

HALLIBURTON				ACOUSTIC CEMENT BOND LOG																											
Company URSA OPERATING CO., LLC. Well YATER 11D-17-07-95 Field PARACHUTE County GARFIELD State CO				Company URSA OPERATING CO., LLC. Well YATER 11D-17-07-95 Field PARACHUTE County GARFIELD State CO																											
Permanent Datum Log Measured From Drilling Measured From				GROUND LEVEL Elevation 5519 KB , 17 Ft. above perm. datum KB				Elevation K.B. 5536 D.F. 5535 G.L. 5519																							
Date @ Time Logged Run No. Depth - Driller Depth - Logger Bottom - Logged Interval Top - Log Interval Max. Recorded Temp. CEMENTING DATA				30 AUGUST 2015 ONE 7460' 7357' 7352' 100' 211 DEG F Surface String N/A				Type Fluid in Hole Density of Fluid Fluid Level Cement Top Est. Logged Equipment / Location Recorded by Witnessed by Protection String N/A Production String N/A Liner																							
Date / Time Cemented Primary / Squeeze Expected Compressive Strength Cement Volume Cement Type / Weight Formulation Mud Type / Mud Wgt.				N/A N/A N/A N/A N/A N/A N/A				N/A N/A N/A N/A N/A N/A N/A																							
Borehole Record				Casing & Tubing Record																											
Run Number				Bit				From				To				Size				Weight				From				To			
ONE				12.25"				1700'				SURFACE				8.625"				32.0#				1700'				SURFACE			
TWO				7.875"				7460'				SURFACE				4.5"				11.6#				7435'				SURFACE			

ONE	7352'	SURFACE	0	60	MAIN LOG SECTION			
	GAMMA RAY		TRAVEL TIME		AMPLITUDE		MSG	
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	200	400	200	0	100	100	1100
DIRECTIONAL INFORMATION								
Maximum Deviation			deg. @		KOP			

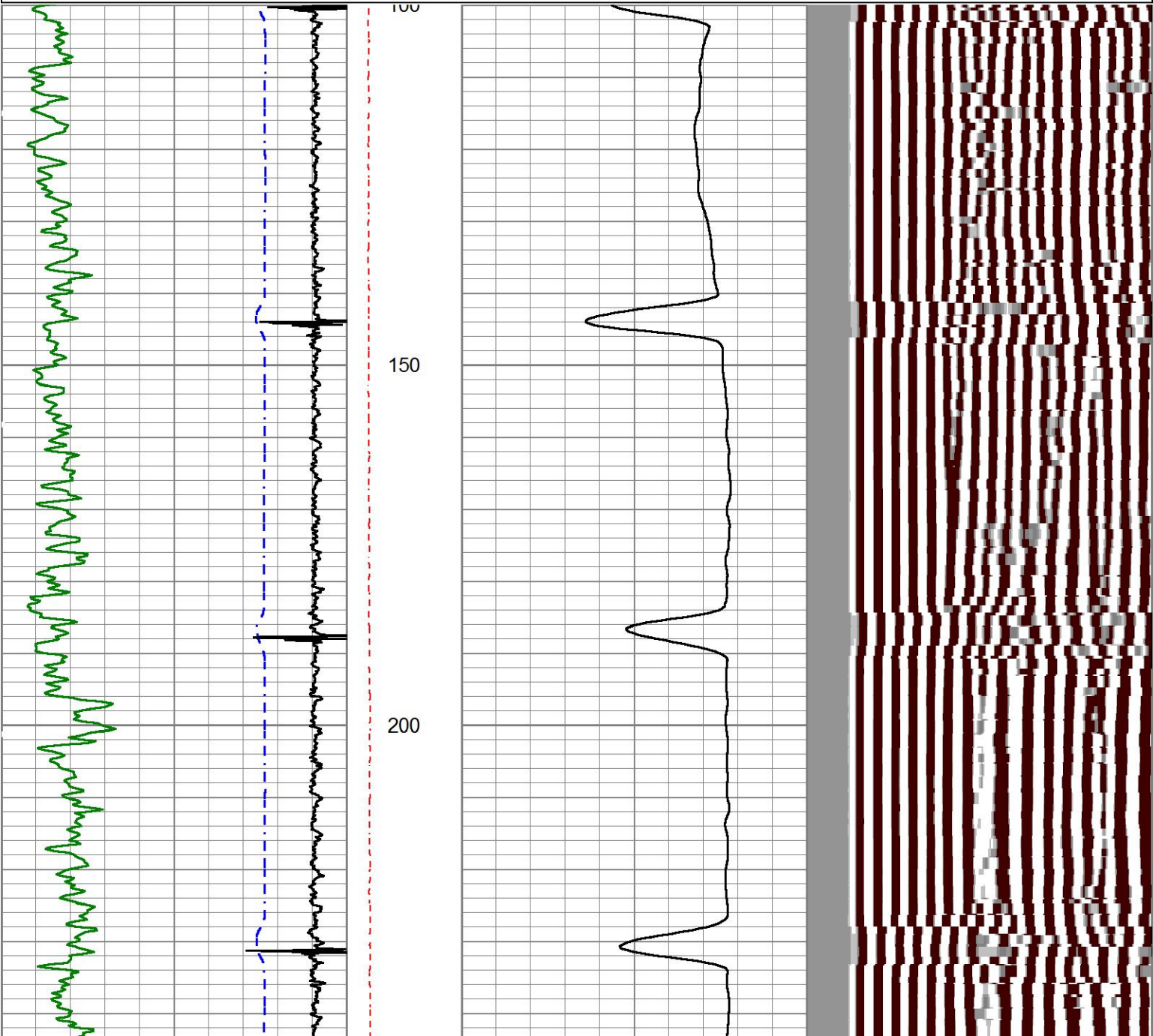
HALLIBURTON

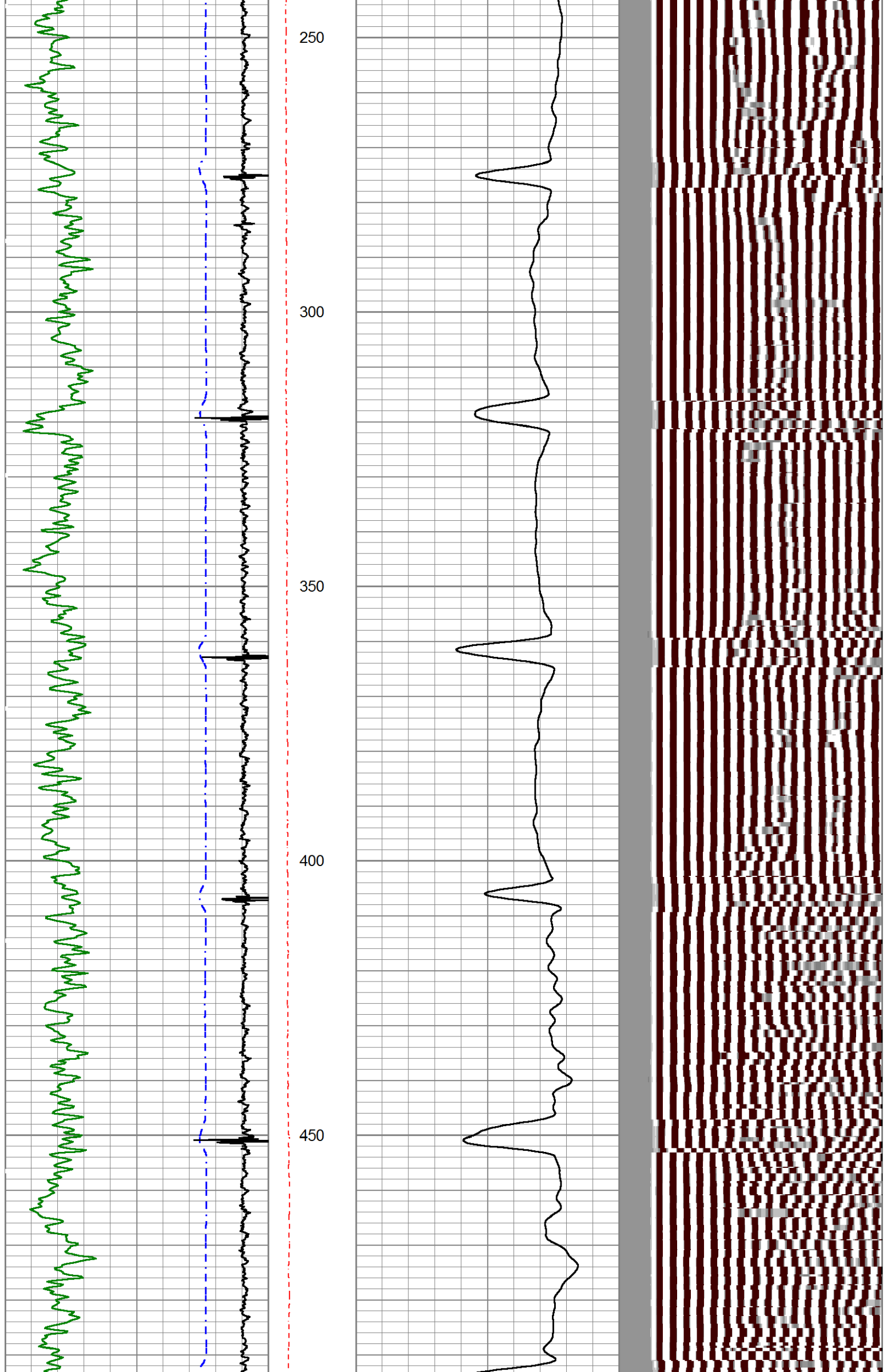
MAIN LOG SECTION

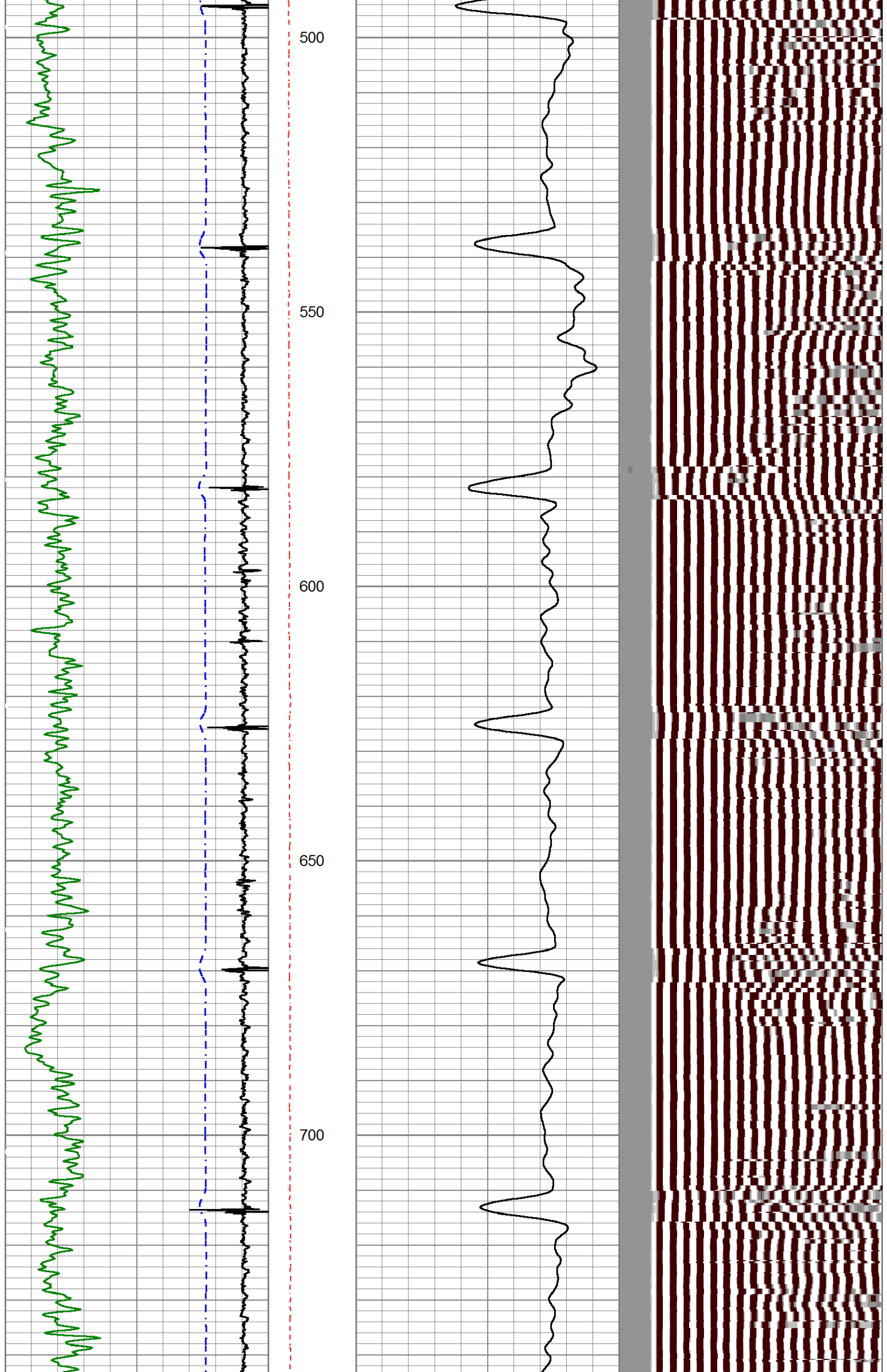
5" = 100'

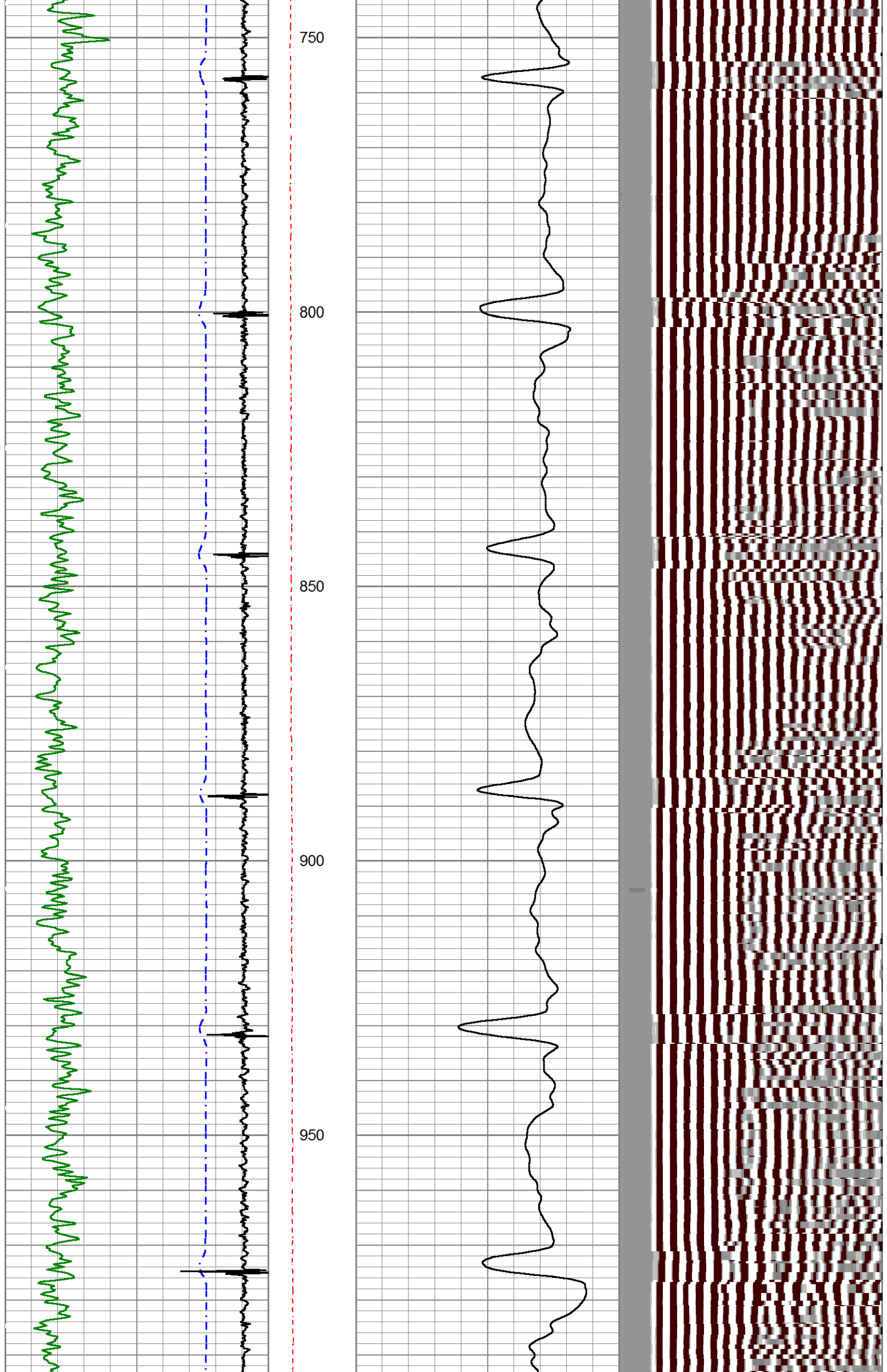
Database File	yater_11d.db
Dataset Pathname	MAIN
Presentation Format	cbl_main
Dataset Creation	Sun Aug 30 18:09:48 2015
Charted by	Depth in Feet scaled 1:240

