Schlumberger

Company: Southern California Gas Company

Well: Standard Sesnon 4B

Field: Aliso Canyon

County: Los Angeles State: California

County: Los Angeles
Field: Aliso Canyon
Location:
Well: Standard Sesnon 4B
Company: Southern California Gas Company

Cement Bond Log

Variable Density Log

Gamma Ray - CCL

Location:		Elev.: K.B.	2910.50 ft
		G.L.	2888.00 ft
		D.F.	
Permanent Datum:	Ground Level	Elev.:	2888.00 f
Log Measured From:	Kelly Bushing	22.50 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		

API Serial No.	Section:	Township:	Range:
04-037-30460	27	3N	16W

Logging Date		15-Aug-2016	
Run Number		Three	
Depth Driller		9127.00 ft	
Schlumberger Depth		8672.00 ft	
Bottom Log Interval		8672.00 ft	
Top Log Interval		28.00 ft	
Casing Fluid Type		Brine with Polymer	
Salinity			
Density		10 lbm/gal	
Fluid Level		8.00 ft	
BIT/CASING/TUBING STRING			
Bit Size		14.00 in	
From		1578.00 ft	
To		9267.00 ft	
Casing/Tubing Size		9.625 in	
Weight		47 lbm/ft	
Grade		L80	
From		0.00 ft	
To		8887.00 ft	
Max Recorded Temperatures			
Logger on Bottom	Time	15-Aug-2016 09:41:00	
Unit Number	Location:	3189 Ventura	
Recorded By		I. Kartawidjaja	
Witnessed By		Mr. Tom McMahon	

Disclaimer

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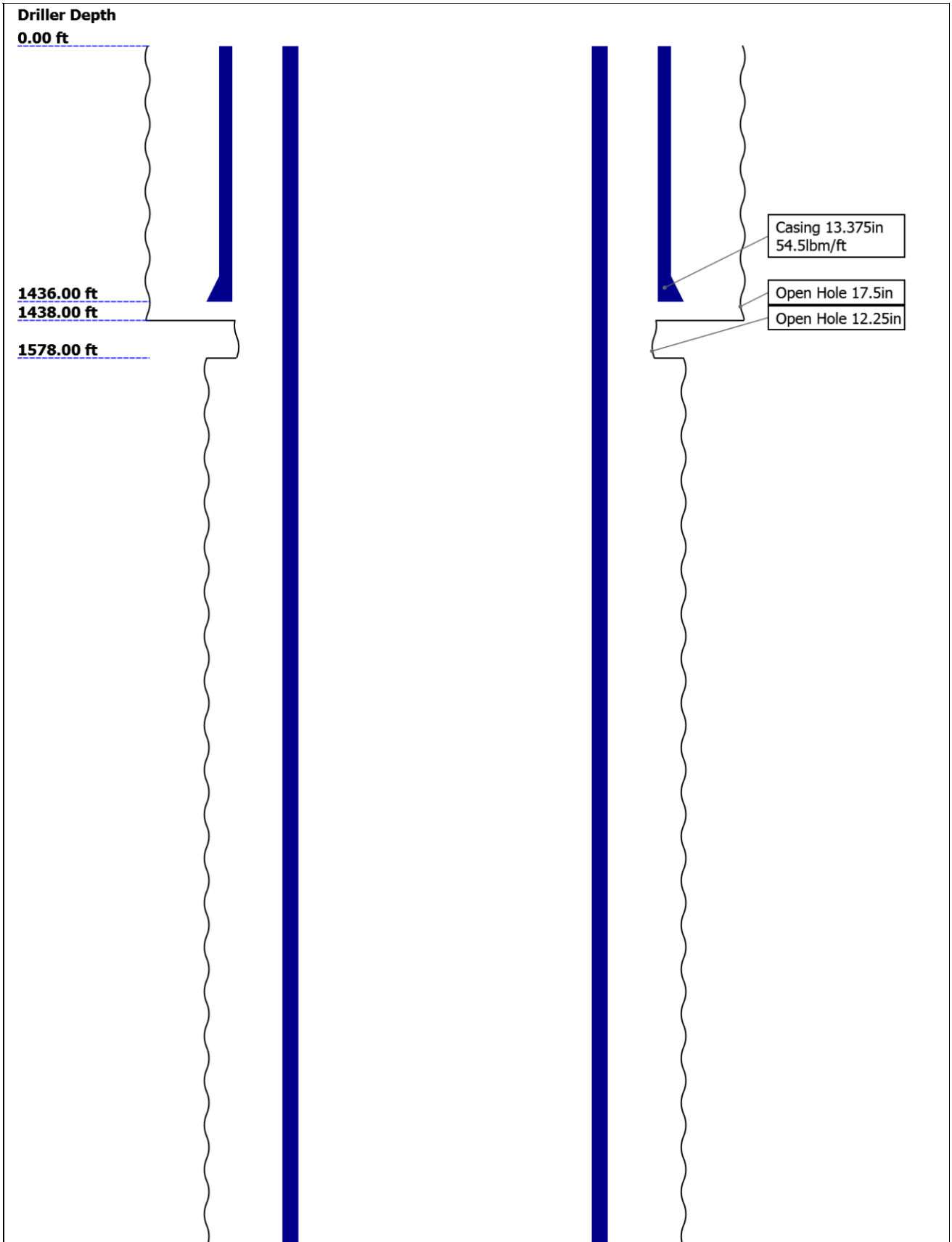
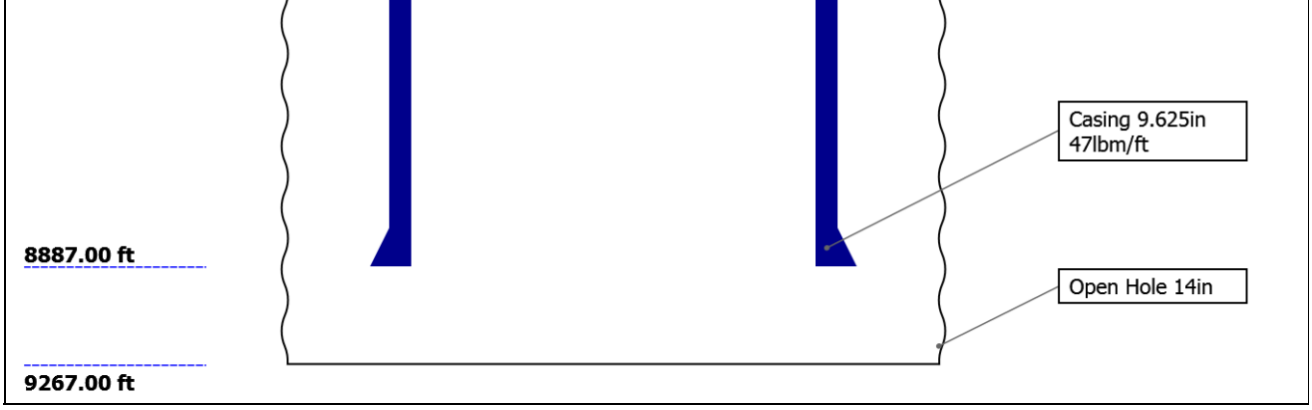
Contents

1. Header
2. Disclaimer
3. Contents
4. Well Sketch
5. Borehole Size/Casing/Tubing Record
6. Remarks and Equipment Summary
7. Job Event Summary
8. Composite 2 Main Pass 5 in = 100 ft
   8.1 Integration Summary
   8.2 Software Version
   8.3 Composite Summary
   8.4 Log (Sonic CBL with VDL)
   8.5 Parameter Listing
9. Three Repeat Pass 5 in = 100 ft
   9.1 Integration Summary
   9.2 Composite Summary
   9.3 Log (Sonic CBL with VDL)

10. USI Fluid Properties Measurement
11. Composite 2 Main Pass 5 in = 100 ft
    11.1 Integration Summary
    11.2 Composite Summary
    11.3 Log (LBV1_USI-VDL (DSLT) Cement 9.625inch)
12. Tail

Well Sketch





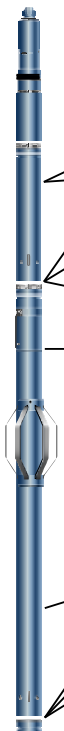
Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	17.5	12.25	14			
Top Driller (ft)	0	1438	1578			
Top Logger (ft)	0	1438	1578			
Bottom Driller (ft)	1438	1578	9267			
Bottom Logger (ft)	1438	1578	9267			
Casing						
Size (in)	13.375	9.625				
Weight (lbm/ft)	54.5	47				
Inner Diameter (in)	12.615	8.681				
Grade	K55	L80				
Top Driller (ft)	0	0				
Top Logger (ft)	0	0				
Bottom Driller (ft)	1436	8887				
Bottom Logger (ft)	1436	8887				

Remarks and Equipment Summary

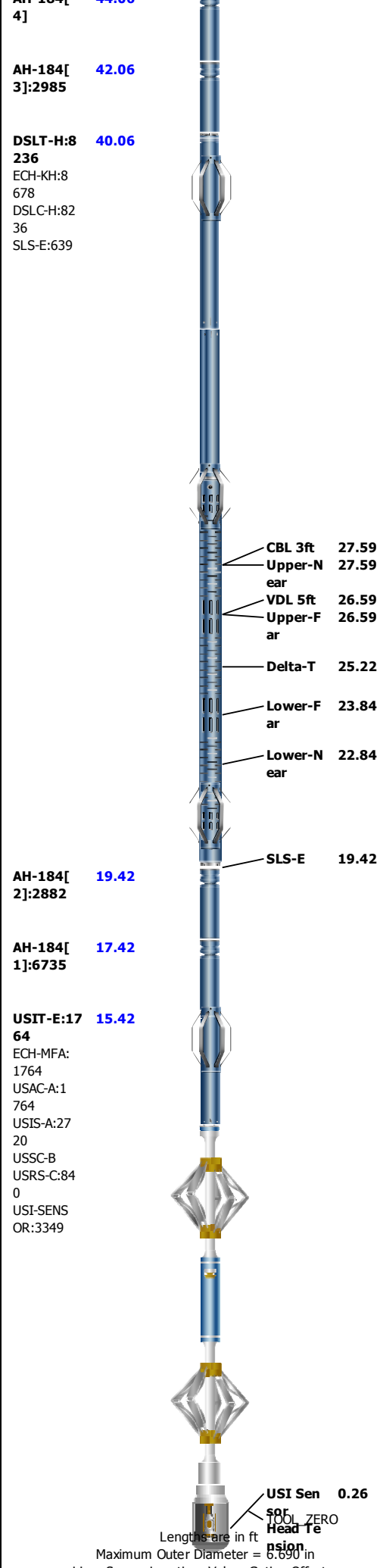
Three: Toolstring

Equip name	Length	MP name	Offset
LEH-QT:2867 LEH-QT:2867	**59.39**	Red	
DTC-H ECH-KC DTC-H	**56.47**	**CTEM HV**	**55.57 0.00**
		TelStatus	**53.47**
		ToolStatus	**53.47**
HGNS-H:3923 HGNH:4819 NSR-F:5002 NPV-N HGNS-H:3923 HACCZ-H:4177 HMCA-H	**53.47**	**Temperature**	**53.44**
		GR	**52.73**
		CNL Porosity	**46.4**
		HMCA	**44.06**
		HGNS	**44.06**
		Accelerometer	**0.00**
AH-184[	**44.06**		



Three: Remarks

Depth correlated to SLB Platform Express log dated 24-Sep-2015 between 8500 and 8600 ft
USIT logged at 10 deg 1.5 inch, speed 3000 fph. Repeat at 10 deg 0.6 inch at 1200 fph
Anomalies repeated at very hi-res
Logs recorded with 0 psi surface pressure
Log recorded from above the 7" liner top to surface
7 inch liner top is 8695 ft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AH-184[3]:2985 42.06
DSLT-H:8236 40.06
ECH-KH:8678
DSLC-H:8236
SLS-E:639
CBL 3ft 27.59
Upper-Near 27.59
VDL 5ft 26.59
Upper-Far 26.59
Delta-T 25.22
Lower-Far 23.84
Lower-Near 22.84
SLS-E 19.42
AH-184[2]:2882 19.42
AH-184[1]:6735 17.42
USIT-E:1764 15.42
ECH-MFA:1764
USAC-A:1764
USIS-A:2720
USSC-B
USRS-C:840
USI-SENSOR:3349
USI Sensor 0.26
TOOL_ZERO
Head Tension
Lengths are in ft
Maximum Outer Diameter = 6.690 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Job Event Summary

Event	Time	Duration	Interval	Remark
Log[1]:Down	Aug-15-2016 08:33	00:02:38	127.37 - 418.01 ft	Fluid Properties
Log[5]:Down	Aug-15-2016 08:39	01:58:31	950.93 - 8648.53 ft	Fluid Properties
Log[7]:Up	Aug-15-2016 09:40	01:04:41	8666.53 - 5508.26 ft	Main pass #1
Log[9]:Up	Aug-15-2016 11:09	00:03:39	8621.92 - 8553.23 ft	Hi-Res Repeat
Log[10]:Up	Aug-15-2016 11:14	00:06:29	8685.57 - 8394.14 ft	Normal Repeat
Log[11]:Up	Aug-15-2016 11:21	00:03:42	8369.15 - 8297.2 ft	Hi-Res Repeat
Log[12]:Up	Aug-15-2016 11:26	00:02:44	8219.41 - 8166.22 ft	Hi-Res Repeat
Log[13]:Up	Aug-15-2016 11:31	00:11:05	7858.18 - 7647.37 ft	Hi-Res repeat
Log[14]:Up	Aug-15-2016 11:57	02:51:00	5649.76 - 145.33 ft	Main Pass #2
Log[2]:Up	Aug-15-2016 15:36	00:04:16	207.17 - 18.83 ft	Surface Pass
Log[3]:Up	Aug-15-2016 15:41	00:03:10	72.43 - 23.13 ft	Hi-Res Repeat

Composite 2

Main Pass 5 in = 100 ft

Software Version

Acquisition System	Version
Maxwell 2016 SP1	6.1.58882.3100
Application Patch	Wireline_Hotfix-Perfo-2016SP1_6.1.63773

Computation	Description	Version
CEVAL	Sonic Cement Evaluation Computation Ensemble provides common Parameters and Channels	6.1.58882.3100

SoftwareVersion_Tool	SoftwareVersion_Run Version	SoftwareVersion_Build Version
WAFE-SEC	Synergy SV451EC version 9.10	Synergy SV451EC version 9.10
WAFE-FEC	Synergy SV451EC version 9.10	Synergy SV451EC version 9.10
WAFE-TMDI	Synergy SV451EC version 46.19	Synergy SV451EC version 46.19

Tool Elements	Description	Software Version	Firmware Version
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	6.1.58882.3100	2.0
SLS-E	Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL	6.1.58882.3100	4.0
USI-SENSOR	USIT Transducer Element	6.1.58882.3100	DSP: v1.82

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Three	Log[7]:Up	Up	5508.26 ft	8666.53 ft	15-Aug-2016 9:40:57 AM	15-Aug-2016 10:45:39 AM	ON	5.97 ft	Yes
Three	Log[10]:Up	Up	8394.14 ft	8685.58 ft	15-Aug-2016 11:14:25 AM	15-Aug-2016 11:20:54 AM	ON	-2.42 ft	Yes
Three	Log[14]:Up	Up	145.33 ft	5649.76 ft	15-Aug-2016 11:57:21 AM	15-Aug-2016 1:48:21 PM	ON	-0.52 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Southern California Gas Company Well:Standard Sesnon 4B

Composite 2:S012

Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:21

BIEP - Bond Index Event Pips DSLT-H[1]

TIME_1900 - Time Marked every 60.00 (s)

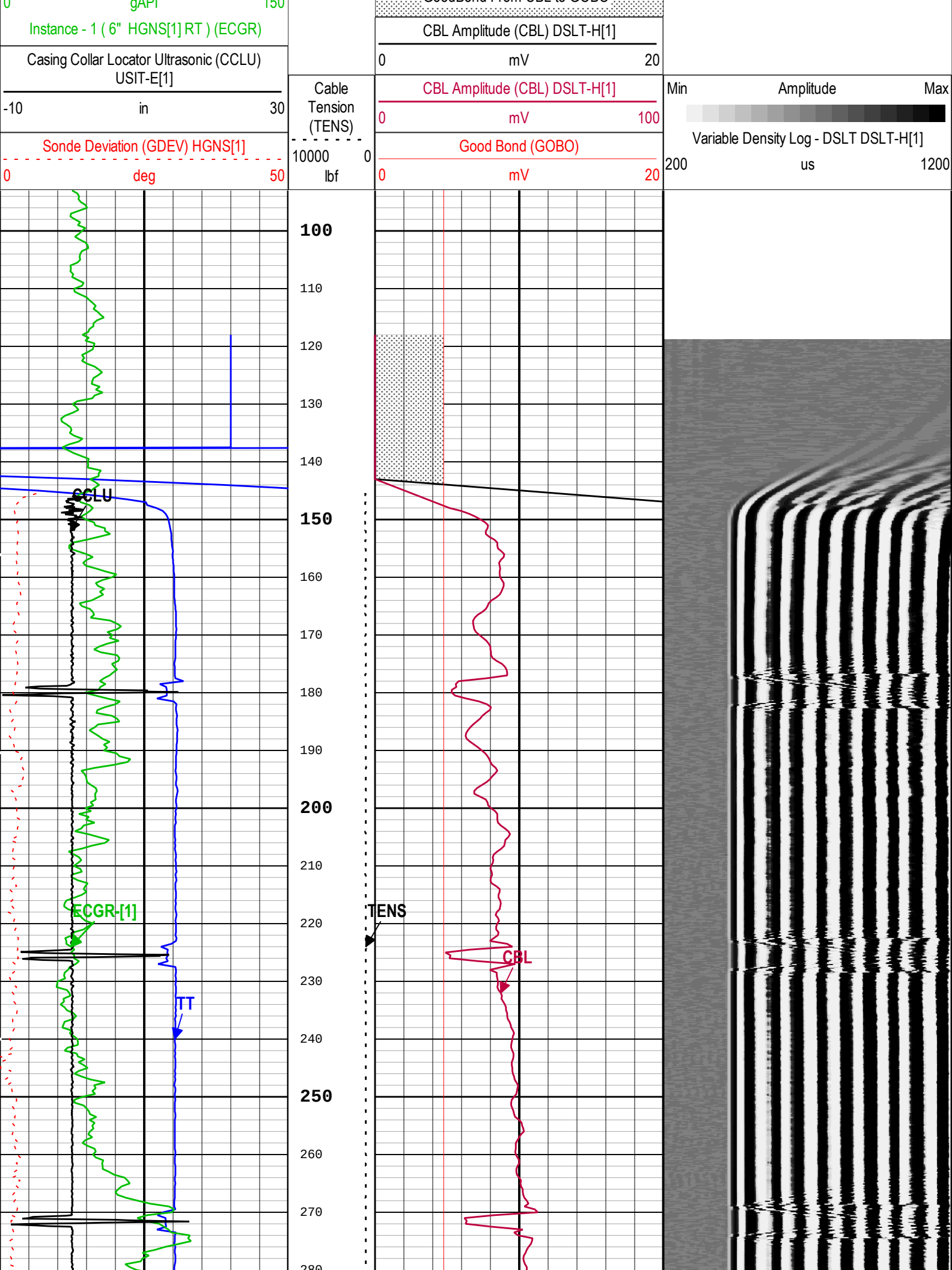
Transit Time for CBL (TT) DSLT-H[1]

400 us 300

Gamma Ray (GR)

