

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8502D-23 (L24 496)

Field: STORY GULCH

County: GARFIELD State: COLORADO

SLIM CEMENT MAPPING LOG  
GAMMA RAY – CCL – TEMPERATUR

County: GARFIELD

Field: STORY GULCH

Location:

Well: SG 8502D-23 (L24 496)

Company: ENCANA OIL & GAS (USA) INC

LOCATION

Permanent Datum:

GROUND LEVEL

Elev.: K.B. 8210.00 ft

Log Measured From:

KELLY BUSHING

G.L. 8180.00 ft

Drilling Measured From:

KELLY BUSHING

D.F. 8209.00 ft

API Serial No.

05-045-21709-000C

Section

23

Township

4S

Range

96W

PVT DATA				Run 1	Run 2	Run 3
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 Date3-Jan-2014

Run Number1

Depth Driller13271 ft

Schlumberger Depth13248 ft

Bottom Log Interval13239 ft

Top Log Interval80 ft

Casing Fluid TypeFRESH WATER

Salinity

Density8.4 lbm/gal

Fluid Level80 ft

BIT/CASING/TUBING STRING

Bit Size8.750 in

From30 ft

To13271 ft

Casing/Tubing Size13271 ft

Weight4.500 in

Grade11.6 lbm/ft

From30 ft

To13271 ft

Maximum Recorded Temperatures292 degF

Logger On Bottom3-Jan-2014

Unit Number391

Recorded ByJASON BARRY

Witnessed ByEMILIO RIVERA

Time17:00

LocationGRAND JUNCTION

Logging Date				Run 1	Run 2	Run 3
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-AUG-2013 11:54:57

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-JB	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6349	Serial Number:	3421	Serial Number:	112136
Calibration Date:	7-31-2013	Calibration Date:	14-AUG-201	Length:	19000 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	<div>Conveyance Method: Wireline</div> <div>Rig Type: LAND</div>	
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10		
Wheel Correction 1:	-5	Calibration RMS:	3		
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 PROCEDURES USED
2. IDW USED AS PRIMARY DEPTH REFERENCE
3. SPWT DRUM COUNTER USED AS SECONDARY DEPTH REFERENCE
- 4.
- 5.
- 6.

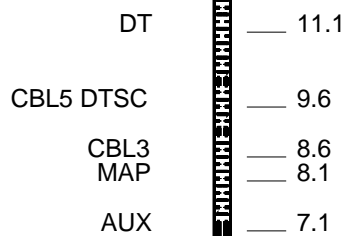
## DISCLAIMER

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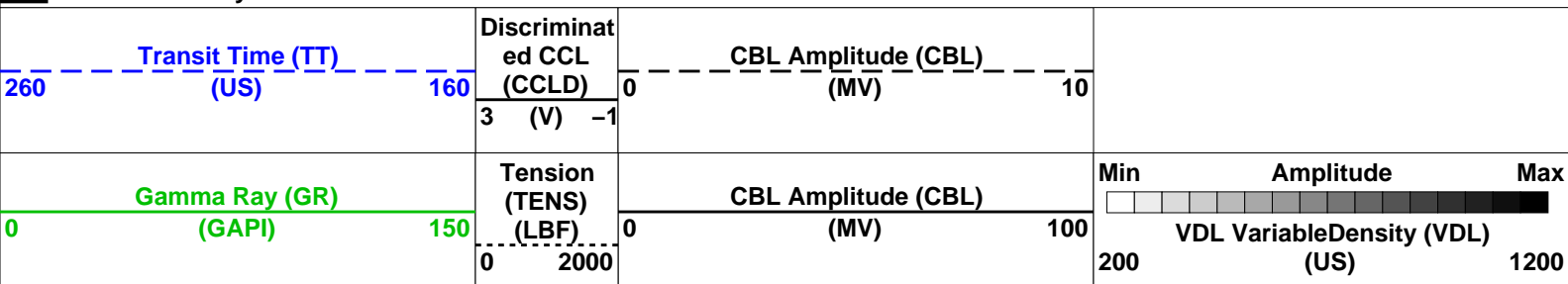
OTHER SERVICES1 OS1: NONE OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWNLOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE: 16:00	
TIME AT BOTTOM: 17:00	
EXIT: 20:30	

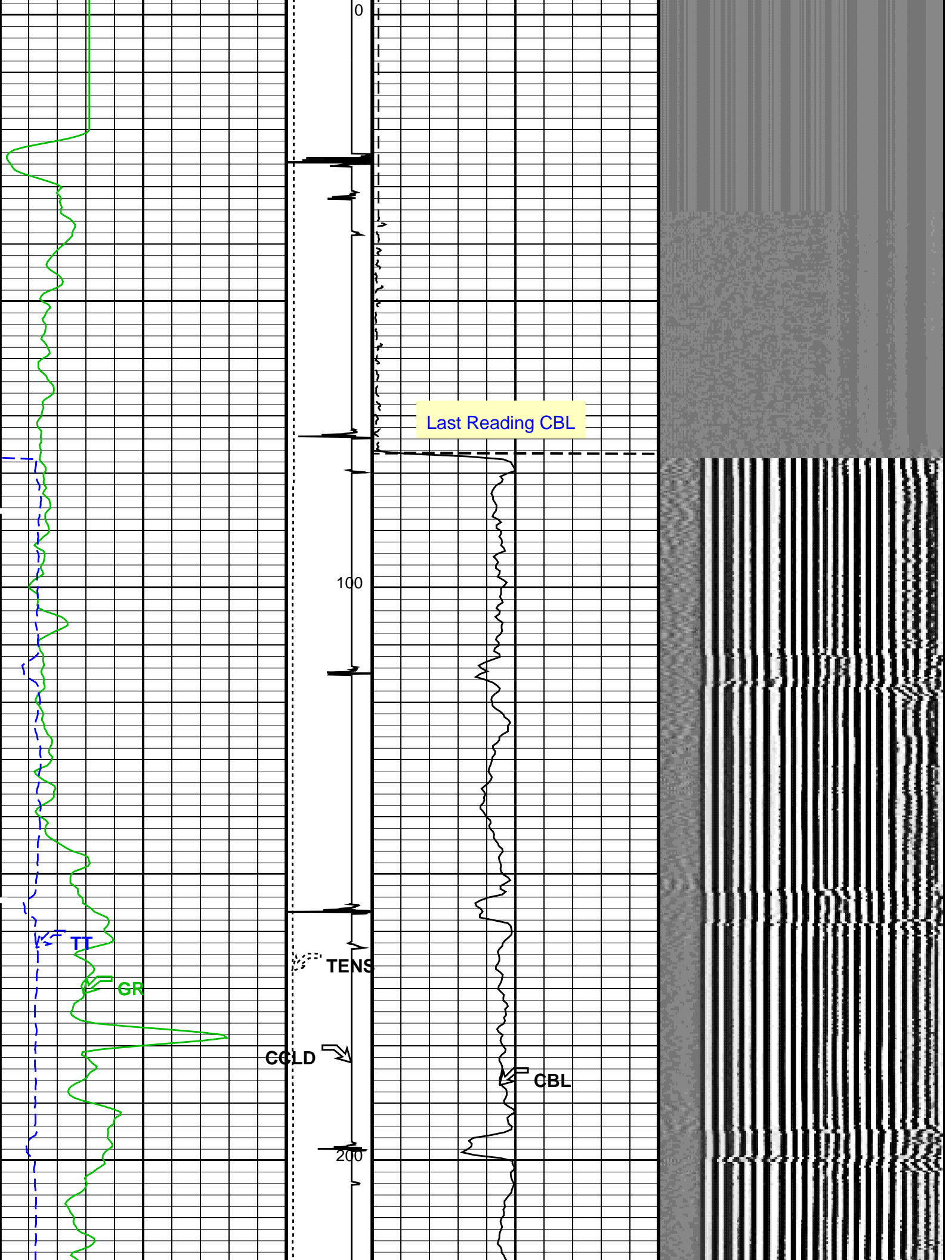


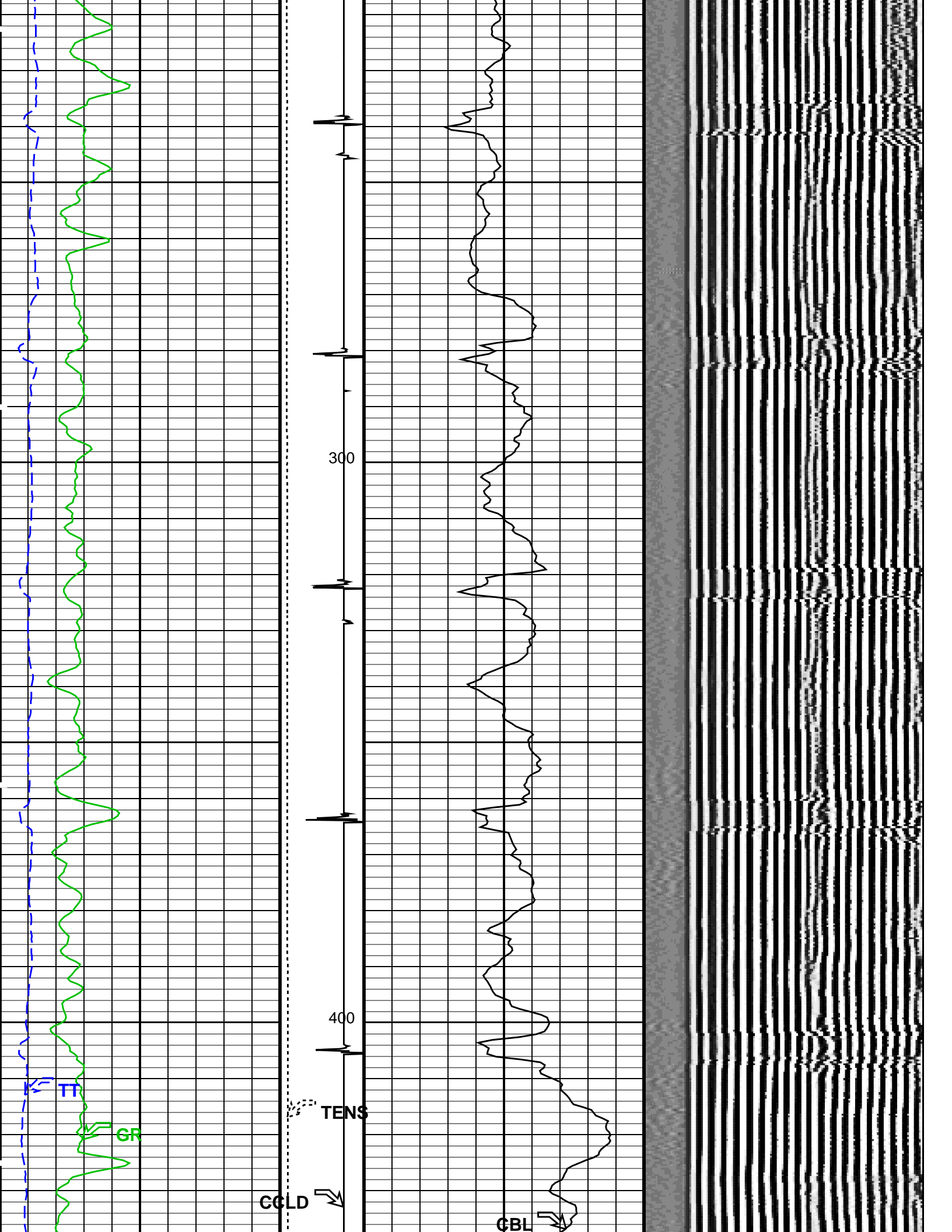
MAX RECORDED TEMPERATURE: 292 DEGF					
MAX RECORDED PRESSURE: 5203 PSIA					
SHORT JOINTS: 11809 FT & 8643 FT					
MAIN PASS LOGGED UNDER 0 SURFACE PRESSURE					
EXPECTED CBL AMP IN FREE PIPE = 80 MV					
CREW: JBARRY, BCUPP, SKRAMER, KJOHNS, JMANN					
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY					
RUN 1			RUN 2		
SERVICE ORDER #: CT1E-00031			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL: 80 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			
AH-38	Detail MT TelStatus CTEM	31.6			
HBMS-B PSC-A 2955 HUDH-A 2955 HSTC-A HBMC-A GR CCL HBMC HTPS-A 2955 HCQG_E_Mano RTD_Thermometer		31.3			
	GR	26.4			
	CCL	24.0			
	HSTC Aux. HBMC Aux.	22.5			
	CQG Manom Well_Temp	21.1			
SCMT-CB SCMC-CA 8164 SECH-CA CMIR-AG SCMS-CB 8317 SCMX-CA		20.2			

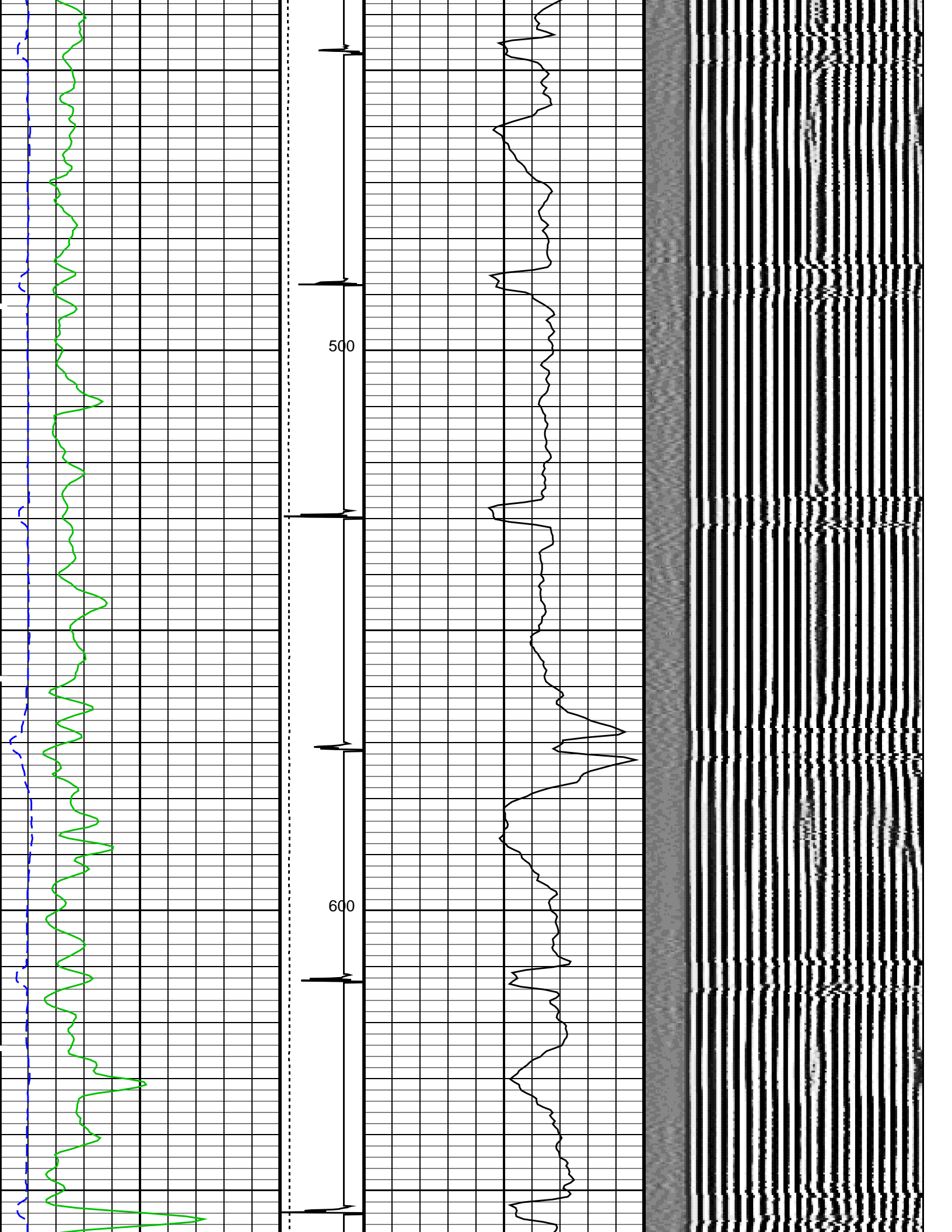


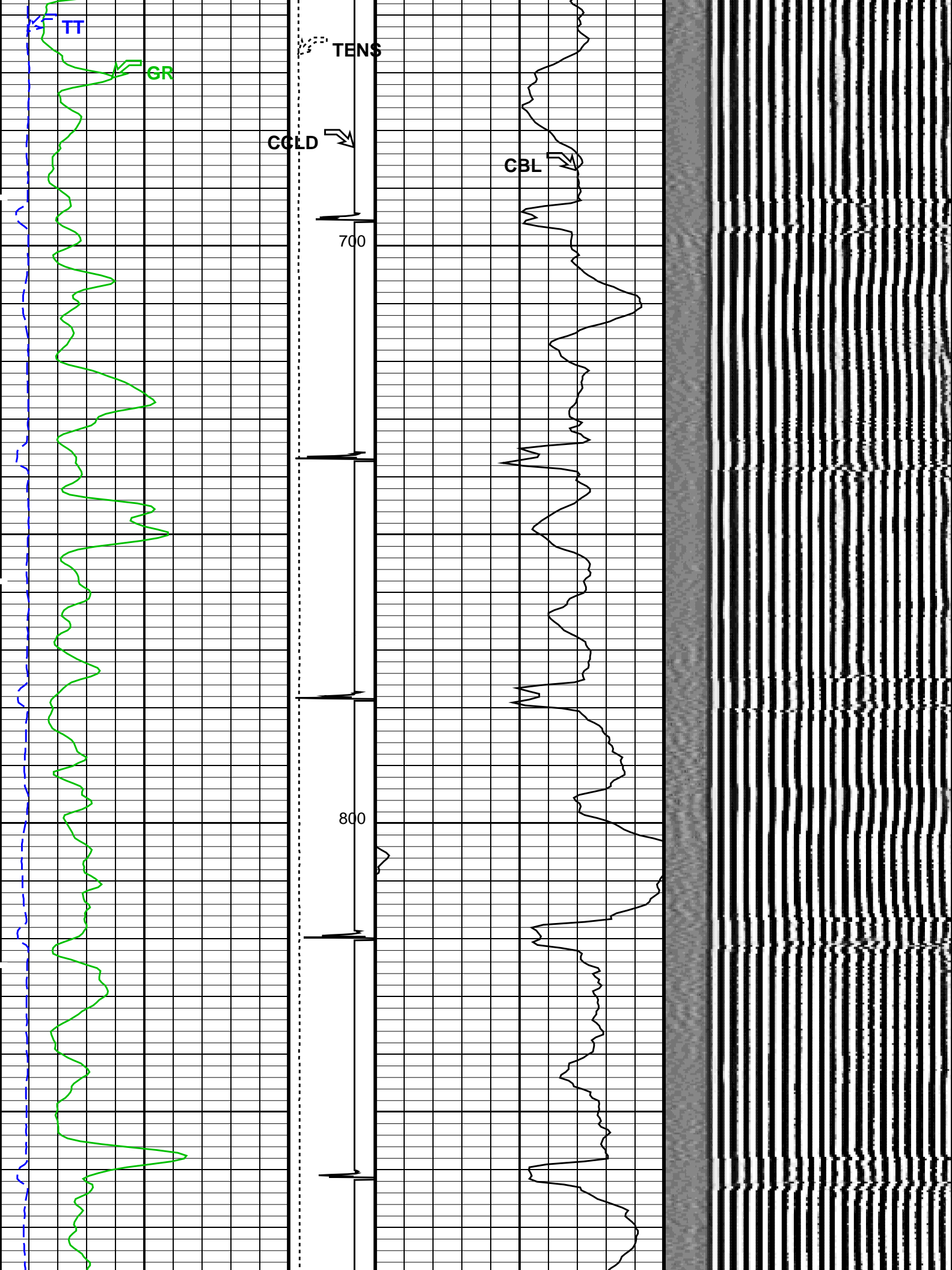
MAXIMUM STRING DIAMETER 2.07 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN FEET

