

Company: Cascade Petroleum LLC

Well: Fisher 13-9S-55W-01

Field: Wildcat

County: Lincoln

State: Colorado

CEMENT BOND	
GAMMA RAY	
CASING COLLAR LOG	
660' FNL & 1505' FWL	Elev.: K.B. 5625.00 ft G.L. 5610.00 ft D.F.
Permanent Datum: _____	GROUND LEVEL _____
Log Measured From: _____	KELLY BUSHING _____
Drilling Measured From: _____	KELLY BUSHING _____
API Serial No. 05-073-06492-000C	Section 13
	Township 9S
	Range 55W

	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	24-Apr-2013		
Run Number	1		
Depth Driller	7822 ft		
Schlumberger Depth	7689 ft		
Bottom Log Interval	7680 ft		
Top Log Interval	2900 ft		
Casing Fluid Type	WATER		
Salinity			
Density	8.4 lbm/gal		
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size	7.875 in		
From			
To			
Casing/Tubing Size	5.500 in		
Weight	17 lbm/ft		
Grade			
From			
To			
Maximum Recorded Temperatures	193 degF		
Logger On Bottom	24-Apr-2013	Time	12:14
Unit Number	354	Location	FORT MORGAN
Recorded By	C MARCH		
Witnessed By	MIKE DECKER		

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: 24-APR-2013 13:07:58

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25P
Serial Number:	6220	Serial Number:	1163	Serial Number:	354
Calibration Date:	27-MAR-2013	Calibration Date:	25-MAR-201	Length:	15000 FT
Calibrator Serial Number:	1	Calibrator Serial Number:	112513	Conveyance Method:	Wireline
Calibration Cable Type:	1-25P	Number of Calibration Points:	0	Rig Type:	LAND
Wheel Correction 1:	-4				
Wheel Correction 2:	-2				

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

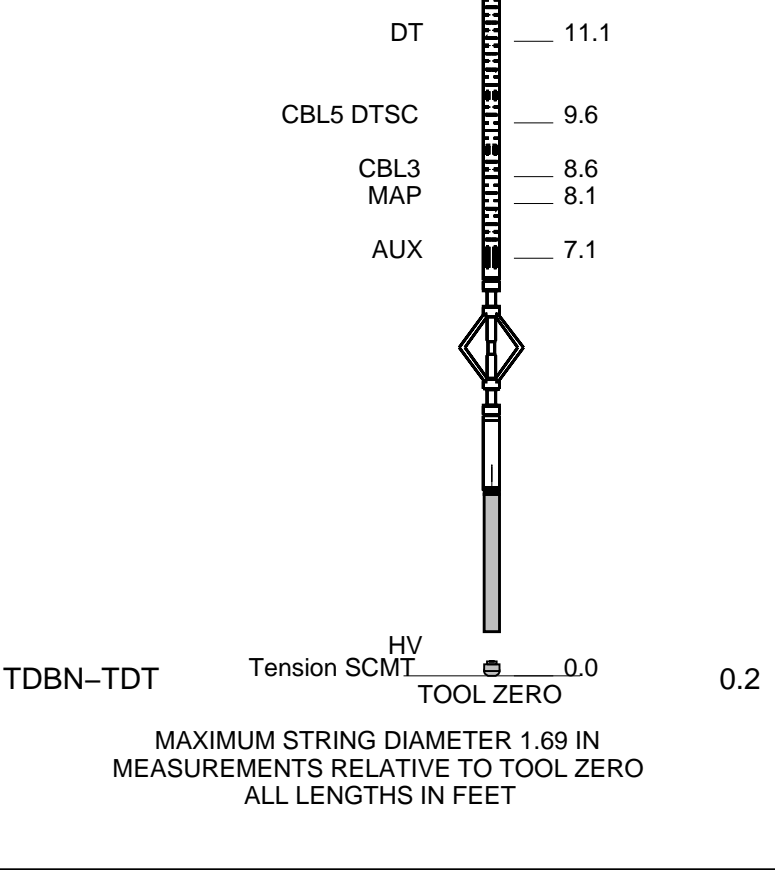
1. IDW WHEELS PRIMARY DEPTH CONTROL
2. DRUM COUNTER USED AS SECONDARY DEPTH CONTROL
- 3.
- 4.
- 5.
- 6.

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	OTHER SERVICES2
OS1: RST	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
CORRELATED TO TRIPLE COMBO RAN	
ON 18-APR-2013 BY SCHLUMBERGER	

REPEAT AND MAIN PASS					
RAN UNDER 0 PSI					
CREW: WILEY, KOLMAN					
THANK YOU					
RUN 1 SERVICE ORDER #: C170-00095 PROGRAM VERSION: 19C2-270 FLUID LEVEL:			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM-A PSC_16MHZ					
DOWNHOLE EQUIPMENT					
MH-22 MH-22		30.3			
AH-38	Detail MT TelStatus CTEM	28.7			
PSPT PSC-A PSPT-A PSTC-A PBMS-A 10k_Sapphire_Mano RTD_Thermometer GR CCL PBMS	GR	28.4 28.4 24.7			
	Well_Temp Manometer CCL PBMS PSTC	21.7 21.5 20.9 20.2			
SCMT-CB SCMC-CA SECH-CA CMIR-AG SCMS-CB 8258 SCMX-CA		20.2			



MAIN PASS

MAXIS Field Log

Company: Cascade Petroleum LLC Well: Fisher 13-9S-55W-0

Output DLIS Files				
DEFAULT	SCMT_PSP_004LUP	FN:3	PRODUCER	24-Apr-2013 12:51

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

Changed Parameter Summary				
DLIS Name	New Value		Previous Value	Depth & Time
ZCMT	2.82	MRAY	3.7	MRAY 6999.7 13:01:30

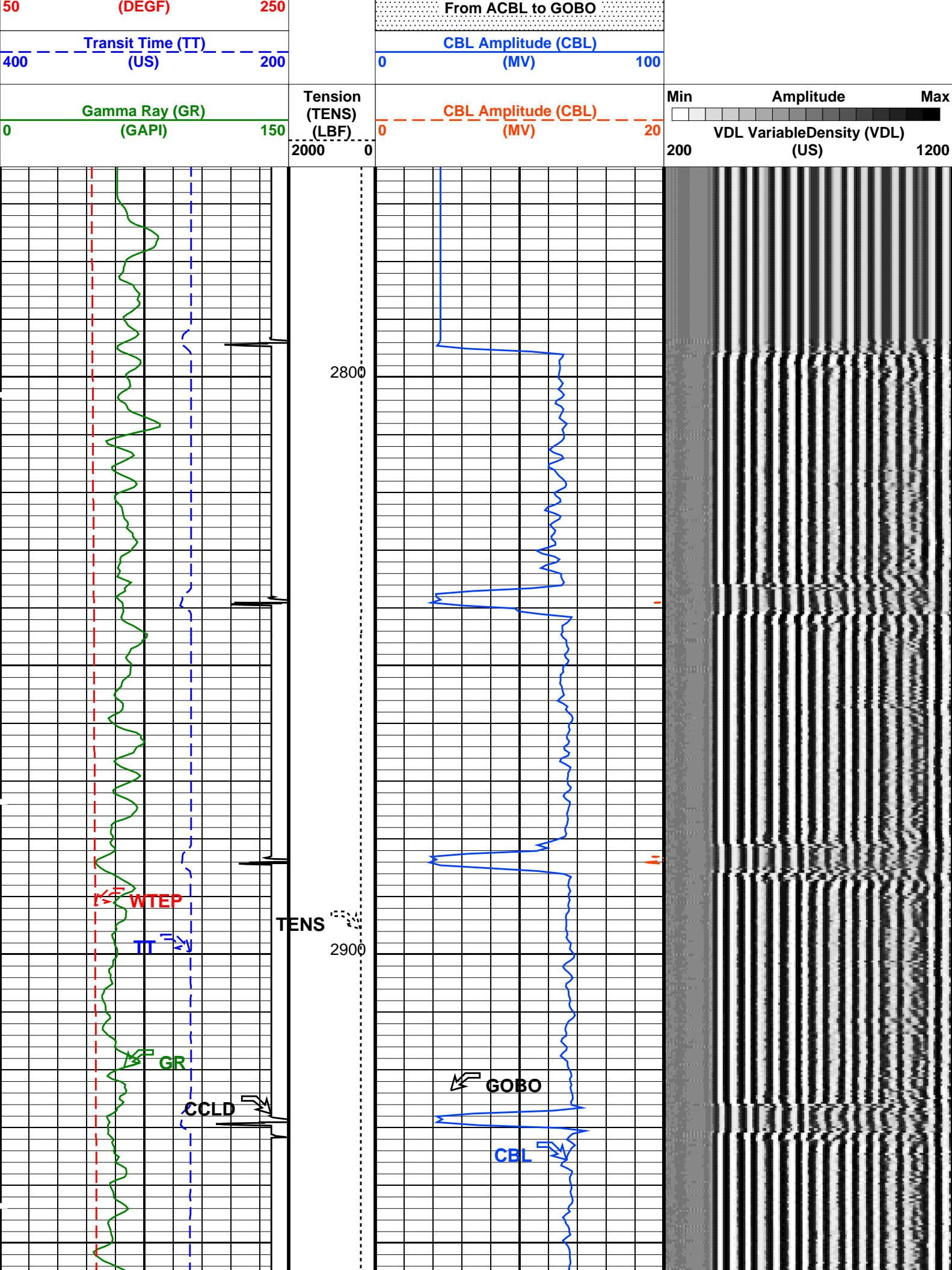
PIP SUMMARY

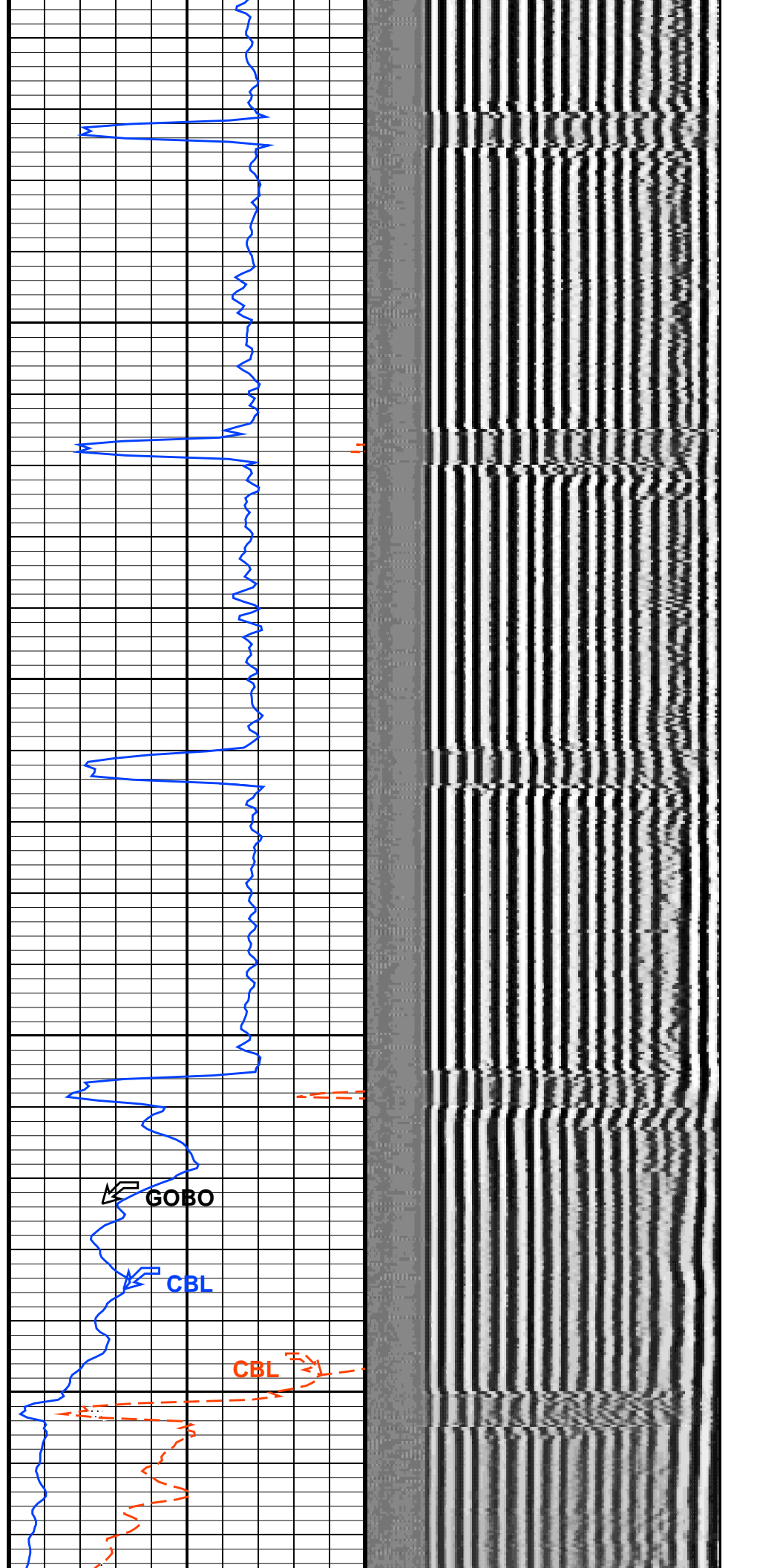
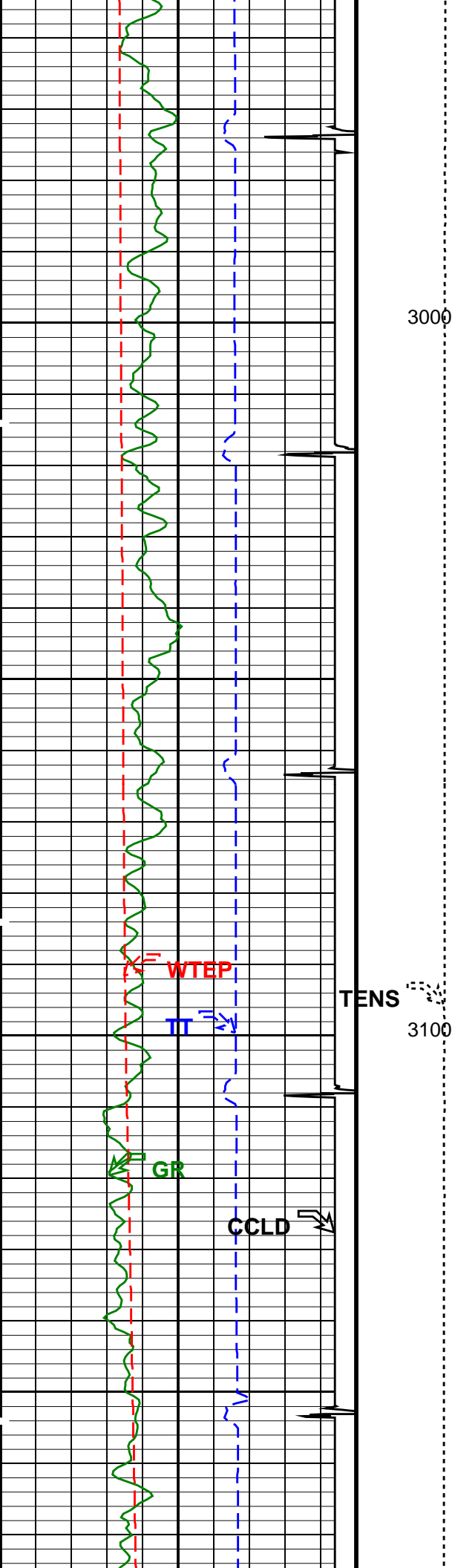
☐ Time Mark Every 60 S

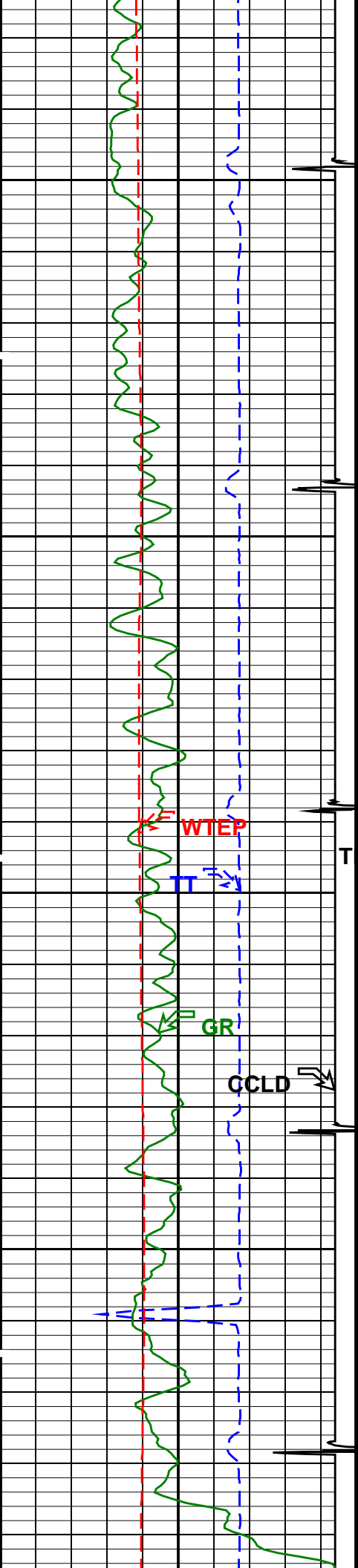
	Discriminated CCL (CCLD)		
	-3.5	(V)	0.5
	COLLARS From CCLD to T1		

Well Temperature (WTEP)

