

Company: ENCANA OIL & GAS (USA) INC

Well: MCU 26-4A (127W)

Field: MAMM CREEK

County: GARFIELD

State: COLORADO

SLIM CEMENT MAPPING LOG
CBL-VDL
GR-CCL

County:	GARFIELD		
Field:	MAMM CREEK		
Location:	SHL: 516 FEL & 1967 FSL		
Well:	MCU 26-4A (127W)		
Company:	ENCANA OIL & GAS (USA) INC		
	LOCATION		
	SHL: 516 FEL & 1967 FSL BHL: 948 FWL & 710 FNL	Elev.: K.B. 7224.00 ft G.L. 7202.00 ft D.F. 7223.00 ft	
	Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____	GROUND LEVEL _____ KELLY BUSHING _____ KELLY BUSHING _____	Elev.: 7202.00 ft 22.00 ft above Perm. Datum
	API Serial No. _____ 05-045-21608-0C		Section 27 Township 7S Range 93W

	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	22-Jan-2013		
Run Number	1		
Depth Driller	10868 ft		
Schlumberger Depth	10784 ft		
Bottom Log Interval	10775 ft		
Top Log Interval	60 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	60 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From	81.16 ft		
To	10868 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade	S-80		
From	22 ft		
To	10846 ft		
Maximum Recorded Temperatures	266 degF		
Logger On Bottom	22-Jan-2013	23:45	
Unit Number	Location		
Recorded By	KIRSTIE BUNTING		
Witnessed By	EUGENE		

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: 12-DEC-2012 9:29:15

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:	
Calibration Date:	4-24-2012	Calibration Date:	28-11-2012	Length:	19700 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	Conveyance Method: Wireline Rig Type: LAND	
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10		
Wheel Correction 1:	-3	Calibration RMS:	6		
Wheel Correction 2:	-4	Calibration Peak Error:	11		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	200.00 FT
Rig Up Length At Bottom:	200.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	
Tool Zero Check At Surface:	

Depth Control Remarks

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

DISCLAIMER

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

OTHER SERVICES1 OS1: RESERVOIR SATURATION OS2: LOG OS3: SIGMA MODE OS4: GR-CCL OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWN LOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 22:45	
TIME AT TD: 23:45	
EXIT TIME: 02:15	

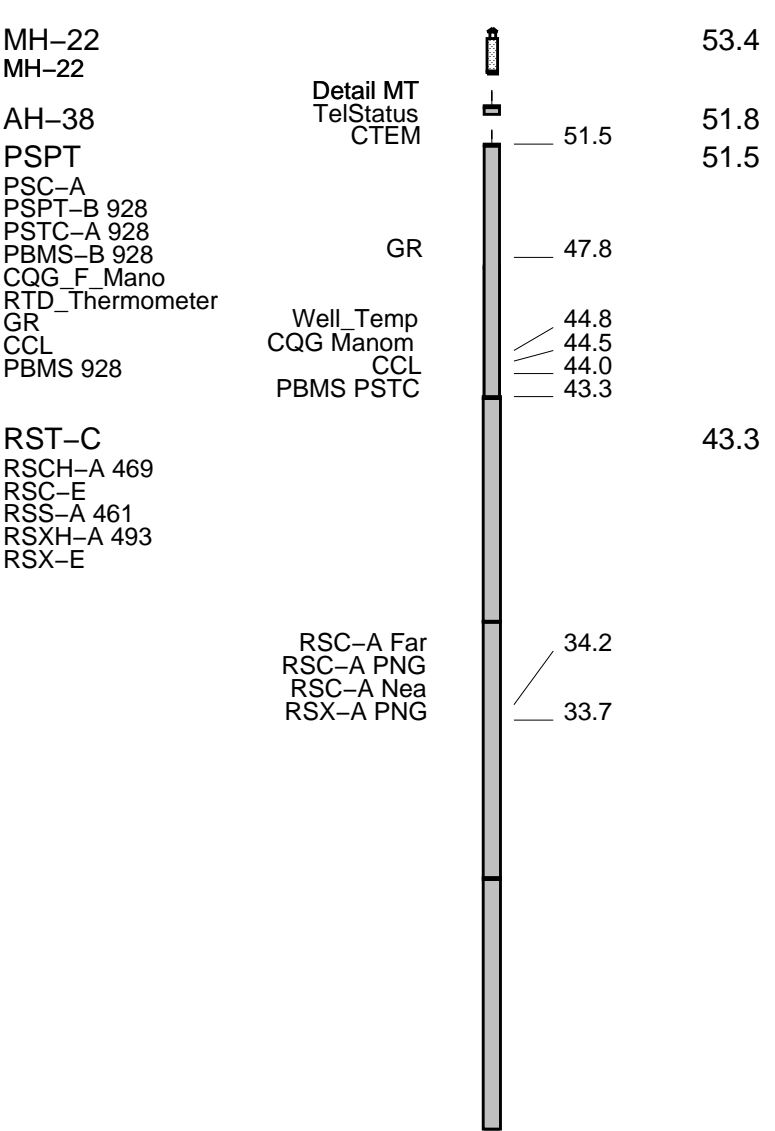
MAXIMUM RECORDED TEMPERATURE: 266 DEGF
MAXIMUM RECORDED PRESSURE: 4327 PSIA
SHORT JOINTS: 8478 FT & 7478 FT
MAIN PASS LOGGED UNDER ZERO SURFACE PRESSURE
EXPECTED CBL MAP AMP IN FREE PIPE = 80 MV
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY CREW: KRISTINE, DADDY, WAZIR, BRANDON, TOM

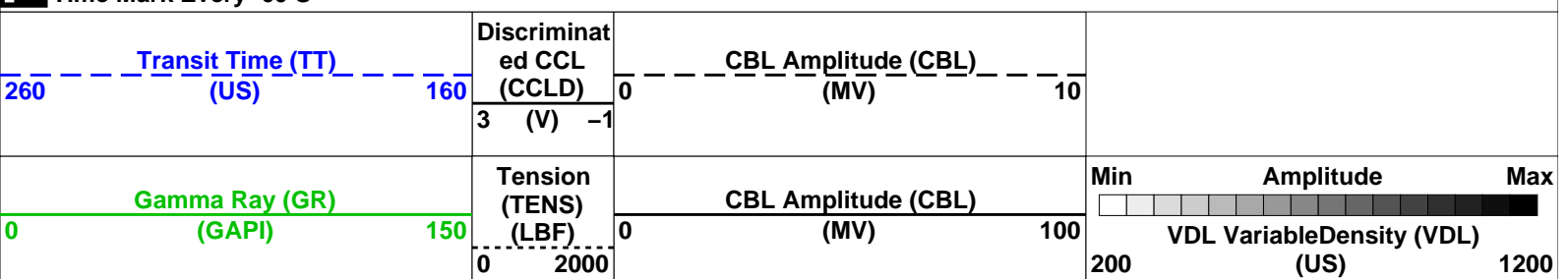
RUN 1			RUN 2		
SERVICE ORDER #:		CGF9-00014	SERVICE ORDER #:		
PROGRAM VERSION:		19C0-187	PROGRAM VERSION:		
FLUID LEVEL:		60 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

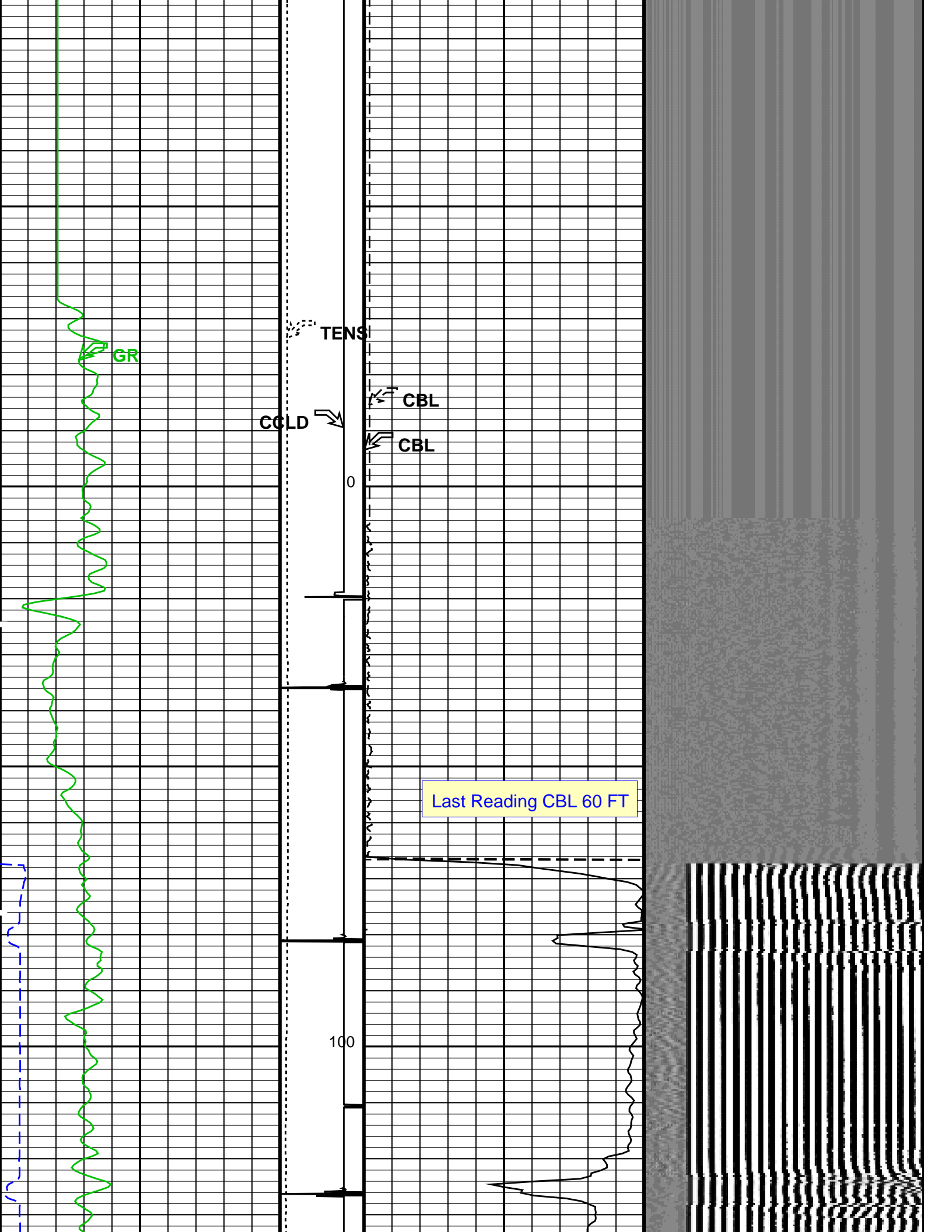
EQUIPMENT DESCRIPTION	
RUN 1	RUN 2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
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100	100

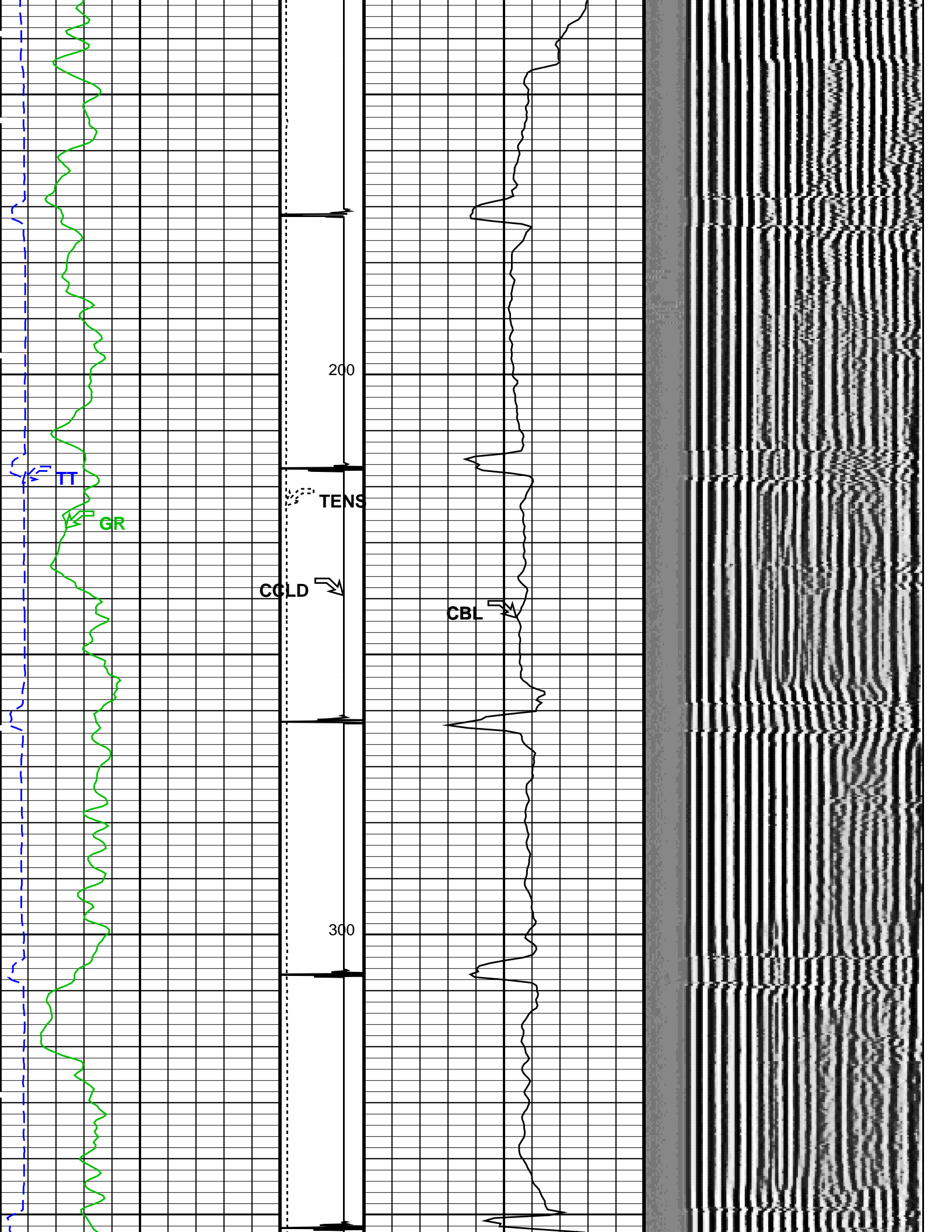
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PSC_16MHZ

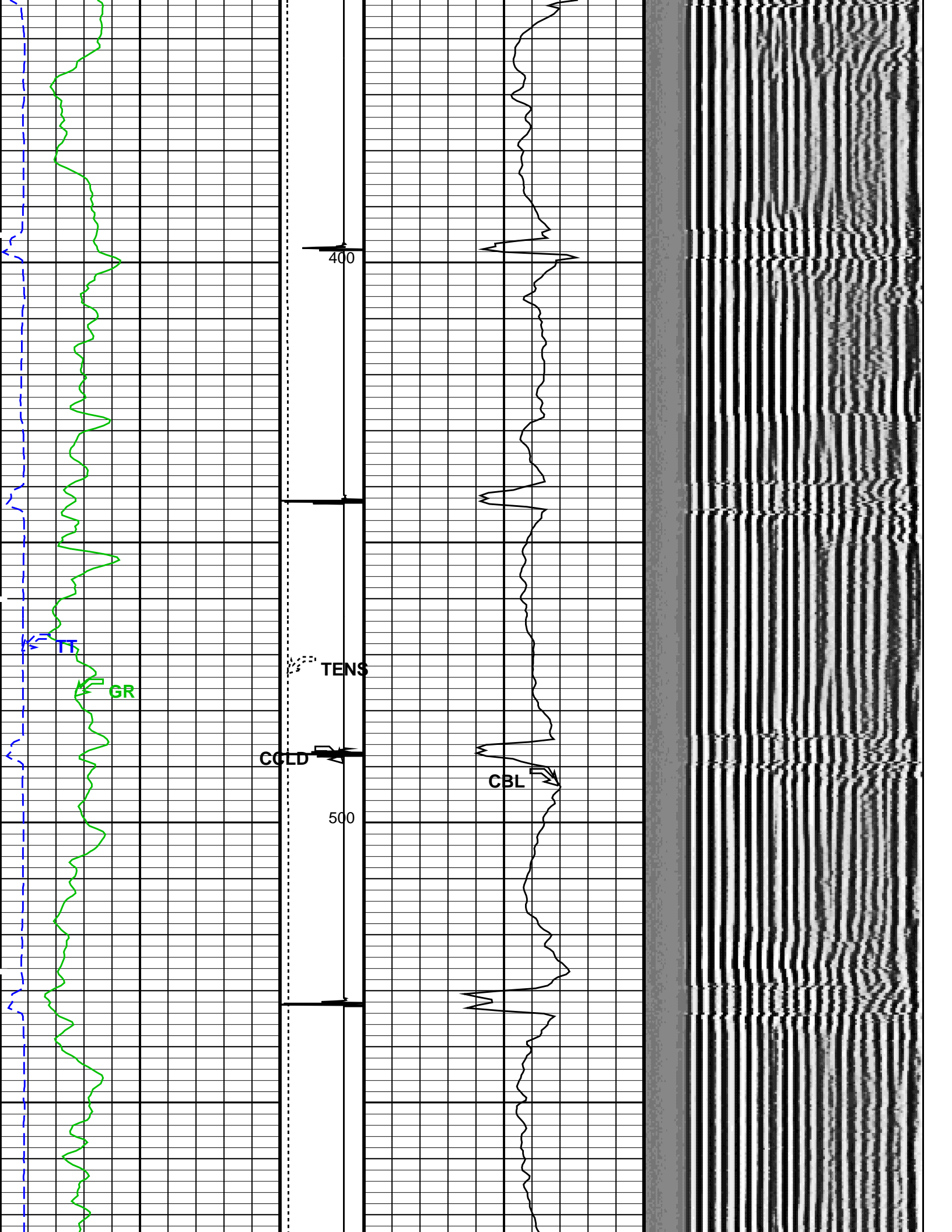
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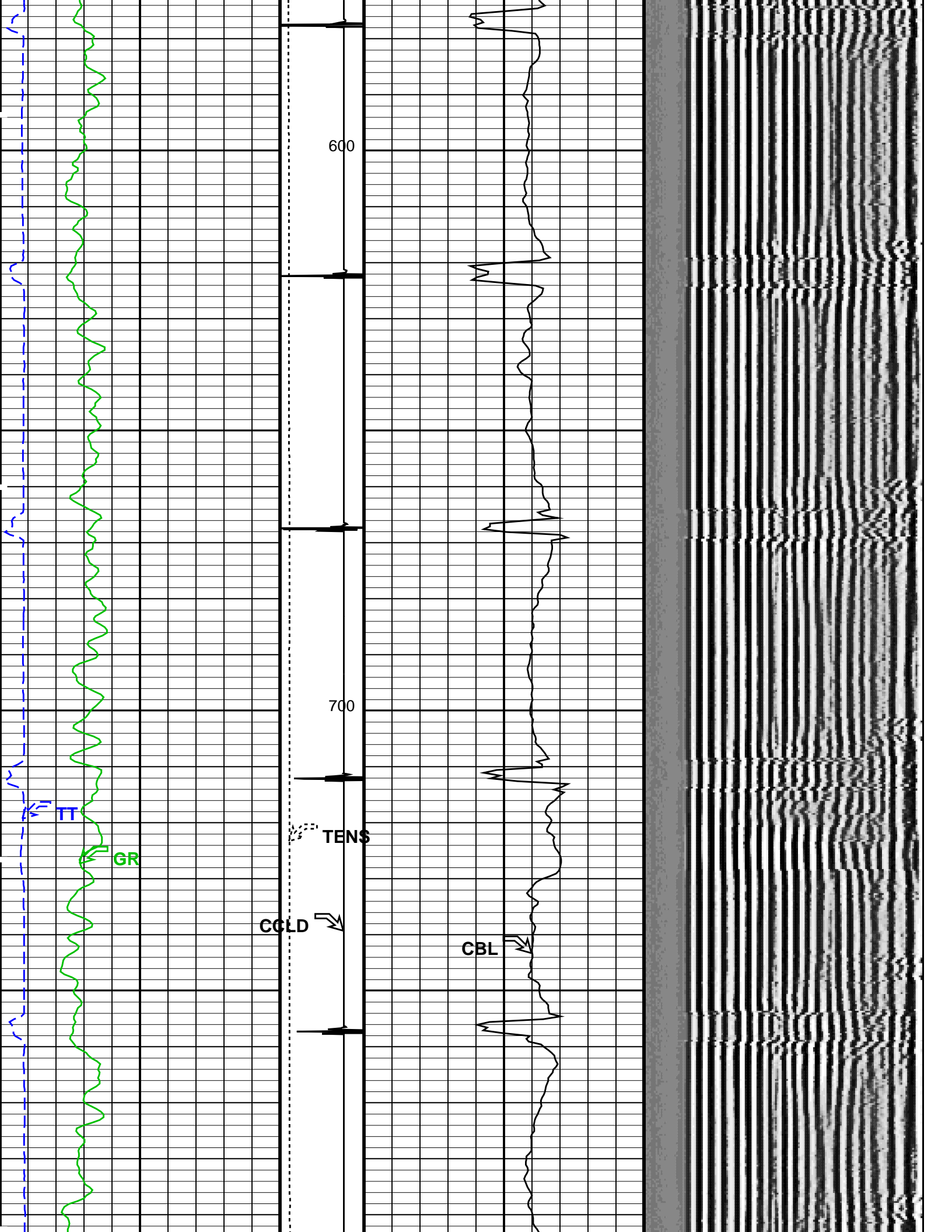


