

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8510E-23 (L24 496)

Field: STORY GULCH

County: GARFIELD State: COLORADO

SLIM CEMENT MAPPING LOG
CBL-VDL
GR-CCL

County: GARFIELD

Field: STORY GULCH

Location: SHL: 1573 FSL & 866 FWL

Well: SGU 8510E-23 (L24 496)

Company: ENCANA OIL & GAS (USA) INC

LOCATION	
SHL: 1573 FSL & 866 FWL	Elev.: K.B. 8210.00 ft
BHL: 1527 FSL & 1812 FEL	G.L. 8180.00 ft
	D.F. 8209.00 ft
Permanent Datum: _____	GROUND LEVEL _____
Log Measured From: _____	KELLY BUSHING _____
Drilling Measured From: _____	KELLY BUSHING _____
API Serial No. _____	Section 24
05-045-21173-000C	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	13-Feb-2013
Run Number	1
Depth Driller	12537 ft
Schlumberger Depth	12436 ft
Bottom Log Interval	12427 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	7.875 in
From	10353 ft
To	12537 ft
Casing/Tubing Size	4.500 in
Weight	13.5 lbm/ft
Grade	P-110
From	30 ft
To	12493 ft
Maximum Recorded Temperatures	283 degF
Logger On Bottom	13-Feb-2013
Unit Number	391
Location	GRAND JUNCTION
Recorded By	JASON BARRY
Witnessed By	RYAN TOMPKINS

Logging Date	
Run Number	
Depth Driller	
Schlumberger Depth	
Bottom Log Interval	
Top Log Interval	
Casing Fluid Type	
Salinity	
Density	
Fluid Level	
BIT/CASING/TUBING STRING	
Bit Size	
From	
To	
Casing/Tubing Size	
Weight	
Grade	
From	
To	
Maximum Recorded Temperatures	
Logger On Bottom	
Unit Number	
Location	
Recorded By	
Witnessed By	

DEPTH SUMMARY LISTING

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

Depth System Equipment

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

Depth Control Parameters

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

Depth Control Remarks

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

DISCLAIMER

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

OTHER SERVICES1	OTHER SERVICES2
OS1: RESERVOIR SATURATION	OS1:
OS2: LOG	OS2:
OS3: SIGMA MODE	OS3:
OS4: GR-CCL	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWN LOG	
TOOL RAN AS PER TOOL SKETCH	
MAX RECORDED TEMP = 283 DEGF	
MAX RECORDED PRESSURE = 5049 PSIA	
SHORT JOINTS = 7968 FT & 10970 FT	

ENTRANCE TIME = 15:15	
LOGGER ON BOTTOM = 16:30	
EXIT TIME = 20:00	
MAIN PASS LOGGED WITH ZERO SURFACE PRESSURE	
CYCLE SKIPPING DUE TO GOOD BOND	
EXPECTED CBL AMPLITUDE OF FREE PIPE 80MV	
THANK YOU FOR CHOOSING E&P WIRELINE SERVICES	
YOUR CREW, K. BUNTING, J.BARRY, K.JOHNS, B.RANSBOTTOM	

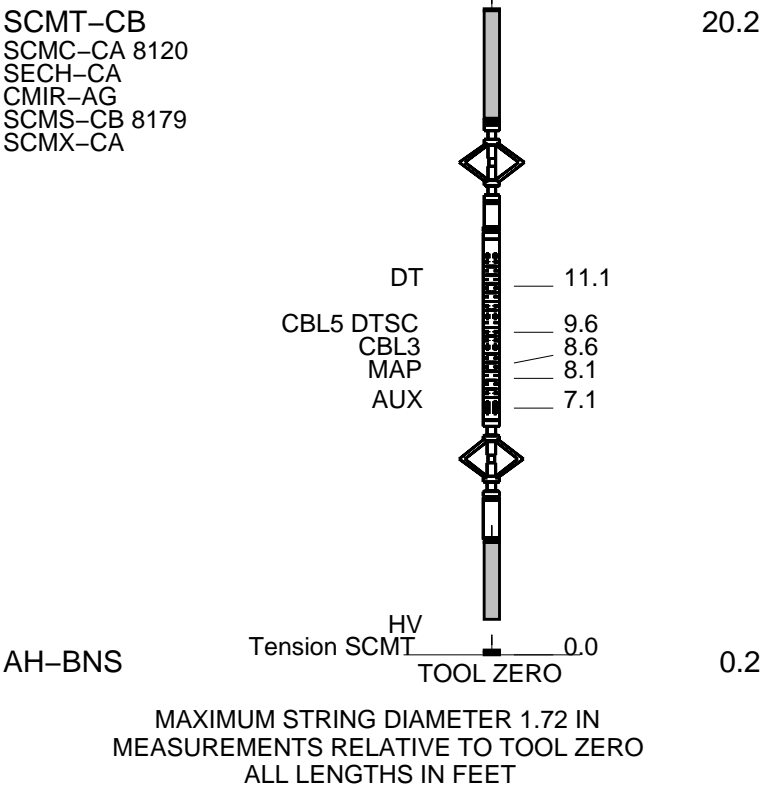
RUN 1 SERVICE ORDER #: C920-00042 PROGRAM VERSION: 19C0-187 FLUID LEVEL: 70 ft			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION	
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	RUN 1	RUN 2
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SURFACE EQUIPMENT		
WITM-A		
PSC_16MHZ		

DOWNHOLE EQUIPMENT			
MH-22			53.3
MH-22			
Detail MT			
AH-38	TelStatus		51.7
PSPT	CTEM		51.5
PSC-A			51.5
PSPT-B 928			
PSTC-A			
PBMS-B	GR		47.8
CQG_F_Mano			
RTD_Thermometer			
GR	Well_Temp		44.7
CCL	CQG Manom		44.4
PBMS	CCL		44.0
	PBMS PSTC		43.2
RST-C			43.2
RSCH-A 469			
RSC-E			
RSS-A 461			
RSXH-A 493			
RSX-E			
	RSC-A Far		34.1
	RSC-A PNG		
	RSC-A Nea		
	RSX-A PNG		33.6



Schlumberger

MAIN PASS CBL VDL

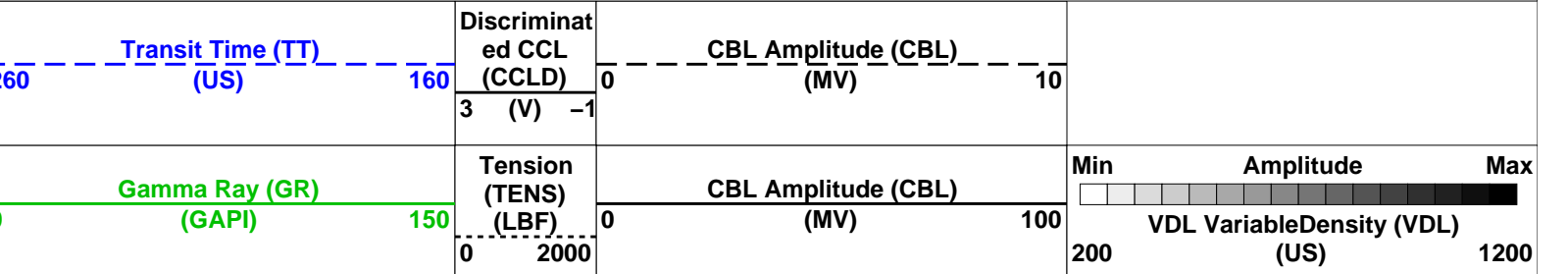
MAXIS Field Log

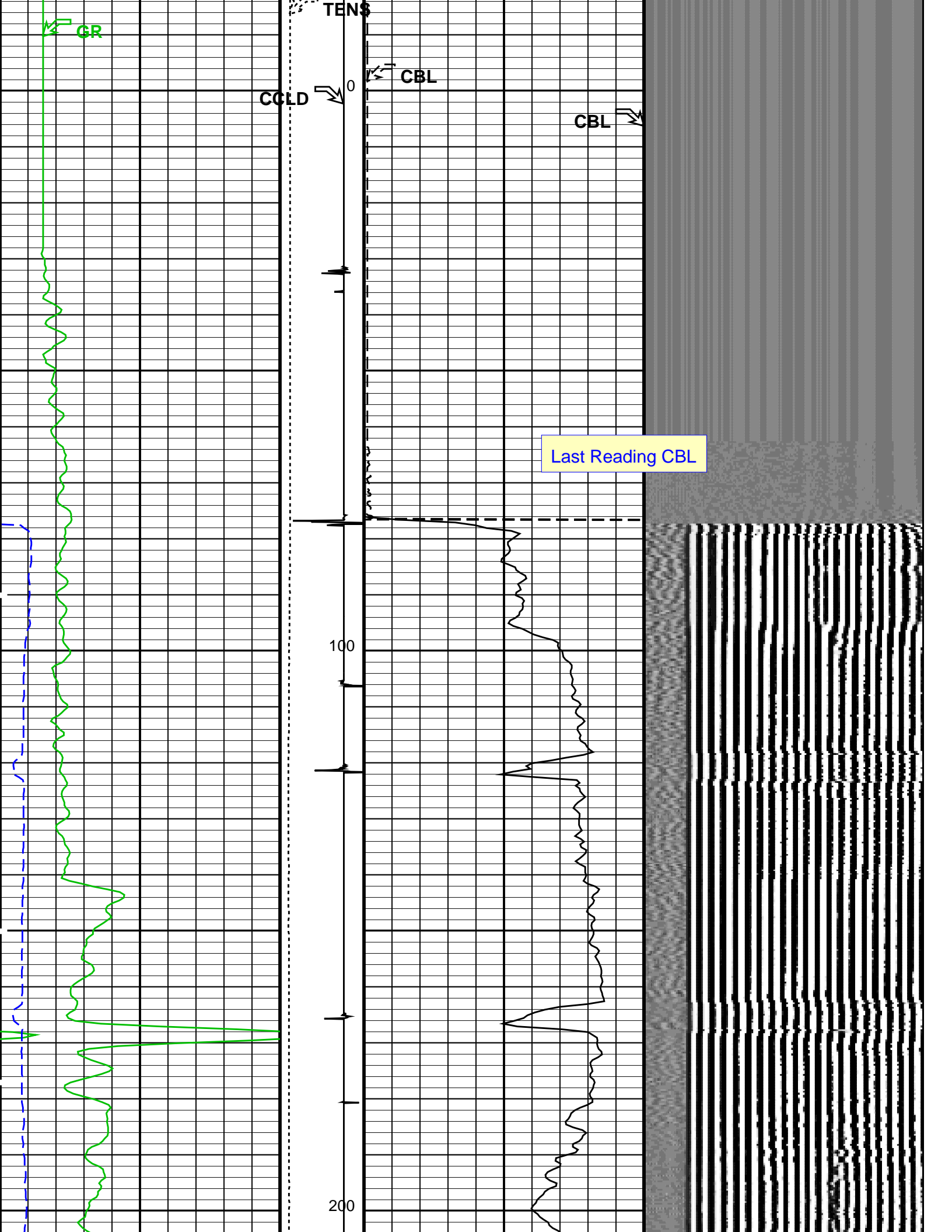
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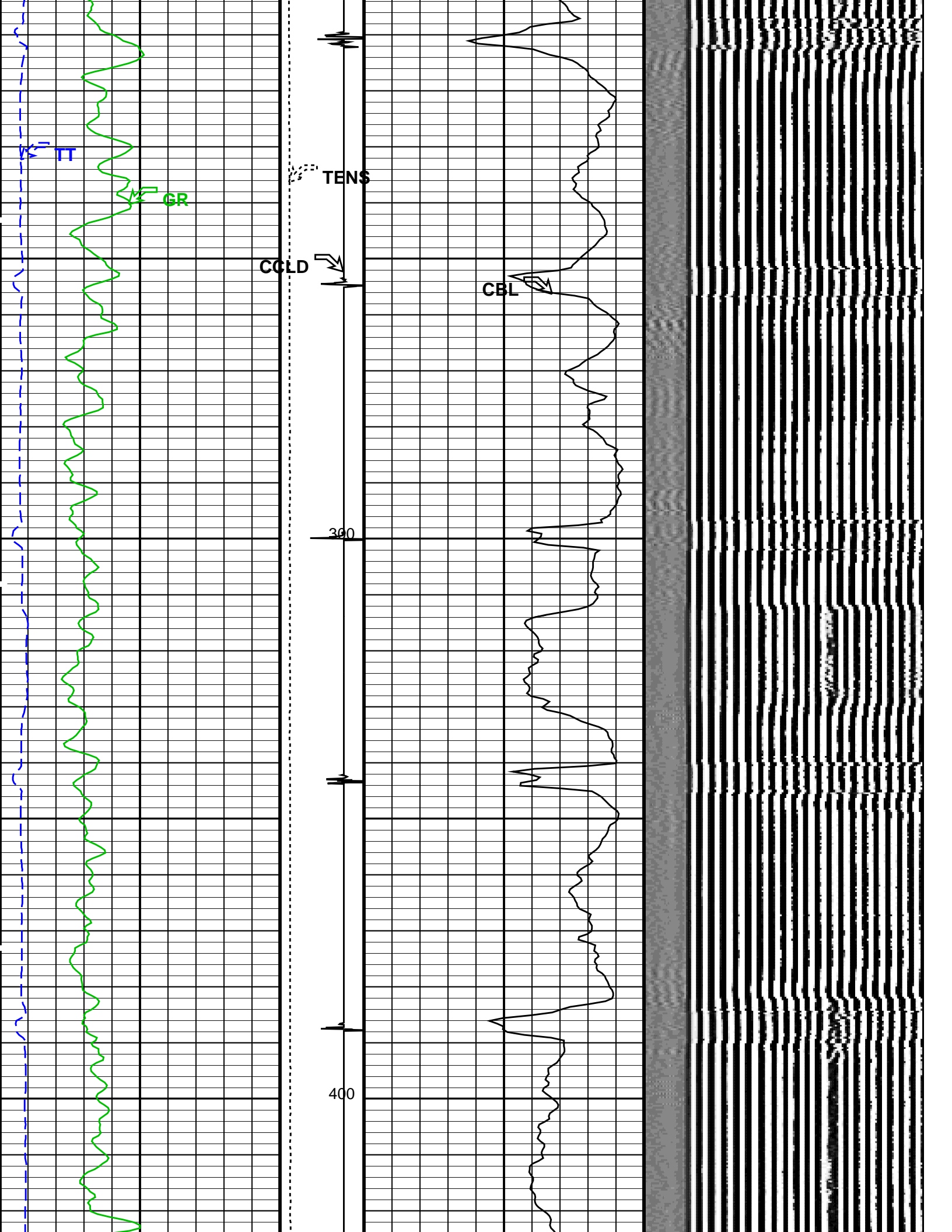
Input DLIS Files						
DEFAULT	SCMT_RST_PSP_019LUP	FN:18	PRODUCER	13-Feb-2013 16:40	12443.0 FT	22.5 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_024PUP	FN:23	PRODUCER	13-Feb-2013 20:07	12448.0 FT	-17.0 FT

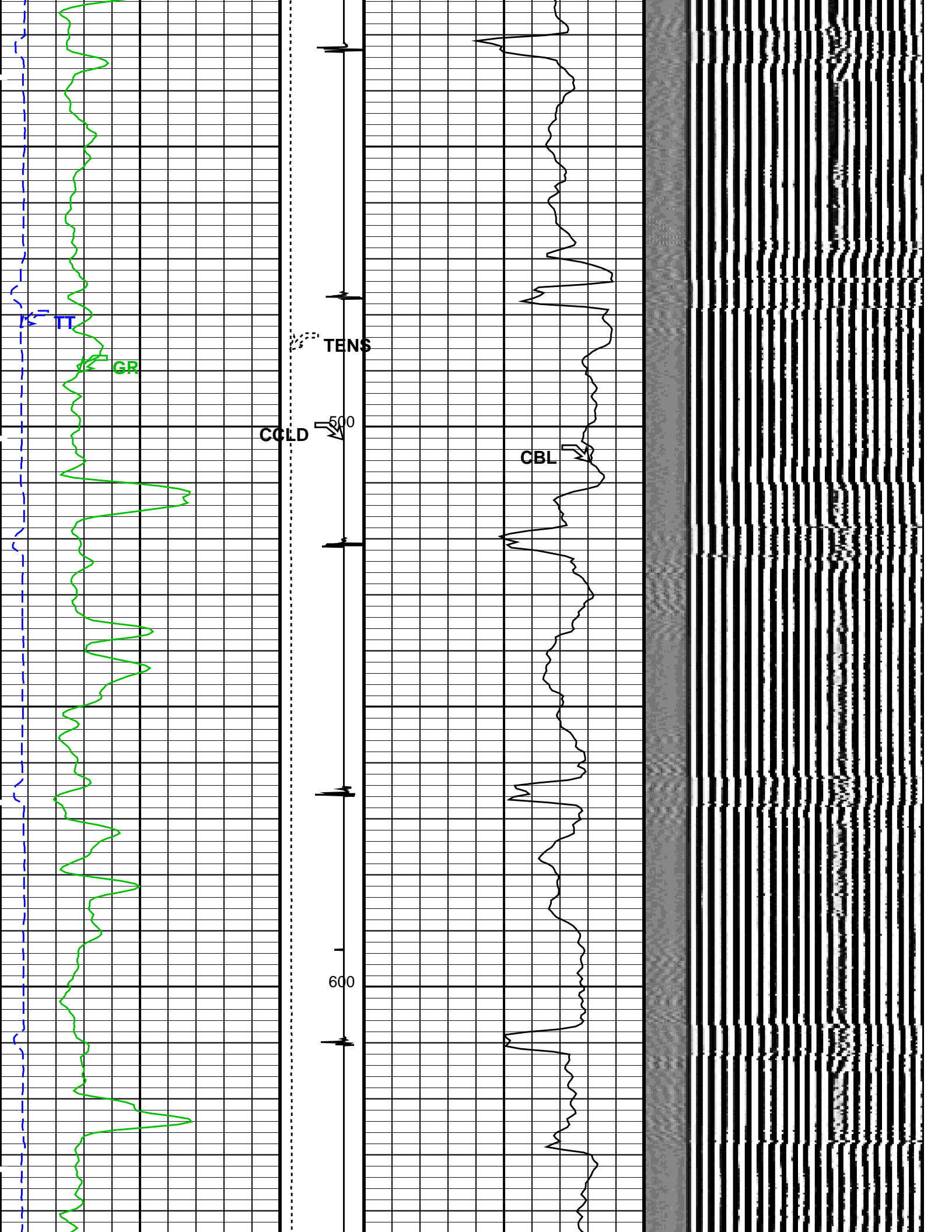
OP System Version: 19C0-187			
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

