

Company: ENCANA OIL & GAS (USA) INC

Well: SGU 8506B-36 (B36 496)

Field: NORTH PARACHUTE

County: GARFIELD State: COLORADO

CEMENT BOND LOG
CBL – VDL
GAMMA RAY – CCL

County: GARFIELD

Field: NORTH PARACHUTE

Location: SHL: NWNE 783 FNL 1654 FWL

Well: SGU 8506B-36 (B36 496)

Company: ENCANA OIL & GAS (USA) INC

LOCATION	
SHL: NWNE 783 FNL 1654 FWL	Elev.: K.B. 8374.00 ft
BHL: SENW 2022 FSL 1972 FEL	G.L. 8352.00 ft
	D.F. 8373.00 ft
Permanent Datum: _____	GROUND LEVEL _____
Log Measured From: _____	KELLY BUSHING _____
Drilling Measured From: _____	KELLY BUSHING _____
API Serial No. _____	Section 36
05-045-19820-000C	Township 4S
	Range 96W

	Run 1	Run 2	Run 3
PVT DATA			
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation			
CEMENTING DATA			
Primary/Squeeze	Primary		
Casing String No			
Lead Cement Type			
Volume			
Density			
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density			
Water Loss			
Additives			
Expected Cement Top			

Logging Date	3-May-2011
Run Number	ONE
Depth Driller	12357 ft
Schlumberger Depth	12286 ft
Bottom Log Interval	12277.1 ft
Top Log Interval	200 ft
Casing Fluid Type	WATER
Salinity	
Density	8.4 lbm/gal
Fluid Level	22 ft
BIT/CASING/TUBING STRING	
Bit Size	7.875 in
From	22 ft
To	12357 ft
Casing/Tubing Size	4.500 in
Weight	11.6 lbm/ft
Grade	P-110
From	22 ft
To	12326 ft
Maximum Recorded Temperatures	285 degF
Logger On Bottom	3-May-2011
Unit Number	391
Recorded By	SHOWKAT HOSSAIN
Witnessed By	EMILIO RIVERA

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

DEPTH SUMMARY LISTING	
-----------------------	--

Date Created: 3-MAY-2011 15:53:48

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-C	Type:	1-25ZT
Serial Number:	5083	Serial Number:		Serial Number:	391
Calibration Date:	09-NOV-2011	Calibration Date:	27-APR-201	Length:	24000 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	17487		
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-5	Calibration RMS:	7	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	11		

Depth Control Parameters	
--------------------------	--

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	254.00 FT
Rig Up Length At Bottom:	253.00 FT
Rig Up Length Correction:	1.00 FT
Stretch Correction:	7.00 FT
Tool Zero Check At Surface:	0.60 FT

Depth Control Remarks	
-----------------------	--

- | |
|---|
| <ol style="list-style-type: none">1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED2. IDW USED AS PRIMAY DEPTH CONTROL.3. Z-CHART AND DRUM COUNTER USED AS SECONDARY DEPTH CONTROL4.5.6. |
|---|

DISCLAIMER

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

OTHER SERVICES1	OTHER SERVICES2
OS1: RST SIGMA	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
THIS IS THE FIRST RUN IN WELL.	
TOOL RAN AS PER TOOL SKETCH.	
TD TAGGED AT: 12286 FT	
MAXIMUM RECORDED TEMPERATURE AT TD: 284.6 DEGF	
MAXIMUM RECORDED PRESSURE AT TD: 5067.8 PSIA	

SHORT JOINTS: 8086 FT – 8106 FT AND 10846 FT – 10867 FT					
EXPECTED FREE PIPE AMPLITUDE: 80 mV					
CYCLE SKIPPING IN ZONES OF GOOD BOND, THUS TT READS HIGH.					
AFE: 10142795					
THANK YOU FOR CHOOSING SCHLUMBERGER.					
CREW: B. CUPP, W. AZIZ, AND M. MYERS					
RUN 1			RUN 2		
SERVICE ORDER #:		BOC2-0004	SERVICE ORDER #:		
PROGRAM VERSION:		18C0-147	PROGRAM VERSION:		
FLUID LEVEL:		22 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM-A 3412 PSC_16MHZ 3412					
DOWNHOLE EQUIPMENT					

SCMT-CB
SCMC-CA 8120
SECH-CA 8120
CMIR-AG 2
SCMS-CB 8303
SCMX-CA 8251

20.5

DT 11.4
CBL5 DTSC 9.9
CBL3 8.9
MAP 8.4
AUX 7.4

AH-BNS
Tension SCMT HV
TOOL ZERO 0.0 0.5

MAXIMUM STRING DIAMETER 2.07 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

MAIN PASS 0 PSI

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC Well: SGU 8506B-36 (B36 496)

Input DLIS Files

DEFAULT SCMT_RST_HBMS_009LUP FN:8 PRODUCER 03-May-2011 13:46 12301.5 FT 95.5 FT

Output DLIS Files

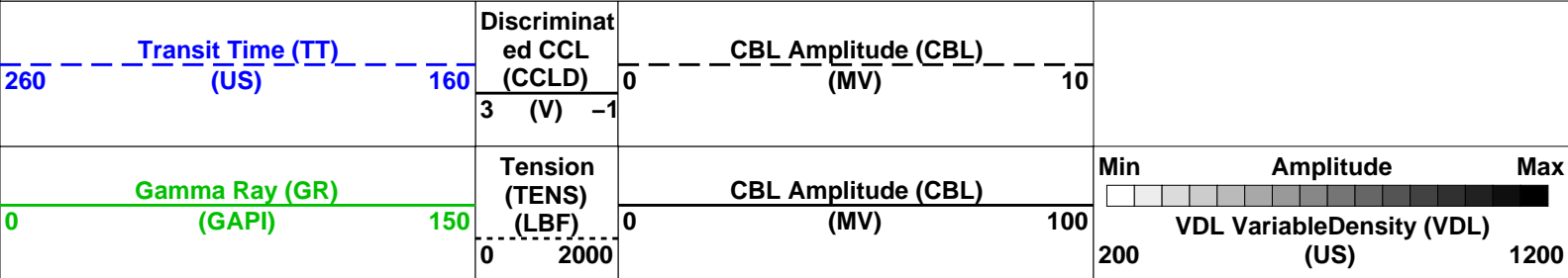
DEFAULT SCMT_RST_HBMS_014PUP FN:13 PRODUCER 03-May-2011 17:09 12322.5 FT 61.5 FT

OP System Version: 18C0-147

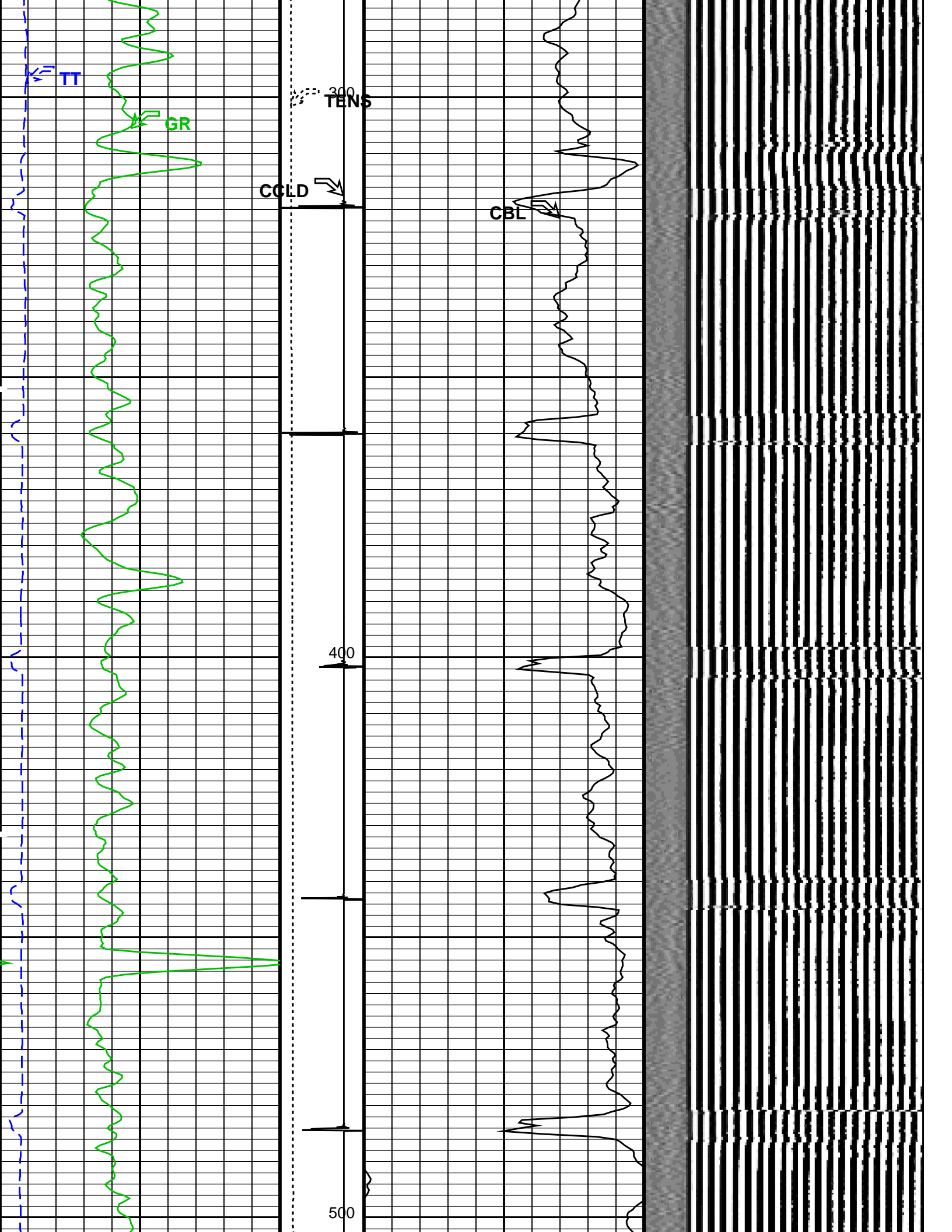
SCMT-CB 18C0-147 RST-C 18C0-147
HBMS-B 18C0-147

