

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8513B-36 (D36 496)

Field: STORY GULCH

County: GARFIELD

State: COLORADO

SLIM CEMENT MAPPING LOG  
CBL – VDL  
GAMMA RAY – CCL

County:	GARFIELD		
Field:	STORY GULCH		
Location:	SHL: 451 FNL & 1028 FWL		
Well:	SG 8513B-36 (D36 496)		
Company:	ENCANA OIL & GAS (USA) INC		
	LOCATION		
	SHL: 451 FNL & 1028 FWL BHL: 875 FSL & 687 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. _____ 05-045-20929-000C	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	12845 ft		
Schlumberger Depth	12766 ft		
Bottom Log Interval	12757 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	9176 ft		
To	12845 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade			
From	30 ft		
To	12822 ft		
Maximum Recorded Temperatures	281 degF		
Logger On Bottom	2-Jul-2013	Time	11:15
Unit Number	391	Location	GRAND JUNCTION
Recorded By	JASON BARRY		
Witnessed By	JOHN MILLER		

Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Fluid Type			
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size			
From			
To			
Casing/Tubing Size			
Weight			
Grade			
From			
To			
Maximum Recorded Temperatures			
Logger On Bottom		Time	
Unit Number		Location	
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	<div>Conveyance Method: Wireline</div> <div>Rig Type: LAND</div>	
Calibration Cable Type:	1-25P	Number of Calibration Points:	10		
Wheel Correction 1:	-3	Calibration RMS:	2		
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

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OTHER SERVICES1	OTHER SERVICES2
OS1: RESERVOIR SATURATION	OS1:
OS2: LOG	OS2:
OS3: SIGMA MODE	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWNLOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 10:15	
TIME ON BOTTOM: 11:15	
EXIT TIME: 14:45	



MAX RECORDED TEMPERATURE: 281 DEGE

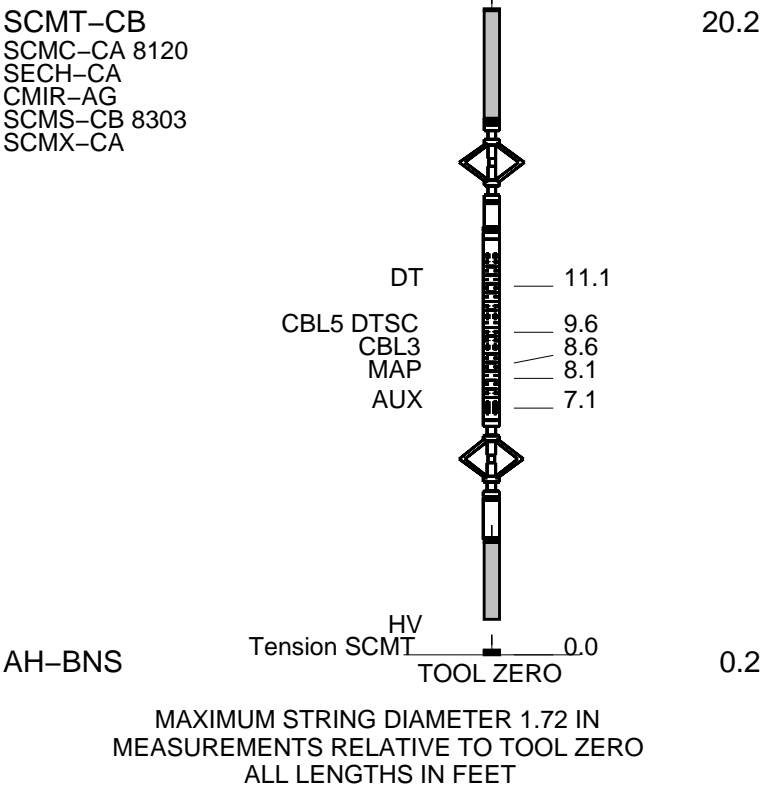
	RUN 1	
SERVICE ORDER #:		C920-00096
PROGRAM VERSION:		19C0-187
FLUID LEVEL:		60 ft

[illegible]

WITM-A  
PSC 16MHZ

# DOWNHOLE EQUIPMENT

Equipment	Depth (ft)
MH-22	53.3
MH-22	
Detail MT	
TelStatus	
CTEM	51.7
PSPT	51.5
PSC-A	
PSPT-B 928	
PSTC-A	
PBMS-B	47.8
CQG_F_Mano	
RTD_Thermometer	
GR	
Well_Temp	44.7
CCL	44.4
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

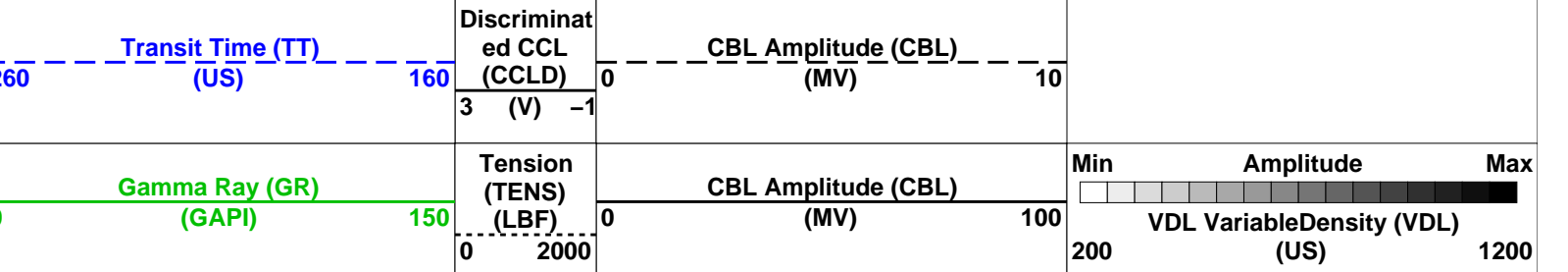
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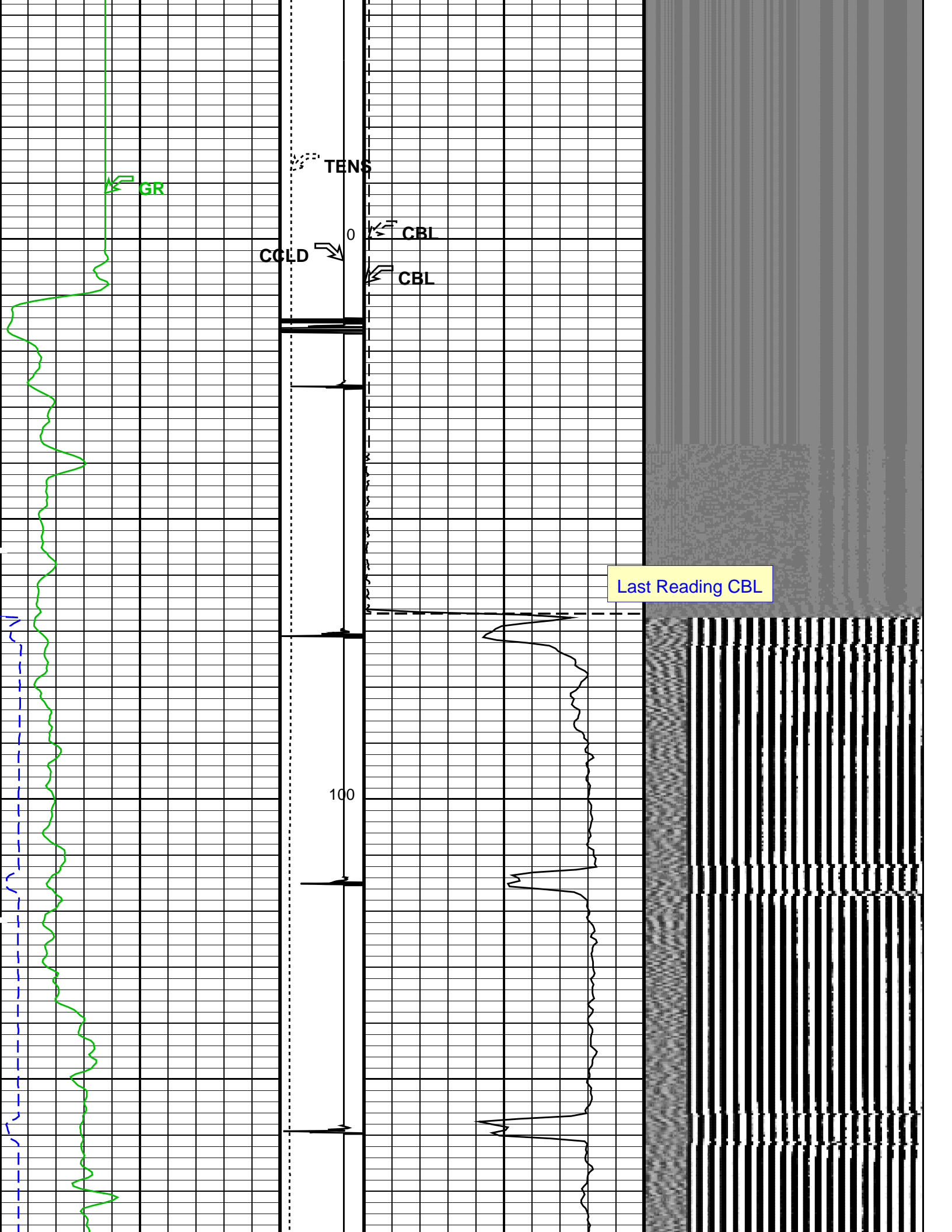
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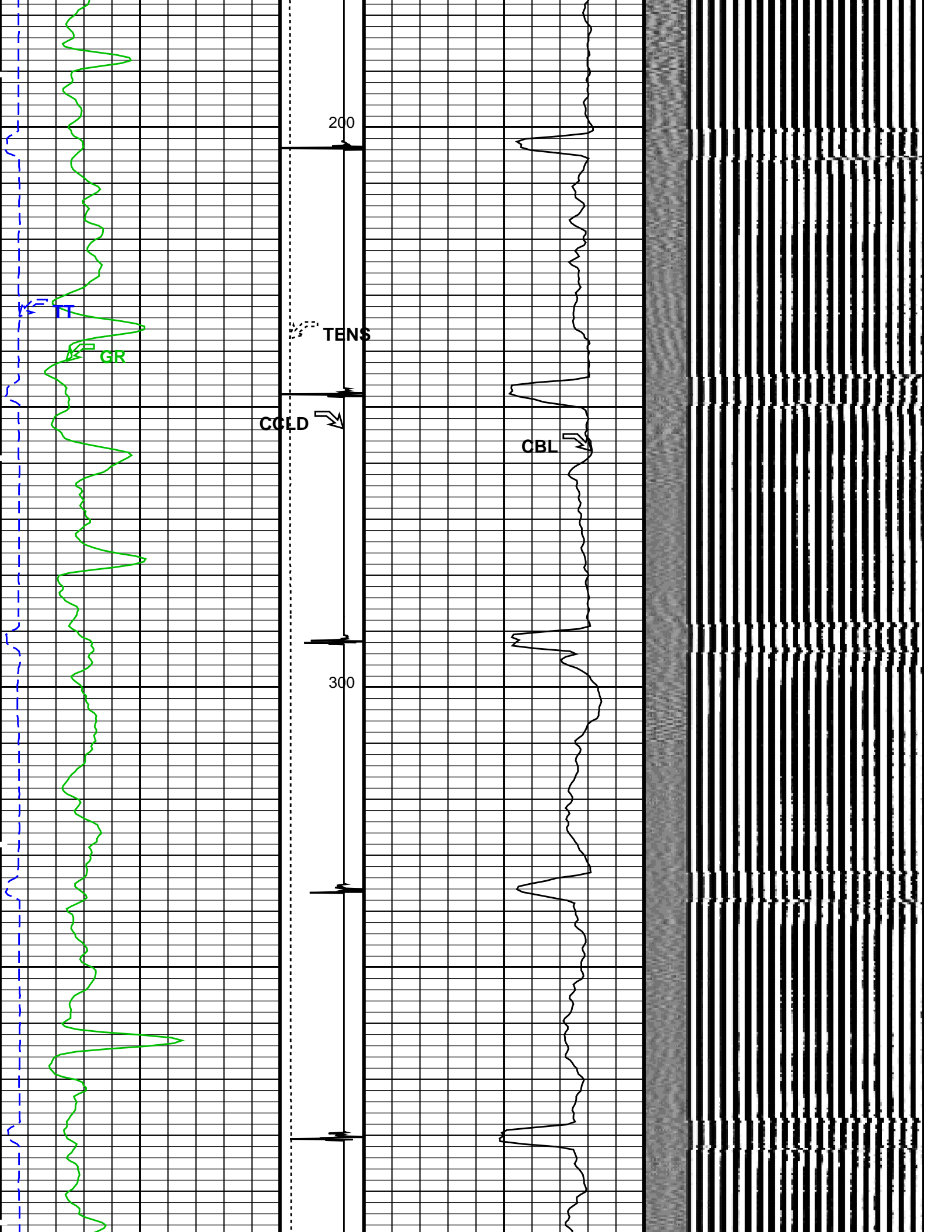
Input DLIS Files						
DEFAULT	SCMT_RST_PSP_005LUP	FN:4	PRODUCER	02-Jul-2013 11:15	12781.5 FT	-7.0 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_011PUP	FN:10	PRODUCER	02-Jul-2013 15:22	12789.5 FT	-43.5 FT
OP System Version: 19C0-187						
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C		SRPC-5214-H2-2012-OP1		
PSPT	SRPC-5214-H2-2012-OP1					

