

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8513C-36 (D36 496)

Field: STORY GULCH

County: GARFIELD

State: COLORADO

County:	GARFIELD		
Field:	STORY GULCH		
Location:	SHL: 443 FNL & 1031 FWL		
Well:	SG 8513C-36 (D36 496)		
Company:	ENCANA OIL & GAS (USA) INC		
SLIM CEMENT MAPPING LOG CBL - VDL GAMMA RAY - CCL	LOCATION		
	SHL: 443 FNL & 1031 FWL BHL: 611 FSL & 689 FWL	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. _____ 05-045-20939-000C		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	2-Jul-2013		
Run Number	1		
Depth Driller	12918 ft		
Schlumberger Depth	12838 ft		
Bottom Log Interval	12829 ft		
Top Log Interval	70 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	70 ft		
BIT/CASING/TUBING STRING			
Bit Size	8.750 in		
From	30 ft		
To	12918 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade			
From	30 ft		
To	12894 ft		
Maximum Recorded Temperatures	283 degF		
Logger On Bottom	2-Jul-2013	16:00	
Unit Number	391	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: 3-JUN-2013 9:46:48

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:	4-24-2012	Calibration Date:	6-3-2013	Length:	19500 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878		
Calibration Cable Type:	1-25P	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-3	Calibration RMS:	2	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	6		

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

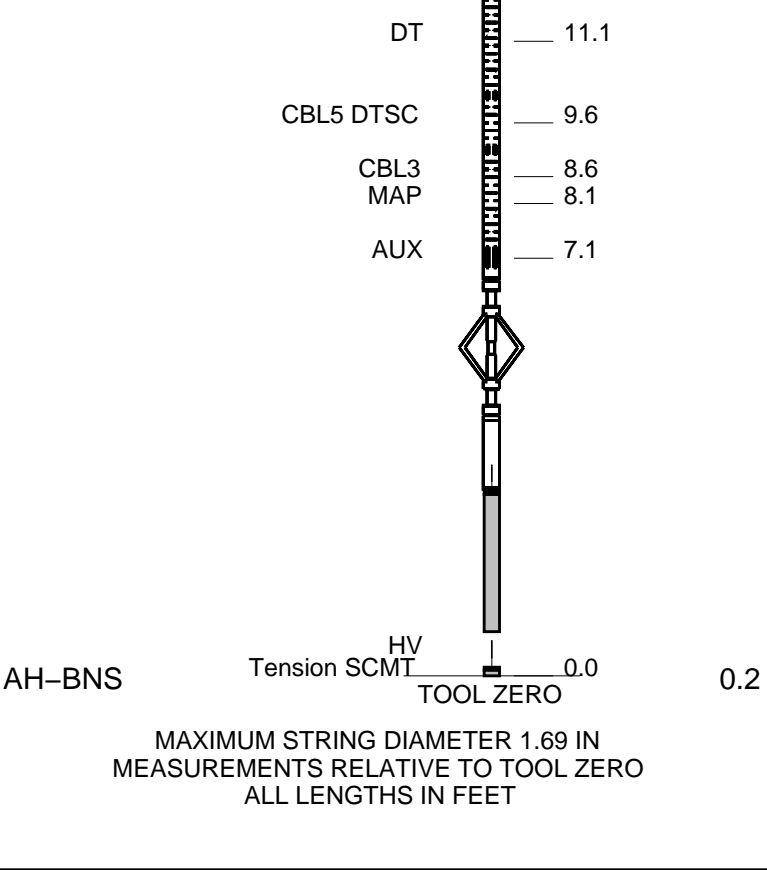
1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES USED
2. IDW USED AS PRIMARY DEPTH CONTROL
3. SWPT DRUM COUNTER USED AS SECONDARY DEPTH CONTROL
- 4.
- 5.
- 6.

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 CORRELATED TO DOWNLOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 15:00	
TIME ON BOTTOM: 16:00	
EXIT TIME: 19:30	

MAX RECORDED TEMPERATURE: 283 DEGF					
MAX RECORDED PRESSURE: 4934 PSIA					
SHORT JOINT: 8465 FT & 11379 FT					
MAIN PASS LOGGED UNDER ZERO SURFACE PRESSURE					
EXPECTED CBL AMP IN FREE PIPE IS 80 MV					
CREW: J BARRY, W AZIZ, K JOHNS, J FESSENDEN					
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY					
RUN 1			RUN 2		
SERVICE ORDER #: C920-00097			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL: 70 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		30.3			
Detail MT TelStatus CTEM		28.7			
PSPT PSC-A PSPT-B 928 PSTC-A PBMS-B CQG_F Mano RTD_Thermometer GR CCL PBMS	28.4	28.4			
	24.7				
	21.7 21.3 20.9				
	20.2				
SCMT-CB SCMC-CA 8120 SECH-CA CMIR-AG SCMS-CB 8303 SCMX-CA		20.2			



MAIN PASS CBL VDL

MAXIS Field Log

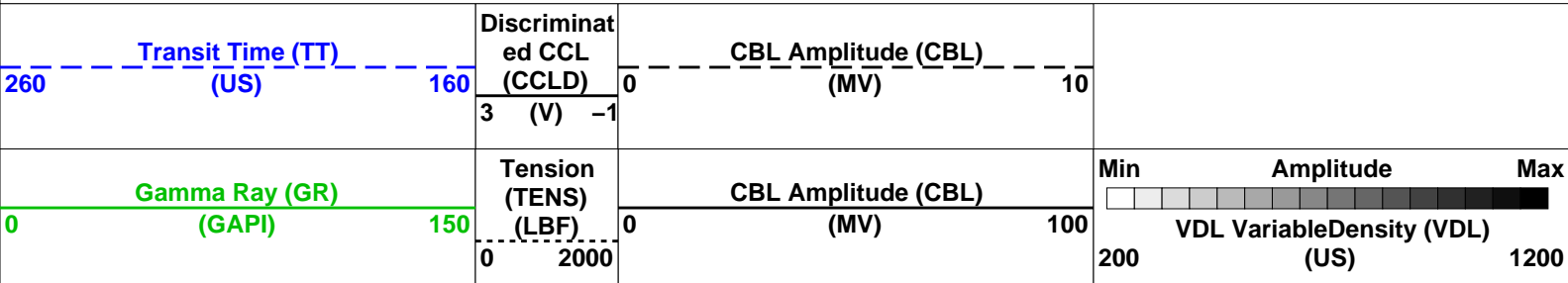
Company: ENCANA OIL & GAS (USA) INC Well: SG 8513C-36 (D36 496)

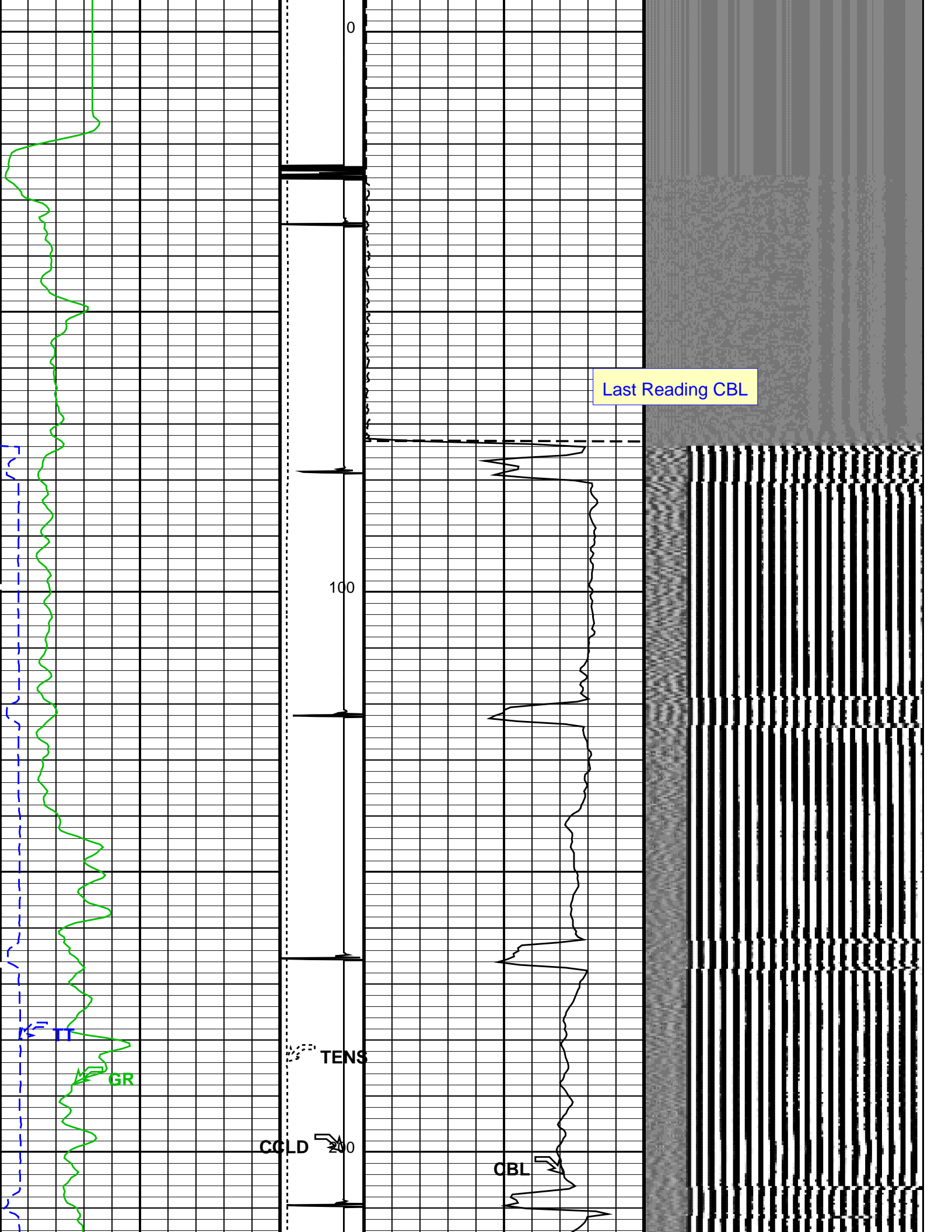
Input DLIS Files						
DEFAULT	SCMT_PSP_016LUP	FN:15	PRODUCER	02-Jul-2013 16:06	12849.5 FT	5.2 FT
Output DLIS Files						
DEFAULT	SCMT_PSP_018PUP	FN:17	PRODUCER	02-Jul-2013 19:29	12857.5 FT	-8.0 FT

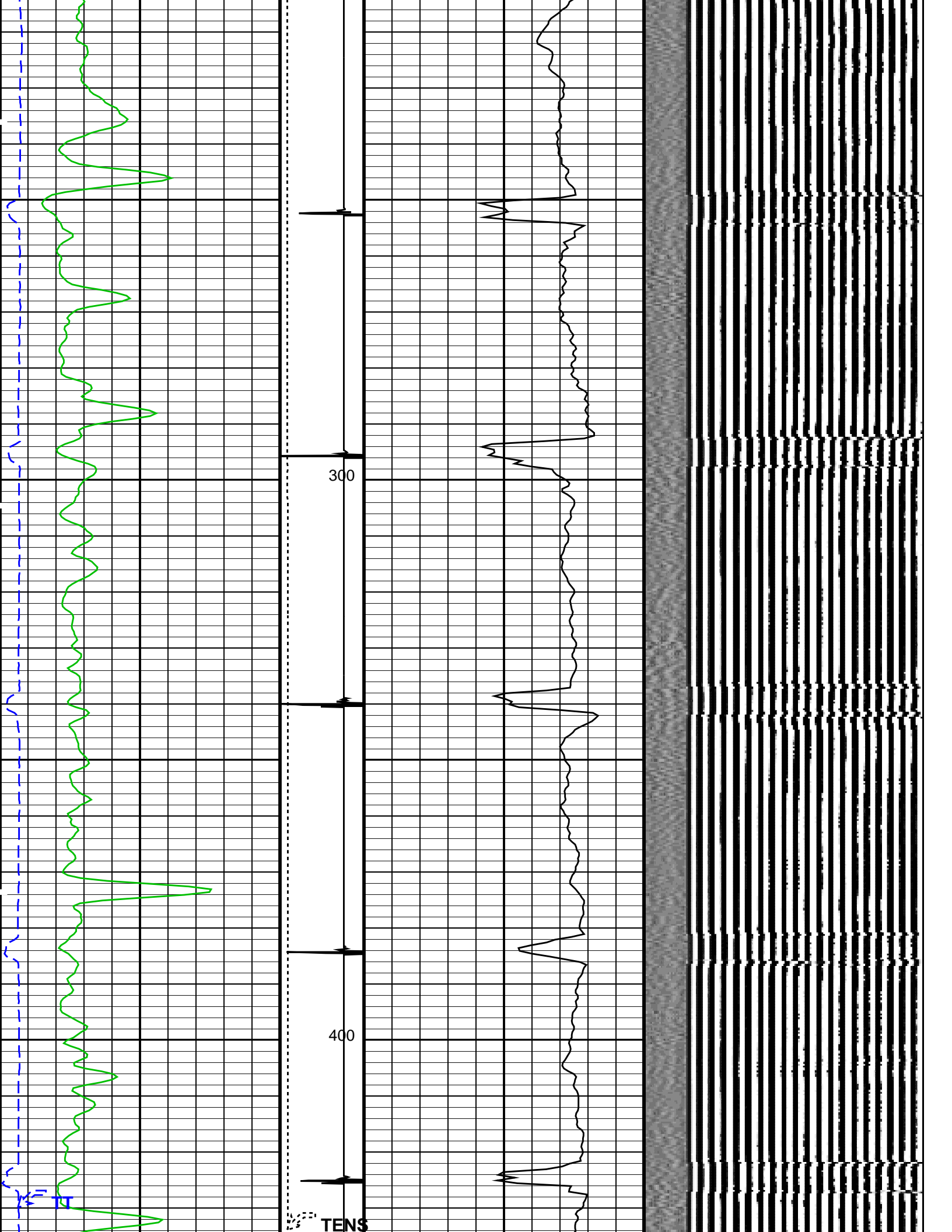
OP System Version: 19C0-187			
SCMT-CB	SRPC-5214-H2-2012-OP1	PSPT	SRPC-5214-H2-2012-OP1

