



**CEMENT
BOND LOG
WITH GAMMA RAY**

Company BEAR PETROLEUM
Well BLACKHALL NO. 3
Field BLACKHALL
County RICE
State KANSAS

Company **BEAR PETROLEUM**
Well **BLACKHALL NO. 3**
Field **BLACKHALL**
County **RICE** State **KANSAS**

Location: API #: SW-SE-SE
Permanent Datum SEC 5 TWP 21S RGE 8W
Log Measured From GROUND LEVEL Elevation 1650
Drilling Measured From KELLY BUSHING
KELLY BUSHING
Elevation
K.B. 1655
D.F. N/A
G.L. 1650

Date of Service	10/27/2015	Run Number	ONE
Depth Driller or PBTID	3550	Depth Logger	3506
Bottom Log Interval	3504	Top Log Interval	800
Open Hole Size	8.625	Type Fluid	WATER
Fluid Level	FULL	Fluid Density	N/A
Max. Recorded Temperature	102	Max. Wellhead Pressure	N/A
Wellhead Connection	N/A	Estimated Cement Top	1015
Unit Number	106	Wireline Size	.288
Location	COLBY KS	Recorded By	J. BEGLER
Witnessed By	JOE BURNETT	Size	WFt
Tubing Record		Top	Bottom
Surface Casing	10 3/4	32	0
Production Casing	4.5"	10.5	0
Liner Record			T.D

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
LYONS KS, SOUTH ON HWY 14 TO ALDEN BLACKTOP,
1/2 WEST, 1/4 NORTH, WEST INTO

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. BEGLER Operator: M. HISS Operator: Operator:	RBT-1	7854433205

Operator	Offset (ft)	Substrate	Description	Length (ft)	O.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
WVFS8	11.63		RBT-Probe (4.5040904) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	107.00
WVFS7	11.63					
WVFS6	11.63					
WVFS5	11.63					
WVFS4	11.63					
WVFS3	11.63					
WVFS2	11.63					
WVFS1	11.63					
WVFCAL	11.63					
WV3FT	11.63					
WV5FT	10.63					
				CENT-Probe Probe Centralizer	2.83	2.75
CCL	3.63					
GR	2.30		GR_CCL-Probe0004 (Probe04)	4.54	2.75	50.00

Dataset: bearpetroleum_blackhallno3.db: field/well/run1/pass6
 Total length: 16.13 ft
 Total weight: 177.00 lb
 O.D.: 2.75 in

Log Variables

Database: C:\ProgramData\Warrior\Data\bearpetroleum_blackhallno3.db

Dataset: field/well/run1/pass6/_vars_

Top - Bottom

PPT usec 0	CASEWGHT lb/ft 11.5	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	SRFTEMP degF 56	CASETHCK in 0	CASEOD in 4.5
PERFS 0	TDEPTH ft 0	BOTTEMP degF 102	BOREID in 7.875				

