



Company: ENCANA OIL & GAS (USA) INC.

Well: TWIN CREEK 12-3D1 (F12E)

Field: MAMM CREEK

County: GARFIELD

State: COLORADO

County:	GARFIELD			
Field:	MAMM CREEK			
Location:	SHL: 2527' FNL & 1614' FWL			
Well:	TWIN CREEK 12-3D1 (F12E)			
Company:	ENCANA OIL & GAS (USA) INC.			
CEMENT BOND LOG CBL-VDL GAMMA RAY – CCL		LOCATION		
		SHL: 2527' FNL & 1614' FWL BHL: 1055' FNL & 2360 FWL		
		Elev.: K.B. 6169.00 ft G.L. 6145.00 ft D.F. 6168.00 ft		
		Permanent Datum: _____ Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING		
API Serial No. 05-045-20386-000C		Section 12	Township 7S	Range 92W

	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	23-May-2012			
Run Number	ONE			
Depth Driller	6008 ft			
Schlumberger Depth	5946 ft			
Bottom Log Interval	5937 ft			
Top Log Interval	200 ft			
Casing Fluid Type	FRESH WATER			
Salinity				
Density	8.4 lbm/gal			
Fluid Level	24 ft			
BIT/CASING/TUBING STRING				
Bit Size	8.750 in			
From	24 ft			
To	6008 ft			
Casing/Tubing Size	4.500 in			
Weight	11.6 lbm/ft			
Grade	S80			
From	24 ft			
To	6008 ft			
Maximum Recorded Temperatures	158 degF			
Logger On Bottom	23-May-2012	Time	18:30	
Unit Number	391	Location	GRAND JUNCTION	
Recorded By	JOHN HNILO			
Witnessed By	UNATTENDED			

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: 23-MAY-2012 20:03:27

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-C	Type:	1-25ZT
Serial Number:	5913	Serial Number:	5032	Serial Number:	391
Calibration Date:	30-SEP-2011	Calibration Date:	2-MAY-2012	Length:	18400 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	1159	Conveyance Method: Wireline Rig Type: Rigless	
Calibration Cable Type:	1-25ZT	Number of Calibration Points:	10		
Wheel Correction 1:	-5	Calibration RMS:	8		
Wheel Correction 2:	-5	Calibration Peak Error:	4		

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	CEMENT BOND LOG, GAMMA RAY, CCL/TEMP LOG
Reference Log Run Number:	1
Reference Log Date:	06-APR-2012
Subsequent Trip Down Log Correction:	3.00 FT

Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES APPLIED
2. IDW USED AS PRIMARY DEPTH REFERENCE, Z-CHART USED AS SECONDARY
- 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: RST: SIGMA OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
CORRELATION LOG NAME: CEMENT BOND, GAMMA RAY, CCL/TEMP LOG	
CORRELATION LOG BY: SCHLUMBERGER (E&P WIRELINE)	
CORRELATION LOG DATE: 06-APR-2012	
MAXIMUM RECORDED PRESSURE: 2539 PSIA	
MAXIMUM RECORDED TEMPERATURE: 158 DegF	
SHORT JOINTS: 3929-3951 FT & 4956-4978 FT	

TDL TAGGED AT: 5946 FT					
MAIN LOG RUN WITH 0 PSIG SURFACE PRESSURE					
CYCLE SKIPPING DUE TO GOOD BOND; CAUSING TT TO READ HIGH					
EXPECTED FREE PIPE AMPLITUDE: 80 mV					
THANK YOU FOR CHOOSING SCHLUMBERGER.					
CREW: 391- WALEED AZIZ, KELLY JOHNS, & CHRIS ARNOLD					
<div> <div>RUN 1</div> <div> <div>SERVICE ORDER #:</div> <div>PROGRAM VERSION:</div> <div>FLUID LEVEL:</div> </div> <div> <div>BUKB-00035</div> <div>19C0-187</div> <div>24 ft</div> </div> </div>			<div> <div>RUN 2</div> <div> <div>SERVICE ORDER #:</div> <div>PROGRAM VERSION:</div> <div>FLUID LEVEL:</div> </div> </div>		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

[illegible]

	RUN 1	RUN 2
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	1	1
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91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

WITM-A 4101 PSC_16MHZ	SURFACE EQUIPMENT	
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DOWNHOLE EQUIPMENT

Equipment	Depth (ft)
MH-22	53.7
MH-22	52.1
AH-38	51.8
PSPT-A	51.8
PSC-A	
PSPT-A 3779	
PSTC	
PBMS-A 3779	48.1
10k_Sapphire_Mano	
RTD Thermometer	
GR 33659	45.0
CCL	44.9
PBMS 2782	44.3
PBMS PSTC	43.5
RST-C	43.5
RSCH-A 298	
RSC-E	
RSS-A 255	
RSXH-A	
RSX-E 425	
RSC-A Far	34.4
RSC-A PNG	
RSC-A Nea	
RSX-A PNG	33.9

SCMT-CB
SCMC-CA
SECH-CA 8139
CMIR-AG
SCMS-CB 8317
SCMX-CA

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 1.72 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET



MAIN PASS 0 PSI

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC. Well: TWIN CREEK 12-4D1

Input DLIS Files

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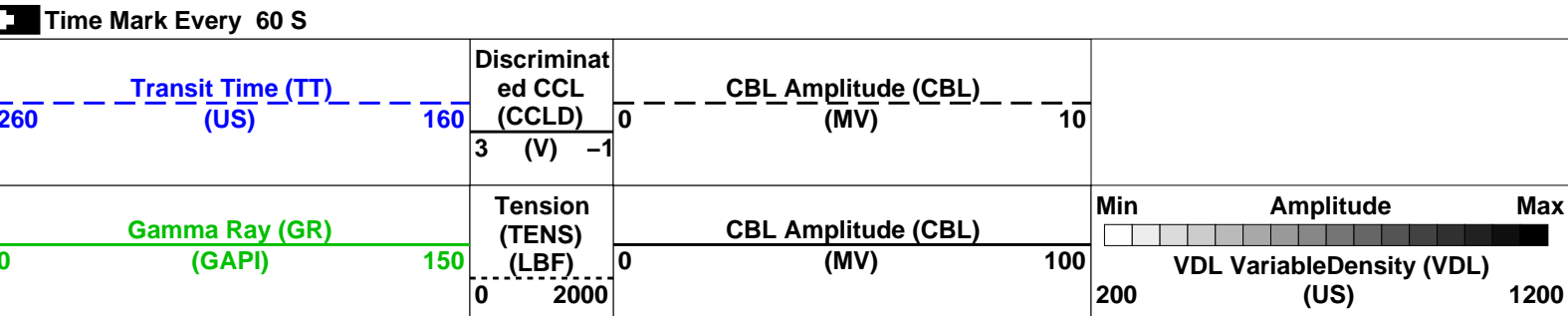
Output DLIS Files

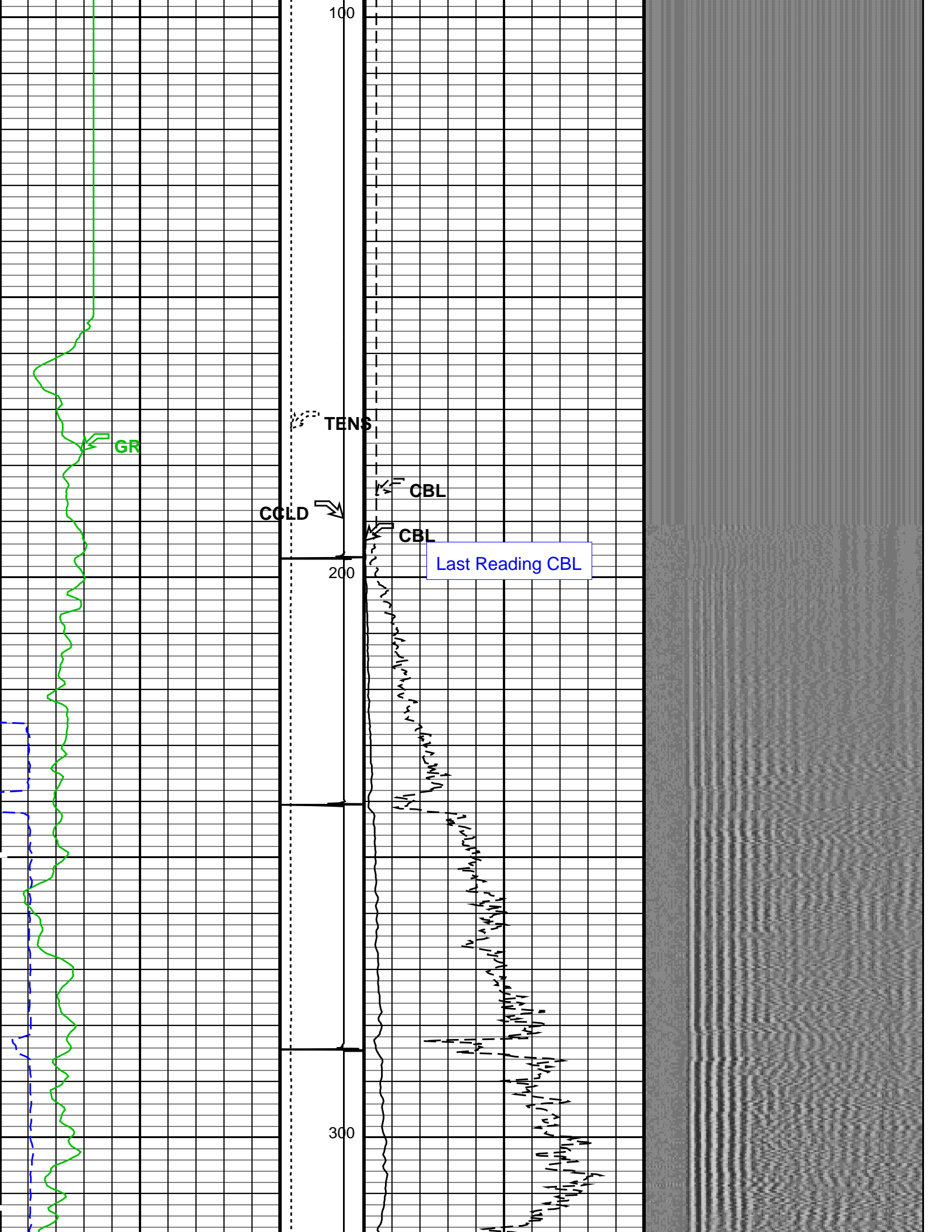
DEFAULT SCMT_RST_PSP_005PUP FN:4 PRODUCER 23-May-2012 20:11 5969.5 FT 96.0 FT

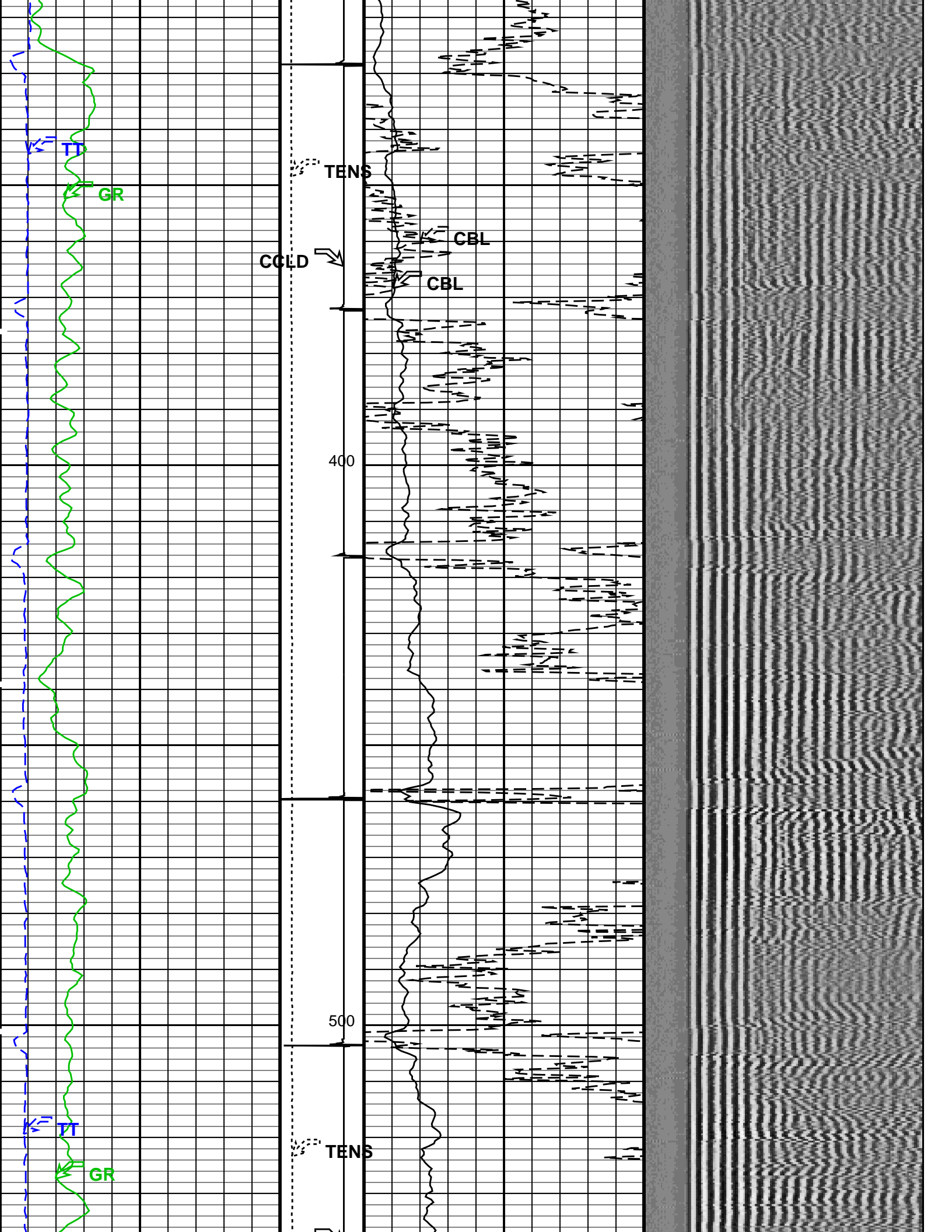
OP System Version: 19C0-187

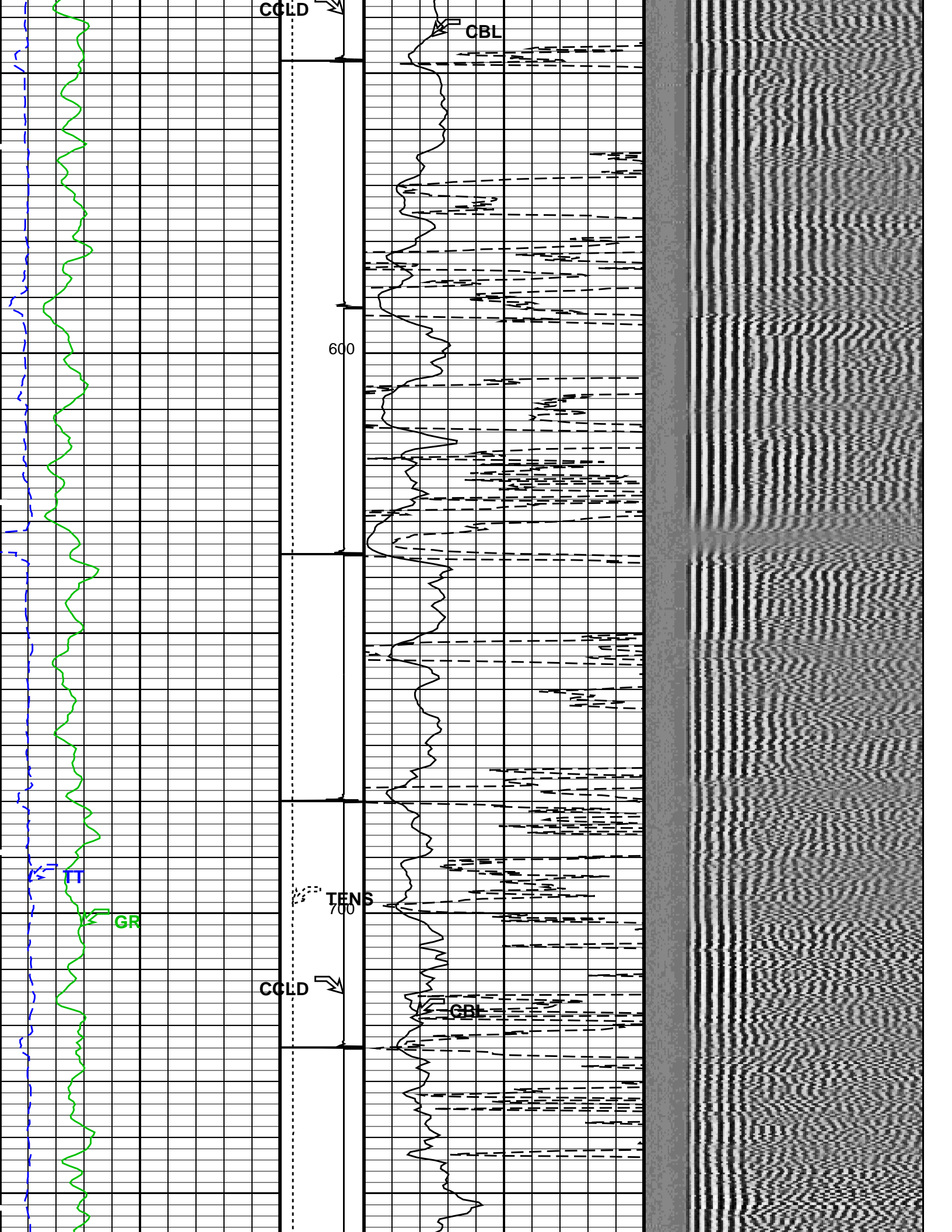
SCMT-CB SRPC-5095-H2-2011-OP1 RST-C SRPC-5095-H2-2011-OP1
PSPT 19C0-187