GOOD BOND

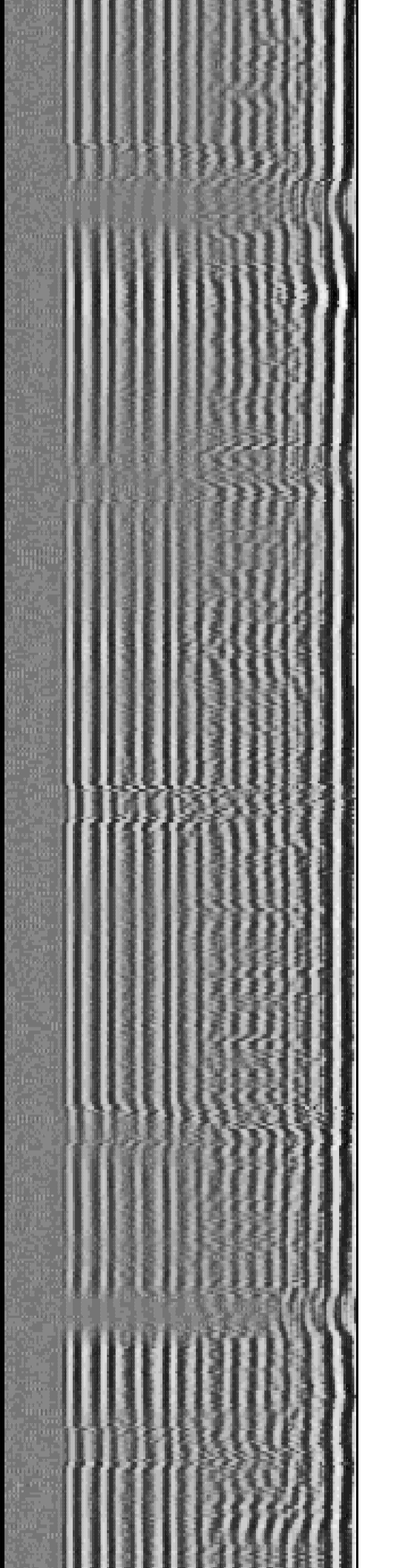
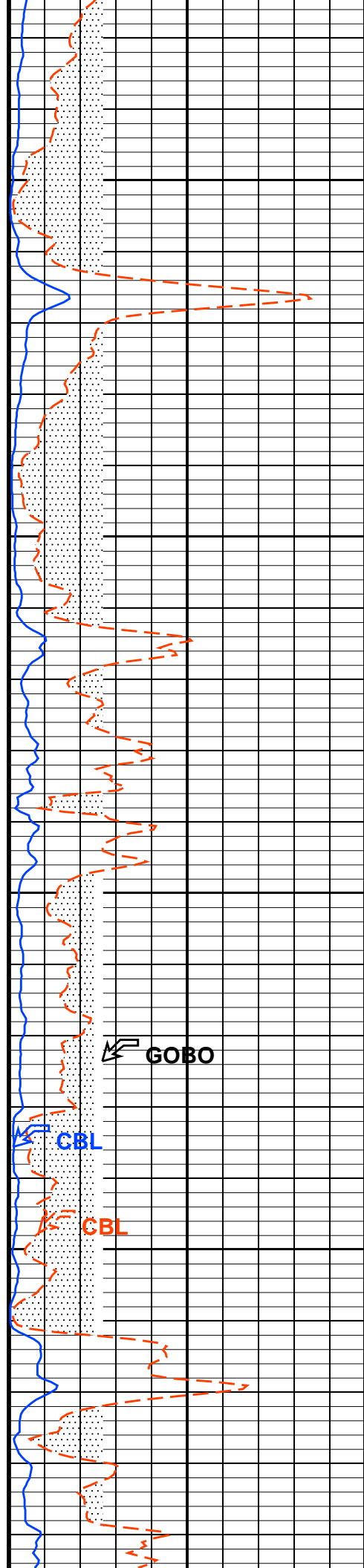


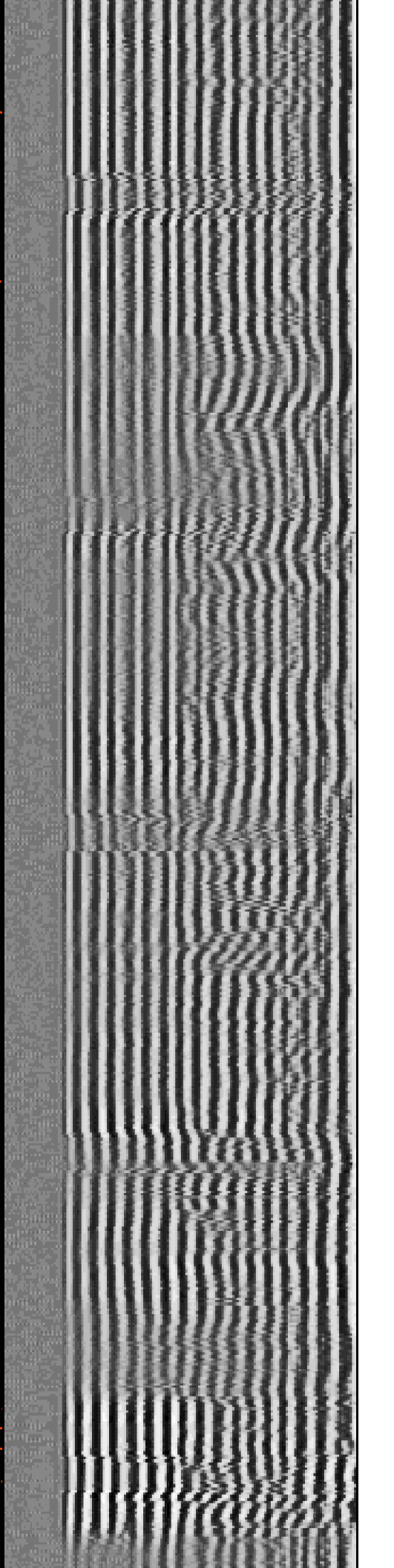
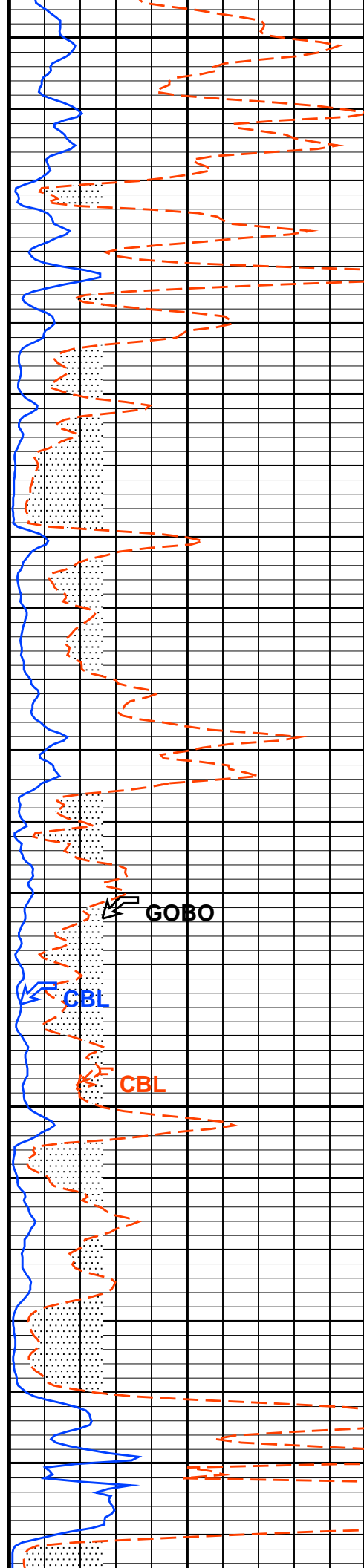
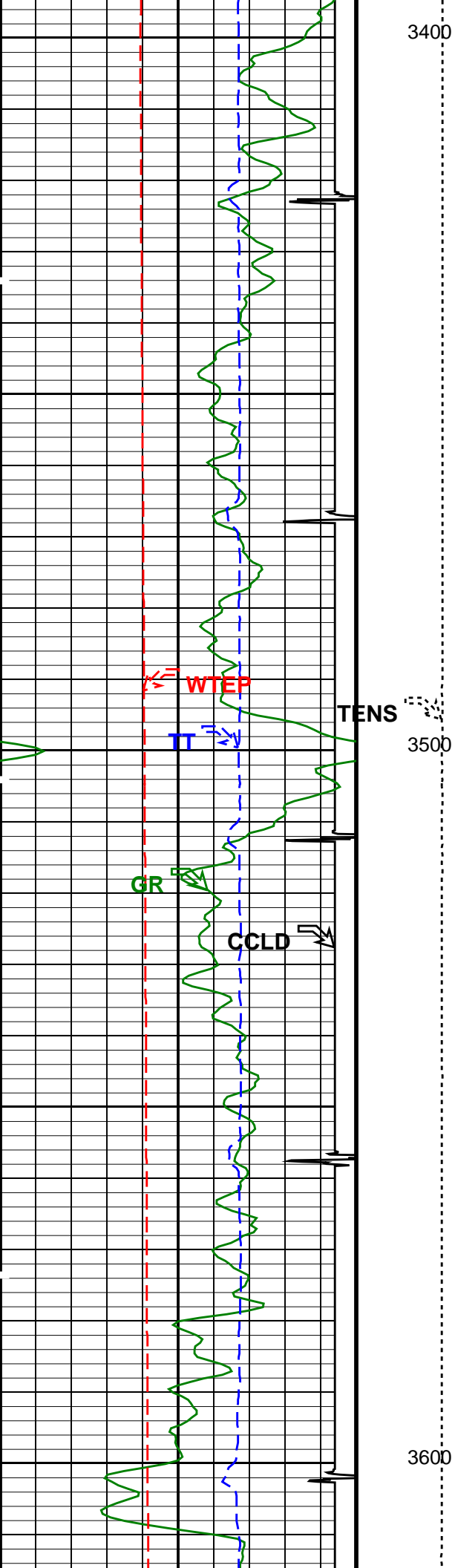


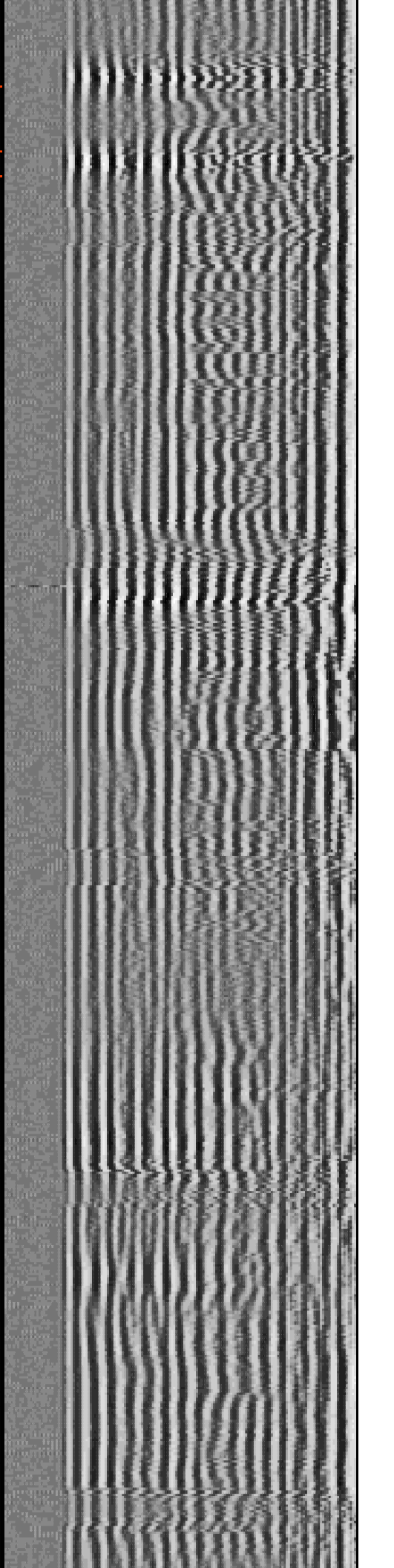
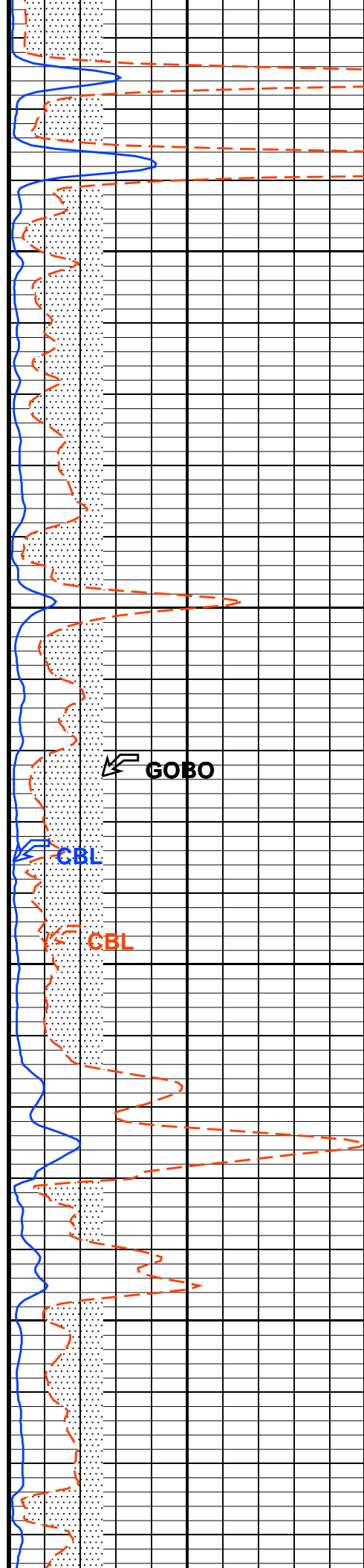
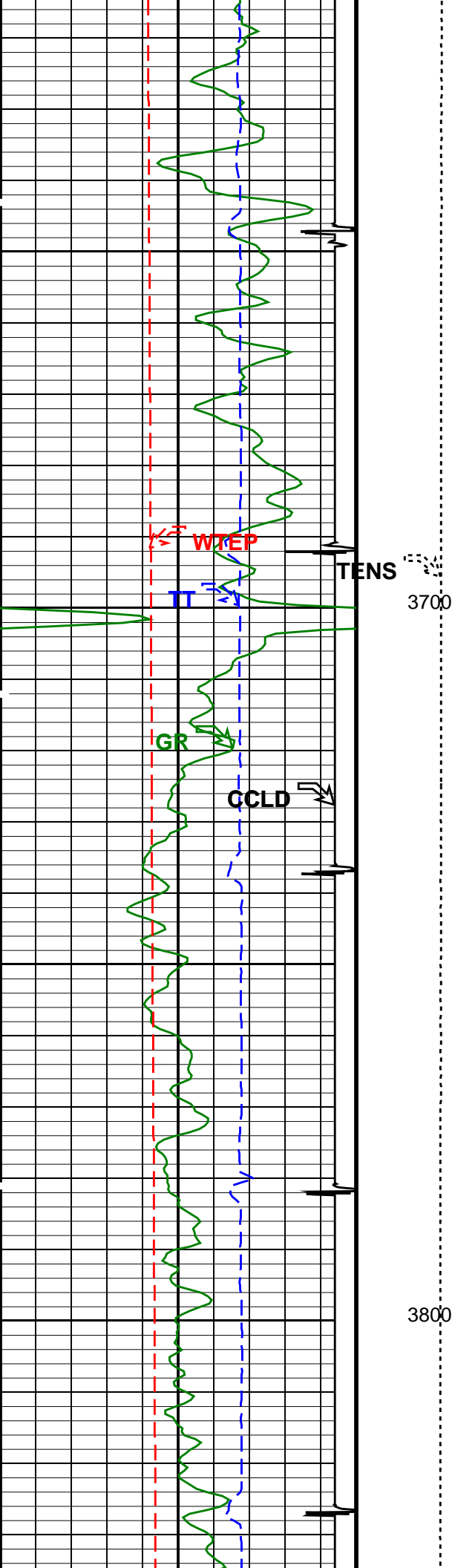