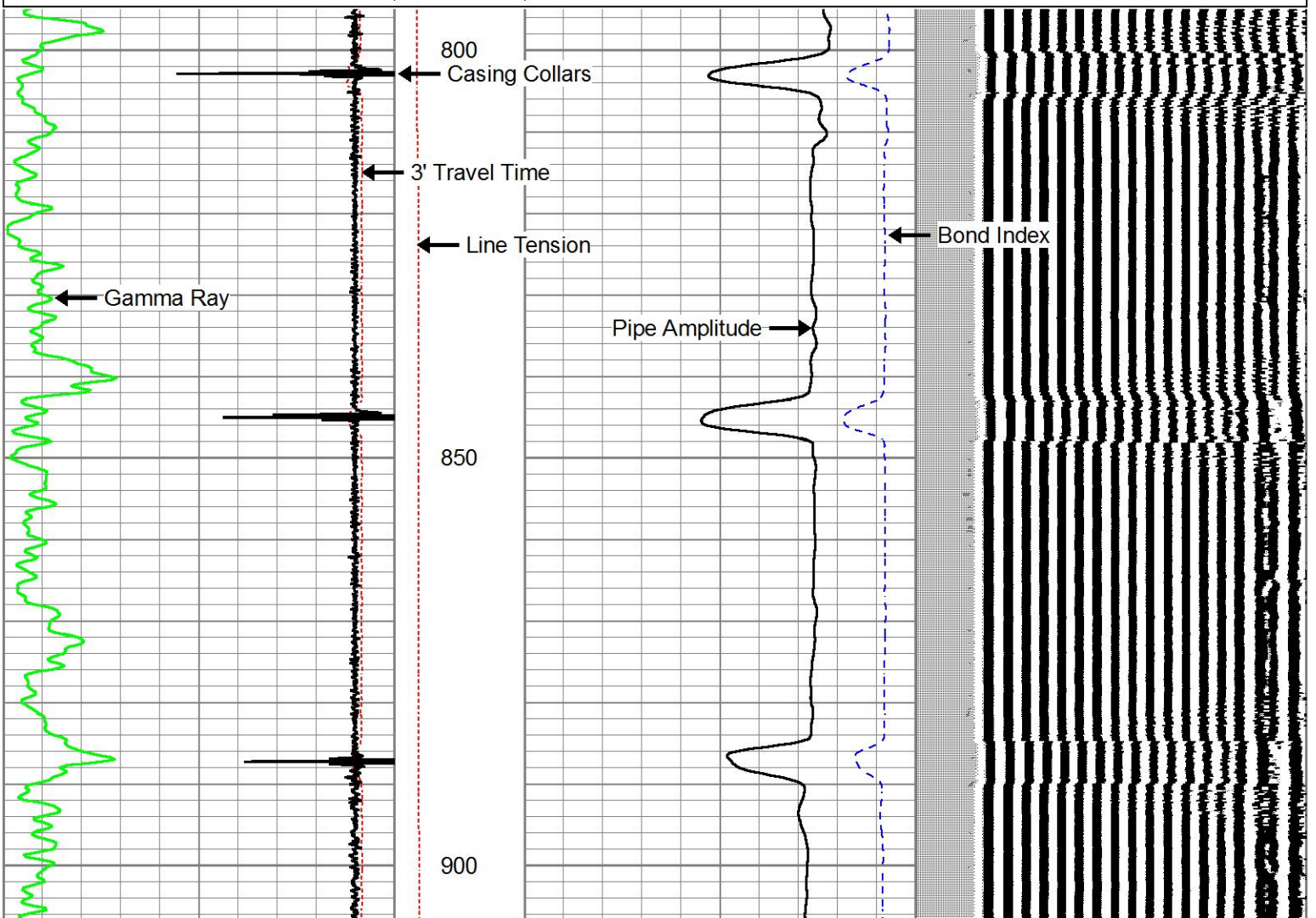


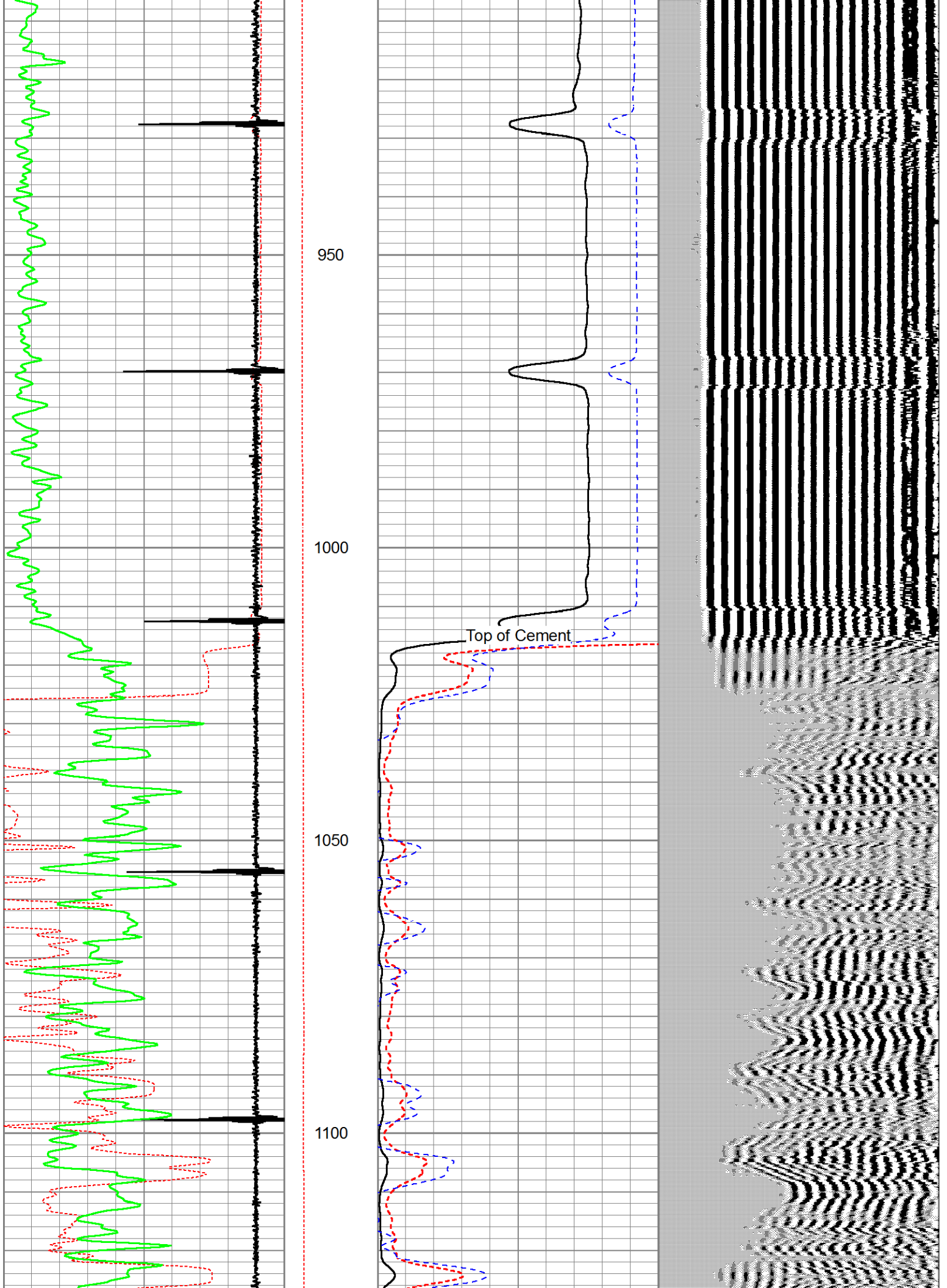
MAIN PASS

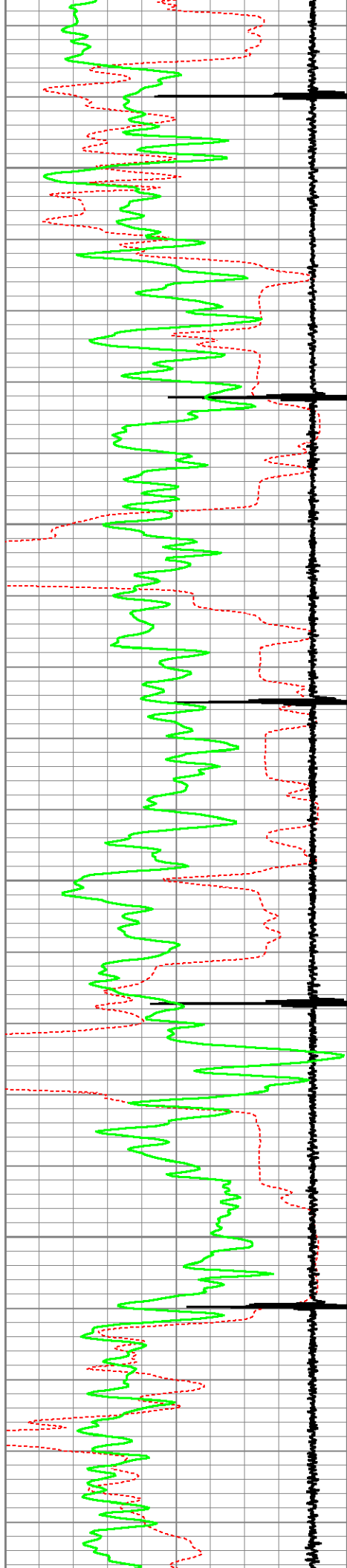
0 PSI SURFACE PRESSURE

Database File: bearpetroleum_blackhallno3.db
 Dataset Pathname: pass6
 Presentation Format: pnr_cbl
 Dataset Creation: Tue Oct 27 11:13:01 2015
