



Radial Cement Bond Log
Gamma Ray
CCL

Company		Kerr McGee Oil and Gas	
Well		GROMALA 5-7A	
Field		WATTENBERG	
County		WELD	
State		COLORADO	
Location:		AP1 # : 05-123-15043	
LAT: 40.24170 LONG: -104.71350		Other Services	
SW/NW			
SEC 7 TWP 3N RGE 65W			
Permanent Datum		GL	Elevation
Log Measured From		K.B. 10'	5022'
Drilling Measured From		KB	Elevation
			K.B. 5032'
			D.F. 5031'
			G.L. 5022'
Date	4-1-2015		
Run Number	ONE		
Depth Driller	8054'		
Depth Logger	6432'		
Bottom Logged Interval	6424'		
Top Log Interval	SURFACE		
Open Hole Size	4.5		
Type Fluid	WATER		
Density / Viscosity	1.0		
Max. Recorded Temp.	216 DEG F		
Estimated Cement Top	4073/121'		
Time Well Ready	N/A		
Time Logger on Bottom	N/A		
Equipment Number	3812		
Location	GREELEY		
Recorded By	N.POLLOCK		
Witnessed By	B.SMITH		
Borehole Record		Tubing Record	
Run Number	Bit	From	To
		Size	Weight
			From
			To
Casing Record	Size	Wgt/Ft	Top
Surface String	8 5/8	24#	SURFACE
Prot. String			
Production String	4 1/2	11.6#	SURFACE
Liner			8055'

<<< Fold Here >>>

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

FREE PIPE CALIBRATION (81mV) 5535'

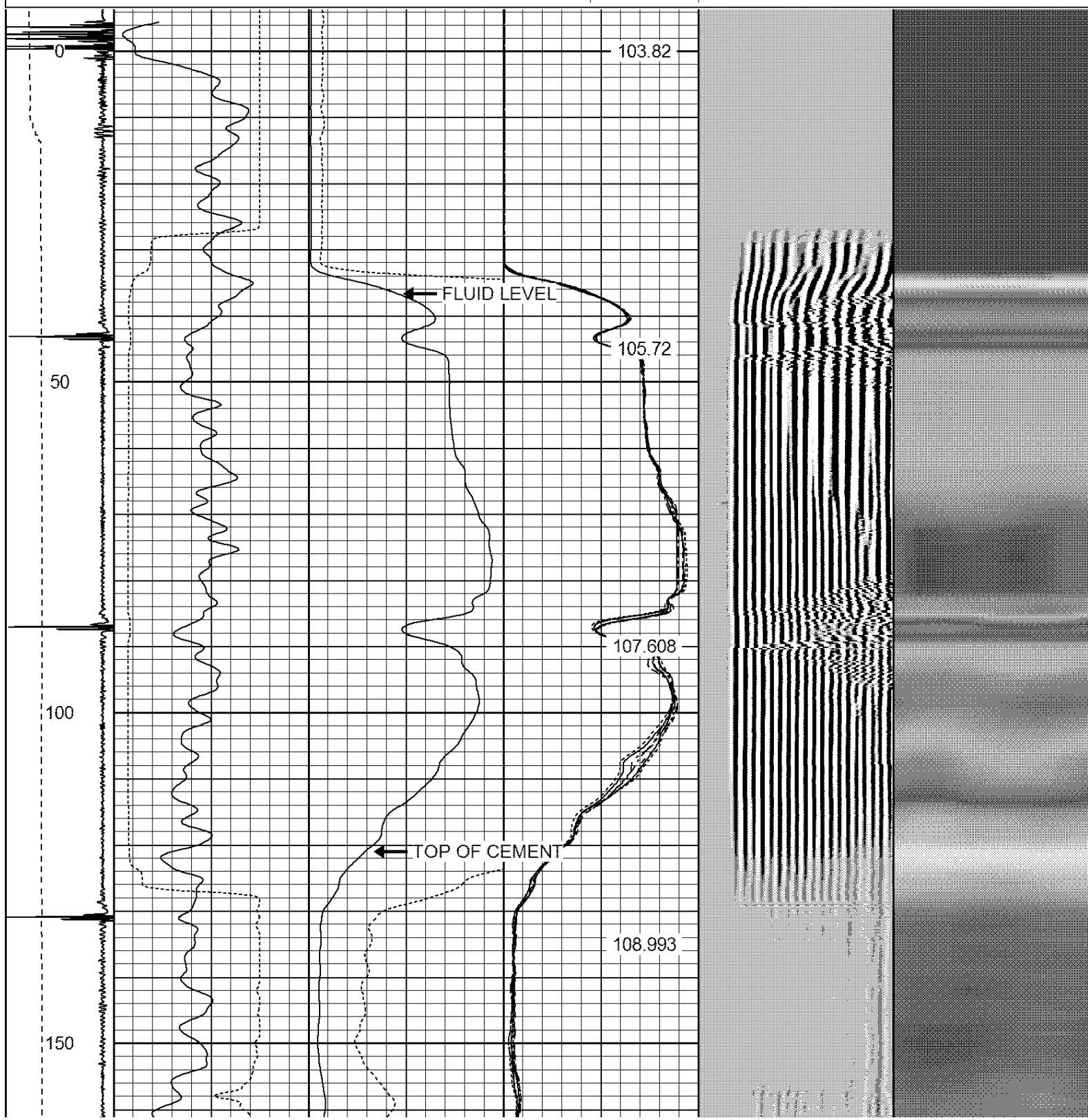
RAN C.B.L. TO VERIFY CEMENTN TOP.

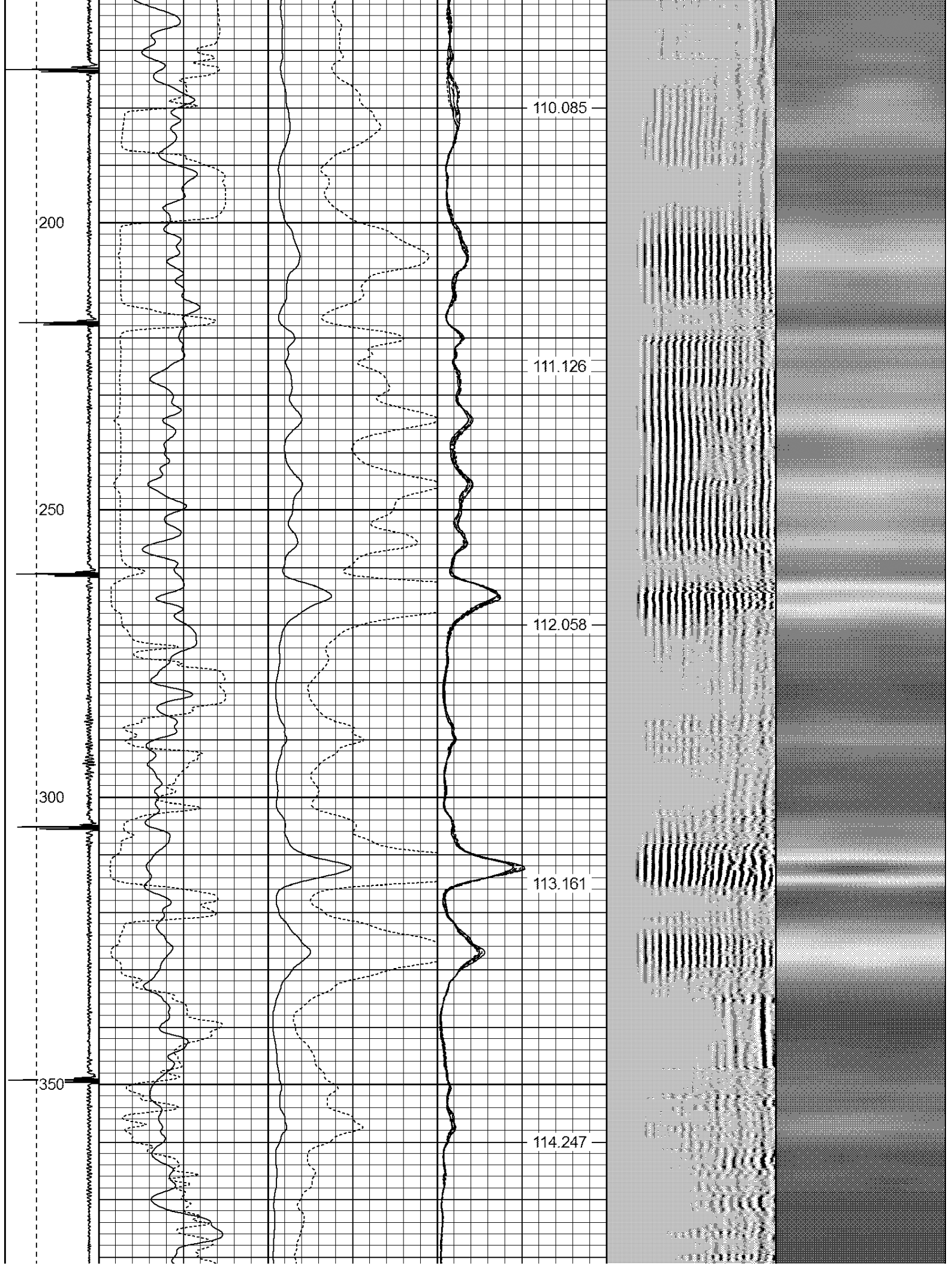
THANK YOU FOR USING WARRIOR ENERGY SERVICES!

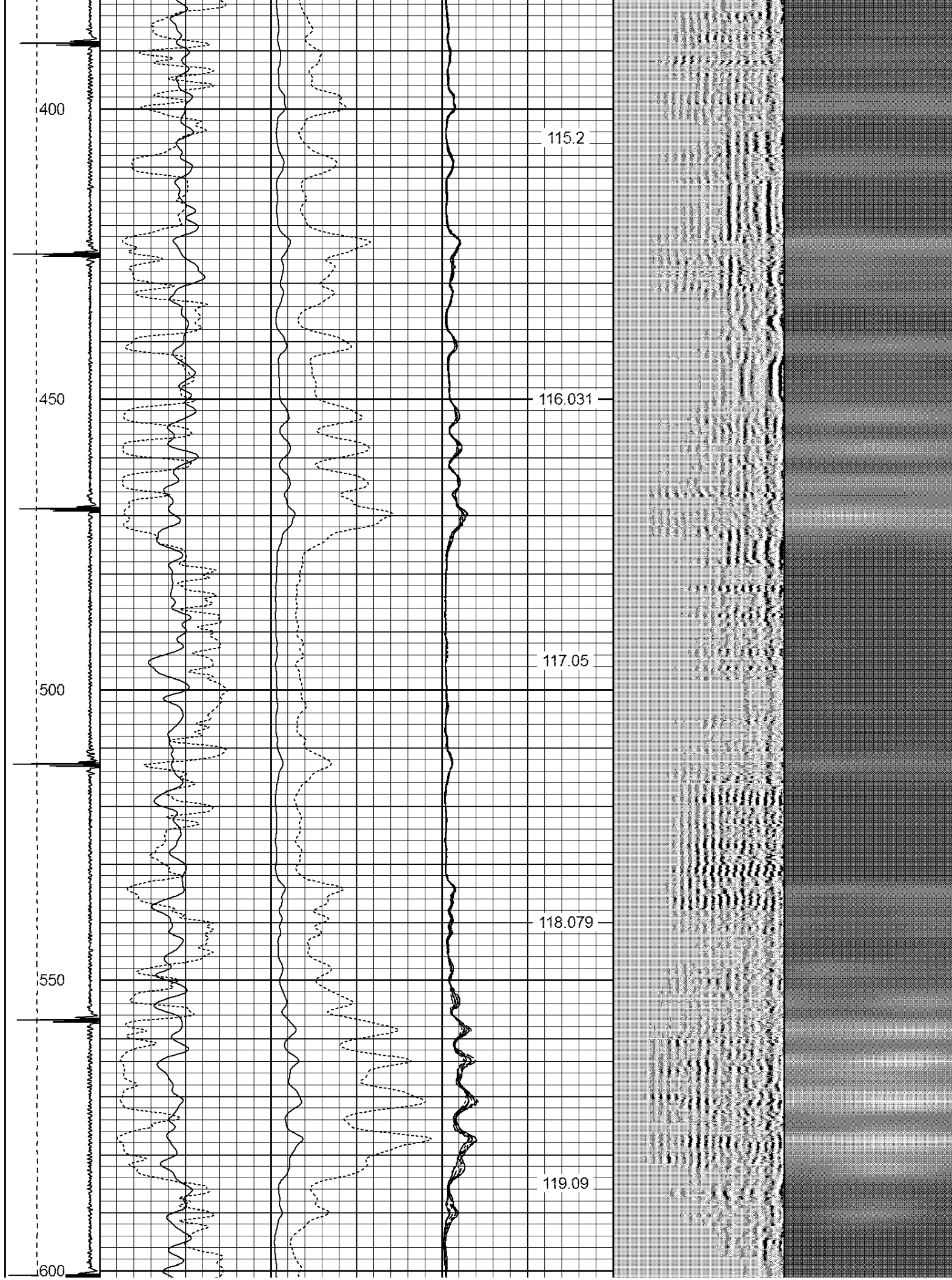
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CENT	19.08					

			PTS275	2.83	2.75	
HEADVOLT	16.25					
RBT	16.25					
IntTemp	14.83					
WVF3FT	11.58		RBT-Probe (Base)	8.92	2.75	90.00
WVFCAL	11.58		Probe Radii Bond Tool with Digital Telemetry			
WVFS1	11.58					
WVFS2	11.58					
WVFS3	11.58					
WVFS4	11.58					
WVFS5	11.58					
WVFS6	11.58					
WVFS7	11.58					
WVFS8	11.58					
WVF5FT	10.58					
CNLSC	6.00		CNT-Probe_B (275)	3.00	2.75	40.00
CNSSC	5.17		6 bow centralizer			
GR	4.33					
CCL	3.64					
			GR-Probe (275)	4.33	2.75	30.00
			Probe 2.75"			
GR	0.90					
Dataset: hsr-gromala 5-7a.db: field/well/run1/pass3 Total Length: 19.08 ft Total Weight: 160.00 lb O.D. 2.75 in						