0 gAPI 150

GoodBond From CBL to GOBO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Instance - 1 (6" HGNS[1] RT) (ECGR)
Casing Collar Locator Ultrasonic (CCLU) USIT-E[1]
-10 in 30
Sonde Deviation (GDEV) HGNS[1]
0 deg 50
Cable Tension (TENS)
10000 0
lbf
CBL Amplitude (CBL) DSLT-H[1]
0 mV 20
CBL Amplitude (CBL) DSLT-H[1]
0 mV 100
Good Bond (GOBO)
0 mV 20
Min Amplitude Max
Variable Density Log - DSLT DSLT-H[1]
200 us 1200
100
110
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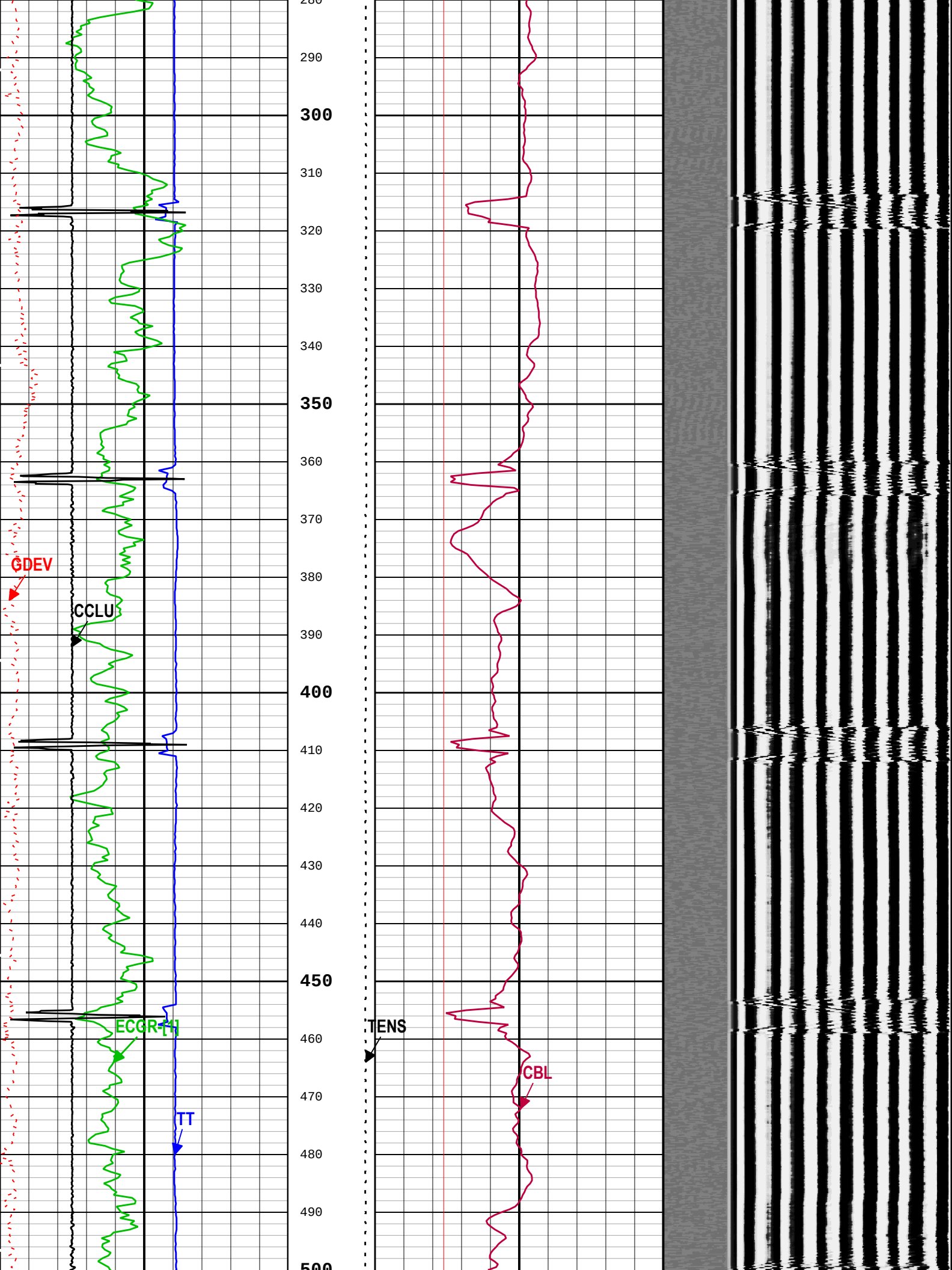
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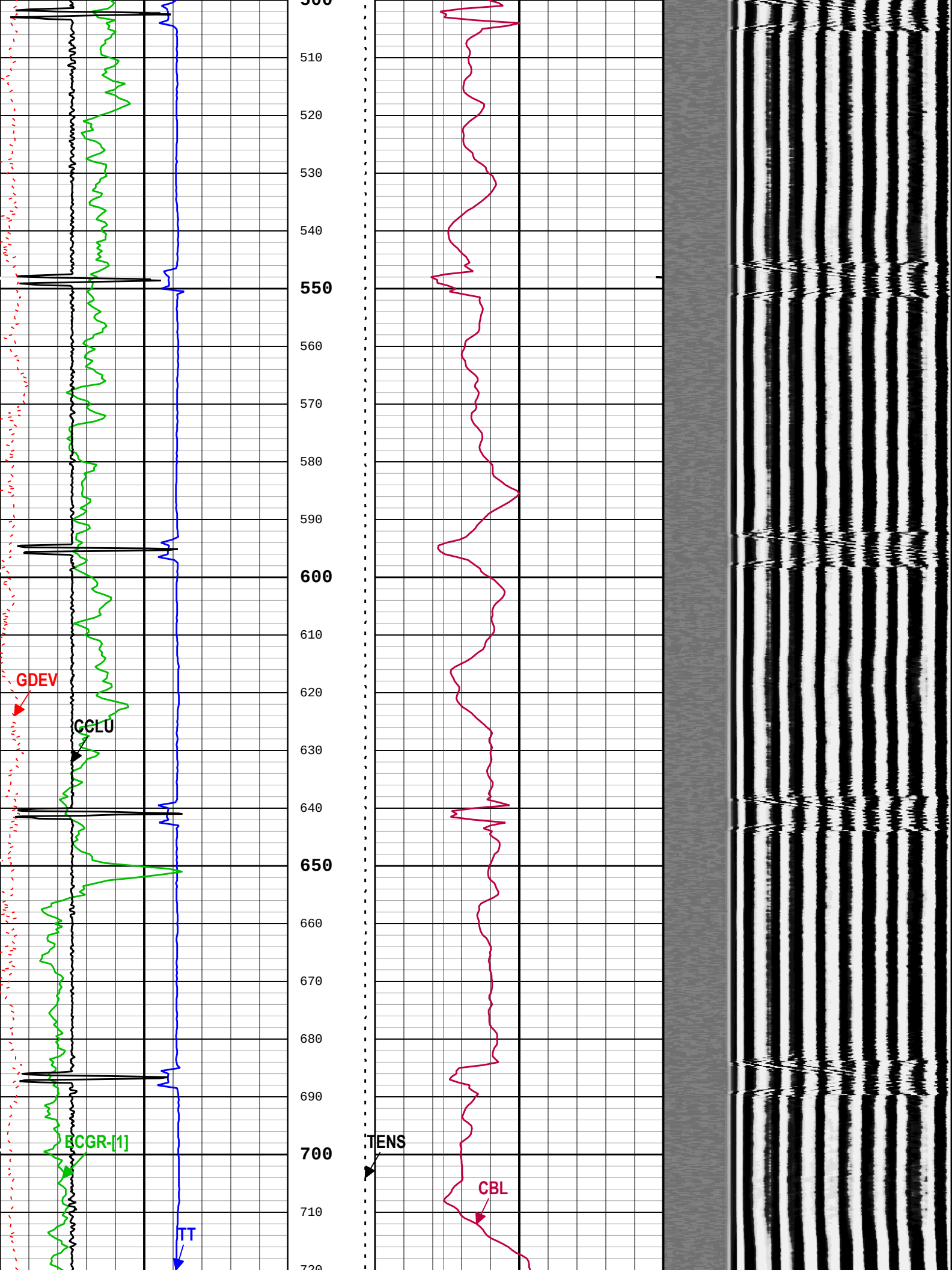
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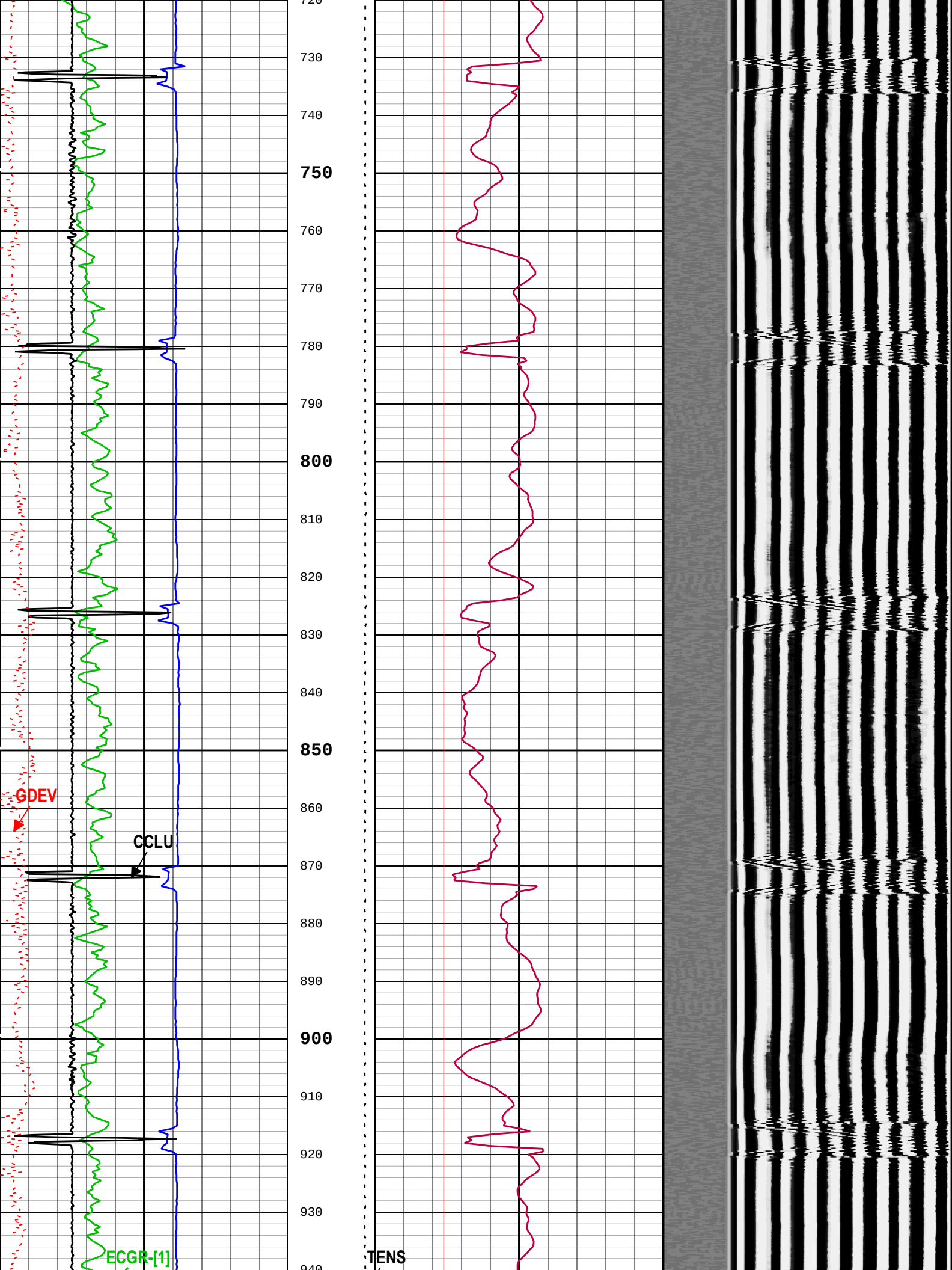
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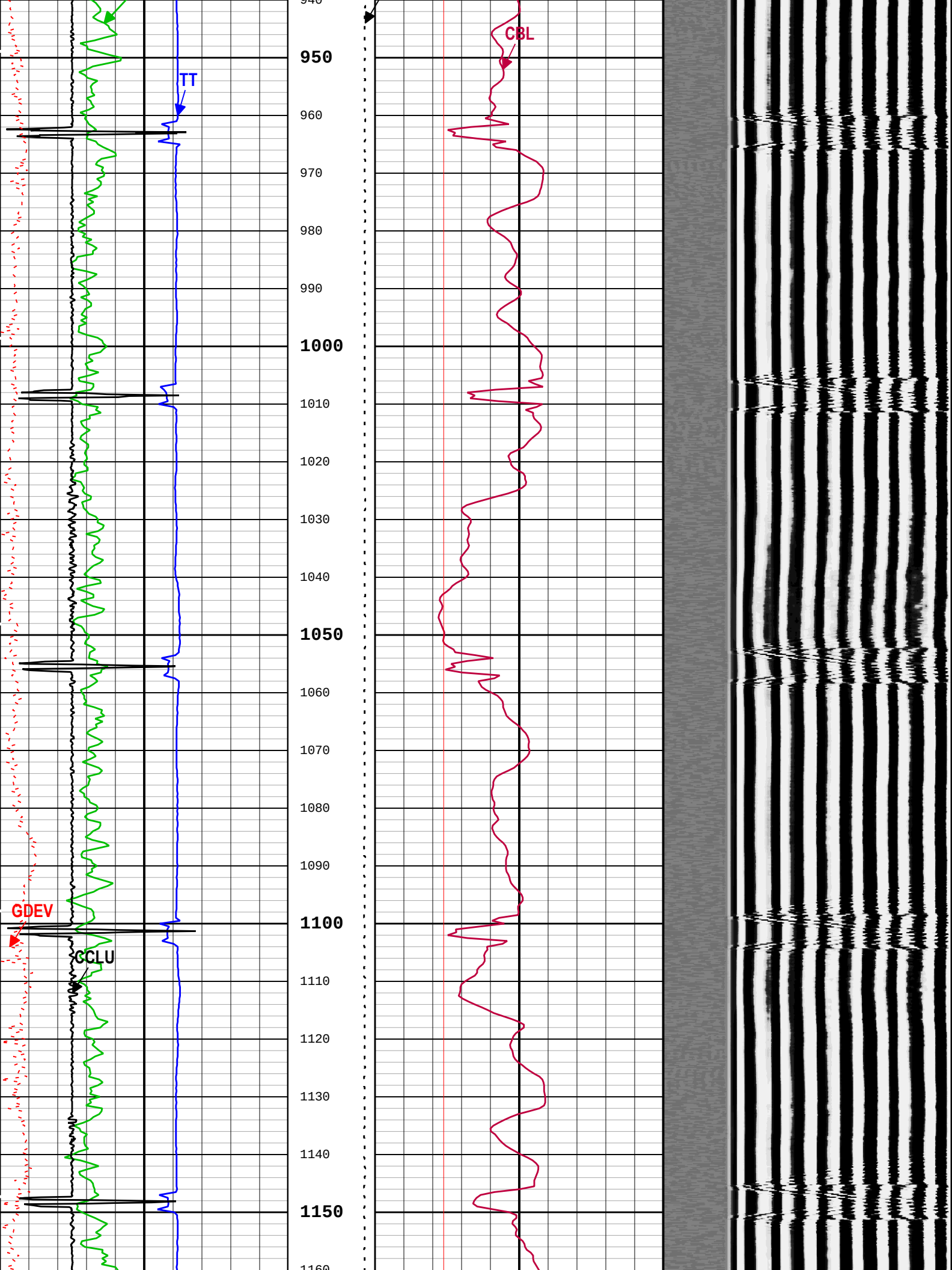
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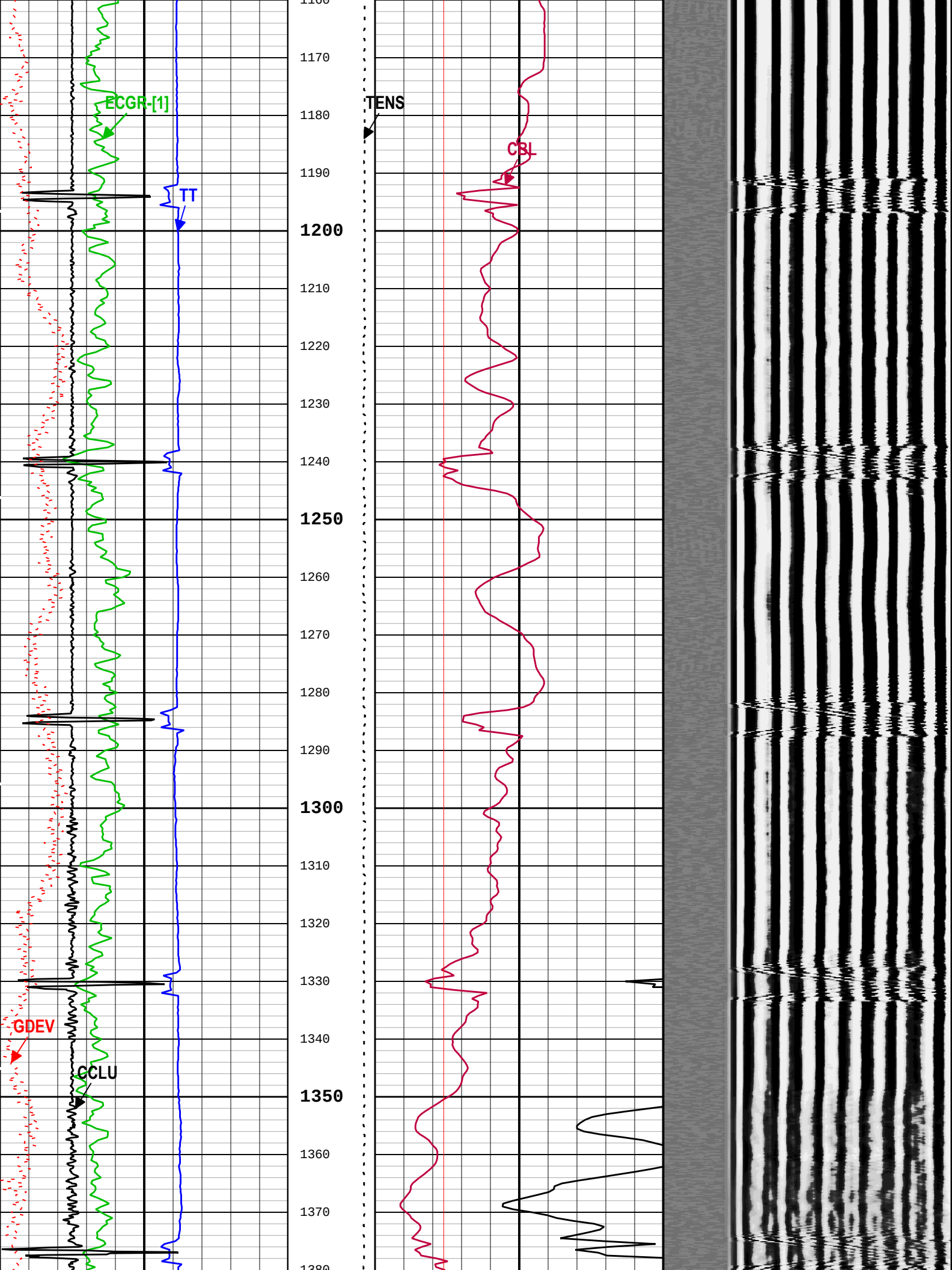
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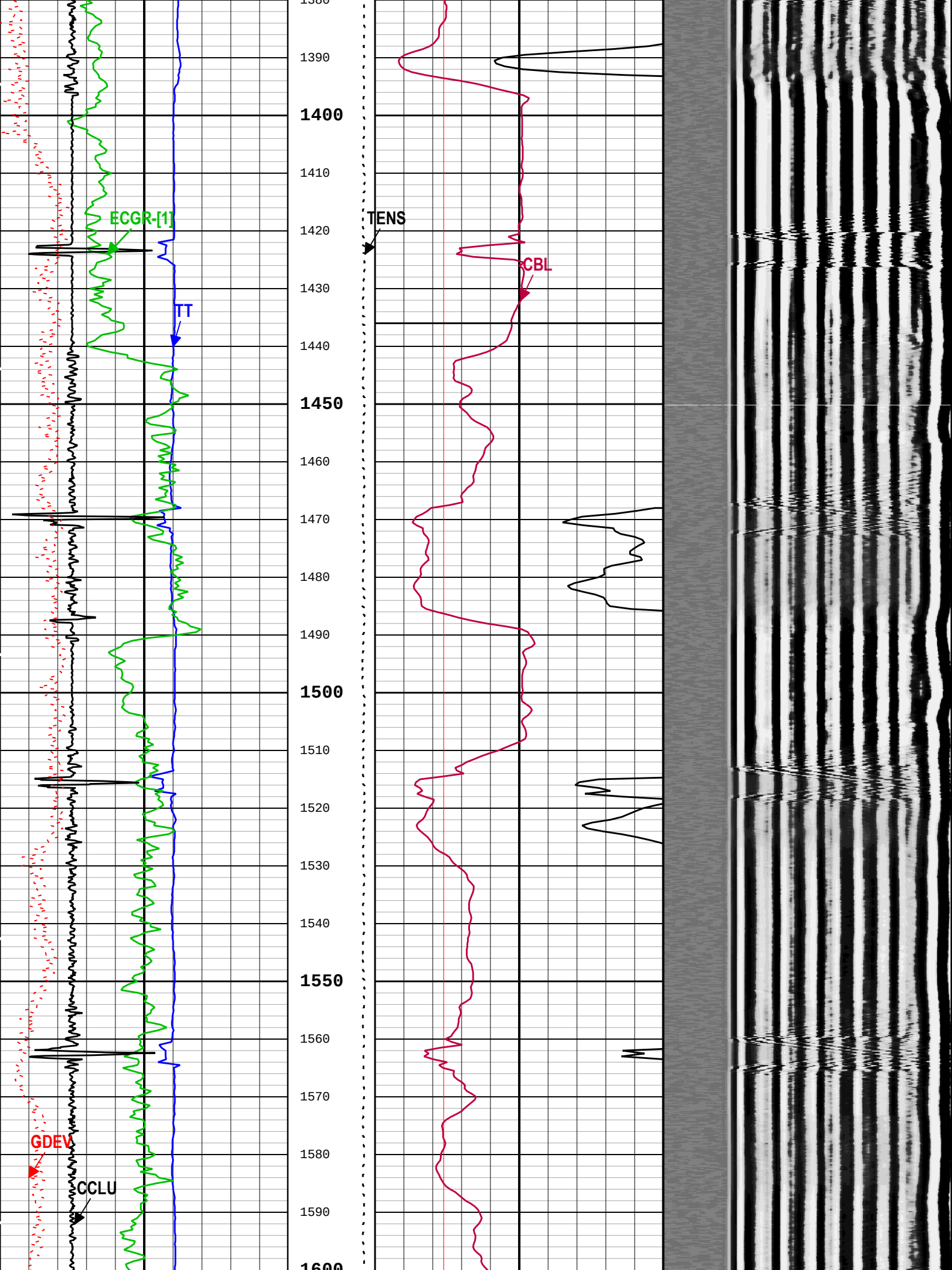
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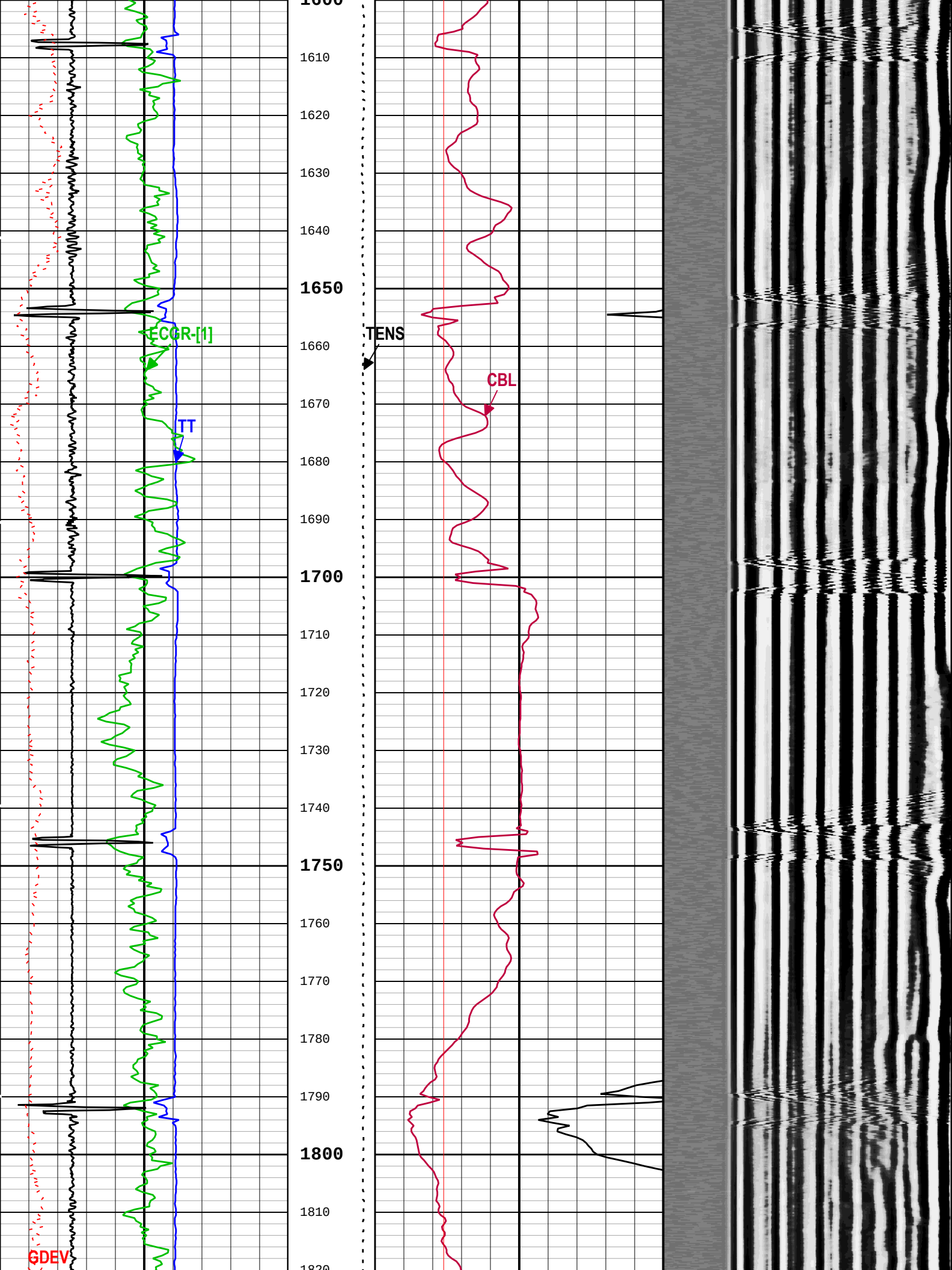
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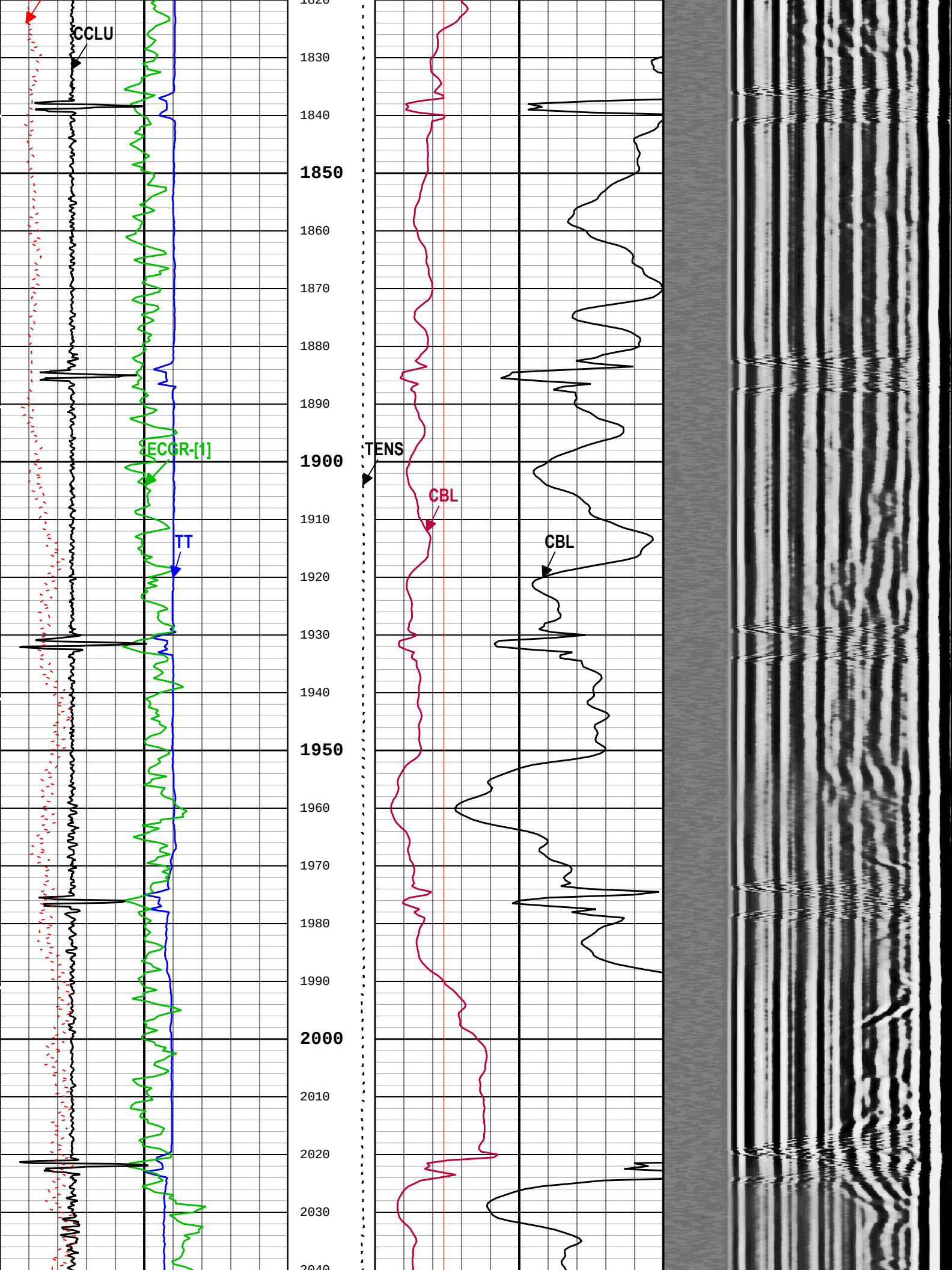
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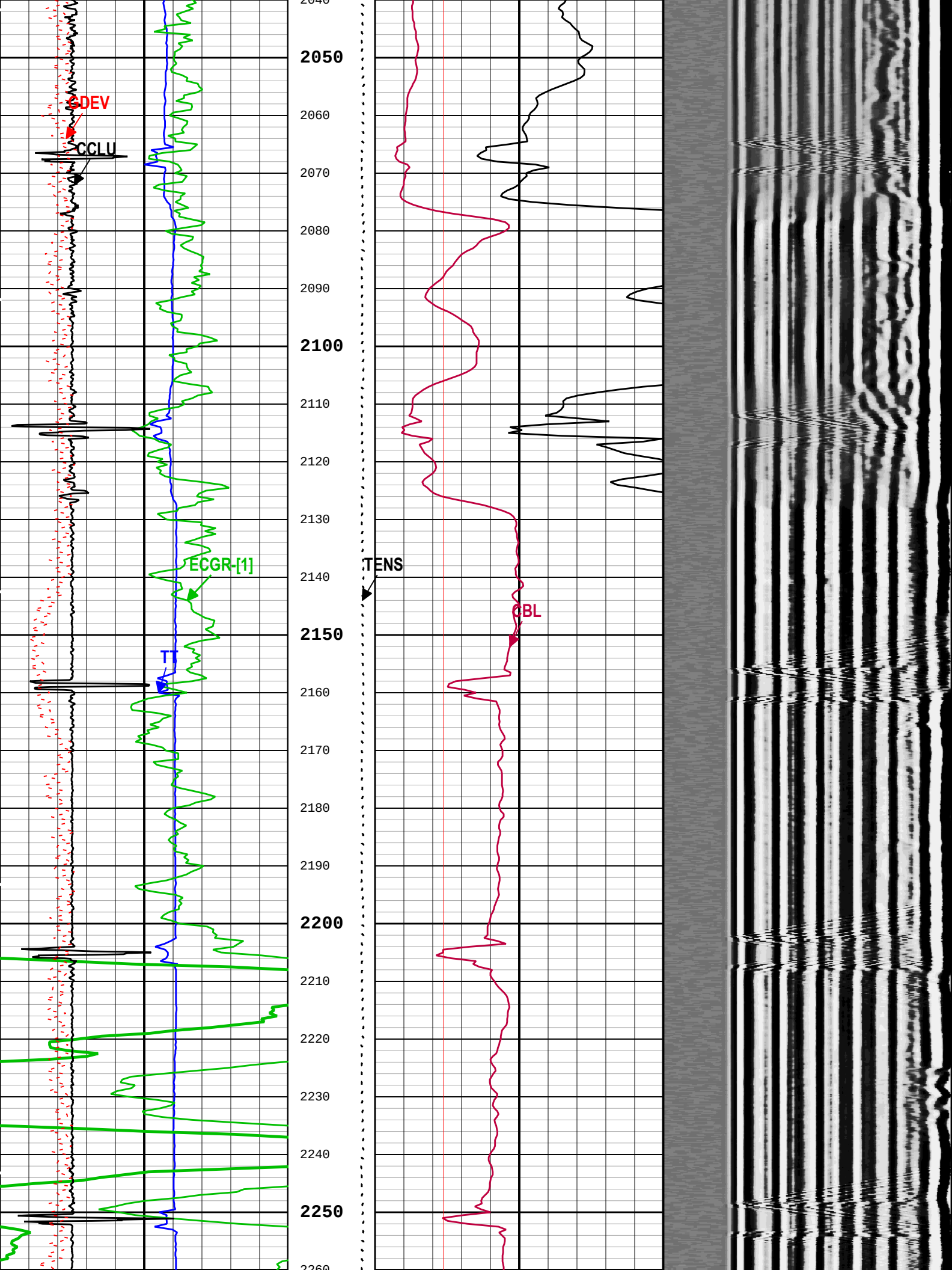
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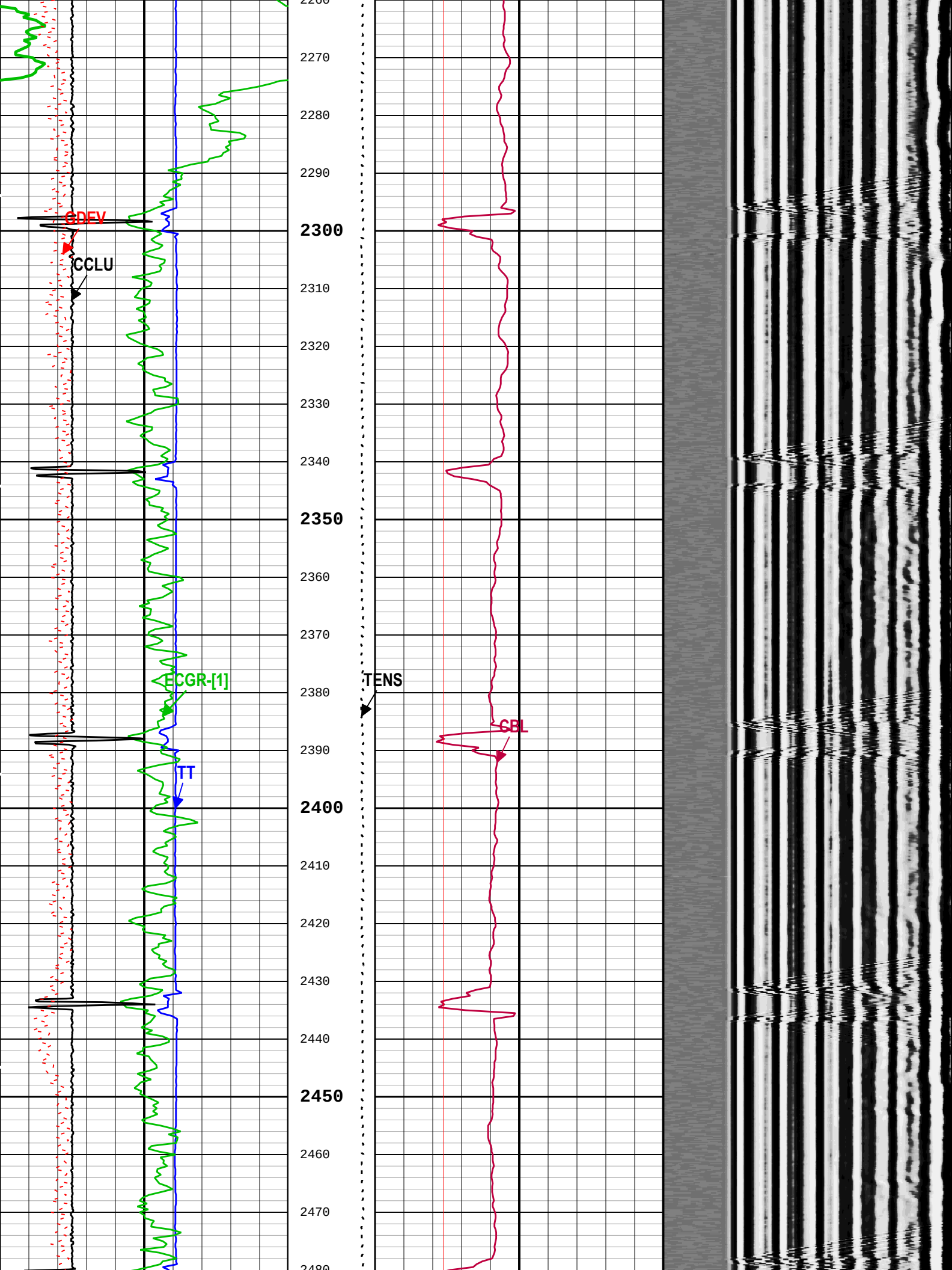