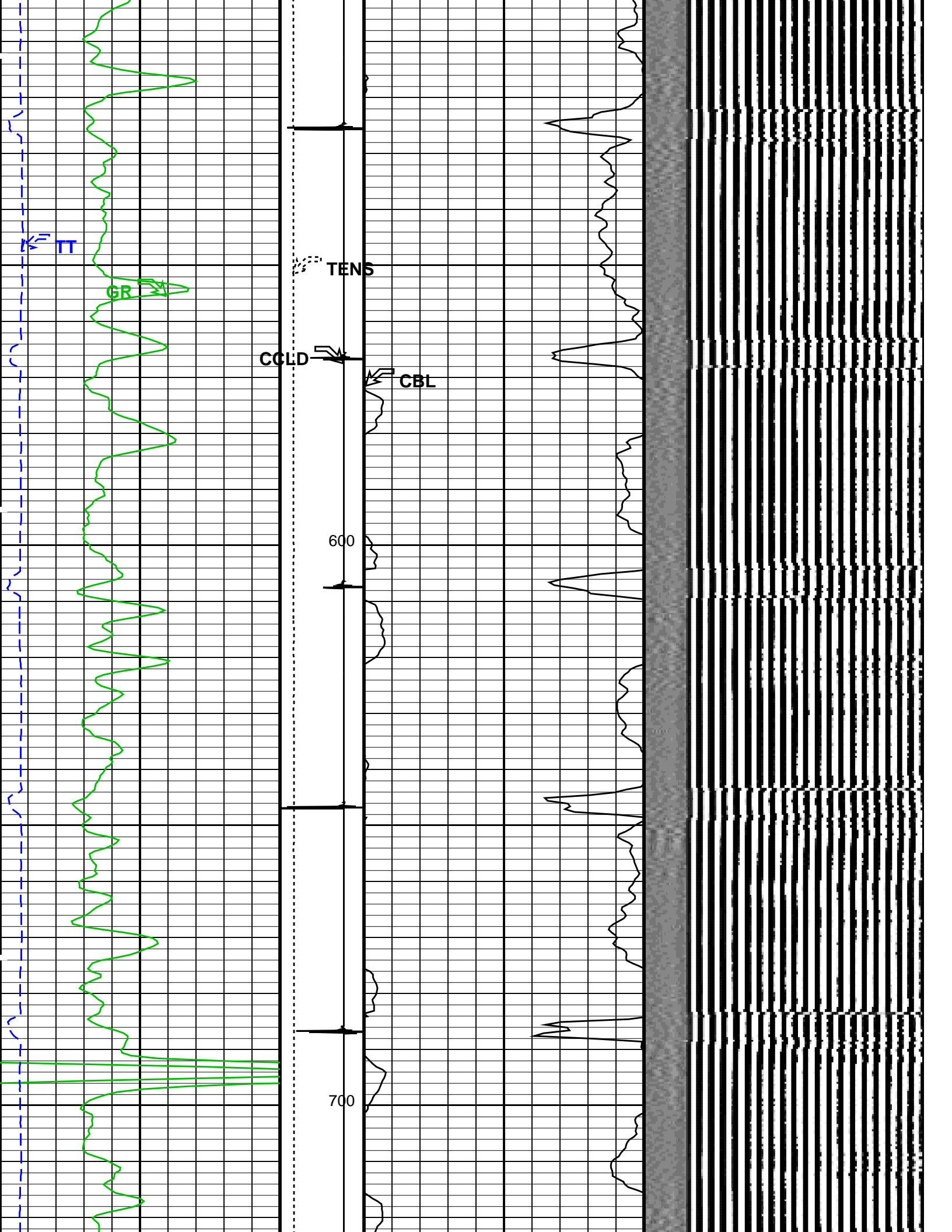
PIP SUMMARY

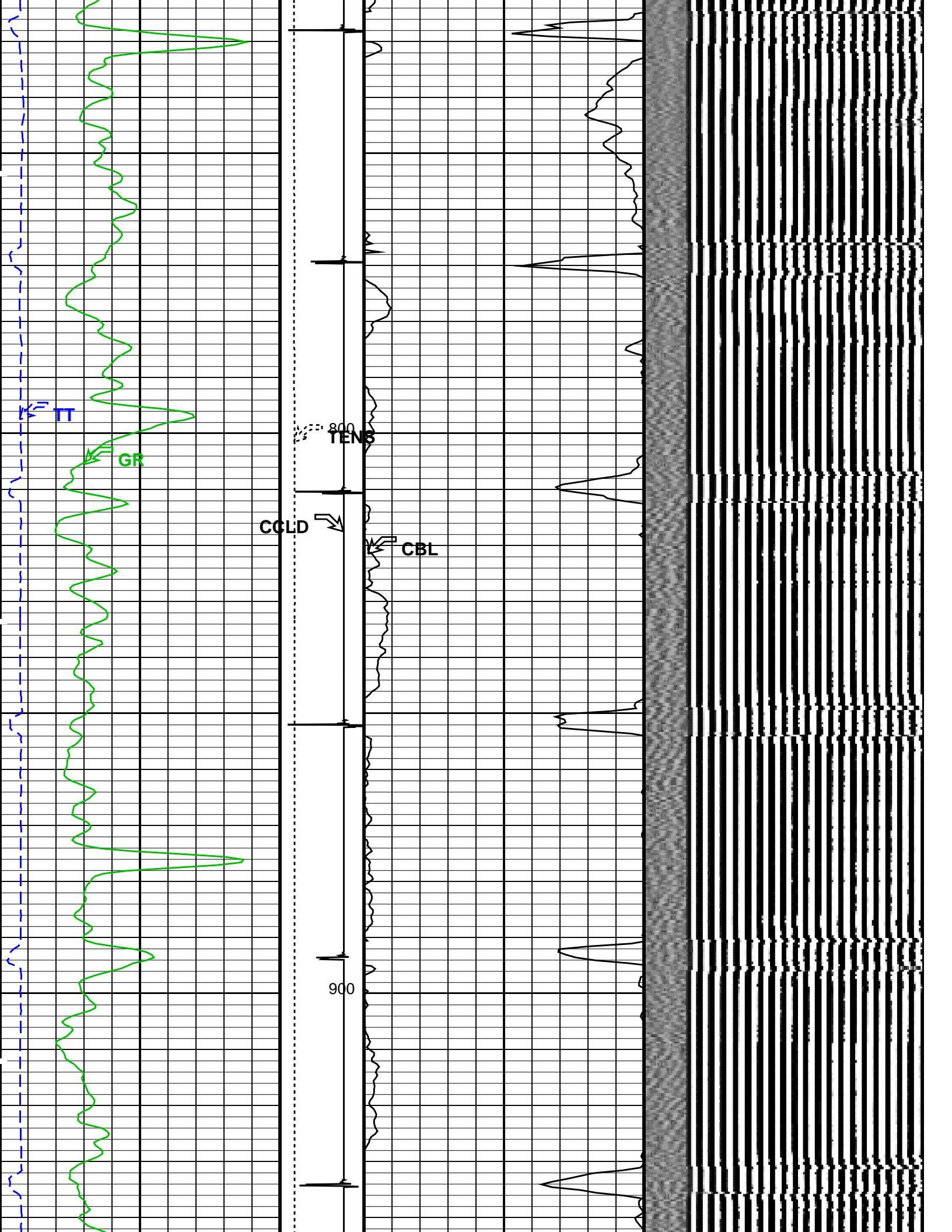
Time Mark Every 60 S

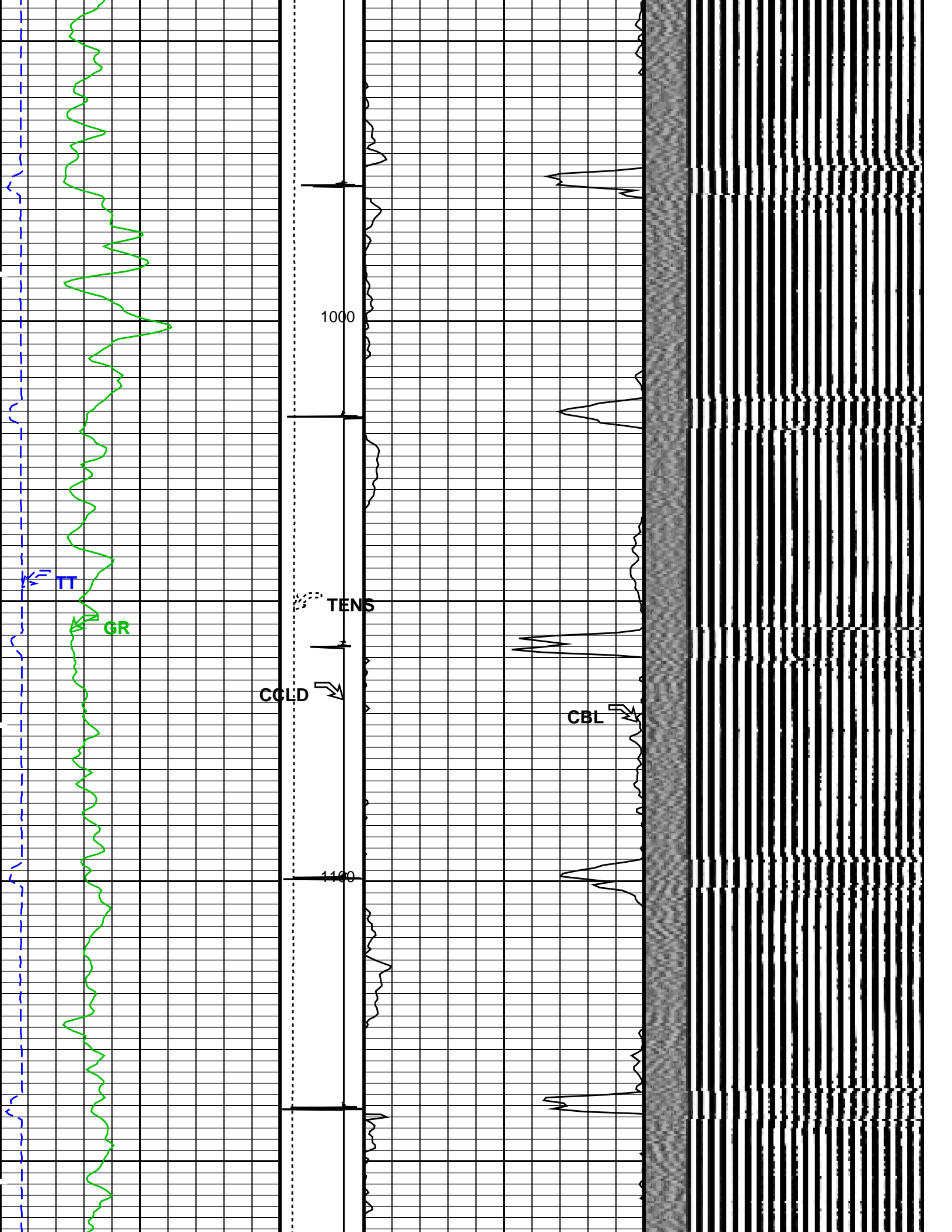


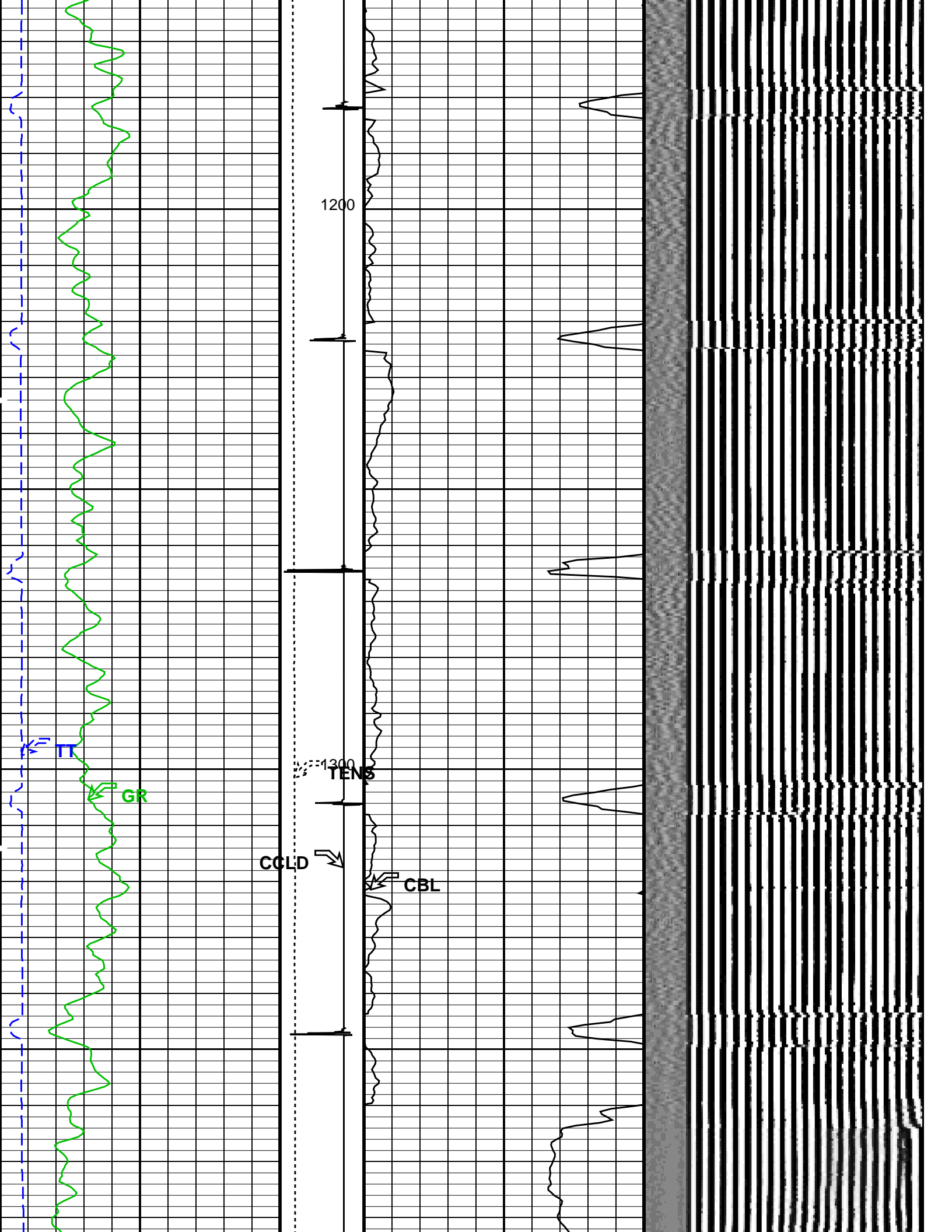


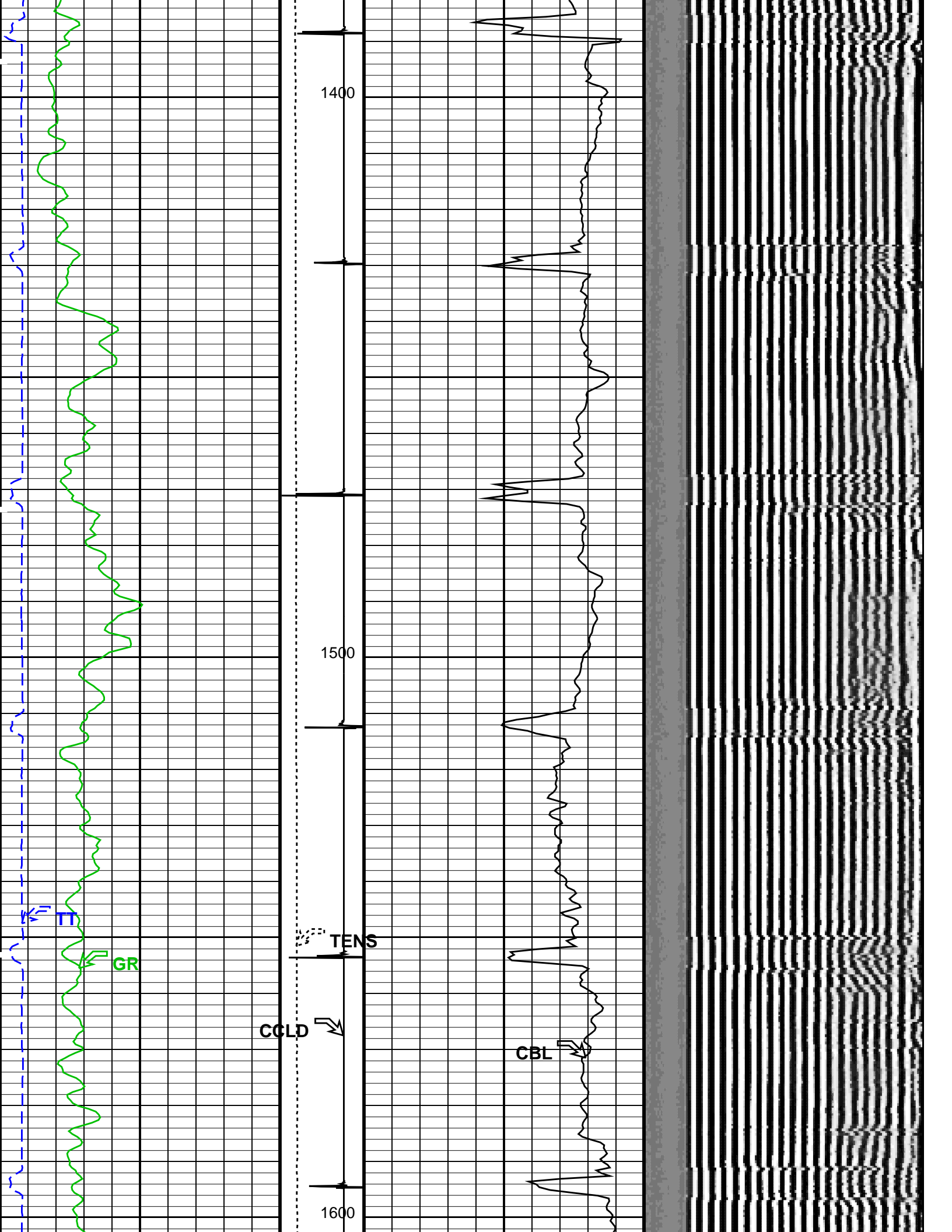


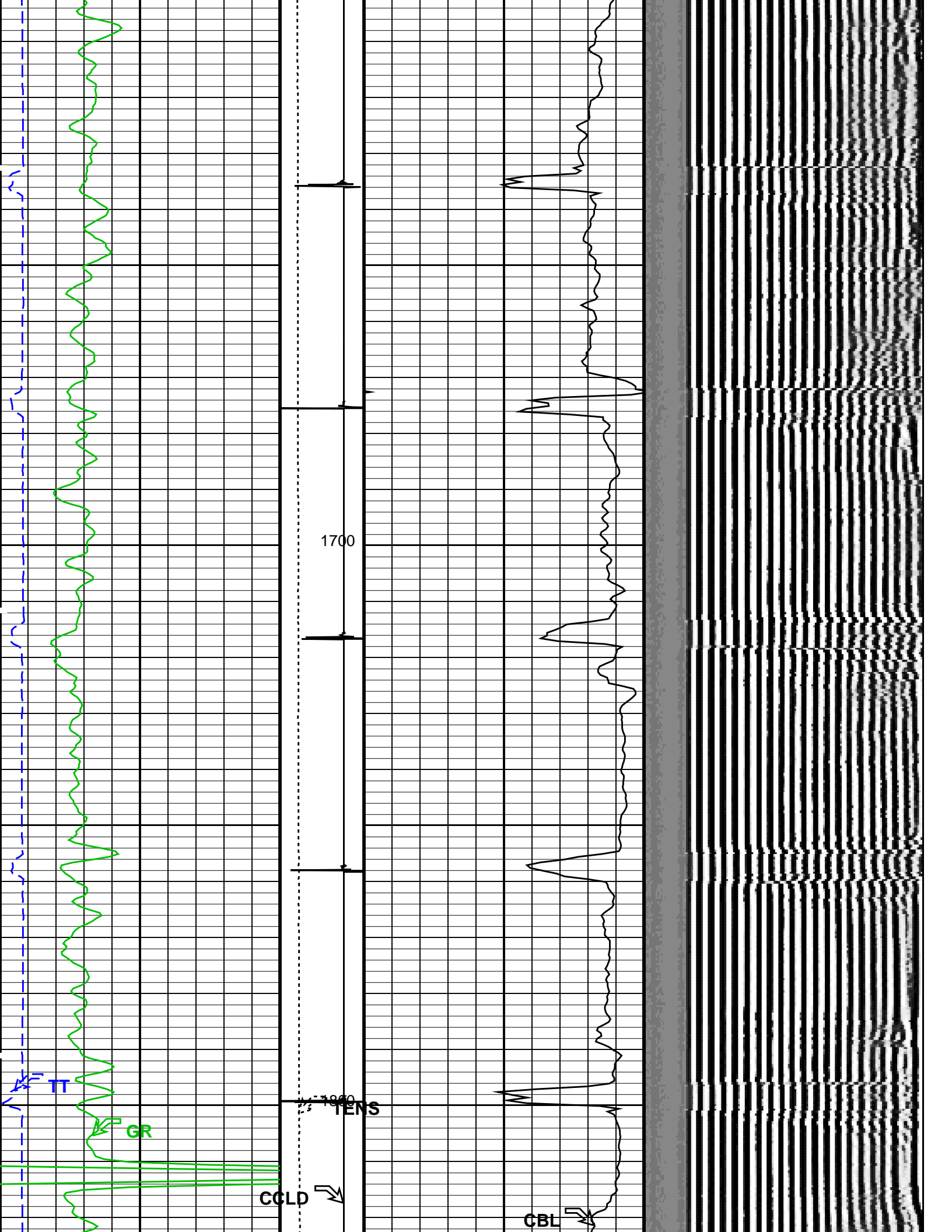


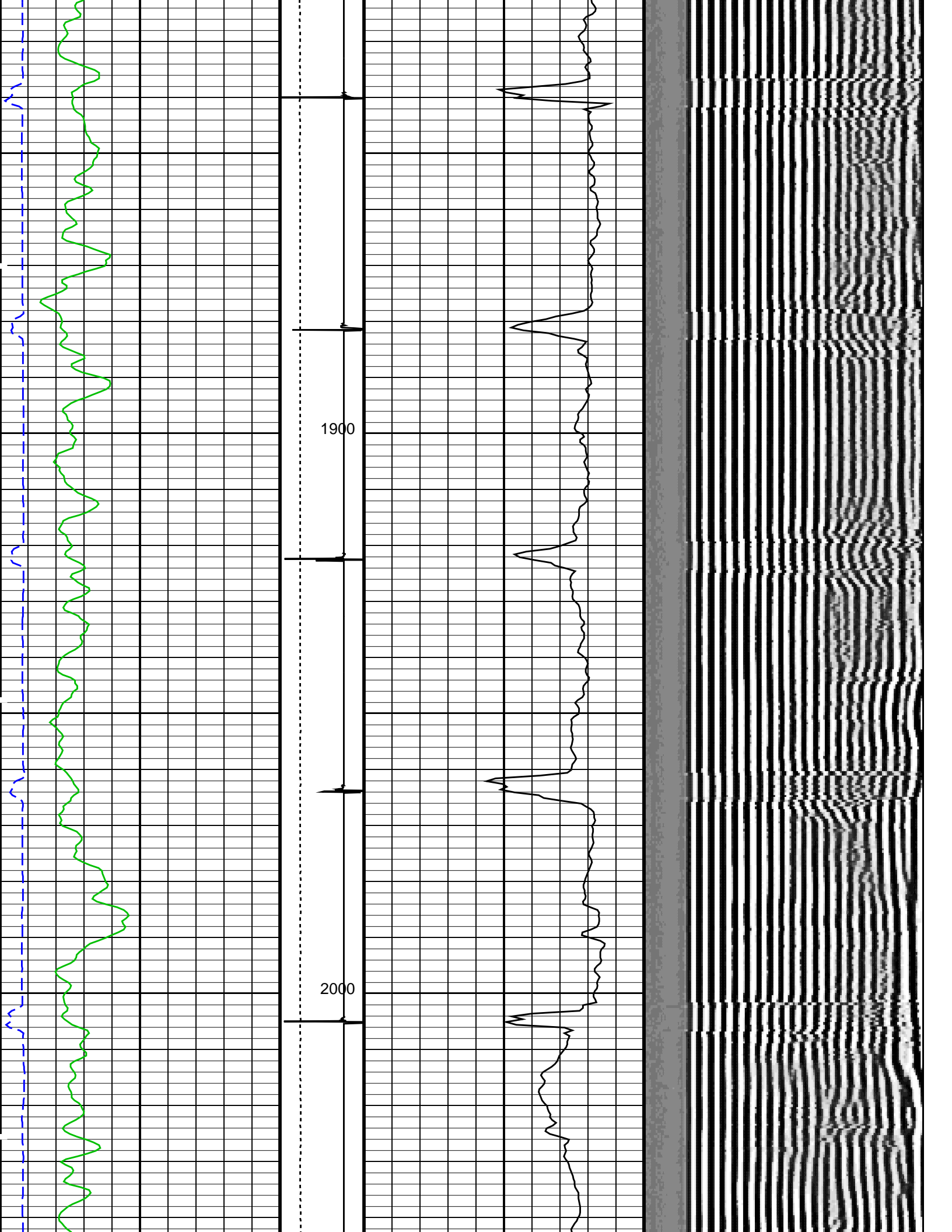


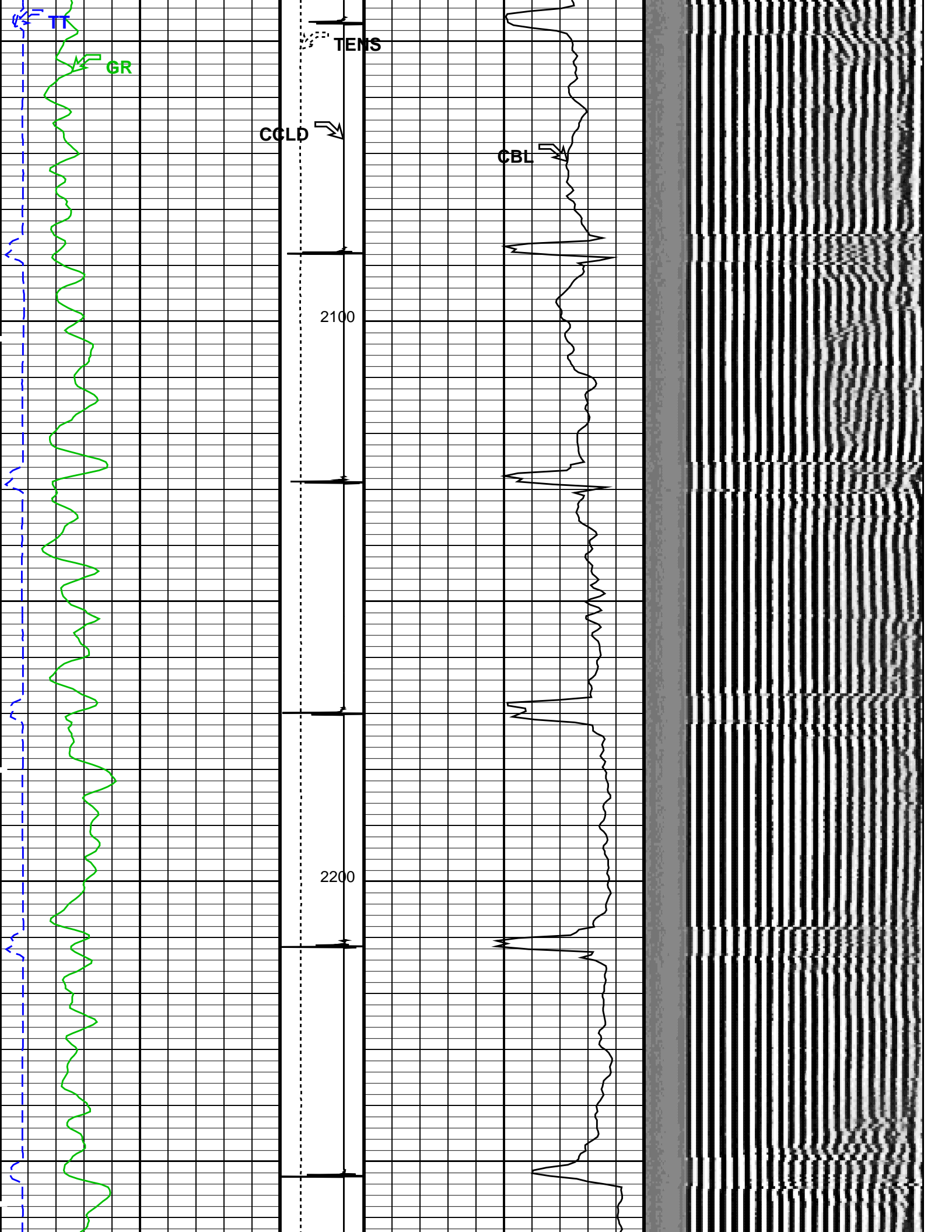


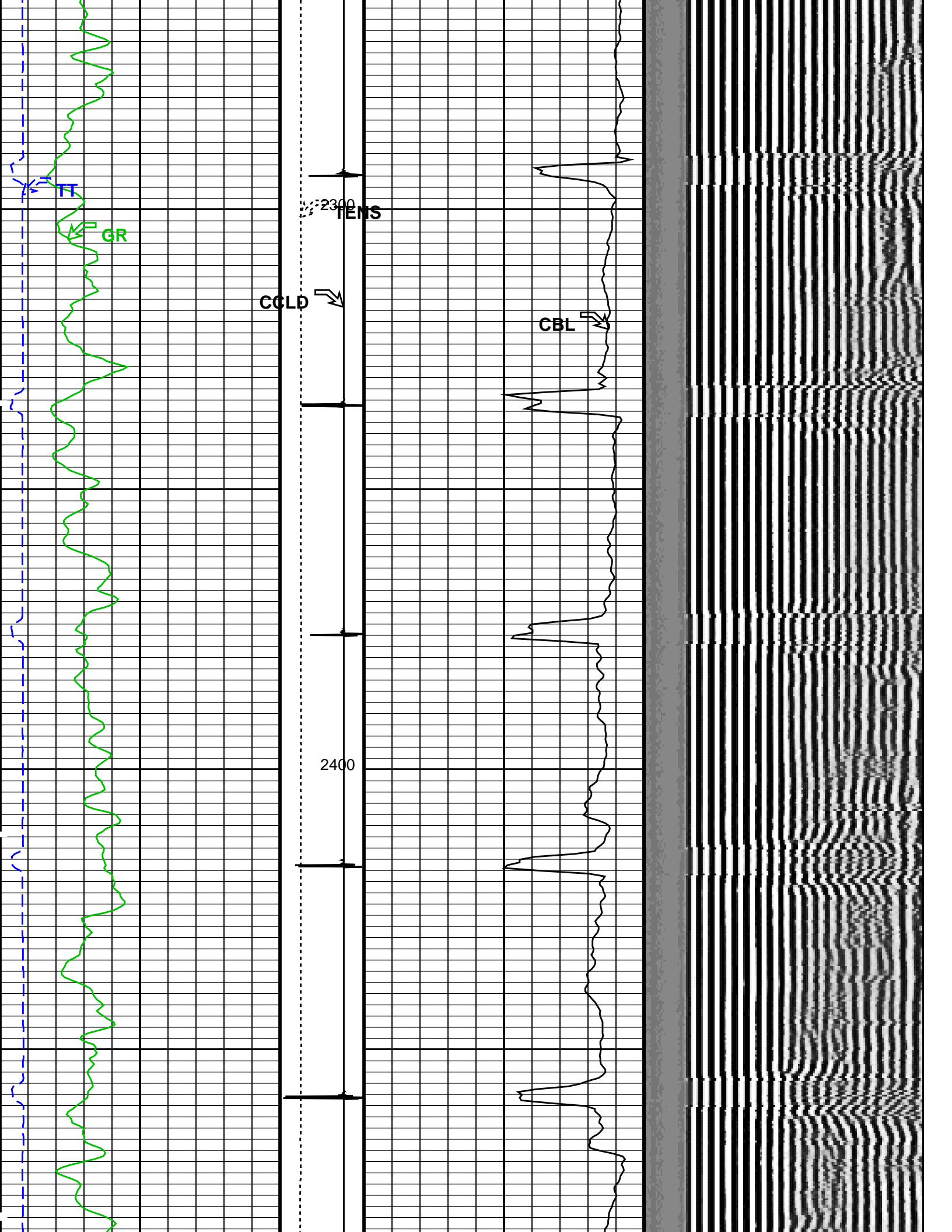


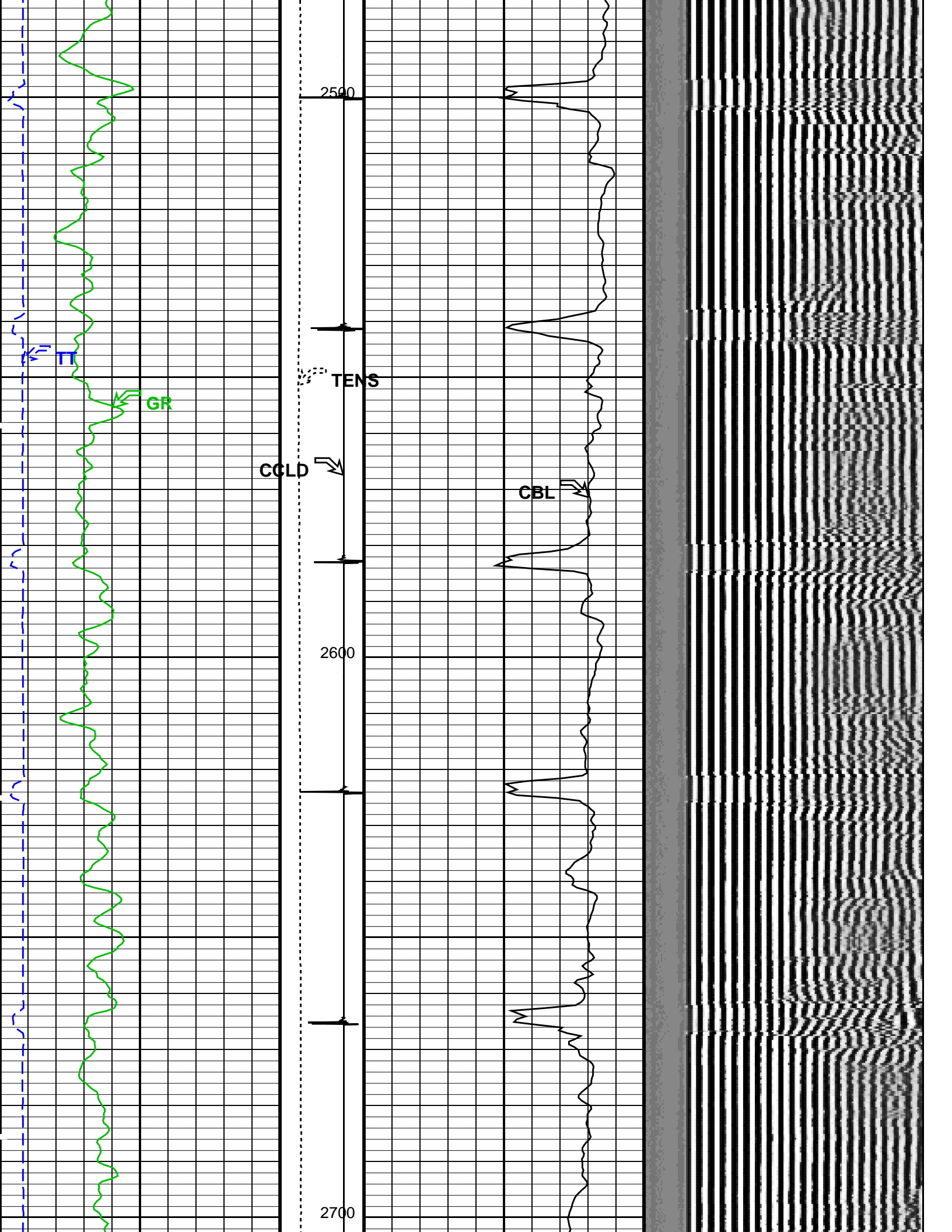


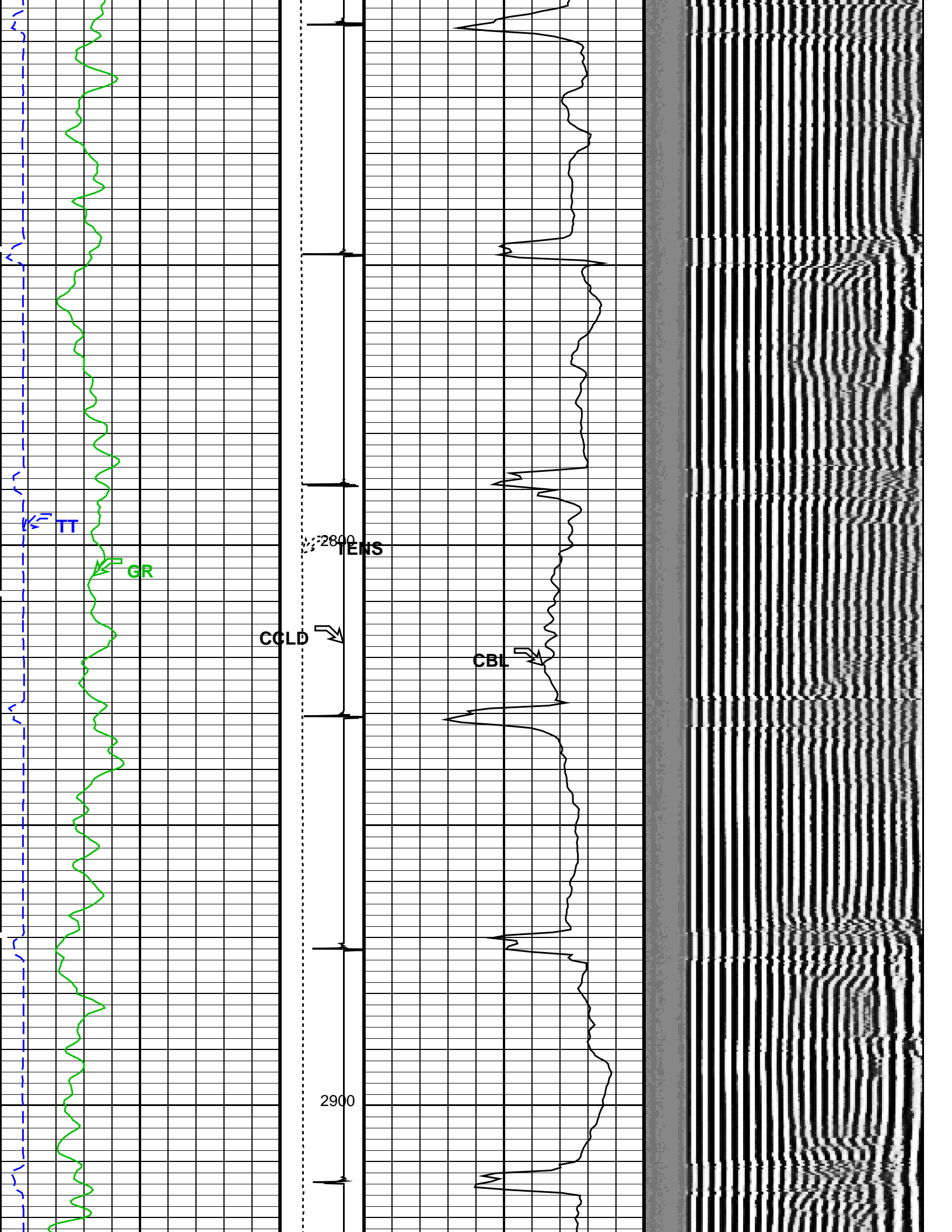


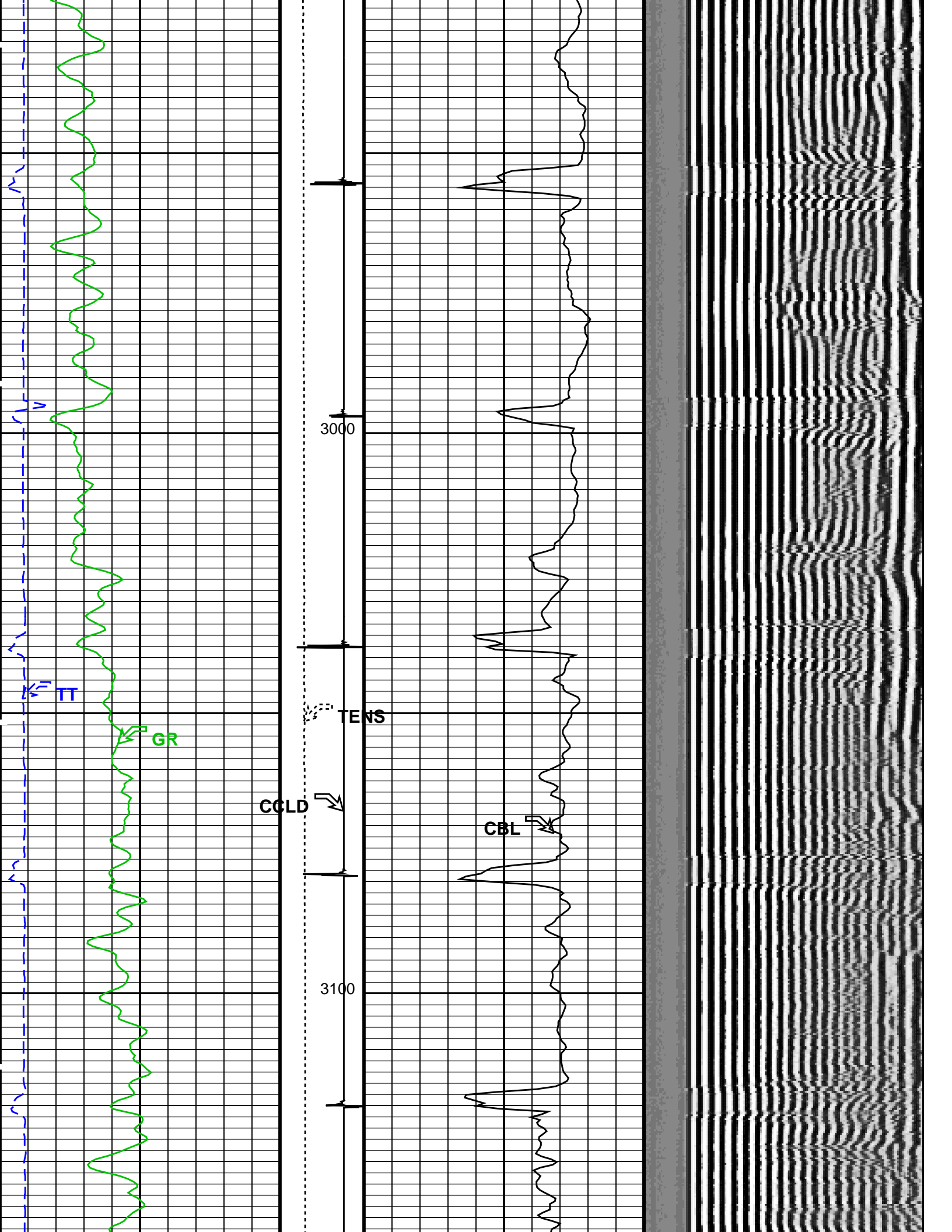


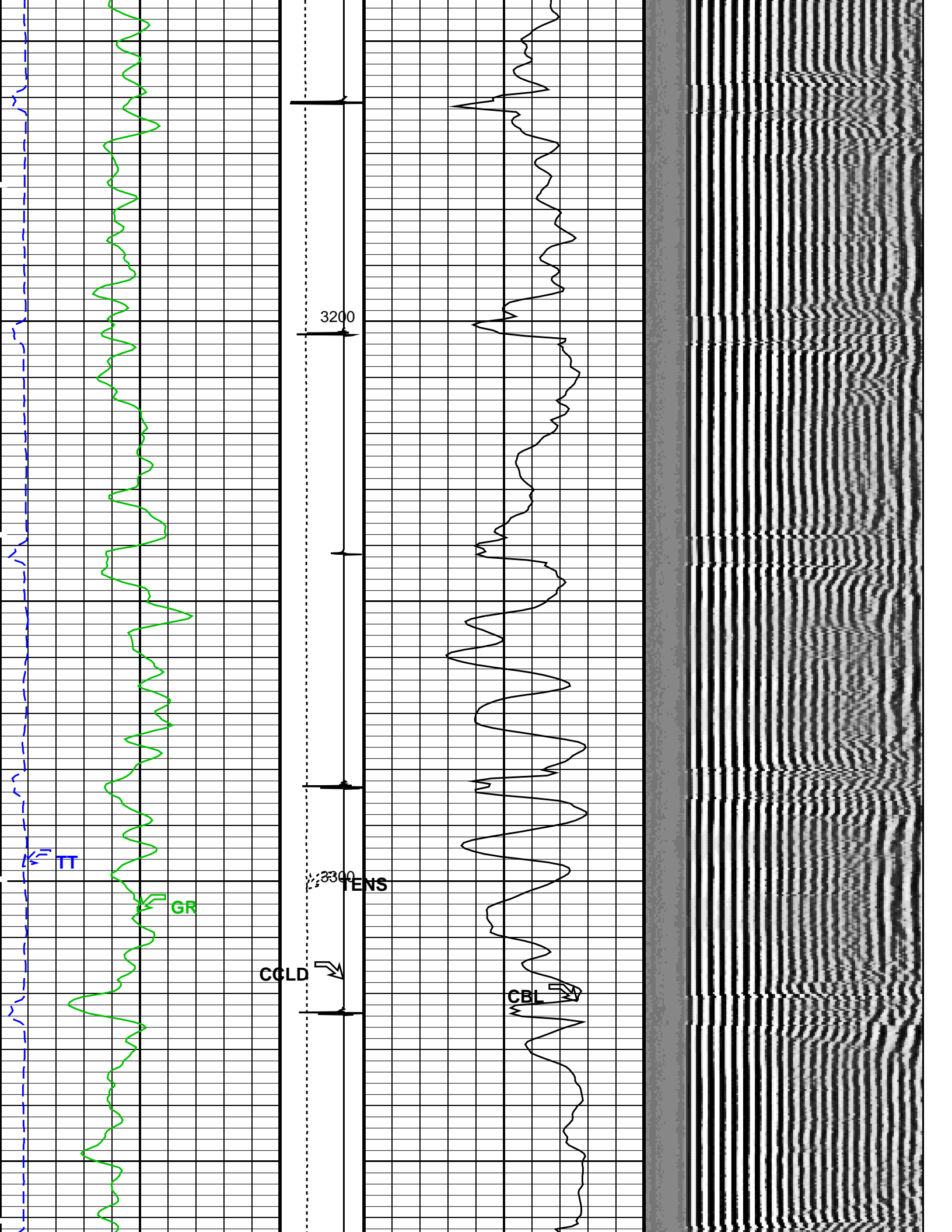