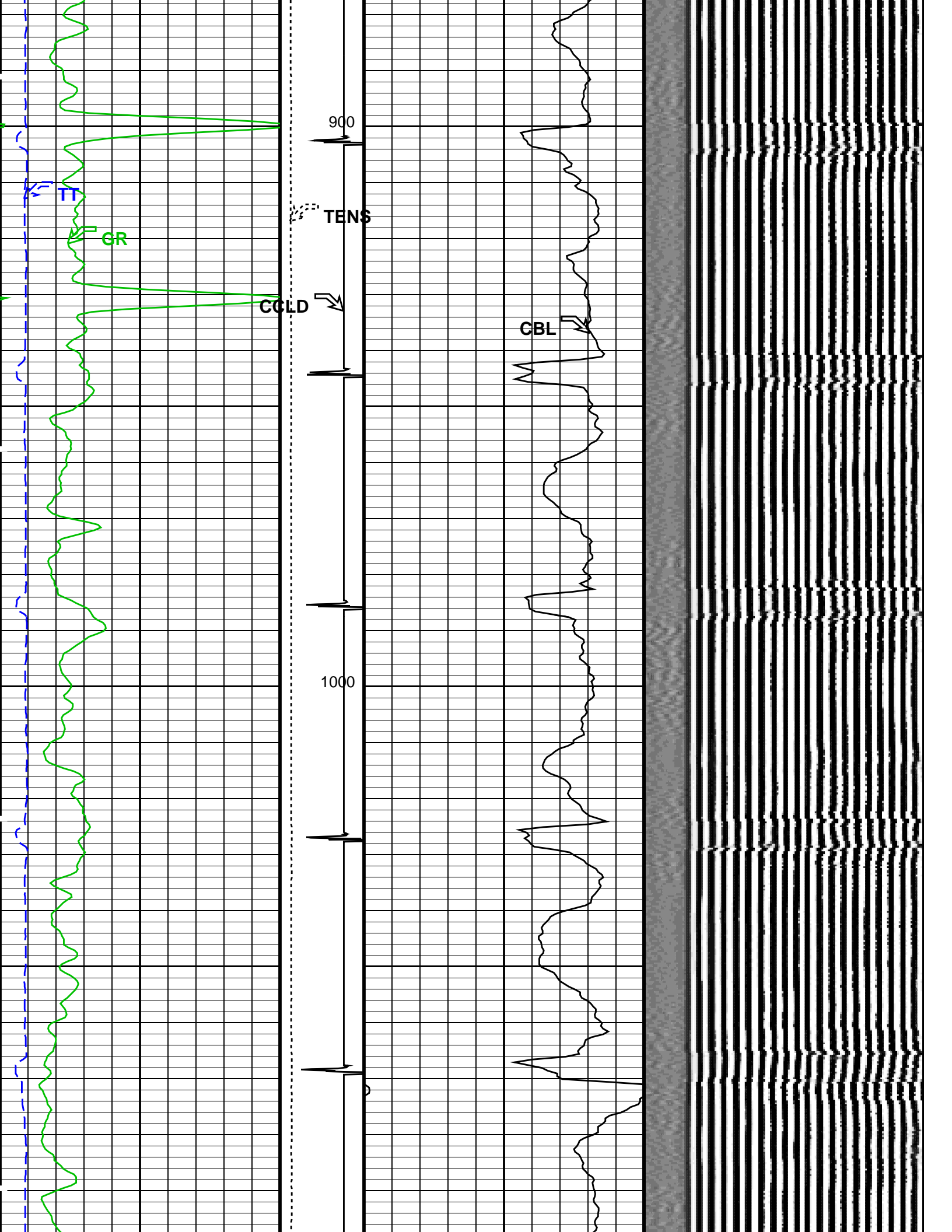




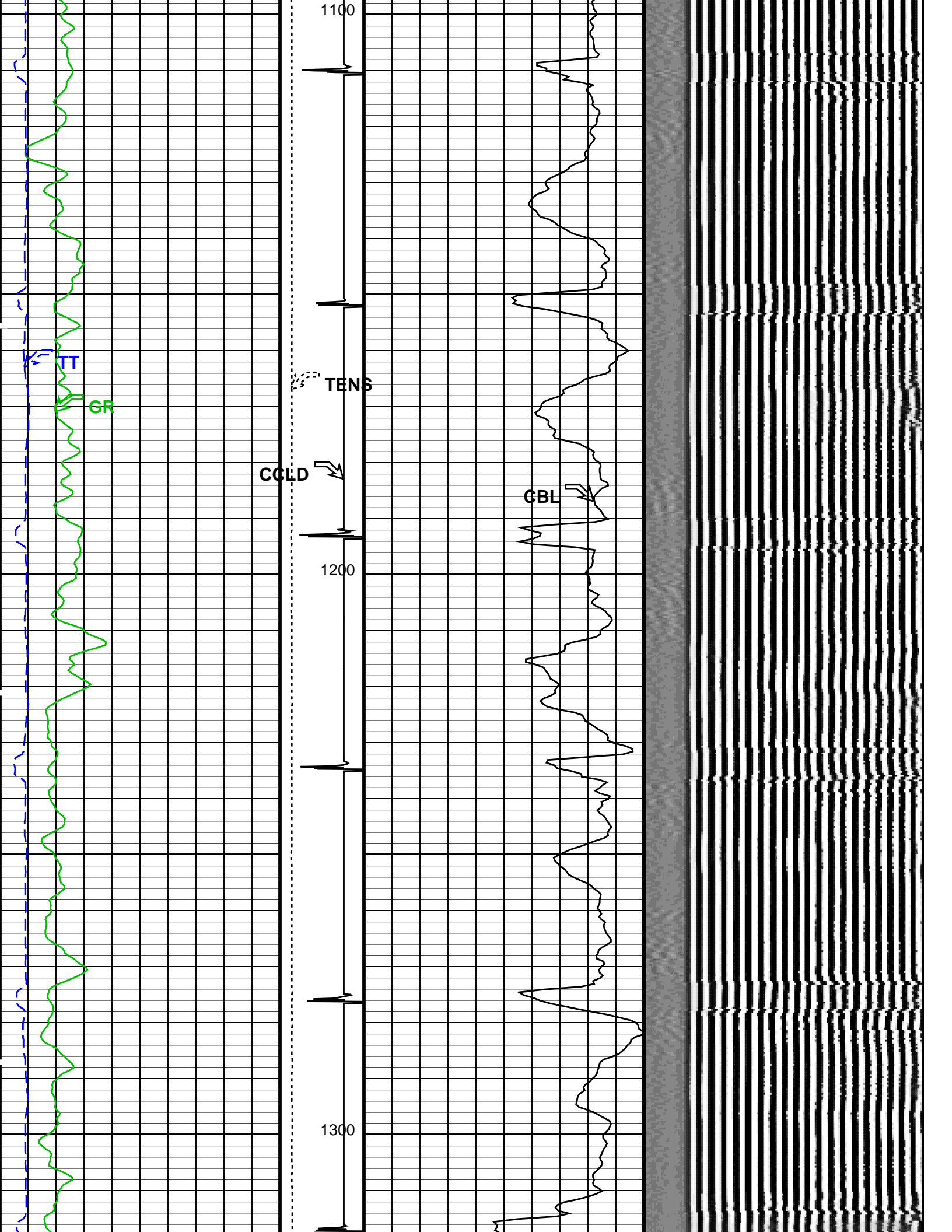




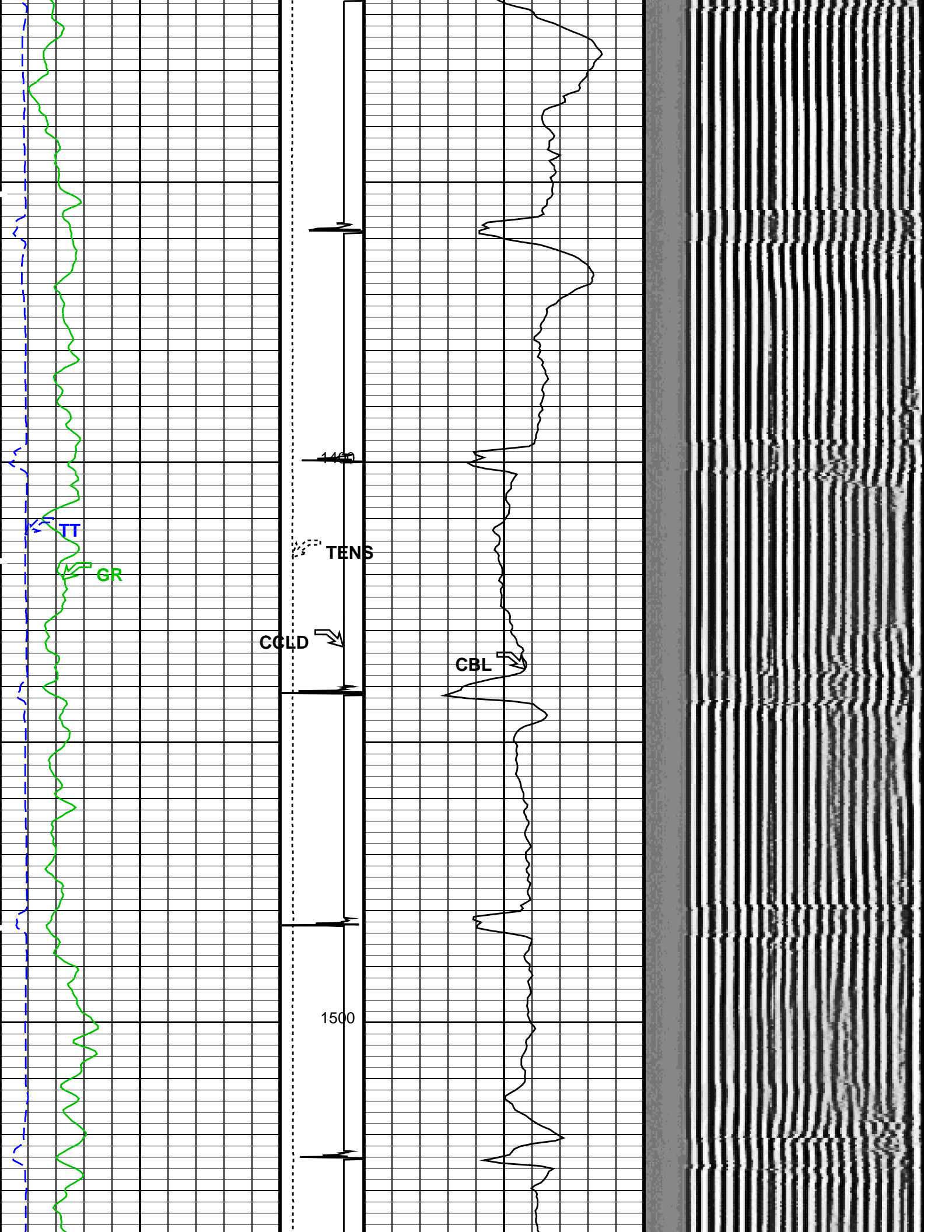


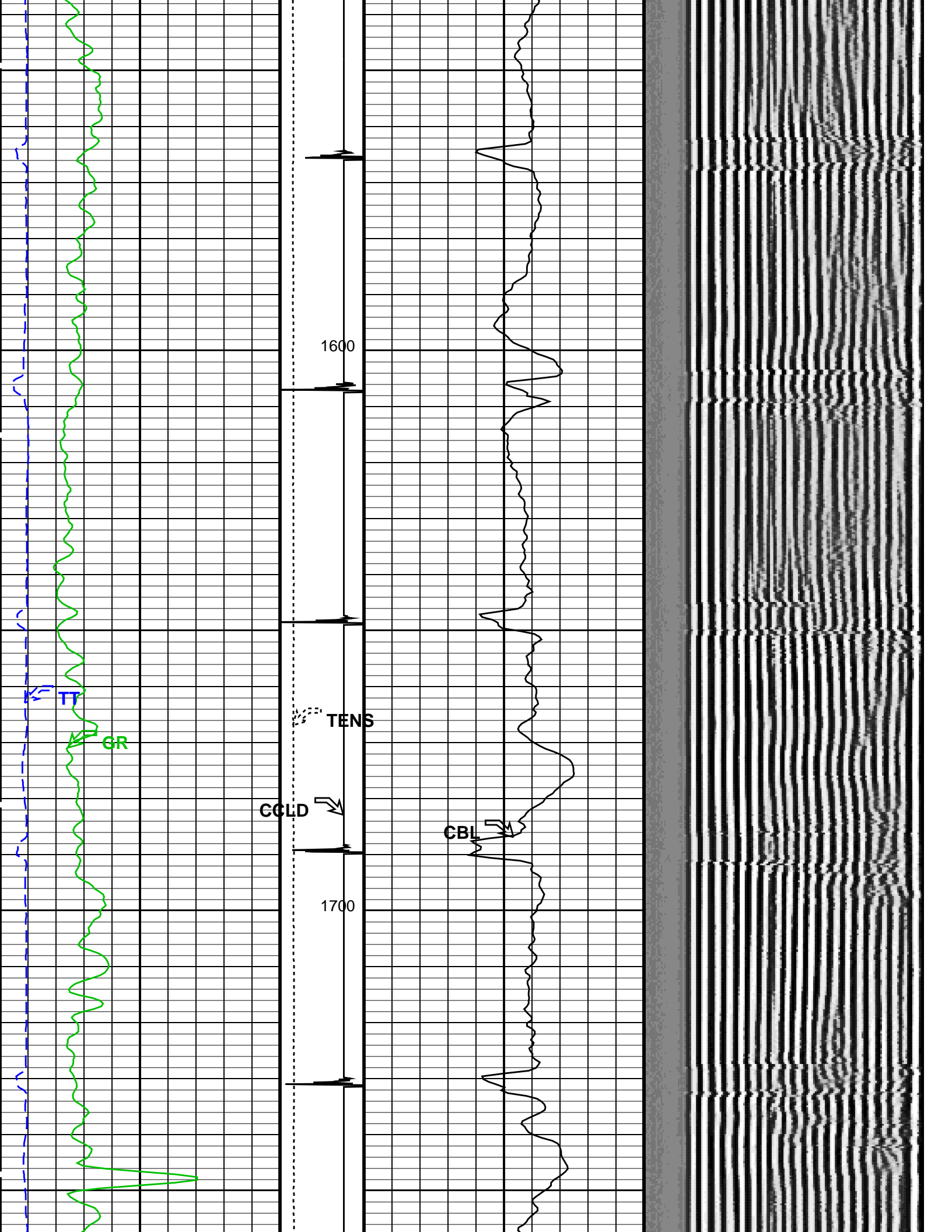


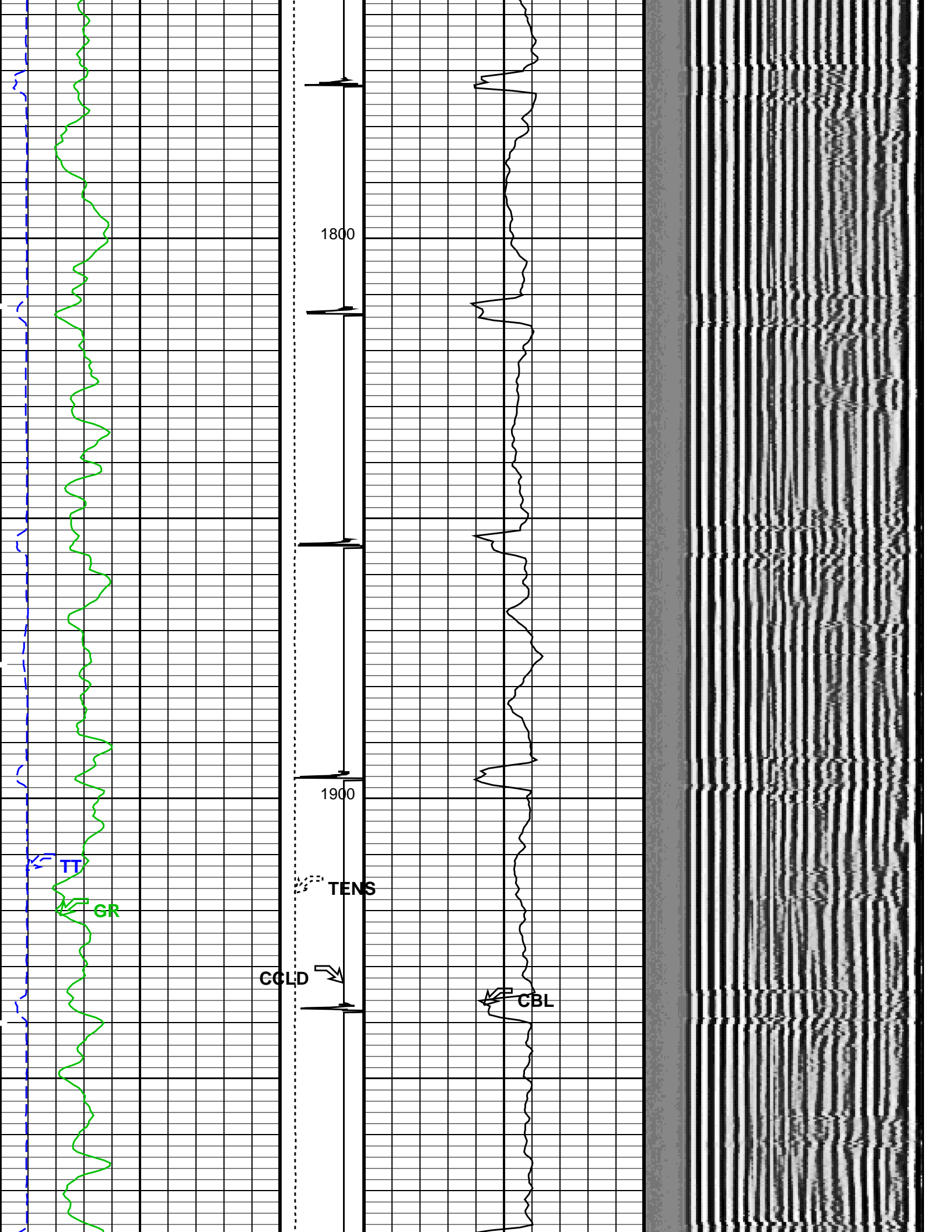


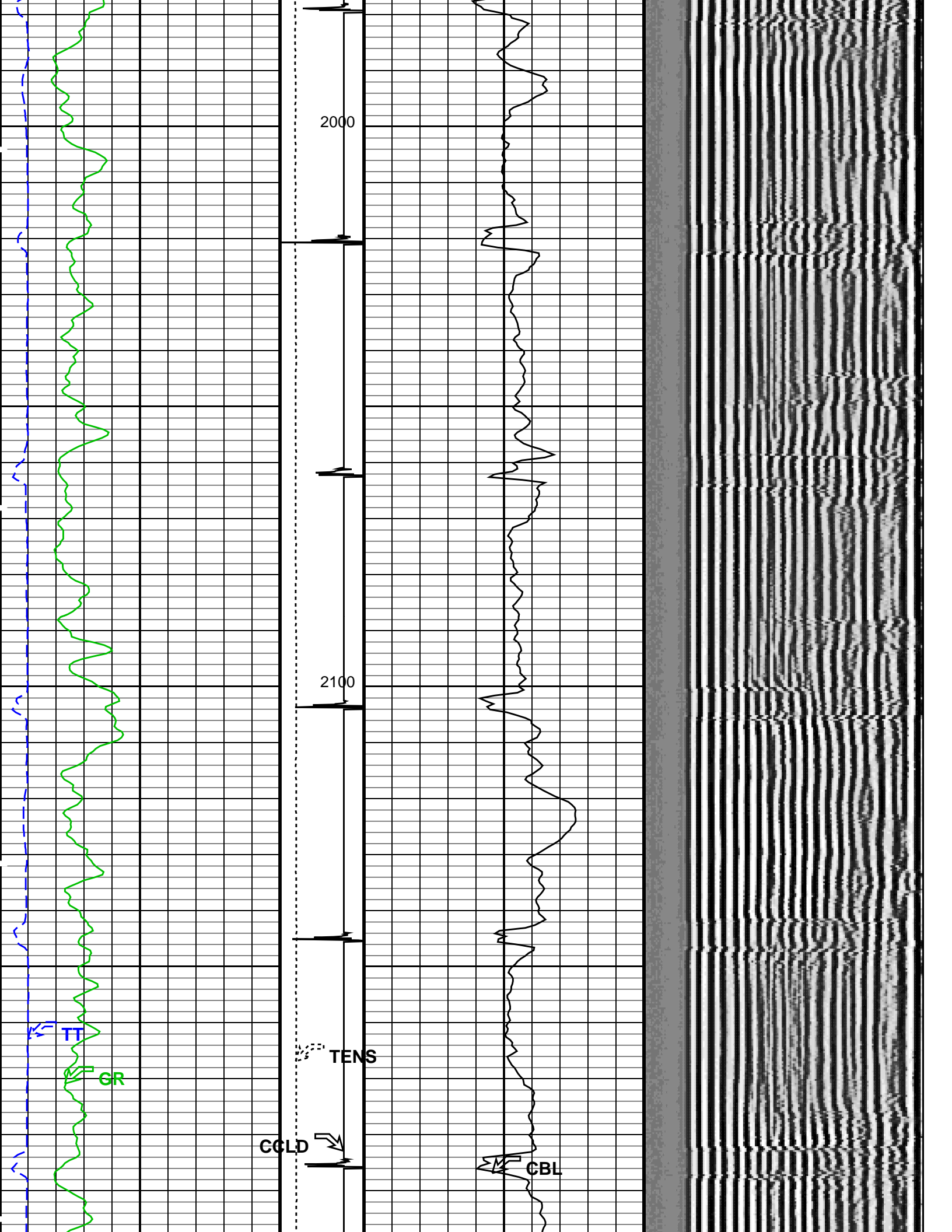




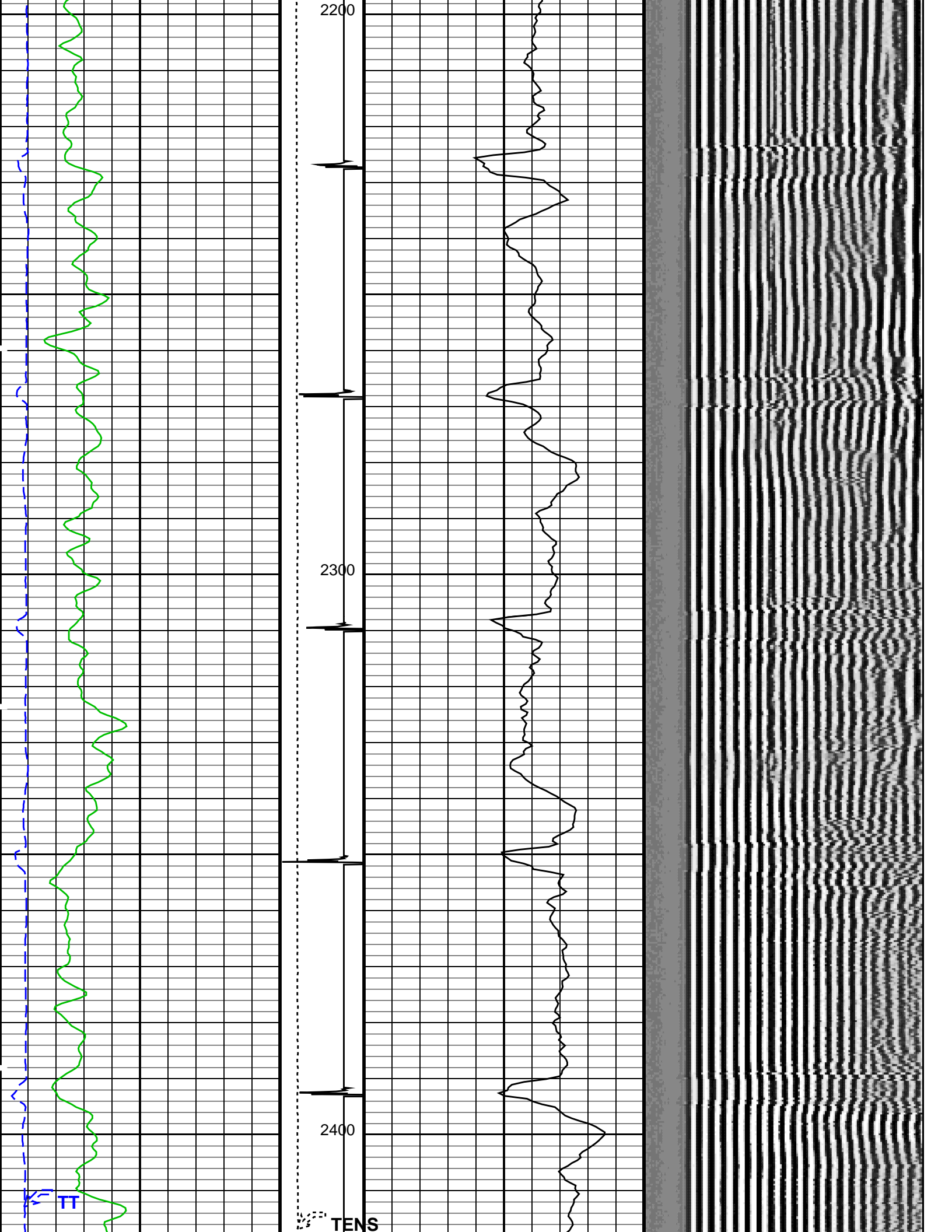


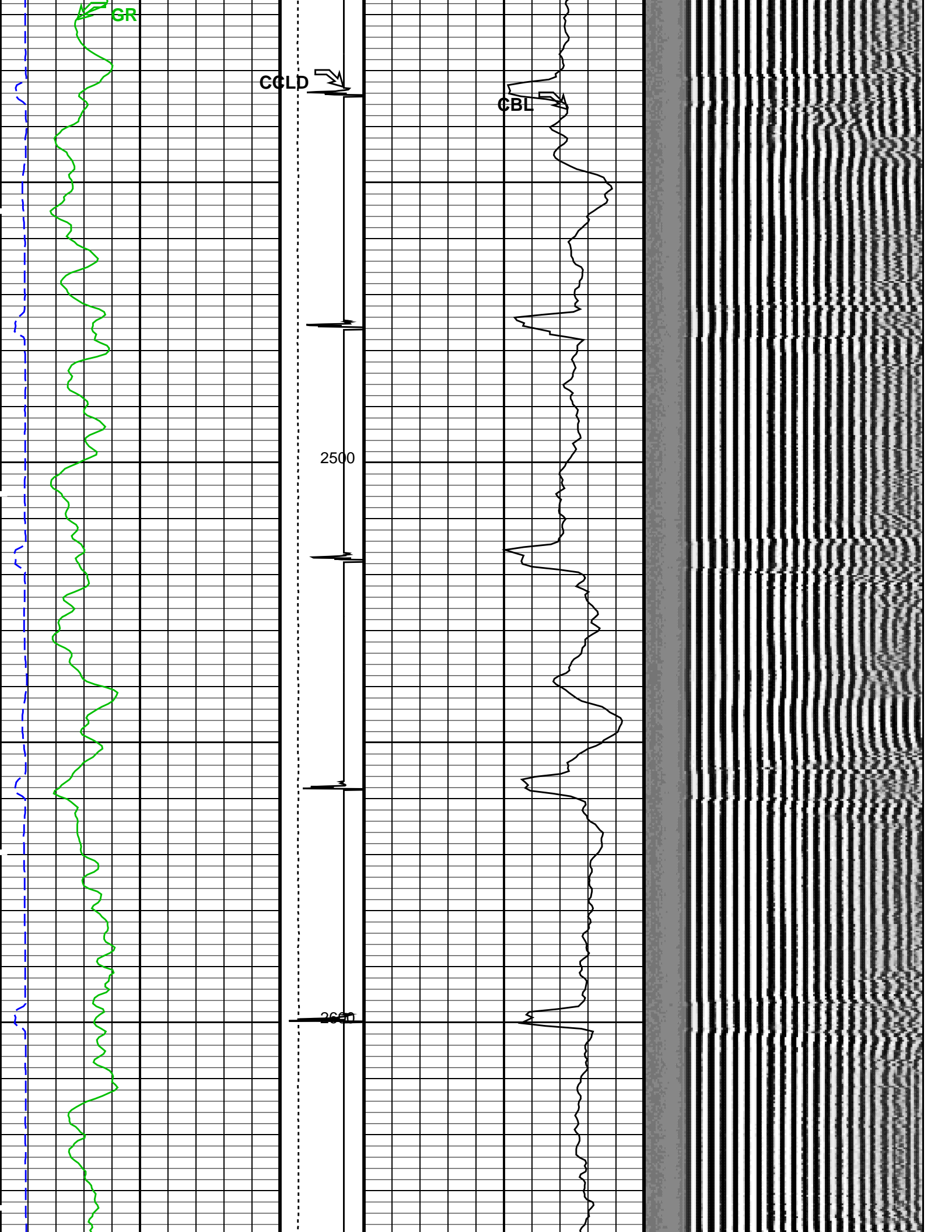


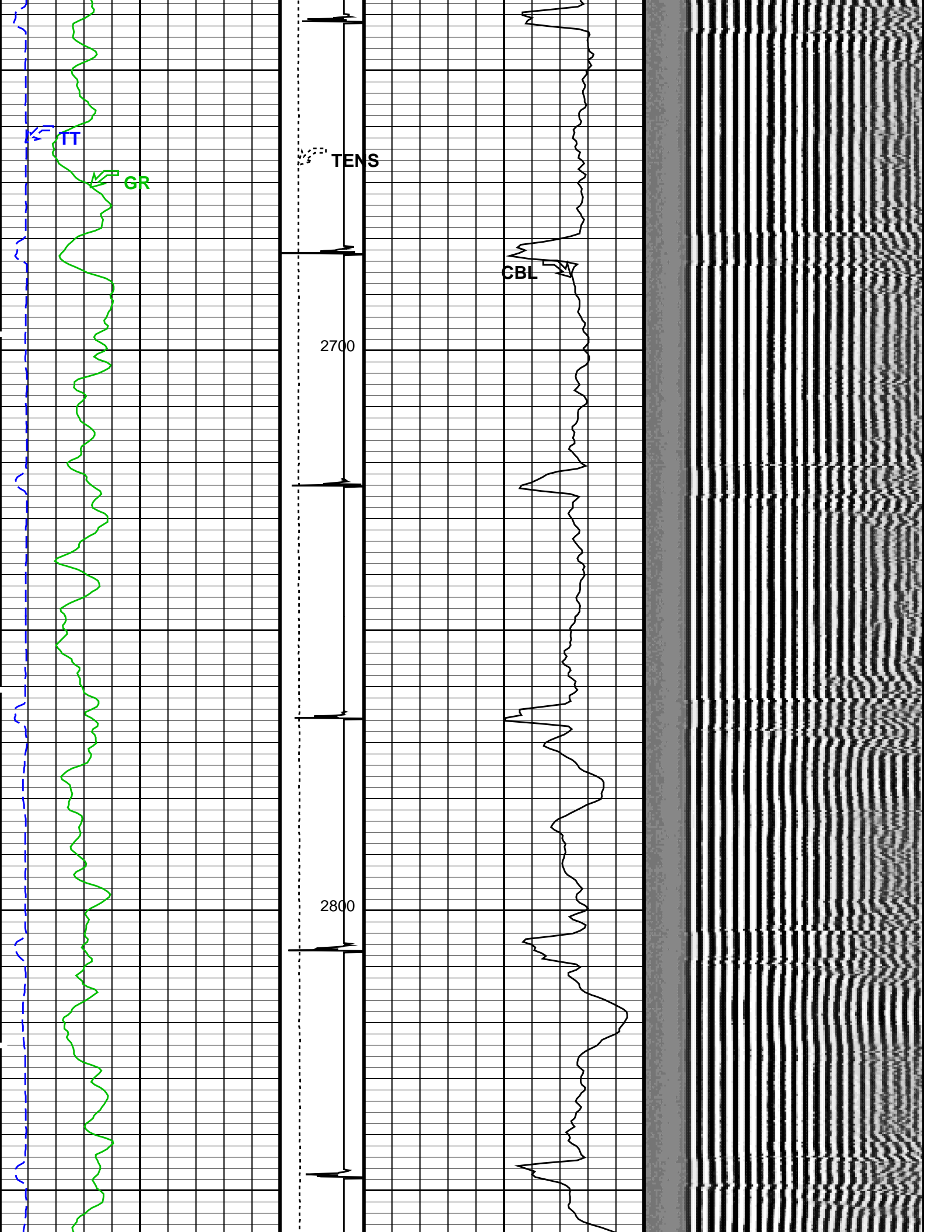


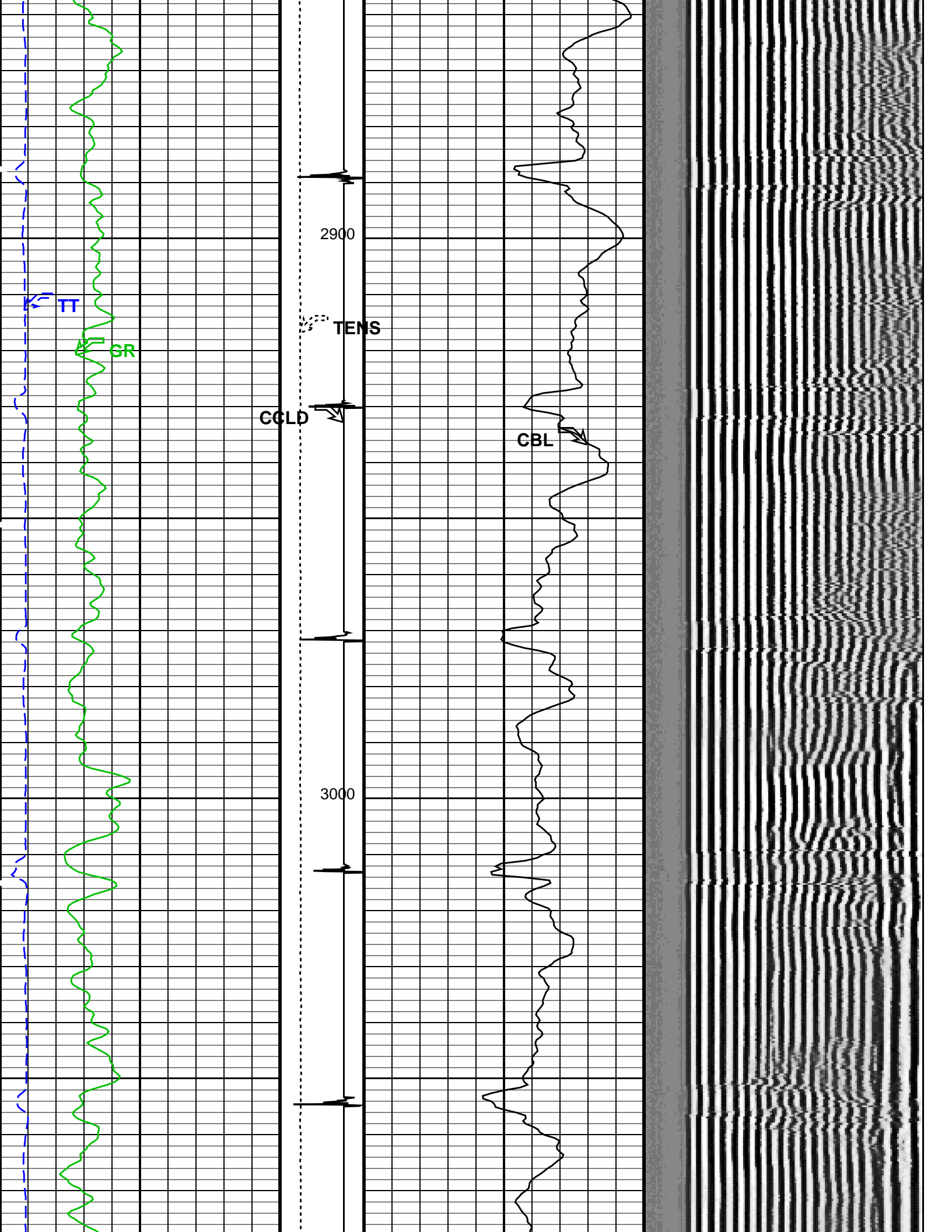




