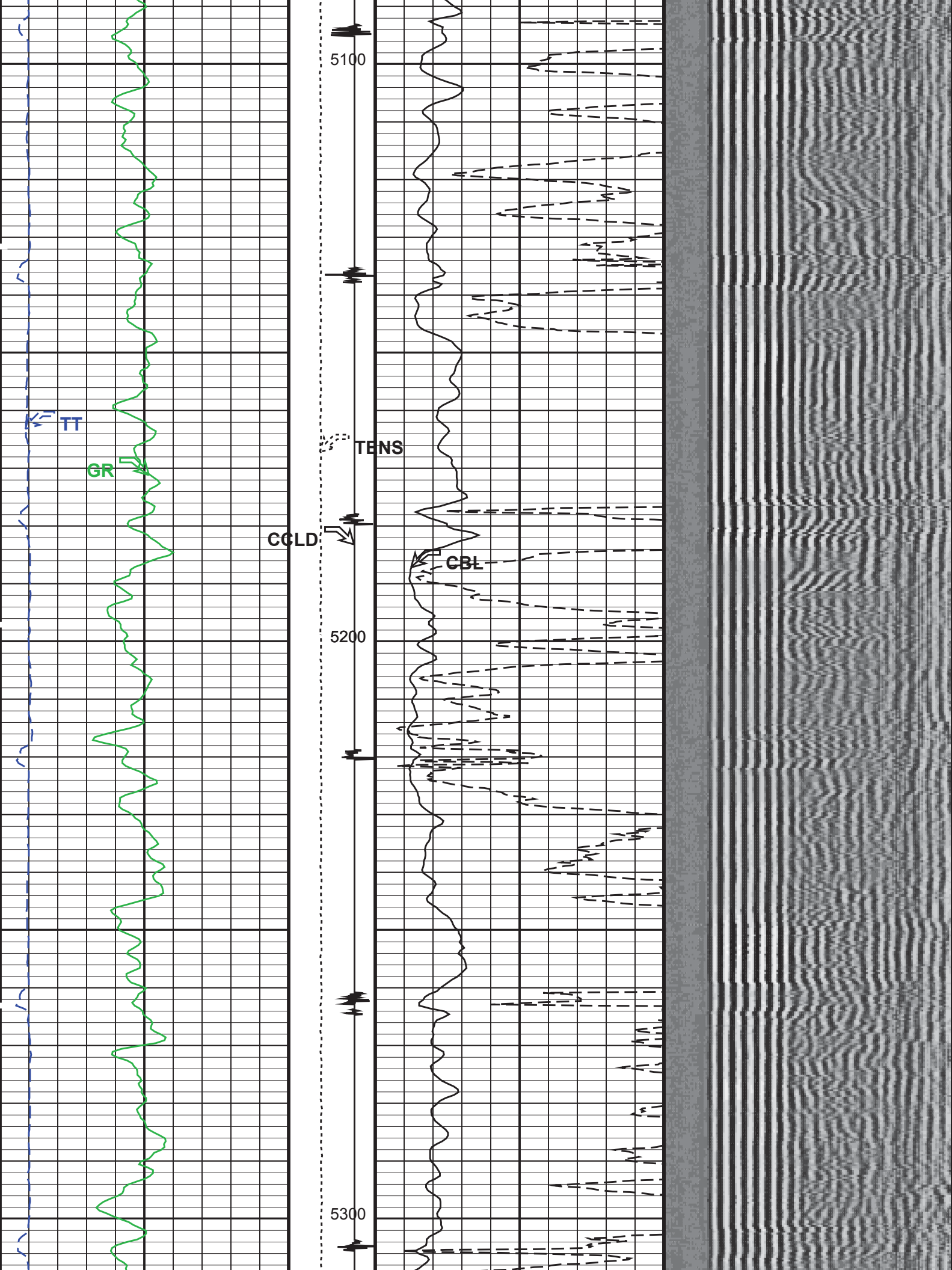


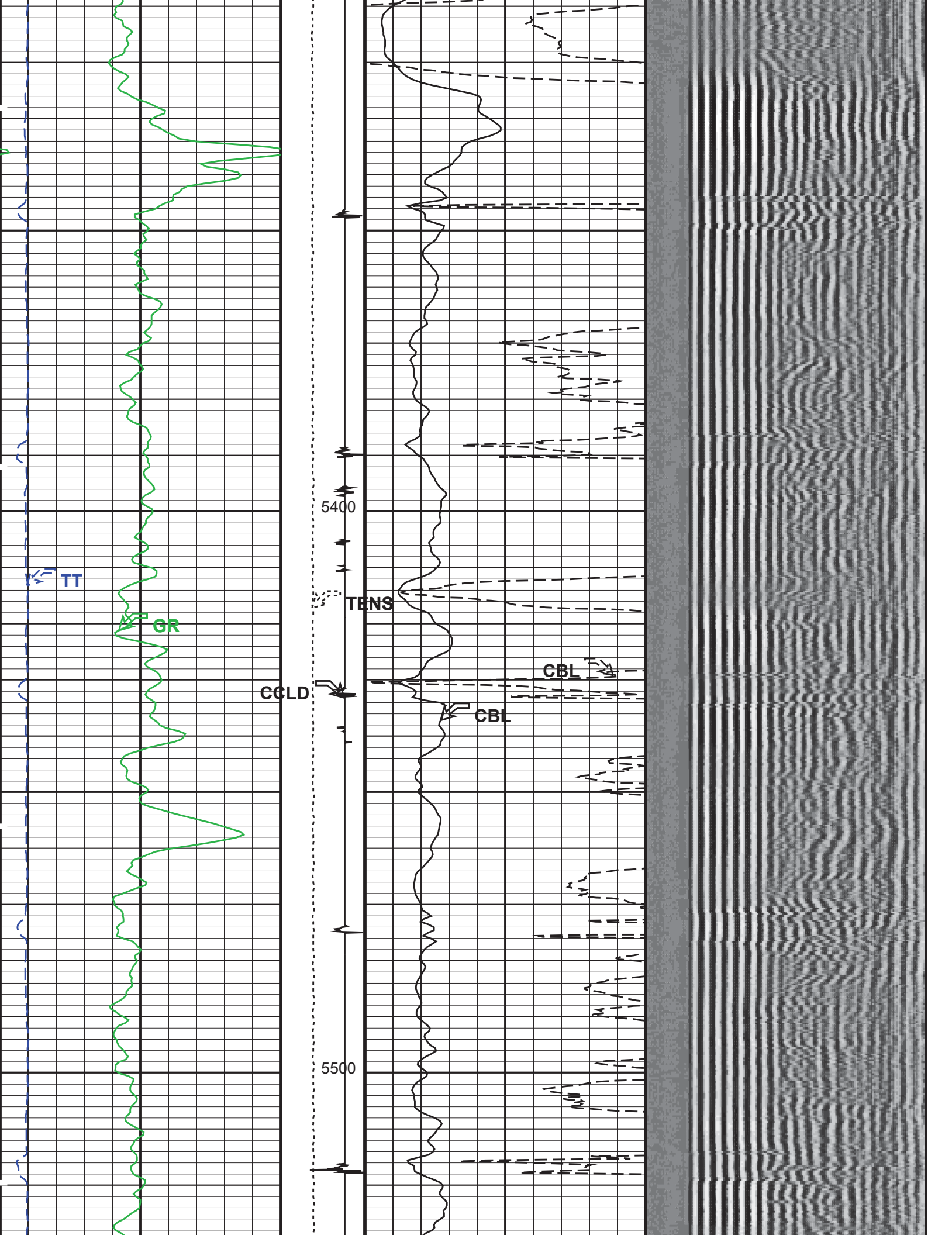


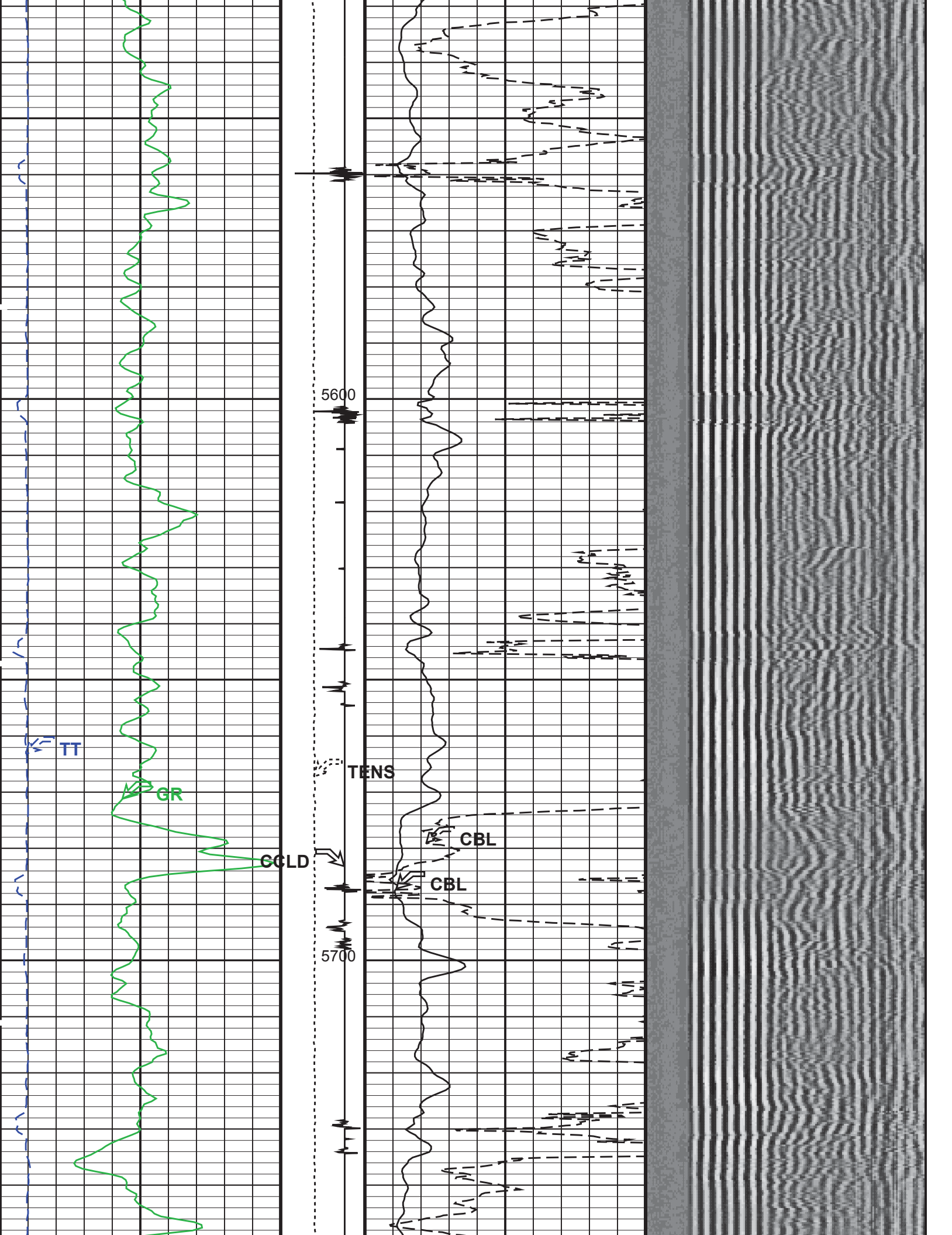


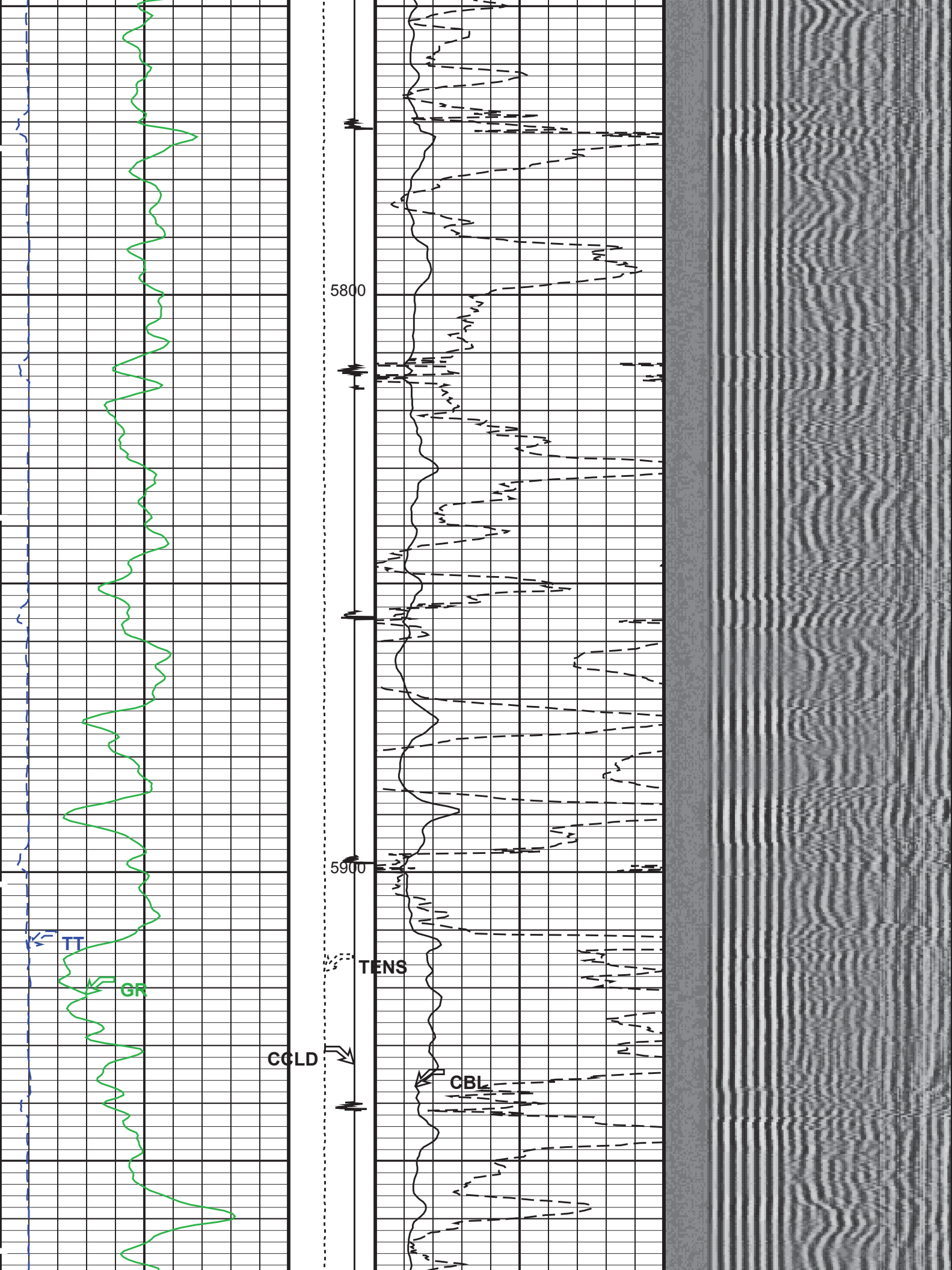


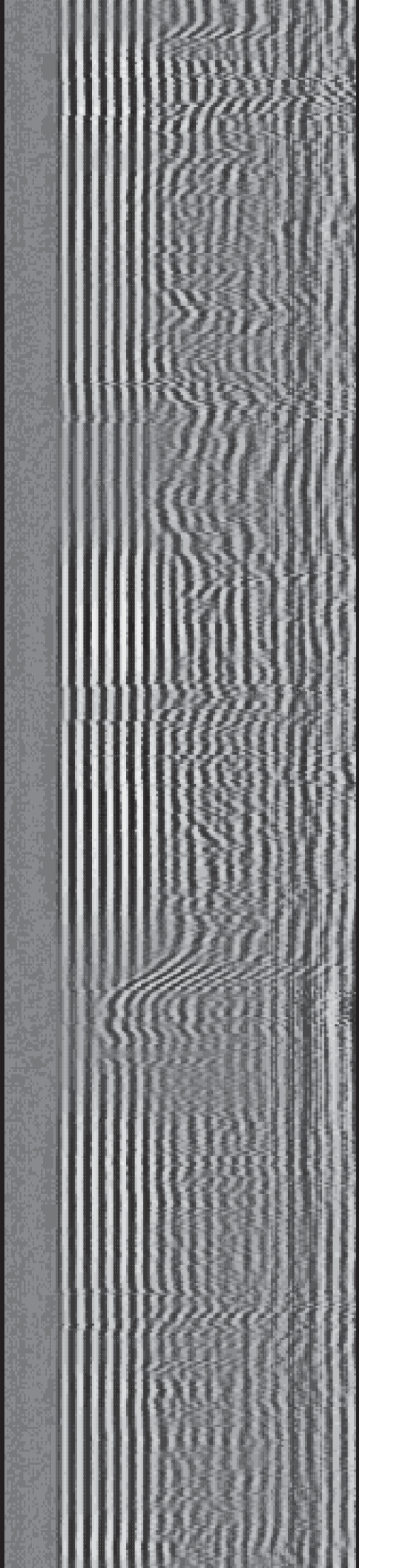
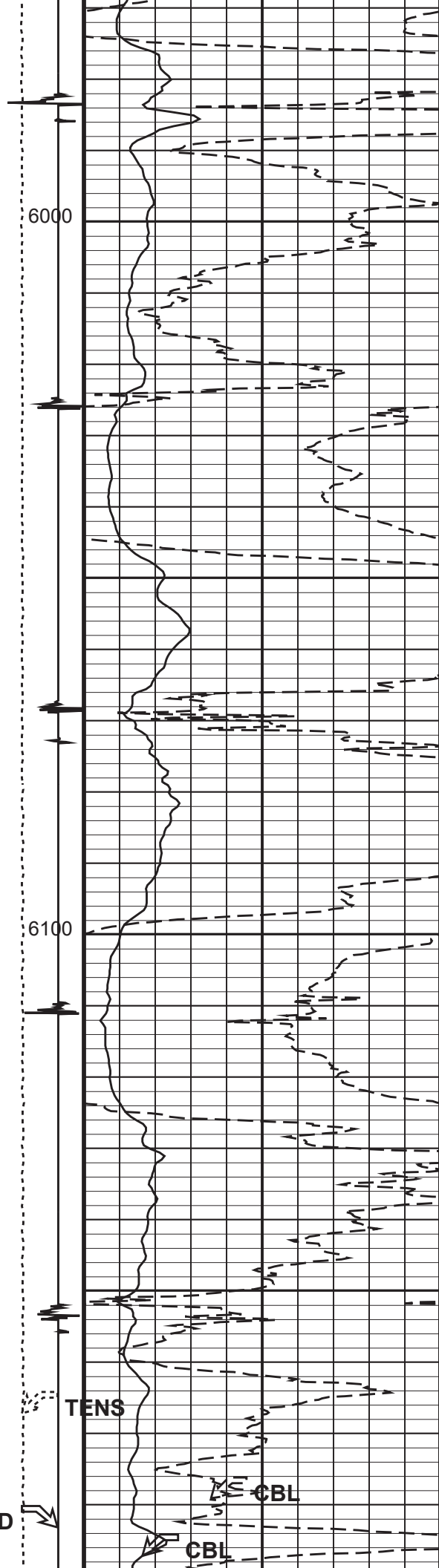
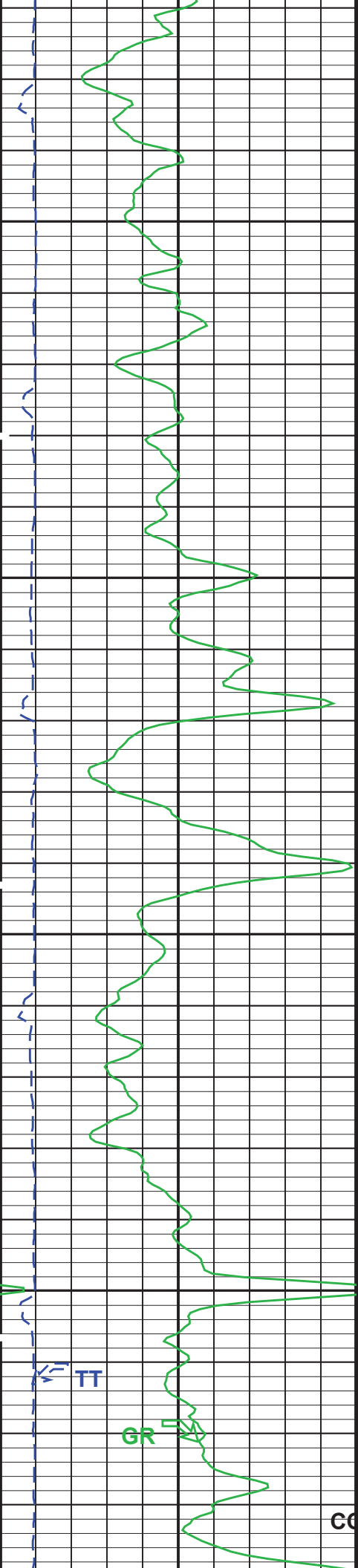