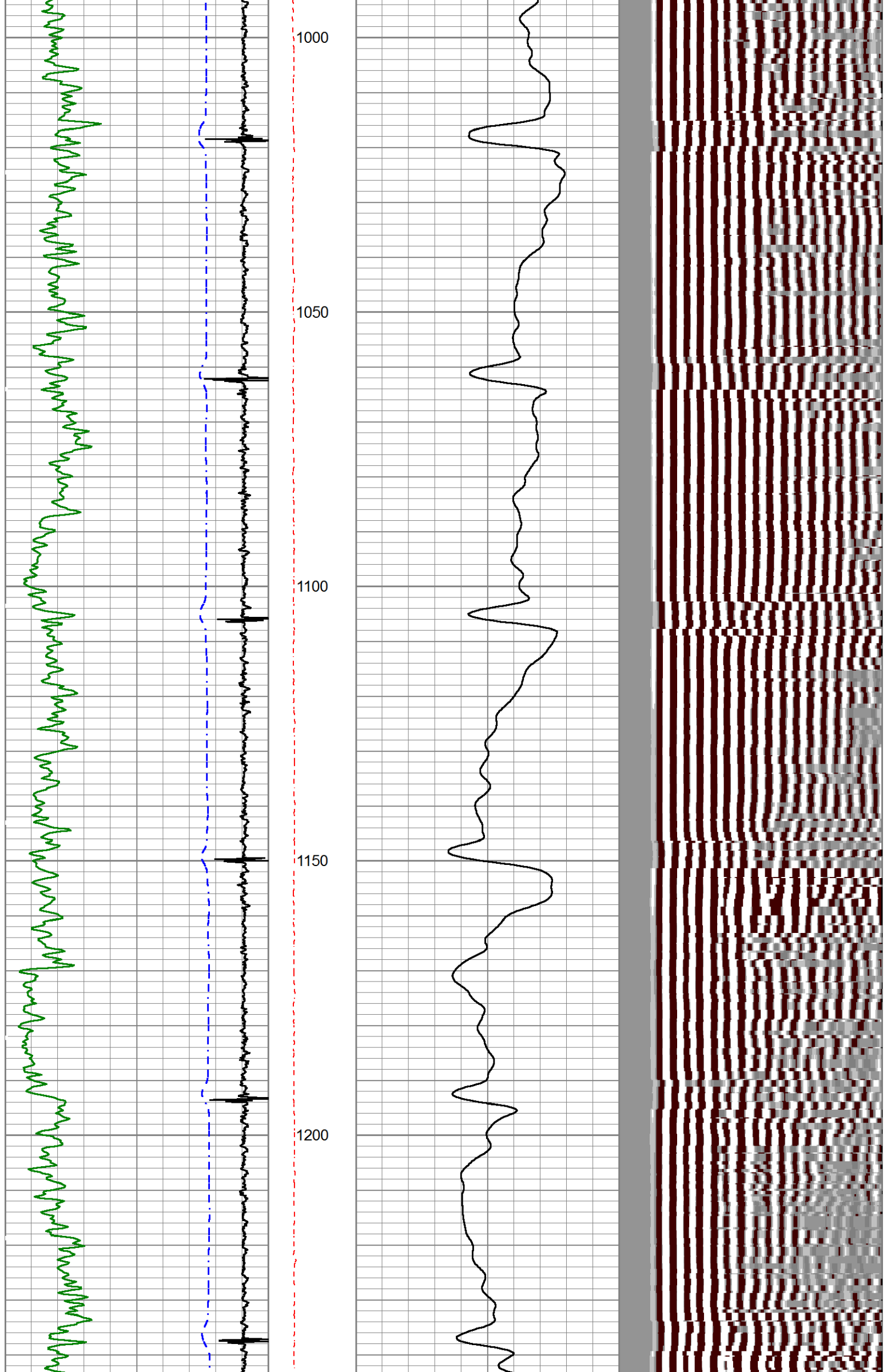
400	TRAVEL TIME (usec)	150	LTEN	0	AMP AMPLITUDE (mV)	10	200	MSG	1100
-3500	CCL	350	0	(lb) 1800	0	AMPLITUDE (mV)	100		
0	Gamma Ray (GAPI)	200							

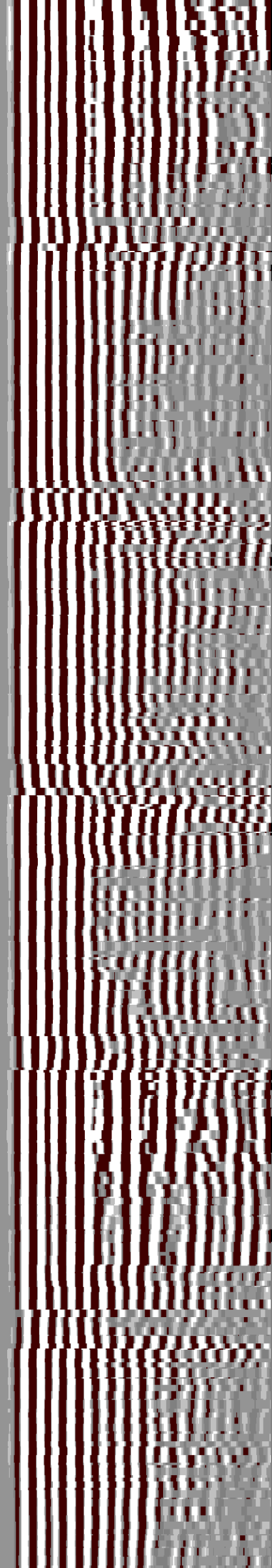
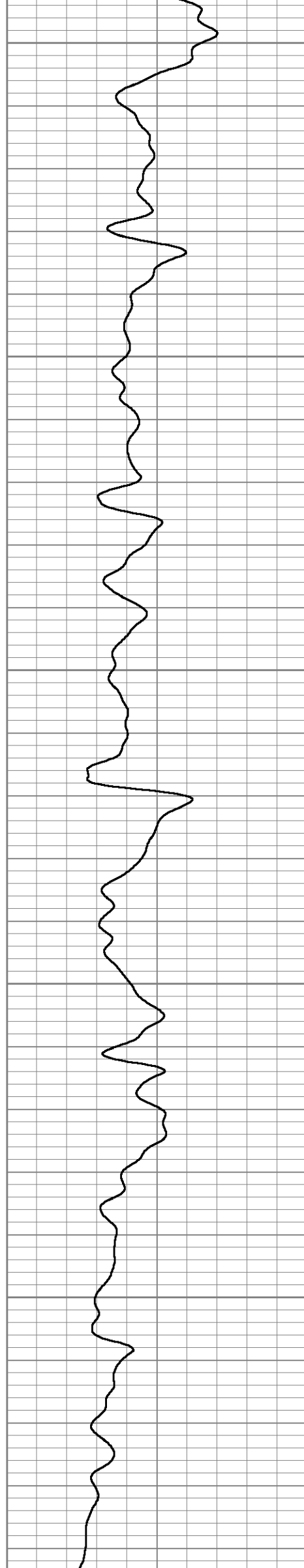
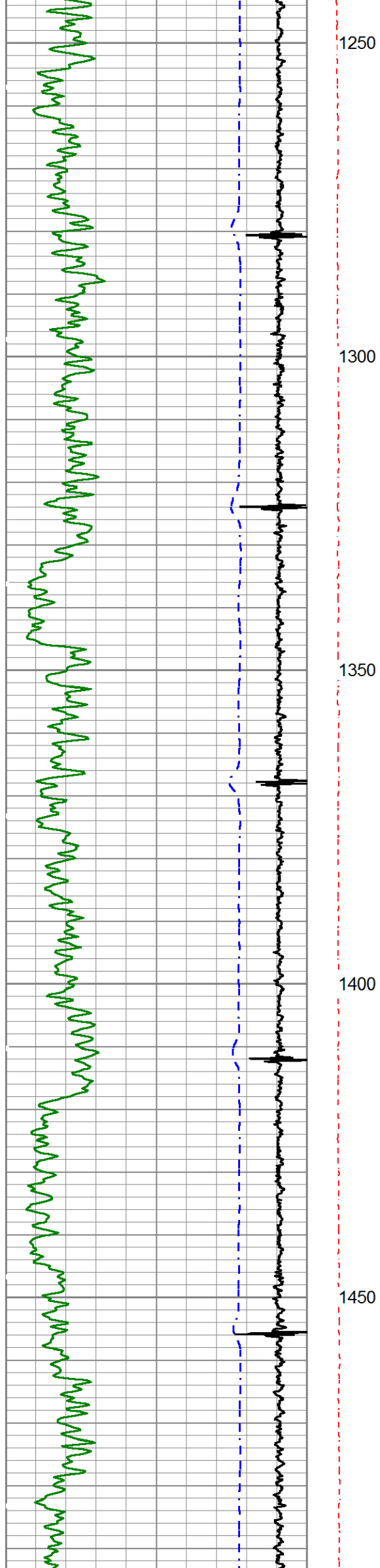


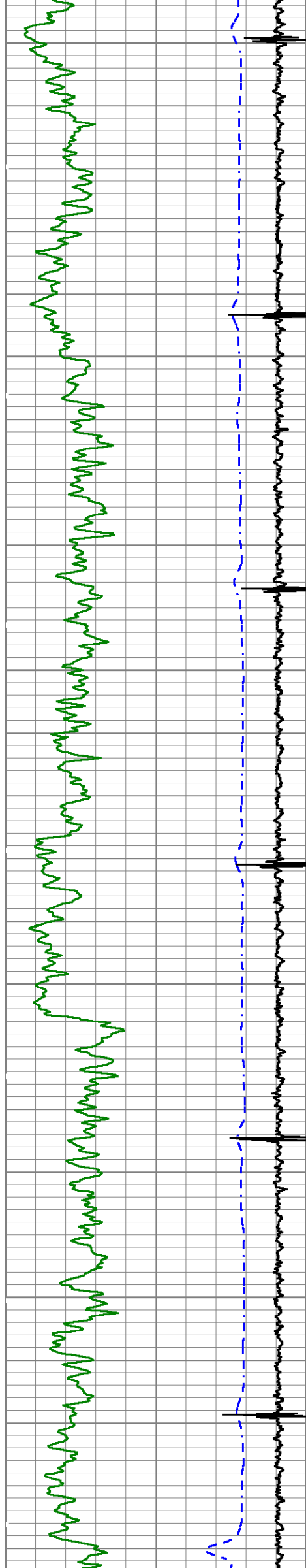












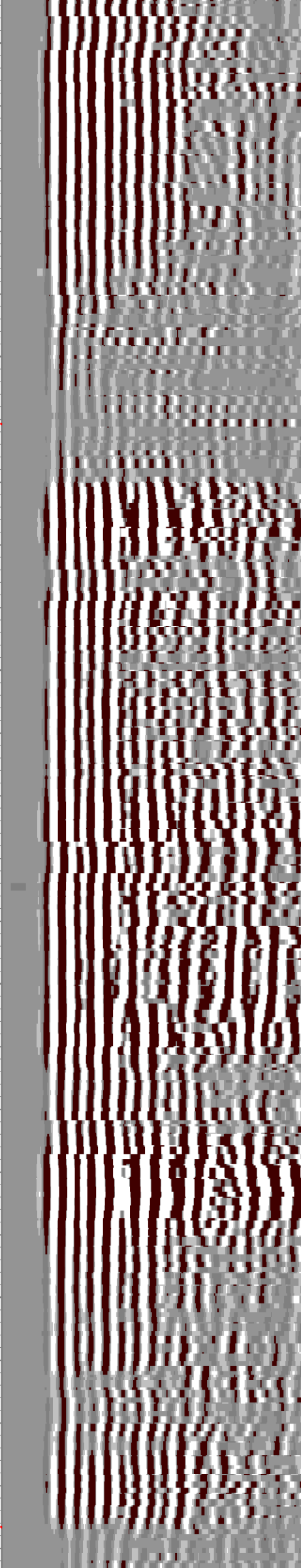
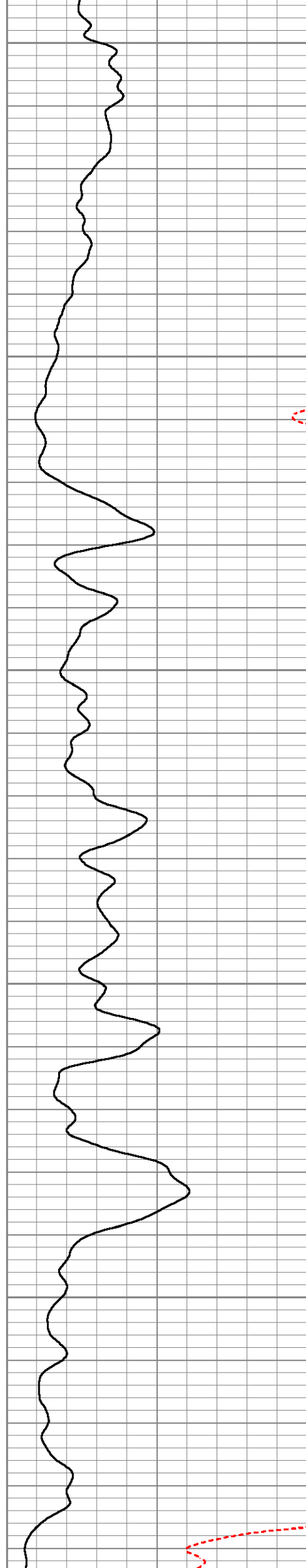
1500

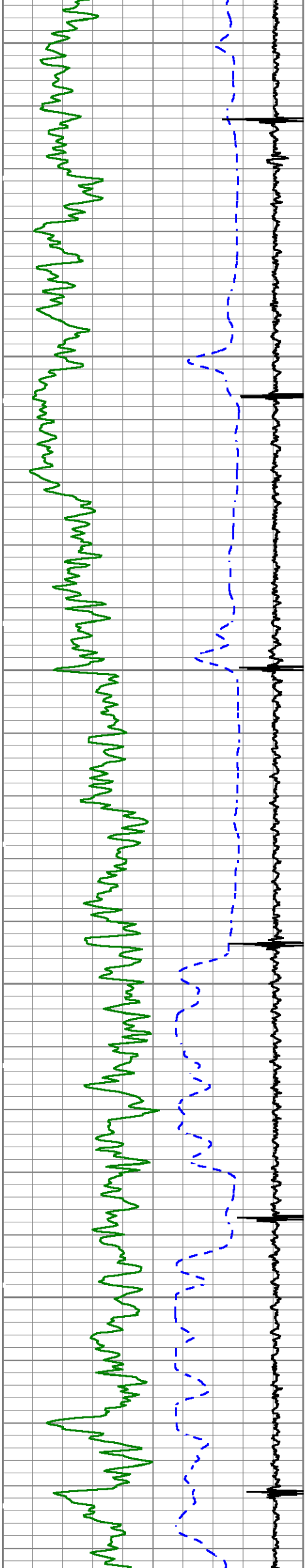
1550

1600

1650

1700





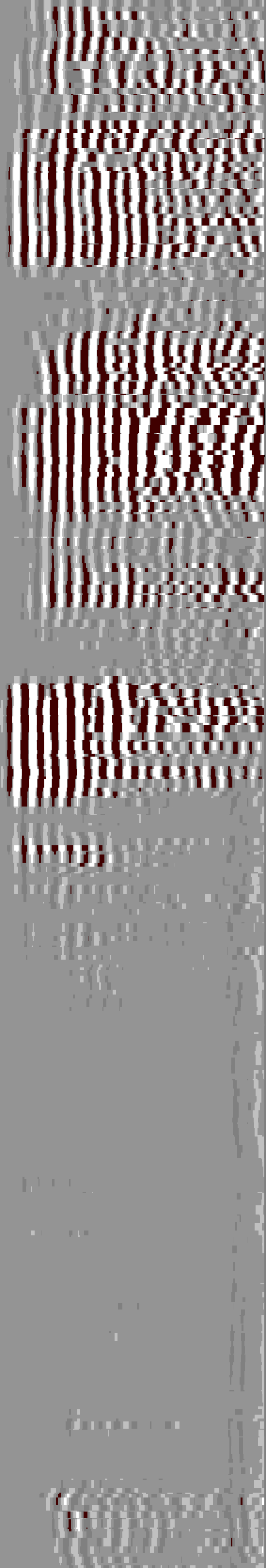
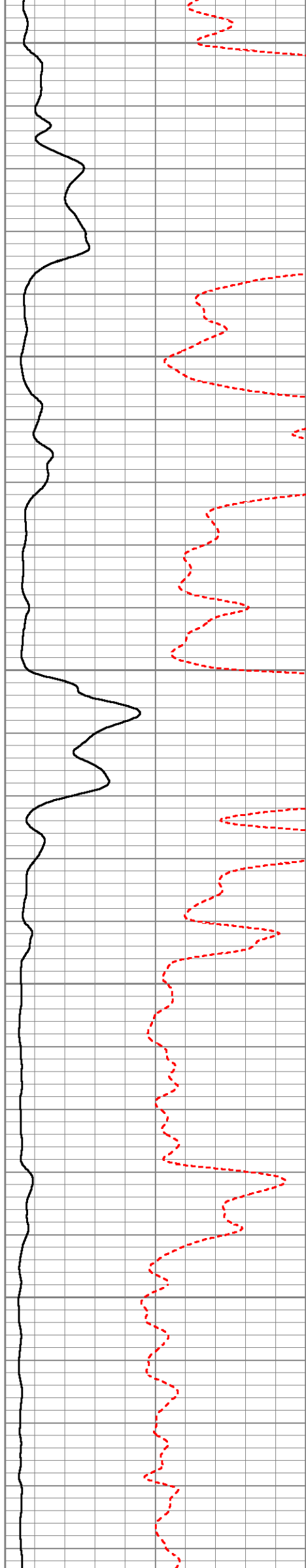
1750

