



# CEMENT BOND LOG

Mesa Wireline

Company	ANTERO RESOURCES PICEANCE CORP.	Company	ANTERO RESOURCES PICEANCE CORP.
Well	McLIN C 23	Well	McLIN C 23
Field	MAMM CREEK	Field	MAMM CREEK
County	GARFIELD	County	GARFIELD
State	COLORADO	State	COLORADO
Location:	SHL: 1919' FSL & 187' FEL SEC. 13 TWP. 06S RGE. 92W	API #: 06-045-20138-0000	Other Services
Permanent Datum	GROUND LEVEL	Elevation	5725'
Log Measured From	KELLY BUSHING = 24 FT	Elevation	5749'
Drilling Measured From	KELLY BUSHING	Elevation	5748'
		Elevation	5725'

Date	13 JUN 2012
Run Number	ONE
Depth Driller	7412'
Depth Logger	7330'
Bottom Logged Interval	7330'
Top Log Interval	SURFACE
Open Hole Size	7.875"
Type Fluid	WATER
Density / Viscosity	~8.34#/GAL
Max. Recorded Temp.	207 DEG F
Estimated Cement Top	3410'
Time Well Ready	N/A
Time Logger on Bottom	1345
Equipment Number	FL0802
Location	GRAND JUNCTION
Recorded By	M. BERNATCHEZ
Witnessed By	L. GARDNER
Borehole Record	
Run Number	Bit From To Size Weight From To
ONE	24.0" SURFACE 80' 12.25" 60' 1000' 7412'
TWO	12.25" 60' 1000' 7412'
THREE	7.875" 1000' 7412'
Casing Record	
Surface String	Size 8.625" Wgt/Ft 24.0" Top SURFACE Bottom 1000'
Prot. String	Size 4.5" Wgt/Ft 11.6# Top SURFACE Bottom 7412'
Production String	Size 4.5" Wgt/Ft 11.6# Top SURFACE Bottom 7412'
Liner	Size 4.5" Wgt/Ft 11.6# Top SURFACE Bottom 7412'

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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

LOG CORRELATED TO WEATHERFORD TRIPLE COMBO DATED 6-JULIE-2012.

SHORT JOINTS: 3675' - 3698' & 5309' - 5331' & 5644' - 5665'