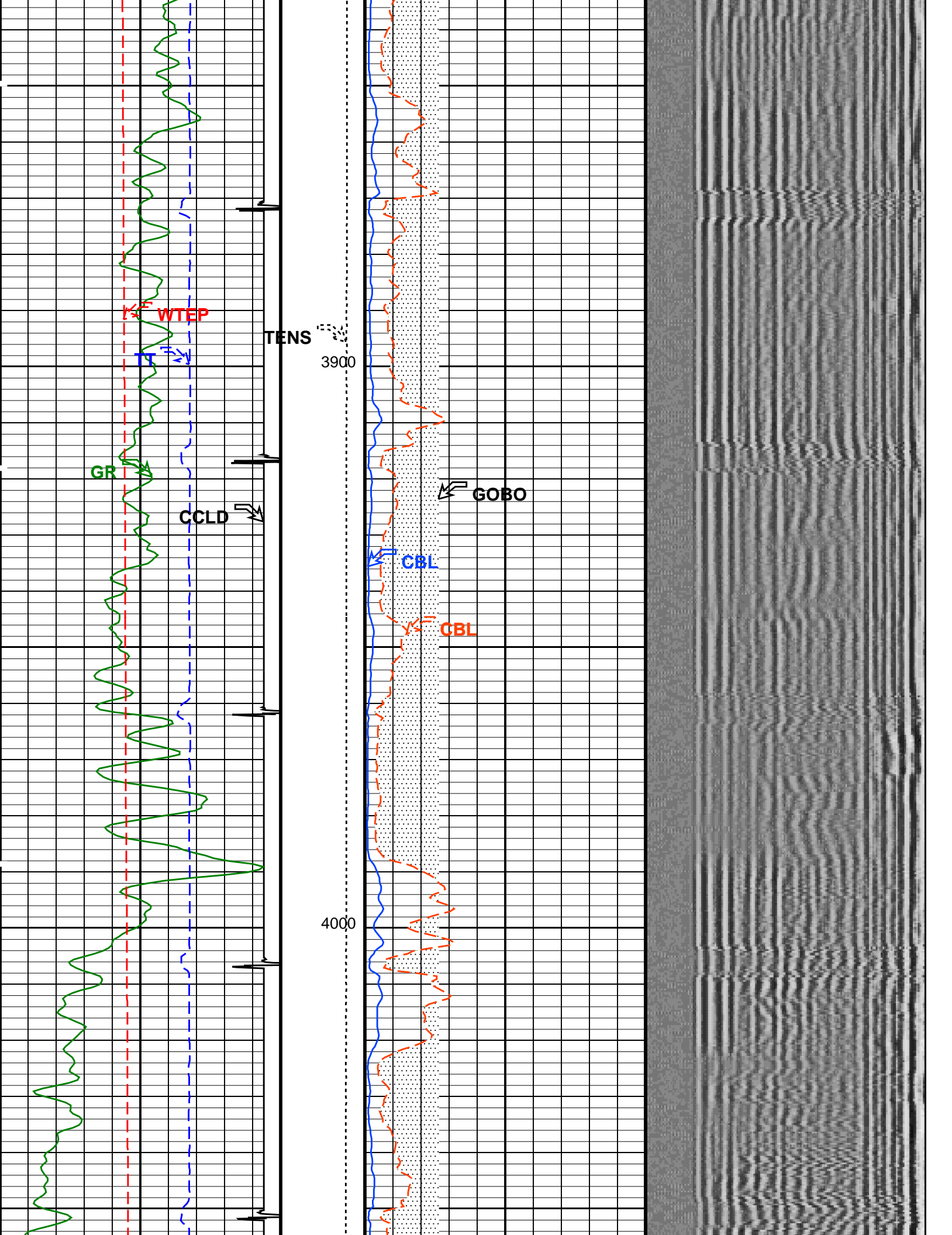
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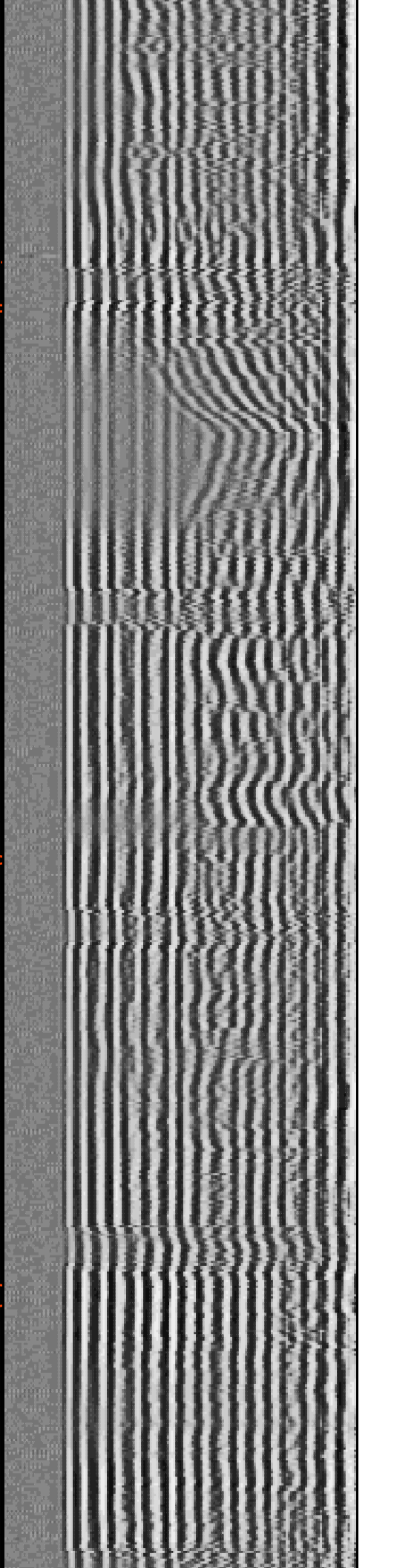
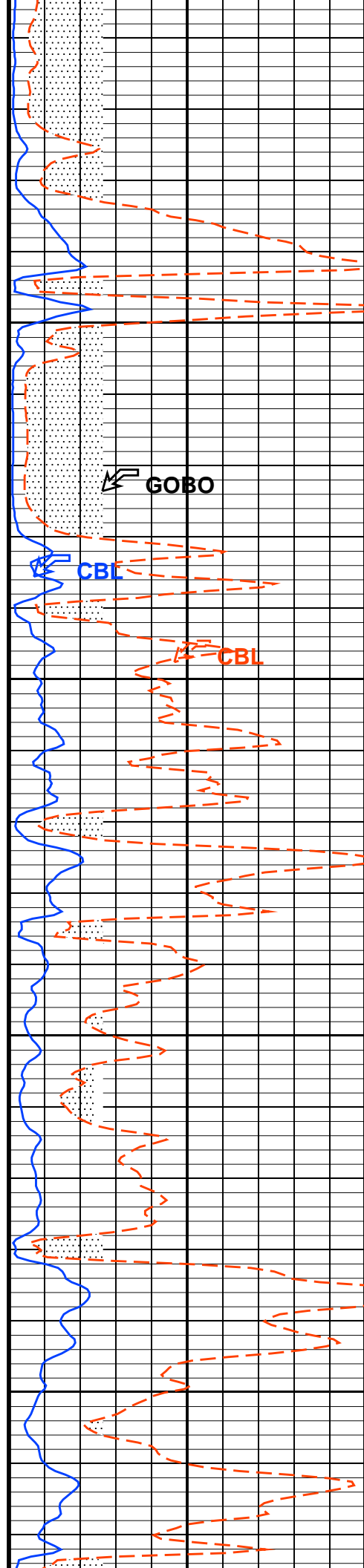
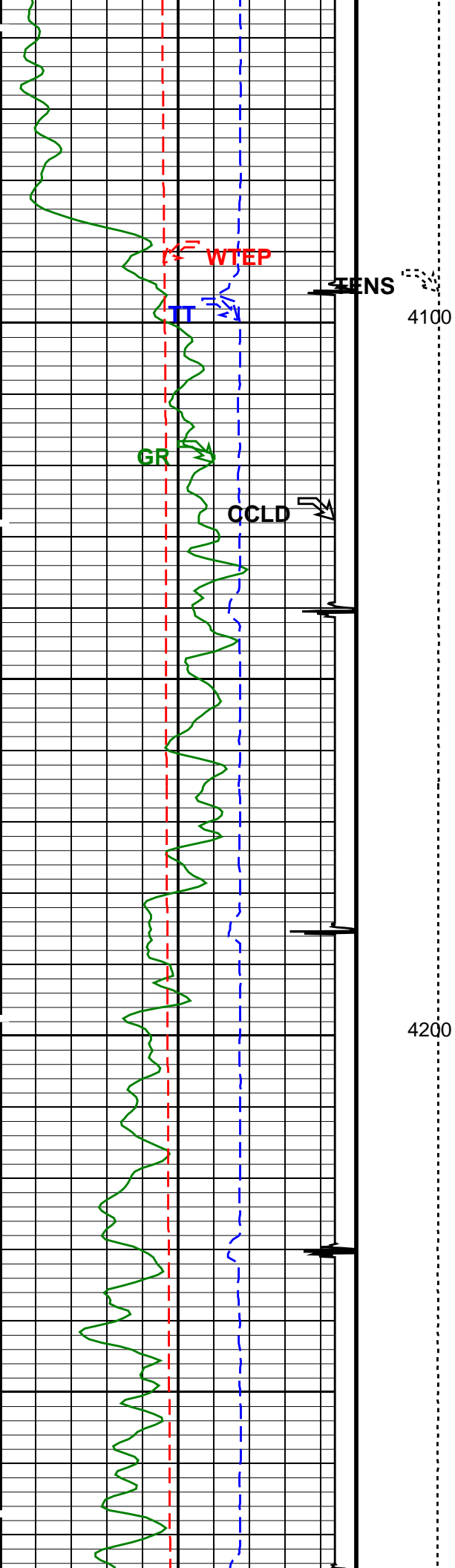
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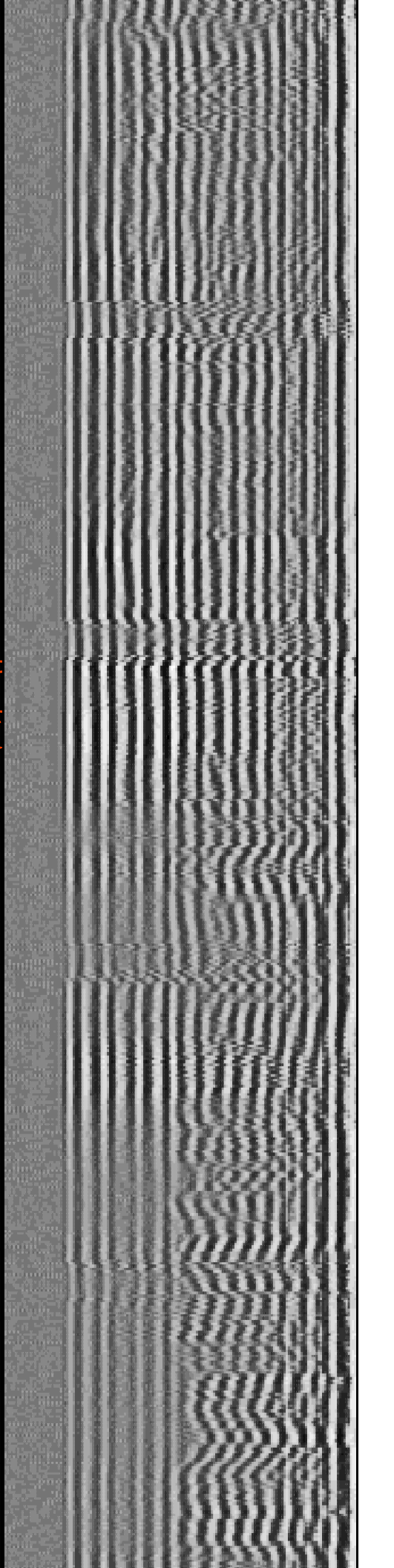
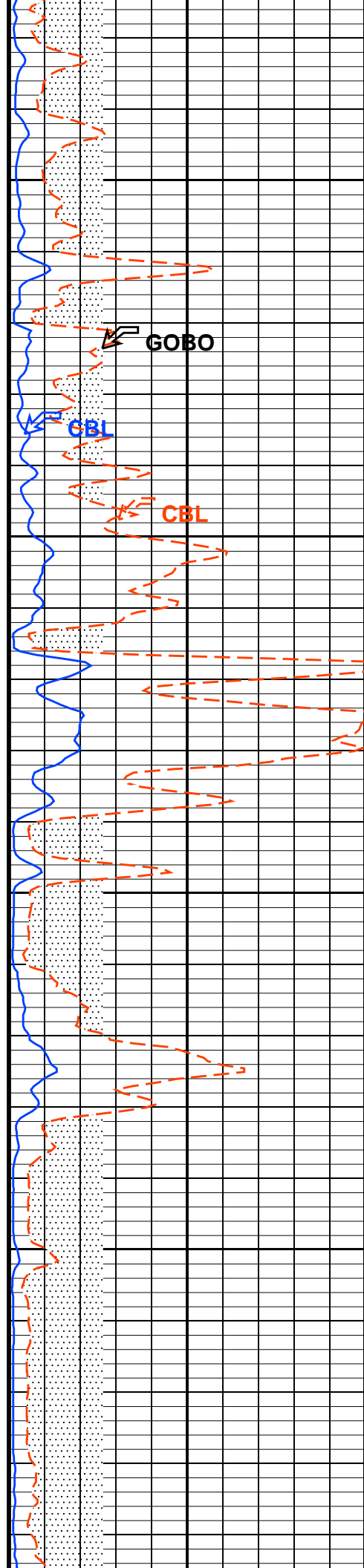
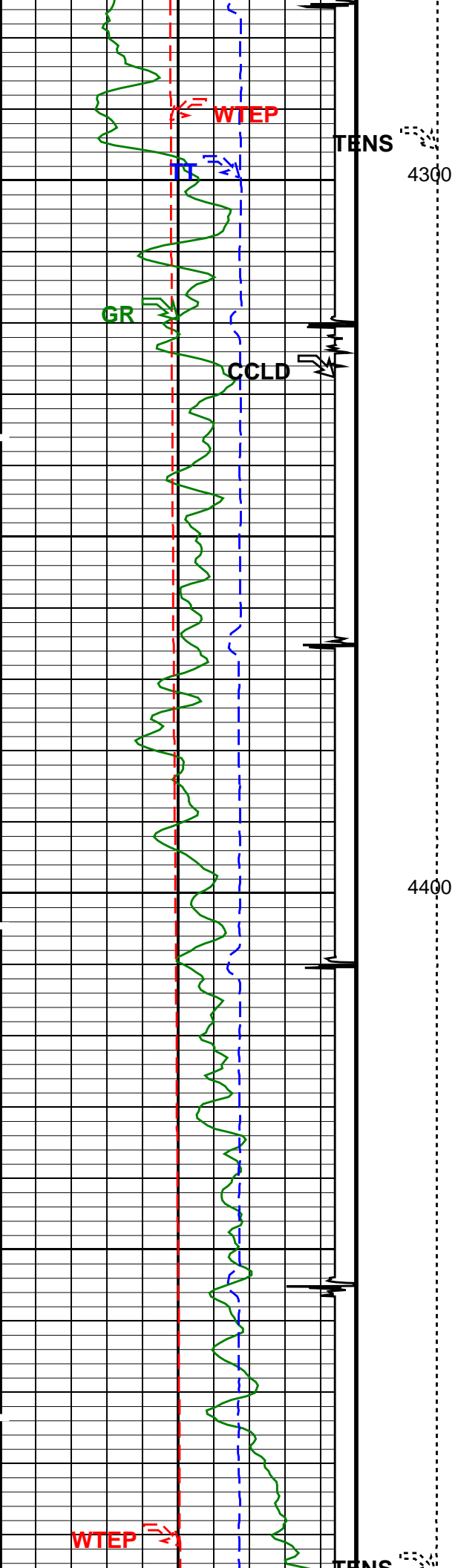


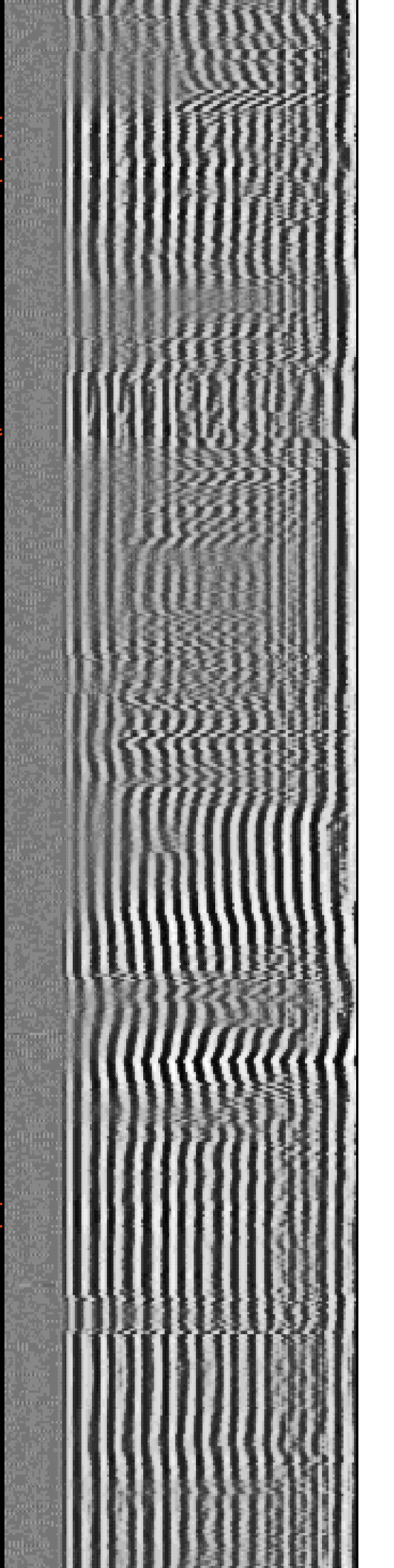
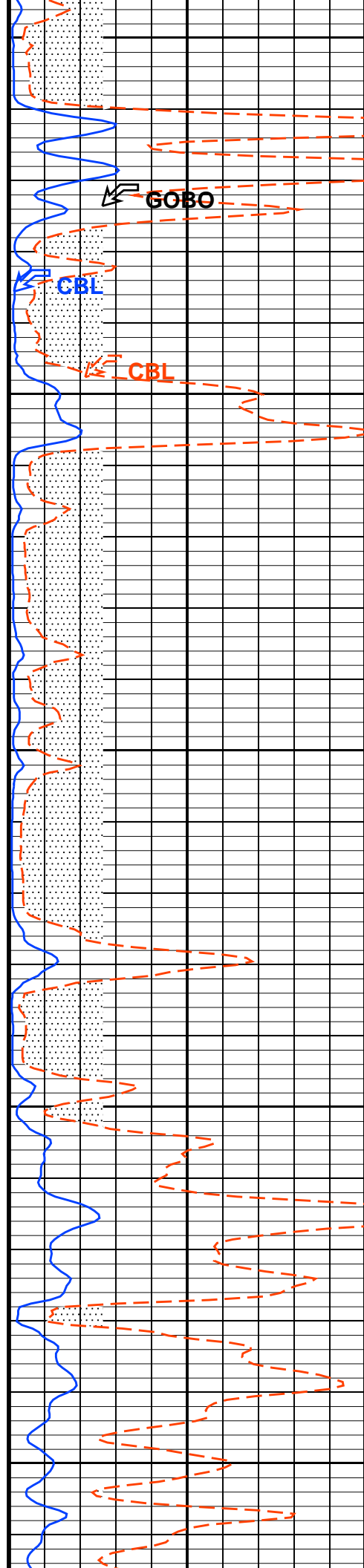
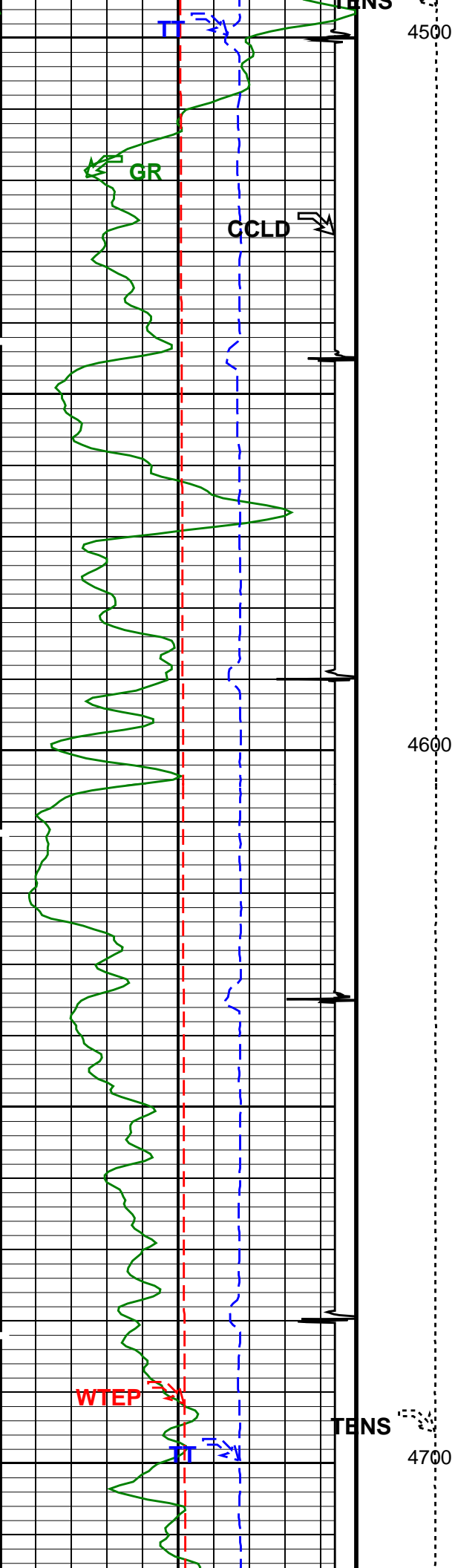