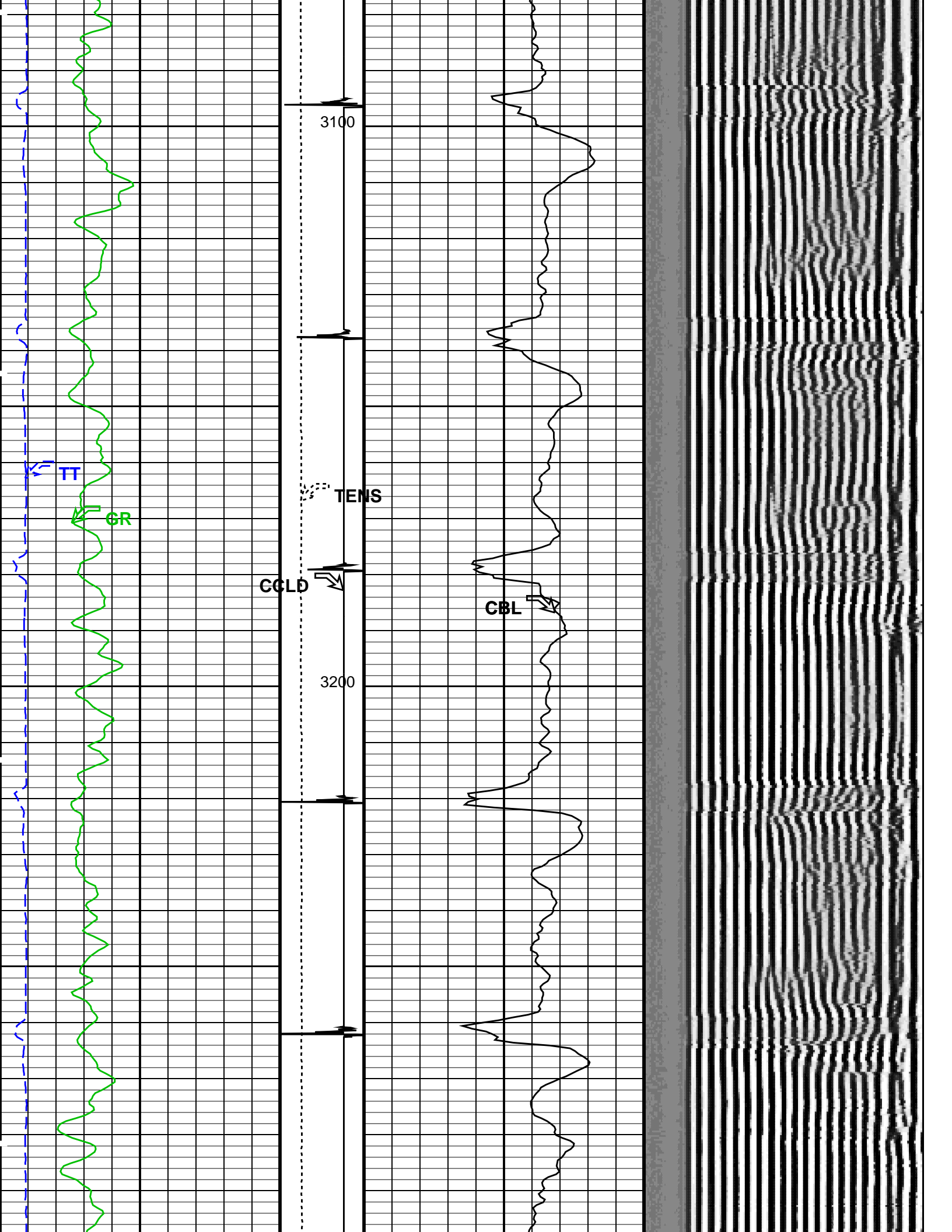


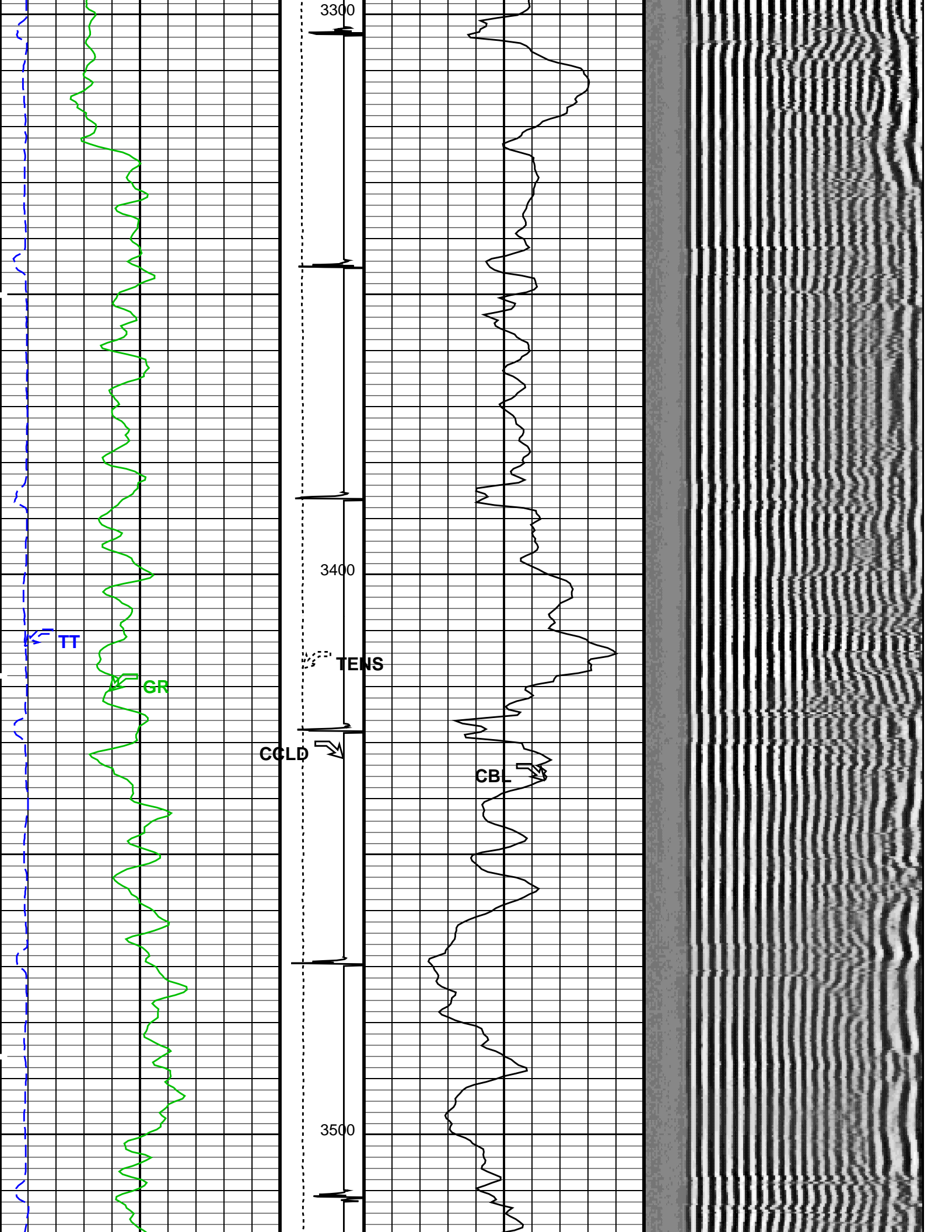


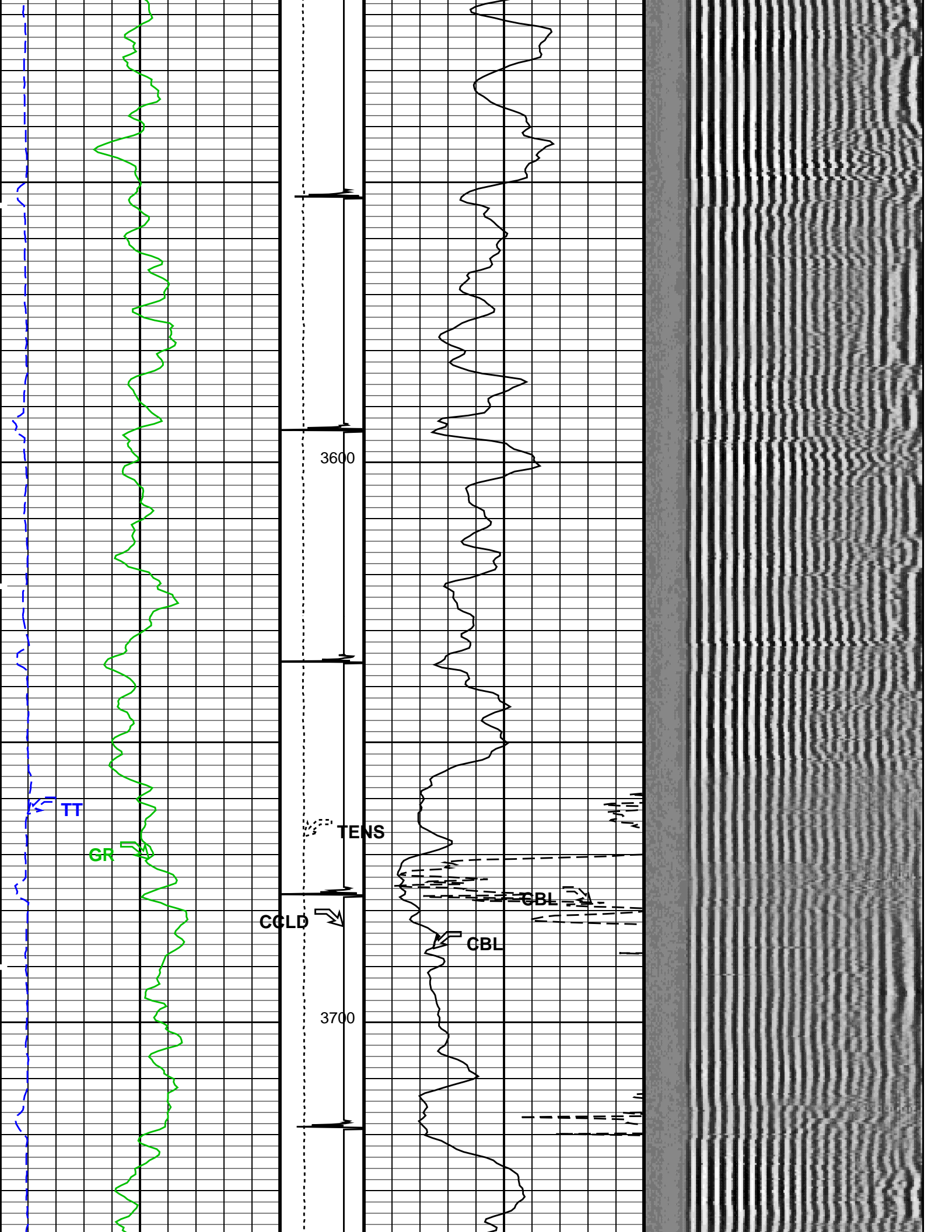


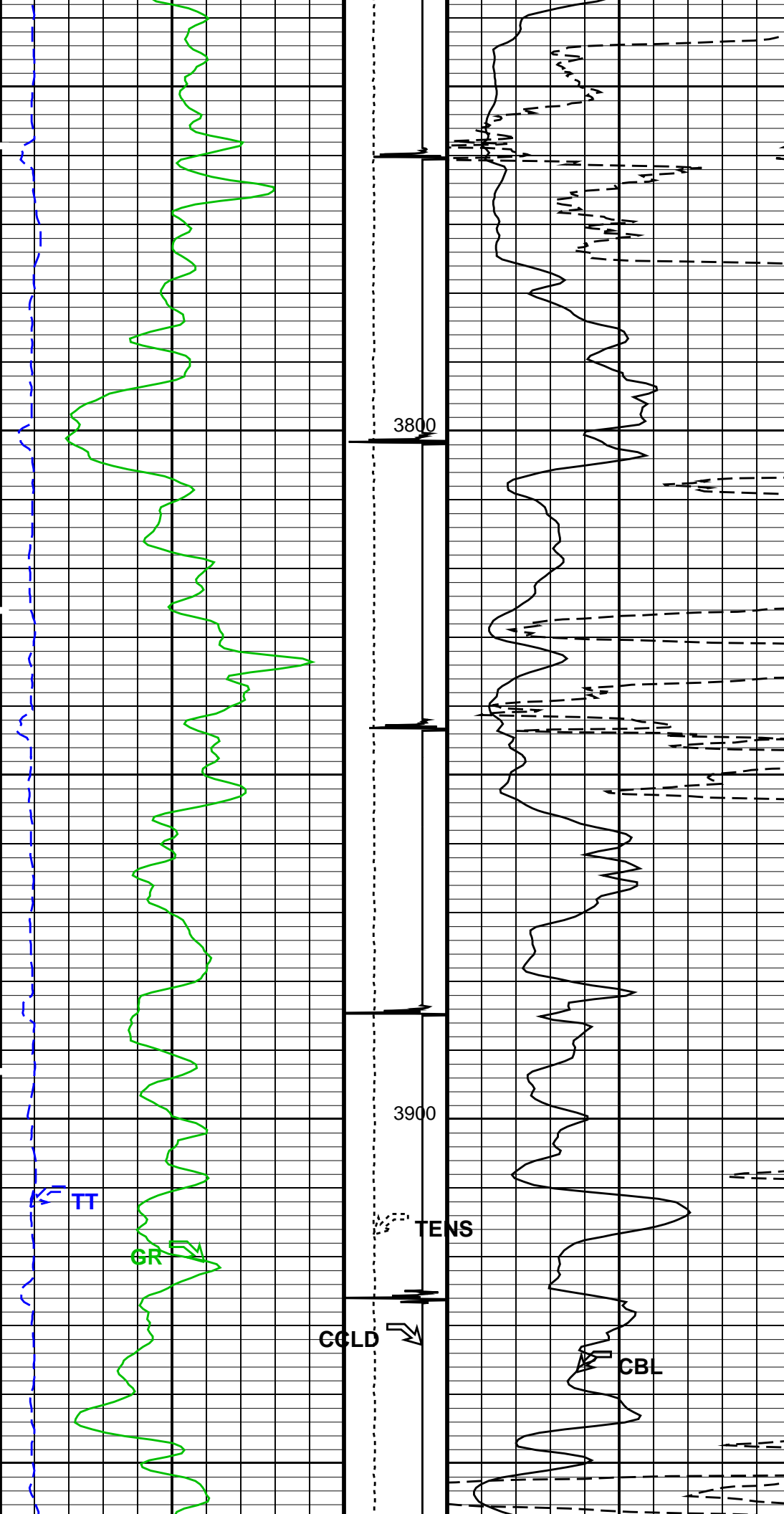




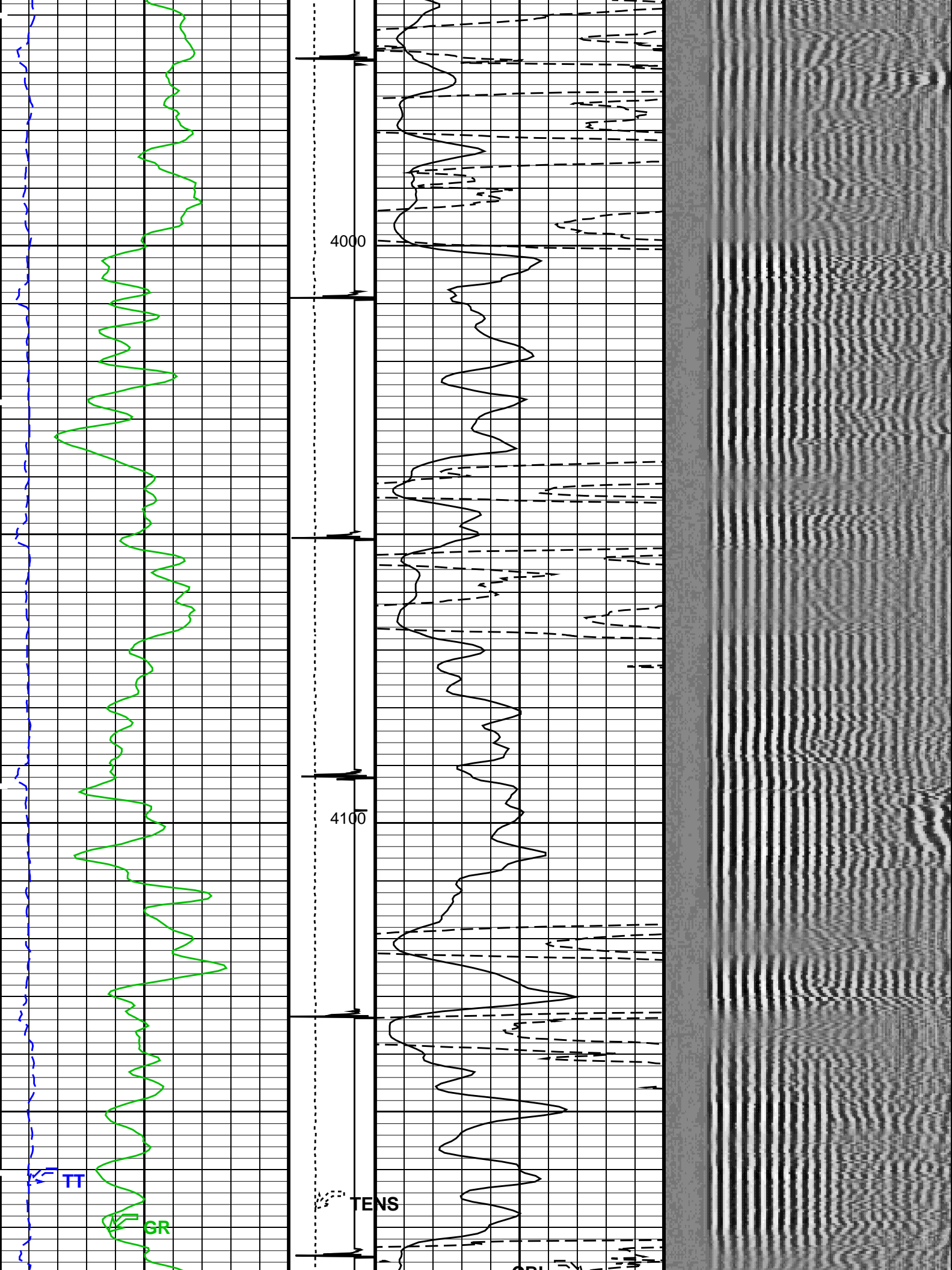


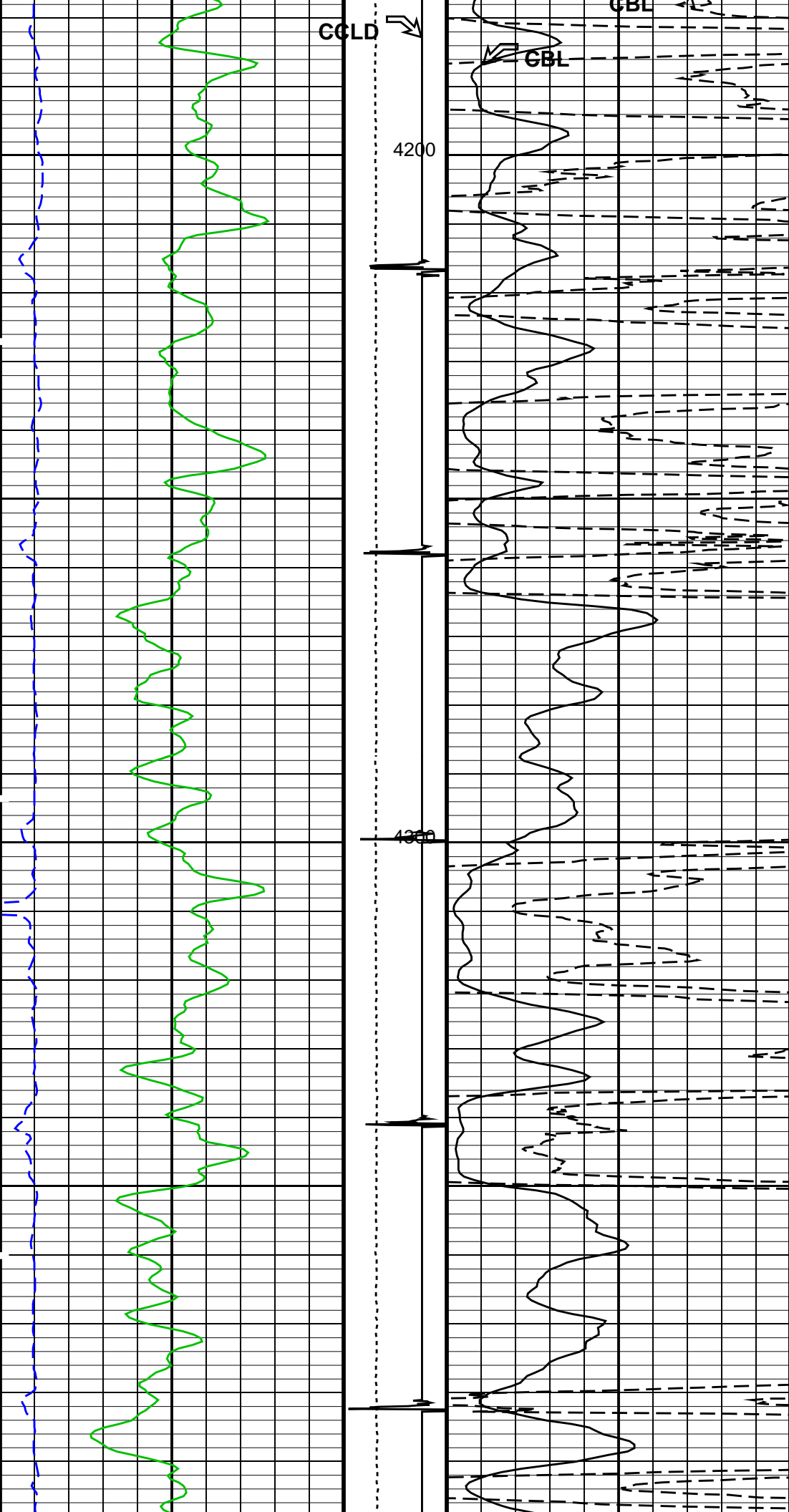


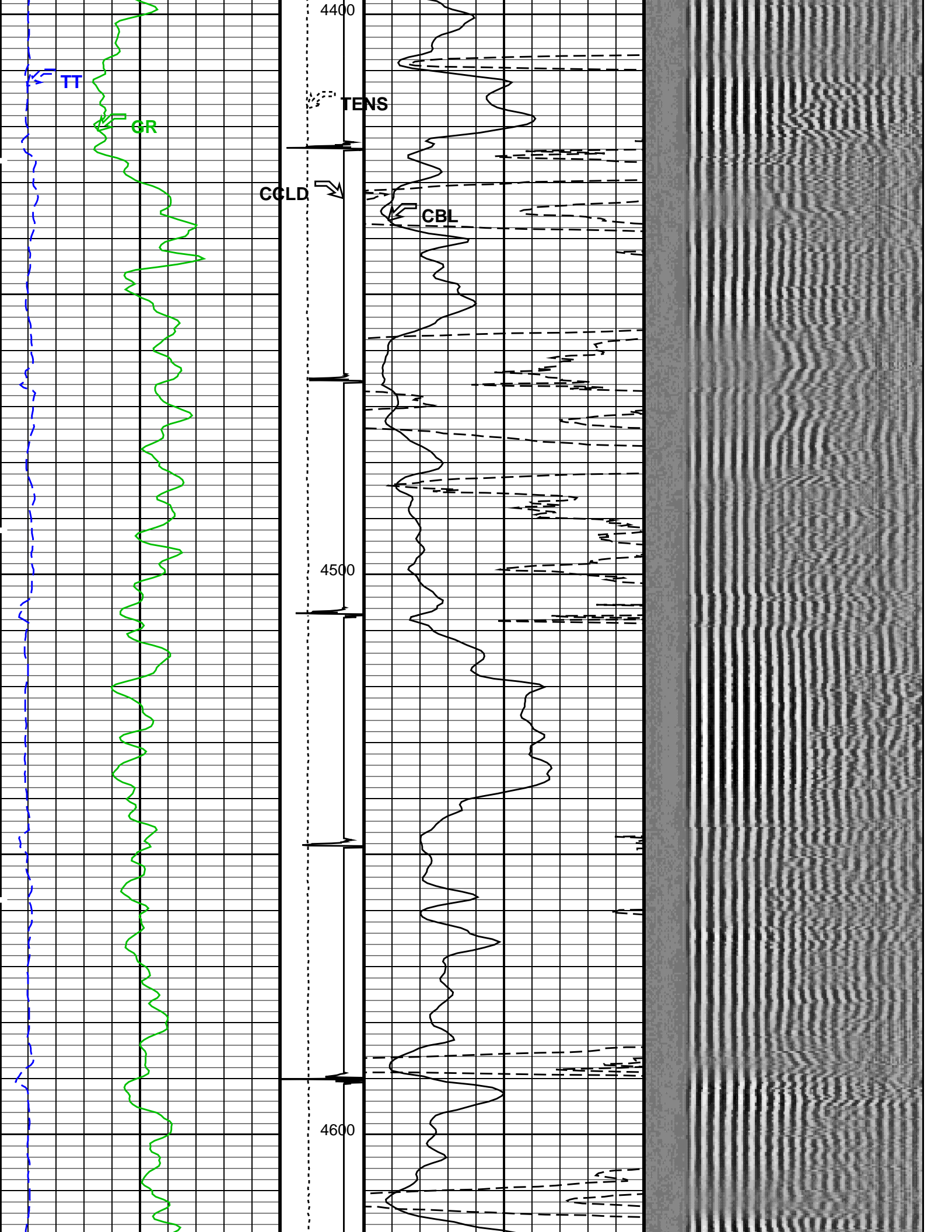


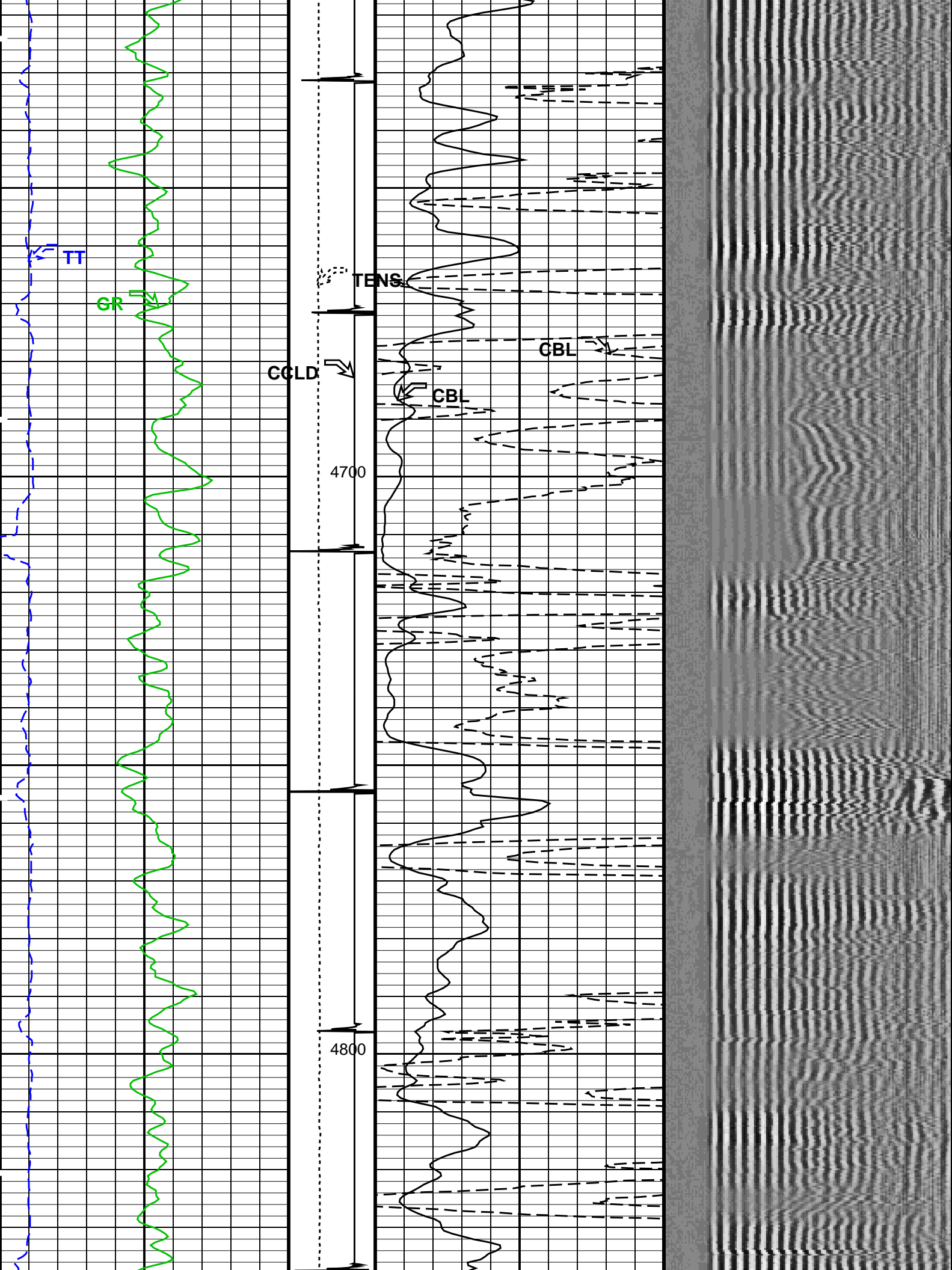




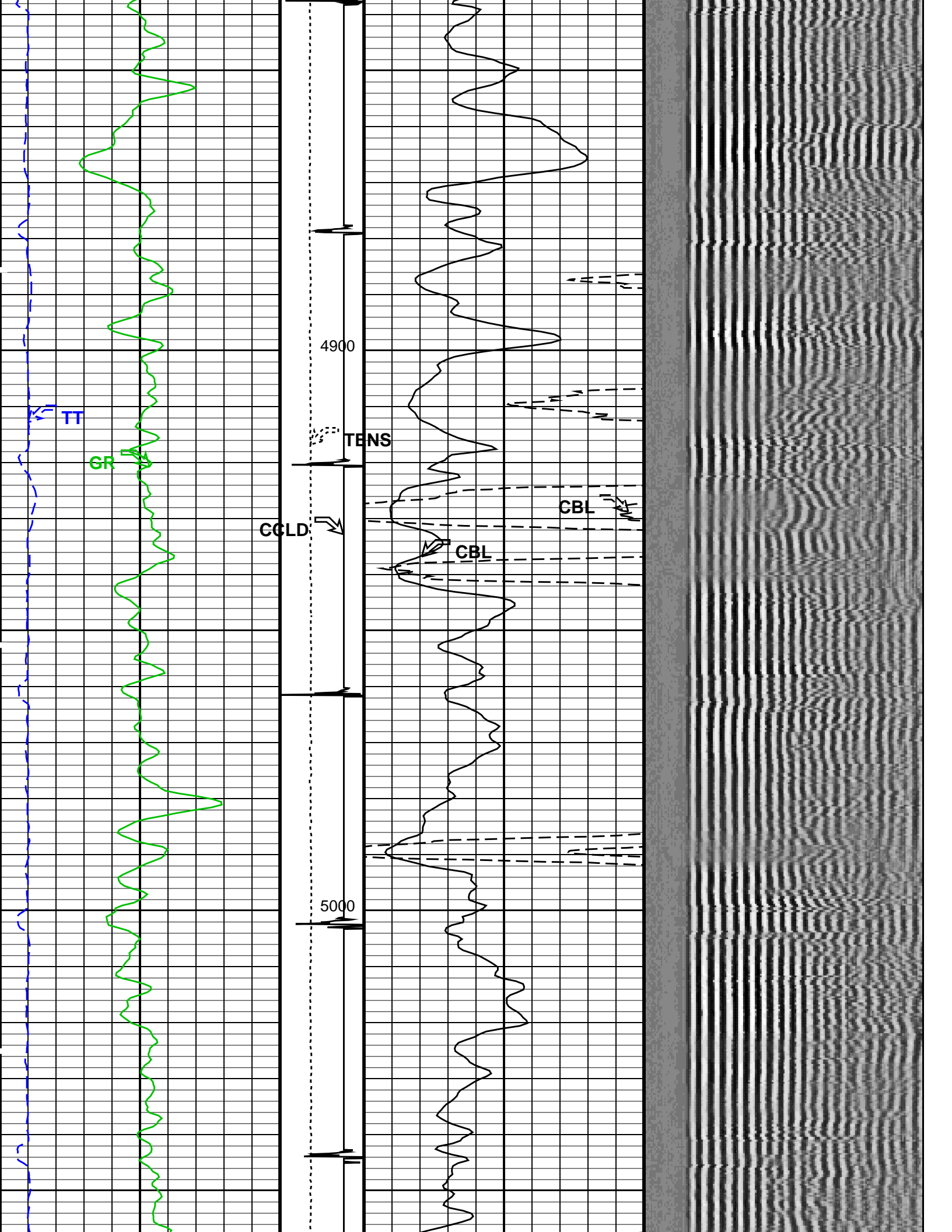


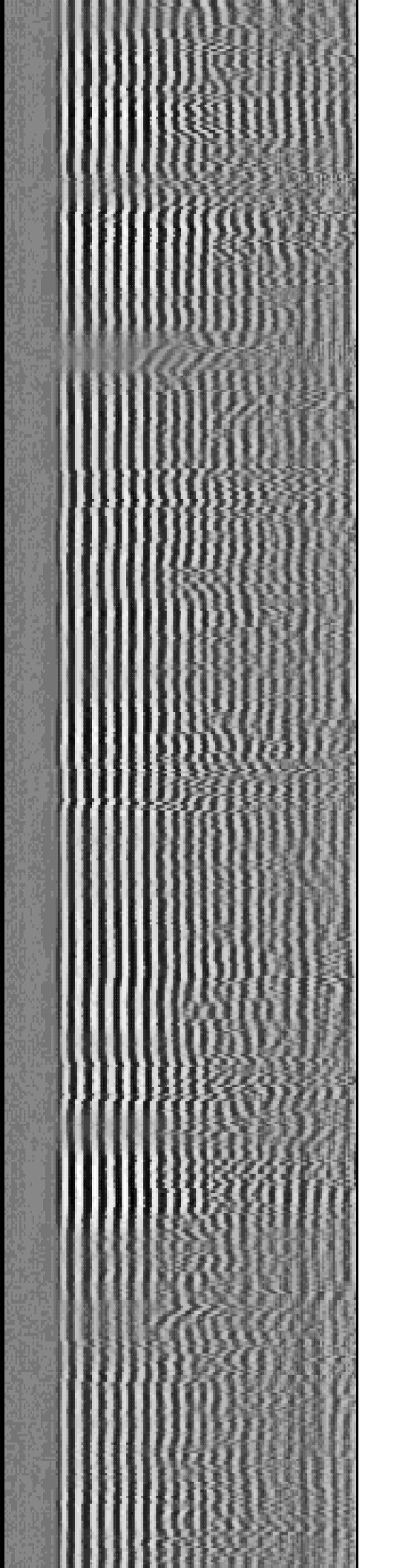
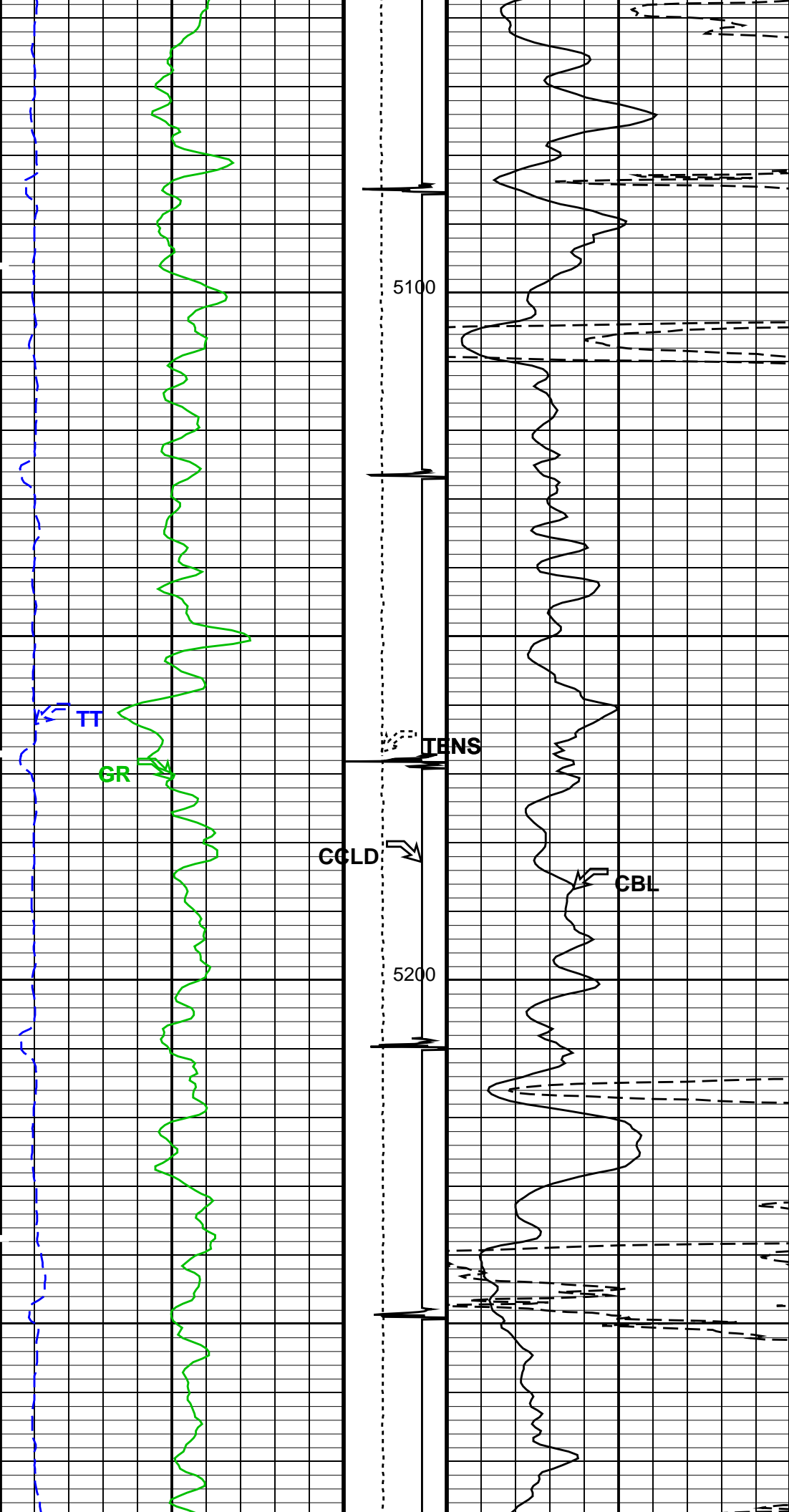