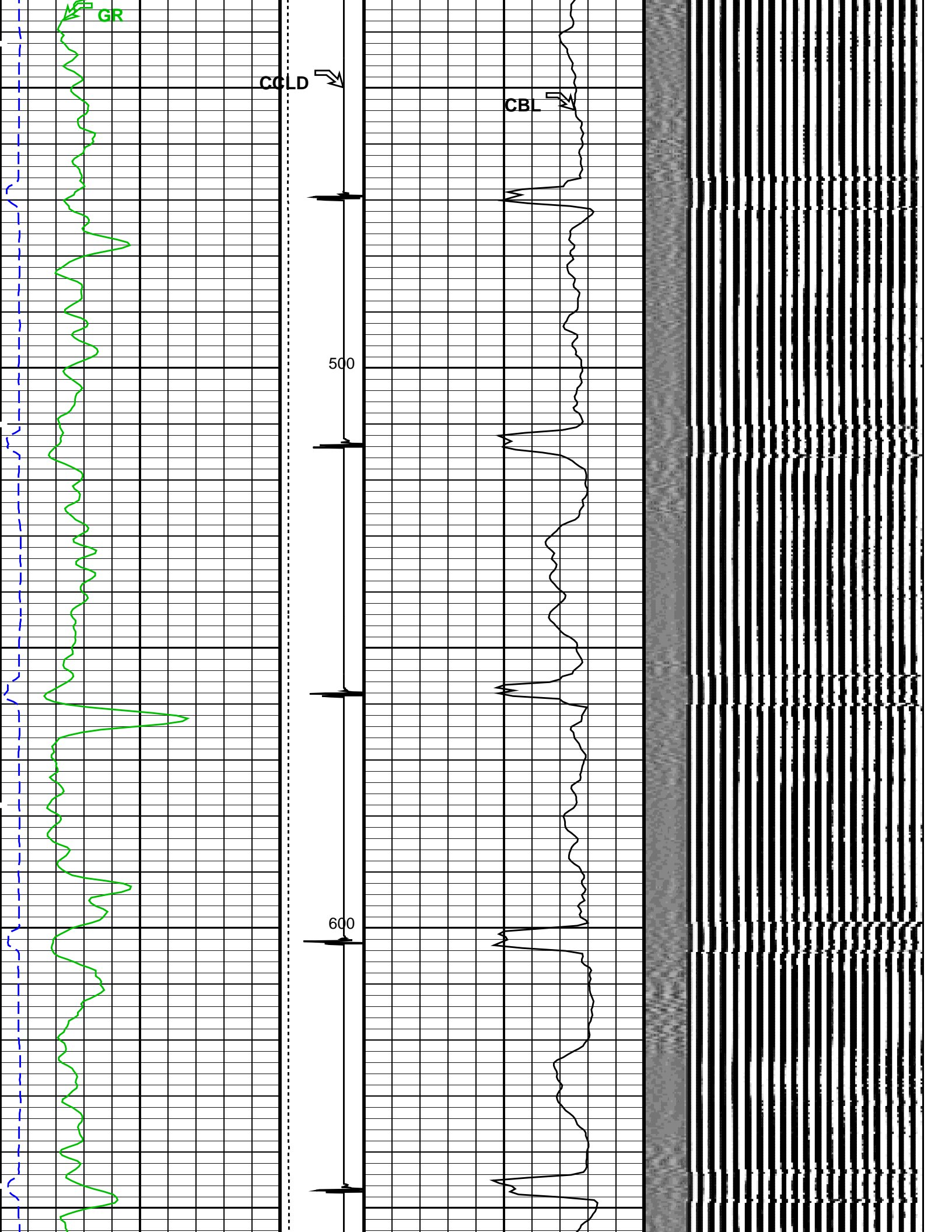
PIP SUMMARY

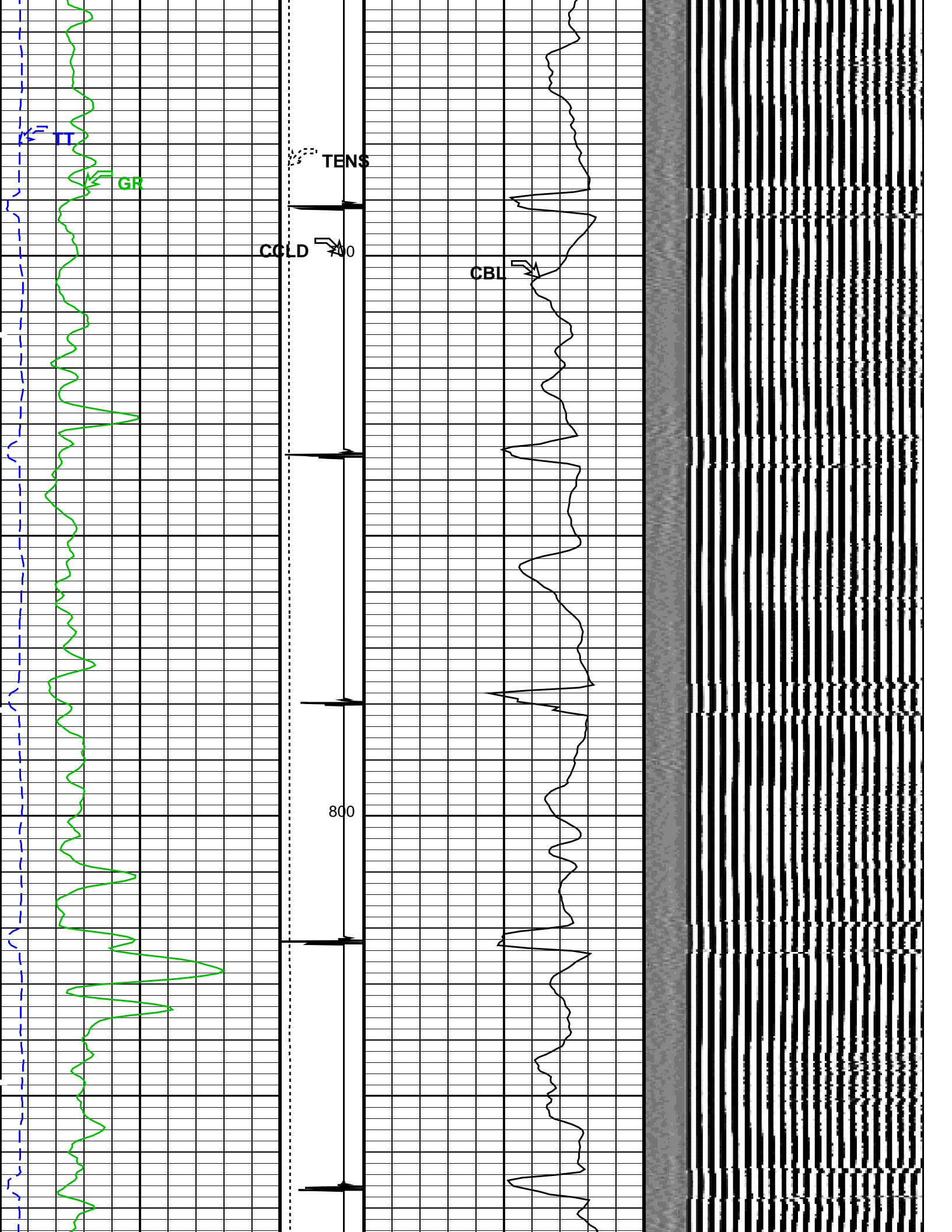
Time Mark Every 60 S

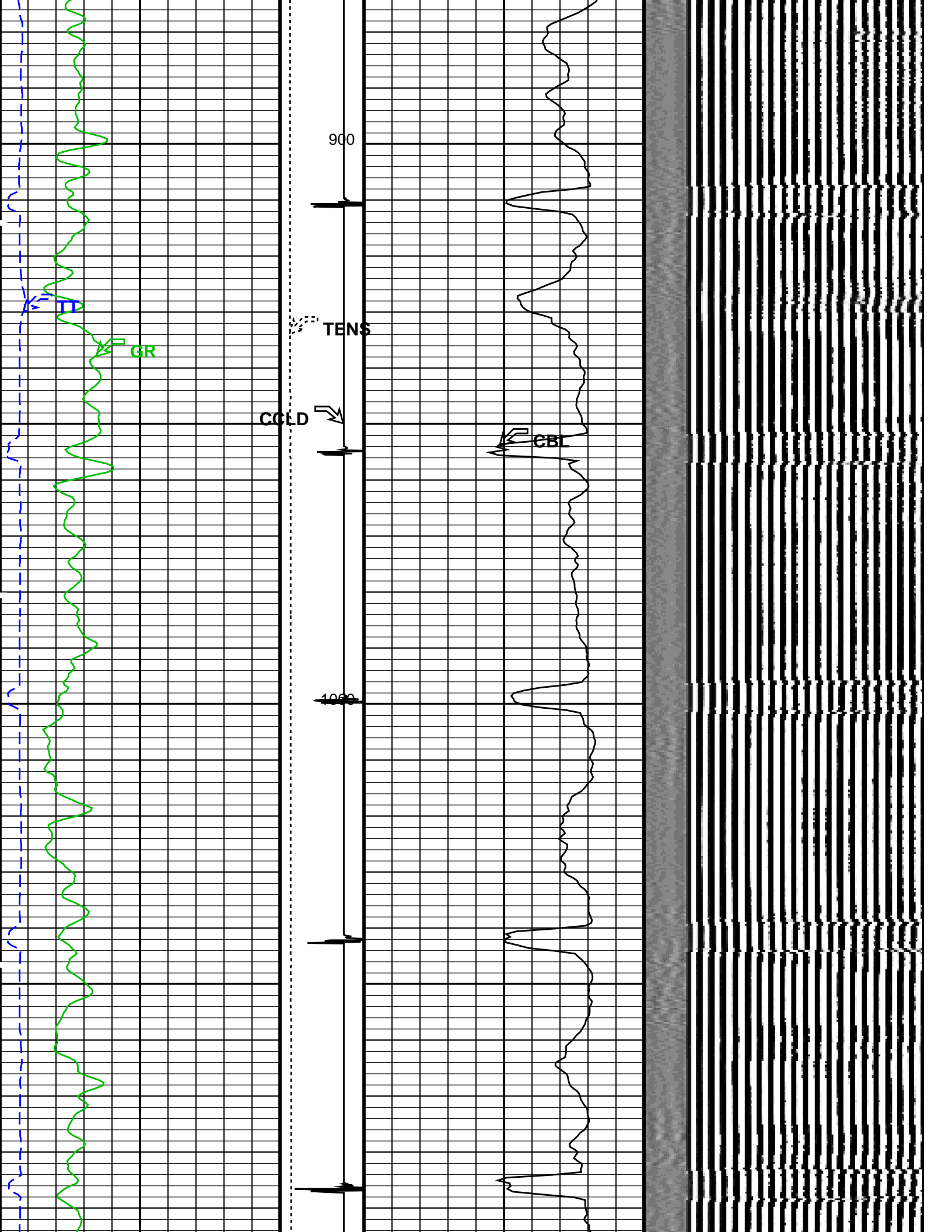


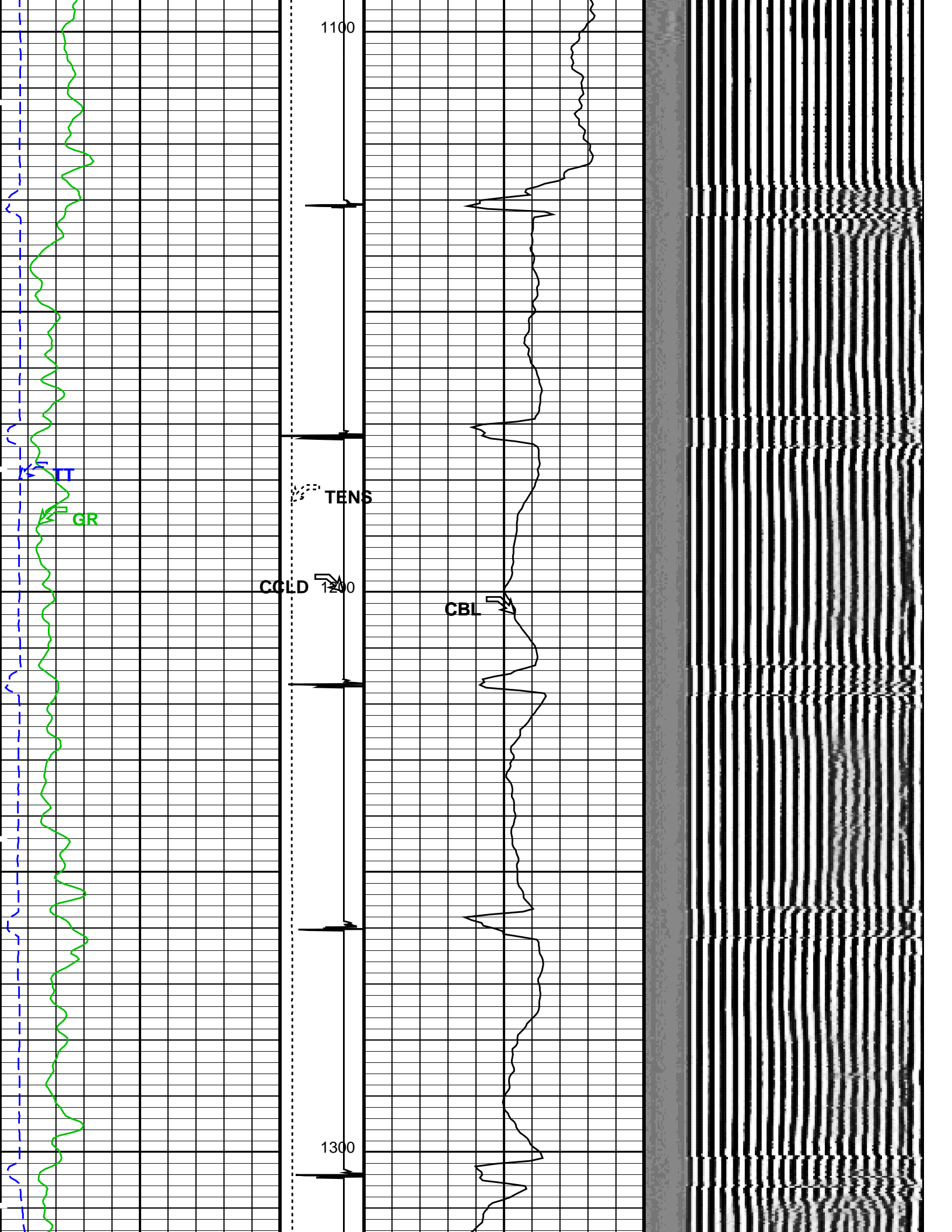


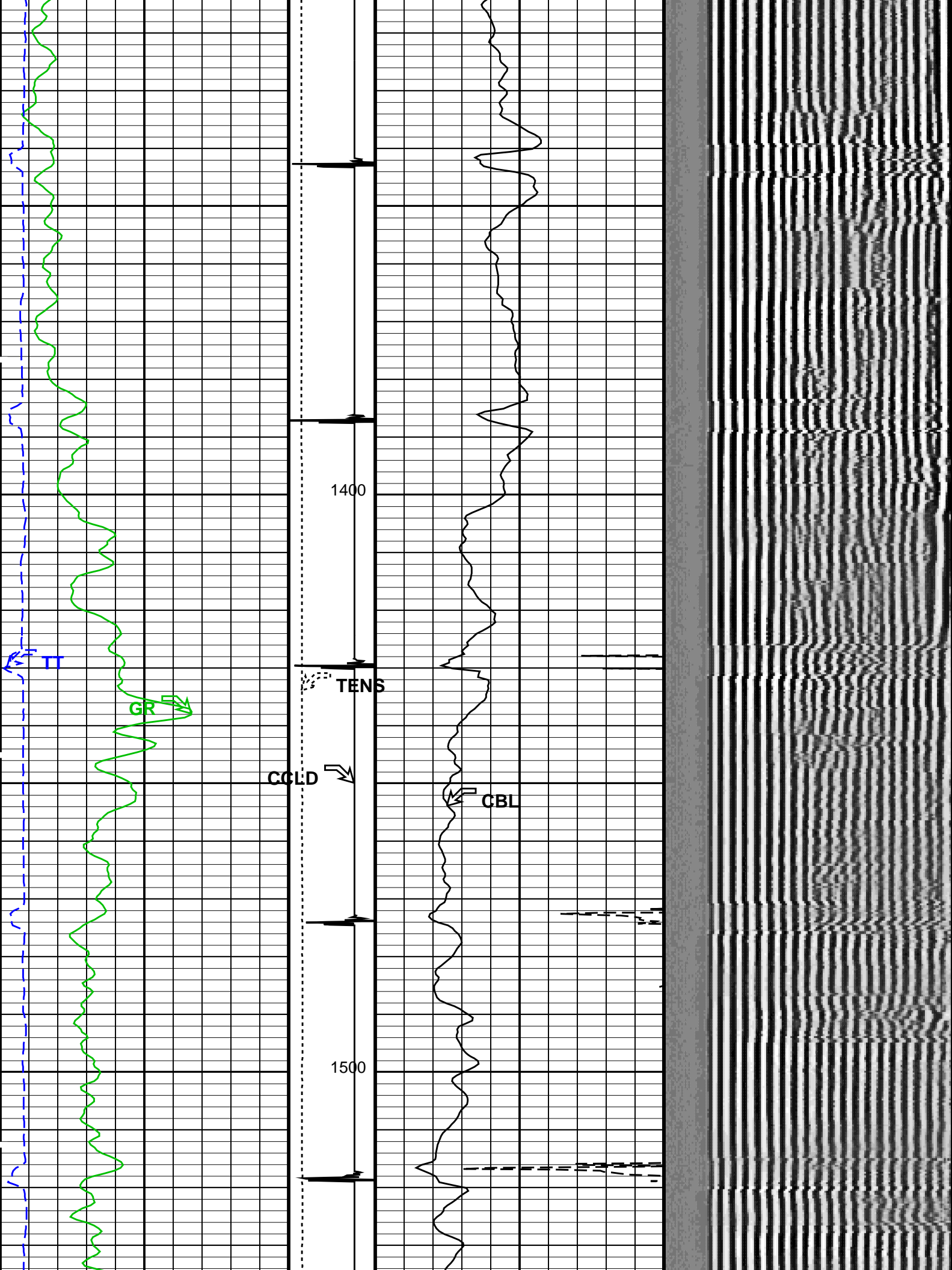


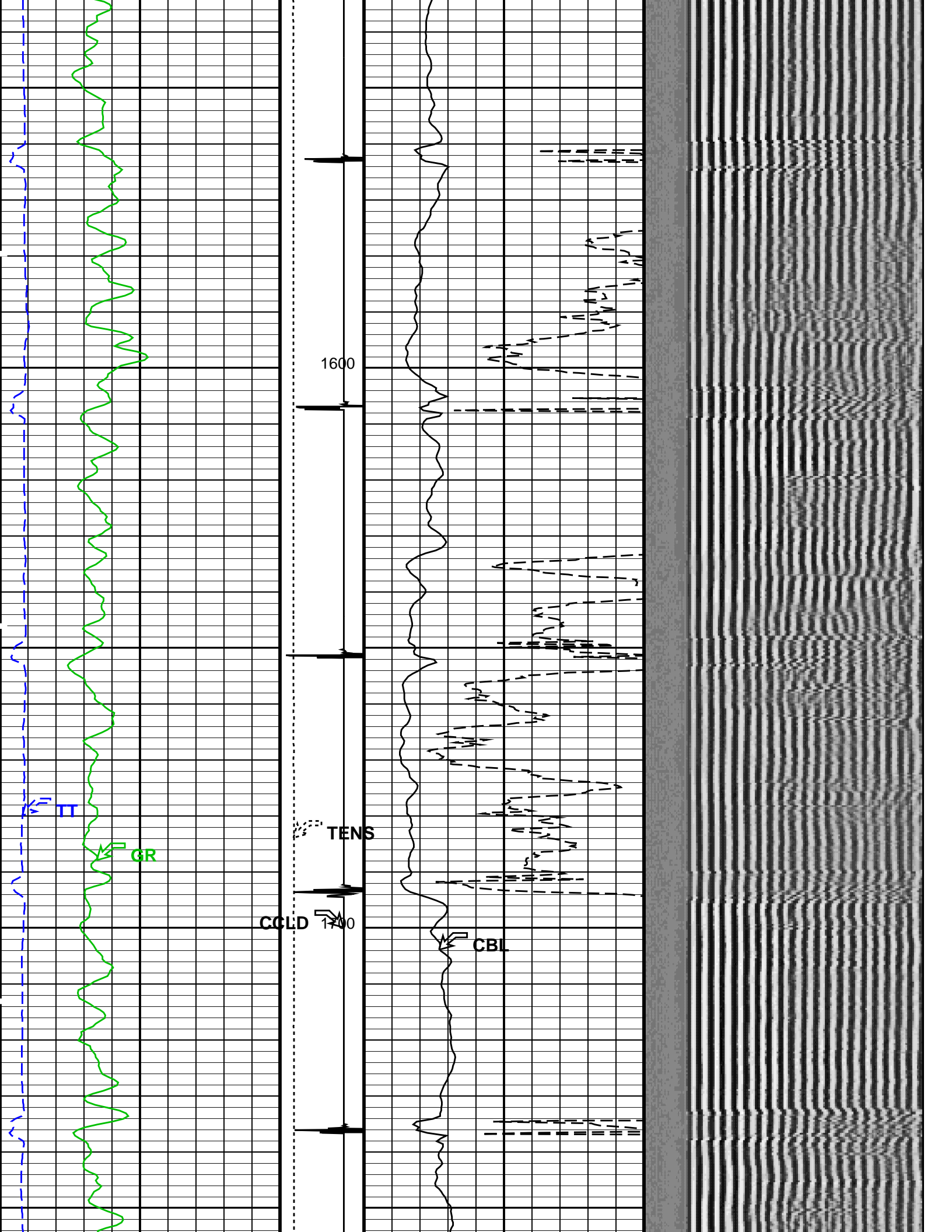


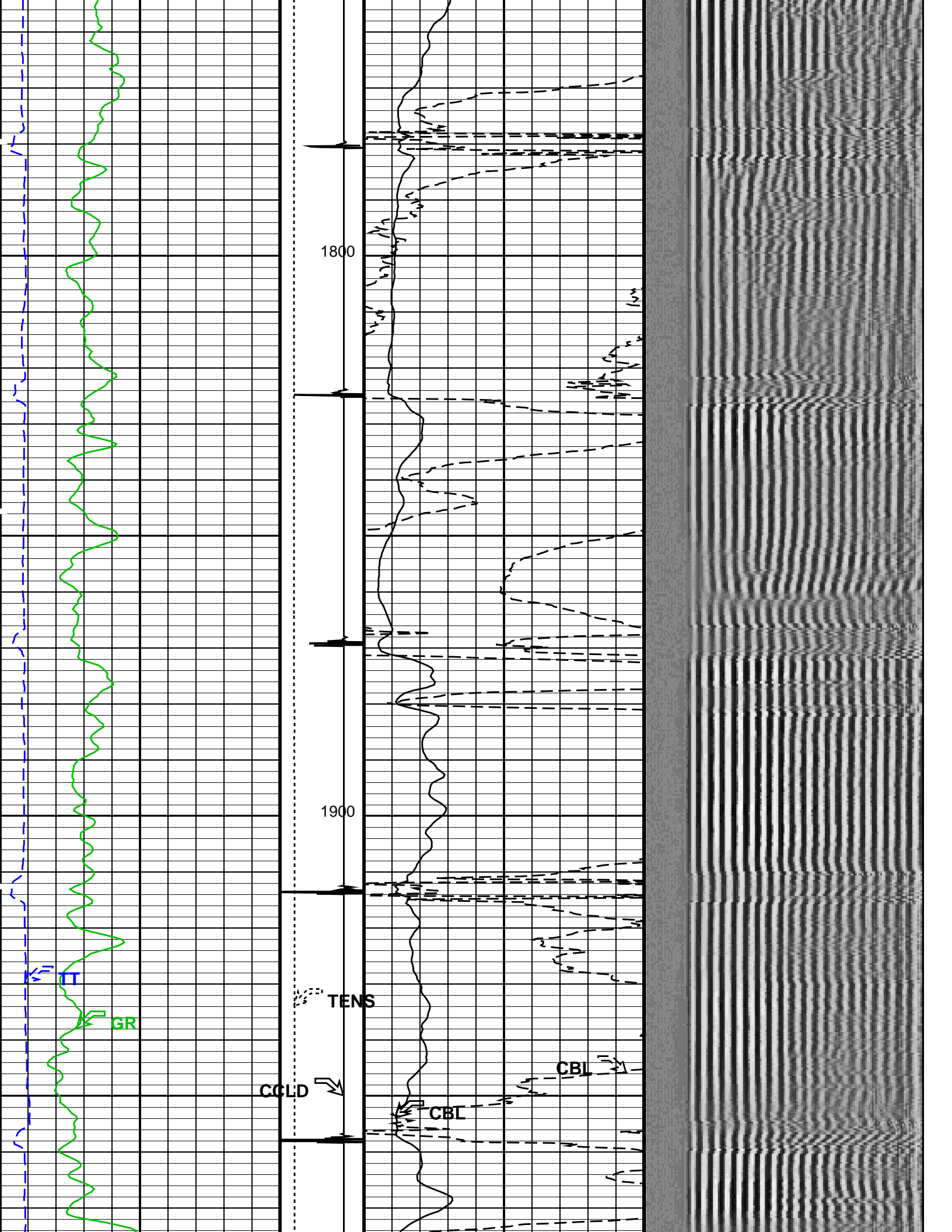


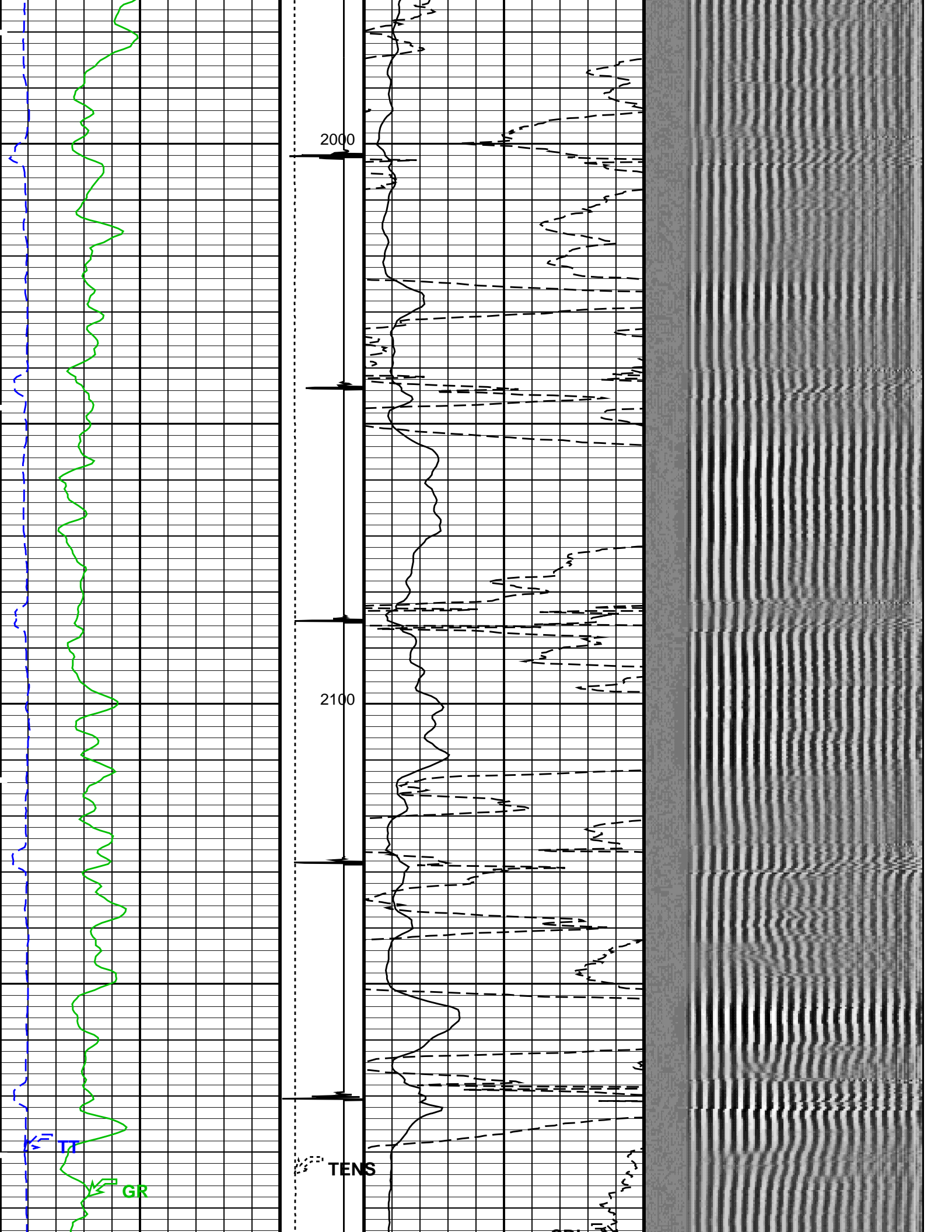