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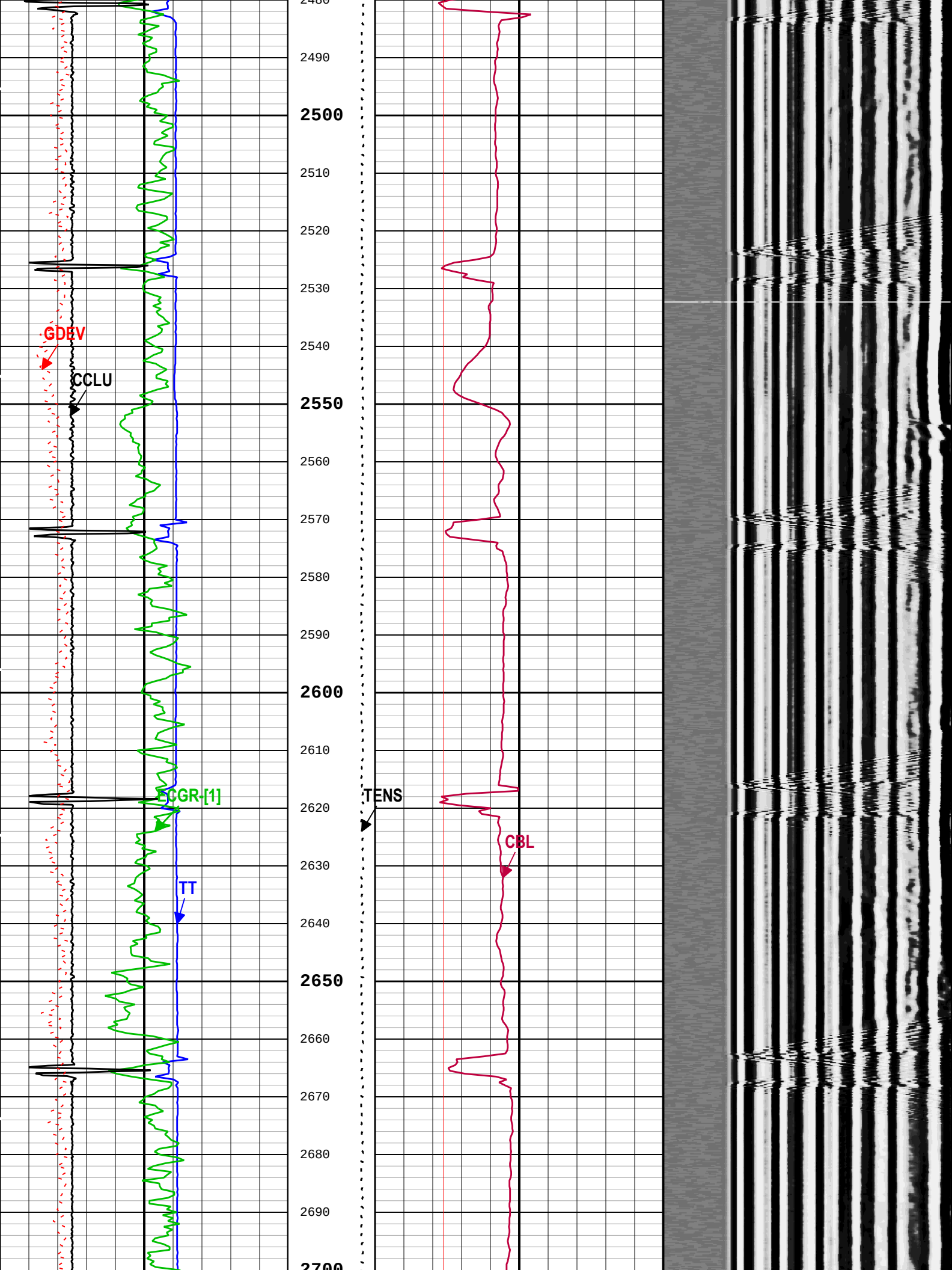
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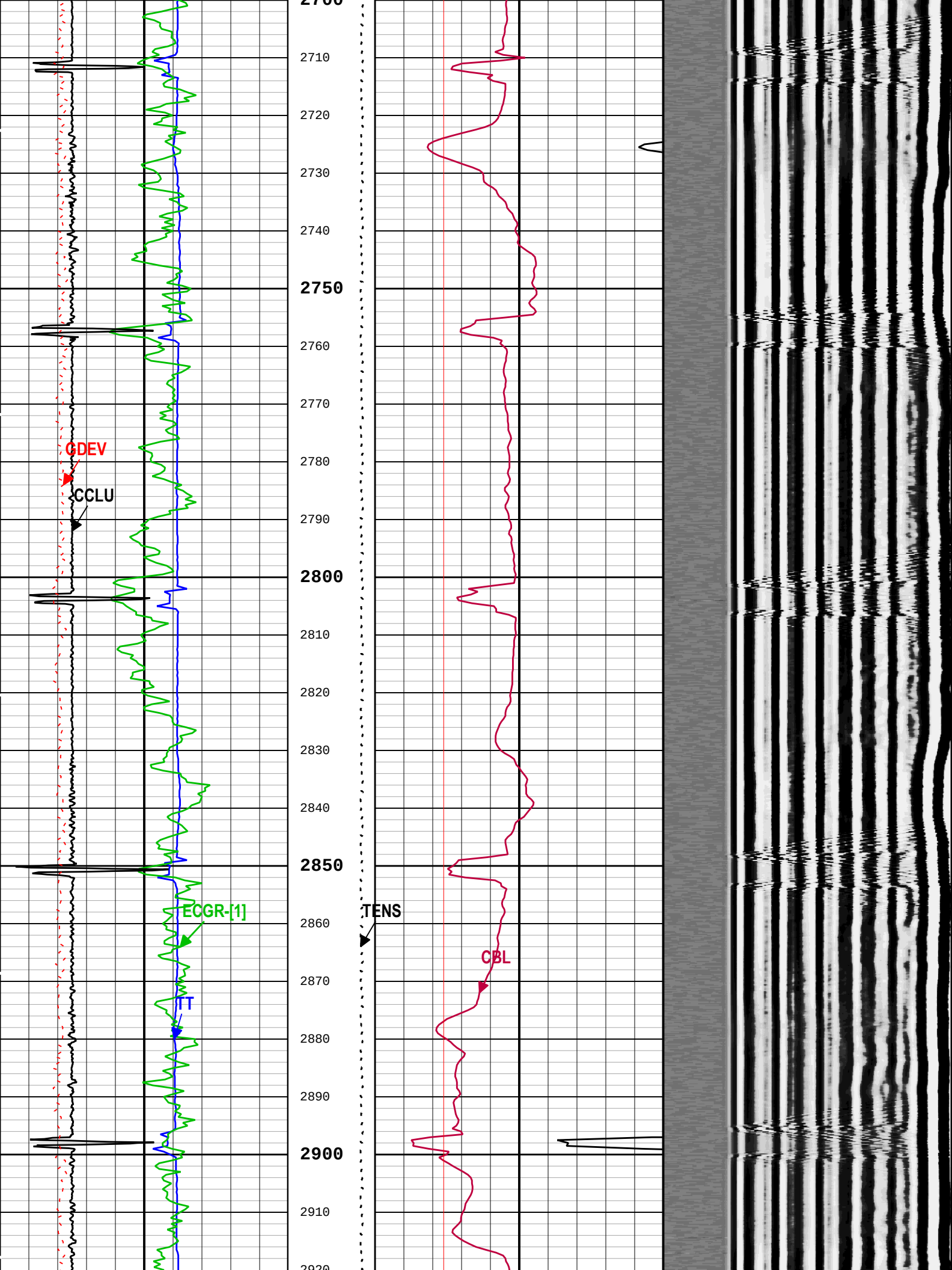
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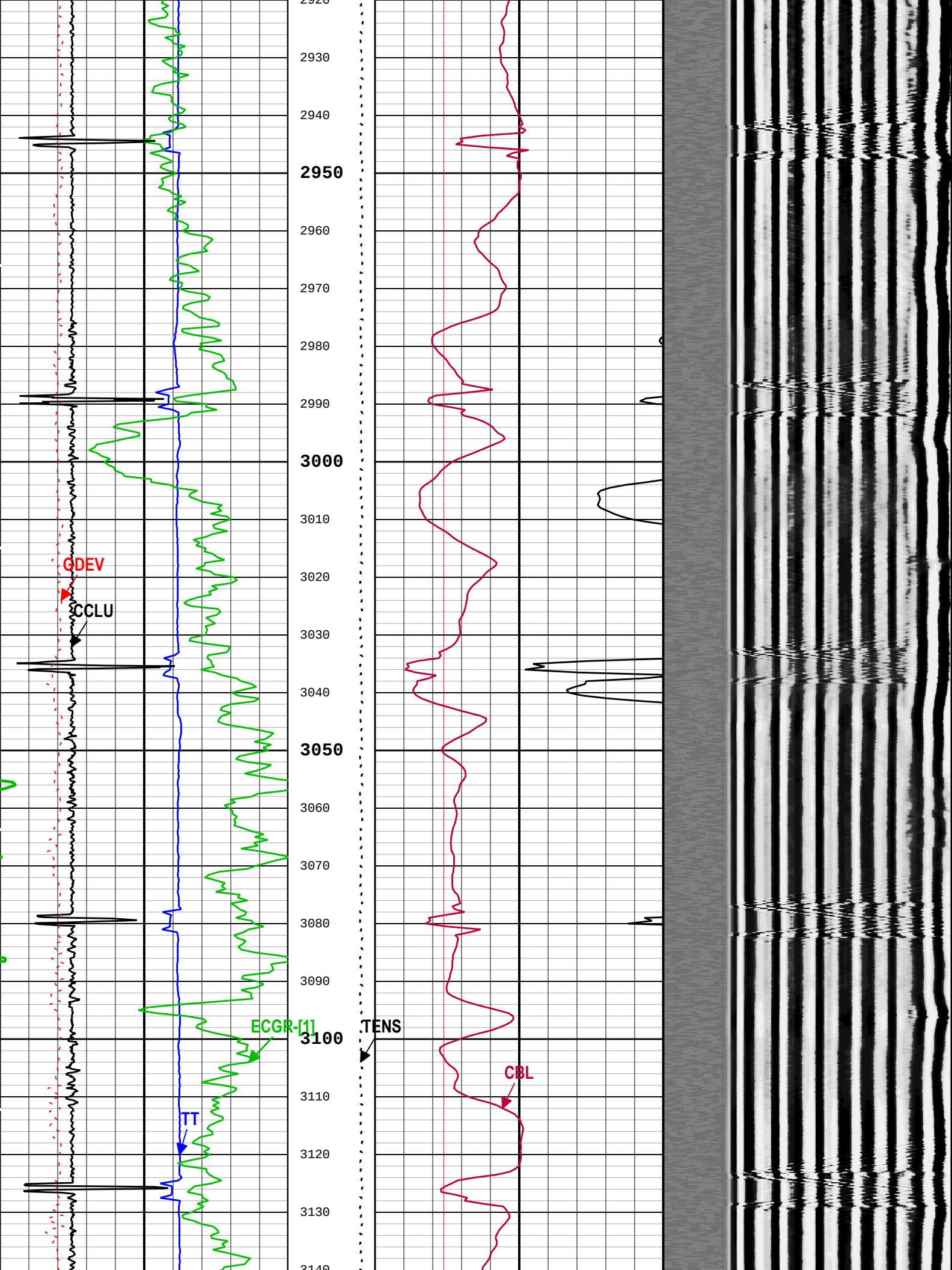
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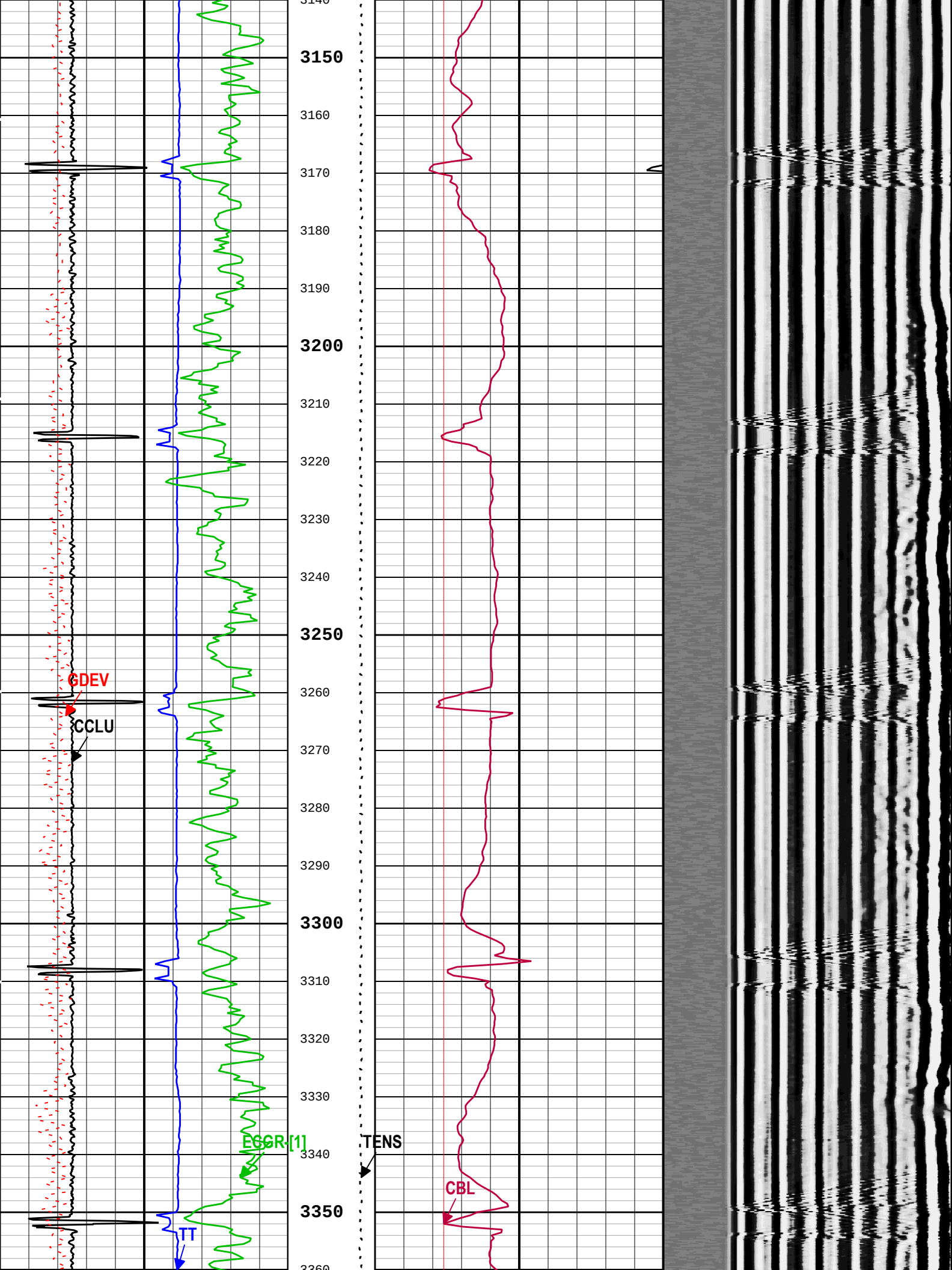
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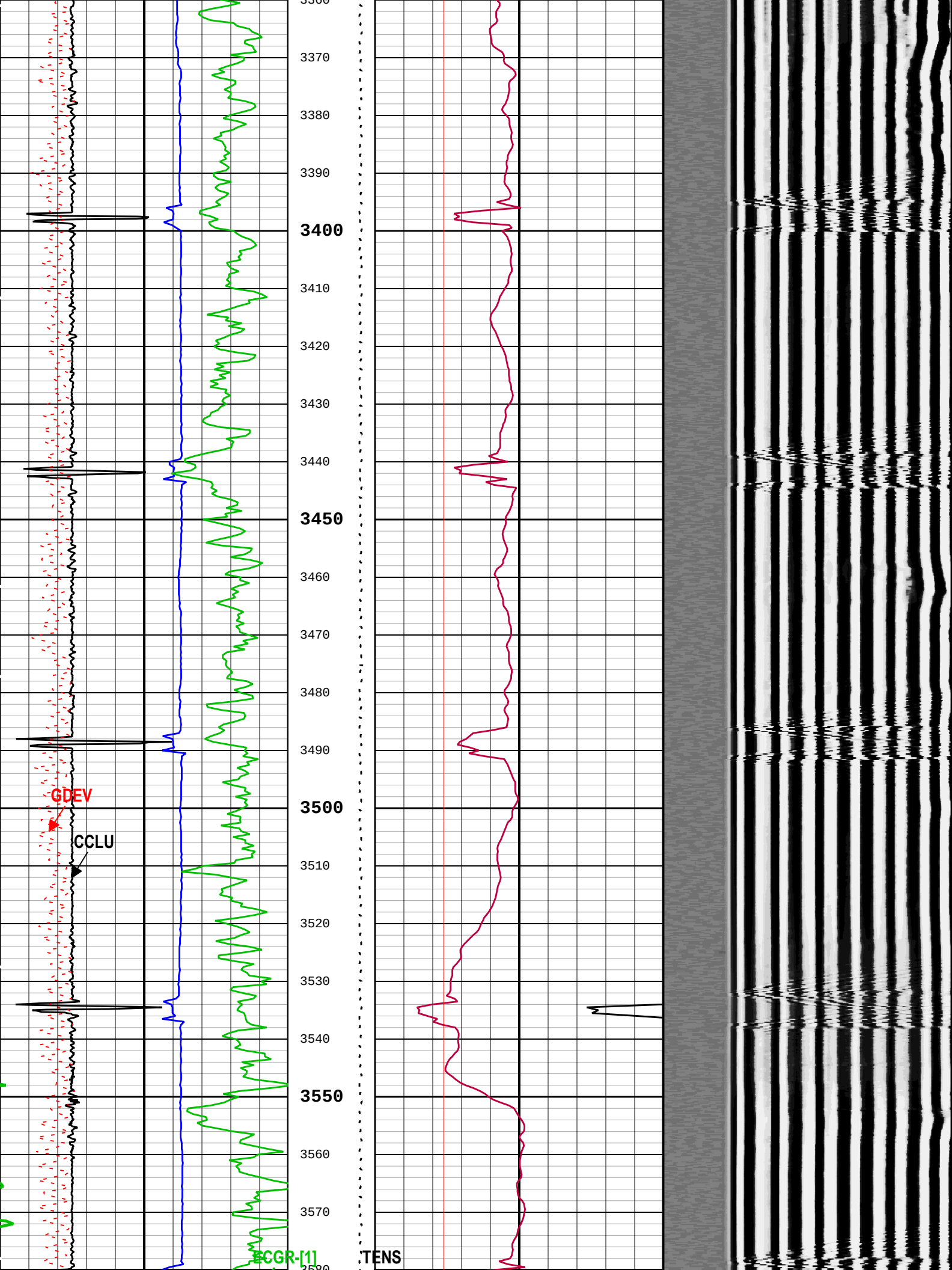
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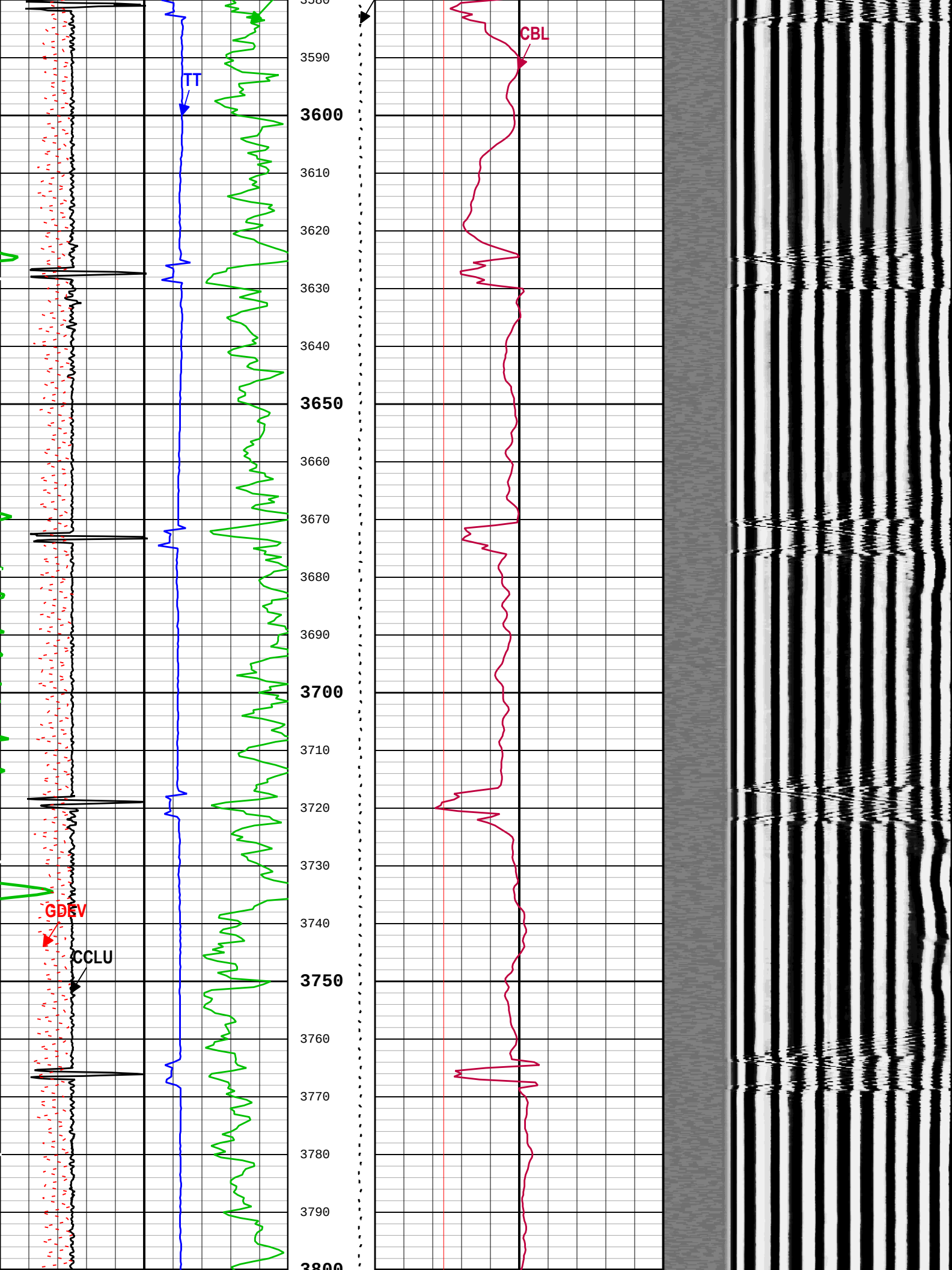
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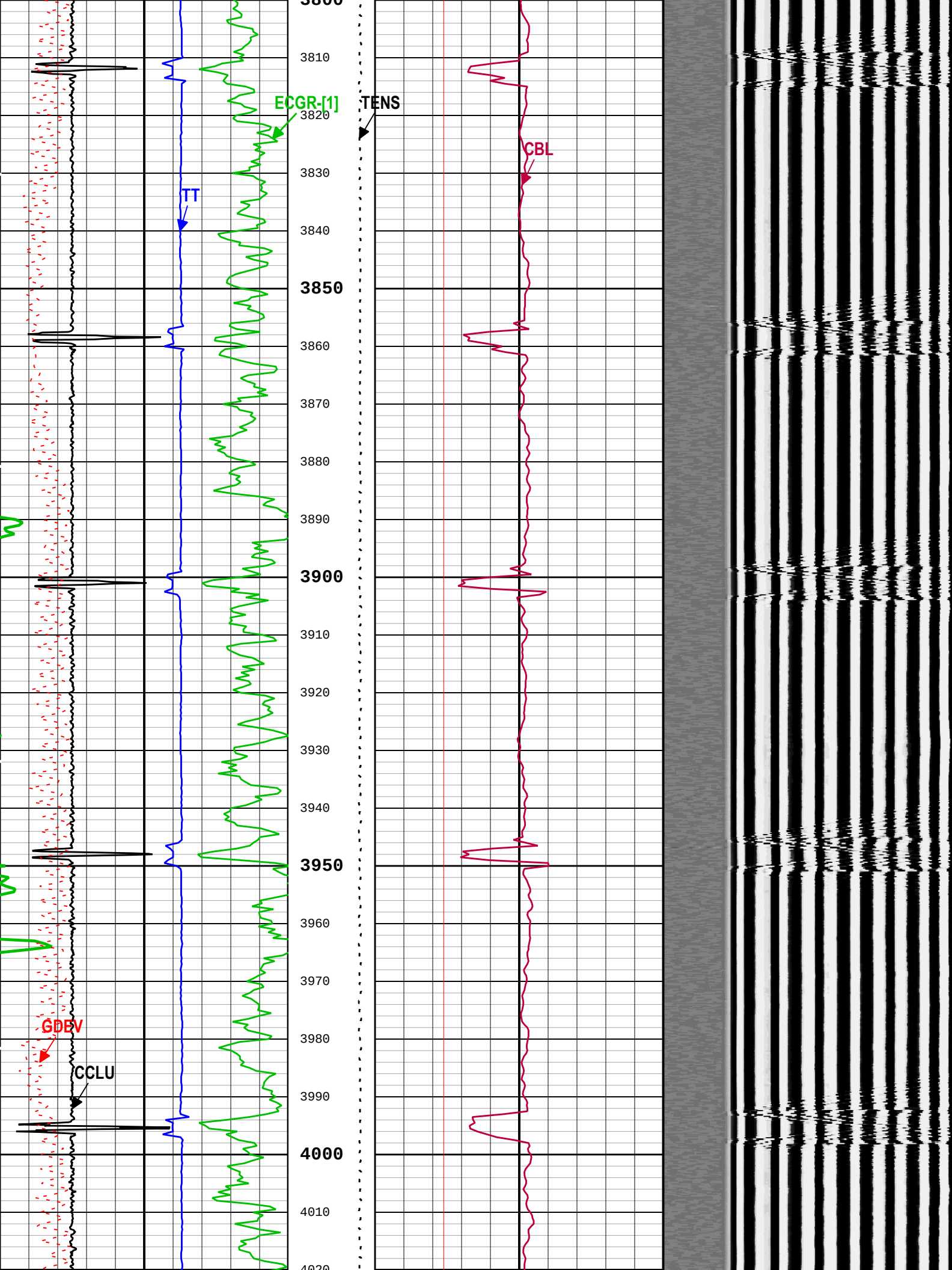
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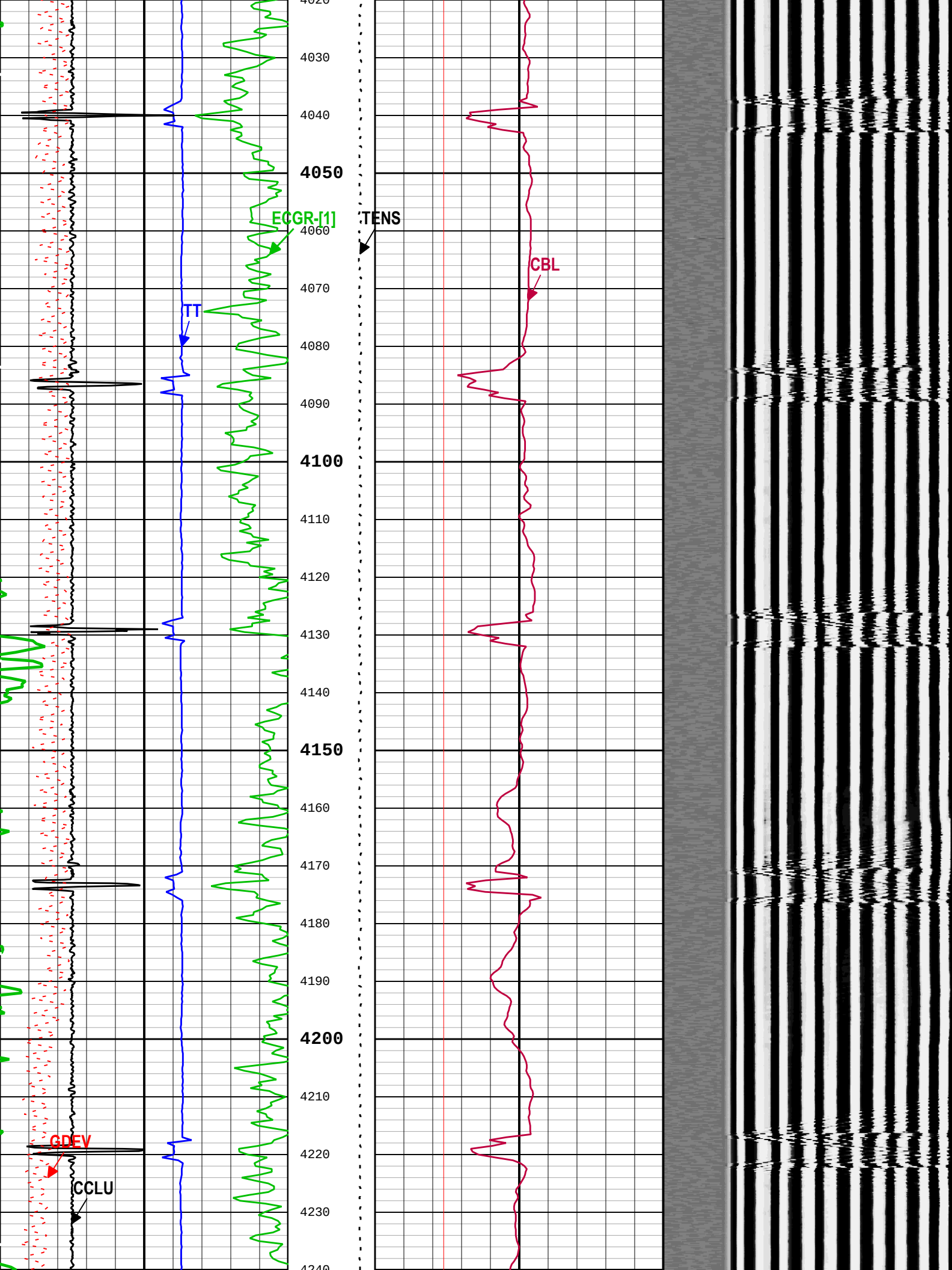
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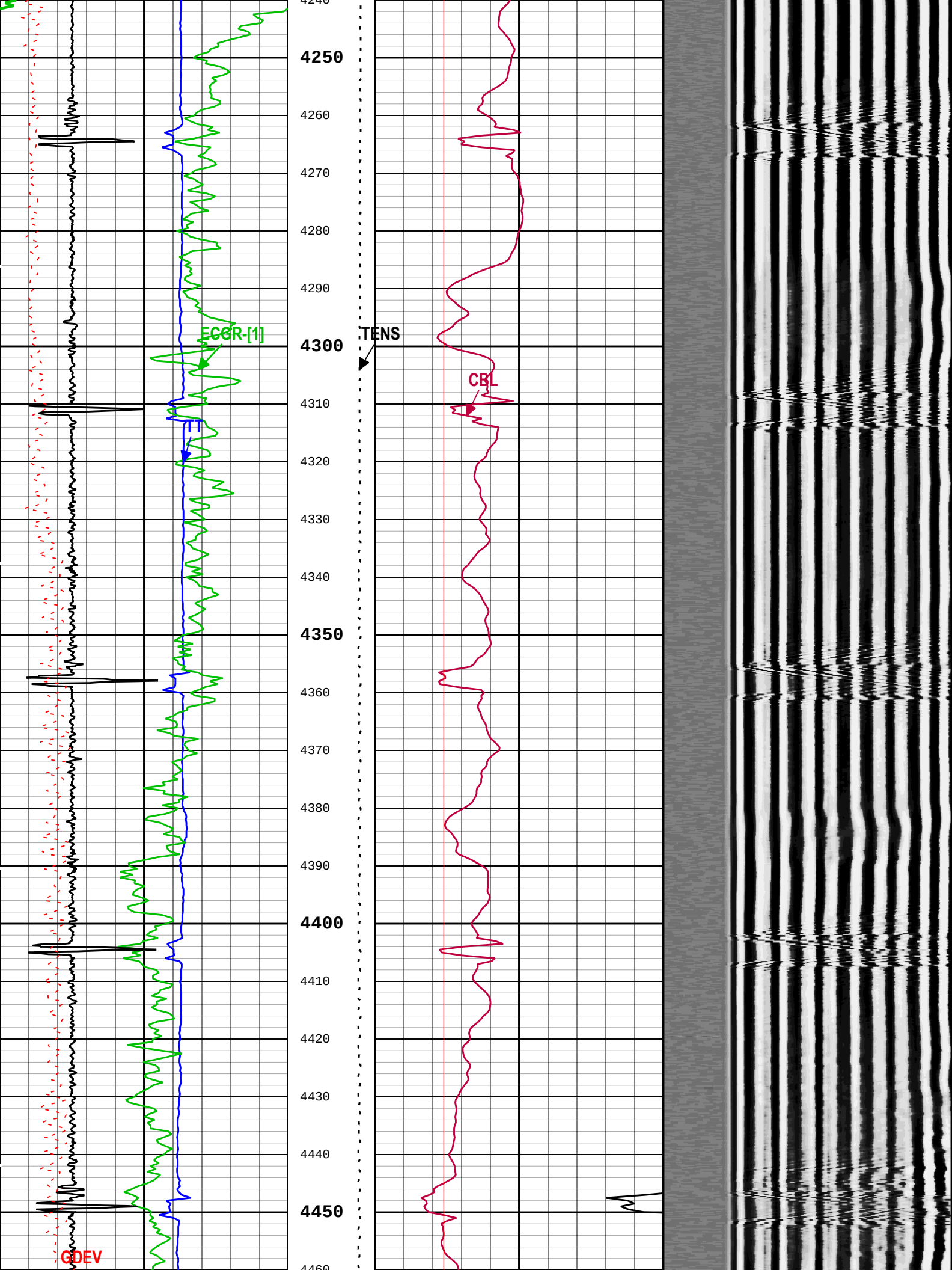
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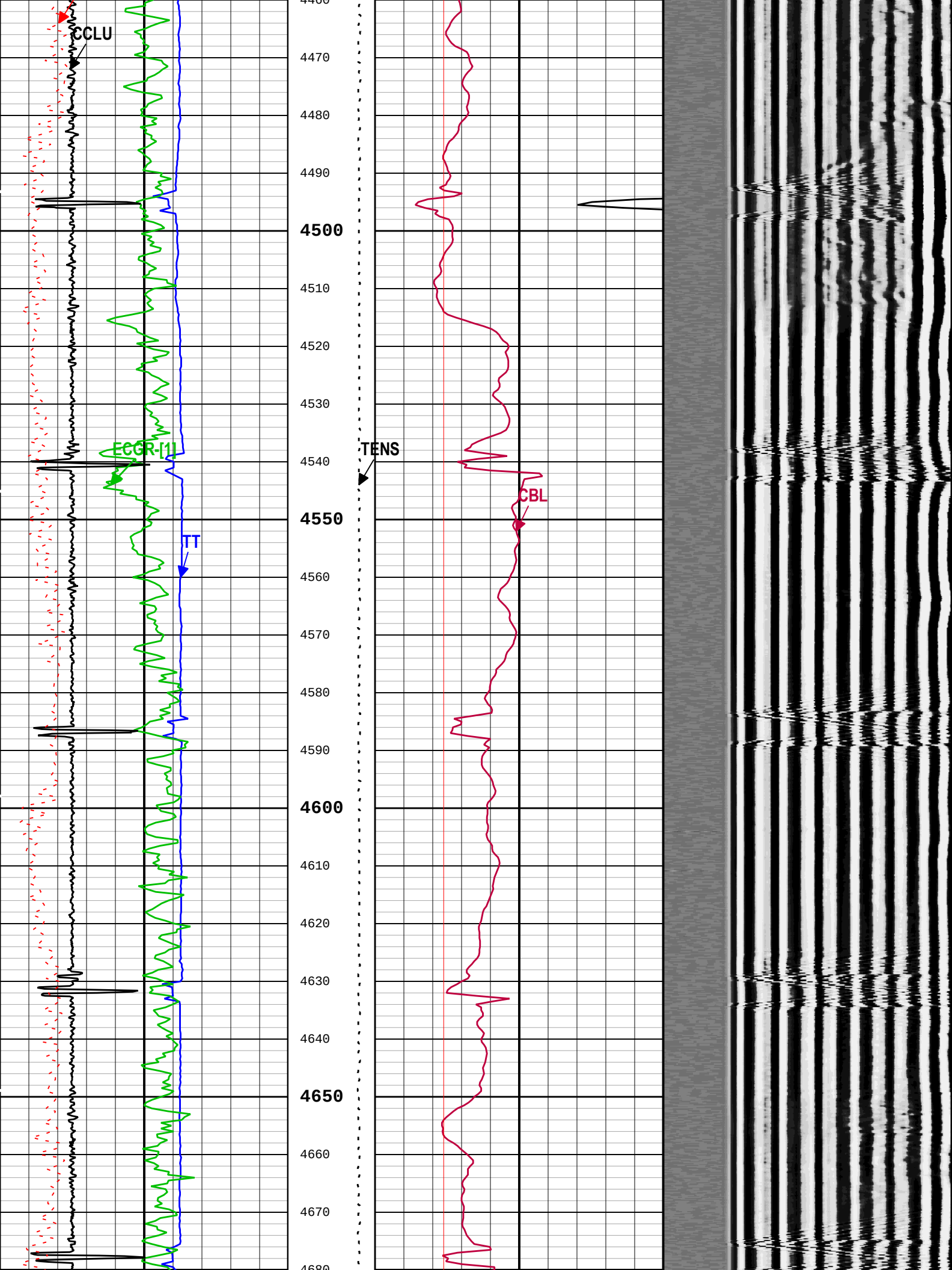
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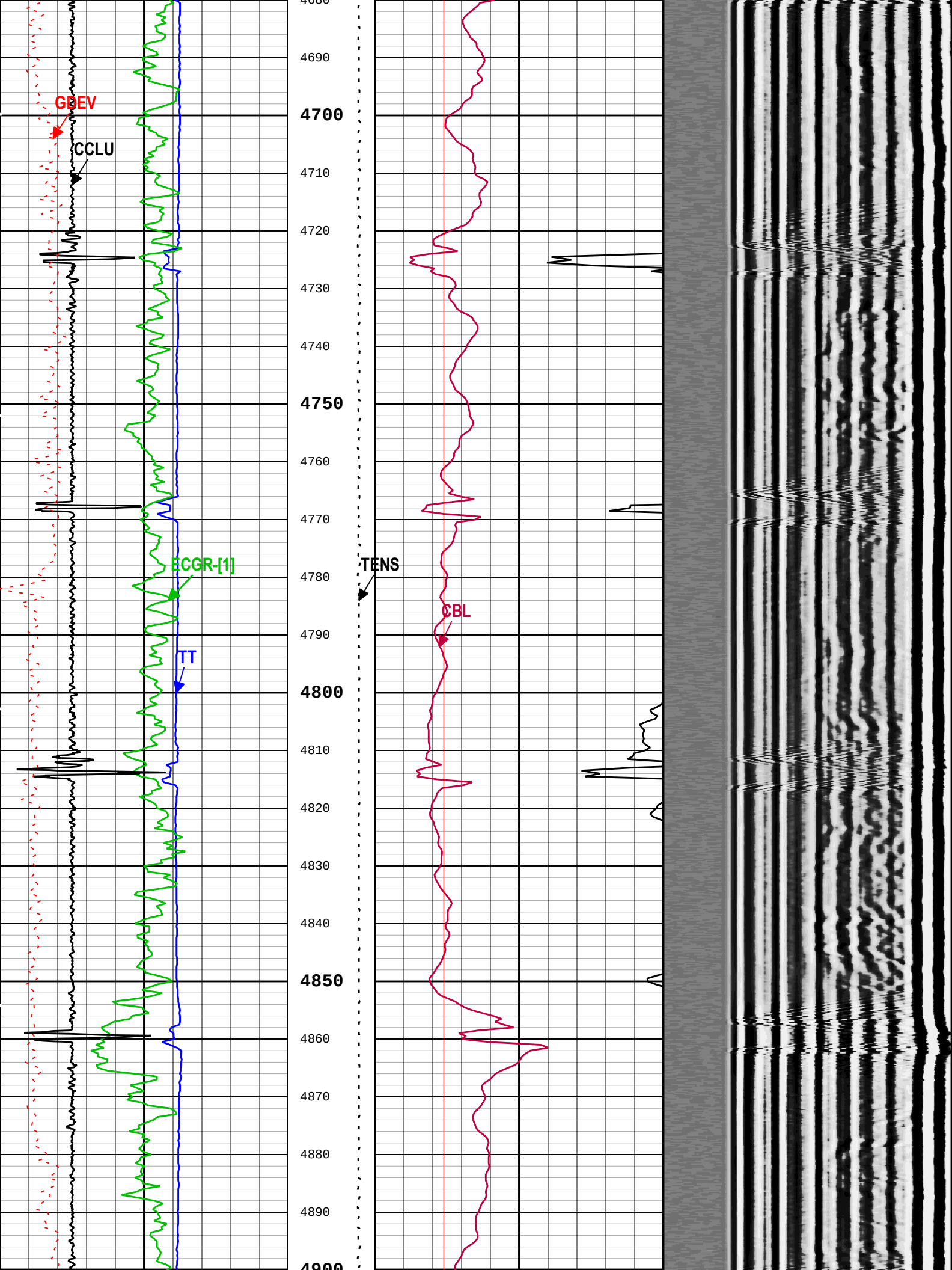
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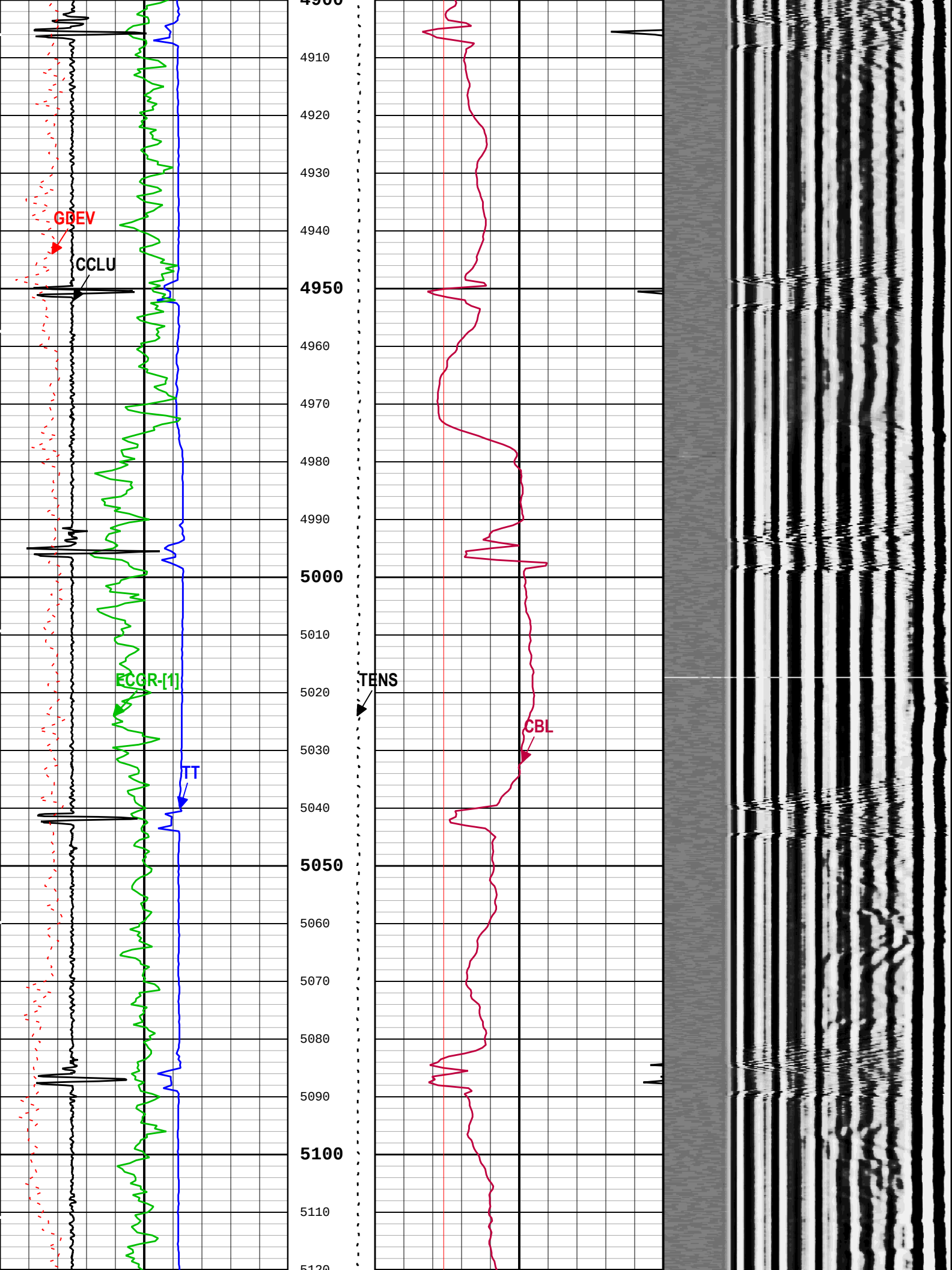
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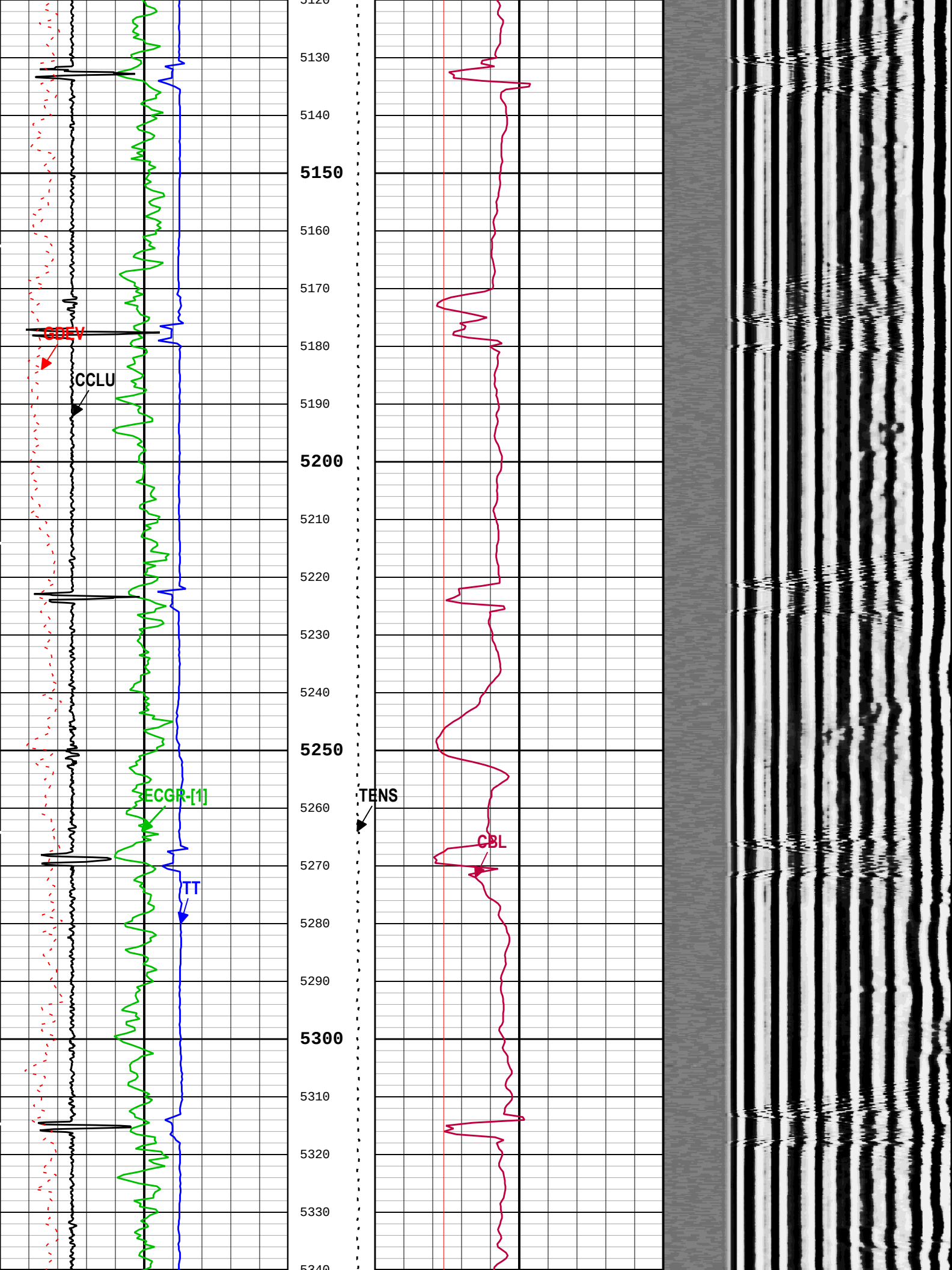
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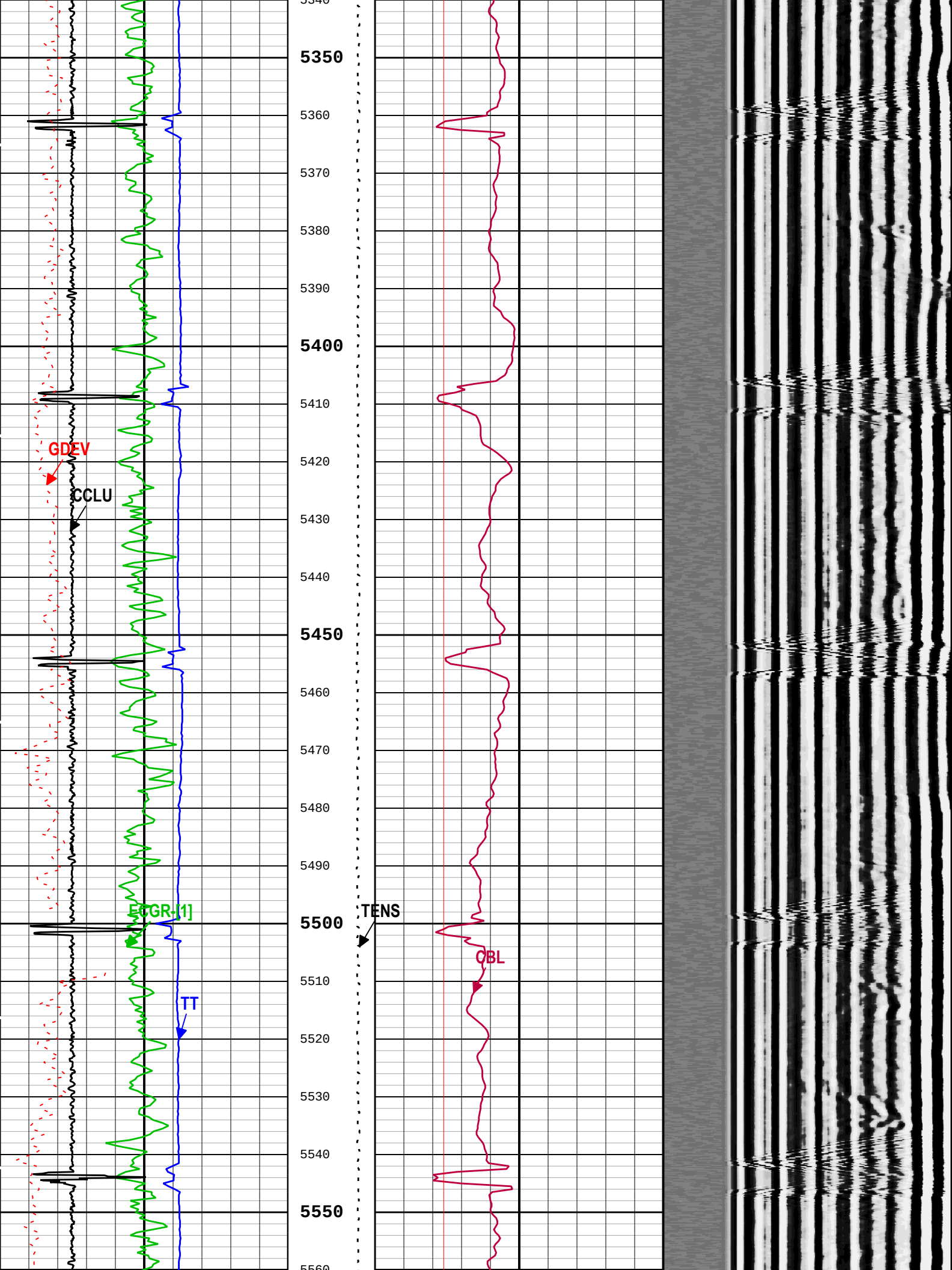