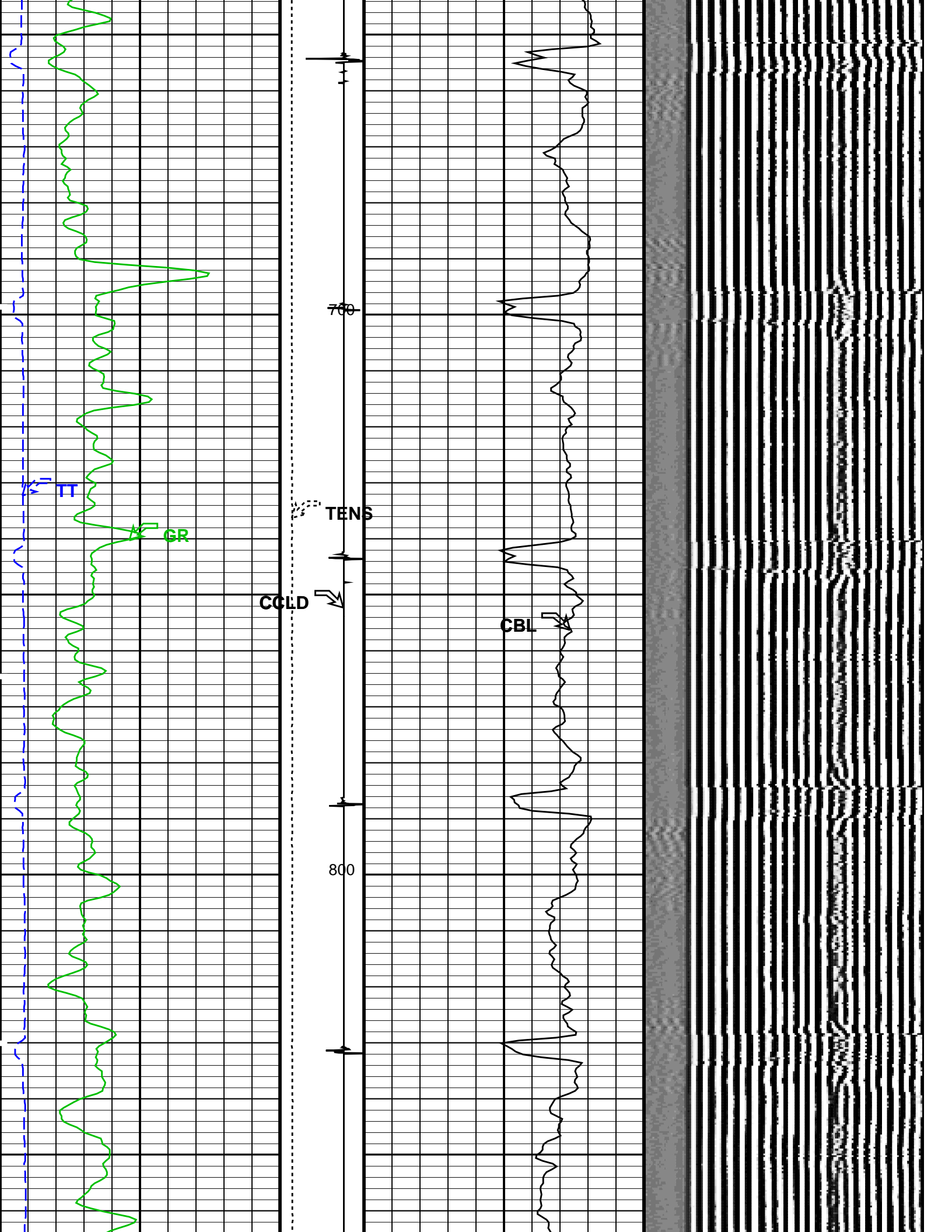
PIP SUMMARY			
Time Mark Every 60 S			

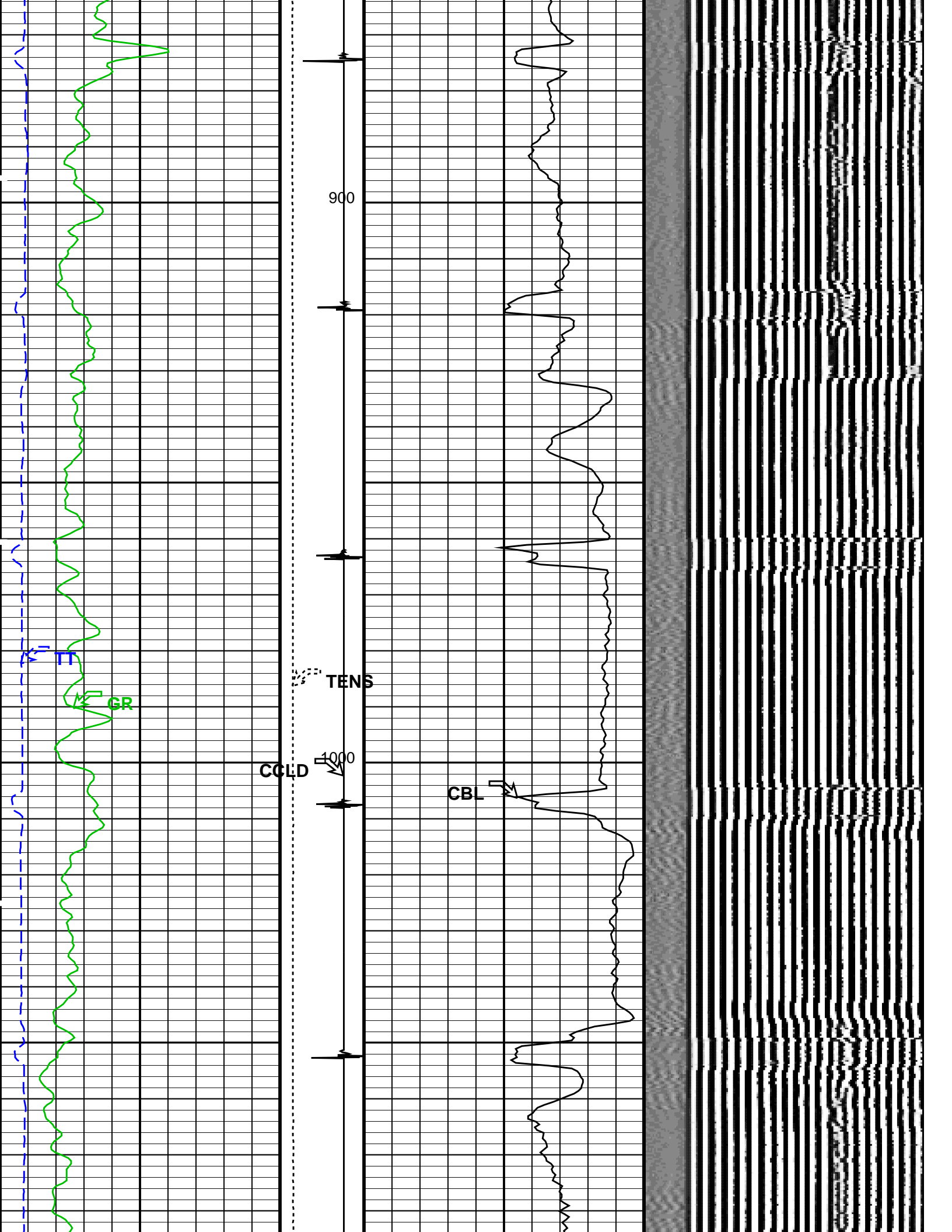


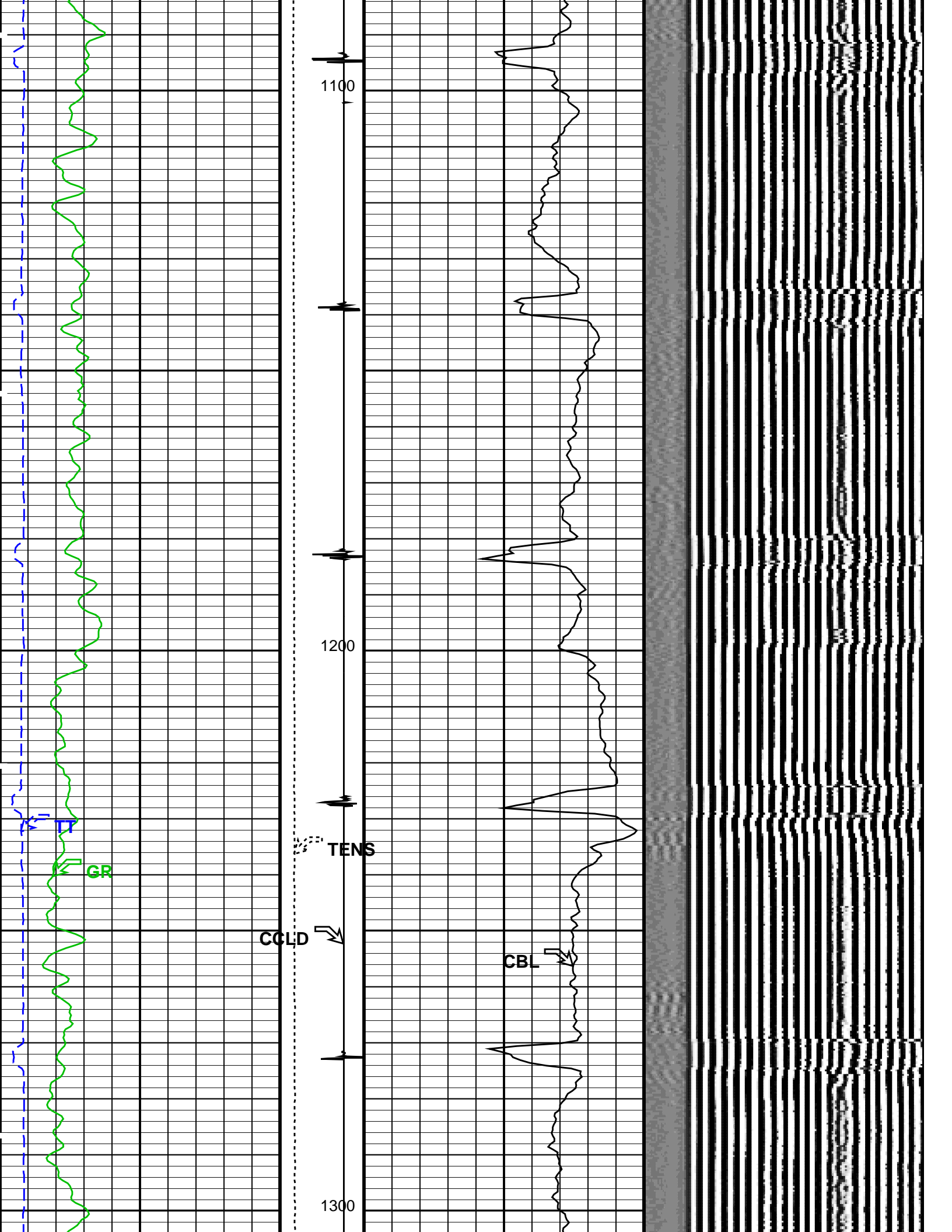


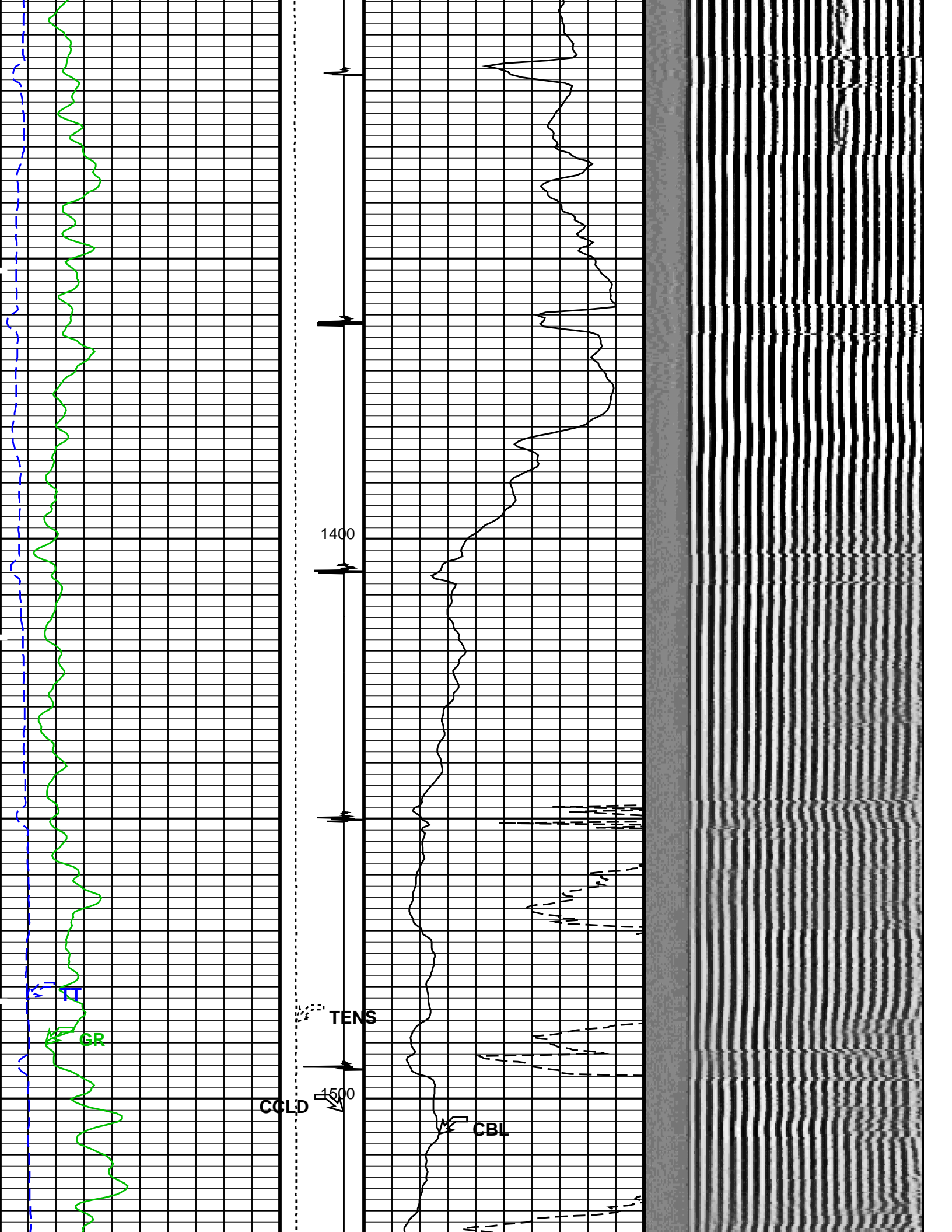


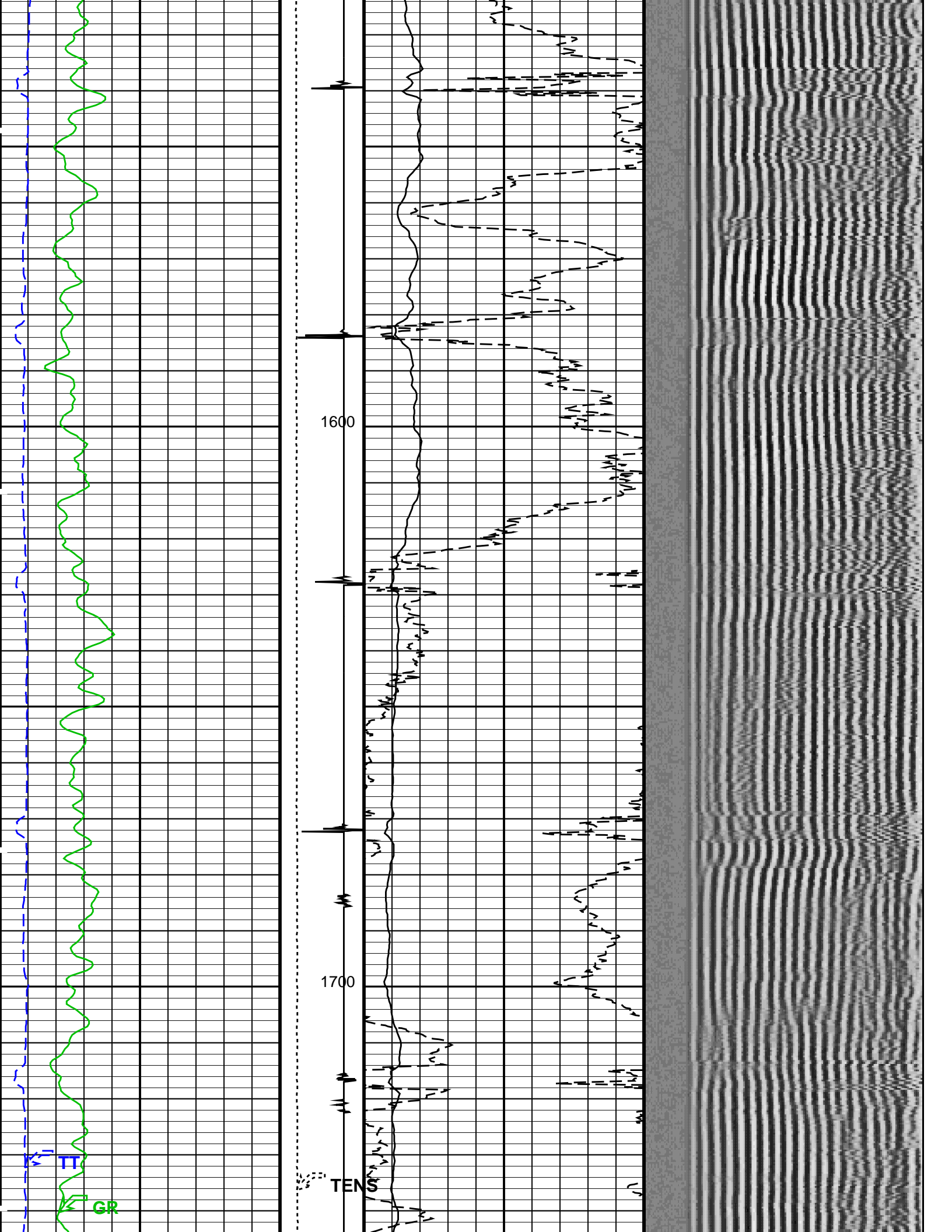


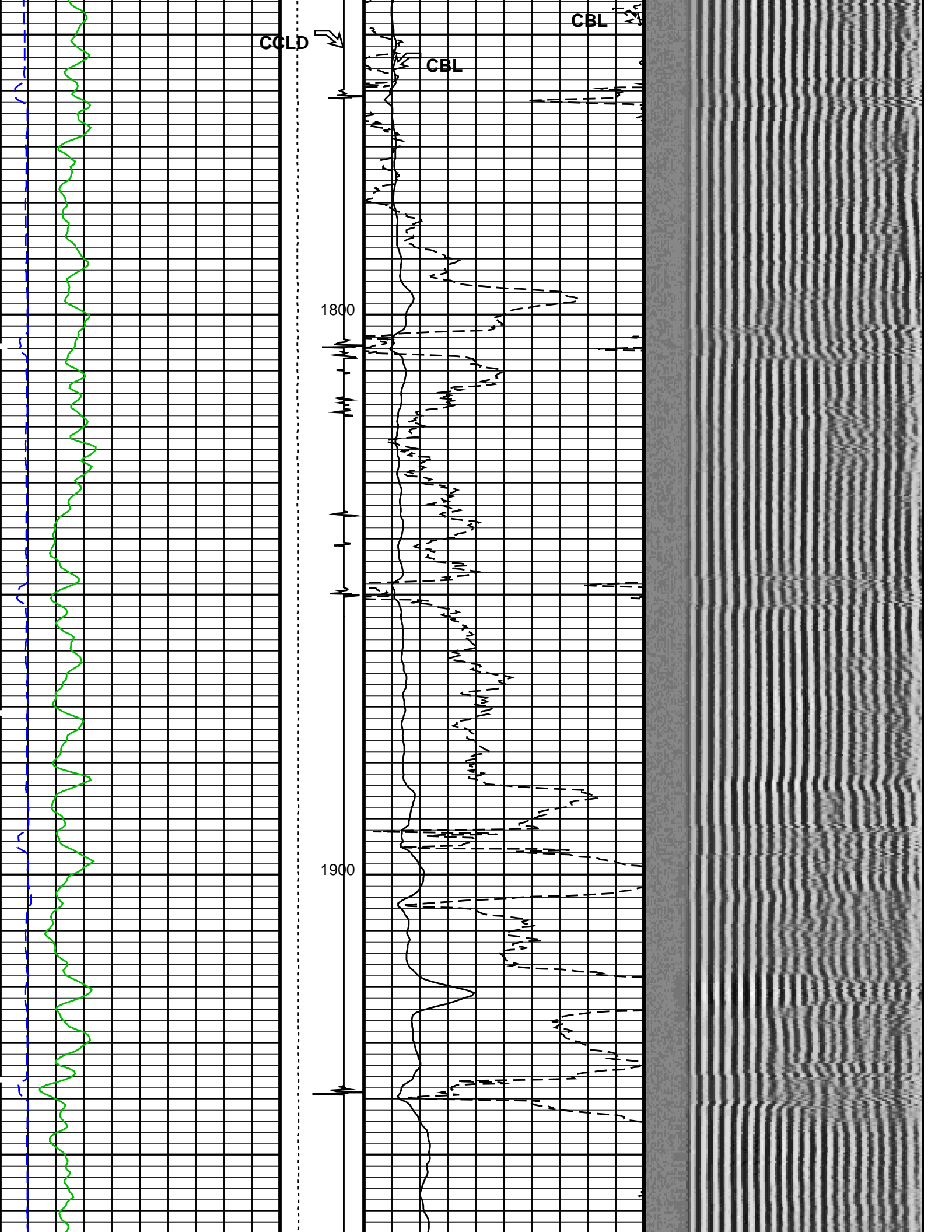


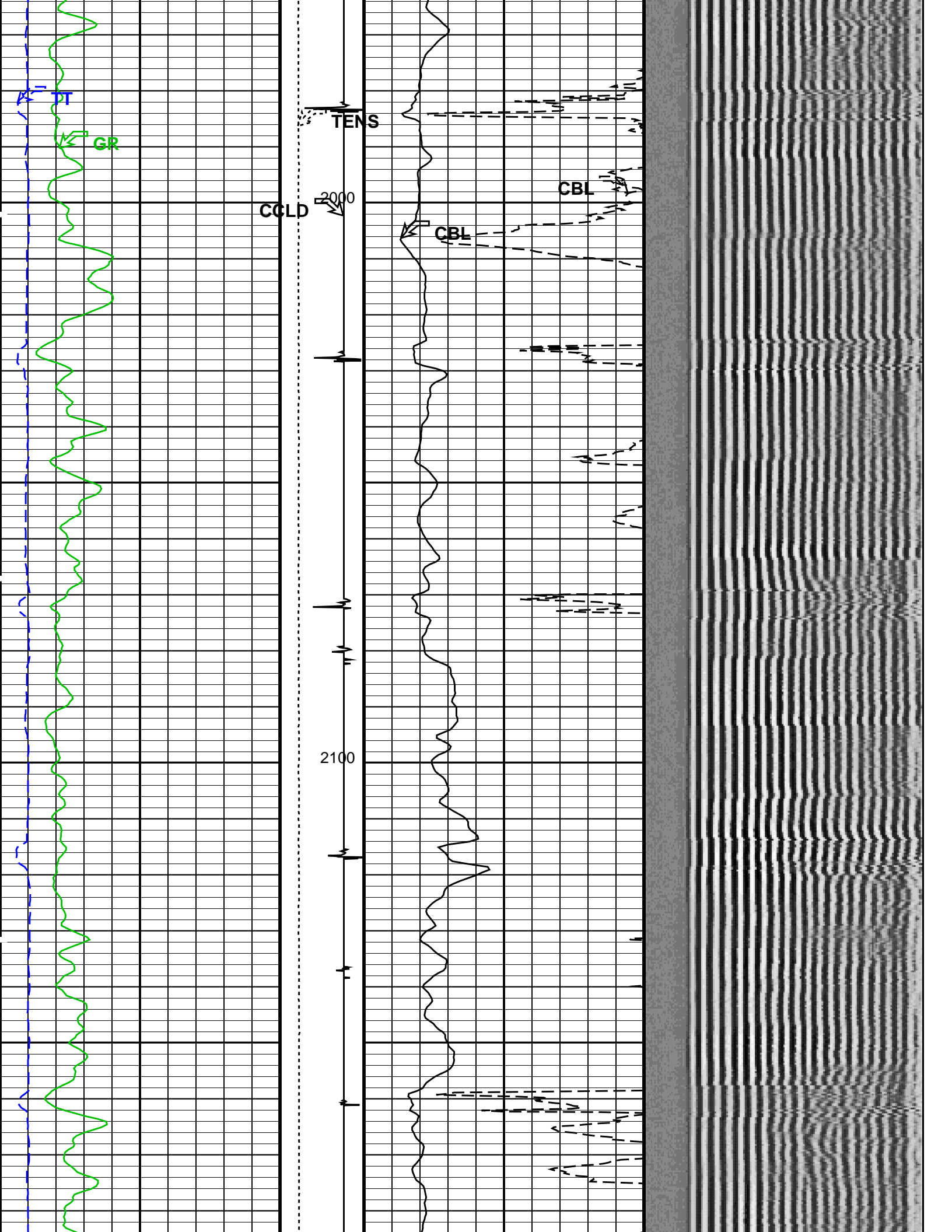


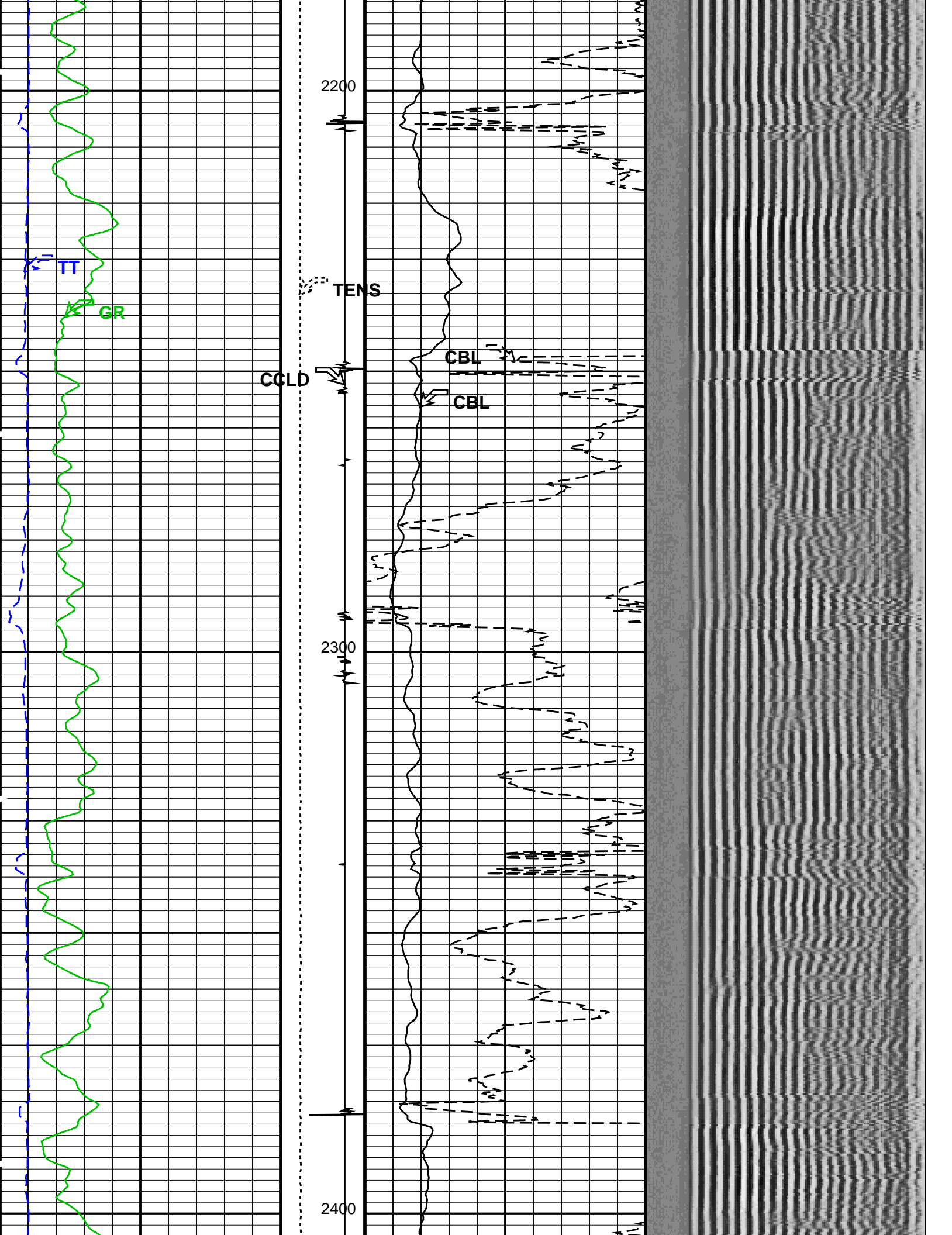


