HALLIBURTON

CEMENT BOND LOG

SCALE 1:240

Company MERIT ENERGY
Well WB SCHERLING 29-3
Field BIG BOW
County GRANT State KANSAS

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Well WB SCHERLING 29-3
Field BIG BOW
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API No.: 15-067-21808 Serv #: 12

Location:

1568' FSL & 1586' FWL

Sec: 29 Twp: 29S Rge: 38W

Other Services

N/A

Permanent Datum		Elevation	3140.2'
Log Measured From	KB , 15 Ft. above perm. datum		
Drilling Measured From			

Elevation
K.B. 3155.2'
D.F. N/A
G.L. 3140.2'

Date @ Time Logged	14 JAN 2015 @ 15:30	Type Fluid in Hole	WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	5975'	Fluid Level	40'
Depth - Logger	5910'	Cement Top Est. Logged	3060'
Bottom - Logged Interval	5907.5'	Equipment / Location	10971670 / LIB
Top - Log Interval	2860'	Recorded by	P.NICHOLS
Max. Recorded Temp.	143 F	Witnessed by	N/A

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
0NE				8.625"	24#	SURFACE	1522'
TWO				5.5"	17#	SURFACE	5975'

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

CORRELATED TO HES DENSITY LOG DATED 09 JAN 2015'.

MARKER JOINT @ 5305'
DEPTH CORRECTION -10'

CREW:HUMISTON.
THANKYOU FOR USING HES.

Service Ticket No. 902036336 API No. 15067218080000 PGM Ver

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client

EQUIPMENT DATA

RCBL		gamma			
Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	080640	Serial No.	060738	Serial No.	
Model No.	PROBE	Model No.	PROBE	Model No.	
Diameter	2.75'	Diameter	2.75"	Diameter	

LOGGING DATA

General Data

Pass No.	Depths From	To	Well Head Pressure	Speed Ft/Min	Logging Run Comments

No.	From	To	Procedure	Ft/Min	
	5910'	2860'	N/A		

	GAMMA RAY		AMPLITUDE		MSG		TRAVEL TIME	
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
	0	150	0	20	200	1200	180	280
	150	300	0	100				

