

Company: ENCANA OIL & GAS (USA) INC

Well: SHIDELER FEDERAL 19-13D (O19EB)

Field: MAMM CREEK

County: GARFIELD

State: COLORADO

County: GARFIELD

Field: MAMM CREEK

Location: SHL: 635 FSL & 1608 FEL

Well: SHIDELER FEDERAL 19-13D (O19EB)

Company: ENCANA OIL & GAS (USA) INC

SLIM CEMENT MAPPING LOG

CBL-VDL

GR-CCL

SHL: 635 FSL & 1608 FEL

BHL: 372 FSL & 534 FWL

Elev.: K.B. 6631.00 ft

G.L. 6509.00 ft

D.F. 6530.00 ft

Permanent Datum: _____

GROUND LEVEL _____

Elev.: 6509.00 ft _____

Log Measured From: _____

KELLY BUSHING _____

22.00 ft above Perm. Datum

Drilling Measured From: _____

KELLY BUSHING _____

API Serial No. _____

Section 19

Township 7S

Range 92W

05-045-21836-000C

PVT DATA				Run 1	Run 2	Run 3
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	27-Apr-2013		
Run Number	1		
Depth Driller	8408 ft		
Schlumberger Depth	8293 ft		
Bottom Log Interval	8284 ft		
Top Log Interval	60 ft		
Casing Fluid Type	FRESH WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	60 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From	7433 ft		
To	8408 ft		
Casing/Tubing Size	4.500 in		
Weight	11.6 lbm/ft		
Grade			
From	22 ft		
To	8388 ft		
Maximum Recorded Temperatures	231 degF		
Logger On Bottom	27-Apr-2013		15:30
Unit Number	391	GRAND JUNCTION	
Recorded By	KIRSTIE BUNTING		
Witnessed By	BILLY MYERS		

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-MAR-2013 10:41:08

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6214	Serial Number:	3421	Serial Number:	112136
Calibration Date:	24-APR-2012	Calibration Date:	20-FEB-2011	Length:	19500 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	Conveyance Method:	Wireline
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10	Rig Type:	LAND
Wheel Correction 1:	-3	Calibration RMS:	4		
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:	

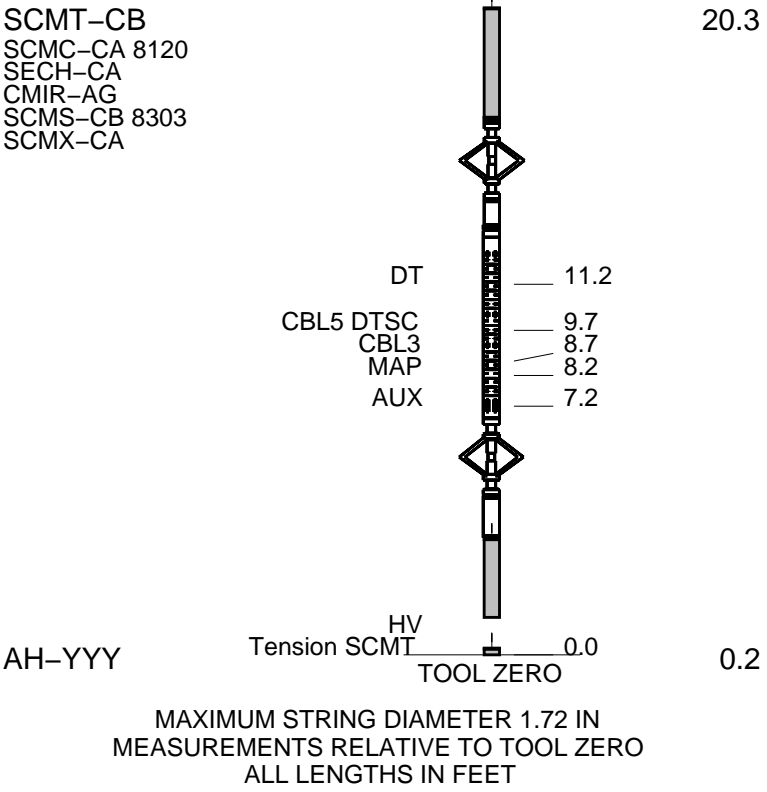
Depth Control Remarks

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

DISCLAIMER

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

OTHER SERVICES1	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 PLATFORM EXPRESS RUN ON 18-JAN-2013	
TOOL RAN AS PER TOOL SKETCH	
MAXIMUM RECORDED TEMPERATURE= 231 DEGF	
MAXIMUM RECORDED PRESSURE= 3341 PSIA	
ENTRANCE TIME= 15:00	



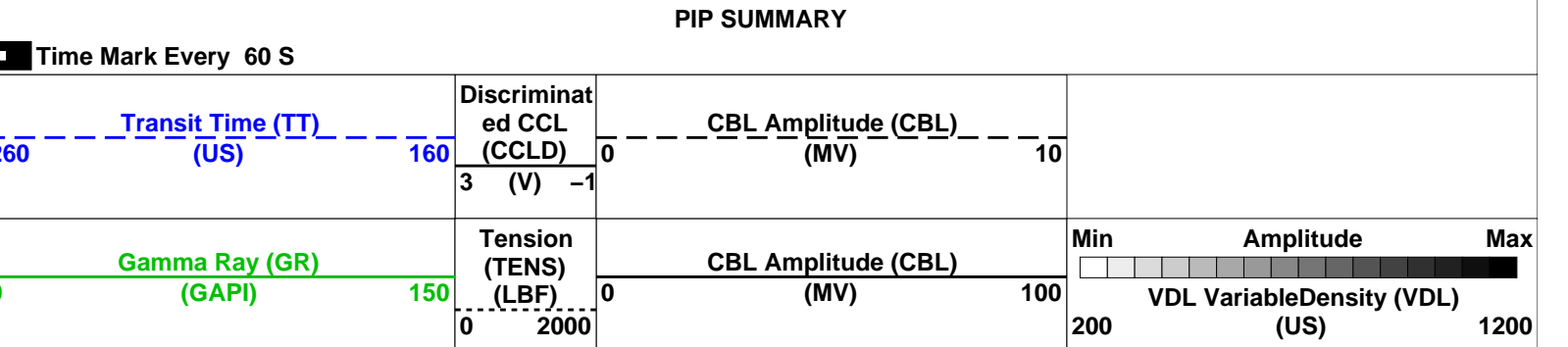
Schlumberger

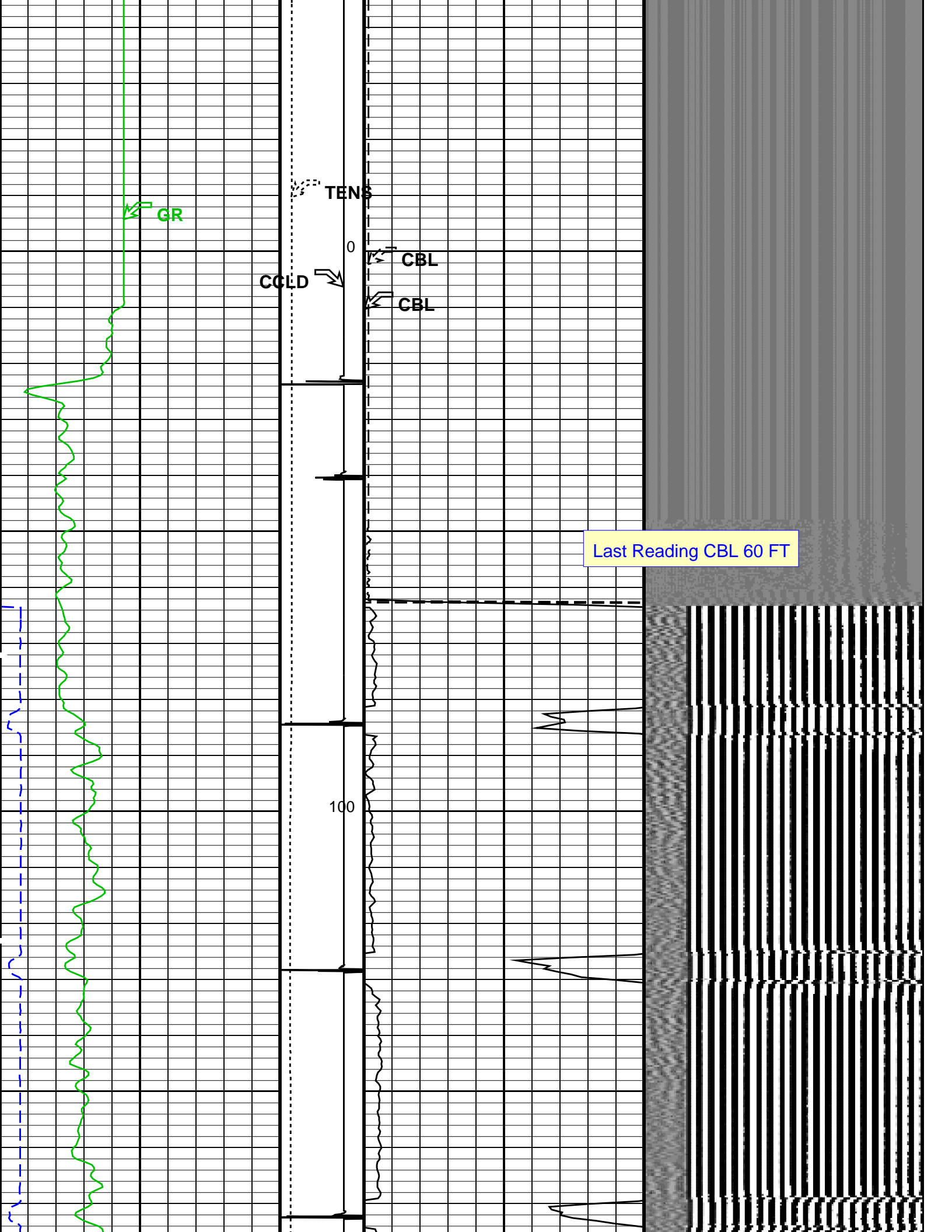
MAIN PASS CBL VDL

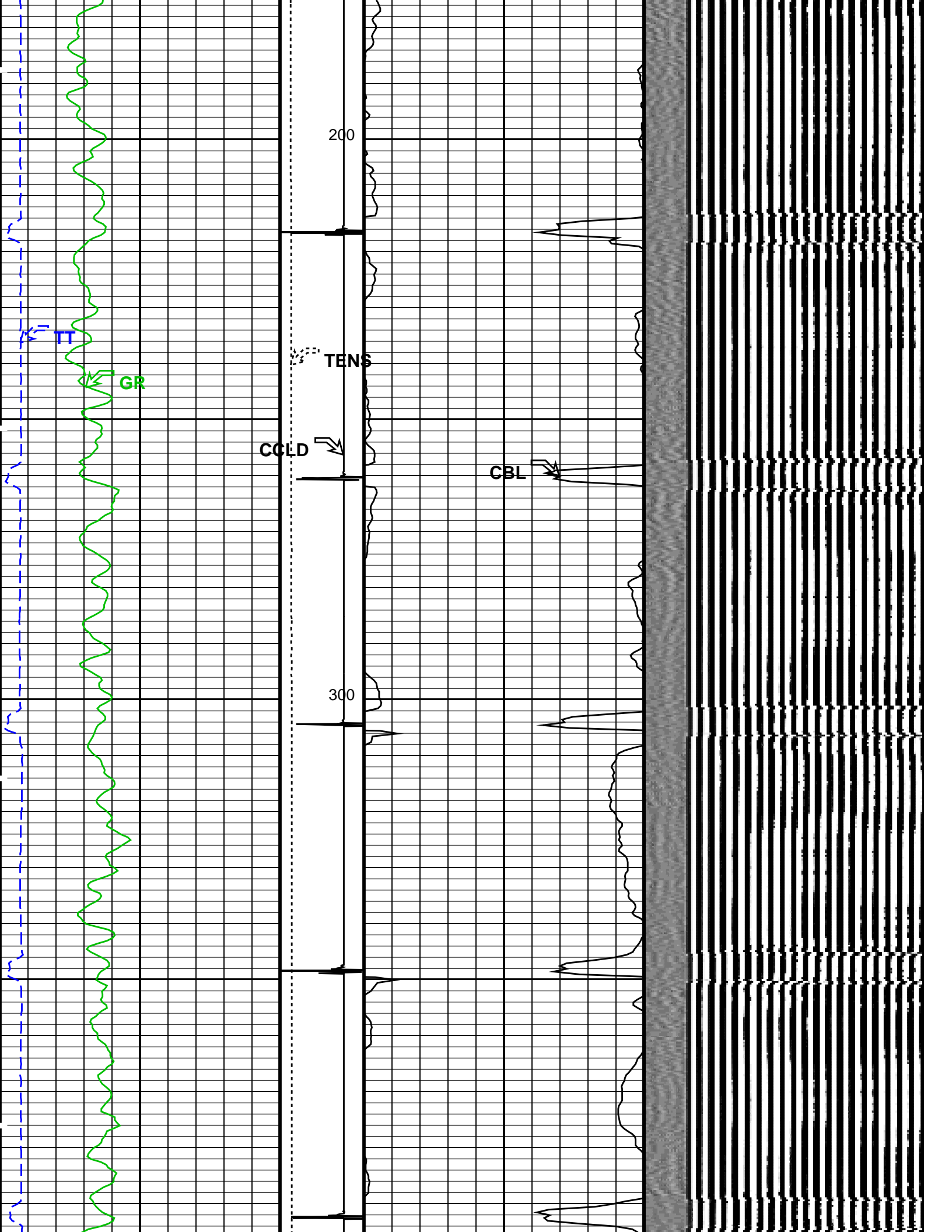
MAXIS Field Log

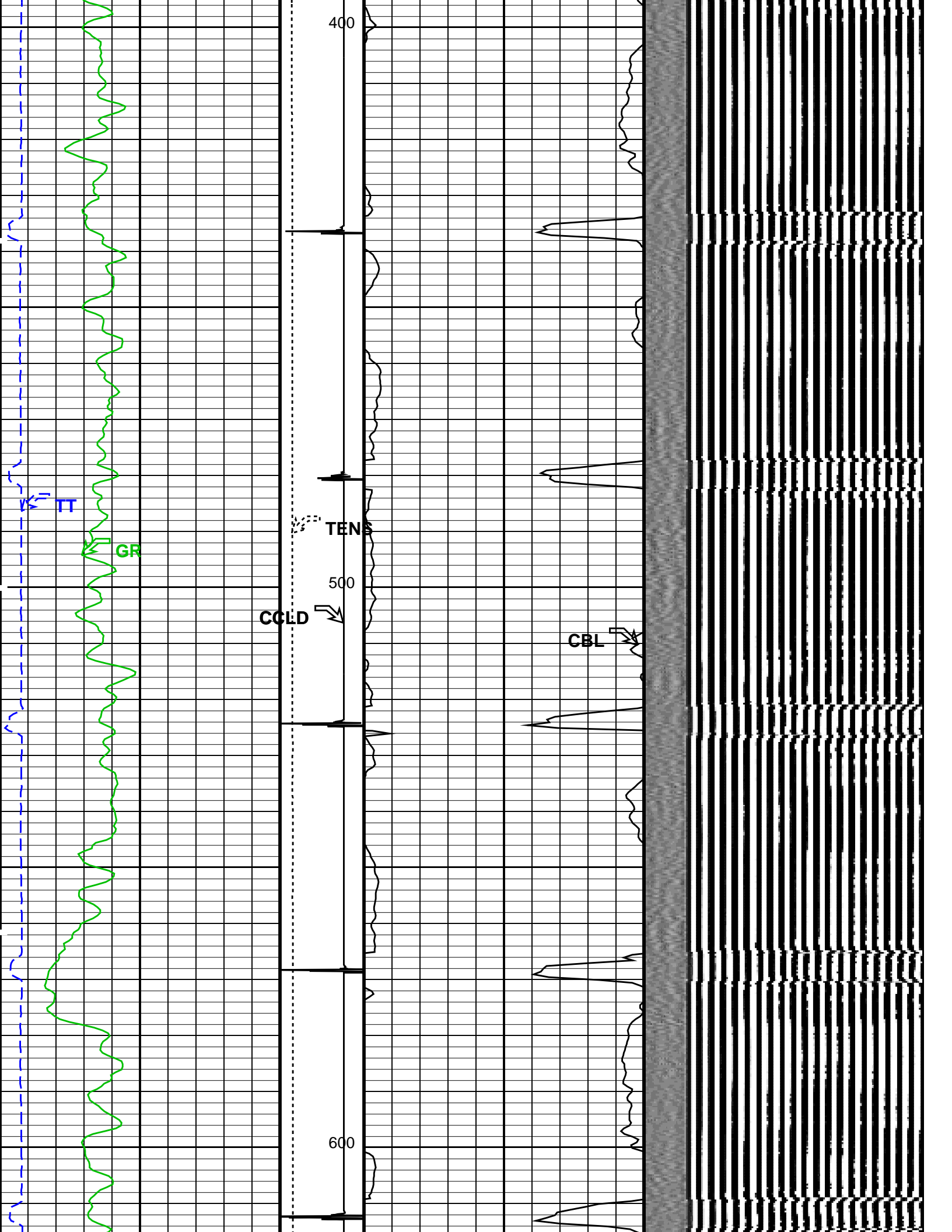
Company: ENCANA OIL & GAS (USA) INC Well: SHIDELER FEDERAL 19-13D (O19EB)

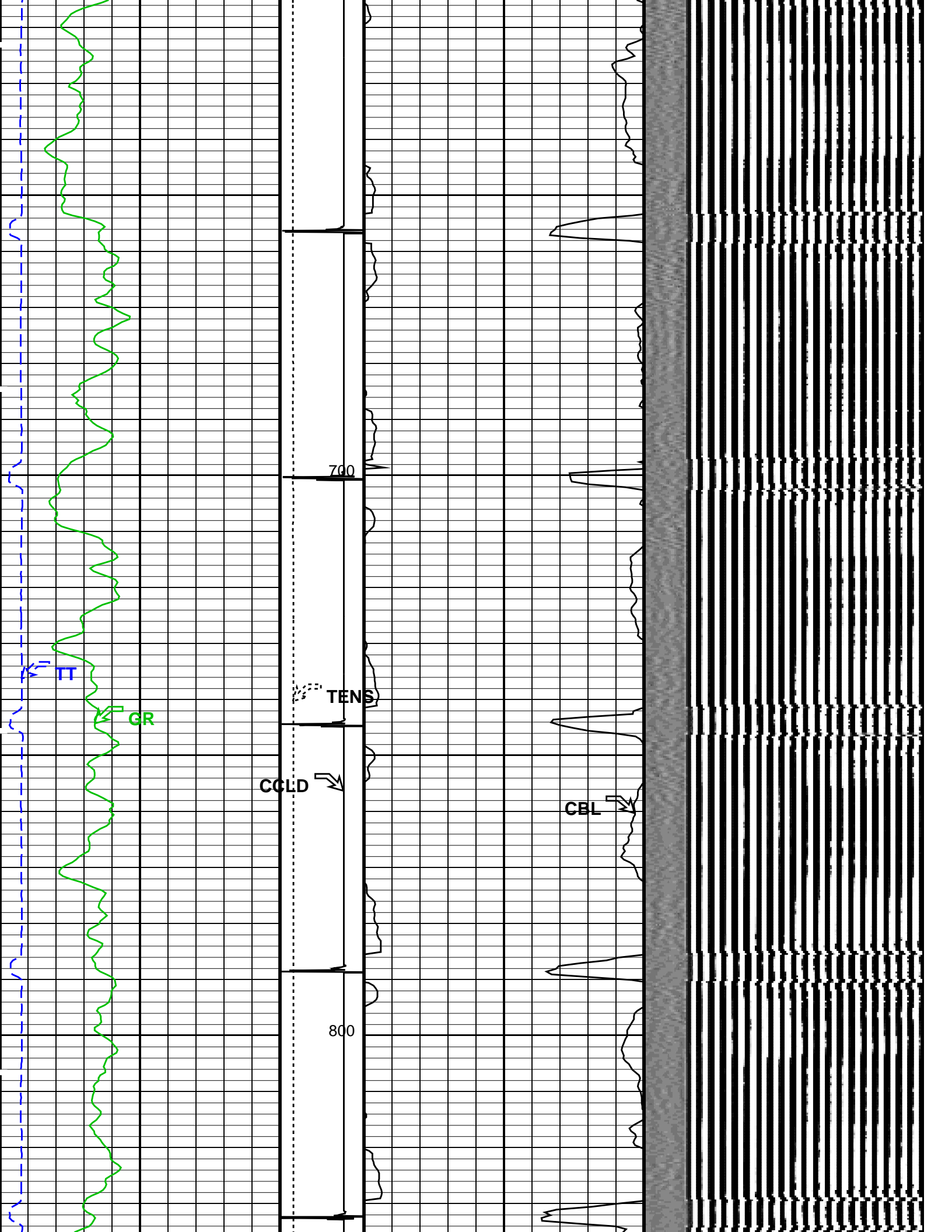
Input DLIS Files						
DEFAULT	Splice_SCMT_RST_PSP_020CUP	FN:1	PRODUCER	27-Apr-2013 17:55	8300.0 FT	-2.3 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_021PUP	FN:19	PRODUCER	27-Apr-2013 17:59	8303.0 FT	-46.0 FT
OP System Version: 19C0-187						
SCMT-CB	SRPC-5214-H2-2012-OP1		RST-C		SRPC-5214-H2-2012-OP1	
PSPT	SRPC-5214-H2-2012-OP1					