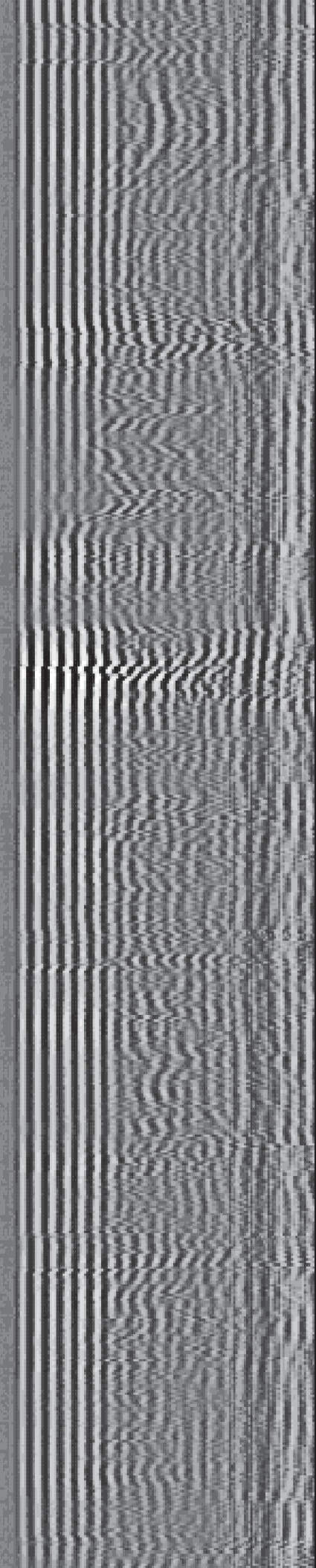
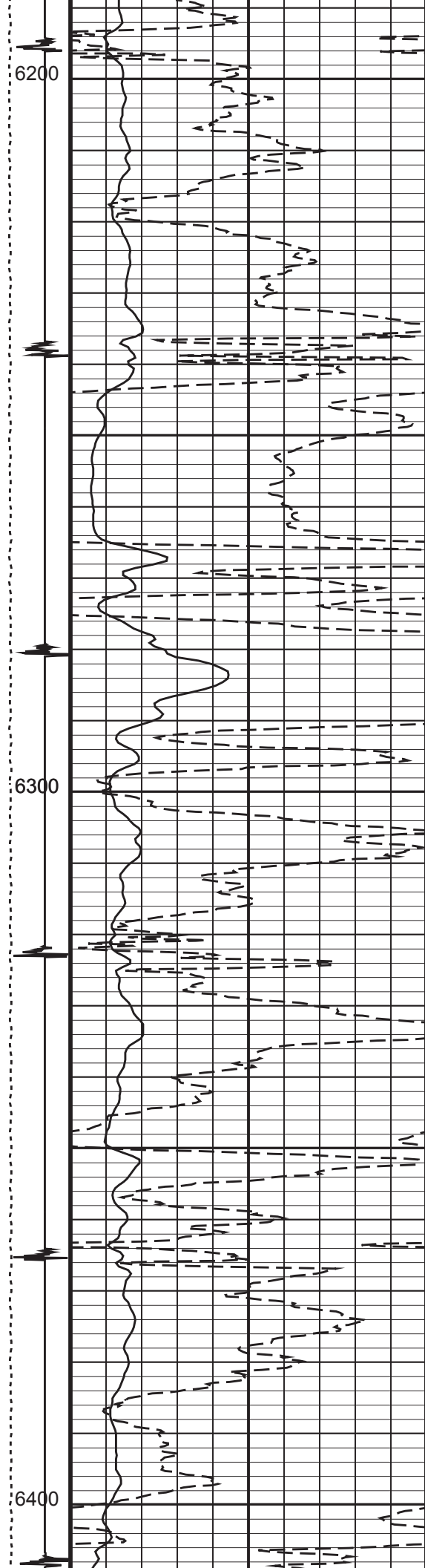
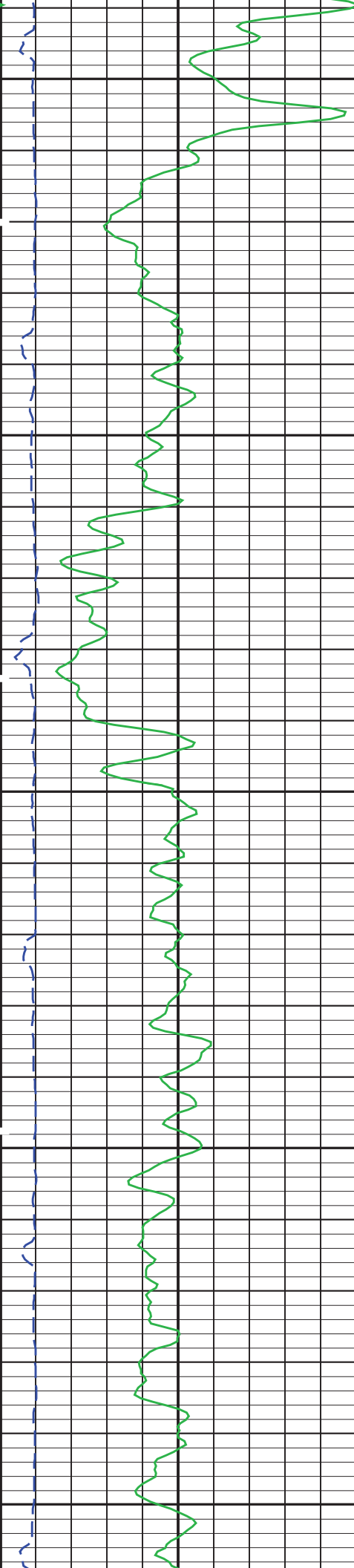


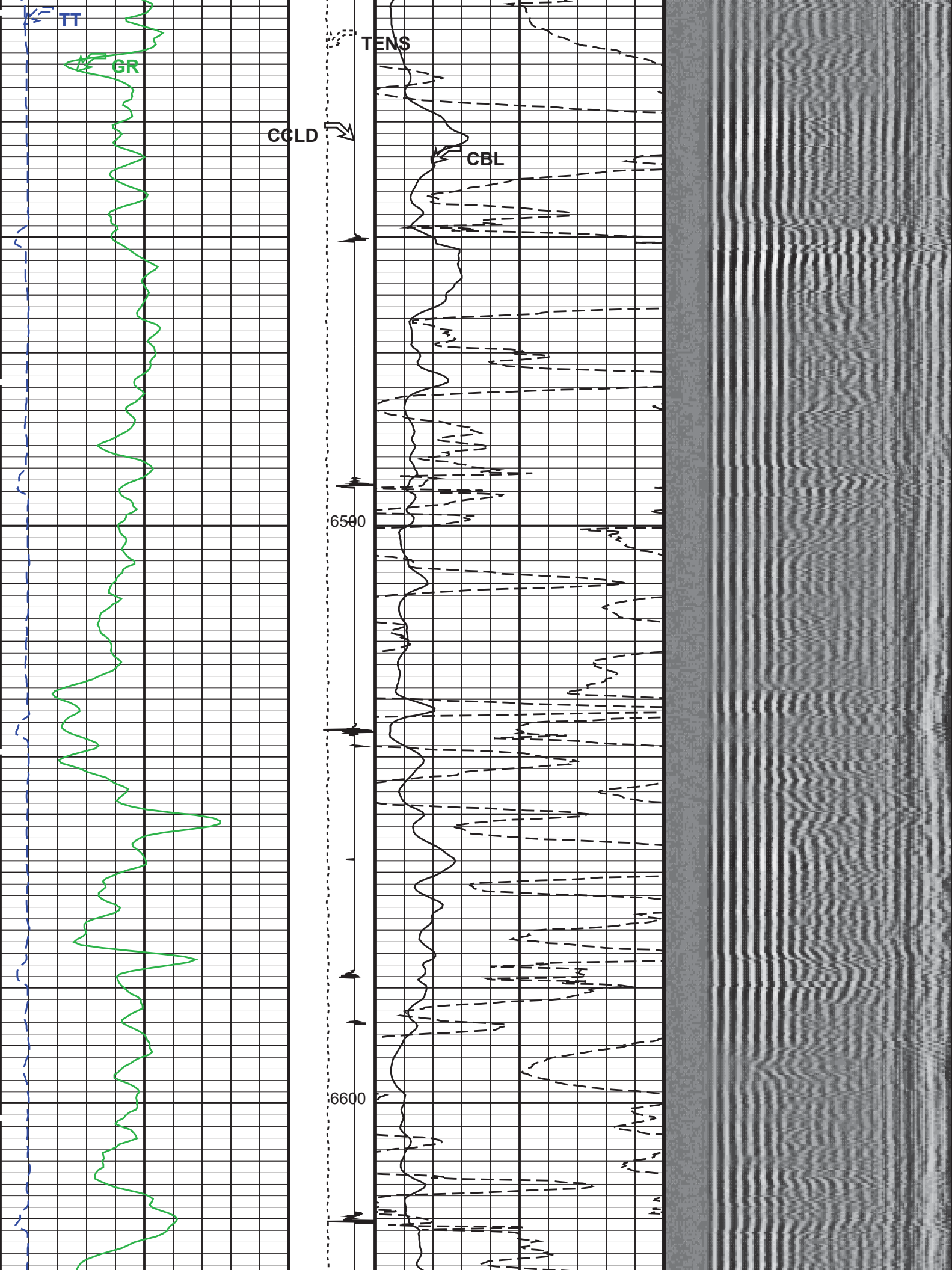


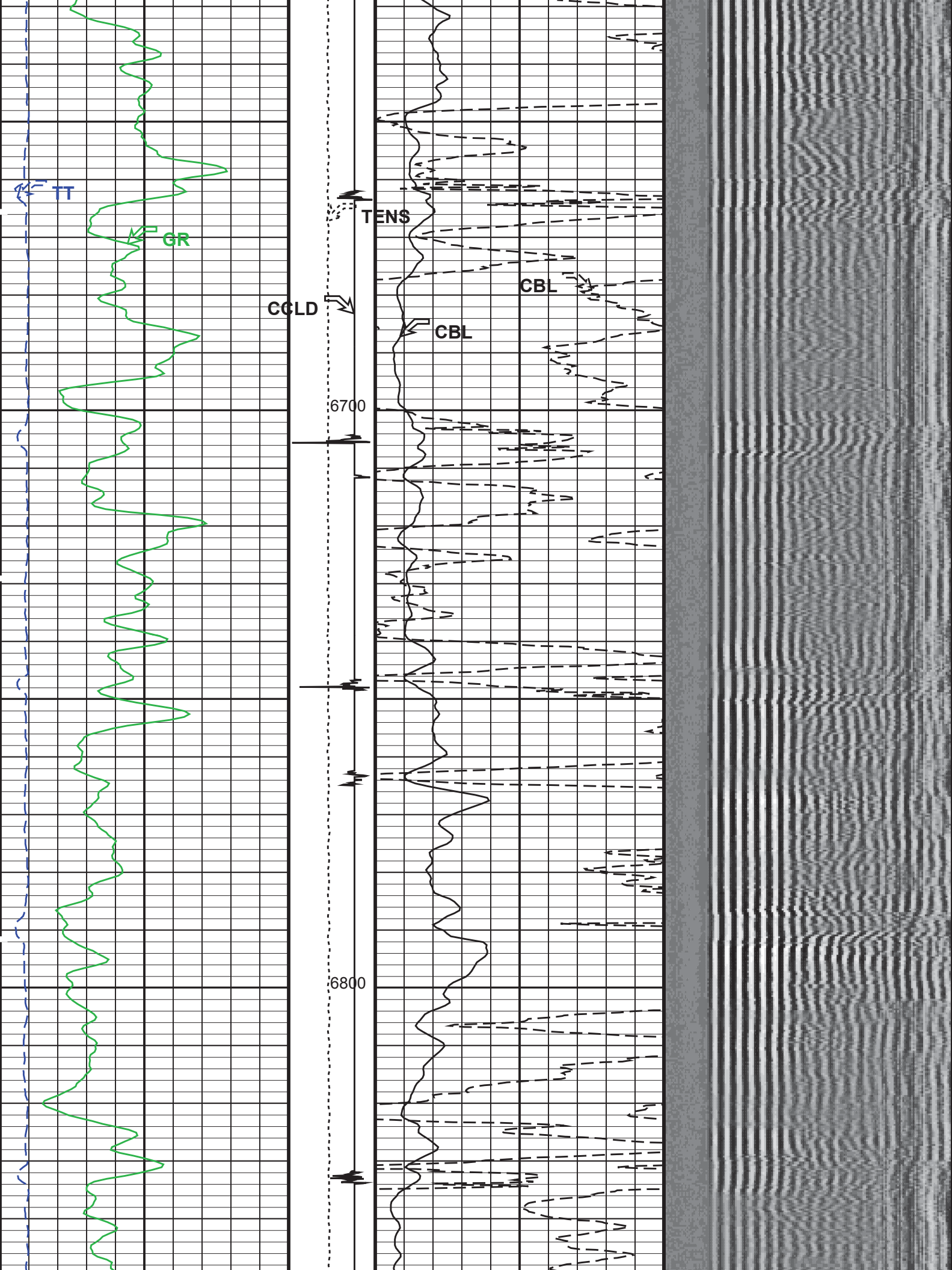


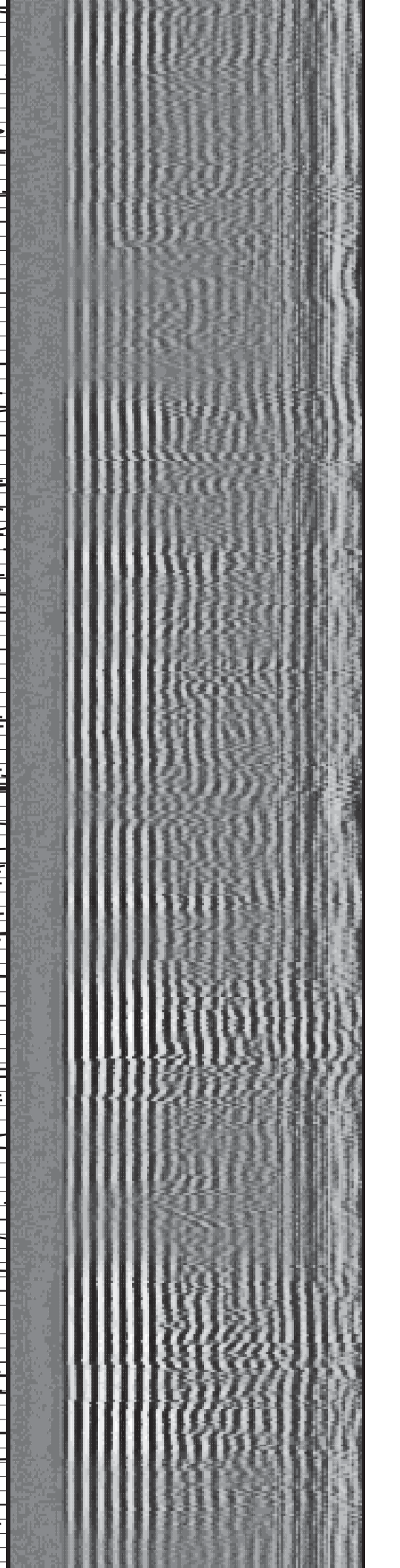
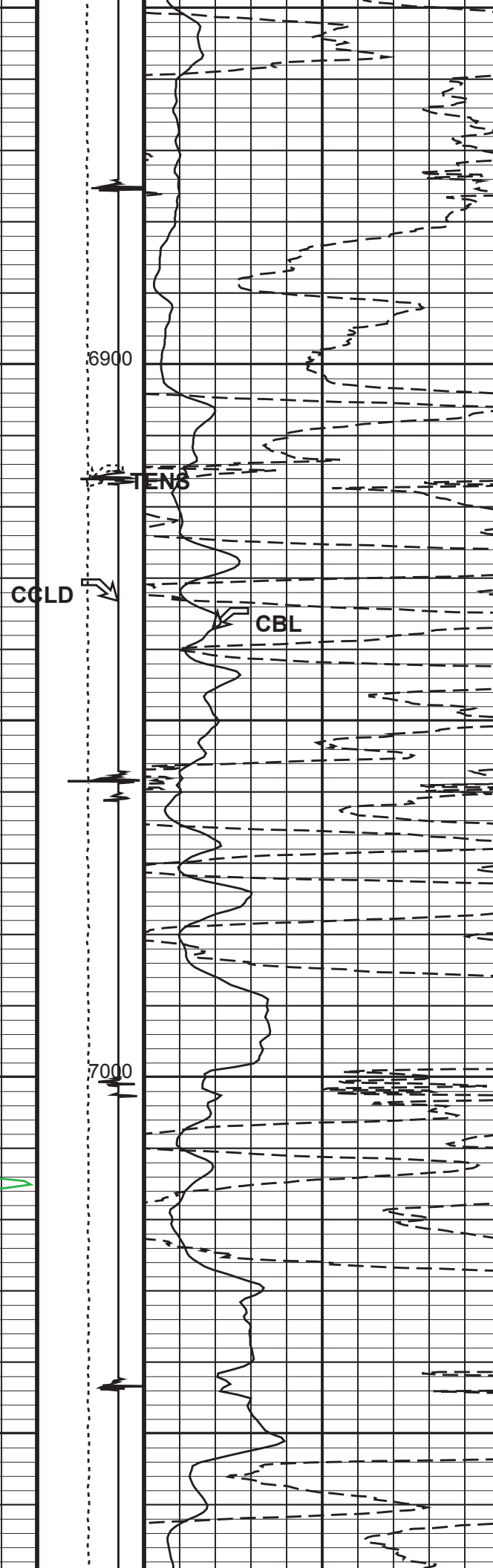
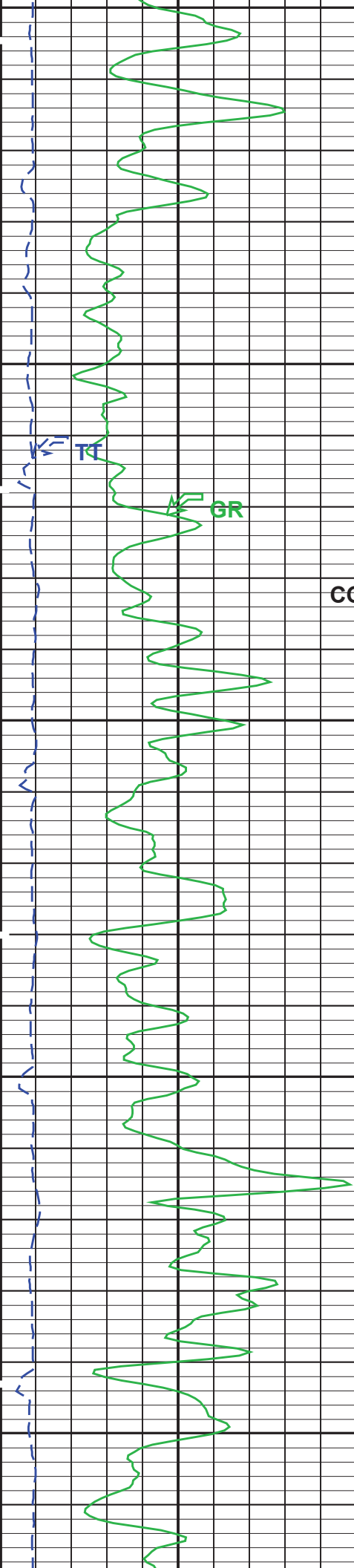


