

Company URSA OPERATING CO., LLC.  
 Well WATSON RANCH B 33C-17-07-95  
 Field PARACHUTE  
 County GARFIELD State CO

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 Field PARACHUTE  
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API No.: 05-045-22802-0000 Serv. #: 902452078  
 Location: SURFACE HOLE LOCATION:  
 1069' FSL & 1890' FWL  
 BOTTOM HOLE LOCATION:  
 1828' FSL & 1996' FEL

Sec: 17 Twp: 07S Rge: 95W  
 GROUND LEVEL Elevation 5585'  
 KB, 17 Ft. above perm. datum  
 KB  
 Elevation  
 K.B. 5602'  
 D.F. 5601'  
 G.L. 5585'

Other Services  
 GAUGE RING  
 RMT

Permanent Datum	GROUND LEVEL		Elevation	5585'	WATER		
Log Measured From	KB		17 Ft. above perm. datum		K.B. 5602'		
Drilling Measured From	KB				D.F. 5601'		
	KB				G.L. 5585'		
Date @ Time Logged	04 JUNE 2015		Type Fluid in Hole	WATER			
Run No.	ONE		Density of Fluid	8.4#			
Depth - Driller	7108'		Fluid Level	FULL			
Depth - Logger	6900'		Cement Top Est. Logged	SEE LOG			
Bottom - Logged Interval	6900'		Equipment / Location	10971668 / G.J.			
Top - Log Interval	1500'		Recorded by	D. SOLIS			
Max. Recorded Temp.	214 DEG F		Witnessed by	R. TOLLE			
CEMENTING DATA	Surface	String	Protection	Production	Liner		
Date / Time Cemented	N/A		String	N/A		N/A	
Primary / Squeeze	N/A		String	N/A		N/A	
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
ONE	12.25"	SURFACE	1789'	8.625"	32.0#	SURFACE	1789'
TWO	7.875"	1789'	7108'	4.5"	11.6#	SURFACE	7108'

<<< Fold Here >>>

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

**Comments**

HES CBL LOG DATED: 04 JUNE 2015 IS THE PRIMARY DEPTH REFERENCE FOR THIS WELL.

GR-RMT-CBL RAN IN COMBINATION.

LOG INTERVALS PER CUSTOMER REQUEST.

SHORT JOINTS @: 2988' - 2998', 5518' - 5528', AND 6412' - 6422'.

\*\*\*THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES.\*\*\*

Service Ticket No. 902452078      API No. 05-045-22800-0000      PGM Ver 14.11.12001

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

**EQUIPMENT DATA**

TELEMETRY		CEMENT BOND TOOL		RESERVOIR MONITOR TOOL	
Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	11224503	Serial No.	11002214	Serial No.	12095949
Model No.	TTTC-U-002	Model No.	RBT-004	Model No.	RMTI-A
Diameter	1.688"	Diameter	3.125"	Diameter	2.125"

**LOGGING DATA**

**General Data**

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

ONE	6900'	1500'	0	REC	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	370	170	0	100	200	1200
DIRECTIONAL INFORMATION								
Maximum Deviation	N/A	deg. @	N/A	KOP	N/A			

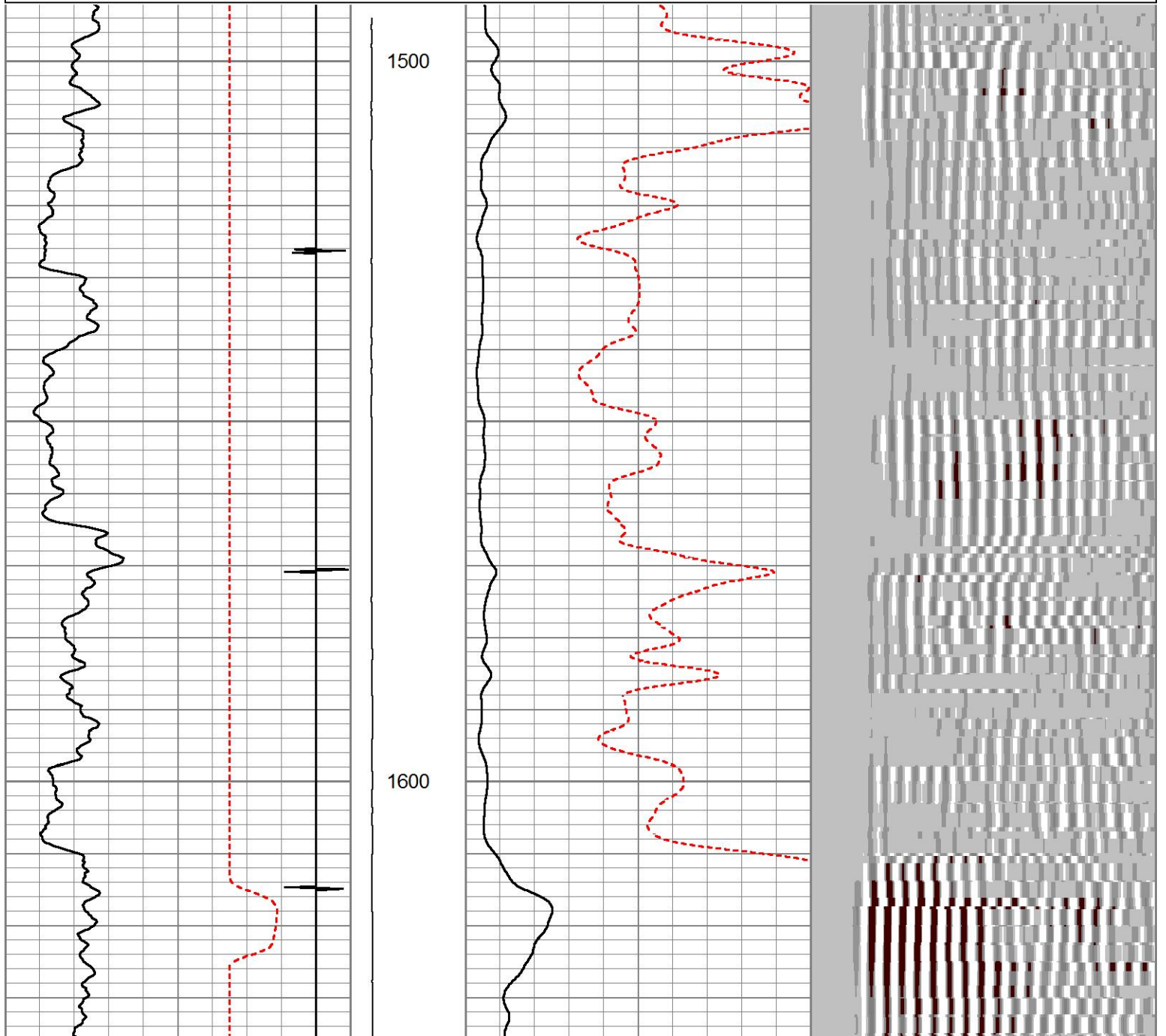
# MAIN LOG SECTION

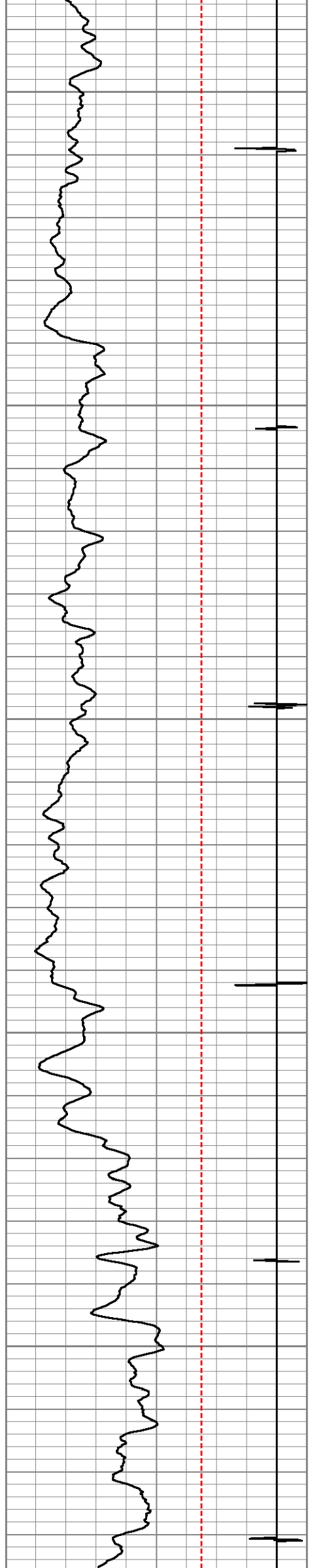
HALLIBURTON

5" = 100'

Database File      watson\_b\_33c\_combo.db  
 Dataset Pathname    MAIN1  
 Presentation Format   CBL\_RB~1  
 Dataset Creation    Thu Jun 04 13:55:08 2015  
 Charted by          Depth in Feet scaled 1:240

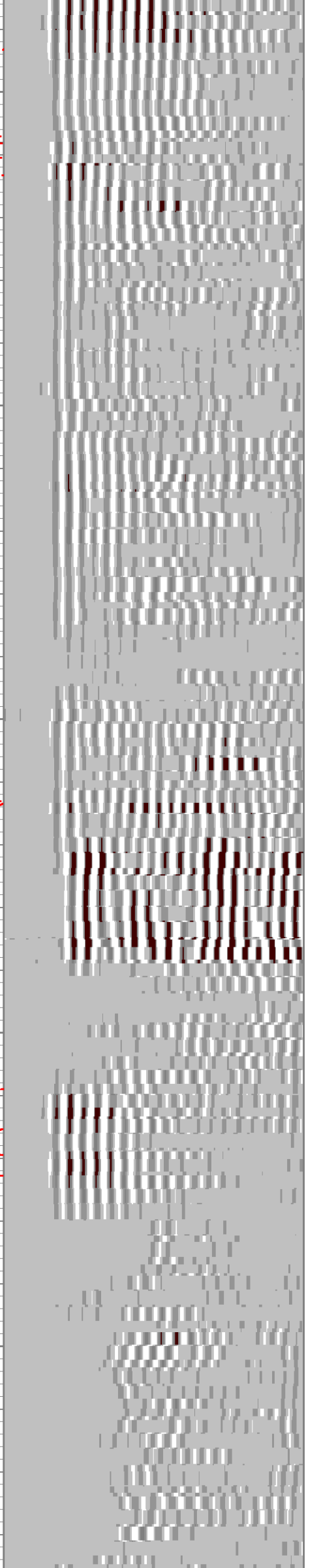
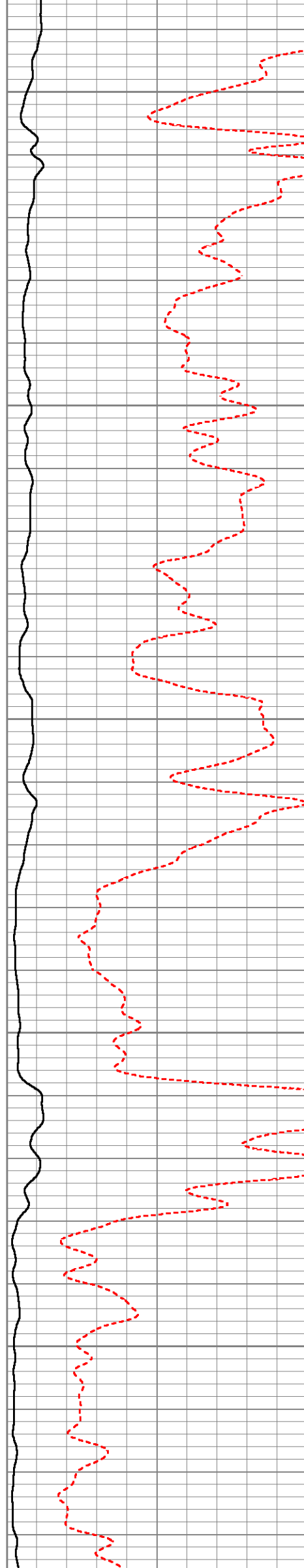
370	TRAVEL TIME (usec)	170	LTEN	0	AMP AMPLITUDE (mV)	10	200	MSG	1200
-5400	Collar Locator	600	0	(lb)3000	0	100			
0	Gamma Ray (GAPI)	200							