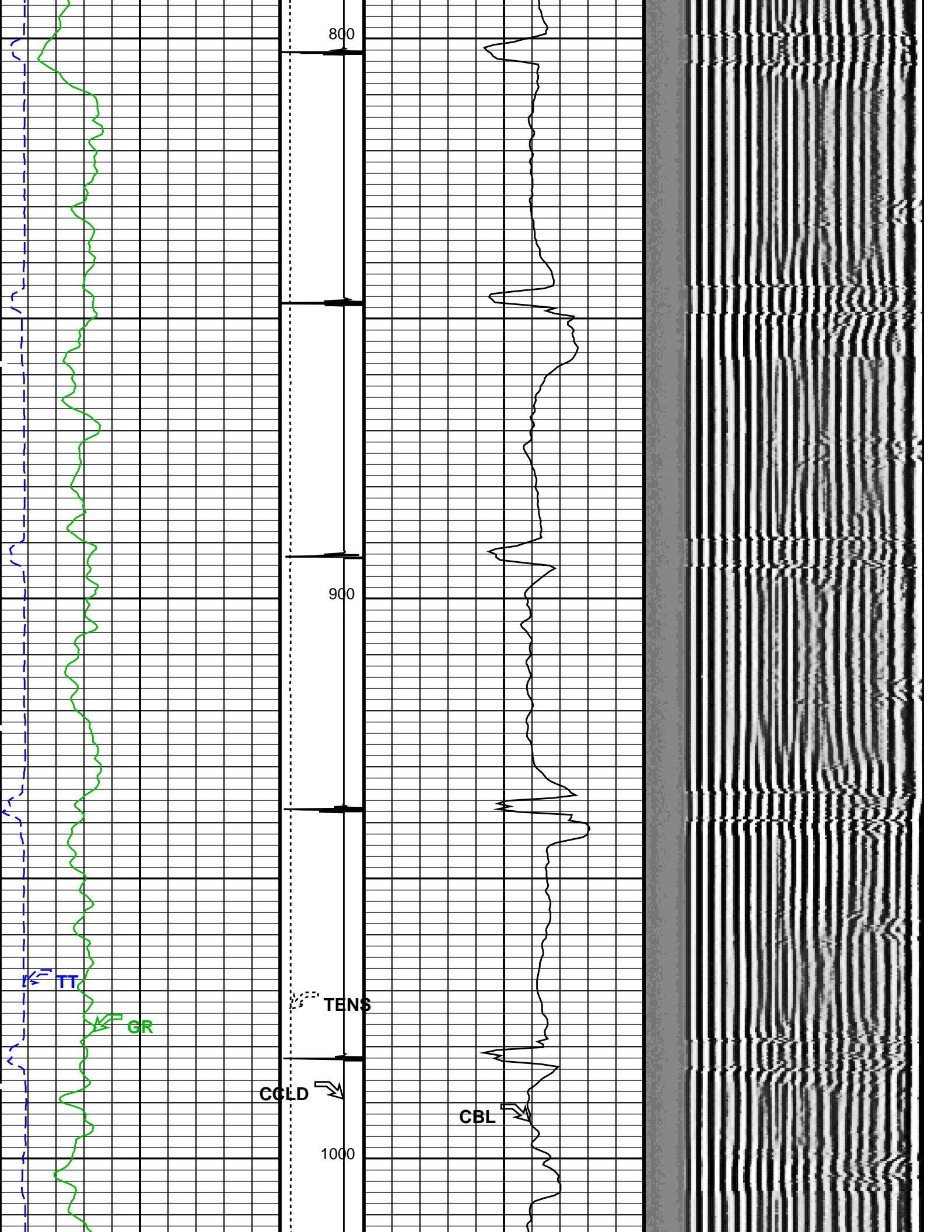


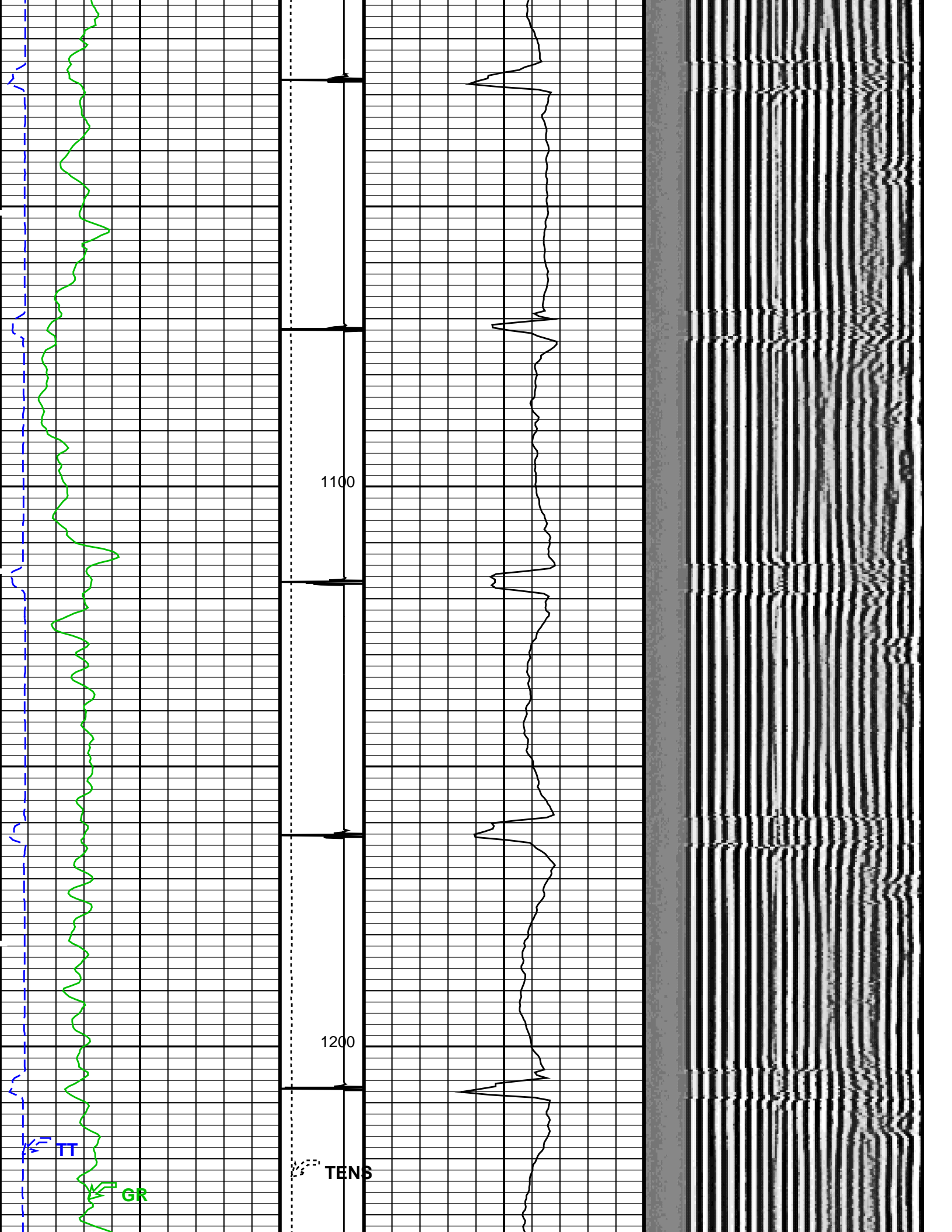


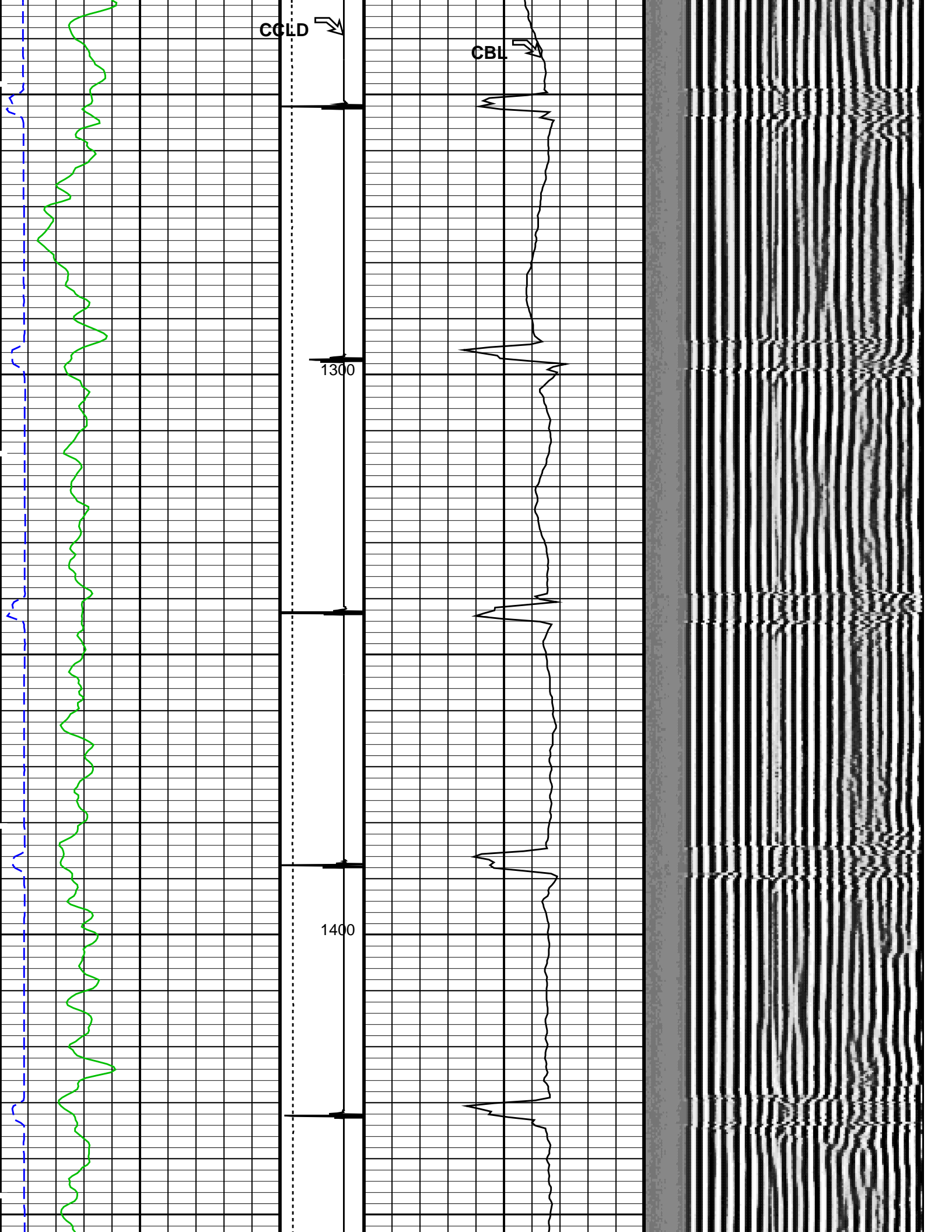


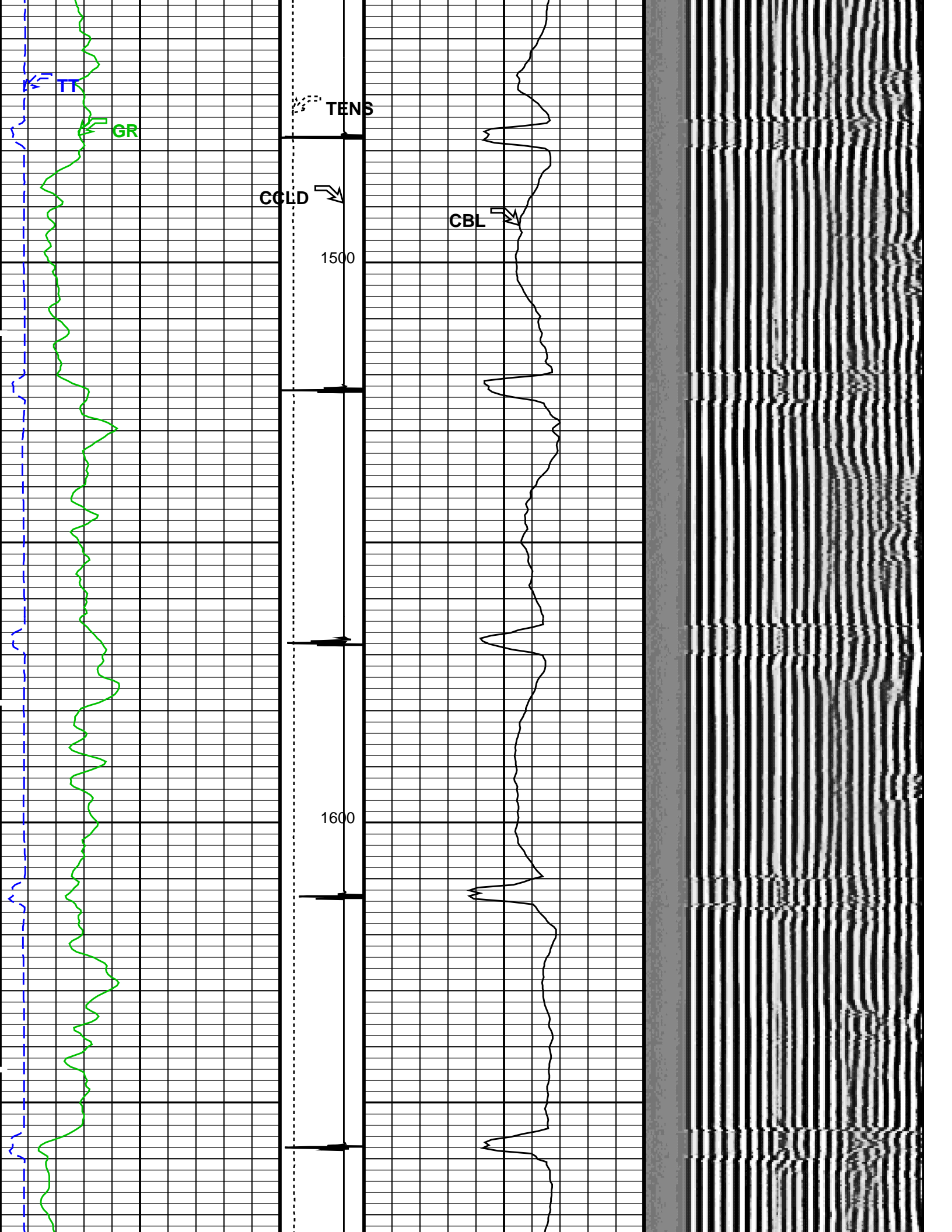


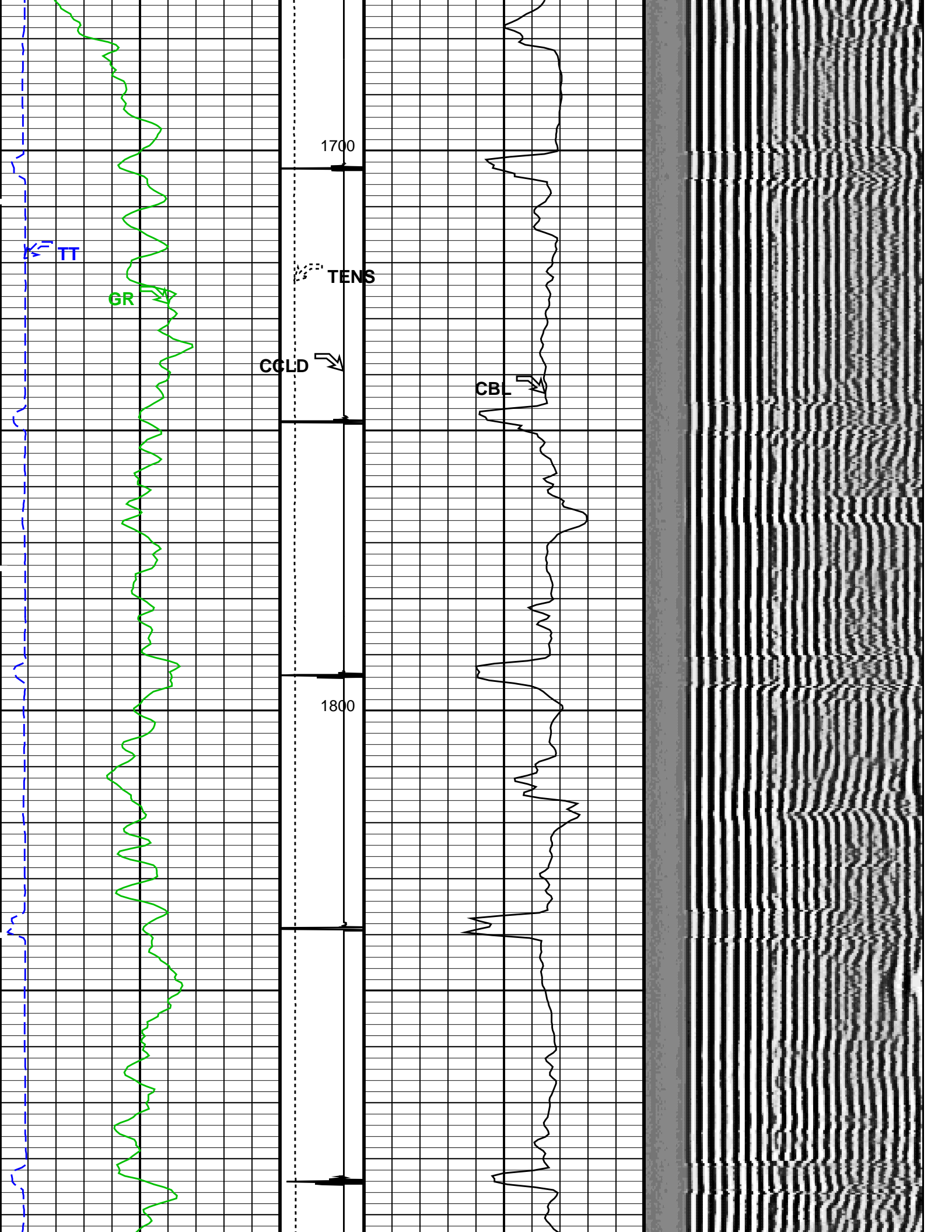


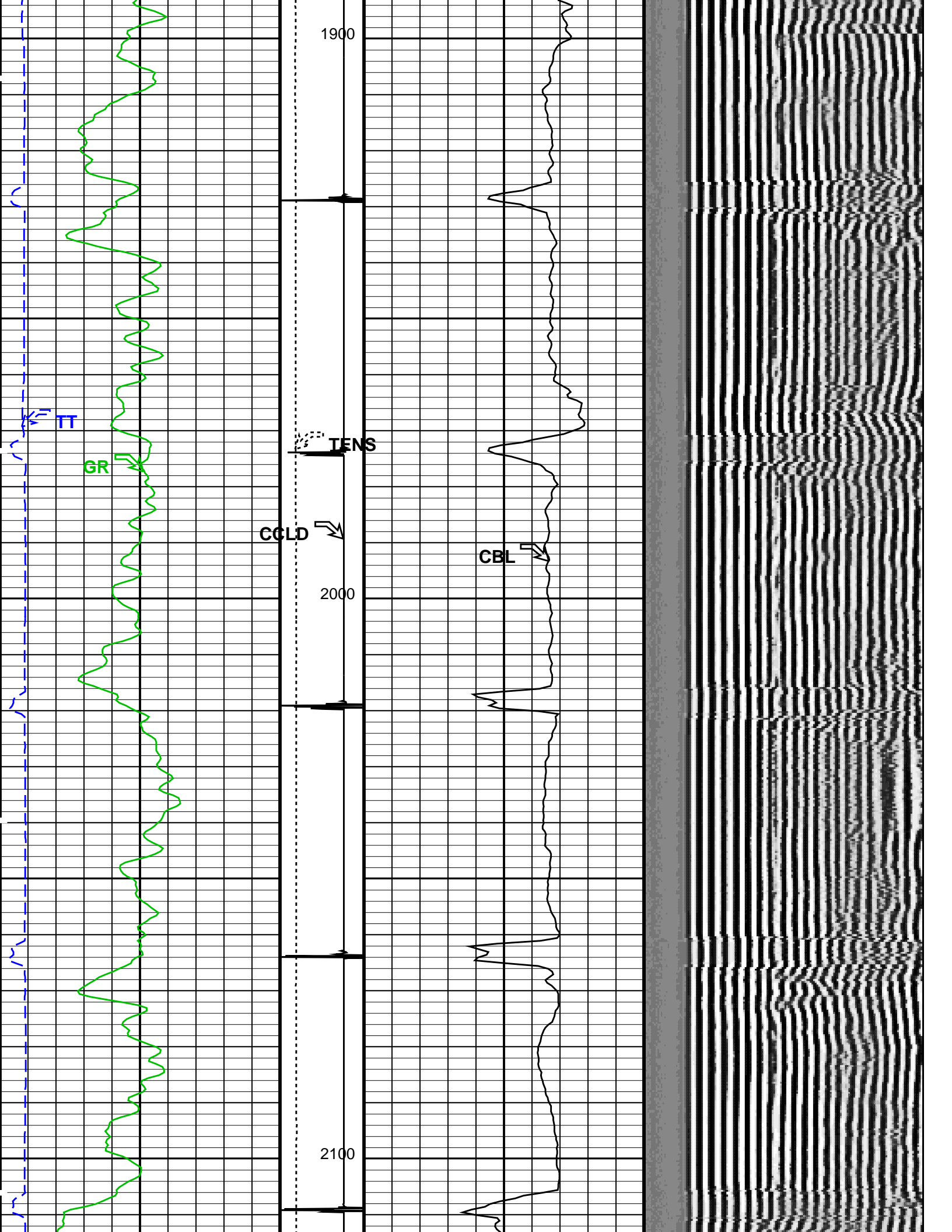


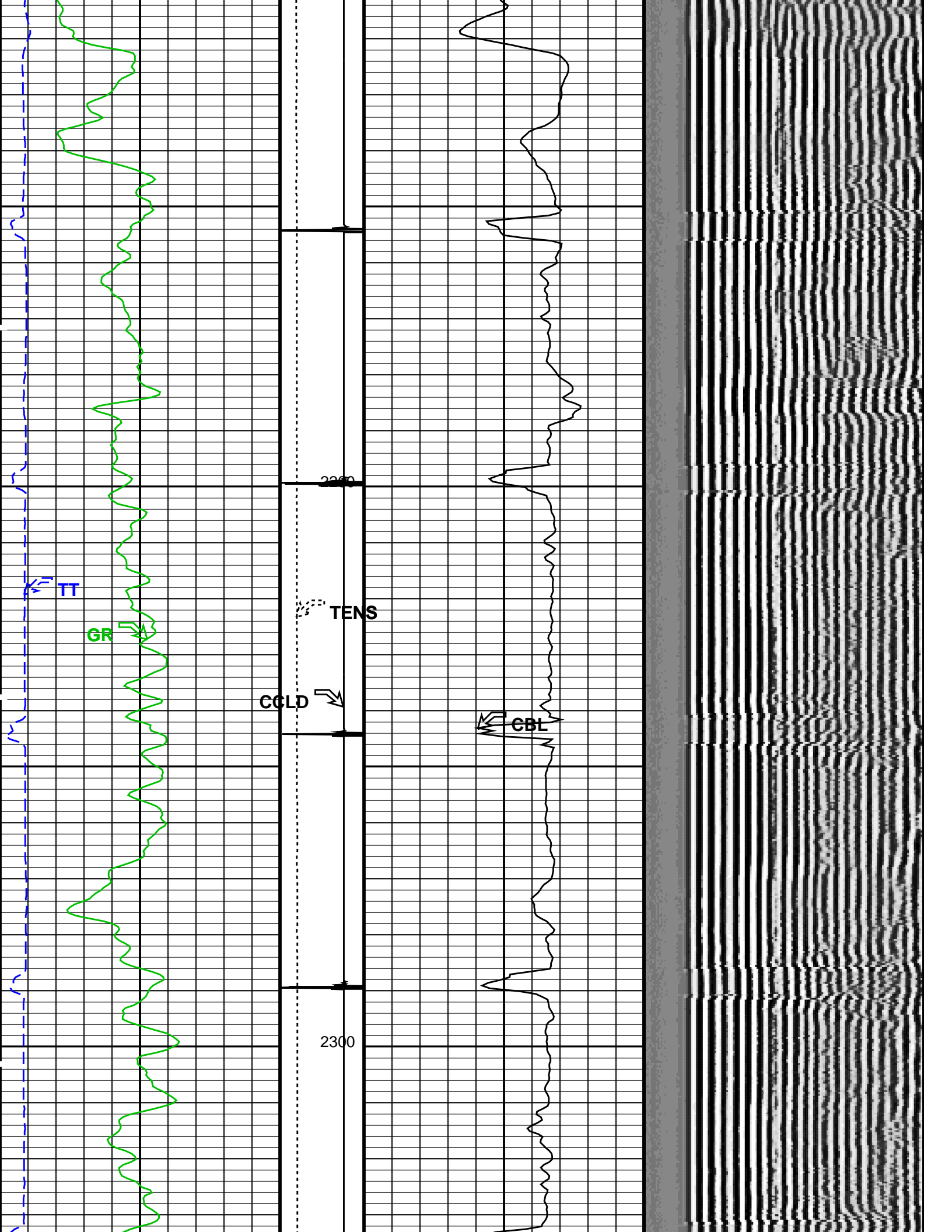


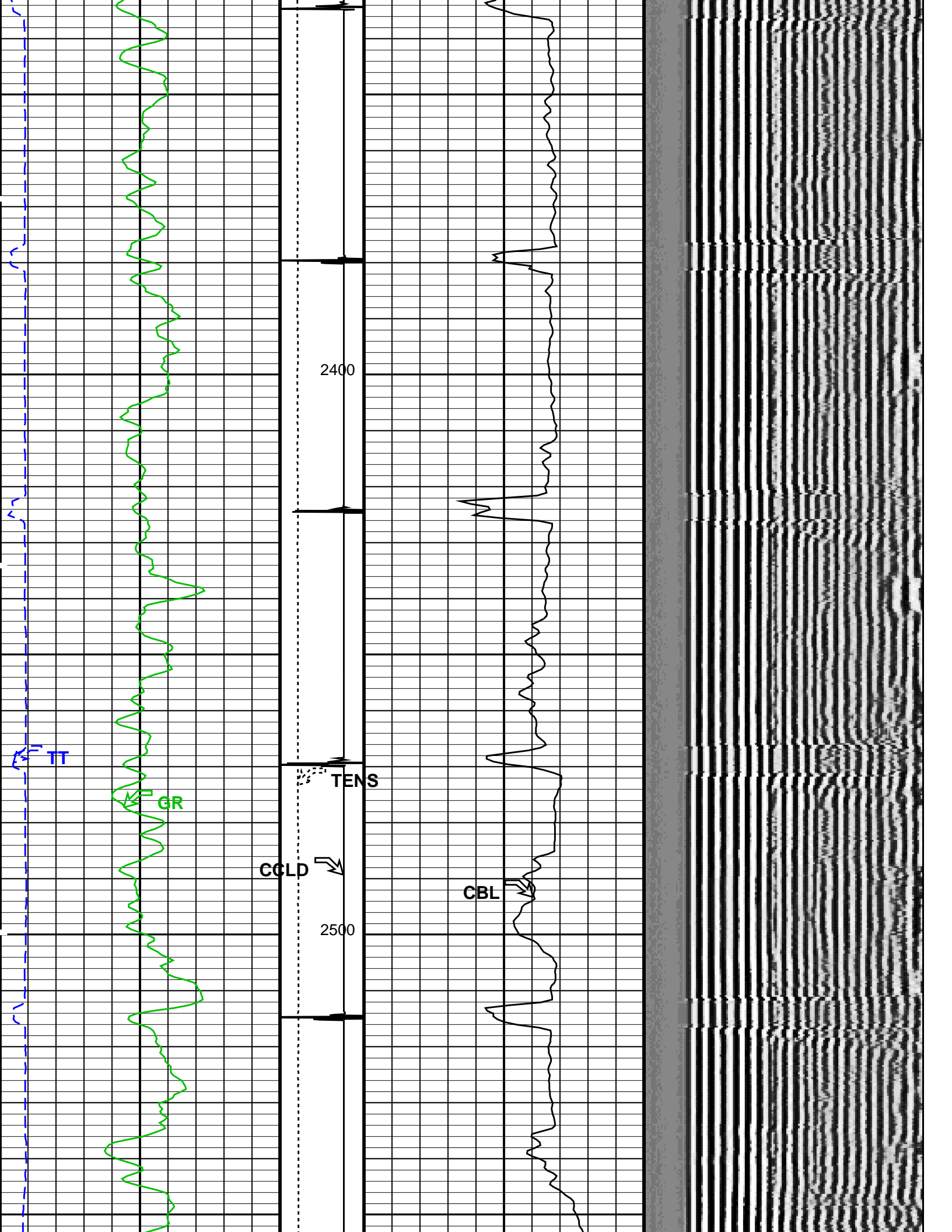