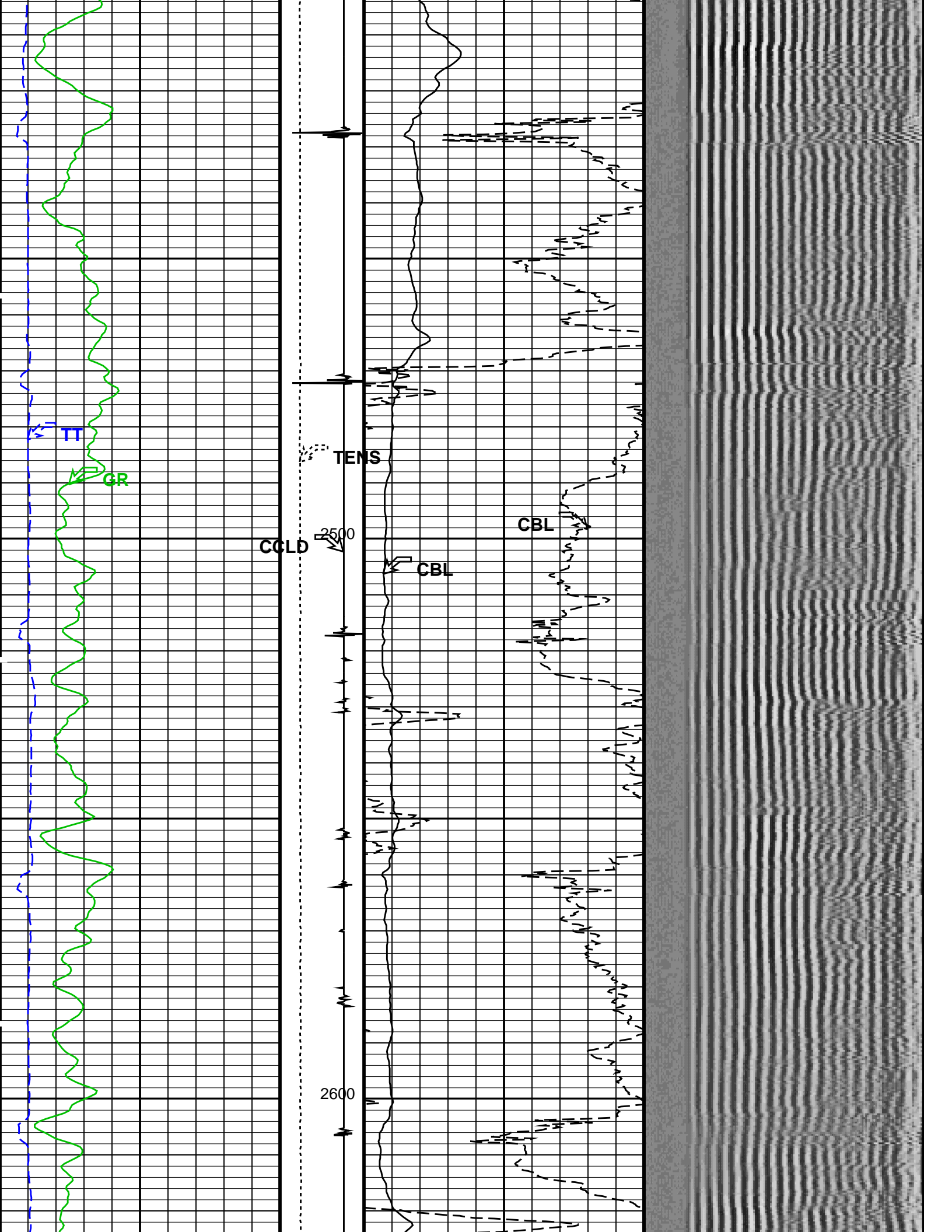


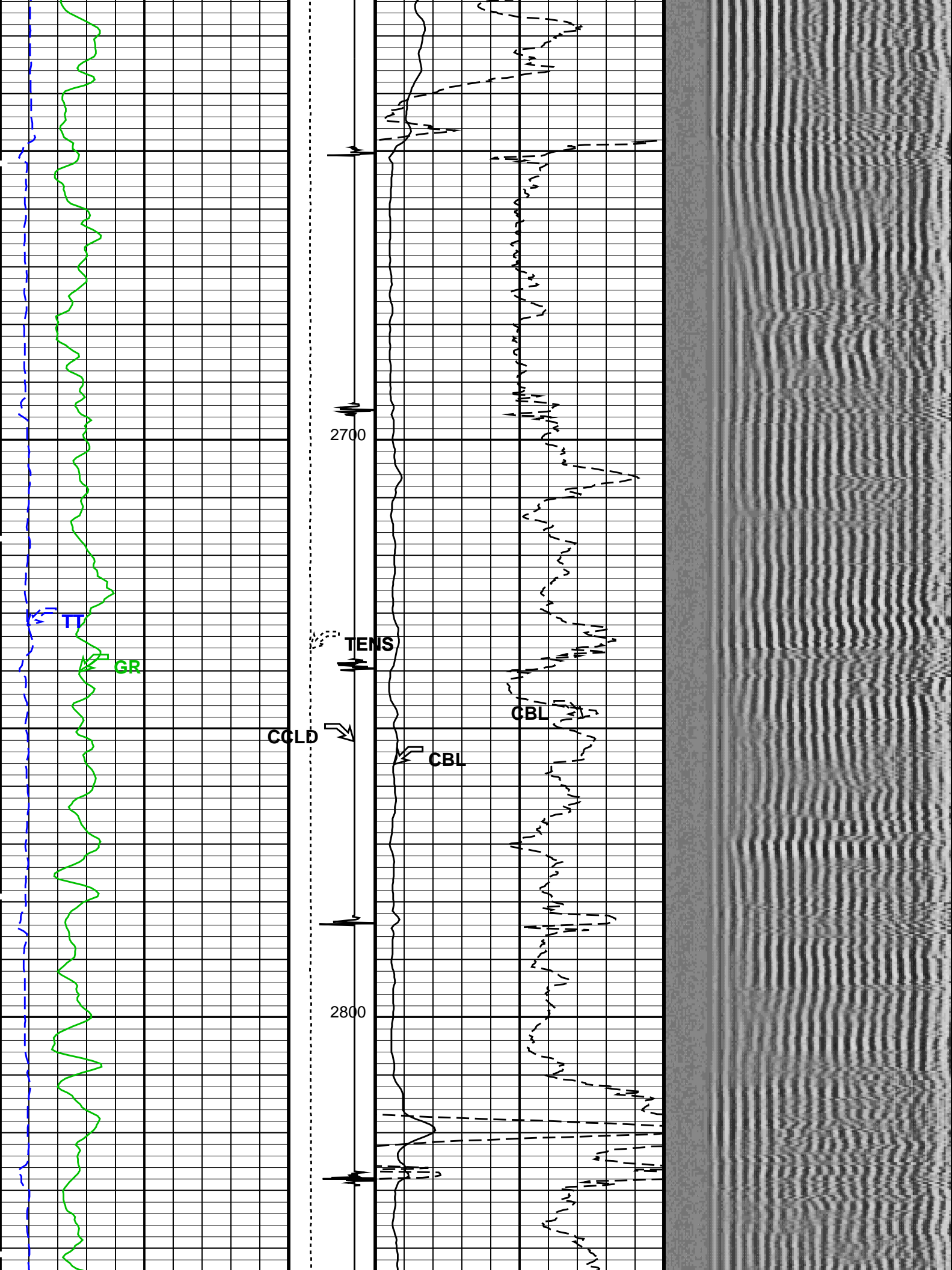


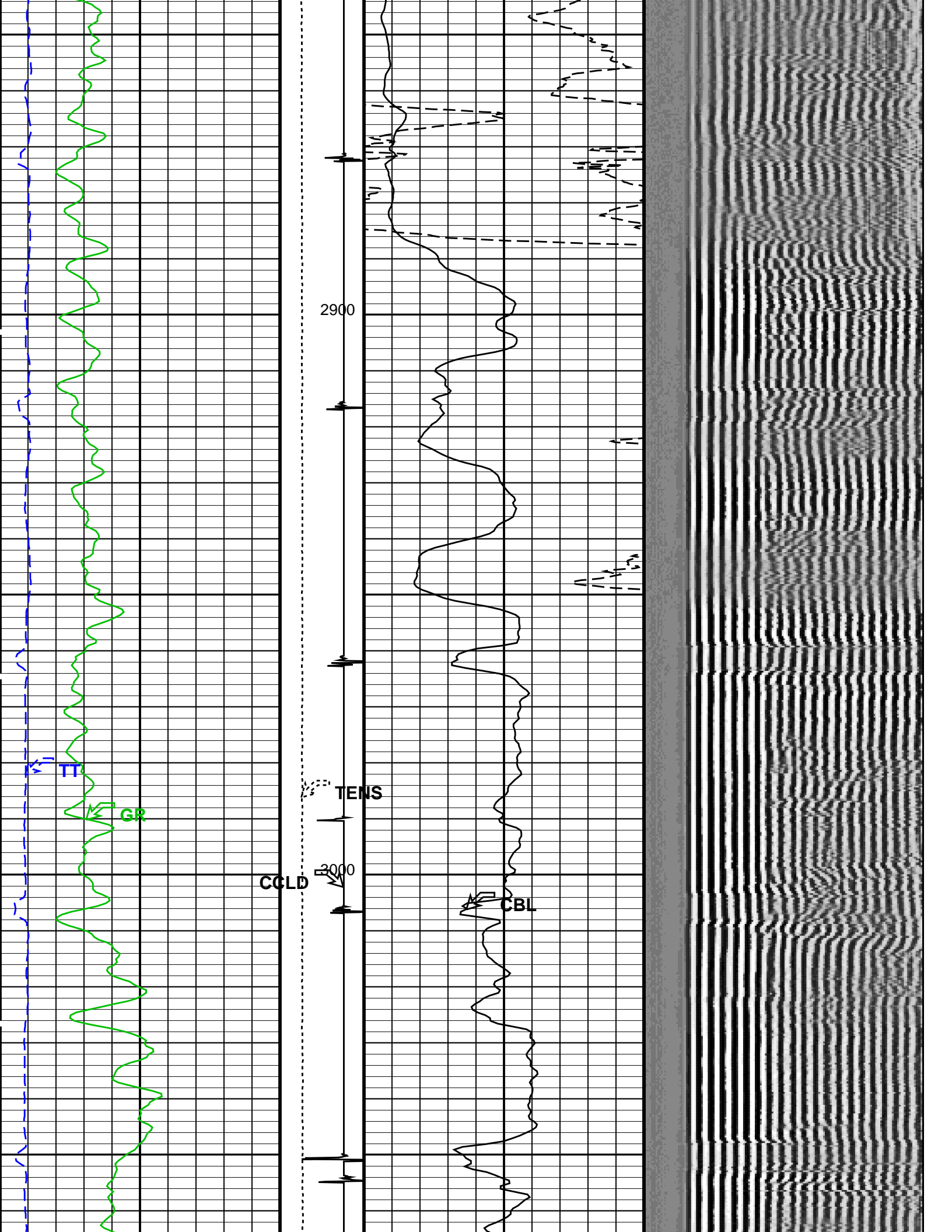


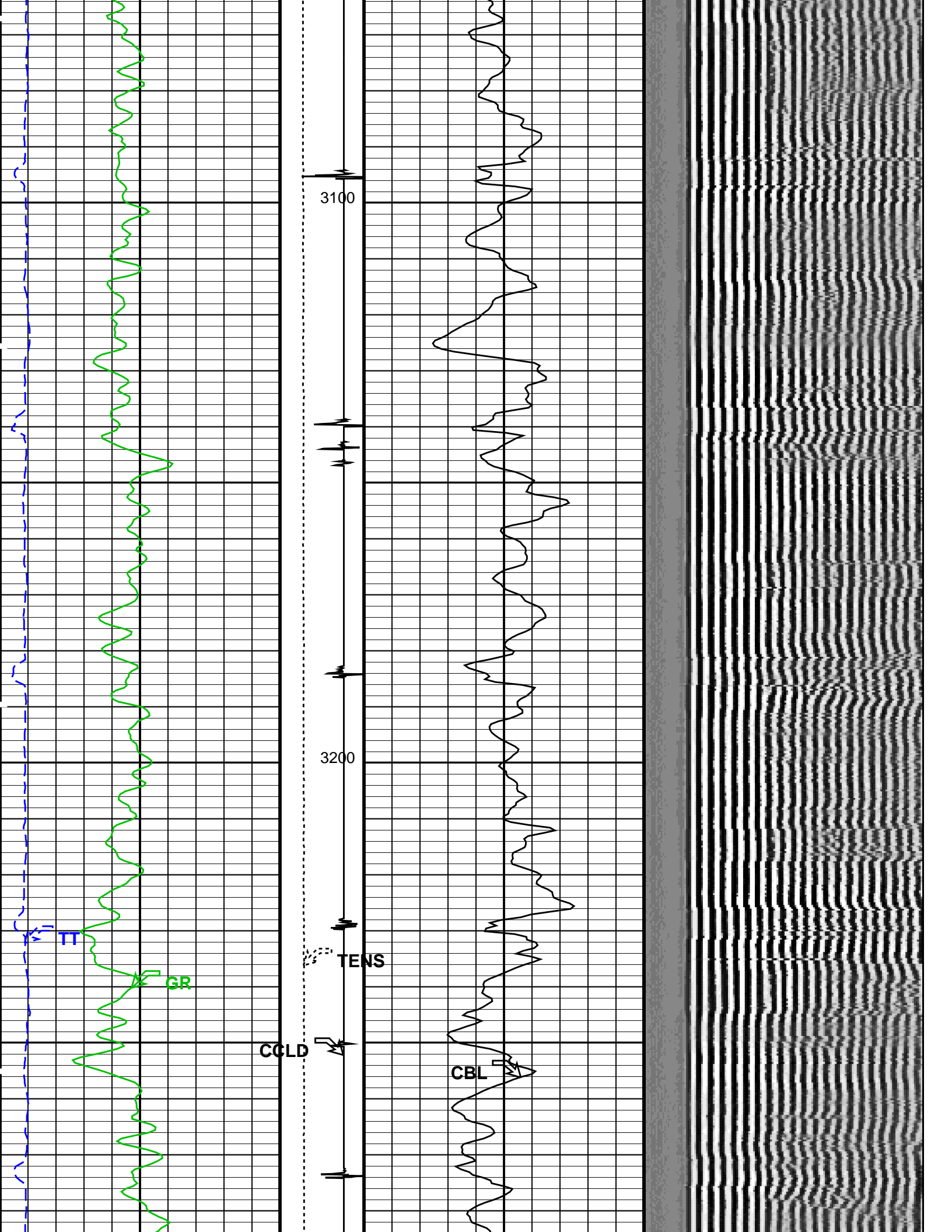


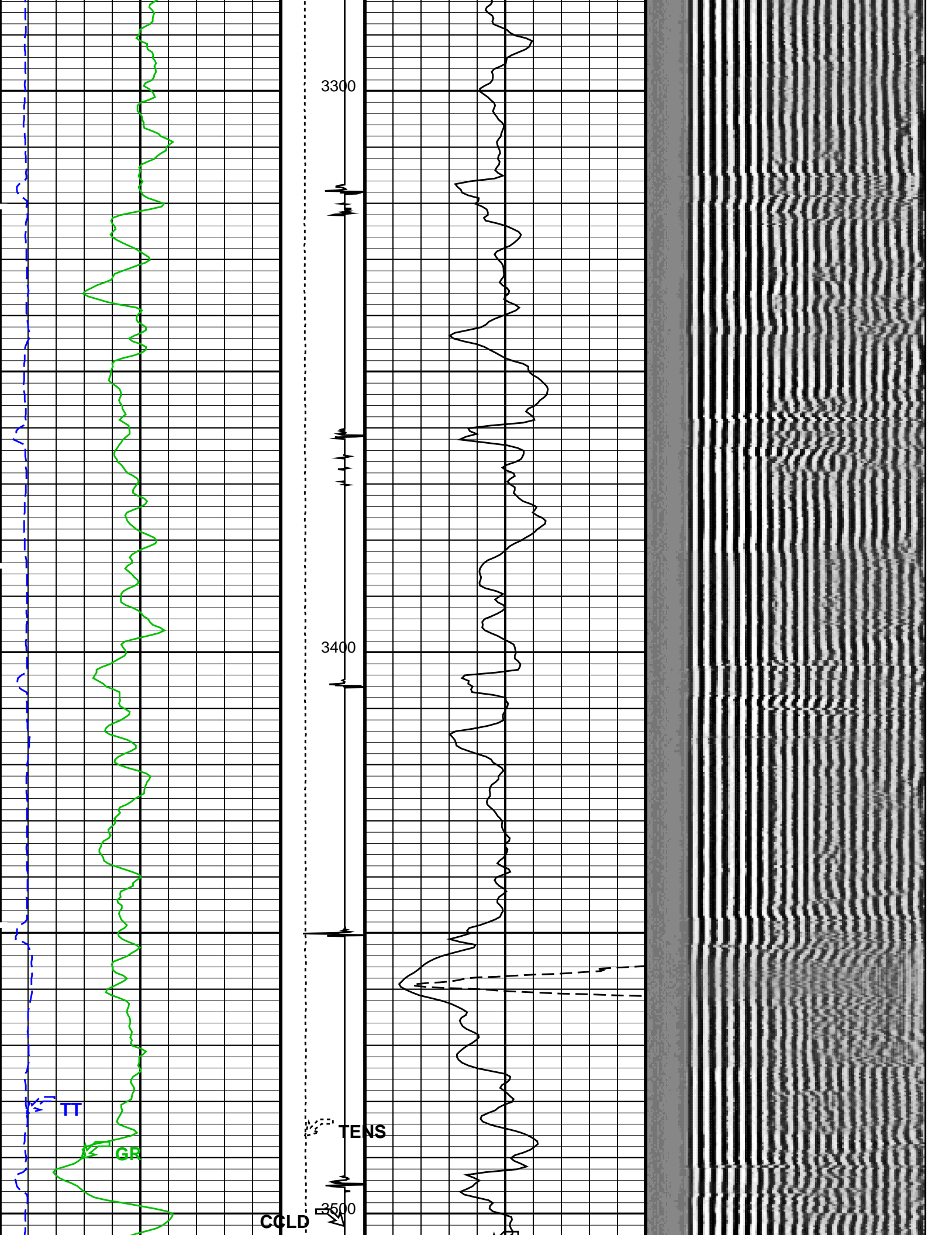


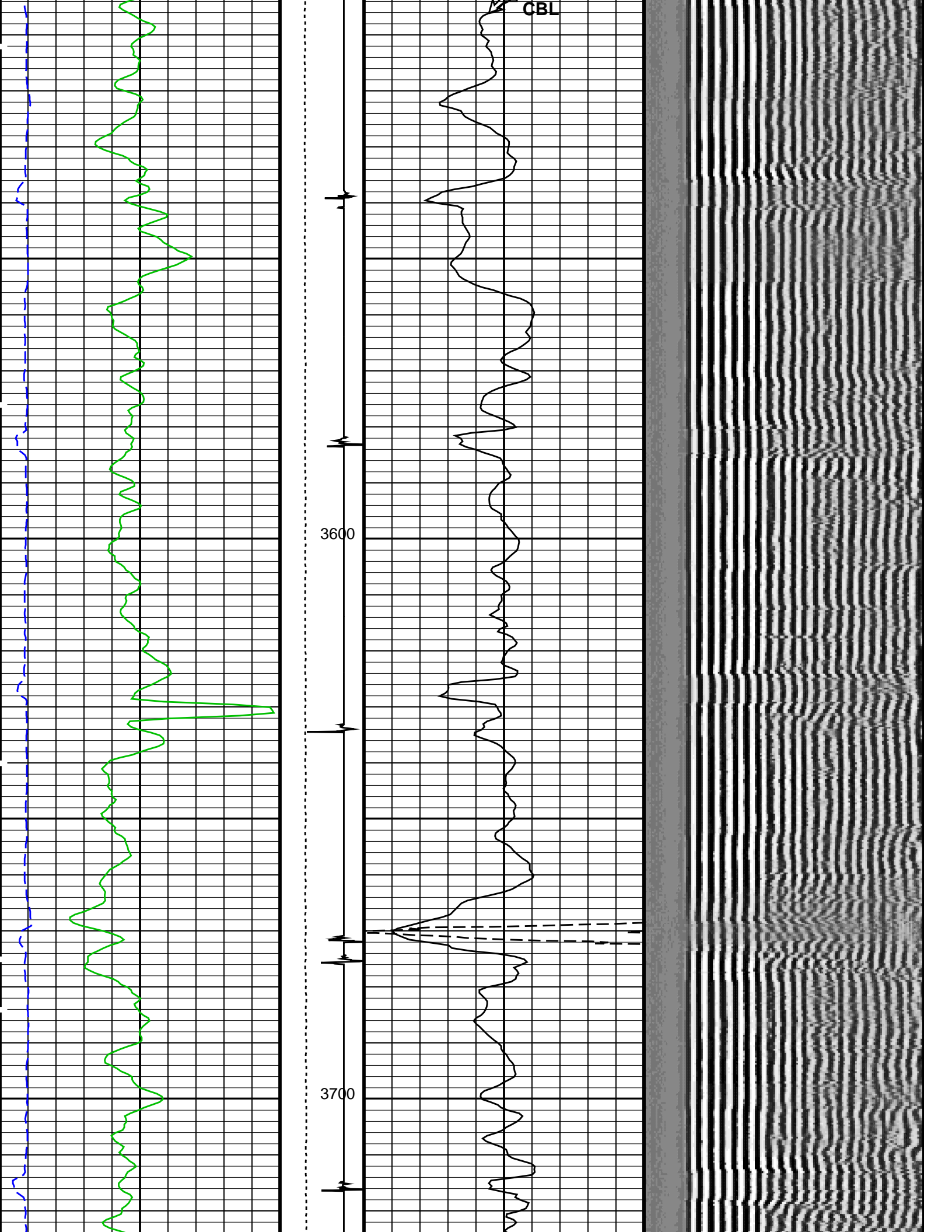


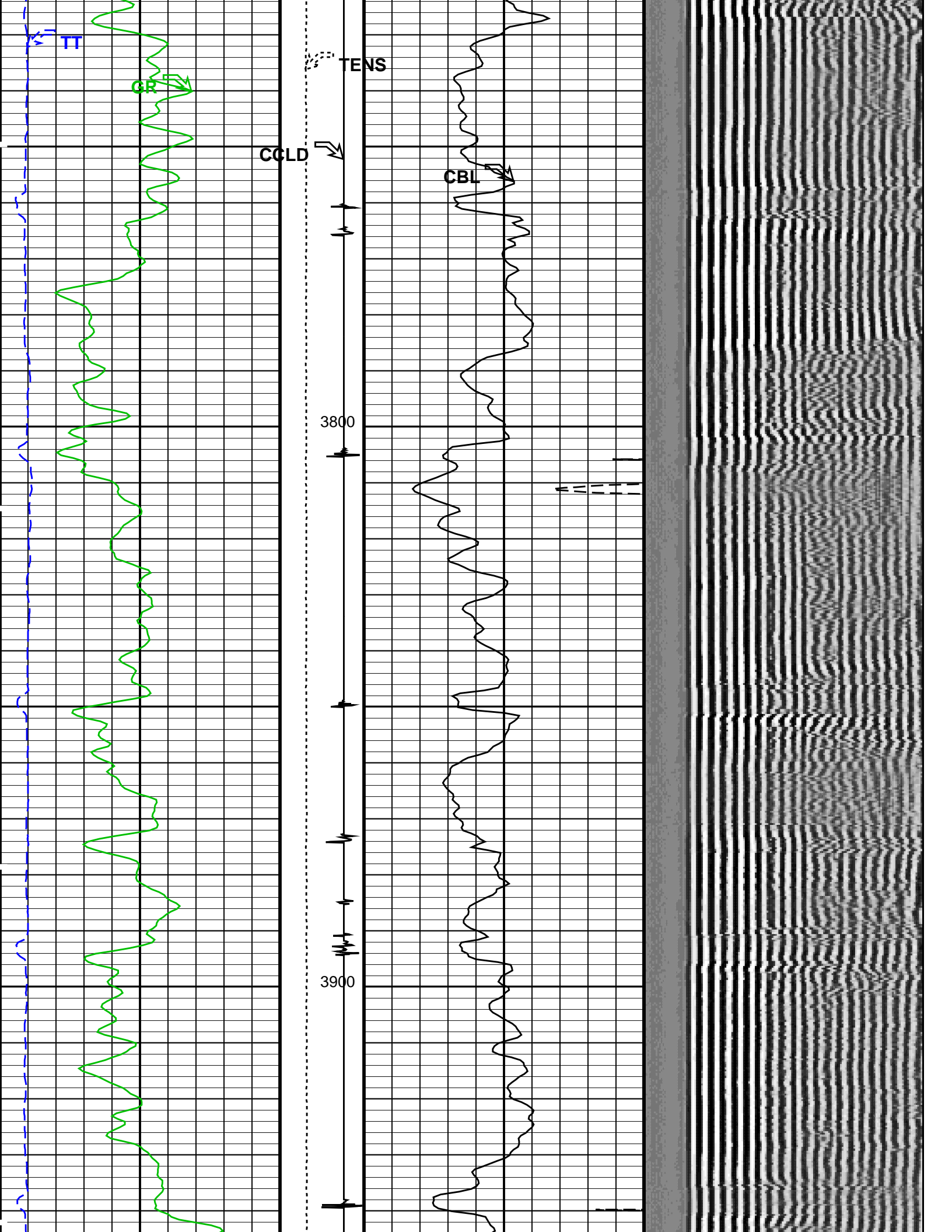


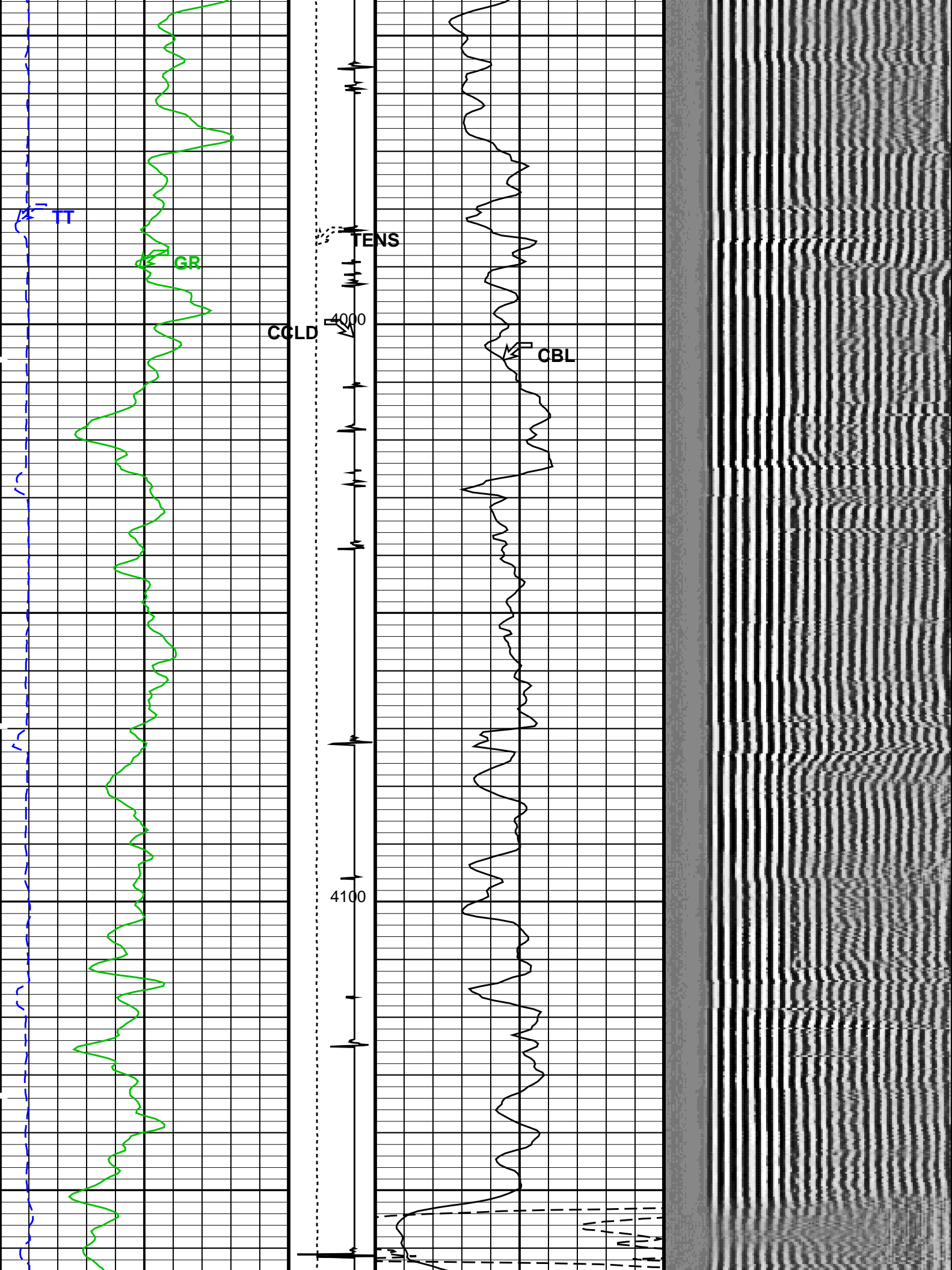


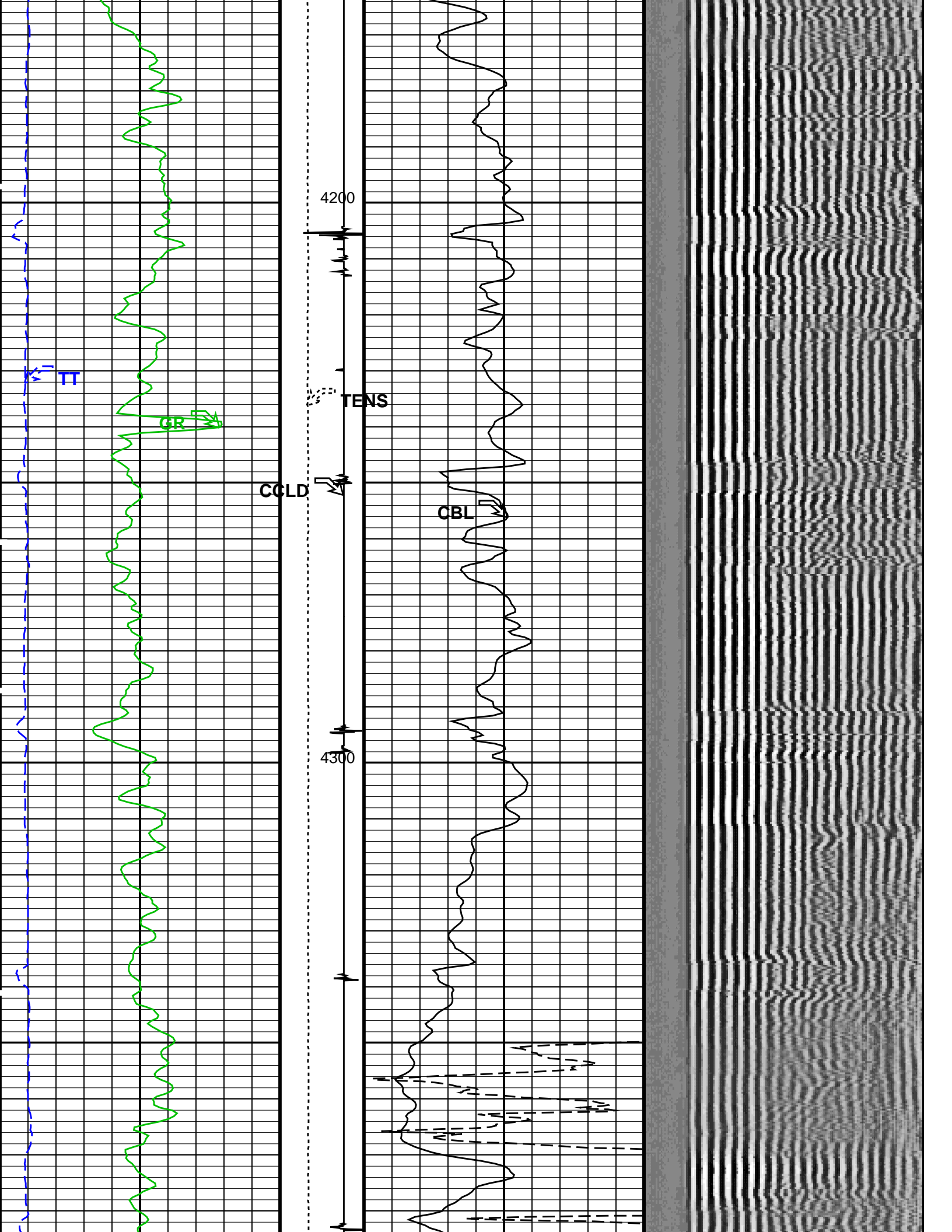


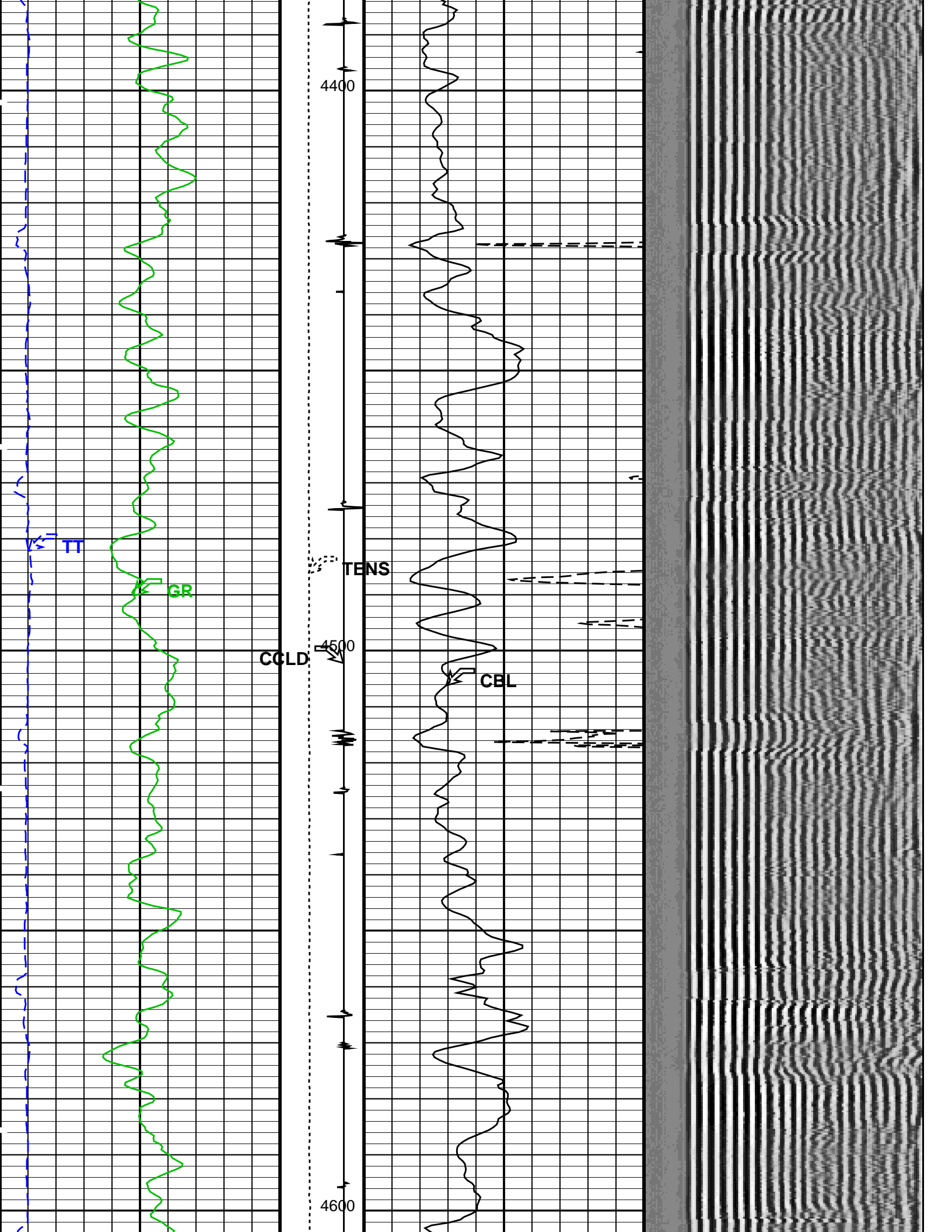