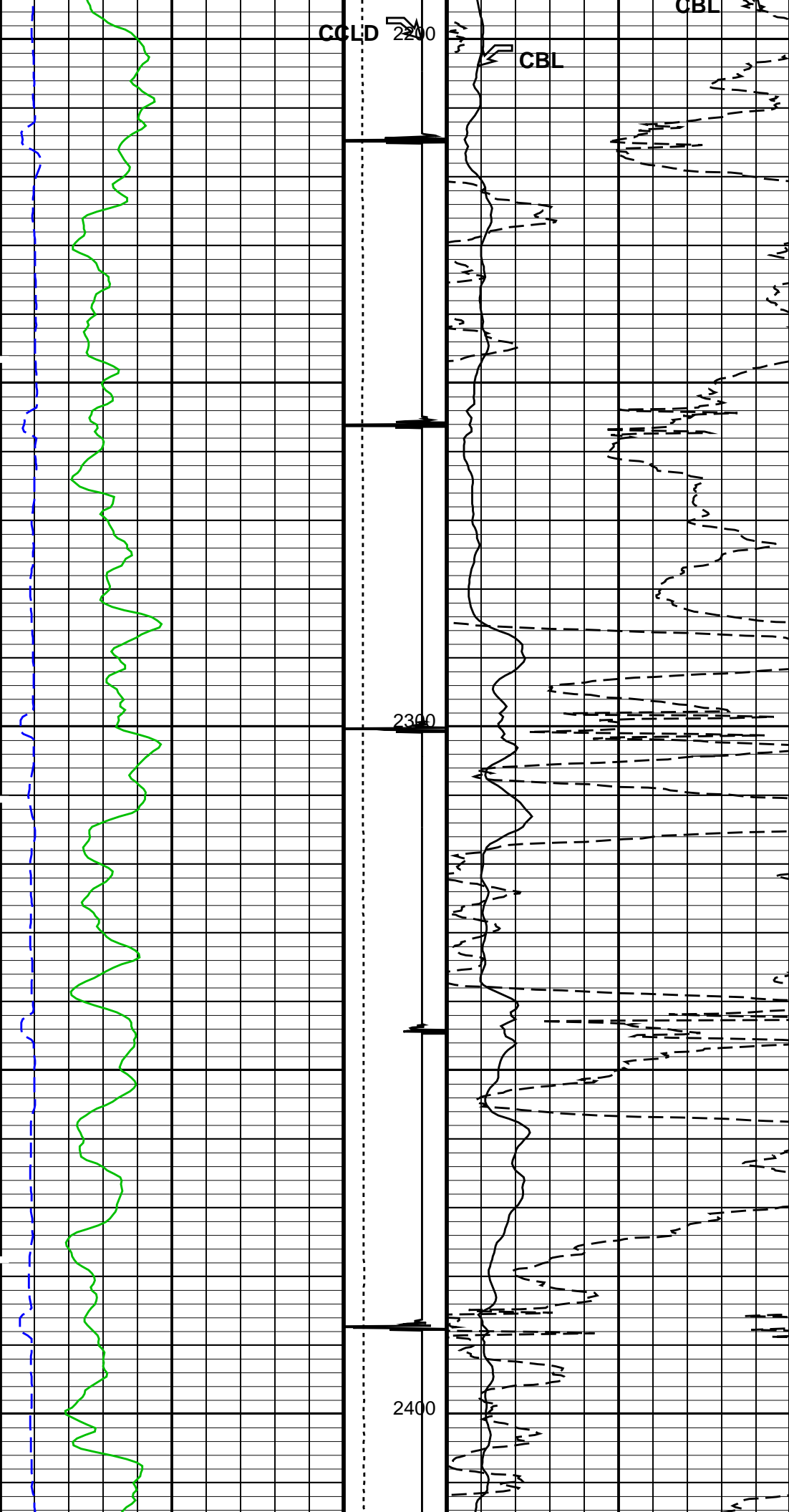


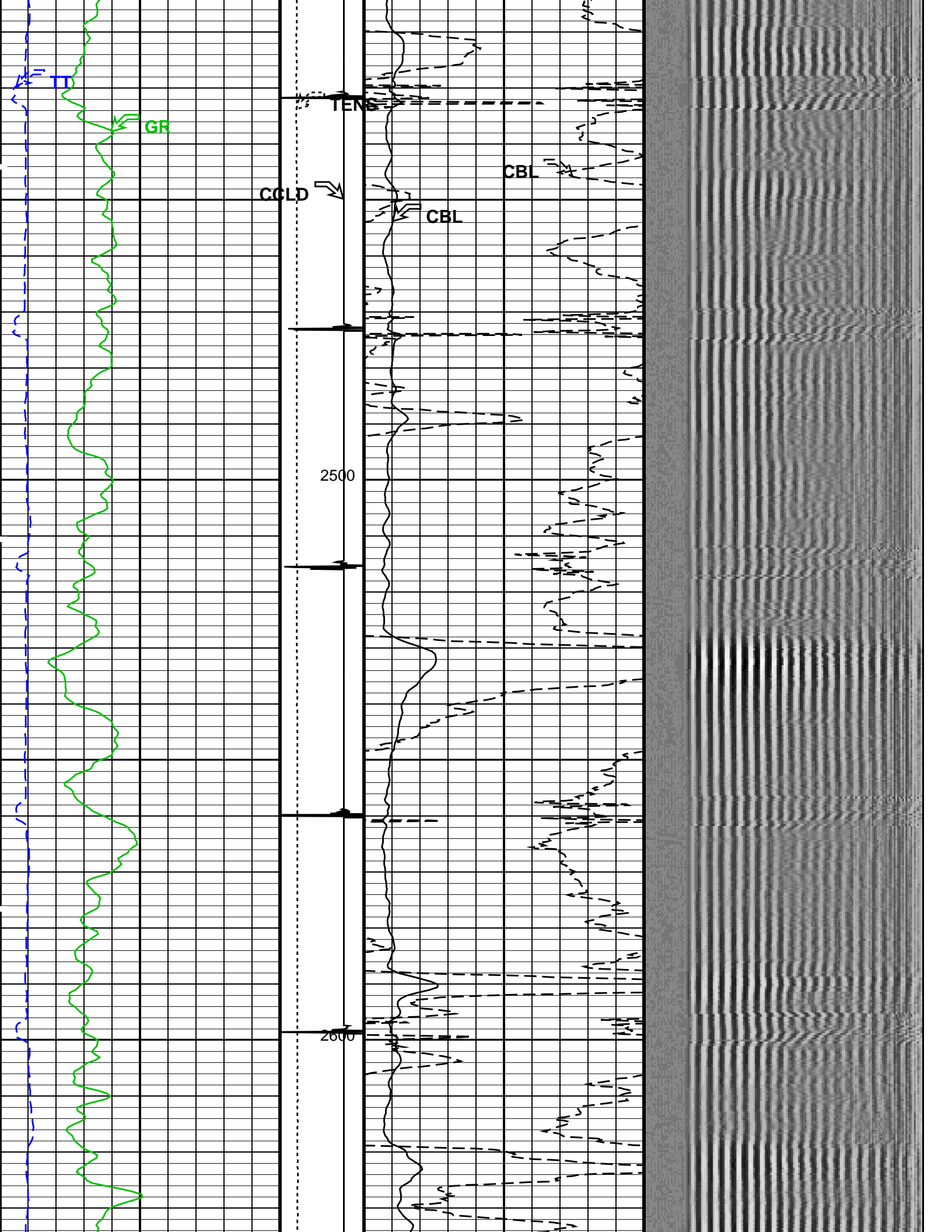


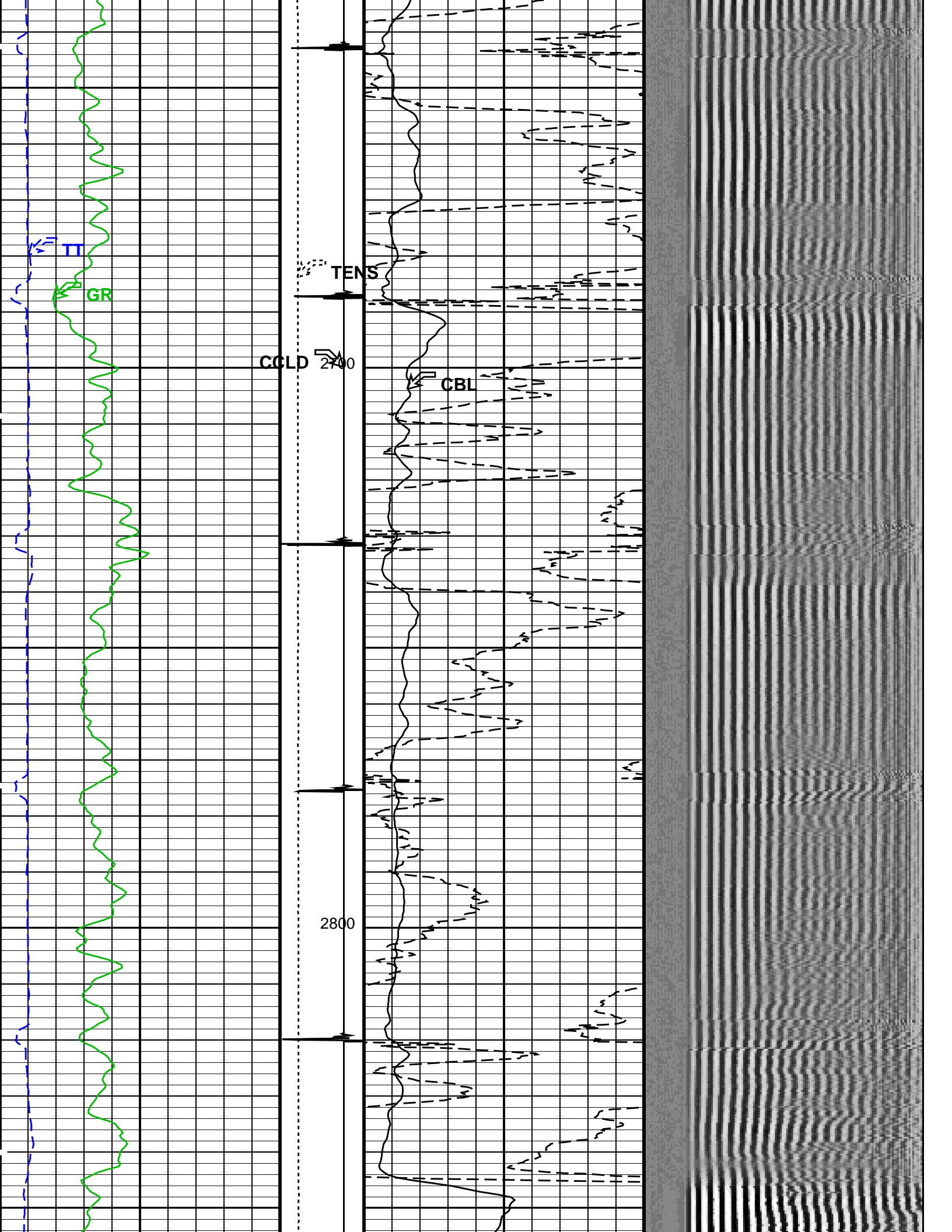


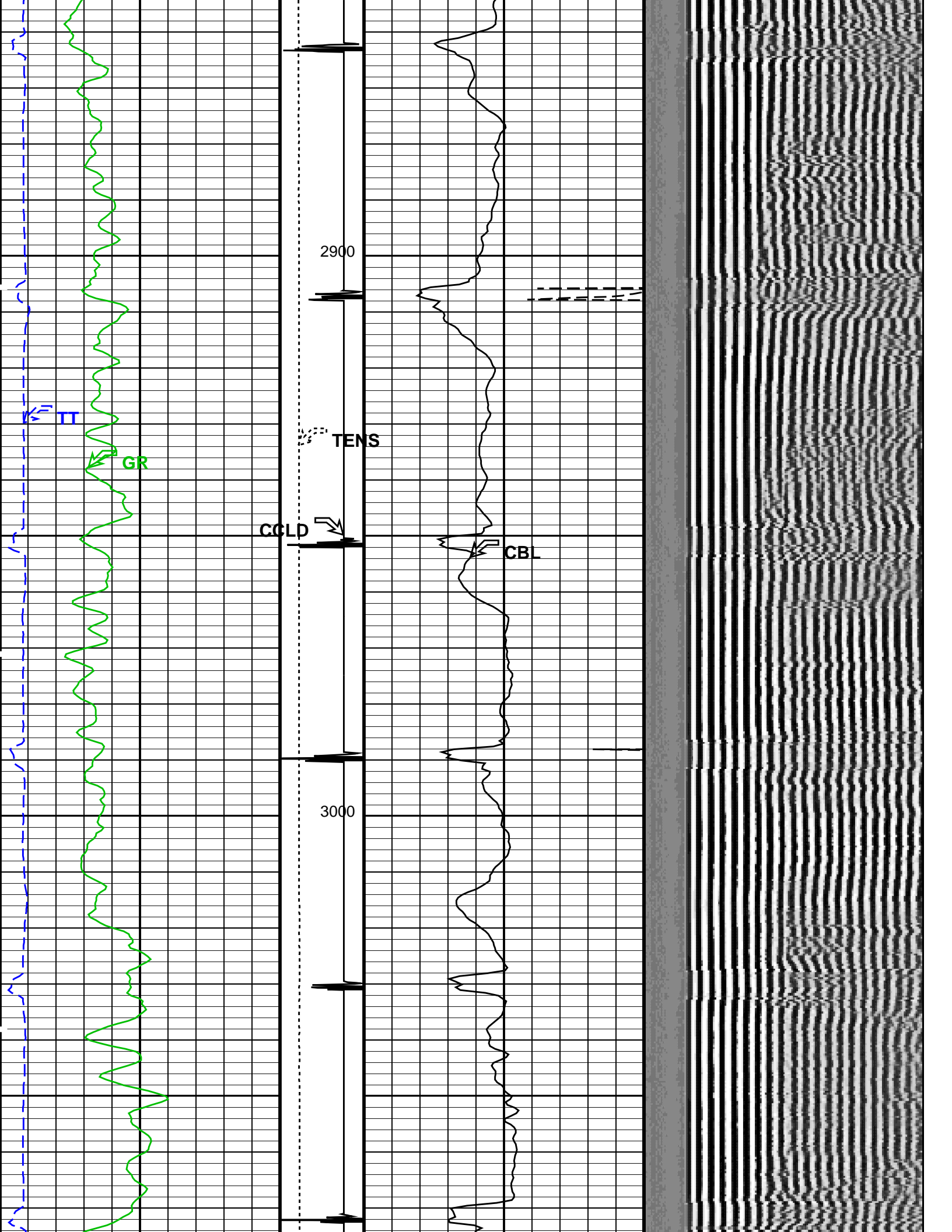


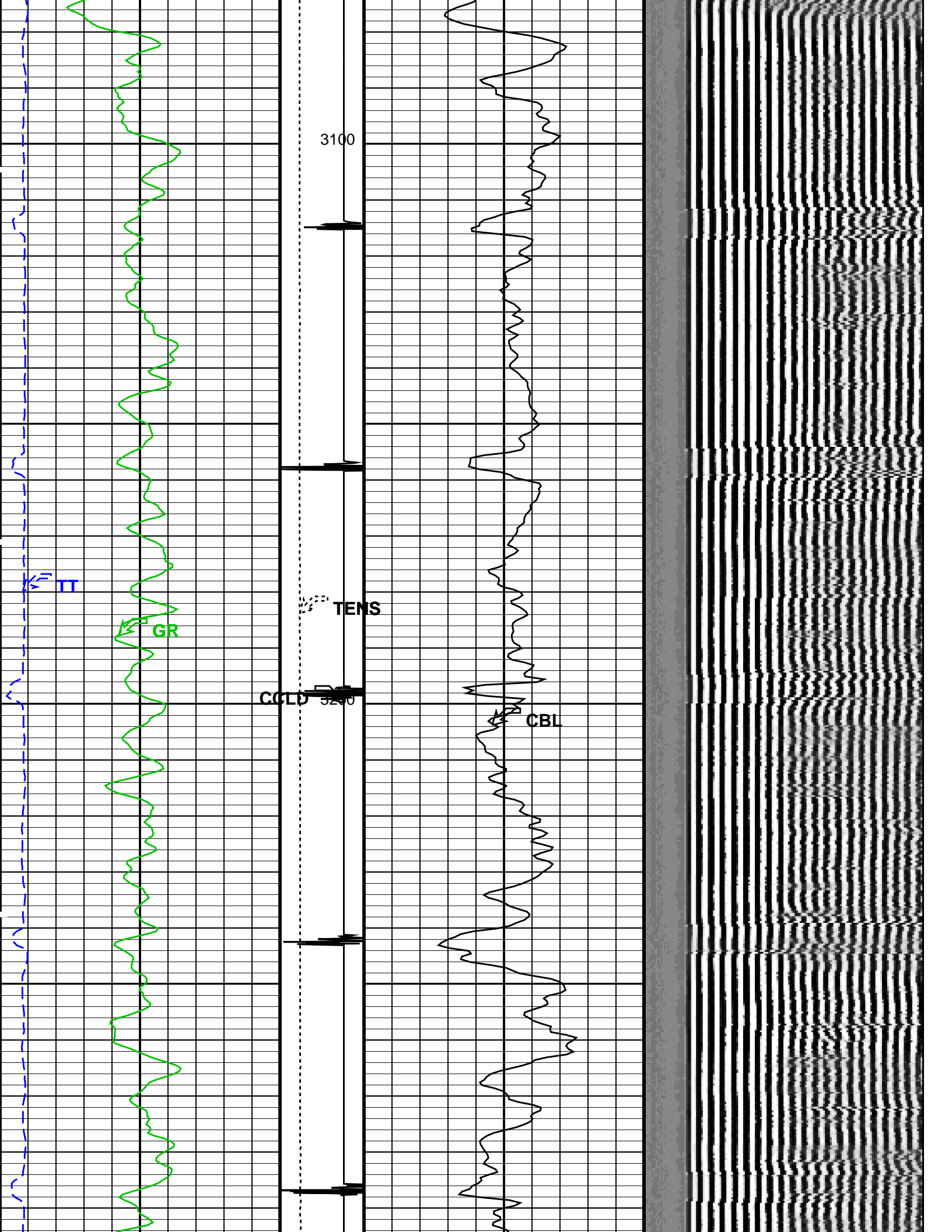


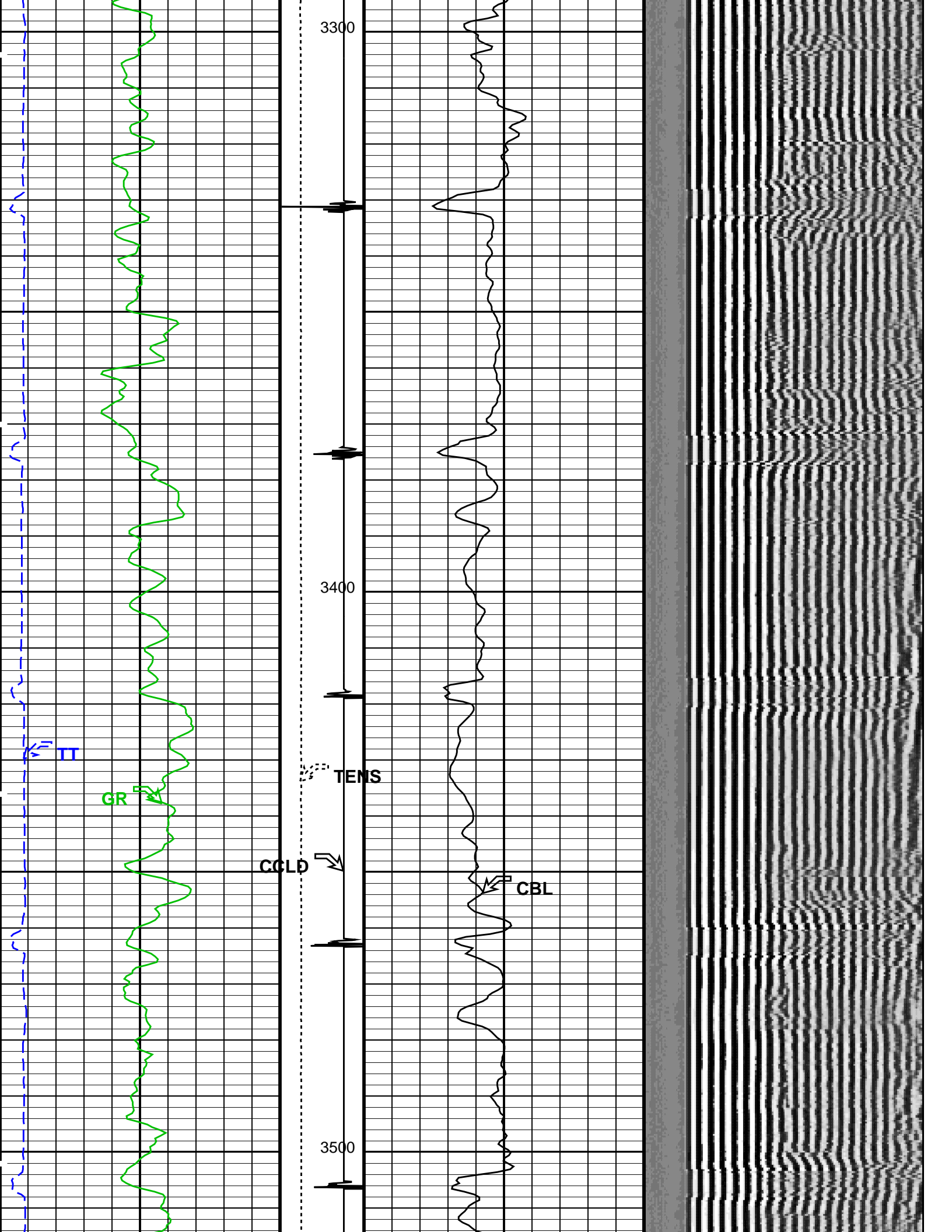


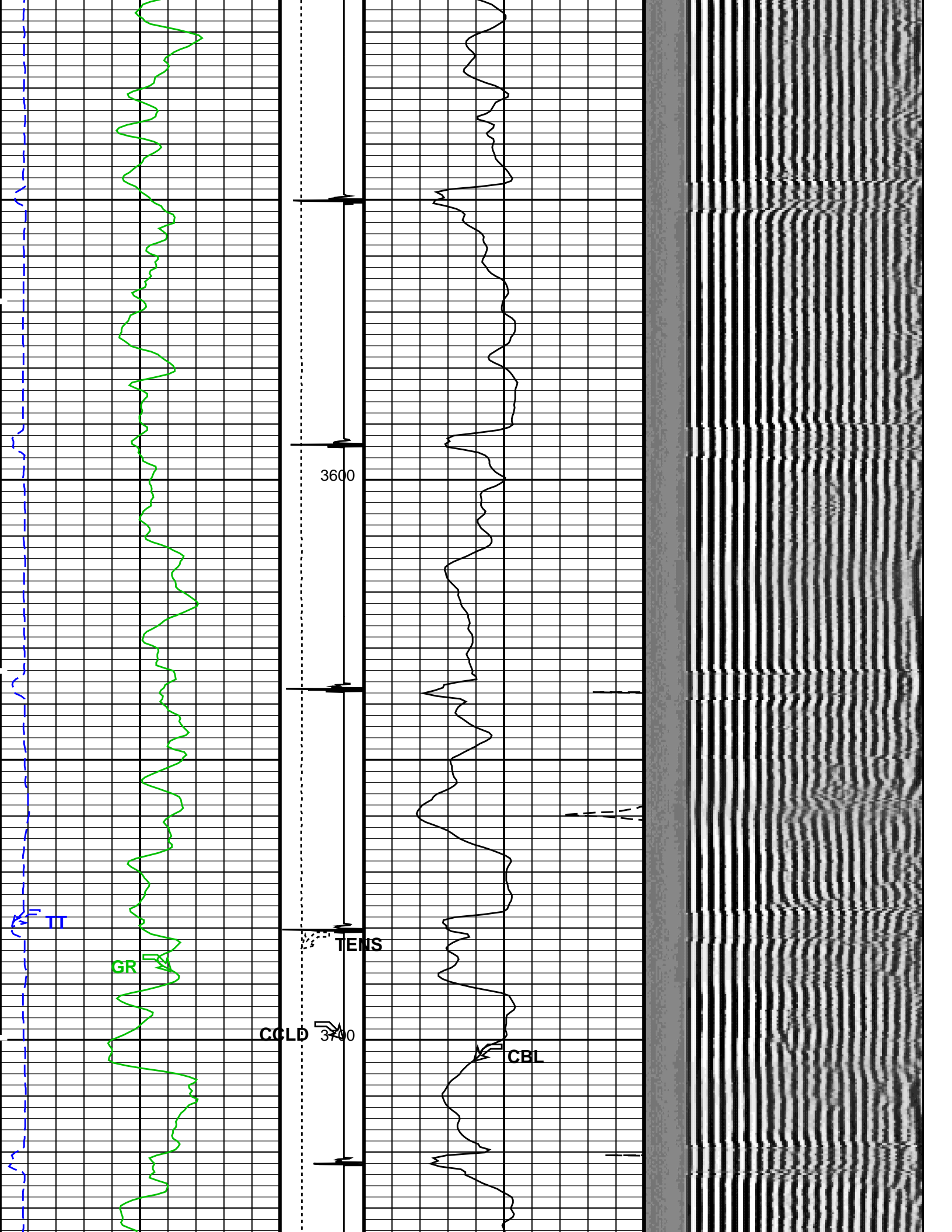


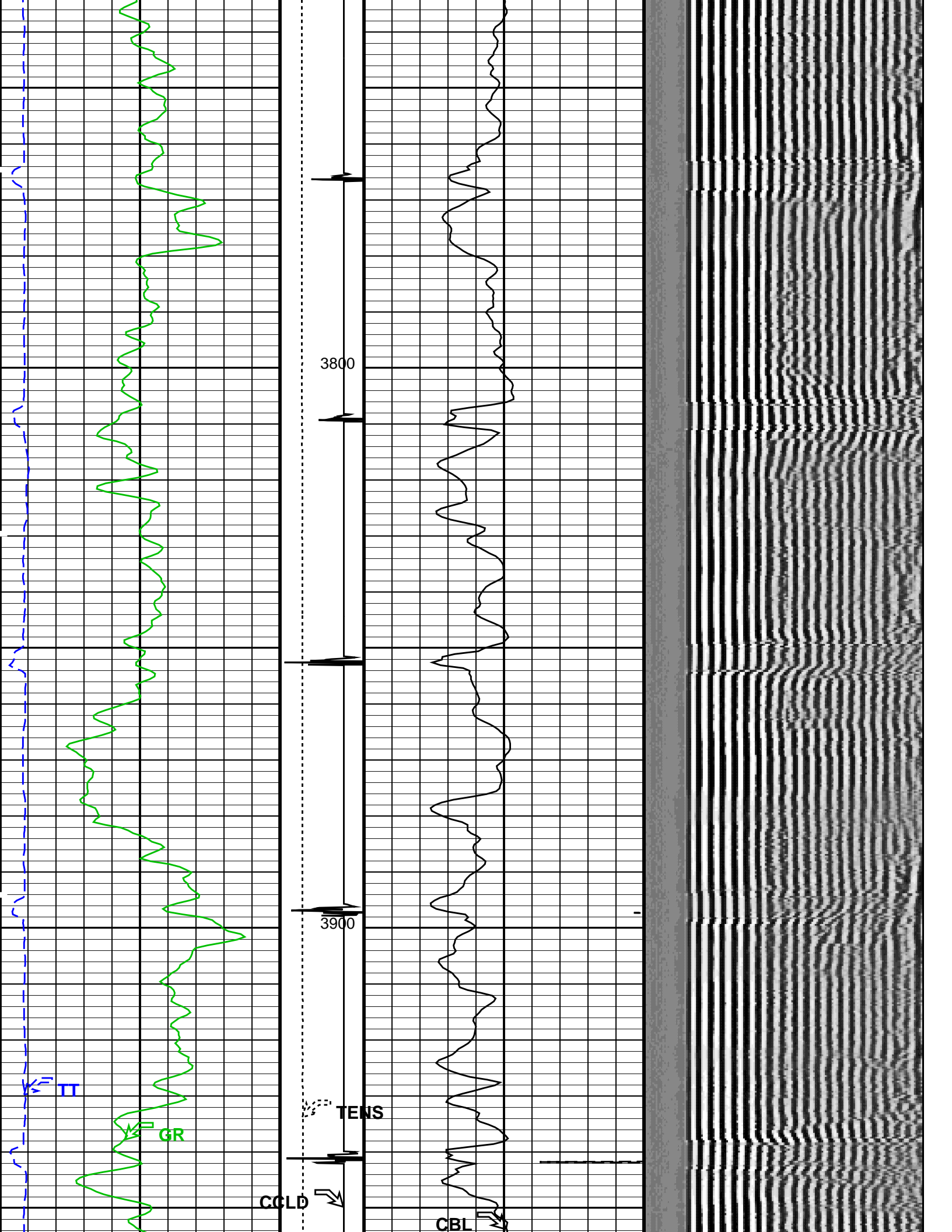


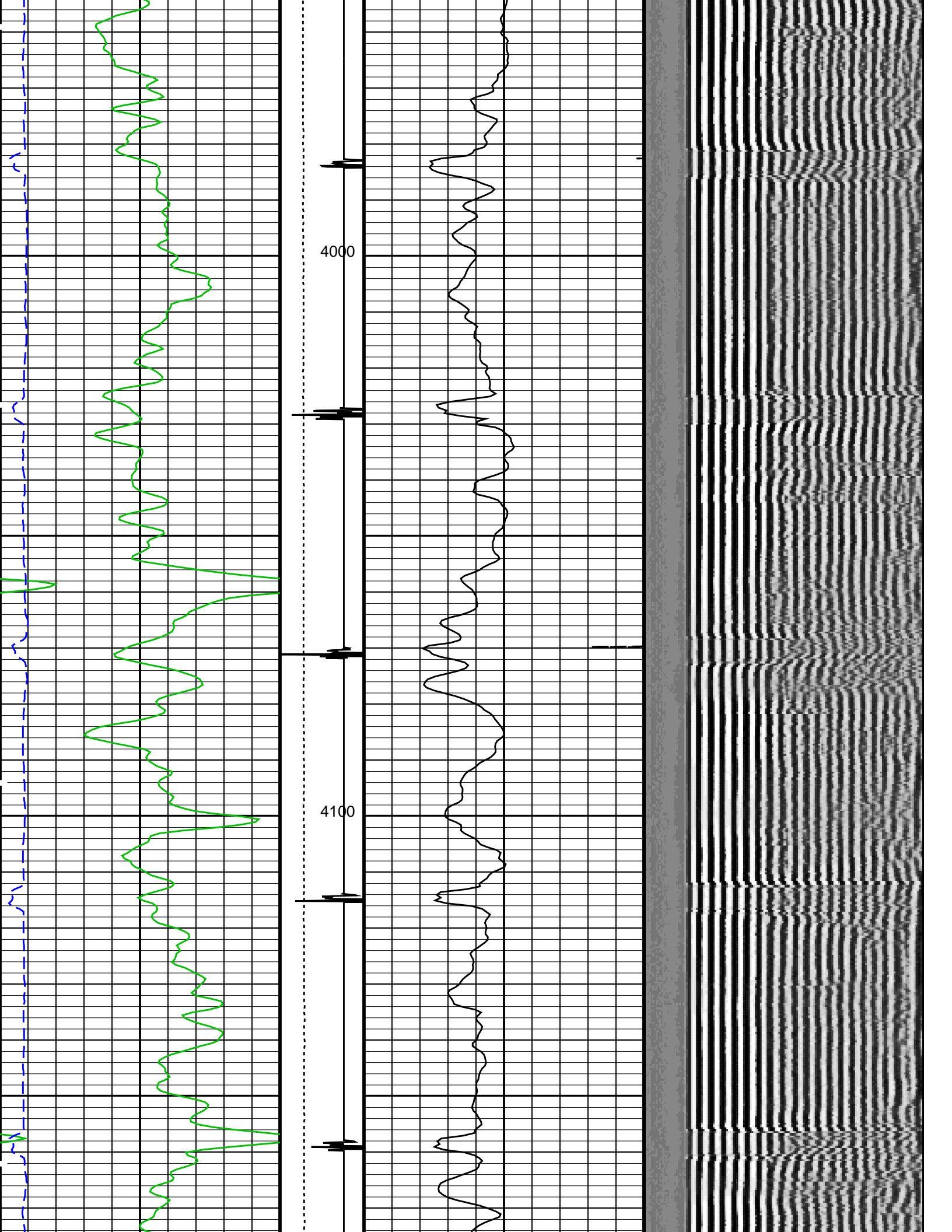


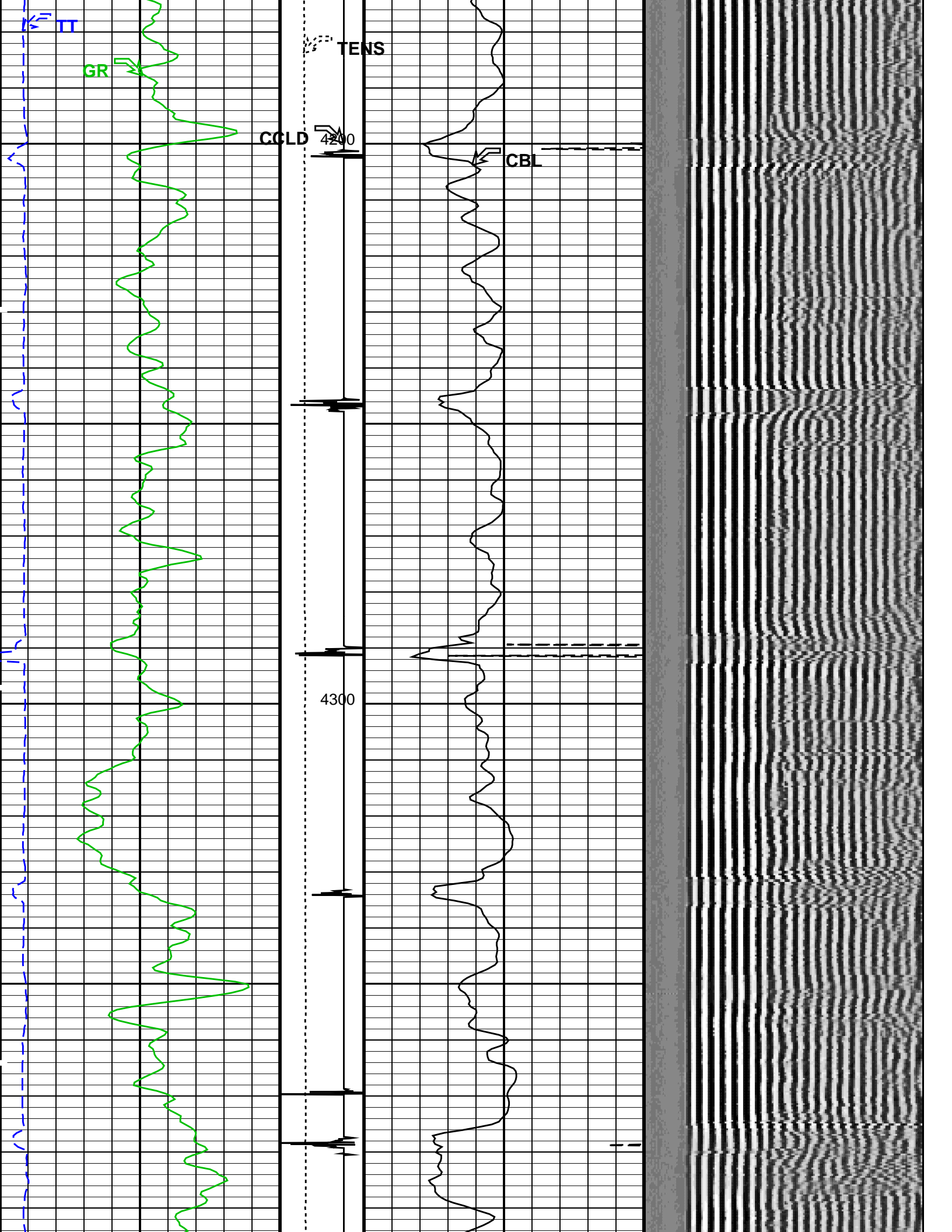


