Schlumberger

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

Well: **DAYBREAK FEDERAL 19−8BB (PJ19)**

Field: **PARACHUTE**

County: **GARFIELD** State: **COLORADO**

CEMENT BOND LOG
CBL − VDL
GAMMA RAY − CCL

County: GARFIELD
Field: PARACHUTE
Location: SHL: NWSE 2052' FSL & 2323' F
Well: DAYBREAK FEDERAL 19−8BB
Company: ENCANA OIL & GAS (USA) INC.

LOCATION

SHL: NWSE 2052' FSL & 2323' FEL
BHL: SENE 2420' FNL & 642' FEL

Elev.: K.B. 5447.00 ft
G.L. 5425.00 ft
D.F. 5446.00 ft

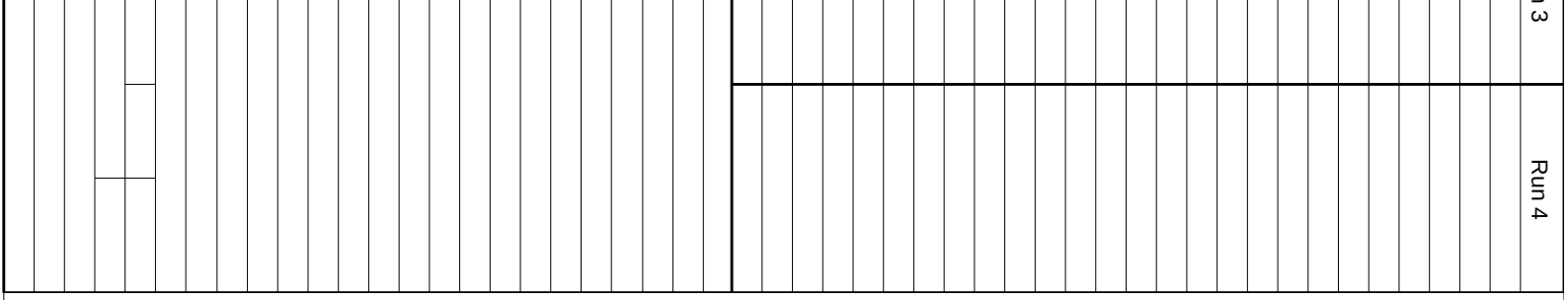
Permanent Datum: GROUND LEVEL Elev.: 5425.00 ft
Log Measured From: KELLY BUSHING 22.00 ft above Perm. Datum
Drilling Measured From: KELLY BUSHING

API Serial No.	Section	Township	Range
05−045−19897−0000	19	7S	95W

Logging Date		6−Oct−2011					
Run Number		TWO					
Depth Driller		6550 ft					
Schlumberger Depth		6449 ft					
Bottom Log Interval		6440.4 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		8.750 in					
From		22 ft					
To		6550 ft					
Casing/Tubing Size		4.500 in					
Weight		11.6 lbm/ft					
Grade		M−80					
From		22 ft					
To		6528 ft					
Maximum Recorded Temperatures		188 degF					
Logger On Bottom	Time	6−Oct−2011	14:04				
Unit Number	Location	391	GRAND JUNCTION				
Recorded By		SHOWKAT HOSSAIN					
Witnessed By		UNATTENDED					

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



DEPTH SUMMARY LISTING

Date Created: 6−OCT−2011 15:40:13

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−JA	Type:	CMTD−C	Type:	1−25ZT
Serial Number:	6322	Serial Number:	5006	Serial Number:	391
Calibration Date:	07−APR−2011	Calibration Date:	04−OCT−2011	Length:	14500 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	174878		
Calibration Cable Type:	1−25ZT	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	−6	Calibration RMS:	4	Rig Type:	Land
Wheel Correction 2:	−5	Calibration Peak Error:	8		

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	PLATFORM EXPRESS
Reference Log Run Number:	1
Reference Log Date:	10−JUN−2011
Subsequent Trip Down Log Correction:	4.00 FT

Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES FOLLOWED.
2. IDW USED AS PRIMARY DEPTH CONTROL.
3. Z−CHART AND DRUM COUNTER USED AS SECONDARY DEPTH CONTROL.
4.
5.
6.

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 A SUBSEQUENT TRIP IN WELL.	
TOOL RAN AS PER TOOL SKETCH.	
CORRELATED TO SCHLUMBERGER PLATFORM EXPRESS DATED 10−JUN−2011 AS RUN 1.	
TD TAGGED AT: 6449 FT	
MAXIMUM RECORDED PRESSURE AT TD: 2562.2 PSIA	
MAXIMUM RECORDED TEMPERATURE AT TD: 188 DEGF	
SHORT JOINTS: 4436 FT − 4457 FT	

EXPECTED FREE PIPE AMPLITUDE: 80 mV

CBL TRANSIT TIME CYCLE SKIPPING IN ZONES OF GOOD CEMENT DUE TO LOW SIGNAL AMPLITUDE.

AFE: 10136251

THANK YOU FOR CHOOSING SCHLUMBERGER.

CREW: 391− W. AZIZ & J. ROSA

RUN 1		RUN 2	
SERVICE ORDER #:	BOC2−00150	SERVICE ORDER #:	
PROGRAM VERSION:	19C0−187	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

MH−22 53.4
MH−22 391

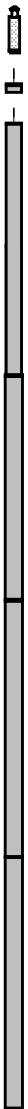
Detail MT
TelStatus
AH−38 51.8
CTEM 51.5
PSPT 51.5
PSC−A
PSPT−A
PSTC−A 1921
PBMS−A 3779
10k_Sapphire_Mano
RTD_Thermometer
GR 34552
CCL
PBMS