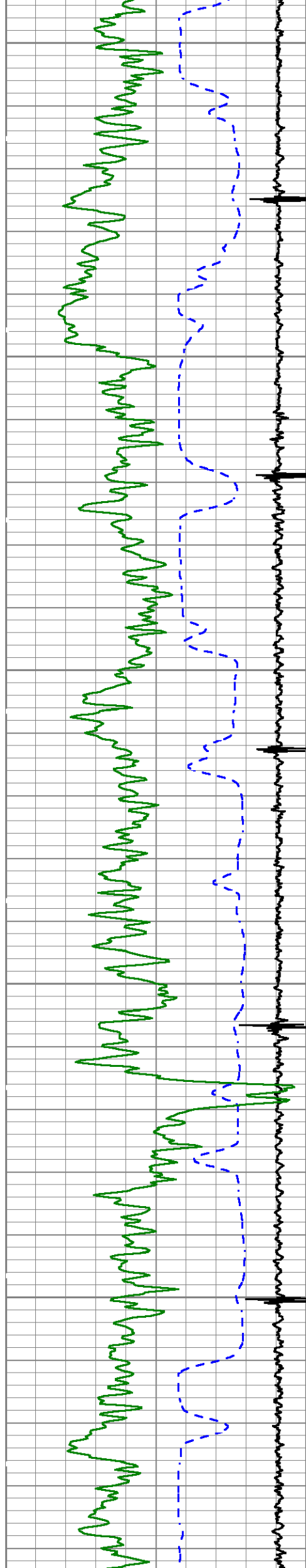
1800

1850

1900

1950





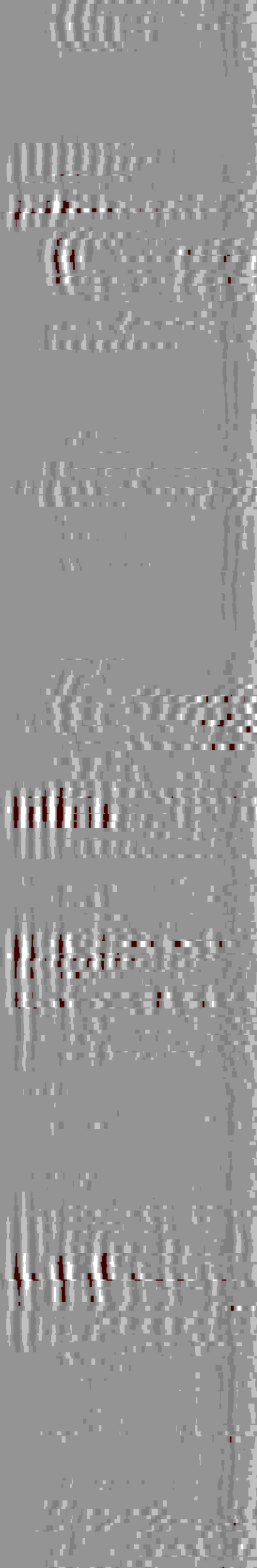
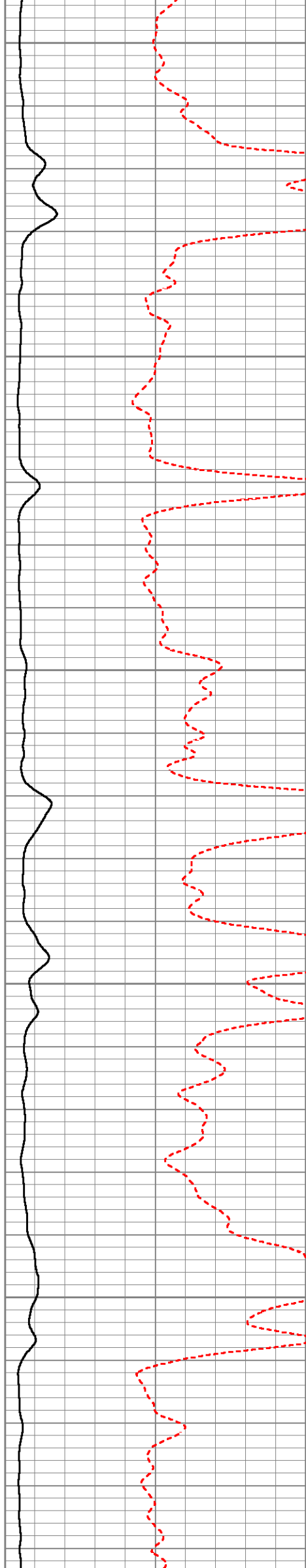
2000