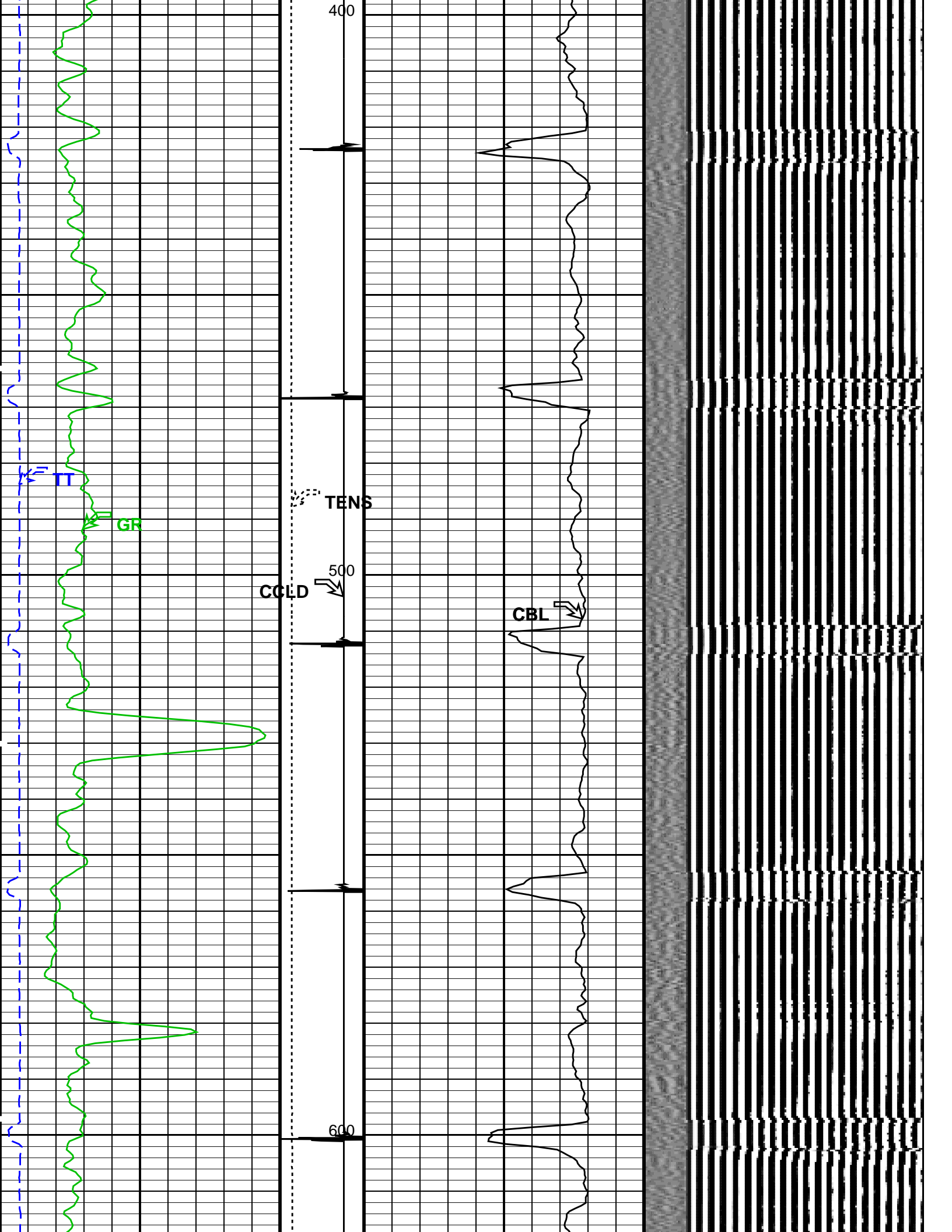
PIP SUMMARY

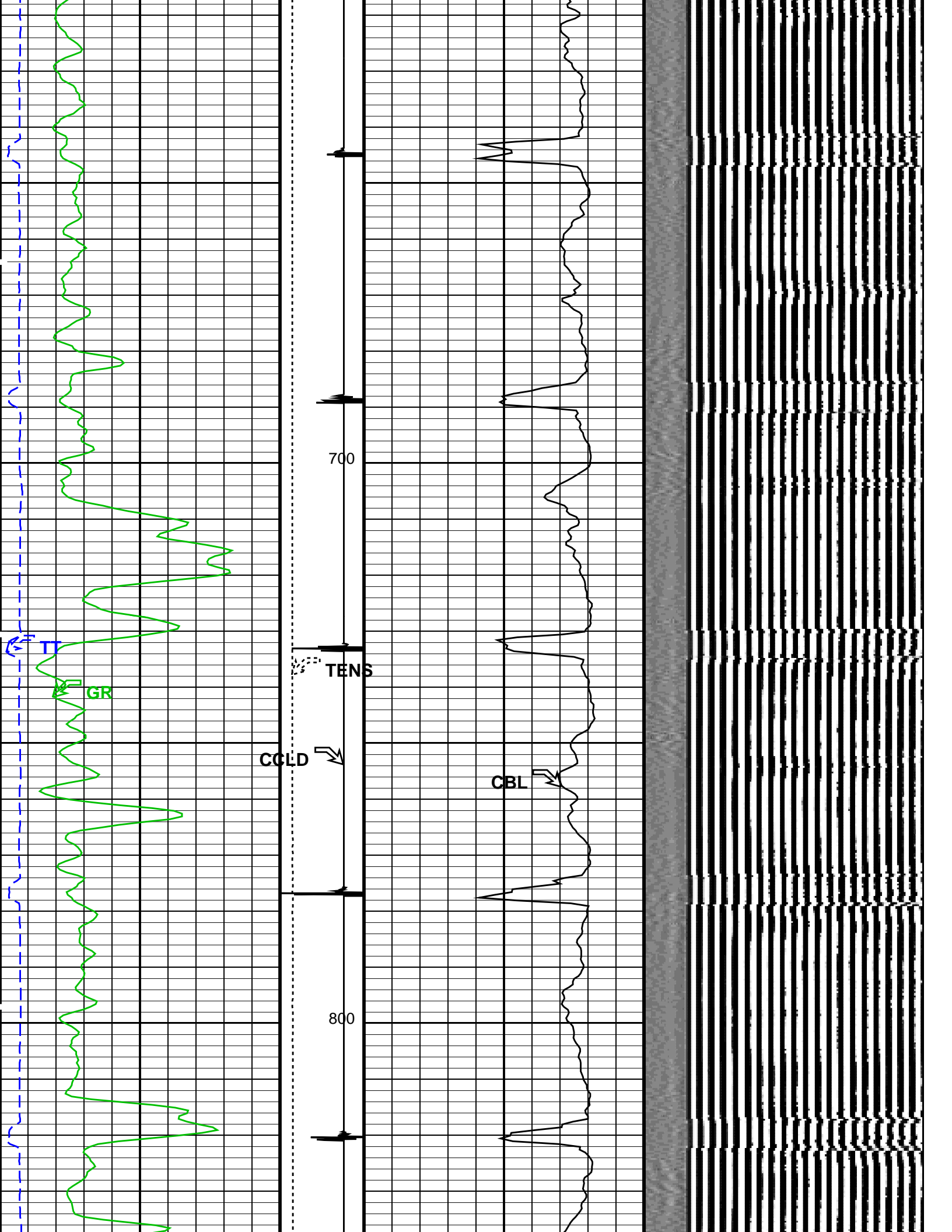
☒ Time Mark Every 60 S

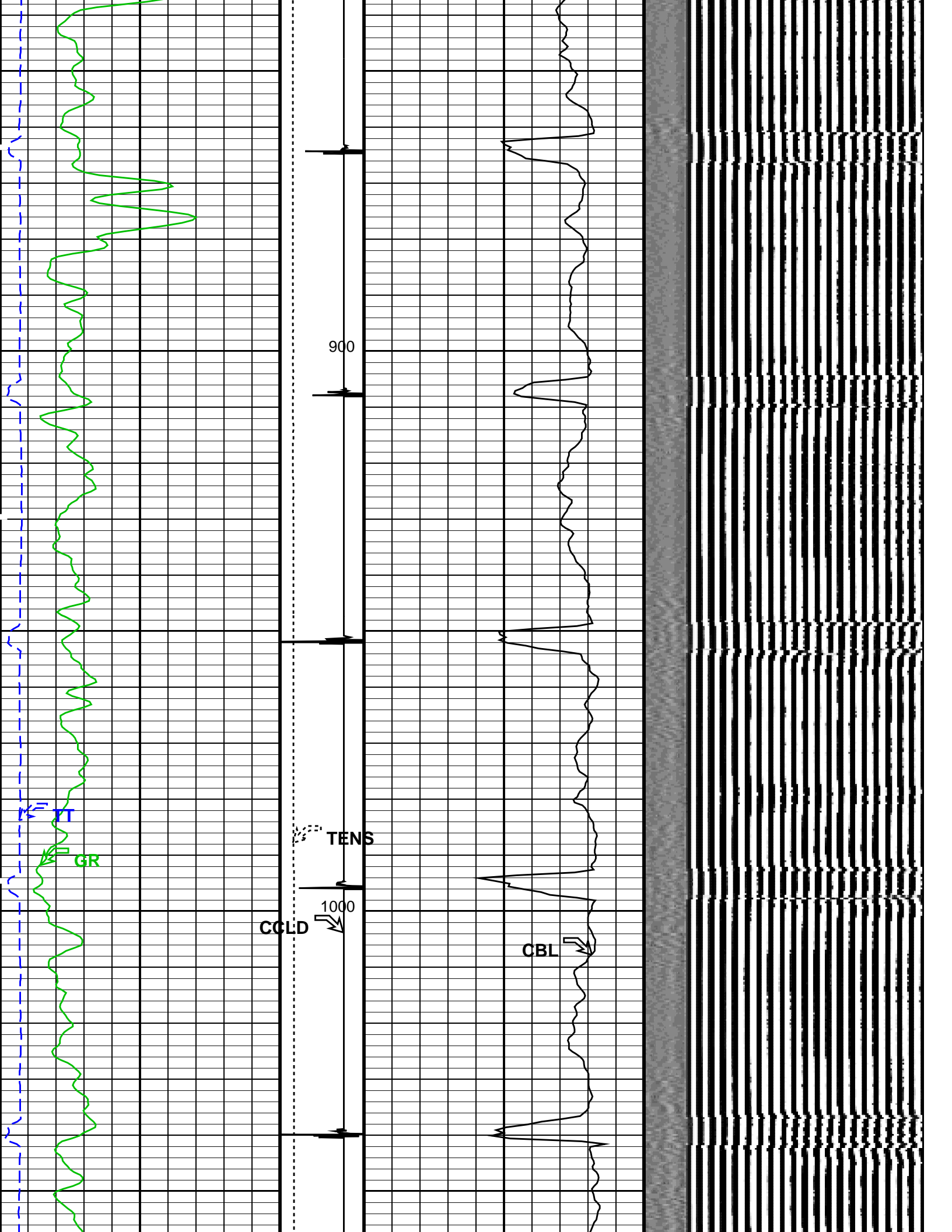




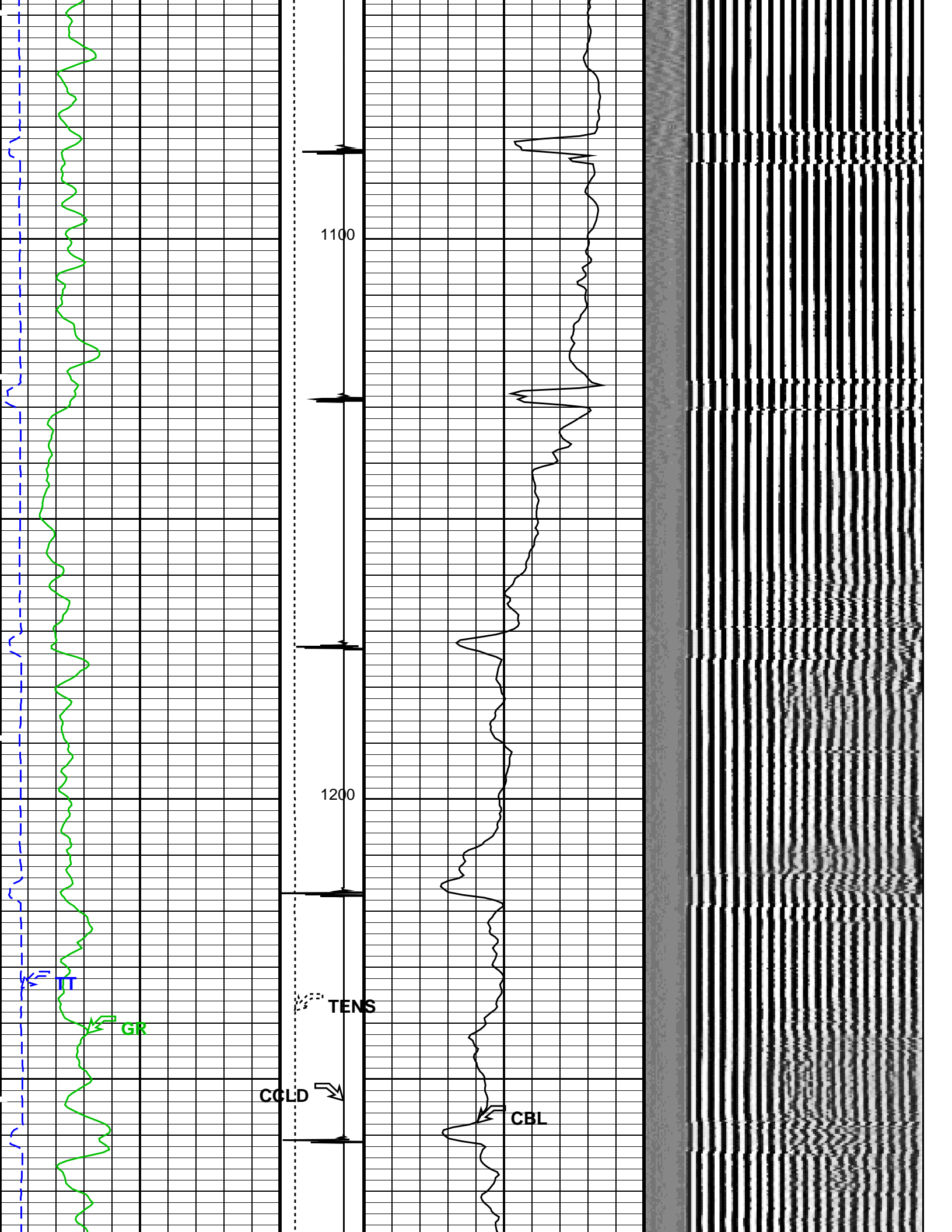




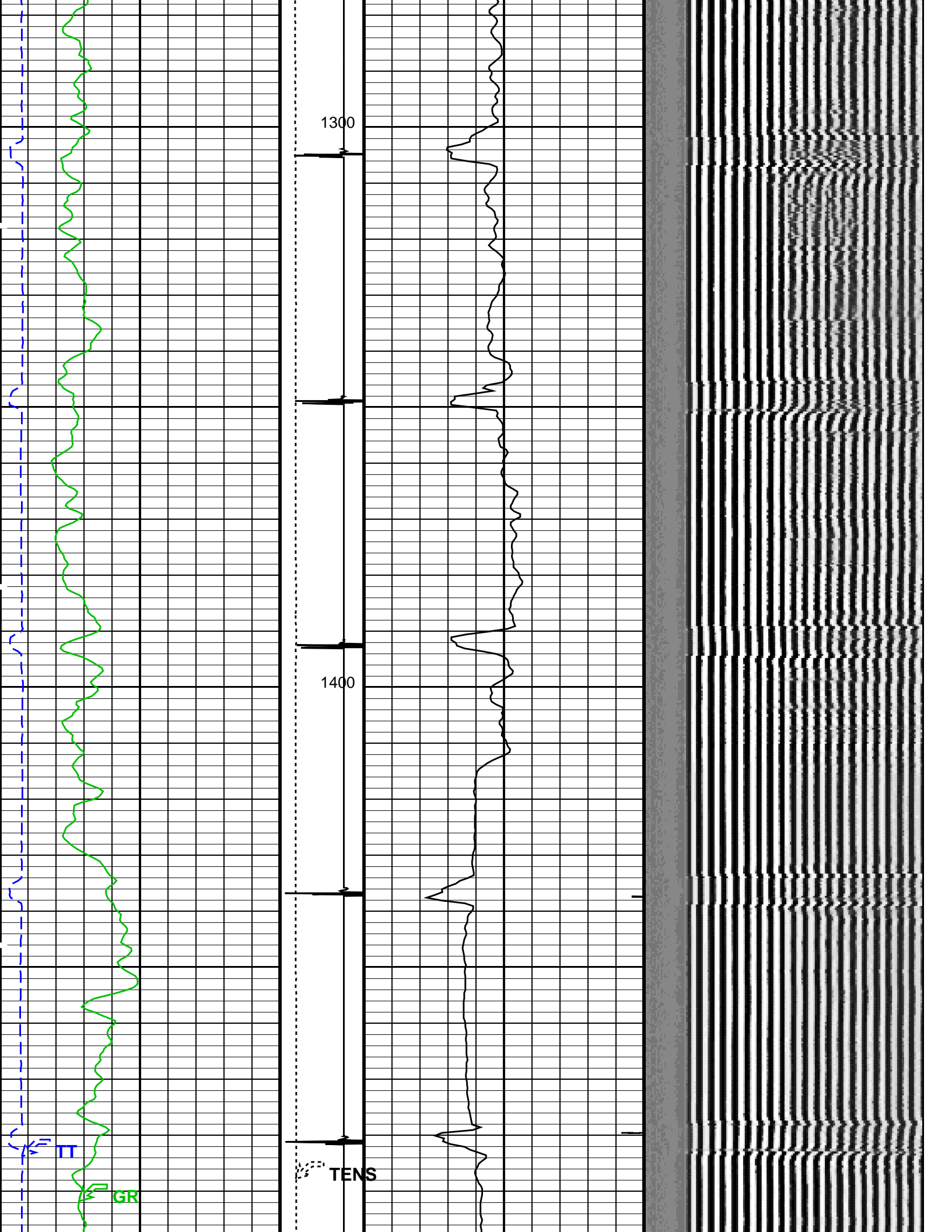


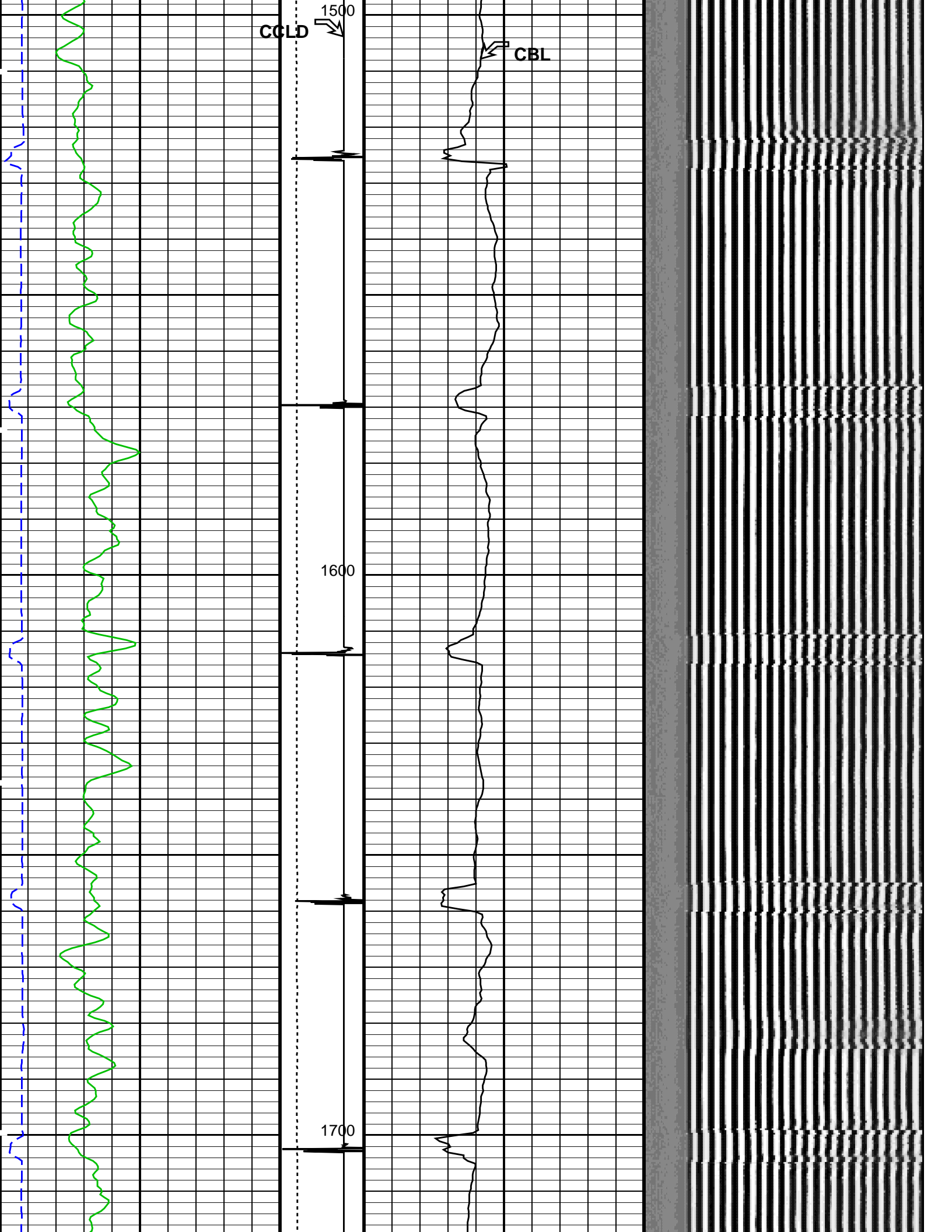


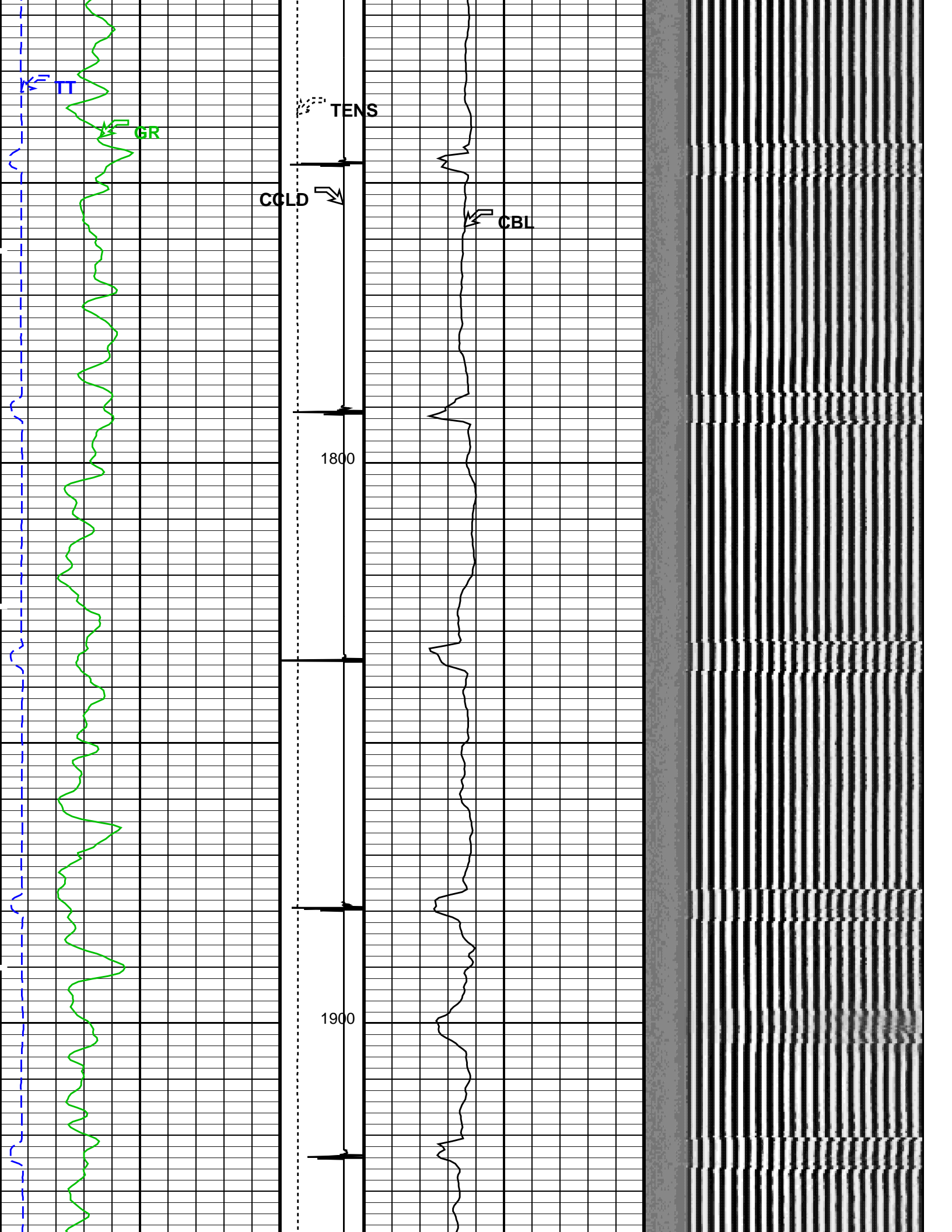


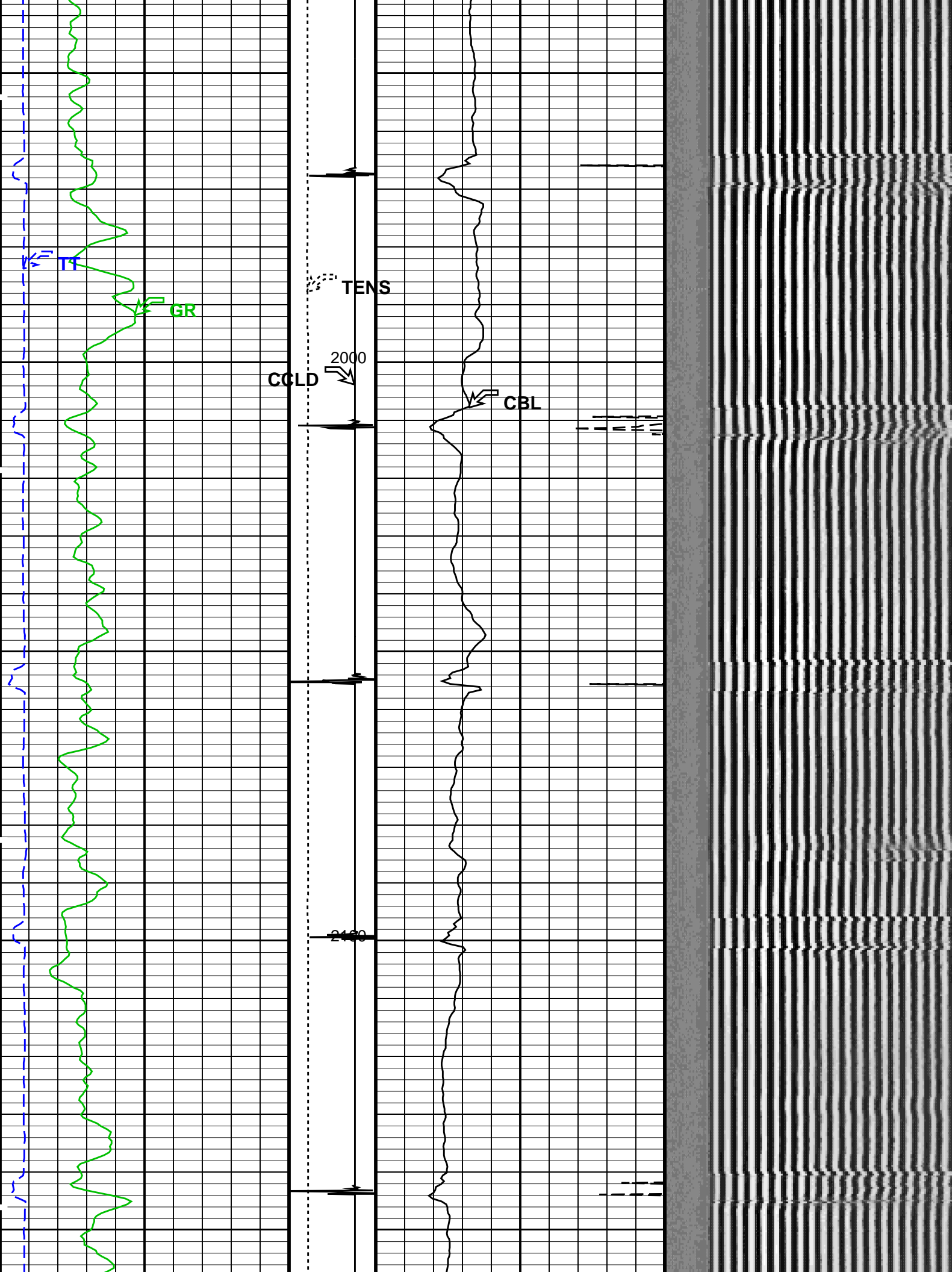


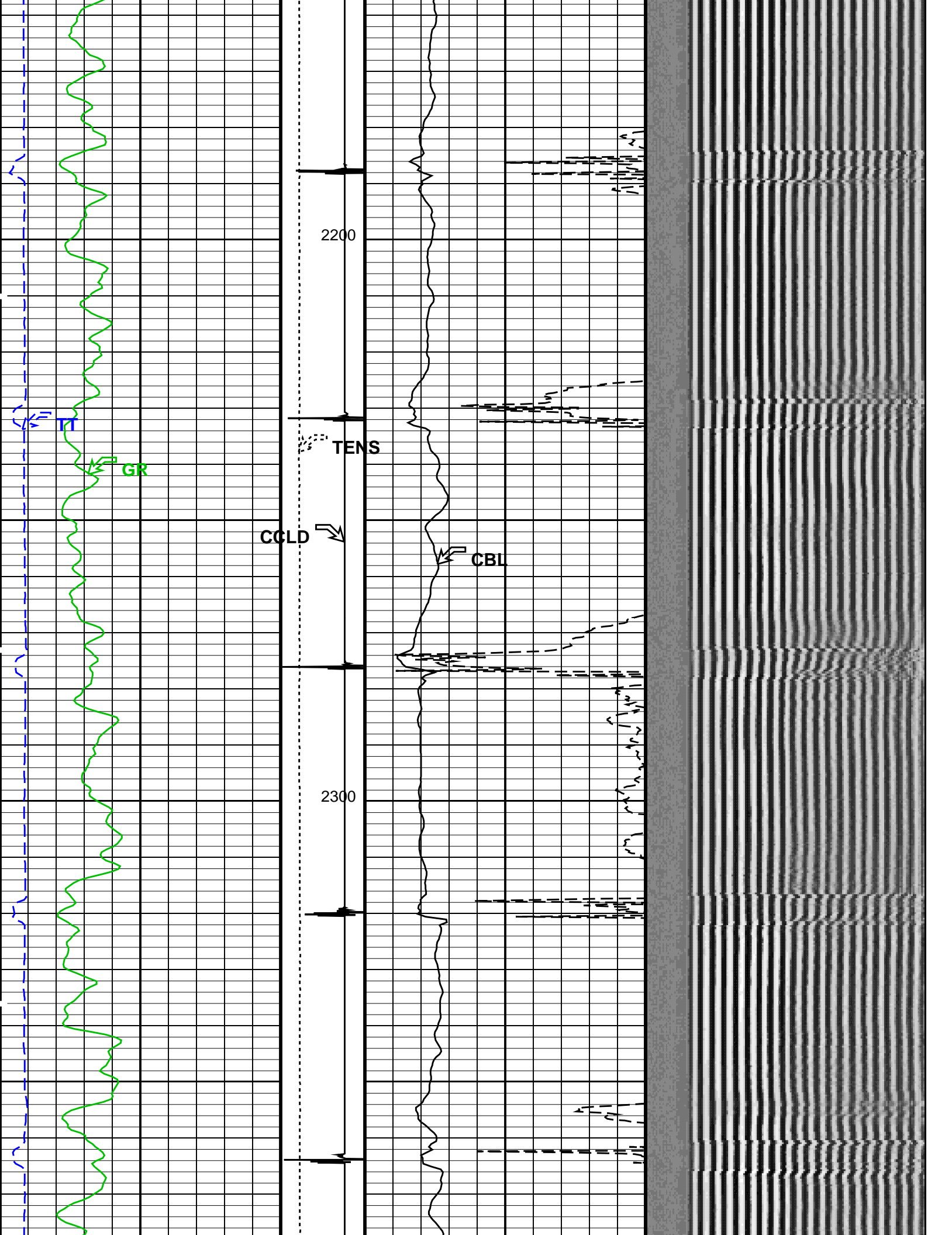