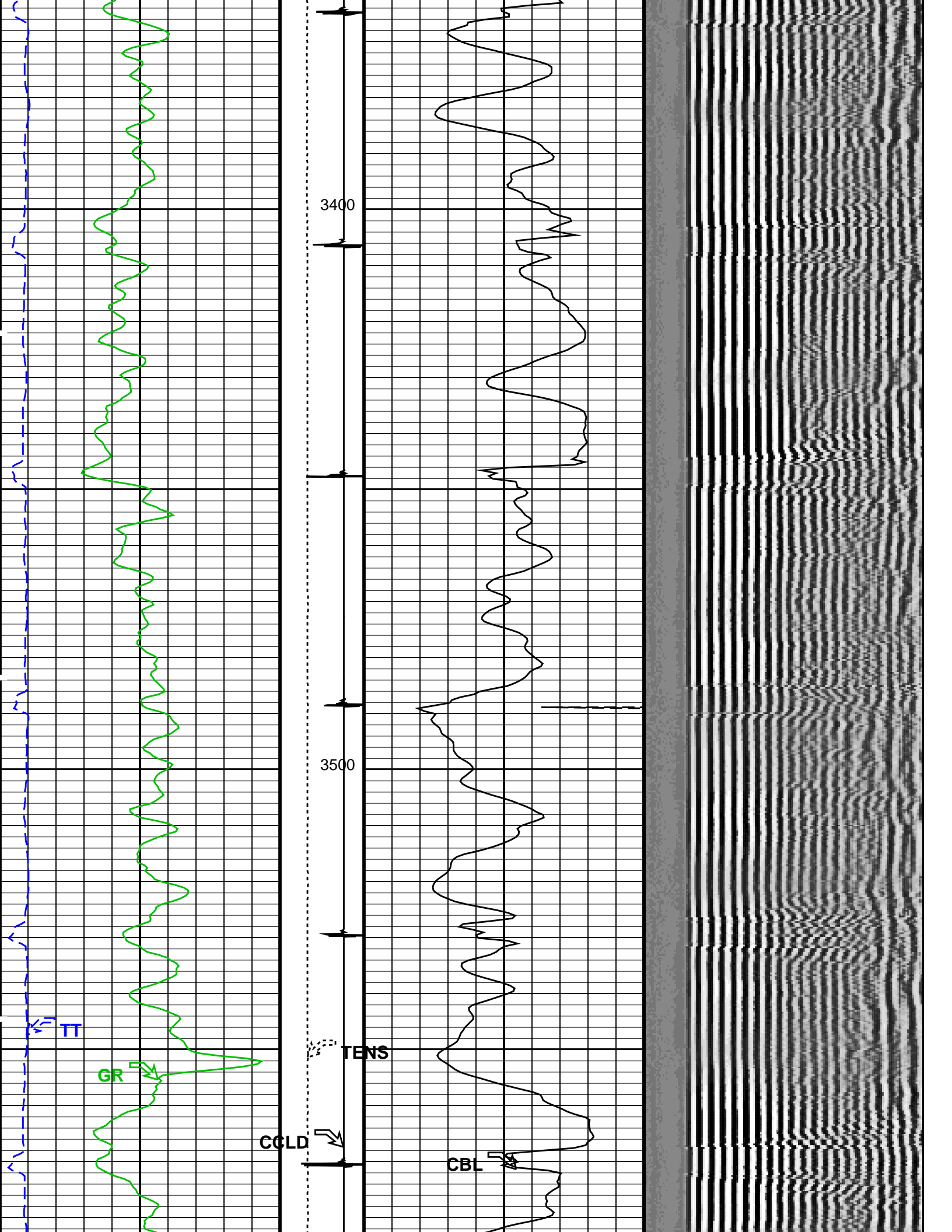


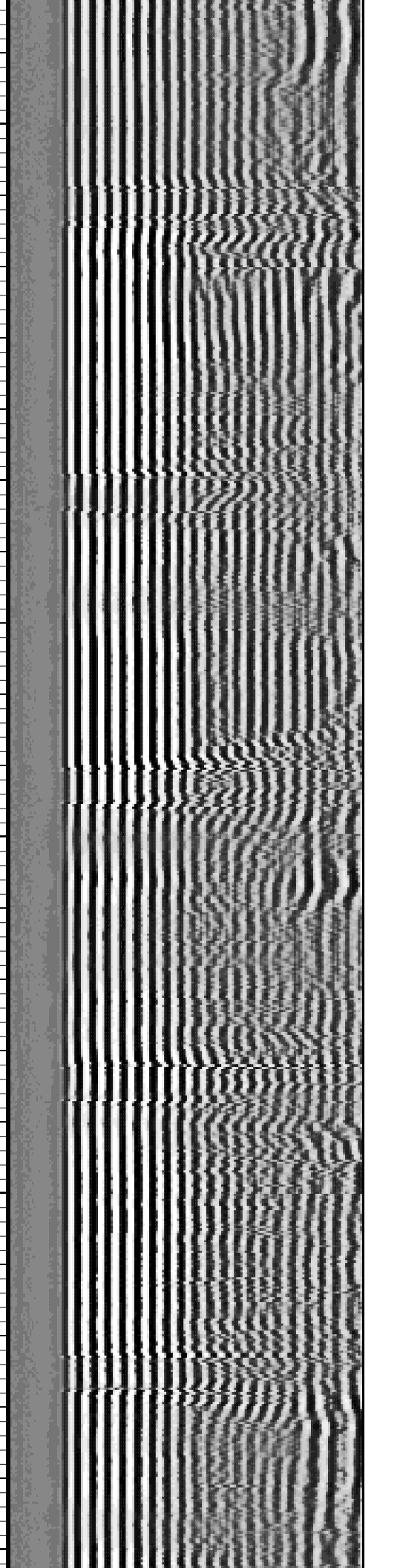
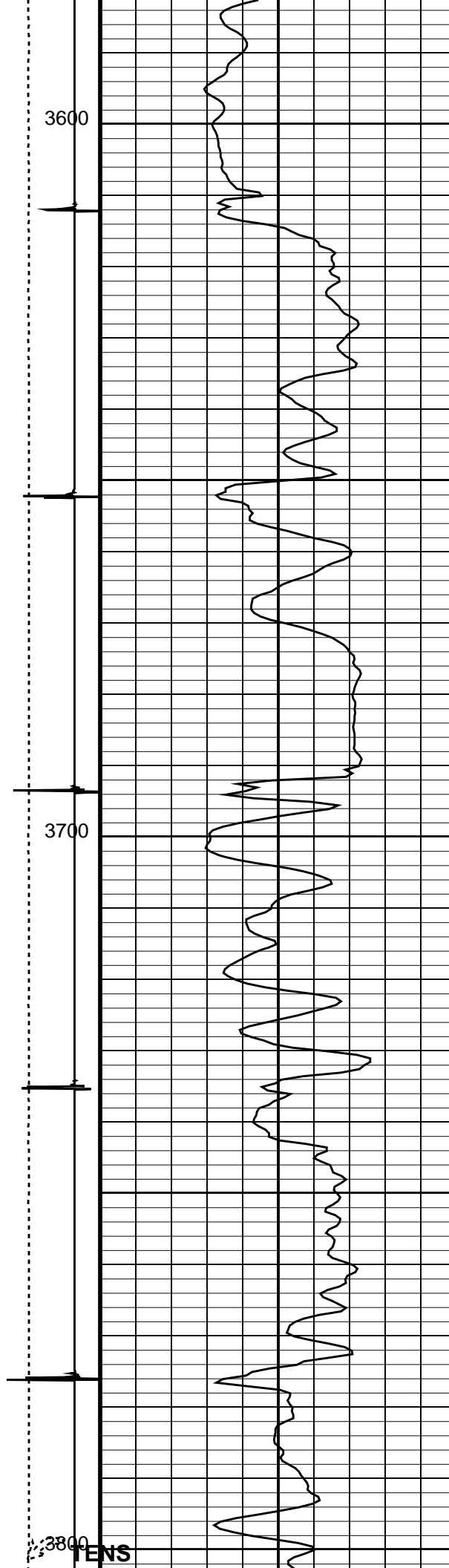
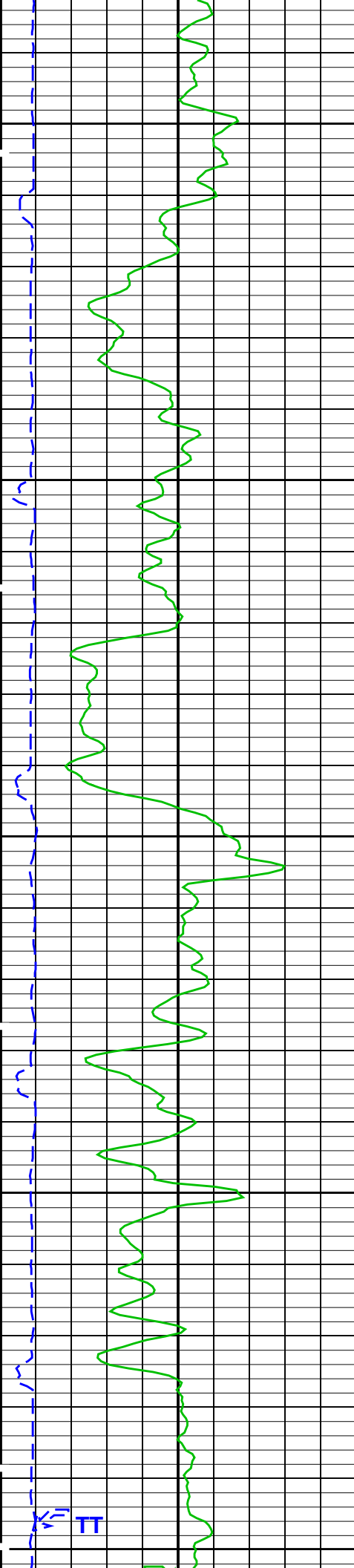


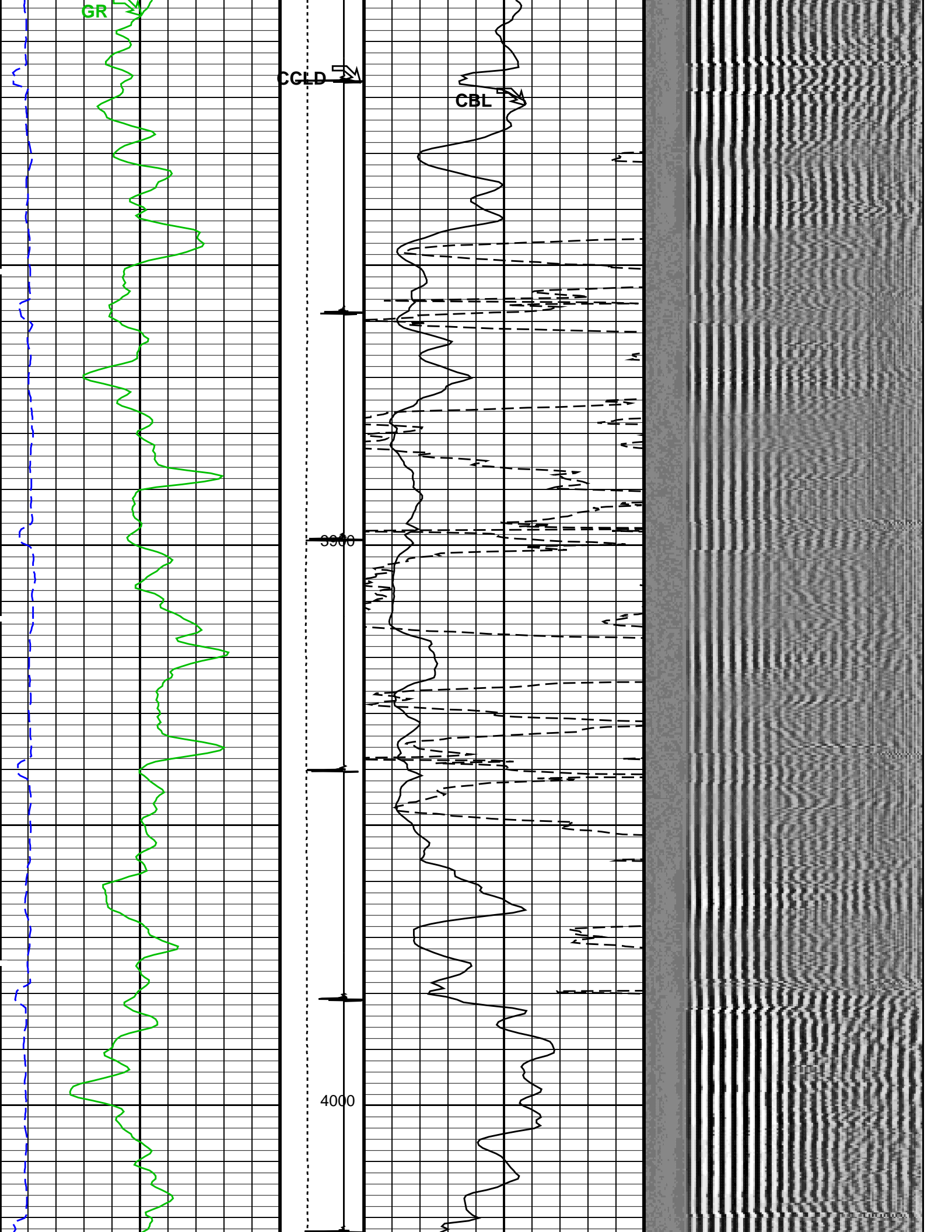


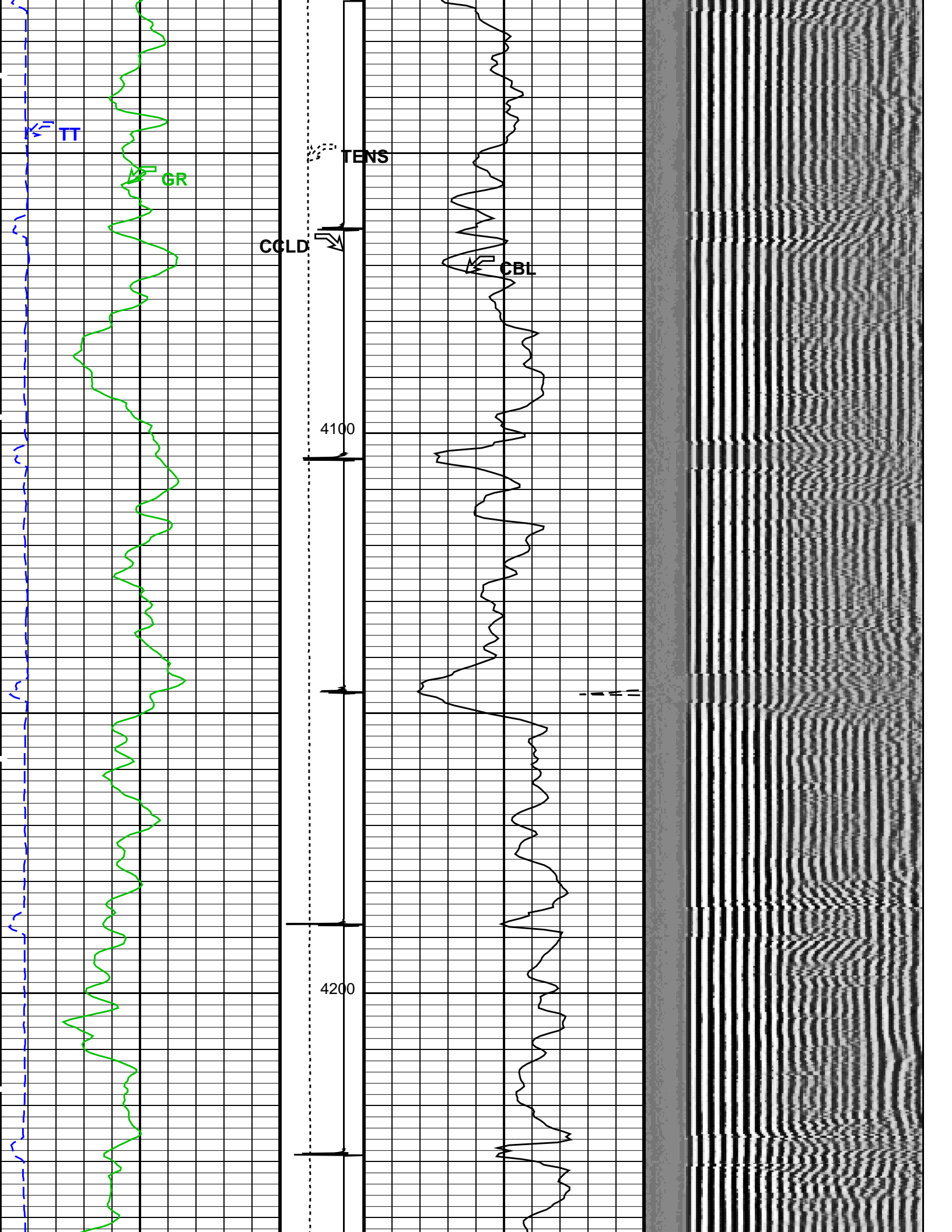


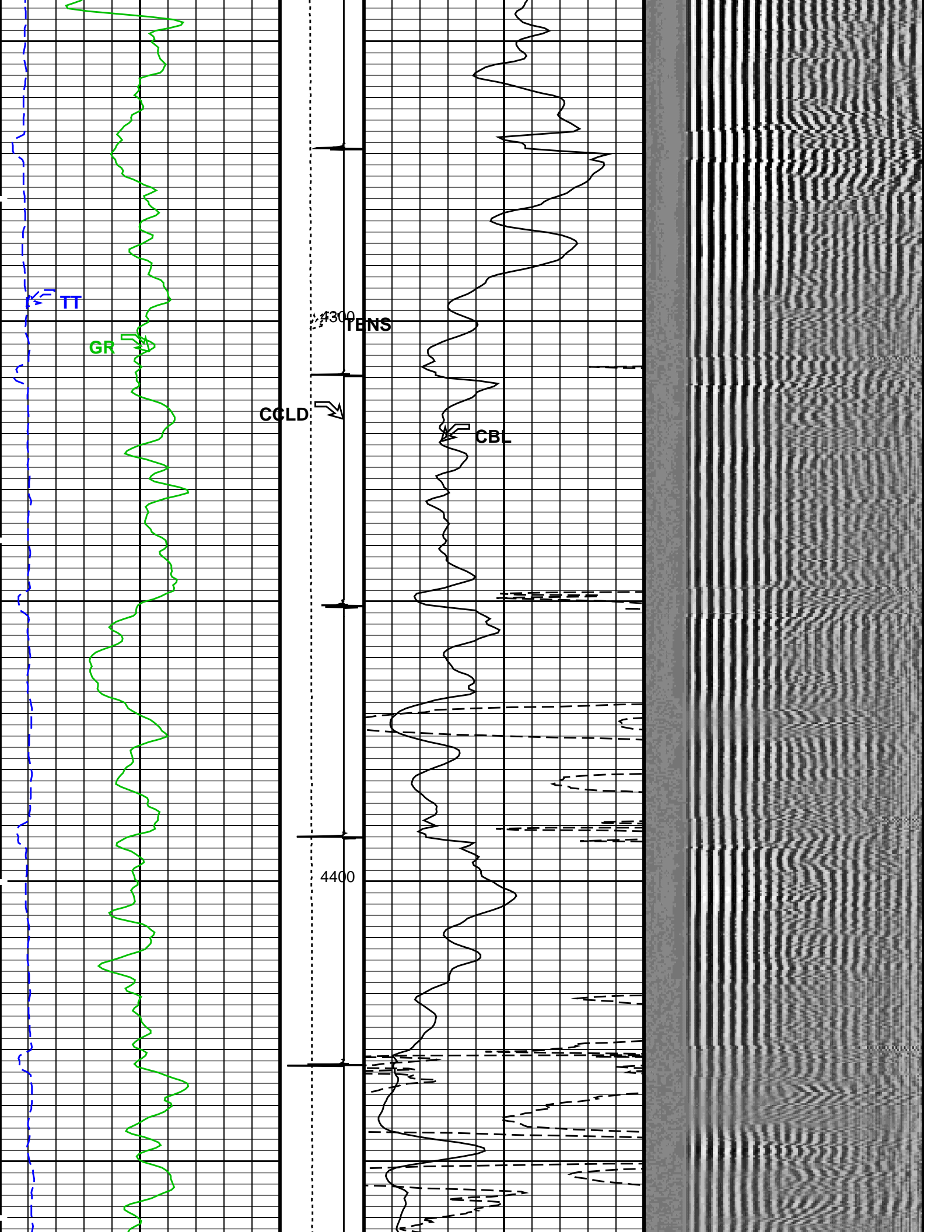


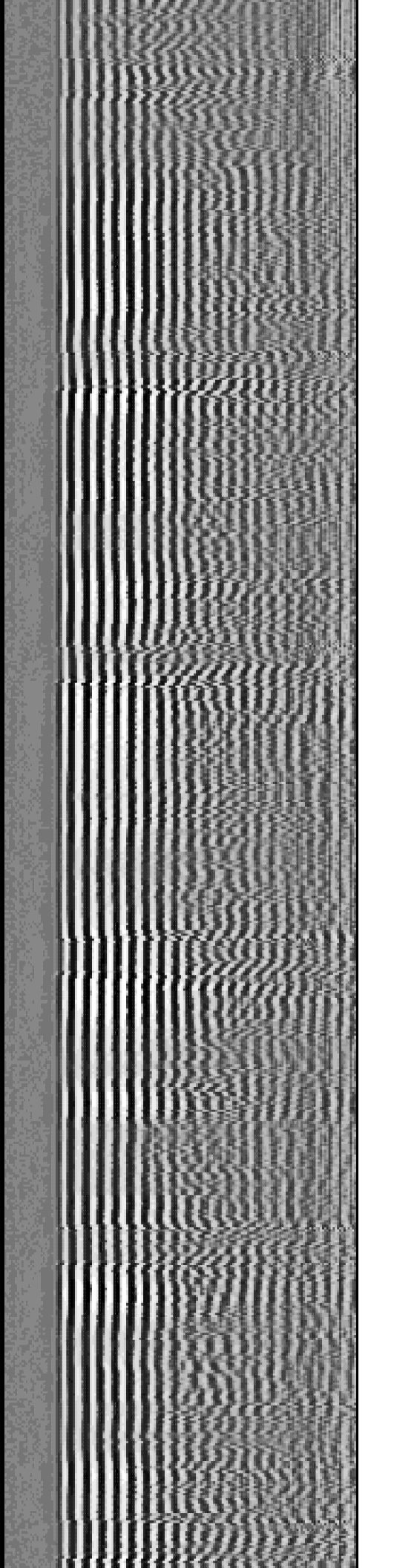
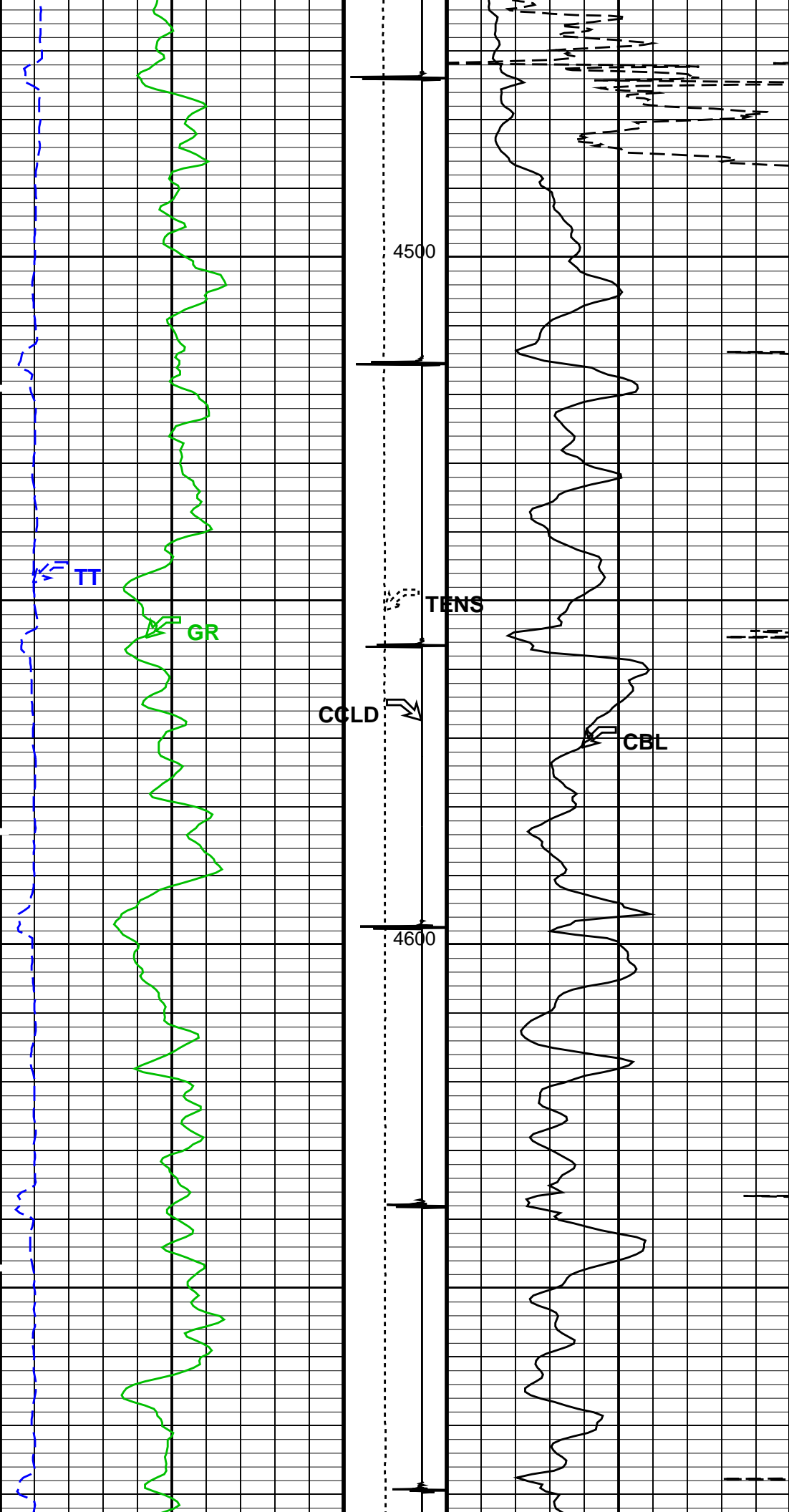


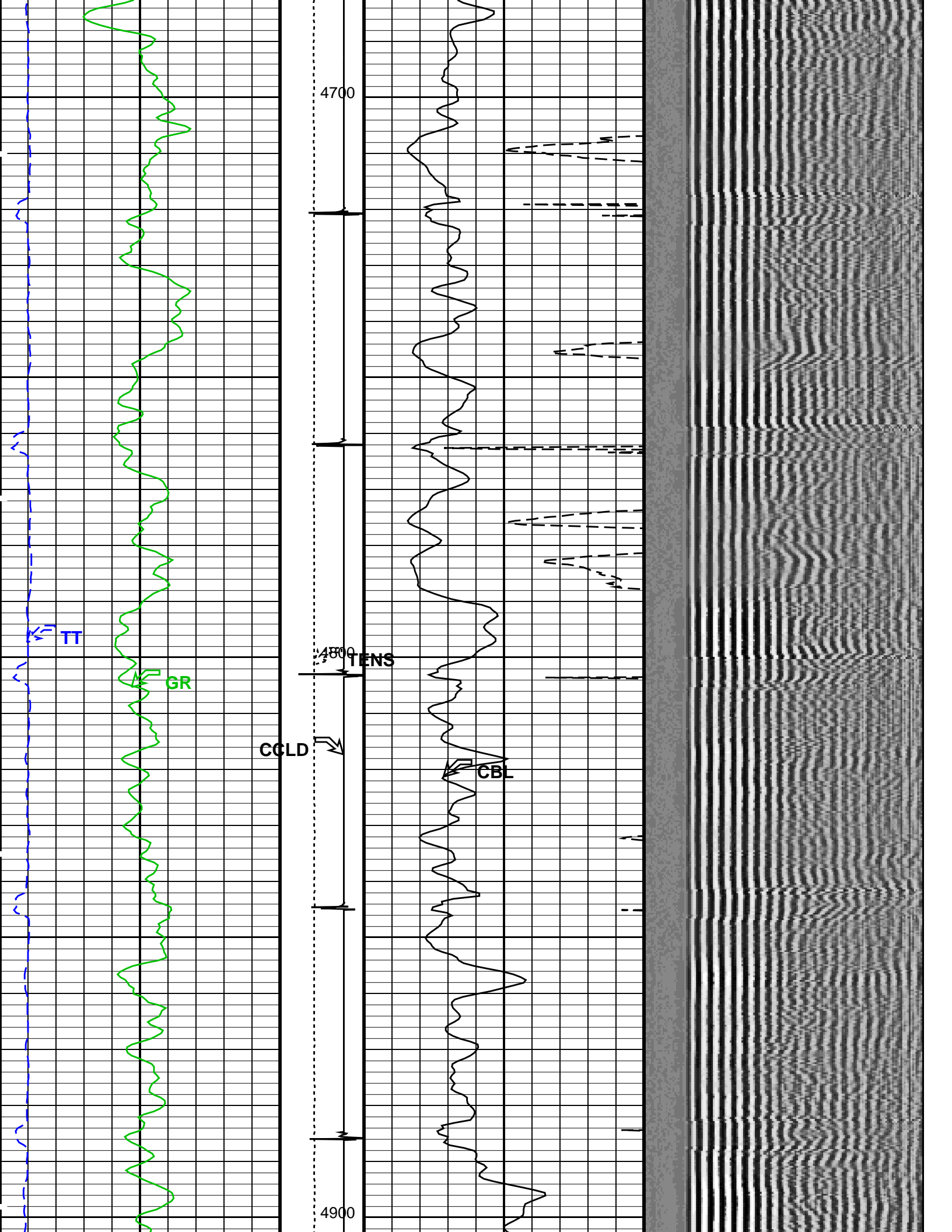


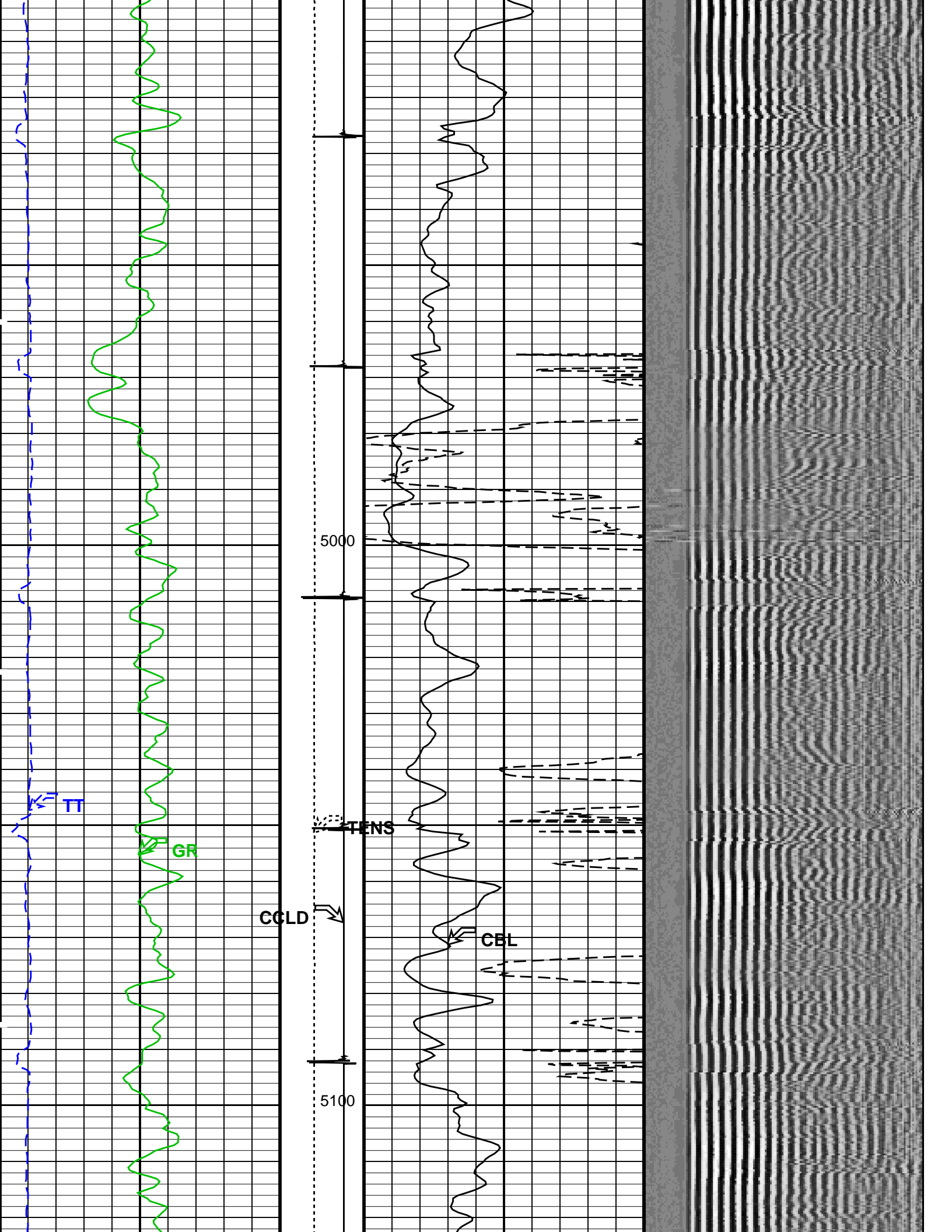


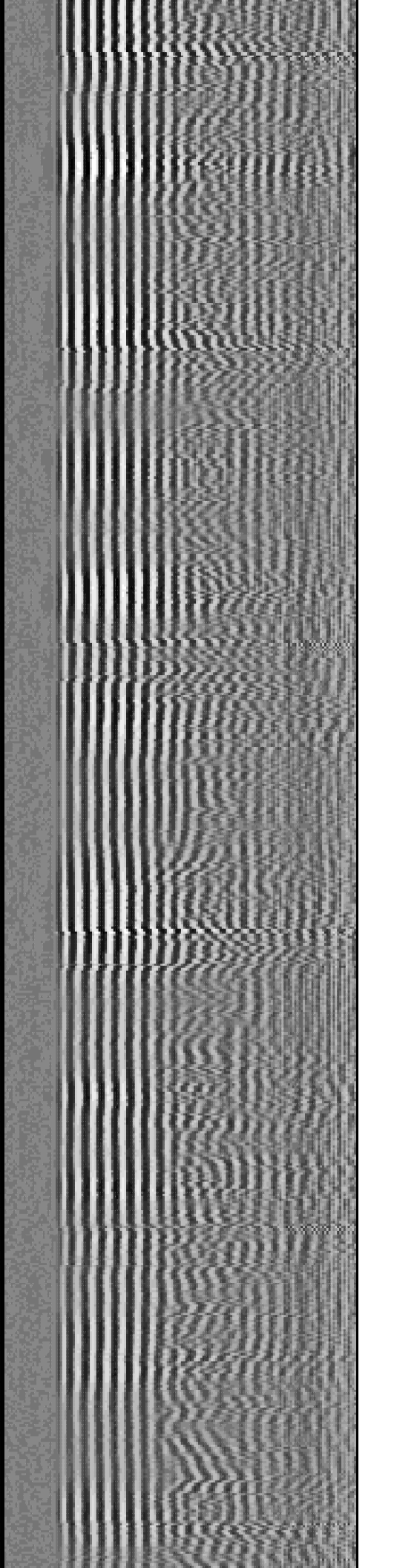
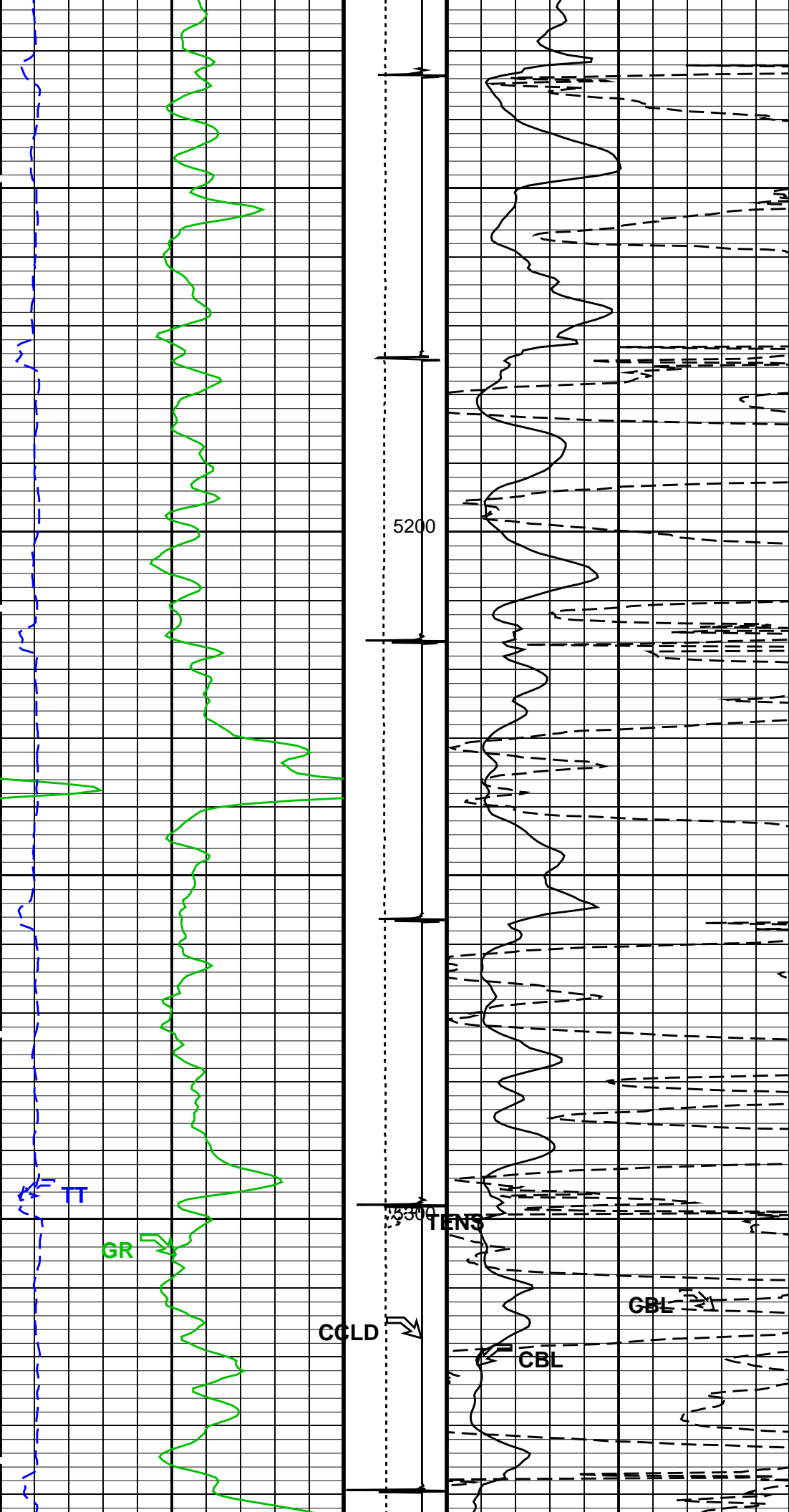