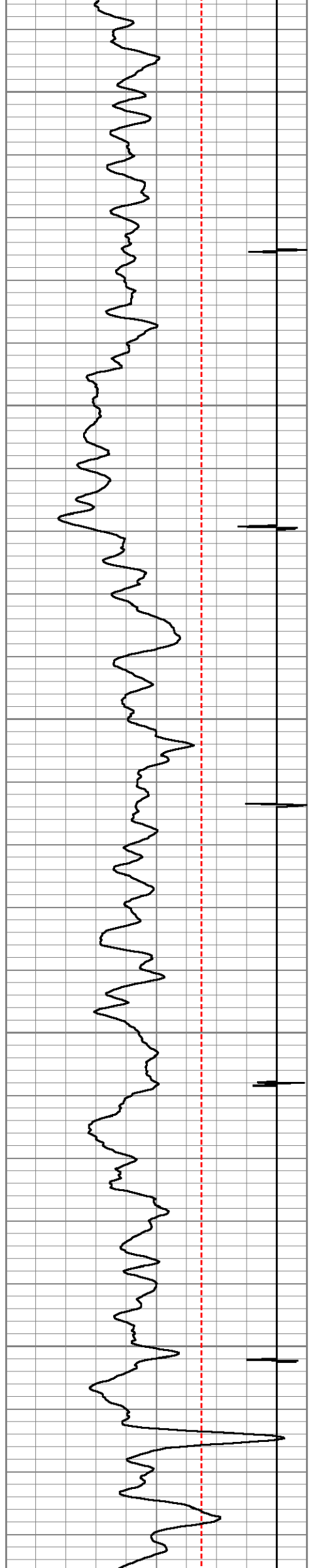




1700

1800

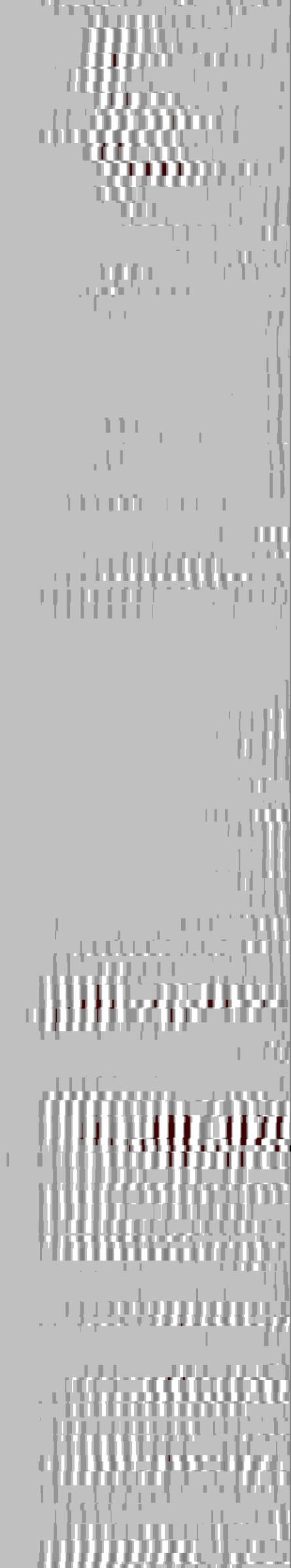
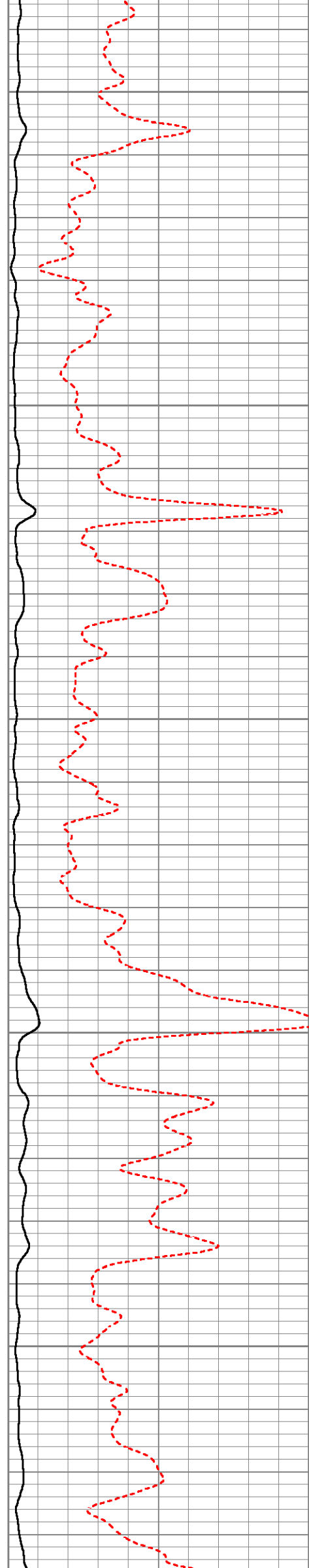