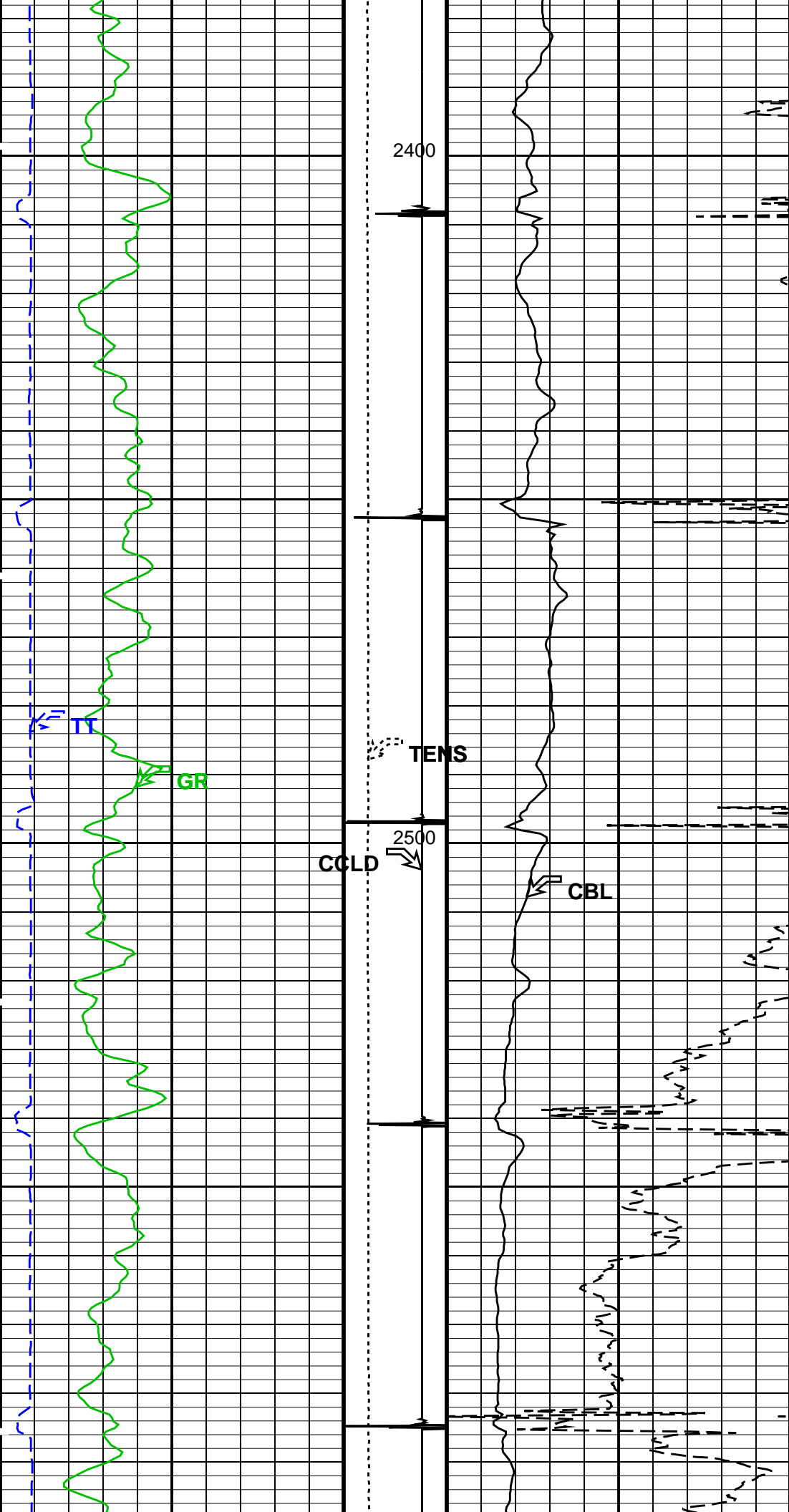


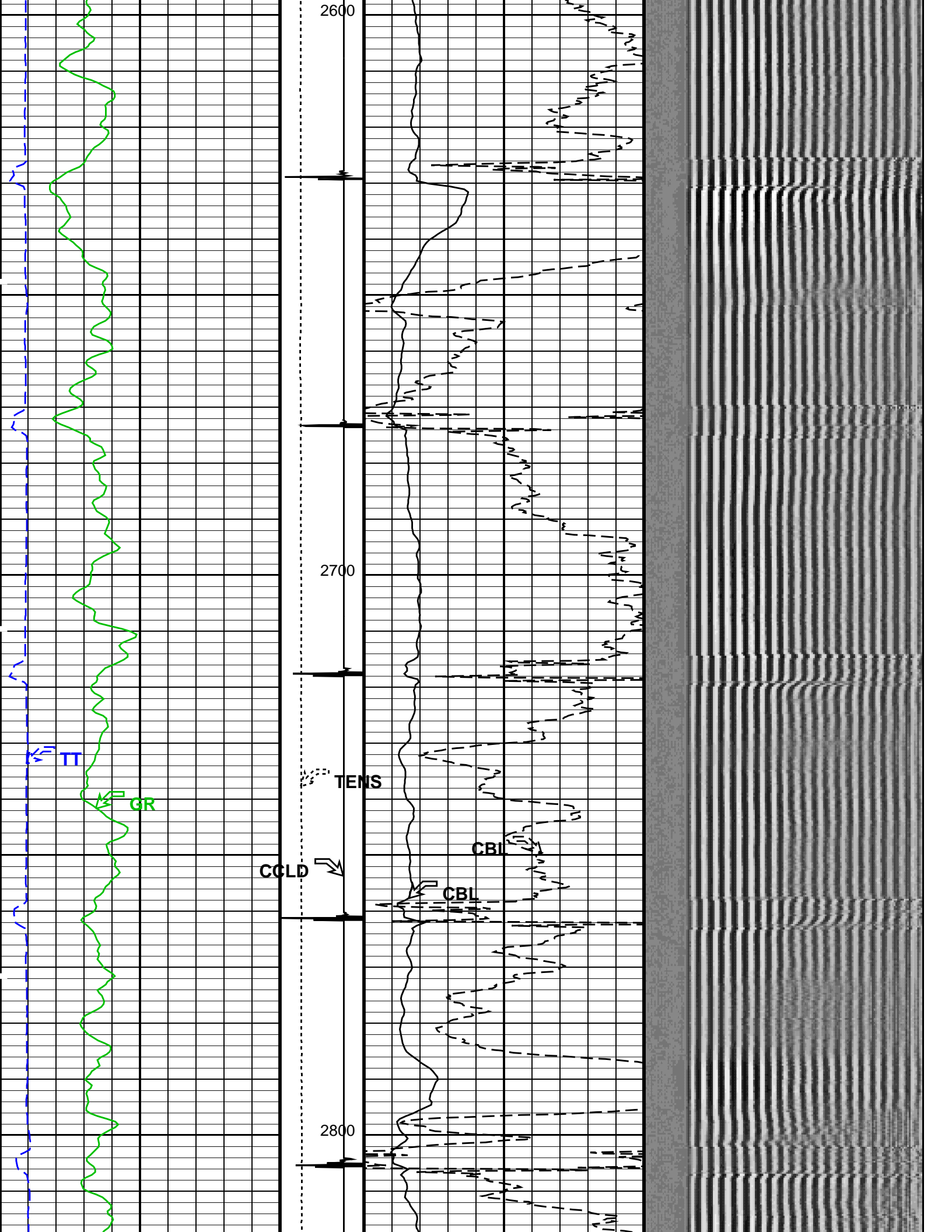


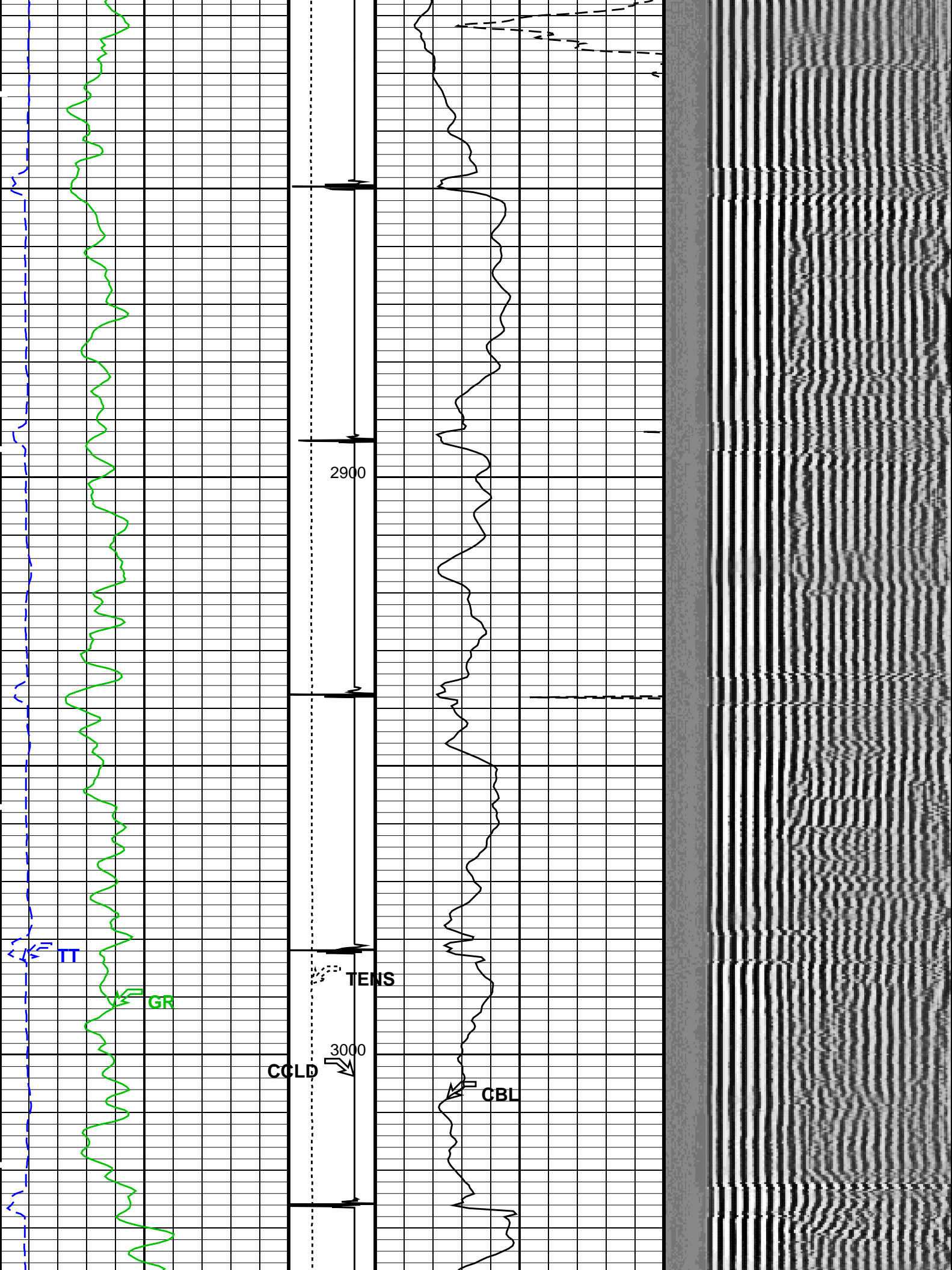




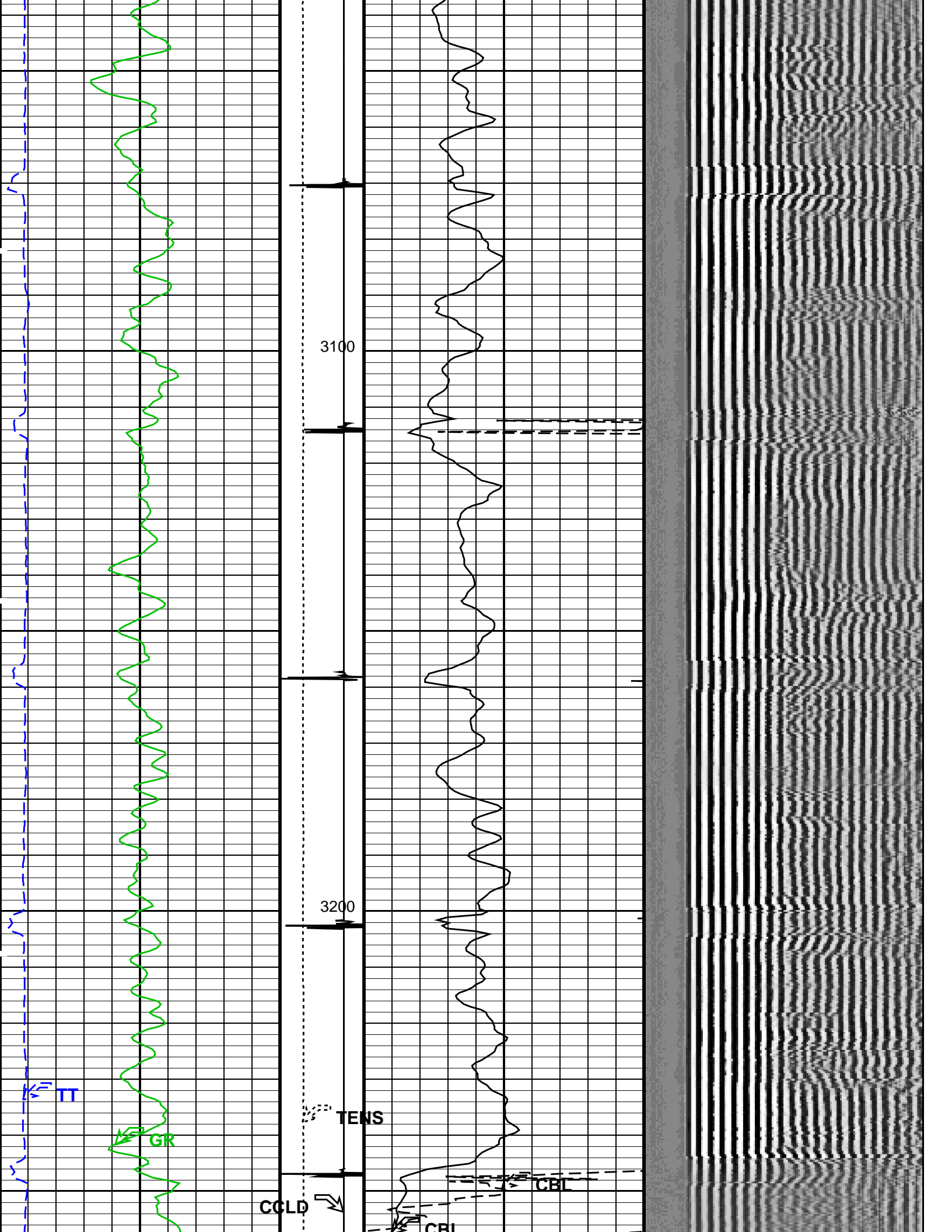


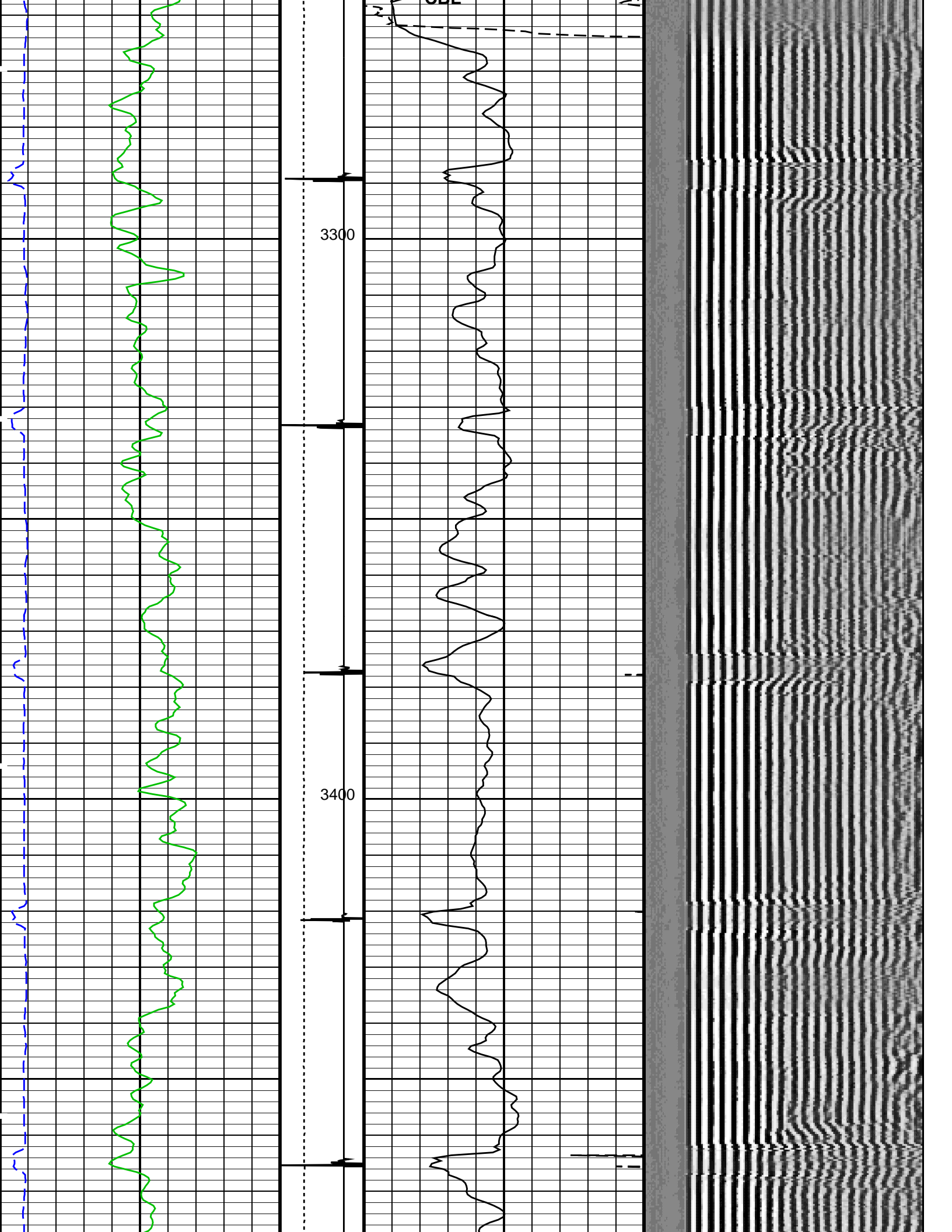


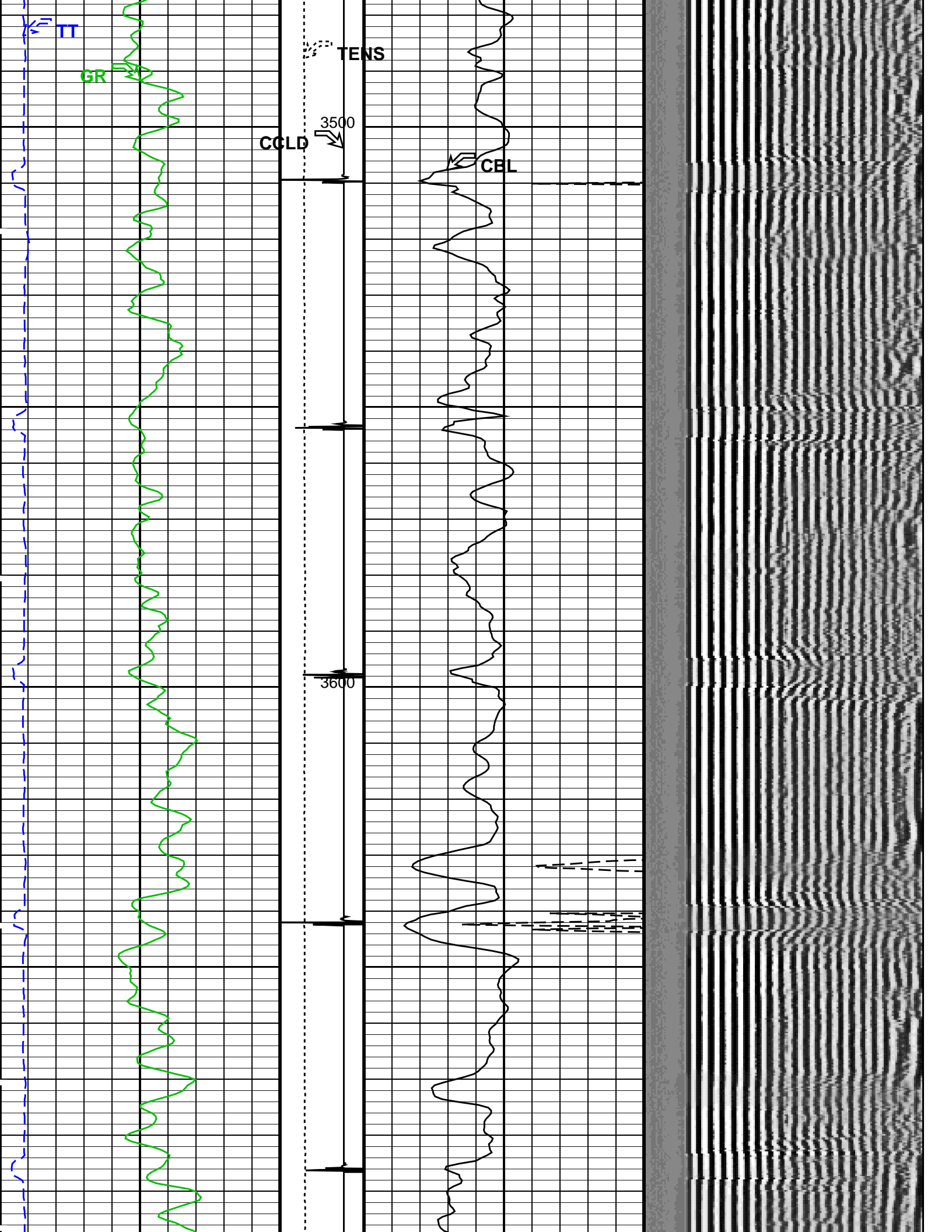


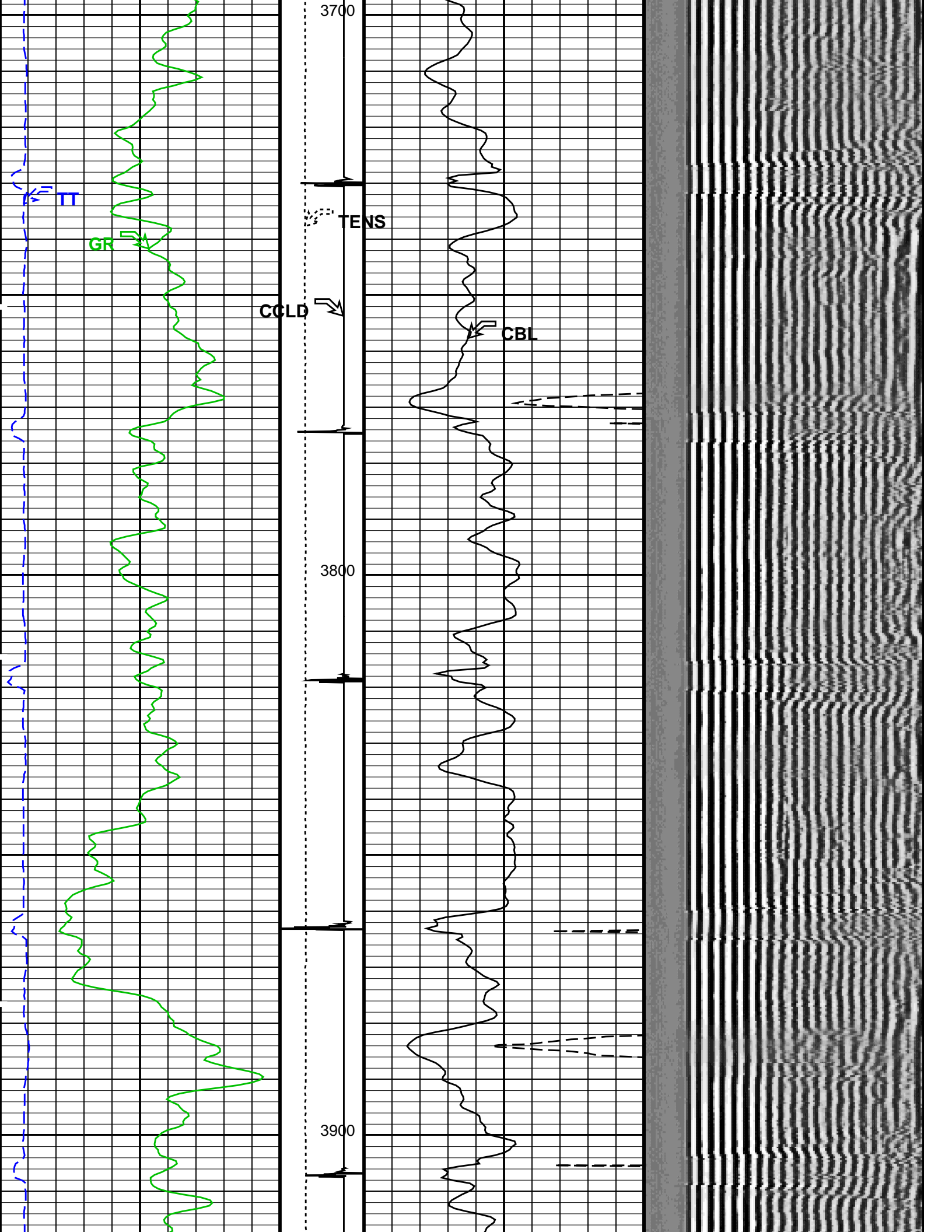




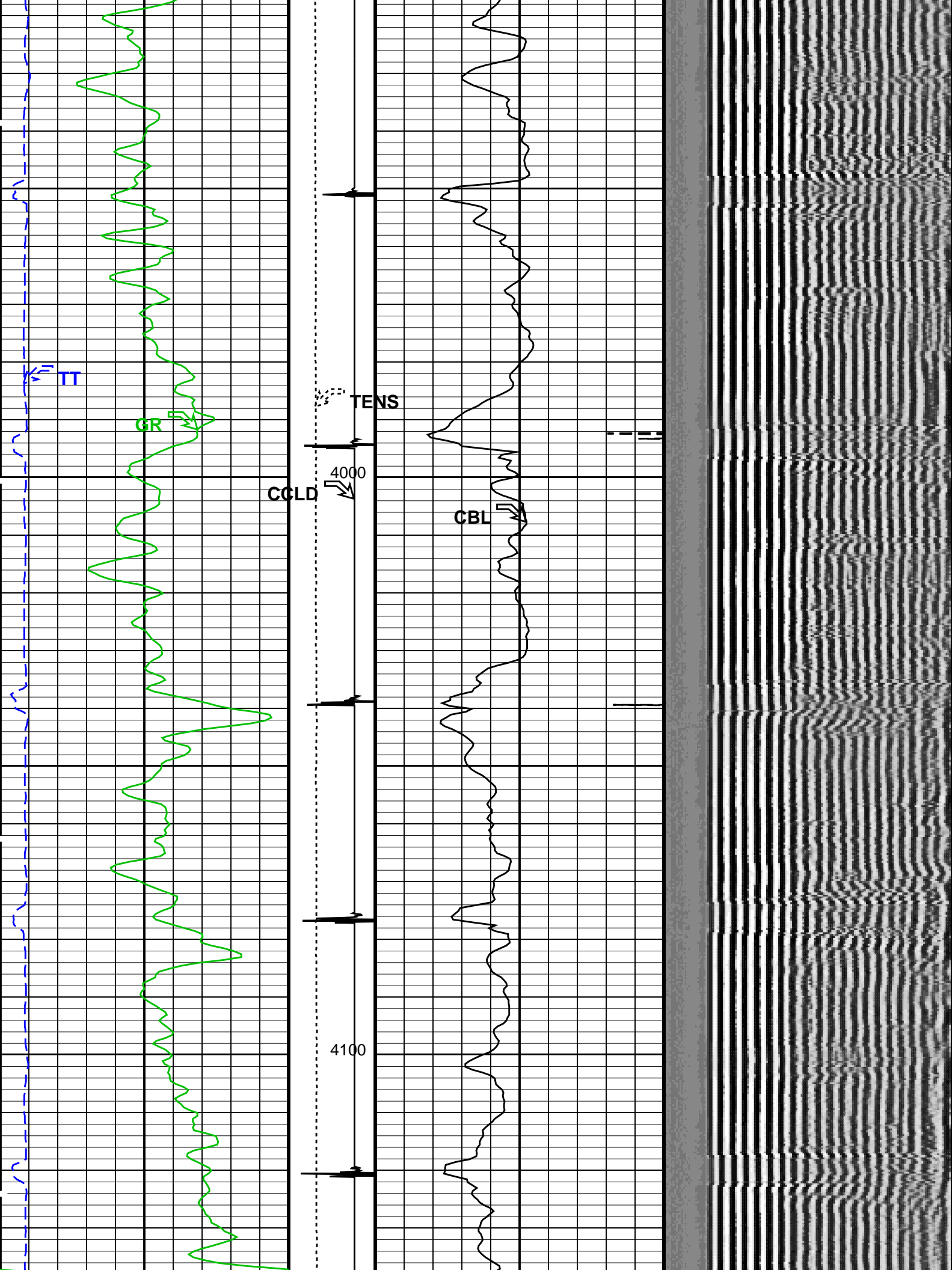


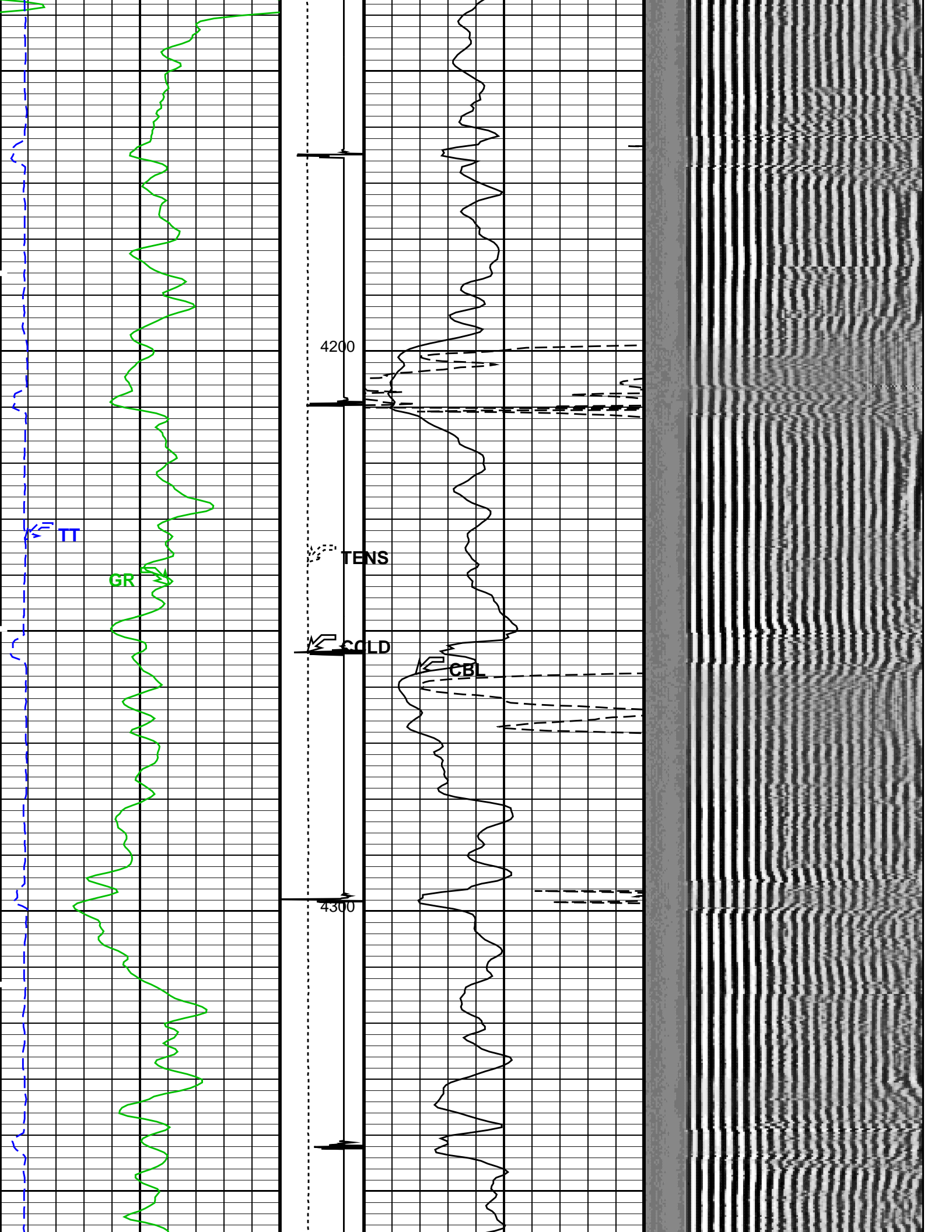