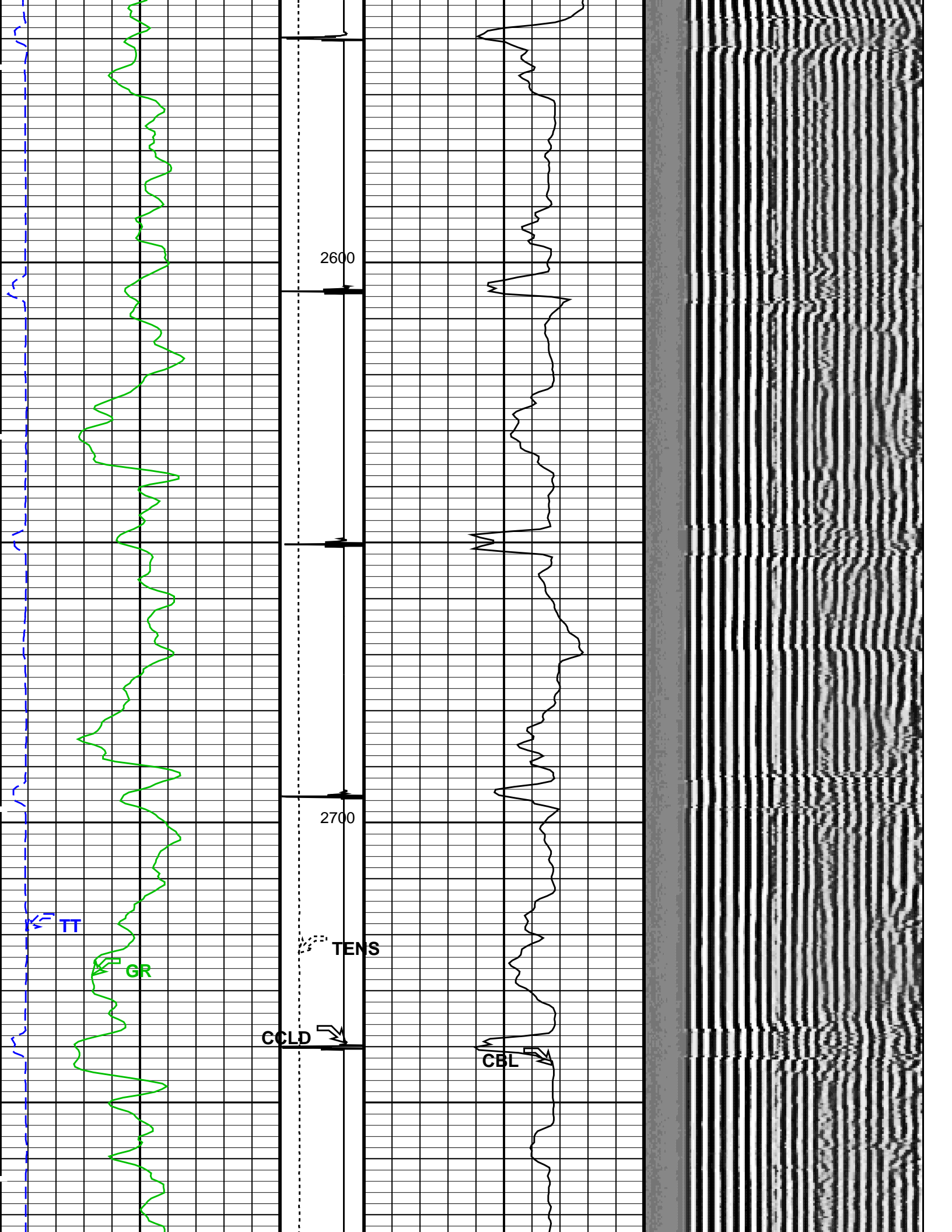


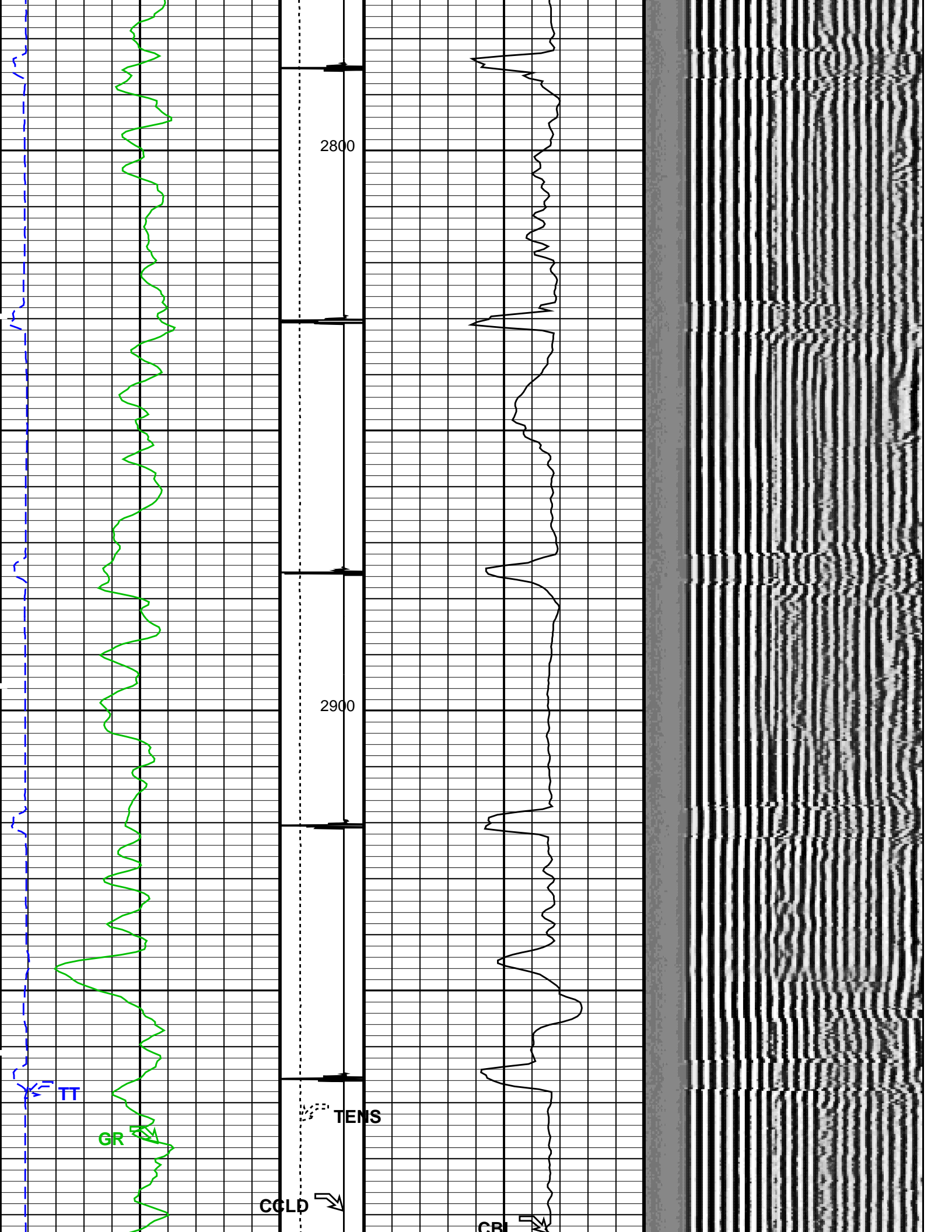


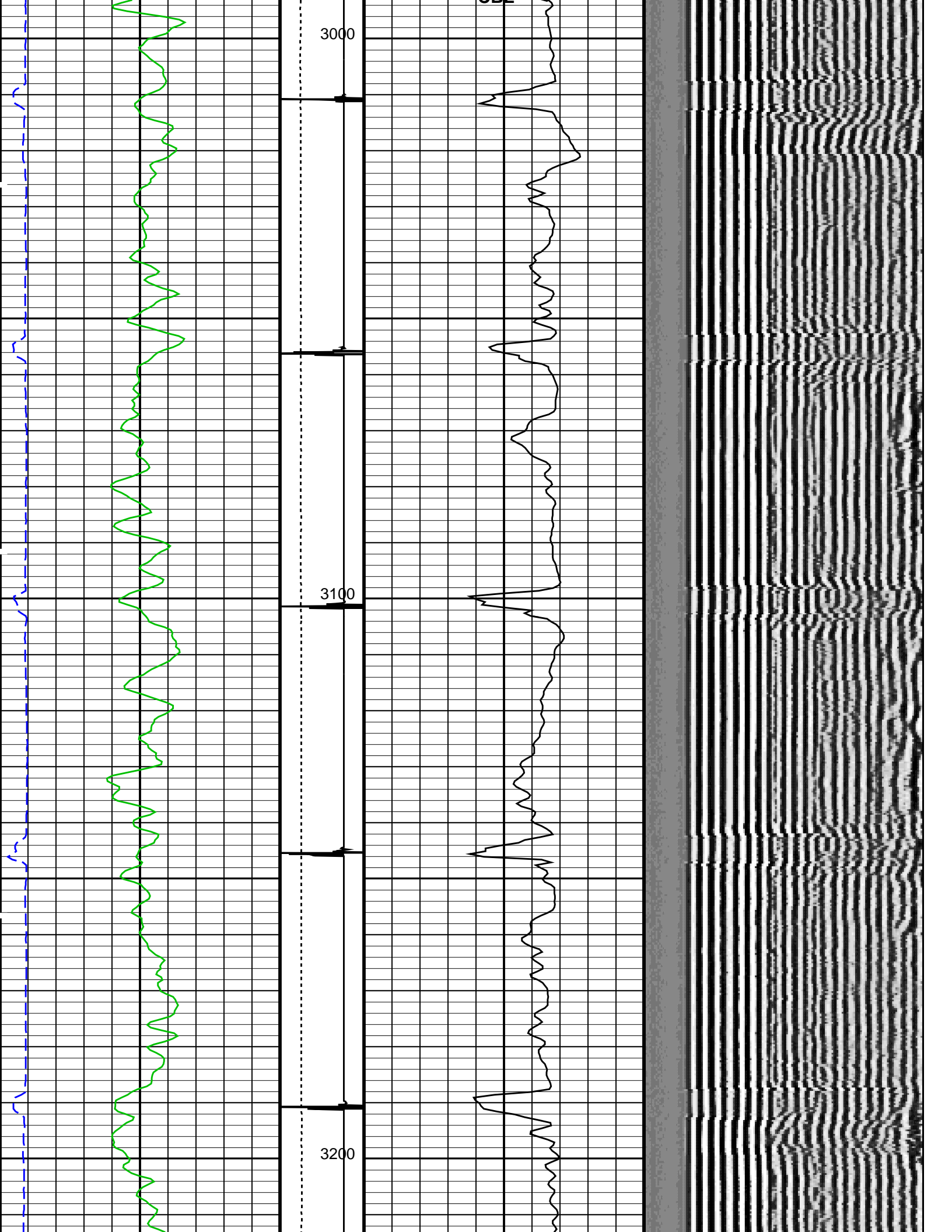


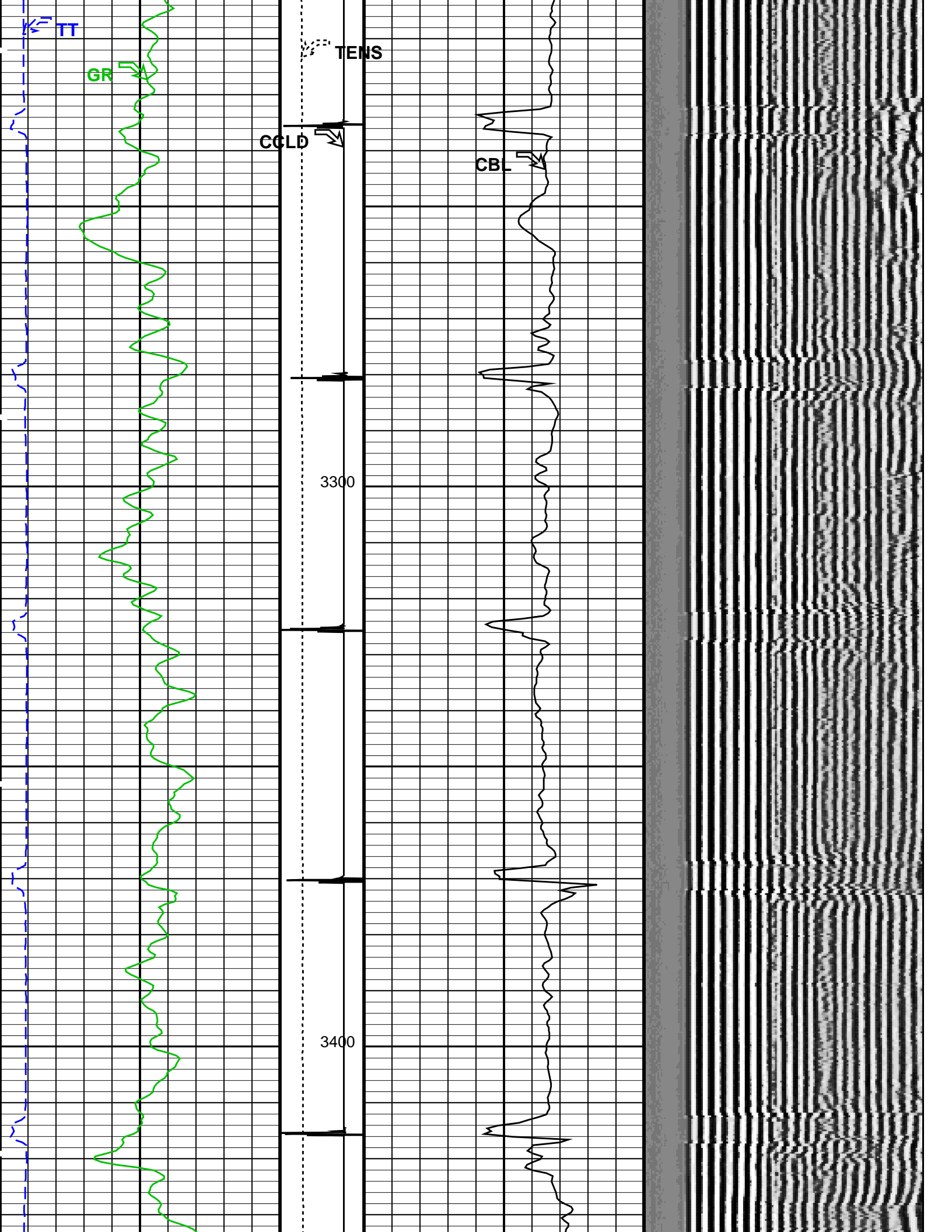


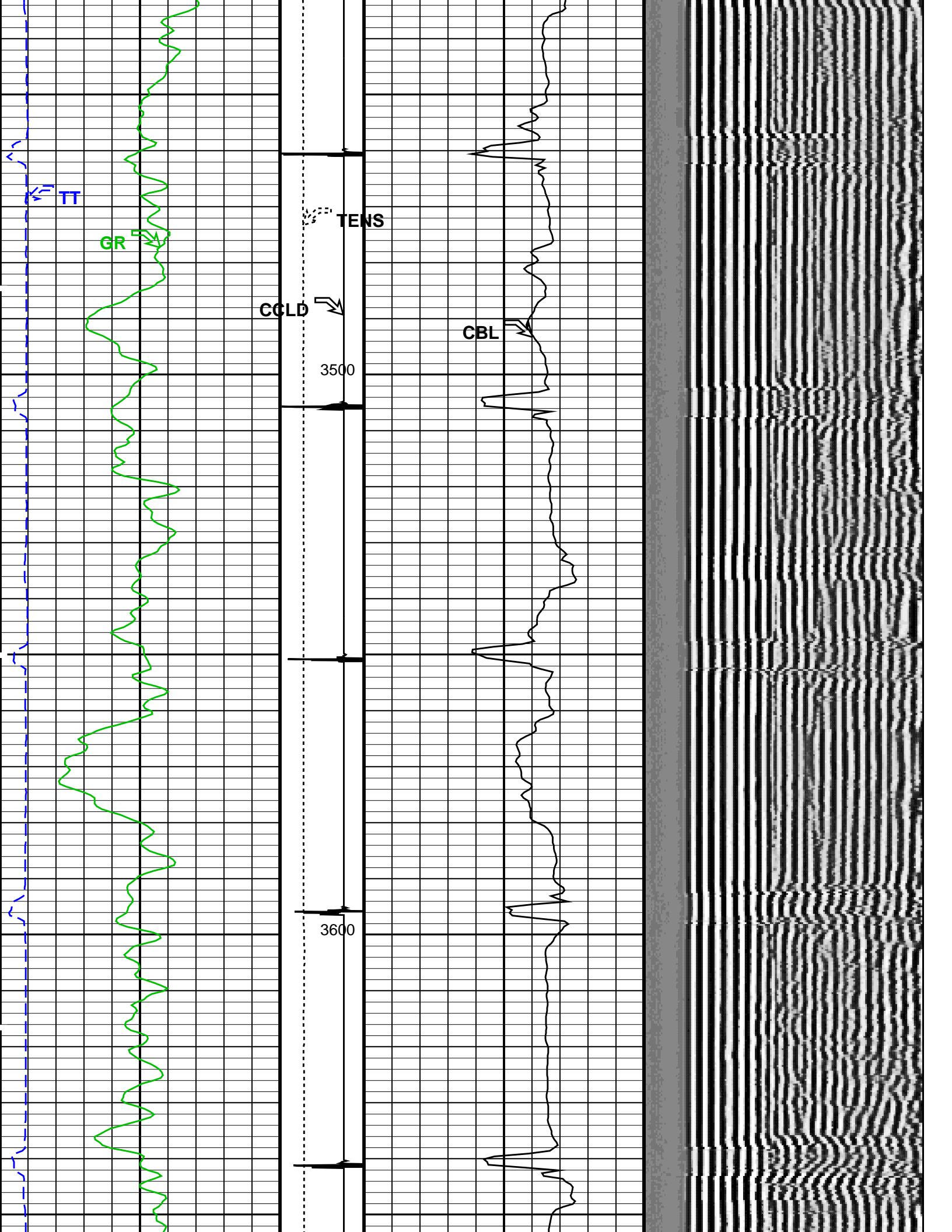


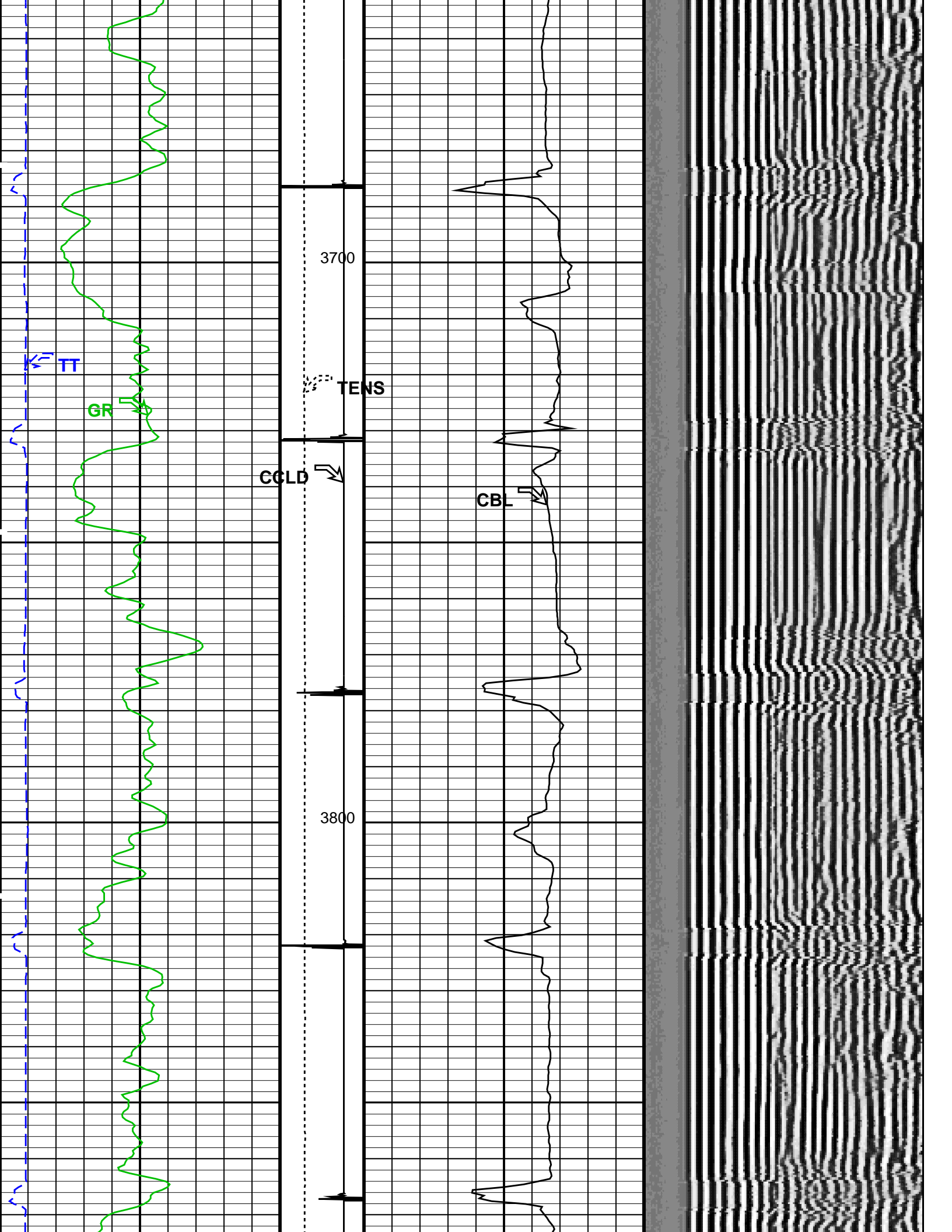


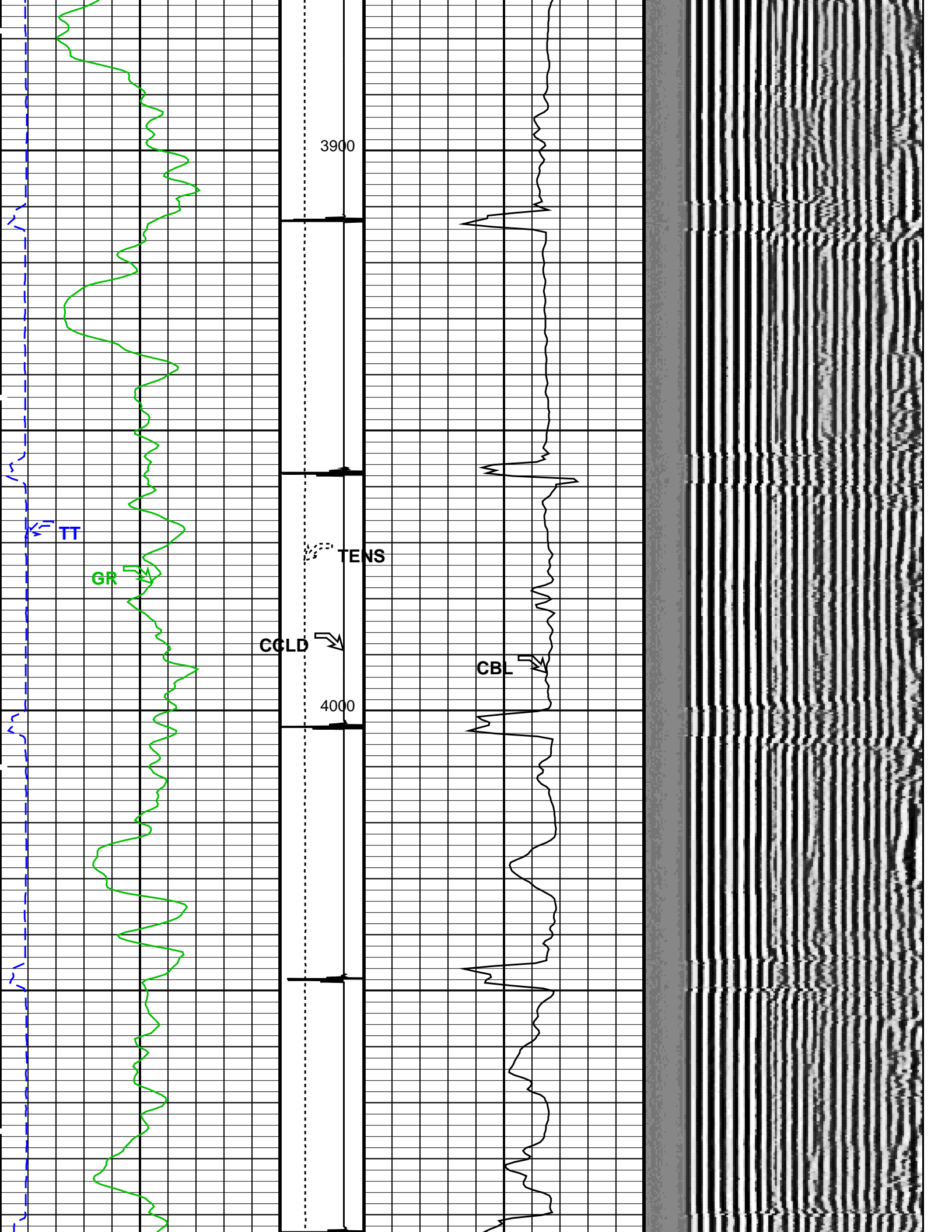


