

**RADIAL CEMENT BOND  
GAMMA RAY  
CCL**

Company		KERR McGEE OIL AND GAS	
Well		WARDELL 3-7-5Z	
Field		WATTENBERG	
County		WELD	
State		CO	
Location:		AP1 # : 05-123-21517 SW/SW LAT:40.23620 & LONG: -104.71120	
Other Services			
Permanent Datum		GL	
Log Measured From		KB 12'	
Drilling Measured From		KB	
SEC 7		TWP 3N	
RGE		65W	
Elevation		5000'	
K.B. 5012'		D.F. 5011'	
G.L. 5000'			
Date		4-9-2015	
Run Number		ONE	
Depth Driller		7544'	
Depth Logger		4098'	
Bottom Logged Interval		4089'	
Top Log Interval		SURFACE	
Open Hole Size		7.875	
Type Fluid		WATER	
Density / Viscosity		1.0	
Max. Recorded Temp.		131 DEG F	
Estimated Cement Top		390'	
Time Well Ready		N/A	
Time Logger on Bottom		N/A	
Equipment Number		4310	
Location		GREELEY	
Recorded By		N. BREHMER	
Witnessed By		L. MORALES	
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size		Weight	
From		To	
Casing Record		Size	
Surface String		8.63	
Prot. String		24#	
Production String		4.5	
Liner		11.6#	
		SURFACE	
		7534'	

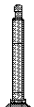
<<< Fold Here >>>

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**




RAN CBL TO VERIFY CEMENT BOND  
HOLE WAS LOADED NIGHT BEFORE LOG  
CALIBRATED FREE PIPE @2564' 81MA FOR 4.5"

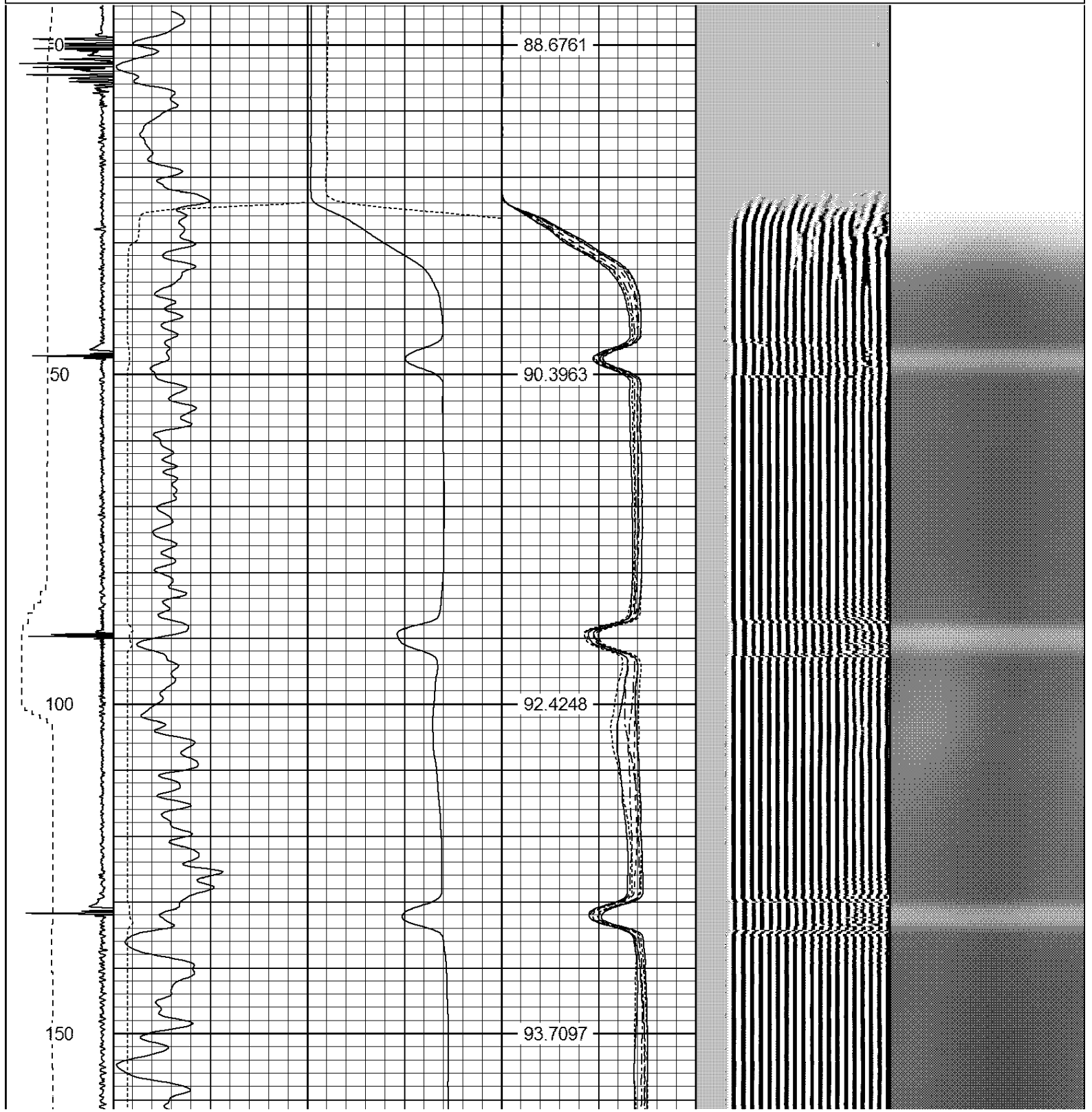
THANK YOU FOR USING WARRIOR !!!!!!!

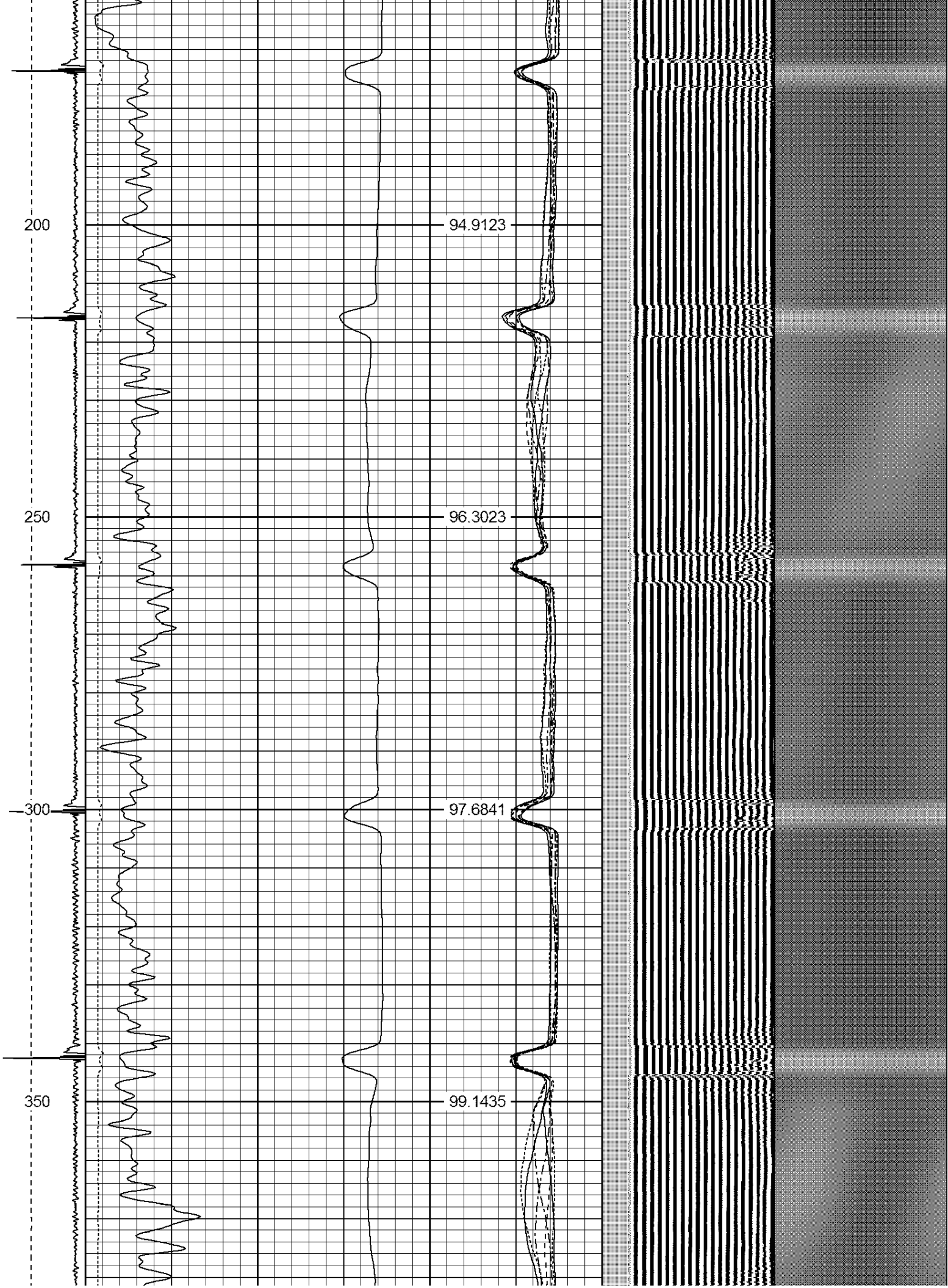
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			1_4	1.00	1.36	5.00