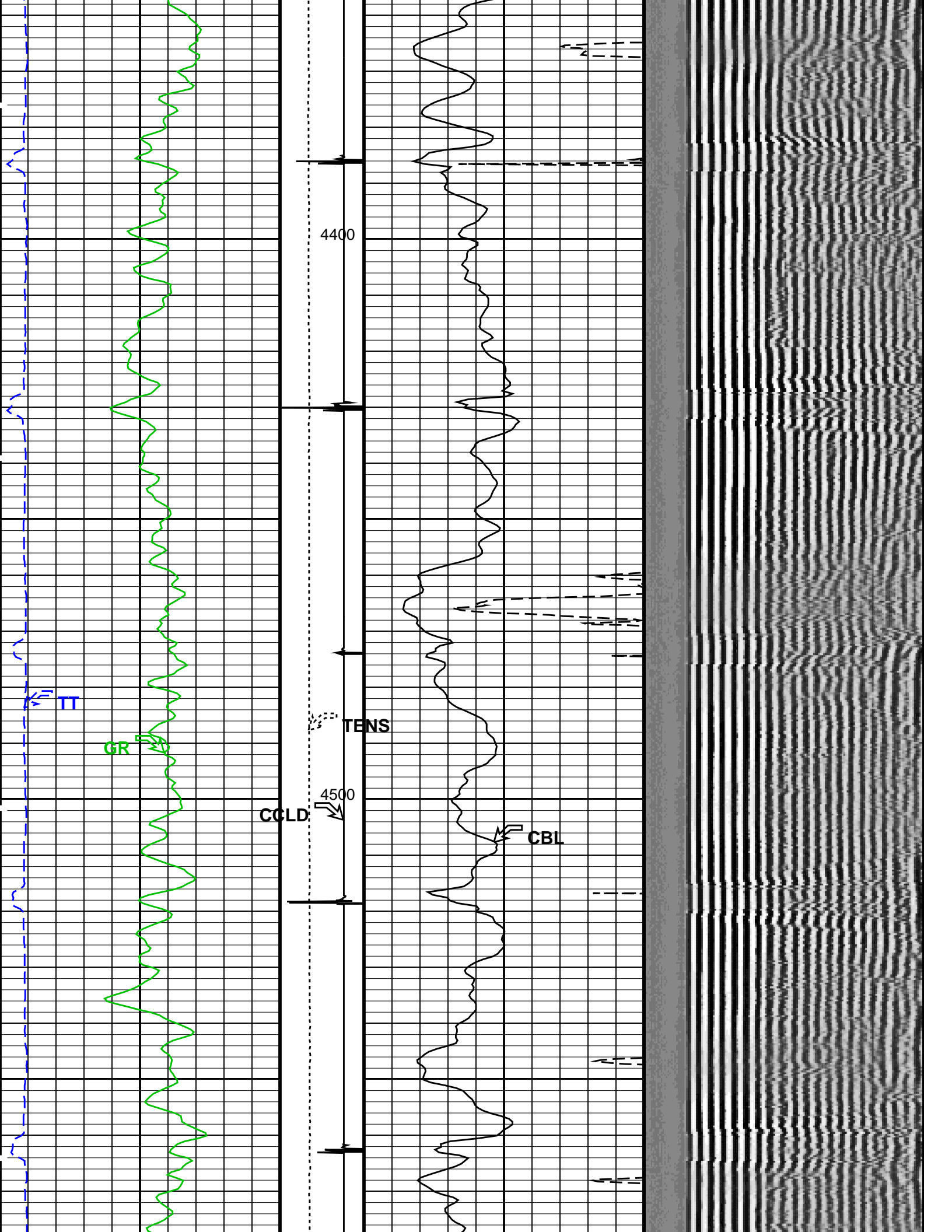


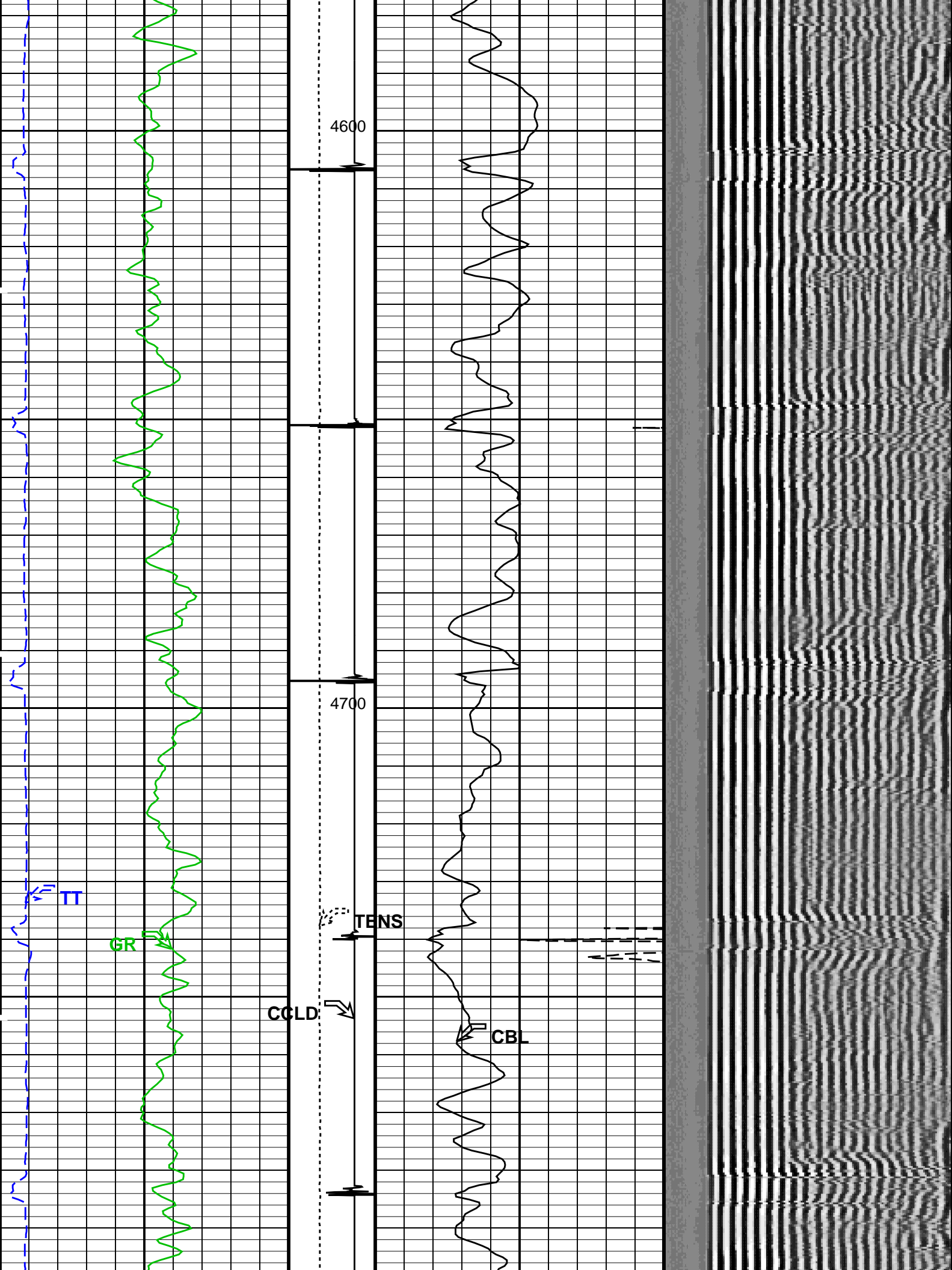




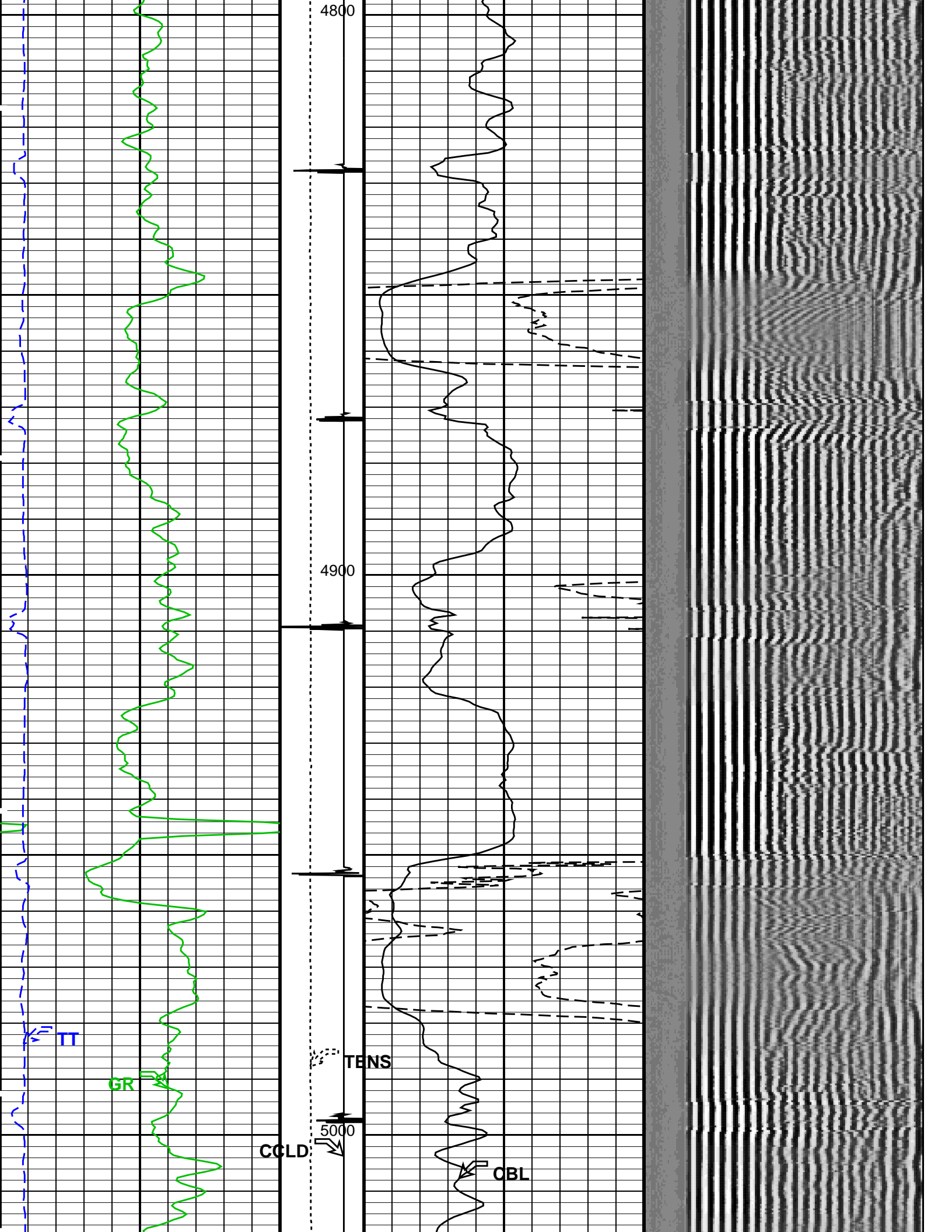


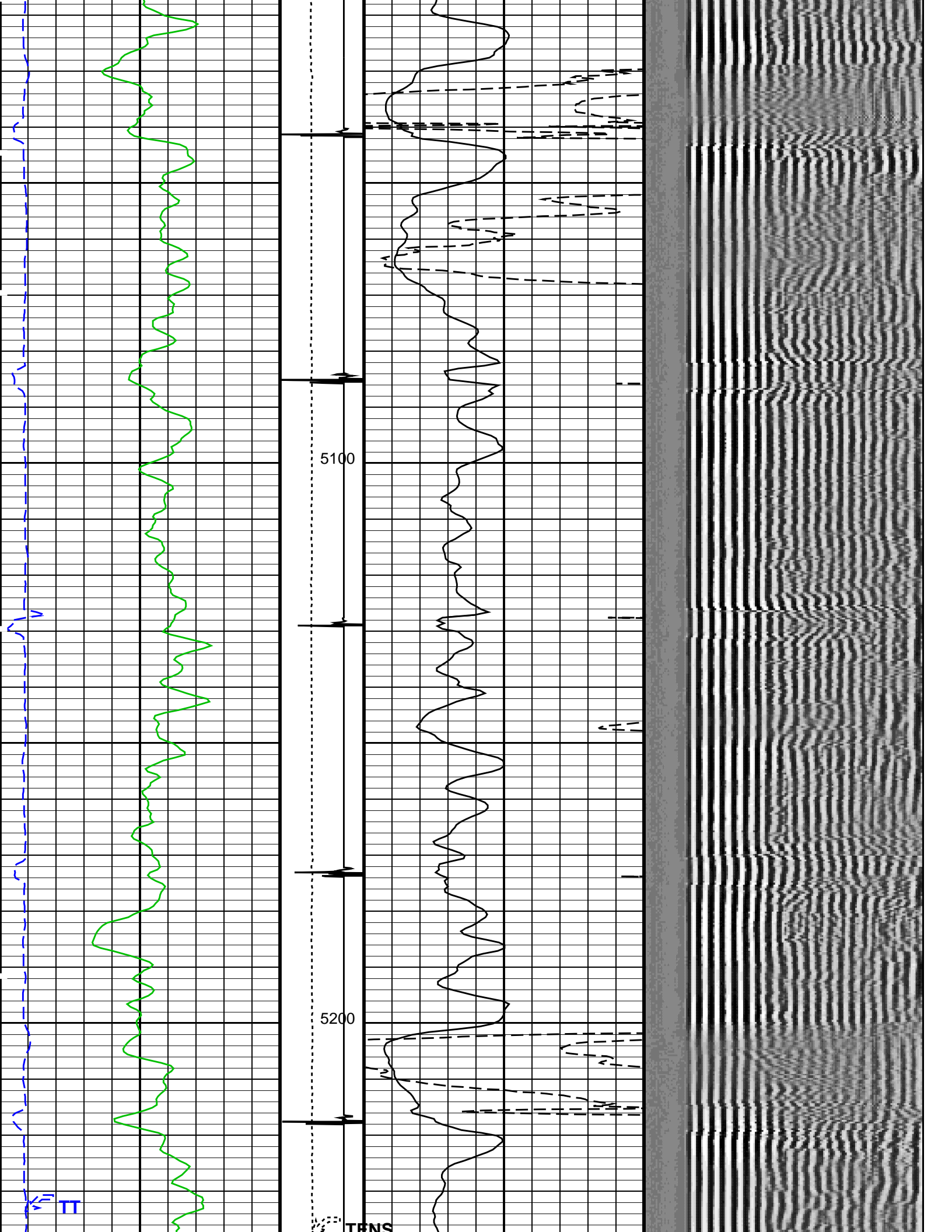


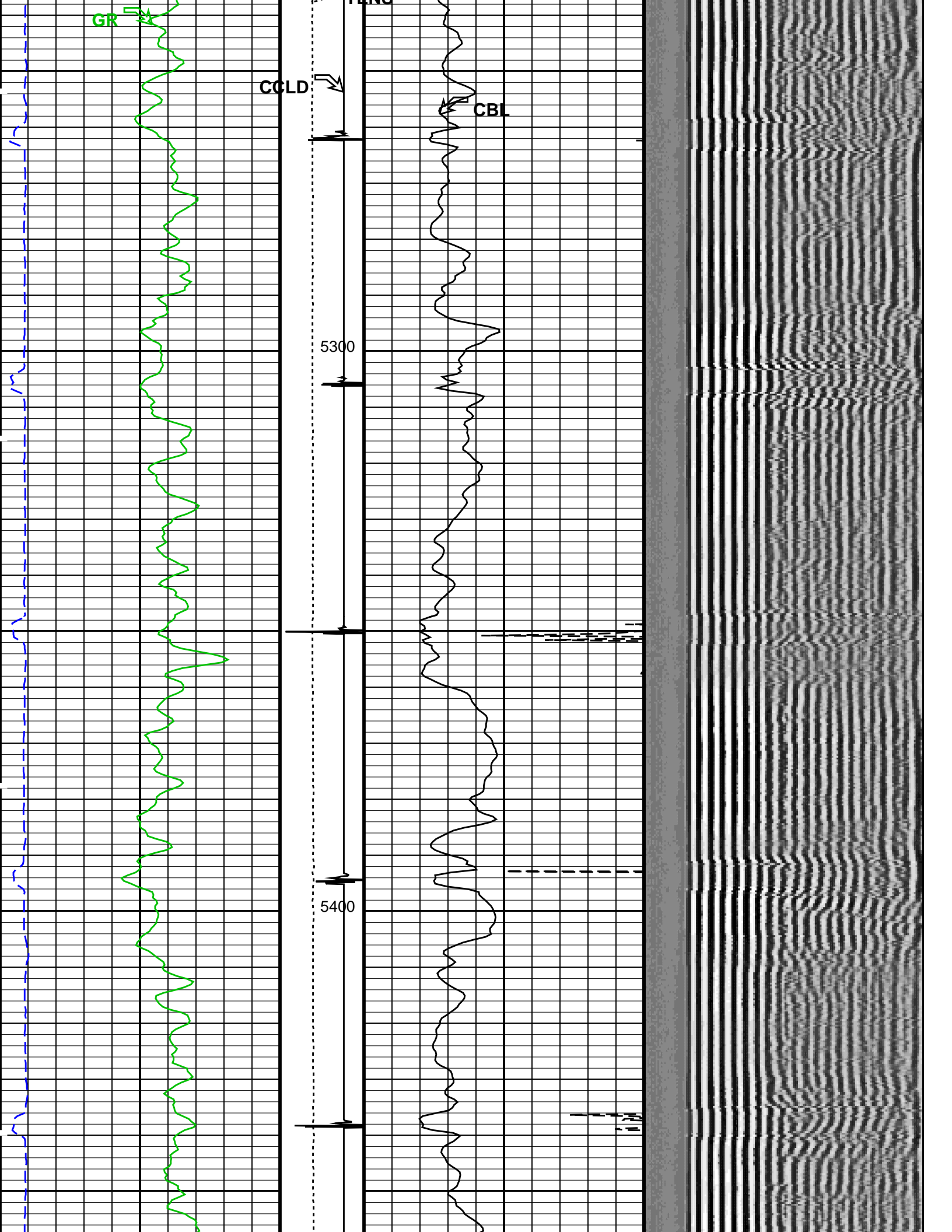


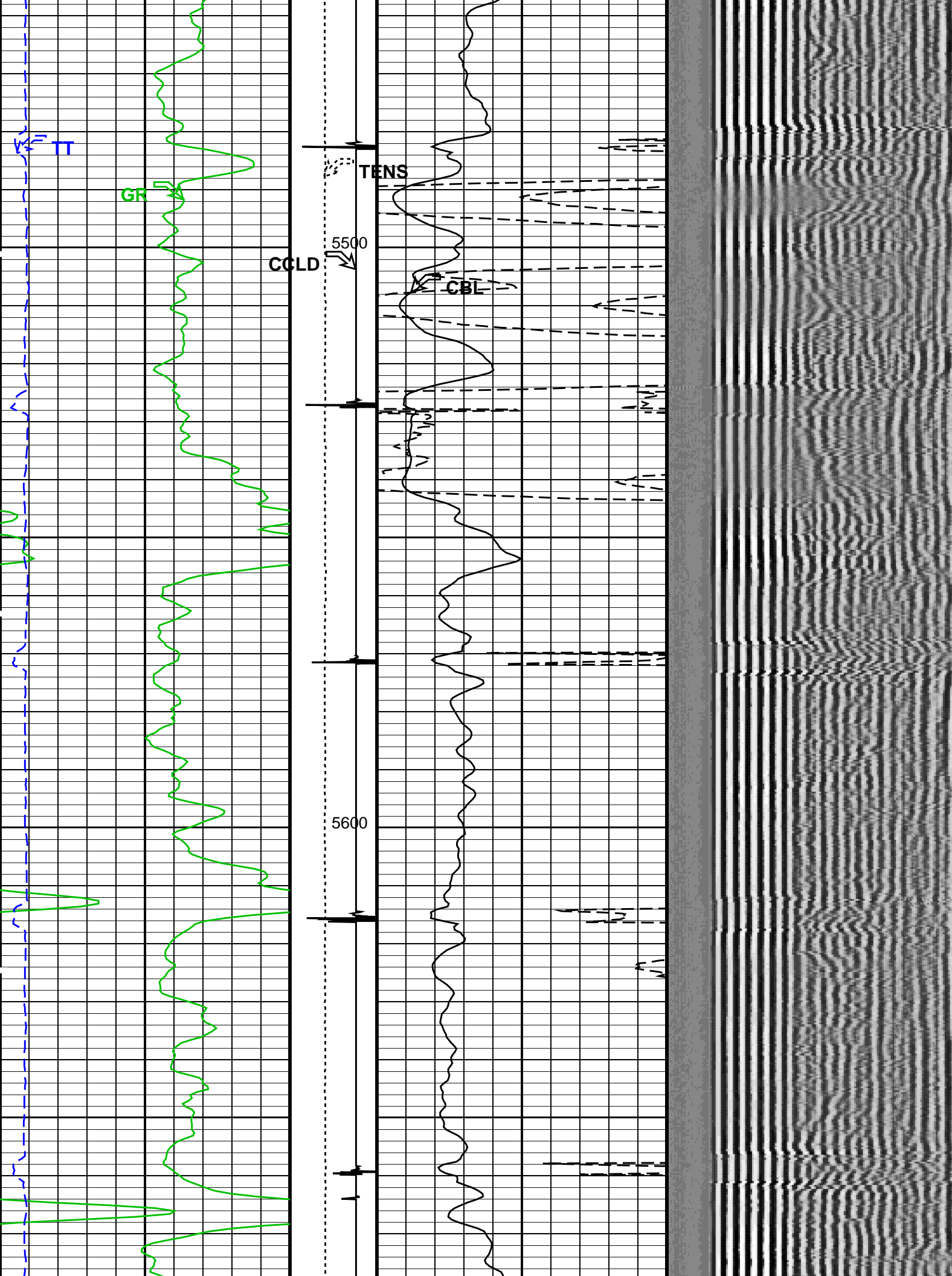




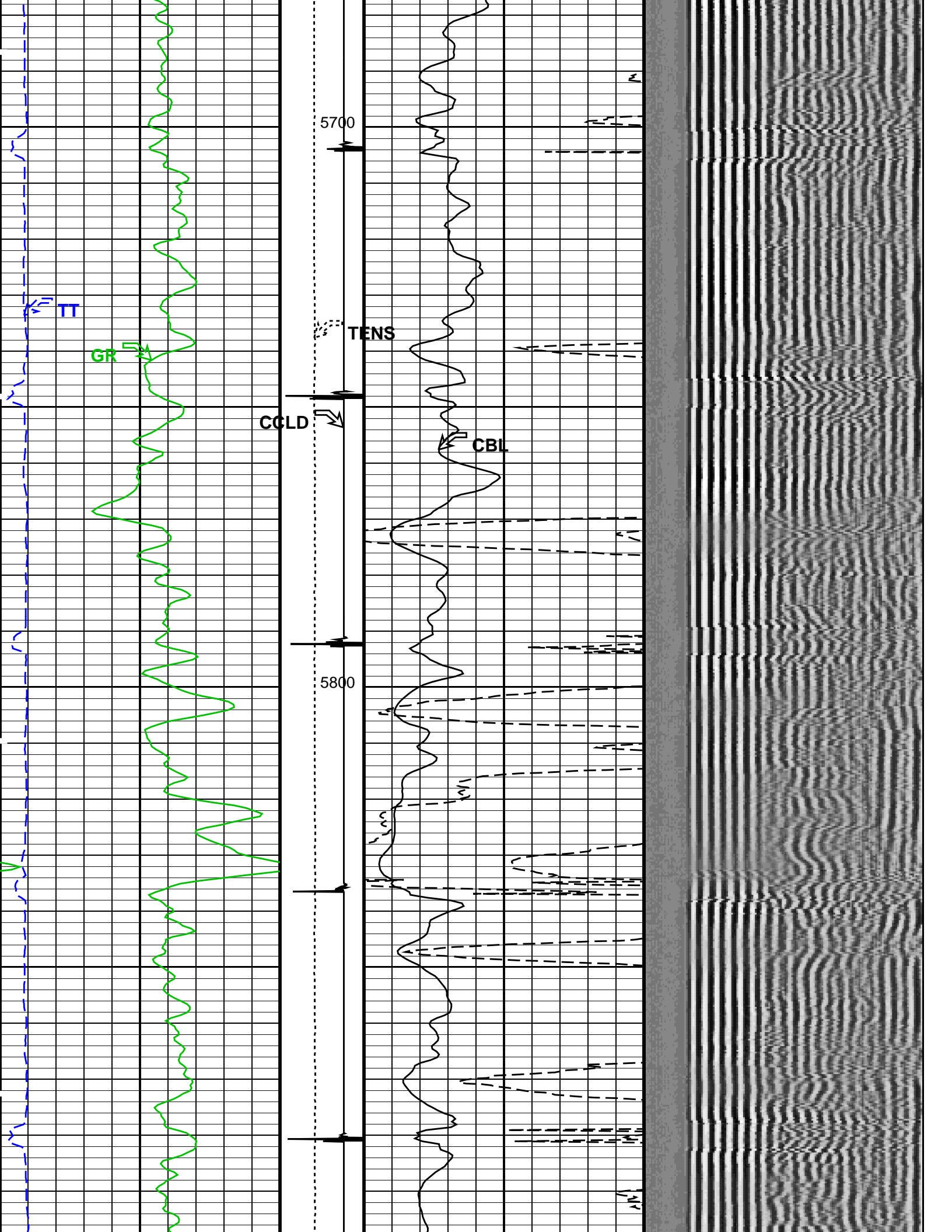


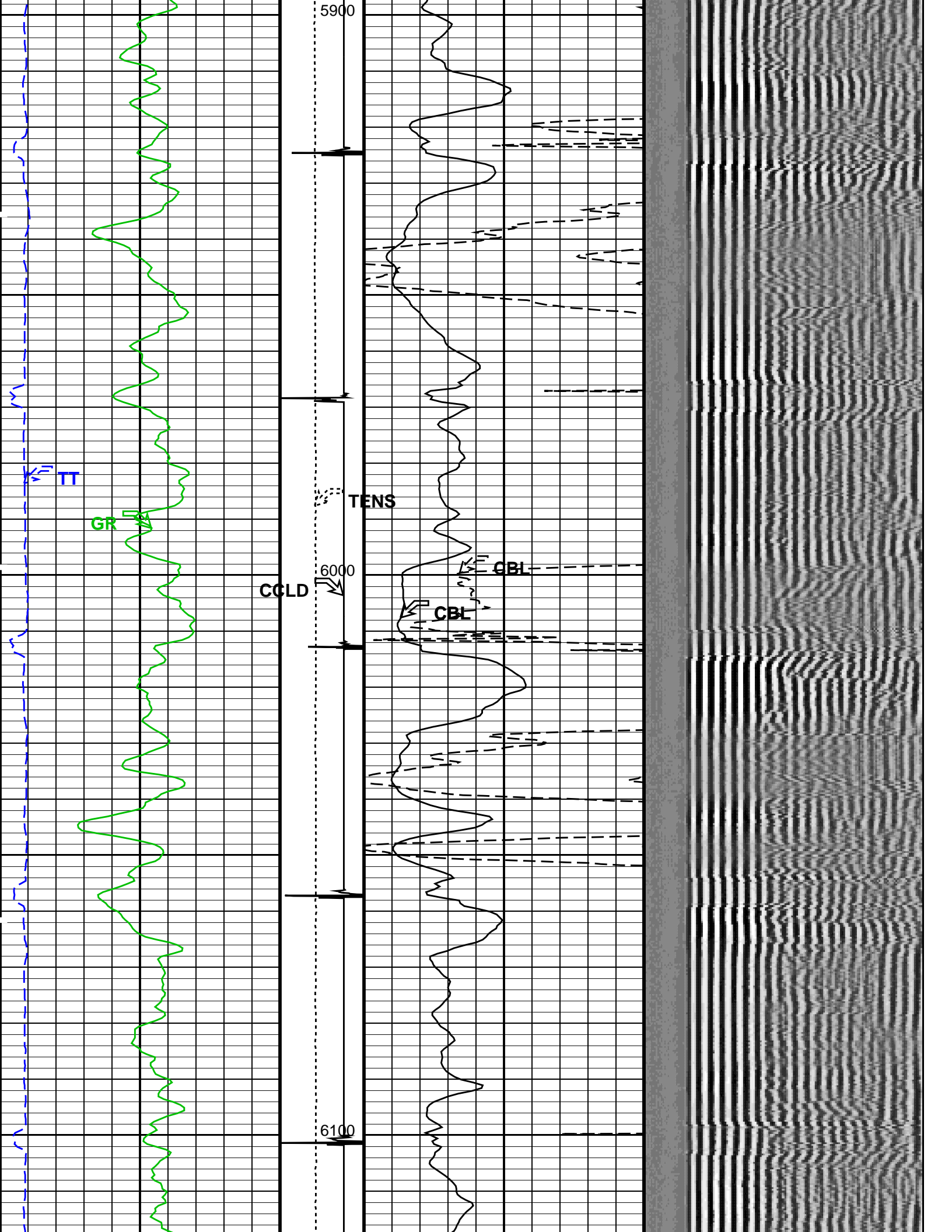


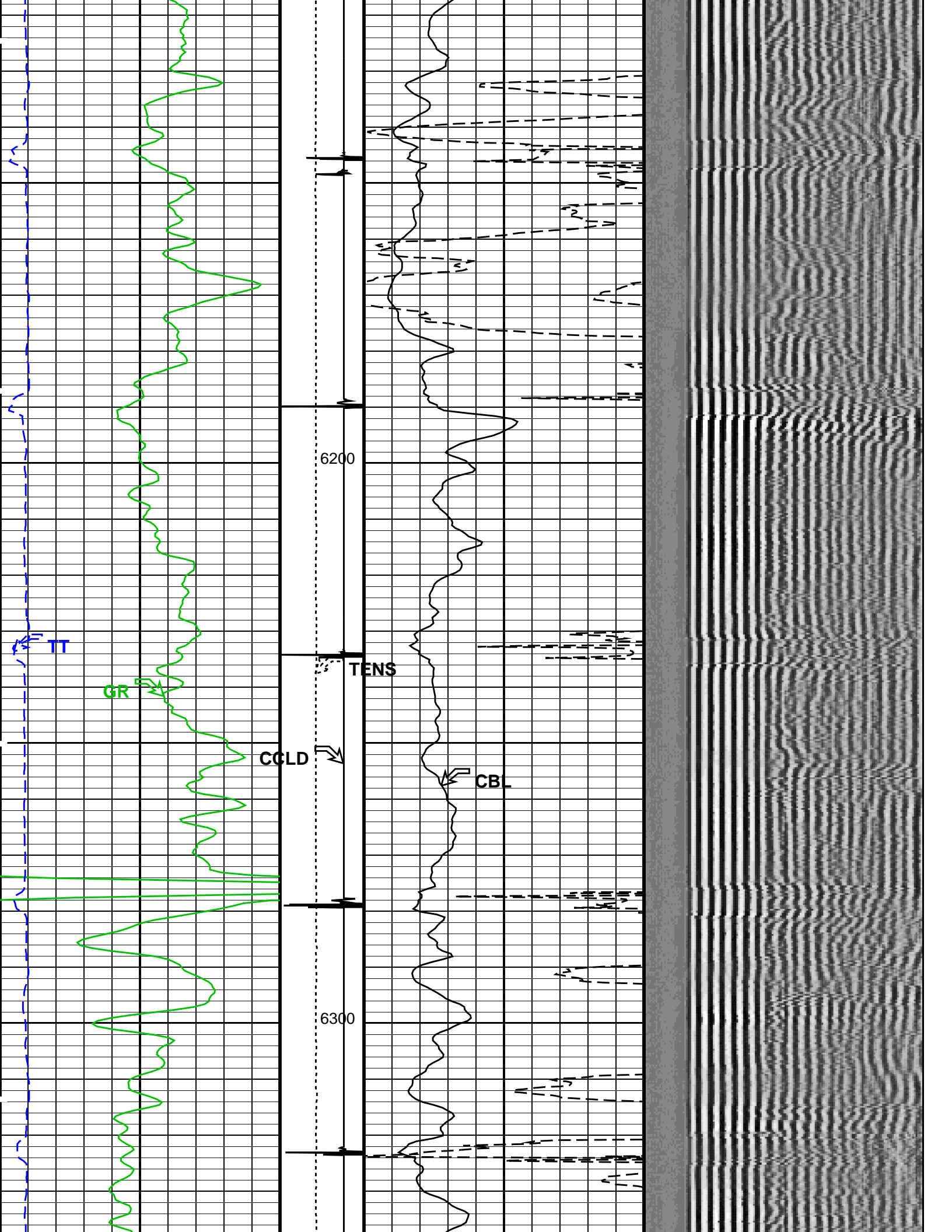


