

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8508D-33 (E34 496)

Field: STORY GULCH

County: GARFIELD

State: COLORADO

SLIM CEMENT MAPPING LOG
CCL – GAMMA RAY – TEMPERATUR

County:	GARFIELD			
Field:	STORY GULCH			
Location:	SHL: 2208 FNL & 996 FWL			
Well:	SG 8508D-33 (E34 496)			
Company:	ENCANA OIL & GAS (USA) INC			
LOCATION		SHL: 2208 FNL & 996 FWL		
		BHL: 2003 FNL & 1302 FEL		
		Elev.: K.B. 8353.00 ft		
		G.L. 8323.00 ft		
Permanent Datum:		D.F. 8352.00 ft		
Log Measured From:		GROUND LEVEL KELLY BUSHING		
Drilling Measured From:		Elev.: 30.00 ft above Perm. Datum		
API Serial No.		KELLY BUSHING		
05-045-21911-000C		Section 34		
		Township 4S		
		Range 96W		

	Run 1	Run 2	Run
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	18-Jan-2014		
Run Number	1		
Depth Driller	11670 ft		
Schlumberger Depth	11601 ft		
Bottom Log Interval	11592 ft		
Top Log Interval	72 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	72 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From	9509 ft		
To	11670 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade			
From	30 ft		
To	11650 ft		
Maximum Recorded Temperatures	279 degF		
Logger On Bottom	18-Jan-2014	20:30	
Unit Number	Location		
417	VERNAL		
Recorded By	JASON BARRY		
Witnessed By	SCOTT PITT		

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

DEPTH SUMMARY LISTING

Date Created: 7-JAN-2014 22:46:59

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25ZA-XXS
Serial Number:	600807	Serial Number:	1157	Serial Number:	111268
Calibration Date:	6/27/2013	Calibration Date:	9/24/2013	Length:	16000 FT
Calibrator Serial Number:		Calibrator Serial Number:	100518		
Calibration Cable Type:	1-25P	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-3	Calibration RMS:	15	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	31		

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. IDW USED AS PRIMARY DEPTH REFERENCE
2. SWPT DRUM COUNTER USED AS SECONDARY DEPTH REFERENCE
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

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

OTHER SERVICES1 OS1: NONE OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWNLOG	
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 19:30	
TIME AT BOTTOM: 20:30	
EXIT TIME: 23:30	

MAX RECORDED TEMPERATURE: 279 DEGF	
MAX RECORDED PRESSURE: 4750 PSIA	
SHORT JOINTS: 7453 FT & 10147 FT	
MAIN PASS LOGGED UNDER 0 SURFACE PRESSURE	
EXPECTED CBL AMP IN FREE PIPE = 80 MV	
CREW: J BARRY, M MCCOY, B CUPP, J ORTIZ, D MOWER	
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY	

RUN 1 SERVICE ORDER #: CT1E-00041 PROGRAM VERSION: 19C2-270 FLUID LEVEL: 72 ft			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

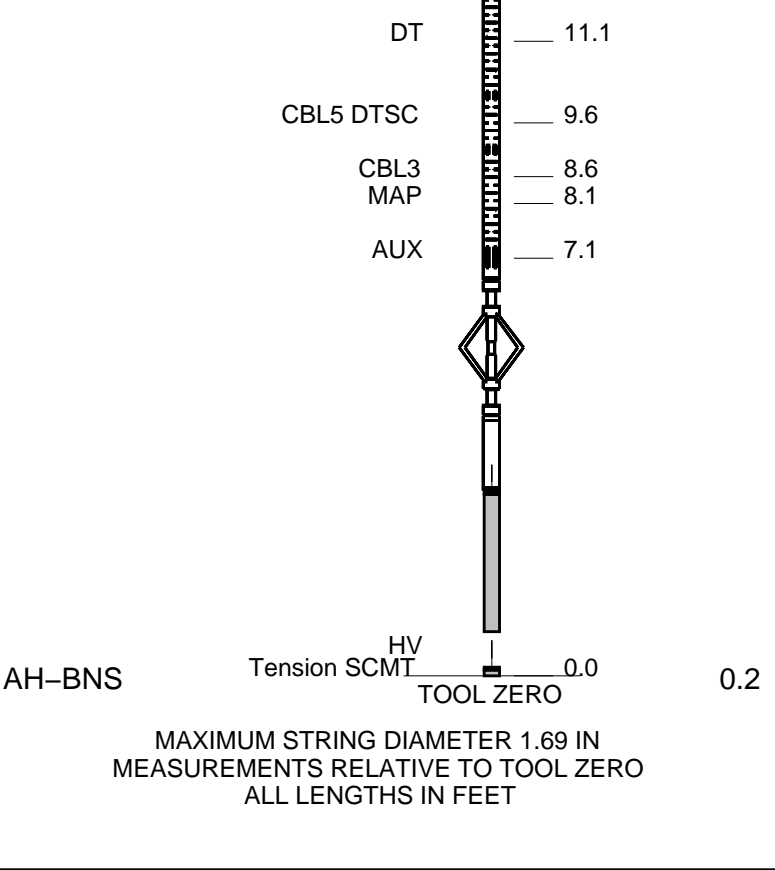
EQUIPMENT	DESCRIPTION

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4	1	1
5	1	1
6	1	1
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8	1	1
9	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

Instrument	Altitude (m)
MH-22	30.3
MH-22	
Detail MT	
TelStatus	
CTEM	28.7
PSPT	28.4
PSC-A	
PSPT-B 861	
PSTC-A	
PBMS-B	
CQG_F_Mano	
RTD_Thermometer	
GR	24.7
CCL	
PBMS	
Well_Temp	21.7
CQG Manom	21.3
CCL	20.9
PBMS PSTC	20.2
SCMT-CB	20.2
SCMC-CA 8076	
SECH-CA	
CMIR-AG	
SCMS-CB 8150	
SCMX-CA	



MAIN PASS CBL VDL

MAXIS Field Log

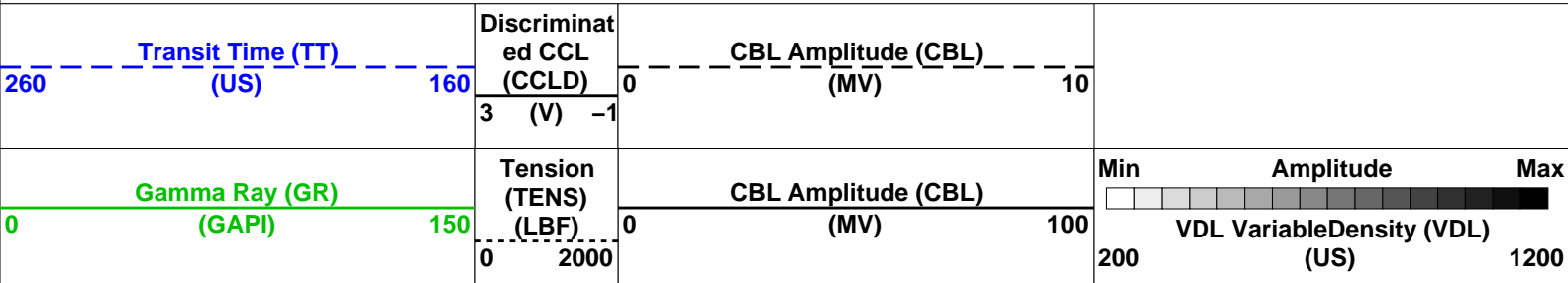
Company: ENCANA OIL & GAS (USA) INC Well: SG 8508D-33 (E34 496)

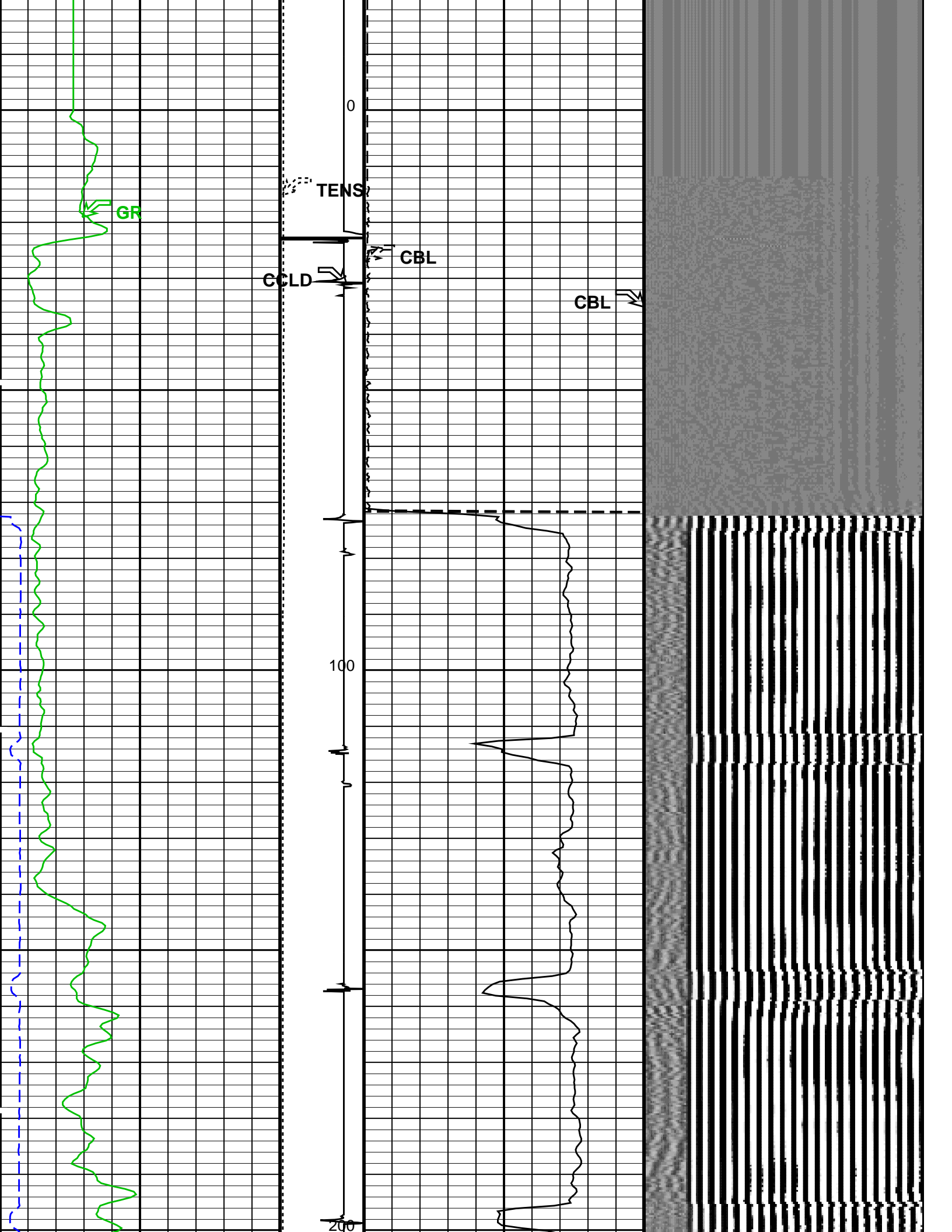
Input DLIS Files						
DEFAULT	SCMT_PSP_061LUP	FN:58	PRODUCER	18-Jan-2014 21:22	11630.0 FT	-6.5 FT
Output DLIS Files						
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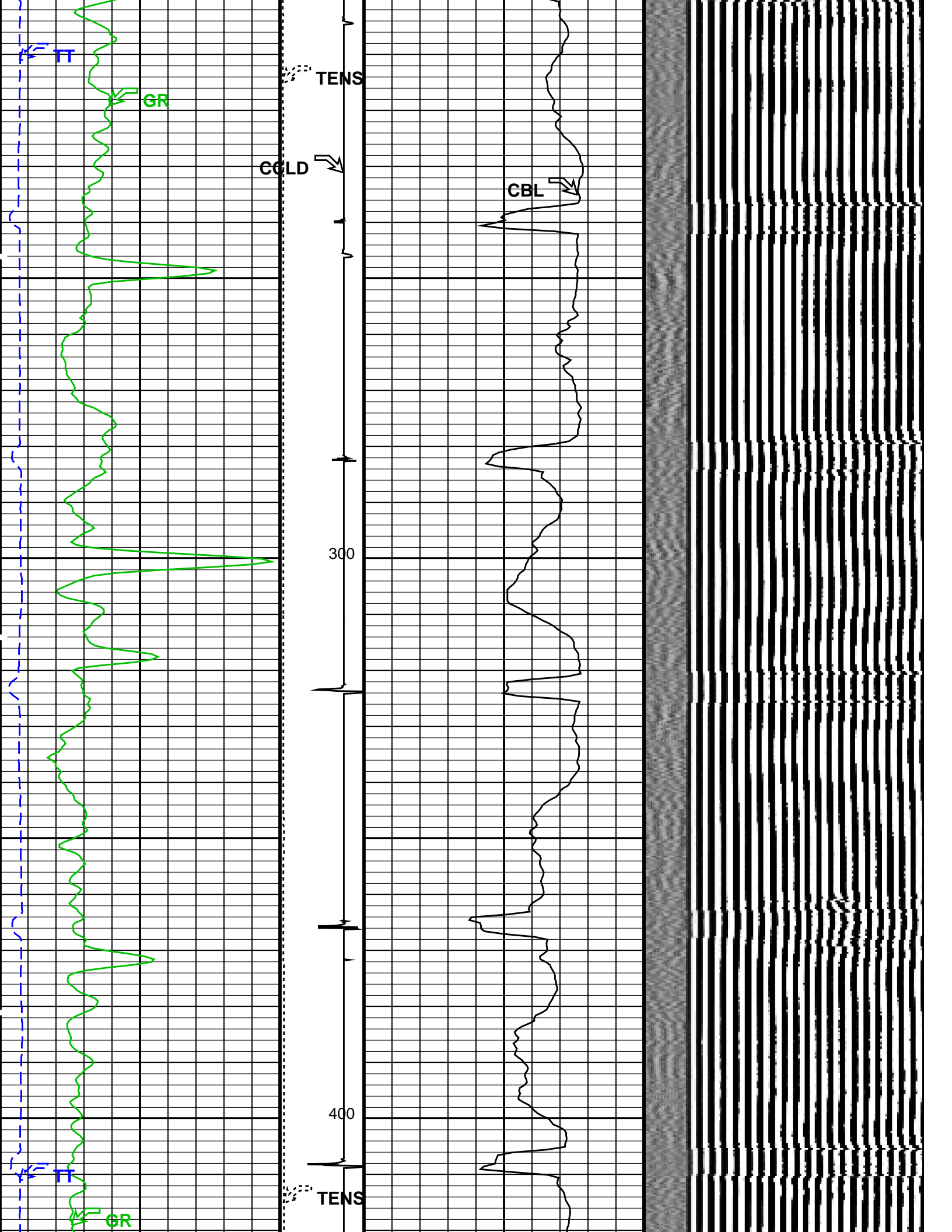
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SCMT-CB	unofficial	PSPT	unofficial

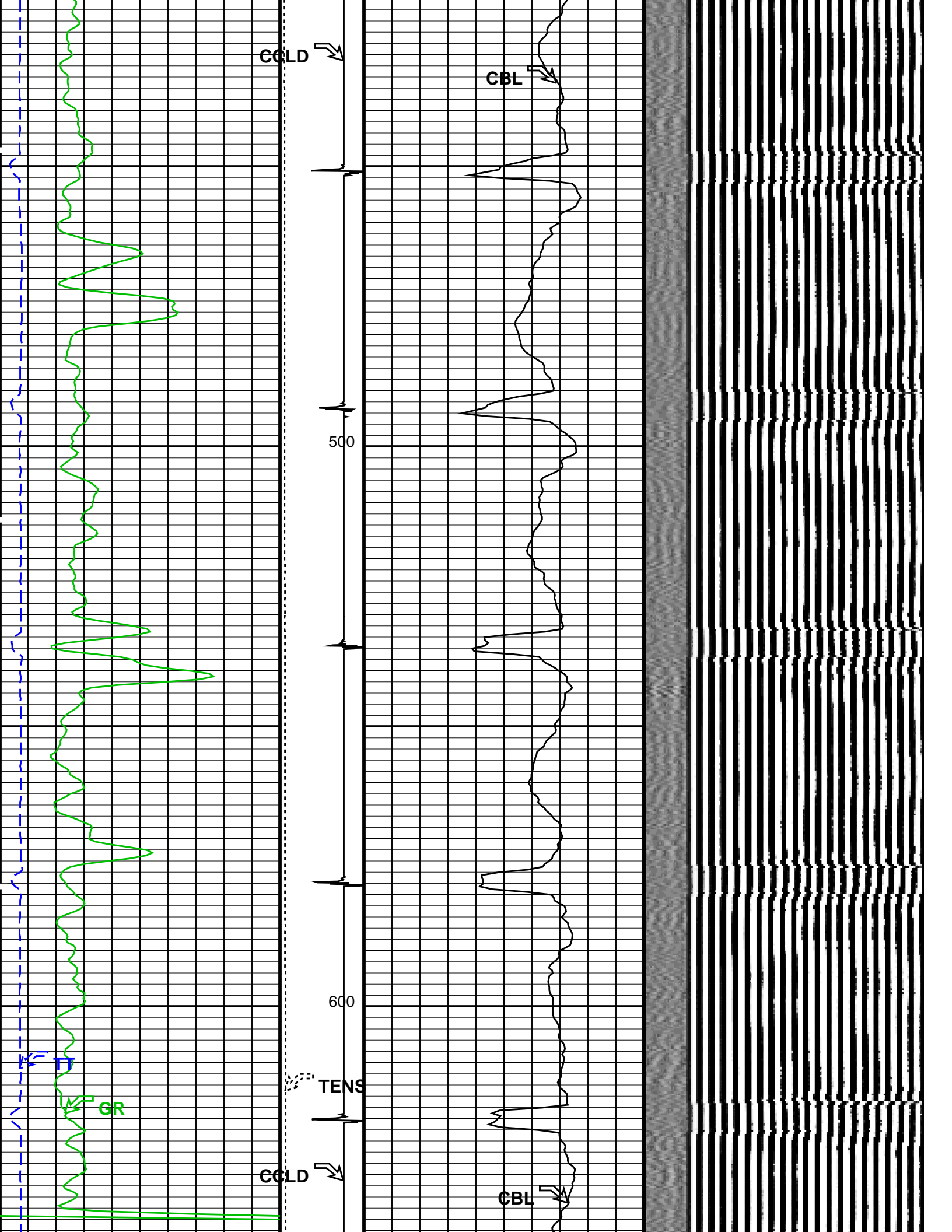
PIP SUMMARY

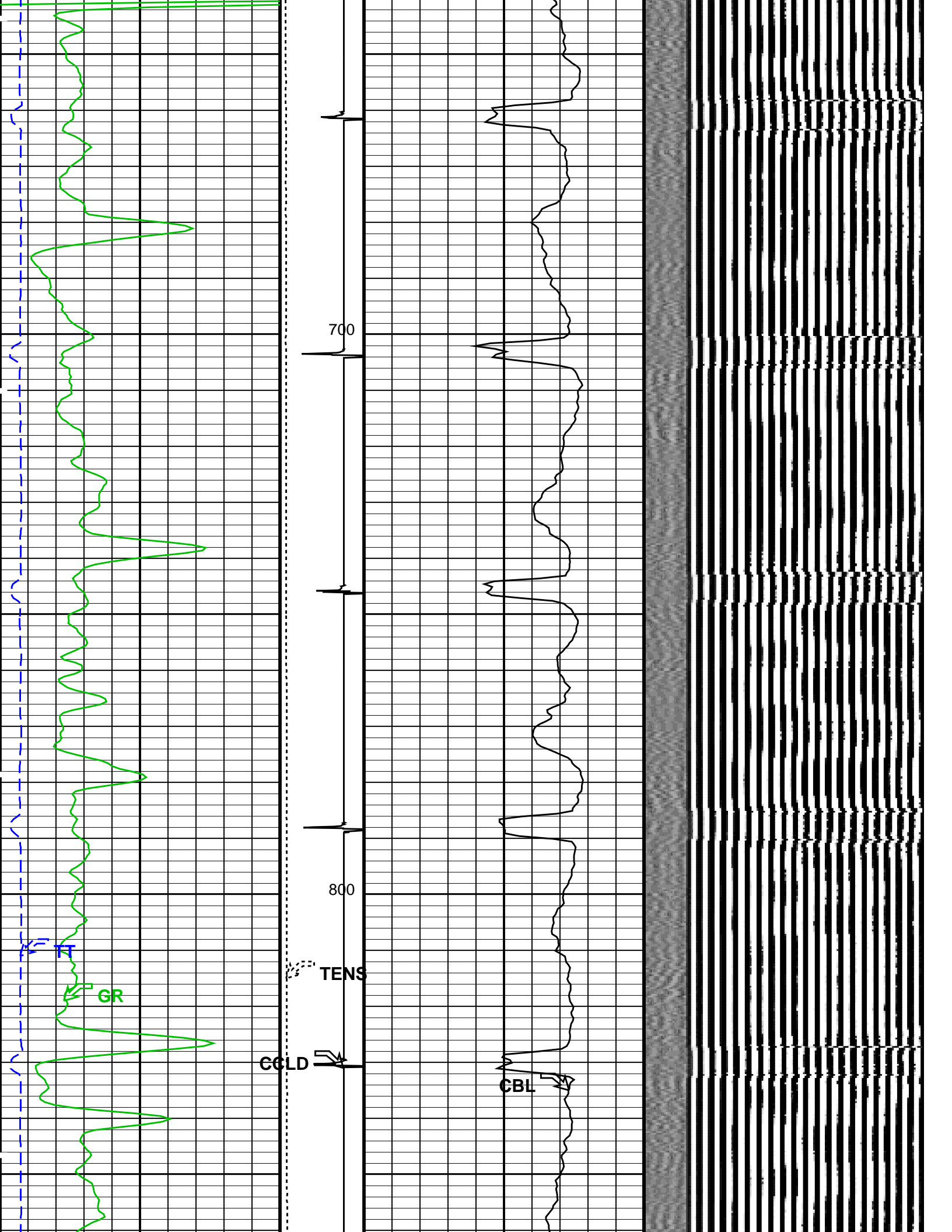
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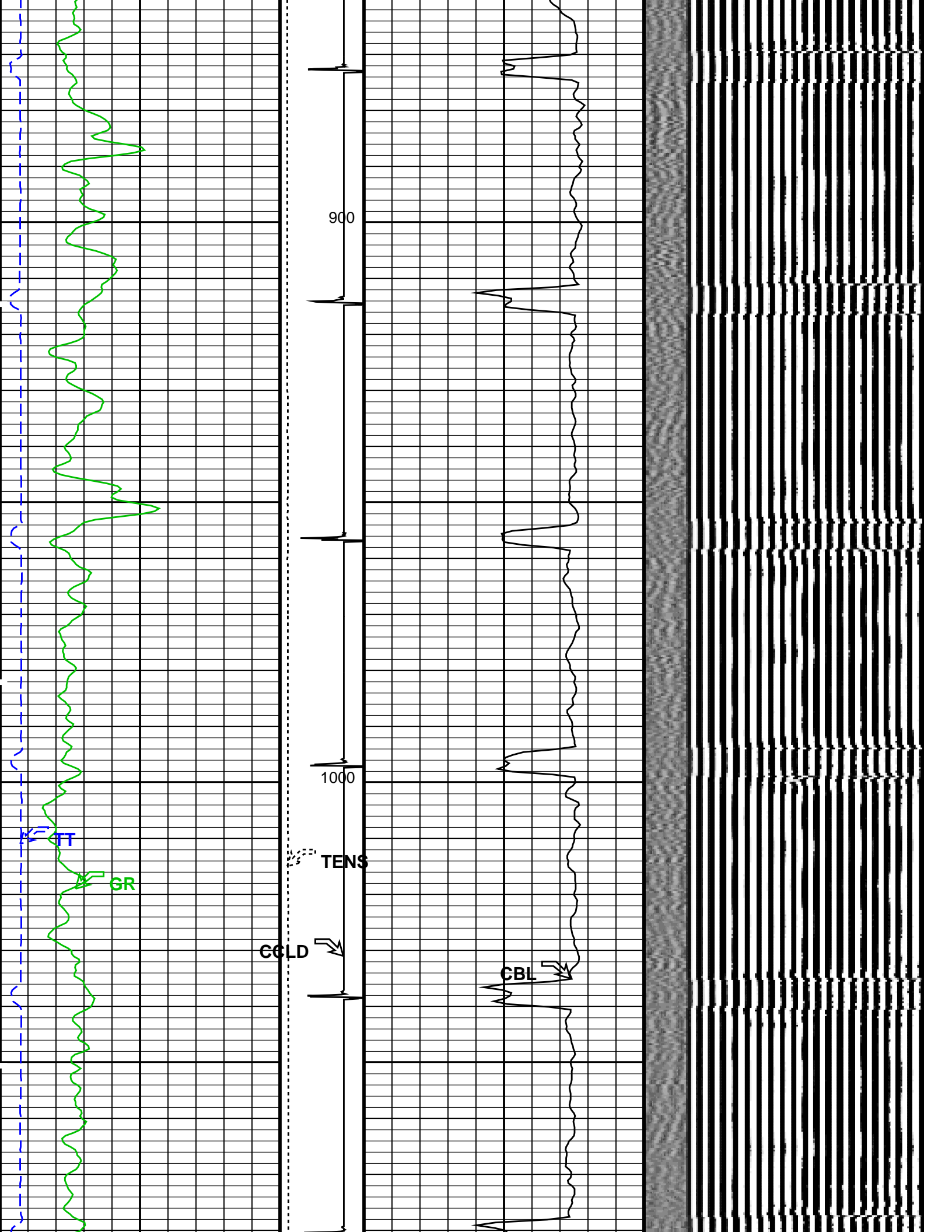