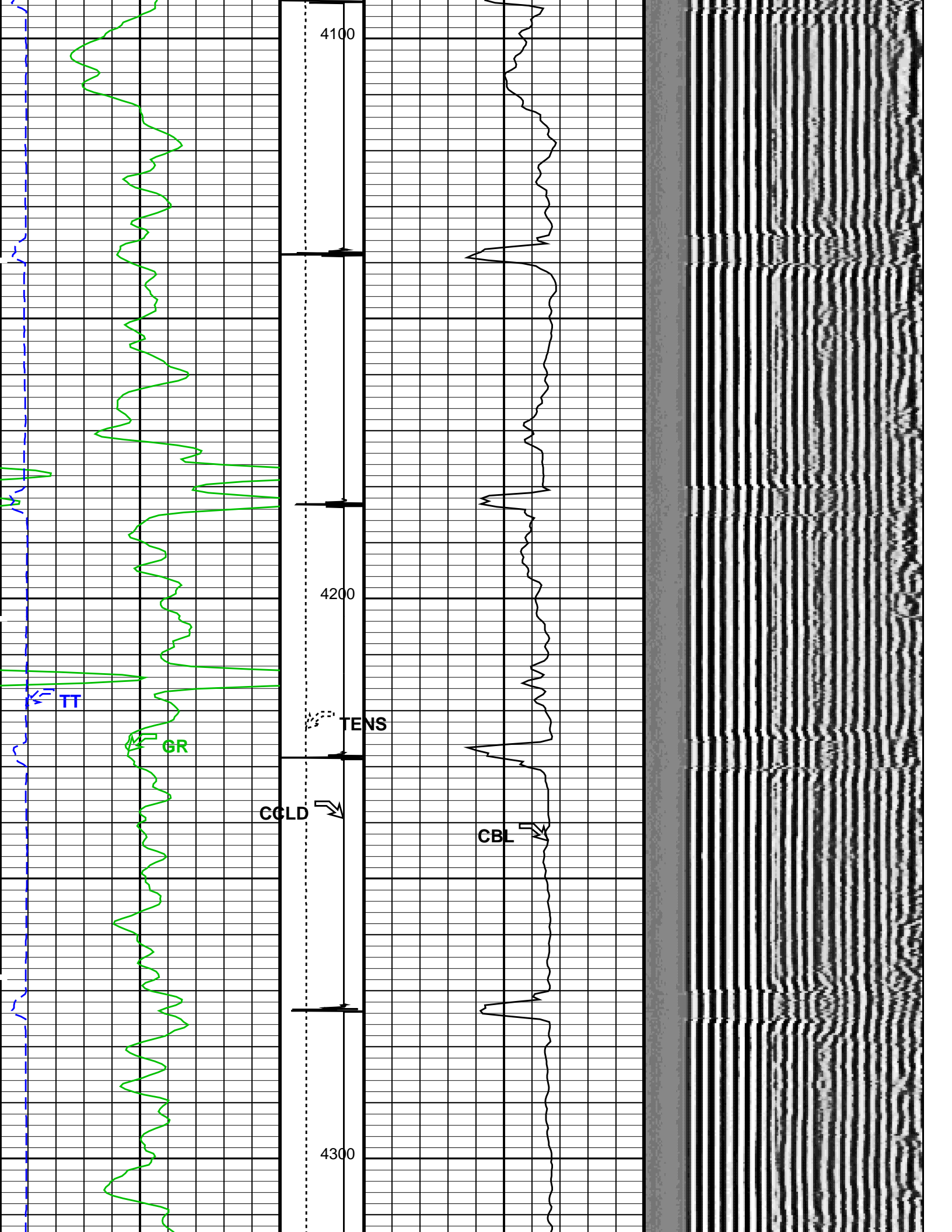


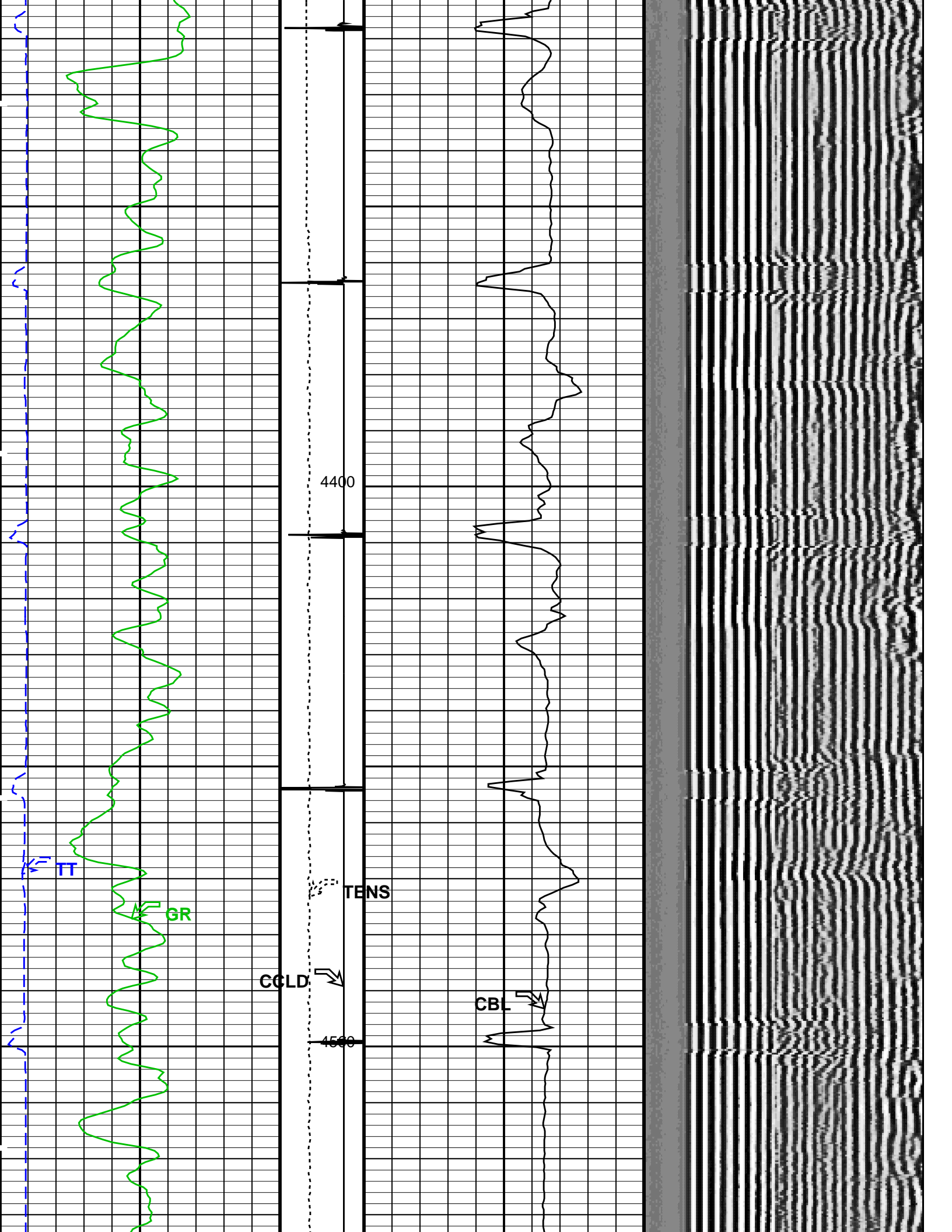


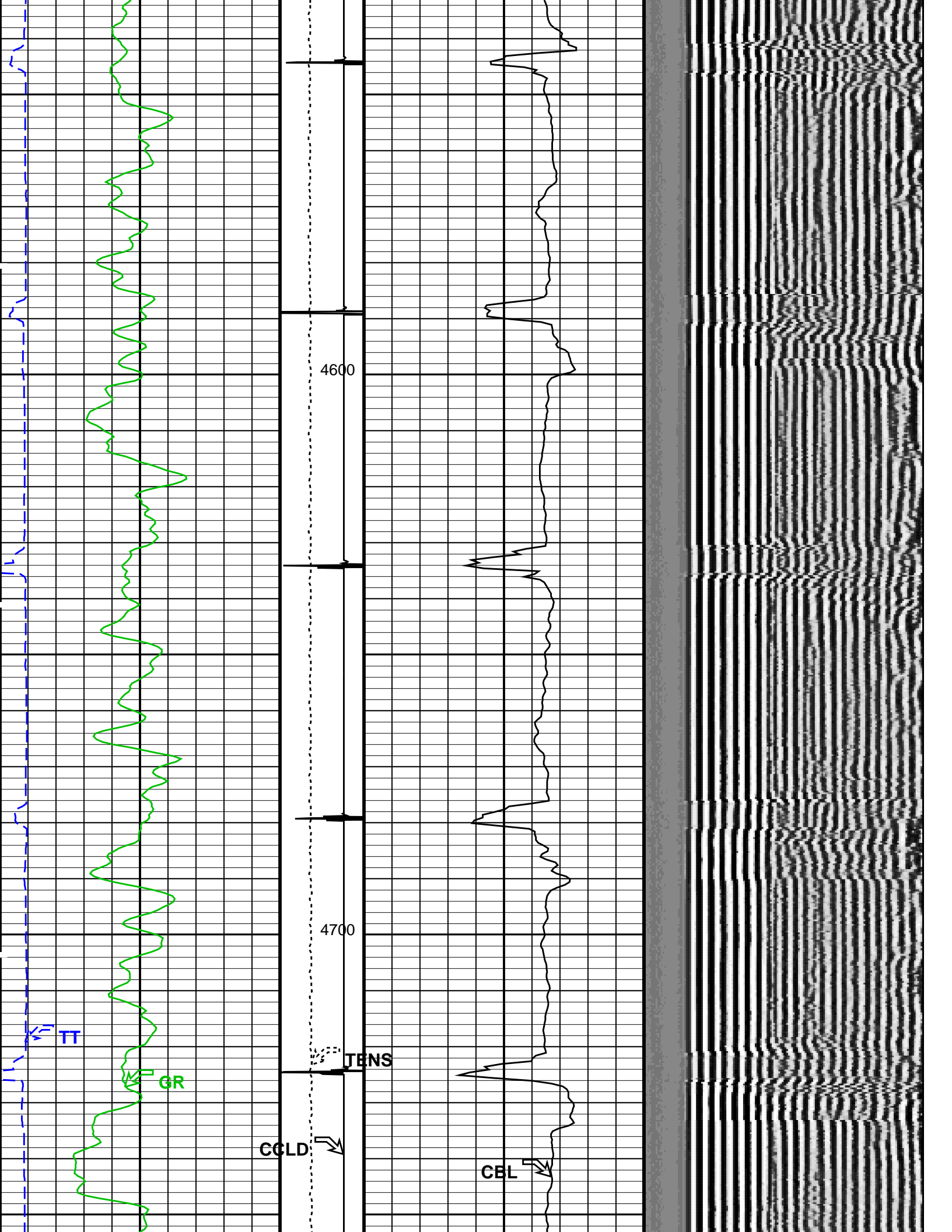


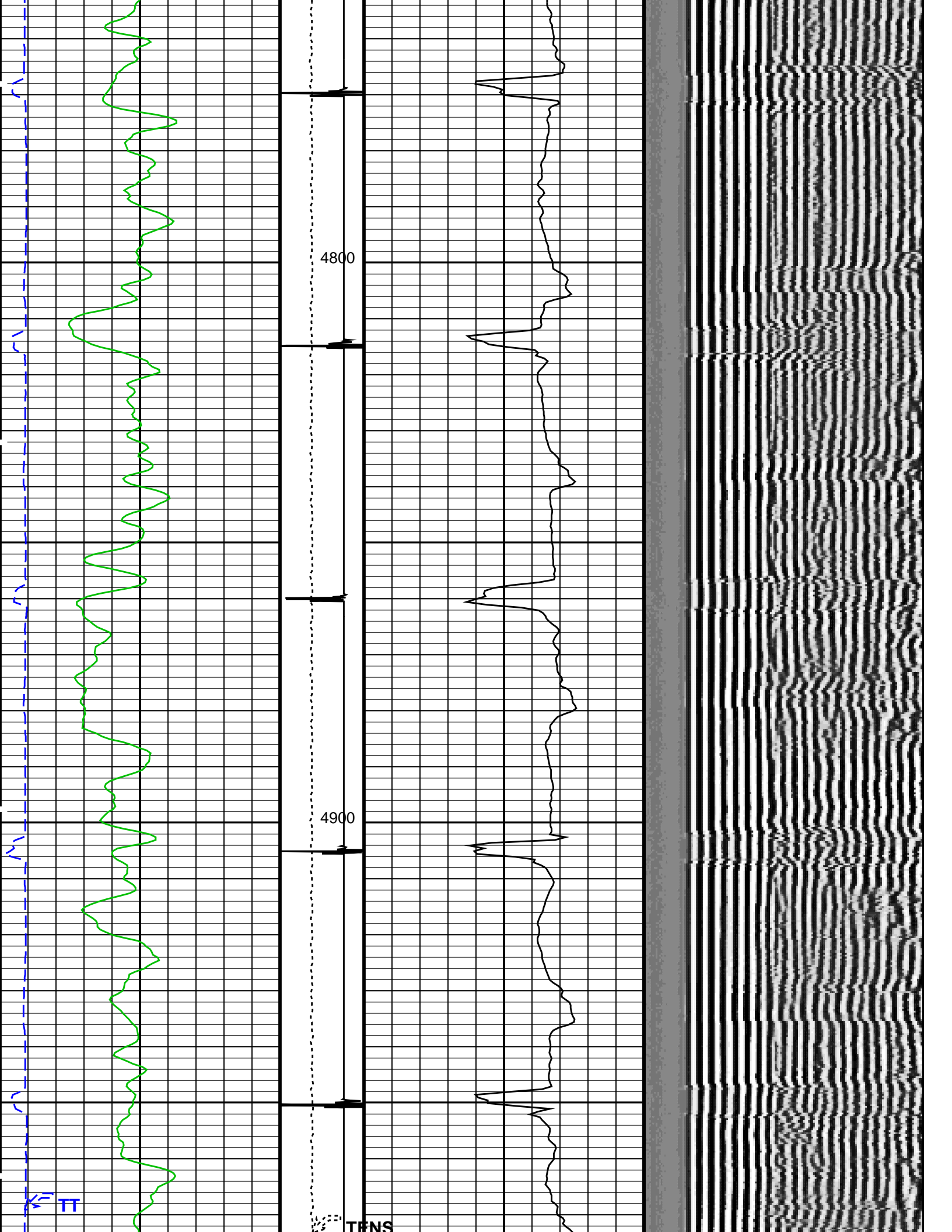


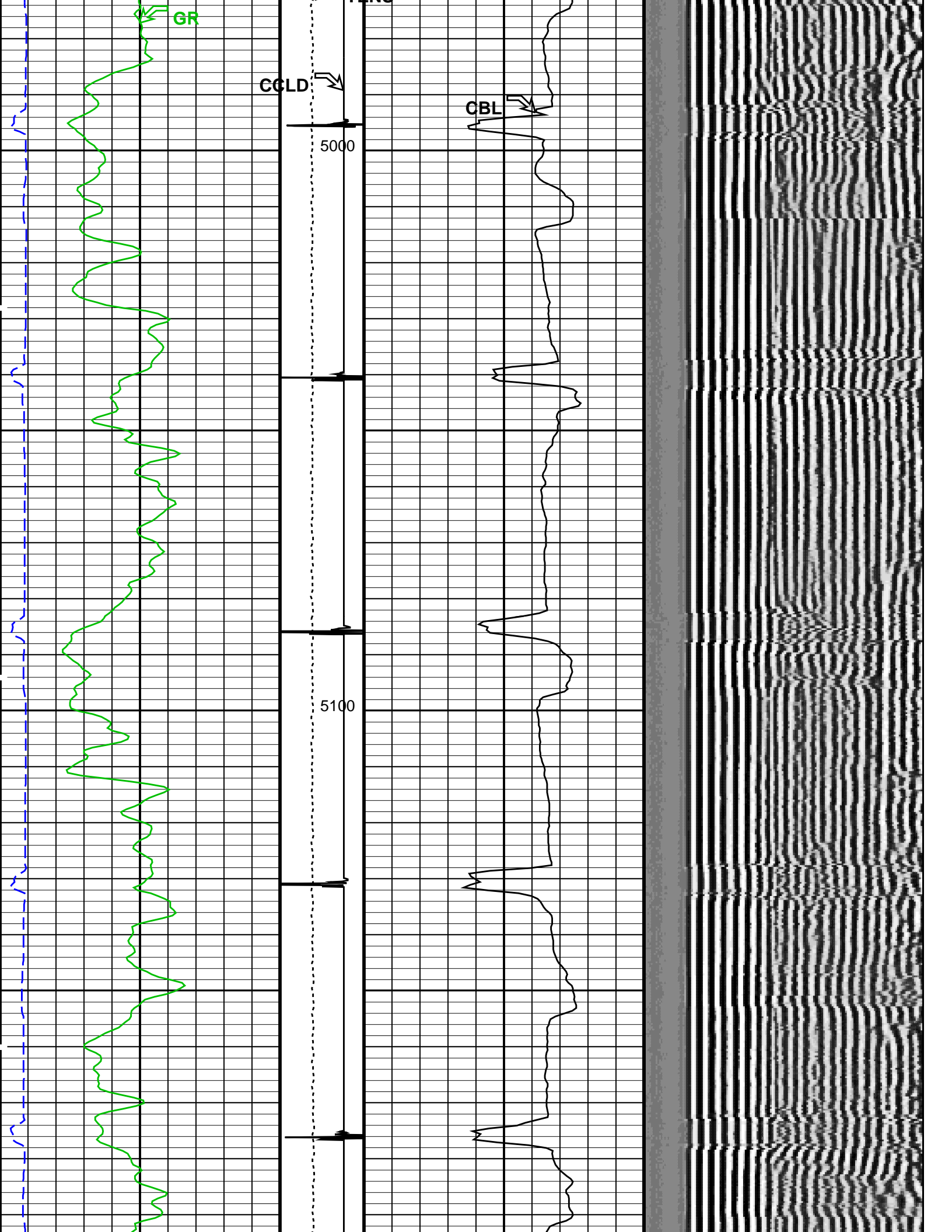


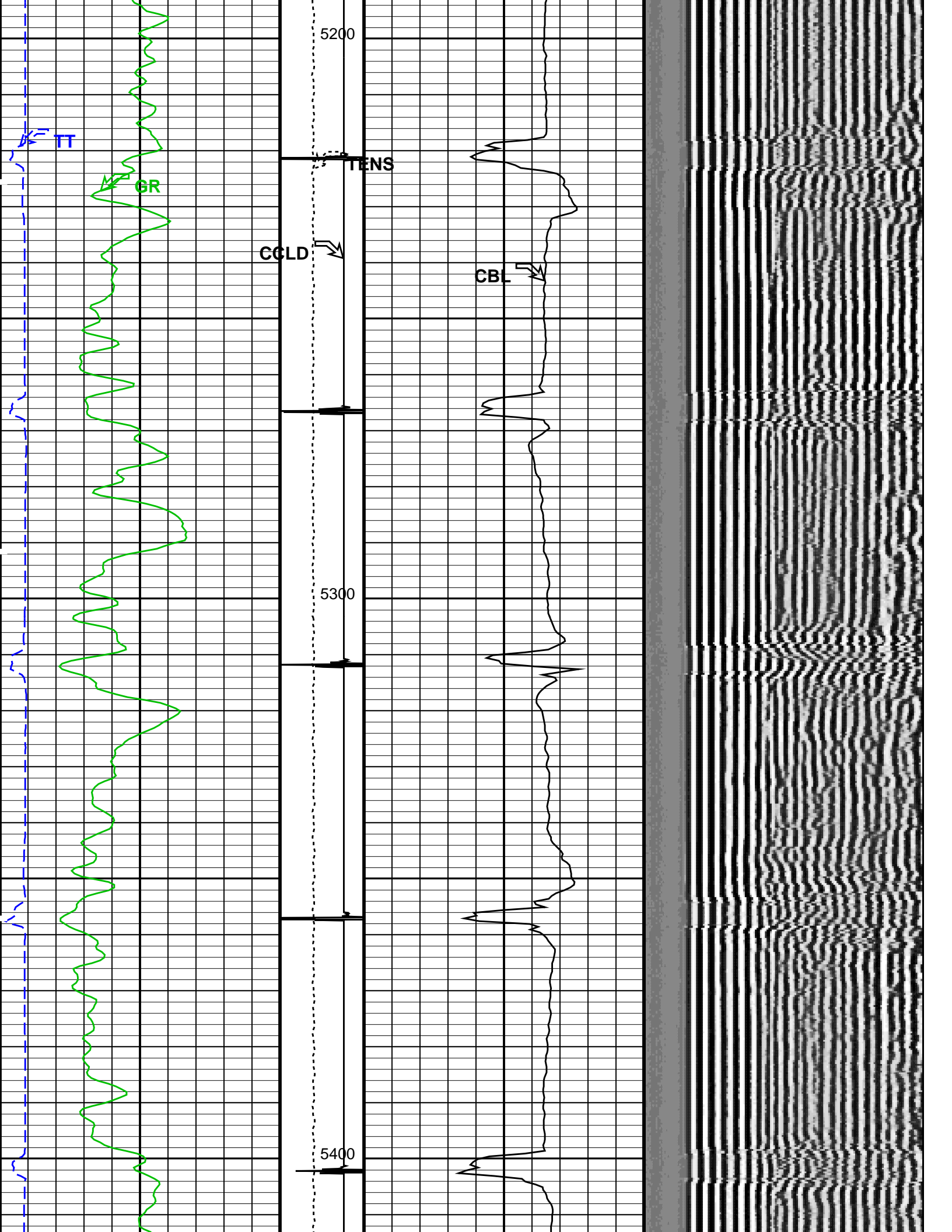


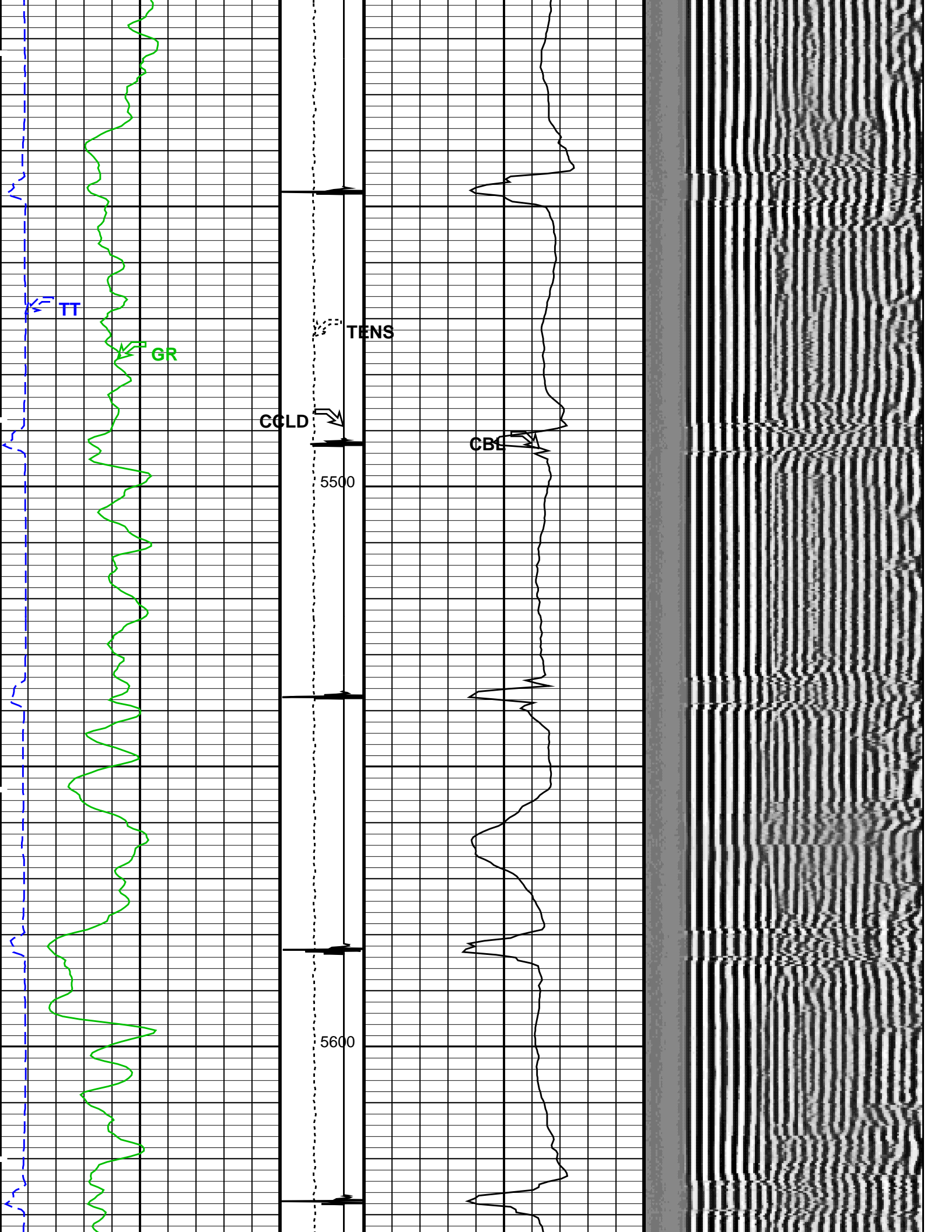


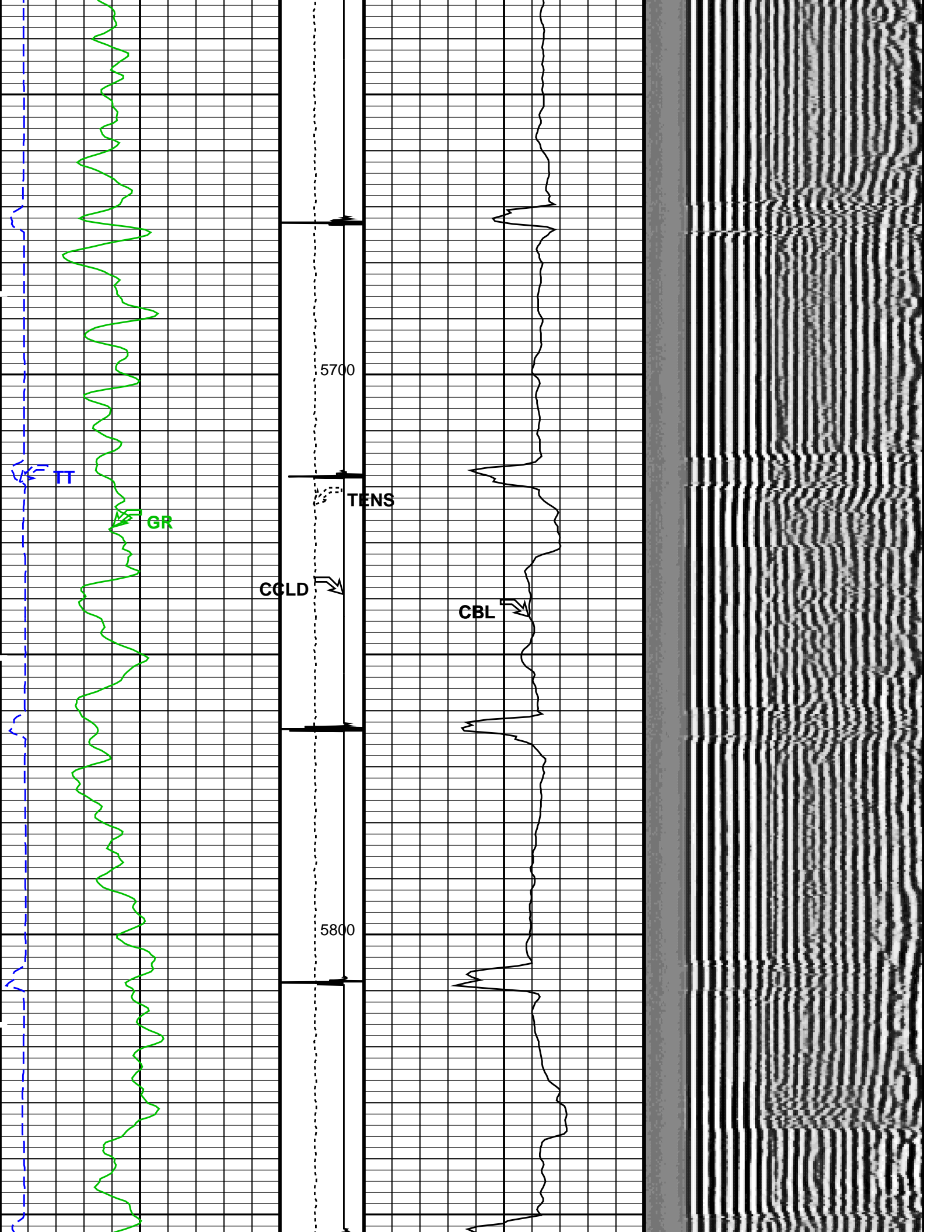