 Charted by: Depth in Feet scaled 1:240

500	3' Travel Time (usec)	235	Line Tension	0	Amplitude (mV)	100	200	VDL	1200
-9	Collar Locator	1	(lb/2000)	1	Bond Index	0			
0	Gamma Ray	150	0						





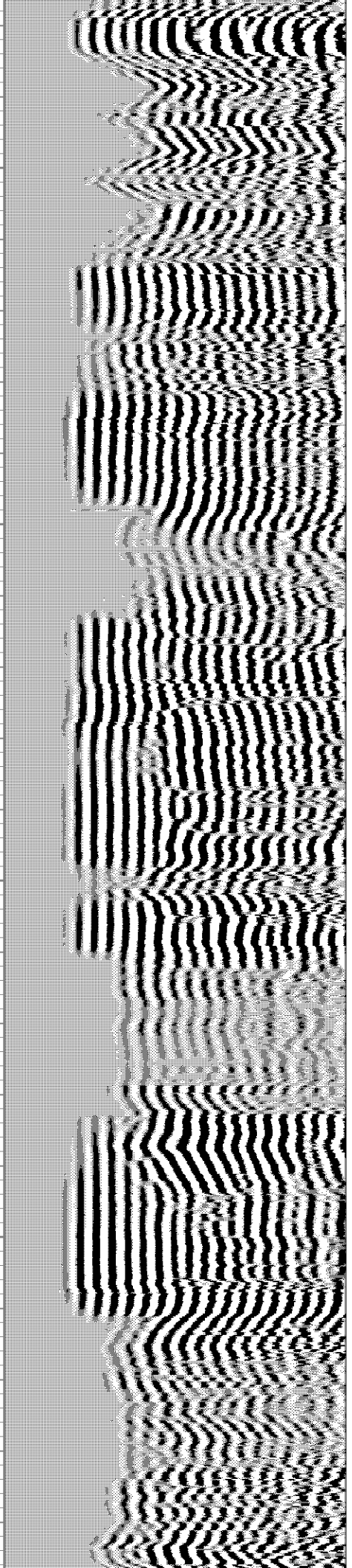
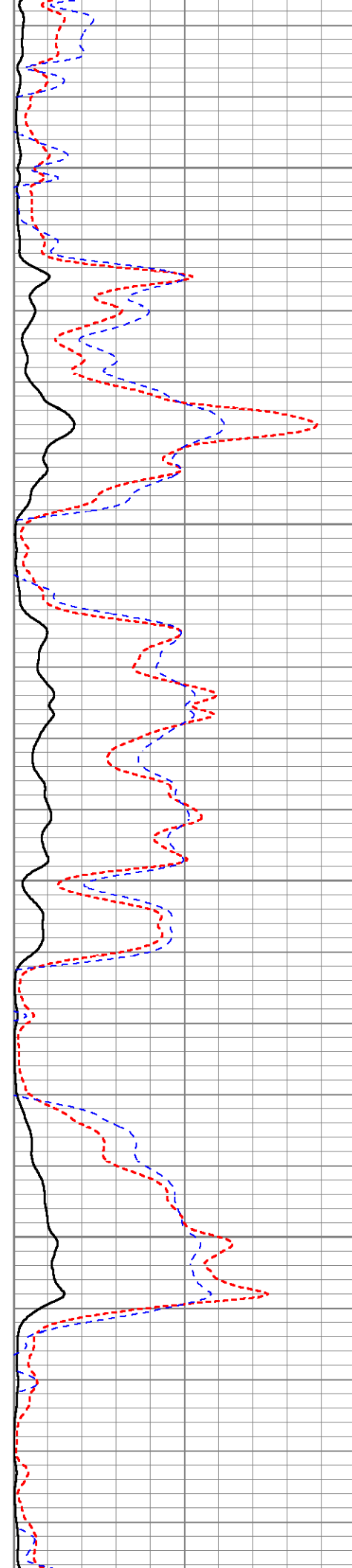