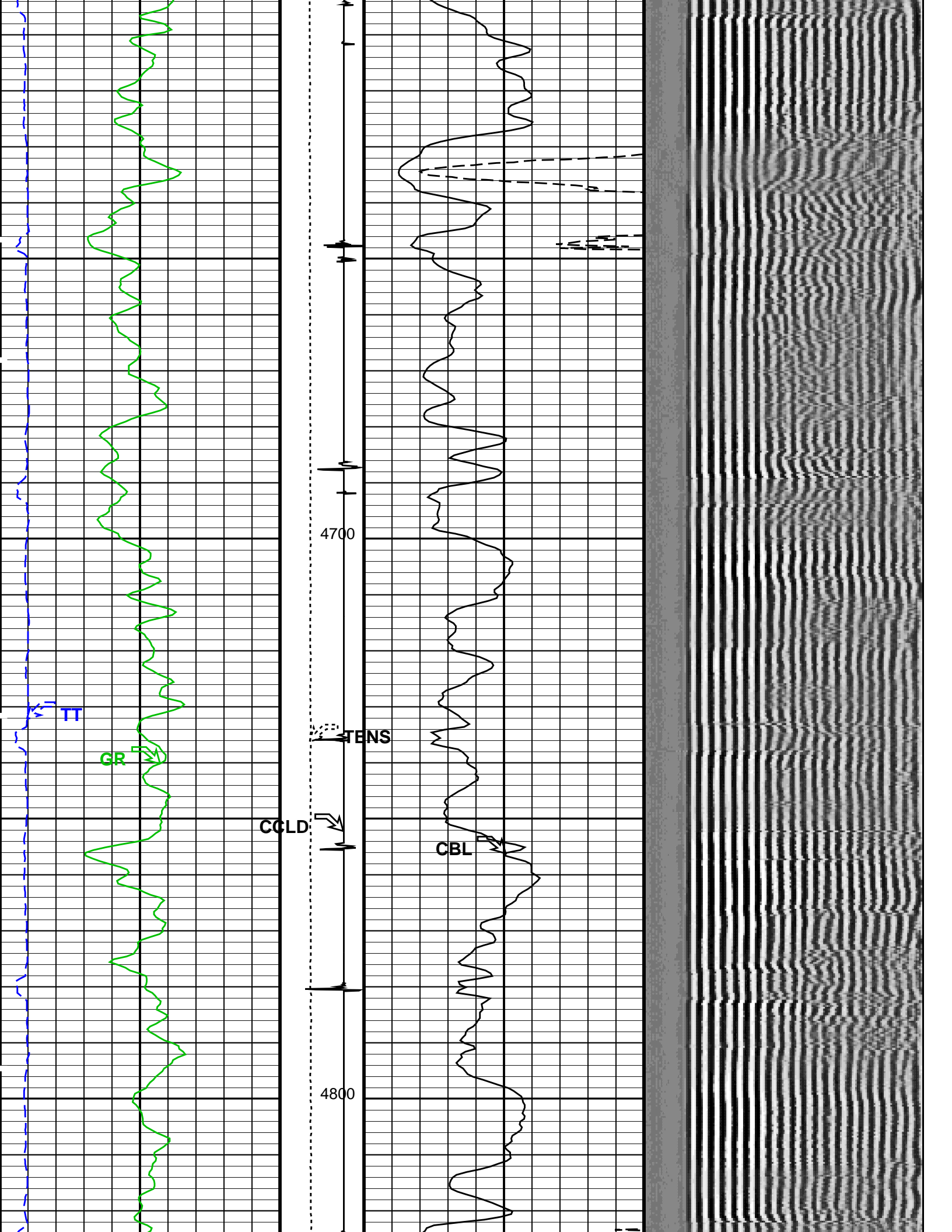


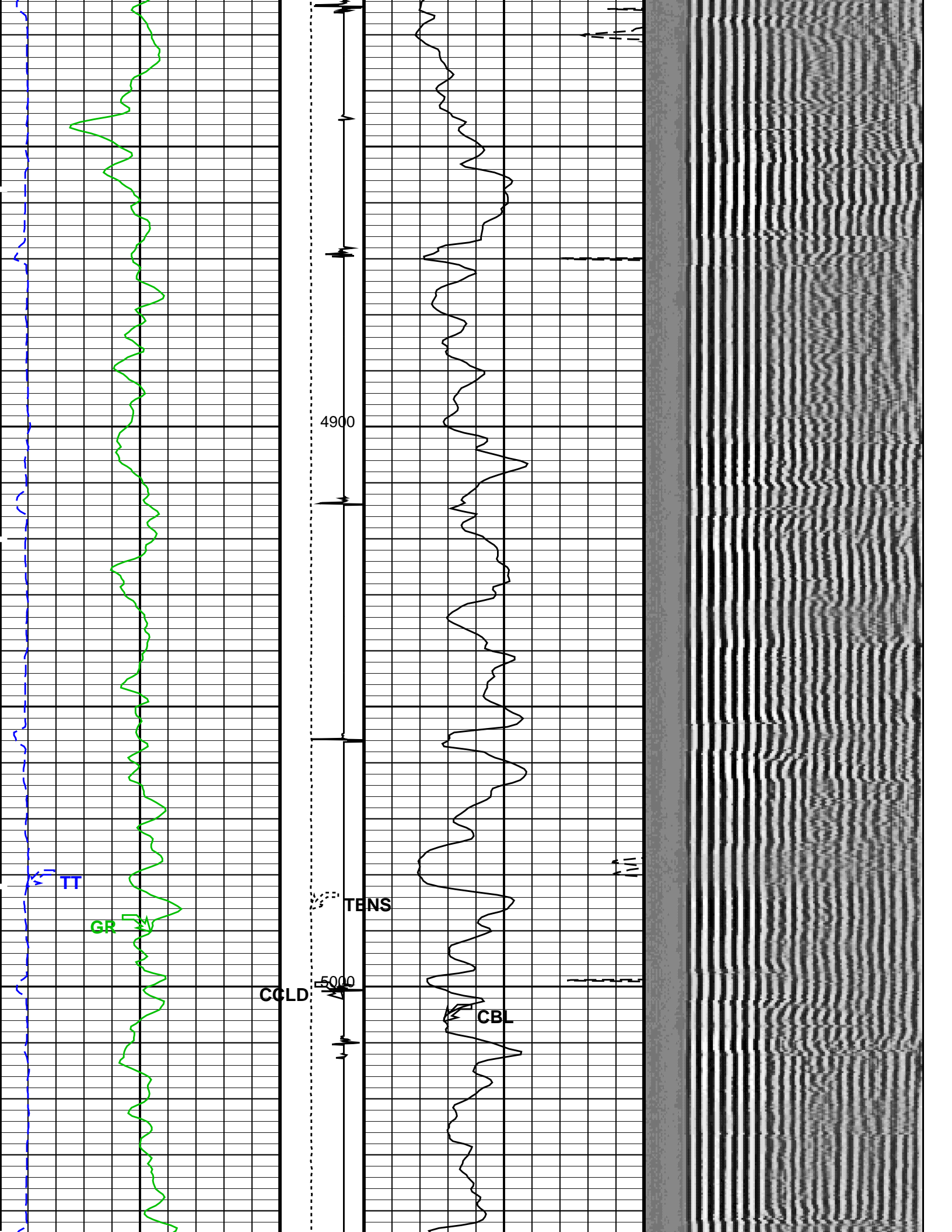


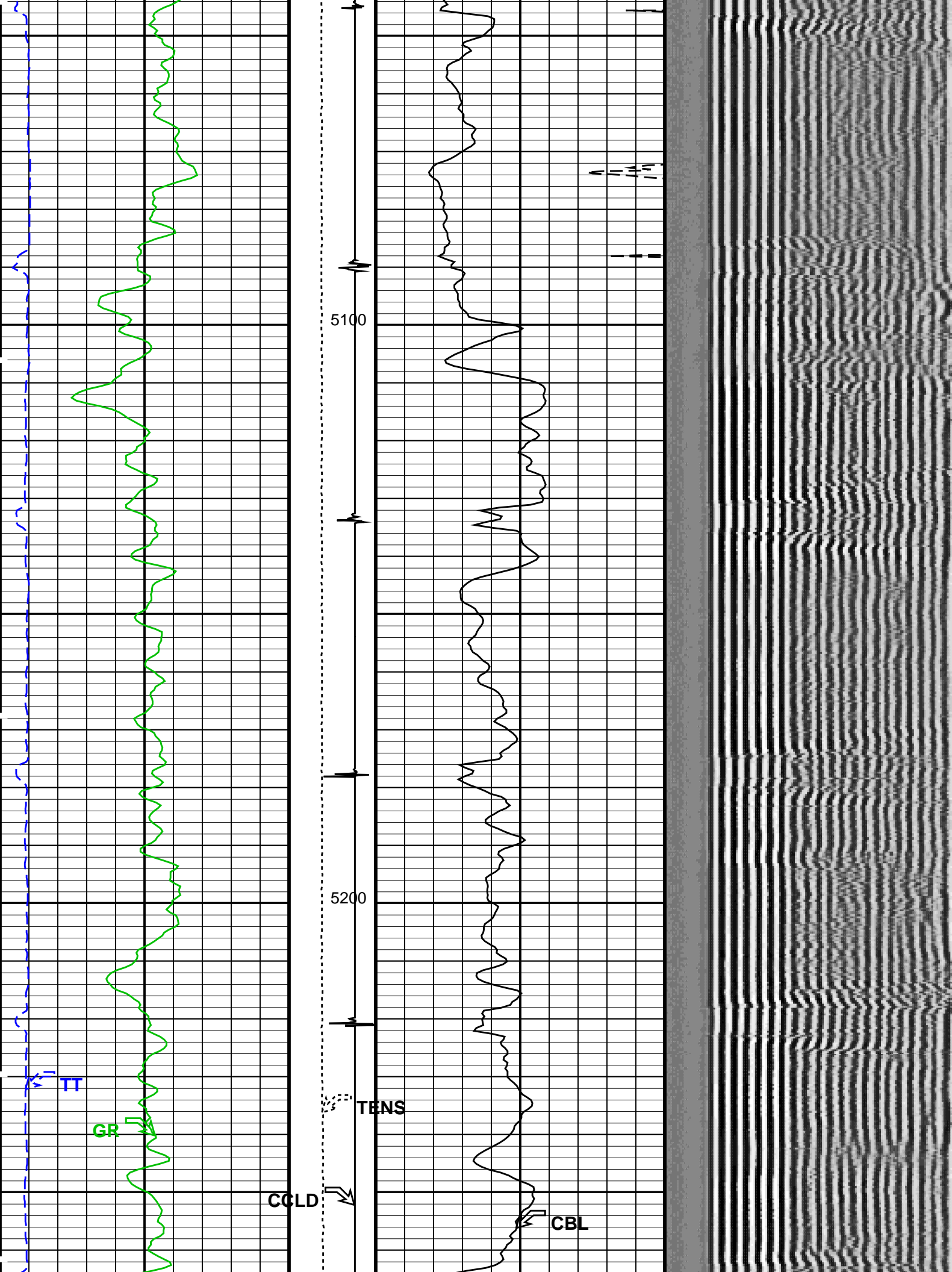


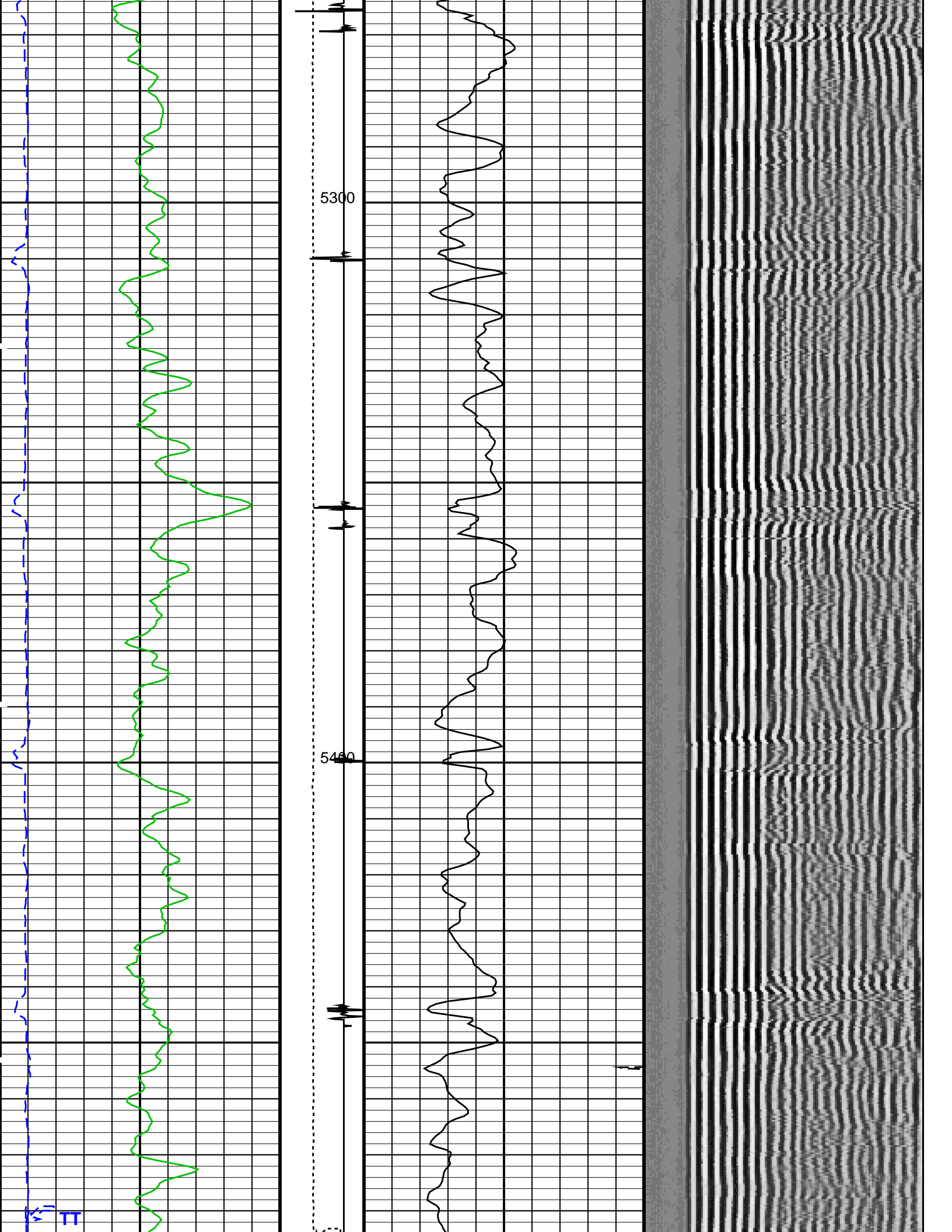


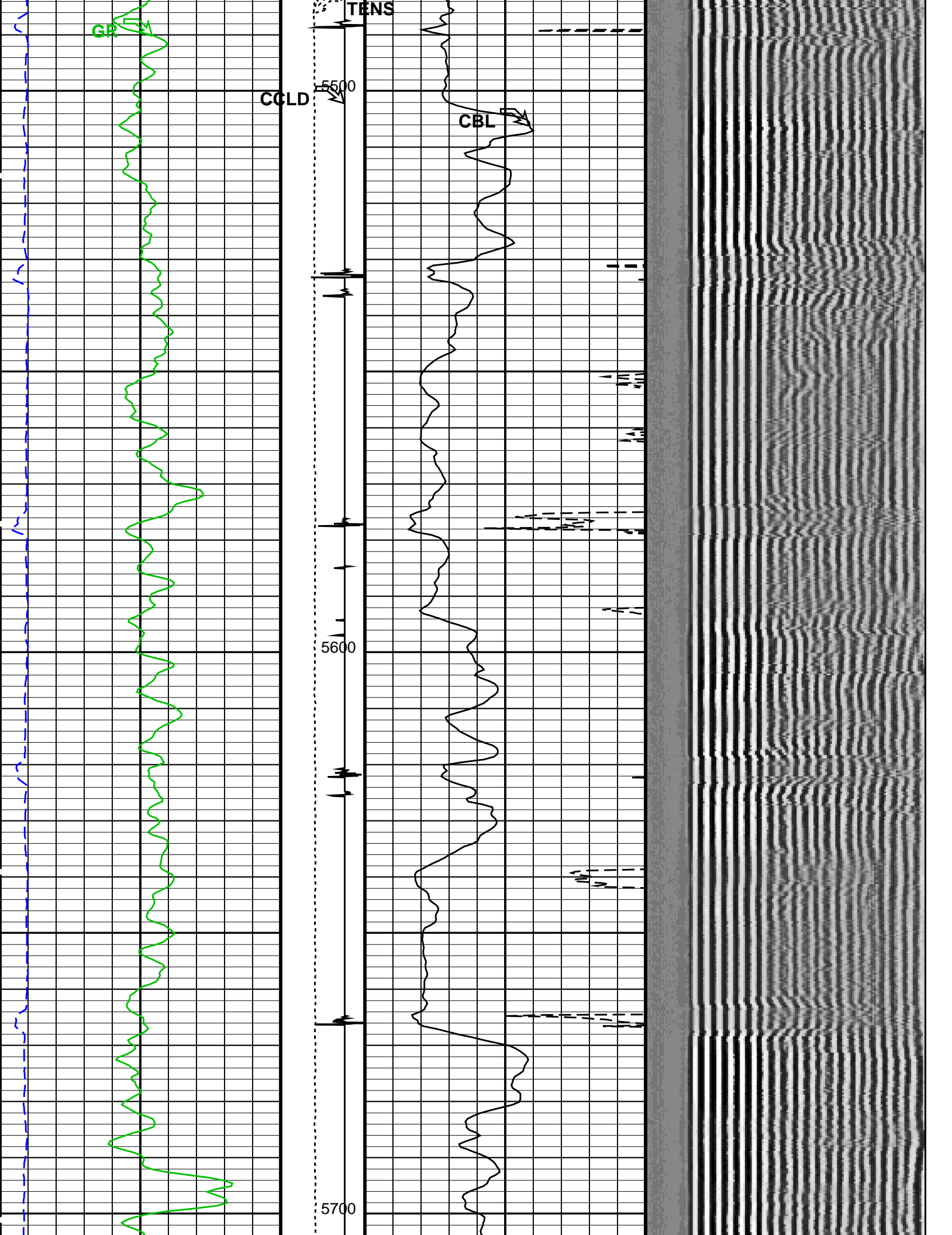


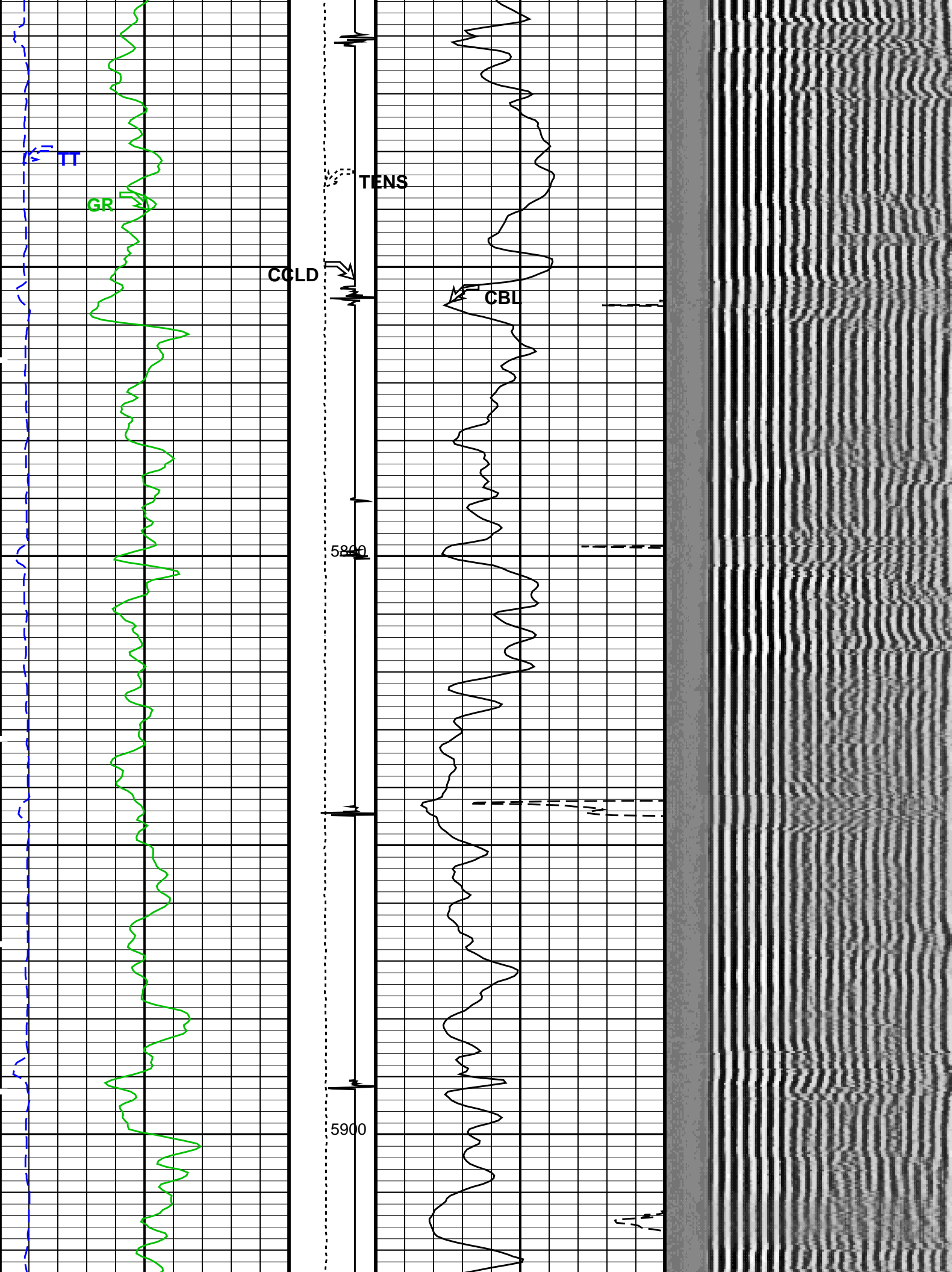


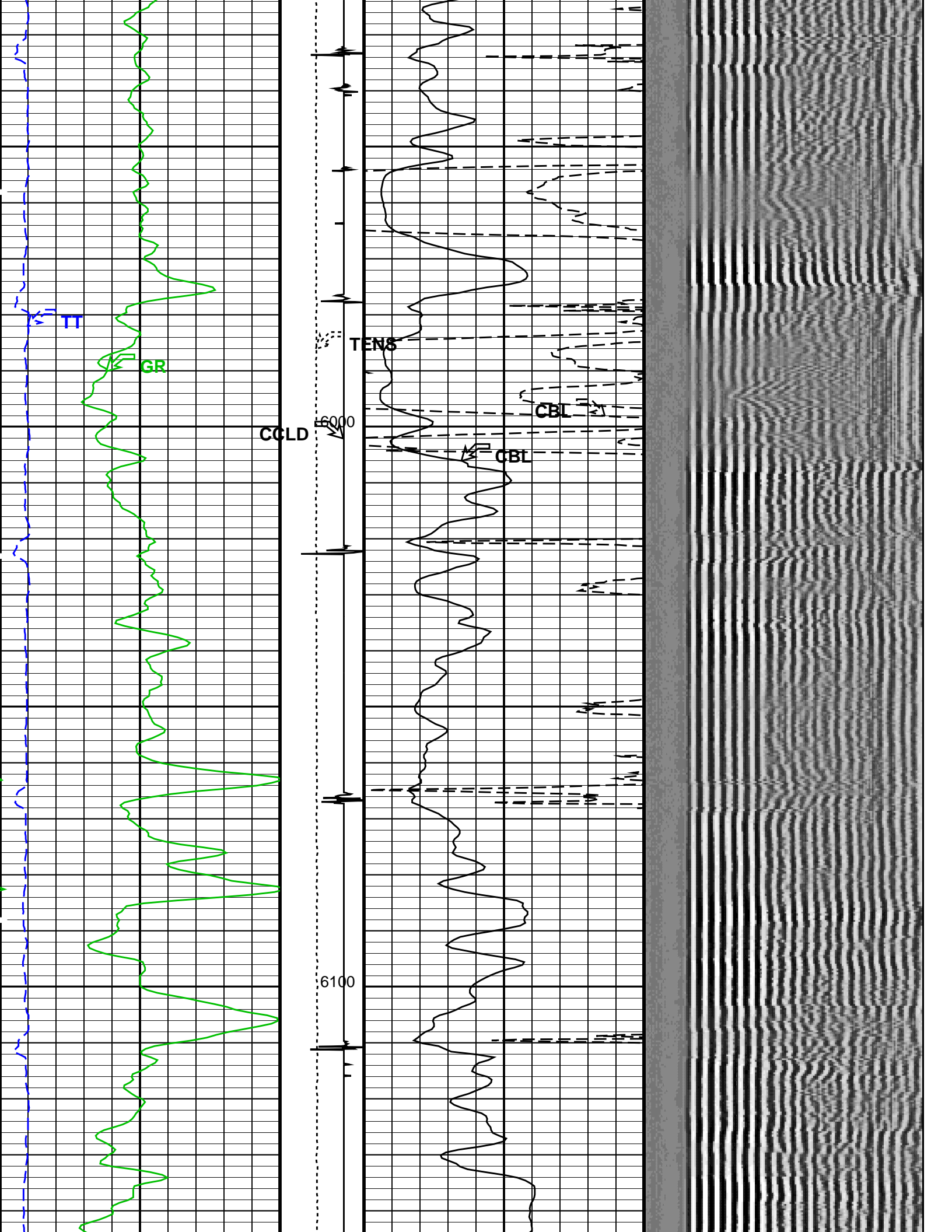


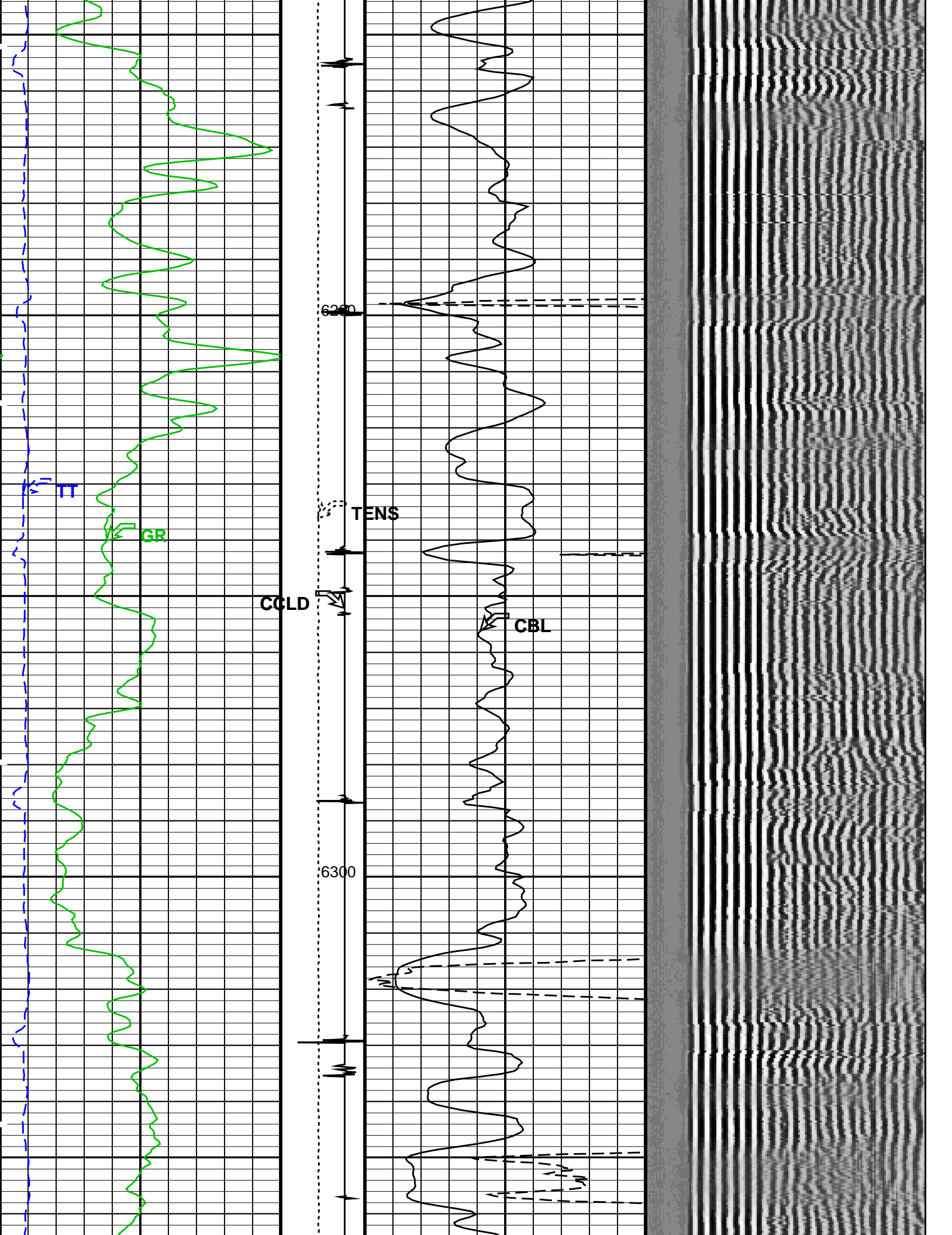


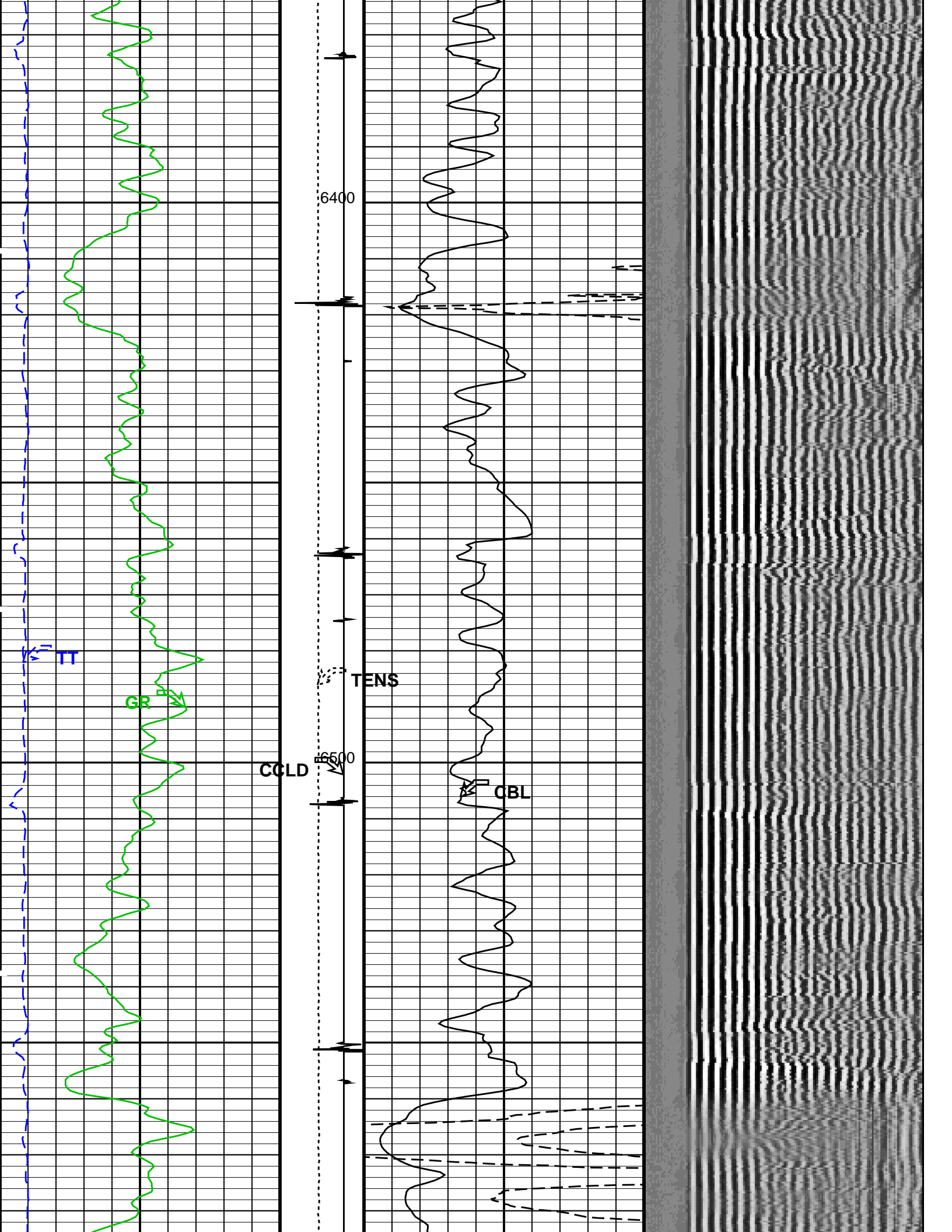