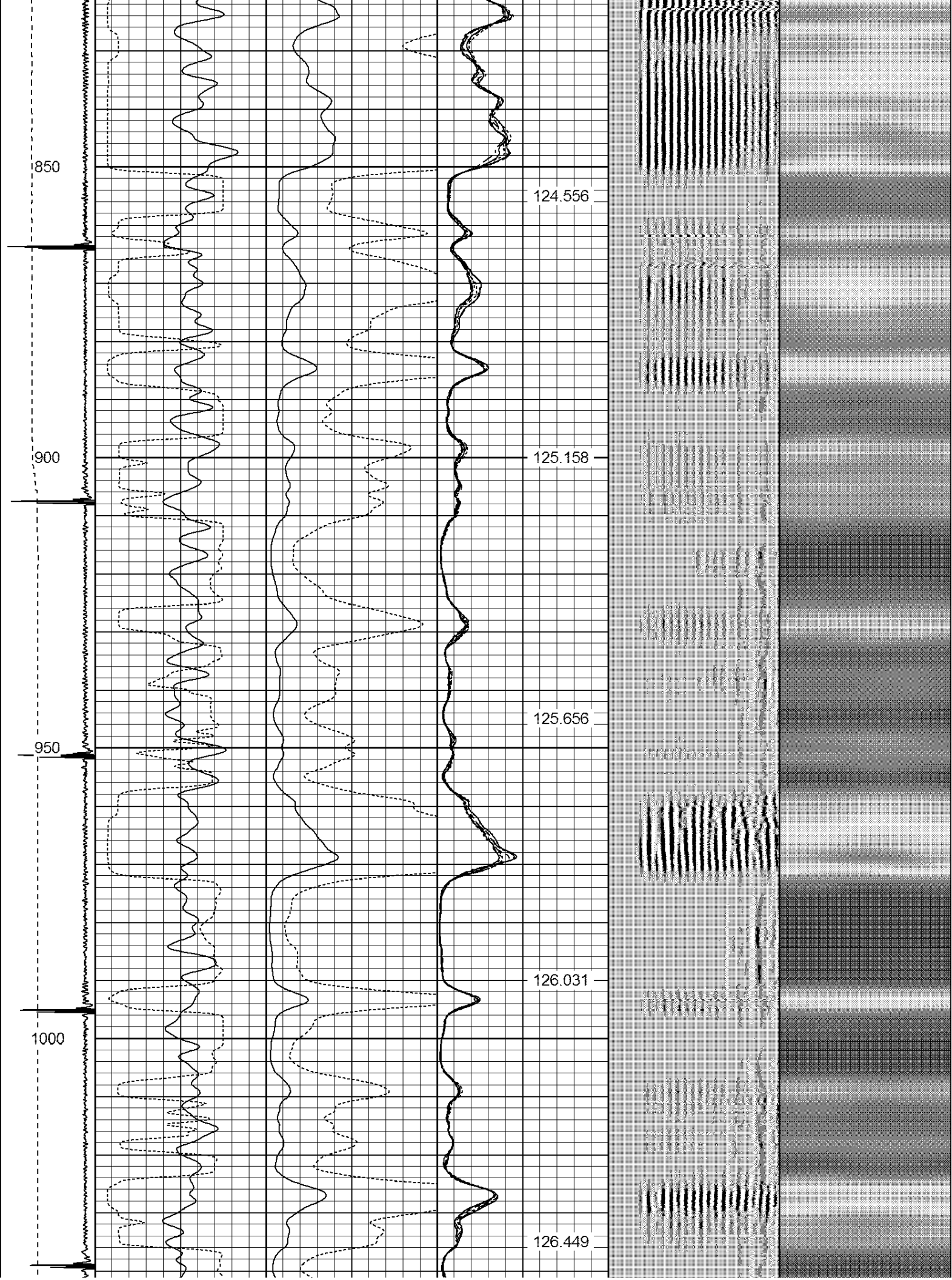
-9	CCL	1	200	TT (usec)	1000	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8
LSPD			0	GR (cps)	200	0	AMPx5 (mV)	20	0	AMPS2	100				1		100
(ft/min)			200	GR (cps)	400				0	AMPS4	100						
0	250								0	AMPS5	100						
									0	AMPS6	100						
									0	AMPS7	100						
									0	AMPS8	100						
										IntTemp							
										(degF)							