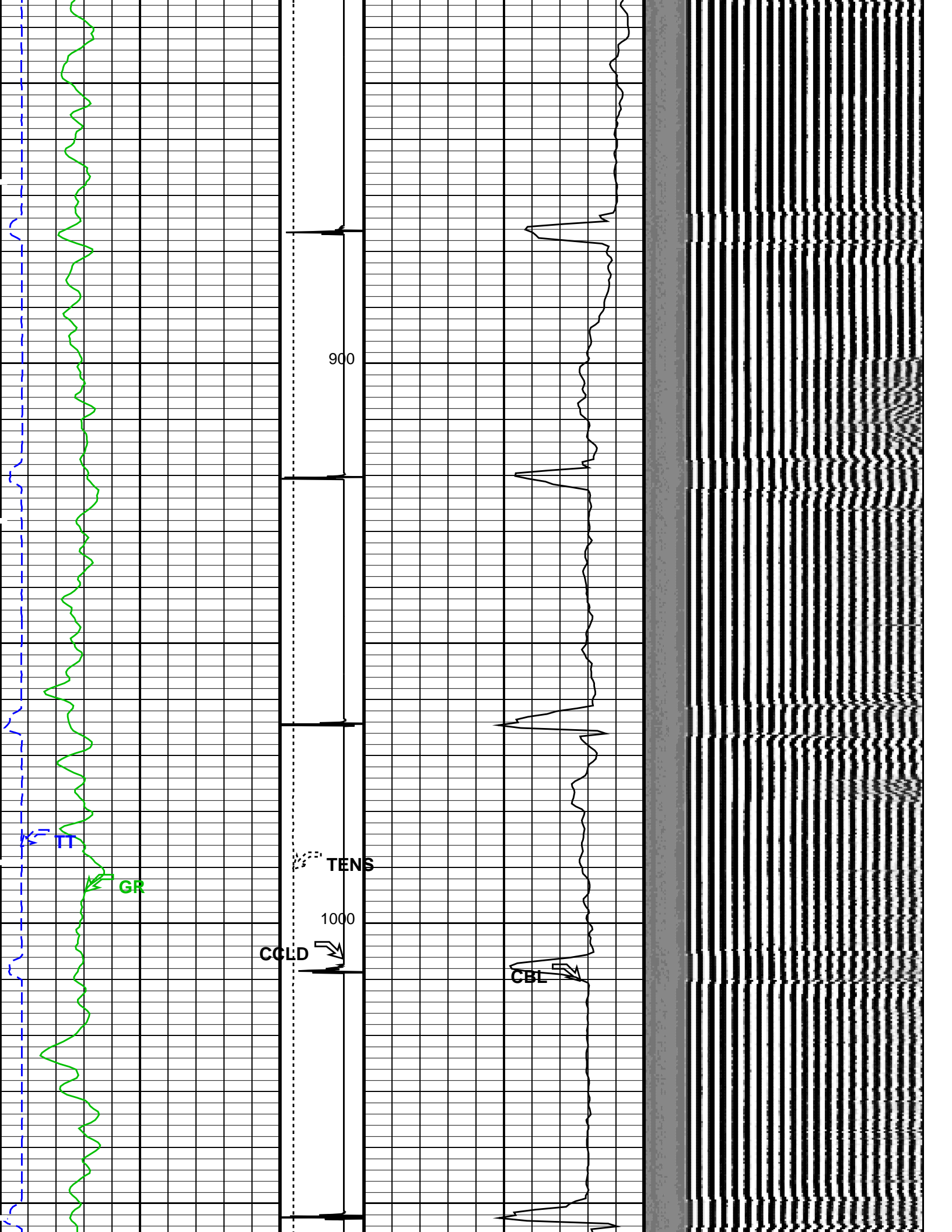


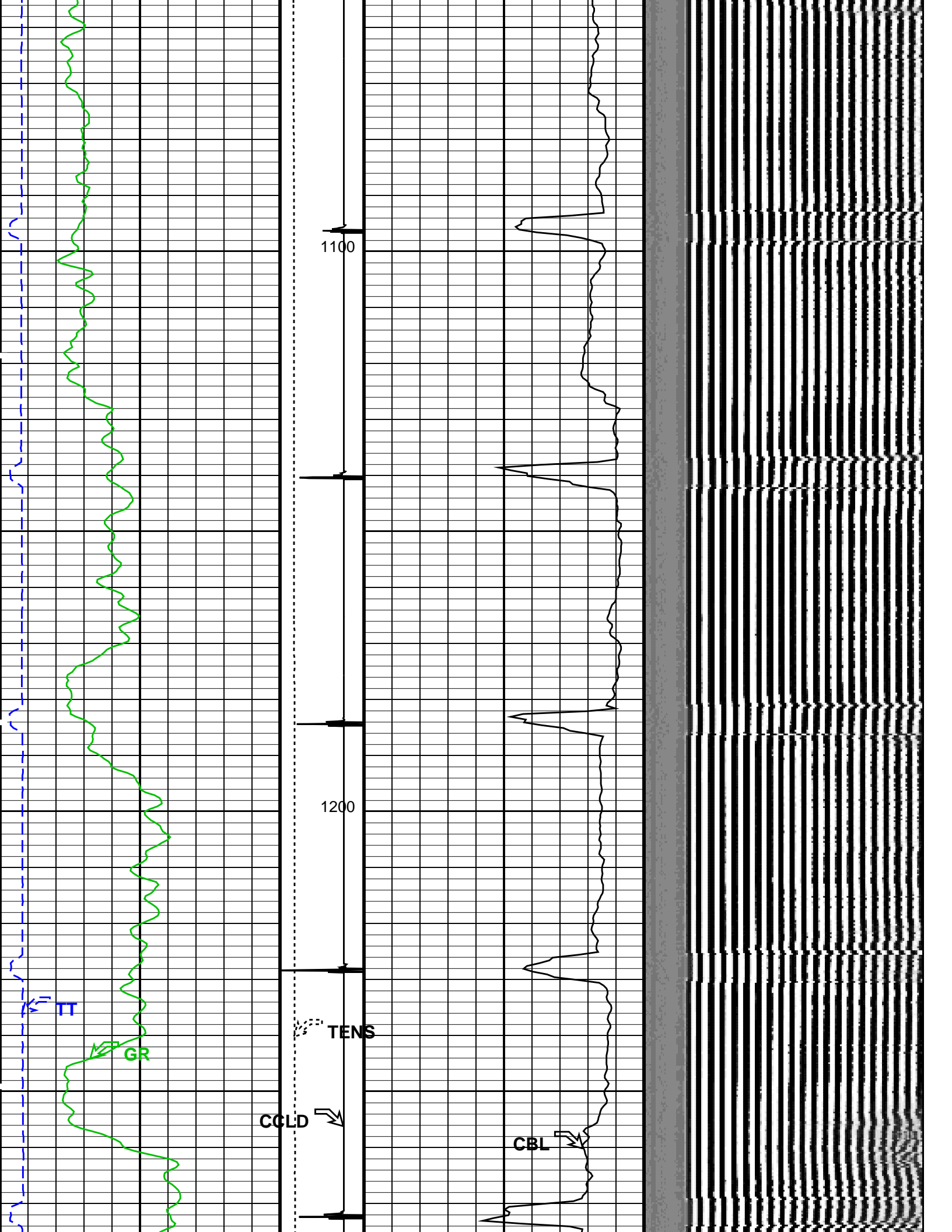


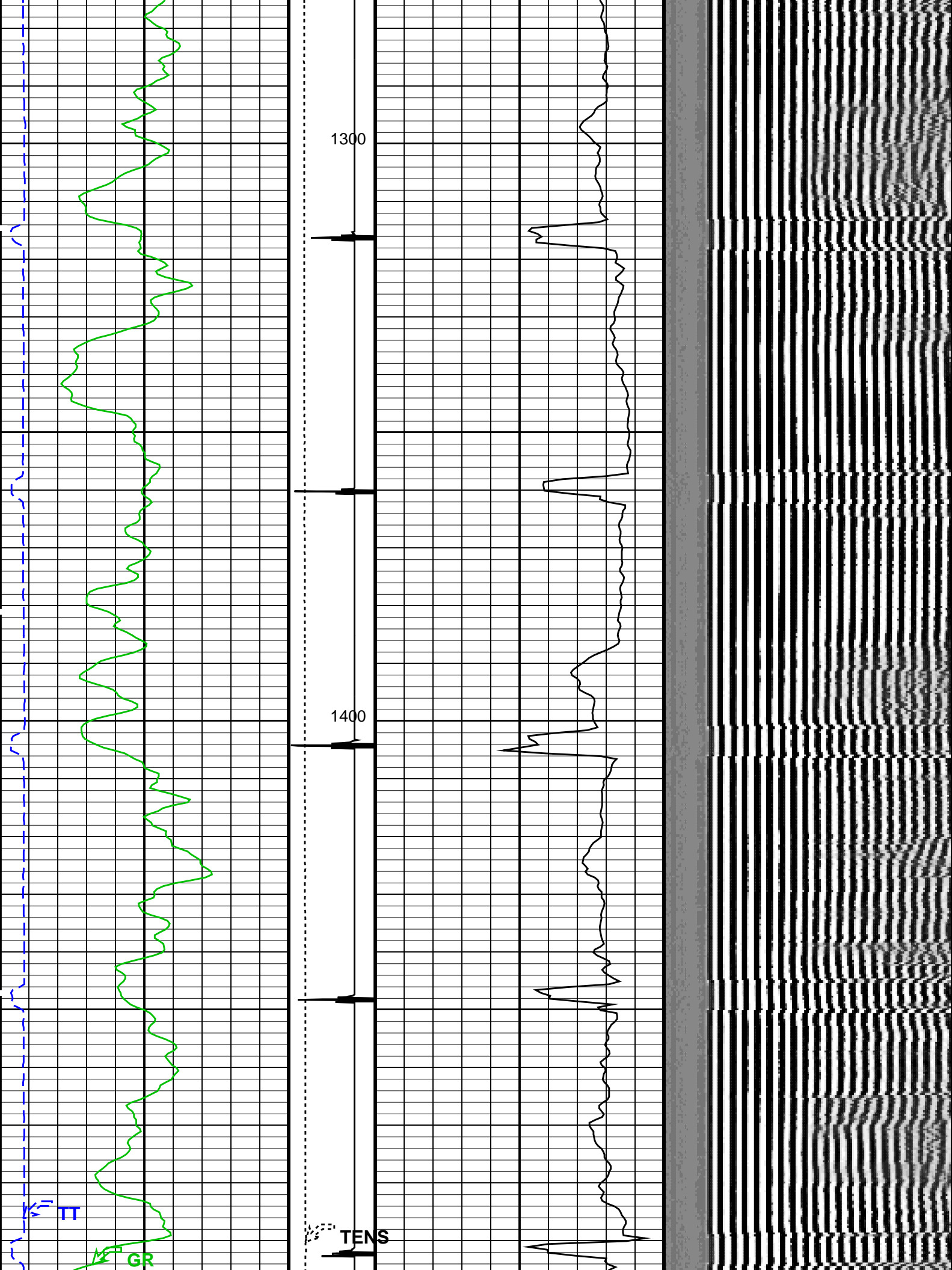


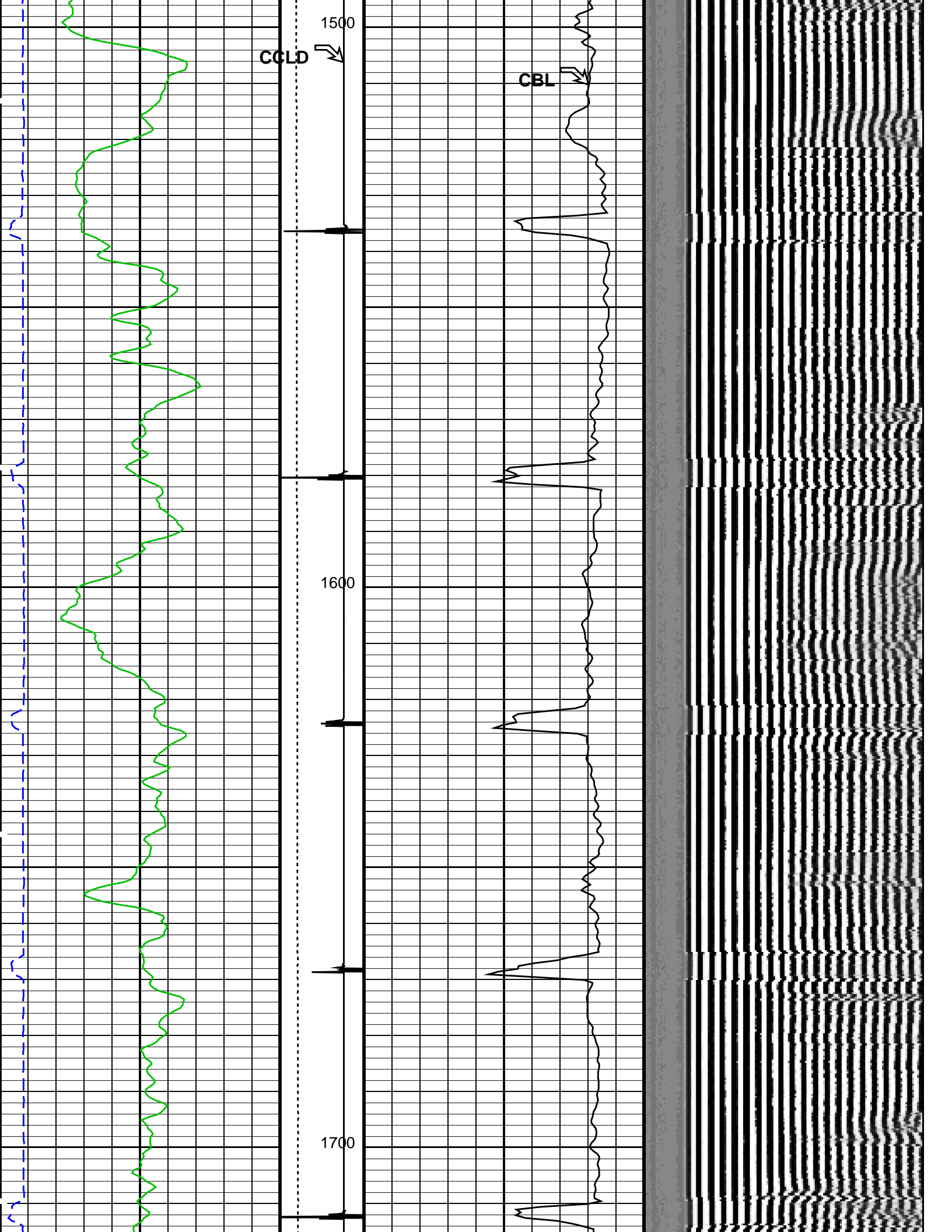


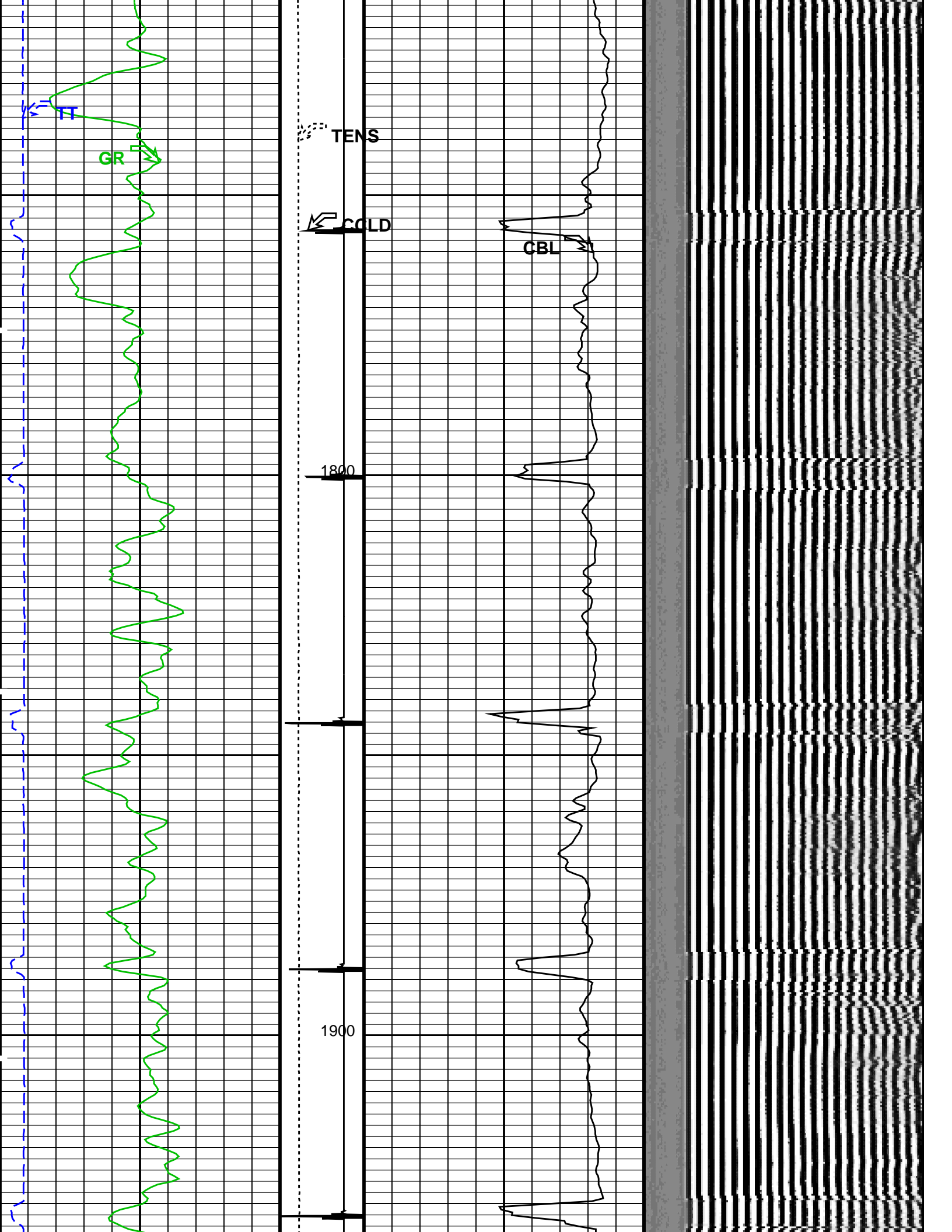


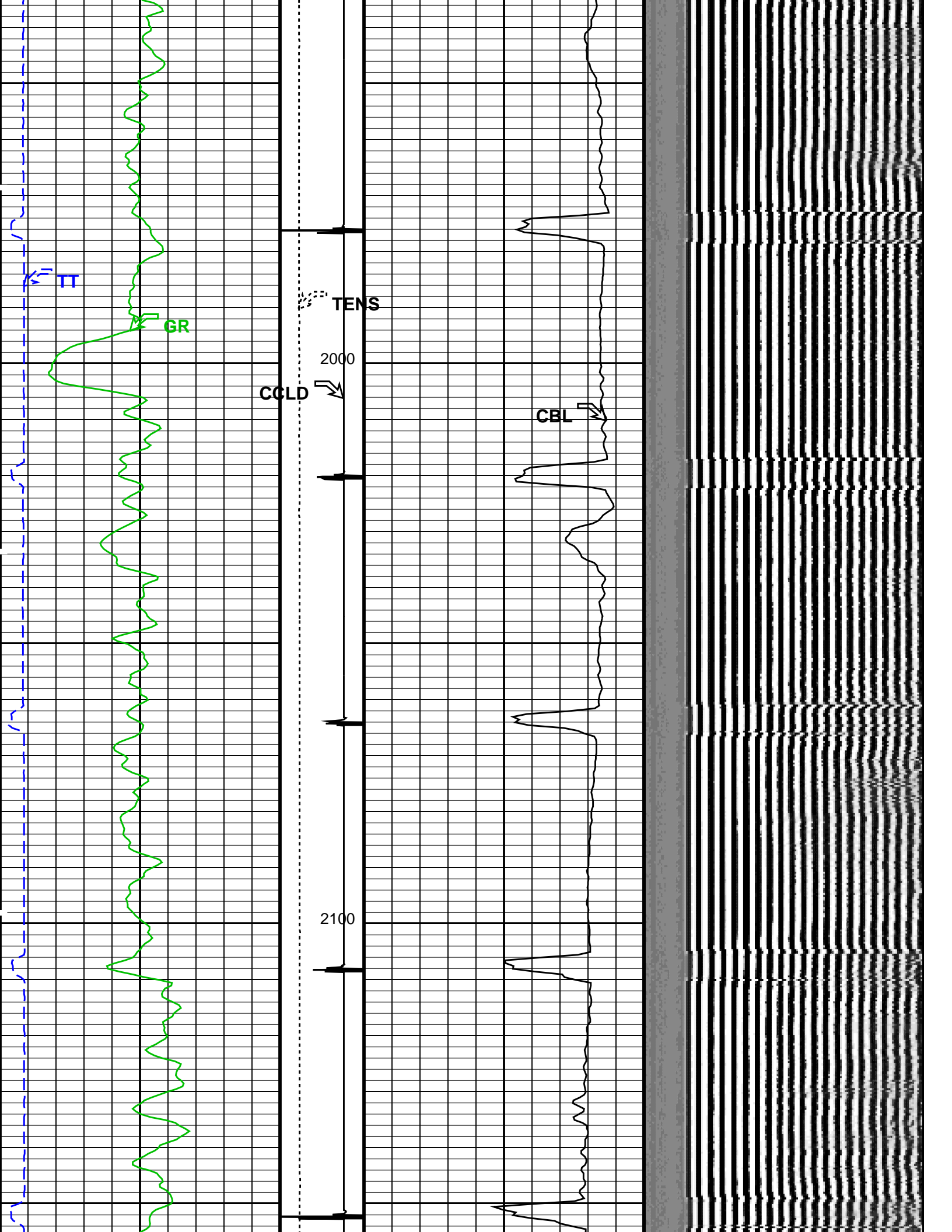


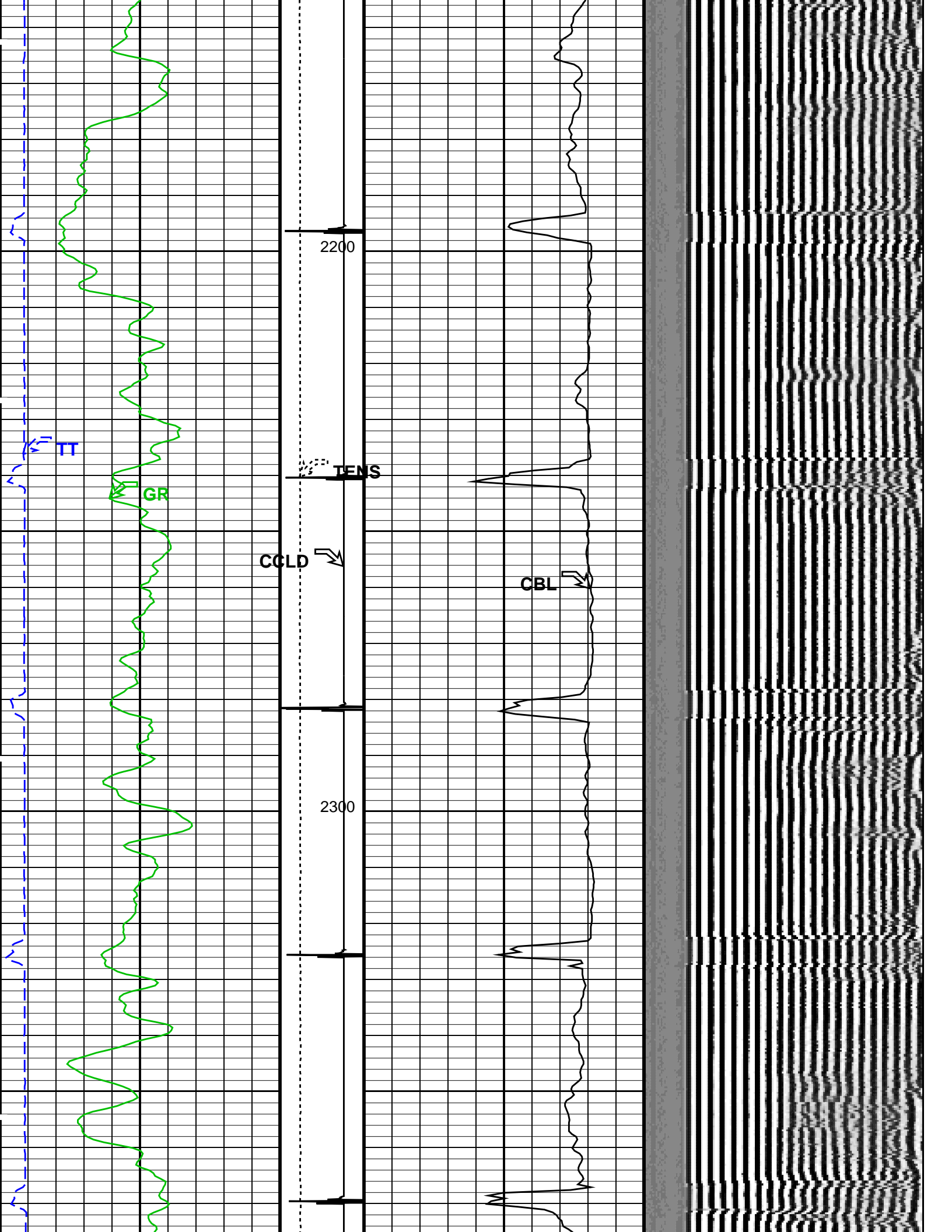