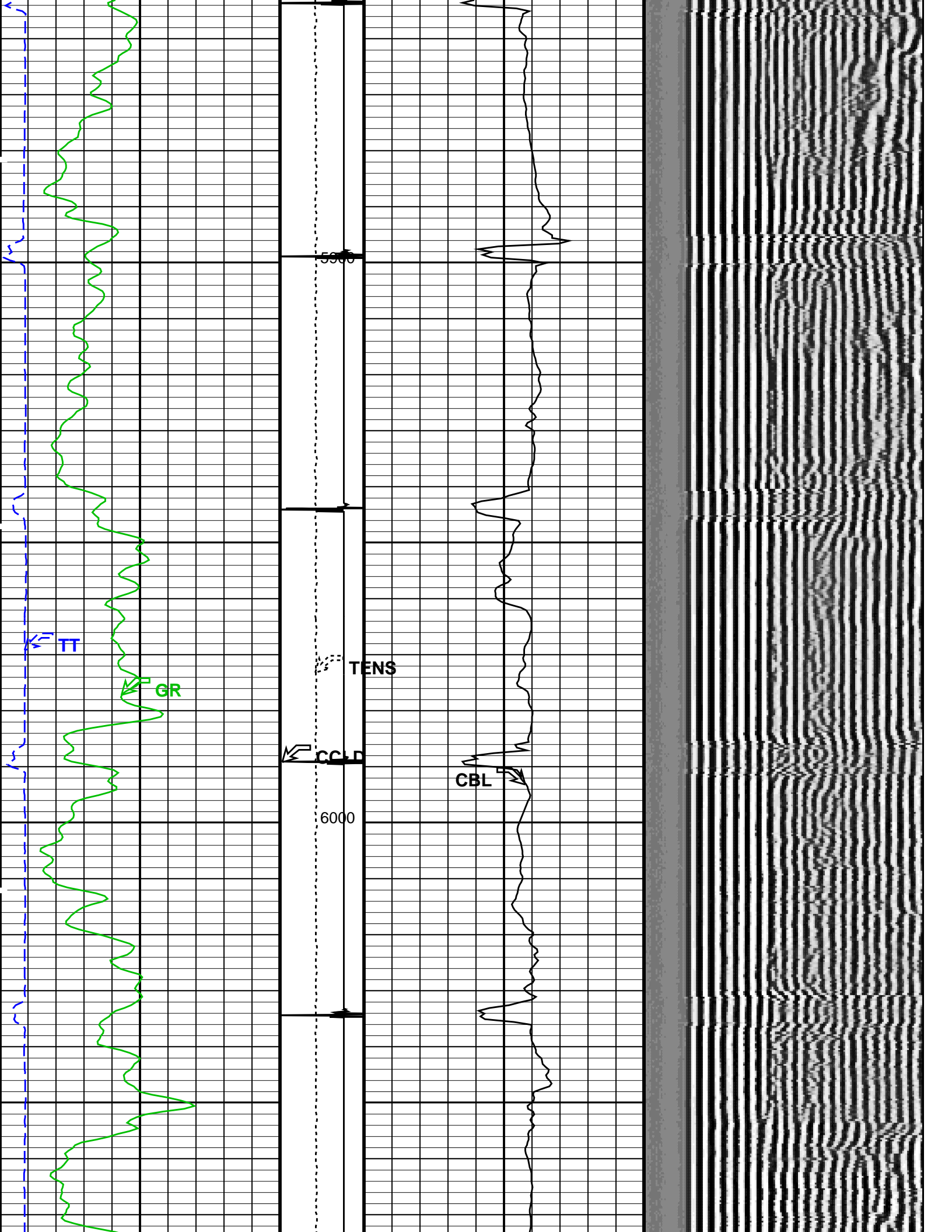


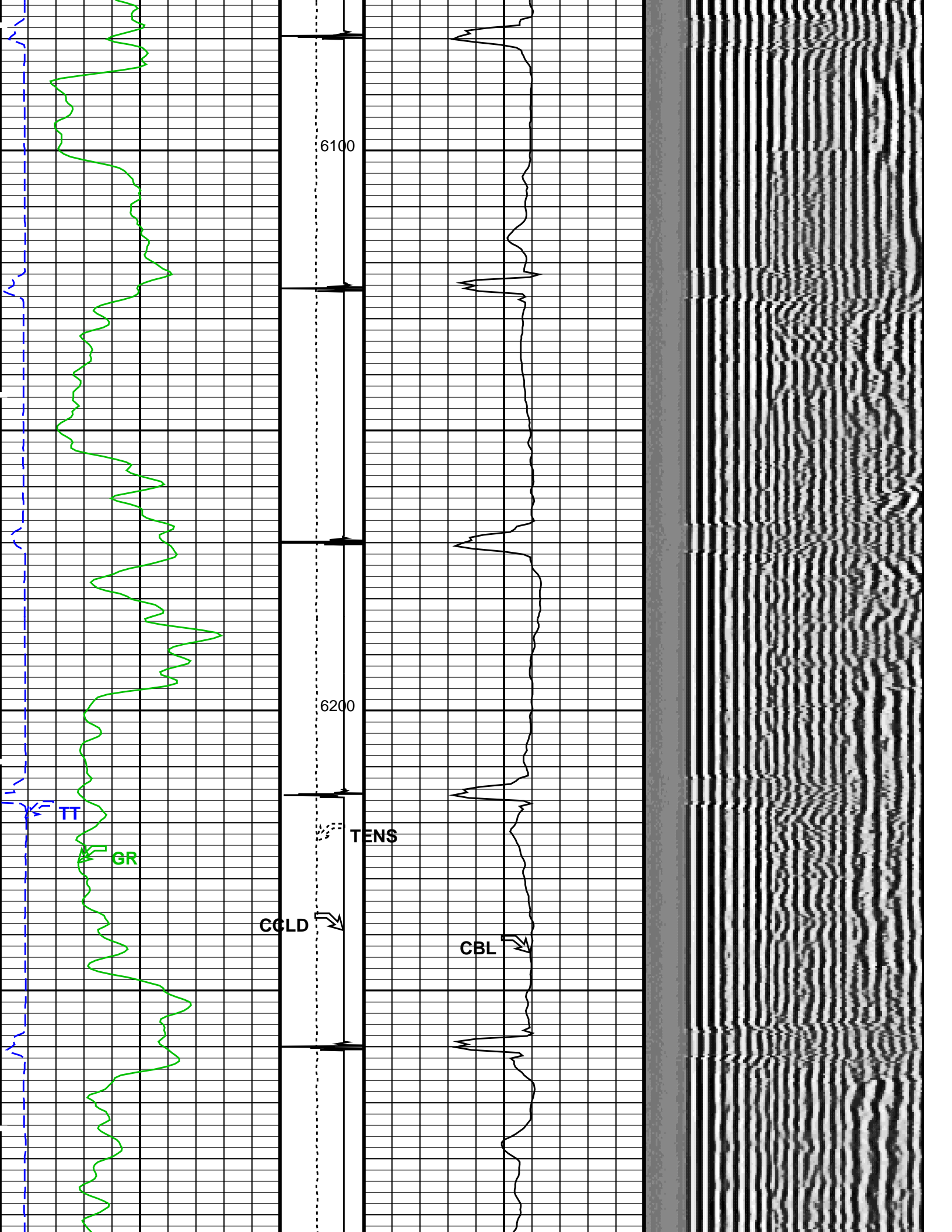


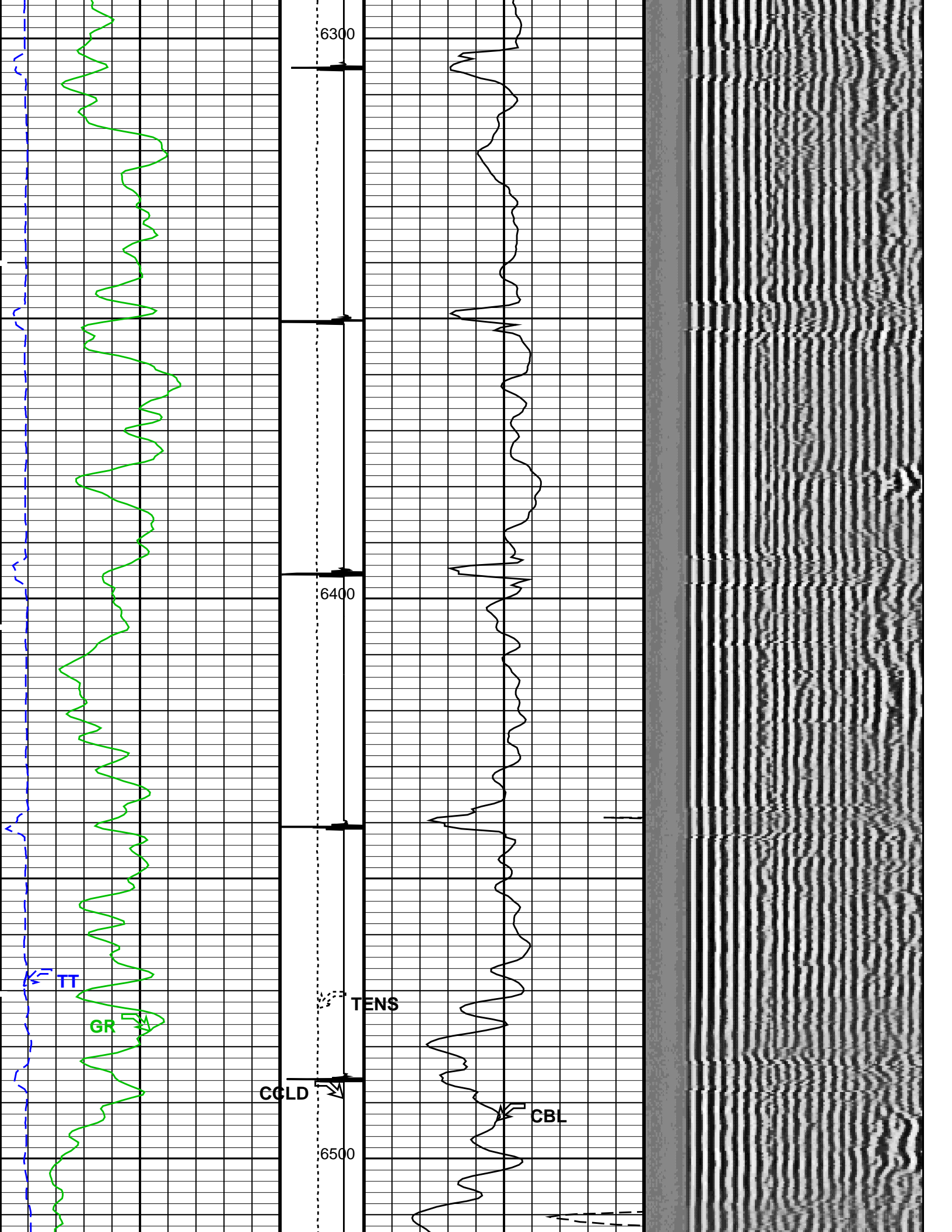


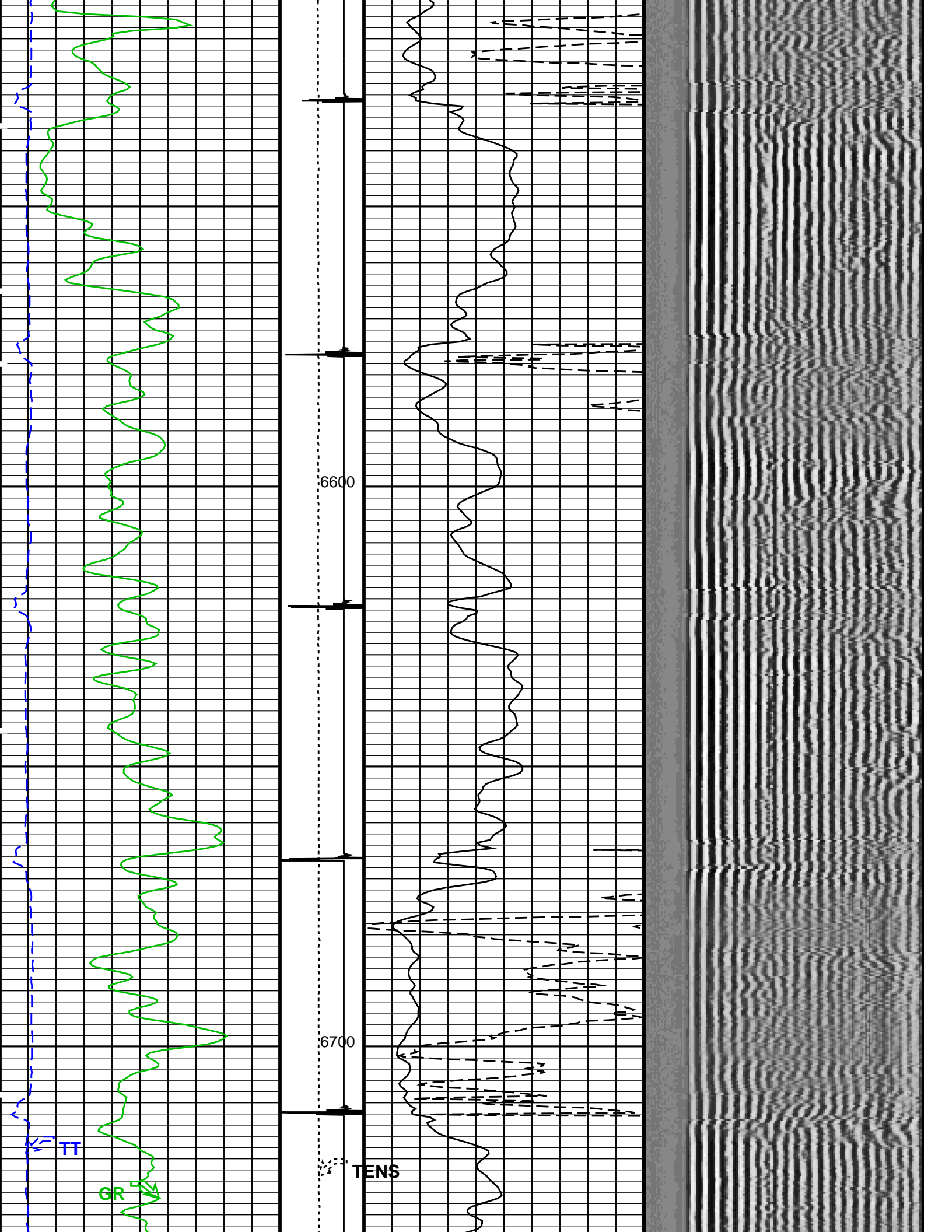


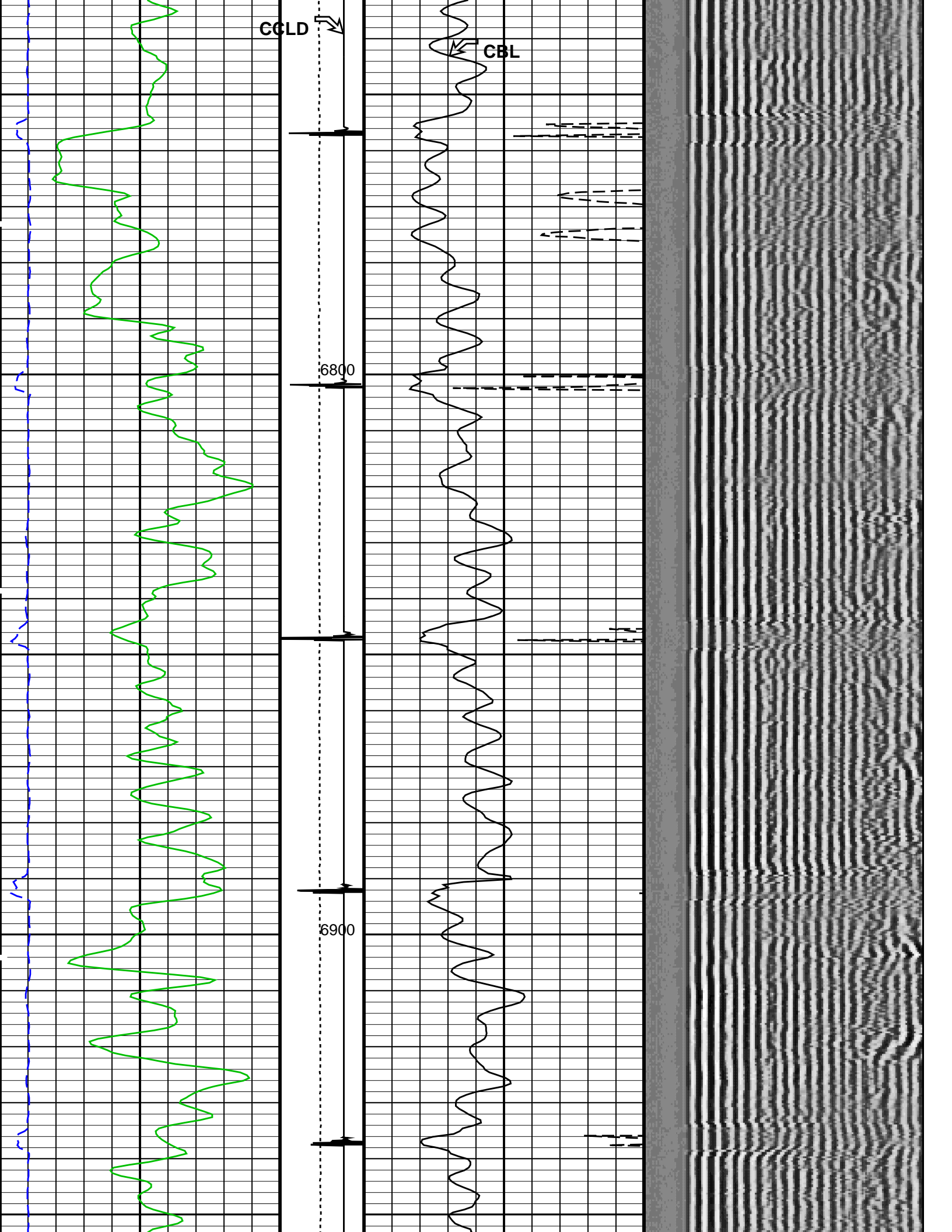


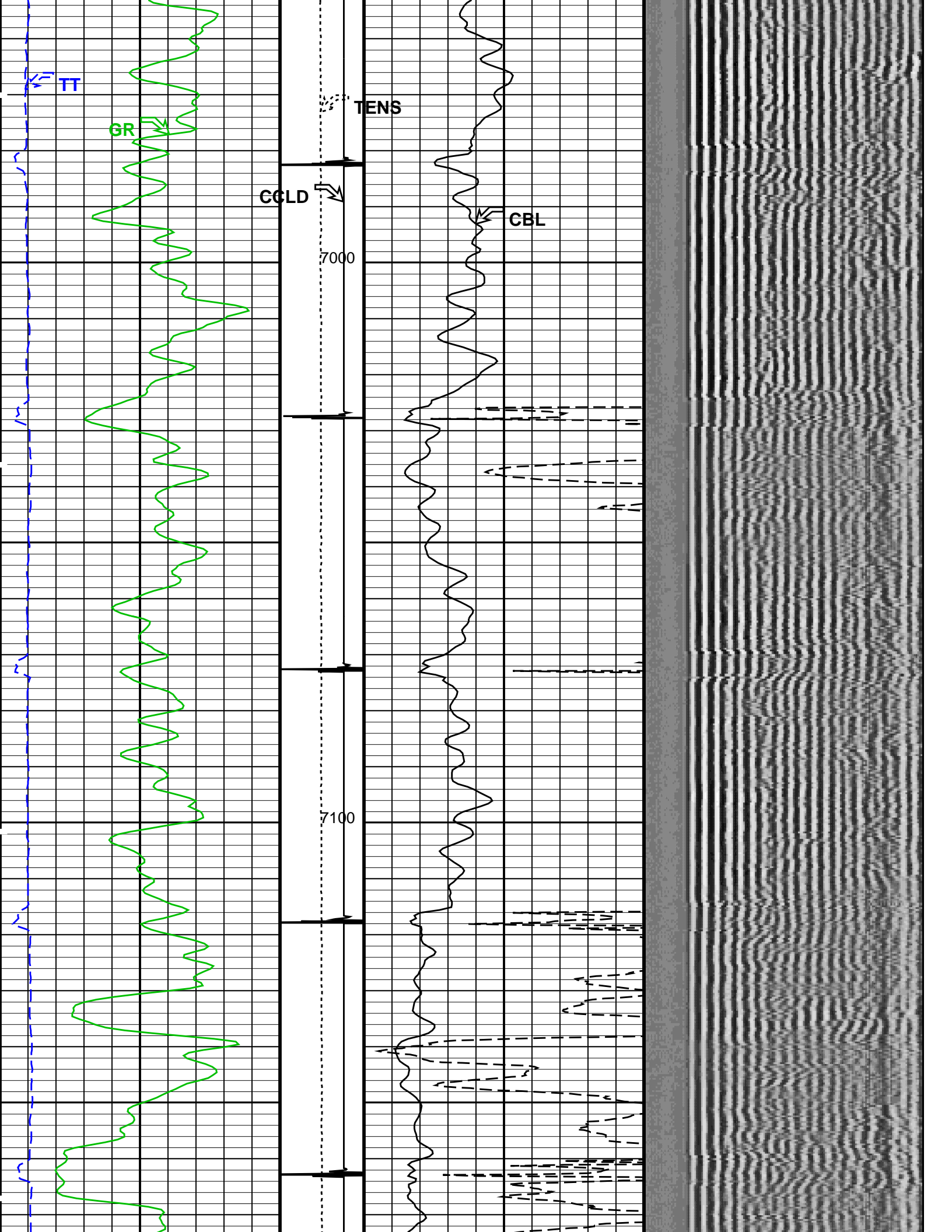


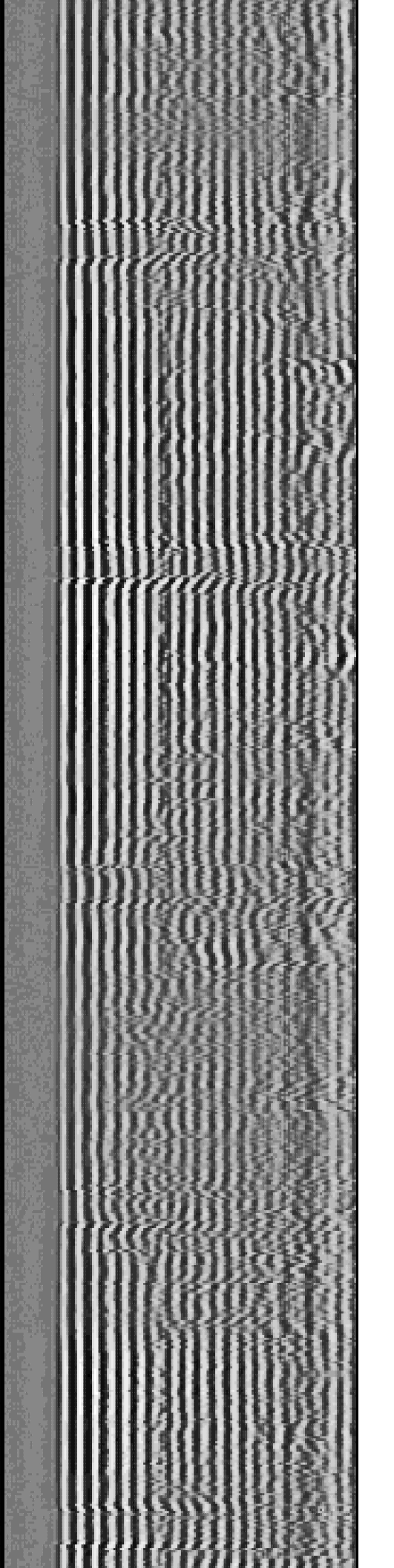
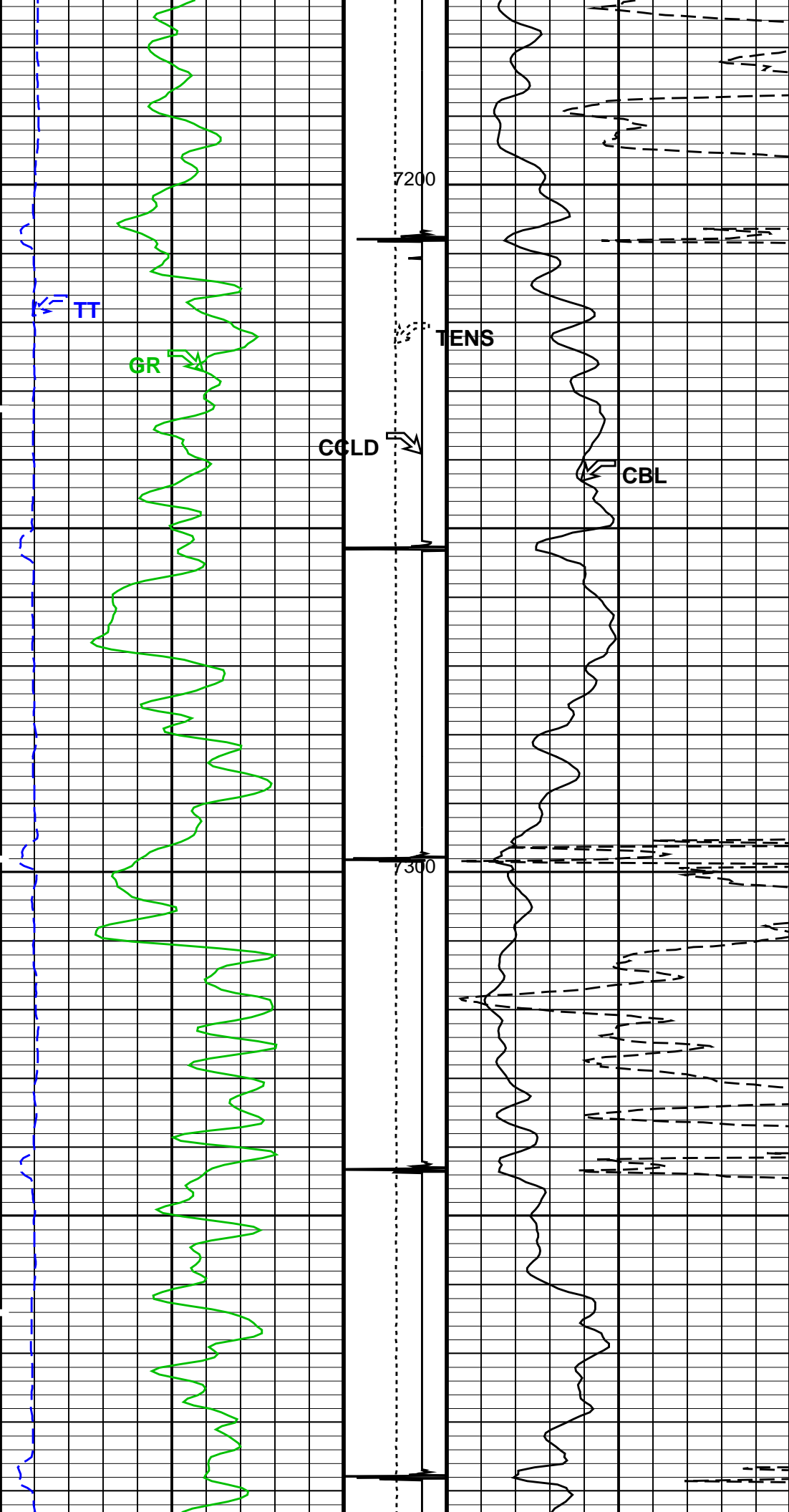