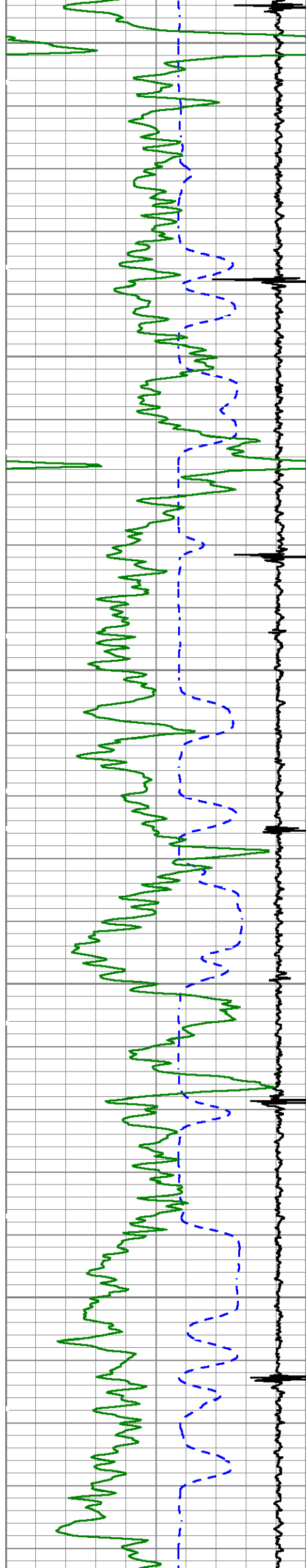
2050

2100

2150

2200





2250

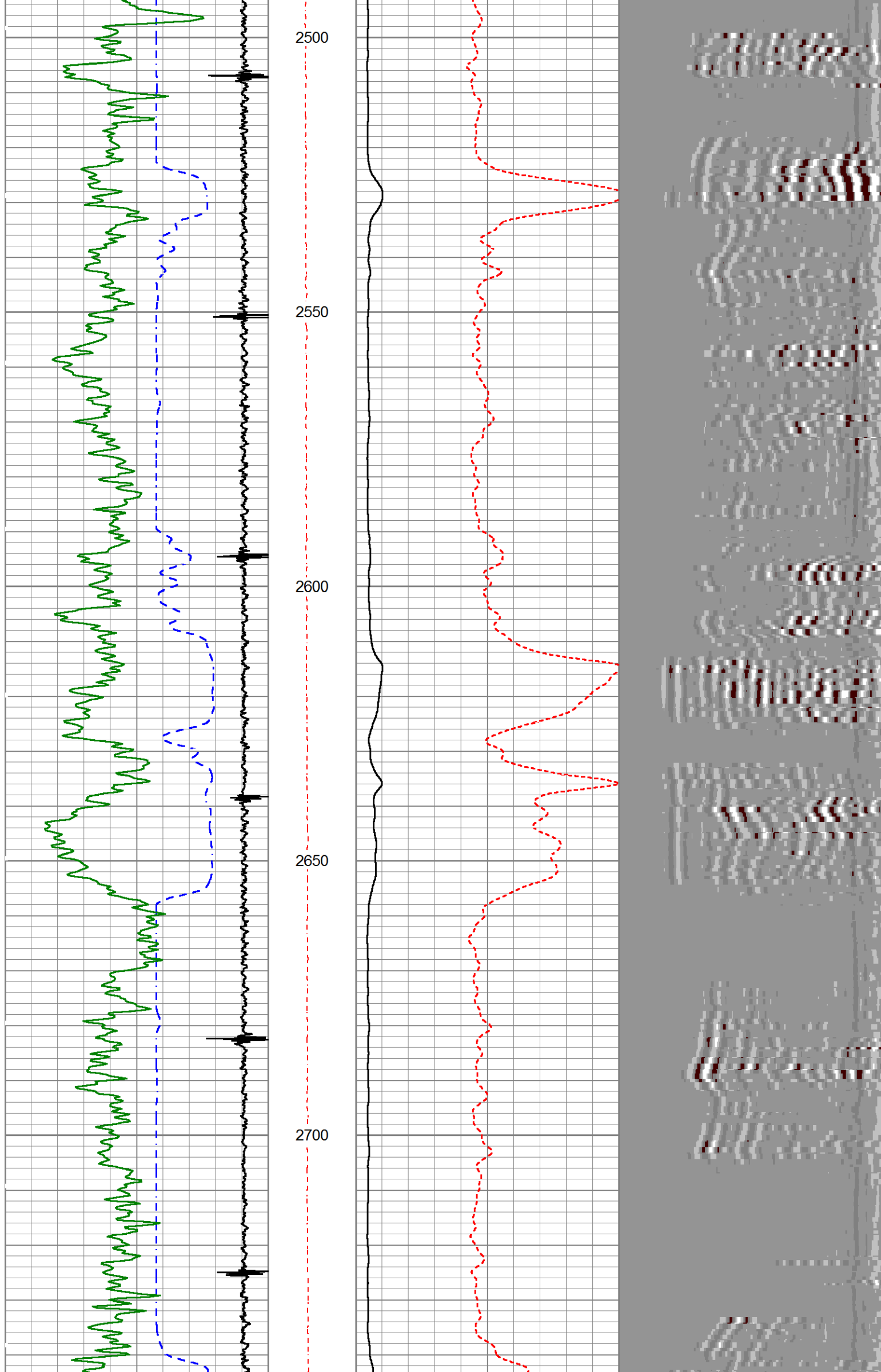
2300

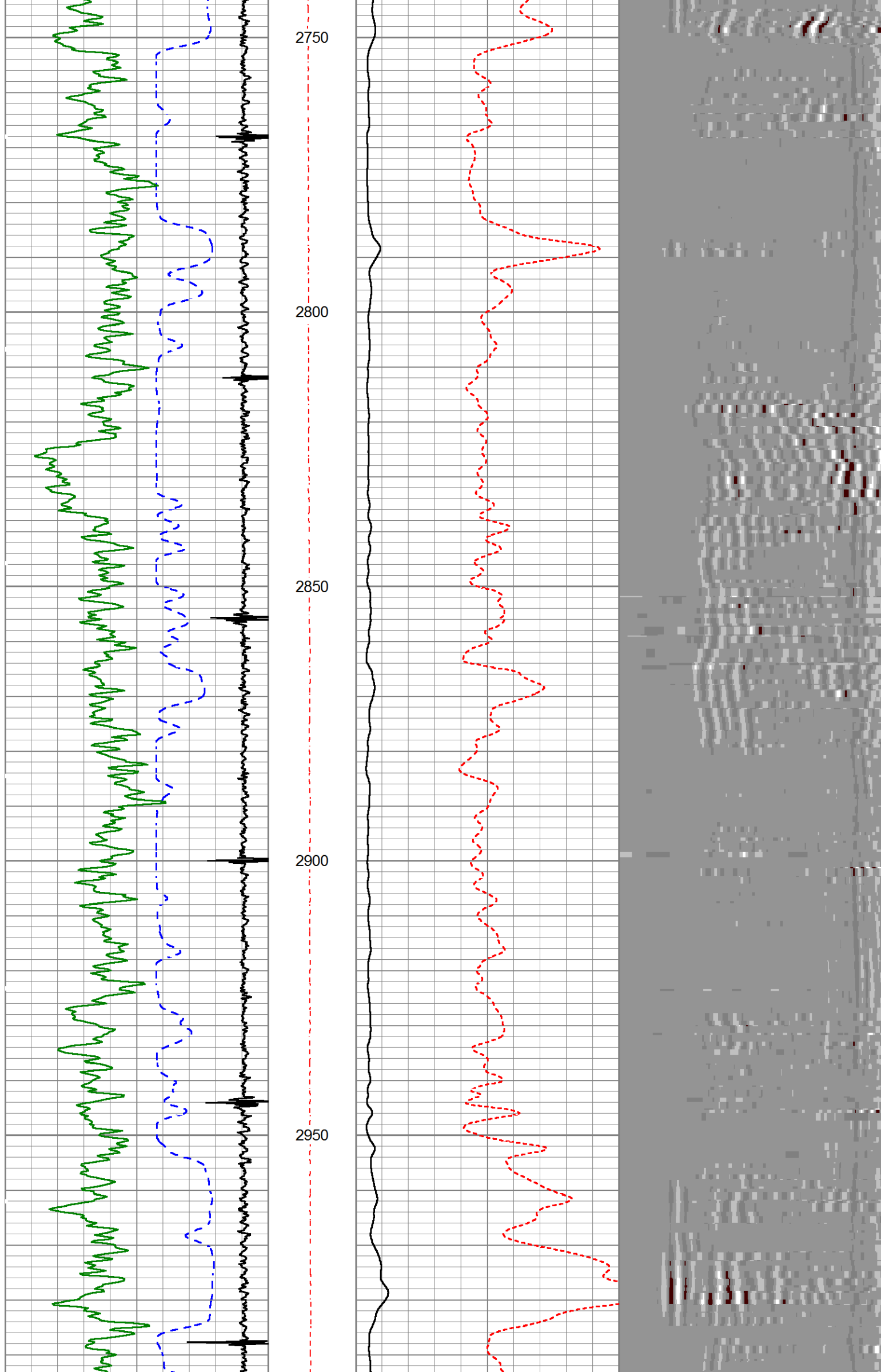
2350

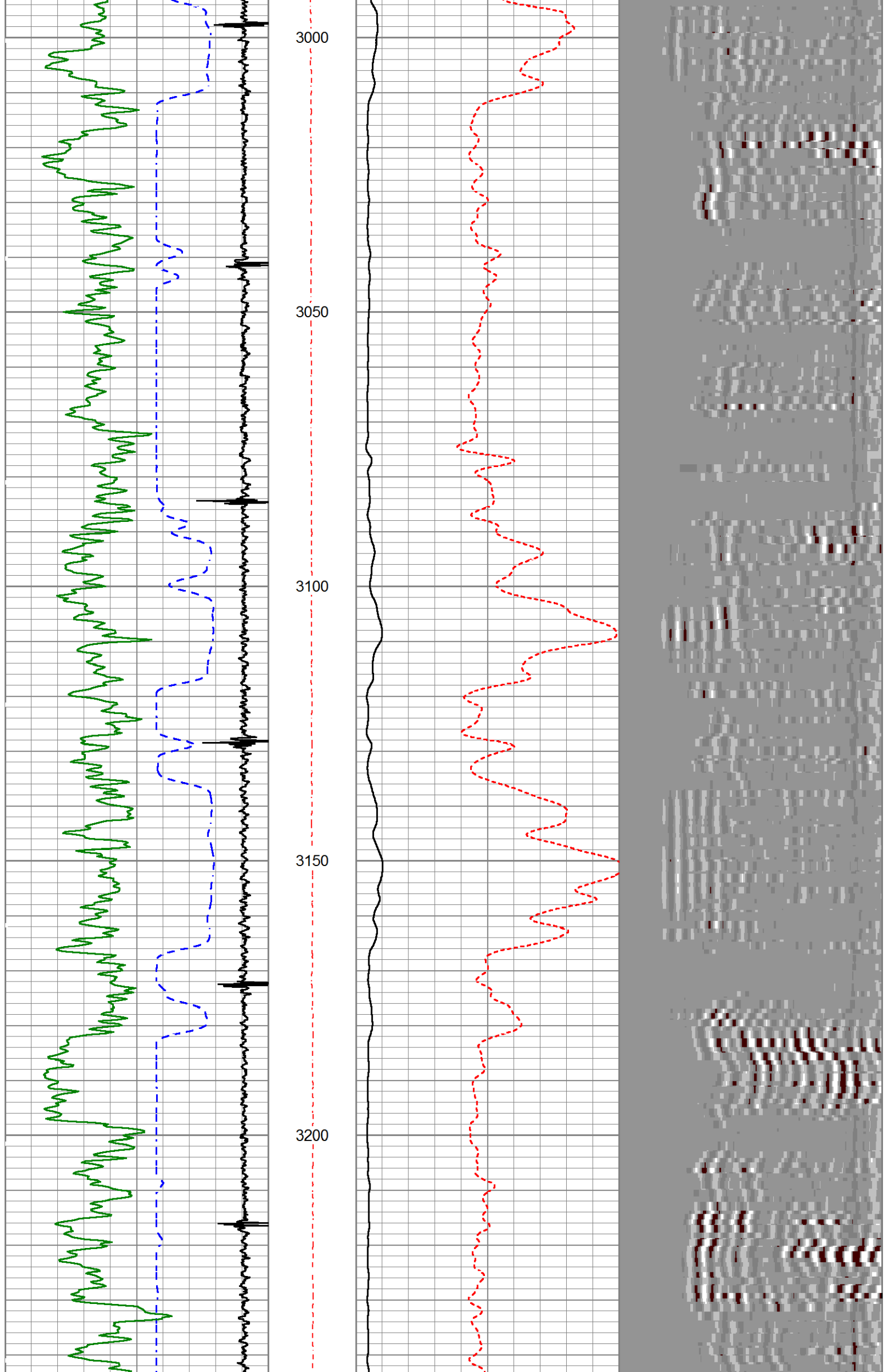
2400

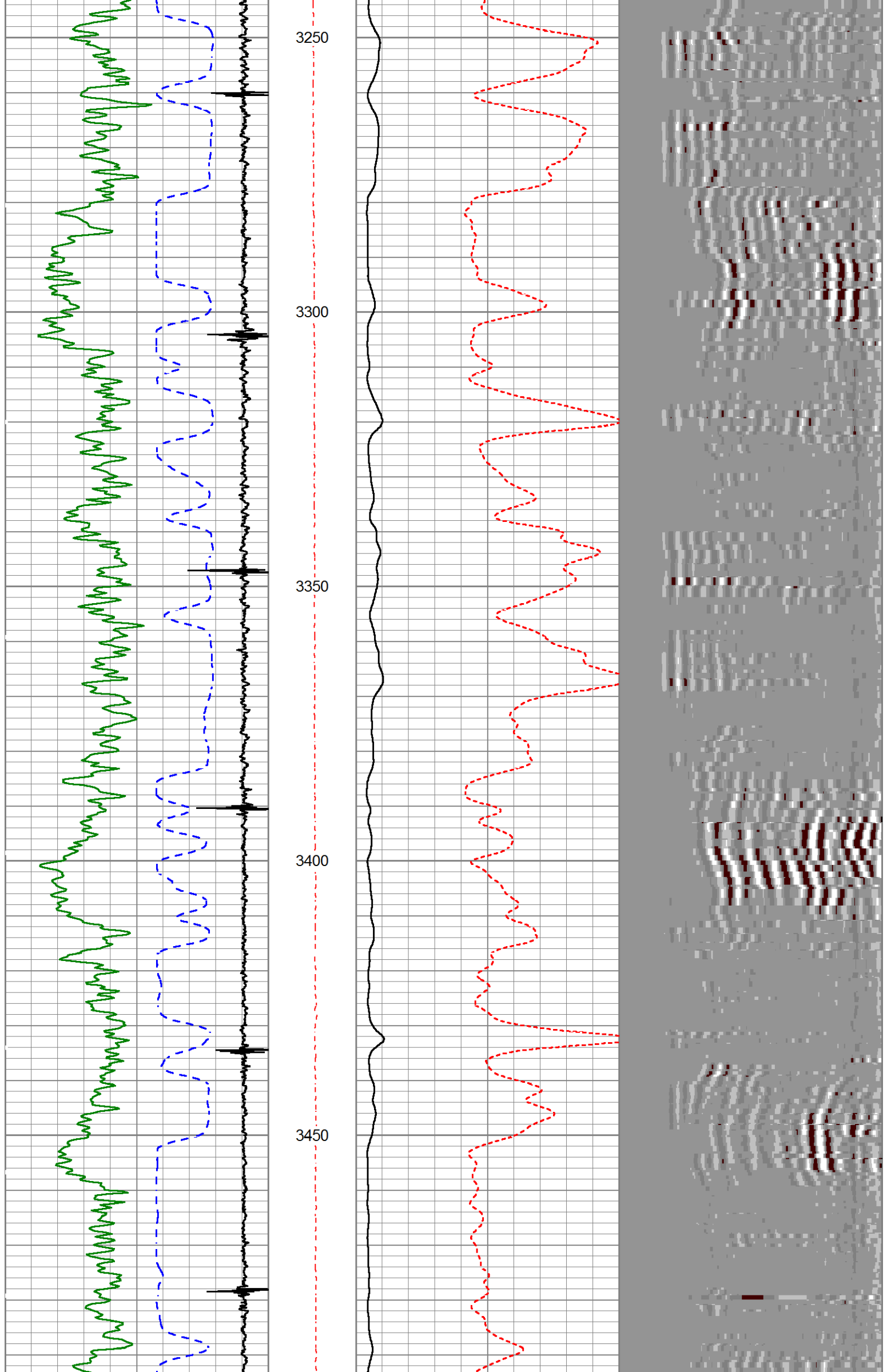
2450

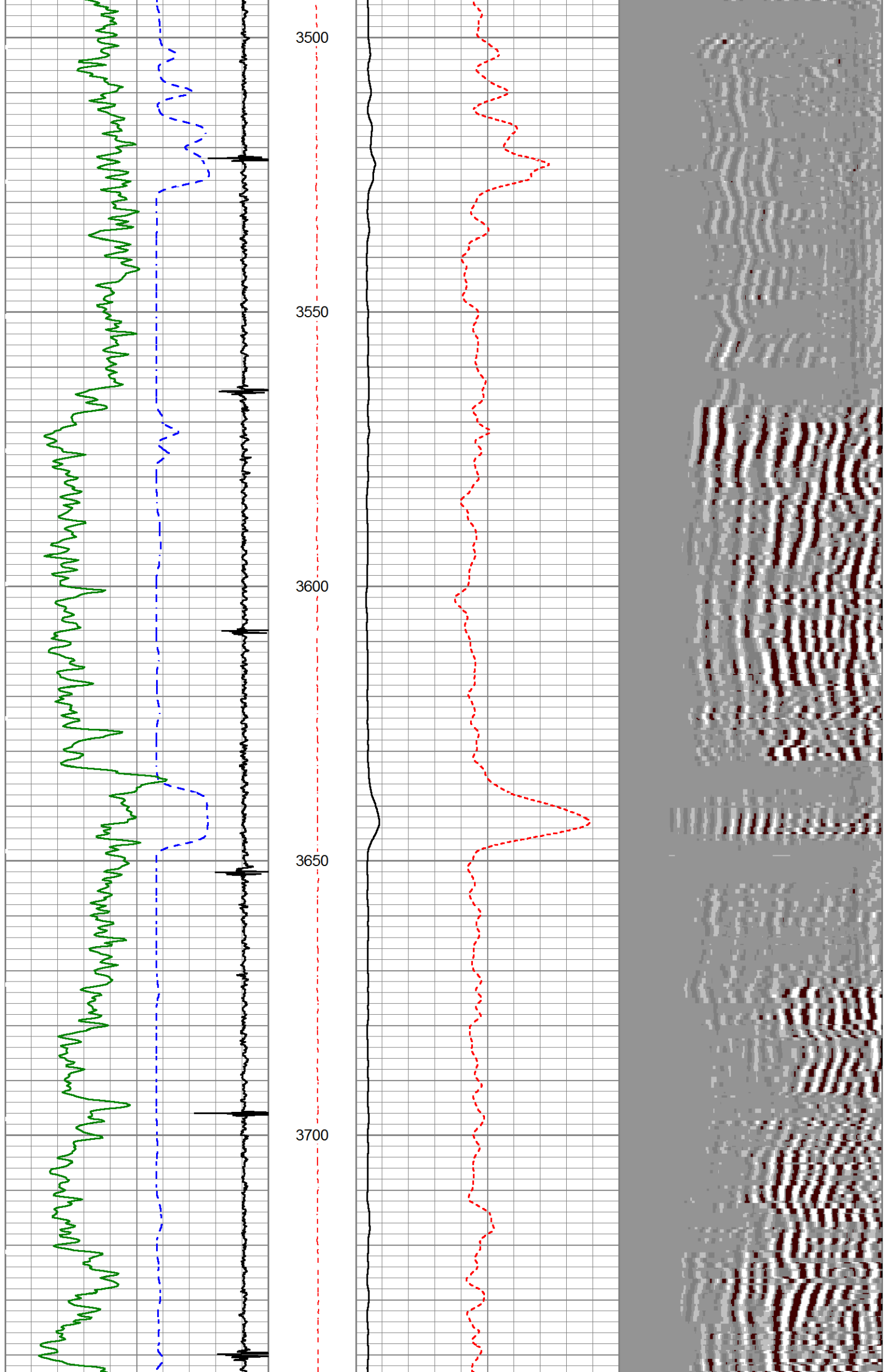


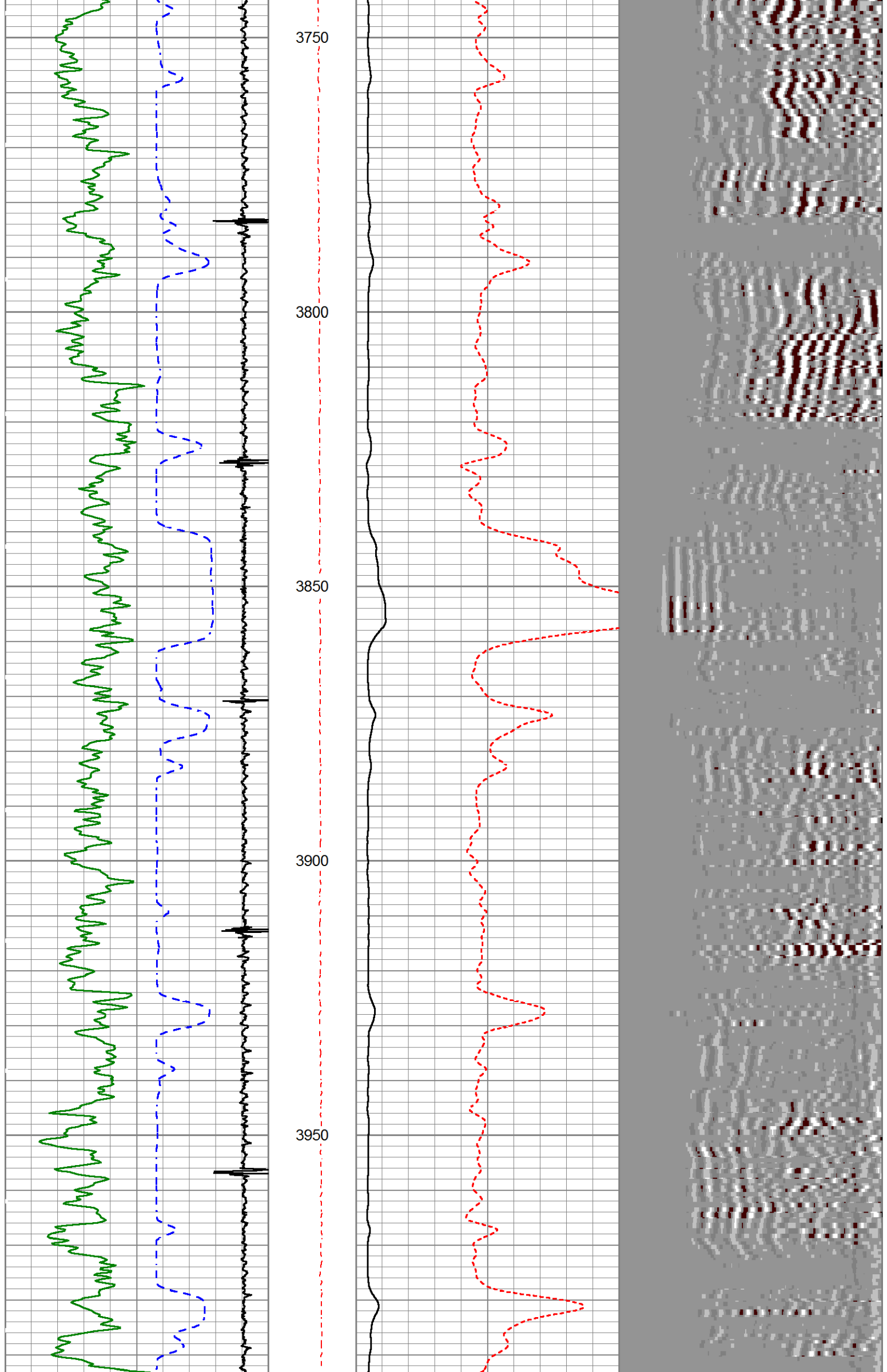


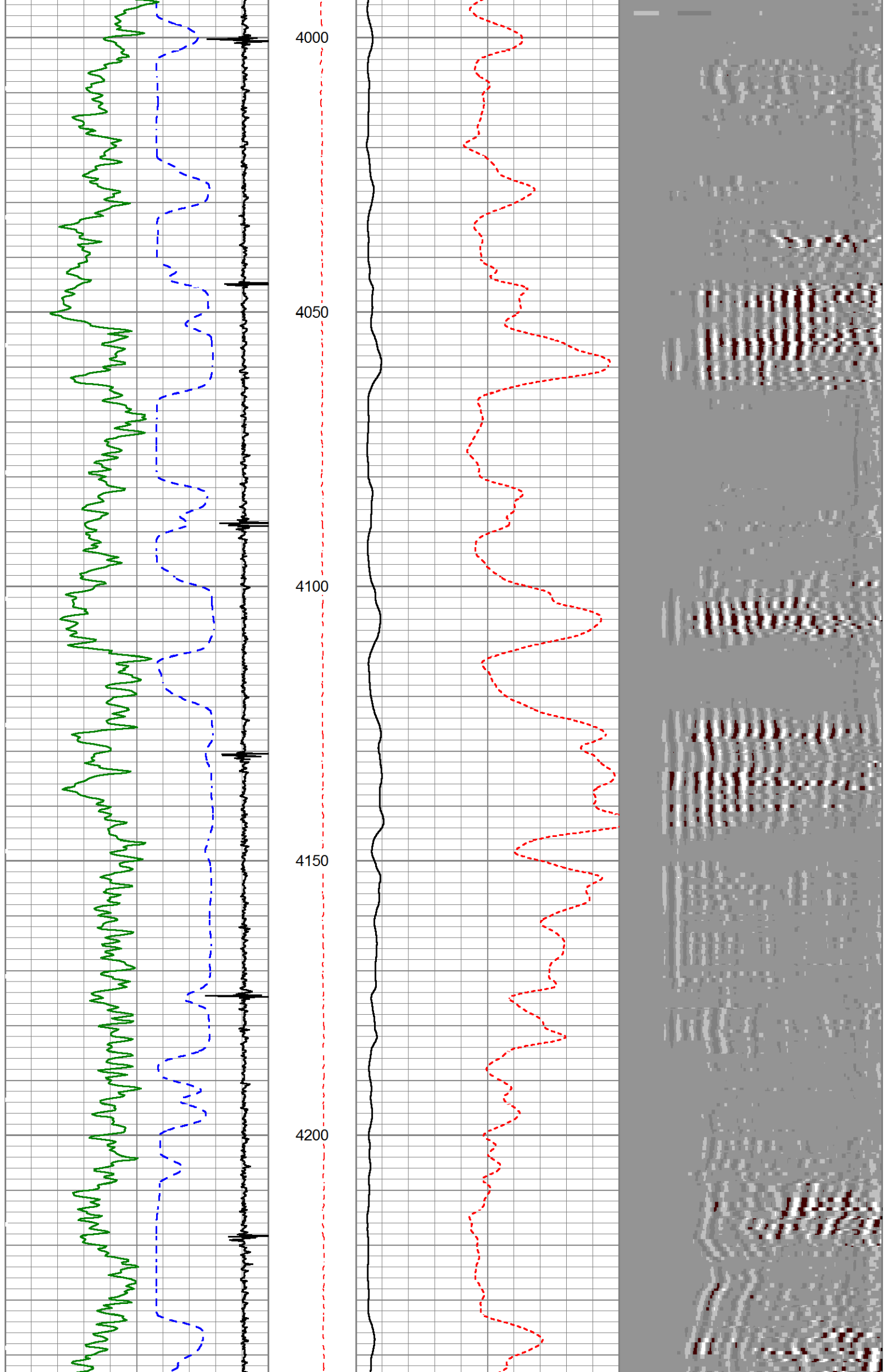


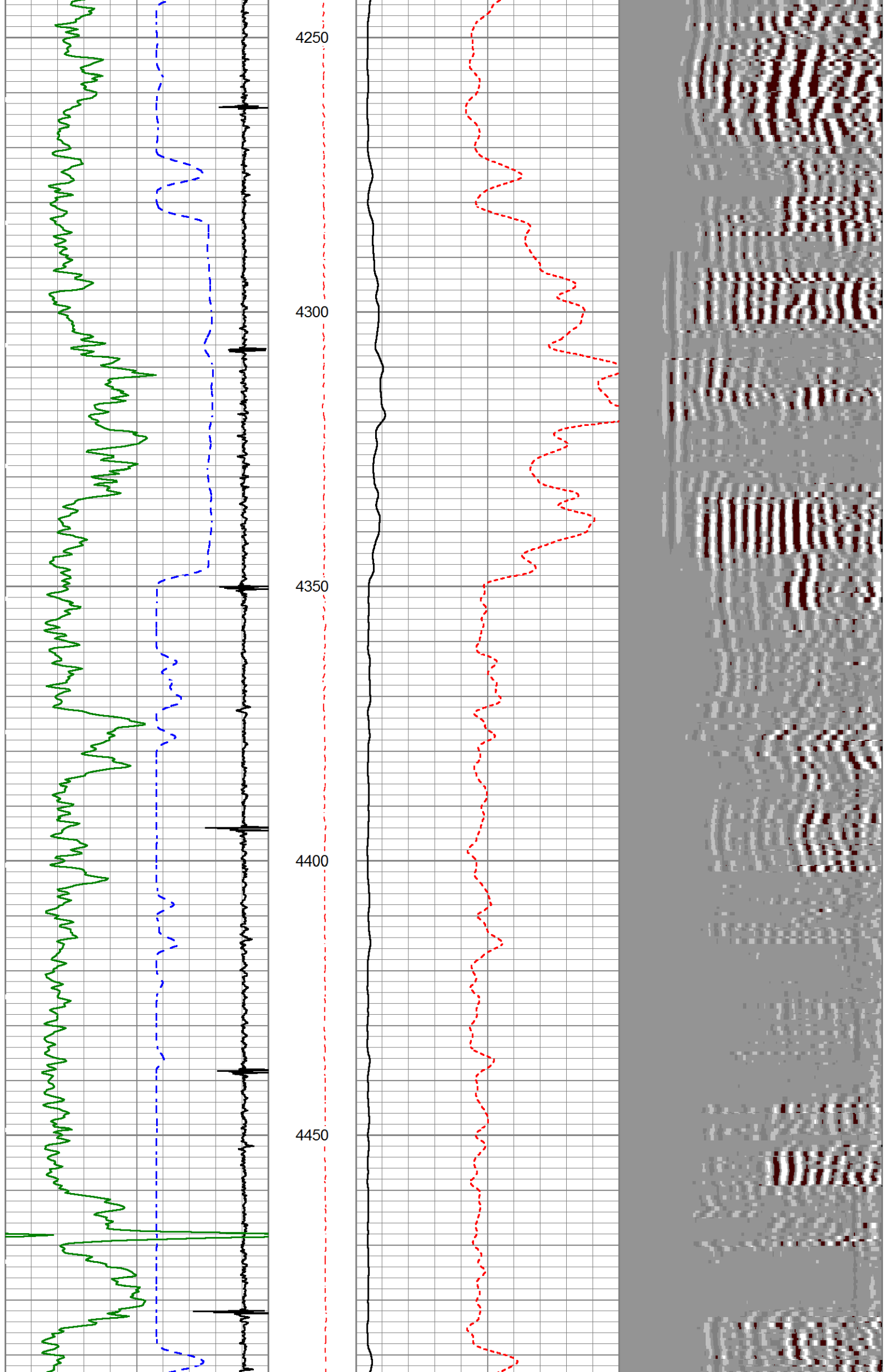


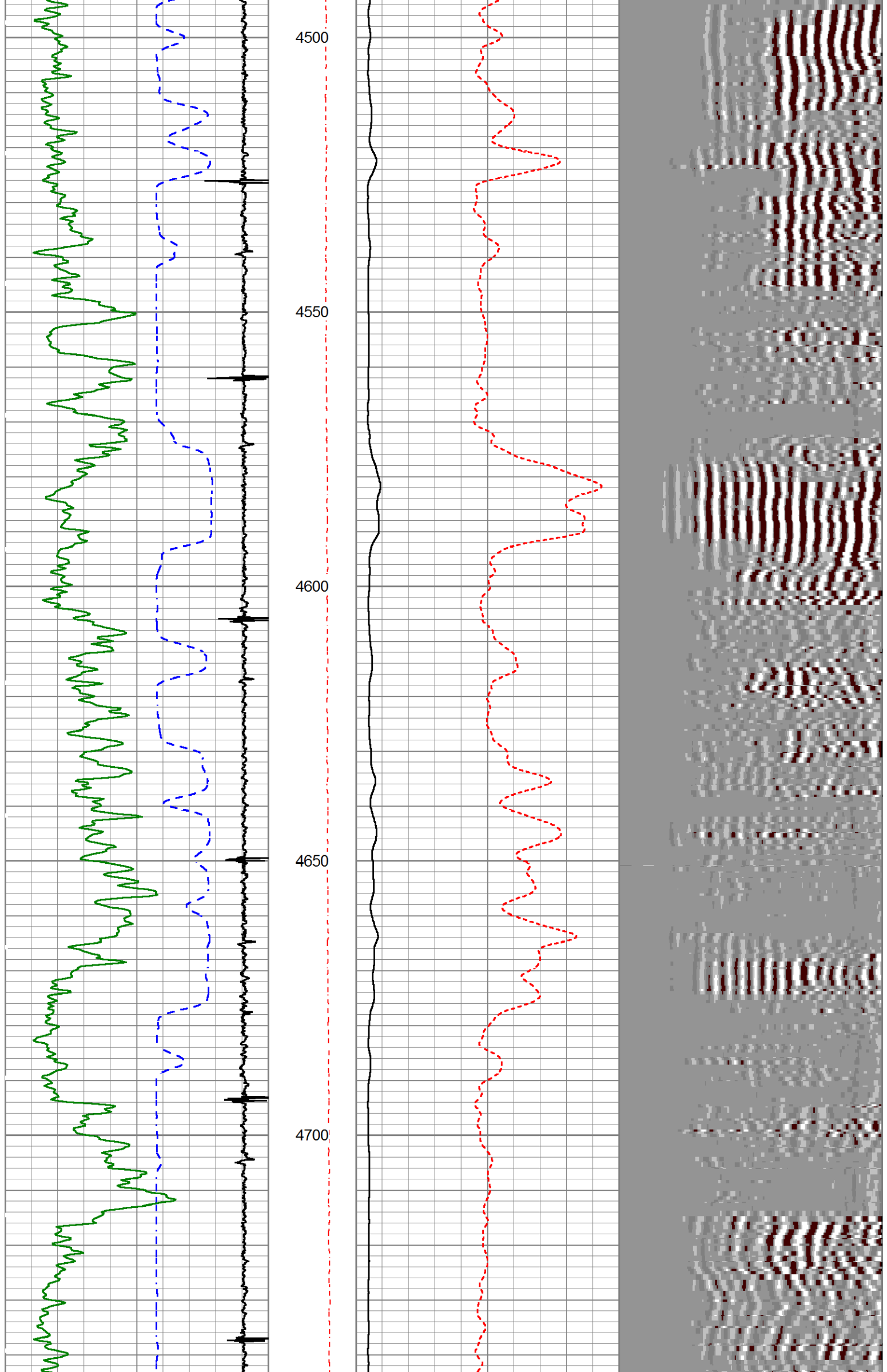


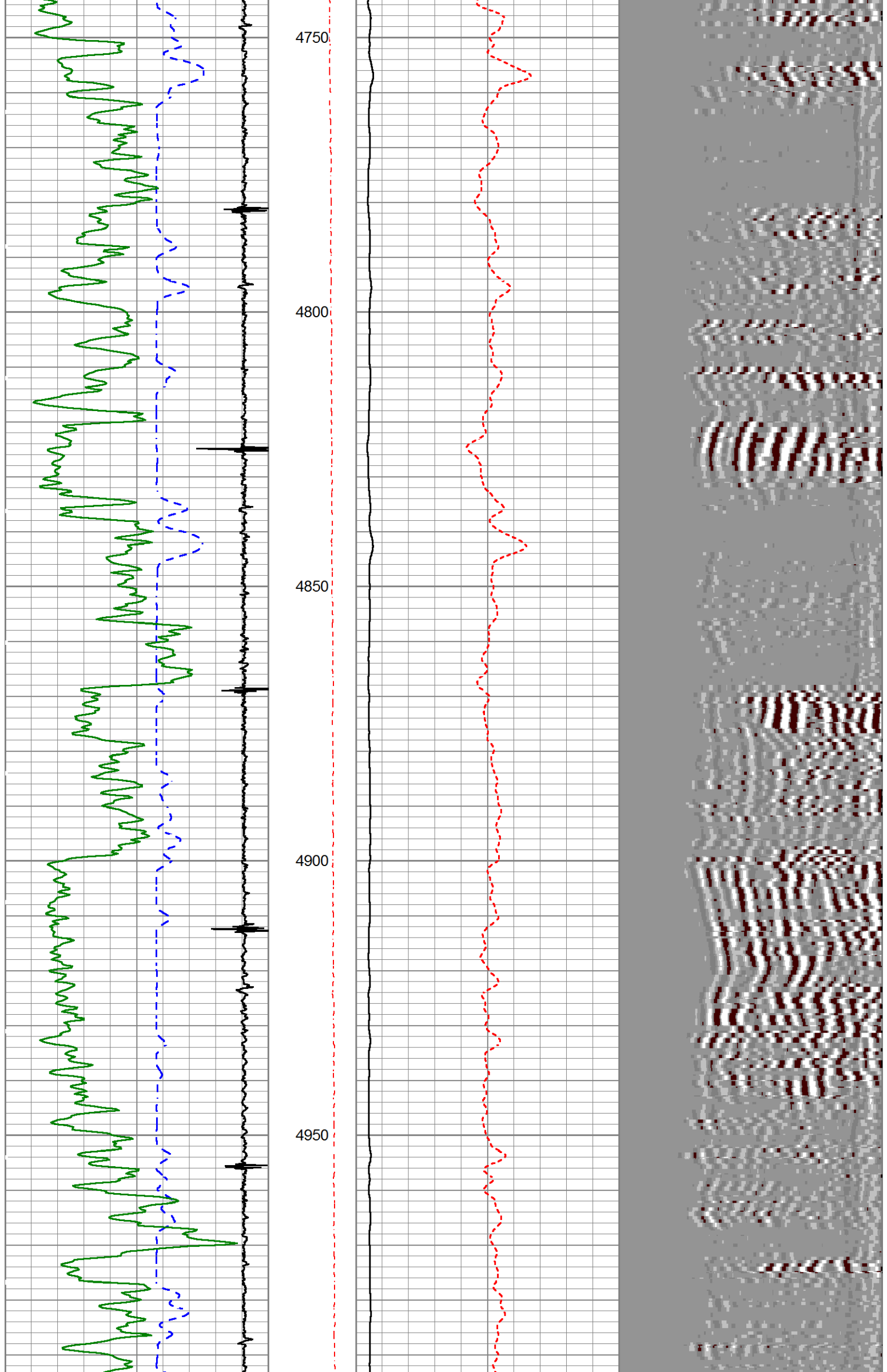


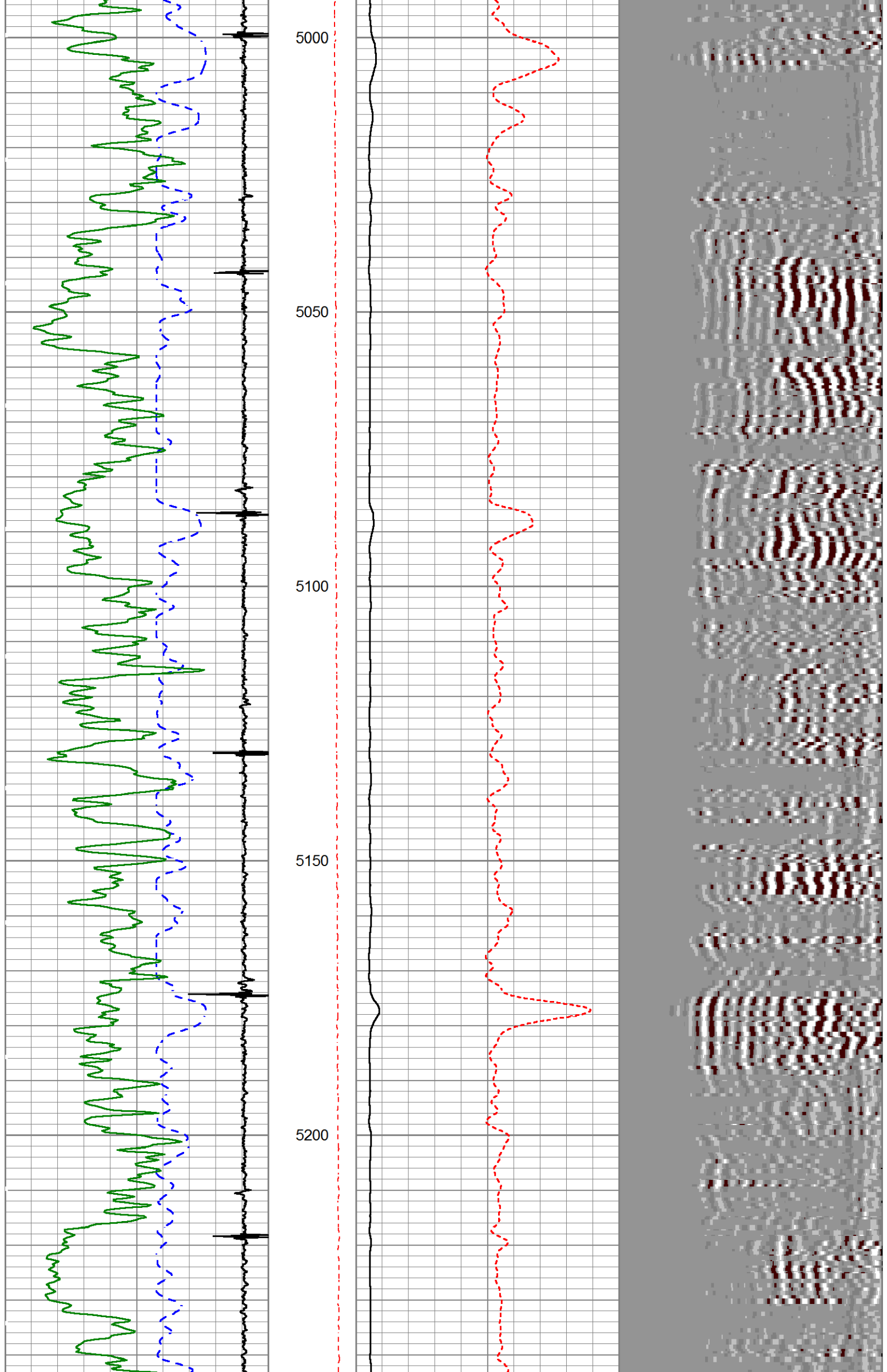


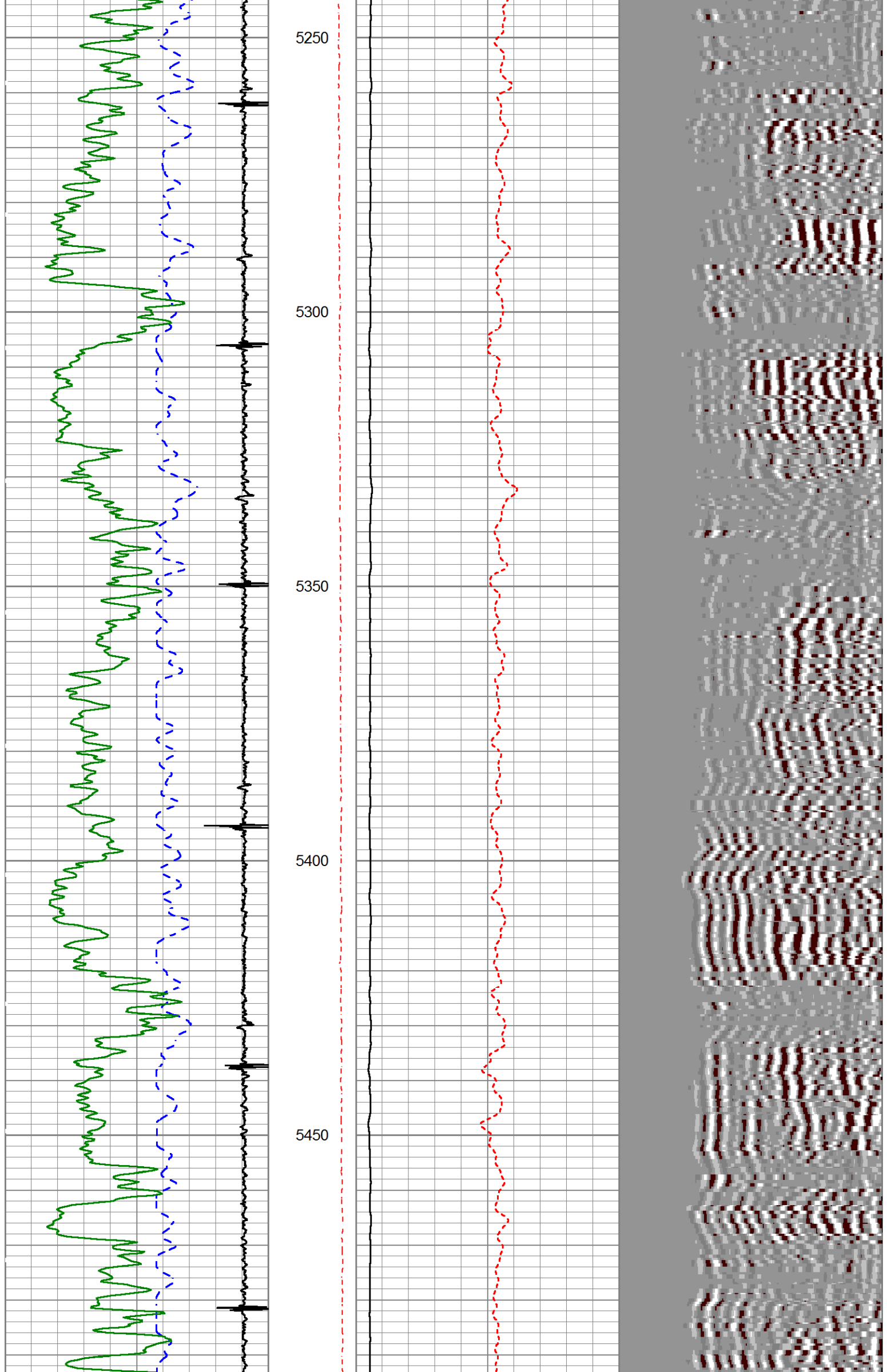


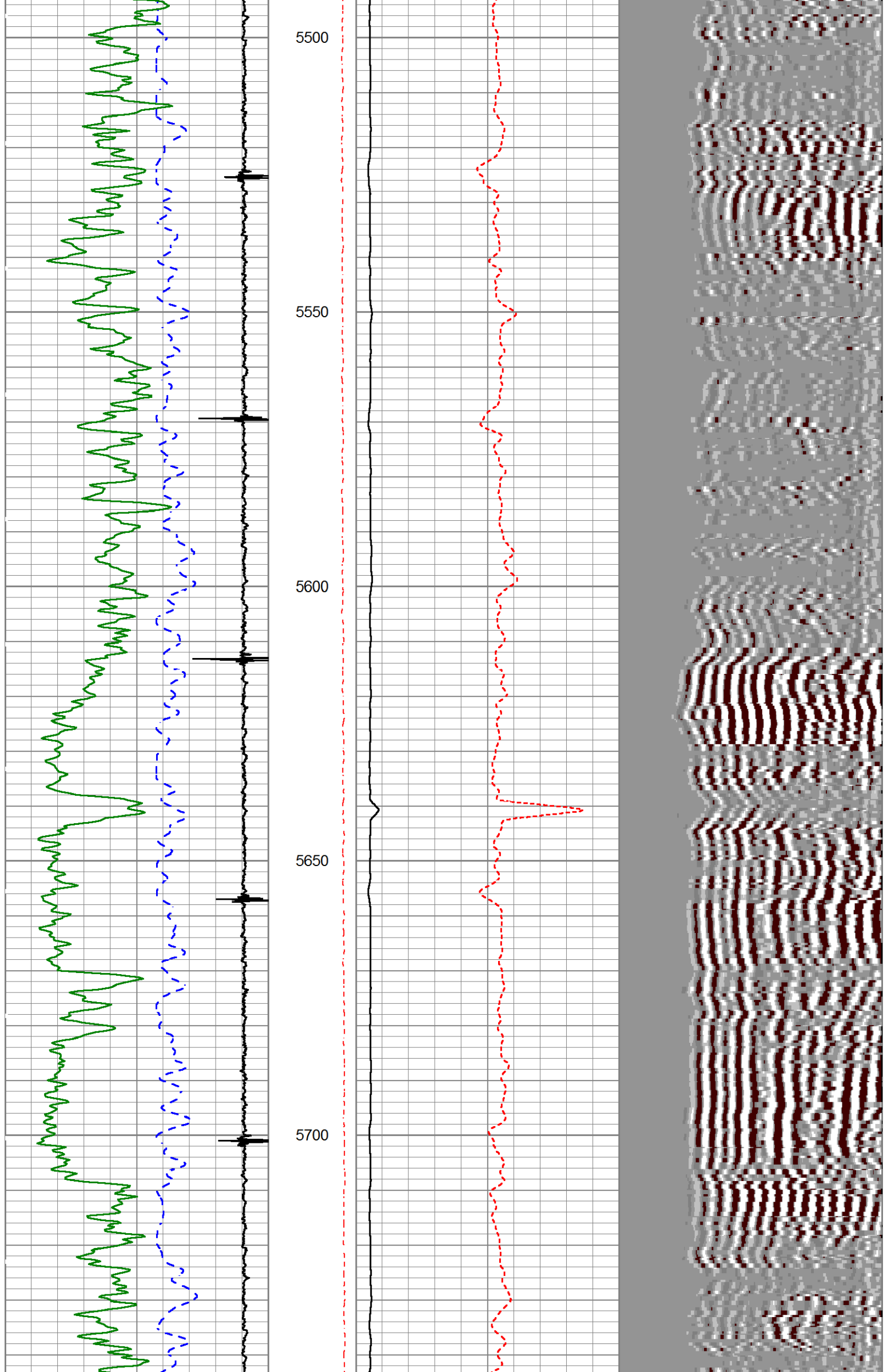


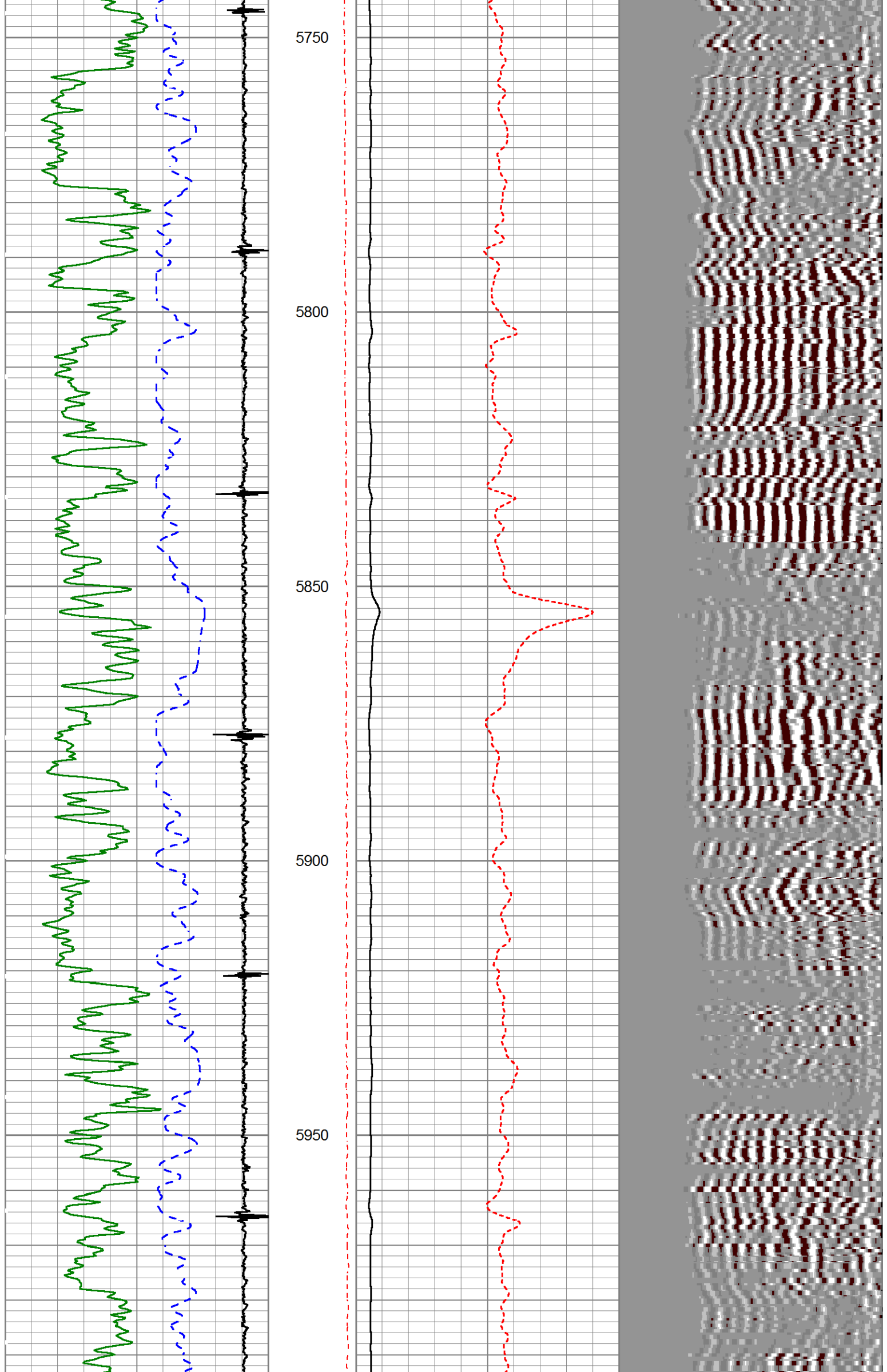


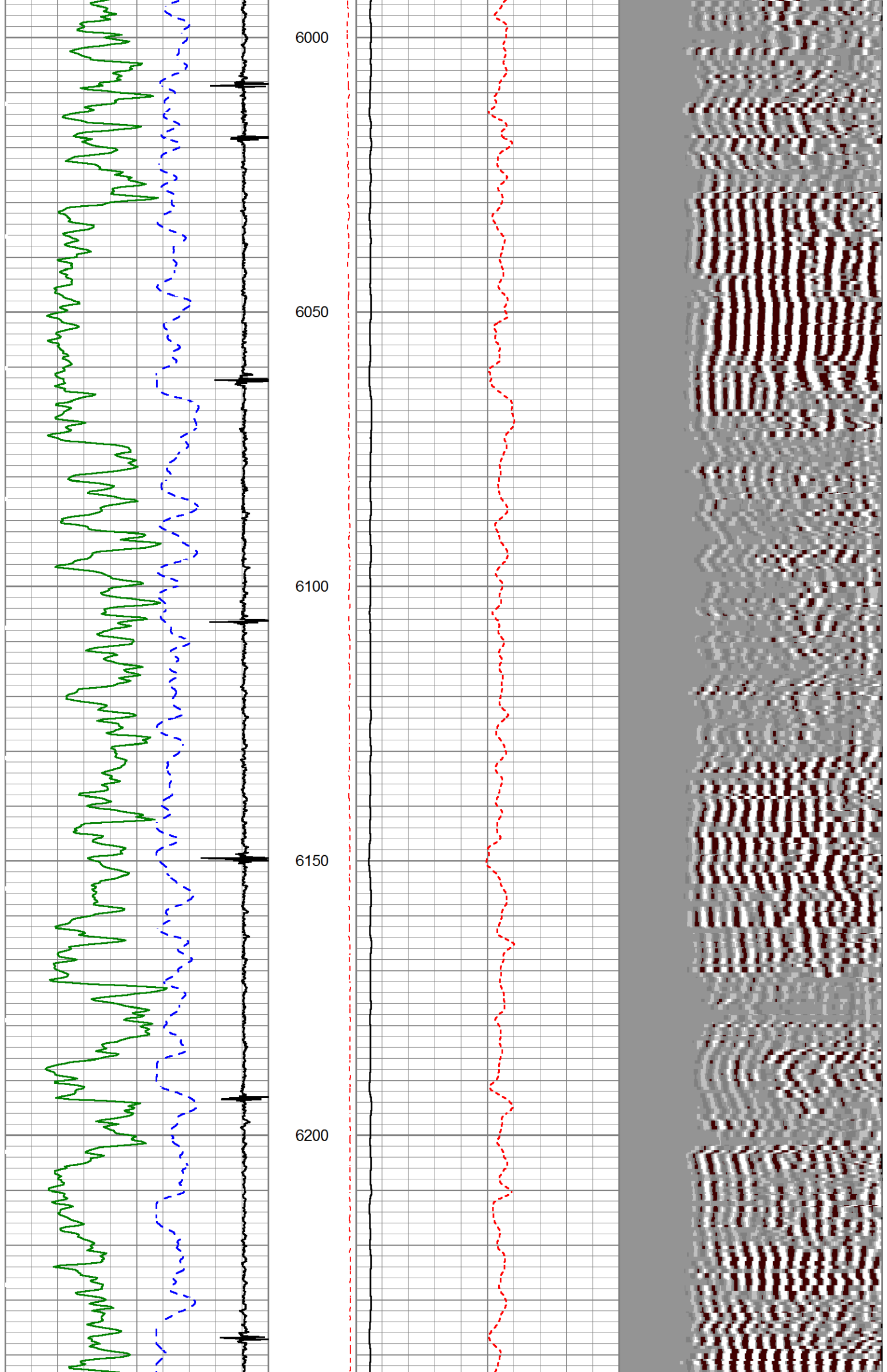


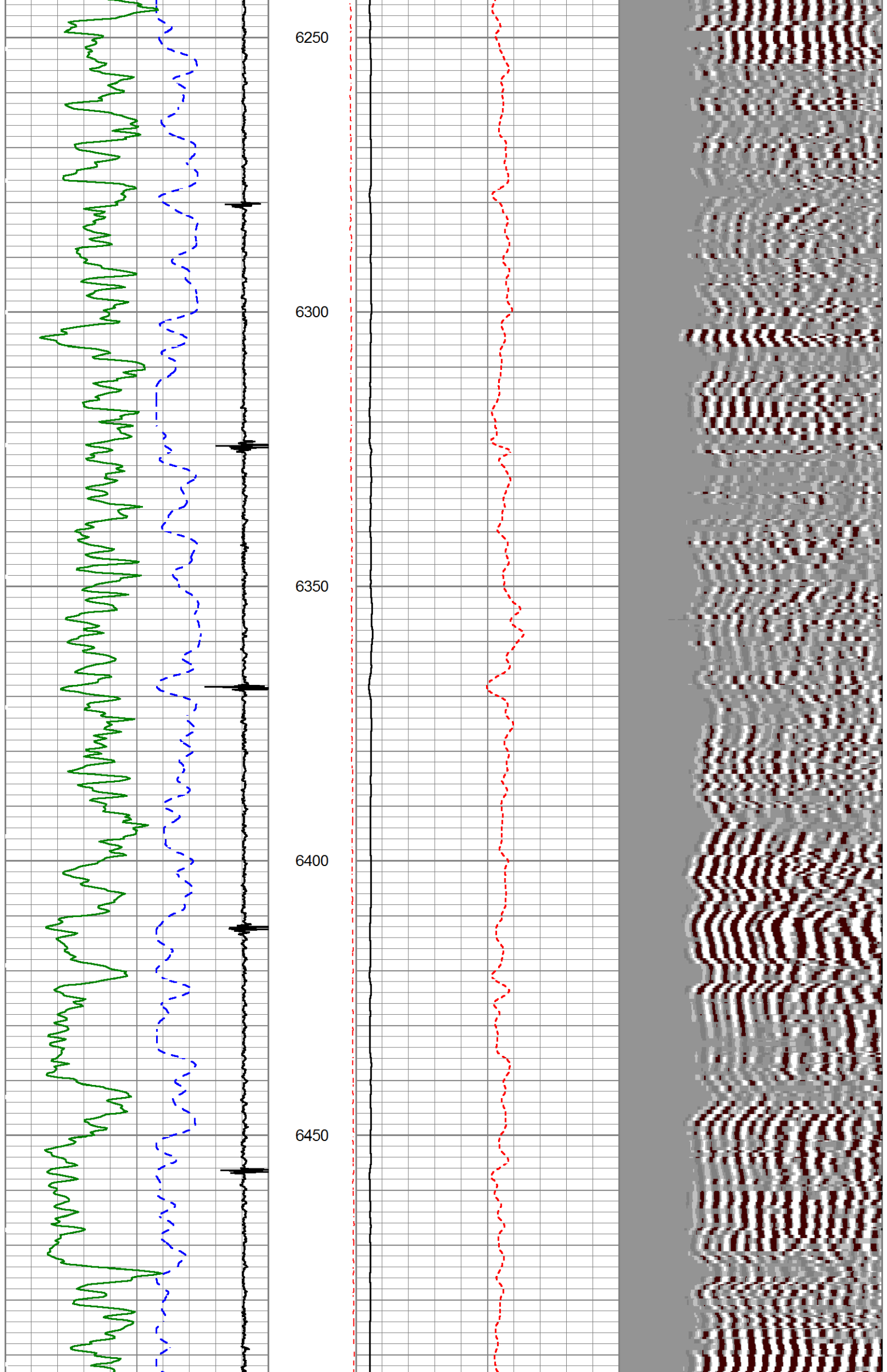


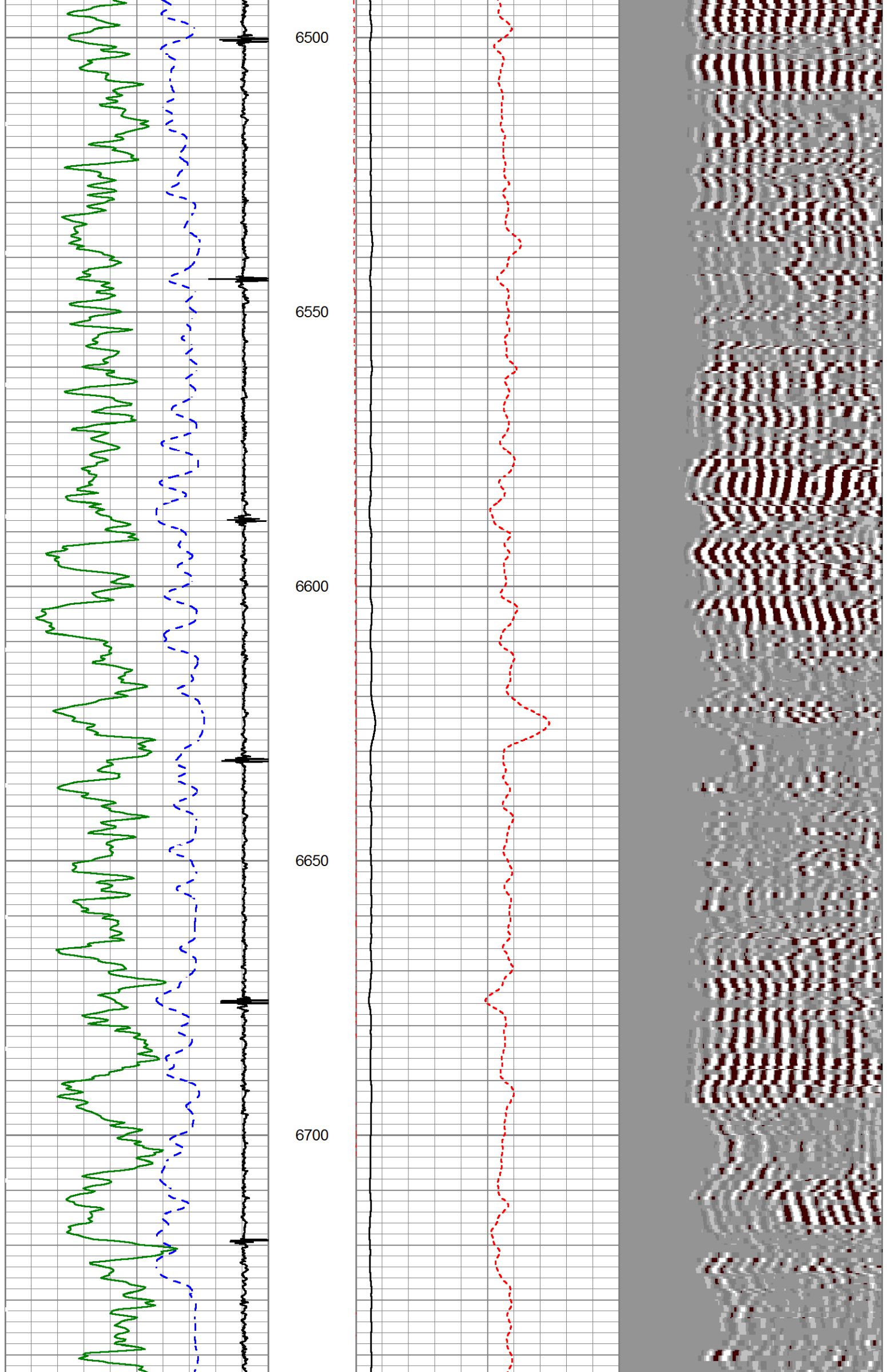


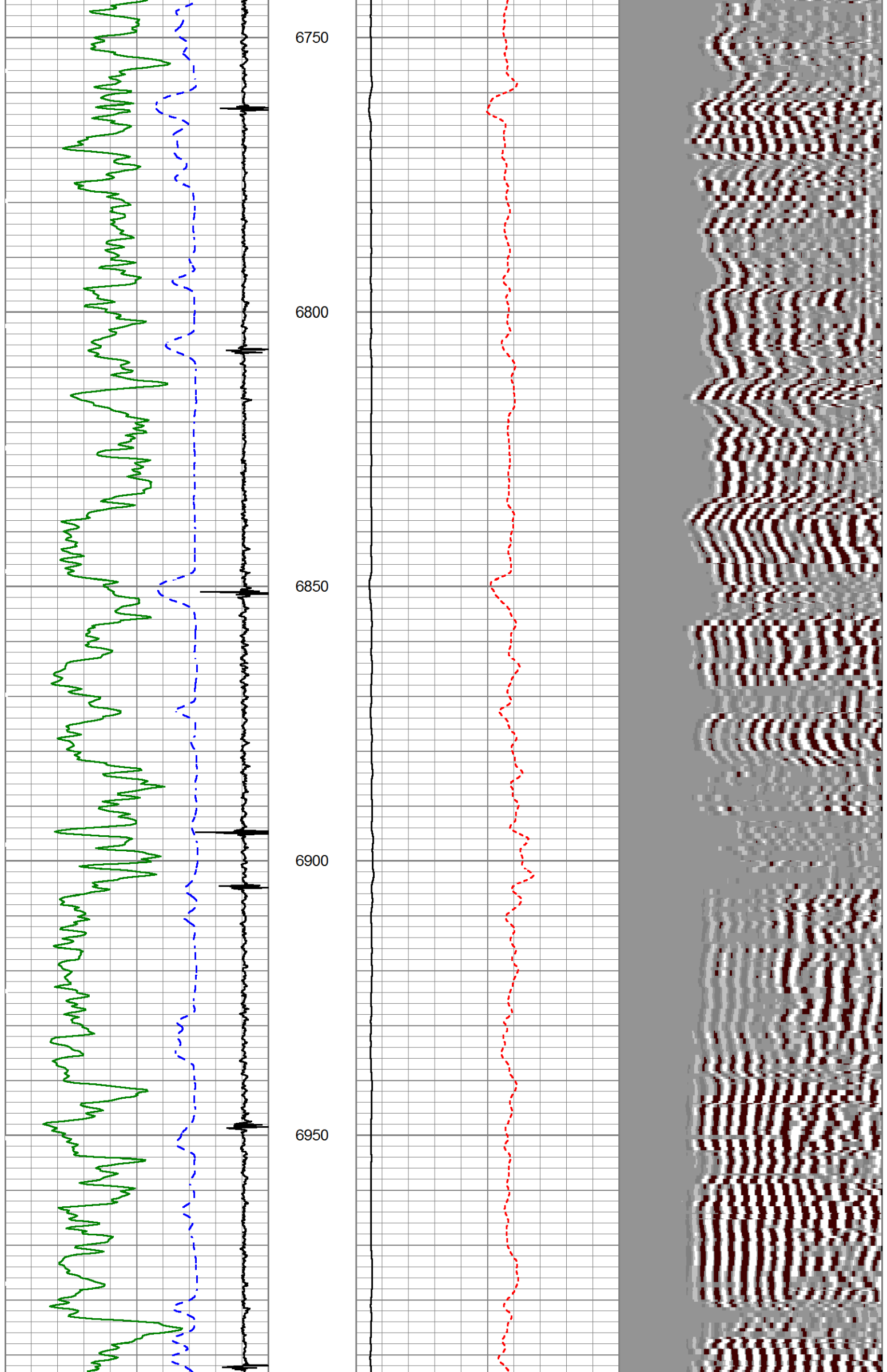


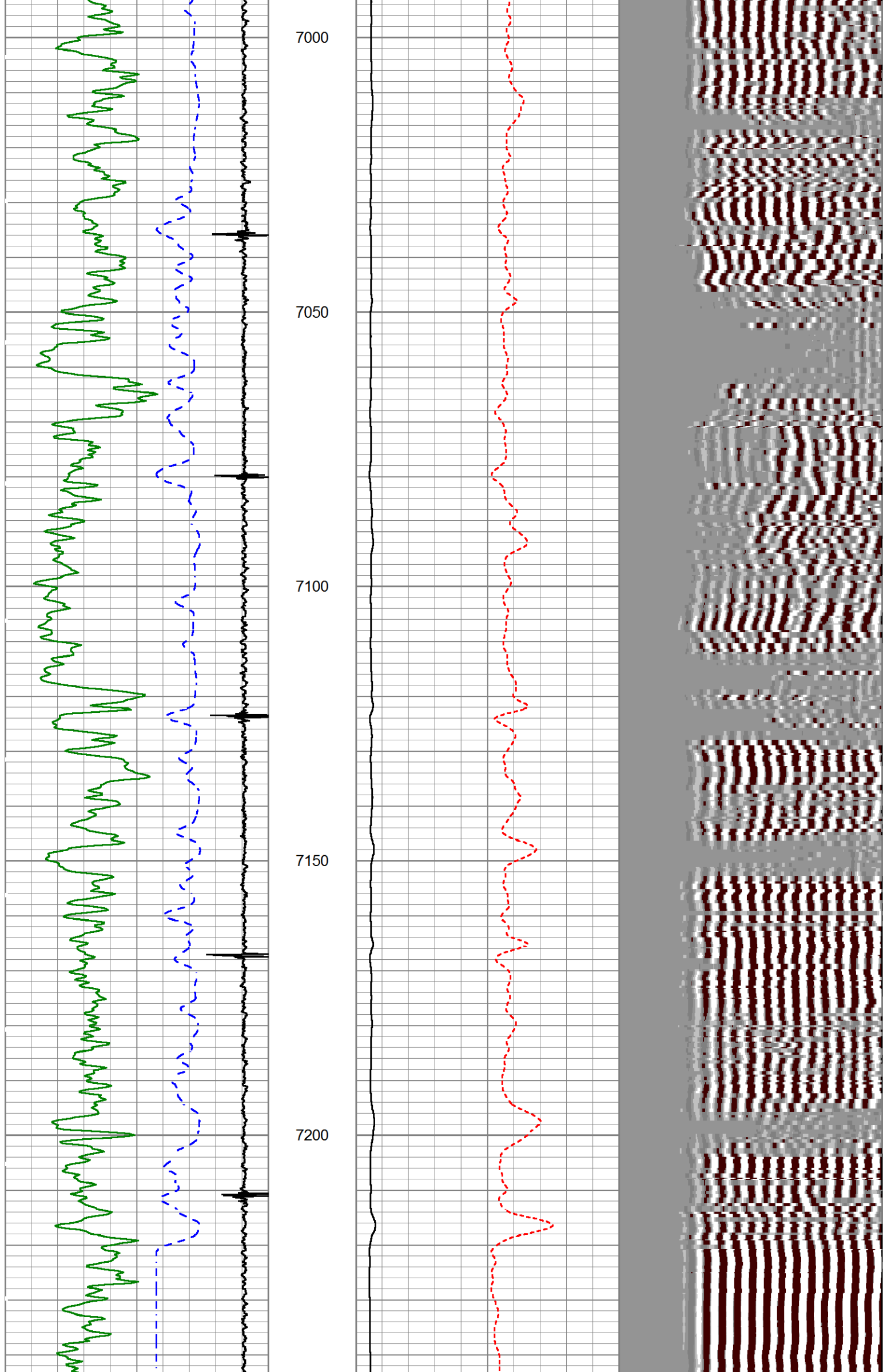


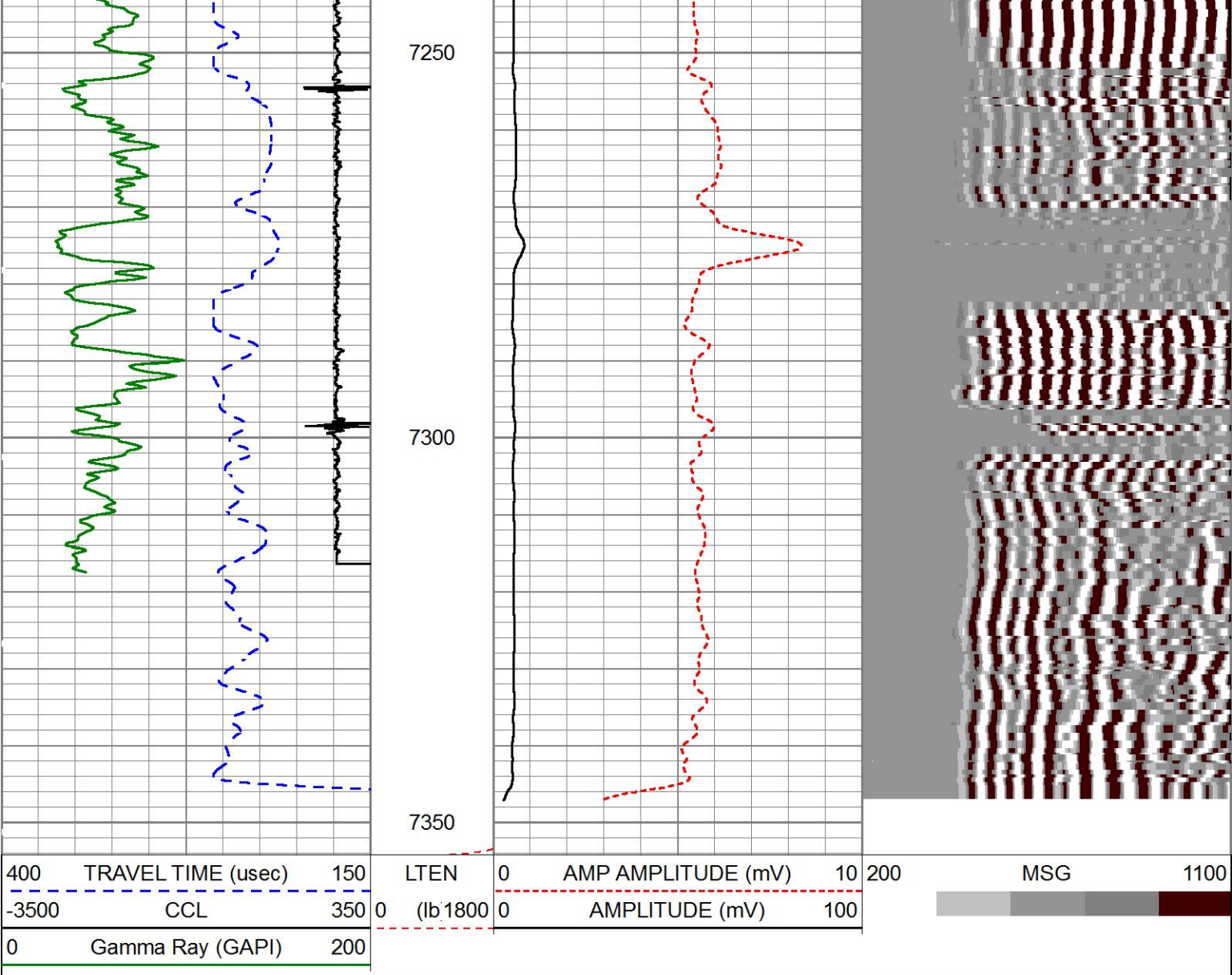












MAIN LOG SECTION

HALLIBURTON

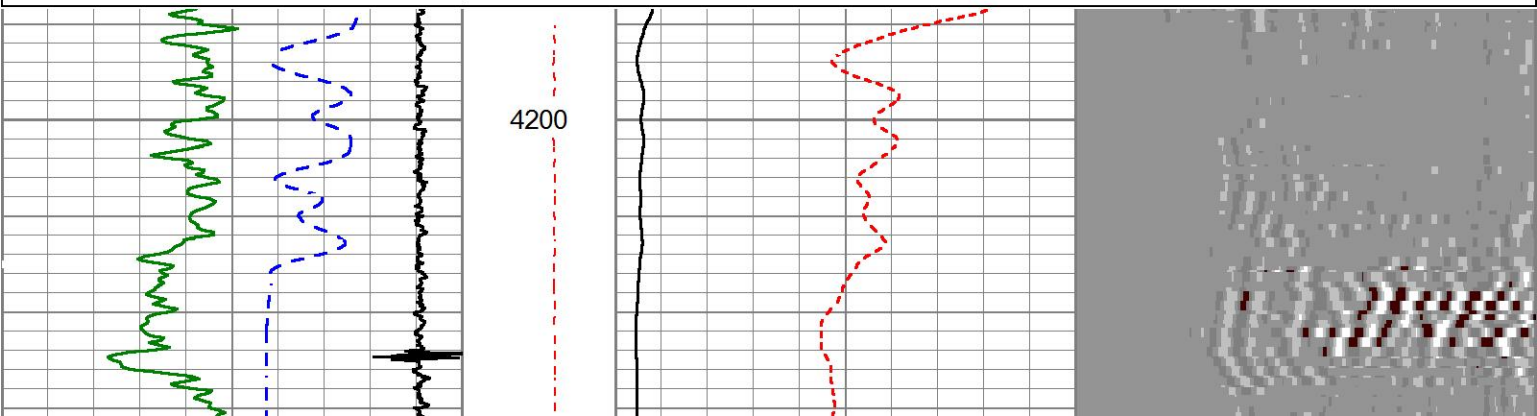
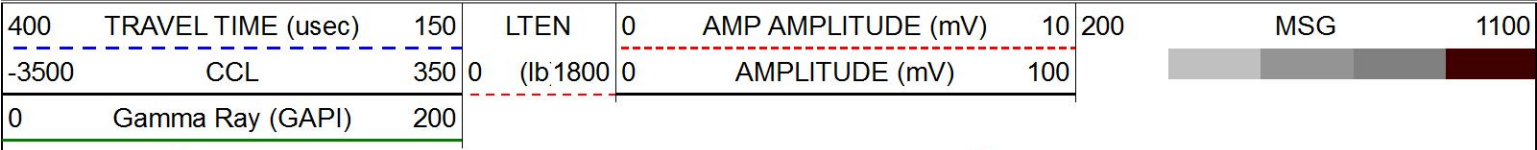
5" = 100'

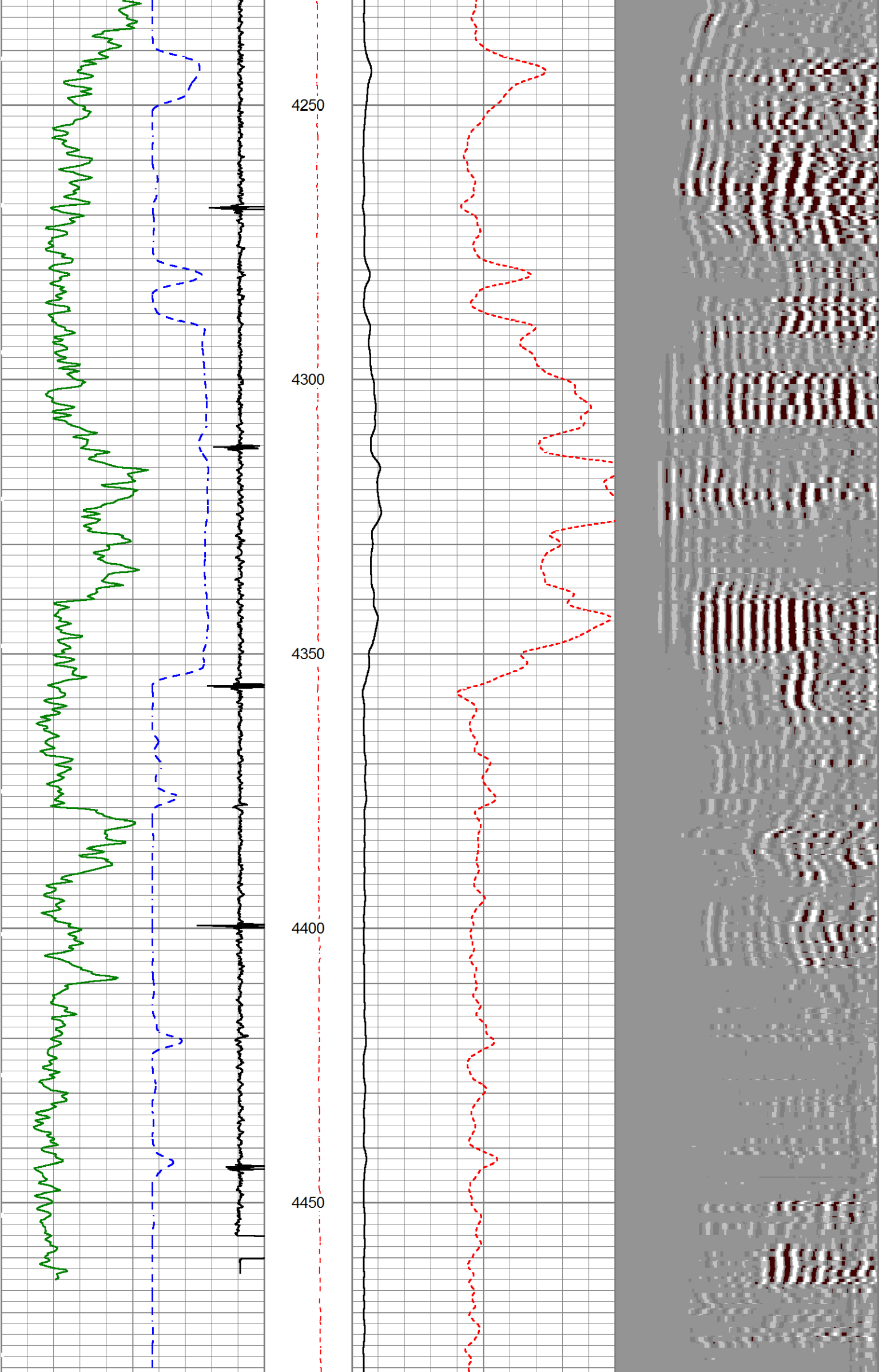
REPEAT LOG SECTION

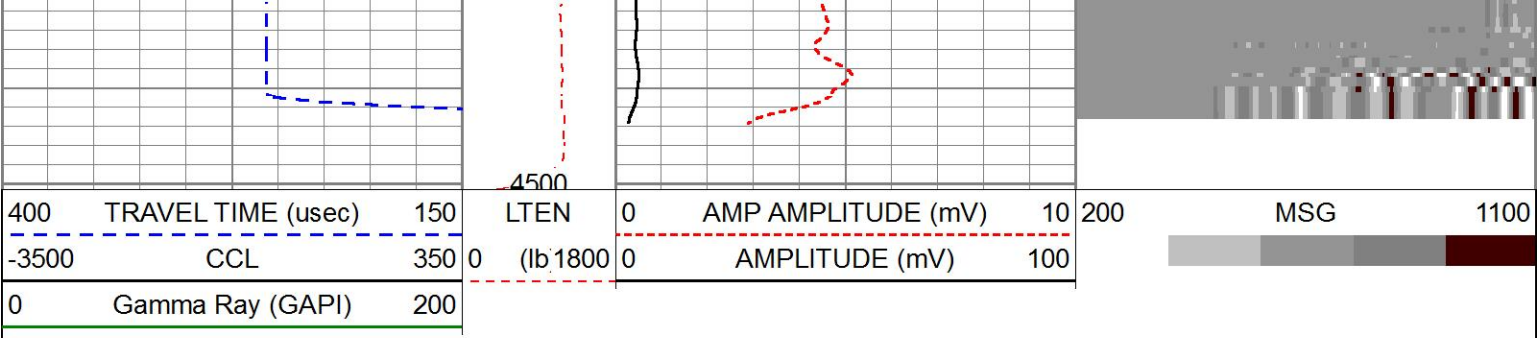