DIRECTIONAL INFORMATION

Maximum Deviation		deg. @		KOP		

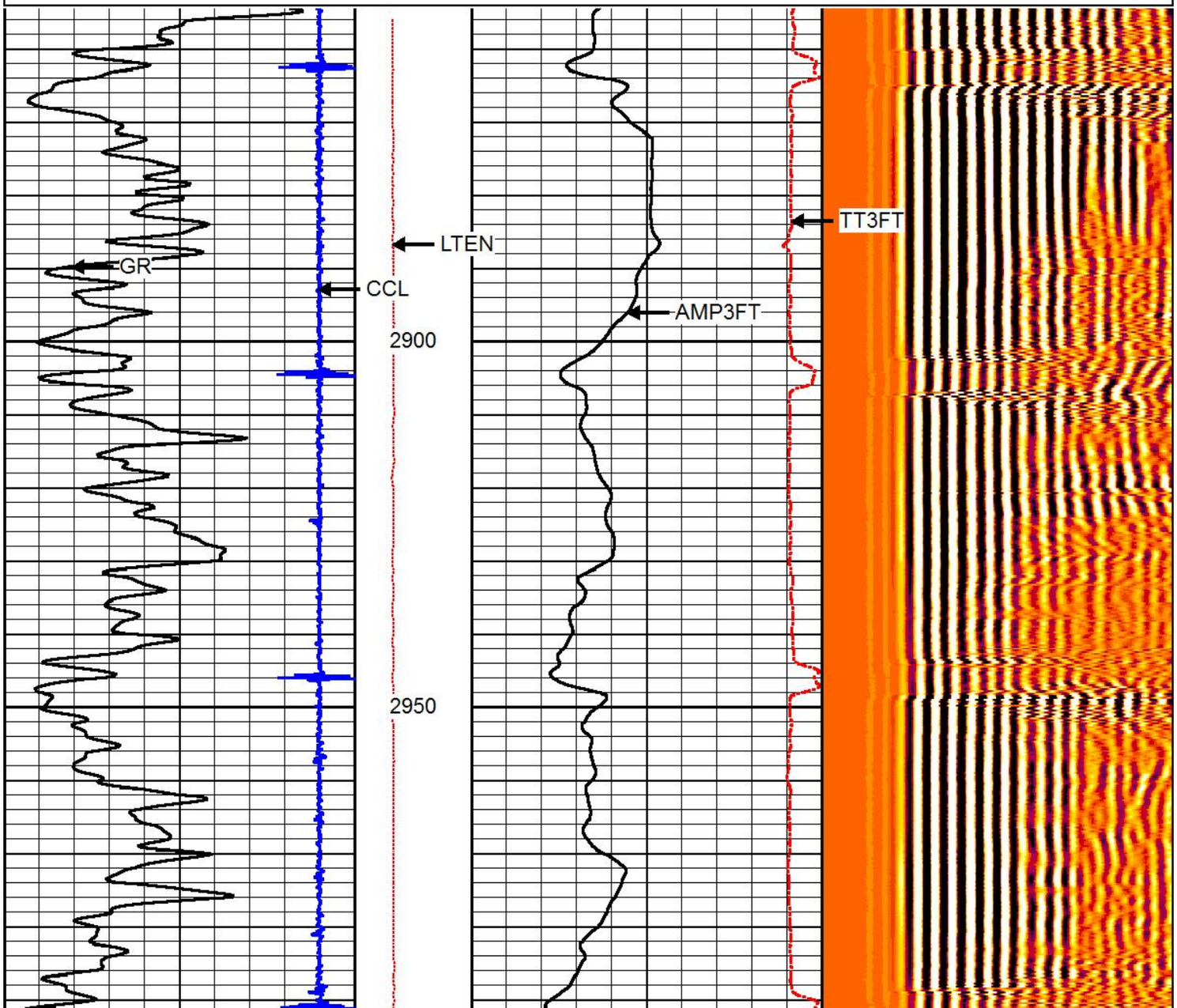
HALLIBURTON

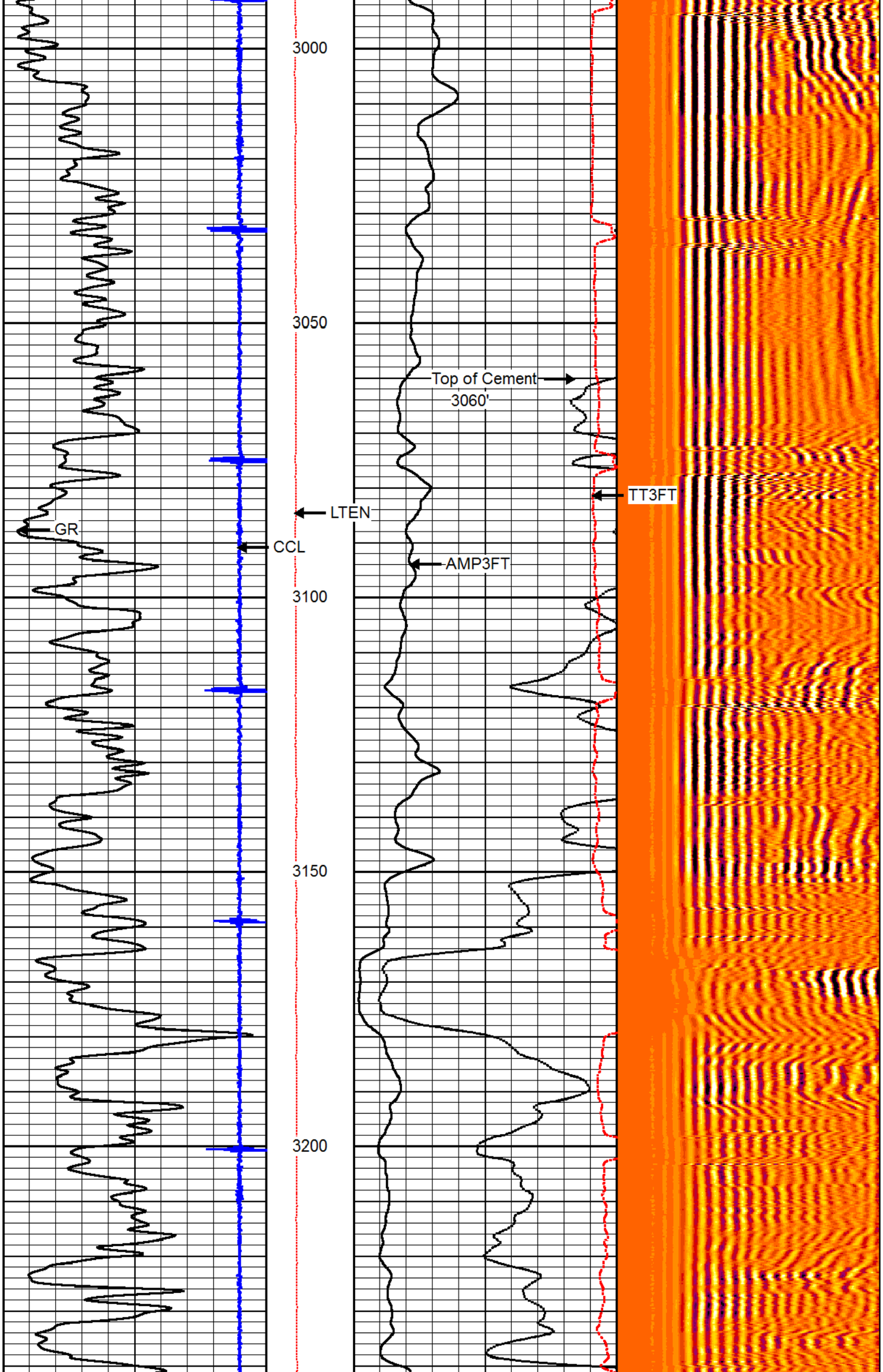
MAIN LOG SECTION

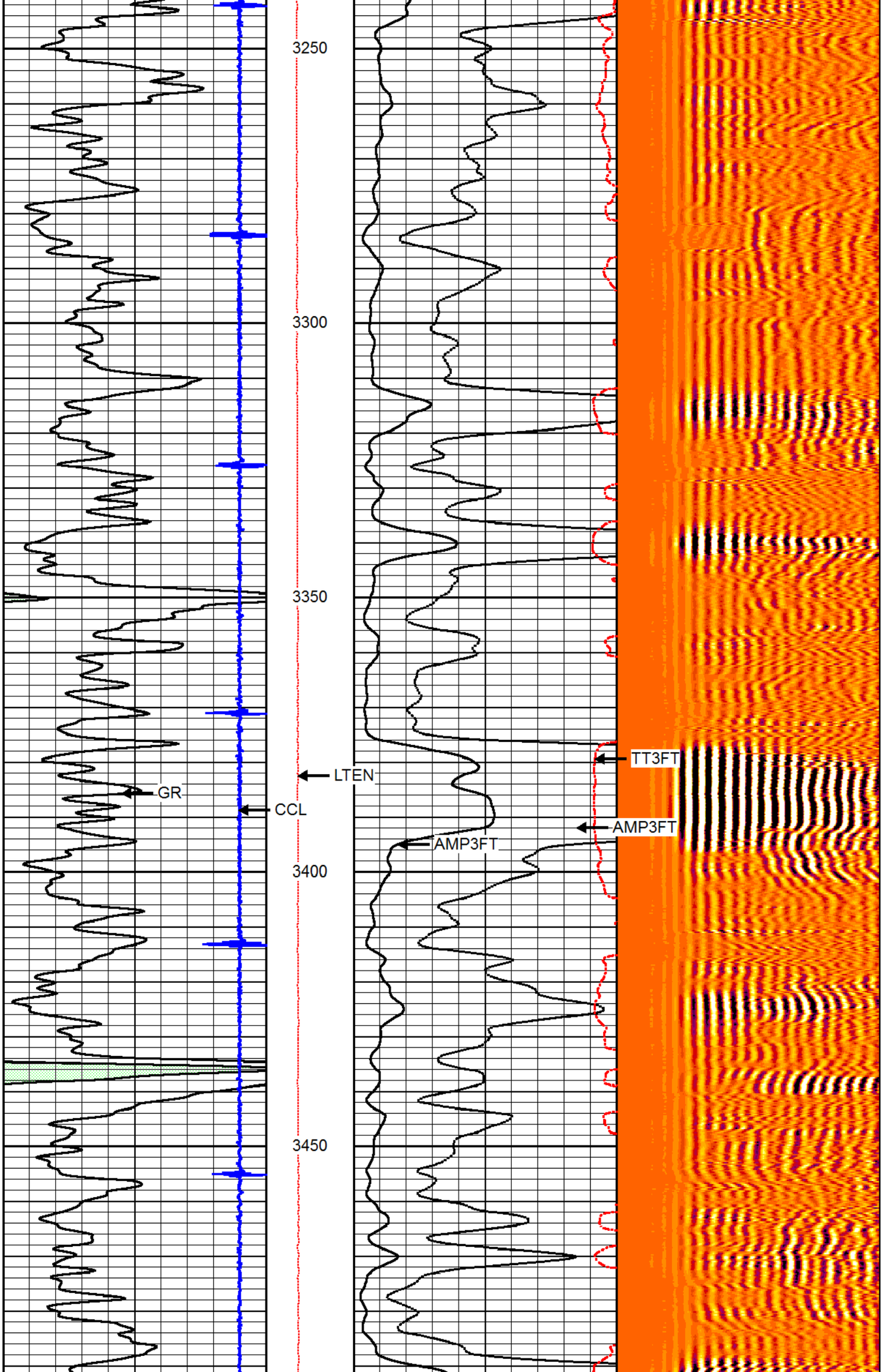
SCALE 1:240

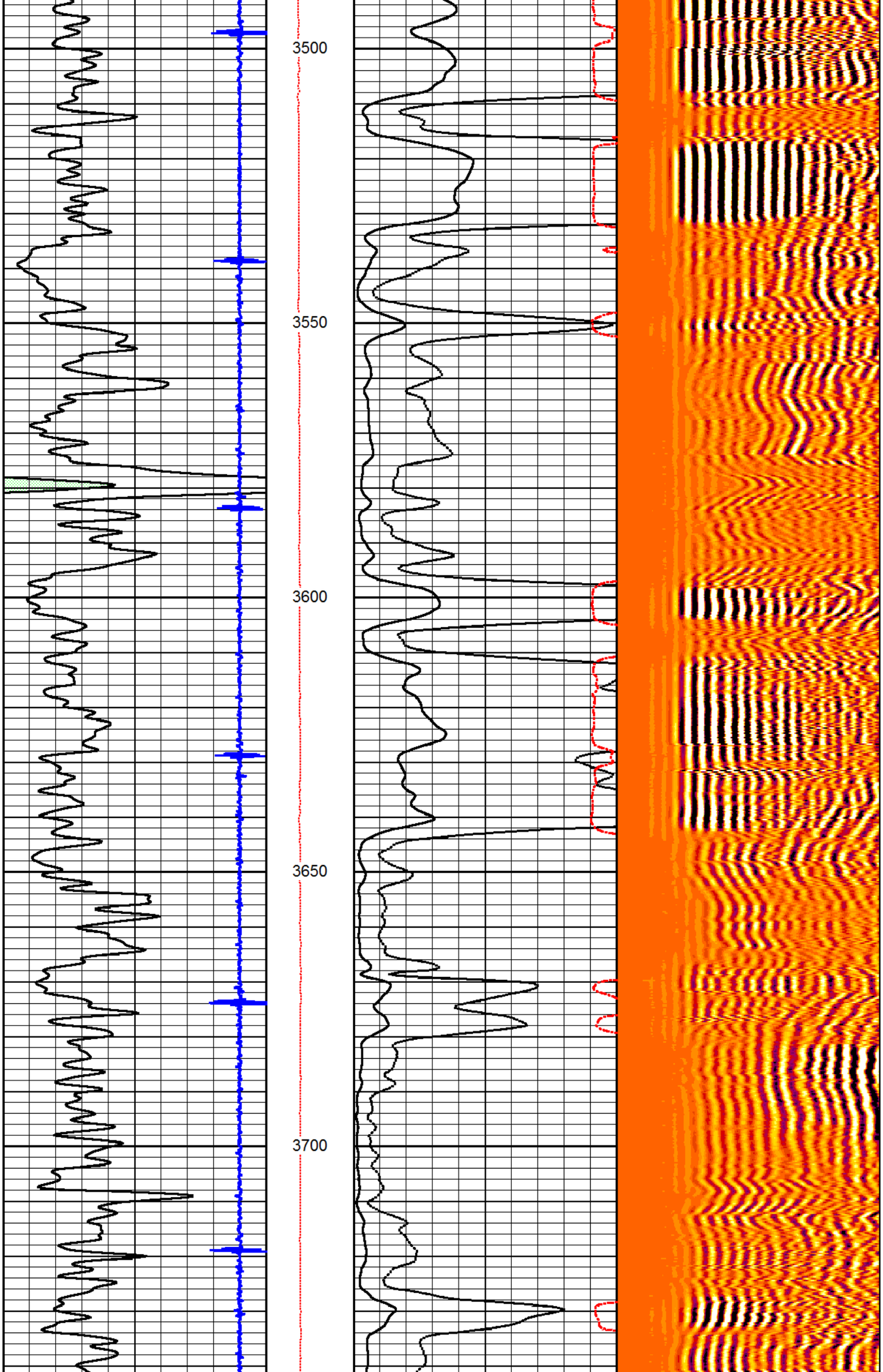
Database File	15067218080000_merit_wb_scherling_29_3_cbl.db
Dataset Pathname	pass5
Presentation Format	cbl_lib
Dataset Creation	Wed Jan 14 13:49:45 2015
Charted by	Depth in Feet scaled 1:240