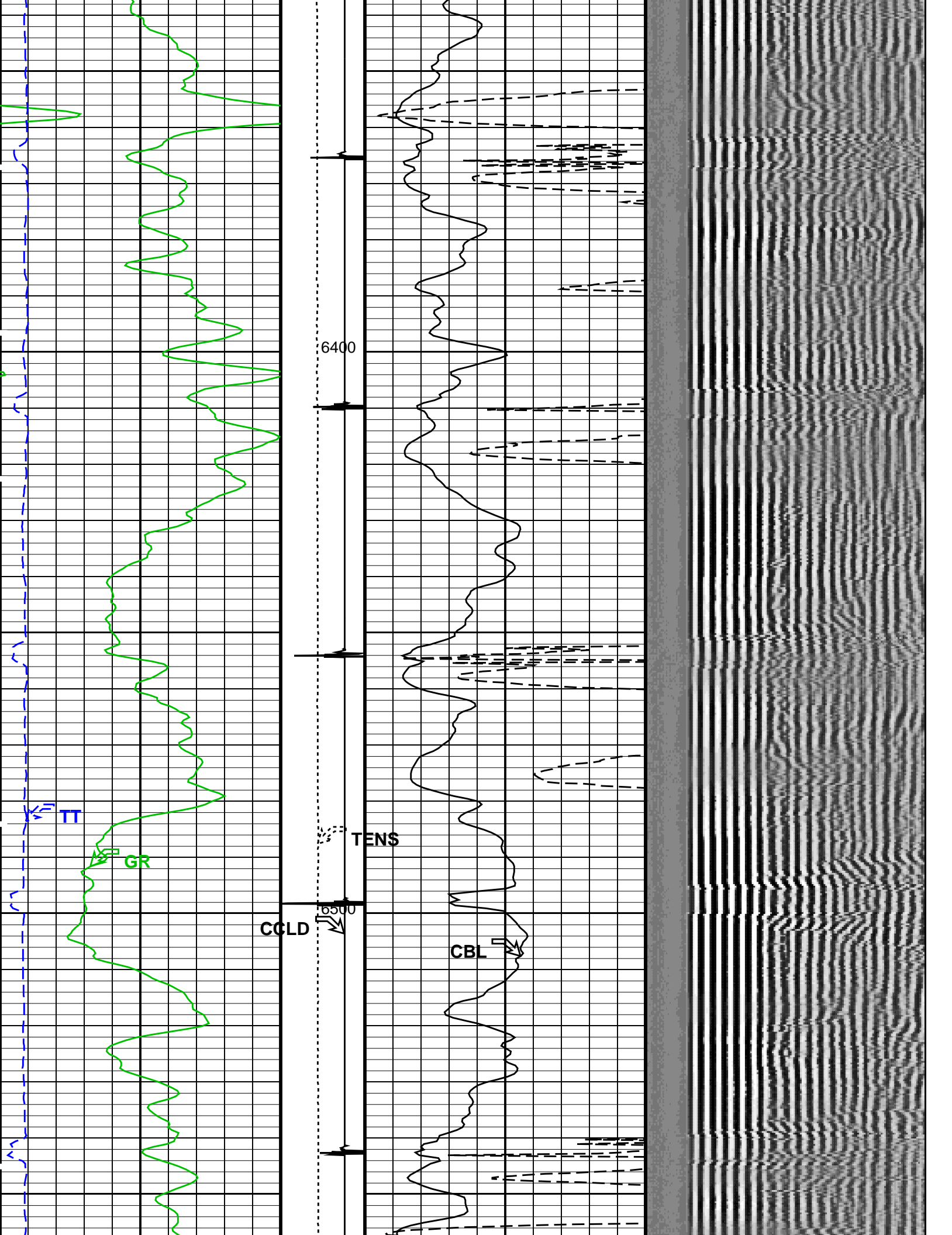




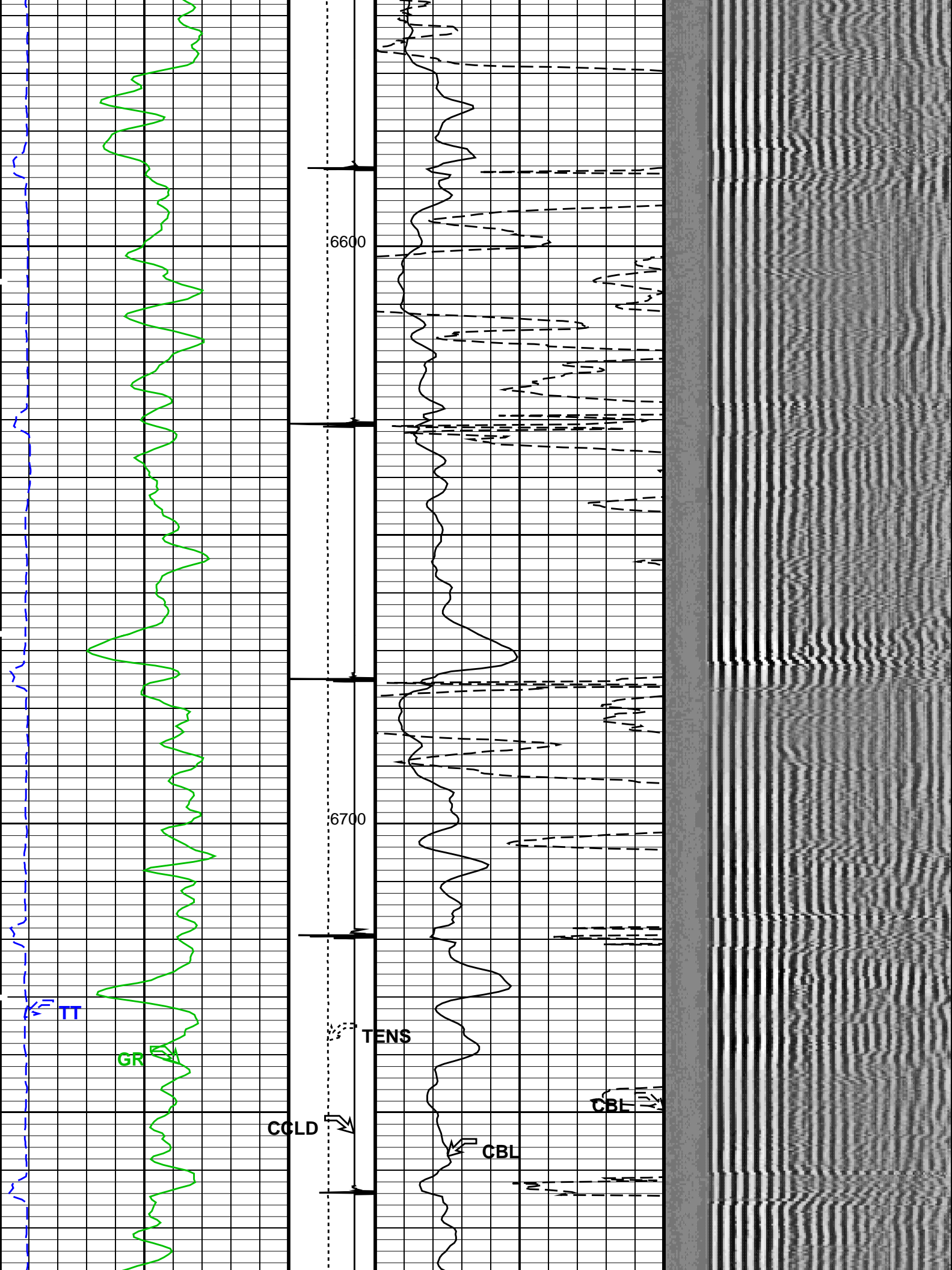


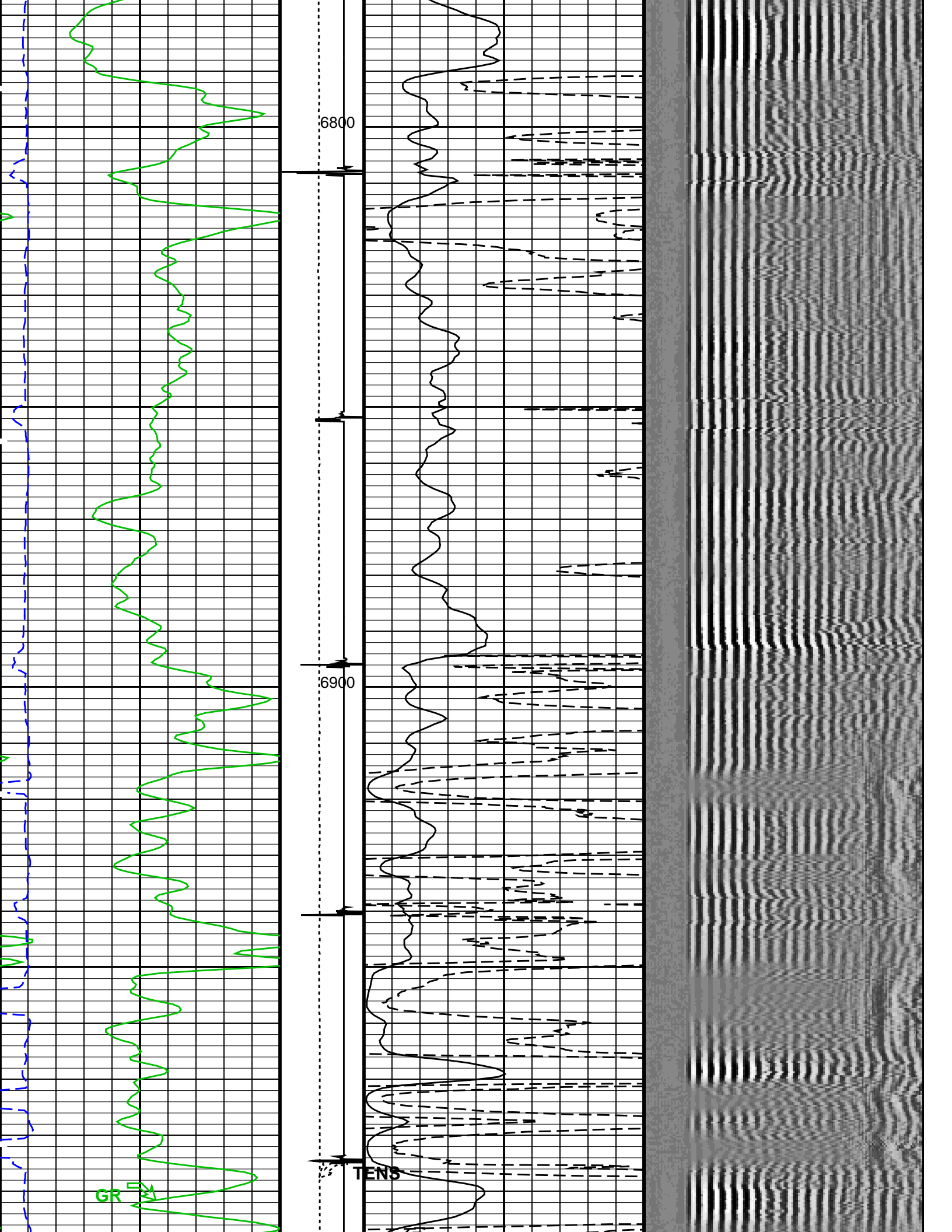


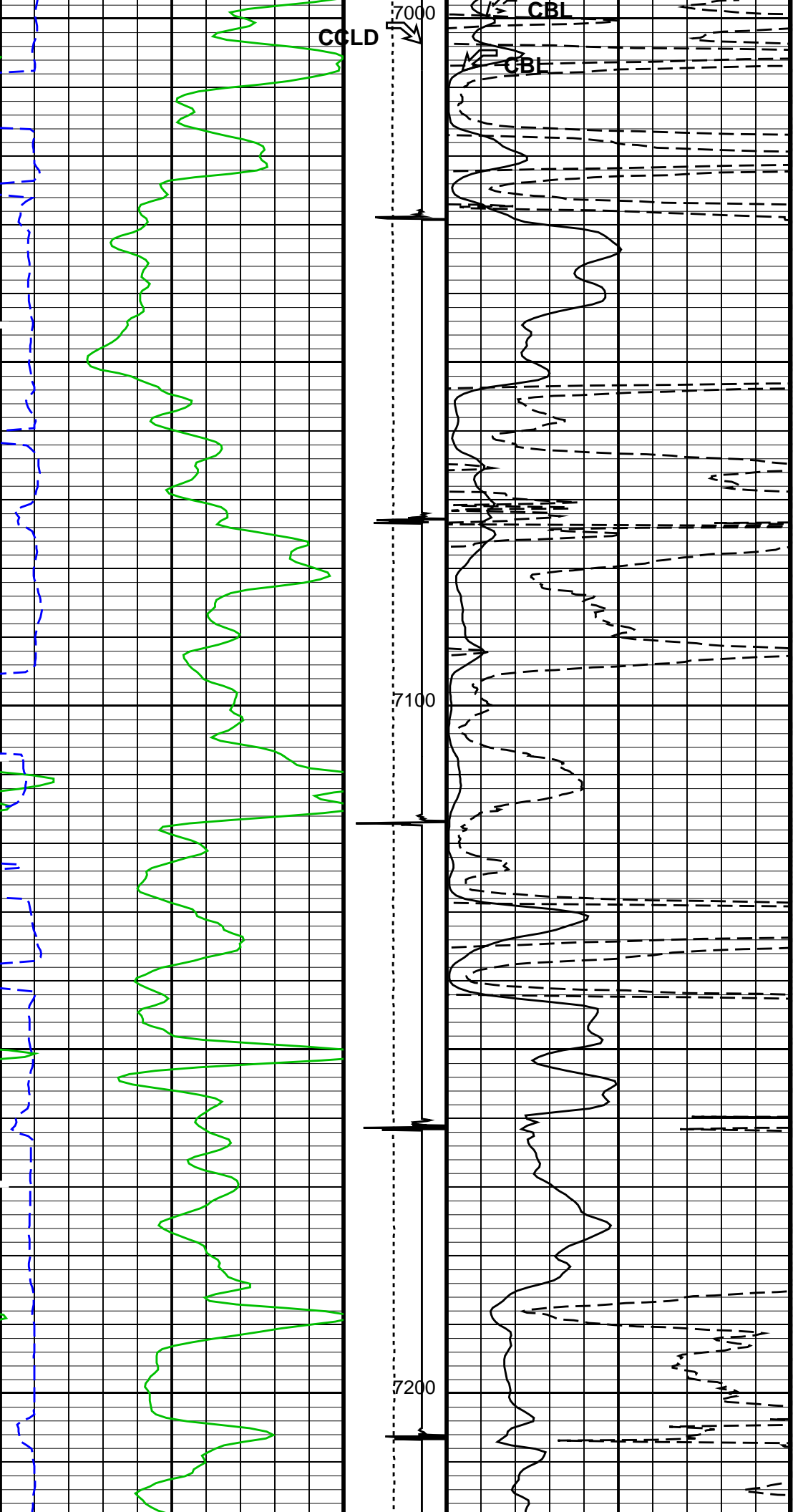




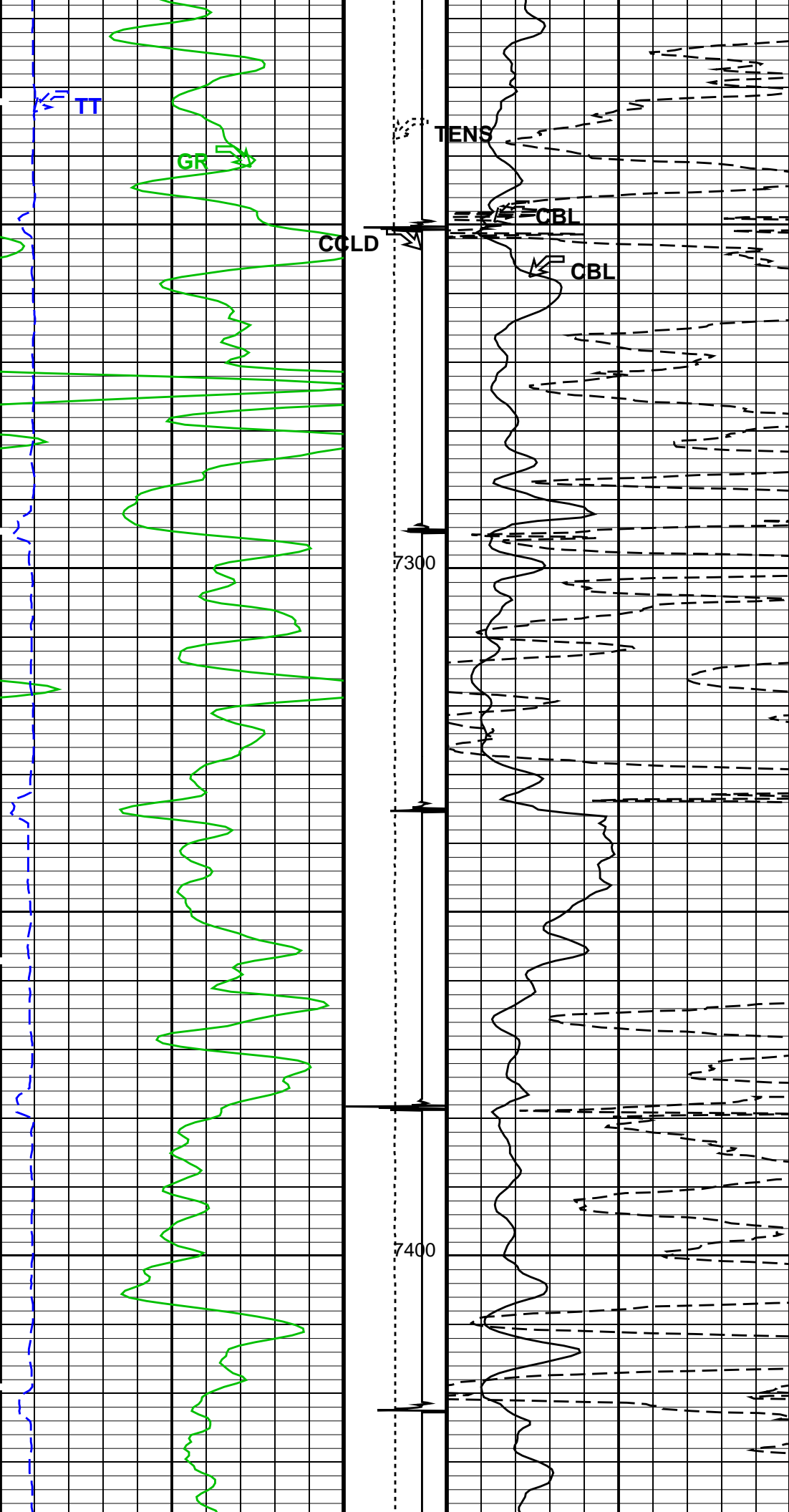


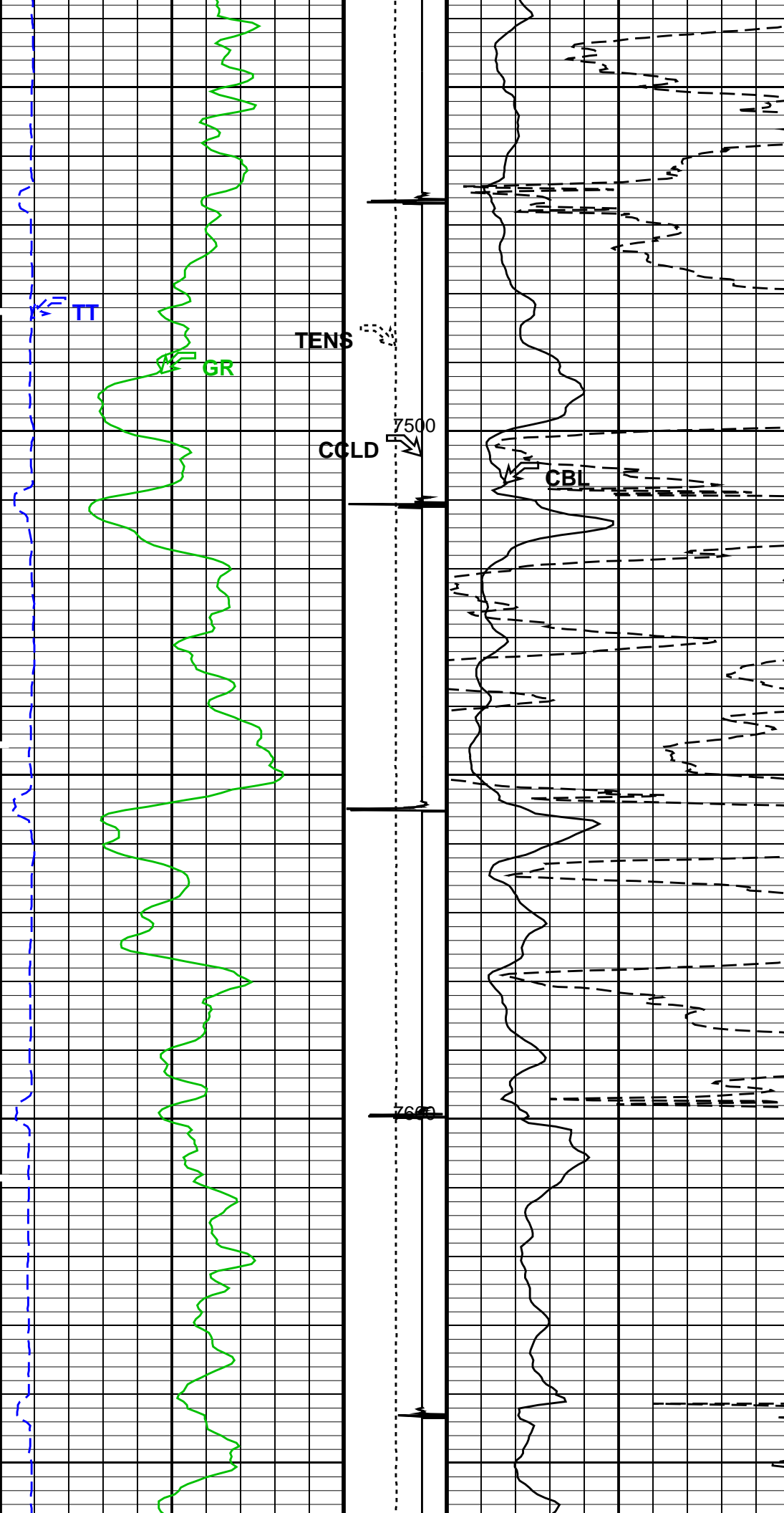




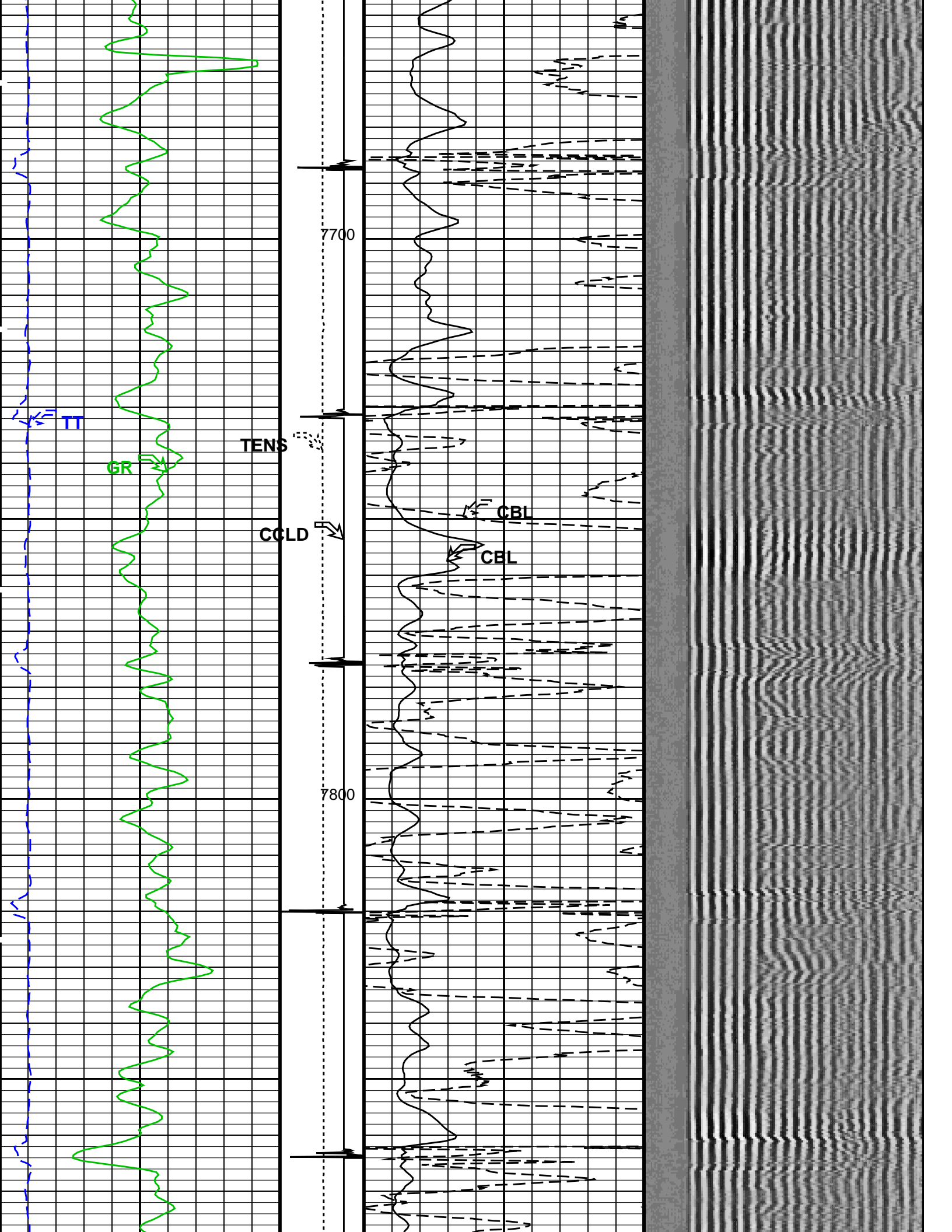


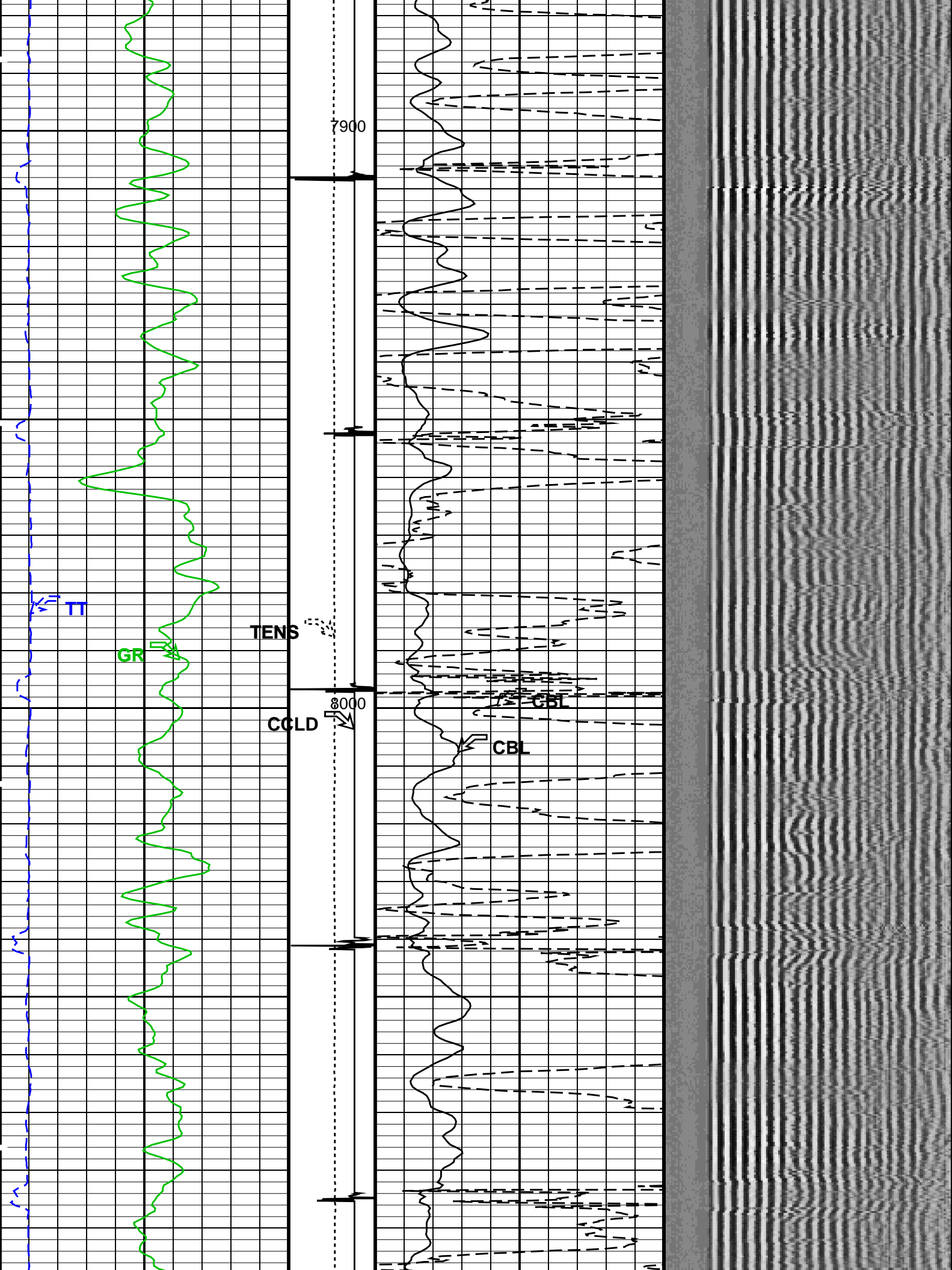


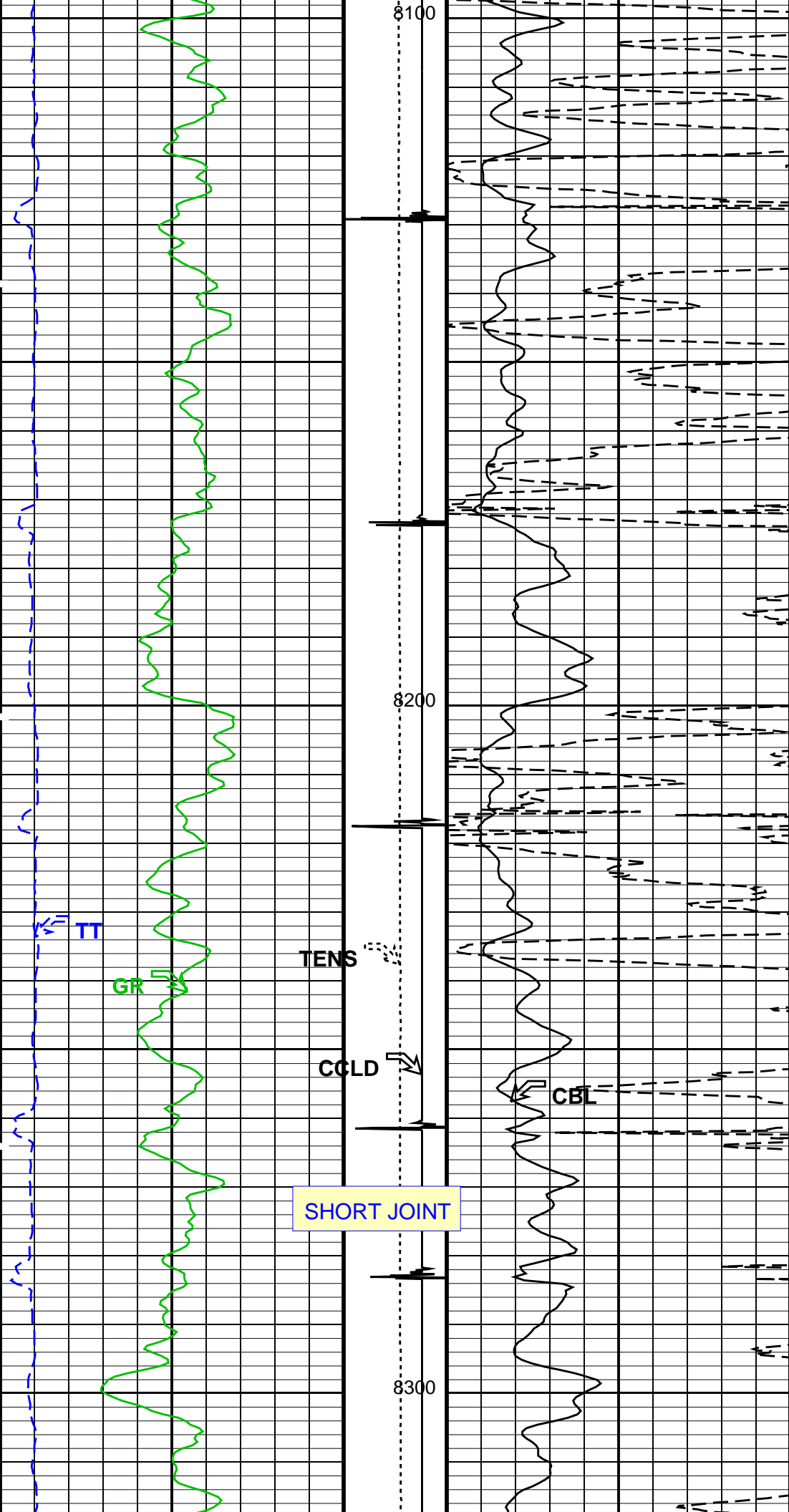


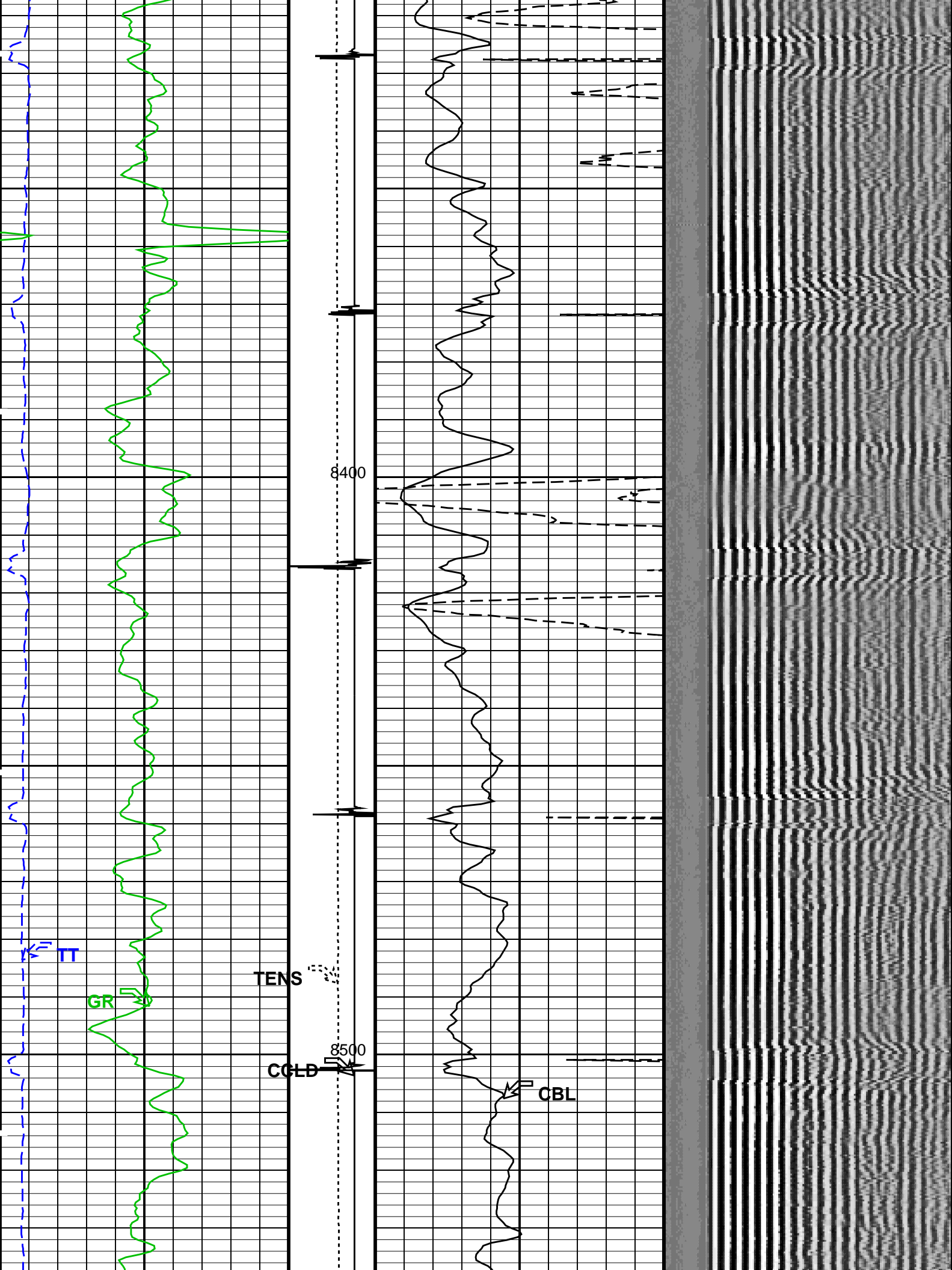