HALLIBURTON

5" = 100'

Database File yater_11d.db
Dataset Pathname REPEAT
Presentation Format cbl_main
Dataset Creation Sun Aug 30 17:29:23 2015
Charted by Depth in Feet scaled 1:240







REPEAT LOG SECTION

HALLIBURTON

5" = 100'

Log Variables

DatabaseD:\Warrior_data\yater_11d.db
Dataset field/well/run1/MAIN/_vars_

Top - Bottom

GAINCO	RINOR	RTF	RTN	RNOR	PPT u sec	MAXAMPL mV	MINAMPL mV
0	0	0	0	0	0	82	2
MINATTN db/ft	MSGGN	USERFTT u sec/ft	ZREF MRayl	BHTEMP_Src	BHSAL2	BHSAL1	POROS2
0.8	1	0	1.7	ITEMPX	0	1	0
POROS1	CASEWGHT lb/ft	LTH	UHSGC	RHO CF	SO in	BORSAL kppm	CASED?
1	11.6	Sandstone	NONE	0.25	0	150	Yes
SRFTEMP degF	MudWgt lb/gal	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BITSIZE in
0	8.33	0.25	4.5	0	7271	210	7.875

Calibration Report

Database File yater_11d.db
Dataset Pathname REPEAT
Dataset Creation Sun Aug 30 17:29:23 2015

Segmented Cement Bond Log Calibration Report

Serial Number: 11002212
Tool Model: 004






Calibration Casing Diameter: 4.500 in
Calibration Depth: 129.148 ft

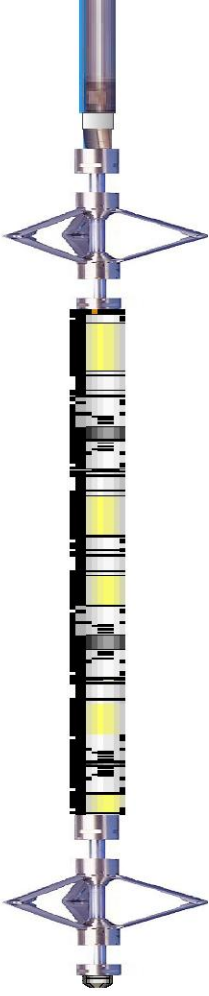
Master Calibration, performed Sun Aug 30 10:39:32 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.008	0.788	2.000	81.196	99.384	2.842
