



Company: ENCANA OIL & GAS (USA) INC

Well: SG 8505E-24 (L24 496)

Field: STORY GULCH

County: GARFIELD State: COLORADO

SLIM CEMENT MAPPING LOG  
CBL-VDL  
GAMMA RAY-CCL

County:	GARFIELD		
Field:	STORY GULCH		
Location:	SHL: 929 FWL & 1665 FSL		
Well:	SG 8505E-24 (L24 496)		
Company:	ENCANA OIL & GAS (USA) INC		
	LOCATION		
	SHL: 929 FWL & 1665 FSL	Elev.: K.B.	8210.00 ft
	BHL: 670 FWL & 2460 FNL	G.L.	8180.00 ft
		D.F.	8209.00 ft
	Permanent Datum:	GROUND LEVEL	Elev.: 8180.00 ft
	Log Measured From:	KELLY BUSHING	30.00 ft above Perm. Datum
	Drilling Measured From:	KELLY BUSHING	
	API Serial No.	Section 24	Township 4S
	05-045-21153-000C		Range 96W

	Oil Density	Run 1	Run 2	Run 3
	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	5-Sep-2013		
Run Number	1		
Depth Driller	12570 ft		
Schlumberger Depth	12350 ft		
Bottom Log Interval	12341 ft		
Top Log Interval	80 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	80 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From	10036 ft		
To	12570 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade			
From	30 ft		
To	12546 ft		
Maximum Recorded Temperatures	286 degF		
Logger On Bottom	5-Sep-2013	8:15	
Unit Number	391	GRAND JUNCTION	
Recorded By	KIRSTIE BUNTING		
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: 14-AUG-2013 11:54:57

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-JB	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6349	Serial Number:	3421	Serial Number:	112136
Calibration Date:	7-31-2013	Calibration Date:	14-AUG-201	Length:	19000 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	<div>Conveyance Method: Wireline</div> <div>Rig Type: LAND</div>	
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10		
Wheel Correction 1:	-5	Calibration RMS:	3		
Wheel Correction 2:	-4	Calibration Peak Error:	8		

## Depth Control Parameters

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

### Depth Control Remarks

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

## DISCLAIMER

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OTHER SERVICES1	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 DOWN LOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 07:30	
TIME AT BOTTOM: 08:15	
EXIT TIME: 13:30	

MAX RECORDED TEMPERATURE: 286 DEGF	
MAX RECORDED PRESSURE: 5164 PSIA	
SHORT JOINTS: 7749 FT & 11044 FT	
MAIN PASS LOGGED UNDER ZERO SURFACE PRESSURE	
EXPECTED CBL AMP IN FREE PIPE = 80 MV	
CREW: KBUNTING WAZIZ KJOHNS KBOZARTH	
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY	

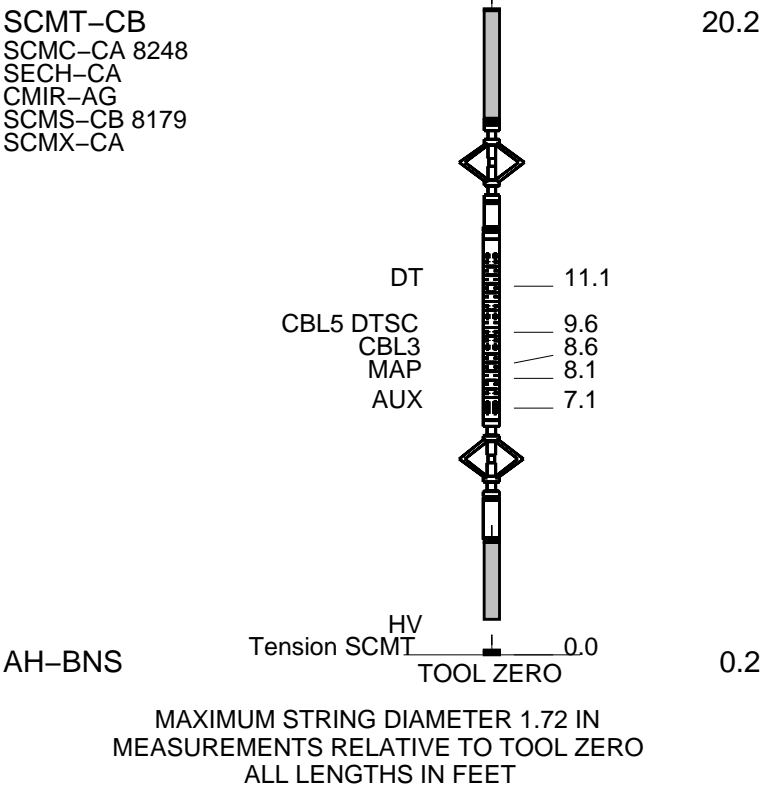
RUN 1 SERVICE ORDER #: CGF9-00122 PROGRAM VERSION: 19C0-187 FLUID LEVEL: 80 ft			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT	DESCRIPTION

	RUN 1	RUN 2
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
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14	1	1
15	1	1
16	1	1
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96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

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 155			
RSC-E			
RSS-A 255			
RSXH-A 309			
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

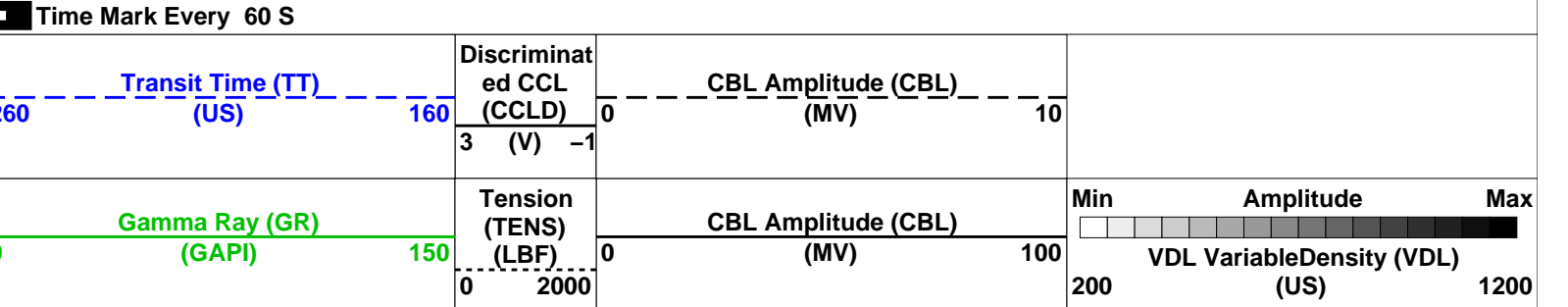
Company: ENCANA OIL & GAS (USA) INC Well: SG 8505E-24 (L24 496)

Input DLIS Files						
DEFAULT	Splice_SCMT_RST_017CUP	FN:1	PRODUCER	05-Sep-2013 13:18	12360.0 FT	-37.8 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_018PUP	FN:16	PRODUCER	05-Sep-2013 13:21	12362.0 FT	-79.0 FT

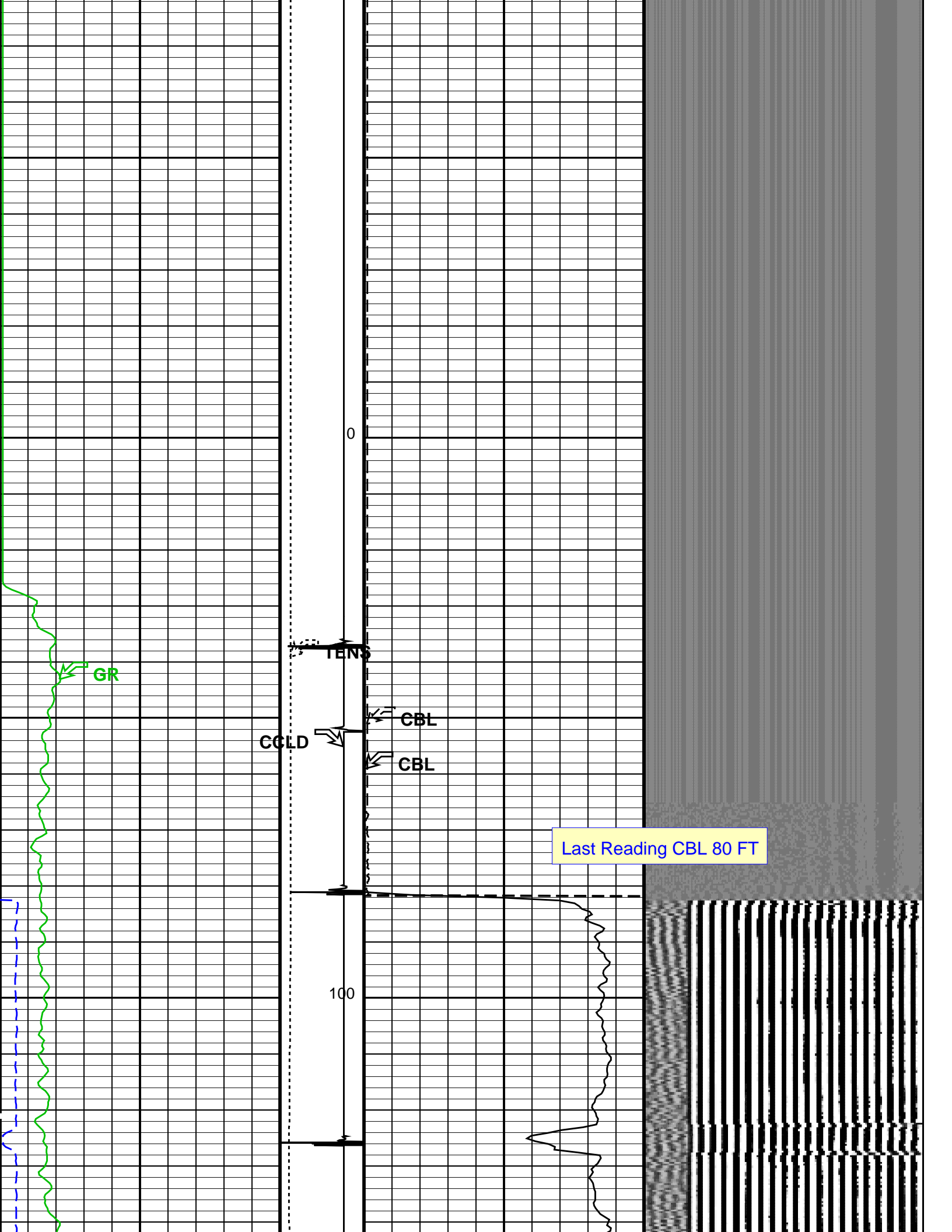
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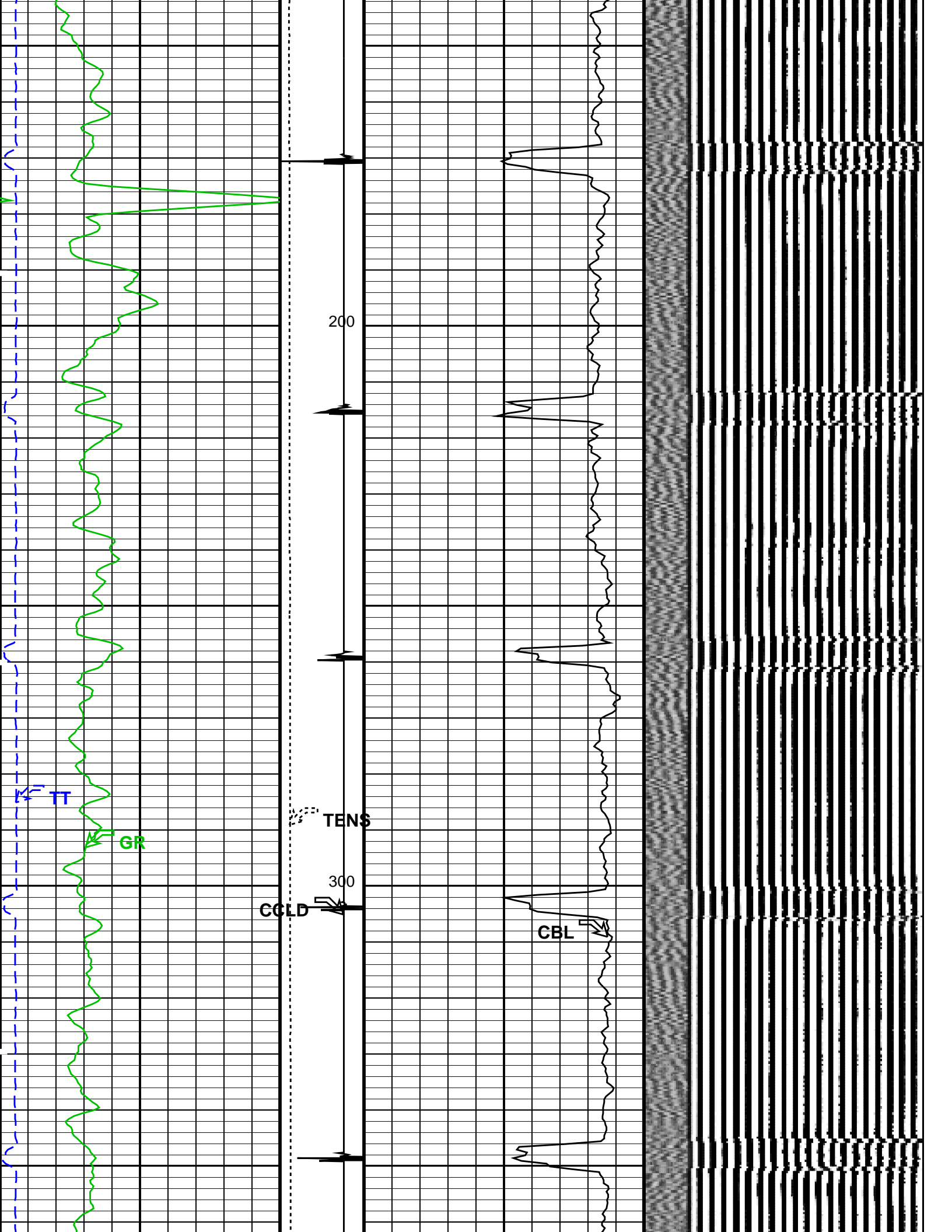
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PSPT	SRPC-5214-H2-2012-OP1		

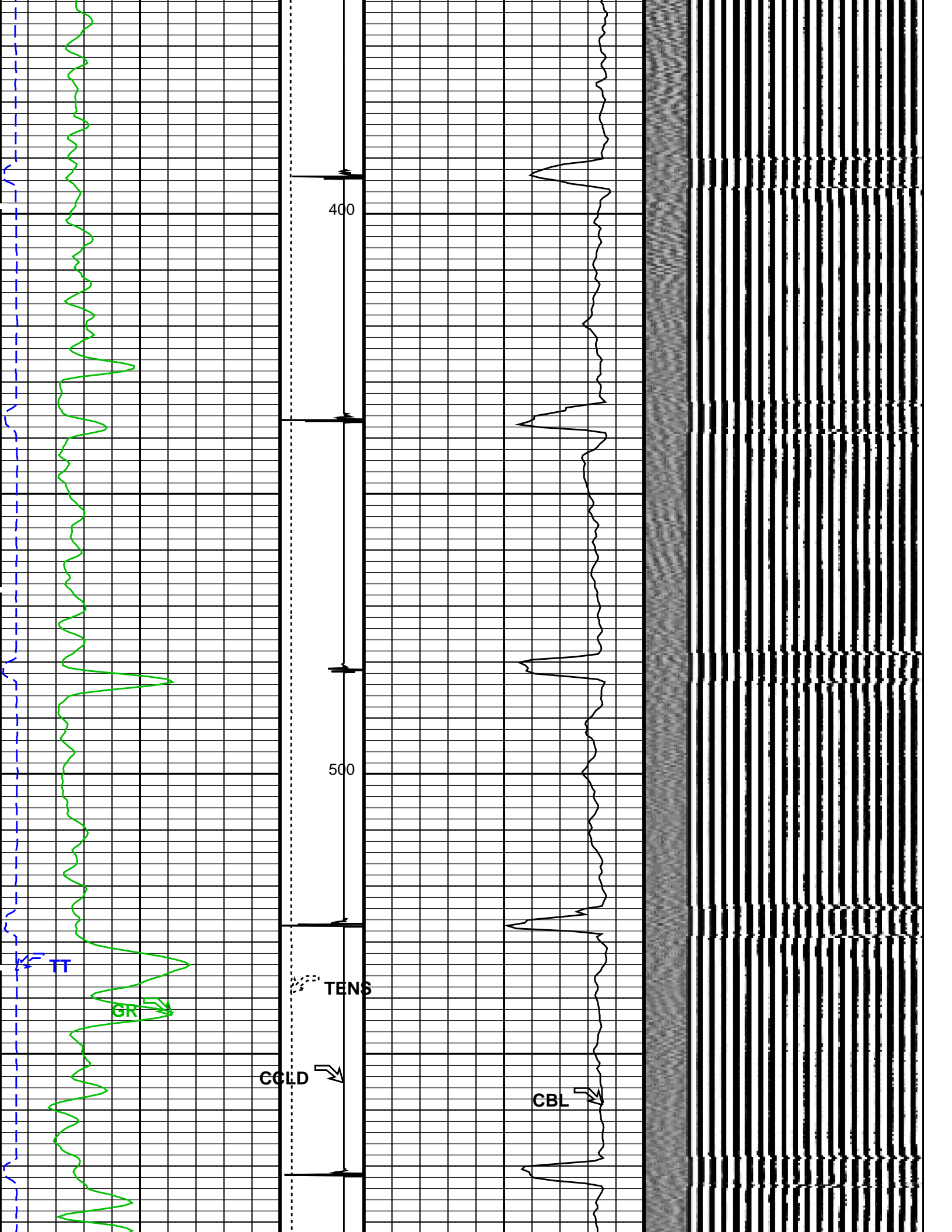
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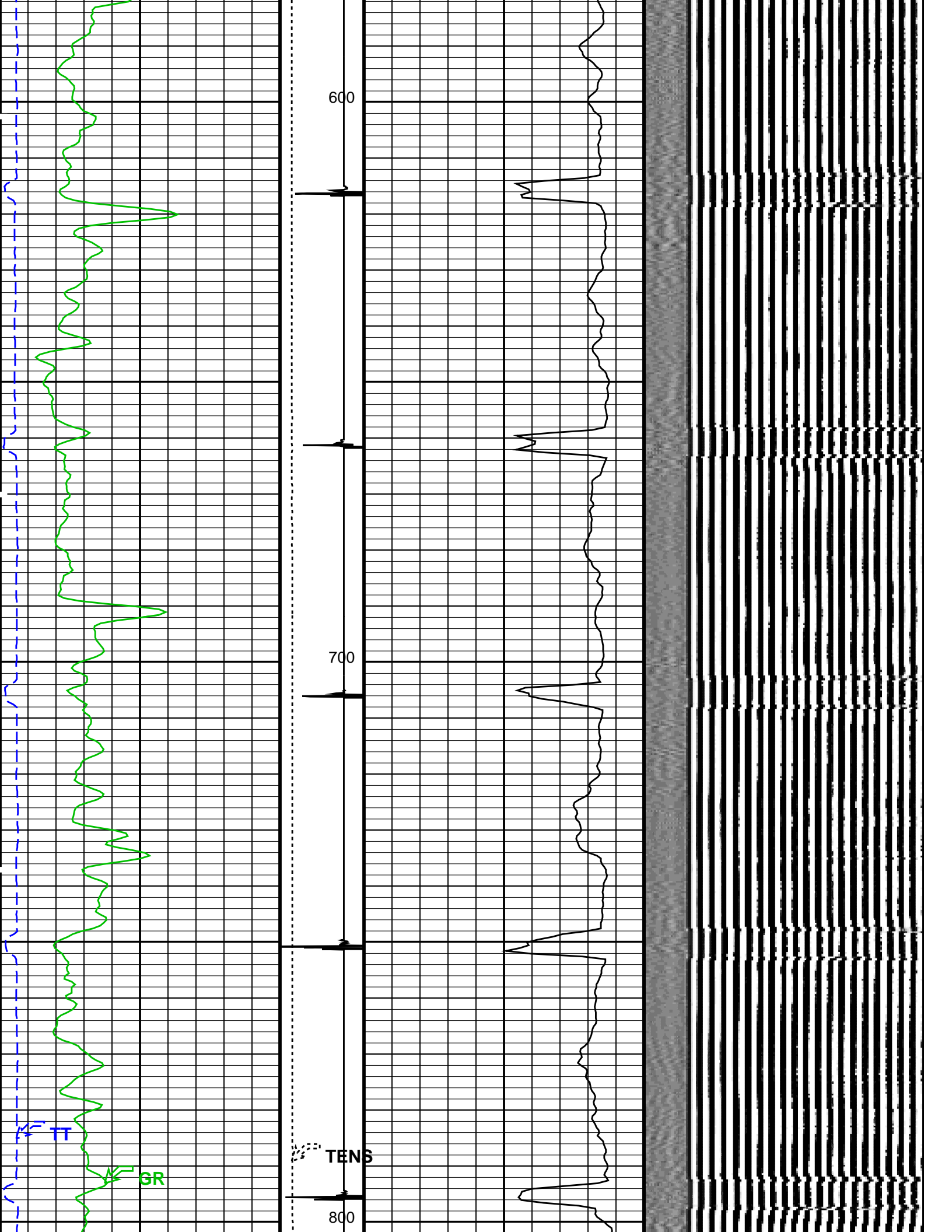