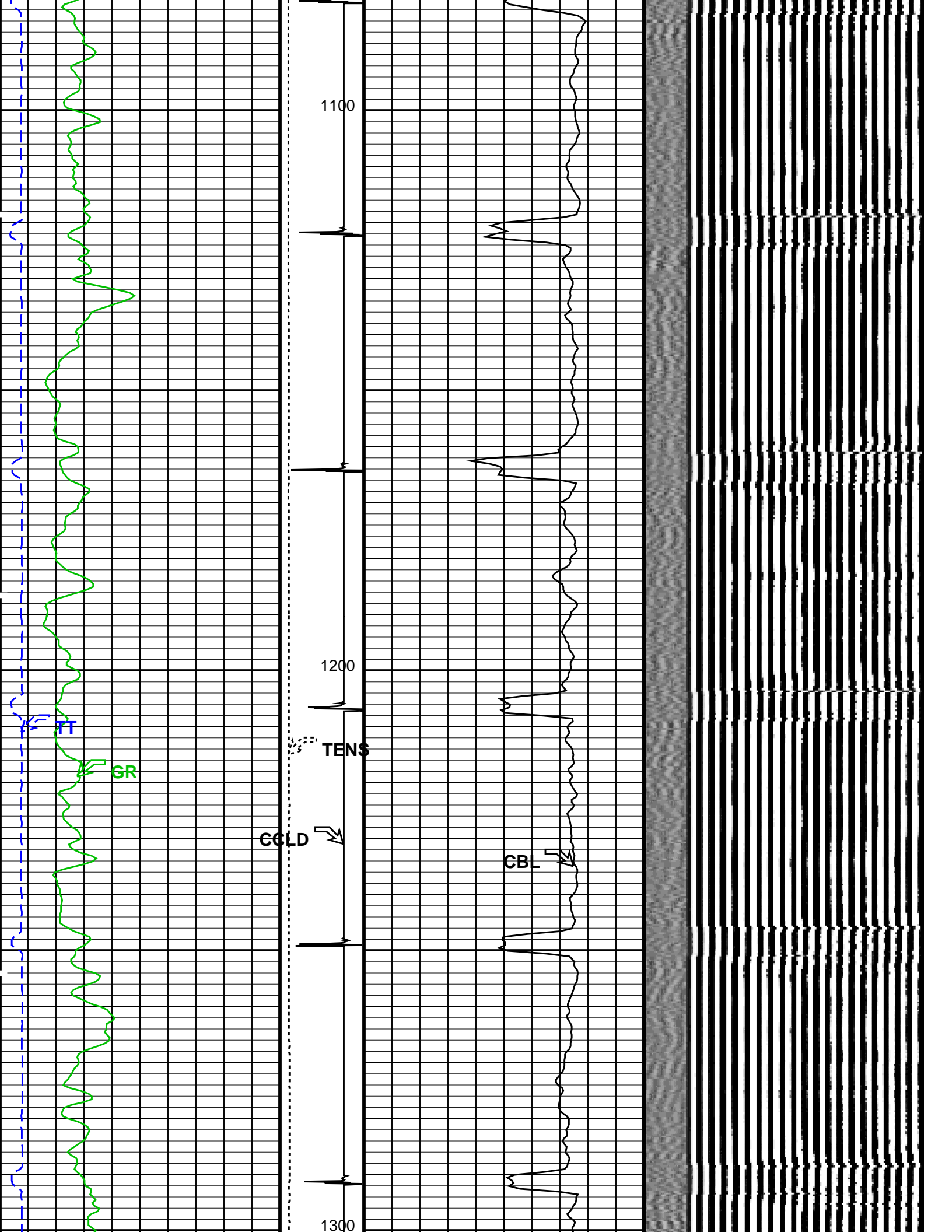


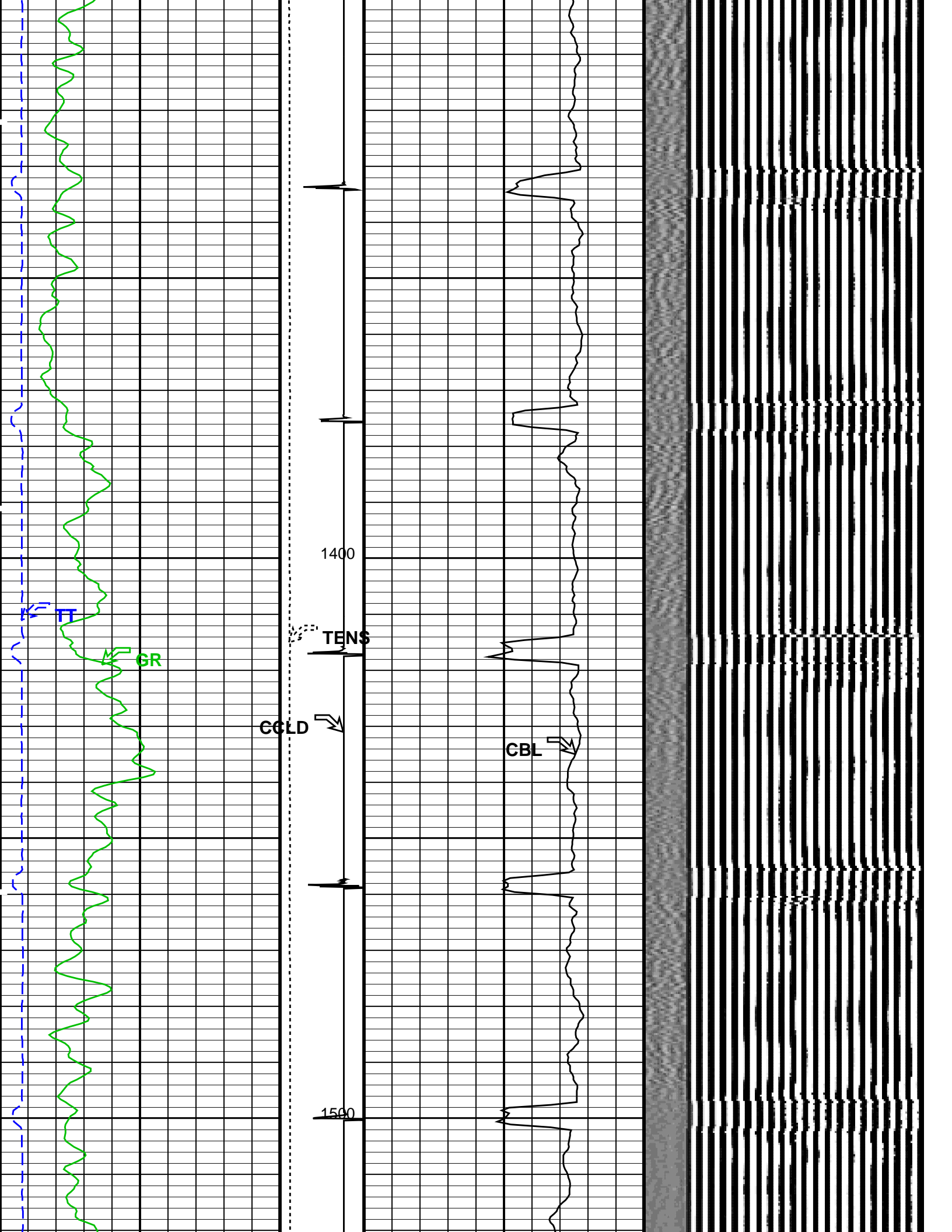


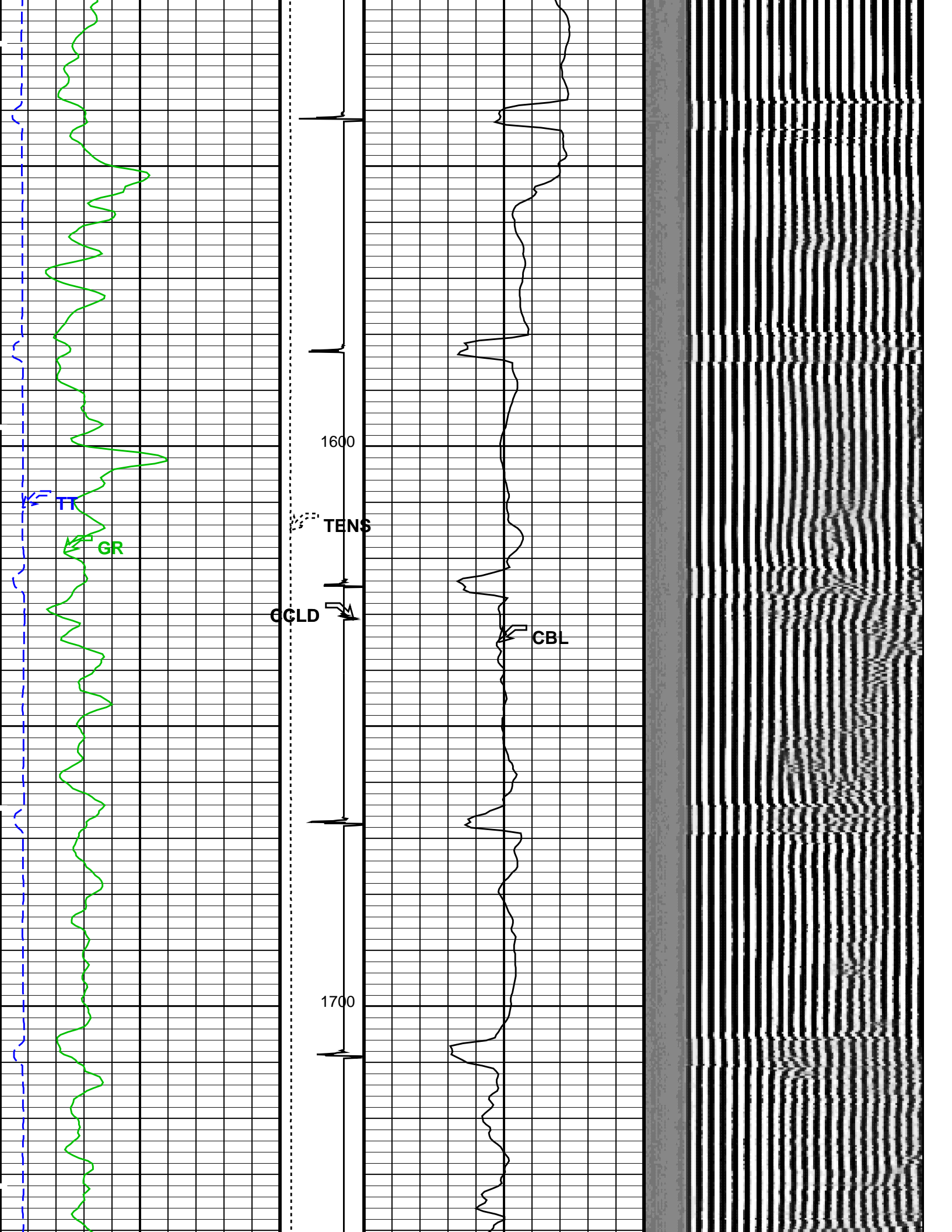


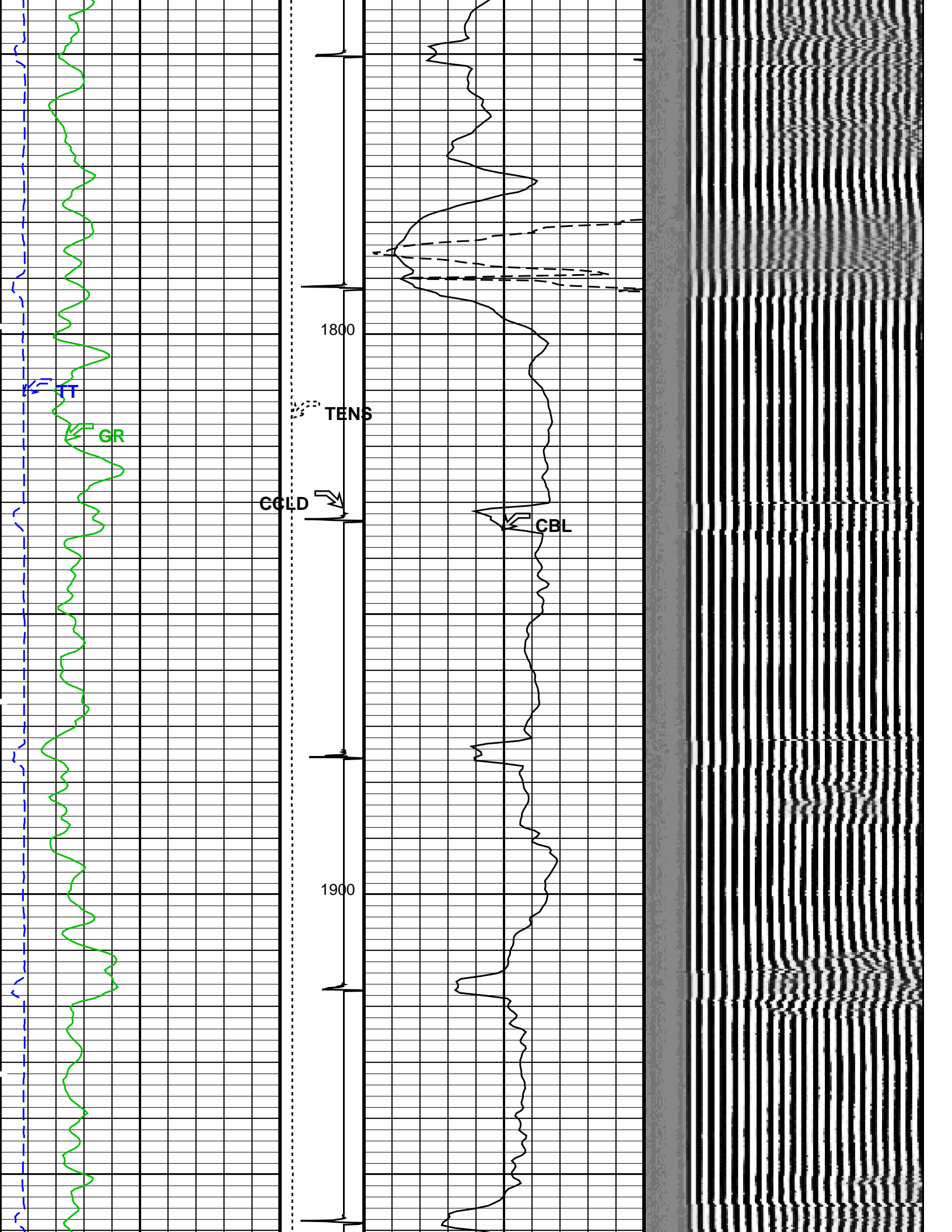


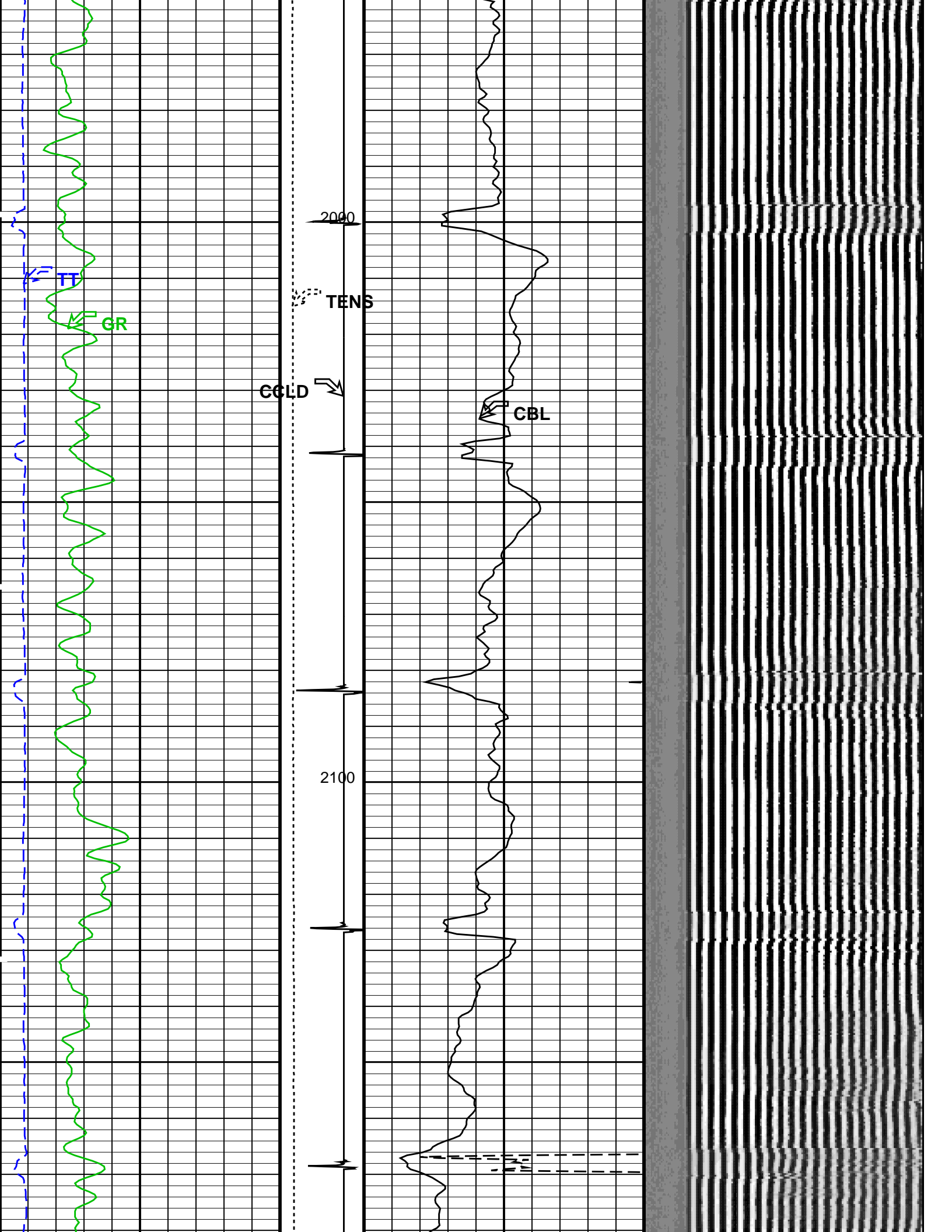


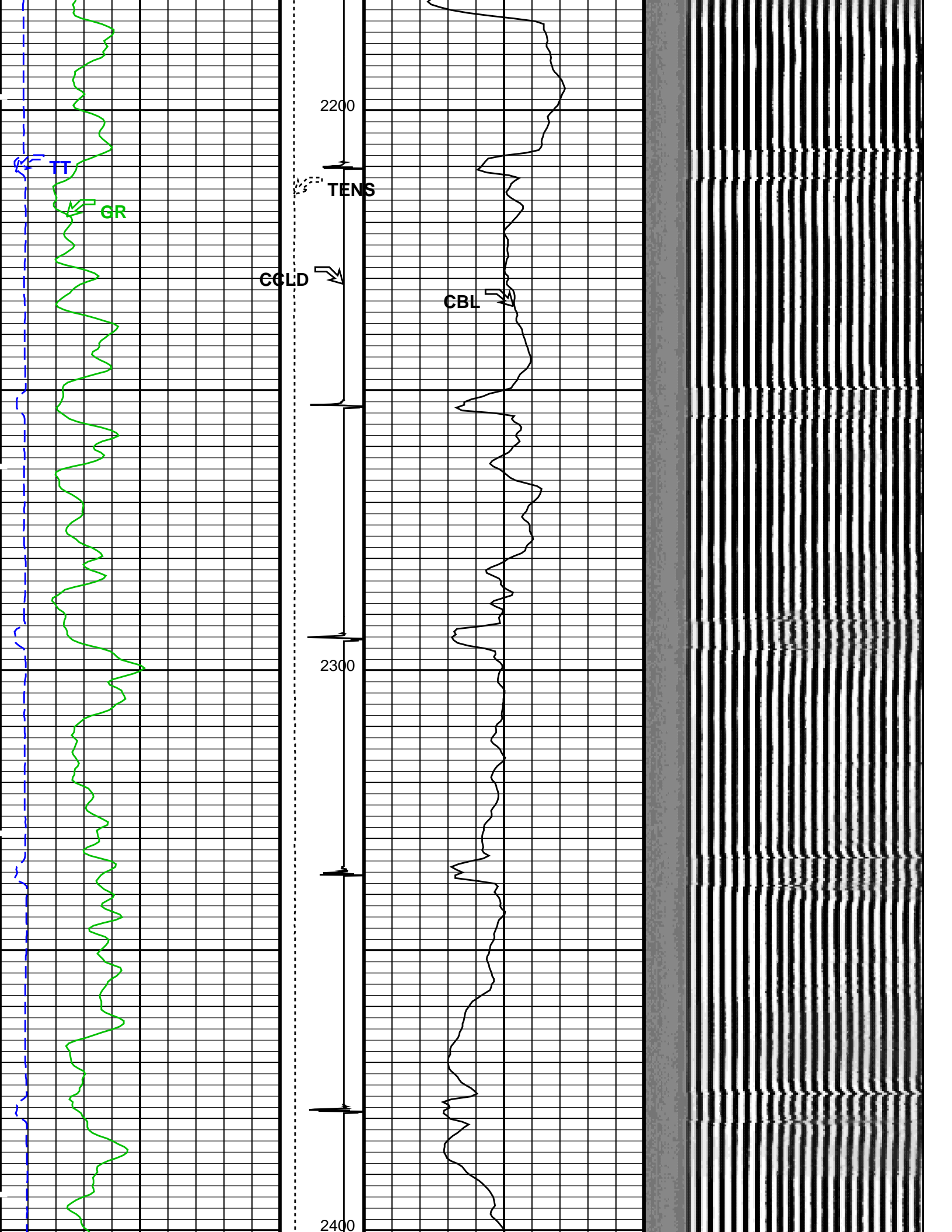


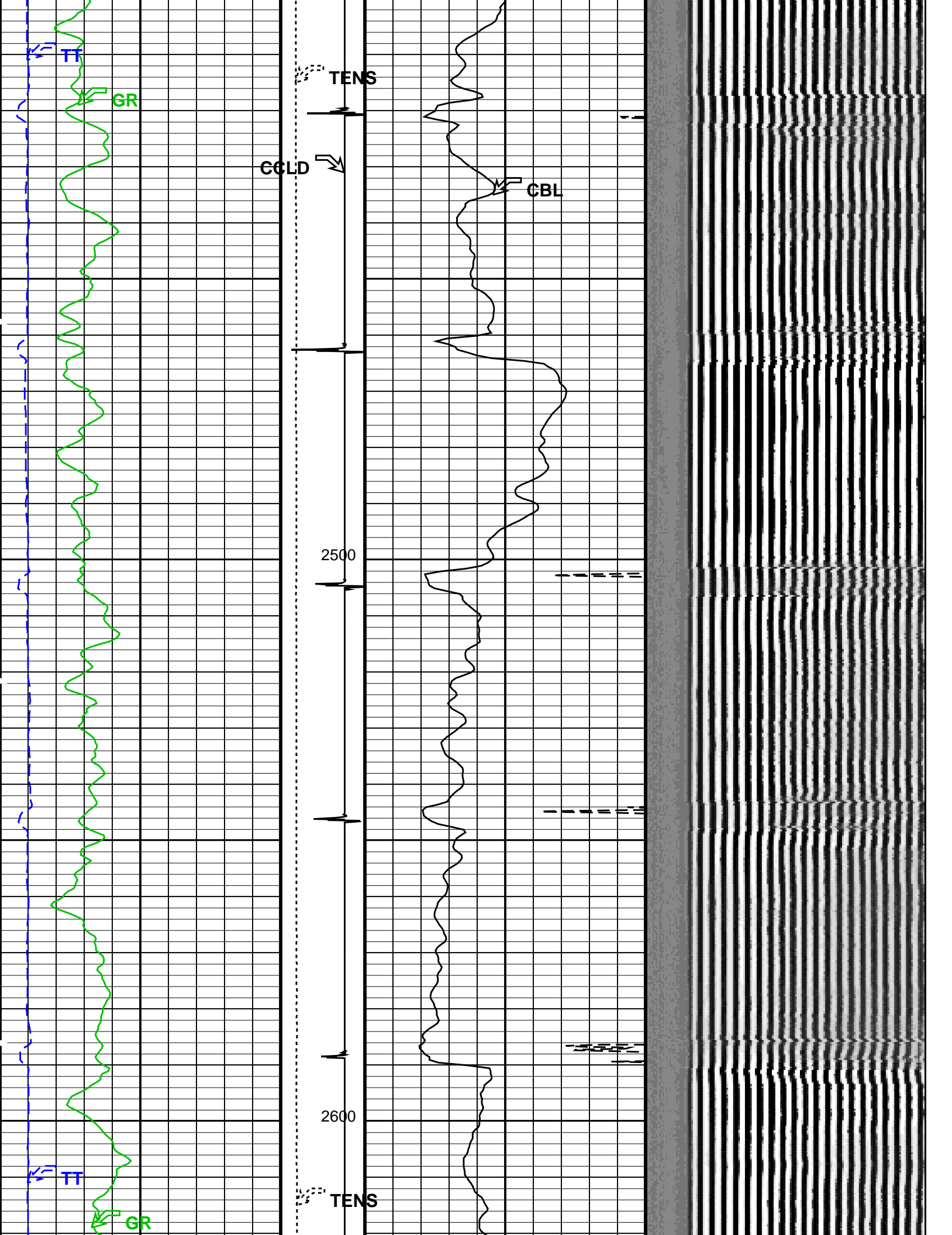


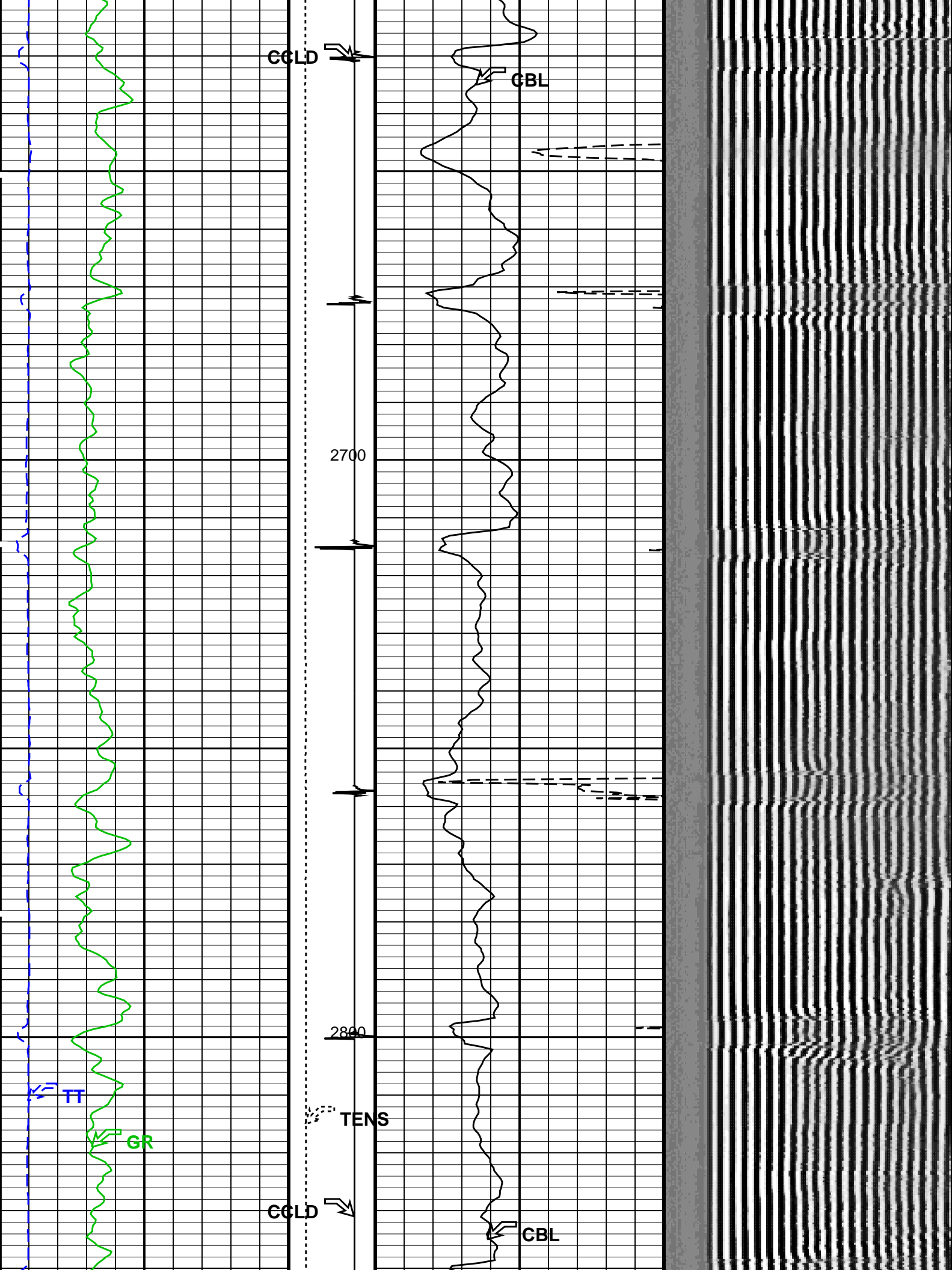