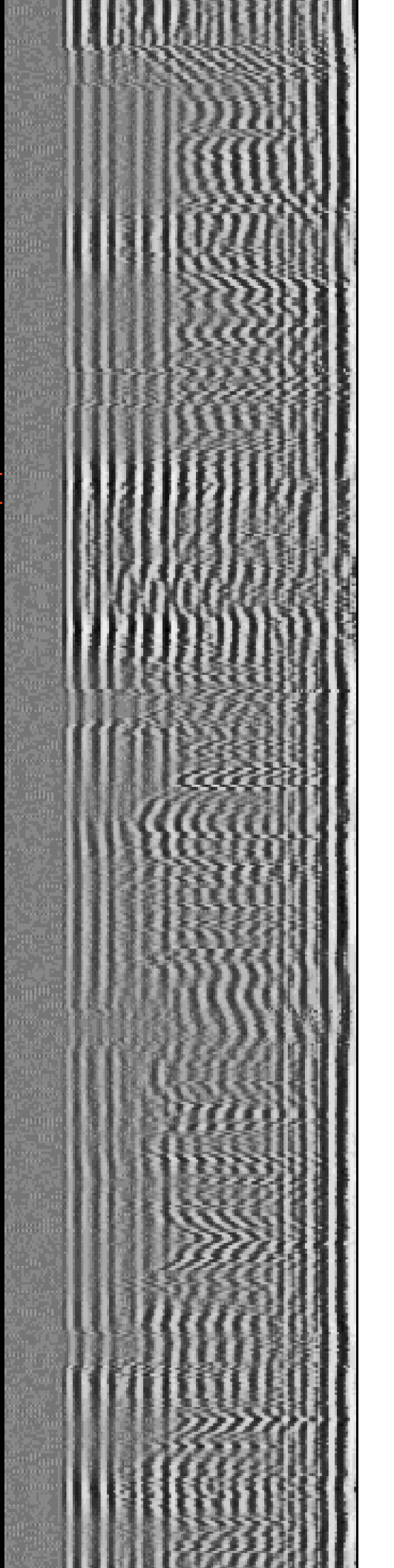
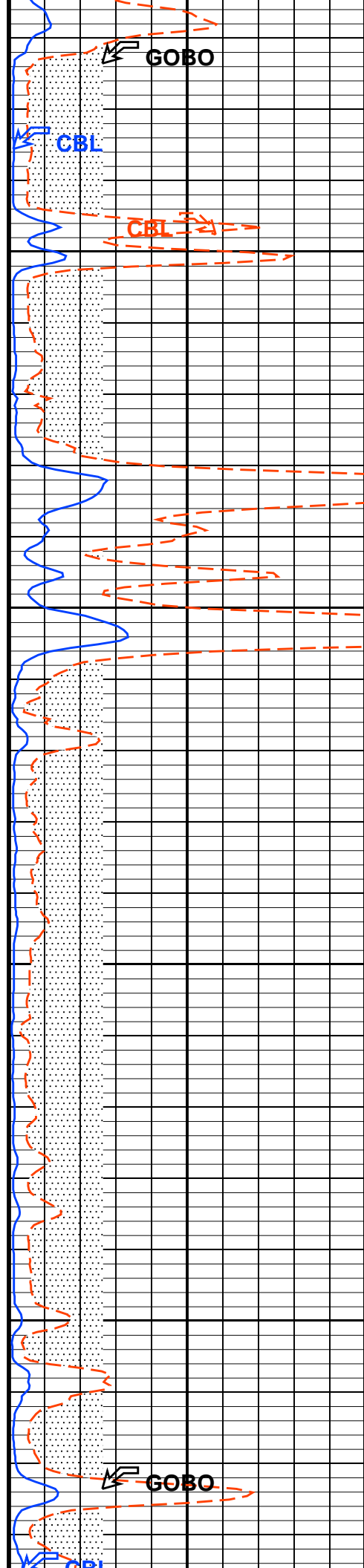
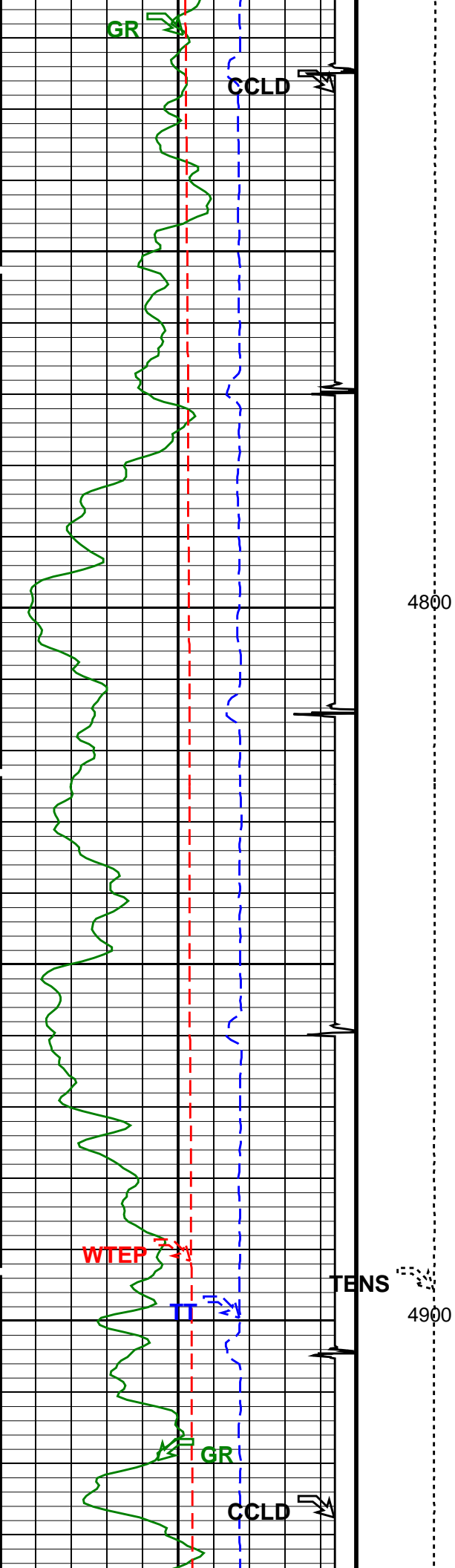


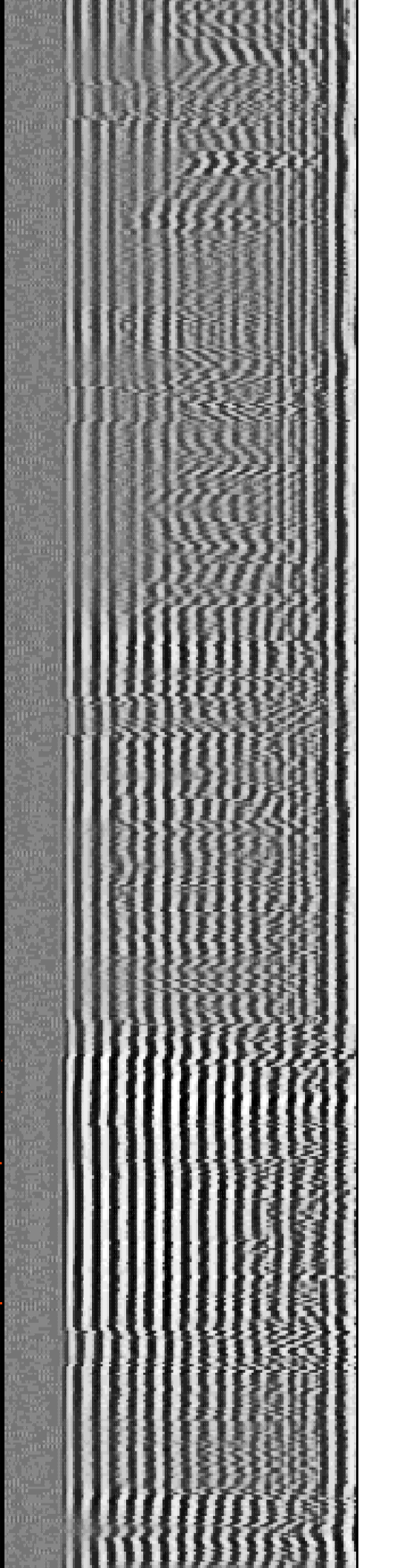
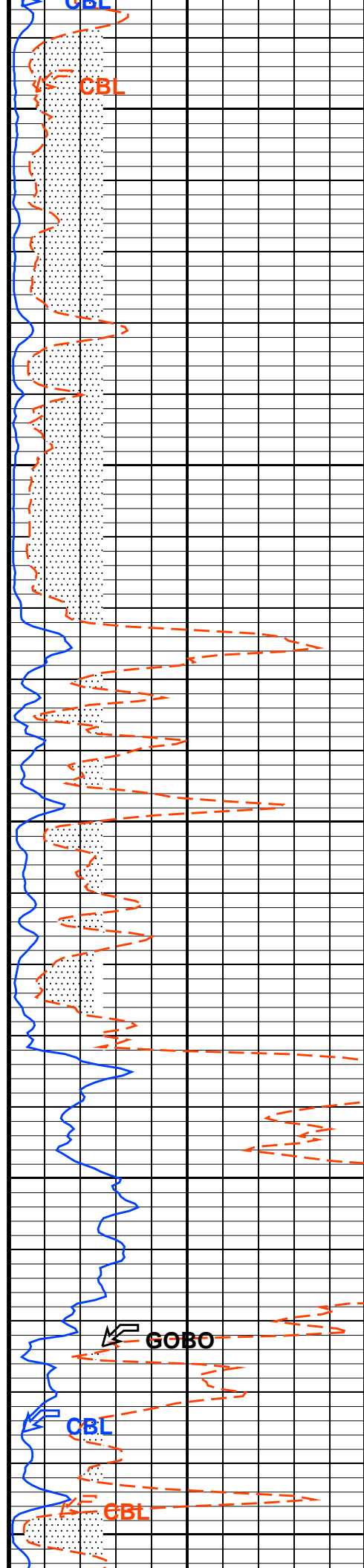
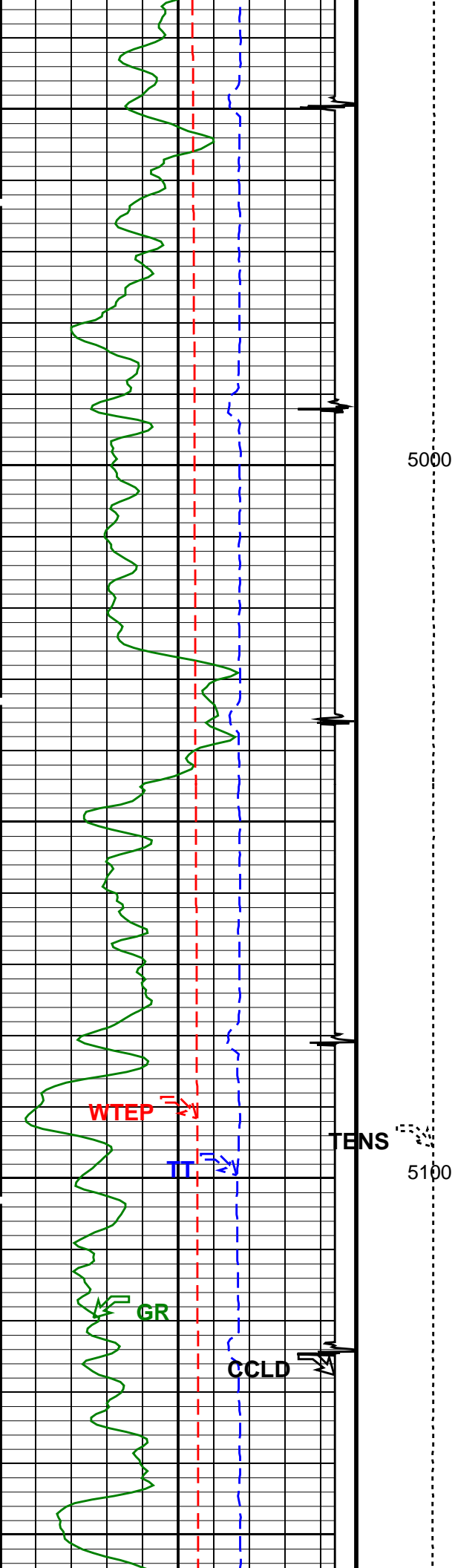