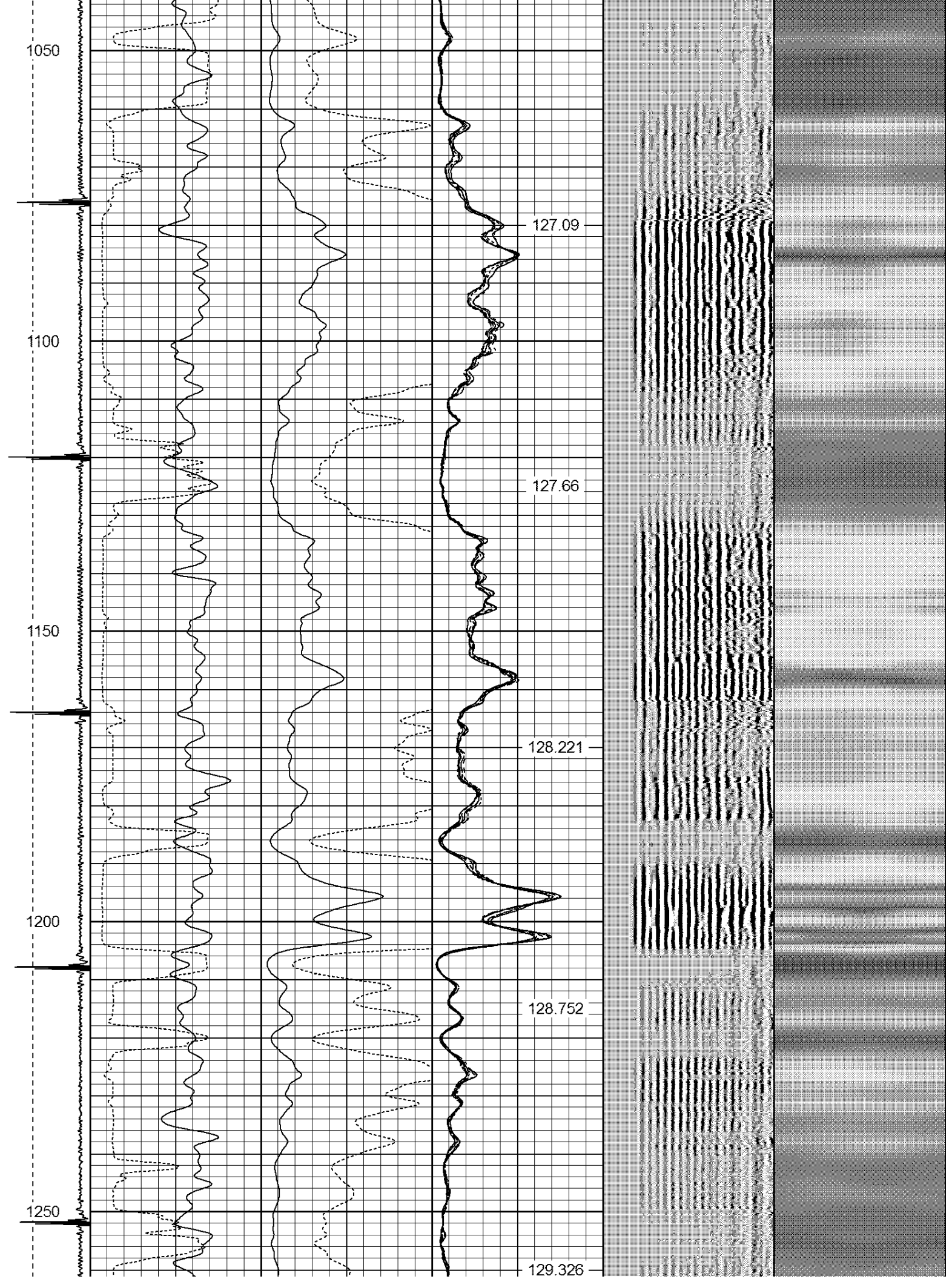


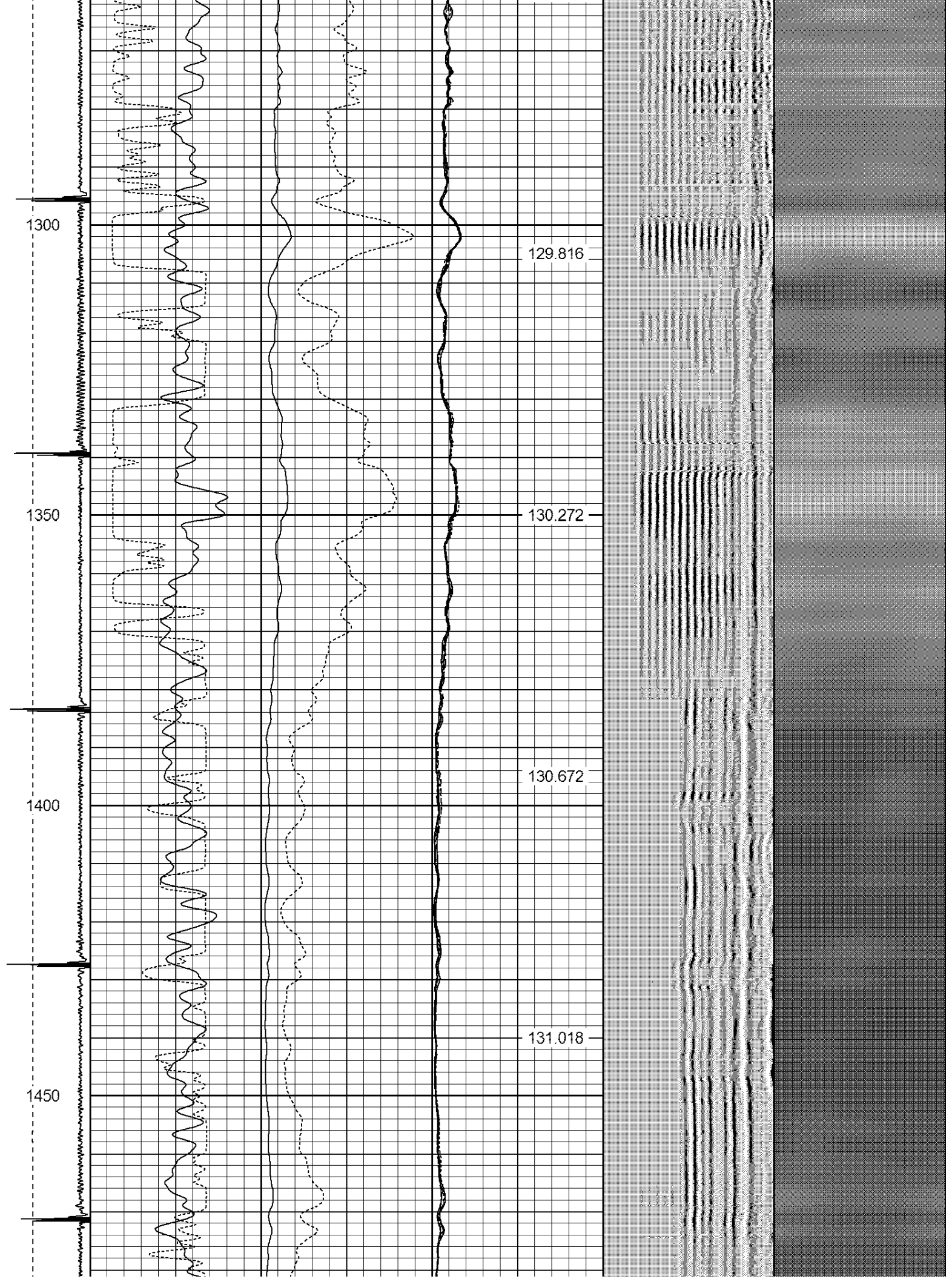


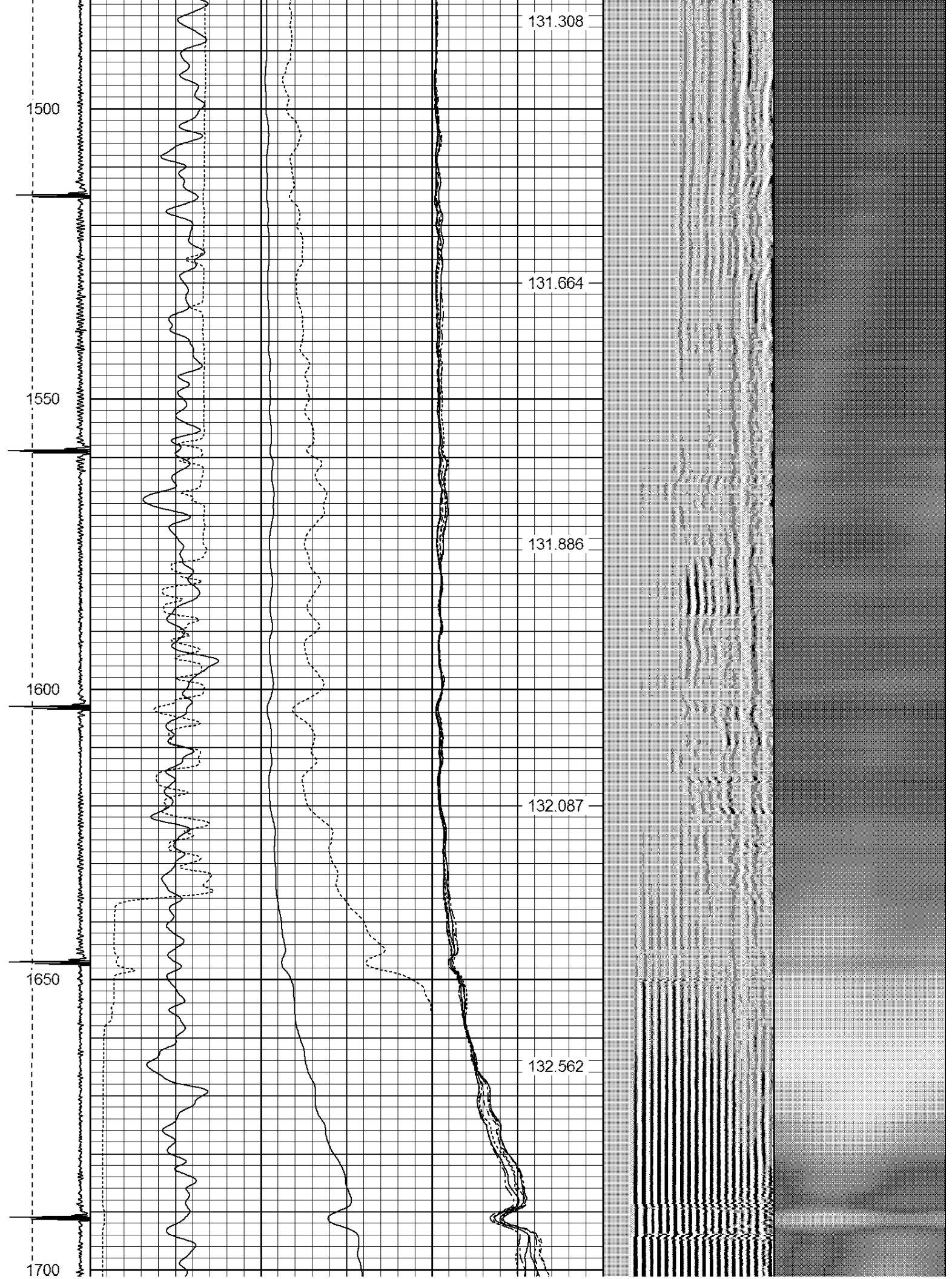


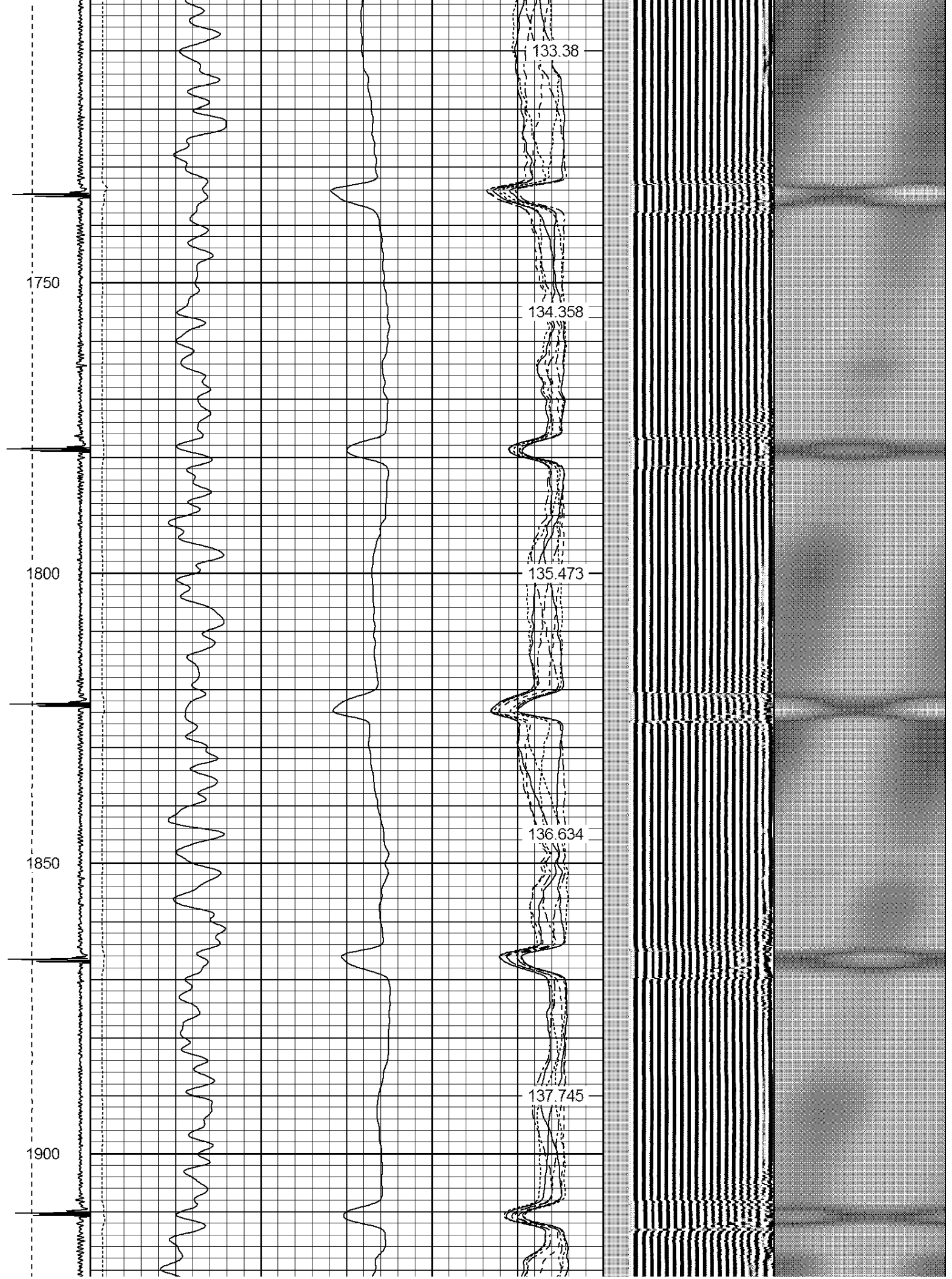


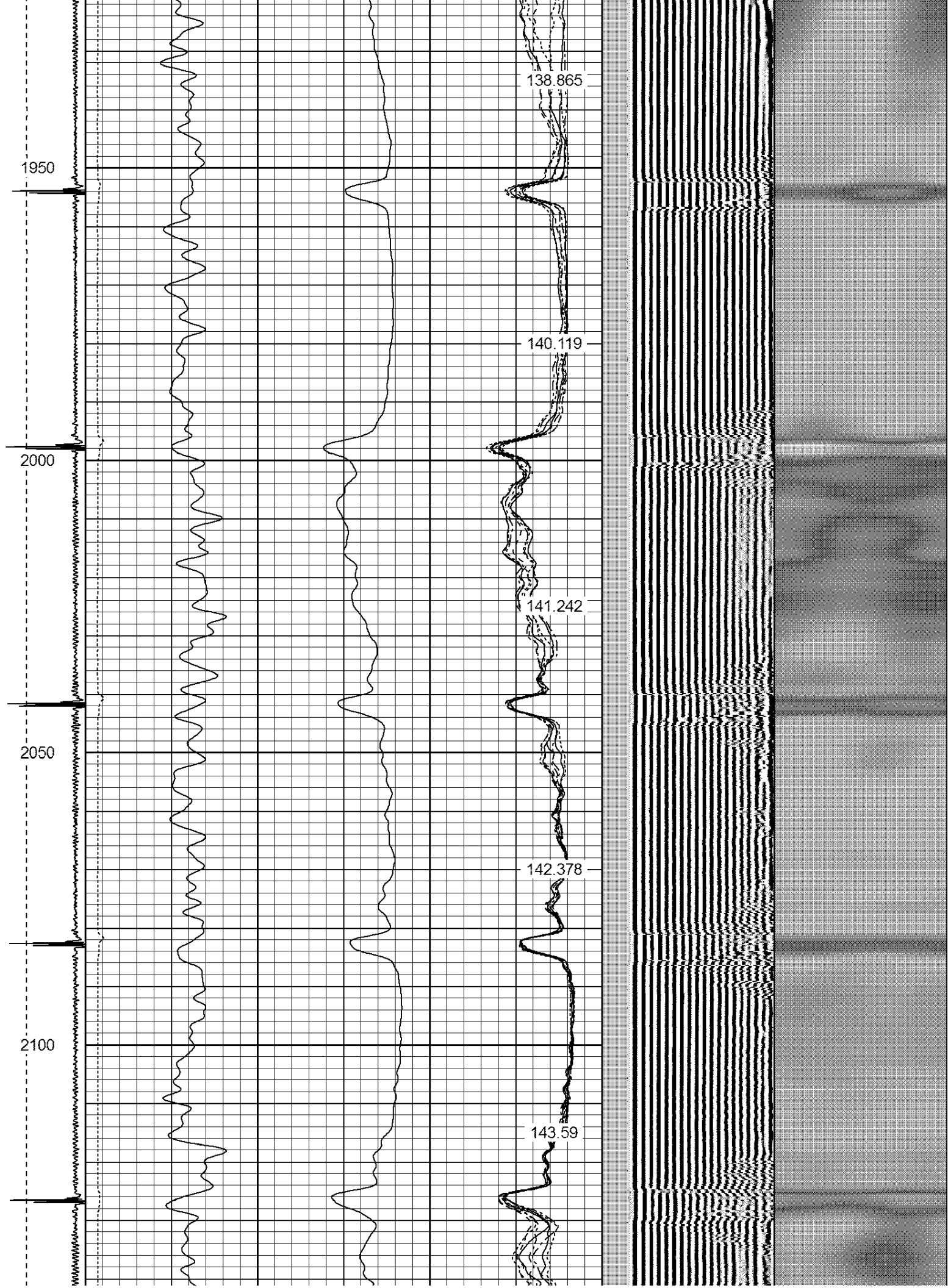