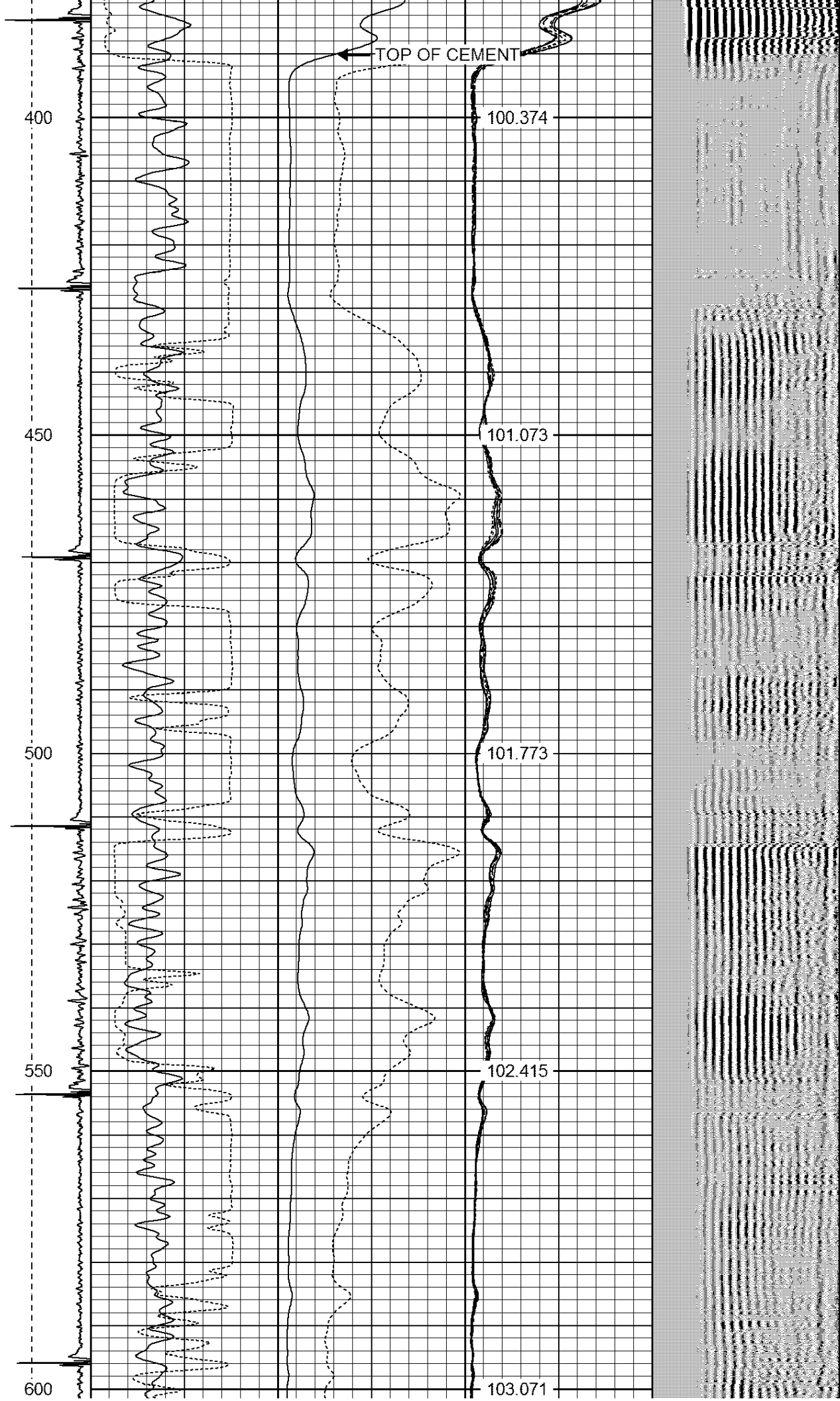
Tool Joint	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)	Tool Joint I.D. (in)	Tool Joint Wall Thickness (in)	Tool Joint Material	Tool Joint Notes
PTS275	2.83	2.75					
HEADVOLT	16.13						
IntTemp	14.71						
WVFS3FT	11.46						
WVFCAL	11.46						
WVFS1	11.46						
WVFS2	11.46						
WVFS3	11.46						
WVFS4	11.46						
WVFS5	11.46						
WVFS6	11.46						
WVFS7	11.46						
WVFS8	11.46						
WVFS5FT	10.46						
CNLSC	6.00						
CNSSC	5.17						
CCL	3.64						
GR	0.90						
RBT-Probe (Base)	8.92	2.75	90.00				Probe Radii Bond Tool with Digital Telemetry
CNT-Probe_B (275)	2.88	2.75	40.00				6 bow centralizer
GR-Probe (275)	4.33	2.75	30.00				Probe 2.75"

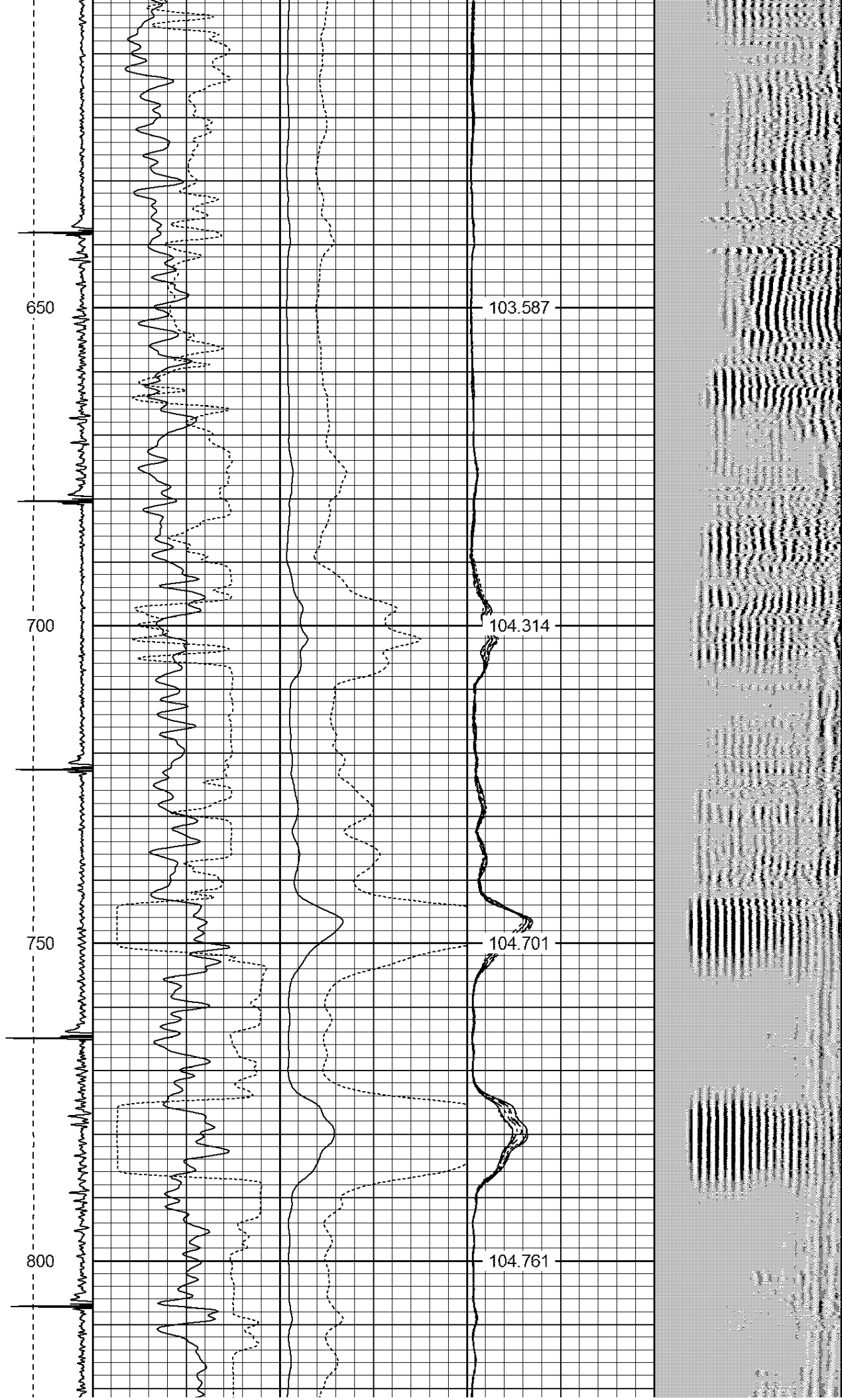
Dataset: wardell 3-7-5.db: field/well/run1/pass2  
Total Length: 19.96 ft  
Total Weight: 165.00 lb  
O.D.: 2.75 in