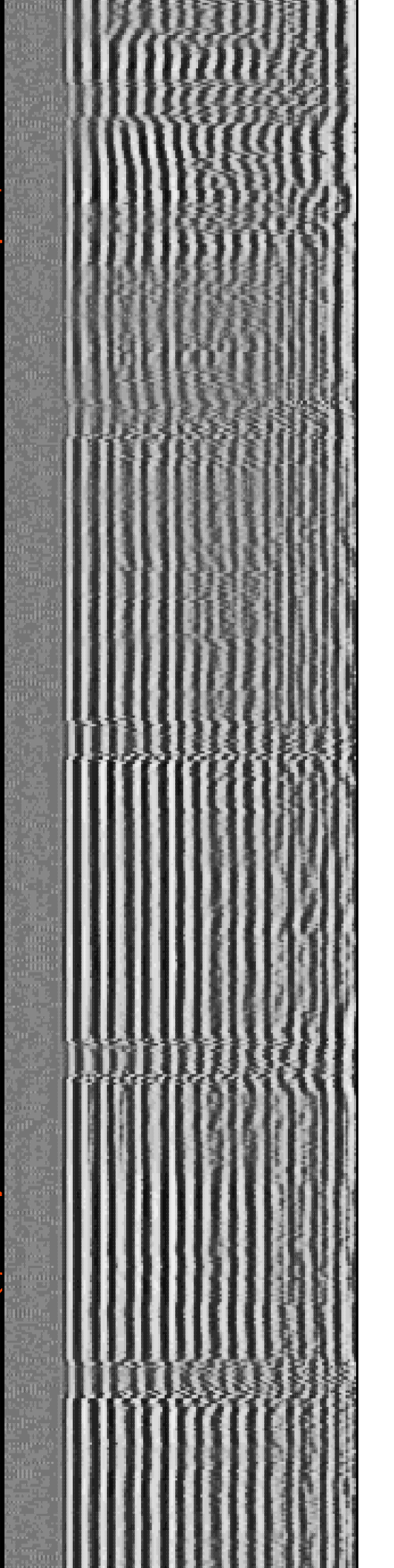
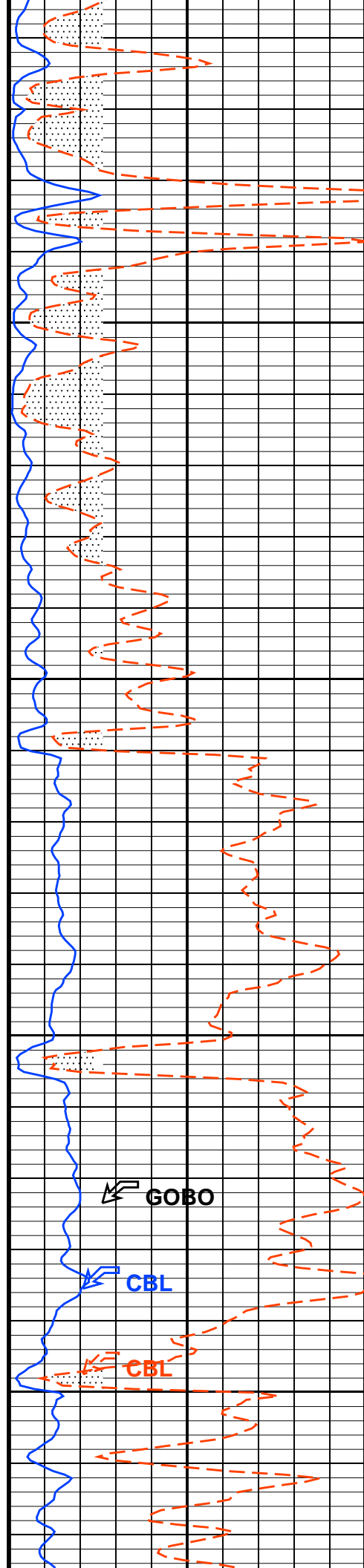
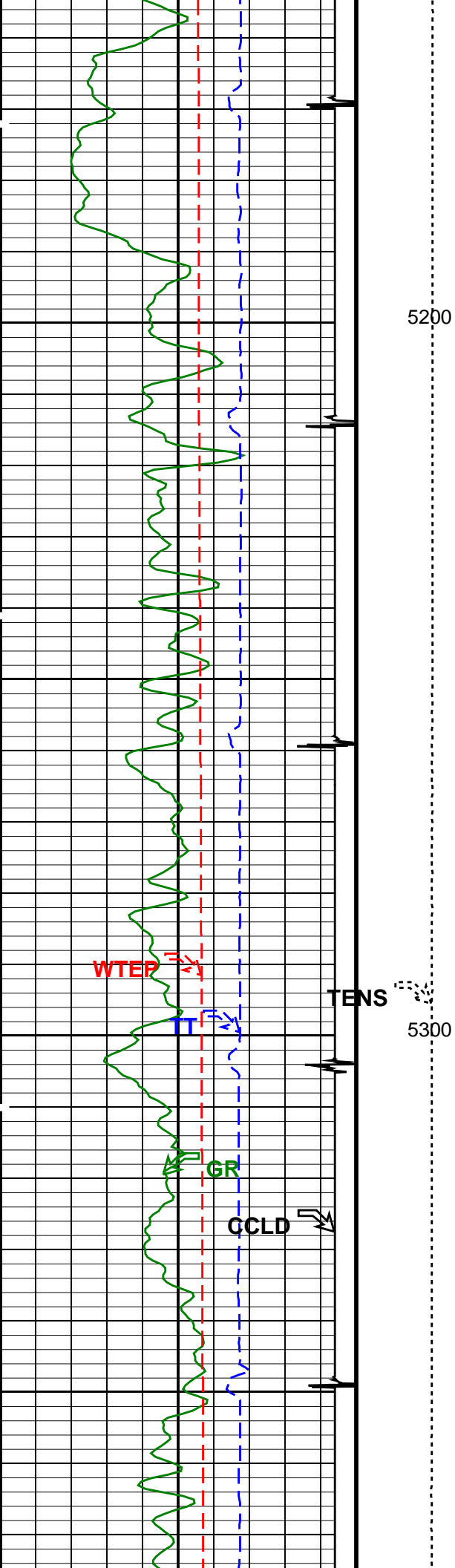


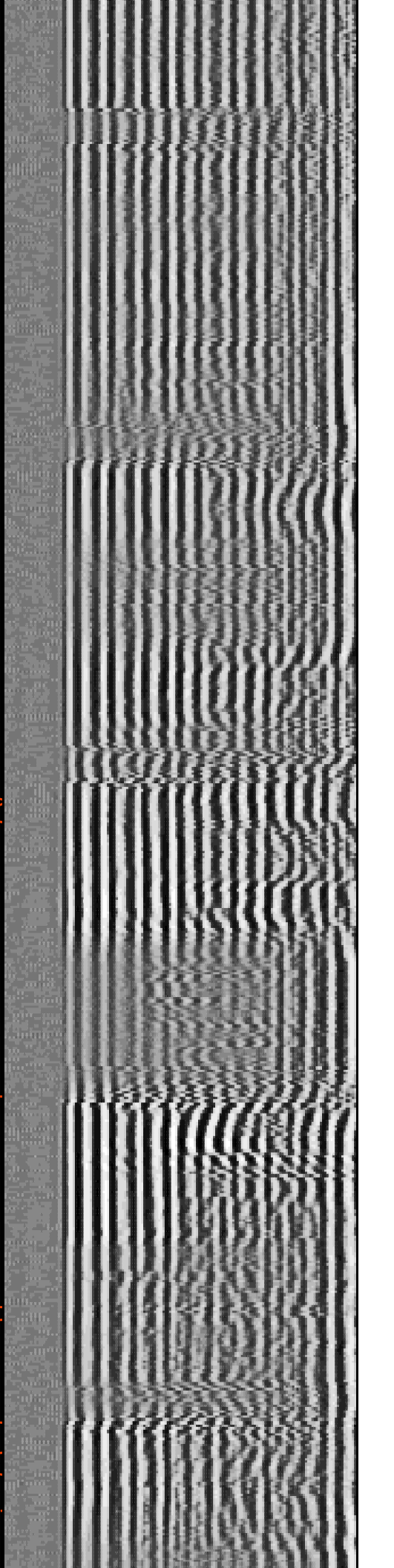
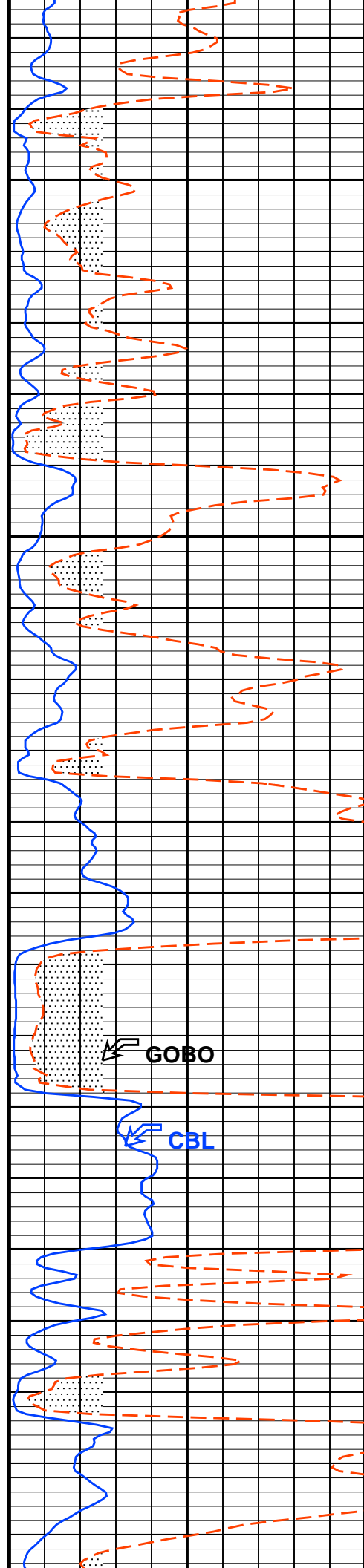
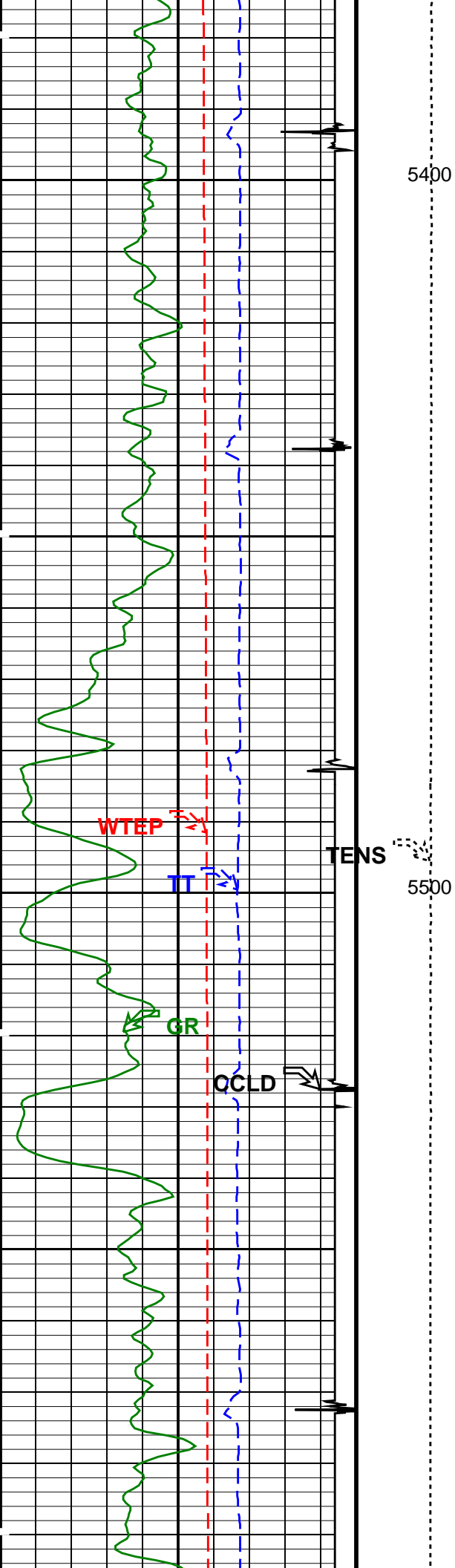


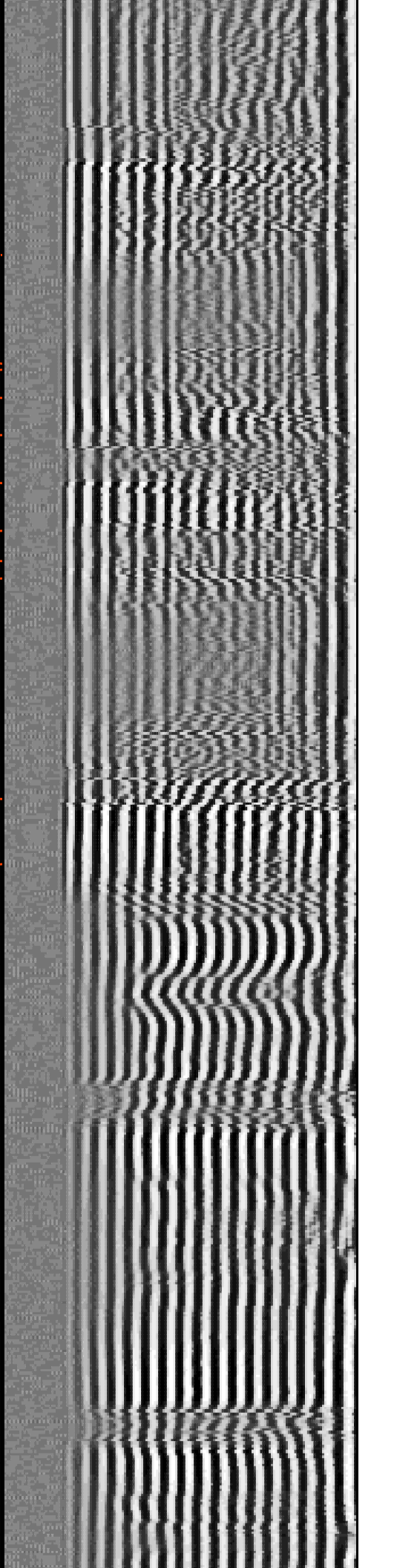
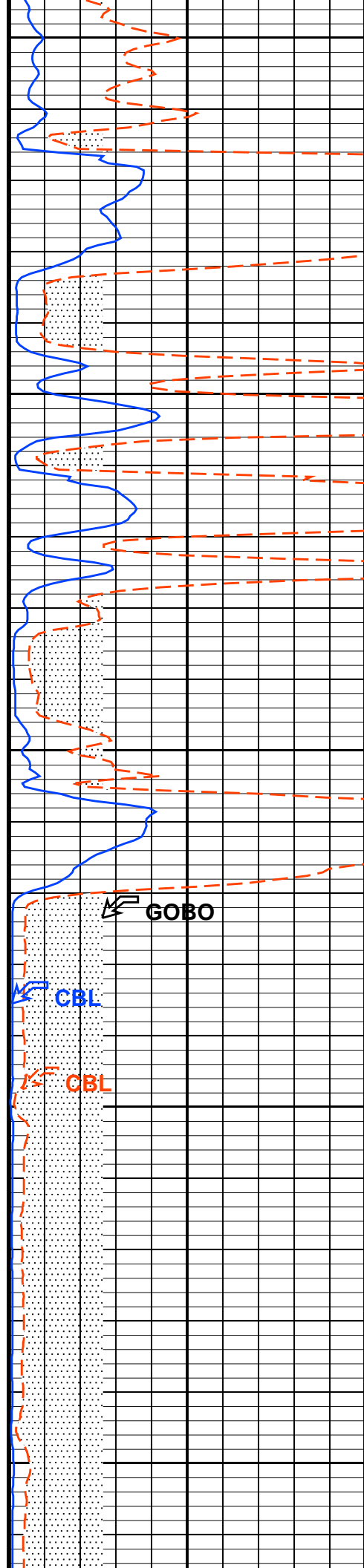
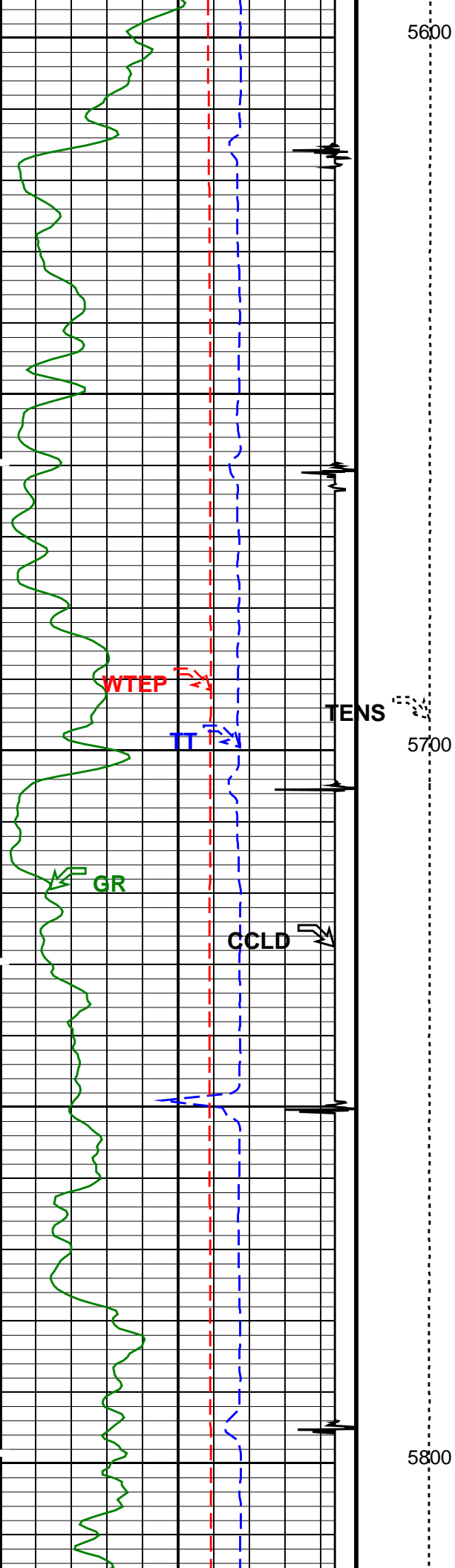