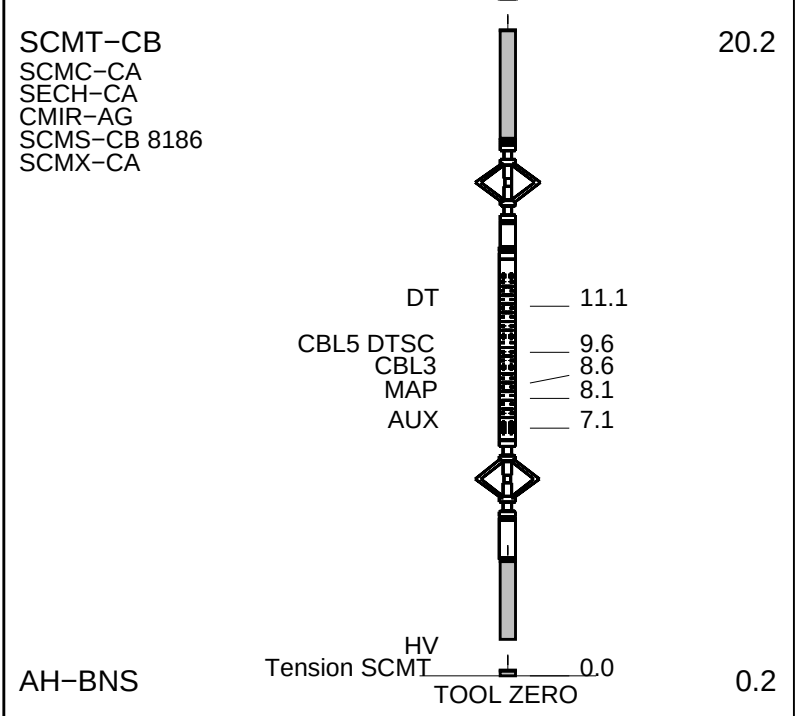
GR 47.8

Well_Temp 44.7
Manometer 44.6
CCL 44.0
PBMS PSTC 43.2

RST−C 43.2
RSCH−A 429
RSC−E 430
RSS−A 373
RSXH−A 436
RSX−E 431

RSC−A Far 34.1
RSC−A PNG
RSC−A Nea
RSX−A PNG 33.6





MAXIMUM STRING DIAMETER 1.72 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: DAYBREAK FEDERAL 19−8BB (PJ19)**

Input DLIS Files

DEFAULT	**SCMT_RST_PSP_086LUP**	**FN:85**	**PRODUCER**	**06−Oct−2011 14:04**	**6463.0 FT**	**134.0 FT**

Output DLIS Files

DEFAULT	**SCMT_RST_PSP_090PUP**	**FN:89**	**PRODUCER**	**06−Oct−2011 15:48**	**6467.0 FT**	**86.0 FT**

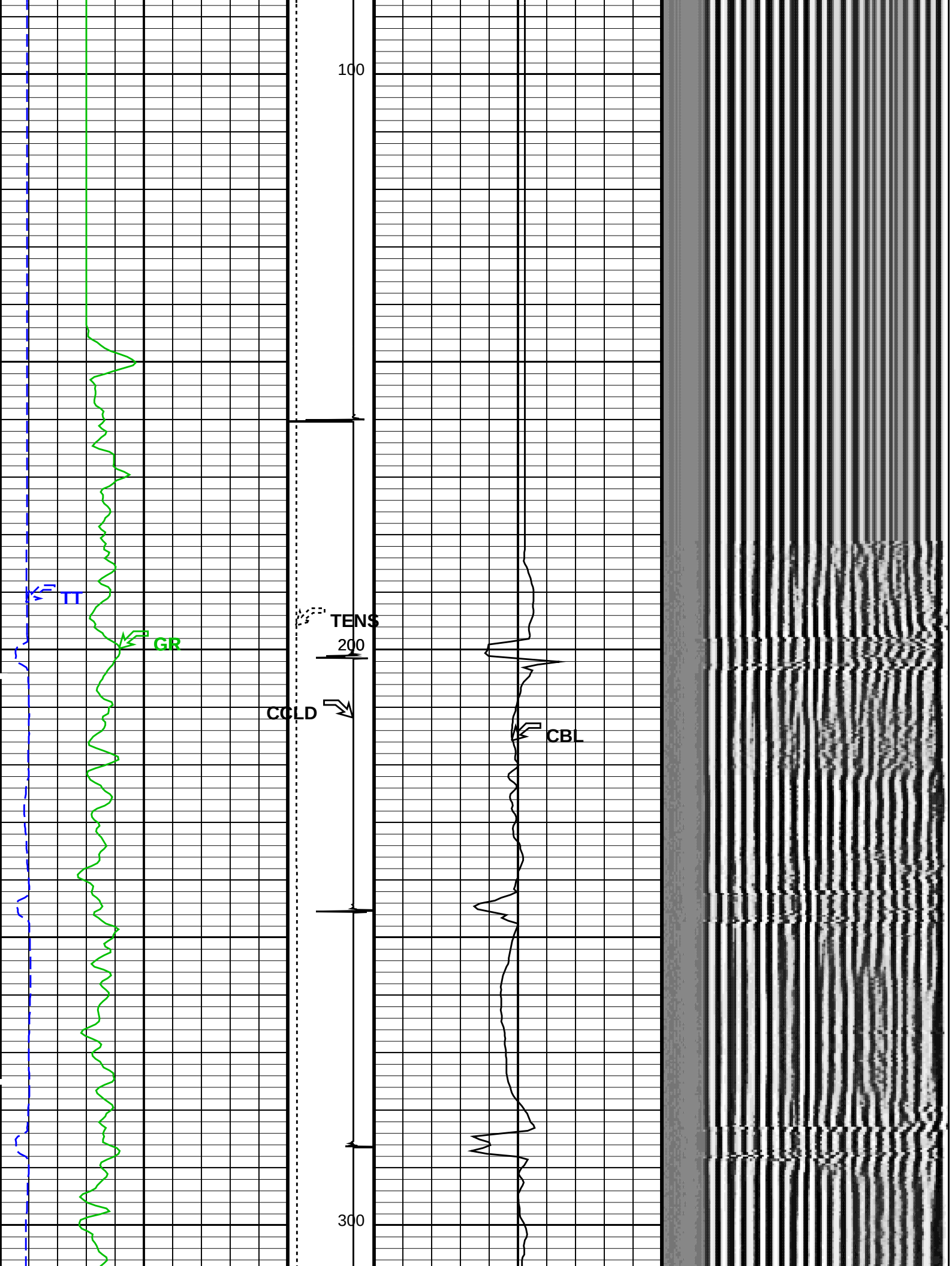
OP System Version: 19C0−187

SCMT−CB	**SRPC−5095−H2−2011−OP19_b**	**RST−C**	**SRPC−5095−H2−2011−OP19_b**
PSPT	**19C0−187**		

PIP SUMMARY

Time Mark Every 60 S

Transit Time (TT) 260 (US) 160	**Discriminated CCL (CCLD)** 3 (V) −1	**CBL Amplitude (CBL)** 0 (MV) 10	