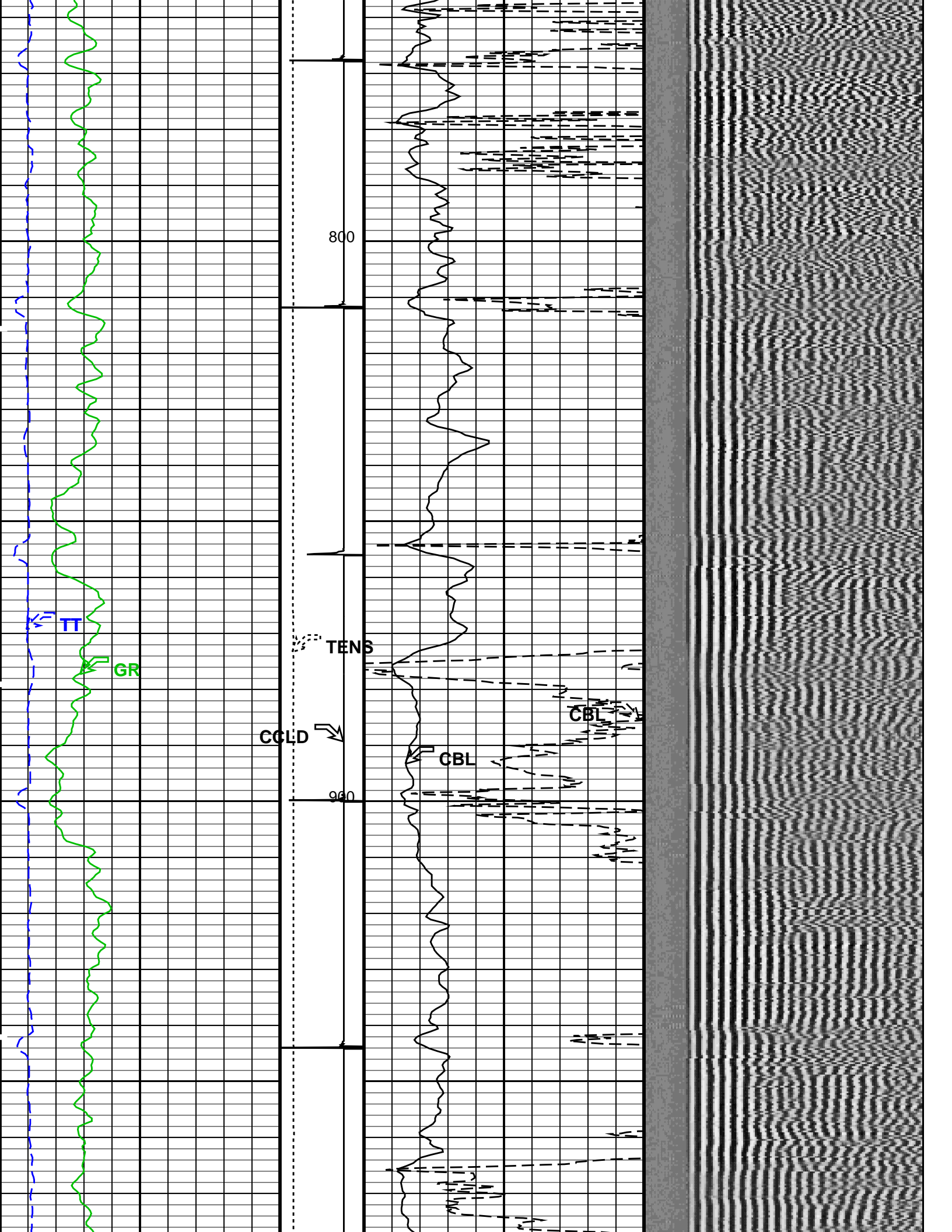
PIP SUMMARY

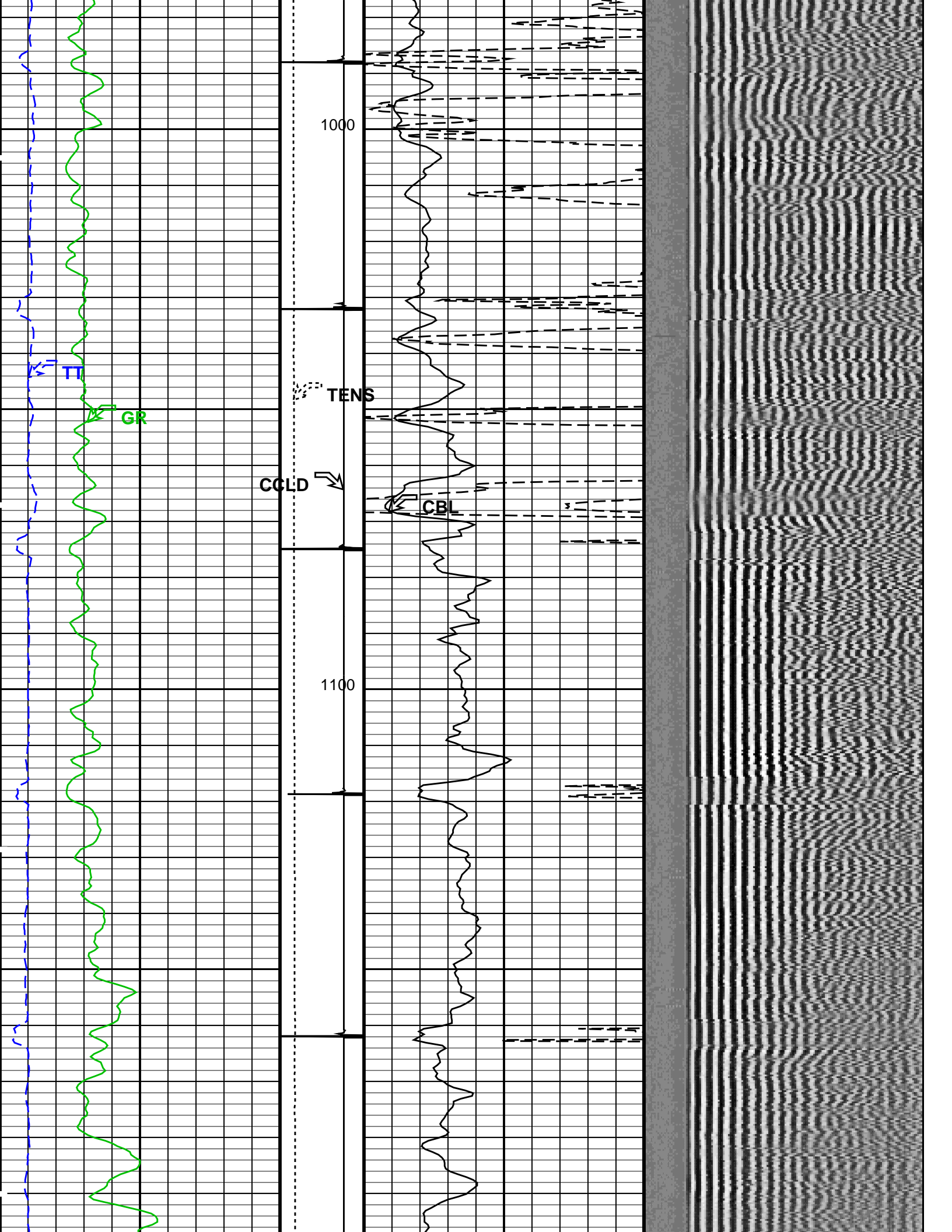


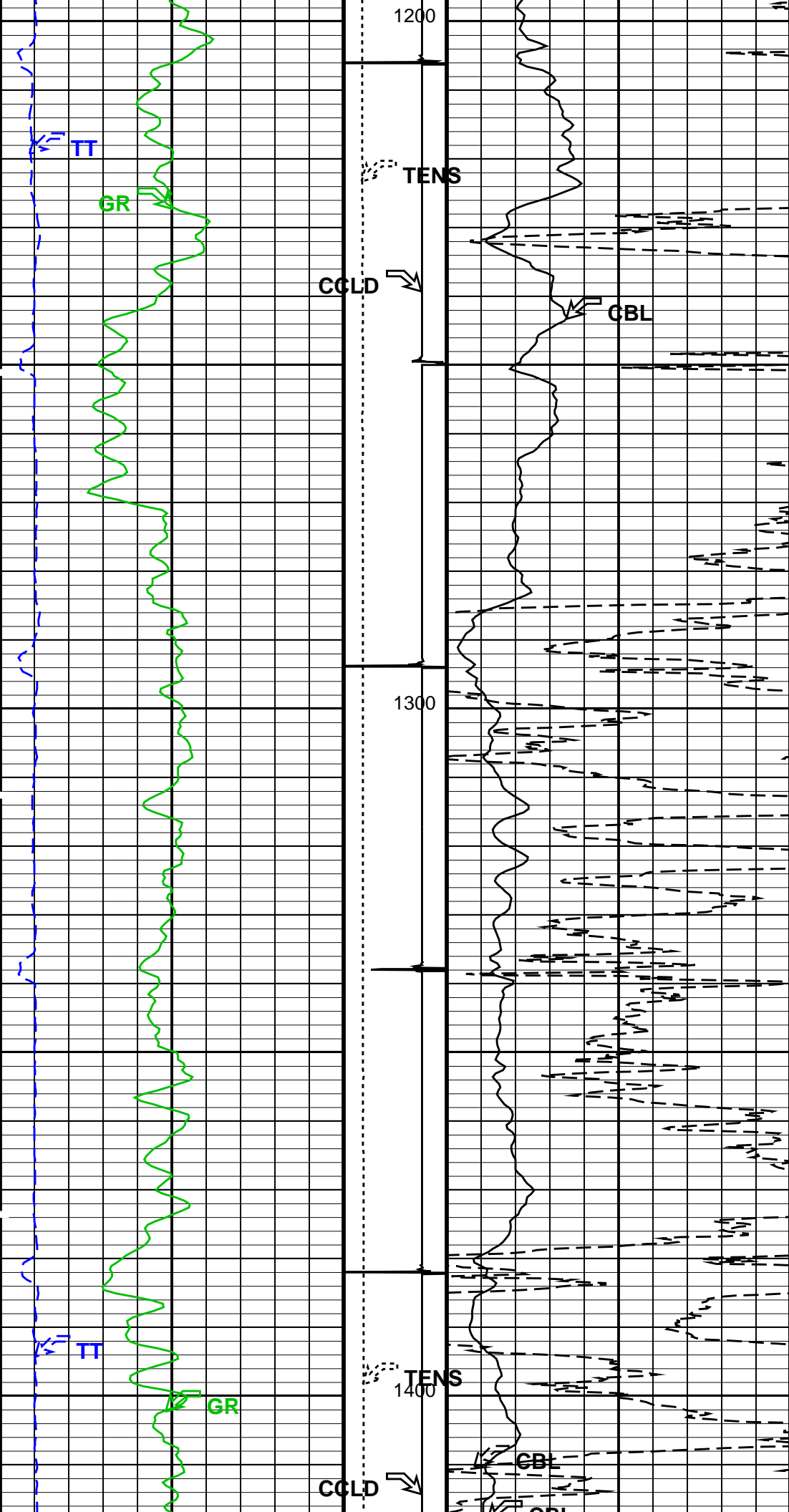


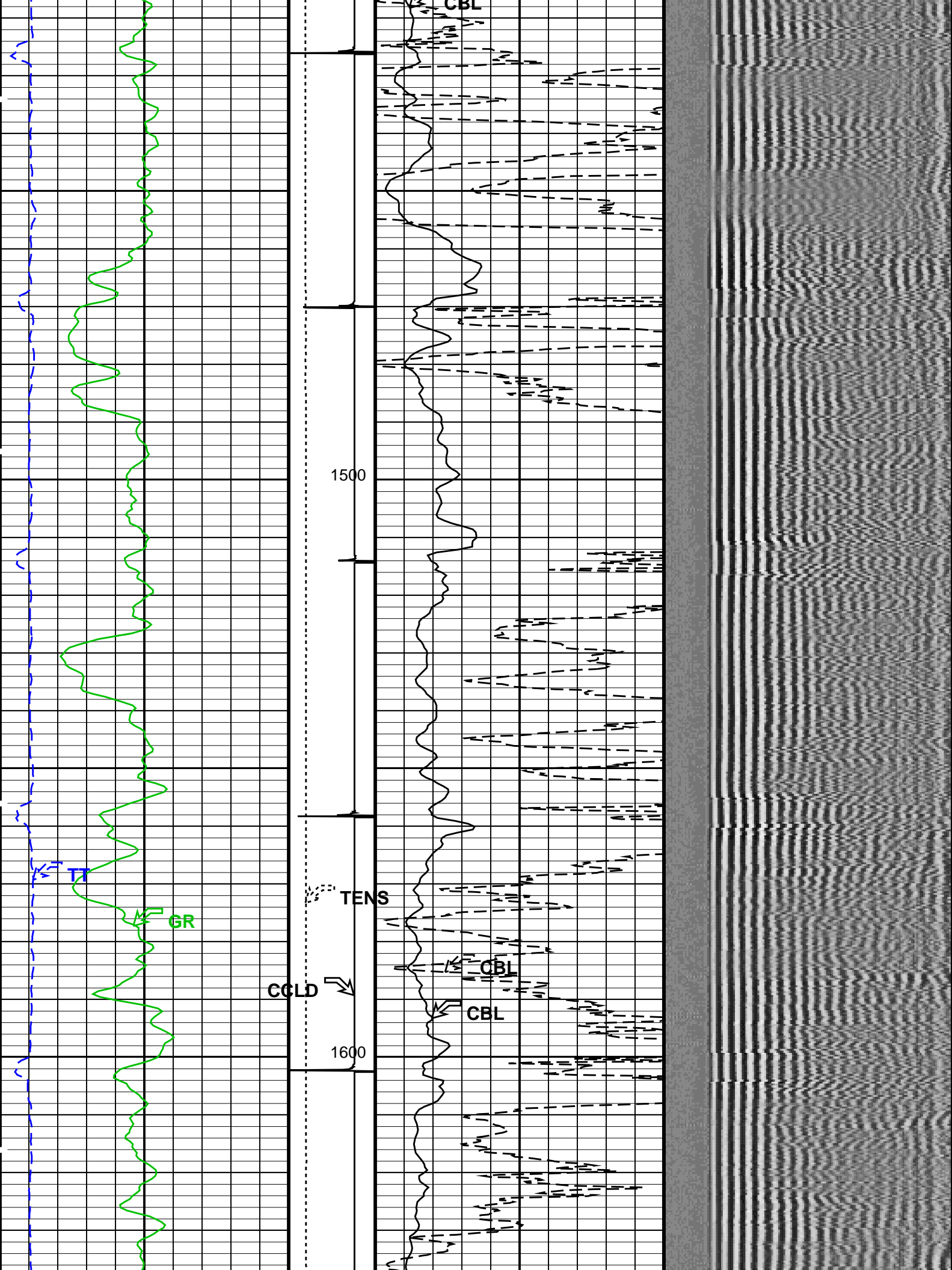


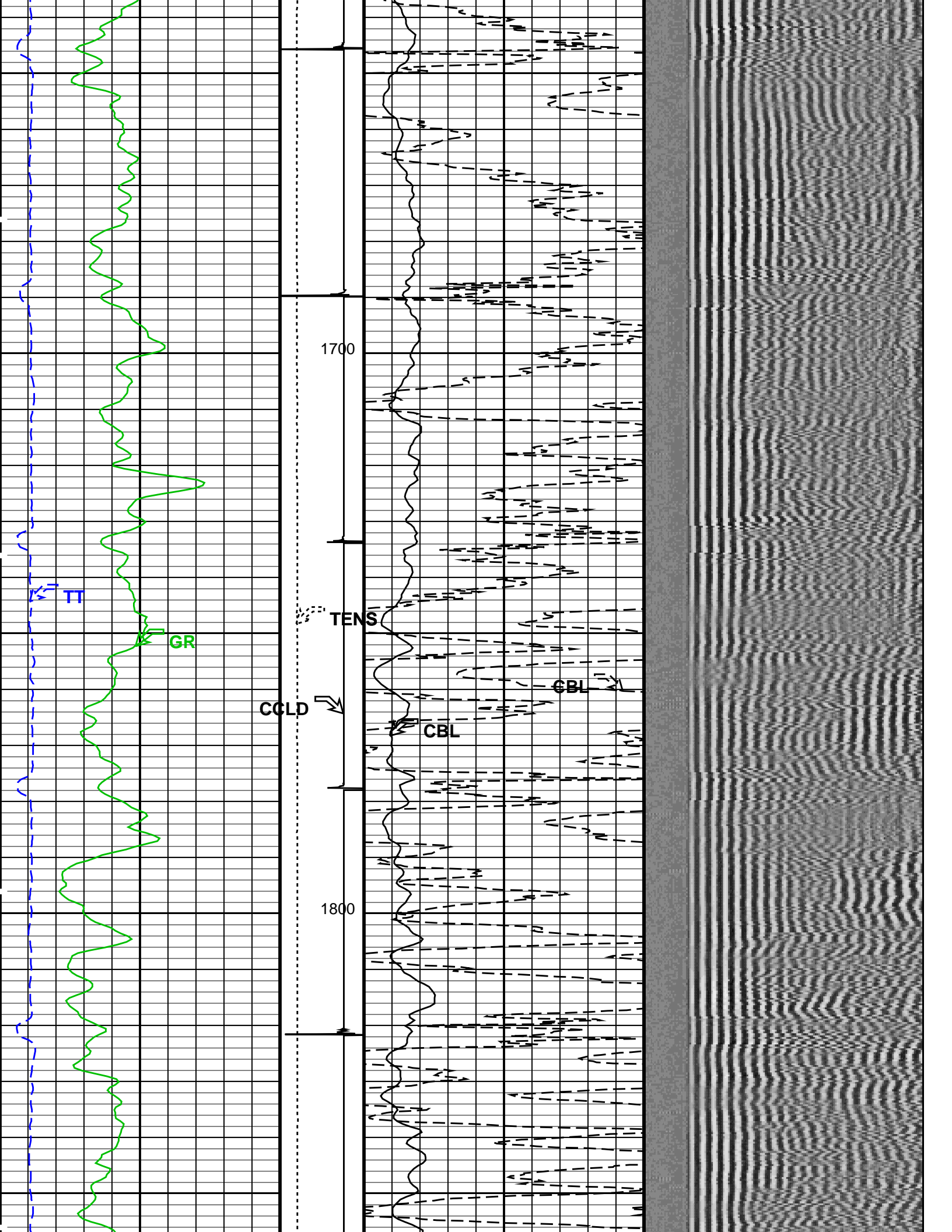


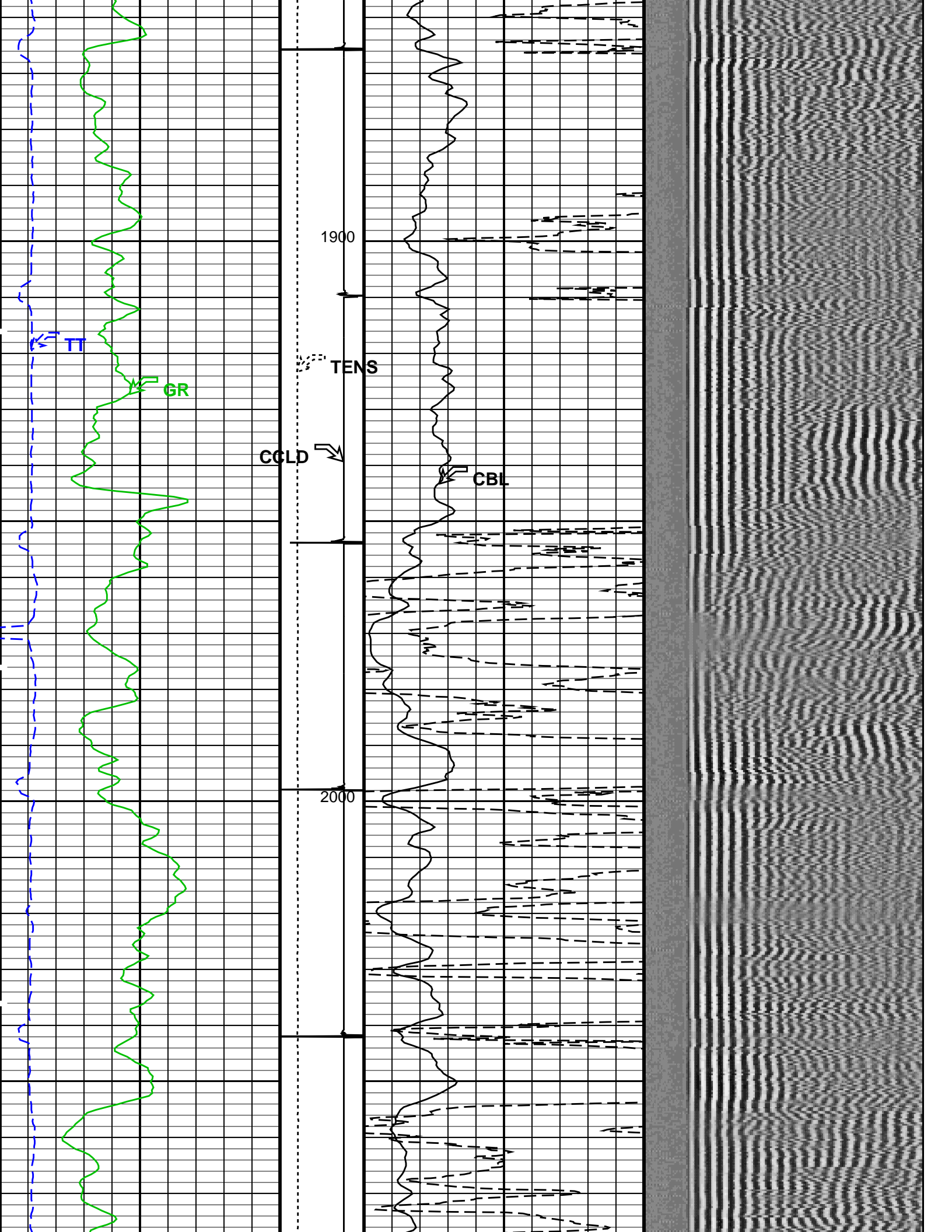


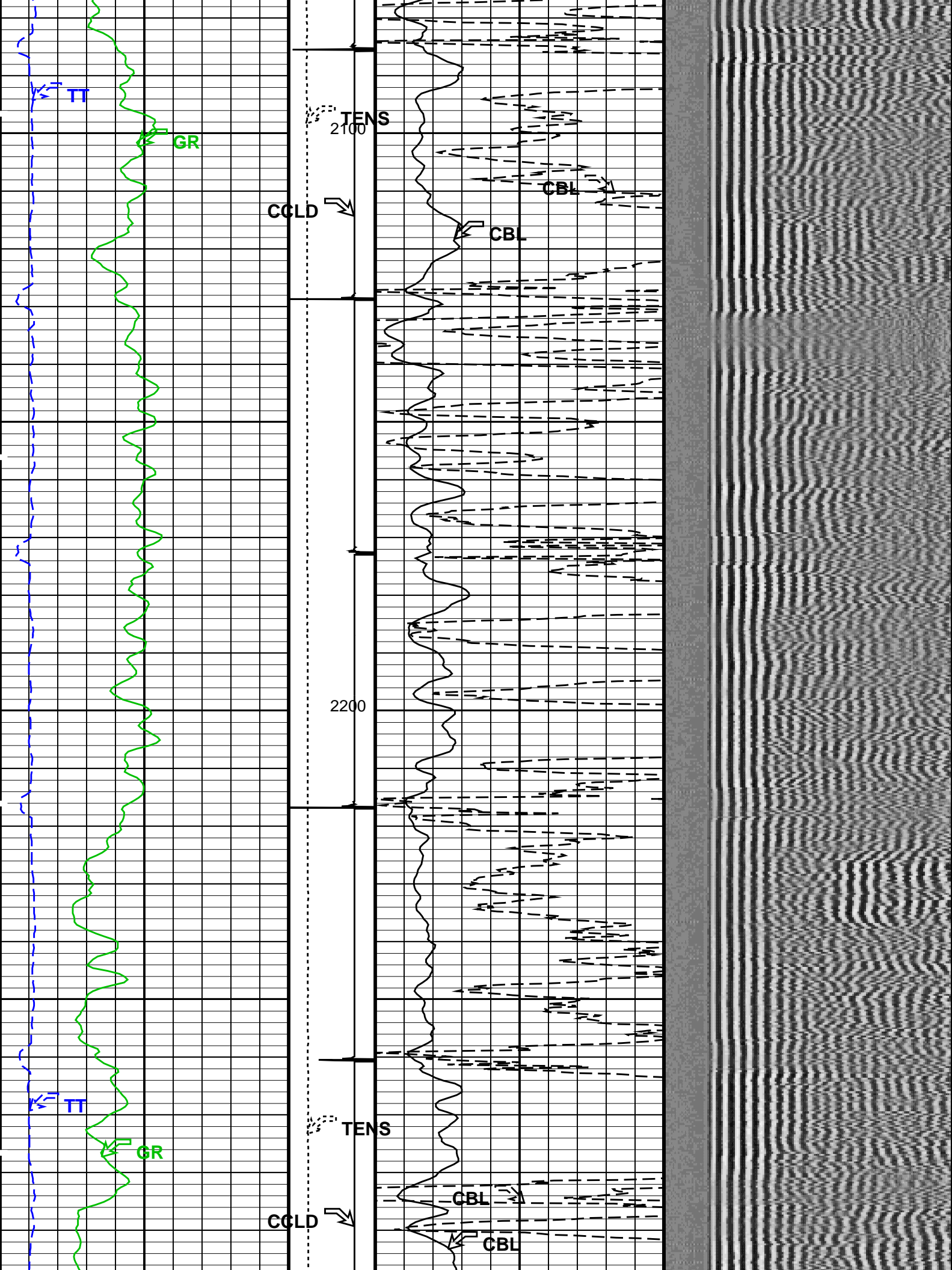


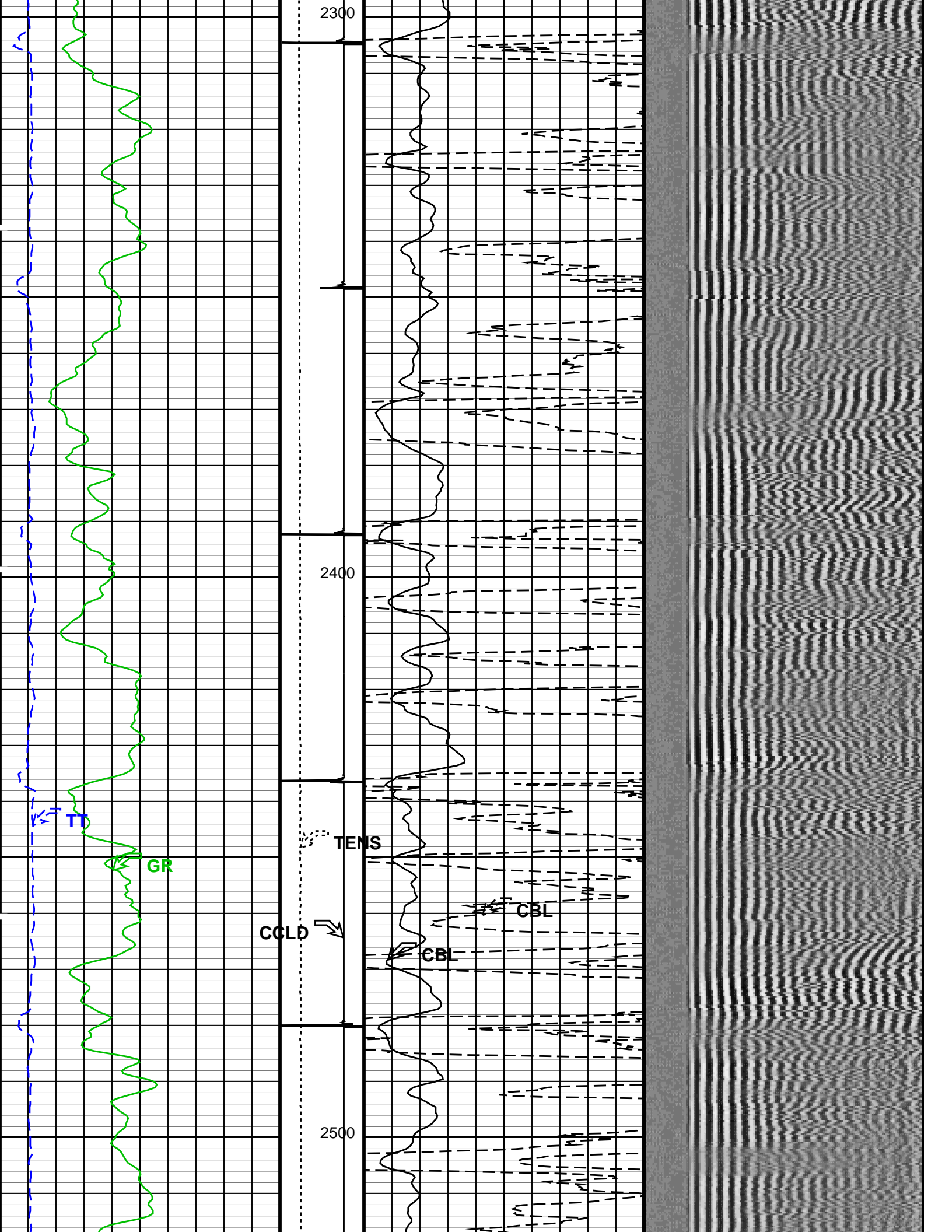


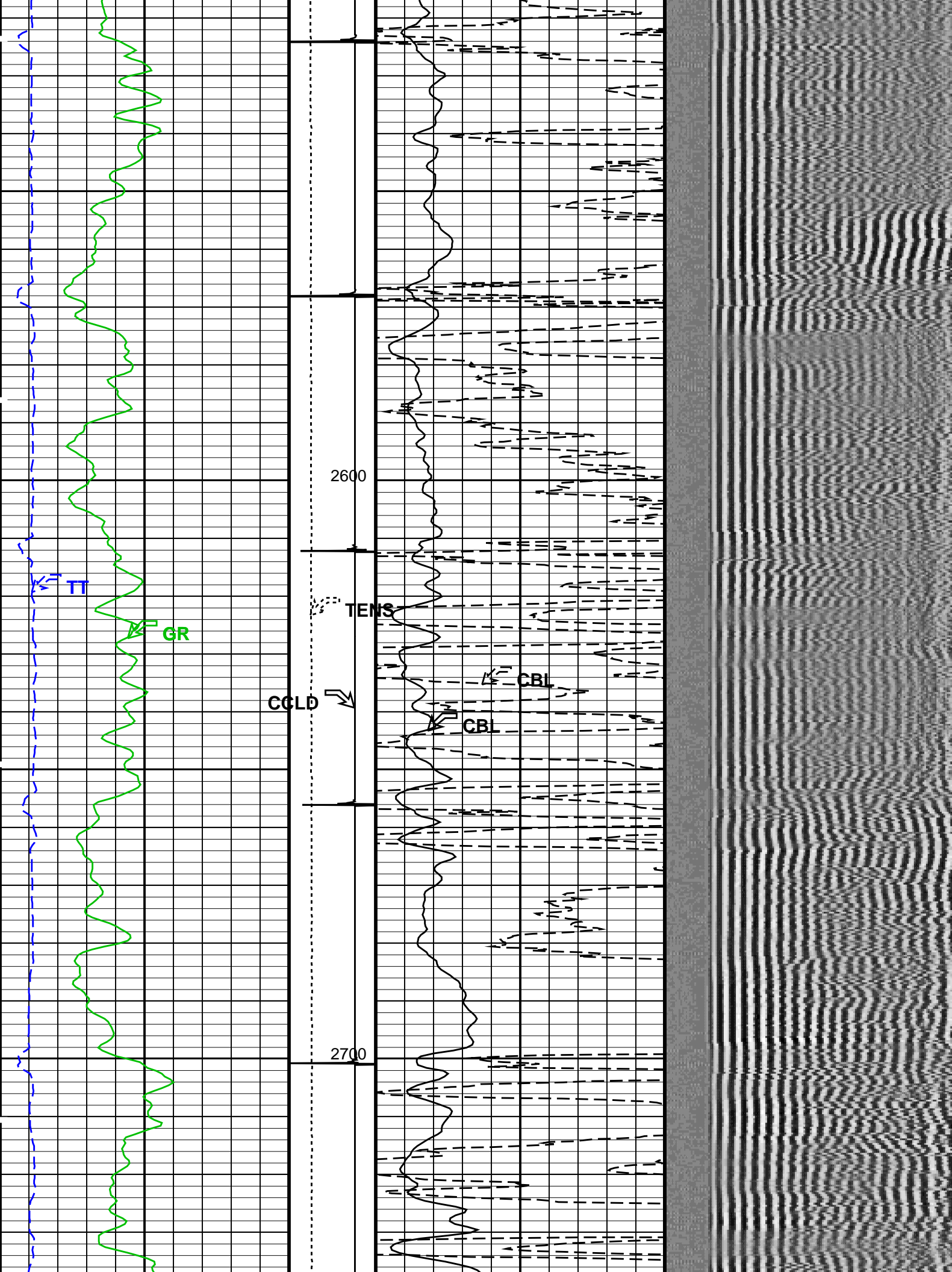


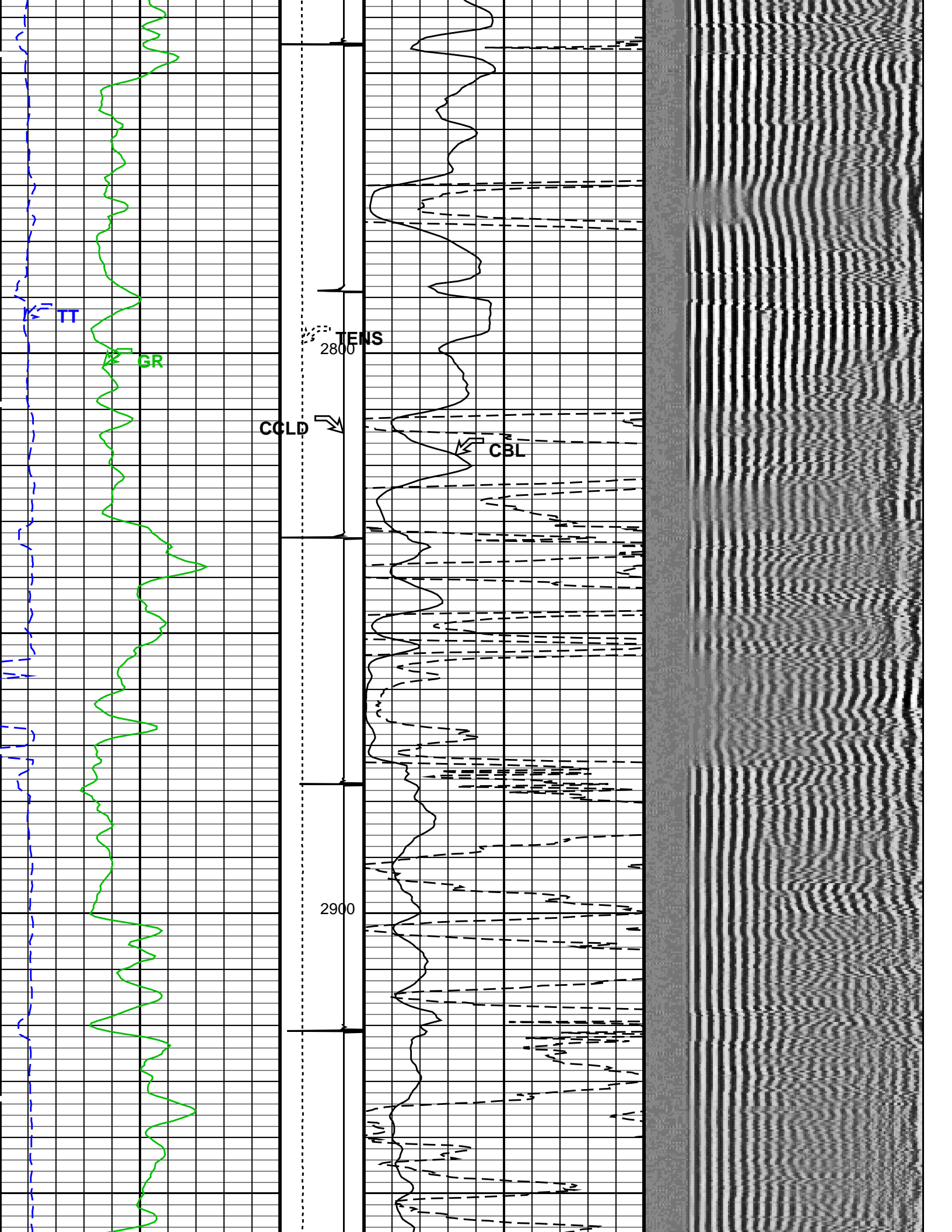


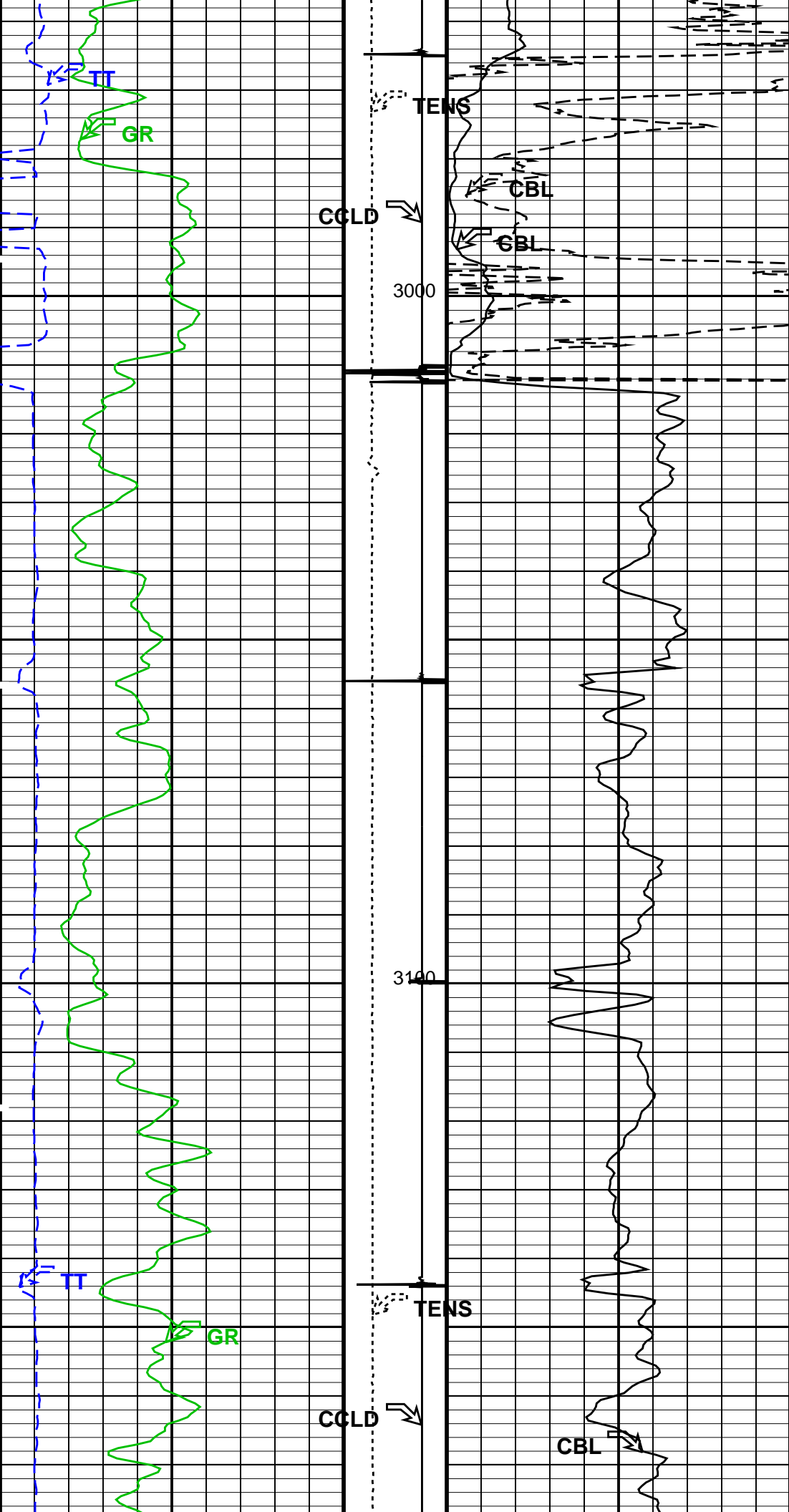


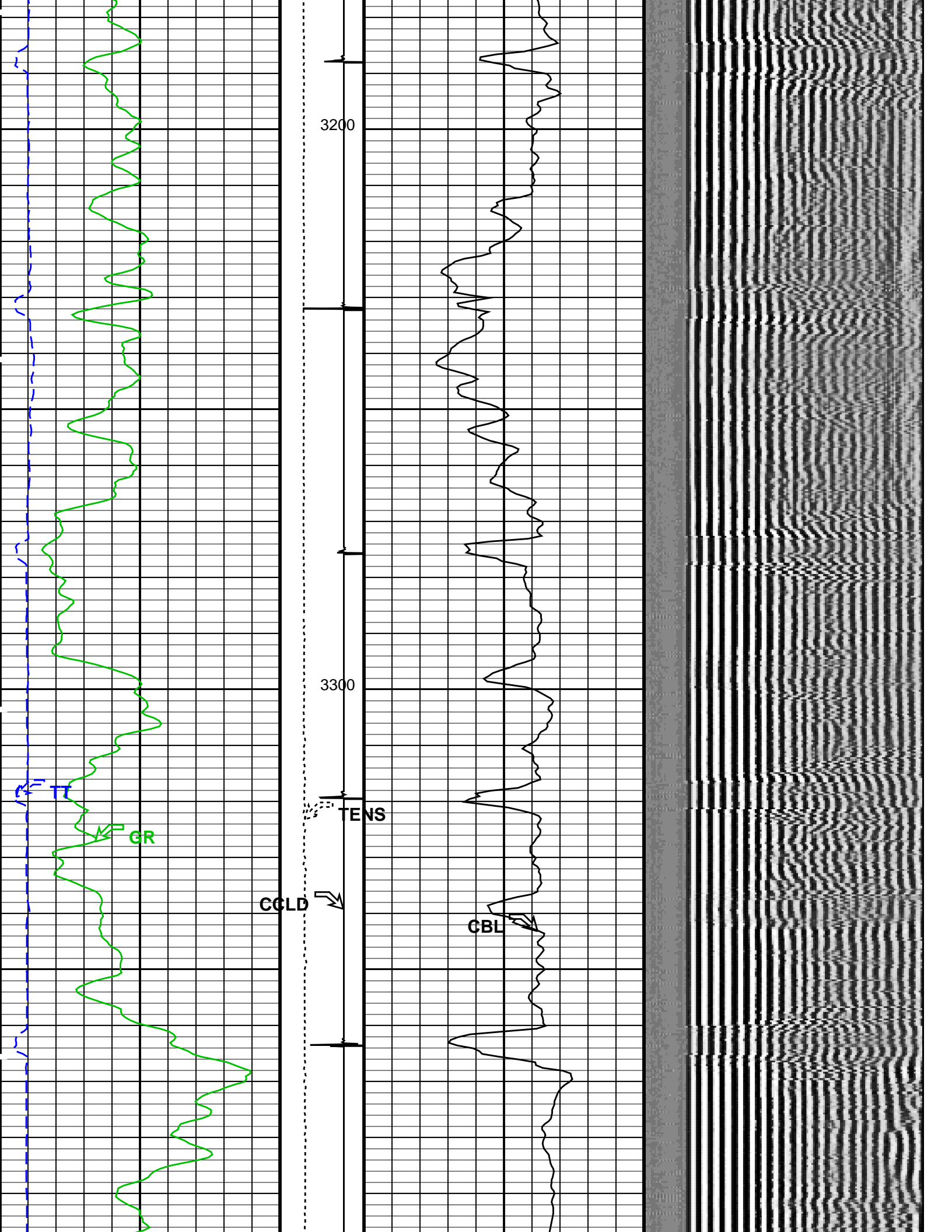


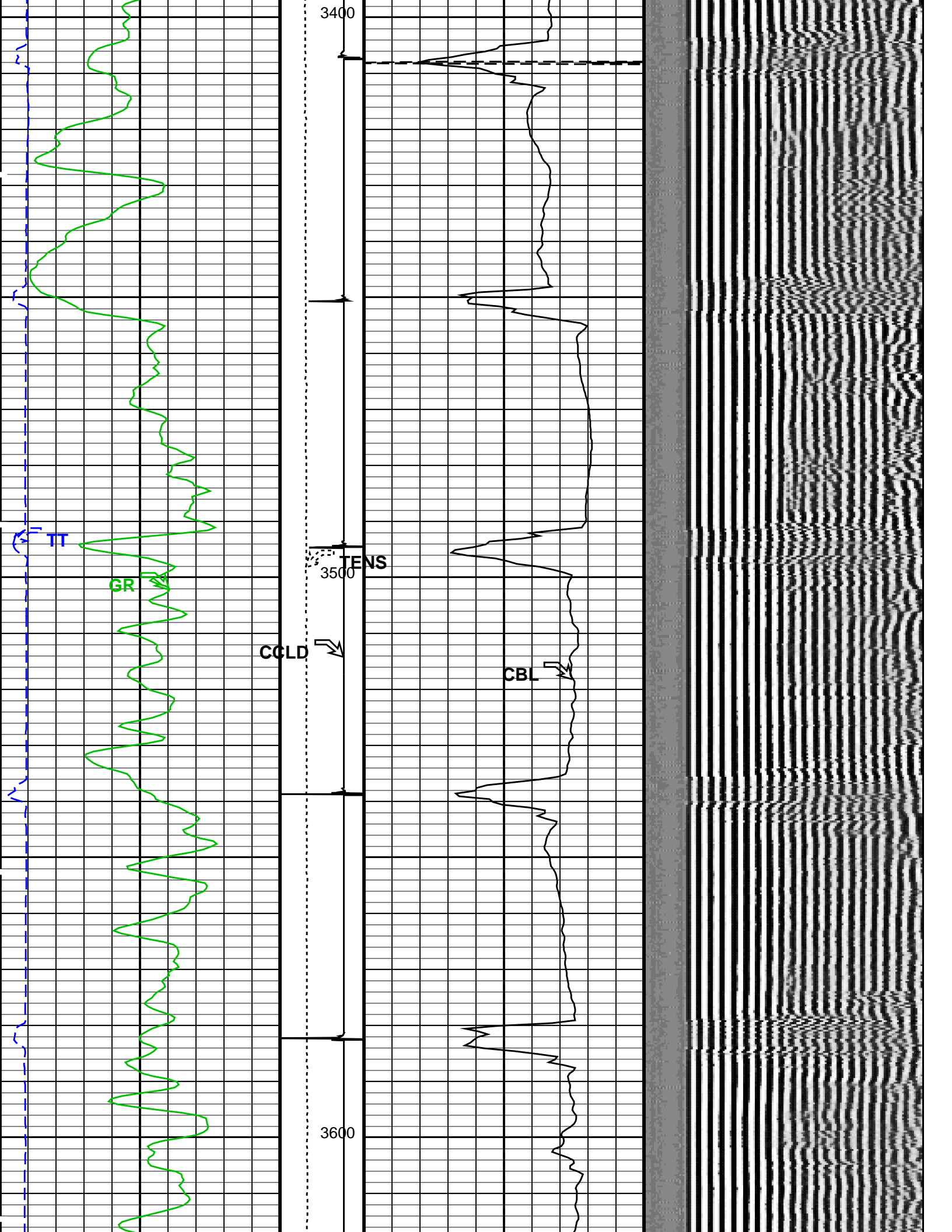