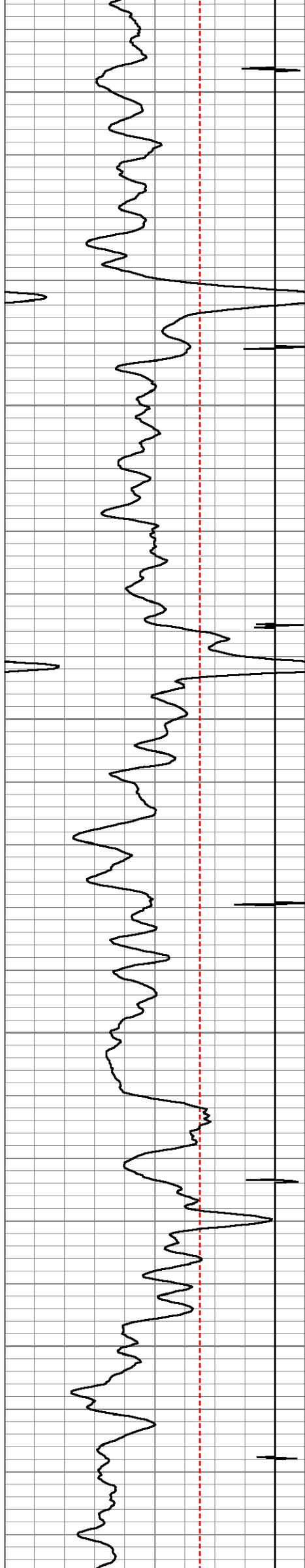


1900

2000

2100

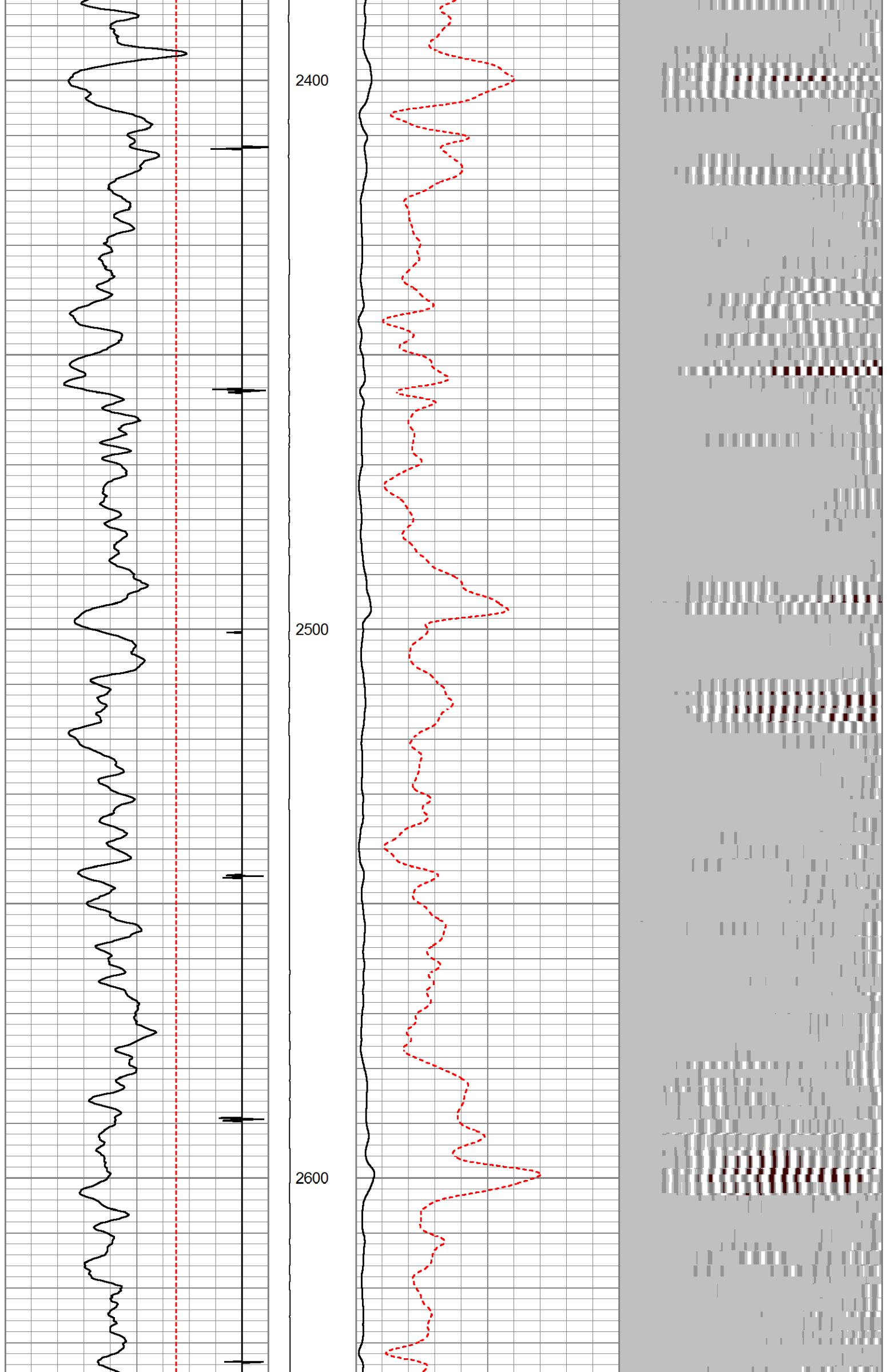


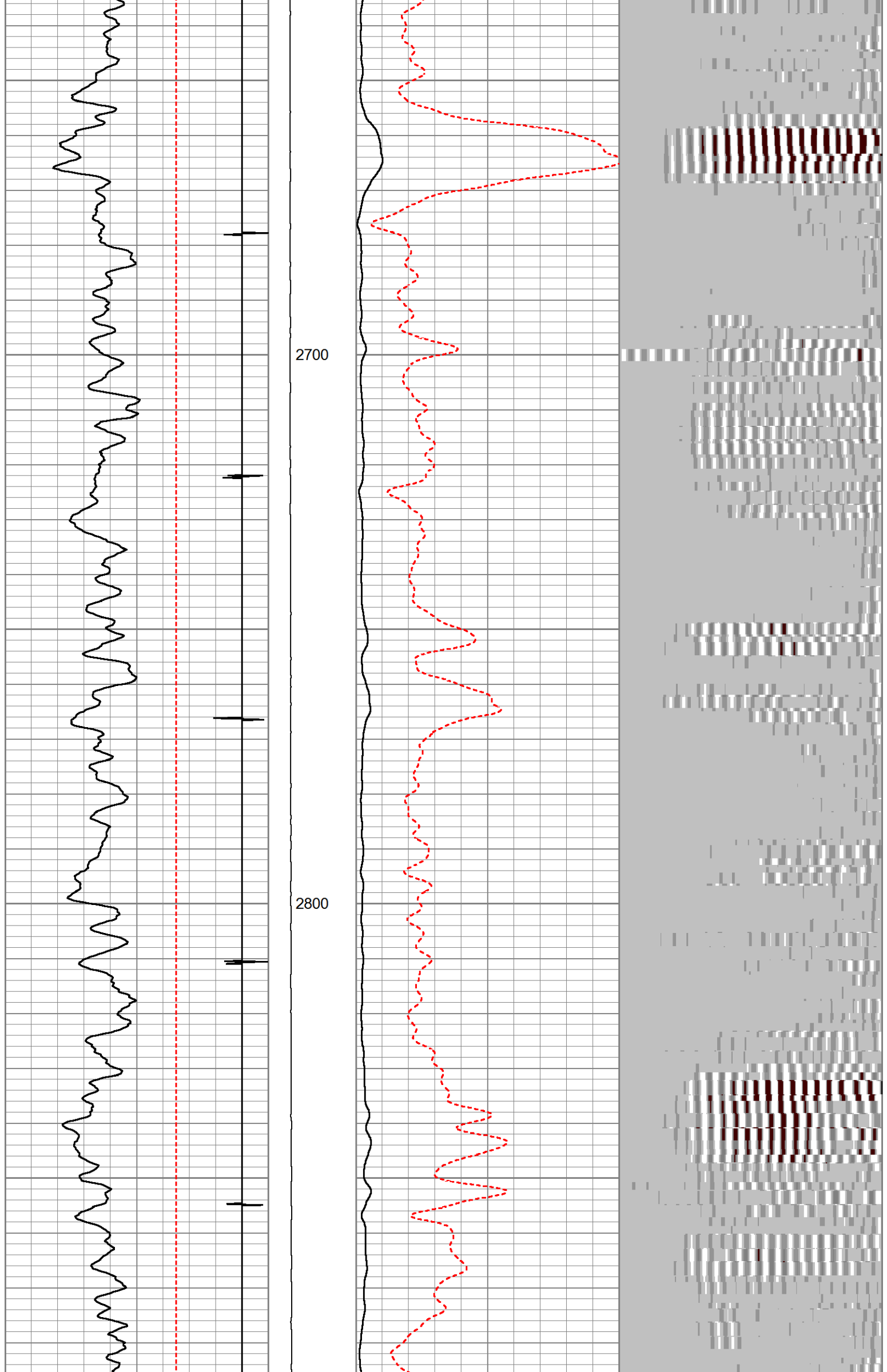


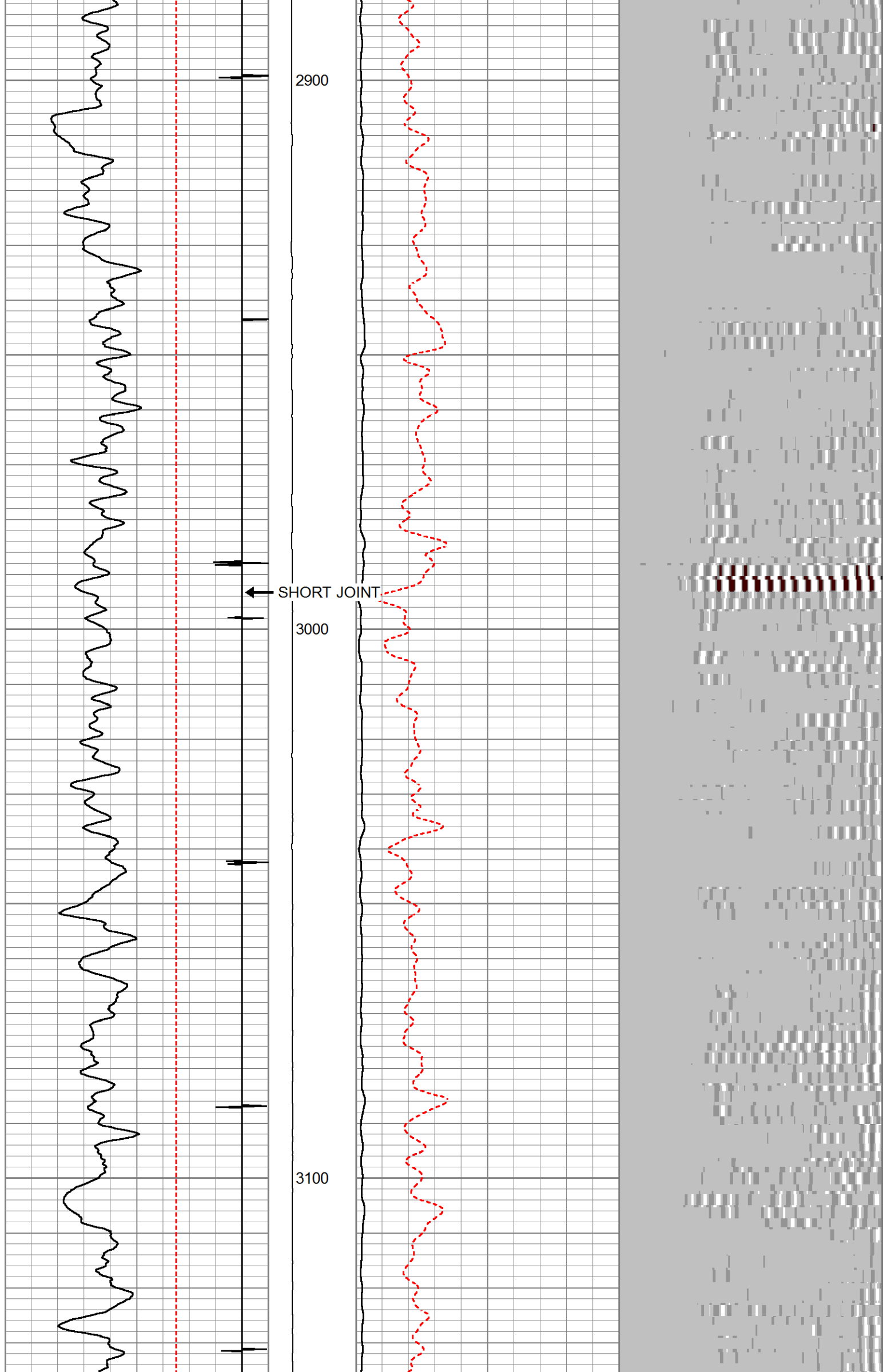
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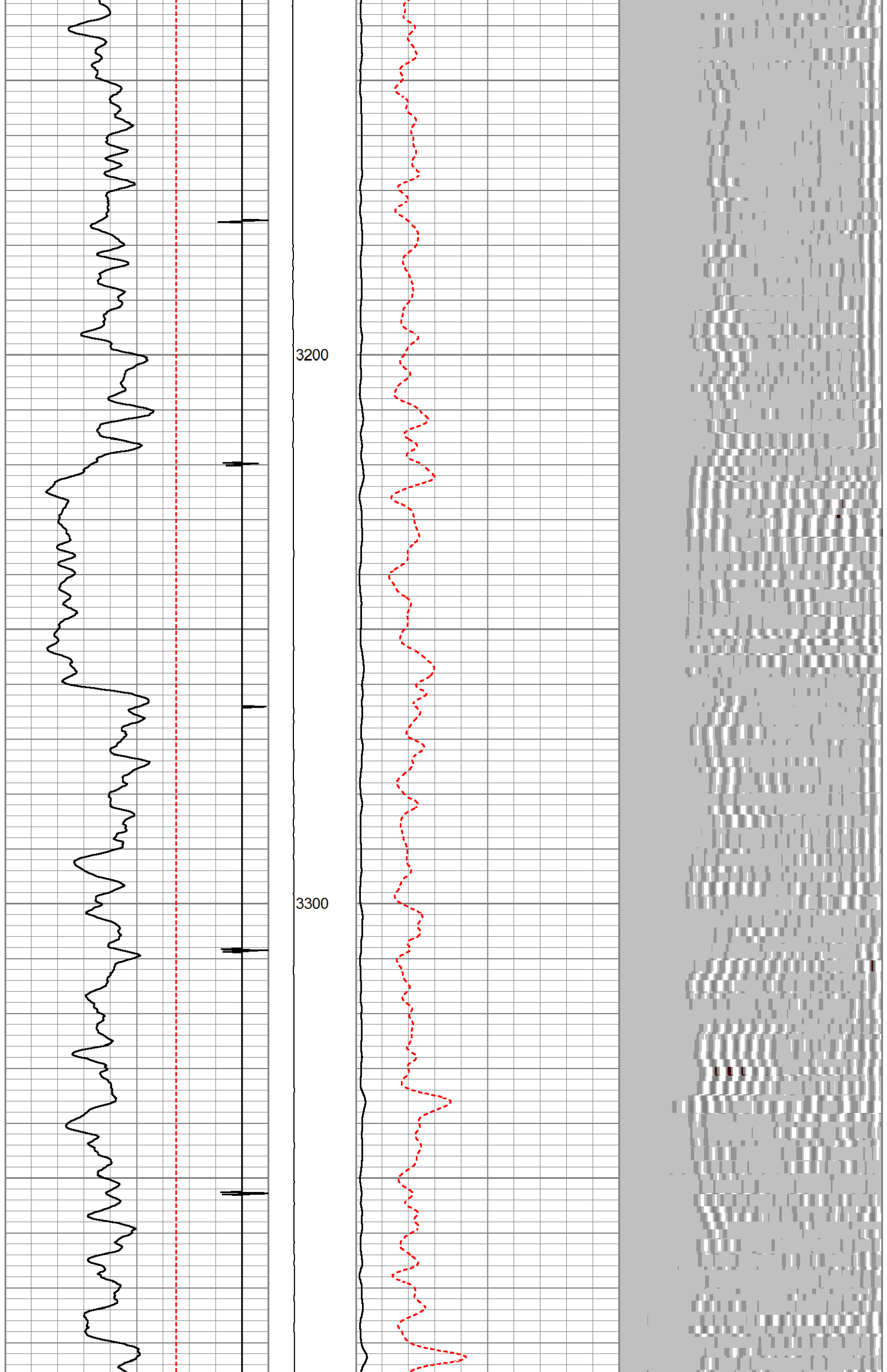
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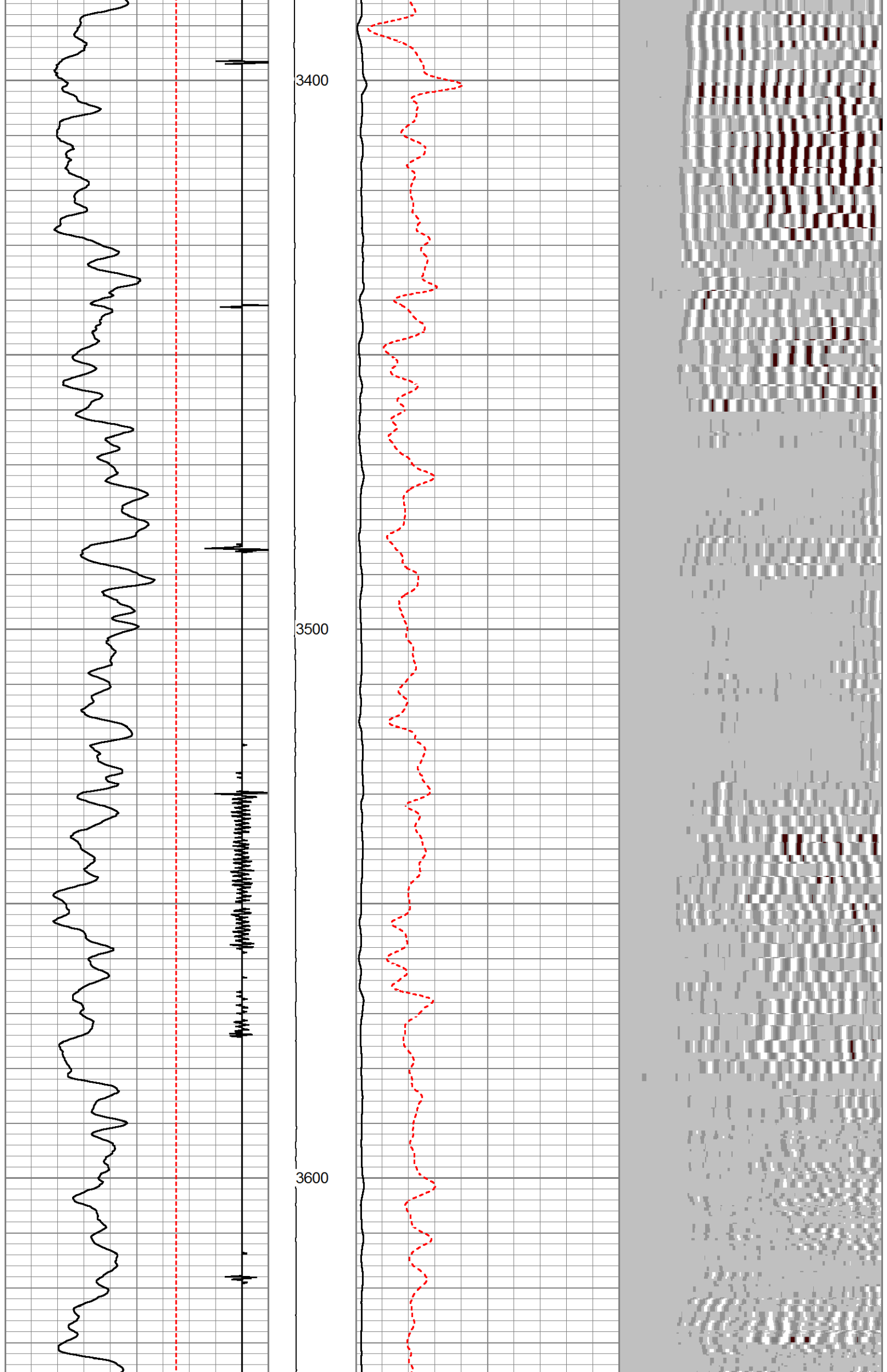