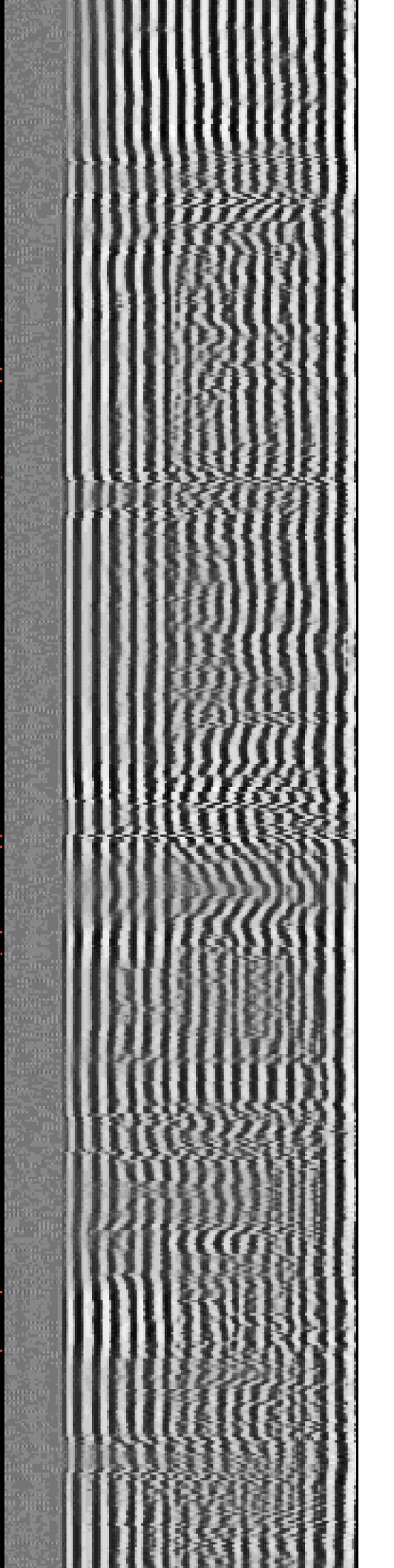
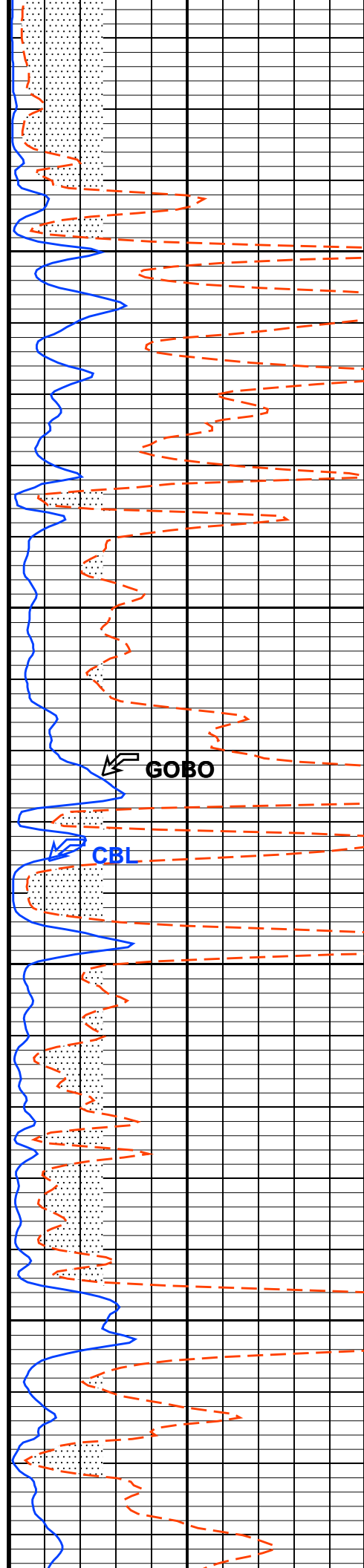
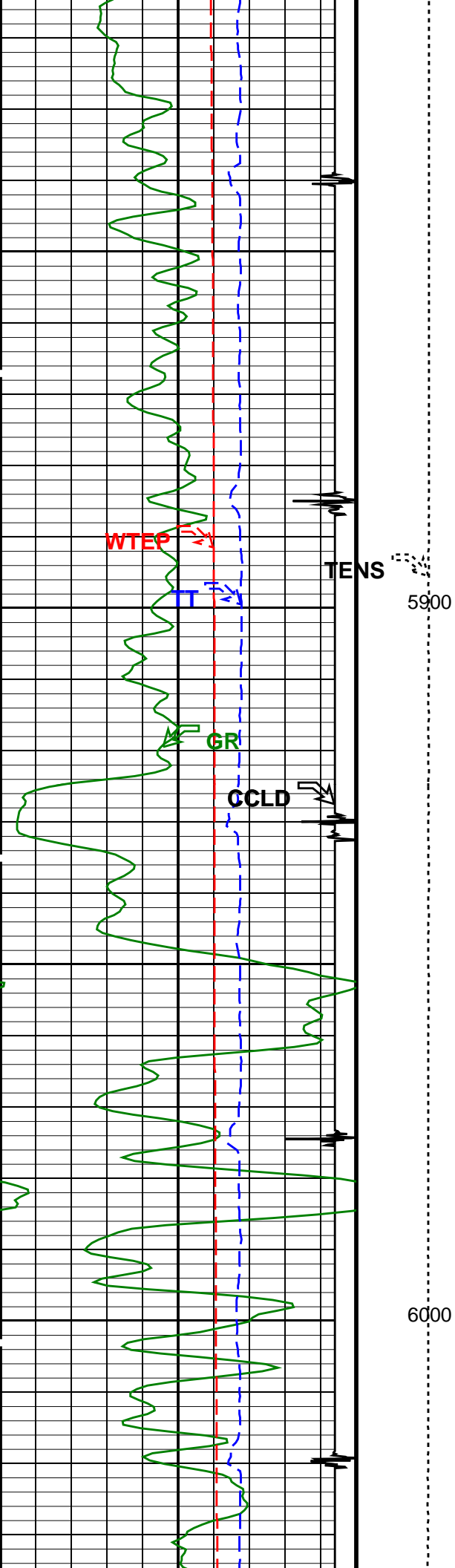


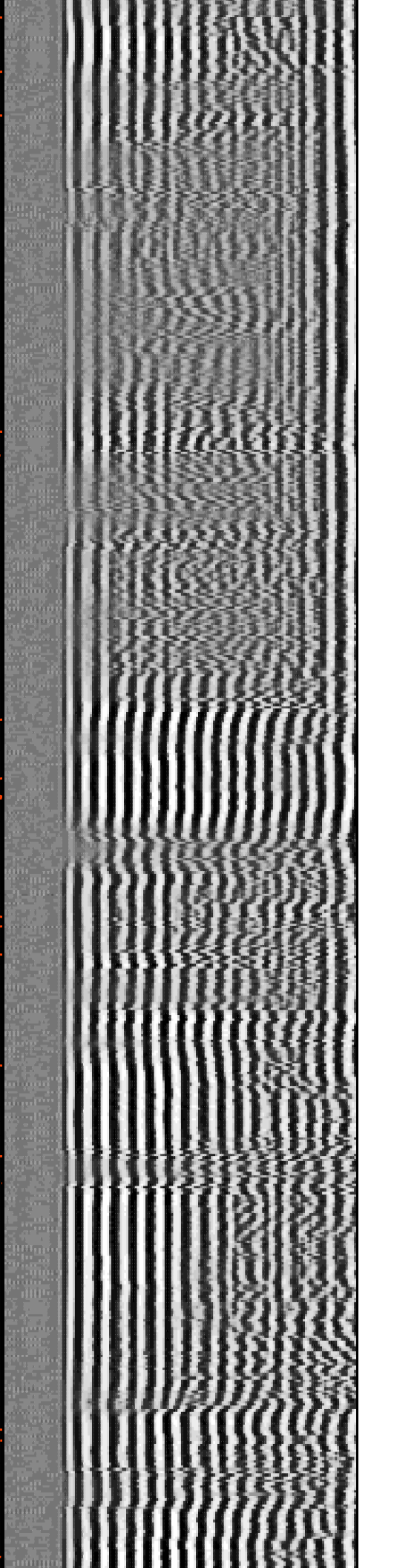
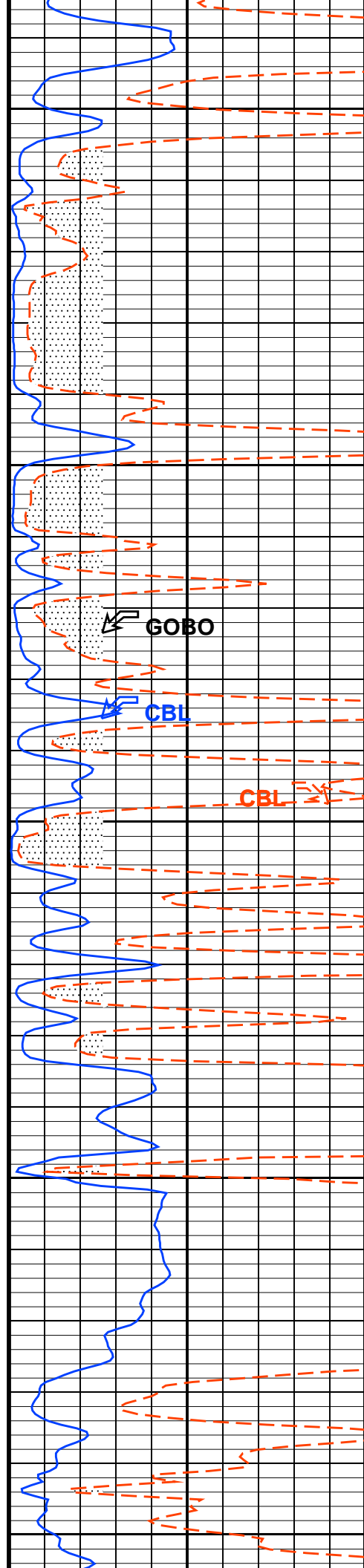
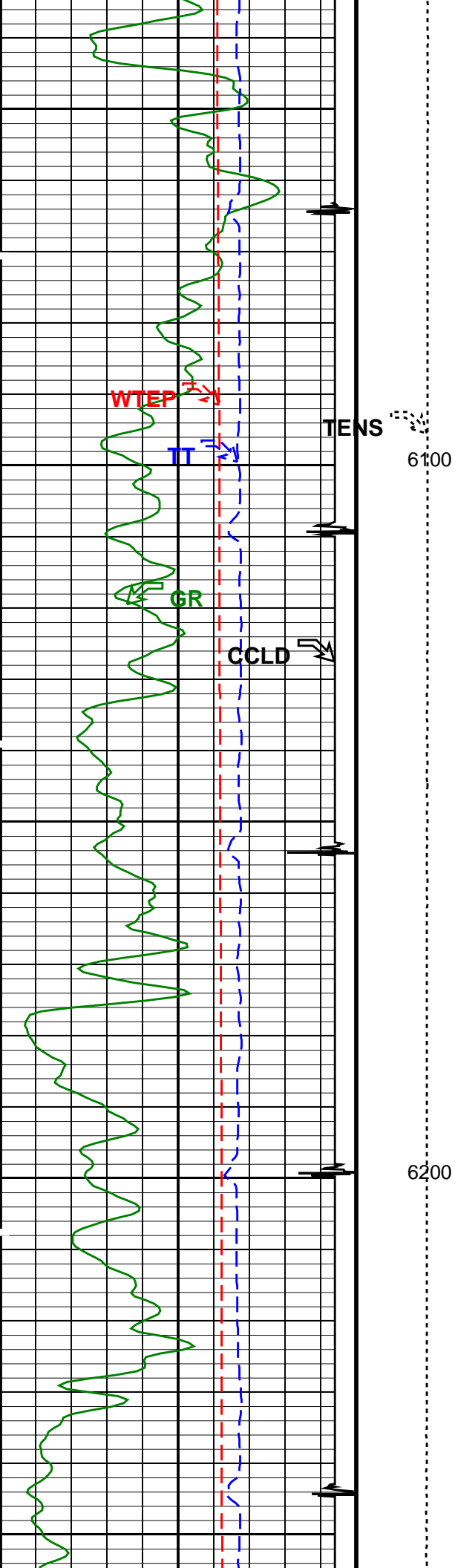