Gamma Ray (GR) 0 (GAPI) 150	**Tension (TENS)** (LBF) 0 2000	**CBL Amplitude (CBL)** 0 (MV) 100	**Min Amplitude Max** **VDL VariableDensity (VDL)** 200 (US) 1200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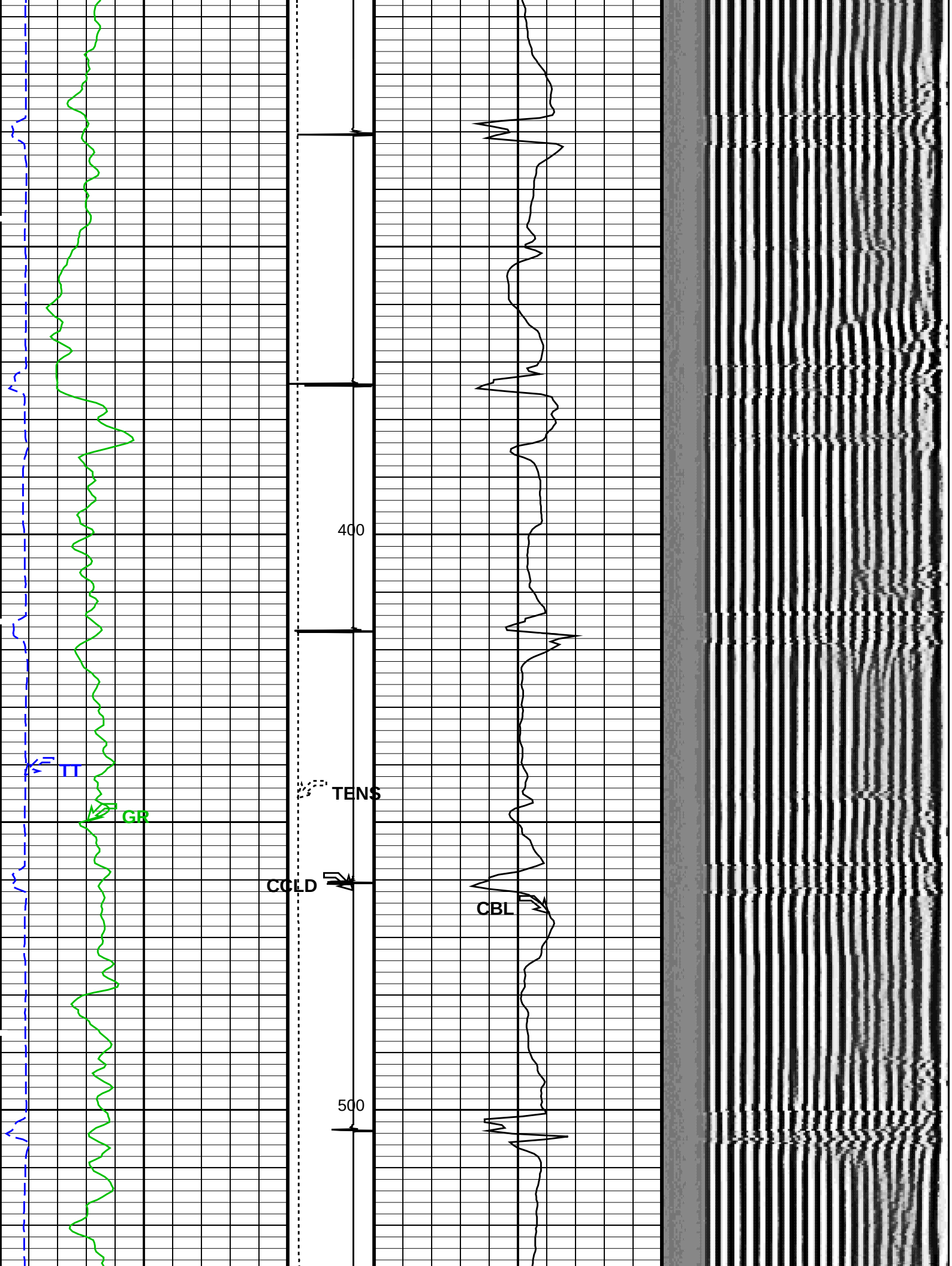
TT
GR
TENS
200
CCLD
CBL
300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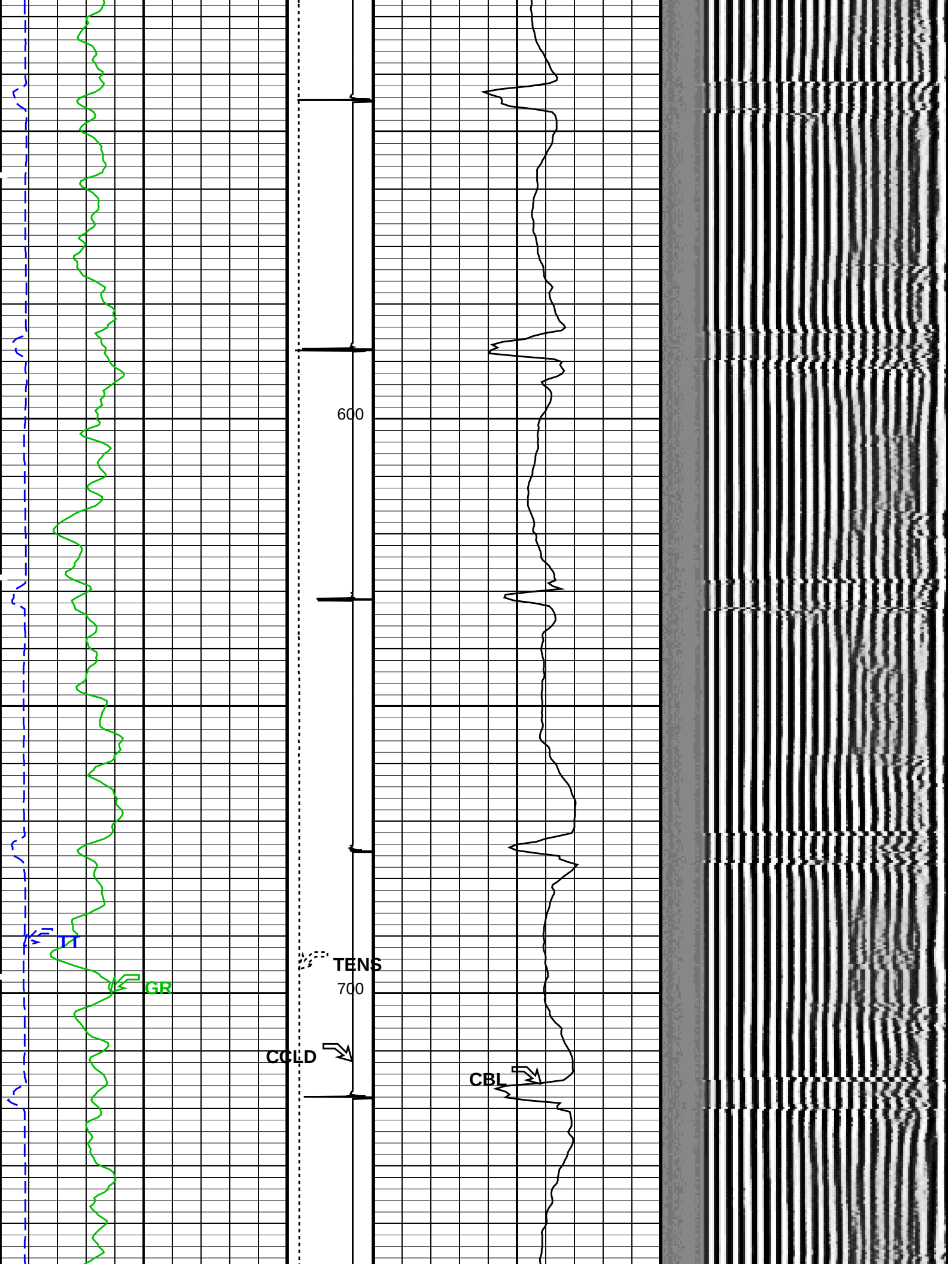
500
TT
GR
TENS
CCLD
CBL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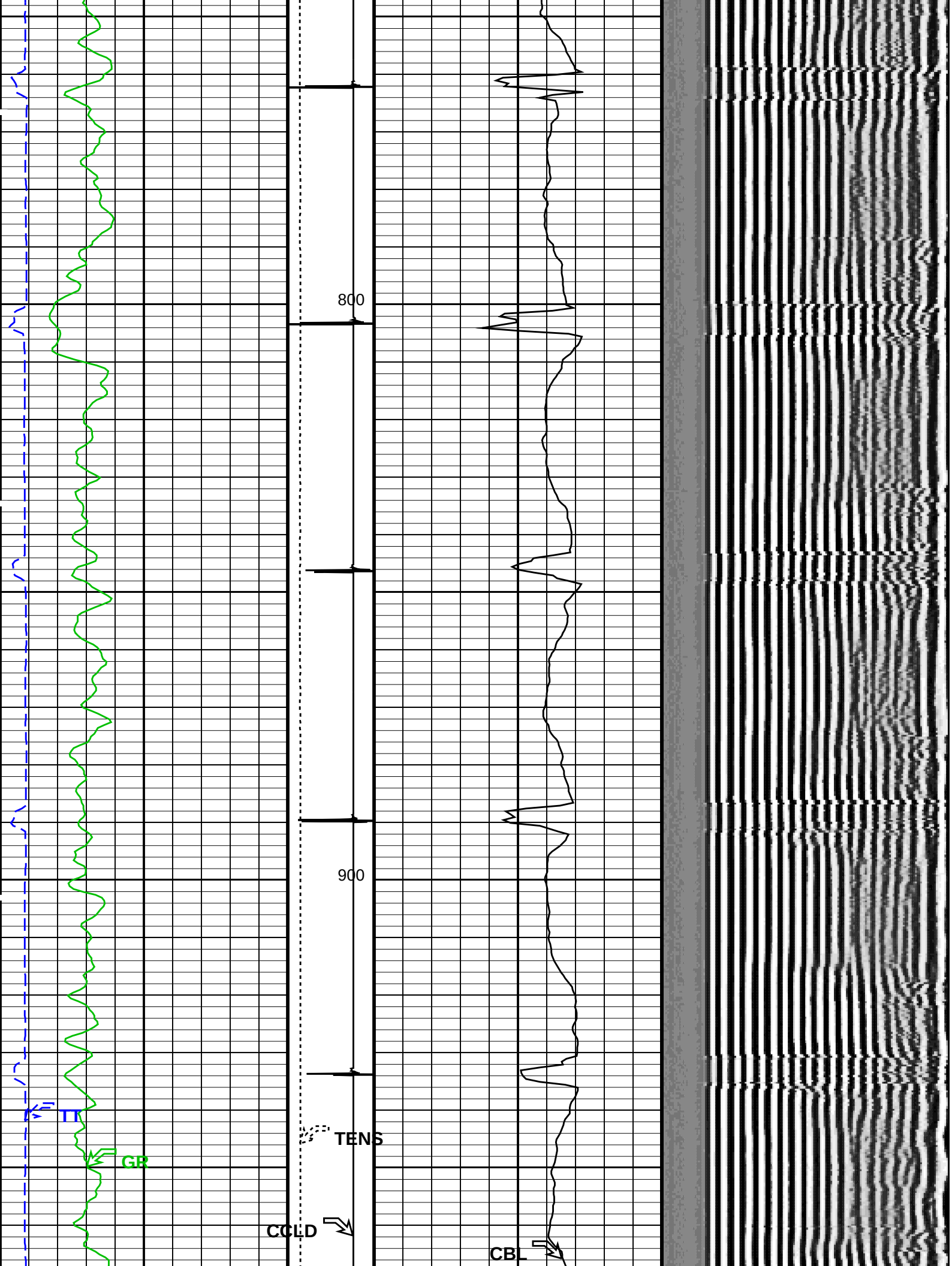
GR
TENS
700
CCLD
CBL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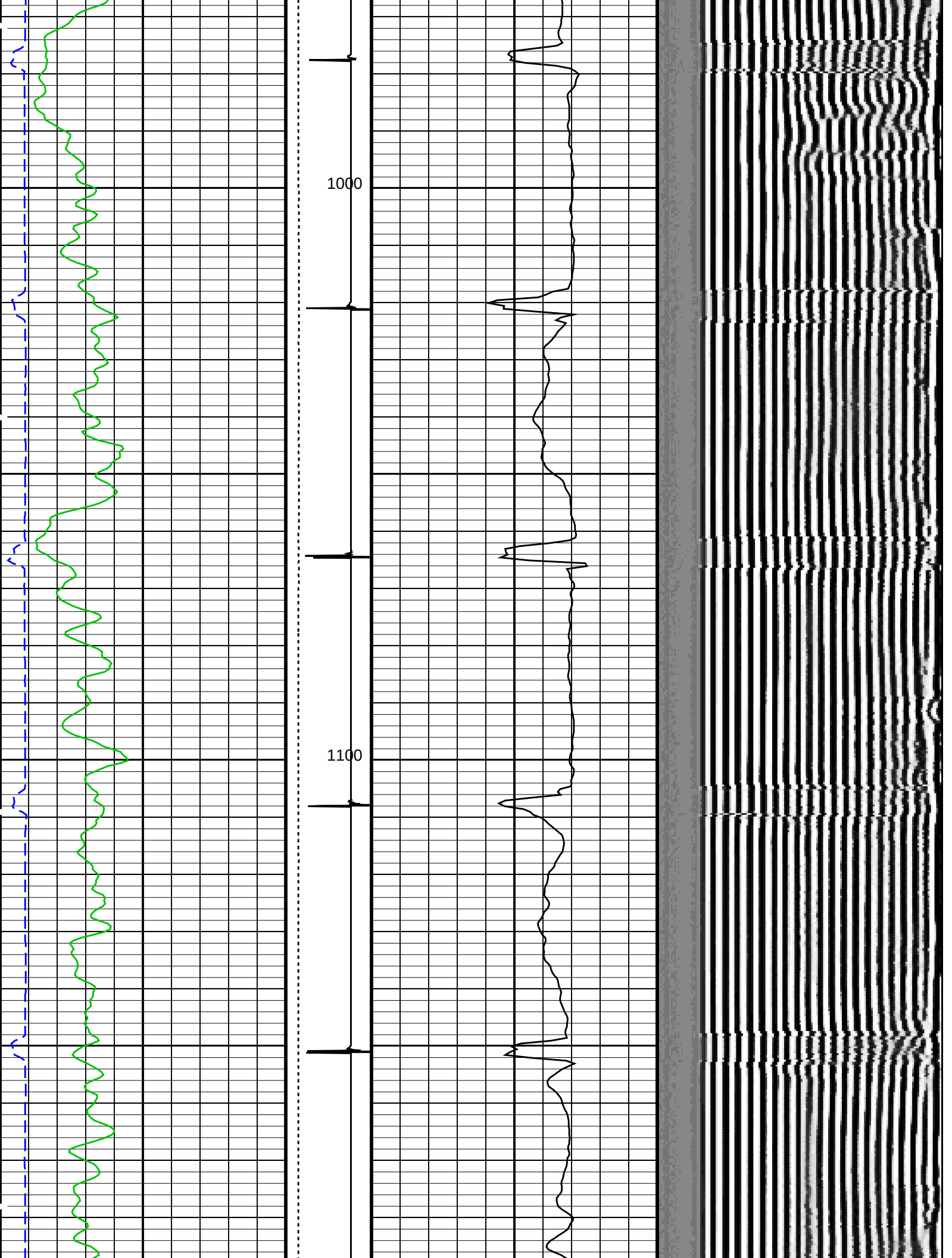
TT
GR
TENS
CCLD
CBL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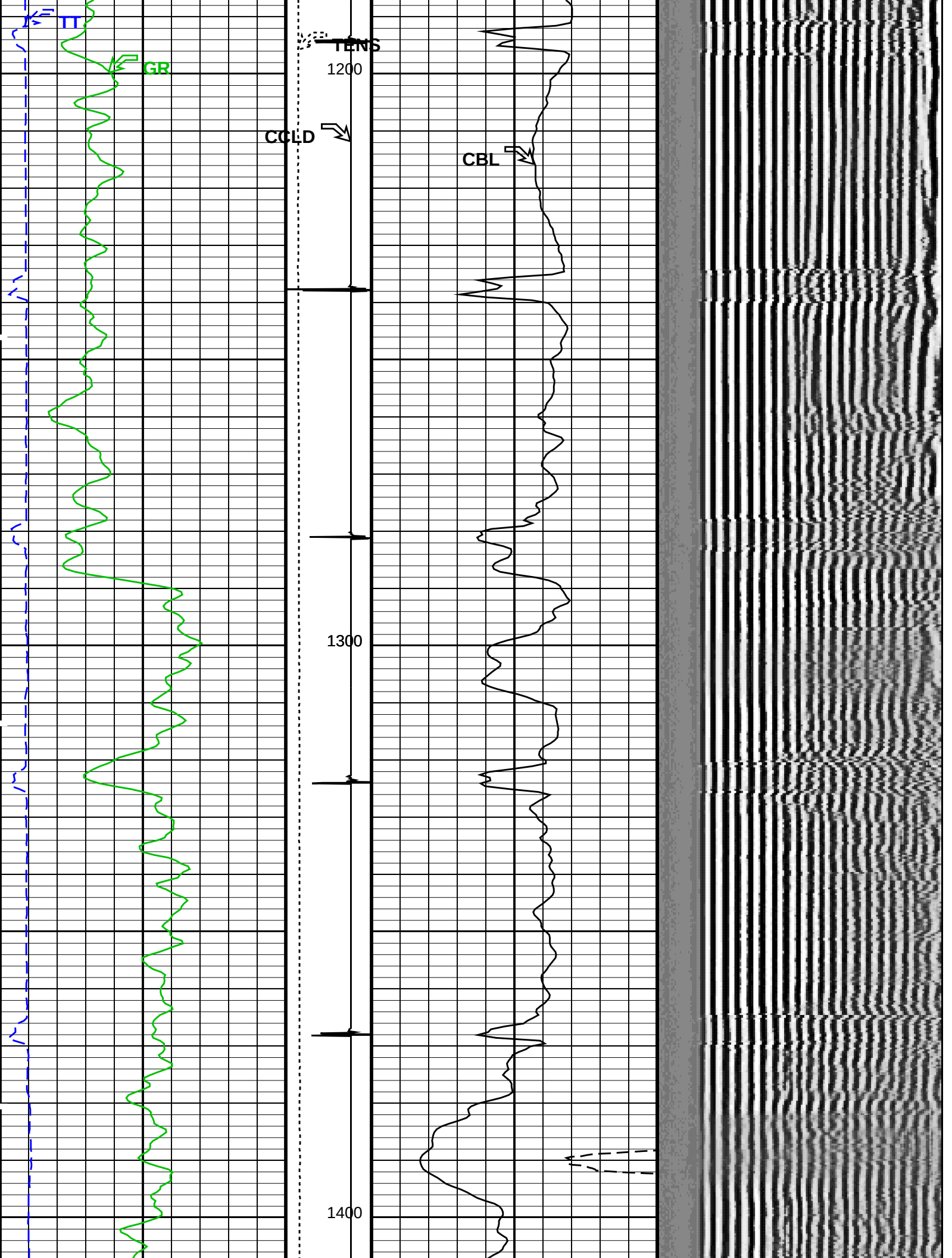
1100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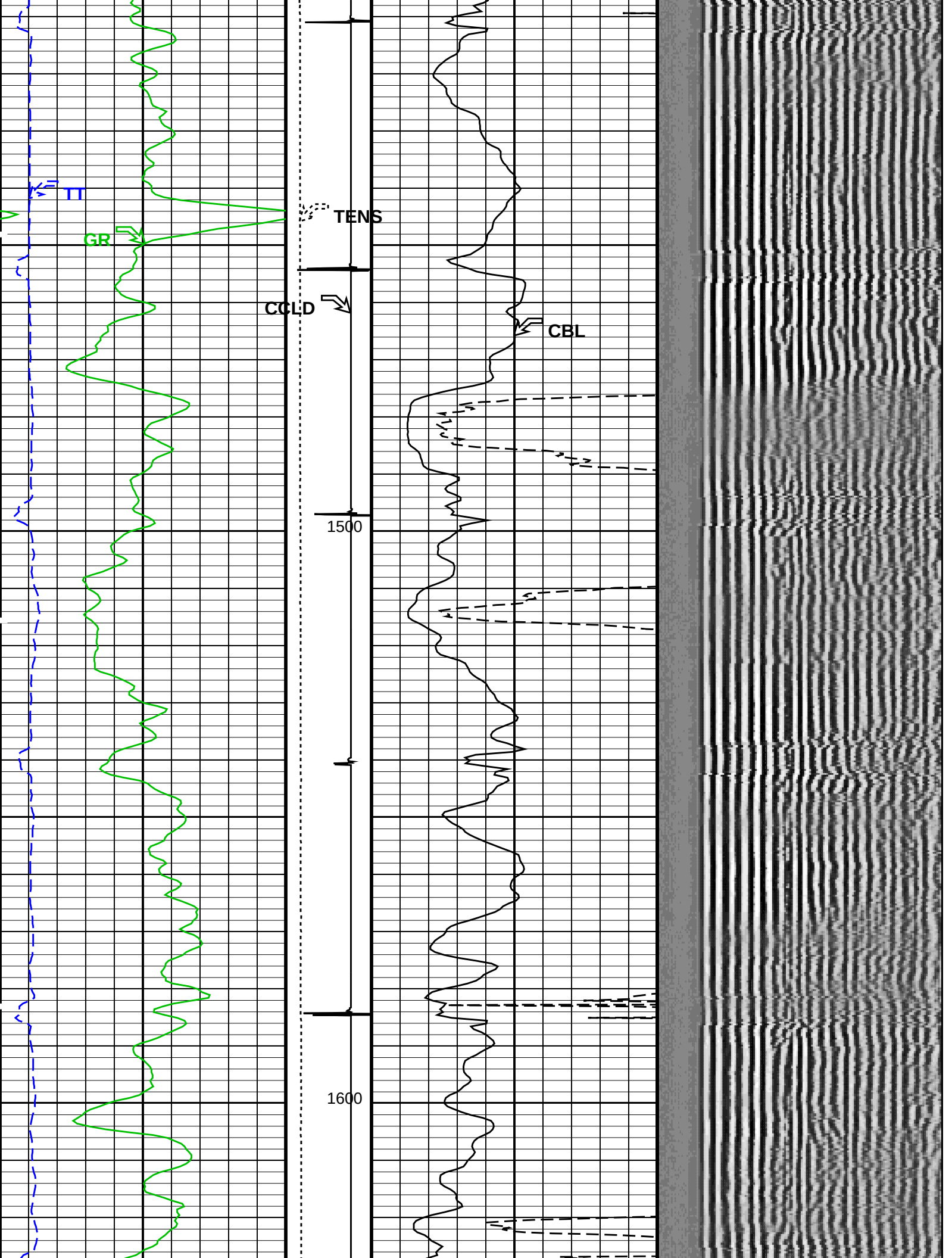
TENS
1200
CCLD
CBL
1300
1400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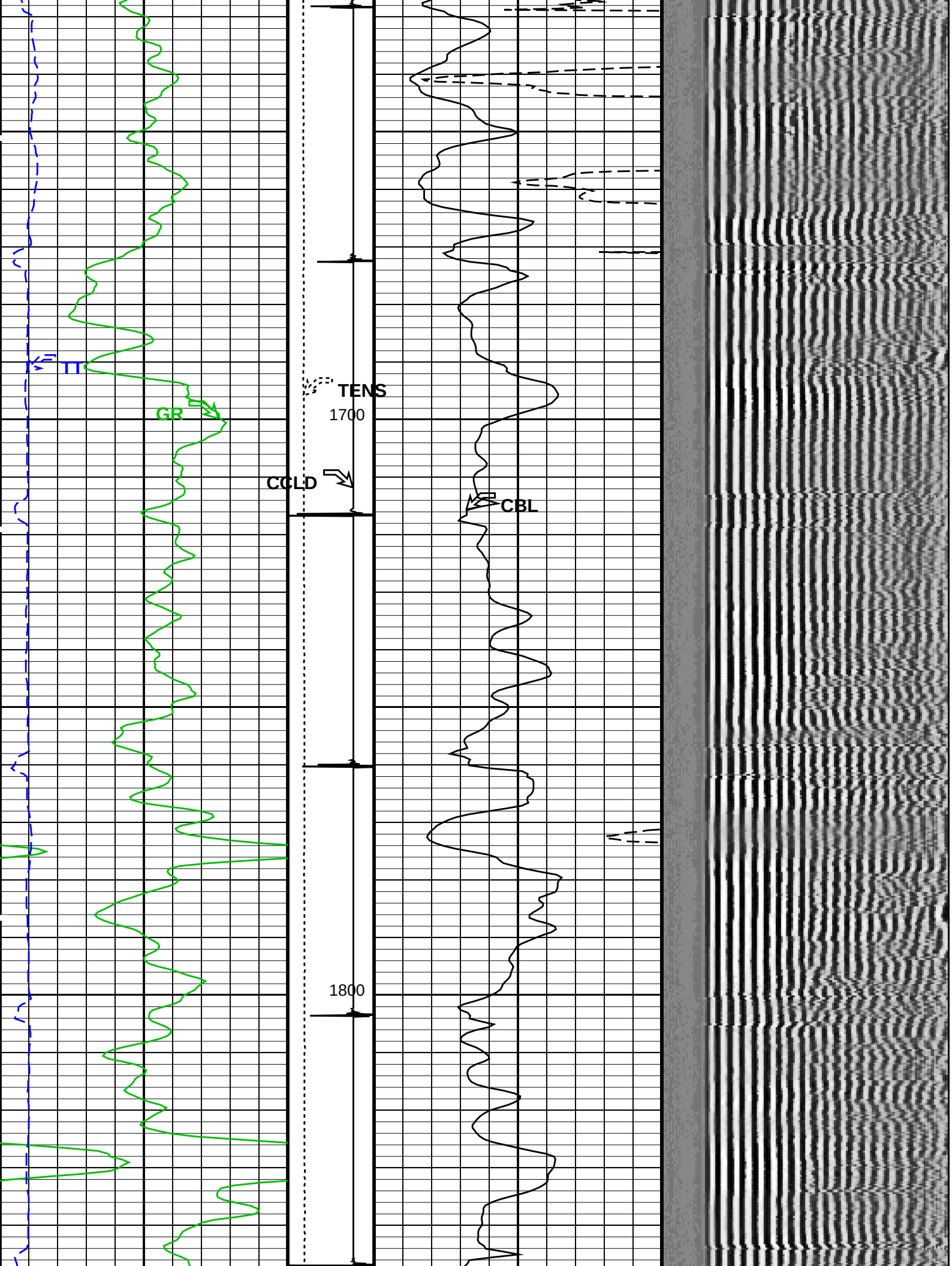