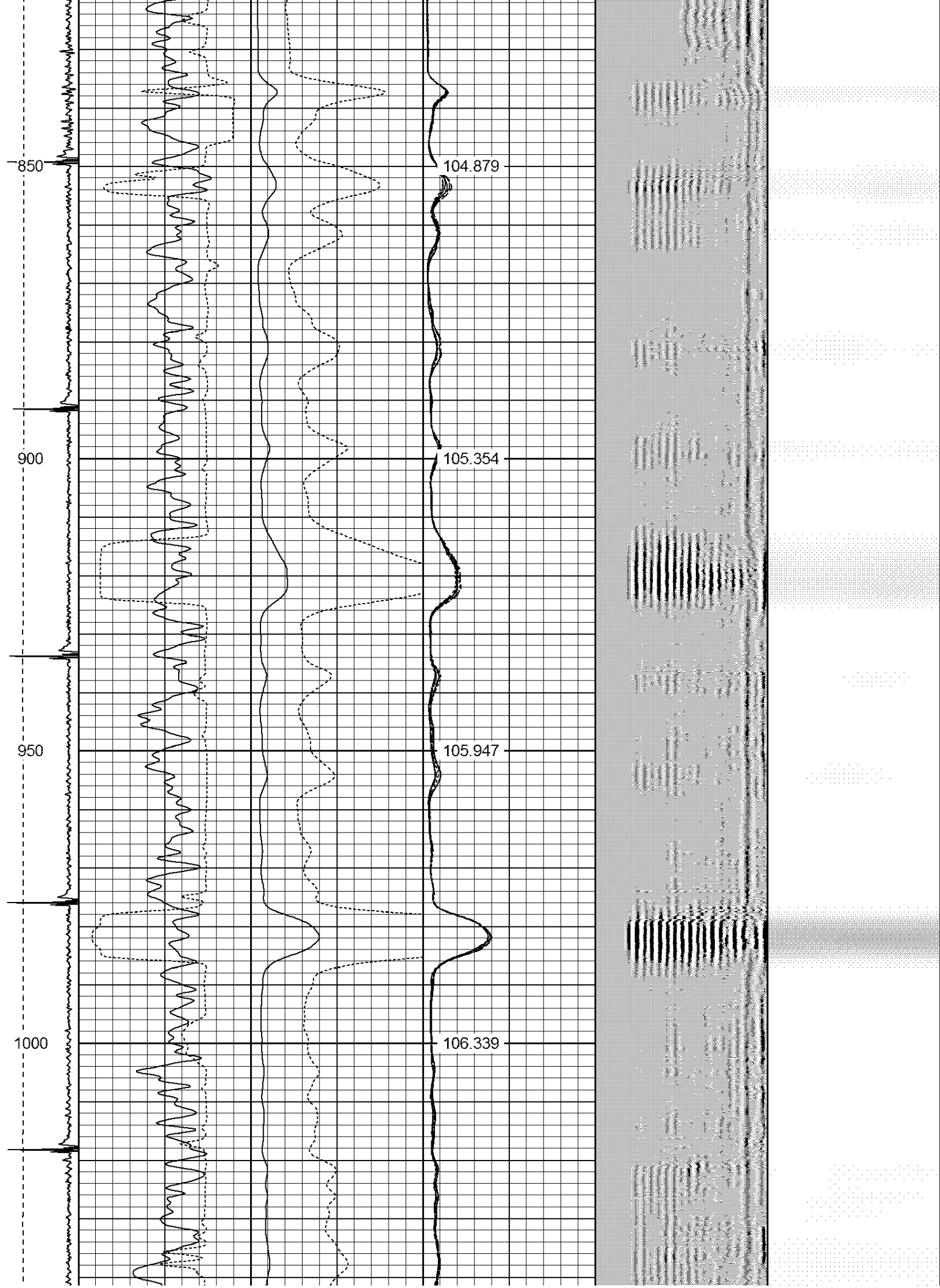
-9	CCL	1	200	TT (usec)	1100	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8
LSPD (ft/min)	0		GR (GAPI)		200	0	AMPx5 (mV)	20	0	AMPS2	100			1			
	200		GR (GAPI)		400				0	AMPS4	100						
0									0	AMPS5	100						
									0	AMPS6	100						
									0	AMPS7	100						
									0	AMPS8	100						
									IntTemp								
									(degF)								