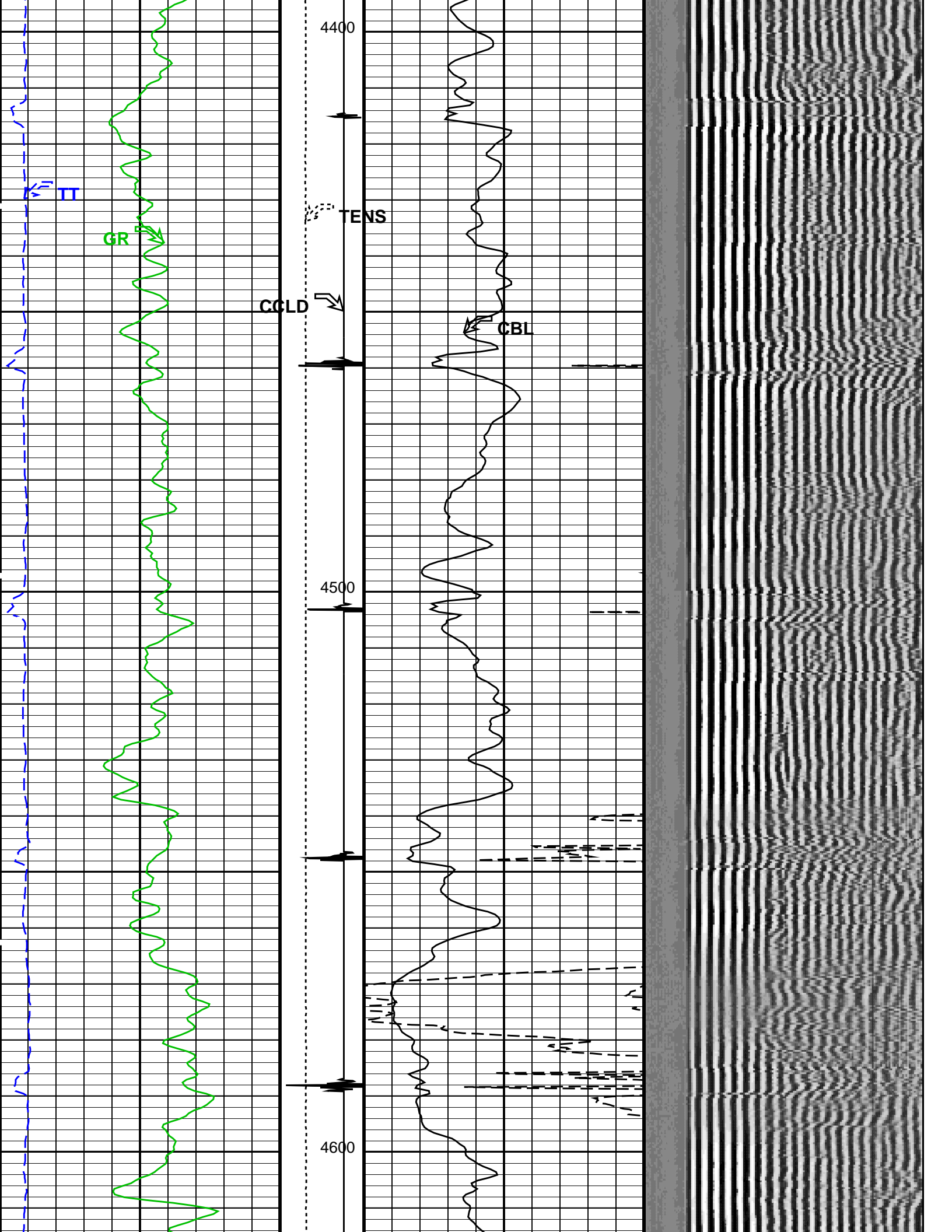


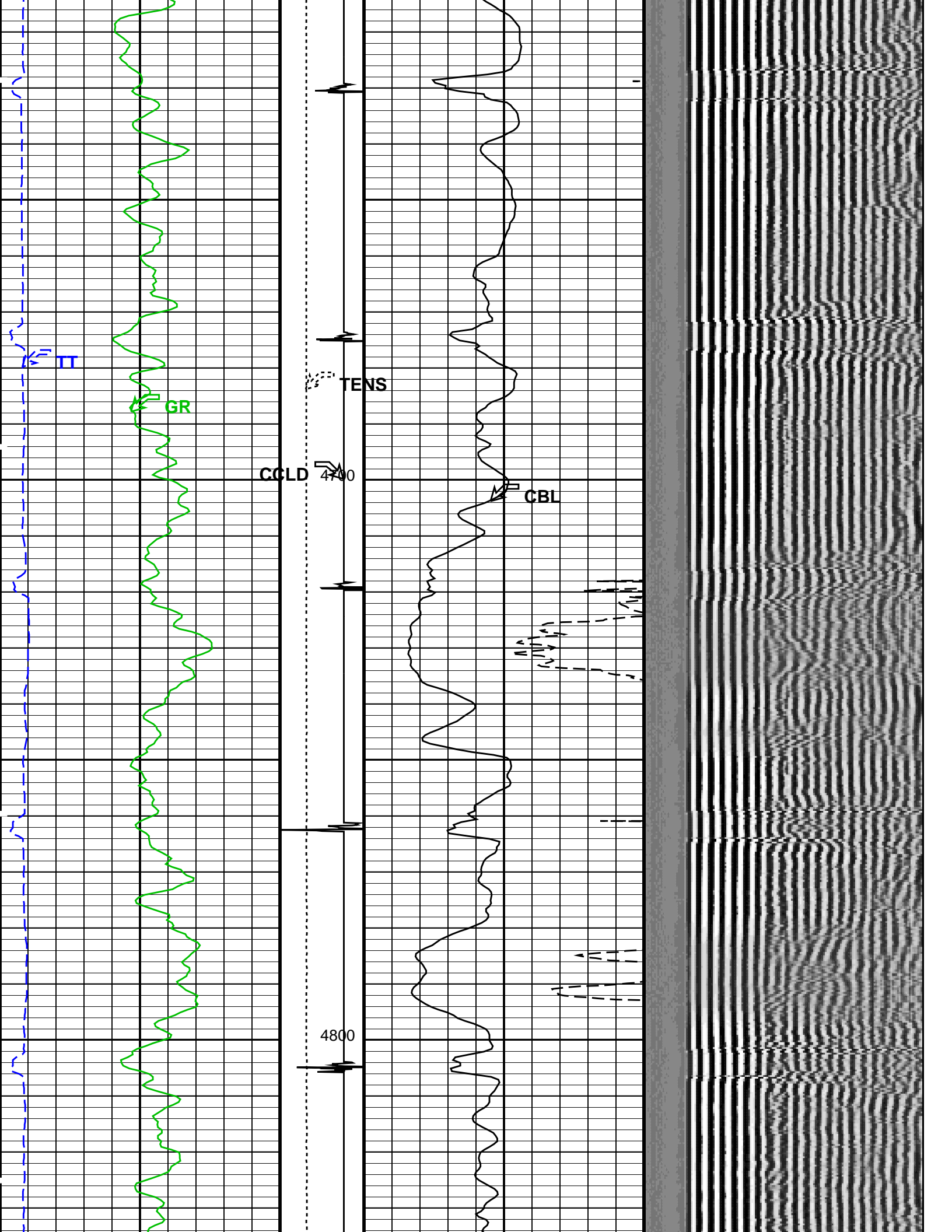


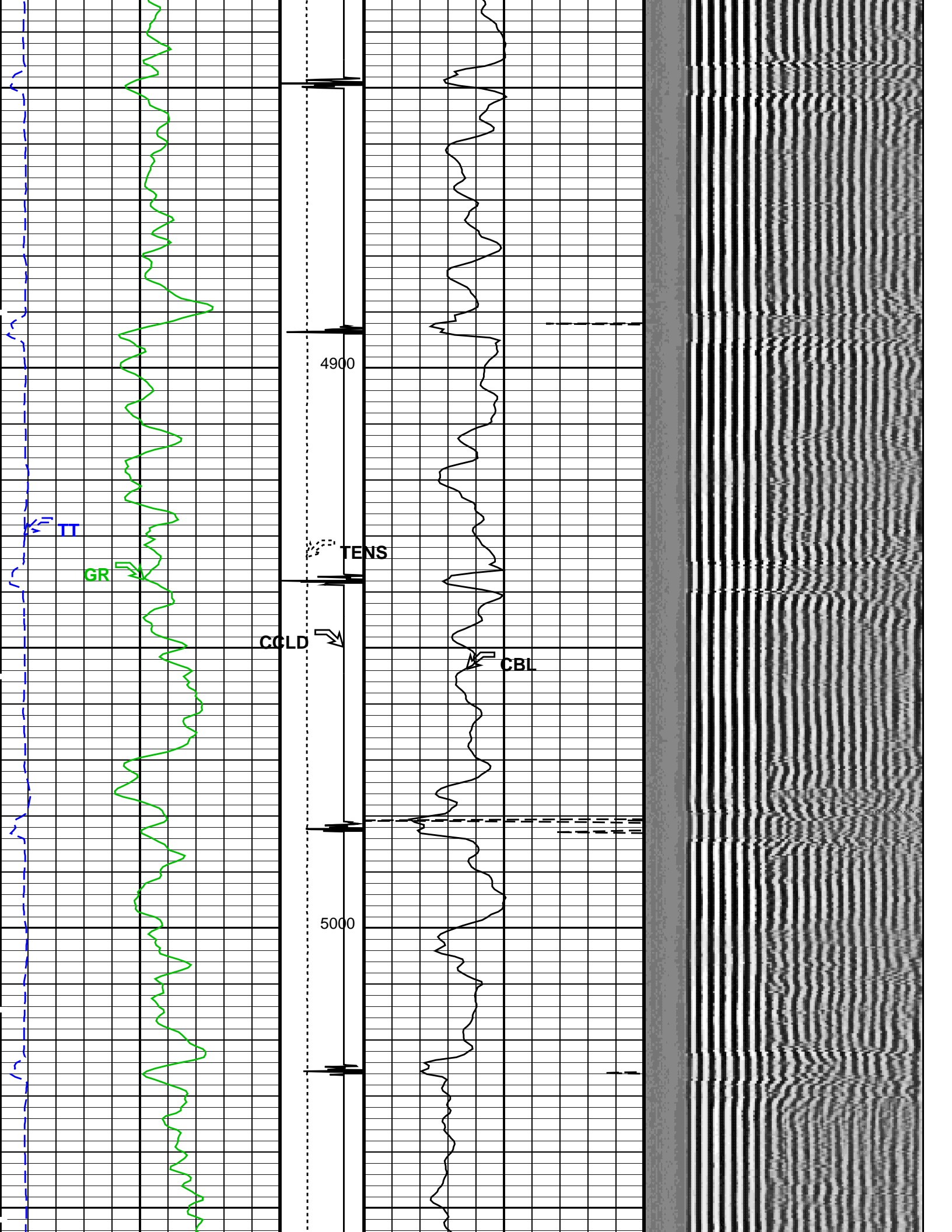


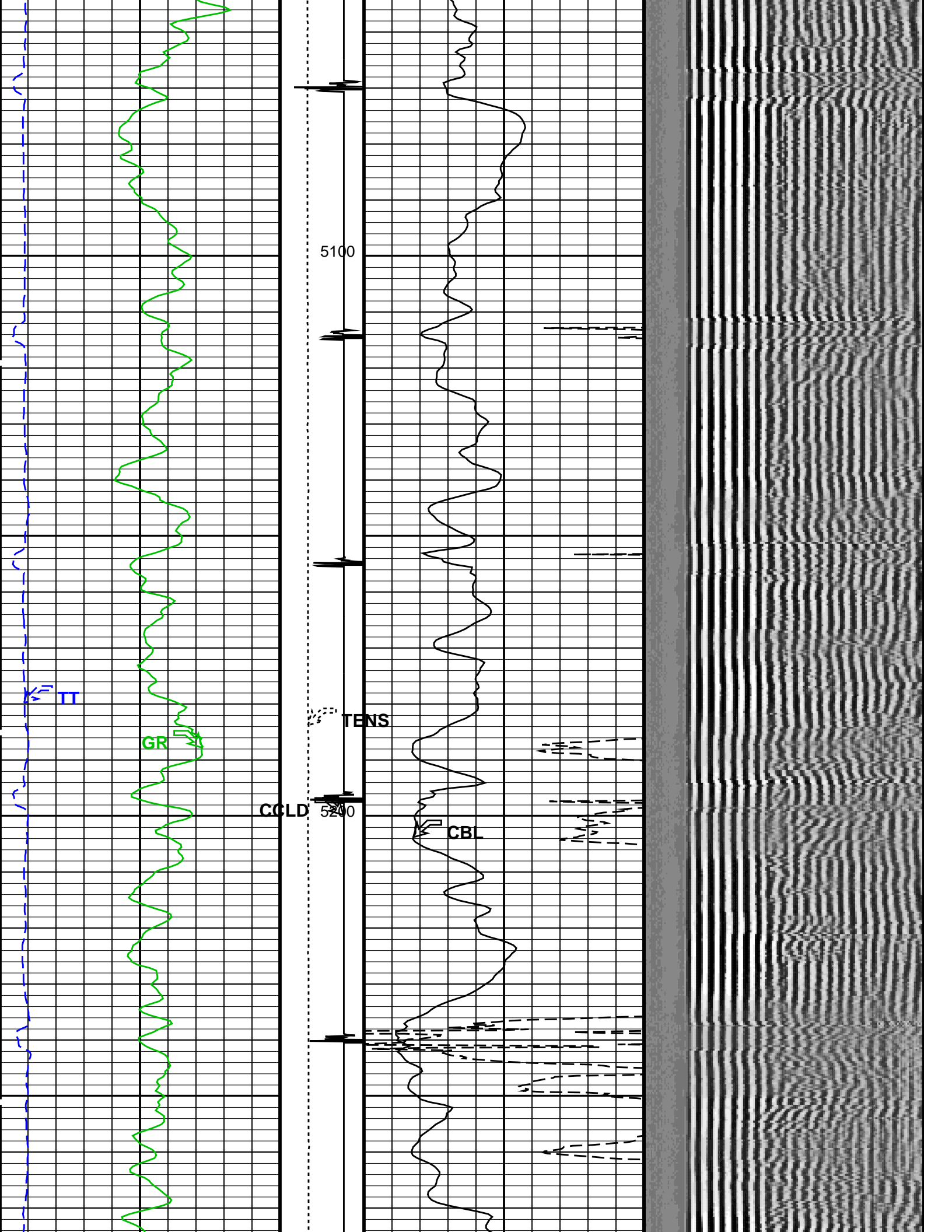


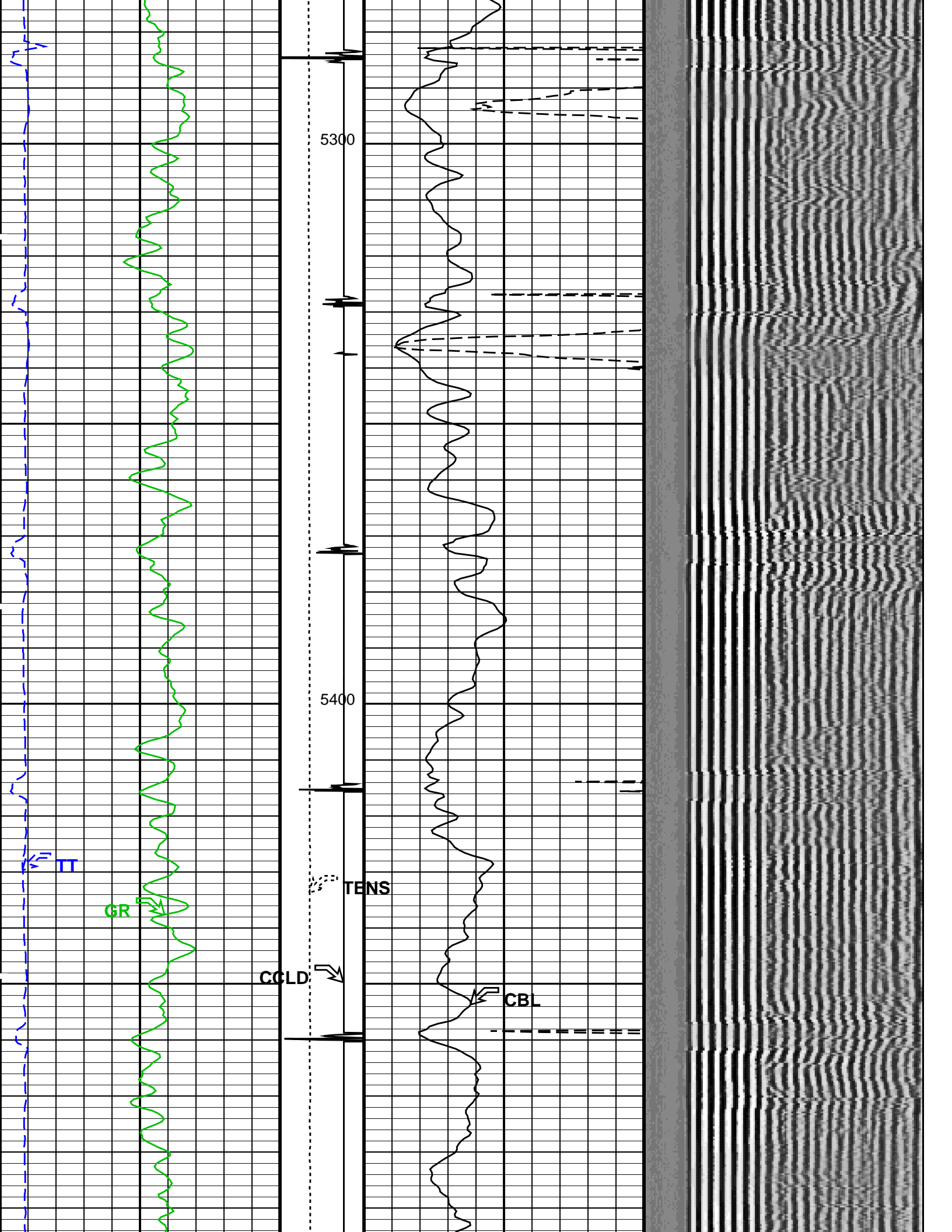


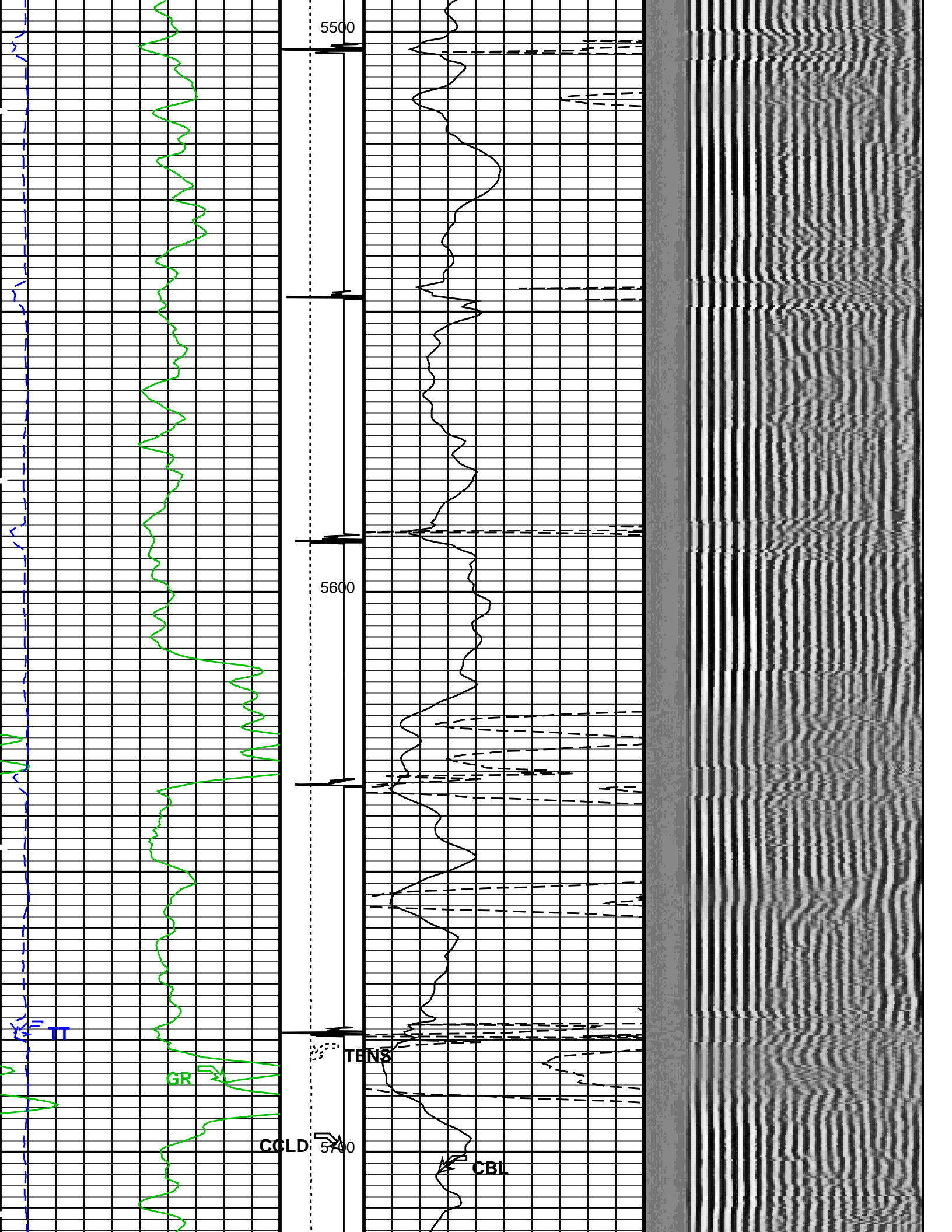


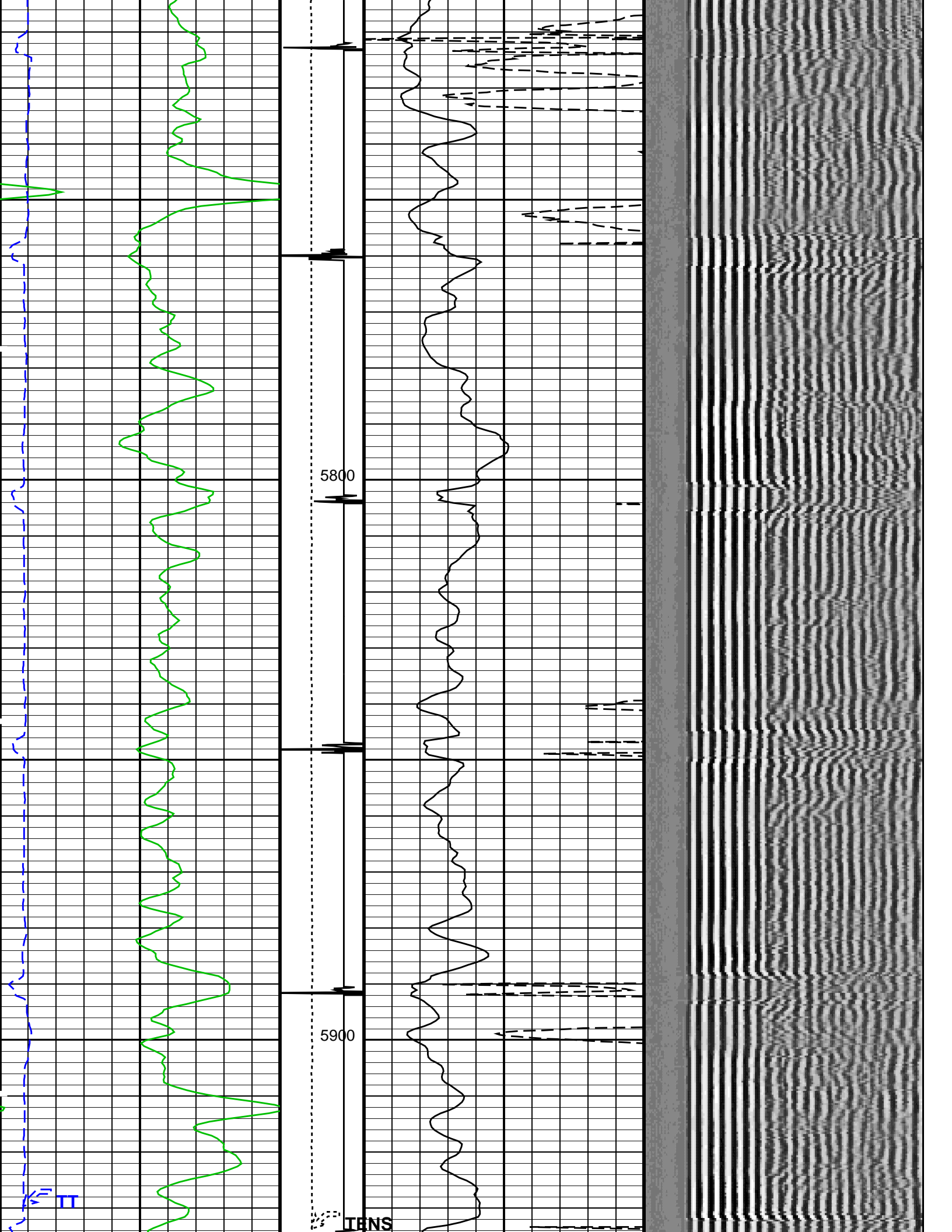


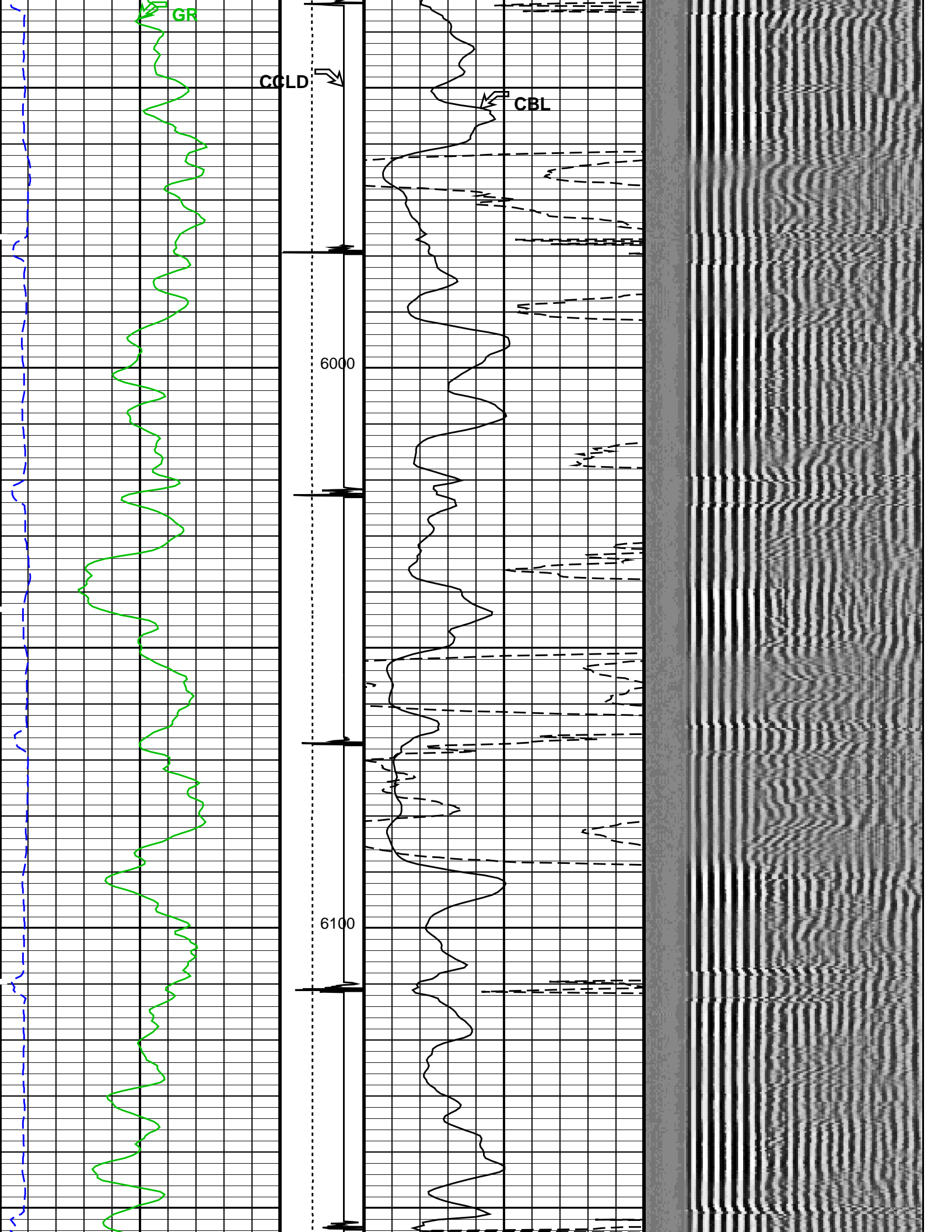


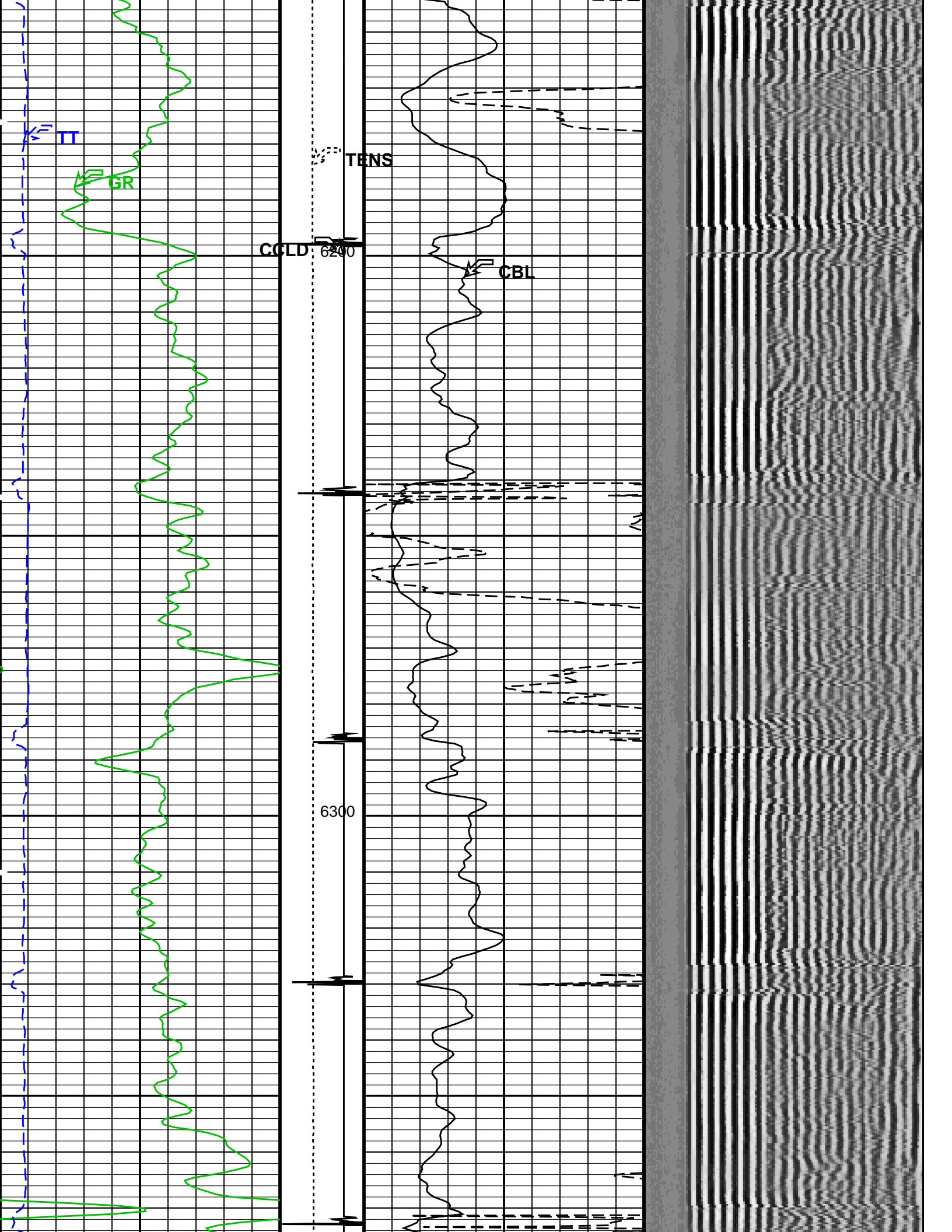