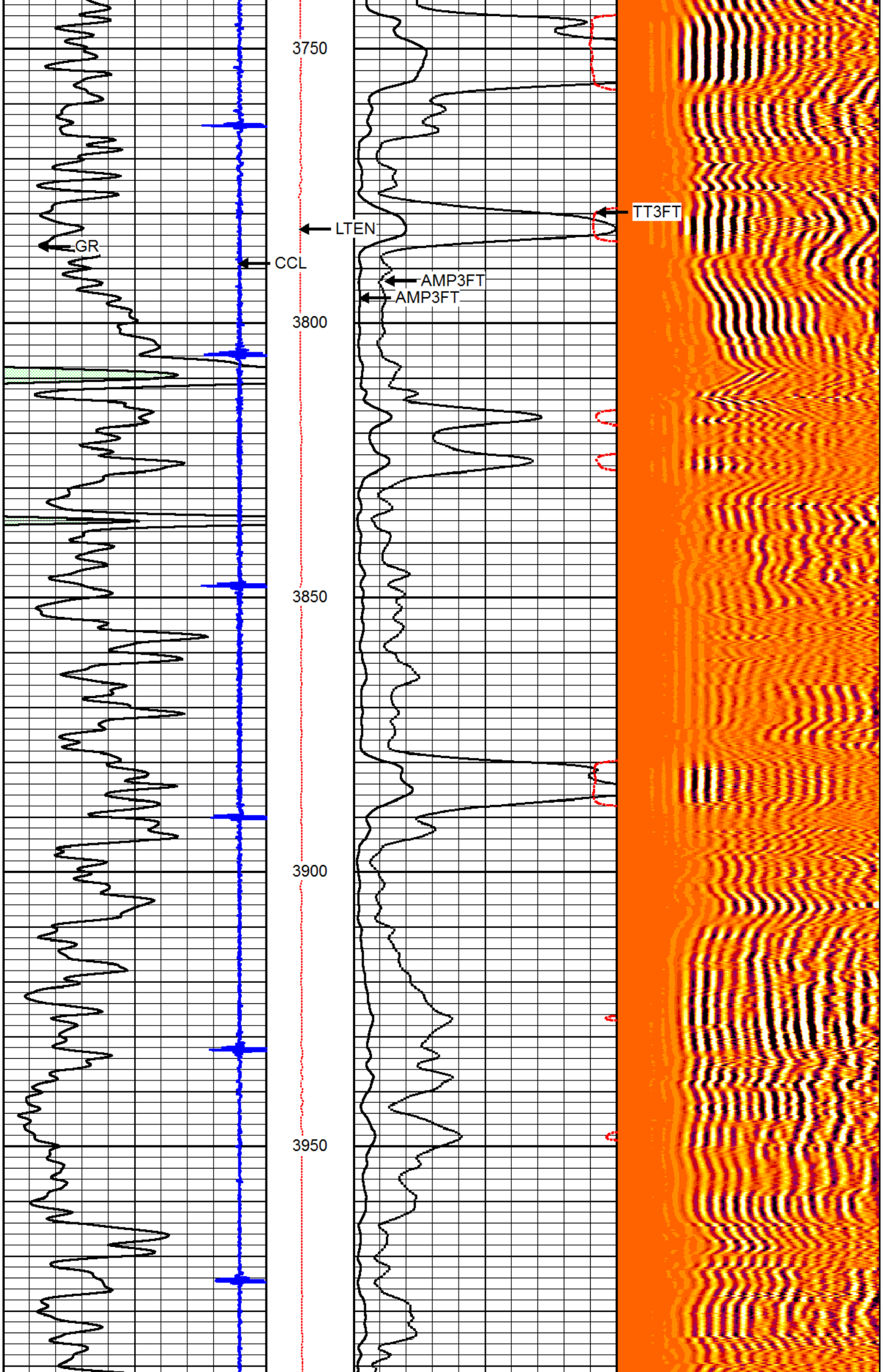
0	GR (GAPI)	150	LTEN	0	AMP3FT (mV)	100	200	MSG	1200
150	gr (GAPI)	300		0	AAMP3FT (mV)	20			
	CCL			180	TT3FT (usec)	280			