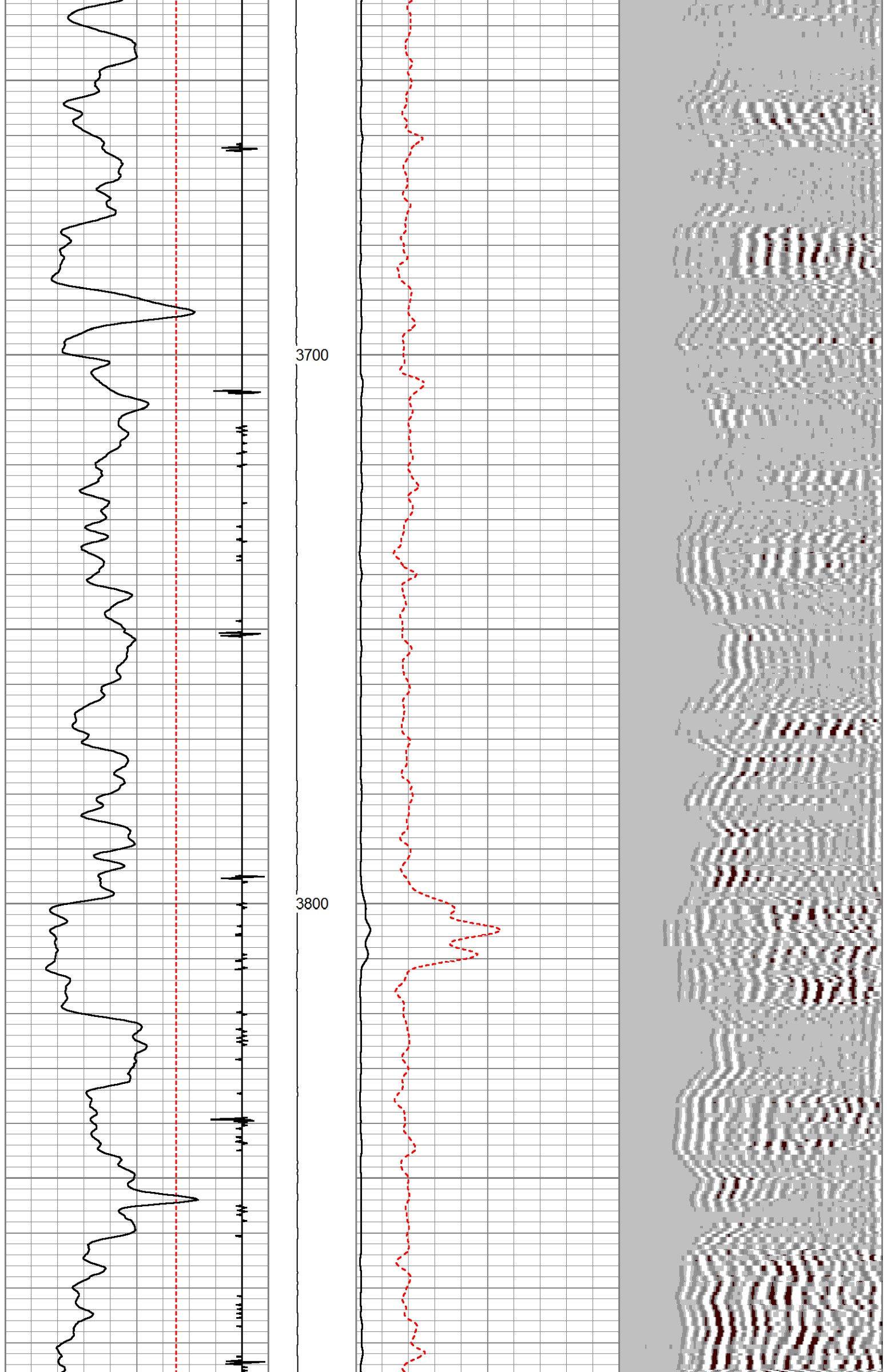


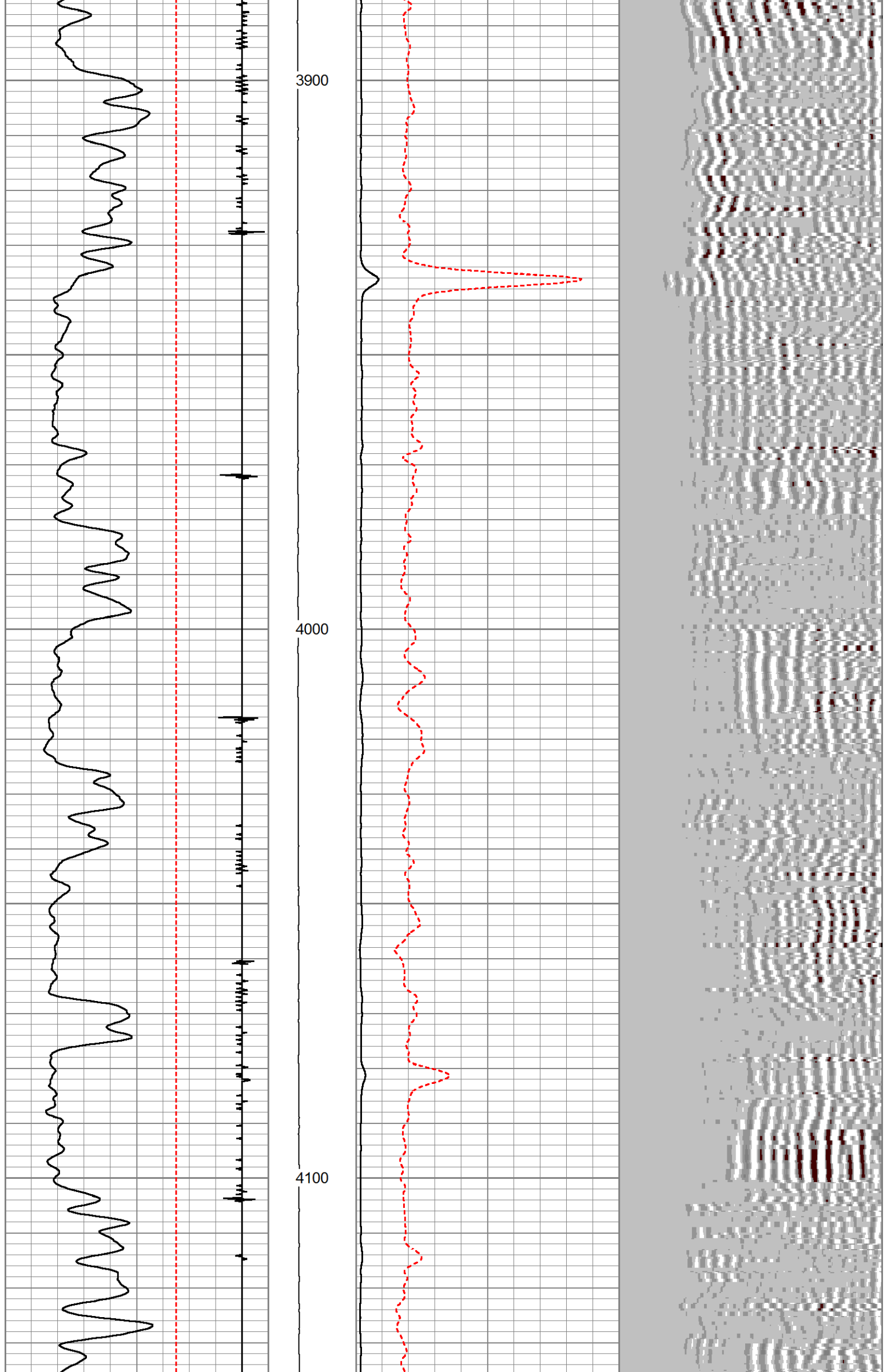


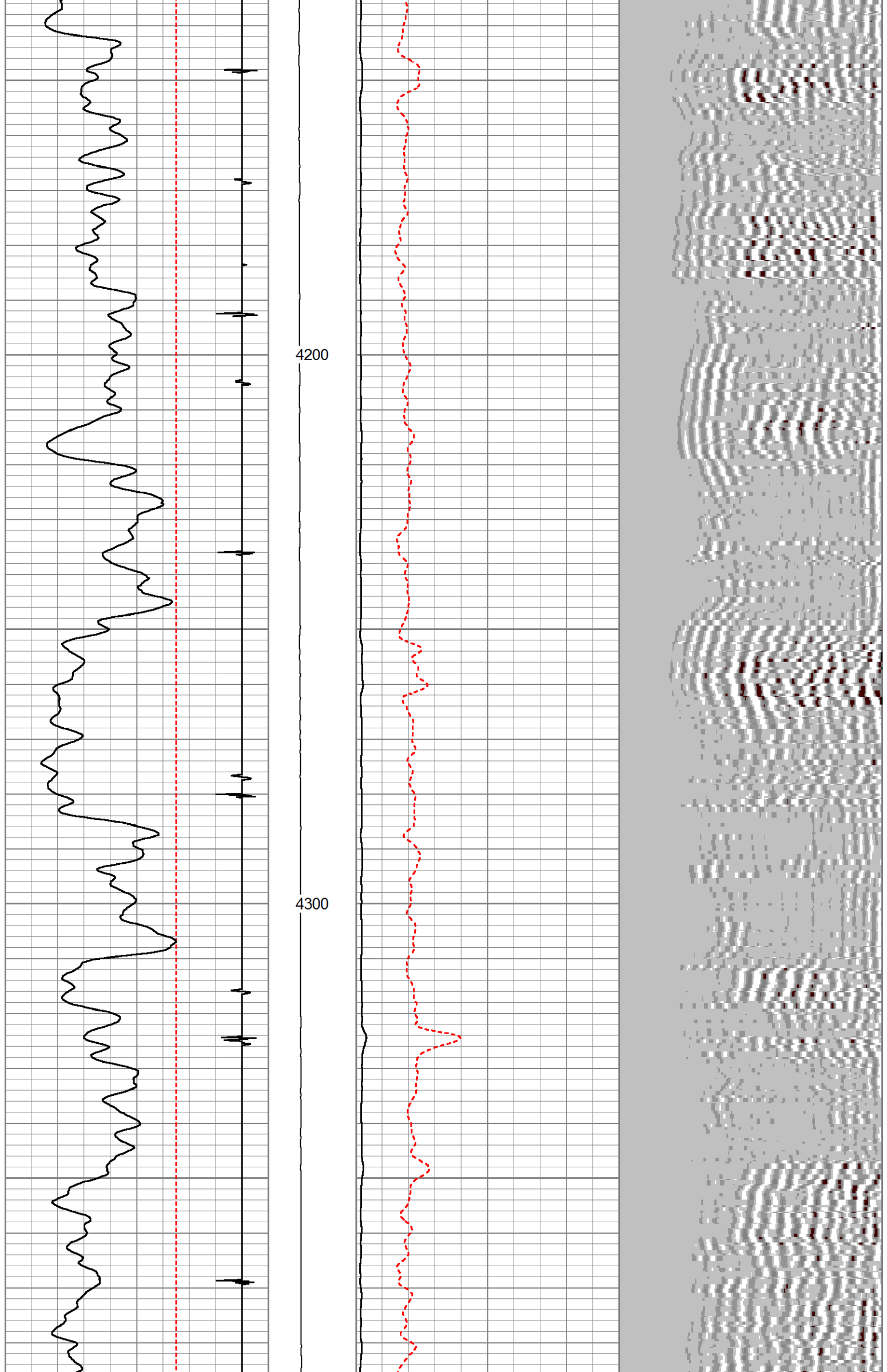


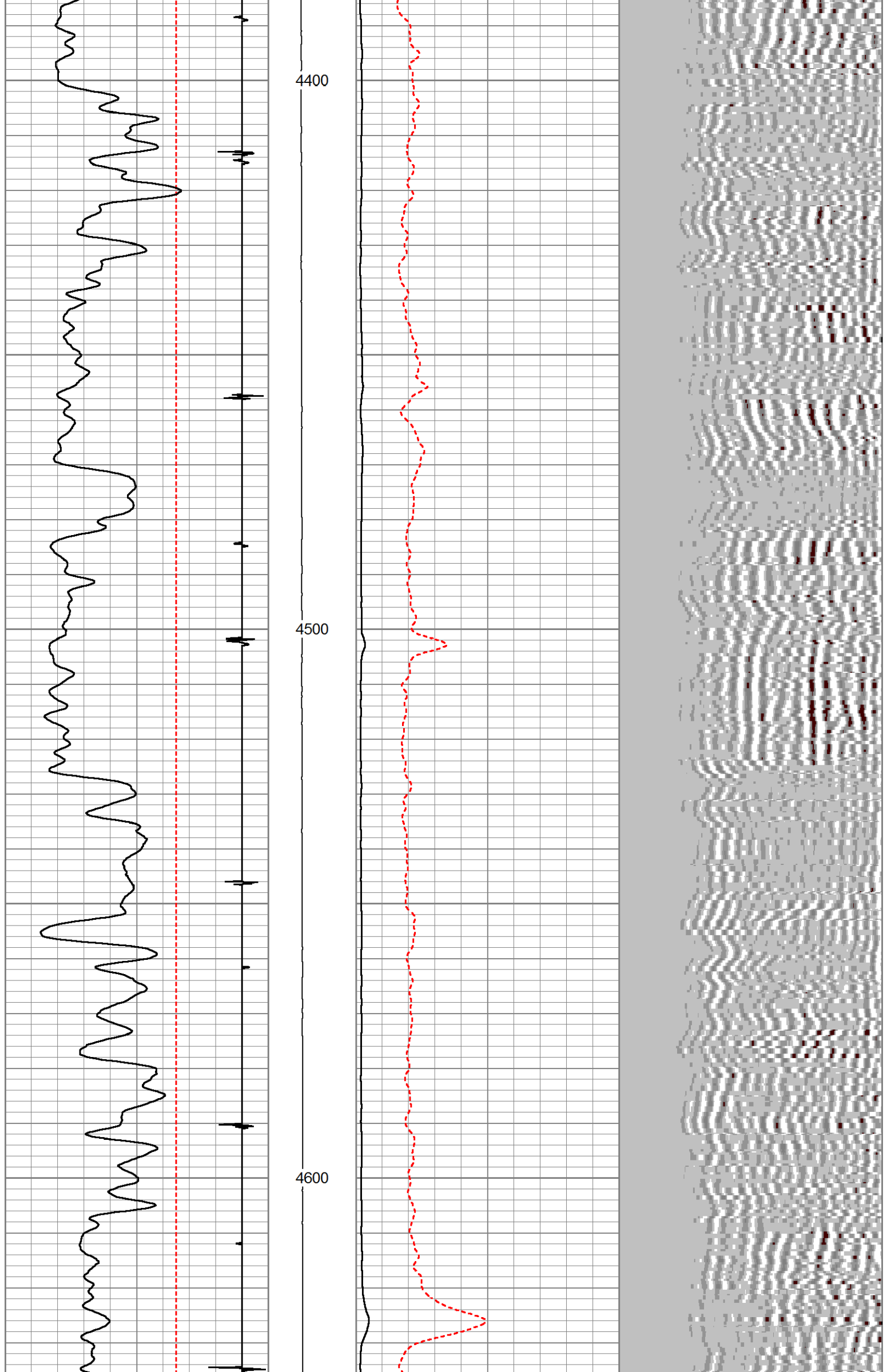


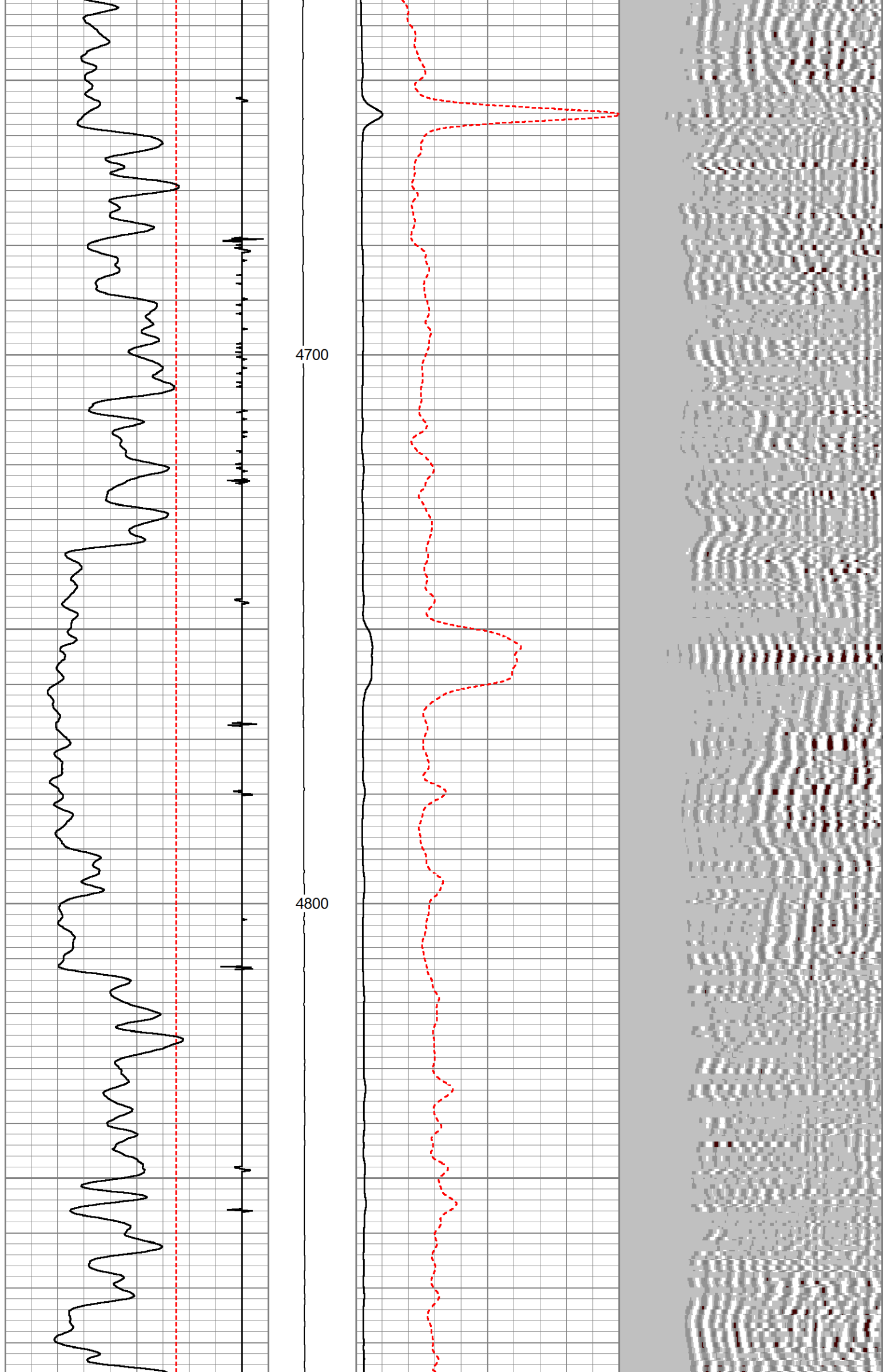


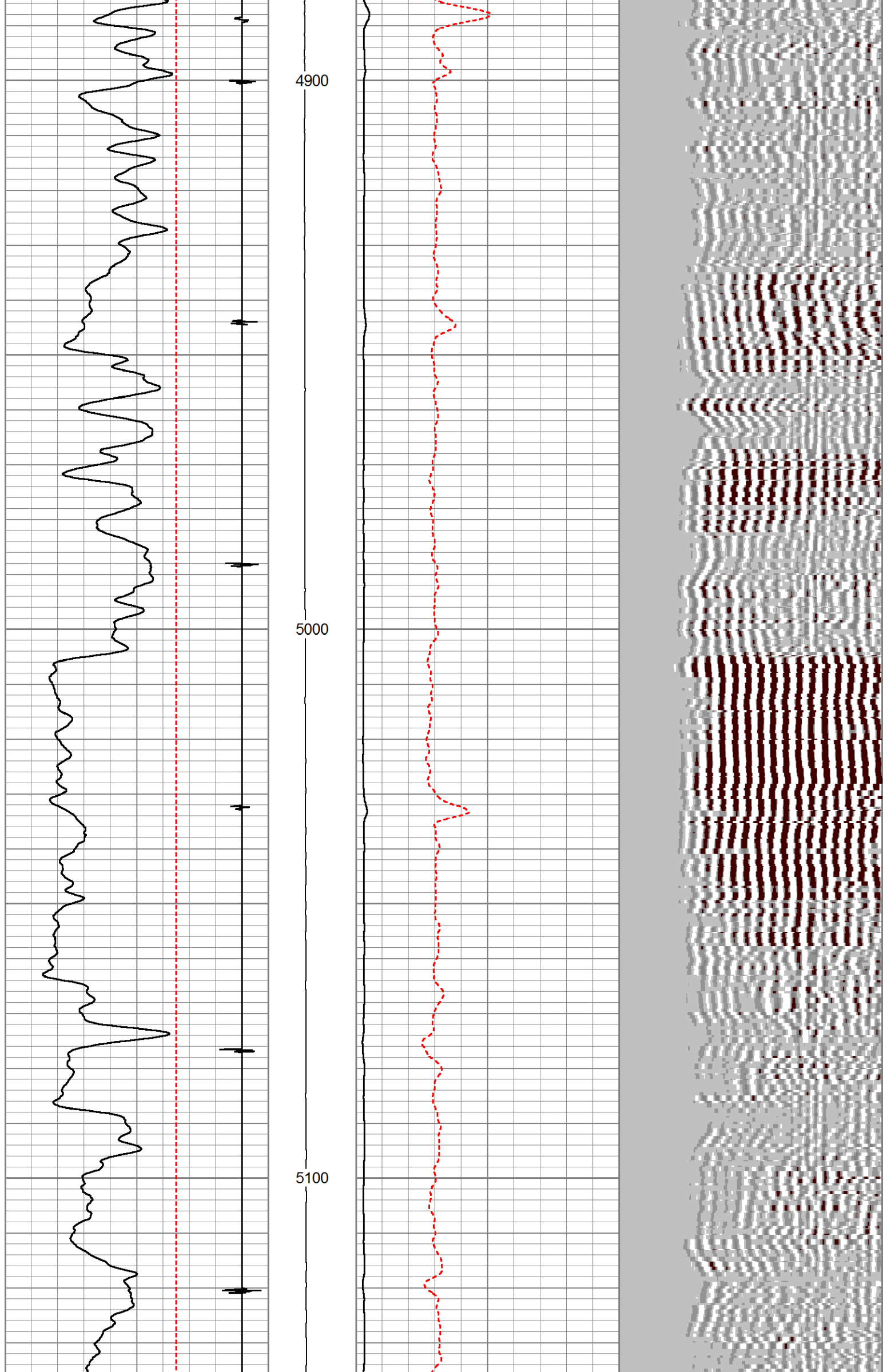