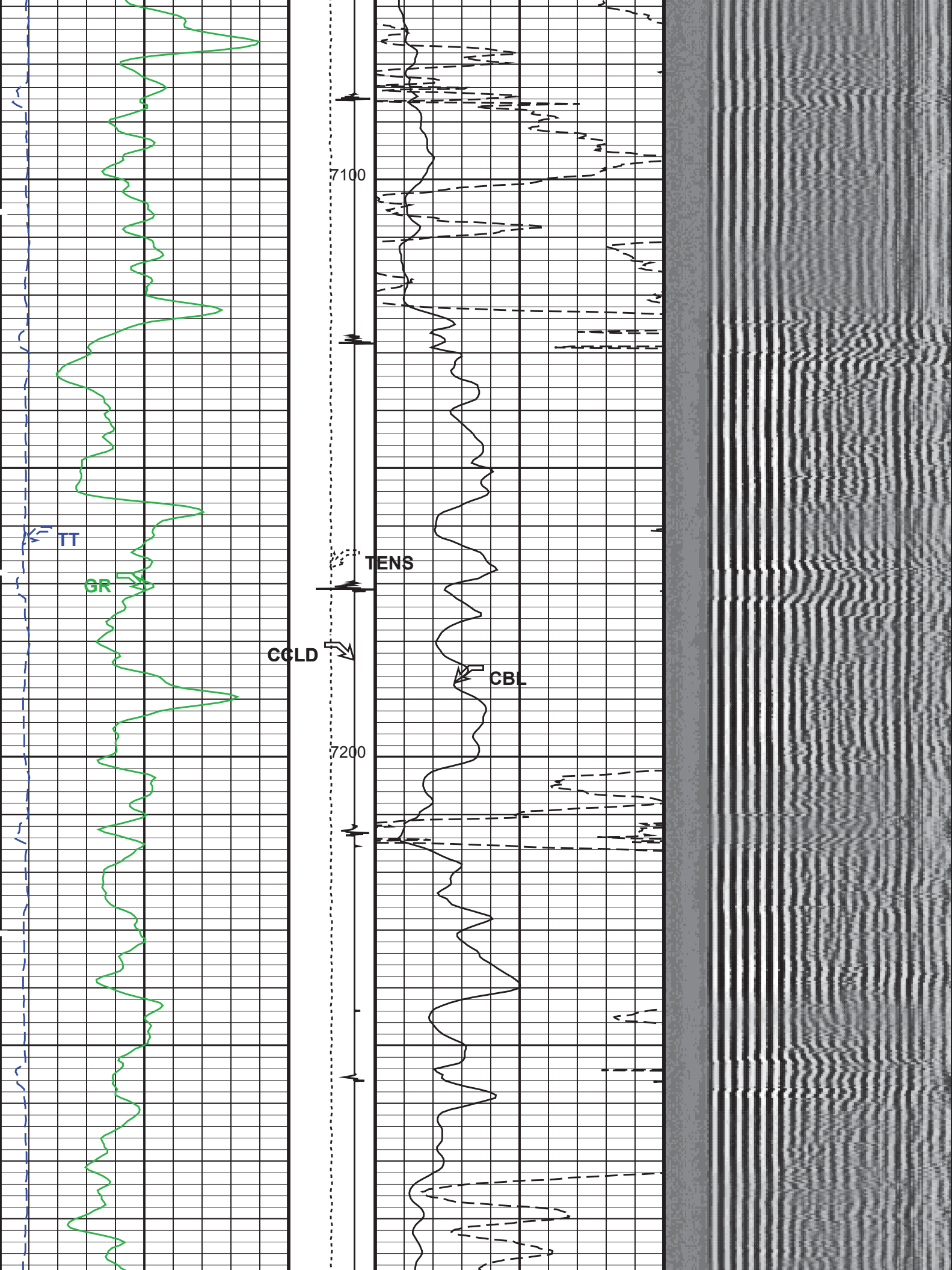


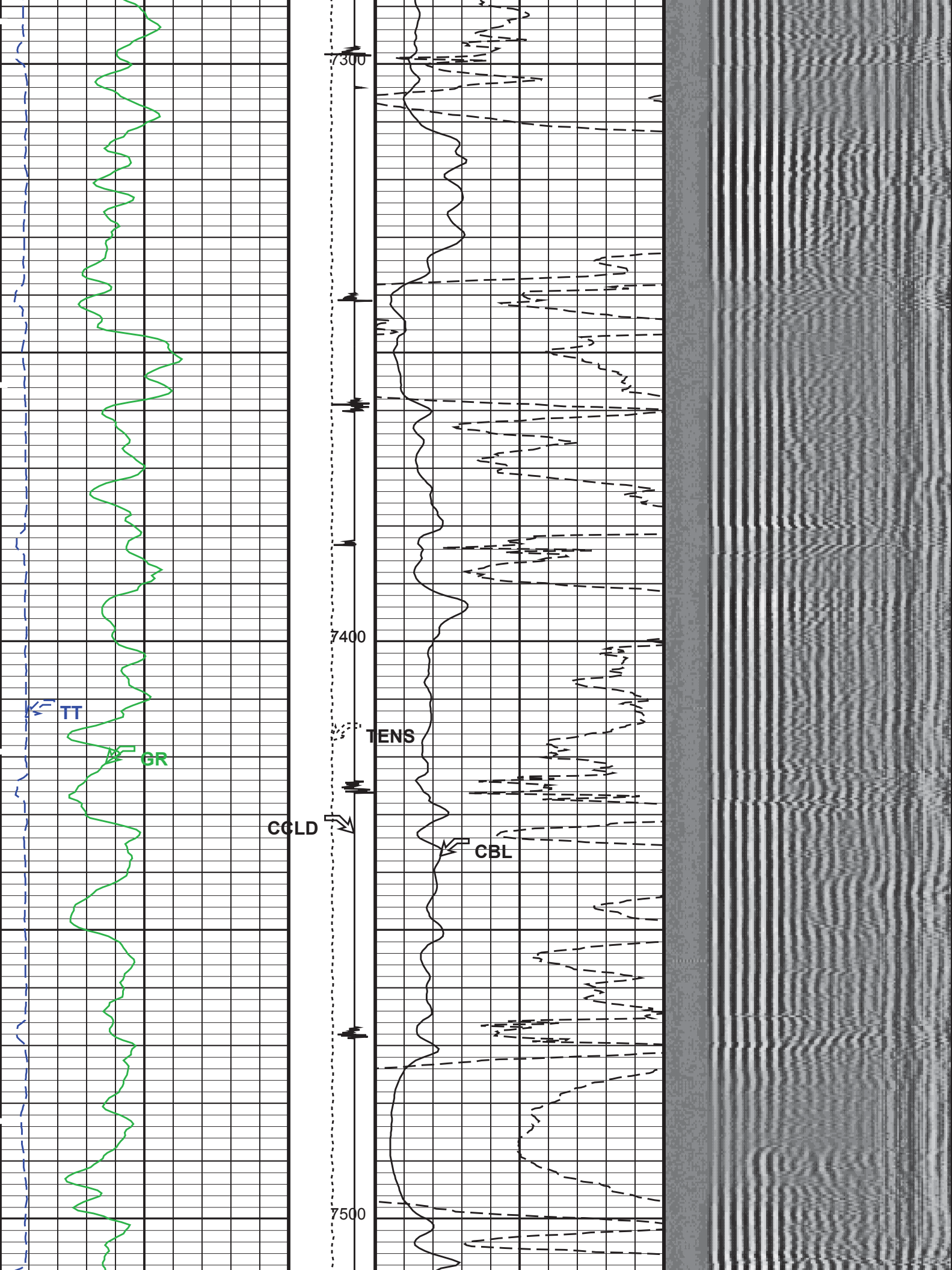


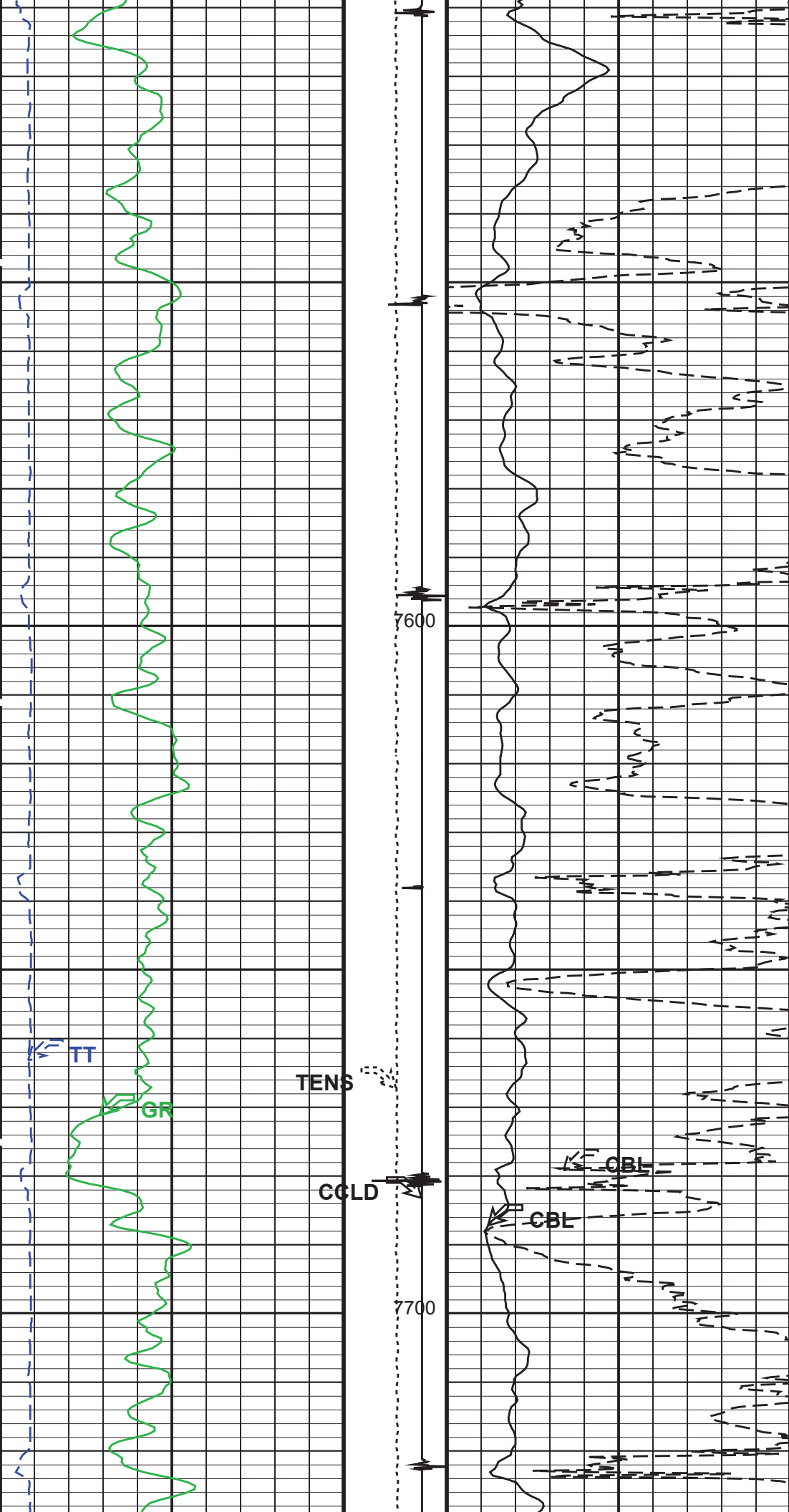


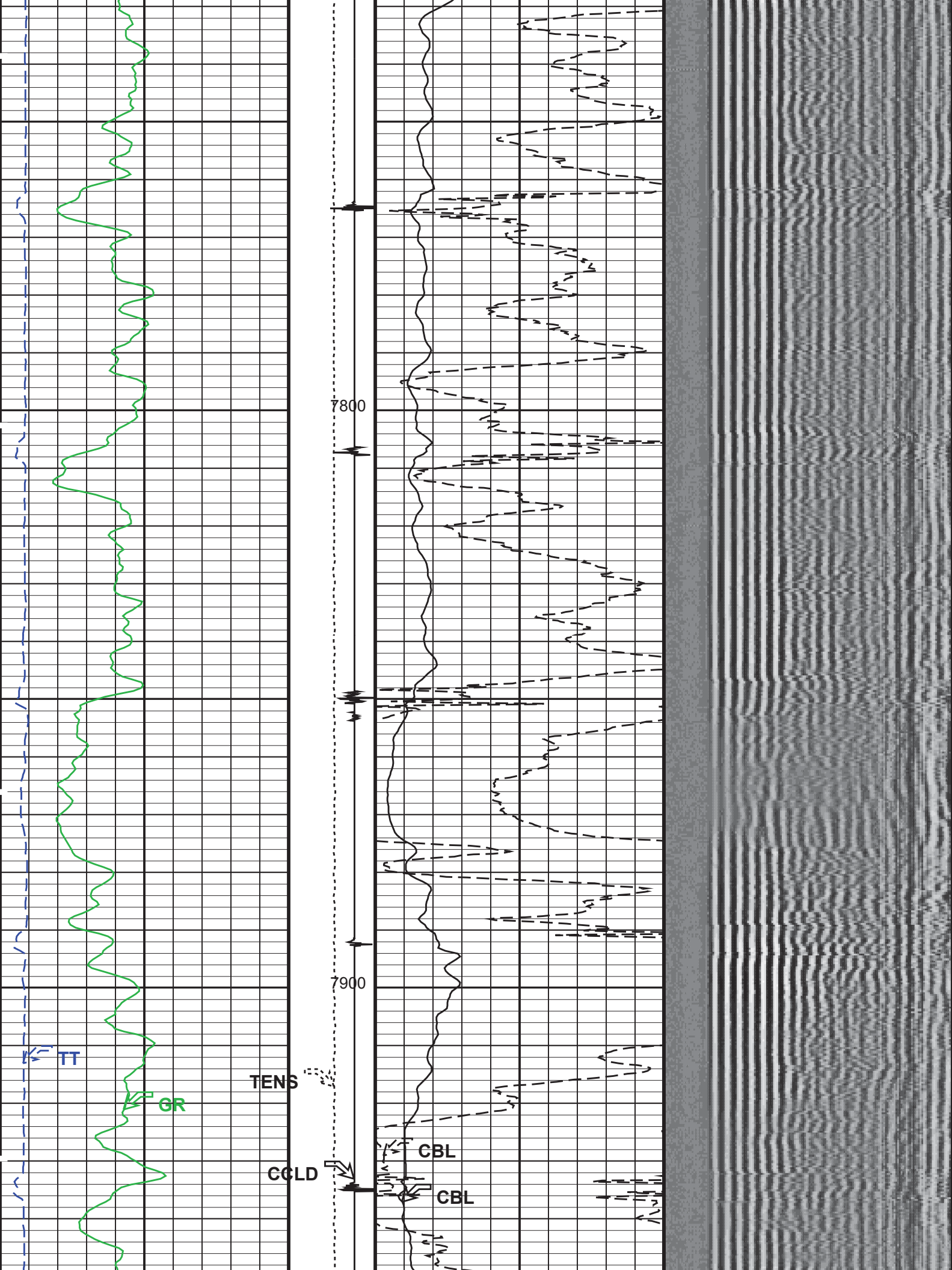


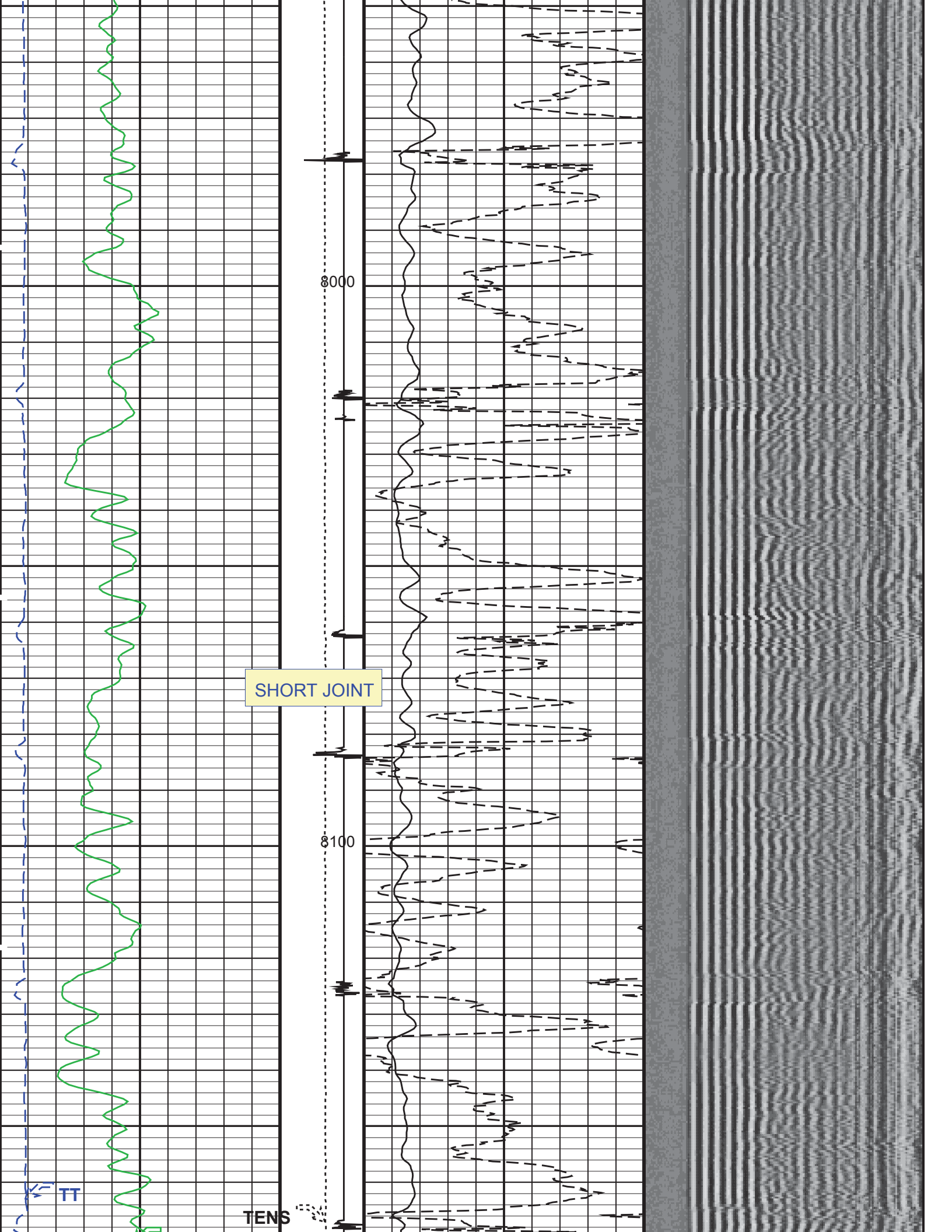


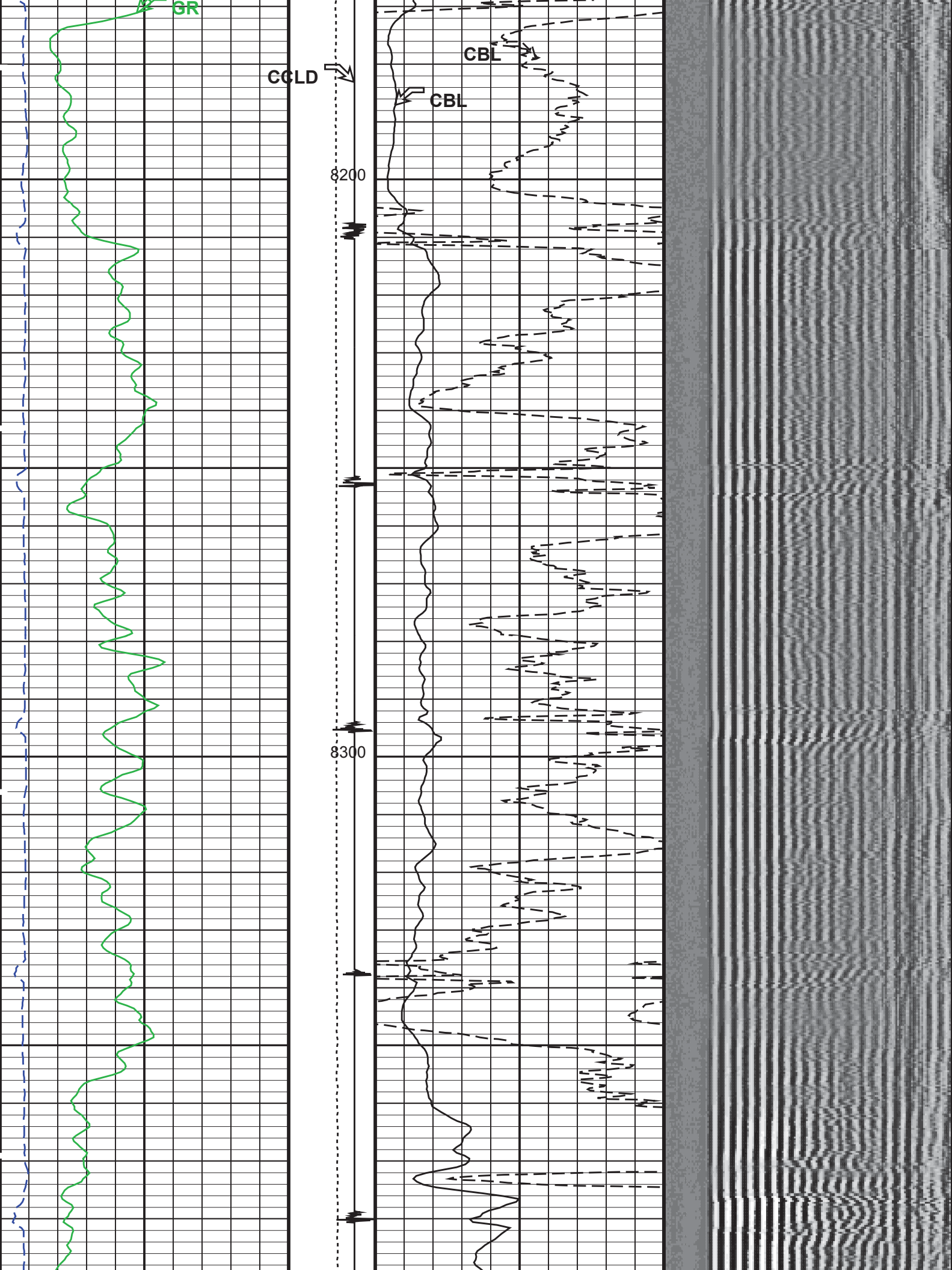