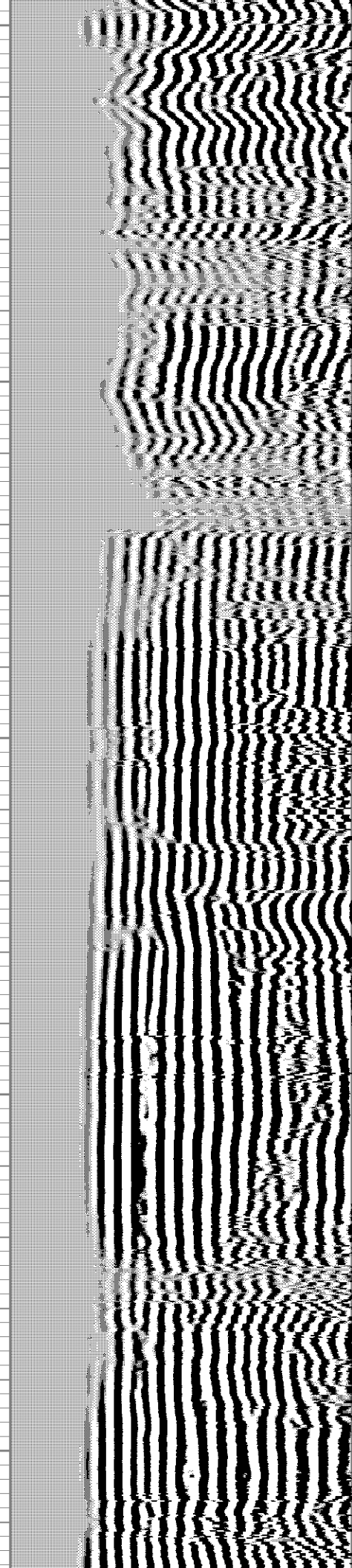
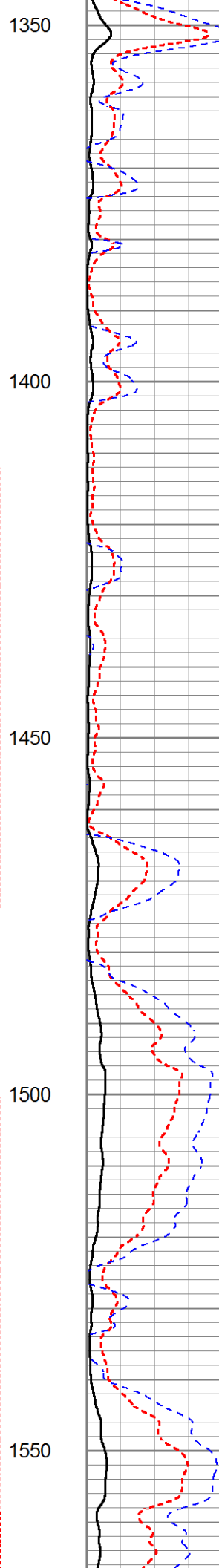
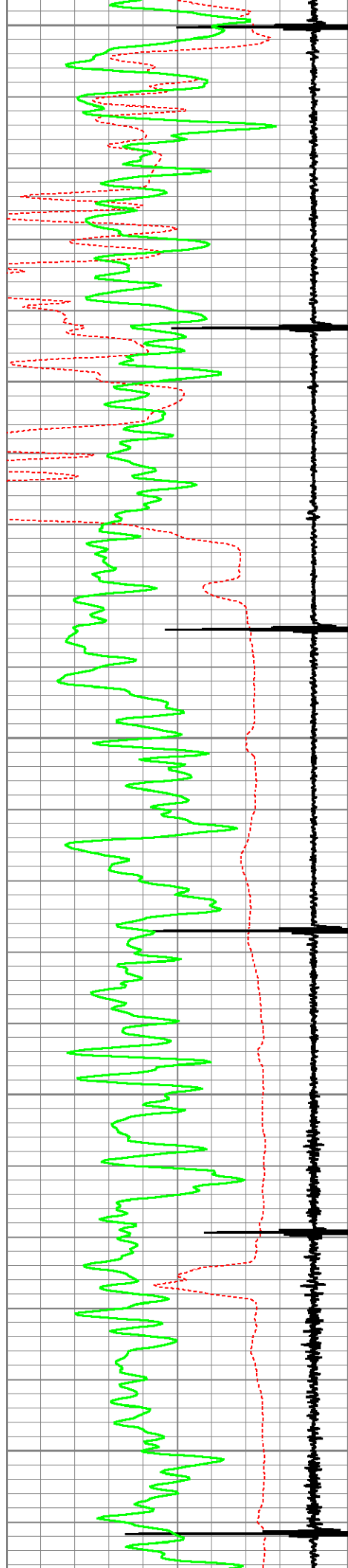
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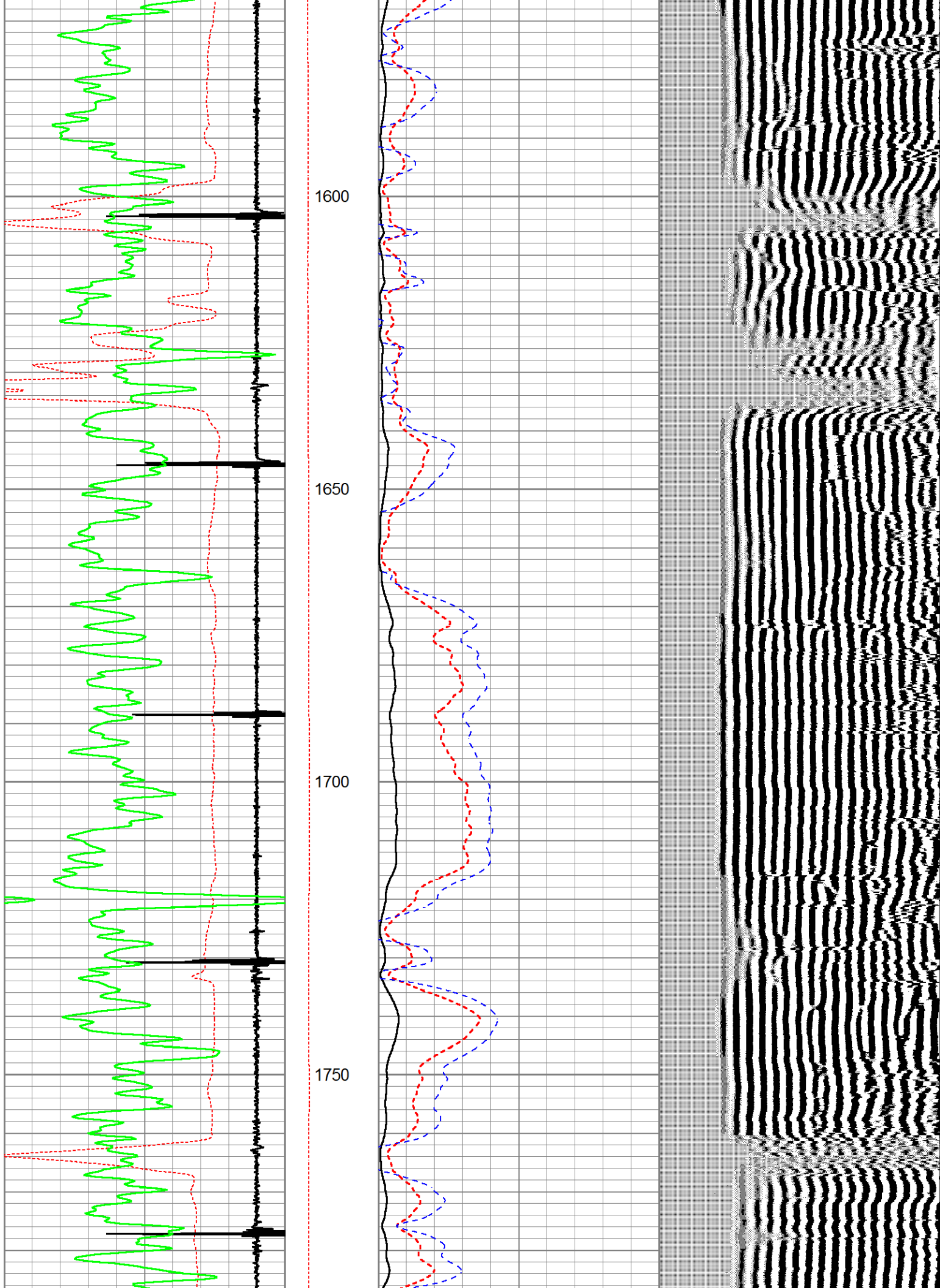