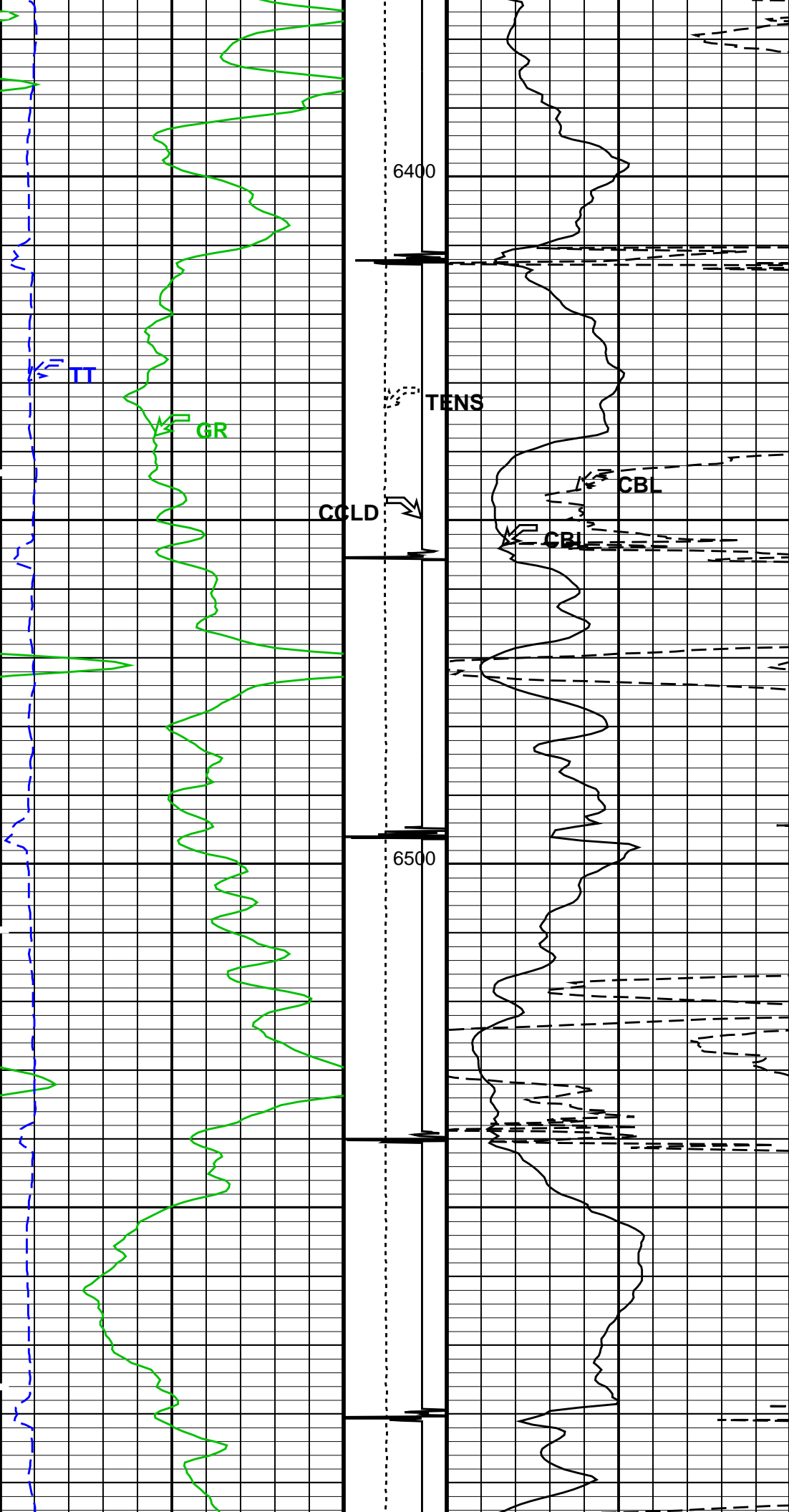


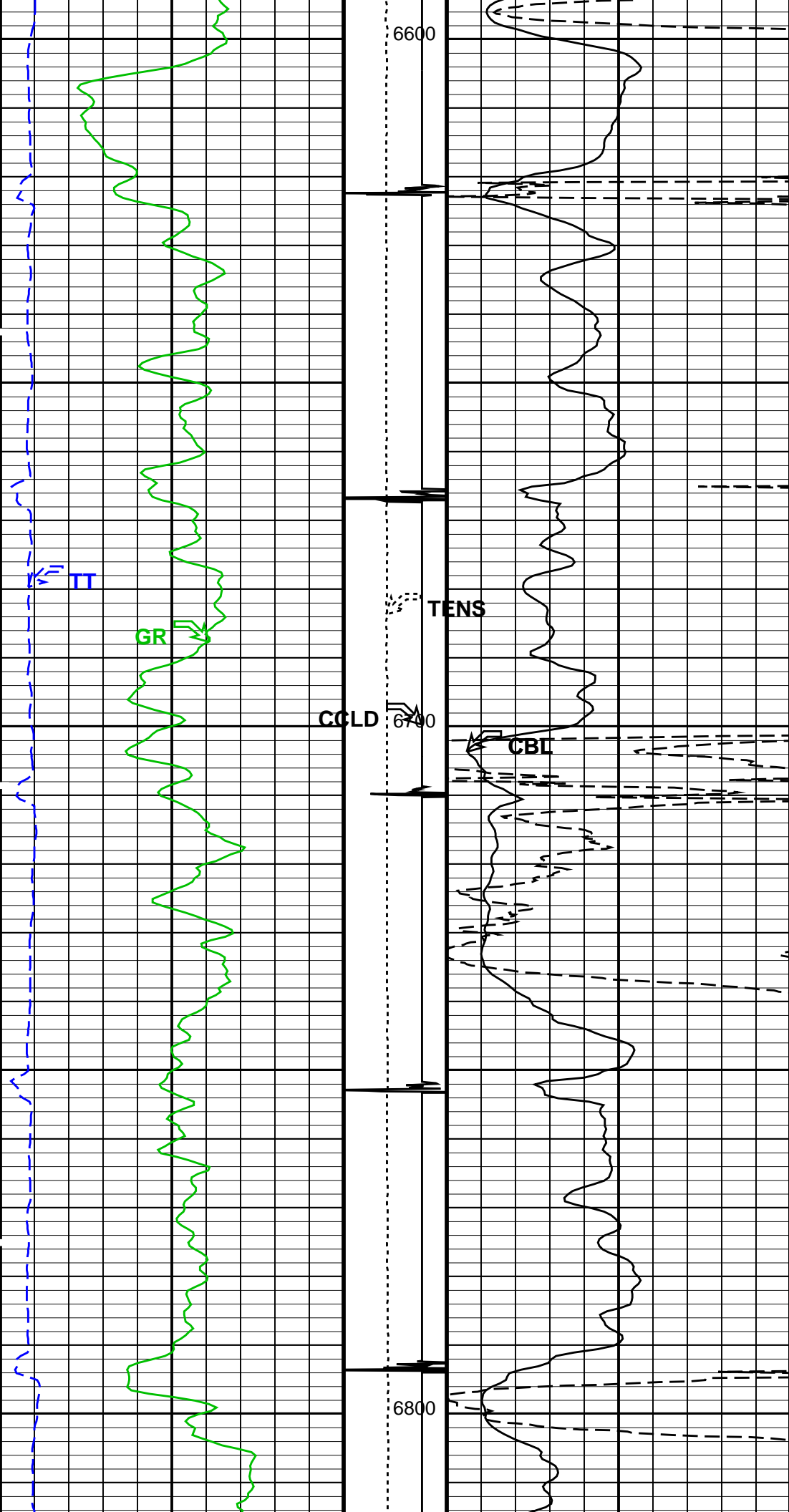


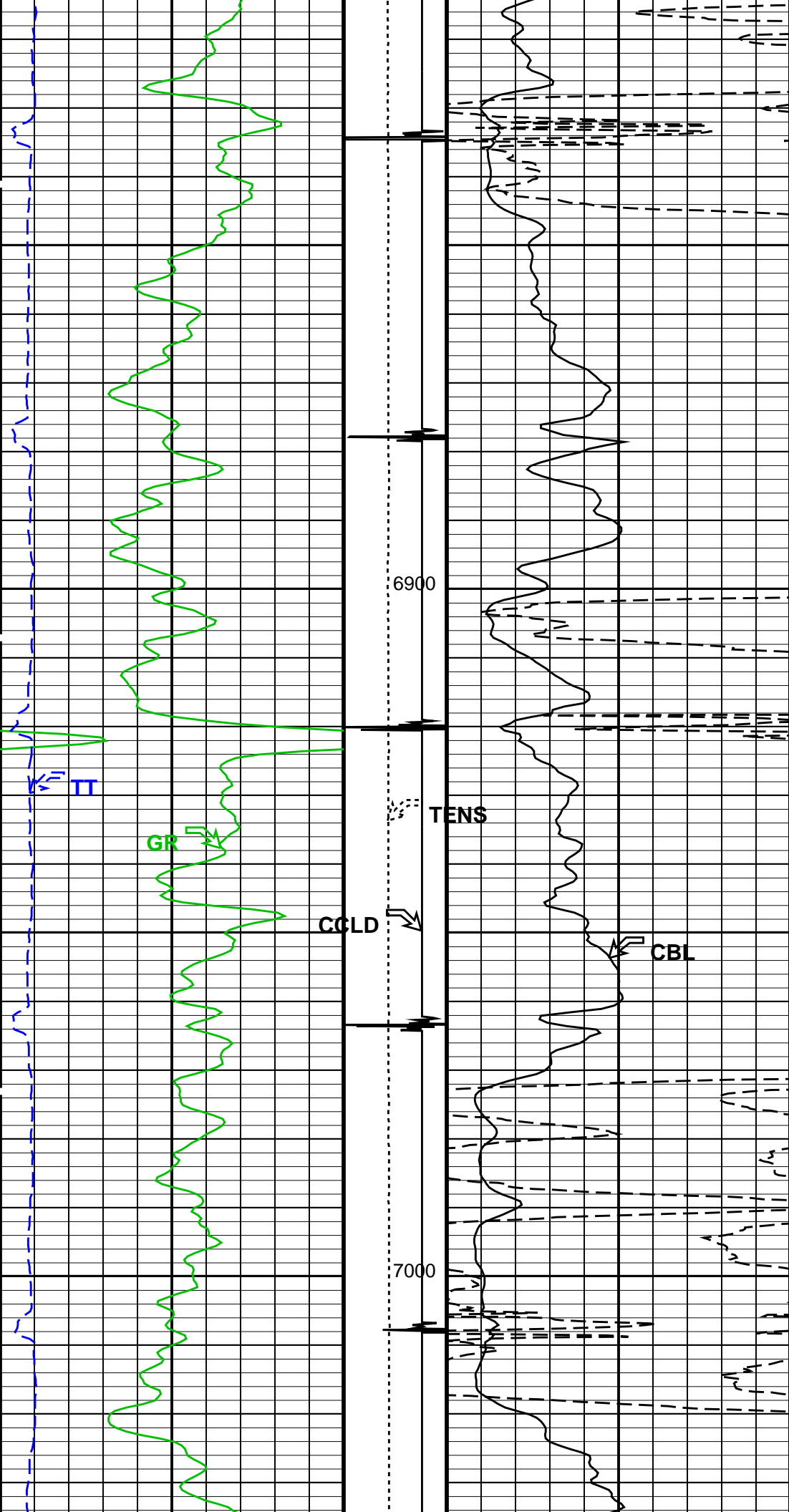


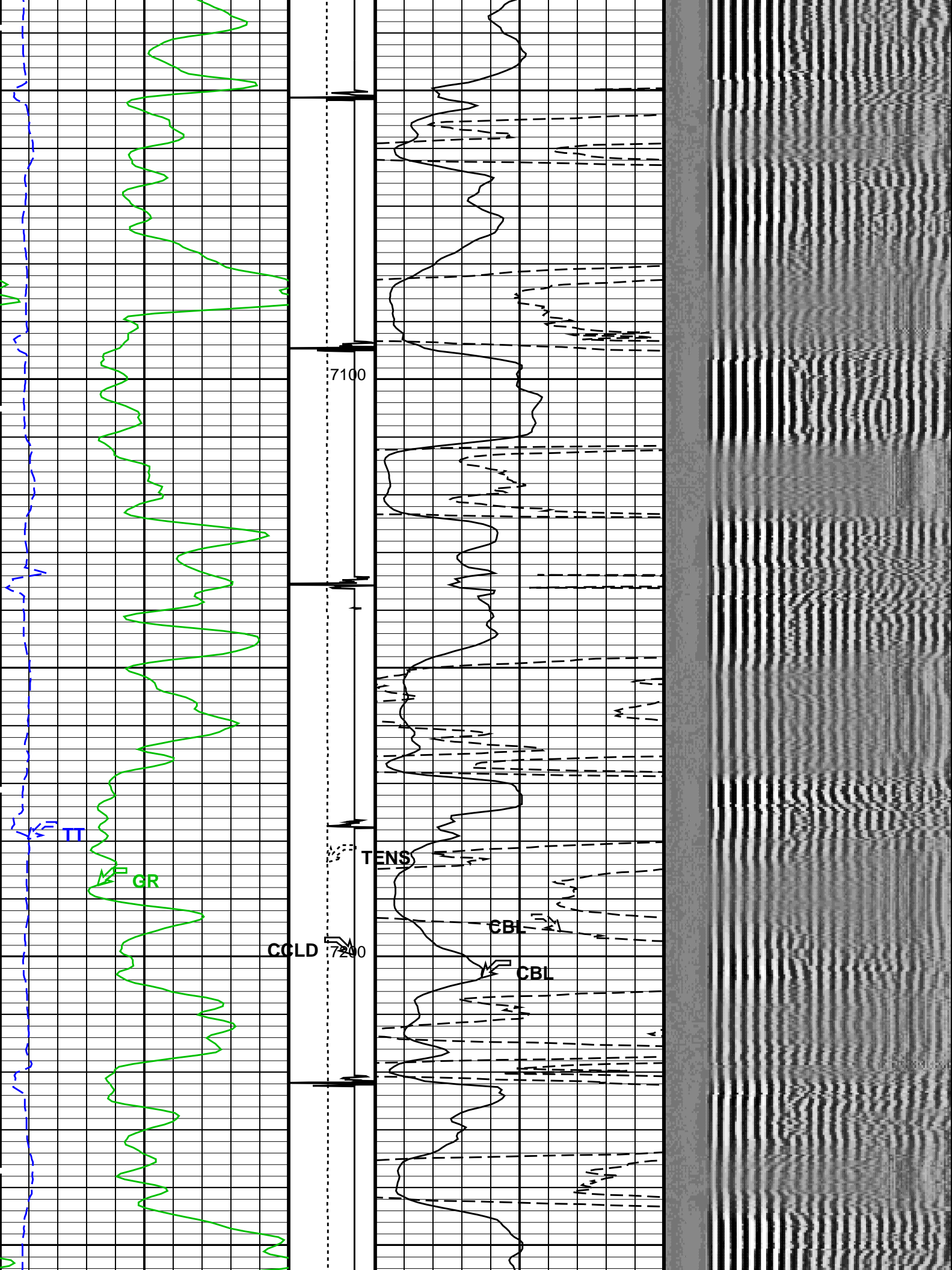


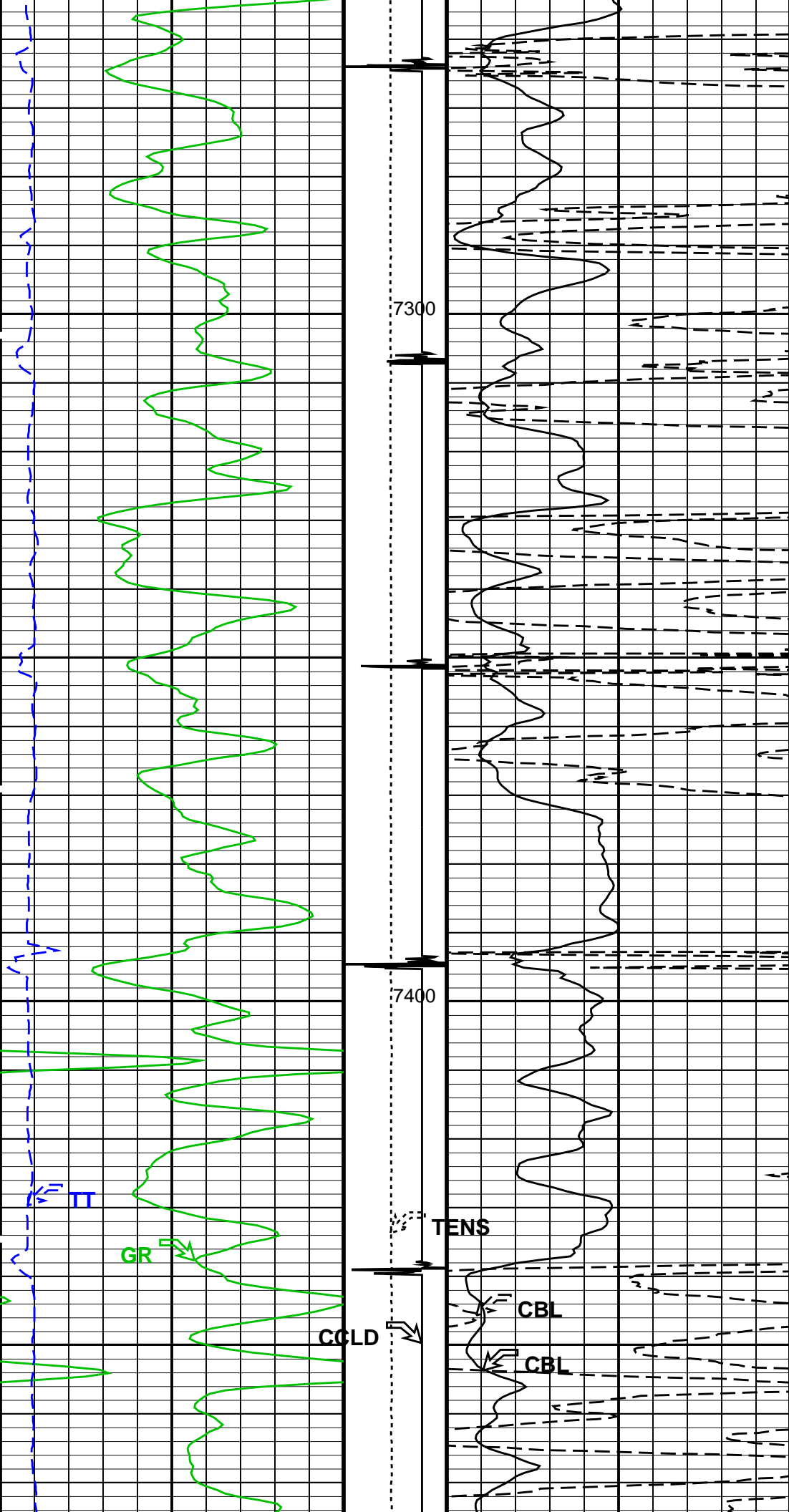


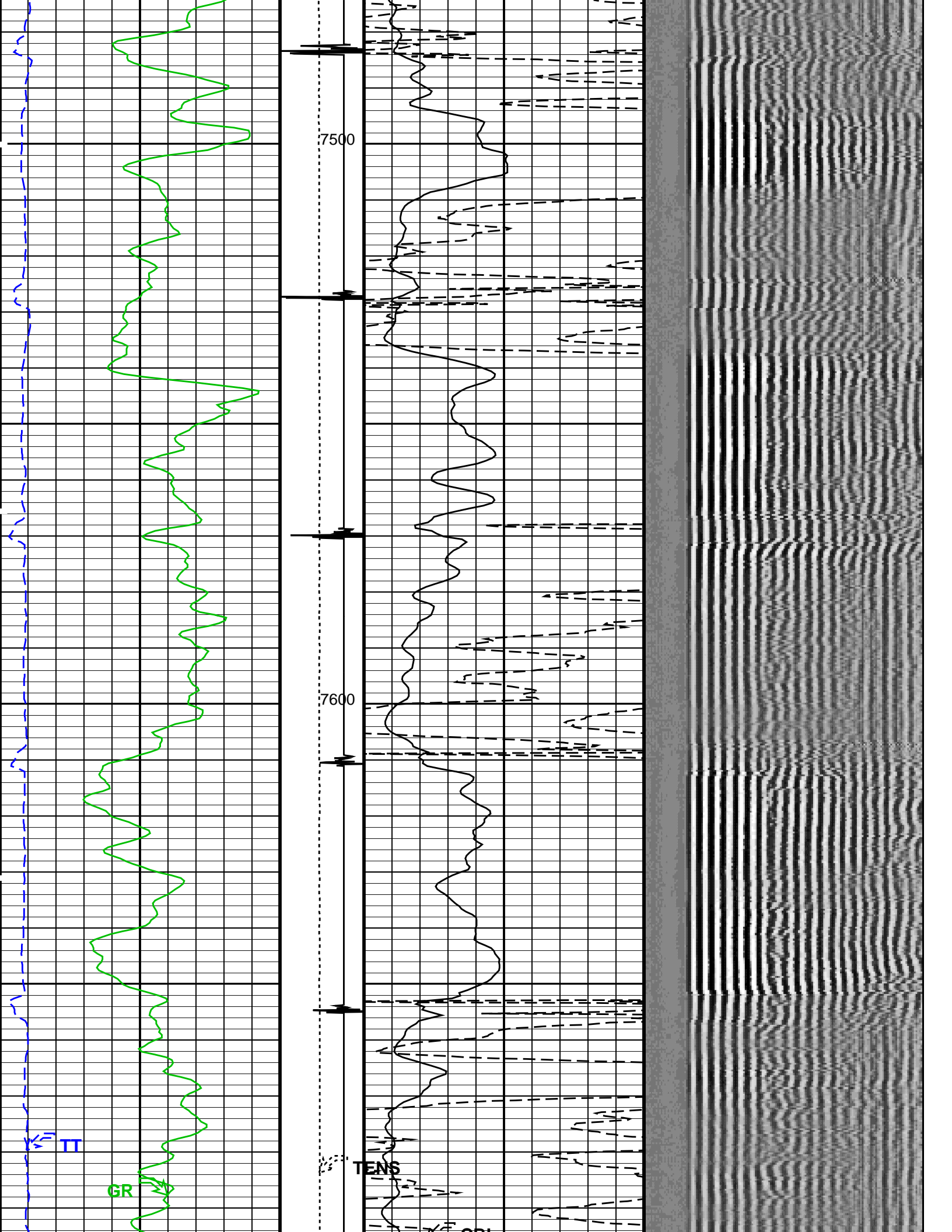


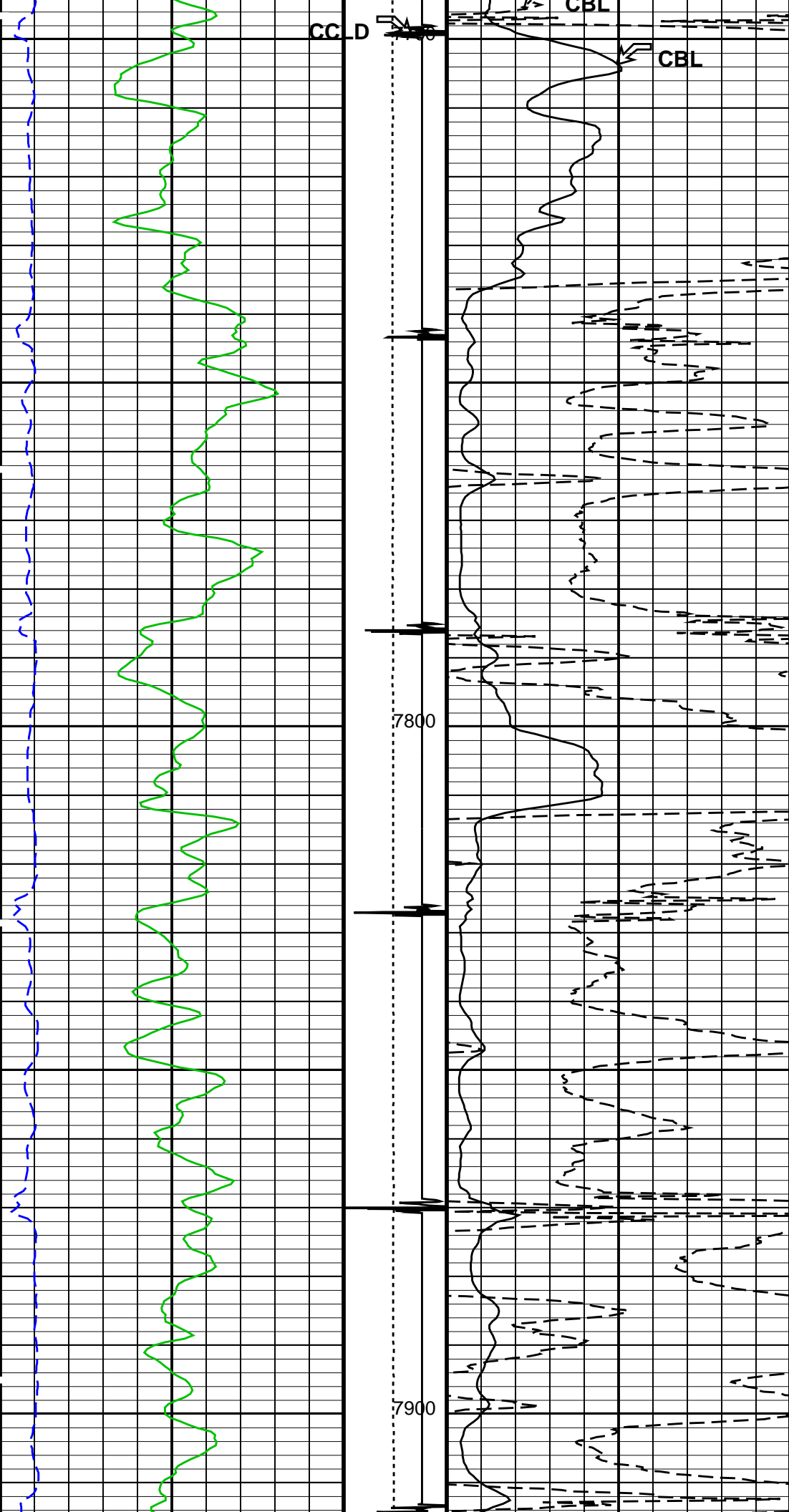


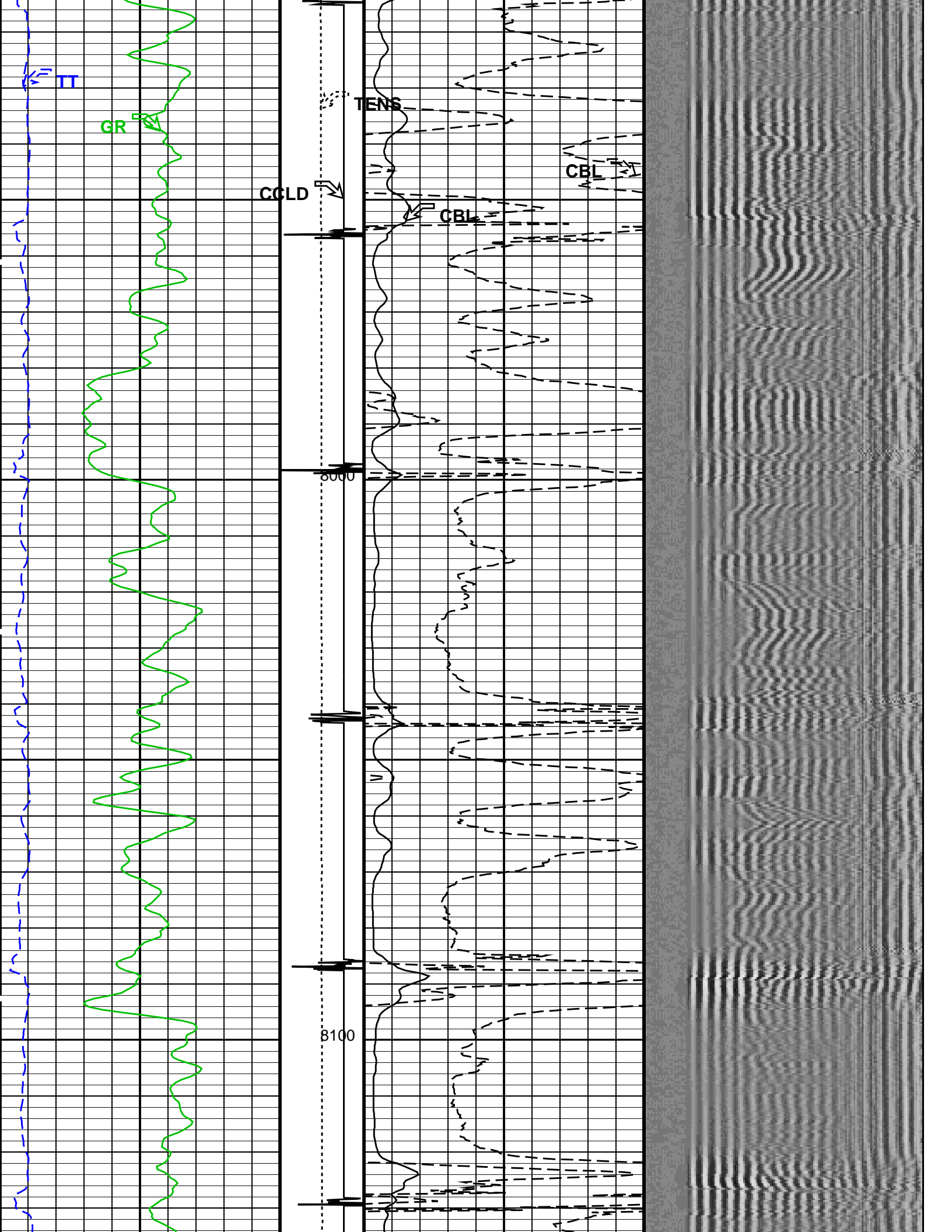


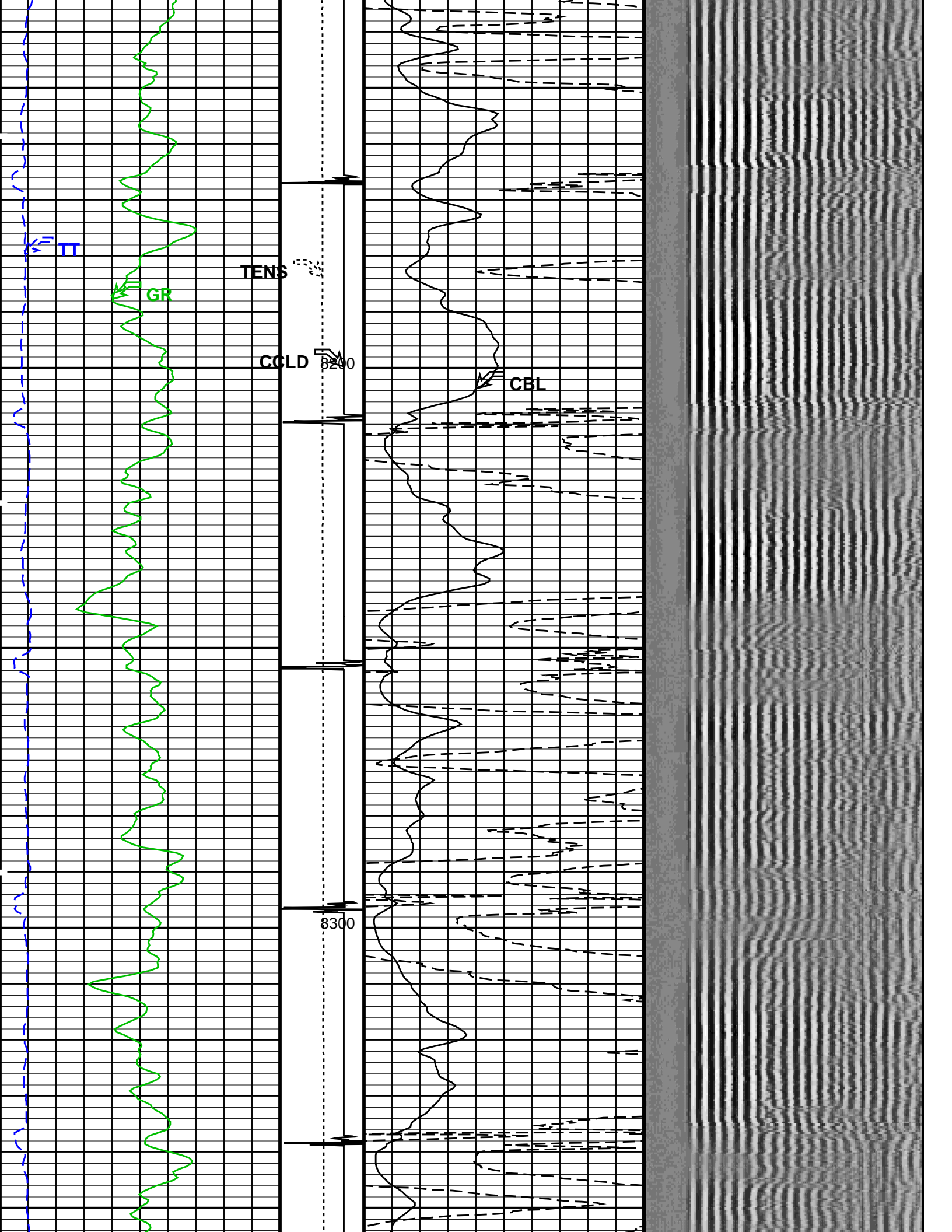