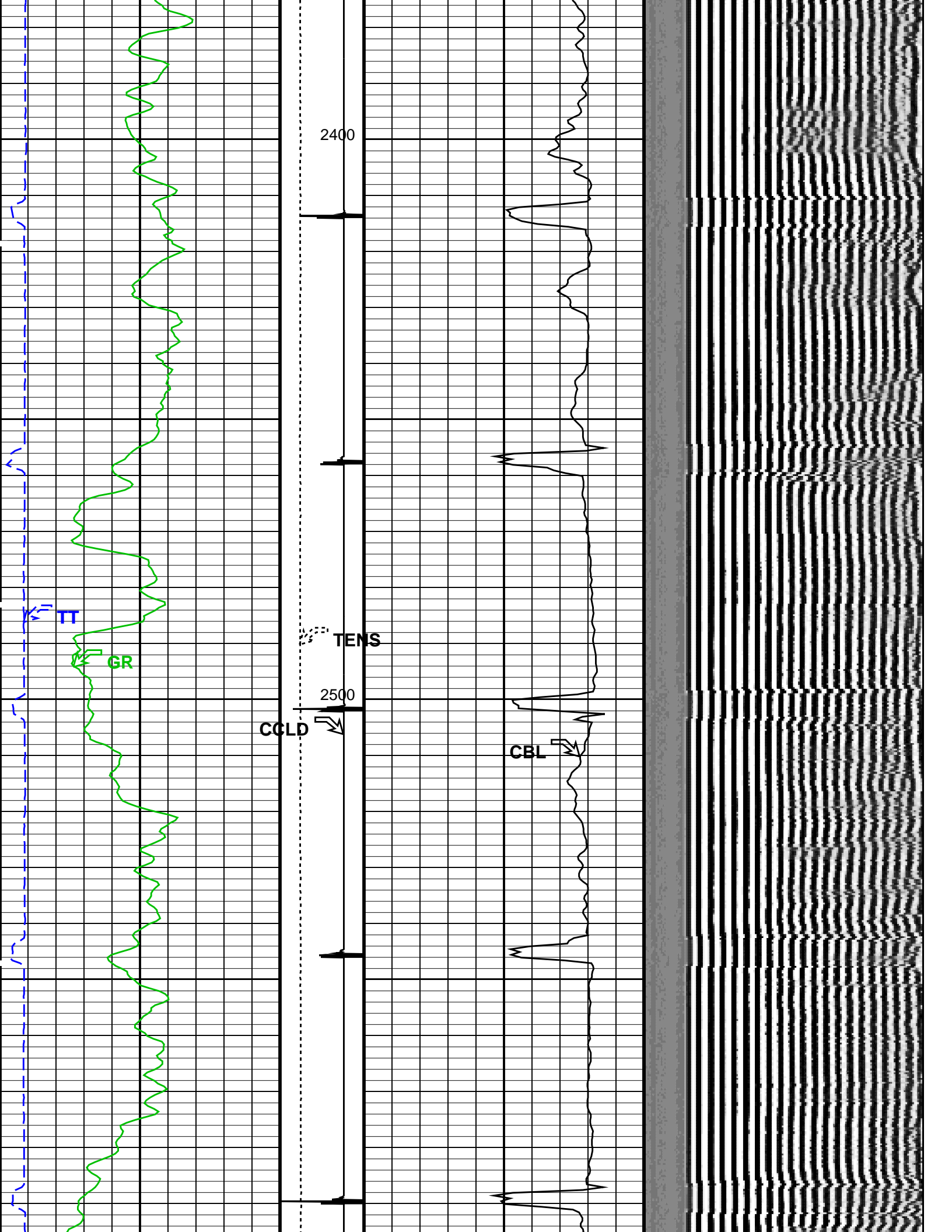


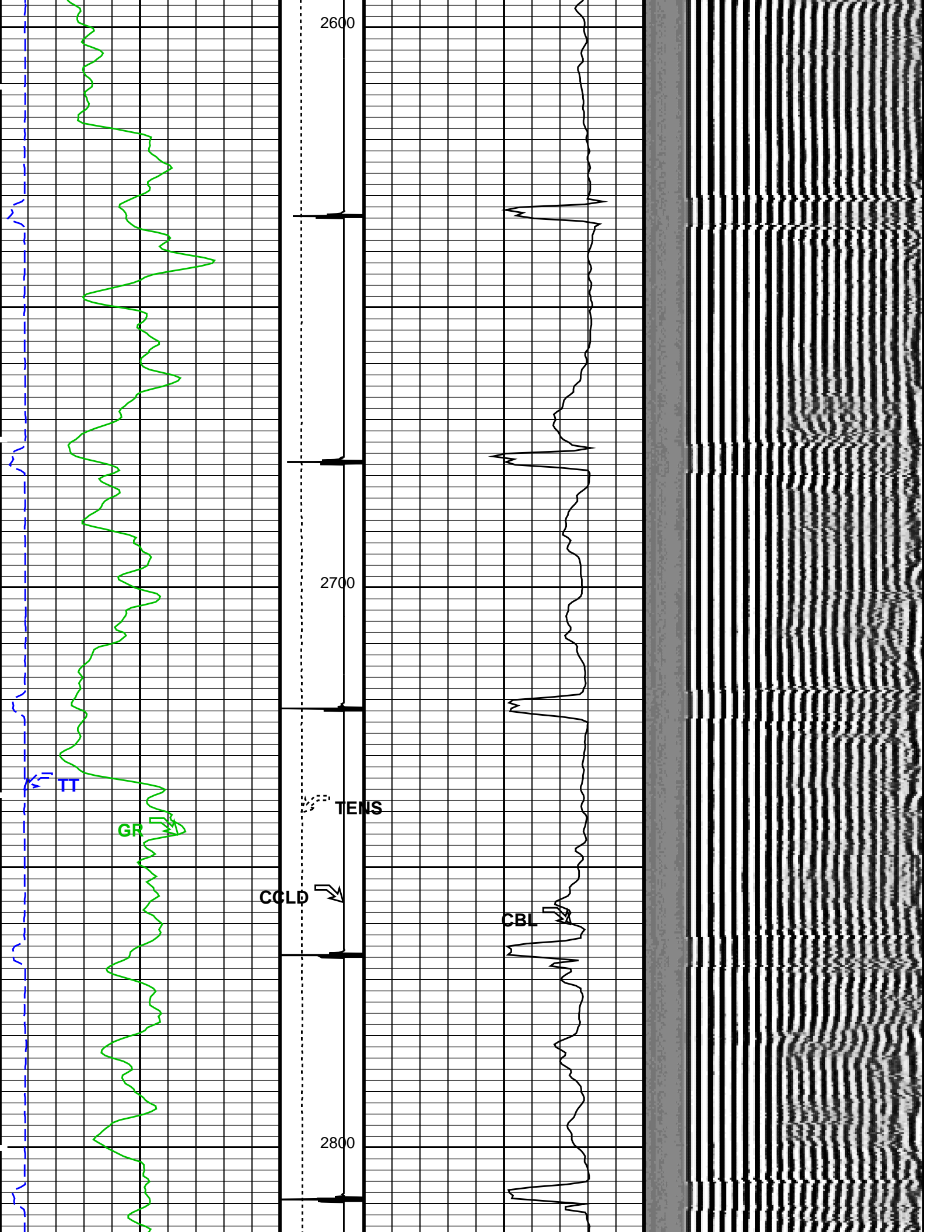


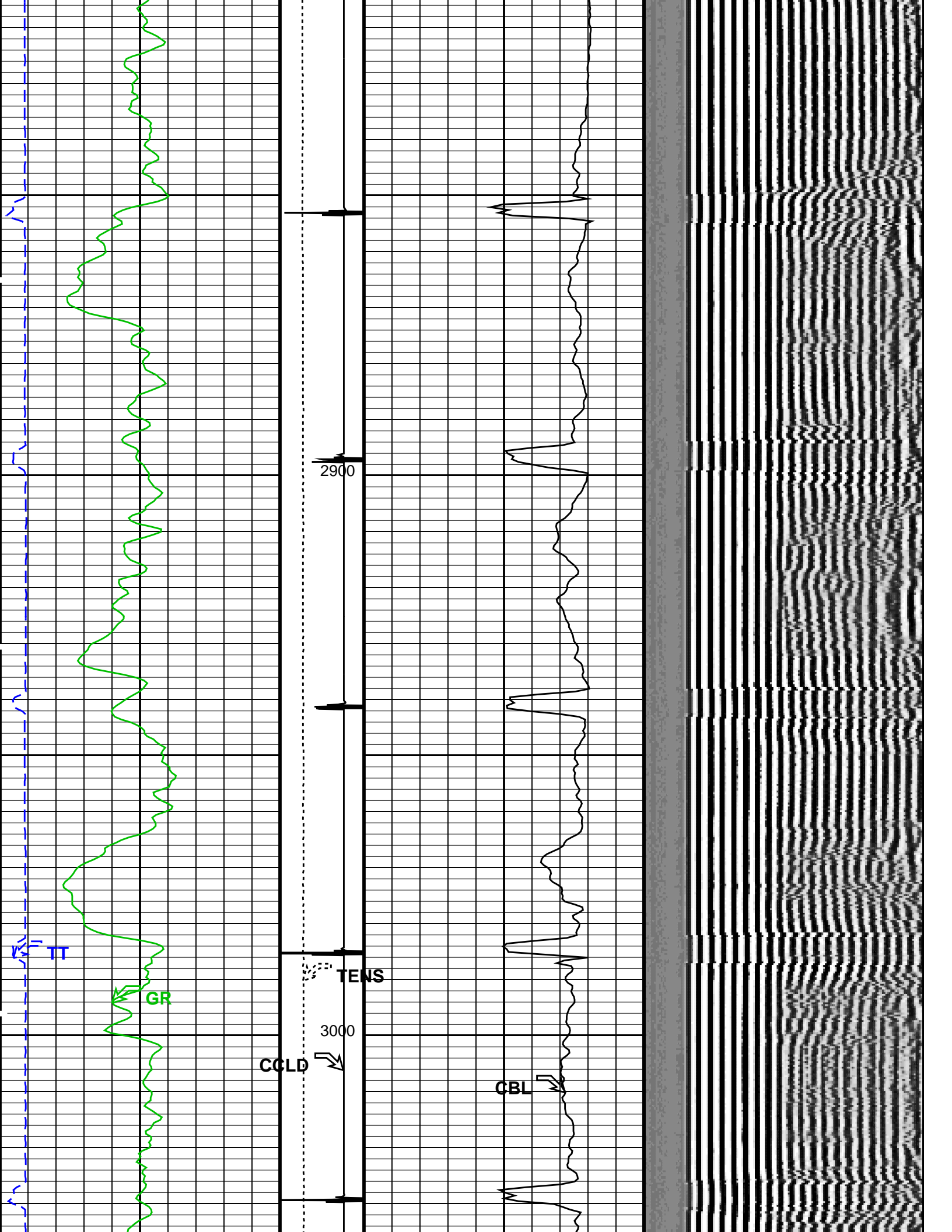


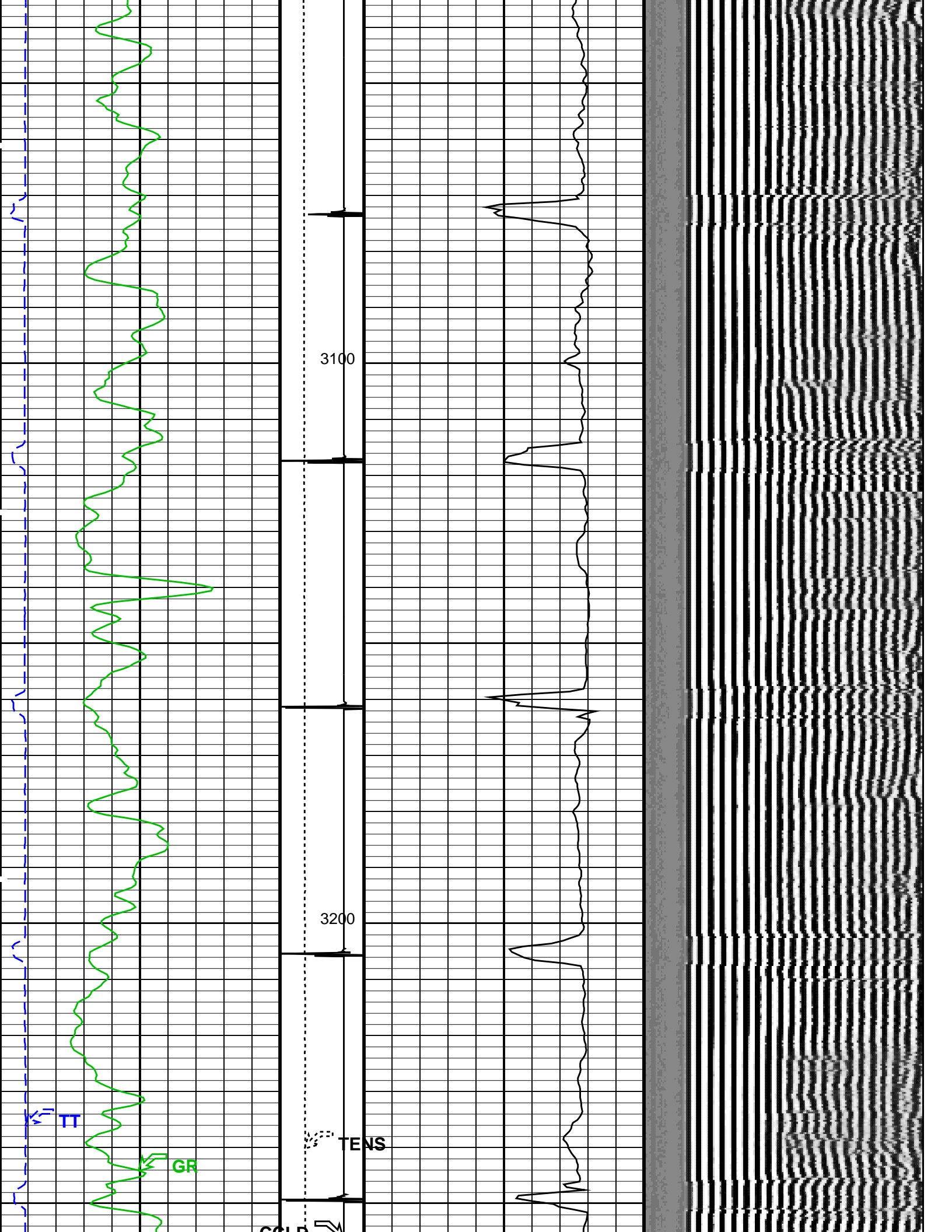


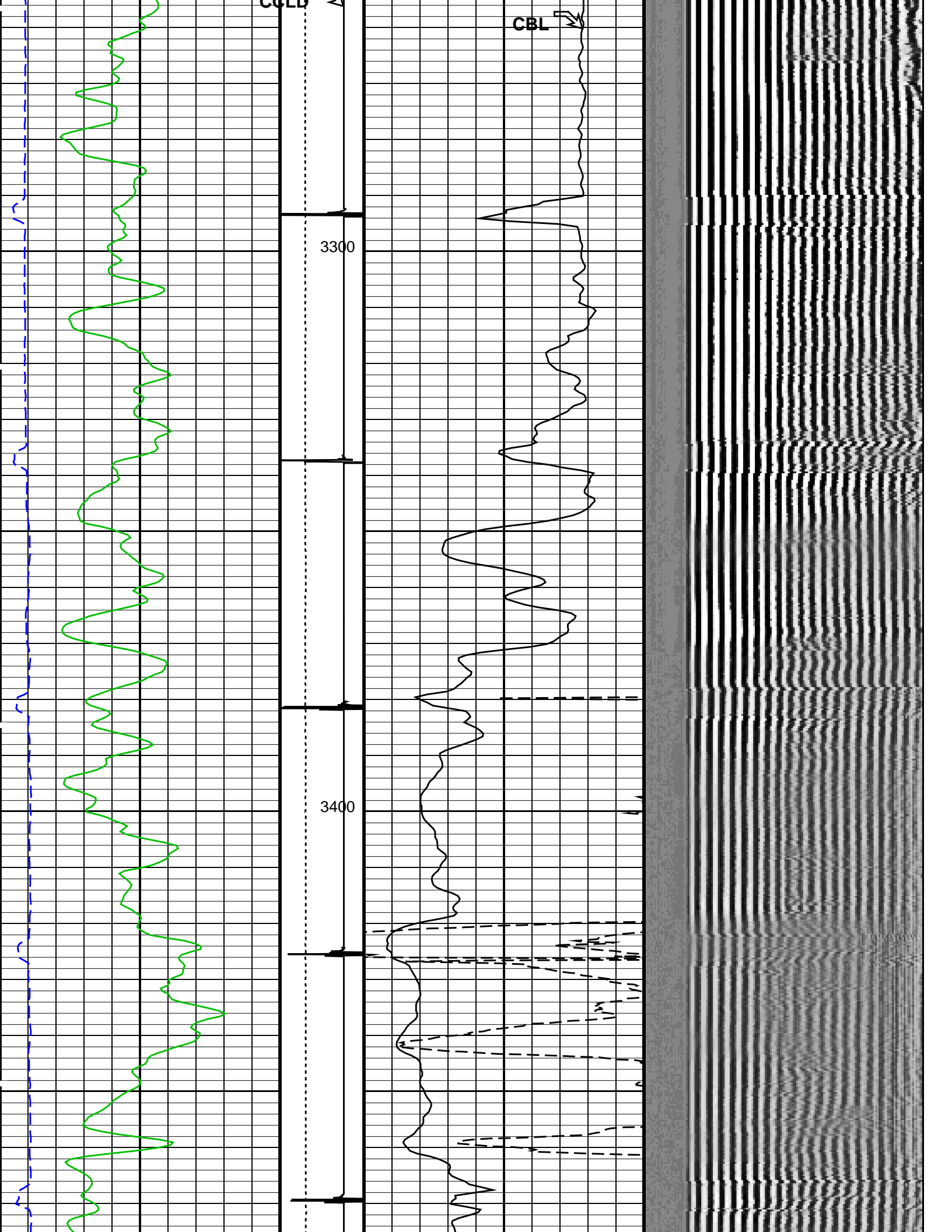


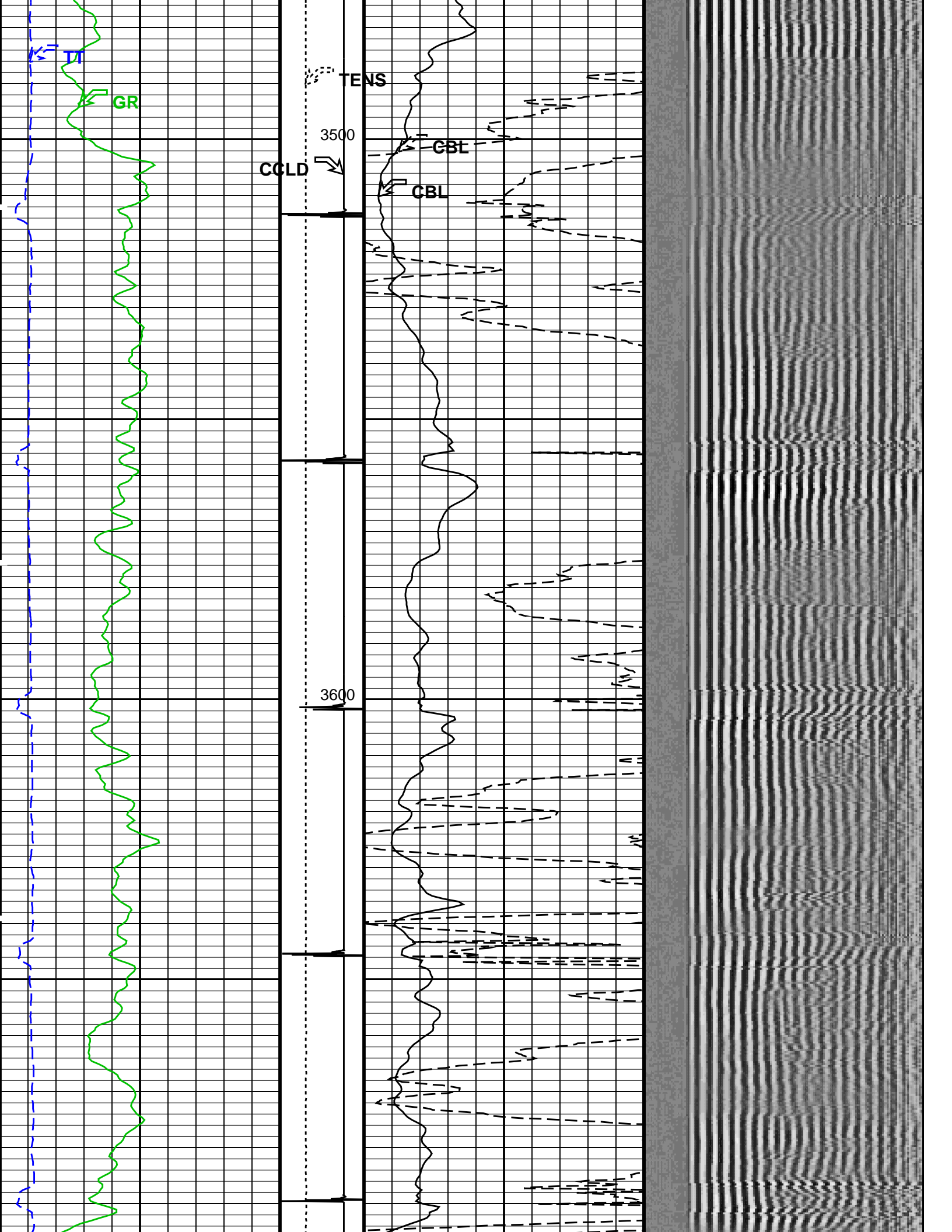