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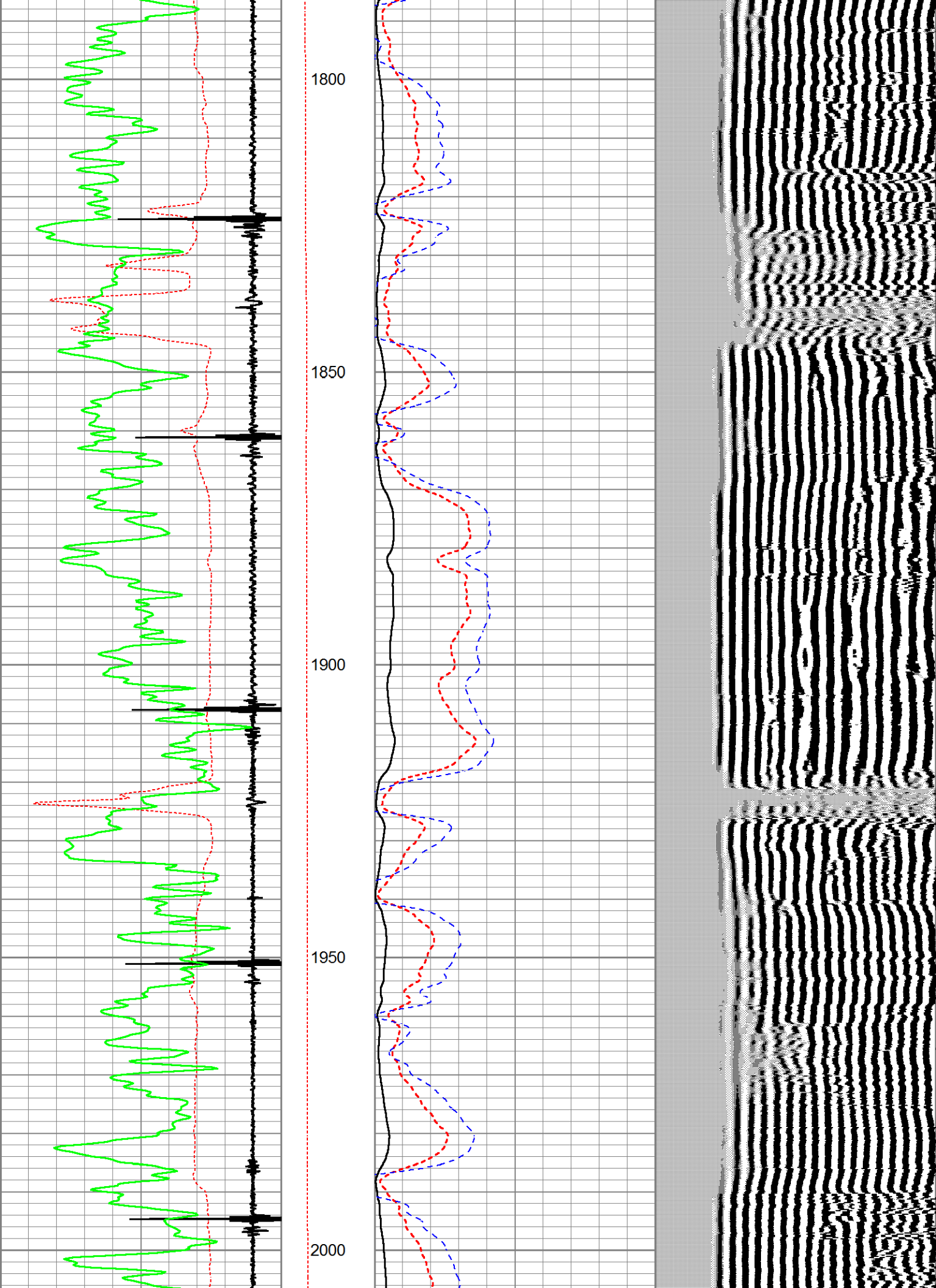
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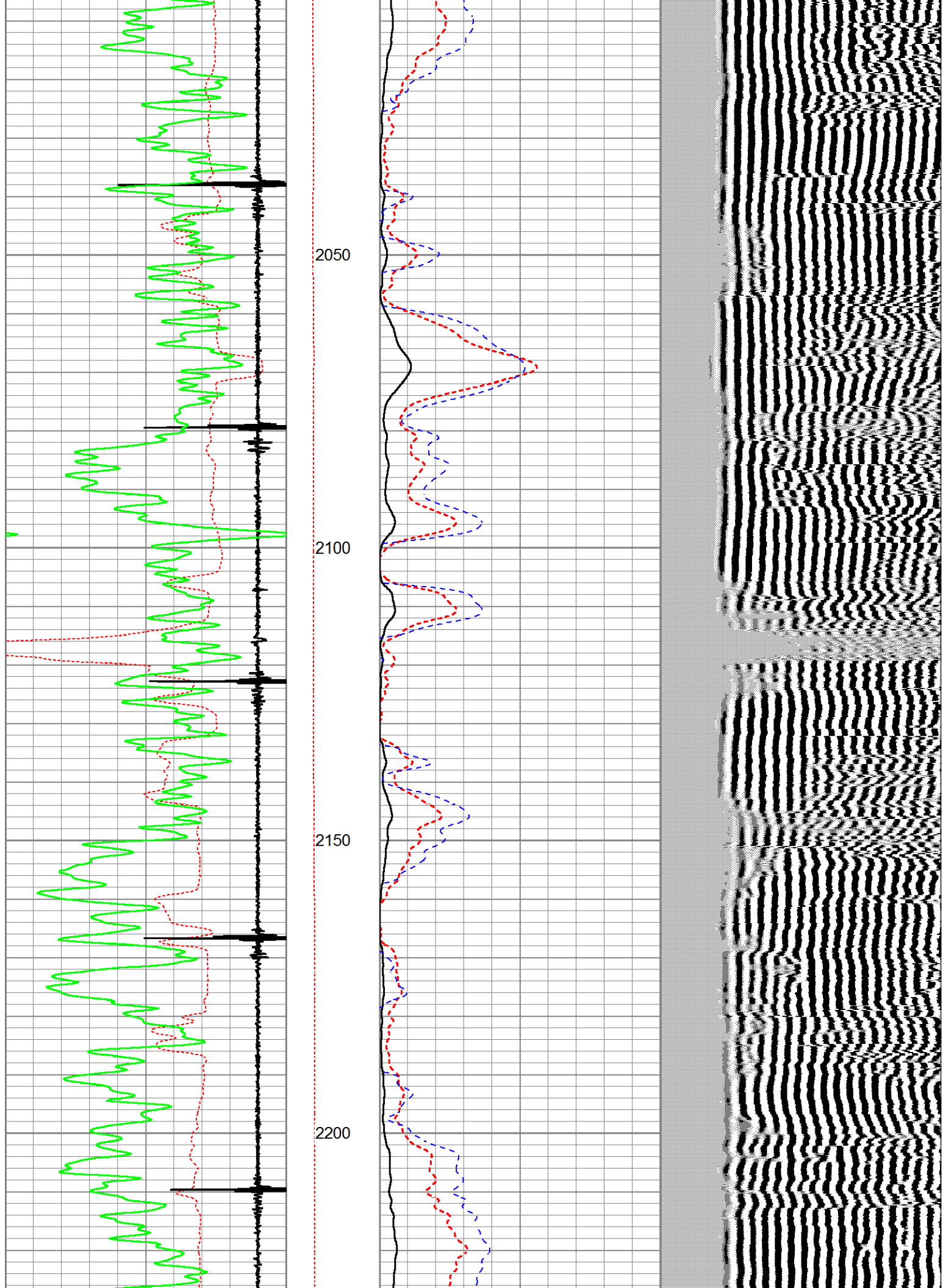
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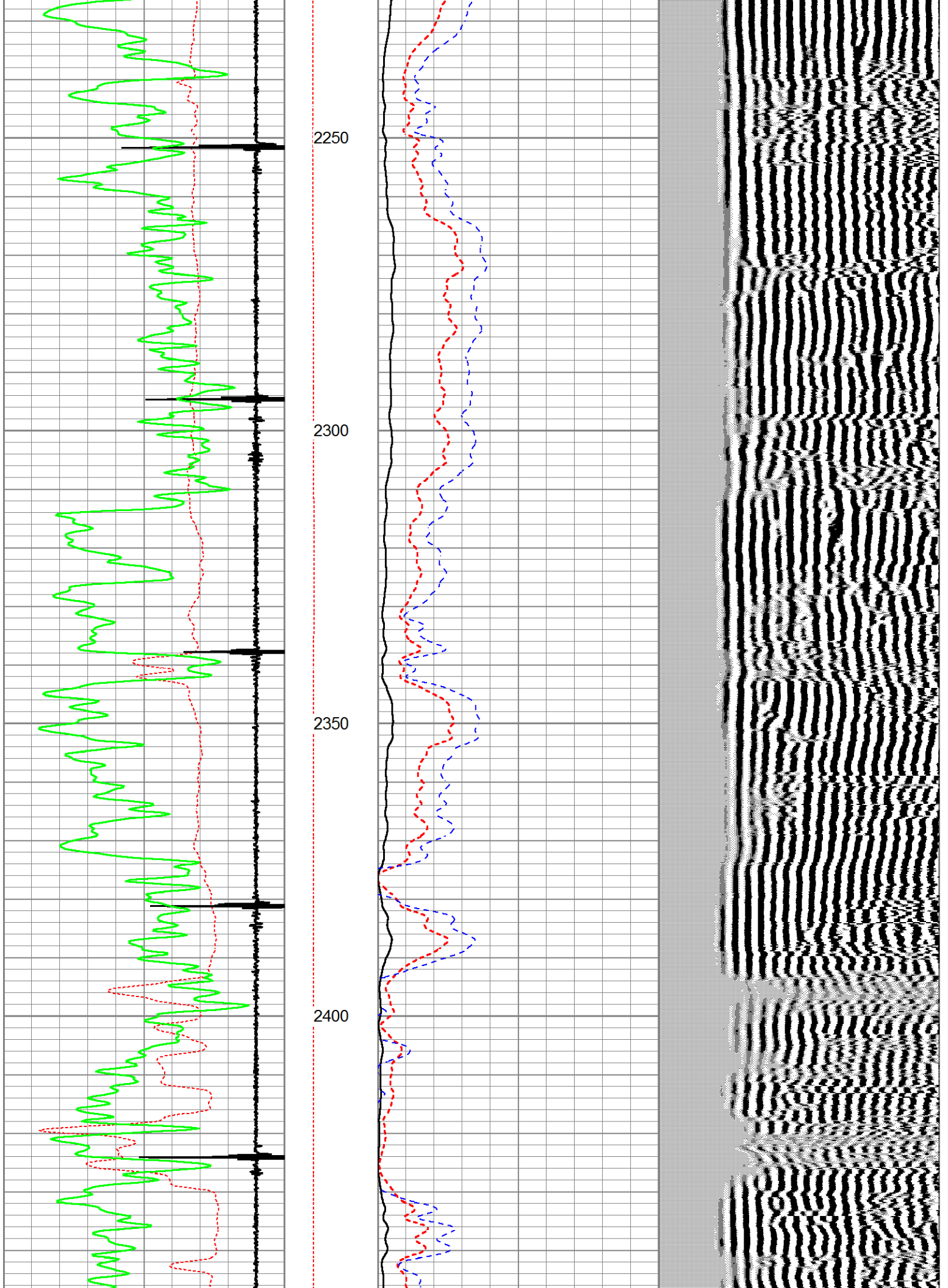