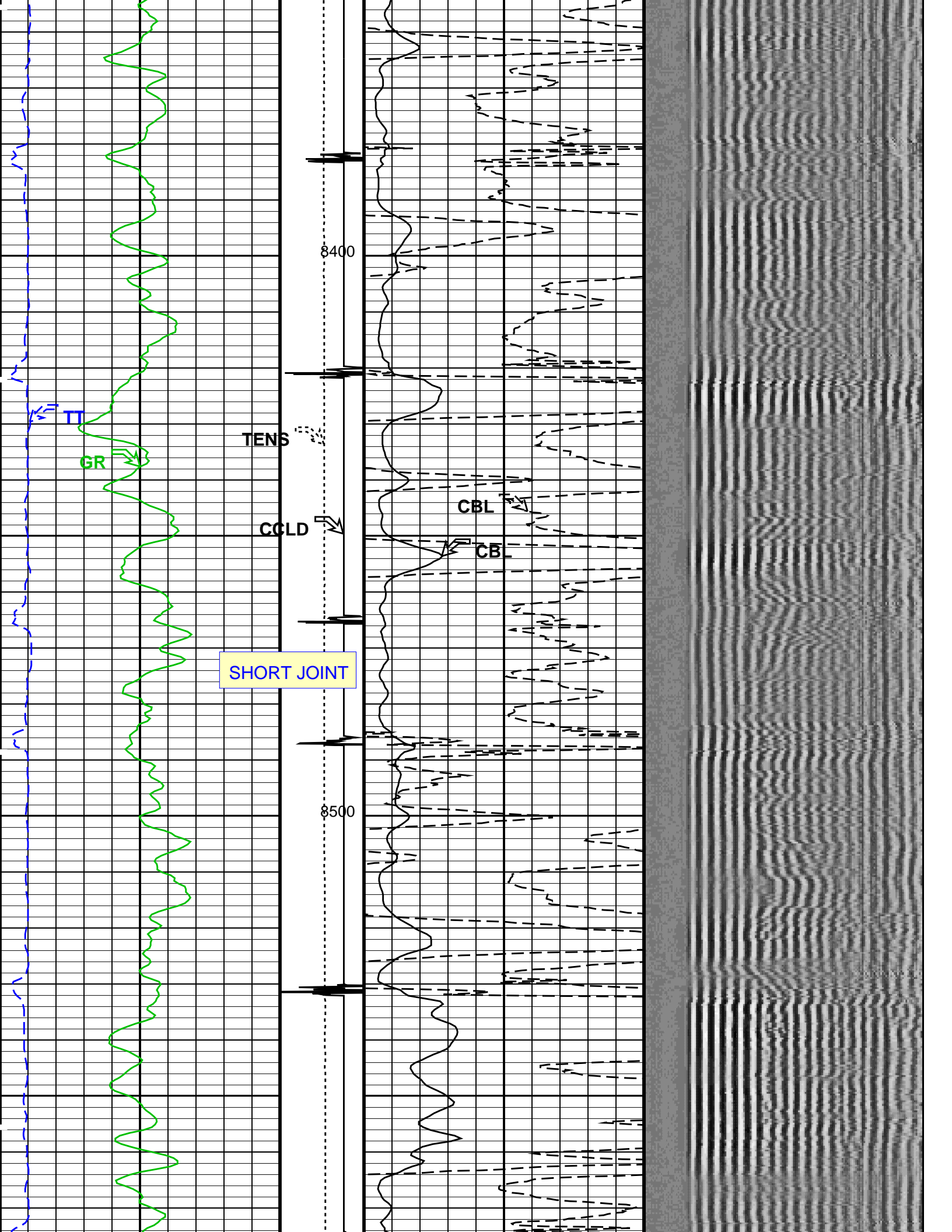


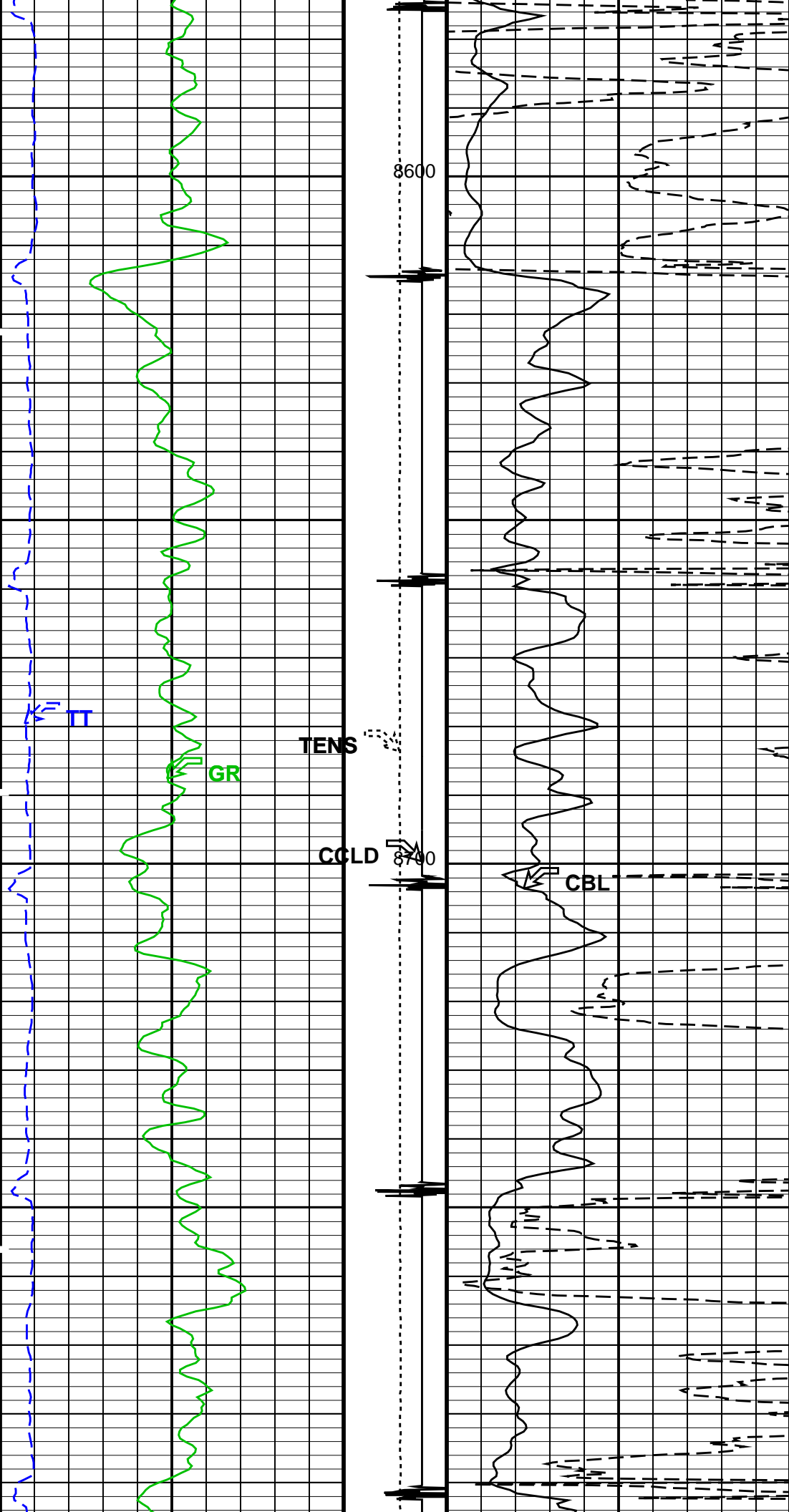


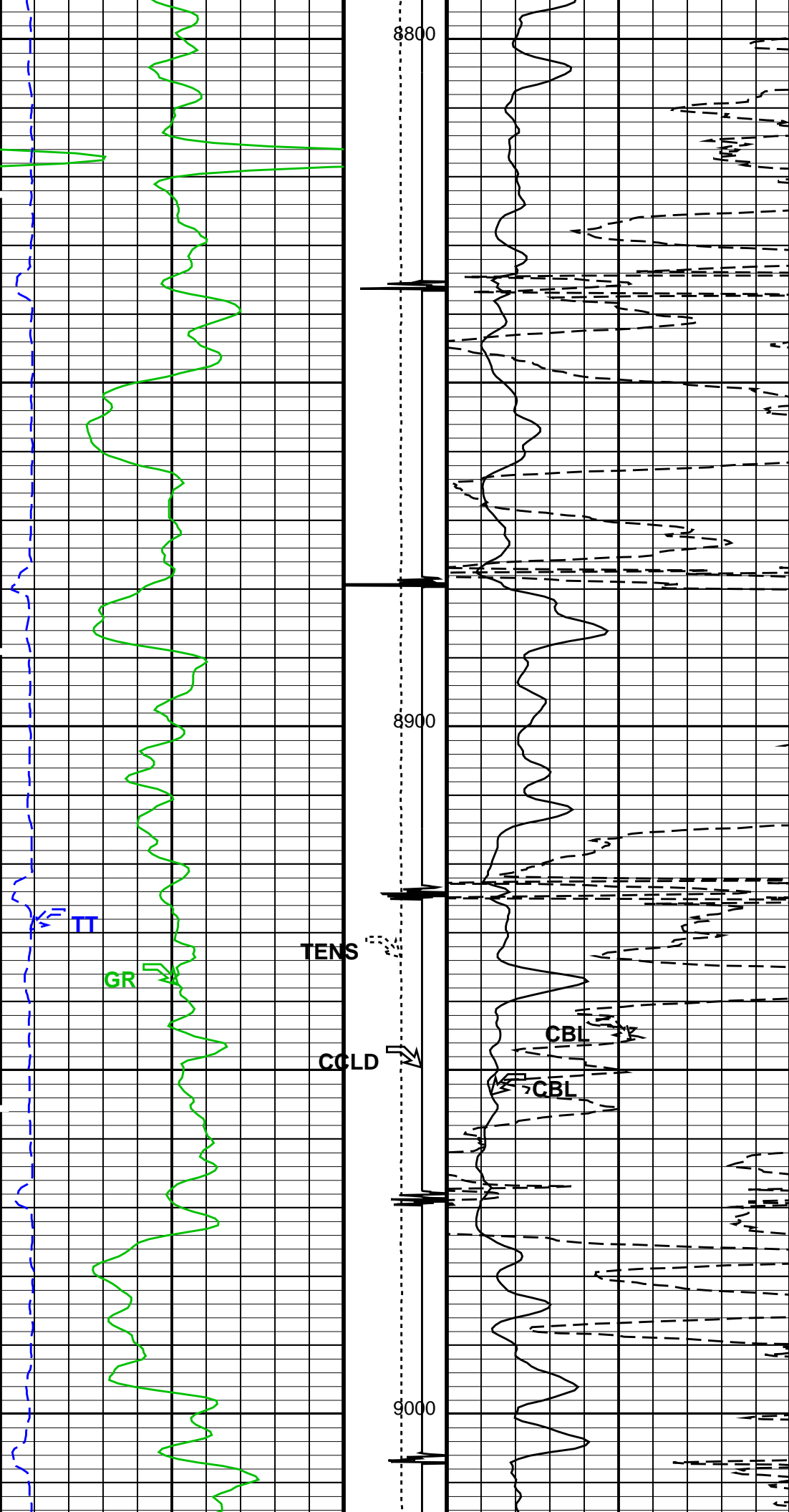


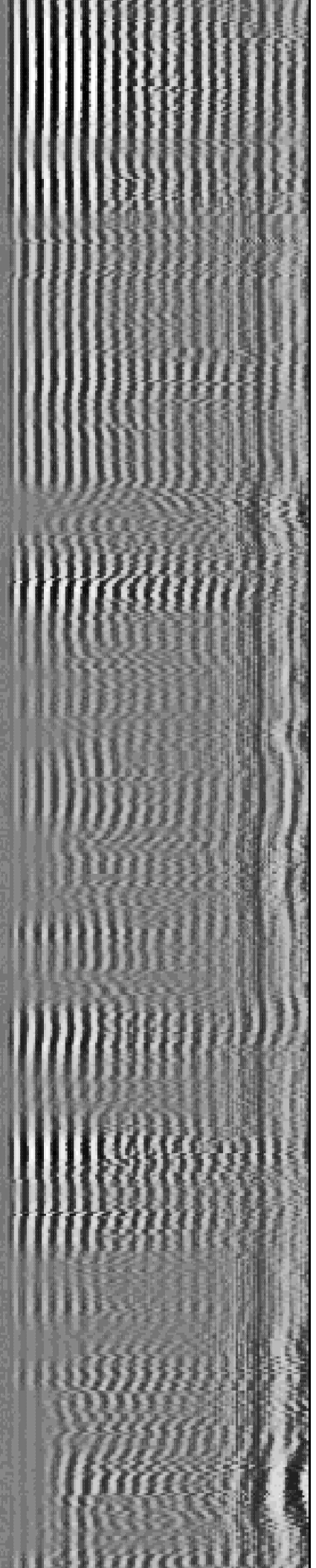
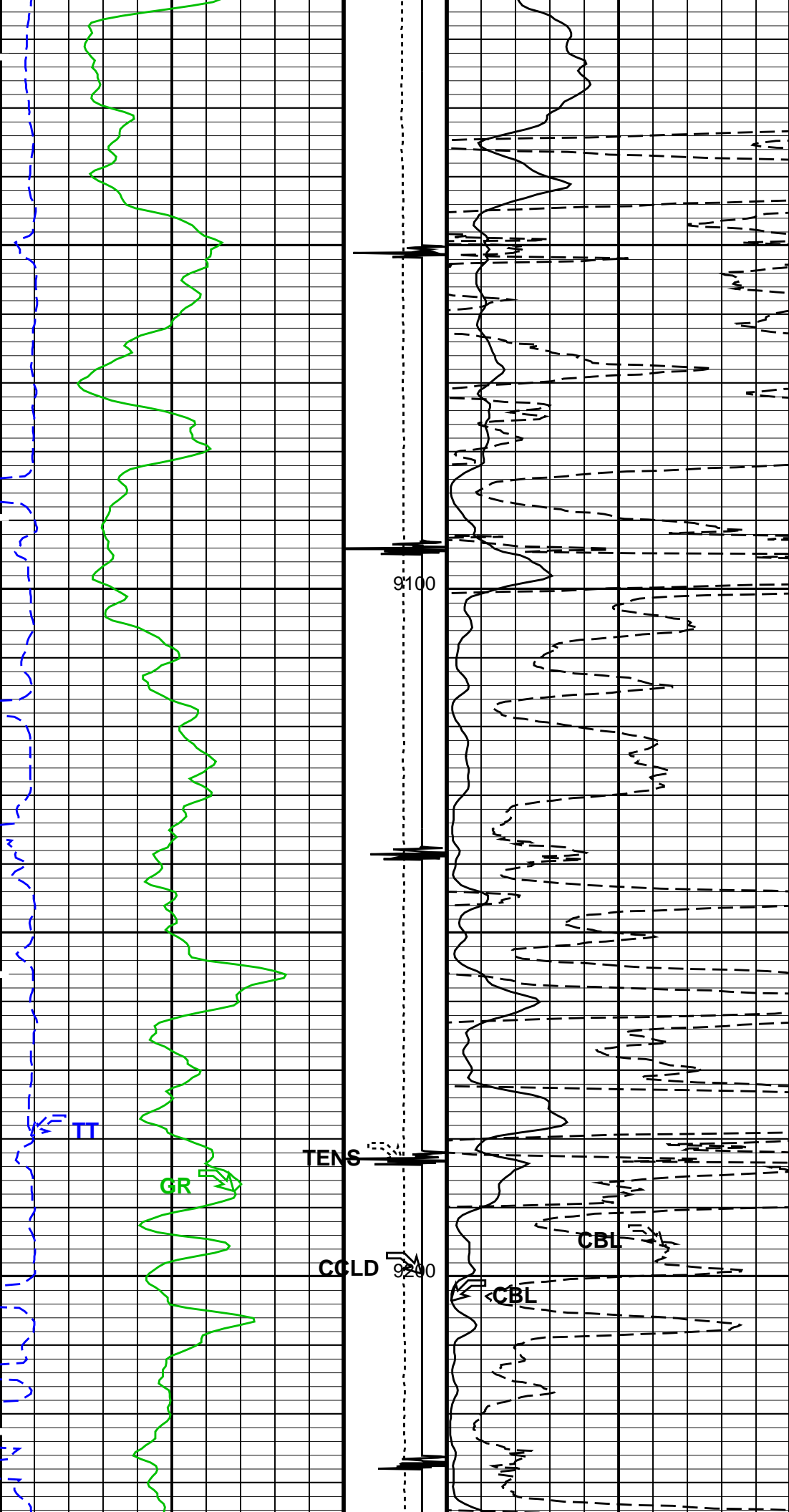


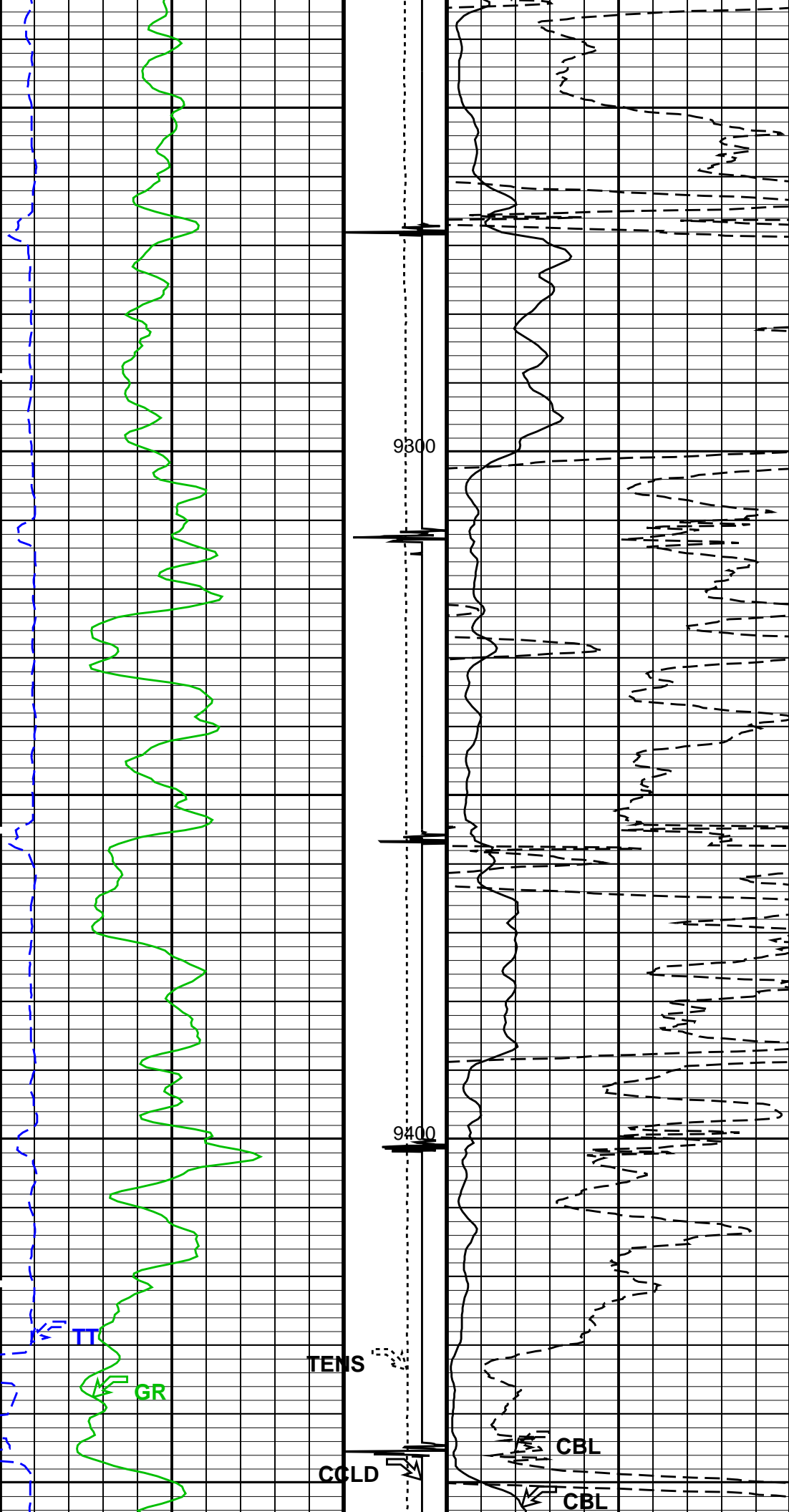


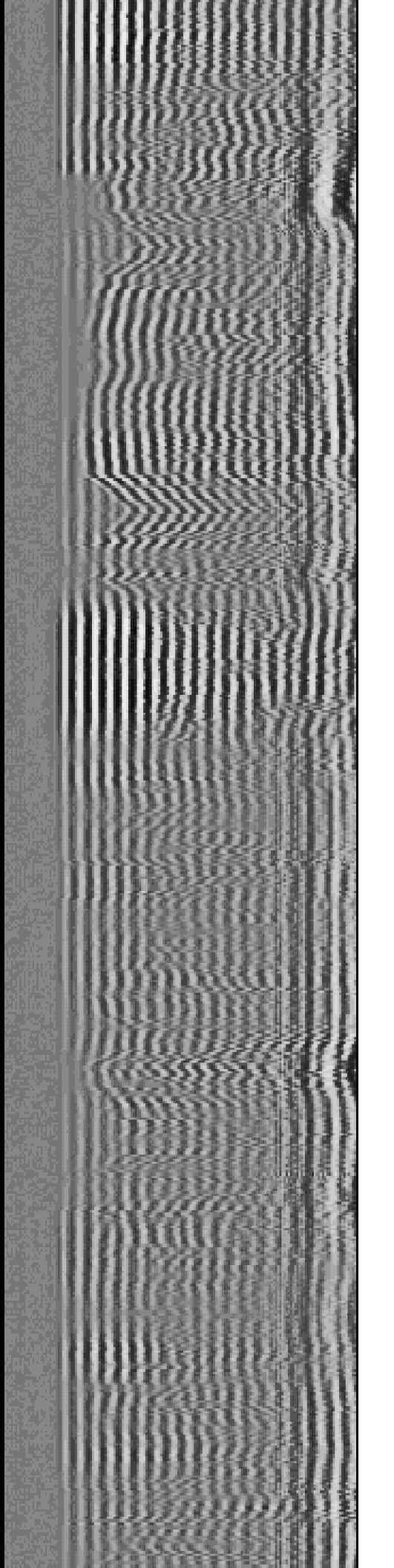
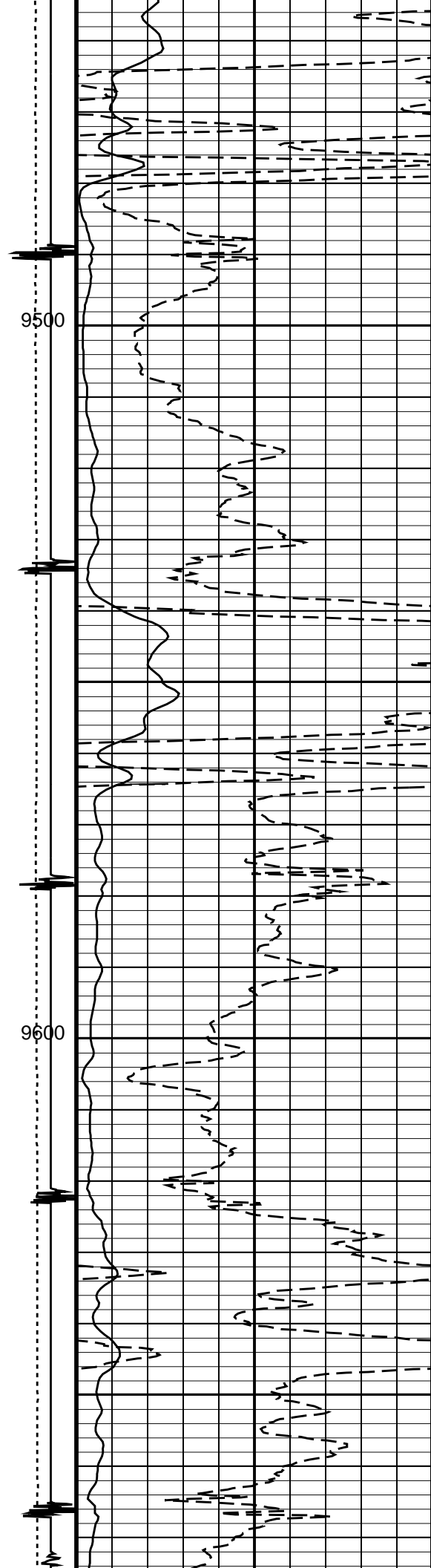
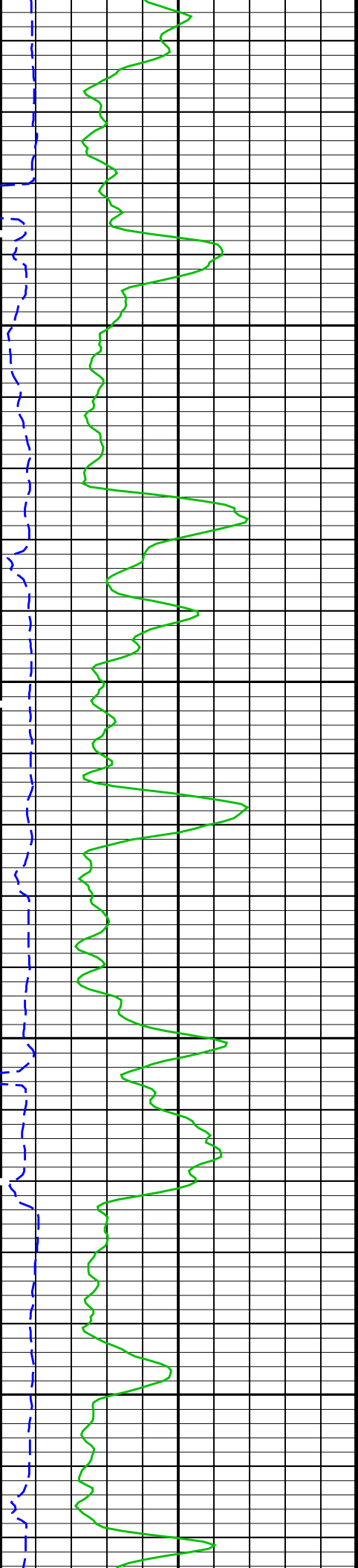