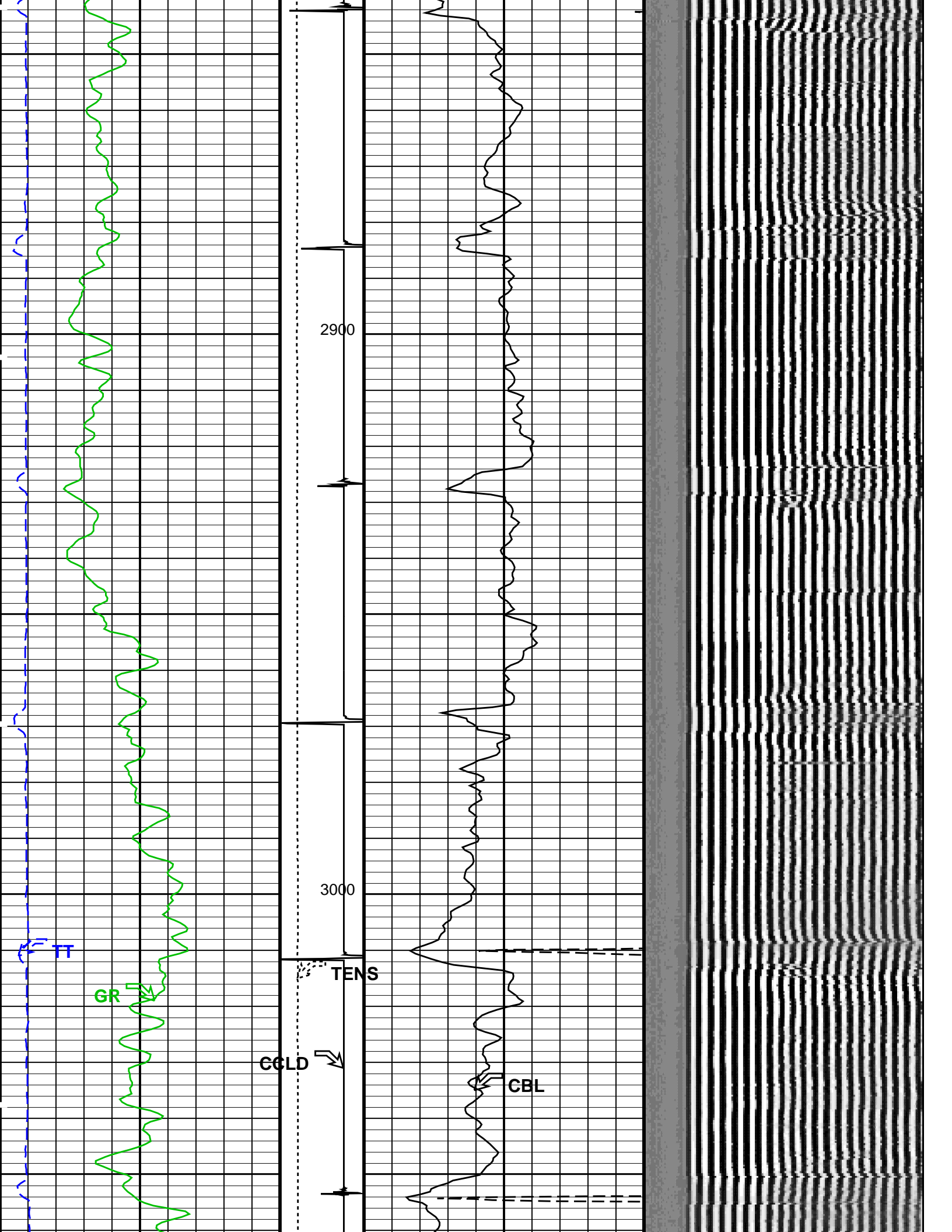


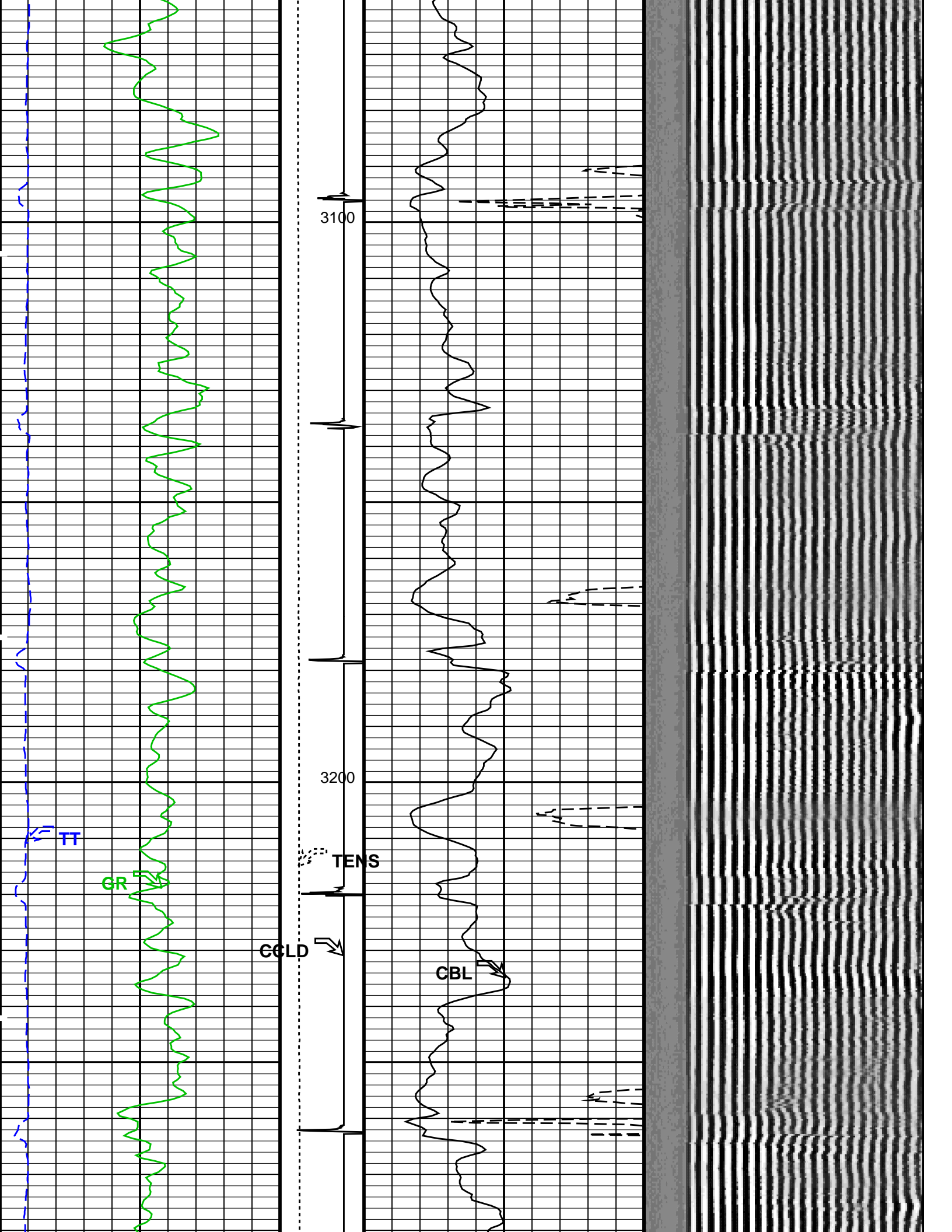


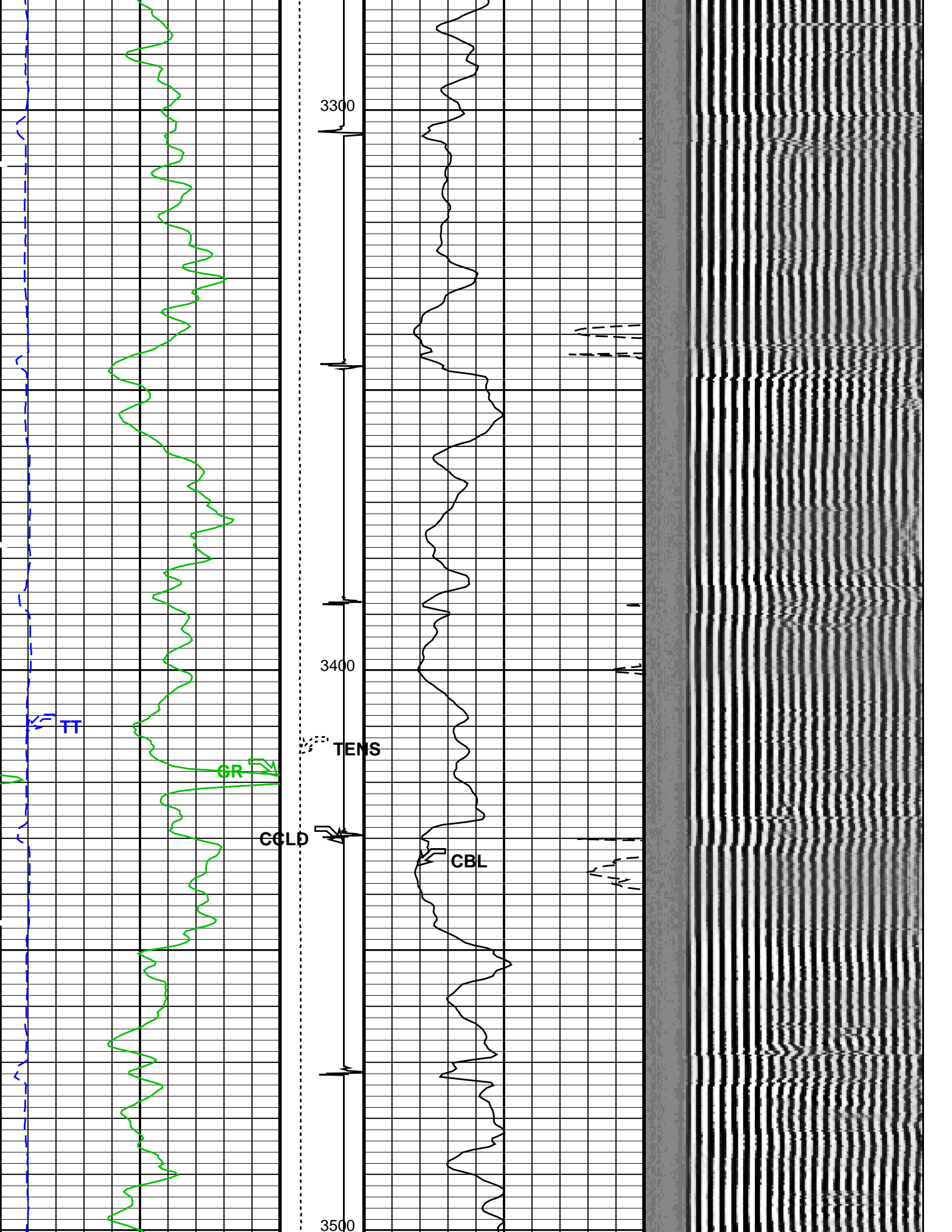


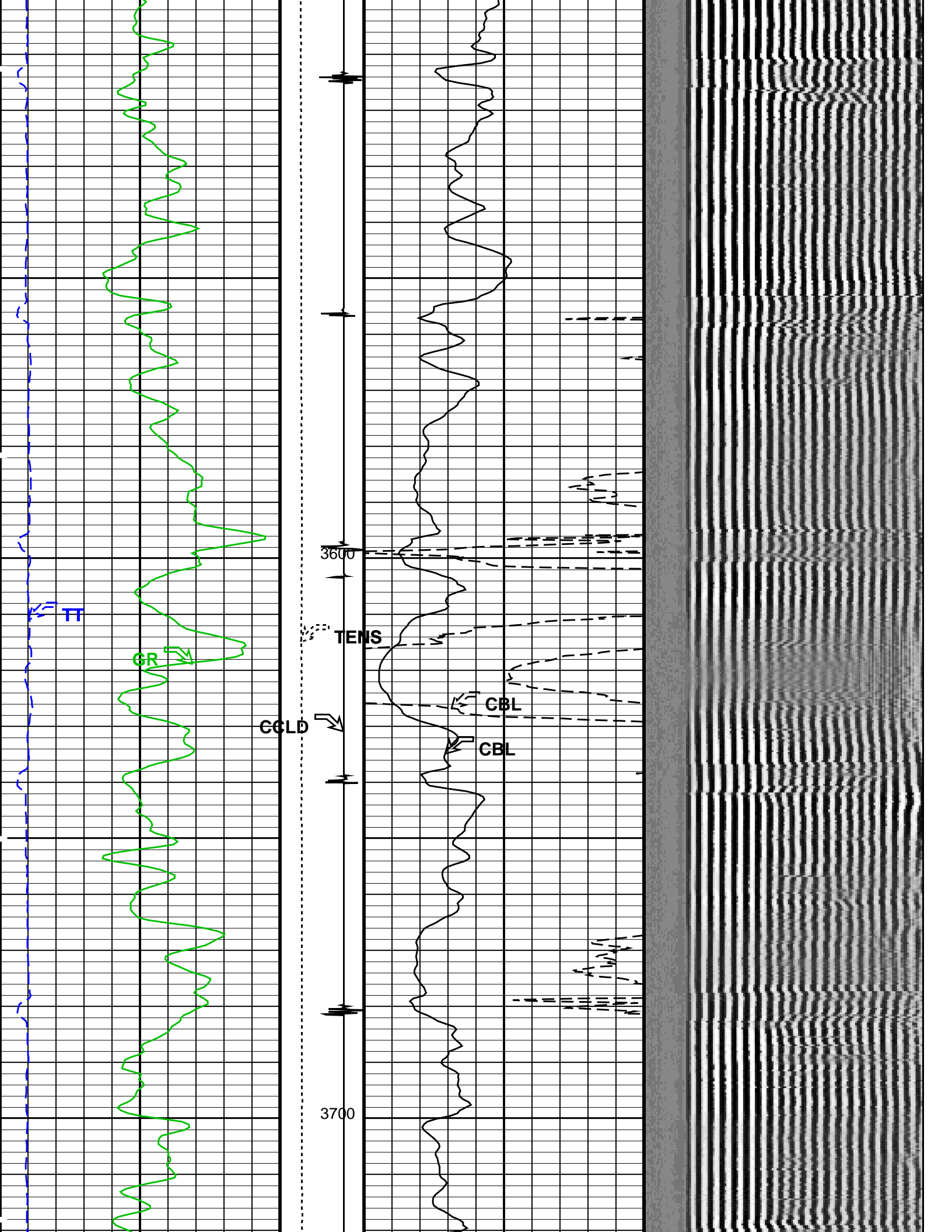


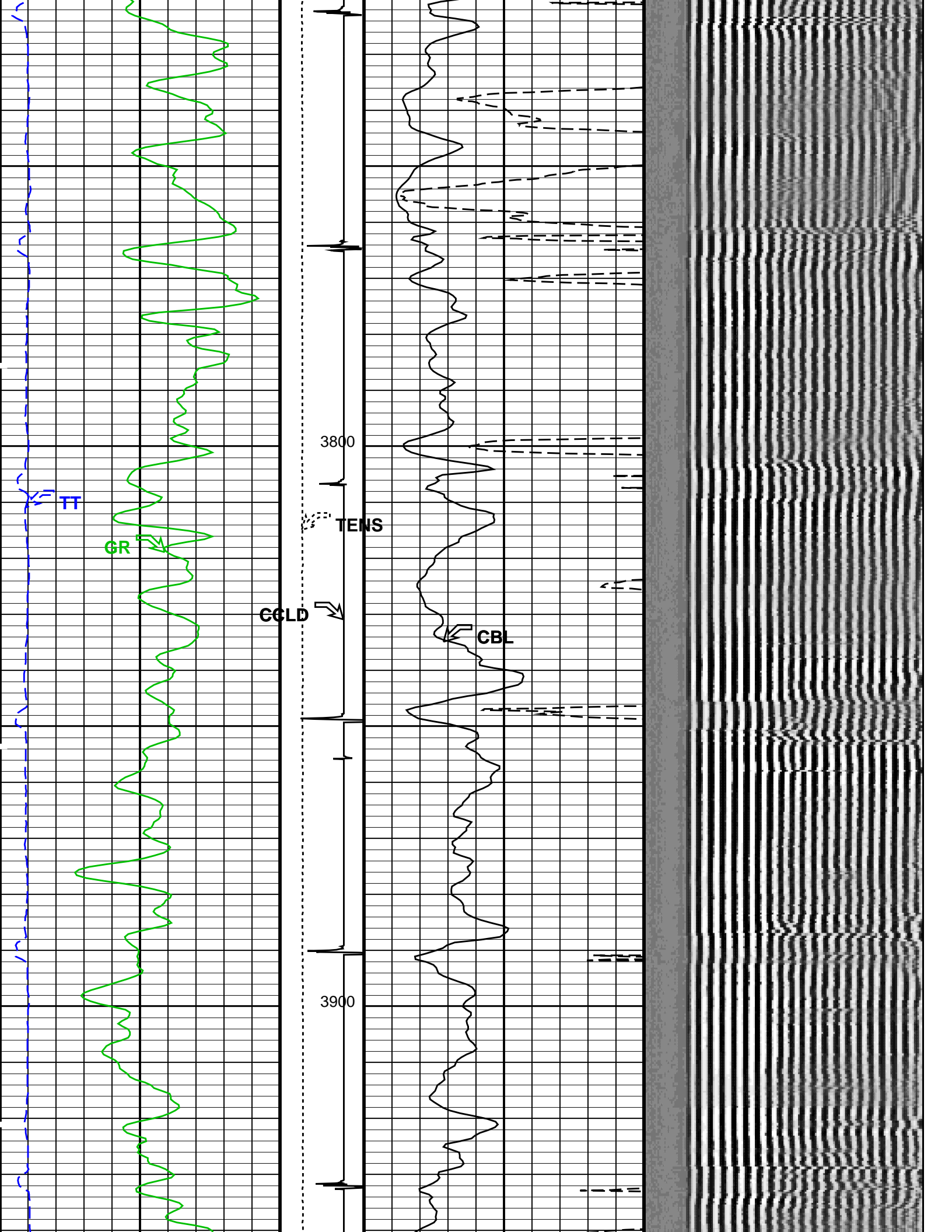


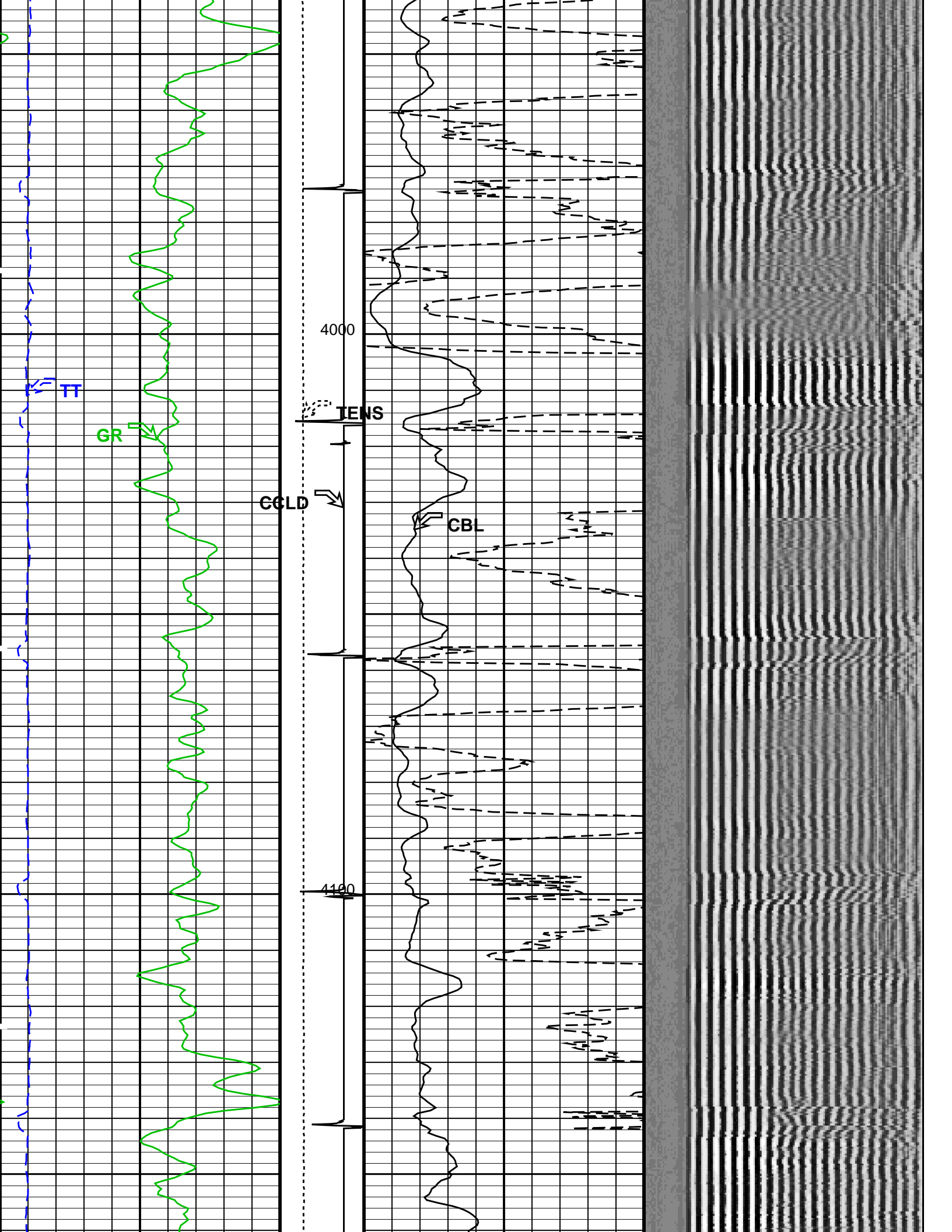


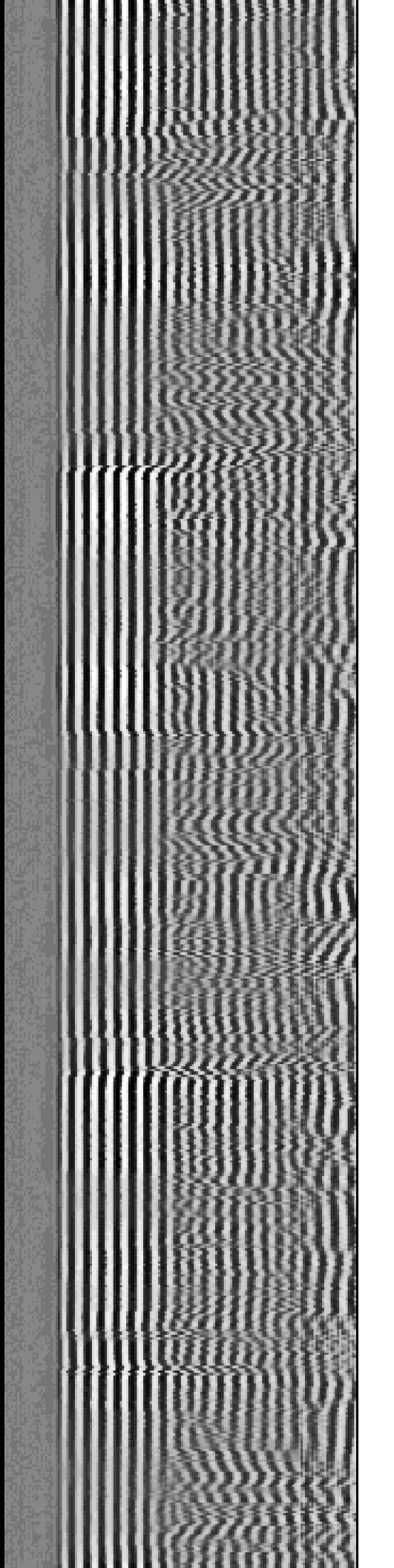
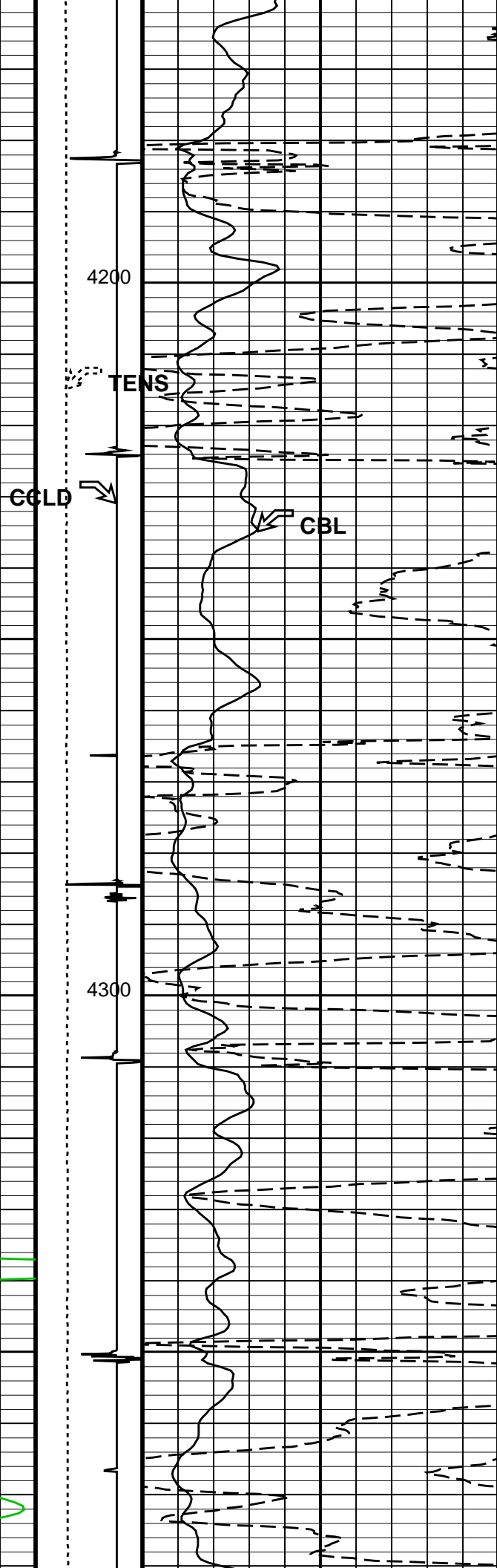
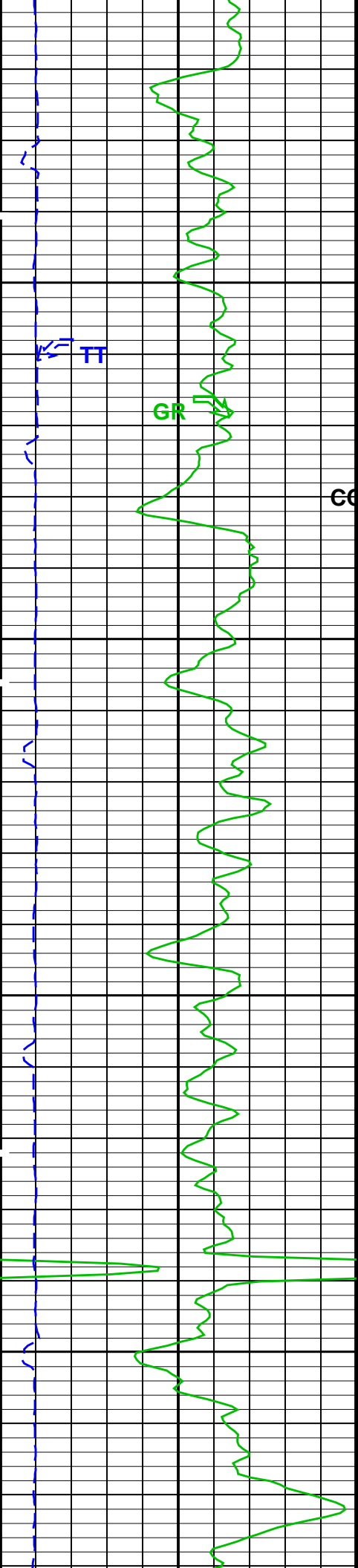