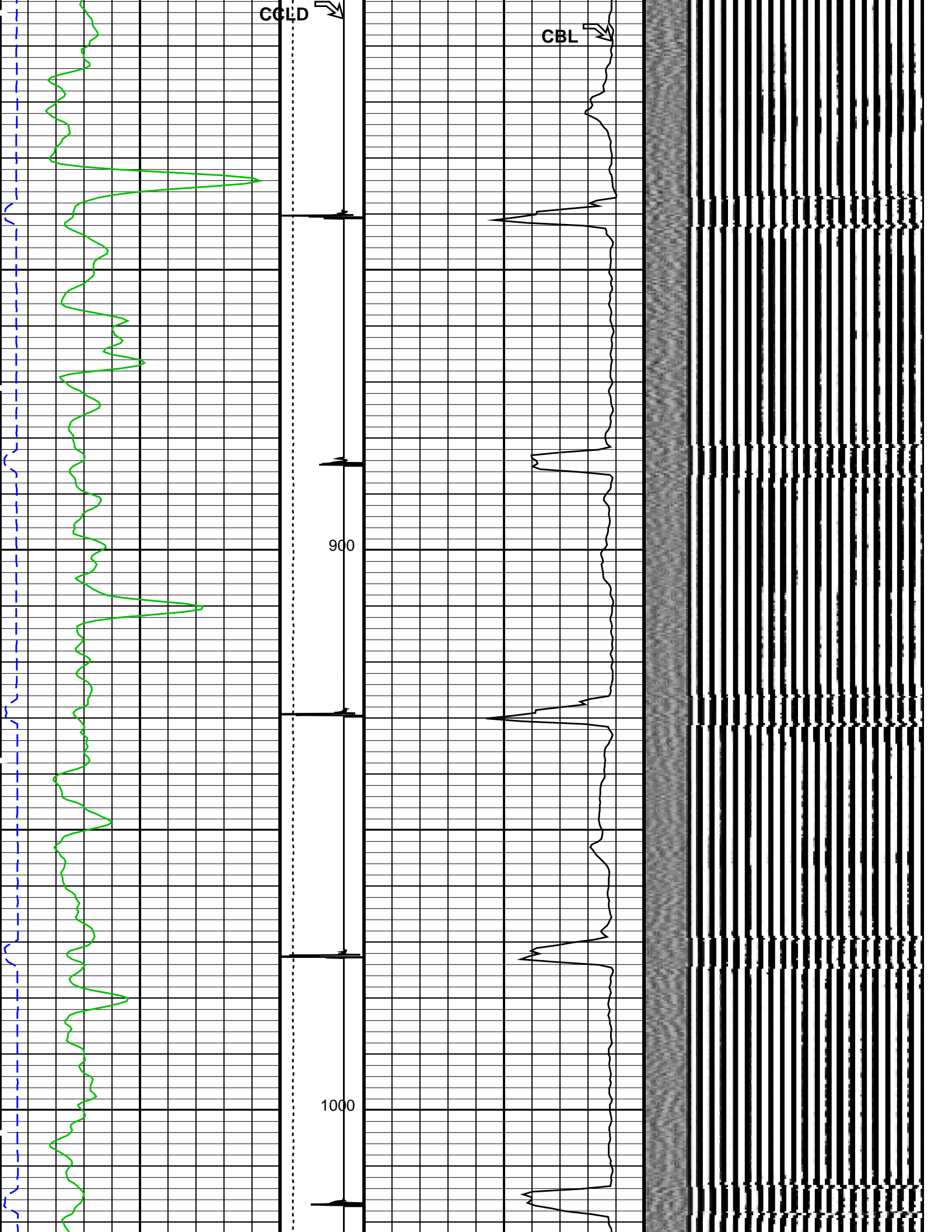


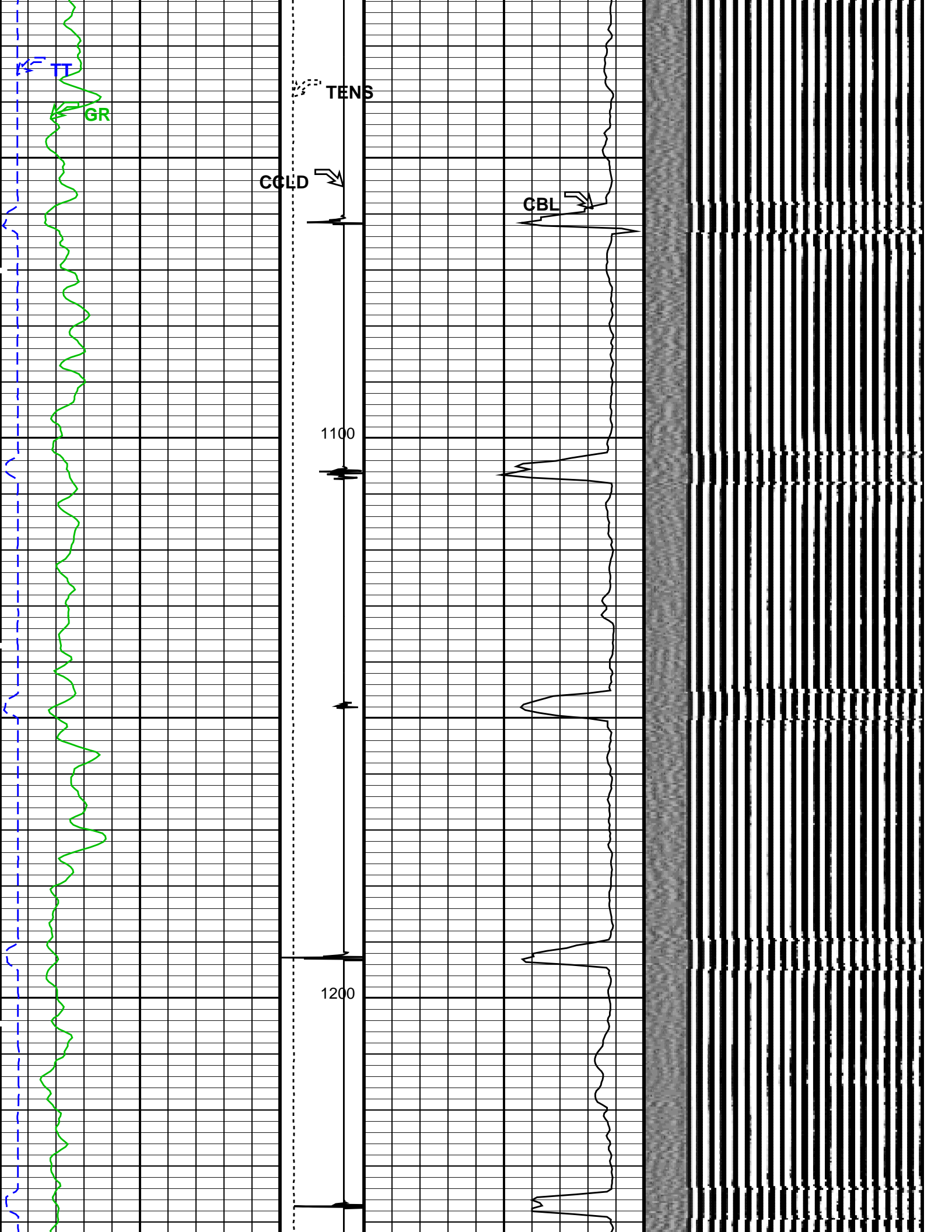




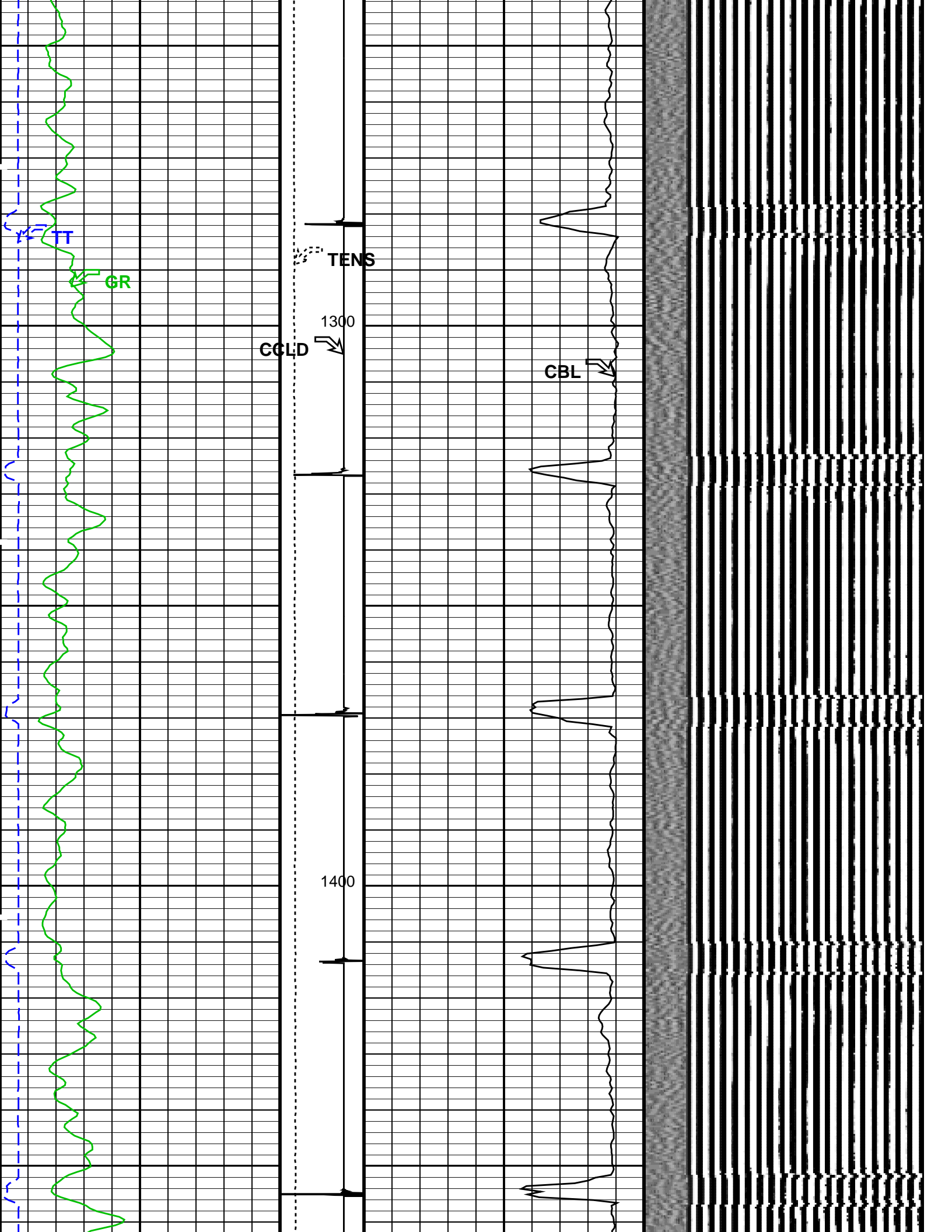


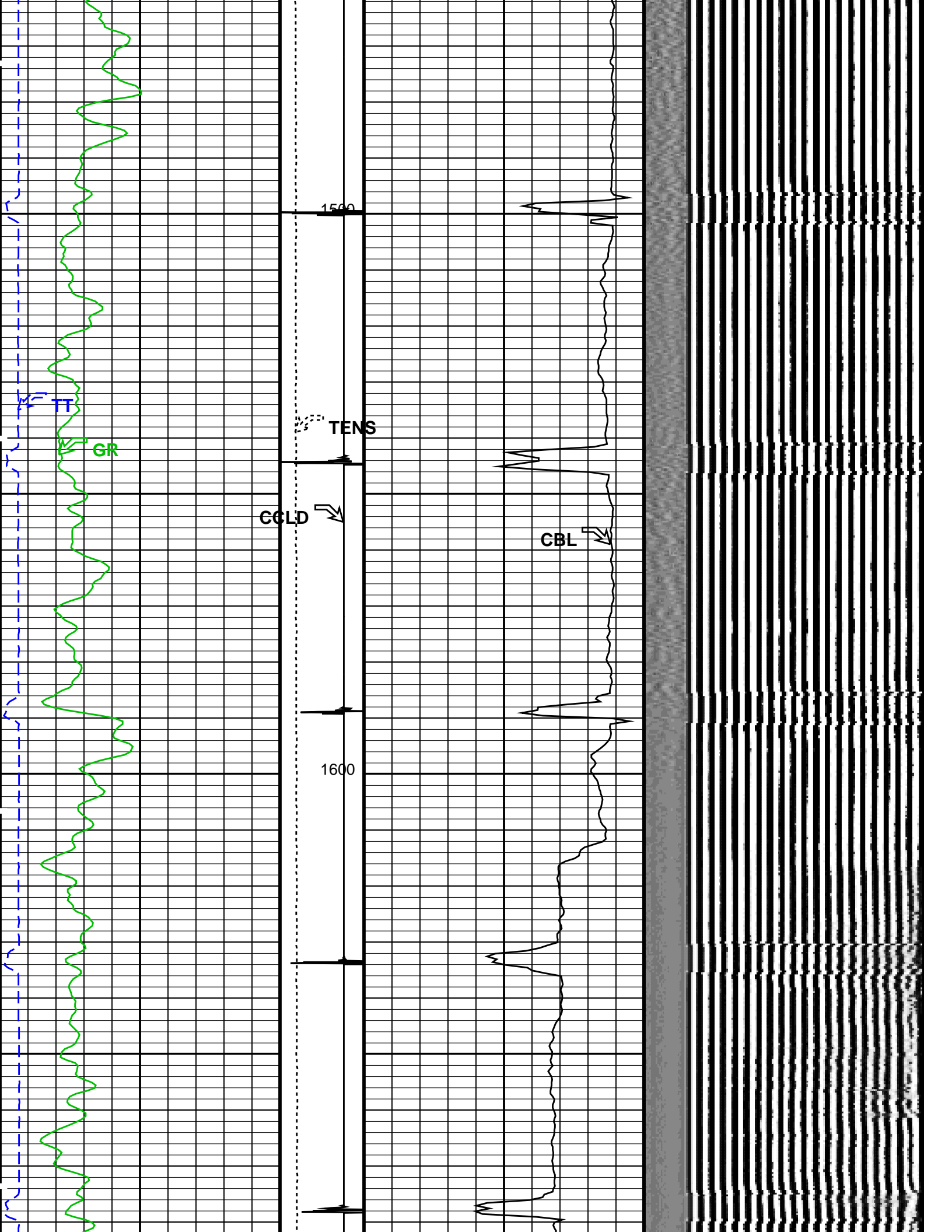




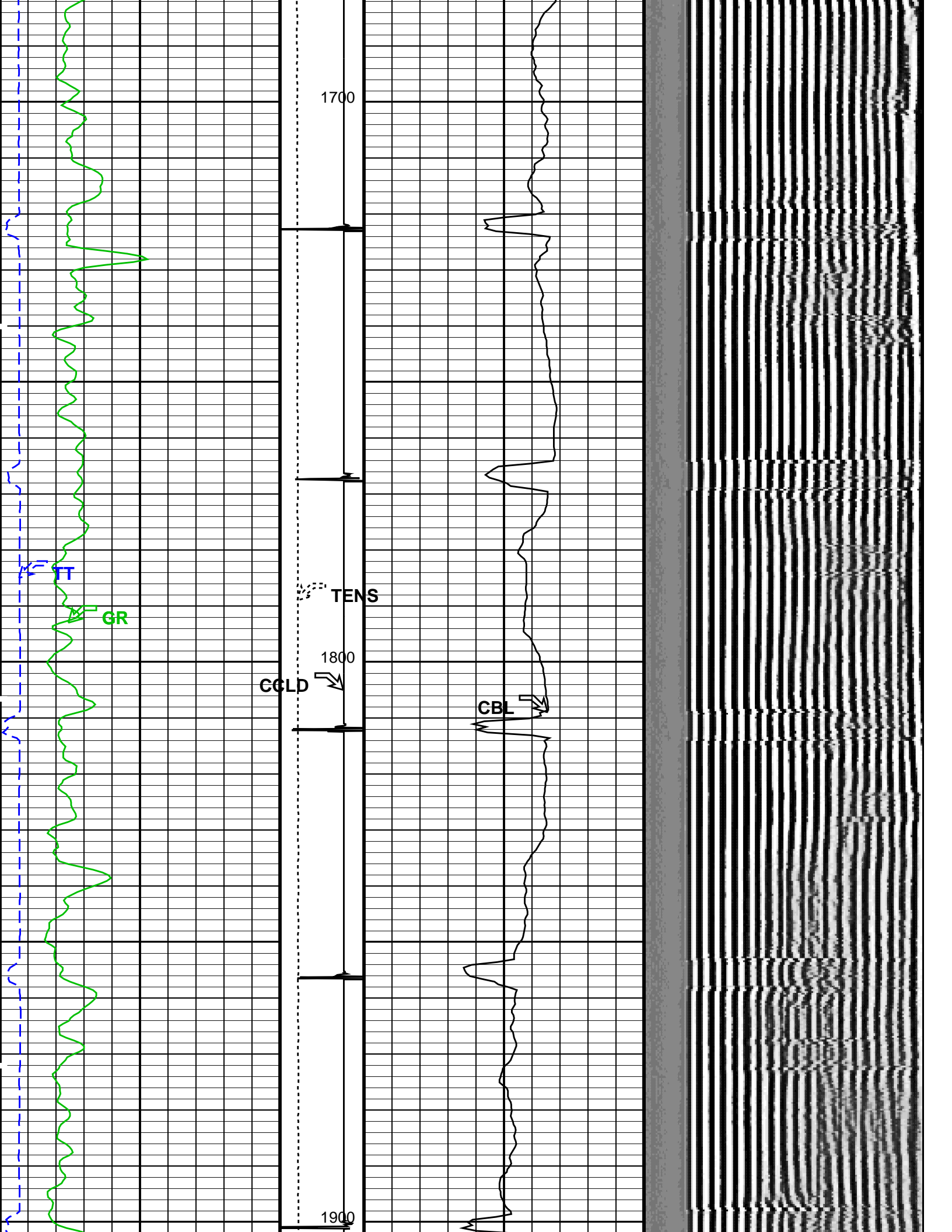


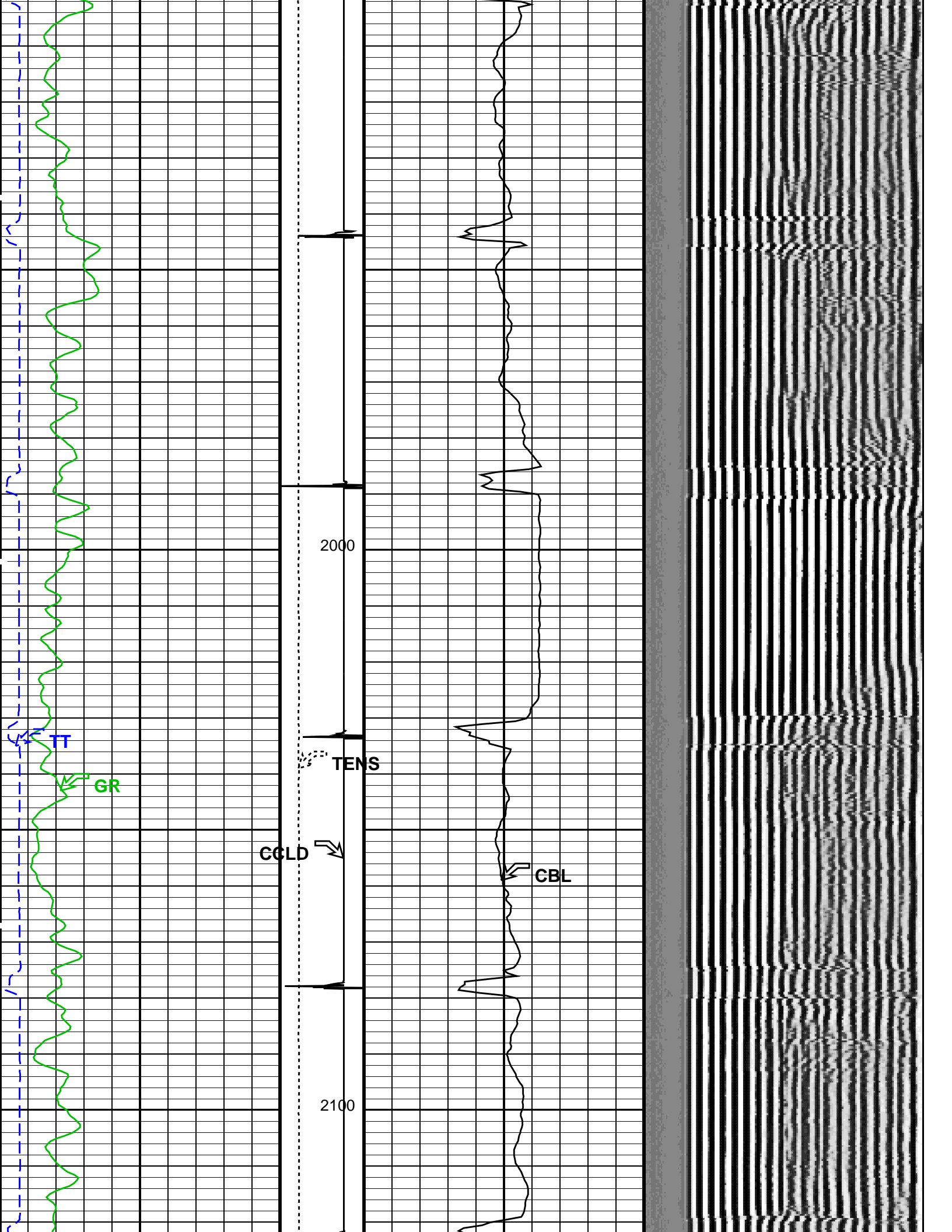


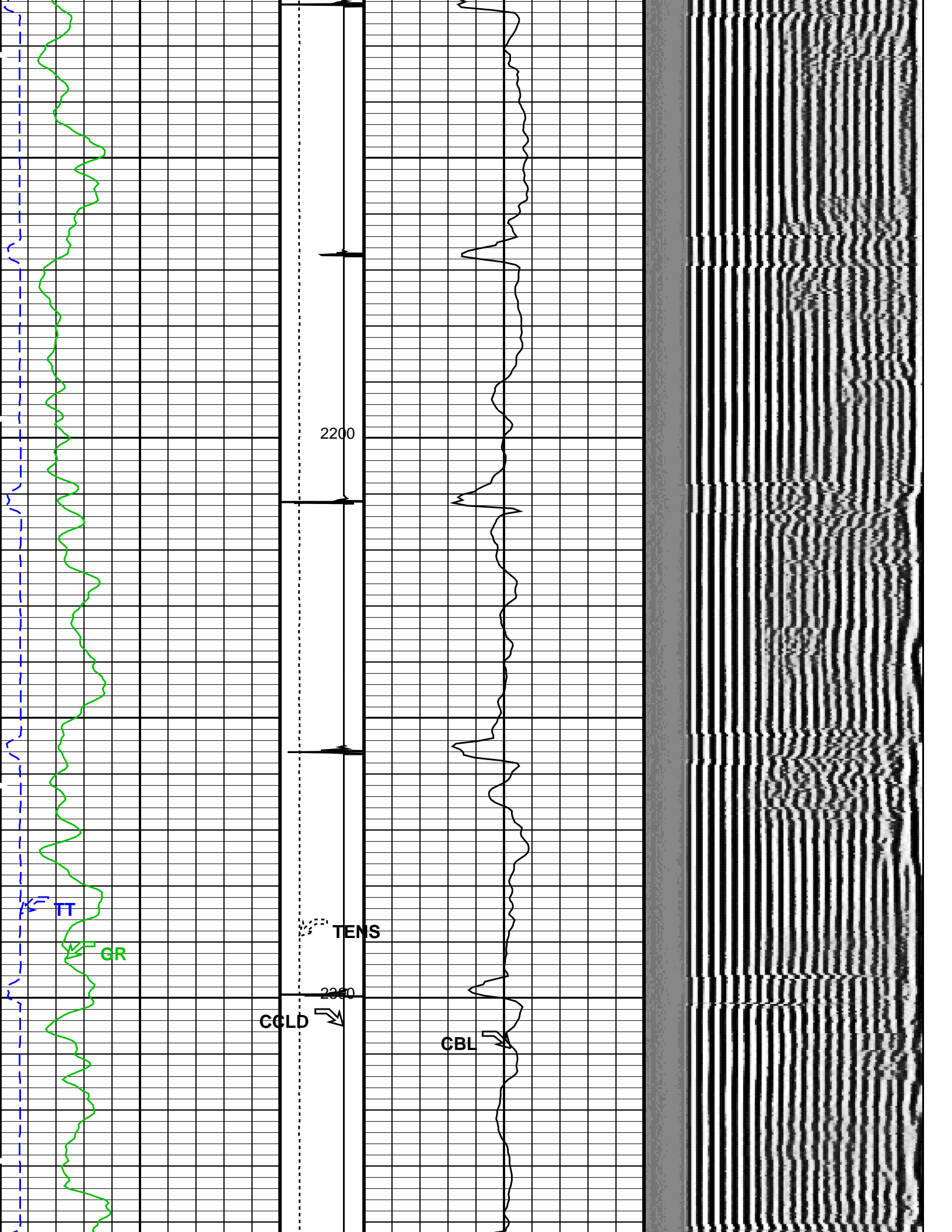


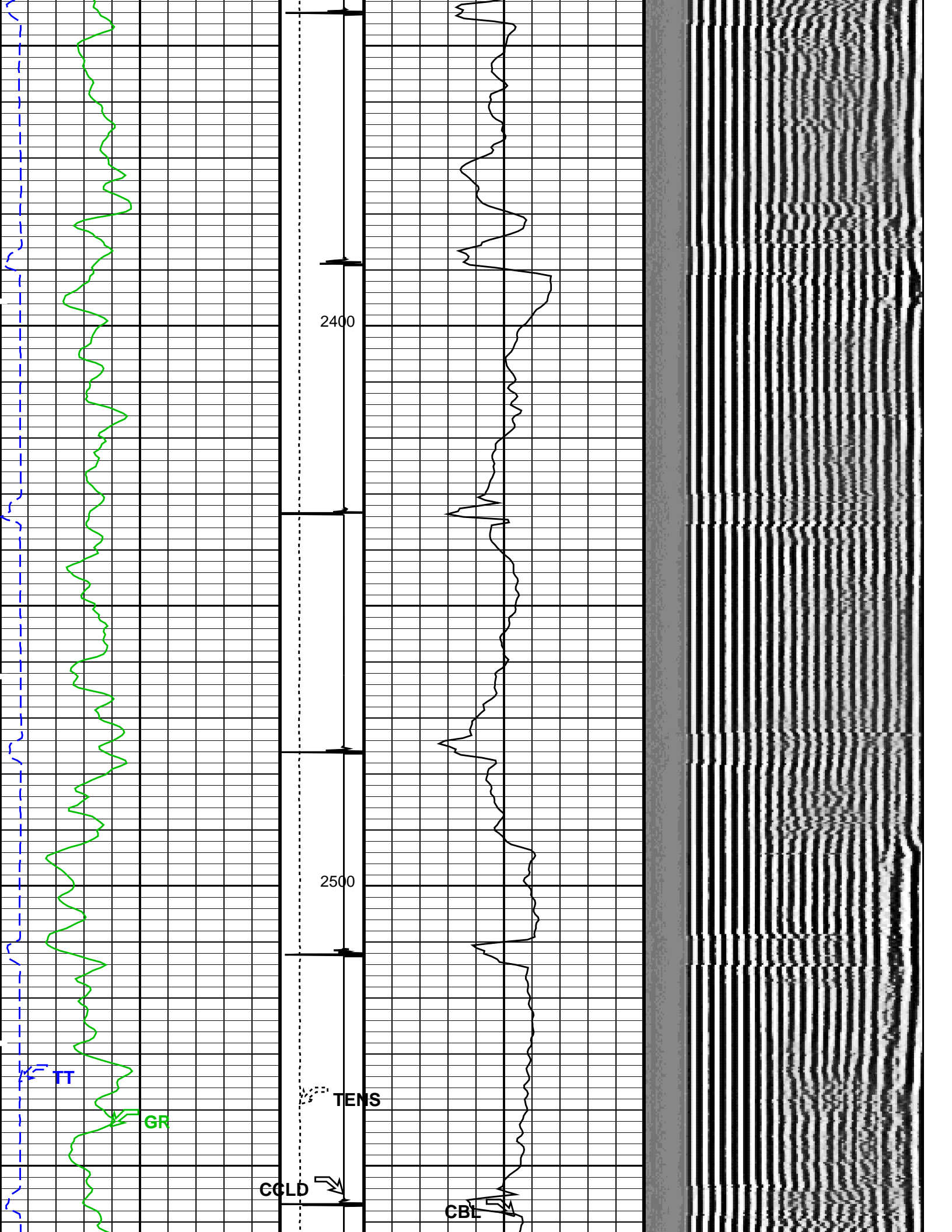