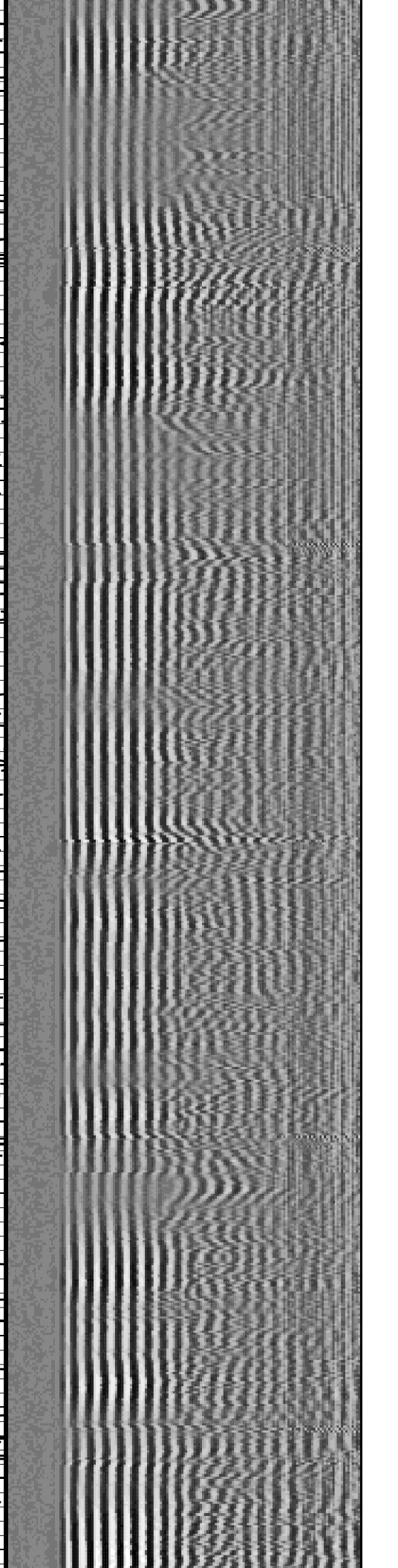
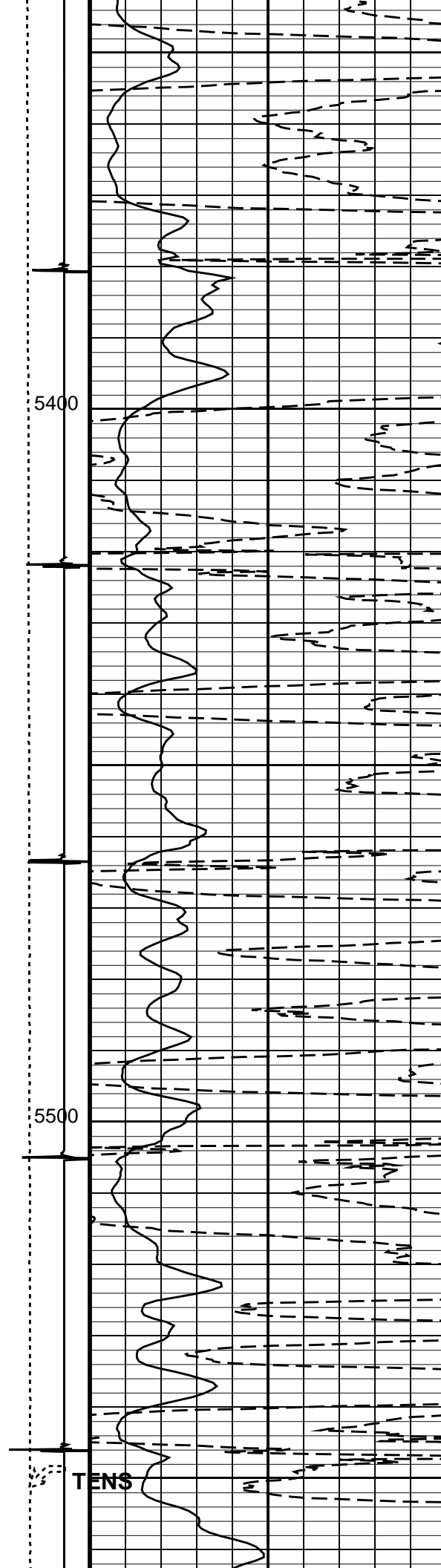
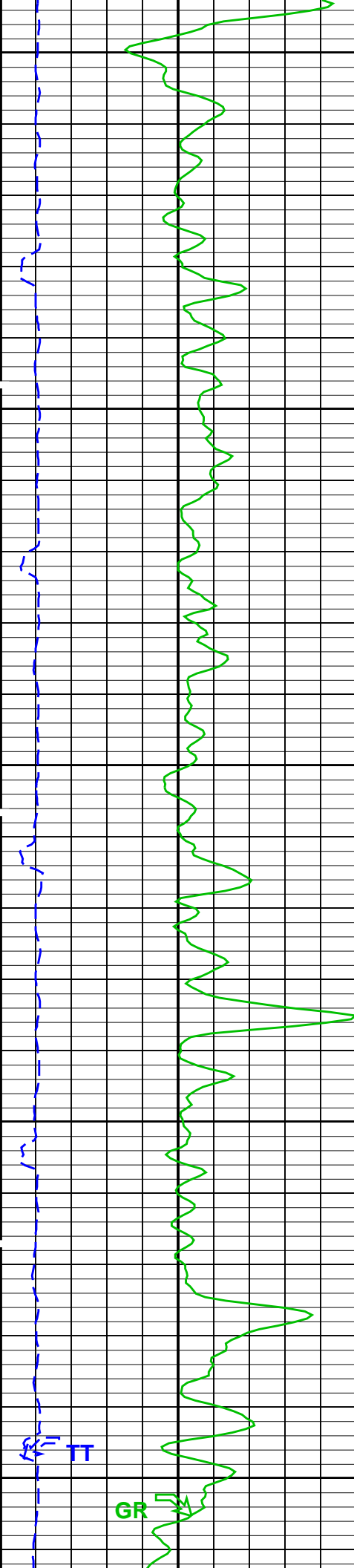


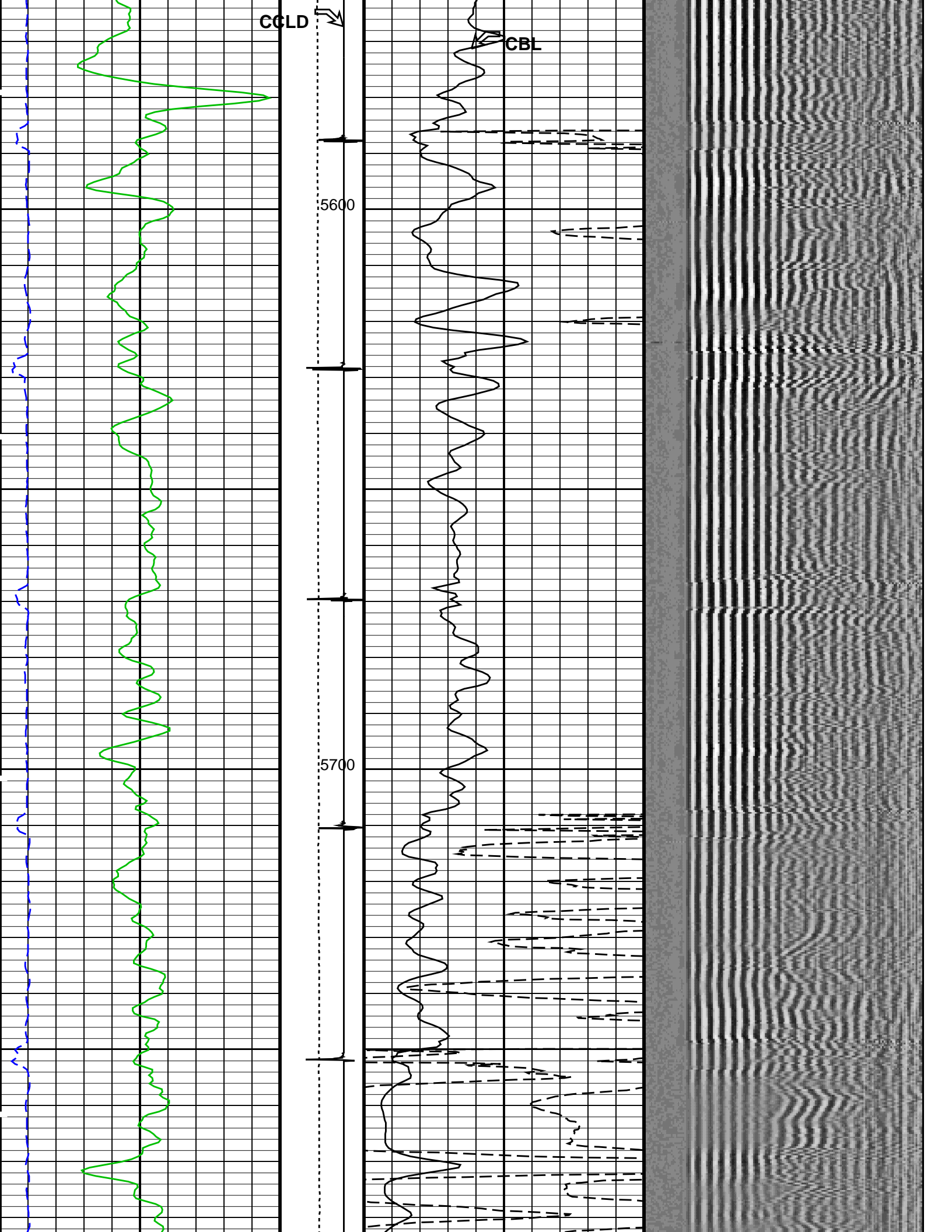


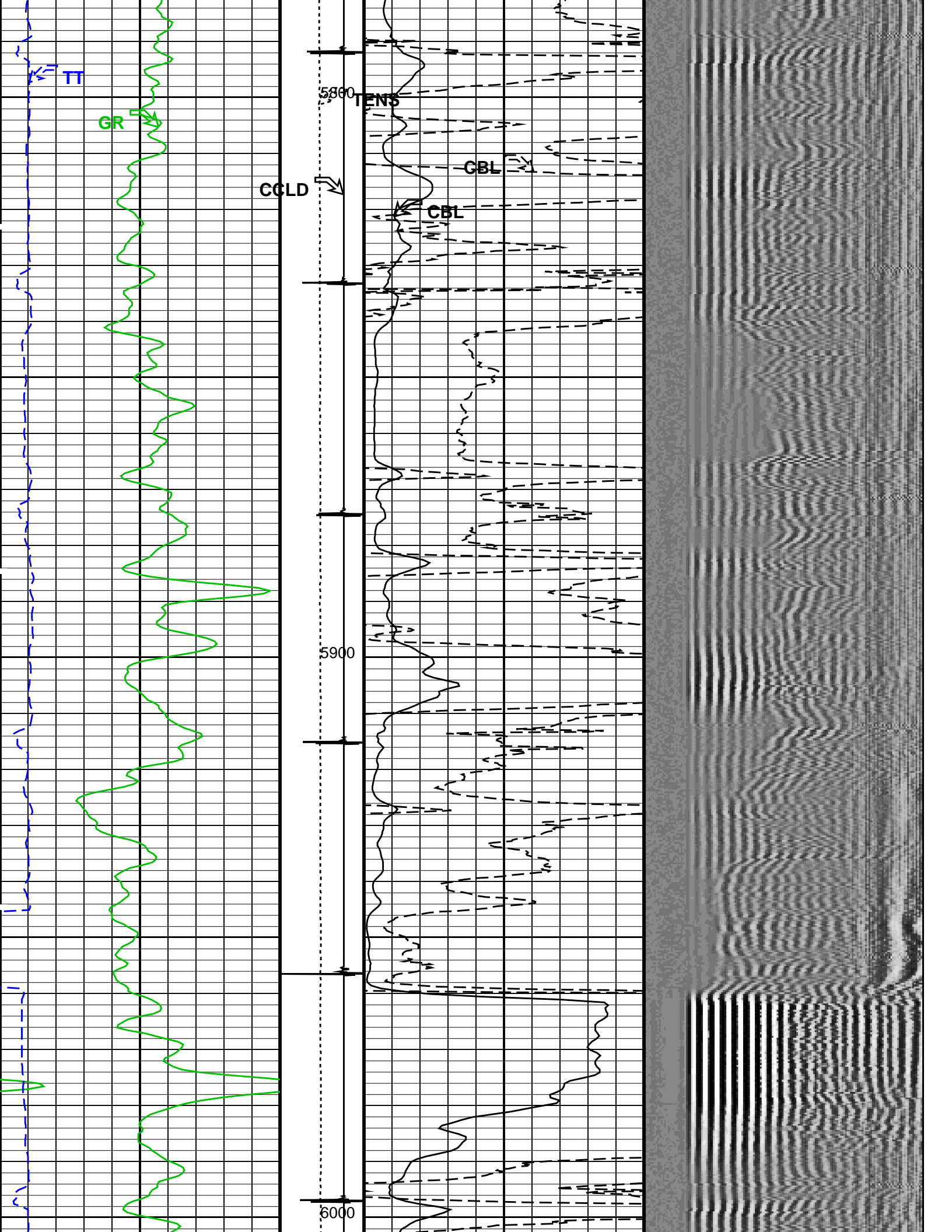


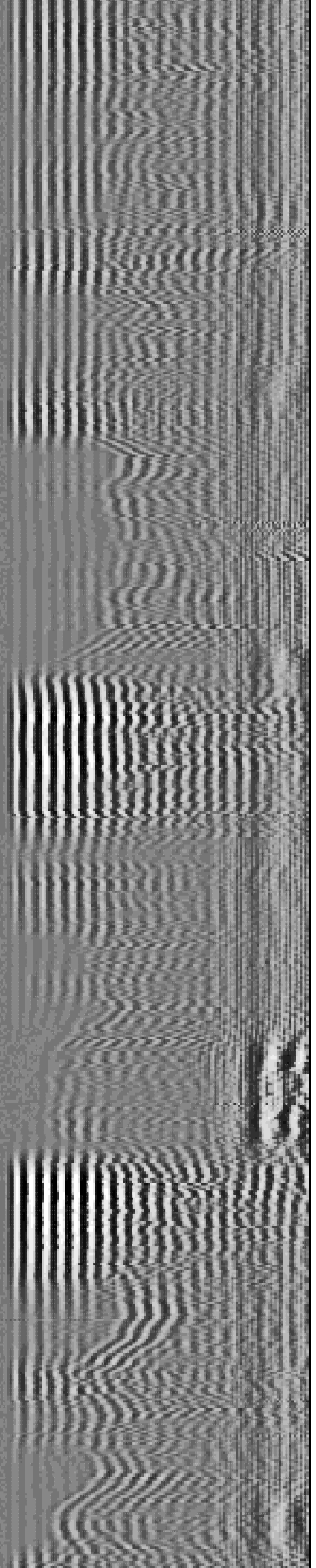
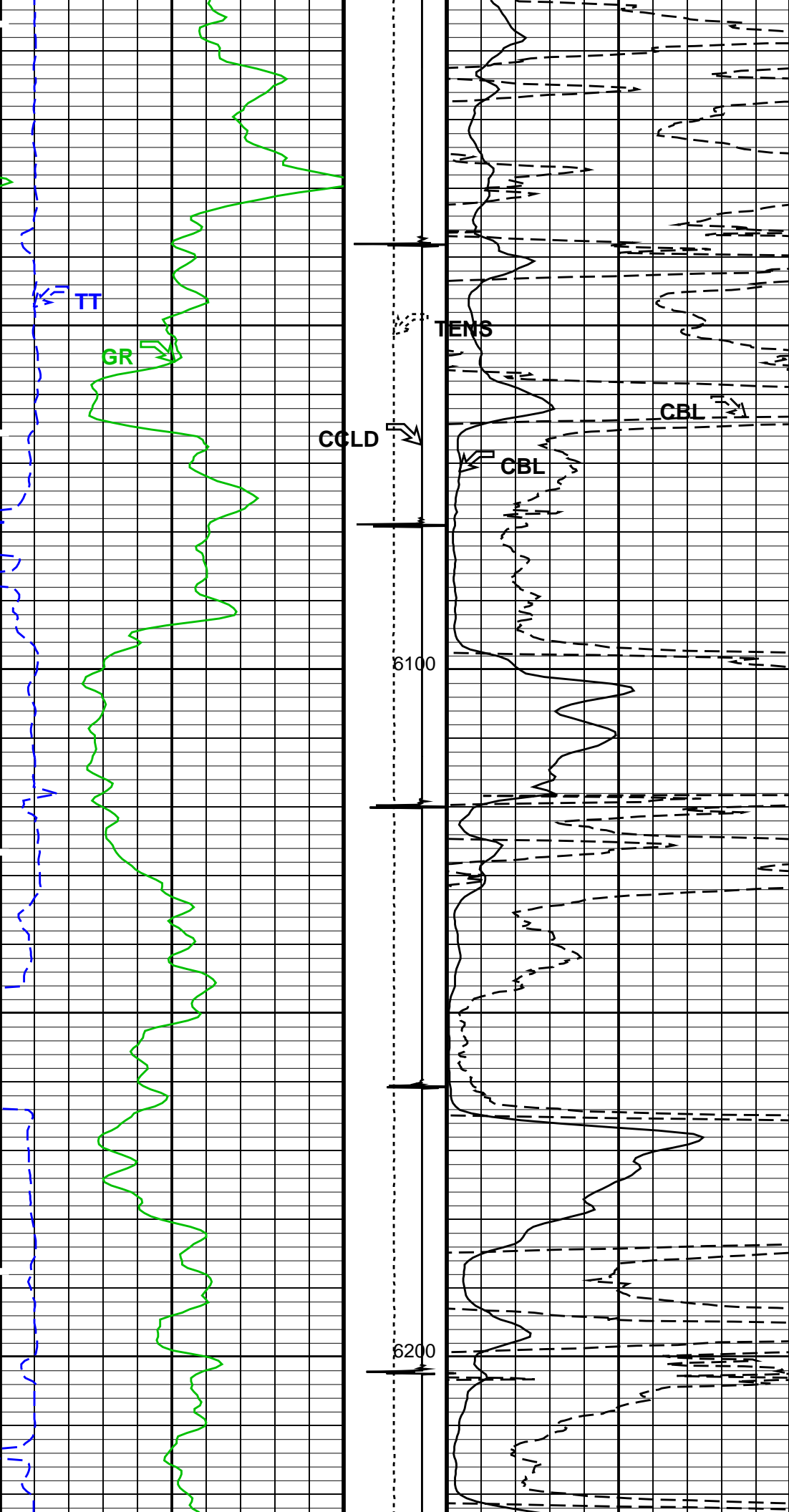