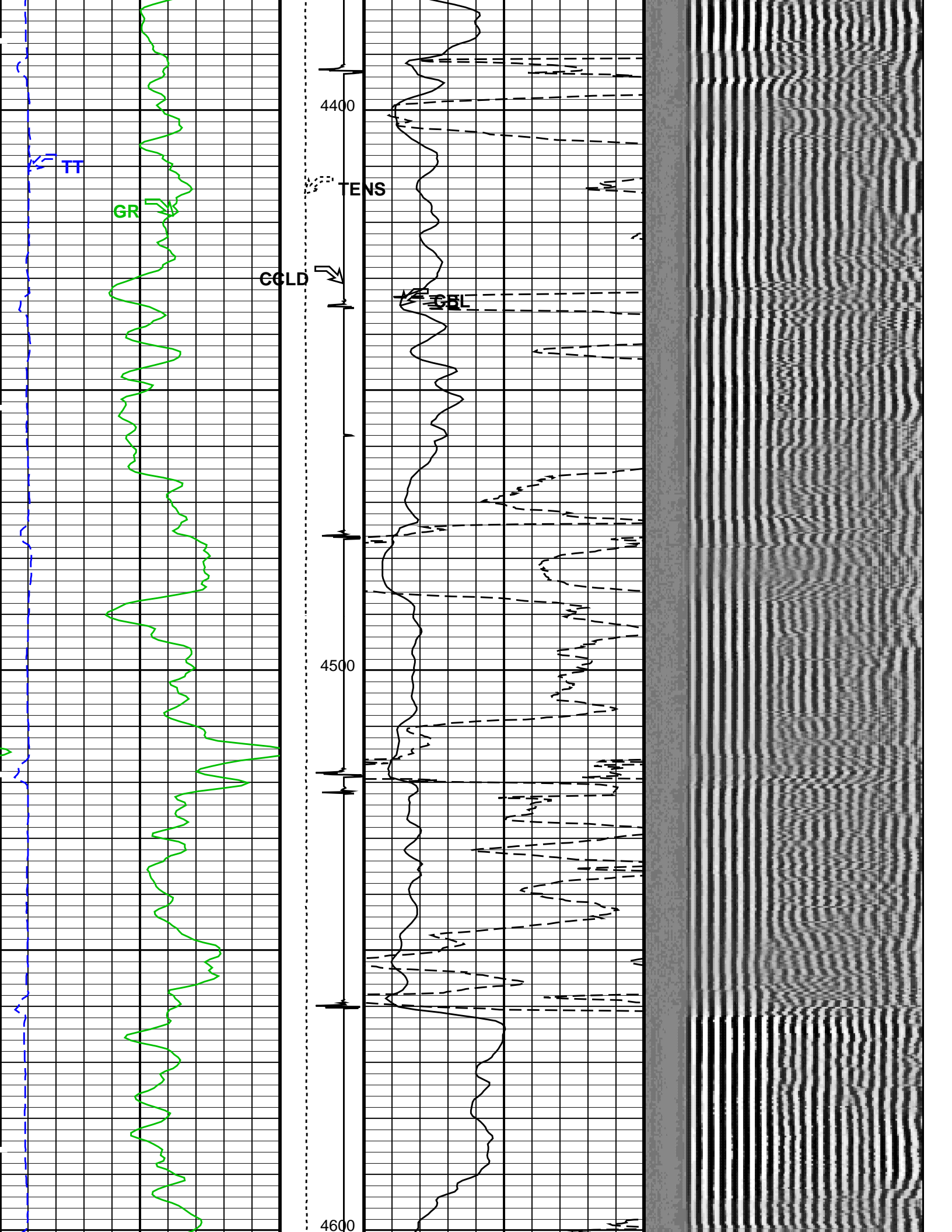


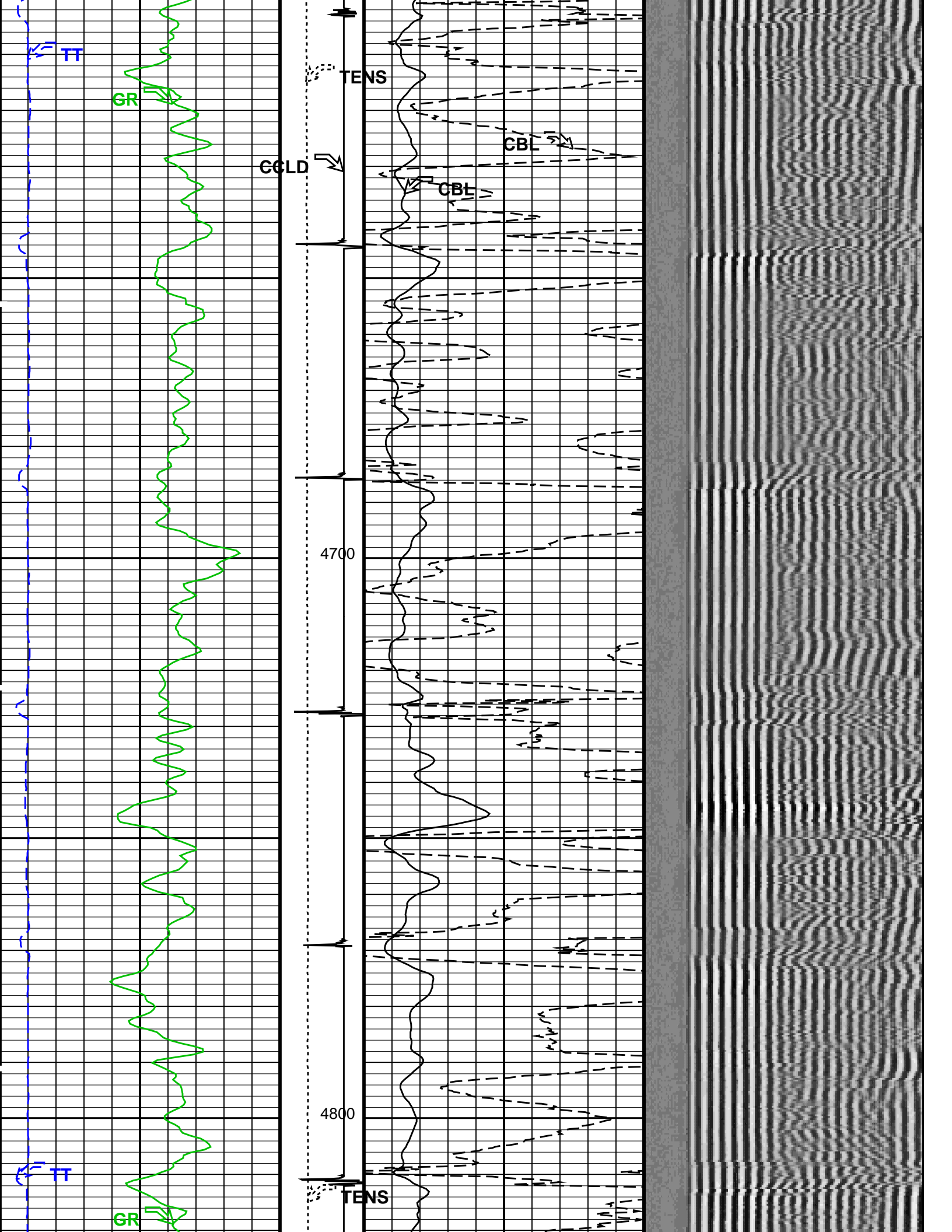


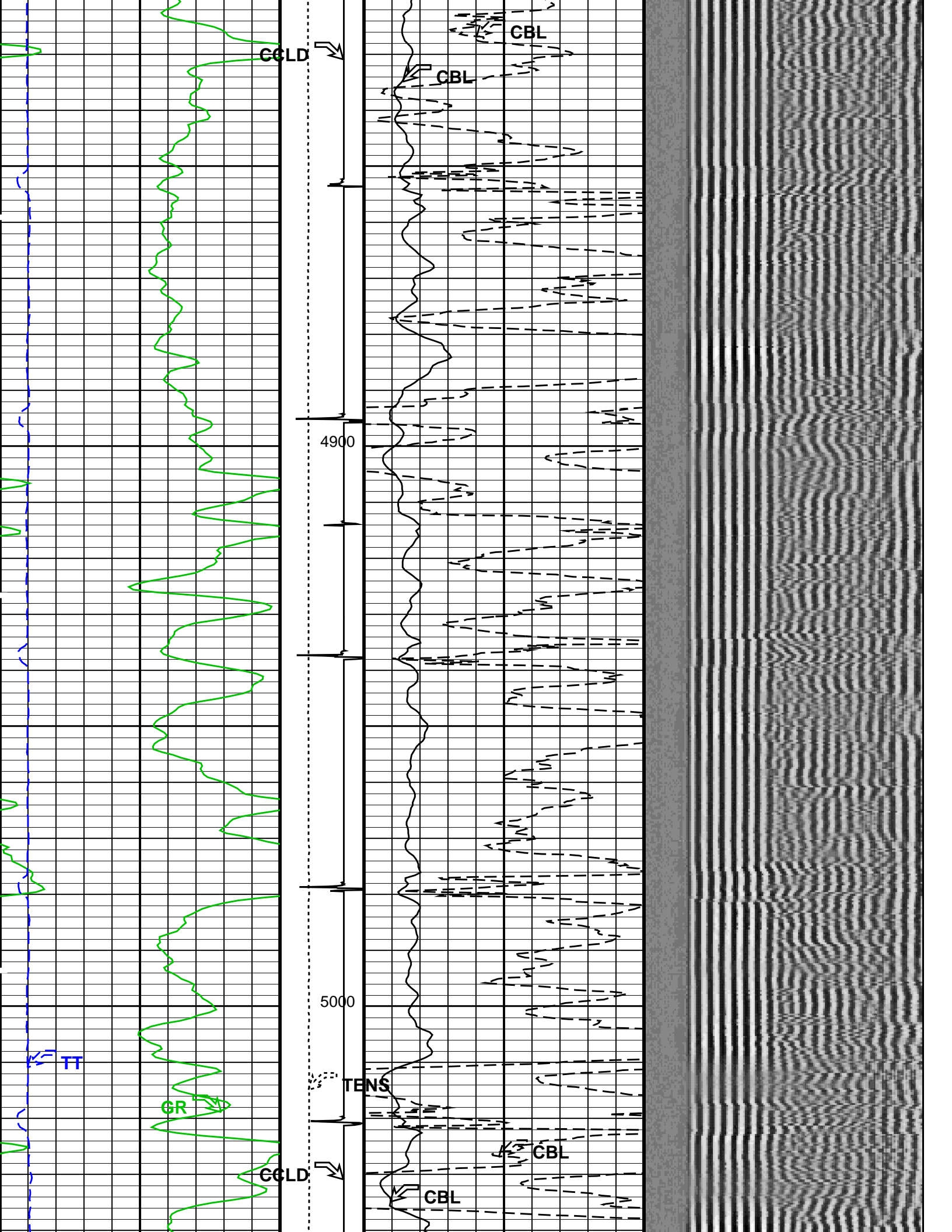


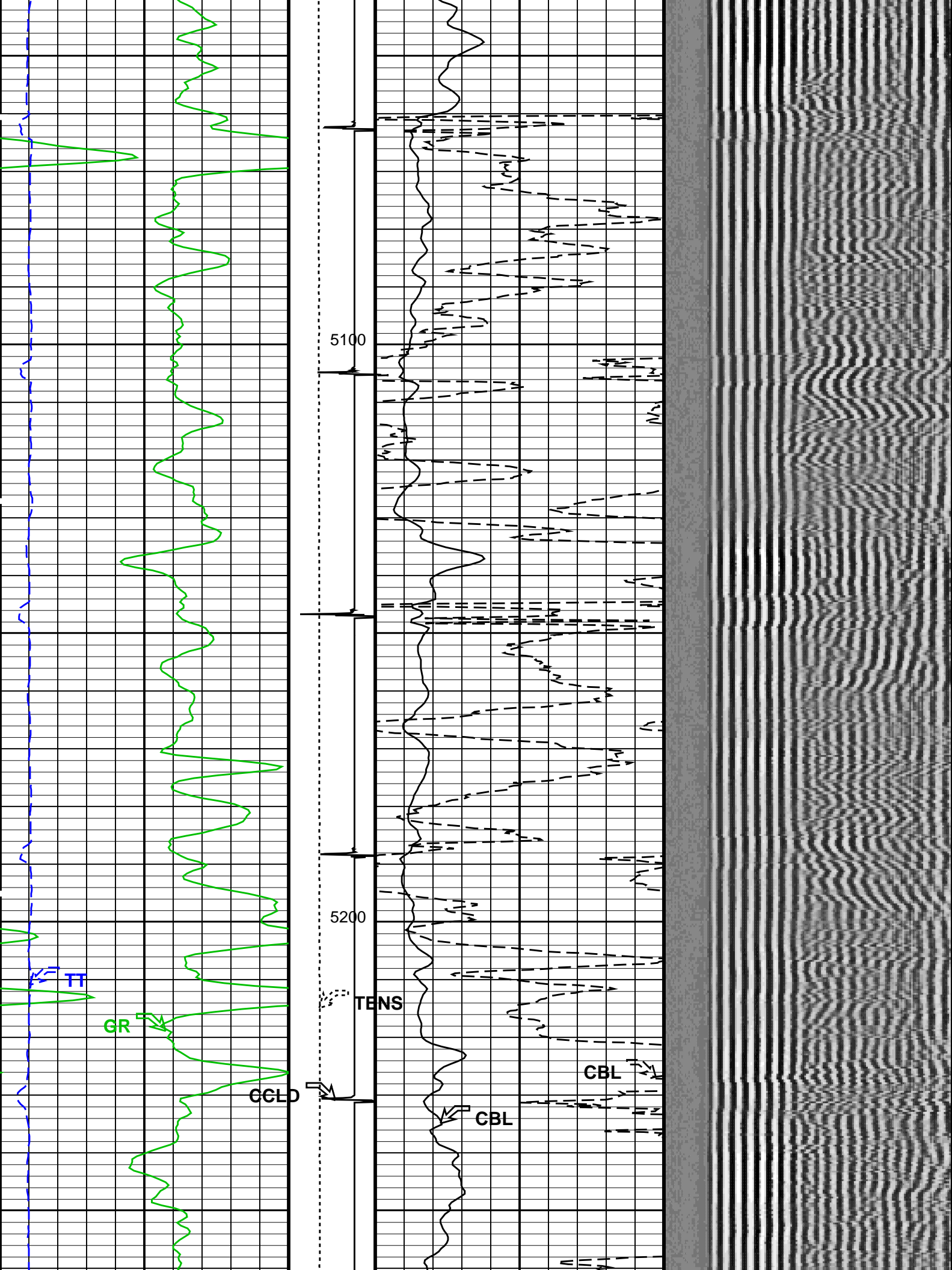


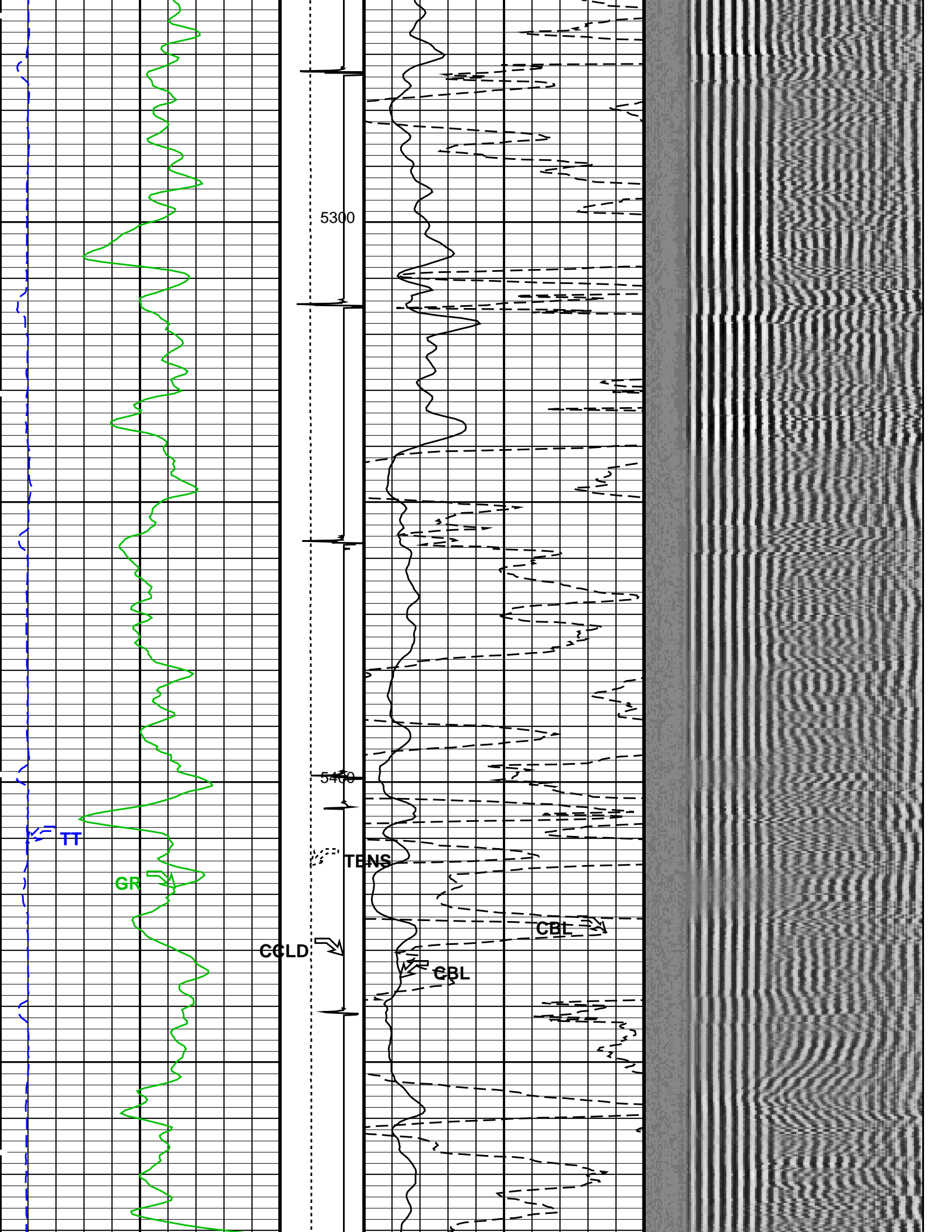


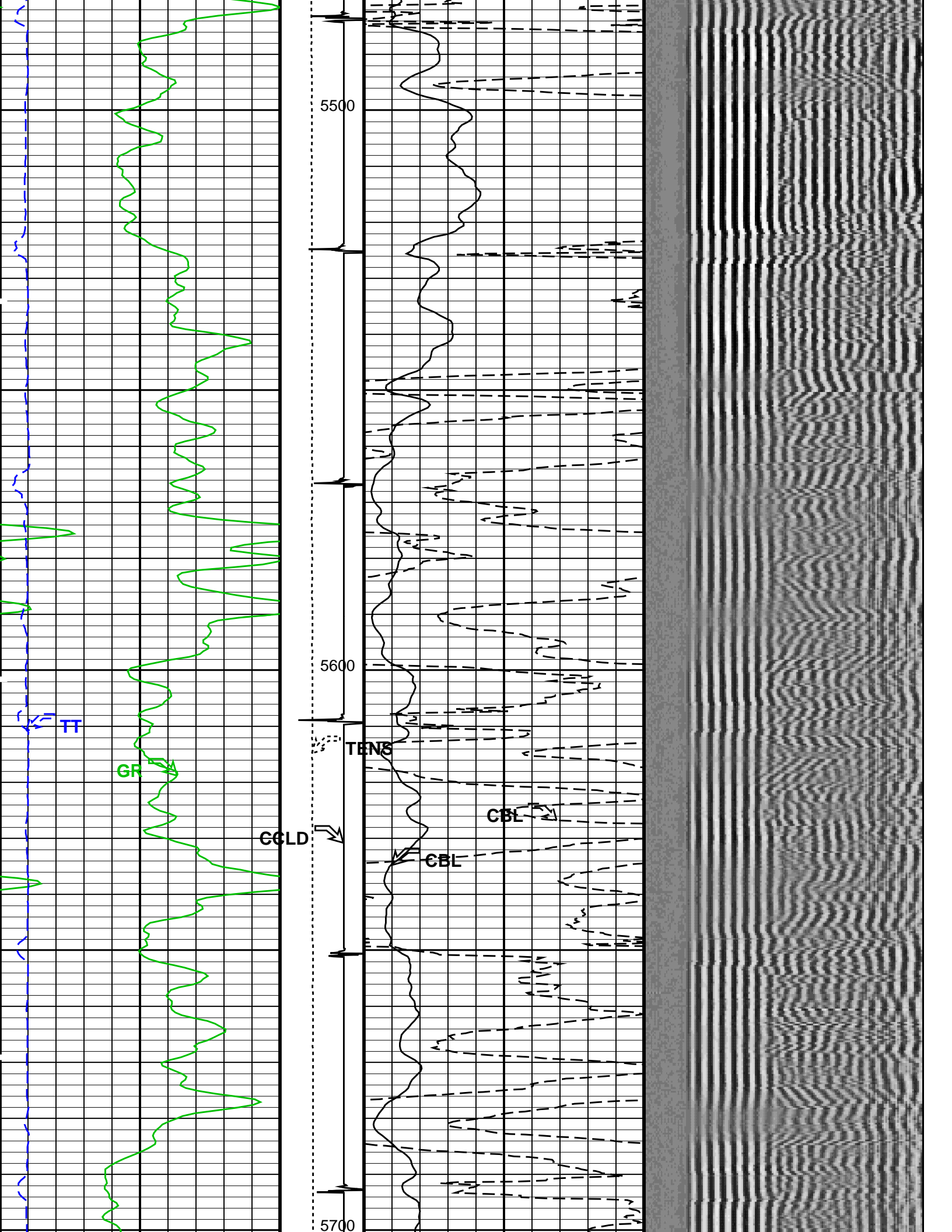


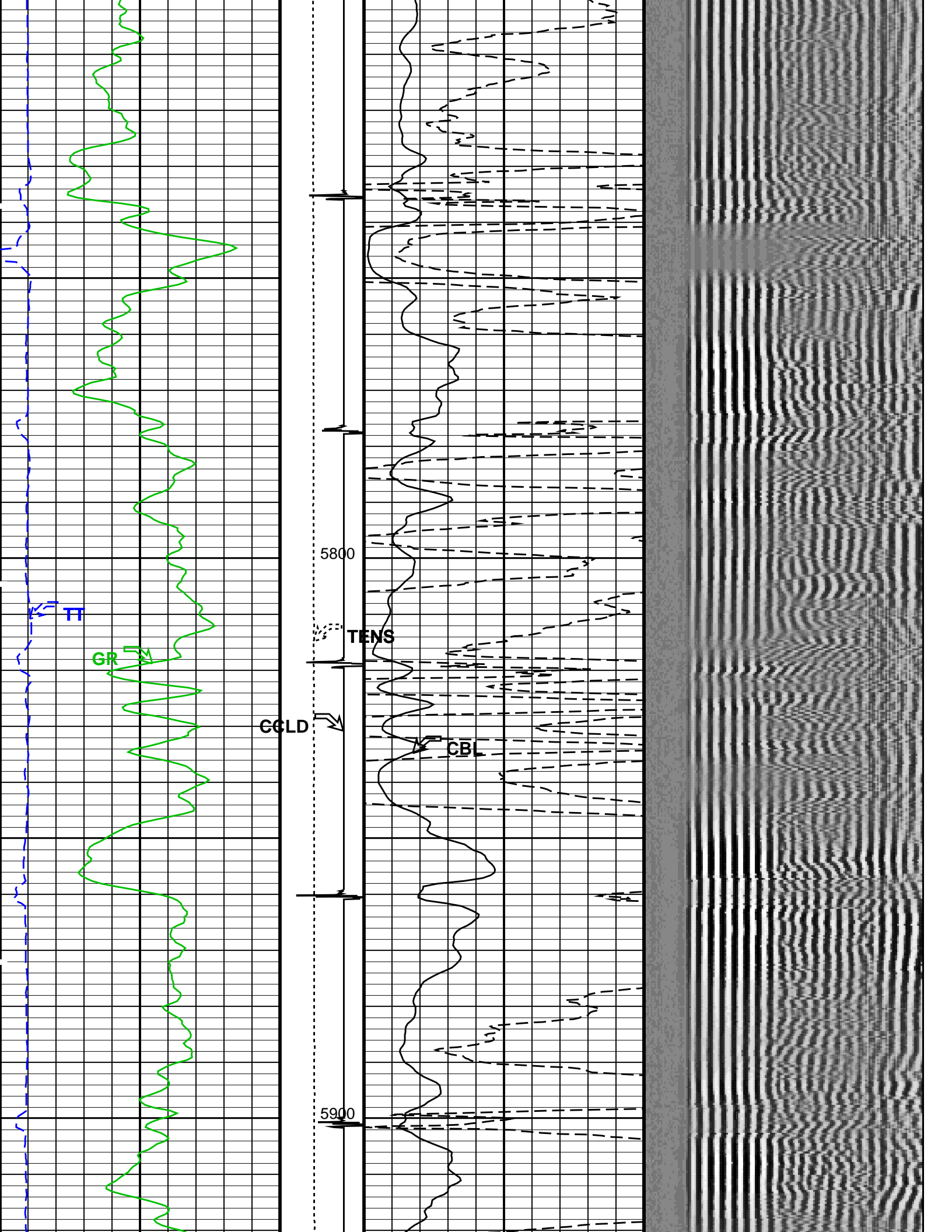