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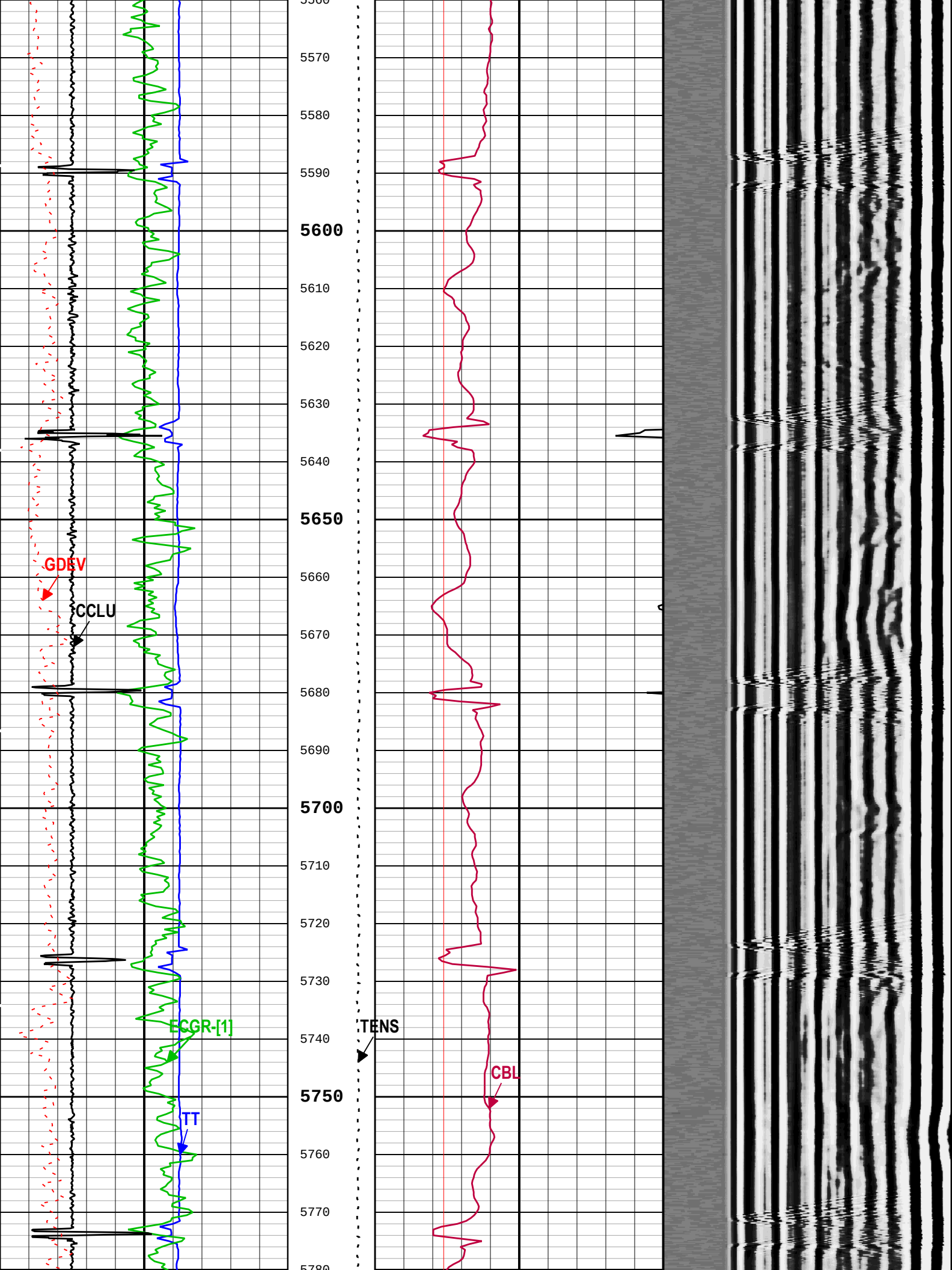
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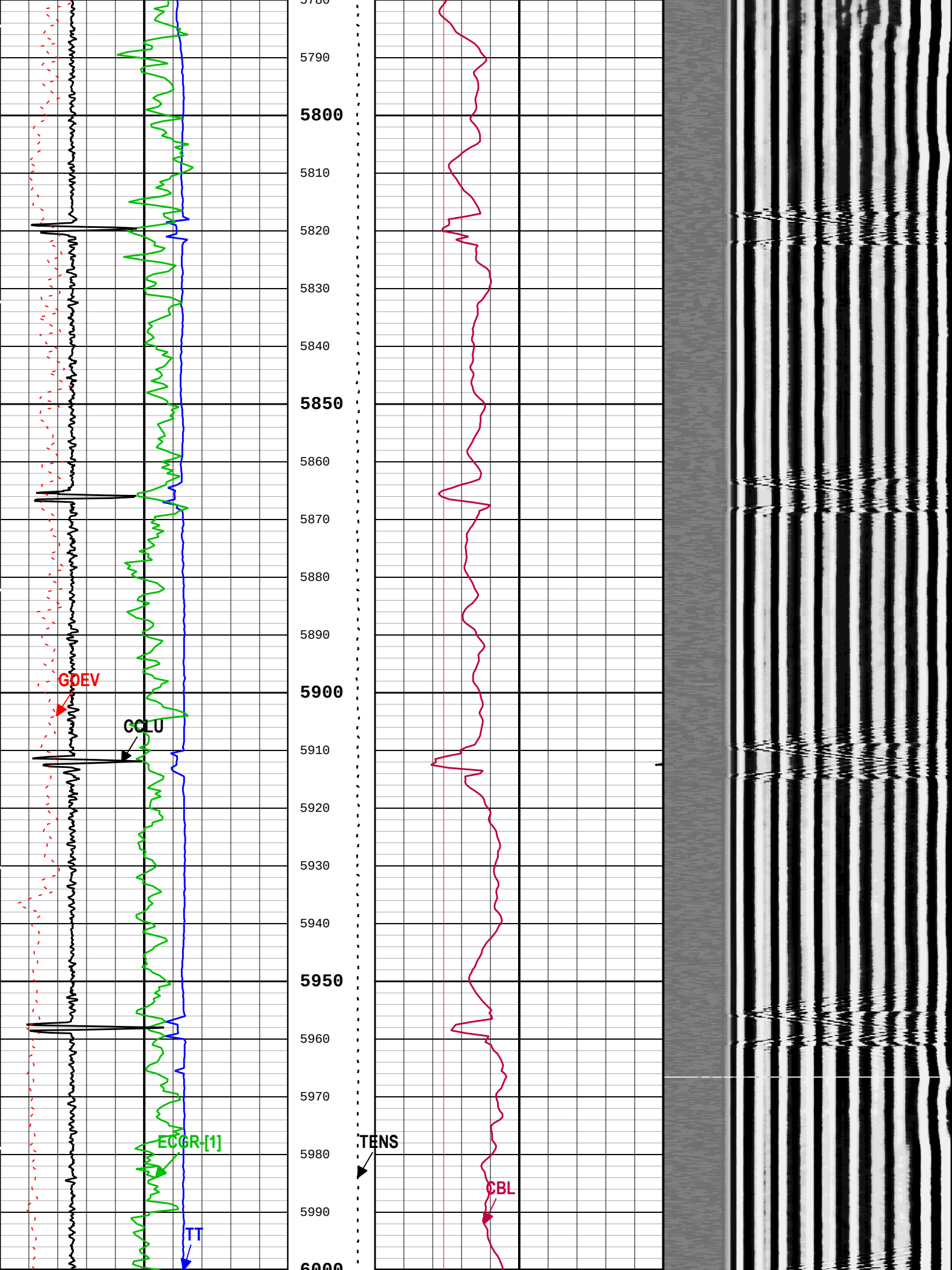
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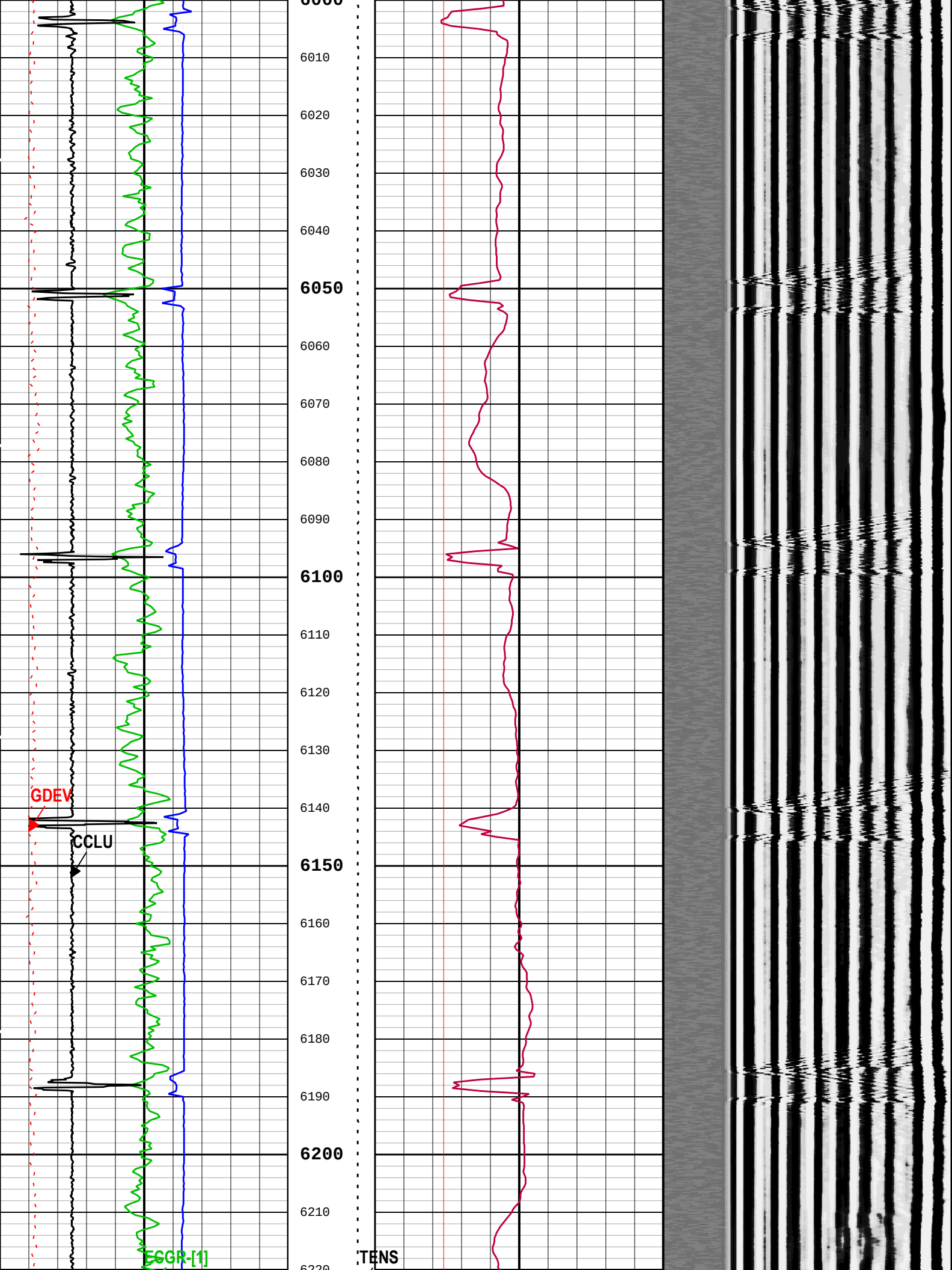
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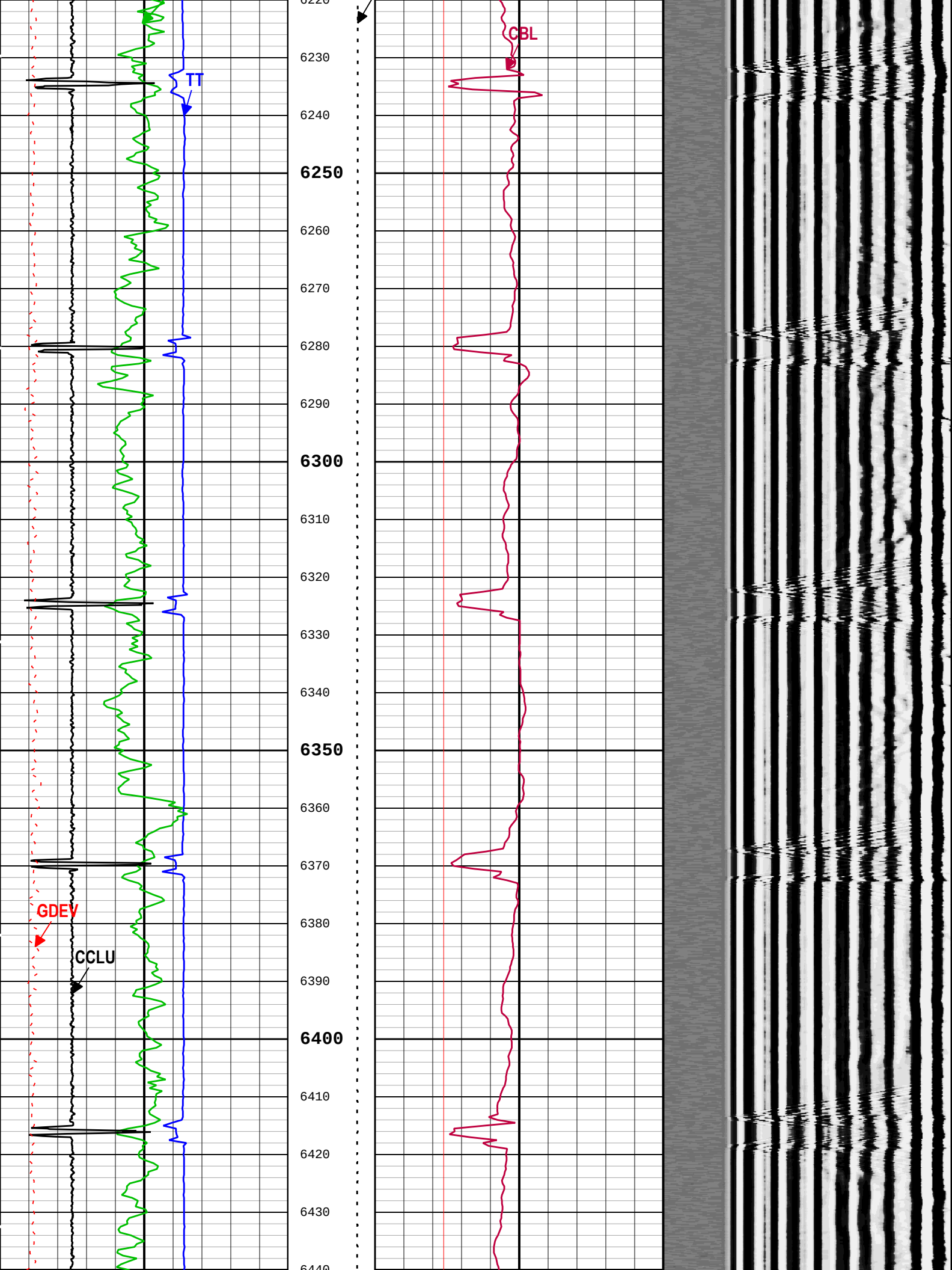
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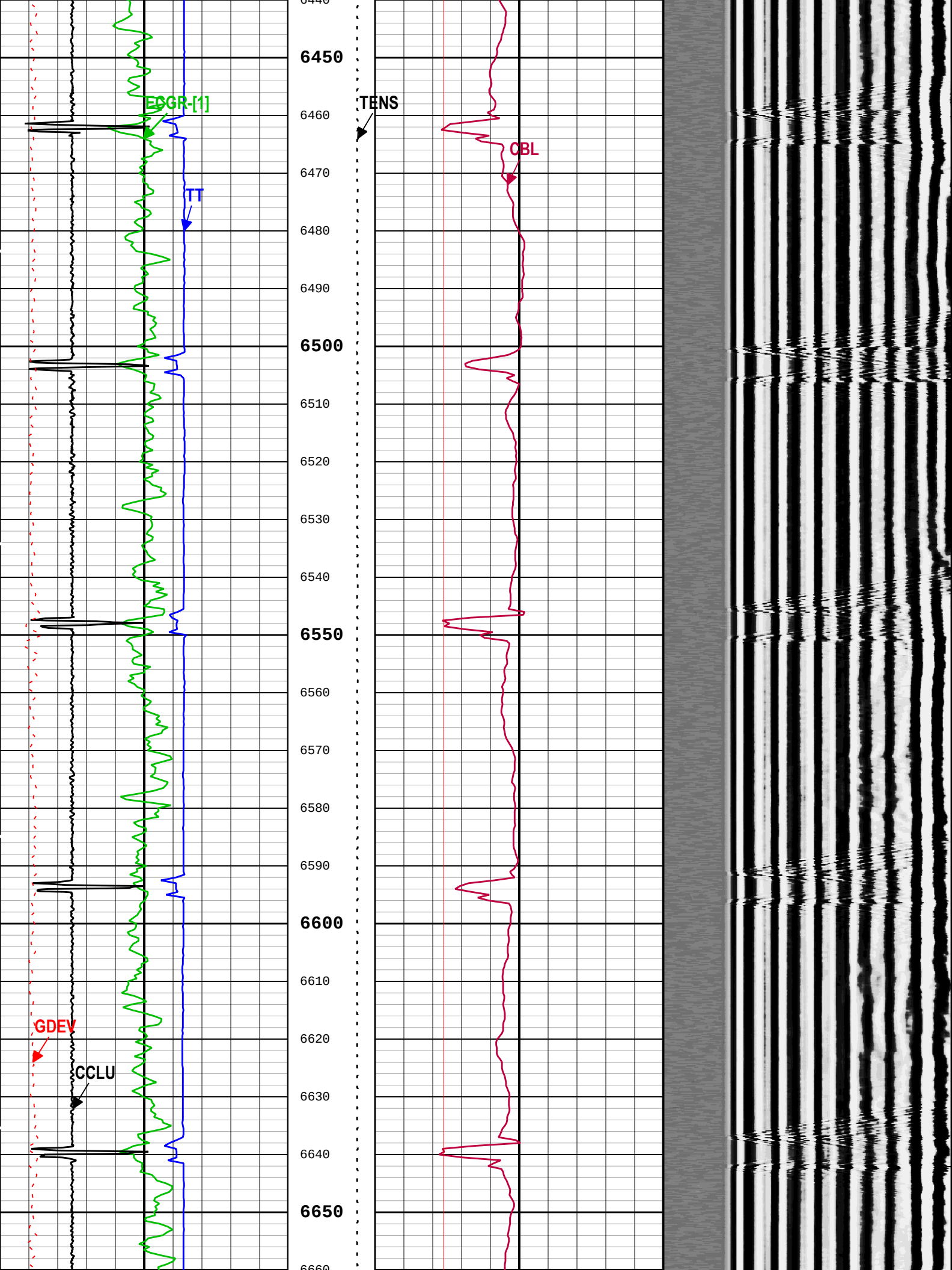
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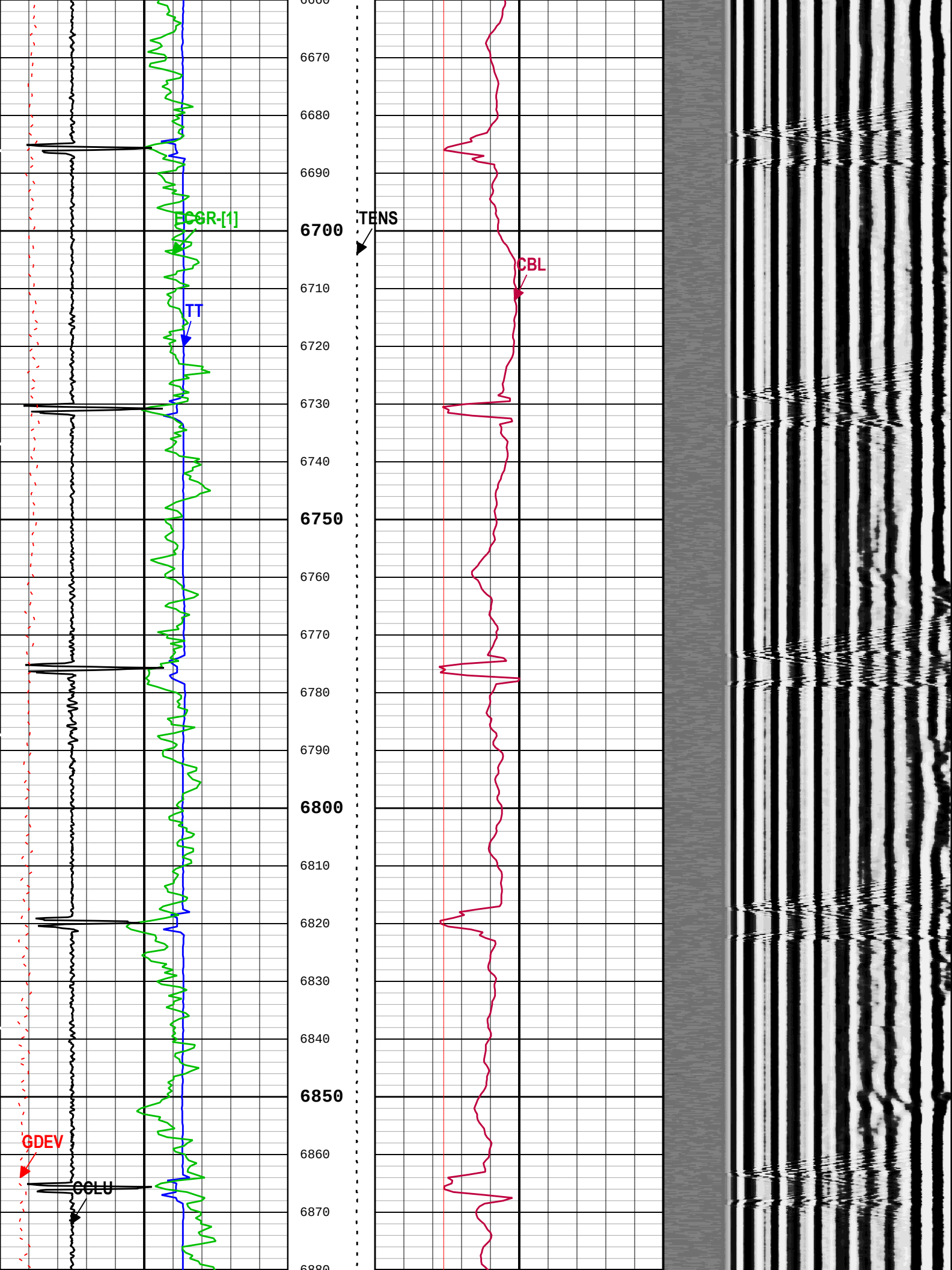
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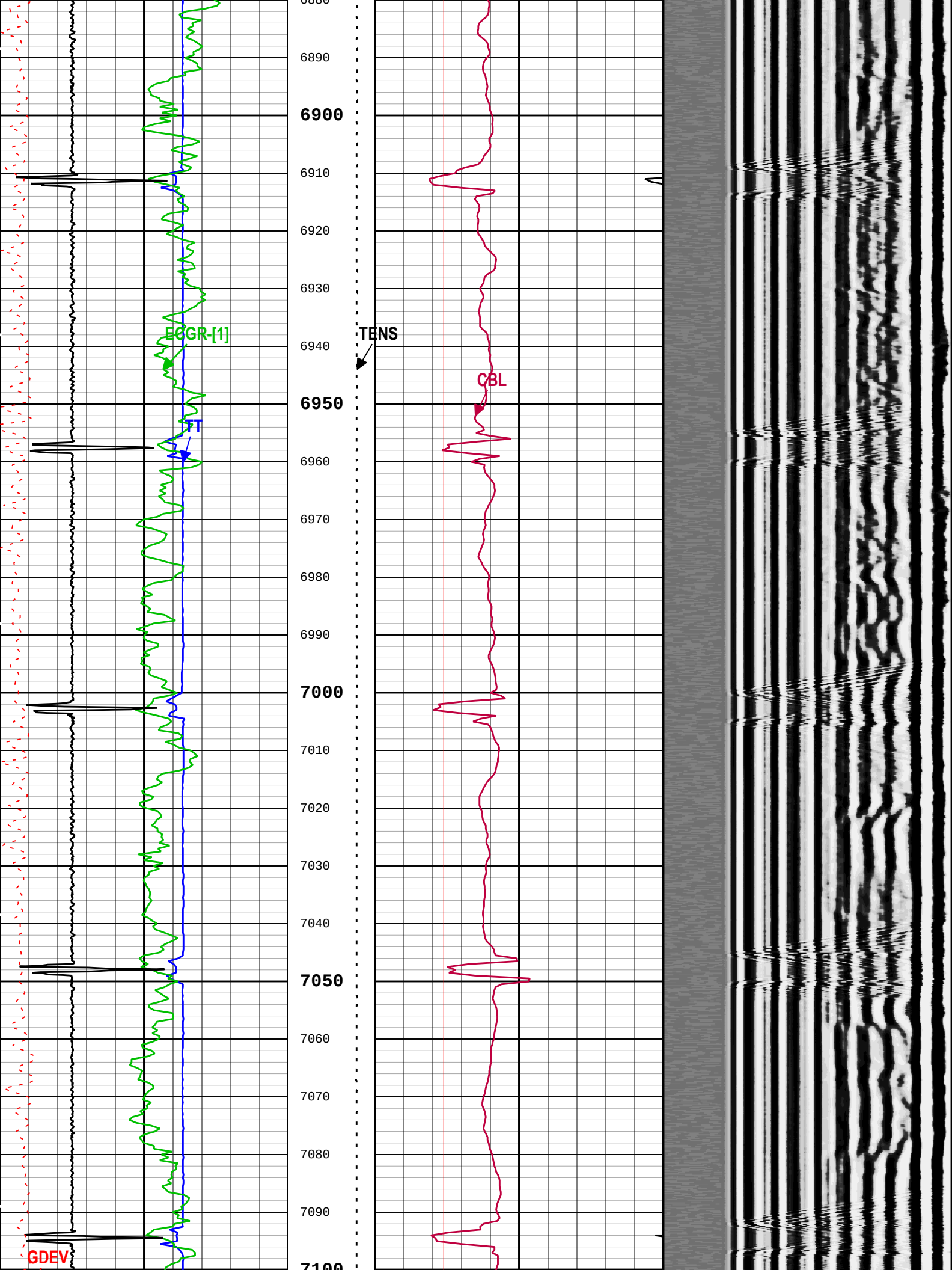
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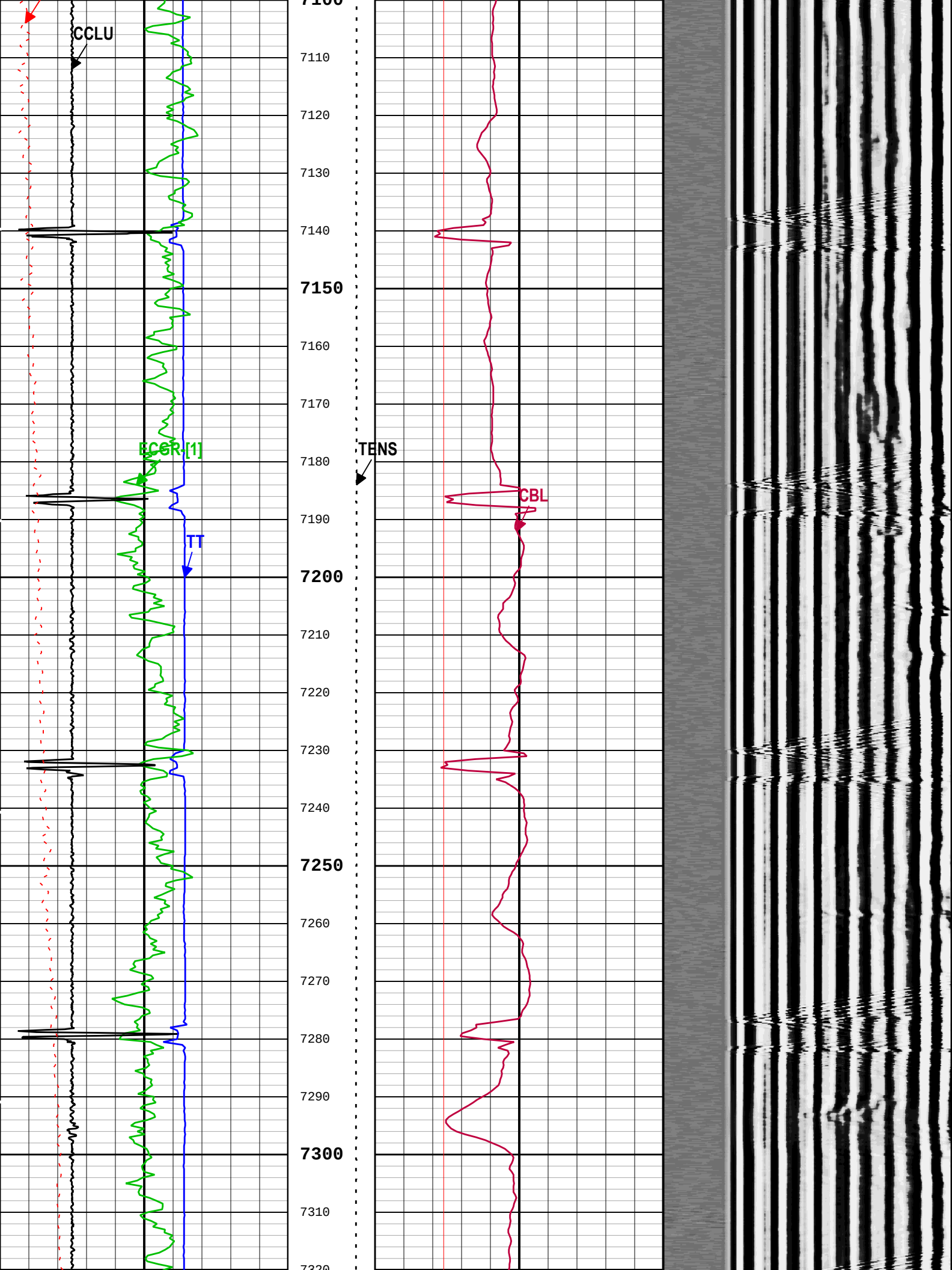
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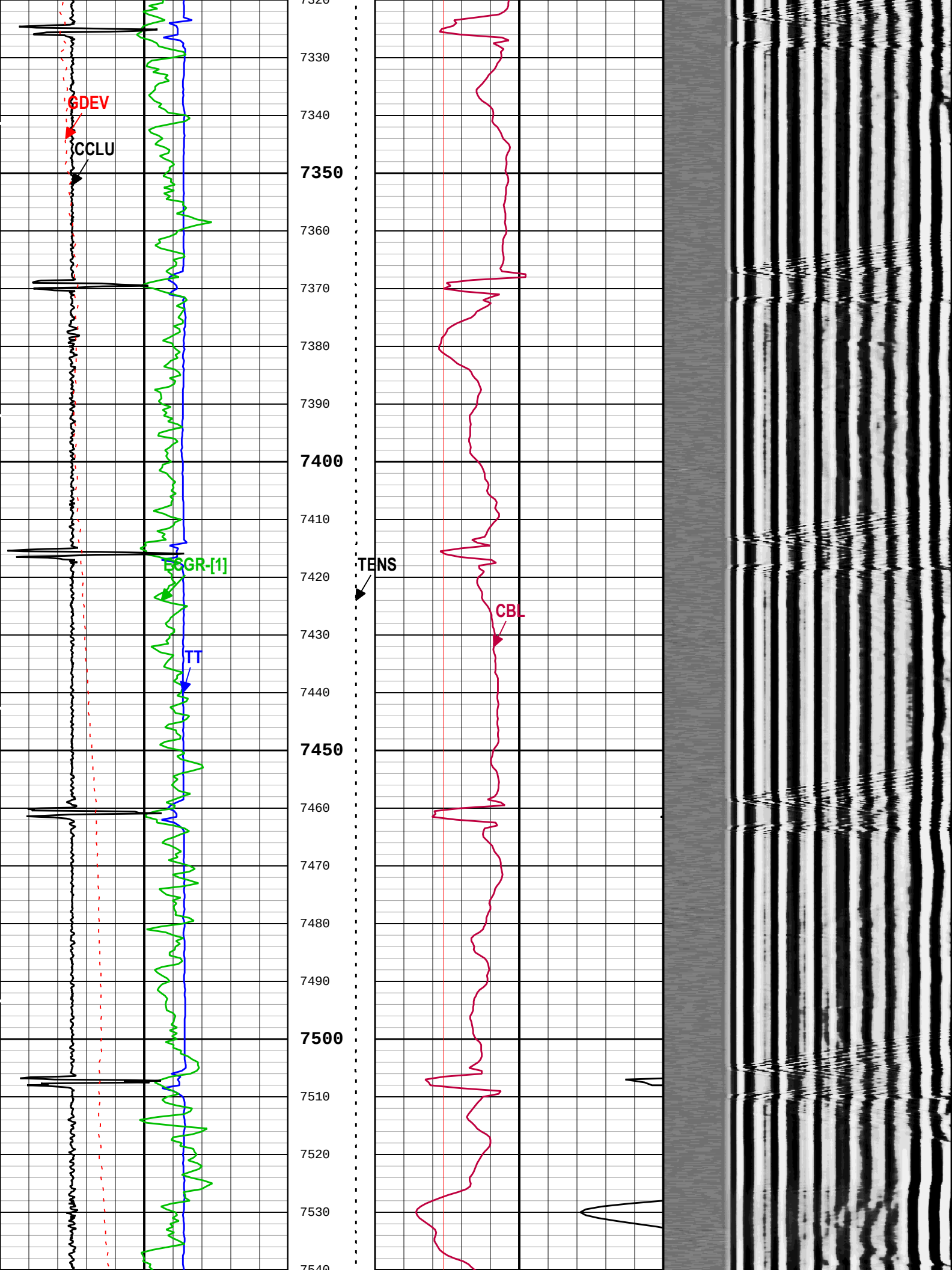
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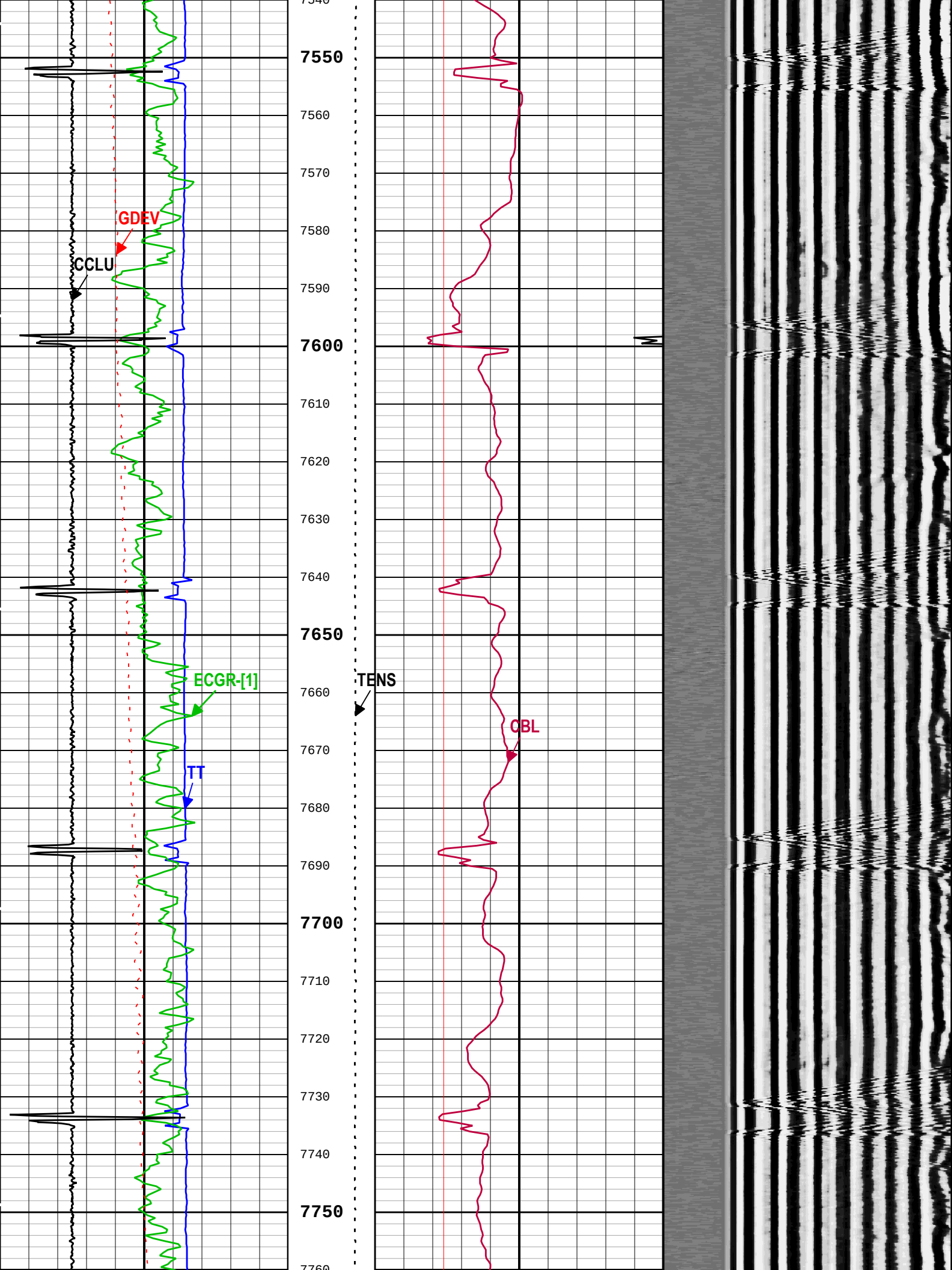
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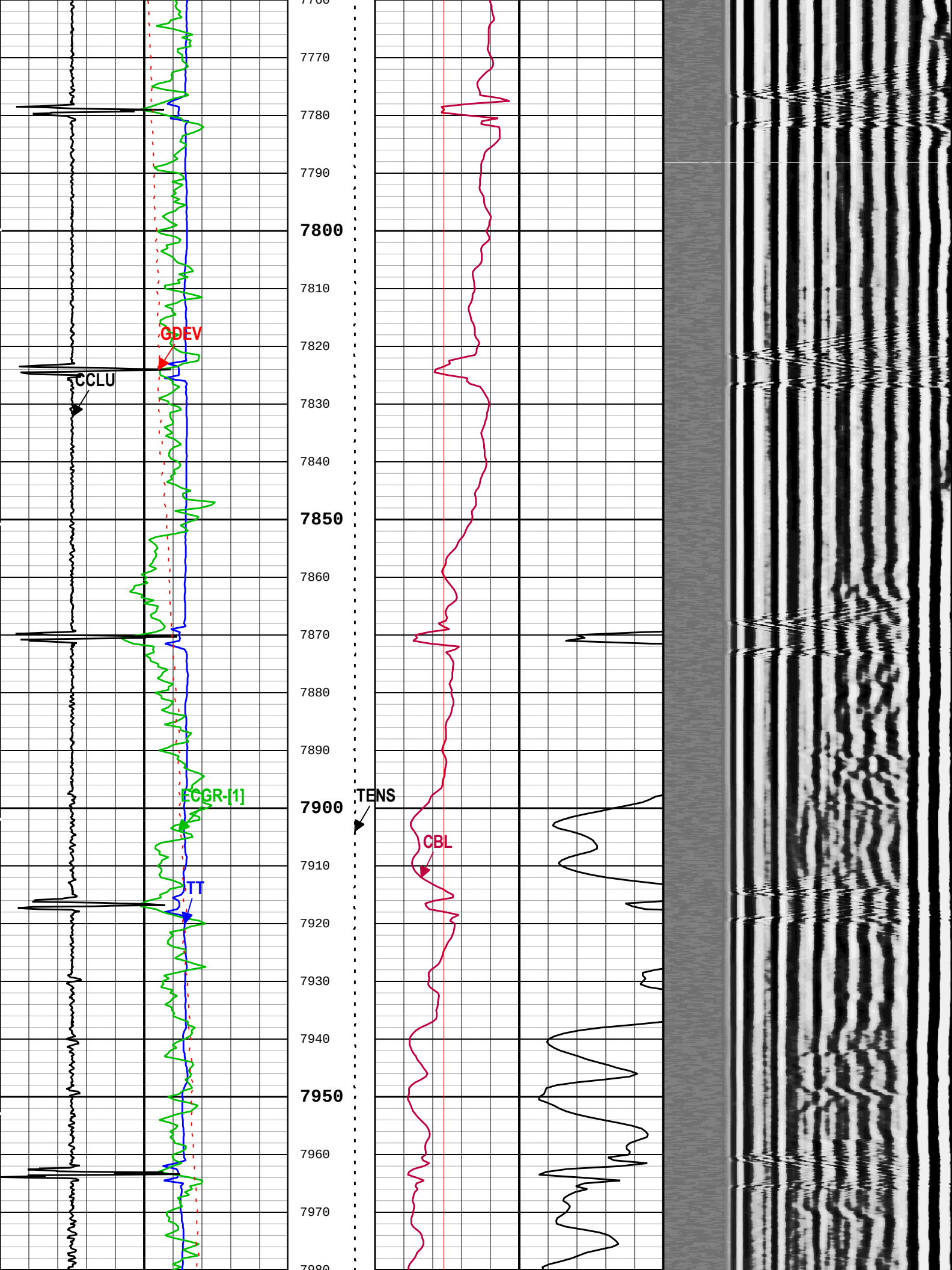
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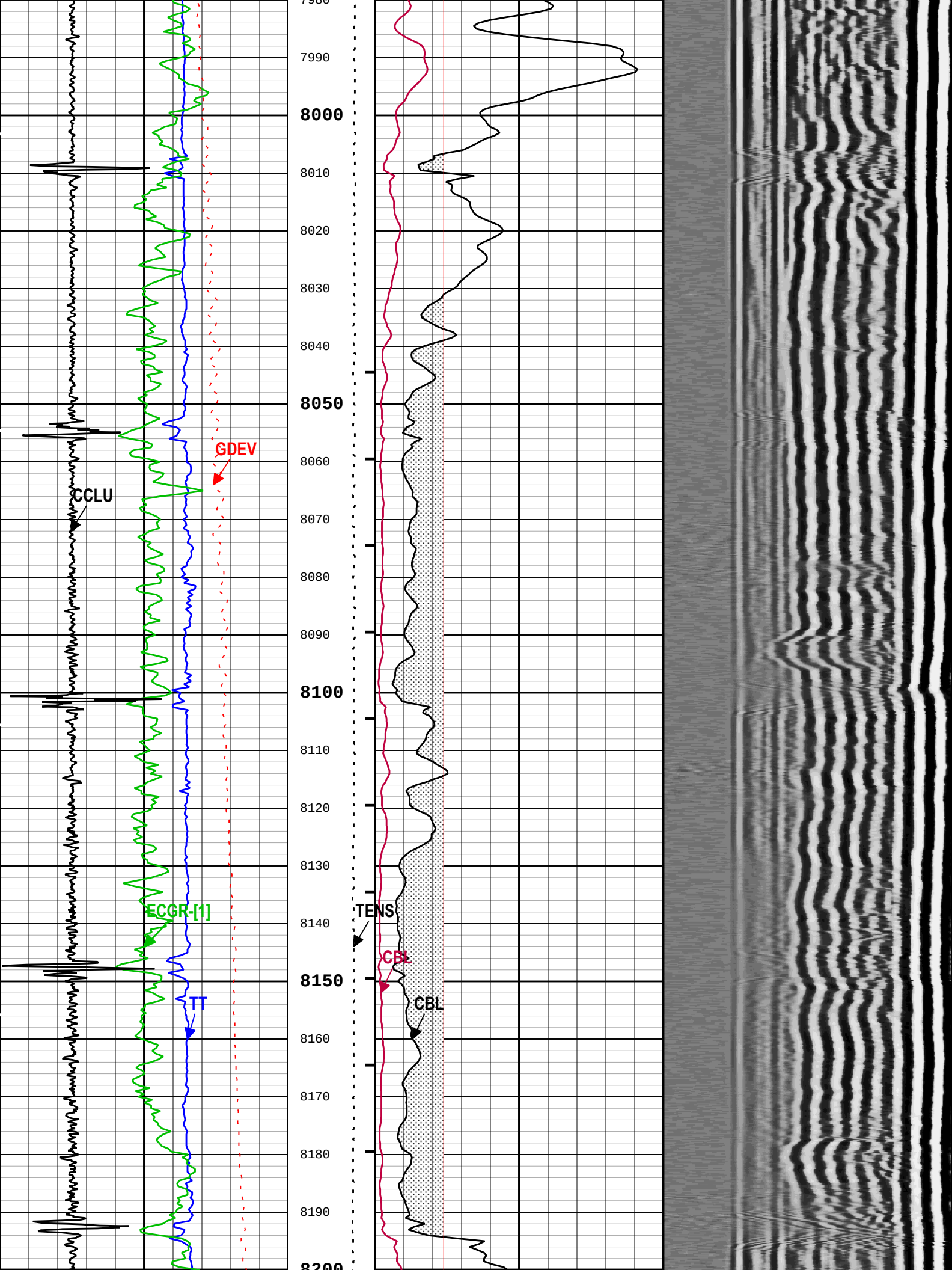
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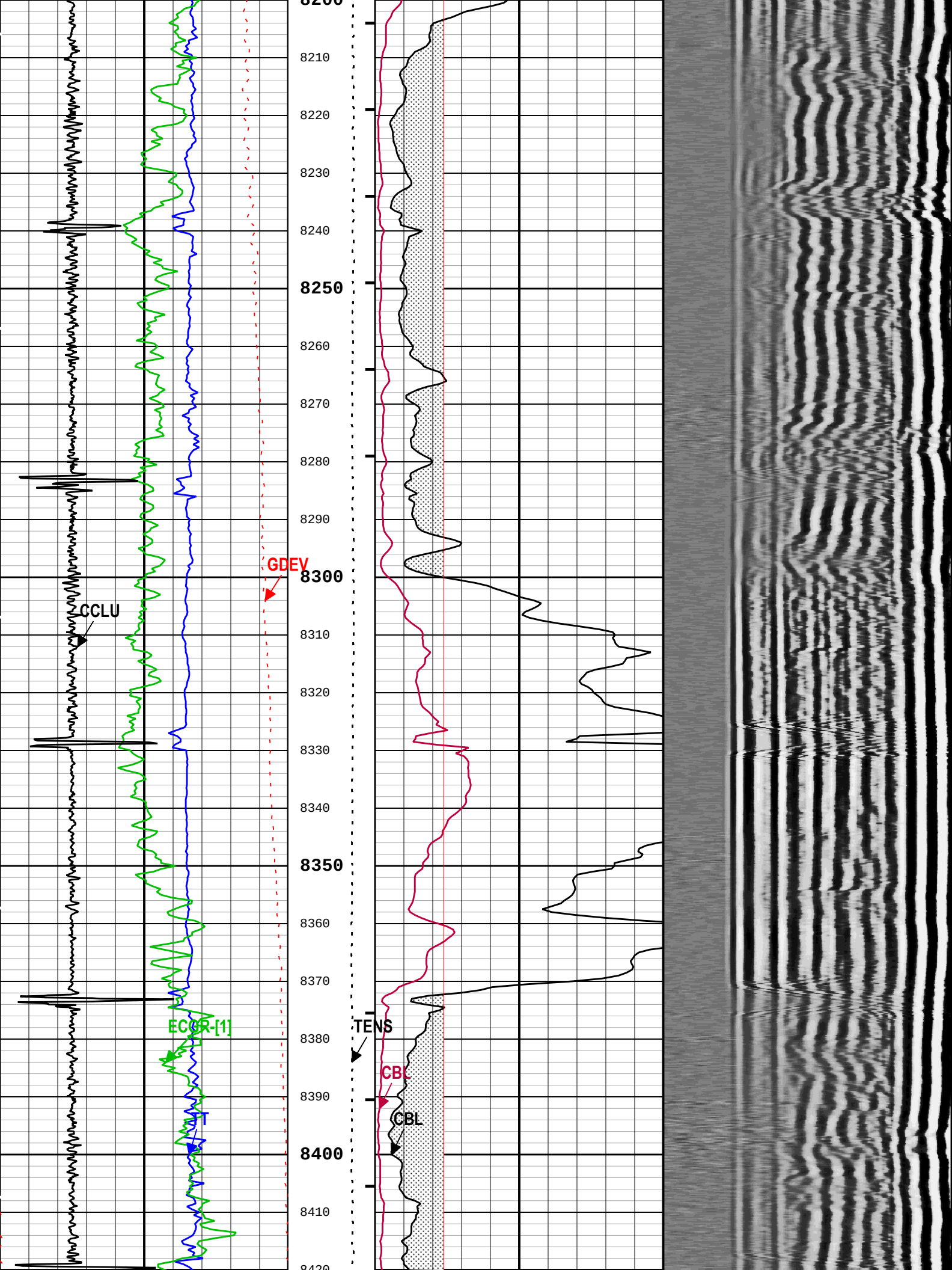
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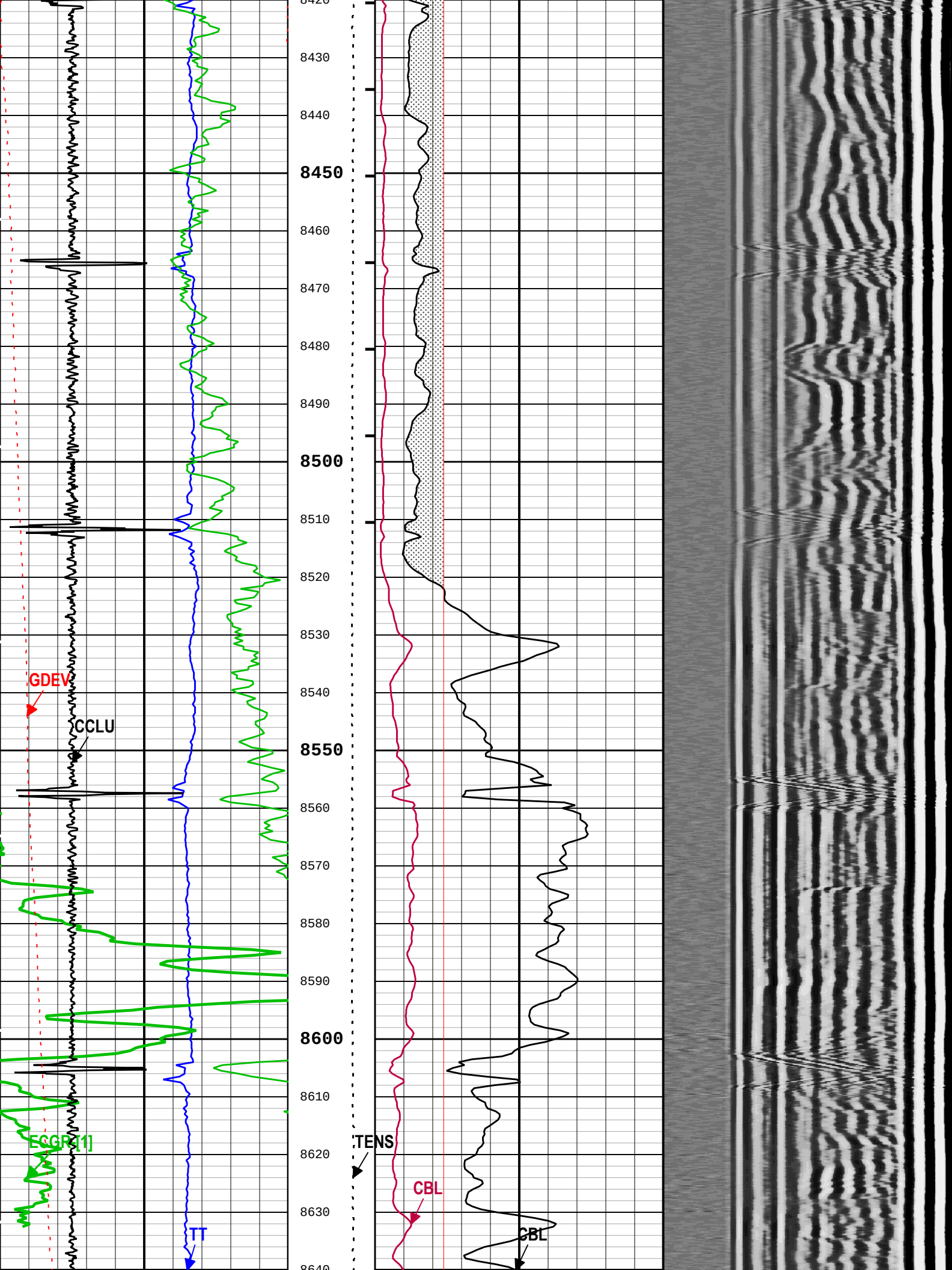
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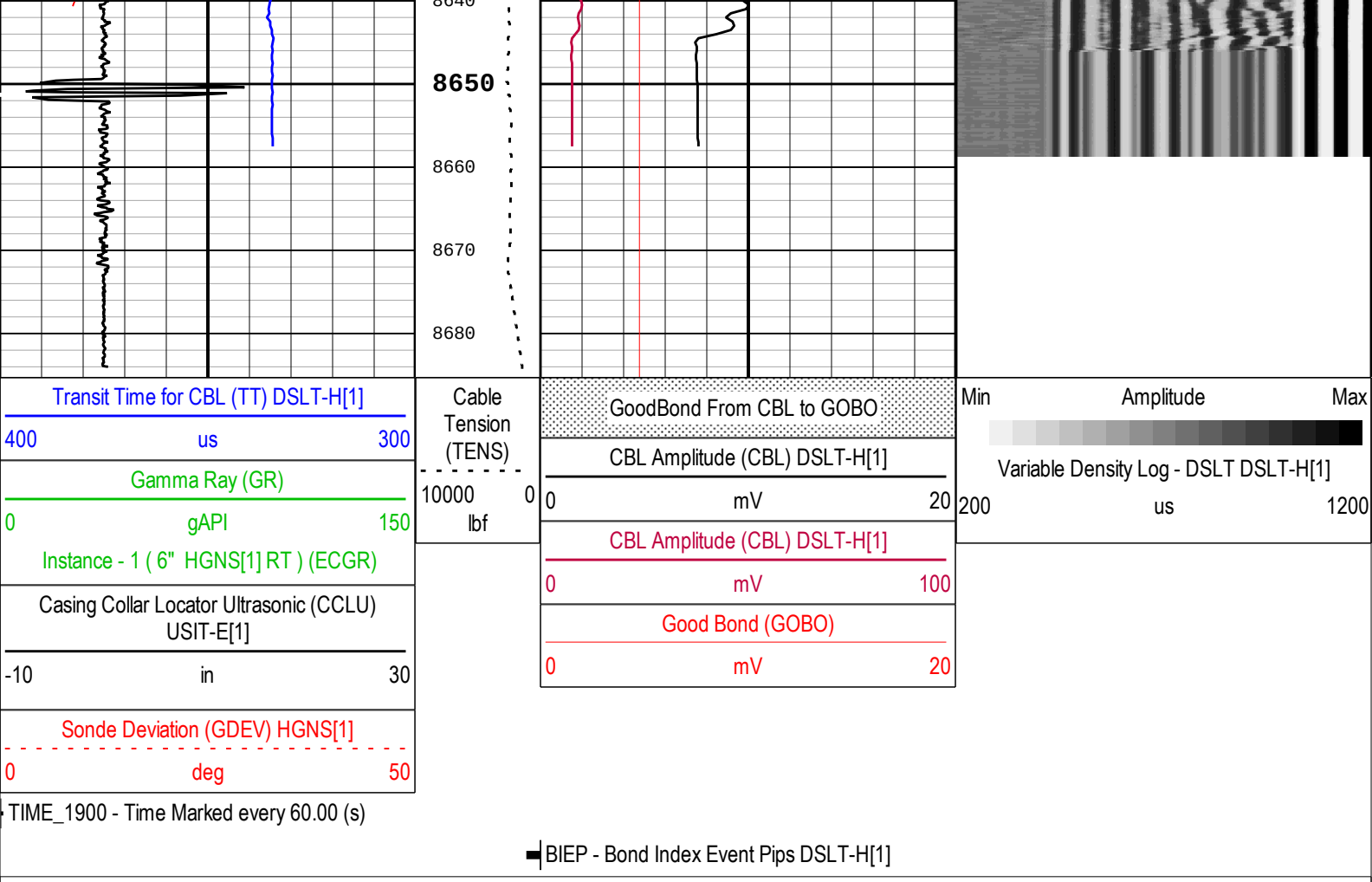


Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:21

Channel Processing Parameters

Three: Parameters

Parameter	Description	Tool	Value	Unit
AMSG	Auxiliary Minimum Sliding Gate	DSLT-H	140	us
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BERJ	Bad Echo Rejection	USIT-E	On	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BILI	Bond Index Level for Zone Isolation	DSLT-H	0.8	
BS	Bit Size	WLSESSION	Depth Zoned	in
CASING_PRATIO	Casing Poisson Ratio	USIT-E	Standard Poisson Ratio	
CBLG	CBL Gate Width	DSLT-H	45	us
CBLO	Casing Bottom (Logger)	WLSESSION	8887	ft
CBRA	CBL LQC Reference Amplitude in Free Pipe	DSLT-H	52	mV
CDEN	Cement Density	HGNS-H	2	g/cm3
CMCF	CBL Cement Type Compensation Factor	DSLT-H	0.52	
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DETE	Delta-T Detection	DSLT-H	E1	
DFD	Drilling Fluid Density	Borehole	10	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FCF	CBL Fluid Compensation Factor	DSLT-H	0.85	
FDII	FPM Data Interpolation Interval	USIT-E	0	ft
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS	

GOBO_CURR	Good Bond in Arbitrary Cement	DSLT-H	8.04	mV
GR_MULTIPLIER	Gamma Ray Multiplier	HGNS-H	1	
HEMA	Hematite Presence Flag	Borehole	No	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
IMAR	Image Rotation	USIT-E	Off	
MAHTR	Manual High Threshold Reference for first arrival detection	DSLT-H	120	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	DSLT-H	7.32	dB/ft
MCI	Minimum Cemented Interval for Isolation	DSLT-H	Depth Zoned	ft
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	29.67	us
MNHTR	Minimum High Threshold Reference for first arrival detection	DSLT-H	100	
MSA	Minimum Sonic Amplitude	DSLT-H	2.61	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	DSLT-H	5.04	mV
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.08	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1	
NMSG	Near Minimum Sliding Gate	DSLT-H	320	us
NMXG	Near Maximum Sliding Gate	DSLT-H	950	us
NUMP	Number of Detection Passes	DSLT-H	2	
RCOD	Reference Calibrator Outer Diameter	USIT-E	7	in
RCSO	Reference Calibrator Standoff	USIT-E	1.378	in
RCTH	Reference Calibrator Thickness	USIT-E	0.295	in
SFAF	Sonic Formation Attenuation Factor	DSLT-H	3.25	dB/ft
SGAD	Sliding Gate Status	DSLT-H	Off	
SGCL	Sliding Gate Closing Delta-T	DSLT-H	130	us/ft
SGCW	Sliding Gate Closing Width	DSLT-H	25	us
SGDT	Sliding Gate Delta-T	DSLT-H	57	us/ft
SGW	Sliding Gate Width	DSLT-H	110	us
SLEV	Signal Level for AGC	DSLT-H	5000	mV
SOCN	Standoff Distance	HGNS-H	0.125	in
SOCO	Standoff Correction Option	HGNS-H	No	
TCUB	T^3 Processing Level	USIT-E	Loop	
THDH	Maximum Search Thickness (percentage of nominal)	USIT-E	130	%
THDL	Minimum Search Thickness (percentage of nominal)	USIT-E	60	%
HISC	Tool Position: Centered or Eccentered	HGNS-H	Eccentered	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0.1	Mrayl
UFGDE	Fiberglass Density	USIT-E	1.95	g/cm3
UFGPS	Fiberglass Processing Selection	USIT-E	No	
UFGVL	Fiberglass Velocity	USIT-E	9678.48	ft/s
USI_FSOD	USIT USI Fluid Slowness Fits Casing Outer Diameter	USIT-E	0_OFF	
USI_FVEL_SEL	USI Fluid Velocity Selection	USIT-E	Automatic	
USI_ZMUD_SEL	USI Mud Impedance Selection	USIT-E	FreePipe Norm.	
THDP	Thickness Detection Policy	USIT-E	Fundamental	
VCAS	Ultrasonic Transversal Velocity in Casing	USIT-E	51.4	us/ft
VDLG	VDL Manual Gain	DSLT-H	5	
ZCAS	Acoustic Impedance of Casing	USIT-E	46.25	Mrayl
ZCMT	Acoustic Impedance of Cement	DSLT-H	5	Mrayl
ZCMT_NEAT	Acoustic Impedance of Cement in Neat Cement	DSLT-H	6.8	Mrayl
ZINI	Initial Estimate of Cement Impedance	USIT-E	-1	Mrayl
ZMUD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

ThreeDepth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	17.5	93	1438
BS	12.25	1438	1578
BS	14	1578	8685.25
MCI	21.68	93	1436
MCI	14.81	1436	8685.25

All depth are actual.