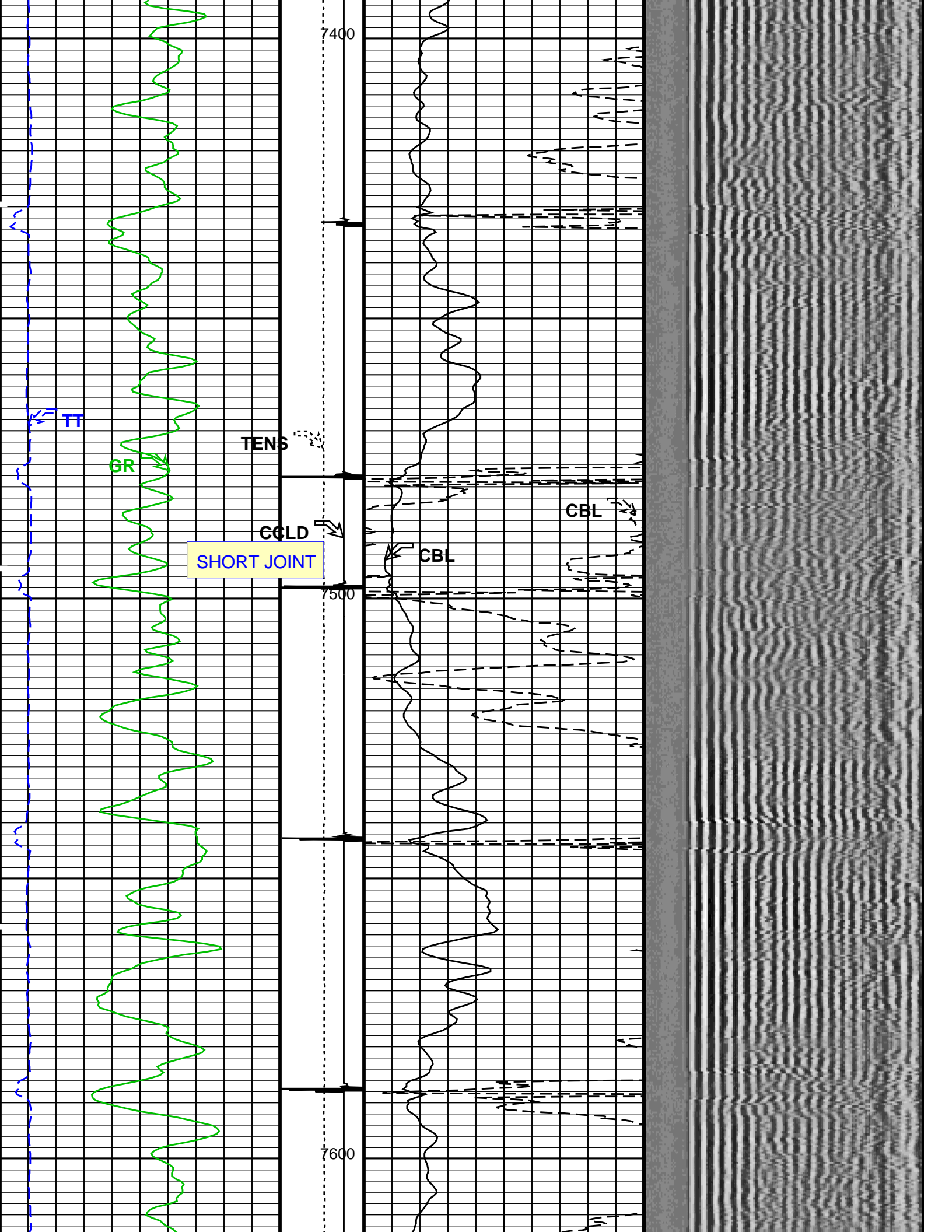


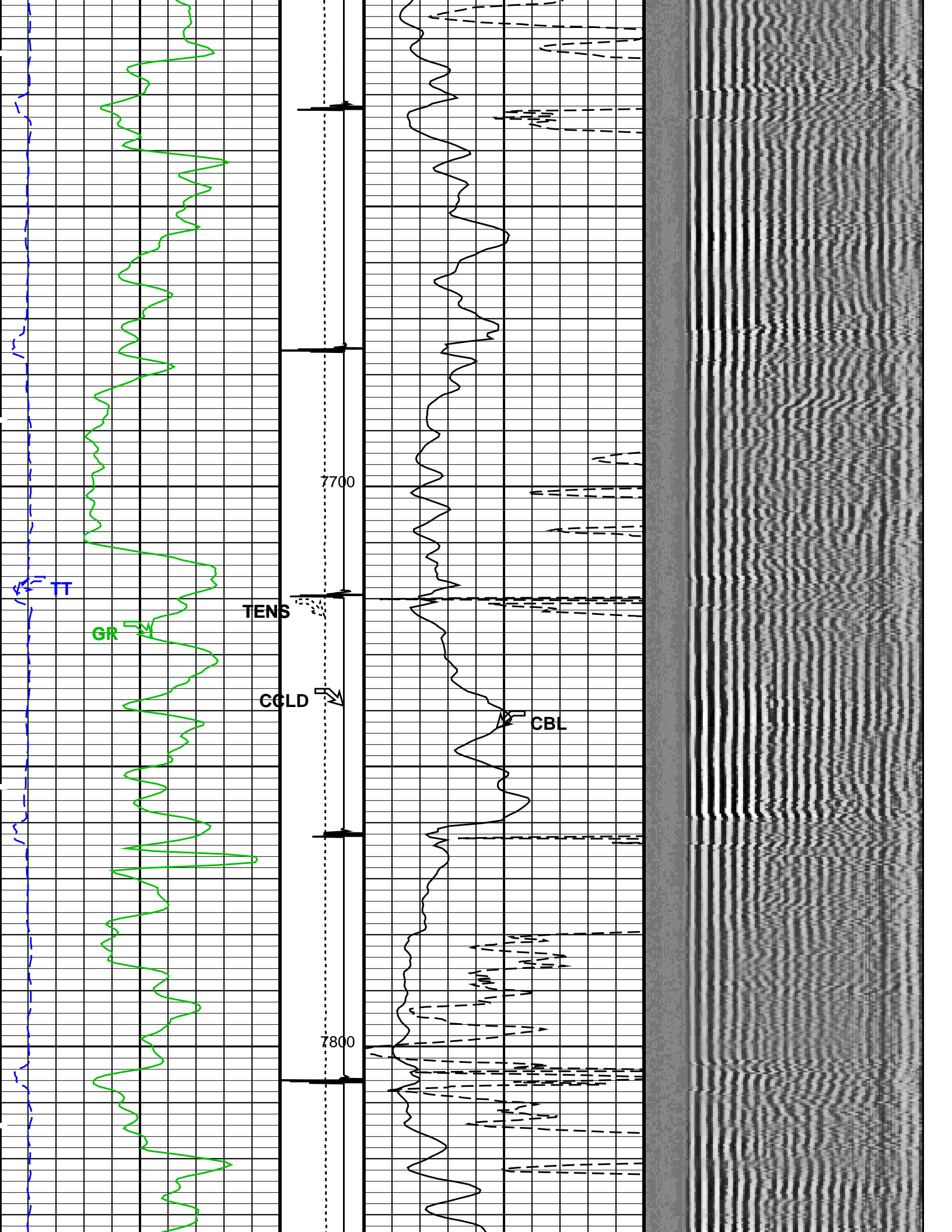


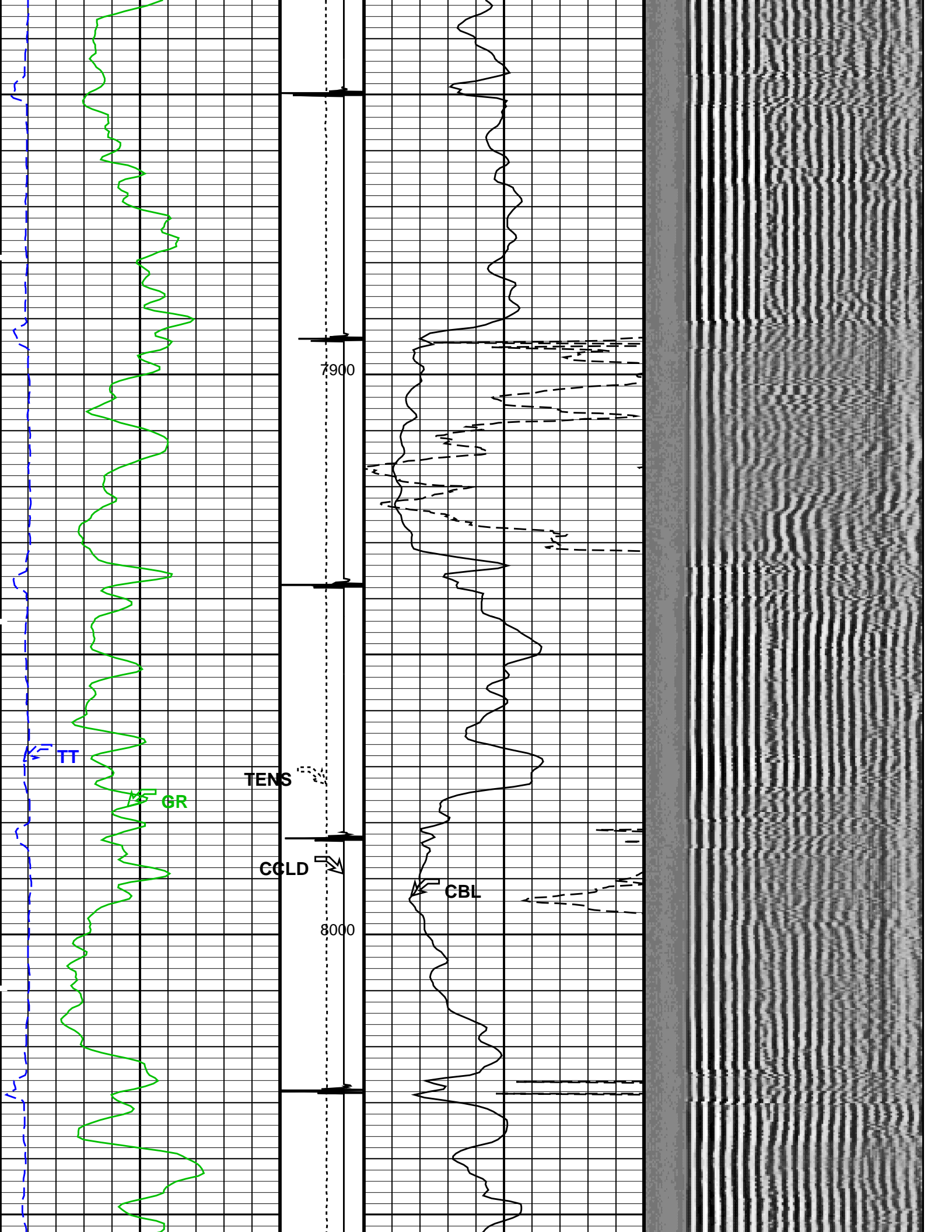


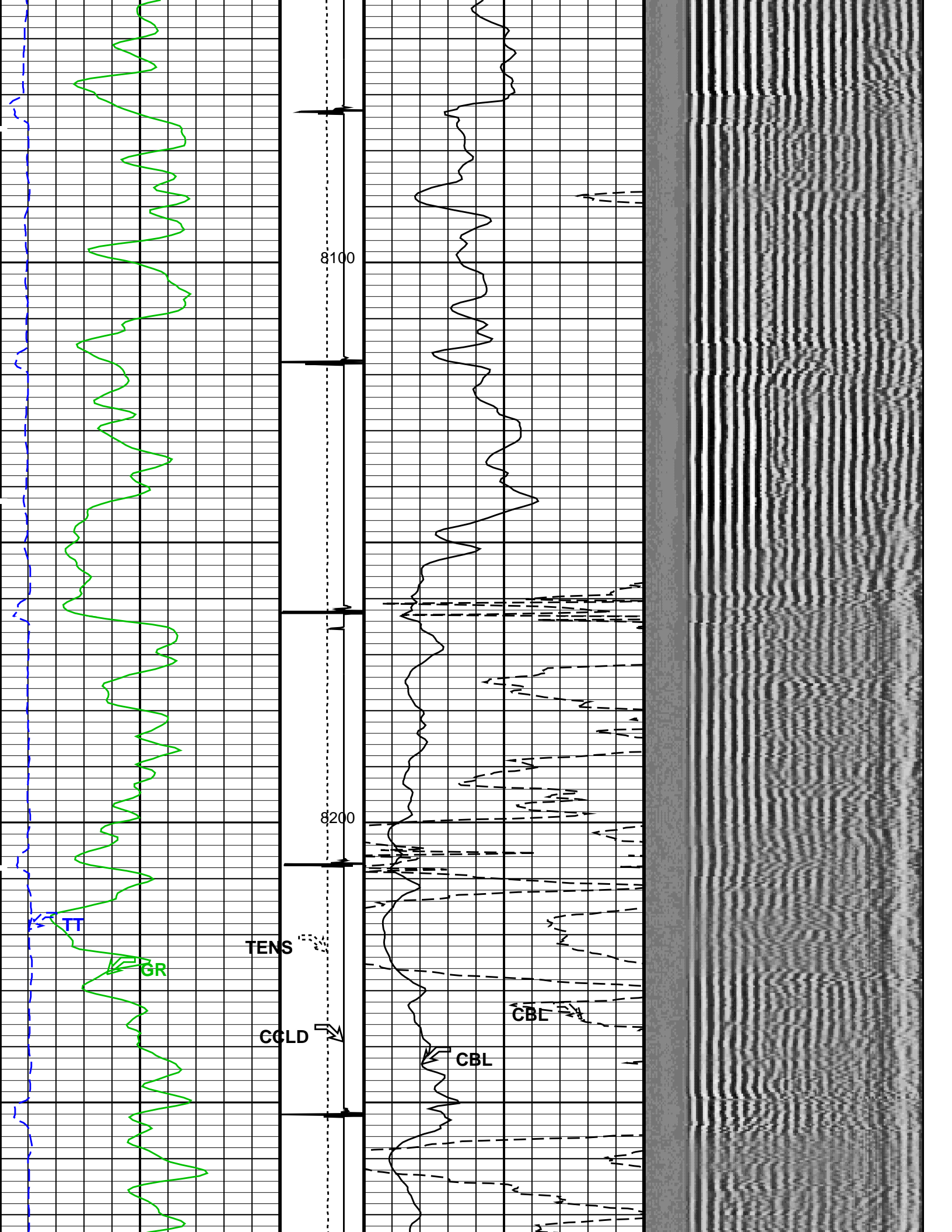


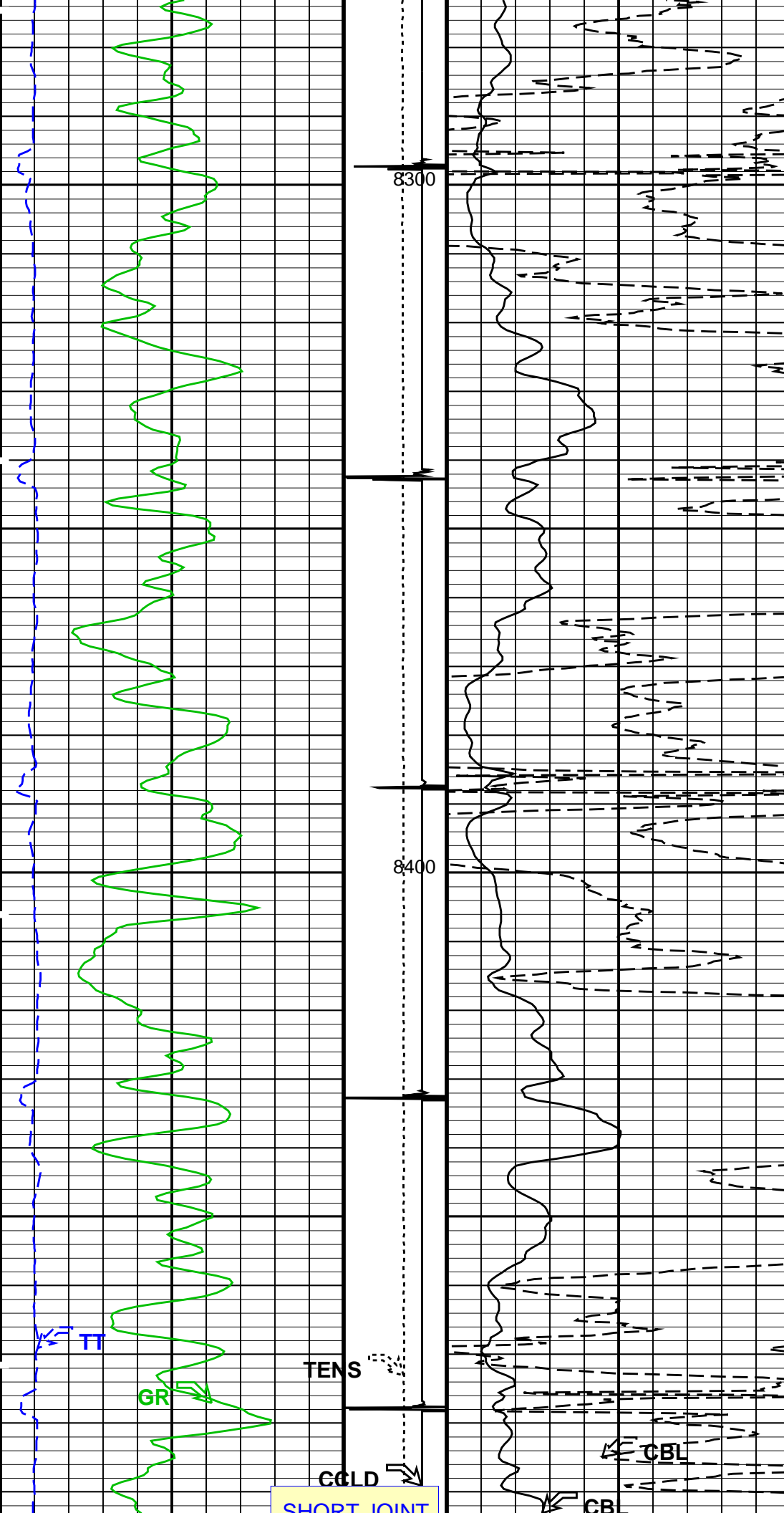




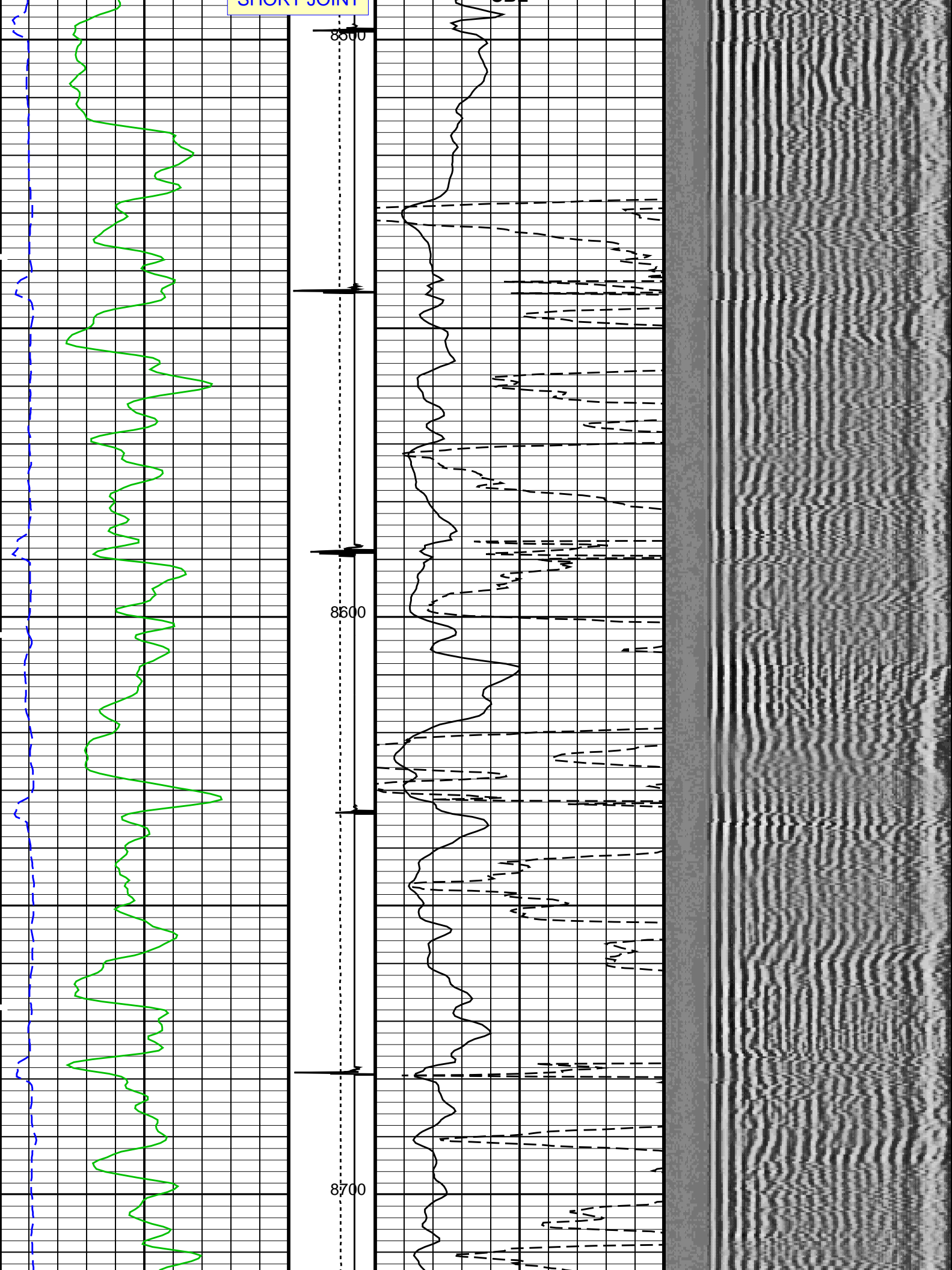


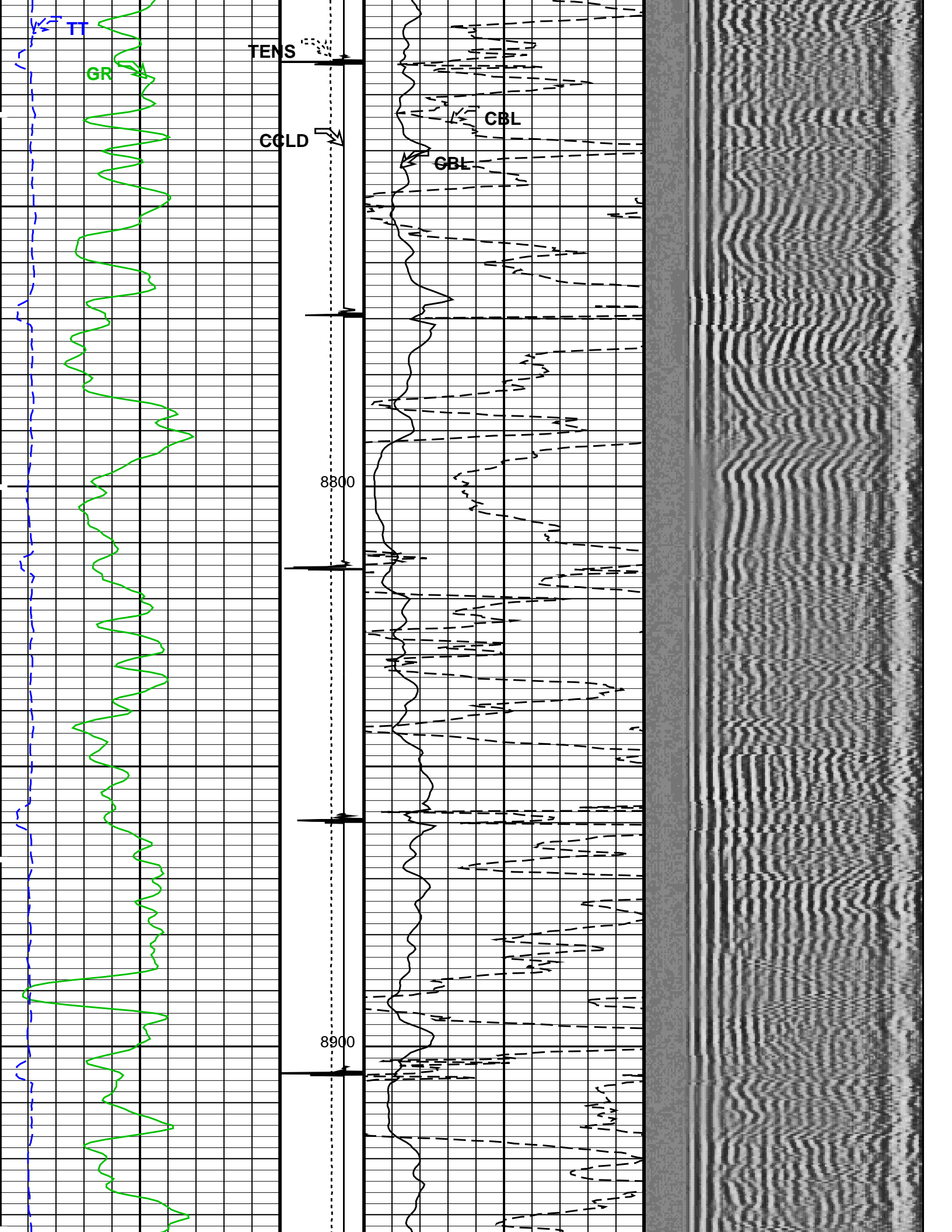


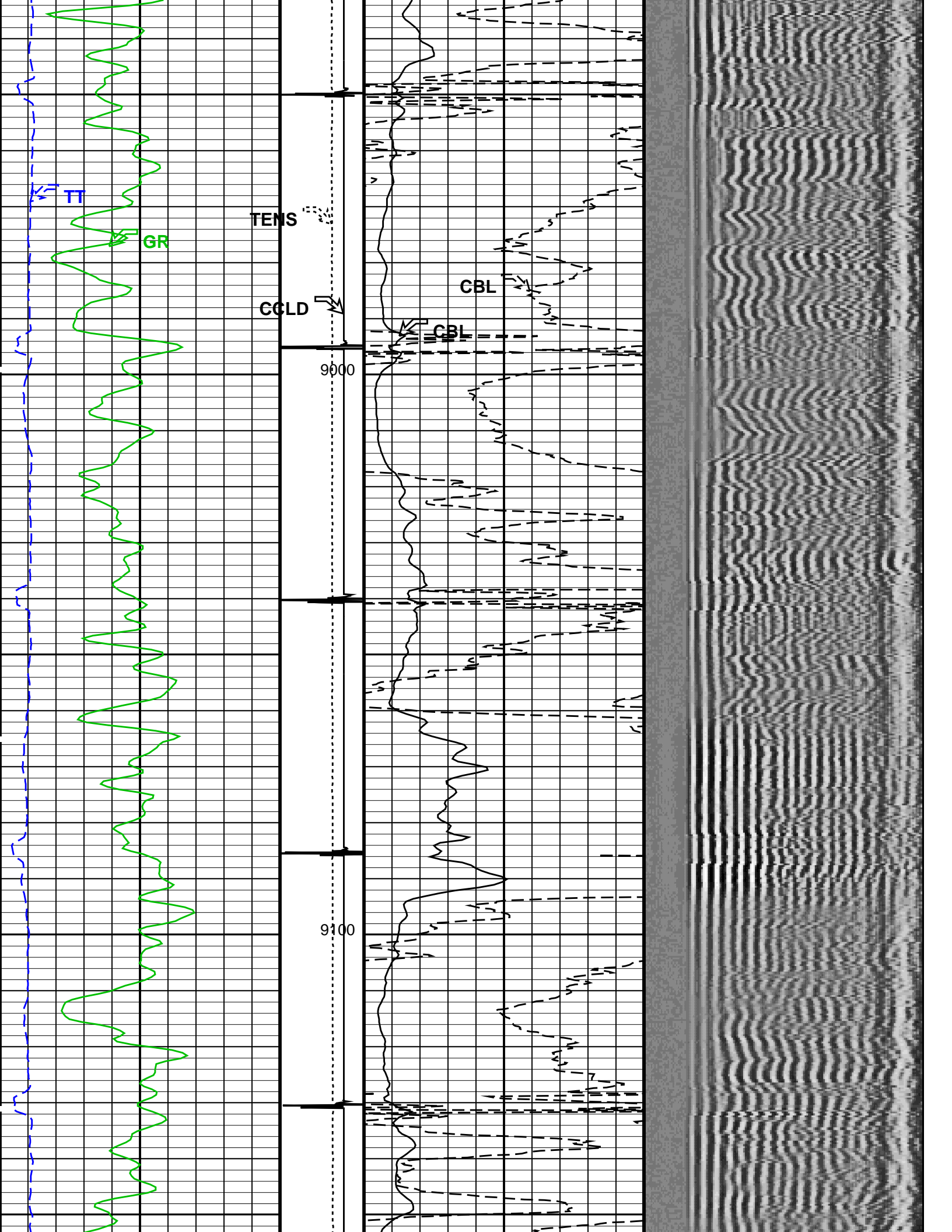


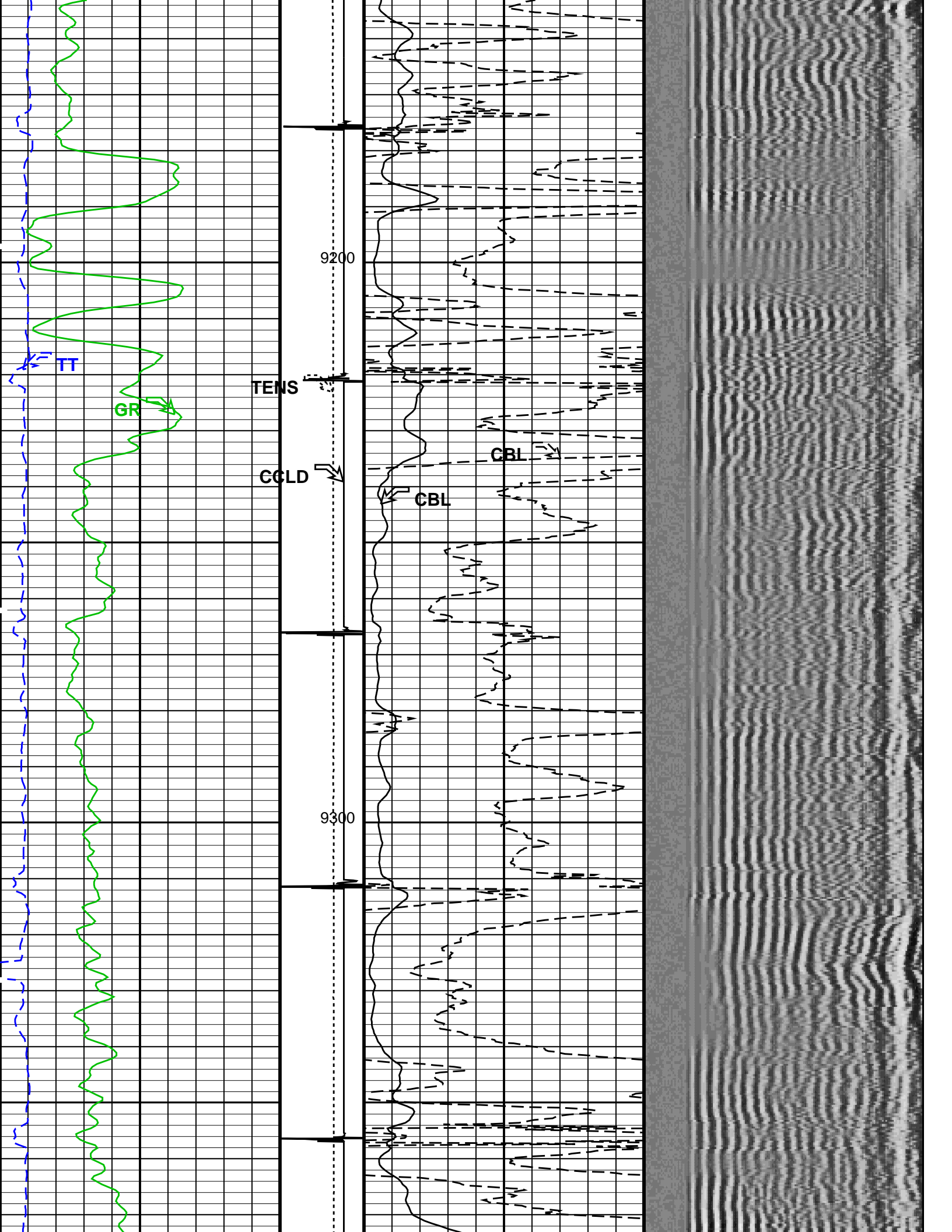


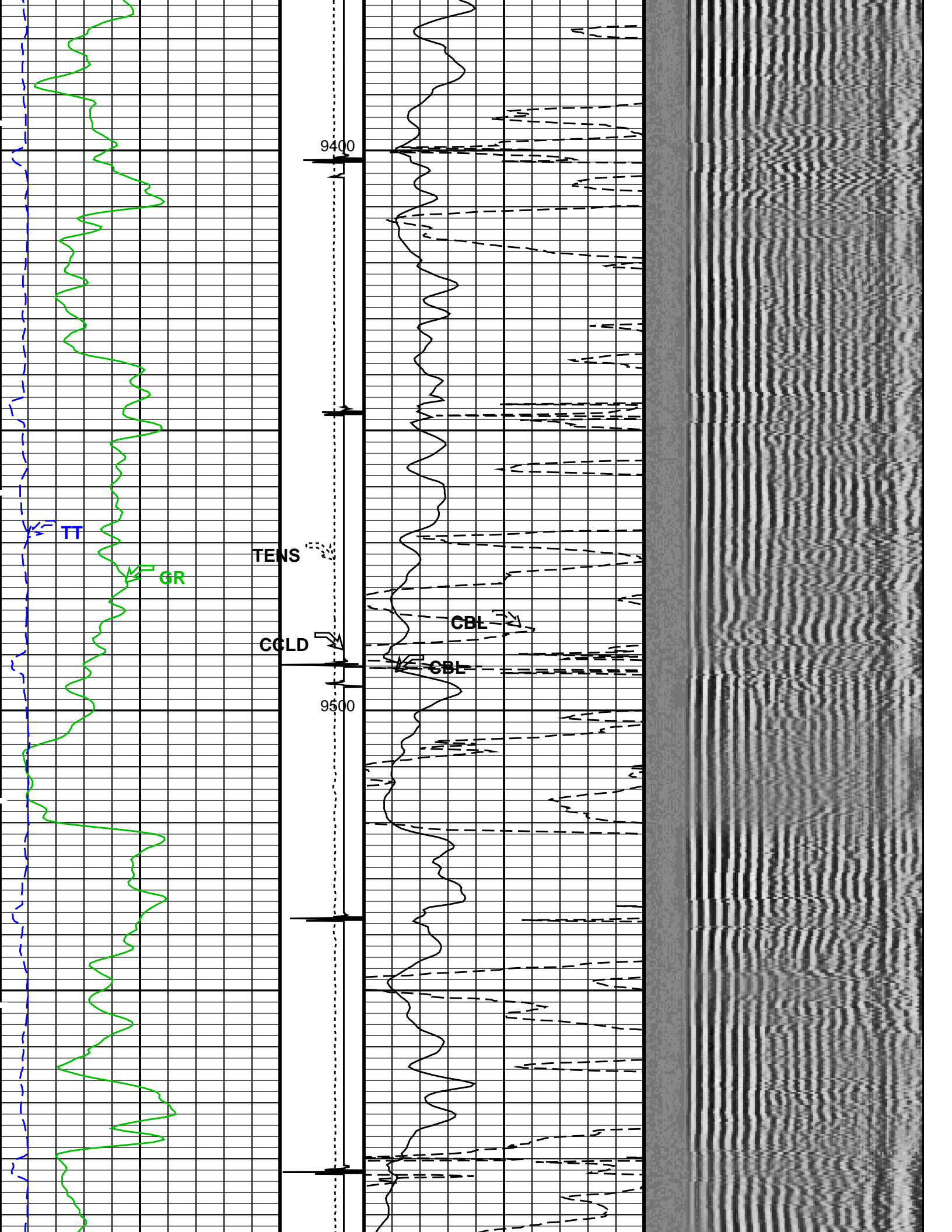
SHORT JOINT

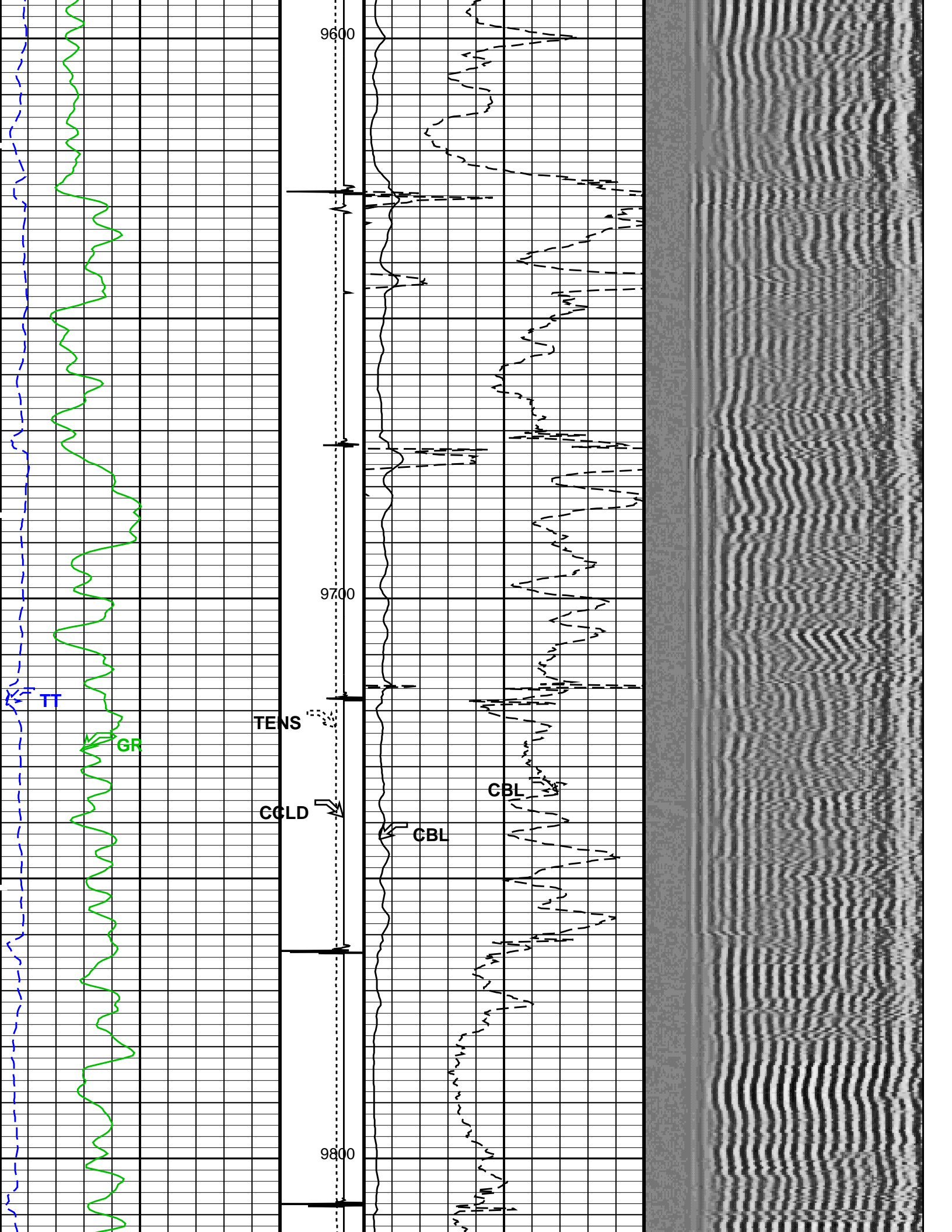


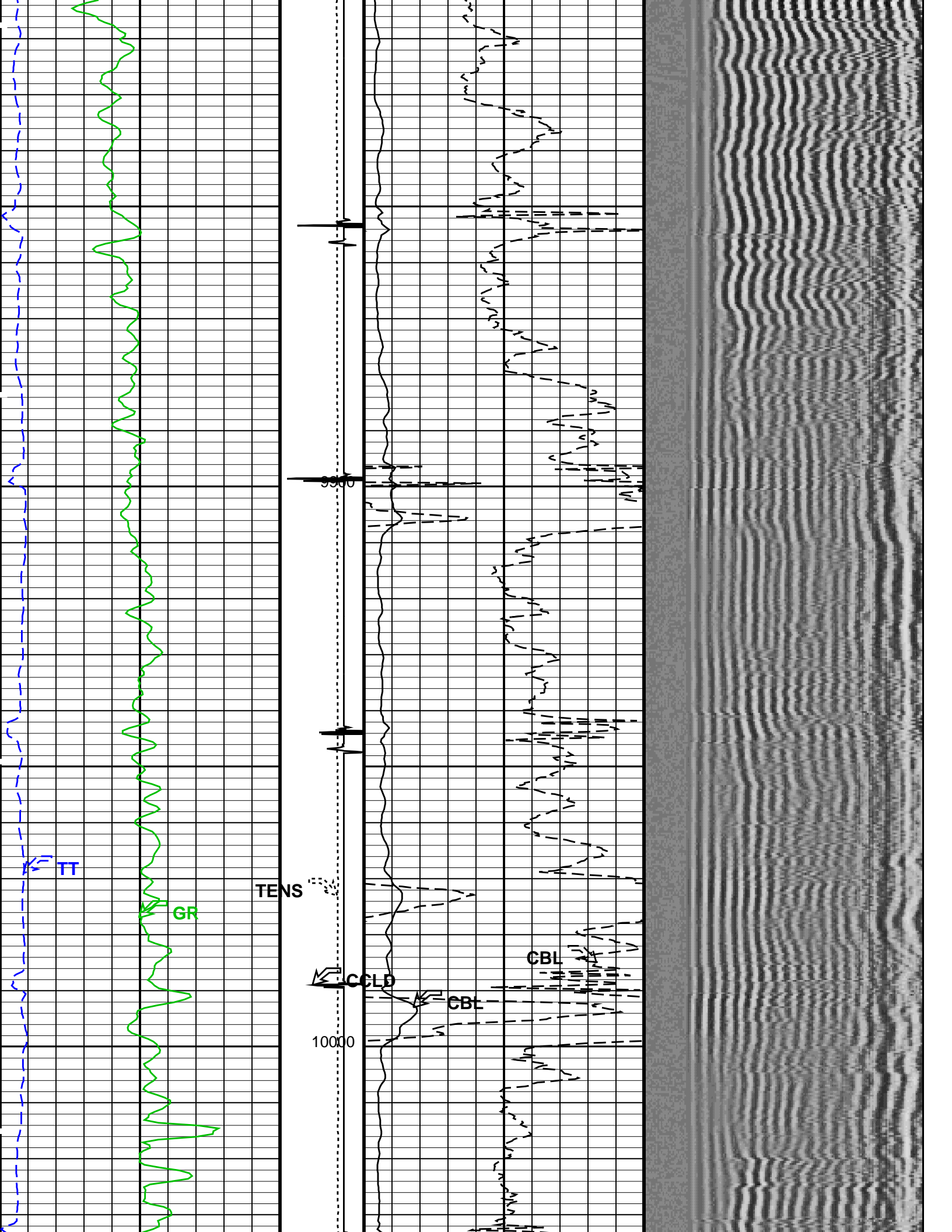


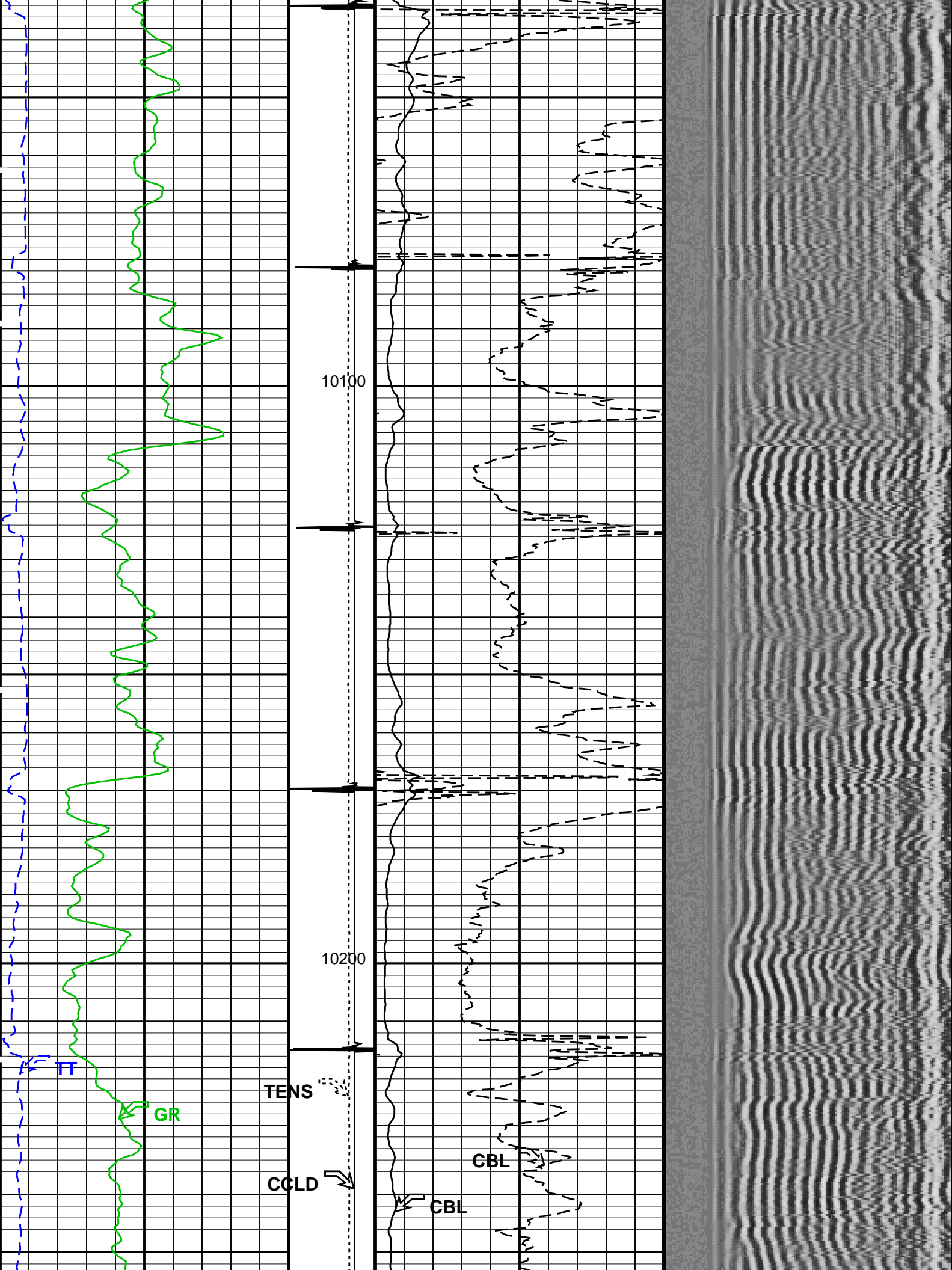


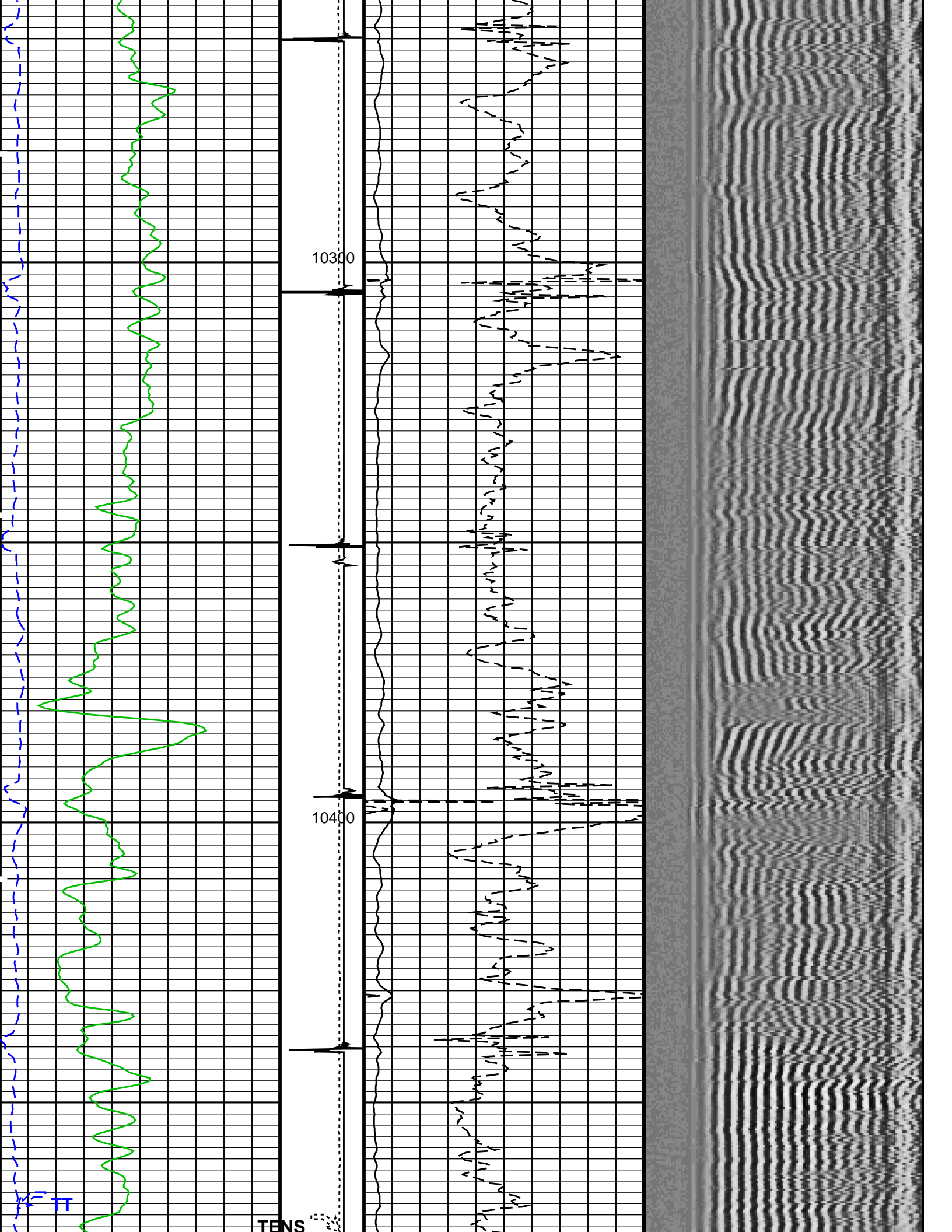


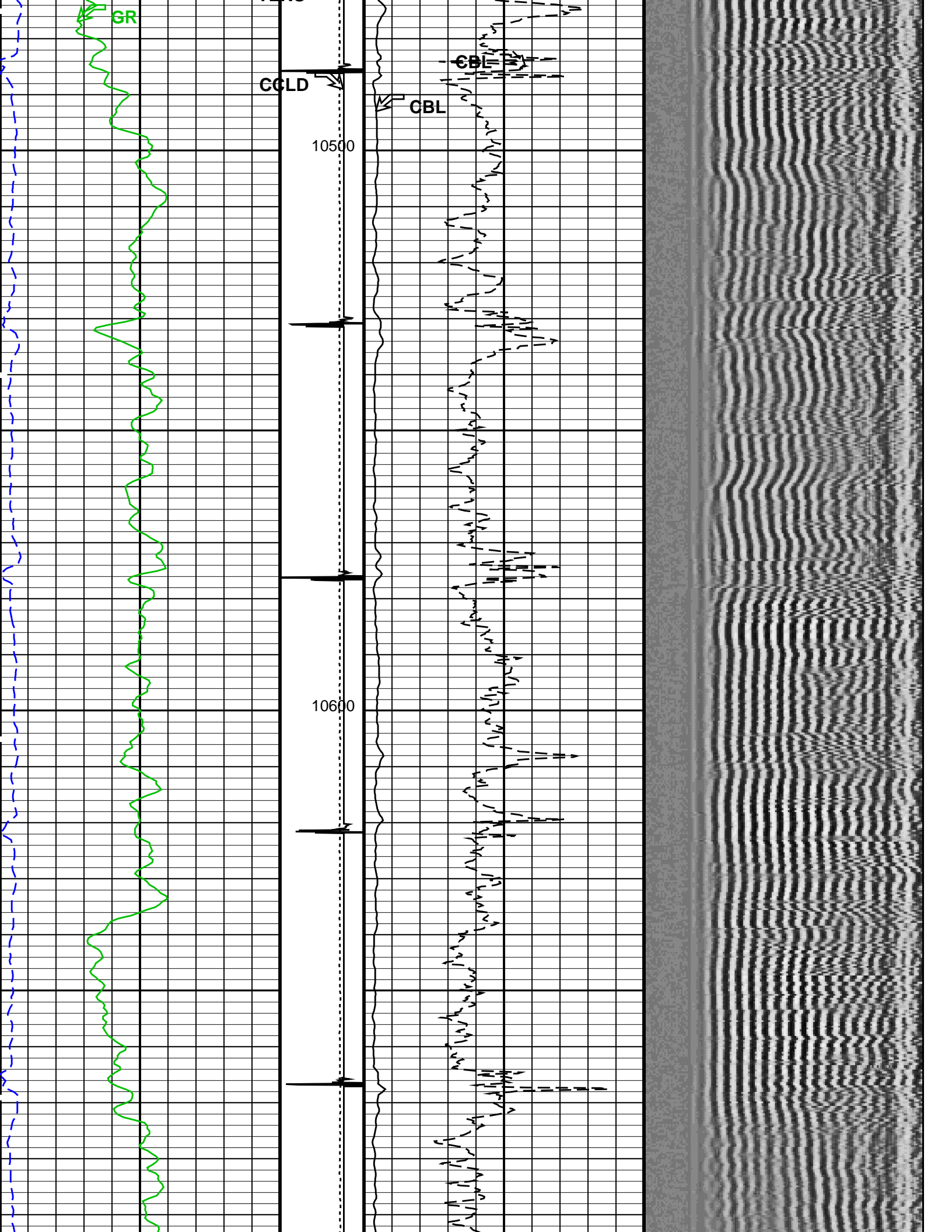


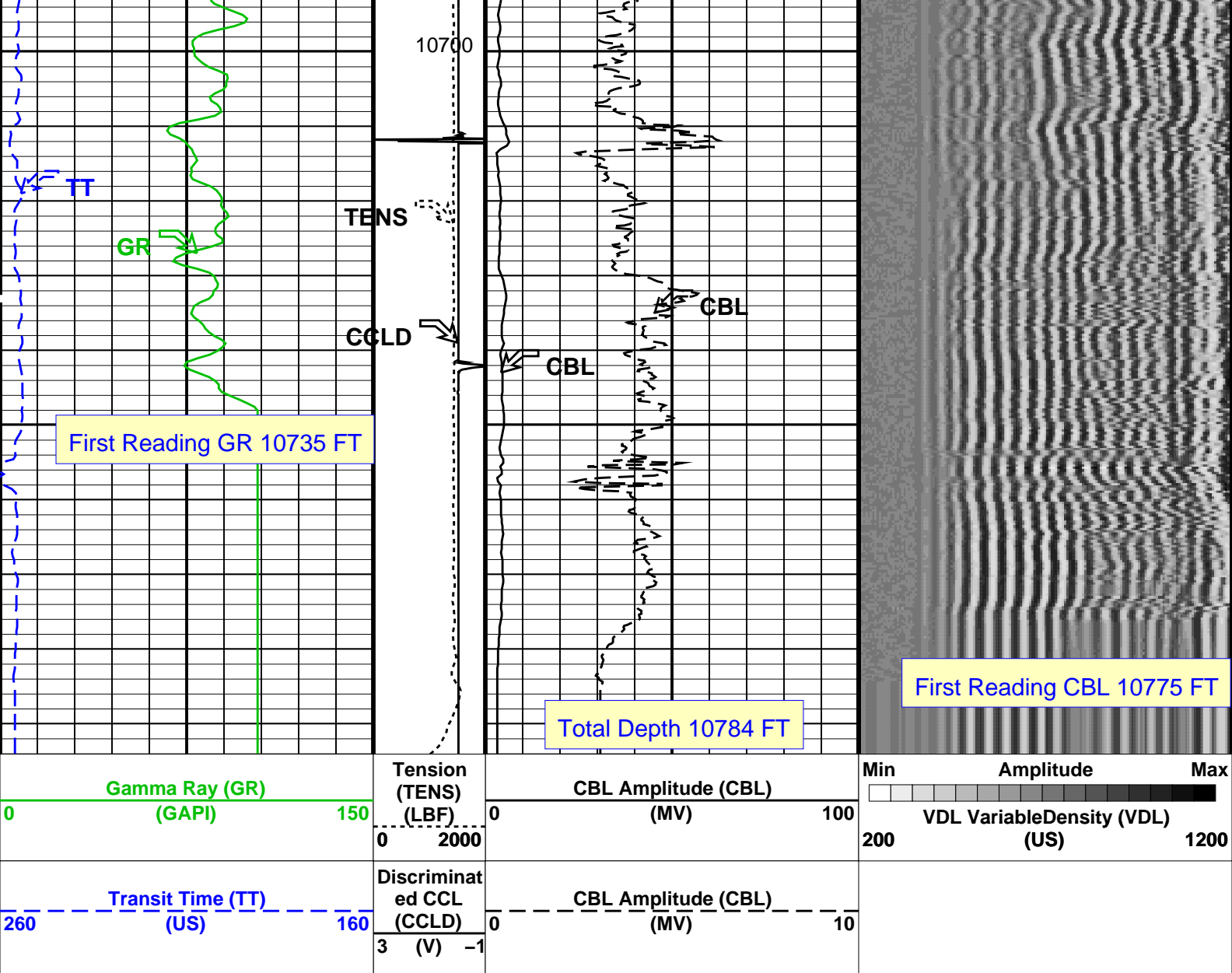












PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 23-Jan-2013 03:21

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		
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	2-JAN-2013		
CBL Correction Factor	0.0710826	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.103584	MAP Adjustment Factor (MPAF)	1.0

MAP 2 Correction Factor	0.0974321
MAP 3 Correction Factor	0.0970306
MAP 4 Correction Factor	0.107300
MAP 5 Correction Factor	0.113090
MAP 6 Correction Factor	0.0923740
MAP 7 Correction Factor	0.0954019
MAP 8 Correction Factor	0.0947290

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	4.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	10784	FT

Input DLIS Files

DEFAULT Splice_SCMT_RST_PSP_072CUP FN:1 PRODUCER 23-Jan-2013 03:19 10790.0 FT -40.0 FT

Output DLIS Files

DEFAULT SCMT_RST_PSP_073PUP FN:71 PRODUCER 23-Jan-2013 03:21

Schlumberger

REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Input DLIS Files

DEFAULT	SCMT_RST_PSP_065LUP	FN:64	PRODUCER	22-Jan-2013 23:01	7631.5 FT	7308.0 FT
DEFAULT	SCMT_RST_PSP_073PUP	FN:71	PRODUCER	23-Jan-2013 03:21	10794.0 FT	-88.0 FT

Output DLIS Files

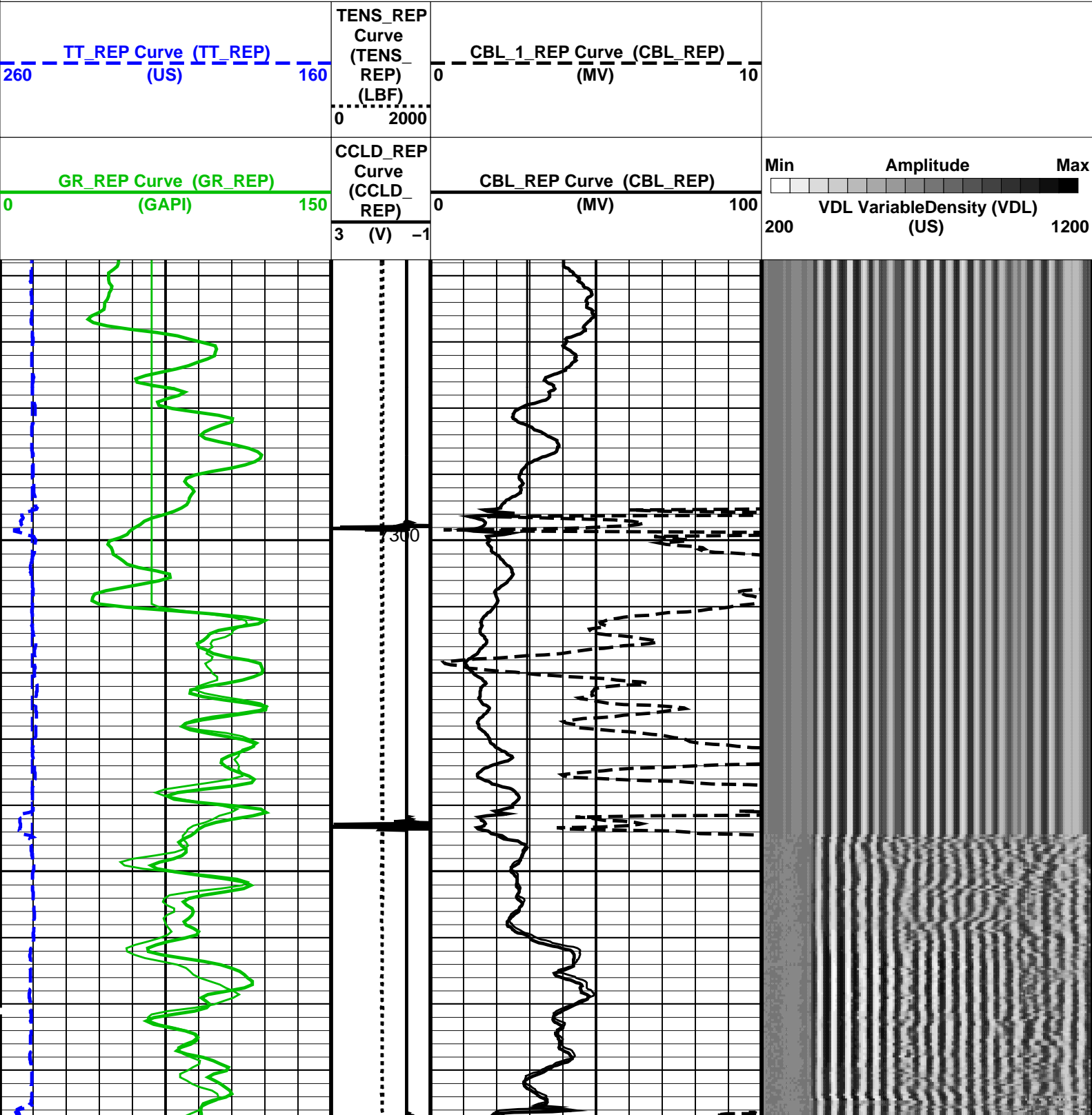