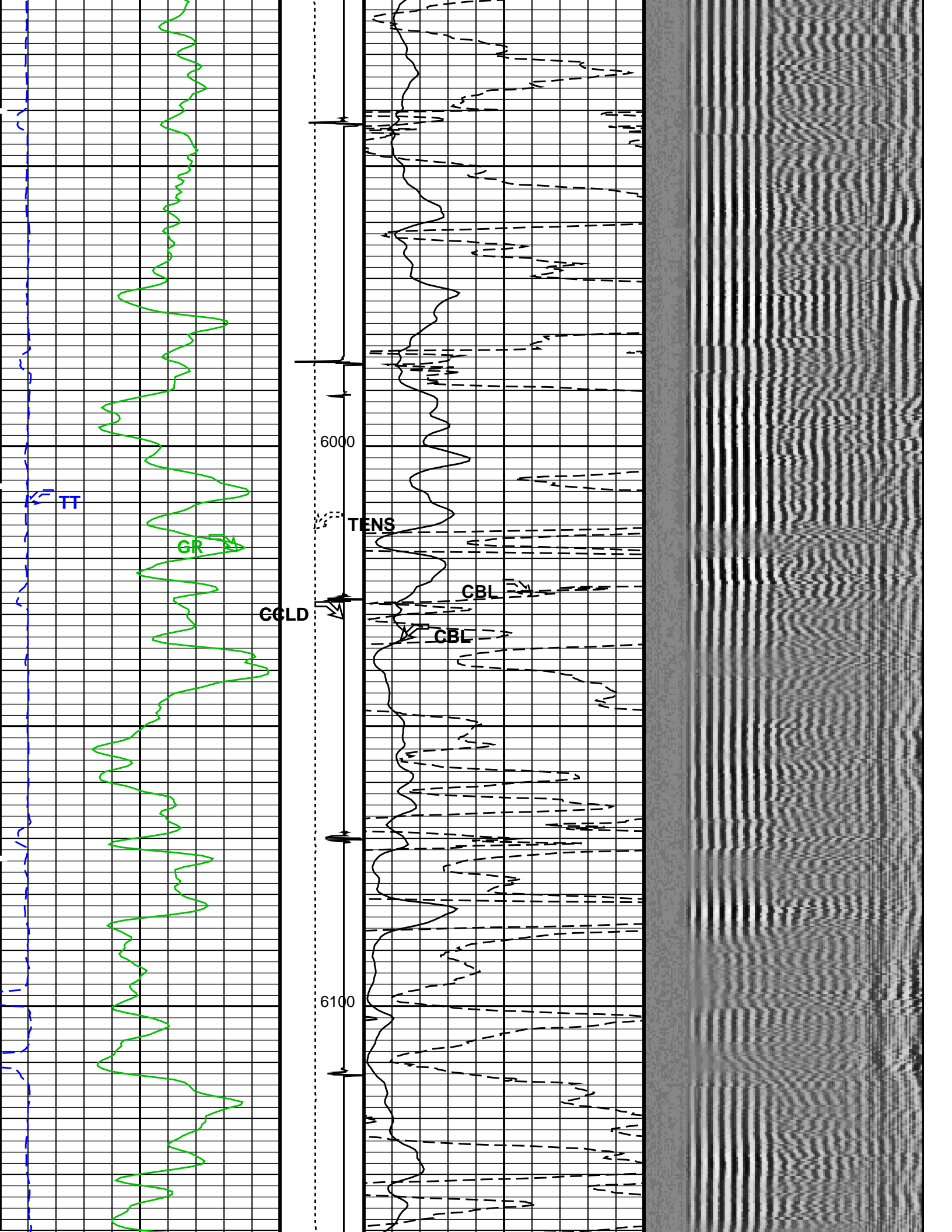


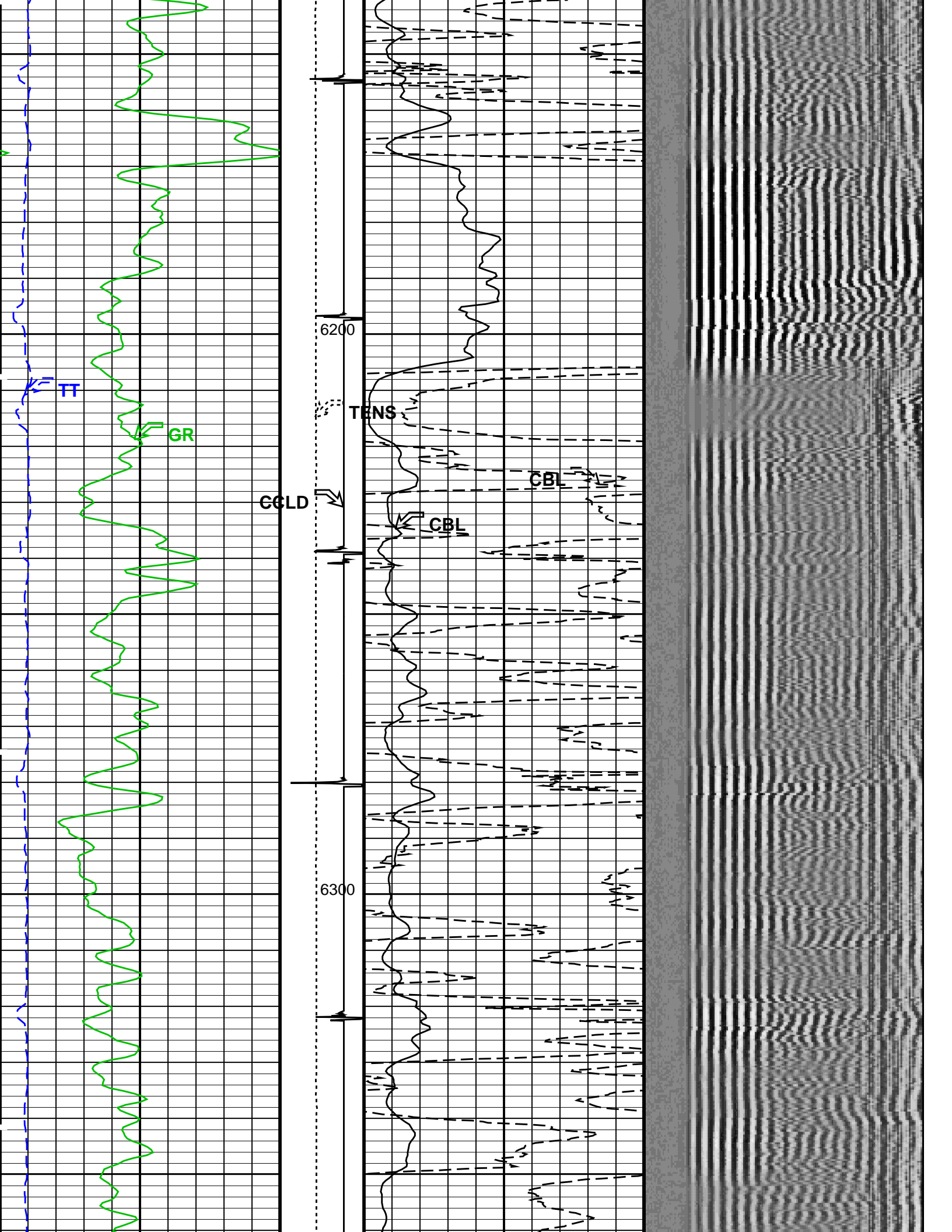


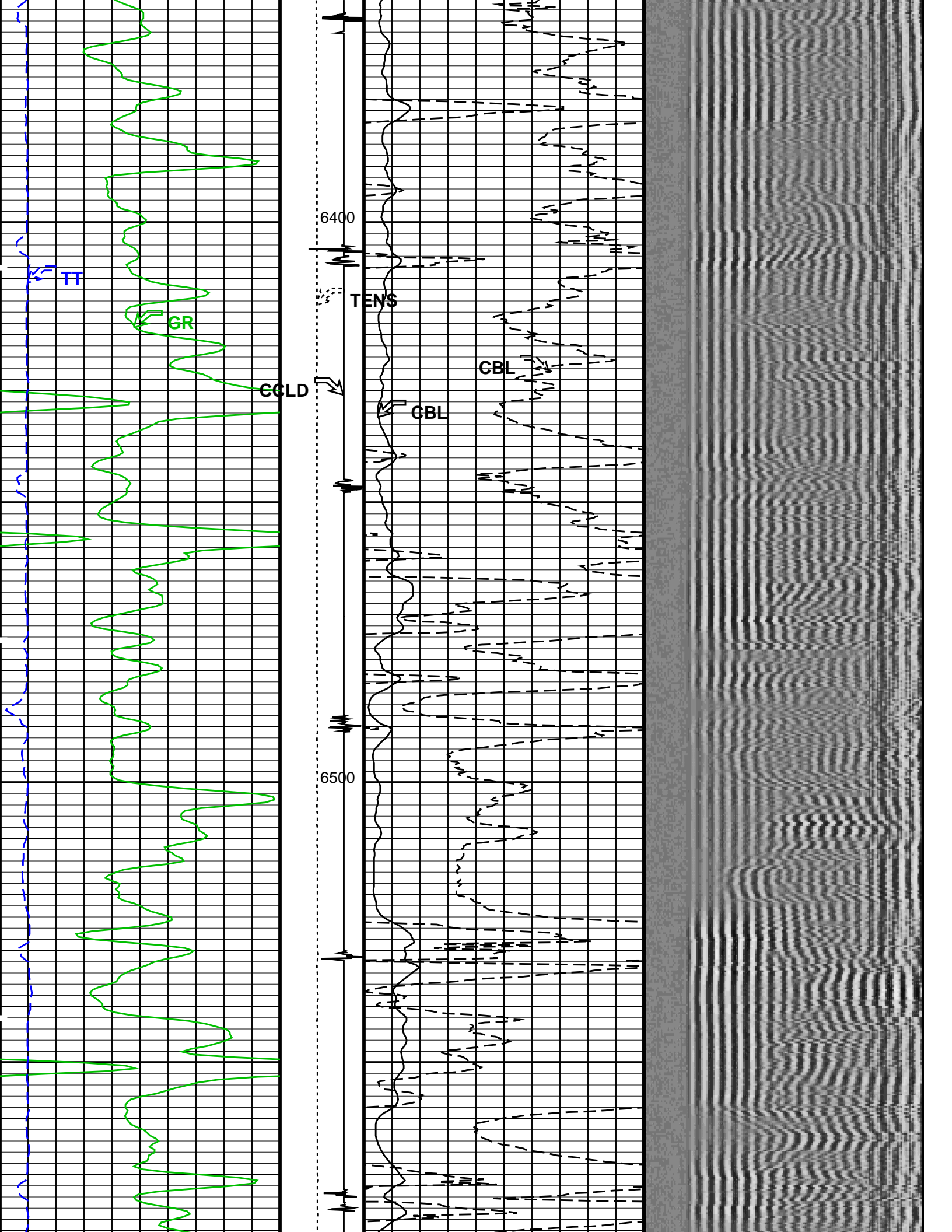


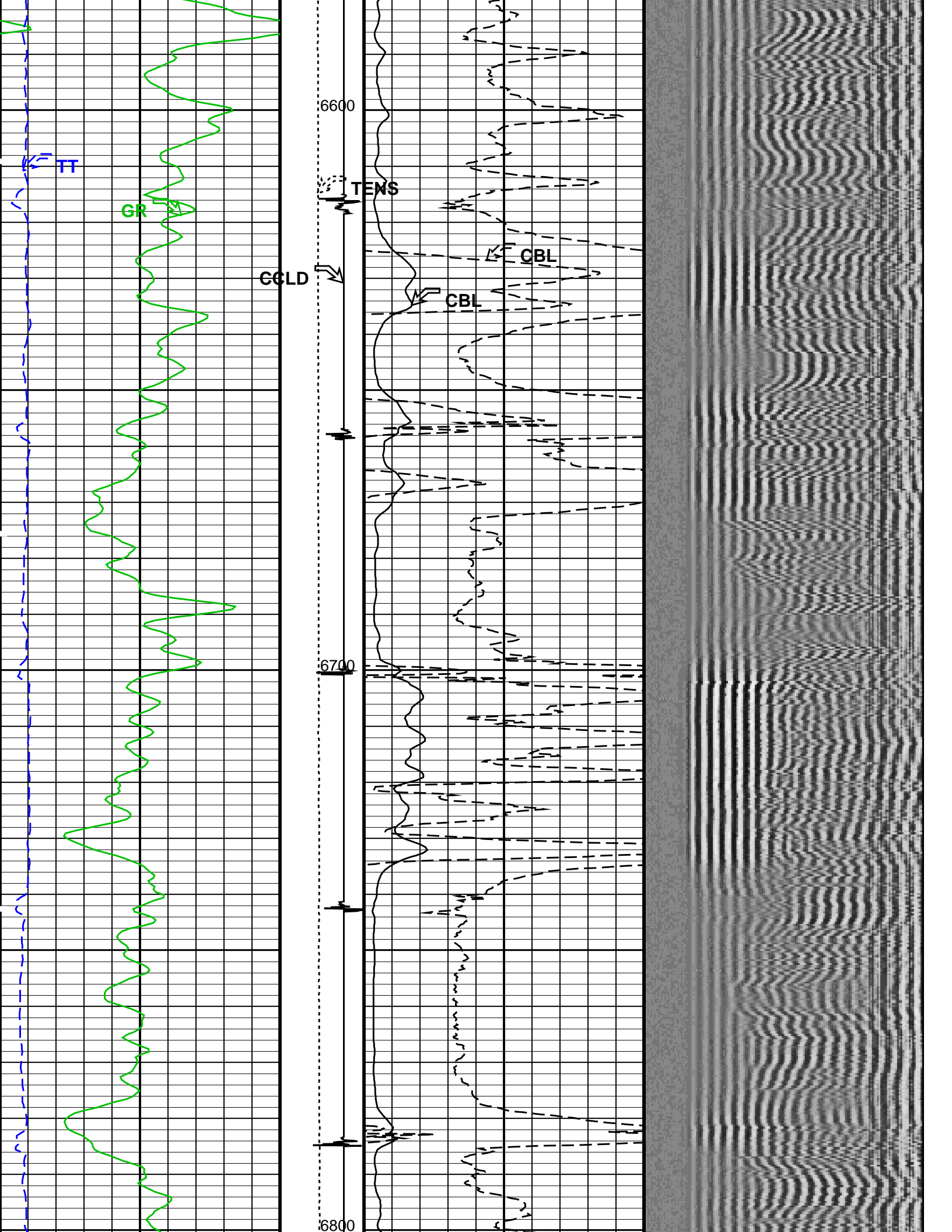


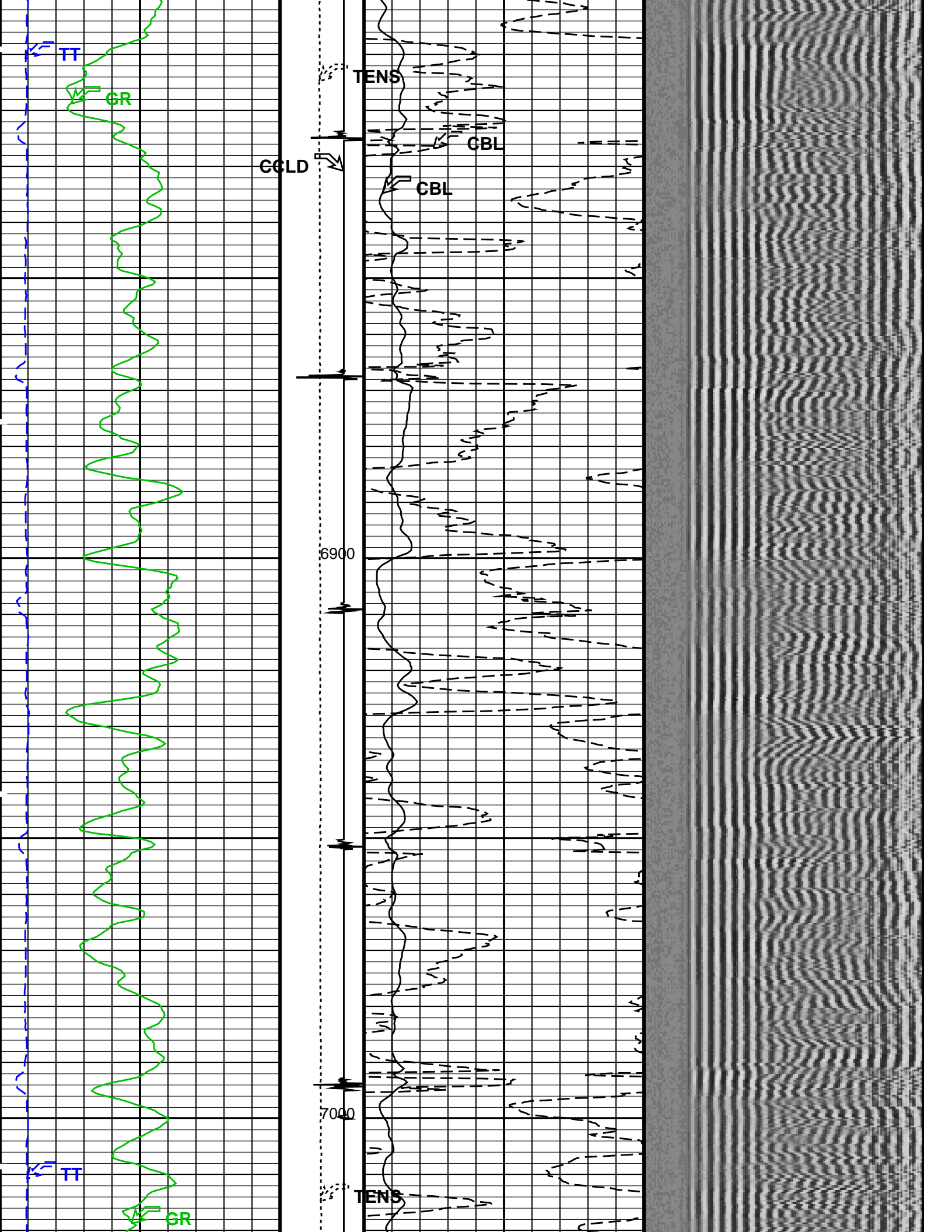


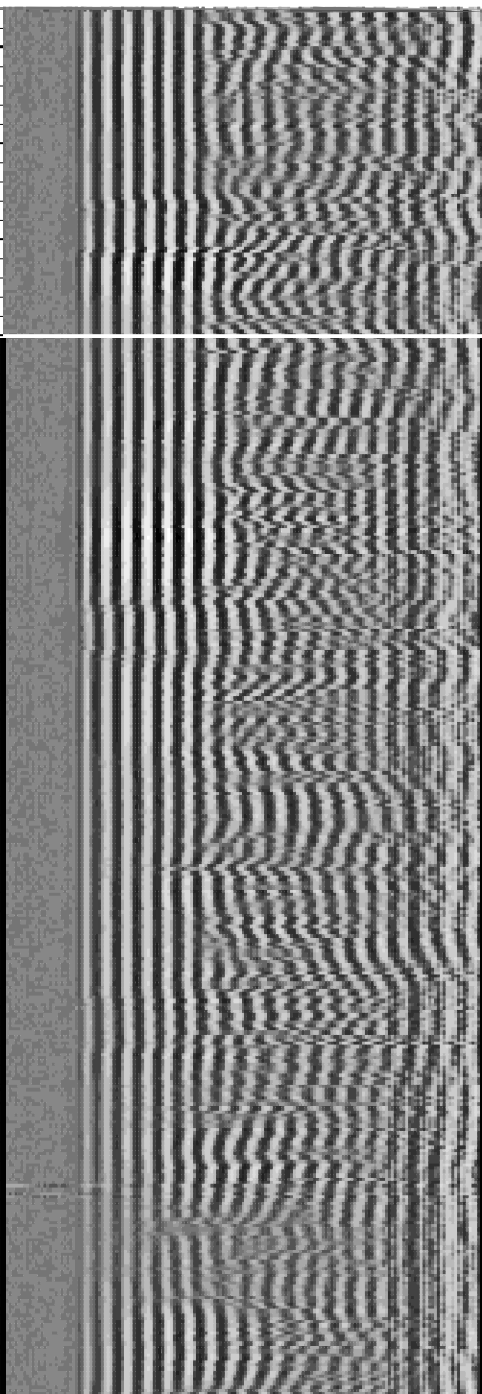
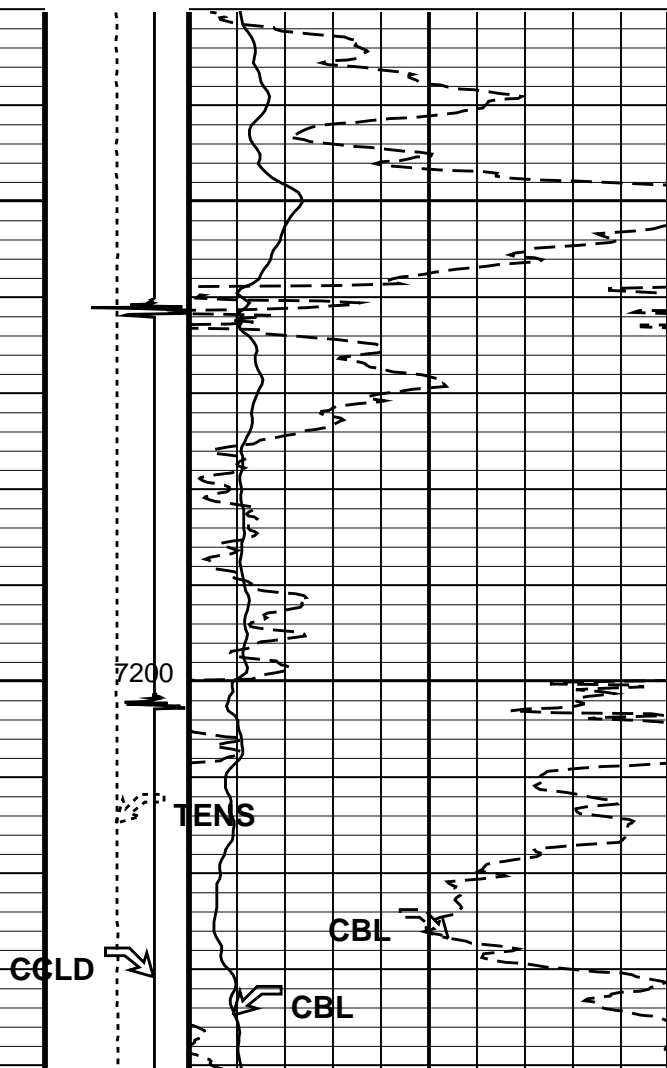
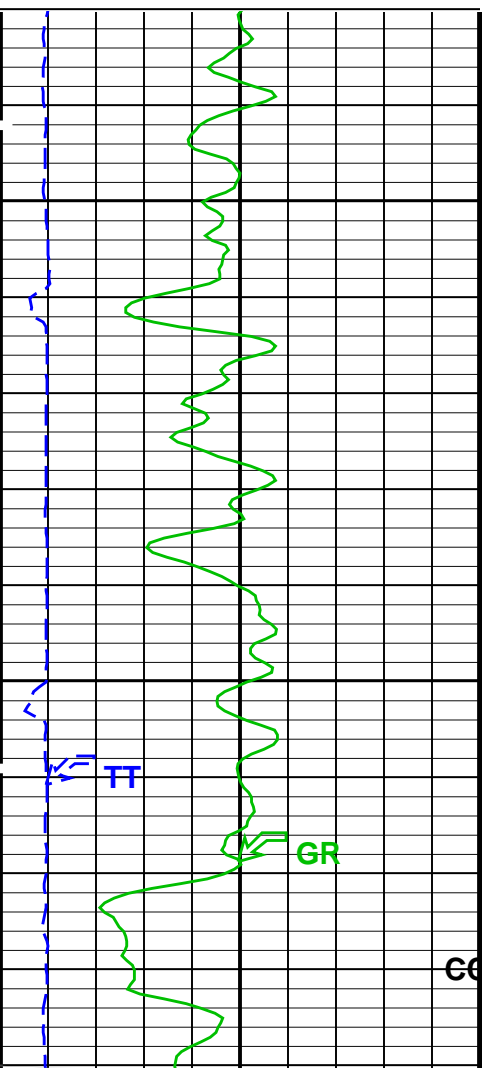