GR
TENS
CCLD
CBL
1500
1600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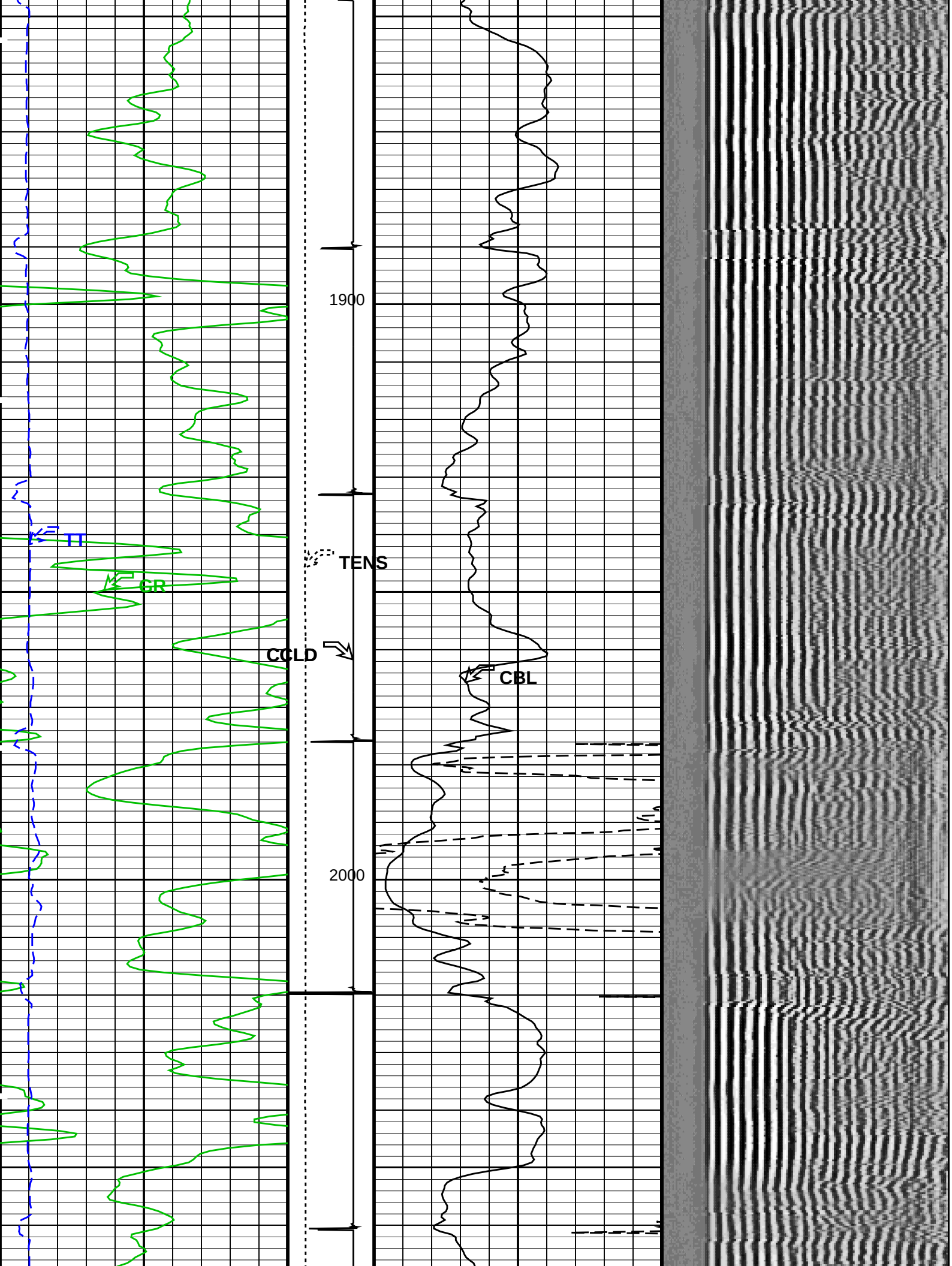
GR
TENS
1700
CCLD
CBL
1800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TENS
GR
CCLD
CBL
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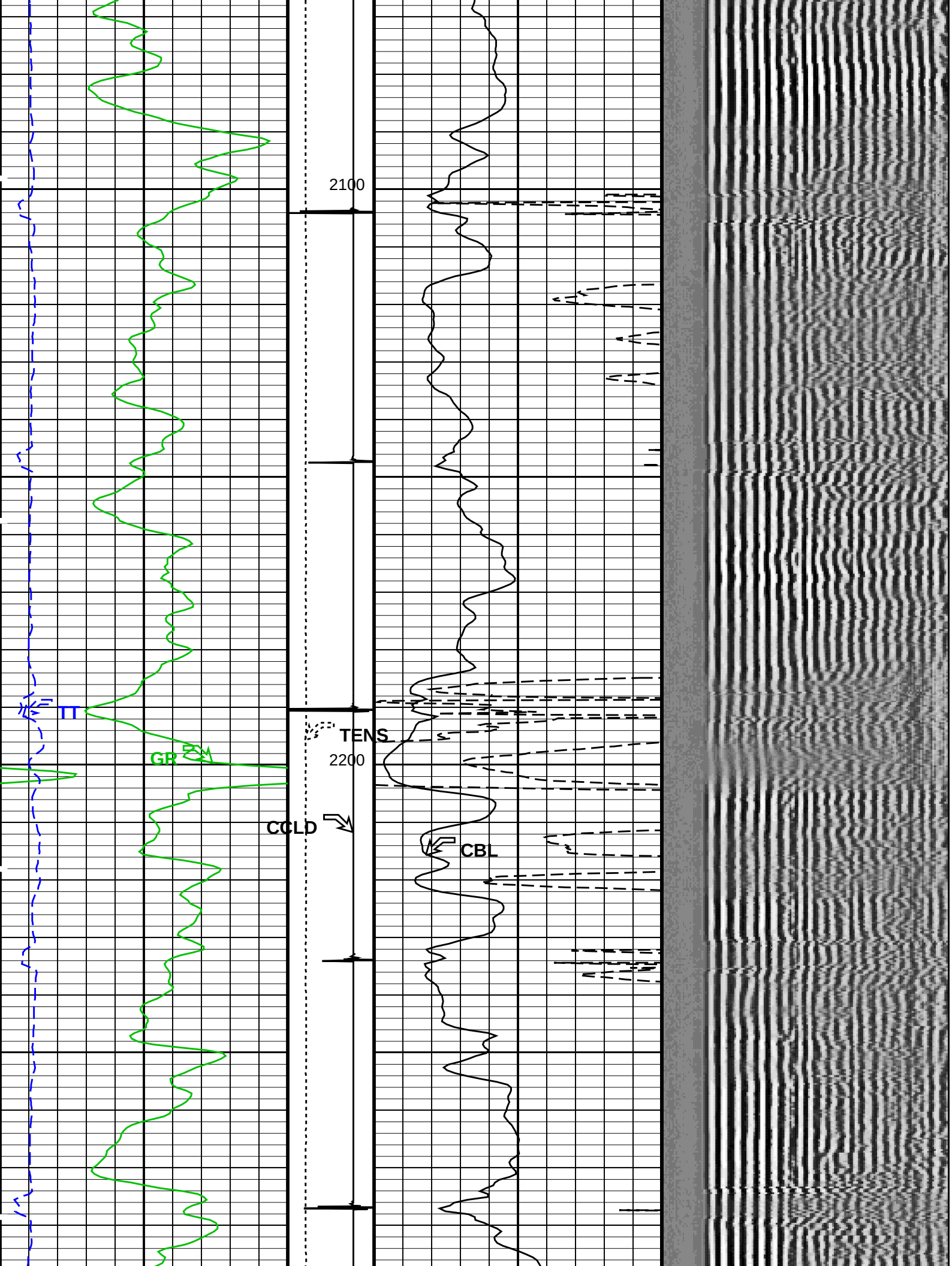
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GR
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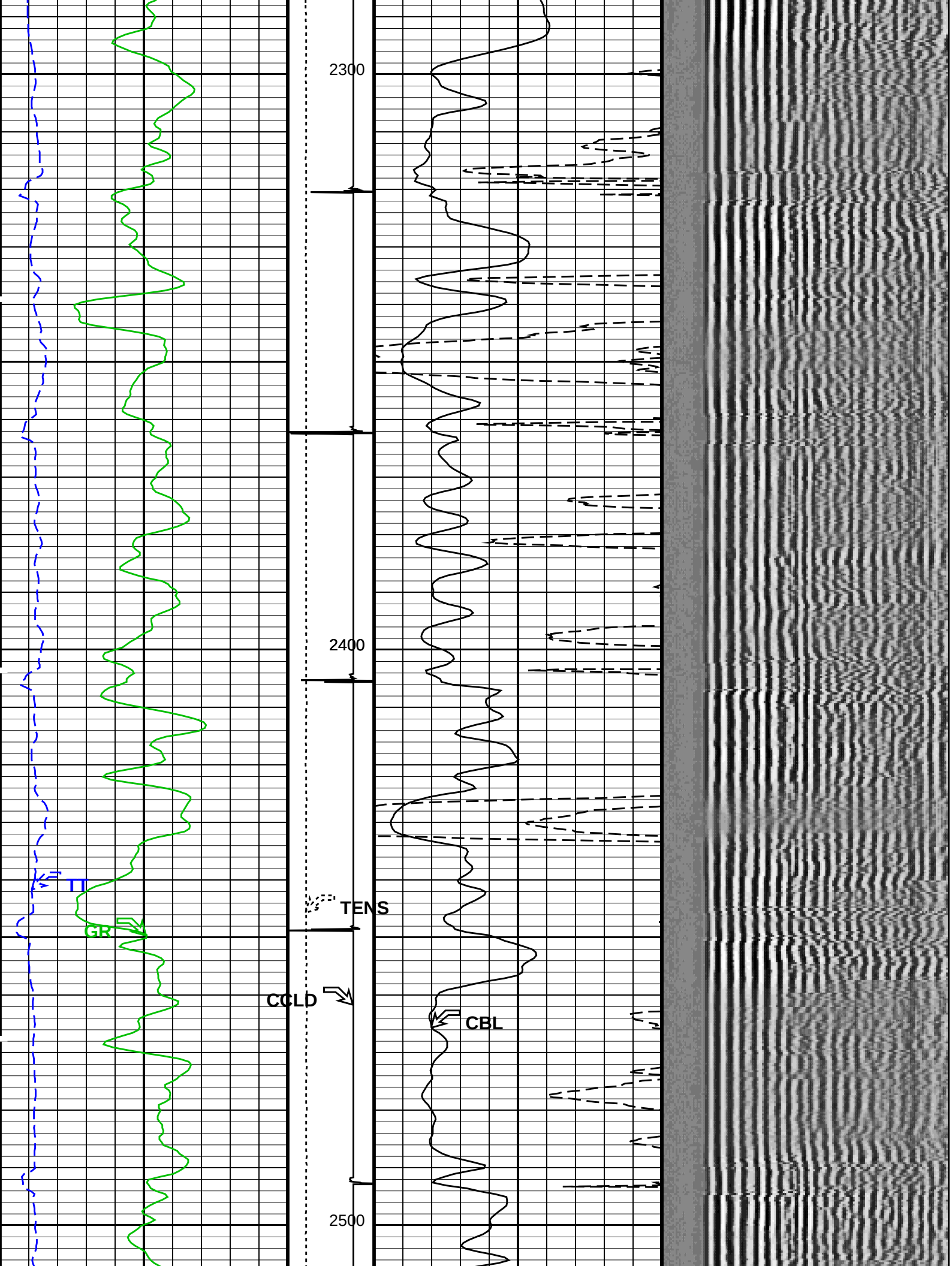
CBL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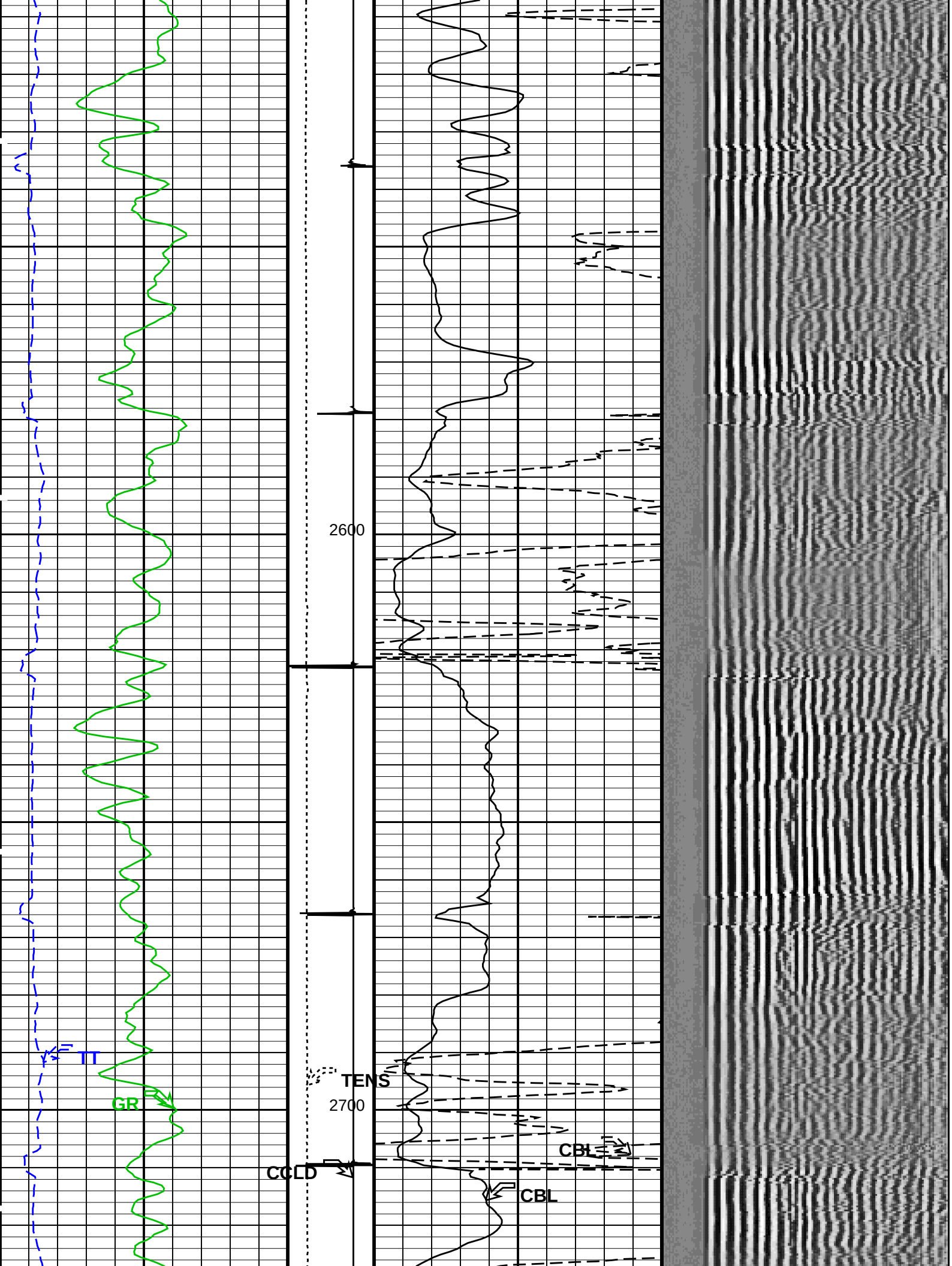
2500
TT
GR
TENS
CCLD
CBL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GR
TENS
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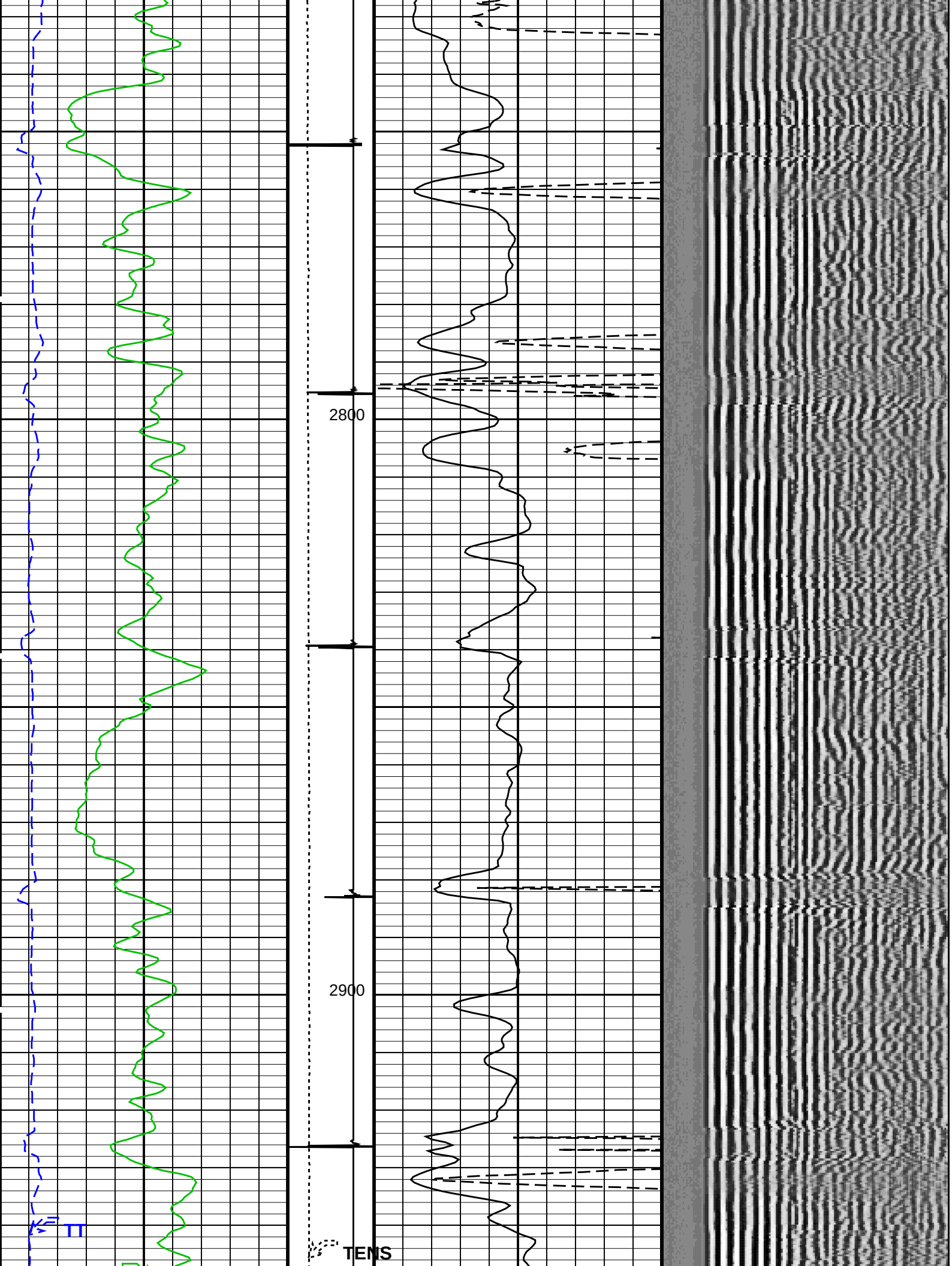
CBL
CCLD
CBL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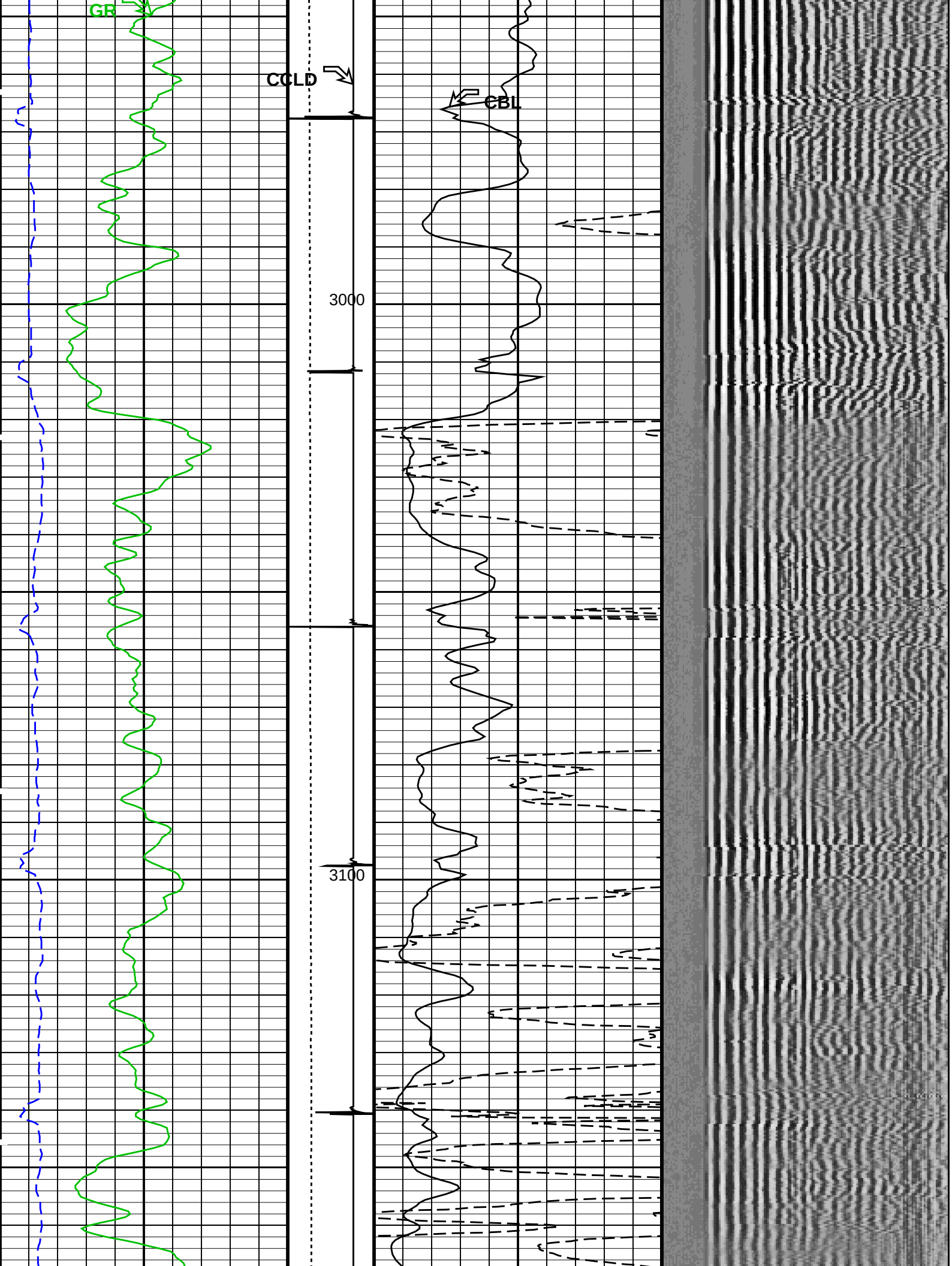
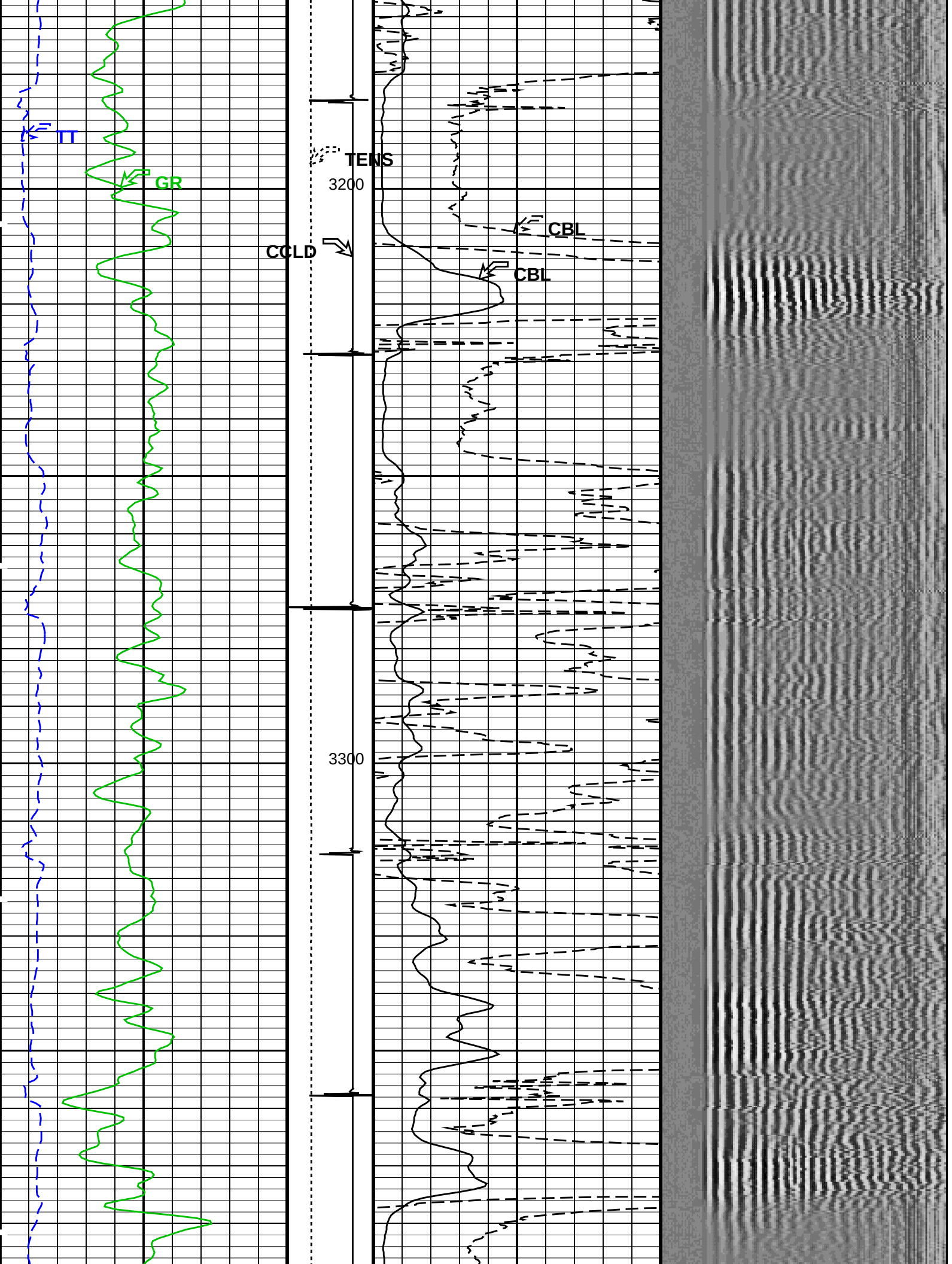
2900
TT
TENS