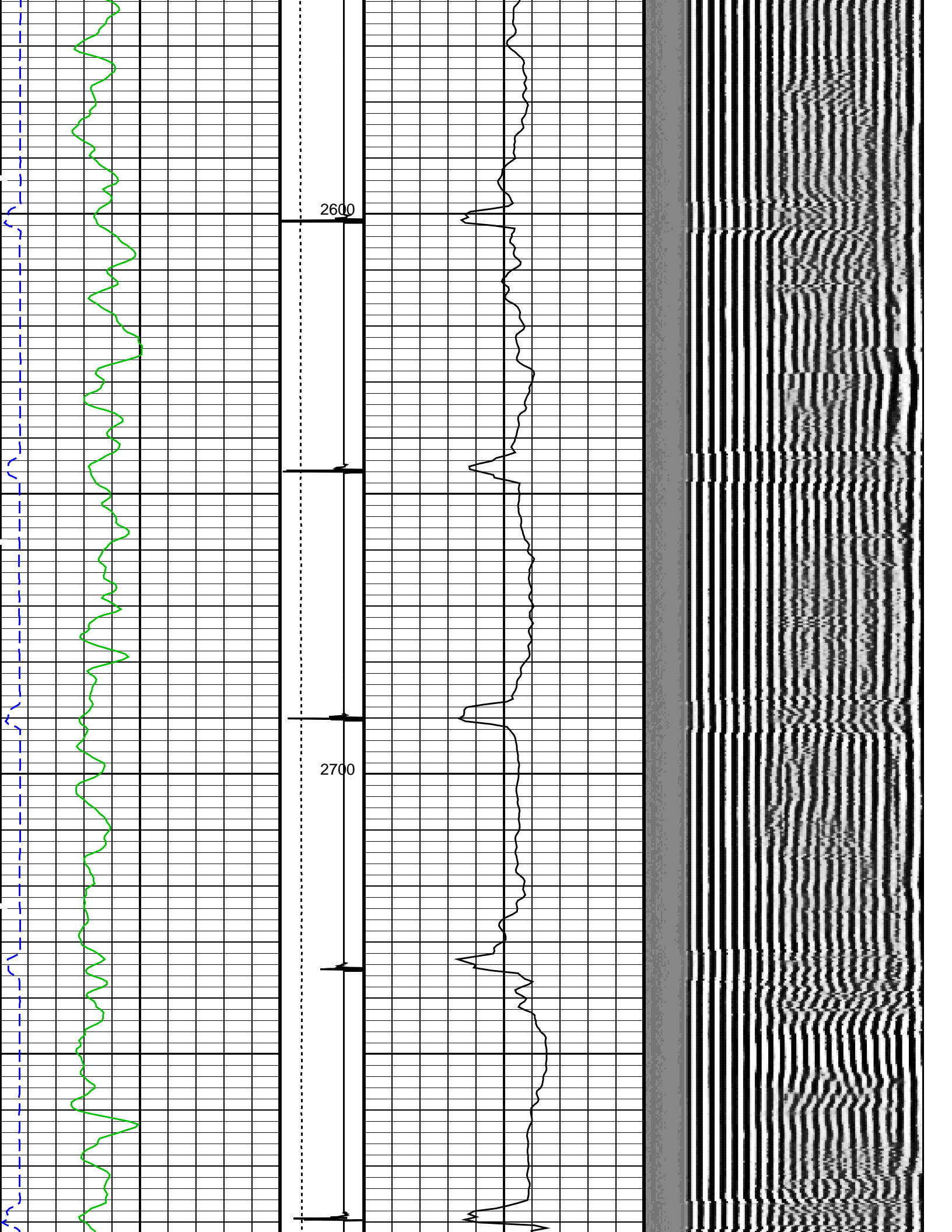


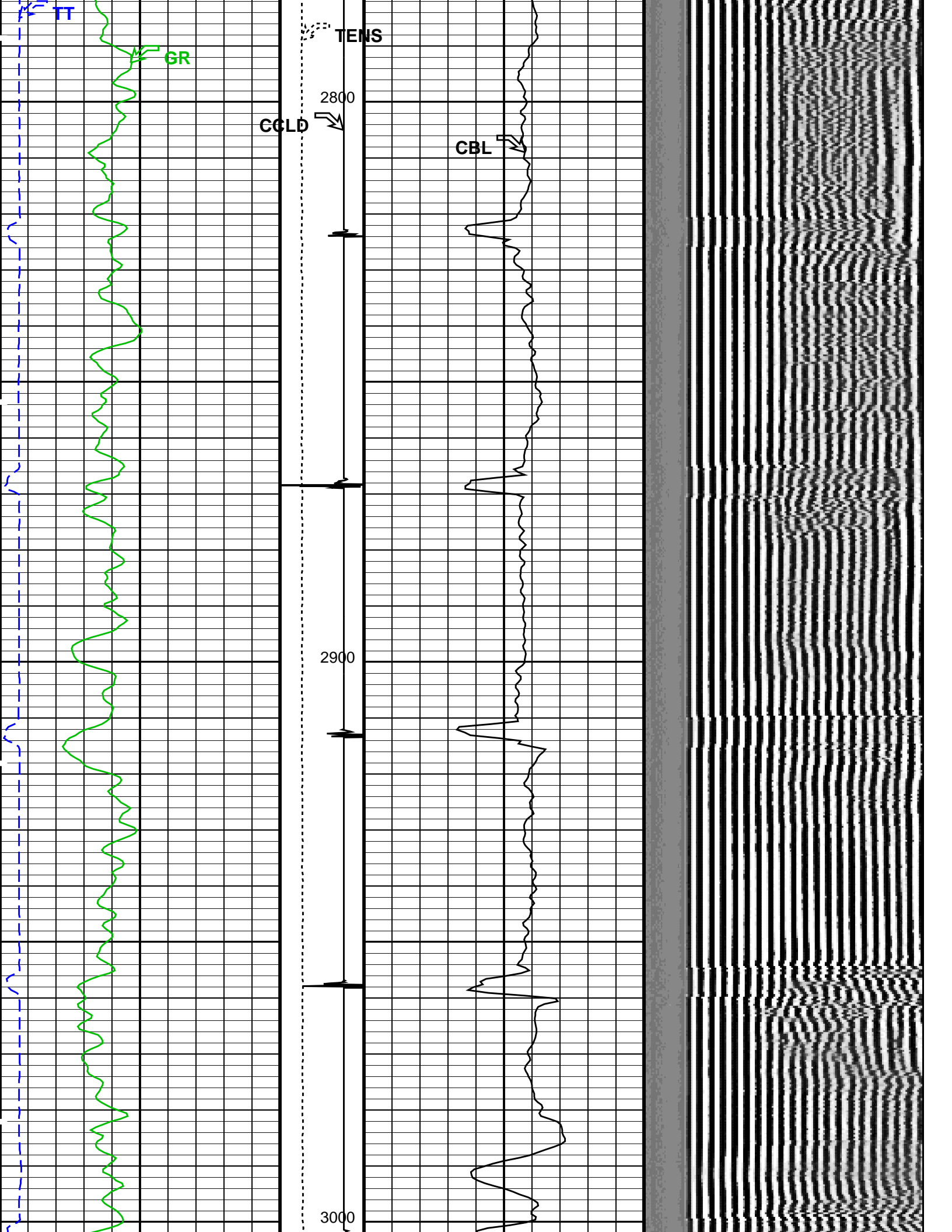


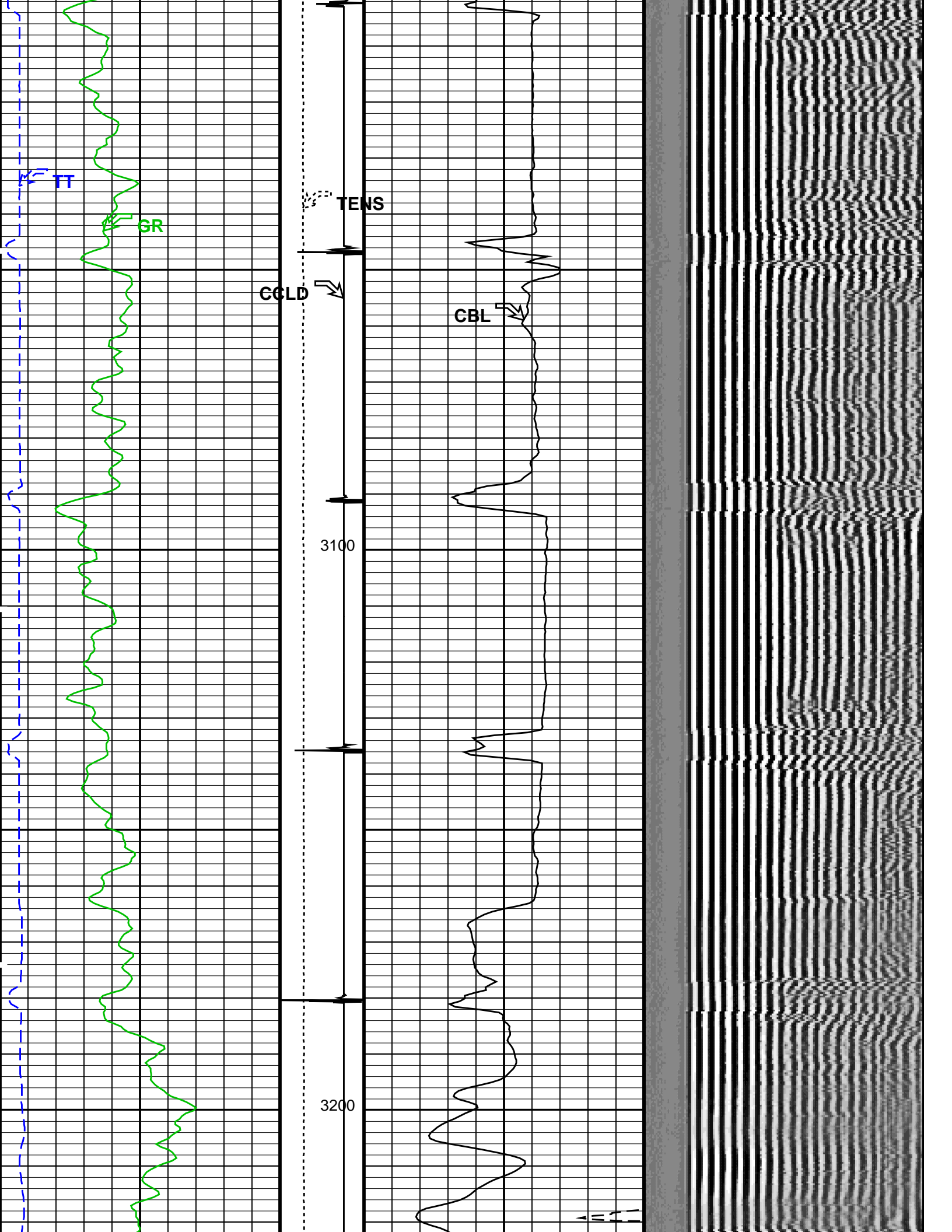


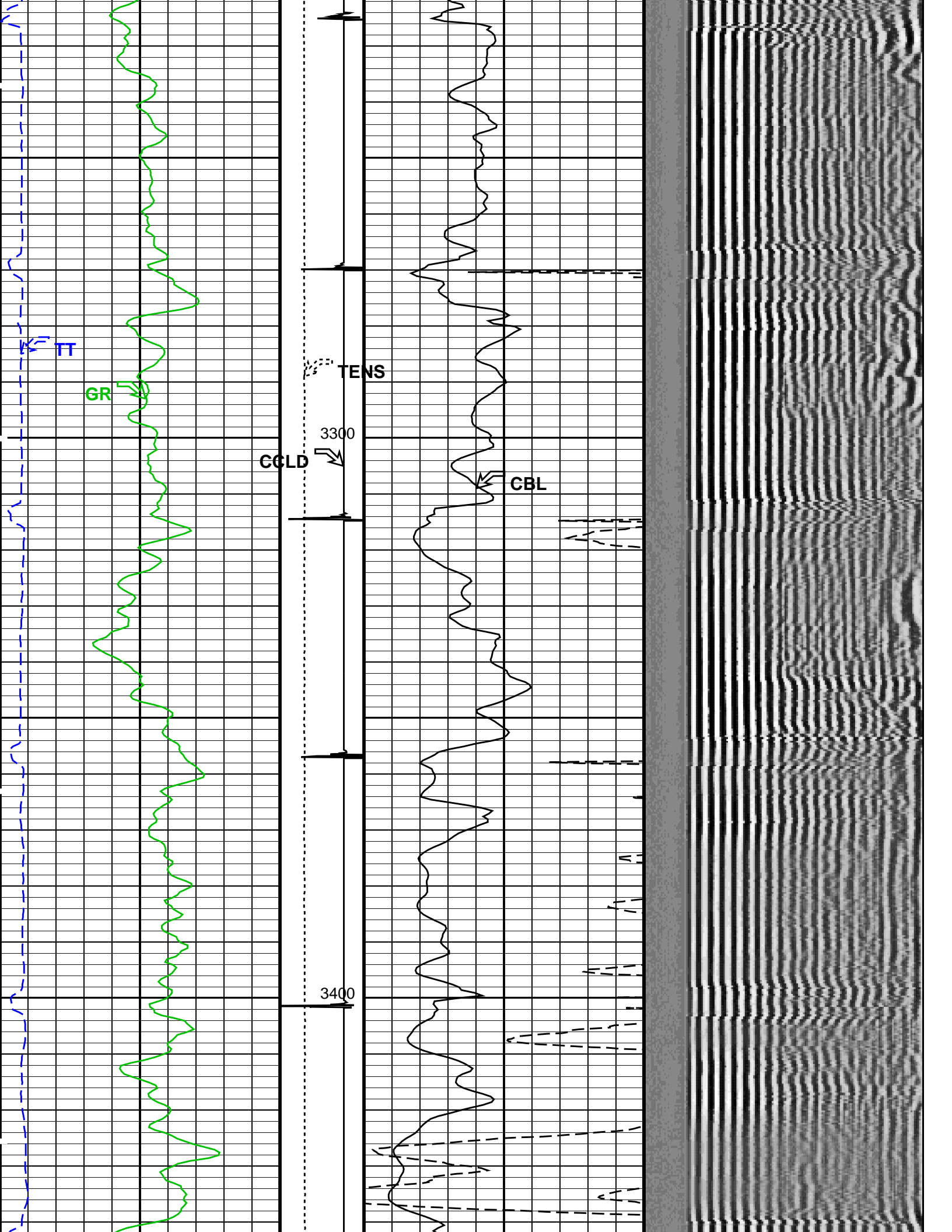




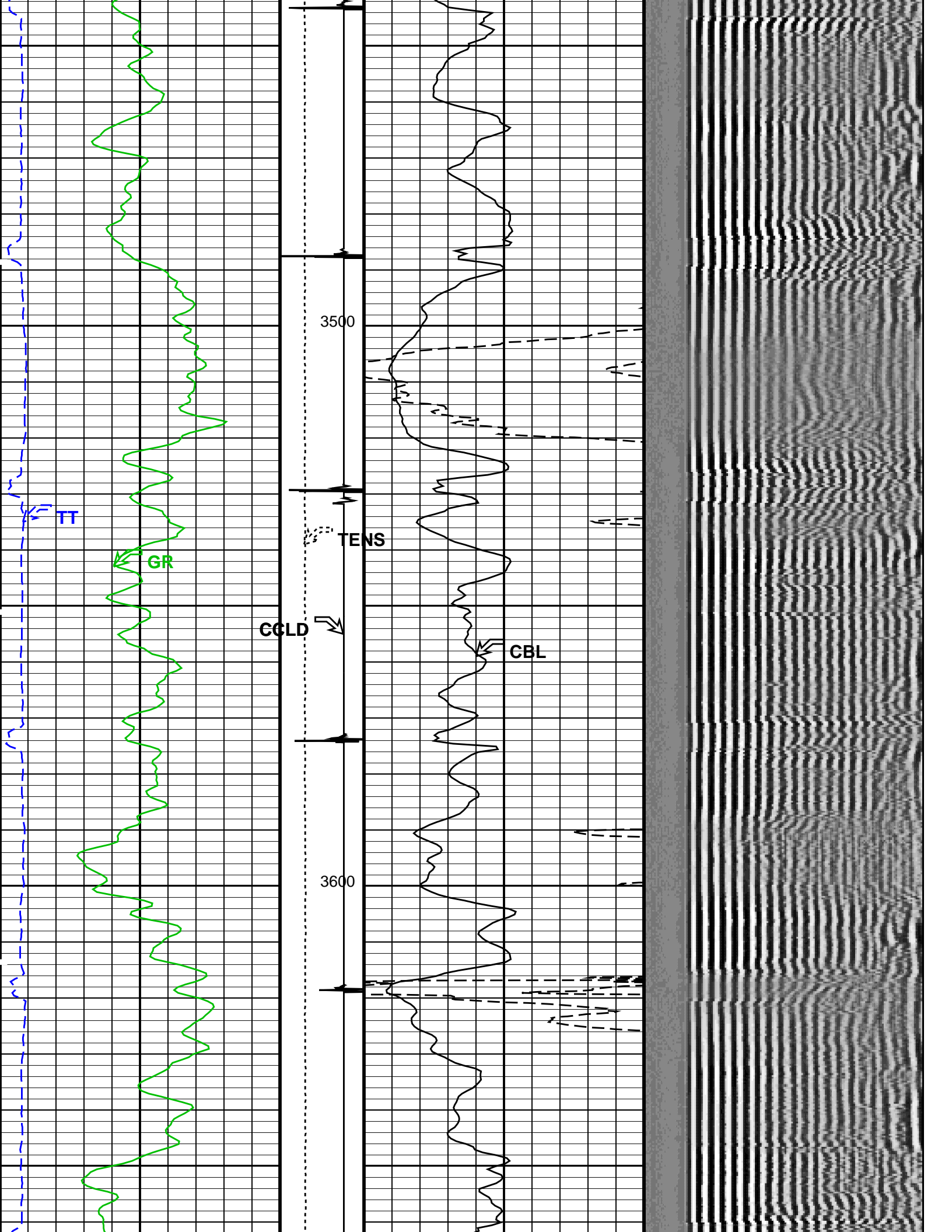


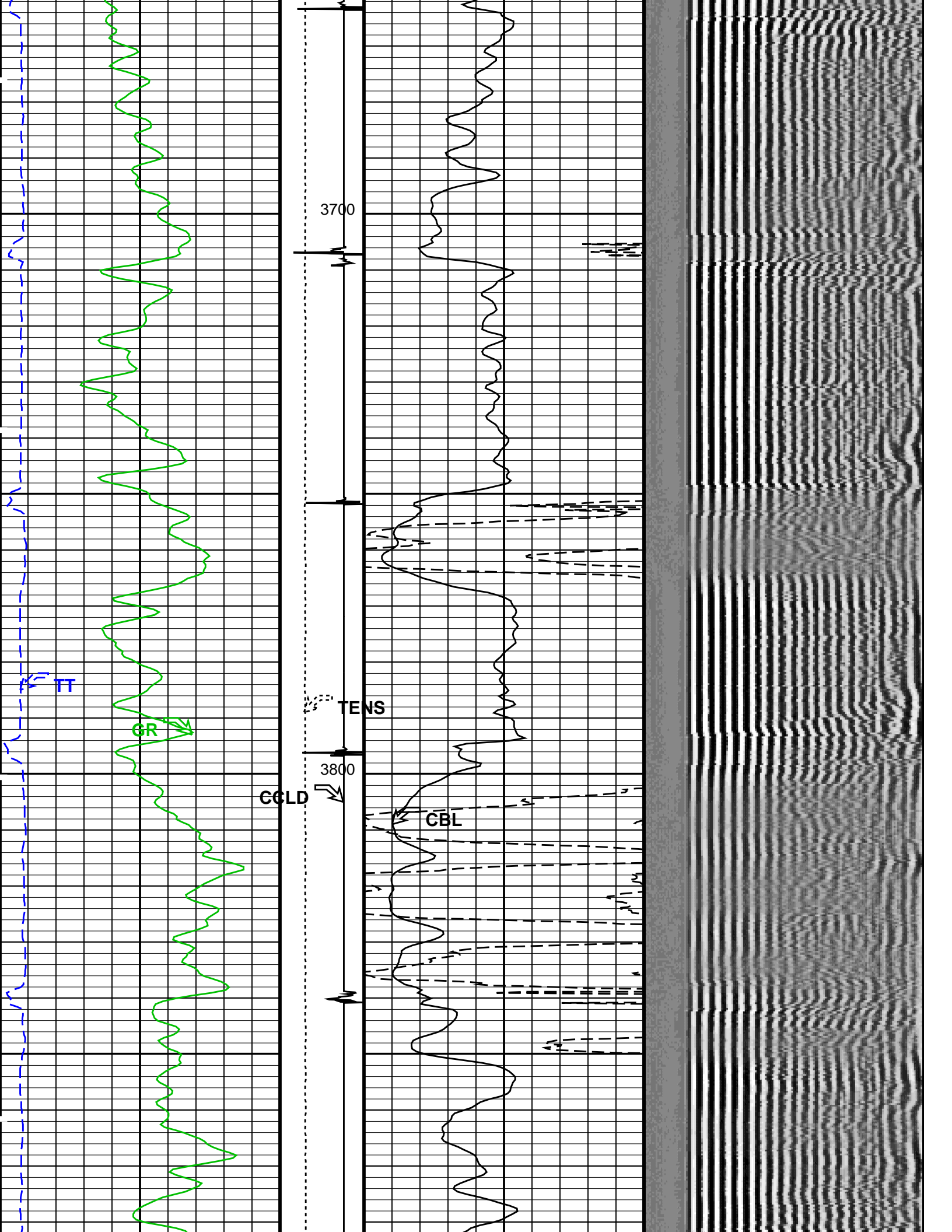


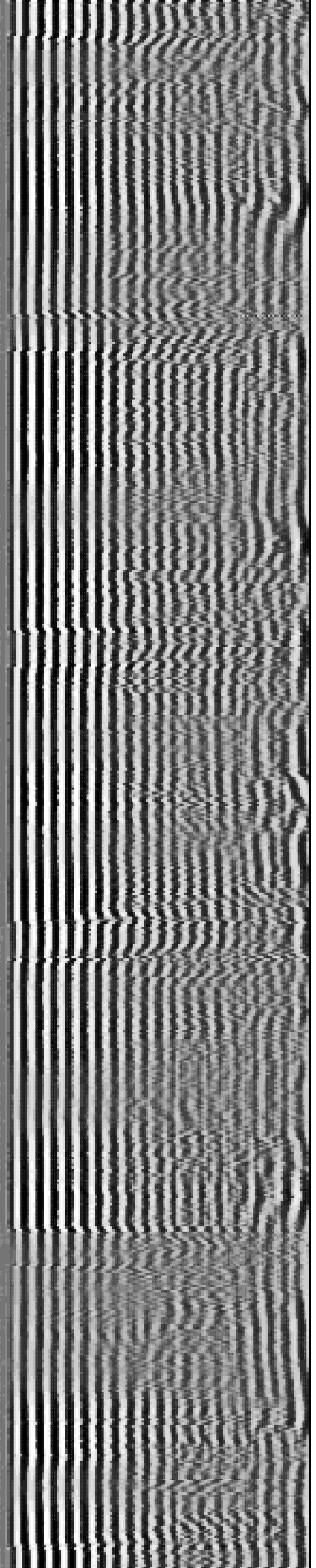
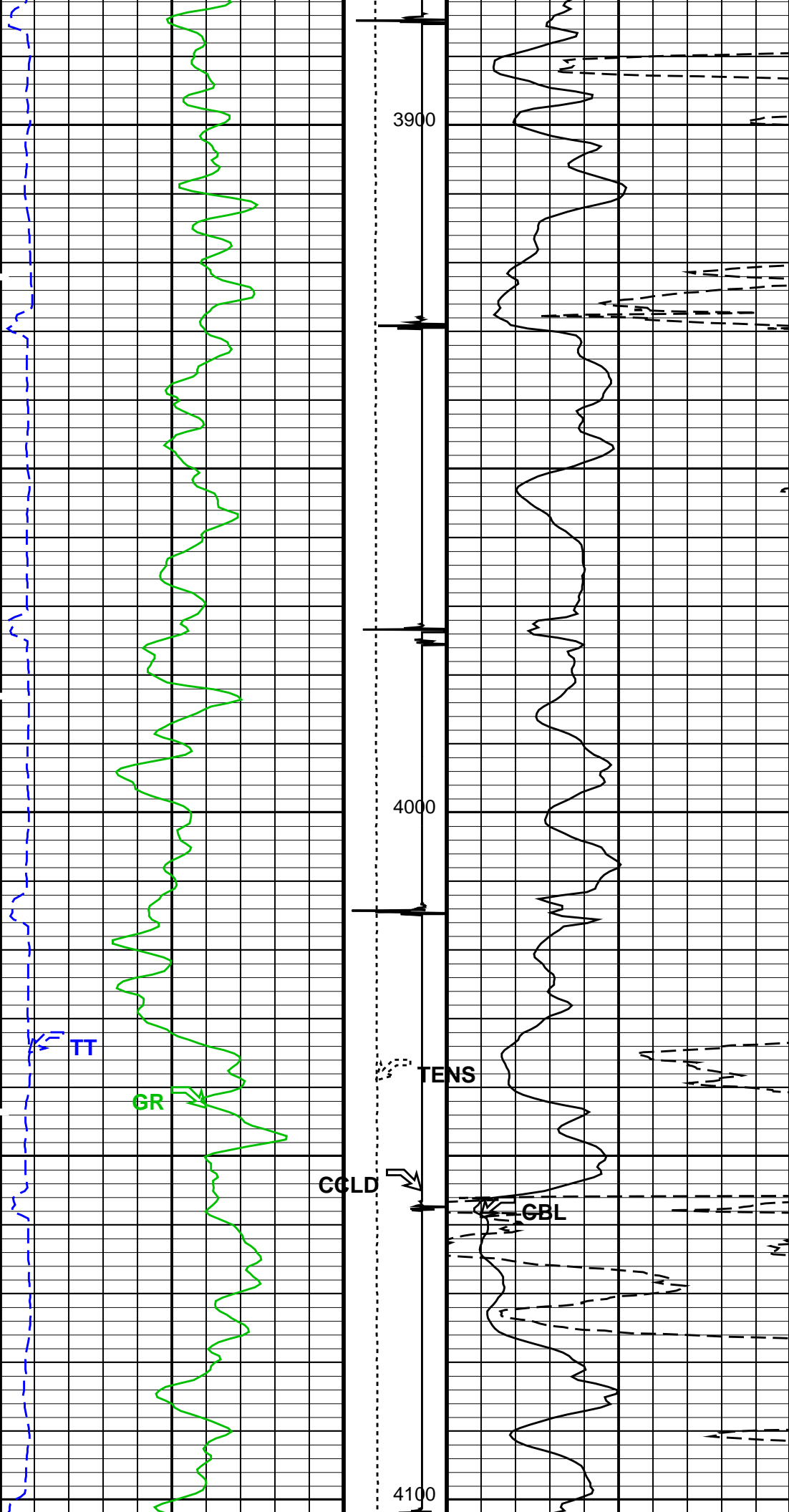