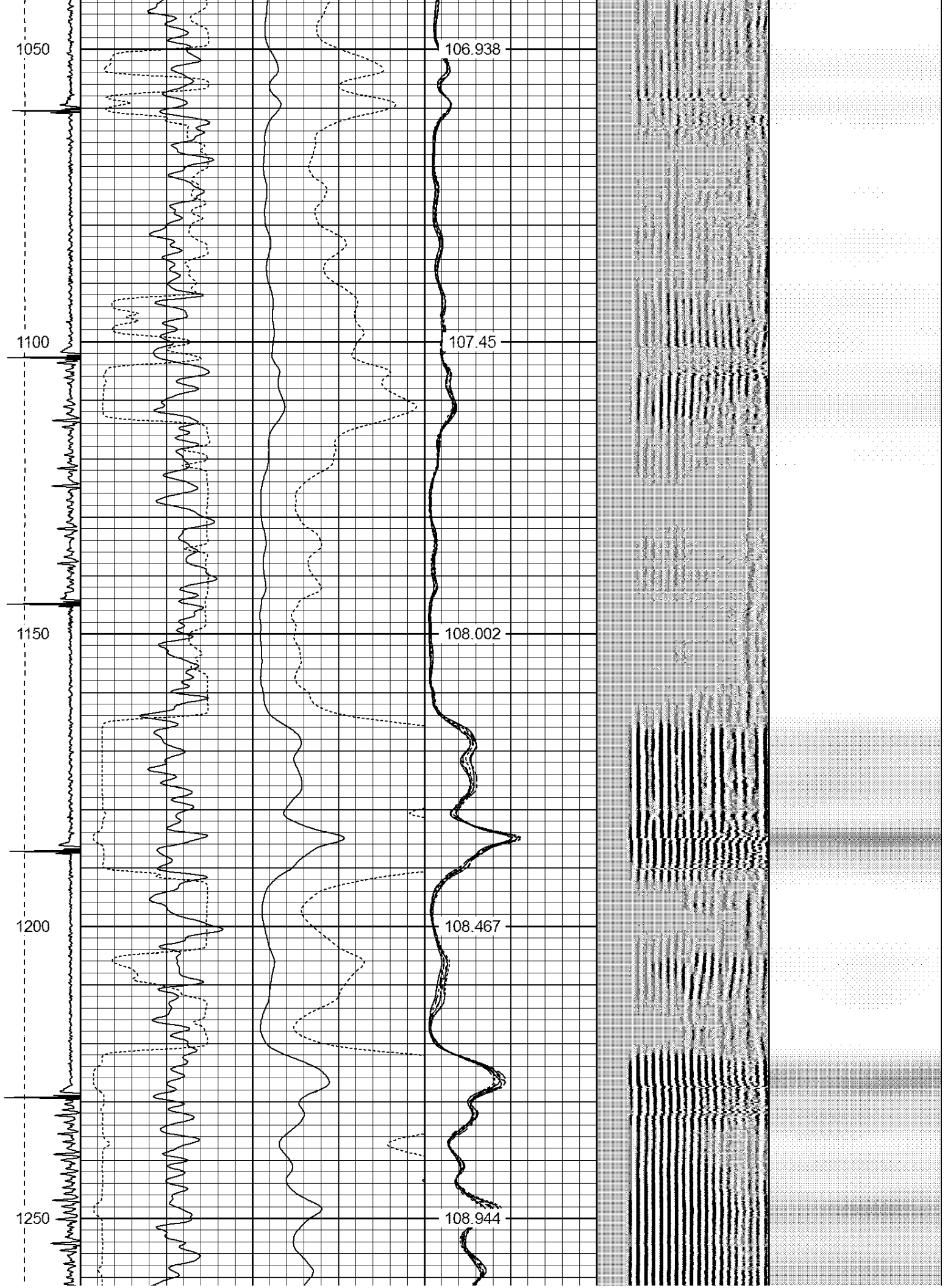




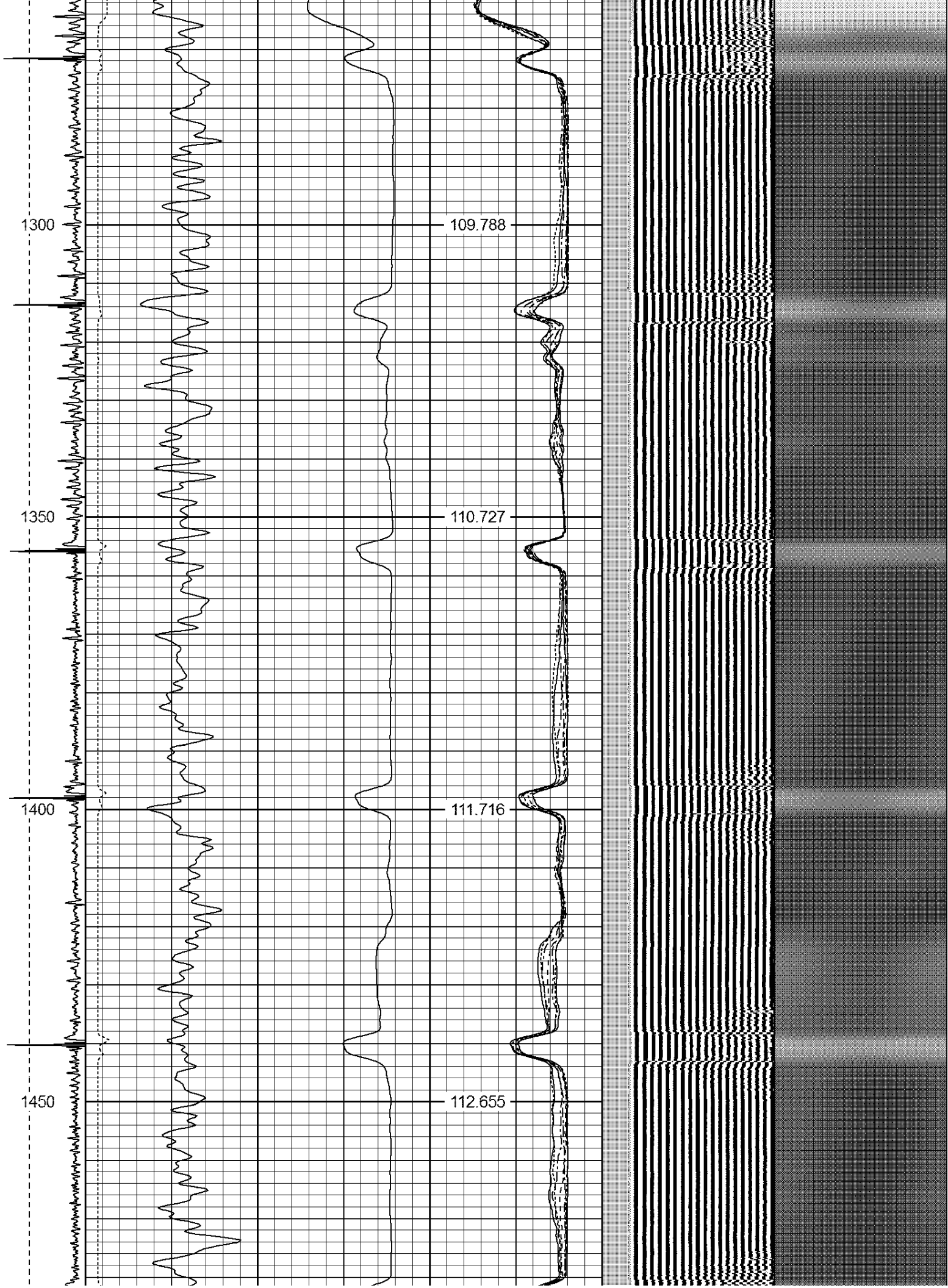