GR
CCLD
CBL
3000
3100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GR
TENS
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CCLD
CBL
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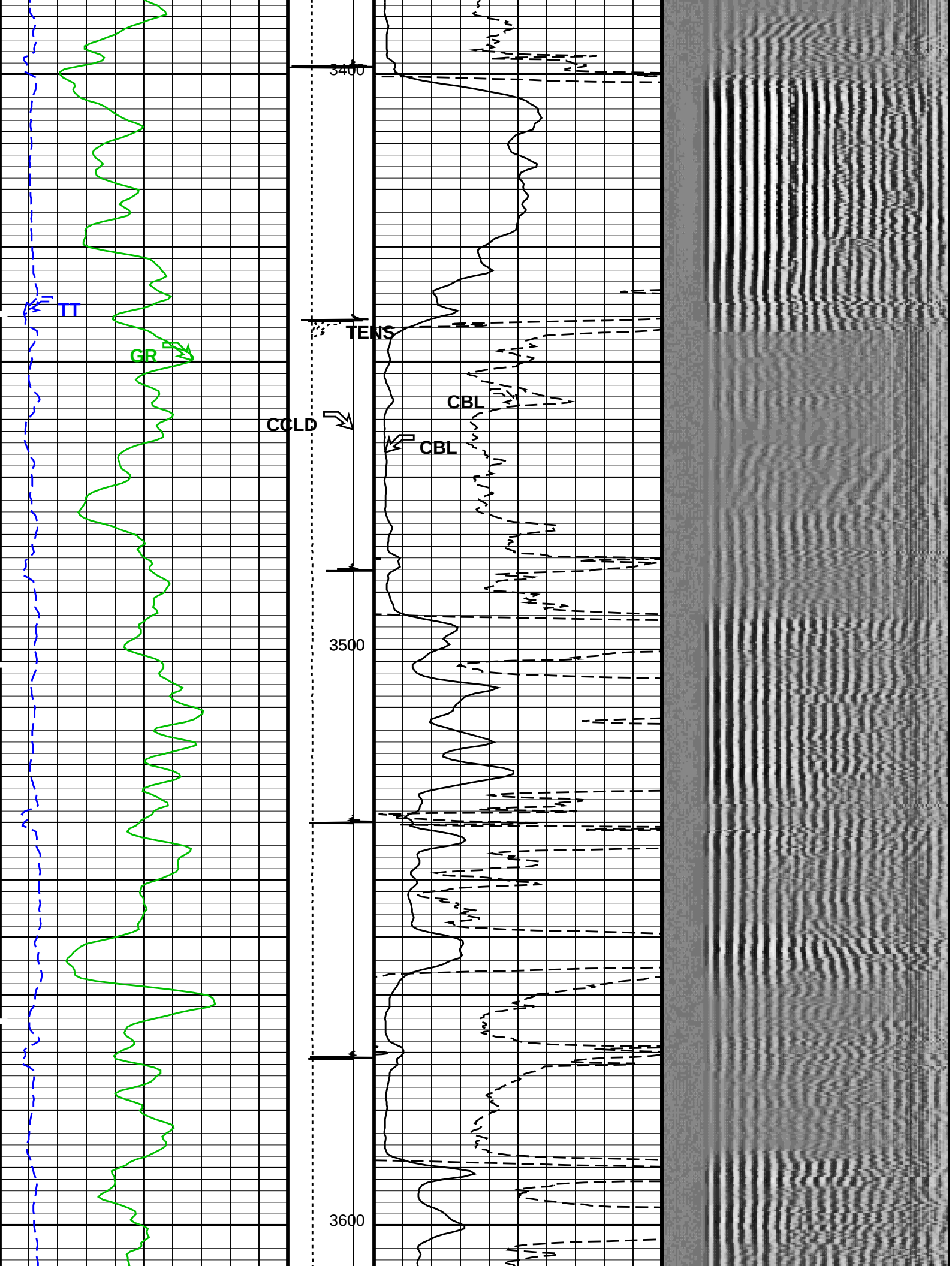
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TENS
GR
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CCLD
CBL
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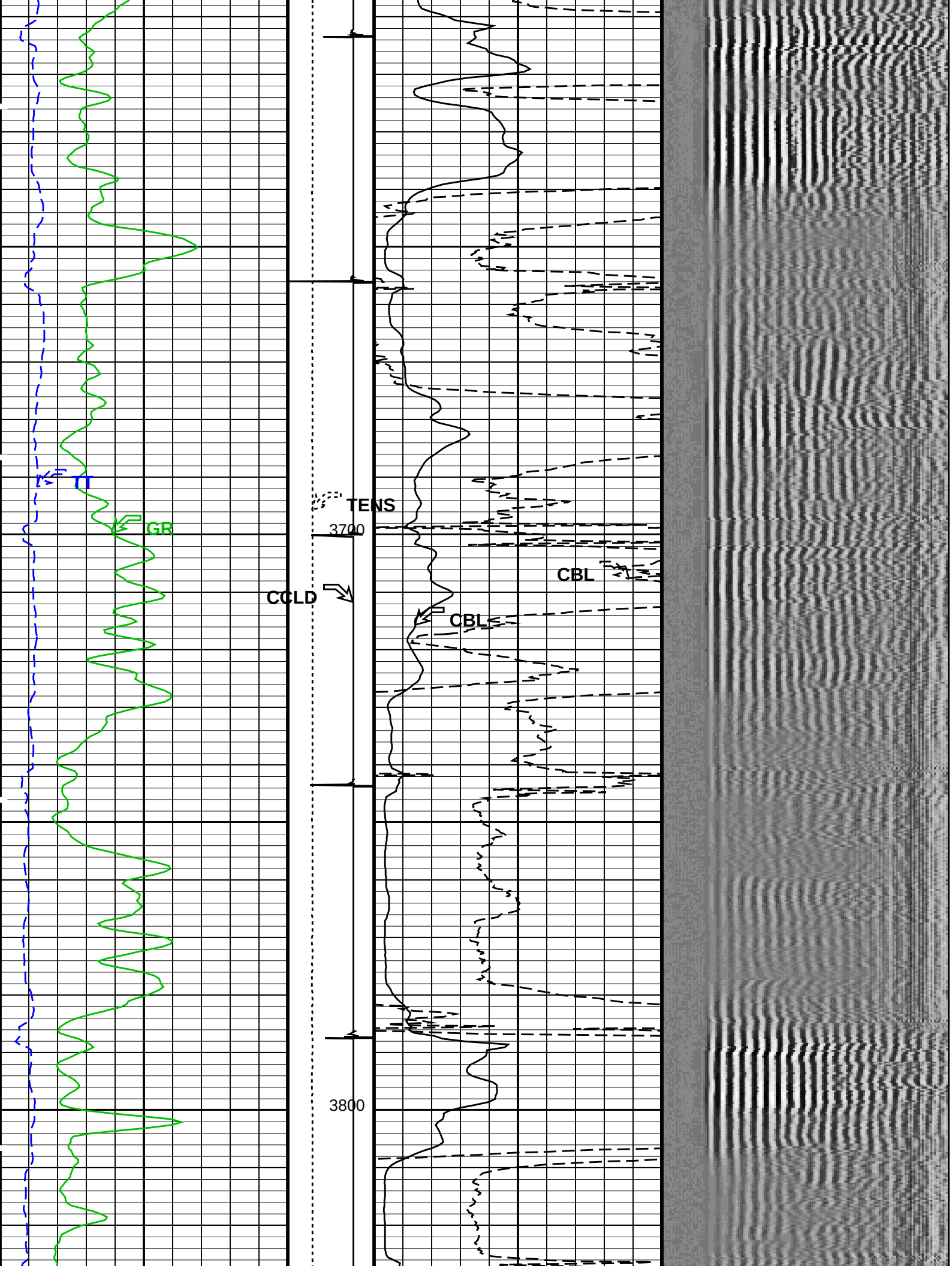
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CBL
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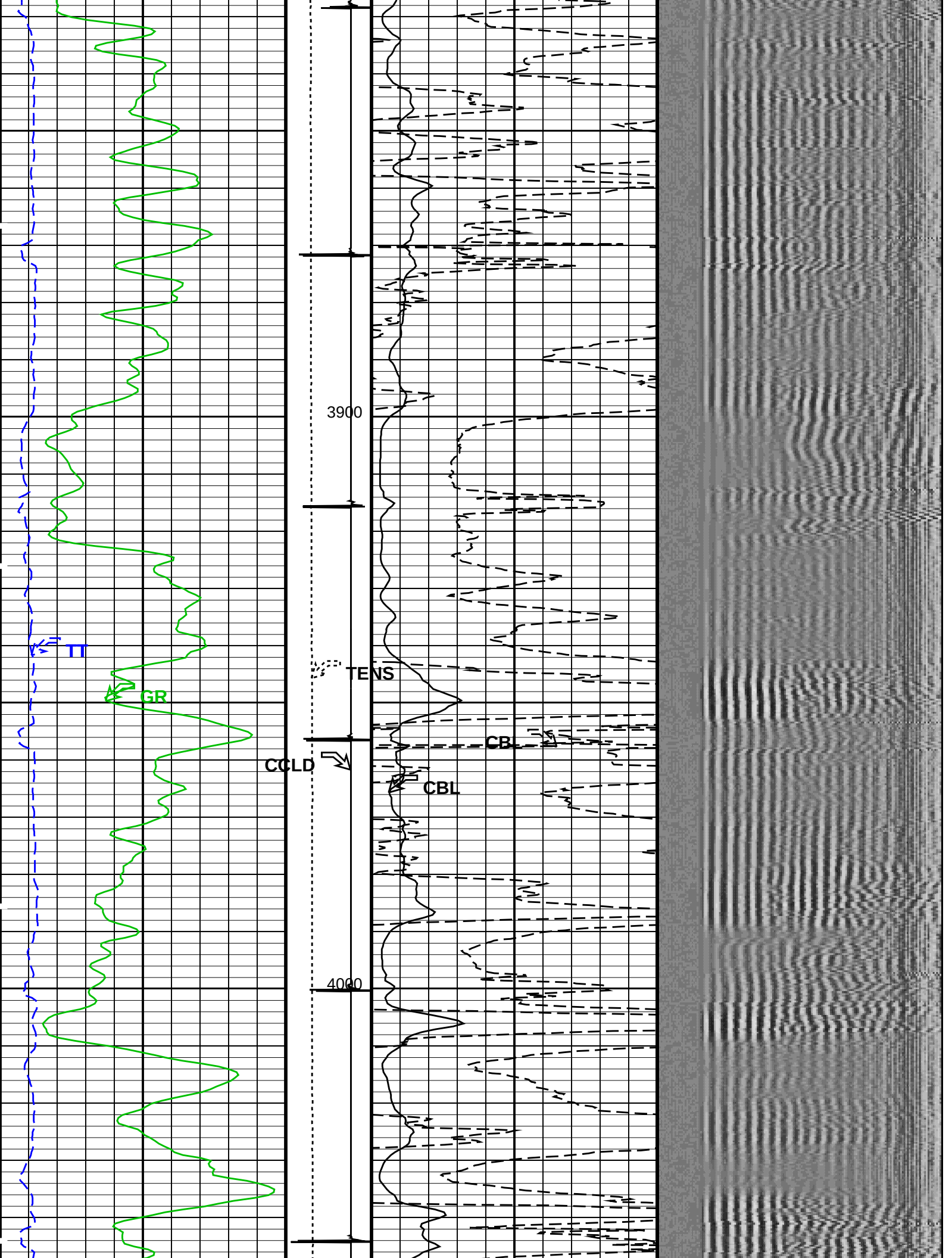
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TT
GR
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CBL
CCLD
CBL