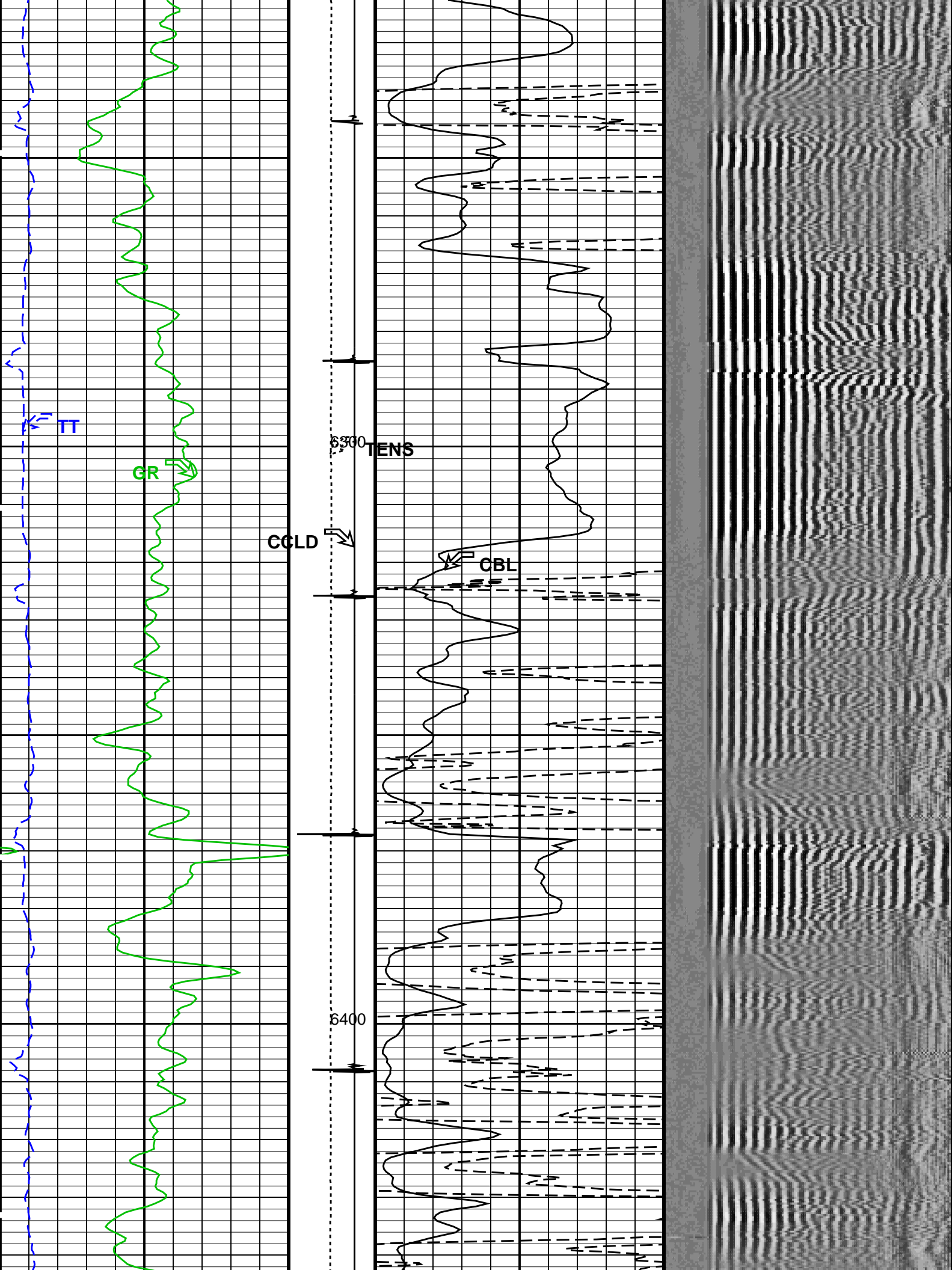


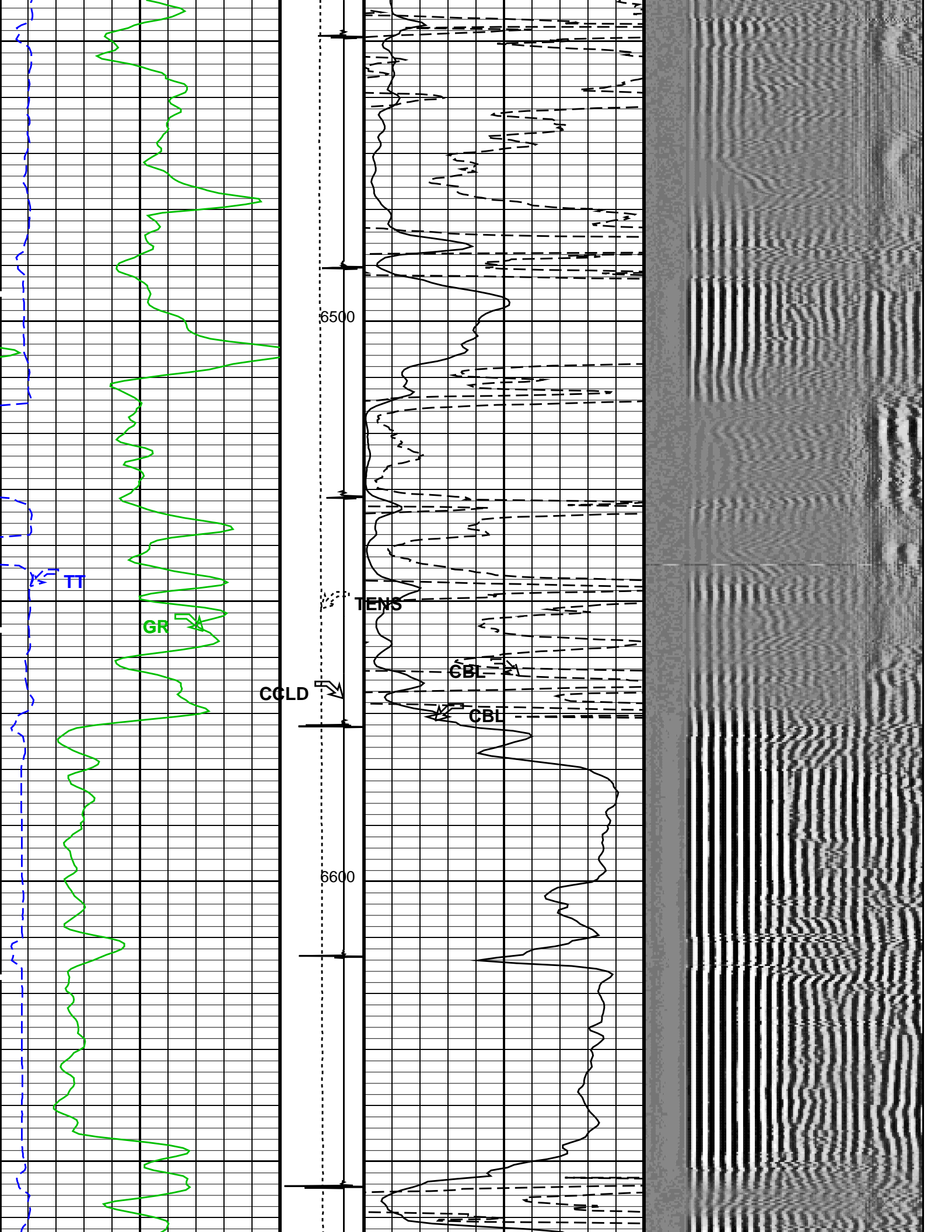


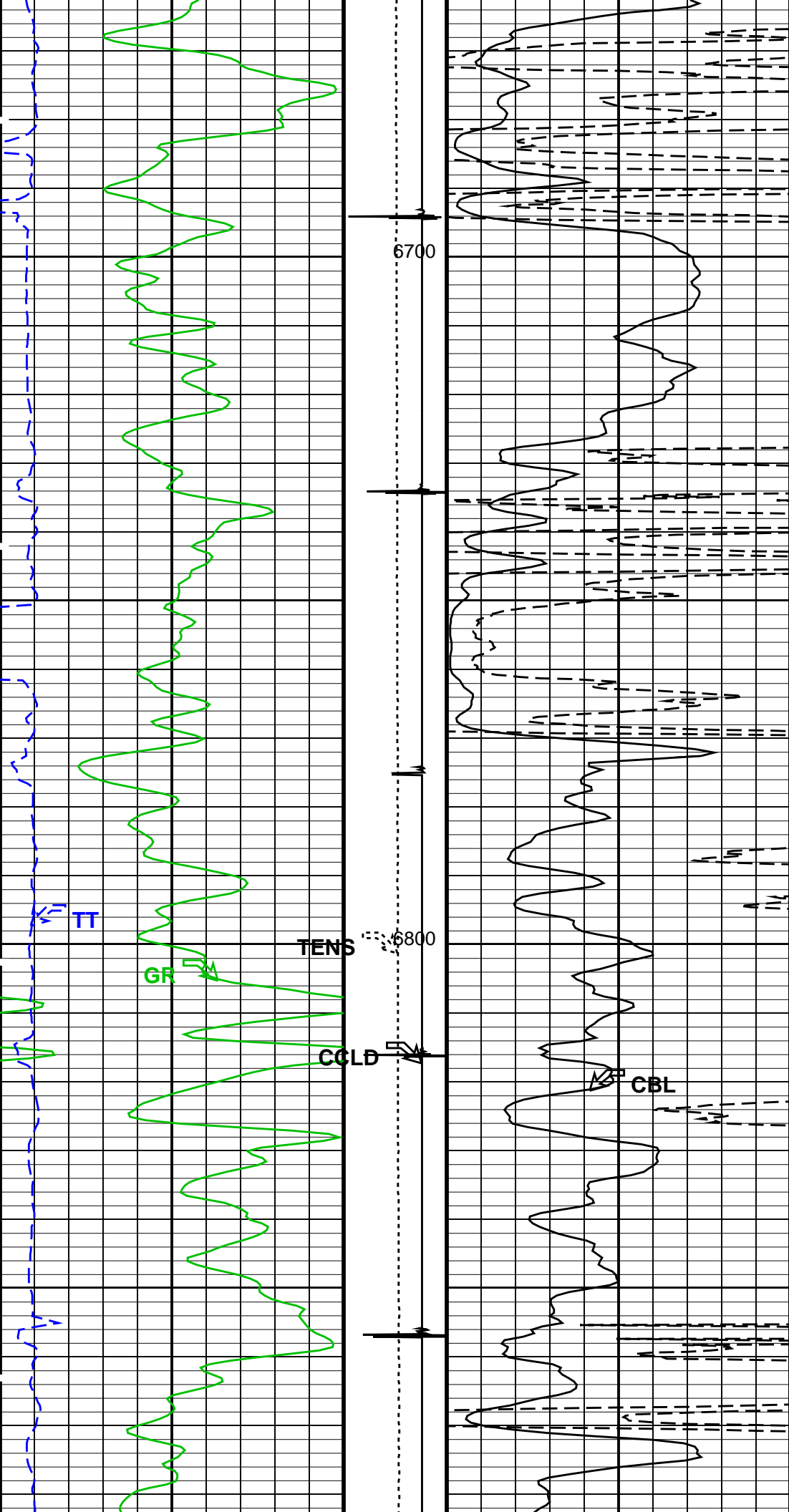


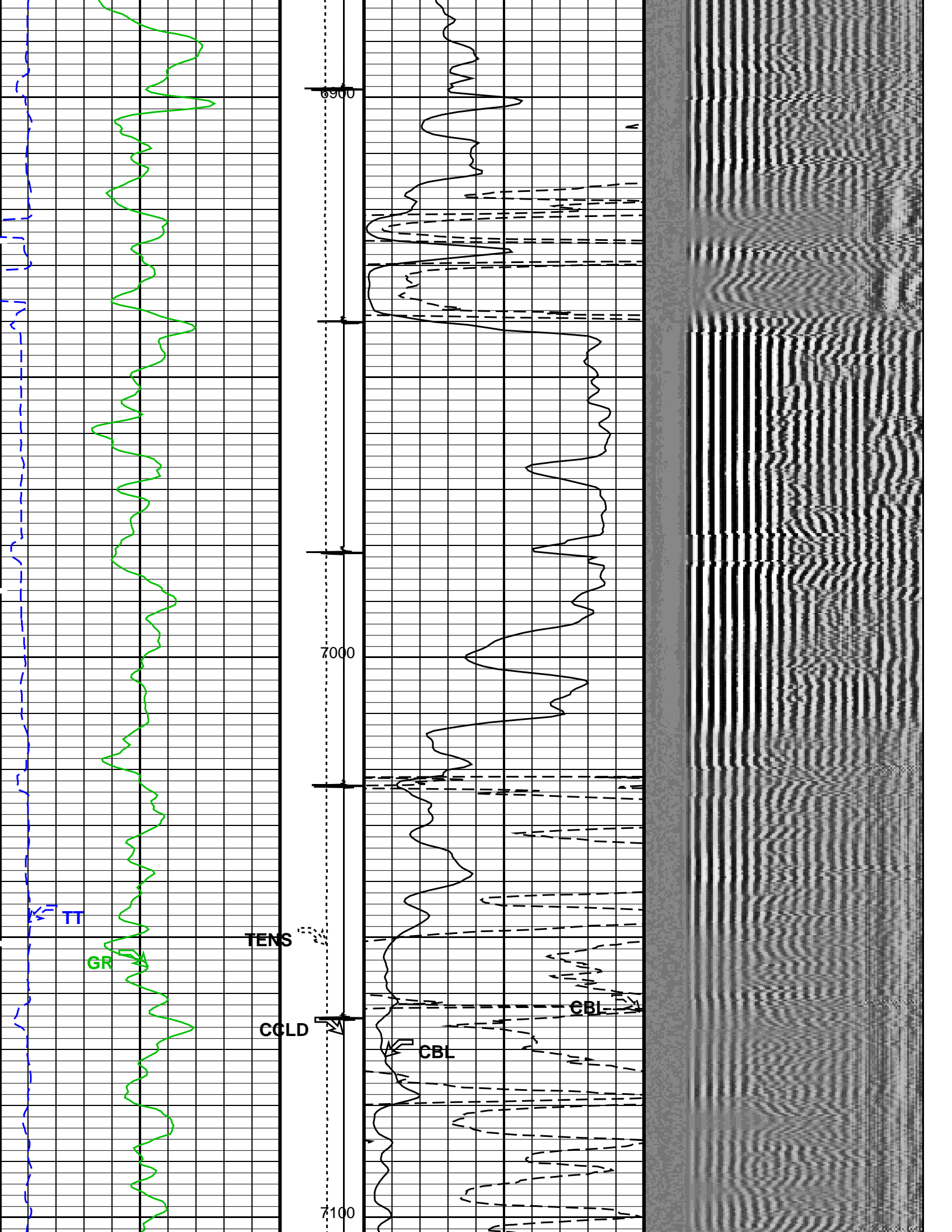


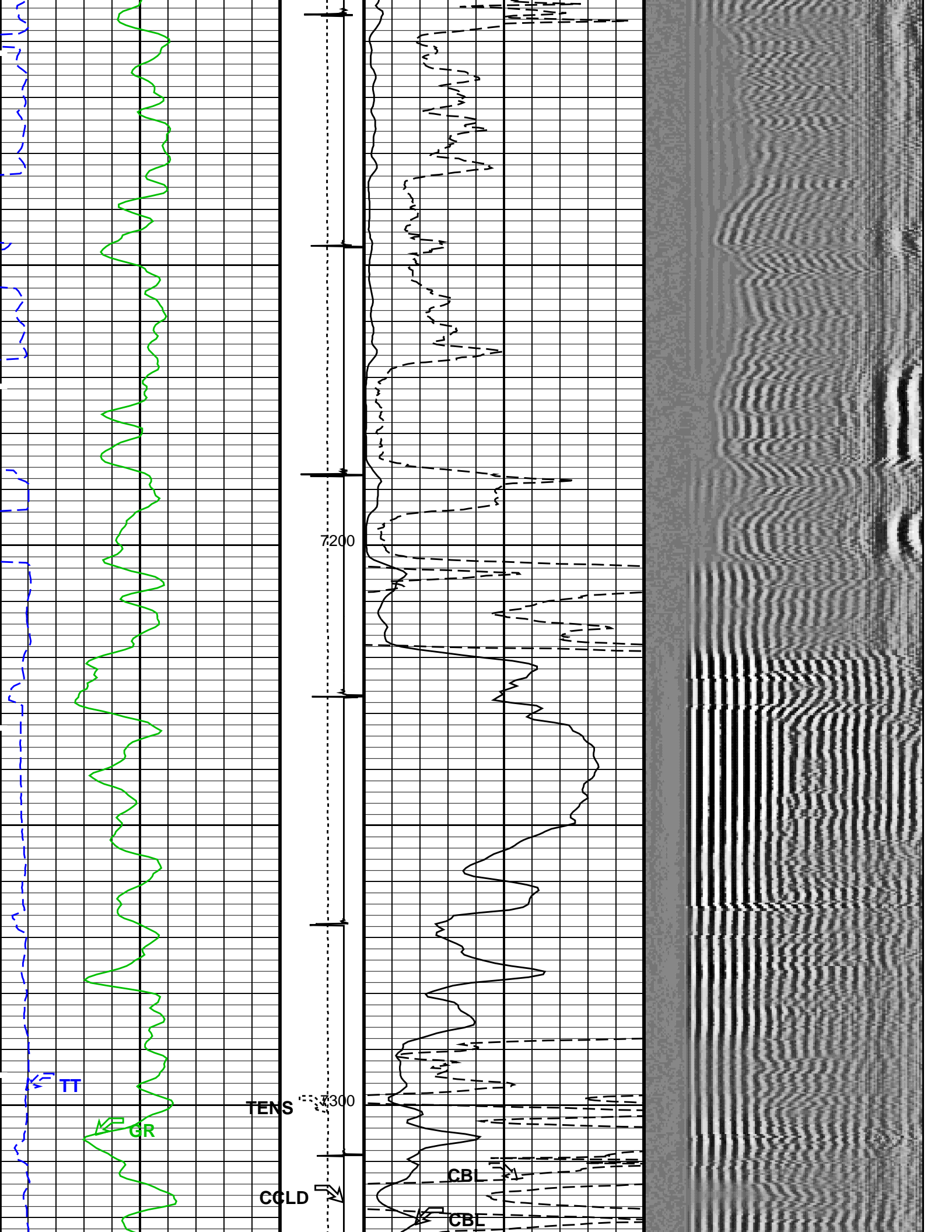


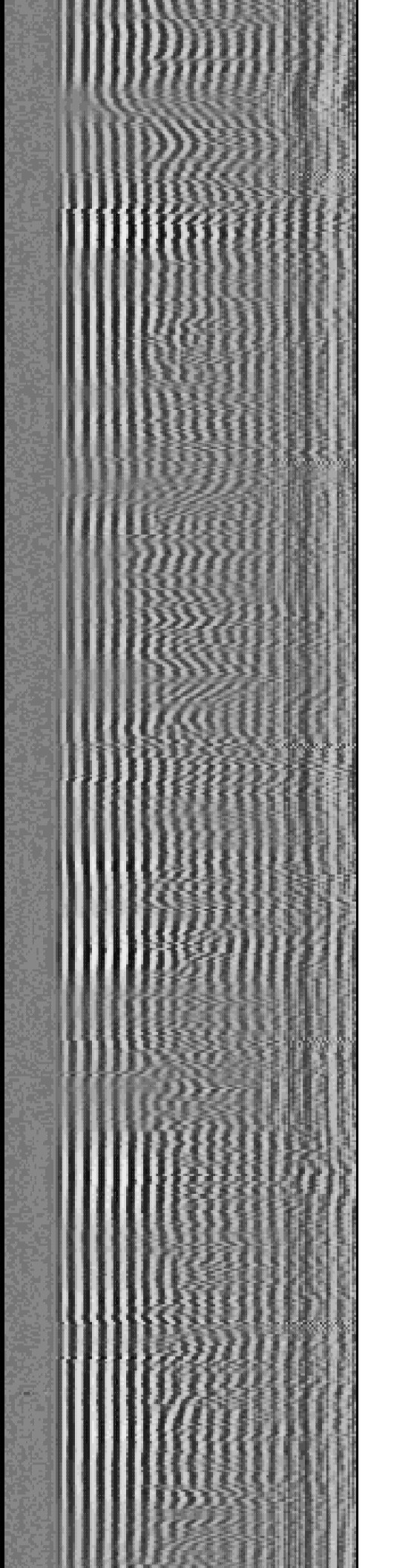
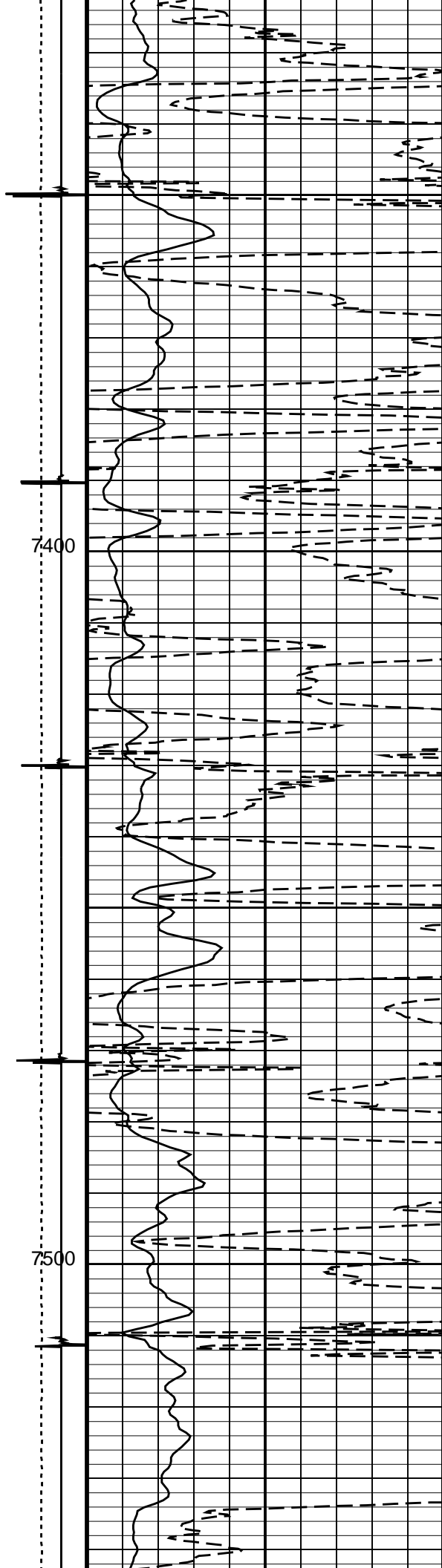
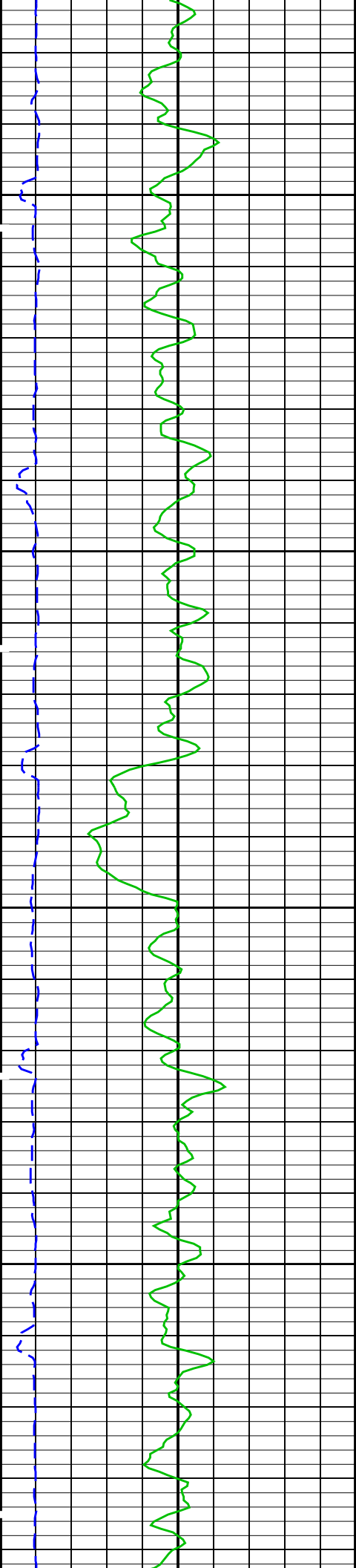


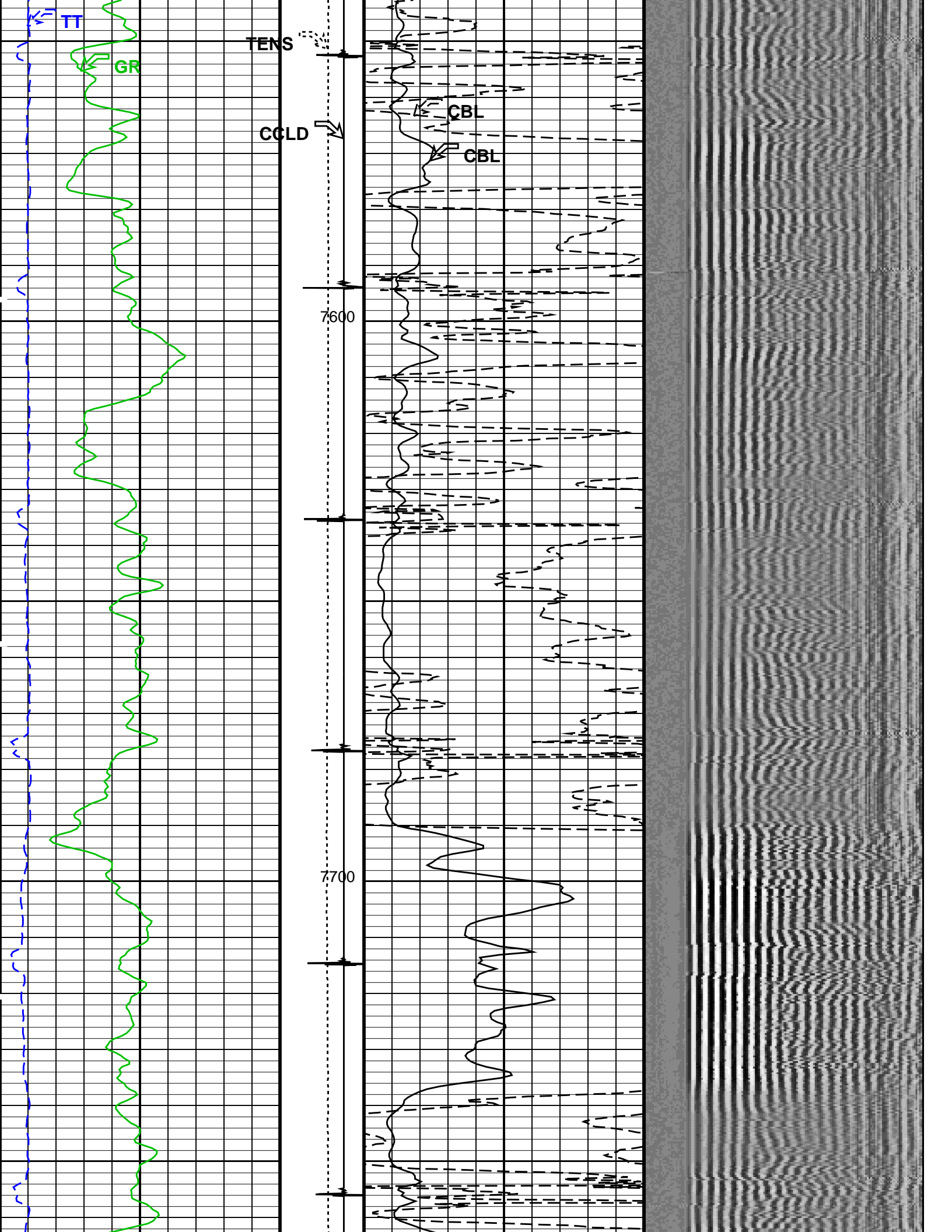


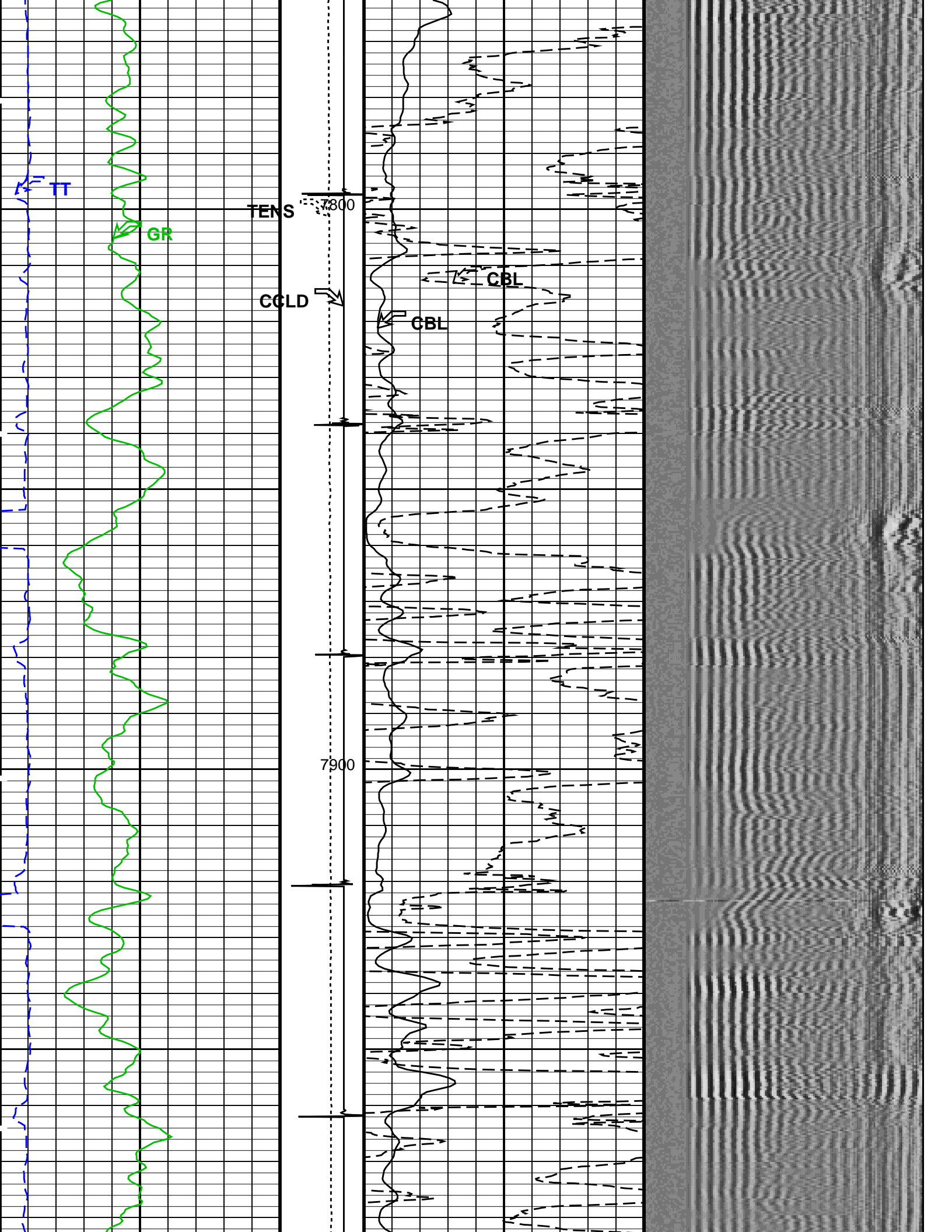


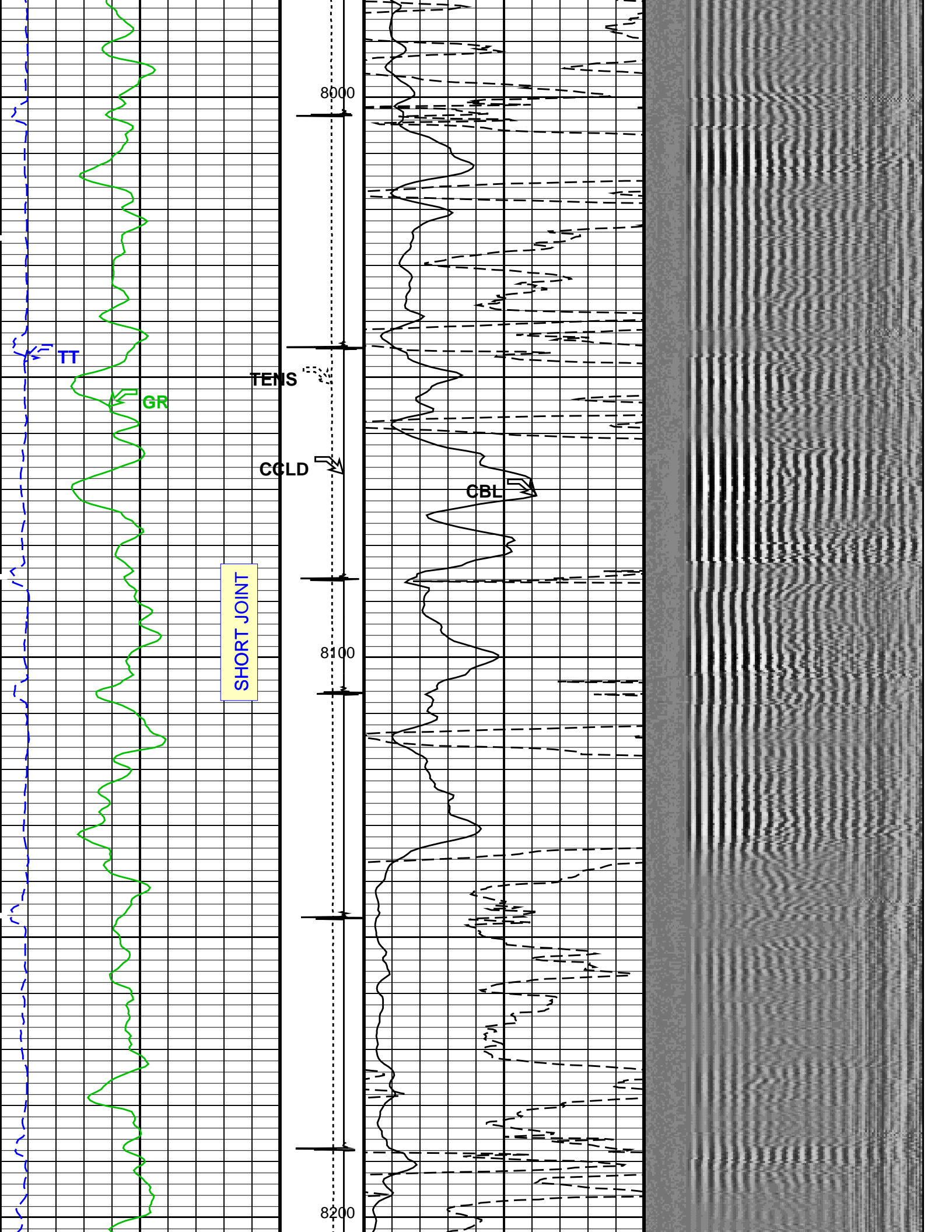


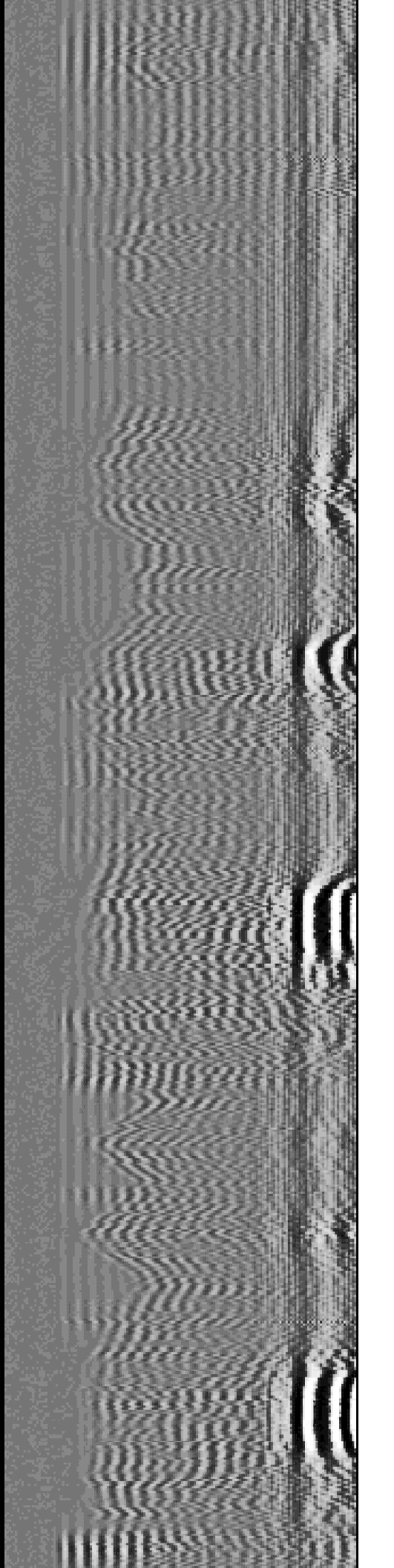
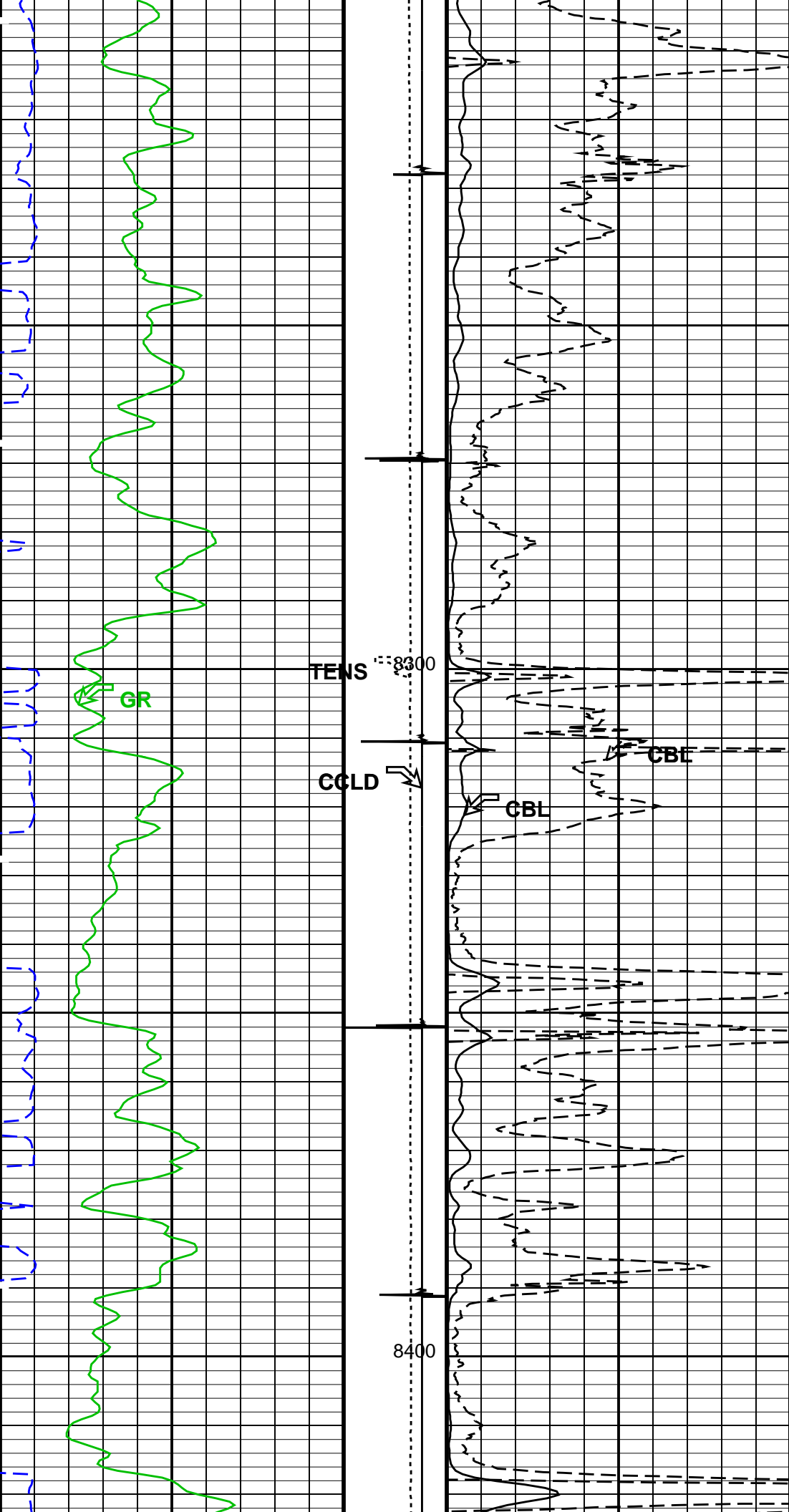