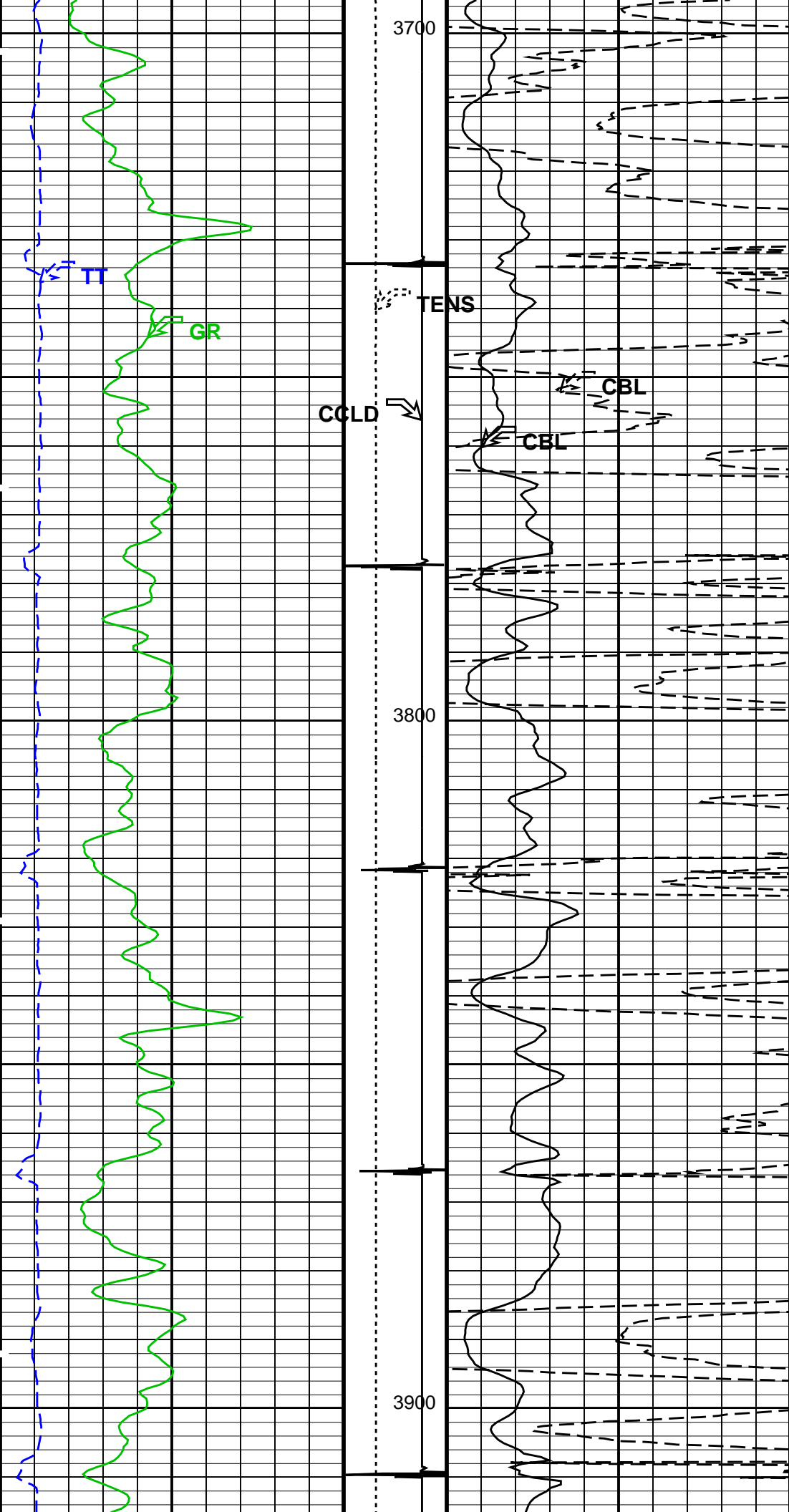


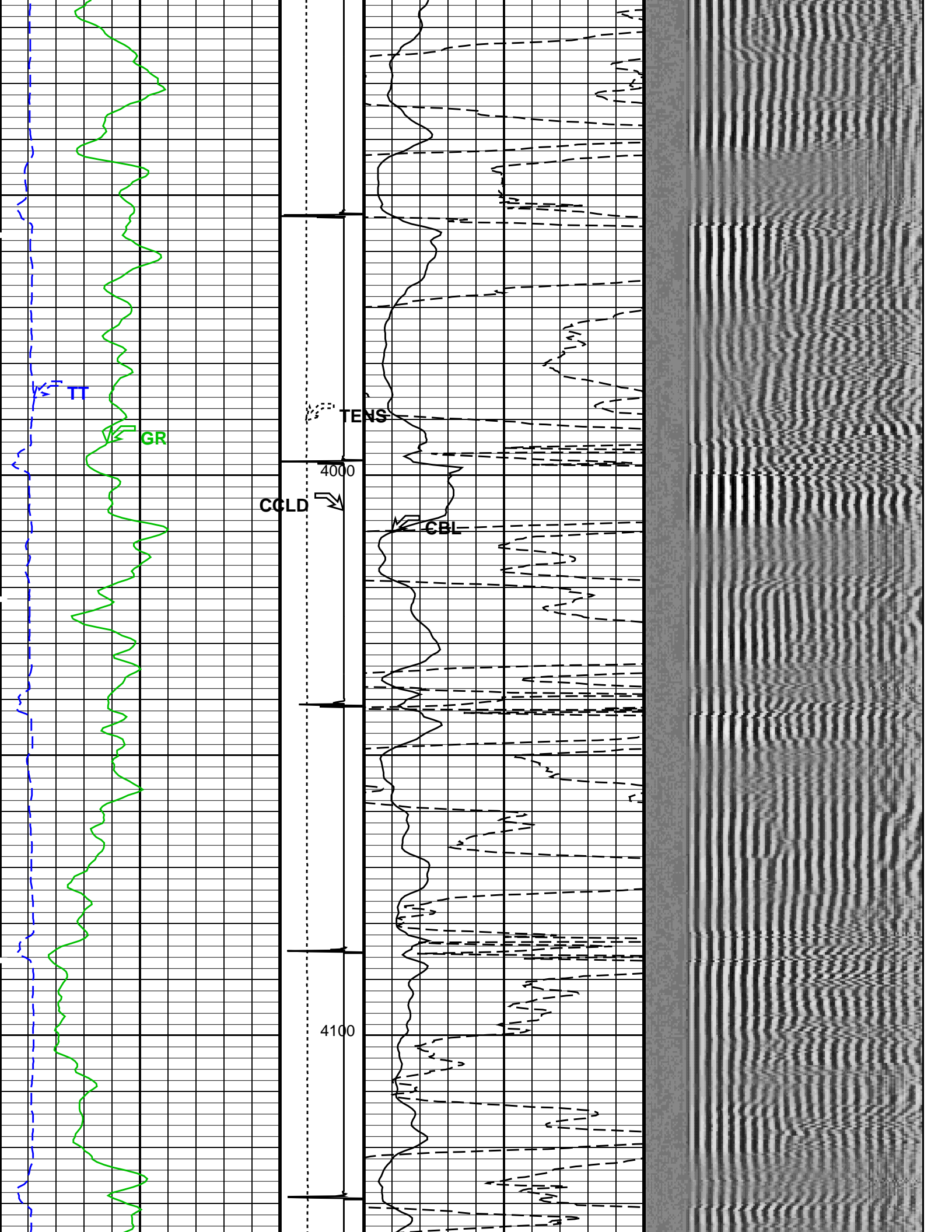


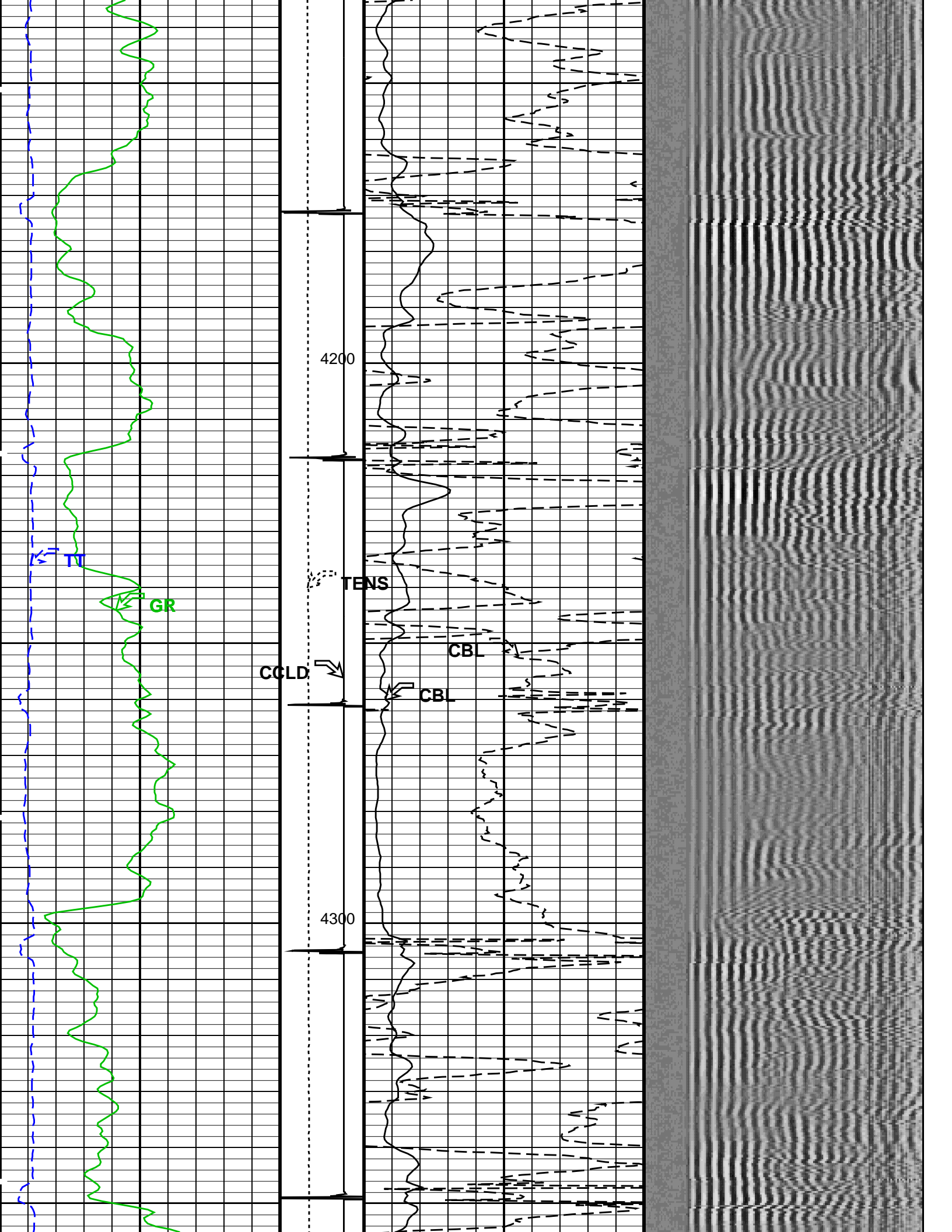


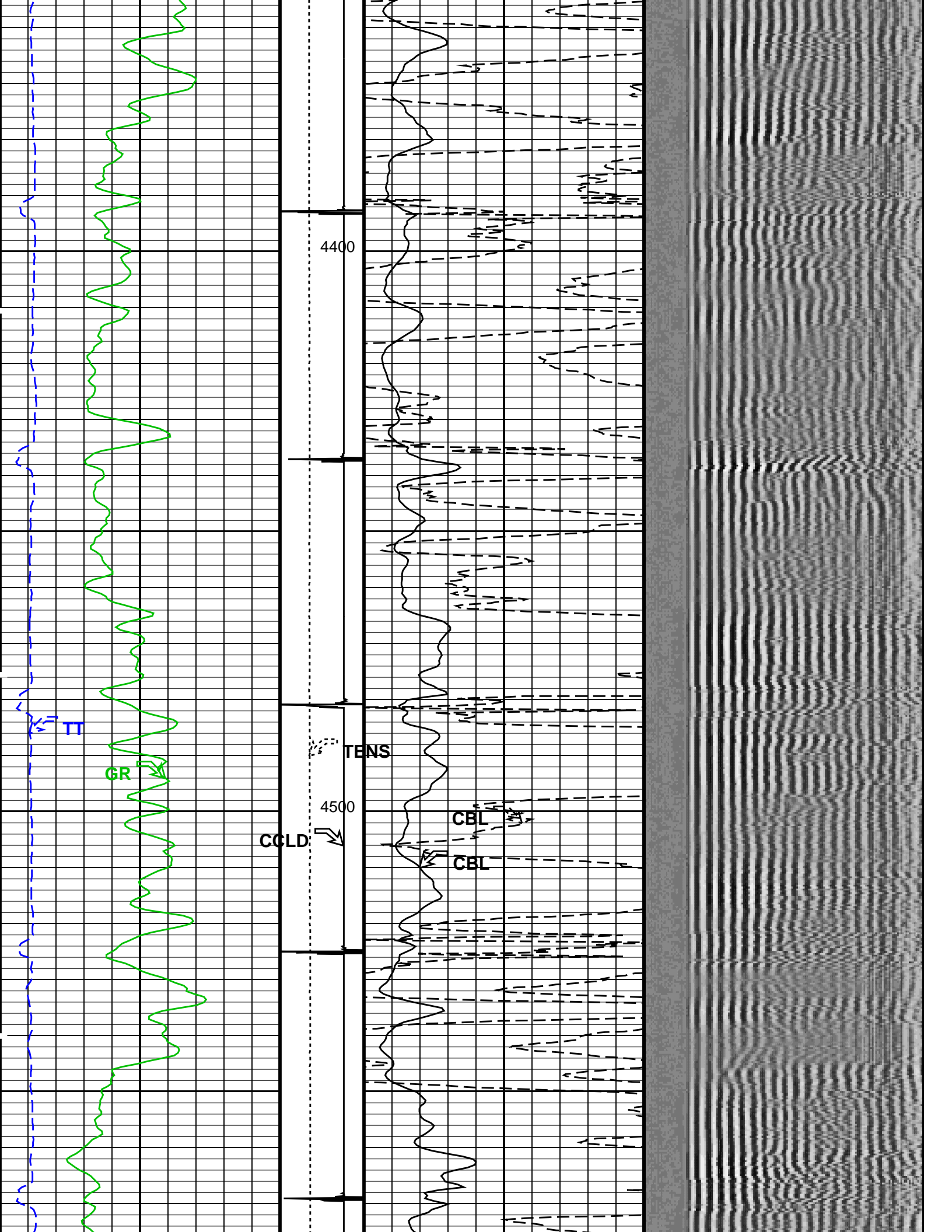


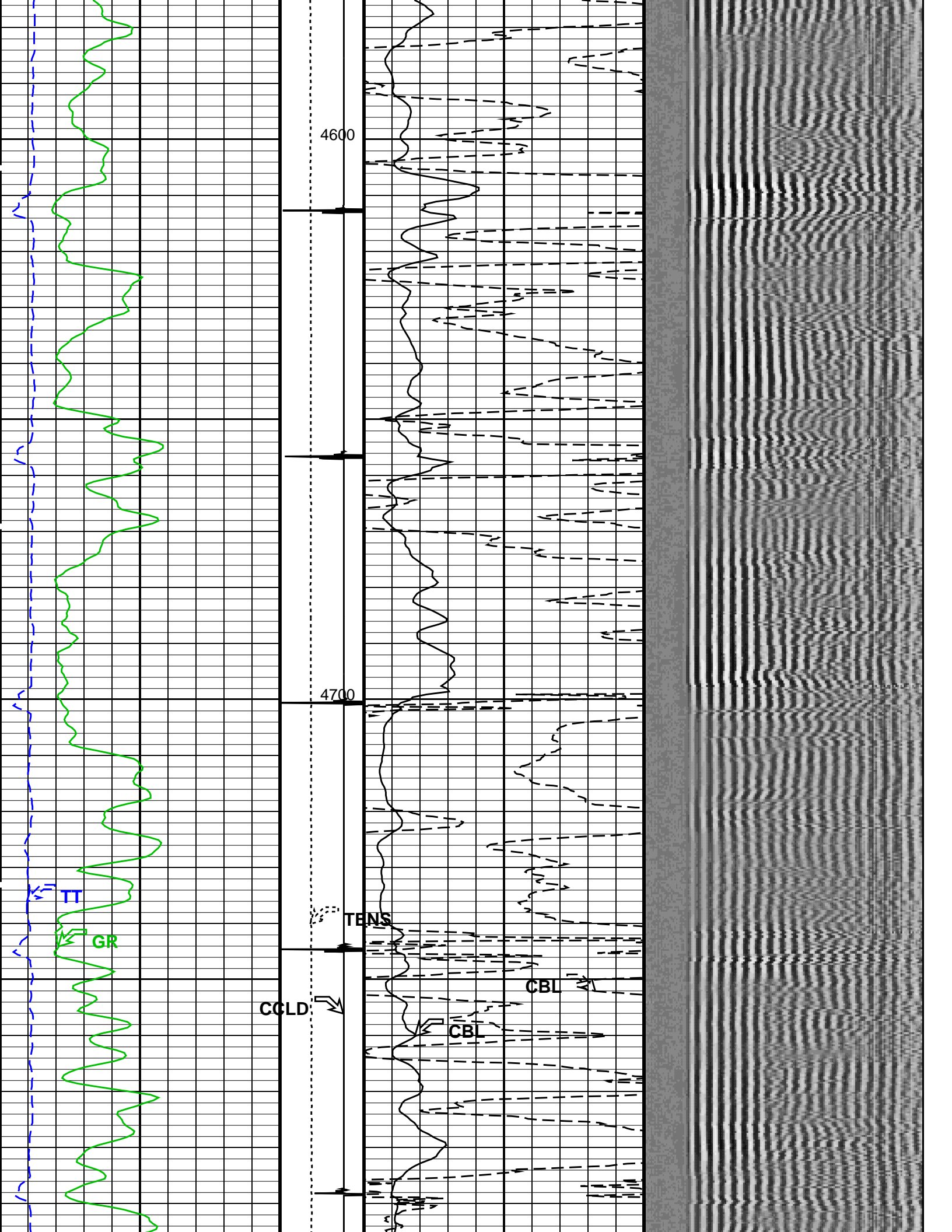


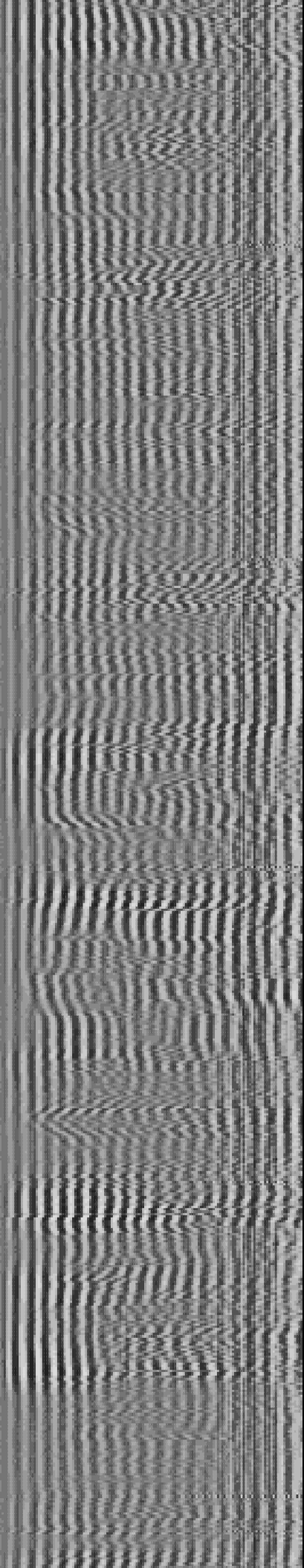
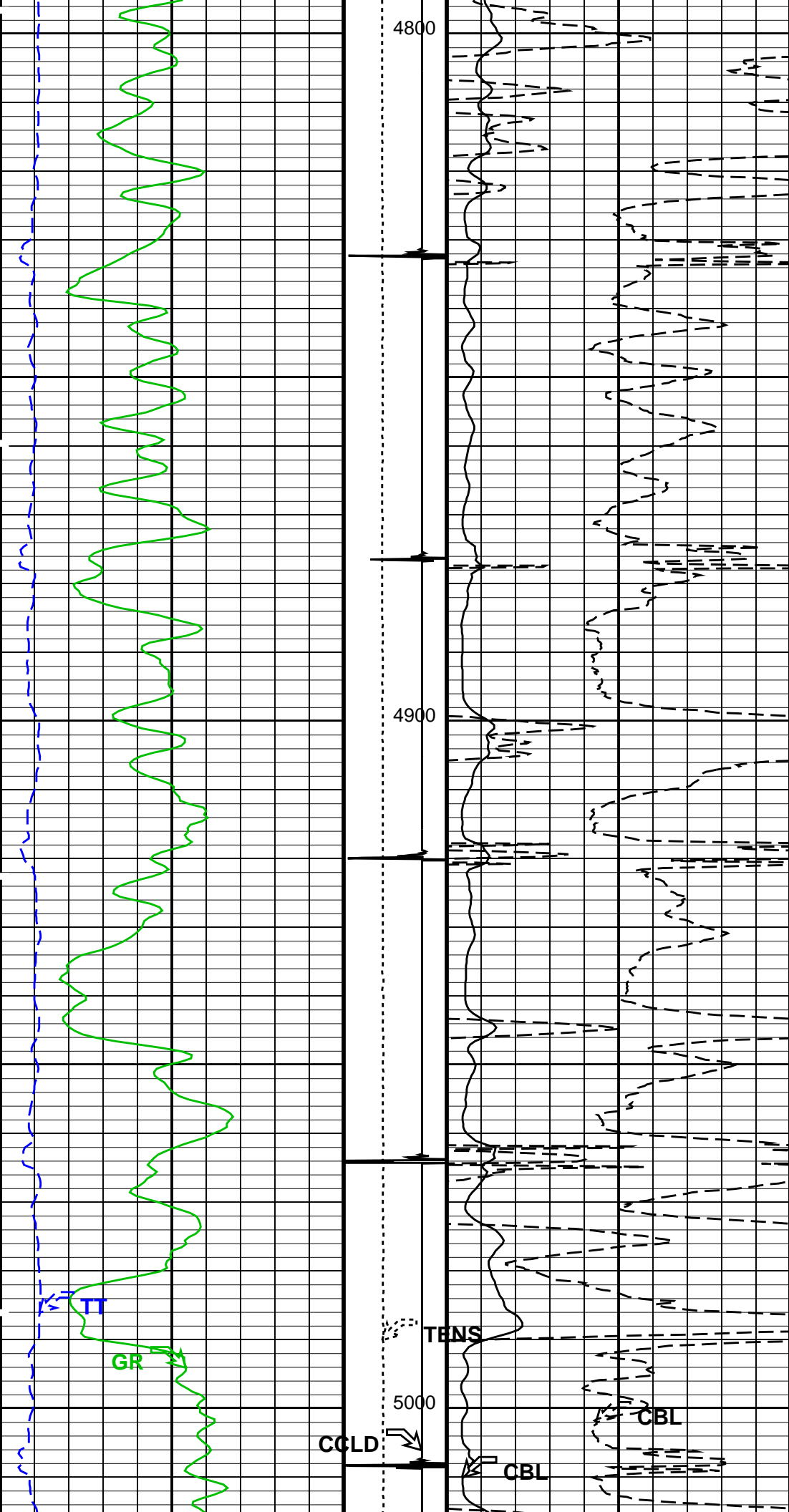