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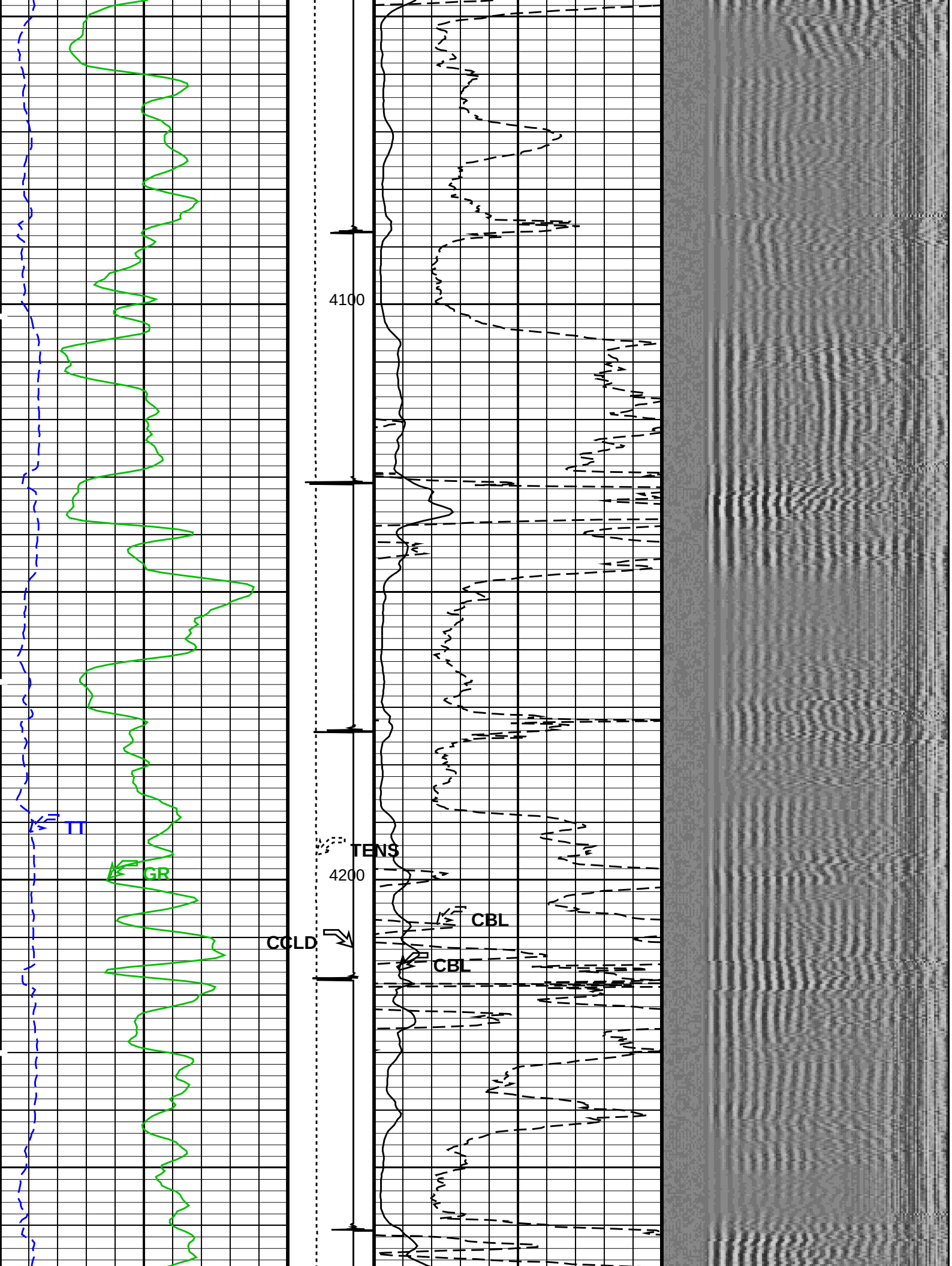
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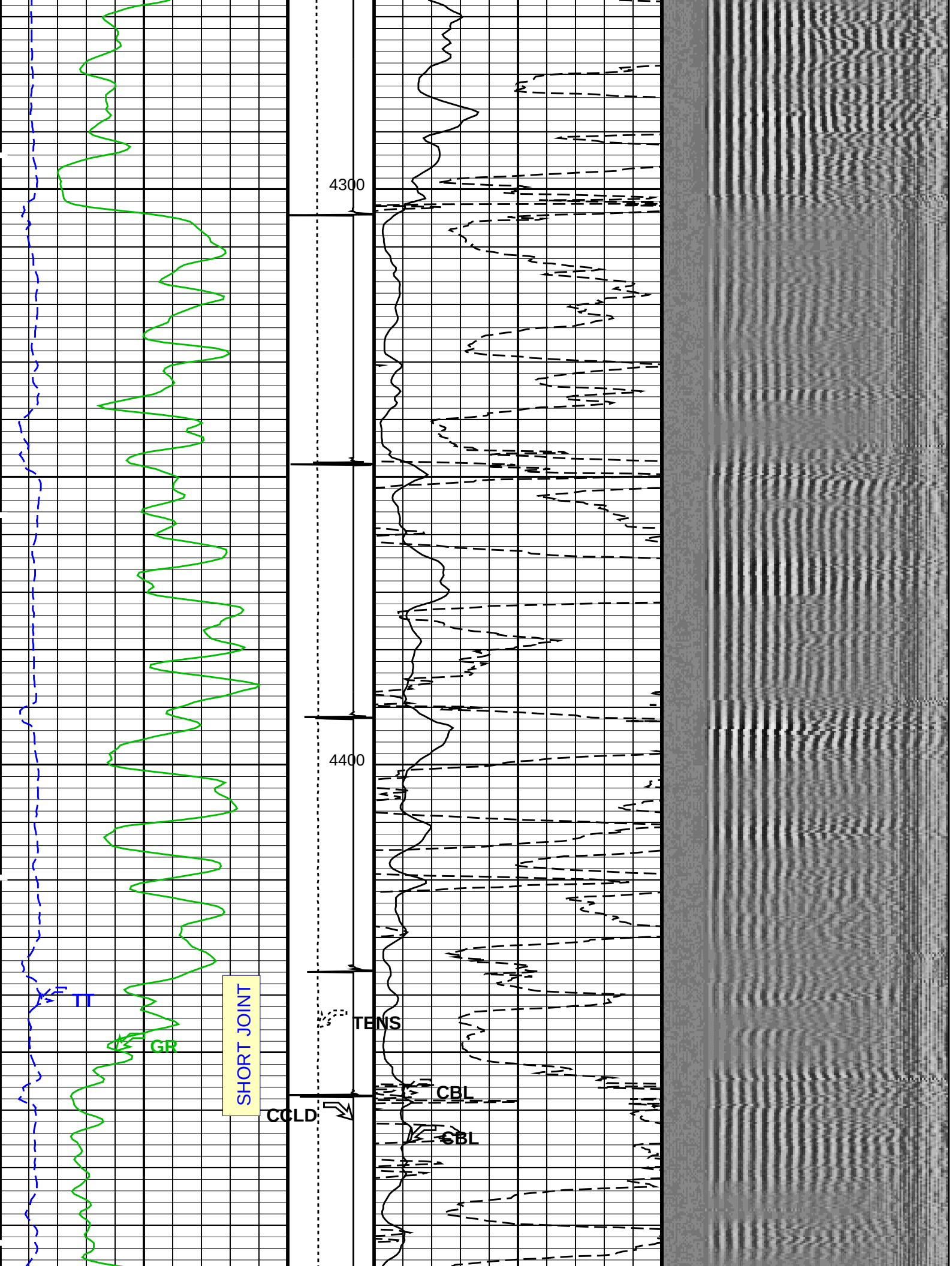
GR
TENS
4200
CBL
CCLD
CBL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GR
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TENS
CBL
CCLD
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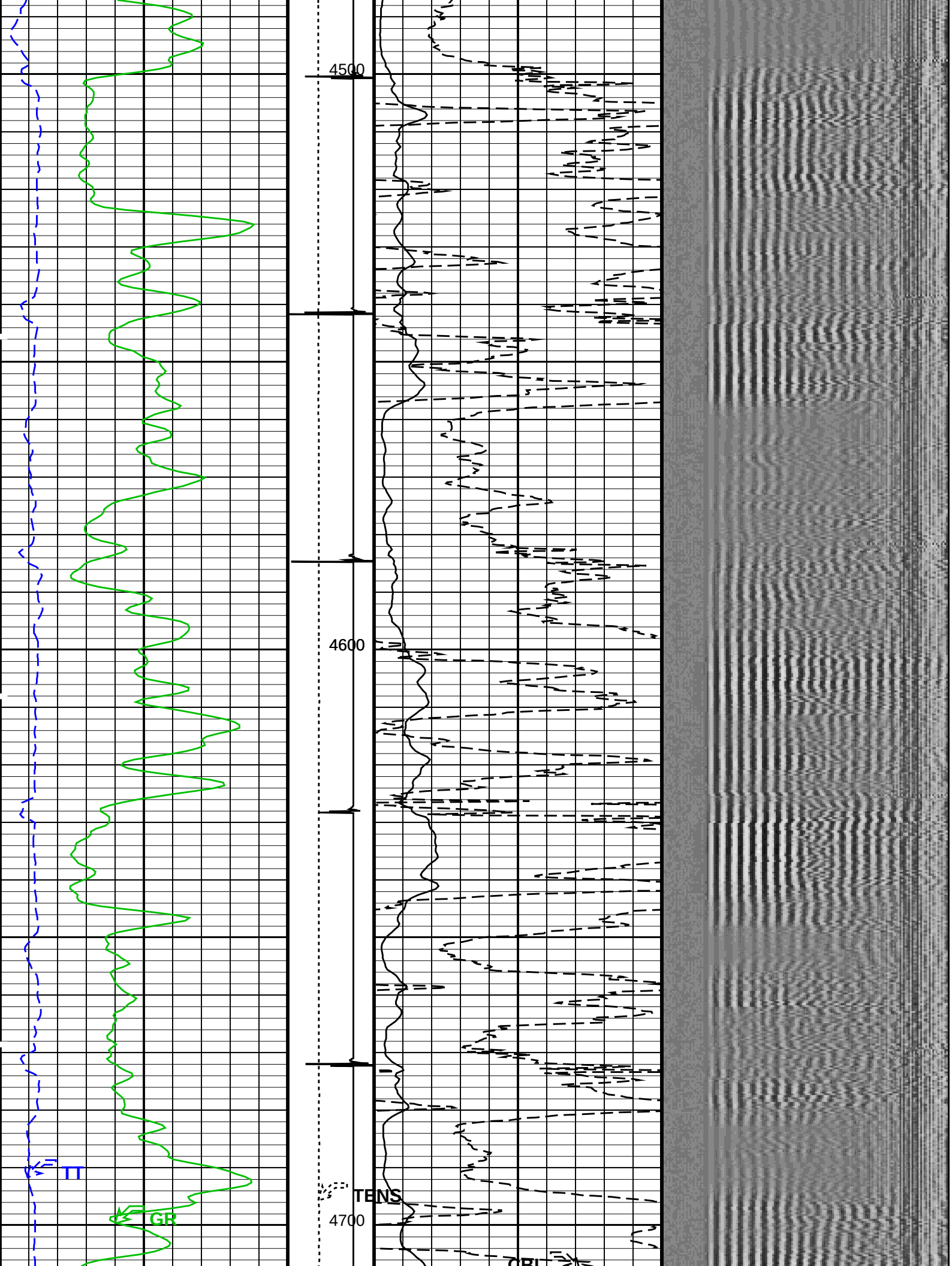
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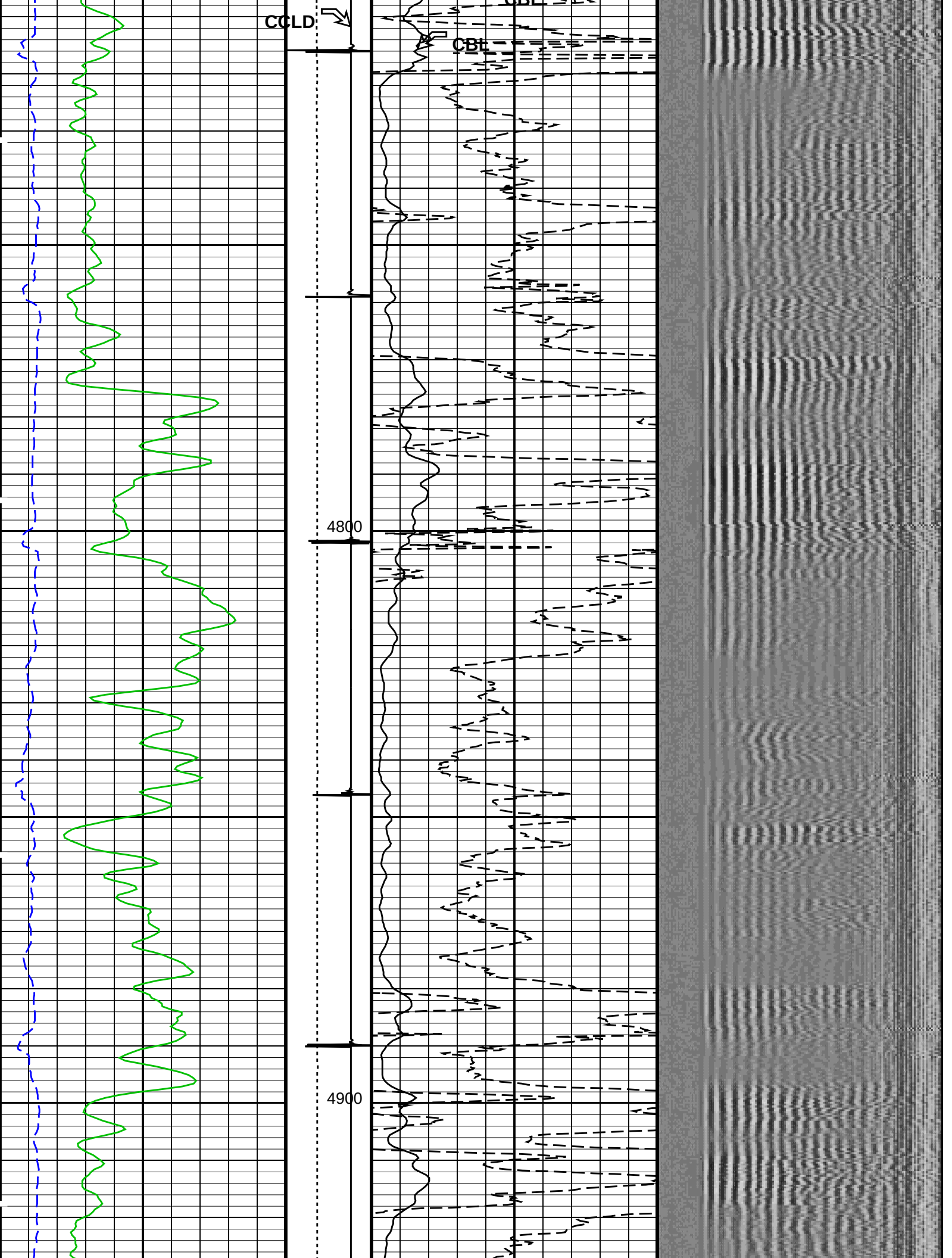
GR
TENS
4700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CBL
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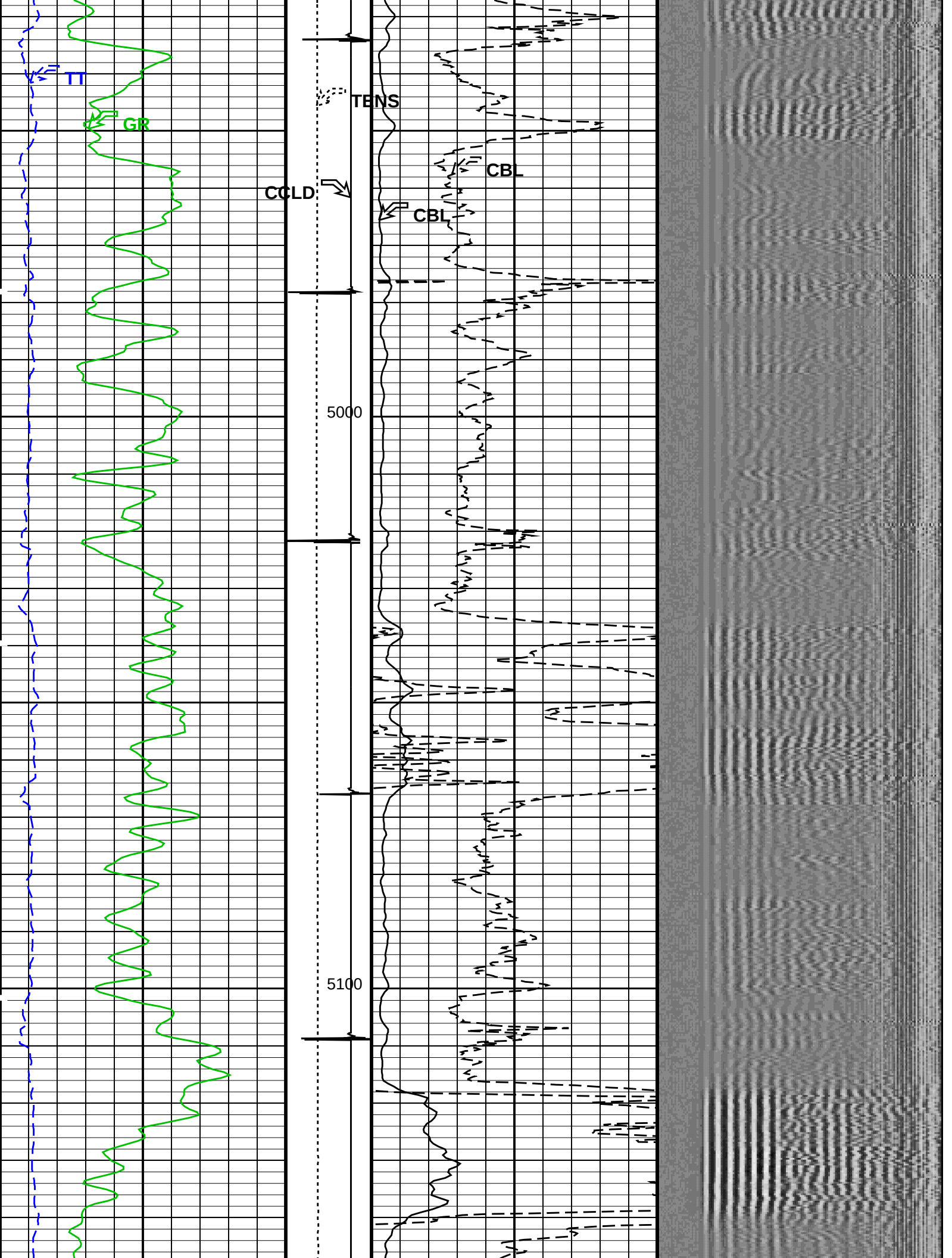
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GR
TENS
CBL
CCLD
CBL