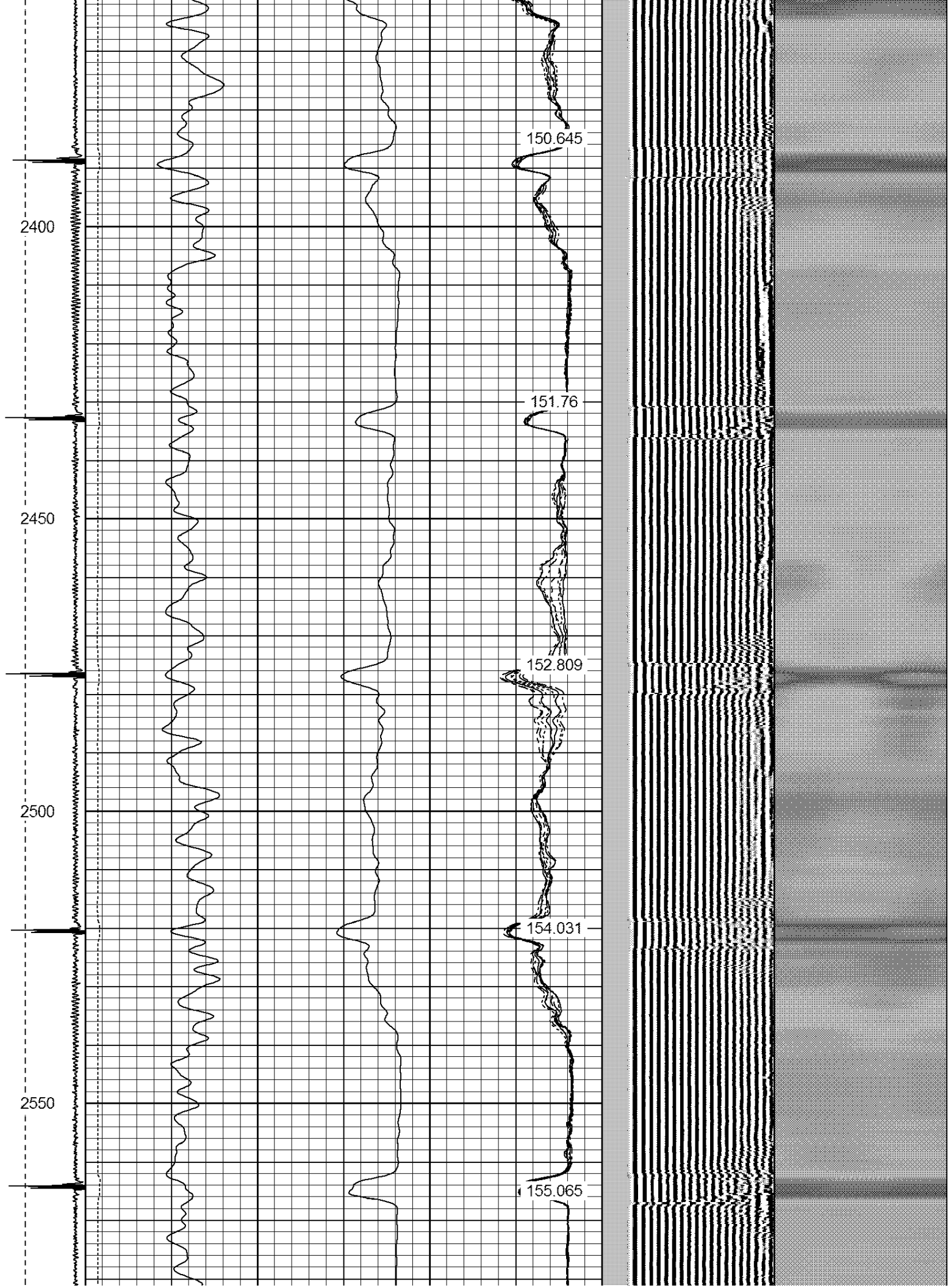


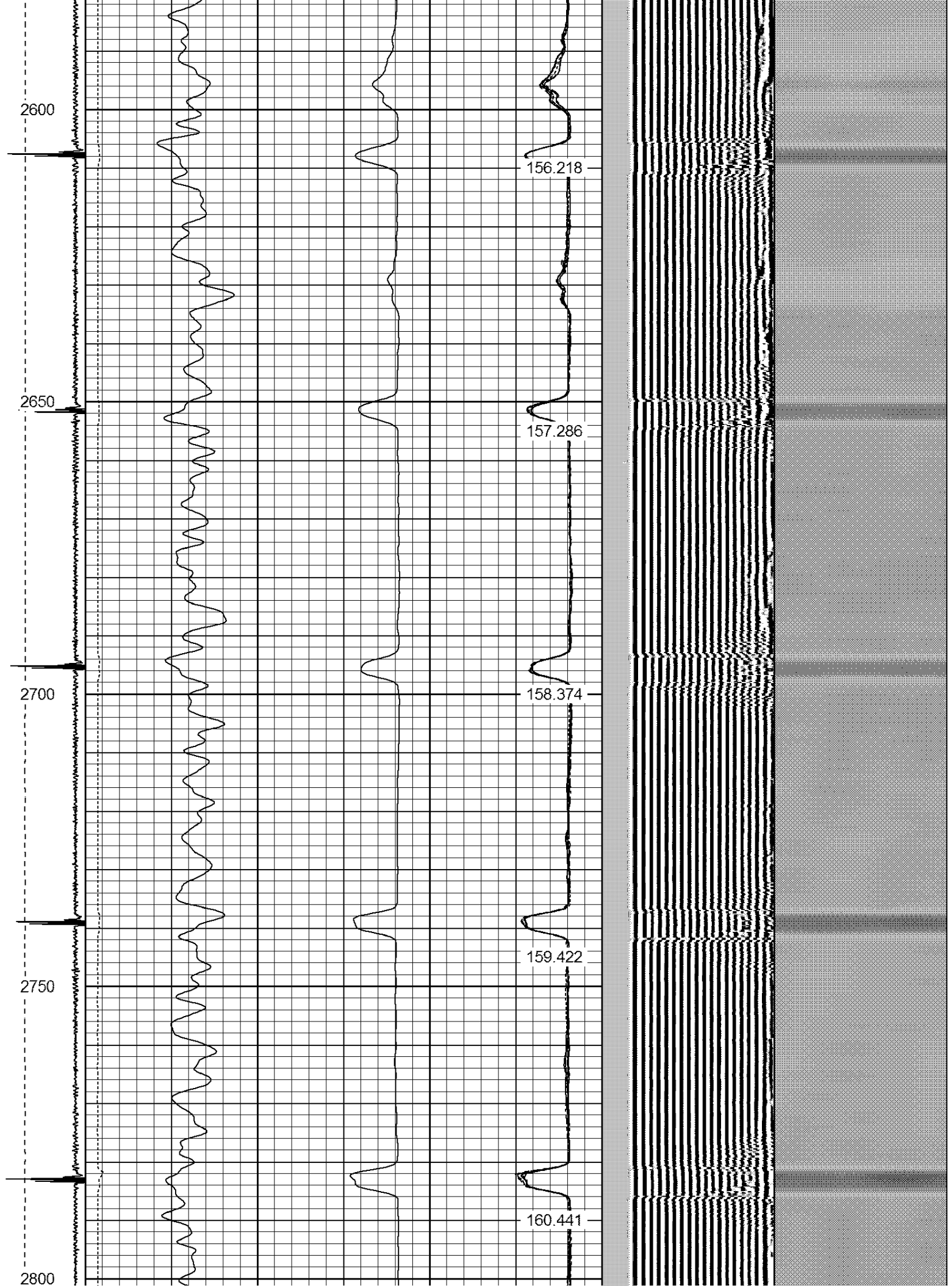


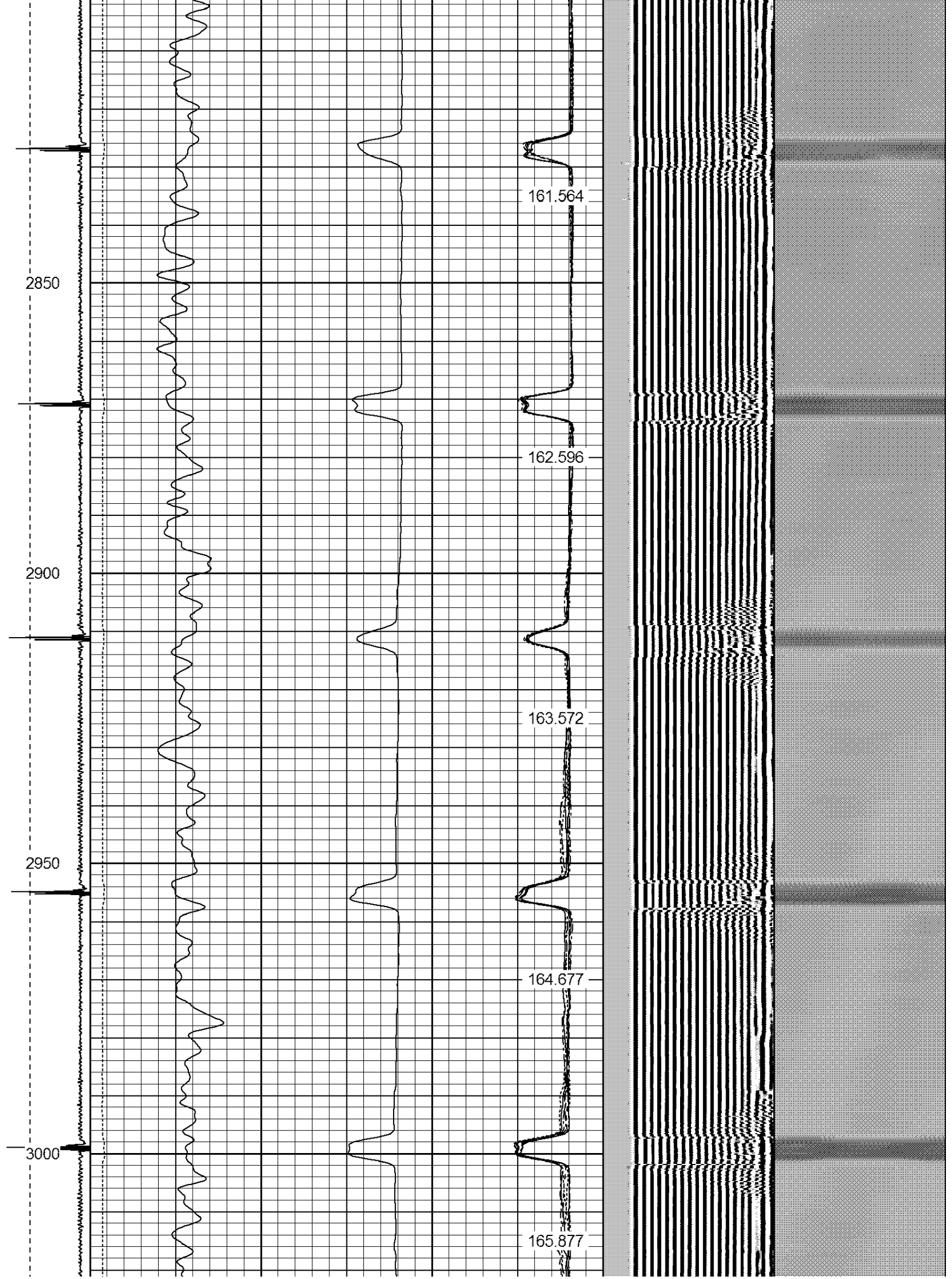


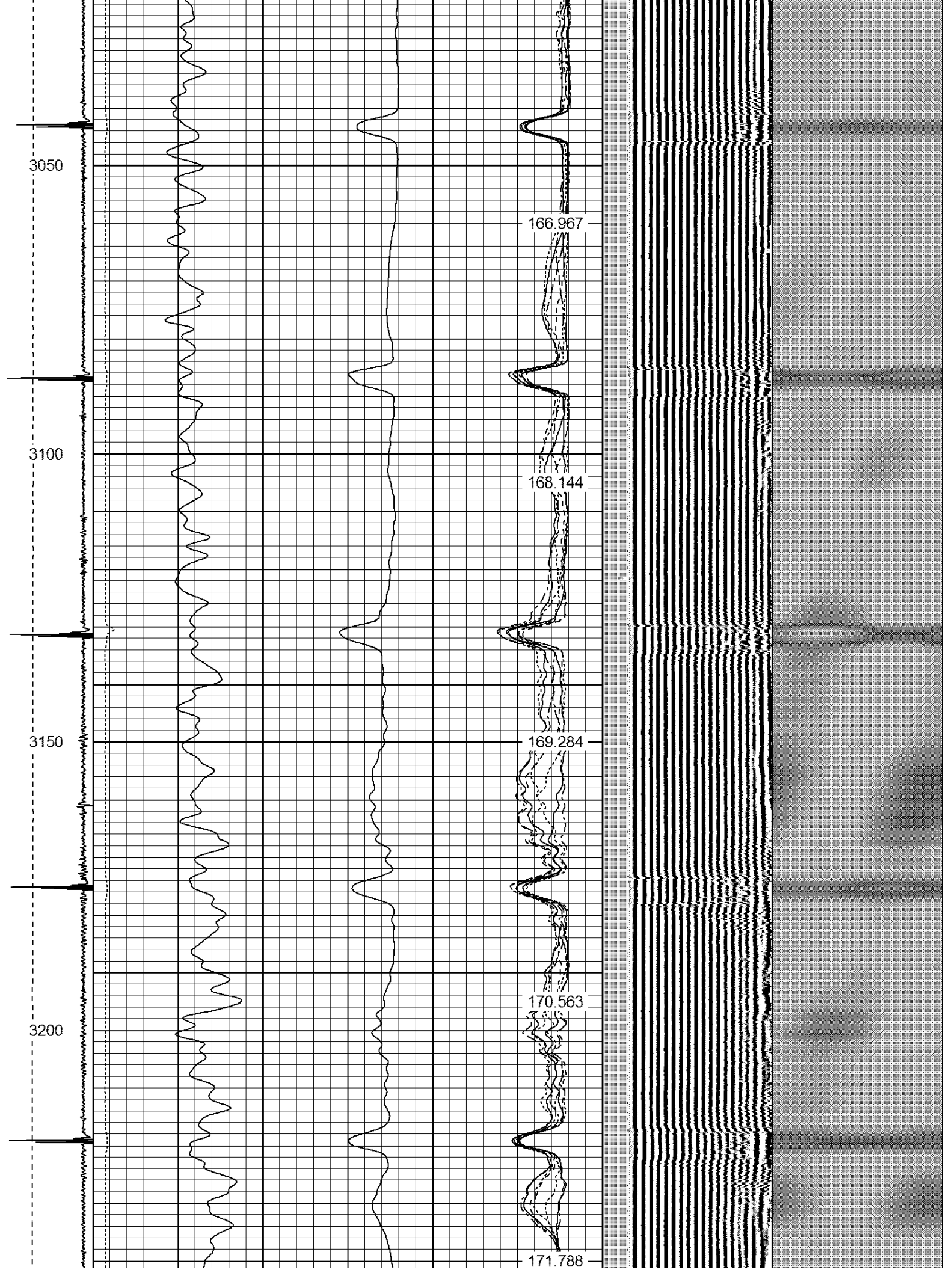