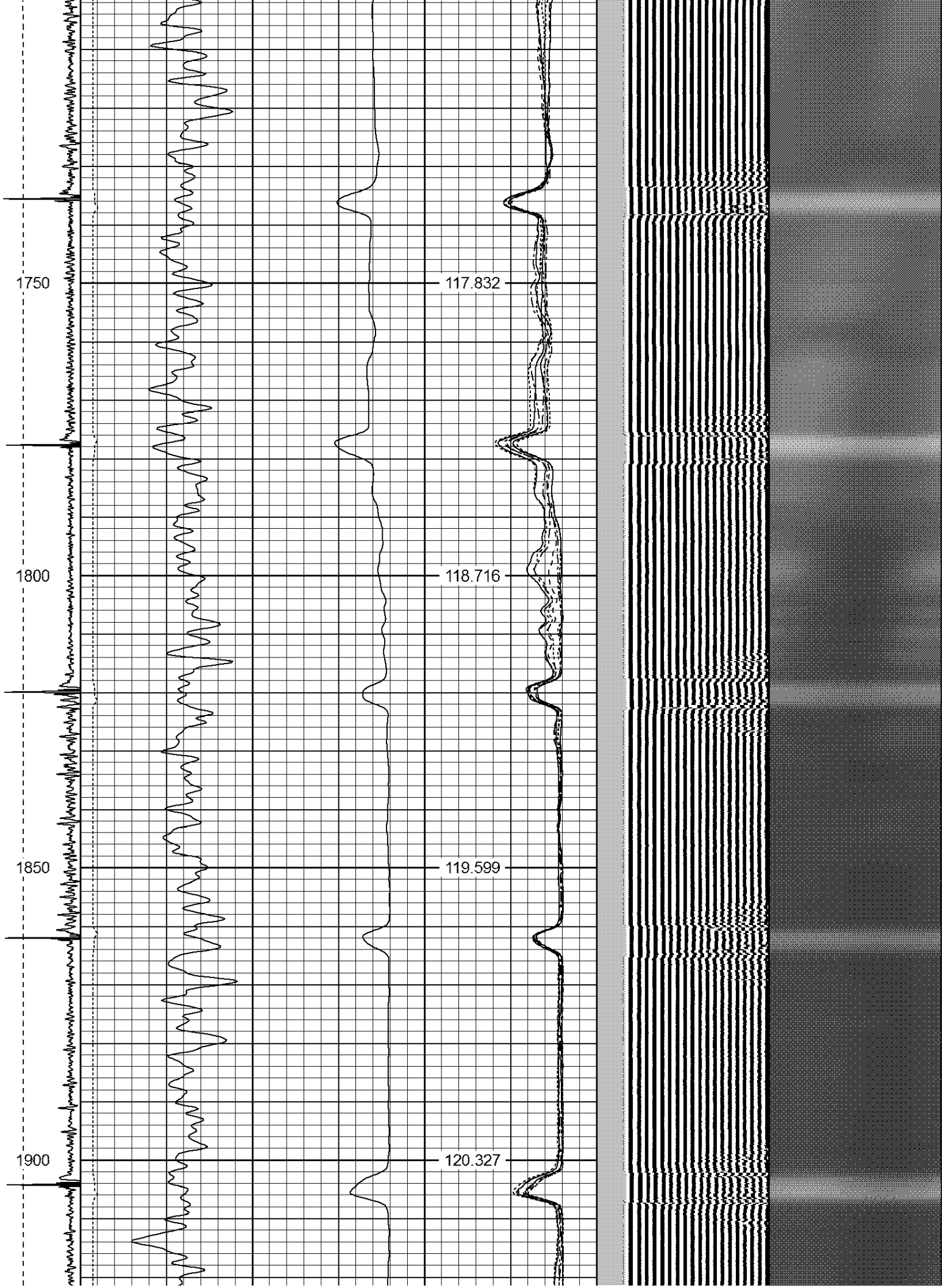


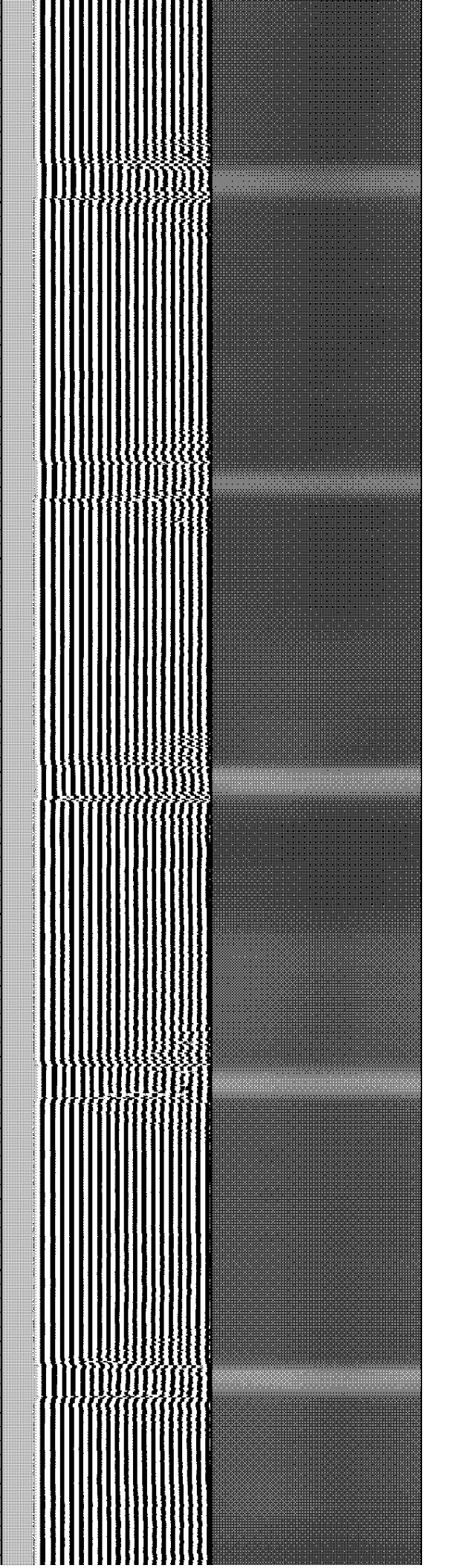
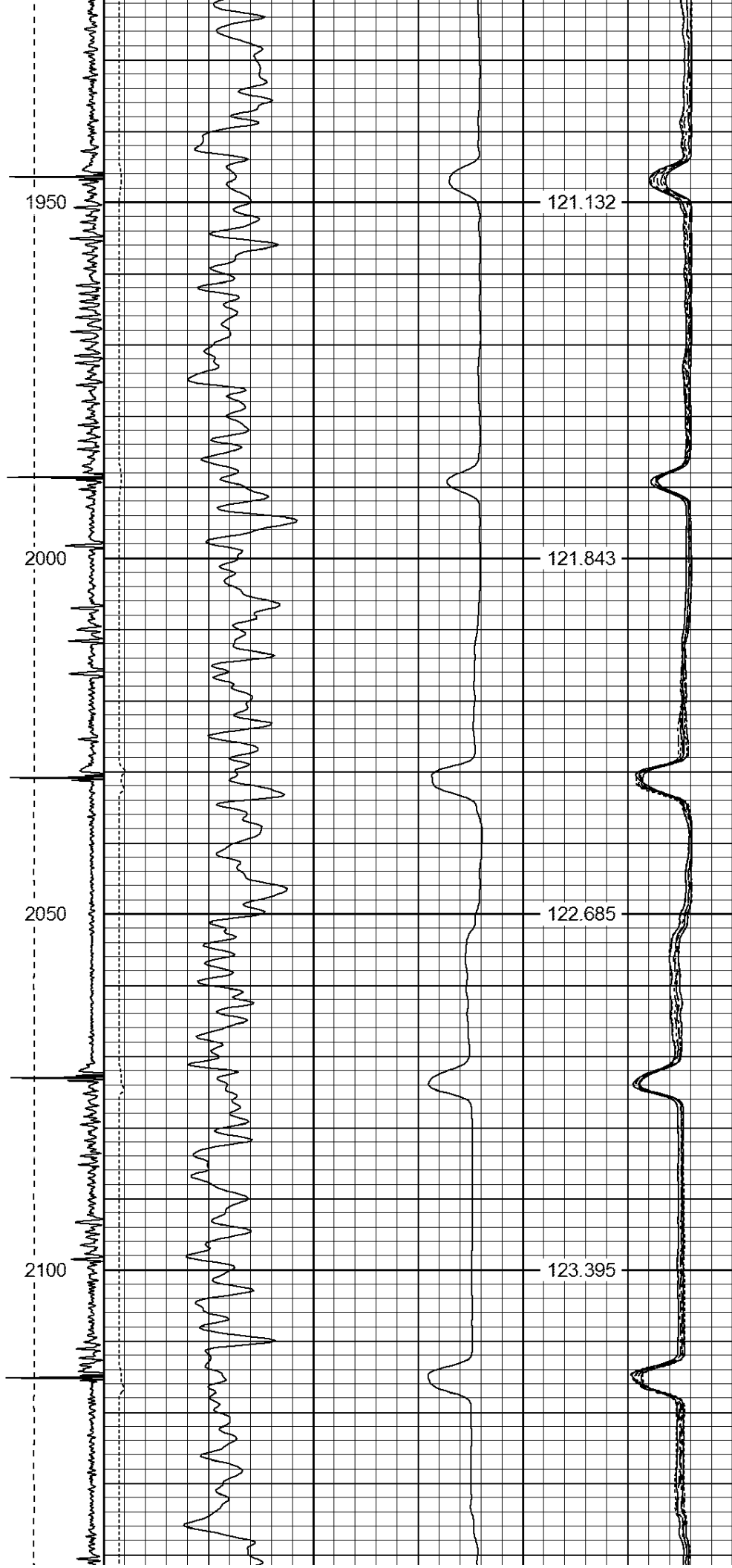