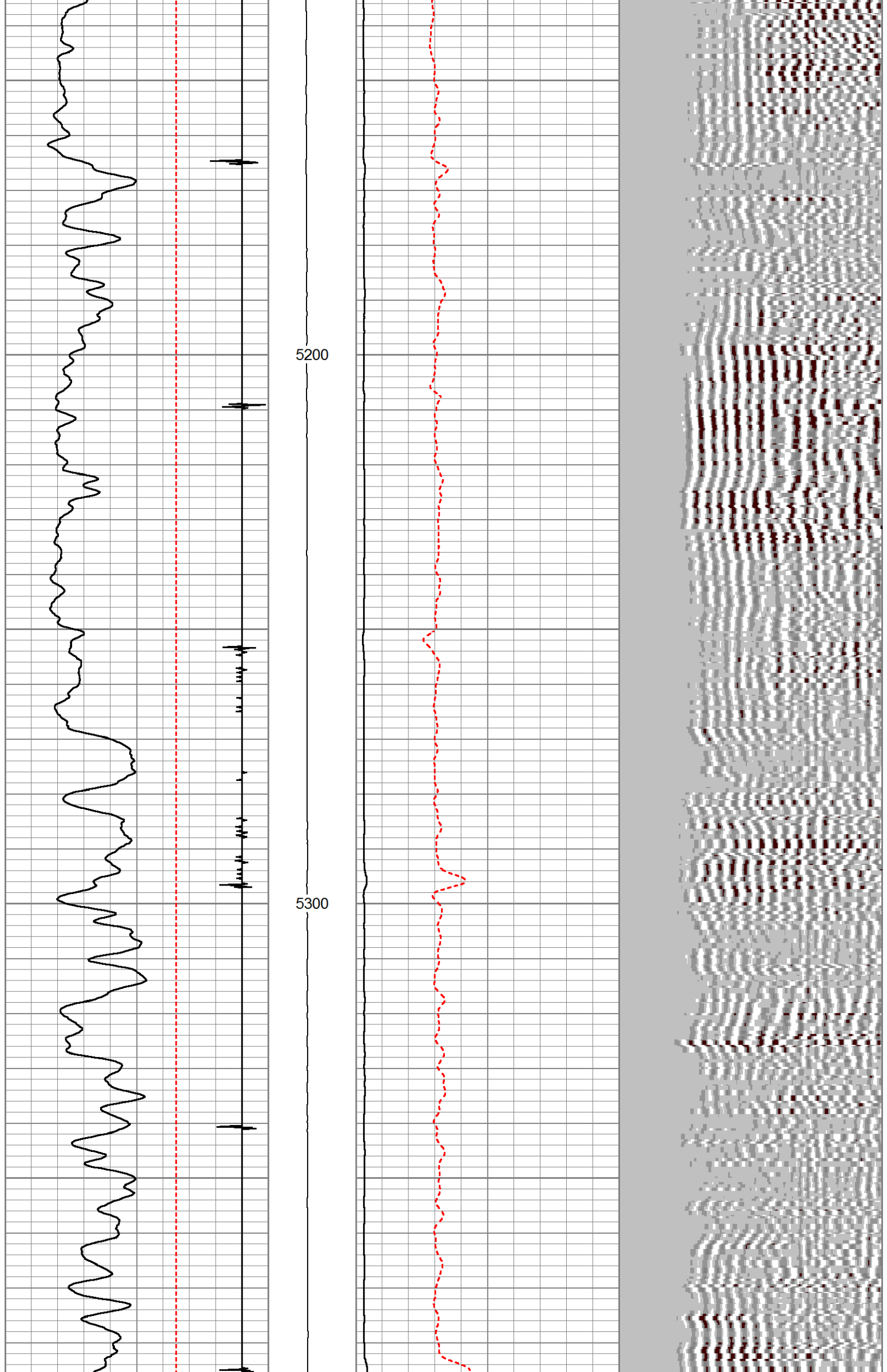


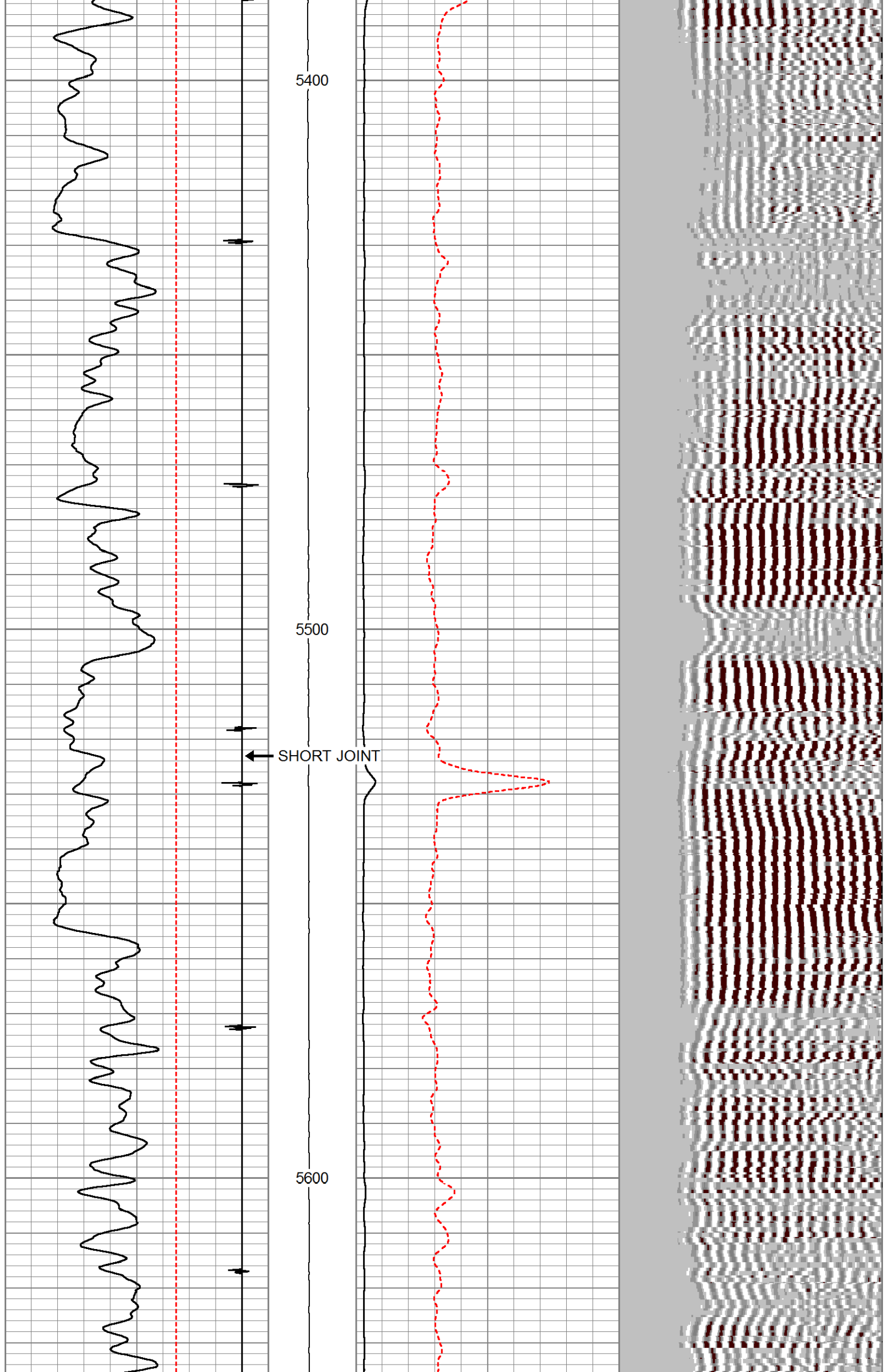


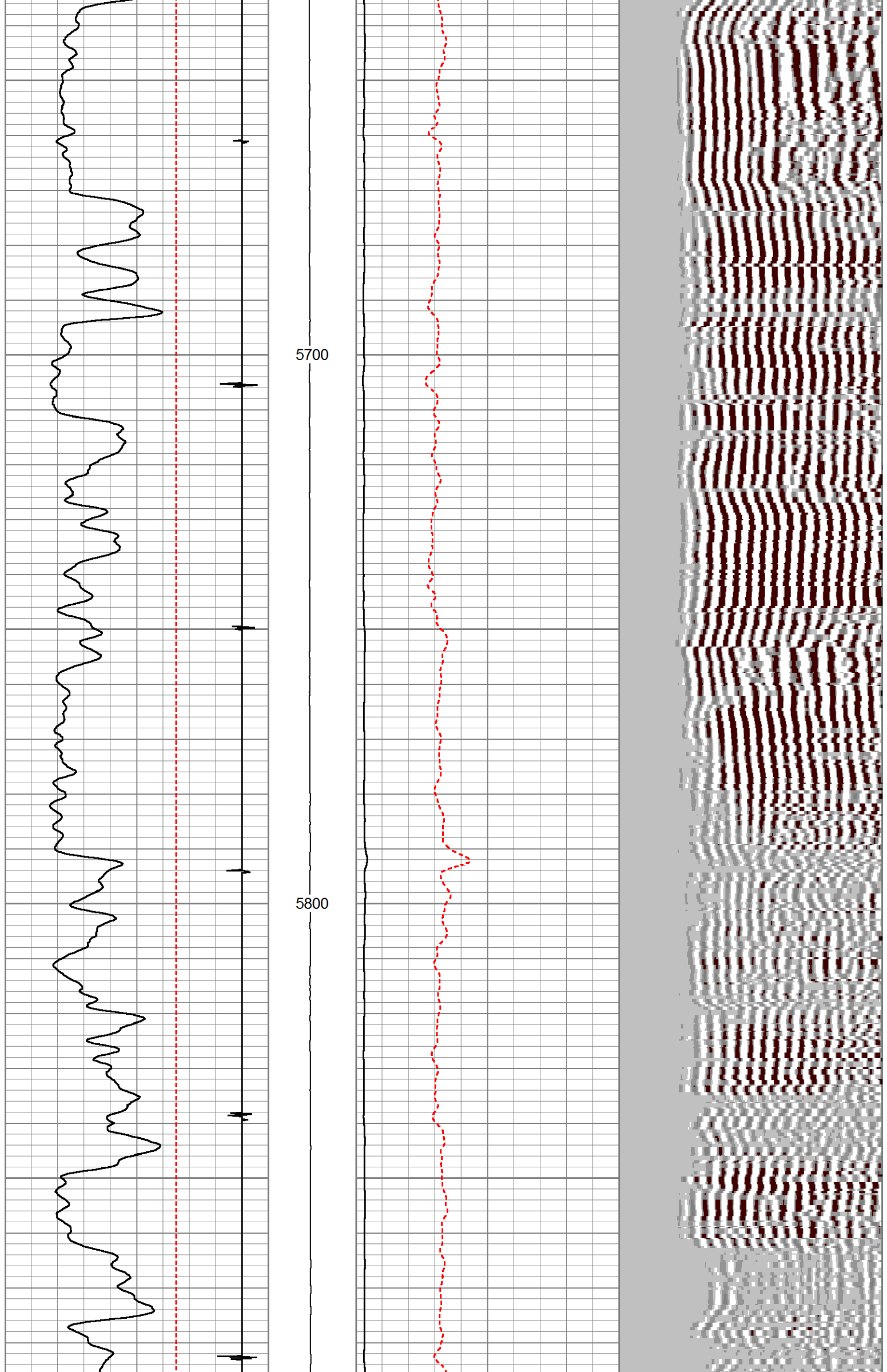


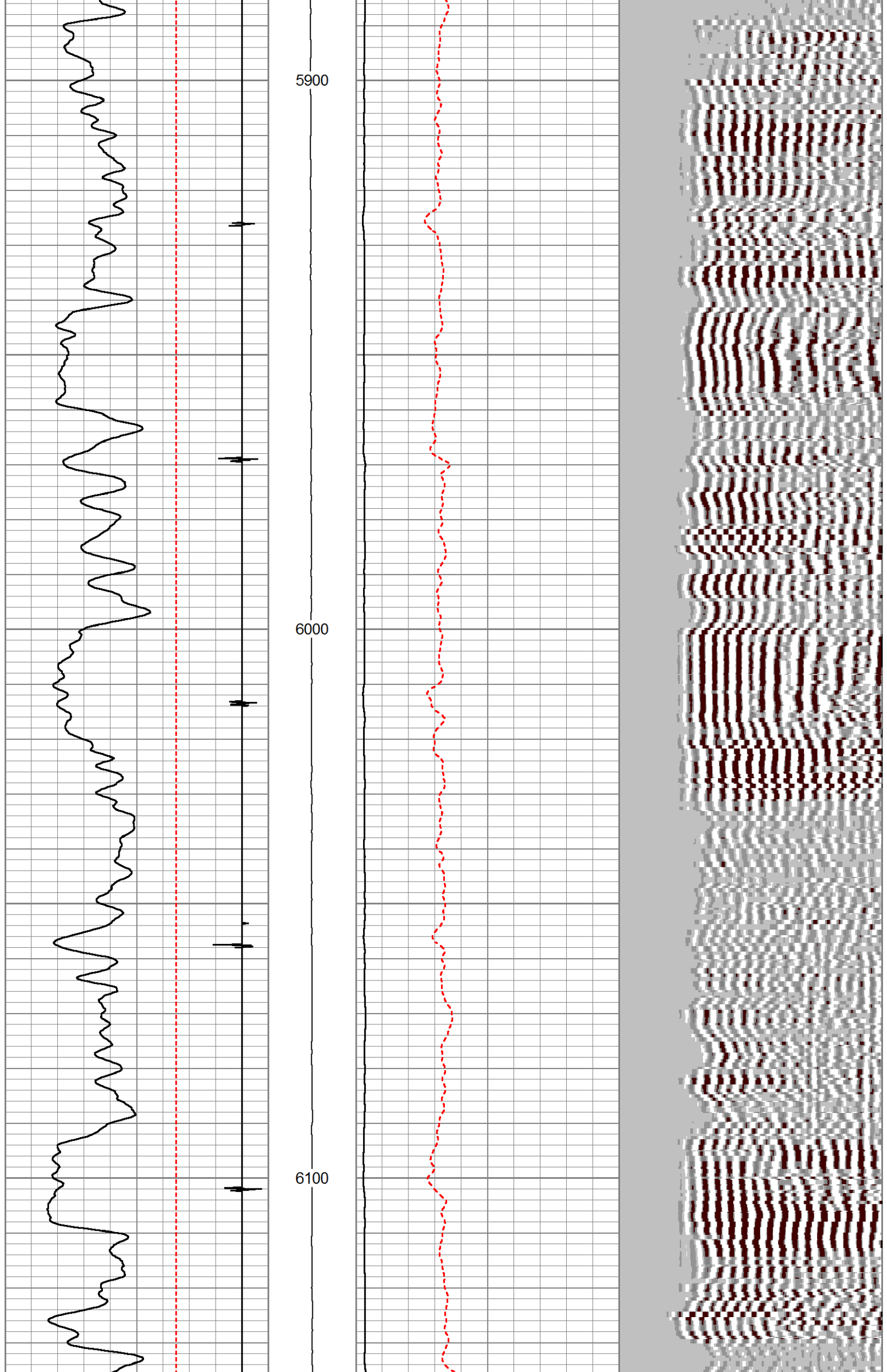


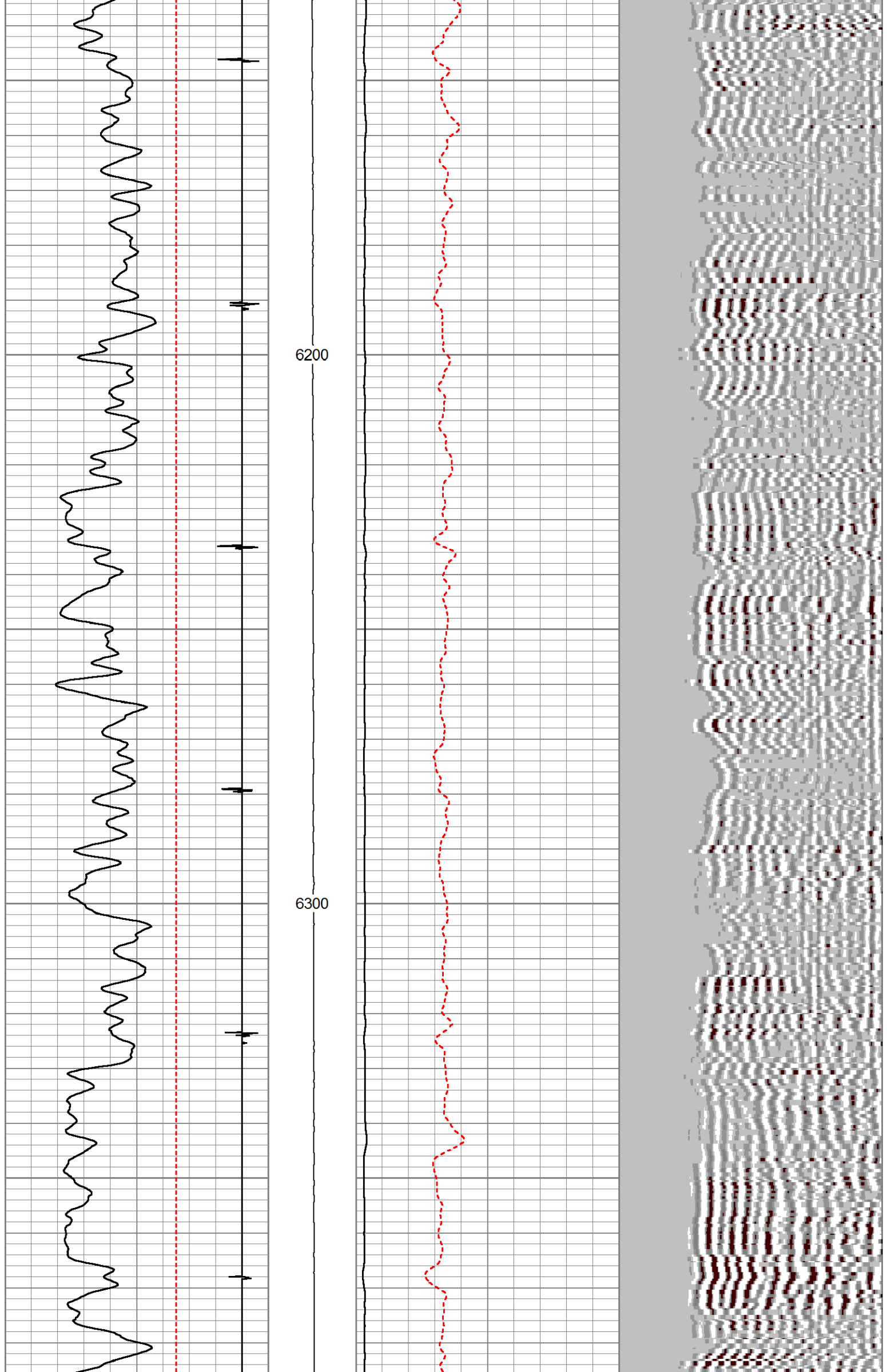


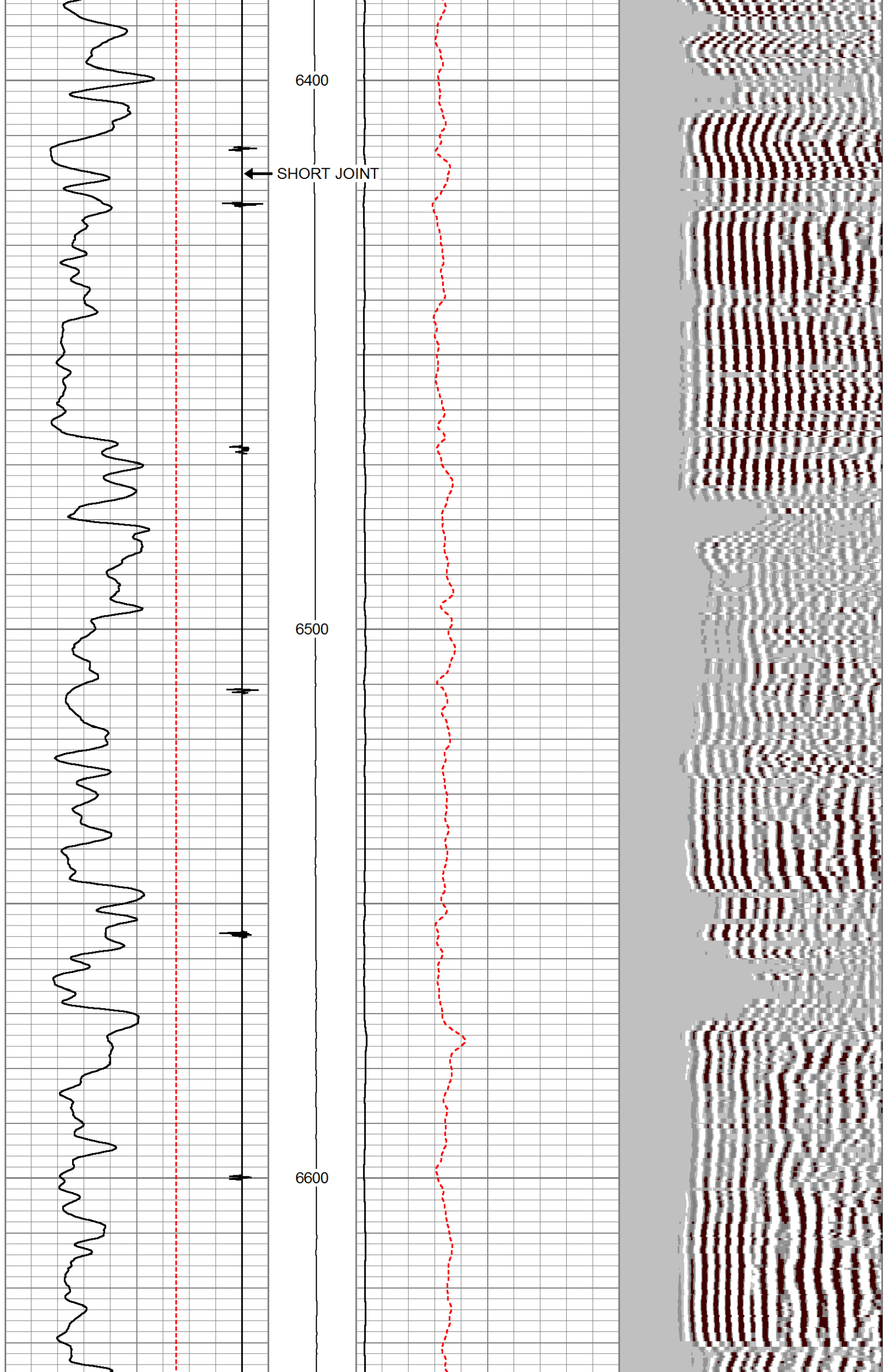