WE APPRECIATE YOUR BUSINESS, MESA WIRELINE LLC, GRAND JUNCTION CO. (970) 257-04



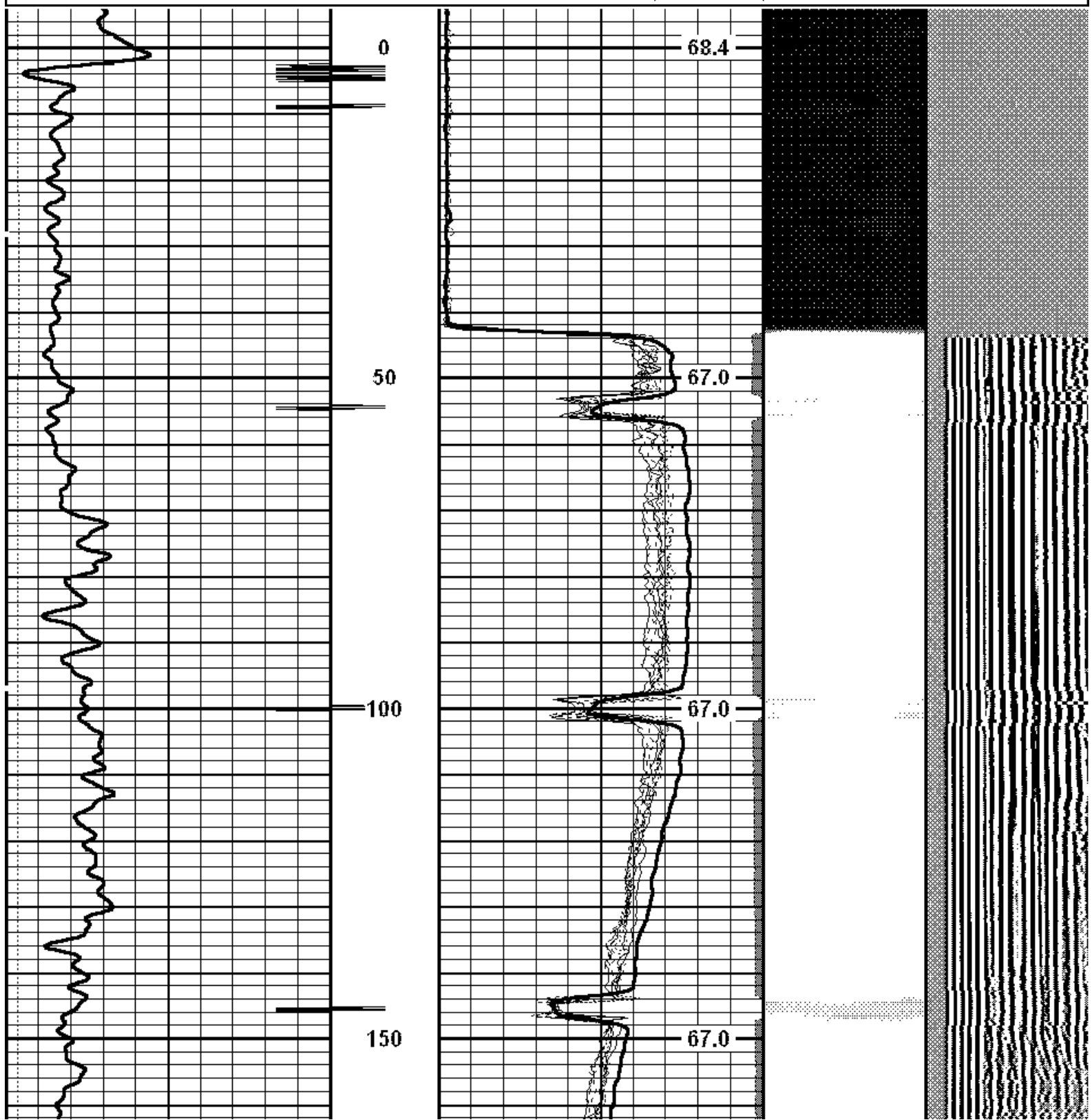
MAIN LOG PASS

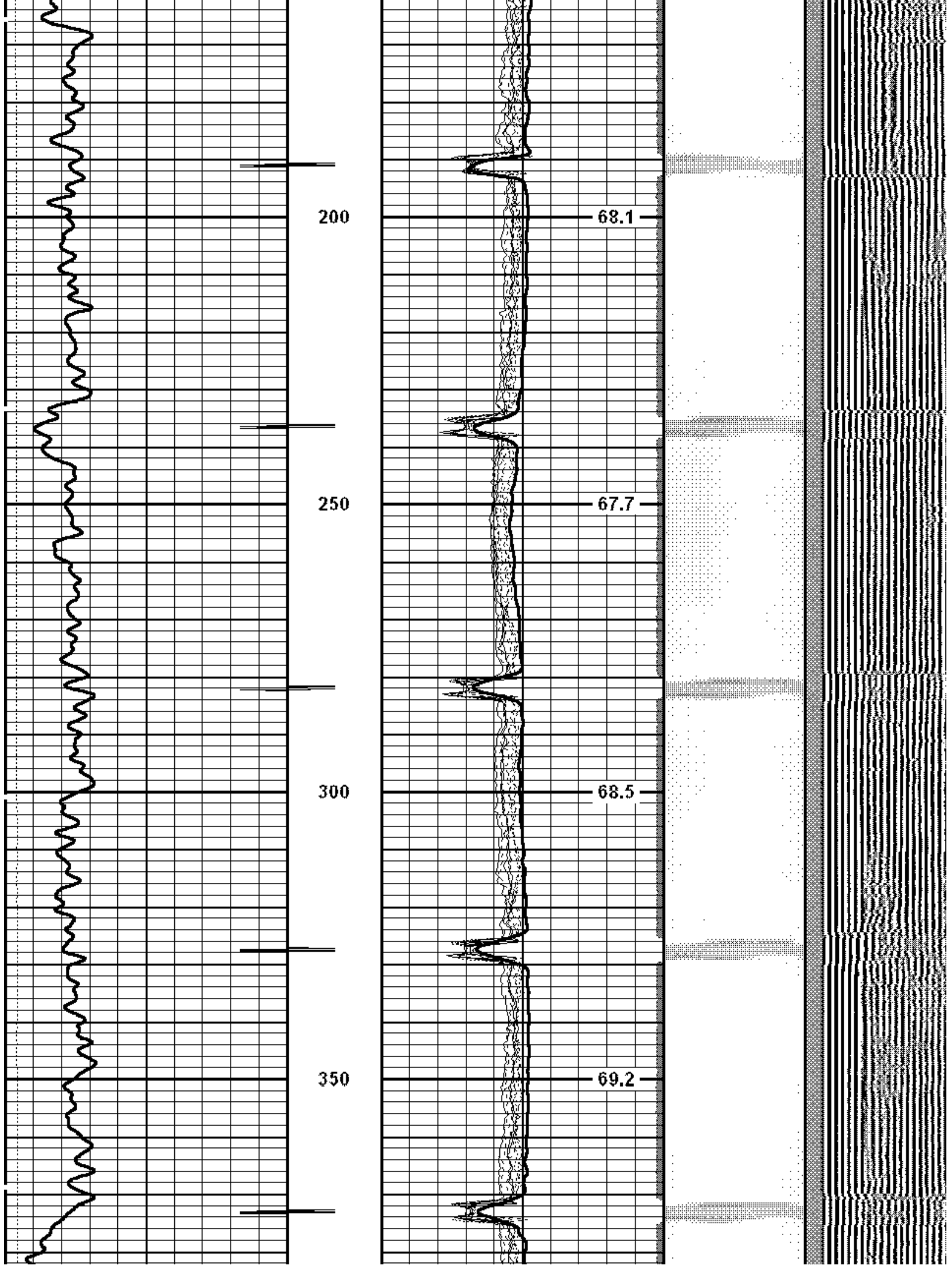
SCALE 5" = 100'