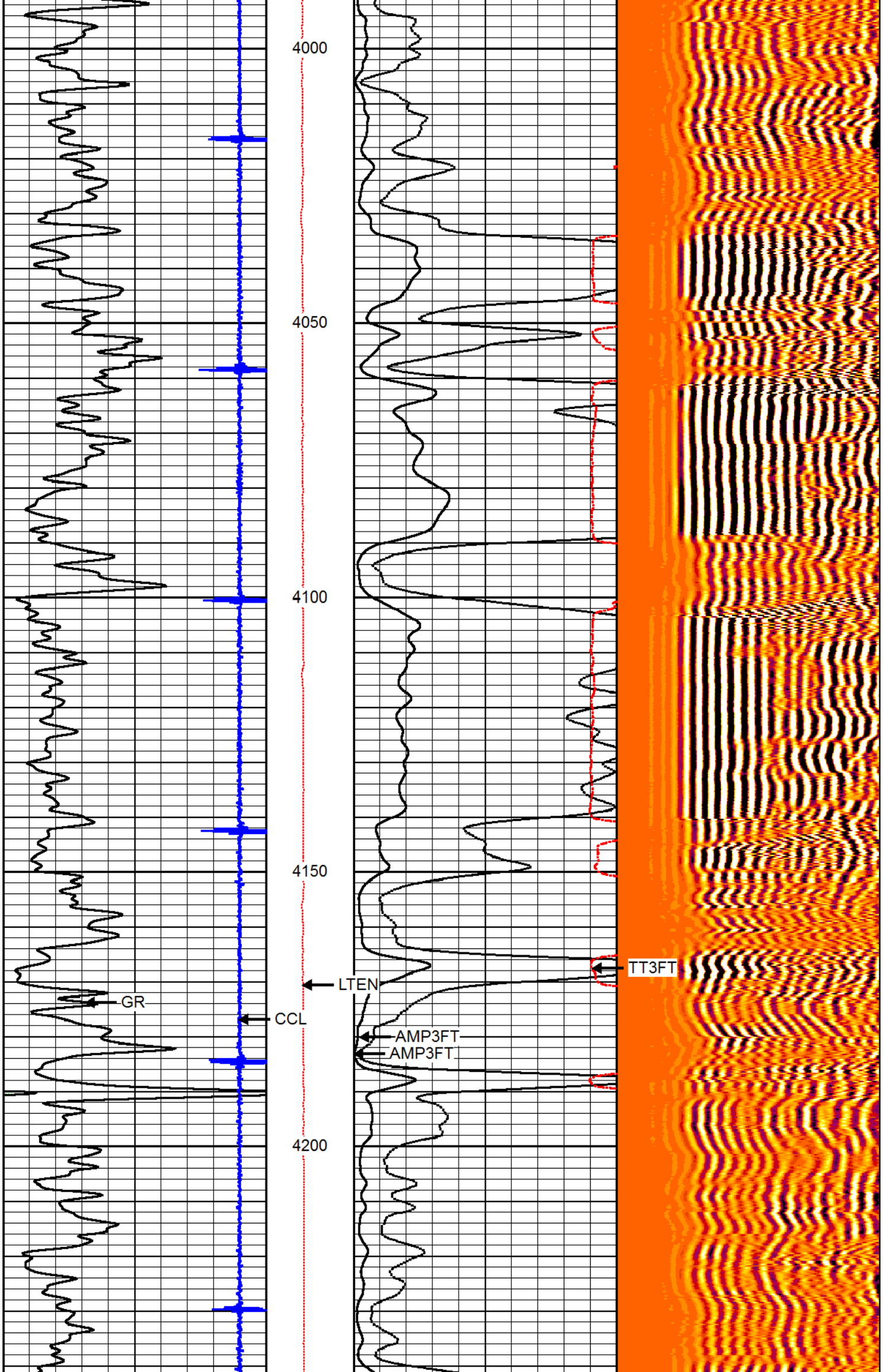


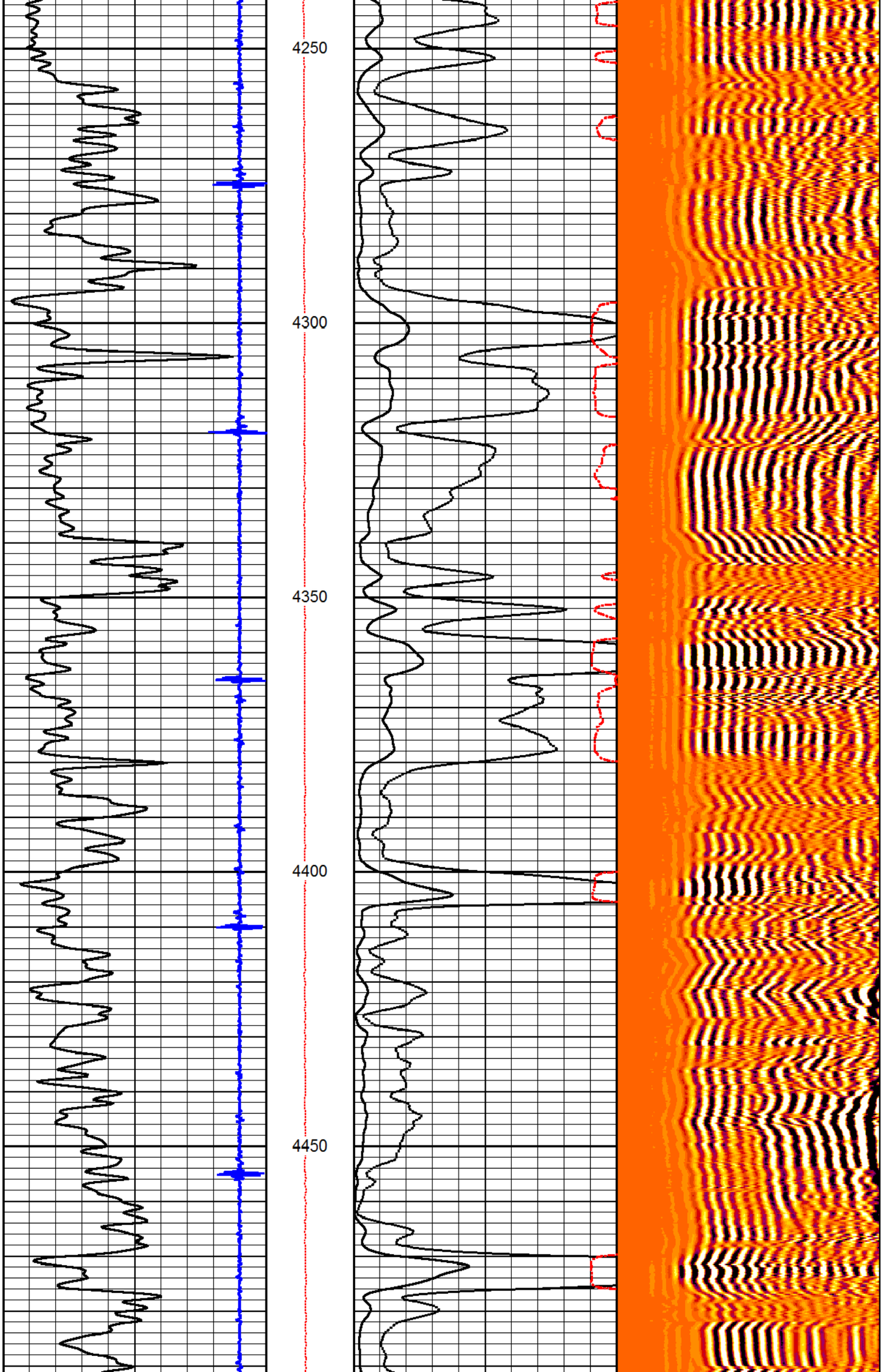

3000
3050
3100
3150
3200
Top of Cement
3060'
TT3FT
LTEN
GR
CCL
AMP3FT

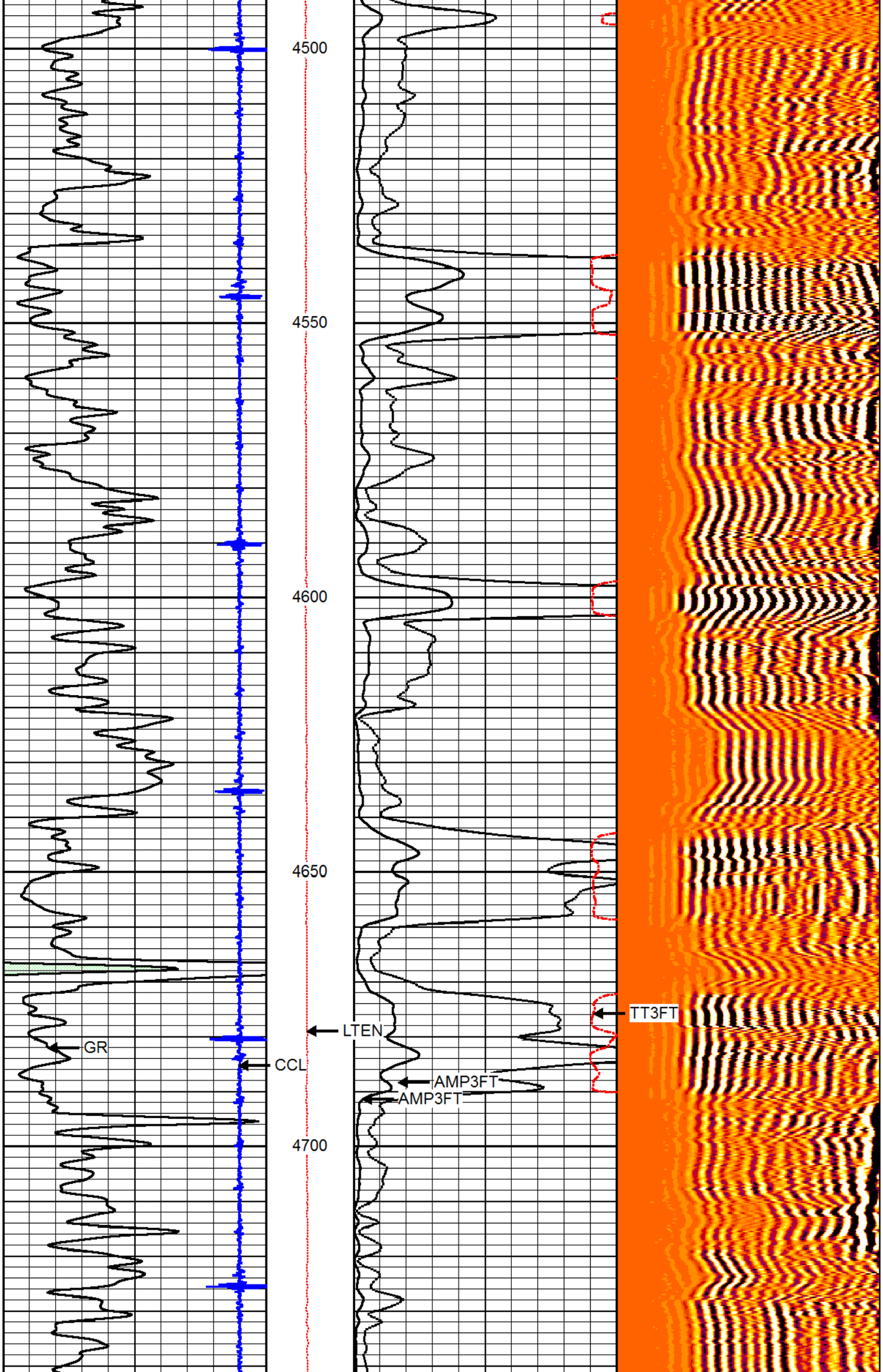

3250
3300
3350
3400
3450
LTEN
GR
CCL
AMP3FT
TT3FT
AMP3FT