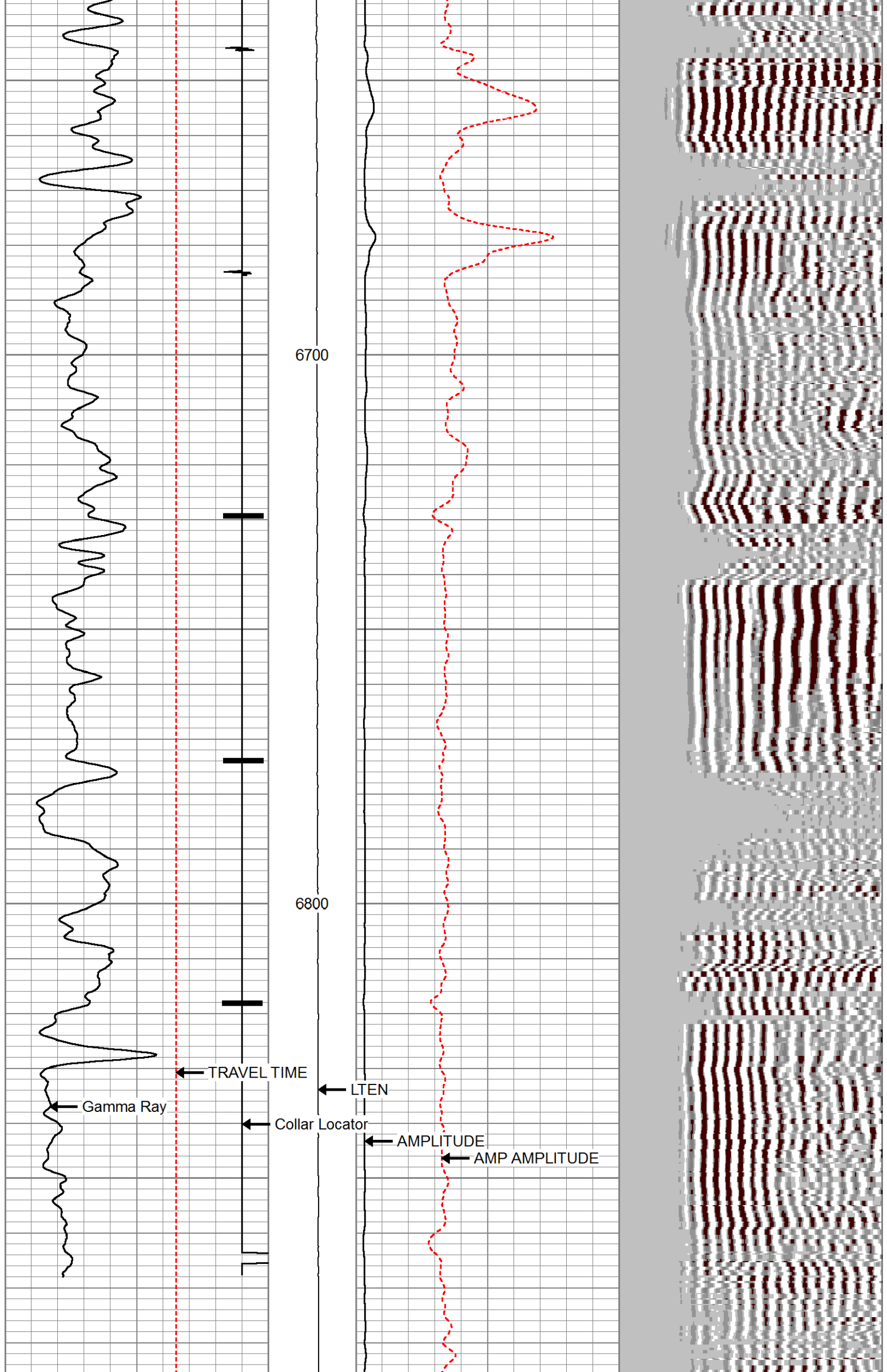


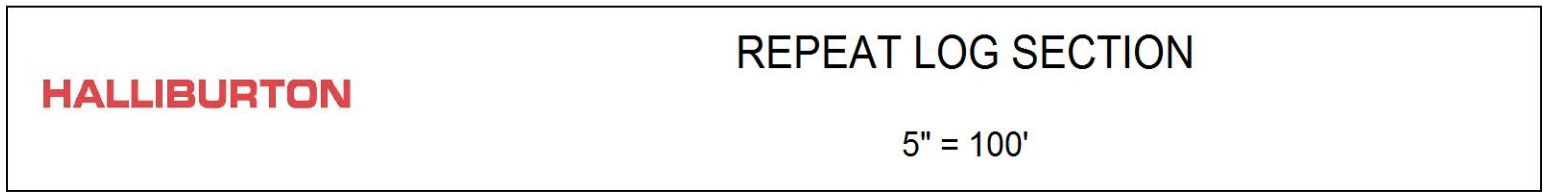
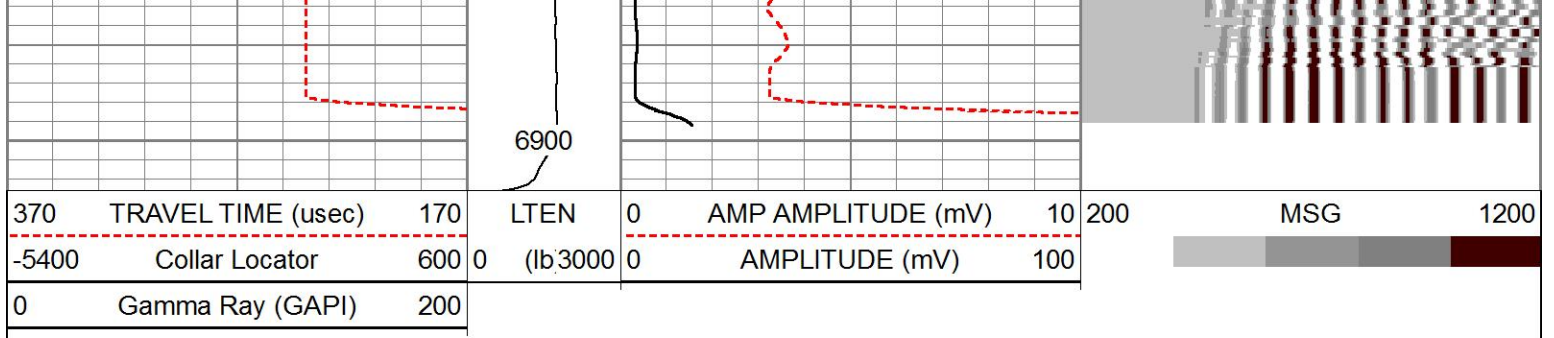




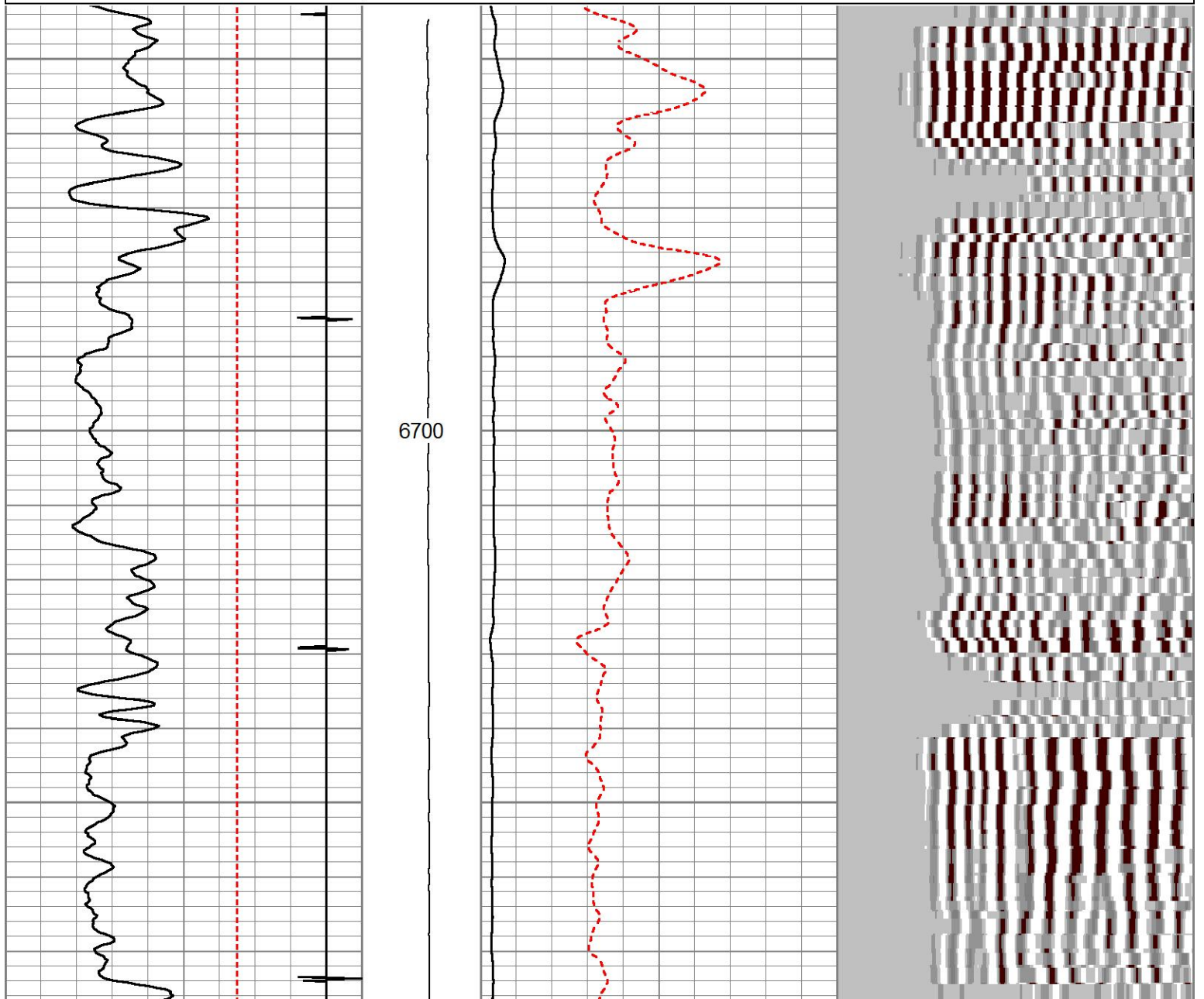
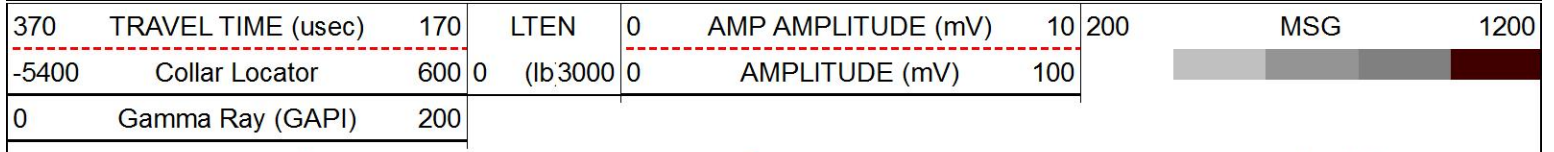