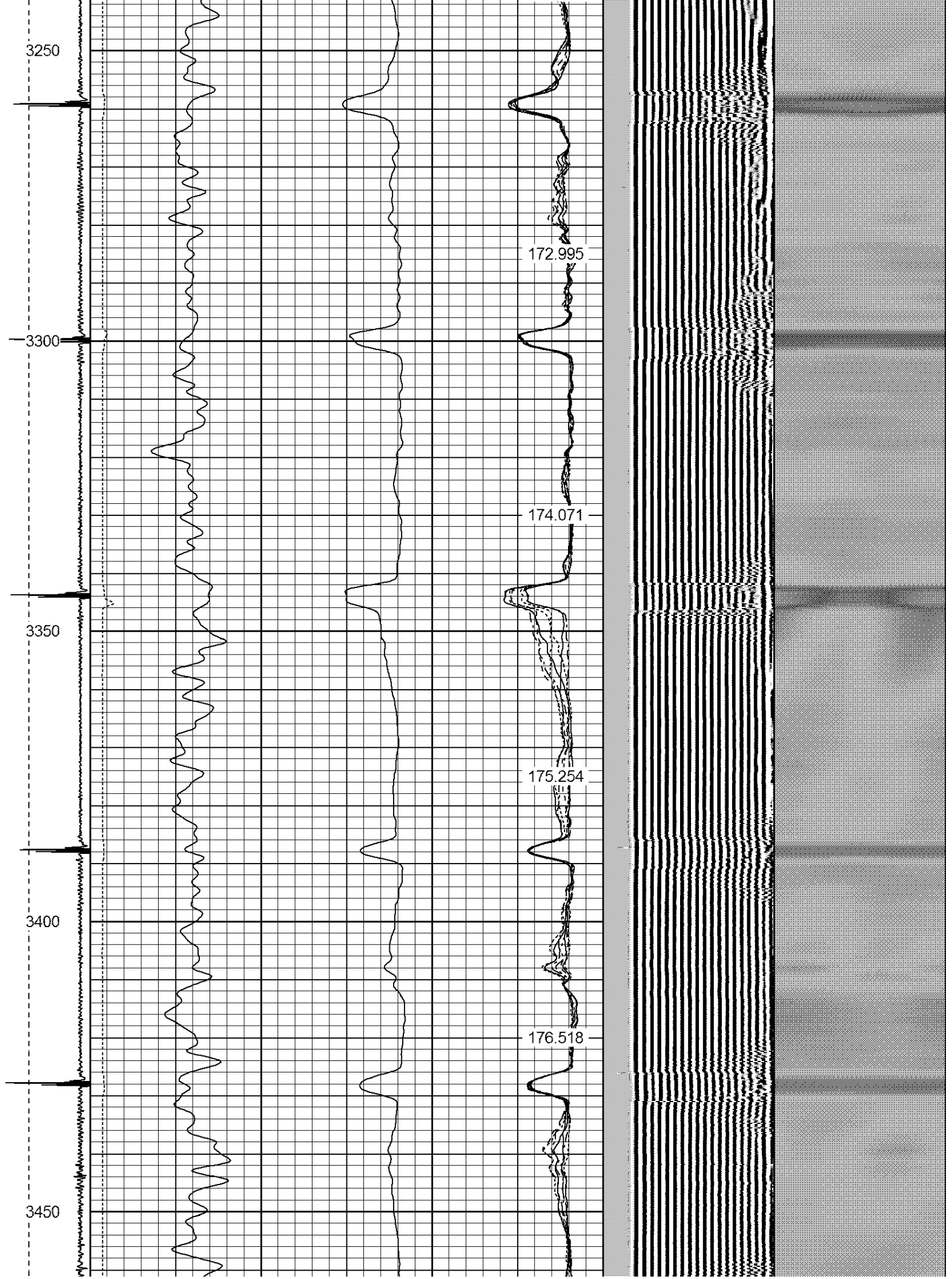


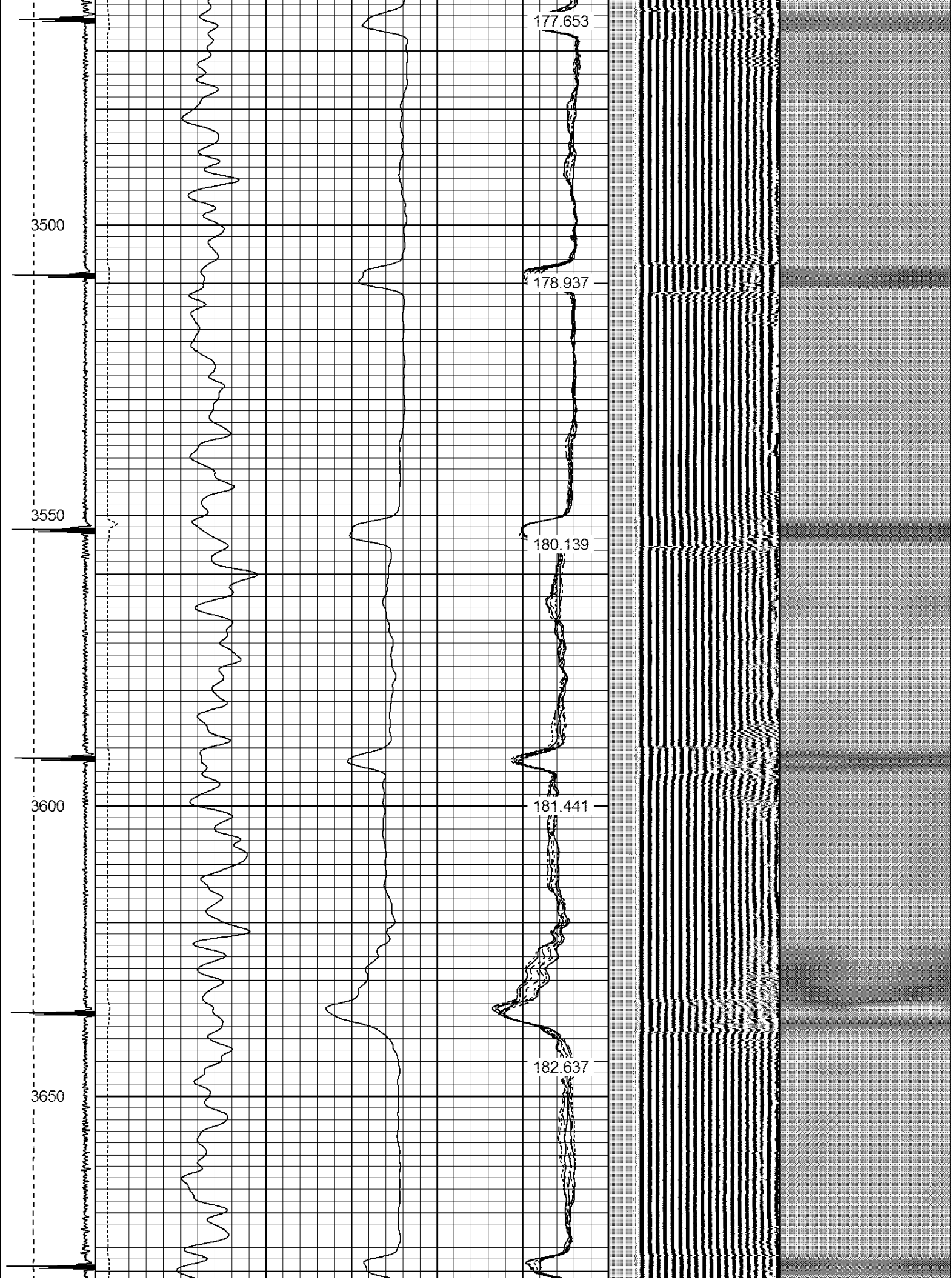


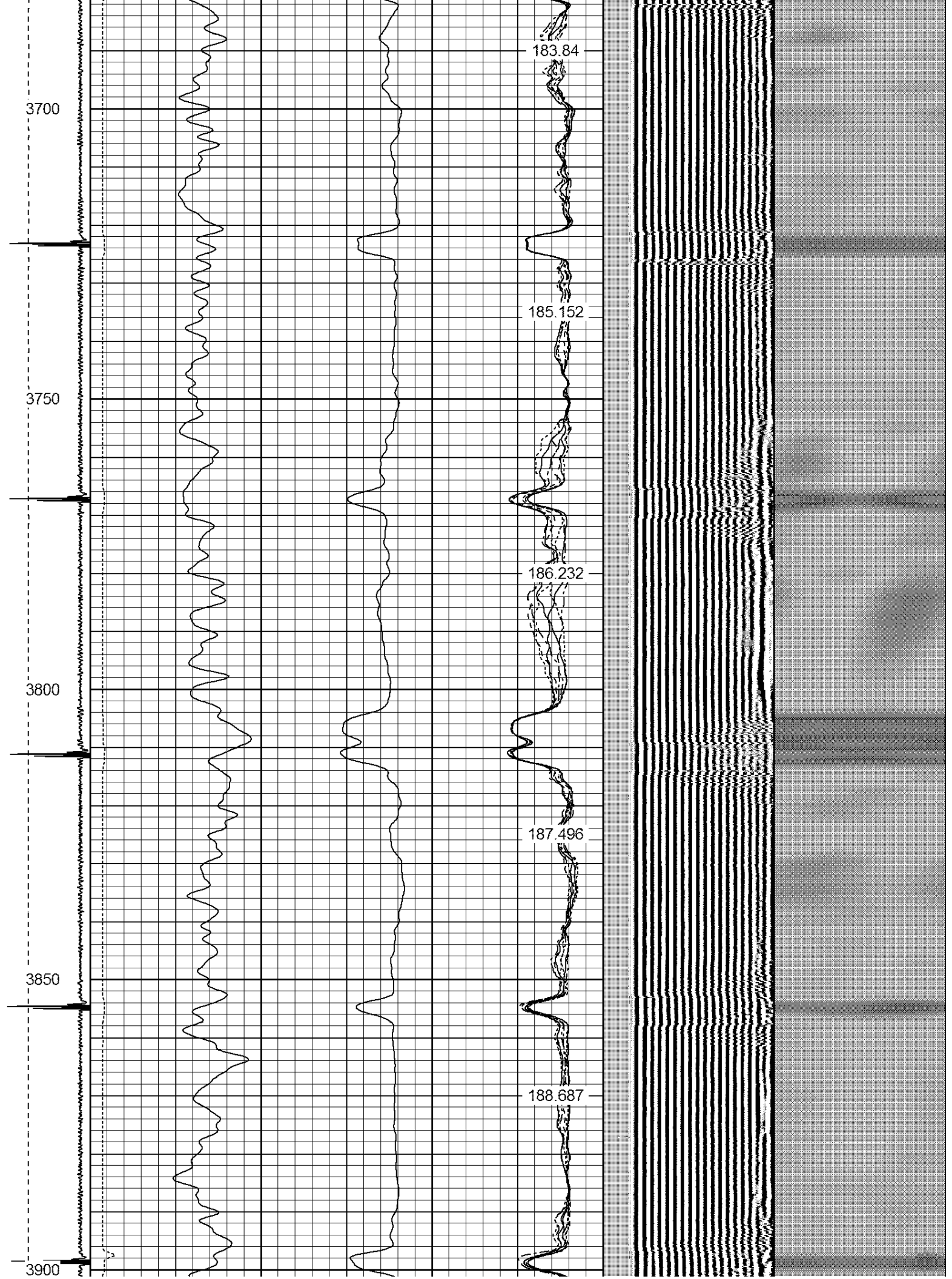


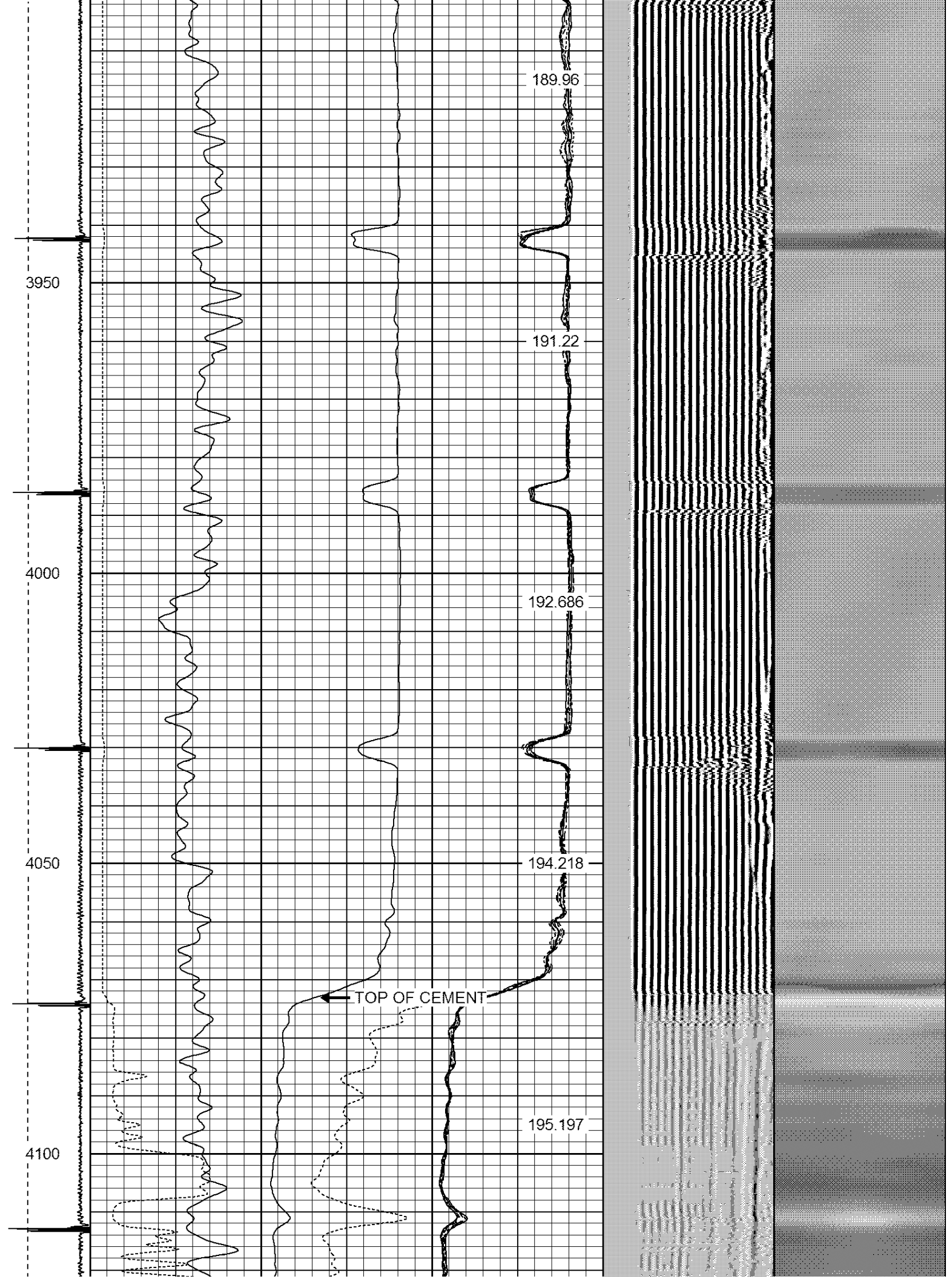


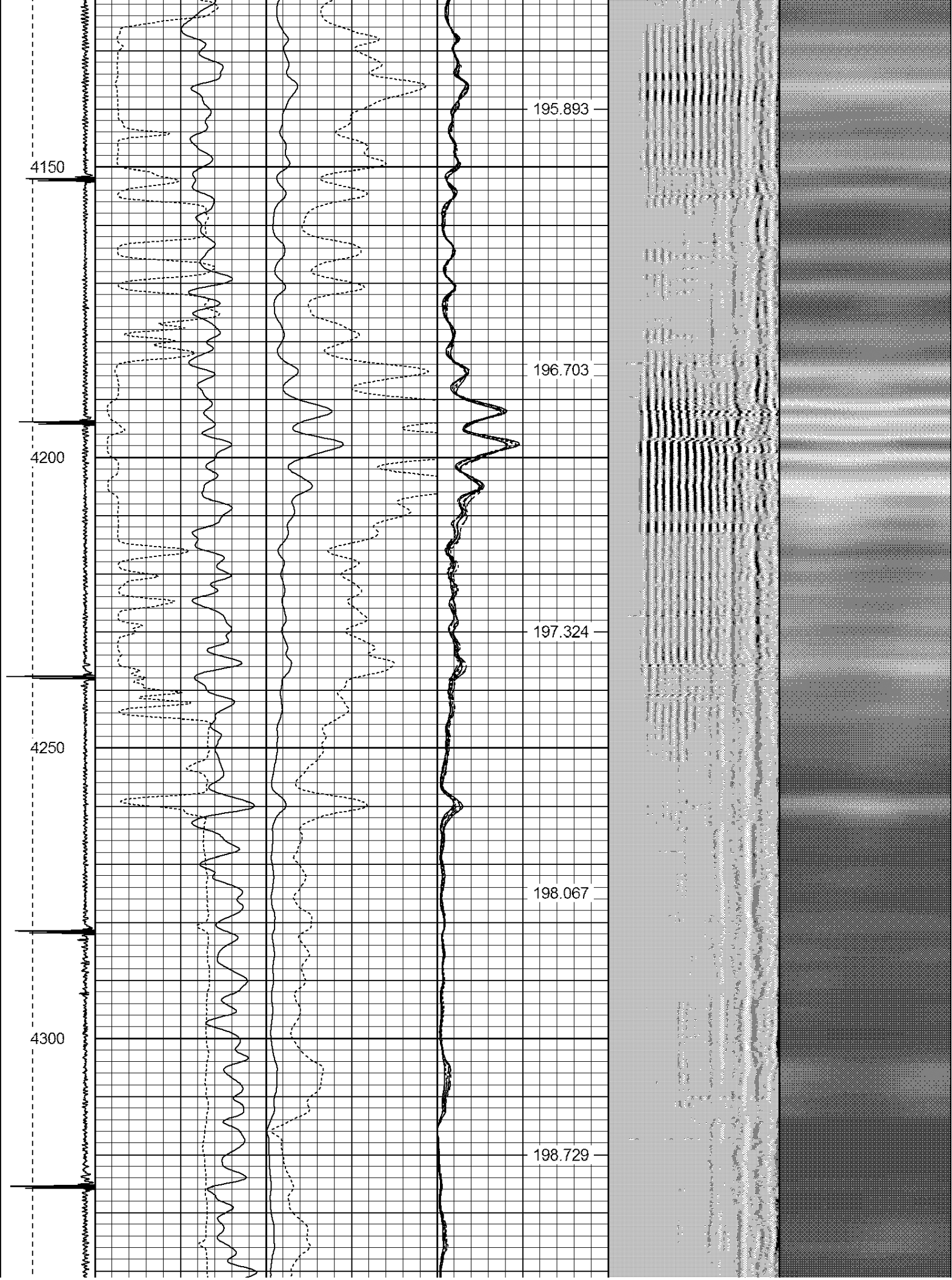