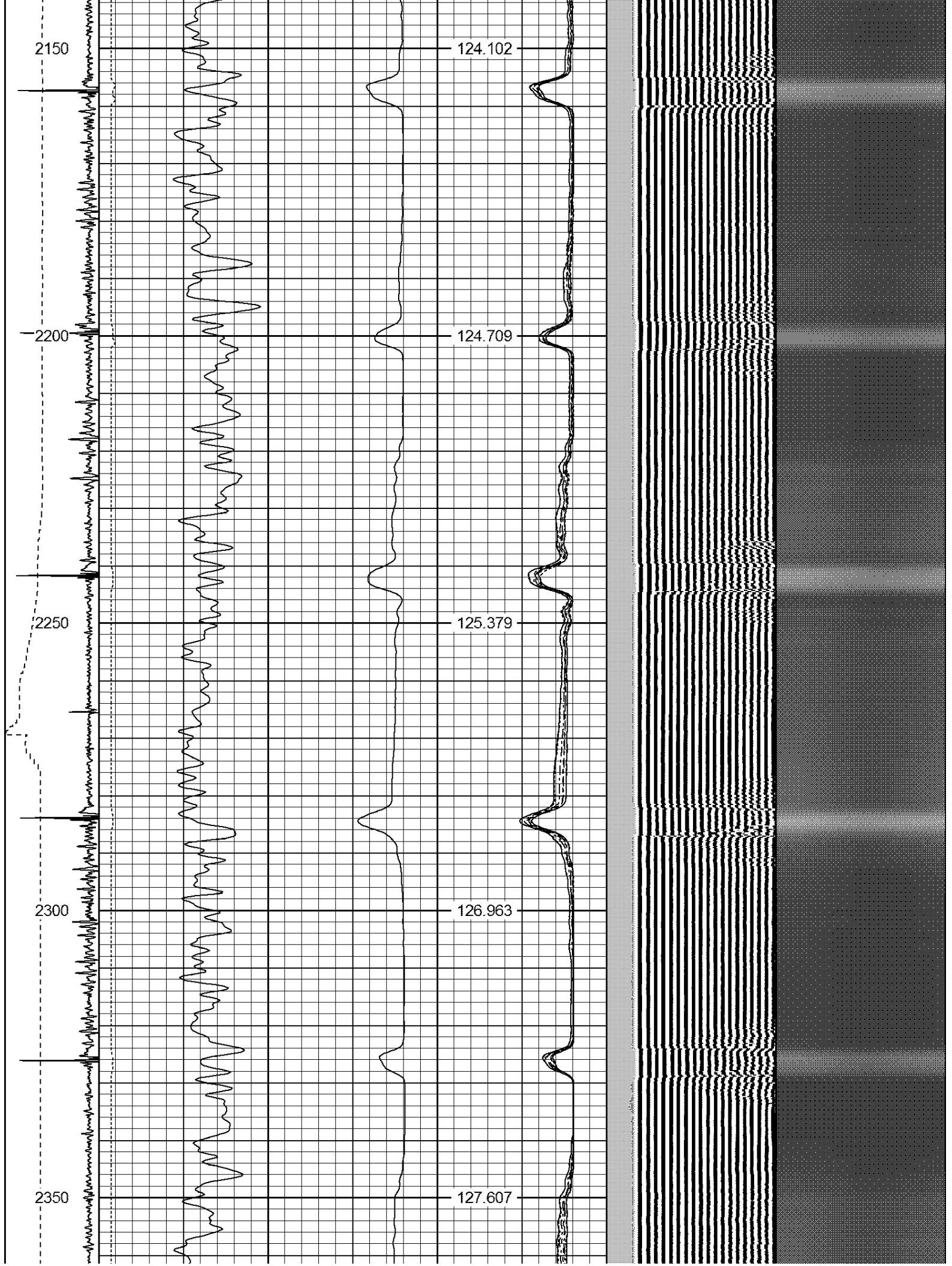


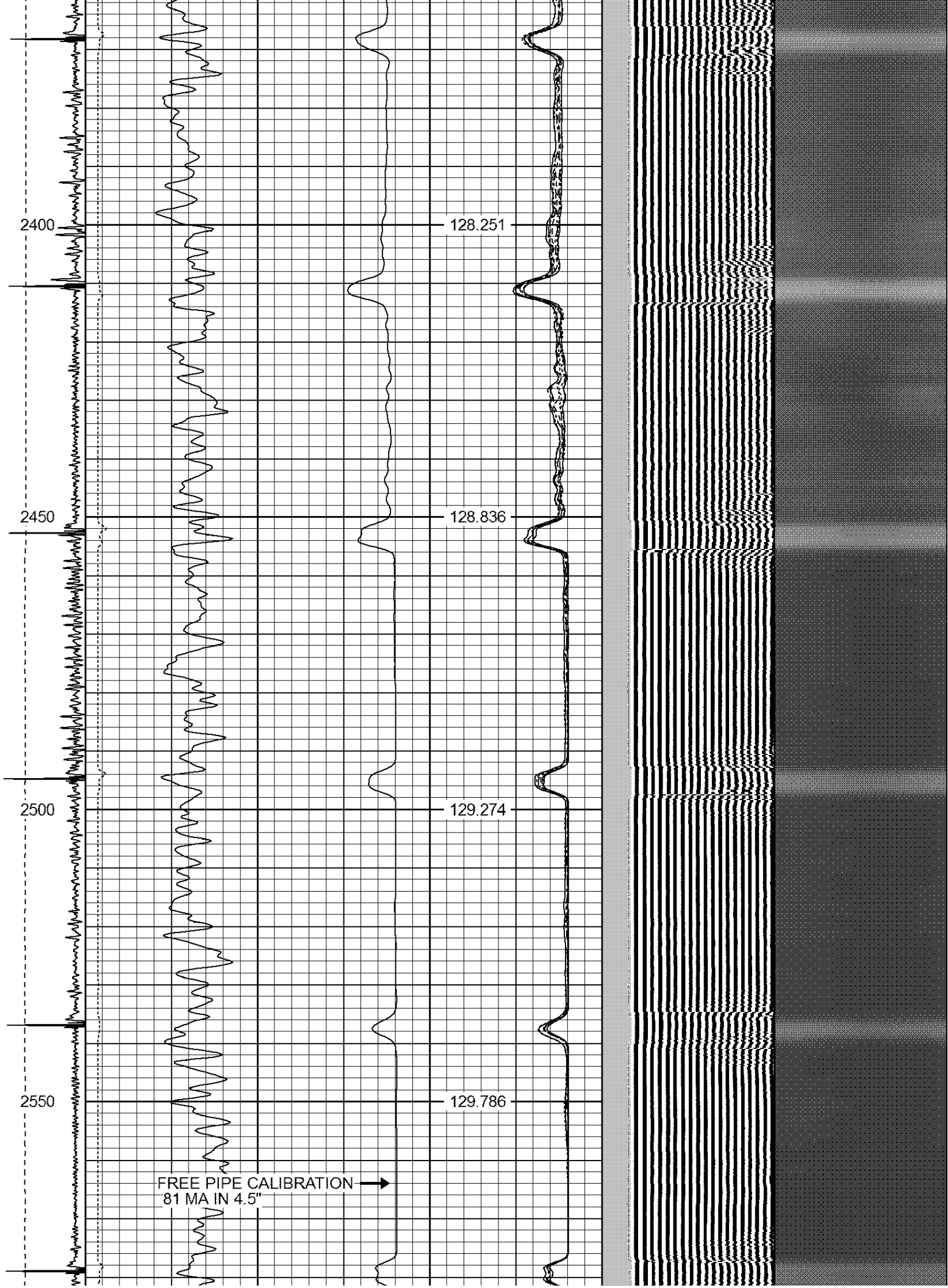






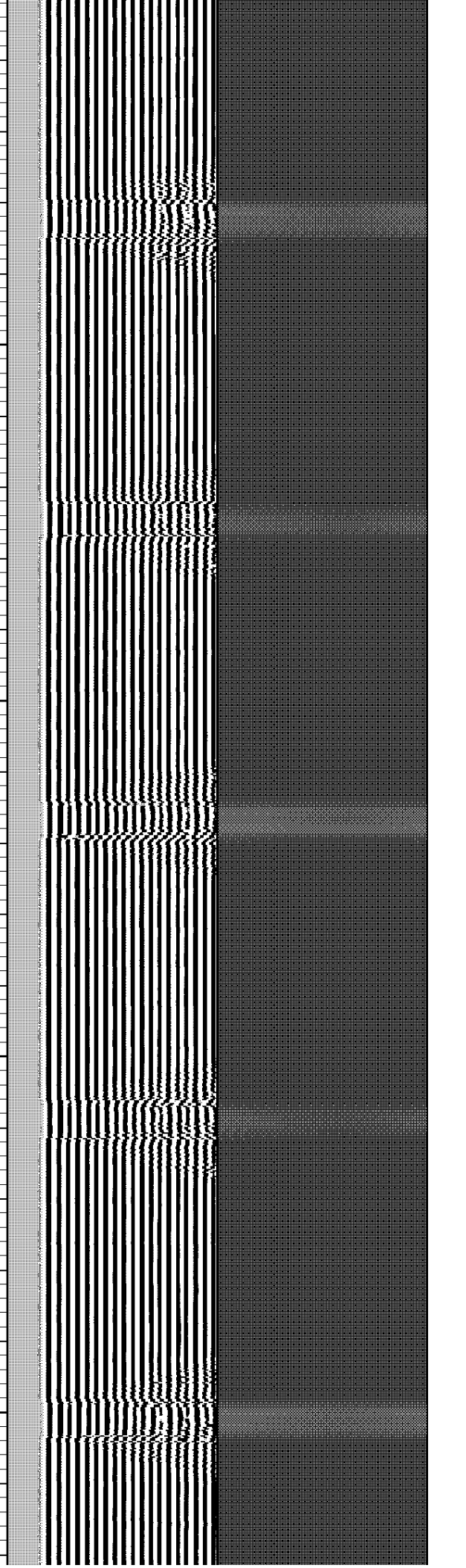
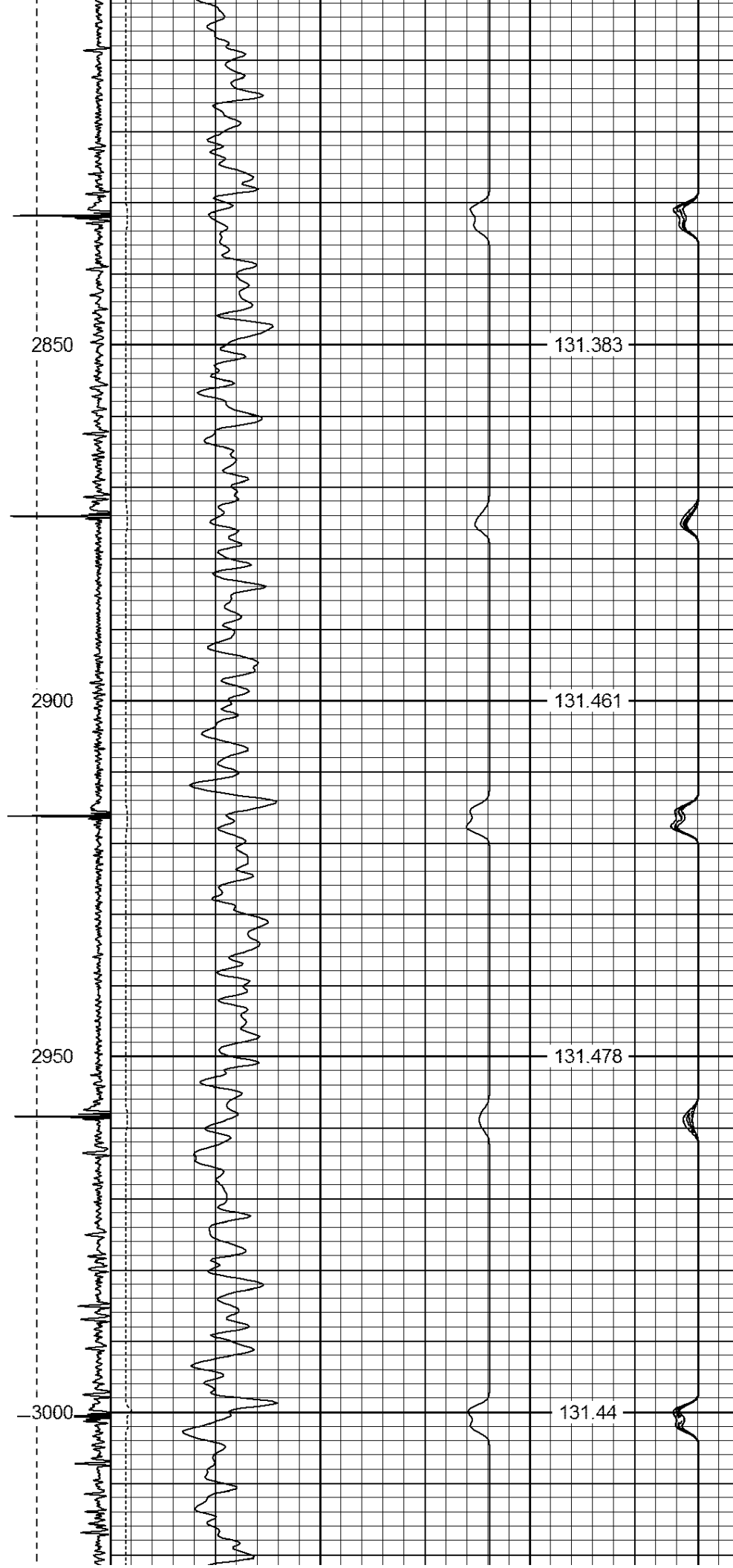