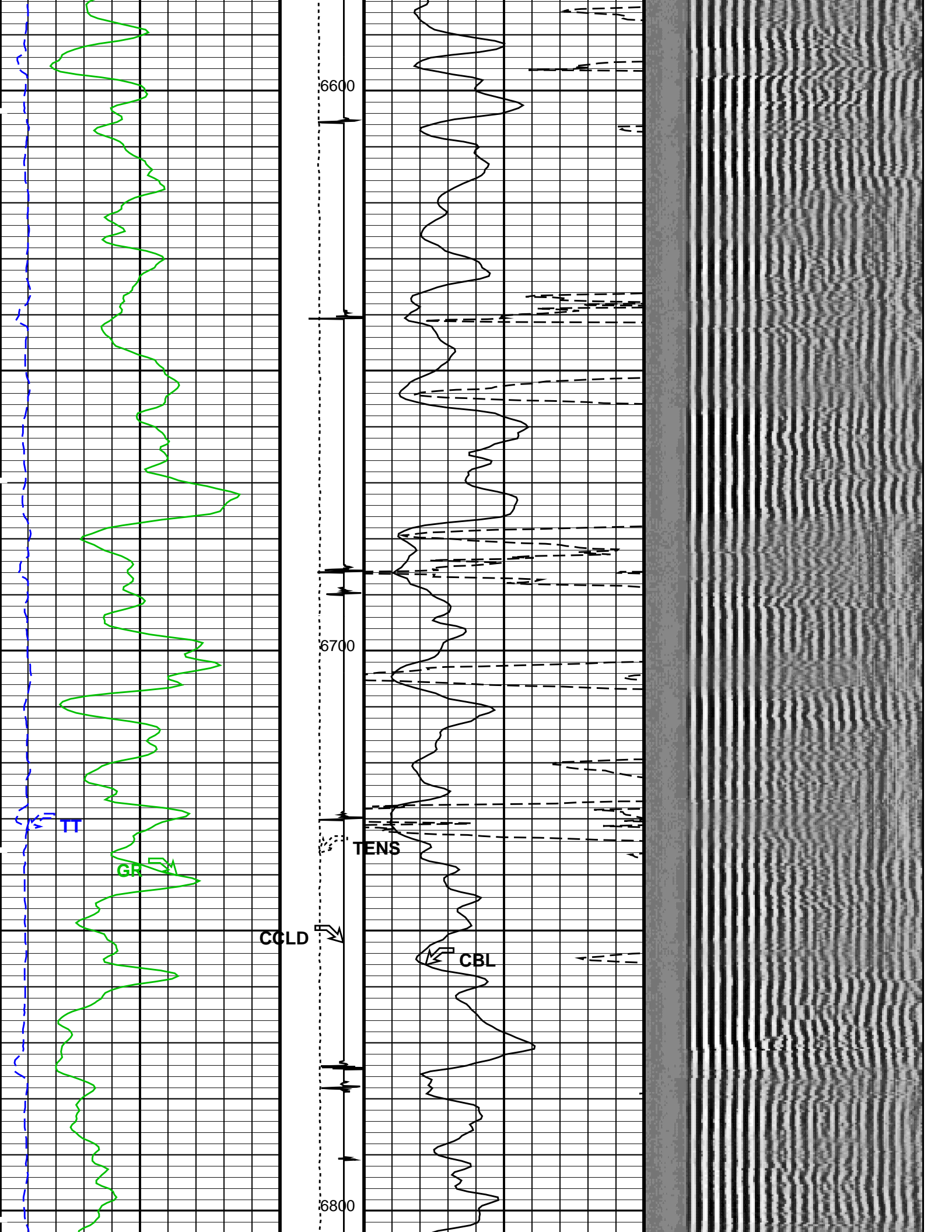


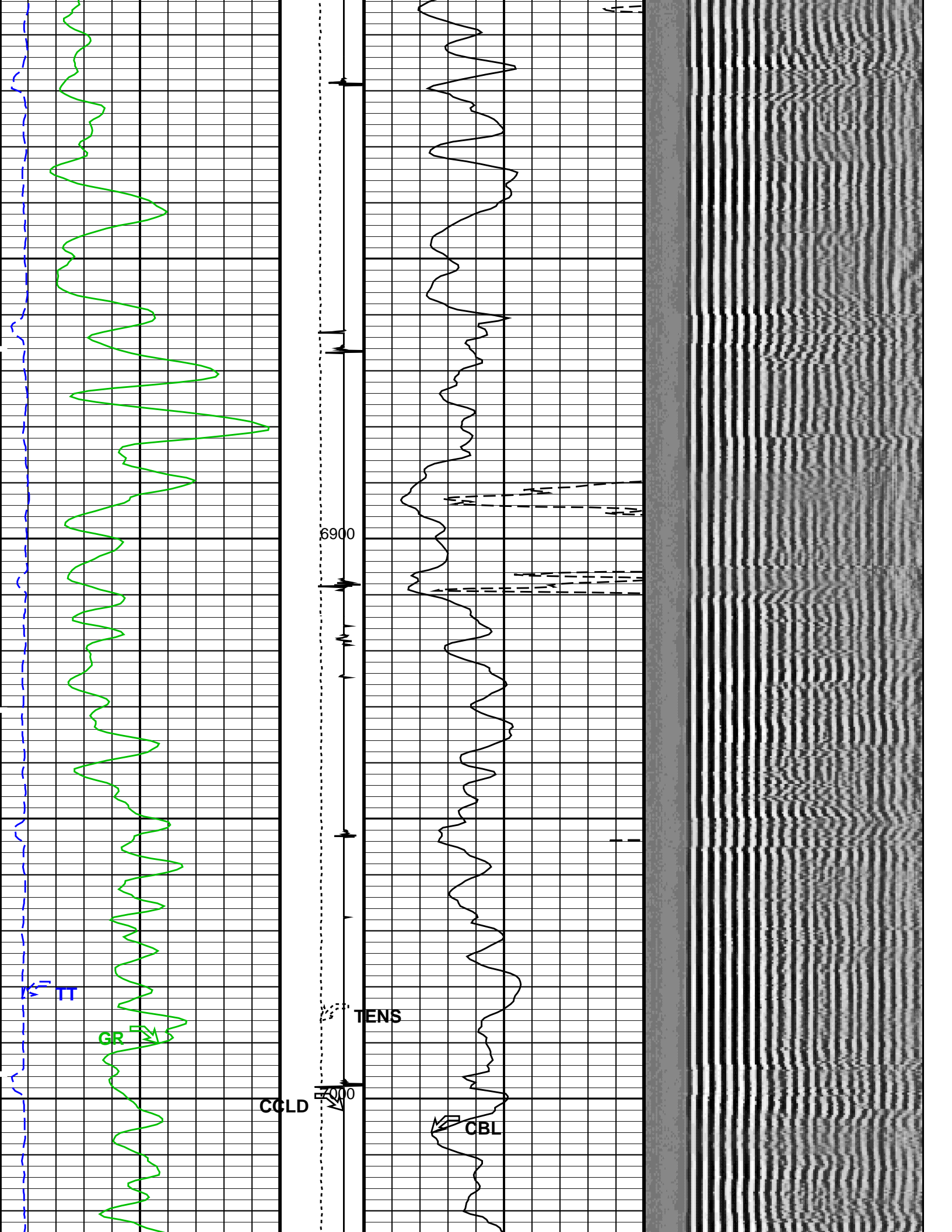


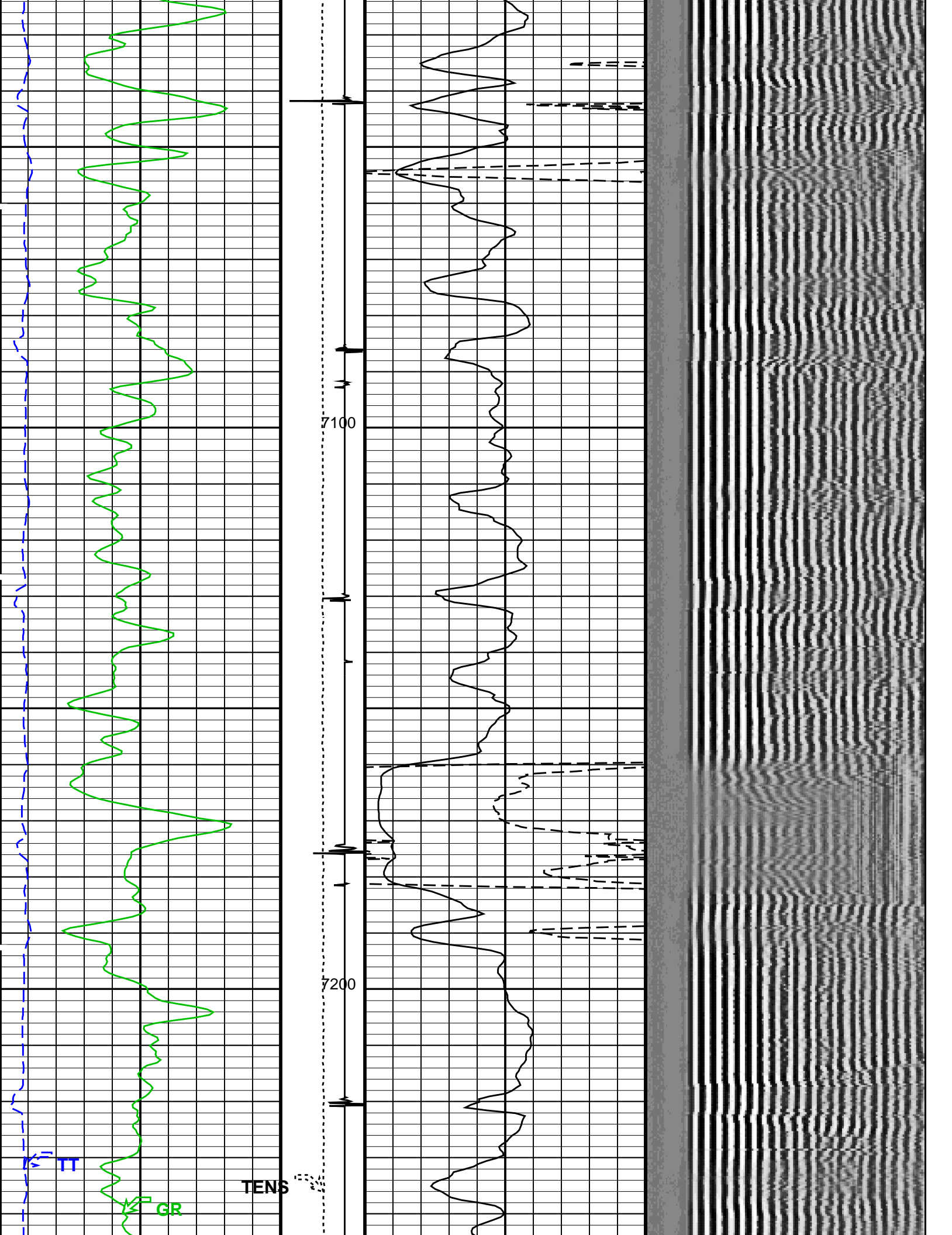


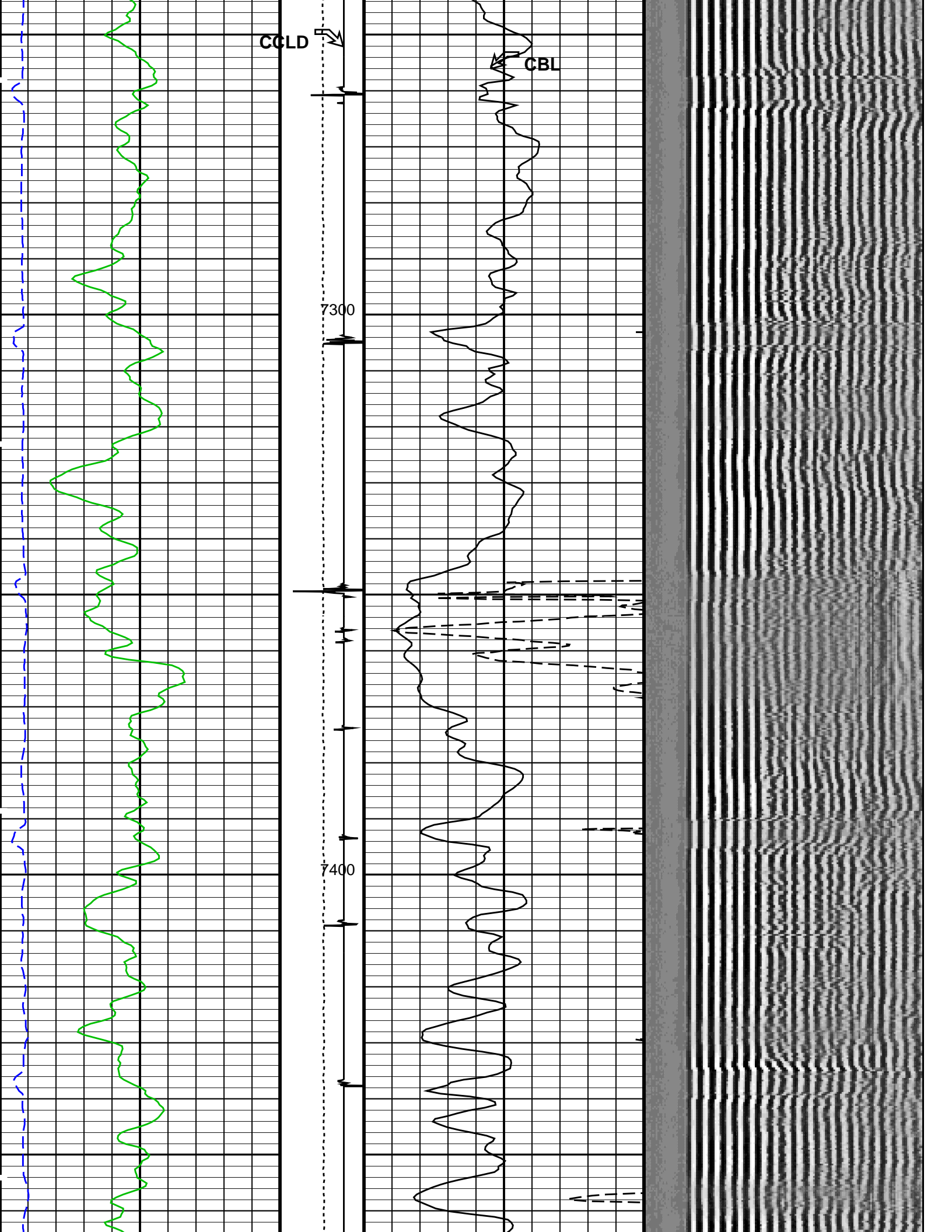


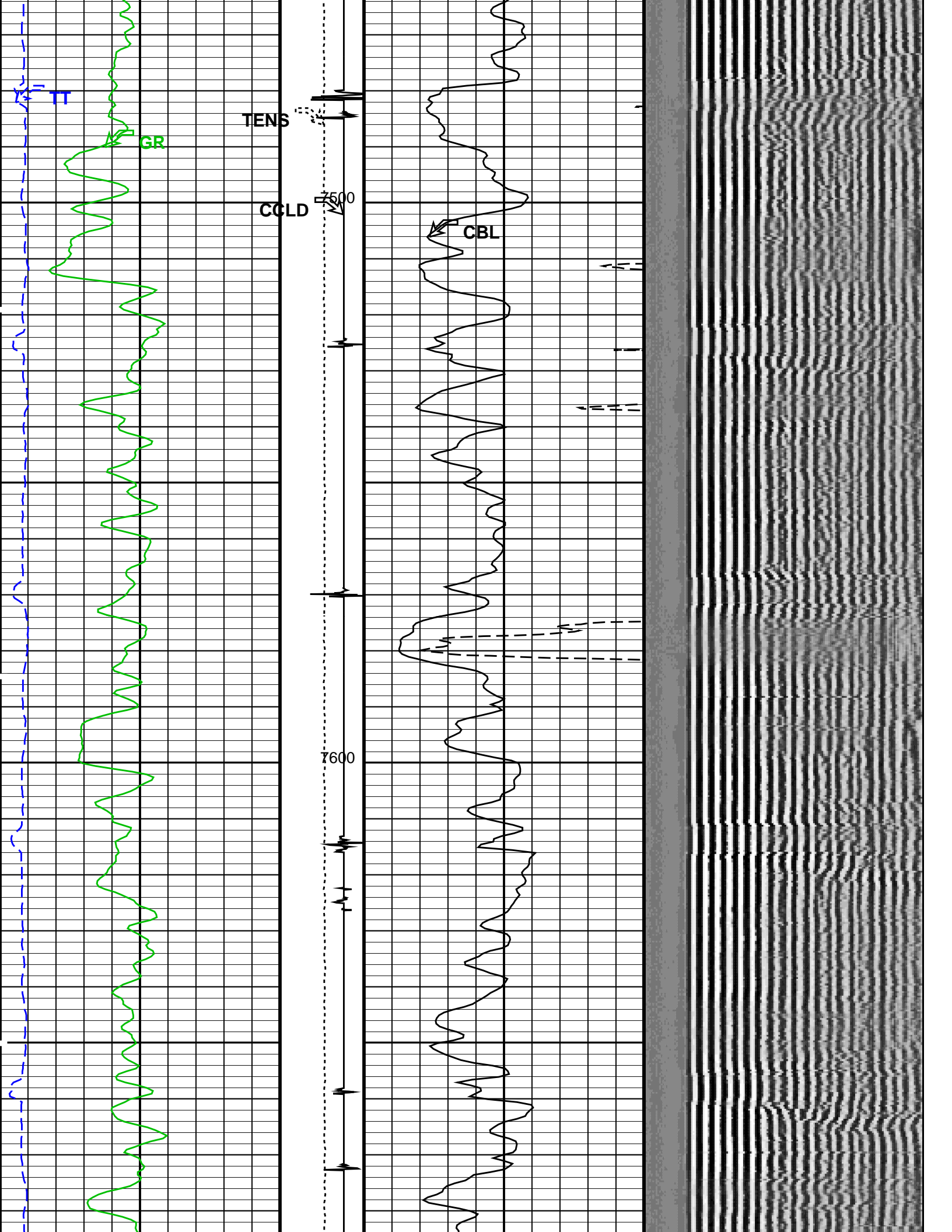


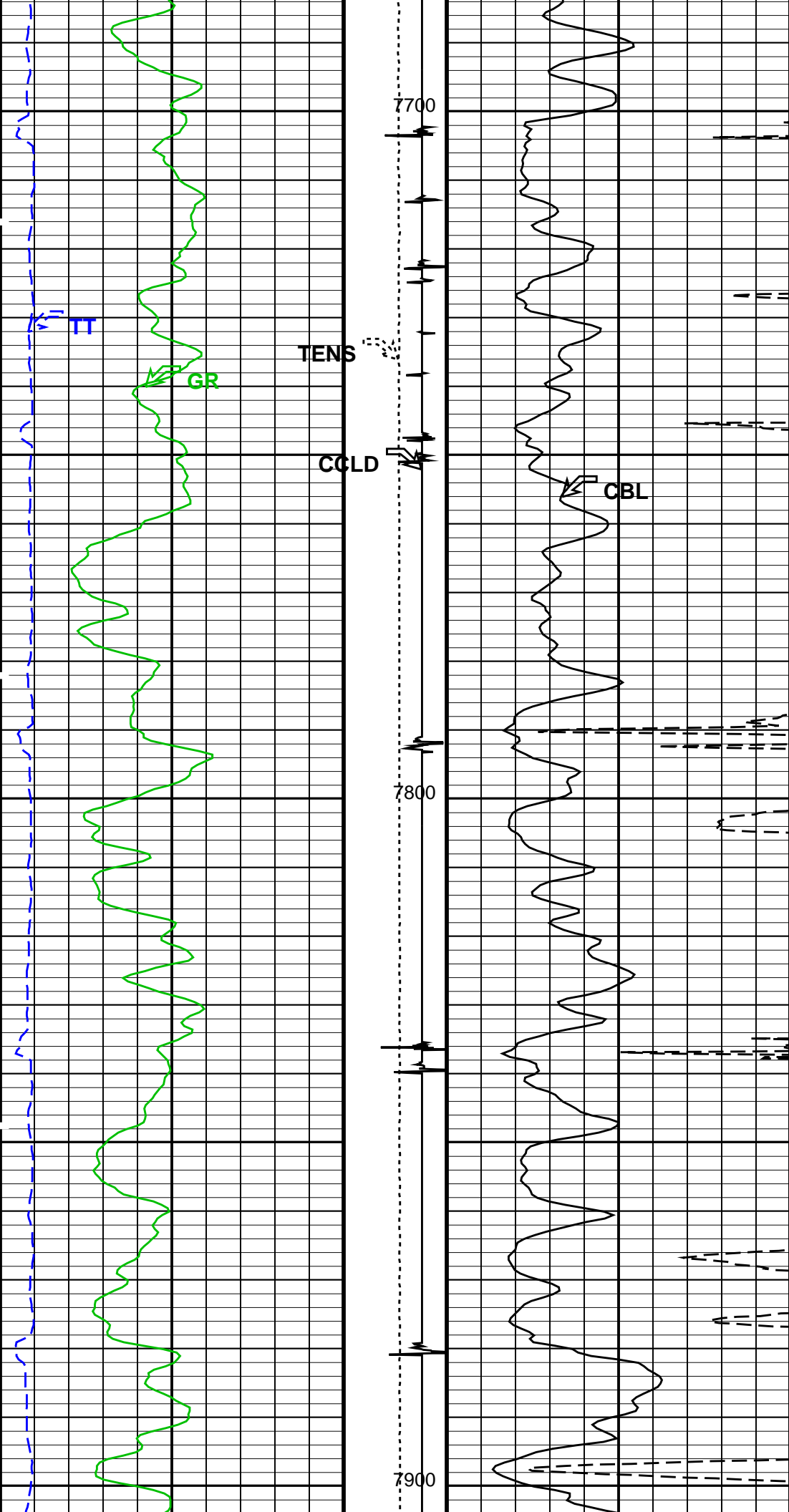


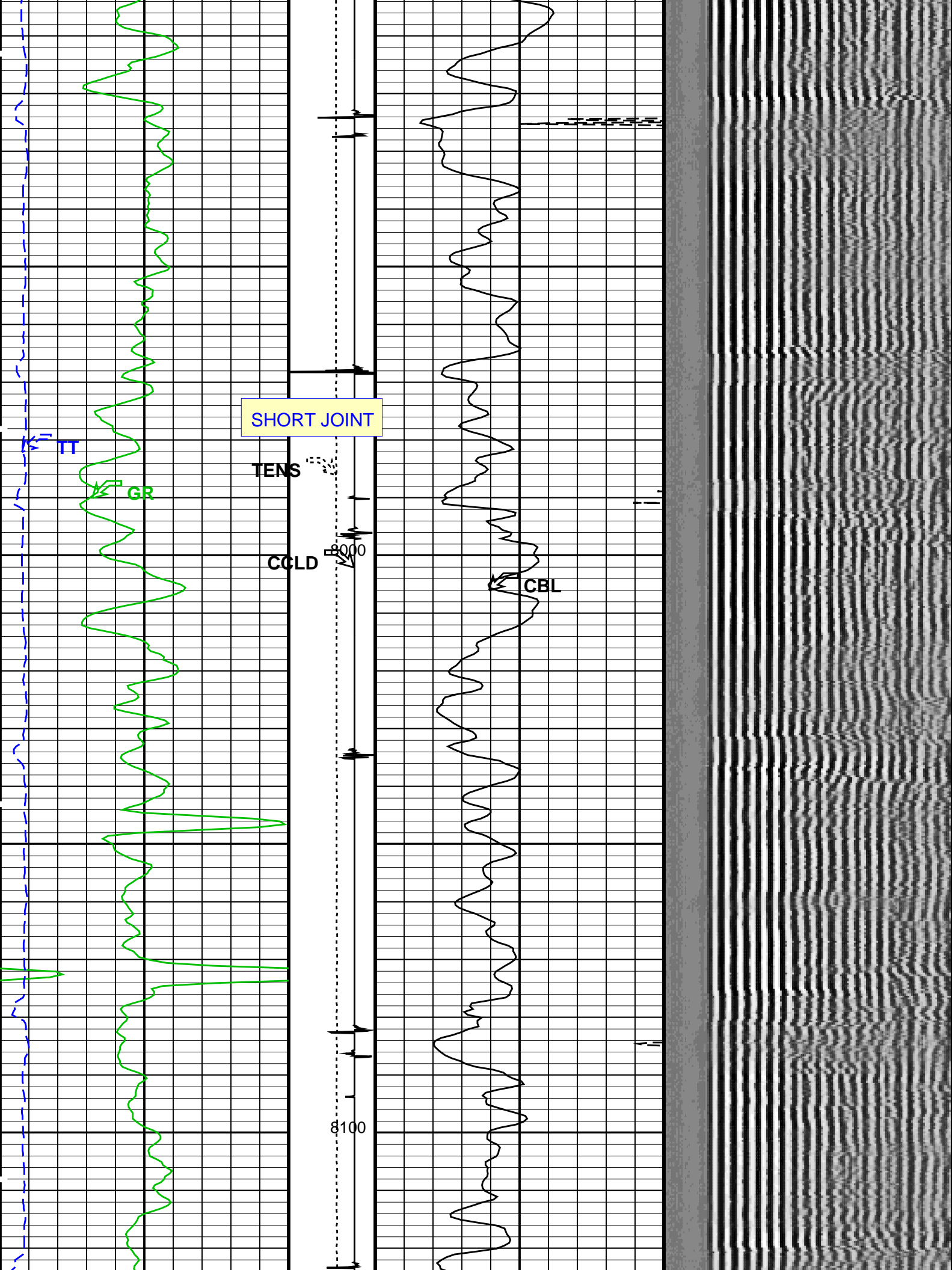


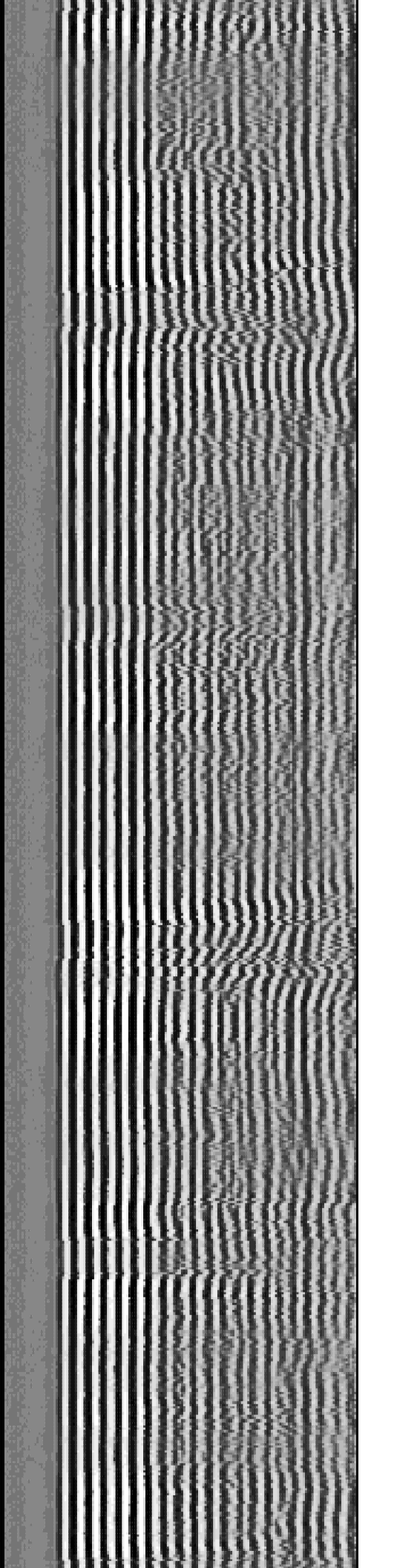
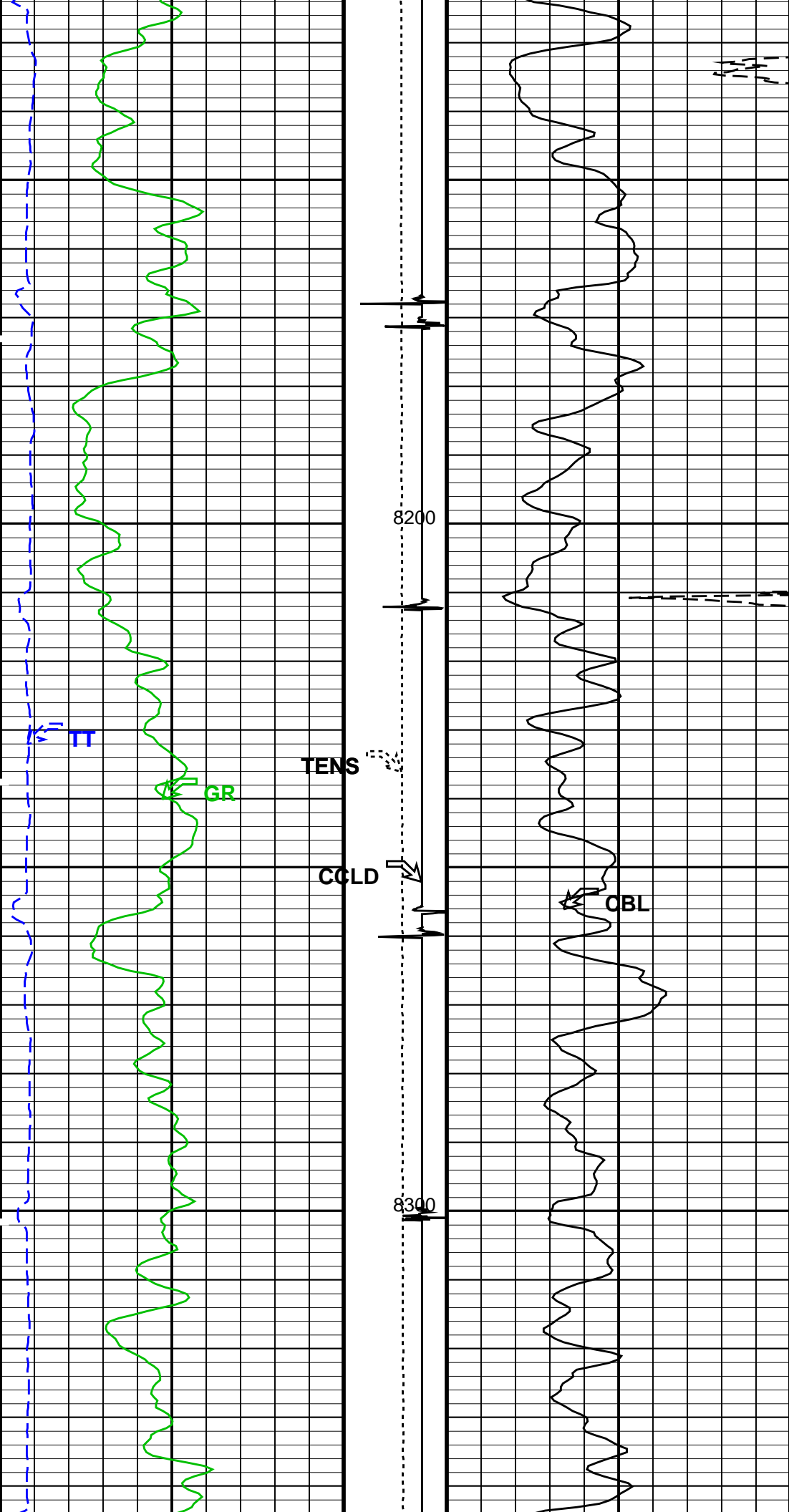