5FT	-0.000	1.192	2.000	81.196	66.436	2.004
S1	-0.009	0.382	2.000	100.000	251.155	4.146
S2	-0.011	0.837	2.000	100.000	115.575	3.270
S3	-0.009	0.813	2.000	100.000	119.289	3.019
S4	-0.010	0.804	2.000	100.000	120.455	3.176
S5	-0.009	0.825	2.000	100.000	117.478	3.040
S6	-0.009	0.849	2.000	100.000	114.123	3.078
S7	-0.008	0.875	2.000	100.000	110.946	2.940
S8	-0.009	0.882	2.000	100.000	109.889	2.925

Reservoir Monitor Tool I Calibration Report					
Serial-Model:		12095949-A			
Shop Calibration Performed:		Tue Aug 25 14:40:09 2015			
Carbon/Oxygen Mode					
Stabilization					
Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	89.00	80.00	9.00	+/-15.00	V
ITCR2	3303	3250	53	+/-250	cps
Near Detector					
	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0259	5.42	<6.00
Fe	206	206 +/-2	0.0969	-----	-----
NGAIN = 0.994	NZOFF = 0.7				
Far Detector					
	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0354	5.76	<6.50
Fe	209	208 +/-2	0.0914	-----	-----
FGAIN = 0.992	FZOFF = 0.5				
Flask Temperature	66.3 degF				
Result	Logged	Expected Value	Diff.	Tol.	Units
COIR2	0.45	0.45	-0.00	+/-0.02	
LIRI2	1.36	1.36	0.00	+/-0.05	