Tool Control Parameters

Three: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	18	dB
DDEL	Digitizing Delay	DSLT-H	0	us
U-USIT_DDT5	USIC Downhole Decimation for T5 only	USIT-E	0_NONE	
DOT(DOS)	Distance between Opposite Transducer Faces	USIT-E	4.874	in
MODE	DSLT Acquisition Mode	DSLT-H	CBL	
RATE	DSLT Firing Rate	DSLT-H	15 Hz	
DTFS	DSLT Telemetry Frame Size	DSLT-H	536	
DWCO	Digitizer Word Count	DSLT-H	250	
EMXV	EMEX Voltage	USIT-E	Time Zoned	V
HRES	Horizontal Resolution	USIT-E	10 deg	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3375	ft/h
MOTOR_PROTECT	Motor Protection	USIT-E	On	
SDTH	Switch Down Threshold	DSLT-H	20000	
SGAI	Selectable Acquisition Gain	DSLT-H	x1	
SUTH	Switch Up Threshold	DSLT-H	1000	
TMUC	Type of Mud	USIT-E	BRI	
UACLV_PERM	Ultrasonic ACLV Permanent	USIT-E	No	
ULOG	Logging Objective	USIT-E	MEASUREMENT	
UMFR	Modulation Frequency	USIT-E	333333	Hz
USFR	Ultrasonic Sampling Frequency	USIT-E	500000	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 500 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 1.5 in LF	
USIT_DEPTHLOG	Starting Depth Log for Ultrasonics	USIT-E	8650	ft
USSP	Ultrasonic Service	USIT-E	USI	
VRES	Vertical Resolution	USIT-E	1.5 in	
WINB	Window Begin Time	USIT-E	Time Zoned	us
WINE	Window End Time	USIT-E	Time Zoned	us
WMOD	Waveform Firing Mode	DSLT-H	Full	

ThreeTime Zoned Parameters

Pass Log[7]:Up

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	60	15-Aug-2016 09:40:57	15-Aug-2016 09:42:45	8651.26	8606.12
EMXV	80	15-Aug-2016 09:42:45	15-Aug-2016 10:45:39	8606.12	5542.26
WINB	30	15-Aug-2016 09:40:57	15-Aug-2016 09:50:17	8651.26	8292.31
WINB	20	15-Aug-2016 09:50:17	15-Aug-2016 10:45:39	8292.31	5542.26

WINE	100	15-Aug-2016 09:40:57	15-Aug-2016 09:50:23	8651.26	8287.09
WINE	110	15-Aug-2016 09:50:23	15-Aug-2016 10:45:39	8287.09	5542.26

Pass Log[10]:Up

EMXV	80	15-Aug-2016 11:14:26	15-Aug-2016 11:20:54	8685.26	8650.46
WINB	25	15-Aug-2016 11:14:26	15-Aug-2016 11:20:54	8685.26	8650.46
WINE	110	15-Aug-2016 11:14:26	15-Aug-2016 11:20:54	8685.26	8650.46

Pass Log[14]:Up

EMXV	80	15-Aug-2016 11:59:28	15-Aug-2016 13:48:21	5542.26	145.39
WINB	25	15-Aug-2016 11:59:28	15-Aug-2016 13:48:21	5542.26	145.39
WINE	110	15-Aug-2016 11:59:28	15-Aug-2016 13:48:21	5542.26	145.39

All depth are at tool zero.

Three

Repeat Pass 5 in = 100 ft

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Three	Log[10]:Up	Up	8394.14 ft	8685.58 ft	15-Aug-2016 11:14:25 AM	15-Aug-2016 11:20:54 AM	ON	-2.42 ft	Yes

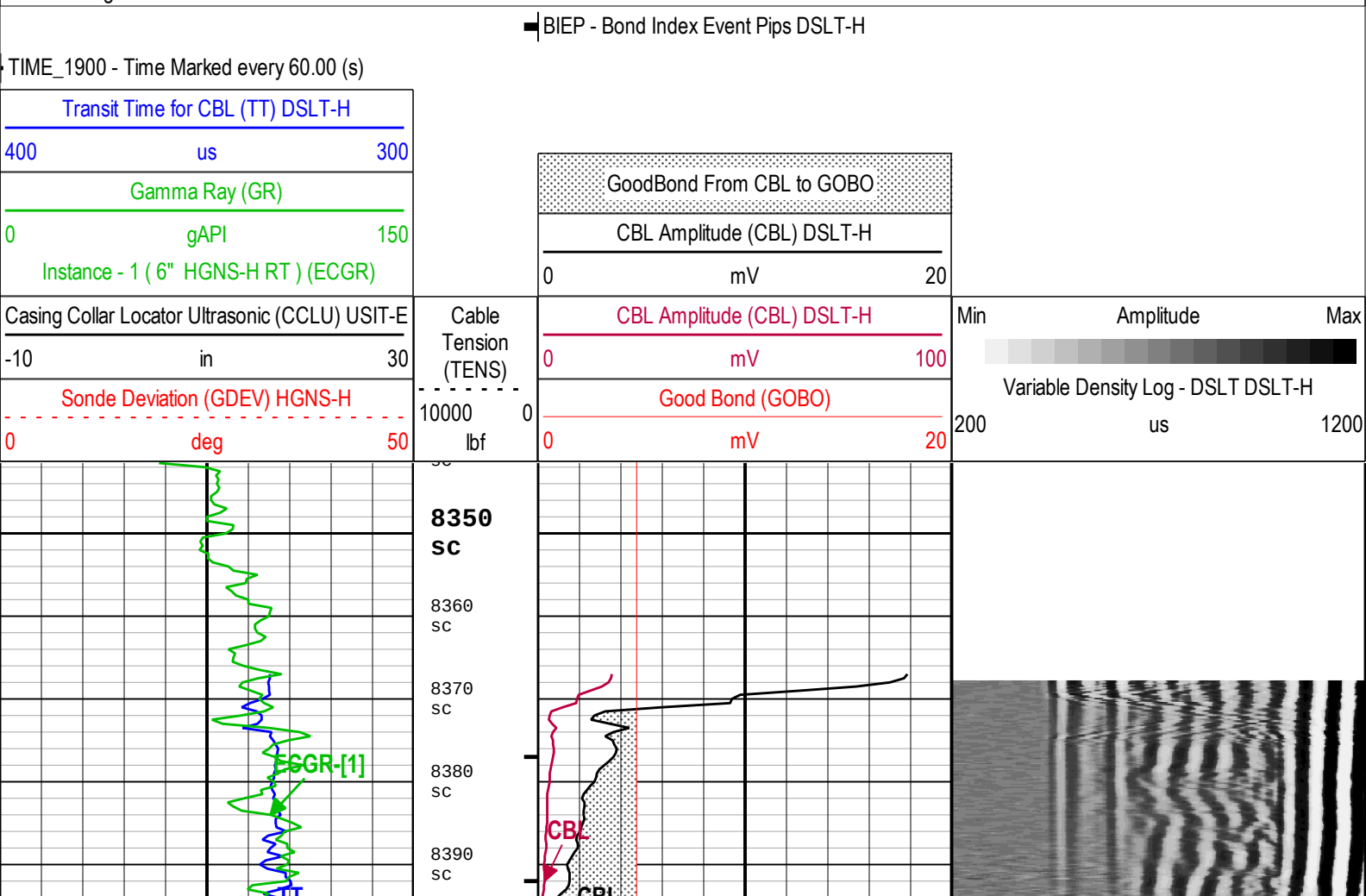
All depths are referenced to toolstring zero

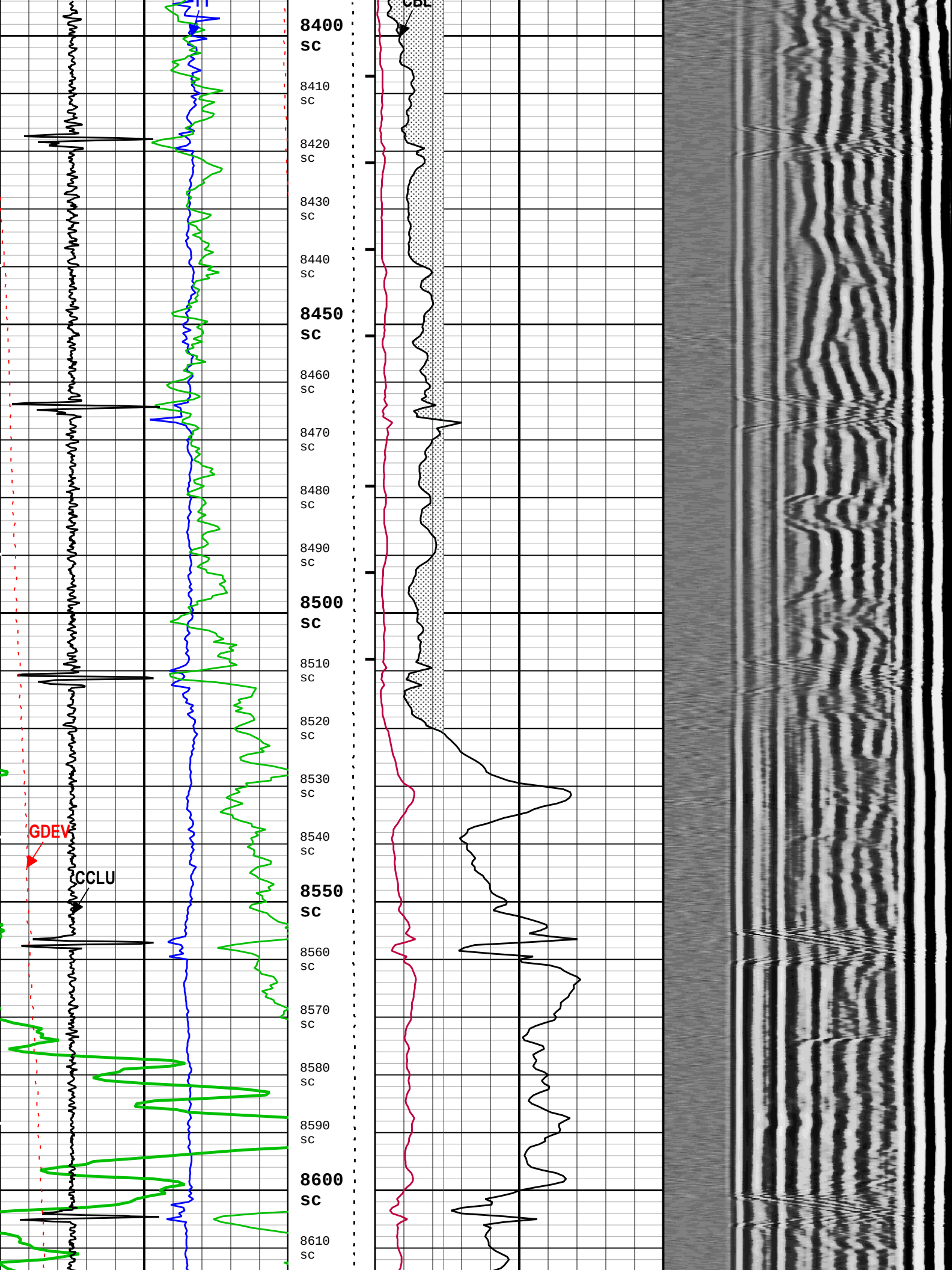
Log

Company:Southern California Gas Company Well:Standard Sesnon 4B

Three: Log[10]:Up:S012

Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:29

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GDEV
CCLU
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8410 sc
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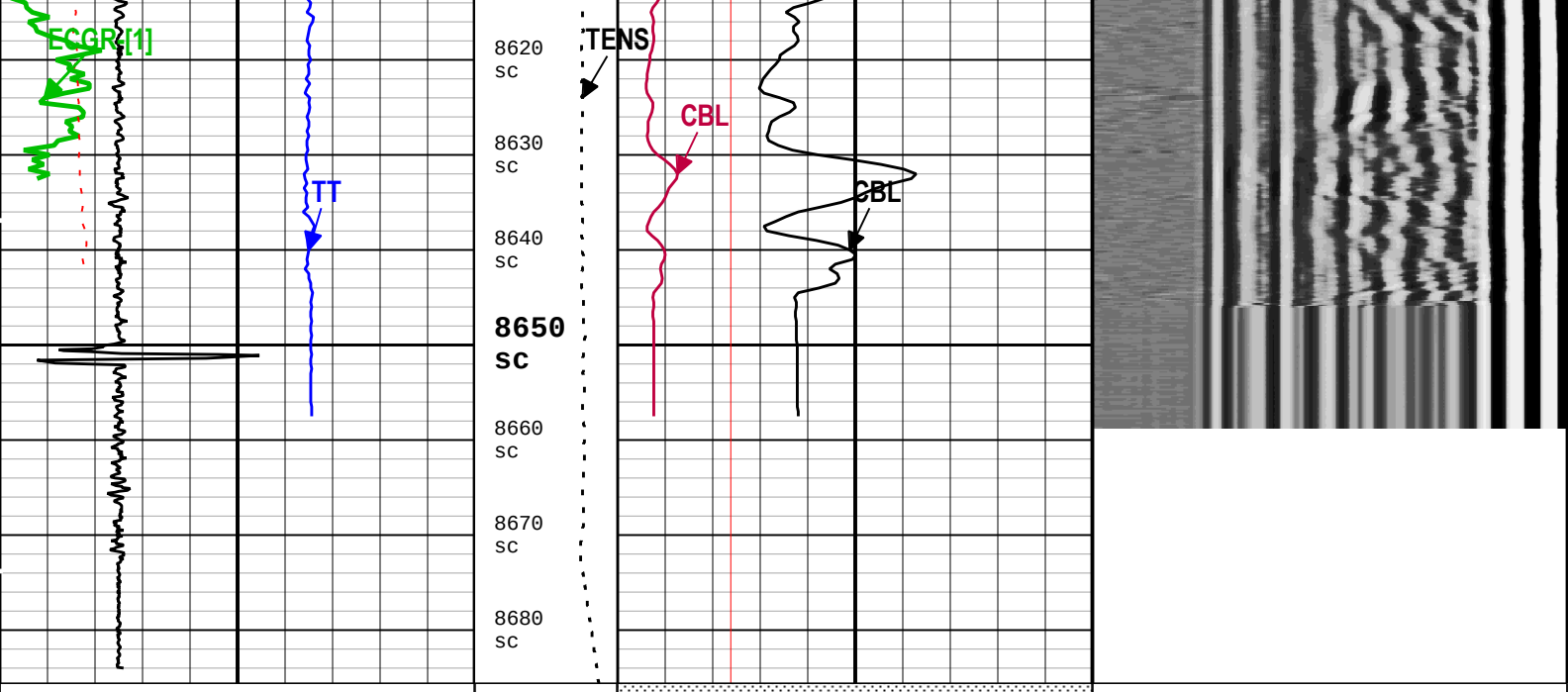
8610 sc



Transit Time for CBL (TT) DSLT-H
400 us 300

Gamma Ray (GR)
0 gAPI 150

Instance - 1 (6" HGNS-H RT) (ECGR)

Casing Collar Locator Ultrasonic (CCLU) USIT-E
-10 in 30

Sonde Deviation (GDEV) HGNS-H
0 deg 50

Cable Tension (TENS)
10000 0
lbf

GoodBond From CBL to GOBO

CBL Amplitude (CBL) DSLT-H
0 mV 20

CBL Amplitude (CBL) DSLT-H
0 mV 100

Good Bond (GOBO)
0 mV 20

Min Amplitude Max

Variable Density Log - DSLT DSLT-H
200 us 1200

TIME_1900 - Time Marked every 60.00 (s)

BIEP - Bond Index Event Pips DSLT-H

Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:29

USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
Run 1	Log[14]:Up	5649.76	145.33

Fluid Velocity = "Automatic".
CFVL equals DFSL channel

Start Depth(ft)	Stop Depth(ft)	Start Value(us/ft)	End Value(us/ft)

Mud Impedance = "FreePipe Norm.".
Free Pipe normalization zone is : 64.34m(211.09ft) to 67.64m(221.92ft)
MUD_N_FRP = 1.08
DFD = 1.20g/cm3(10.00lbm/gal)
CZMD median computed in free pipe normalization interval = 1.90 MRayl

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)

Composite 2

Main Pass 5 in = 100 ft

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Three	Log[7]:Up	Up	5508.26 ft	8666.53 ft	15-Aug-2016 9:40:57 AM	15-Aug-2016 10:45:39 AM	ON	5.97 ft	Yes
Three	Log[10]:Up	Up	8394.14 ft	8685.58 ft	15-Aug-2016 11:14:25 AM	15-Aug-2016 11:20:54 AM	ON	-2.42 ft	Yes

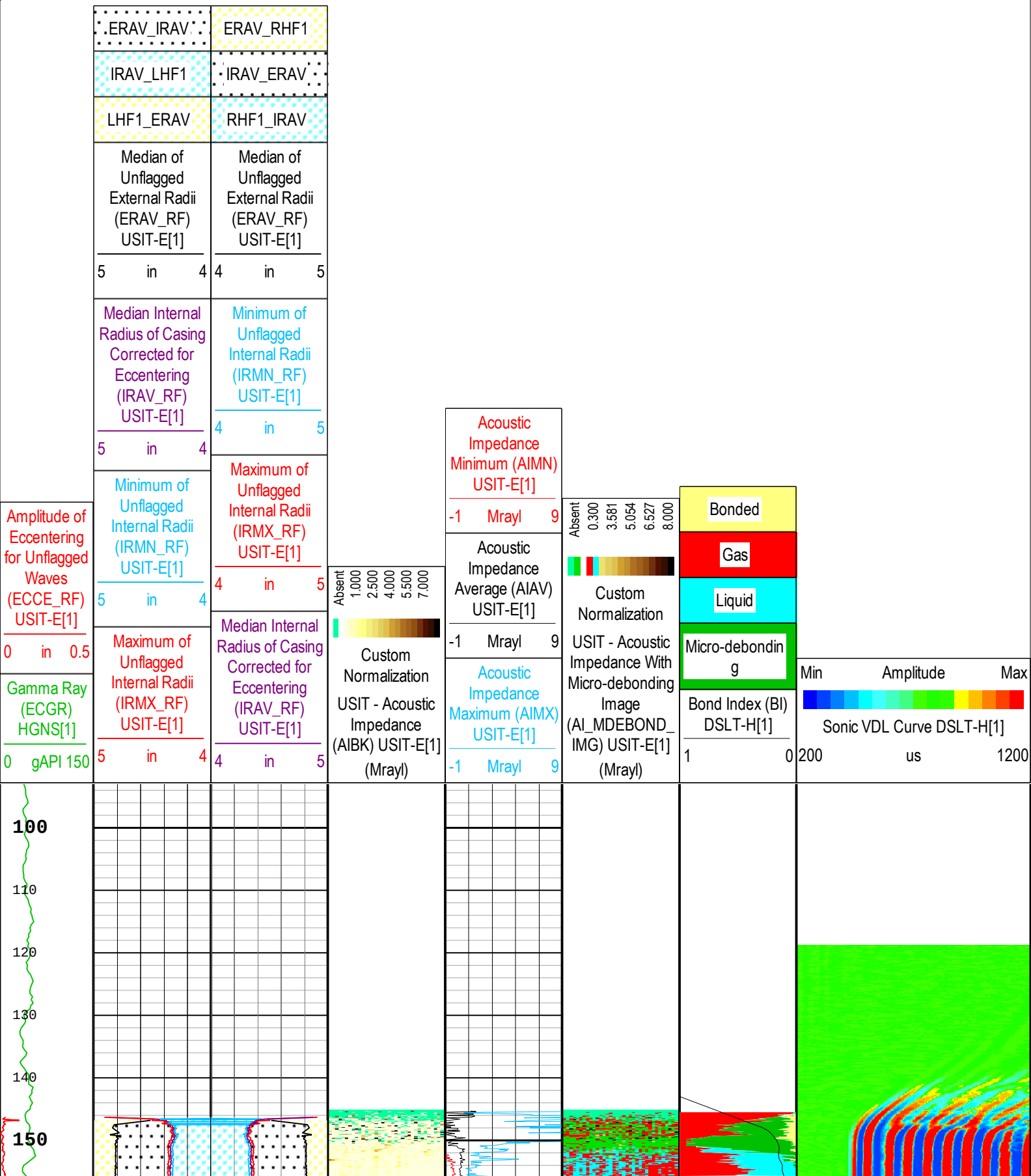
Three	Log[14]:Up	Up	145.33 ft	5649.76 ft	15-Aug-2016 11:57:21 AM	15-Aug-2016 1:48:21 PM	ON	-0.52 ft	Yes

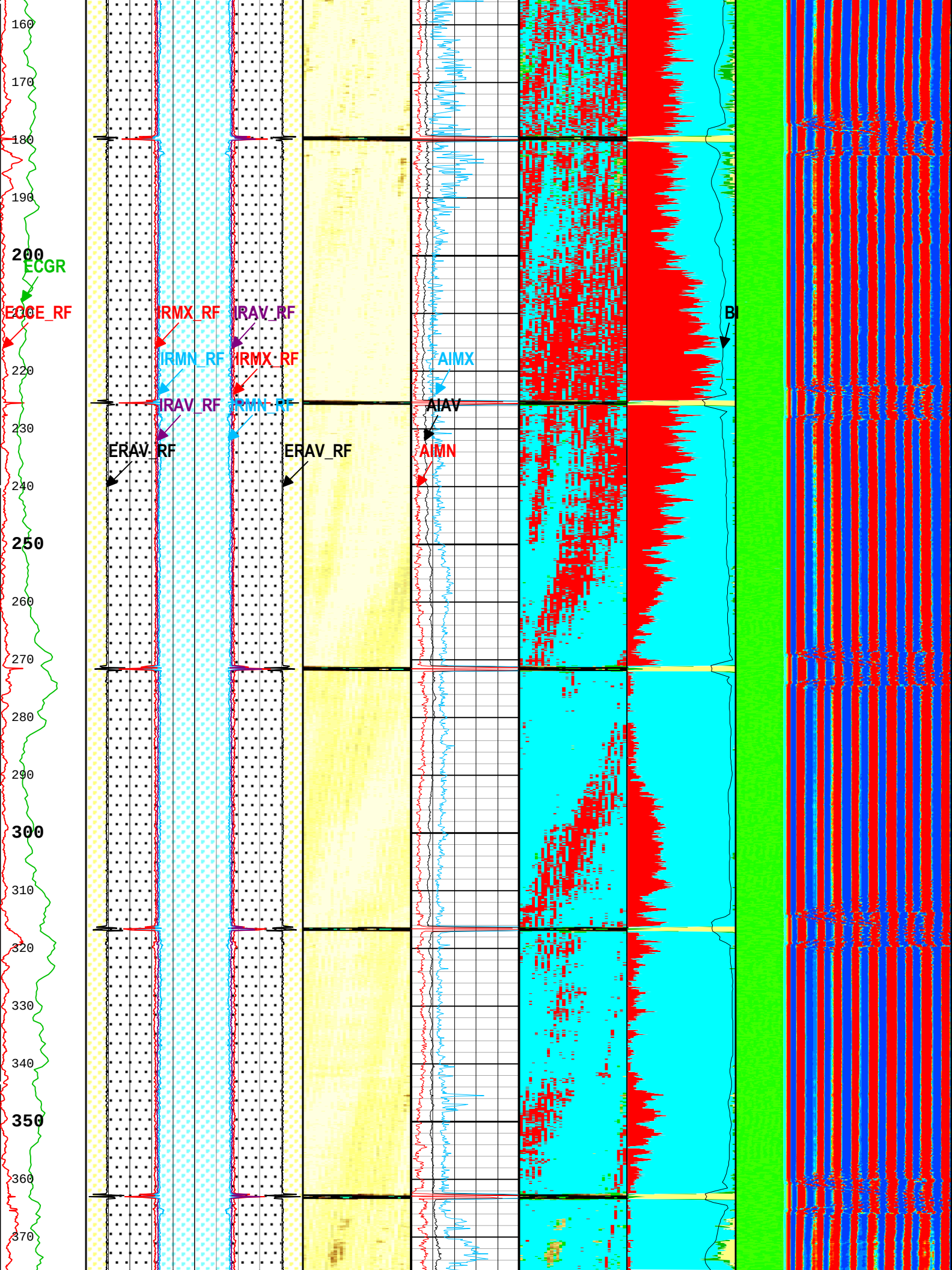
All depths are referenced to toolstring zero

Log Company:Southern California Gas Company Well:Standard Sesnon 4B Composite 2:S012

Description: USI VDL Cement Format: Log (LBV1_USI-VDL (DSLT) Cement 9.625inch) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:36

TIME_1900 - Time Marked every 60.00 (s)