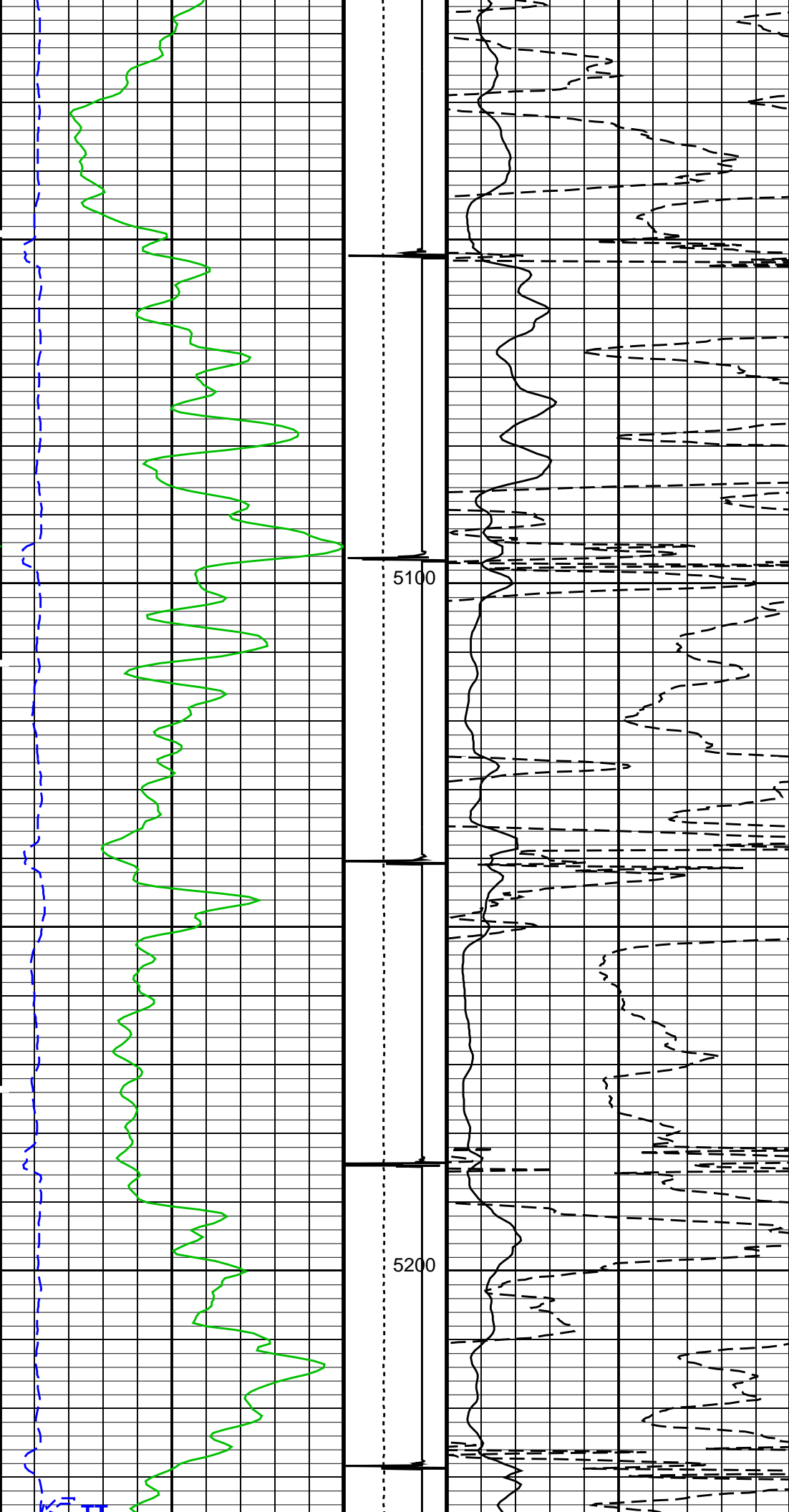


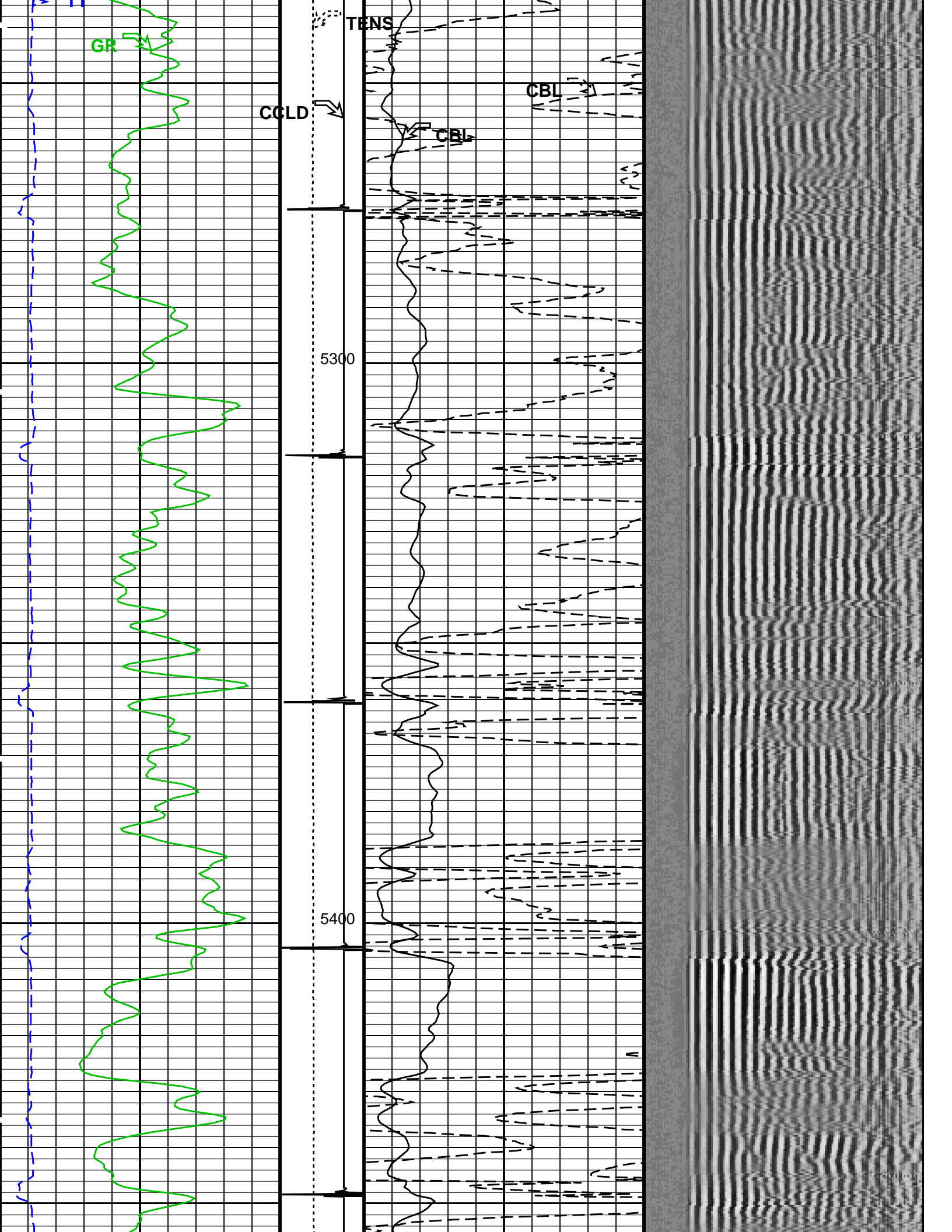


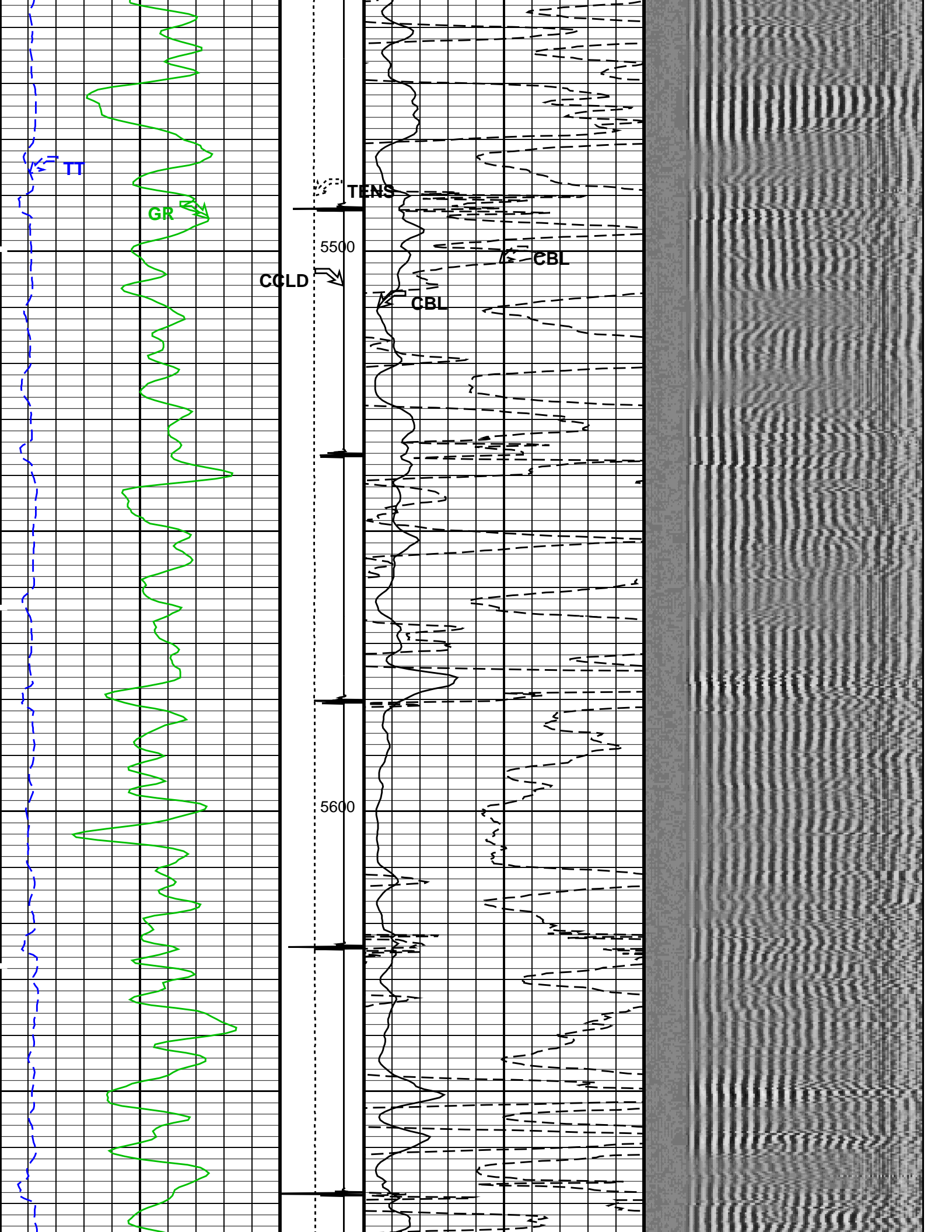


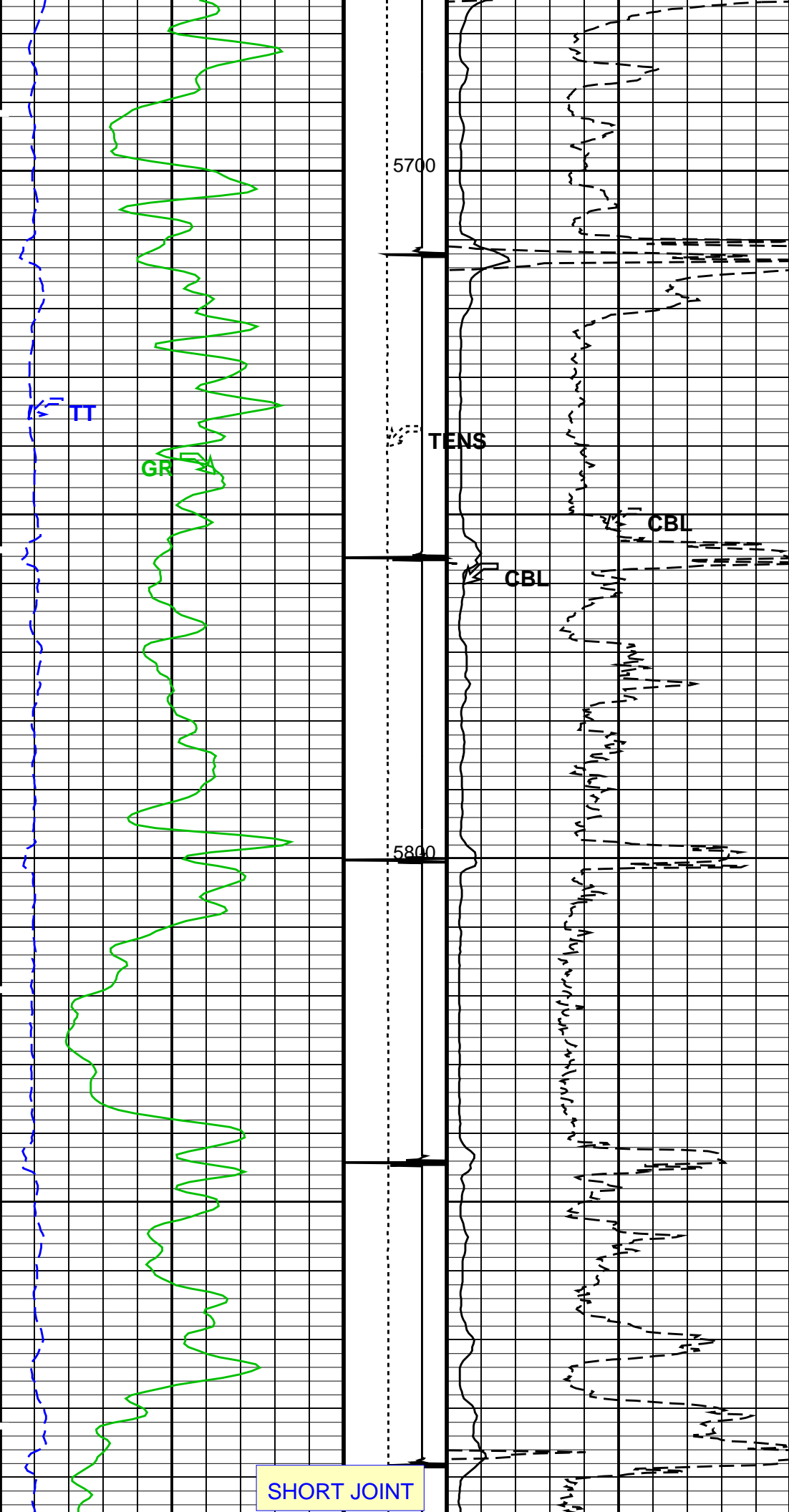




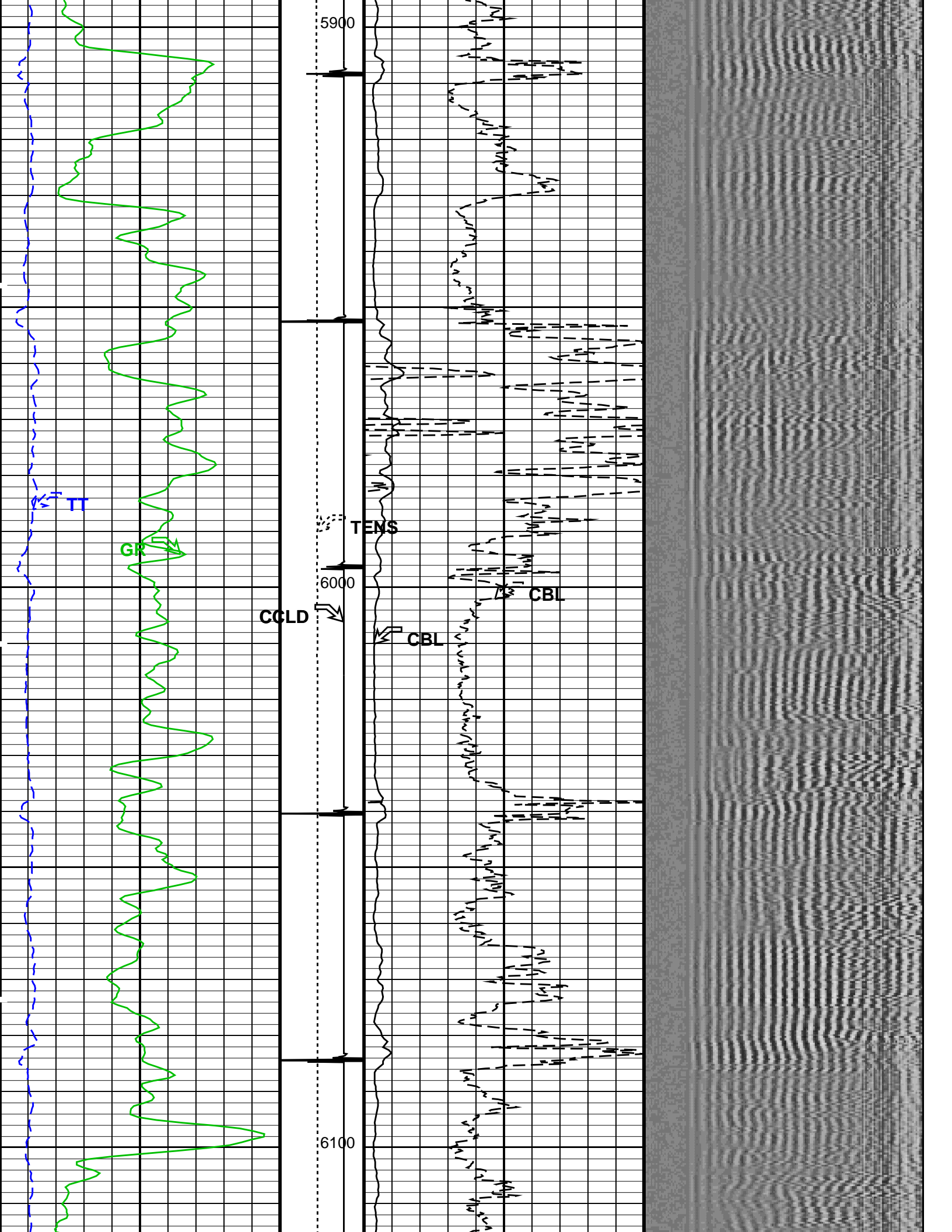


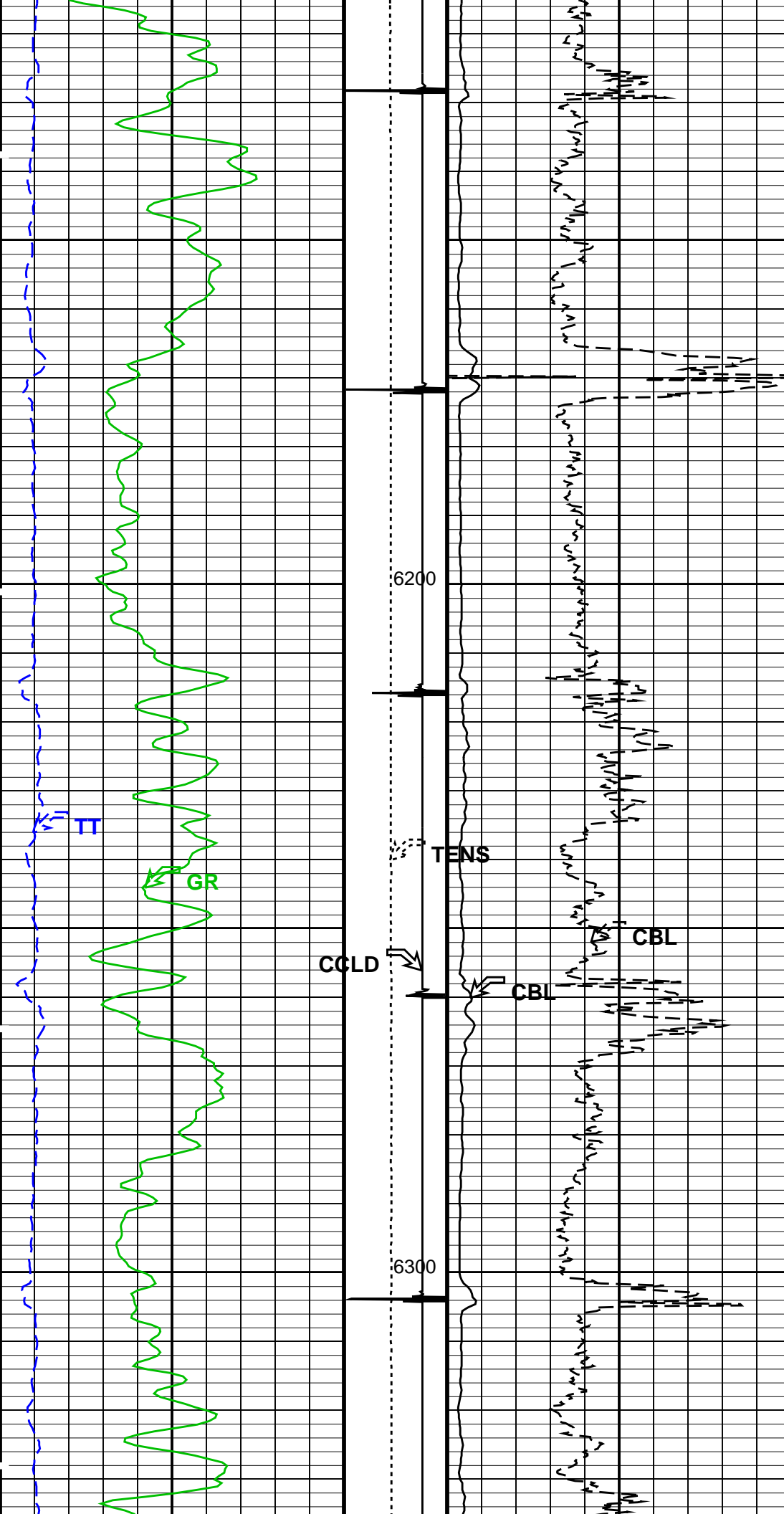