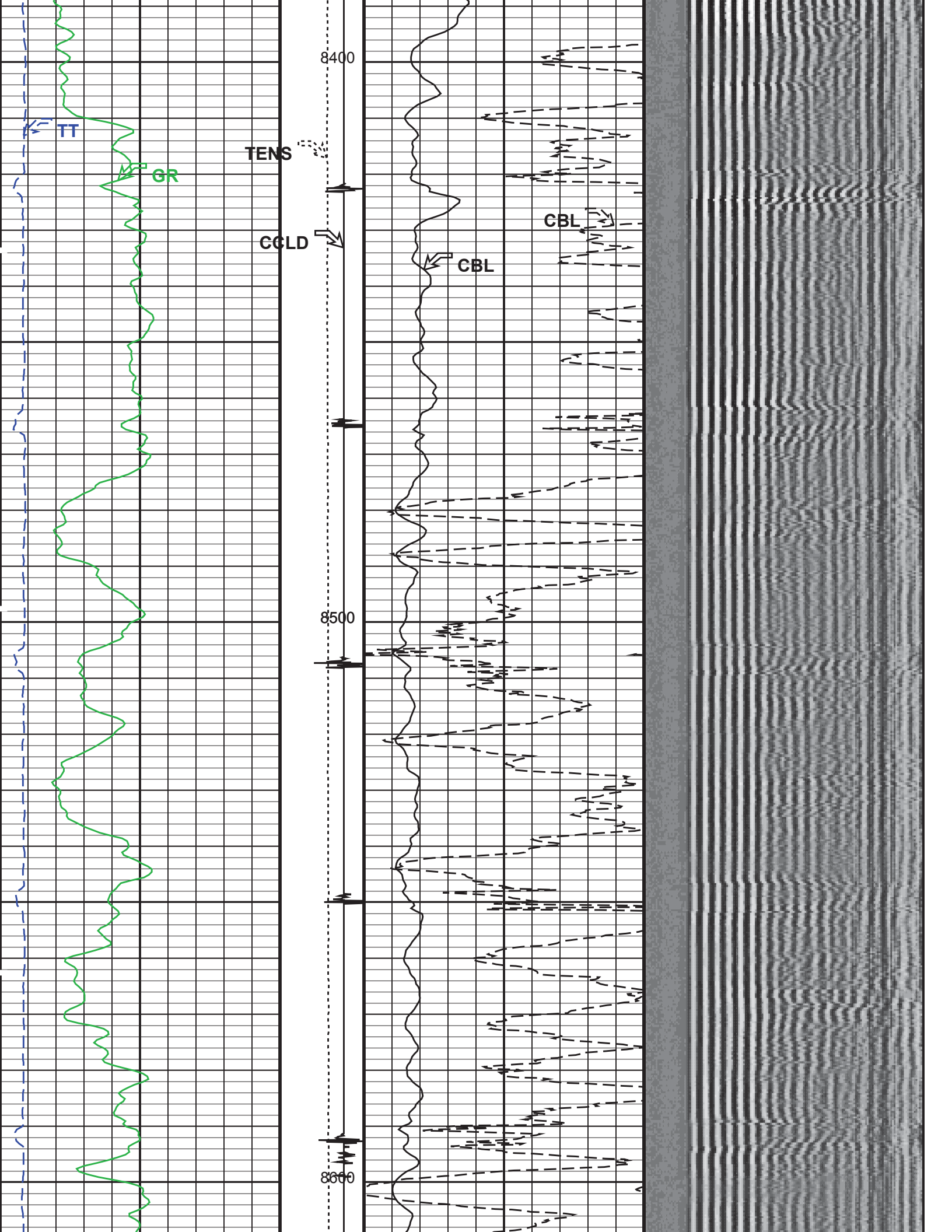


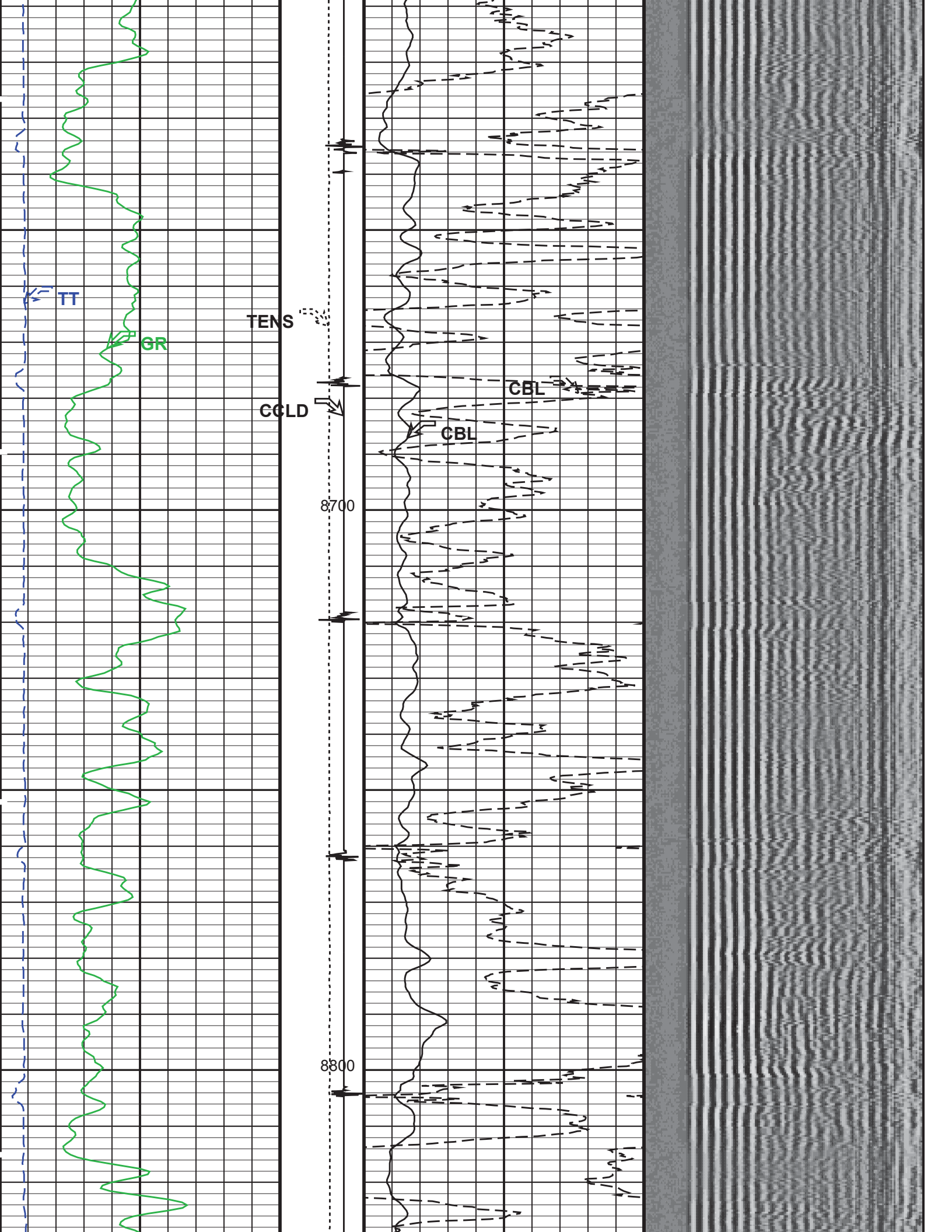


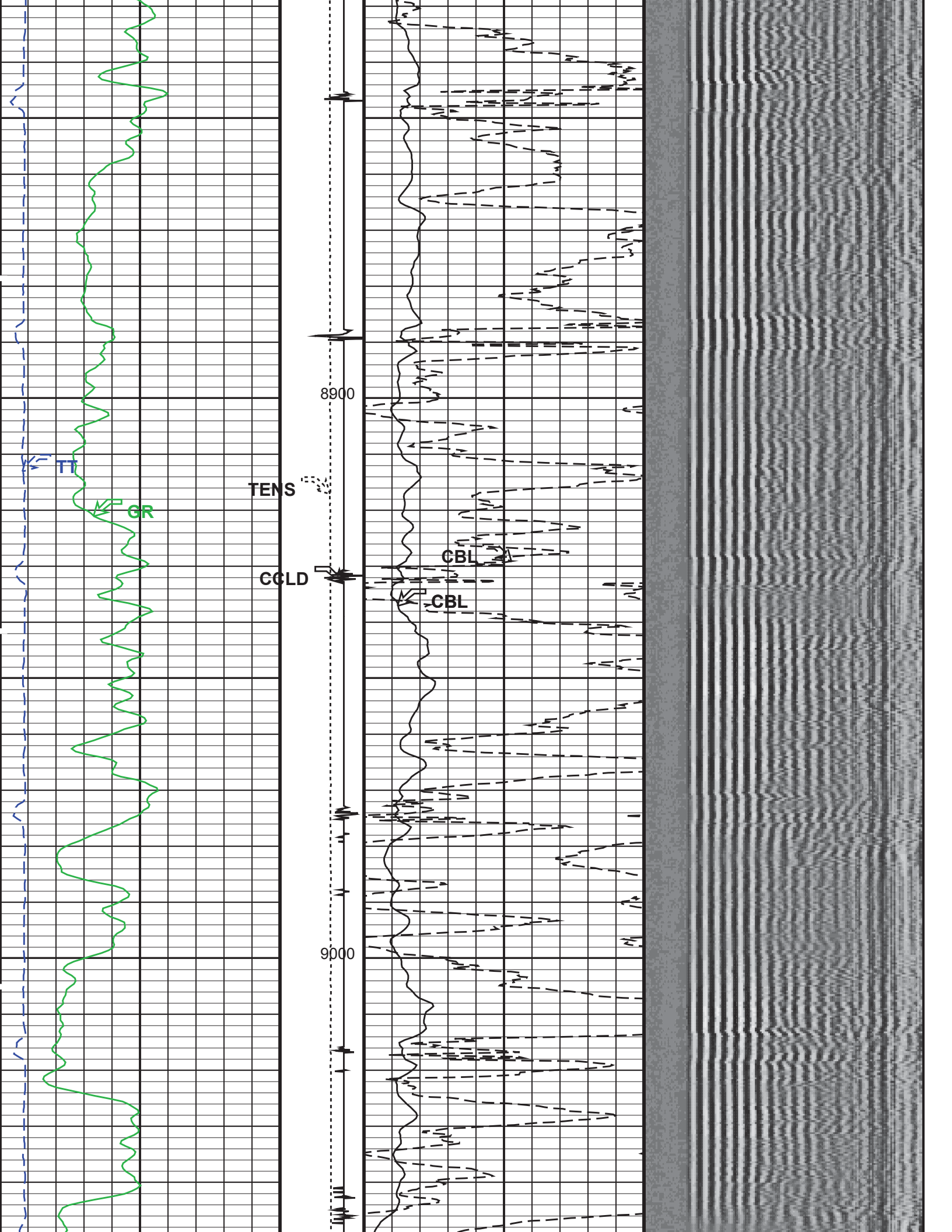


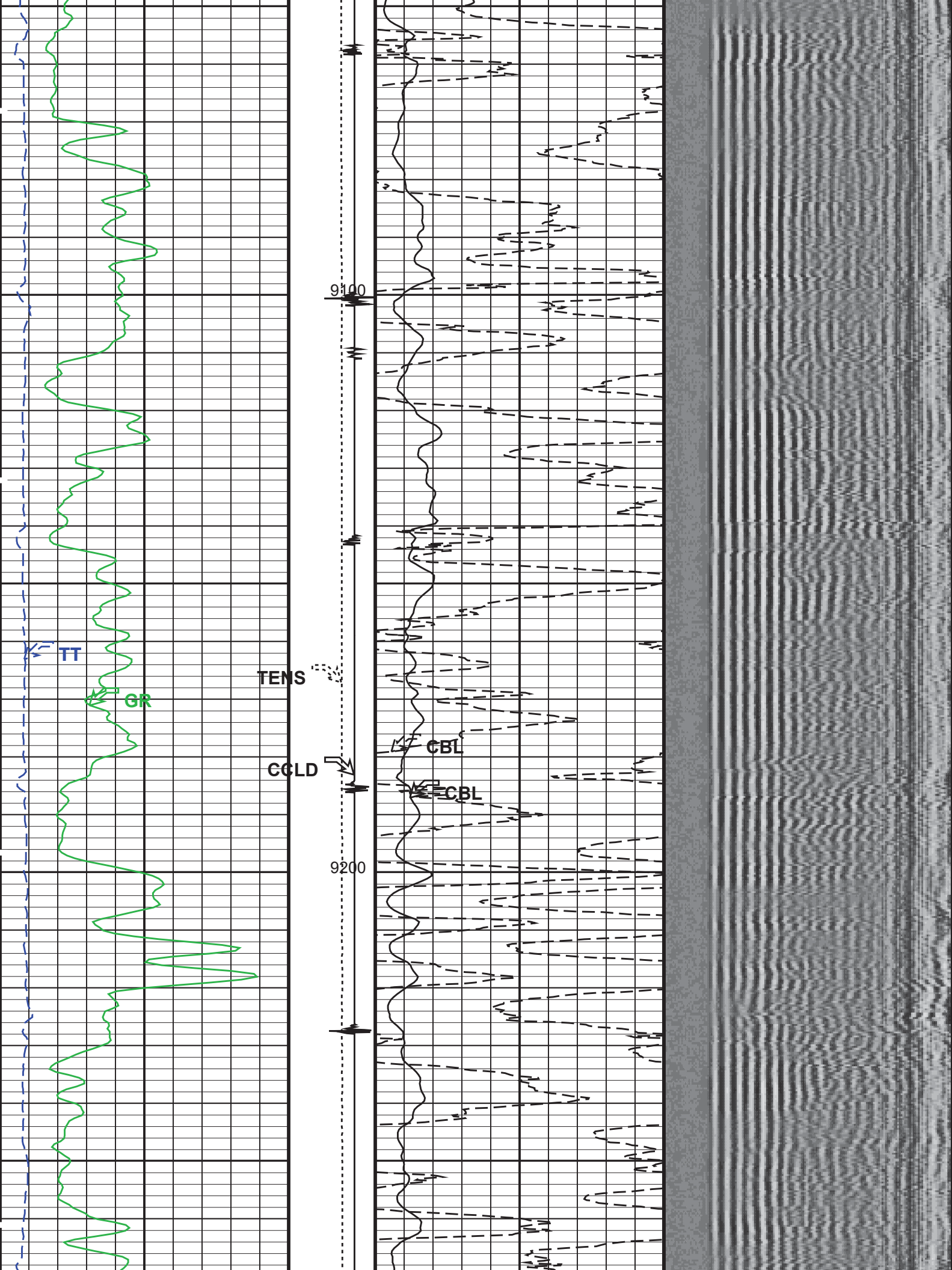


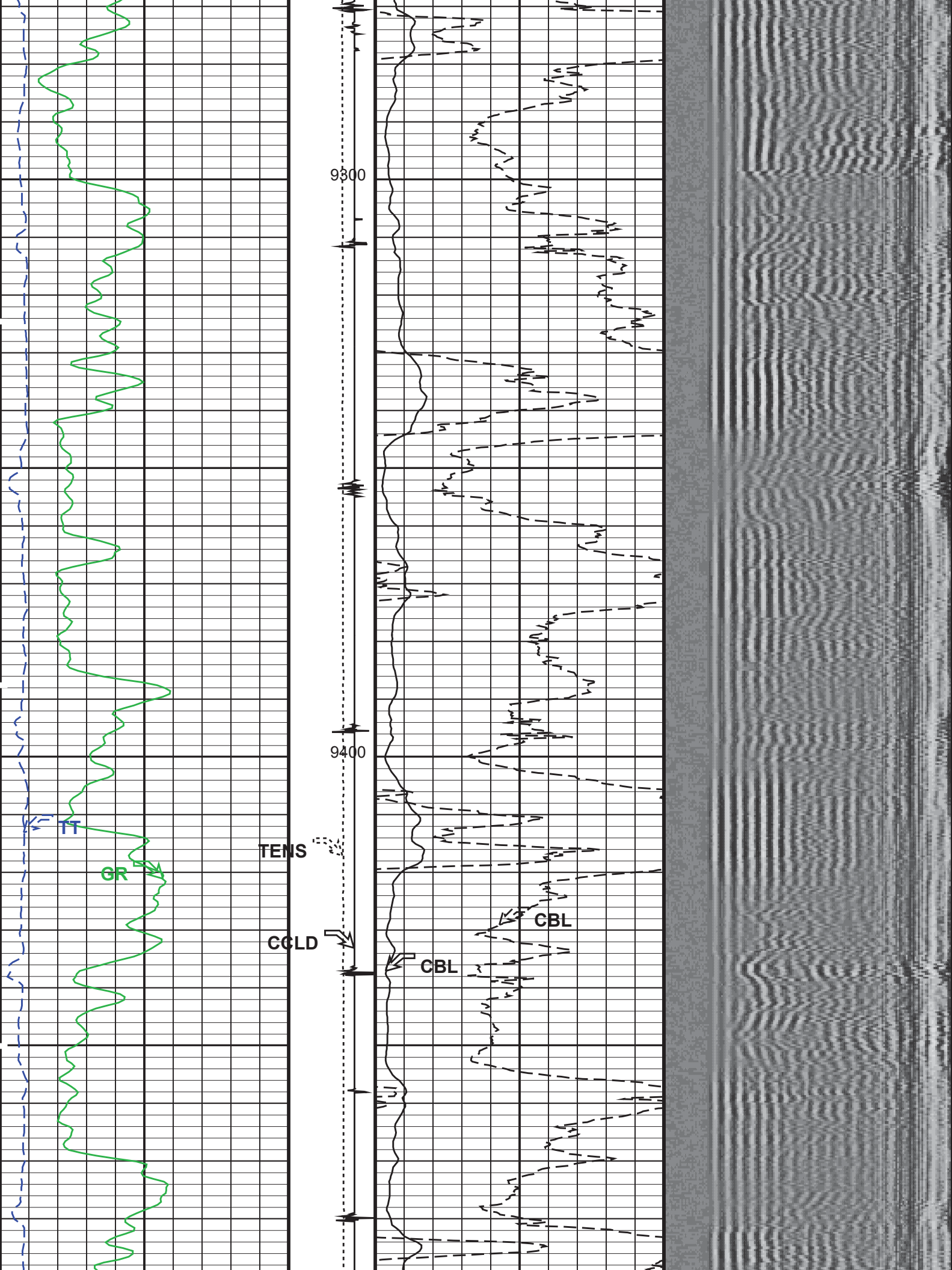


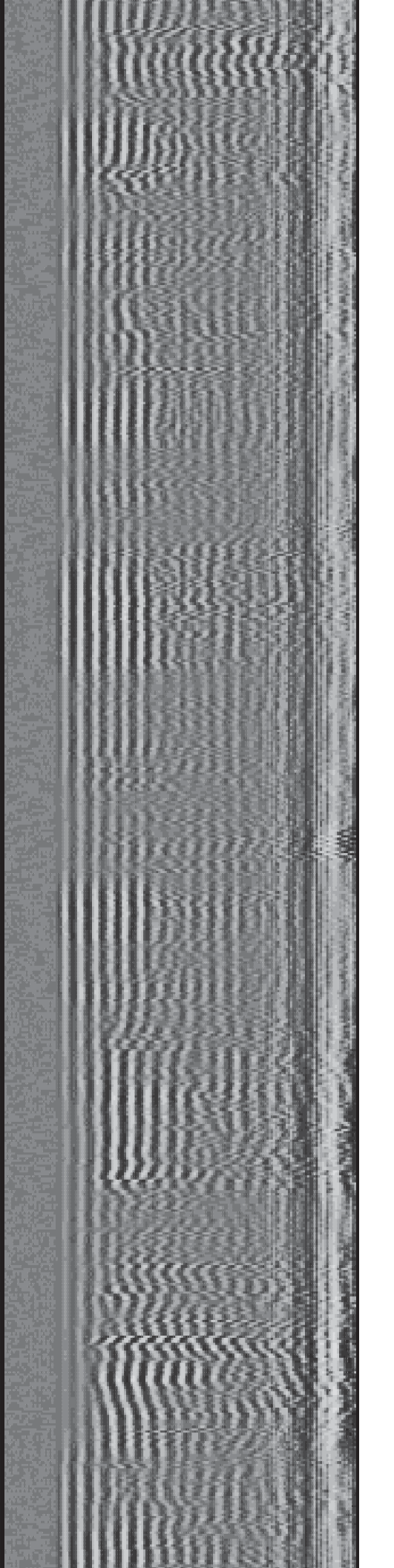
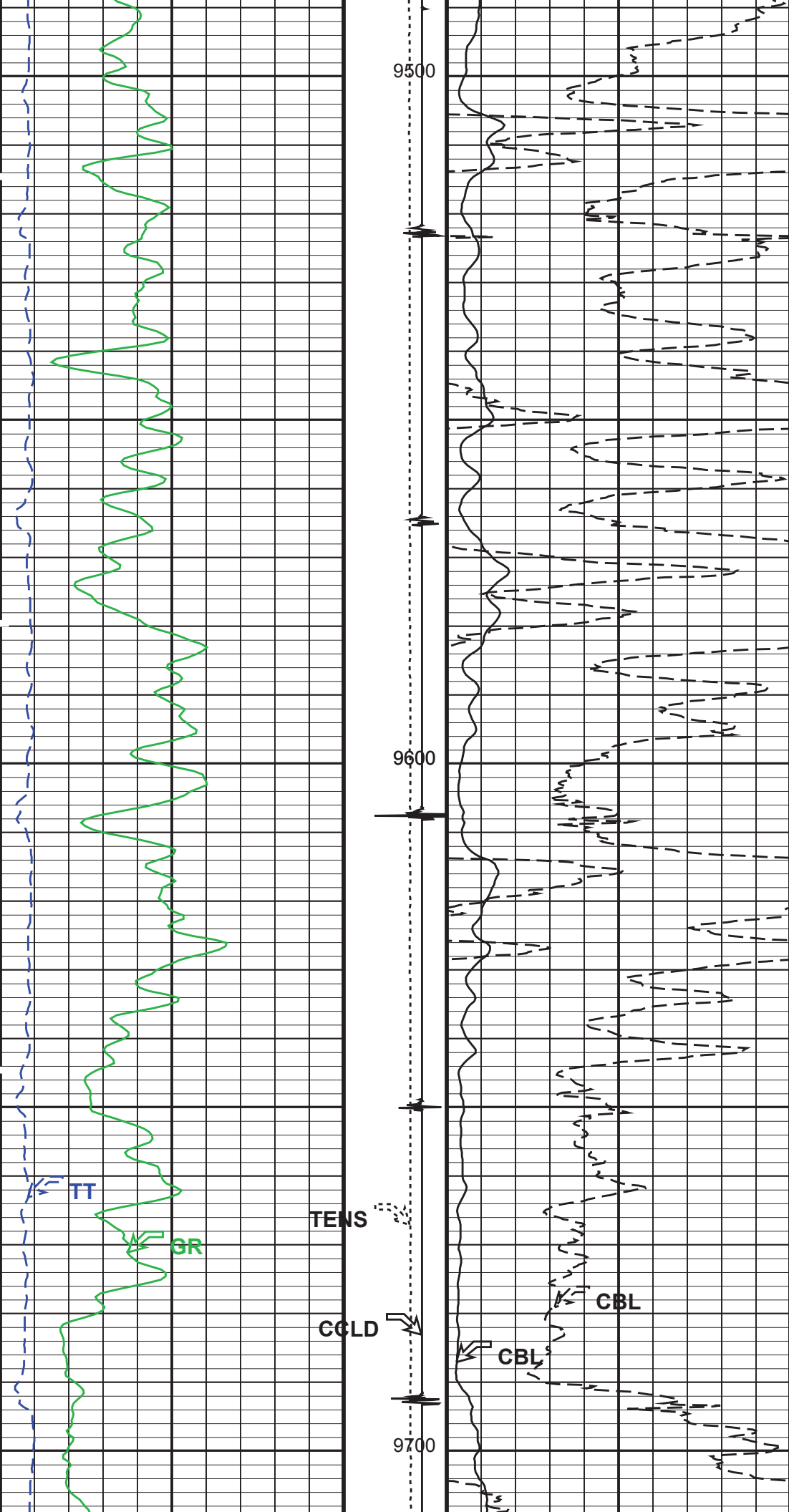