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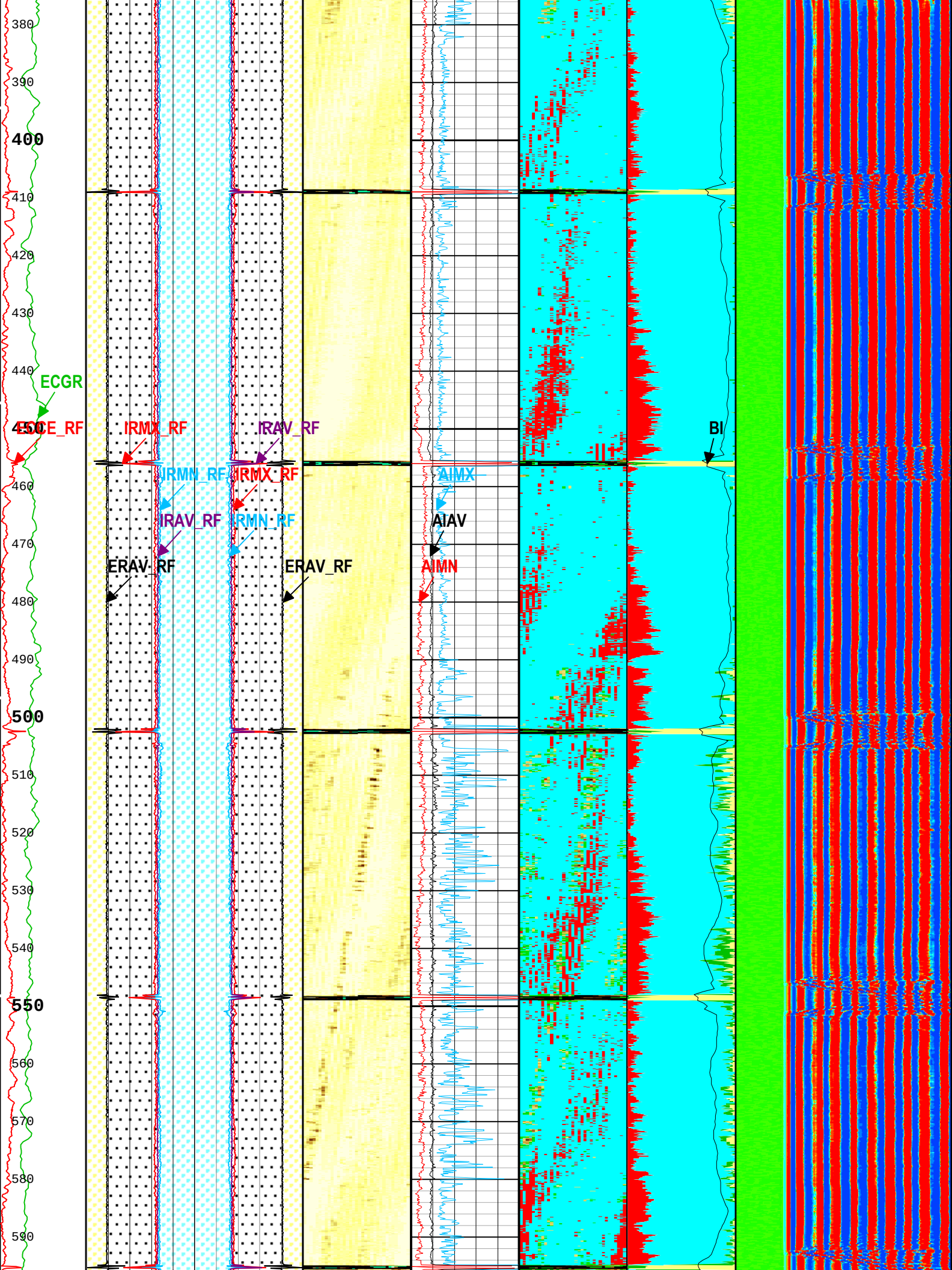
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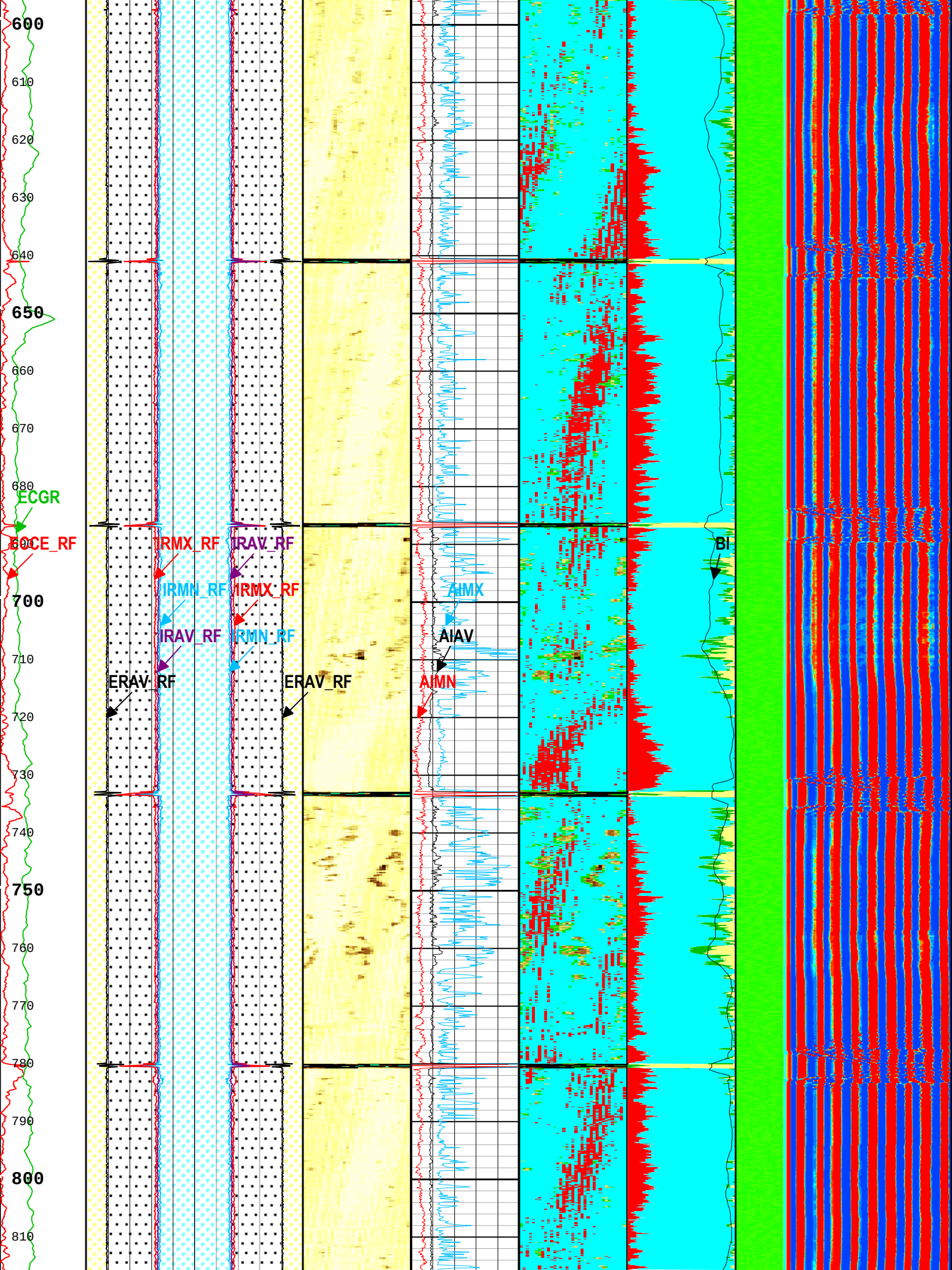
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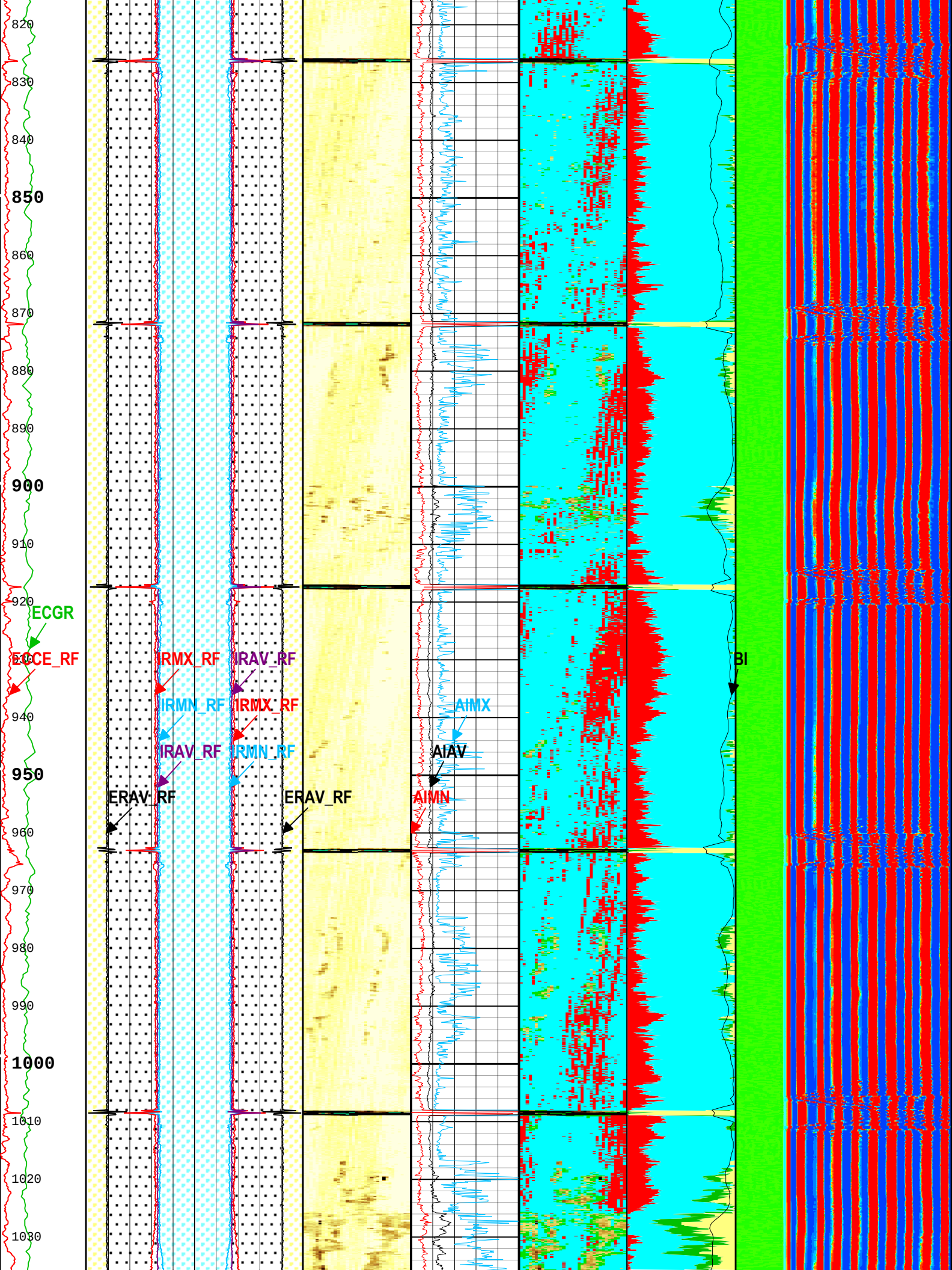
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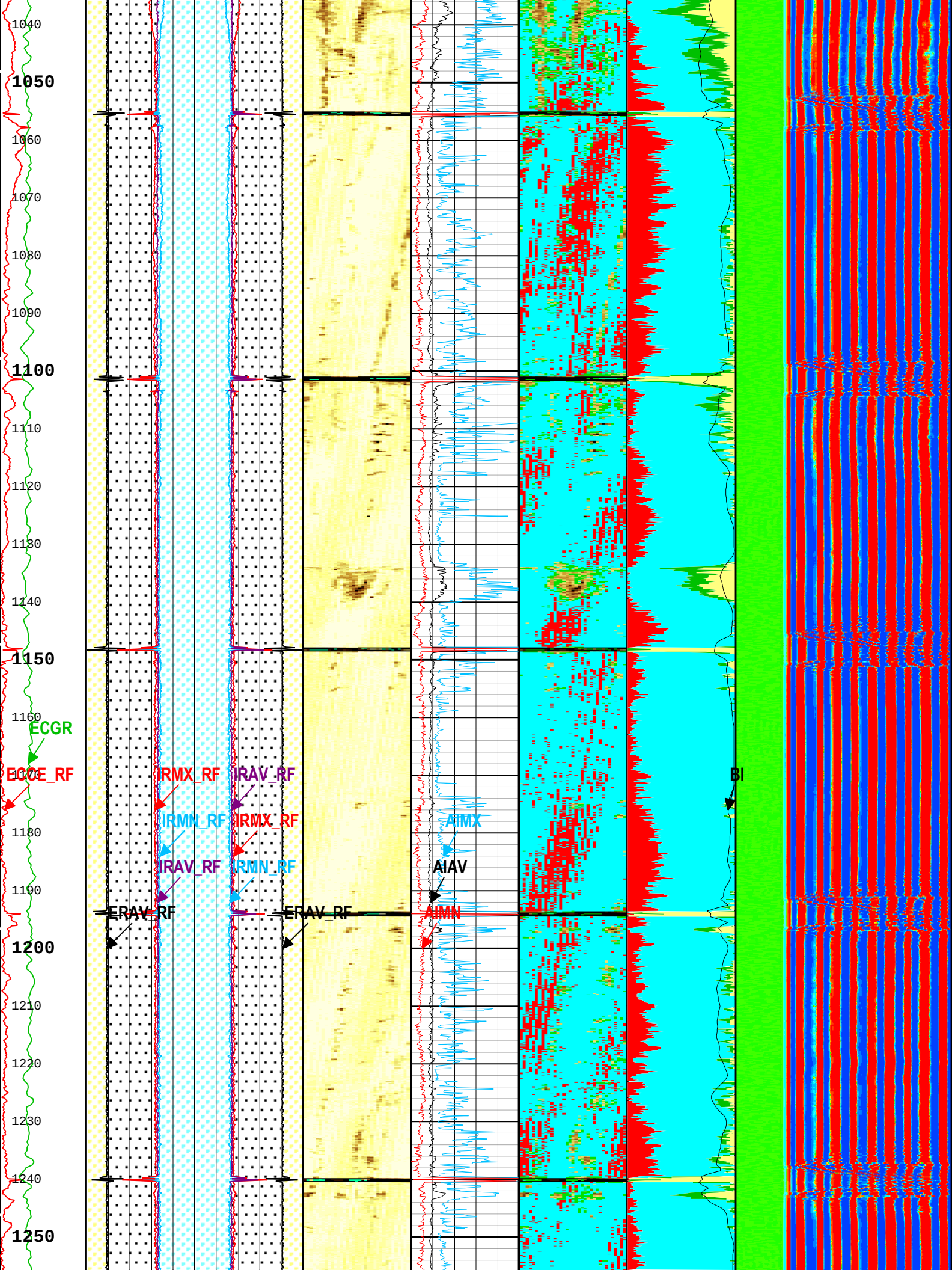
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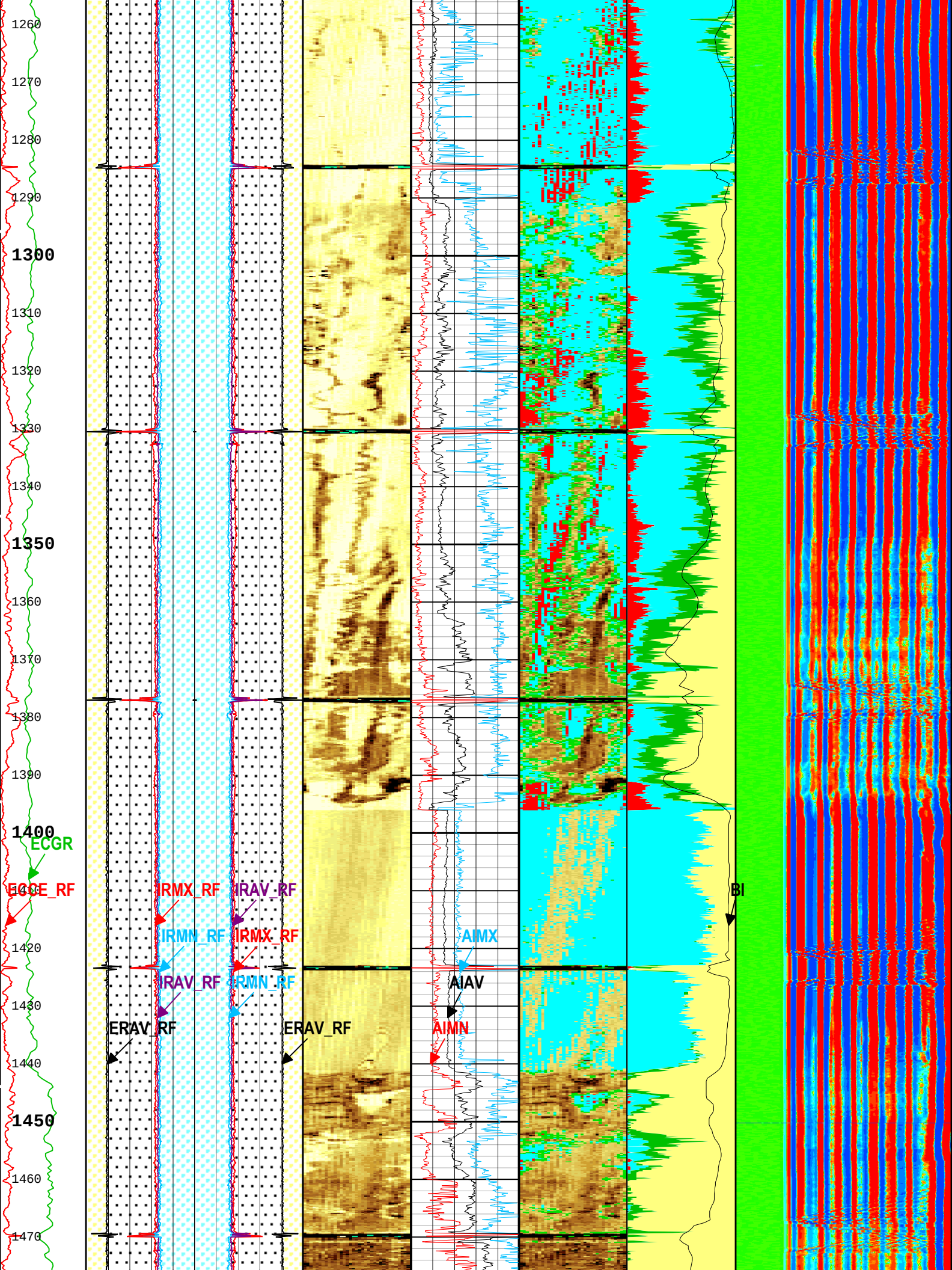
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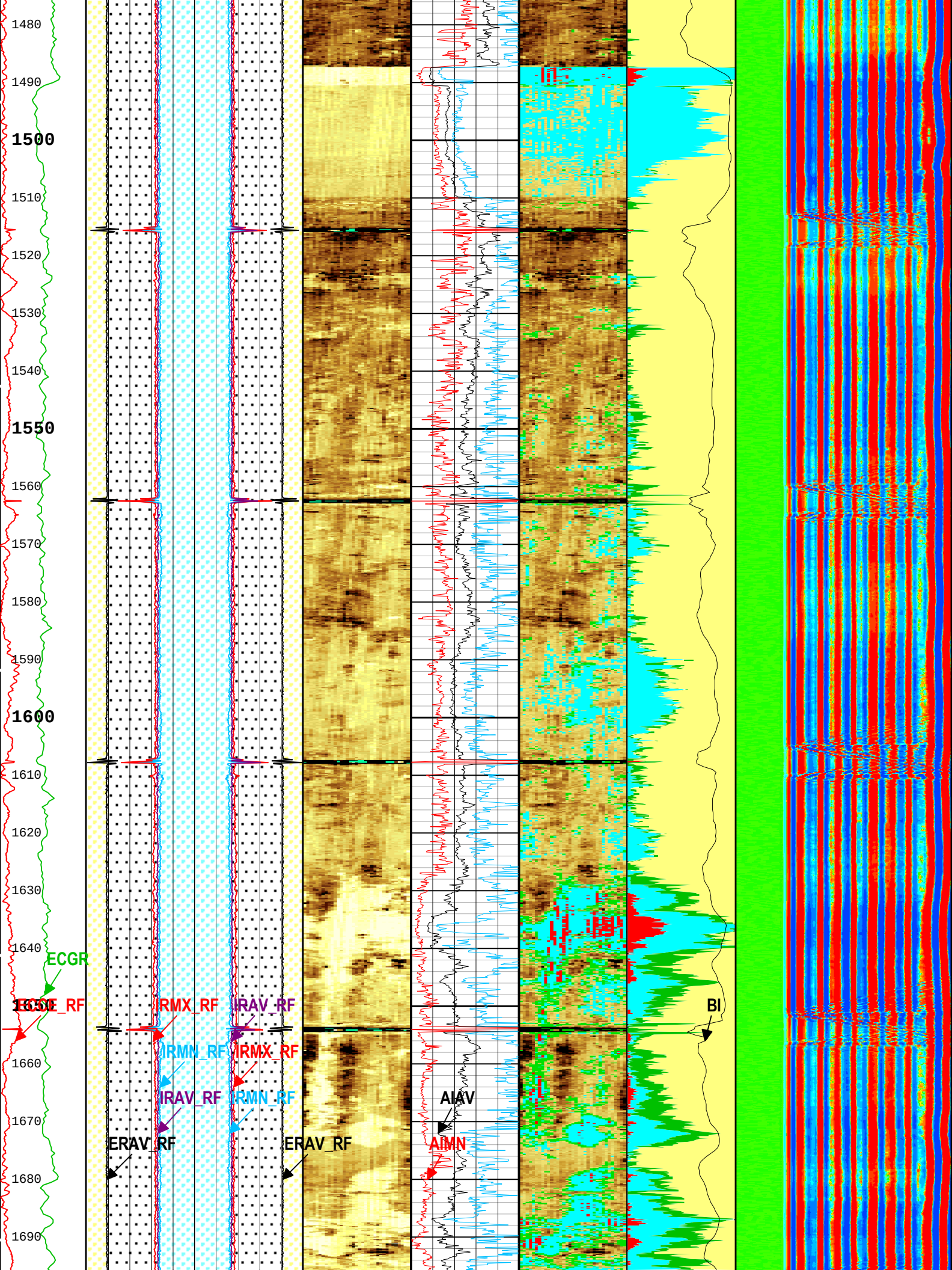
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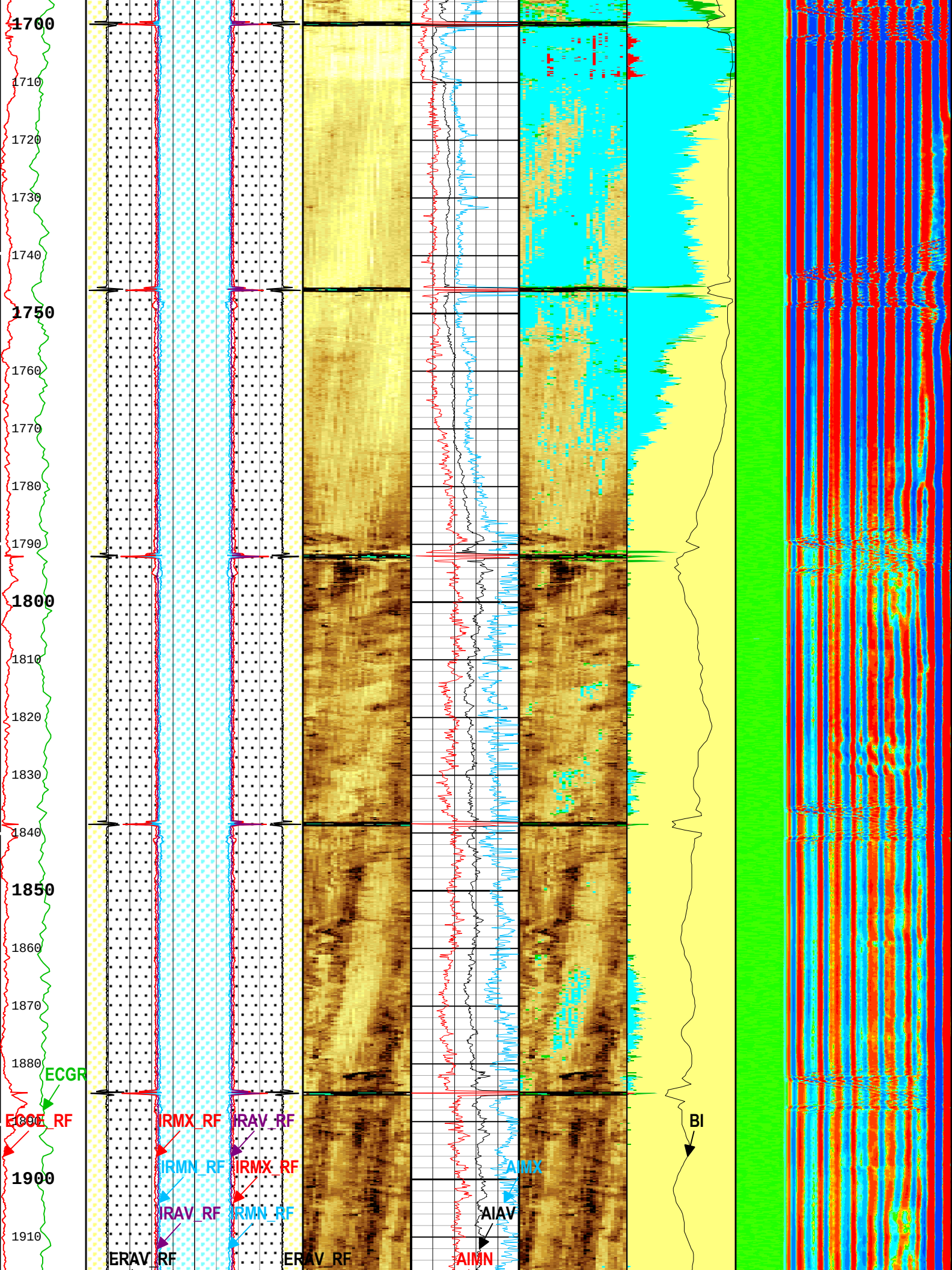
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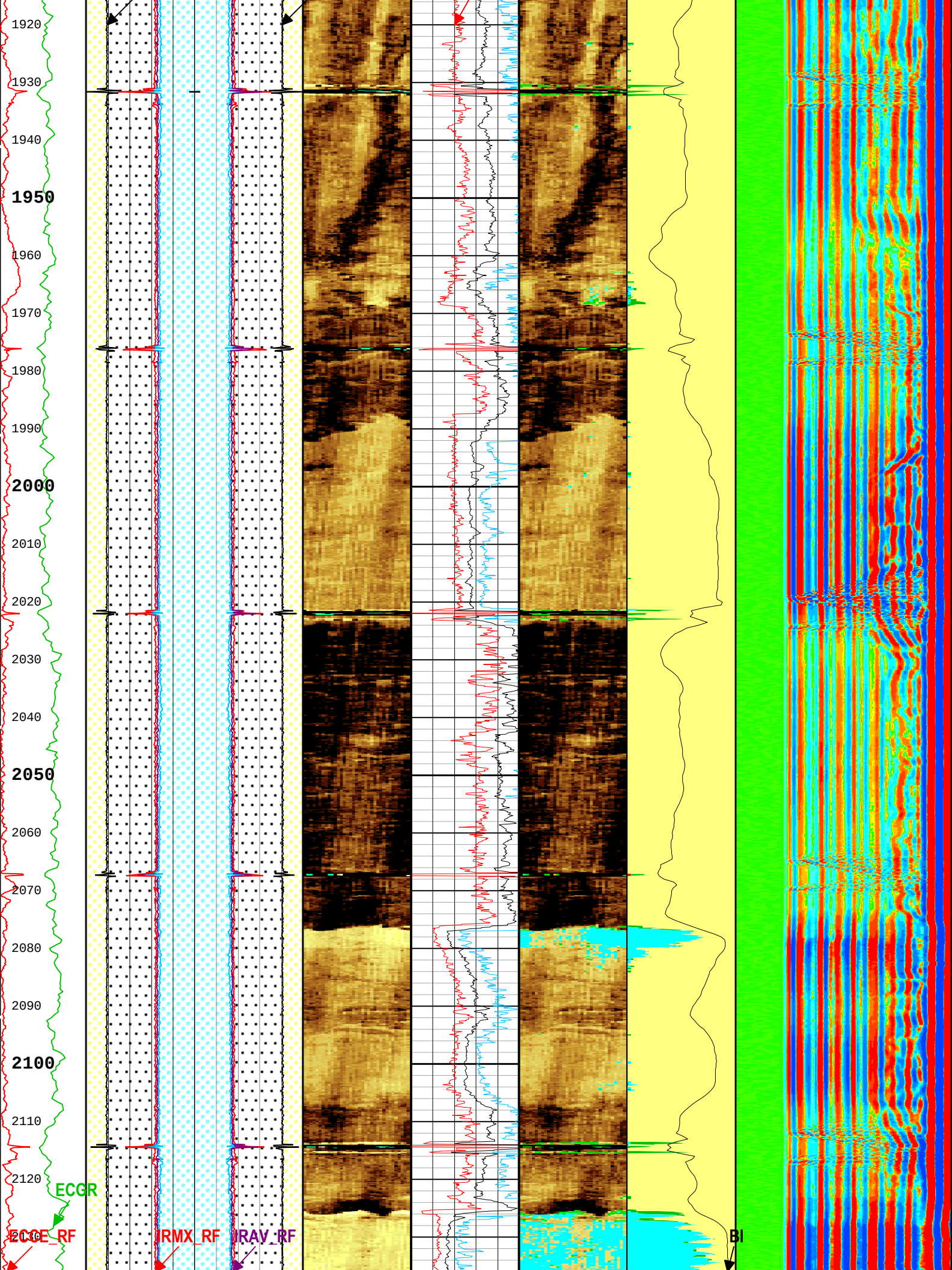
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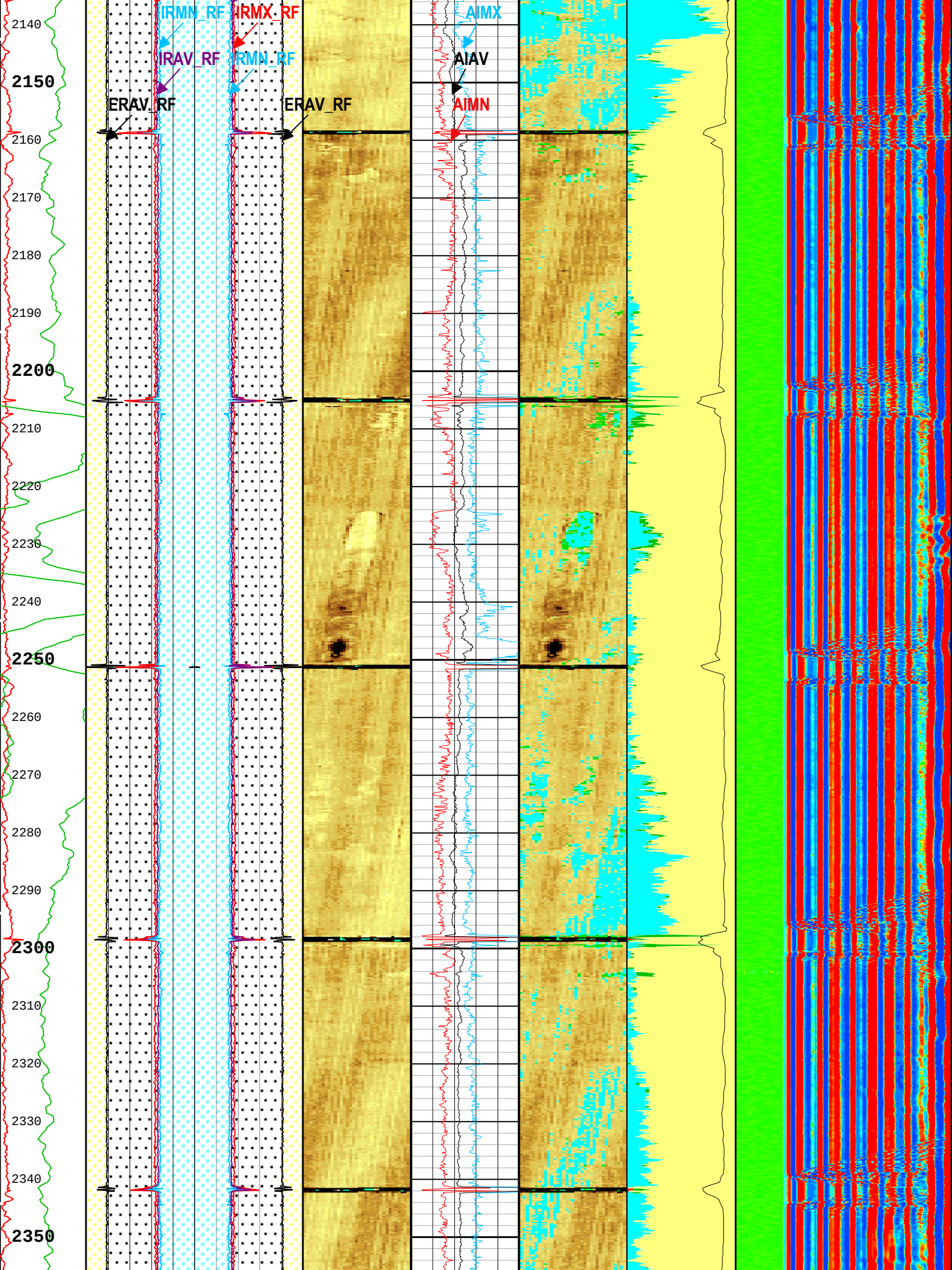
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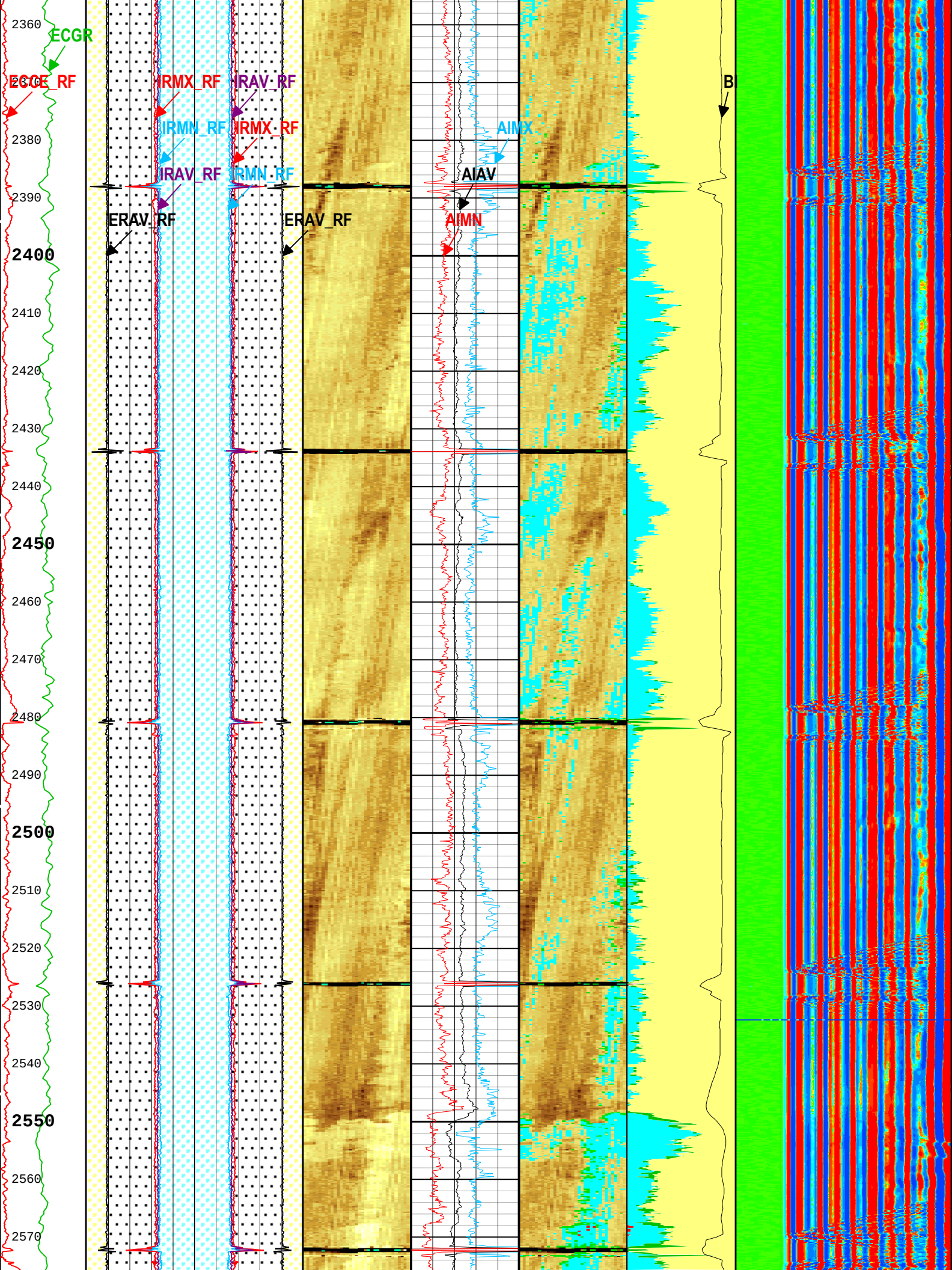
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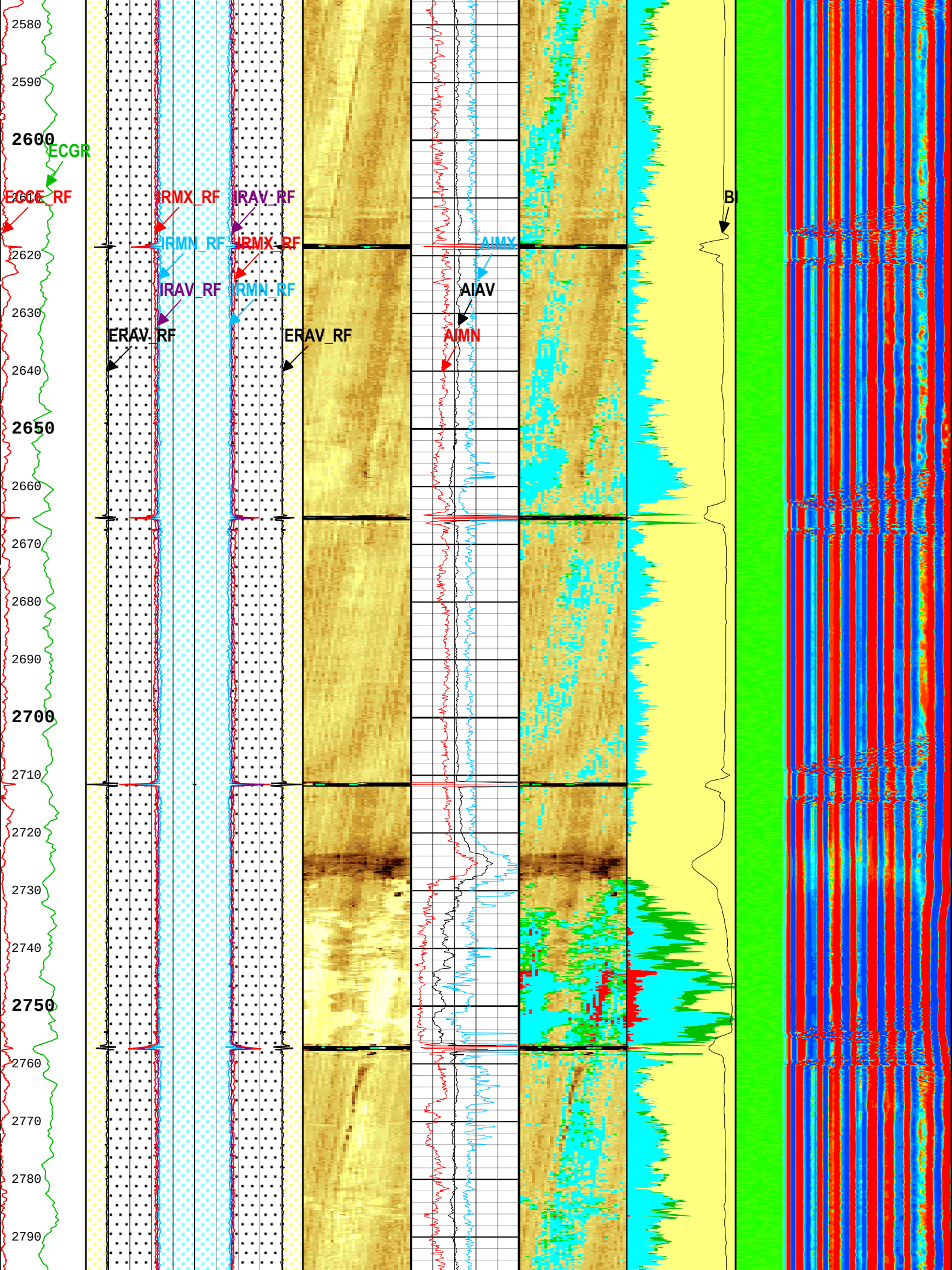
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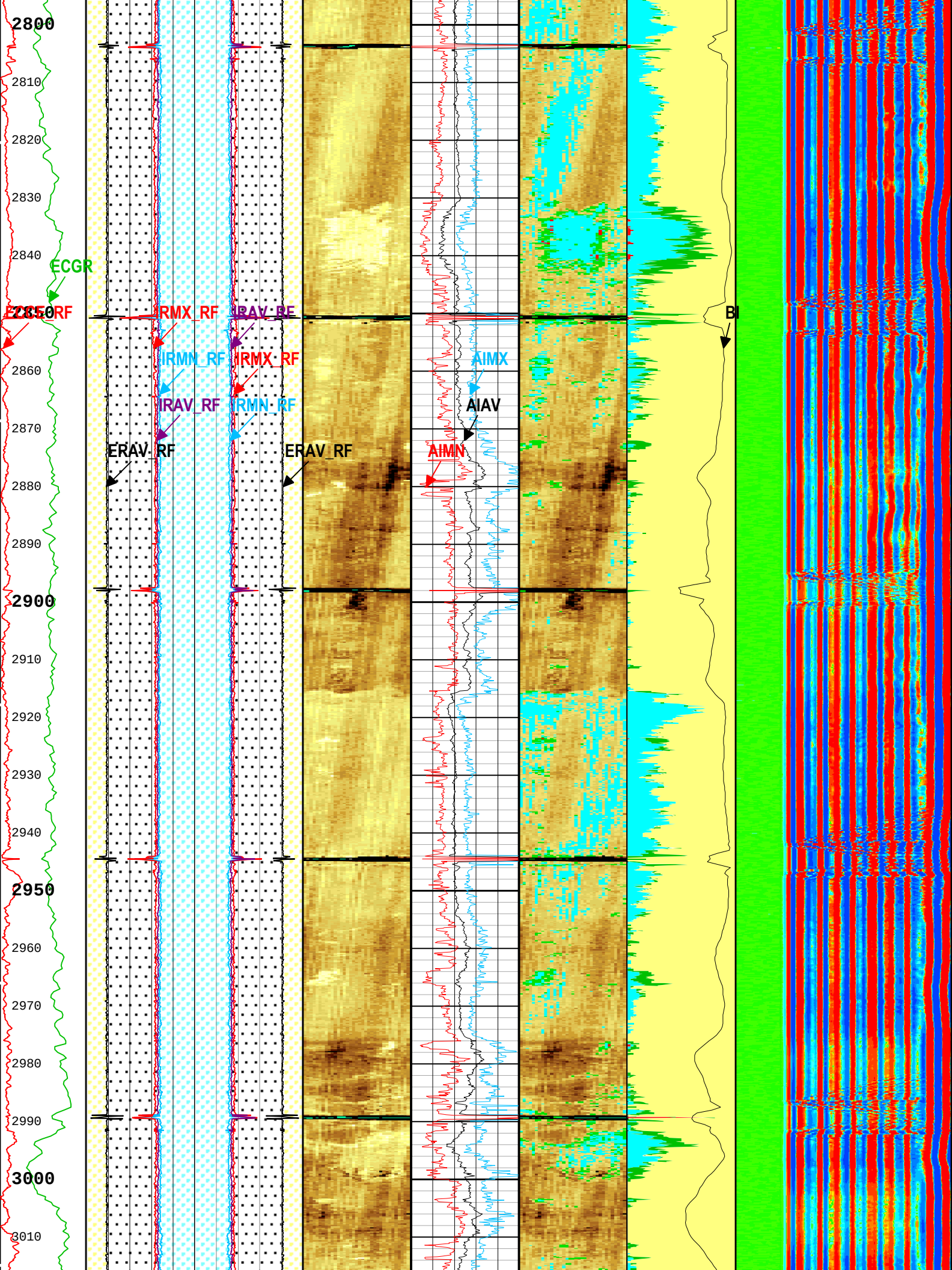
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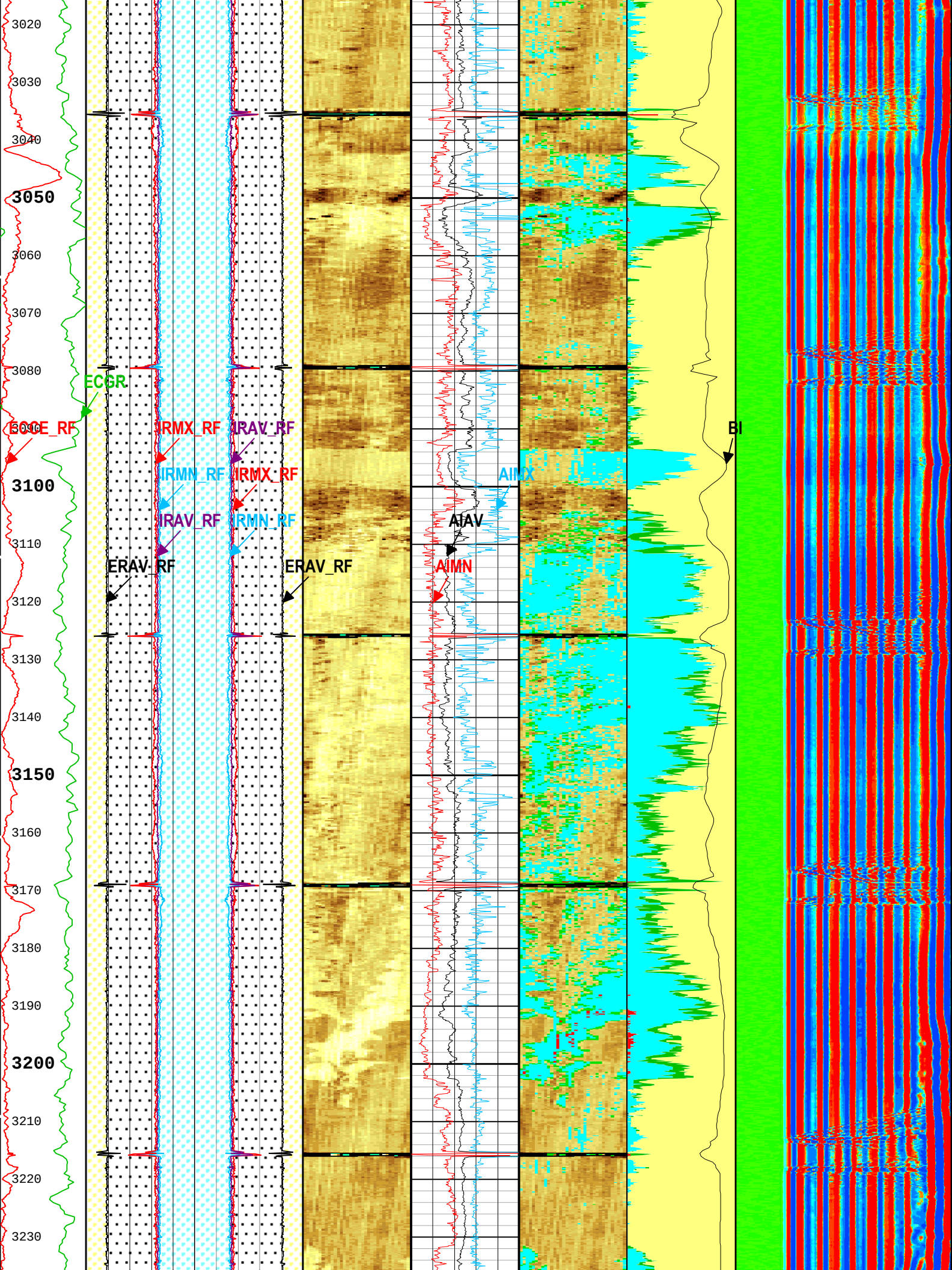
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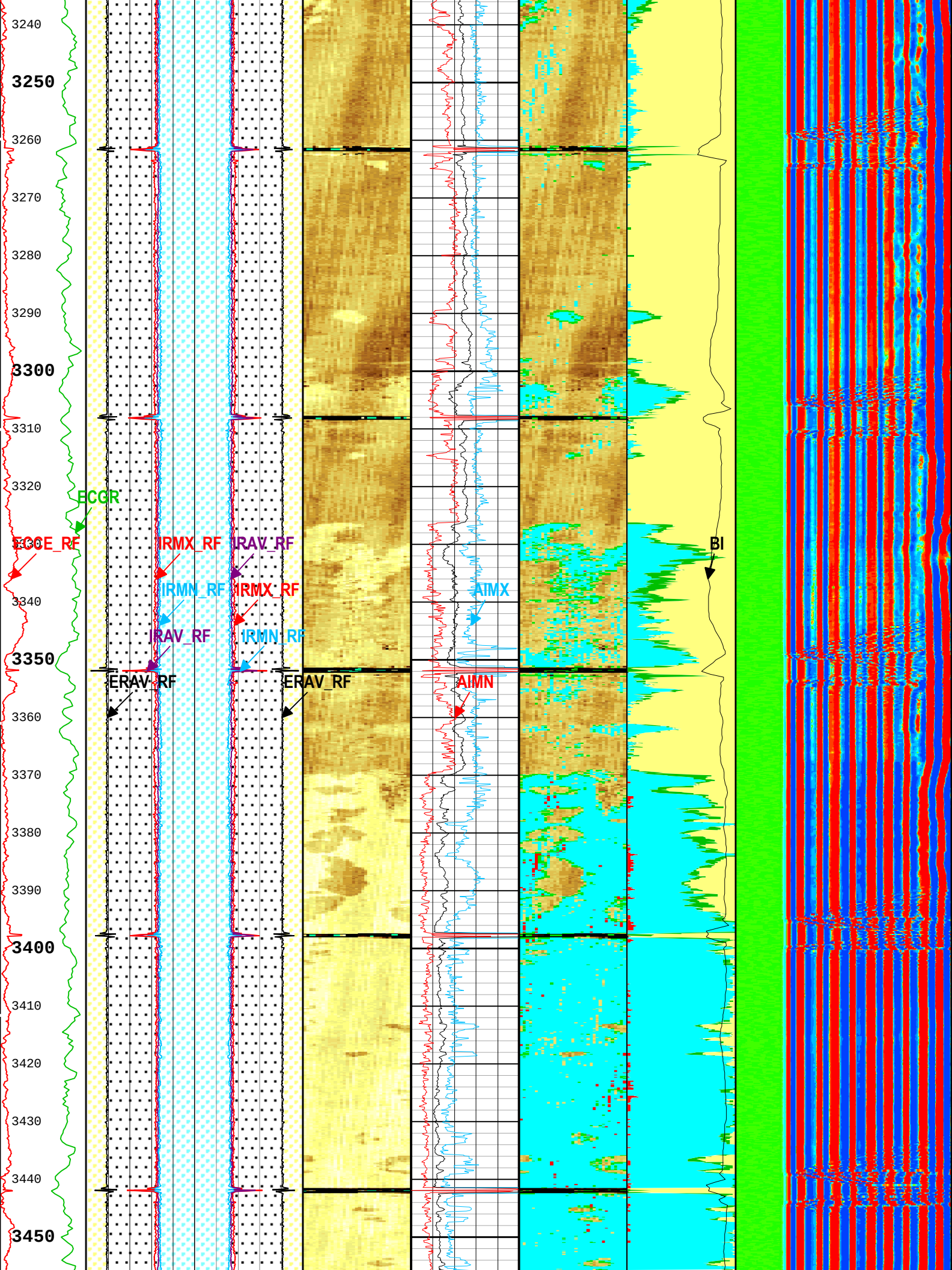
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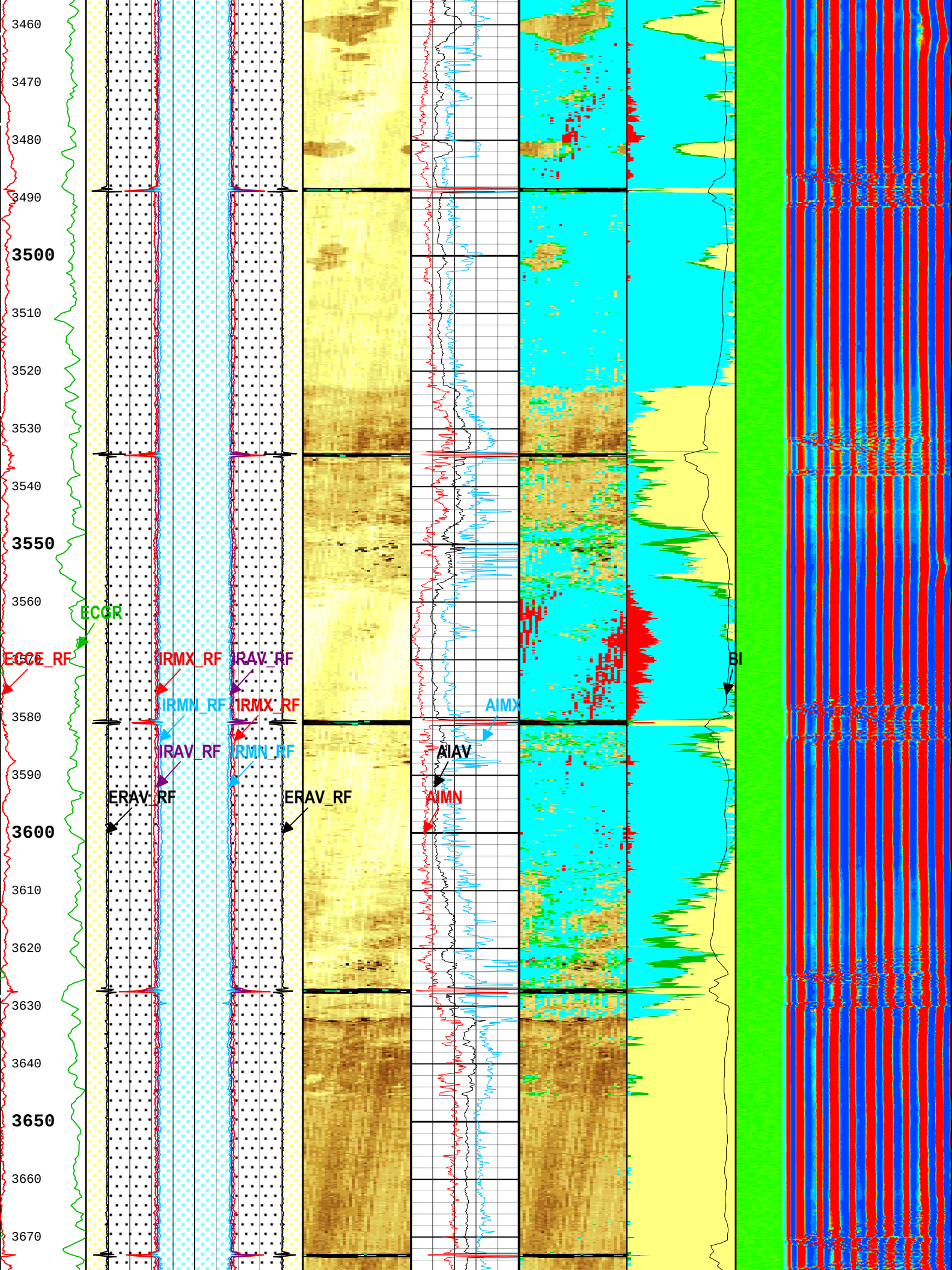
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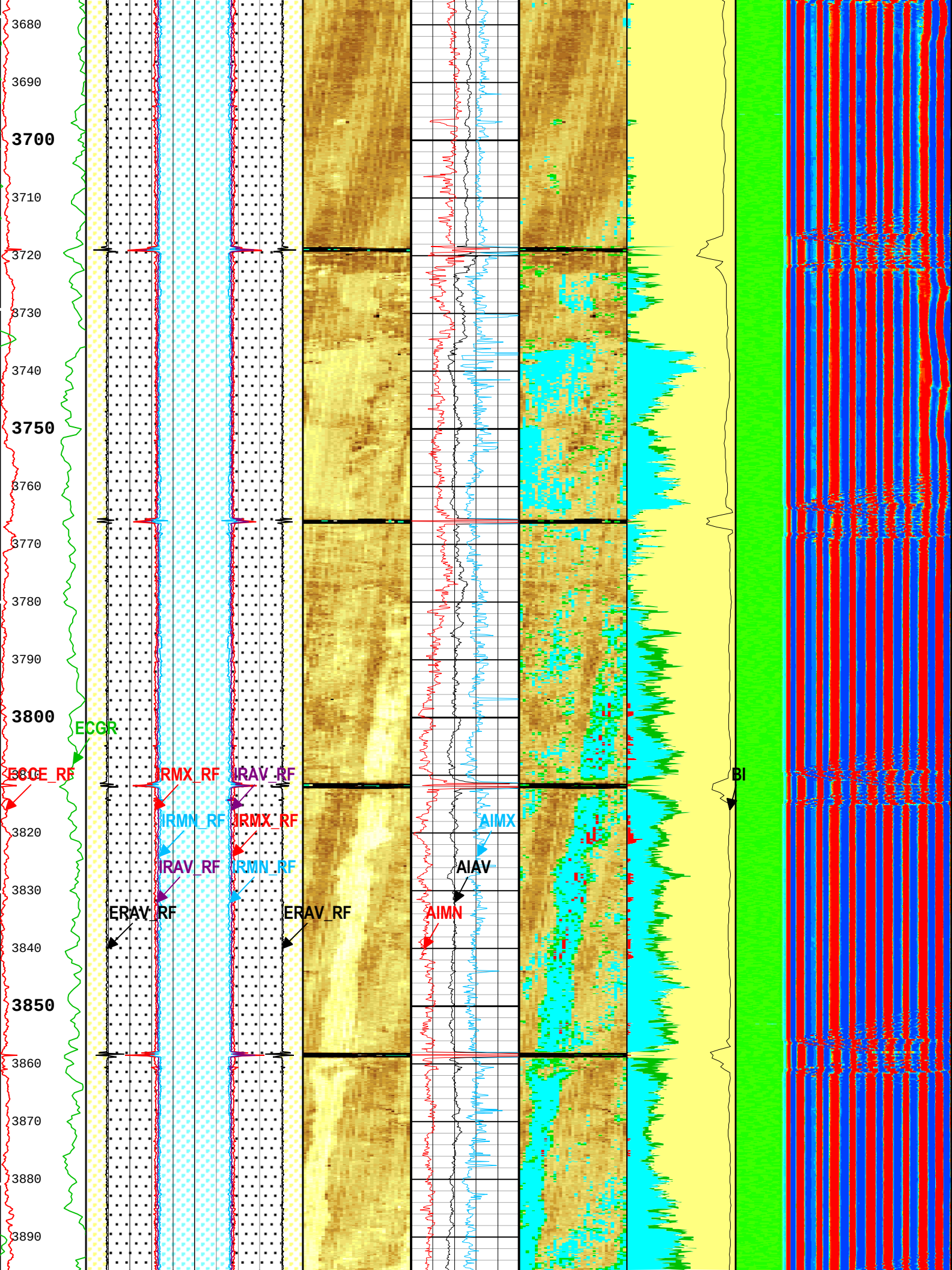
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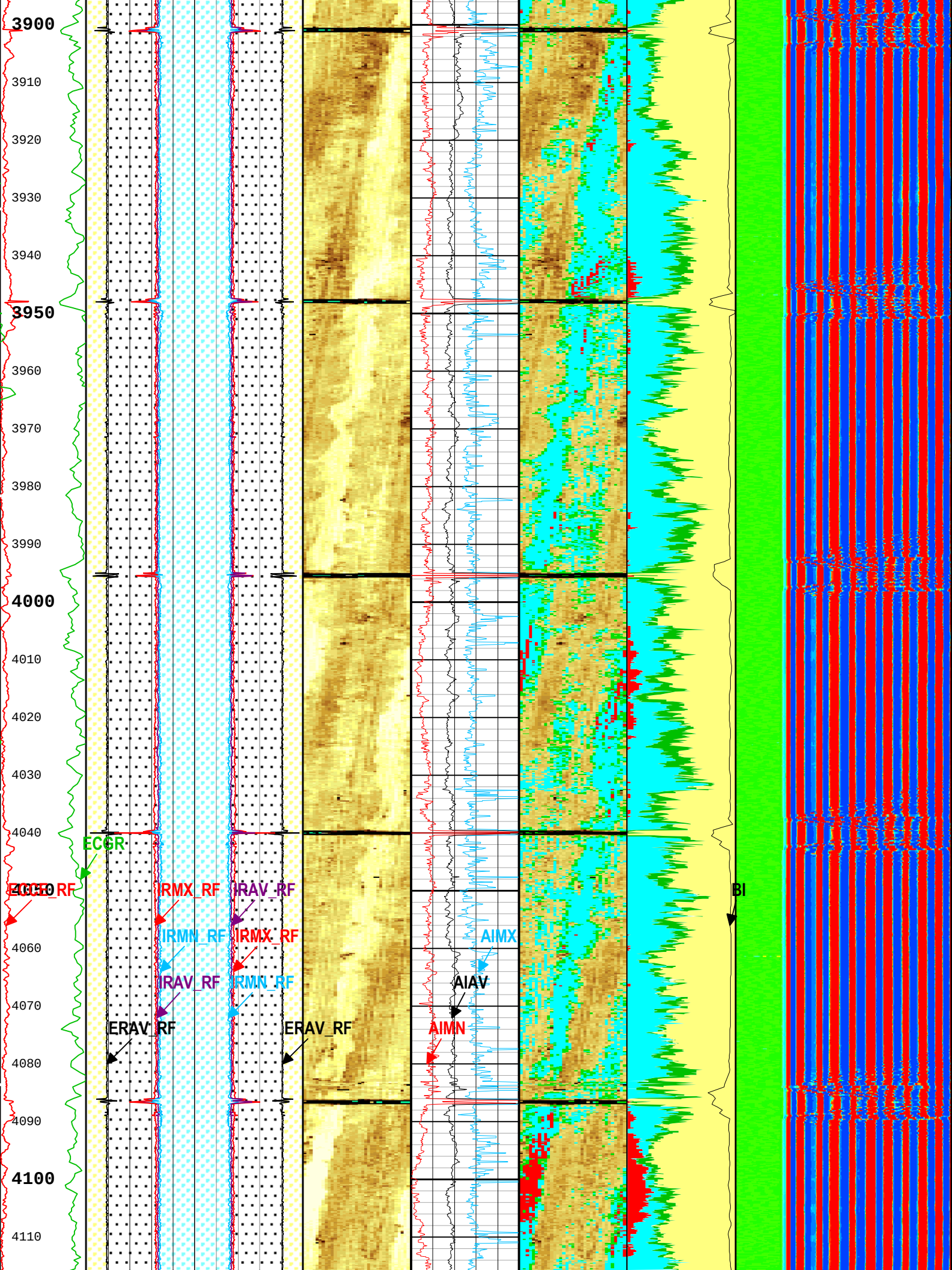
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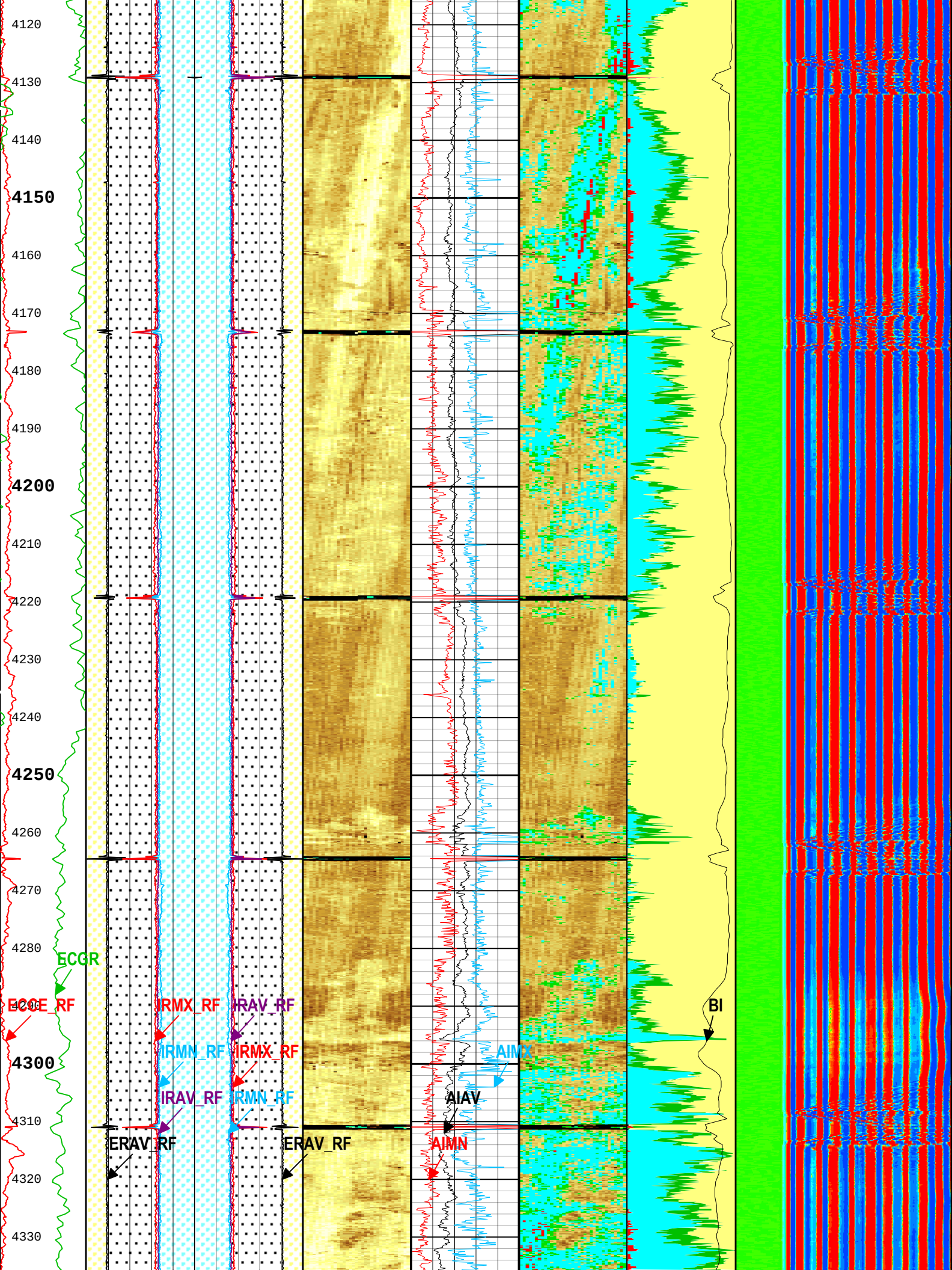
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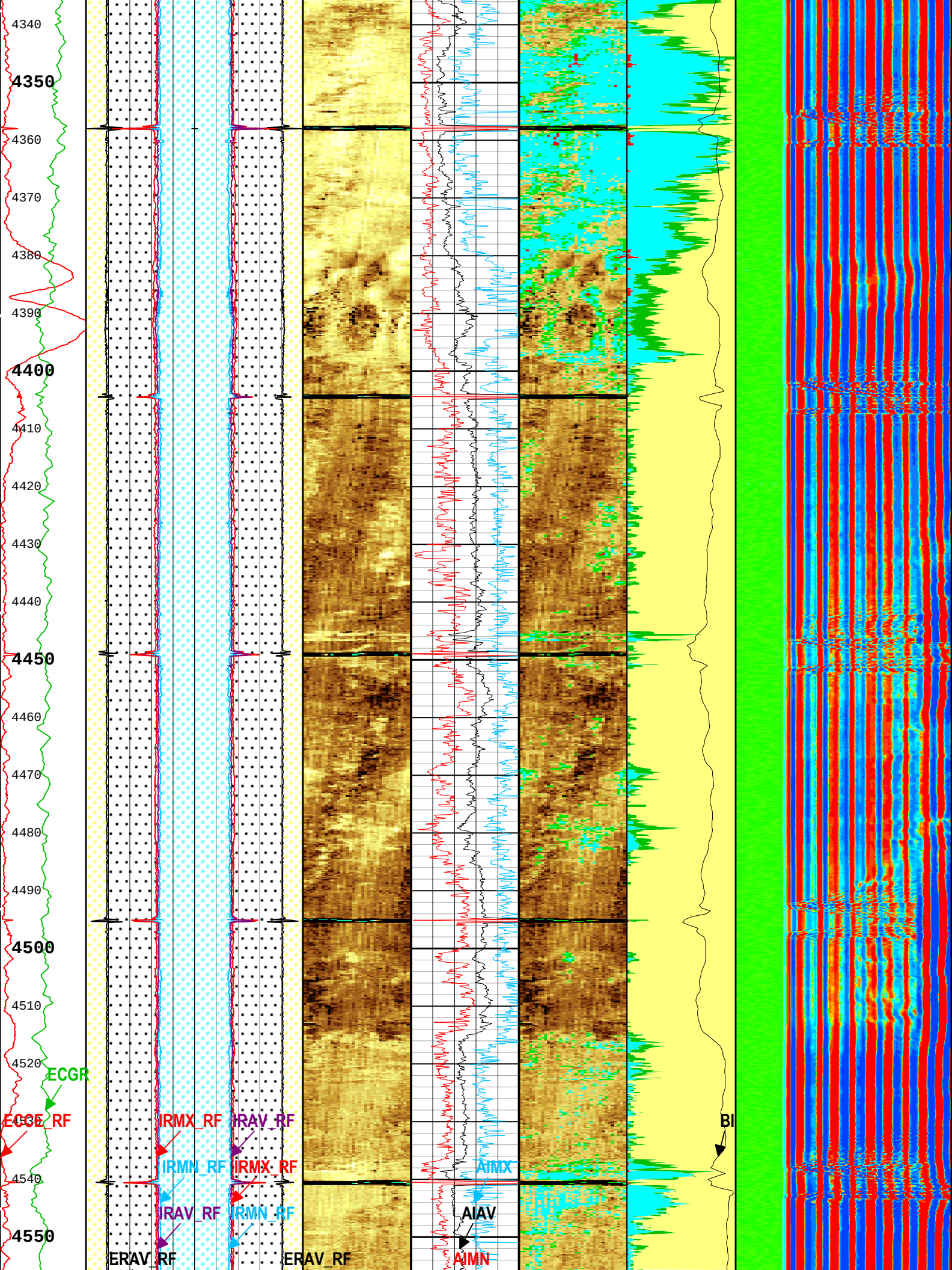
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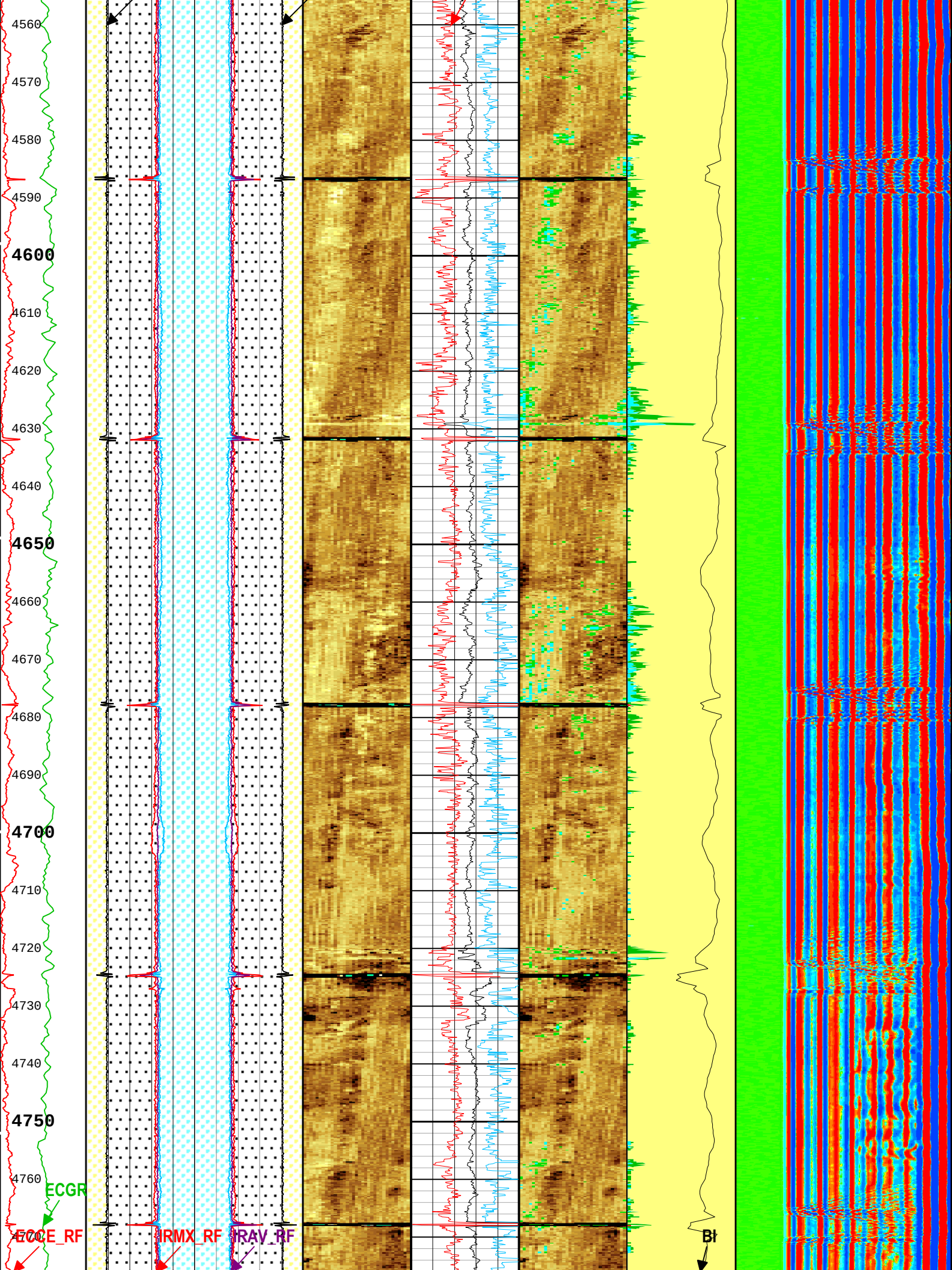
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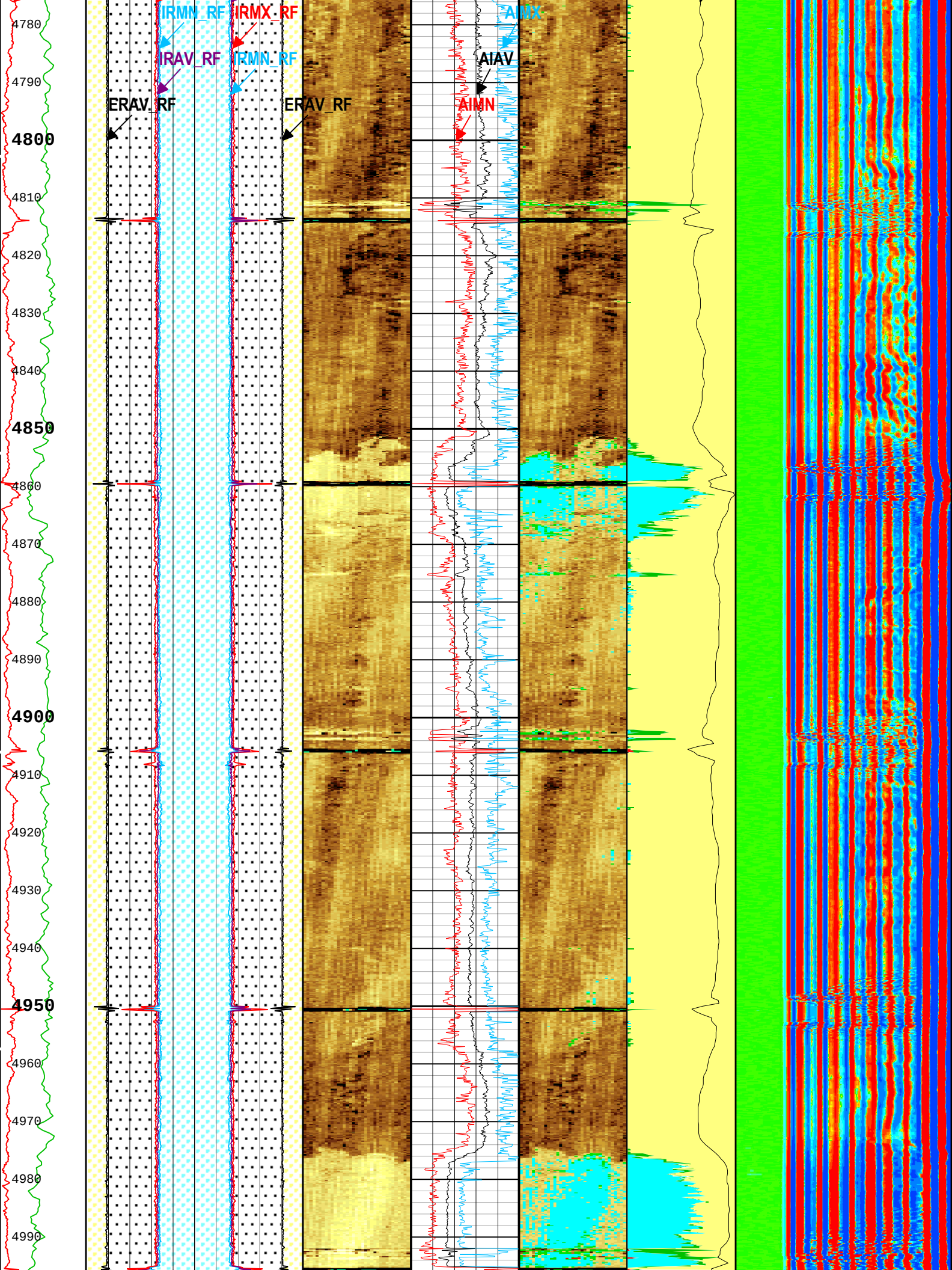
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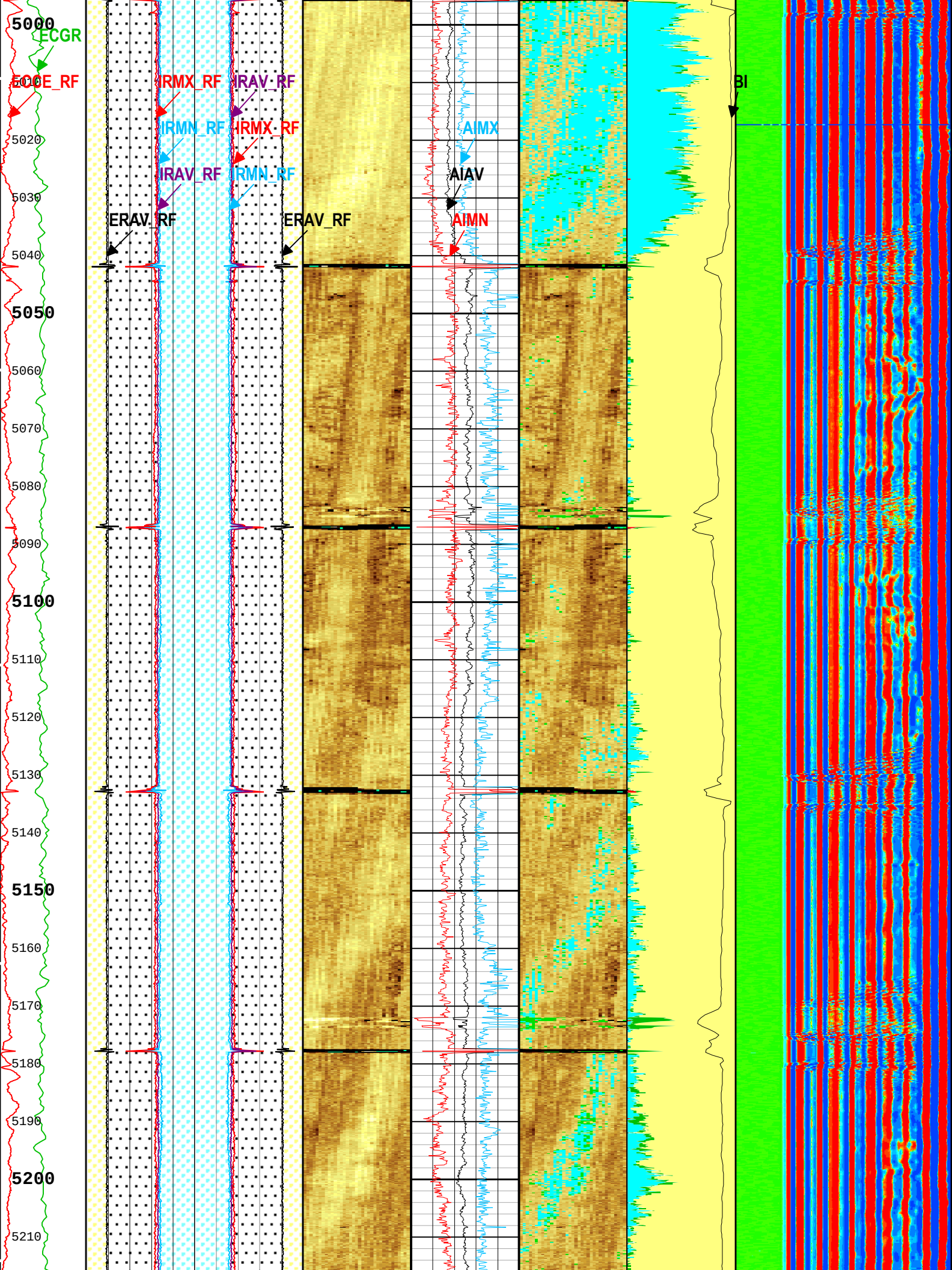
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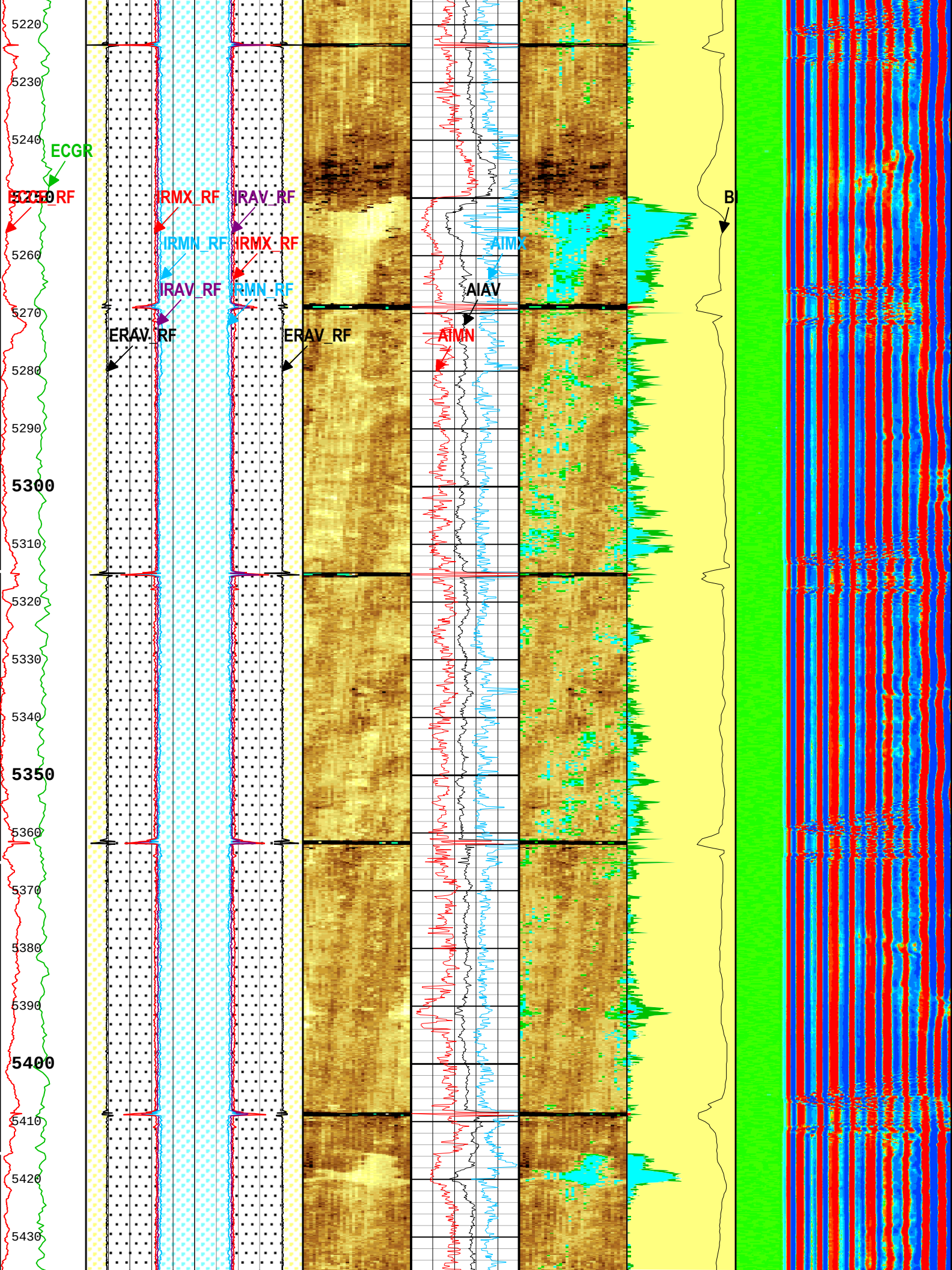
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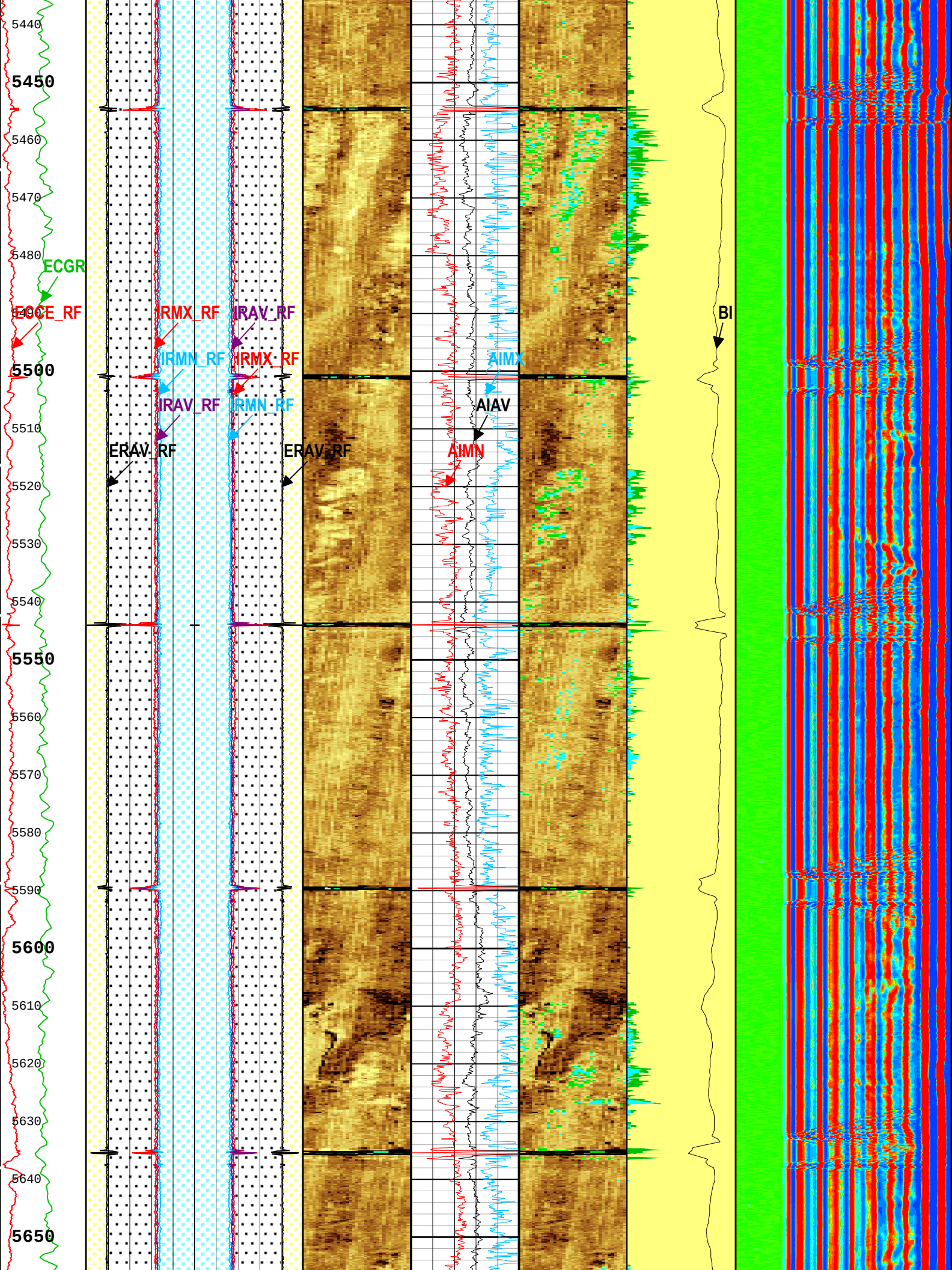
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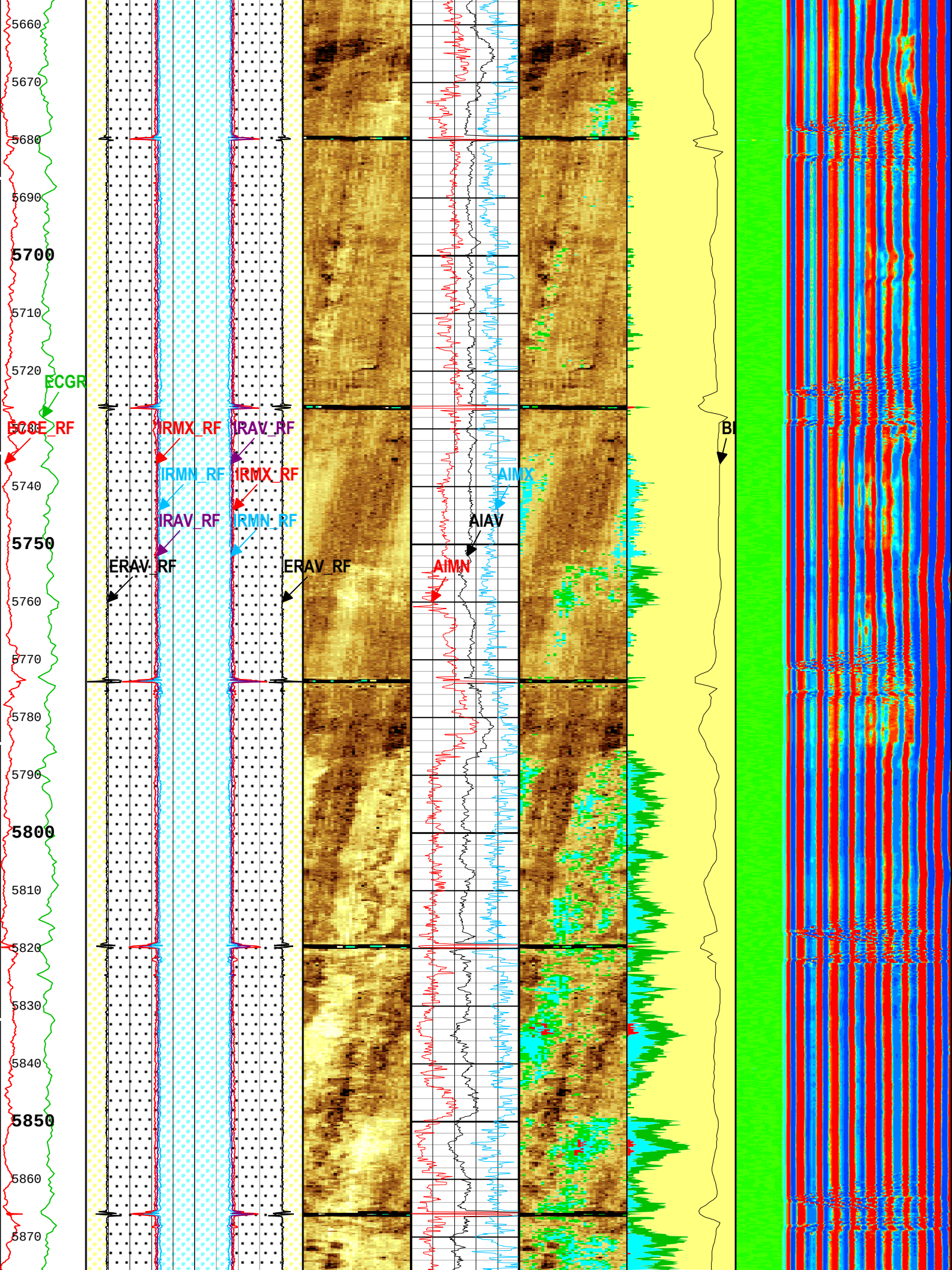
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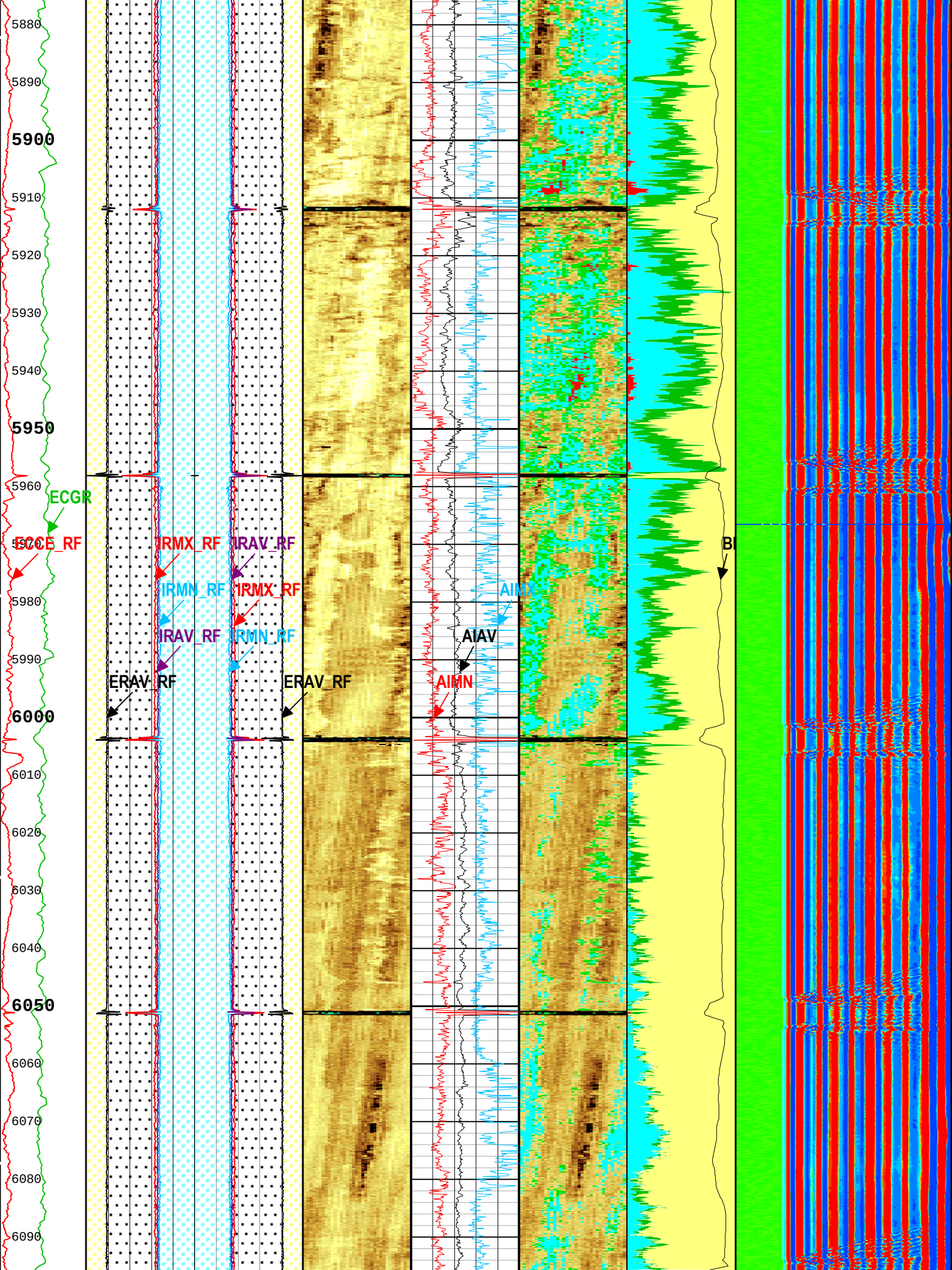
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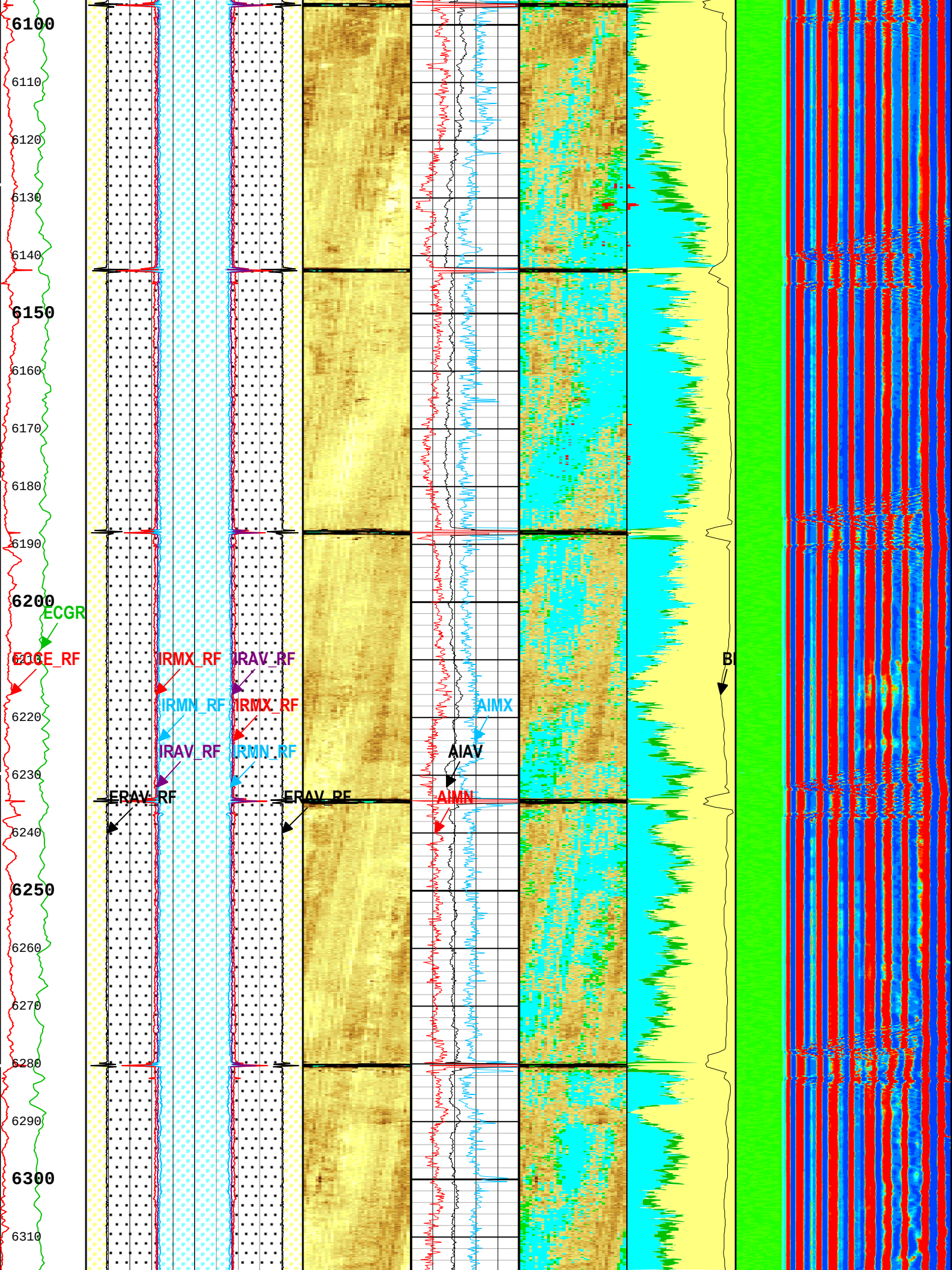
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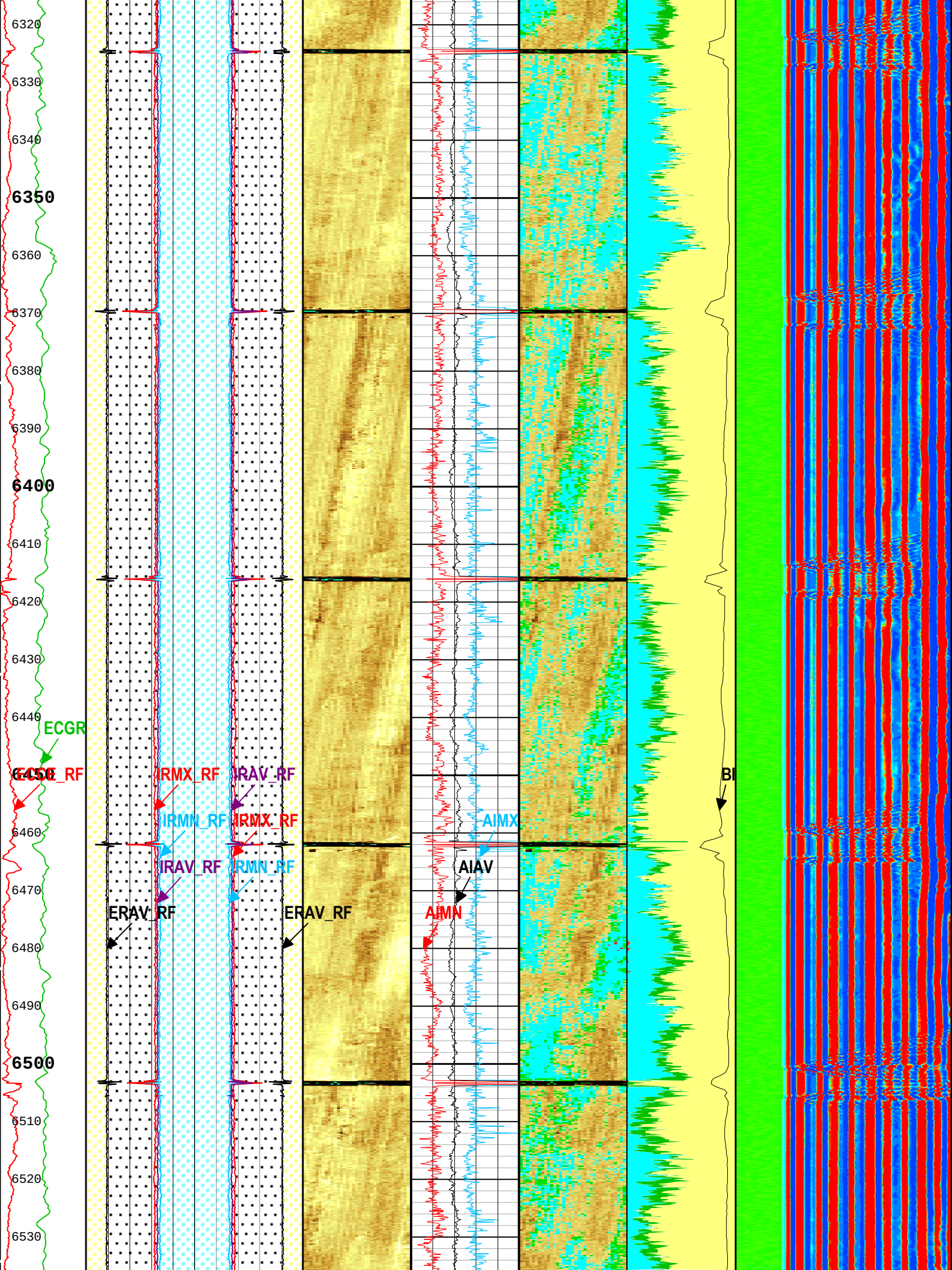
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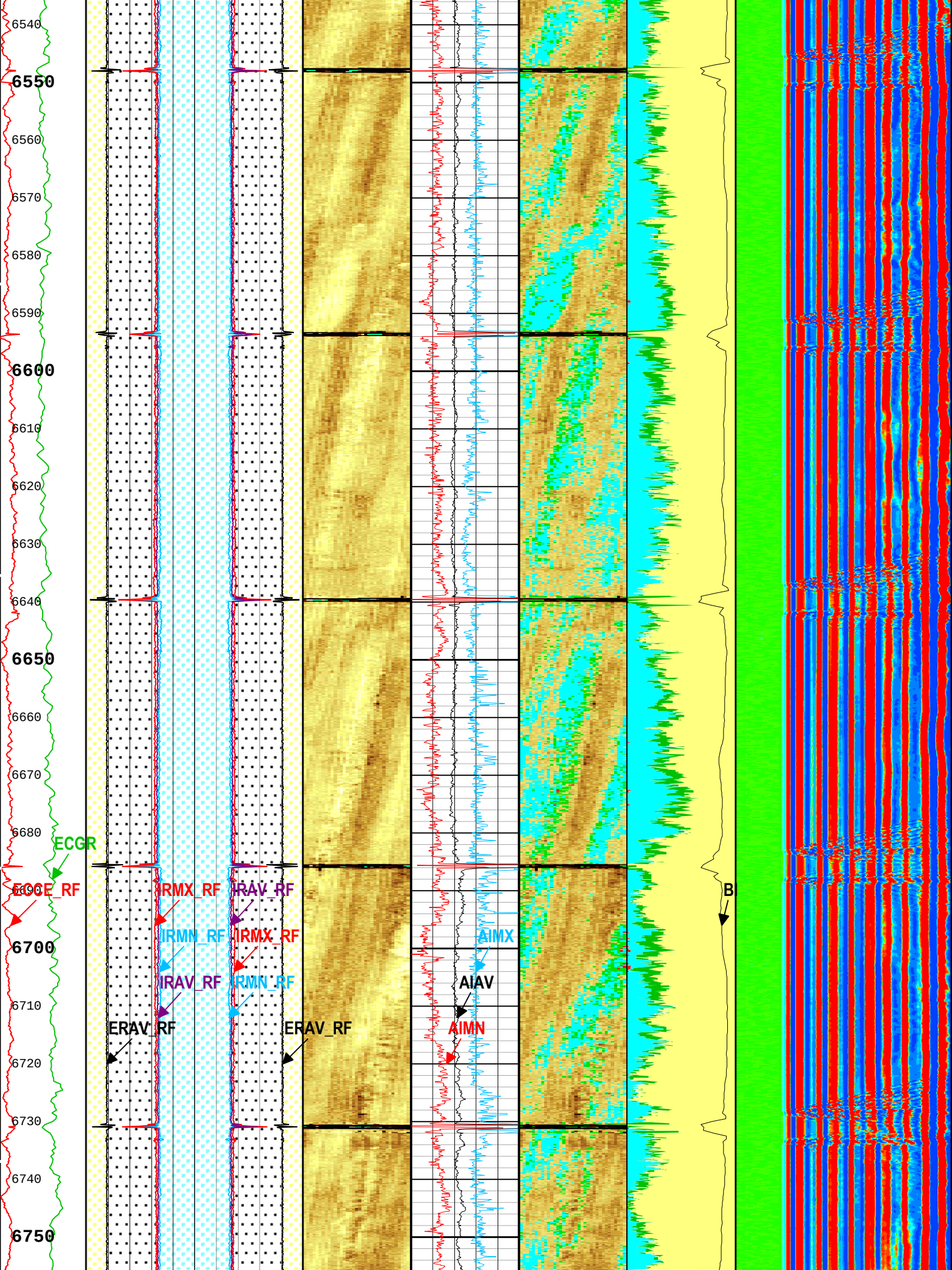