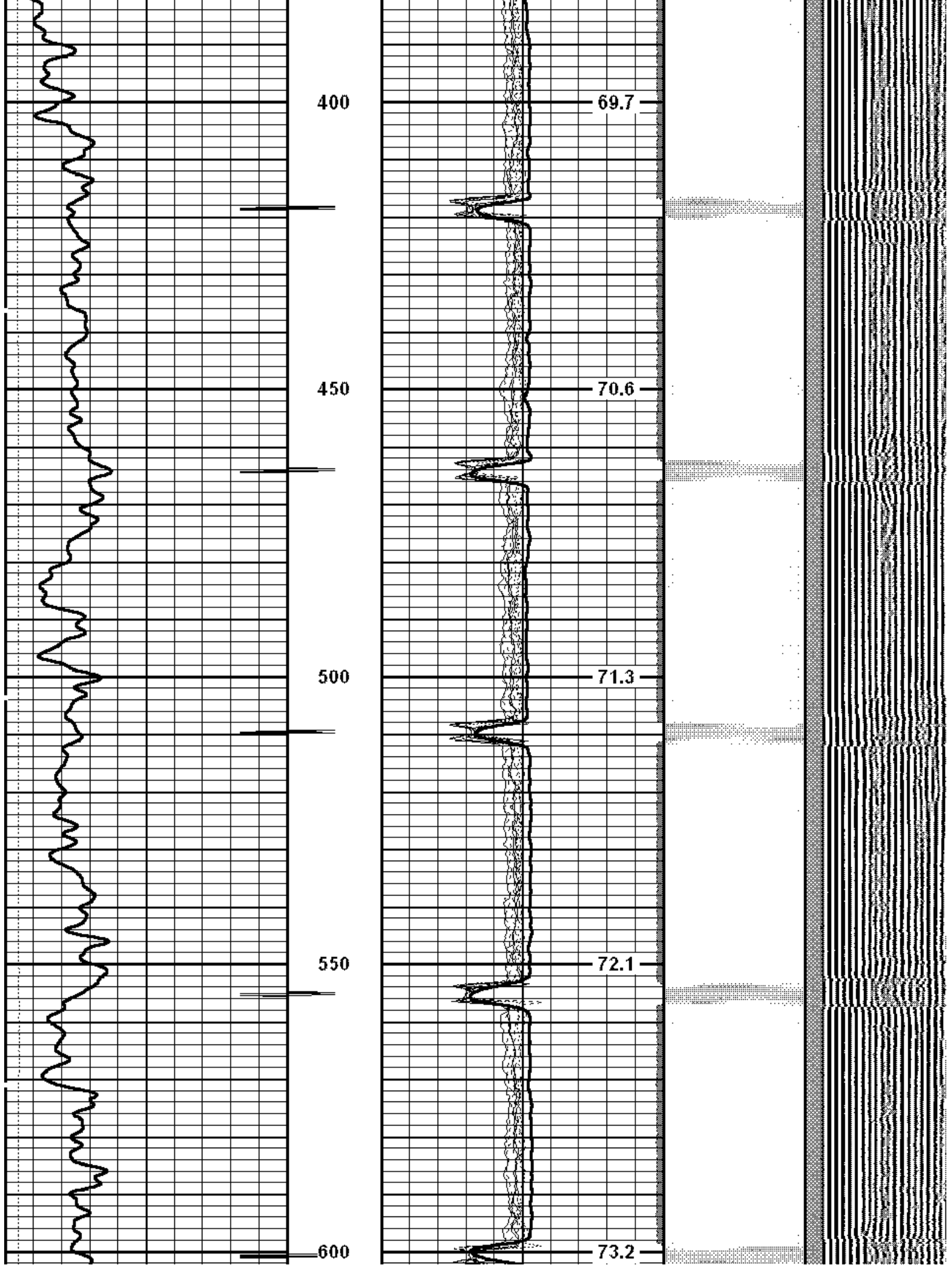
# Mesa Wireline

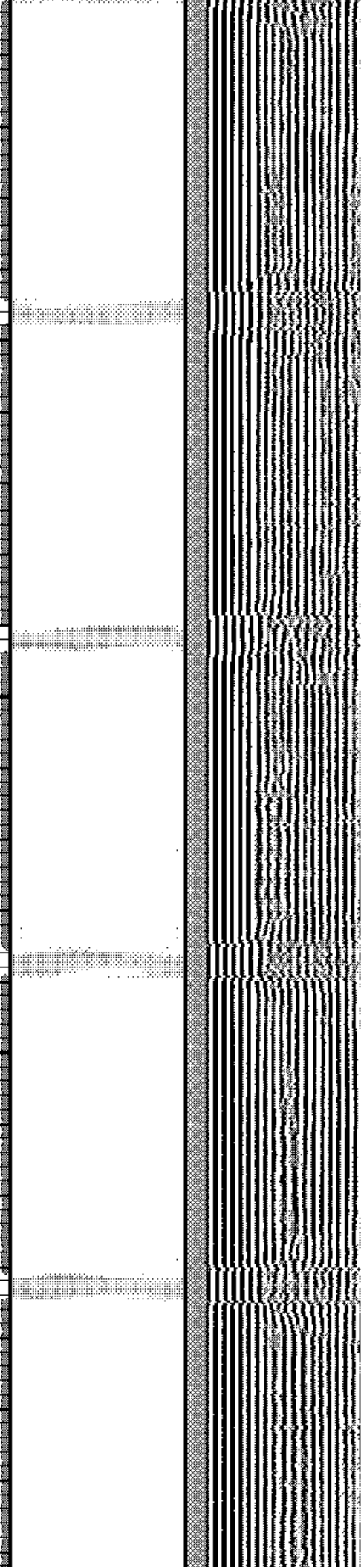
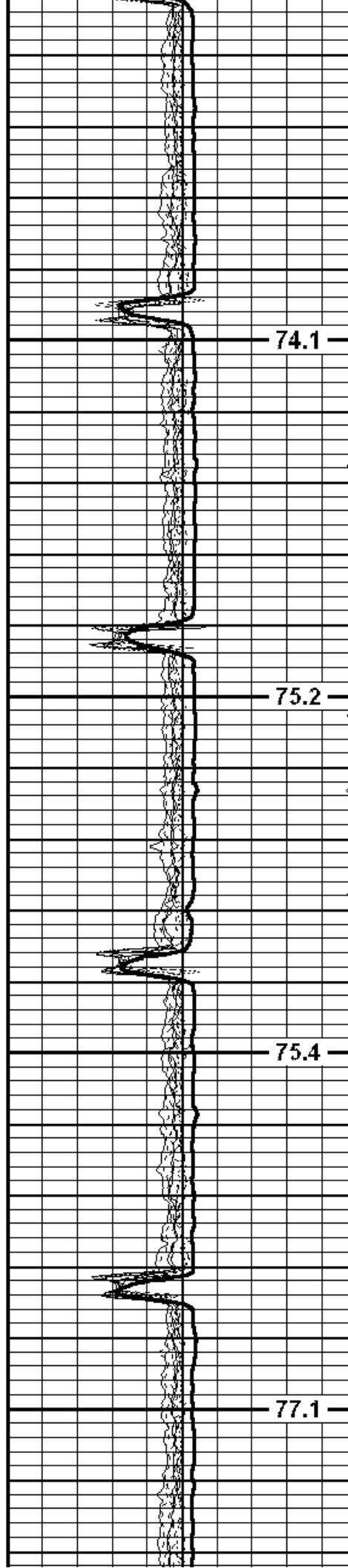
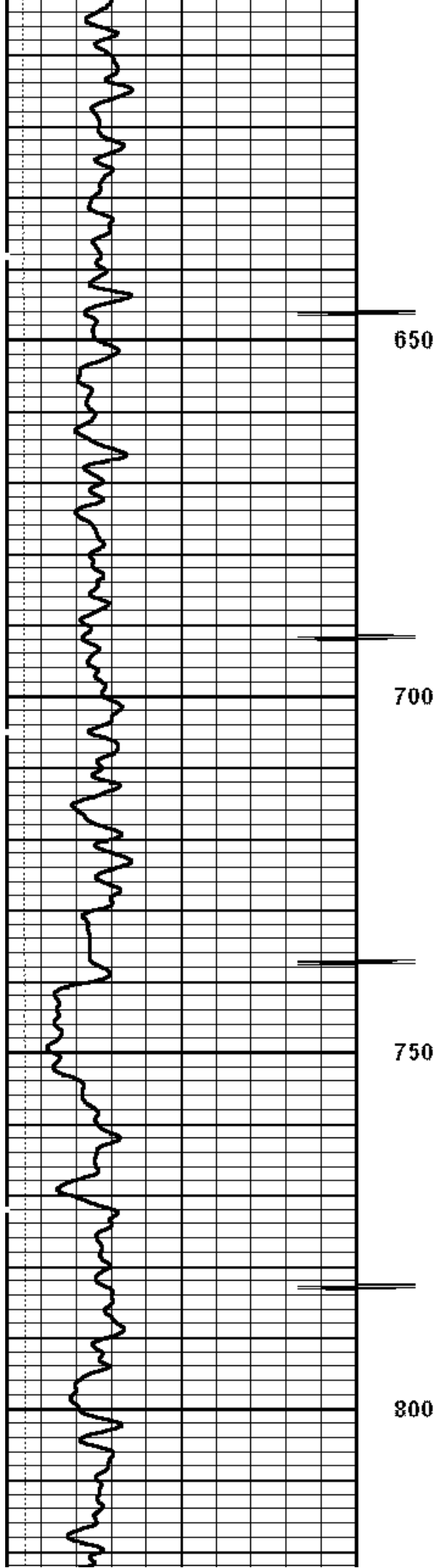
**Database File:** mclin c23.db  
**Dataset Pathname:** pass3  
**Presentation Format:** rbtfinal  
**Dataset Creation:** Wed Jun 13 13:51:18 2012 by Log Std Casedhole 08121  
**Charted by:** Depth in Feet scaled 1:240