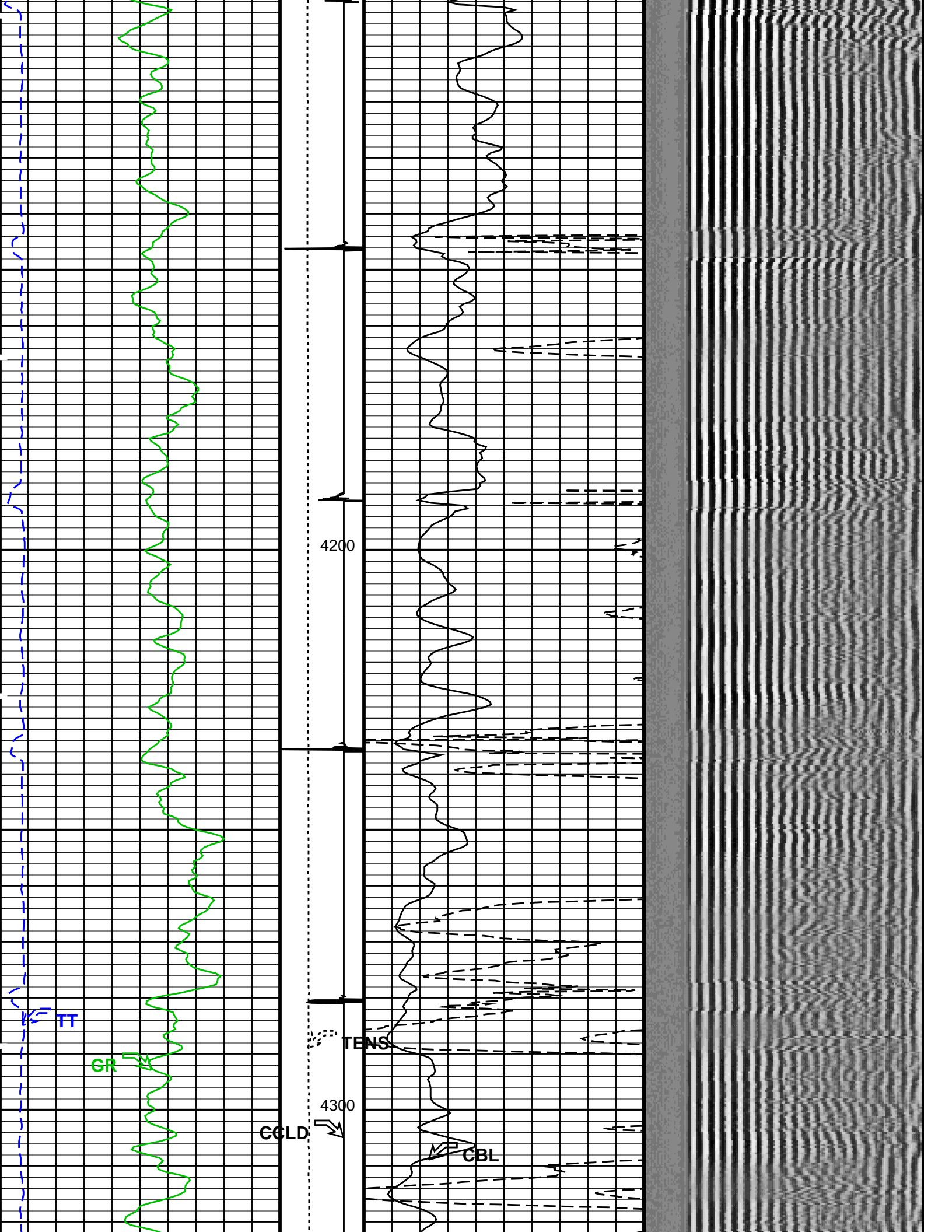




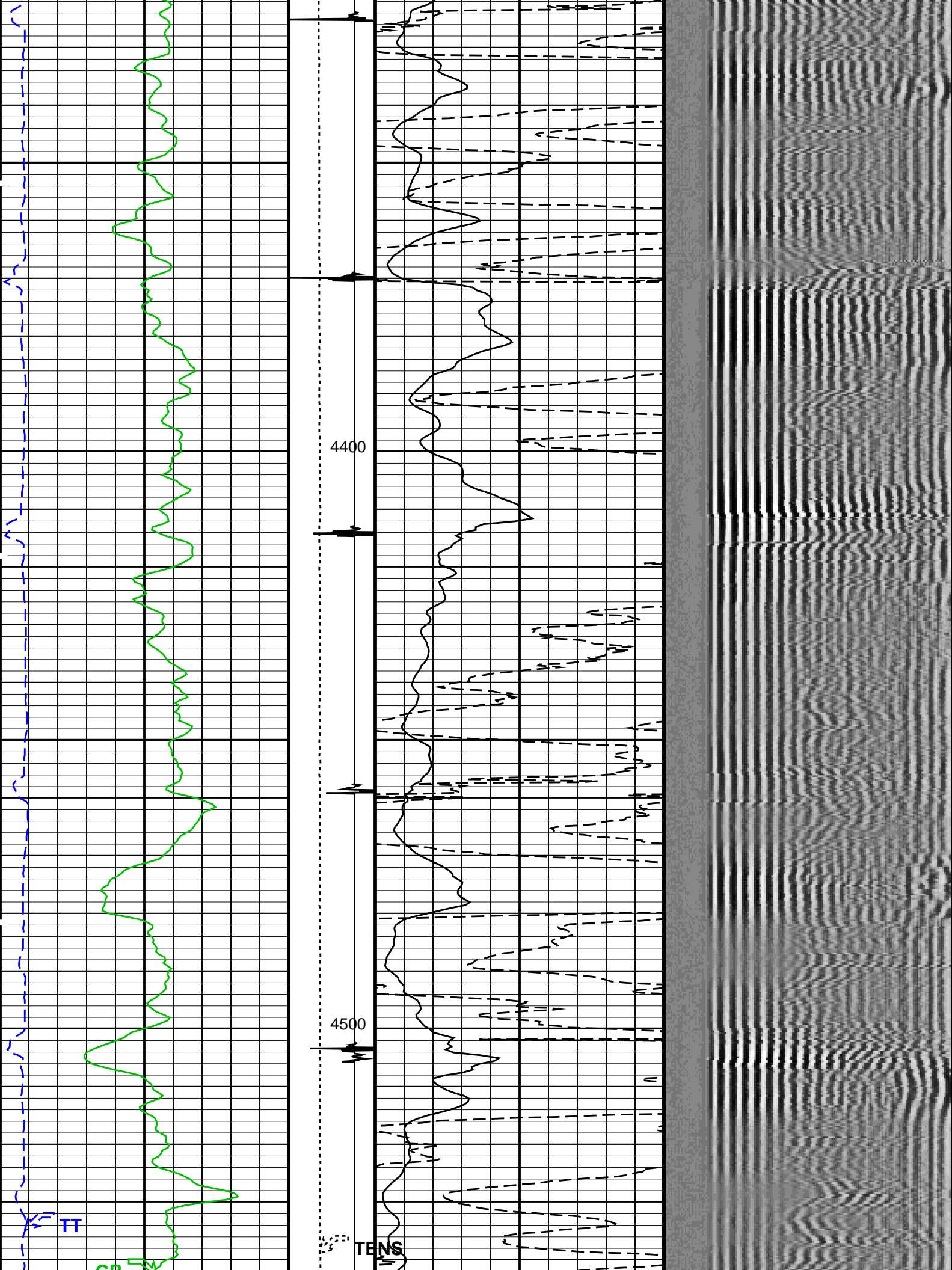


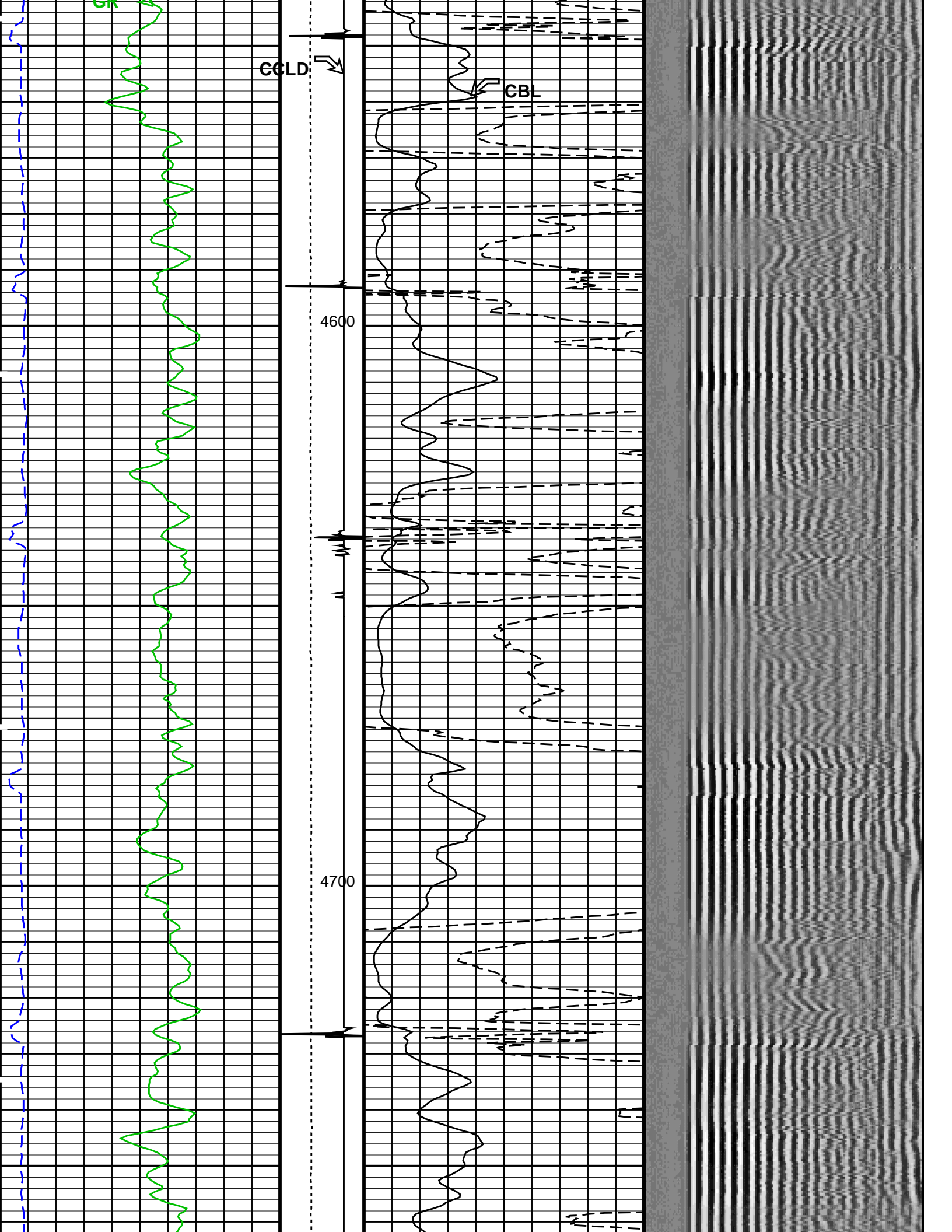


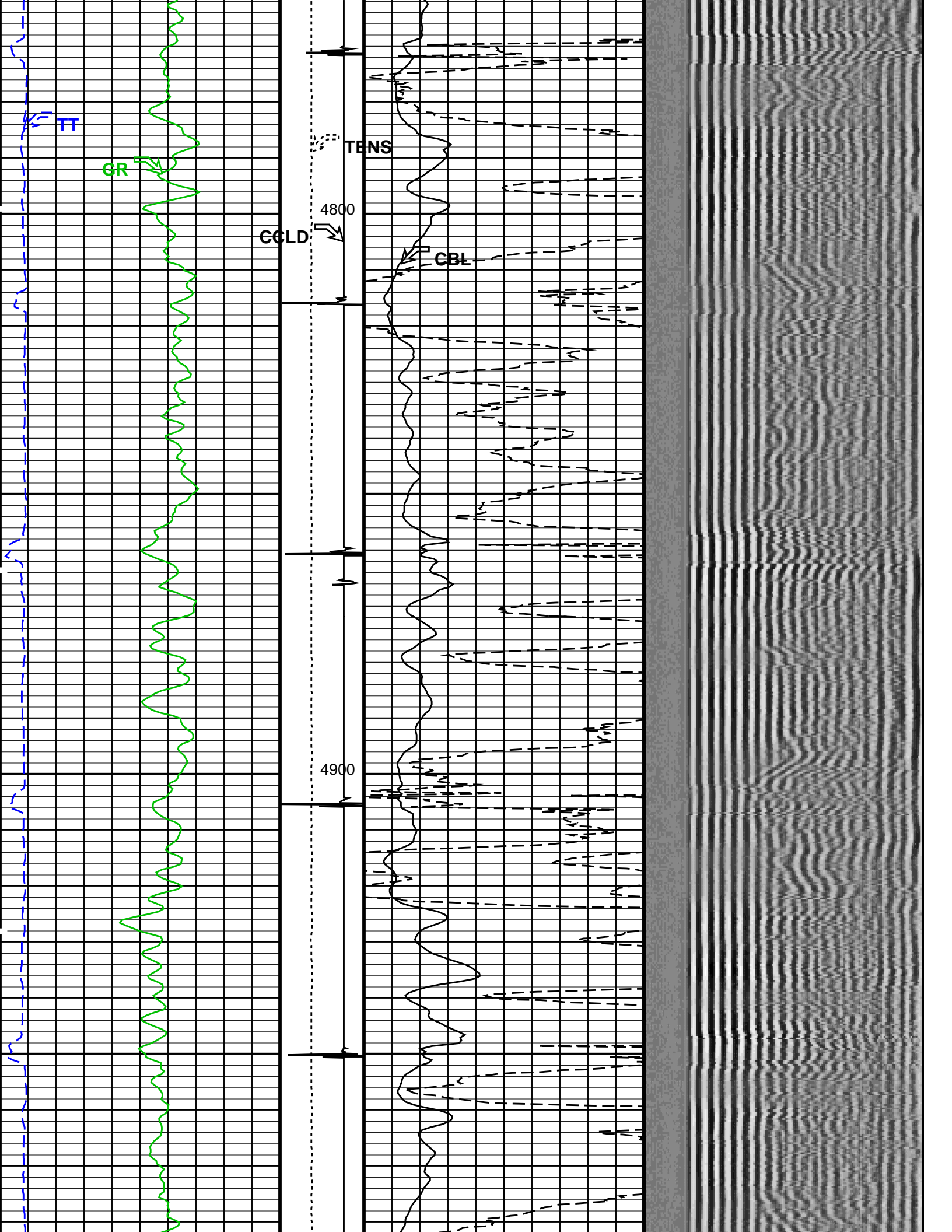


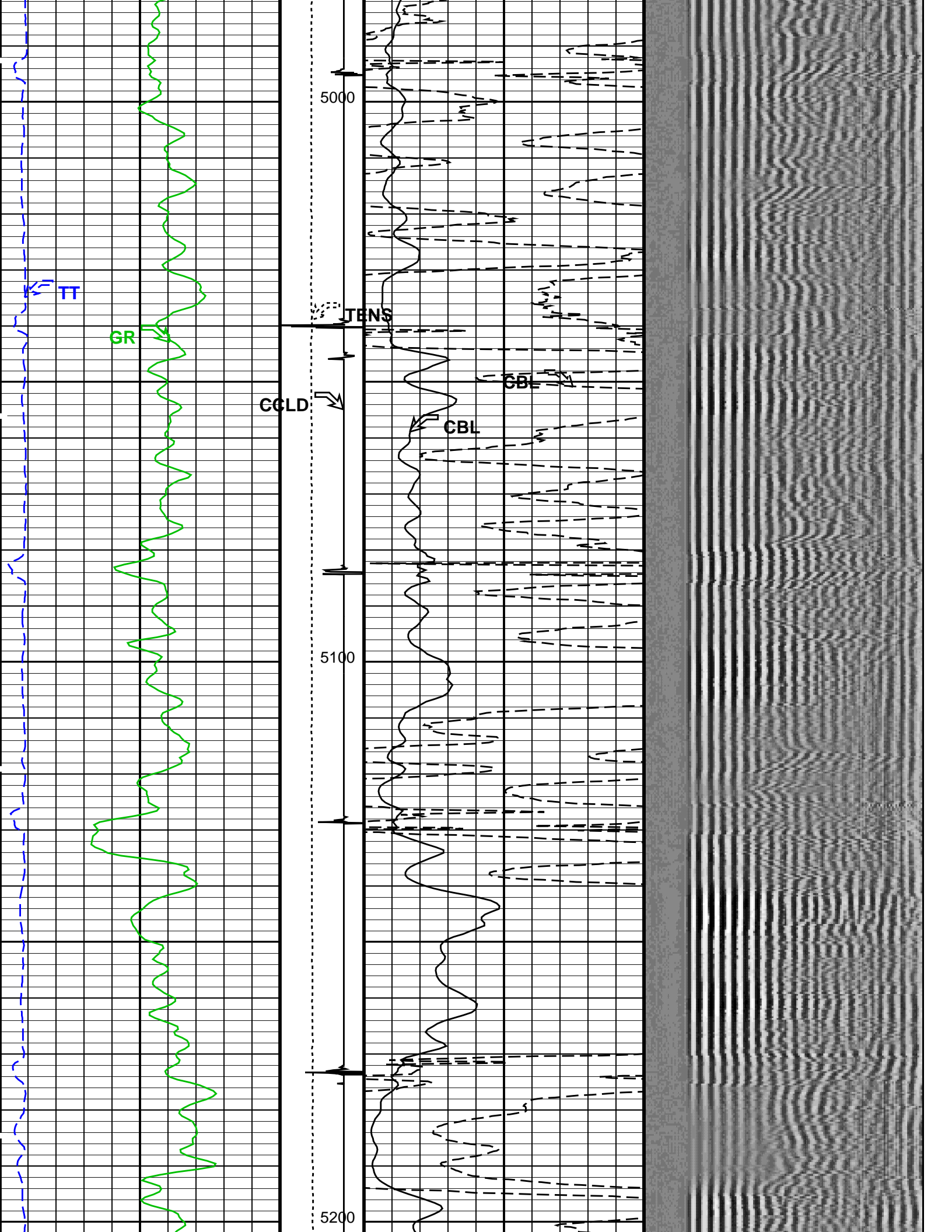




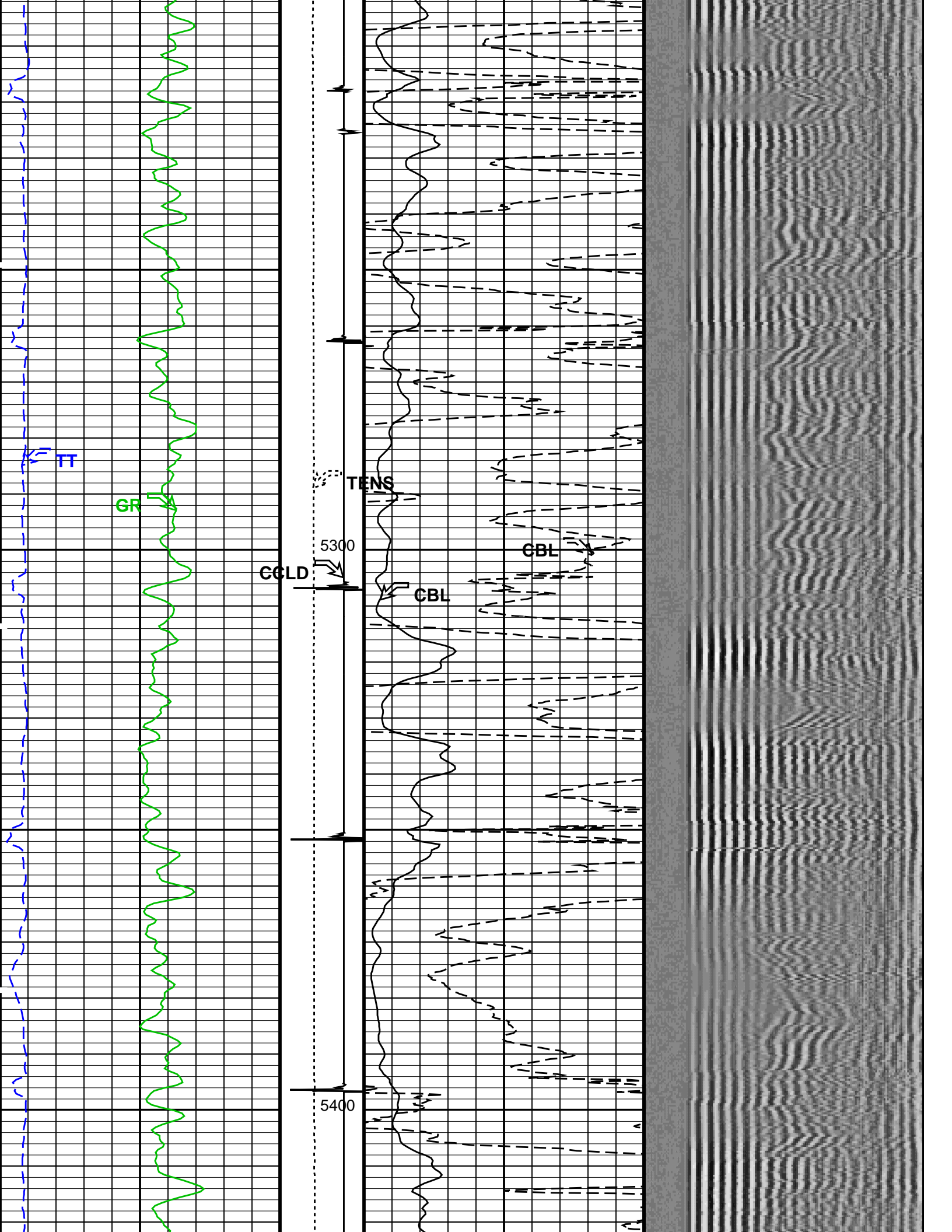


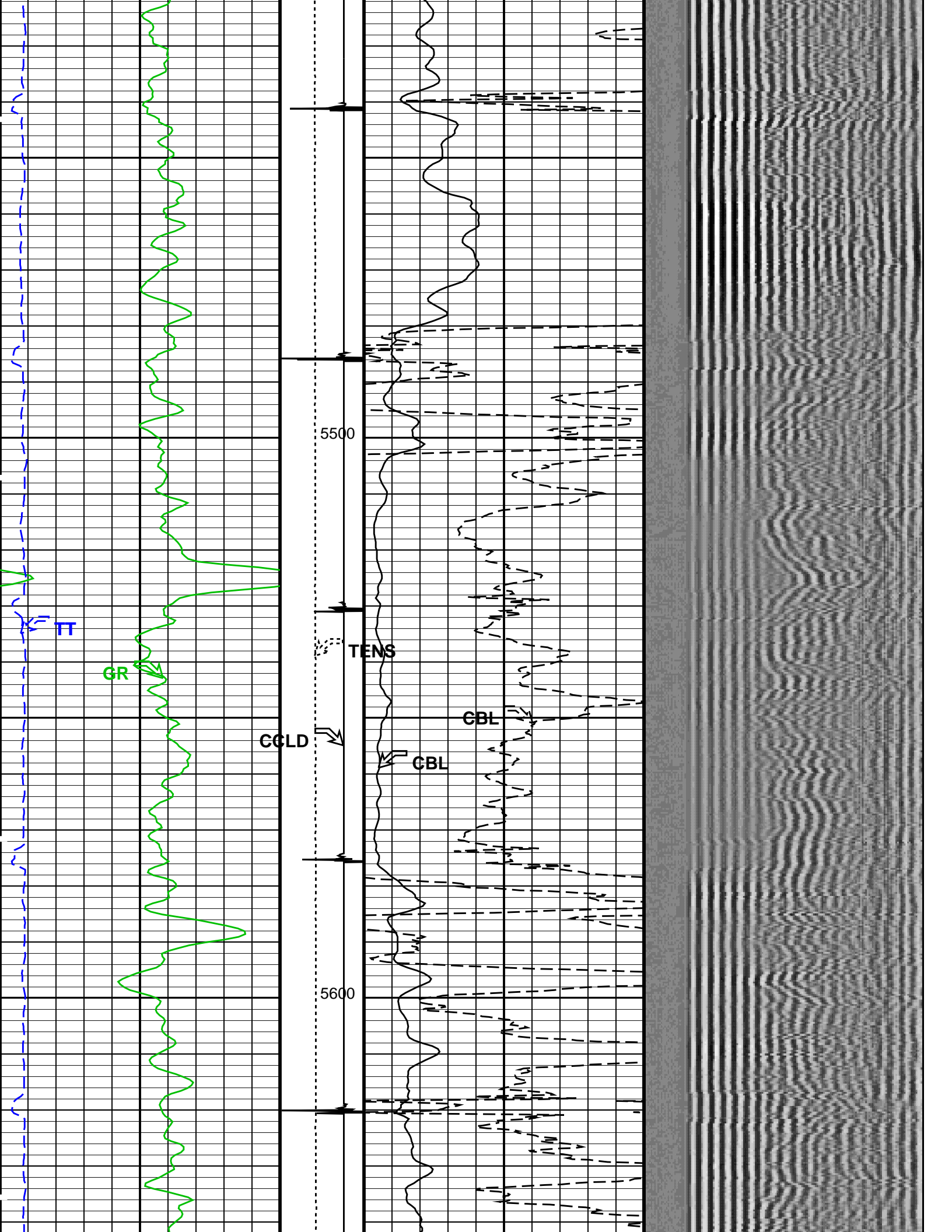


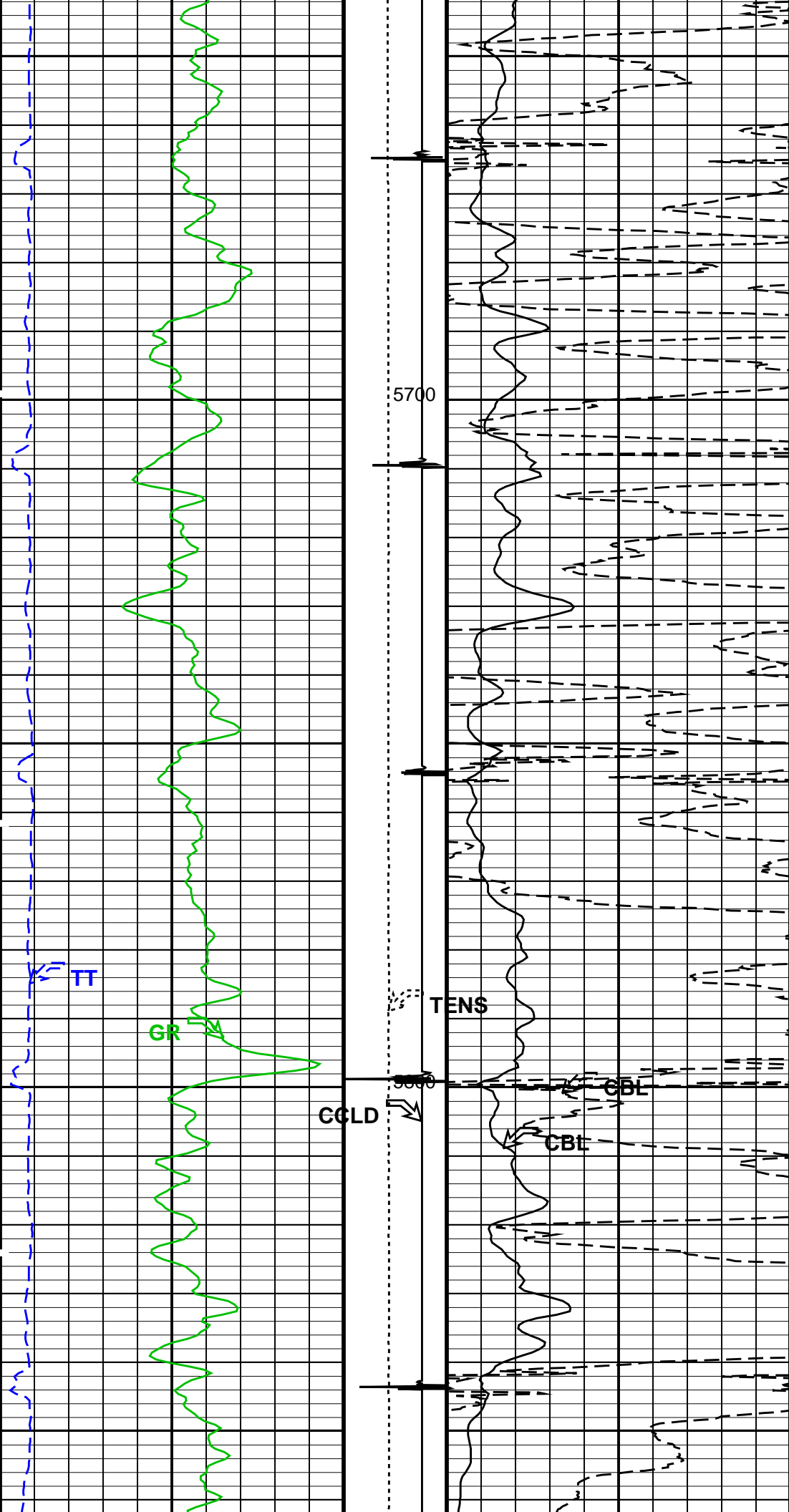




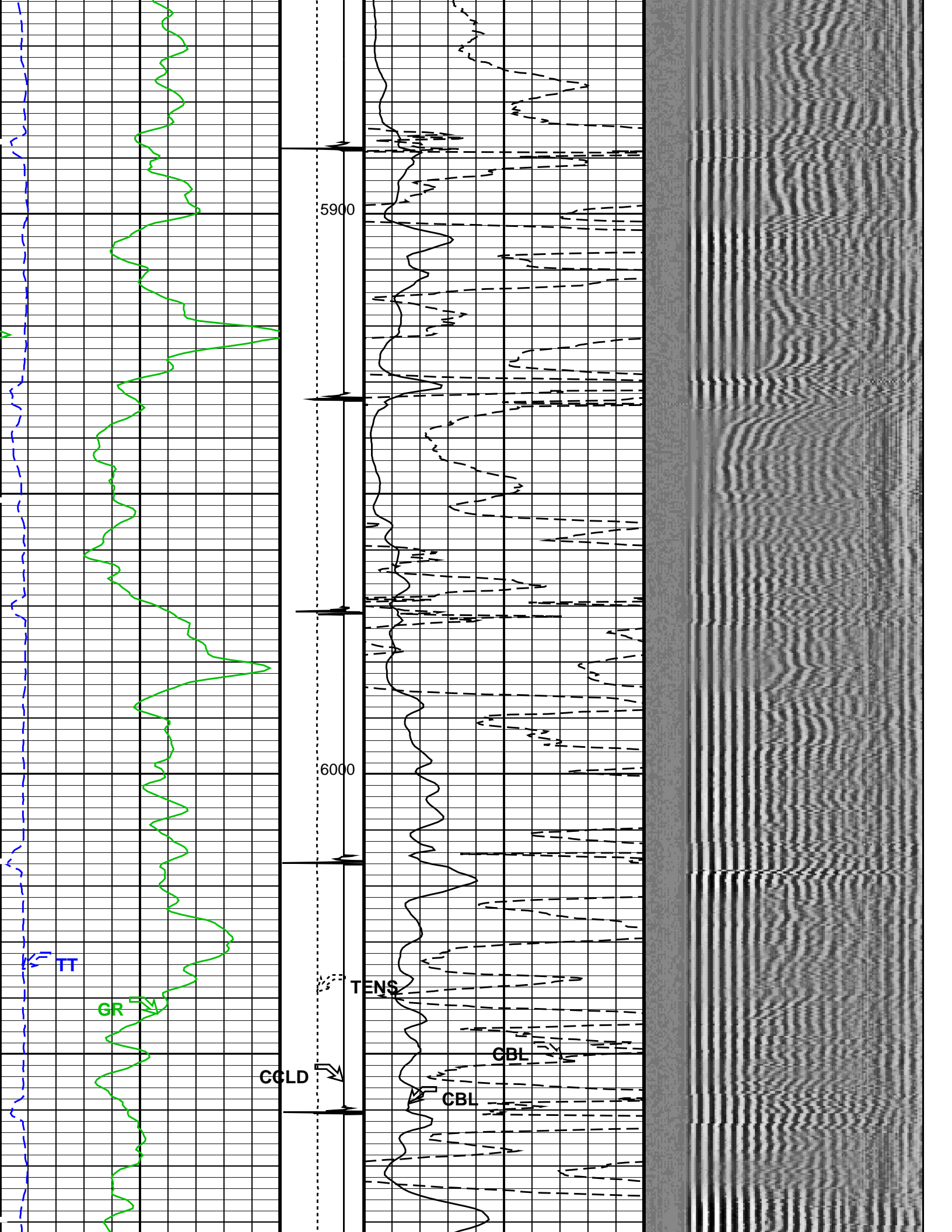


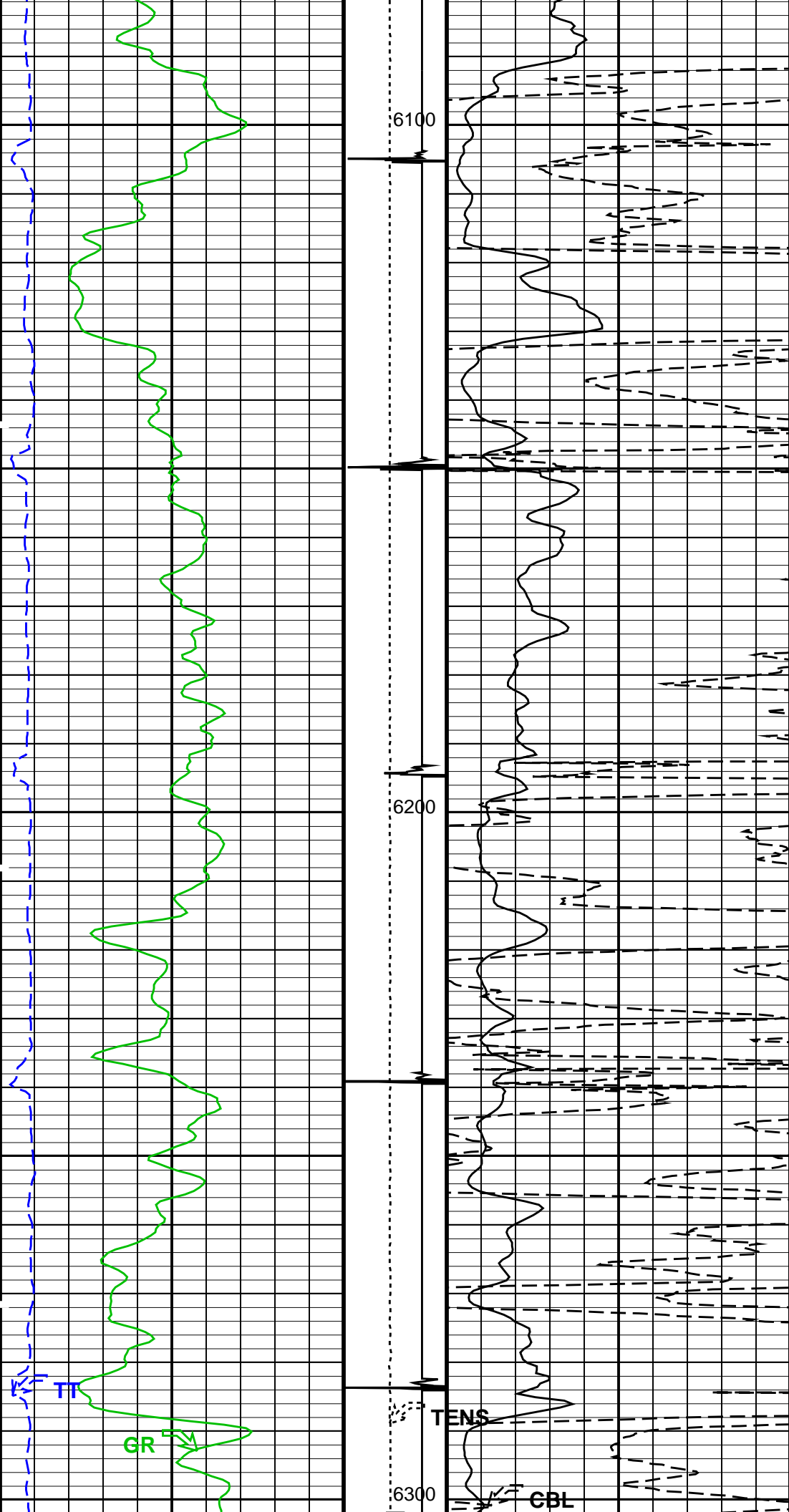


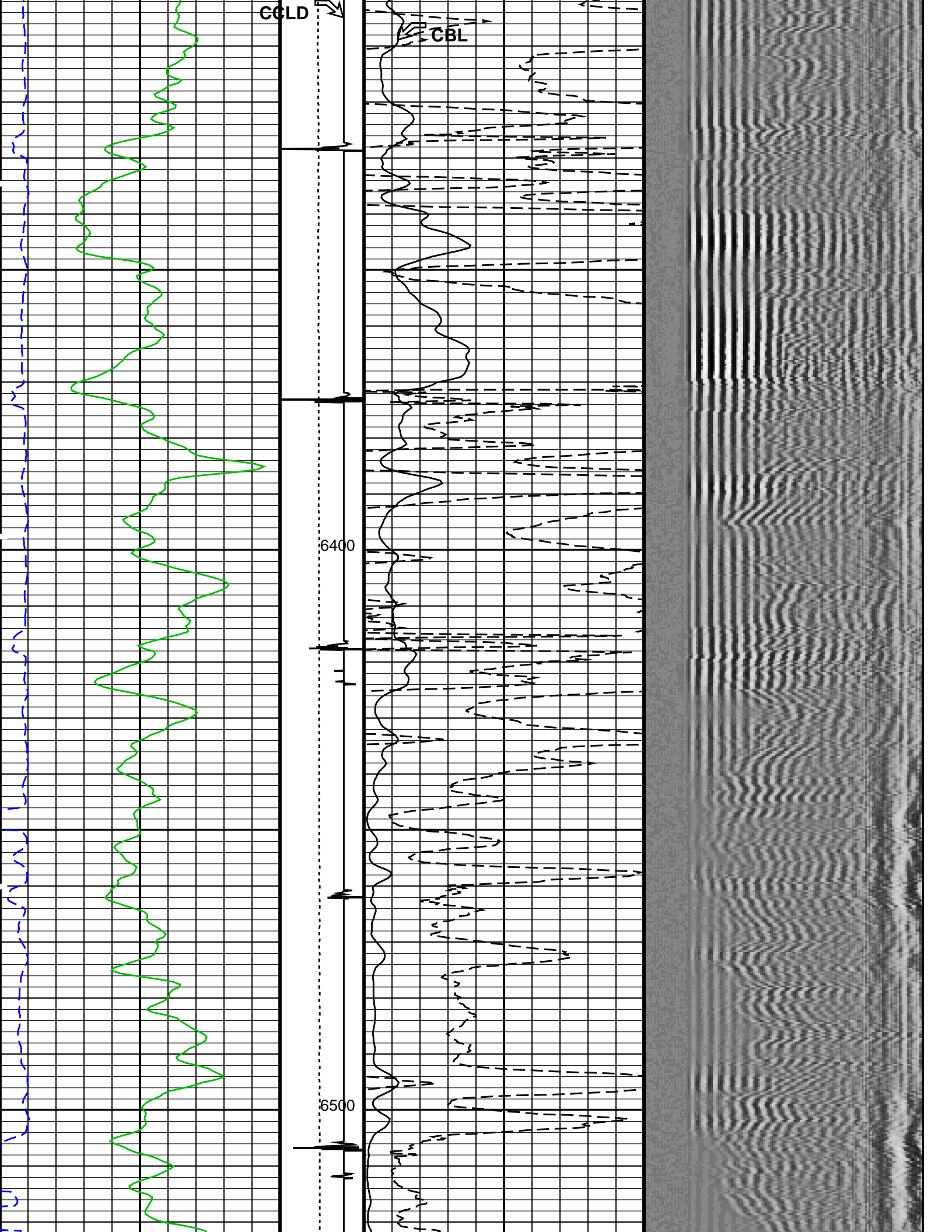




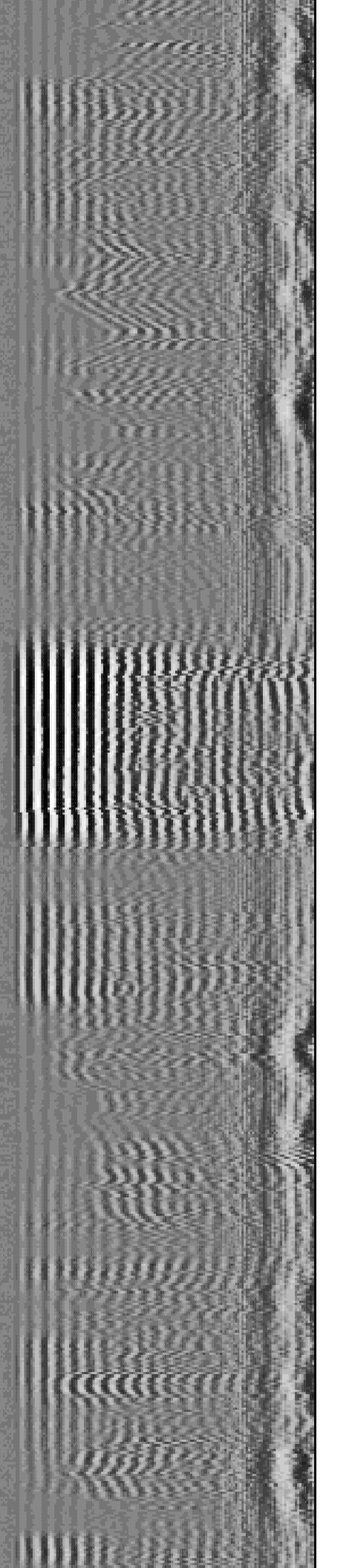
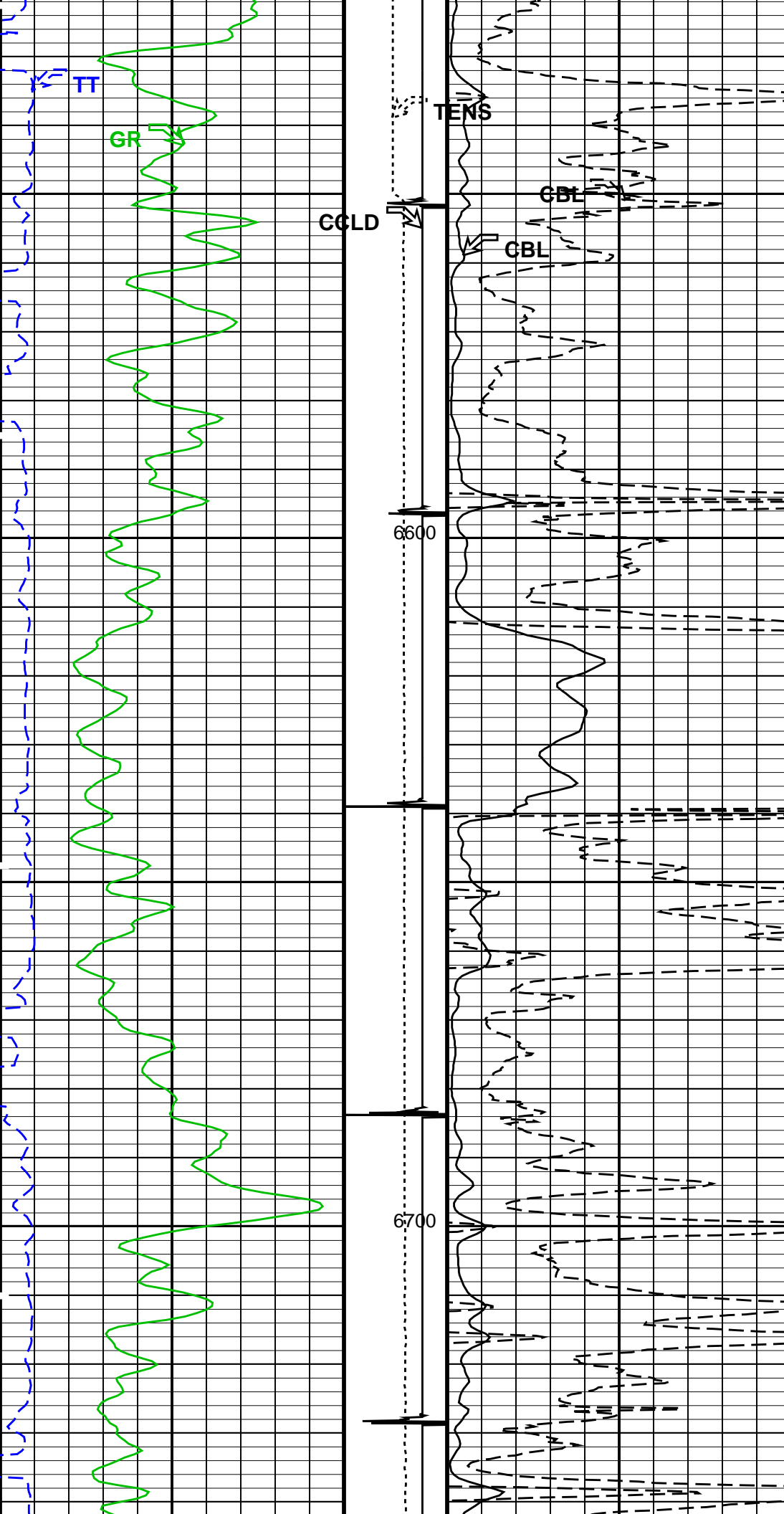