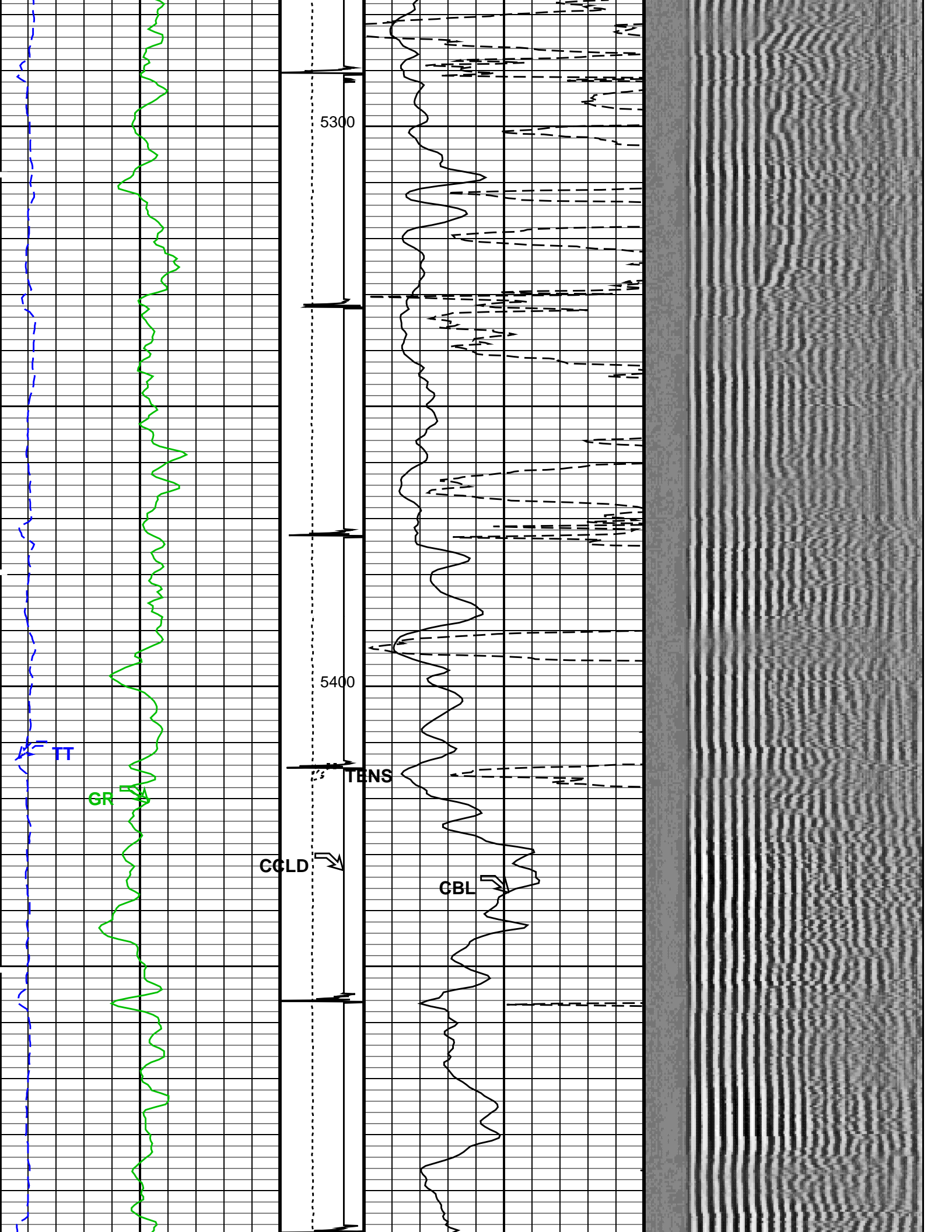


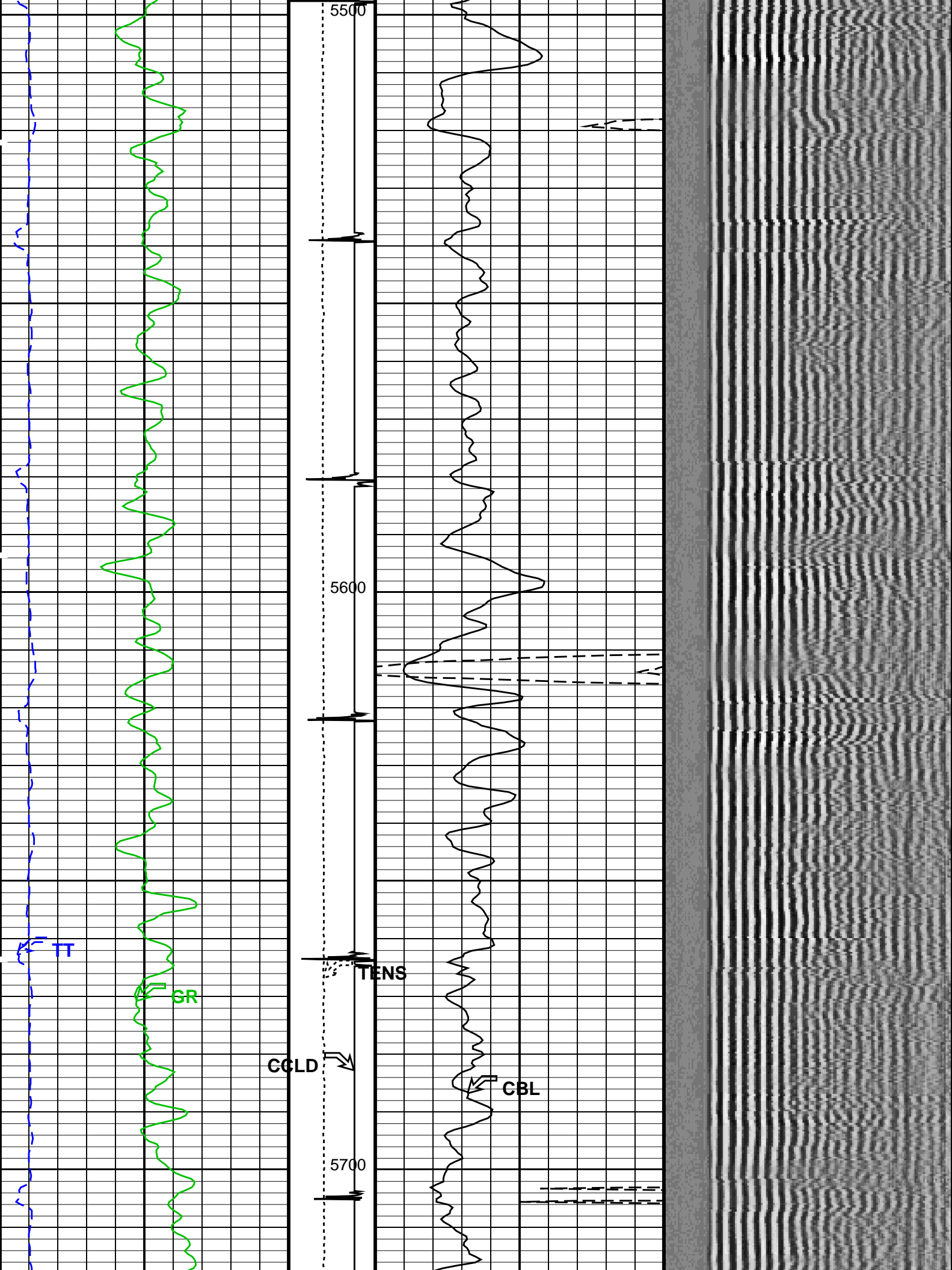




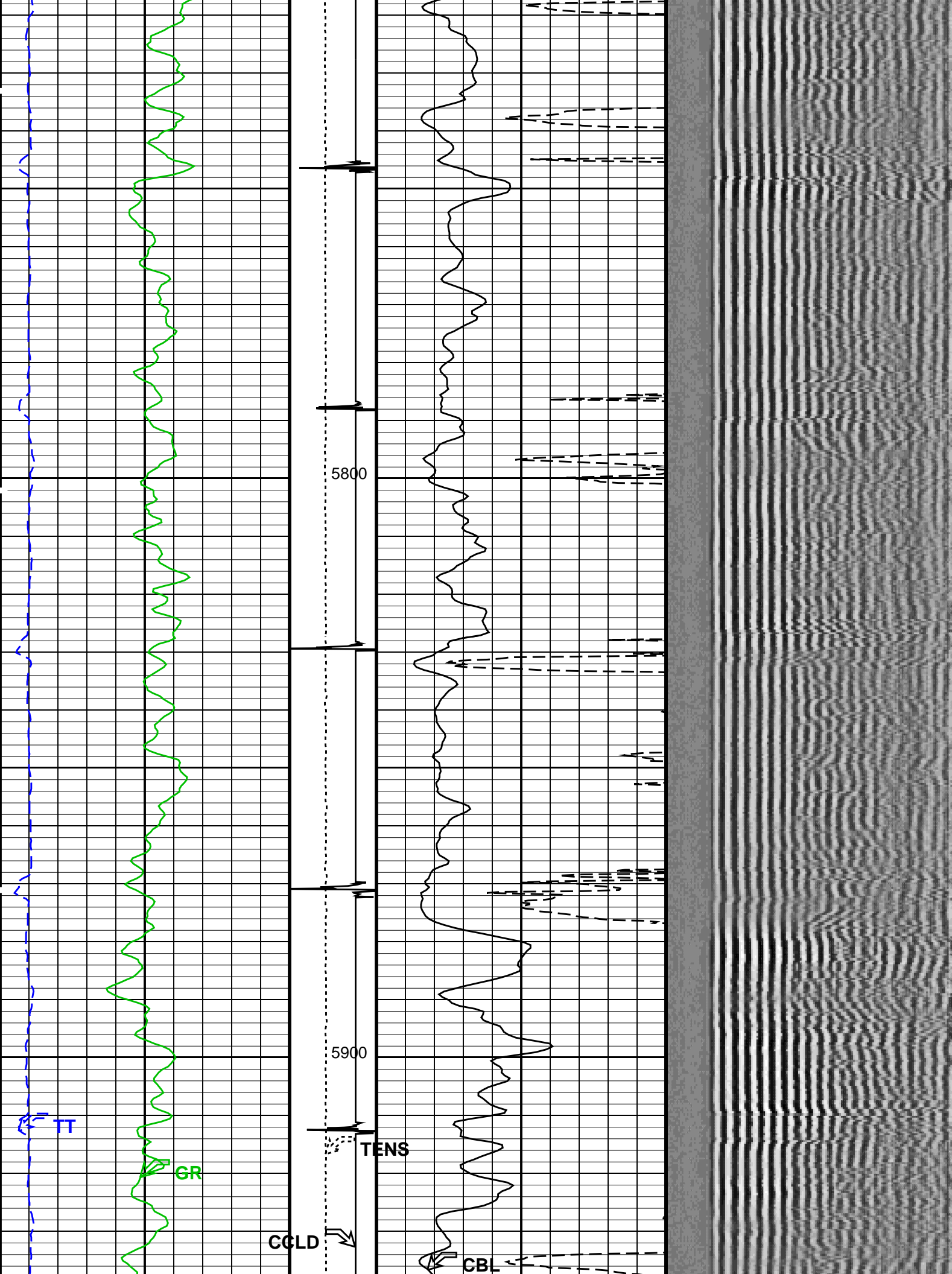


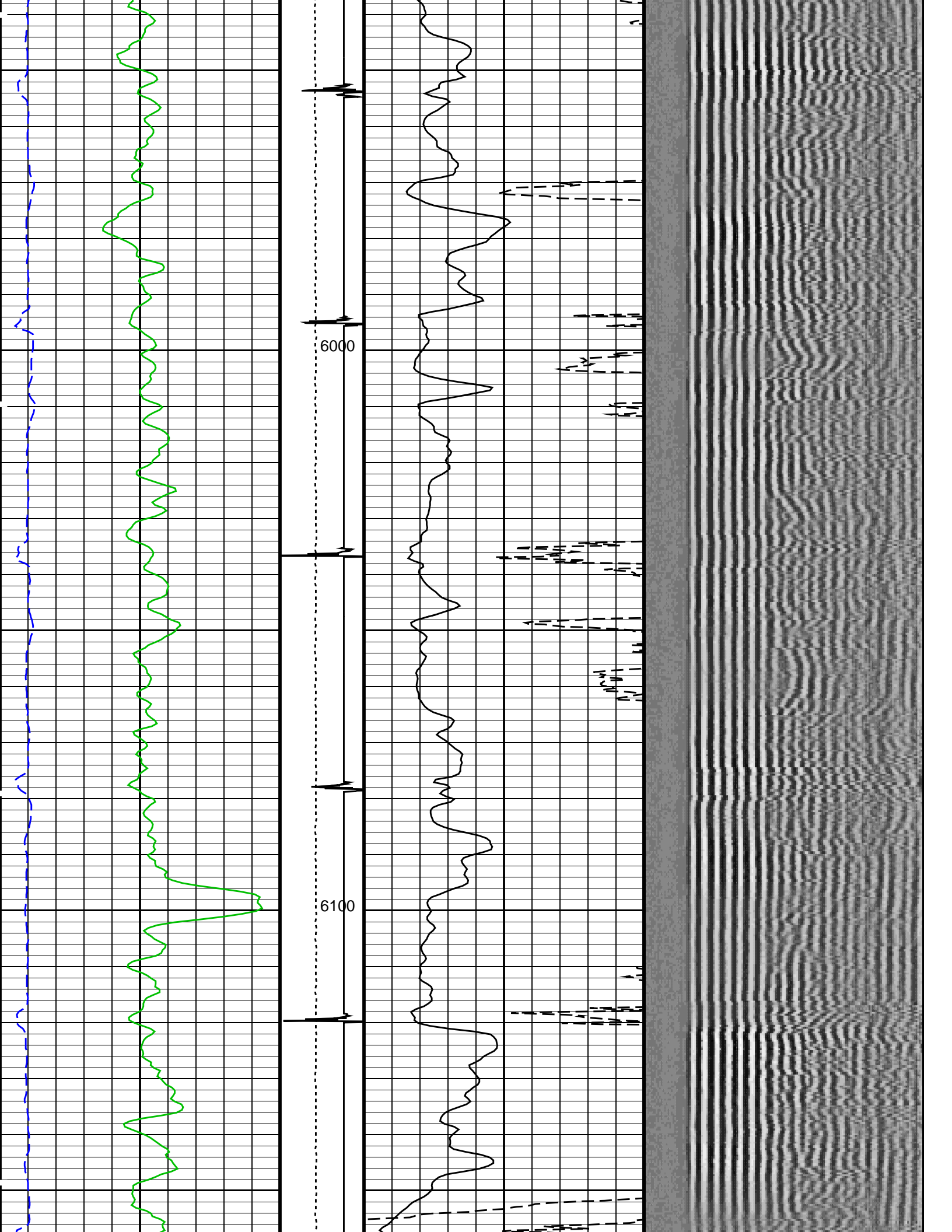


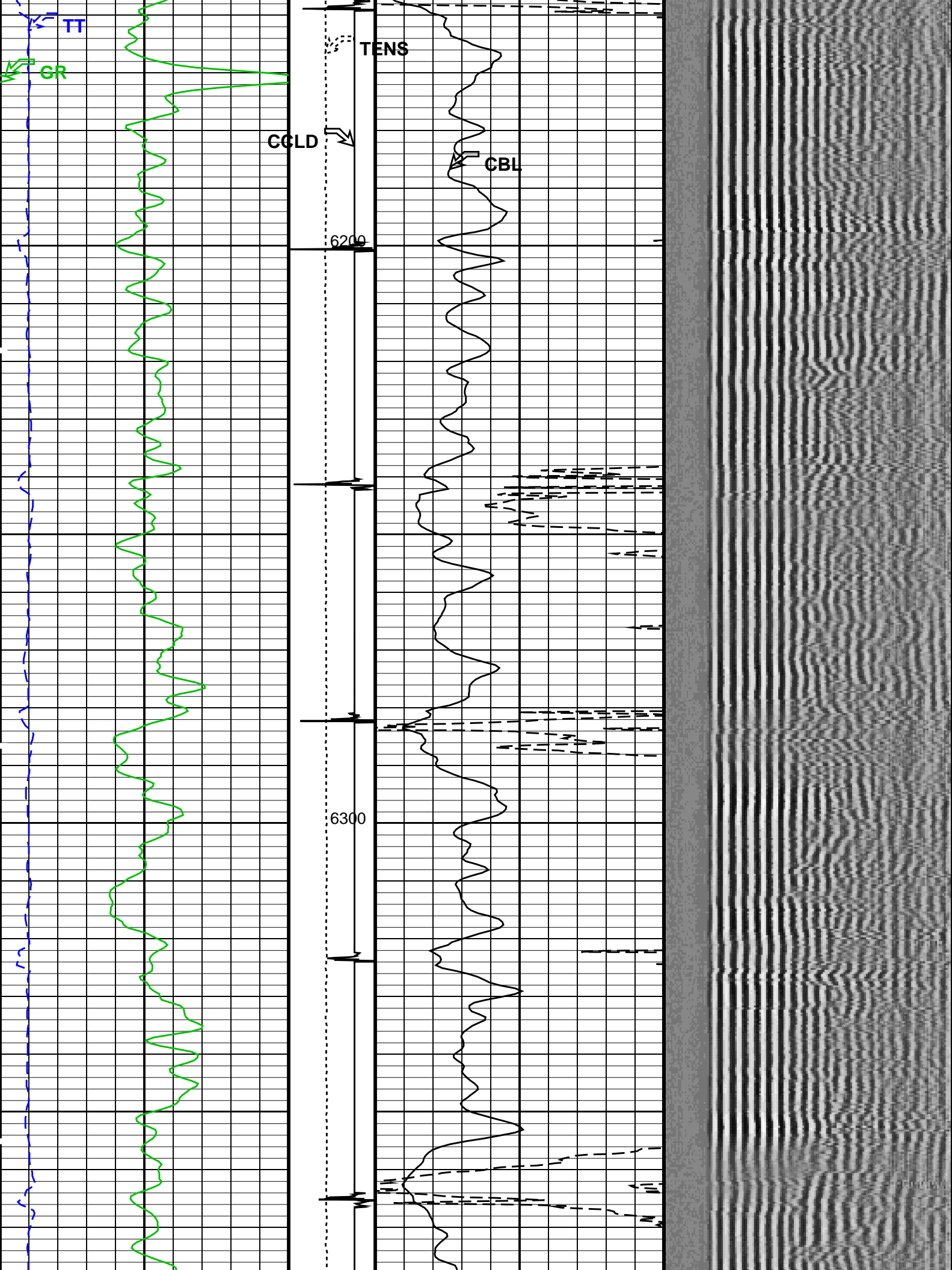


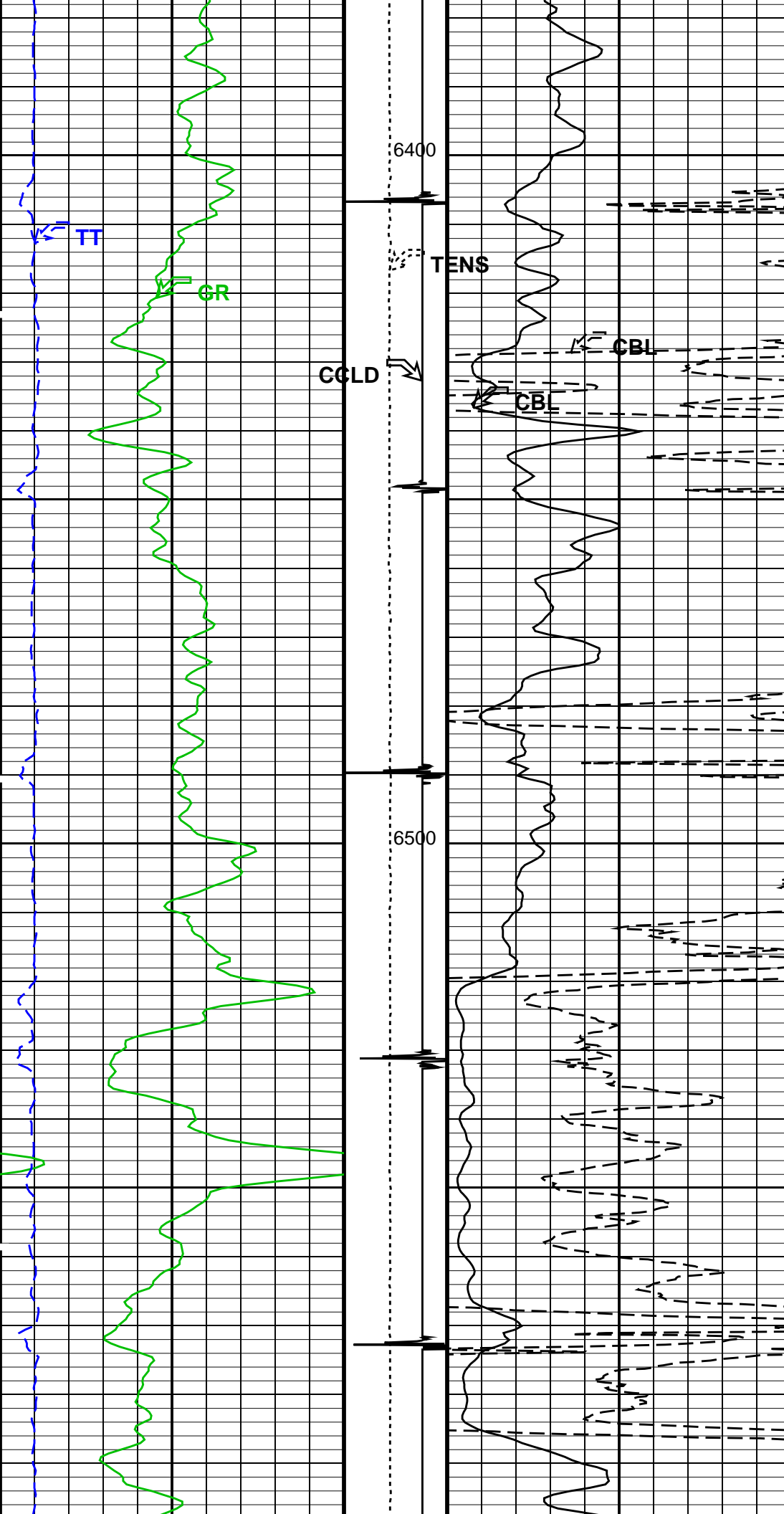




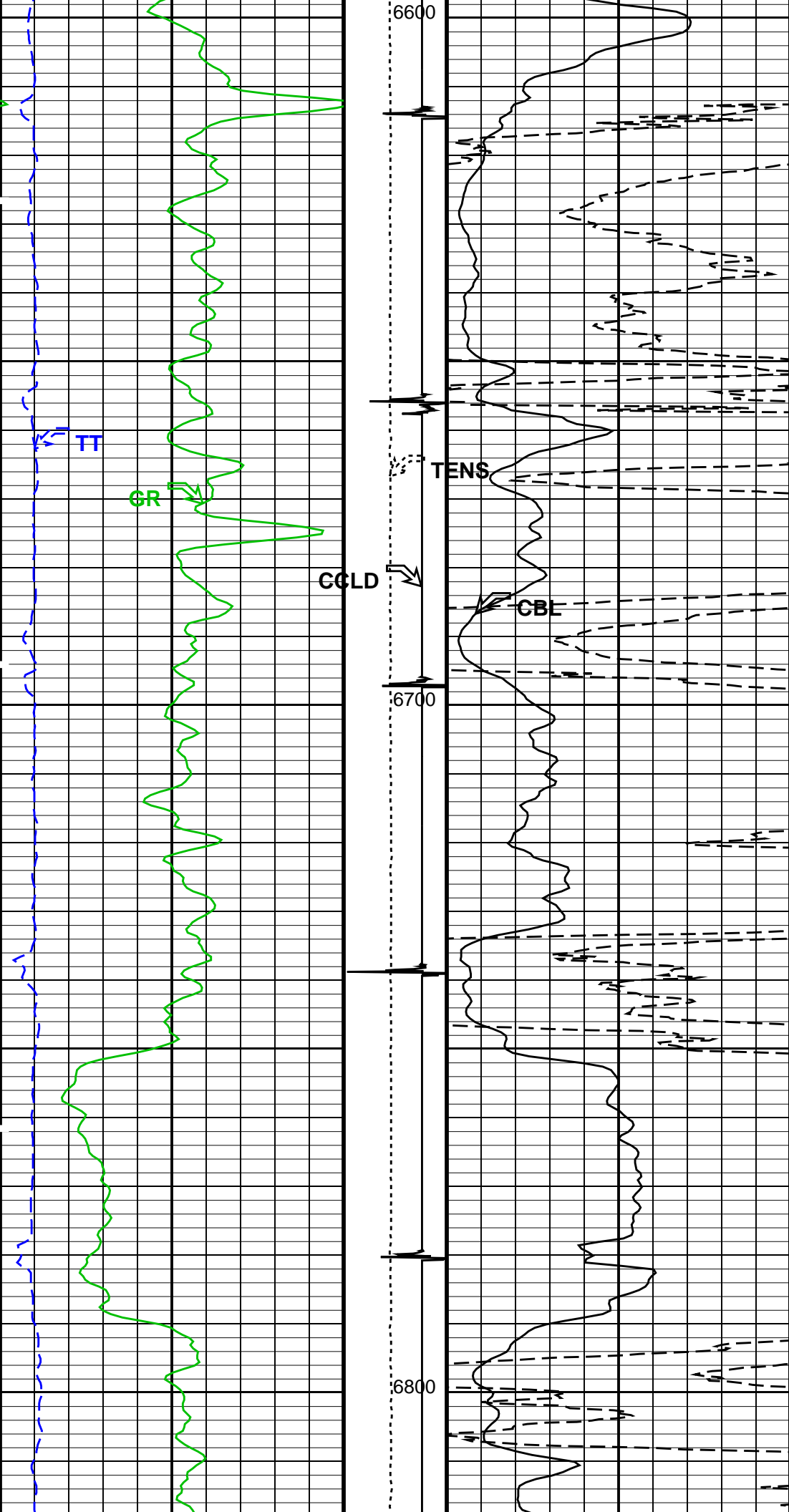


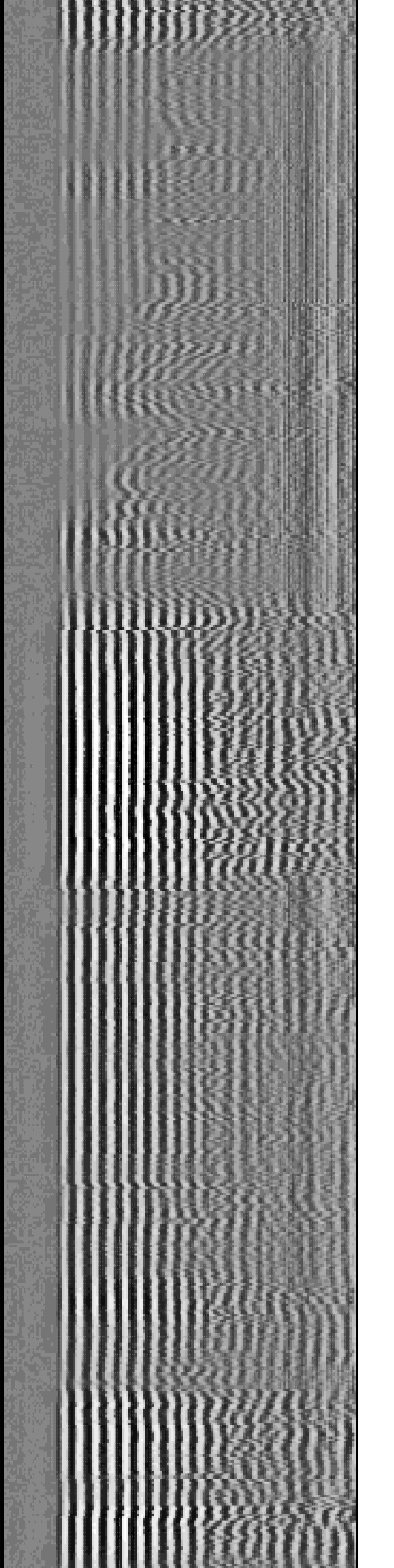
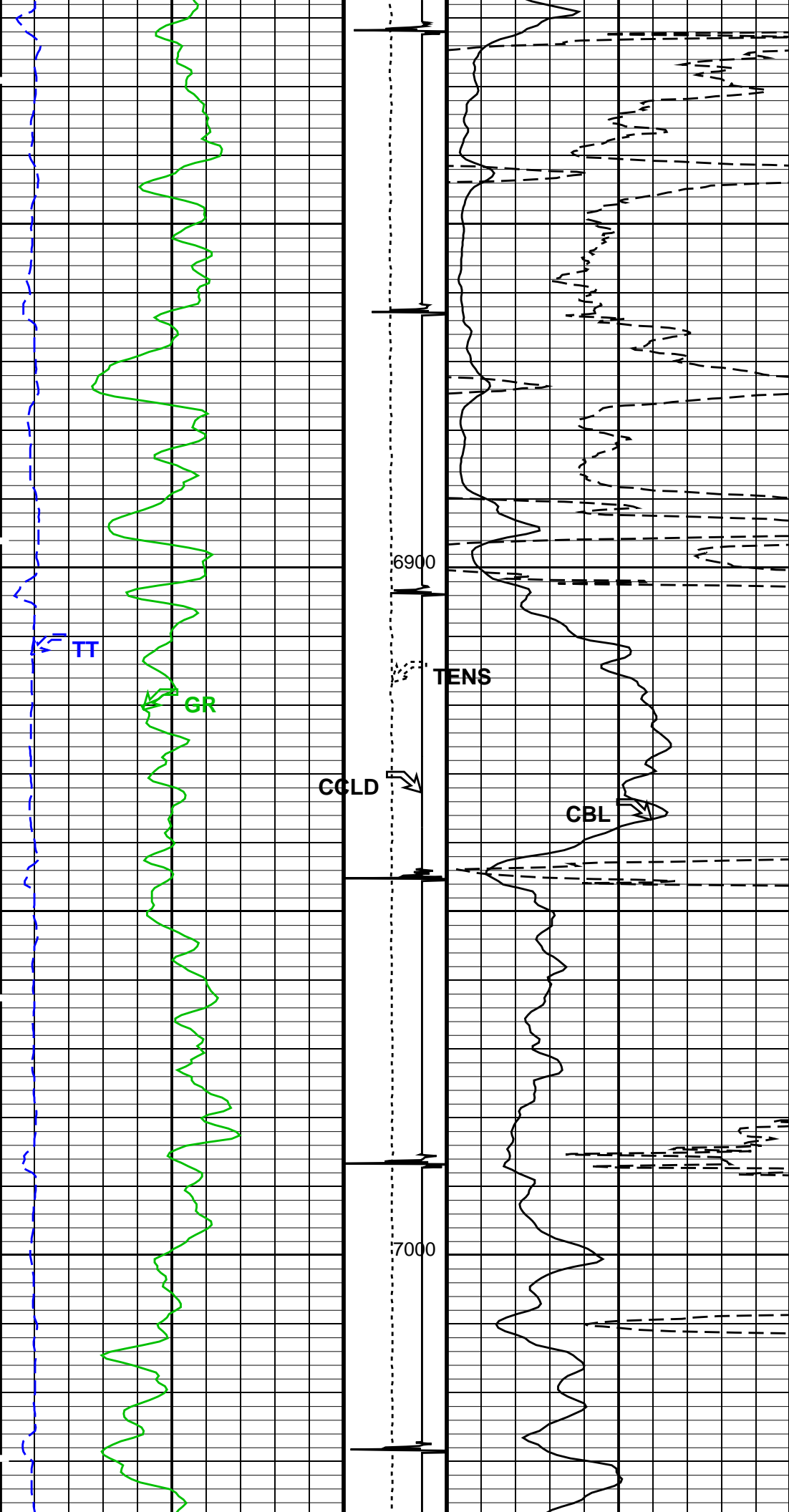