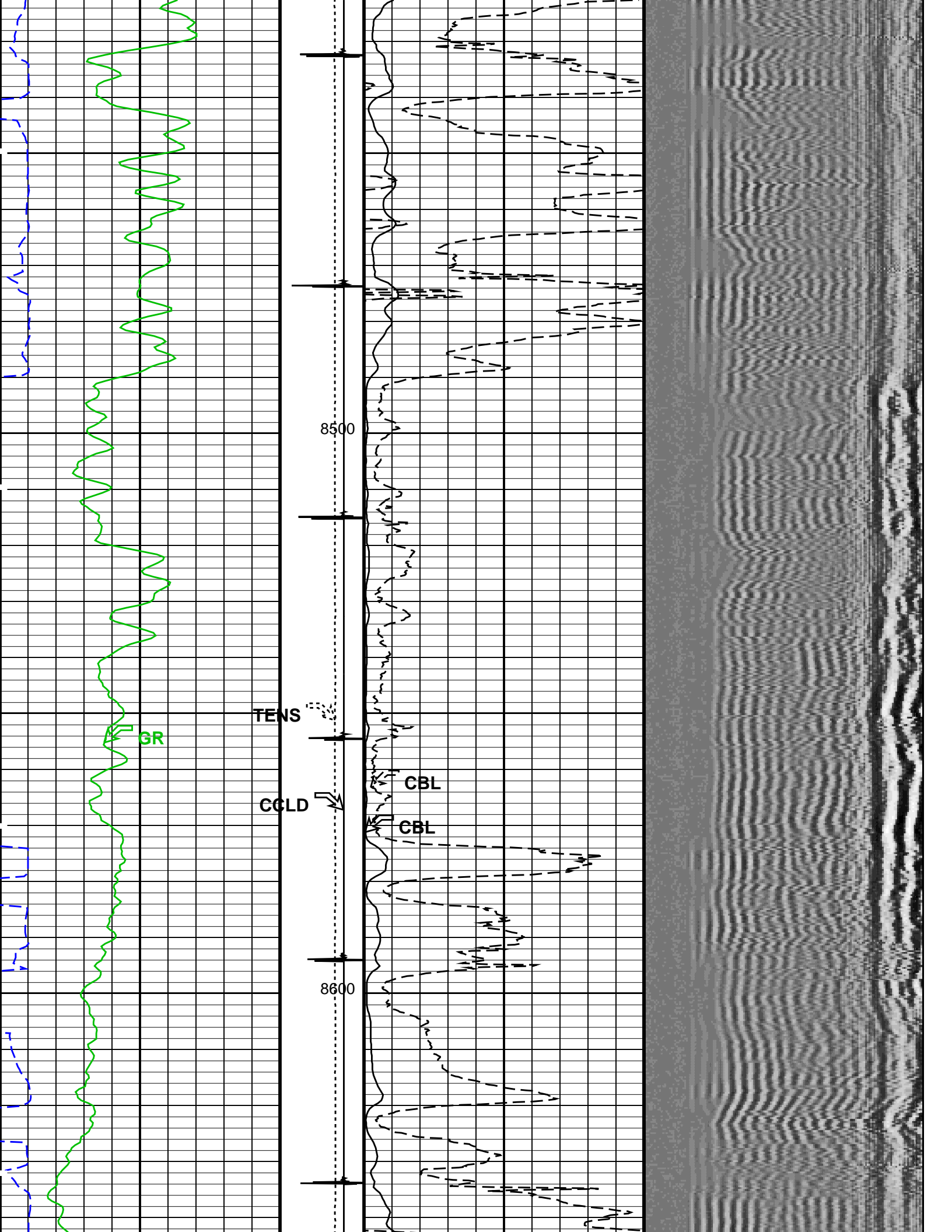


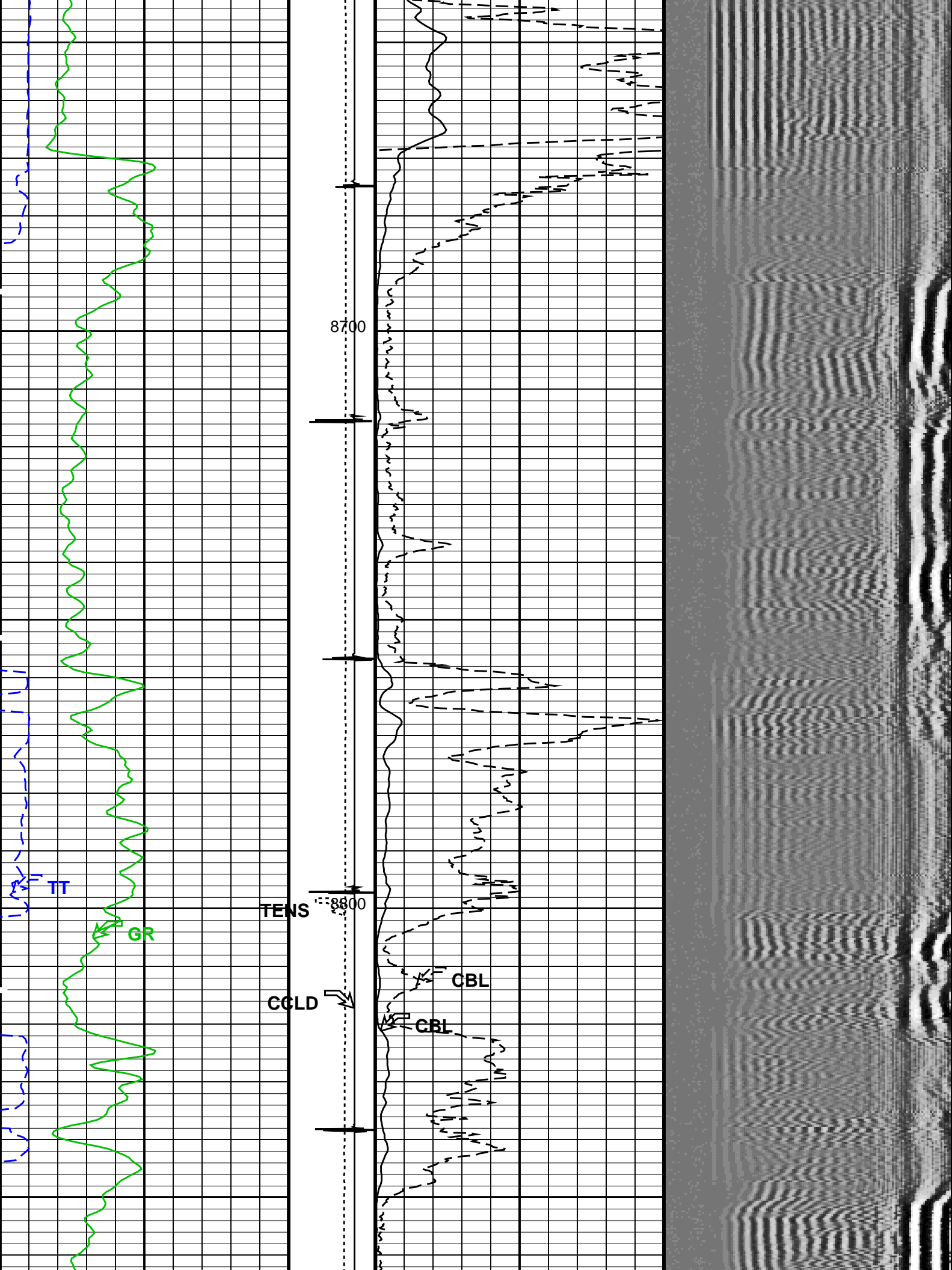


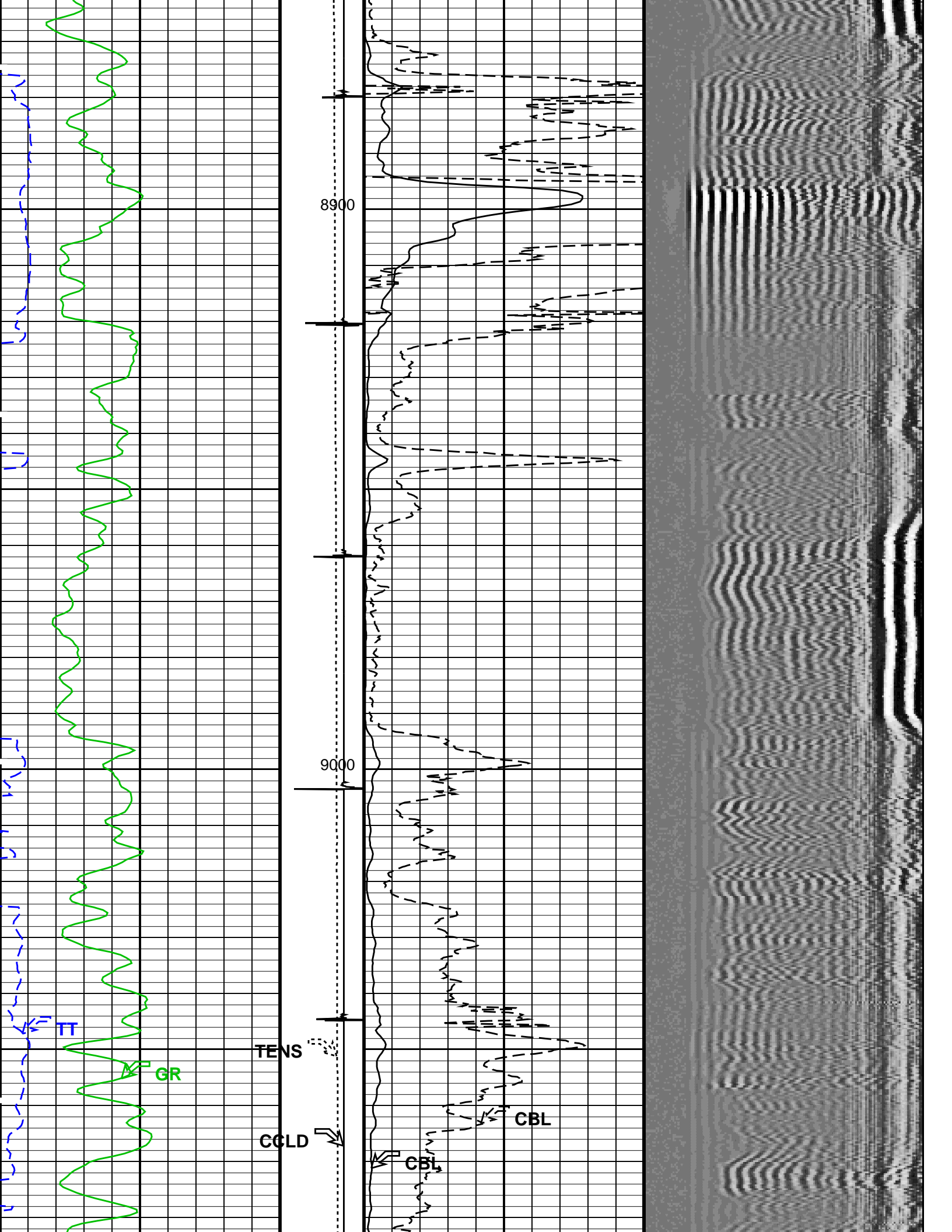


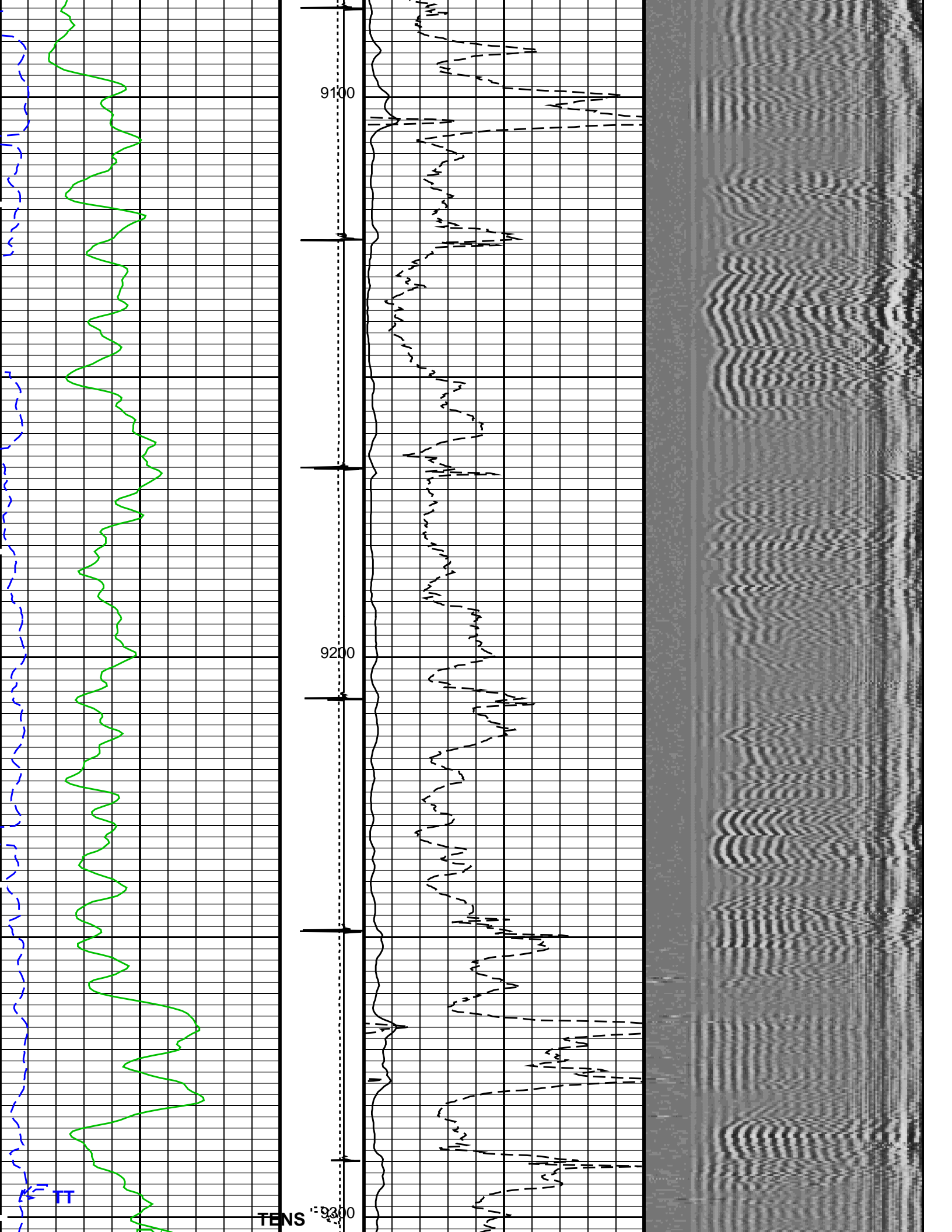


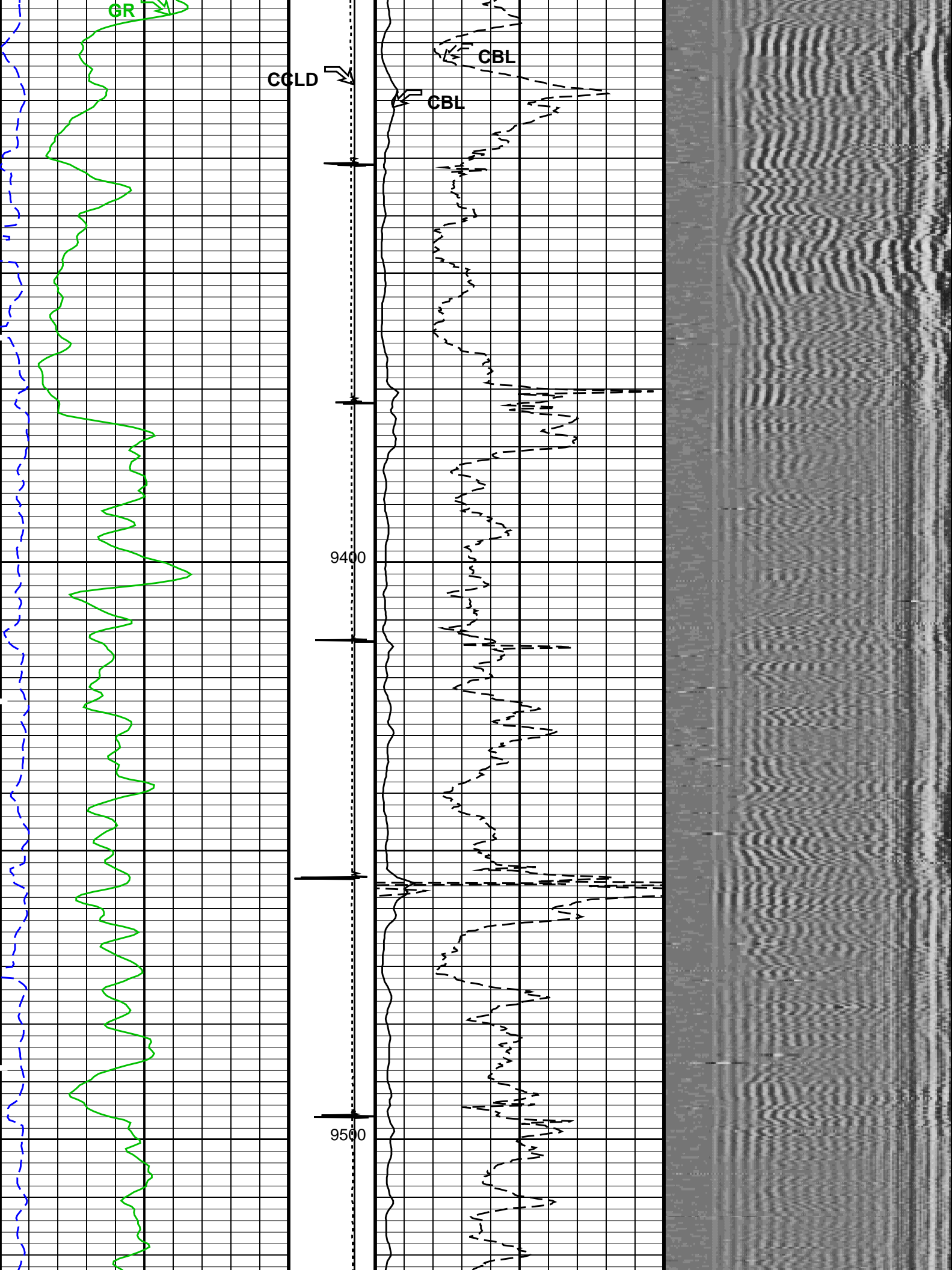


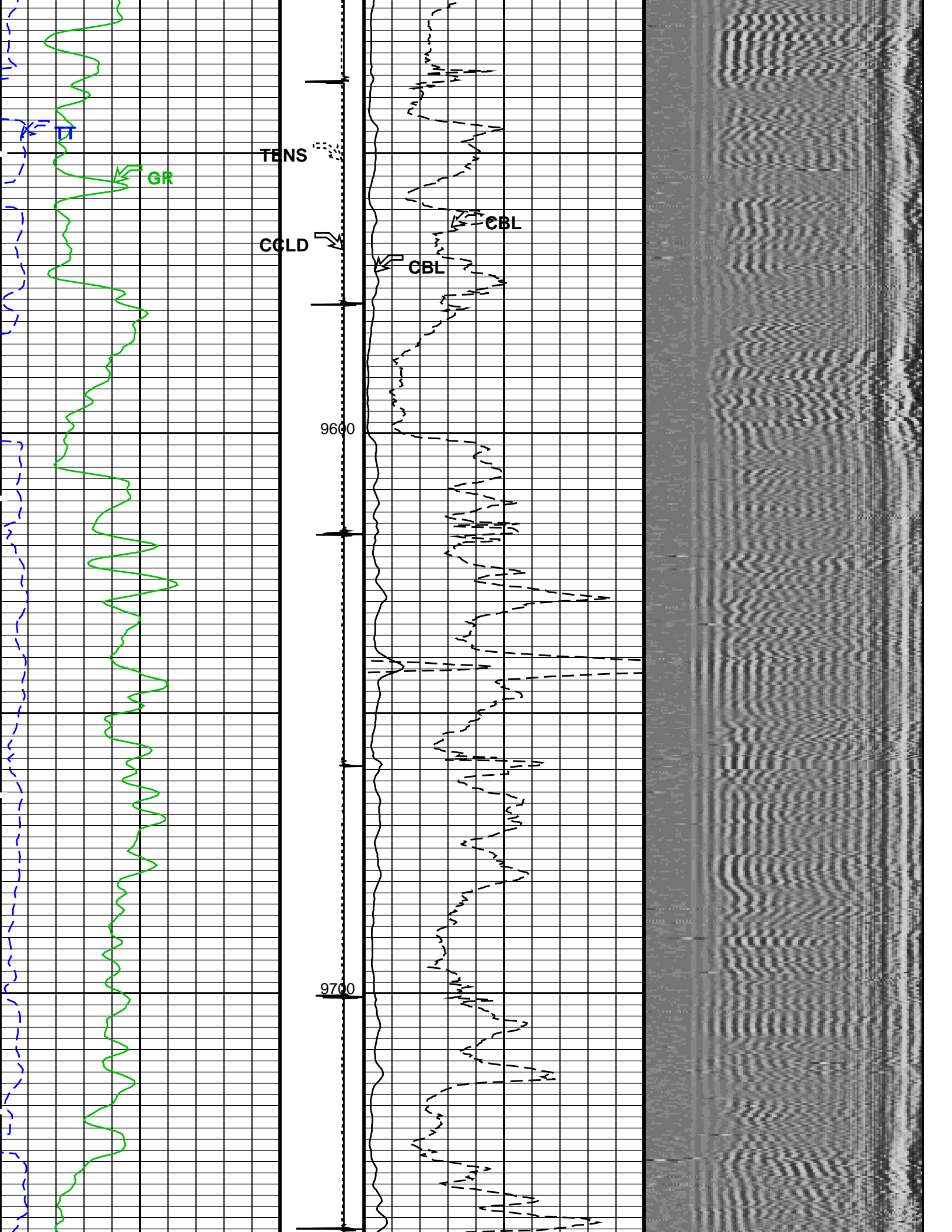


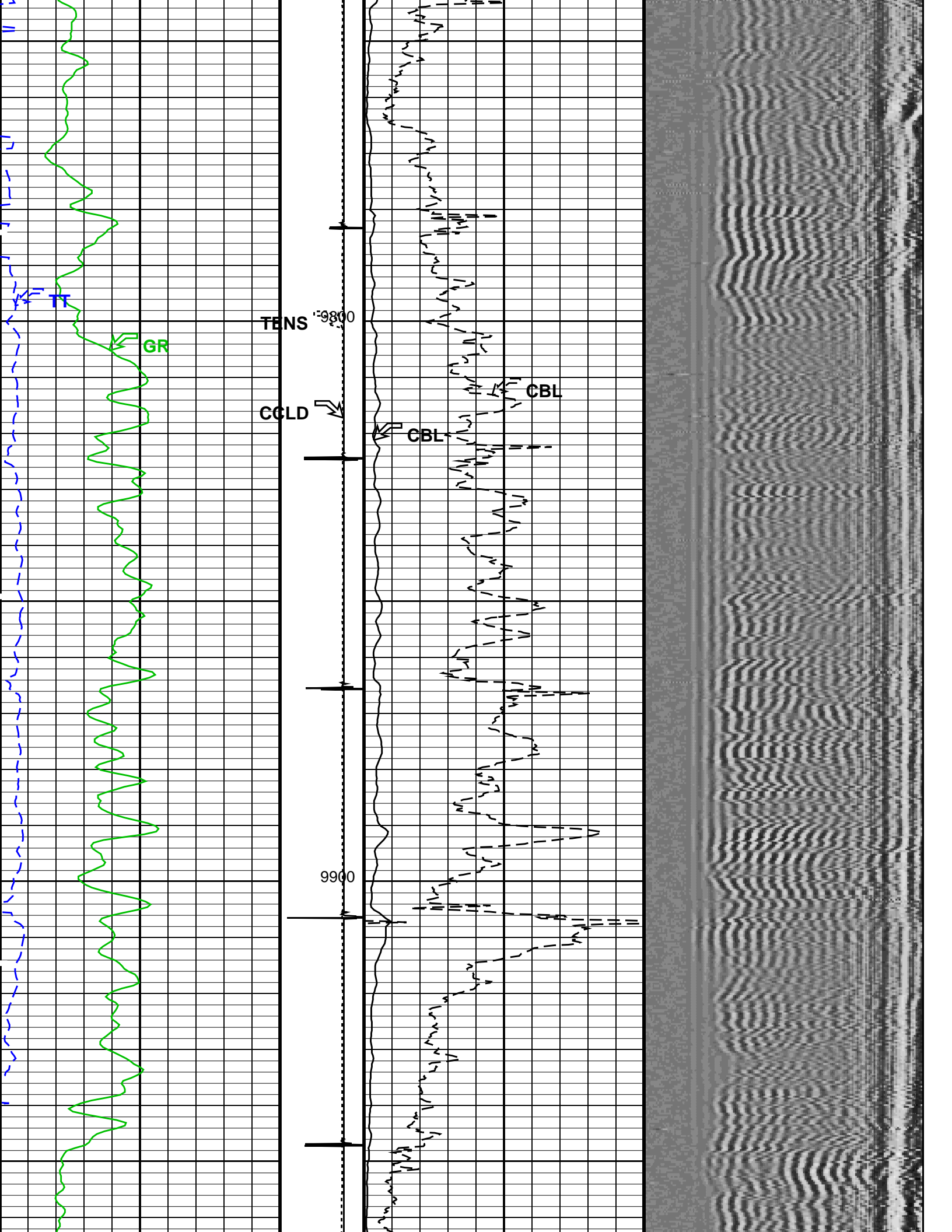


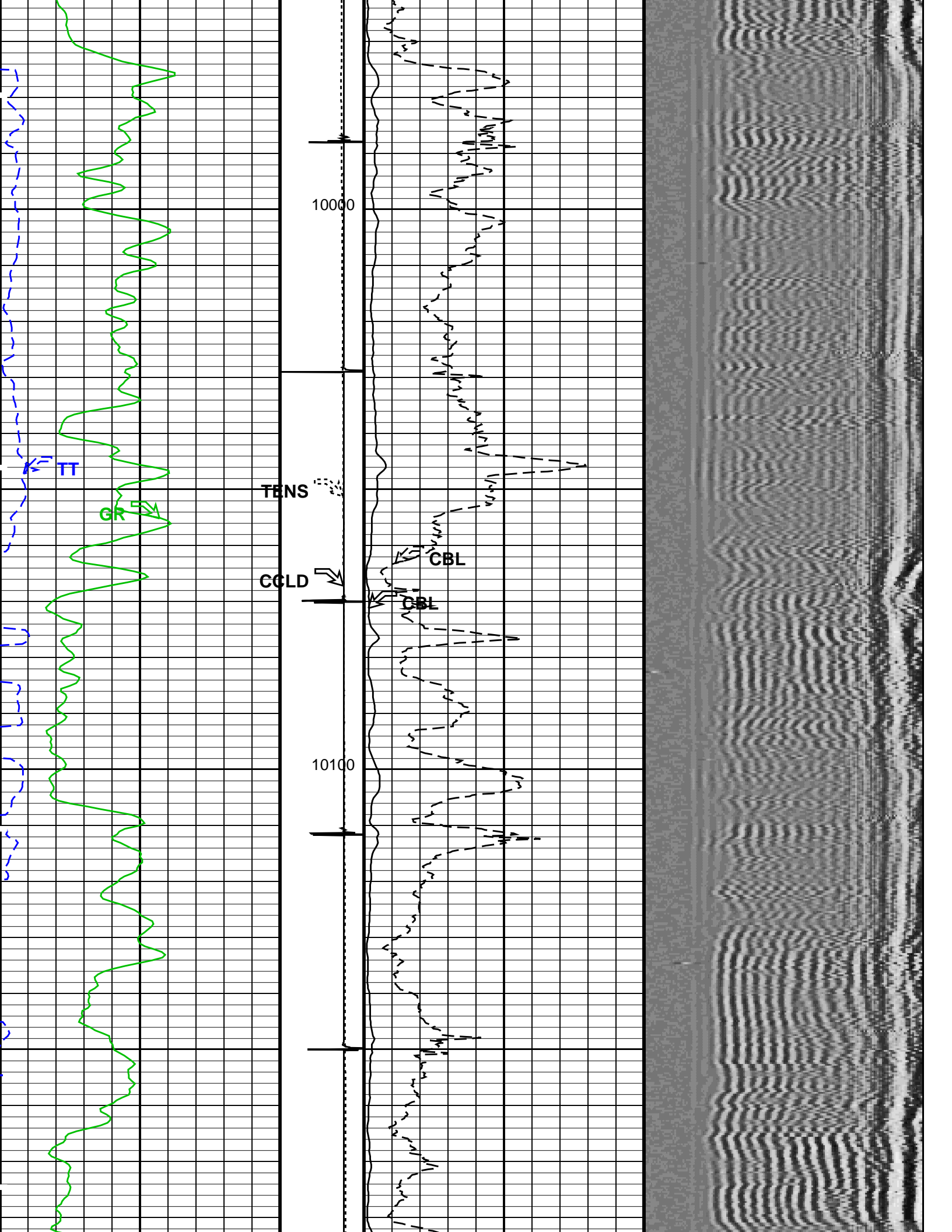


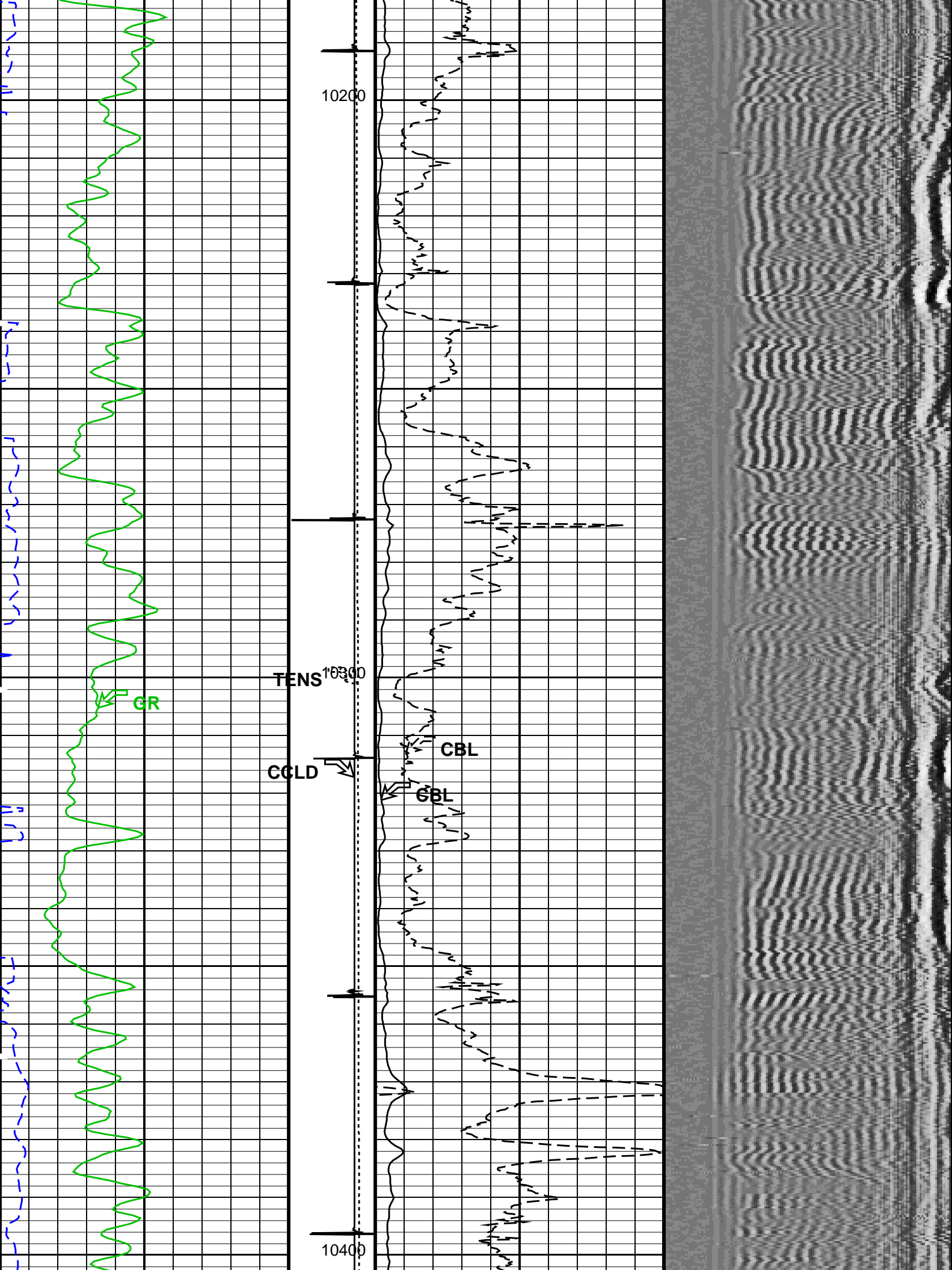