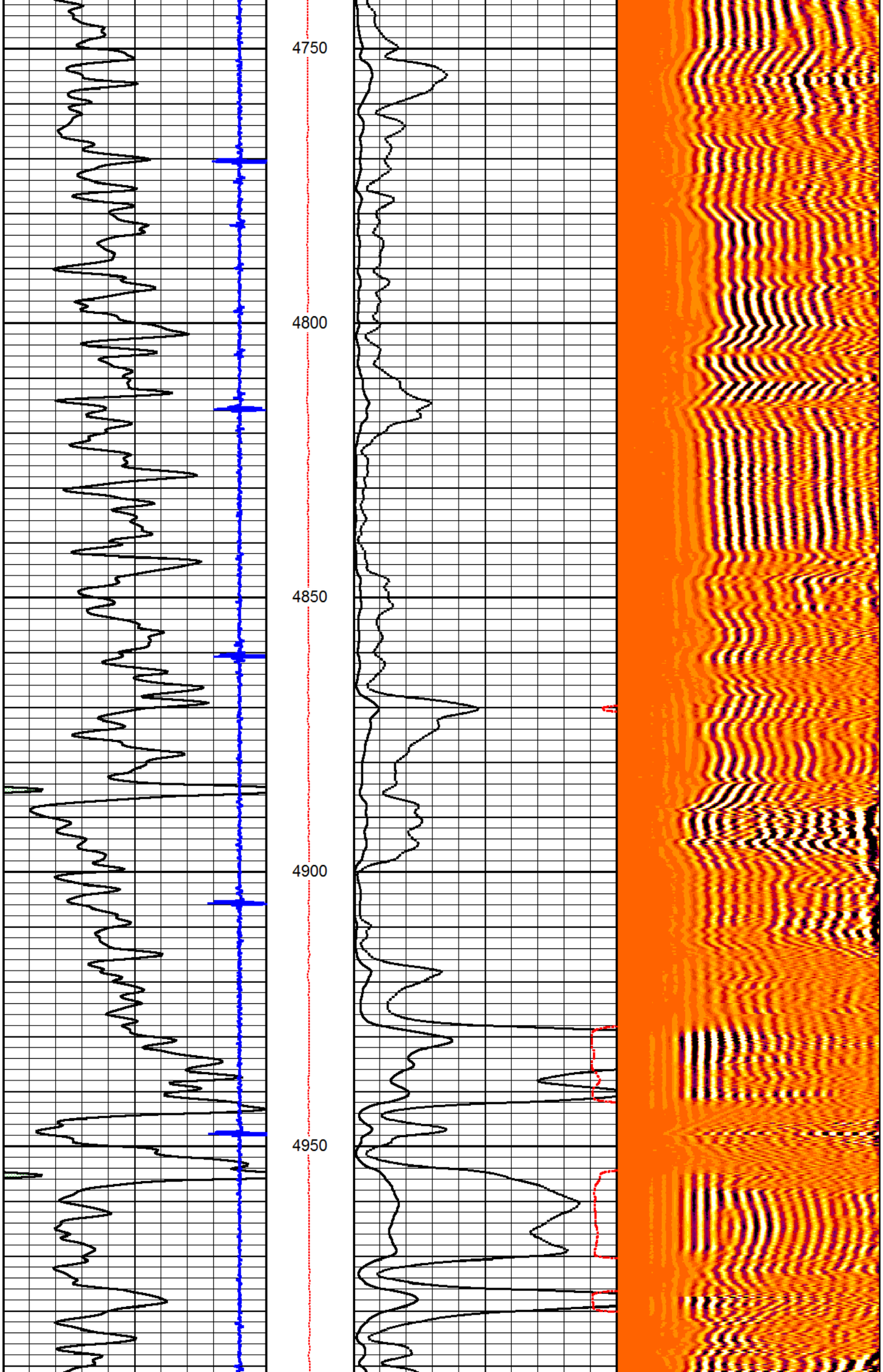

3500
3550
3600
3650
3700

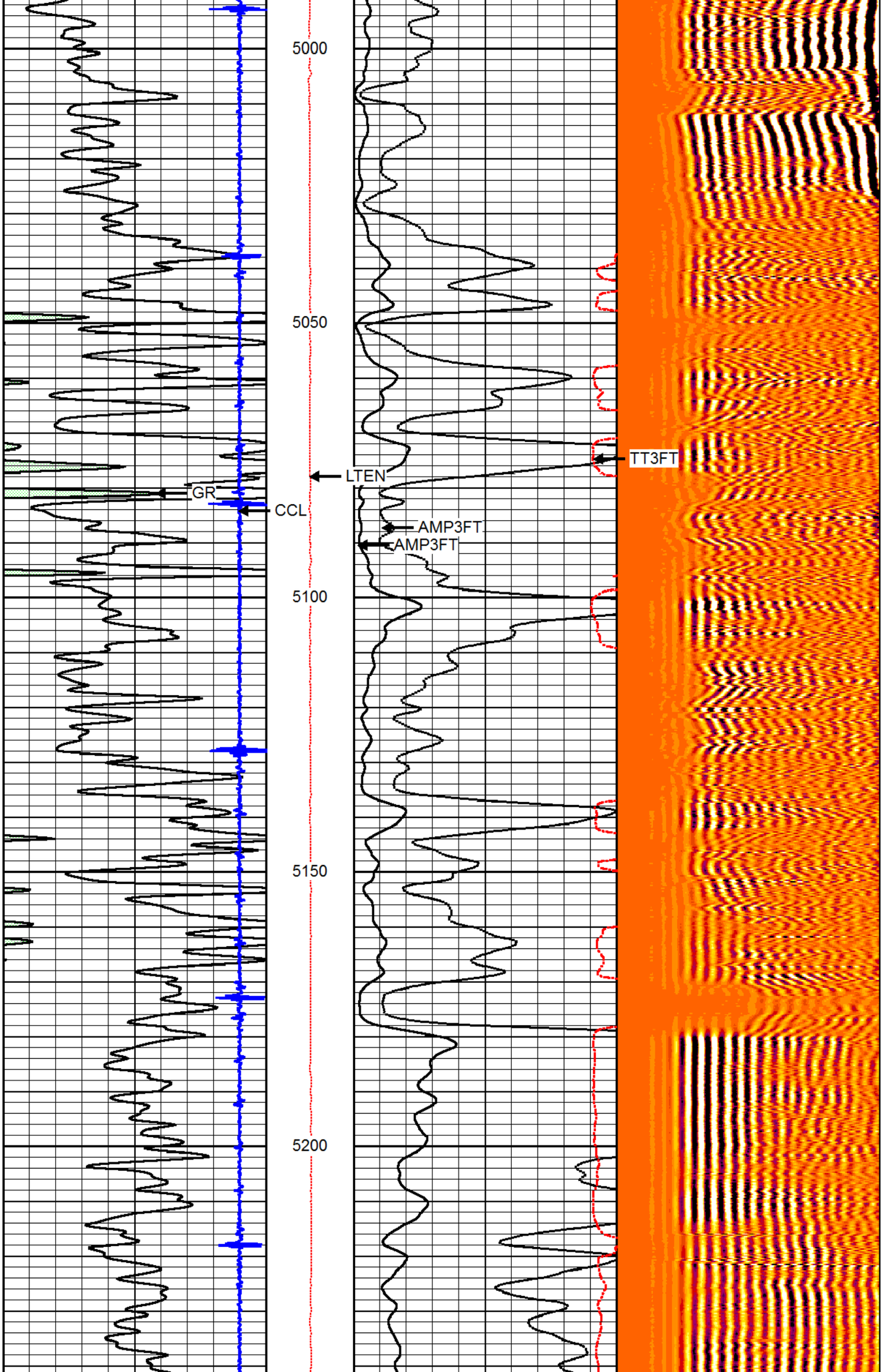

3750
3800
3850
3900
3950
GR
CCL
LTEN
AMP3FT
AMP3FT
TT3FT

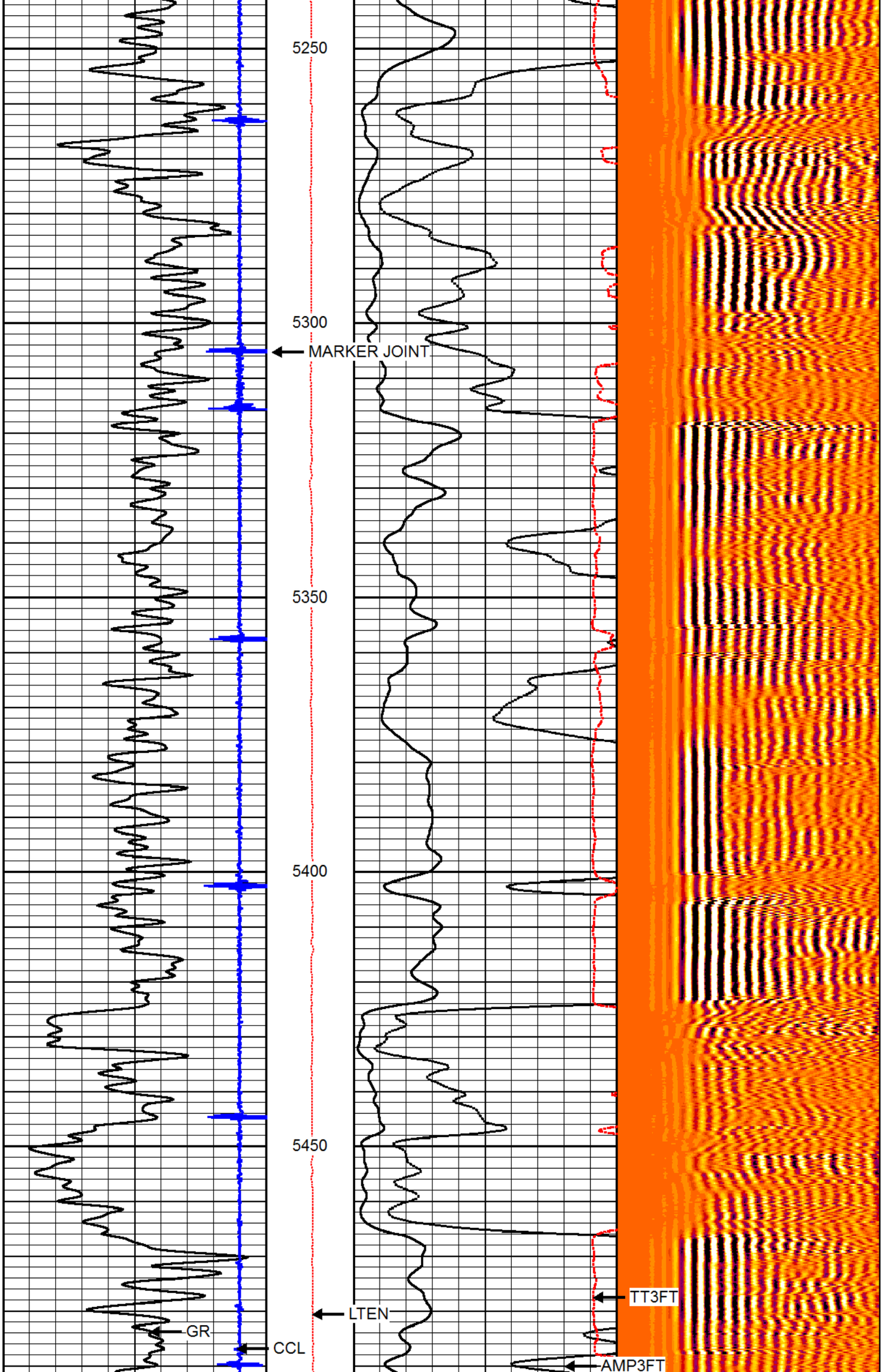

4000
4050
4100
4150
4200
LTEN
GR
CCL
AMP3FT
AMP3FT