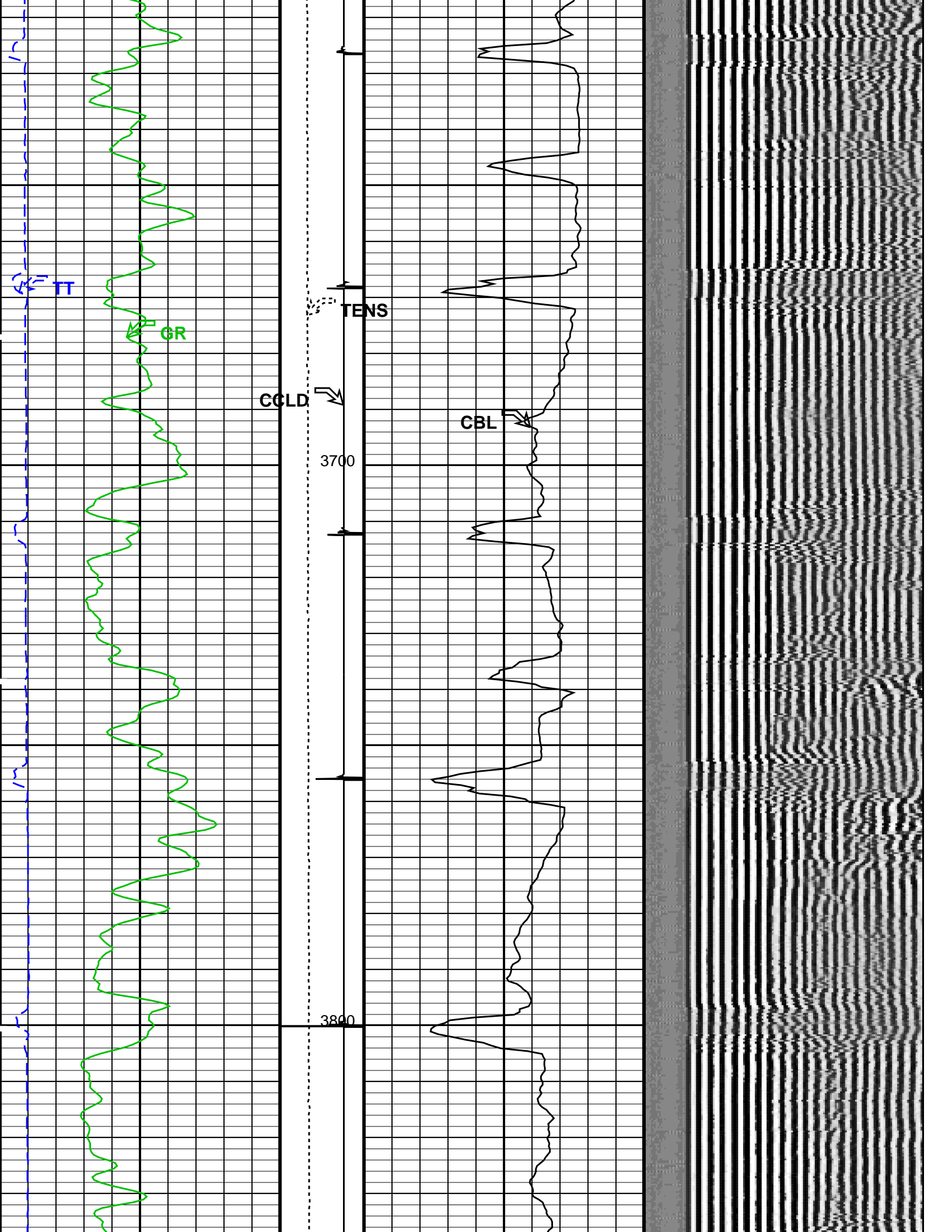


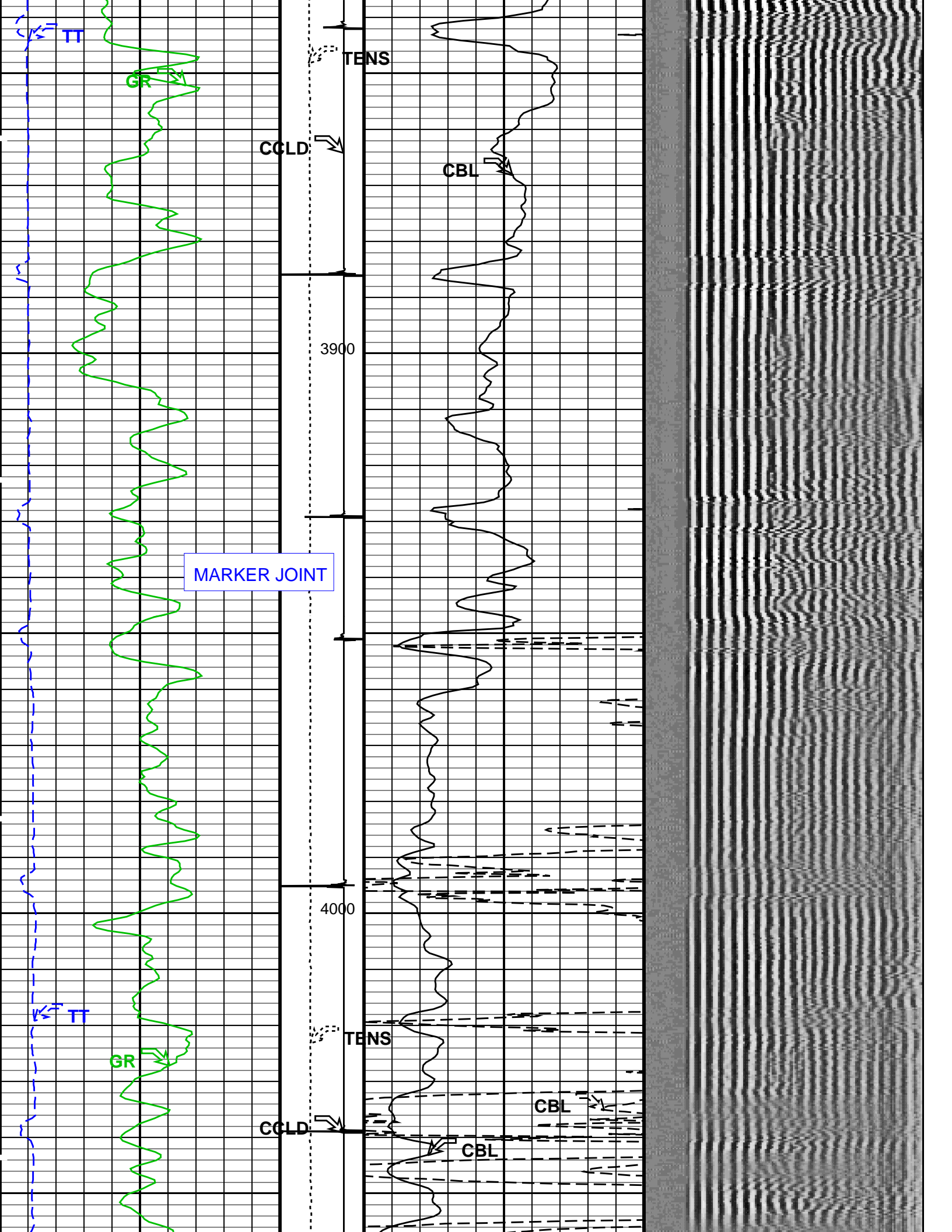


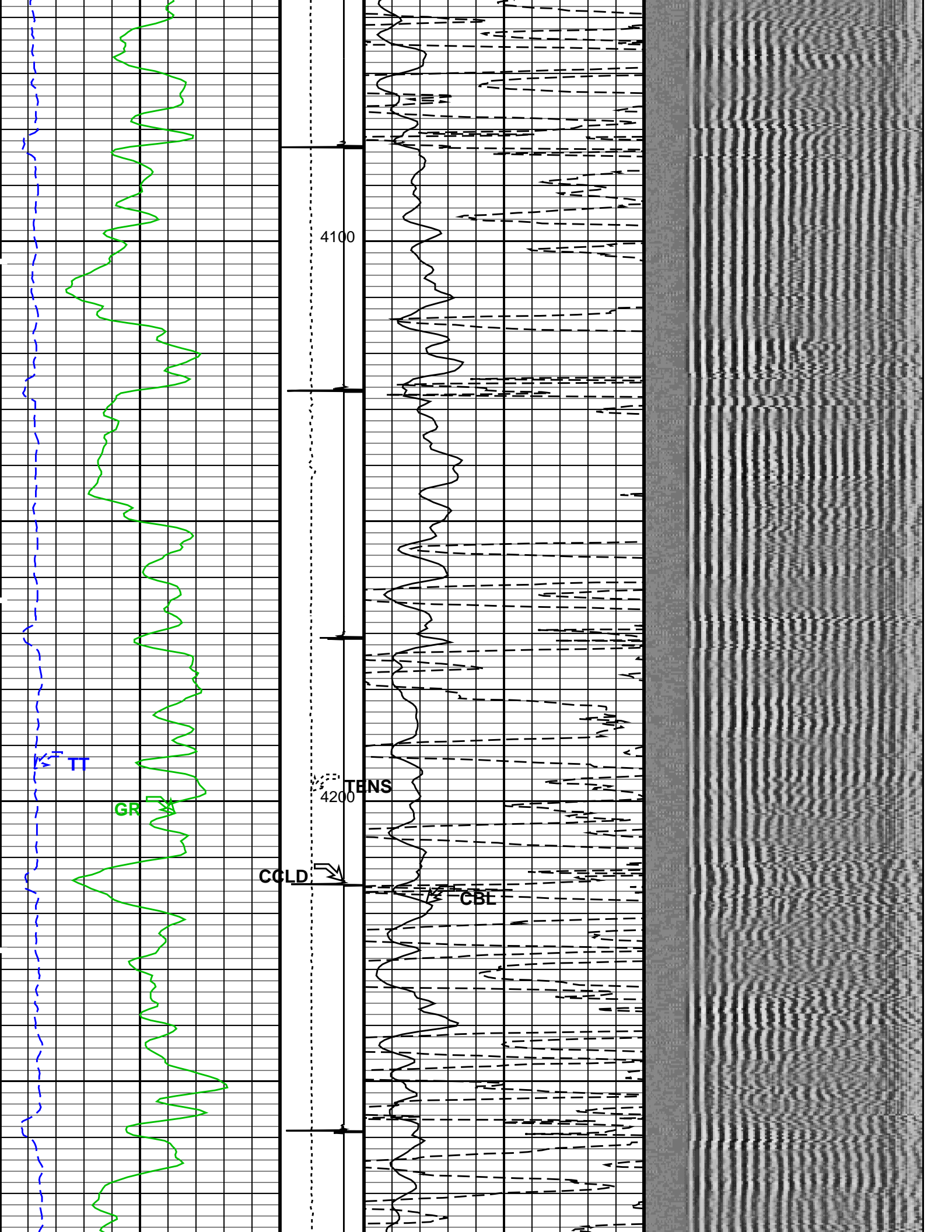


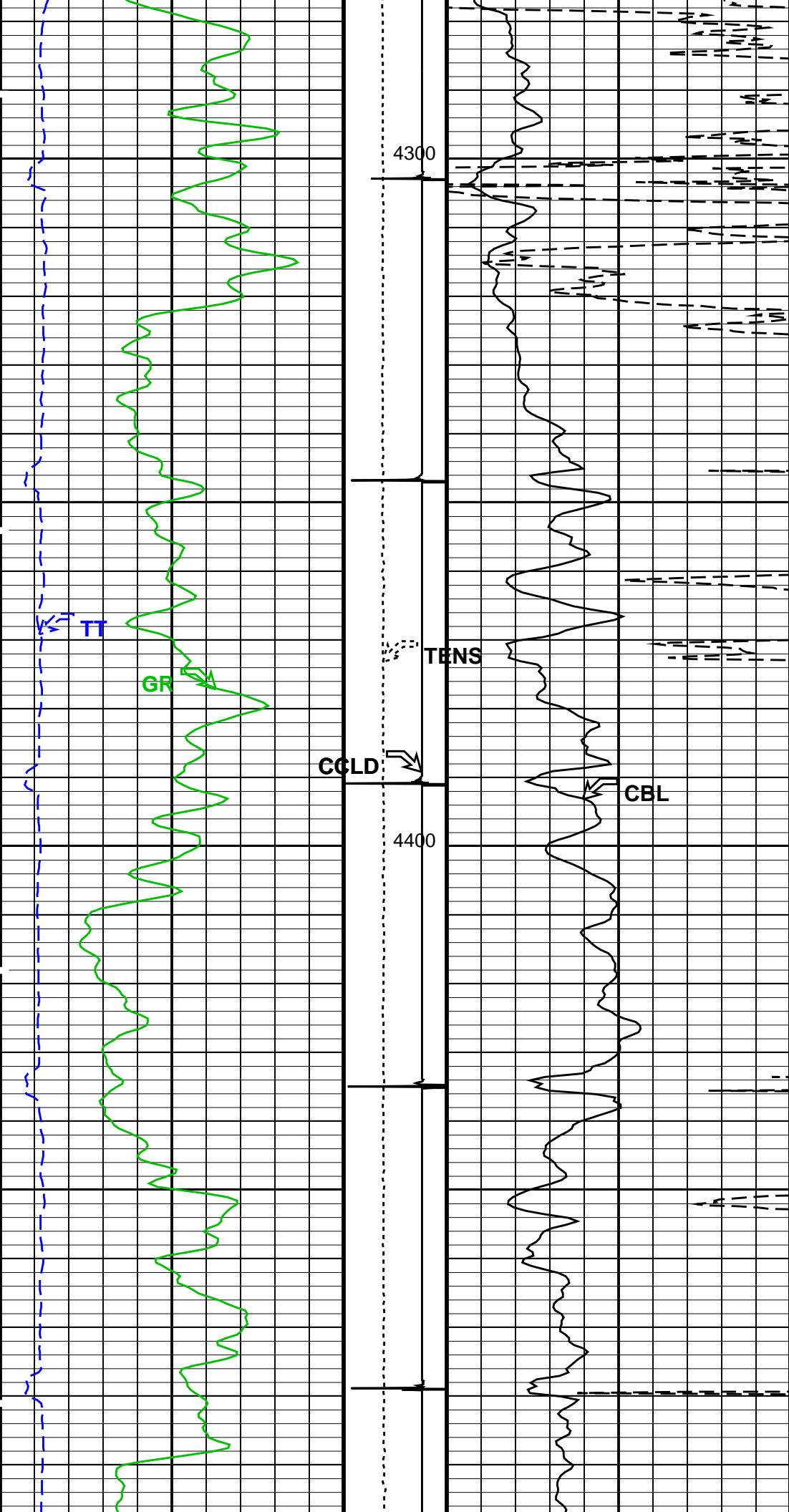


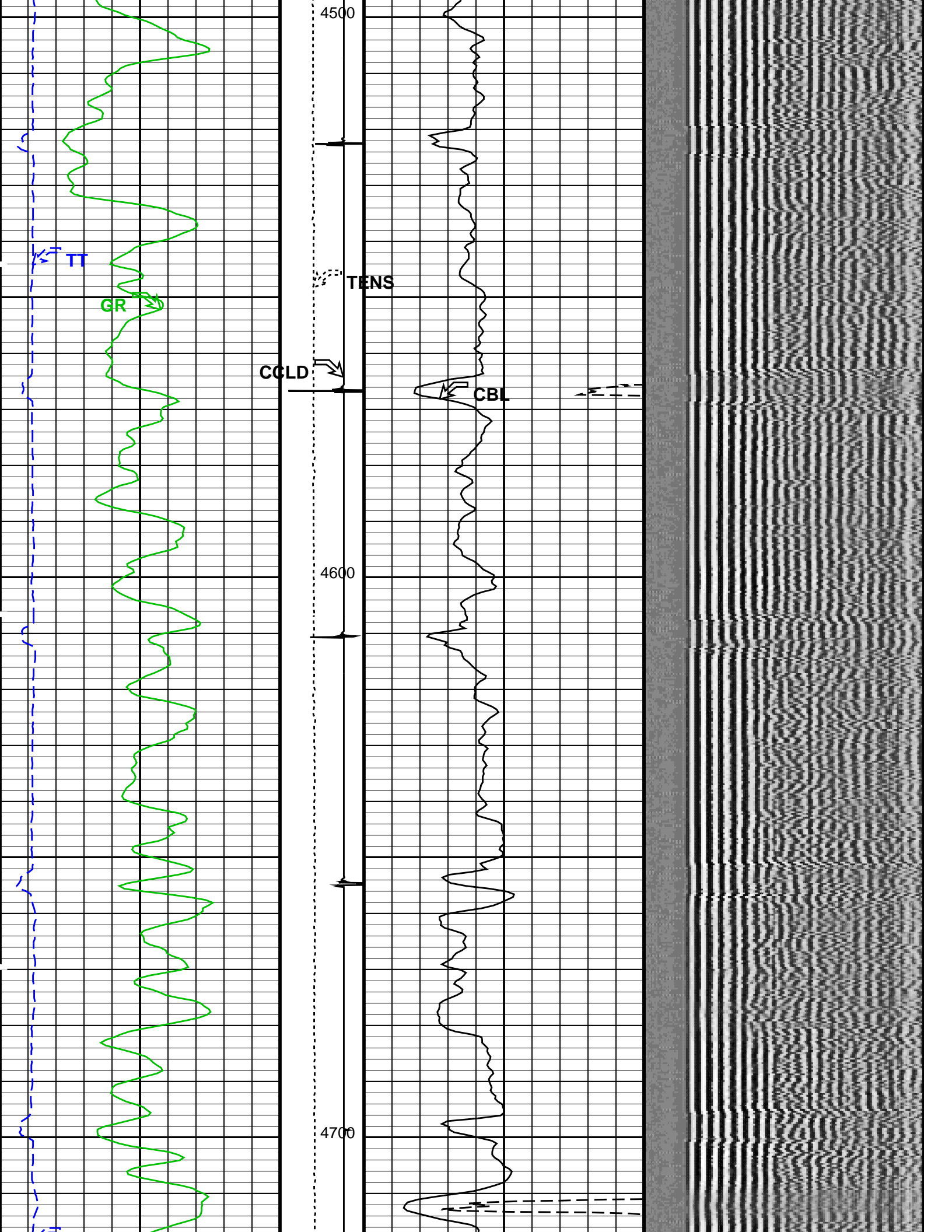


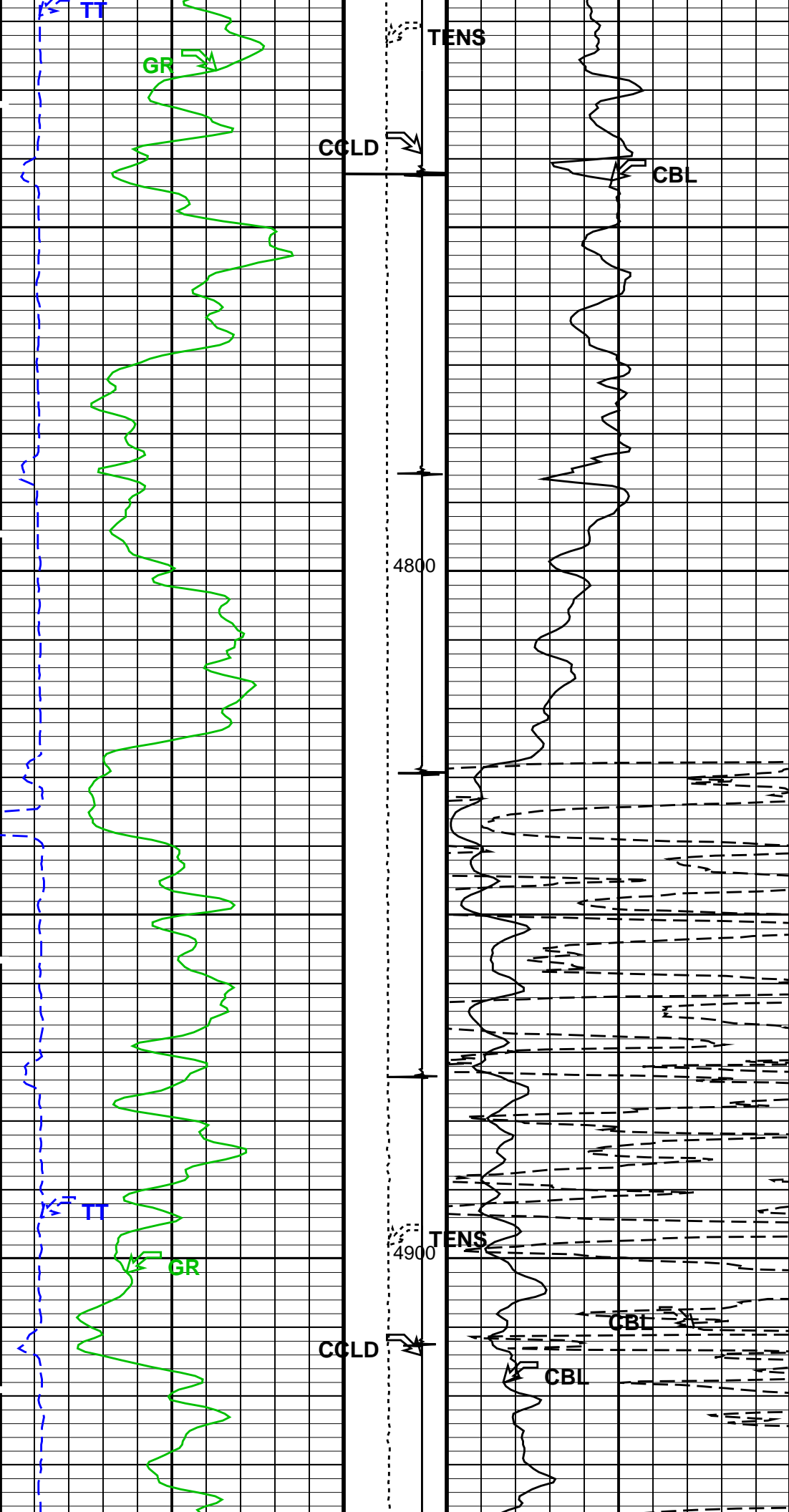


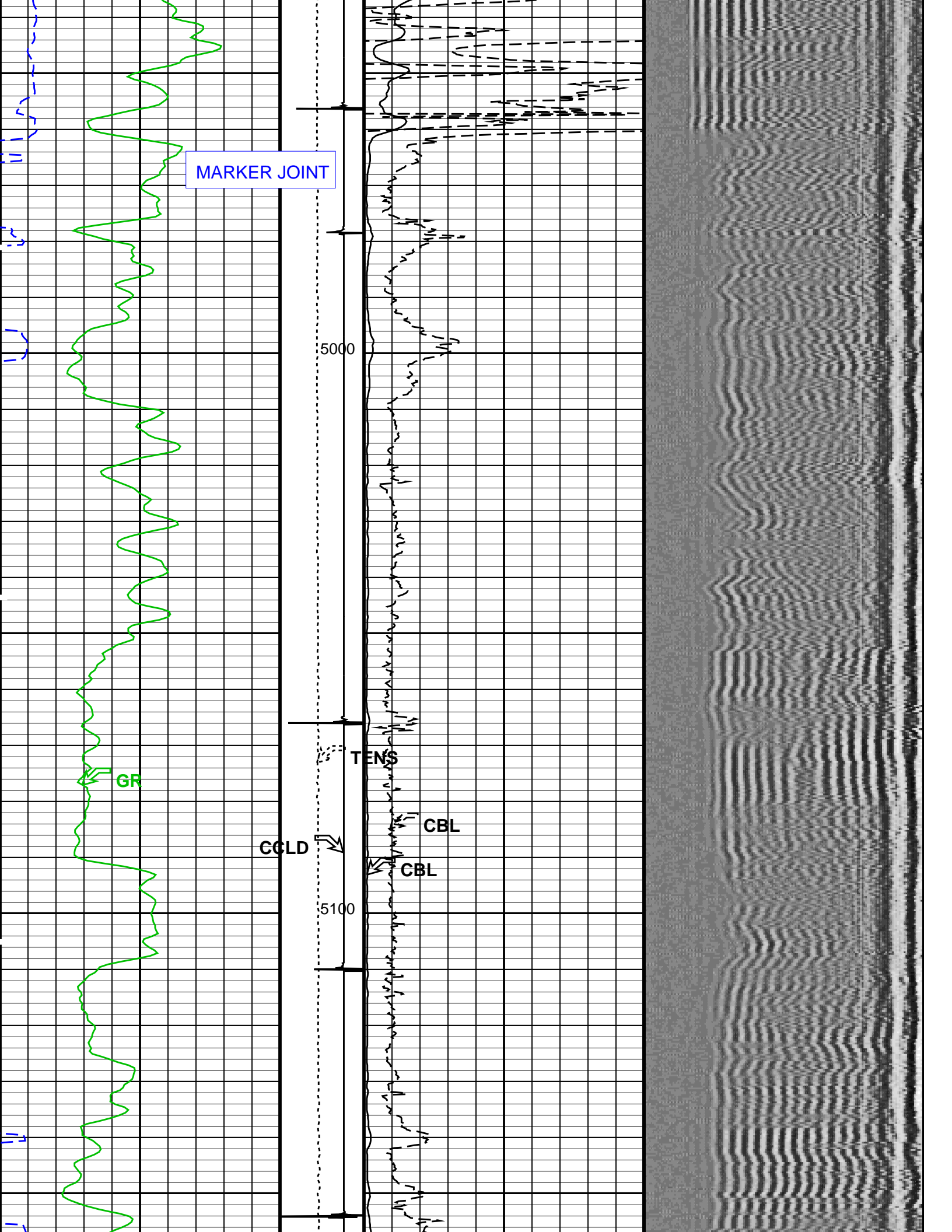


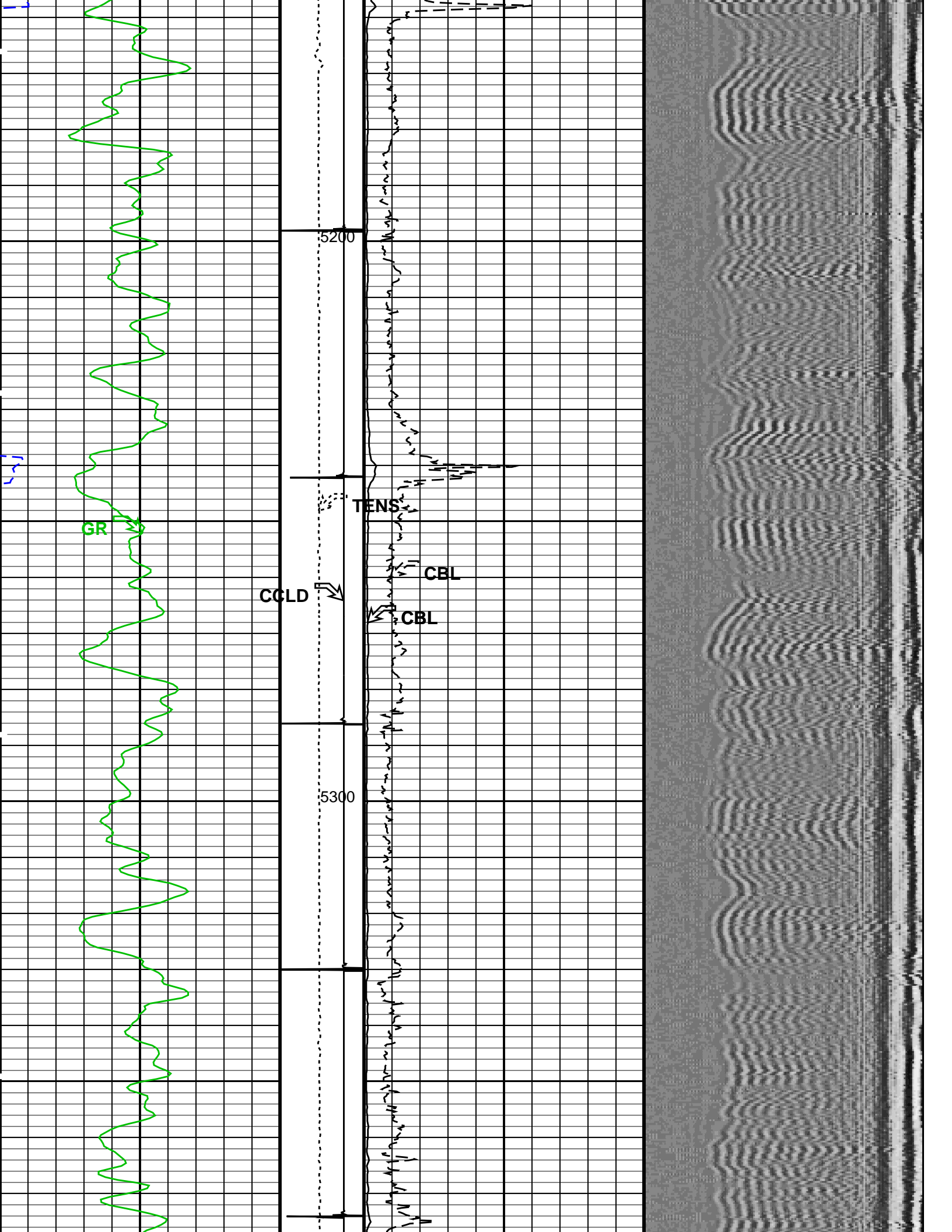


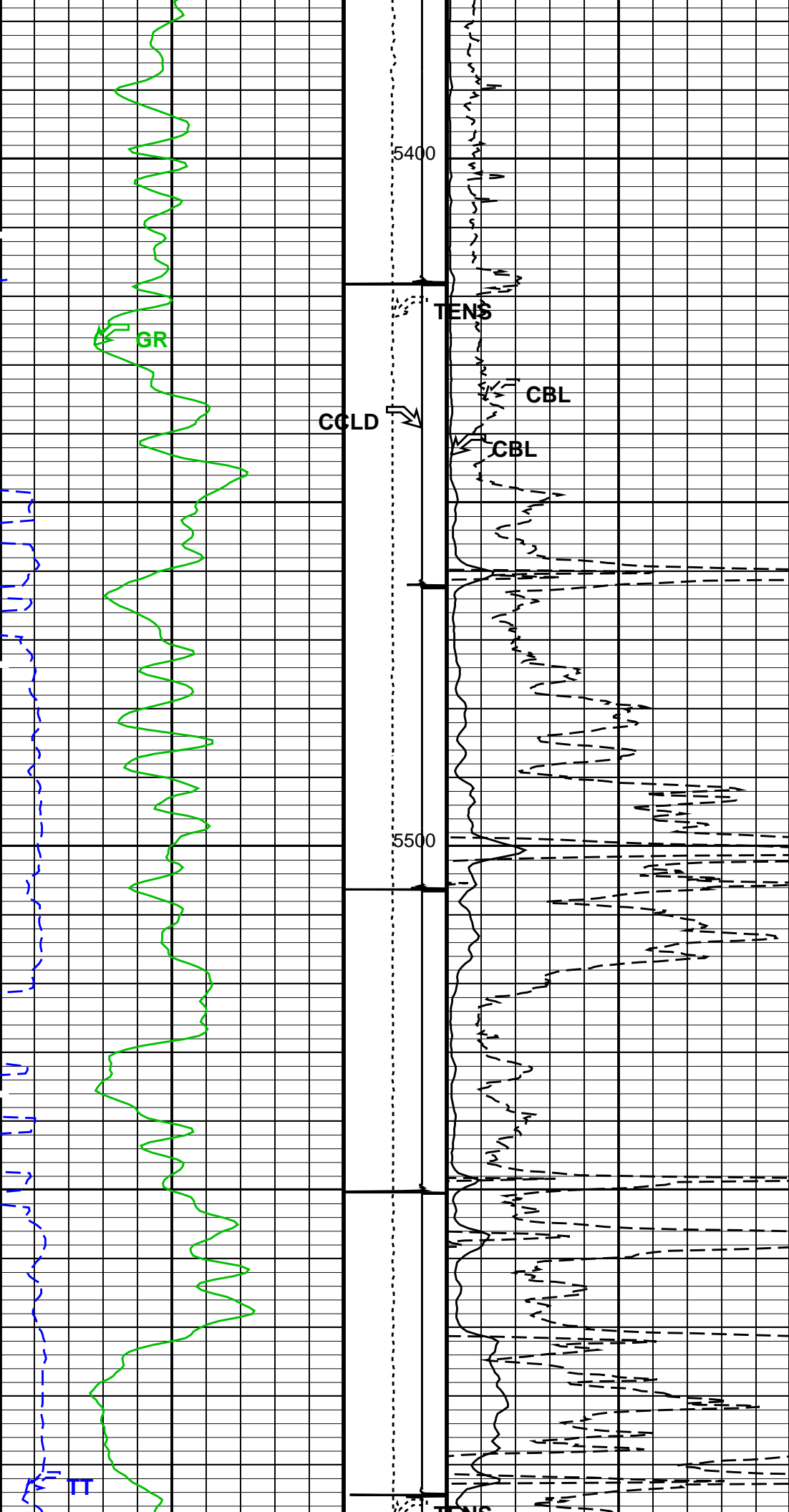


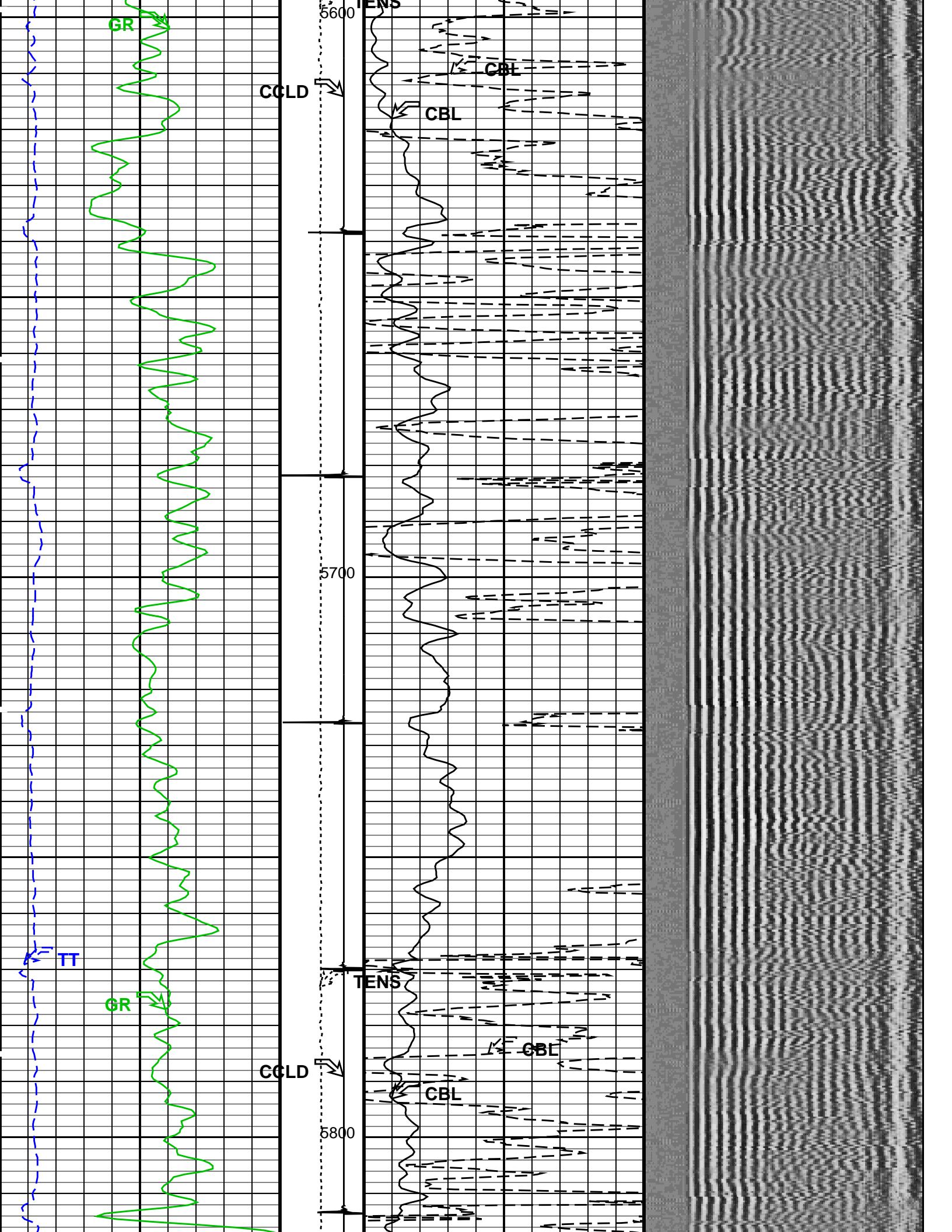


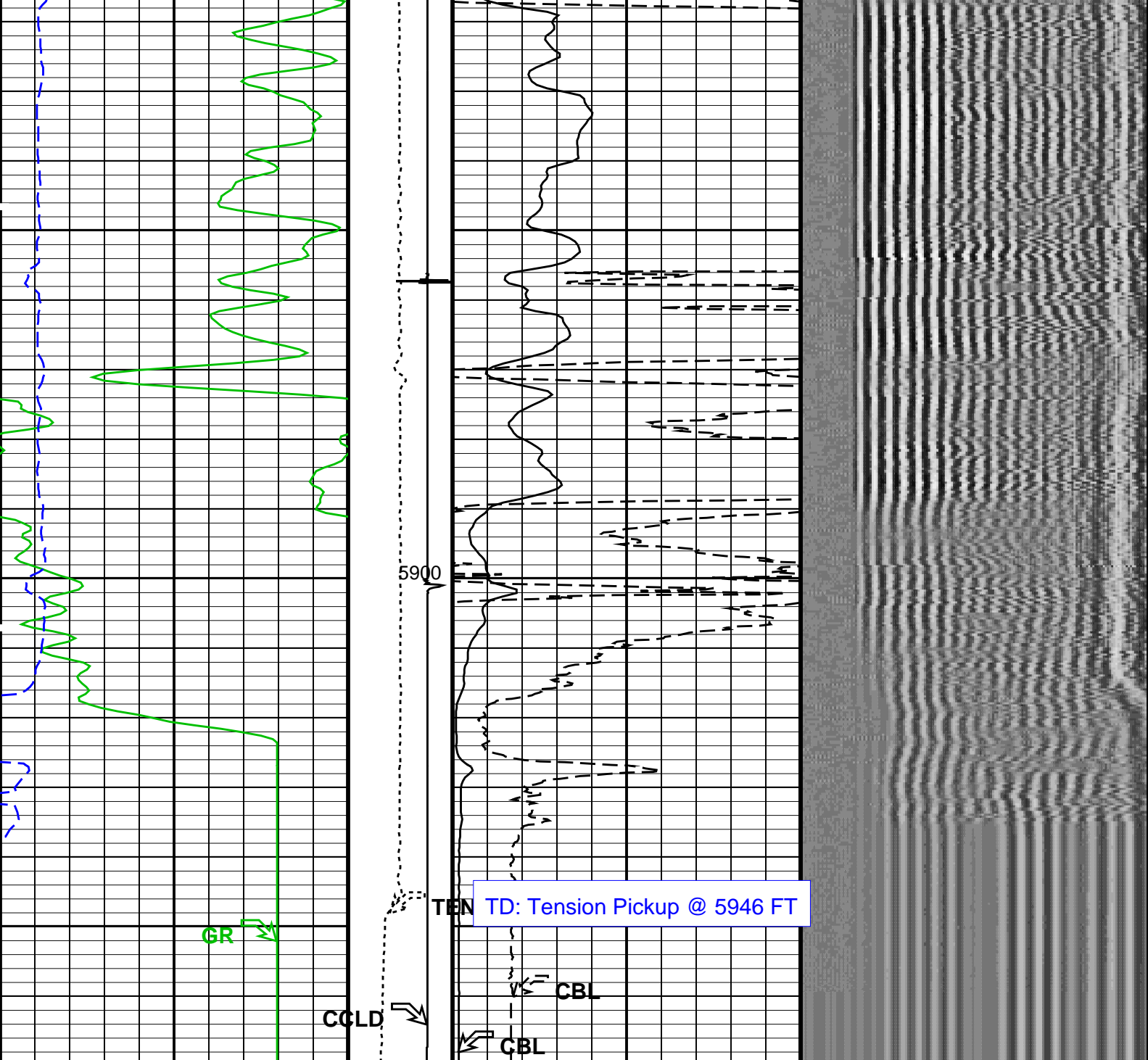