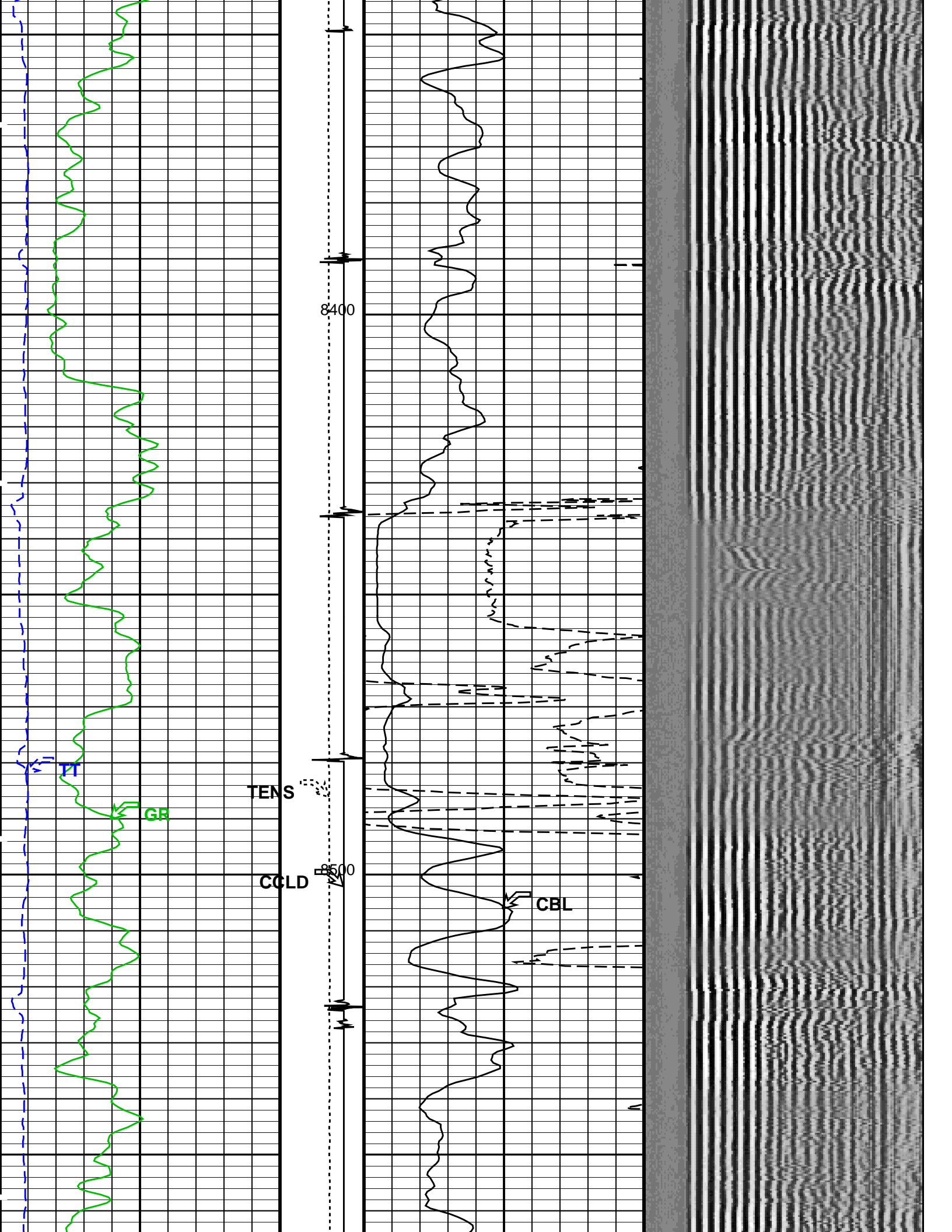


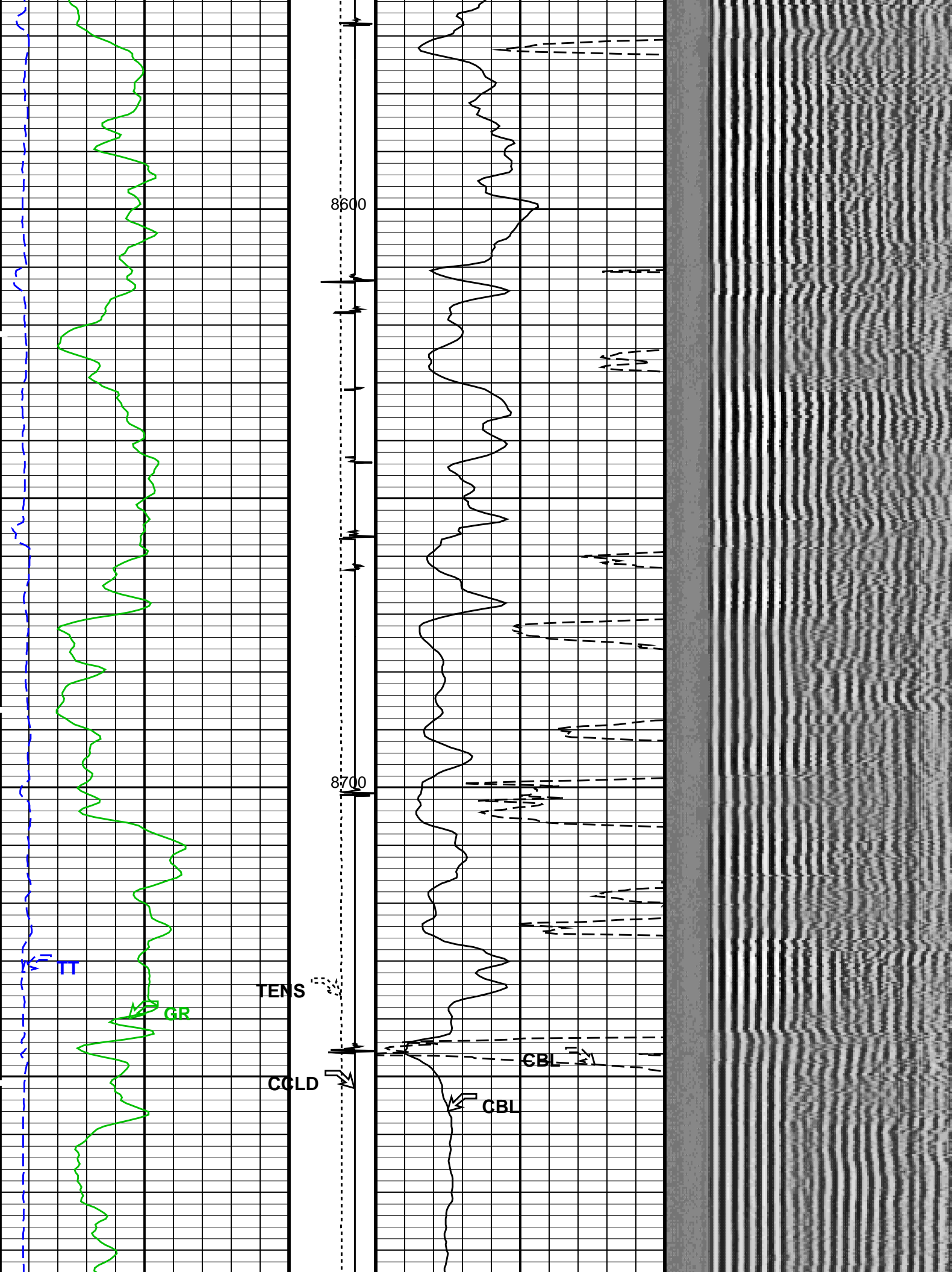


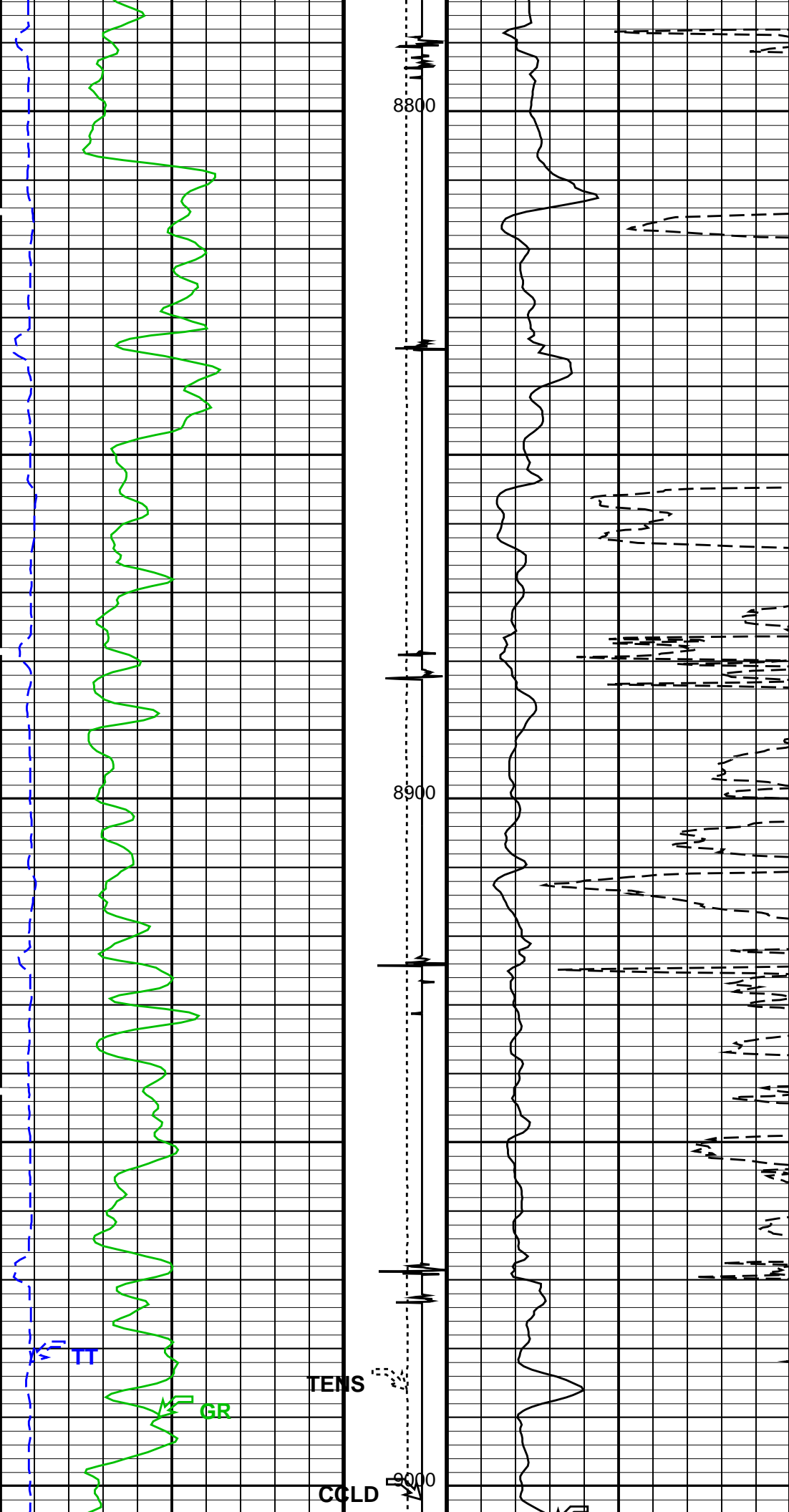


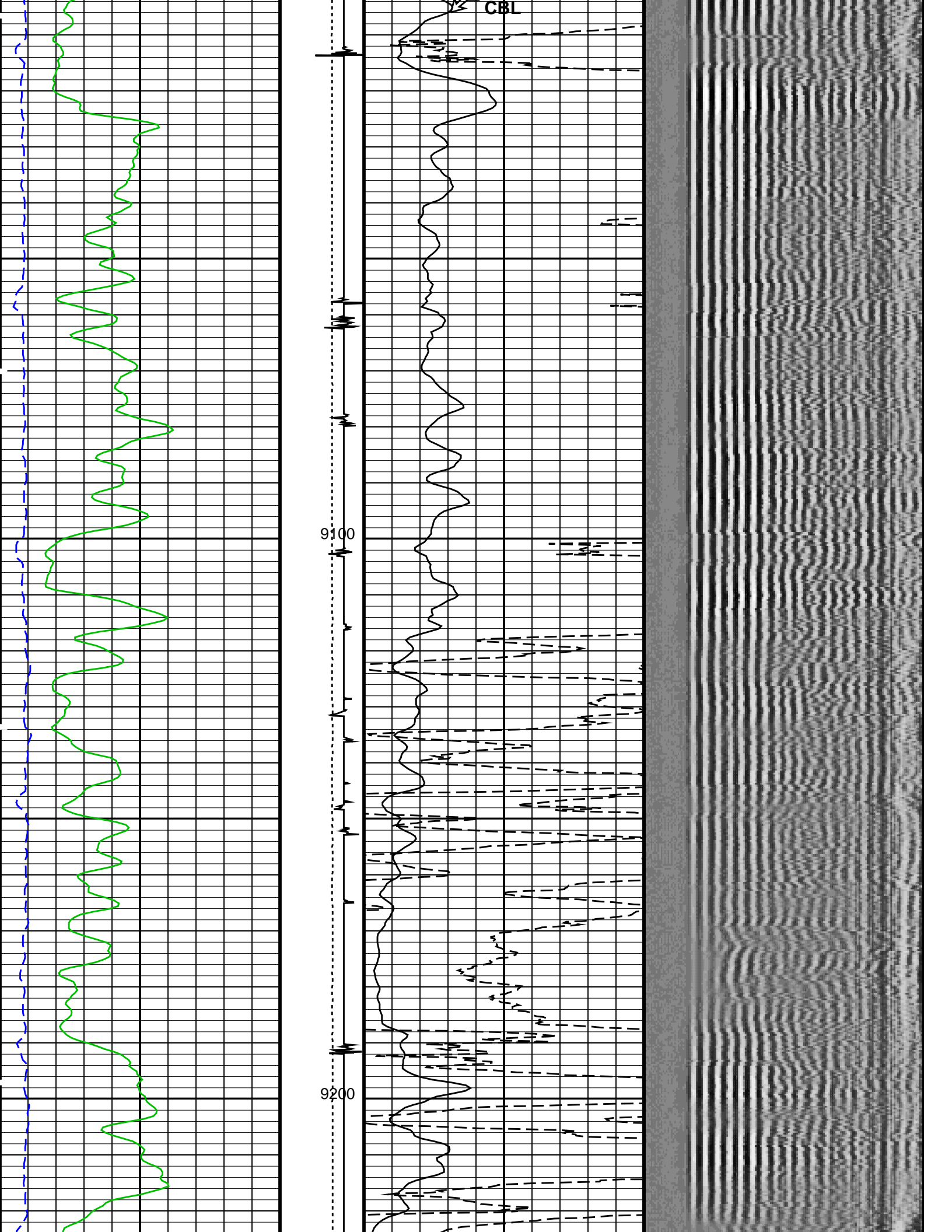


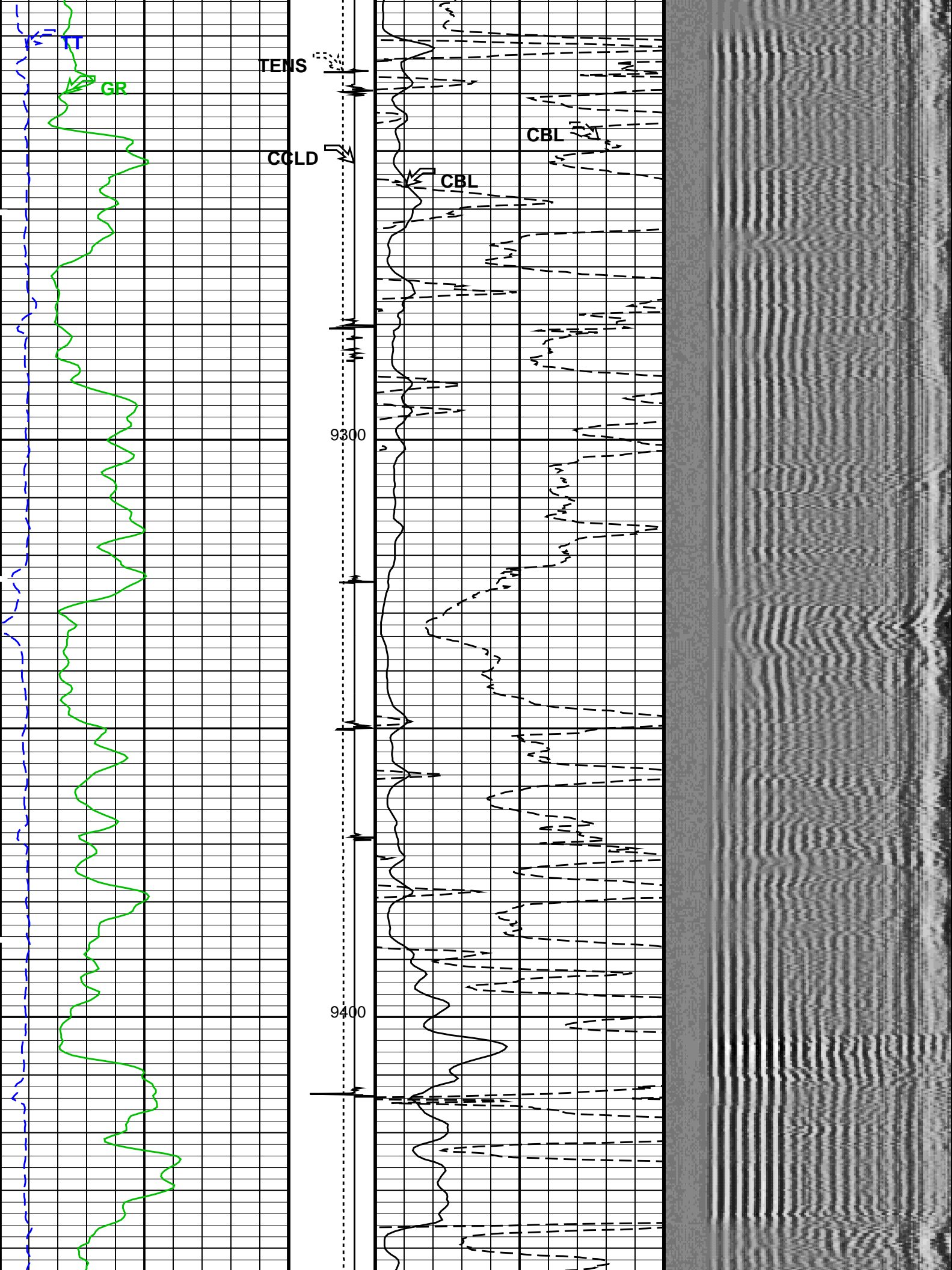


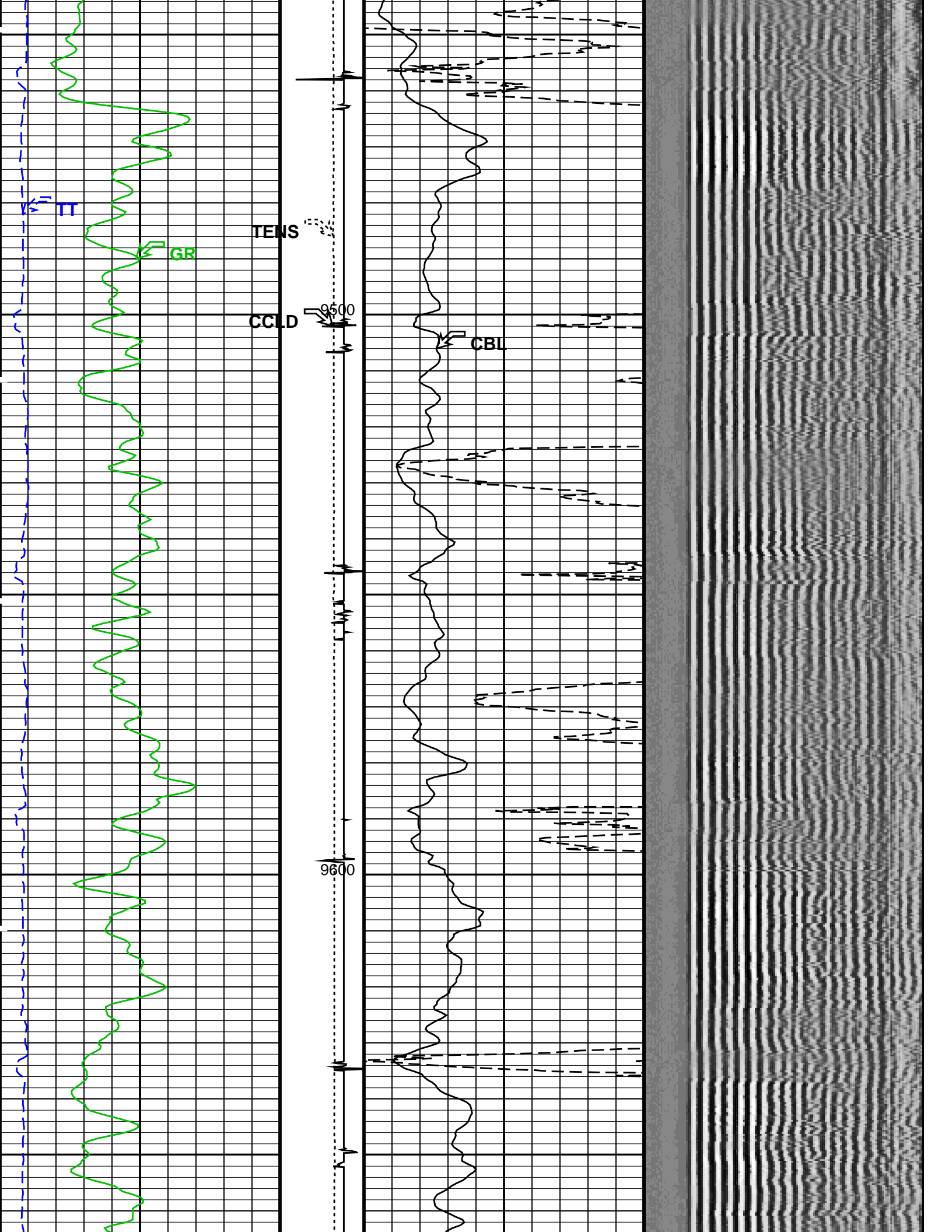


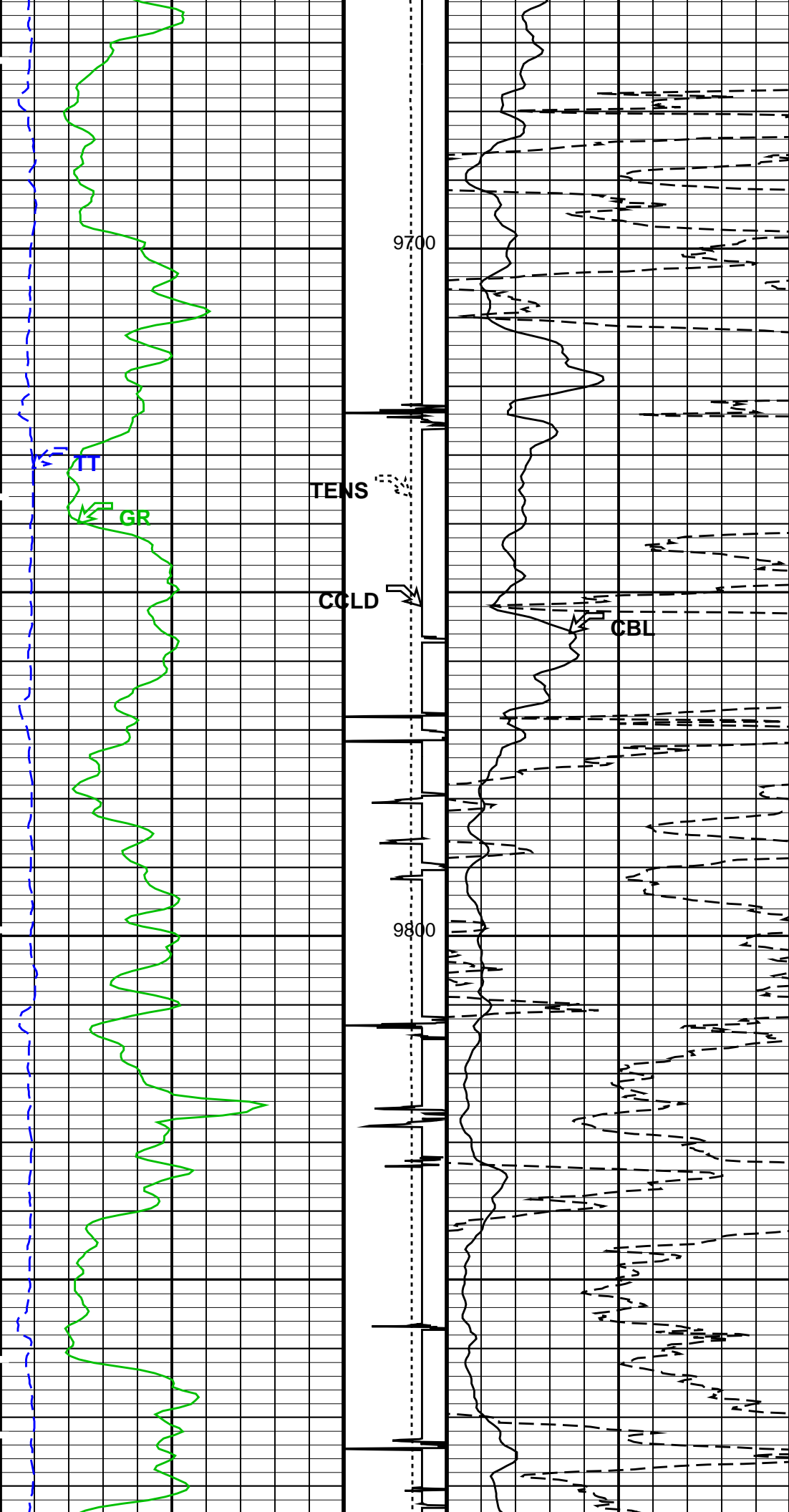


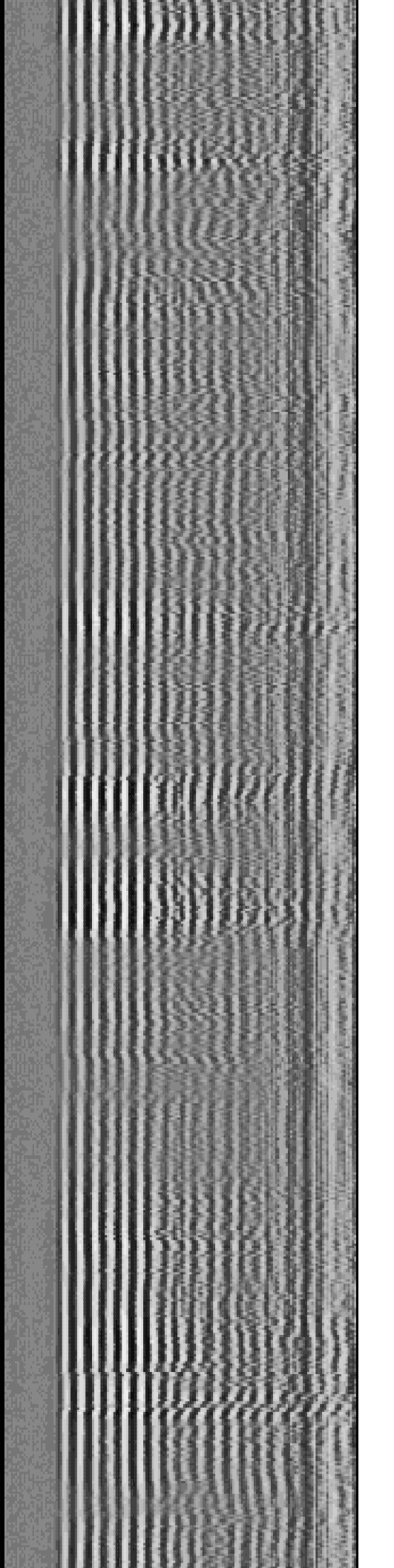
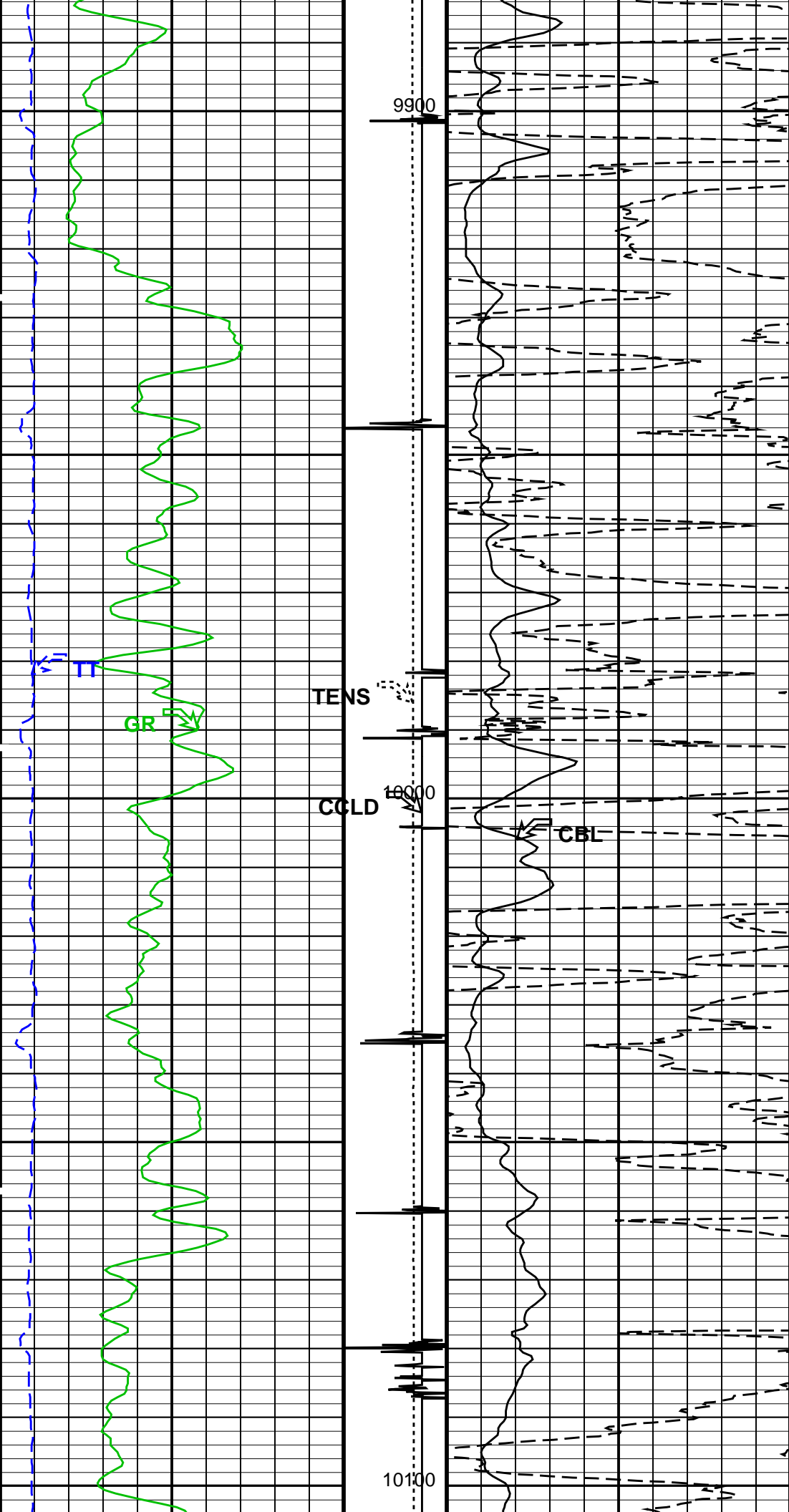