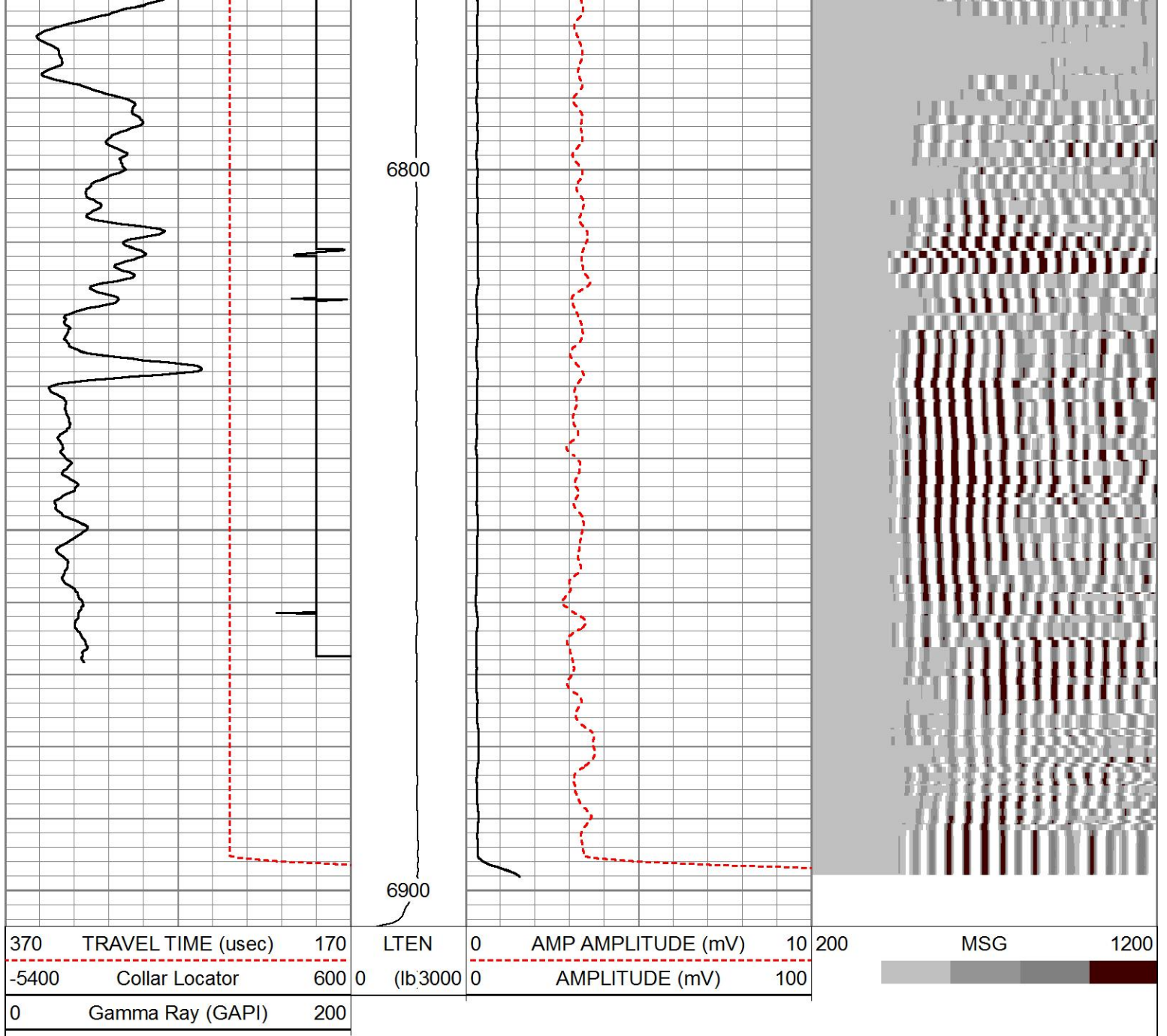






Database File      watson\_b\_33c\_combo.db  
 Dataset Pathname    CBLRPT1  
 Presentation Format    cbl\_rbt\_1  
 Dataset Creation      Thu Jun 04 13:44:16 2015  
 Charted by            Depth in Feet scaled 1:240