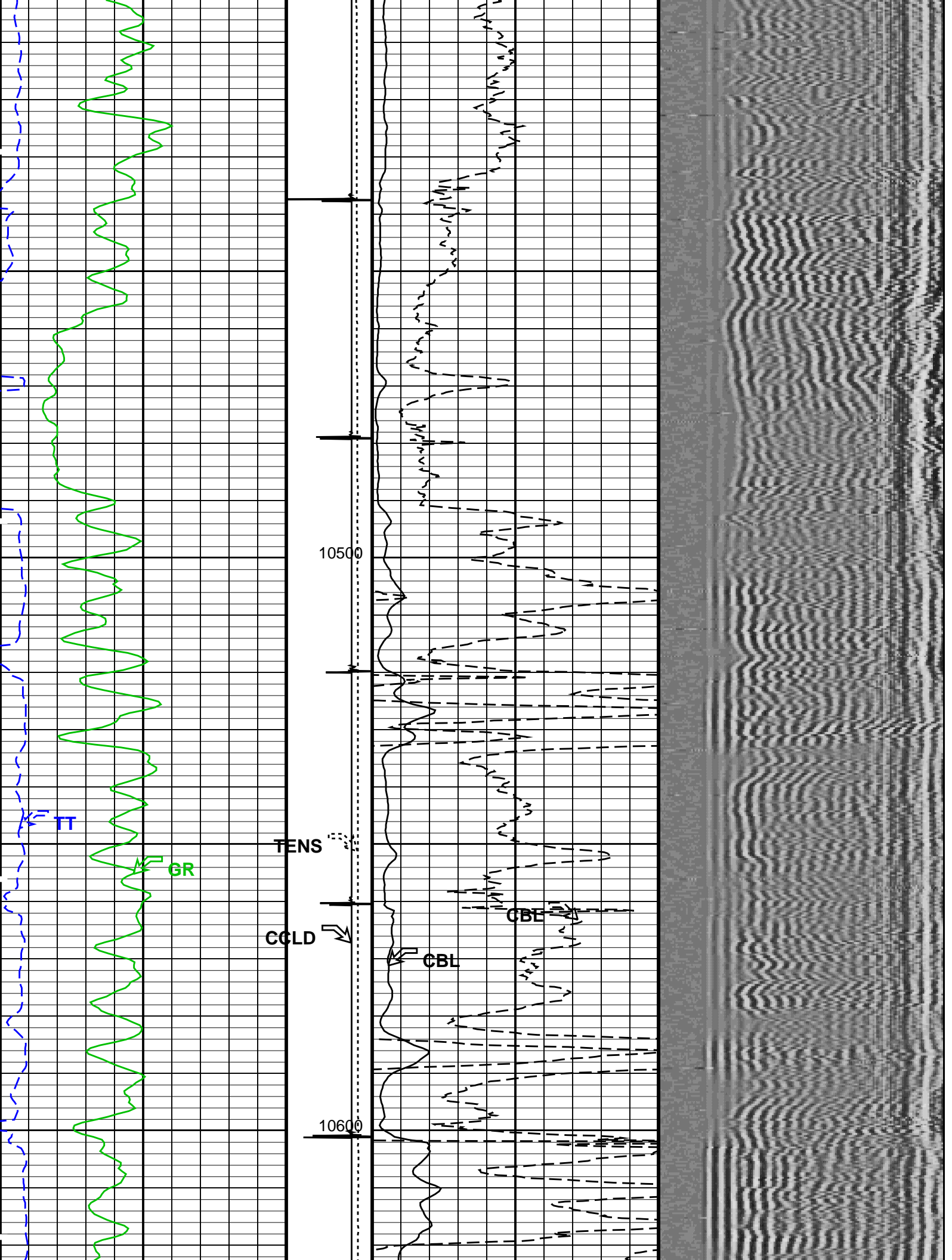


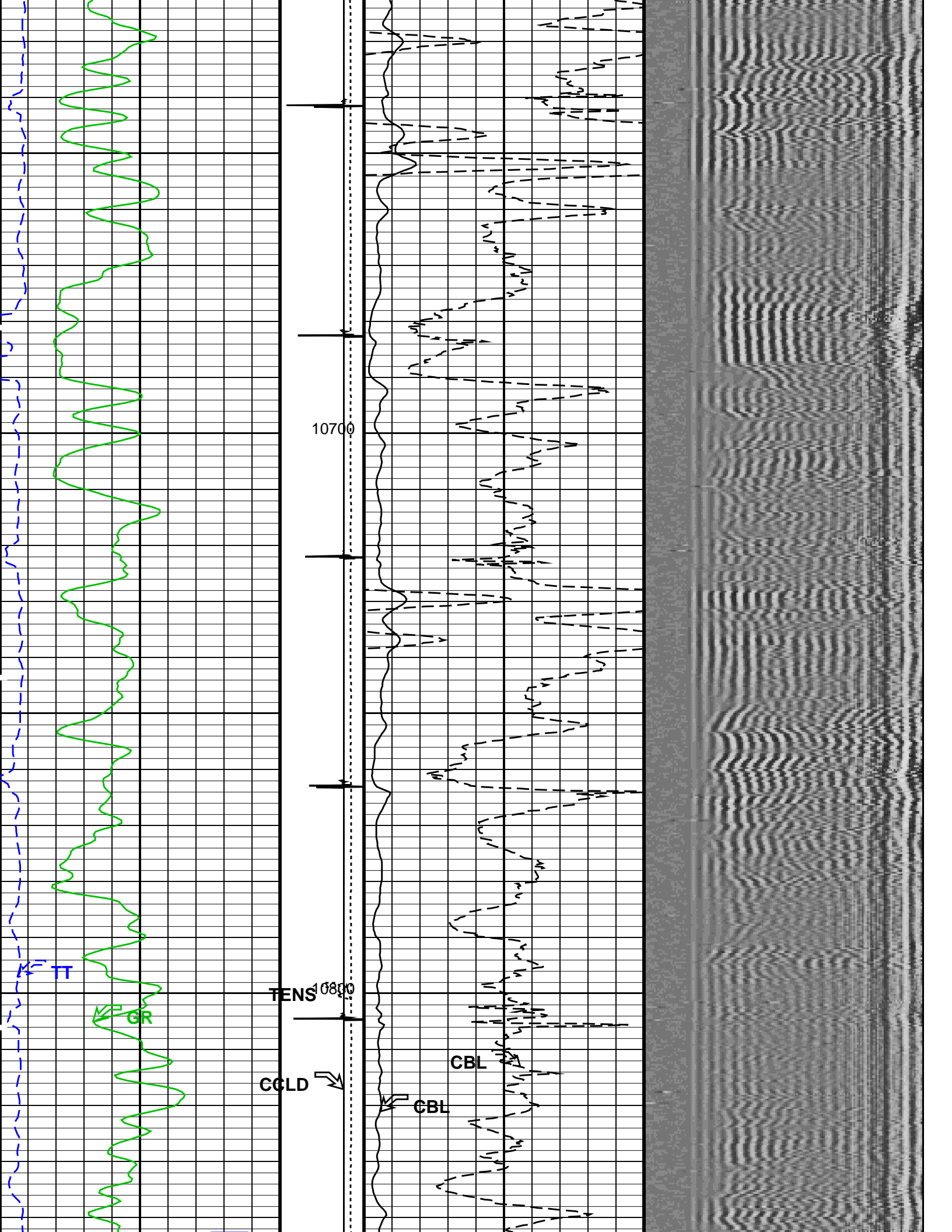


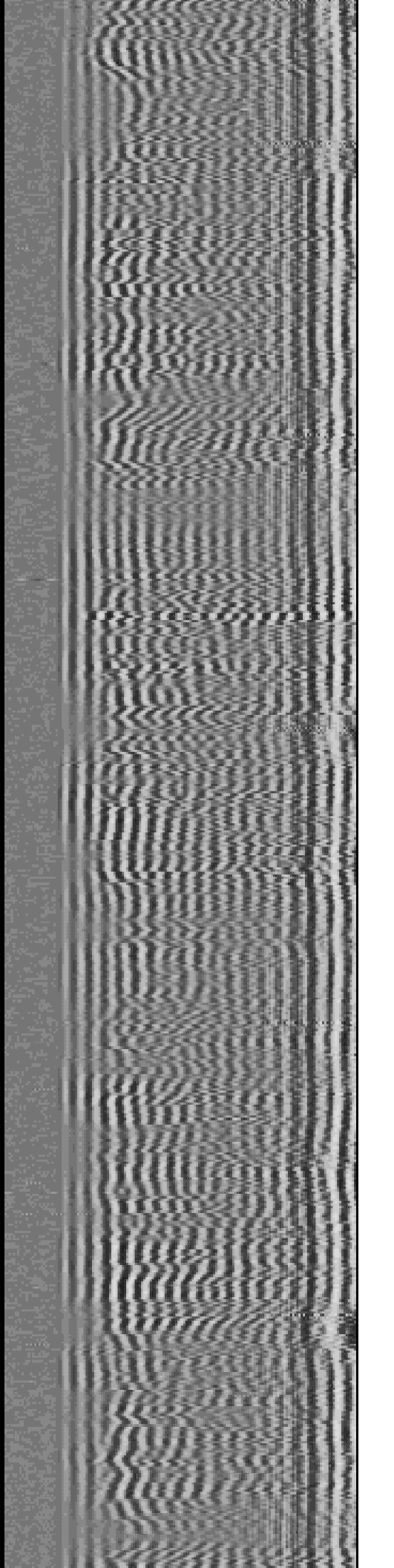
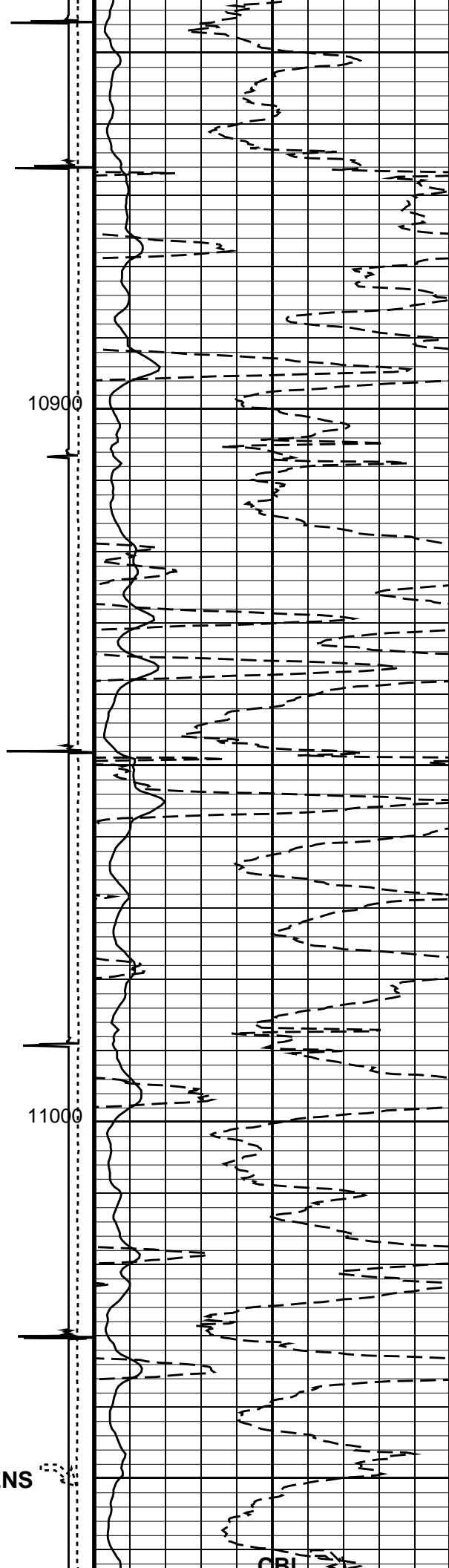
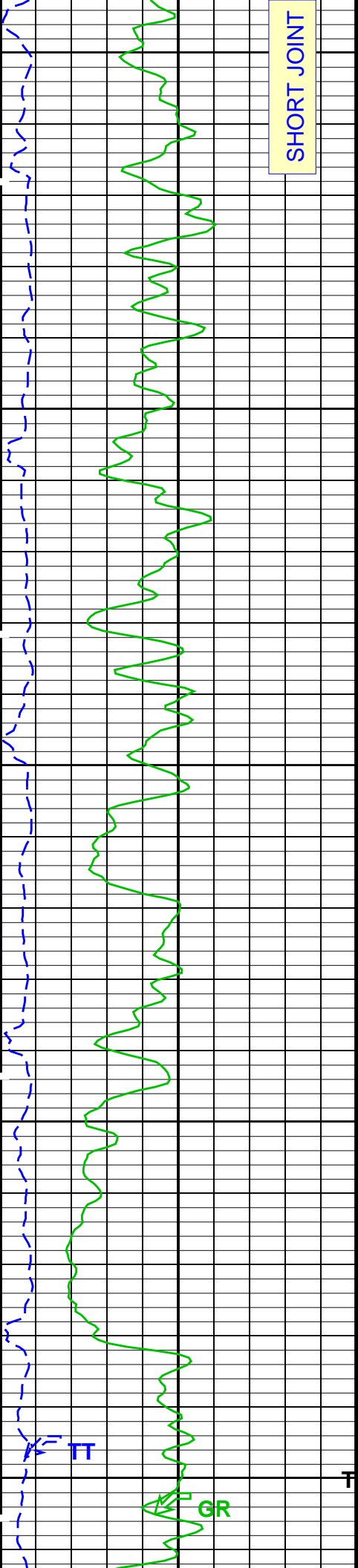


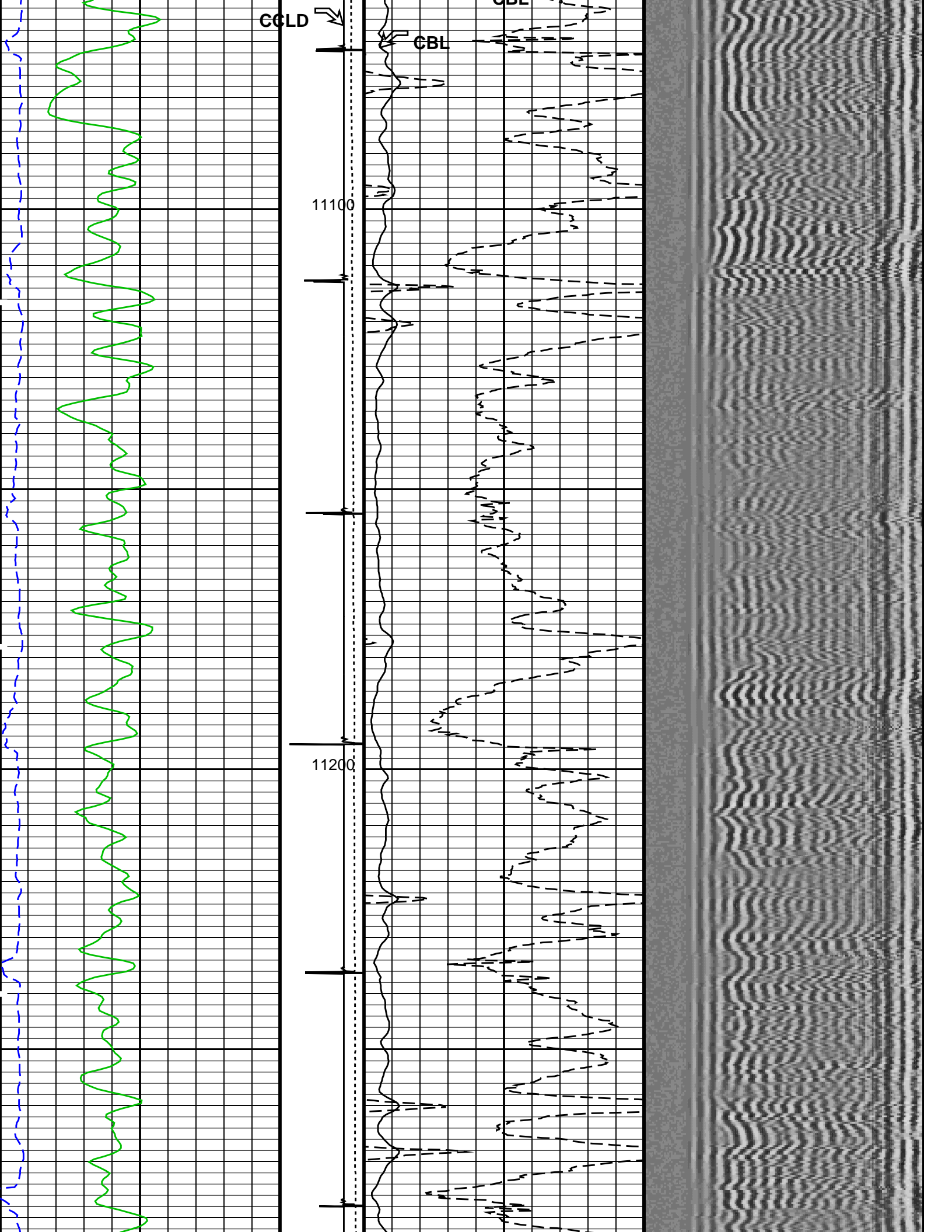


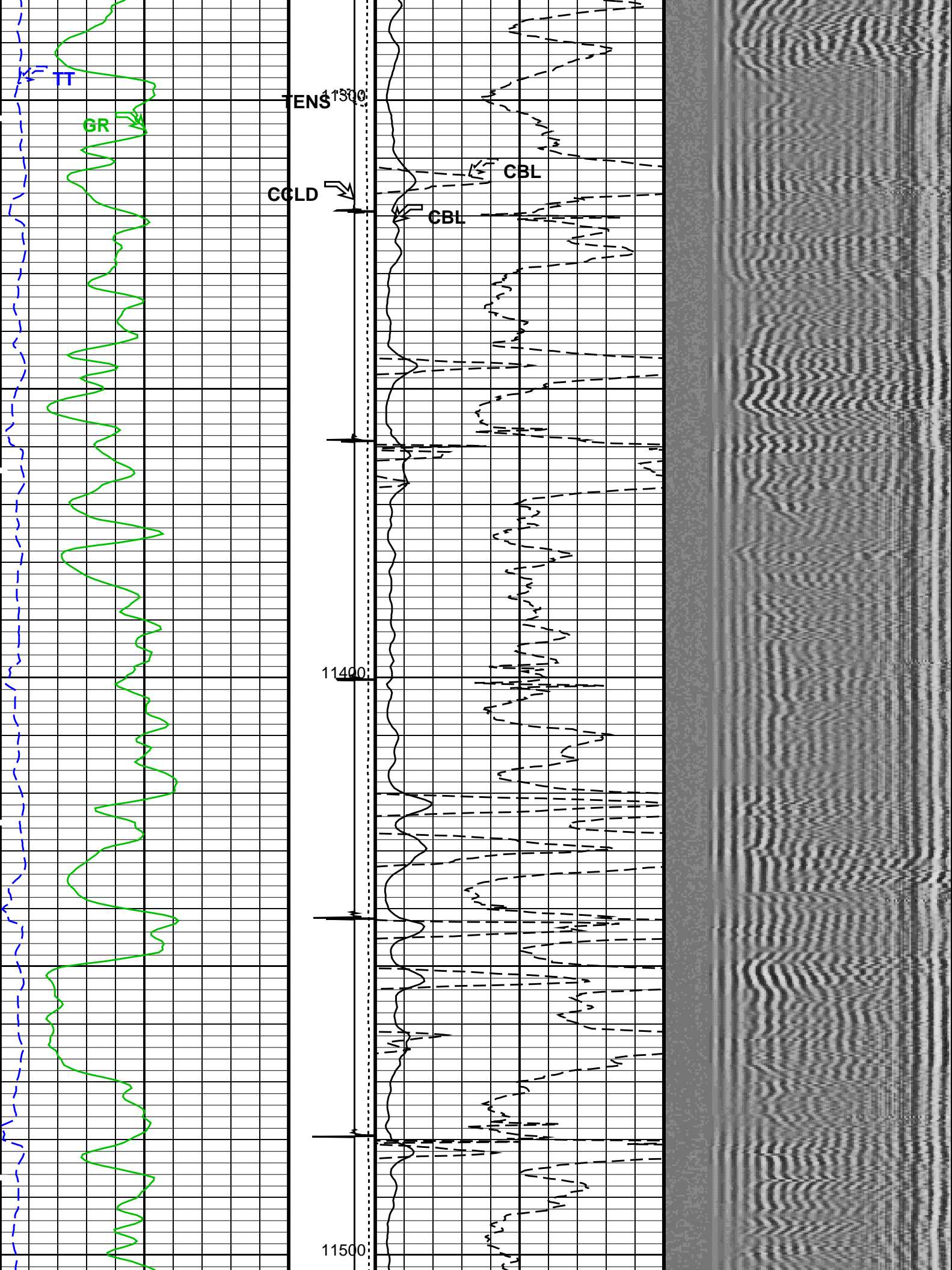


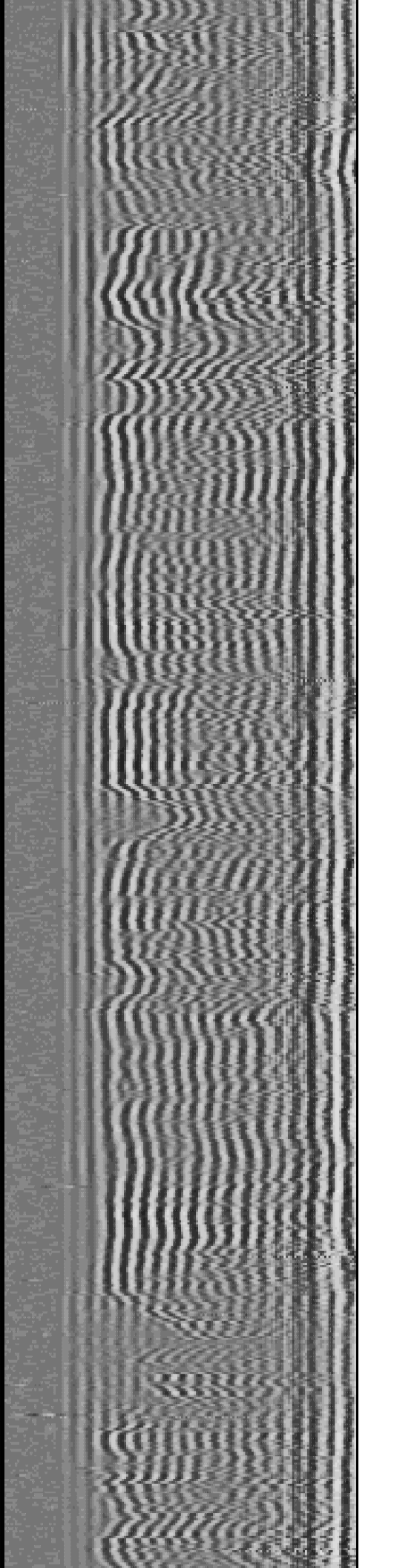
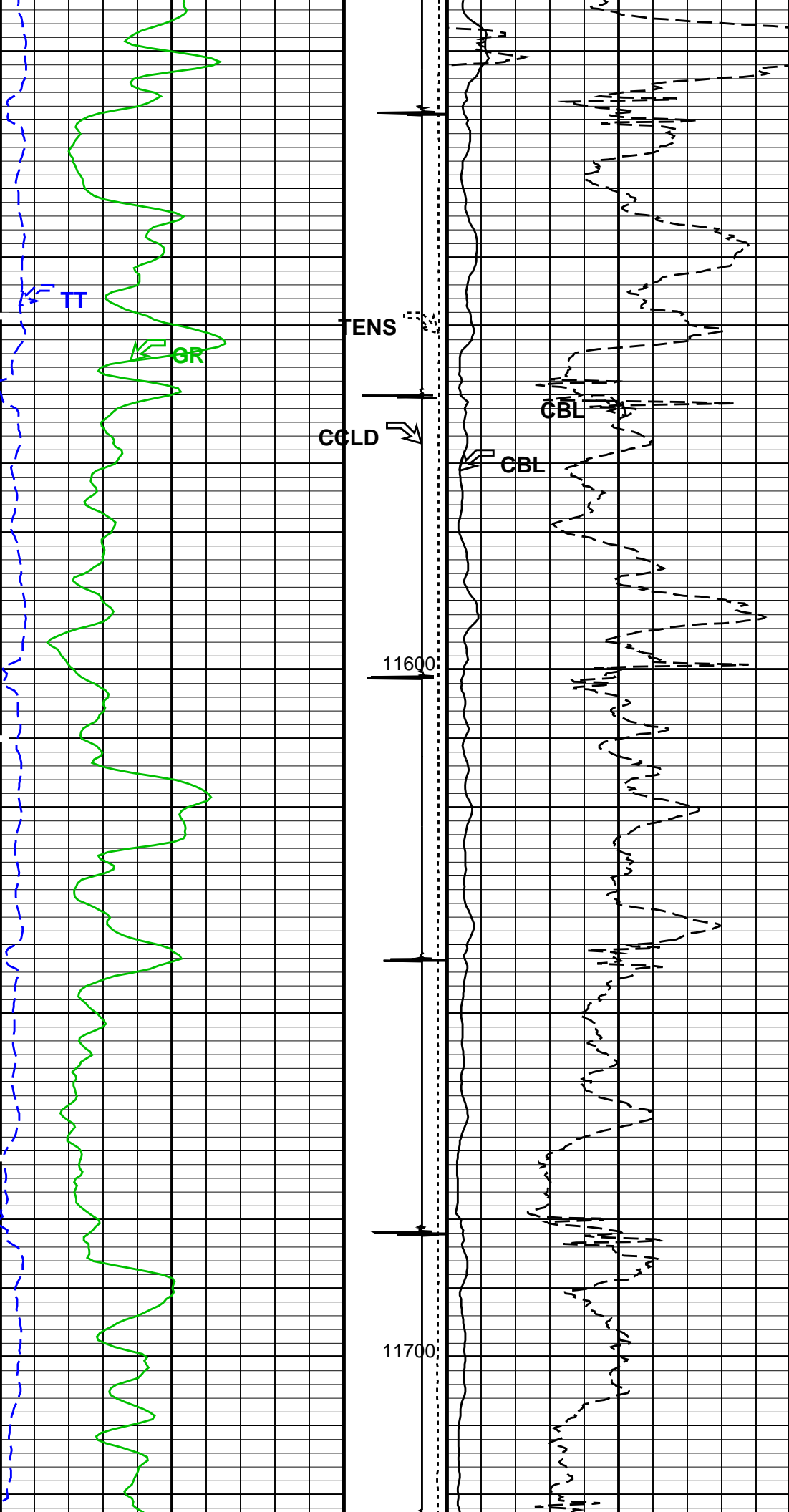