Gamma Ray (GR) (GAPI)	Tension (TENS) (LBF)	CBL Amplitude (CBL) (MV)	Min Amplitude Max VDL VariableDensity (VDL) (US)
260 Transit Time (TT) (US)	Discriminat ed CCL (CCLD) (V)	CBL Amplitude (CBL) (MV)	1200

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 23-May-2012 20:11

OP System Version: 19C0-187

SCMT-CB SRPC-5095-H2-2011-OP1 RST-C SRPC-5095-H2-2011-OP1
PSPT 19C0-187

<<<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	0.572185 MV (100% Cement)
			1.53691 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.27087 MV (100% Cement)
			8.02441 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	15-SEP-2011		
CBL Correction Factor	0.0704035	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.0943008	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0954480		
MAP 3 Correction Factor	0.0954593		
MAP 4 Correction Factor	0.103213		
MAP 5 Correction Factor	0.0887287		
MAP 6 Correction Factor	0.0833684		
MAP 7 Correction Factor	0.0874583		
MAP 8 Correction Factor	0.0870242		

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	228.797	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	342.797	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	206	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1.00741	
GOBO	Good Bond	1.53691	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	171.797	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	4.27087	MV
MSA	Minimum Sonic Amplitude	0.572185	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
	System and Miscellaneous		
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	8.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	5950	FT

Input DLIS Files						
DEFAULT	SCMT_RST_PSP_002LUP	FN:1	PRODUCER	23-May-2012 18:29	5961.5 FT	140.0 FT