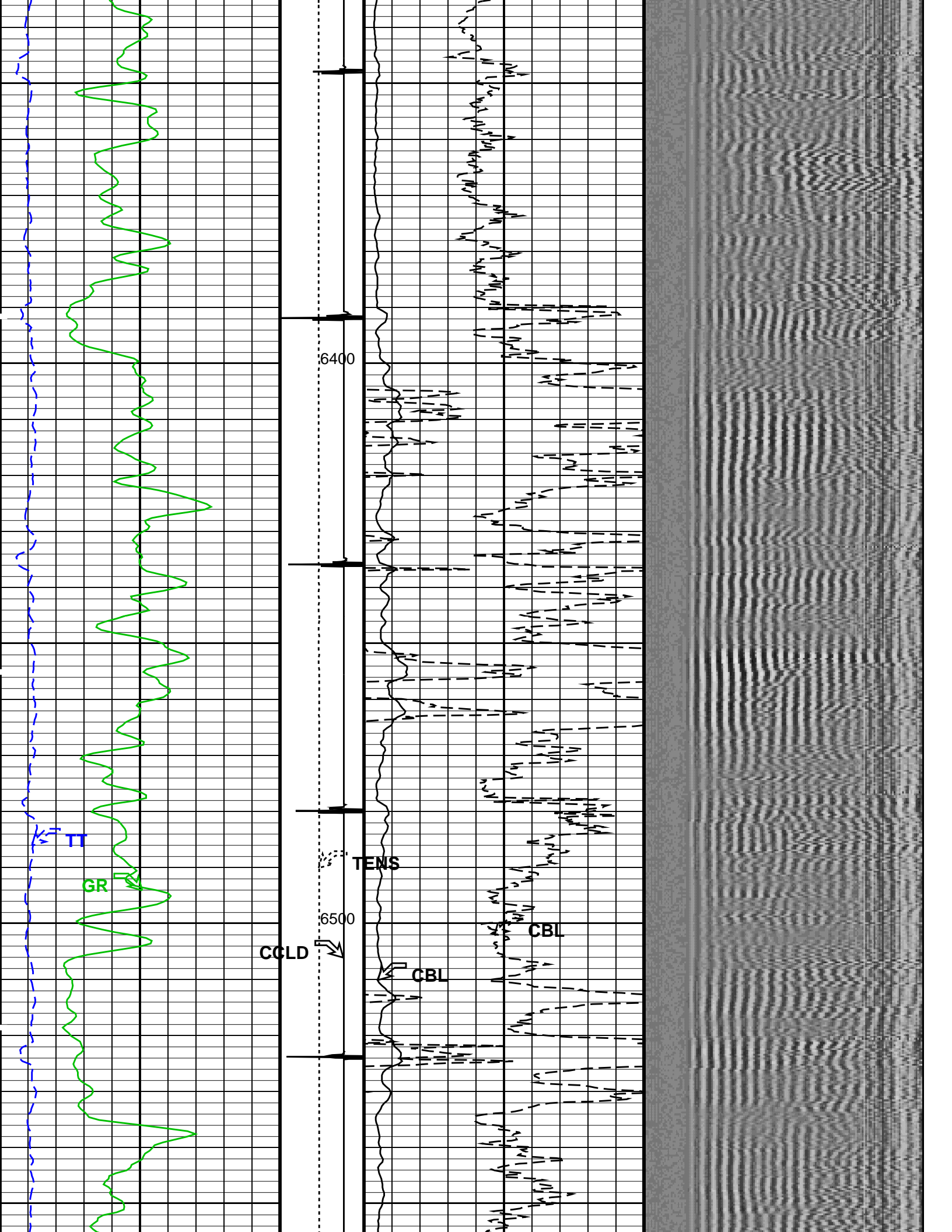


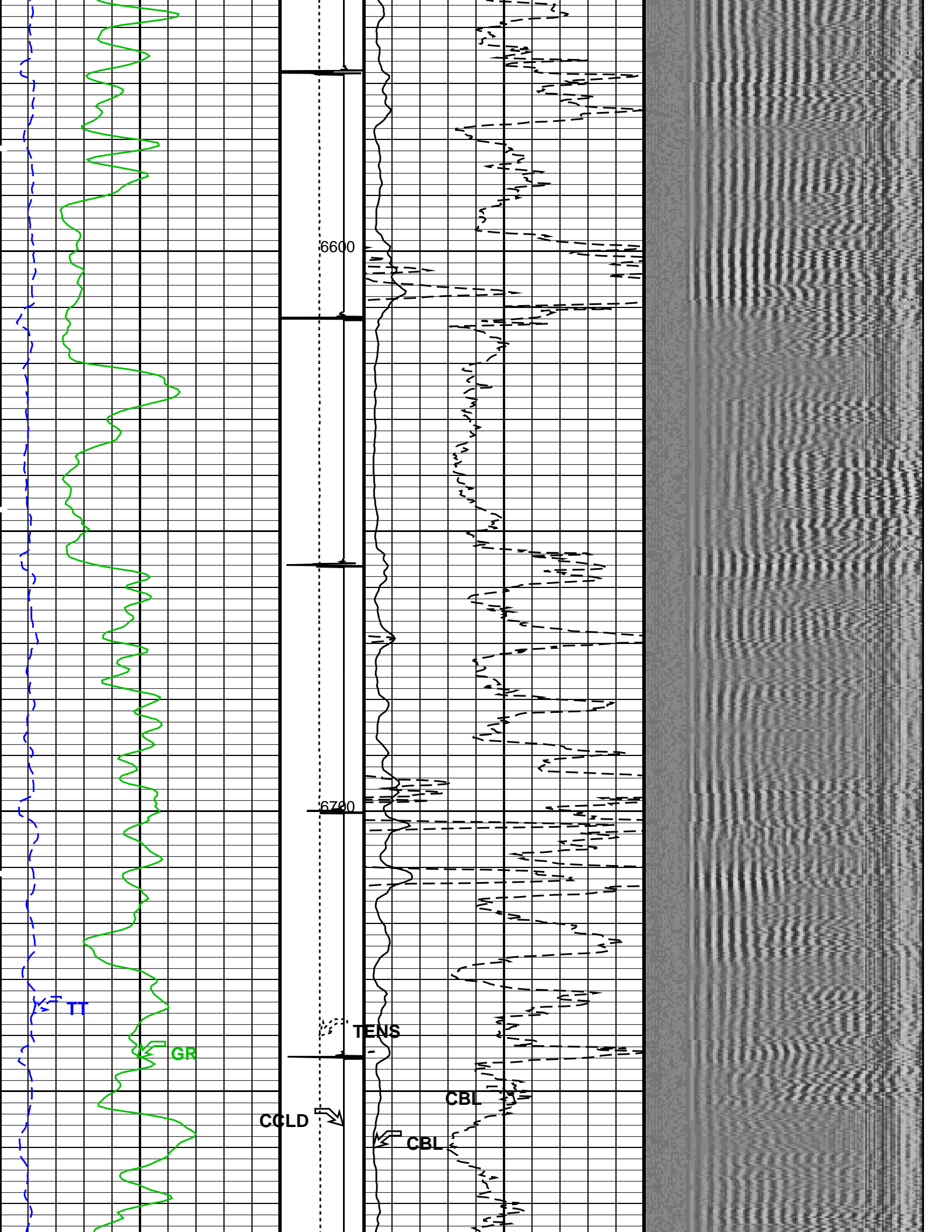


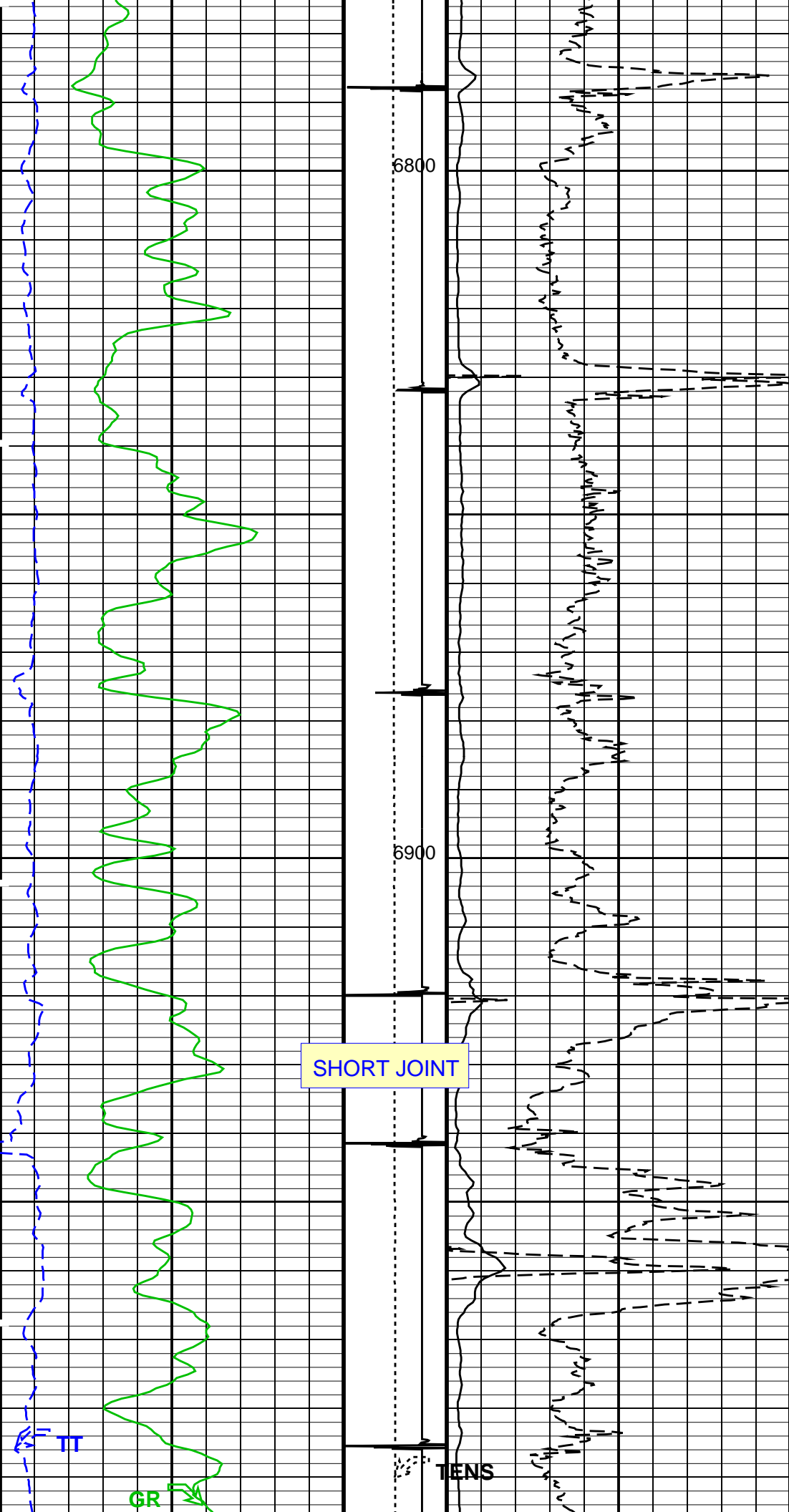
SHORT JOINT

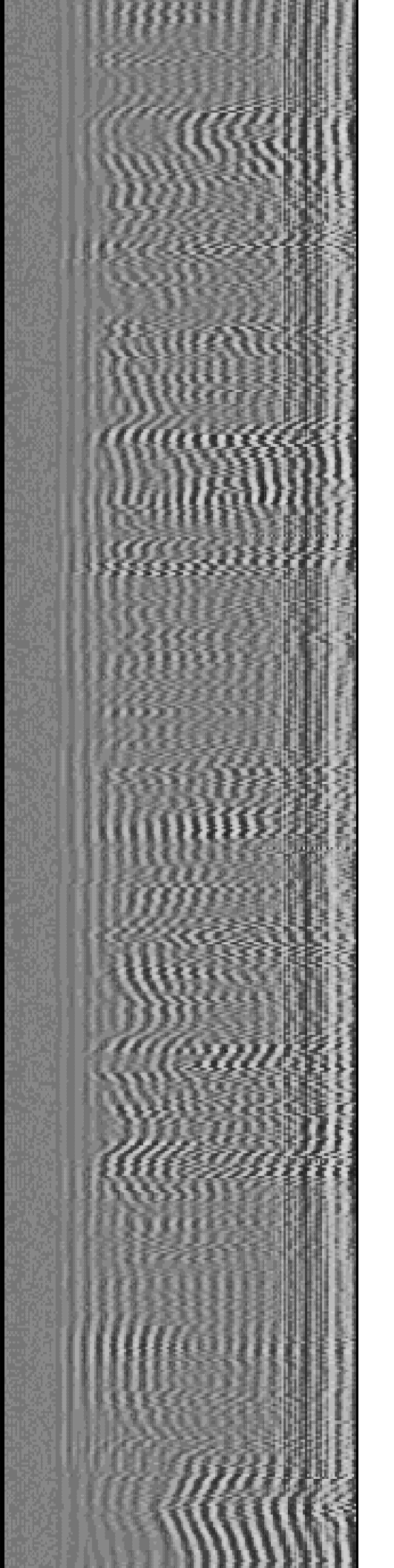
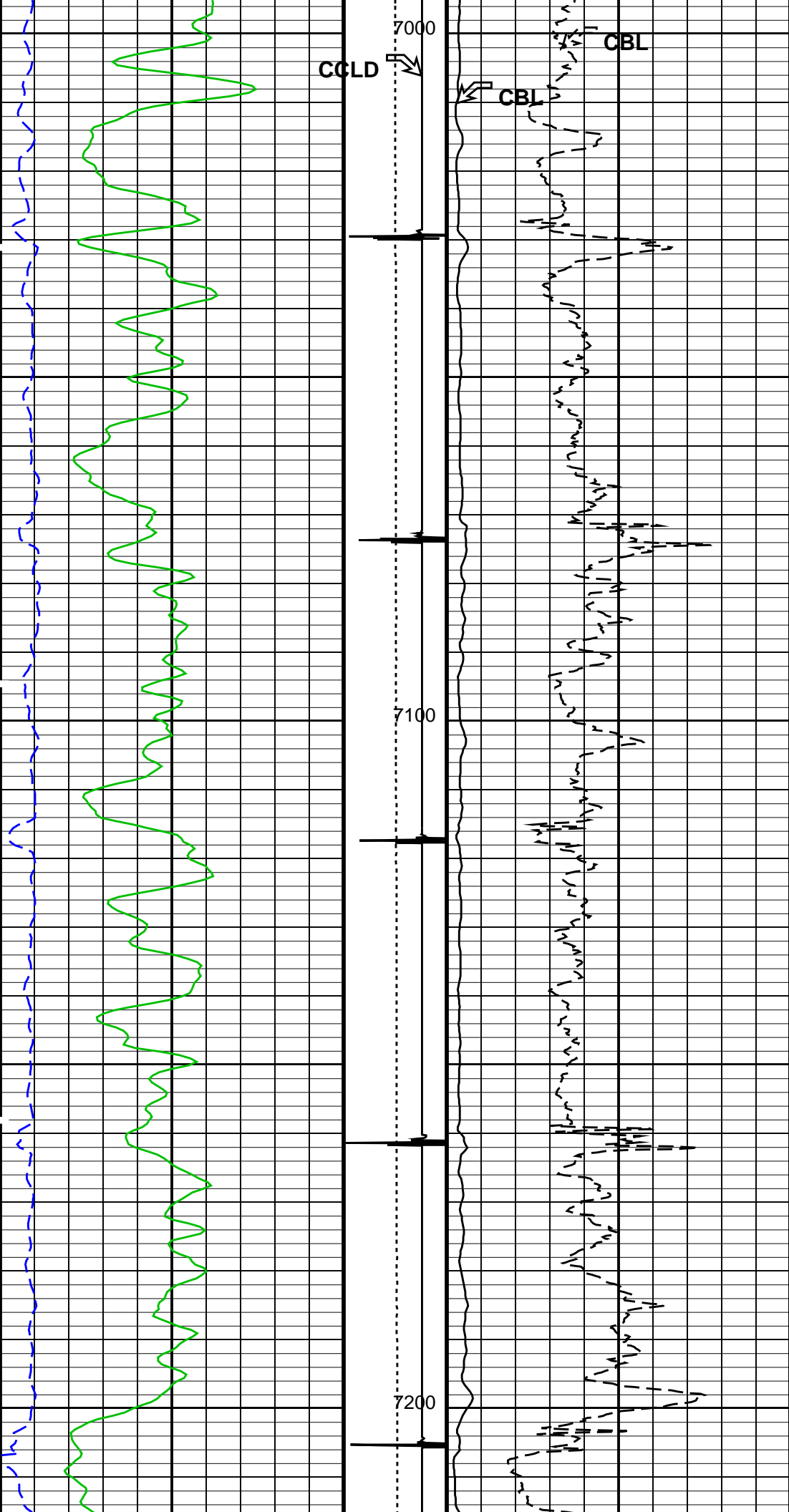