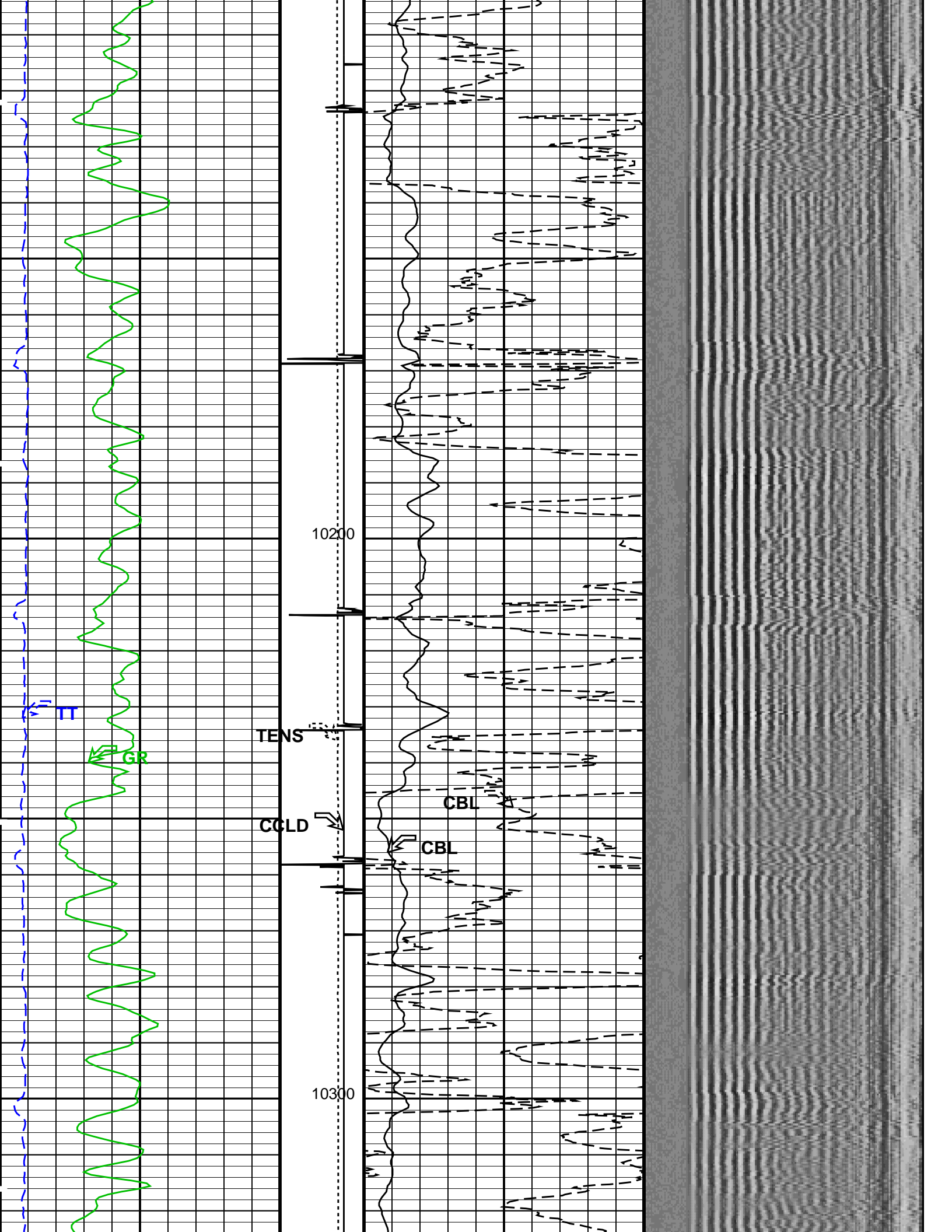


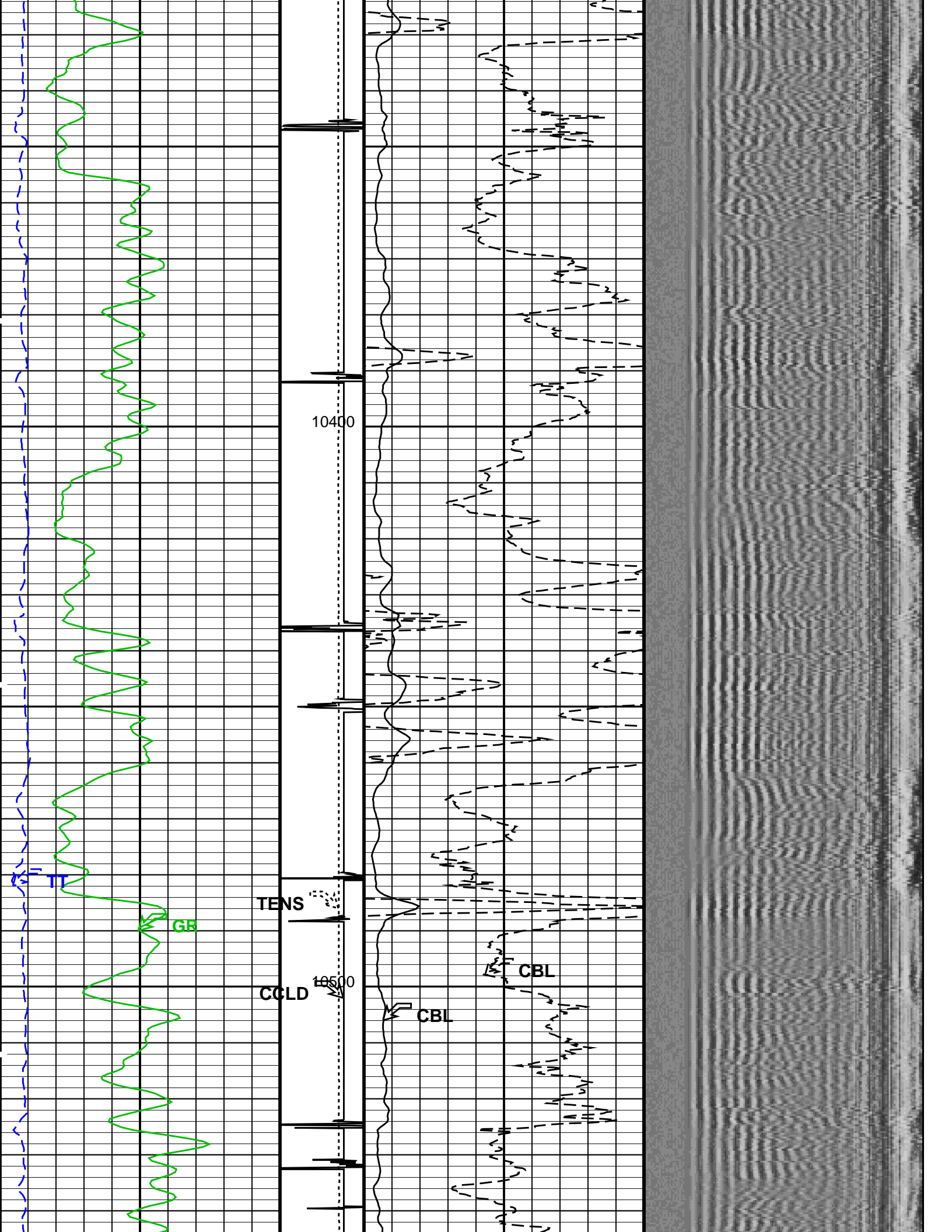


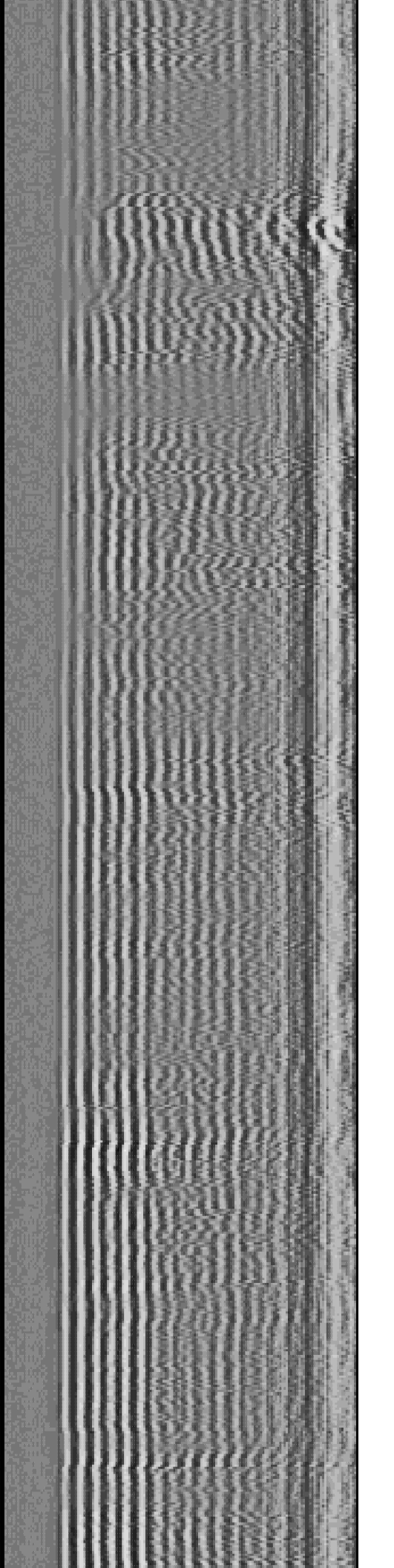
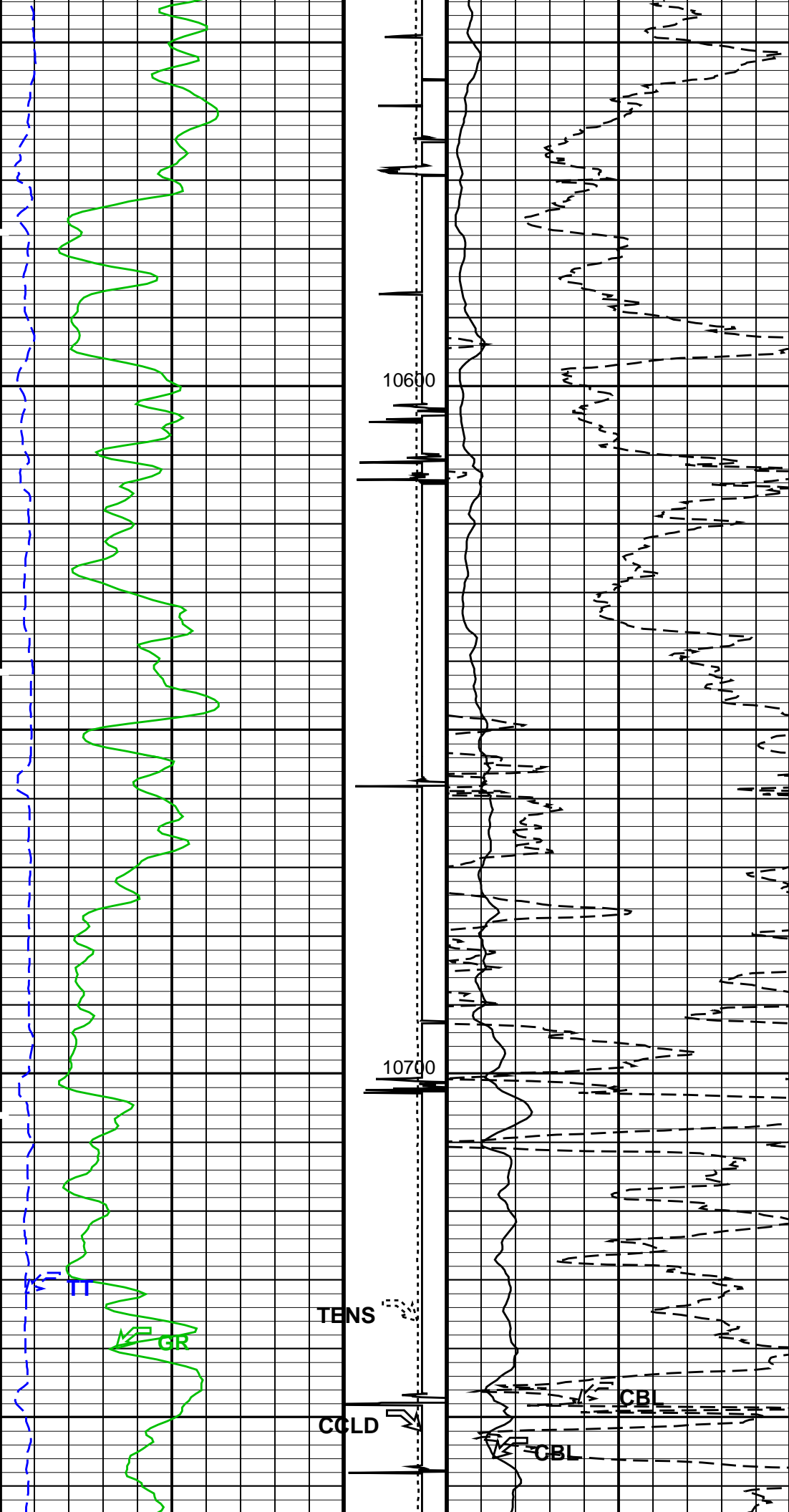