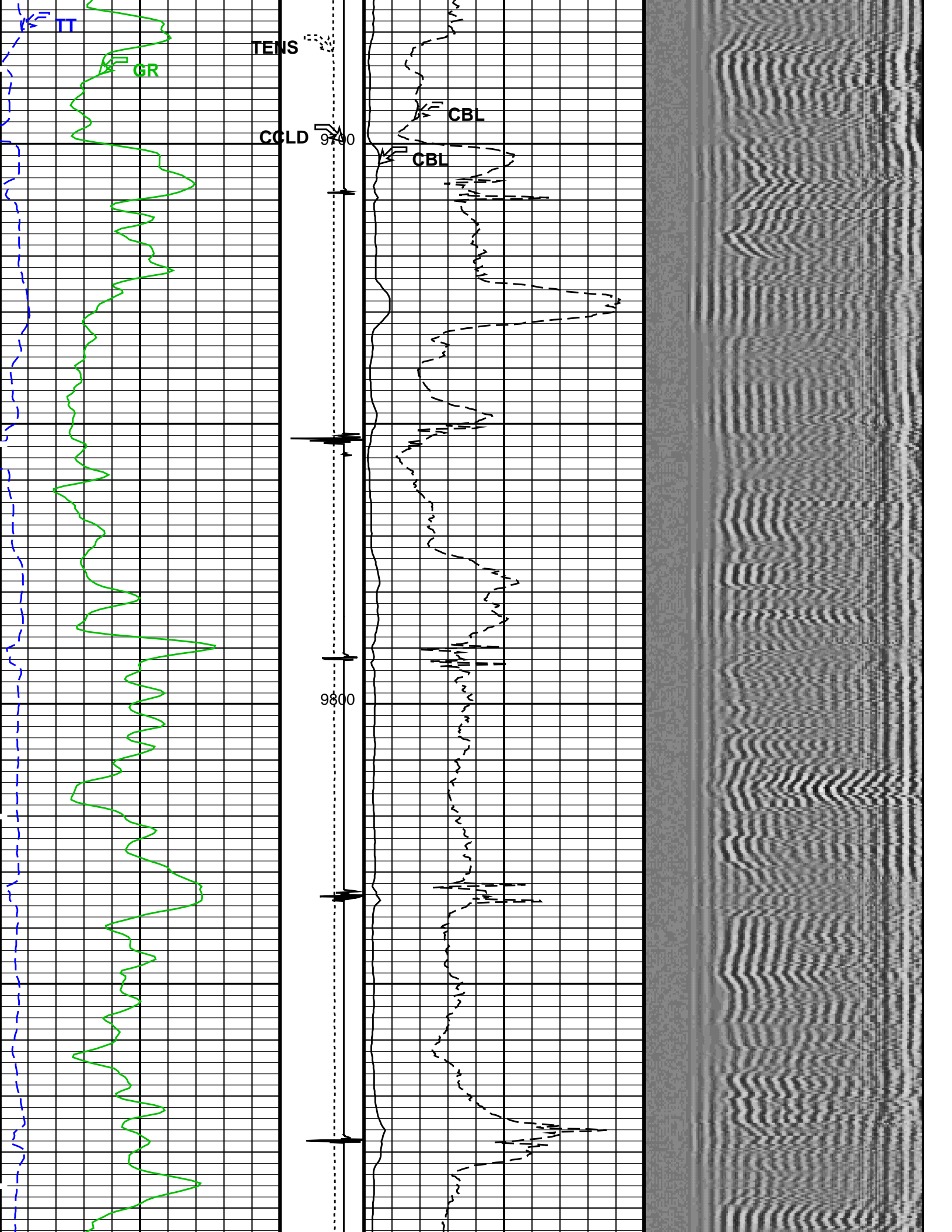


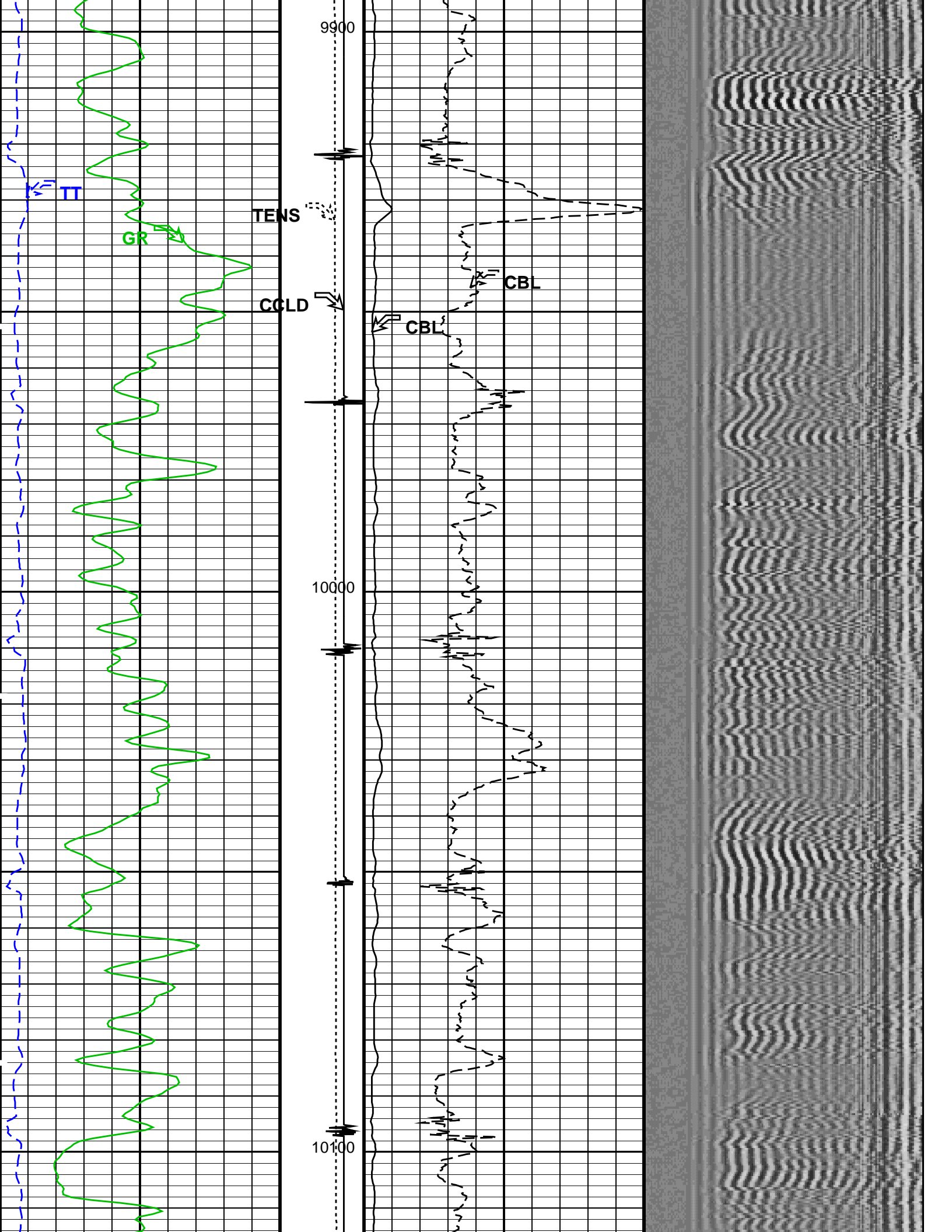


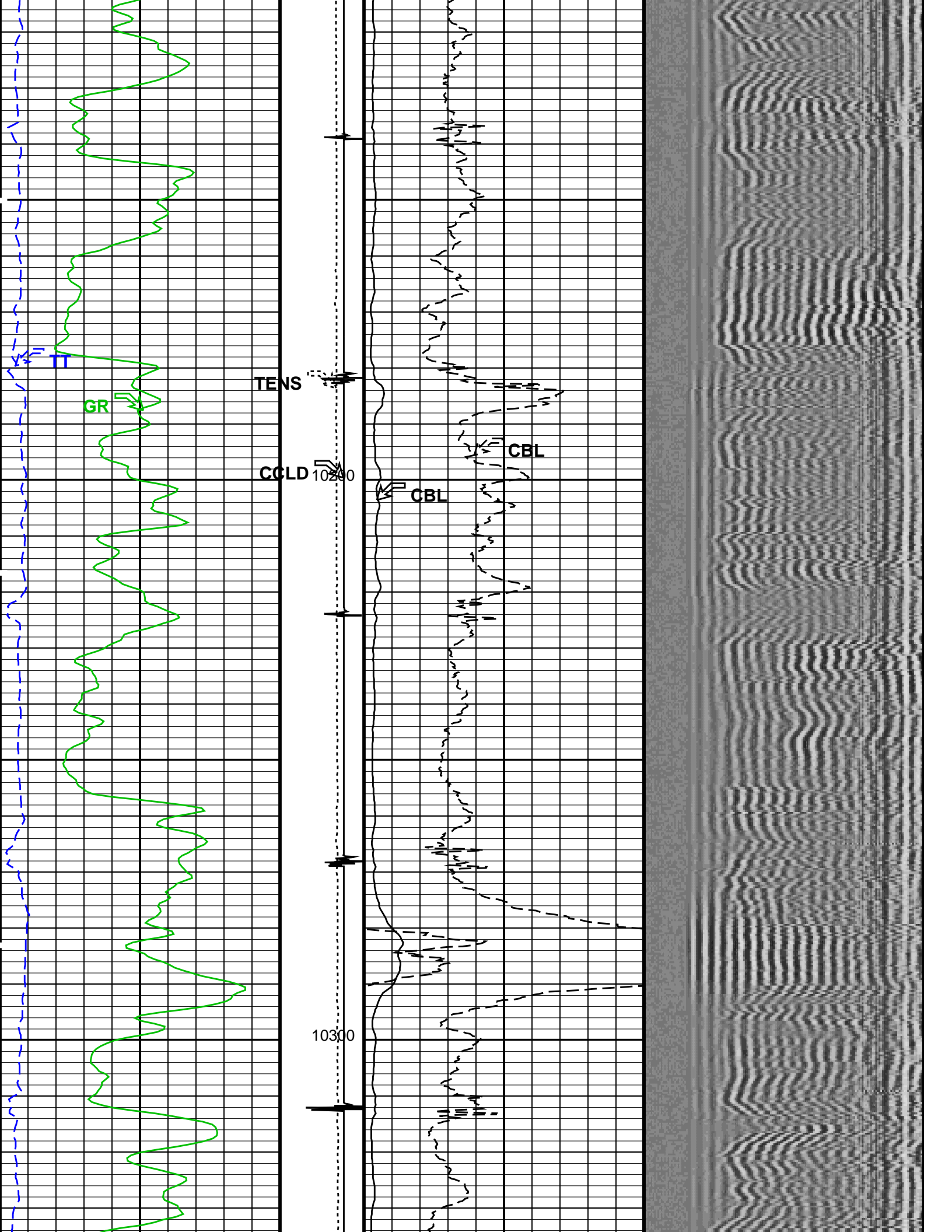


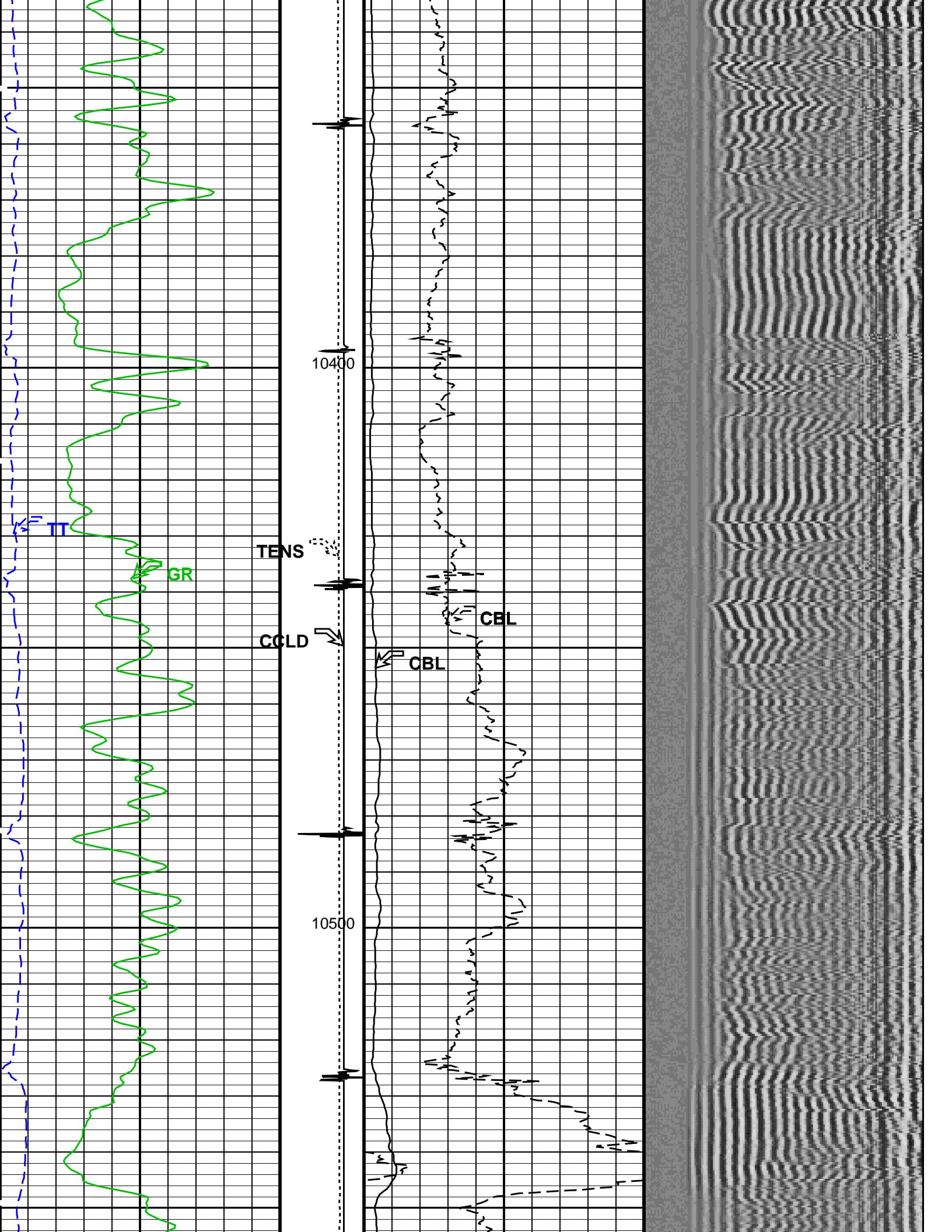


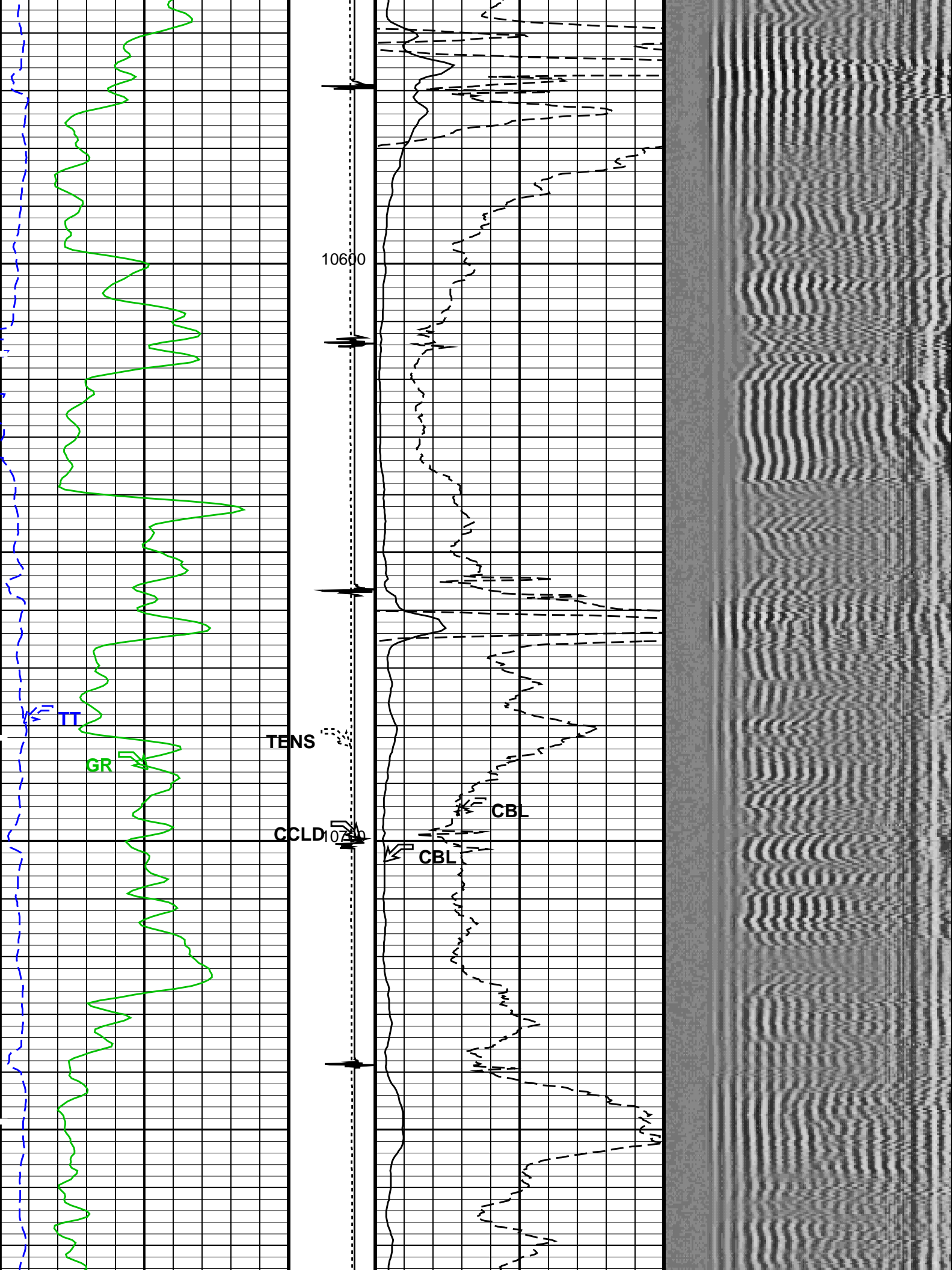


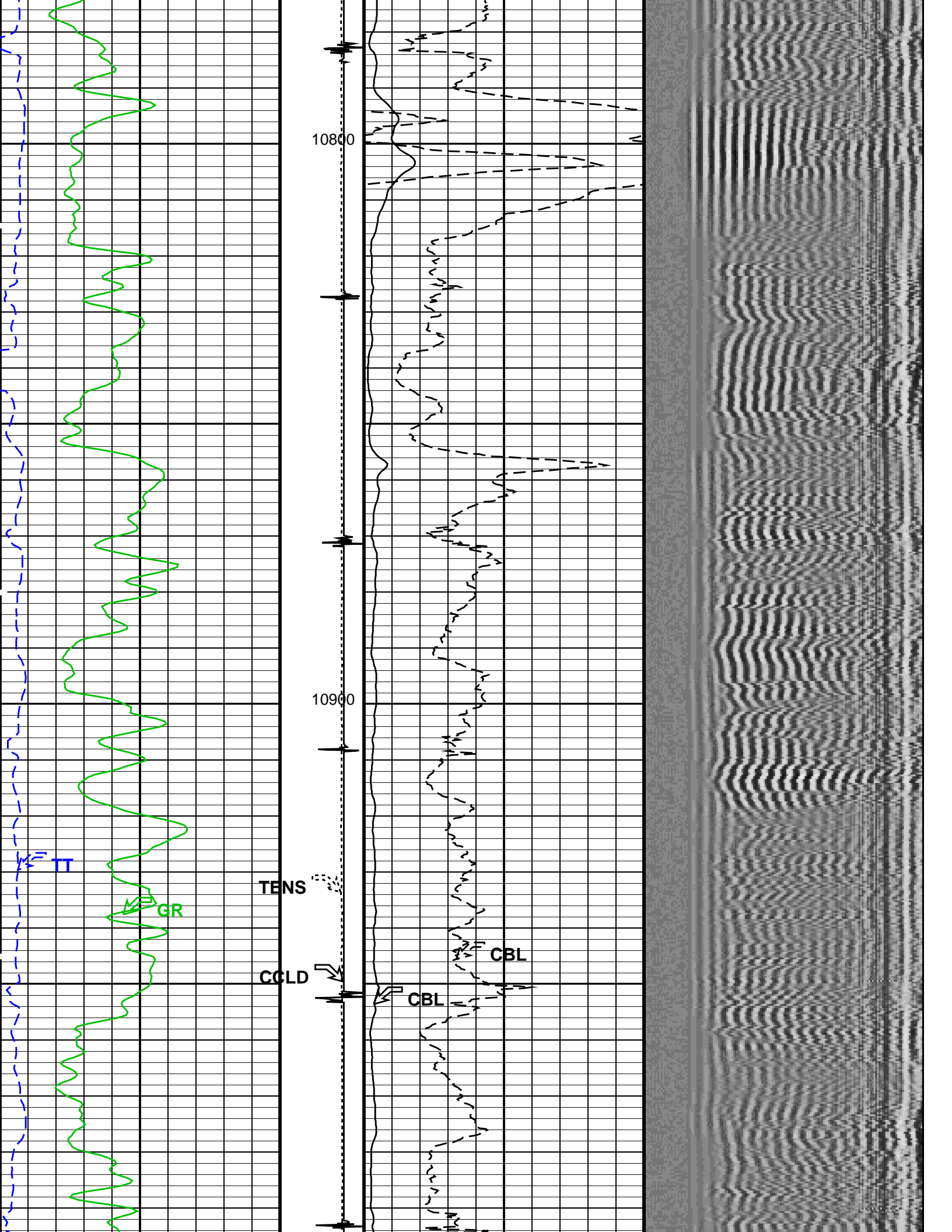


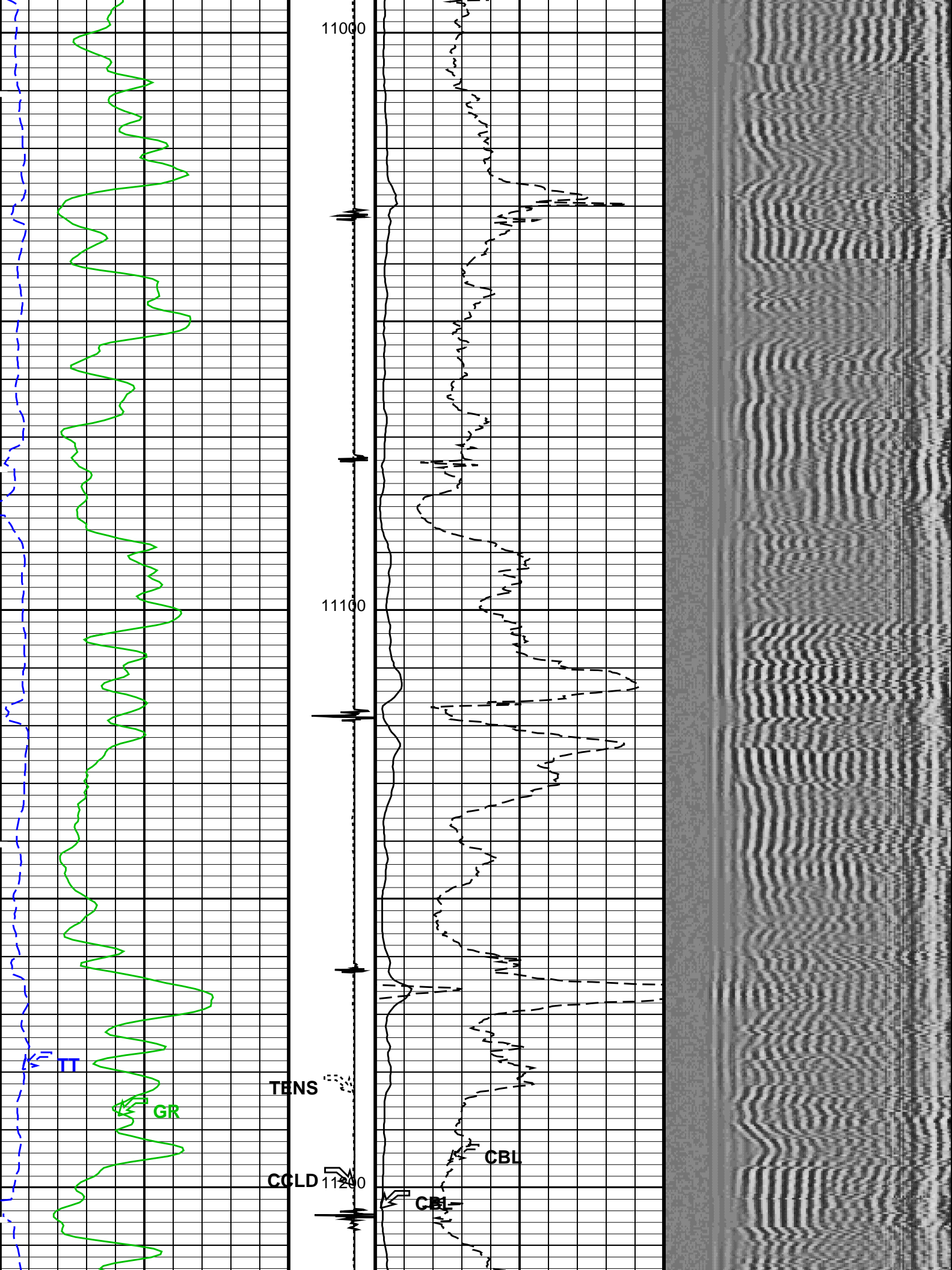


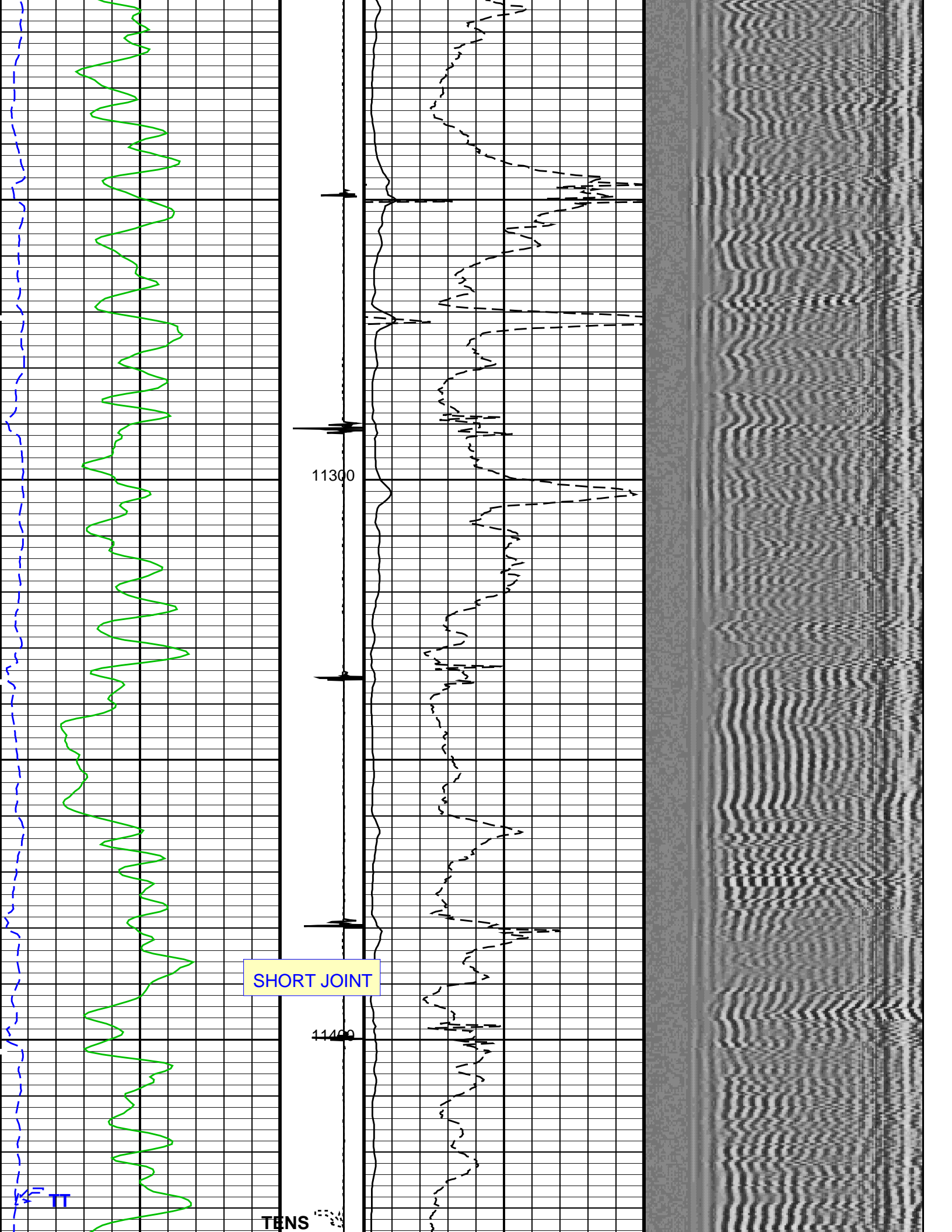


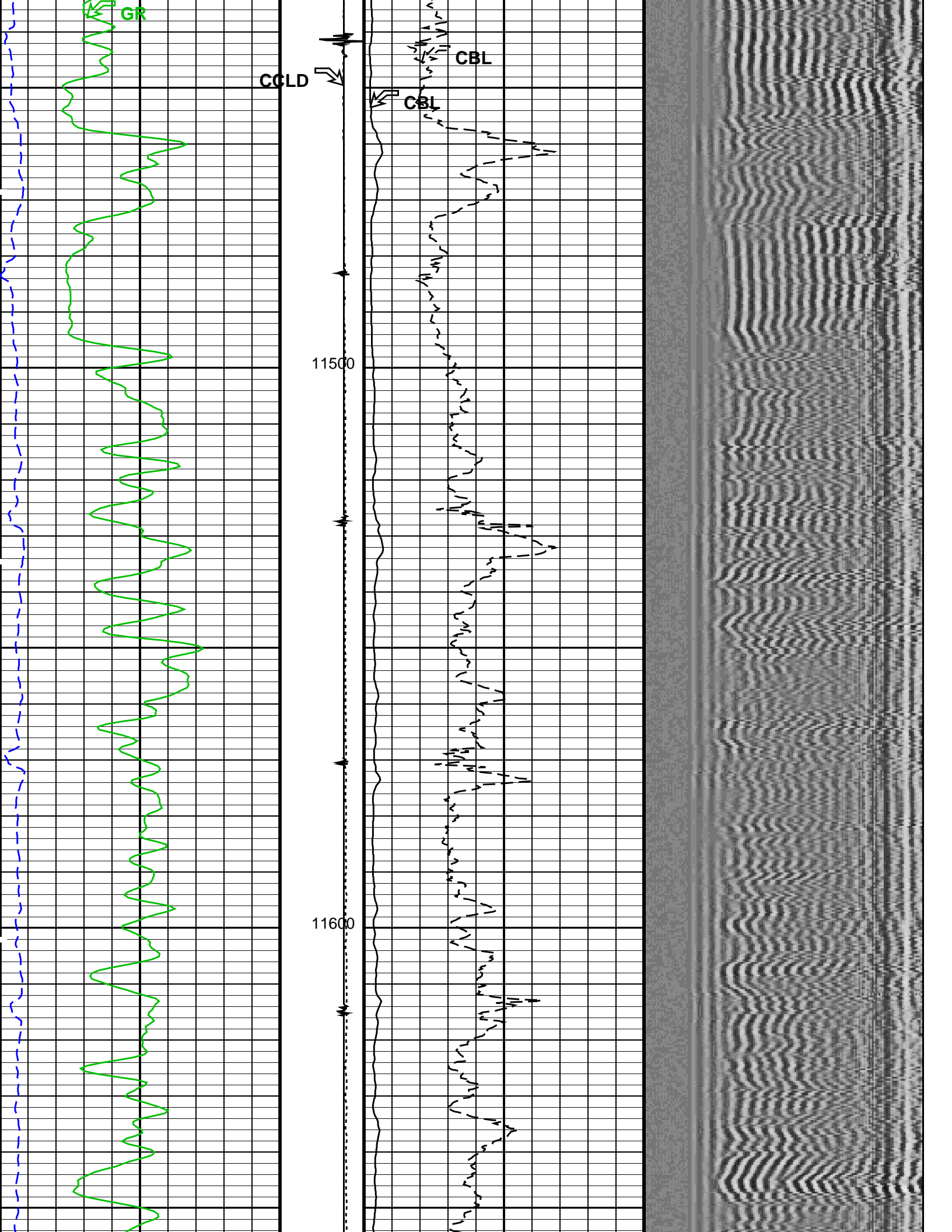


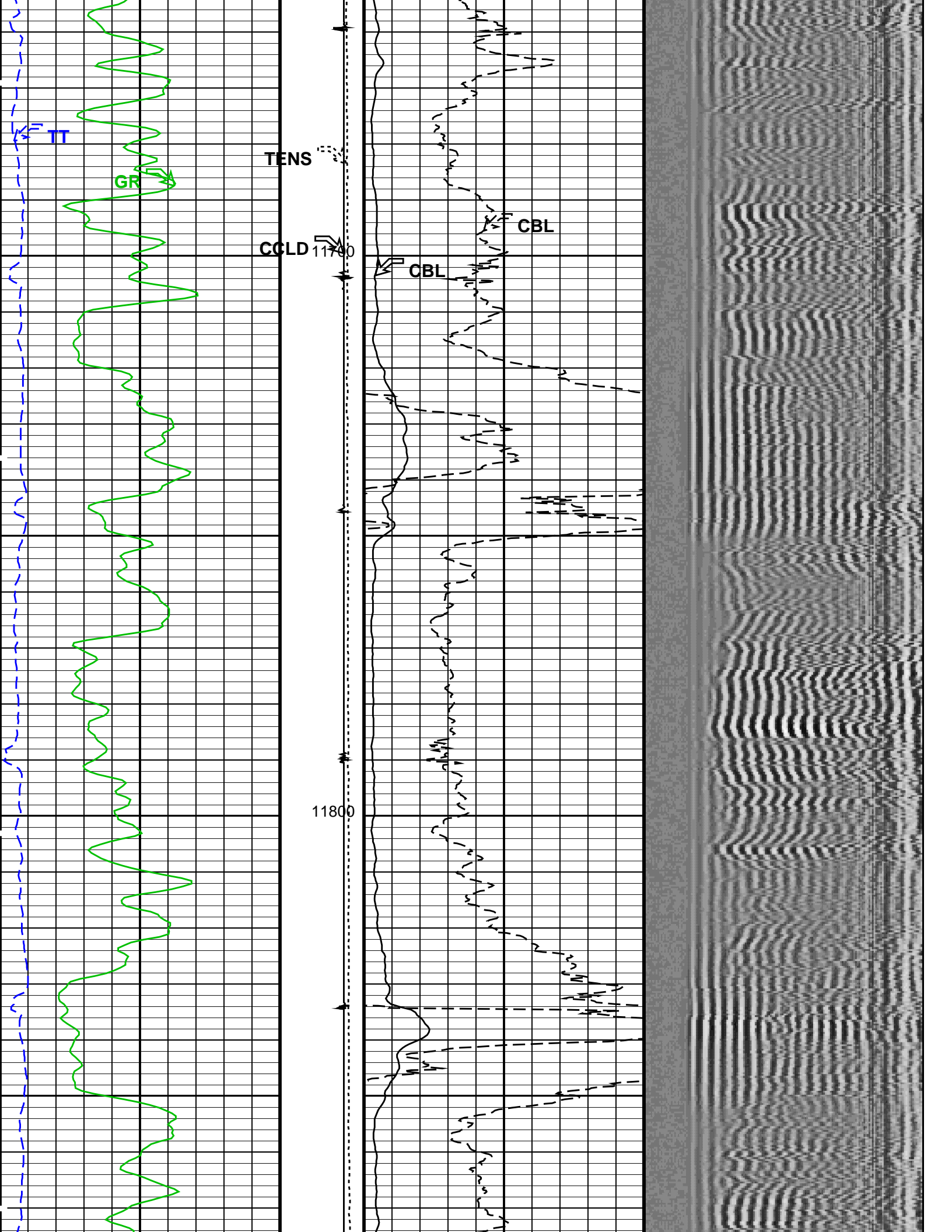


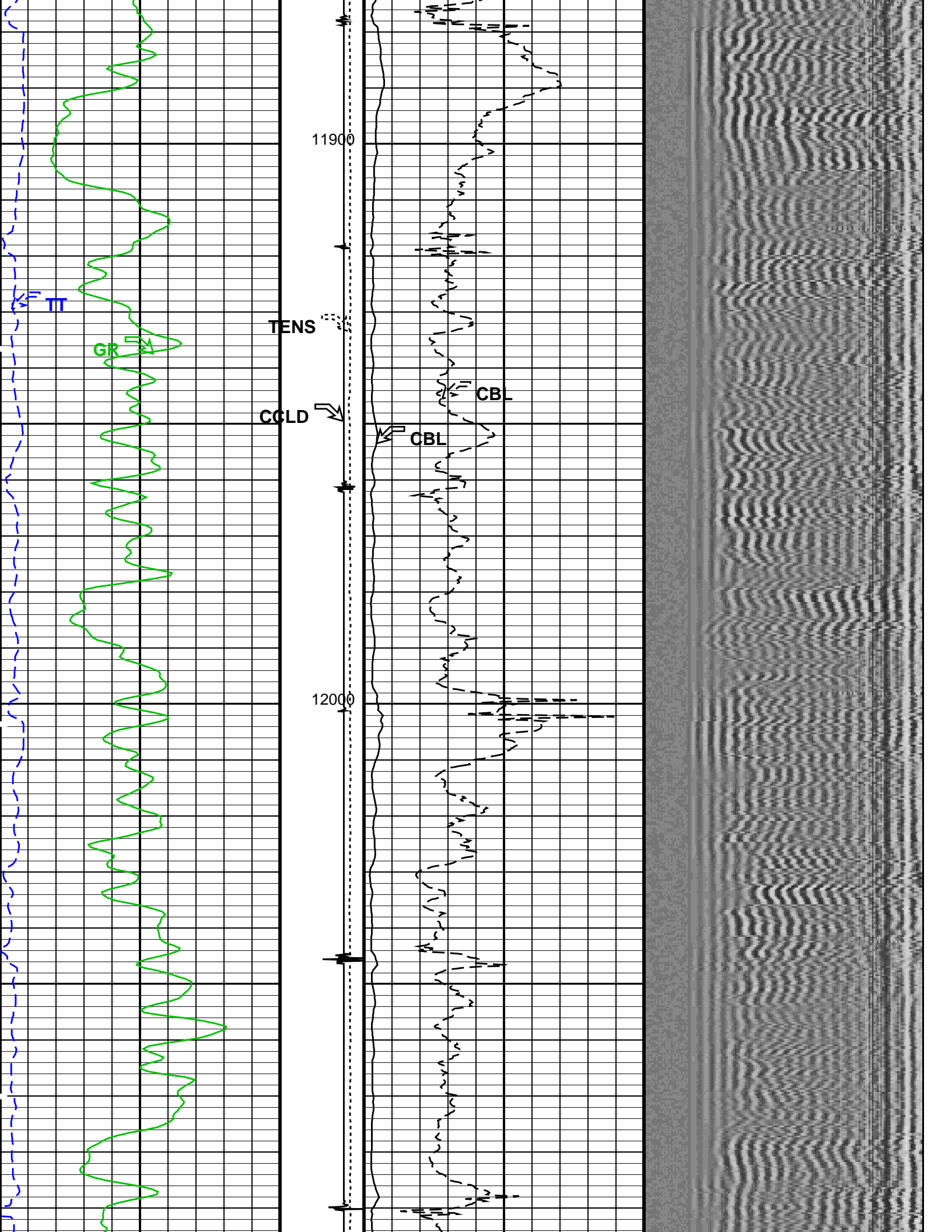


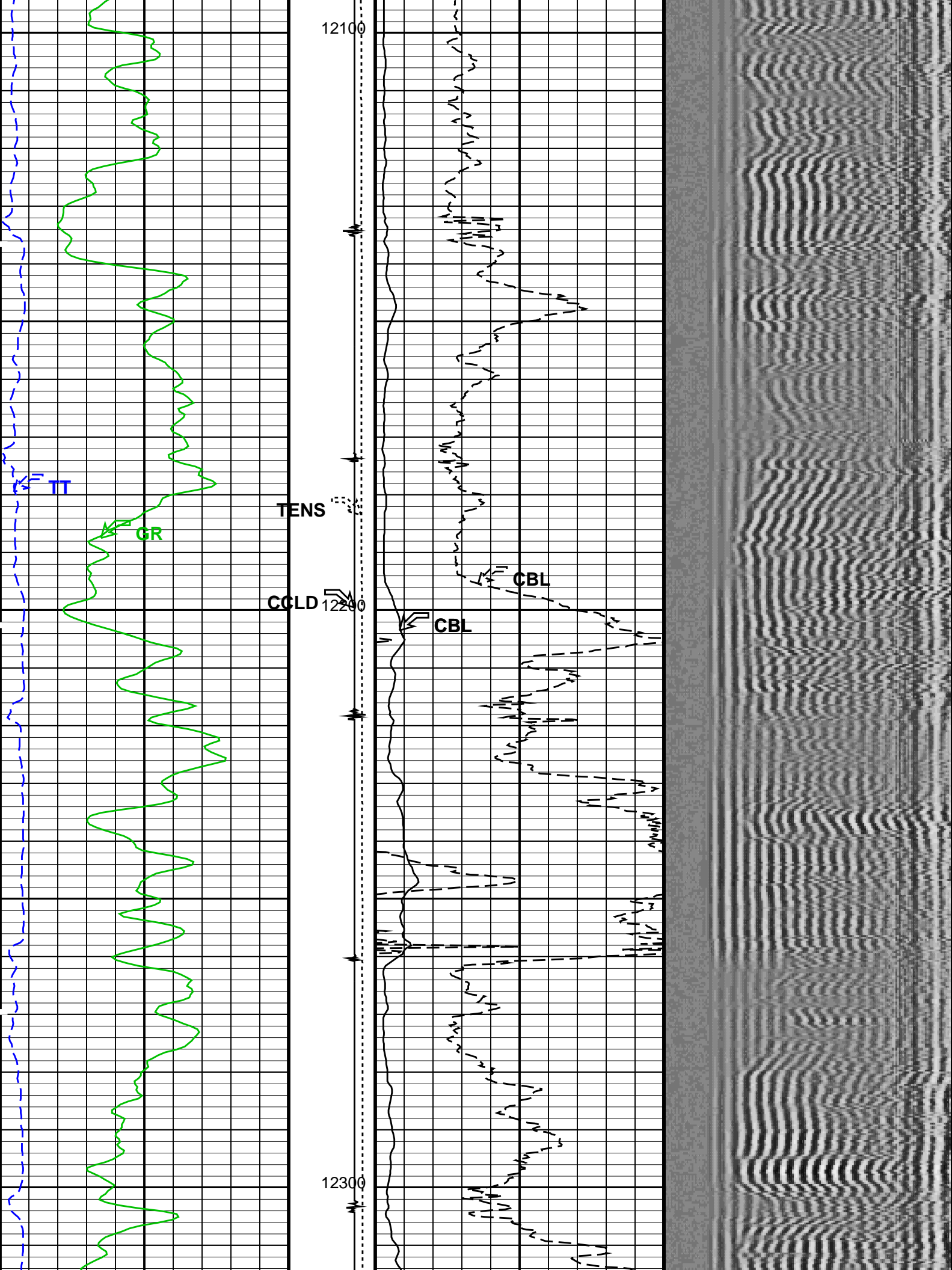


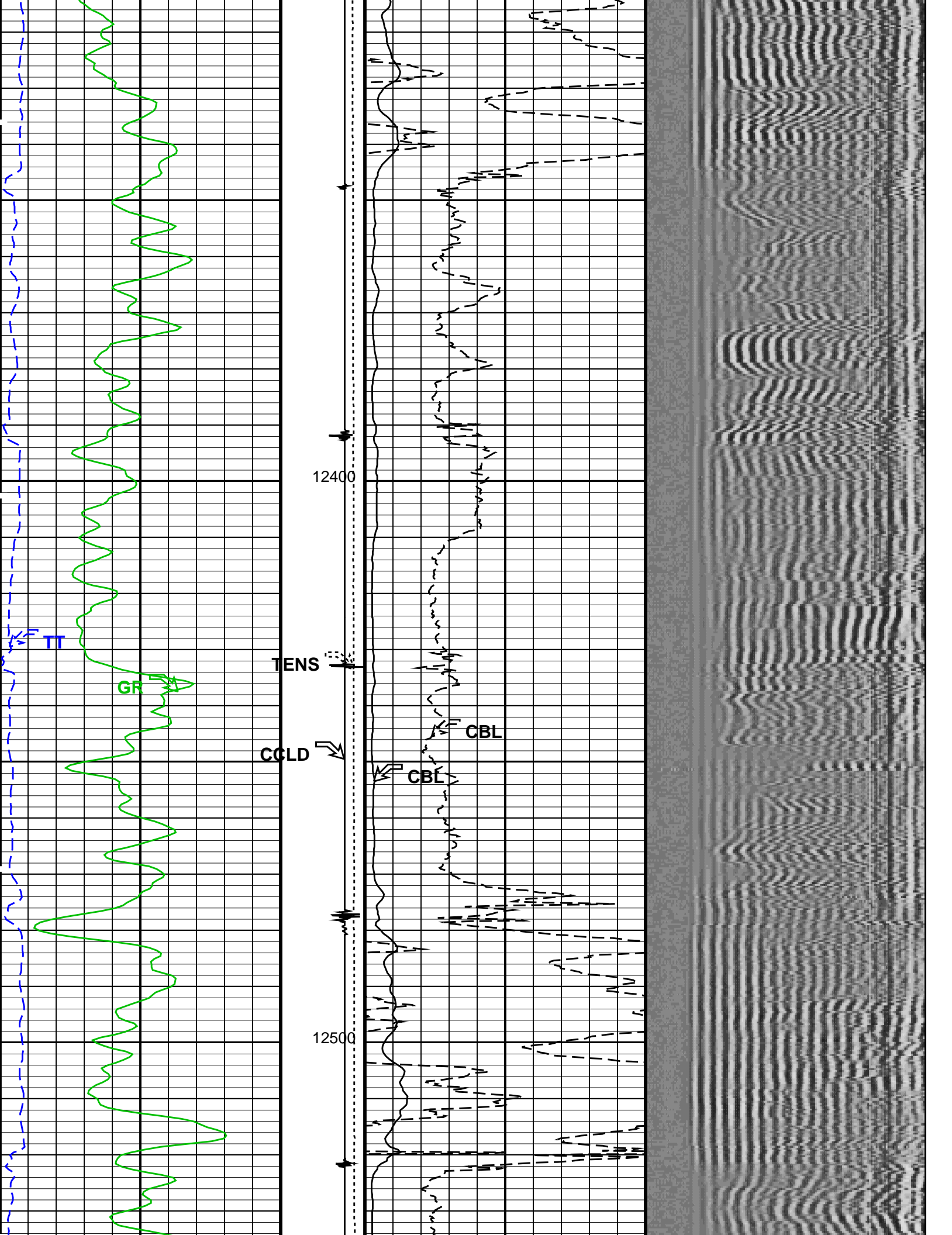


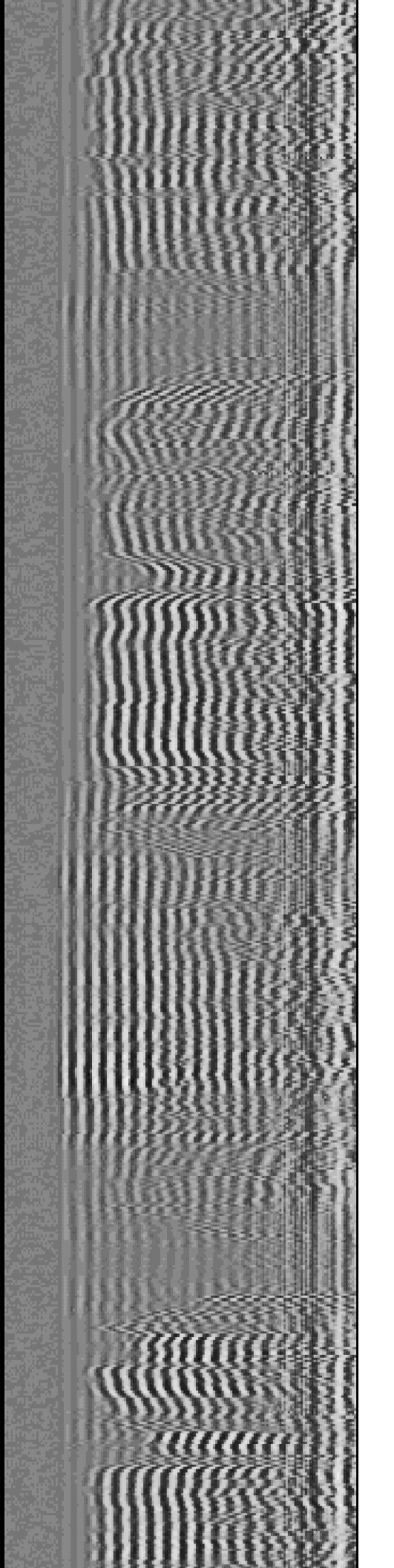
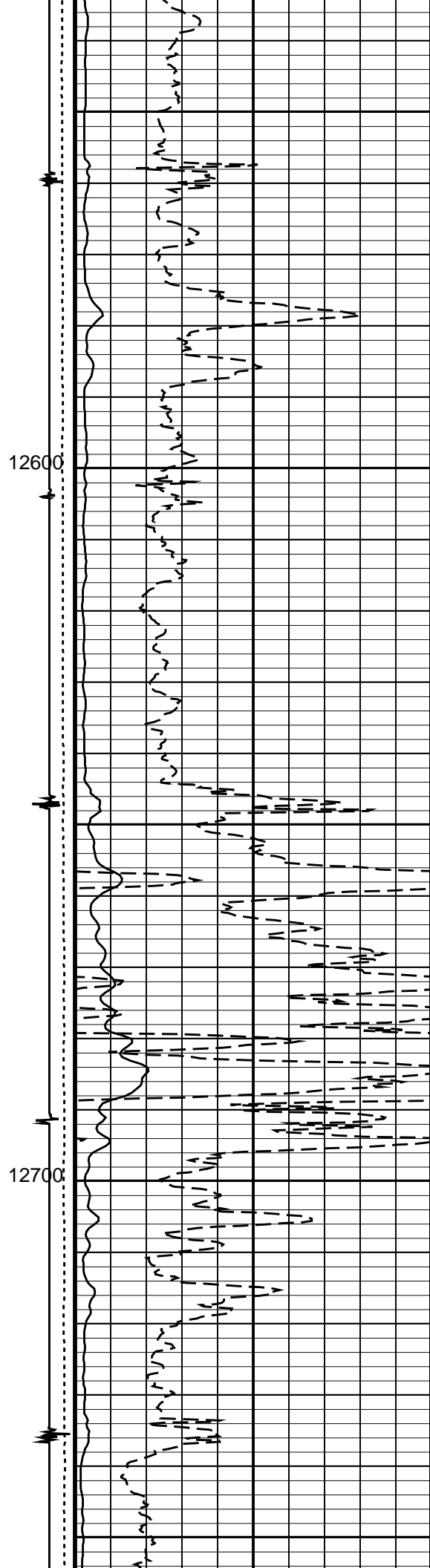
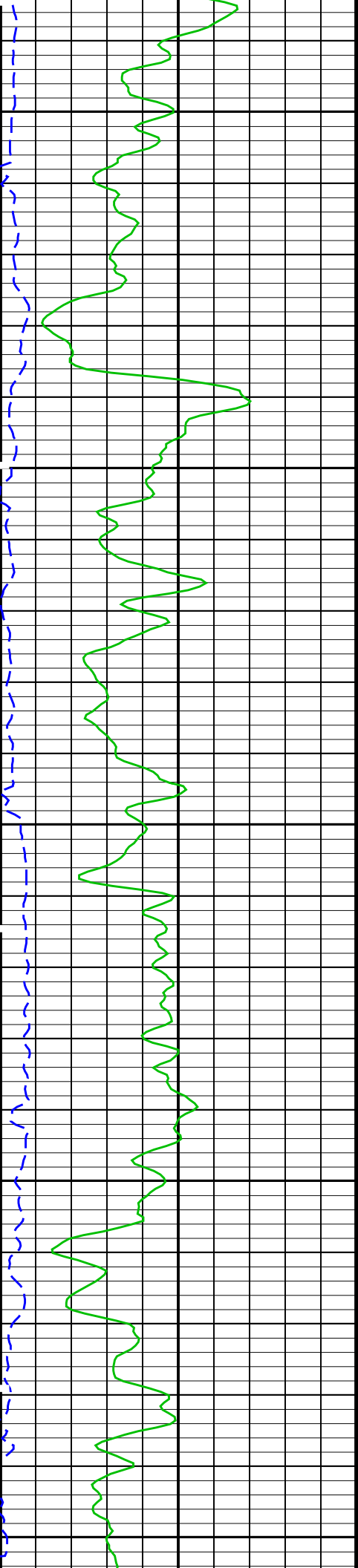


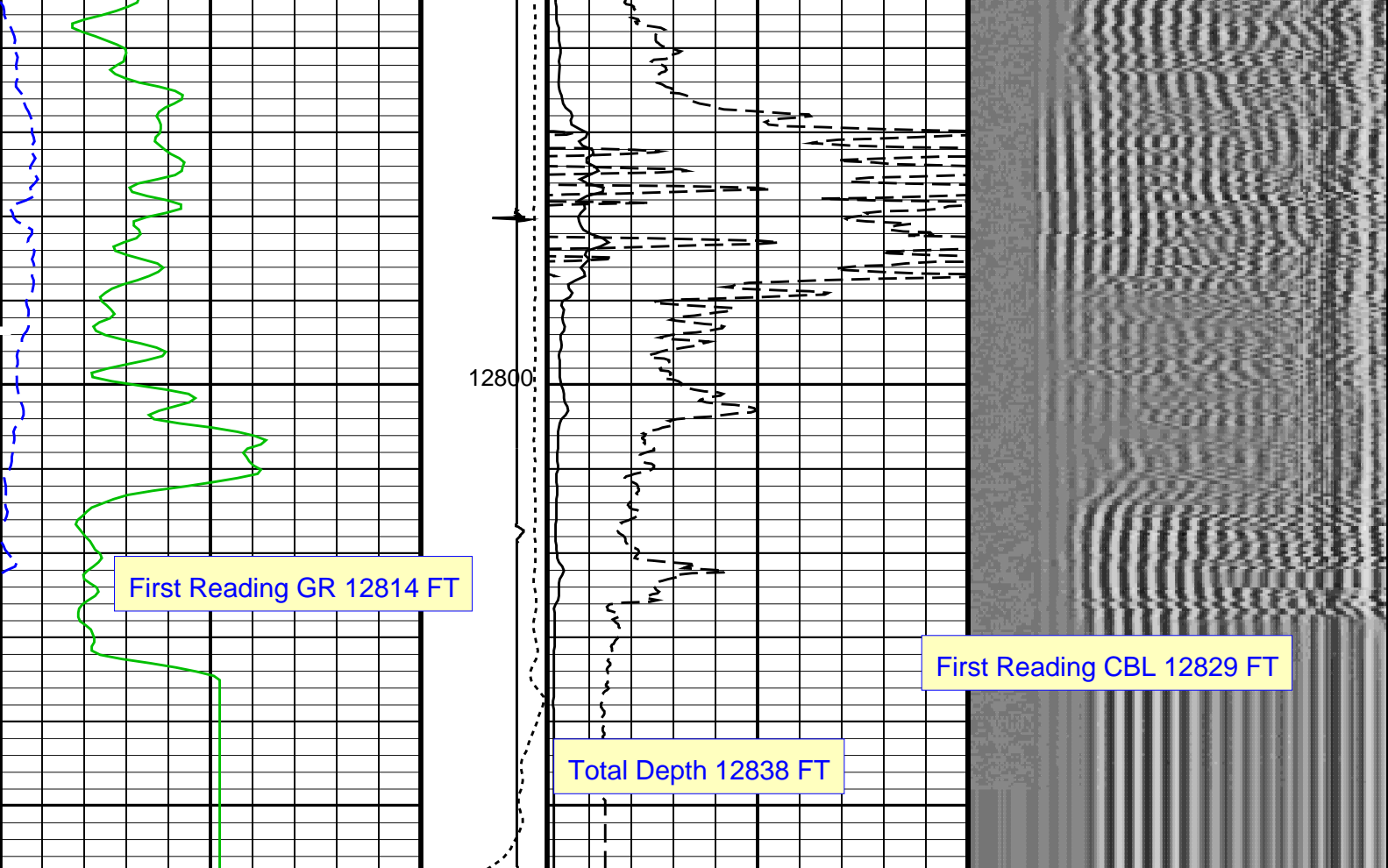












Gamma Ray (GR) (GAPI)	Tension (TENS) (LBF)	CBL Amplitude (CBL) (MV)	Min	Amplitude	Max
0	0	0	200	VDL Variable Density (VDL) (US)	1200
150	2000	100			
Transit Time (TT) (US)	Discriminated CCL (CCLD) (V)	CBL Amplitude (CBL) (MV)			
260	3 -1	10			
160					

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 02-Jul-2013 19:29

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 8303		
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	7-SEP-2012		
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.700000
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0

MAP 2 Correction Factor	0.165126
MAP 3 Correction Factor	0.125717
MAP 4 Correction Factor	0.196395
MAP 5 Correction Factor	0.147692
MAP 6 Correction Factor	0.128887
MAP 7 Correction Factor	0.150775
MAP 8 Correction Factor	0.144577

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			
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	8.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12838	FT

Input DLIS Files

DEFAULT	SCMT_PSP_016LUP	FN:15	PRODUCER	02-Jul-2013 16:06	12849.5 FT	5.2 FT
---------	-----------------	-------	----------	-------------------	------------	--------

Output DLIS Files

DEFAULT	SCMT_PSP_018PUP	FN:17	PRODUCER	02-Jul-2013 19:29
---------	-----------------	-------	----------	-------------------

Schlumberger

REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Input DLIS Files

DEFAULT	SCMT_PSP_014LUP	FN:13	PRODUCER	02-Jul-2013 15:44	8567.5 FT	8262.0 FT
DEFAULT	SCMT_PSP_018PUP	FN:17	PRODUCER	02-Jul-2013 19:29	12857.5 FT	-8.0 FT

Output DLIS Files

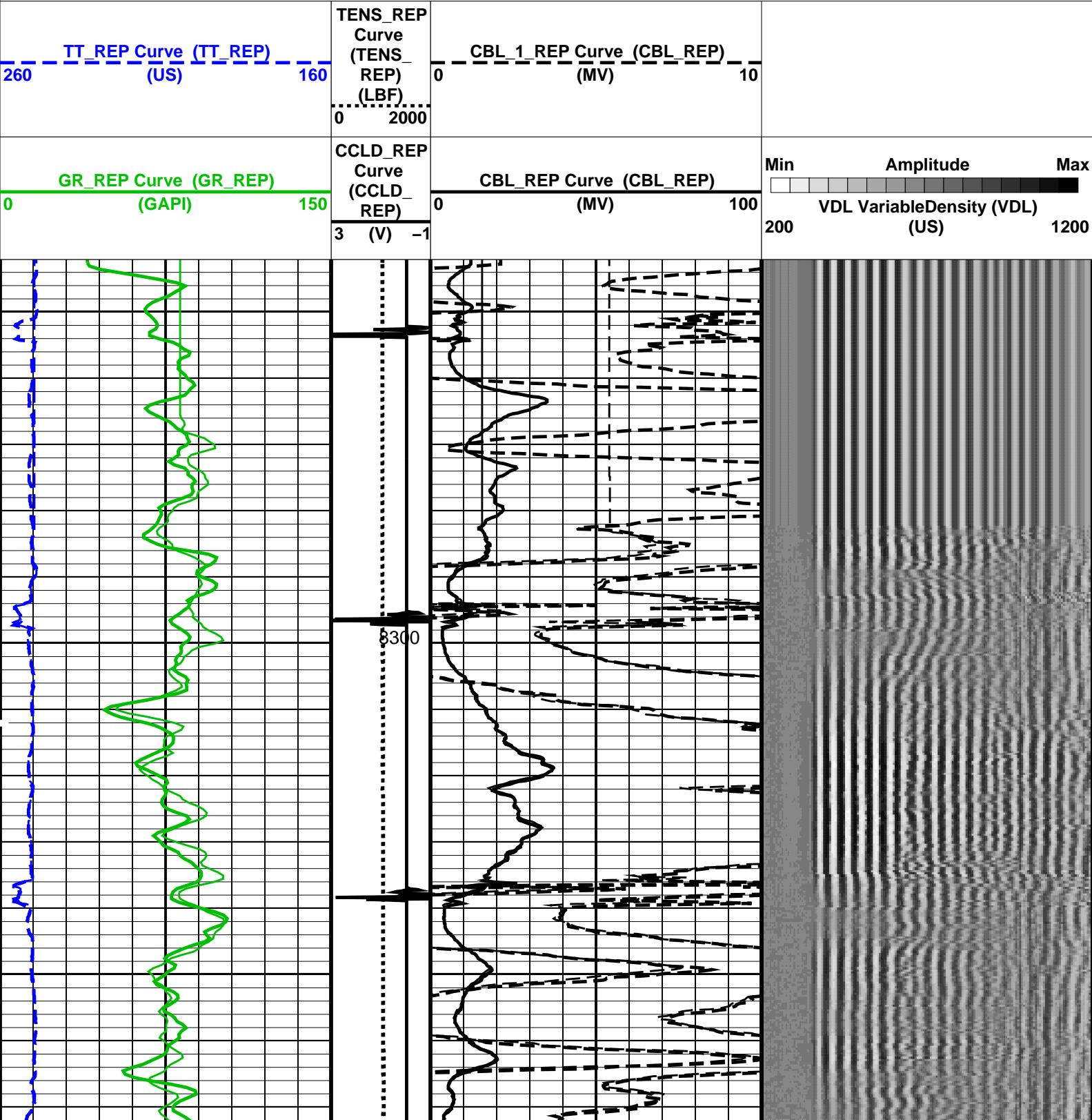
DEFAULT	SCMT_PSP_019PUP	FN:18	PRODUCER	02-Jul-2013 19:38	8568.5 FT	8241.5 FT
---------	-----------------	-------	----------	-------------------	-----------	-----------

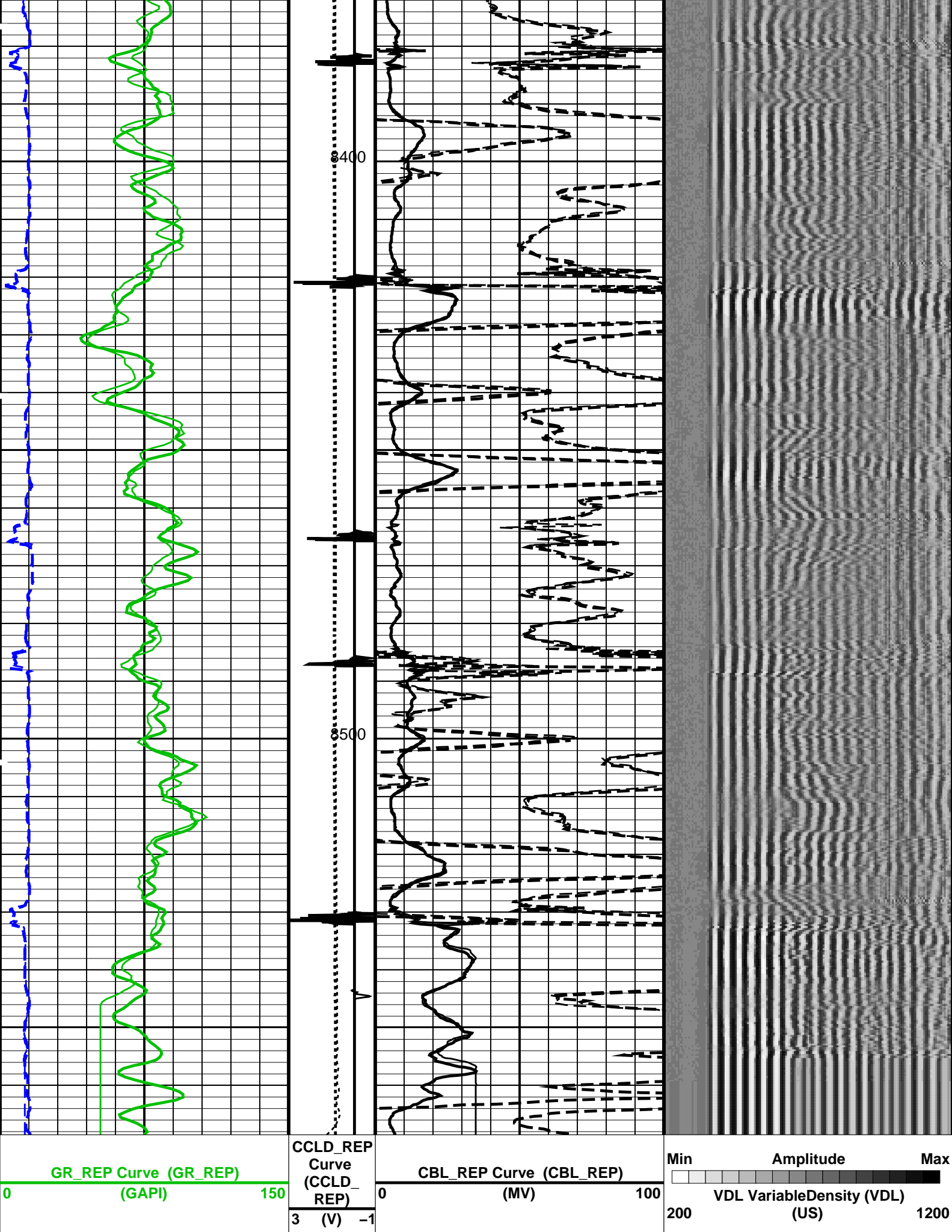
OP System Version: 19C0-187

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

PIP SUMMARY

Time Mark Every 60 S





TT REP Curve (TT REP)		Curve (TENS REP) (LBF)	CBL 1 REP Curve (CBL REP)	
260	(US)	160	0	10
		0	2000	
PIP SUMMARY				
Time Mark Every 60 S				
Format: CBL_VDL_REP		Vertical Scale: 5" per 100'		Graphics File Created: 02-Jul-2013 19:38
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 8303			
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	7-SEP-2012			
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.700000	
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0	
MAP 2 Correction Factor	0.165126			
MAP 3 Correction Factor	0.125717			
MAP 4 Correction Factor	0.196395			
MAP 5 Correction Factor	0.147692			
MAP 6 Correction Factor	0.128887			
MAP 7 Correction Factor	0.150775			