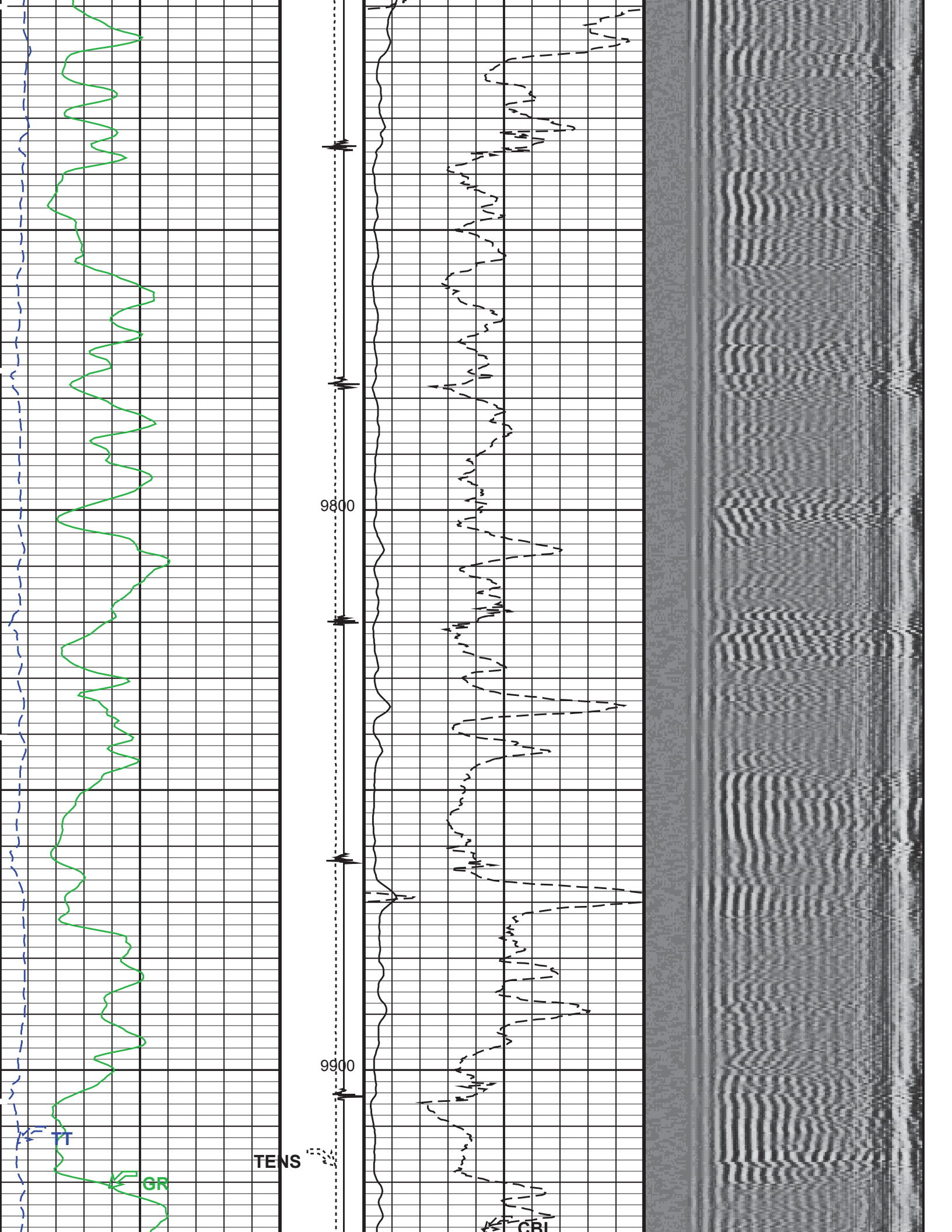


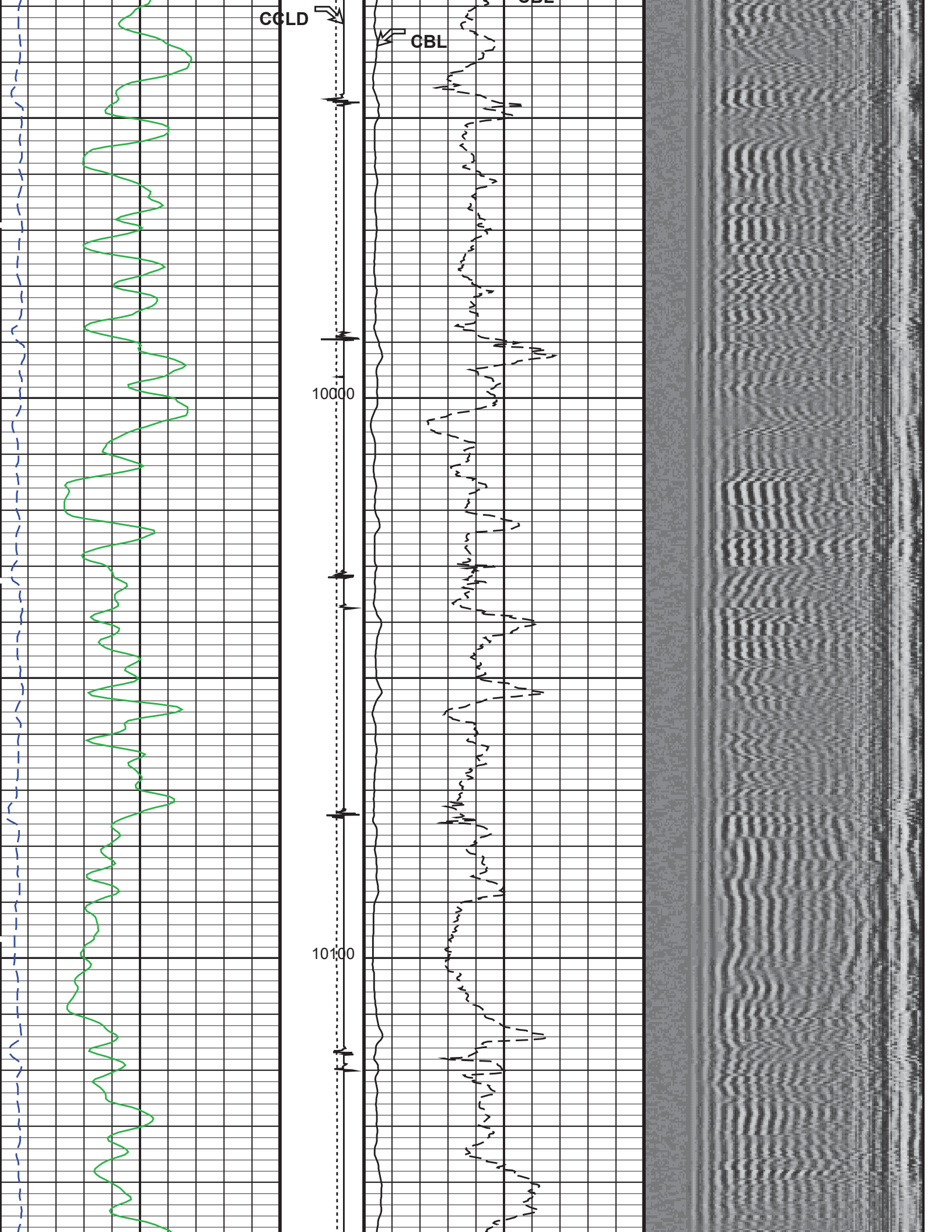


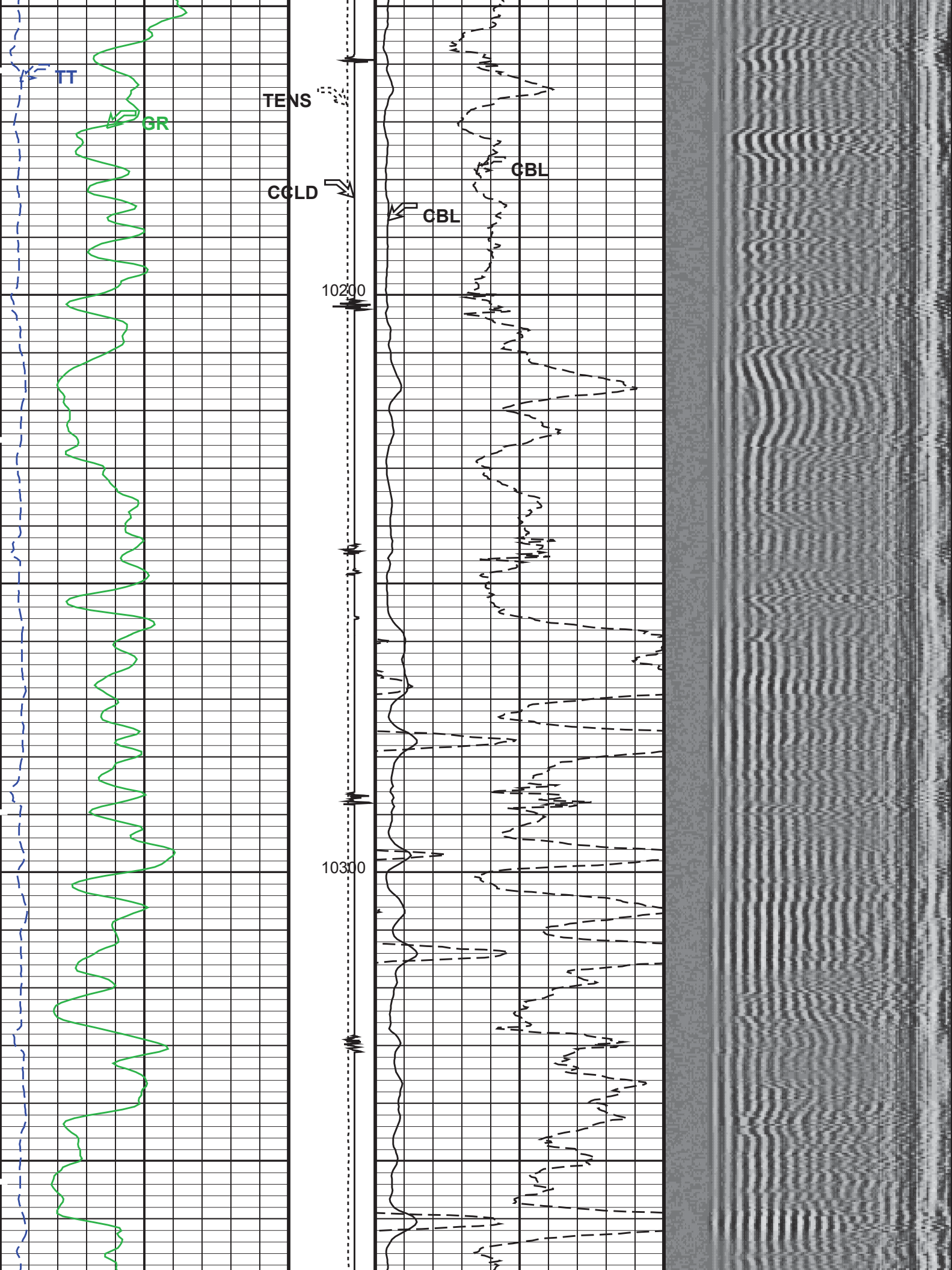


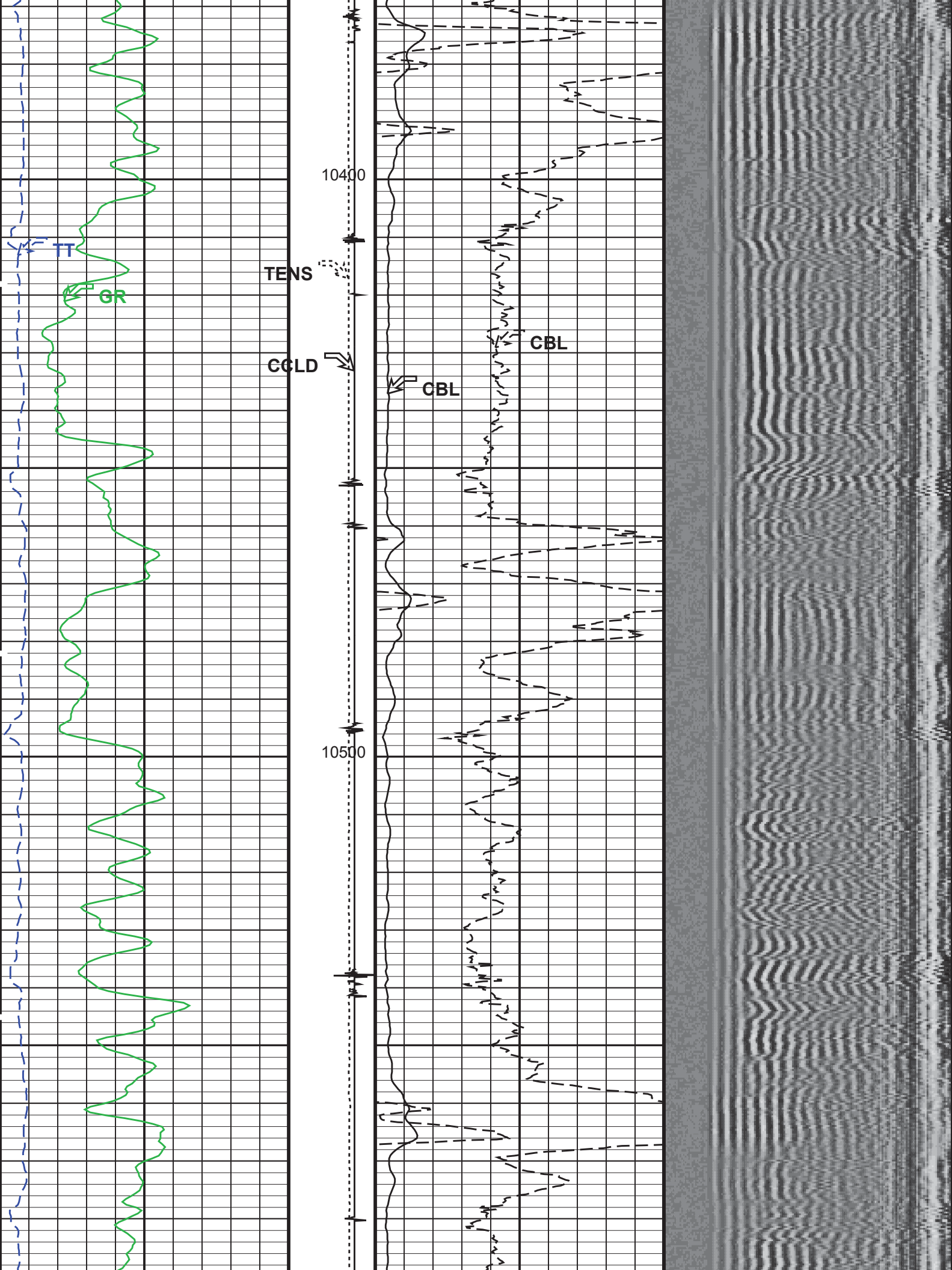


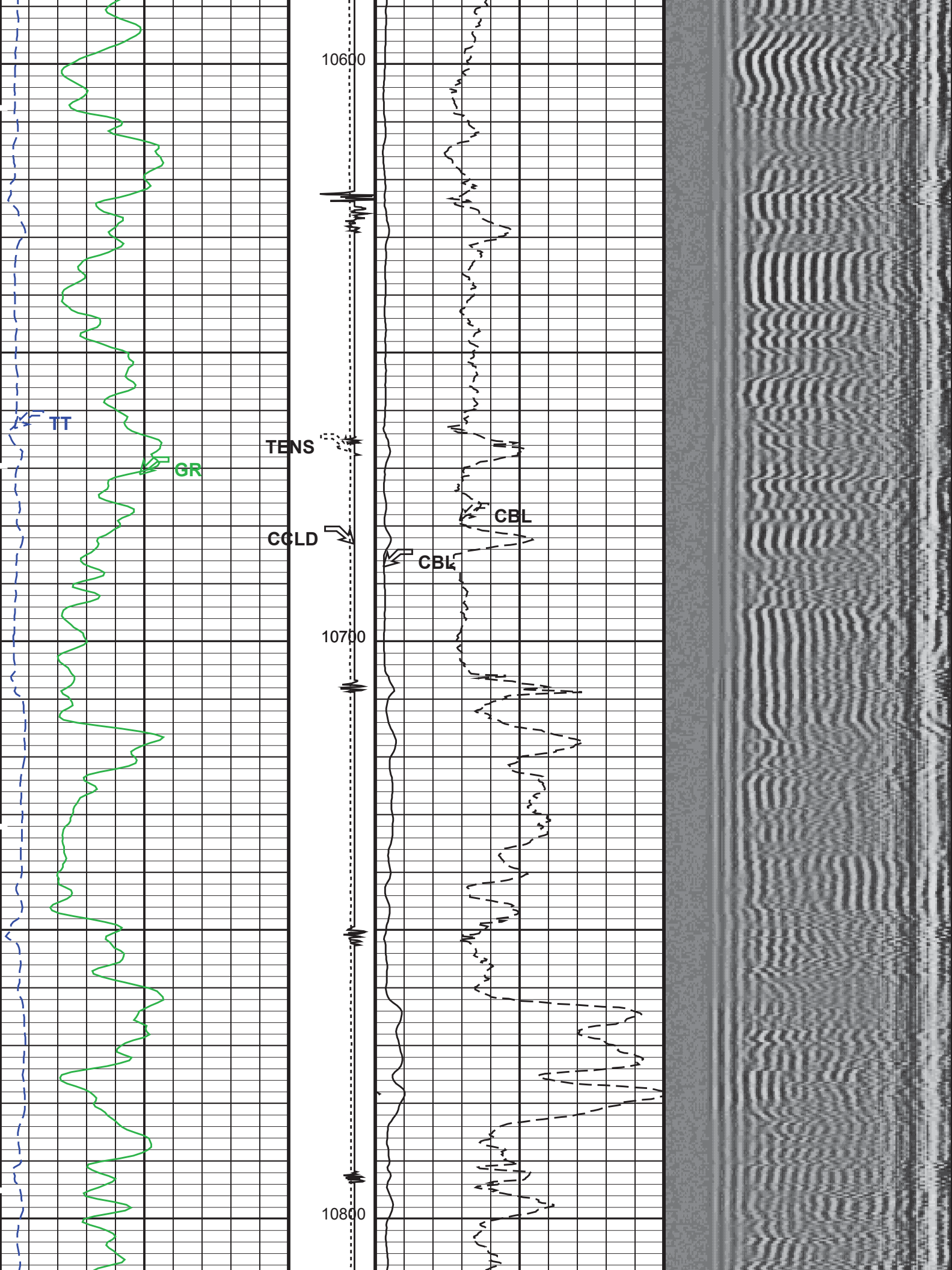


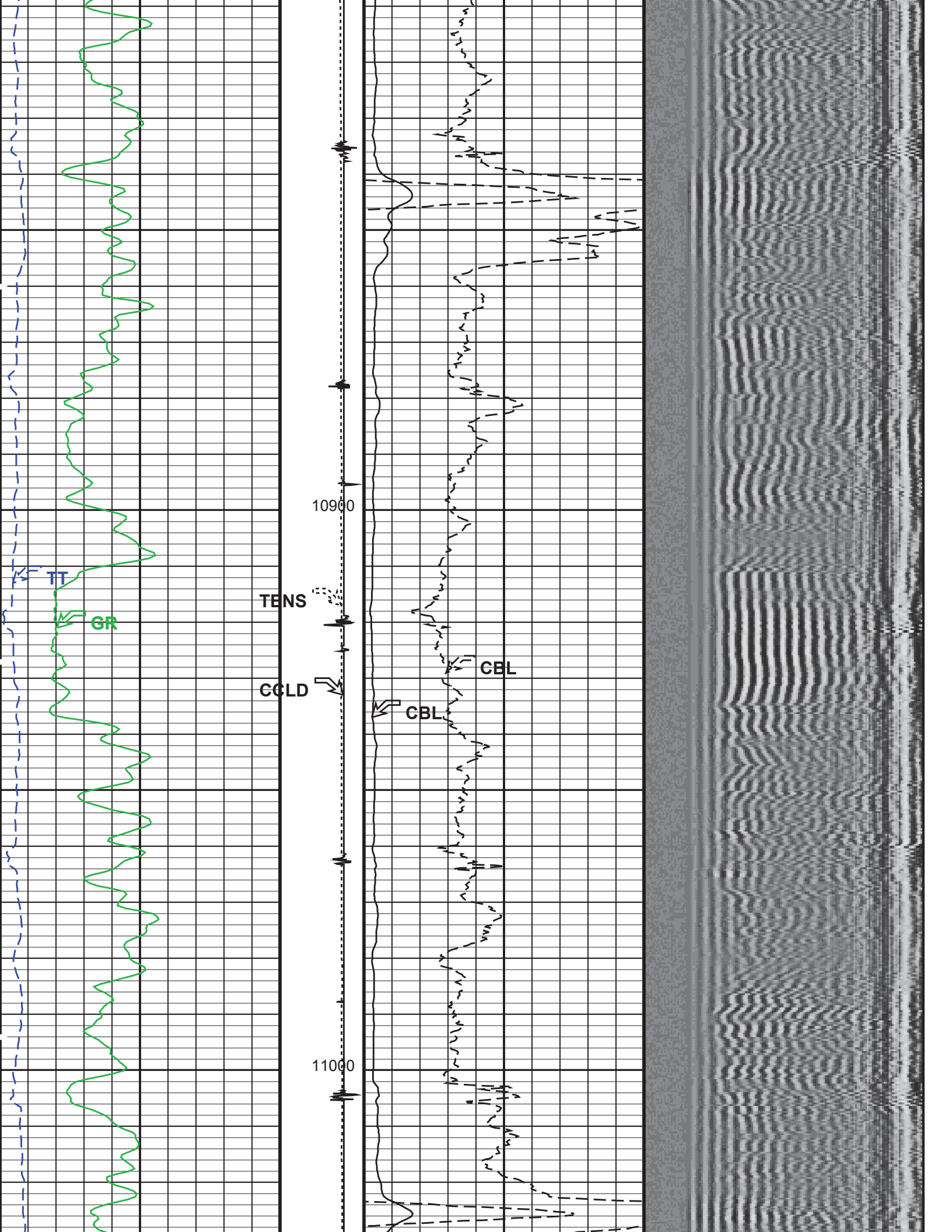


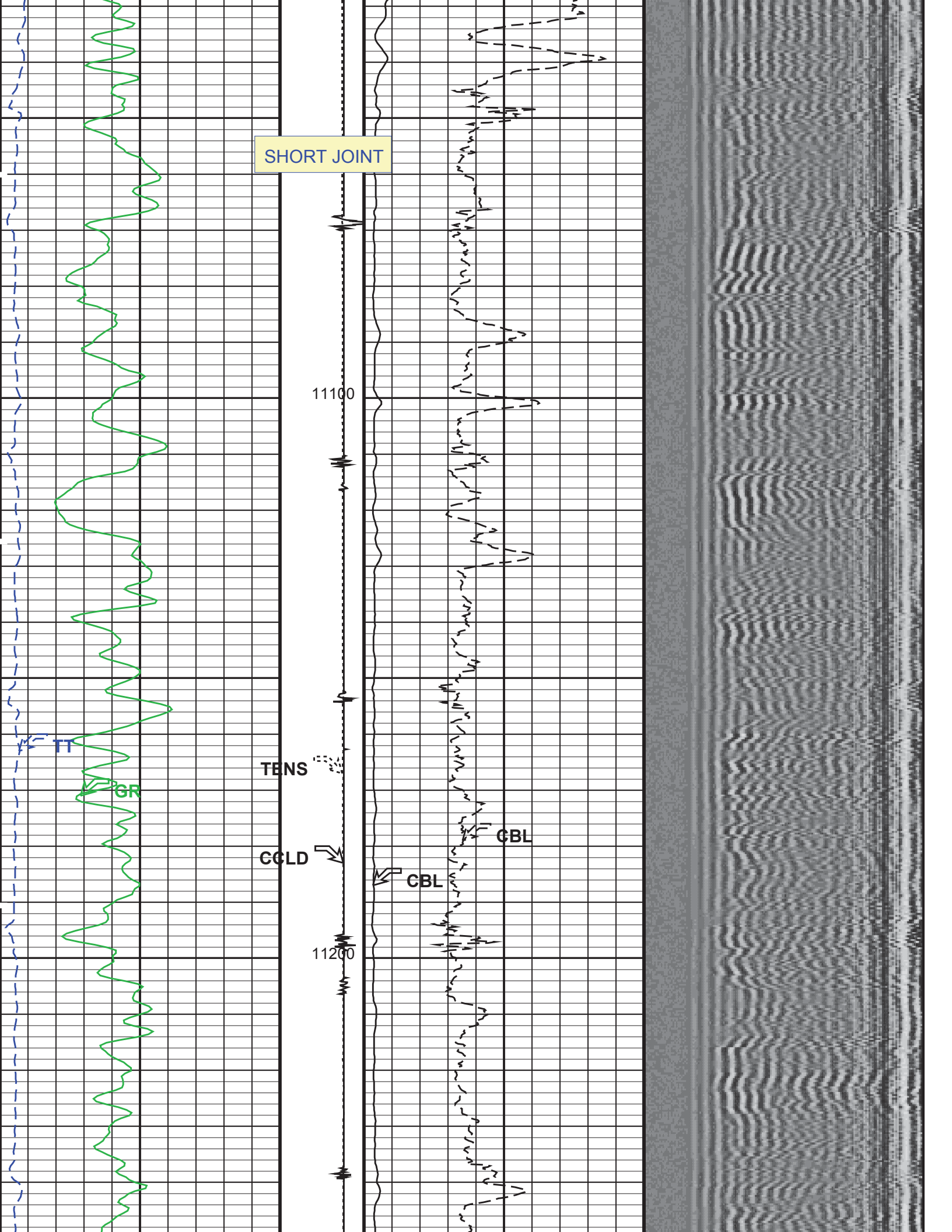


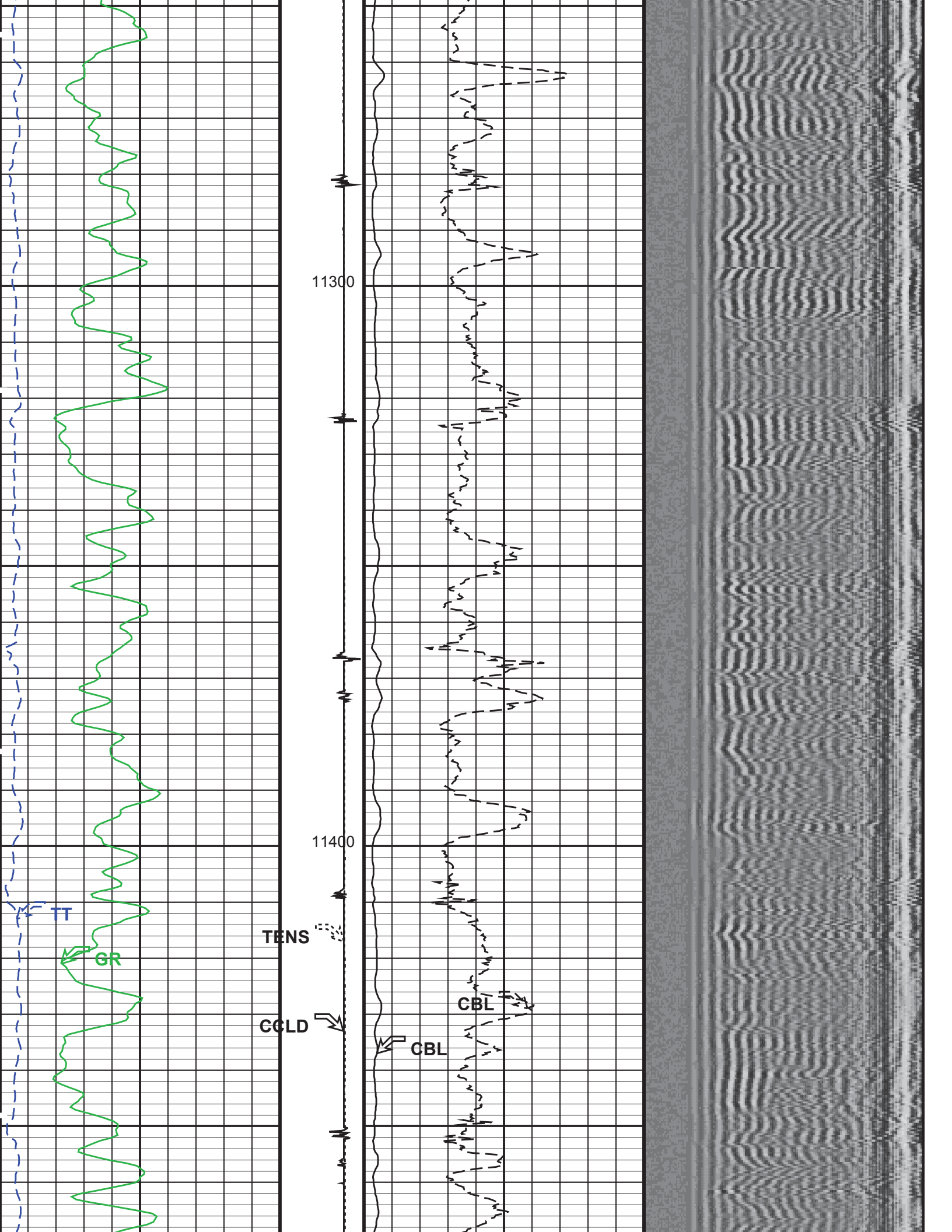


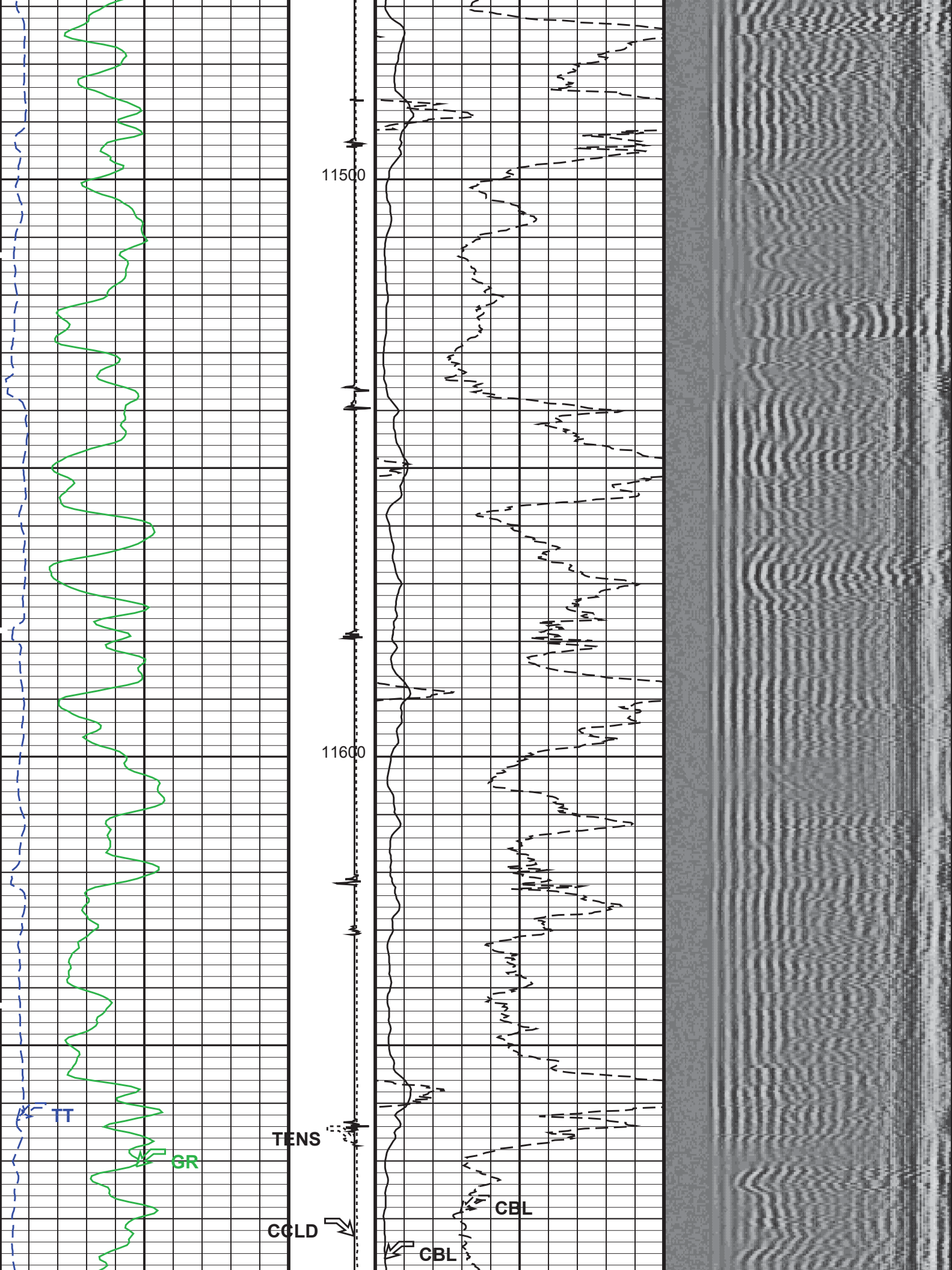


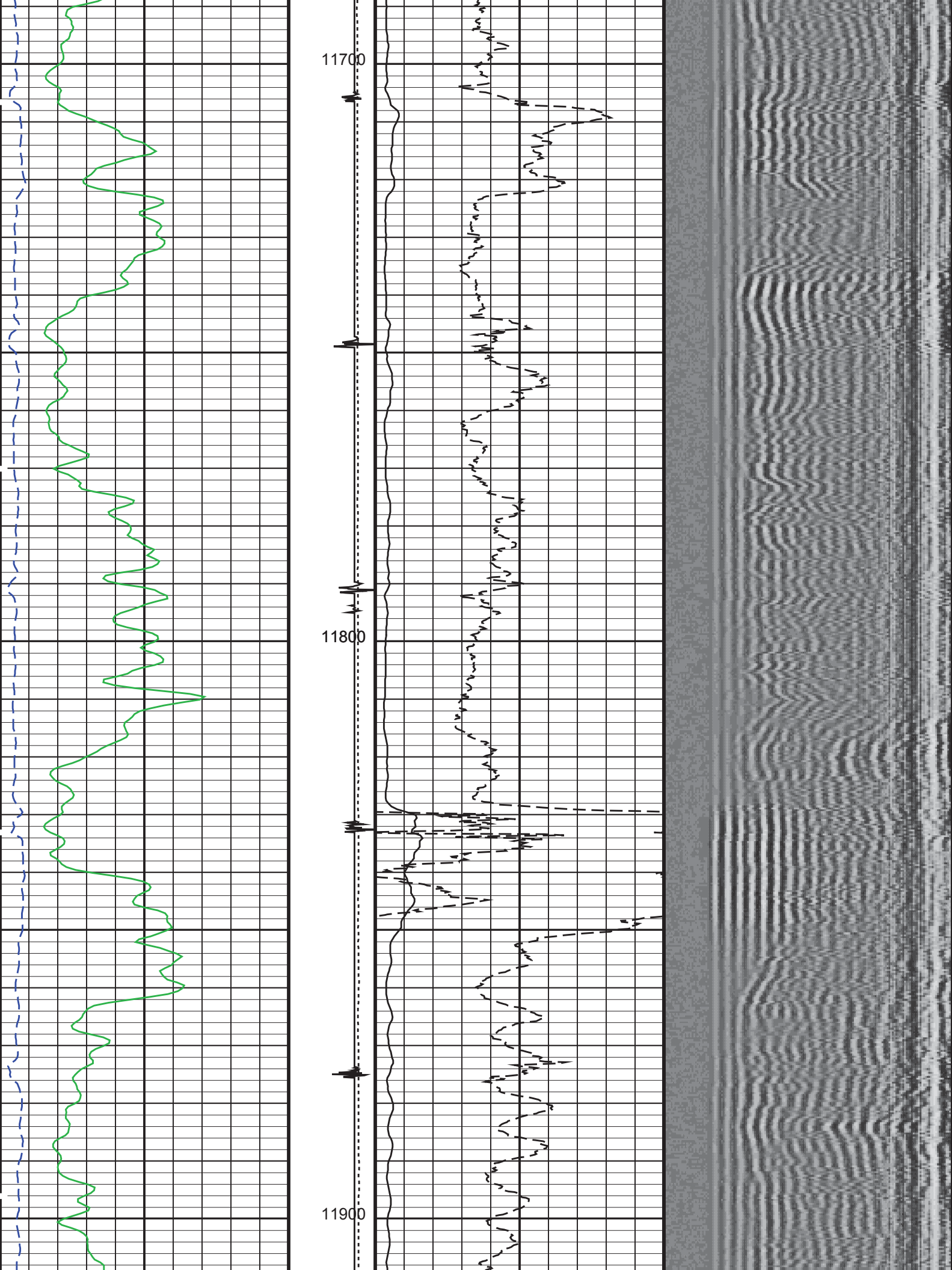


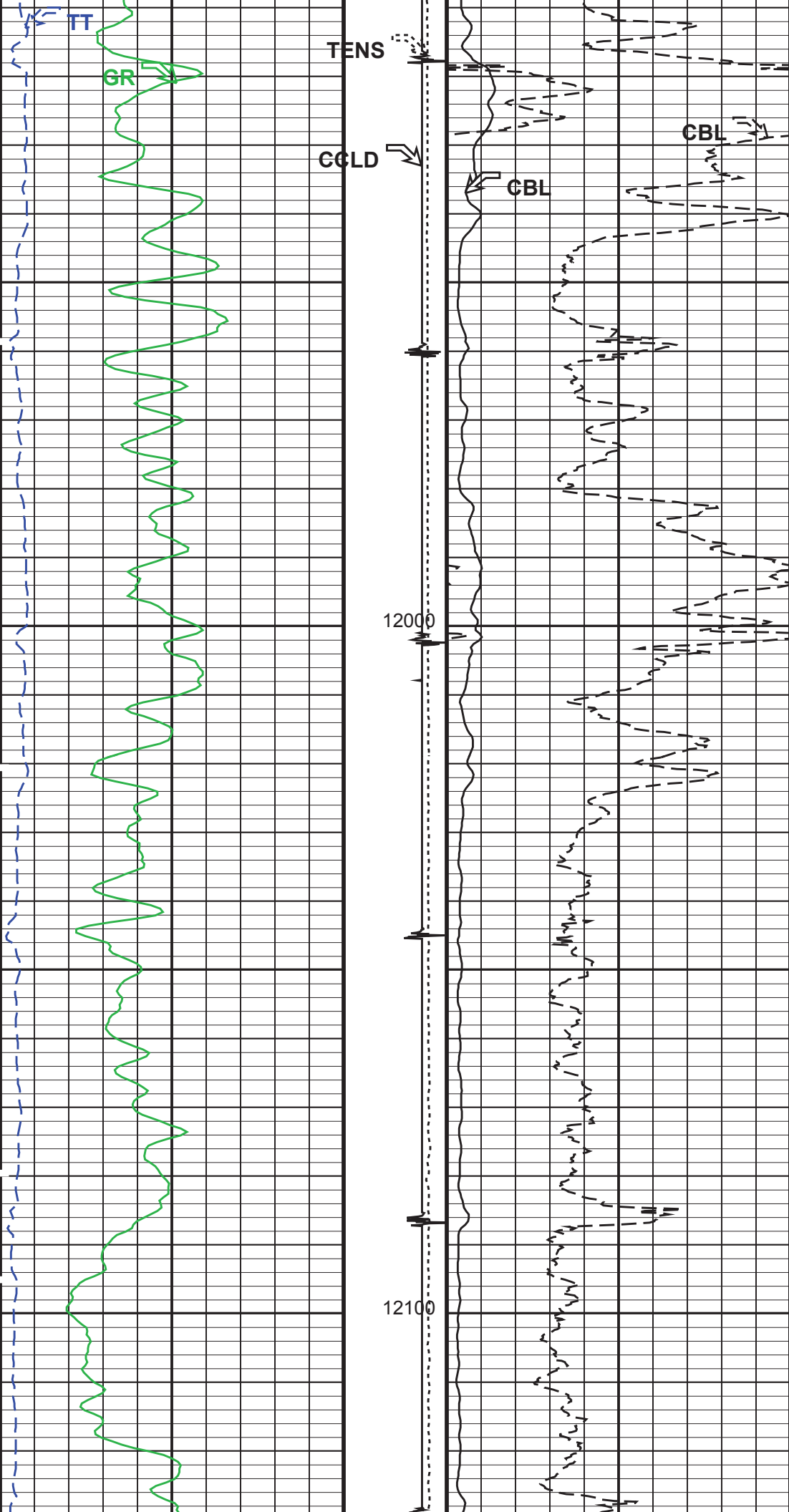


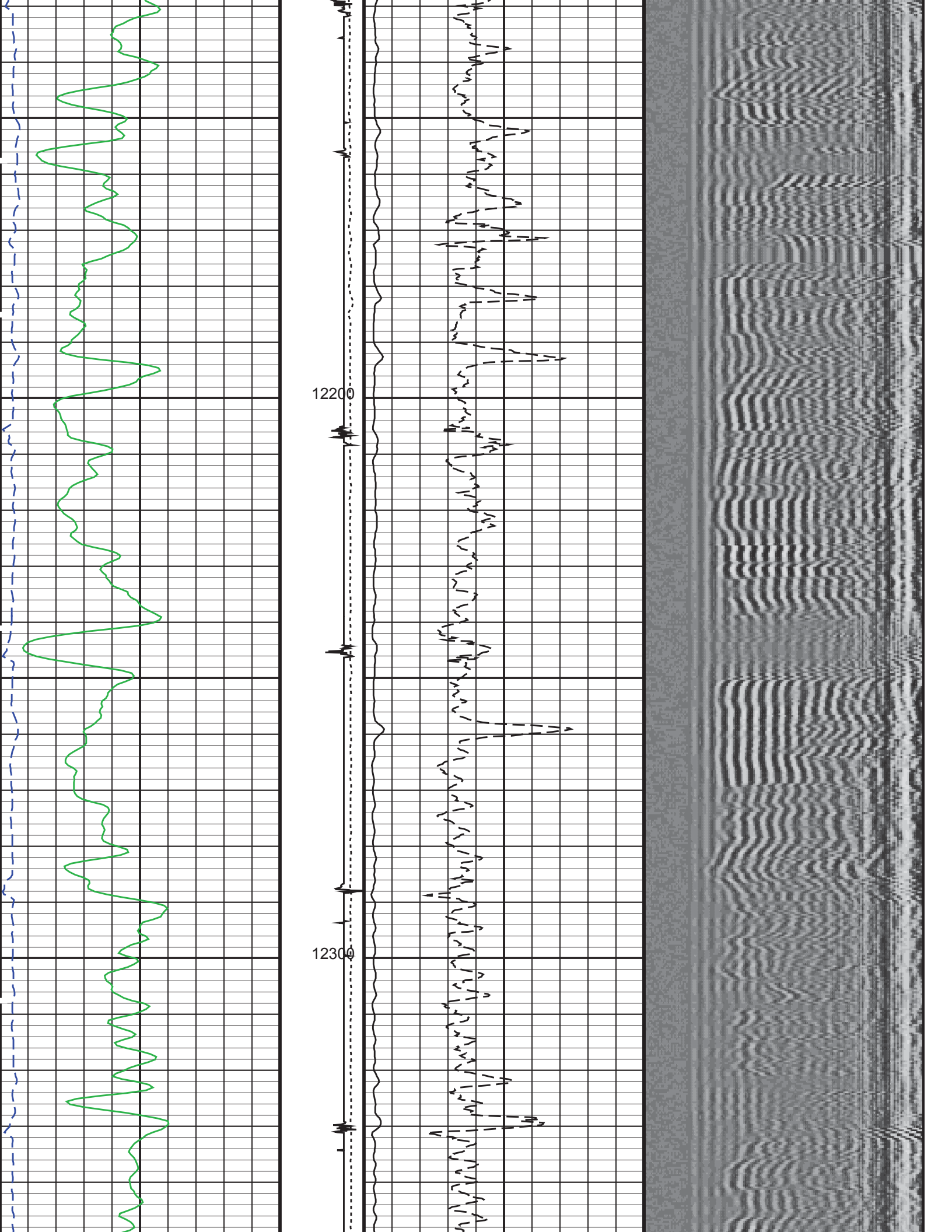


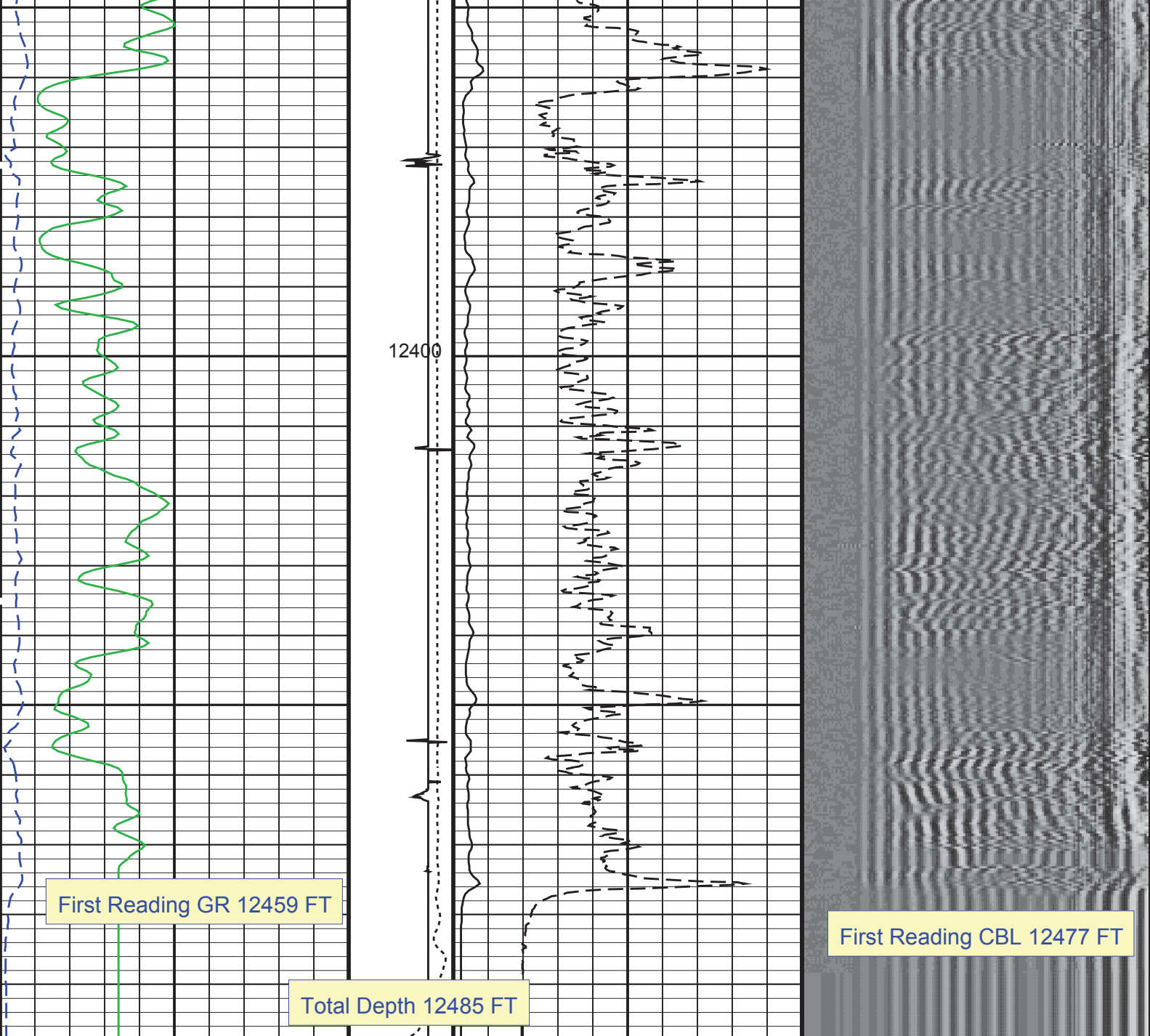