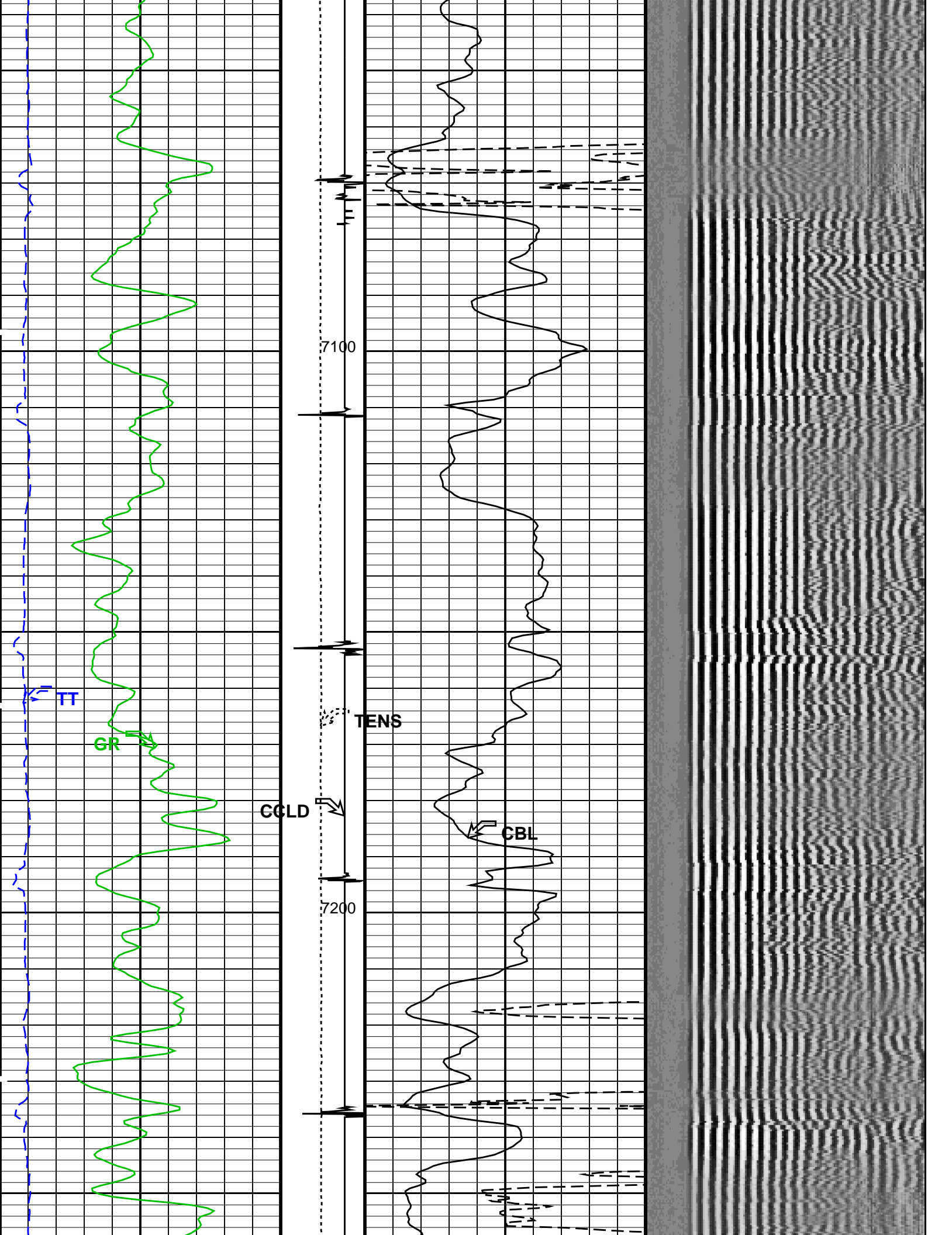


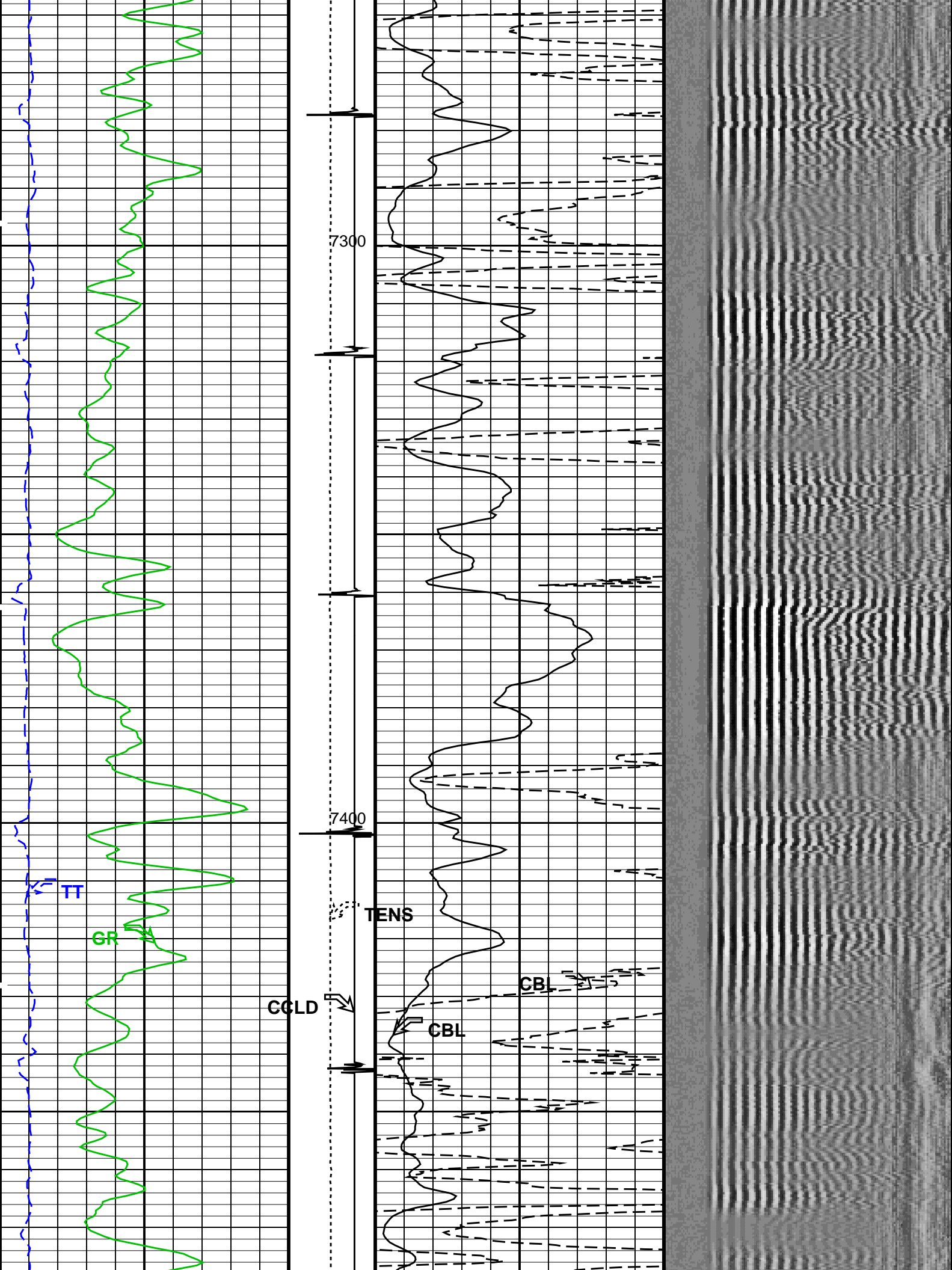




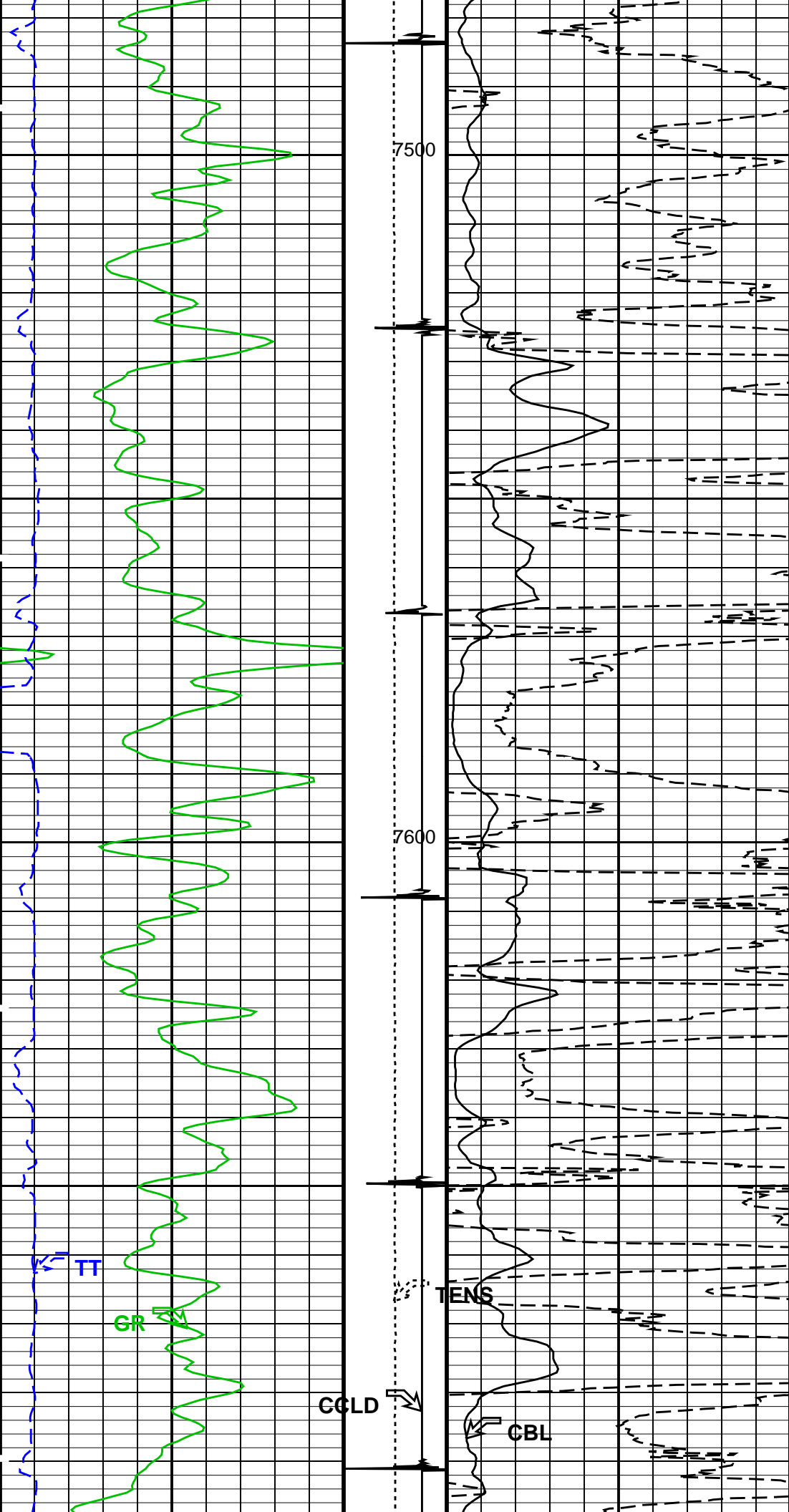


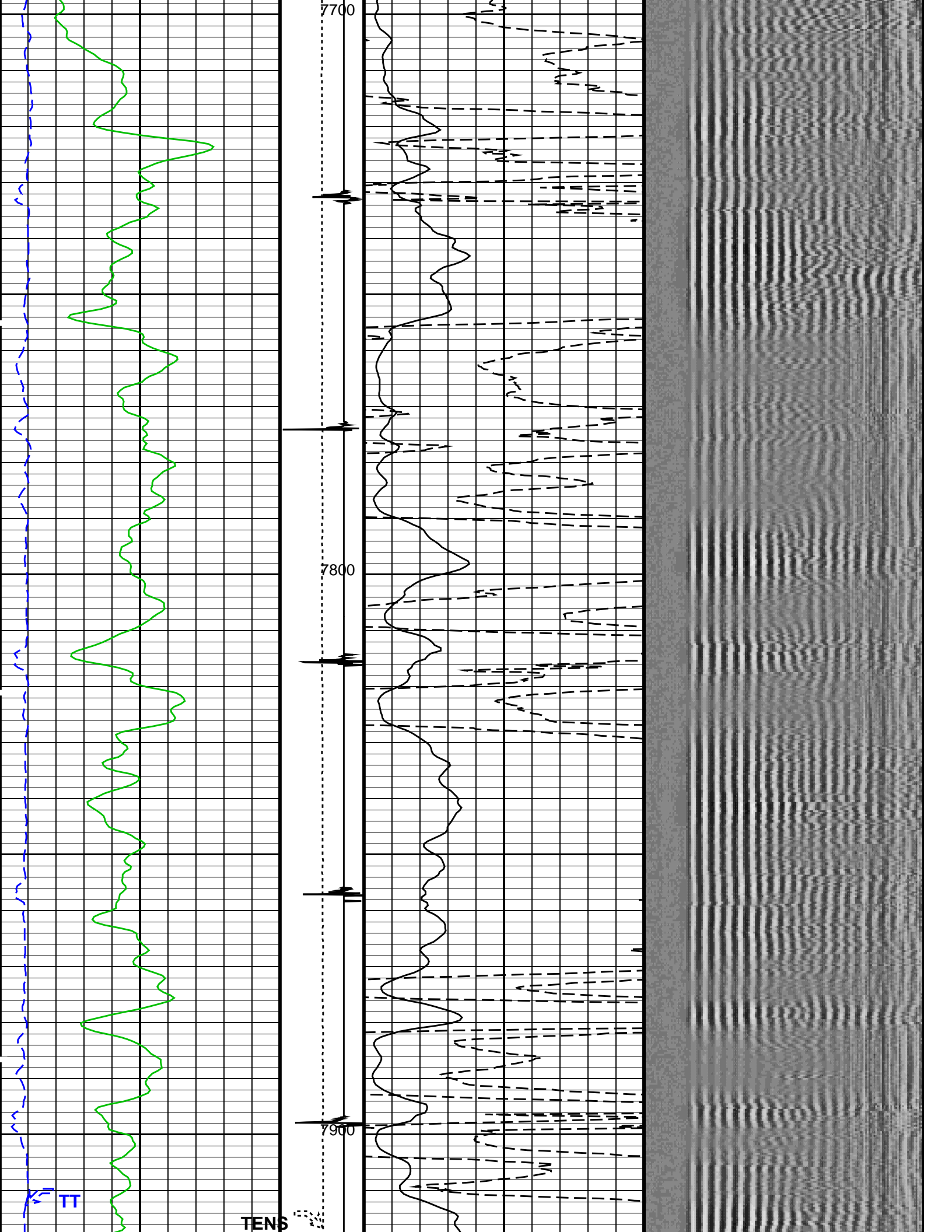


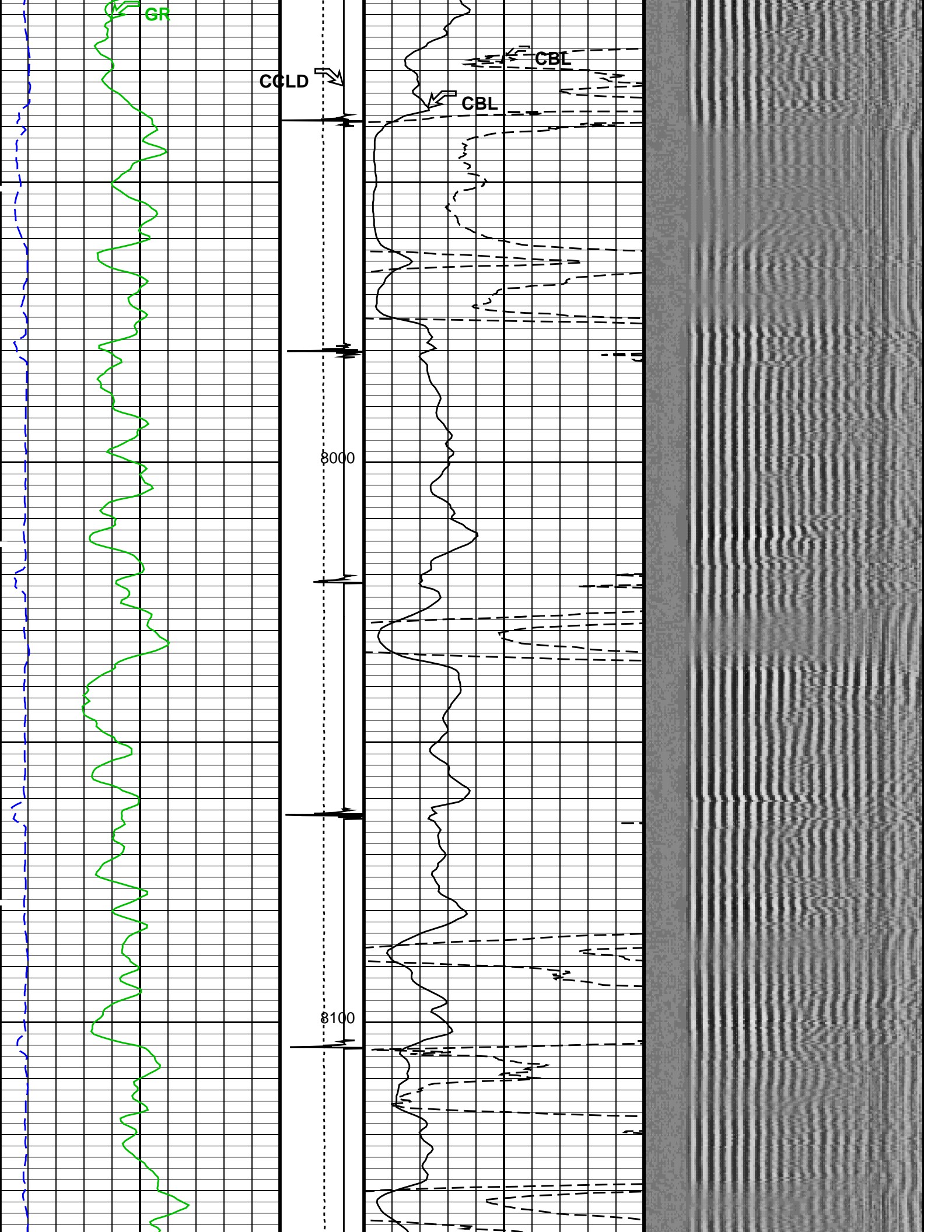


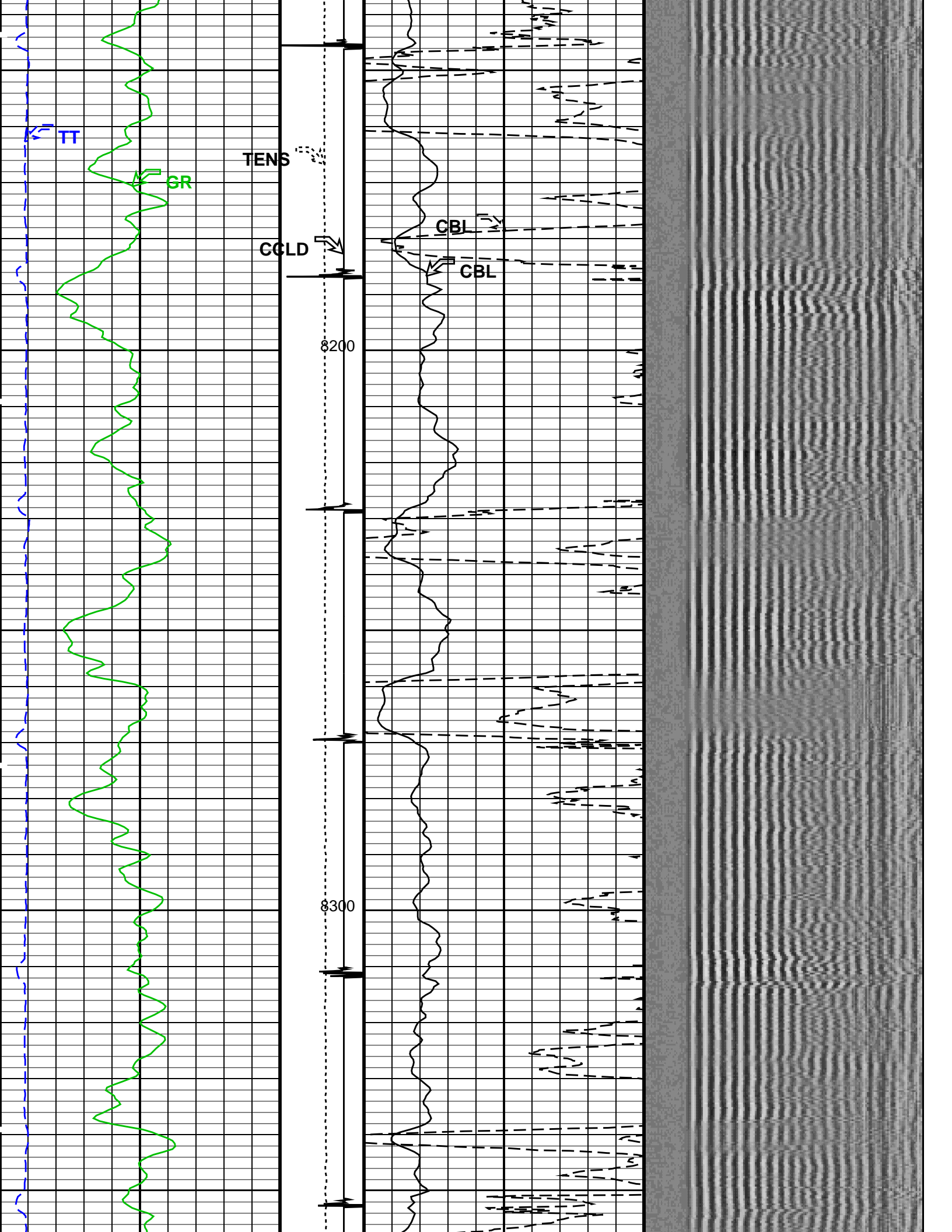




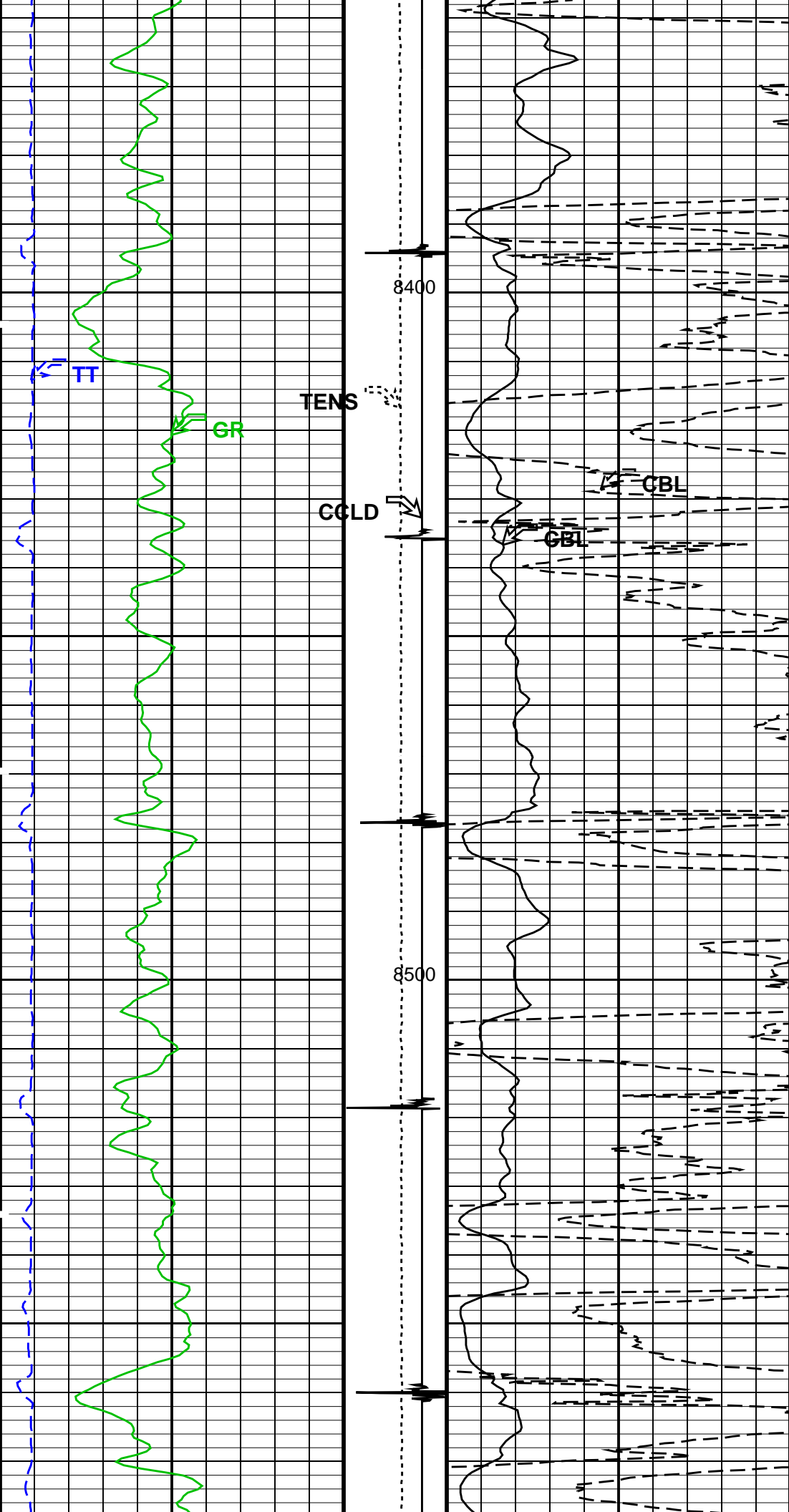


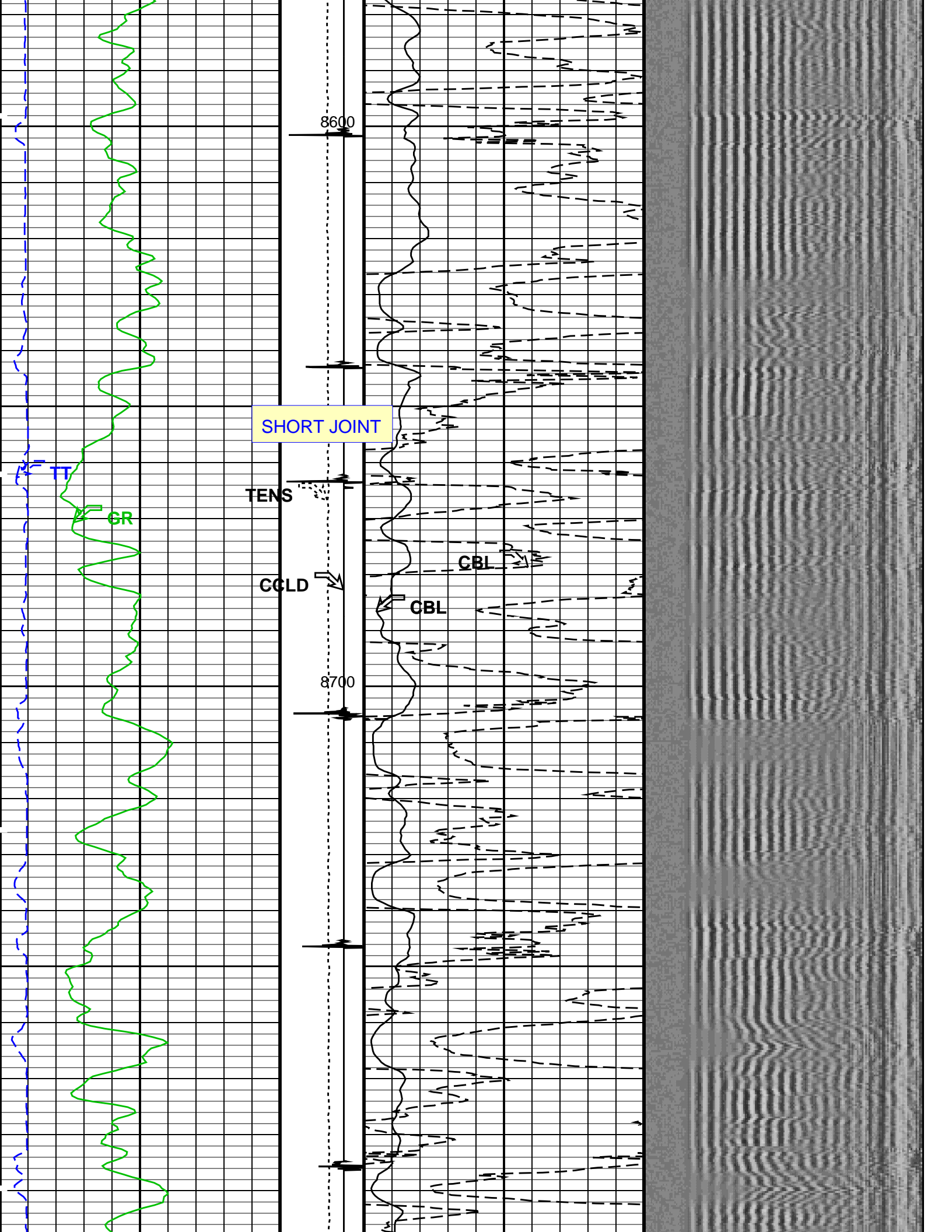