TCCR2	5298	5000	298	+/-1000	cps
ITCR2	3236	3200	36	+/-250	cps
Sigma Mode					
Stabilization					
Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	88.00	80.00	8.00	+/-15.00	V
FCAP	10073	10000	73	+/-500	cps
Horizontal Water Tank					
Result	Logged	Expected Value	Diff.	Tol.	Units
N/F Normalizer	0.90	0.95	-0.05		
N/F Inel Norm	0.58	0.61	-0.03		
RNF	1.11	1.07	0.04	+/-0.12	
RINC	1.73	1.64	0.09	+/-0.18	
SGFN	24.12	24.00	0.12	+/-0.50	cu
SGFF	22.92	22.85	0.07	+/-0.50	cu
FSIN	24271	24000	271	+/-2000	cps
FCAP	10228	10000	228	+/-1000	cps
NFTR	0.85			<5.00	
FFTR	0.82			<5.00	
NBKG	219			<500	cps
FBKG	108			<500	cps
RTN	0.40	0.40	-0.00	+/-0.10	usec
RTF	0.42	0.40	0.02	+/-0.10	usec
Calibration Software Modules					
HRMTI Module	2015.5.4.0				
DATA Module	2015.5.15.4				

RMTI Module		2015.5.15.1		Log Data Acquisition Software Modules	
HRMTI Module		2013.11.14.0			
RMTI Module		2014.8.28.1			
Gamma Ray Calibration Report					
Type / Serial:		002 / 11495480			
SHOP CALIBRATION		Thu Aug 27 12:29:28 2015			
	Counts/Sec.	Gain	Offset	Jig	Units
Background	38.0				cps
Calibrator	333.5				cps
		1.3806			GAPI/cps
PRIMARY VERIFICATION					
Background	51.9				cps
Calibrator	471.0				cps