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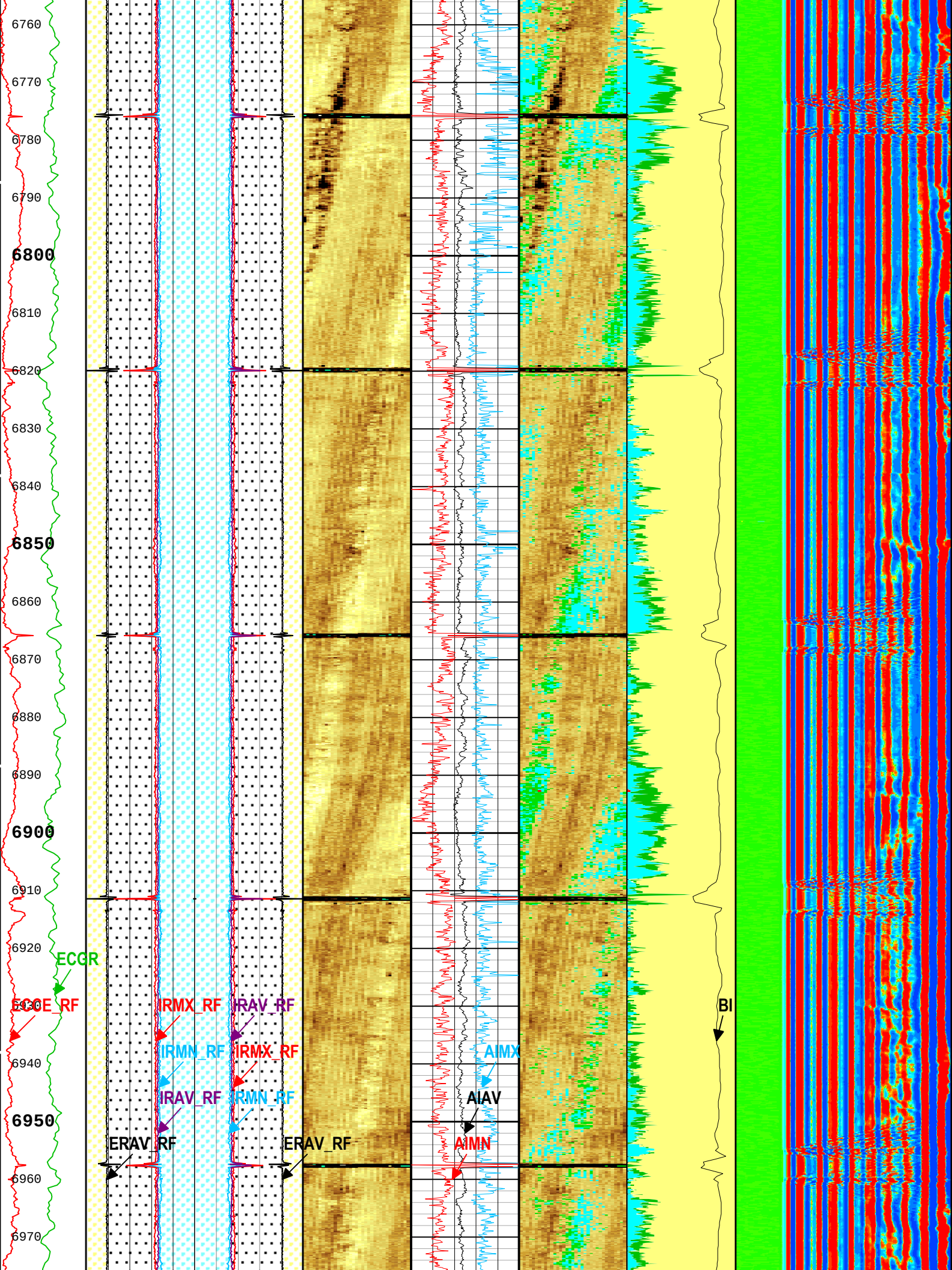
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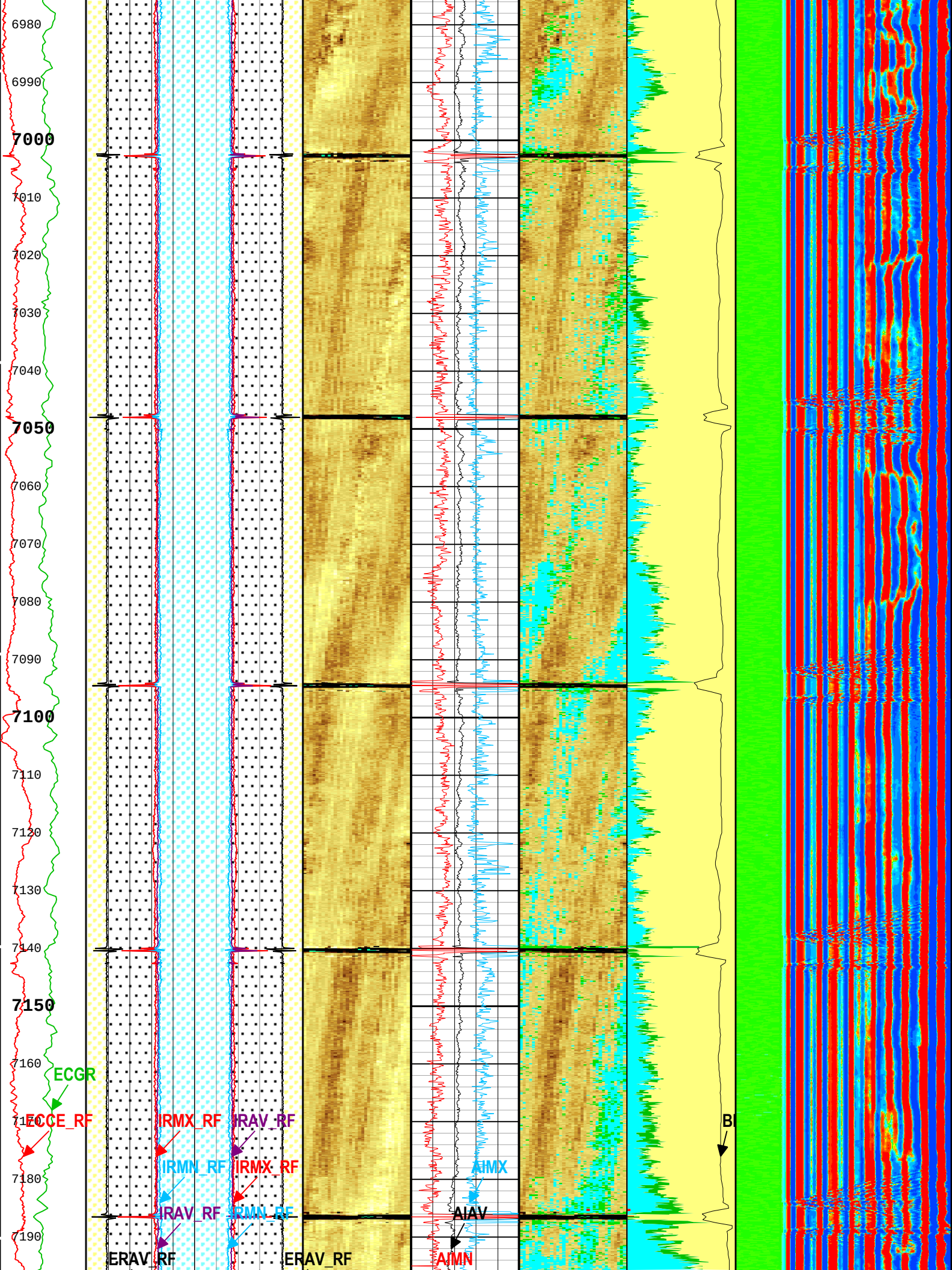
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ECCE_RF
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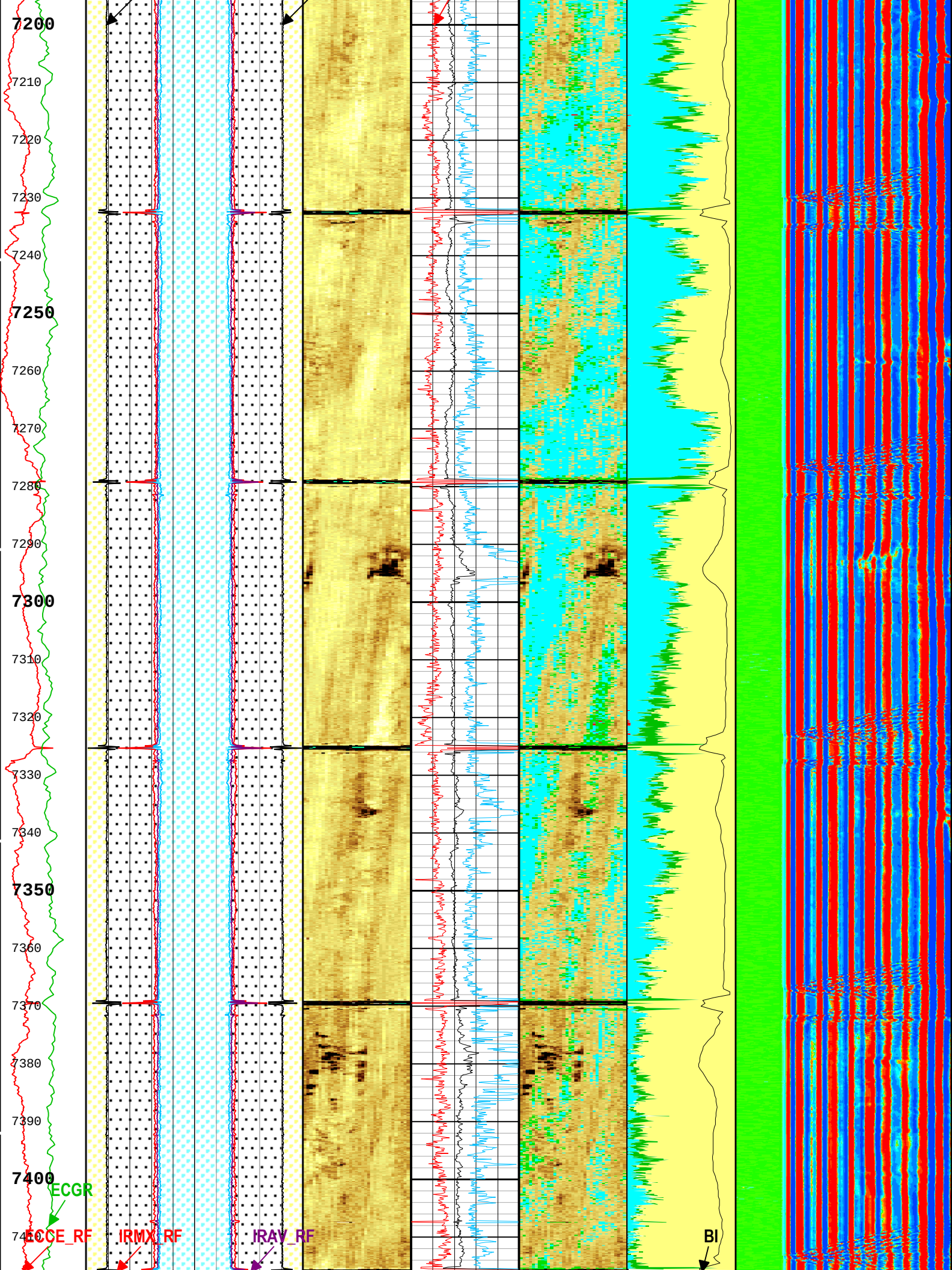
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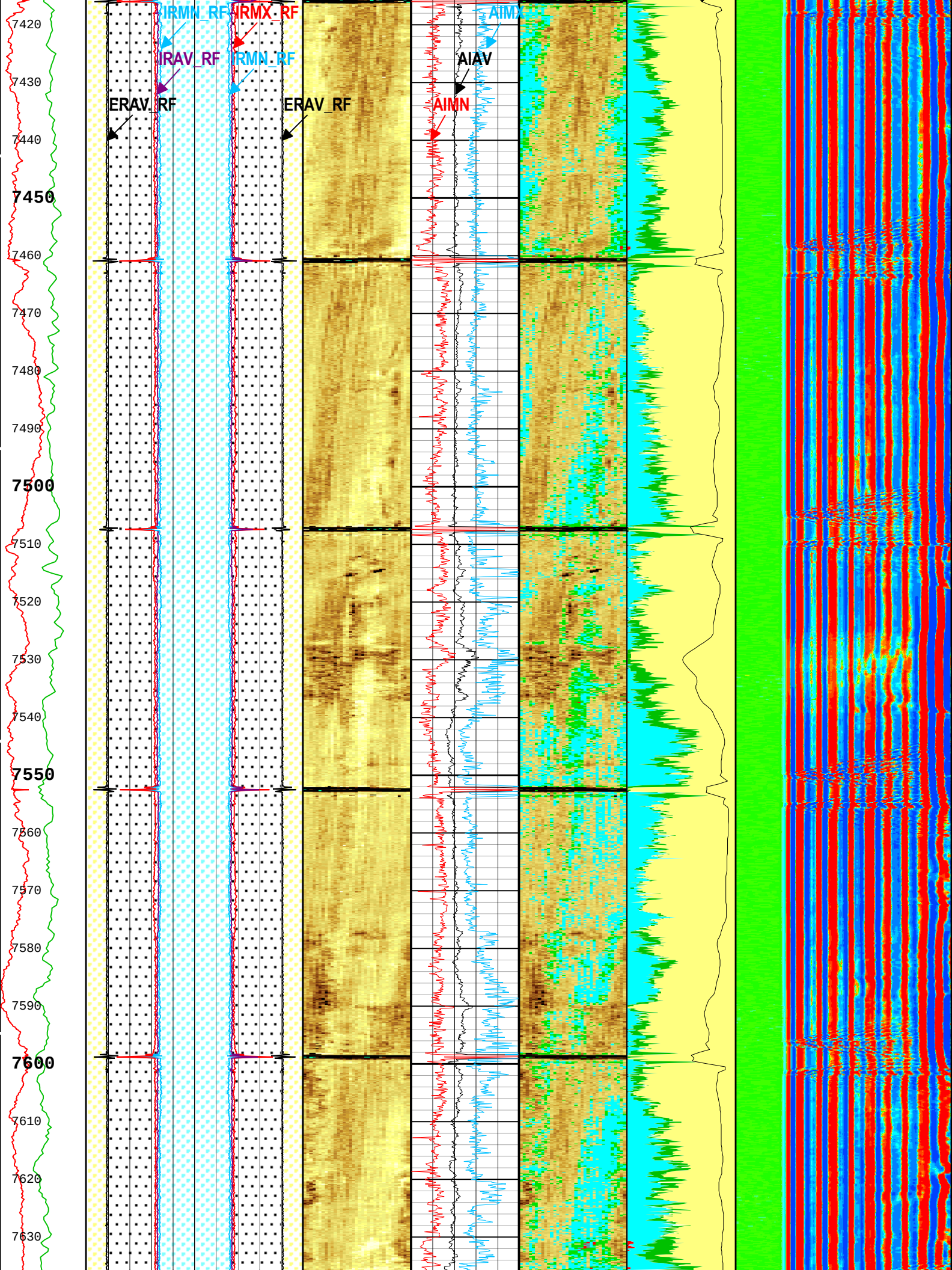
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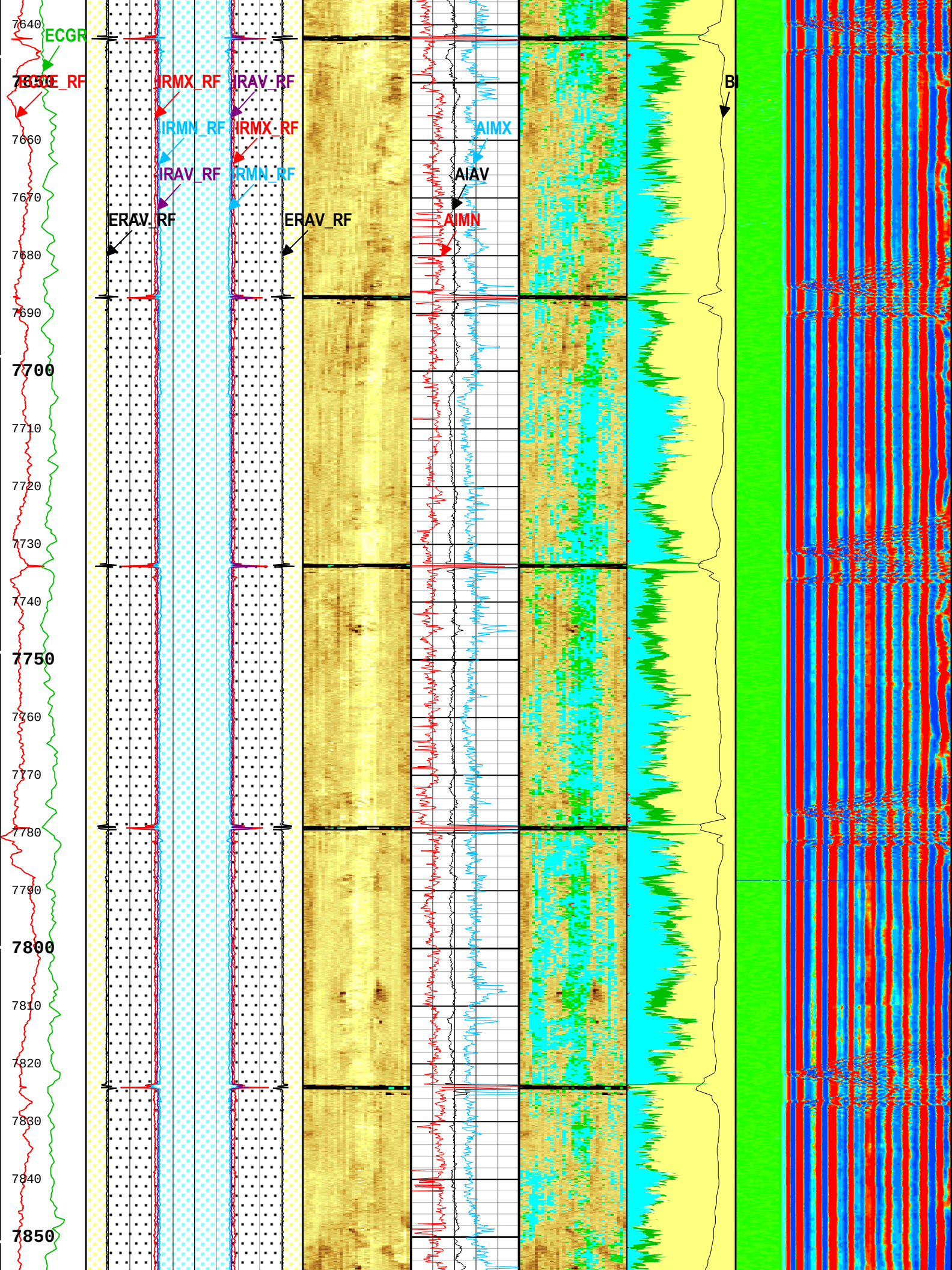
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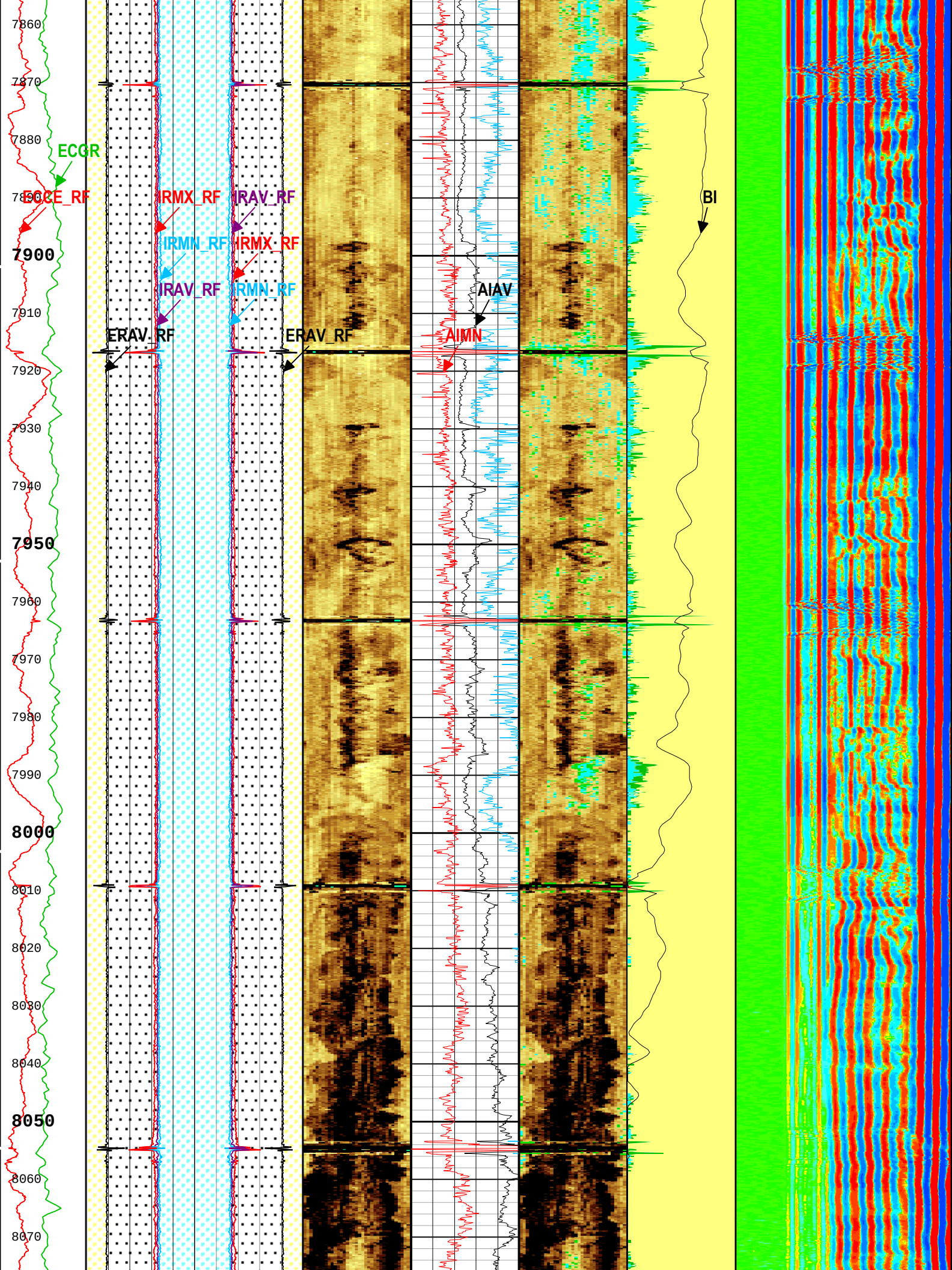
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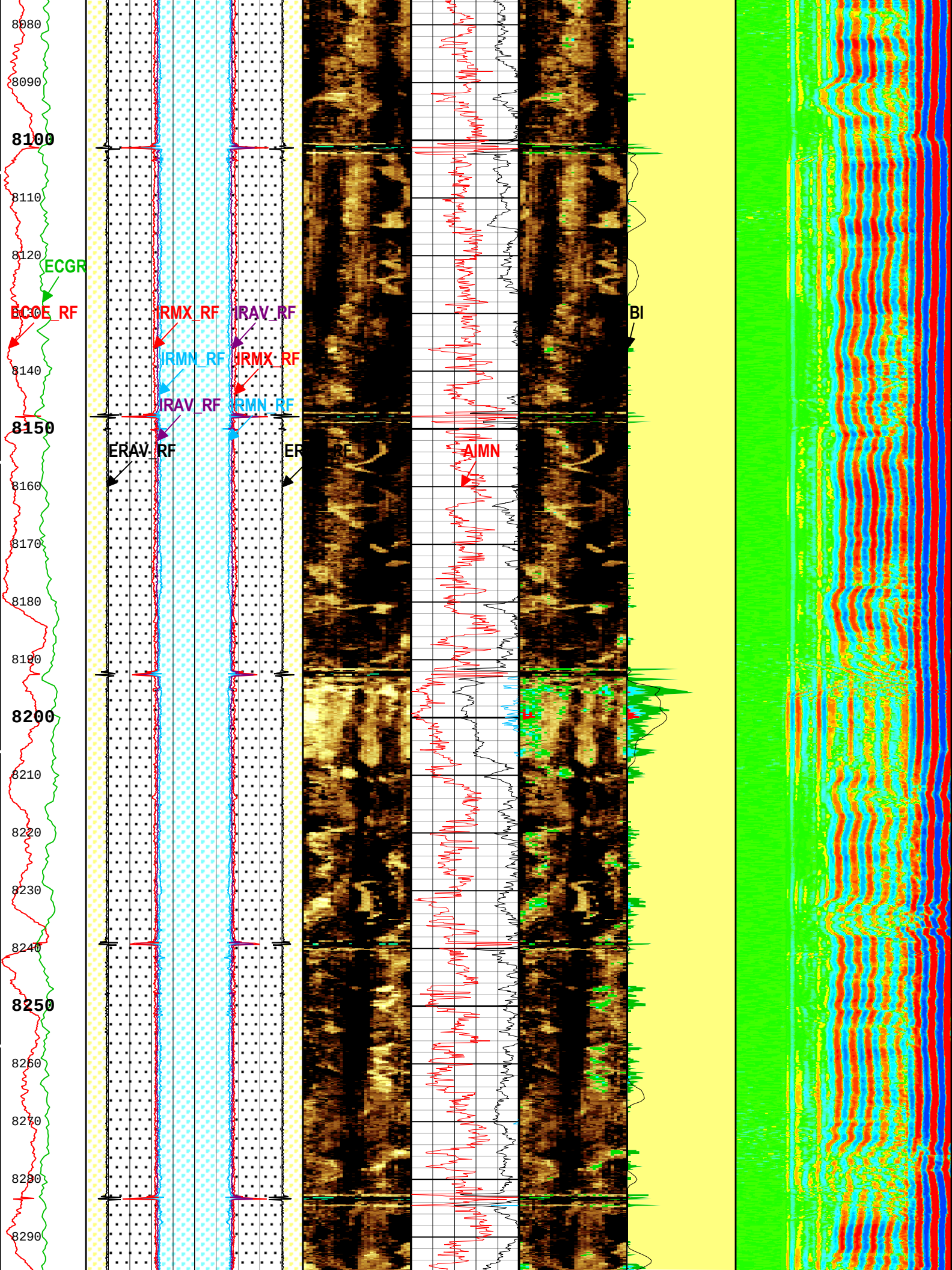
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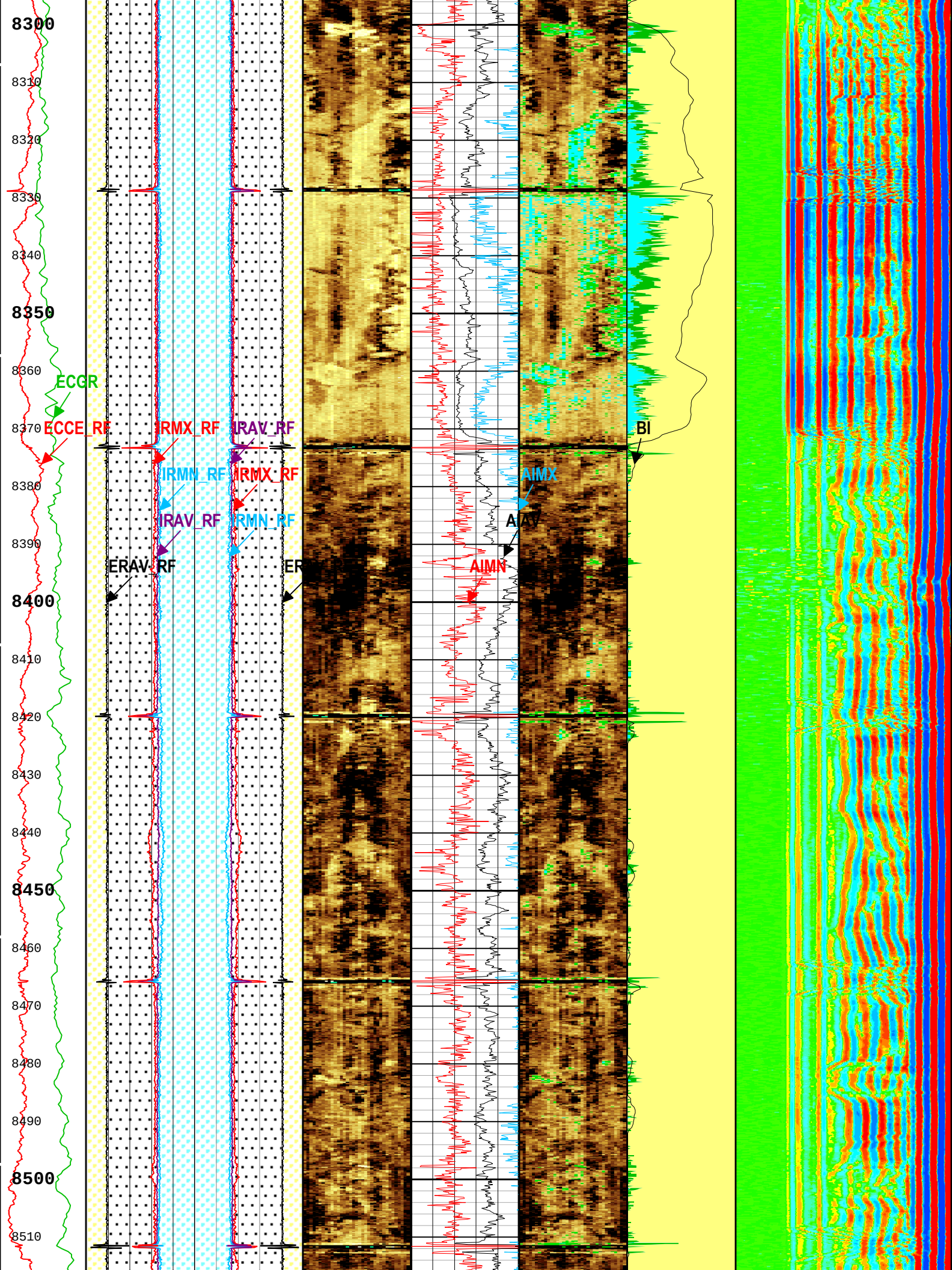
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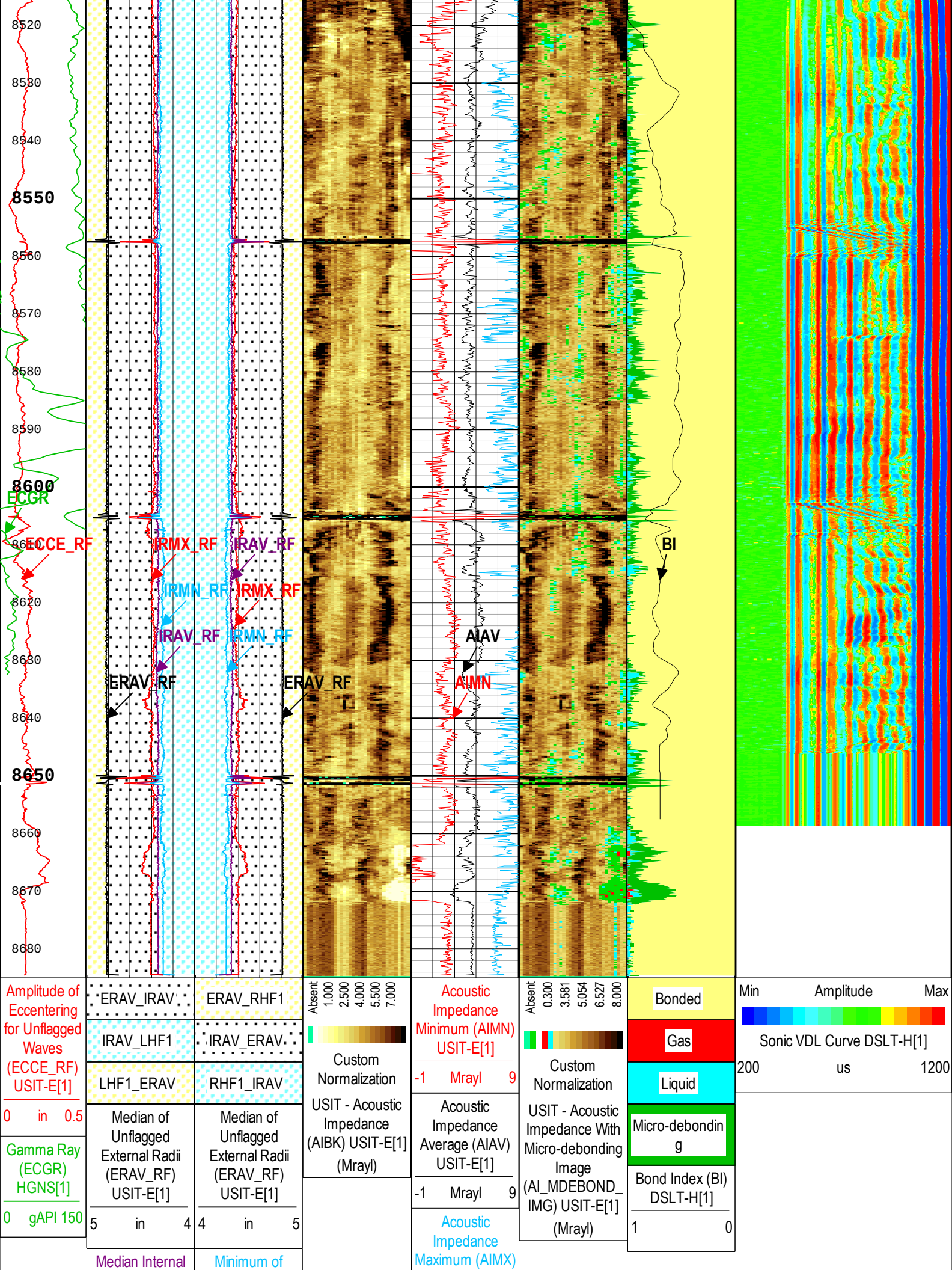
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IRMX_RF
IRAV_RF
IRMN_RF
IRMX_RF
IRAV_RF
IRMN_RF
ERAV_RF
ERAV_RF
AIAV
AIMN
BI
Amplitude of Eccentering for Unflagged Waves (ECCE_RF) USIT-E[1]
0 in 0.5
Gamma Ray (ECGR) HGNS[1]
0 gAPI 150
ERAV_IRAV
IRAV_LHF1
LHF1_ERAV
Median of Unflagged External Radii (ERAV_RF) USIT-E[1]
5 in 4
Median Internal
ERAV_RHF1
IRAV_ERAV
RHF1_IRAV
Median of Unflagged External Radii (ERAV_RF) USIT-E[1]
4 in 5
Minimum of
Absent 1.000 2.500 4.000 5.500 7.000
Custom Normalization
USIT - Acoustic Impedance (AIBK) USIT-E[1] (Mrayl)
Acoustic Impedance Minimum (AIMN) USIT-E[1]
-1 Mrayl 9
Acoustic Impedance Average (AIAV) USIT-E[1]
-1 Mrayl 9
Acoustic Impedance Maximum (AIMX)
Absent 0.300 3.581 5.054 6.527 8.000
Custom Normalization
USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E[1] (Mrayl)
Bonded
Gas
Liquid
Micro-debonding
Bond Index (BI) DSLT-H[1]
1 0
Min Amplitude Max
Sonic VDL Curve DSLT-H[1]
200 us 1200

Radius of Casing Corrected for Eccentering (IRAV_RF) USIT-E[1]	Unflagged Internal Radii (IRMN_RF) USIT-E[1]
5 in 4	4 in 5
Minimum of Unflagged Internal Radii (IRMN_RF) USIT-E[1]	Maximum of Unflagged Internal Radii (IRMX_RF) USIT-E[1]
5 in 4	4 in 5
Maximum of Unflagged Internal Radii (IRMX_RF) USIT-E[1]	Median Internal Radius of Casing Corrected for Eccentering (IRAV_RF) USIT-E[1]
5 in 4	4 in 5

USIT-E[1]

-1 Mrayl 9

TIME_1900 - Time Marked every 60.00 (s)

Description: USI VDL Cement Format: Log (LBV1_USI-VDL (DSLT) Cement 9.625inch) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2016 22:39:36

Company:	Southern California Gas Company
Well:	Standard Sesnon 4B
Field:	Aliso Canyon
County:	Los Angeles
State:	California

Schlumberger

Cement Bond Log
Variable Density Log
Gamma Ray - CCL