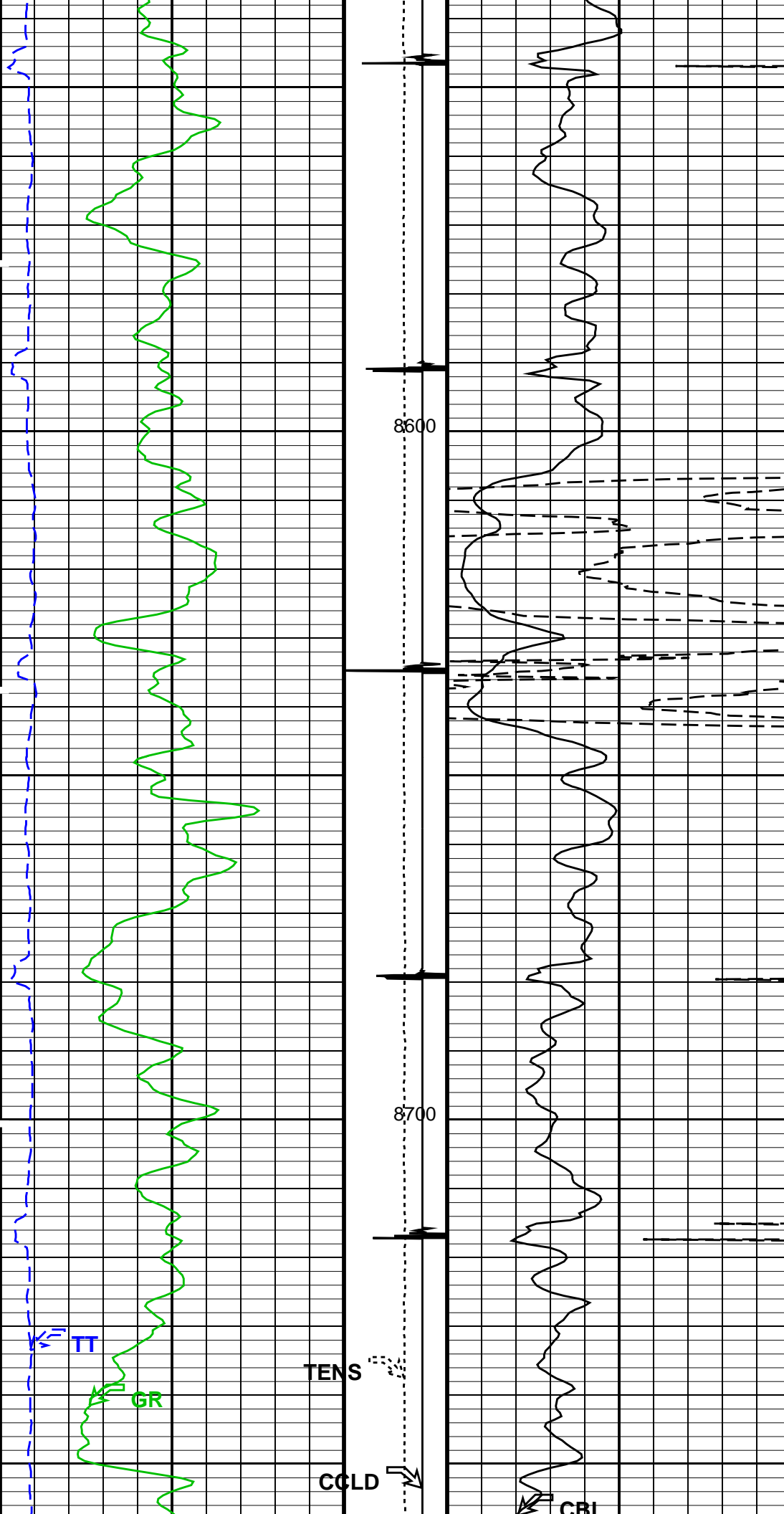




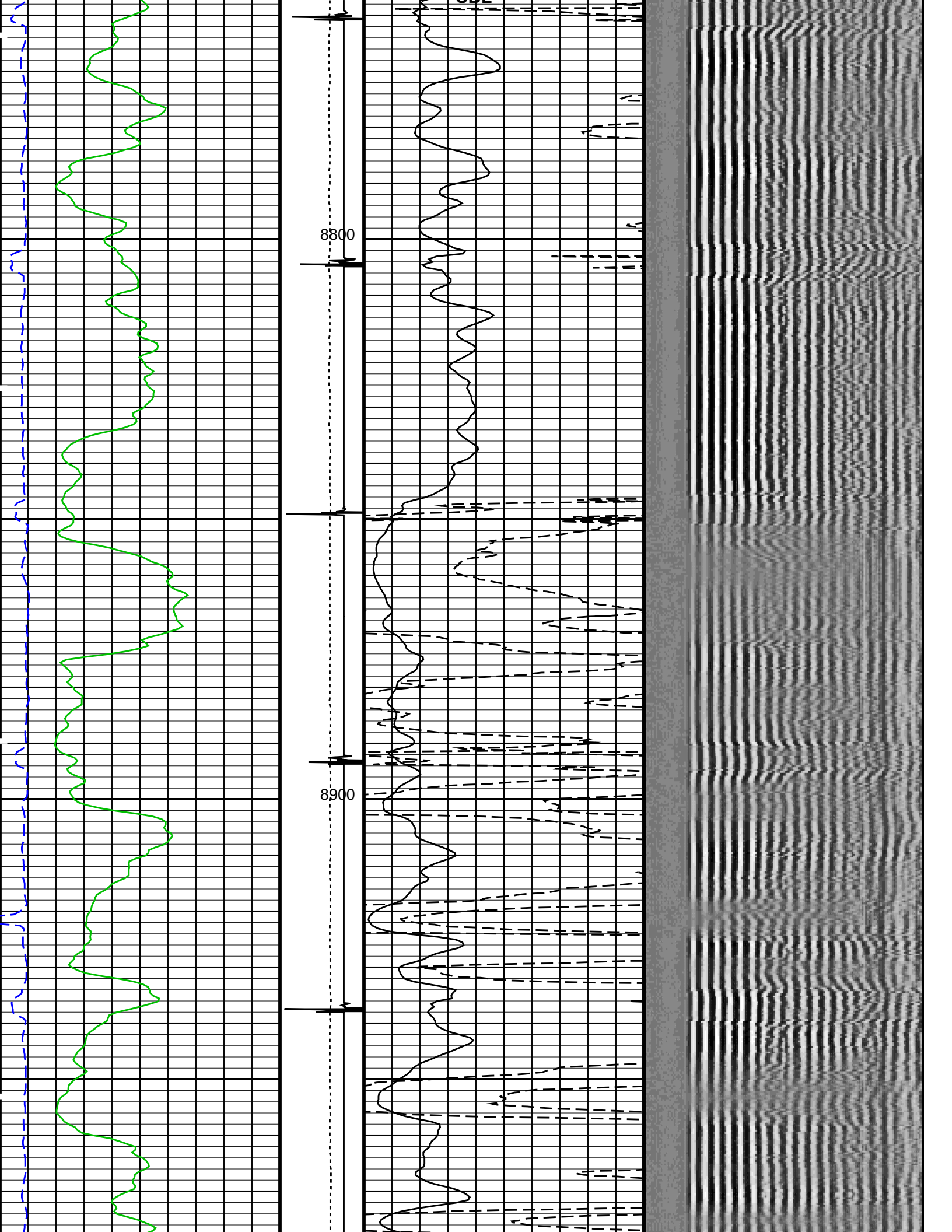


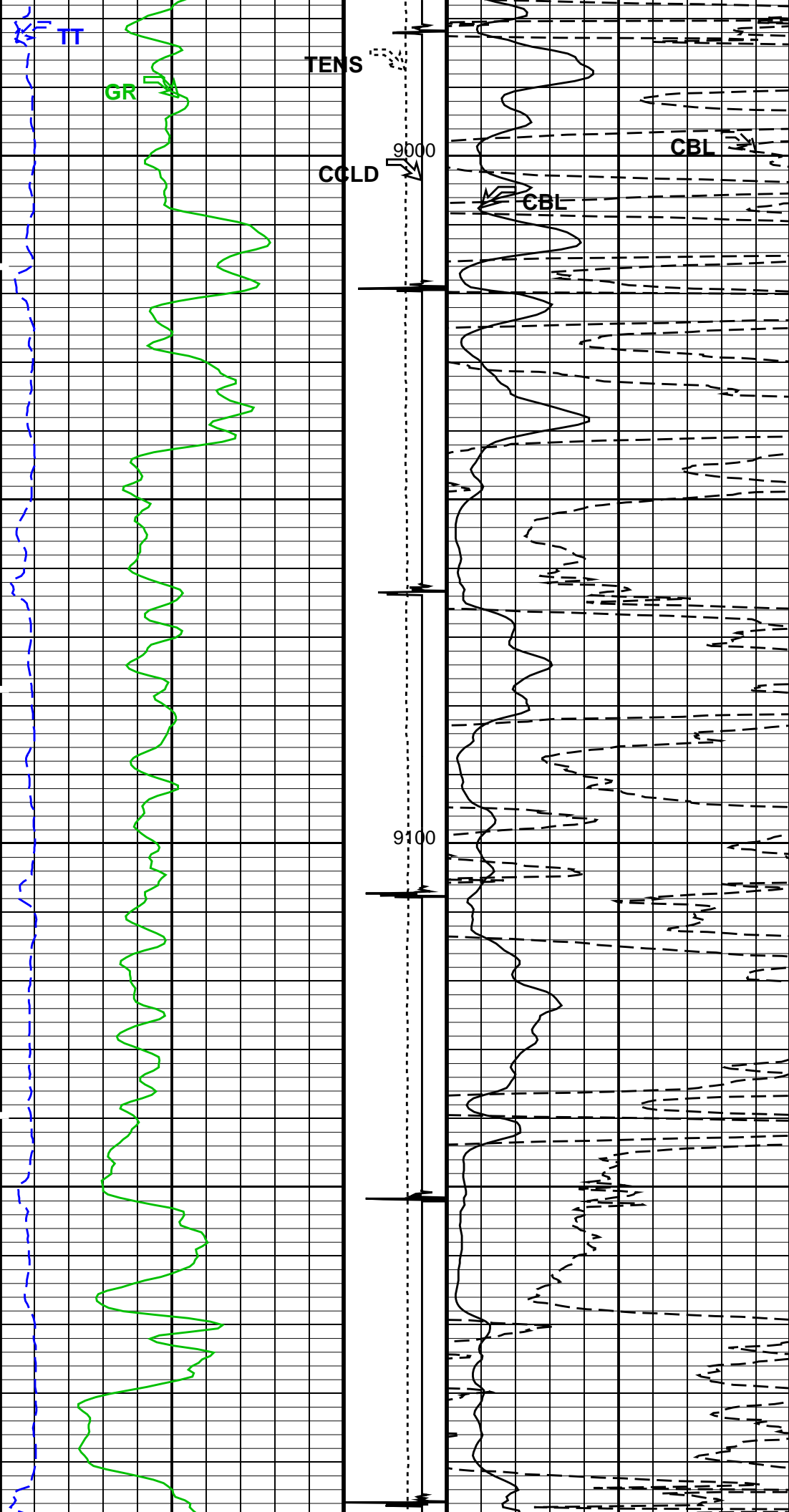


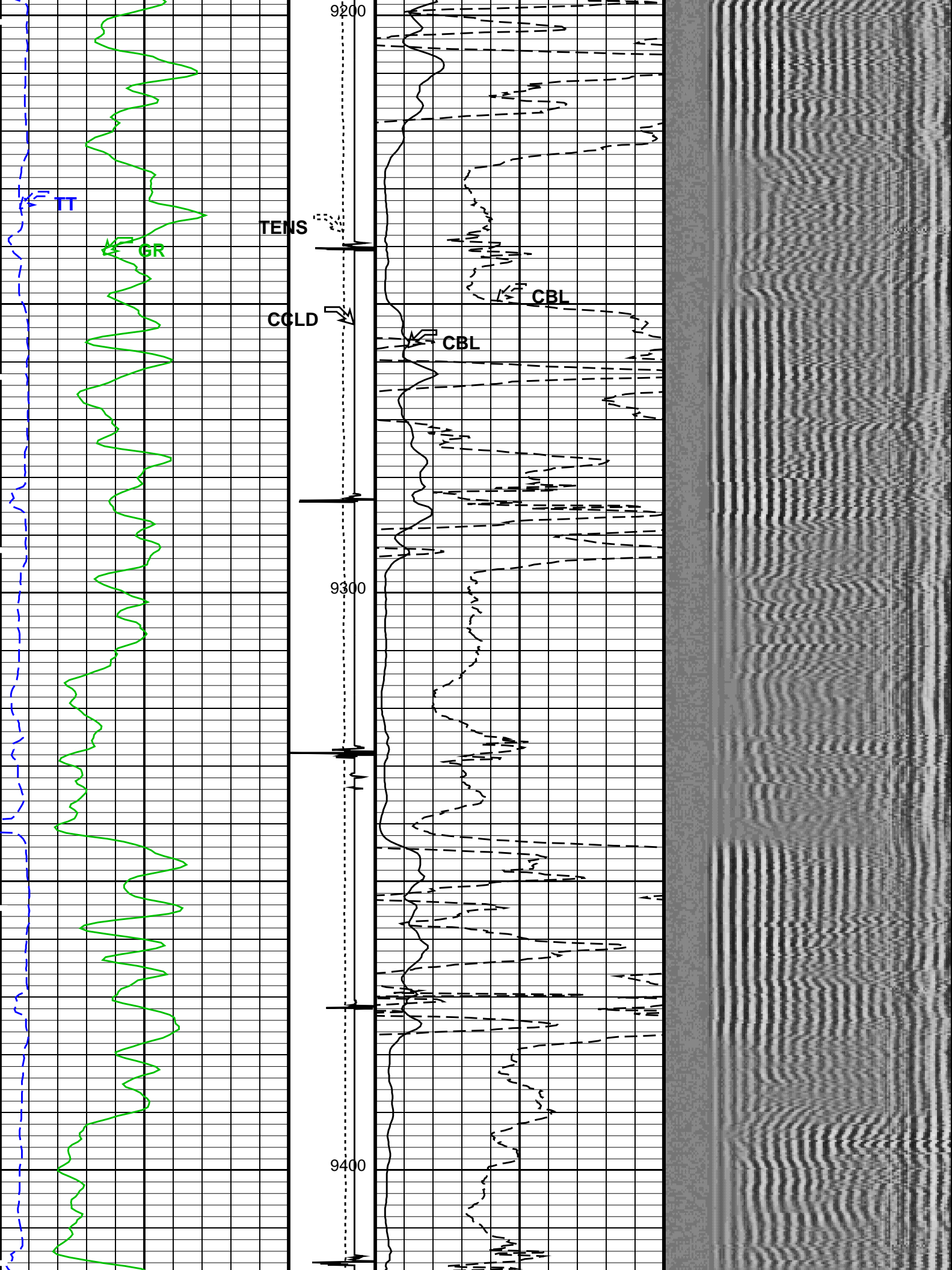




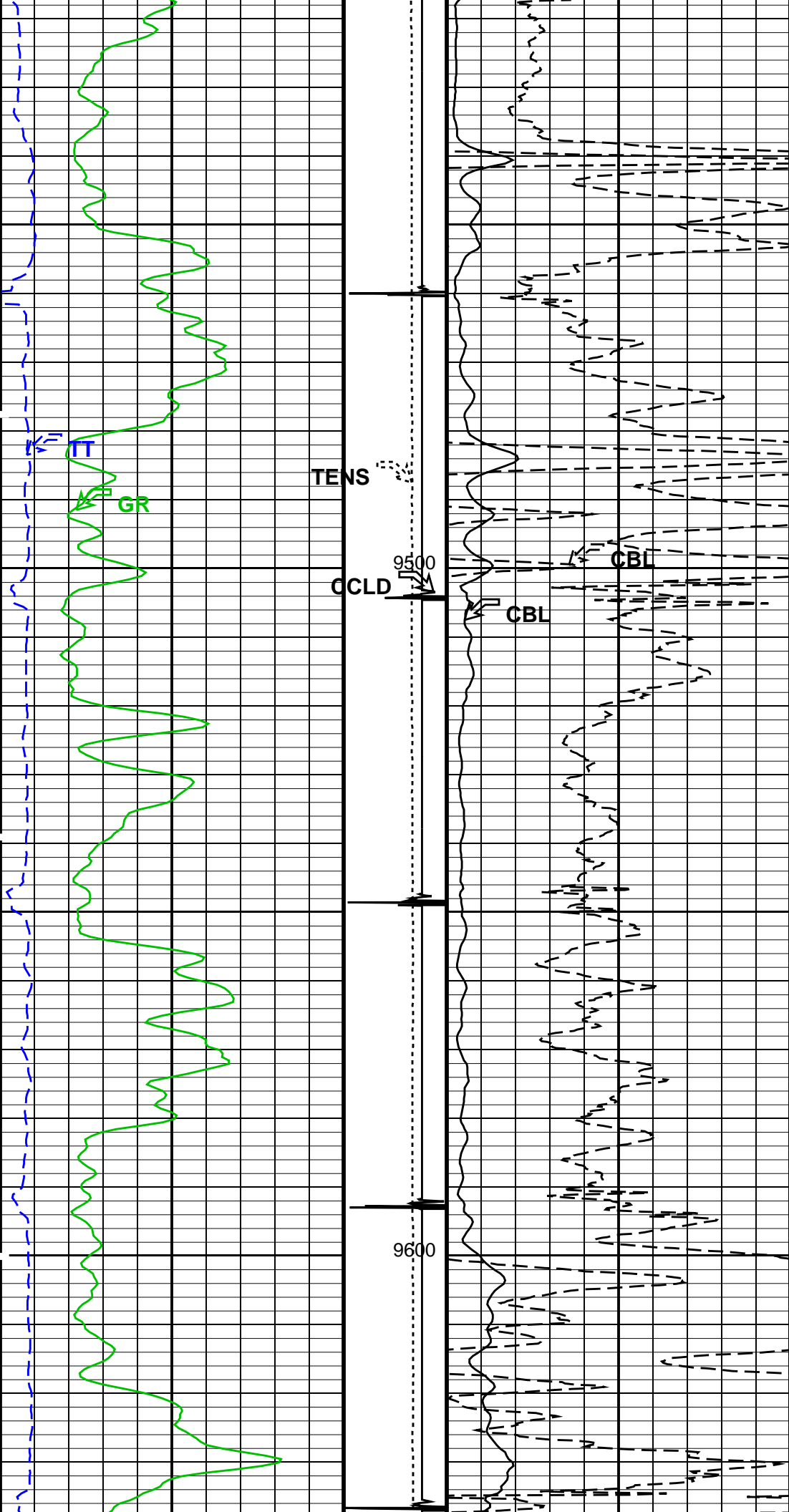


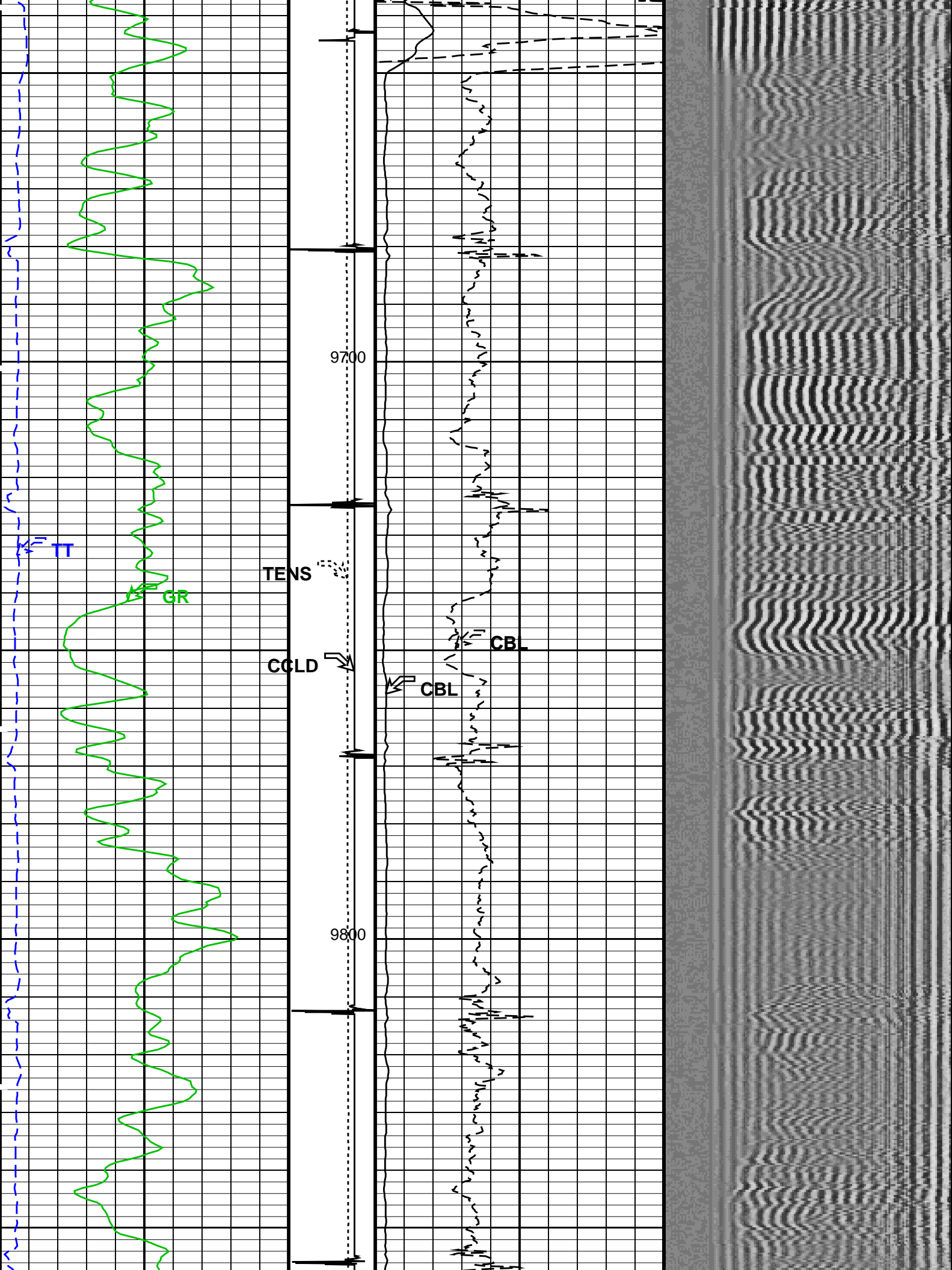




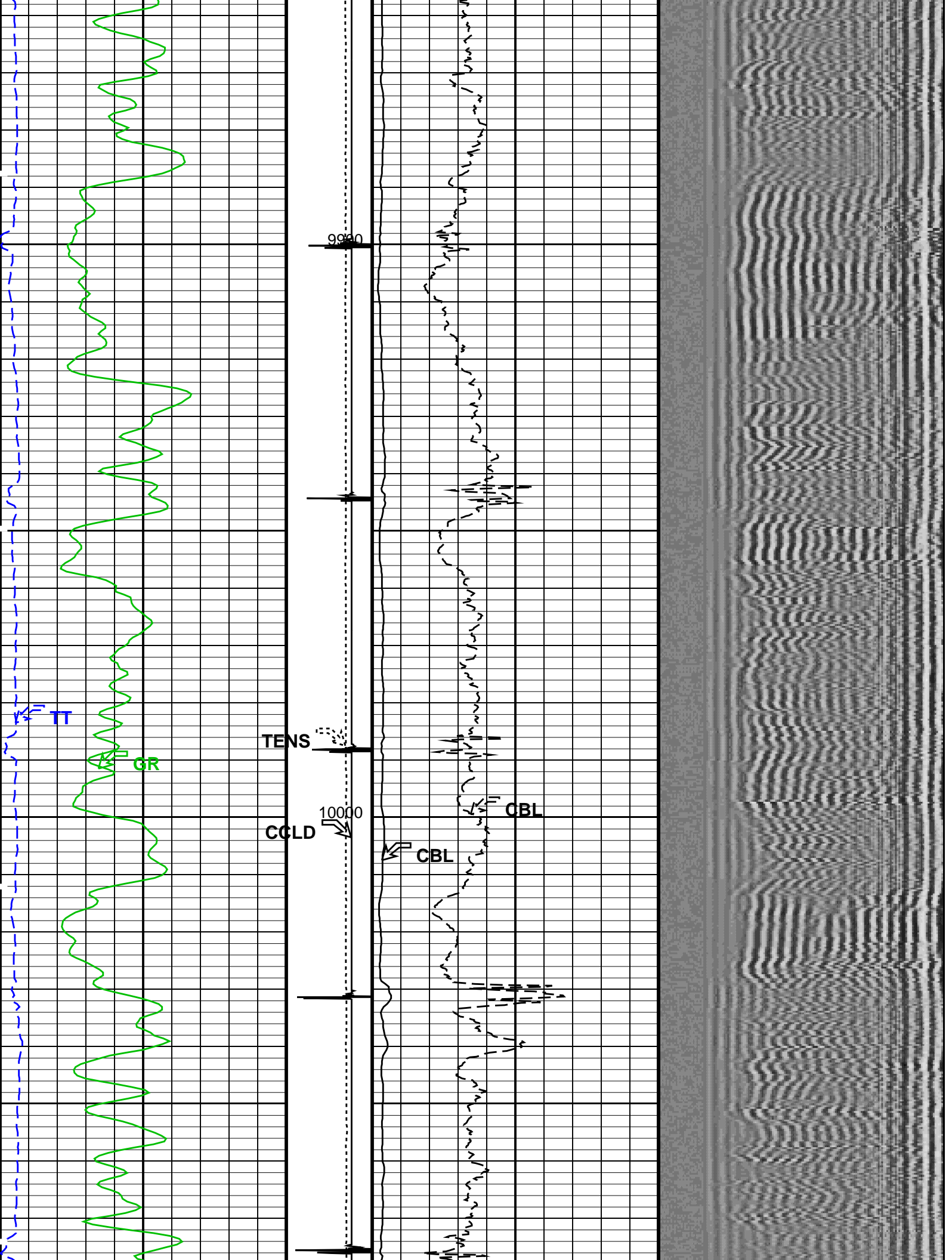


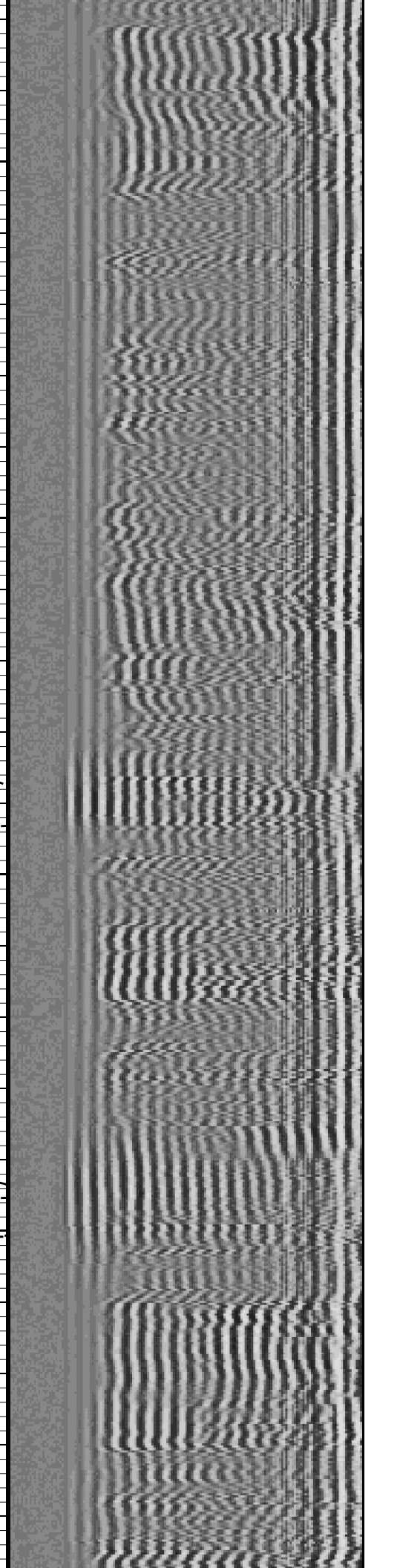
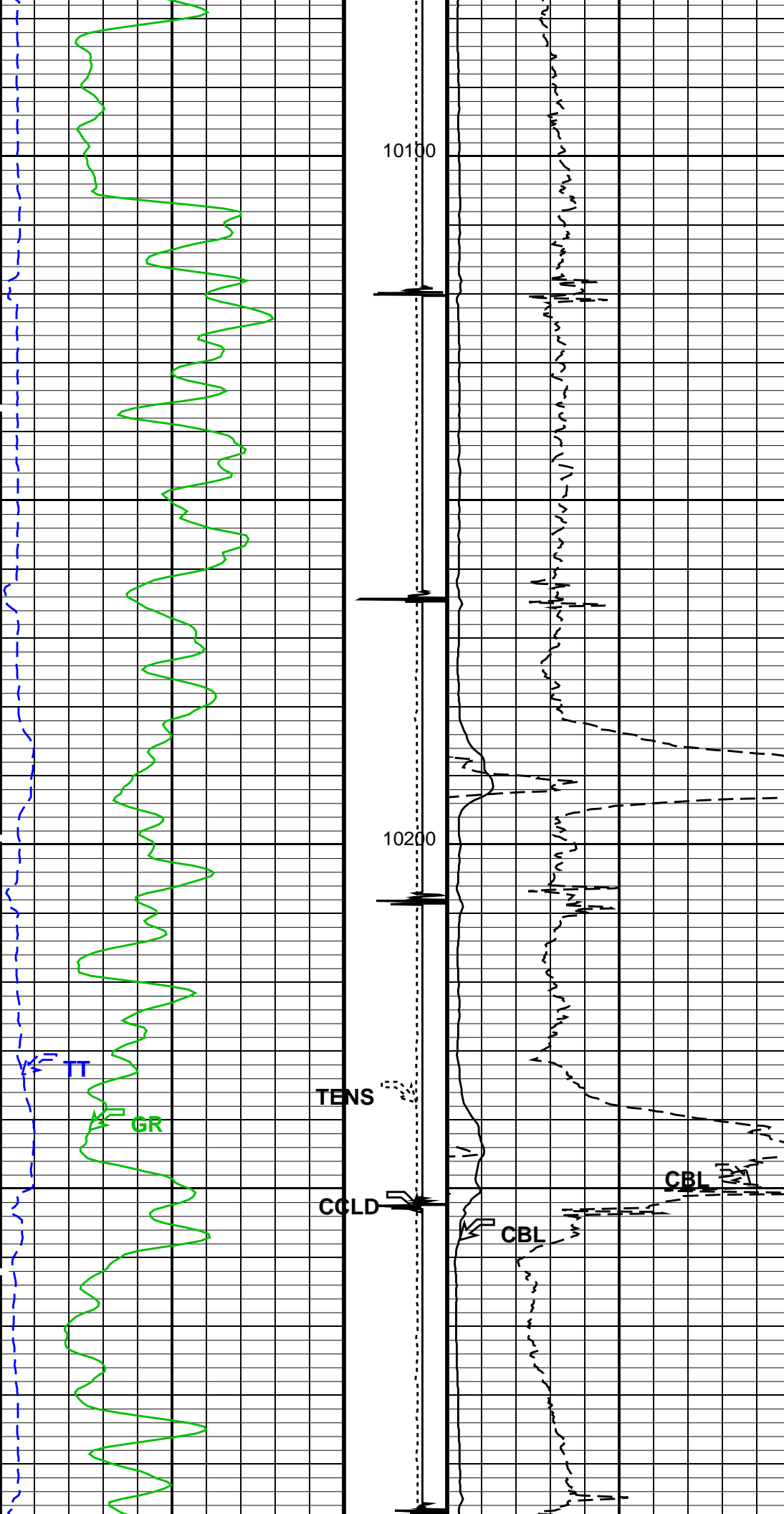