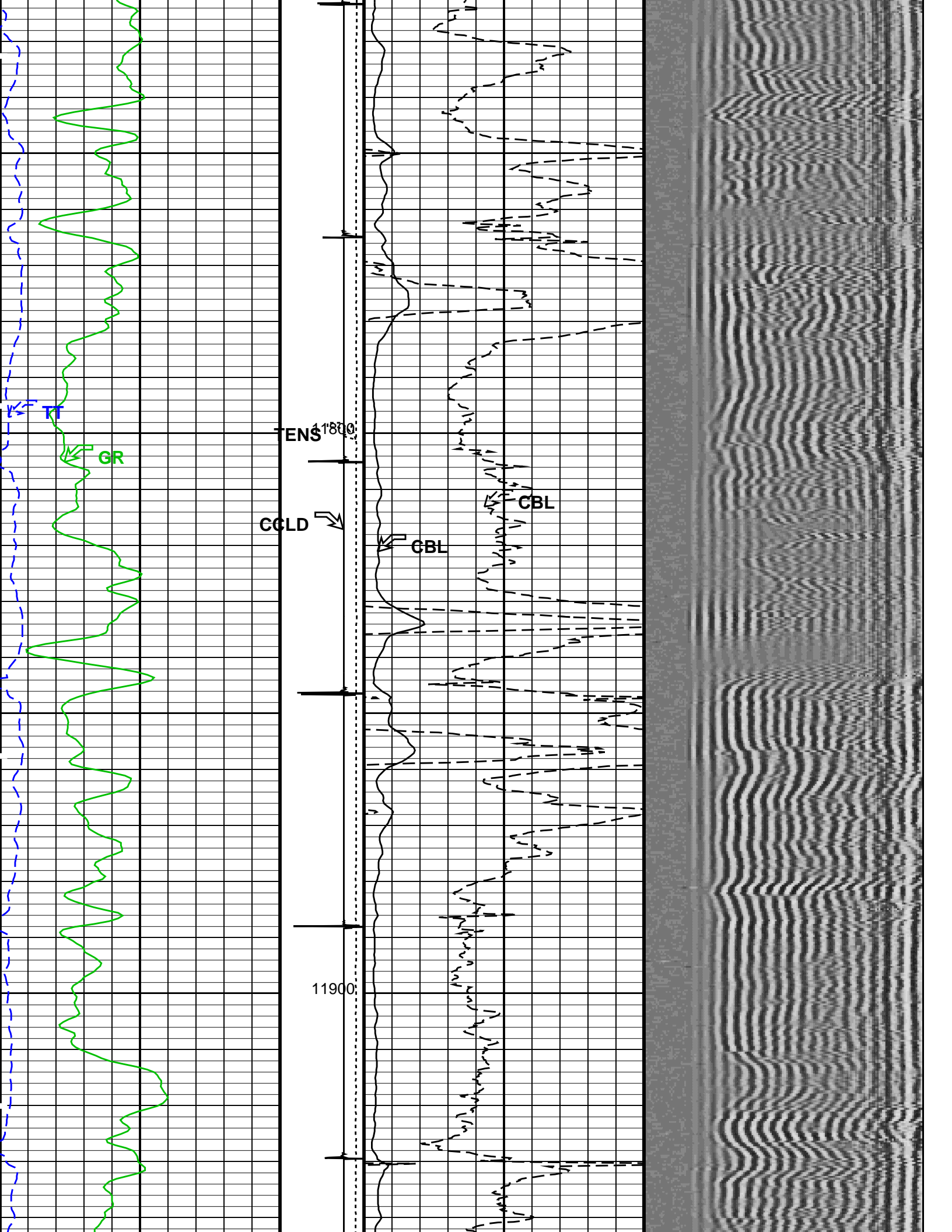


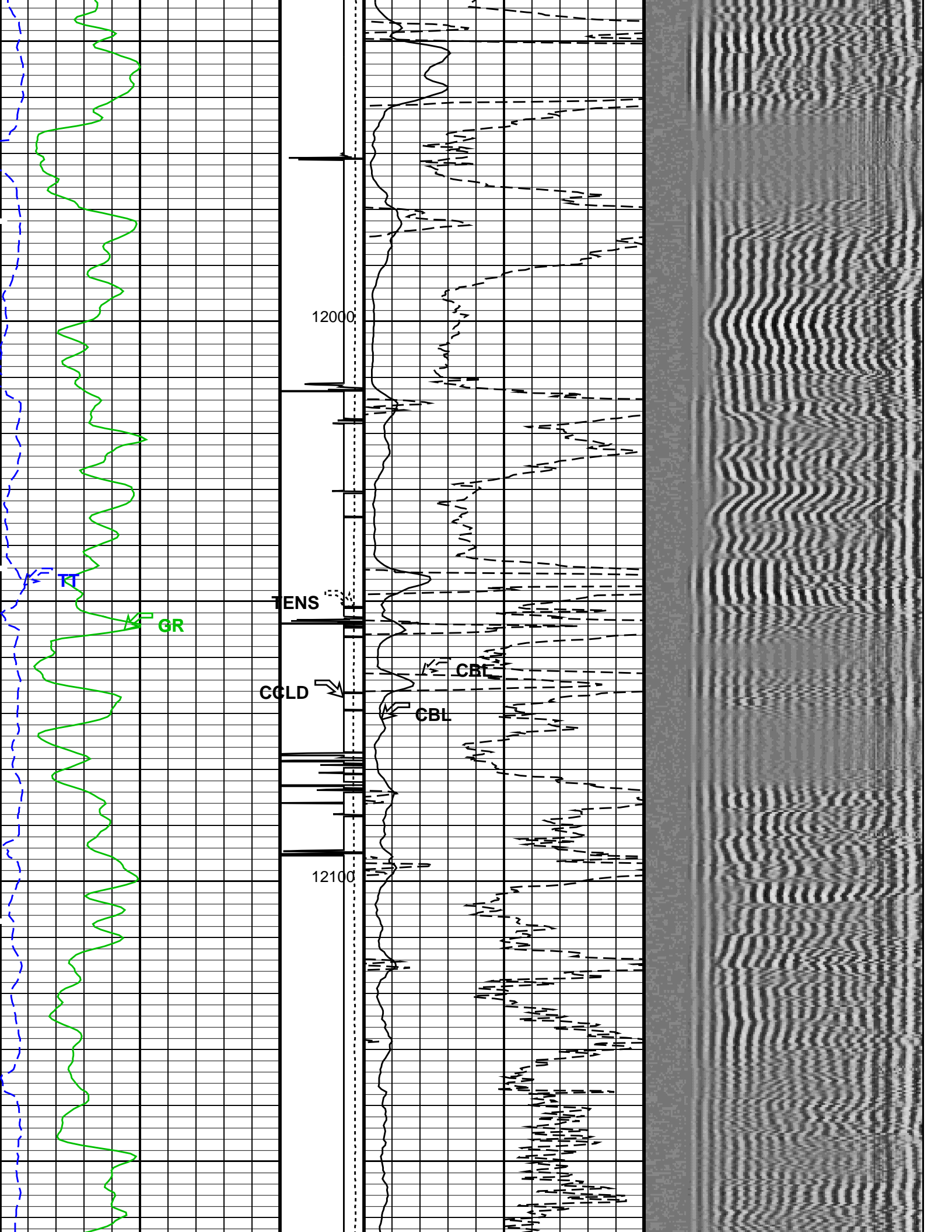


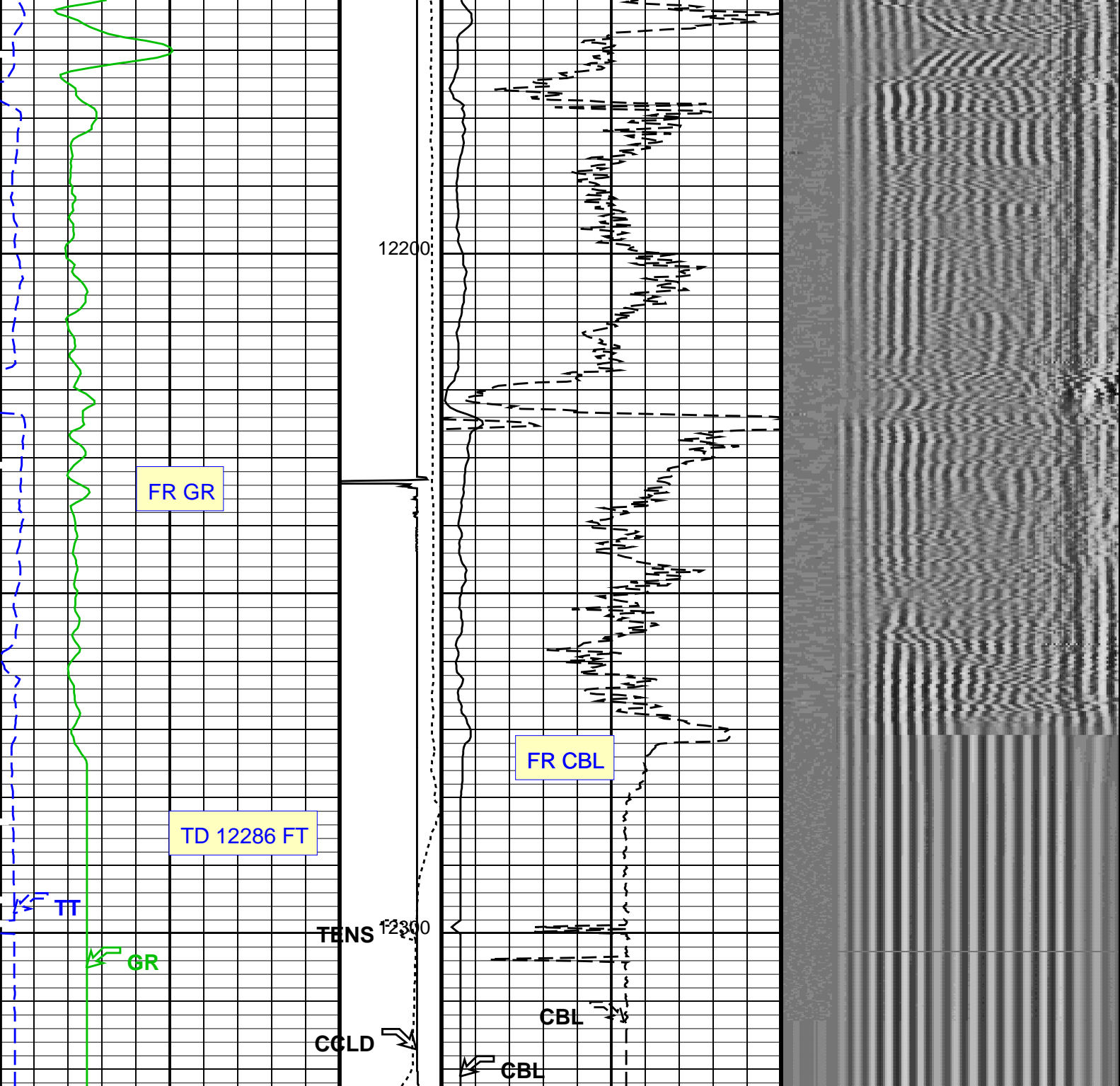












Gamma Ray (GR) (GAPI)	0 150	Tension (TENS) (LBF)	0 2000	CBL Amplitude (CBL) (MV)	0 100	Min Amplitude Max
Transit Time (TT) (US)	260 160	Discriminat ed CCL (CCLD) (V)	3 -1	CBL Amplitude (CBL) (MV)	0 10	VDL Variable Density (VDL) (US) 200 1200

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 03-May-2011 17:09

OP System Version: 18C0-147

SCMT-CB
HBMS-B

18C0-147
18C0-147

RST-C

18C0-147

<<<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	0.572744 MV (100% Cement)
			1.53811 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.27504 MV (100% Cement)
			8.03067 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	17-JAN-2011		
CBL Correction Factor	0.0743637	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.165722	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.192039		
MAP 3 Correction Factor	0.132977		
MAP 4 Correction Factor	0.175062		
MAP 5 Correction Factor	0.161562		
MAP 6 Correction Factor	0.177685		
MAP 7 Correction Factor	0.144065		
MAP 8 Correction Factor	0.233552		

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	228.424	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	342.424	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	40	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	204.5	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1	
GOBO	Good Bond	1.53811	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	171.424	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	4.27504	MV
MSA	Minimum Sonic Amplitude	0.572744	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	21.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	12286	FT

Input DLIS Files

DEFAULT SCMT_RST_HBMS_009LUP FN:8 PRODUCER 03-May-2011 13:46 12301.5 FT 95.5 FT

Output DLIS Files

Schlumberger**REPEAT ANALYSIS**

MAXIS Field Log

Company: ENCANVA OIL & GAS (USA) INC

Well: SGU 8506B-36 (B36 496)

Input DLIS Files

DEFAULT

SCMT_RST_PSP_005PUP

FN:4

PRODUCER

03-May-2011 16:18 8281.0 FT

7775.5 FT

Output DLIS Files

DEFAULT

SCMT_RST_HBMS_014PUP

FN:13

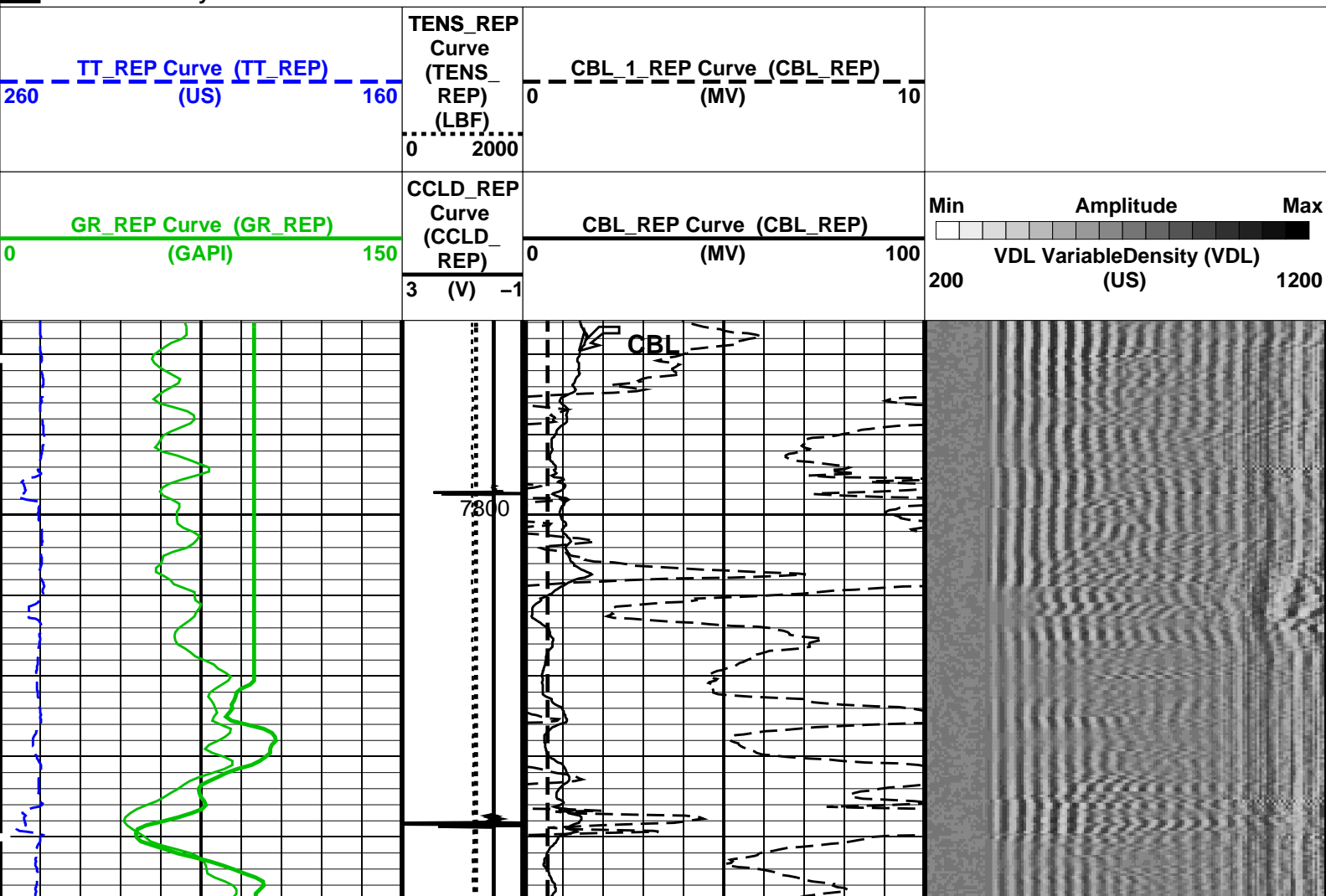
PRODUCER

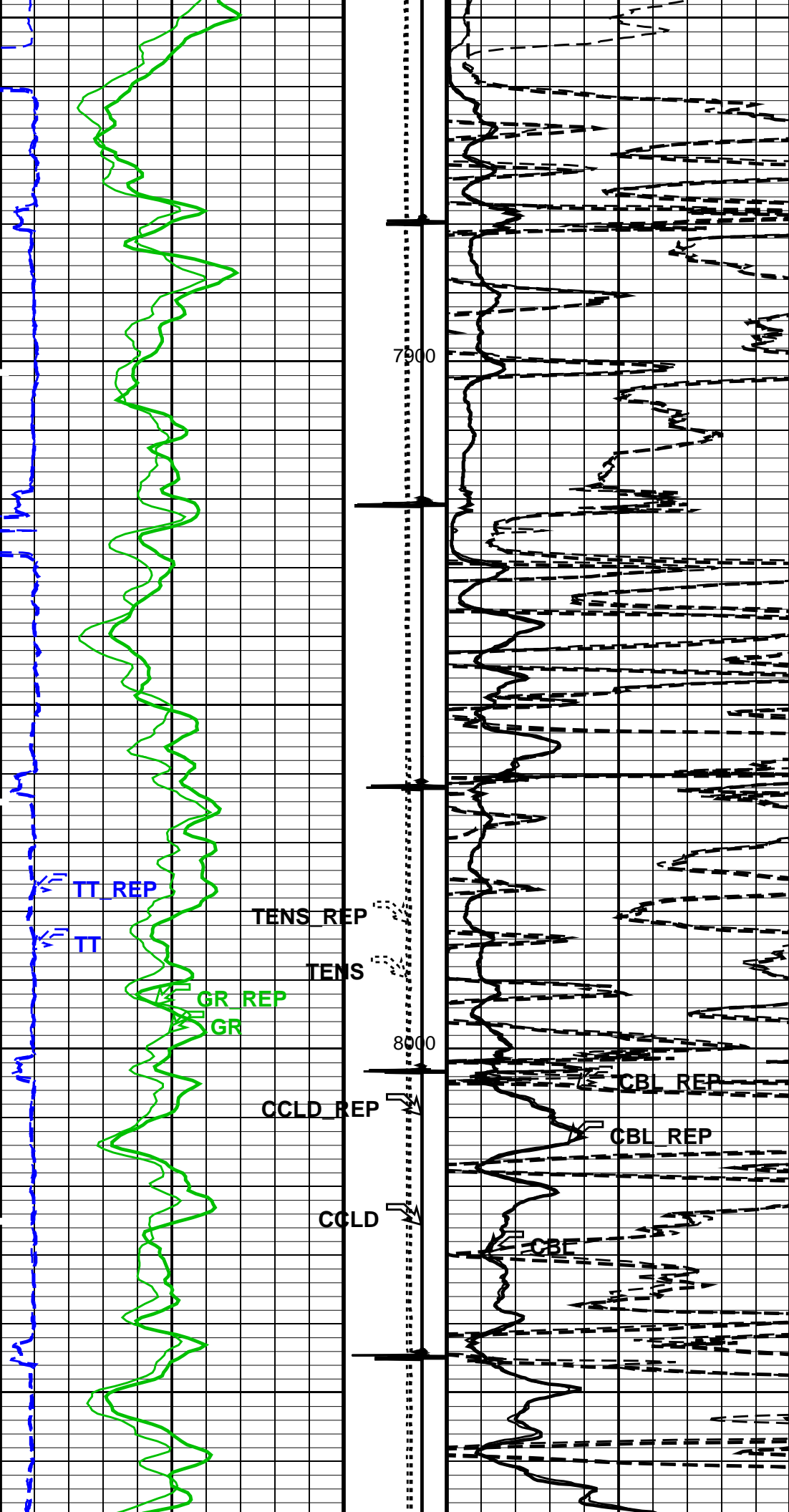
03-May-2011 17:09

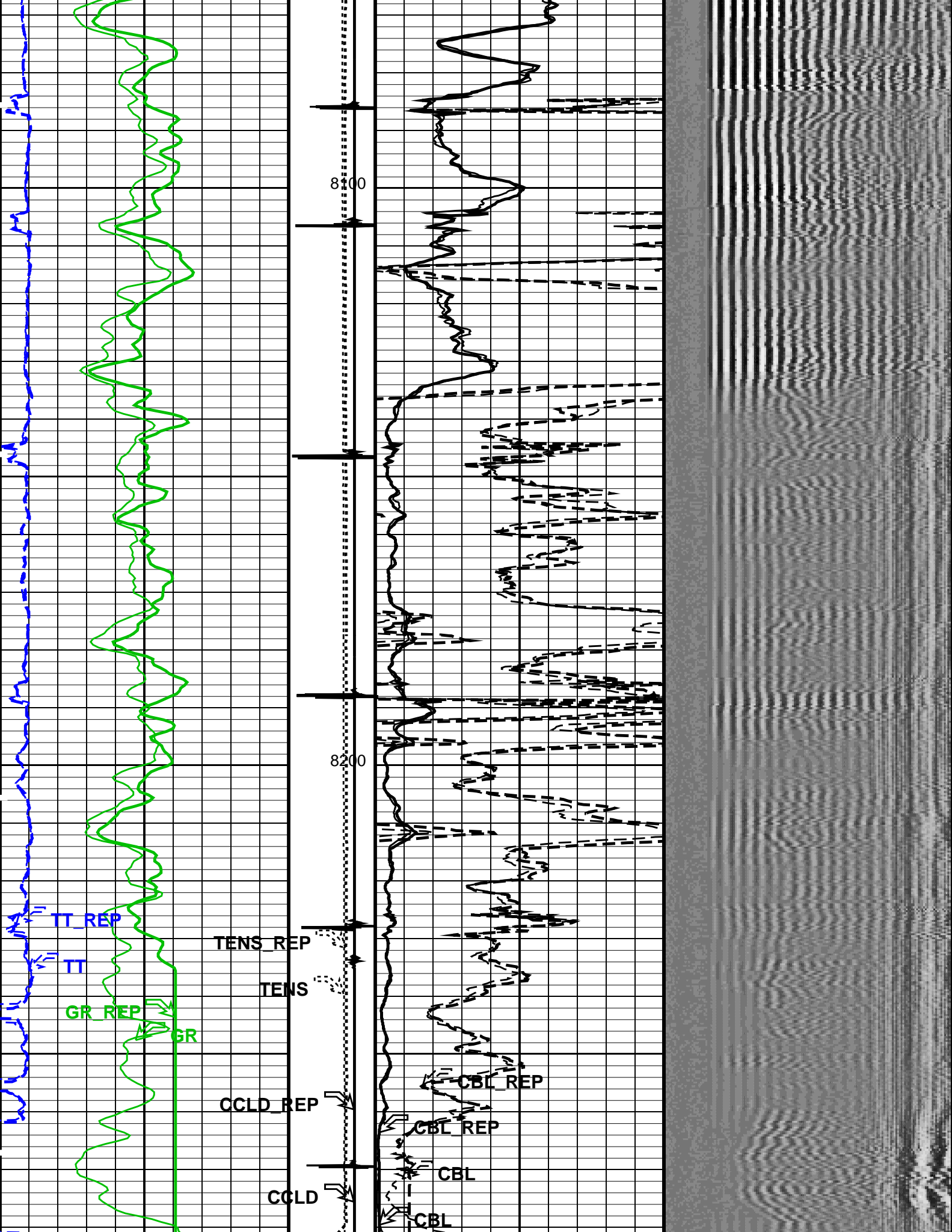
OP System Version: 18C0-147SCMT-CB
HBMS-B18C0-147
18C0-147

RST-C

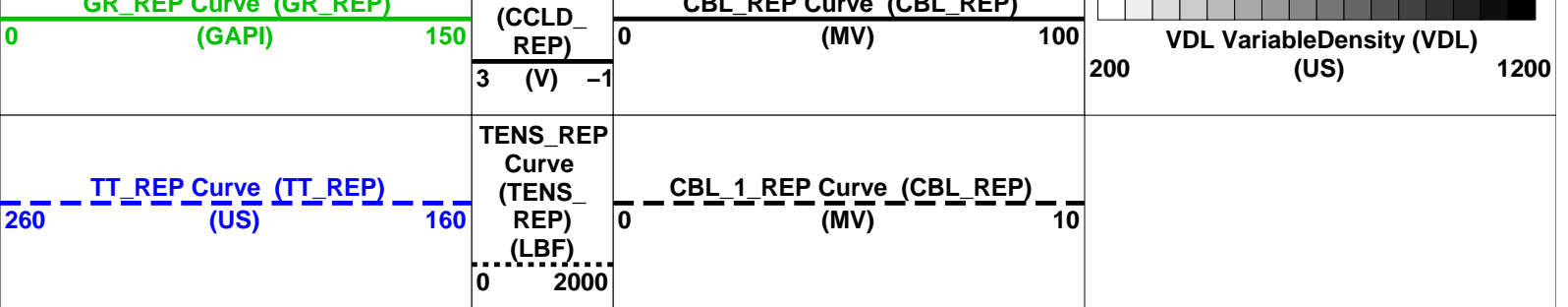
18C0-147

PIP SUMMARY☒ Time Mark Every 60 S





GR_REP Curve (GR_REP)	CCLD_REP Curve	CBL_REP Curve (CBL_REP)	Min	Amplitude	Max
-----------------------	----------------	-------------------------	-----	-----------	-----



PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100'

Graphics File Created: 03-May-2011 17:09

OP System Version: 18C0-147

SCMT-CB 18C0-147 RST-C 18C0-147
HBMS-B 18C0-147

<<<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	0.572744 MV (100% Cement) 1.53811 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.27504 MV (100% Cement) 8.03067 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	17-JAN-2011		
CBL Correction Factor	0.0743637	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.165722	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.192039		
MAP 3 Correction Factor	0.132977		
MAP 4 Correction Factor	0.175062		
MAP 5 Correction Factor	0.161562		
MAP 6 Correction Factor	0.177685		
MAP 7 Correction Factor	0.144065		
MAP 8 Correction Factor	0.233552		

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	228.424 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	342.424 US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20 MV
CBLG	CBL Gate Width	40 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	204.5 US/F
FATT	Acoustic Attenuation due to Fluid	0 DB/F
FCF	CBL Fluid Compensation Factor	1
GOBO	Good Bond	1.53811 MV
MAPD	SCMT MAP Peak Detection Mode	PEAK
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	171.424 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	4.27504	MV
MSA	Minimum Sonic Amplitude	0.572744	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	21.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	12286	FT

Input DLIS Files						
DEFAULT	SCMT_RST_PSP_005PUP	FN:4	PRODUCER	03-May-2011 16:18	8281.0 FT	7775.5 FT
Output DLIS Files						
DEFAULT	SCMT_RST_HBMS_014PUP	FN:13	PRODUCER	03-May-2011 17:09		



COEFFICIENTS

MAXIS Field Log

Client:	Tool:	PSP
Field:	Sub Type:	PBMS
Well:	Sensor:	GR
Run date:		

PBMS Gamma Ray		RESISTORS FOR GR SENSOR N.34384,TOOL HBMS-BA2880. SENSOR S/N:	
Sonde Serial NB		Sensor Serial NB	34384
Calib Date ddmmyy	160206	Matrix Size	12
Coeff CRC	D8B5	GR HV Rt	
	Rt**0	Rt**1	
Rt**0	+.200000000000e+04	+.173000000000e+04	

Client:

Field:

Well:

Run date:

Tool:

Sub Type:

Sensor:

PSP

PBMS

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.2880 S/N:

2880

260408

16

A3AF

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	-.104337336008E+04	+.798824971753E+03	-.251944021281E+03
	Tt**3	Tt**4	Tt**5
Tt**0	+.406192777109E+02	-.240958437264E+01	0.0

Client:

Field:

Well:

Run date:

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.2880 S/N:

2880

260408

66

66B8

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.694668499013E+04	+.138137467574E-01	-.206148488488E-06
Fc**1	-.104285125976E+01	-.125721589078E-04	-.971577899959E-10
Fc**2	+.101045175546E-05	+.480801816357E-10	+.889110474366E-15
Fc**3	+.127326781620E-11	+.130693902354E-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	-.802395356069E-10	-.148392899370E-14	-.162952476494E-19
Fc**1	+.114970383999E-15	+.186330526680E-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 2880
Calib Date ddmmyy 260408
Matrix Size 66
Coeff CRC 3690

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.114978632240E+03	-.318843725686E-03	+.651766172344E-08
Fb**1	-.590205352250E-02	+.168686572404E-07	+.162345150354E-12
Fb**2	-.362996279263E-07	+.407654559315E-12	+.452411391342E-17
Fb**3	-.276281361281E-12	+.871817059405E-17	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	+.199118144093E-13	-.260997933236E-18	+.618908211390E-21
Fb**1	+.250084591851E-17	+.455070709200E-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 2880
Calib Date ddmmyy 260408
Matrix Size 16
Coeff CRC 71B5

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310736316923E+05	+.273670214709E-02	+.731815197856E-06
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.654219198492E-10	-.150585137208E-15	-.117697151708E-19

PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 2880
Calib Date ddmmyy 260408
Matrix Size 16
Coeff CRC ECB5

Clock Temp Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.116053417872E+03	-.554118045908E-02	-.348241454518E-07
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	+.207992675474E-12	-.353168788938E-17	-.345142848607E-21

Company: ENCANA OIL & GAS (USA) INC



Well: SGU 8506B-36 (B36 496)
Field: NORTH PARACHUTE
County: GARFIELD
State: COLORADO

CEMENT BOND LOG
CBL - VDL
GAMMA RAY - CCL