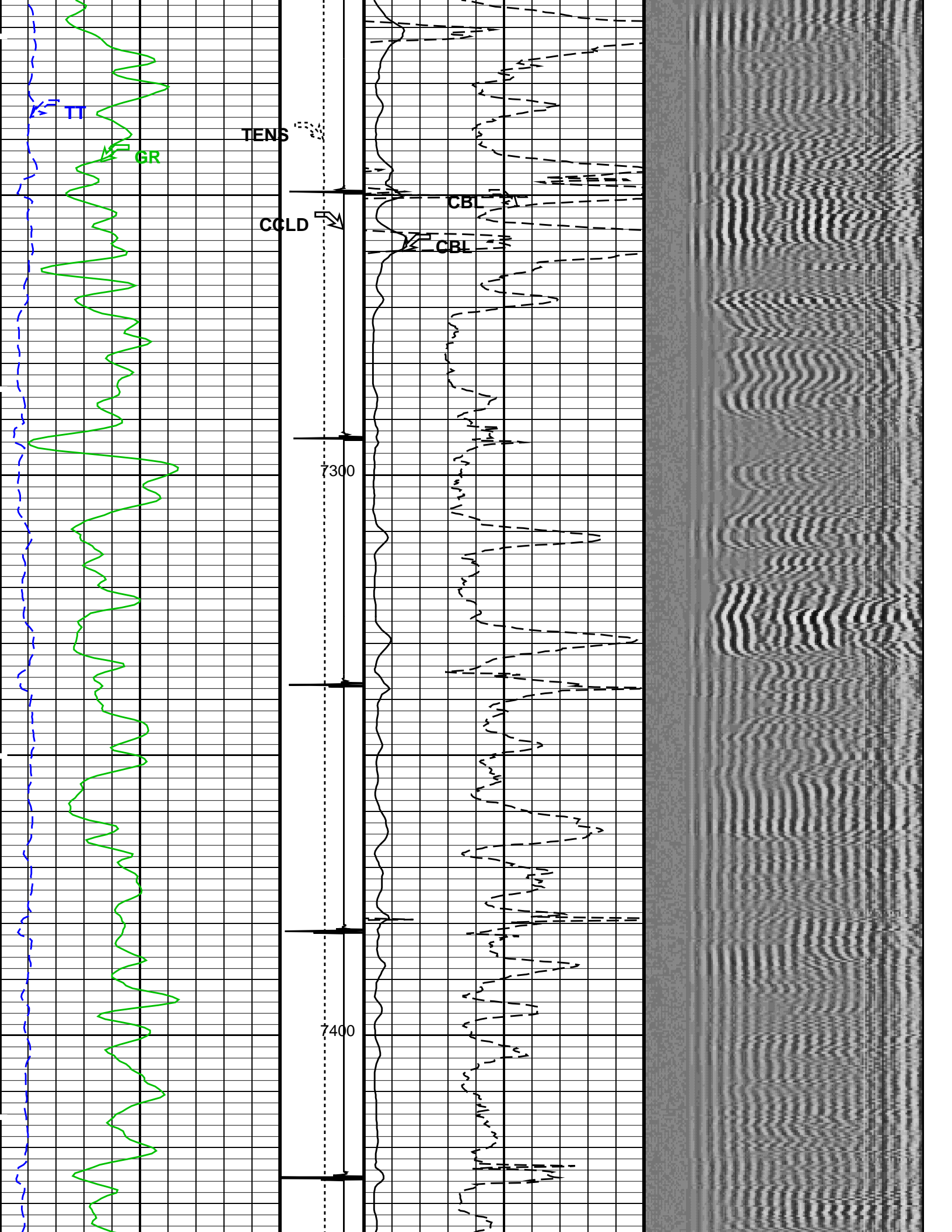


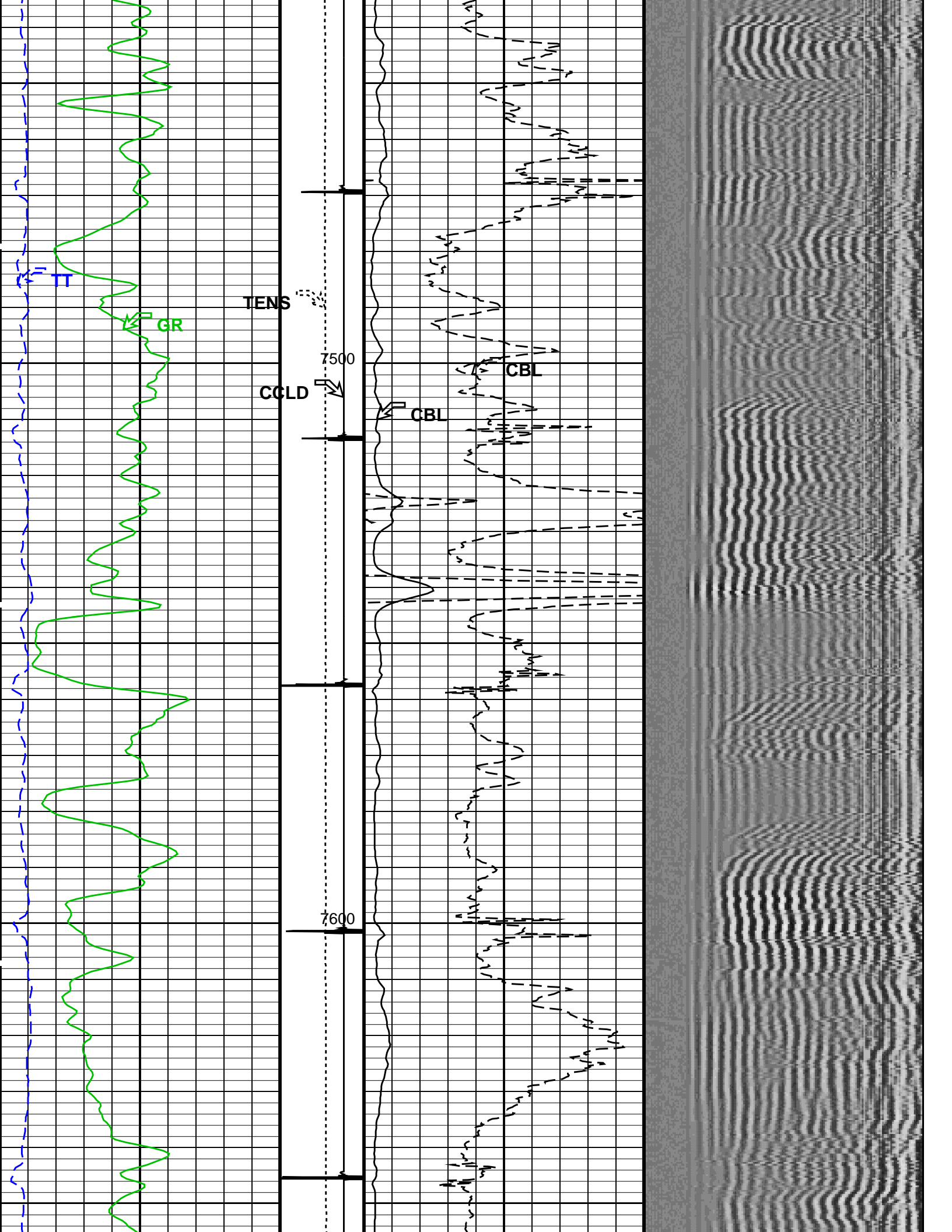


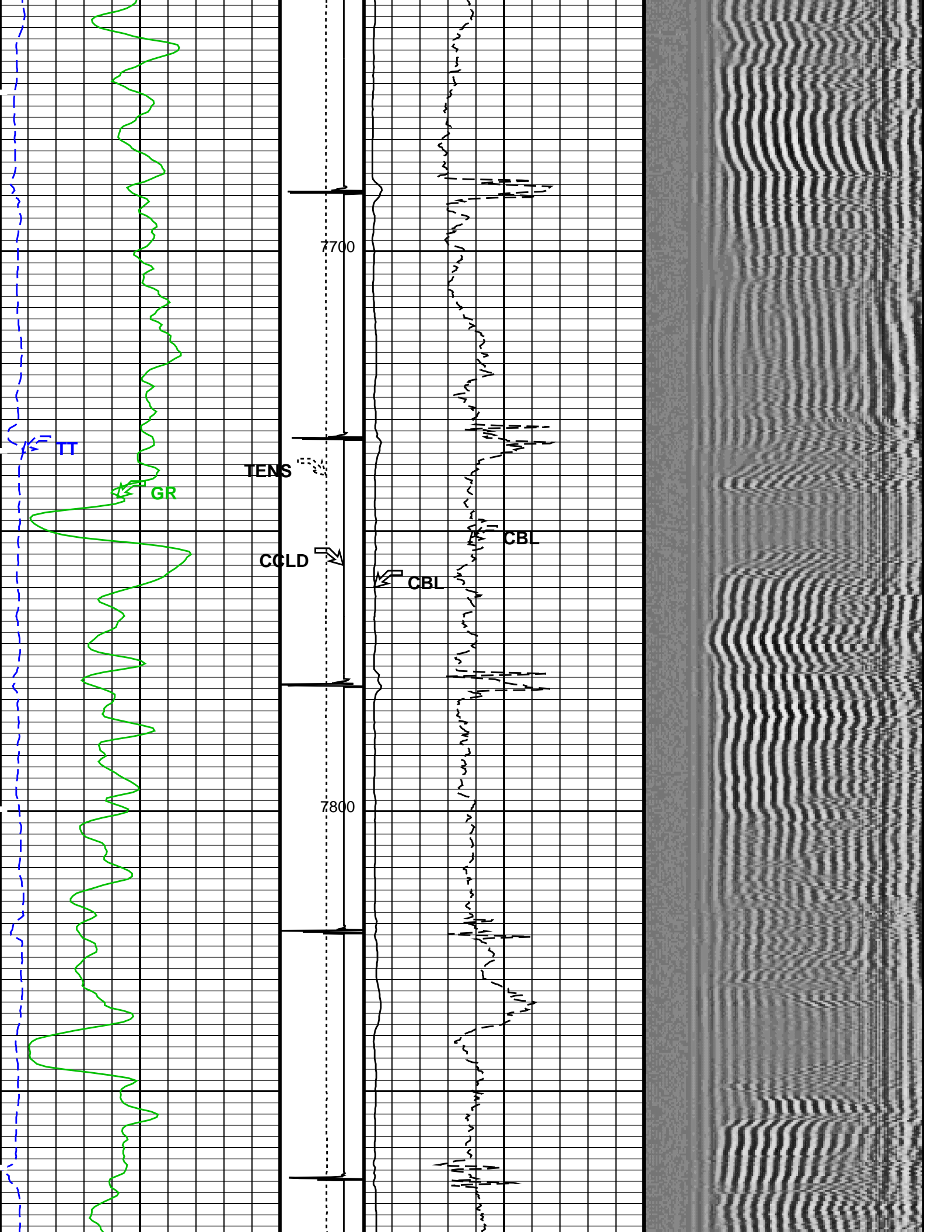


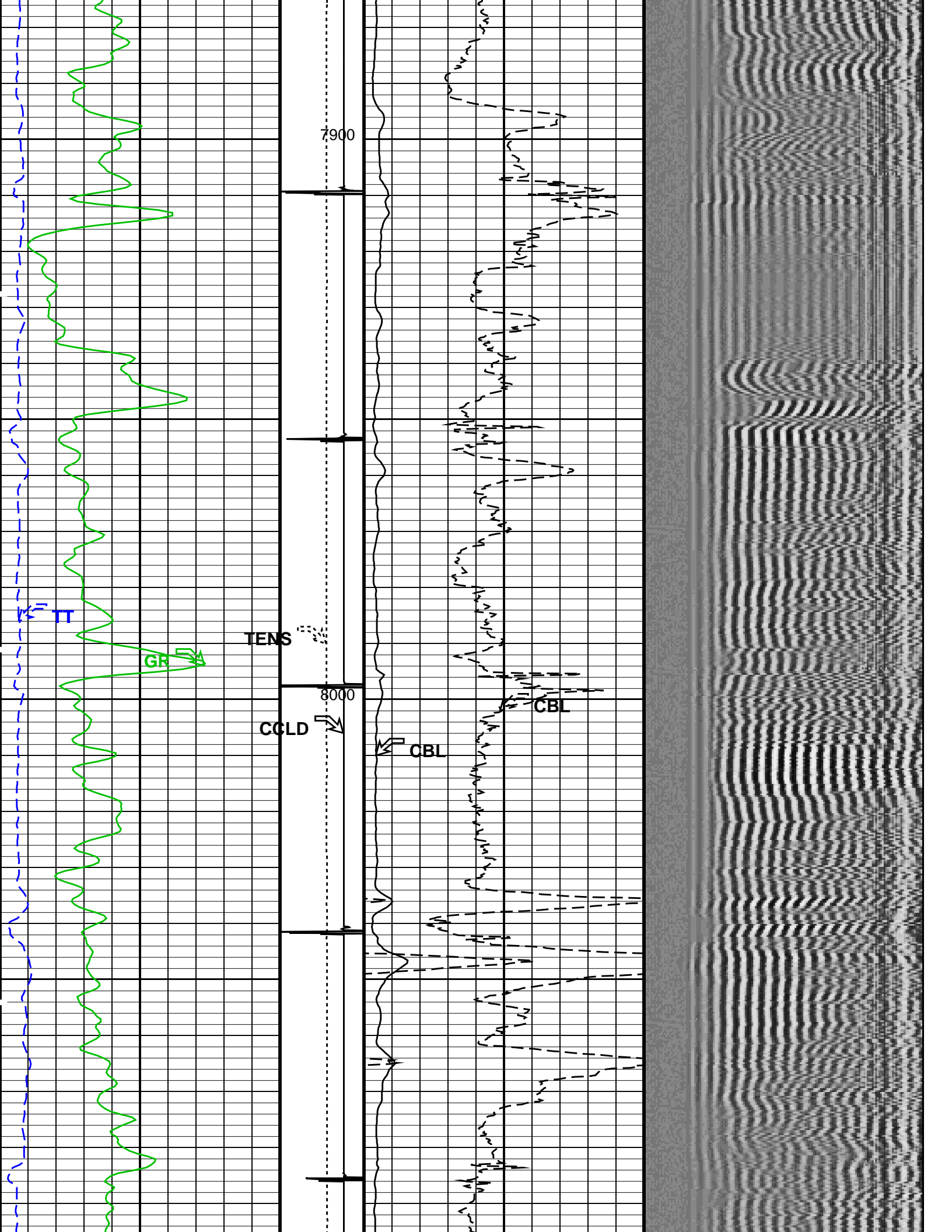


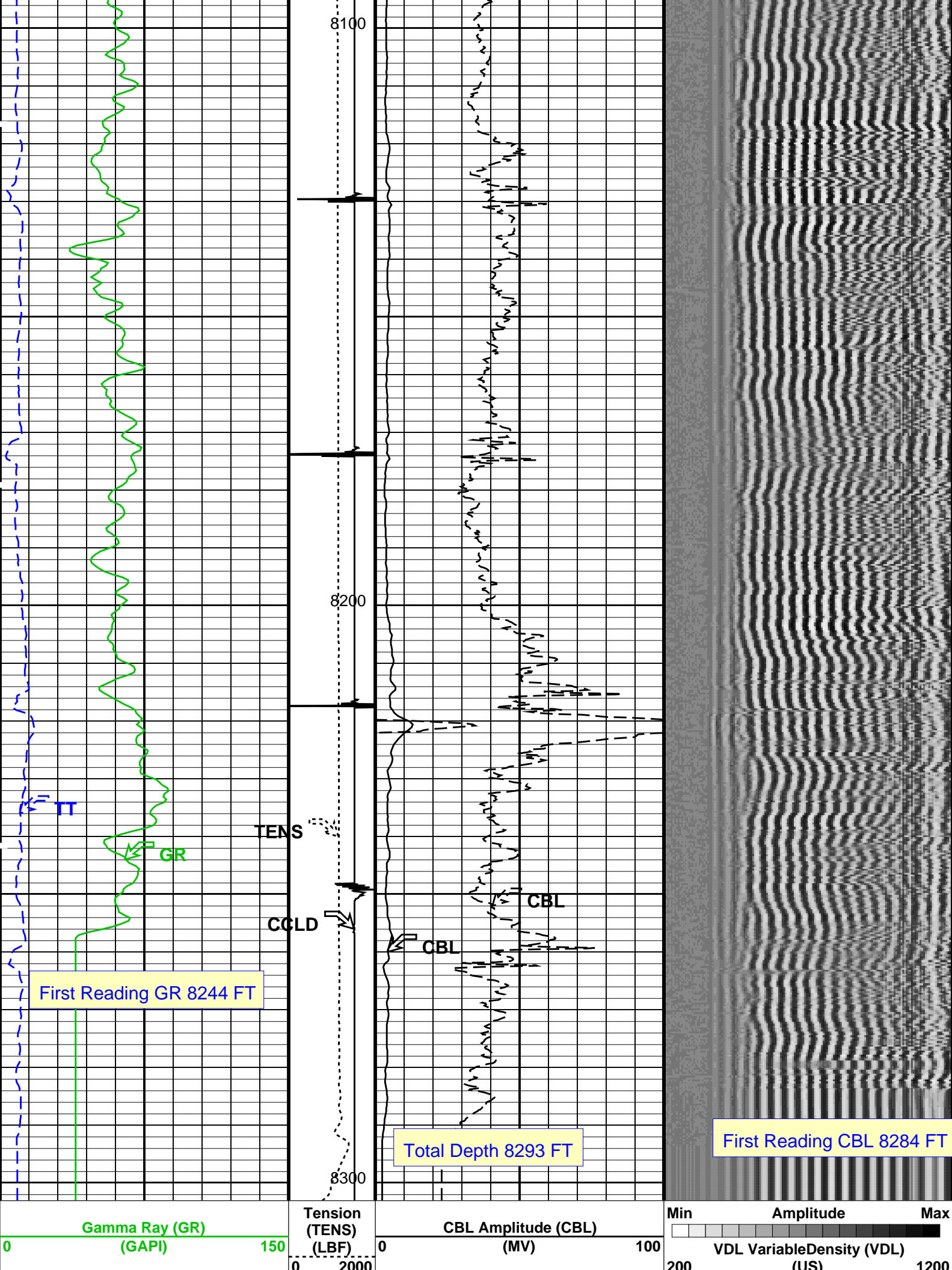












Transit Time (TT) (US)		Discriminat ed CCL (CCLD) 3 (V) -1	CBL Amplitude (CBL) (MV)		
260	160	0	10		
PIP SUMMARY					
Time Mark Every 60 S					
Format: CBL_VDL		Vertical Scale: 5" per 100'		Graphics File Created: 27-Apr-2013 17:59	
OP System Version: 19C0-187					
SCMT-CB PSPT	SRPC-5214-H2-2012-OP1 SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1		
<<<SCMT Cement Evaluation Information Summary>>>					
Sonde Serial Number	SCMS-CB 8303				
Current Casing Size	4.50000 IN				
Casing Weight	11.6000 LB/F				
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement)		
			1.55185 MV (80% Cement)		
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement)		
			8.10244 MV (80% Cement)		
Master Calibration (Normalization)		Before Calibration (Adjustment)			
Date of Master Calibration	7-SEP-2012				
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.900000		
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0		
MAP 2 Correction Factor	0.165126				
MAP 3 Correction Factor	0.125717				
MAP 4 Correction Factor	0.196395				
MAP 5 Correction Factor	0.147692				
MAP 6 Correction Factor	0.128887				
MAP 7 Correction Factor	0.150775				
MAP 8 Correction Factor	0.144577				
Parameters					
DLIS Name	Description	Value			
SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD					
BILI	Bond Index Level for Zone Isolation	0.8			
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK			
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	224.559	US		
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV		
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK			
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	338.559	US		
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV		
CBLG	CBL Gate Width	45	US		
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV		
CMCF	CBL Cement Type Compensation Factor	1			
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN			
CMTM	SCMT Operating Mode	LOG			
CSCS	SCMT Slow Channel Index	VCC			
CTHI	Casing Thickness	0.255617	IN		
DTF	Delta-T Fluid	189	US/F		
FATT	Acoustic Attenuation due to Fluid	0	DB/F		
FCF	CBL Fluid Compensation Factor	0.924277			
GOBO	Good Bond	1.55185	MV		
MAPD	SCMT MAP Peak Detection Mode	PEAK			
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US		
MAPT	SCMT MAP Fixed Threshold Level	30	MV		
MATT	Maximum Attenuation	16.5449	DB/F		
MCCF	MAP Cement Type Compensation Factor	1			
MCI	Minimum Cemented Interval for Isolation	1.25	FT		
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV		
MSA	Minimum Sonic Amplitude	0.579149	MV		

MSA	Minimum Sonic Amplitude	0.379149	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
DO	Depth Offset for Playback	8.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	8293	FT

Input DLIS Files

DEFAULT	Splice_SCMT_RST_PSP_020CUP	FN:1	PRODUCER	27-Apr-2013 17:55	8300.0 FT	-2.3 FT
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Output DLIS Files

DEFAULT	SCMT_RST_PSP_021PUP	FN:19	PRODUCER	27-Apr-2013 17:59
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Schlumberger

REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANNA OIL & GAS (USA) INC	Well: SHIDELER FEDERAL 19-13D (O19EB)
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Input DLIS Files

DEFAULT	SCMT_RST_PSP_014LUP	FN:13	PRODUCER	27-Apr-2013 15:06	6126.0 FT	5768.5 FT
DEFAULT	SCMT_RST_PSP_021PUP	FN:19	PRODUCER	27-Apr-2013 17:59	8303.0 FT	-46.0 FT