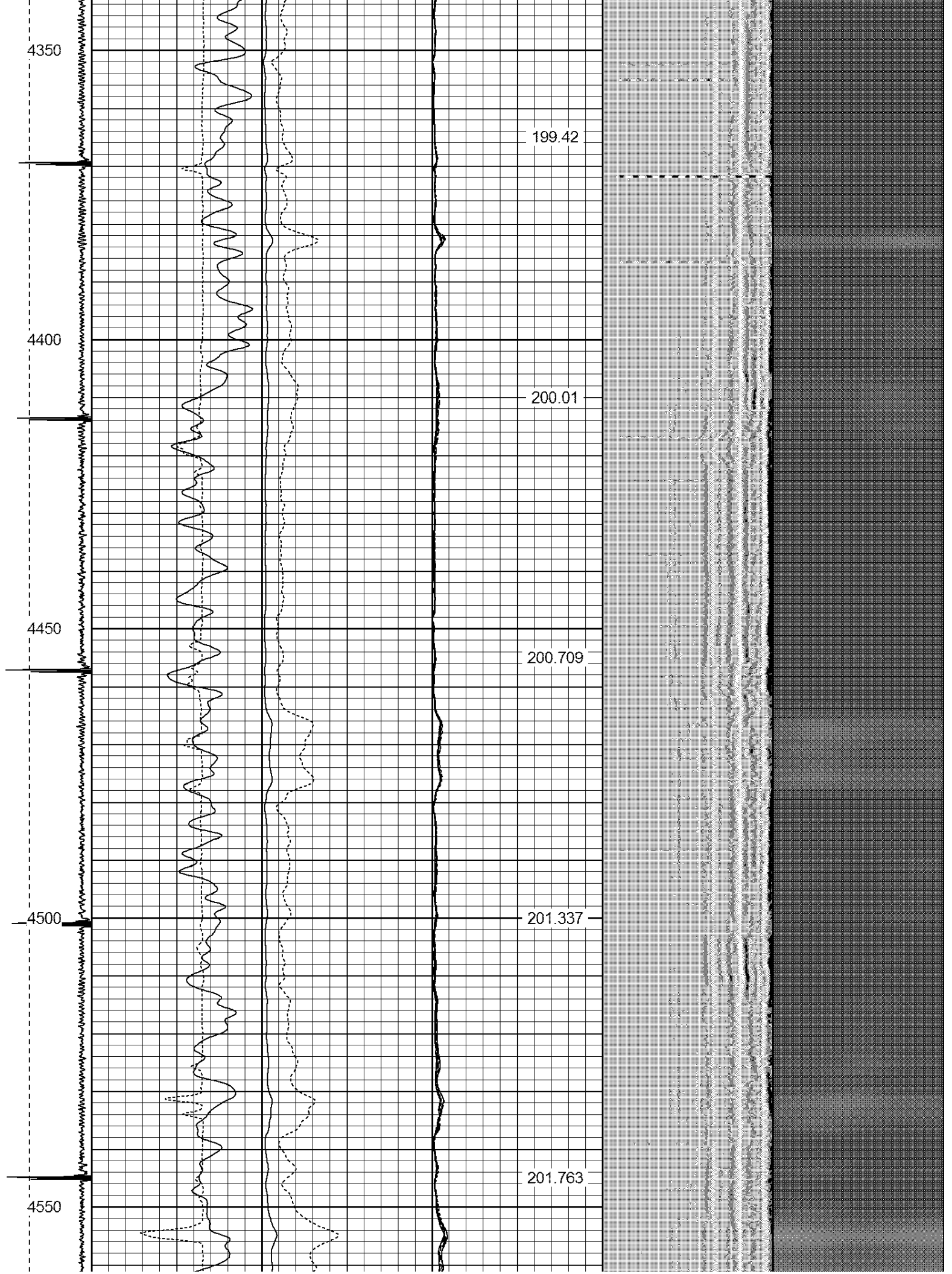


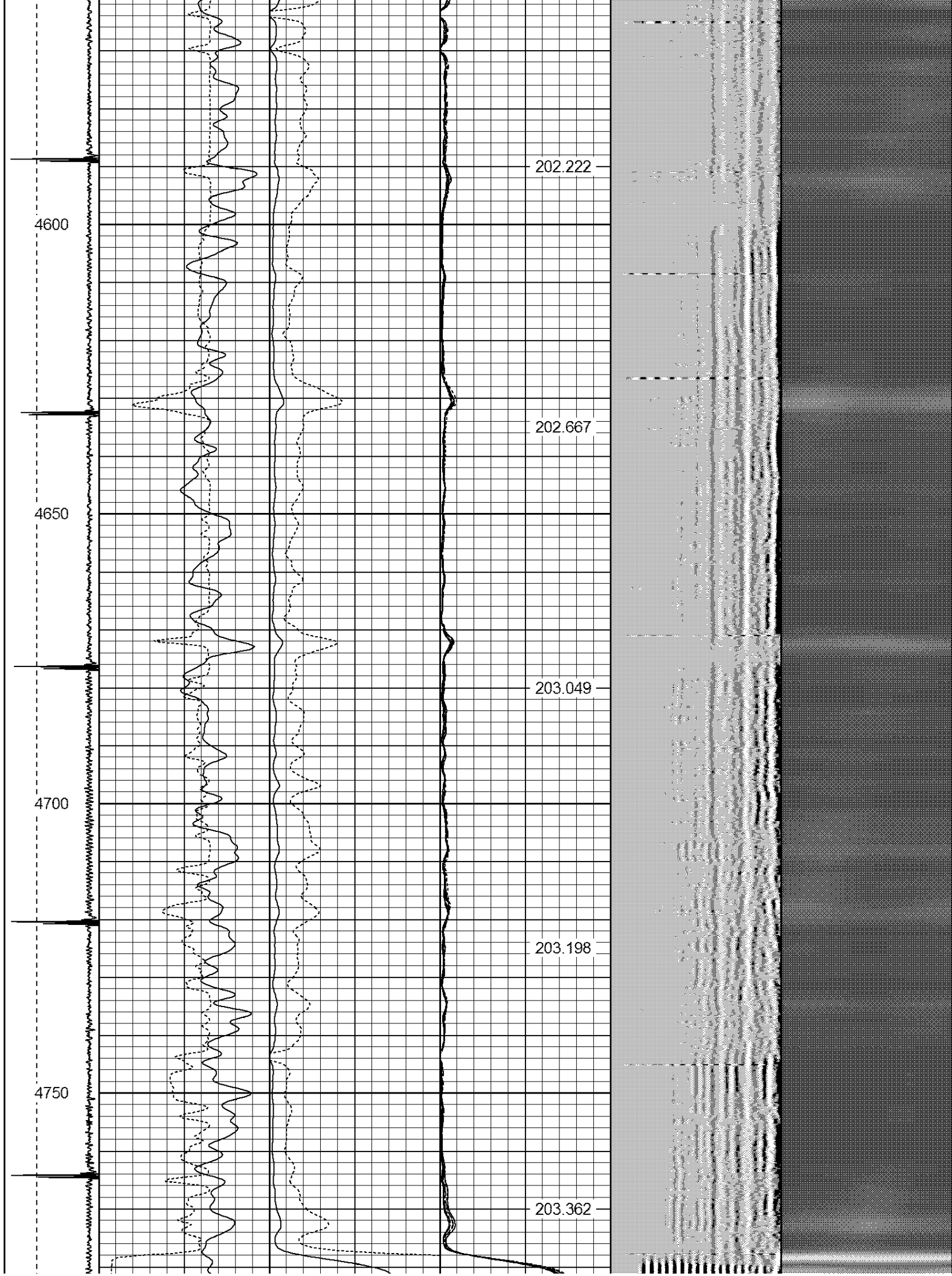


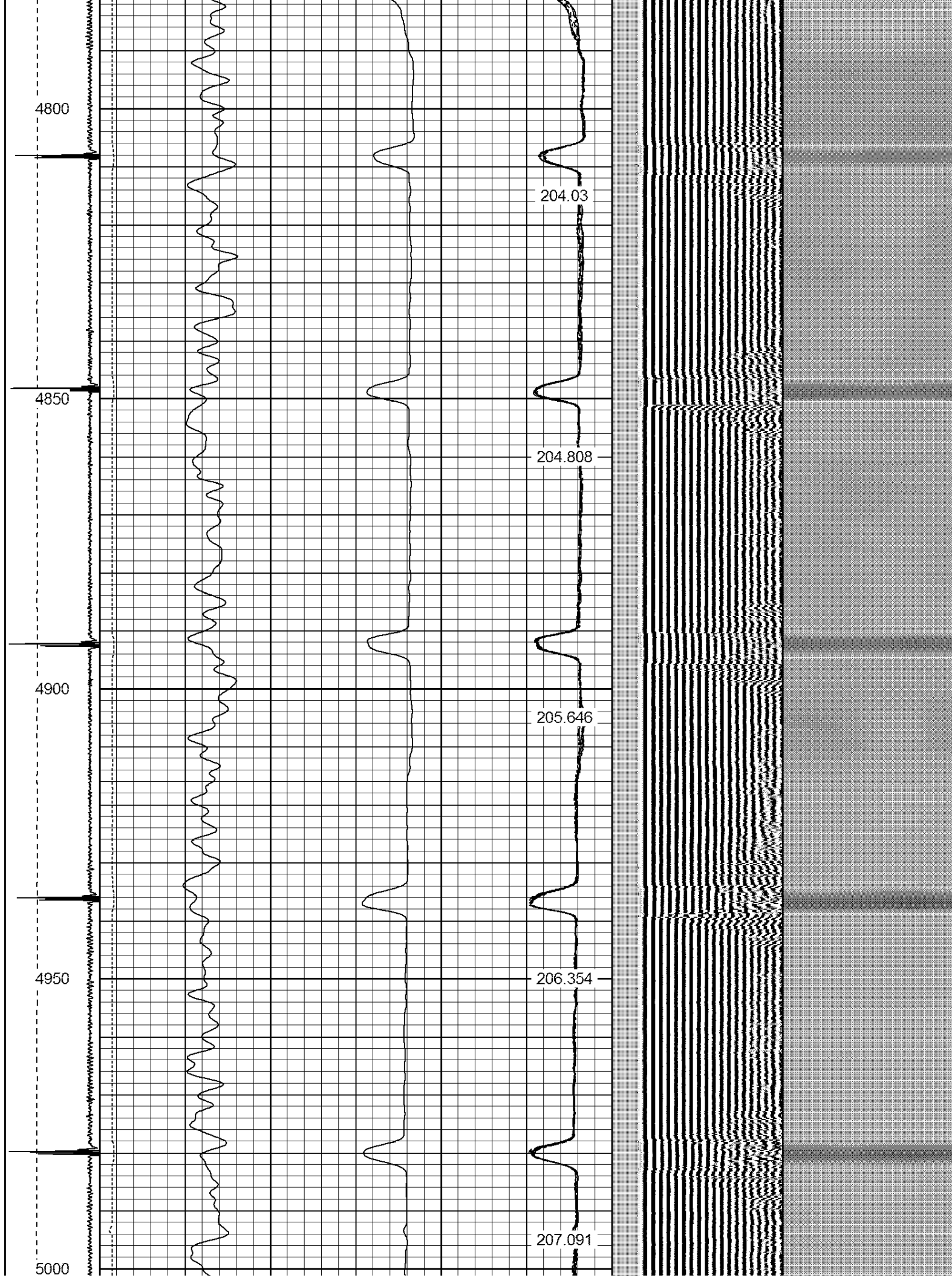


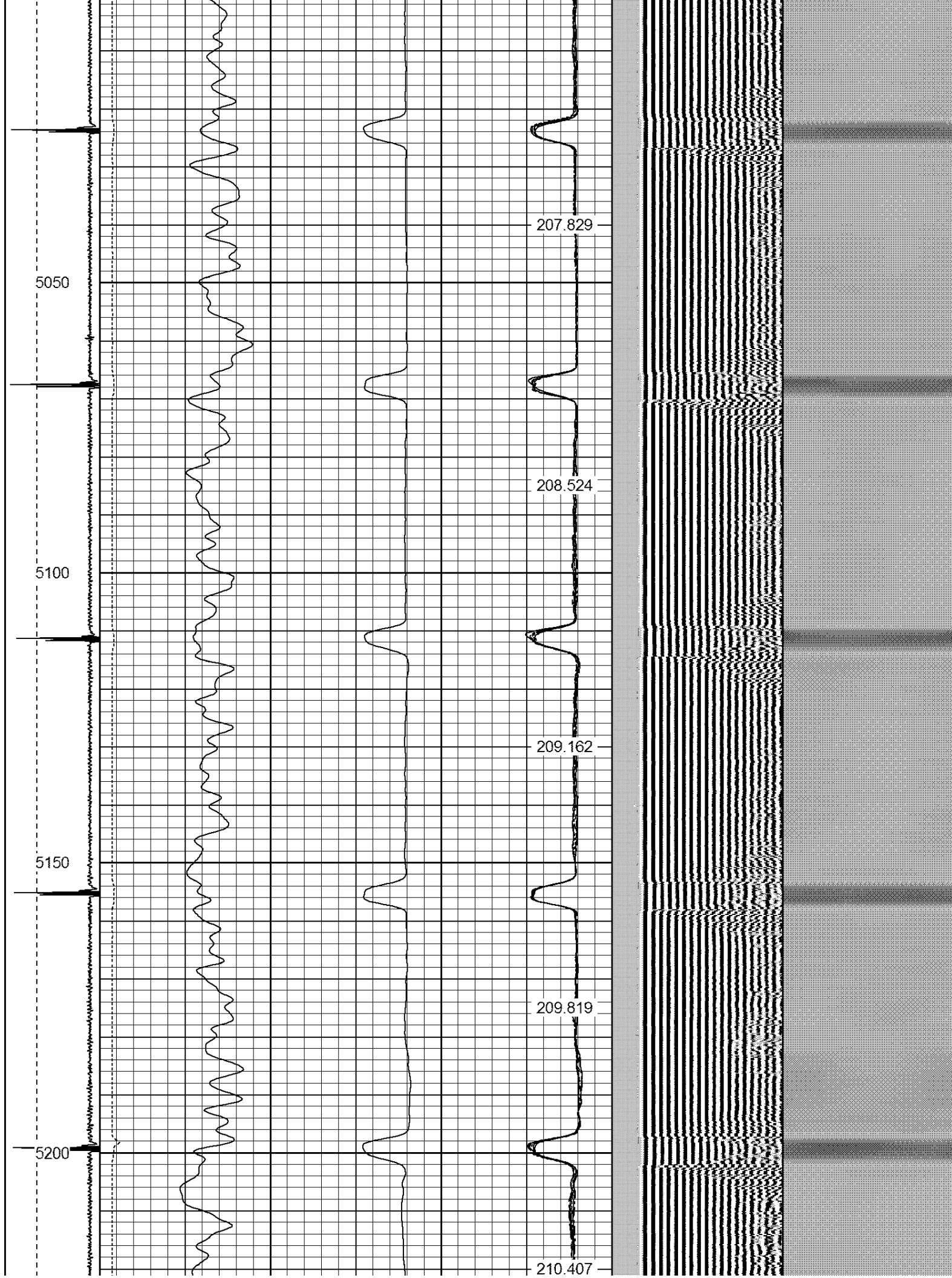


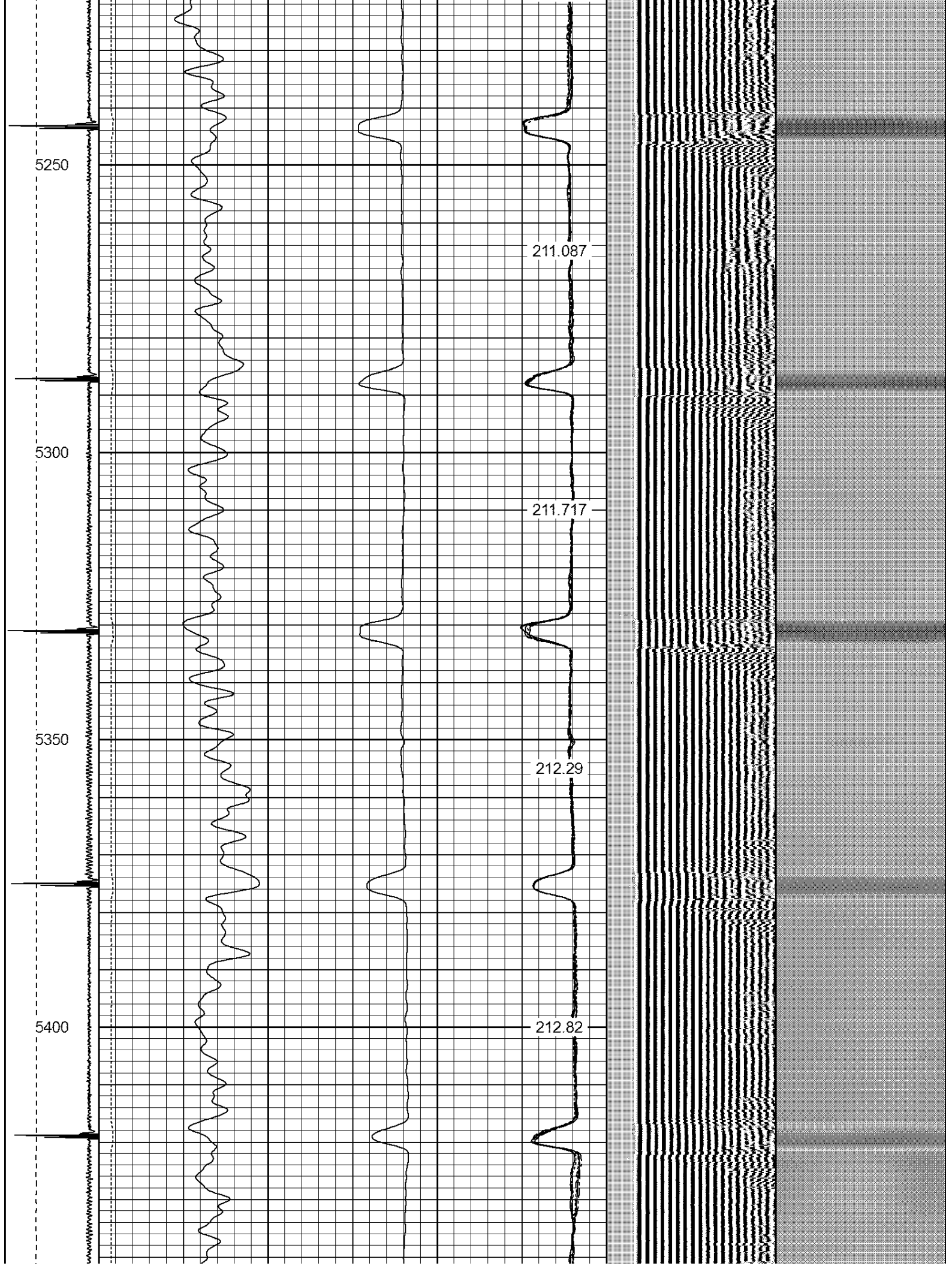