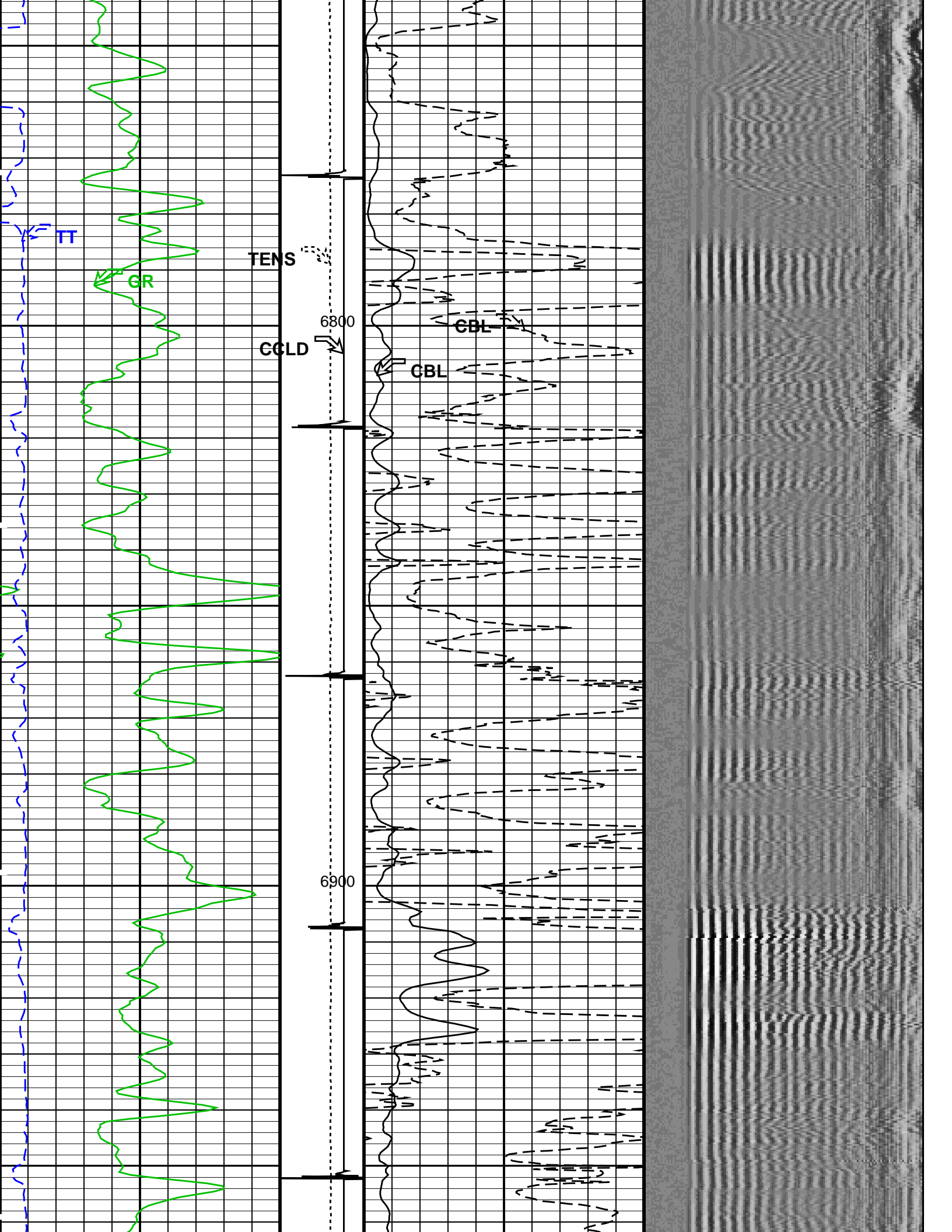




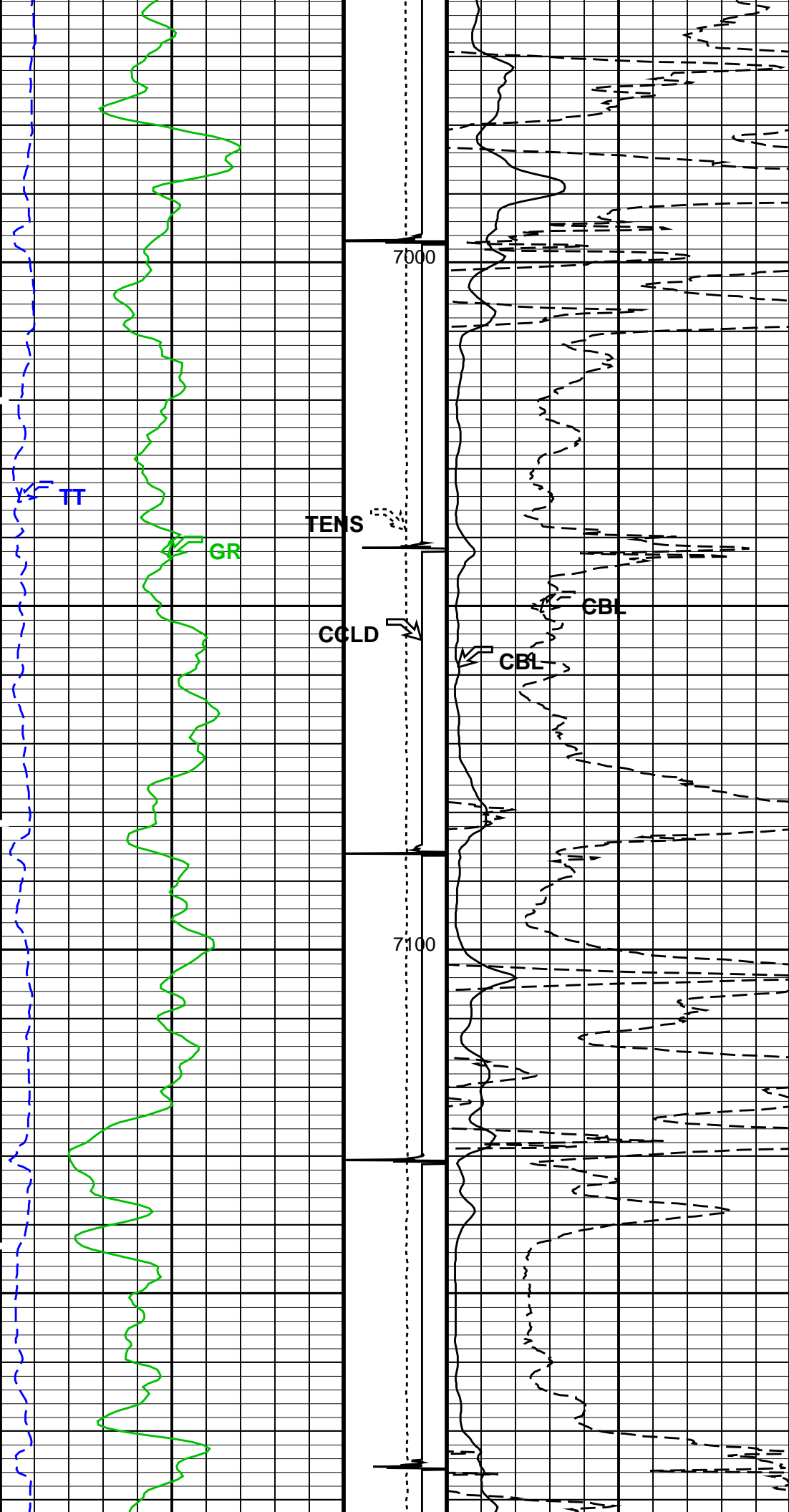


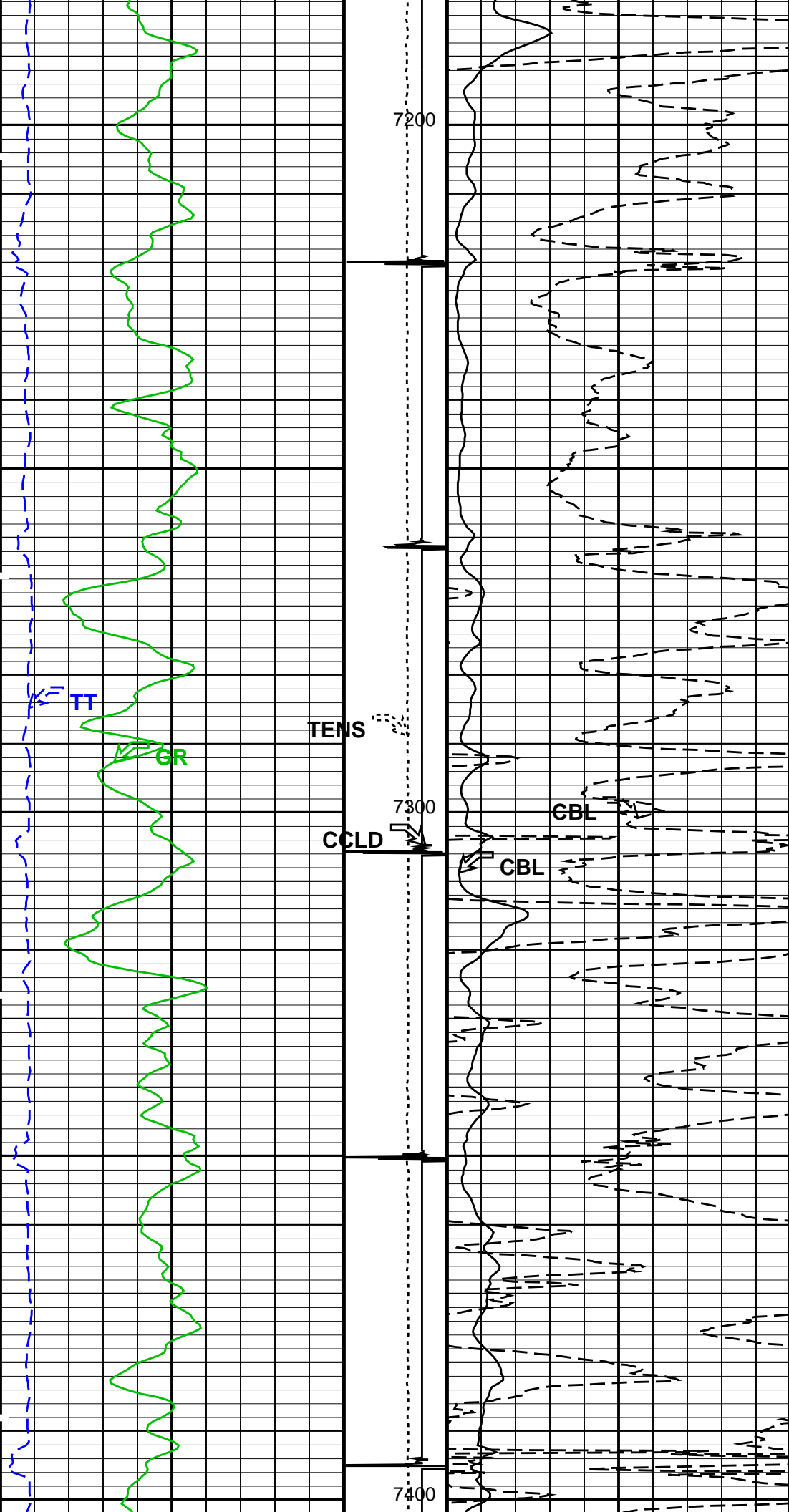


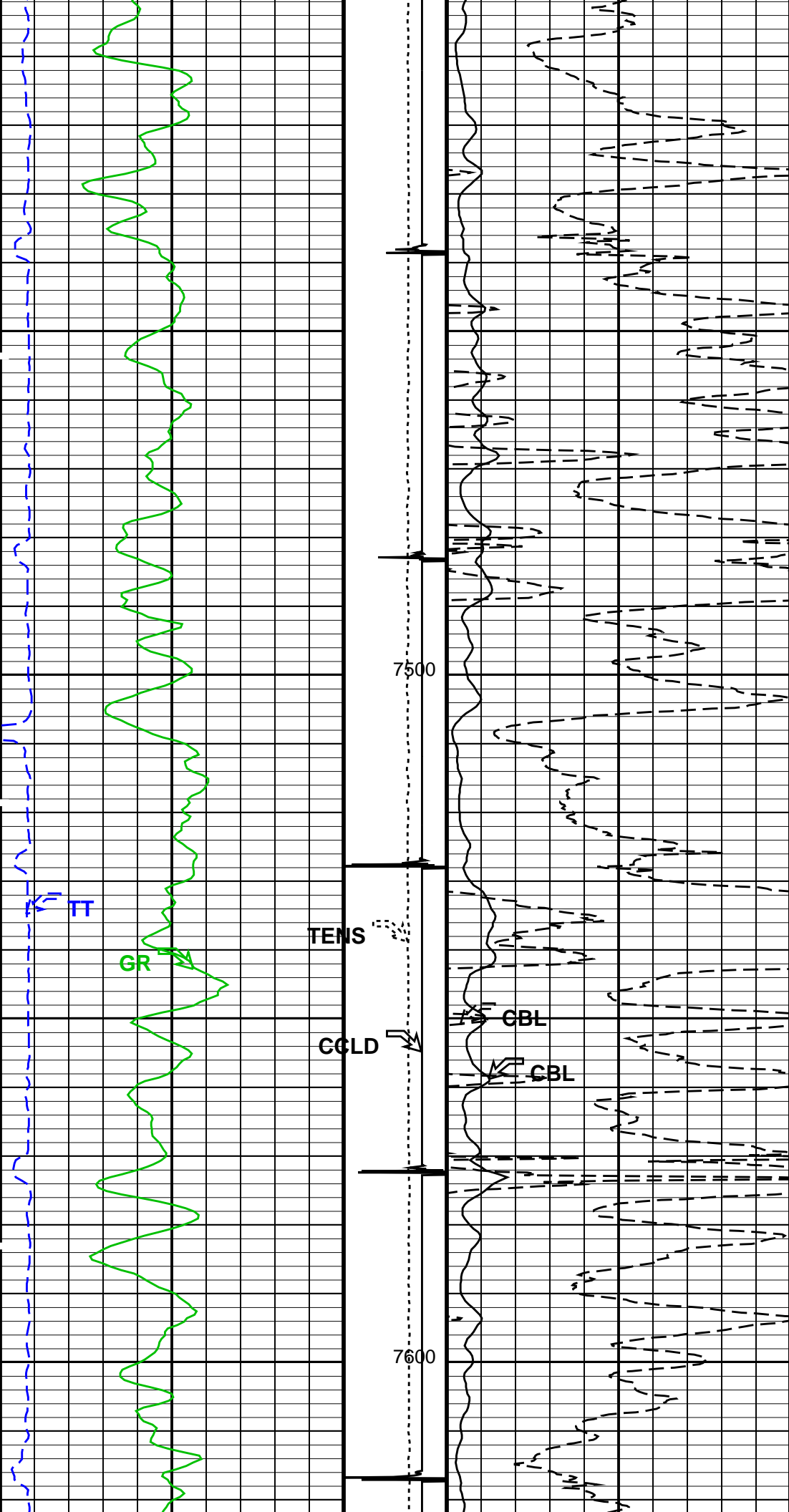


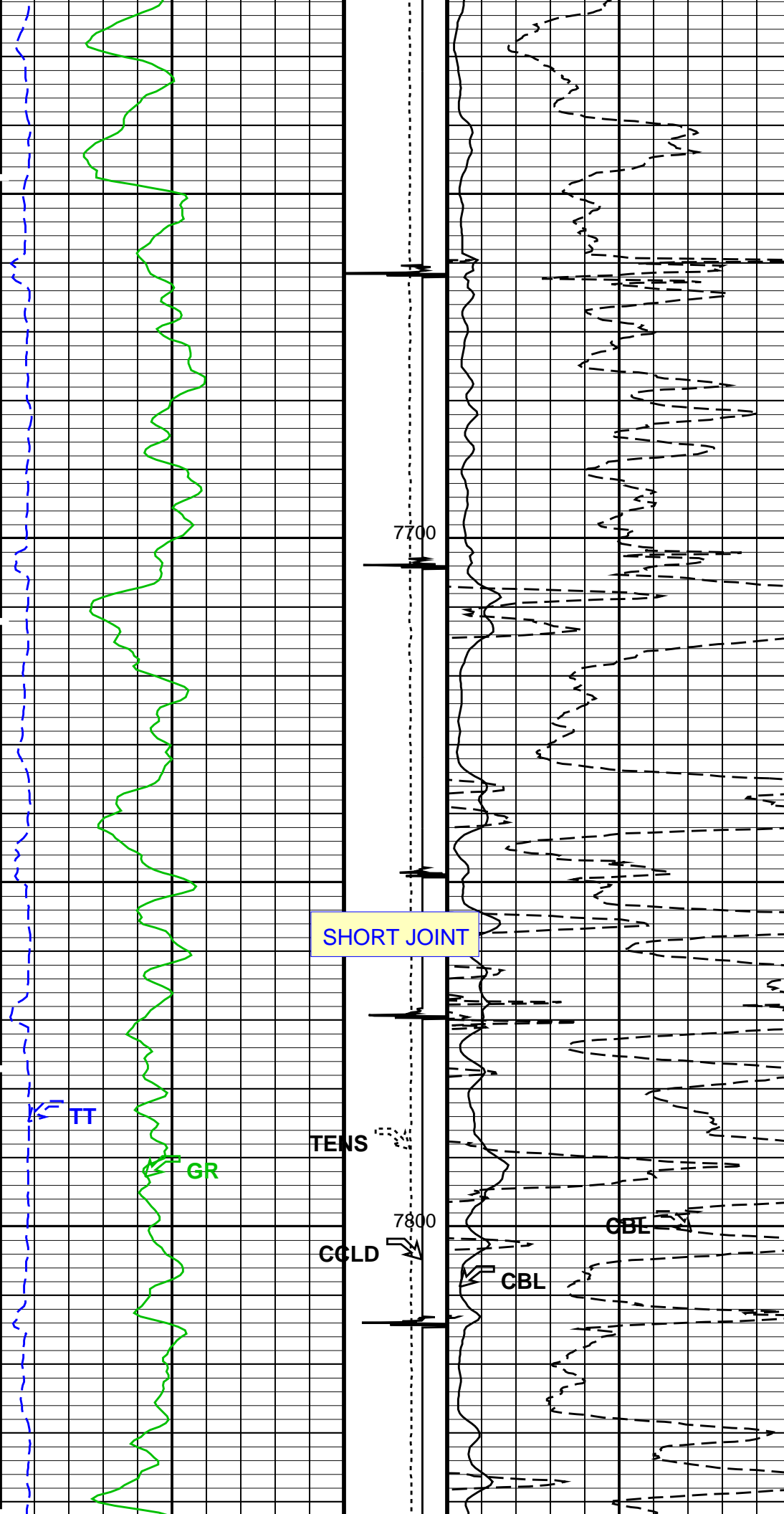




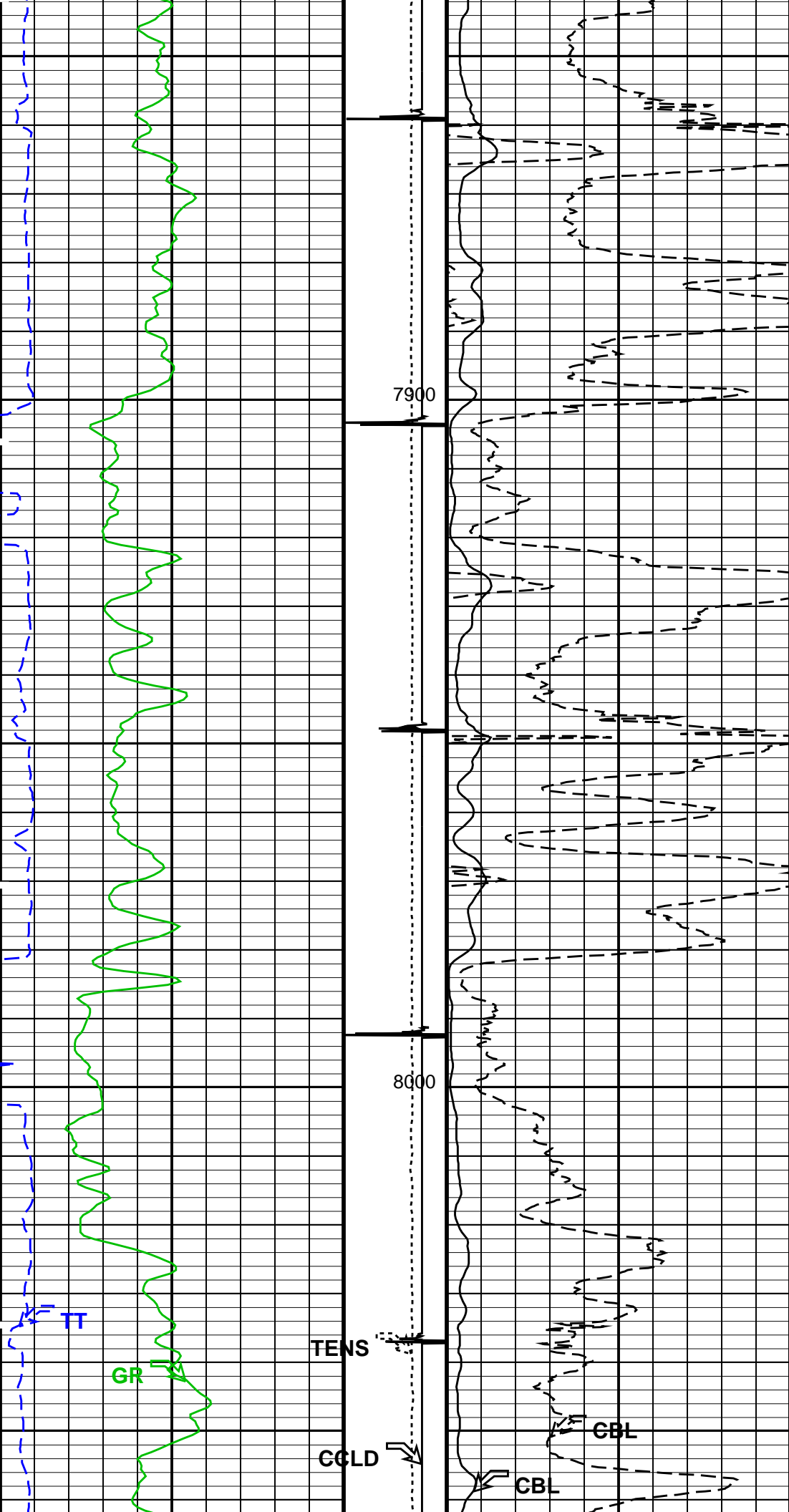


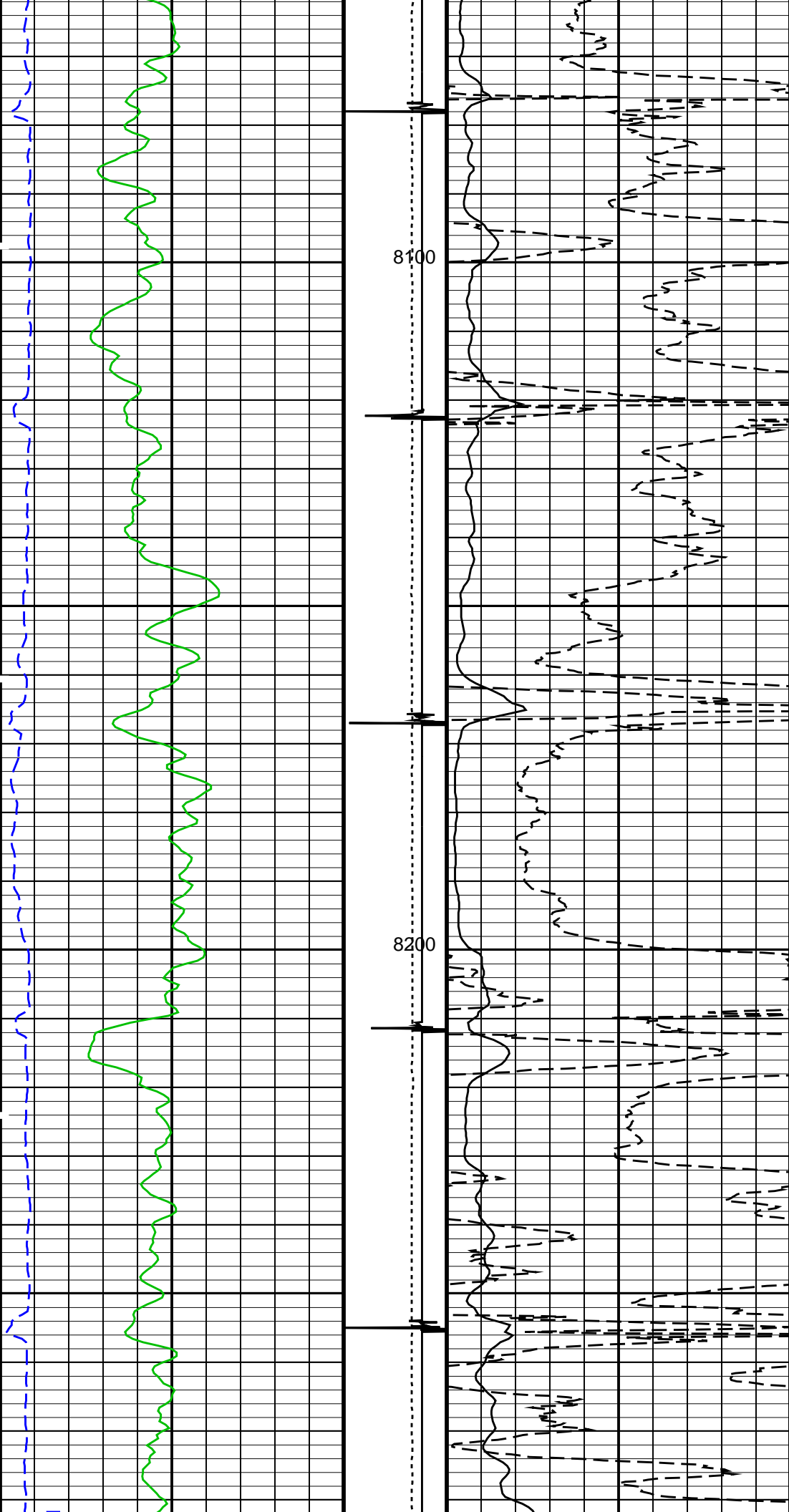