Difference				419.0	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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	37.55		STNDCH-STND_CH	1.08	1.44	1.00
			1.4375 IN CABLE HEAD			
GR	35.29		TTTCU-002 (11495480)	7.65	1.69	100.00
			Through Tubing Telemetry Cartridge - Ultrawire			
			XHU-003 (11983708)	1.58	1.69	7.00
			Crossover Halliburton 1553 to Ultrawire			
RmtTFGT	24.64		RMTI-A (12095949)	14.00	2.13	77.00
RmtTNGT	24.14					
			Halliburton RMTI Tool			

RmtFP5V	16.39		X-OVER-SondexxGo Sondex Box x Go Pin Cross Over	0.31	1.69	1.00
RmtCommFWa	16.39		AUH-001 (11072111) Adaptor Ultrawire/Halliburton	0.38	1.69	3.00
			PRC-022 (01) Production Roller Centralizer 6 Arm	3.00	2.75	35.00
CBLTEMP	8.35		RBT-004 (11002212) Radial Bond Tool (UW 3 1/8)	9.48	3.13	140.00
LLMTEN	0.00		PRC #2 -022 (02) Production Roller Centralizer 6 Arm	3.00	2.75	35.00
			BUL-006 (000002) Bullnose Terminator	0.22	1.69	1.20
Dataset: yater_11d.db: field/well/run1/MAIN Total length: 40.70 ft Total weight: 400.20 lb O.D.: 3.13 in						

Company	URSA OPERATING CO., LLC.				
Well	YATER 11D-17-07-95				
Field	PARACHUTE				
County	GARFIELD		State	CO	
HALLIBURTON	ACOUSTIC CEMENT BOND LOG				