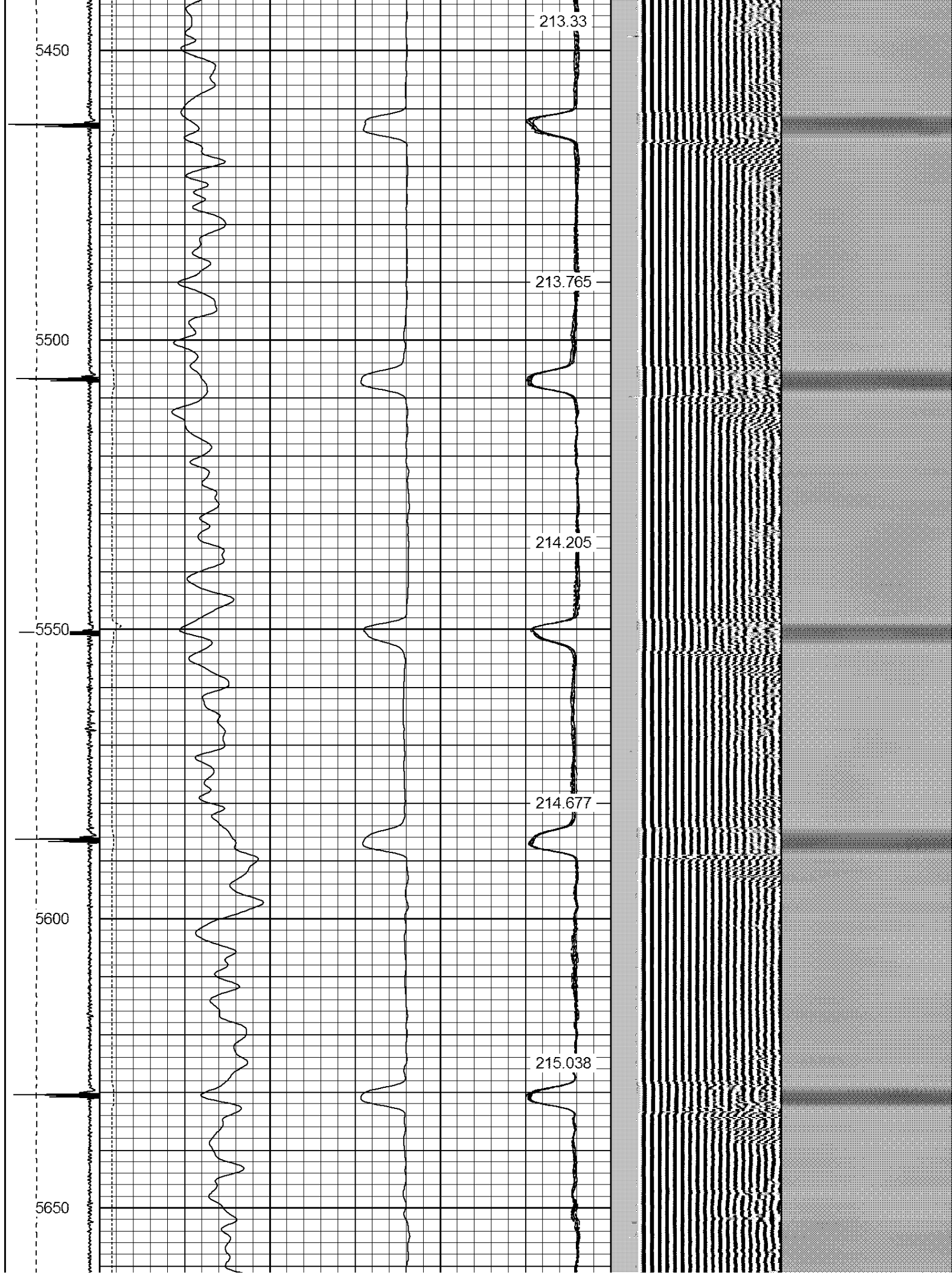


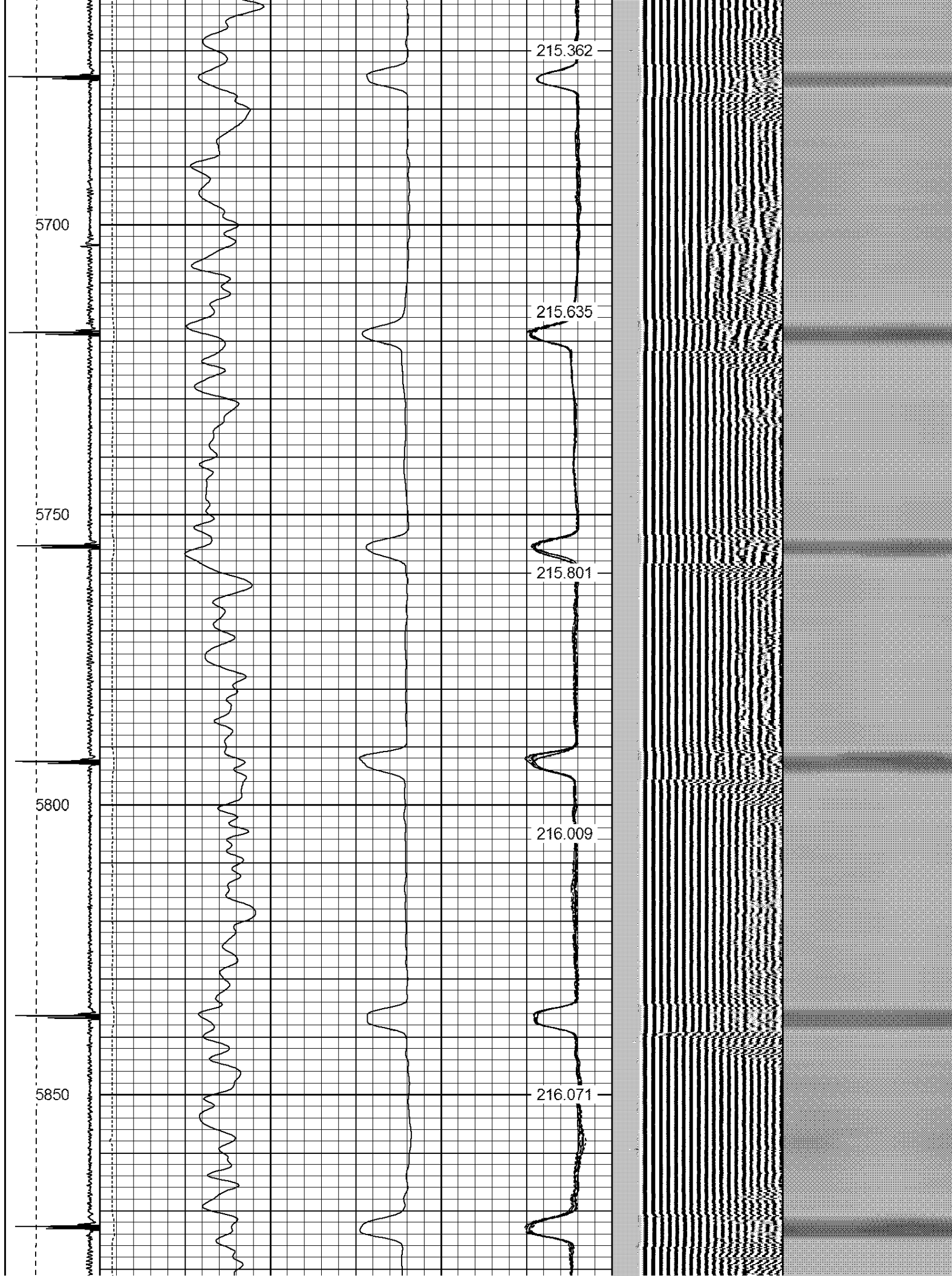


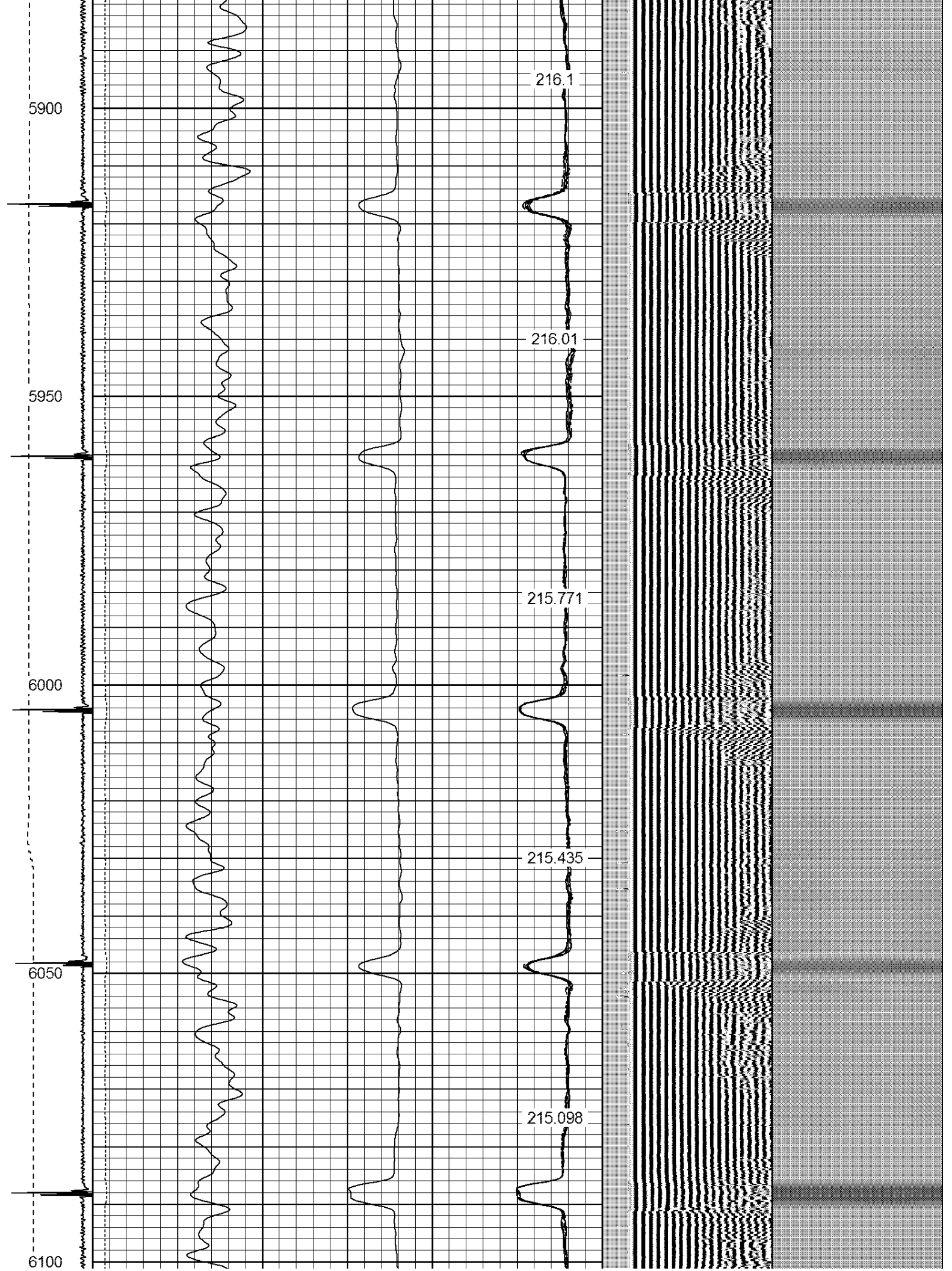


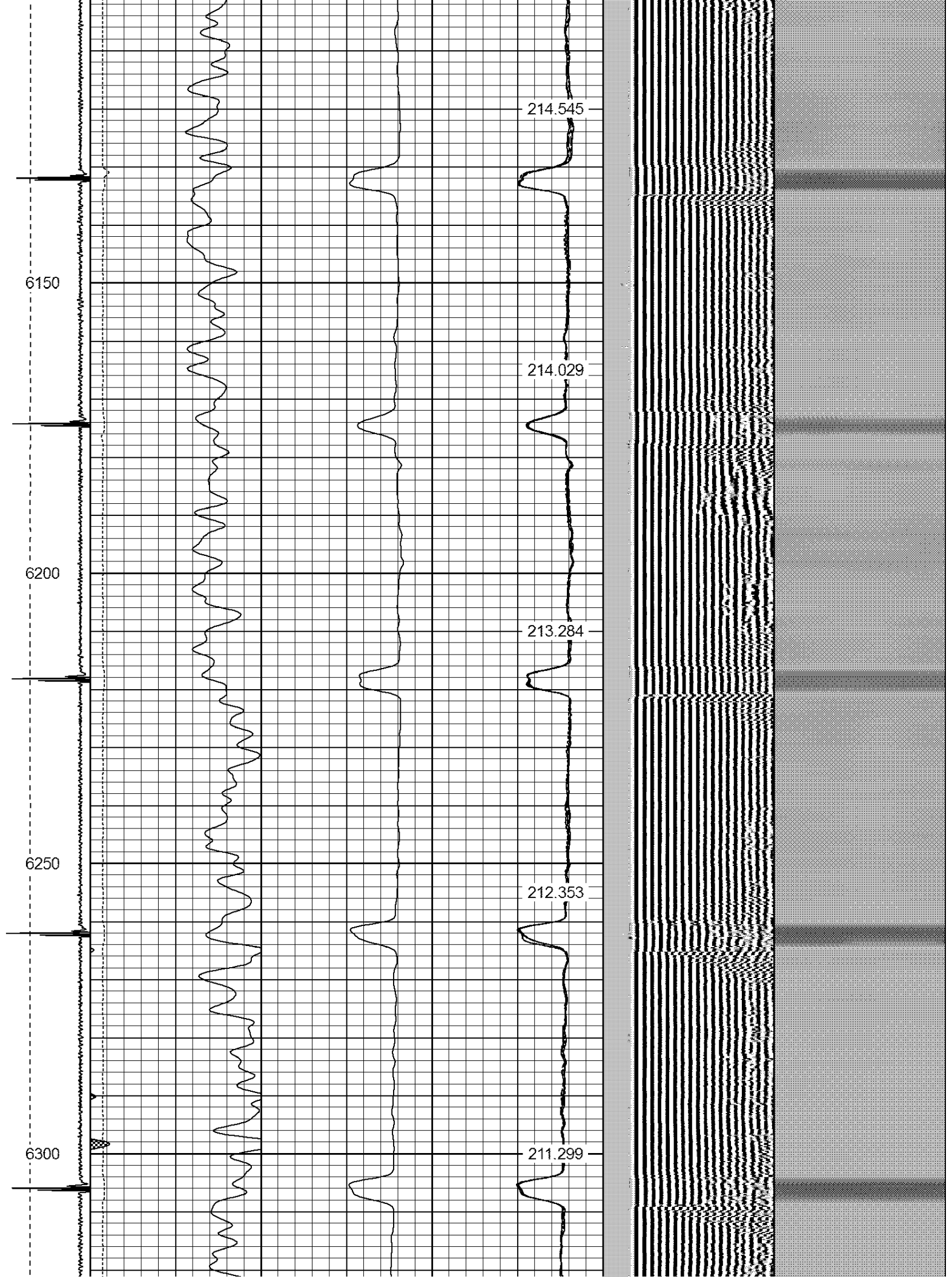