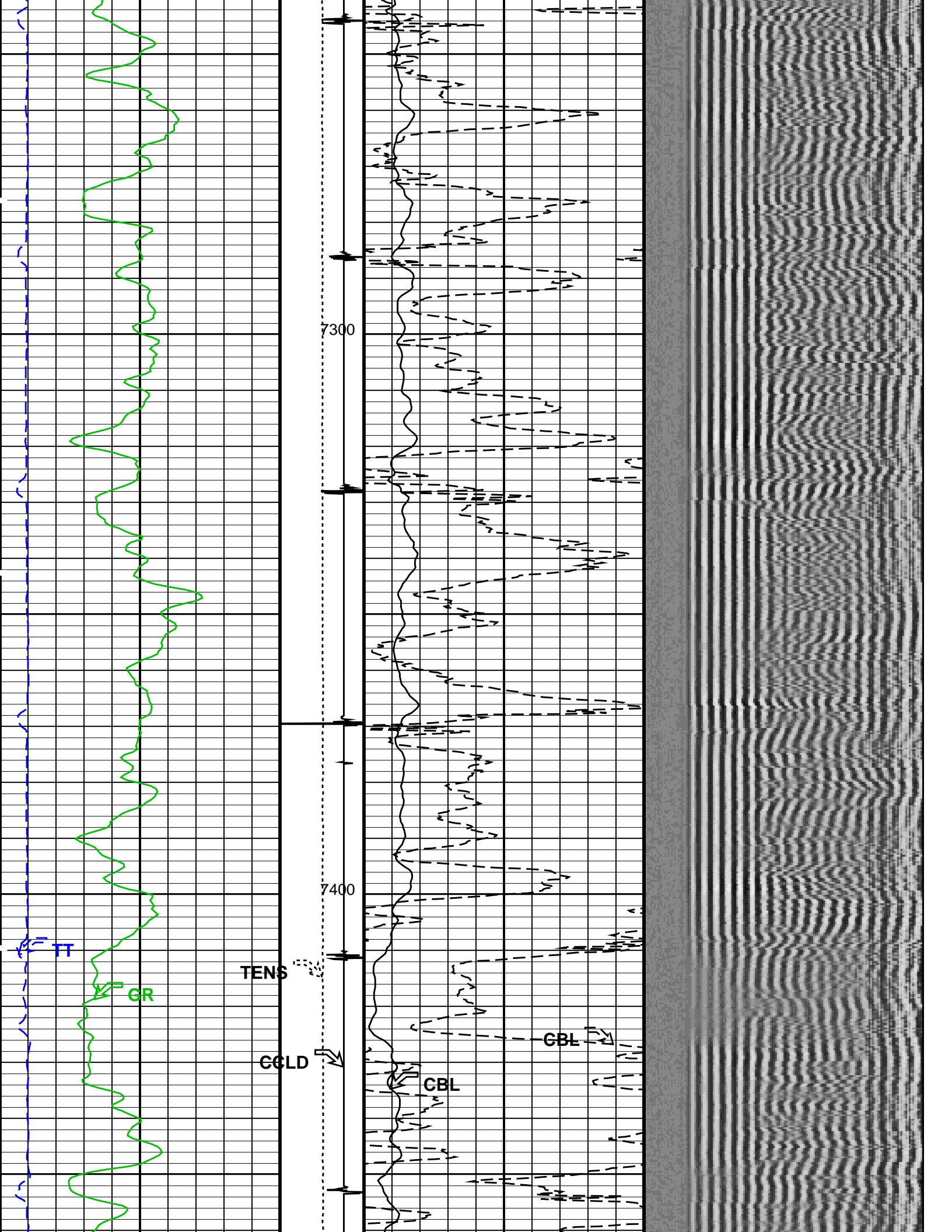


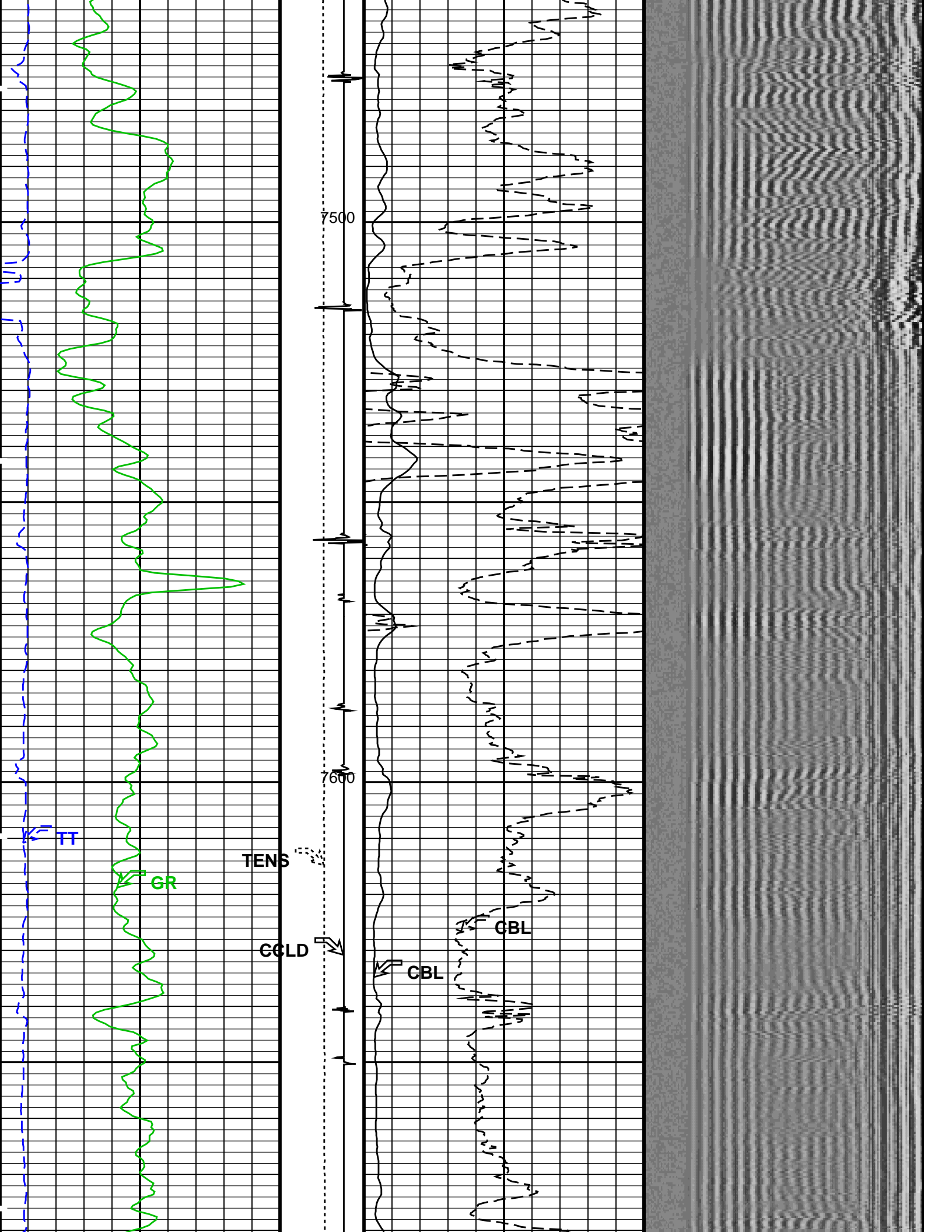


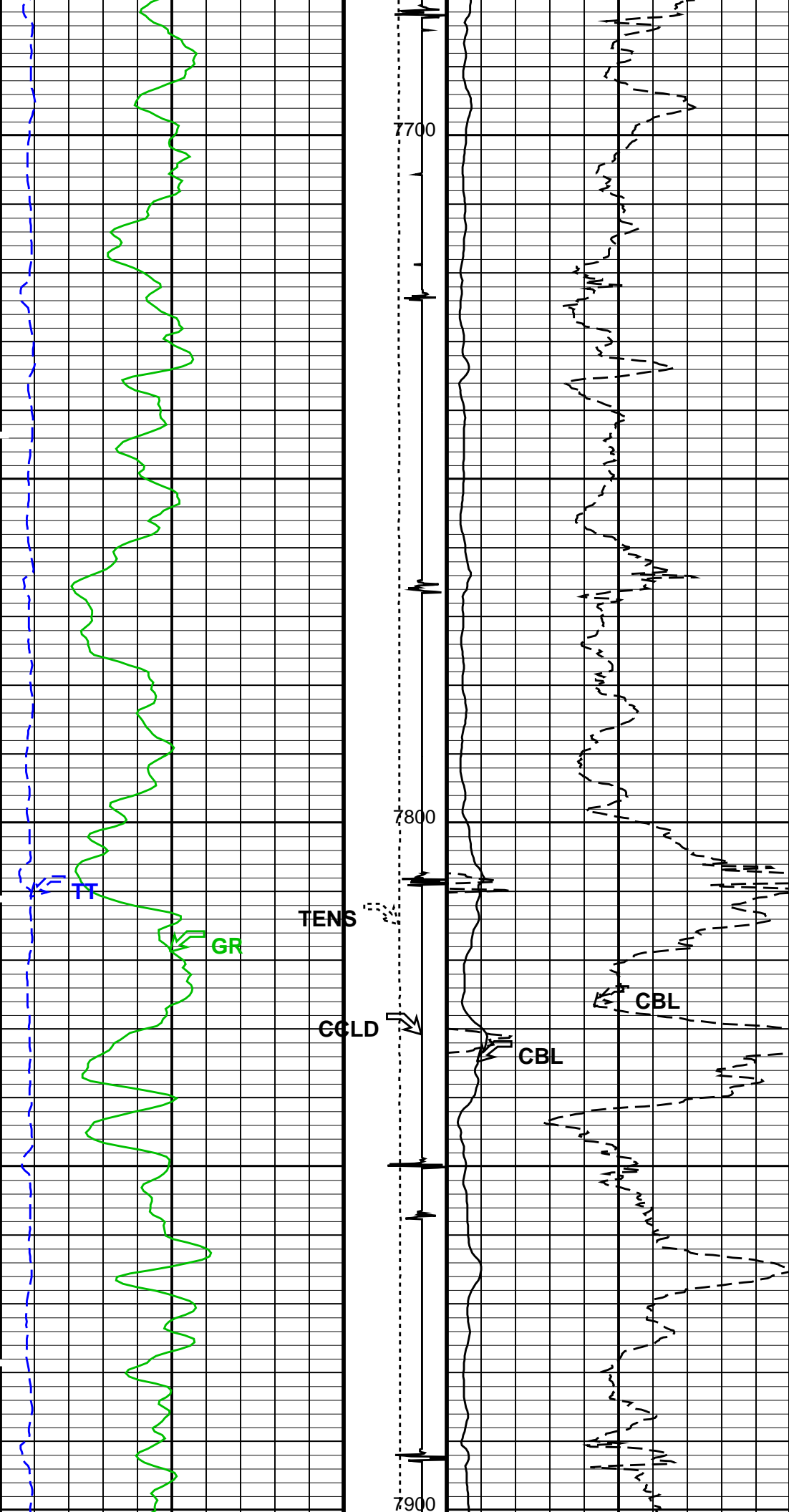


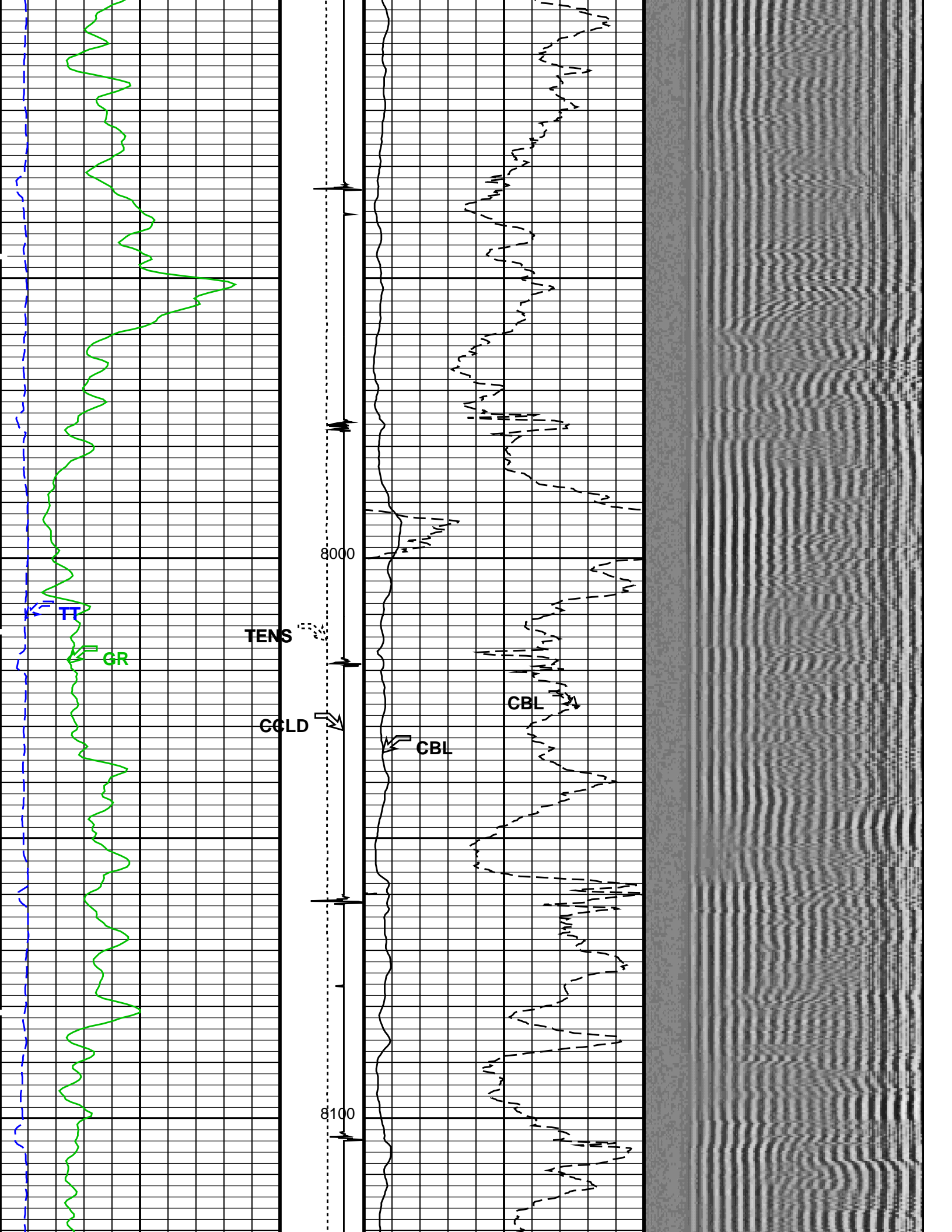


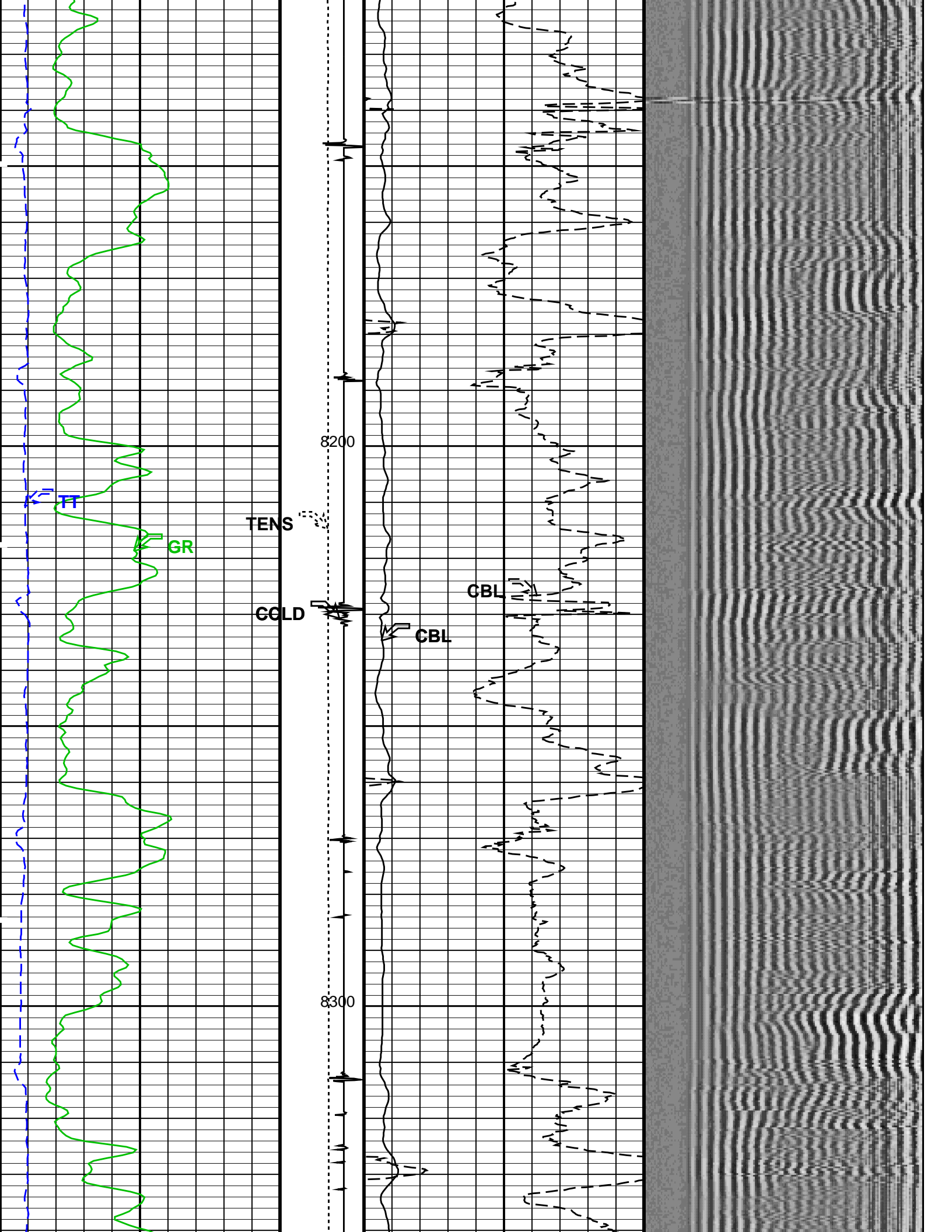


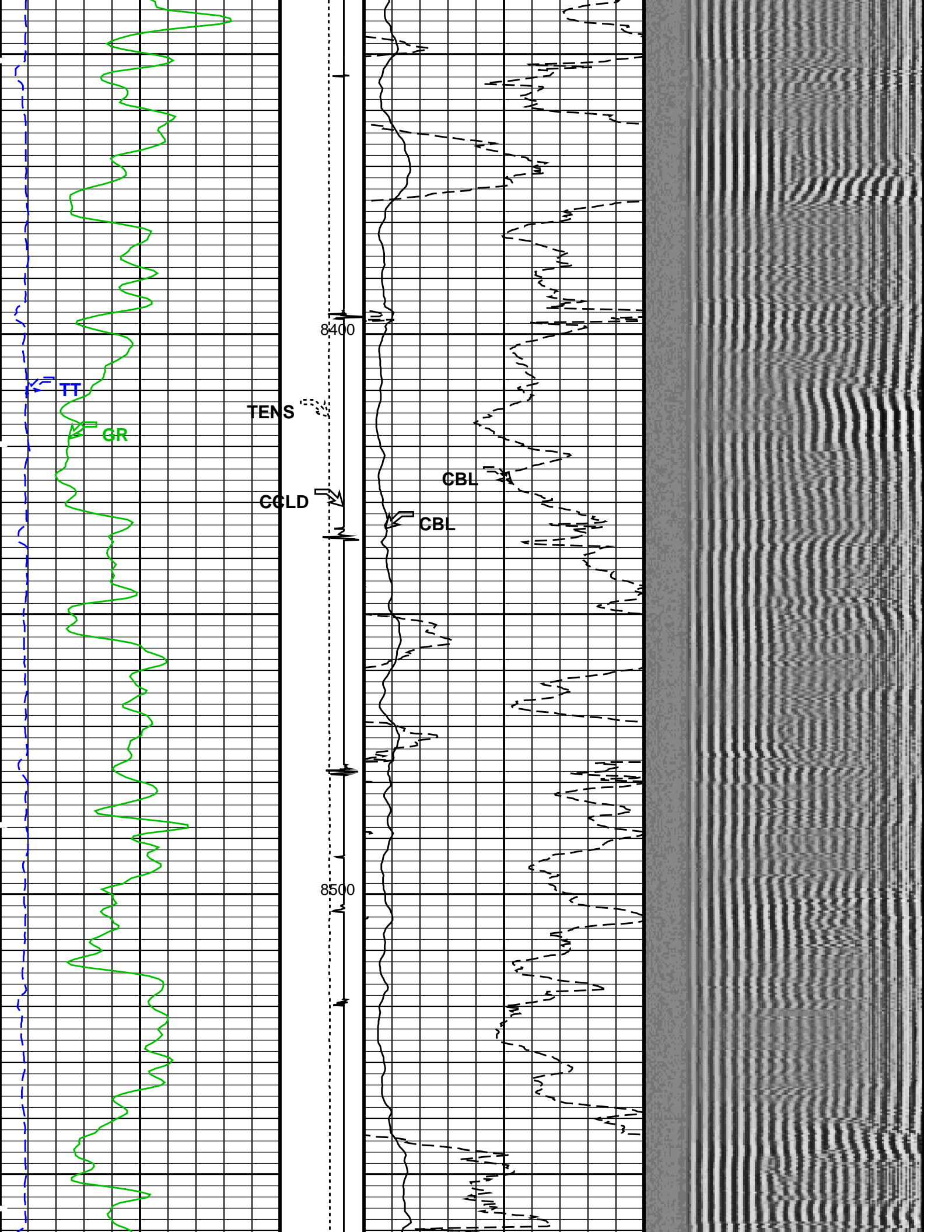


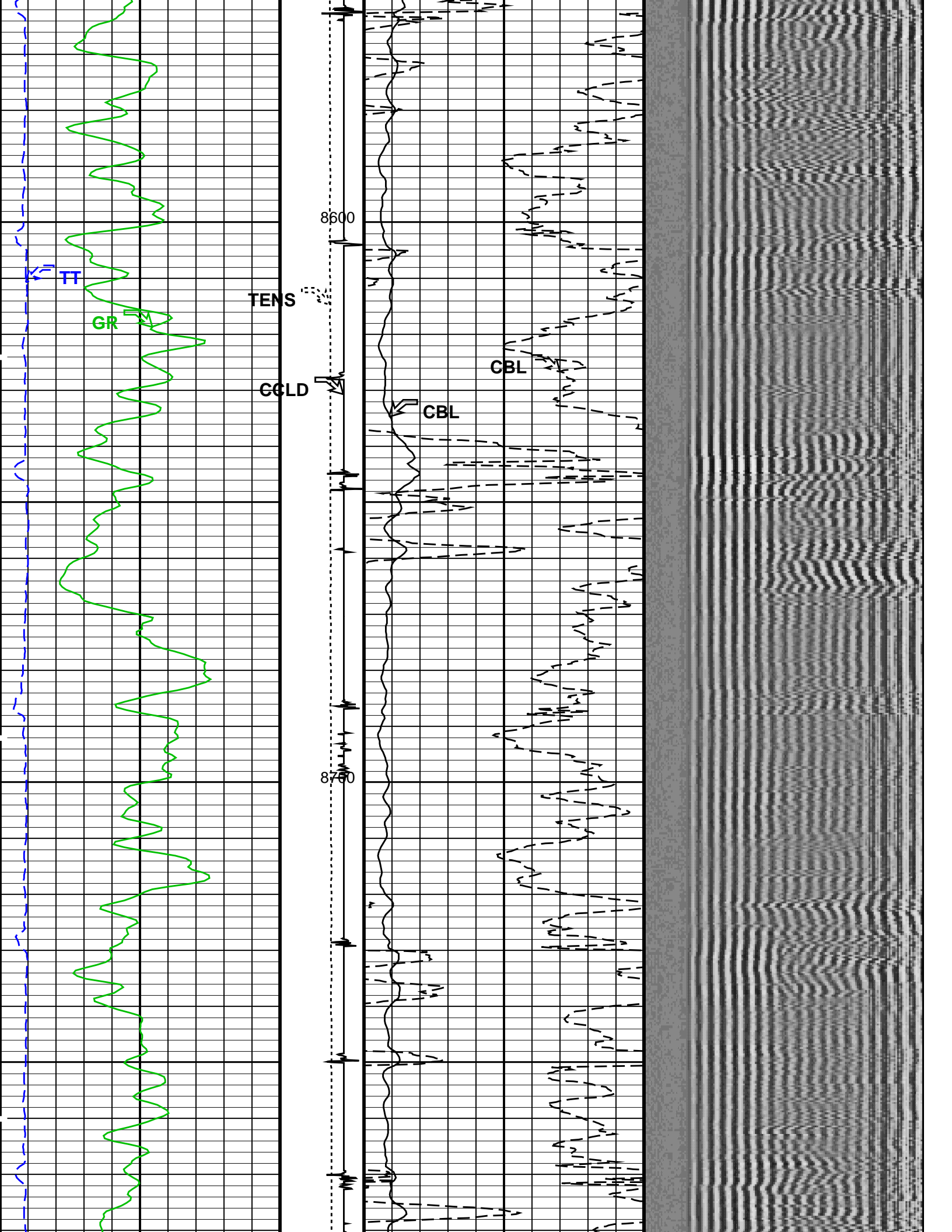


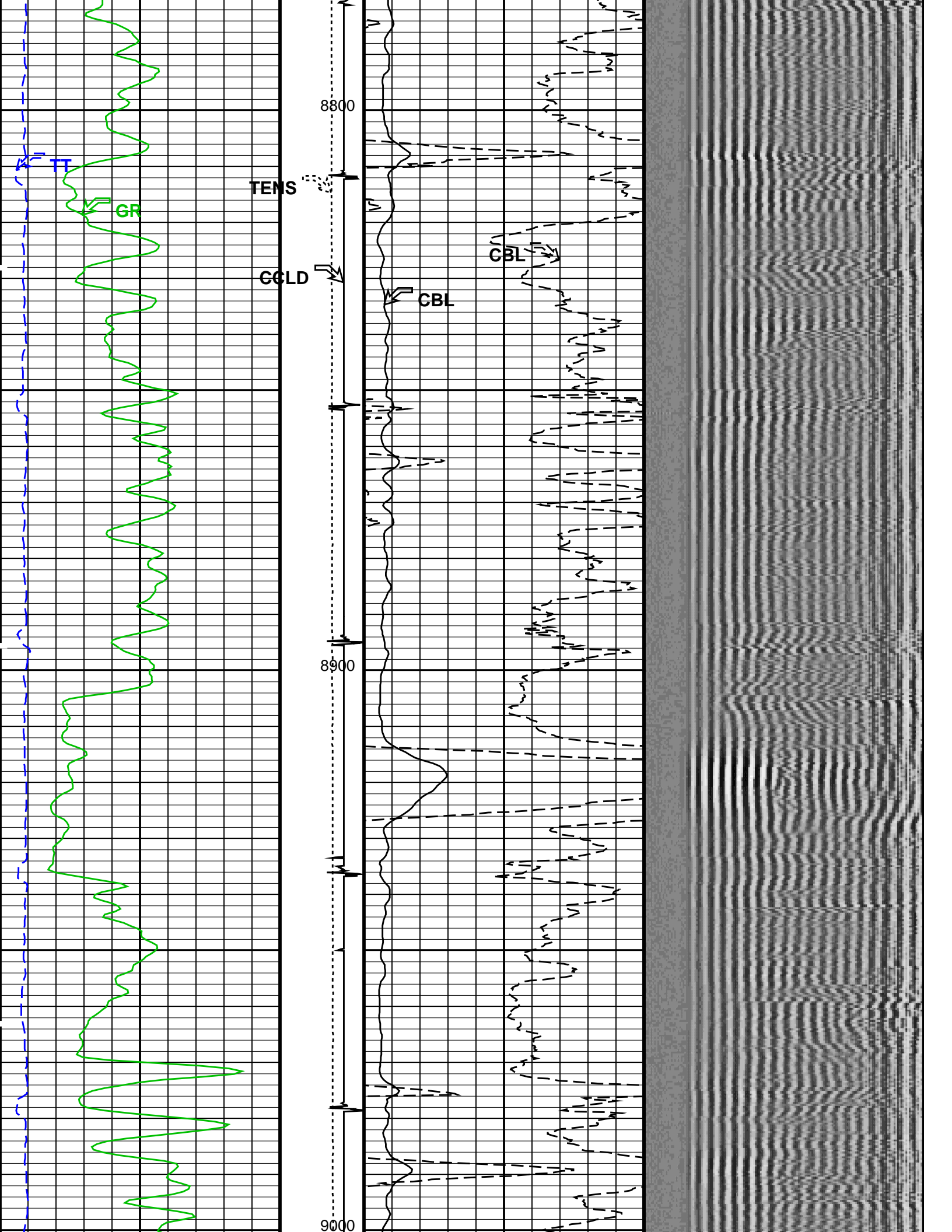