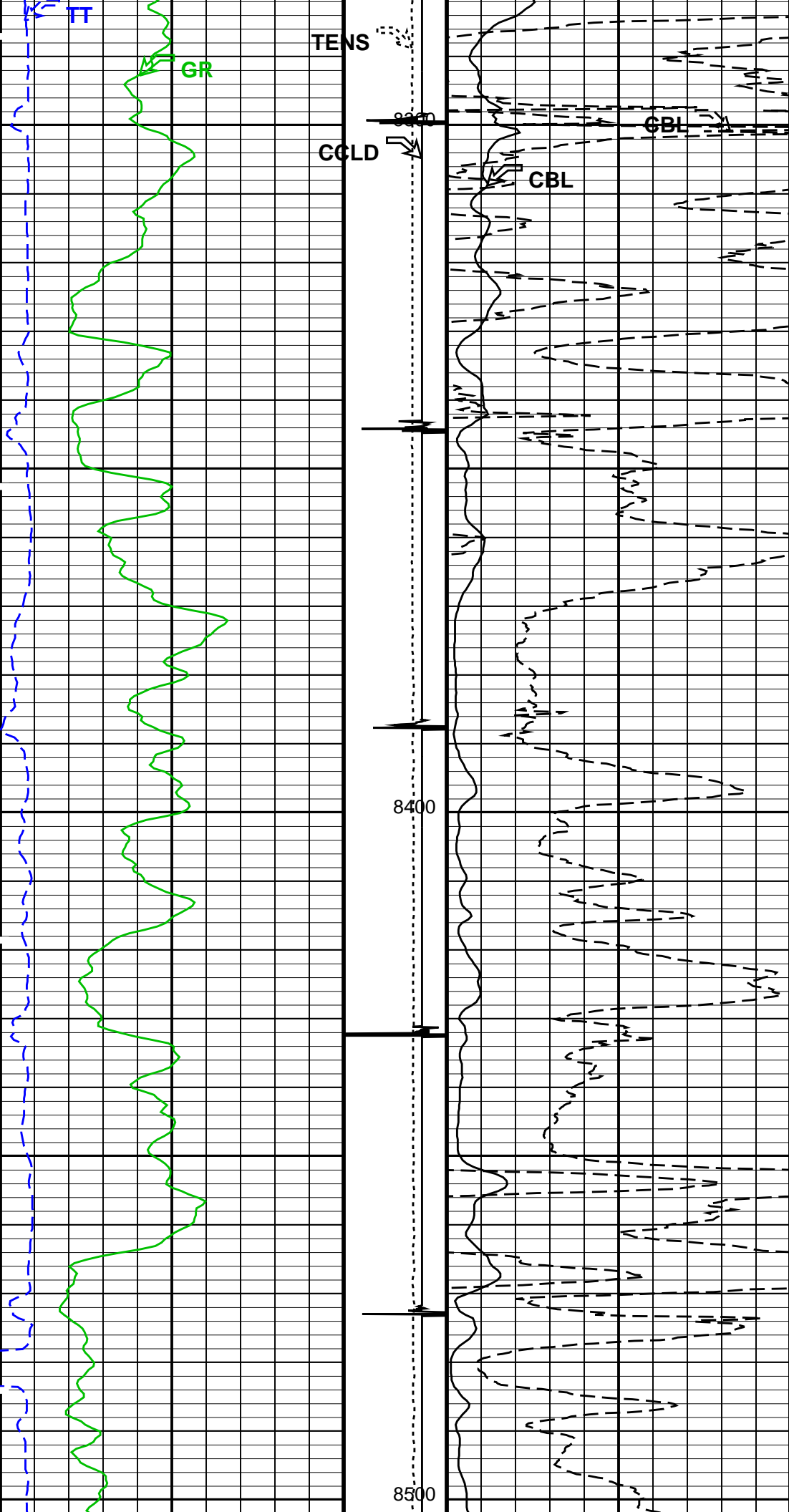


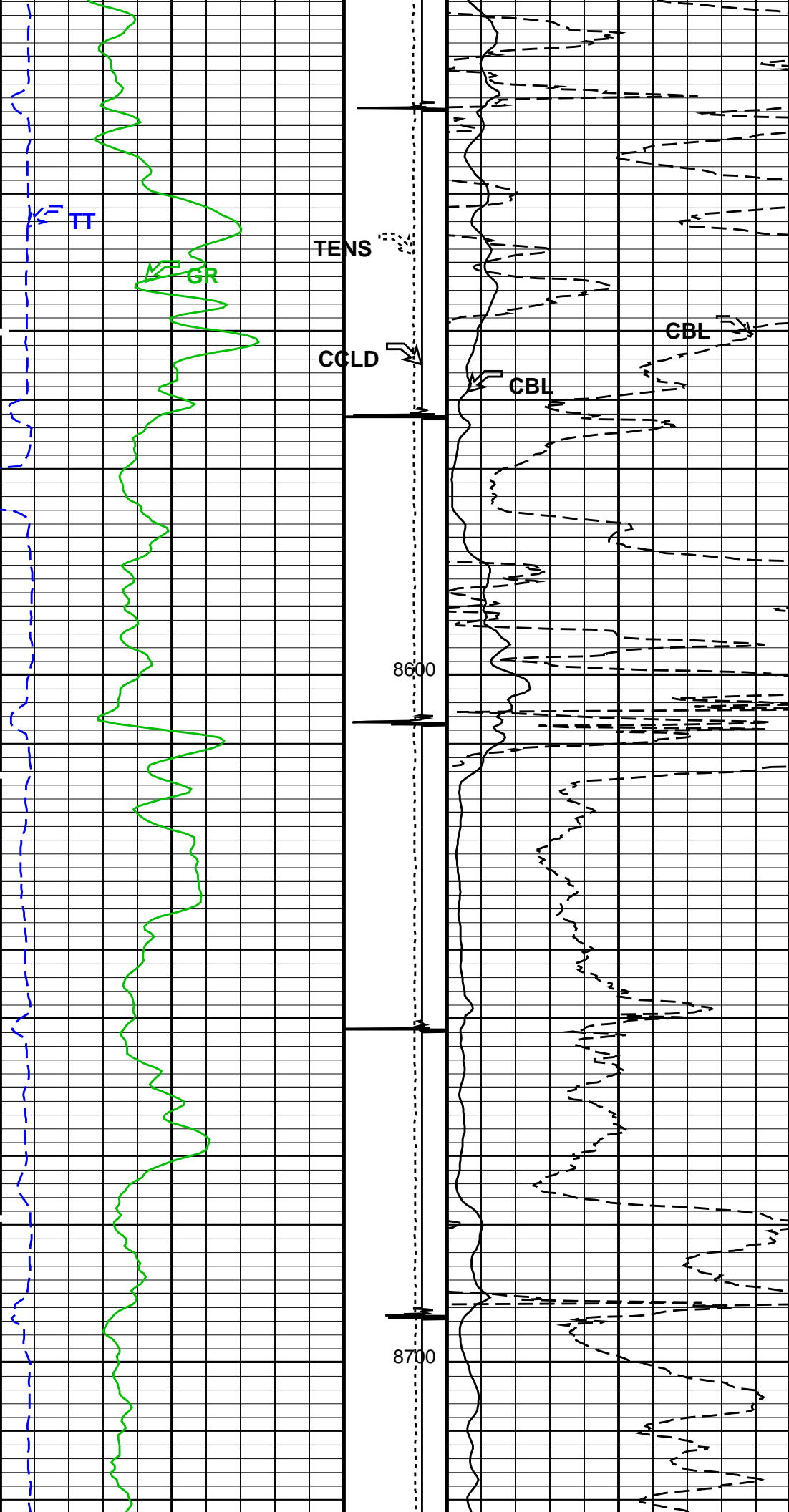




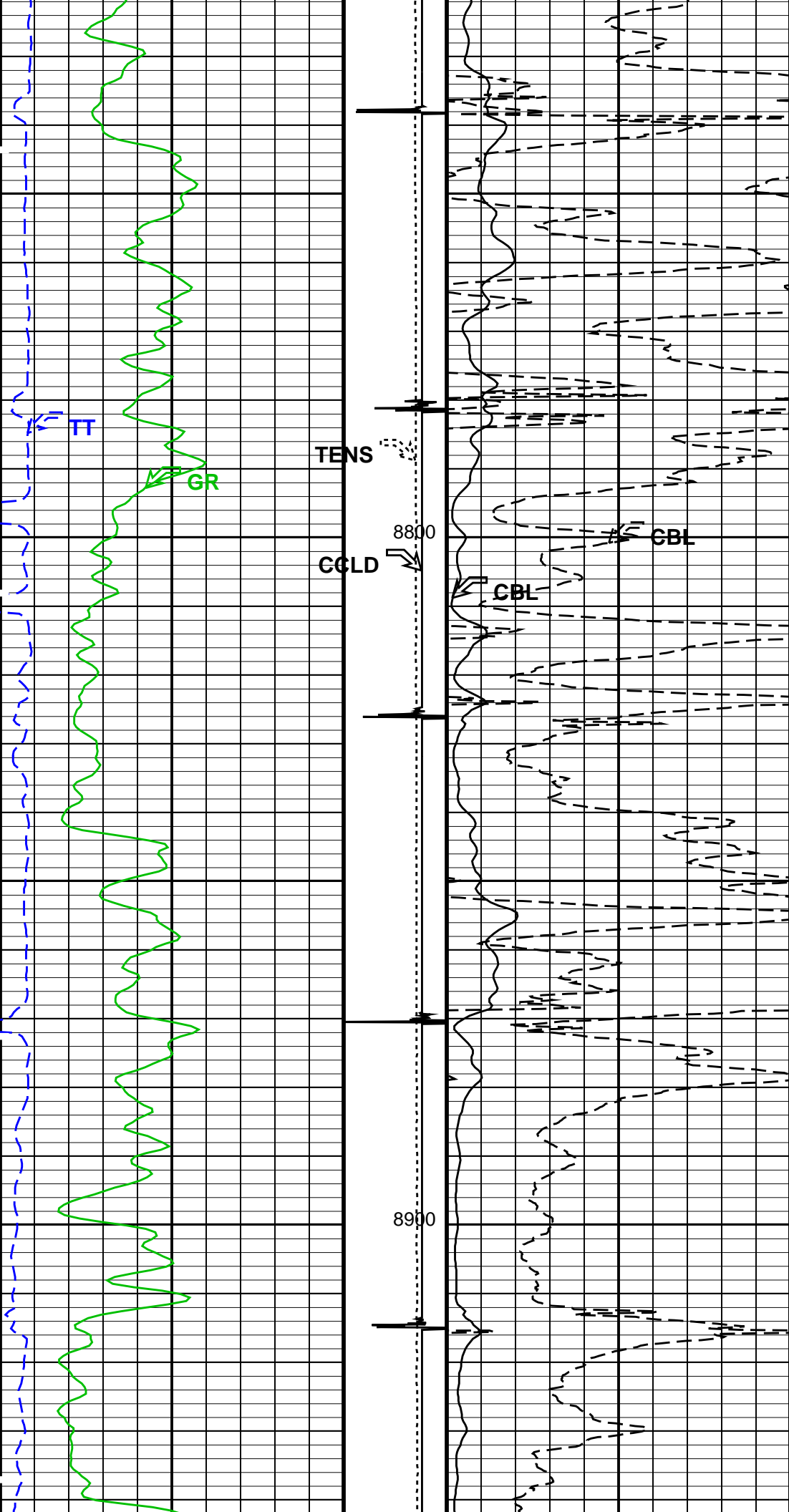


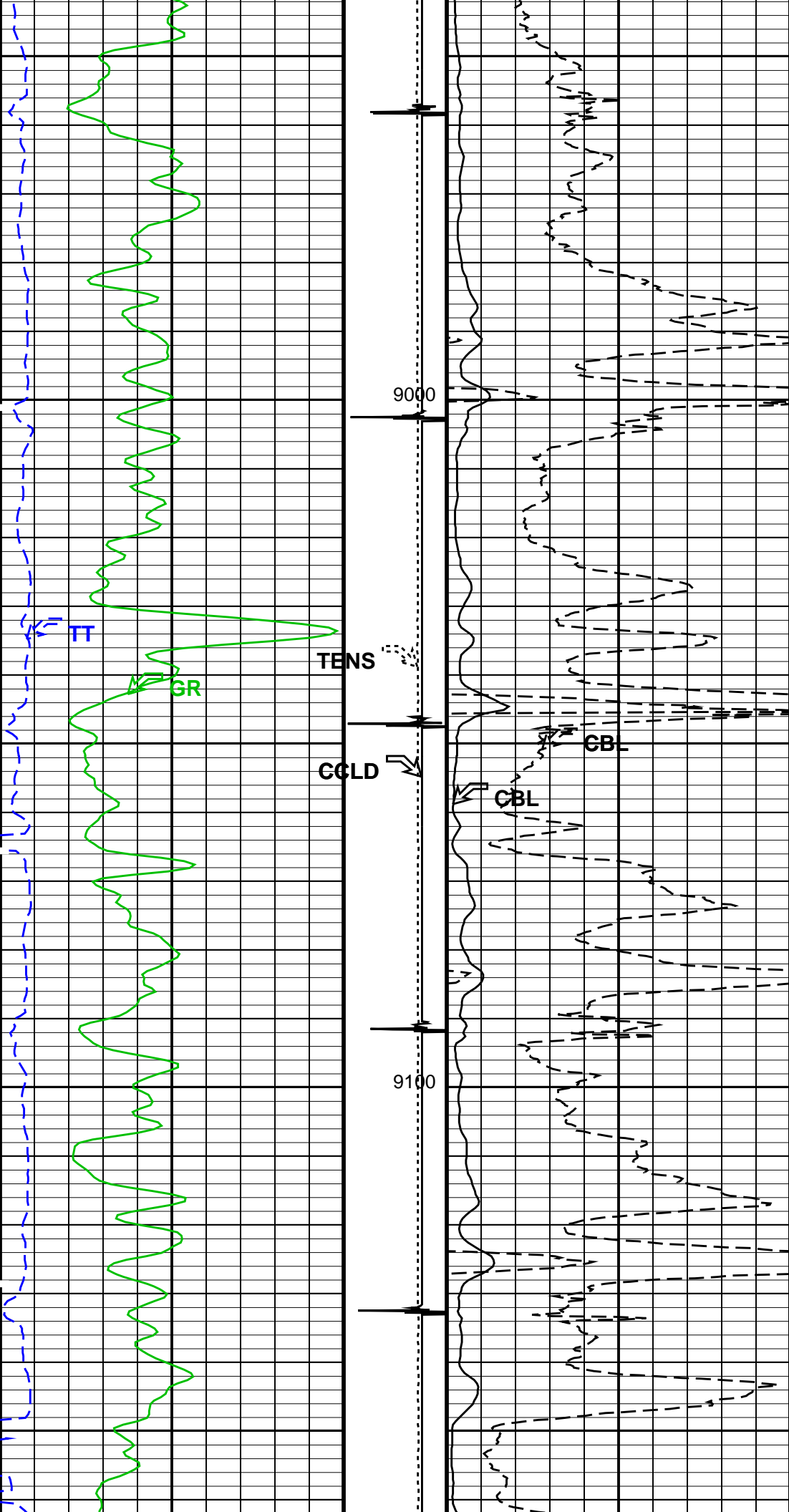


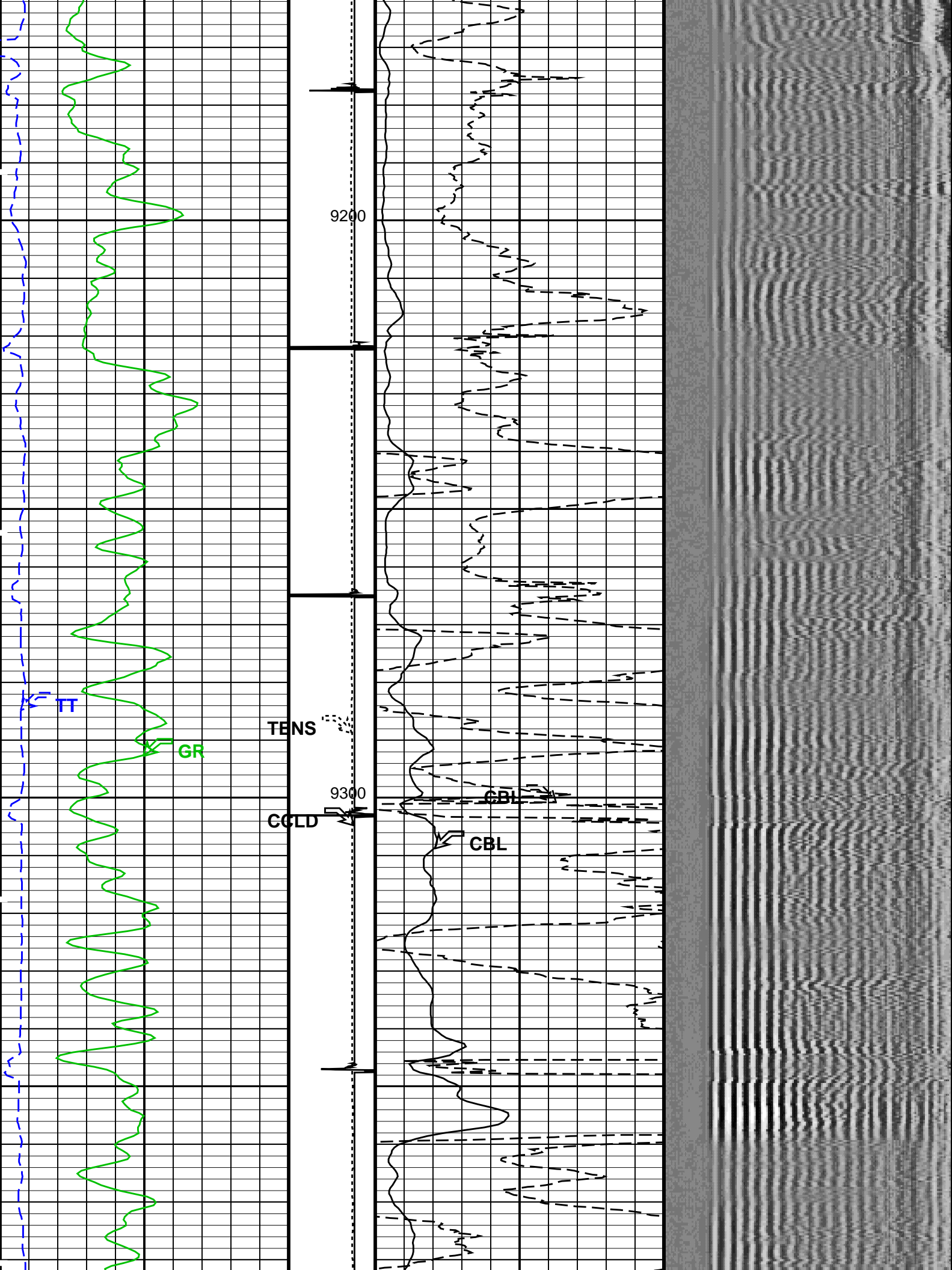


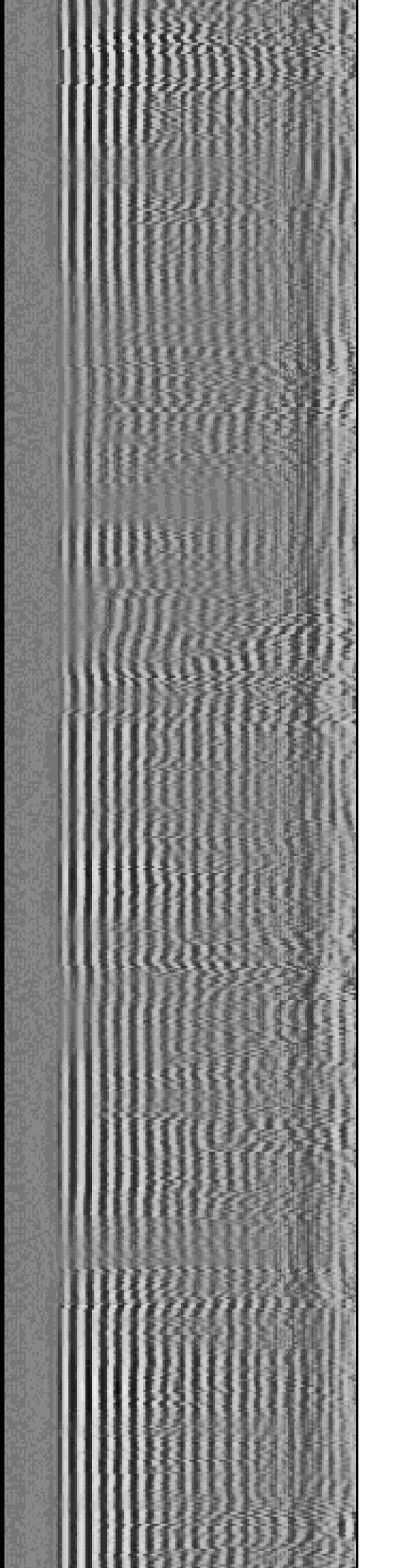
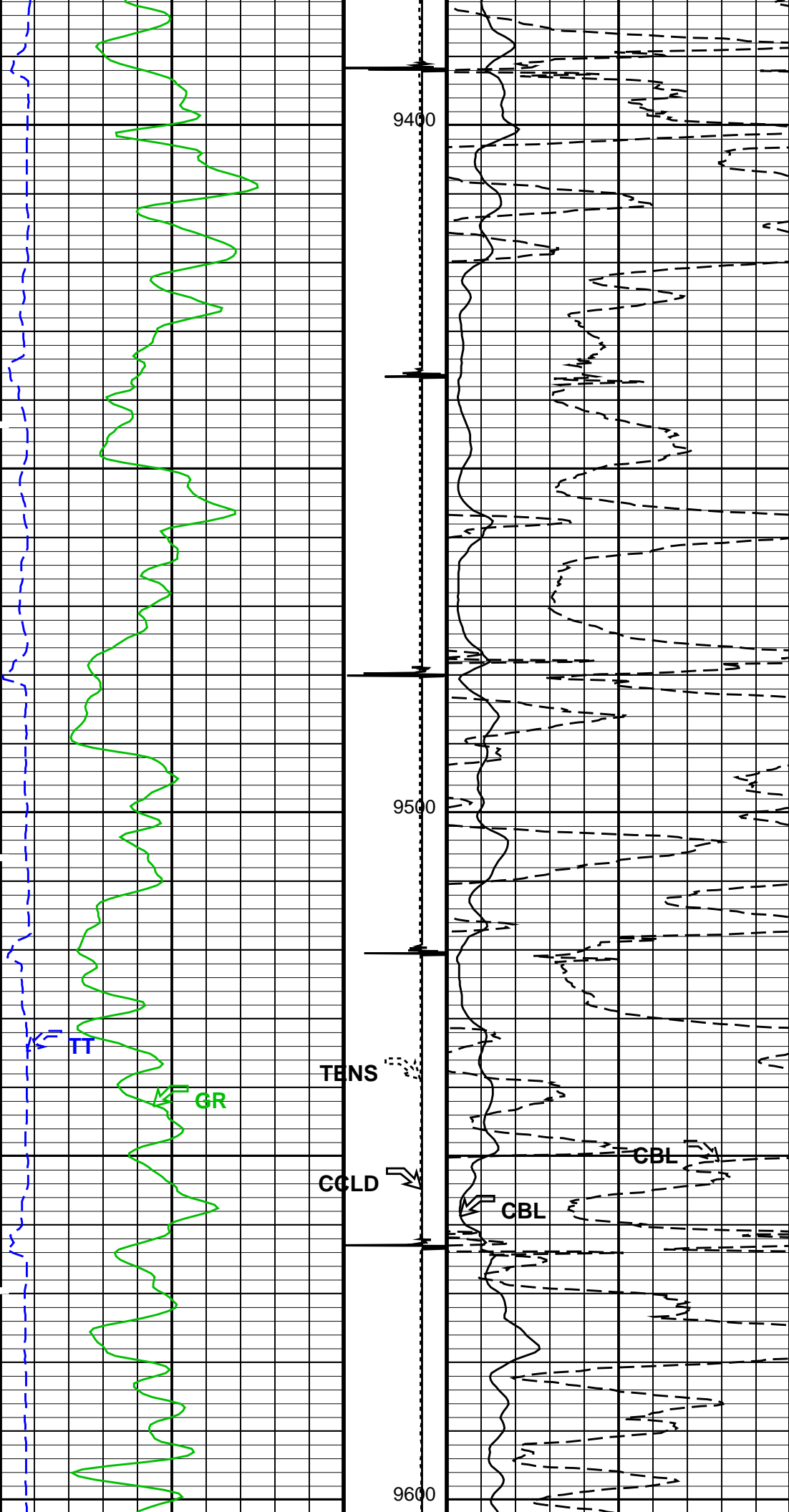