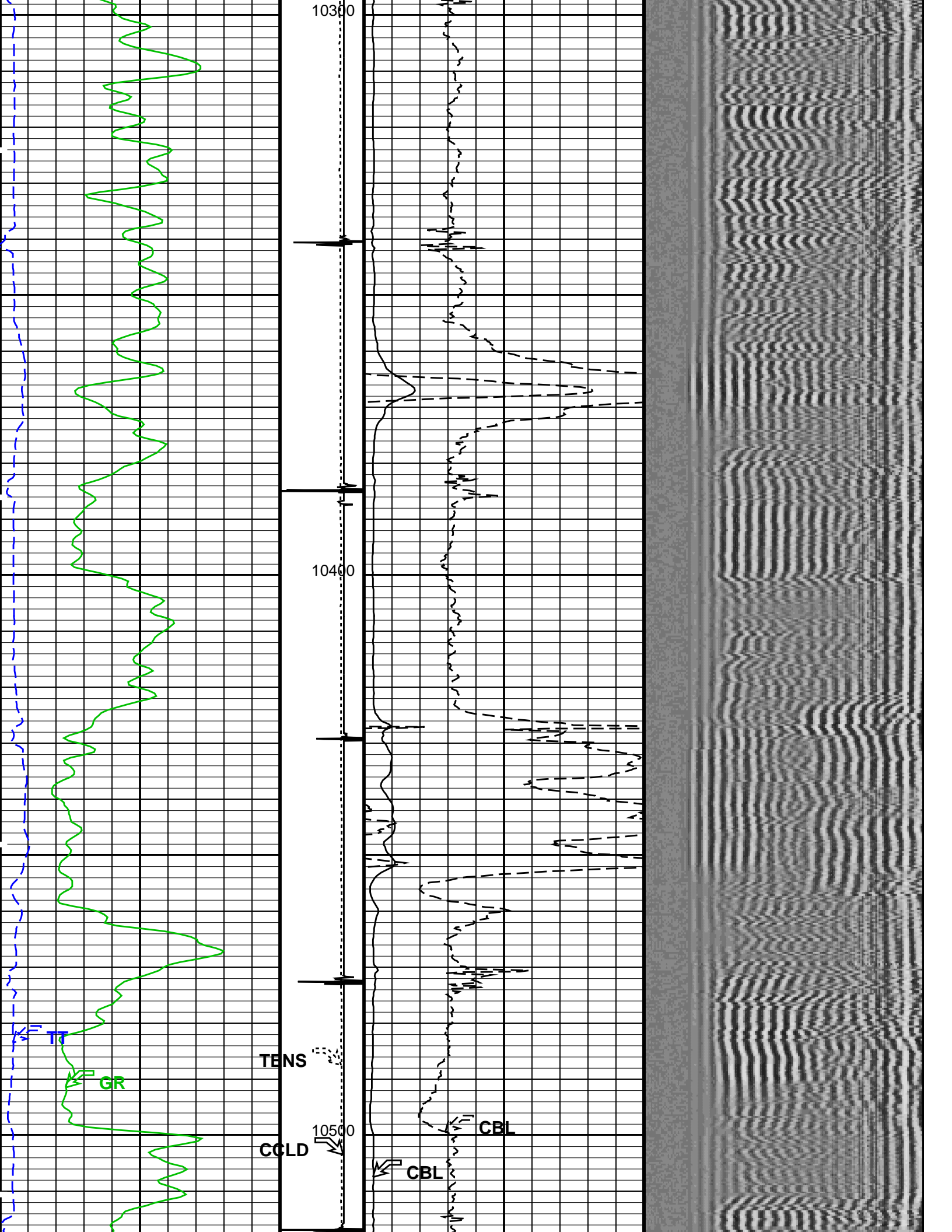


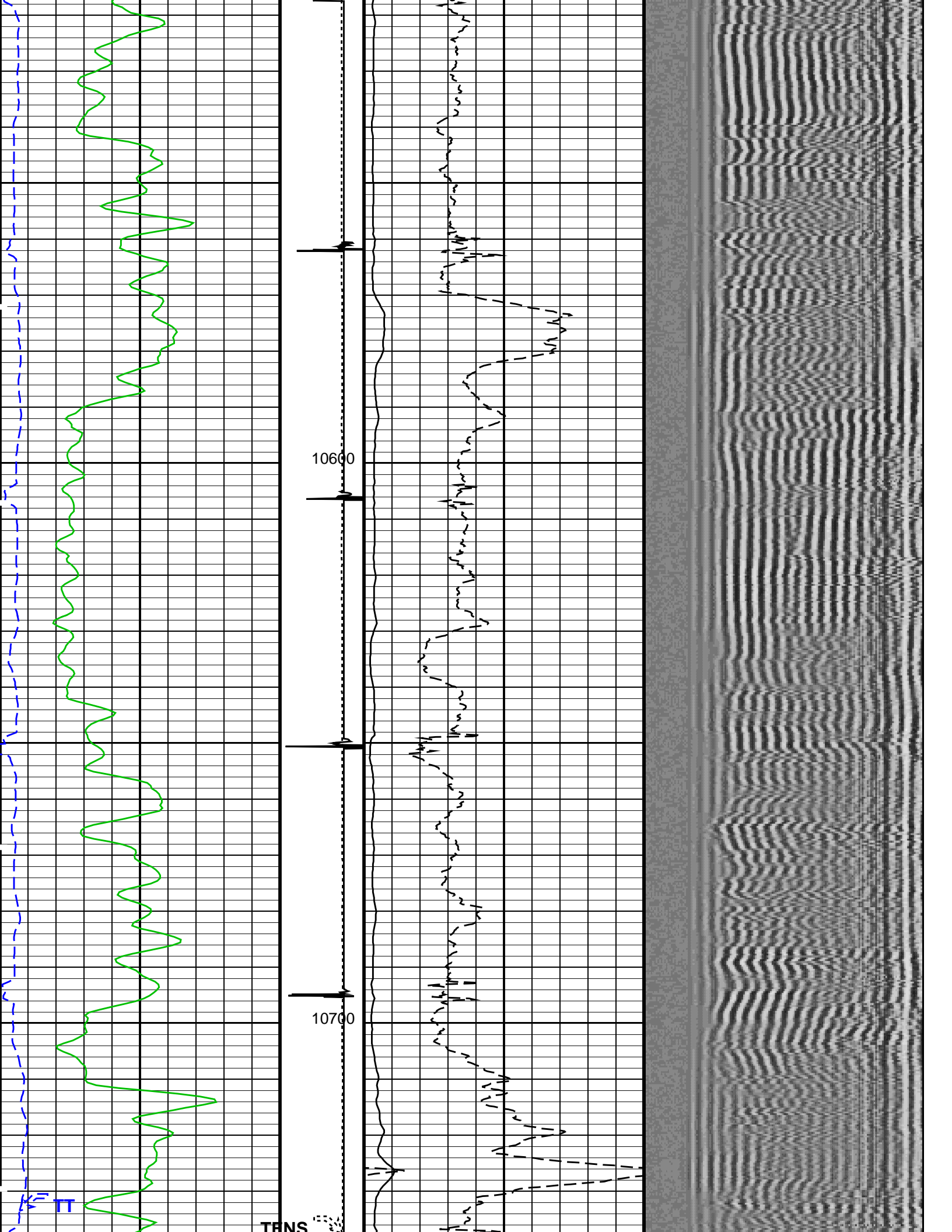




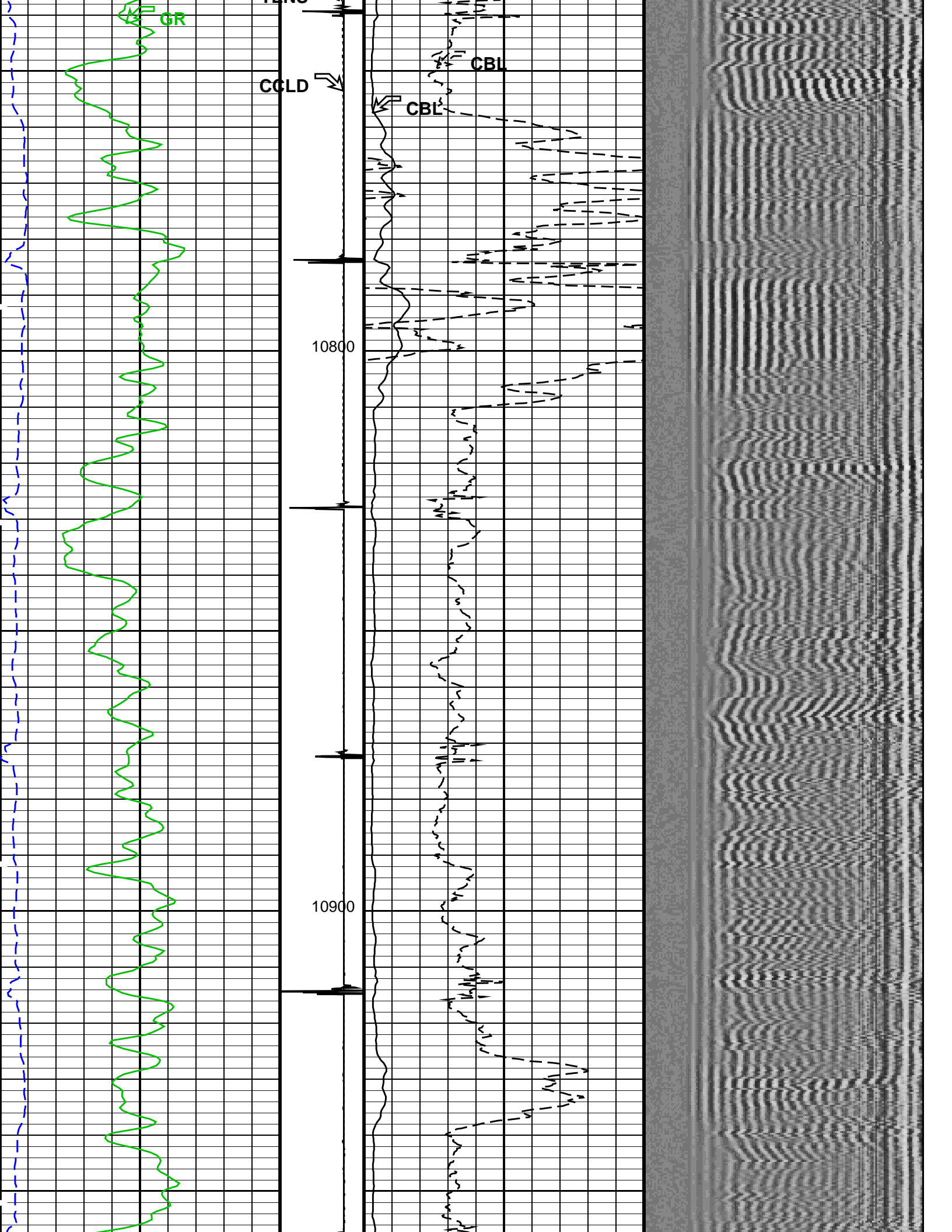




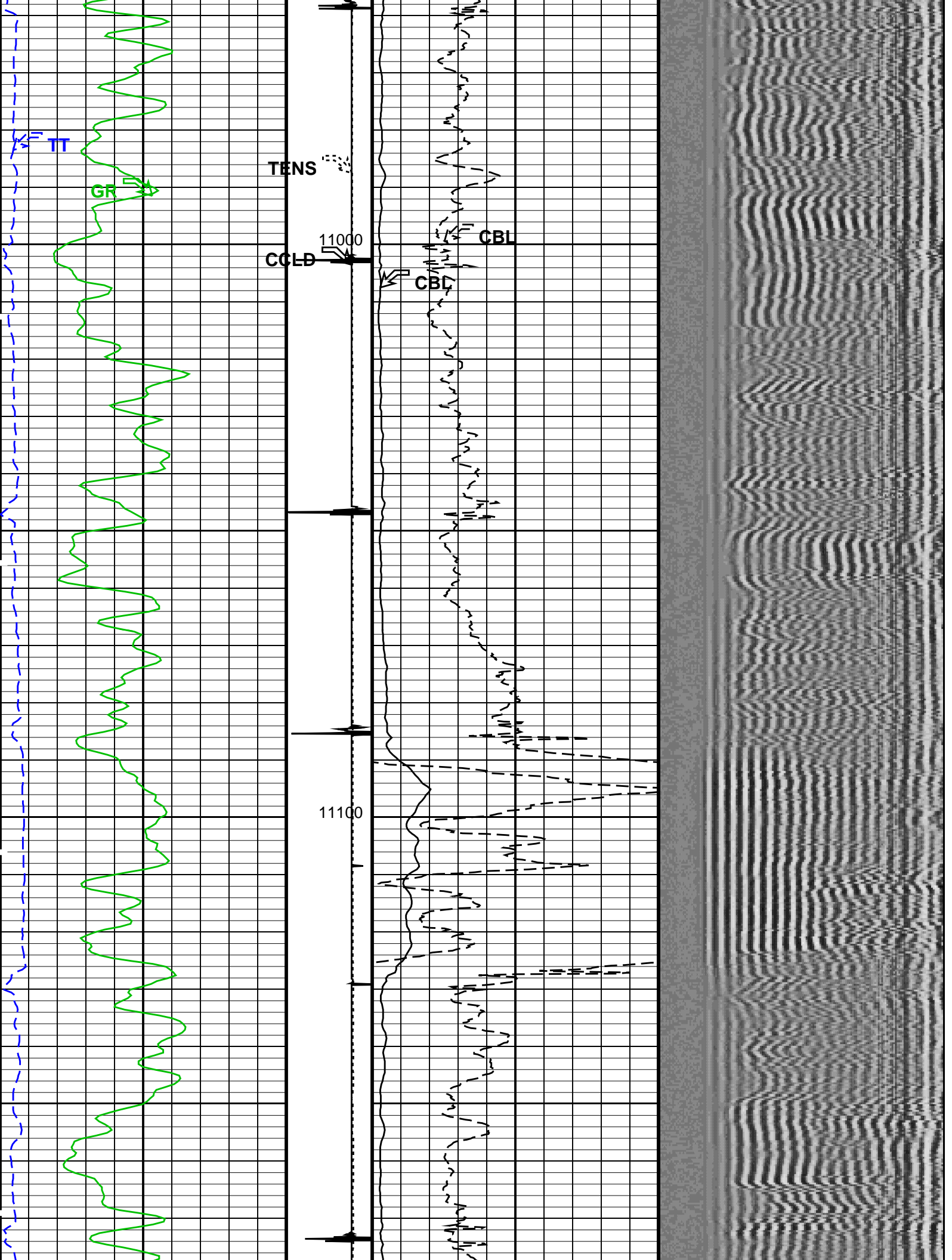


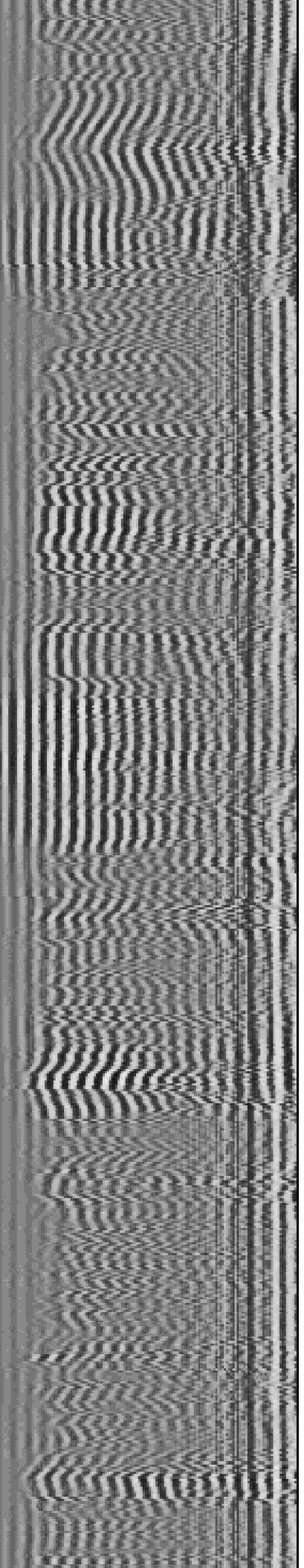
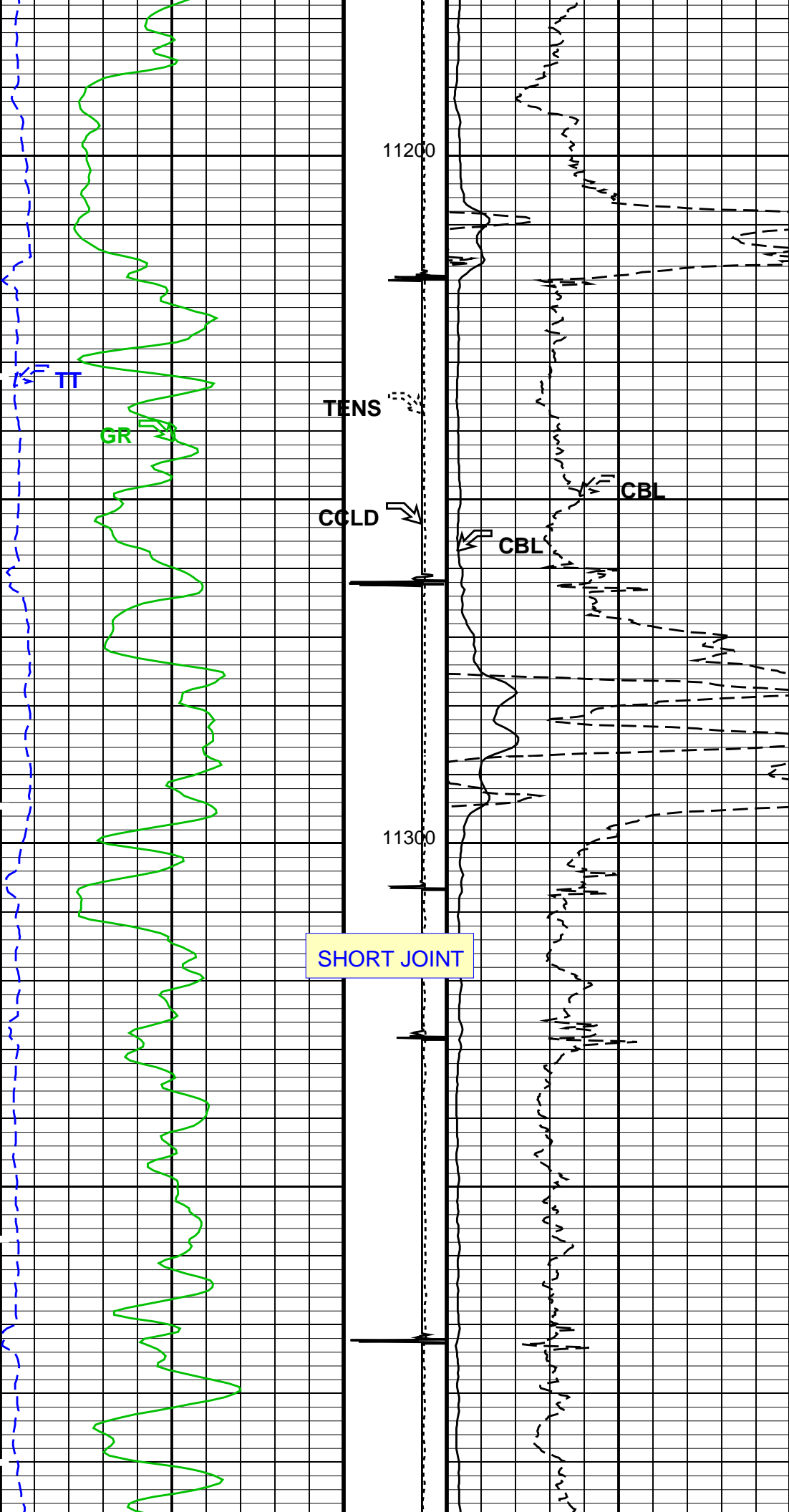