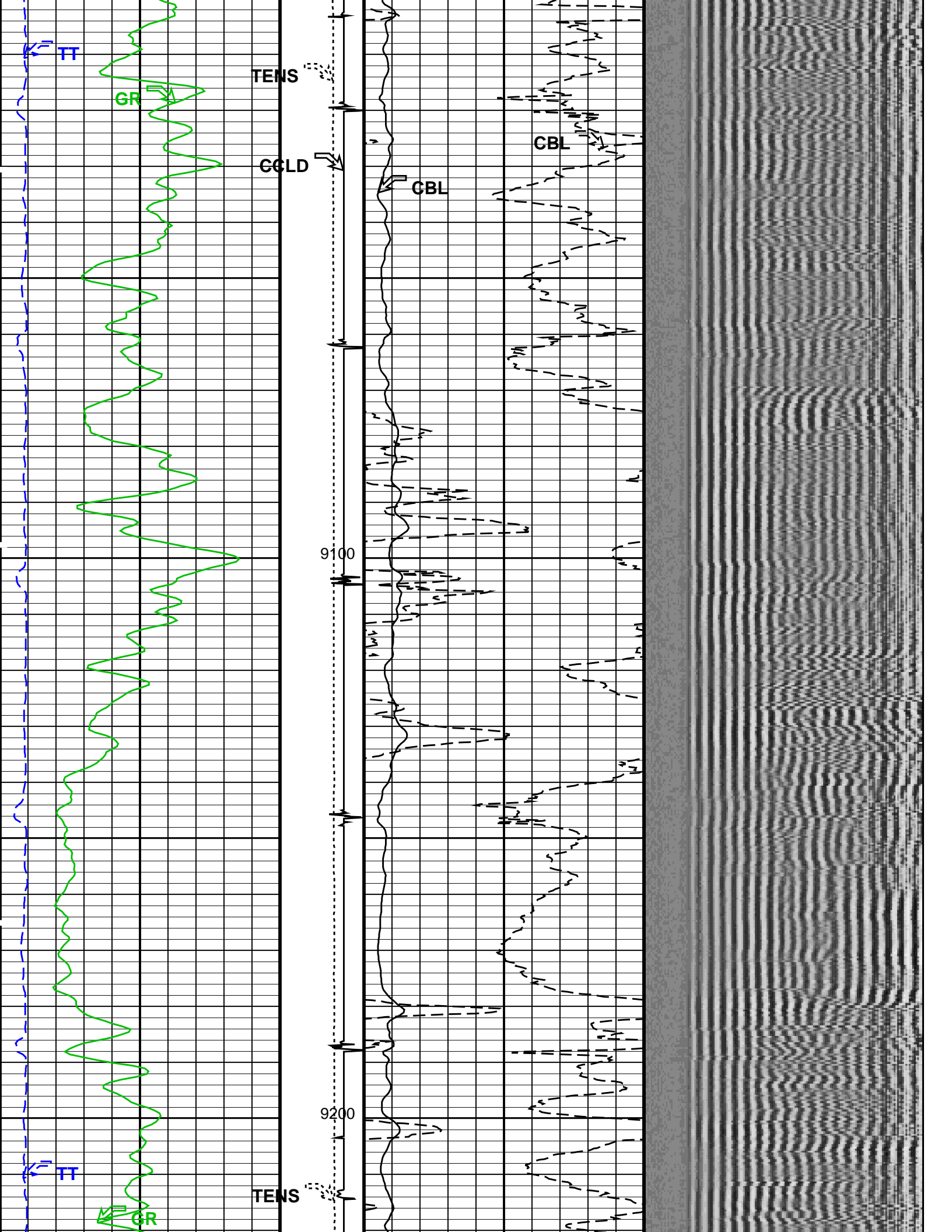


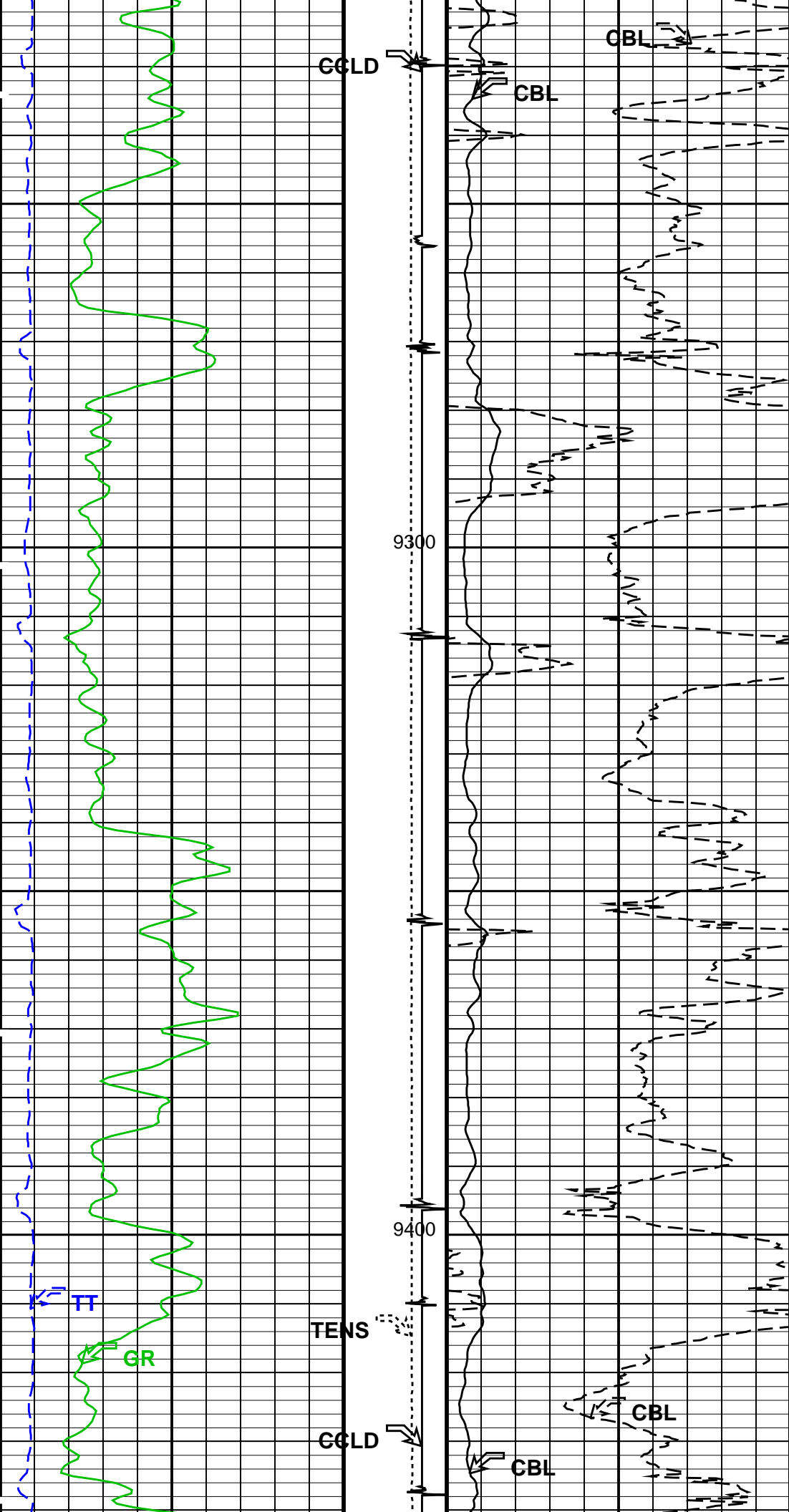


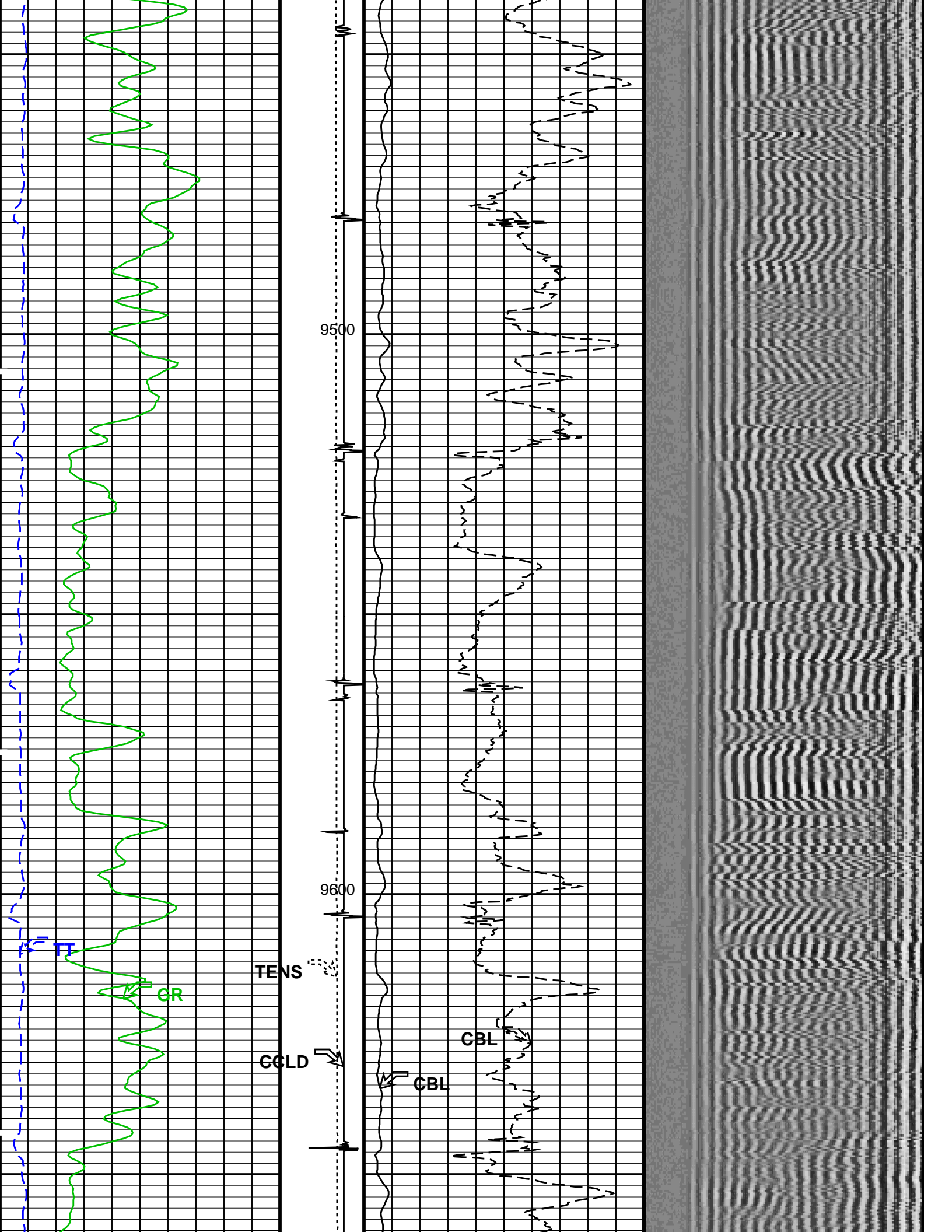


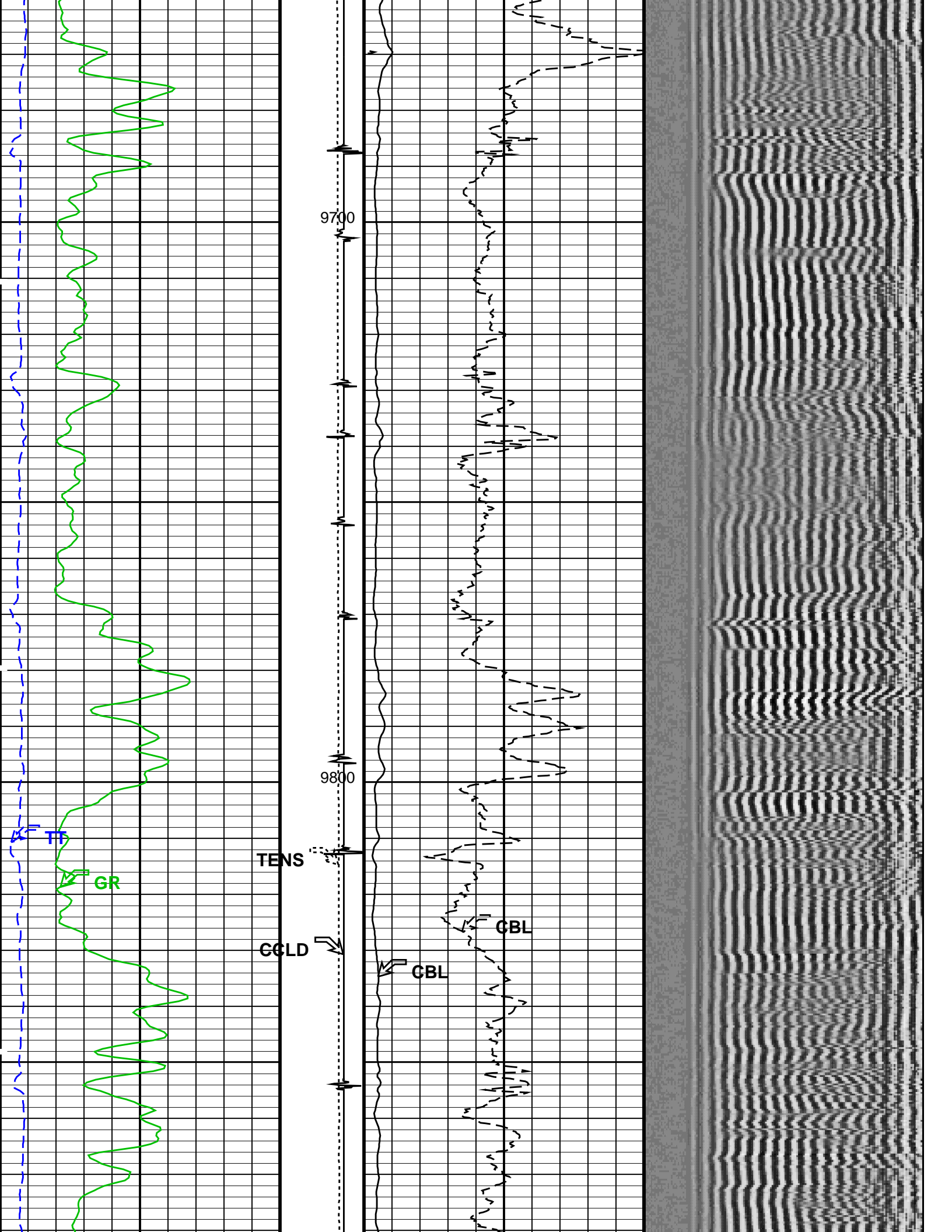


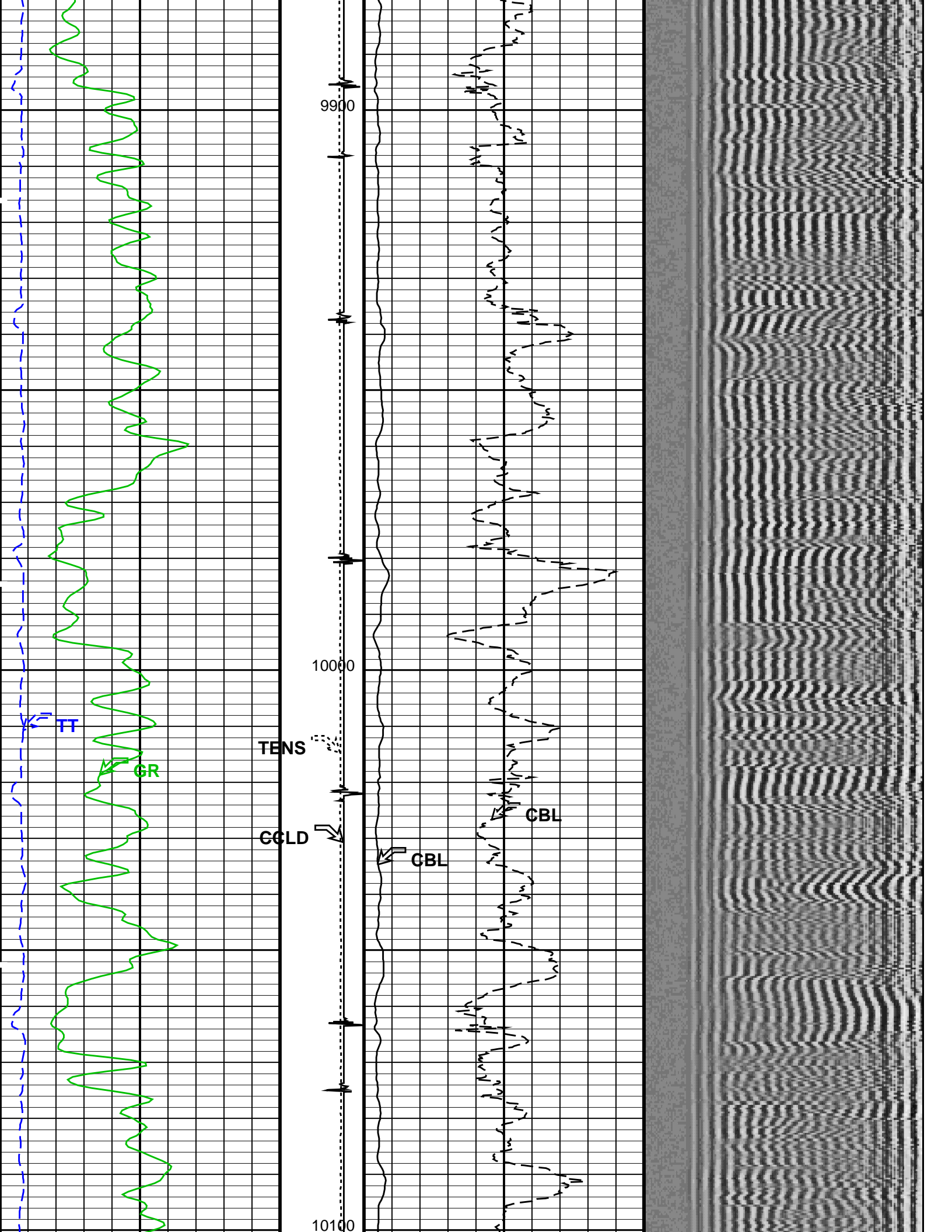


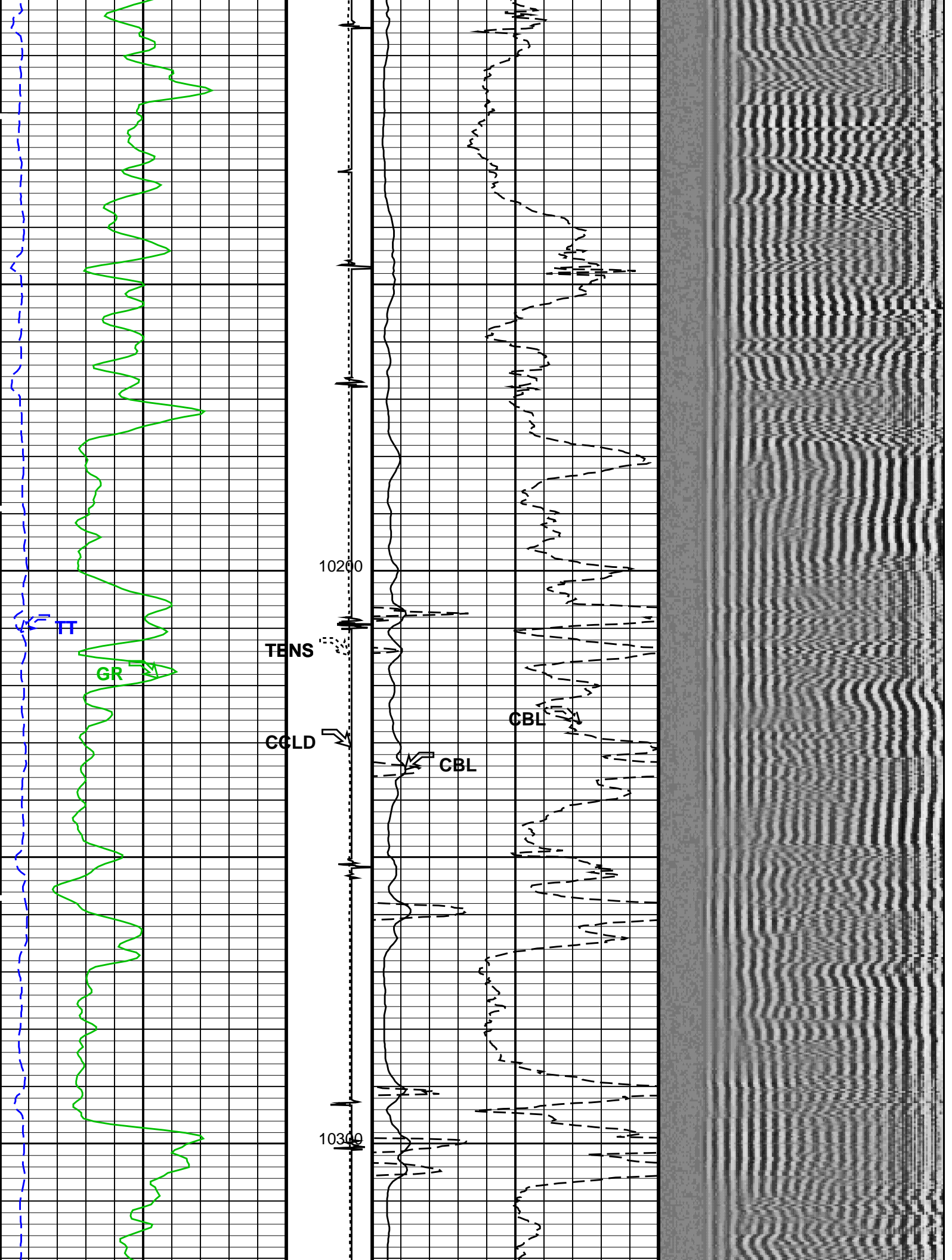


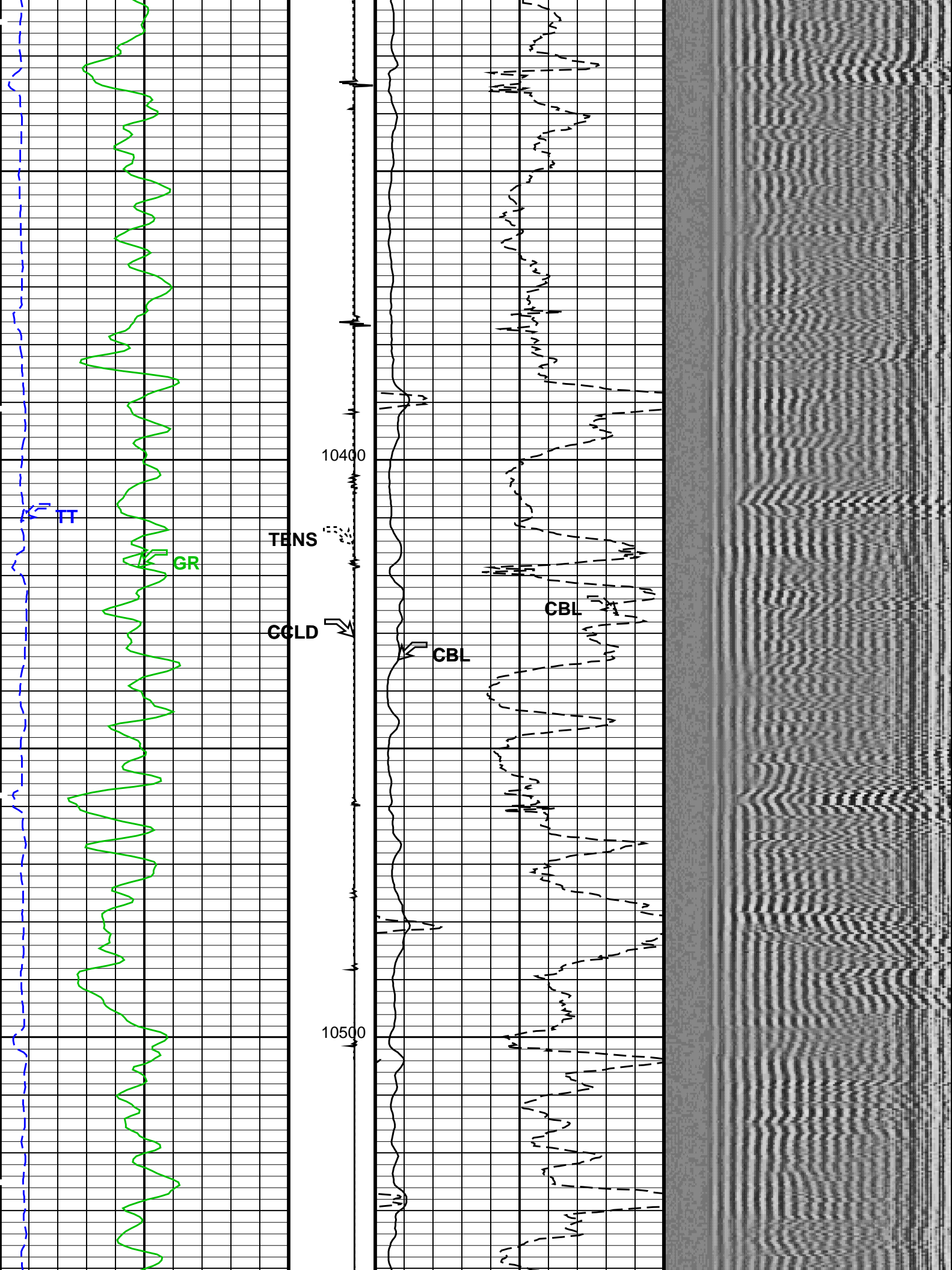


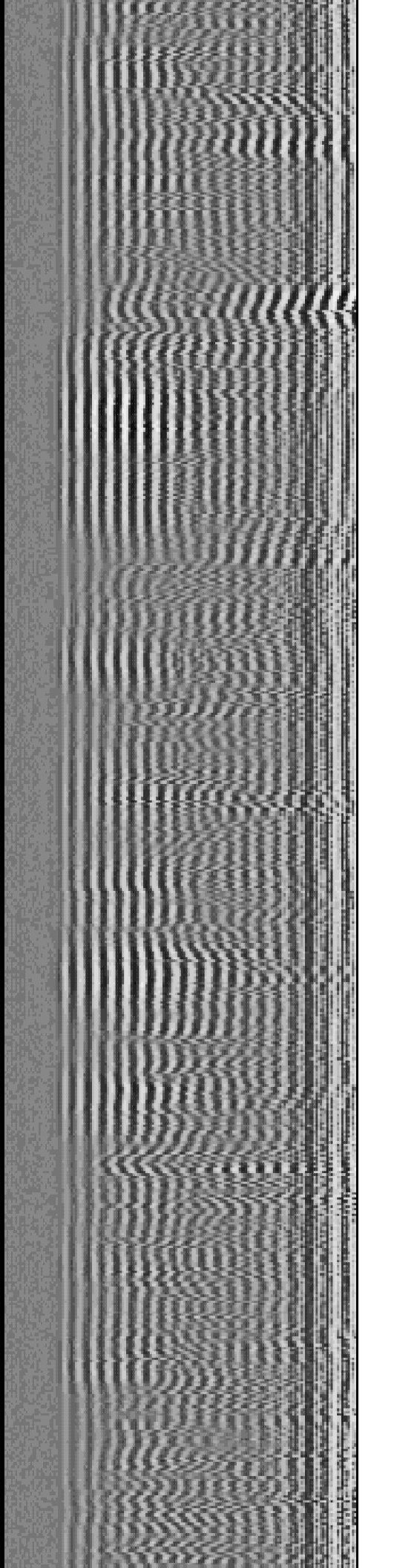
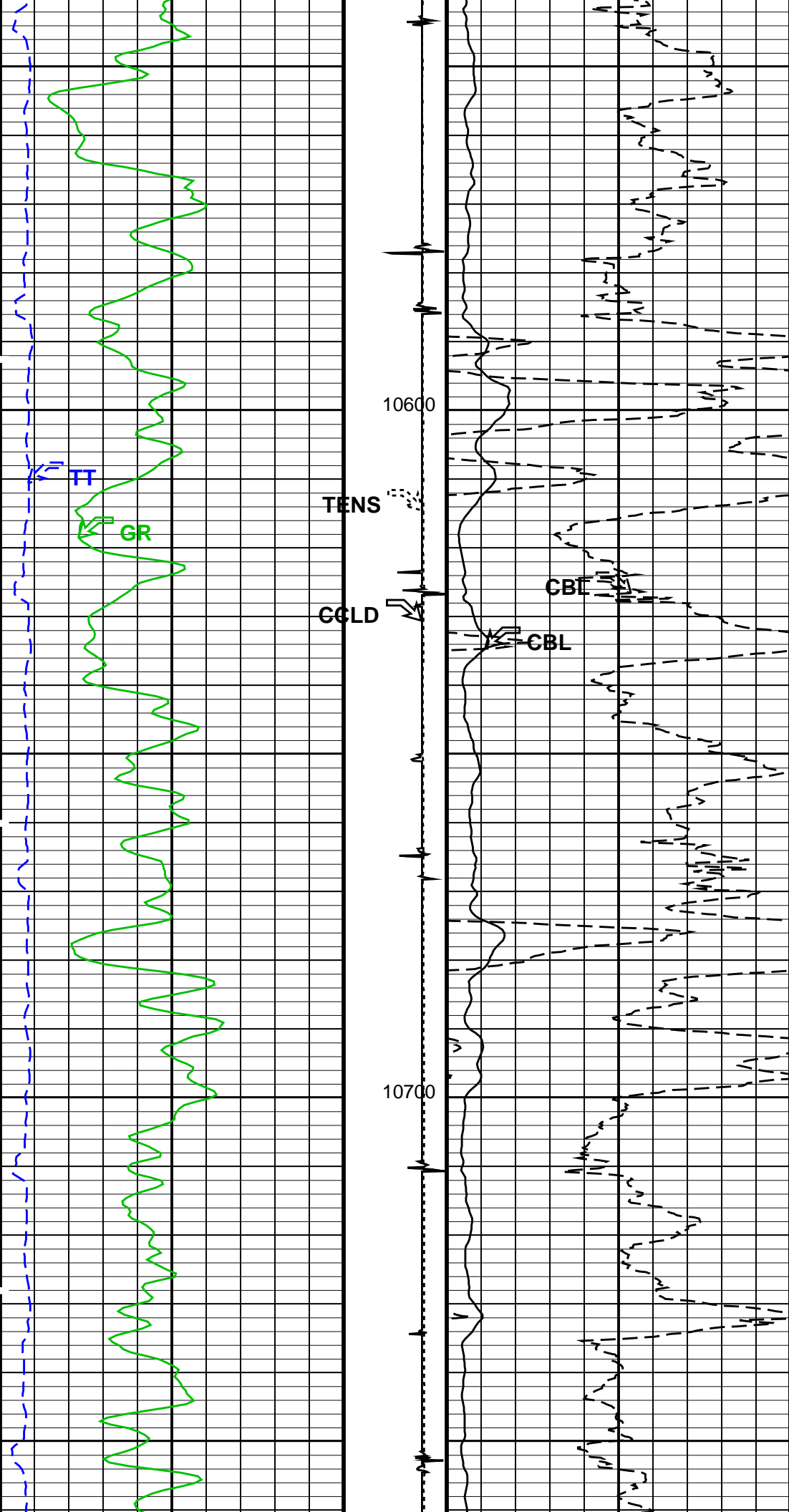