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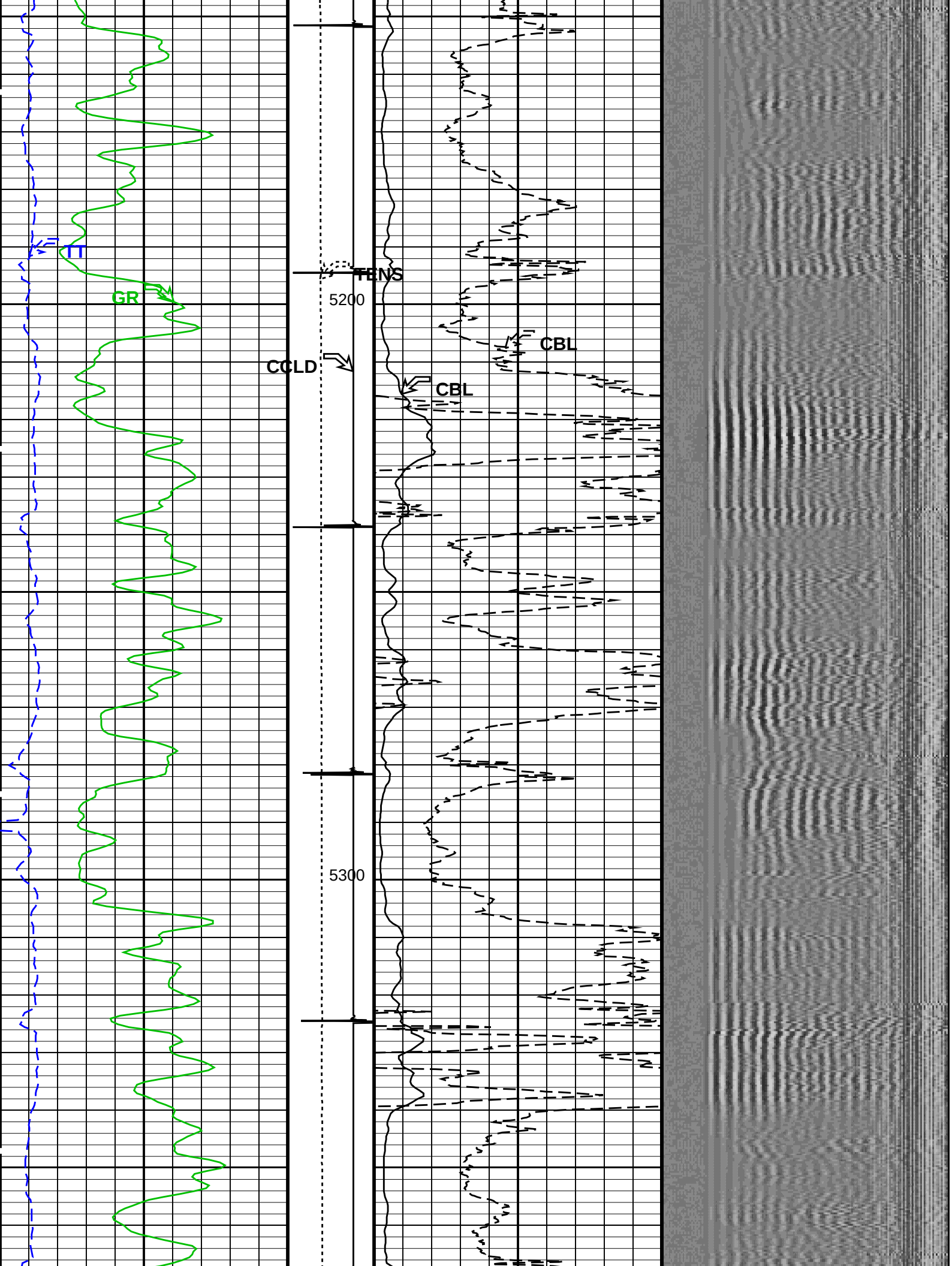
5100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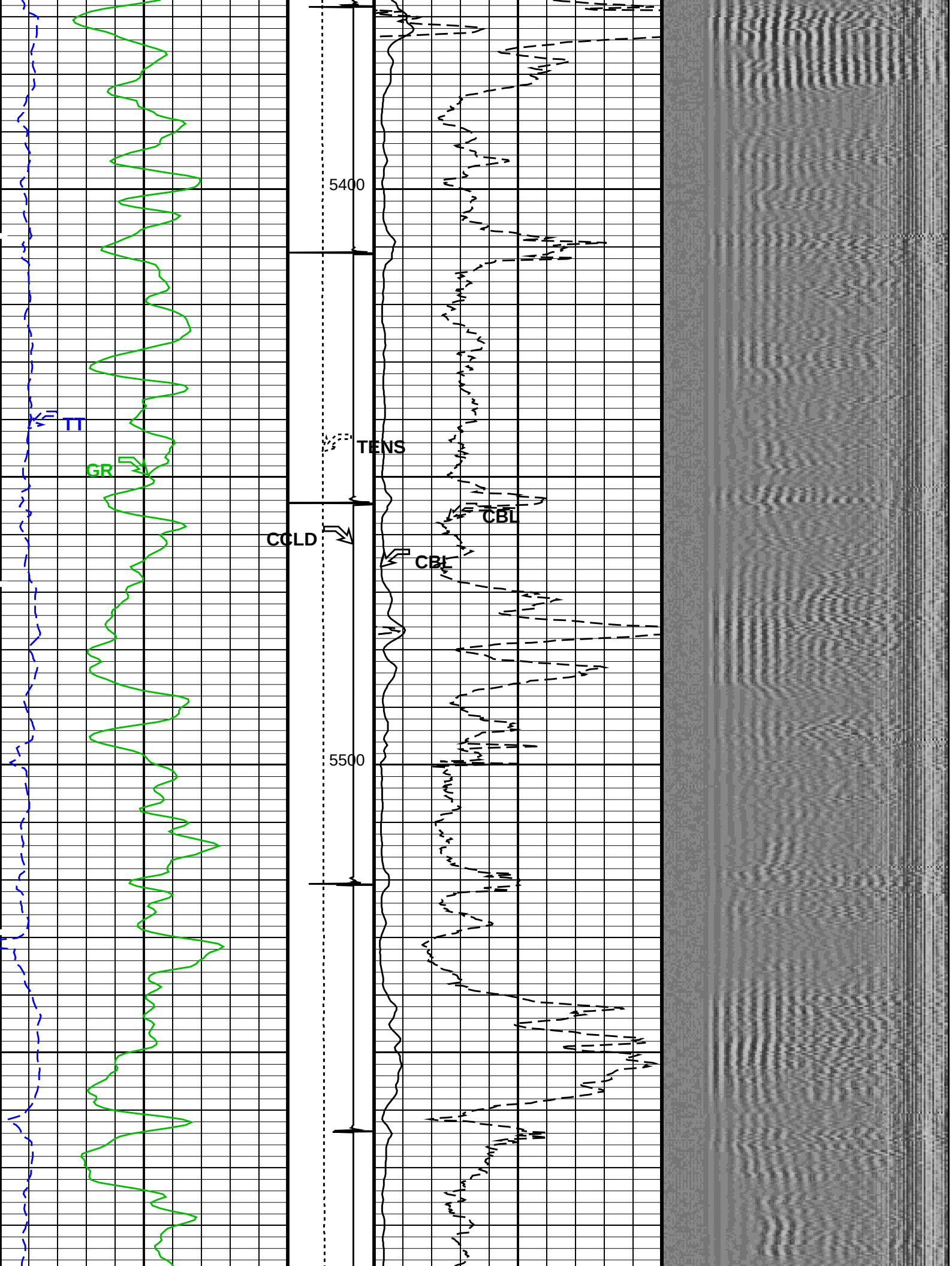
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TENS
GR
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CCLD
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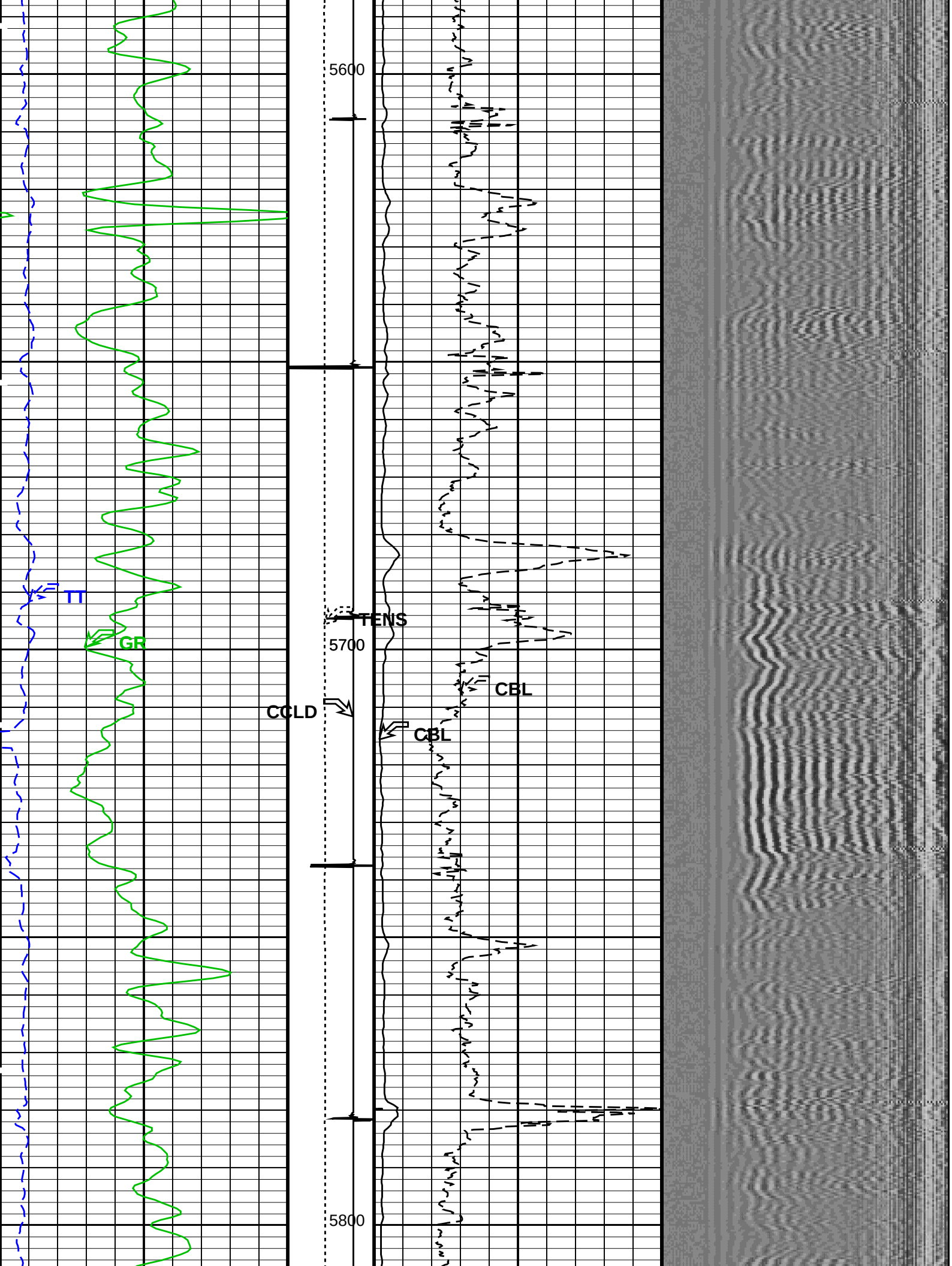
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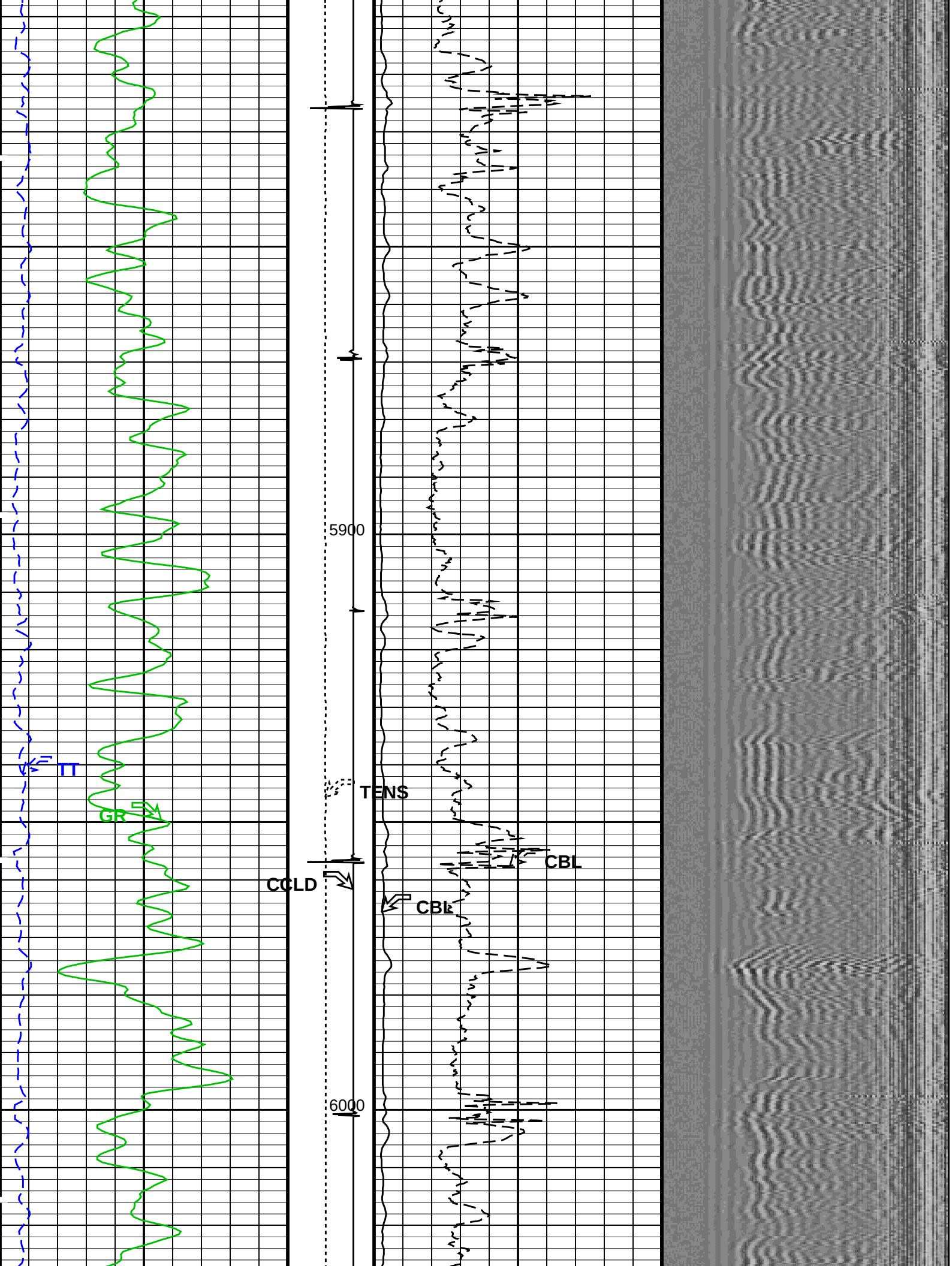
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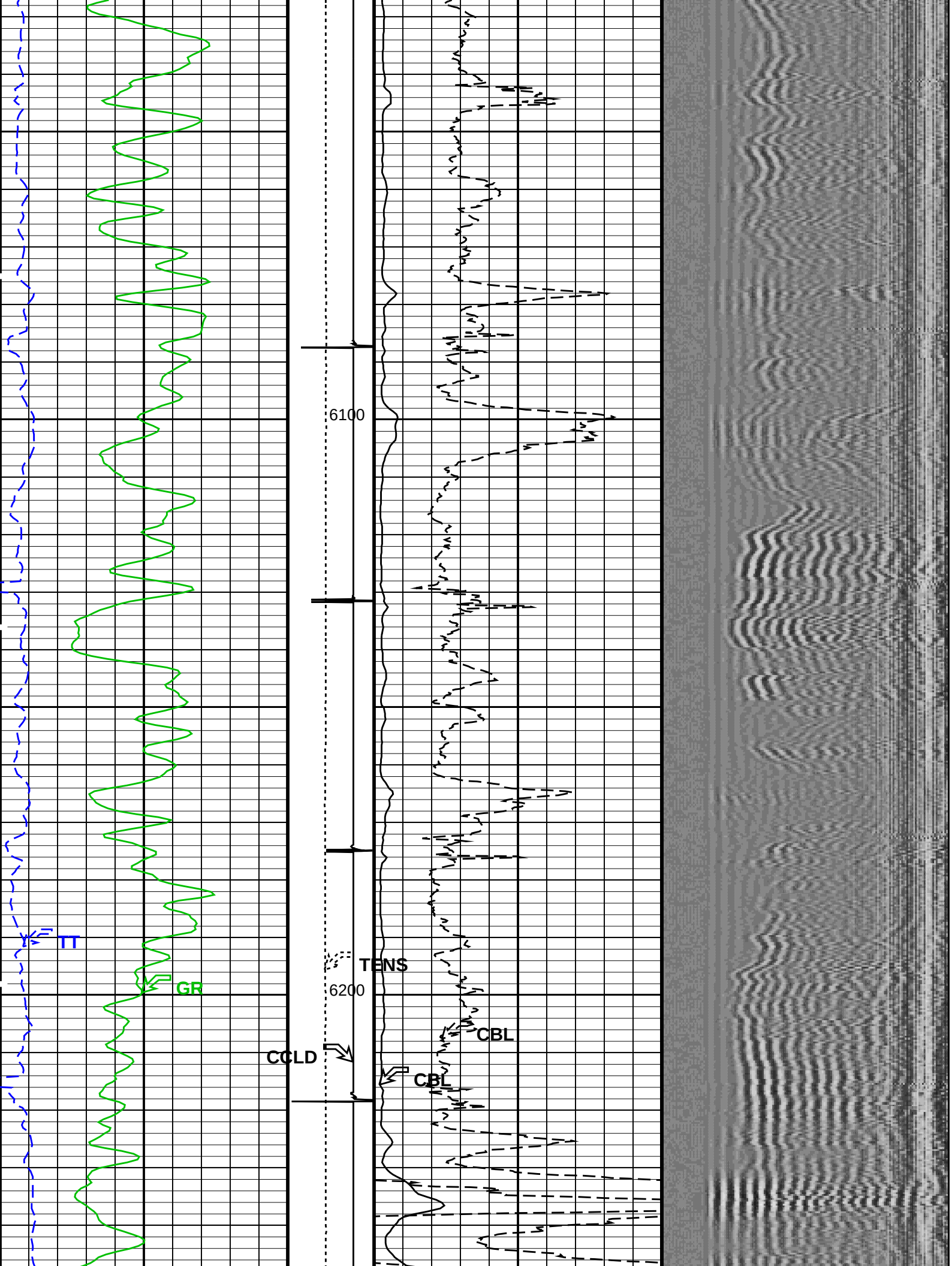
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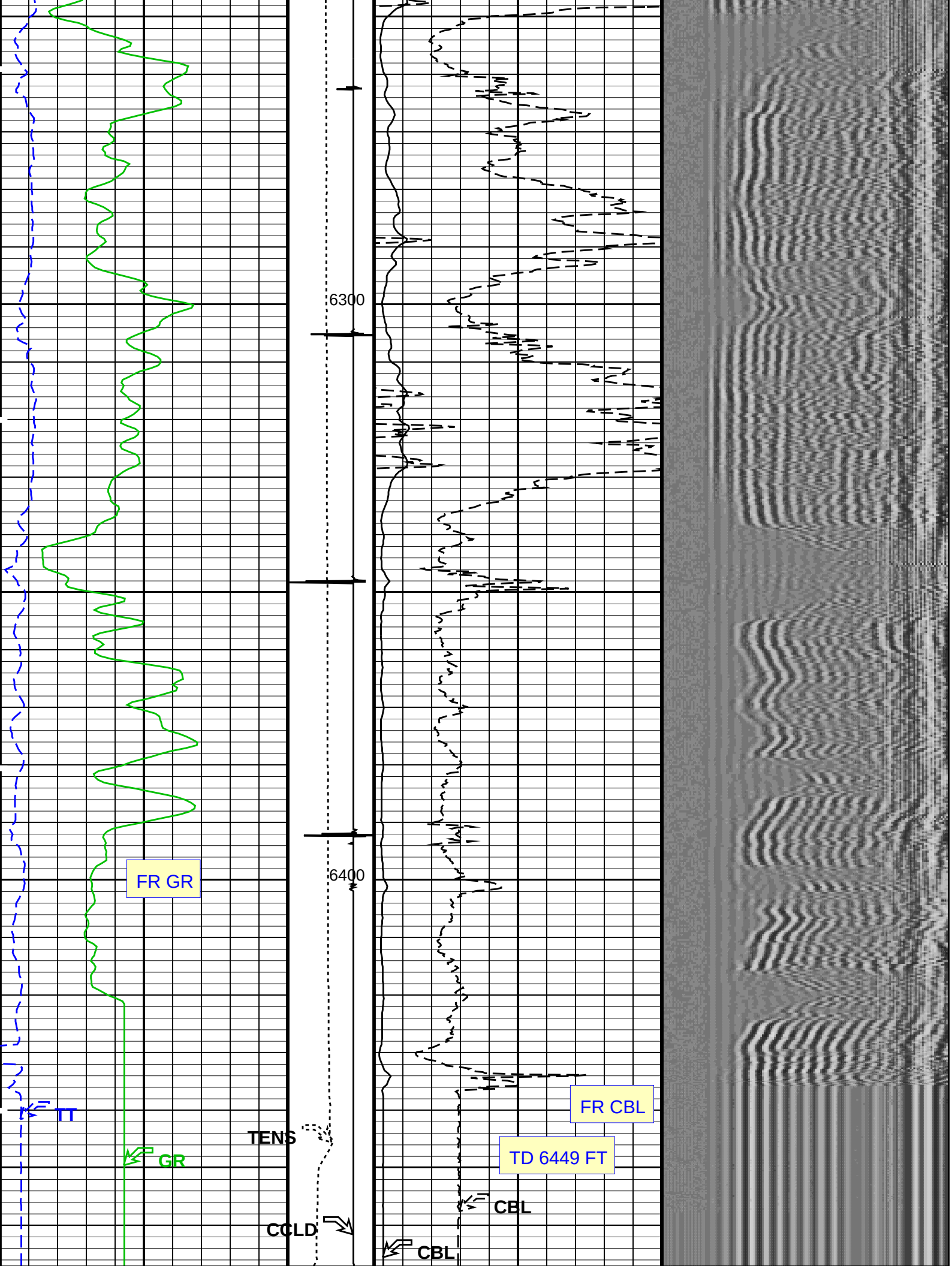
6300
6400
FR GR
TT
GR
TENS
CCLD
CBL
CBL
FR CBL
TD 6449 FT