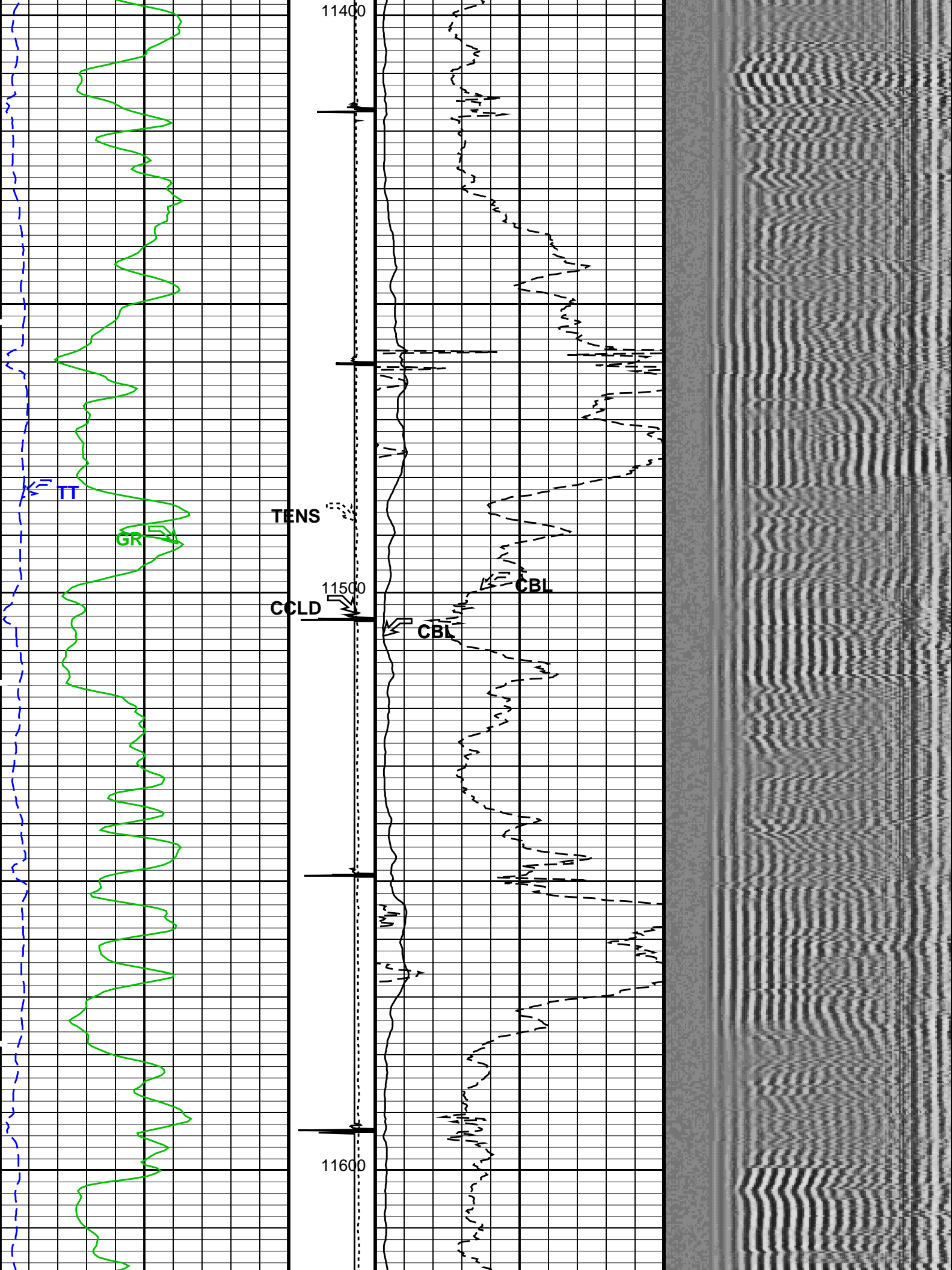


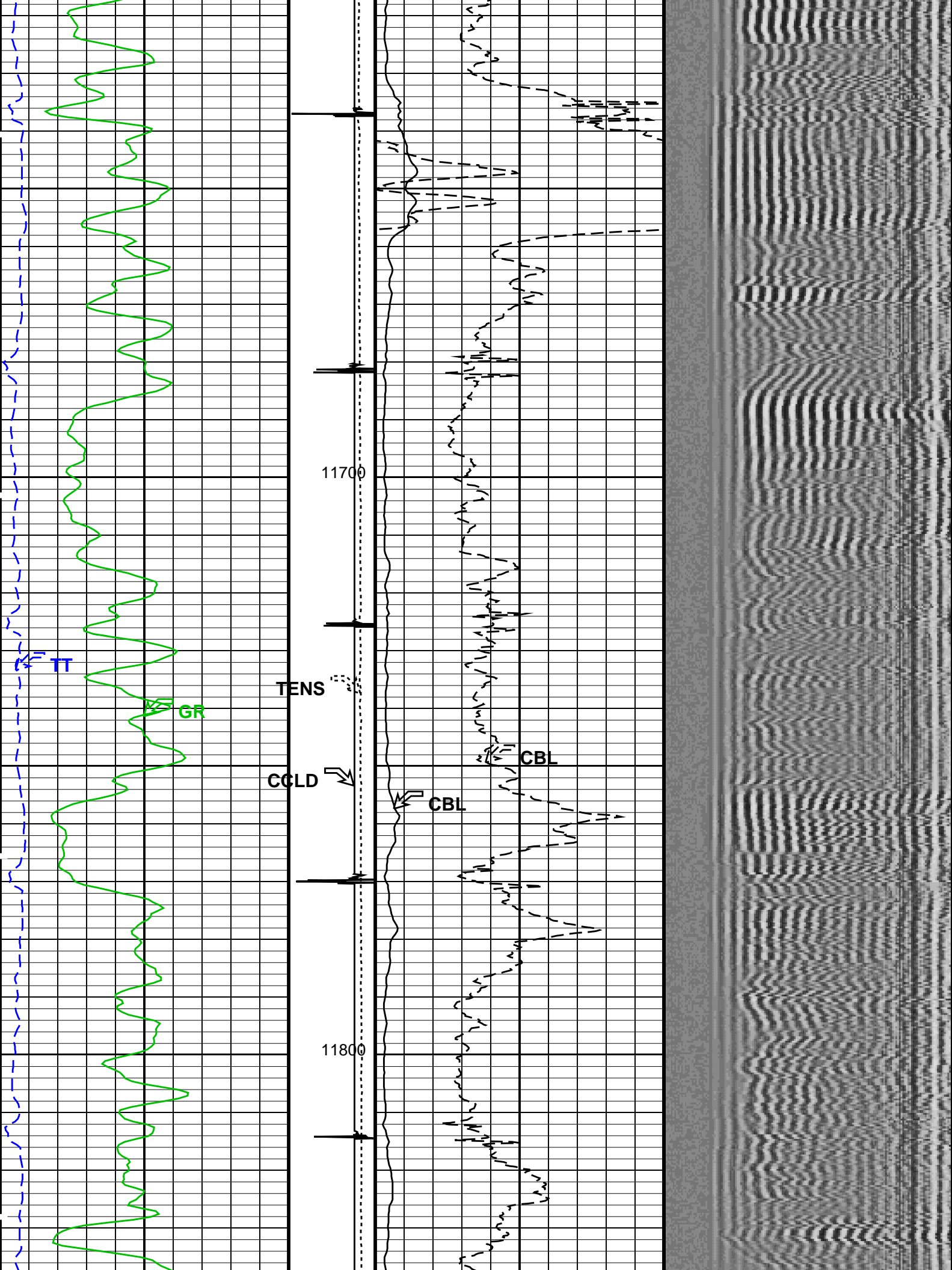




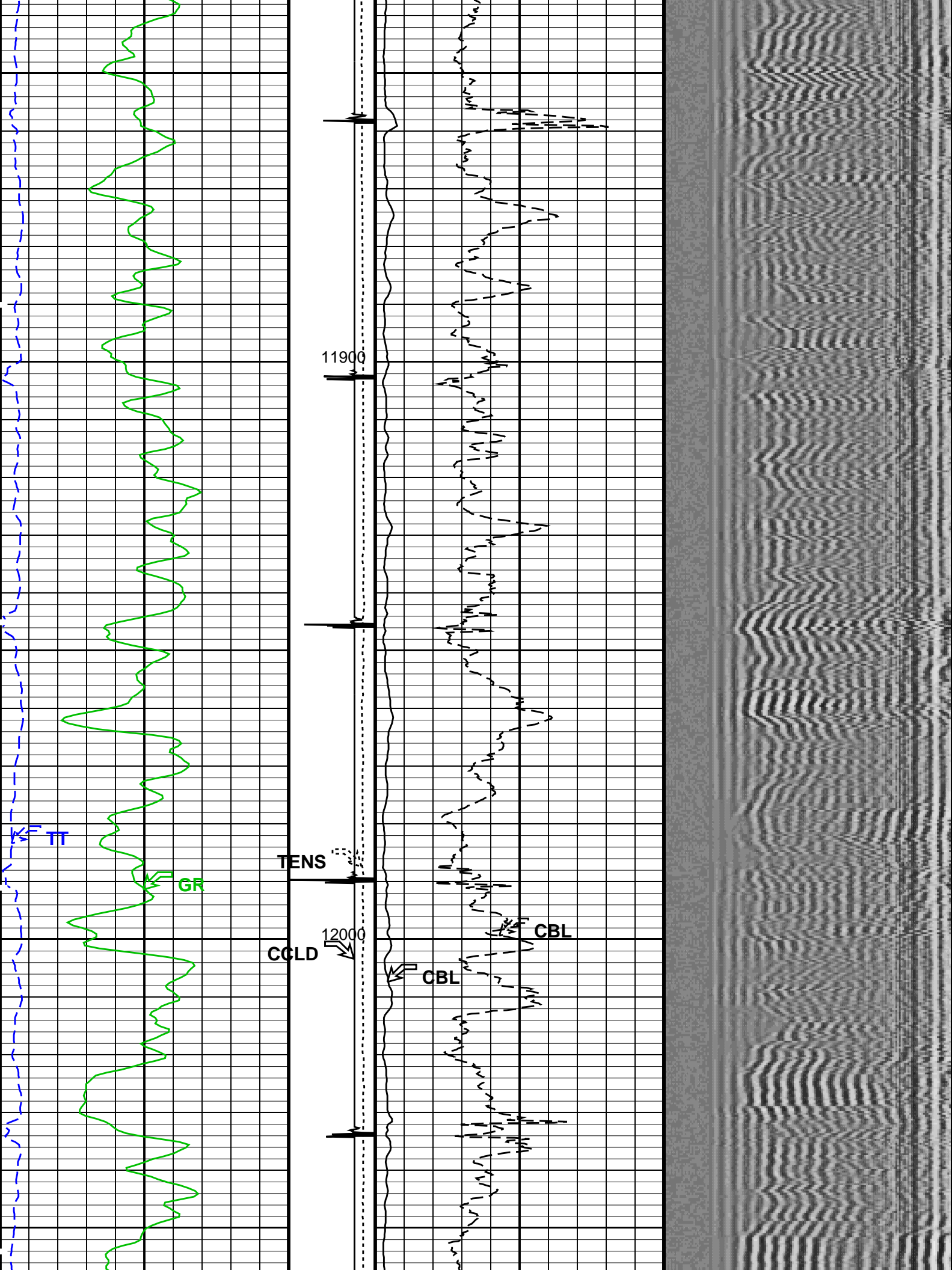




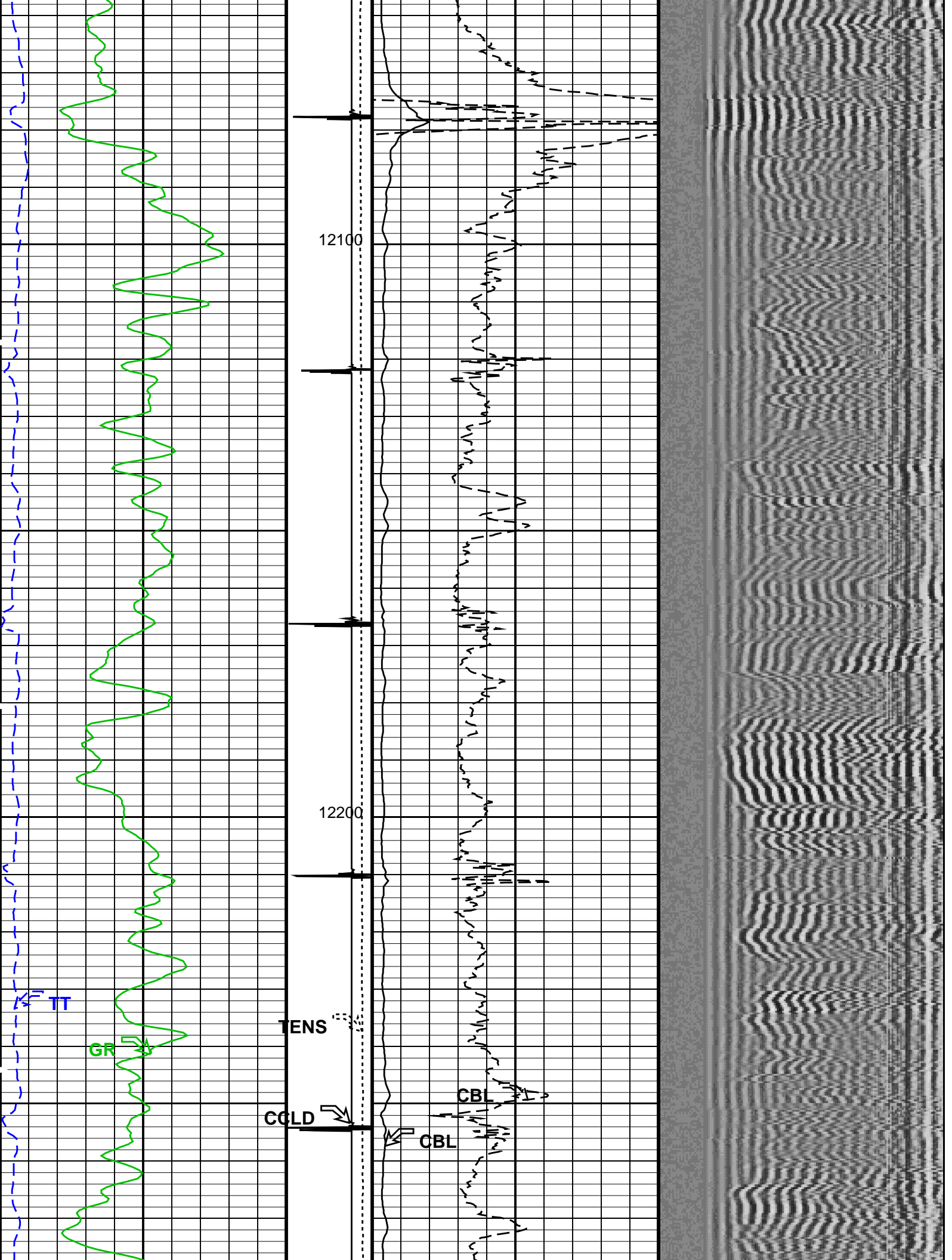


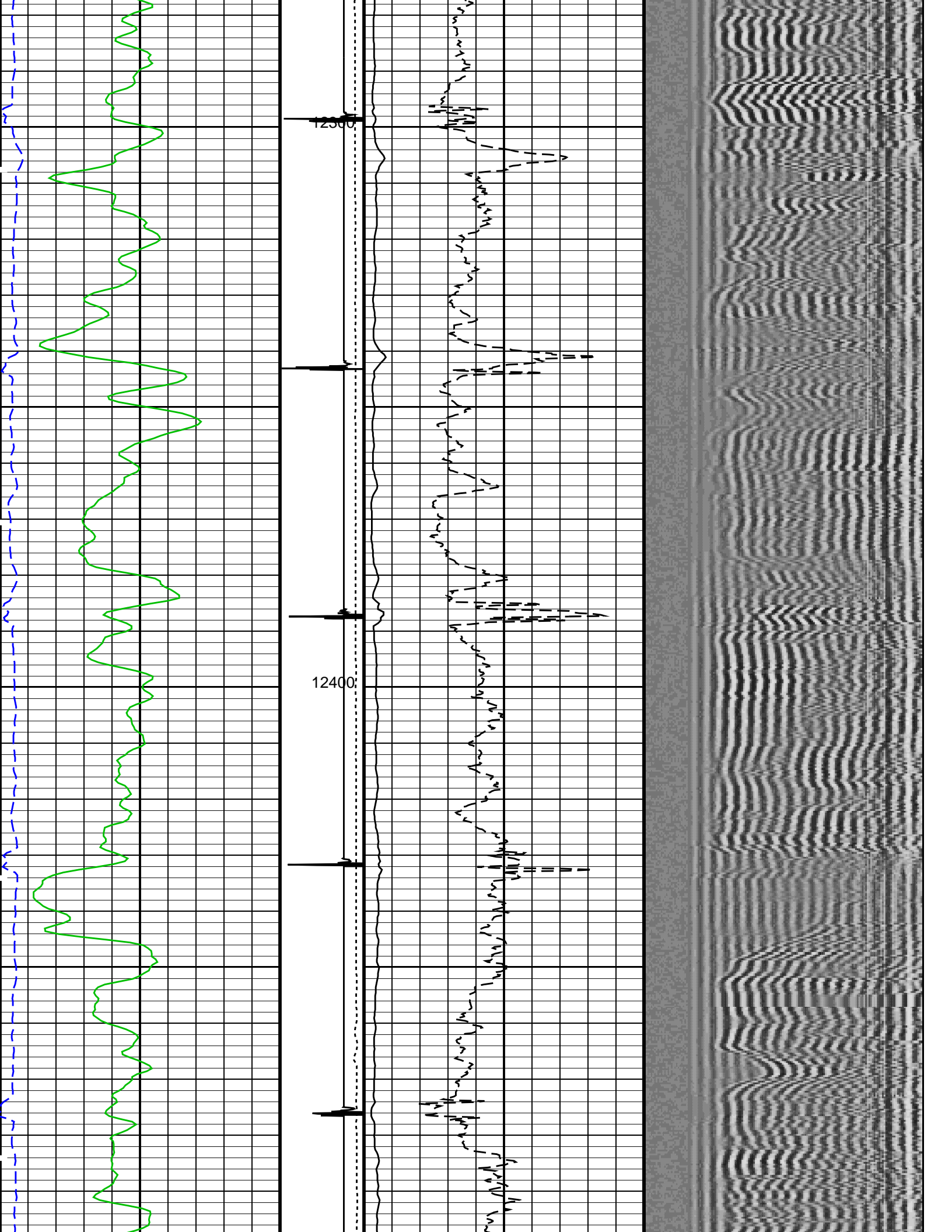


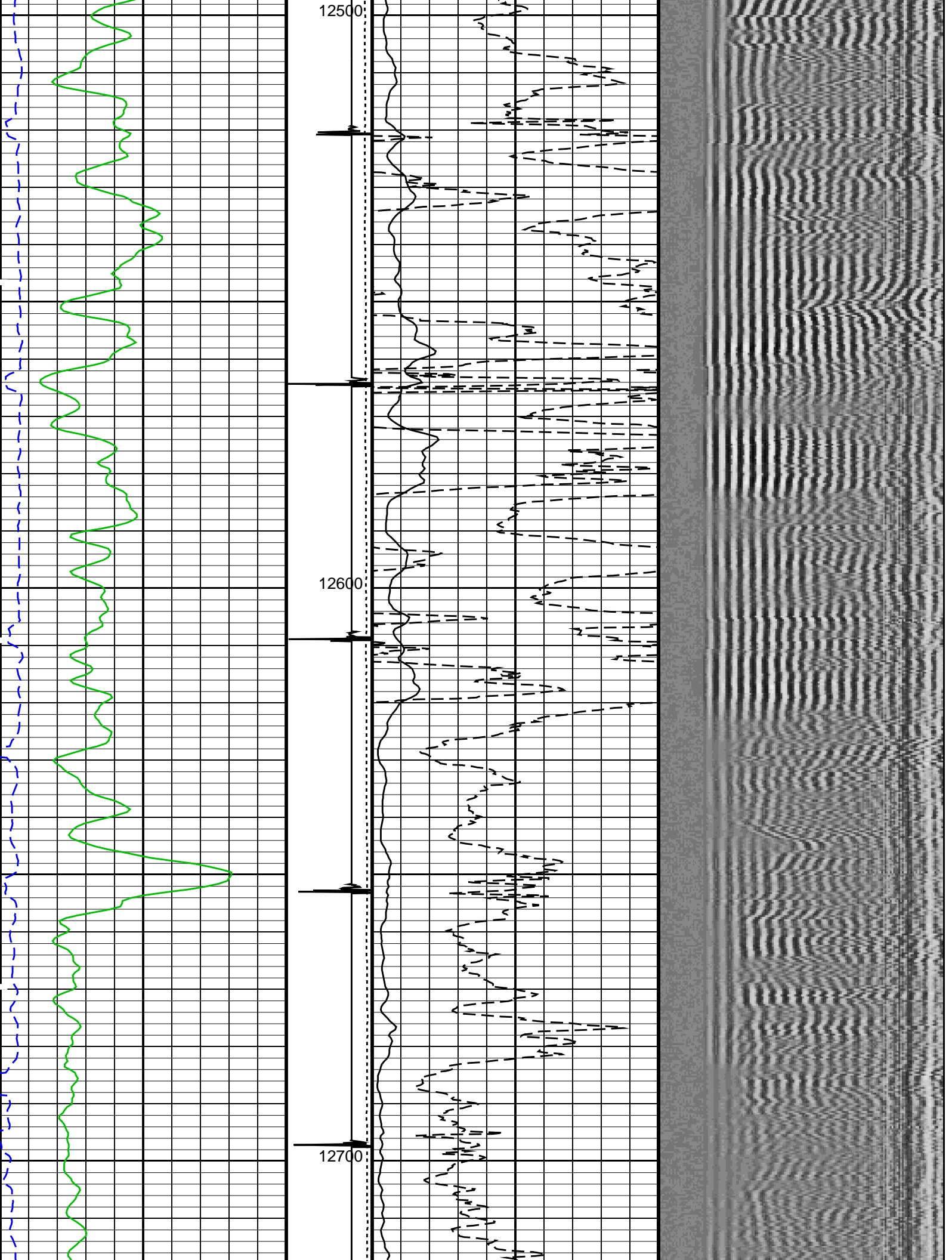


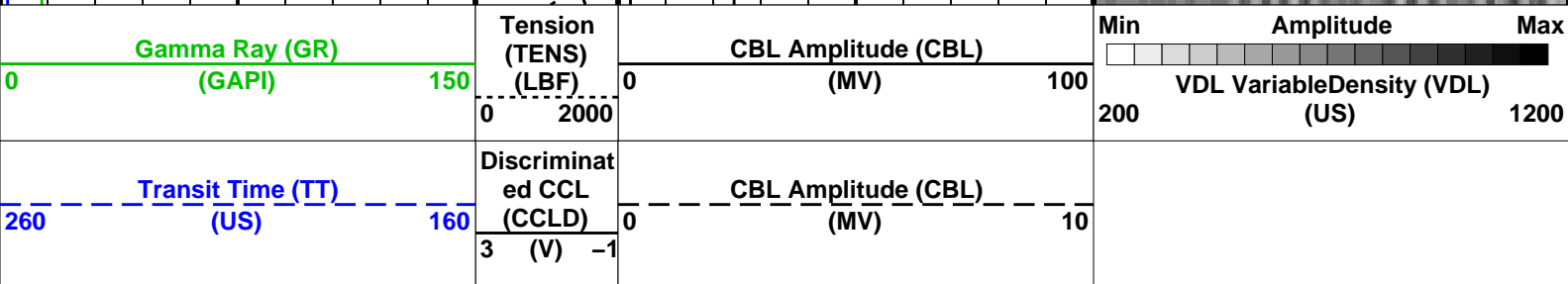
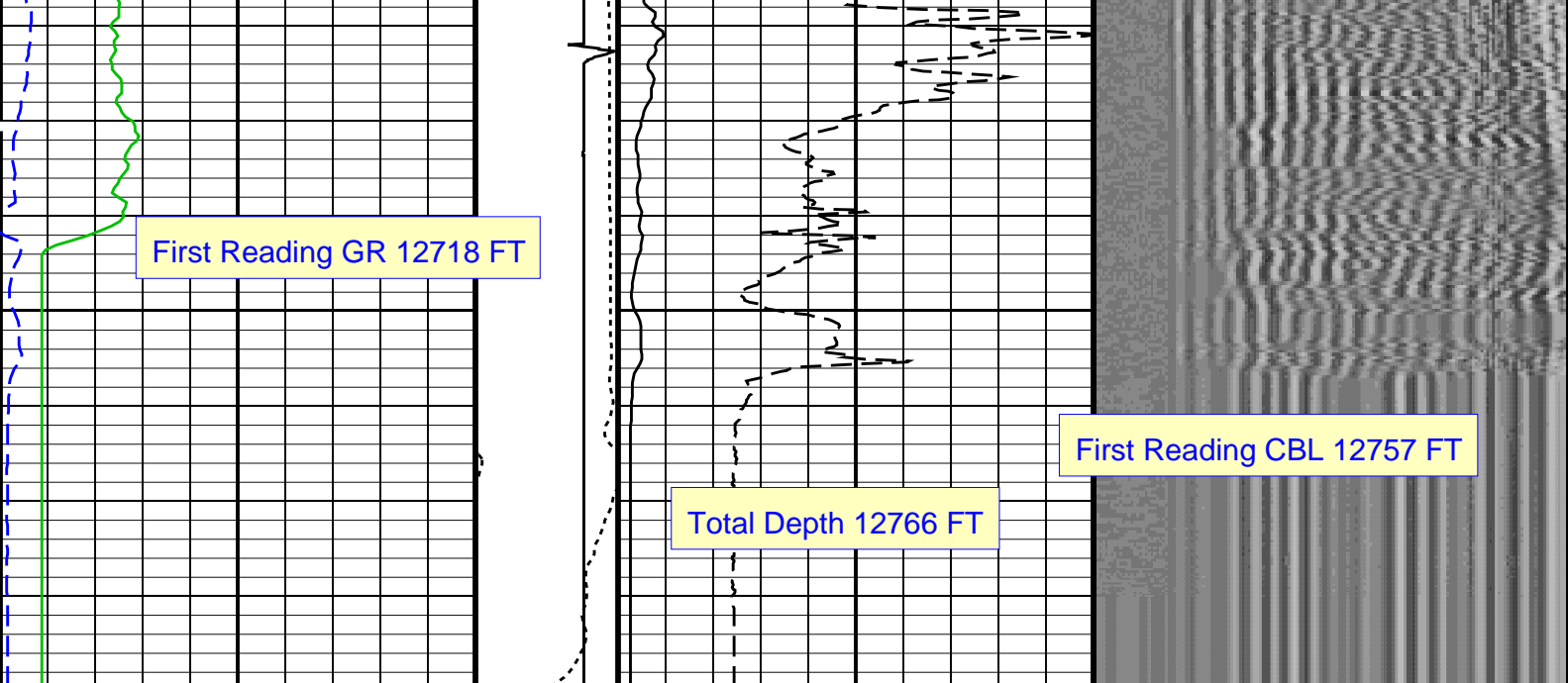












#### PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 02-Jul-2013 15:22

### 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 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	12766	FT

### Input DLIS Files

DEFAULT	SCMT_RST_PSP_005LUP	FN:4	PRODUCER	02-Jul-2013 11:15	12781.5 FT	-7.0 FT
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### Output DLIS Files

DEFAULT	SCMT_RST_PSP_011PUP	FN:10	PRODUCER	02-Jul-2013 15:22
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## REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC	Well: SG 8513B-36 (D36 496)
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### Input DLIS Files

DEFAULT	SCMT_RST_PSP_002LUP	FN:1	PRODUCER	02-Jul-2013 10:43	8396.5 FT	8038.5 FT
DEFAULT	SCMT_RST_PSP_011PUP	FN:10	PRODUCER	02-Jul-2013 15:22	12789.5 FT	-43.5 FT

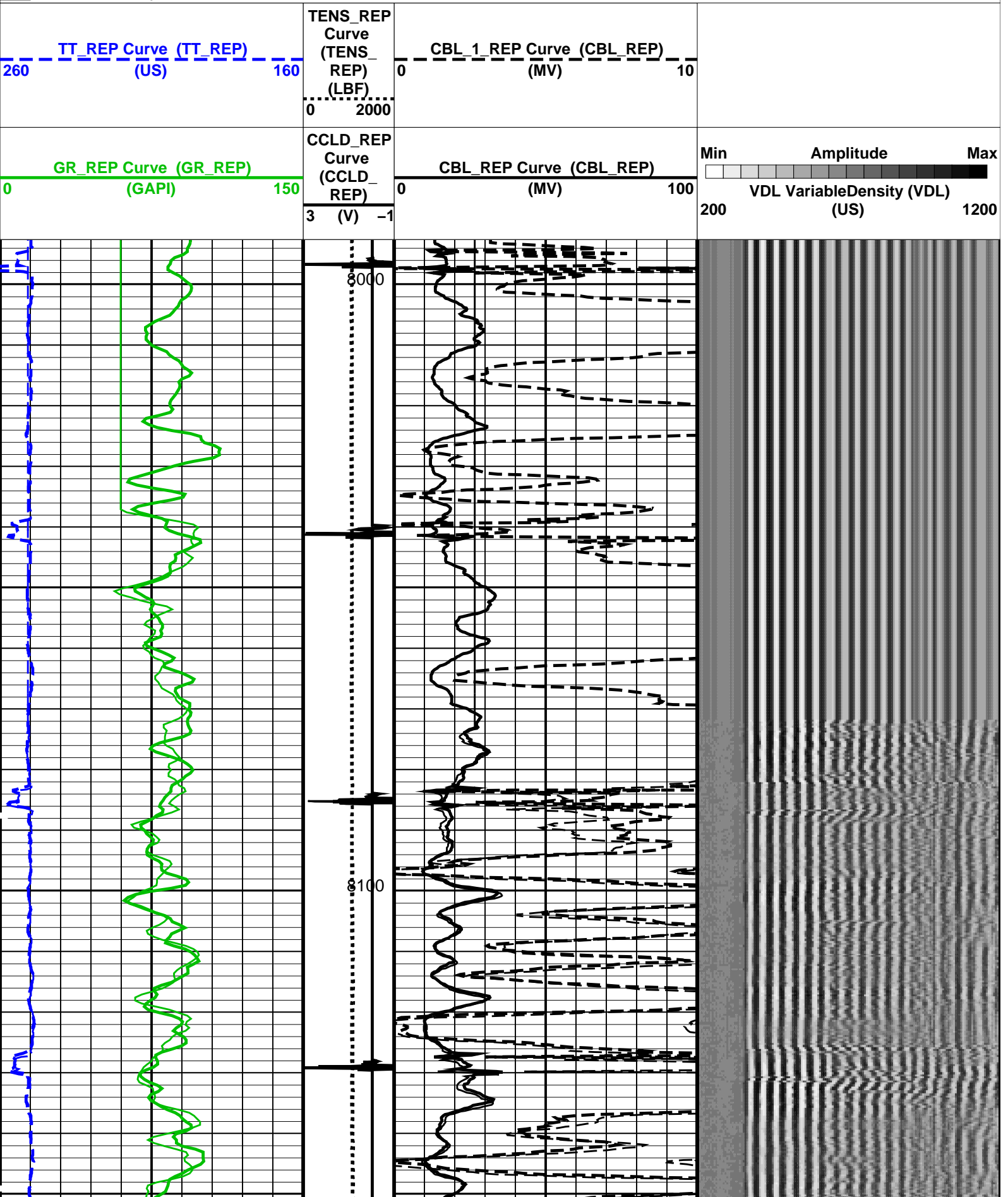
### Output DLIS Files

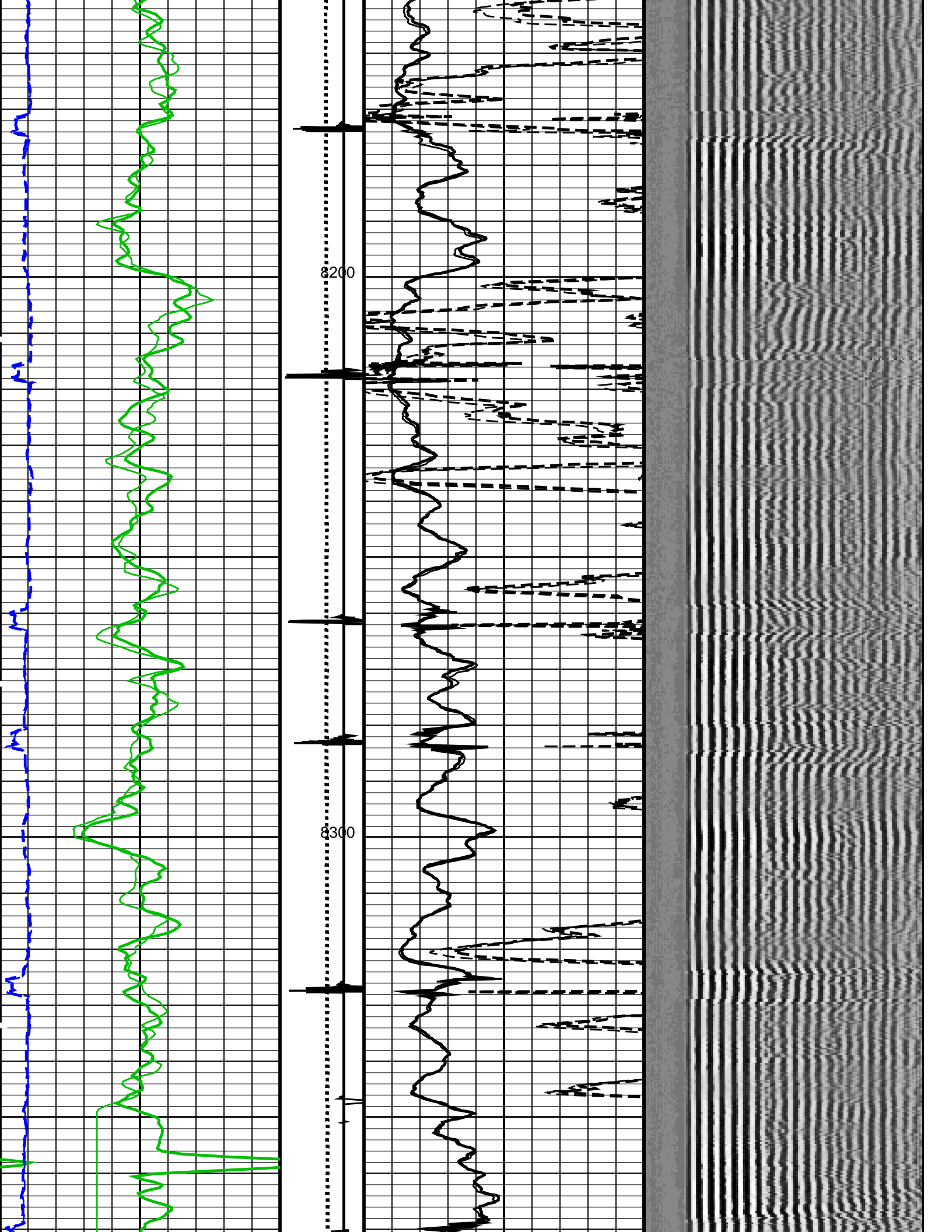
DEFAULT	SCMT_RST_PSP_012PUP	FN:11	PRODUCER	02-Jul-2013 15:32	8394.5 FT	7992.0 FT
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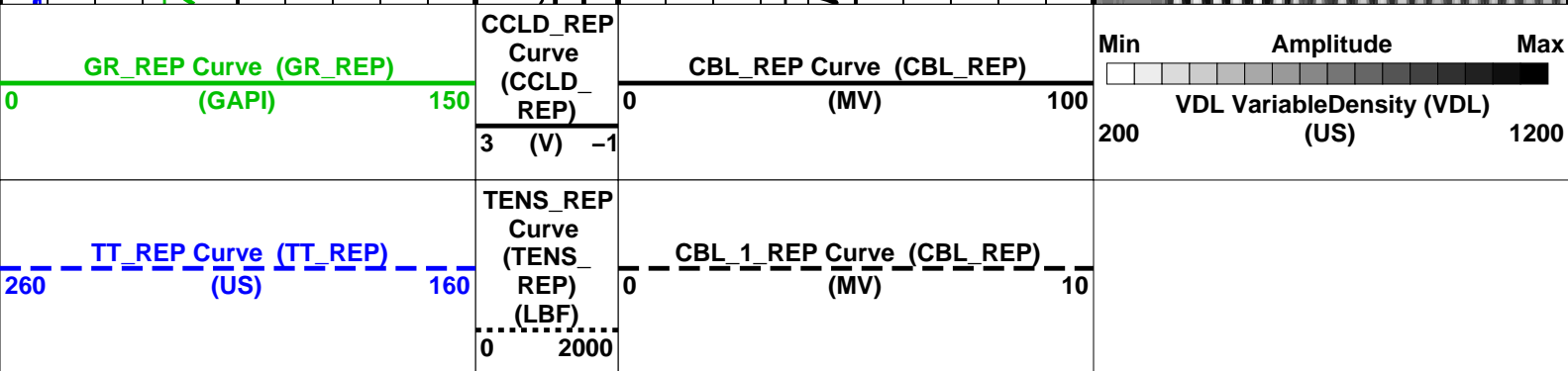
SCMT-CB PSPT	SRPC-5214-H2-2012-OP1 SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
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PIP SUMMARY

Time Mark Every 60 S







### PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 02-Jul-2013 15:32

## 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 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	-2.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12766	FT

### Input DLIS Files

DEFAULT	SCMT_RST_PSP_002LUP	FN:1	PRODUCER	02-Jul-2013 10:43	8396.5 FT	8038.5 FT
DEFAULT	SCMT_RST_PSP_011PUP	FN:10	PRODUCER	02-Jul-2013 15:22	12789.5 FT	-43.5 FT

### Output DLIS Files

DEFAULT	SCMT_RST_PSP_012PUP	FN:11	PRODUCER	02-Jul-2013 15:32
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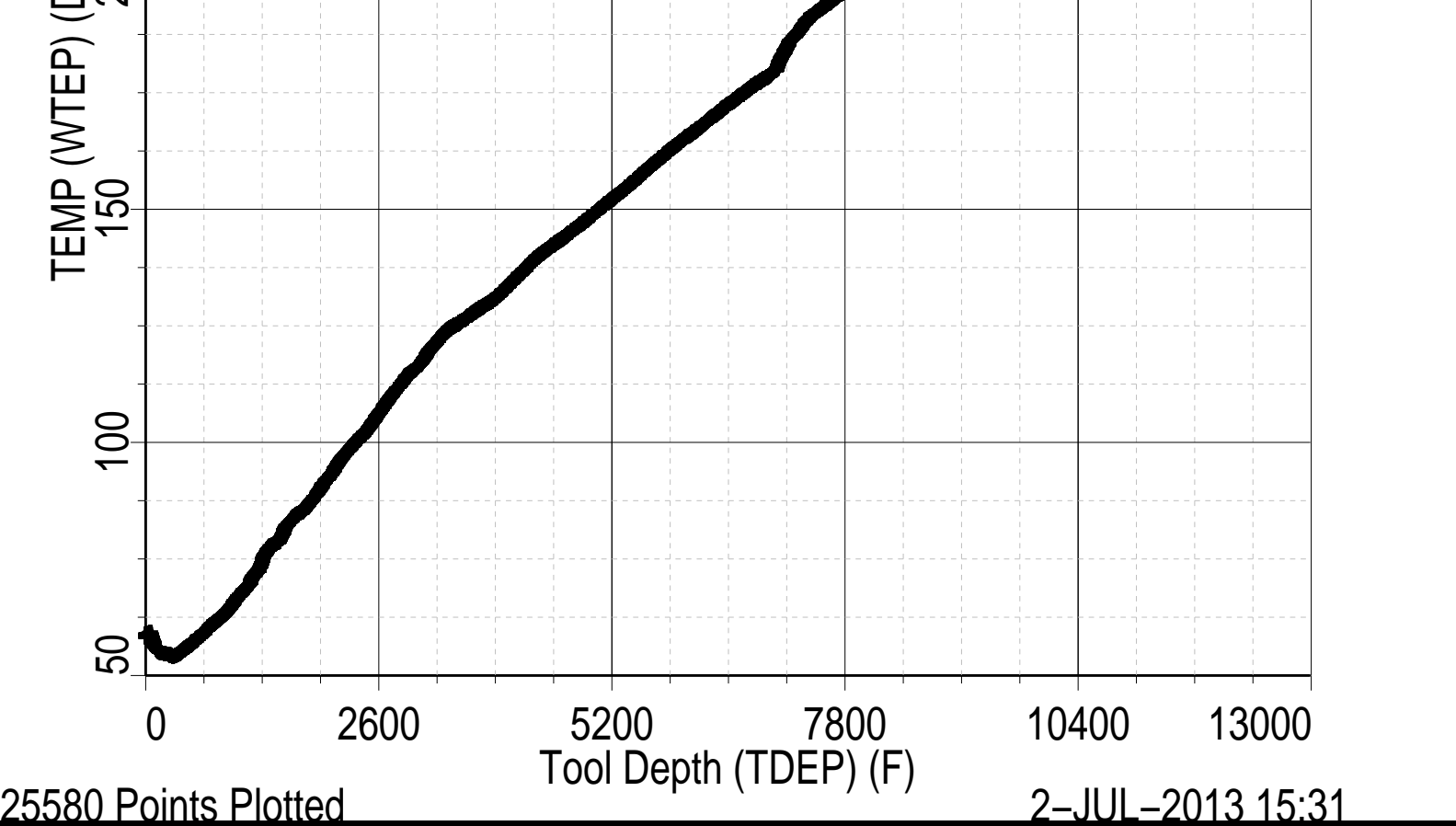
**Schlumberger**

## TEMPERATURE PLOT

MAXIS Field Log

Index: 12789.5 – -43.5 FT





Schlumberger

PBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC  
Field: STORY GULCH  
Well: SG 8513B-36 (D36 496)  
Run date: 2-Jul-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: SG 8513B-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 8513B-36 (D36 496)

Run date: 2-Jul-2013

Tool: PSP

Sub Type: PBMS

Sensor: CQG

Sensor 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

	(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

	(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



MASTER CALIBRATION

## Primary Equipment:










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

SCMX – CA  
 SCMS – CB 8317  
 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)
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 8513B–36 (D36 496)**Field: **STORY GULCH**County: **GARFIELD**State: **COLORADO**

SLIM CEMENT MAPPING LOG

CBL – VDL

GAMMA RAY – CCL