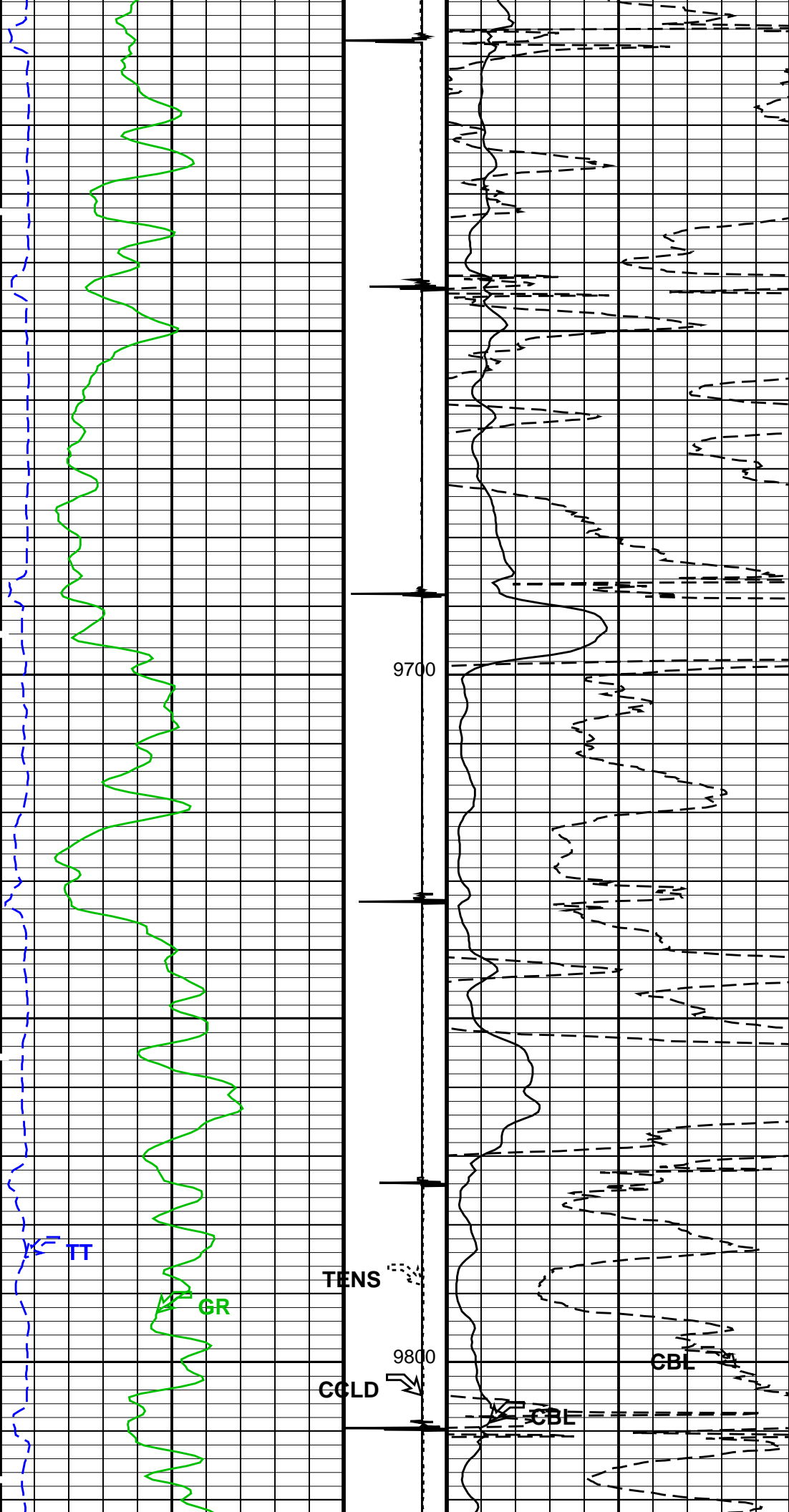




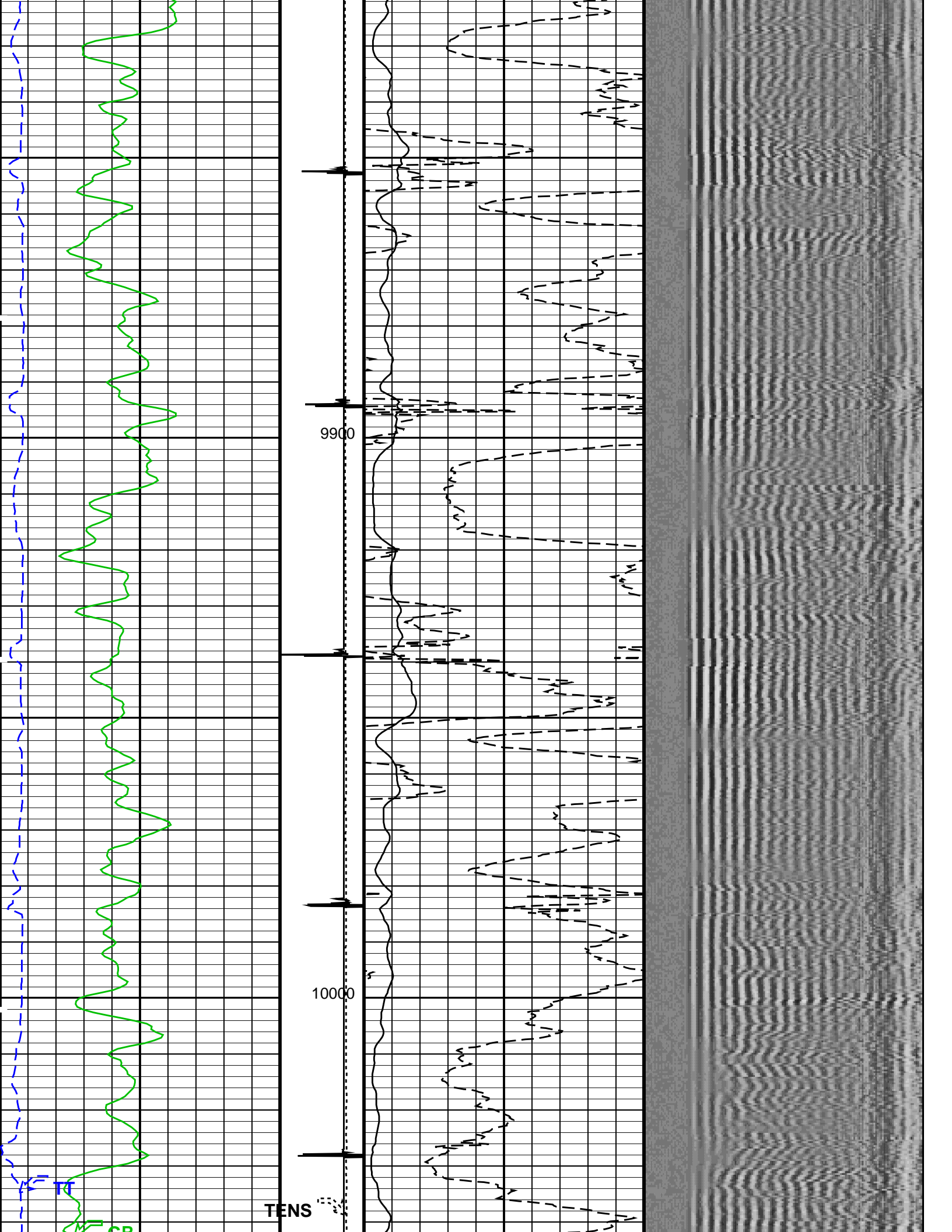


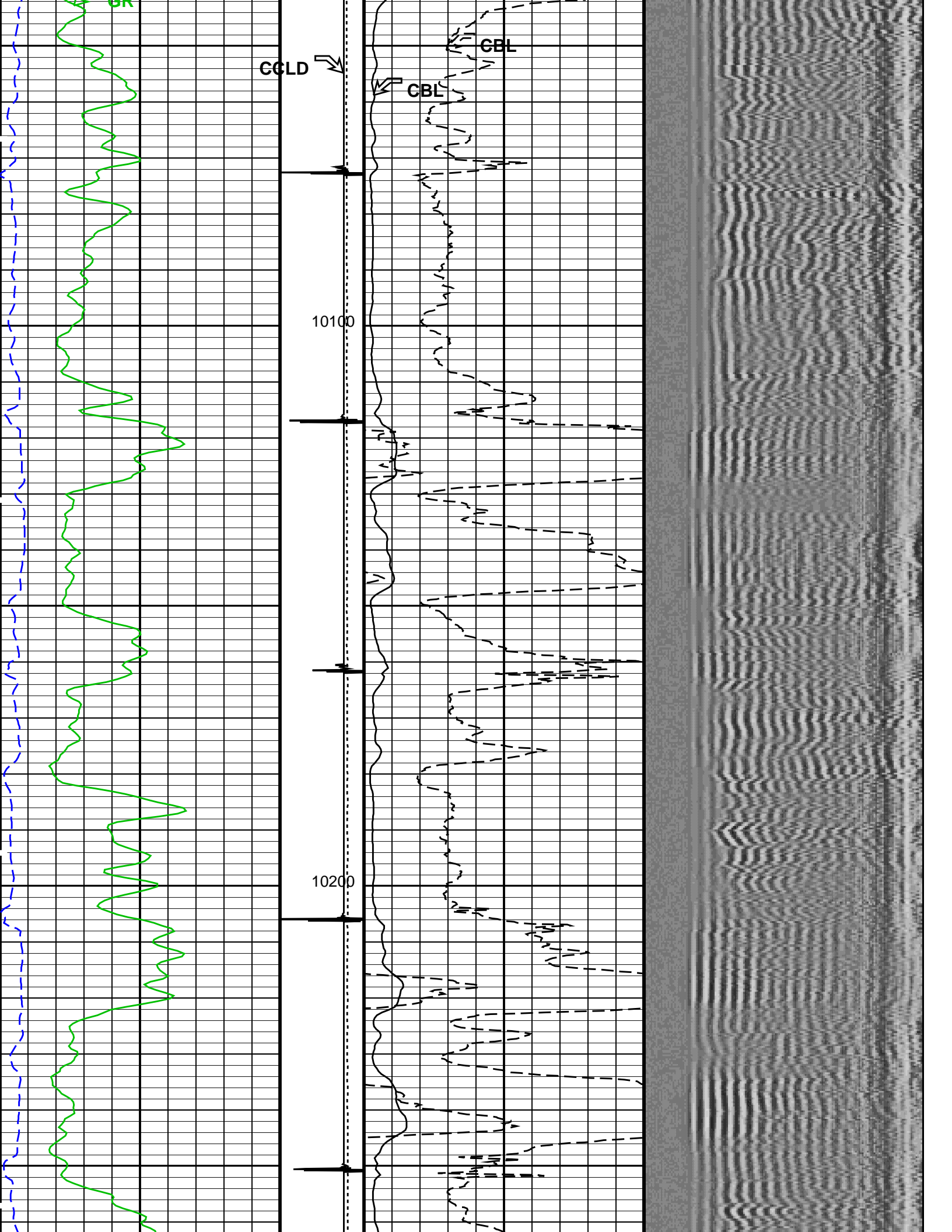


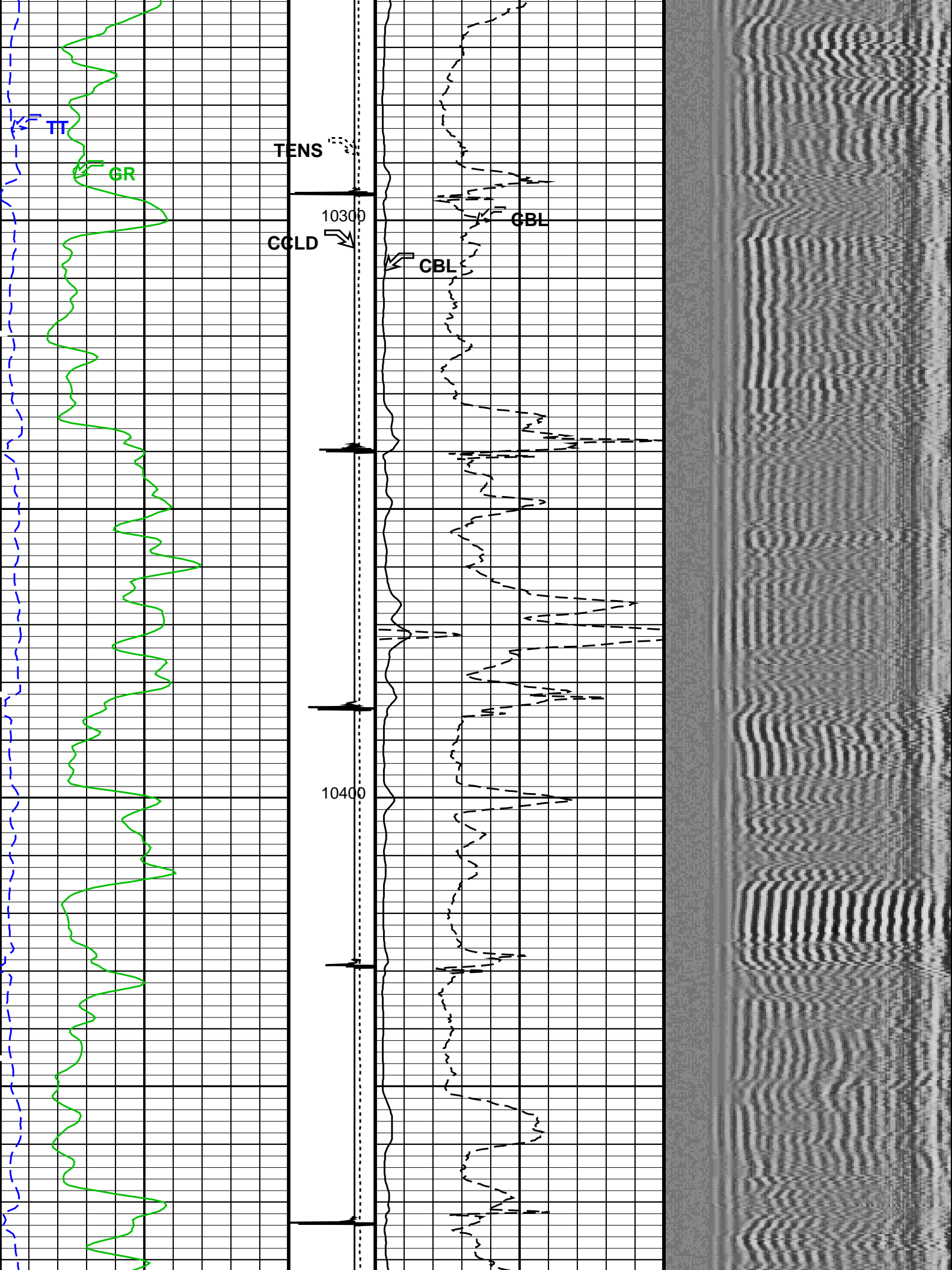


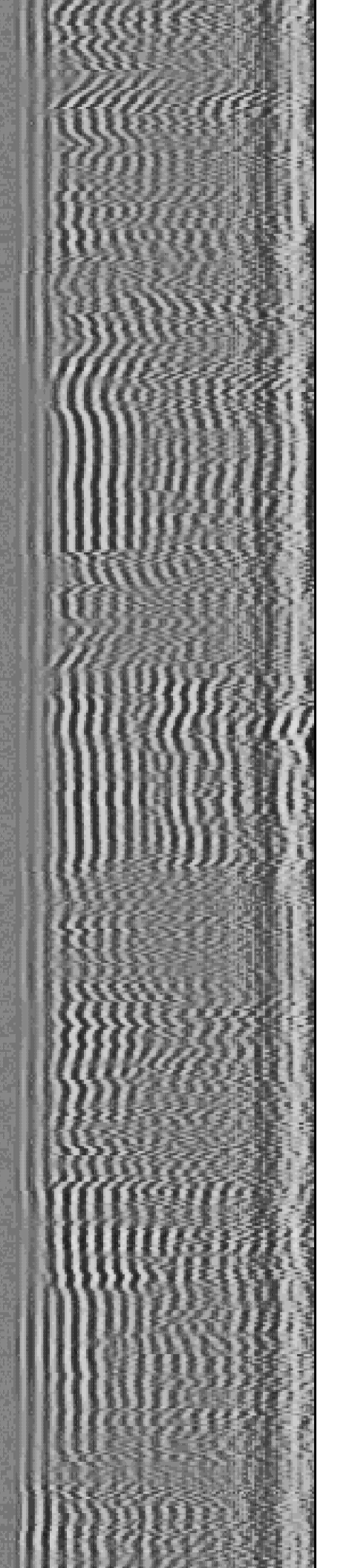
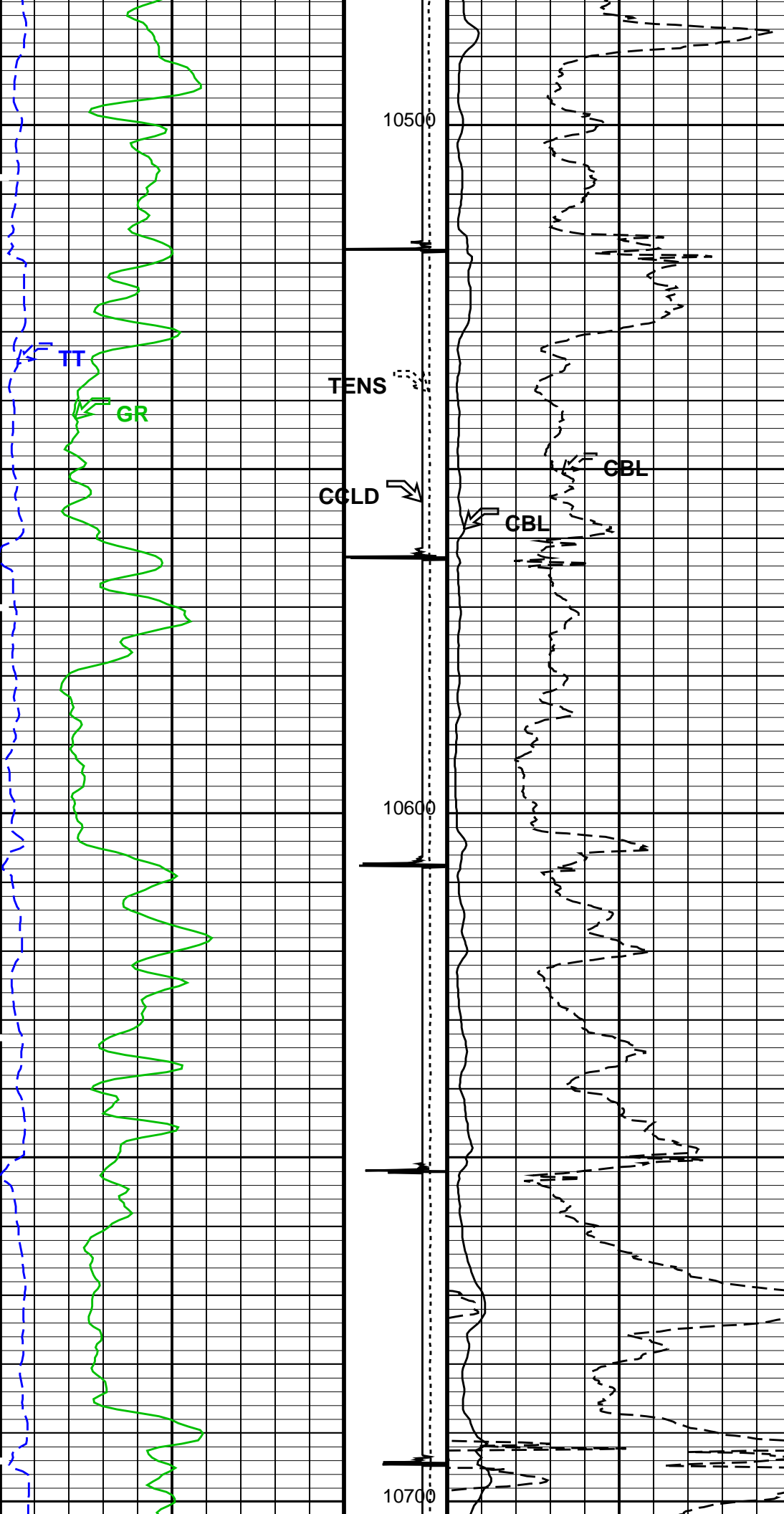




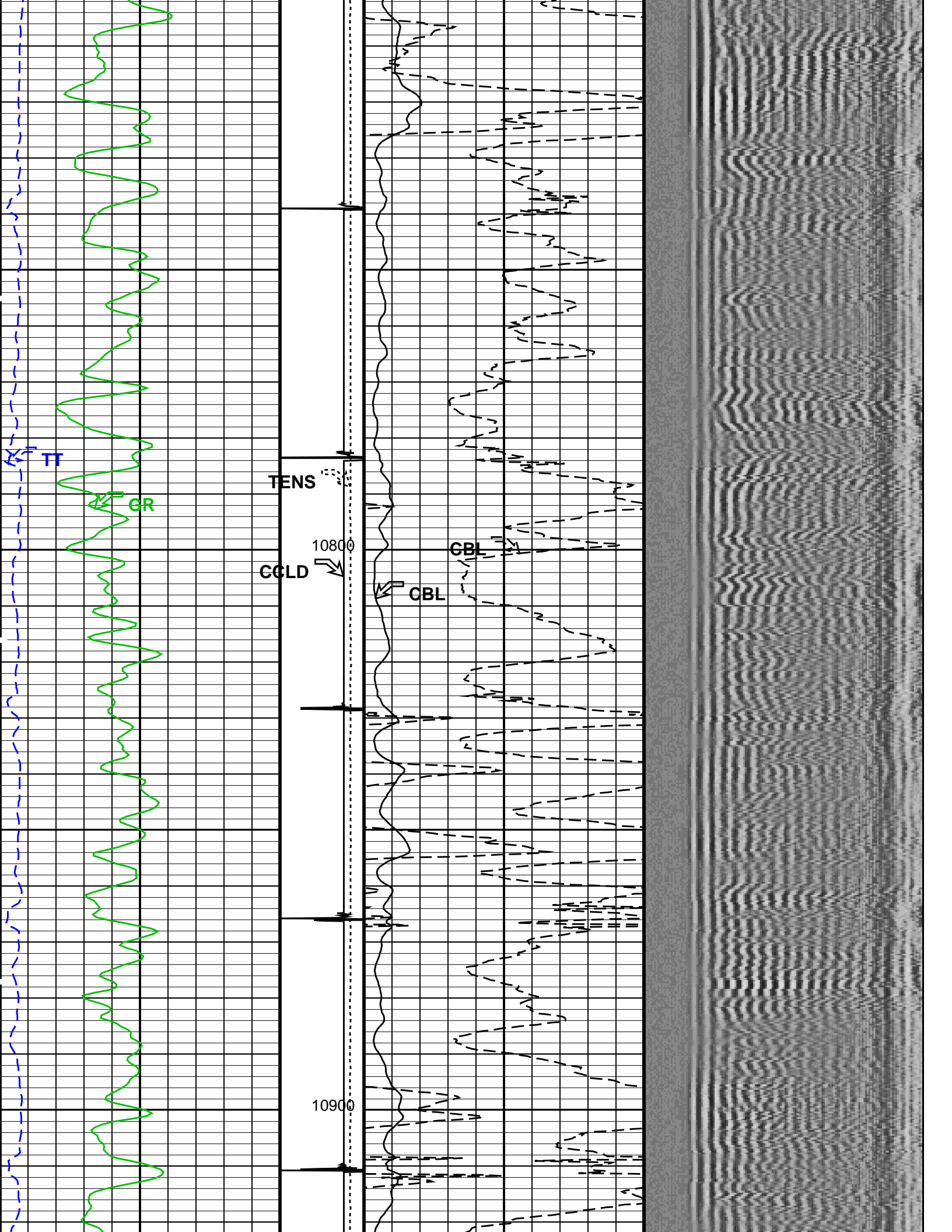




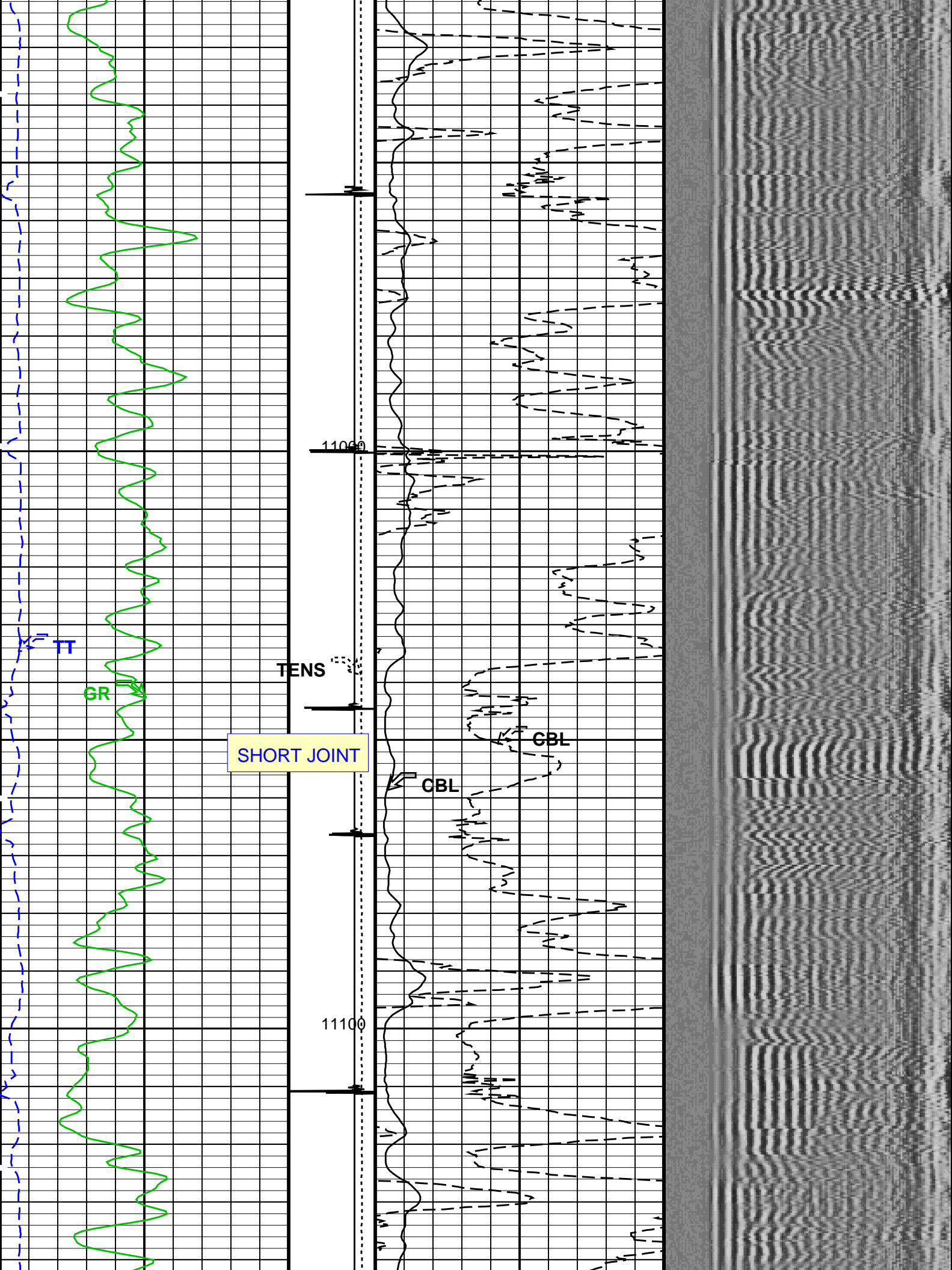


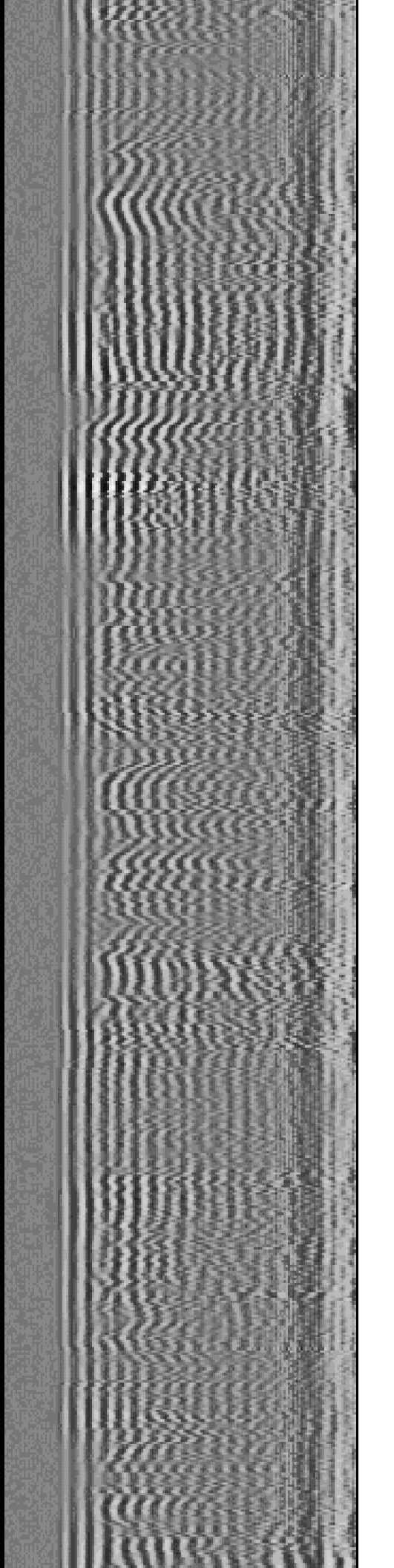
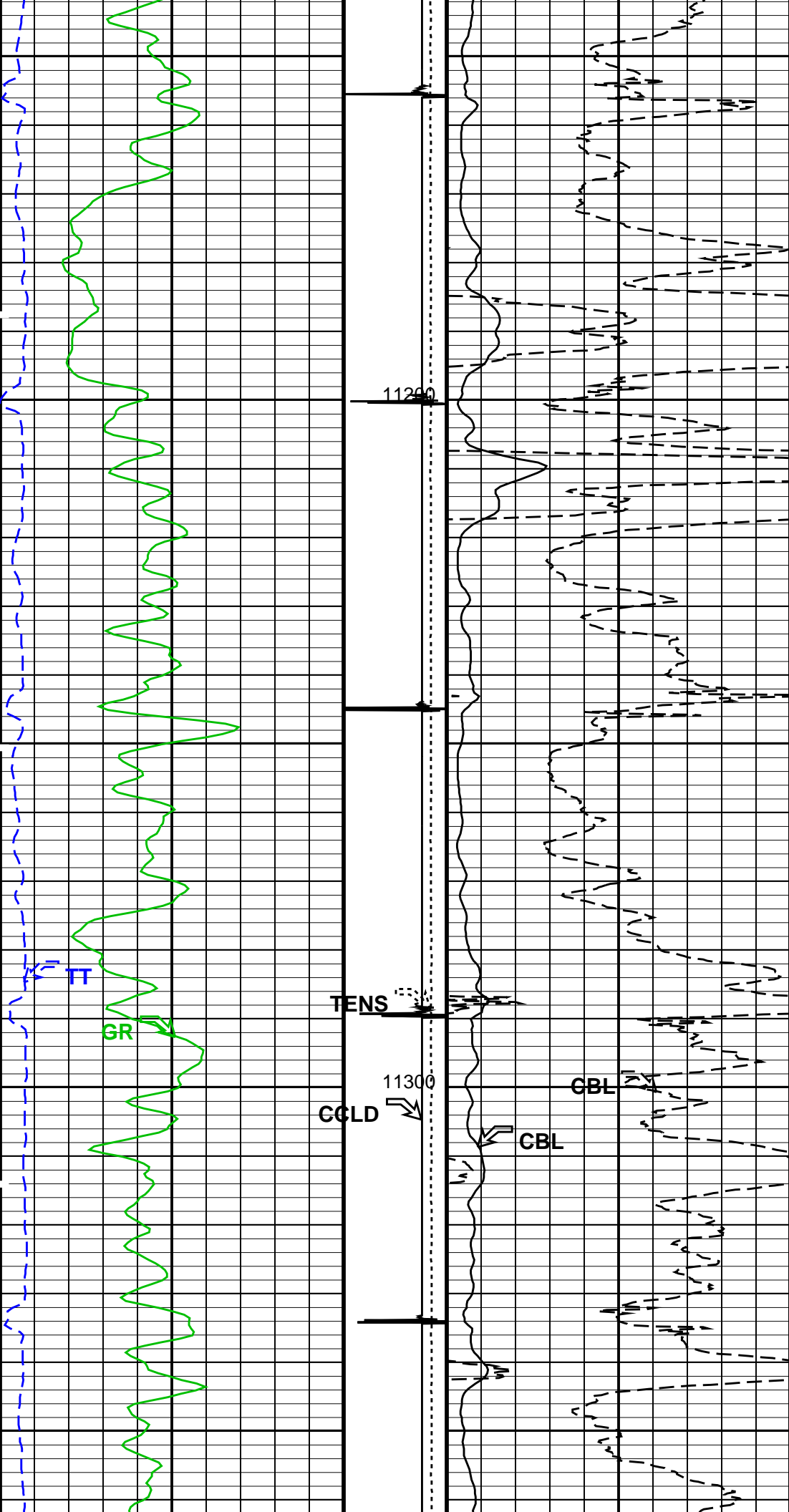