DEFAULT	SCMT_RST_PSP_074PUP	FN:72	PRODUCER	23-Jan-2013 03:30	7632.5 FT	7257.0 FT
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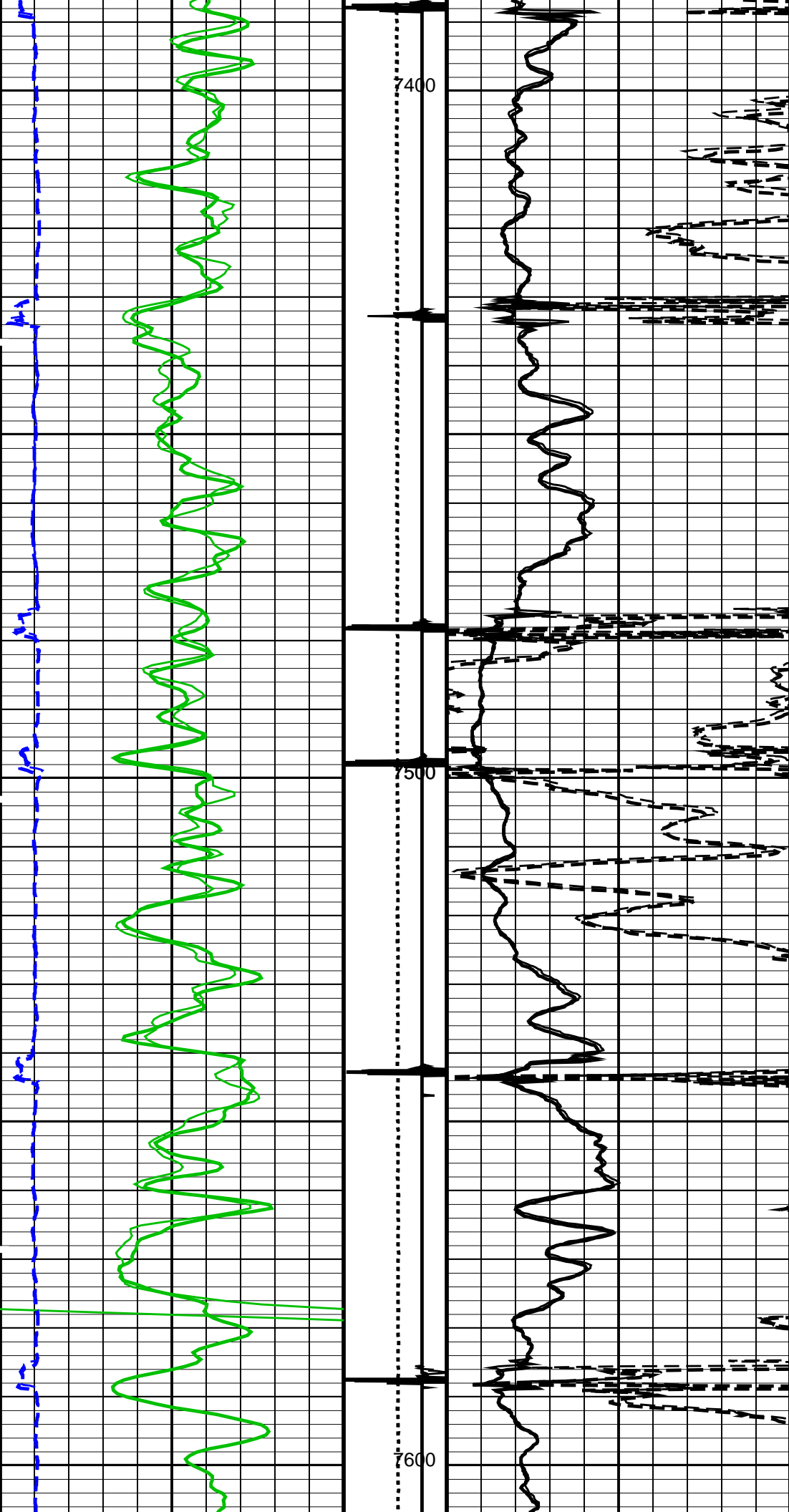
OP System Version: 19C0-187

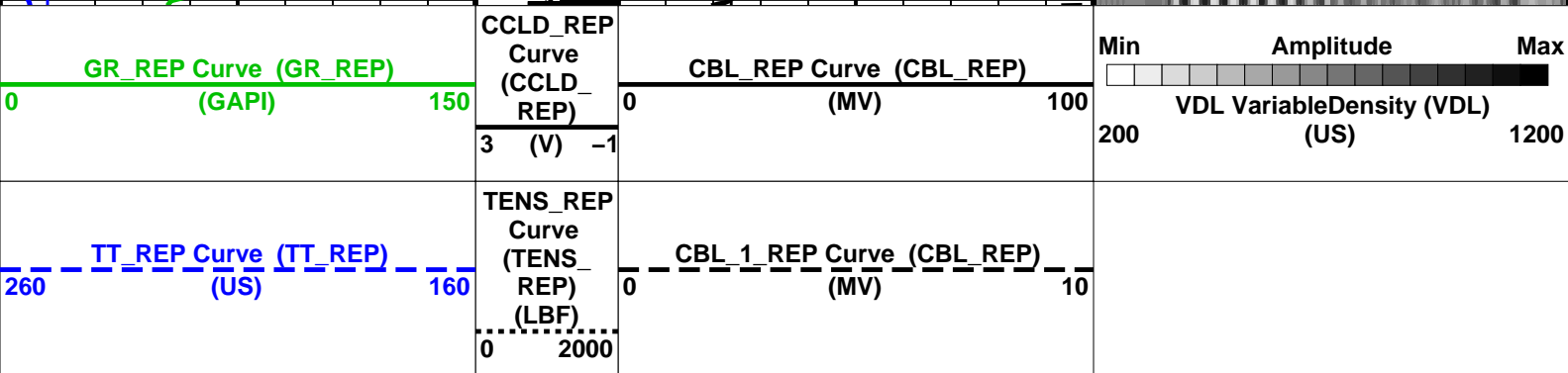
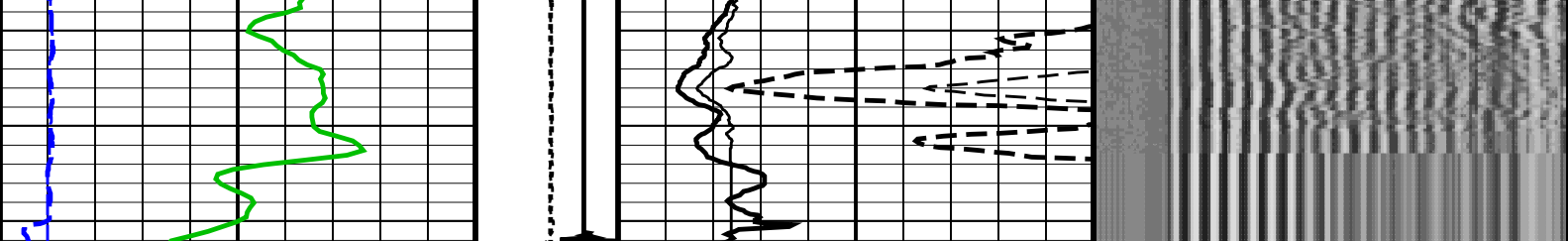
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

PIP SUMMARY

Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100'

Graphics File Created: 23-Jan-2013 03:30

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		
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	2-JAN-2013		
CBL Correction Factor	0.0710826	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.103584	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0974321		
MAP 3 Correction Factor	0.0970306		
MAP 4 Correction Factor	0.107300		
MAP 5 Correction Factor	0.113090		
MAP 6 Correction Factor	0.0923740		
MAP 7 Correction Factor	0.0954019		
MAP 8 Correction Factor	0.0947290		

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
CB5C	CBL Gate Width	45 US

CBLG	CBL Gate Width	43	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	10784	FT

Input DLIS Files

DEFAULT	SCMT_RST_PSP_065LUP	FN:64	PRODUCER	22-Jan-2013 23:01	7631.5 FT	7308.0 FT
DEFAULT	SCMT_RST_PSP_073PUP	FN:71	PRODUCER	23-Jan-2013 03:21	10794.0 FT	-88.0 FT

Output DLIS Files

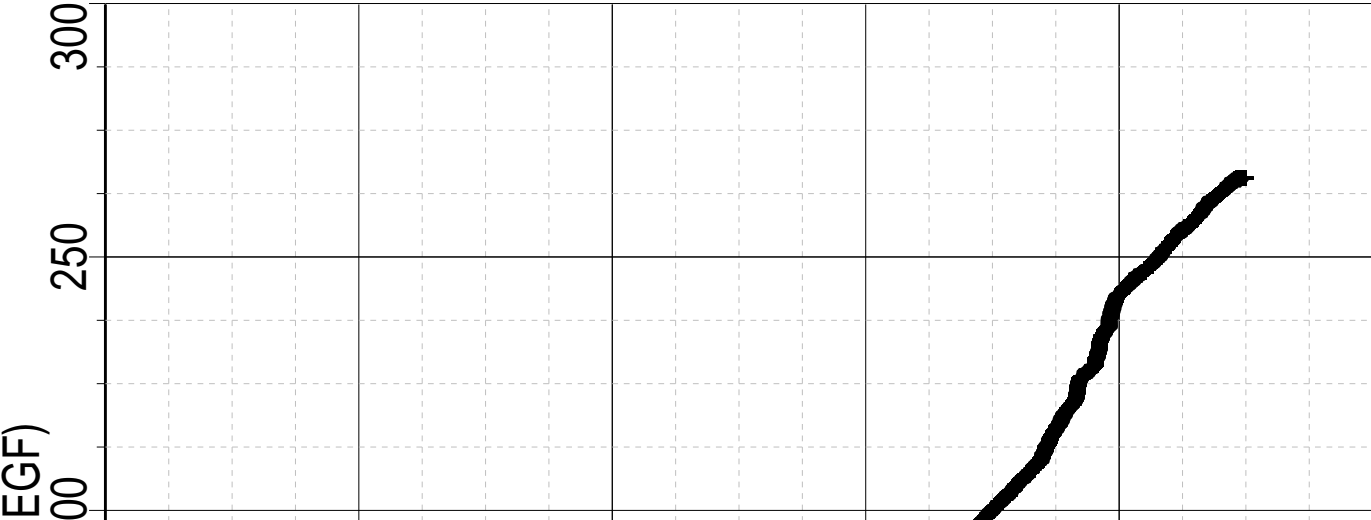
DEFAULT	SCMT_RST_PSP_074PUP	FN:72	PRODUCER	23-Jan-2013 03:30
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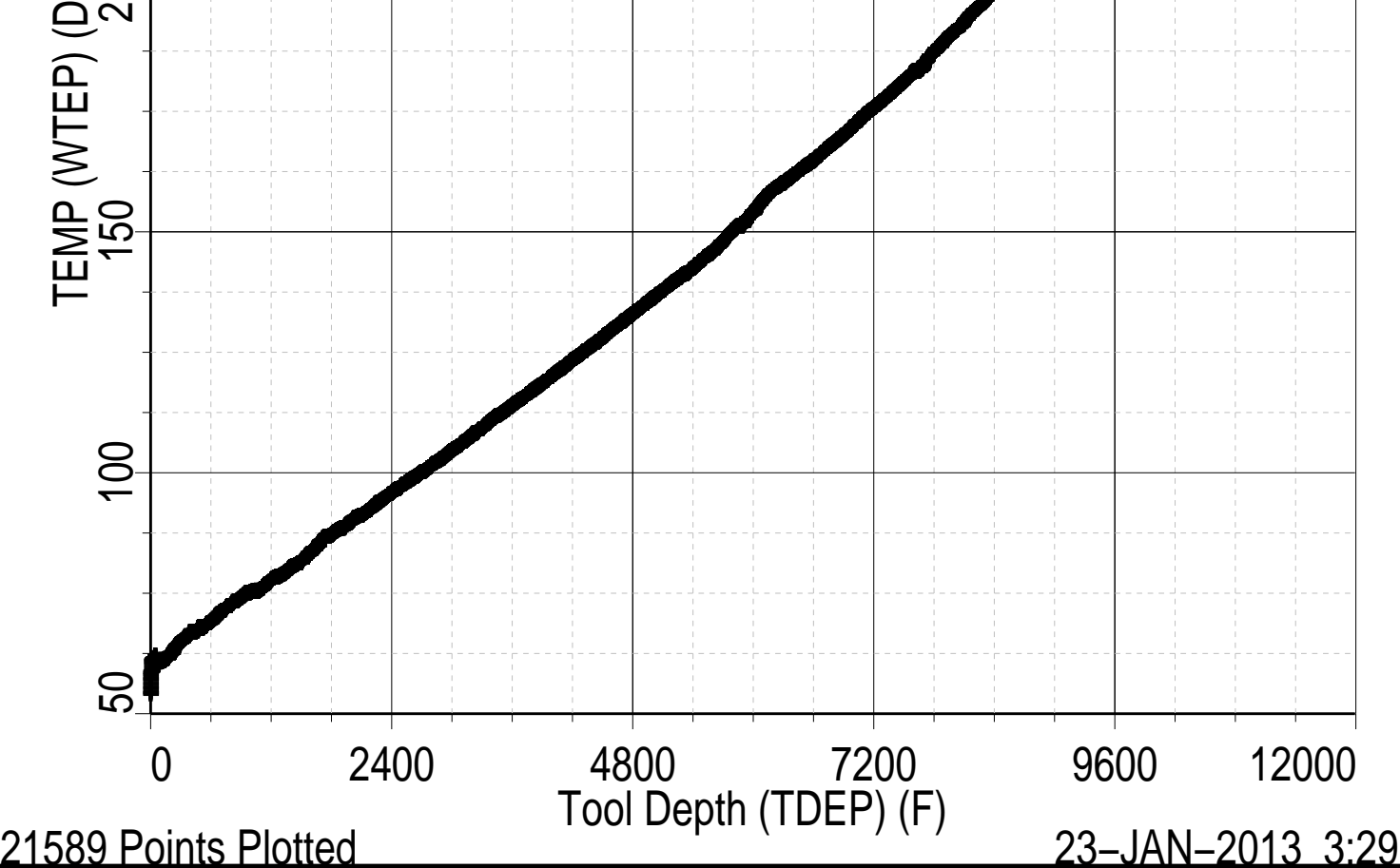
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TEMPERATURE PLOT

MAXIS Field Log

Index: 10794.0 – -88.0 FT





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PBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC
Field: MAMM CREEK
Well: MCU 26-4A (I27W)
Run date: 22-Jan-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

+1.182000000000e+04

+3.320000000000e+04

Client: ENCANA OIL & GAS (USA) INC

Field: MAMM CREEK