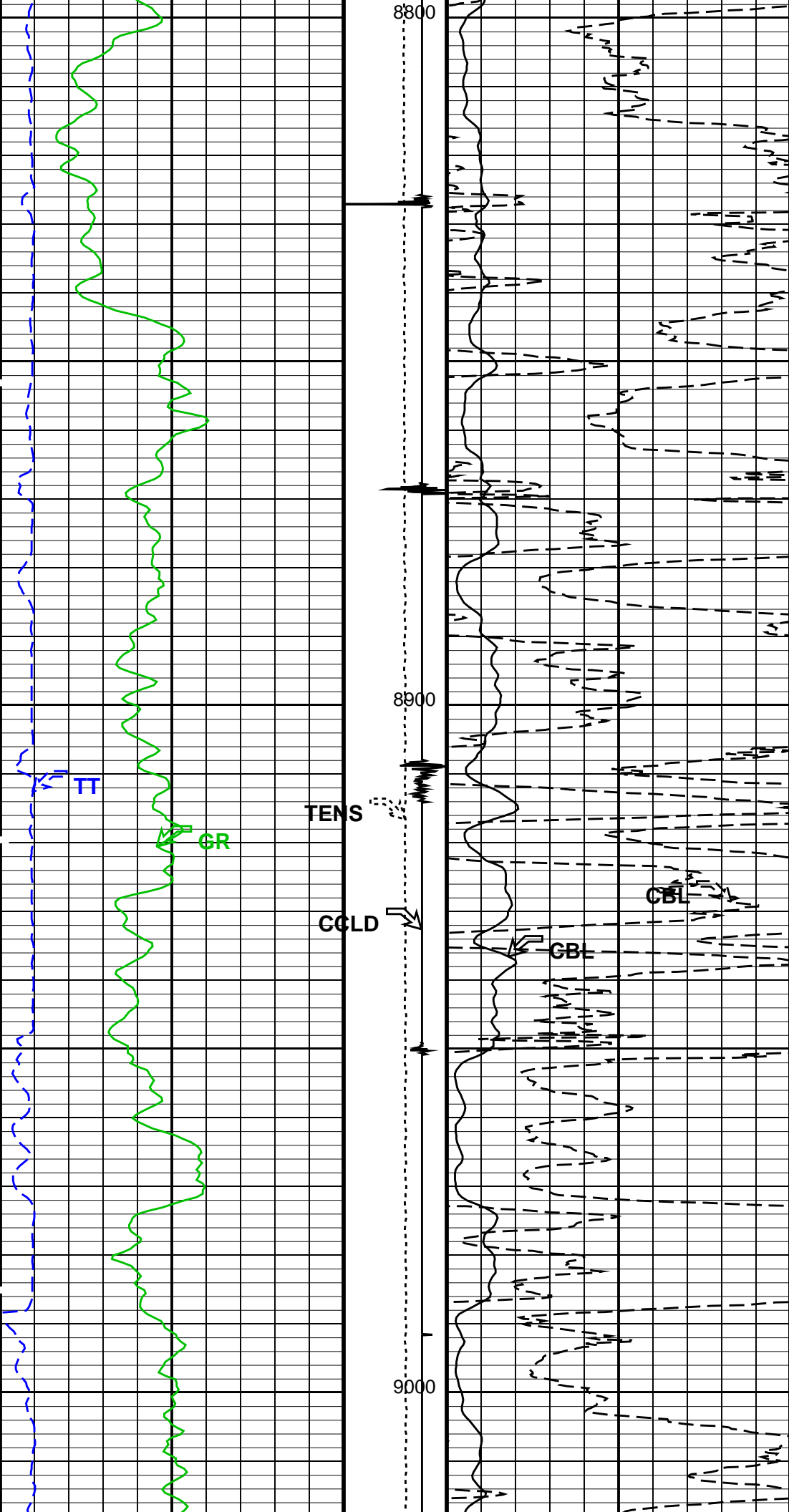


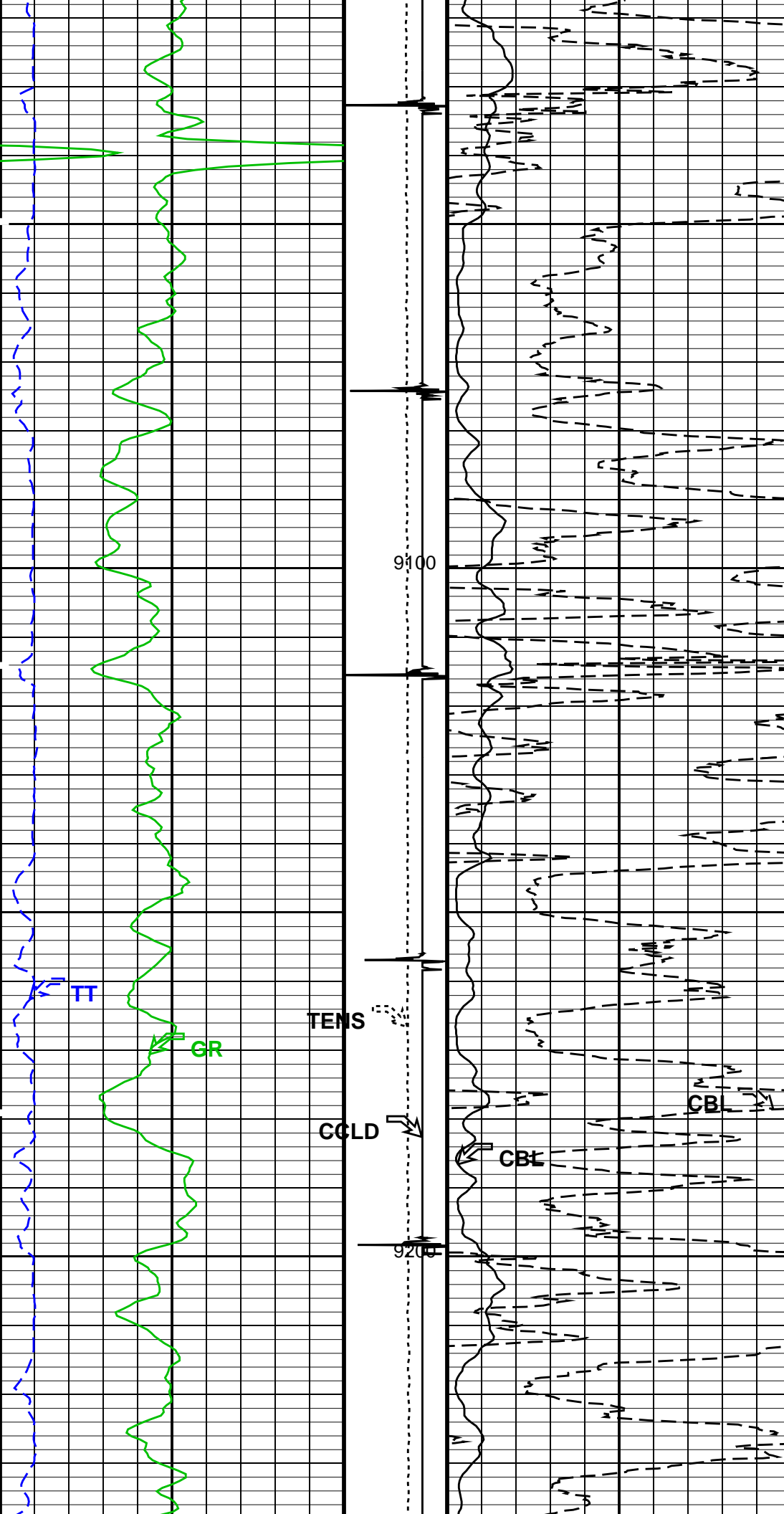




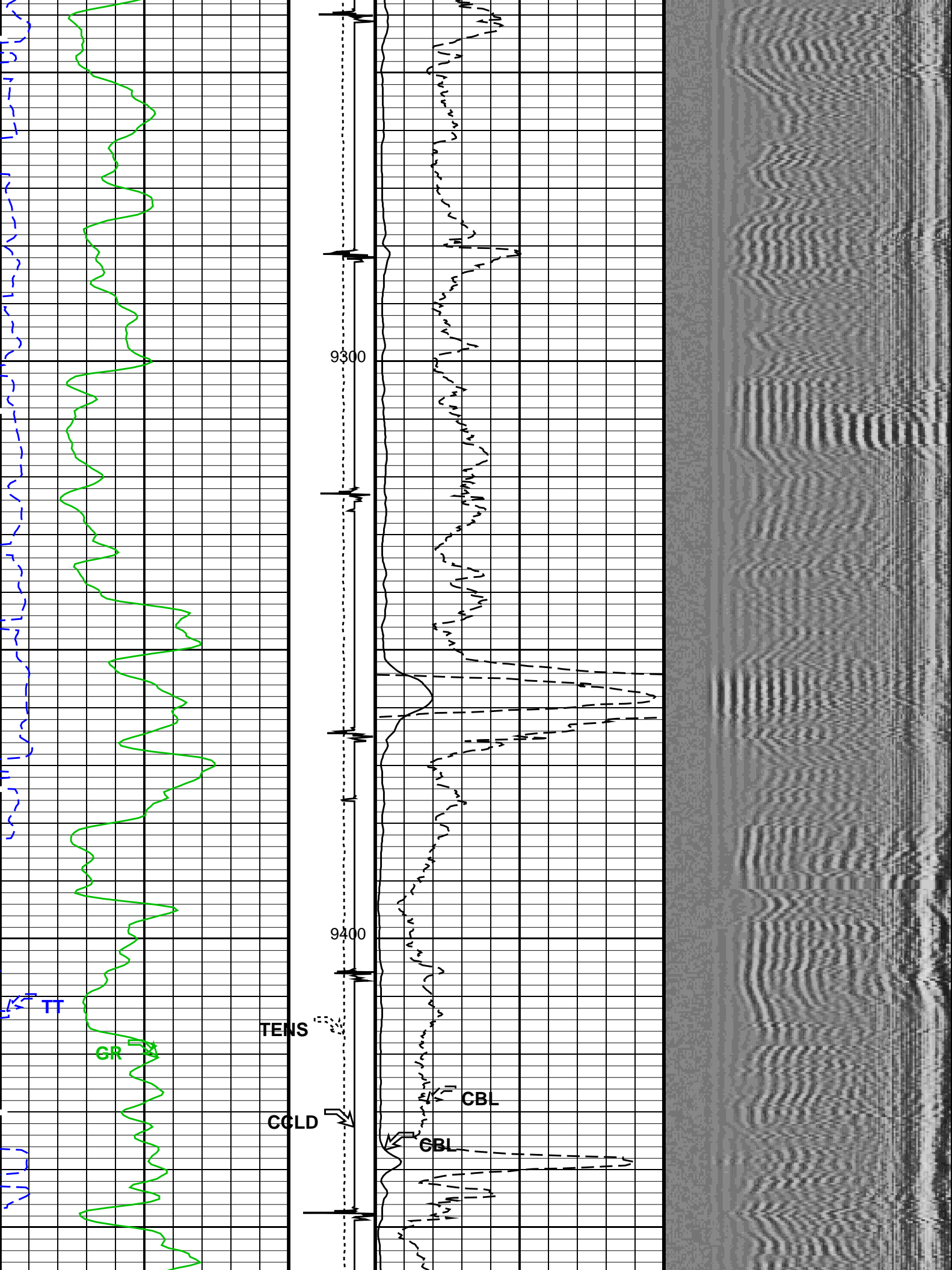




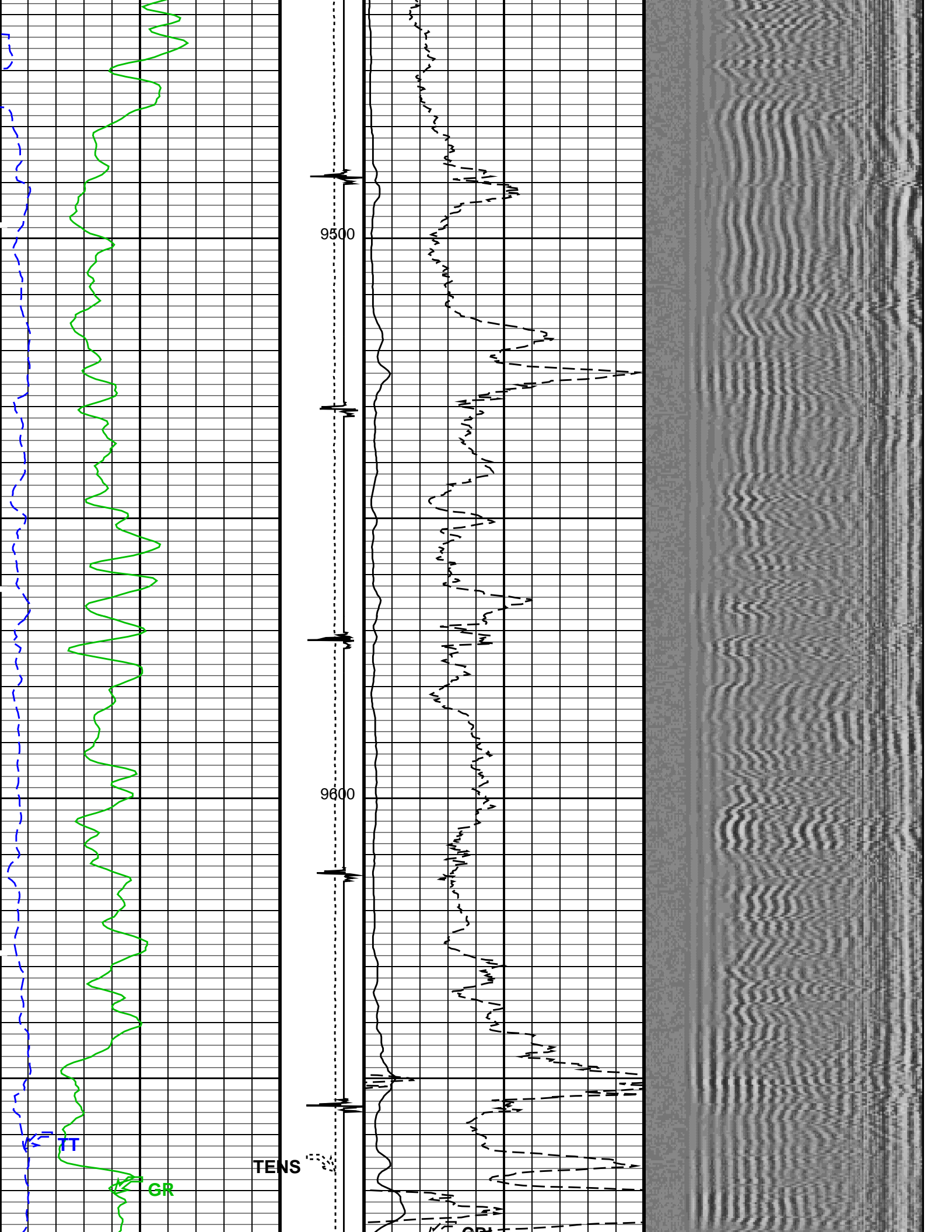


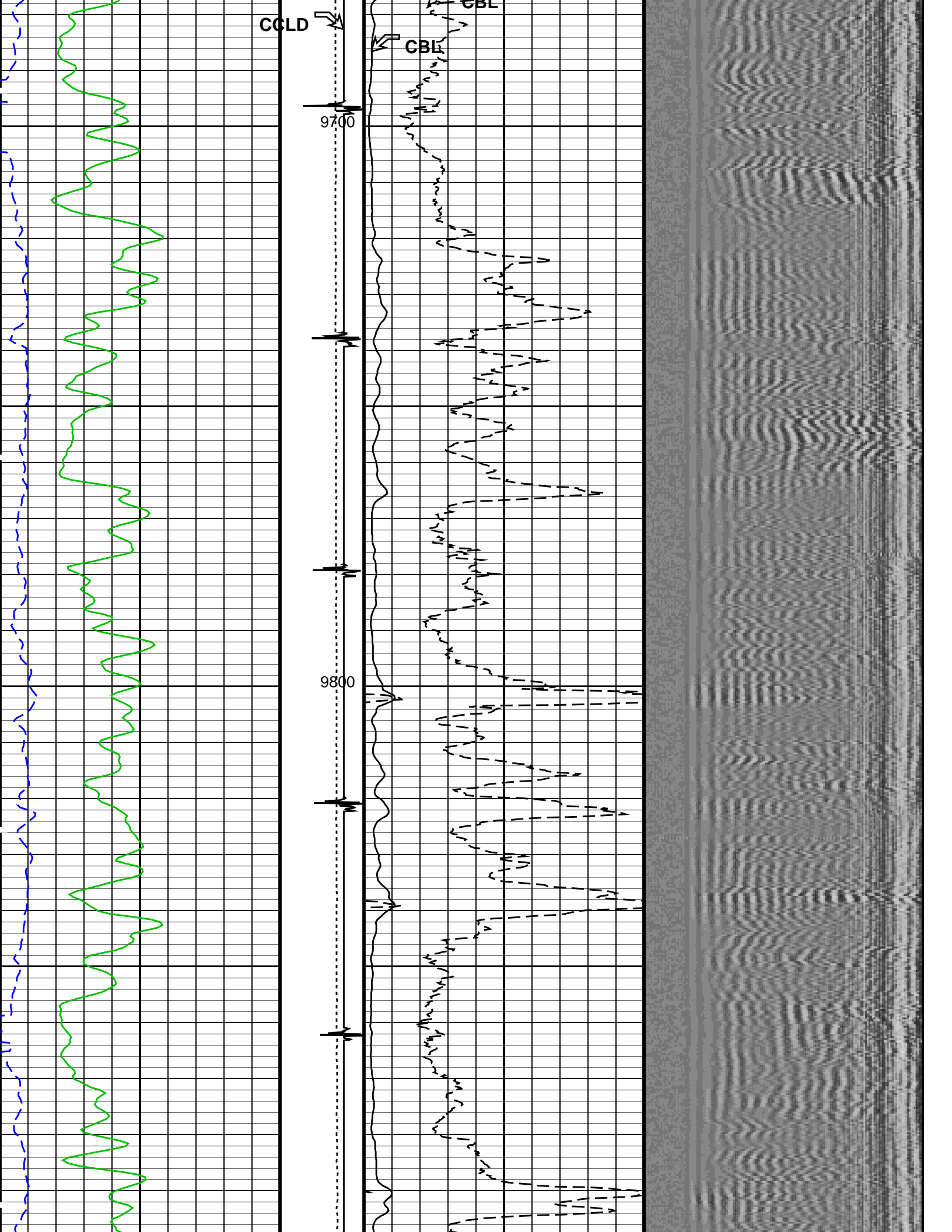


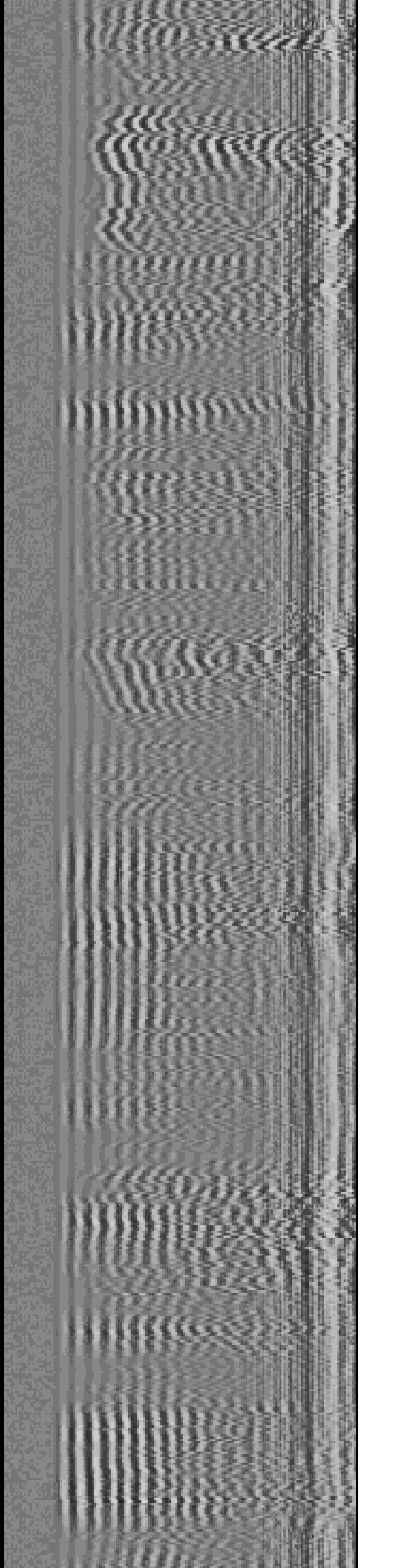
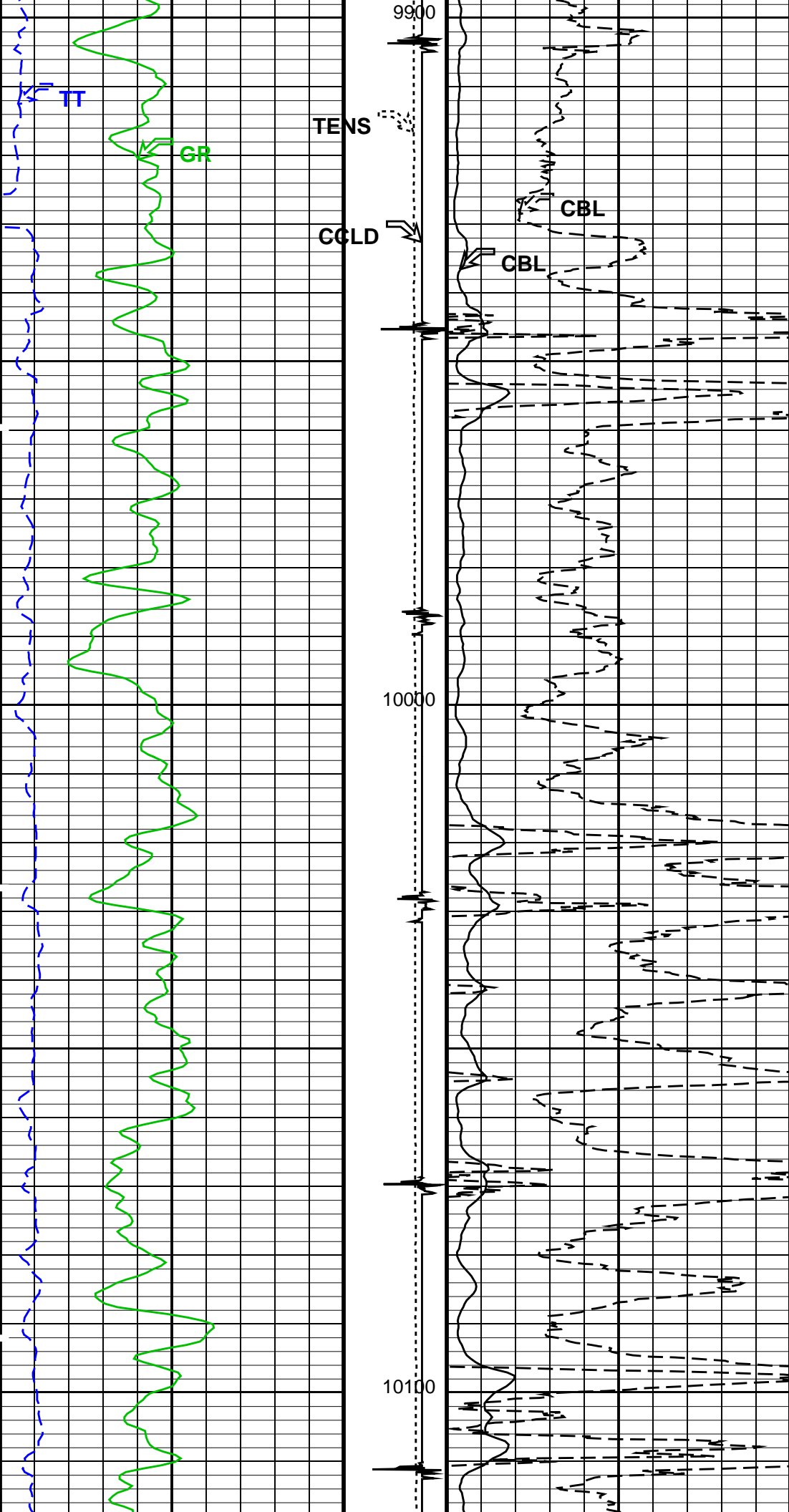


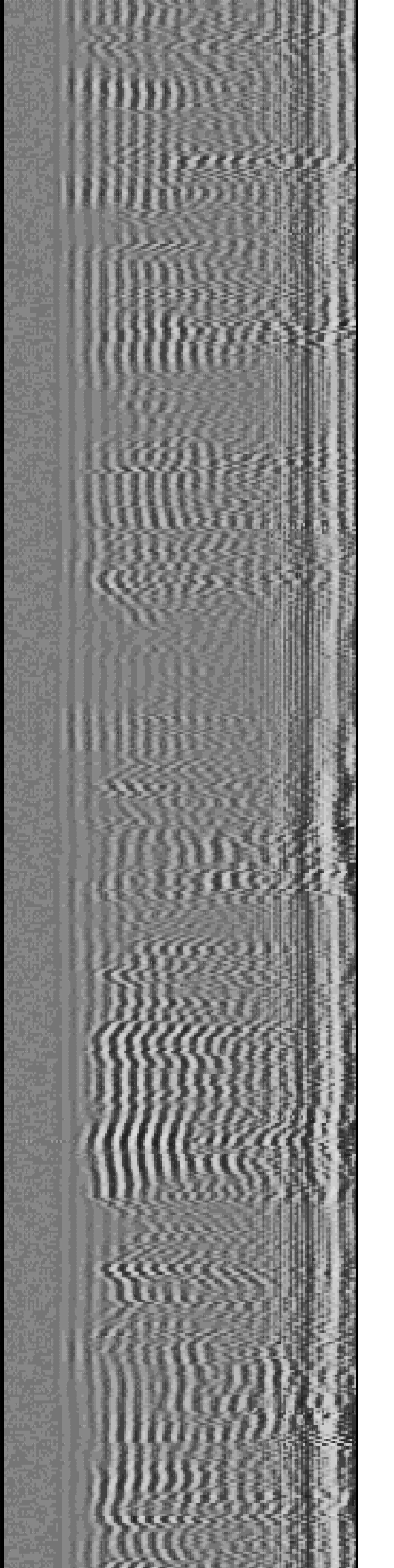
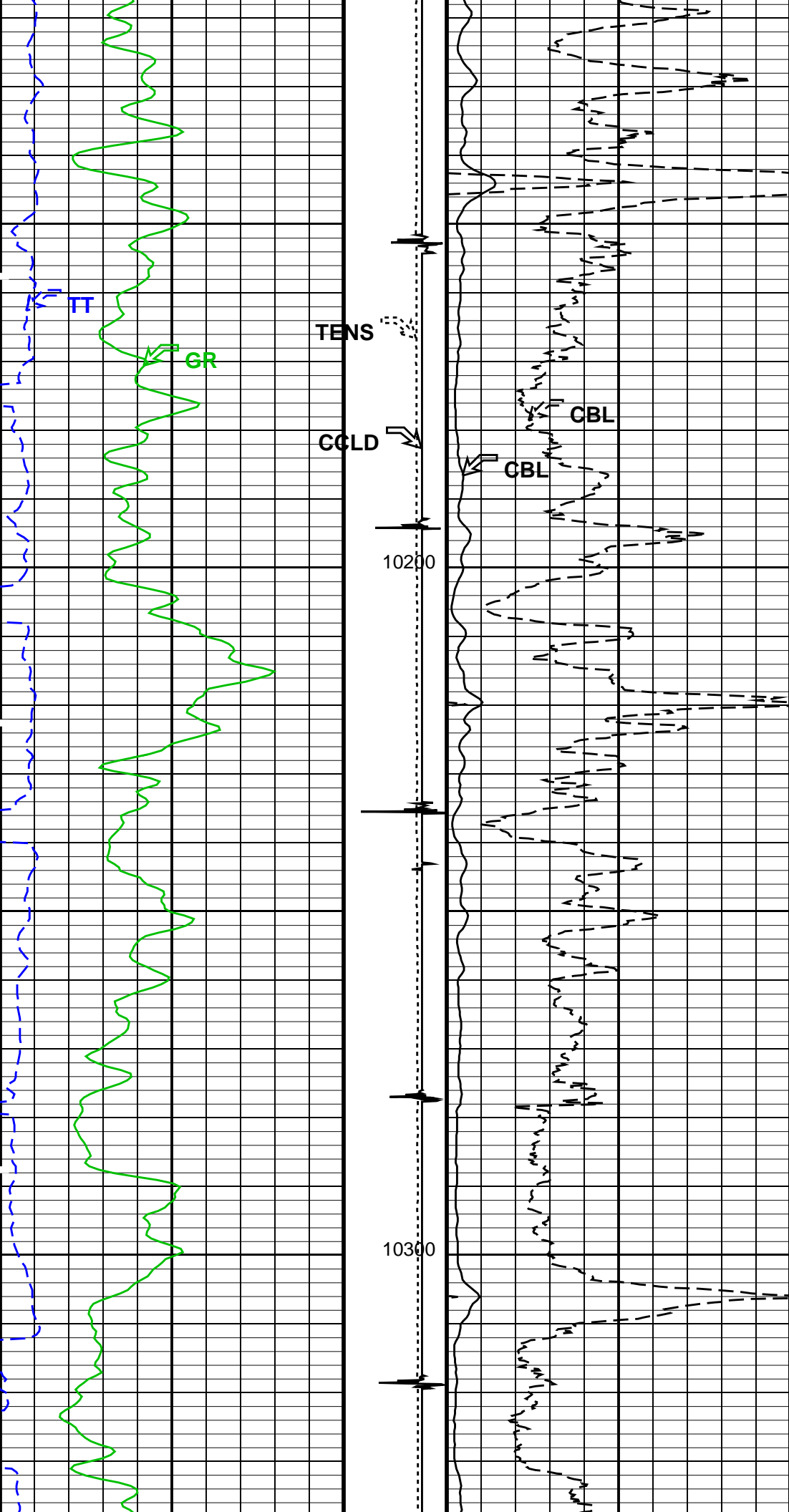