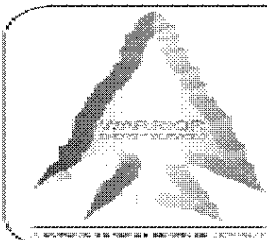
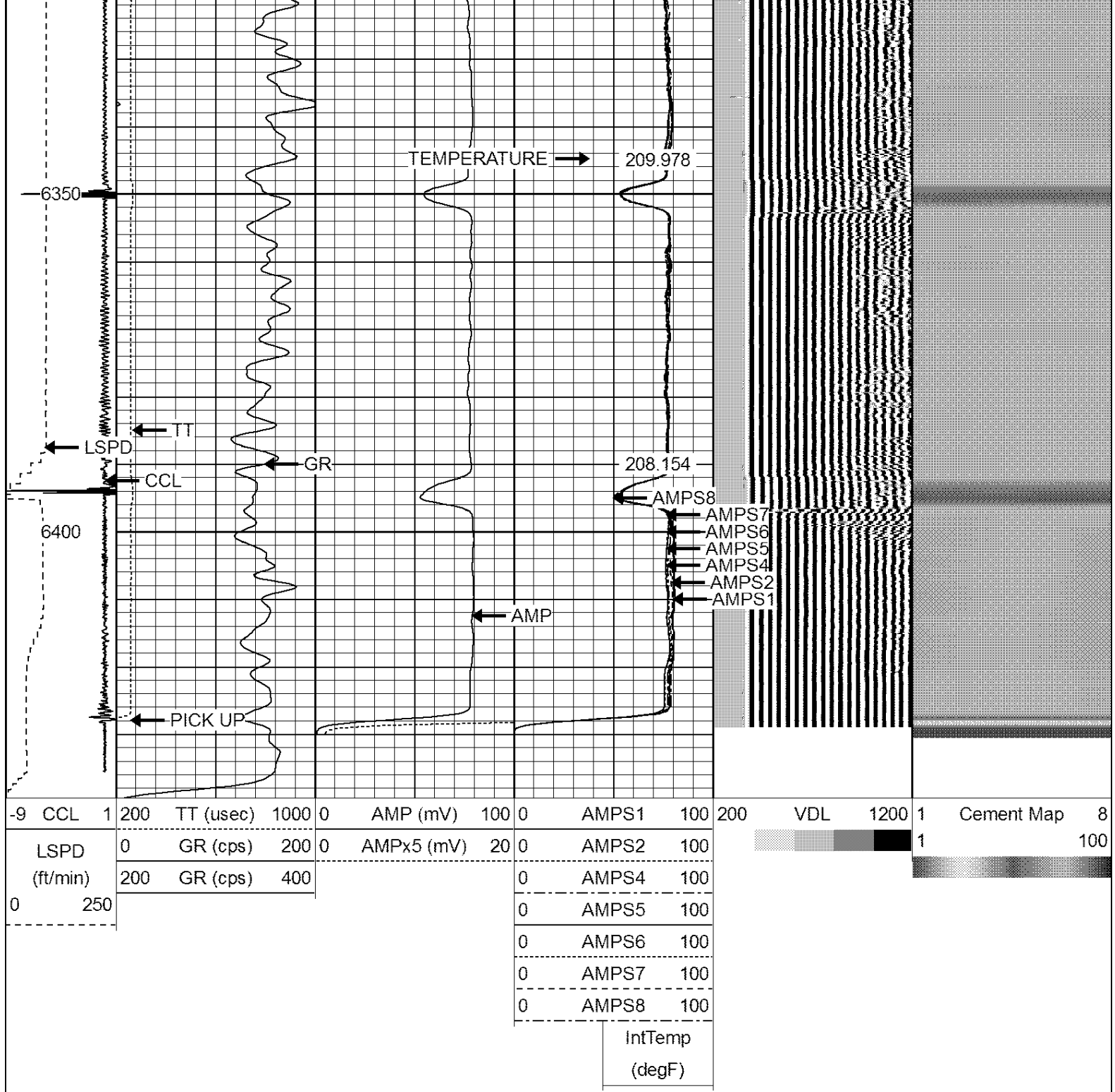












WARRIOR
ENERGY SERVICES

Company Kerr McGee Oil and Gas

Well GROMALA 5-7A

Field WATTENBERG

County WELD

State COLORADO