0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000	Gamma Ray (GR) (GAPI)	Tension (TENS) (LBF)	CBL Amplitude (CBL) (MV)	Min 200 Amplitude Max 1200 VDL Variable Density (VDL) (US)
260 Transit Time (TT) (US)	0 150	0 2000 Discriminat ed CCL (CCLD) (V) -1	0 100 CBL Amplitude (CBL) (MV)	

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100' Graphics File Created: 19-Mar-2013 03:22

OP System Version: 19C0-187

SCMT-CB SRPC-5214-H2-2012-OP1 HBMS-B SRPC-5214-H2-2012-OP1

<<<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	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	0.102913		

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	40	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		
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	13.50	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12485	FT

Input DLIS Files						
DEFAULT	SCMT_HBMS_023LUP	FN:22	PRODUCER	19-Mar-2013 00:01	12498.0 FT	58.0 FT
Output DLIS Files						
DEFAULT	SCMT_HBMS_025PUP	FN:24	PRODUCER	19-Mar-2013 03:22		

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8510D-23 (L24 496)

Input DLIS Files

DEFAULT	SCMT_HBMS_022LUP	FN:21	PRODUCER	18-Mar-2013 23:39	8178.0 FT	7865.0 FT
DEFAULT	SCMT_HBMS_025PUP	FN:24	PRODUCER	19-Mar-2013 03:22	12498.0 FT	26.5 FT