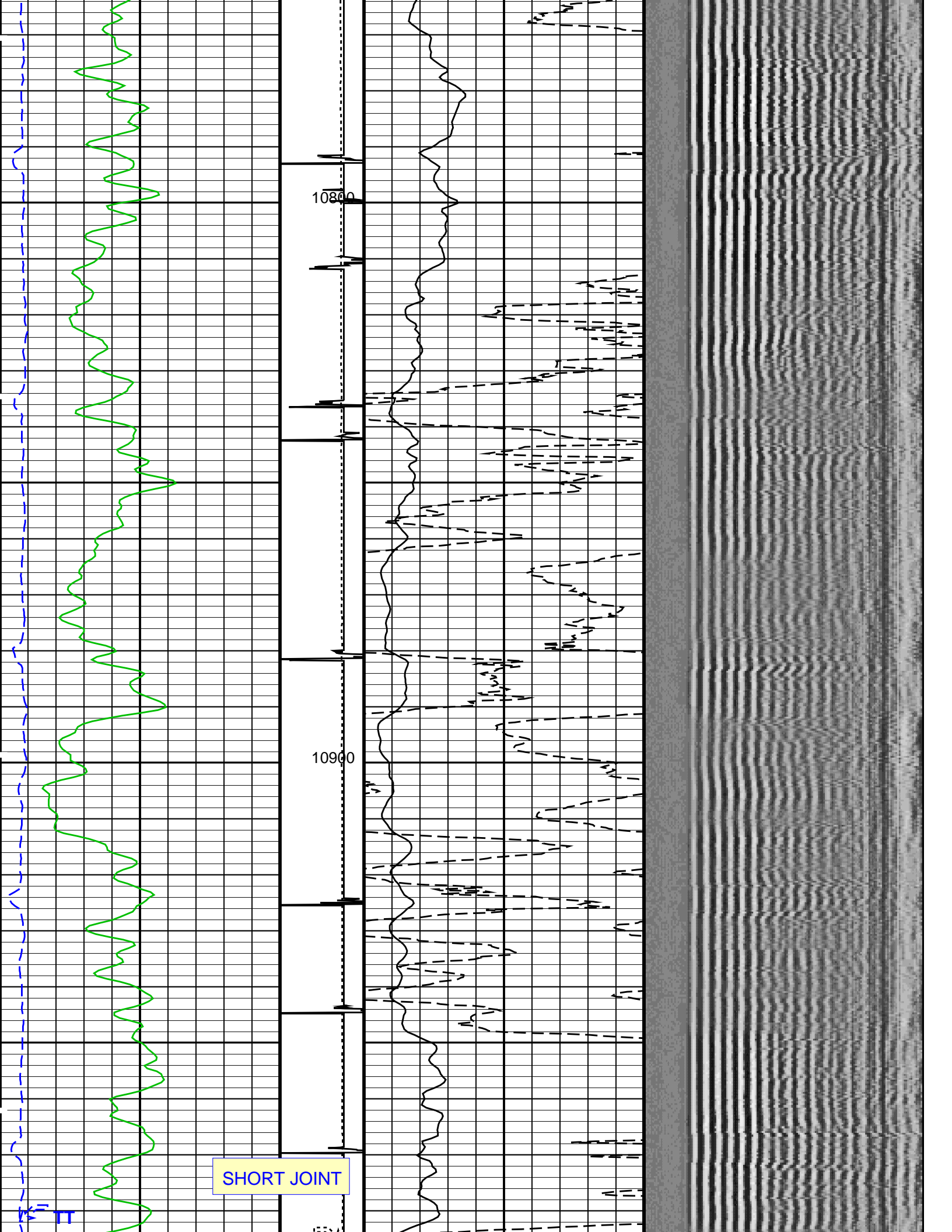


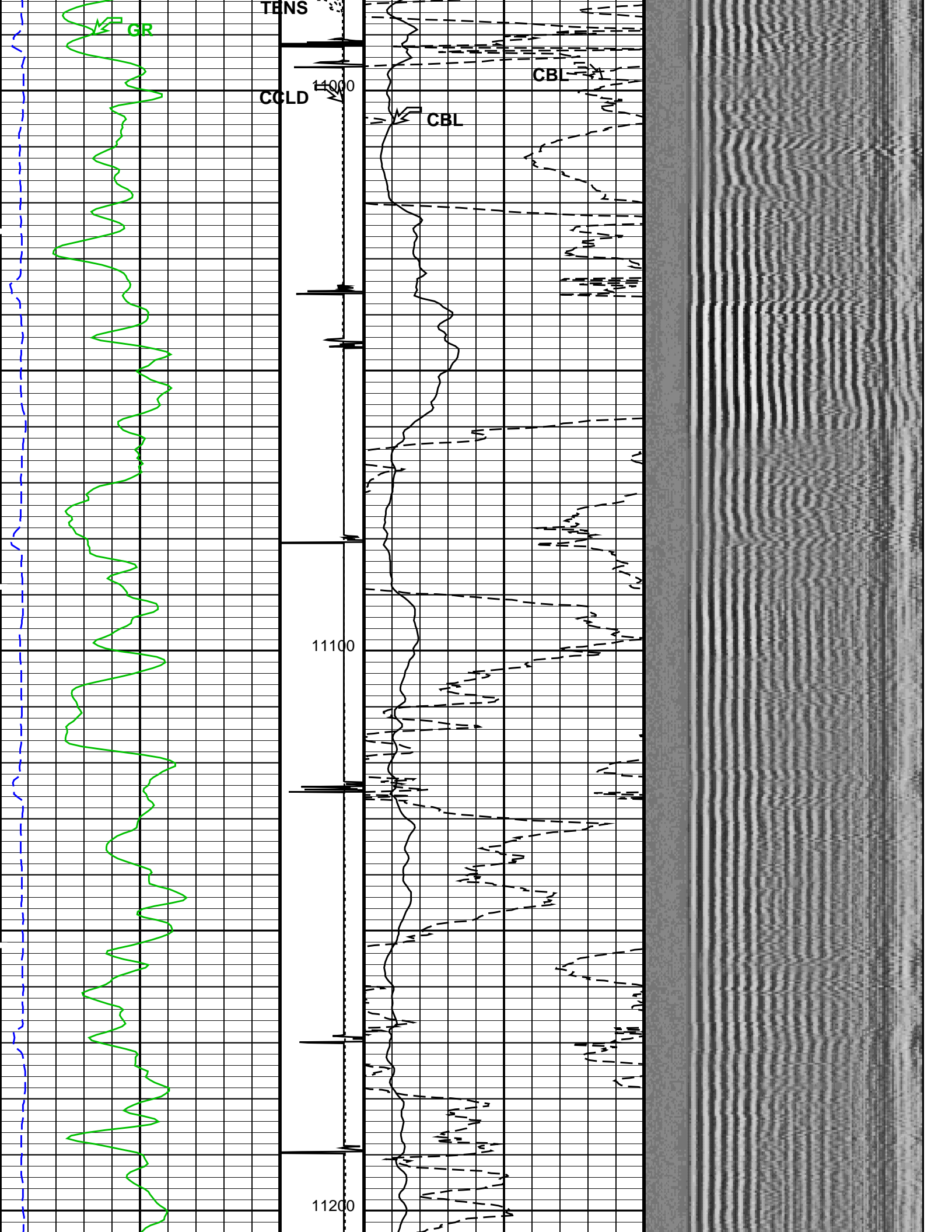


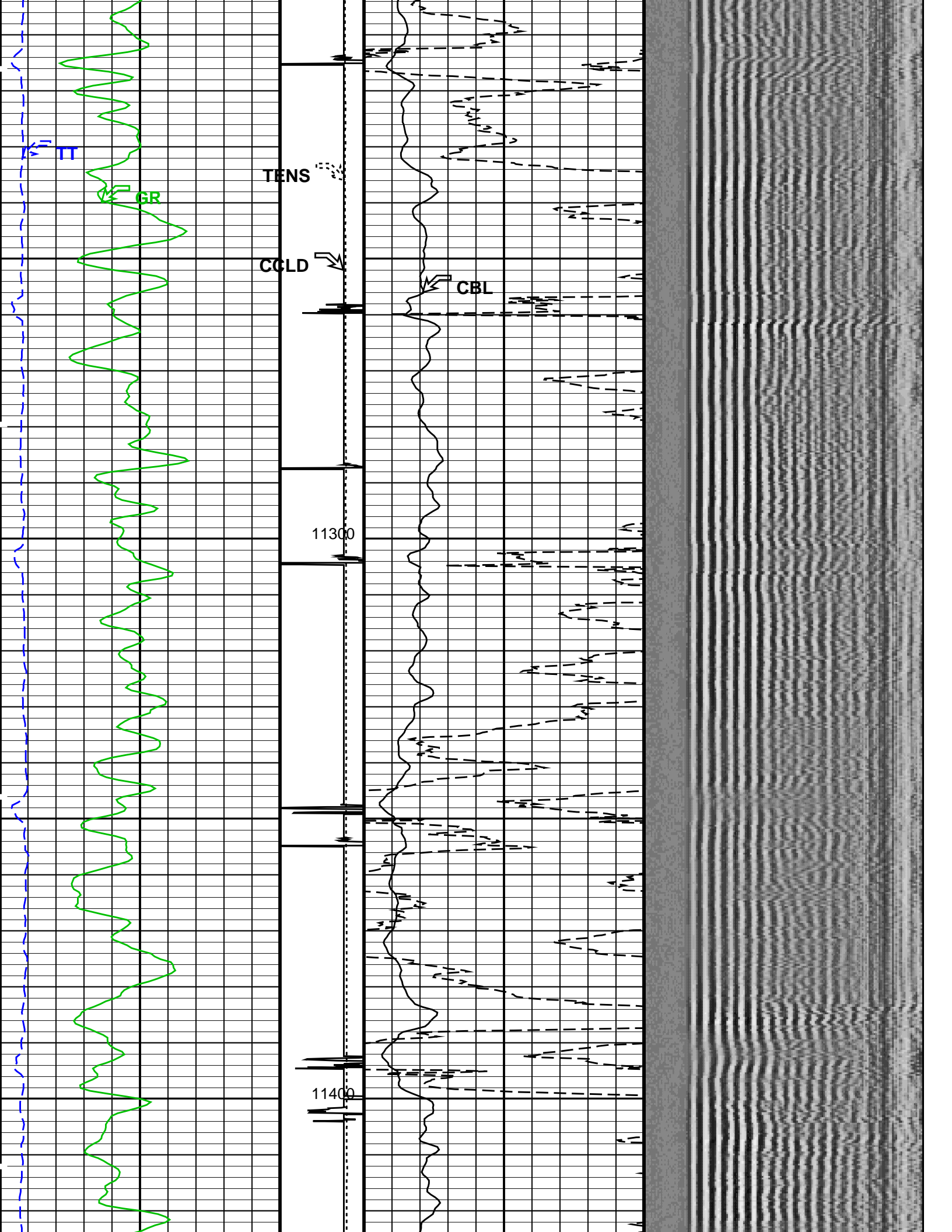


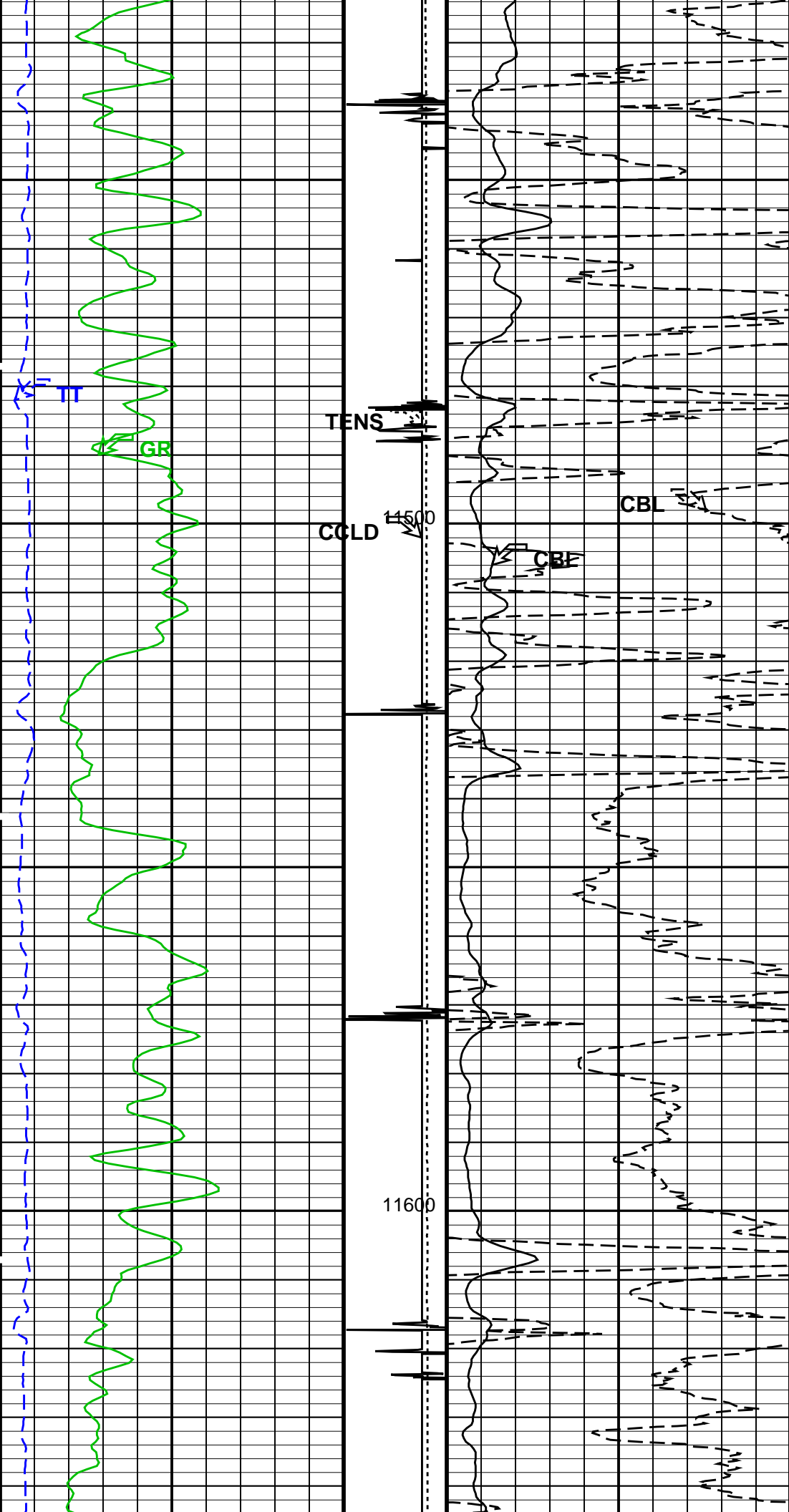


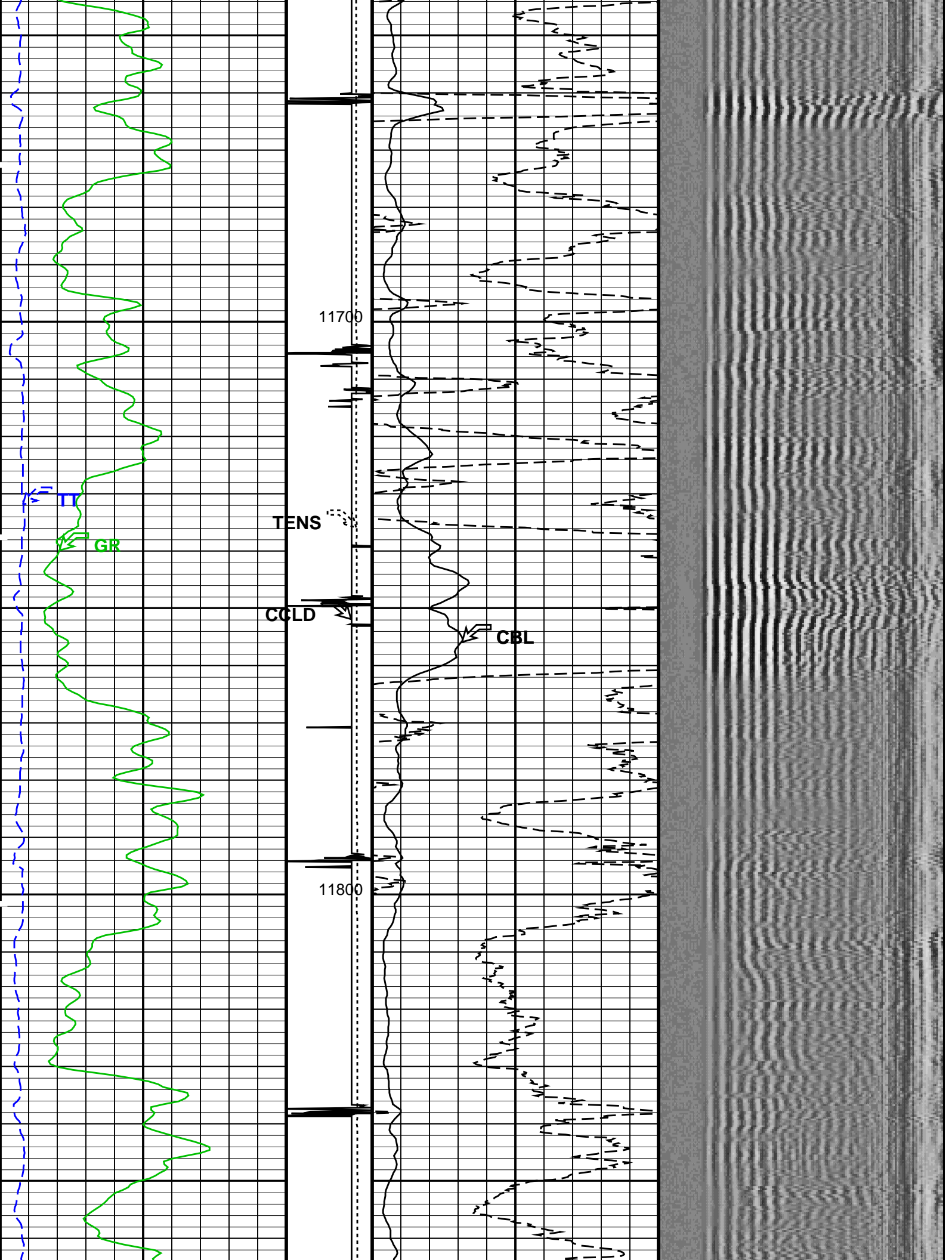


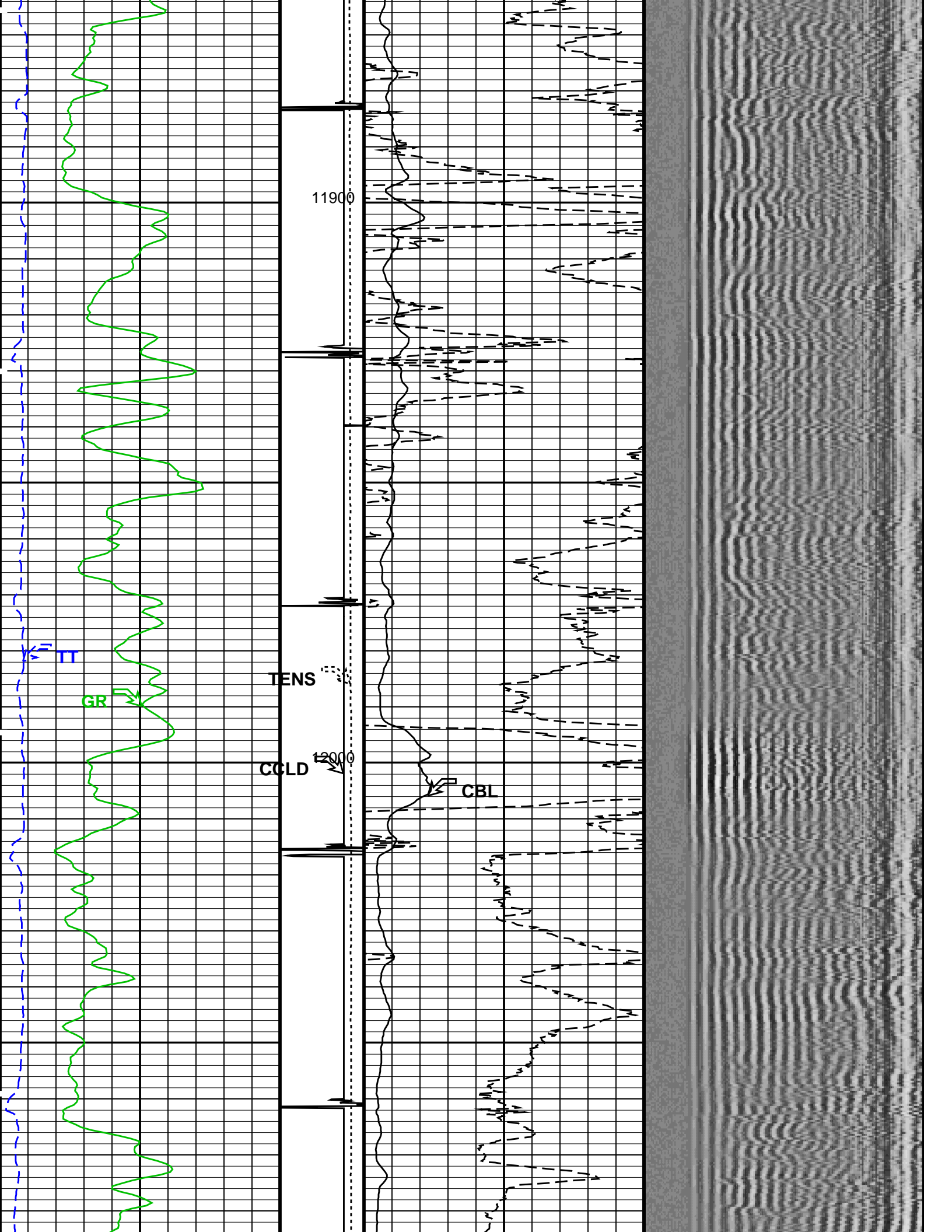


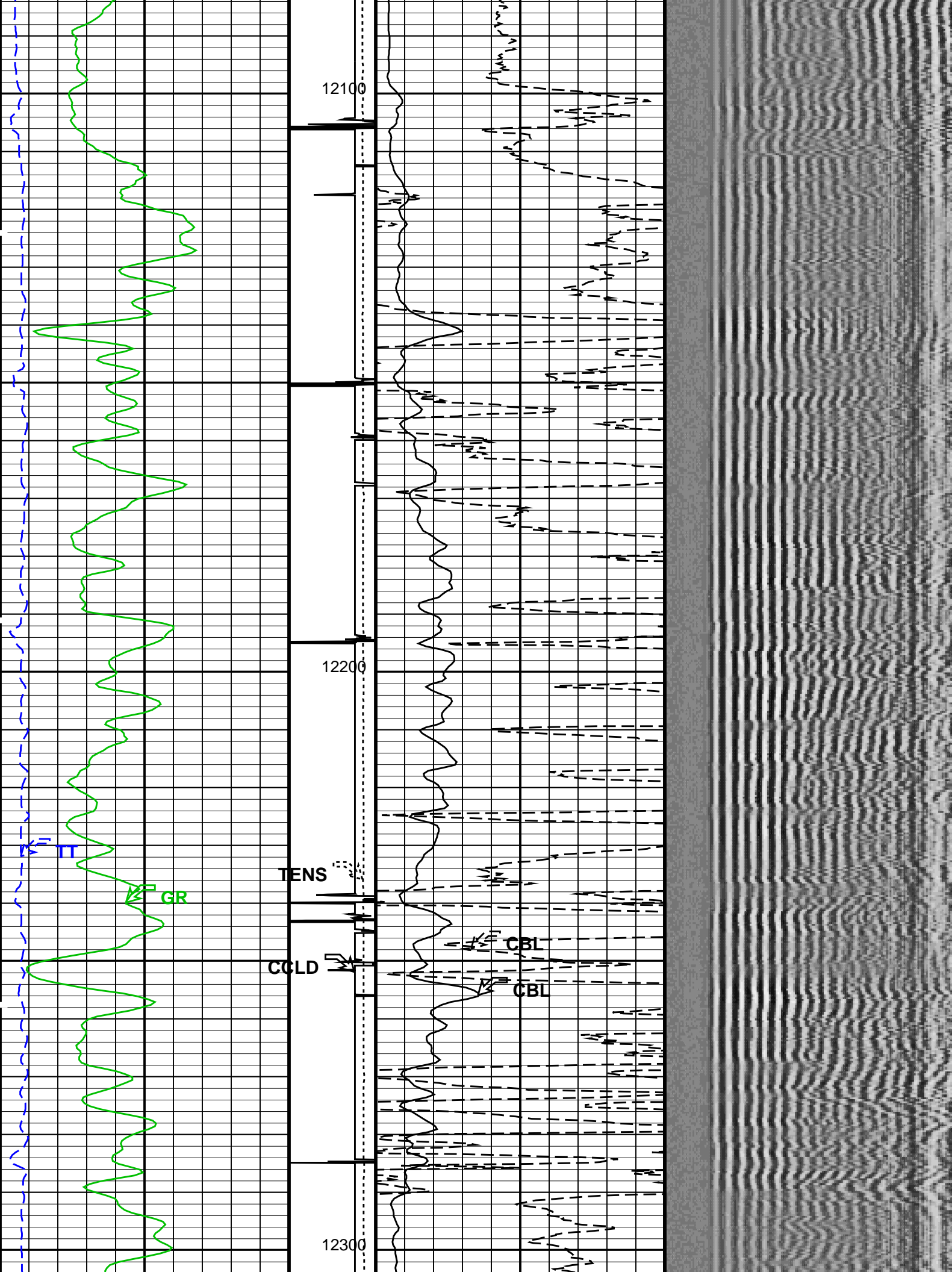


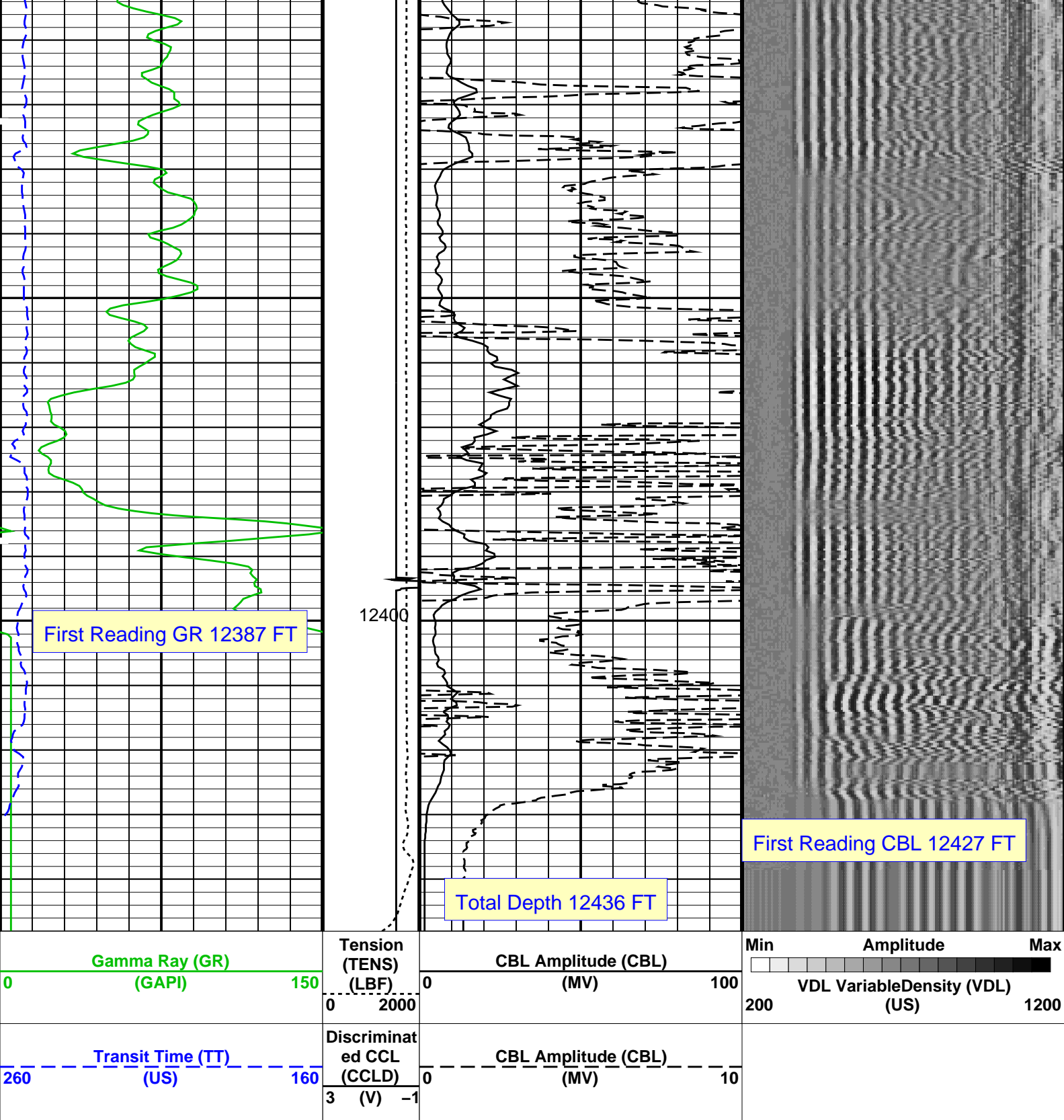












PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 13-Feb-2013 20:07

OP System Version: 19C0-187

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

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number SCMS-CB 8179

Current Casing Size 4 50000 IN

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)	0.900000
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	45	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	5.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12436	FT

Input DLIS Files

DEFAULT	SCMT_RST_PSP_019LUP	FN:18	PRODUCER	13-Feb-2013 16:40	12443.0 FT	22.5 FT
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Output DLIS Files

DEFAULT	SCMT_RST_PSP_024PUP	FN:23	PRODUCER	13-Feb-2013 20:07
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MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8510E-23 (L24 496)

Input DLIS Files

DEFAULT	SCMT_RST_PSP_017LUP	FN:16	PRODUCER	13-Feb-2013 16:11	8080.5 FT	7712.2 FT
DEFAULT	SCMT_RST_PSP_024PUP	FN:23	PRODUCER	13-Feb-2013 20:07	12448.0 FT	-17.0 FT

Output DLIS Files

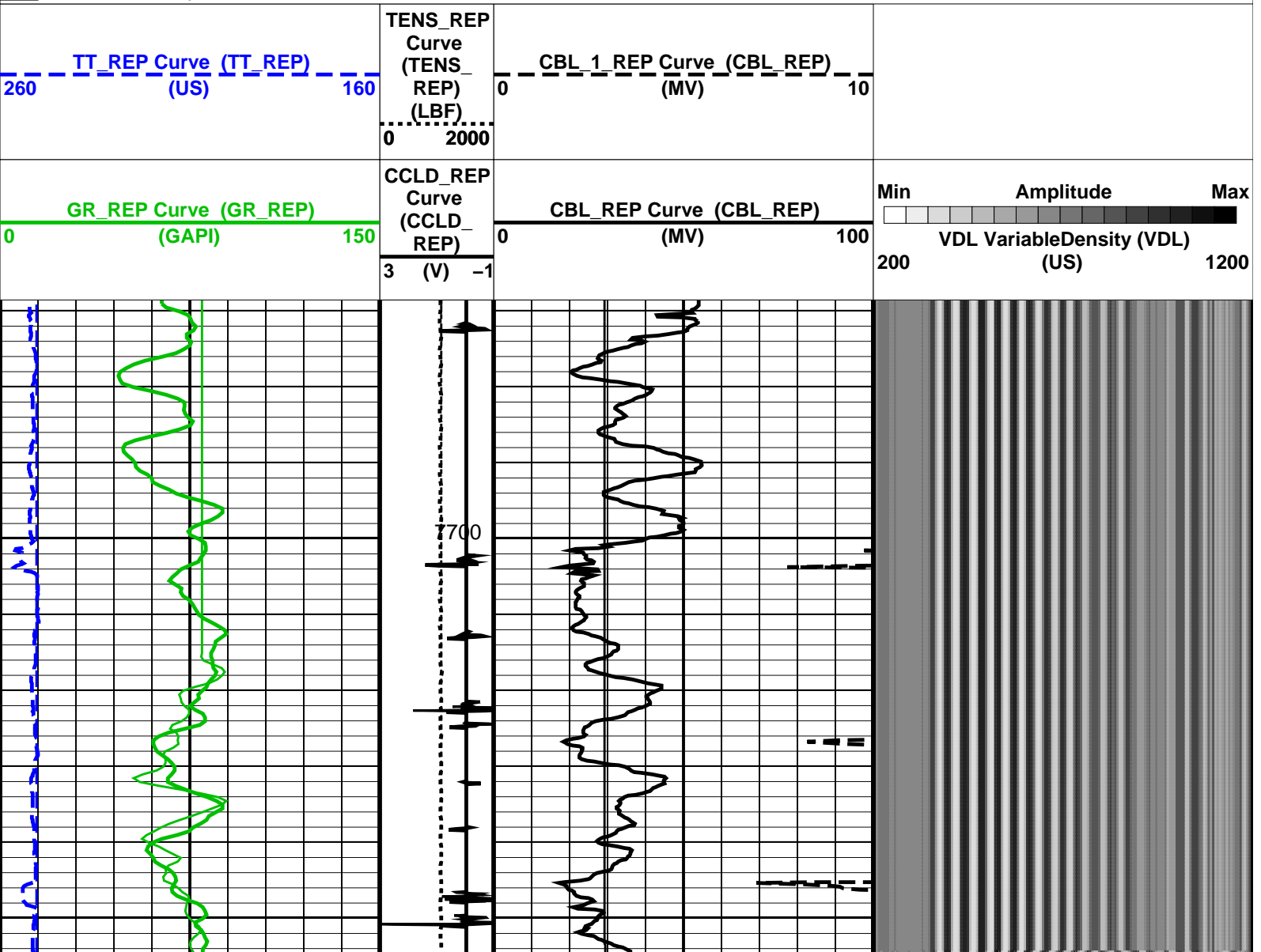
DEFAULT	SCMT_RST_PSP_025PUP	FN:24	PRODUCER	13-Feb-2013 20:19	8080.5 FT	7668.0 FT
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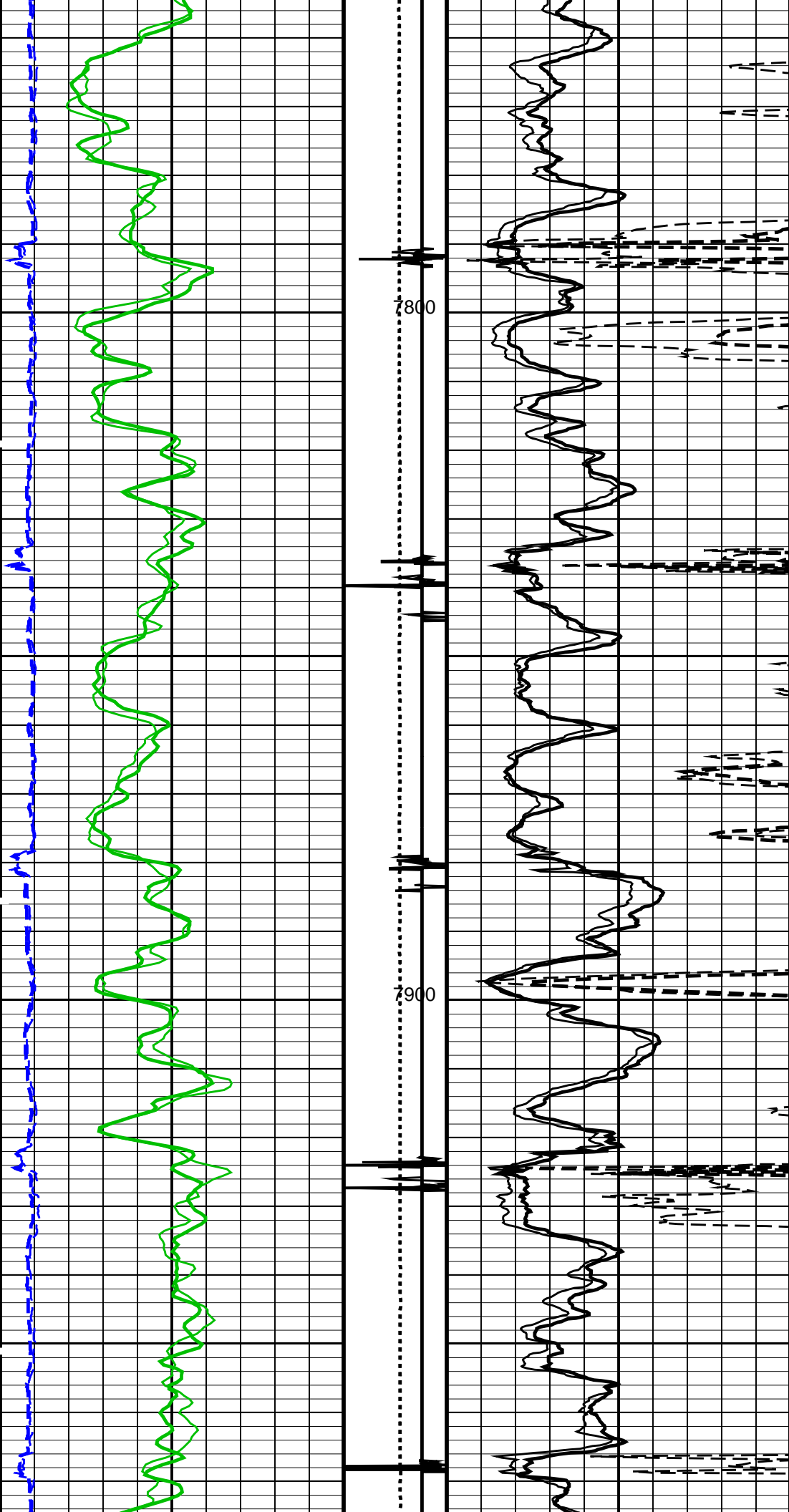
OP System Version: 19C0-187

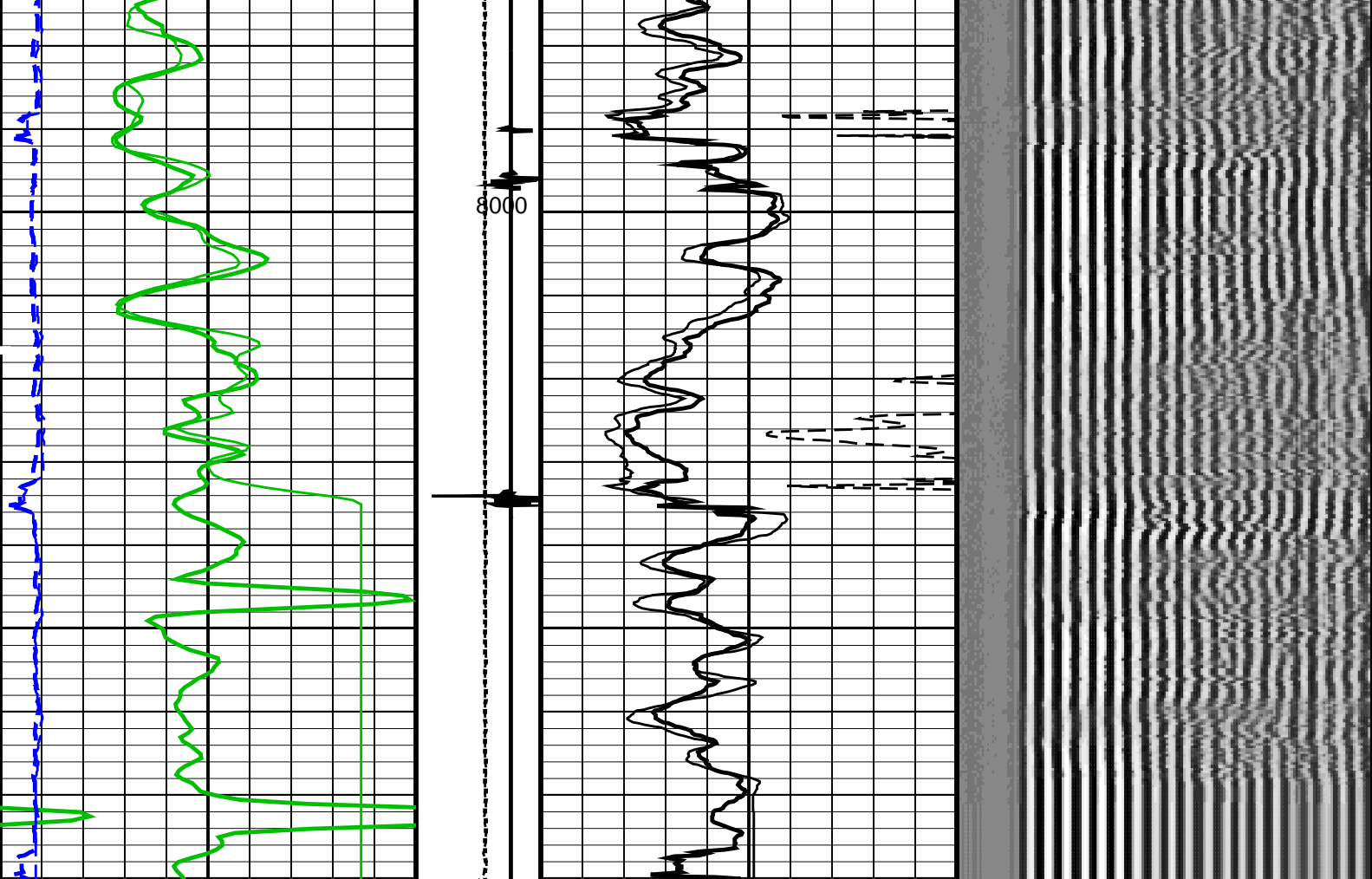
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

PIP SUMMARY

Time Mark Every 60 S







GR_REP Curve (GR_REP) (GAPI) 0 150	CCLD_REP Curve (CCLD_REP) (V) -1 3	CBL_REP Curve (CBL_REP) (MV) 0 100	Min Amplitude Max 200 VDL Variable Density (VDL) (US) 1200
TT_REP Curve (TT_REP) (US) 260 160	TENS_REP Curve (TENS_REP) (LBF) 0 2000	CBL_1_REP Curve (CBL_REP) (MV) 0 10	

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100'

Graphics File Created: 13-Feb-2013 20:19

OP System Version: 19C0-187

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

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number SCMS-CB 8179

Current Casing Size 4.5000 IN

Casing Weight 13.5000 LB/F

Expected CBL Amplitude 81 MV
in Free Pipe Section

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)	0.900000
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	45 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
DORL	Depth Offset for Repeat Analysis	0.0 FT
PP	Playback Processing	RECOMPUTE
TD	Total Depth	12436 FT

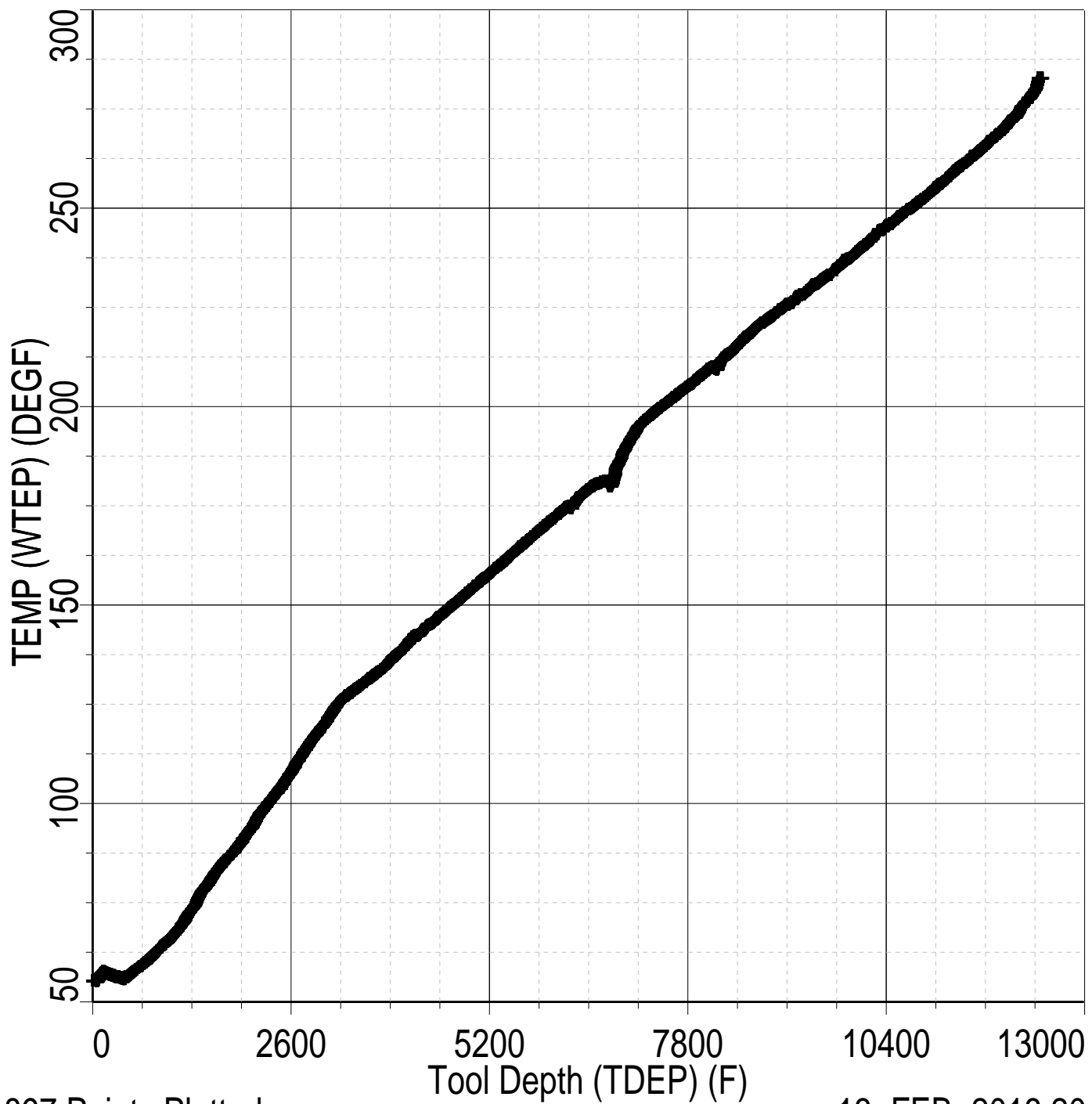
Input DLIS Files

DEFAULT	SCMT_RST_PSP_017LUP	FN:16	PRODUCER	13-Feb-2013 16:11	8080.5 FT	7712.2 FT
DEFAULT	SCMT_RST_PSP_024PUP	FN:23	PRODUCER	13-Feb-2013 20:07	12448.0 FT	-17.0 FT

Output DLIS Files

DEFAULT	SCMT_RST_PSP_025PUP	FN:24	PRODUCER	13-Feb-2013 20:19
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Index: 12448.0 – -17.0 FT



24897 Points Plotted

13-FEB-2013 20:18

Schlumberger**PBMS COEFFICIENTS**

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SGU 8510E-23 (L24 496)

Run date: 13-Feb-2013

Tool: PSP

Sub Type: PBMS

Sensor: GR

PBMS Gamma Ray

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

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

33223

090800

12

CFE2

GR HV Rt

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

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SGU 8510E-23 (L24 496)

Run date: 13-Feb-2013

Tool: PSP

Sub Type: PBMS

Sensor: WellTemp RTD

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

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

928

280612

16

A24E

WTemp Coeff

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

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SGU 8510E-23 (L24 496)

Run date: 13-Feb-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

Calib Date ddmmyy

:

928

280612

Matrix Size 66
Coeff CRC 283B

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.117016867873E+03	-.284359629614E-03	+.604391180345E-08
Fb**1	-.598309140812E-02	+.182731130848E-07	+.160166486172E-12
Fb**2	-.307621454576E-07	+.300601550309E-12	+.311233548560E-17
Fb**3	-.419658736767E-12	+.117473708647E-16	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

	Fc**3	Fc**4	Fc**5
Fb**0	+.114322792679E-12	+.153807711176E-17	-.736714260866E-21
Fb**1	-.528037875456E-18	-.220337637519E-21	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

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:







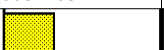
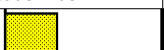

Slim Cement Mapping Xmitter Electronics	SCMX - CA	
Slim Cement Mapping Sonde	SCMS - CB	8179
Slim Cement Mapping Cartridge	SCMC - CA	8120

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		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:

Well:

Field:

County:

State:

ENCANA OIL & GAS (USA) INC

SGU 8510E-23 (L24 496)

STORY GULCH

GARFIELD

COLORADO

Schlumberger

SLIM CEMENT MAPPING LOG

CBL-VDL

GR-CCL