TT3FT

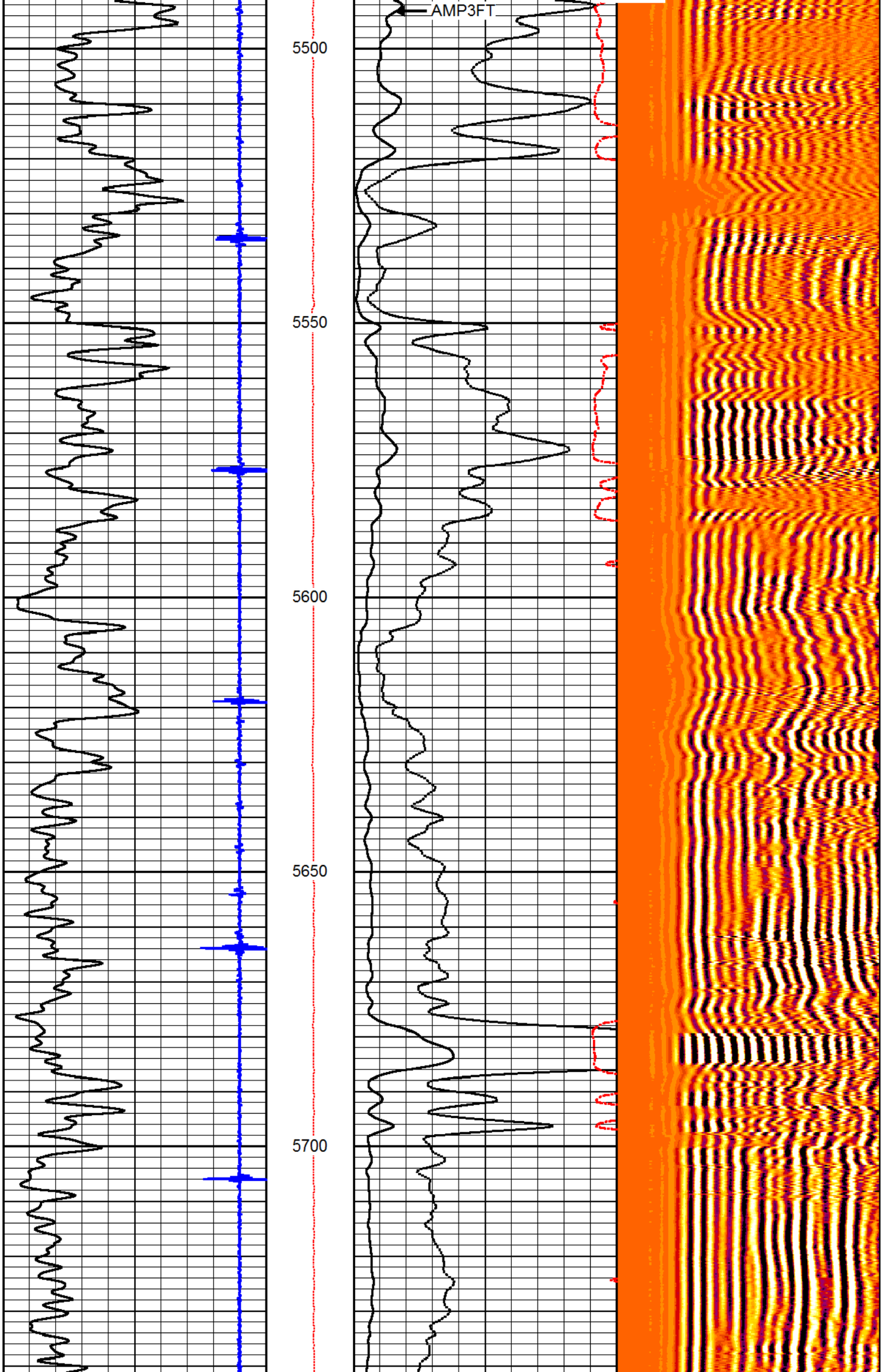

4250
4300
4350
4400
4450

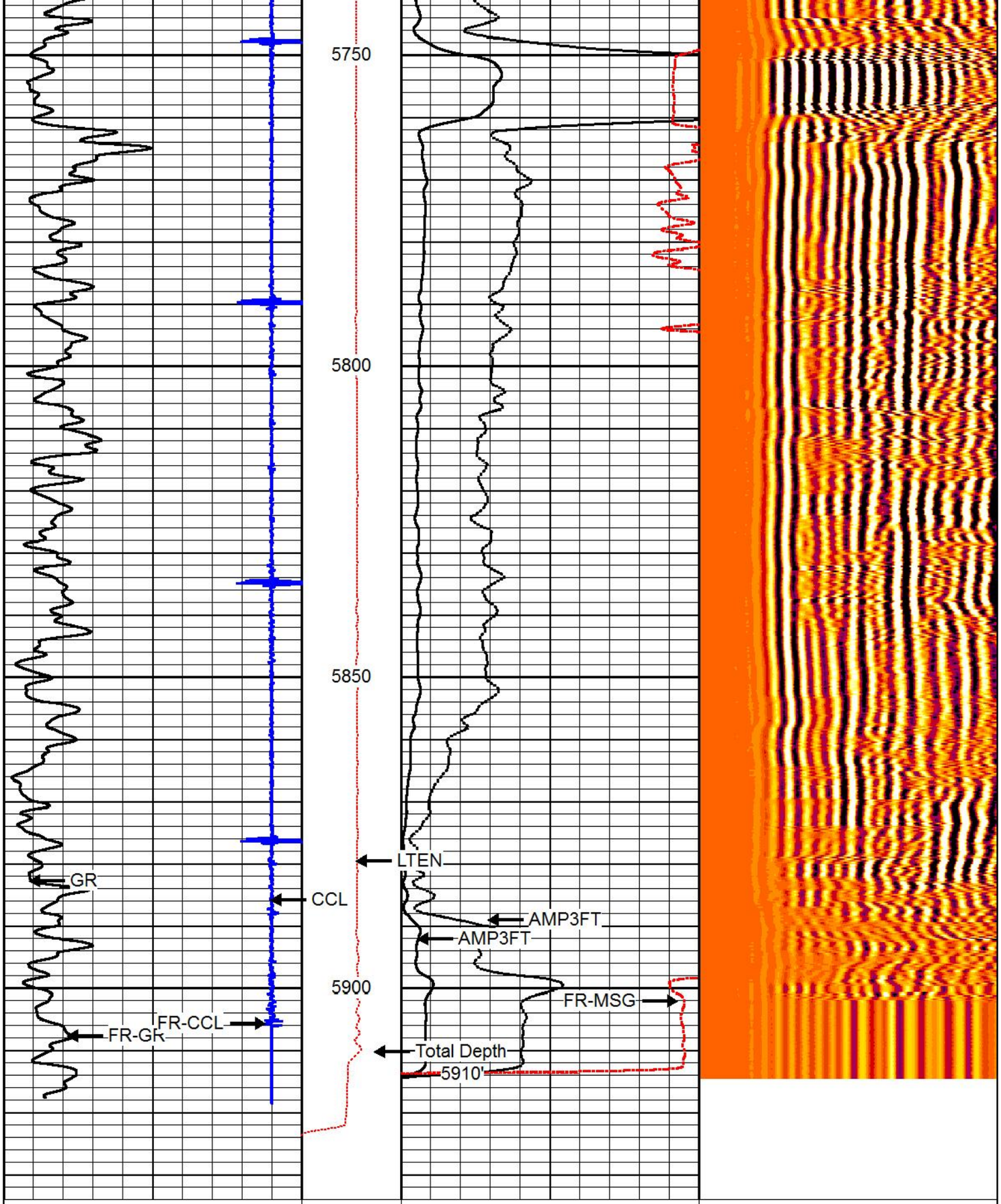

4500
4550
4600
4650
4700
GR
CCL
LTEN
AMP3FT
AMP3FT
TT3FT


4750
4800
4850
4900
4950


5000
5050
5100
5150
5200
LTEN
GR
CCL
AMP3FT
AMP3FT