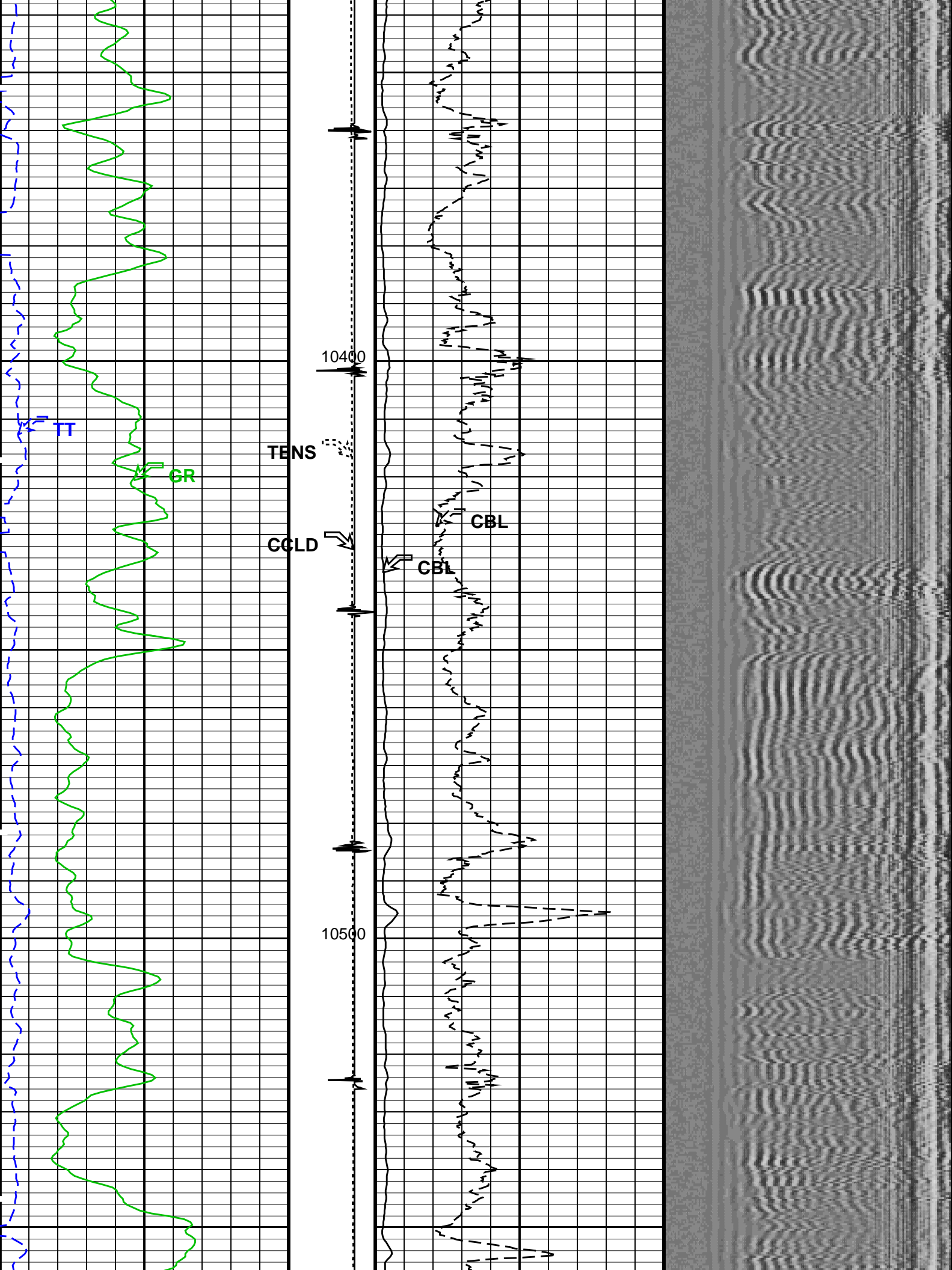




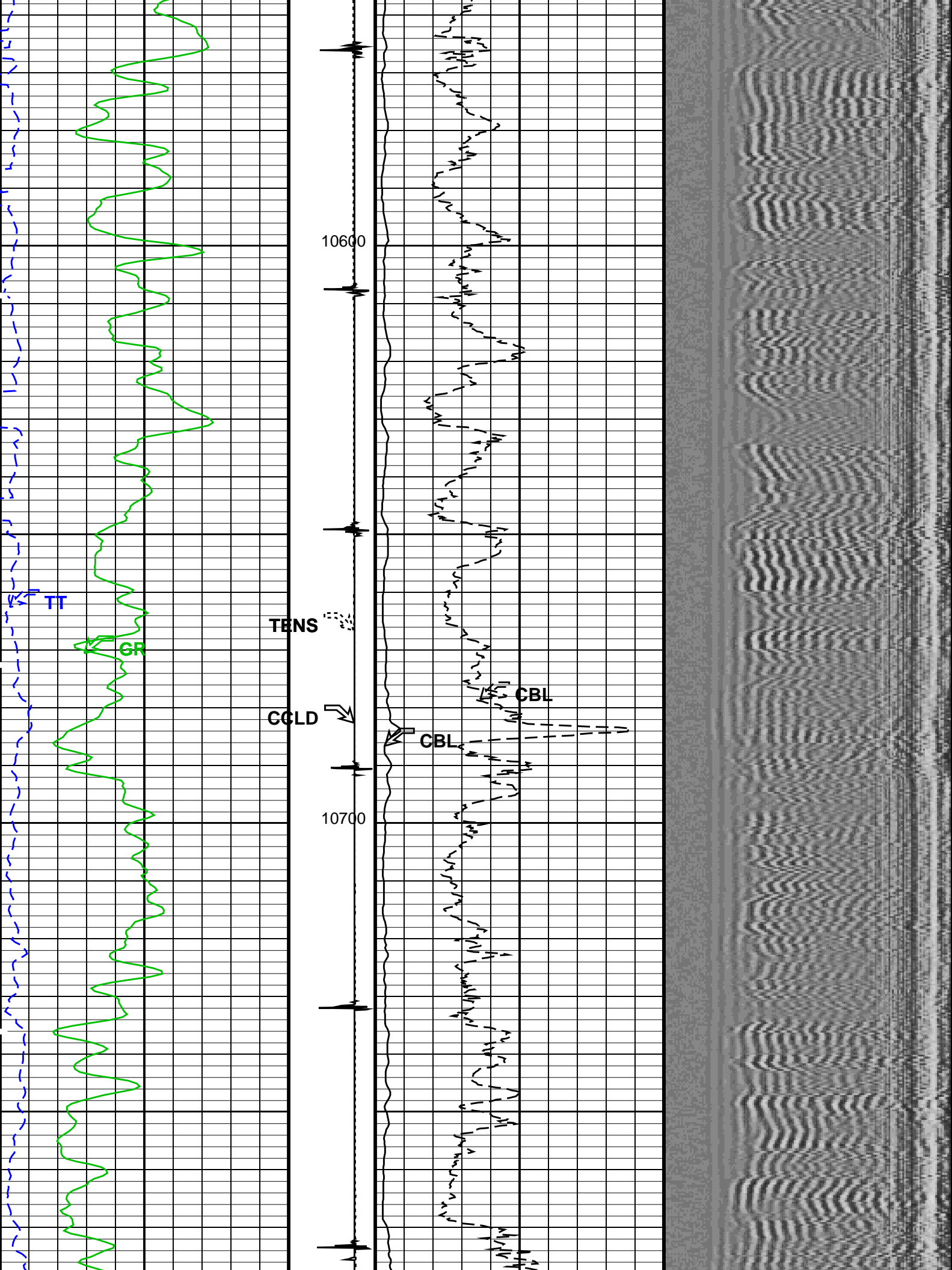


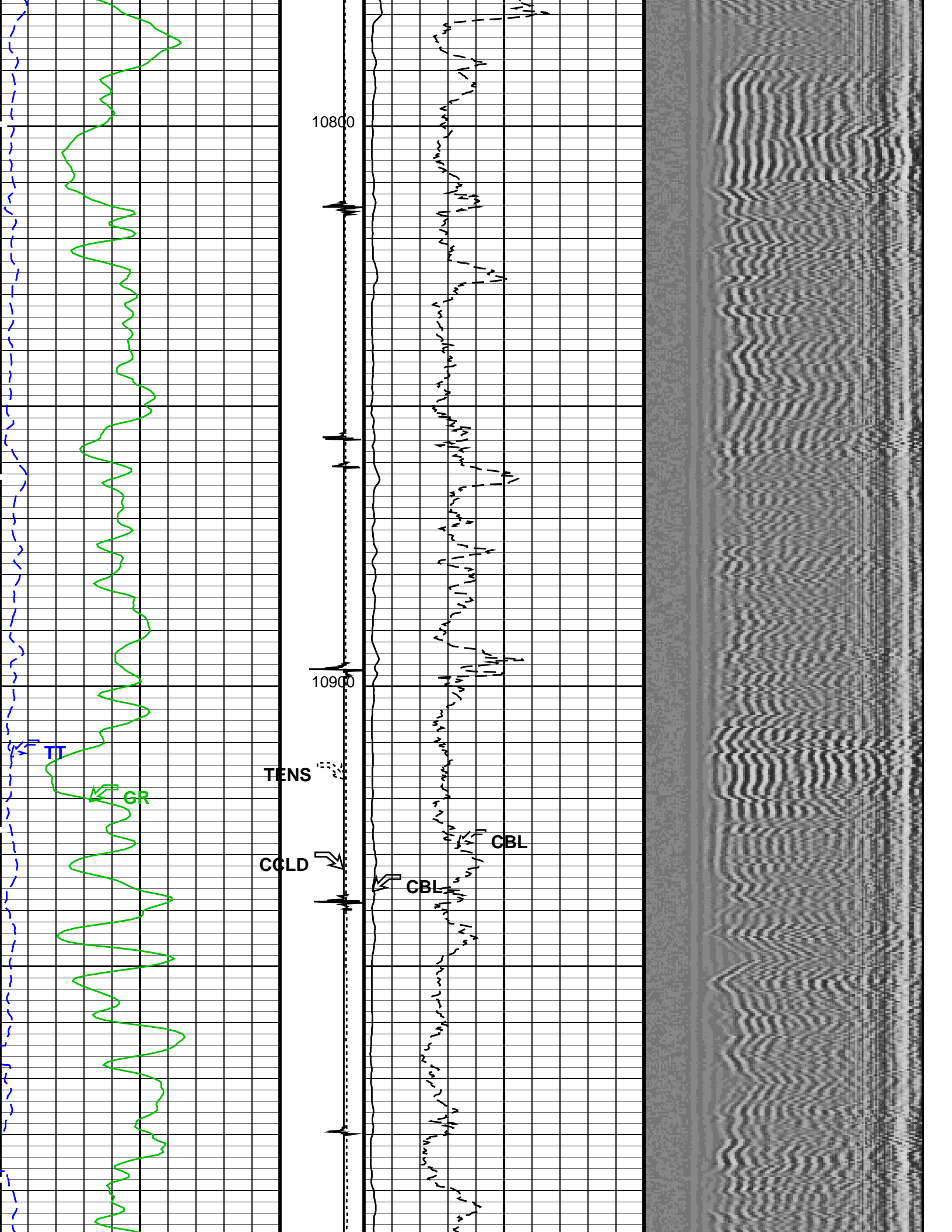


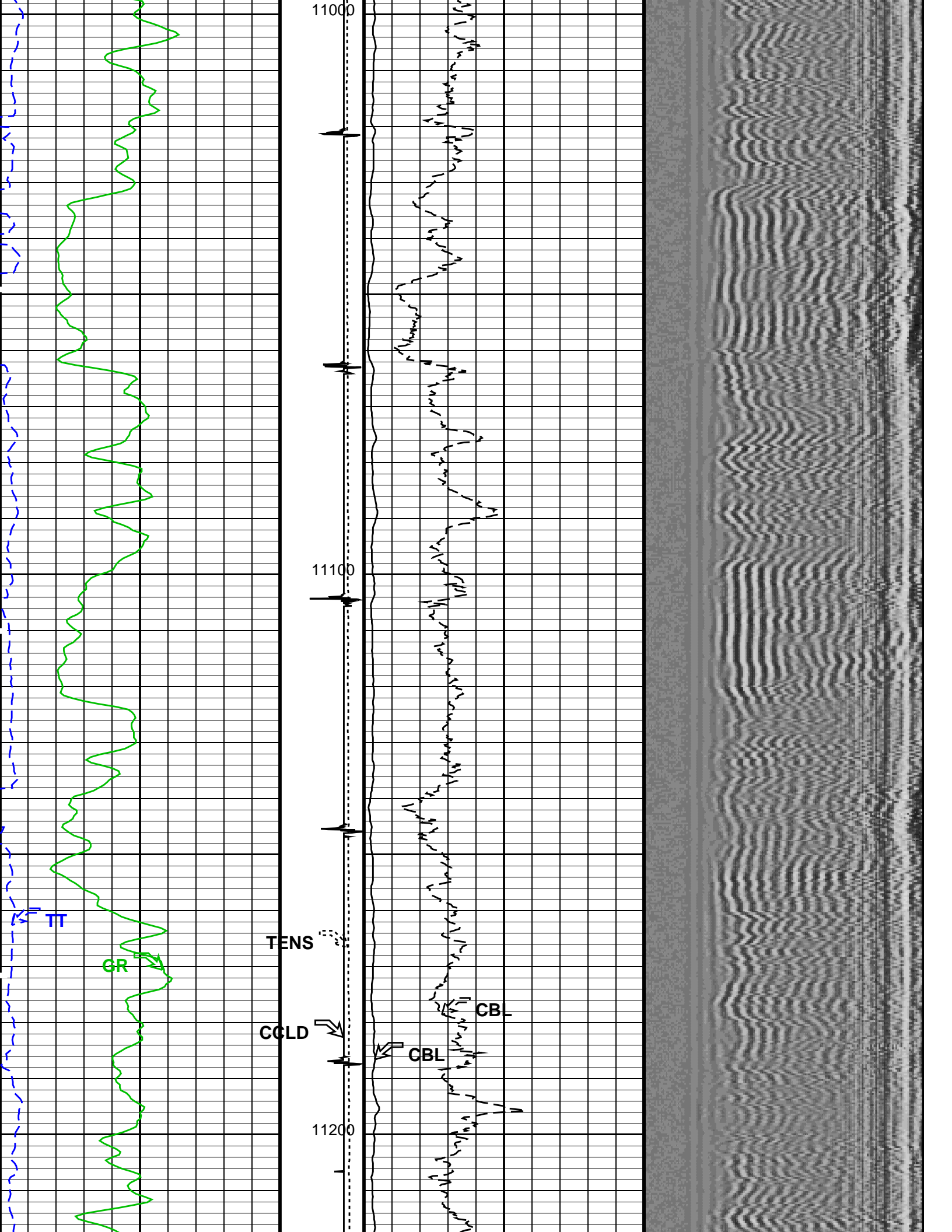


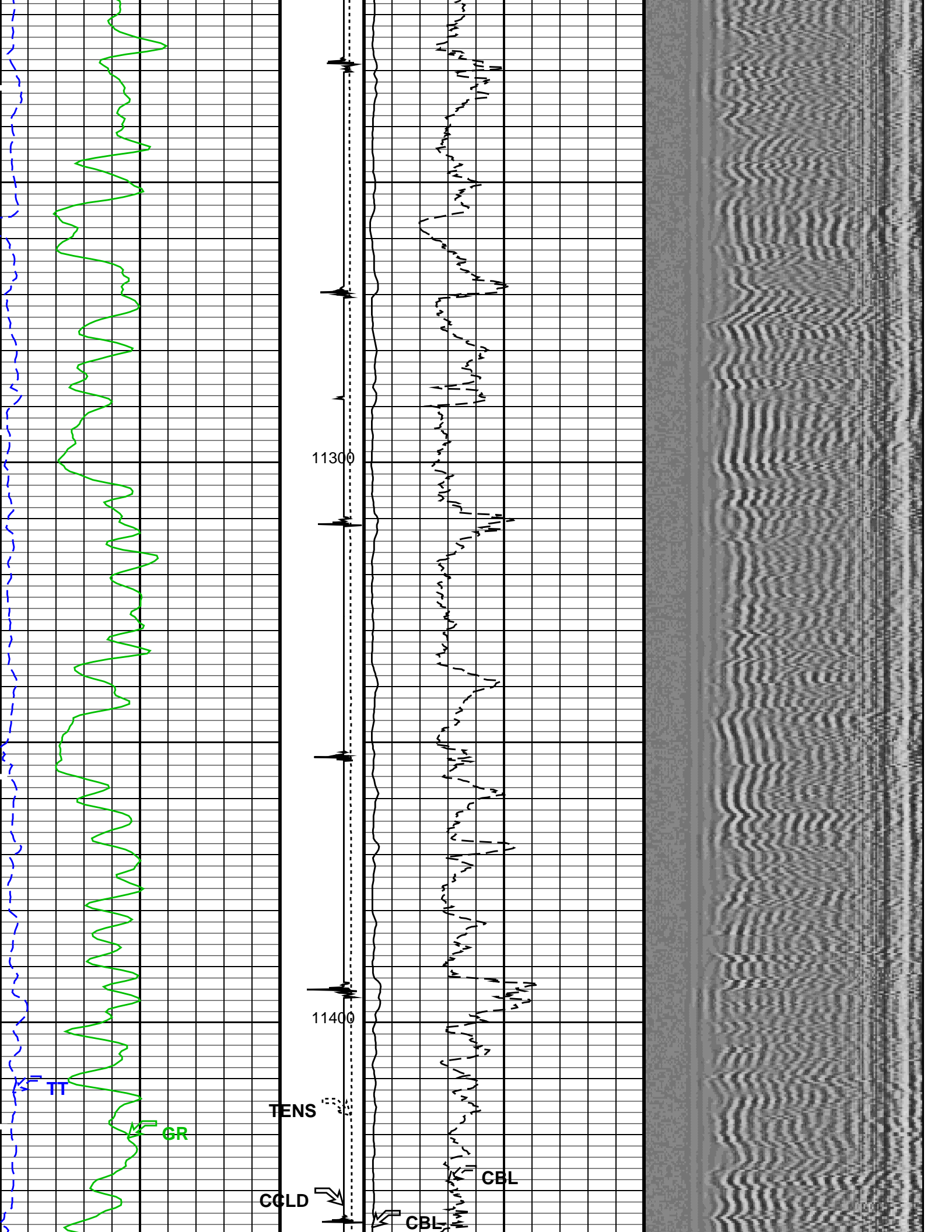




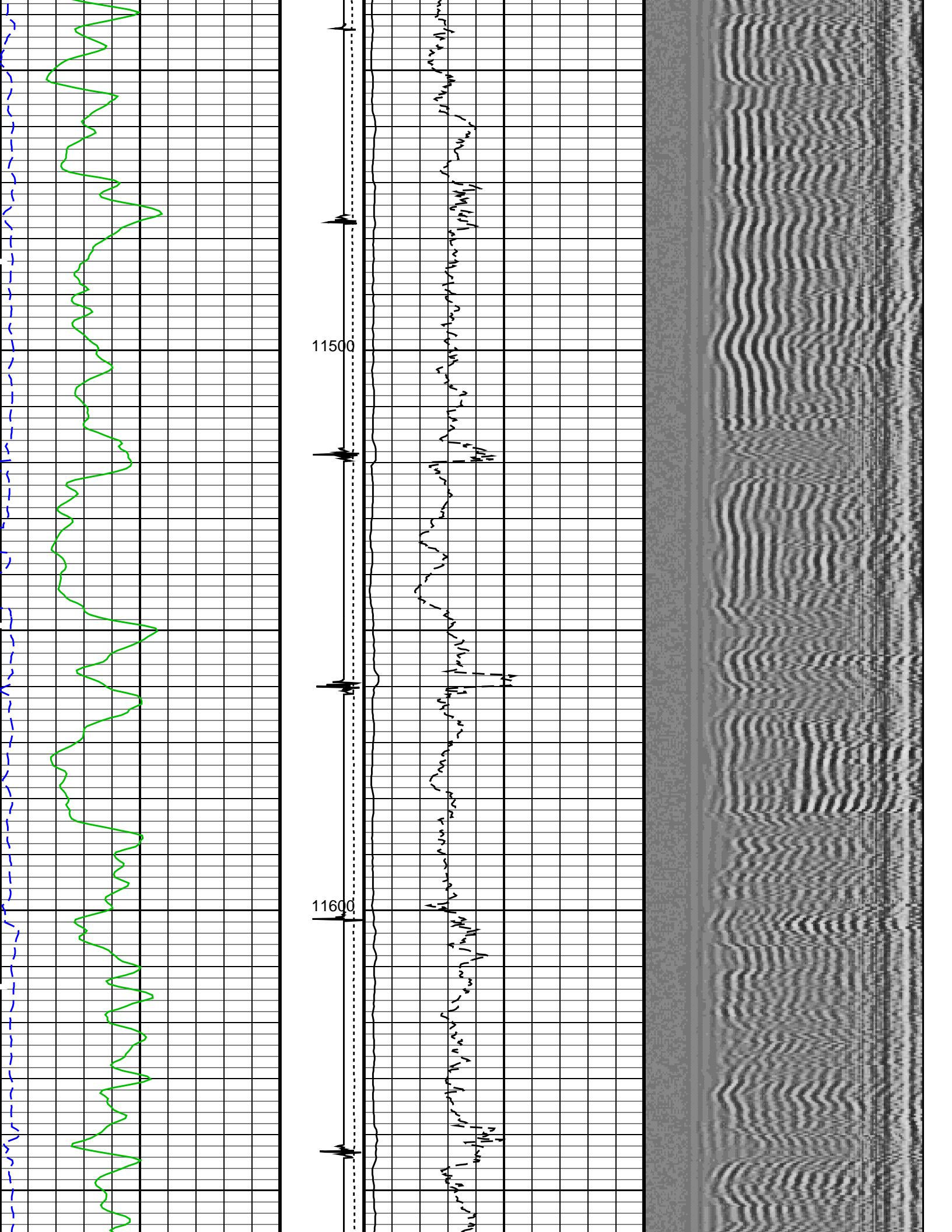




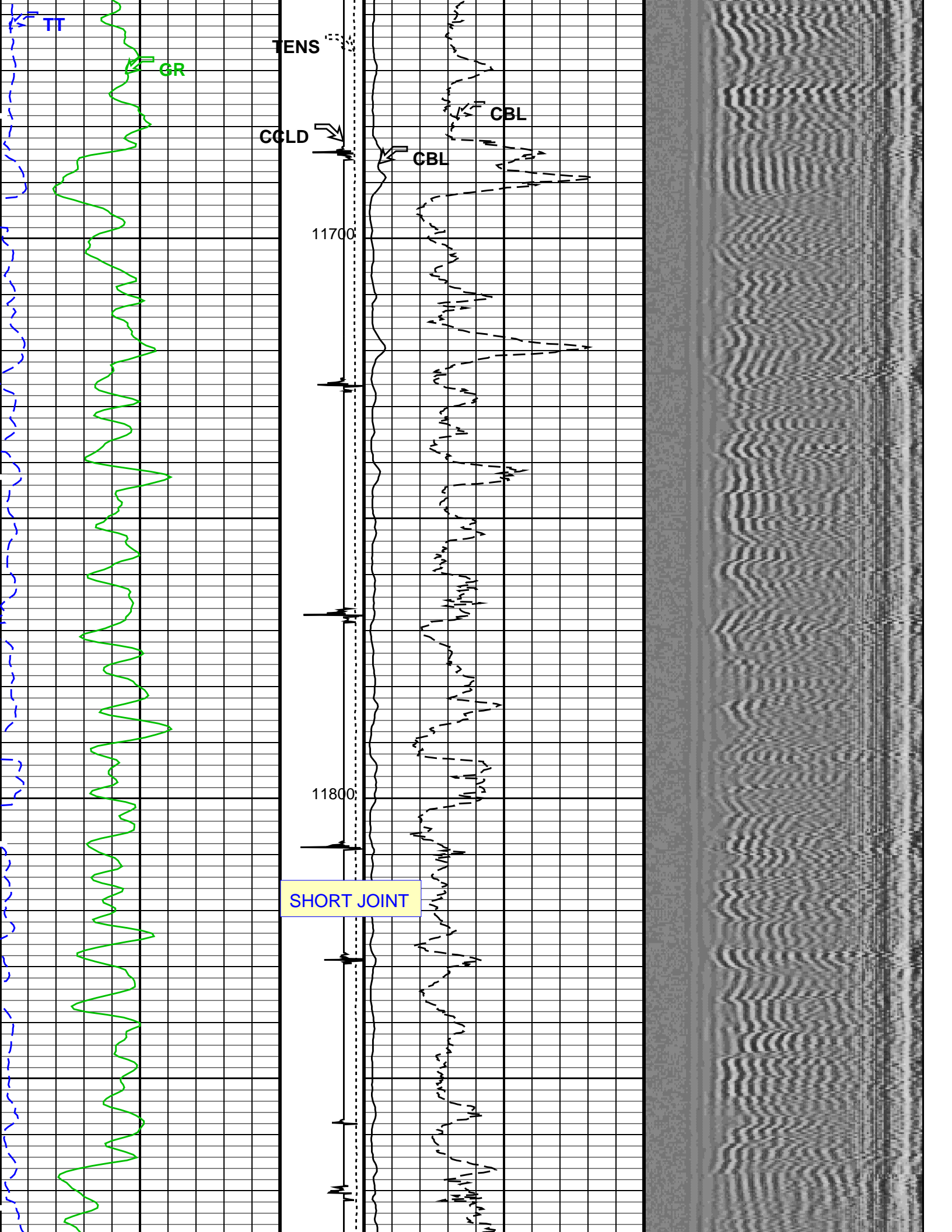


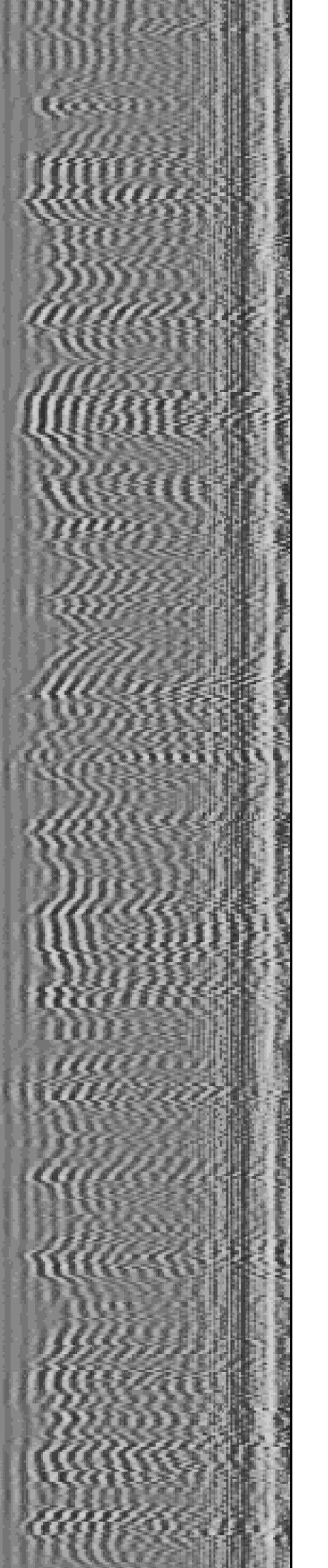
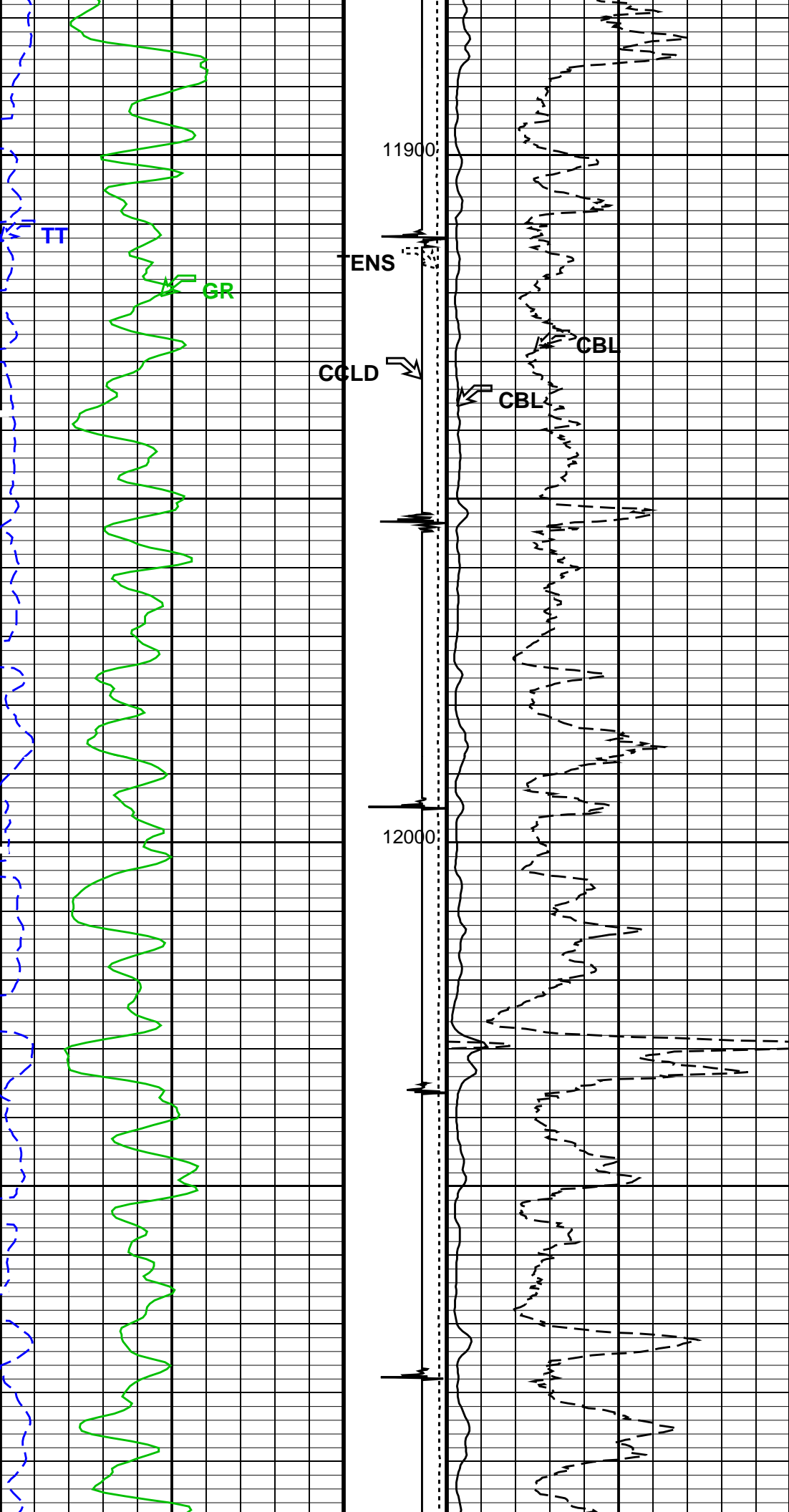