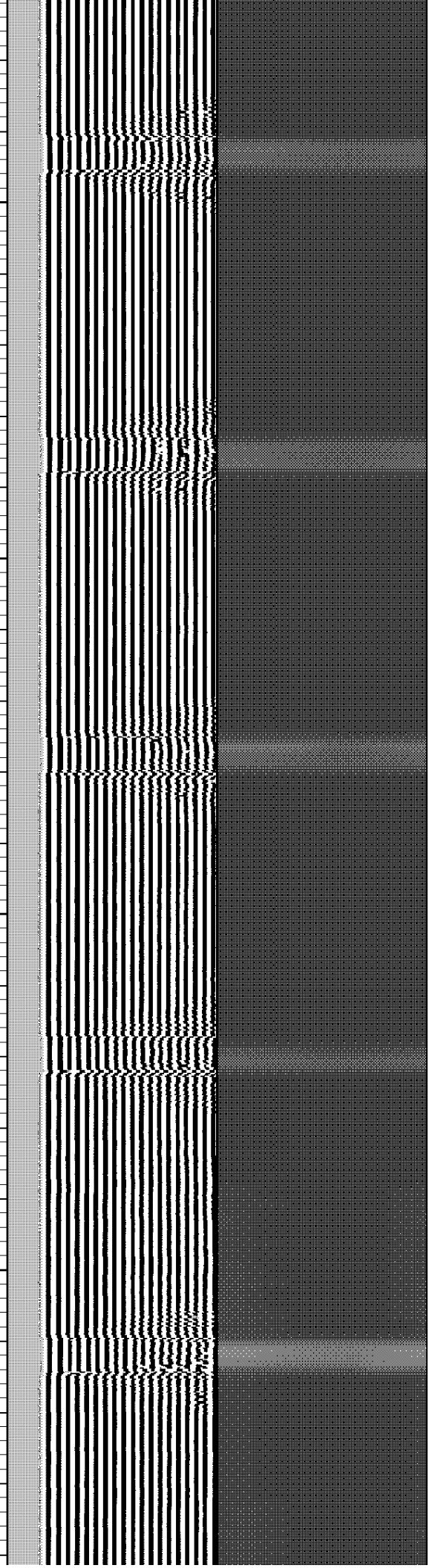
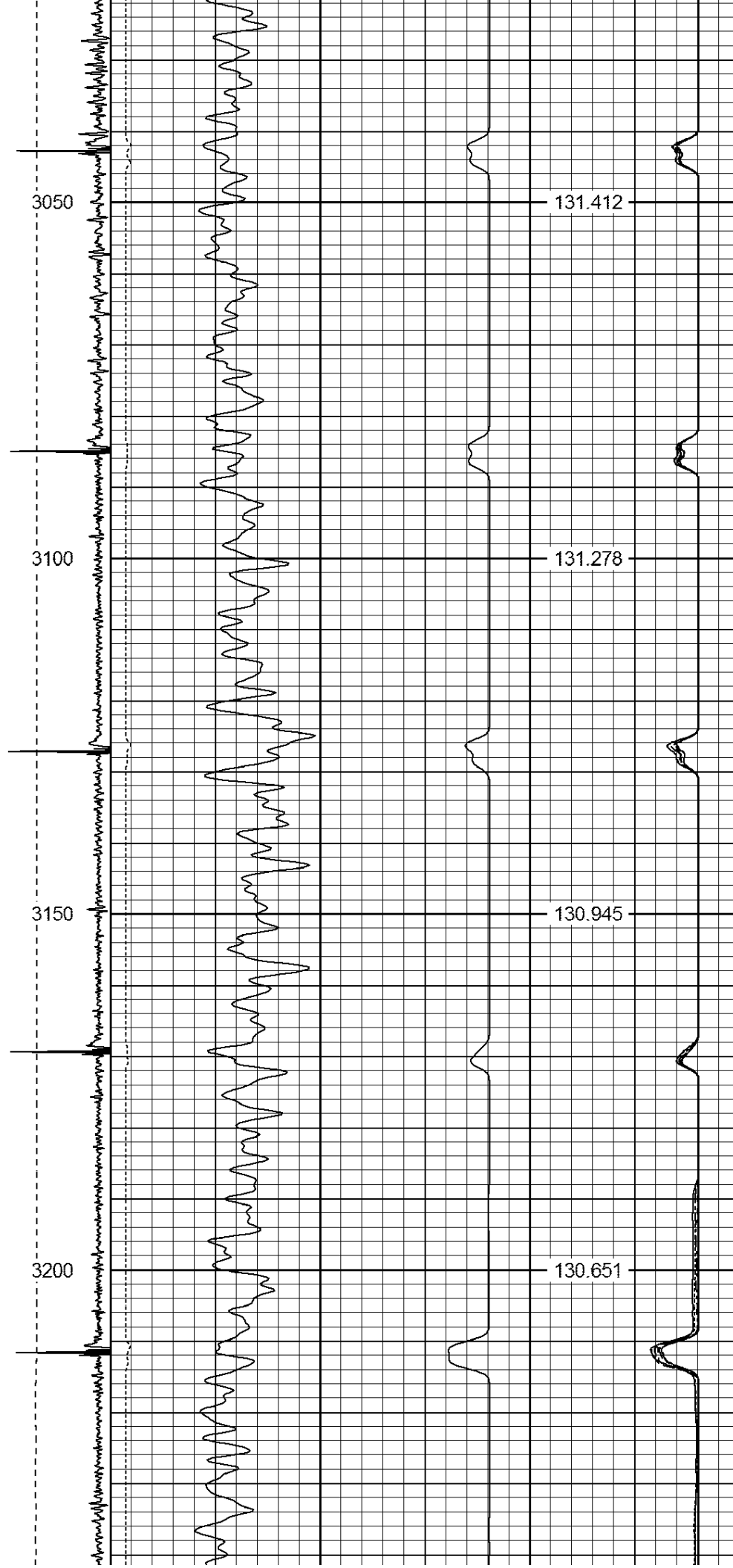