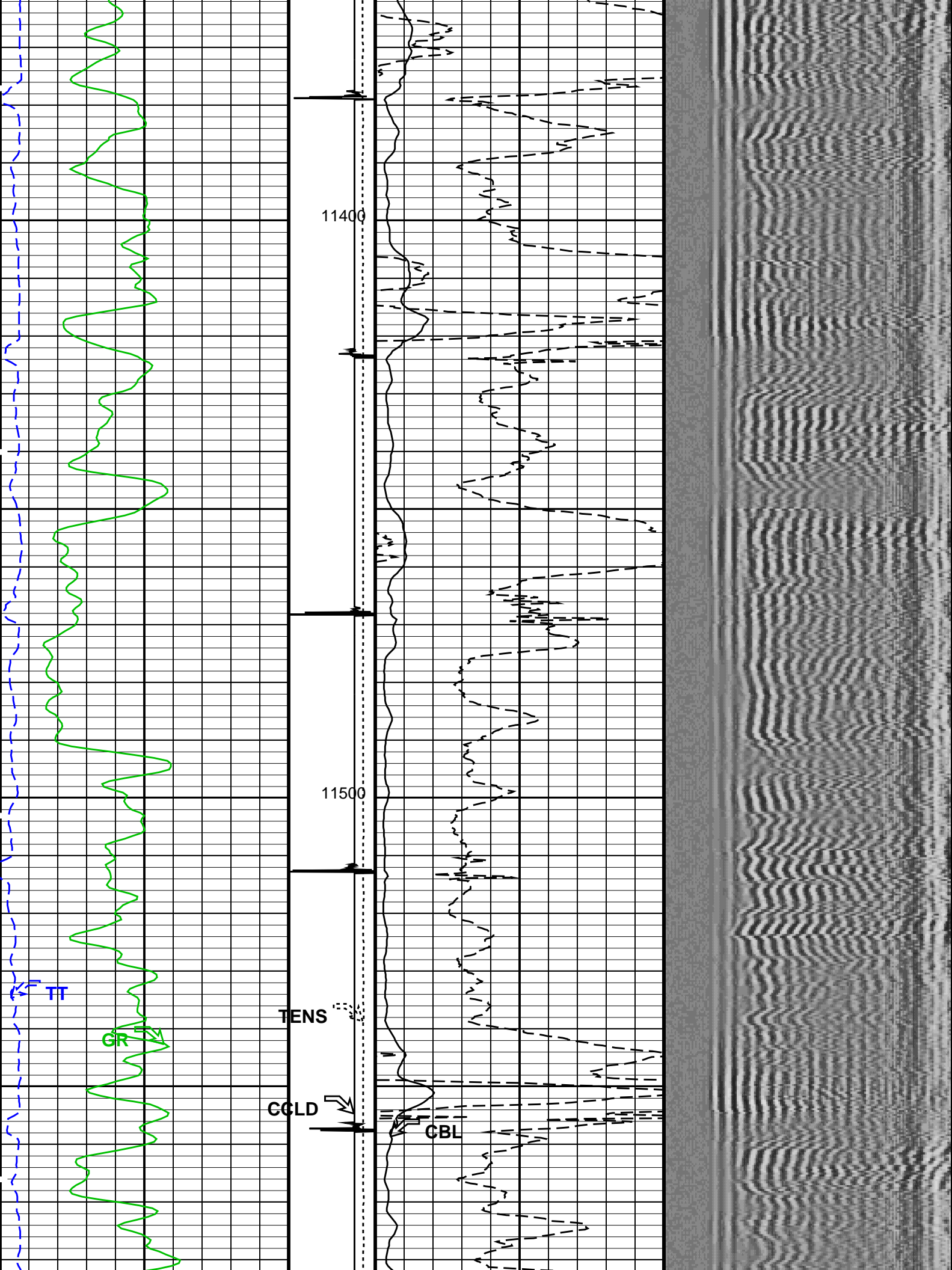




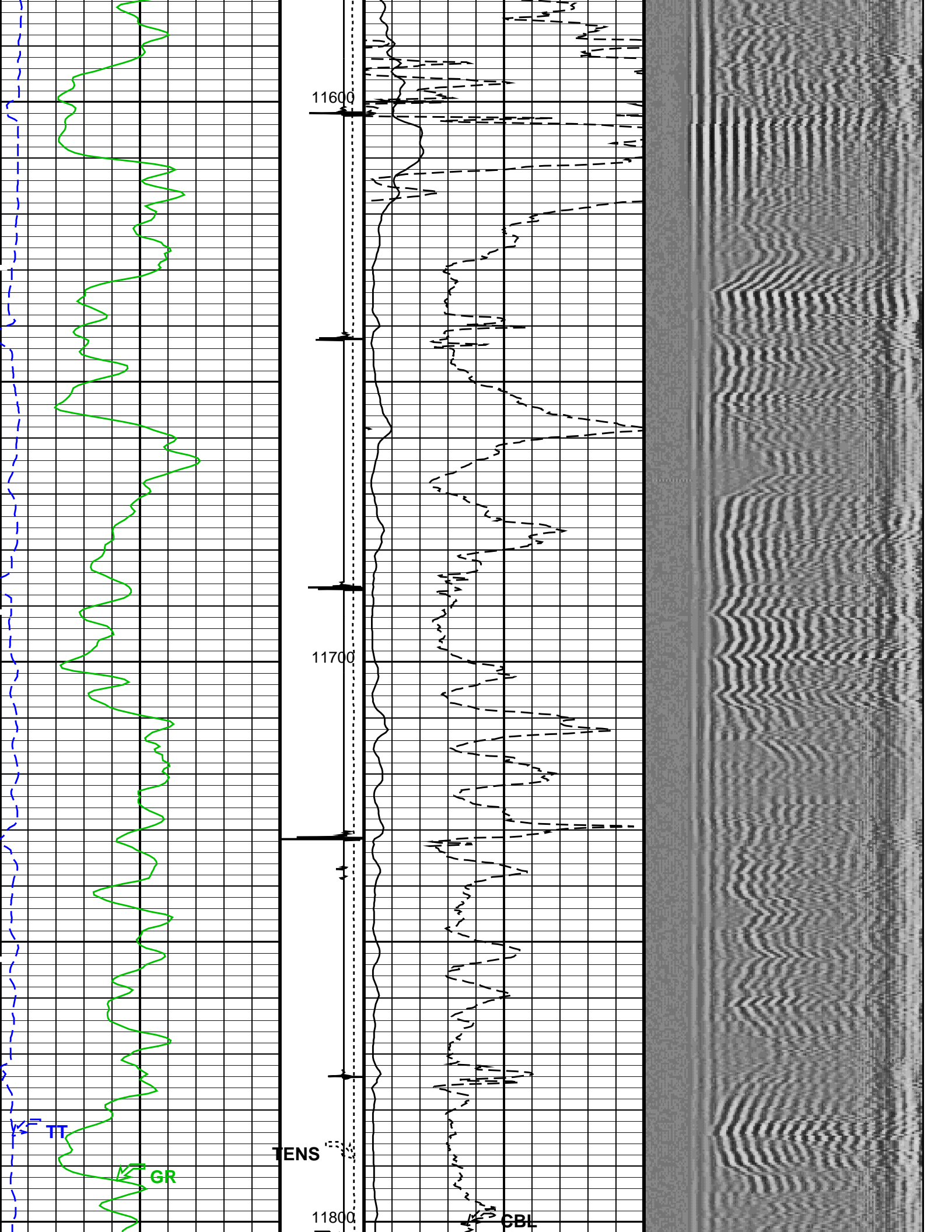


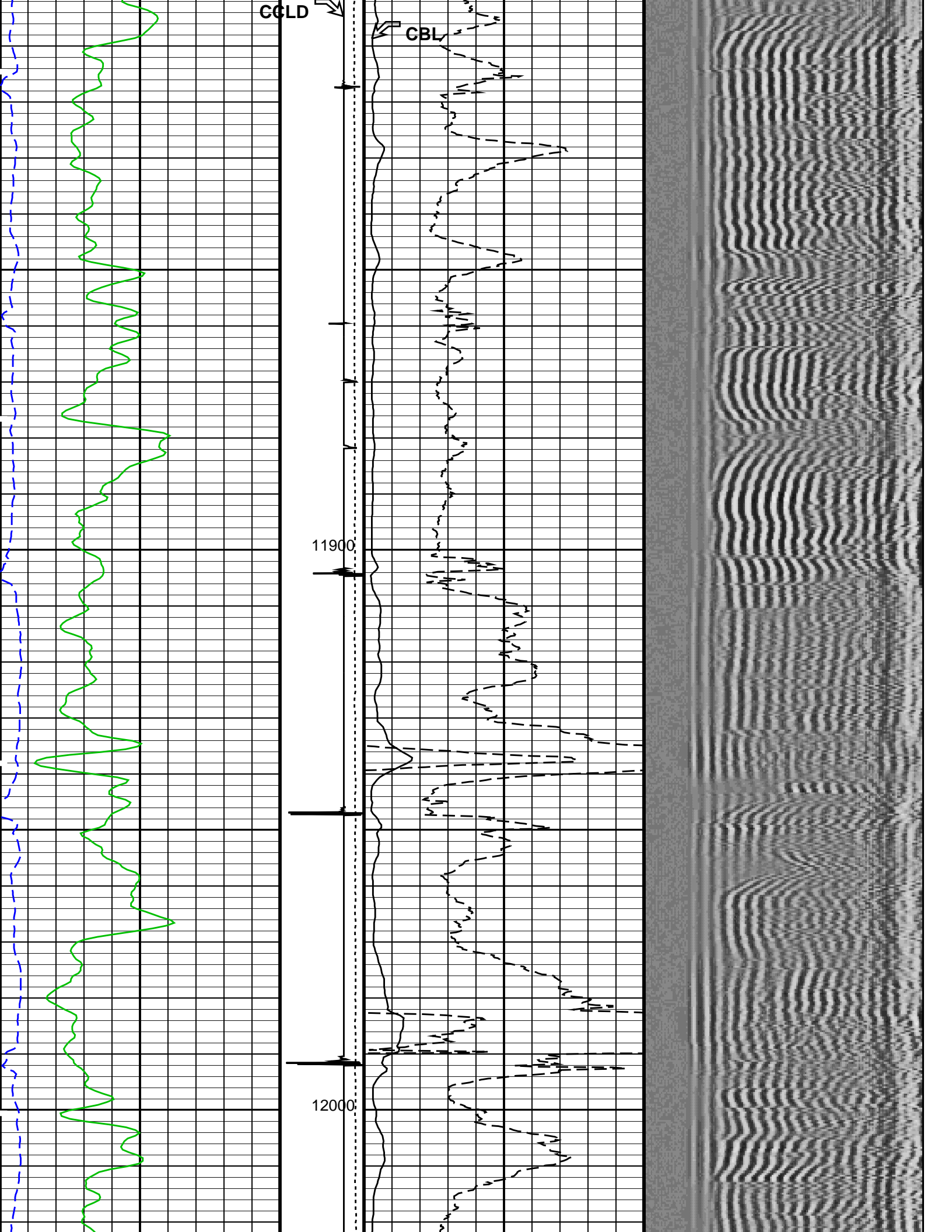




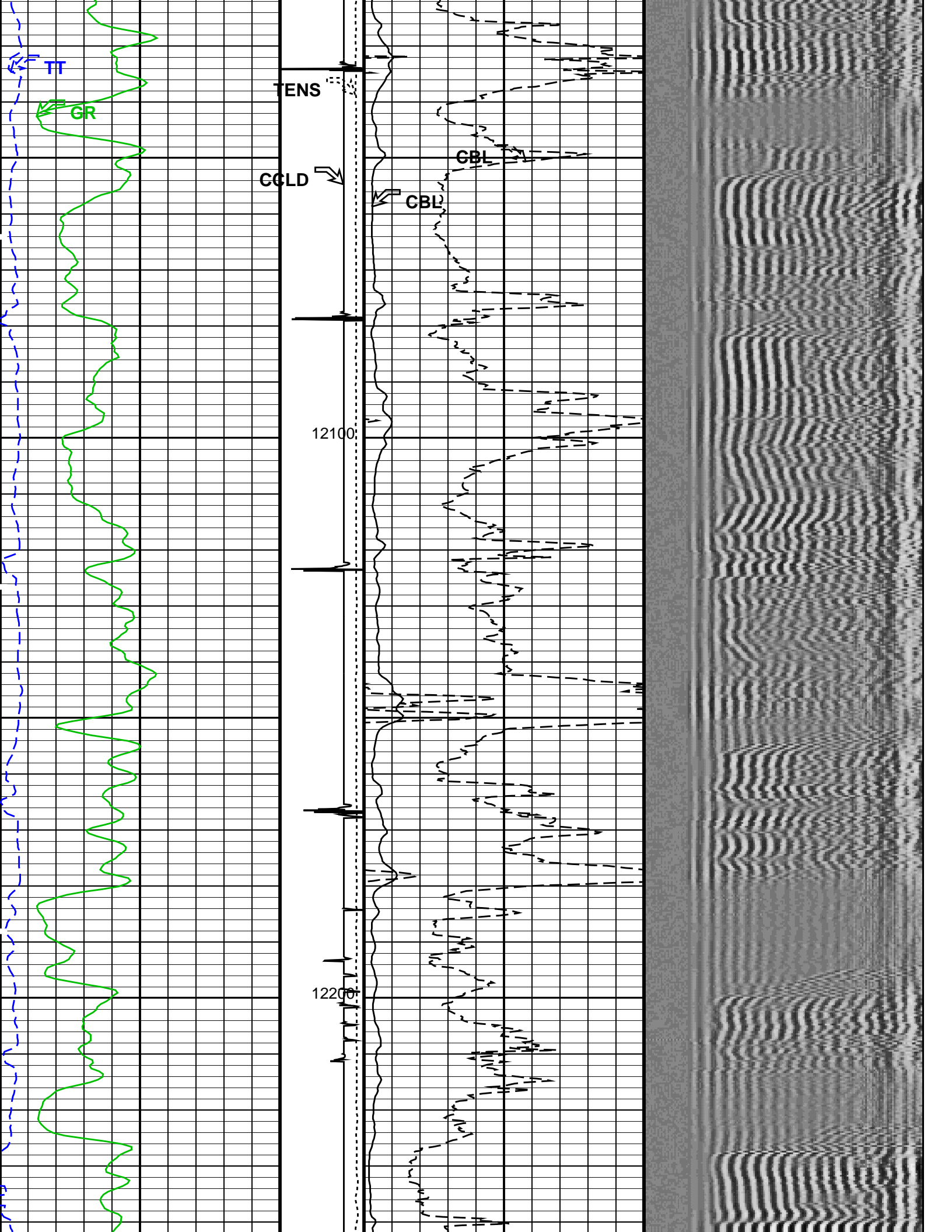


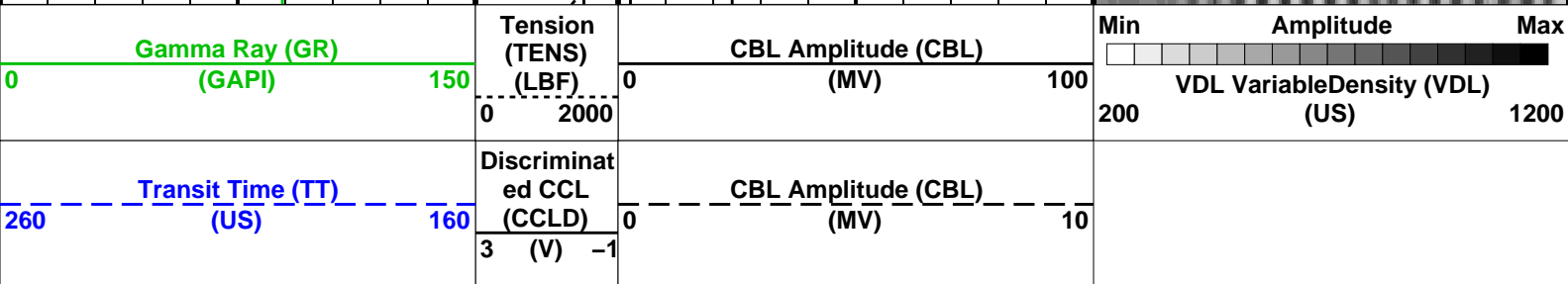
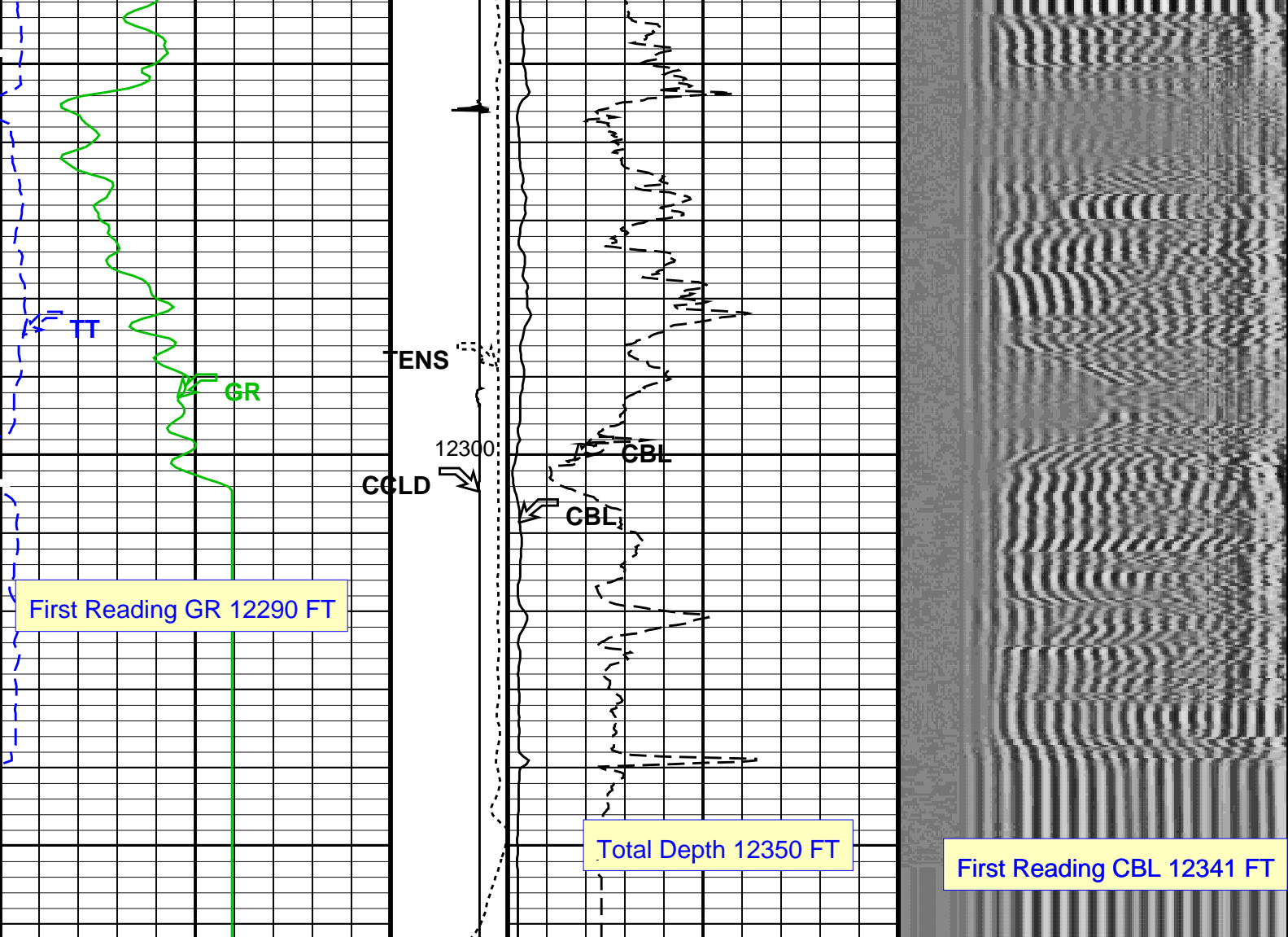












PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 05-Sep-2013 13:21

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 6-MAR-2012

CBL Correction Factor 0.0704263

MAP 1 Correction Factor 0.0993191

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

CBL Adjustment Factor (CBAF) 0.750000

MAP Adjustment Factor (MPAF) 1.0

## 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			
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	10.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12350	FT

## Input DLIS Files

DEFAULT	Splice_SCMT_RST_017CUP	FN:1	PRODUCER	05-Sep-2013 13:18	12360.0 FT	-37.8 FT
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## Output DLIS Files

DEFAULT	SCMT_RST_PSP_018PUP	FN:16	PRODUCER	05-Sep-2013 13:21
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REPEAT ANALYSIS CBL VDL

Input DLIS Files

DEFAULT	SCMT_RST_HBMS_003LUP	FN:2	PRODUCER	05-Sep-2013 07:43	8024.5 FT	7653.5 FT
DEFAULT	SCMT_RST_PSP_018PUP	FN:16	PRODUCER	05-Sep-2013 13:21	12362.0 FT	-79.0 FT

Output DLIS Files

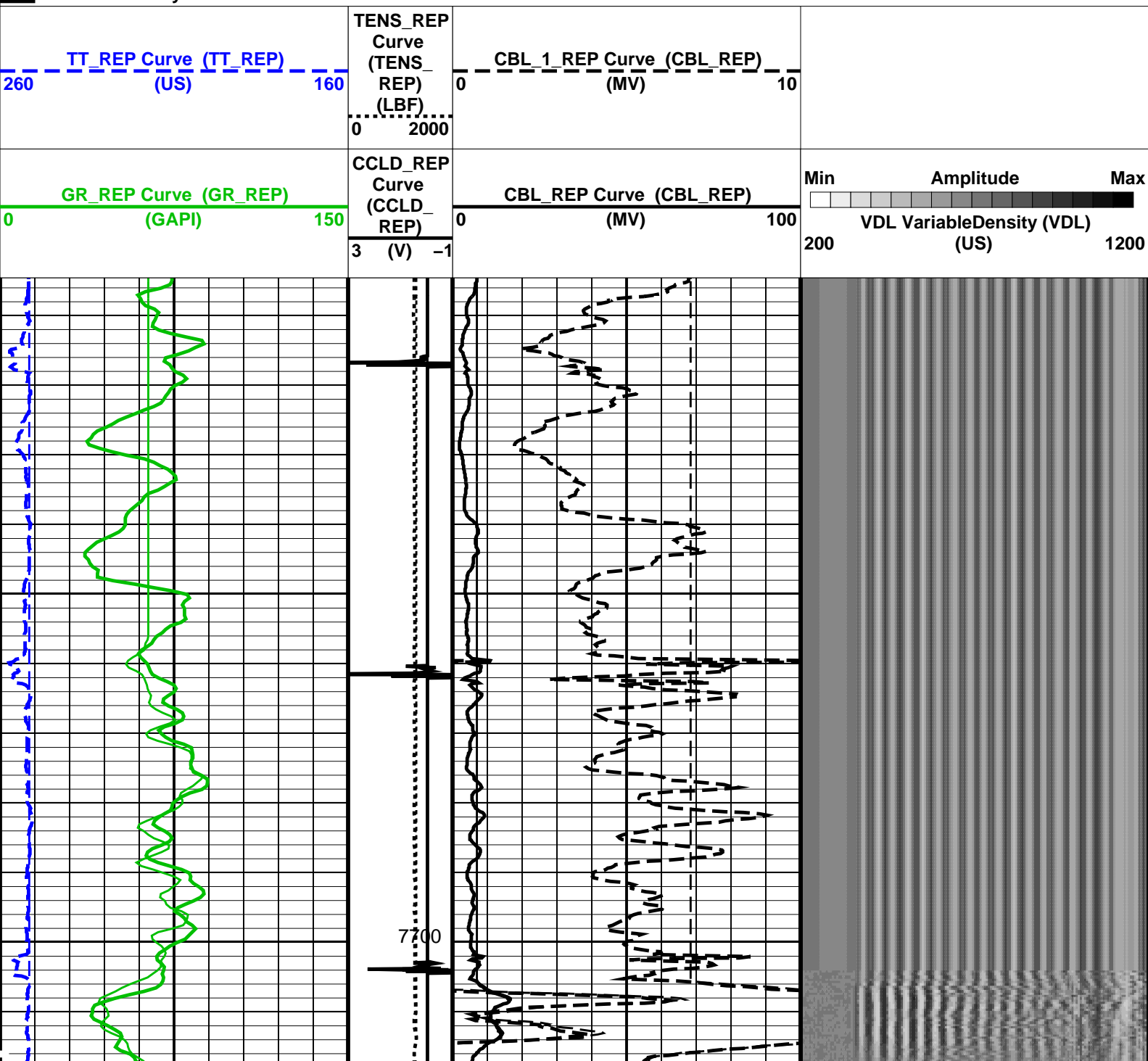
DEFAULT	SCMT_RST_PSP_019PUP	FN:17	PRODUCER	05-Sep-2013 13:31	8026.5 FT	7604.0 FT
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OP System Version: 19C0-187

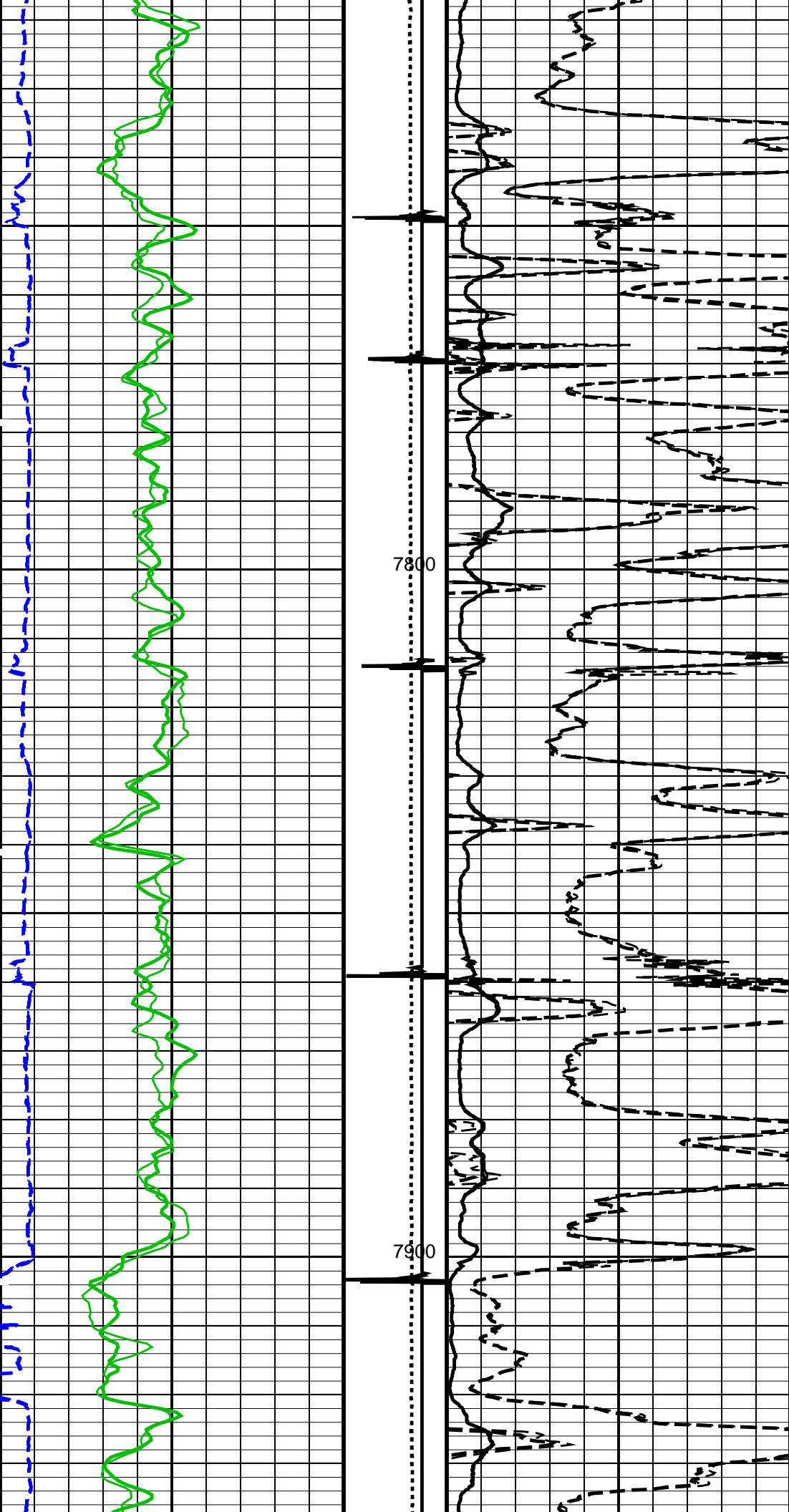
SCMT-CB	SRPC-5214-H2-2012-OP1!	RST-C	SRPC-5214-H2-2012-OP1!
PSPT	SRPC-5214-H2-2012-OP1!		

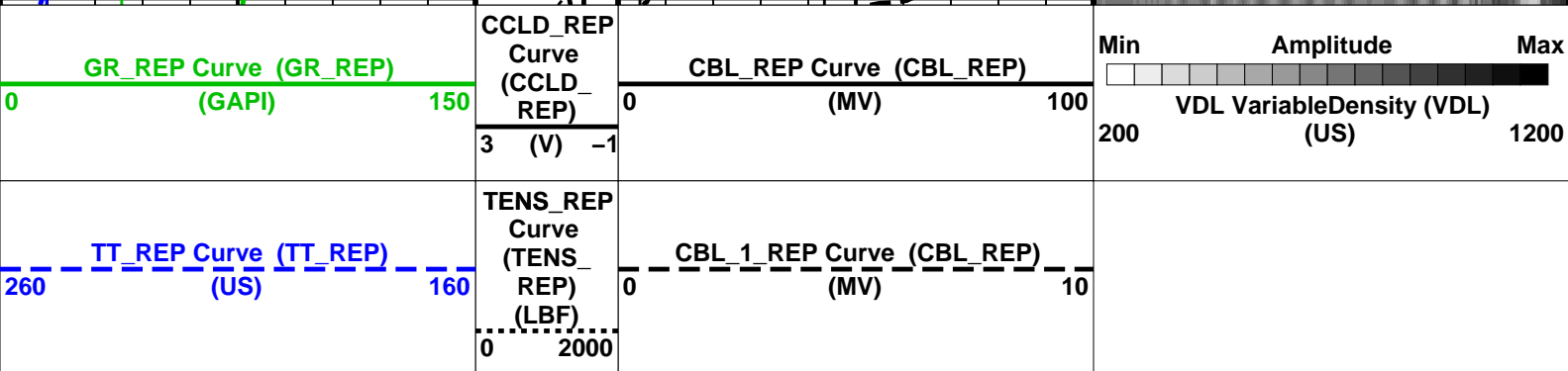
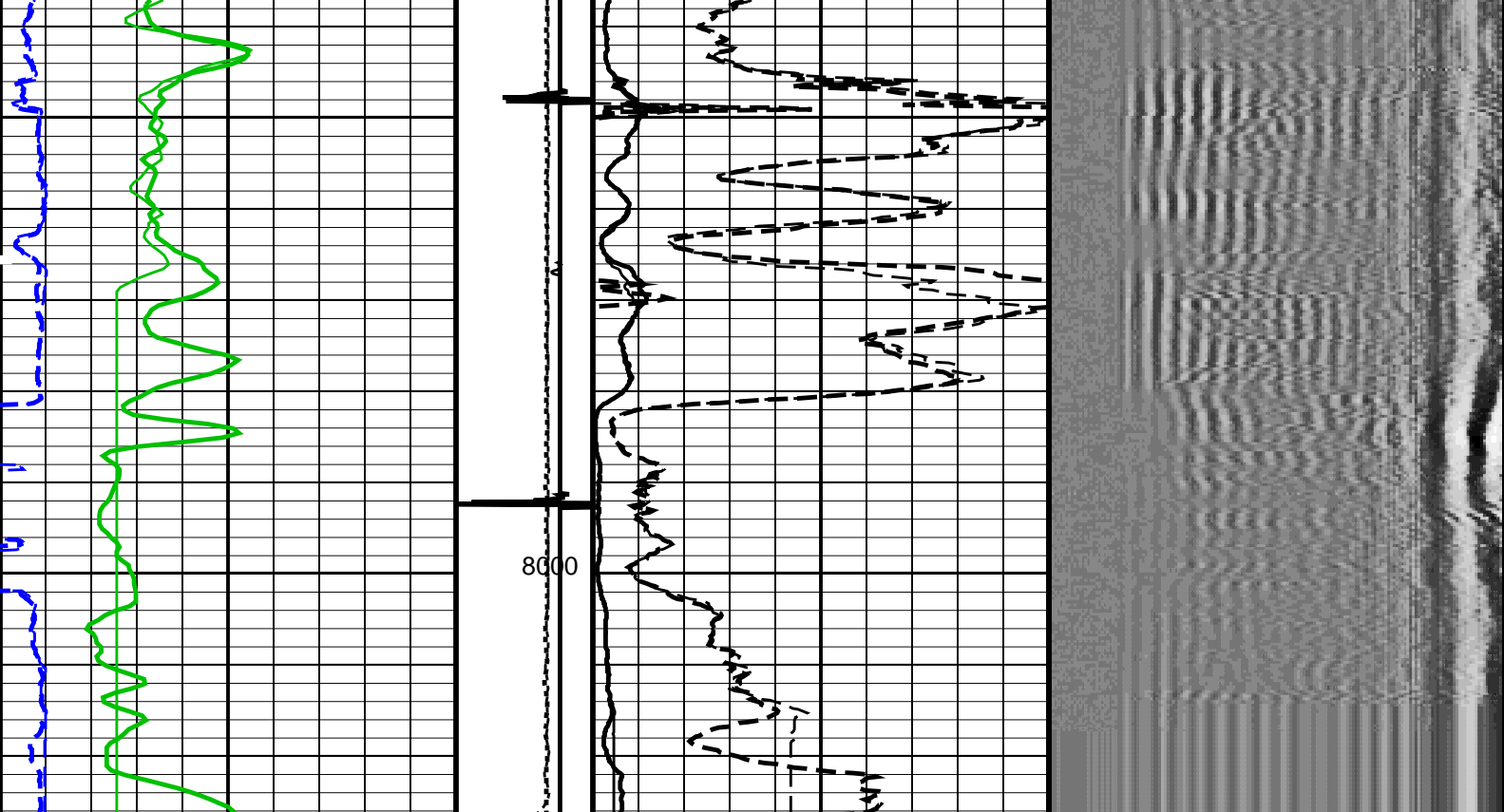
PIP SUMMARY

Time Mark Every 60 S









### PIP SUMMARY

Time Mark Every 60 S

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

Graphics File Created: 05-Sep-2013 13:31

## 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>>>

<b>Sonde Serial Number</b>	SCMS-CB 8179		
<b>Current Casing Size</b>	4.5000 IN		
<b>Casing Weight</b>	11.6000 LB/F		
<b>Expected CBL Amplitude in Free Pipe Section</b>	80 MV	<b>Minimum Sonic Amplitude</b>	0.579149 MV (100% Cement) 1.55185 MV (80% Cement)
		<b>MAP Minimum Sonic Amplitude</b>	4.32284 MV (100% Cement) 8.10244 MV (80% Cement)
<b>Master Calibration (Normalization)</b>		<b>Before Calibration (Adjustment)</b>	
<b>Date of Master Calibration</b>	6-MAR-2012		
<b>CBL Correction Factor</b>	0.0704263	<b>CBL Adjustment Factor (CBAF)</b>	0.750000
<b>MAP 1 Correction Factor</b>	0.0993191	<b>MAP Adjustment Factor (MPAF)</b>	1.0
<b>MAP 2 Correction Factor</b>	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	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			
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	12350	FT

## Input DLIS Files

DEFAULT	SCMT_RST_HBMS_003LUP	FN:2	PRODUCER	05-Sep-2013 07:43	8024.5 FT	7653.5 FT
DEFAULT	SCMT_RST_PSP_018PUP	FN:16	PRODUCER	05-Sep-2013 13:21	12362.0 FT	-79.0 FT

## Output DLIS Files

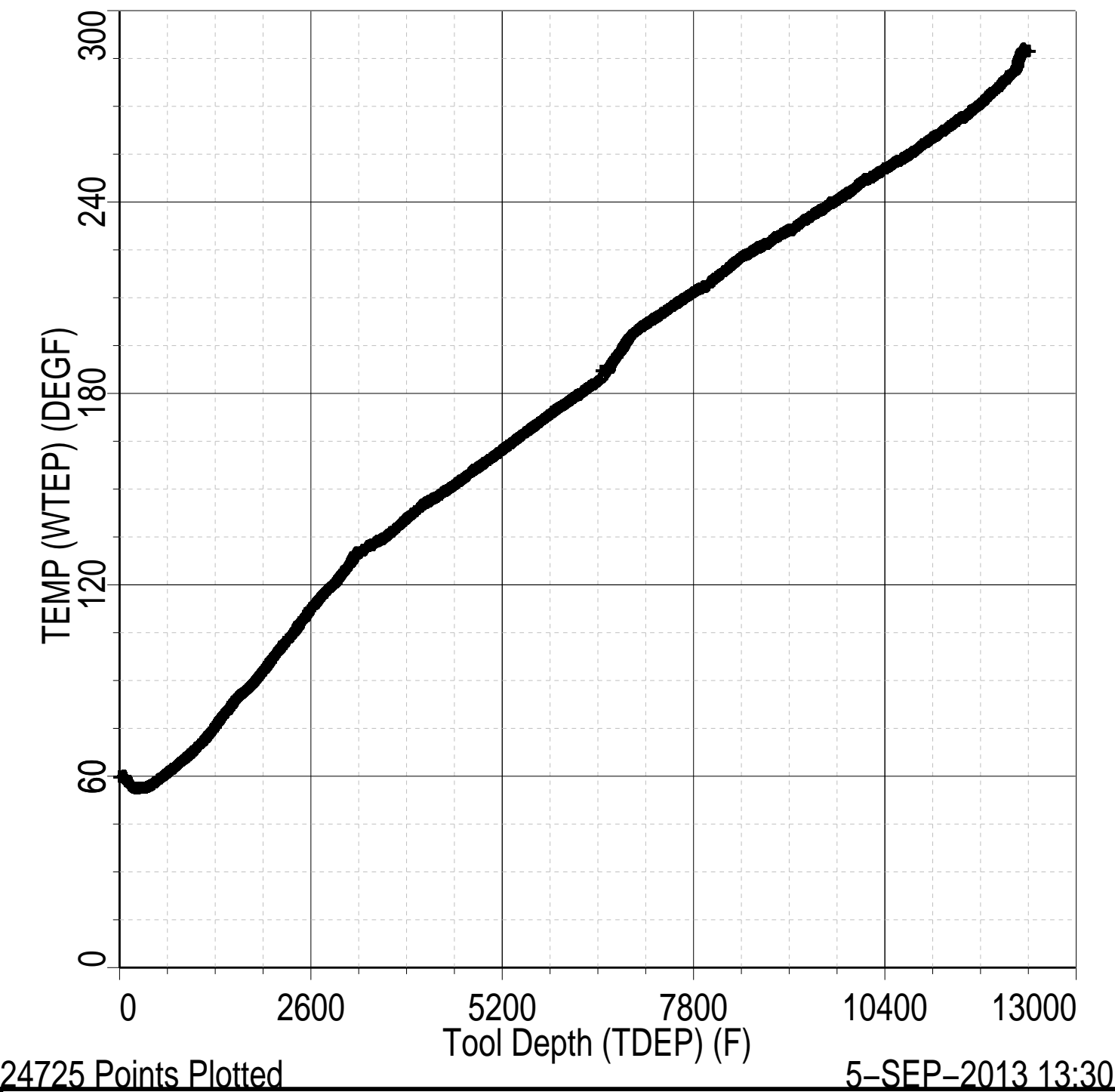
DEFAULT	SCMT_RST_PSP_019PUP	FN:17	PRODUCER	05-Sep-2013 13:31
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Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 12362.0 – -79.0 FT



**Schlumberger**

## PBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC  
Field: STORY GULCH  
Well: SG 8505E-24 (L24 496)  
Run date: 5-Sep-2013

Tool: PSP  
Sub Type: PBMS  
Sensor: GR



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

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

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Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	STORY GULCH	Sub Type:	PBMS
Well:	SG 8505E–24 (L24 496)	Sensor:	WellTemp RTD
Run date:	5–Sep–2013		

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PBMS RTD Well Thermometer

Sonde Serial NB	COEFFICIENTS FOR RTD THERMOMETER PBMS–B.928 S/N:
Sensor Serial NB	928
Calib Date ddmmyy	280612
Matrix Size	16
Coeff CRC	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 8505E-24 (L24 496)

Run date: 5-Sep-2013

Tool:

Sub Type:

Sensor:

PSP

PBMS

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

Matrix Size

Coeff CRC

:

928

280612

66

283B

Temp Coeff

Fc**0	Fc**1	Fc**2
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Fb**0	+1.117016867873E+03	−.284359629614E−03	+604391180345E−08
Fb**1	−.598309140812E−02	+1.182731130848E−07	+1.160166486172E−12
Fb**2	−.307621454576E−07	+3.00601550309E−12	+3.11233548560E−17
Fb**3	−.419658736767E−12	+1.17473708647E−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	+3.10874009898E+05	+2.88920923041E−02	+6.97940727038E−06
	(Fb'−Fc')**3	(Fb'−Fc')**4	(Fb'−Fc')**5
(Fb'−Fc')**0	−.657432344763E−10	−.412920638782E−15	+2.13369826099E−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	+1.115369519827E+03	−.565338877075E−02	−.333717531829E−07
	(Fb'−Fc')**3	(Fb'−Fc')**4	(Fb'−Fc')**5
(Fb'−Fc')**0	−.124387135327E−12	+7.13102327208E−16	−.316084316842E−20



## MASTER CALIBRATION

### MAXIS Field Log

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

##### Primary Equipment:

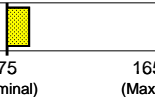
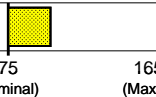
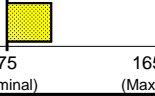
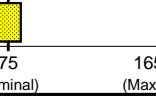
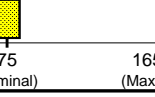
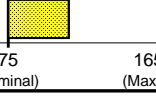
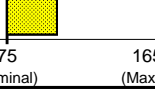
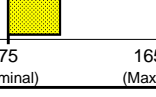

Slim Cement Mapping Xmitter Electronics	SCMX – CA	8251
Slim Cement Mapping Sonde	SCMS – CB	8179
Slim Cement Mapping Cartridge	SCMC – CA	8121

##### Auxiliary Equipment:

Slim Electronics Cartridge Housing	SECH – CA	8120
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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: **ENCANA OIL & GAS (USA) INC**

Well: **SG 8505E–24 (L24 496)**

Field: **STORY GUI CH**





Field: **STORY COLORADO**  
County: **GARFIELD**  
State: **COLORADO**

SLIM CEMENT MAPPING LOG  
CBL-VDL  
GAMMA RAY-CCL