TT3FT


5250
5300
MARKER JOINT
5350
5400
5450
LTEN
GR
CCL
TT3FT
AMP3FT


AMP3FT
5500
5550
5600
5650
5700



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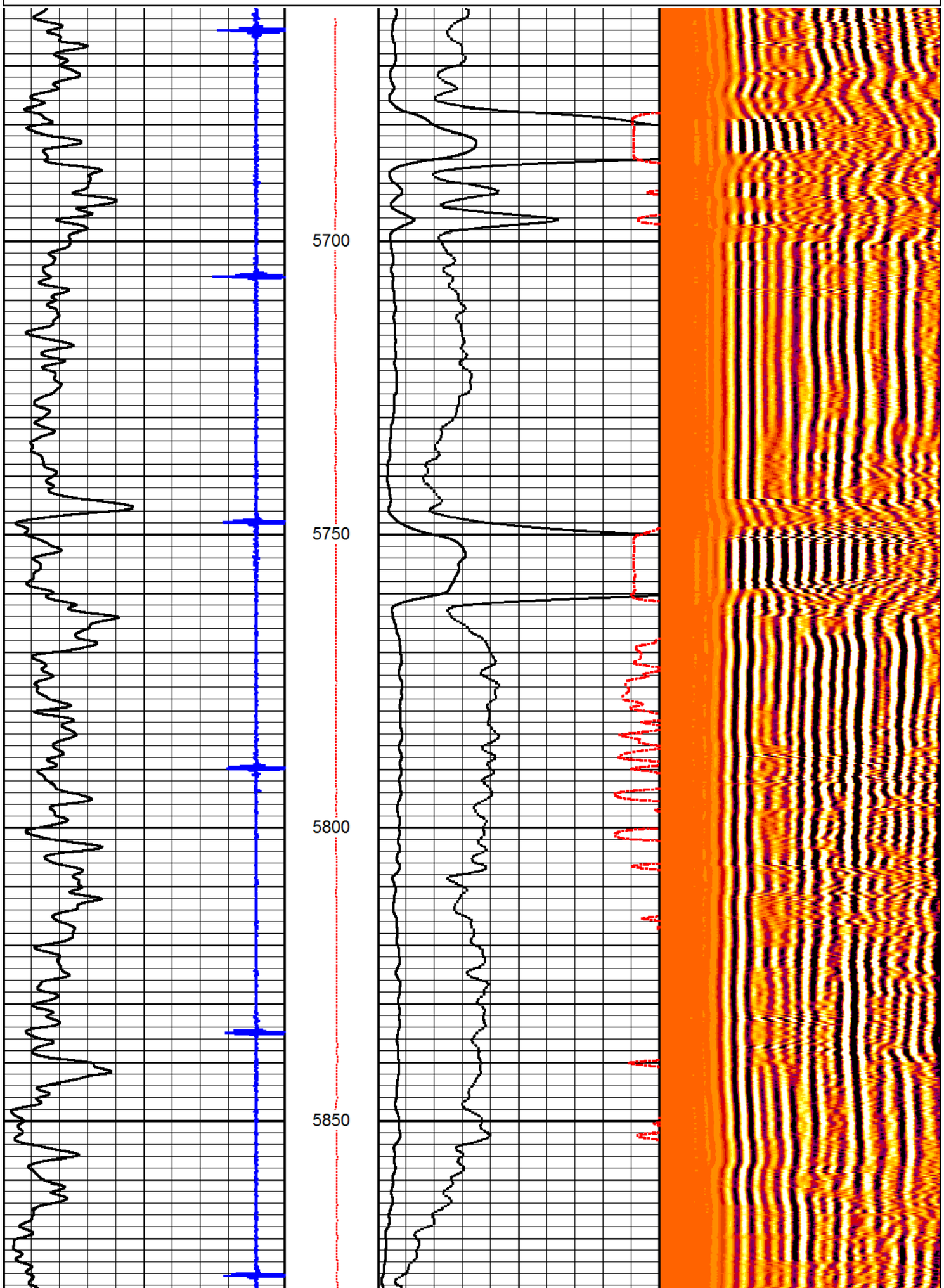
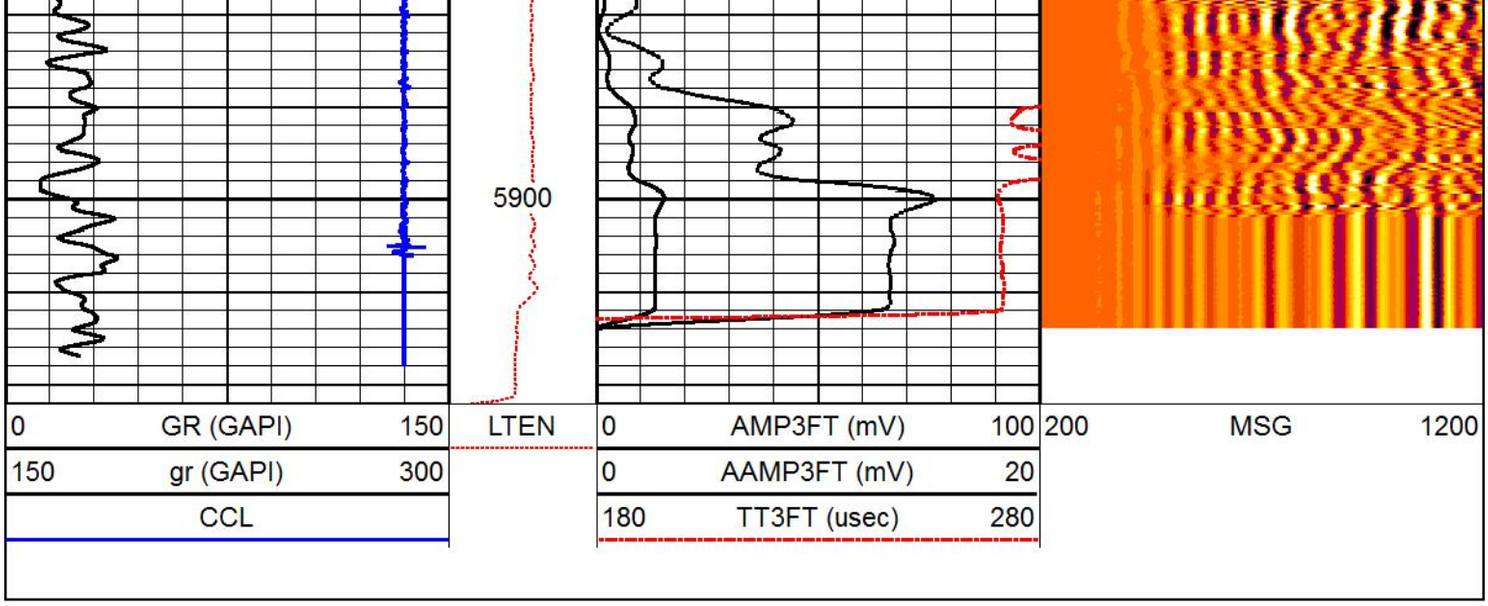
REPEAT SECTION