Output DLIS Files						
DEFAULT	SCMT_RST_PSP_005PUP	FN:4	PRODUCER	23-May-2012 20:11		

Company: ENCANA OIL & GAS (USA) INC.

Well: TWIN CREEK 12-4D1

Input DLIS Files

DEFAULT	SCMT_RST_PSP_002LUP	FN:1	PRODUCER	23-May-2012 18:29	5961.5 FT	140.0 FT
DEFAULT	SCMT_RST_PSP_004PUP	FN:3	PRODUCER	23-May-2012 20:10	5955.5 FT	5570.0 FT

Output DLIS Files

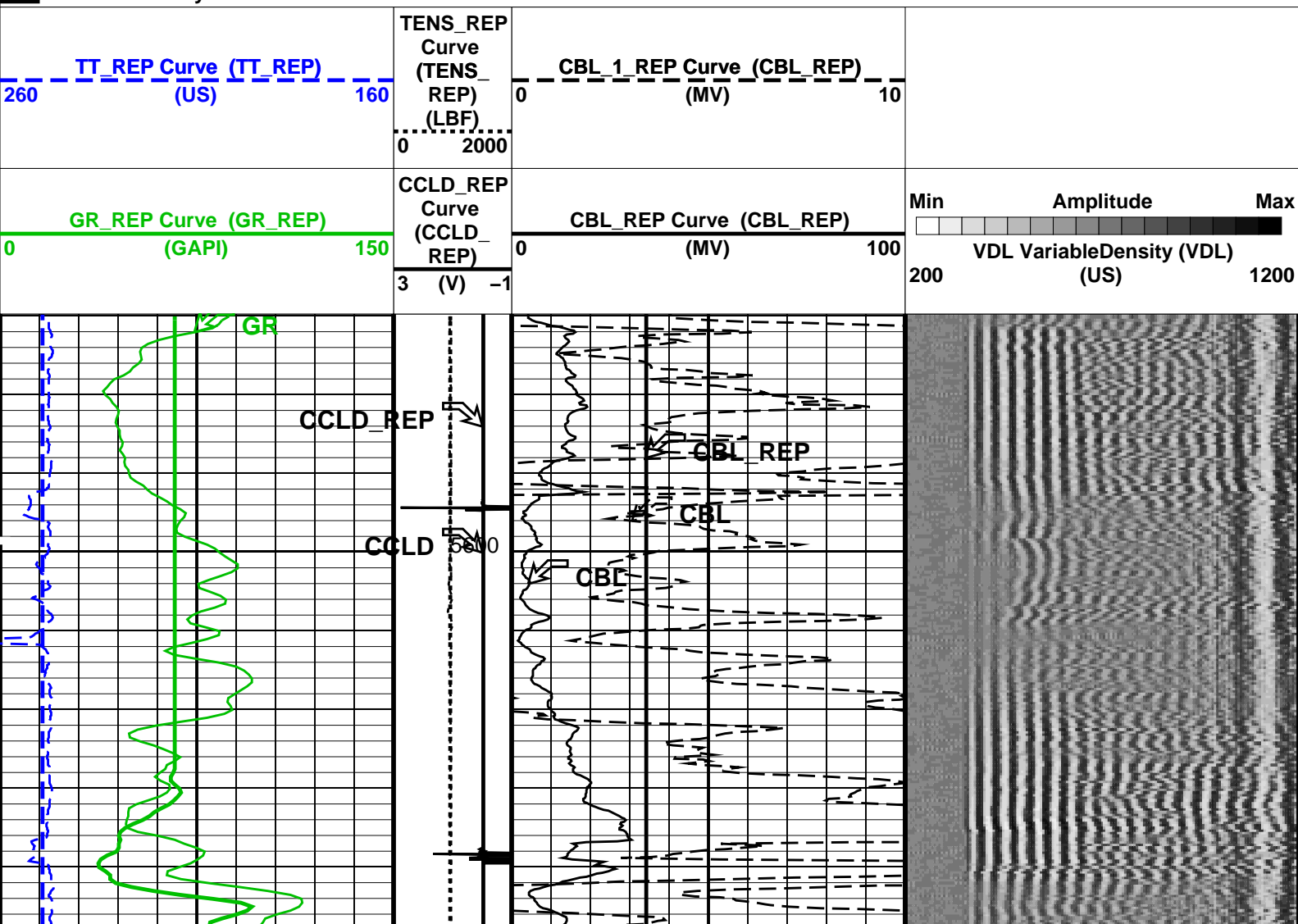
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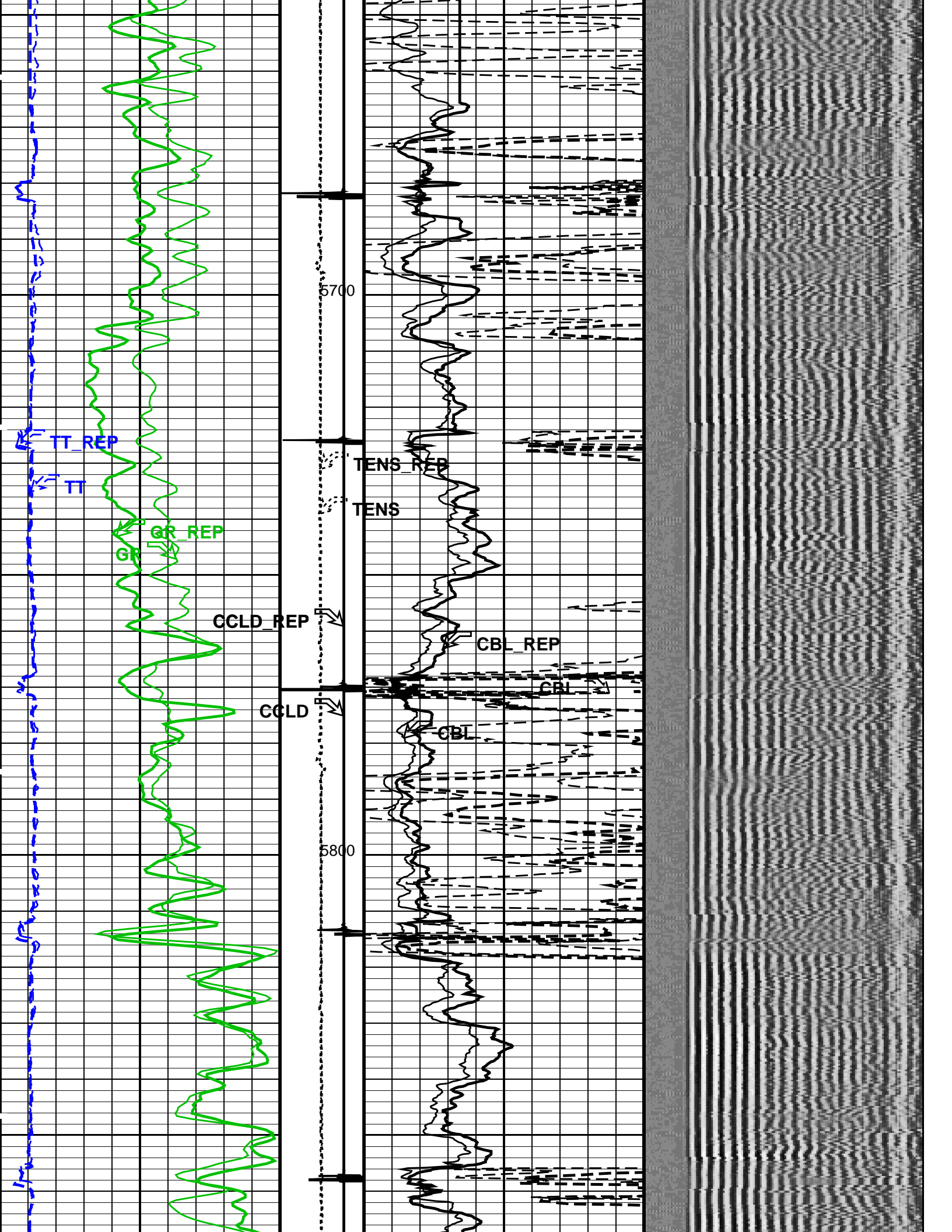
OP System Version: 19C0-187