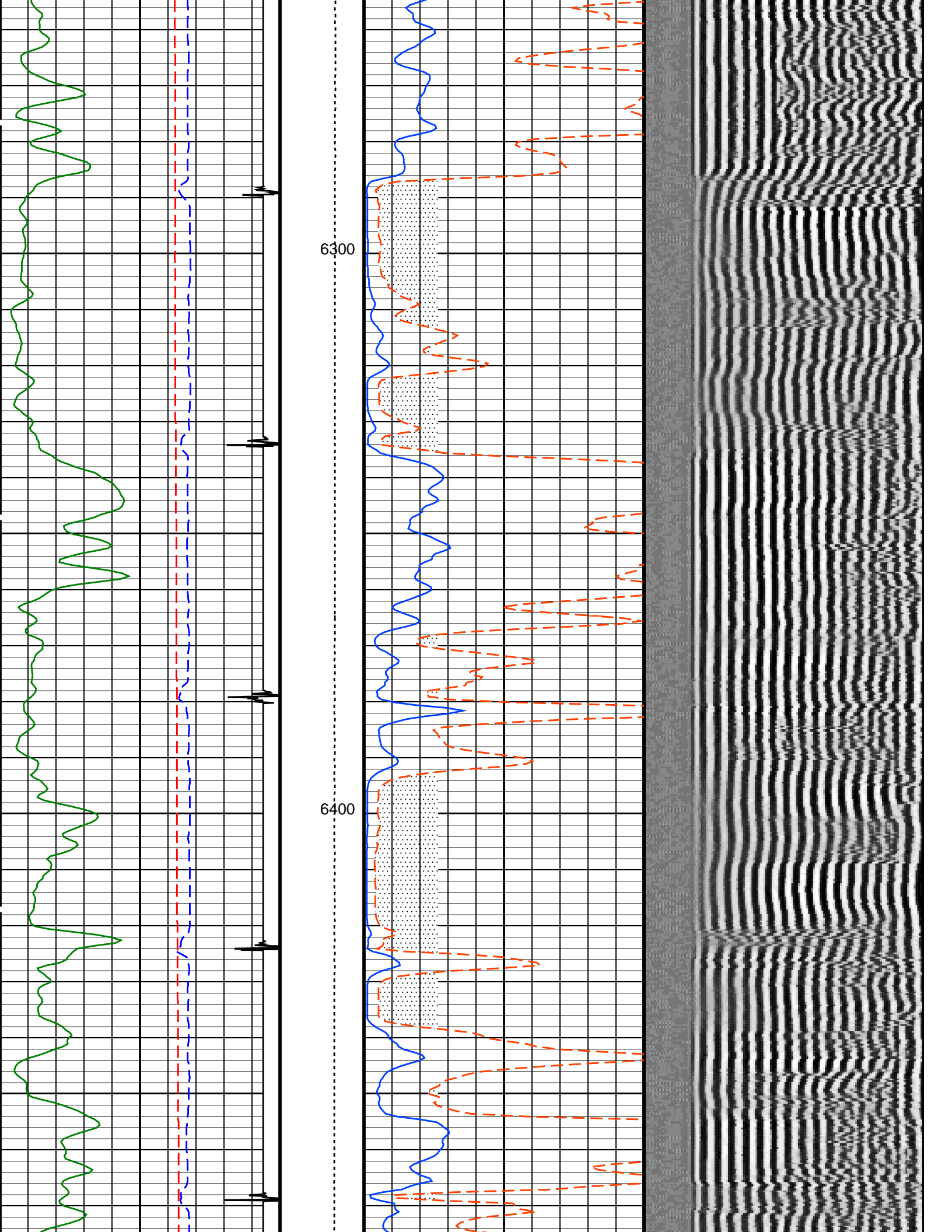


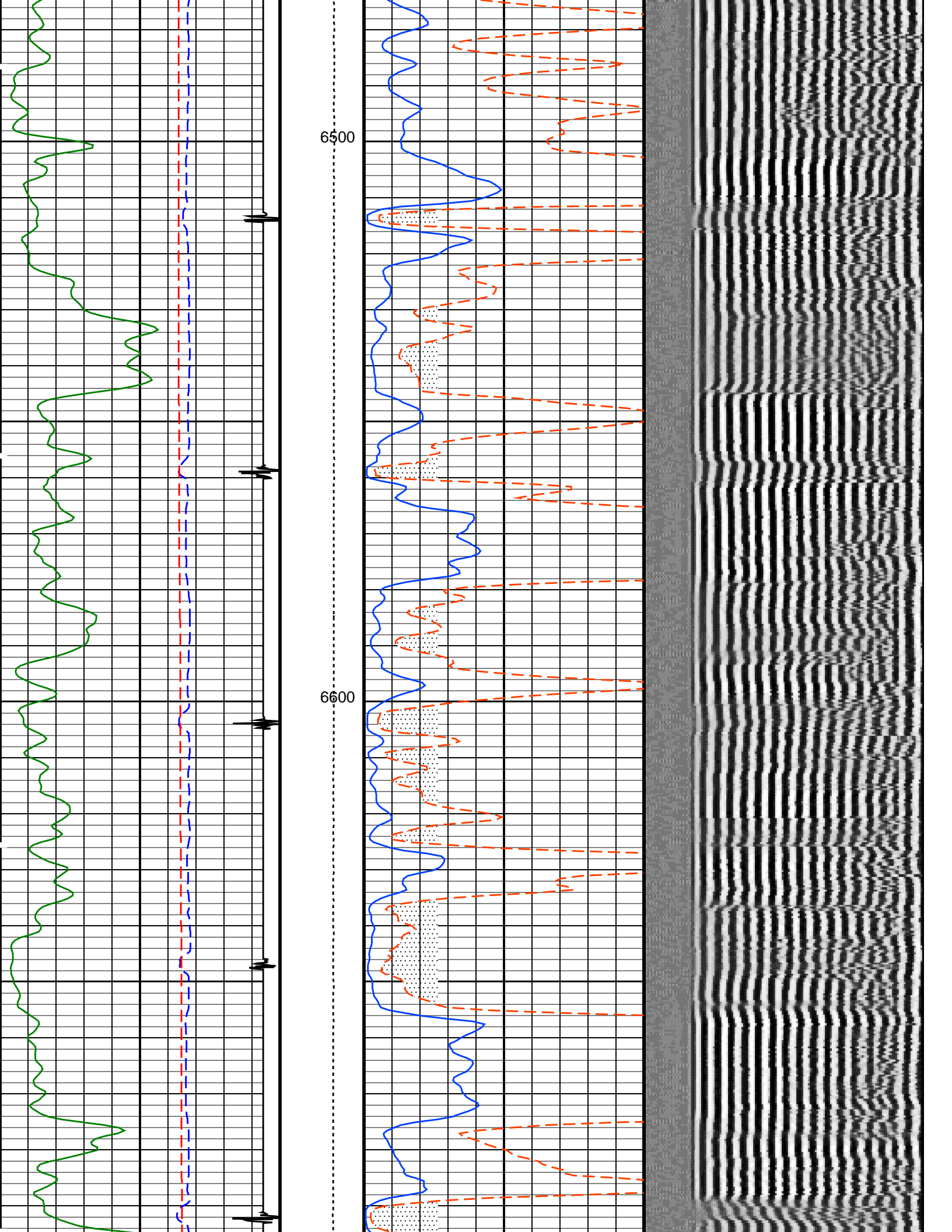


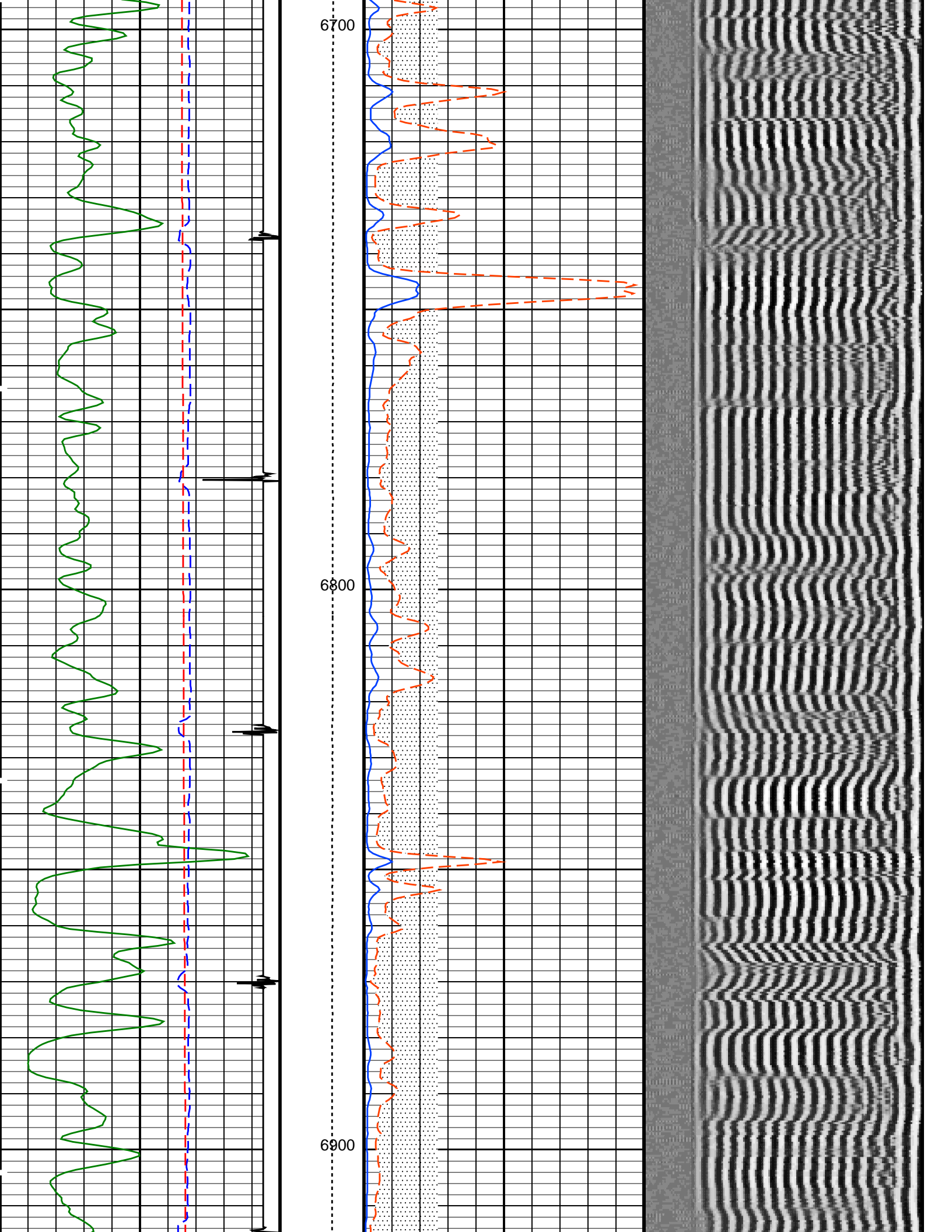


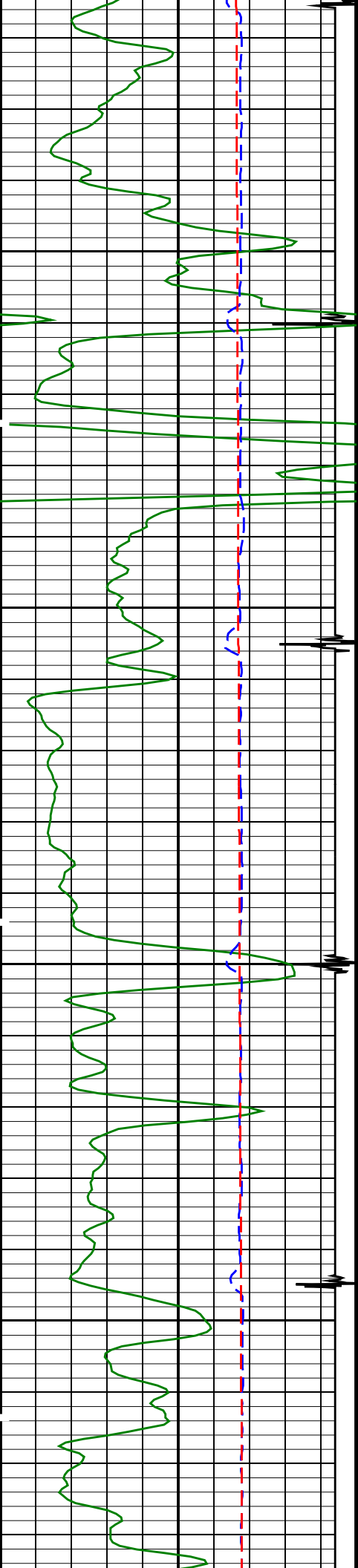






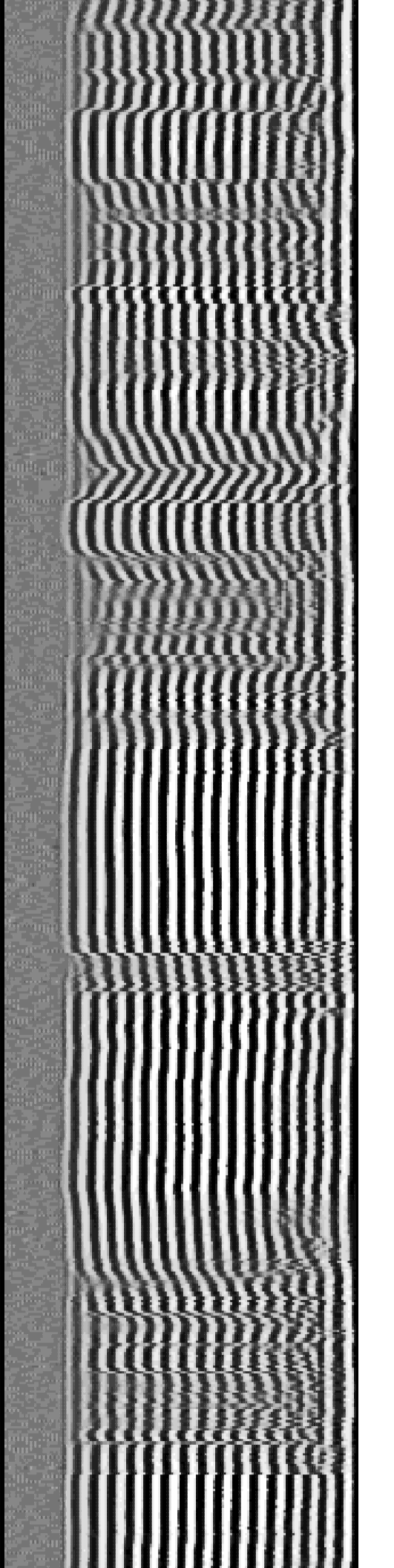
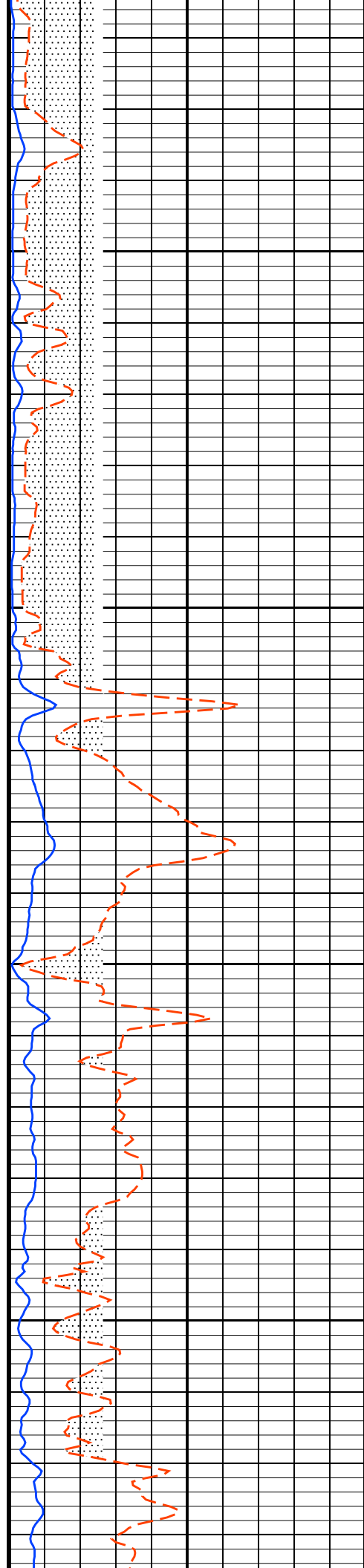


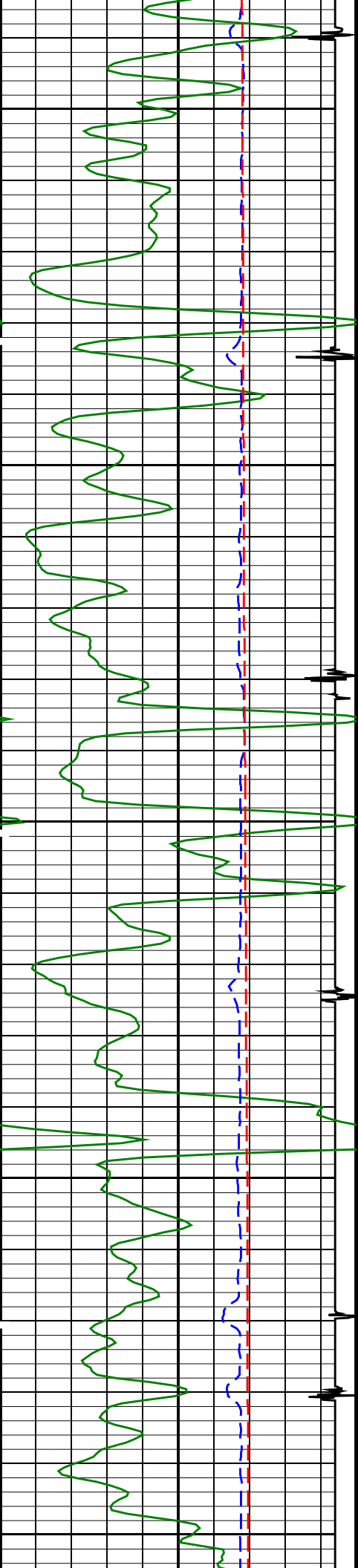




7000

7100

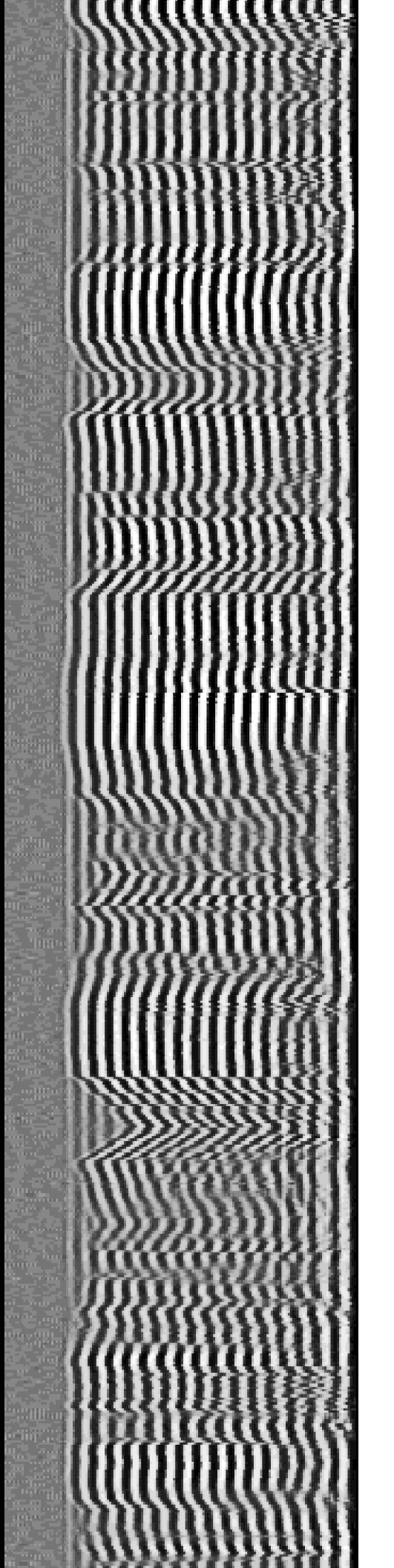
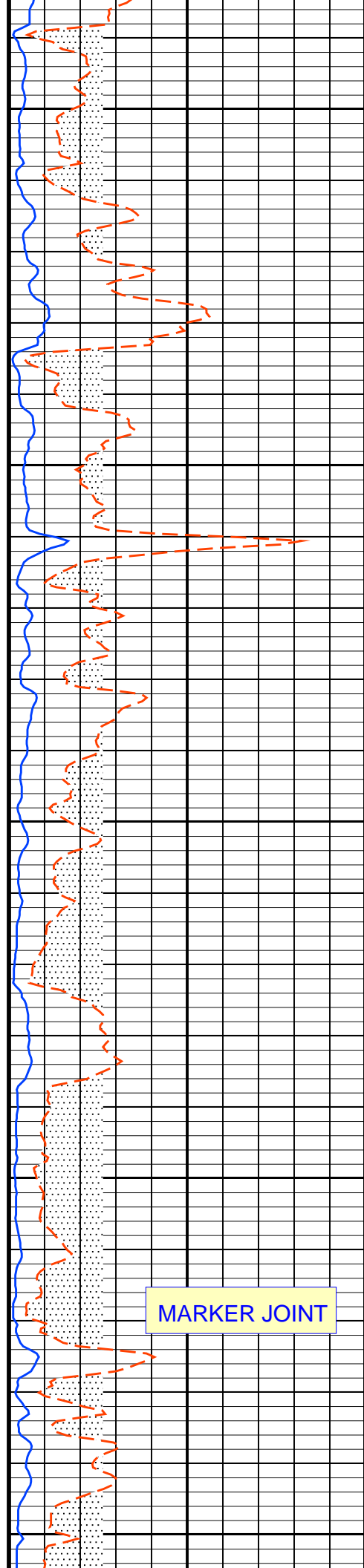