Database File	15067218080000_merit_wb_scherling_29_3_cbl.db
Dataset Pathname	pass4
Presentation Format	cbl_lib

Presentation Format obi_lb
Dataset Creation Wed Jan 14 13:43:05 2015
Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150	LTEN	0	AMP3FT (mV)	100	200	MSG	1200
150	gr (GAPI)	300		0	AAMP3FT (mV)	20			
	CCL			180	TT3FT (usec)	280			





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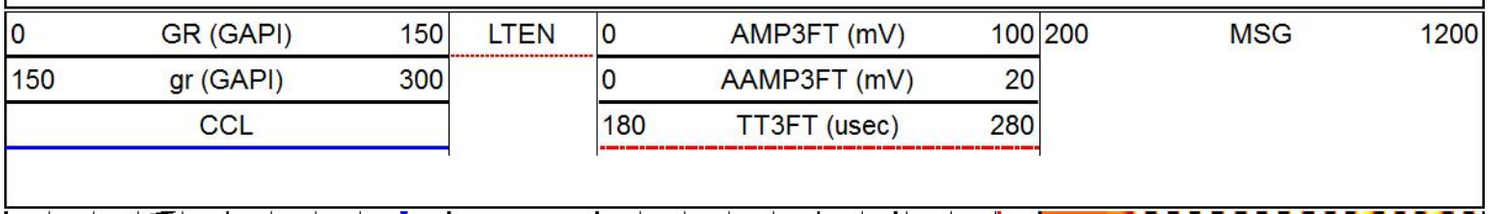
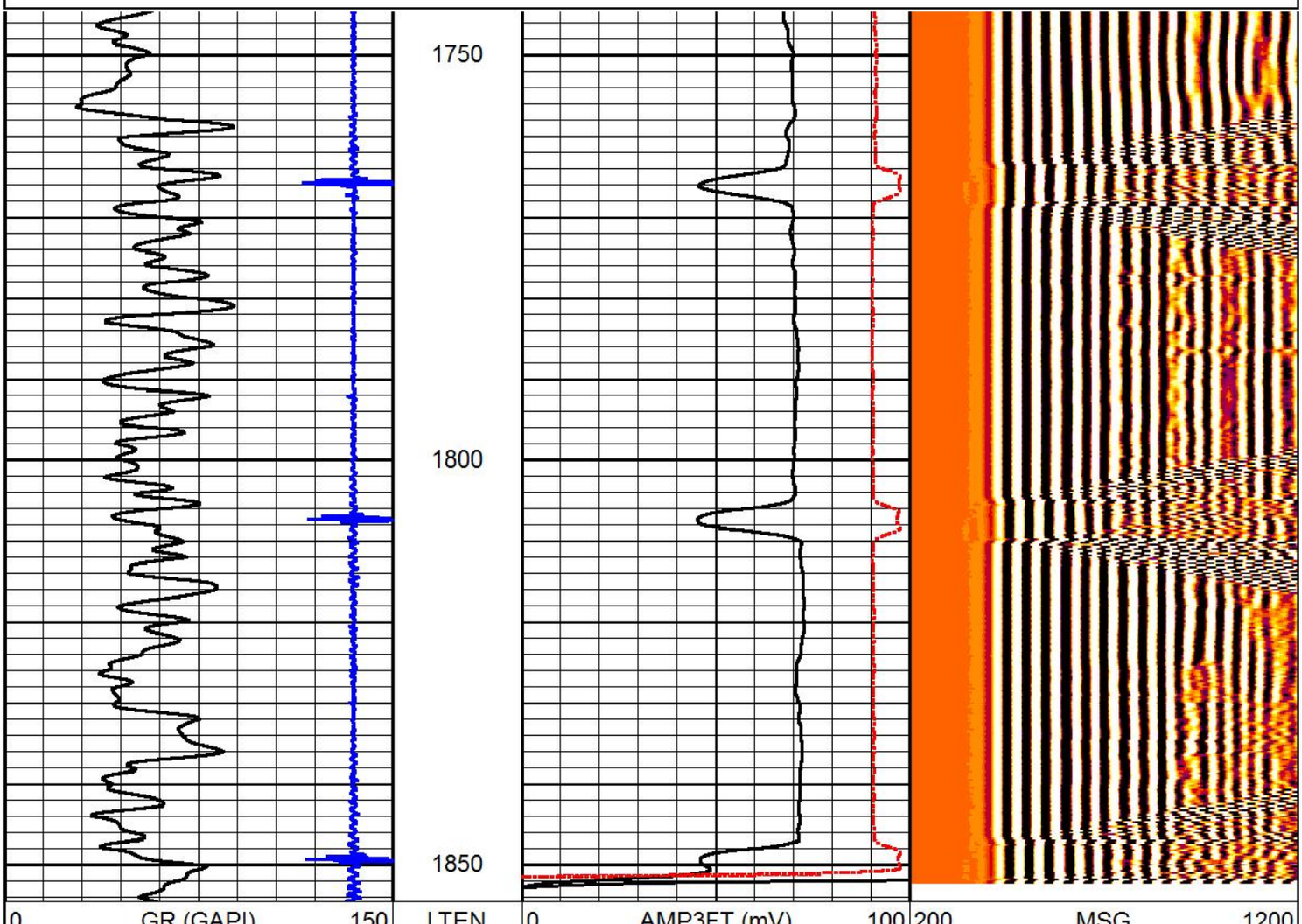
FREE PIPE SECTION

Database File	15067218080000_merit_wb_scherling_29_3_cbl.db
Dataset Pathname	pass3
Presentation Format	cbl_lib
Dataset Creation	Wed Jan 14 13:25:53 2015
Charted by	Depth in Feet scaled 1:240





150	gr (GAPI)	300	0	AAMP 3FT (mv)	20
CCL			180	TT3FT (usec)	280

Calibration Report

Database File	15067218080000_merit_wb_scherling_29_3_cbl.db
Dataset Pathname	pass5
Dataset Creation	Wed Jan 14 13:49:45 2015

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 060738

SHOP CALIBRATION Mon Dec 22 13:33:13 2014

	Counts/Sec.	Gain	Offset	Jig	Units
Background	55.2				cps
Calibrator	374.0				cps
		1.3906			GAPI/cps

PRIMARY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	080640	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	1840.702	ft

Master Calibration, performed Wed Jan 14 13:25:38 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.015	0.631	0.500	71.921	115.828	-1.221
CAL	0.012	0.818				
5'	0.011	0.605	0.500	71.921	120.115	-0.764
SUM						
S1	0.018	0.683	0.000	100.000	150.243	-2.680
S2	0.016	0.646	0.000	100.000	158.794	-2.502
S3	0.016	0.587	0.000	100.000	175.151	-2.747
S4	0.015	0.537	0.000	100.000	191.576	-2.912
S5	0.016	0.564	0.000	100.000	182.706	-2.980
S6	0.015	0.646	0.000	100.000	158.563	-2.394
S7	0.015	0.702	0.000	100.000	145.475	-2.179
S8	0.015	0.707	0.000	100.000	144.633	-2.221

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset

CAL	0.000	0.000	0.012	0.818	1.000	0.000

Air Zero Calibration, performed (Not Performed):

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

Serial Number: 080640
Tool Model: Probe
Performed: Mon Jun 10 14:52:07 2013

	Reference	Reading
Low Reference:	89.00 degF	101.15 degF
High Reference:	134.00 degF	144.83 degF

Gain: 1.03
Offset: -16.00
Delta Spacing 1

Log Variables

Database C:\ProgramData\Warrior\Data\15067218080000_merit_wb_scherling_29_3_cbl.db
Dataset field/well/run1/pass5

Top - Bottom

BHTEMP_Src	PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	SRFTEMP degF
1	270	17	72	1	0.8	0
MudWgt lb/gal	**CASETHCK in**	**CASEOD in**	**PERFS**	**TDEPTH ft**	**BOTTEMP degF**	**BITSIZE in**
9.5	0	5.5	0	5910	143	7.875

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
STNDCH	15.03		STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.50	1.44	1.00
RBT_PRB275	13.53					

TEMP	11.24				
WVFCAL	9.03	RBT_PRB275-Probe (080640) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
GR_PRB275	4.78				
CCL	3.92				
GR	2.54	GR_PRB275-probe275dig (060738) Probe Digital Gamma CCL	4.78	2.75	57.00
LLMTEN	0.00				

Dataset: 15067218080000_merit_wb_scherling_29_3_cbl.db: field/well/run1/pass5
Total length: 15.03 ft
Total weight: 148.00 lb
O.D.: 2.75 in

Company	MERIT ENERGY		
Well	WB SCHERLING 29-3		
Field	BIG BOW		
County	GRANT	State	KANSAS

HALLIBURTON

CEMENT BOND LOG

SCALE 1:240