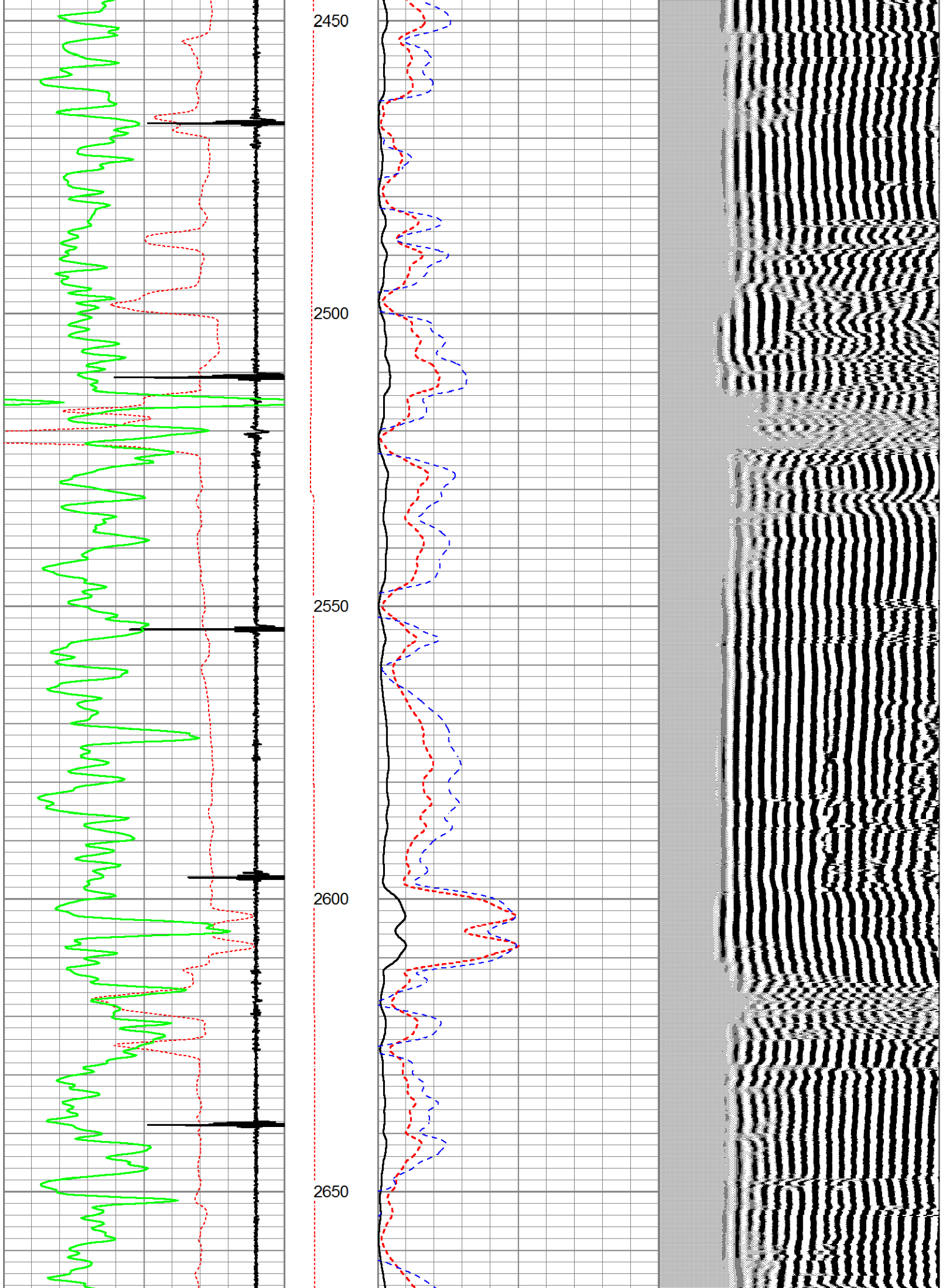


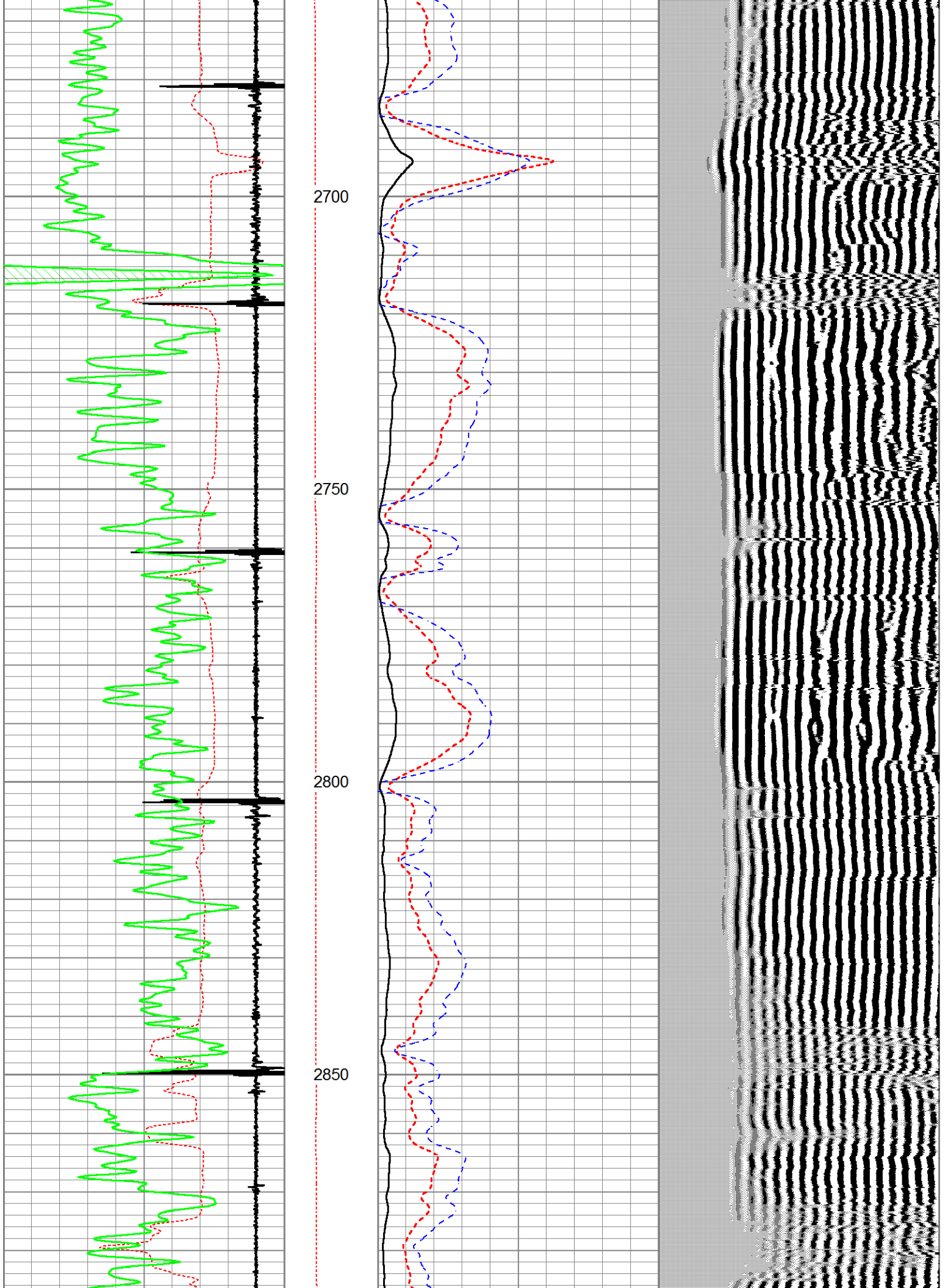


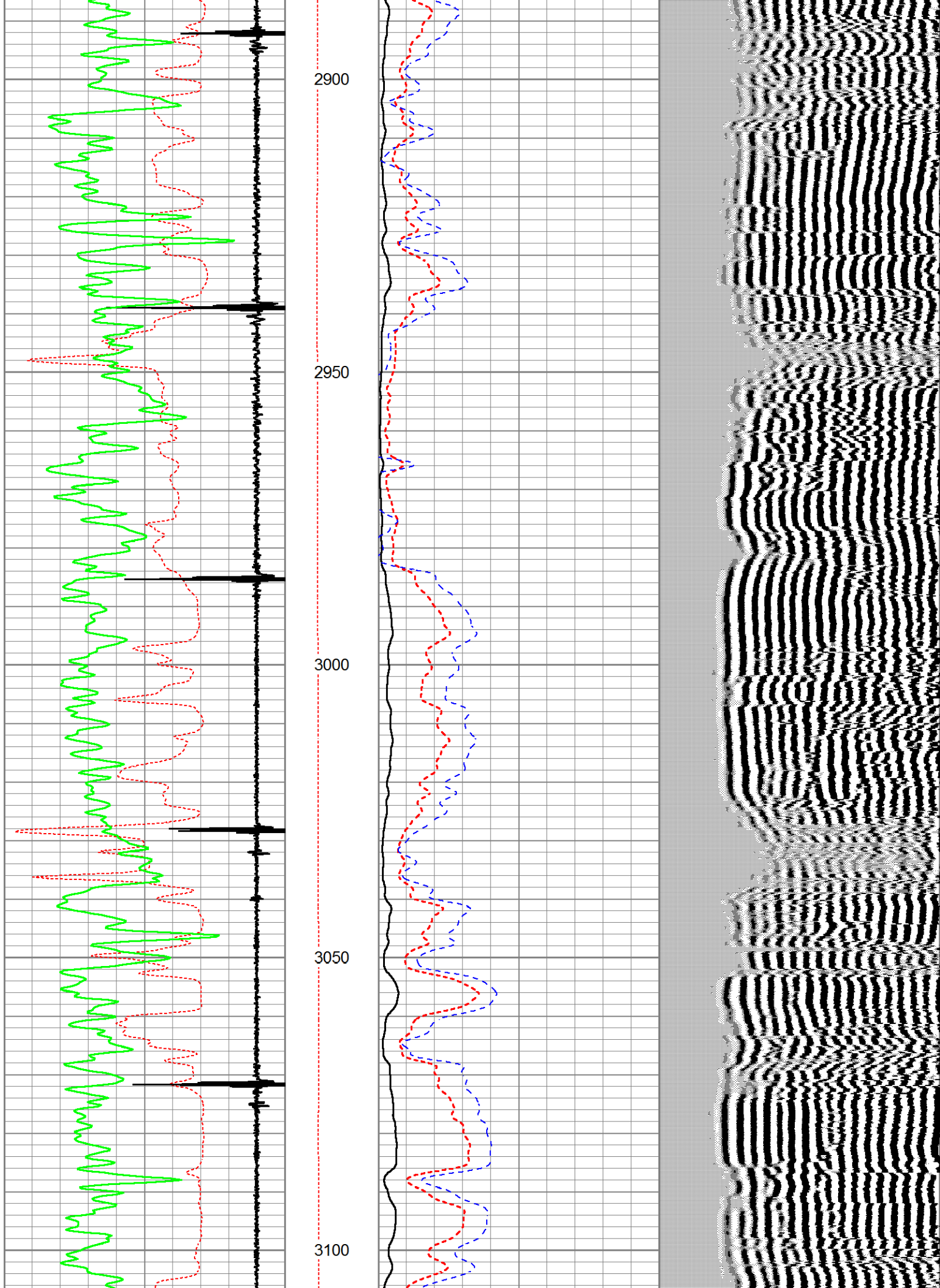


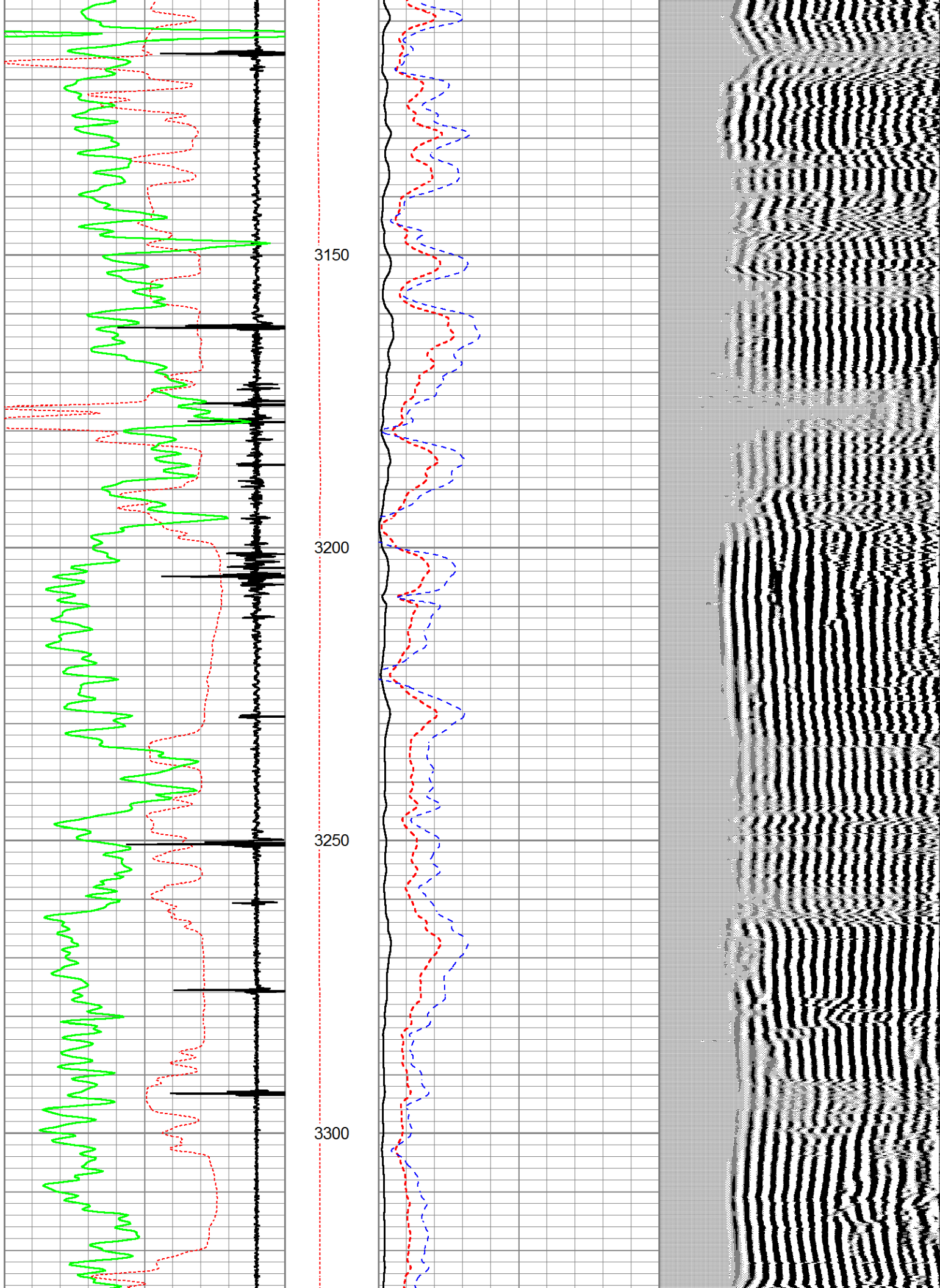


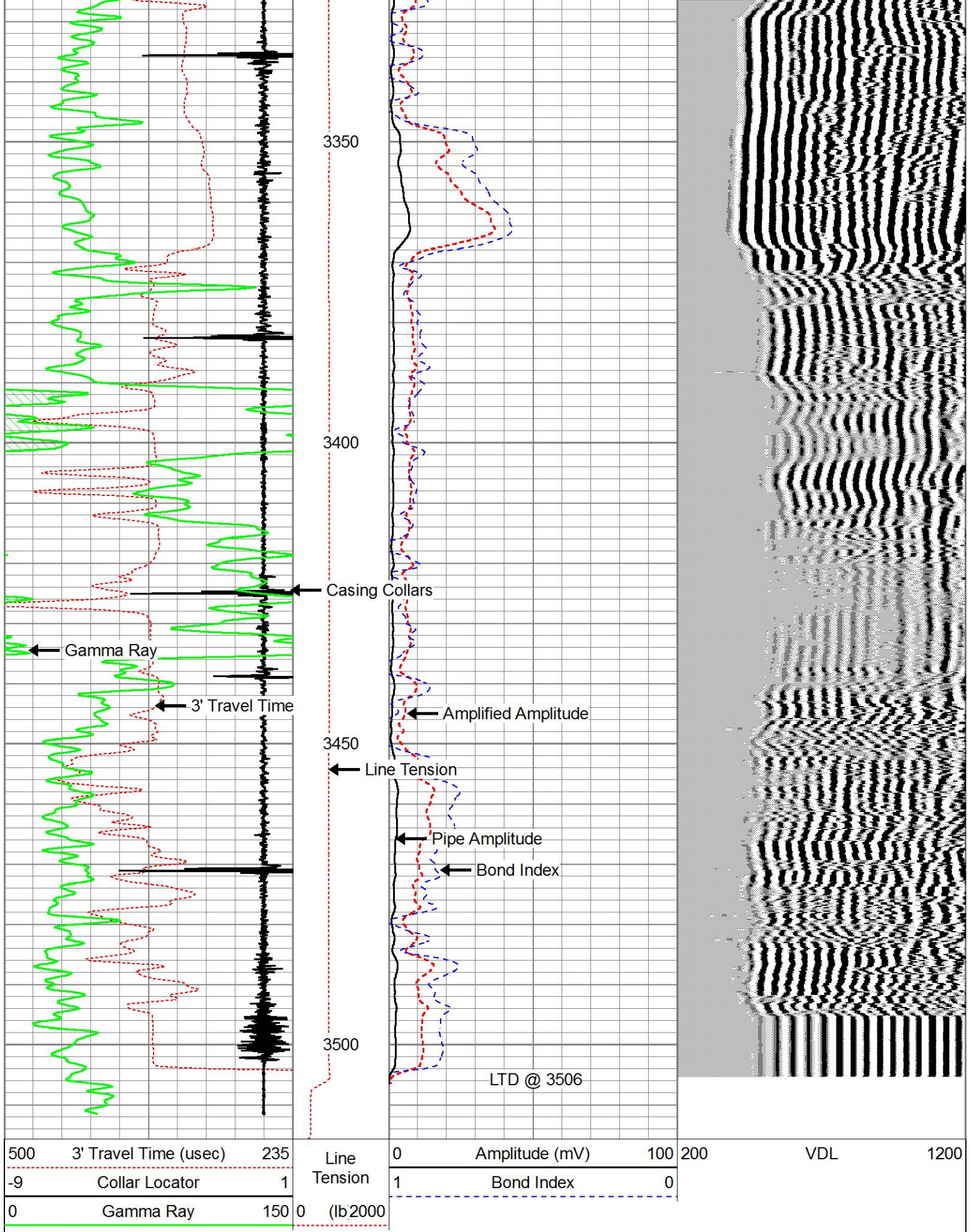








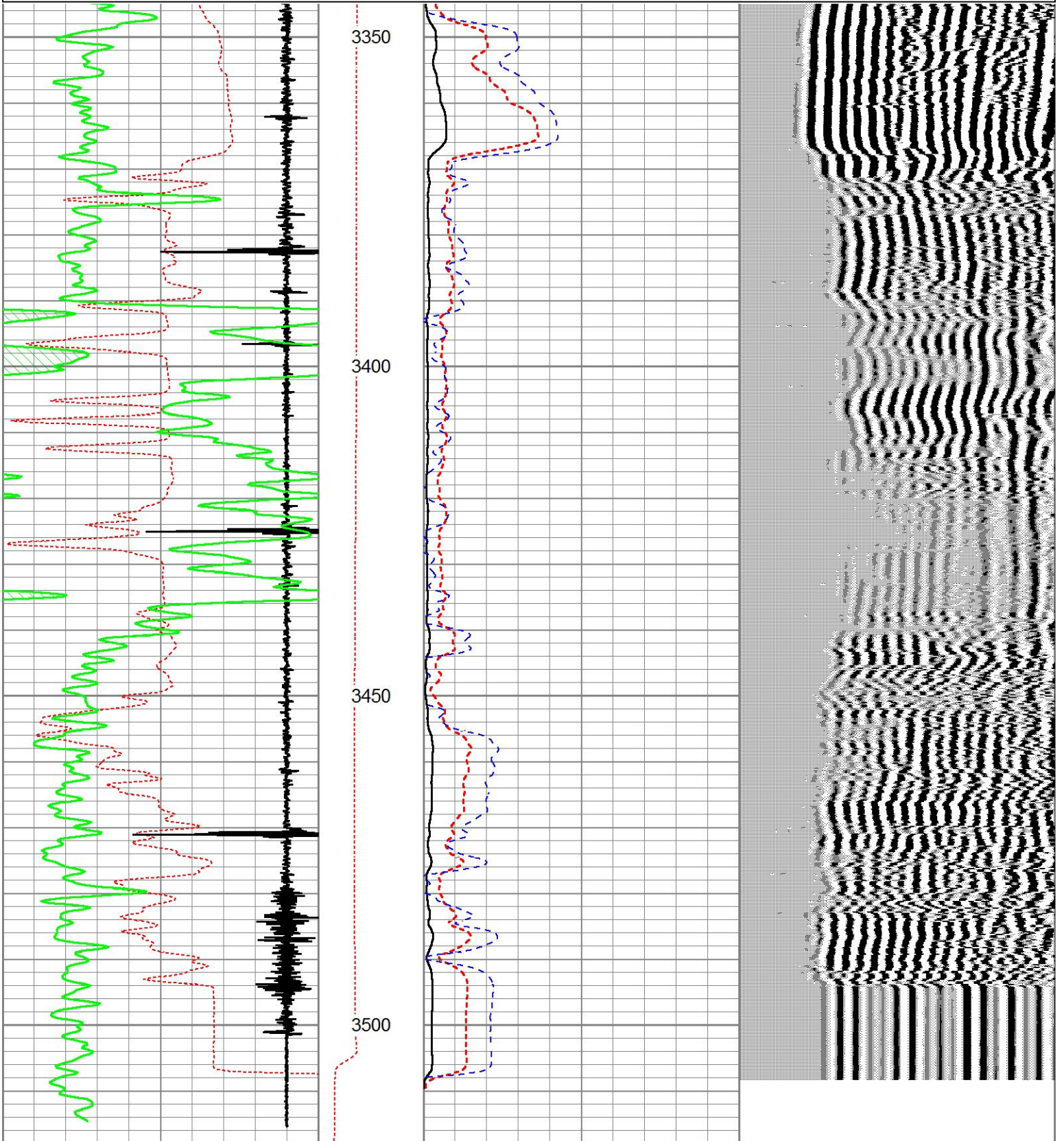




REPEAT SECTION

Database File bearpetroleum_blackhallno3.db
Dataset Pathname pass5
Presentation Format pnr_cbl
Dataset Creation Tue Oct 27 11:06:46 2015
Charted by Depth in Feet scaled 1:240

500	3' Travel Time (usec)	235	Line	0	Amplitude (mV)	100	200	VDL	1200
-9	Collar Locator	1	Tension	1	Bond Index	0			
0	Gamma Ray	150	0	(lb/2000)					



500	3' Travel Time (usec)	235	Line	0	Amplitude (mV)	100	200	VDL	1200
-9	Collar Locator	1	Tension	1	Bond Index	0			
0	Gamma Ray	150	0 (lb,2000)						