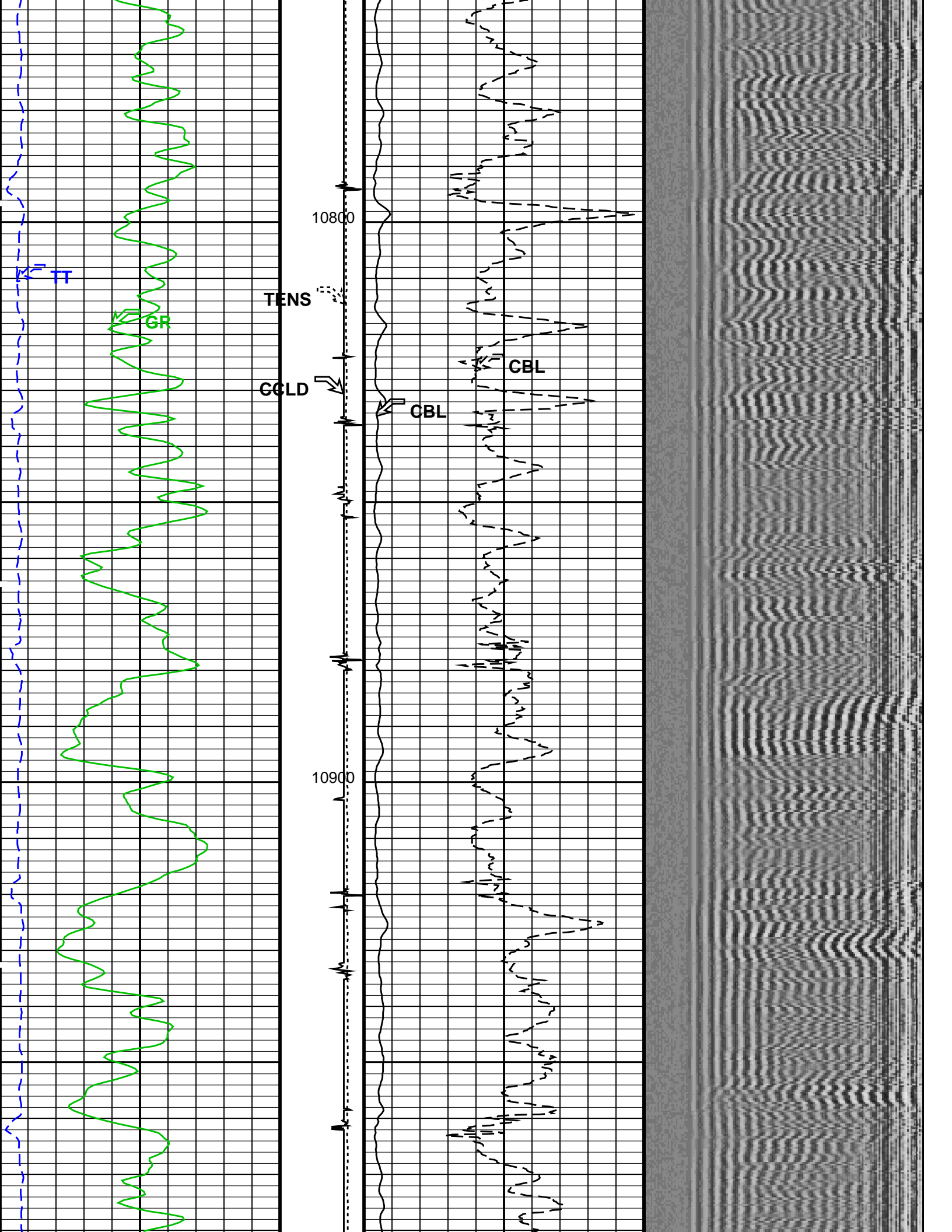


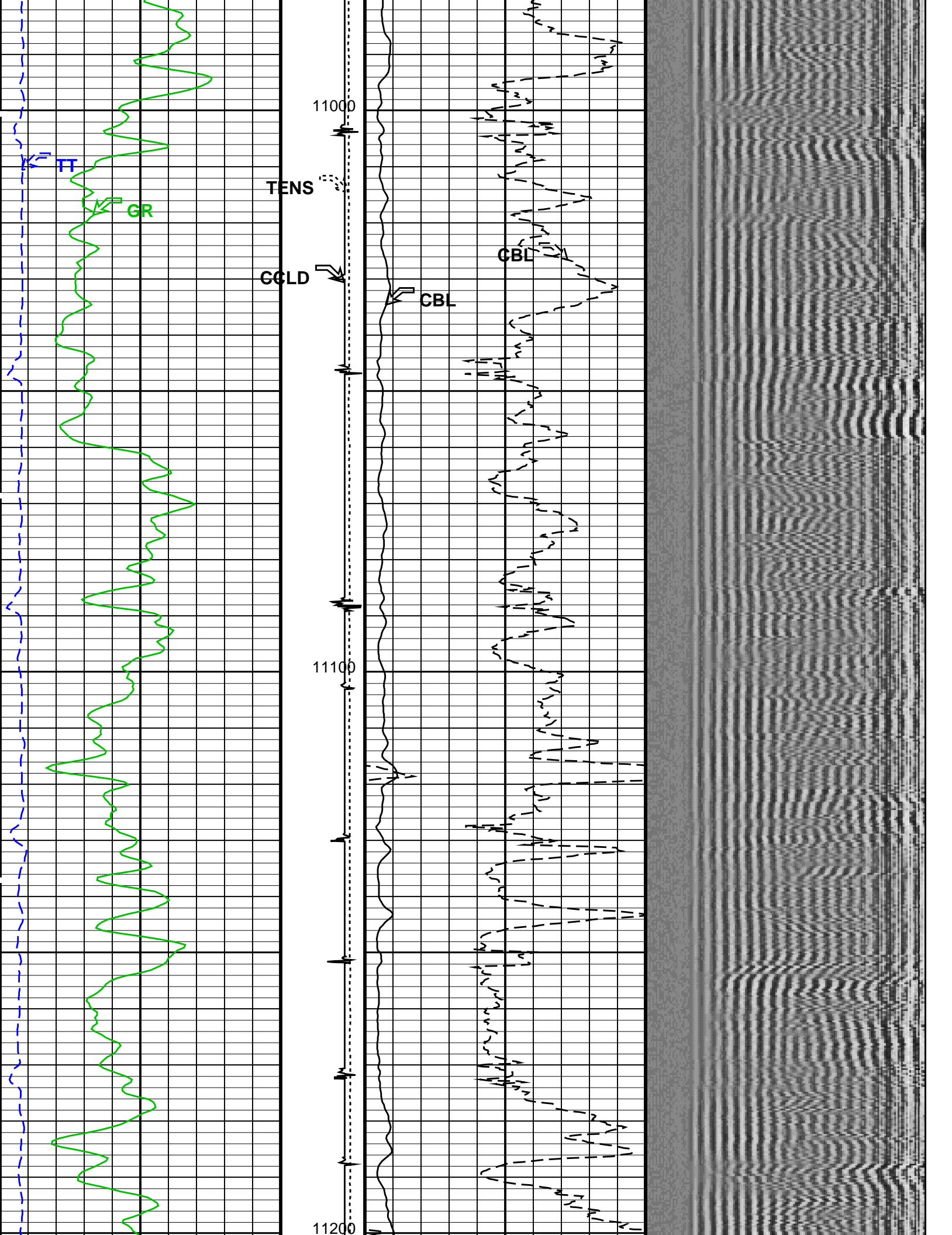


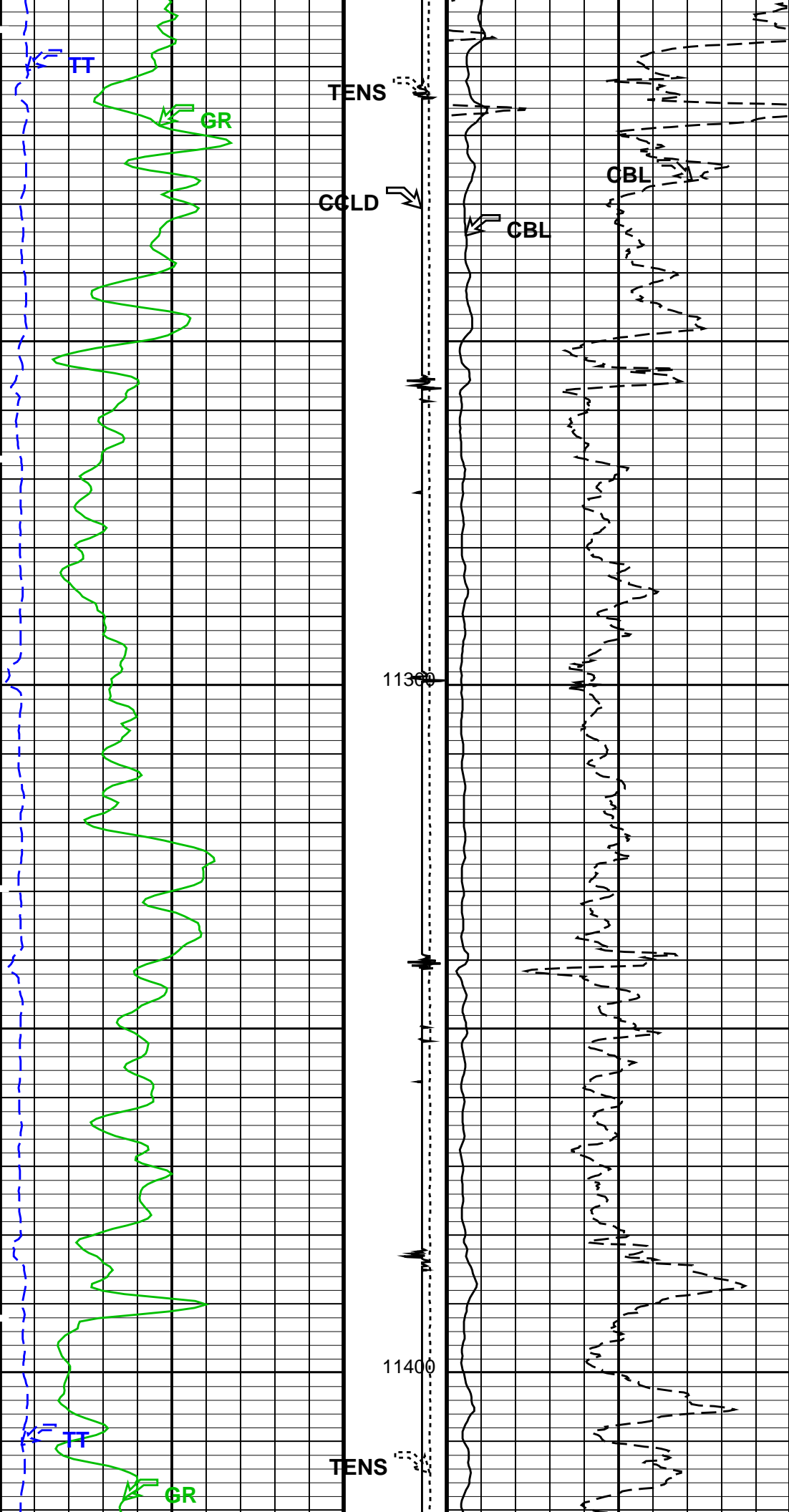


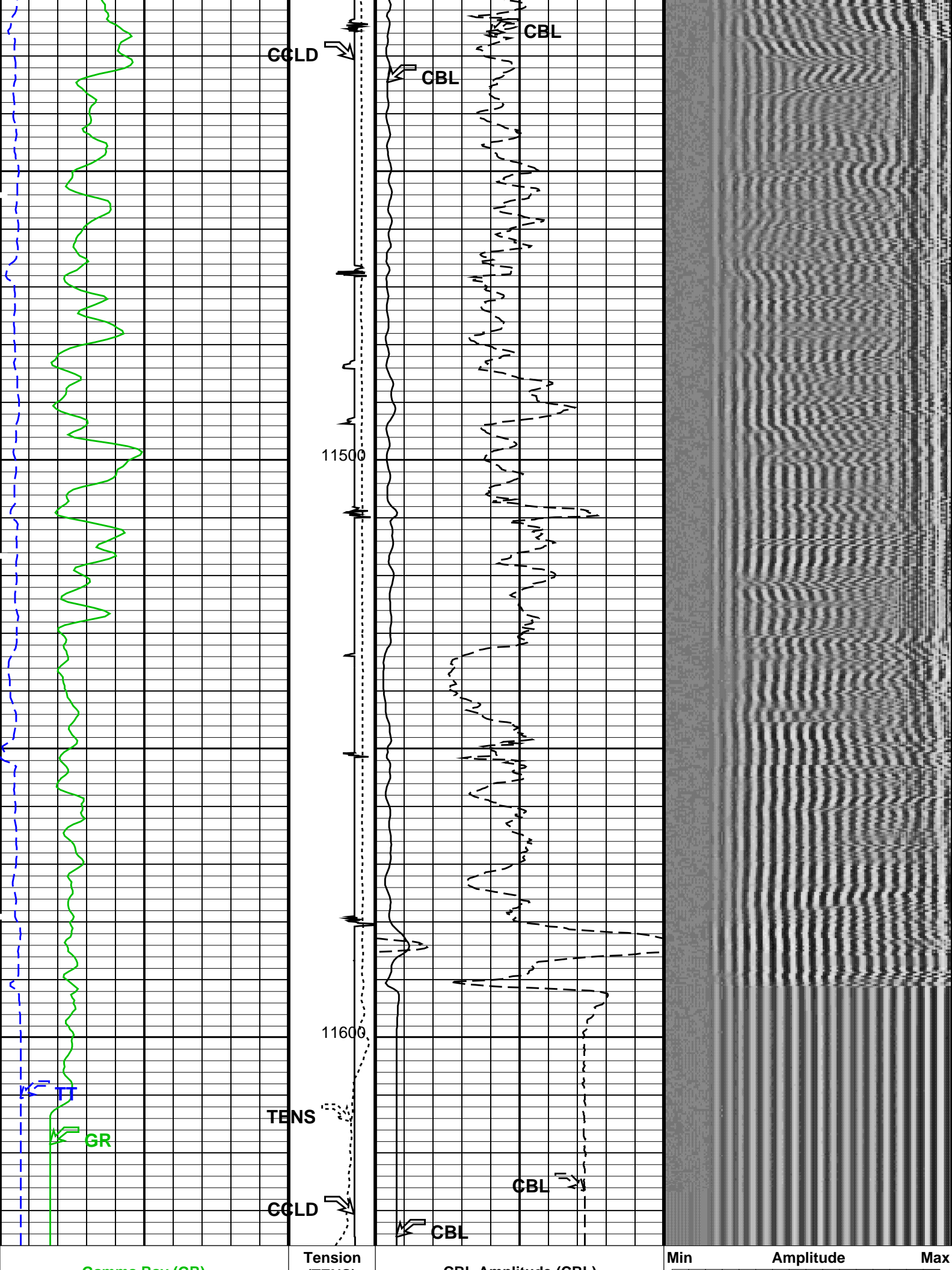












<div> <div>Gamma Ray (GR)</div> <div>(GAPI)</div> <div>150</div> </div>			<div> <div>(TENS)</div> <div>(LBF)</div> <div>0</div> <div>2000</div> </div>	<div> <div>CBL Amplitude (CBL)</div> <div>(MV)</div> <div>0</div> <div>100</div> </div>		<div> <div>VDL VariableDensity (VDL)</div> <div>(US)</div> <div>200</div> <div>1200</div> </div>
<div> <div>Transit Time (TT)</div> <div>(US)</div> <div>260</div> <div>160</div> </div>			<div> <div>Discriminat</div> <div>ed CCL</div> <div>(CCLD)</div> <div>3</div> <div>(V)</div> <div>-1</div> </div>	<div> <div>CBL Amplitude (CBL)</div> <div>(MV)</div> <div>0</div> <div>10</div> </div>		

PIP SUMMARY						
<div> <div>Time Mark Every</div> <div>60 S</div> </div>						
Format: CBL_VDL			Vertical Scale: 5" per 100'		Graphics File Created: 19-Jan-2014 00:32	

OP System Version: 19C2-270			
SCMT-CB	unofficial	PSPT	unofficial

<<<SCMT Cement Evaluation Information Summary>>>			
Sonde Serial Number	SCMS-CB 8150		
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	18-JAN-2013		
CBL Correction Factor	0.0714244	CBL Adjustment Factor (CBAF)	0.700000
MAP 1 Correction Factor	0.105729	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0974552		
MAP 3 Correction Factor	0.0933426		
MAP 4 Correction Factor	0.0893609		
MAP 5 Correction Factor	0.0787527		
MAP 6 Correction Factor	0.0753900		
MAP 7 Correction Factor	0.0917553		
MAP 8 Correction Factor	0.0903068		

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	60	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	6.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	11601	FT

Input DLIS Files

DEFAULT SCMT_PSP_061LUP FN:58 PRODUCER 18-Jan-2014 21:22 11630.0 FT -6.5 FT

Output DLIS Files

DEFAULT SCMT_PSP_063PUP FN:60 PRODUCER 19-Jan-2014 00:32

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REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC Well: SG 8508D-33 (E34 496)

Input DLIS Files

DEFAULT SCMT_PSP_063PUP FN:60 PRODUCER 19-Jan-2014 00:32 11636.0 FT -22.0 FT

Output DLIS Files

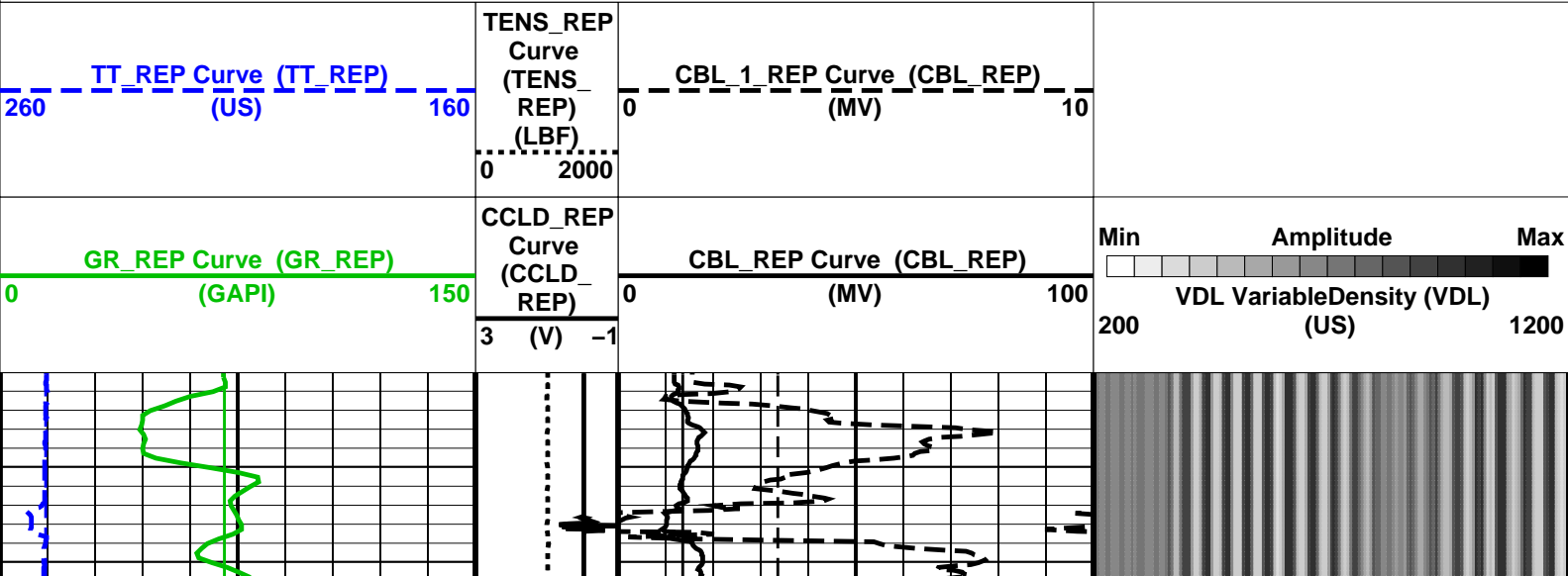
DEFAULT SCMT_PSP_064PUP FN:61 PRODUCER 19-Jan-2014 00:39 7565.5 FT 7269.5 FT

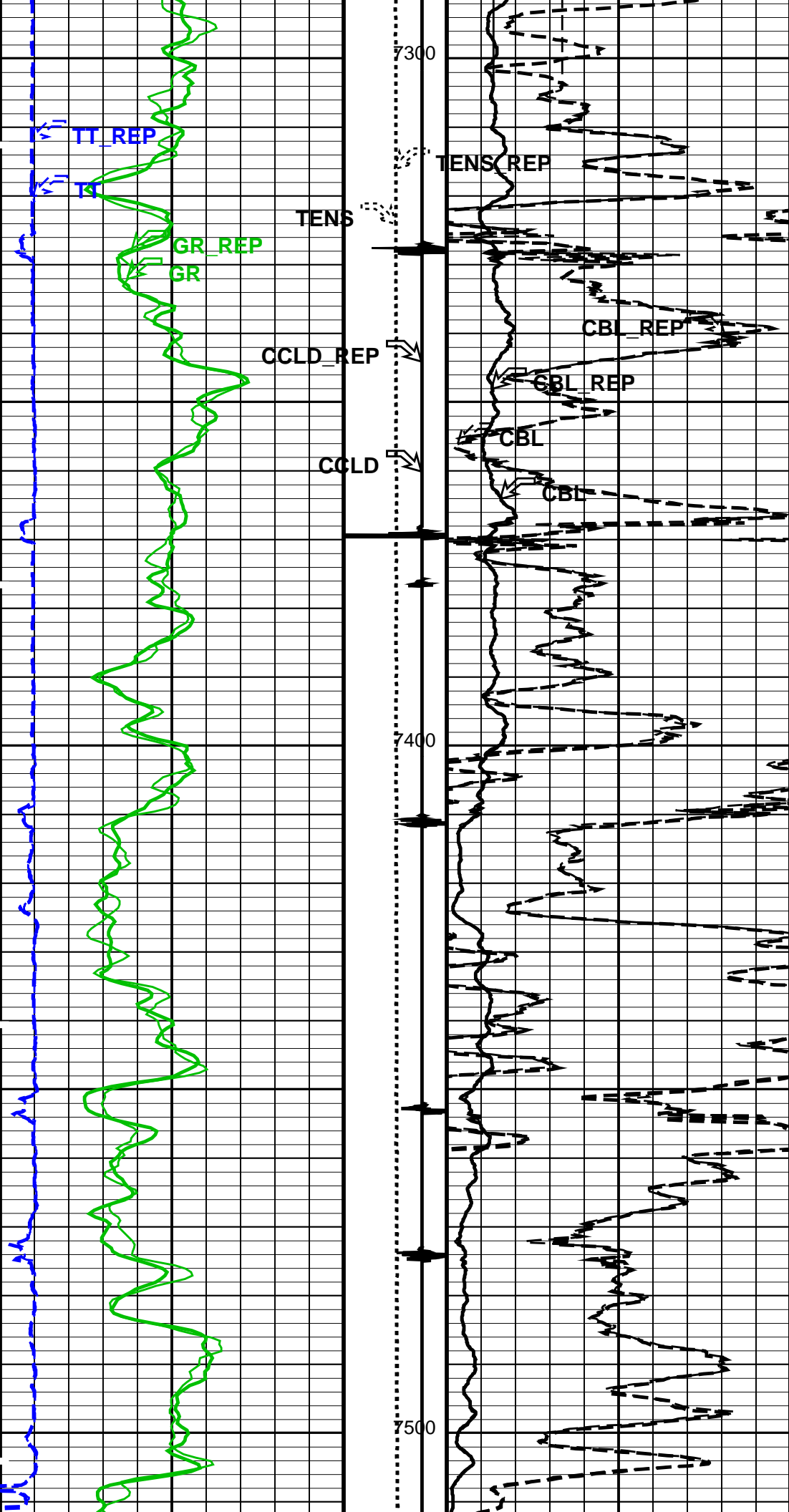
OP System Version: 19C2-270

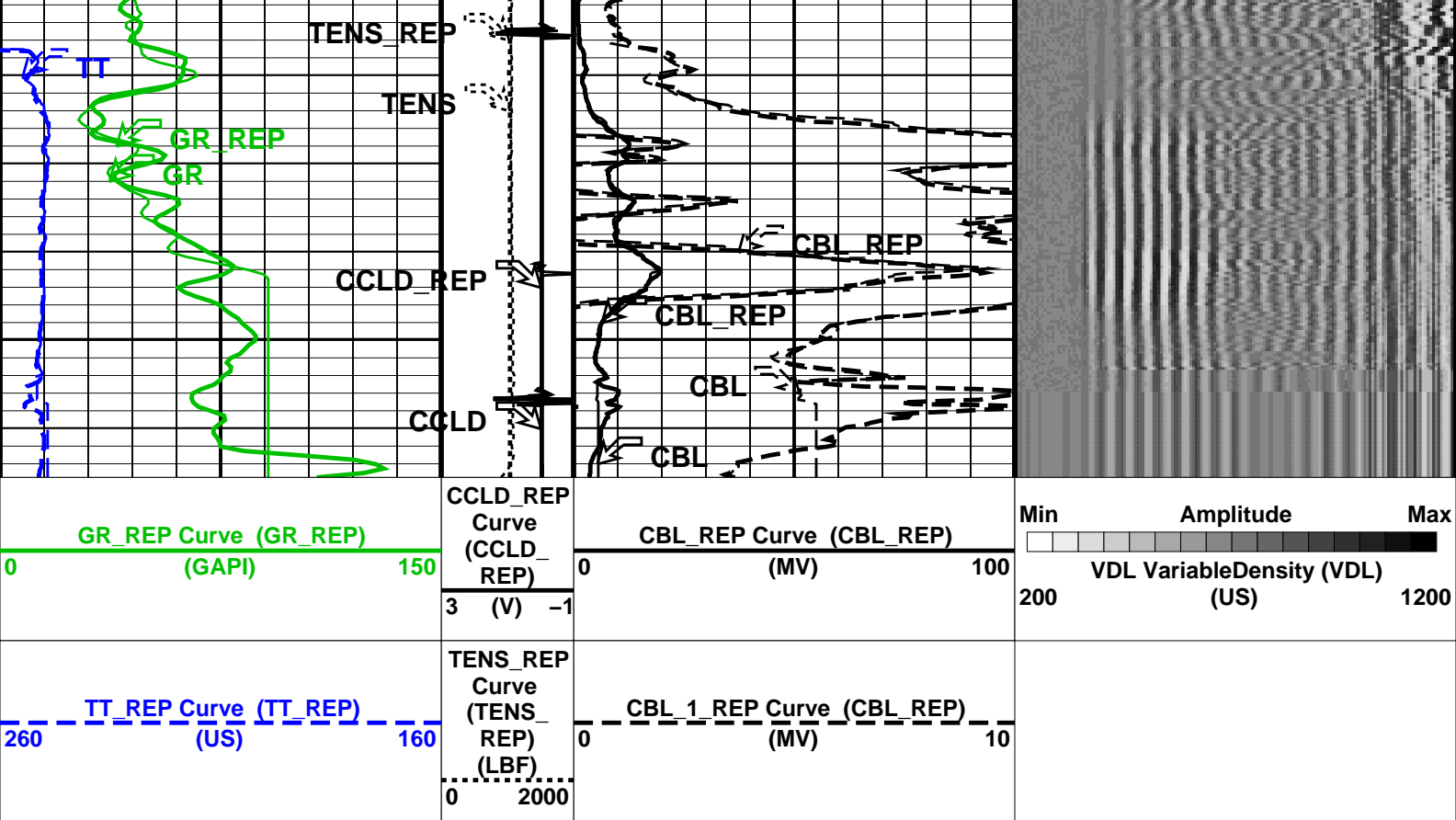
SCMT-CB unofficial PSPT unofficial

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: 19-Jan-2014 00:39

OP System Version: 19C2-270

SCMT-CB unofficial PSPT unofficial

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8150		
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	18-JAN-2013		
CBL Correction Factor	0.0714244	CBL Adjustment Factor (CBAF)	0.700000
MAP 1 Correction Factor	0.105729	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0974552		
MAP 3 Correction Factor	0.0933426		
MAP 4 Correction Factor	0.0893609		
MAP 5 Correction Factor	0.0787527		
MAP 6 Correction Factor	0.0753900		
MAP 7 Correction Factor	0.0917553		
MAP 8 Correction Factor	0.0903068		

Parameters

PLUS Name Description Value

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	60	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMT C	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	-1.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	11601	FT

Input DLIS Files

DEFAULT	SCMT_PSP_063PUP	FN:60	PRODUCER	19-Jan-2014 00:32	11636.0 FT	-22.0 FT
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Output DLIS Files

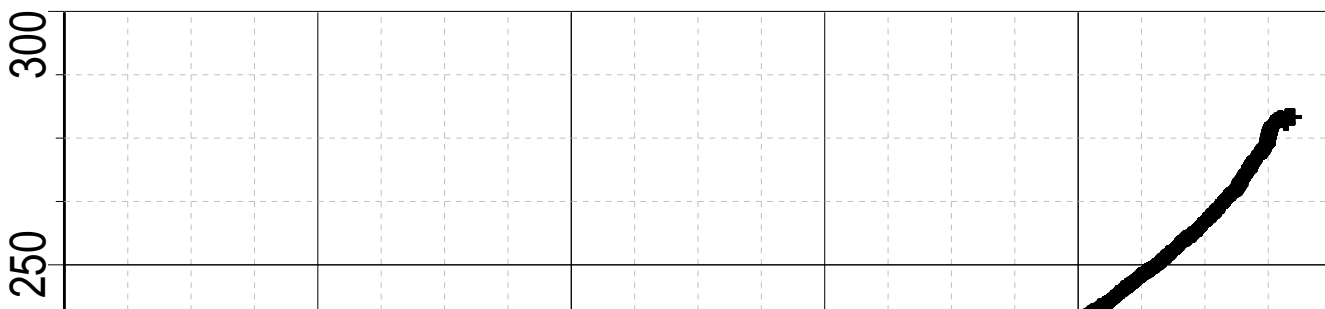
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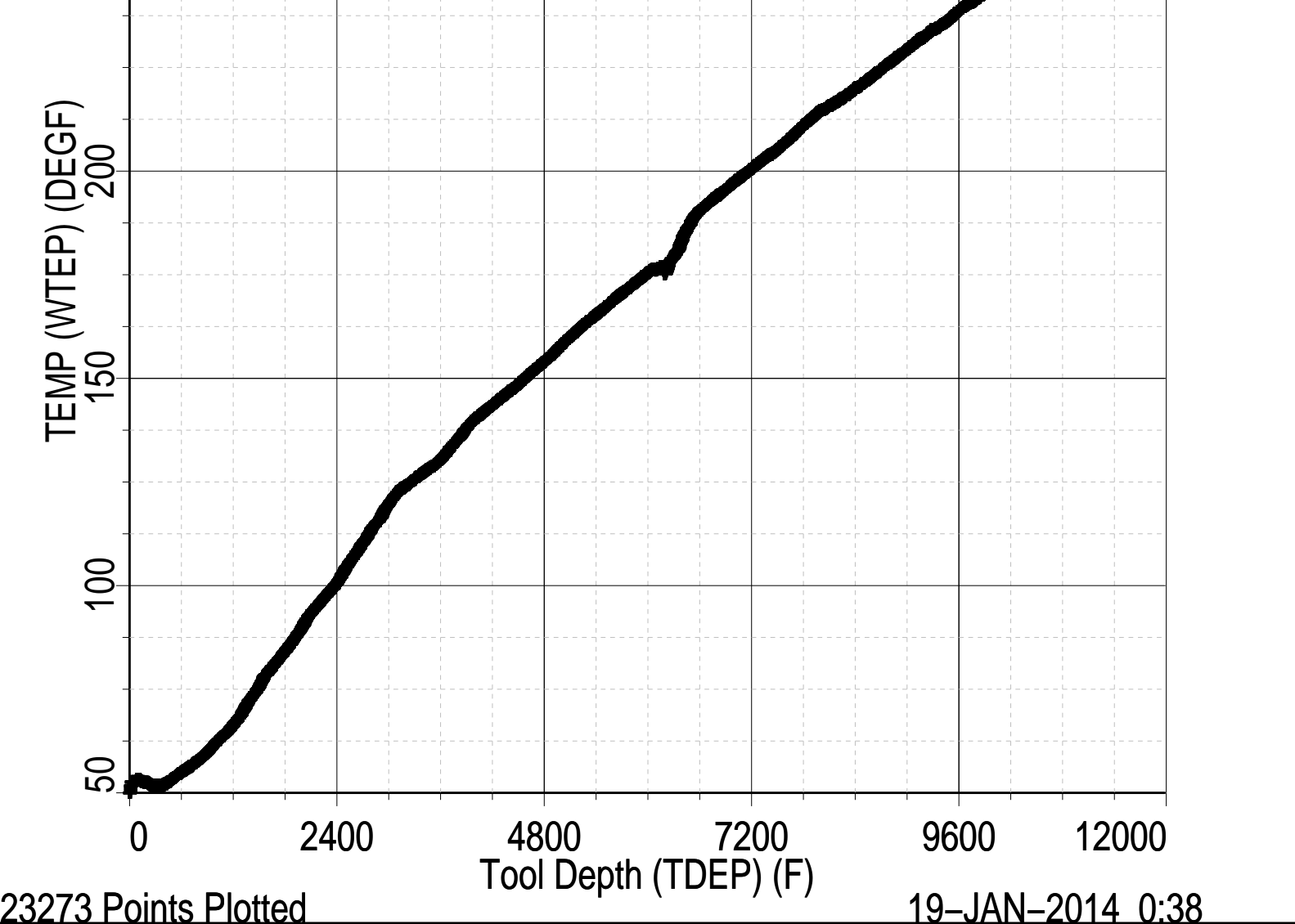
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 11636.0 – -22.0 FT





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MASTER CALIBRATION

MAXIS Field Log

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

Primary Equipment:

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

SCMX – CA
SCMS – CB 8150
SCMC – CA 8078

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		1135	Master		1231
	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		1286	Master		1343
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		1524	Master		1592
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		1308	Master		1329
500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)			500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)		
Phase	CBL Amplitude Plus MV	Value			
Master		1344			
1000 (Minimum) 1350 (Nominal) 1700 (Maximum)					
Master: 18-Jan-2013 14:10					

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PBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC
Field: STORY GULCH
Well: SG 8508D-33 (E34 496)
Run date: 18-Jan-2014

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.33155, TOOL PBMS-BA0861. SENSOR S/N:

33155

220499

12

0710

GR HV Rt

Rt**0

Rt**1

Rt**0

+ .237000000000e+04

+ .332000000000e+04

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SG 8508D–33 (E34 496)

Run date: 18–Jan–2014

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.861 S/N:

861

310502

16

DEC6

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	–.143179842319E+03	–.888852291415E+02	+.731918491078E+02
	Tt**3	Tt**4	Tt**5
Tt**0	–.118395145374E+02	+.745799453953E+00	0.0

Client: ENCANA OIL & GAS (USA) INC

Field: STORY GULCH

Well: SG 8508D–33 (E34 496)

Run date: 18–Jan–2014

Tool: PSP

Sub Type: PBMS

Sensor: CQG

PBMS Quartz Gauge type F

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

COEFFICIENTS FOR CQG PBMS–B.861 S/N:

861

310502

Matrix Size 66
Coeff CRC 596C

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.711550762736E+04	+.153878897800E-01	-.257179234978E-06
Fc**1	-.105337091645E+01	-.125552962261E-04	-.950503832919E-10
Fc**2	+.115225841409E-05	+.490354586520E-10	+.105988949651E-14
Fc**3	+.883393528945E-12	+.665635296961E-16	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	-.804211610994E-10	-.705264184158E-15	-.605951709459E-19
Fc**1	+.263504457670E-15	+.366947427014E-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 861
Calib Date ddmmyy 310502
Matrix Size 66
Coeff CRC 73C2

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.114909007864E+03	-.261563620571E-03	+.727201308276E-08
Fb**1	-.599411471804E-02	+.192684257496E-07	+.149578546349E-12
Fb**2	-.320292169705E-07	+.373670664357E-12	+.871958109779E-18
Fb**3	-.307852303739E-12	+.927295382637E-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	+.182108938515E-12	-.195543095905E-16	-.228467332529E-20
Fb**1	-.413038704885E-17	-.706757563488E-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
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PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 861
Calib Date ddmmyy 310502
Matrix Size 16
Coeff CRC C7E9

Clock Freq Coeff

	(Fb'–Fc')**0	(Fb'–Fc')**1	(Fb'–Fc')**2
(Fb'–Fc')**0	+.310508075363E+05	+.294368299940E–02	+.769893562204E–06
	(Fb'–Fc')**3	(Fb'–Fc')**4	(Fb'–Fc')**5
(Fb'–Fc')**0	–.664433457831E–10	–.367102372803E–16	–.149627163753E–19

PBMS Quartz Gauge type F

Sonde Serial NB :
Sensor Serial NB 861
Calib Date ddmmyy 310502
Matrix Size 16
Coeff CRC 57FD

Clock Temp Coeff

	(Fb'–Fc')**0	(Fb'–Fc')**1	(Fb'–Fc')**2
(Fb'–Fc')**0	+.117831722096E+03	–.563036688315E–02	–.289752074861E–07
	(Fb'–Fc')**3	(Fb'–Fc')**4	(Fb'–Fc')**5
(Fb'–Fc')**0	+.424868386643E–12	–.842142459987E–16	+.376543844967E–20

Company: ENCANA OIL & GAS (USA) INC



Well: SG 8508D–33 (E34 496)
Field: STORY GULCH
County: GARFIELD
State: COLORADO

SLIM CEMENT MAPPING LOG
CCL – GAMMA RAY – TEMPERATUR