Output DLIS Files

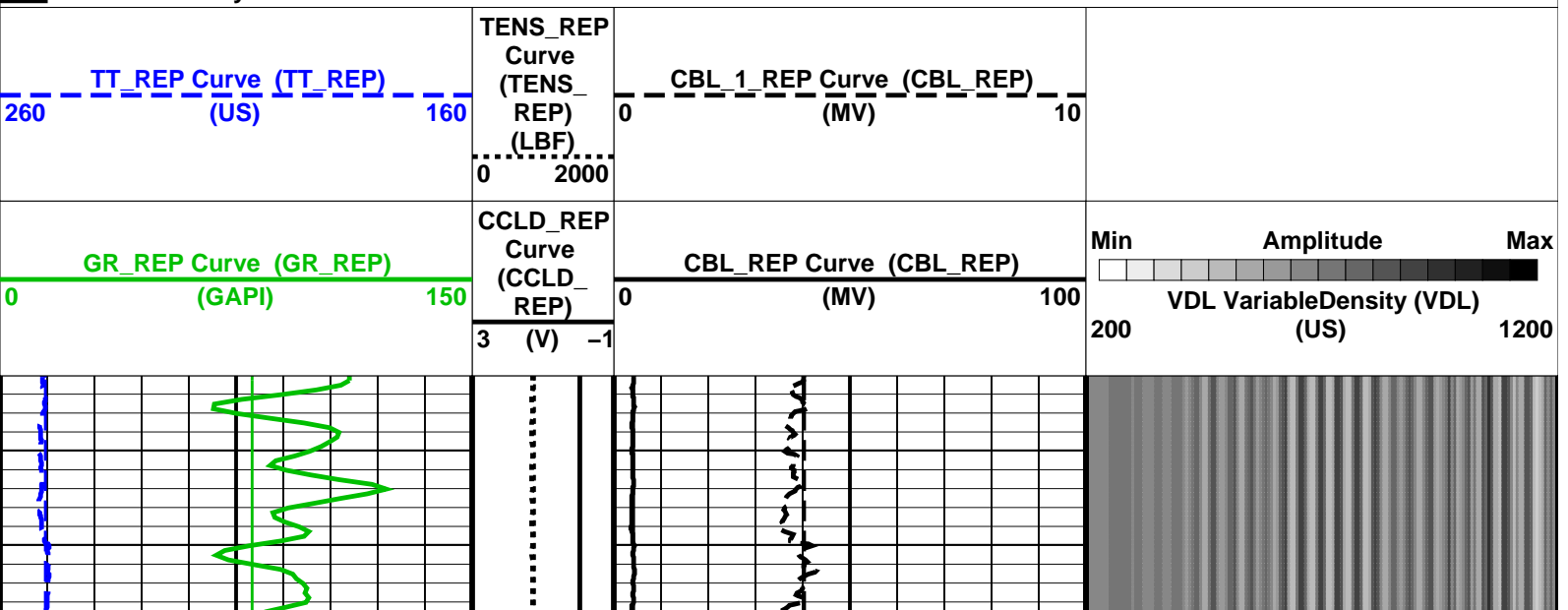
DEFAULT	SCMT_RST_PSP_022PUP	FN:20	PRODUCER	27-Apr-2013 18:06	6131.0 FT	5721.5 FT
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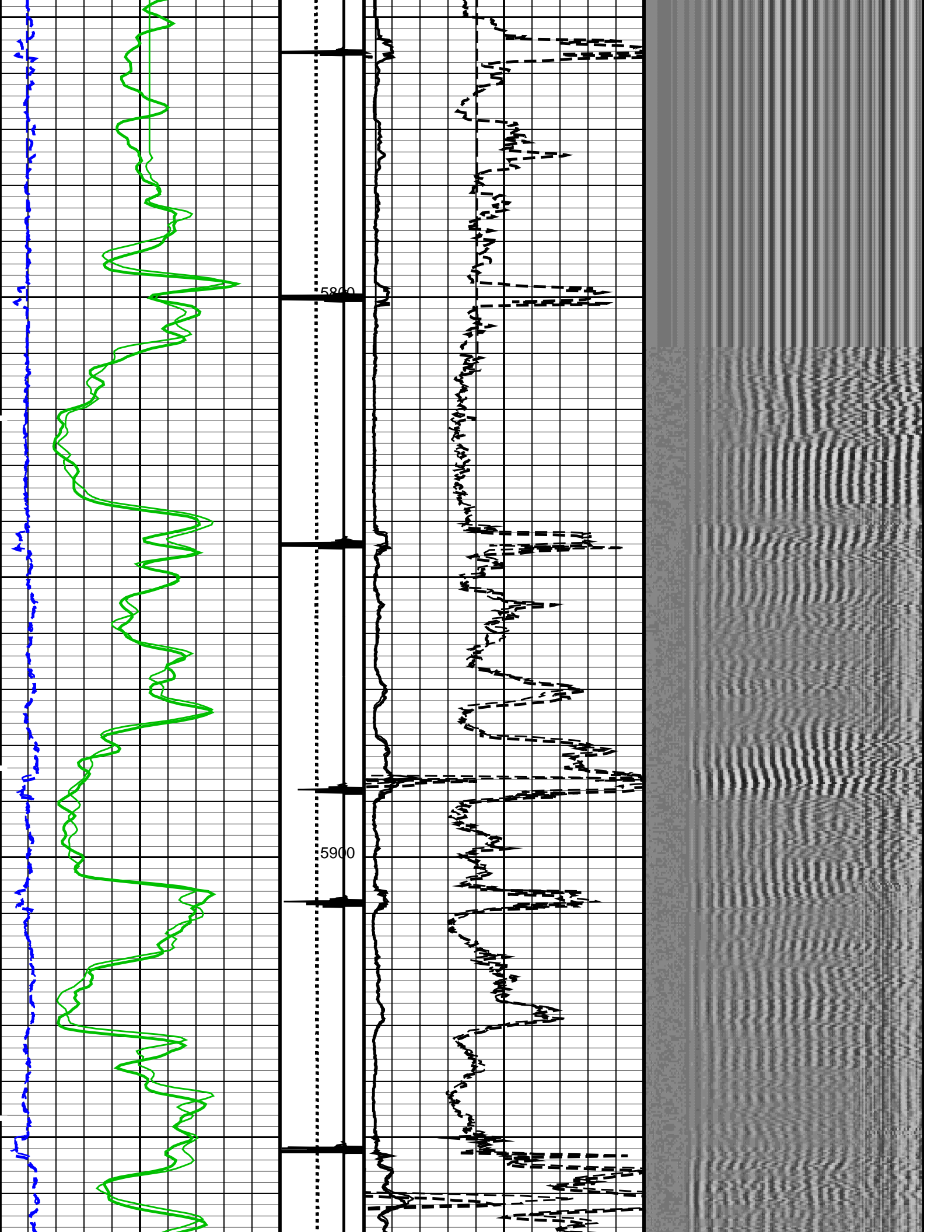
OP System Version: 19C0-187

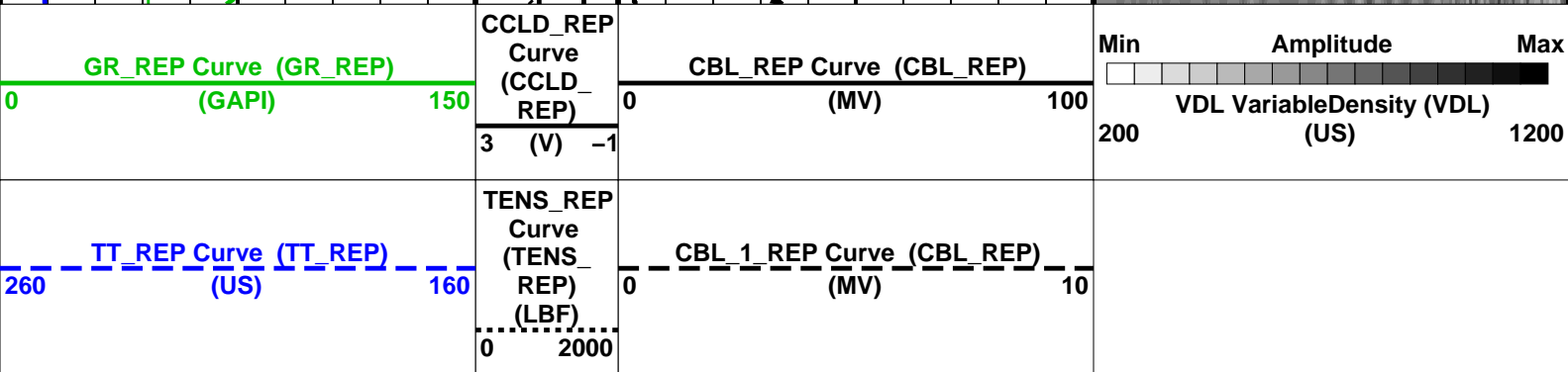
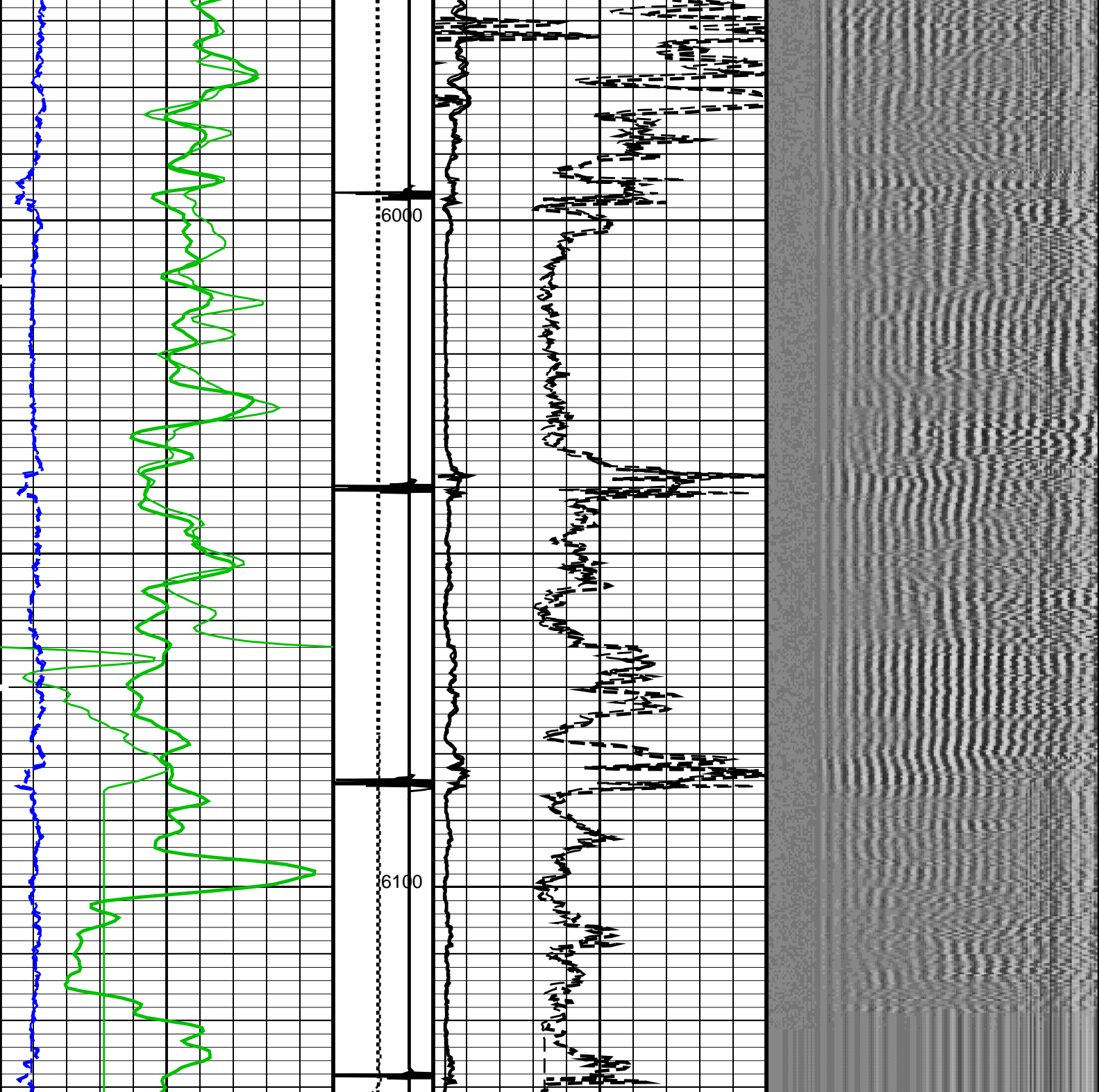
SCMT-CB	SRPC-5214-H2-2012-OP1	RST-C	SRPC-5214-H2-2012-OP1
PSPT	SRPC-5214-H2-2012-OP1		

PIP SUMMARY

Time Mark Every 60 S







PIP SUMMARY

SCMT-CB PSPT	SRPC-5214-H2-2012-OP1! SRPC-5214-H2-2012-OP1!	RST-C	SRPC-5214-H2-2012-OP1!
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<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8303		
Current Casing Size	4.50000 IN		
Casing Weight	11.6000 LB/F		
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement) 1.55185 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement) 8.10244 MV (80% Cement)
Master Calibration (Normalization)	Before Calibration (Adjustment)		
Date of Master Calibration	7-SEP-2012		
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.900000
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.165126		
MAP 3 Correction Factor	0.125717		
MAP 4 Correction Factor	0.196395		
MAP 5 Correction Factor	0.147692		
MAP 6 Correction Factor	0.128887		
MAP 7 Correction Factor	0.150775		
MAP 8 Correction Factor	0.144577		

Parameters

DLIS Name	Description	Value	
SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD			
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	224.559	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	338.559	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	45	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CSIZ	Current Casing Size	4.500	IN
CWEI	Casing Weight	11.60	LB/F
DO	Depth Offset for Playback	5.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	8293	FT

Input DLIS Files

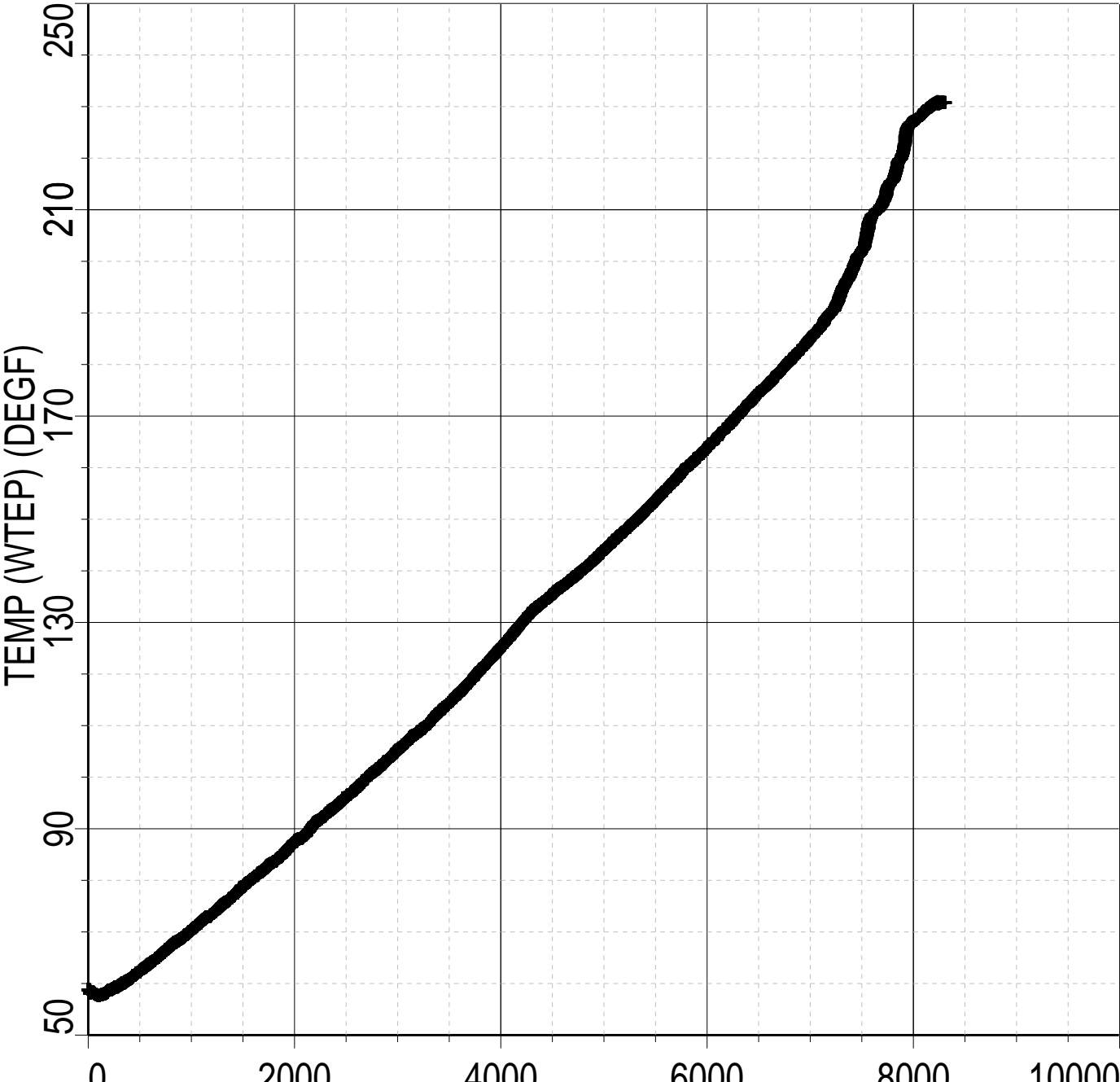
DEFAULT	SCMT_RST_PSP_014LUP	FN:13	PRODUCER	27-Apr-2013 15:06	6126.0 FT	5768.5 FT
DEFAULT	SCMT_RST_PSP_021PUP	FN:19	PRODUCER	27-Apr-2013 17:59	8303.0 FT	-46.0 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_022PUP	FN:20	PRODUCER	27-Apr-2013 18:06		

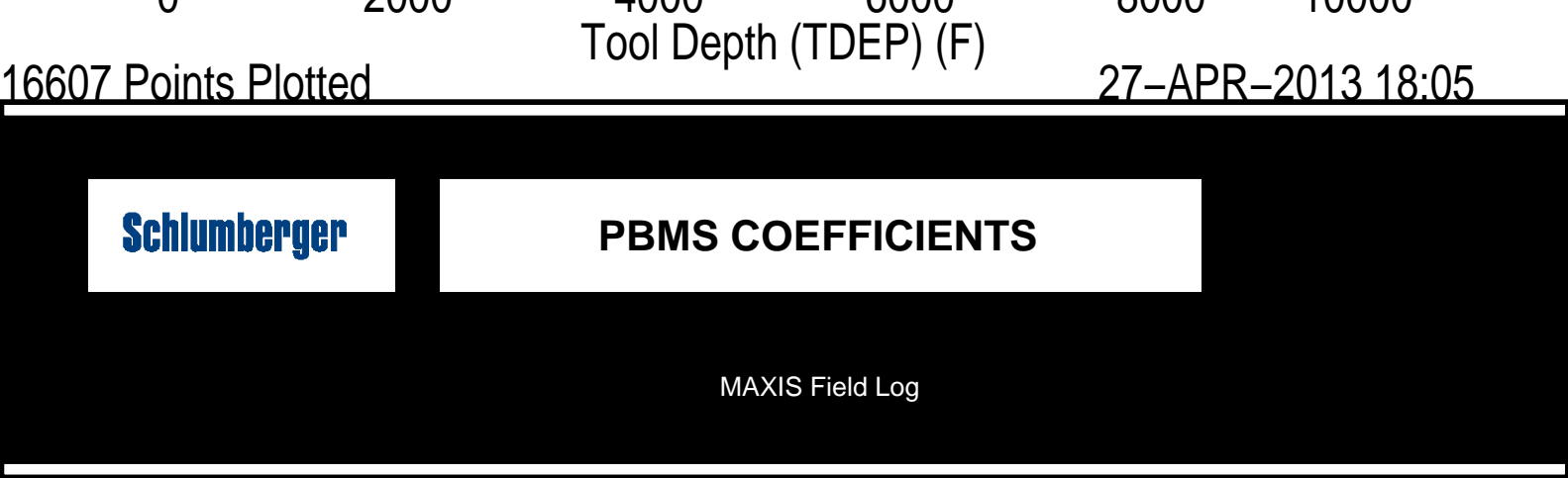
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 8303.0 – -46.0 FT





Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	MAMM CREEK	Sub Type:	PBMS
Well:	SHIDELER FEDERAL 19-13D (O19EB)	Sensor:	GR
Run date:	27-Apr-2013		

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	<div>+.182000000000e+04</div>	<div>+.332000000000e+04</div>

Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	MAMM CREEK	Sub Type:	PBMS
Well:	SHIDELER FEDERAL 19-13D (O19EB)	Sensor:	WellTemp RTD
Run date:	27-Apr-2013		

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: MAMM CREEK
 Well: SHIDELER FEDERAL 19-13D (O19EB)
 Run date: 27-Apr-2013

Tool: PSP
 Sub Type: PBMS
 Sensor: CQG

PBMS Quartz Gauge type F

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

Sensor Serial NB 928
 Calib Date ddmmyy 280612
 Matrix Size 66
 Coeff CRC 9DC3

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.714463802232E+04	+.183434658655E-01	-.156620073569E-06
Fc**1	-.100638308957E+01	-.119899563644E-04	-.912155899025E-10
Fc**2	+.936268101283E-06	+.423898071451E-10	+.958076371919E-15
Fc**3	+.185123362373E-11	+.203107925433E-15	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0
	Fb**3	Fb**4	Fb**5
Fc**0	-.746577997611E-10	-.588773826860E-15	-.622250441458E-19
Fc**1	-.120636521092E-15	+.400325894750E-19	0.0

Fc**2	0.0	0.0	0.0
Fc**3	0.0	0.0	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 928
 Calib Date ddmmyy 280612
 Matrix Size 66
 Coeff CRC 283B

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.117016867873E+03	-.284359629614E-03	+.604391180345E-08
Fb**1	-.598309140812E-02	+.182731130848E-07	+.160166486172E-12
Fb**2	-.307621454576E-07	+.300601550309E-12	+.311233548560E-17
Fb**3	-.419658736767E-12	+.117473708647E-16	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

	Fc**3	Fc**4	Fc**5
Fb**0	+.114322792679E-12	+.153807711176E-17	-.736714260866E-21
Fb**1	-.528037875456E-18	-.220337637519E-21	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 928
 Calib Date ddmmyy 280612
 Matrix Size 16
 Coeff CRC 093F

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310874009898E+05	+.288920923041E-02	+.697940727038E-06

	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	- .657432344763E-10	- .412920638782E-15	+ .213369826099E-20

(Fb'-Fc')**0	+.1337432347032E+03	+.1712920000702E+03	+.12100033020000E+03
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PBMS Quartz Gauge type F

Sonde Serial NB :

Sensor Serial NB 928

Calib Date ddmmyy 280612

Matrix Size 16

Coeff CRC 8419

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.115369519827E+03	-.565338877075E-02	-.333717531829E-07
	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.124387135327E-12	+.713102327208E-16	-.316084316842E-20



MASTER CALIBRATION

MAXIS Field Log

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

Primary Equipment:

Slim Cement Mapping Xmitter Electronics

SCMX – CA

 Slim Cement Mapping Sonde

SCMS – CB8303

 Slim Cement Mapping Cartridge

SCMC – CA8120

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			876.9	Master			726.7
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	MAP 3 Amplitude Plus MV		Value	Phase	MAP 4 Amplitude Plus MV		Value
Master			954.5	Master			611.0
	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			812.5	Master			931.0
	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
	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)		500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Master	<div><div></div></div>	795.9	Master	<div><div></div></div>	830.0
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)	500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)
Phase	CBL Amplitude Plus MV				
Master	<div><div></div></div>	1269			
1000 (Minimum)	1350 (Nominal)	1700 (Maximum)			
Master: 7-Sep-2012 16:30					

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

Schlumberger

Well: **SHIDELER FEDERAL 19-13D (O19EB)**

Field: **MAMM CREEK**

County: **GARFIELD**

State: **COLORADO**

SLIM CEMENT MAPPING LOG
CBL-VDL
GR-CCL