Well: MCU 26-4A (I27W)

Run date: 22-Jan-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: MAMM CREEK

Well: MCU 26-4A (I27W)

Run date: 22-Jan-2013

Tool: PSP

Sub Type: PBMS

Sensor: CQG

PBMS Quartz Gauge type F

Sonde Serial NB

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

Sonde Serial NB 928
Calib Date ddmmyy 280612
Matrix Size 66
Coeff CRC 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	+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**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

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MASTER CALIBRATION

MAXIS Field Log

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

Primary Equipment:










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

SCMX – CA
 SCMS – CB 8179
 SCMC – CA 8120

Auxiliary Equipment:

Slim Electronics Cartridge Housing

SECH – CA

Slim Cement Mapping Tool, 1–11/16 OD Master Calibration							
SCMT CBL and MAP Amplitude Normalization in SFT–155/~255							
Phase	MAP 1 Amplitude Plus MV		Value	Phase	MAP 2 Amplitude Plus MV		Value
Master			1158	Master			1232
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 3 Amplitude Plus MV		Value	Phase	MAP 4 Amplitude Plus MV		Value
Master			1237	Master			1118
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 5 Amplitude Plus MV		Value	Phase	MAP 6 Amplitude Plus MV		Value
Master			1061	Master			1299
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 7 Amplitude Plus MV		Value	Phase	MAP 8 Amplitude Plus MV		Value
Master			1258	Master			1267
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	CBL Amplitude Plus MV		Value				
Master			1351				
	1000 (Minimum)	1350 (Nominal)	1700 (Maximum)				
Master: 2-Jan-2013 15:55							

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

Schlumberger

Well: **MCU 26–4A (I27W)**

Field: **MAMM CREEK**

County: **GARFIELD**

State: **COLORADO**

SLIM CEMENT MAPPING LOG

CBL–VDL

GR–CCL