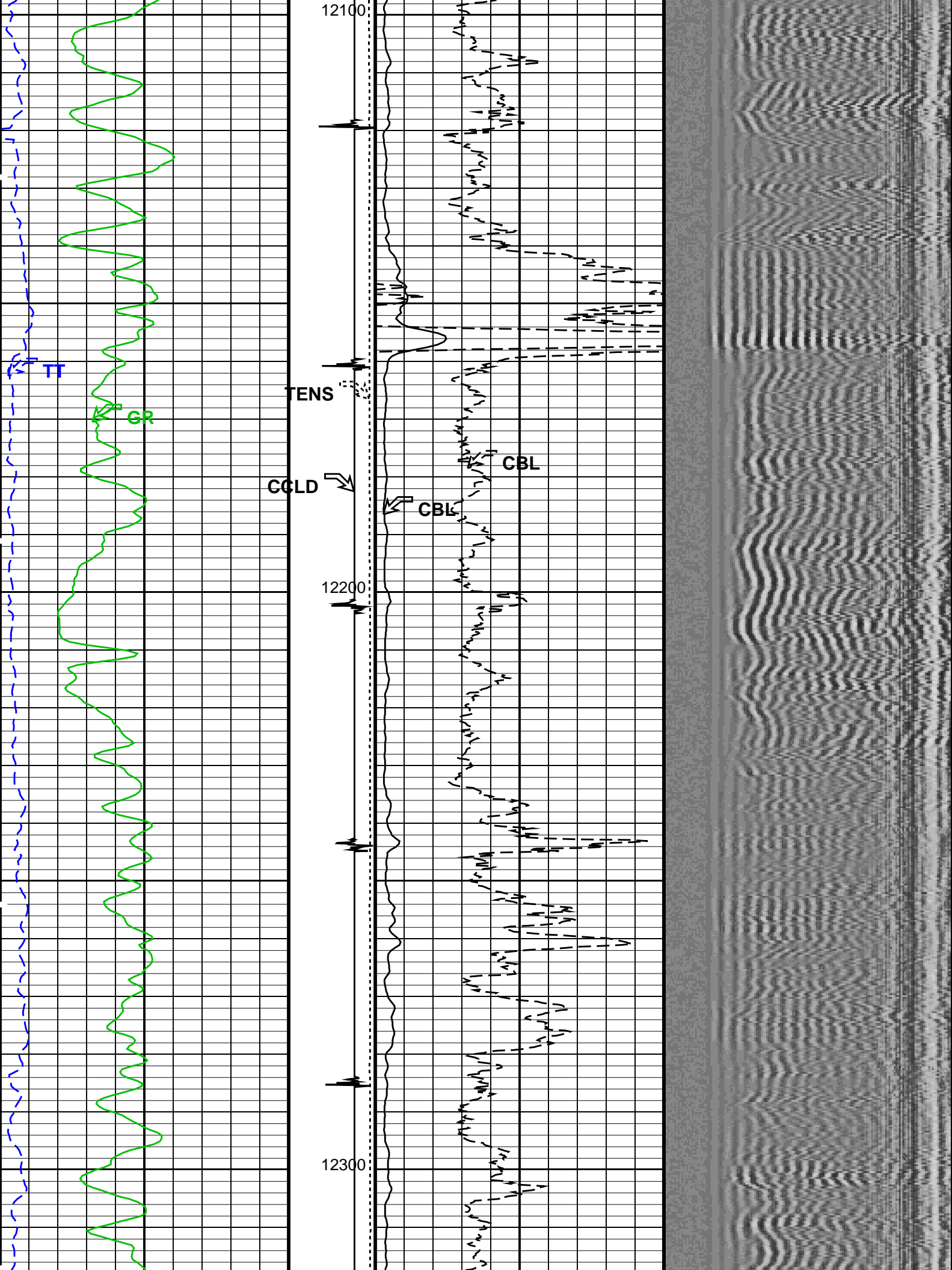


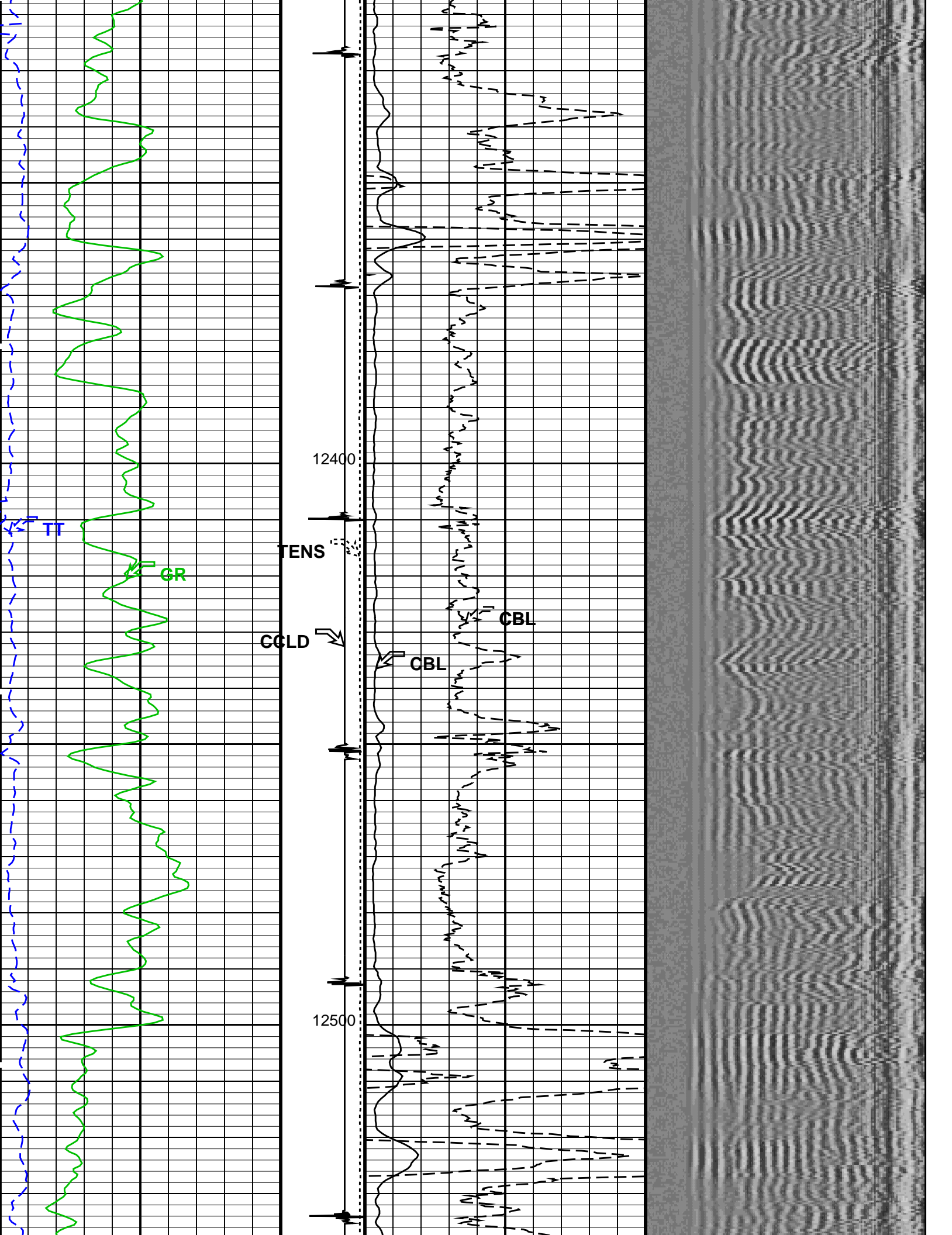




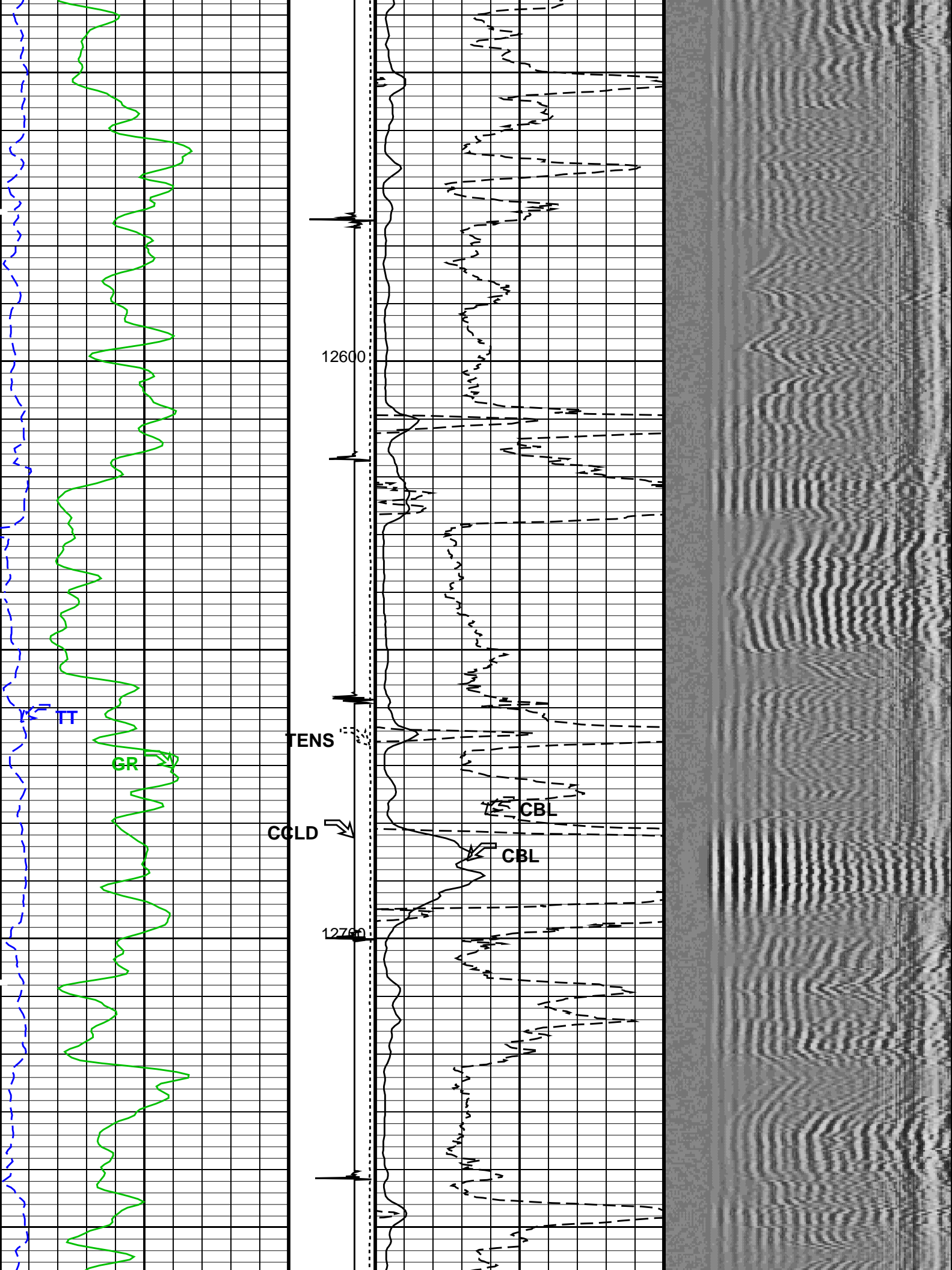


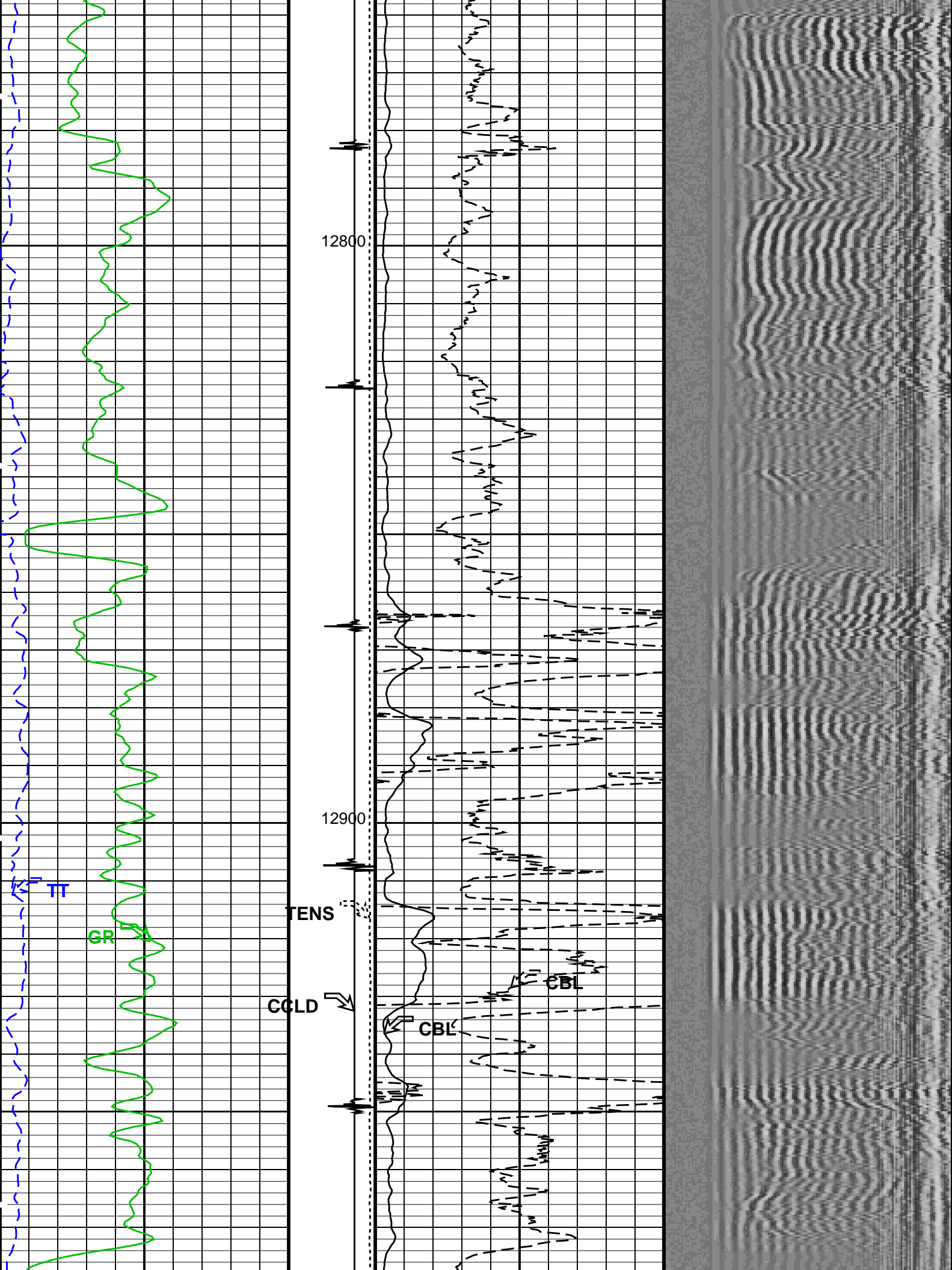


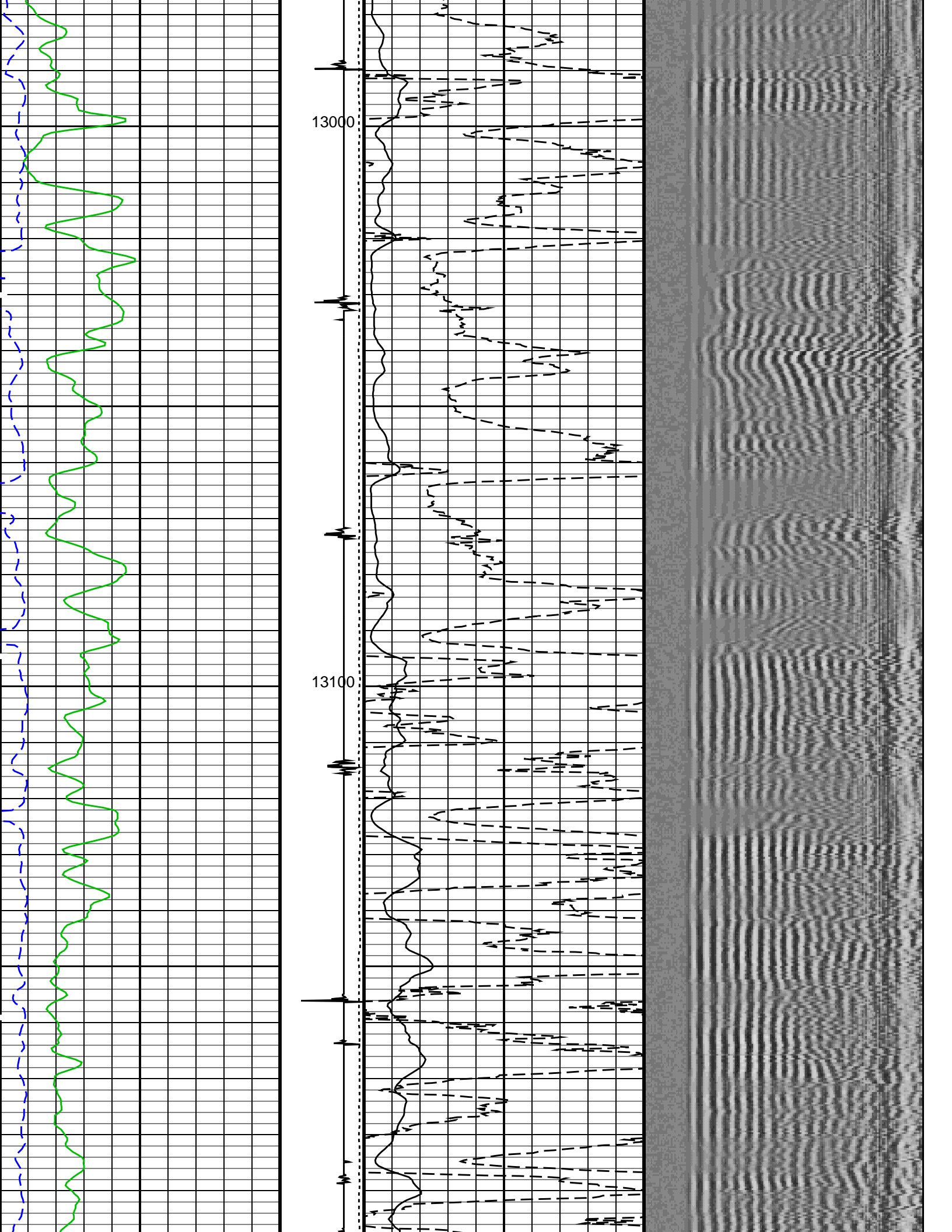


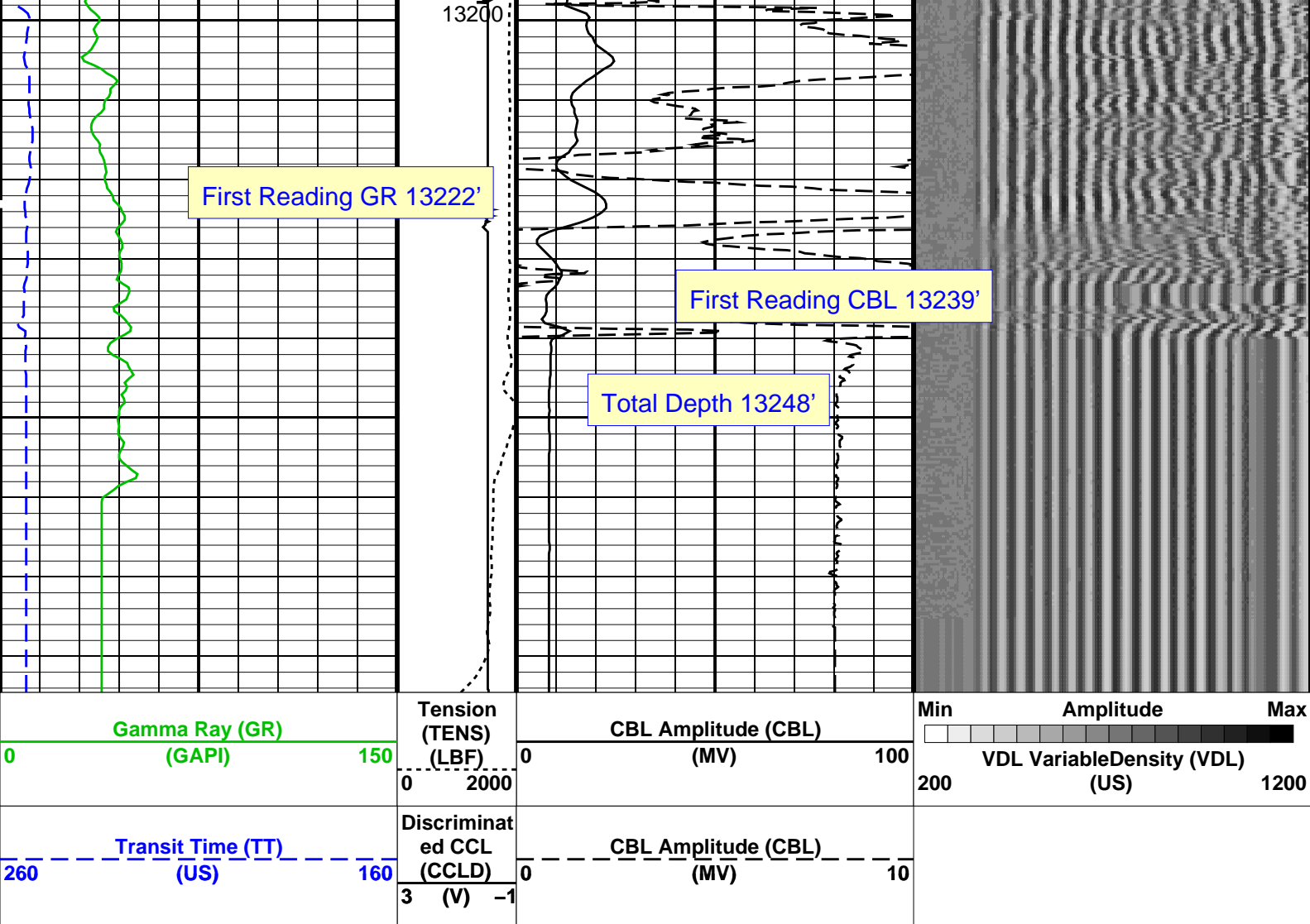












#### PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 03-Jan-2014 20:30

### OP System Version: 19C0-187

SCMT-CB 19C0-187 HBMS-B 19C0-187

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

Sonde Serial Number SCMS-CB 8317

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 19-NOV-2013

CBL Correction Factor 0.0760937

CBL Adjustment Factor (CBAF) 1.0

MAP 1 Correction Factor 0.150622

MAP Adjustment Factor (MPAF) 1.0

MAP 2 Correction Factor 0.179433

MAP 3 Correction Factor 0.224866

MAP 4 Correction Factor 0.185593

MAP 5 Correction Factor 0.169494



MAP 6 Correction Factor	0.164349
MAP 7 Correction Factor	0.149944
MAP 8 Correction Factor	0.141671

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	60	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					
CSIZ	Current Casing Size	4.500	IN		
CWEI	Casing Weight	11.60	LB/F		
DFD	Drilling Fluid Density	8.40	LB/G		
DO	Depth Offset for Playback	10.0	FT		
PP	Playback Processing	RECOMPUTE			
TD	Total Depth	13248	FT		

Input DLIS Files						
DEFAULT	SCMT_HBMS_035LUP	FN:34	PRODUCER	03-Jan-2014 17:04	13274.5 FT	9.5 FT
Output DLIS Files						
DEFAULT	SCMT_HBMS_036PUP	FN:35	PRODUCER	03-Jan-2014 20:30		



REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC					Well: SG 8502D-23 (L24 496)	
Input DLIS Files						
DEFAULT	SCMT_HBMS_033LUP	FN:32	PRODUCER	03-Jan-2014 16:33	8816.5 FT	8559.0 FT
DEFAULT	SCMT_HBMS_036PUP	FN:35	PRODUCER	03-Jan-2014 20:30	13284.5 FT	-5.0 FT

# Output DLIS Files

DEFAULT

SCMT\_HBMS\_037PUP

FN:36

PRODUCER

03-Jan-2014 20:44

8818.0 FT

8536.0 FT

## OP System Version: 19C0-187

SCMT-CB

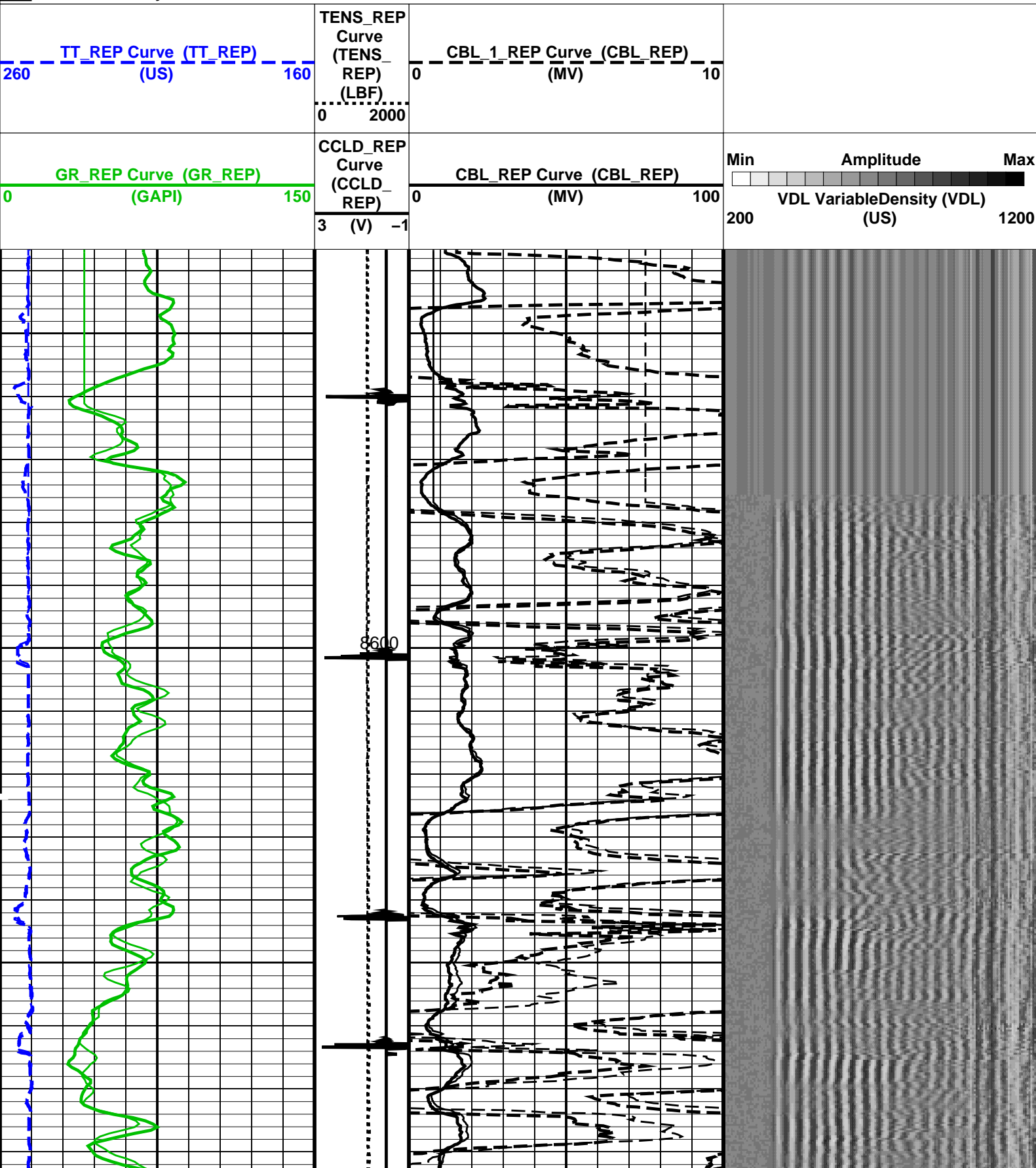
19C0-187

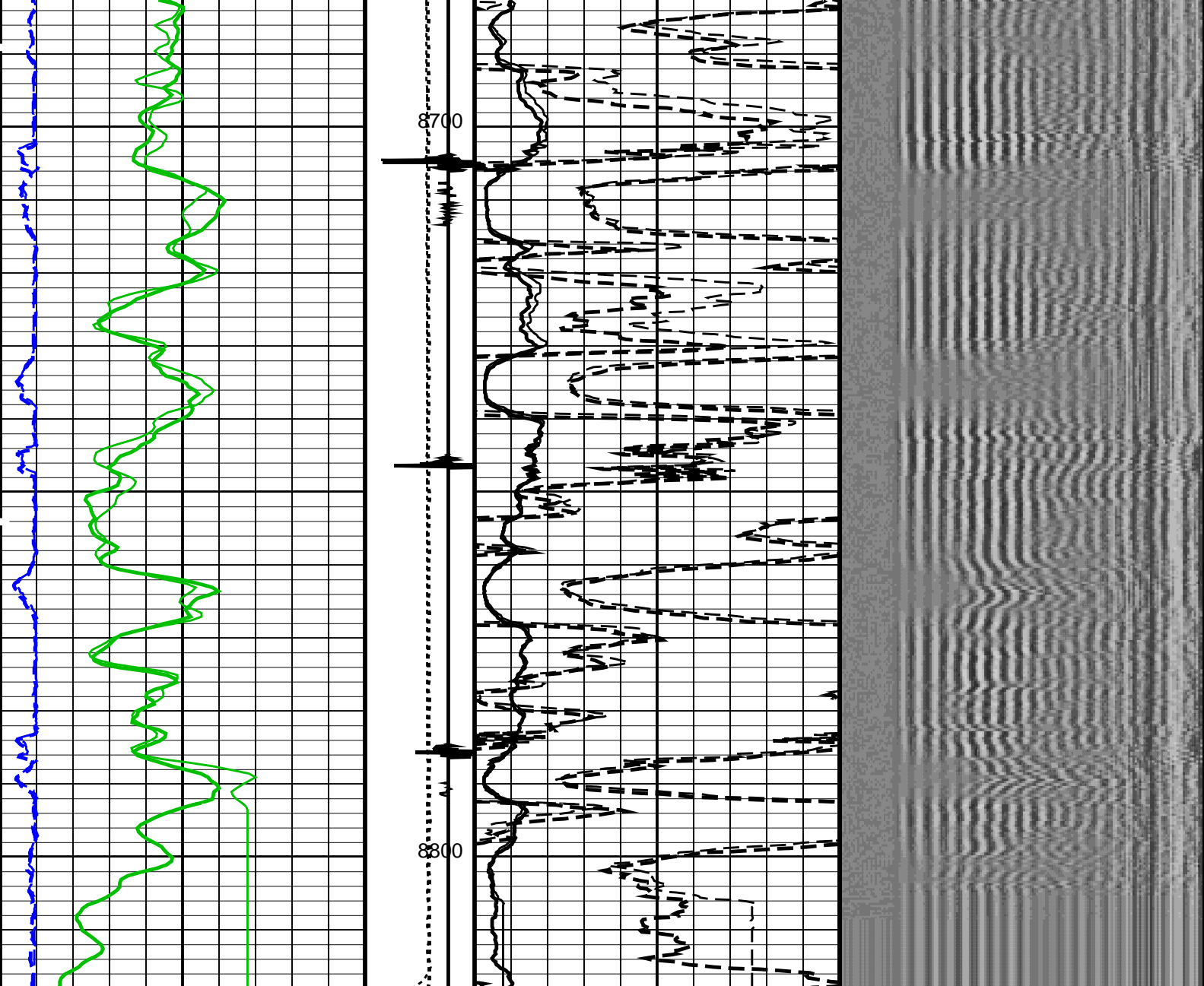
HBMS-B

19C0-187

### PIP SUMMARY

Time Mark Every 60 S





GR_REP Curve (GR_REP) (GAPI)		CCLD_REP Curve (CCLD_REP) (V)	CBL_REP Curve (CBL_REP) (MV)	Min      Amplitude      Max VDL VariableDensity (VDL) (US)
0	150	3    -1	0    100	
TT_REP Curve (TT_REP) (US)		TENS_REP Curve (TENS_REP) (LBF)	CBL_1_REP Curve (CBL_REP) (MV)	
260	160	0    2000	0    10	

PIP SUMMARY

Time Mark Every 60 S  
Format: CBL\_VDL\_REP    Vertical Scale: 5" per 100'    Graphics File Created: 03-Jan-2014 20:44

OP System Version: 19C0-187

SCMT-CB    19C0-187    HBMS-B    19C0-187

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number    SCMS-CB 8317

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	19–NOV–2013		
CBL Correction Factor	0.0760937	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.150622	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.179433		
MAP 3 Correction Factor	0.224866		
MAP 4 Correction Factor	0.185593		
MAP 5 Correction Factor	0.169494		
MAP 6 Correction Factor	0.164349		
MAP 7 Correction Factor	0.149944		
MAP 8 Correction Factor	0.141671		

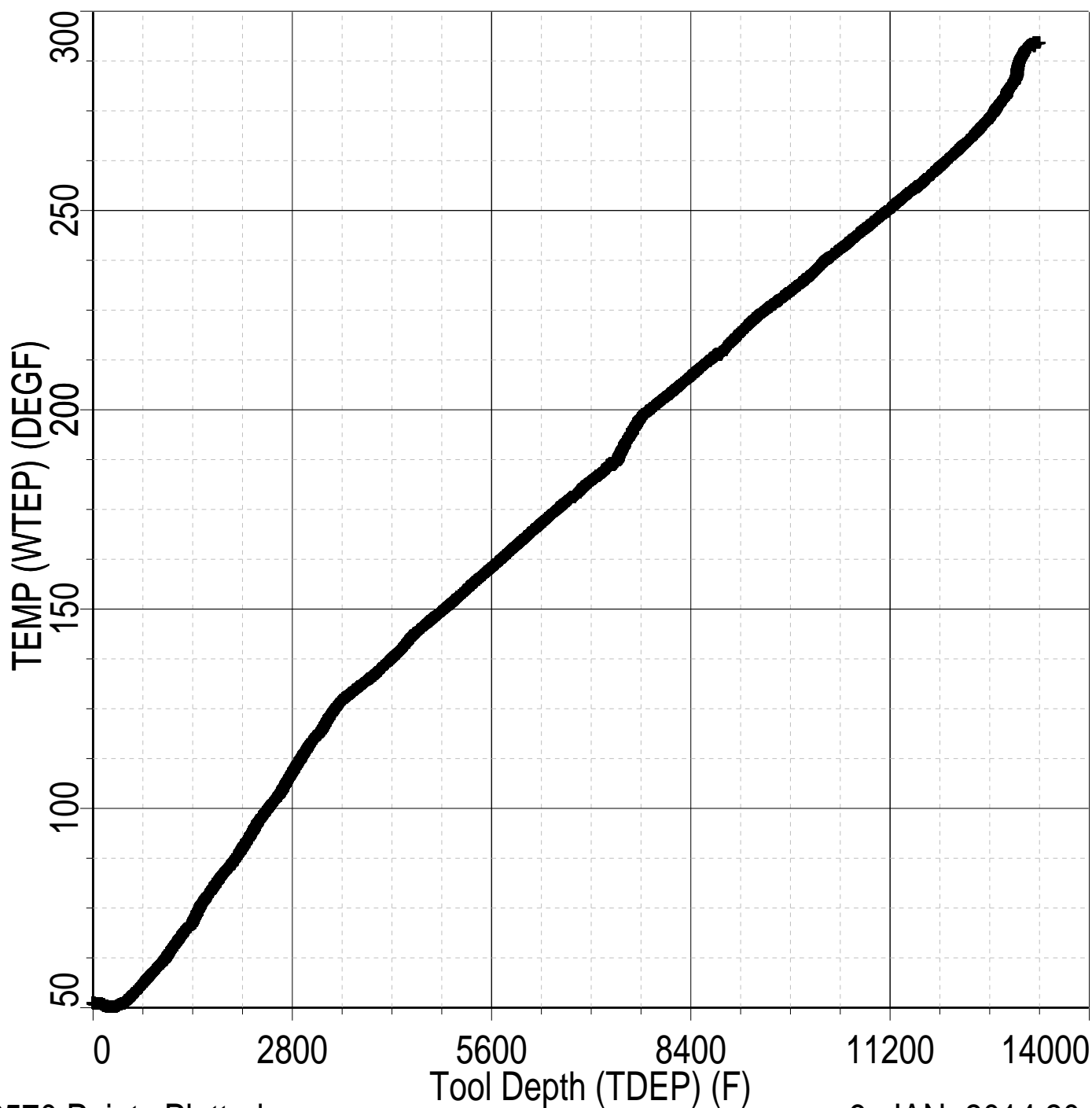
Parameters			
DLIS Name	Description	Value	
	SCMT–CB: Slim Cement Mapping Tool, 1–11/16 OD		
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	224.559	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	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	60	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		
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	1.5	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	13248	FT

Input DLIS Files						
DEFAULT	SCMT_HBMS_033LUP	FN:32	PRODUCER	03–Jan–2014 16:33	8816.5 FT	8559.0 FT
DEFAULT	SCMT_HBMS_036PUP	FN:35	PRODUCER	03–Jan–2014 20:30	13284.5 FT	–5.0 FT
Output DLIS Files						
DEFAULT	SCMT_HBMS_037PUP	FN:36	PRODUCER	03–Jan–2014 20:44		



MAXIS Field Log

Index: 13284.5 – -5.0 FT



26570 Points Plotted

3-JAN-2014 20:43

# MAXIS Field Log

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

### Primary Equipment:


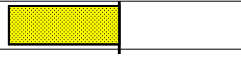
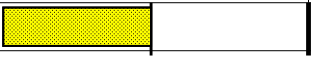
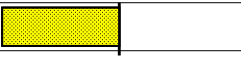

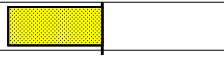



Slim Cement Mapping Xmitter Electronics	SCMX – CA	
Slim Cement Mapping Sonde	SCMS – CB	8317
Slim Cement Mapping Cartridge	SCMC – CA	8120

### Auxiliary Equipment:

Slim Electronics Cartridge Housing	SECH – CA
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## 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				796.7	Master				668.8
	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				533.7	Master				646.6
	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				708.0	Master				730.2
	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				800.3	Master				847.0
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)			500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)	
Phase	CBL Amplitude Plus MV			Value					
Master				1262					
	1000 (Minimum)	1350 (Nominal)	1700 (Maximum)						
Master: 19–Nov–2013 17:30									

**Schlumberger**

**PBMS COEFFICIENTS**

MAXIS Field Log

Field:STORY GULCH

Well:SG 8502D–23 (L24 496)

Run date:3–Jan–2014

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.37166,TOOL HBMS–BA2955. SENSOR S/N:

37166

280912

12

6646

GR HV Rt		
	Rt**0	Rt**1
Rt**0	+.<200000000000e+04	+.193000000000e+04

Client:ENCANA OIL & GAS (USA) INC

Field:STORY GULCH

Well:SG 8502D–23 (L24 496)

Run date:3–Jan–2014

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.2955 S/N:

2955

140513

16

9ABB

WTemp Coeff			
	Tt**0	Tt**1	Tt**2
Tt**0	–.579466850375E+03	+.321000211776E+03	–.769493413393E+02
	Tt**3	Tt**4	Tt**5
Tt**0	+.118371810108E+02	–.654027317127E+00	0.0

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SG 8502D-23 (L24 496)

Run date: 3-Jan-2014

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.2955 S/N:

2955

140513

66

AD6E

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.805218055799E+04	+.230687803777E-01	+.120020876821E-07
Fc**1	-.107970514637E+01	-.131245085272E-04	-.102678735701E-09
Fc**2	+.111466223414E-05	+.524200534425E-10	+.949904926223E-15
Fc**3	+.255809900188E-11	+.160726360322E-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	-.772560939667E-10	-.145379238115E-14	-.218737246914E-19
Fc**1	+.968642492374E-16	+.223810216552E-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

:

2955

140513

66



Coeff CRC

EC8A

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+1.120725065588E+03	-.313379211795E-03	+7.08634488020E-08
Fb**1	-.596235012256E-02	+1.182626448637E-07	+1.104369551702E-12
Fb**2	-.295513003186E-07	+3.341136223414E-12	-.998721617444E-18
Fb**3	-.375208992867E-12	+7.12560466778E-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	+1.136541410168E-12	-.403343086990E-17	-.830542374631E-21
Fb**1	-.618398112617E-18	+4.429129395353E-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 2955  
 Calib Date ddmmyy 140513  
 Matrix Size 16  
 Coeff CRC 6C01

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+3.10812532328E+05	+2.24728840165E-02	+7.42962292518E-06
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.673865003325E-10	-.911707425039E-16	-.961889742081E-20

PBMS Quartz Gauge type F

Sonde Serial NB :  
 Sensor Serial NB 2955  
 Calib Date ddmmyy 140513  
 Matrix Size 16  
 Coeff CRC D6FA

Clock Temp Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+1.122085335110E+03	-.602096613375E-02	-.167139647989E-07

	(Fb'–Fc')**3	(Fb'–Fc')**4	(Fb'–Fc')**5
(Fb'–Fc')**0	–.105604526136E–11	–.109719083283E–15	+.100037226713E–19

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

**Schlumberger**

Well: **SG 8502D–23 (L24 496)**  
Field: **STORY GULCH**  
County: **GARFIELD**  
State: **COLORADO**

SLIM CEMENT MAPPING LOG  
GAMMA RAY – CCL – TEMPERATUR