Output DLIS Files

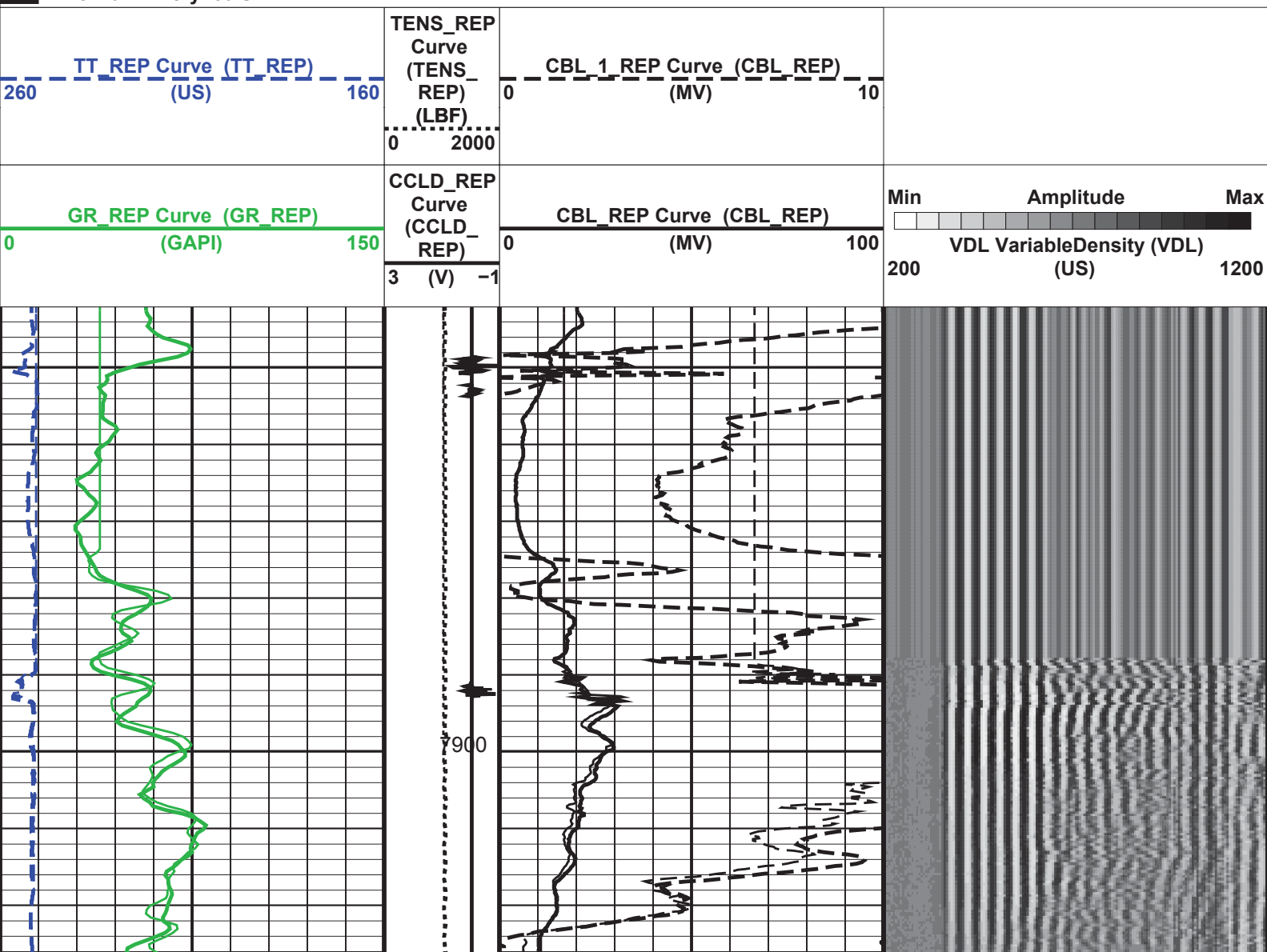
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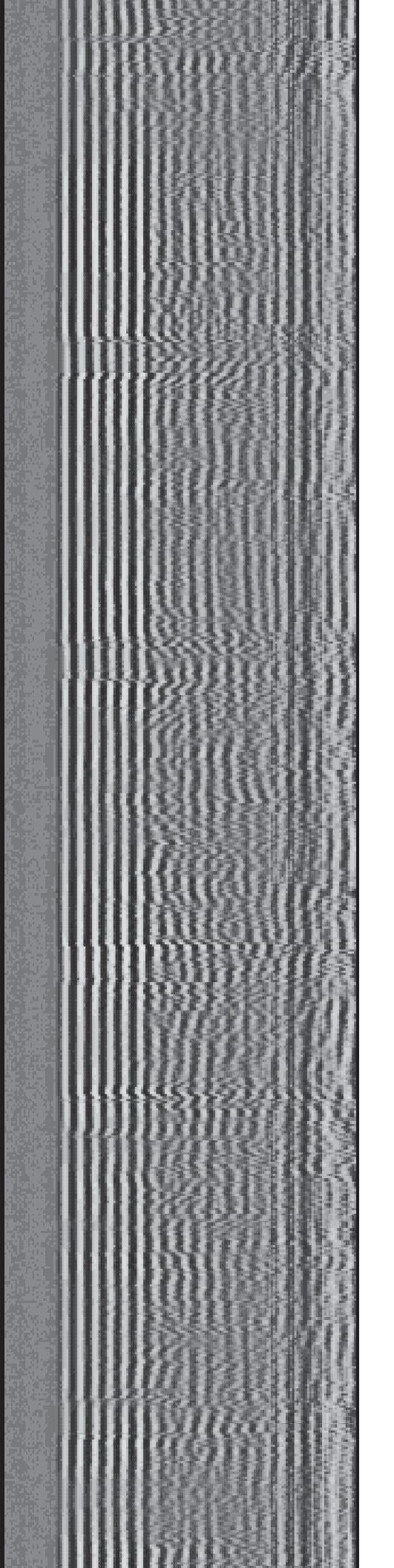
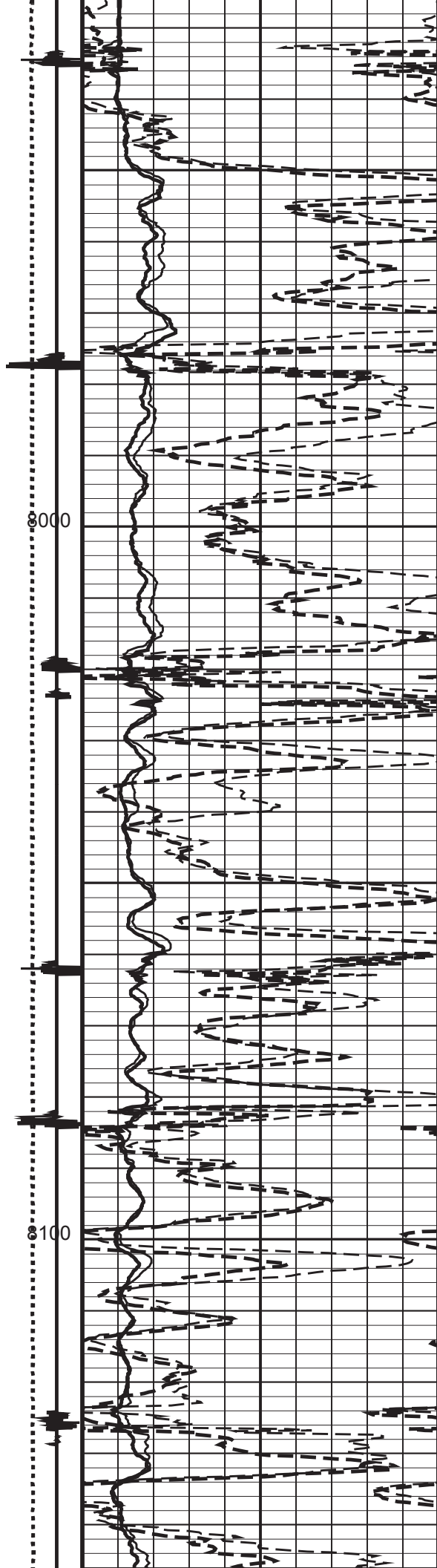
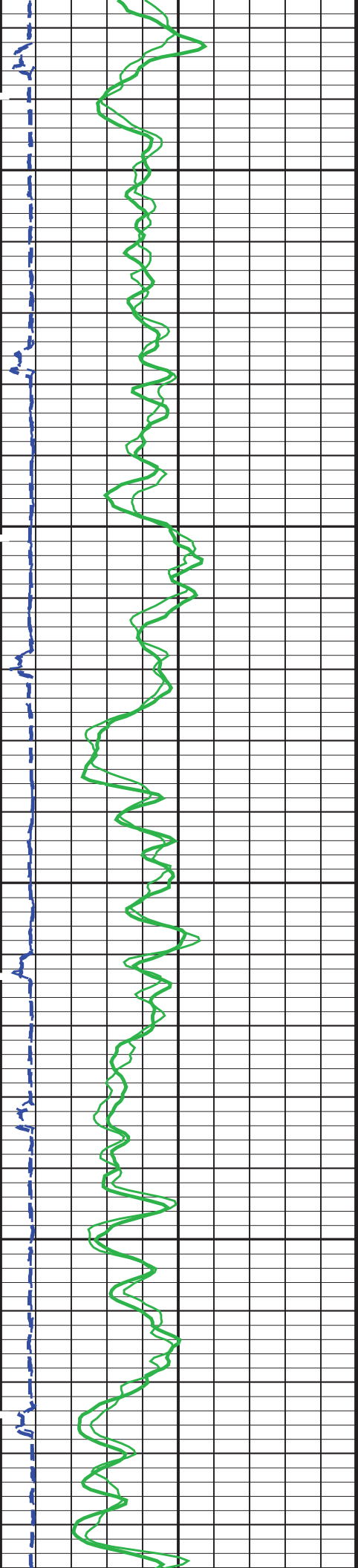
OP System Version: 19C0-187

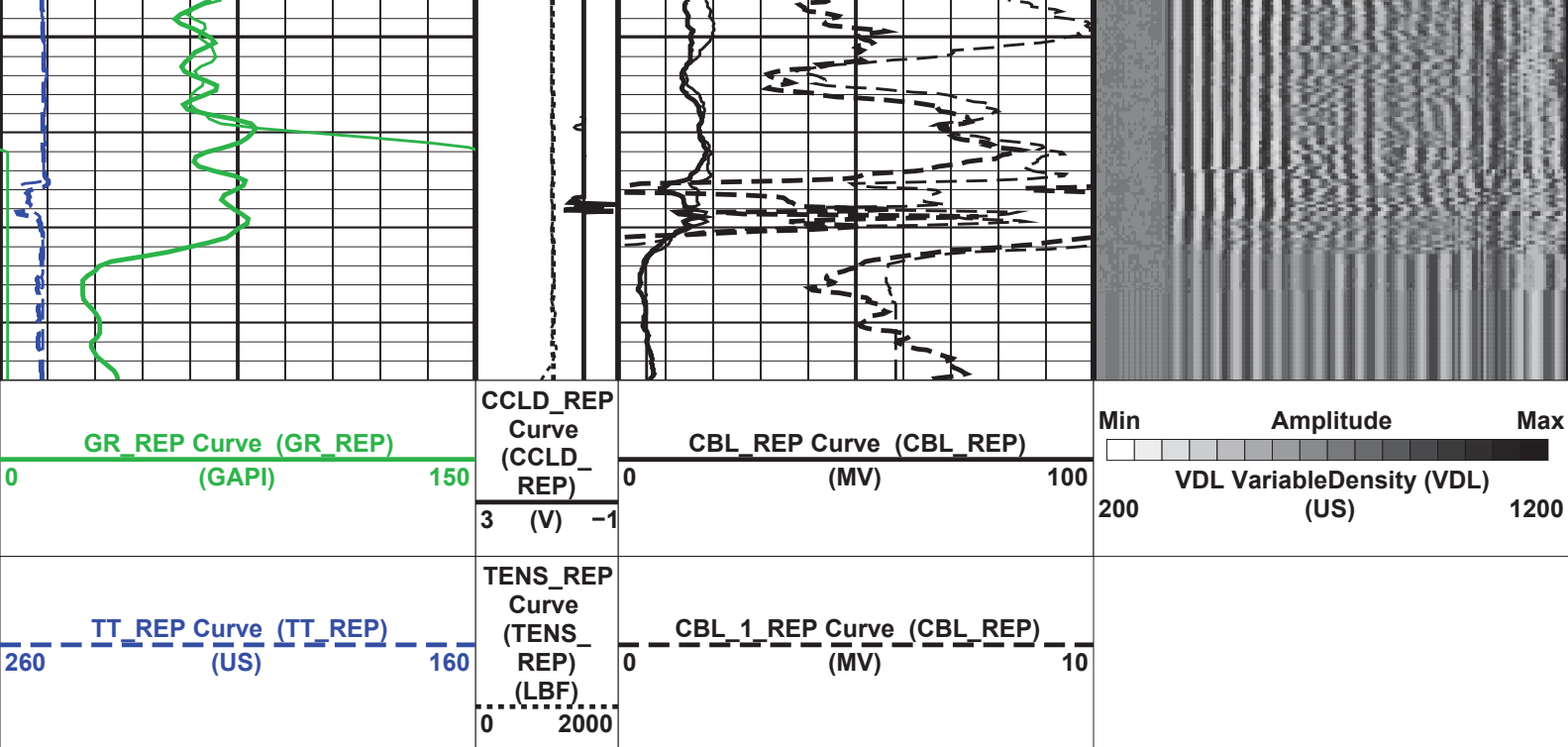
SCMT-CB	SRPC-5214-H2-2012-OP1	HBMS-B	SRPC-5214-H2-2012-OP1
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PIP SUMMARY

Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100'

Graphics File Created: 19-Mar-2013 03:30

OP System Version: 19C0-187

SCMT-CB SRPC-5214-H2-2012-OP1 HBMS-B SRPC-5214-H2-2012-OP1

<<<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 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 0.102913

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 PEAK
CB3G SCMT CBL 3 ft Peak Detection Mode 223.206 US
SCMT CBL 3 ft Peak Detection T0, Delay and Noise Gate

CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	225.206	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	40	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			
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	13.50	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	8.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12485	FT

Input DLIS Files

DEFAULT	SCMT_HBMS_022LUP	FN:21	PRODUCER	18-Mar-2013 23:39	8178.0 FT	7865.0 FT
DEFAULT	SCMT_HBMS_025PUP	FN:24	PRODUCER	19-Mar-2013 03:22	12498.0 FT	26.5 FT

Output DLIS Files

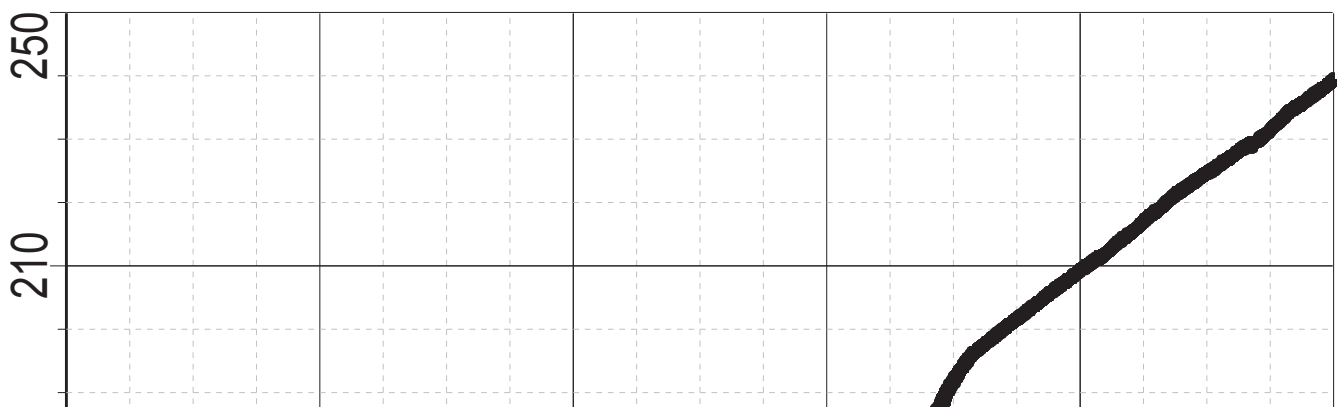
DEFAULT	SCMT_HBMS_026PUP	FN:25	PRODUCER	19-Mar-2013 03:30
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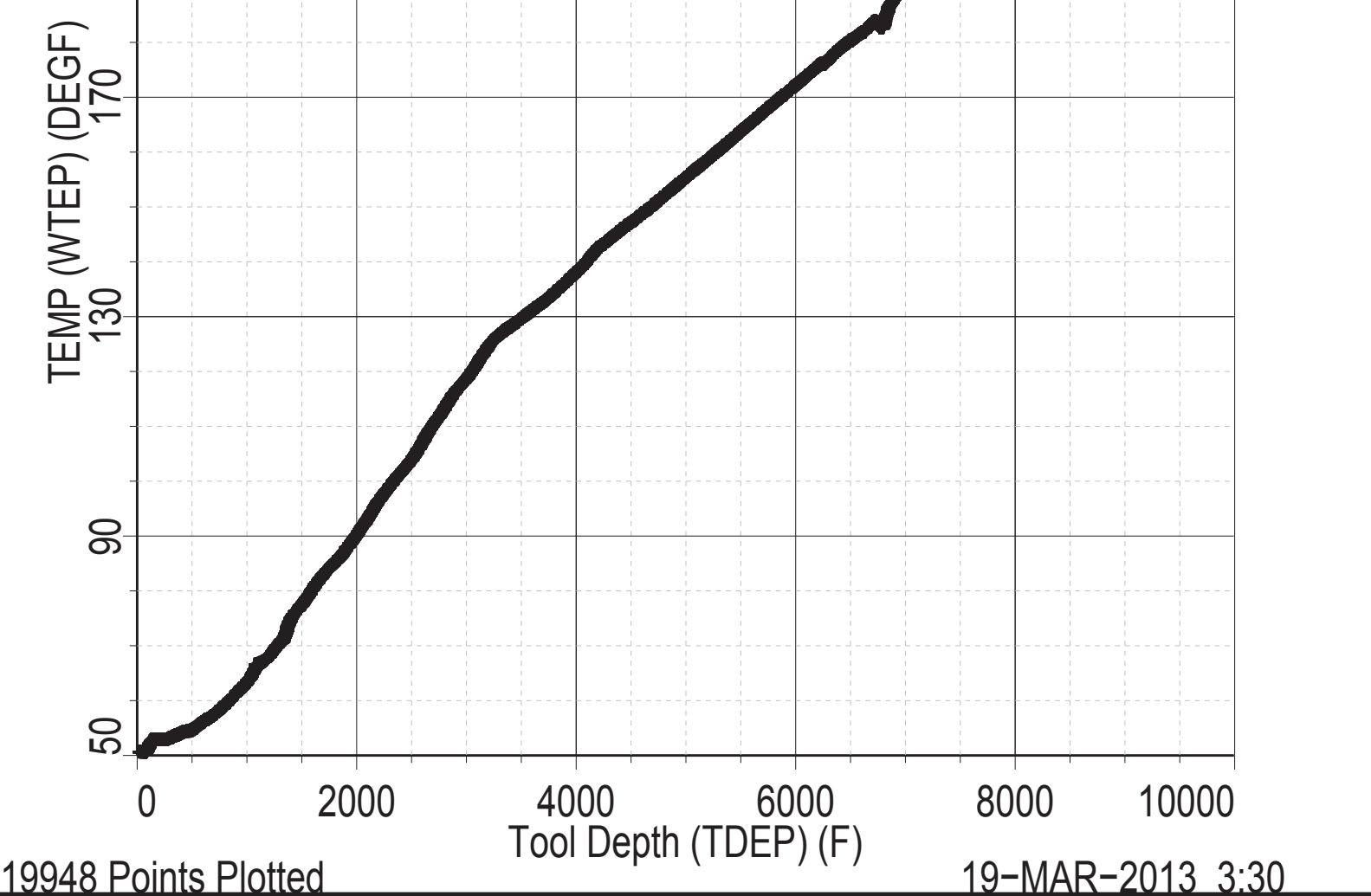
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 12498.0 – 26.5 FT





PBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC
Field: STORY GULCH
Well: SGU 8510D-23 (L24 496)
Run date: 18-Mar-2013

Tool: PSP
Sub Type: PBMS
Sensor: GR

PBMS Gamma Ray
Sonde Serial NB
Sensor Serial NB
Calib Date ddmmyy
Matrix Size
Coeff CRC

GR HV Rt

RESISTORS FOR GR SENSOR N.34473, TOOL HBMS-BA2884. SENSOR S/N:
34473
090506
12
0708

Rt**0

Rt**1

Rt**2

+ 000000000000 +04

+ 100000000000 +04

Rt**0	+.200000000000e+04	+.190000000000e+04
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Client: ENCANA OIL & GAS (USA) INC
Field: STORY GULCH
Well: SGU 8510D-23 (L24 496)
Run date: 18-Mar-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.2884 S/N:
2884
290706
16
B134

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	-.111322977181E+04	+.870150832462E+03	-.279503665762E+03
	Tt**3	Tt**4	Tt**5
Tt**0	+.449965652060E+02	-.264920434334E+01	0.0

Client: ENCANA OIL & GAS (USA) INC
Field: STORY GULCH
Well: SGU 8510D-23 (L24 496)
Run date: 18-Mar-2013

Tool: PSP
Sub Type: PBMS
Sensor: CQG

PBMS Quartz Gauge type F

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR CQG PBMS-B.2884 S/N:

2884

290706

66

CA7A

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.746225778248E+04	+.221418944849E-01	-.210426289152E-06
Fc**1	-.104881478055E+01	-.124860716120E-04	-.949662972749E-10
Fc**2	+.872904863754E-06	+.426833452654E-10	+.759423319181E-15
Fc**3	+.239319347612E-11	+.290279345385E-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	-.812091932516E-10	-.147717591127E-14	-.150620854654E-19
Fc**1	+.145644303959E-15	+.160803895109E-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

Calib Date ddmmyy

Matrix Size

Coeff CRC

:

2884

290706

66

F21E

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.113897507996E+03	-.324965333678E-03	+.697134219555E-08
Fb**1	-.601014483015E-02	+.175847256148E-07	+.180458009797E-12
Fb**2	-.317240807344E-07	+.374112953741E-12	+.133653042149E-17
Fb**3	-.236568542854E-12	+.787205826536E-17	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	+.881675188724E-13	-.146952444192E-16	-.415359060767E-21

Fb**1	-.553774805449E-18	-.739378844697E-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 2884

Calib Date ddmmyy 290706

Matrix Size 16

Coeff CRC 72C9

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310161623072E+05	+.363878692519E-02	+.311171630292E-06
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.277965051815E-10	-.181738305366E-14	-.633170122188E-20

PBMS Quartz Gauge type F

Sonde Serial NB :

Sensor Serial NB 2884

Calib Date ddmmyy 290706

Matrix Size 16

Coeff CRC 3E80

Clock Temp Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.111177101155E+03	-.545261137223E-02	-.112186276799E-06
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	+.756690675632E-11	-.207457772298E-16	-.121623071907E-19

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

Primary Equipment:








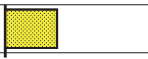

Slim Cement Mapping Xmitter Electronics
 Slim Cement Mapping Sonde
 Slim Cement Mapping Cartridge

SCMX – CA
 SCMS – CB 8179
 SMC – 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 8510D-23 (L24 496)**

Field: **STORY GULCH**

County: **GARFIELD**

State: **COLORADO**

SLIM CEMENT MAPPING LOG
 GAMMA RAY – CCL – TEMPERATUR
 CBL – VDL