### REPEAT LOG SECTION

**HALLIBURTON**

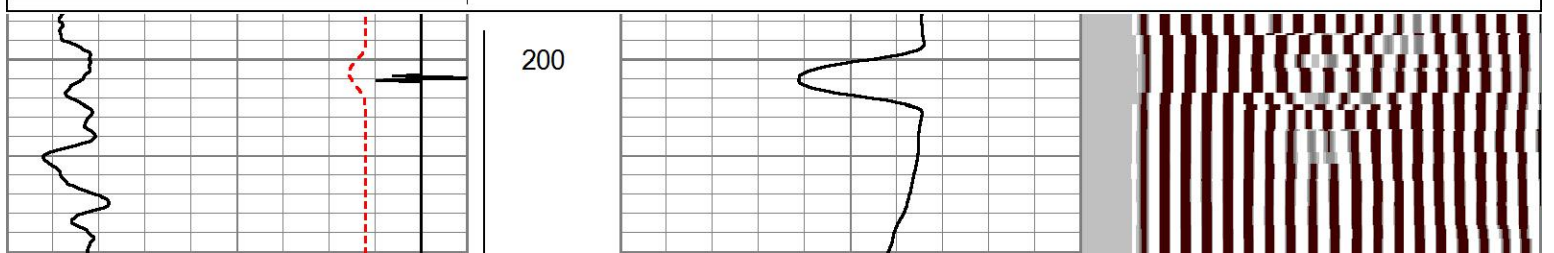
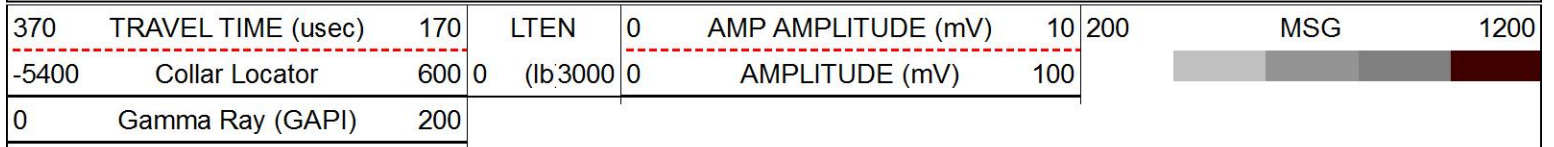
5" = 100'

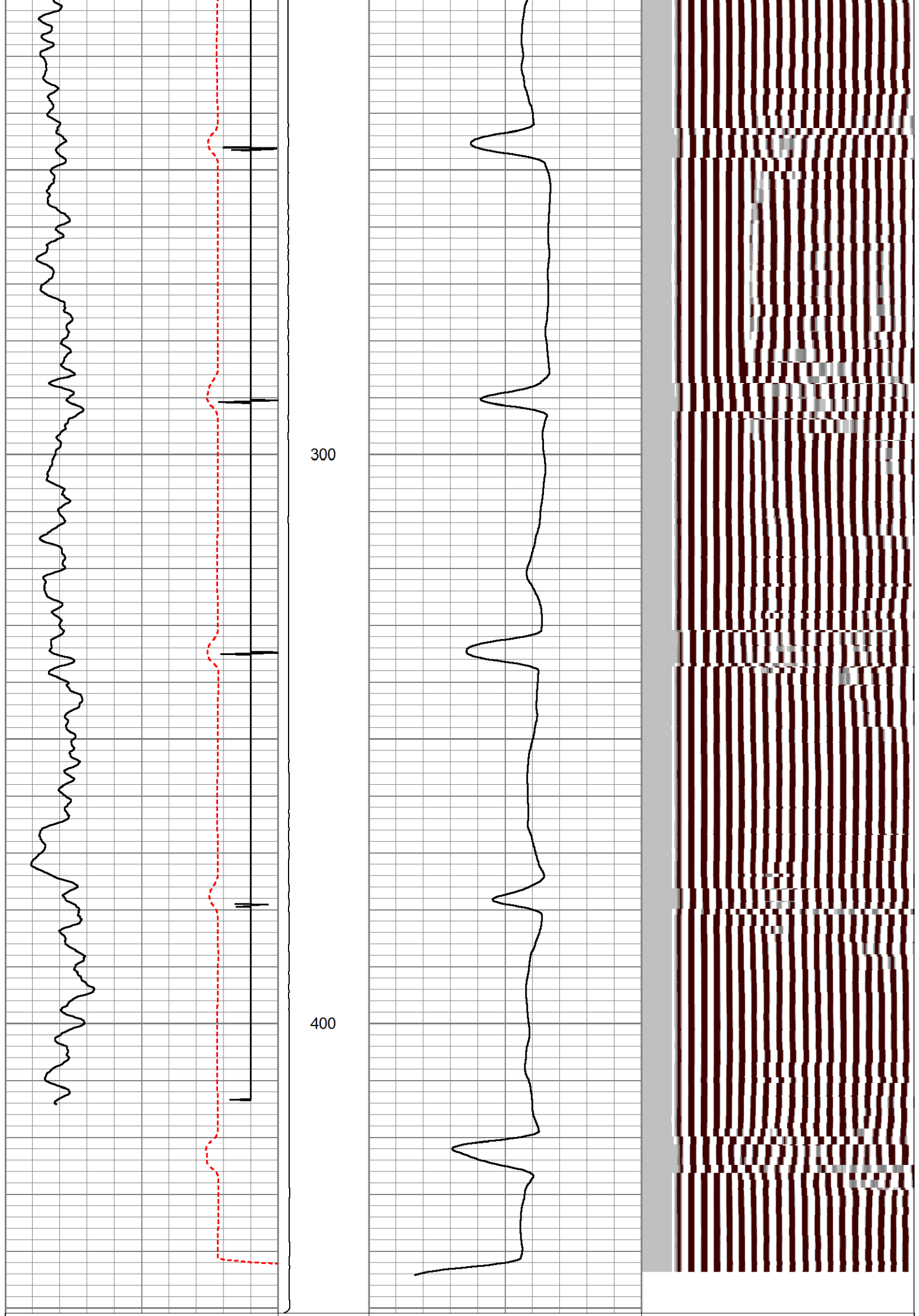
### FREE PIPE LOG SECTION

**HALLIBURTON**

5" = 100'

Database File      watson\_b\_33c\_combo.db  
 Dataset Pathname    FREE1  
 Presentation Format   cbl\_rbt\_1  
 Dataset Creation    Thu Jun 04 12:58:59 2015  
 Charted by          Depth in Feet scaled 1:240





370	TRAVEL TIME (usec)	170	LTEN	0	AMP AMPLITUDE (mV)	10	200	MSG	1200
-5400	Collar Locator	600	(lb,3000	0	AMPLITUDE (mV)	100			
0	Gamma Ray (GAPI)	200							

# FREE PIPE LOG SECTION

**HALLIBURTON**

5" = 100'

**Log Variables** DatabaseD:\Warrior\_data\watson\_b\_33c\_combo.db  
Dataset field/well/run1/MAIN2/\_vars\_

### Top - Bottom

BHTEMP_Src	BHSAL2	BHSAL1	POROS2	POROS1	LTH	UHSGC	RHOFC
ITEMPX	0	1	0	1	Sandstone	NONE	0.25
SO in 0	BORSAL kppm 150	CASED? Yes	PPT usec 0	CASEWGHT lb/ft 11.6	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8
SRFTEMP degF 0	MudWgt lb/gal 8.4	CASETHCK in 0.25	CASEOD in 4.5	PERFS 0	TDEPTH ft 0	BOTTEMP degF 100	BITSIZE in 7.875

### Calibration Report

Database File      watson\_b\_33c\_combo.db  
Dataset Pathname    MAIN1  
Dataset Creation    Thu Jun 04 13:55:08 2015

#### Segmented Cement Bond Log Calibration Report

Serial Number:                    11002214  
Tool Model:                        004  
  
Calibration Casing Diameter:    4.500        in  
Calibration Depth:                206.907     ft

#### Master Calibration, performed Thu Jun 04 08:40:05 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.195	0.877	1.500	81.196	74.313	16.017
5FT	-0.205	0.490	1.500	81.196	114.642	25.010
S1	-0.193	0.992	0.000	100.000	84.421	16.282
S2	-0.197	0.785	0.000	100.000	101.902	20.027
S3	-0.195	1.048	0.000	100.000	80.455	15.706
S4	-0.197	0.919	0.000	100.000	89.610	17.670
S5	-0.194	0.811	0.000	100.000	99.423	19.323
S6	-0.197	0.743	0.000	100.000	106.389	20.918
S7	-0.196	0.673	0.000	100.000	115.056	22.588
S8	-0.197	0.693	0.000	100.000	112.289	22.148

### Calibration Report

Serial Number:                    11002214  
Tool Model:                        004  
Performed:  
  
Reference (degF)                    Reading ( )  
Low:                                0.000                                0.000  
High:                                1.000                                1.000  
Gain = 1.000                                Offset = 0.000

#### Reservoir Monitor Tool I Calibration Report

Serial-Model:                                12095949-A

## Carbon/Oxygen Mode

## Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	82.00	80.00	2.00	+/-15.00	V
ITCR2	3281	3250	31	+/-250	cps

## Near Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0270	5.32	<6.00
Fe	207	206 +/-2	0.0961	----	----
NGAIN = 0.993		NZOFF = 0.7			

## Far Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0360	5.72	<6.50
Fe	209	208 +/-2	0.0918	----	----
FGAIN = 0.991		FZOFF = 0.5			

Flask Temperature 63.5 degF

Result	Logged	Expected Value	Diff.	Tol.	Units
COIR2	0.45	0.45	-0.00	+/-0.02	
LIRI2	1.65	1.64	0.01	+/-0.05	
TCCR2	5061	5000	61	+/-1000	cps
ITCR2	3240	3200	40	+/-250	cps

## Sigma Mode

## Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	82.00	80.00	2.00	+/-15.00	V
FCAP	10080	10000	80	+/-500	cps

## Horizontal Water Tank

Result	Logged	Expected Value	Diff.	Tol.	Units
N/F Normalizer	0.91	0.95	-0.04		
N/F Inel Norm	0.58	0.61	-0.03		
RNF	1.10	1.07	0.03	+/-0.12	
RINC	1.71	1.64	0.07	+/-0.18	
SGFN	24.09	24.00	0.09	+/-0.50	cu
SGFF	22.90	22.85	0.05	+/-0.50	cu
FSIN	24192	24000	192	+/-2000	cps
FCAP	10177	10000	177	+/-1000	cps
NFTR	0.84			<5.00	
FFTR	0.88			<5.00	
NBKG	179			<500	cps
FBKG	93			<500	cps
RTN	0.40	0.40	0.00	+/-0.10	usec
RTF	0.43	0.40	0.03	+/-0.10	usec

## Calibration Software Modules

HRMTI Module 2013.11.14.0  
RMTI Module 2014.8.28.1

## Log Data Acquisition Software Modules

HRMTI Module 2013.11.14.0

## Gamma Ray Calibration Report

Type / Serial: 002 / 11224503

## SHOP CALIBRATION

Thu Jun 04 08:32:15 2015

Background	Counts/Sec.	Gain	Offset	Jig	Units
Calibrator	36.8				cps
	322.4	1.4100			cps
					GAPI/cps

## PRIMARY VERIFICATION

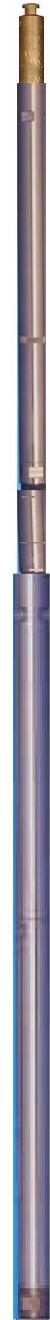
Background	53.3				cps
Calibrator	467.2				cps
Difference				413.8	GAPI

## 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)
			STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.50	1.44	1.00
CCL	37.31					
GR	35.05		TTTCU-002 (11224503) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00
			XHU-003 (12461939) Crossover Halliburton 1553 to Ultrawire	1.58	1.69	7.00
RmtTFGT	24.39					
RmtTNGT	23.89		RMTI-A (12095949) Halliburton RMTI Tool	14.00	2.13	77.00
RmtFP5V	16.14		X-OVER-SondexxGo	0.31	1.69	1.00

RmtCommFWa16.14				Sondex Box x Go Pin Cross Over	0.38	1.69	3.00
				AUH-001 (11072111) Adaptor Ultrawire/Halliburton			
				CENT-Probe_275 Probe 2 3/4 Centralizer	2.88	2.75	20.00
CBLTEMP	8.23			RBT-004 (11002214) Radial Bond Tool (UW 3 1/8) 20K Rated	9.48	3.13	140.00
				CENT-Probe_275 Probe 2 3/4 Centralizer	2.88	2.75	20.00
LLMTEN	0.00			BUL-006 (000002) Bullnose Terminator	0.22	1.69	1.20
		Dataset: watson_b_33c_combo.db: field/well/run1/MAIN1					
		Total length: 40.88 ft					
		Total weight: 370.20 lb					
		O.D.: 3.13 in					



Company	URSA OPERATING CO., LLC.		
Well	WATSON RANCH B 33C-17-07-95		
Field	PARACHUTE		
County	GARFIELD	State	CO
<b>HALLIBURTON</b>	ACOUSTIC CEMENT BOND LOG		