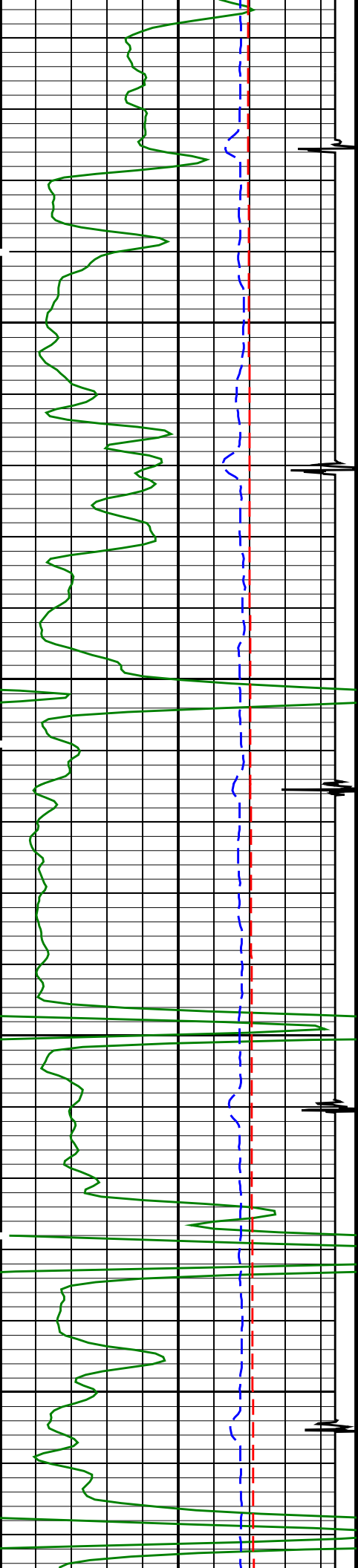


7200

7300

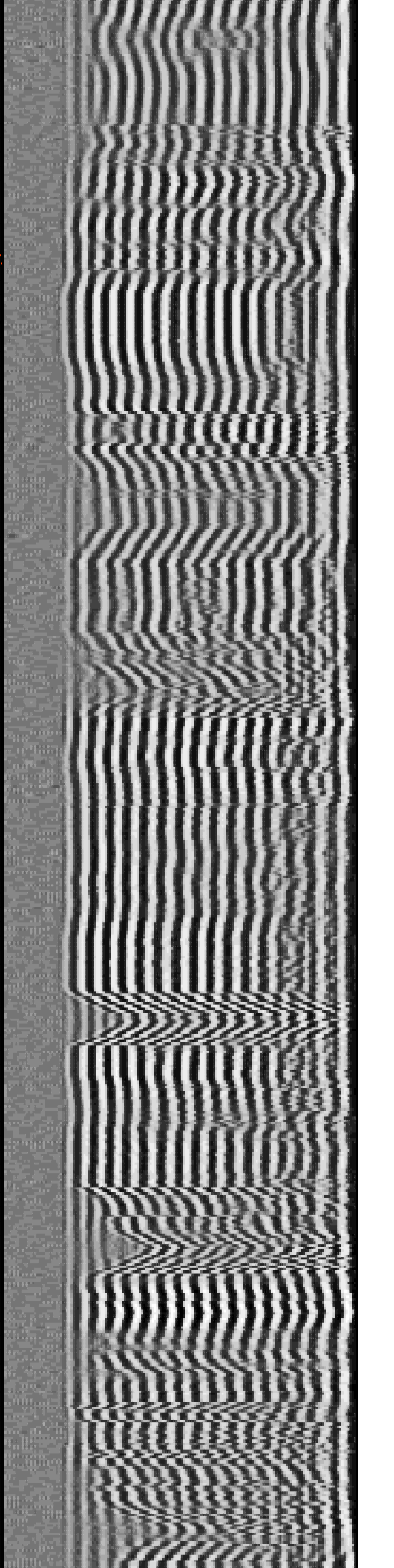
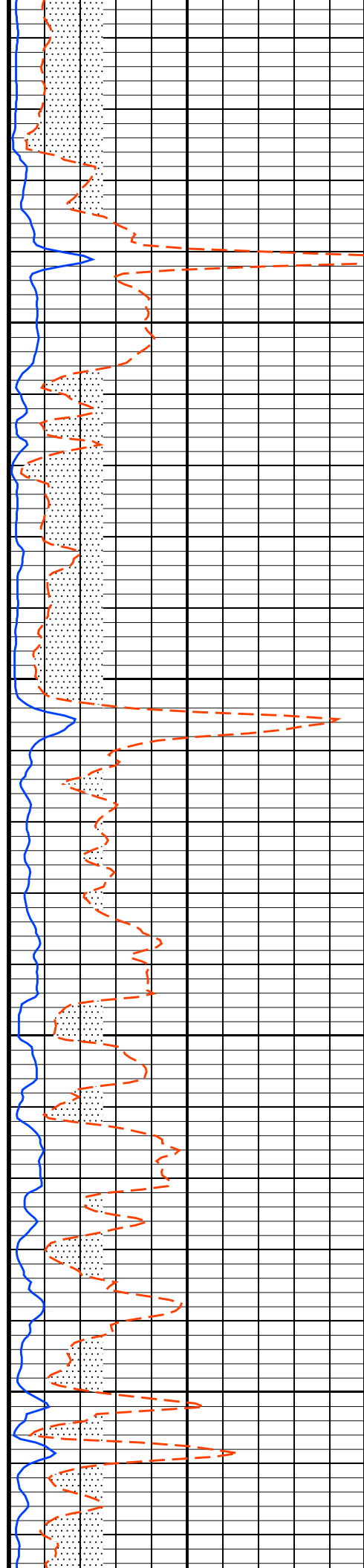
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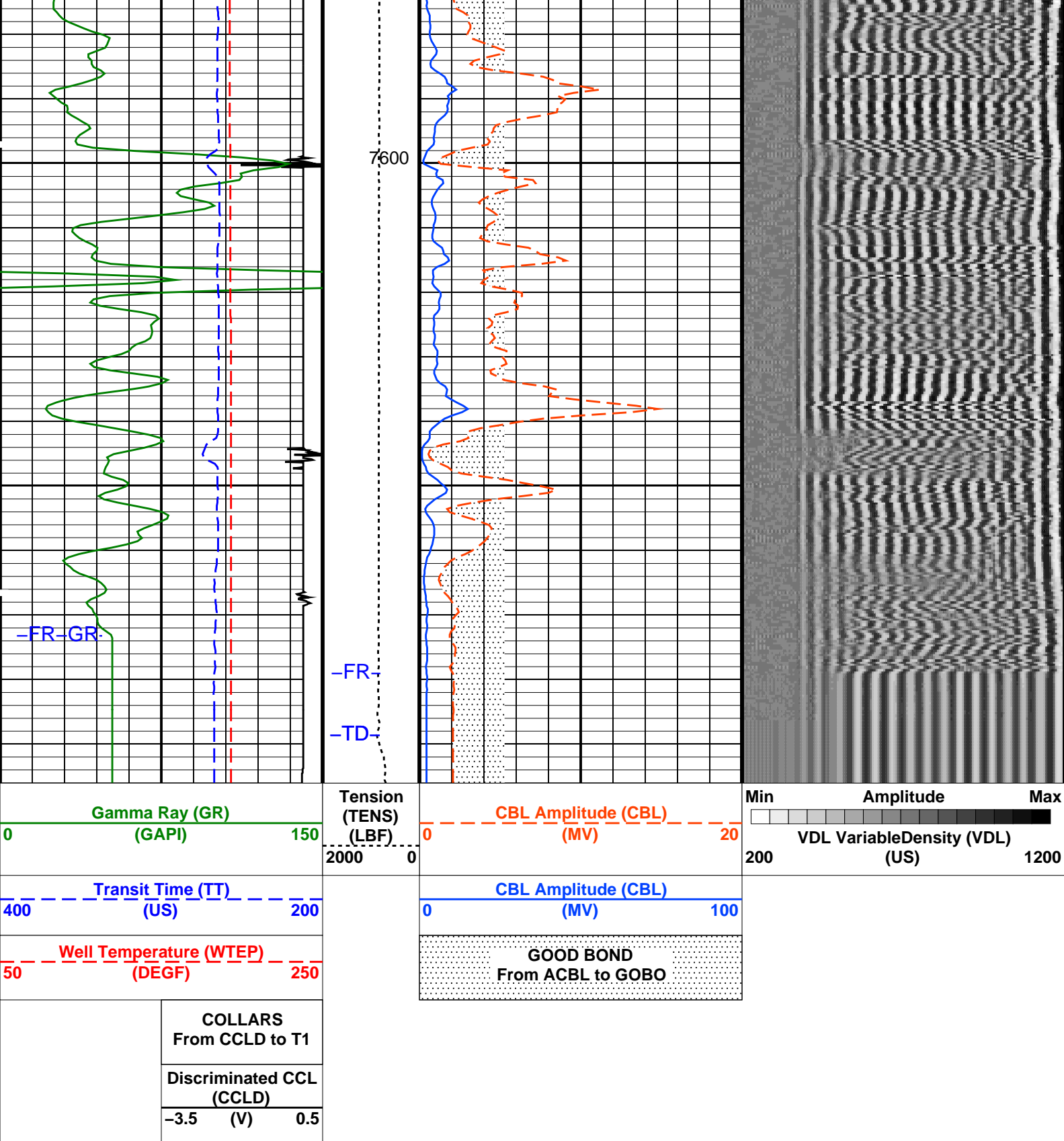




7400

7500





PIP SUMMARY

Time Mark Every 60 S

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	243.137	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	357.137	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	71	MV
CMCF	CBL Cement Type Compensation Factor	0.196292	
CMT	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.306128	IN
DTF	Delta-T Fluid	204.5	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	1	
GOBO	Good Bond	2.61257	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	186.137	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	8.69115	DB/F
MCCF	MAP Cement Type Compensation Factor	0.355424	
MCI	Minimum Cemented Interval for Isolation	4.75	FT
MMSA	MAP Minimum Sonic Amplitude	7.2608	MV
MSA	Minimum Sonic Amplitude	1.14425	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	3.7	MRAY
System and Miscellaneous			
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	17.00	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
TD	Total Depth	-50000	FT

Format: CBL_VDL Vertical Scale: 5" per 100' Graphics File Created: 24-Apr-2013 12:51

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

Output DLIS Files			
DEFAULT	SCMT_PSP_004LUP	FN:3	PRODUCER 24-Apr-2013 12:51



REPEAT PASS

MAXIS Field Log

Company: Cascade Petroleum LLC Well: Fisher 13-9S-55W-0

Output DLIS Files			
DEFAULT	SCMT_PSP_003LUP	FN:2	PRODUCER 24-Apr-2013 12:44

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

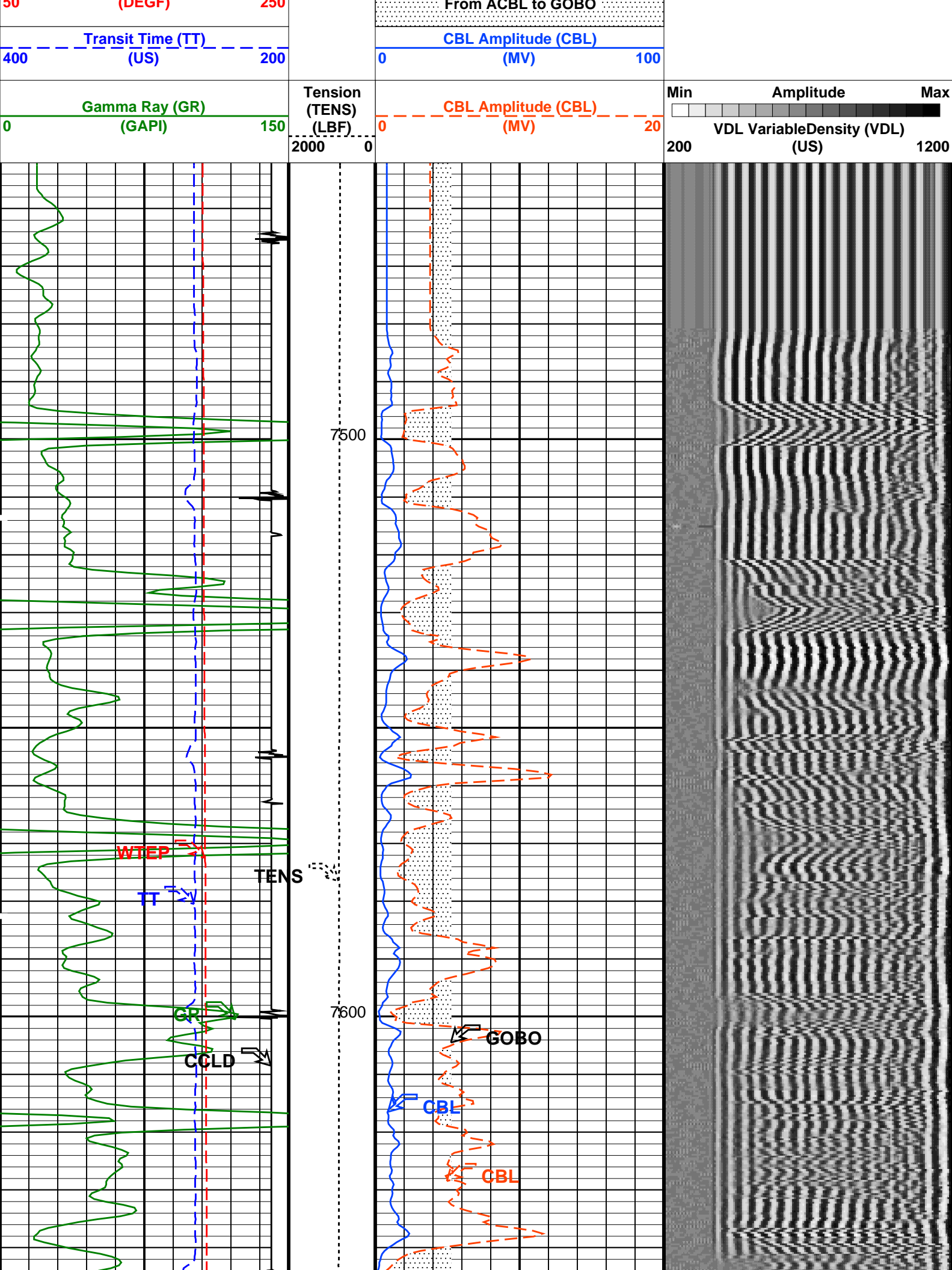
PIP SUMMARY			
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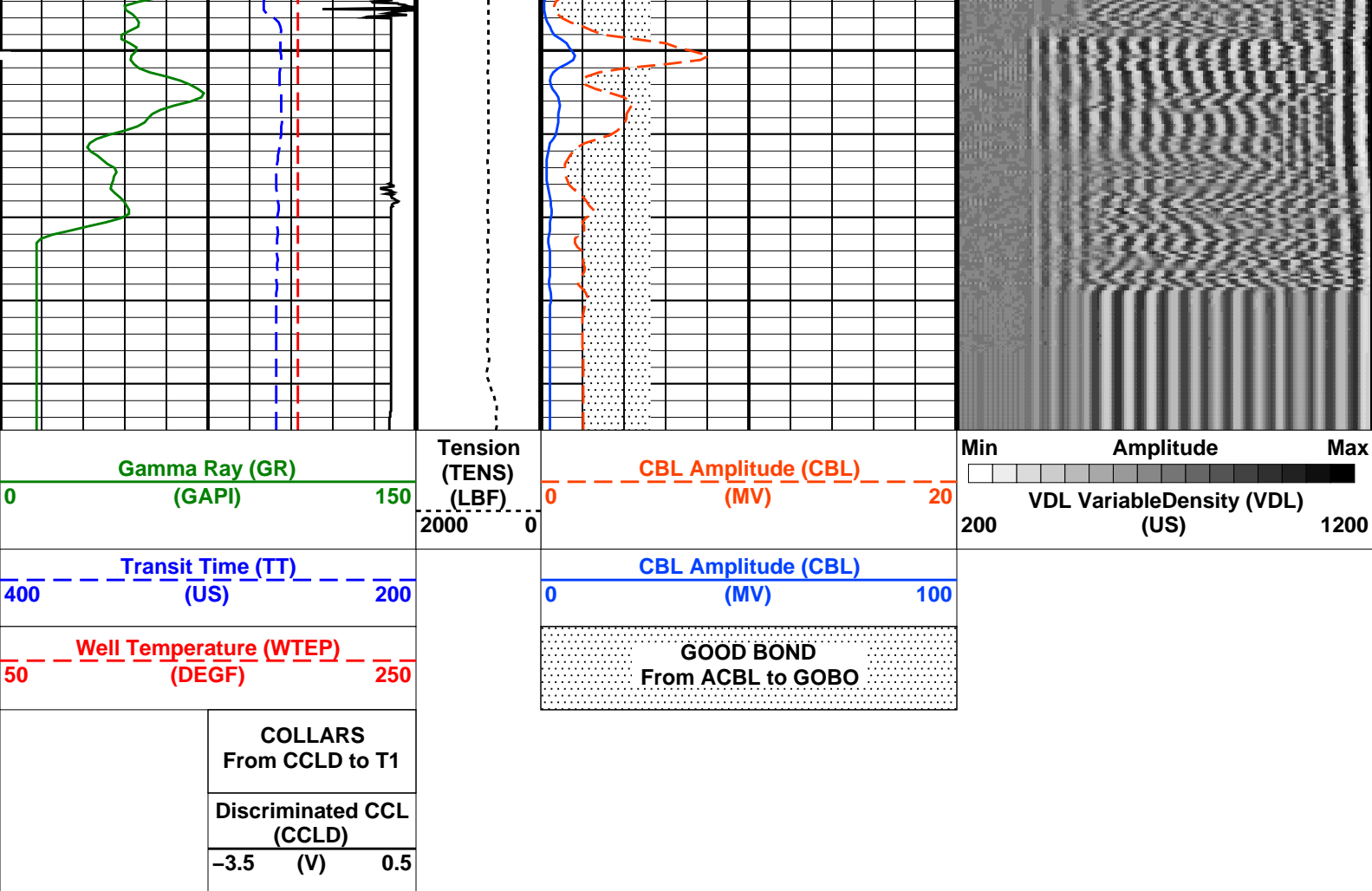
Time Mark Every 60 S

Discriminated CCL (CCLD)
-3.5 (V) 0.5
COLLARS From CCLD to T1

Well Temperature (WTEP) 50 (DEG F) 250

GOOD BOND





PIP SUMMARY

Time Mark Every 60 S

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	243.137 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	357.137 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	71 MV
CMCF	CBL Cement Type Compensation Factor	0.196292
CMT C	SCMT Slow Channel Multiplexer Mode	SCAN
CMTM	SCMT Operating Mode	LOG
CSCS	SCMT Slow Channel Index	VCC
CTHI	Casing Thickness	0.306128 IN
DTF	Delta-T Fluid	204.5 US/F
FATT	Acoustic Attenuation due to Fluid	0 DB/F
FCF	CBL Fluid Compensation Factor	1
GOBO	Good Bond	2.61257 MV
MAPD	SCMT MAP Peak Detection Mode	PEAK
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	186.137 US
MAPT	SCMT MAP Fixed Threshold Level	30 MV
MATT	Maximum Attenuation	8.69115 DB/F
MCCF	MAP Cement Type Compensation Factor	0.355424
MCI	Minimum Cemented Interval for Isolation	4.75 FT
MMSA	MAP Minimum Sonic Amplitude	7.2608 MV
MSA	Minimum Sonic Amplitude	1.14425 MV
PEDE	Peak Detection On/Off Switch in Playback	OFF
VDLG	VDL Manual Gain	5
ZCMT	Acoustic Impedance of Cement	3.7 MRAY
System and Miscellaneous		
CSIZ	Current Casing Size	5.500 IN
CWEI	Casing Weight	17.00 LB/F
DFD	Drilling Fluid Density	8.40 LB/G
TD	Total Depth	50000 FT

OP System Version: 19C2-270

SCMT-CB	19C2-270	PSPT	19C2-270
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Output DLIS Files

DEFAULT	SCMT_PSP_003LUP	FN:2	PRODUCER	24-Apr-2013 12:44
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Company: **Cascade Petroleum LLC**

Schlumberger

Well: **Fisher 13-9S-55W-01**

Field: **Wildcat**

County: **Lincoln**

State: **Colorado**

CEMENT BOND
GAMMA RAY
CASING COLLAR LOG