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

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL **Vertical Scale: 5" per 100'** **Graphics File Created: 06−Oct−2011 15:48**

OP System Version: 19C0−187

SCMT−CB	SRPC−5095−H2−2011−OP19_b	RST−C	SRPC−5095−H2−2011−OP19_b
PSPT	19C0−187		

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS−CB 8186		
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	23−FEB−2011		
CBL Correction Factor	0.0700110	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.0960446	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.103019		
MAP 3 Correction Factor	0.112474		
MAP 4 Correction Factor	0.170246		
MAP 5 Correction Factor	0.138168		
MAP 6 Correction Factor	0.126543		
MAP 7 Correction Factor	0.0891491		
MAP 8 Correction Factor	0.107987		

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	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	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	4.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	−50000	FT

Input DLIS Files

DEFAULT	SCMT_RST_PSP_086LUP	FN:85	PRODUCER	06−Oct−2011 14:04	6463.0 FT	134.0 FT

Output DLIS Files

DEFAULT	SCMT_RST_PSP_090PUP	FN:89	PRODUCER	06−Oct−2011 15:48		

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REPEAT ANALYSIS

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC. Well: DAYBREAK FEDERAL 19−8BB (PJ19

Input DLIS Files

DEFAULT	SCMT_RST_PSP_086LUP	FN:85	PRODUCER	06−Oct−2011 14:04	6463.0 FT	134.0 FT
DEFAULT	SCMT_RST_PSP_089PUP	FN:88	PRODUCER	06−Oct−2011 15:47	5658.0 FT	5258.0 FT

Output DLIS Files

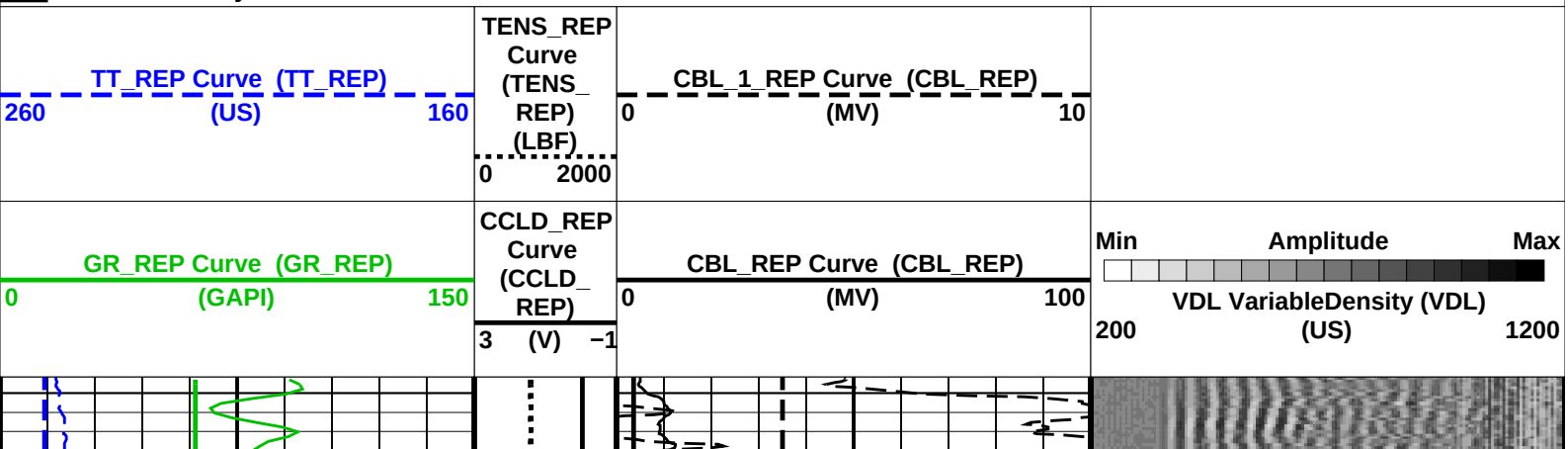
DEFAULT	SCMT_RST_PSP_090PUP	FN:89	PRODUCER	06−Oct−2011 15:48		

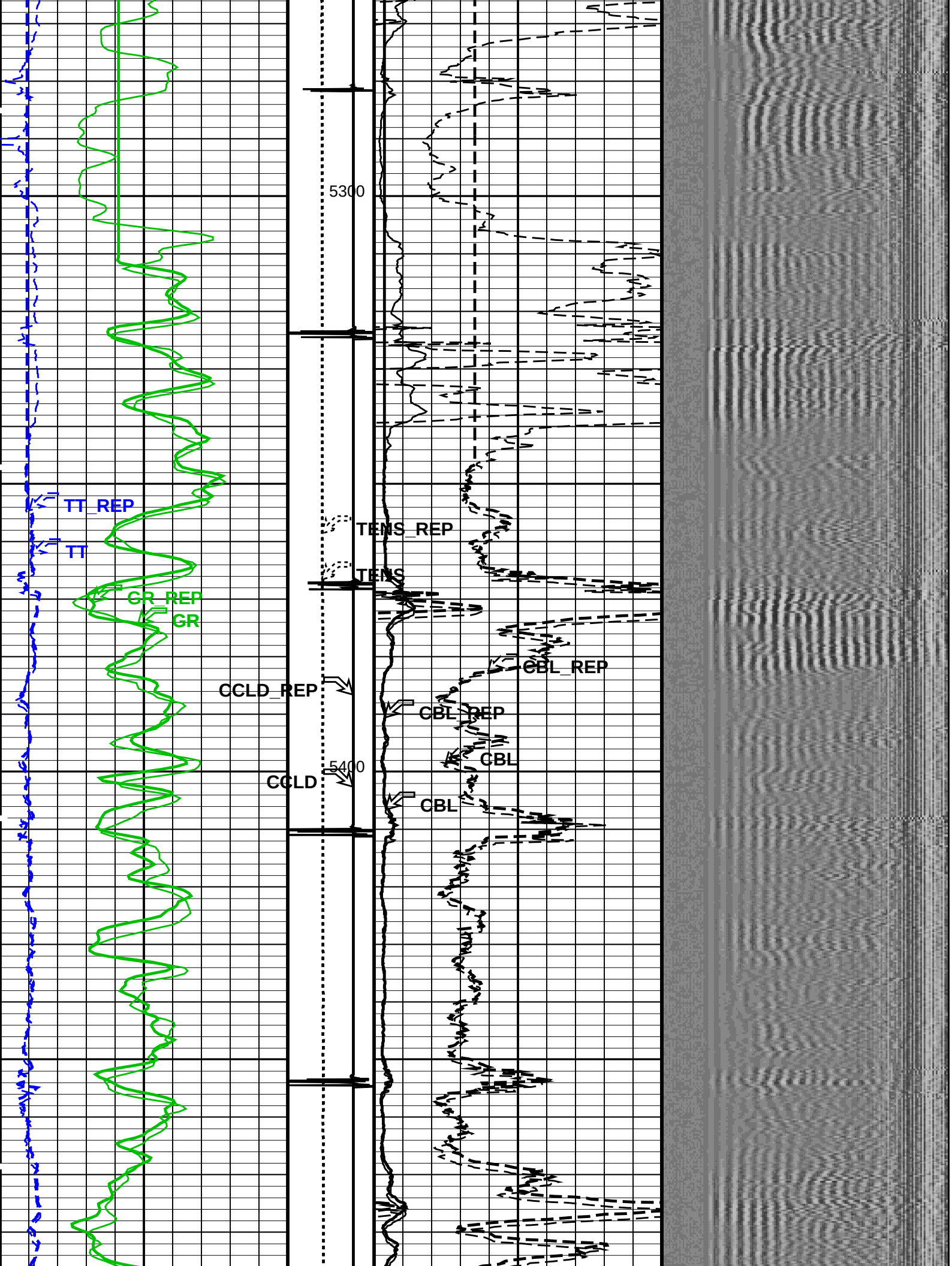
OP System Version: 19C0−187

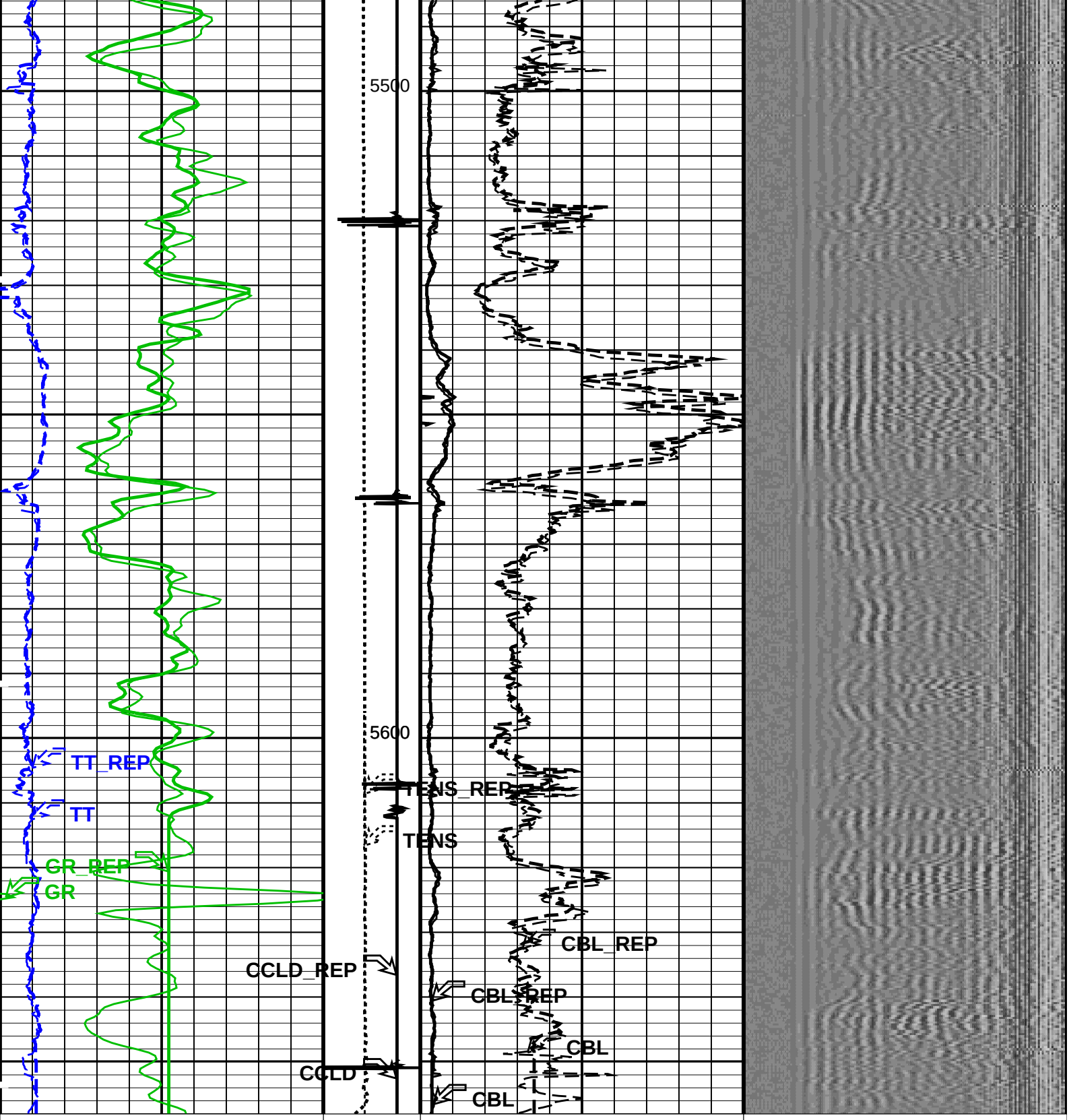
SCMT−CB	SRPC−5095−H2−2011−OP19_b	RST−C	SRPC−5095−H2−2011−OP19_b
PSPT	19C0−187		

PIP SUMMARY

Time Mark Every 60 S




5300
TT_REP
TT
TENS_REP
TENS
GR_REP
GR
CBL_REP
CCLD_REP
CBL_REP
CBL
5400
CCLD
CBL



GR_REP Curve (GR_REP)
0 (GAPI) 150

CCLD_REP Curve (CCLD_REP)
3 (V) −1

CBL_REP Curve (CBL_REP)
0 (MV) 100

Min Amplitude Max
VDL VariableDensity (VDL)
200 (US) 1200

TT_REP Curve (TT_REP)
260 (US) 160

TENS_REP Curve (TENS_REP) (LBF)
0 2000

CBL_1_REP Curve (CBL_REP)
0 (MV) 10

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100' Graphics File Created: 06−Oct−2011 15:48

OP System Version: 19C0−187

SCMT−CB	SRPC−5095−H2−2011−OP19_b	RST−C	SRPC−5095−H2−2011−OP19_b
PSPT	19C0−187		

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS−CB 8186		
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	23−FEB−2011		
CBL Correction Factor	0.0700110	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.0960446	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.103019		
MAP 3 Correction Factor	0.112474		
MAP 4 Correction Factor	0.170246		
MAP 5 Correction Factor	0.138168		
MAP 6 Correction Factor	0.126543		
MAP 7 Correction Factor	0.0891491		
MAP 8 Correction Factor	0.107987		

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	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	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	4.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	

PT	Playback Processing		NORMAL	
TD	Total Depth		−50000	FT

Input DLIS Files

DEFAULT	SCMT_RST_PSP_086LUP	FN:85	PRODUCER	06−Oct−2011 14:04	6463.0 FT	134.0 FT
DEFAULT	SCMT_RST_PSP_089PUP	FN:88	PRODUCER	06−Oct−2011 15:47	5658.0 FT	5258.0 FT

Output DLIS Files

DEFAULT	SCMT_RST_PSP_090PUP	FN:89	PRODUCER	06−Oct−2011 15:48

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COEFFICIENTS

MAXIS Field Log

Client:	ENCANA OIL & GAS (USA) INC.	Tool:	PSP
Field:	PARACHUTE	Sub Type:	PBMS
Well:	DAYBREAK FEDERAL 19−5 (PJ19)	Sensor:	Clock Model
Run date:	5−Oct−2011		

PBMS Digitalization Clock

Sonde Serial NB	
Sensor Serial NB	3779
Calib Date ddmmyy	090107
Matrix Size	16
Coeff CRC	D285

Clock Coeff

	Temp**0	Temp**1	Temp**2
Temp**0	−.210501098404E+03	−.537713340627E+01	−.752421519422E−01

	Temp**3	Temp**4	Temp**5
Temp**0	+.630273975887E−03	+.266728381738E−05	0.0

Client:	ENCANA OIL & GAS (USA) INC.	Tool:	PSP
Field:	PARACHUTE	Sub Type:	PBMS

Well: DAYBREAK FEDERAL 19−5 (PJ19) **Sensor:** Sapphire

Run date: 5−Oct−2011

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB	**COEFFICIENTS FOR SAPPHIRE PBMS−A.3779 S/N:**
Sensor Serial NB	**3779**
Calib Date ddmmyy	**090107**
Matrix Size	**66**
Coeff CRC	**4C82**

Pres Coeff

	Tt**0	Tt**1	Tt**2
Tp**0	−.611876617639E+04	+.471061007964E+04	−.216447354932E+04
Tp**1	+.371836126905E+04	−.234756196935E+04	+.129149325686E+04
Tp**2	+.193143980957E+02	−.189348218853E+01	−.341812471126E+01
Tp**3	−.568815065386E+01	+.200079683569E+01	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0

	Tt**3	Tt**4	Tt**5
Tp**0	+.380249508124E+03	−.247683004908E+02	0.0
Tp**1	−.227135245080E+03	+.146352372057E+02	0.0
Tp**2	0.0	0.0	0.0
Tp**3	0.0	0.0	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB	**:**
Sensor Serial NB	**3779**
Calib Date ddmmyy	**090107**
Matrix Size	**66**
Coeff CRC	**C39E**

Temp Coeff

	Tp**0	Tp**1	Tp**2
Tt**0	−.278275571347E+03	+.251216271916E+01	−.820715649824E+00
Tt**1	+.598349067015E+02	−.107326373545E+01	+.652890183203E−01
Tt**2	+.109160002120E+02	+.262812193556E+00	−.450134240377E−02
Tt**3	−.673302171285E+00	−.213772918779E−01	0.0
Tt**4	0.0	0.0	0.0

Tt**5	0.0	0.0	0.0

	Tp**3	Tp**4	Tp**5
Tt**0	+.151507143209E+00	−.592670012996E−02	0.0
Tt**1	+.127486538512E−01	−.437897076104E−02	0.0
Tt**2	0.0	0.0	0.0
Tt**3	0.0	0.0	0.0
Tt**4	0.0	0.0	0.0
Tt**5	0.0	0.0	0.0

Client: ENCANA OIL & GAS (USA) INC. **Tool:** PSP
Field: PARACHUTE **Sub Type:** PBMS
Well: DAYBREAK FEDERAL 19−5 (PJ19) **Sensor:** GR
Run date: 5−Oct−2011

PBMS Gamma Ray

Sonde Serial NB	**RESISTORS FOR GR SENSOR N.34552,TOOL PBMS−AA3779. SENSOR S/N:**
Sensor Serial NB	**34552**
Calib Date ddmmyy	**030606**
Matrix Size	**12**
Coeff CRC	**3AE5**

GR HV Rt

	Rt**0	Rt**1
Rt**0	+.200000000000e+04	+.214000000000e+04

Client: ENCANA OIL & GAS (USA) INC. **Tool:** PSP
Field: PARACHUTE **Sub Type:** PBMS
Well: DAYBREAK FEDERAL 19−5 (PJ19) **Sensor:** WellTemp RTD
Run date: 5−Oct−2011

PBMS RTD Well Thermometer

Sonde Serial NB	**COEFFICIENTS FOR RTD THERMOMETER PBMS−A.3779 S/N:**
Sensor Serial NB	**3779**
Calib Date ddmmyy	**090107**
Matrix Size	**16**
Coeff CRC	**3846**

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt0**	**+.492135102627E+02**	**−.278827553804E+03**	**+.142867554561E+03**

	Tt**3	Tt**4	Tt**5
Tt0**	**−.233378392336E+02**	**+.145553494493E+01**	**0.0**

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

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Well: **DAYBREAK FEDERAL 19−8BB (PJ19)**
Field: **PARACHUTE**
County: **GARFIELD**
State: **COLORADO**

CEMENT BOND LOG
CBL − VDL
GAMMA RAY − CCL