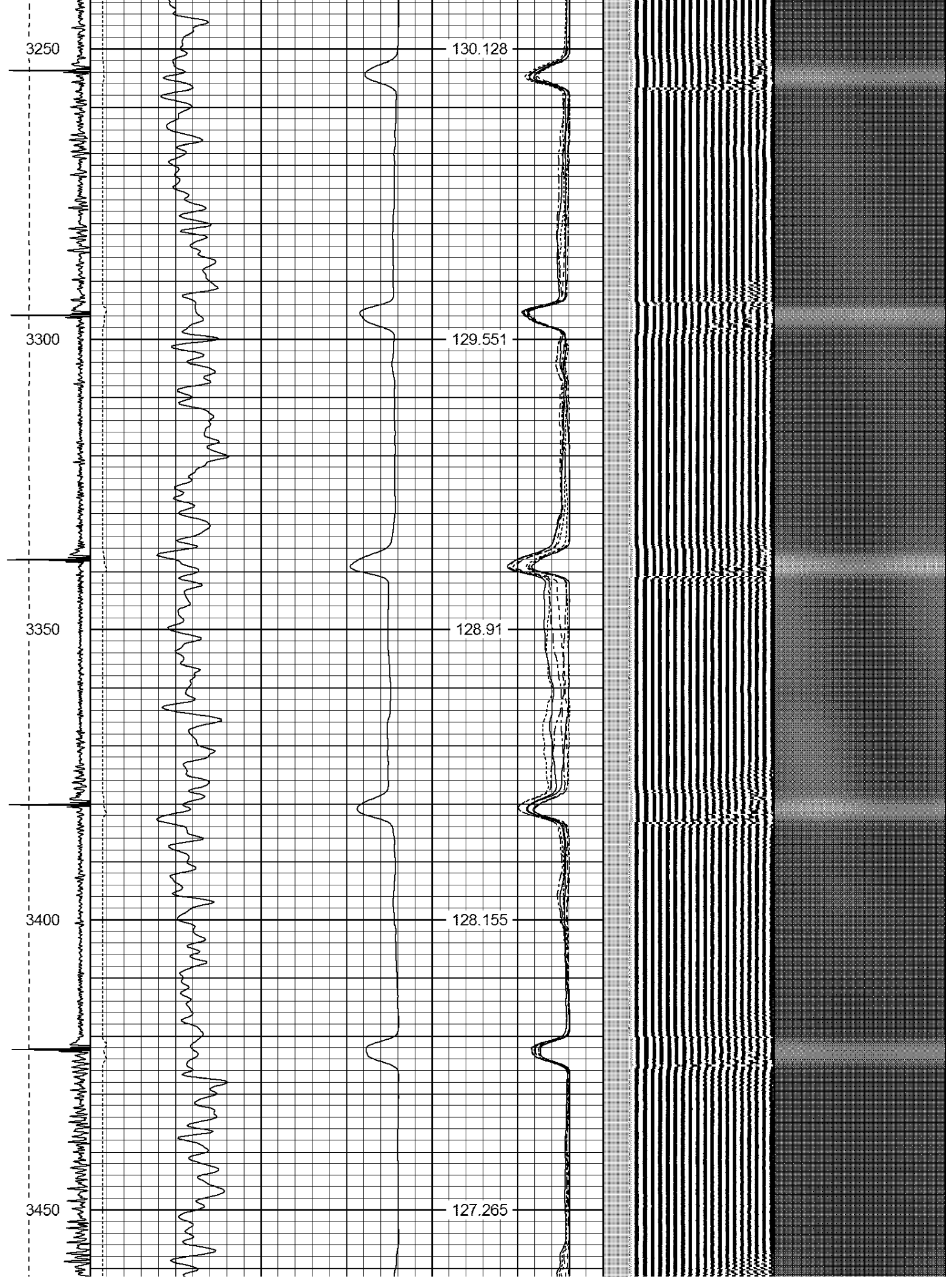


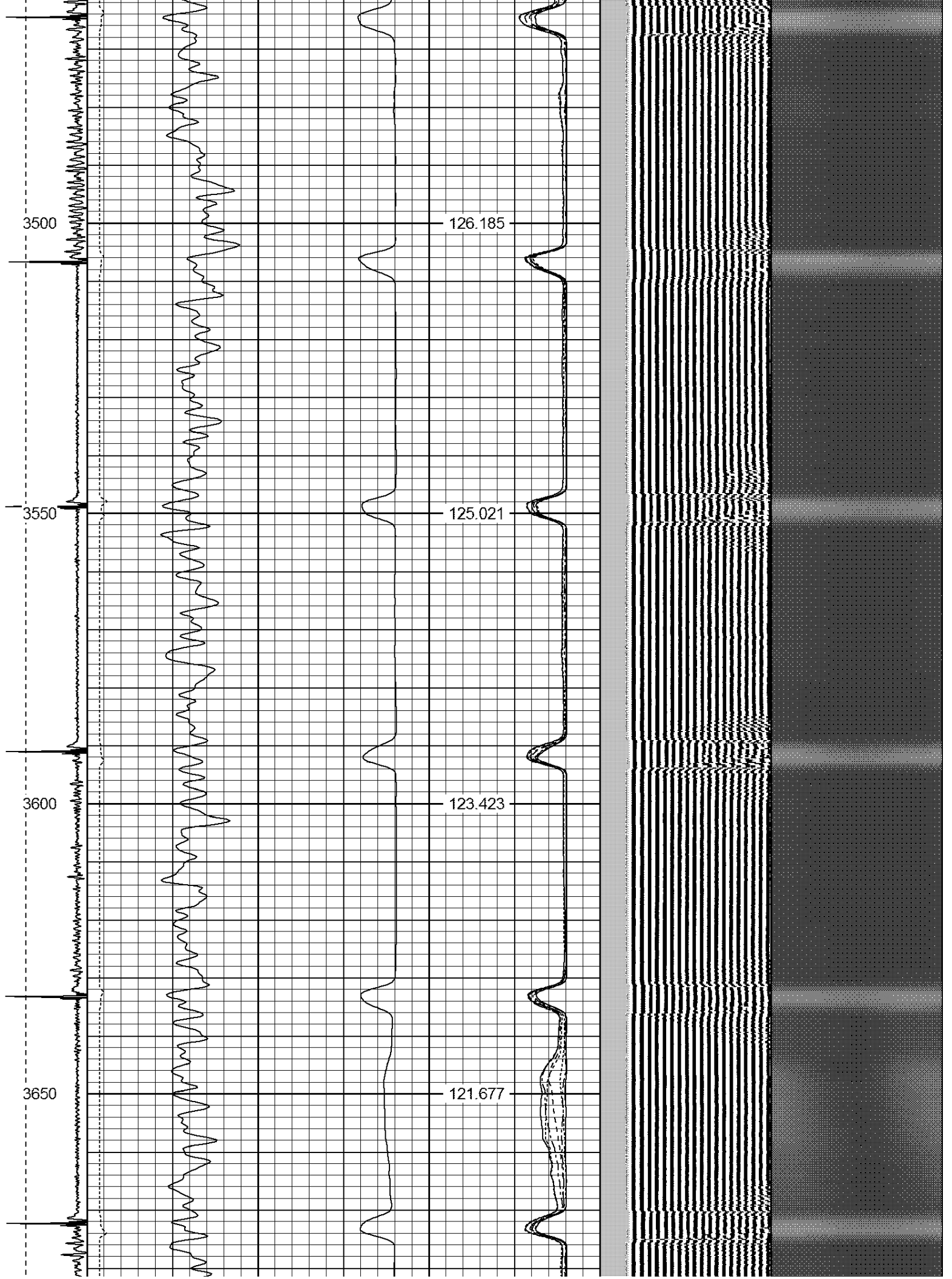




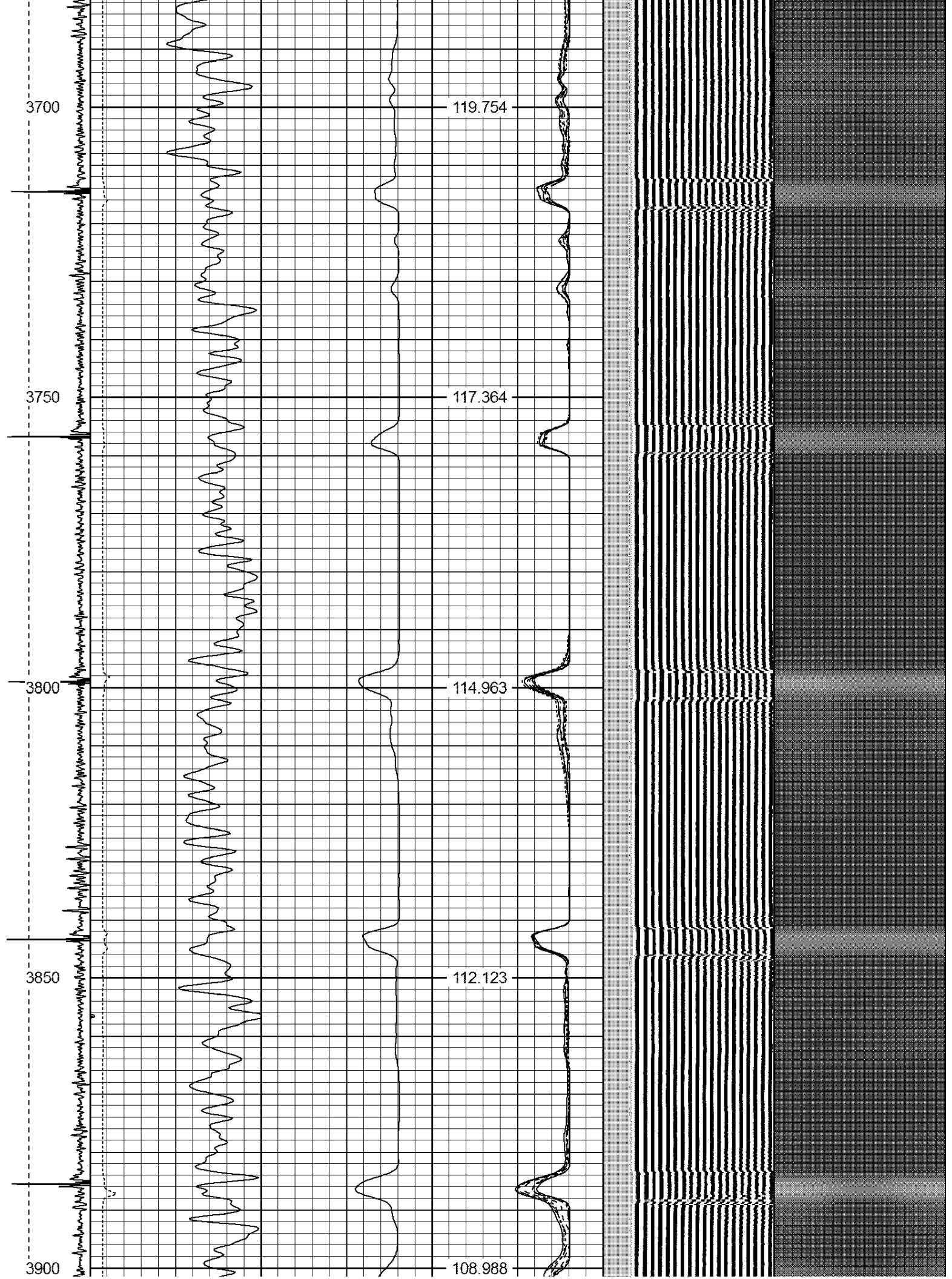




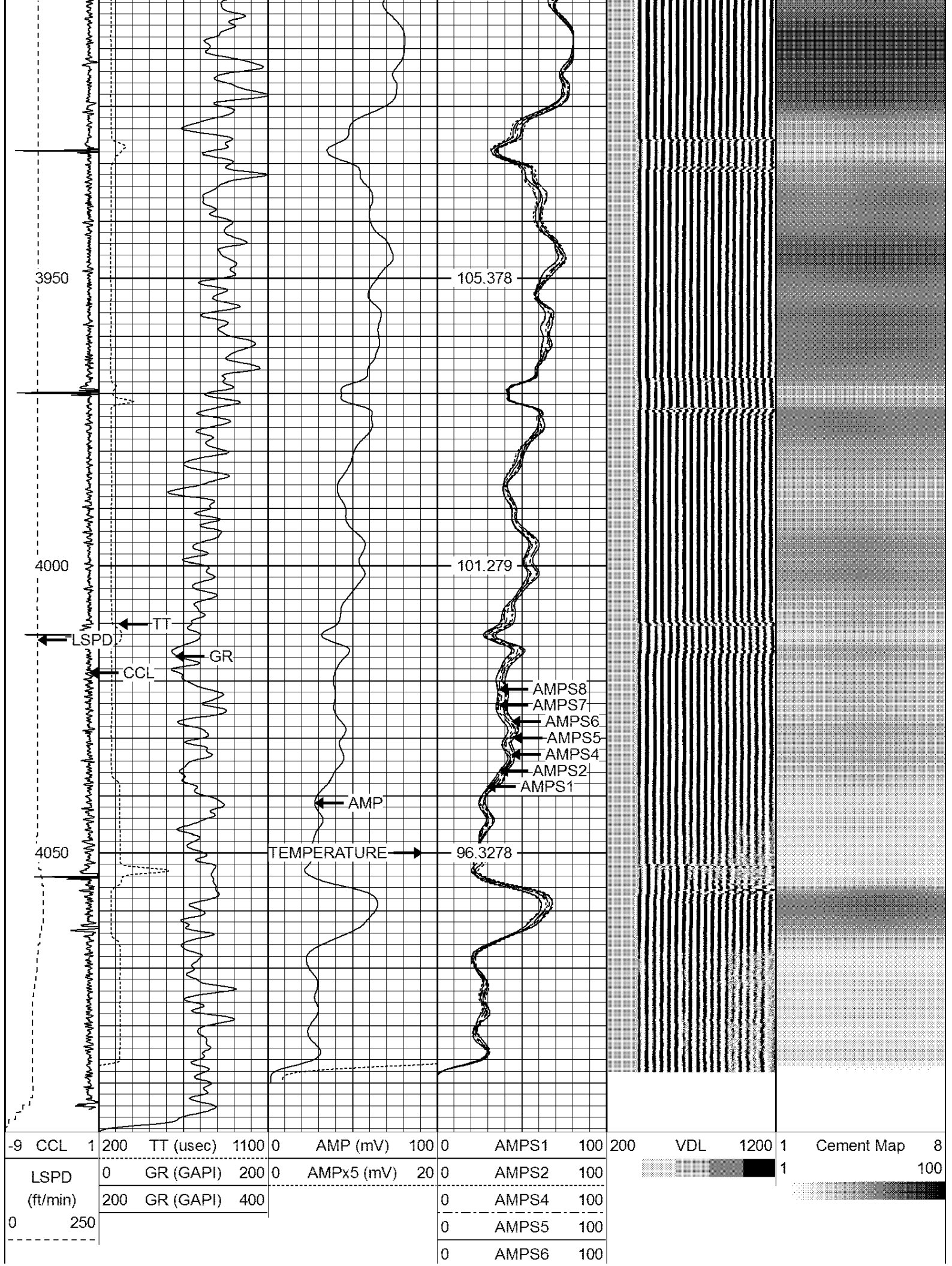




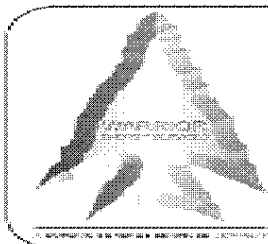








0	AMPS7	100
0	AMPS8	100
IntTemp		
(degF)		



**WARRIOR**  
ENERGY SERVICES

Company KERR McGEE OIL AND GAS

Well WARDELL 3-7-5Z

Field WATTENBERG

County WELD

State CO