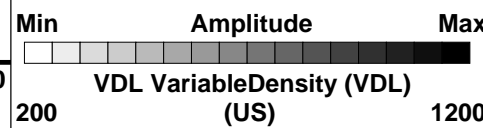
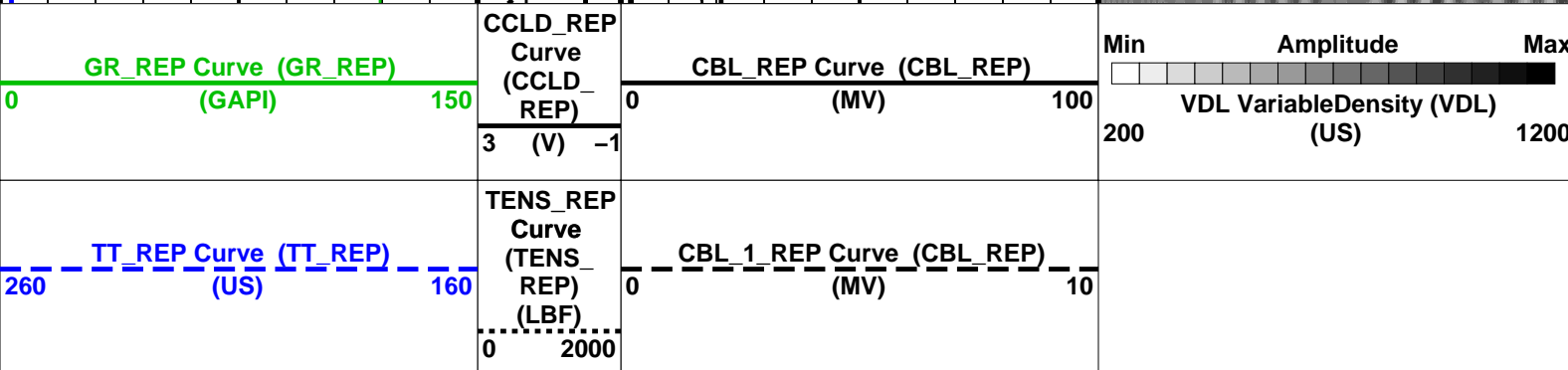
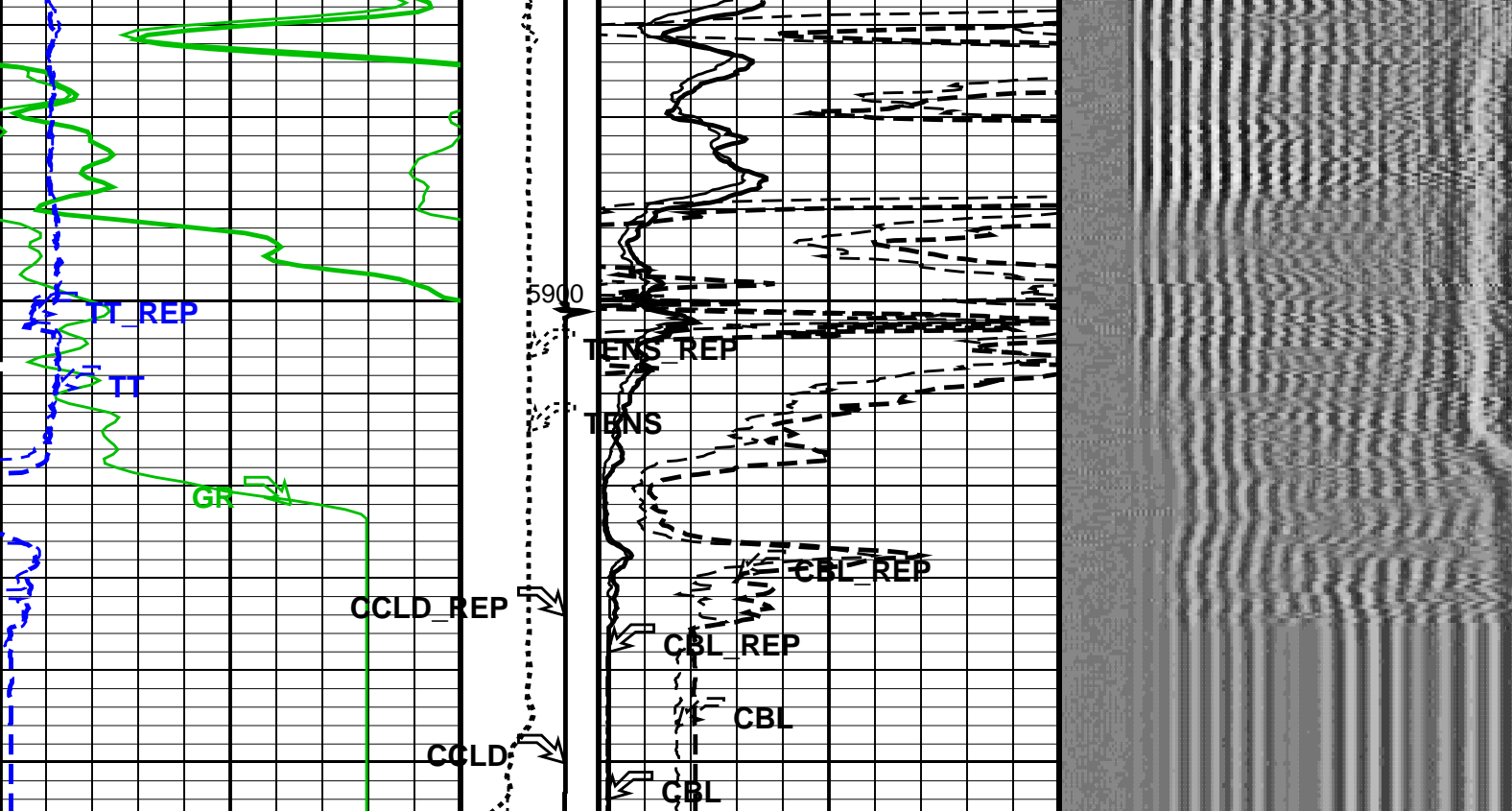
SCMT-CB	SRPC-5095-H2-2011-OP1!	RST-C	SRPC-5095-H2-2011-OP1!
PSPT	19C0-187		

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: 23-May-2012 20:11

OP System Version: 19C0-187

SCMT-CB SRPC-5095-H2-2011-OP1 RST-C SRPC-5095-H2-2011-OP1
PSPT 19C0-187

<<<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	0.572185 MV (100% Cement) 1.53691 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.27087 MV (100% Cement) 8.02441 MV (80% Cement)
Master Calibration (Normalization)	Before Calibration (Adjustment)		
Date of Master Calibration	15-SEP-2011		
CBL Correction Factor	0.0704035	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.0943008	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.0954480		

MAP 3 Correction Factor	0.0954593
MAP 4 Correction Factor	0.103213
MAP 5 Correction Factor	0.0887287
MAP 6 Correction Factor	0.0833684
MAP 7 Correction Factor	0.0874583
MAP 8 Correction Factor	0.0870242

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	228.797	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	342.797	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	206	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1.00741	
GOBO	Good Bond	1.53691	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	171.797	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	4.27087	MV
MSA	Minimum Sonic Amplitude	0.572185	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	8.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	5950	FT

Input DLIS Files

DEFAULT	SCMT_RST_PSP_002LUP	FN:1	PRODUCER	23-May-2012 18:29	5961.5 FT	140.0 FT
DEFAULT	SCMT_RST_PSP_004PUP	FN:3	PRODUCER	23-May-2012 20:10	5955.5 FT	5570.0 FT

Output DLIS Files

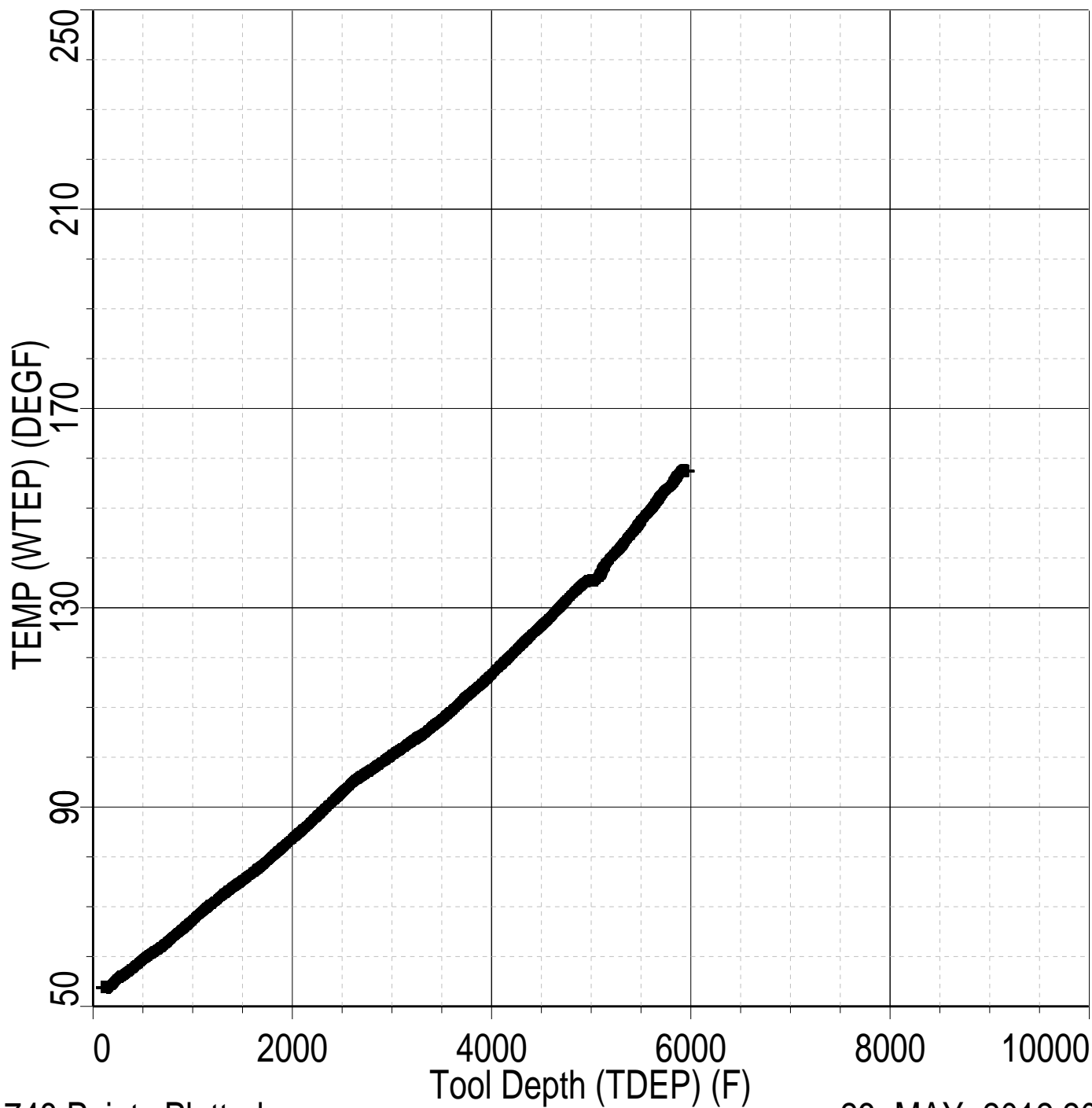
DEFAULT	SCMT_RST_PSP_005PUP	FN:4	PRODUCER	23-May-2012 20:11
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Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 5969.5 – 96.0 FT



11748 Points Plotted

23-MAY-2012 20:14

Schlumberger

TOOL COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC.
Field: MAMM CREEK
Well: TWIN CREEK 12-4D1
Run date: 23-May-2012

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.34552,TOOL PBMS-AA3779. SENSOR S/N:
34552
030606
12
3AE5

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

Client:

Field:

Well:

Run date:

ENCANA OIL & GAS (USA) INC.
MAMM CREEK
TWIN CREEK 12-4D1
23-May-2012

Tool:

Sub Type:

Sensor:

PSP
PBMS
Sapphire

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR SAPPHIRE PBMS-A.3779 S/N:
3779
090107
66
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	+1.146352372057E+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	+1.109160002120E+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	+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.
Field: MAMM CREEK
Well: TWIN CREEK 12-4D1
Run date: 23-May-2012

Tool: PSP
Sub Type: PBMS
Sensor: WellTemp RTD

0.0

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
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Slim Cement Mapping Tool, 1–11/16 OD Master Calibration – SCMT CBL and MAP Amplitude Normalization in SFT–155/–255

Master: 15–Sep–2011 17:05

MAP 1 Amplitude Plus	1075	1273	---	---	---	---	MV
MAP 2 Amplitude Plus	1075	1257	---	---	---	---	MV
MAP 3 Amplitude Plus	1075	1257	---	---	---	---	MV
MAP 4 Amplitude Plus	1075	1163	---	---	---	---	MV
MAP 5 Amplitude Plus	1075	1352	---	---	---	---	MV
MAP 6 Amplitude Plus	1075	1439	---	---	---	---	MV
MAP 7 Amplitude Plus	1075	1372	---	---	---	---	MV
MAP 8 Amplitude Plus	1075	1379	---	---	---	---	MV
CBL Amplitude Plus	1350	1364	---	---	---	---	MV

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

Primary Equipment:










Slim Cement Mapping Xmitter Electronics	SCMX – CA	8120
Slim Cement Mapping Sonde	SCMS – CB	8150
Slim Cement Mapping Cartridge	SCMC – CA	8120

Auxiliary Equipment:

Slim Electronics Cartridge Housing	SECH – CA	8139
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Slim Cement Mapping Tool, 1–11/16 OD Master Calibration

SCMT CBL and MAP Amplitude Normalization in SFT–155/–255

Phase	MAP 1 Amplitude Plus MV	Value	Phase	MAP 2 Amplitude Plus MV	Value
Master		1273	Master		1257
	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		1257	Master		1163
	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		1352	Master		1439
	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		1372	Master		1379
	500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)			500.0 (Minimum) 1075 (Nominal) 1650 (Maximum)	
Phase	CBL Amplitude Plus MV	Value			
Master		1364			
	1000 (Minimum) 1350 (Nominal) 1700 (Maximum)				

Master: 15–Sep–2011 17:05

Well: **TWIN CREEK 12-3D1 (F12E)**
Field: **MAMM CREEK**
County: **GARFIELD**
State: **COLORADO**

CEMENT BOND LOG

CBL-VDL

GAMMA RAY - CCL