MAP 8 Correction Factor	0.144577			
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			
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	1.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12838	FT

Input DLIS Files

DEFAULT	SCMT_PSP_014LUP	FN:13	PRODUCER	02-Jul-2013 15:44	8567.5 FT	8262.0 FT
DEFAULT	SCMT_PSP_018PUP	FN:17	PRODUCER	02-Jul-2013 19:29	12857.5 FT	-8.0 FT

Output DLIS Files

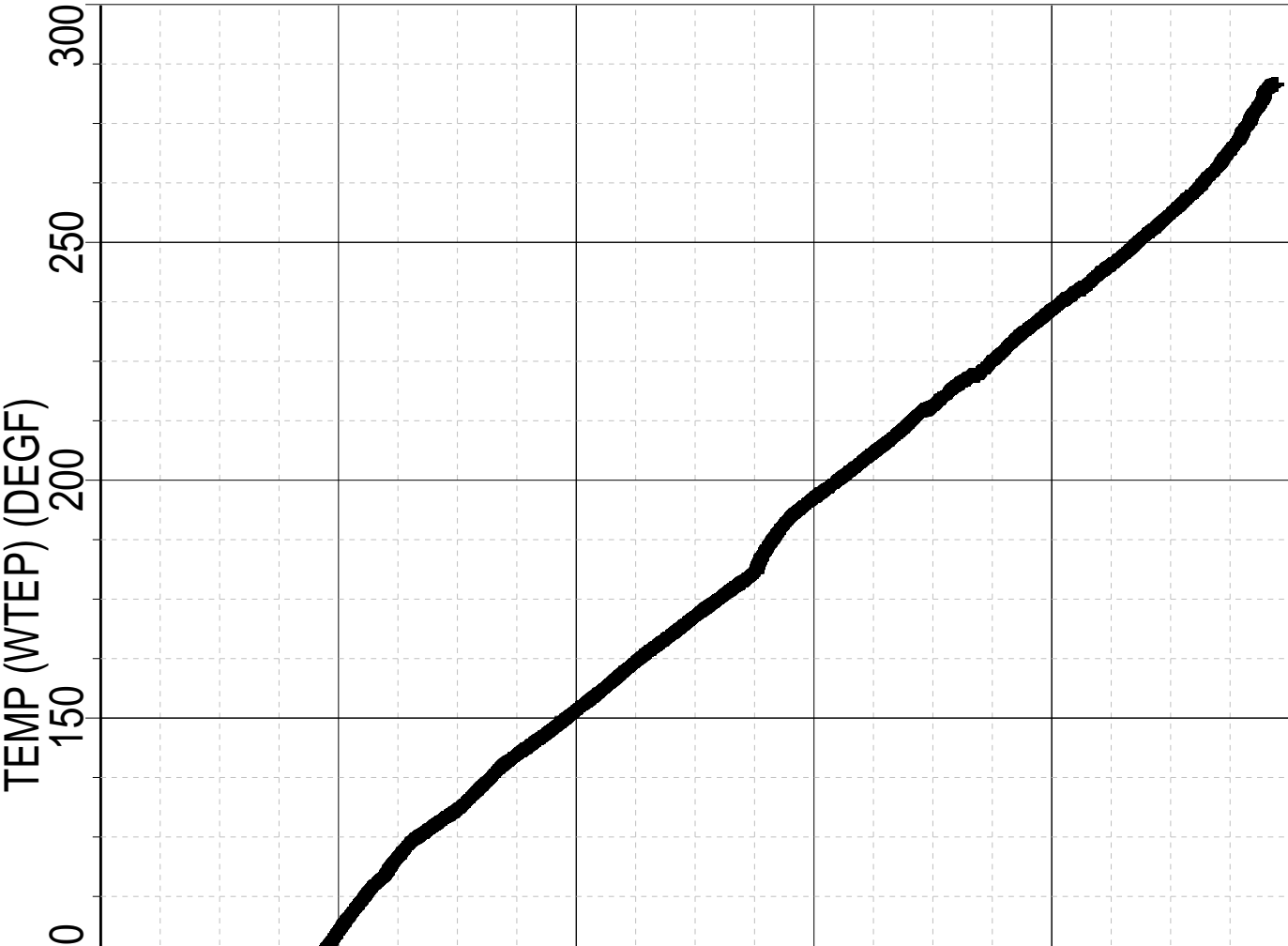
DEFAULT	SCMT_PSP_019PUP	FN:18	PRODUCER	02-Jul-2013 19:38
---------	-----------------	-------	----------	-------------------

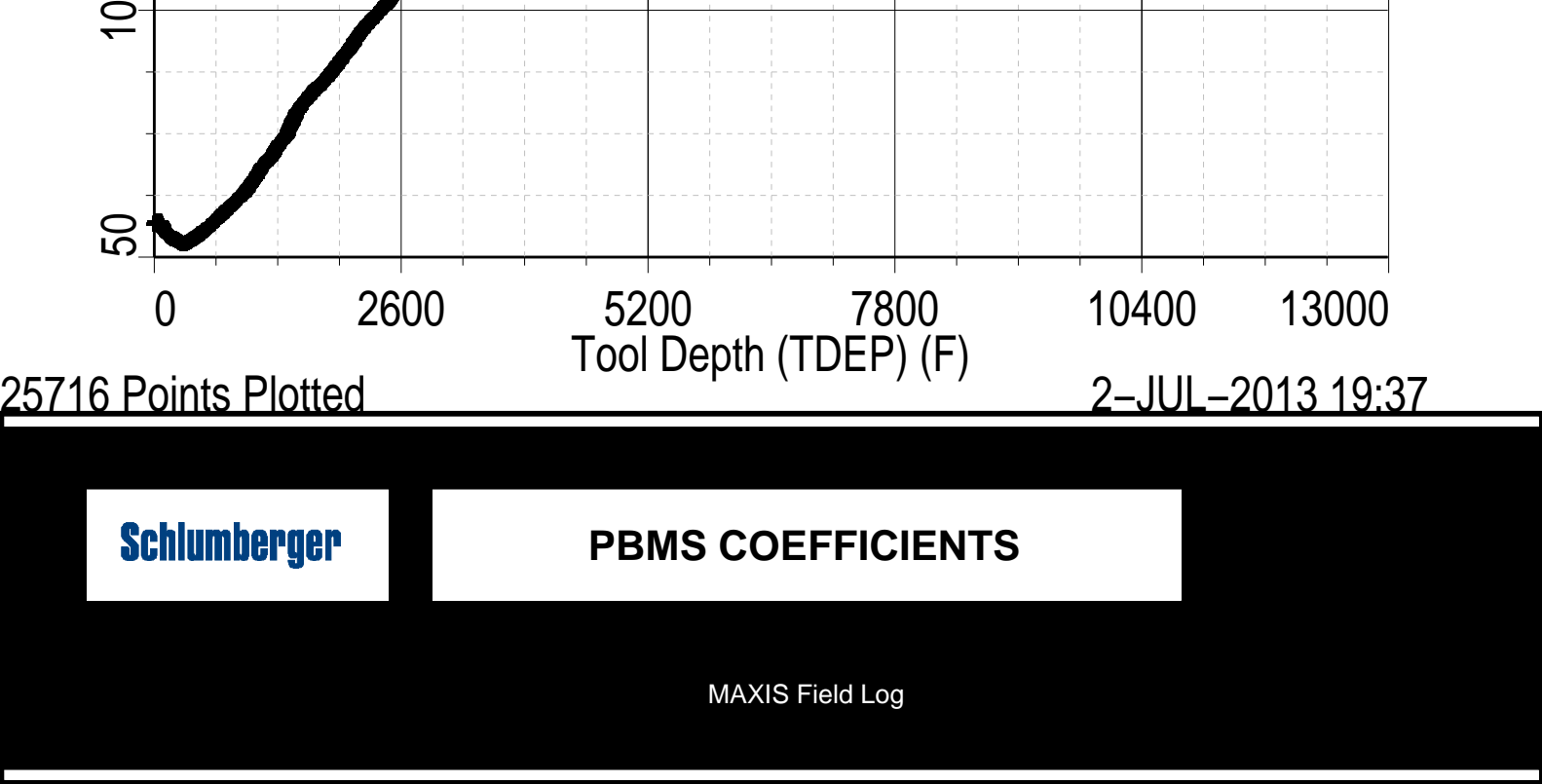
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 12857.5 – -8.0 FT





Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	STORY GULCH	Sub Type:	PBMS
Well:	SG 8513C-36 (D36 496)	Sensor:	GR
Run date:	2-Jul-2013		

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			
	<div>Rt**0Rt**1</div>		
Rt**0	<table><tr><td>+.182000000000e+04</td><td>+.332000000000e+04</td></tr></table>	+.182000000000e+04	+.332000000000e+04
+.182000000000e+04	+.332000000000e+04		

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SG 8513C–36 (D36 496)

Run date: 2–Jul–2013

Tool: PSP

Sub Type: PBMS

Sensor: WellTemp RTD

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

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

928

280612

16

A24E

WTemp Coeff

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

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SG 8513C–36 (D36 496)

Run date: 2–Jul–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.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
Calib Date ddmmyy 280612
Matrix Size 66
Coeff CRC 283B

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+1.117016867873E+03	−.284359629614E−03	+604391180345E−08
Fb**1	−.598309140812E−02	+1.82731130848E−07	+1.60166486172E−12
Fb**2	−.307621454576E−07	+300601550309E−12	+311233548560E−17
Fb**3	−.419658736767E−12	+1.117473708647E−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	+1.114322792679E−12	+1.153807711176E−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 SCMx - CA
Slim Cement Mapping Sonde SCMS - CB 8317
Slim Cement Mapping Cartridge SCMC - CA 8120

Auxiliary Equipment:
Slim Electronics Cartridge Housing SECH - CA

Slim Cement Mapping Tool, 1-11/16 OD Master Calibration					
SCMT CBL and MAP Amplitude Normalization in SFT-155/-255					
Phase	MAP 1 Amplitude Plus MV	Value	Phase	MAP 2 Amplitude Plus MV	Value
Master		1029	Master		864.7
	500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)			500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)	

(Minimum) (Nominal) (Maximum)			(Minimum) (Nominal) (Maximum)				
Phase	MAP 3 Amplitude Plus MV		Value	Phase	MAP 4 Amplitude Plus MV		Value
Master			776.8	Master			948.8
	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			1034	Master			949.7
	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			890.8	Master			866.8
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	CBL Amplitude Plus MV		Value				
Master			1334				
	1000 (Minimum)	1350 (Nominal)	1700 (Maximum)				
Master: 26-Sep-2012 14:15							

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

Schlumberger

Well: **SG 8513C-36 (D36 496)**

Field: **STORY GULCH**

County: **GARFIELD**

State: **COLORADO**

SLIM CEMENT MAPPING LOG

CBL – VDL

GAMMA RAY – CCL