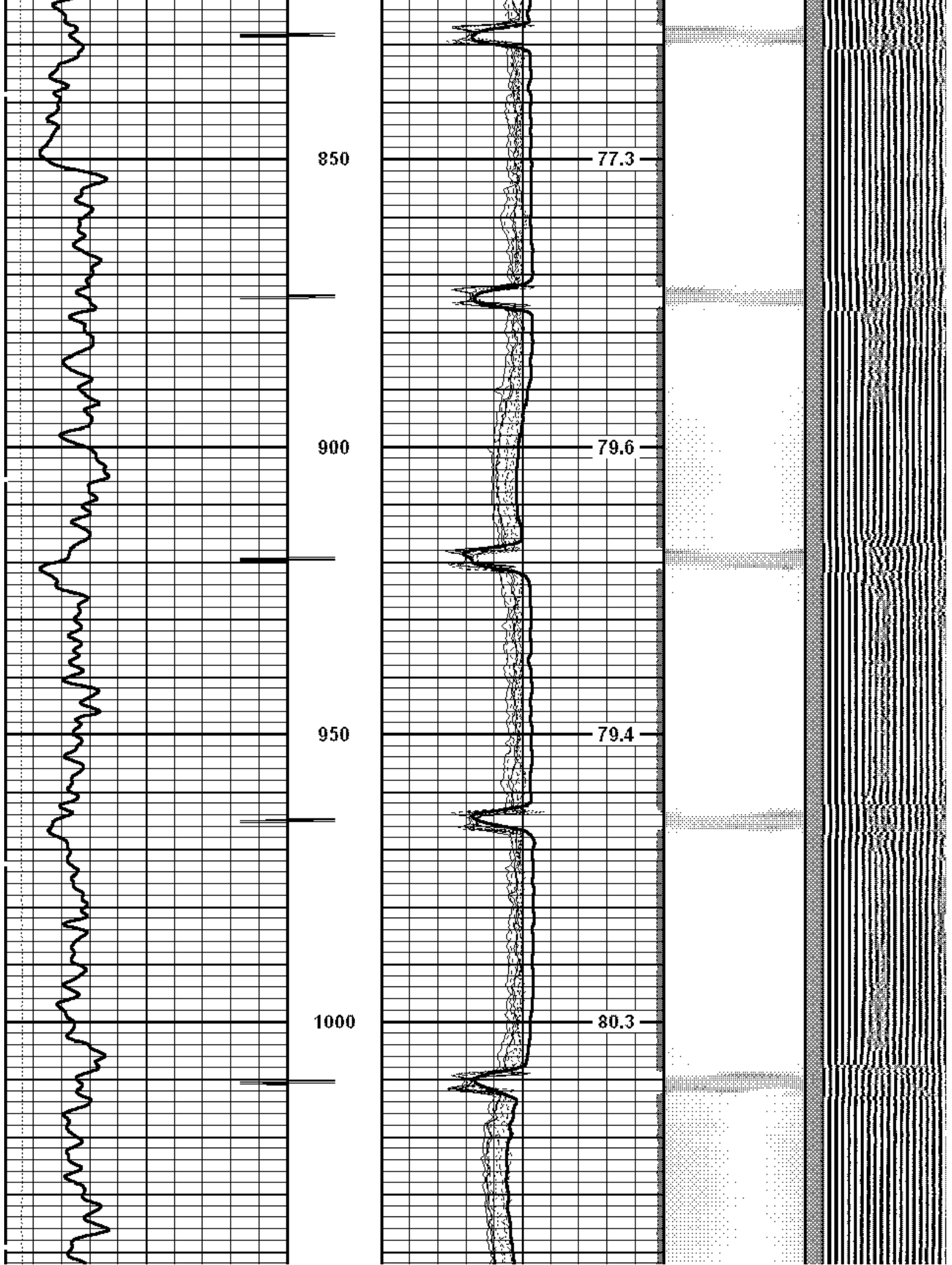
0	GR (GAPI)	200	0	Amplitude (mV)	100	1 SECTORS 8	Variable Density
0	LTEN (lb)	5000	0	TT3FT (usec)	200	0	70 200 1200
CCL			TEMP		(degF)		

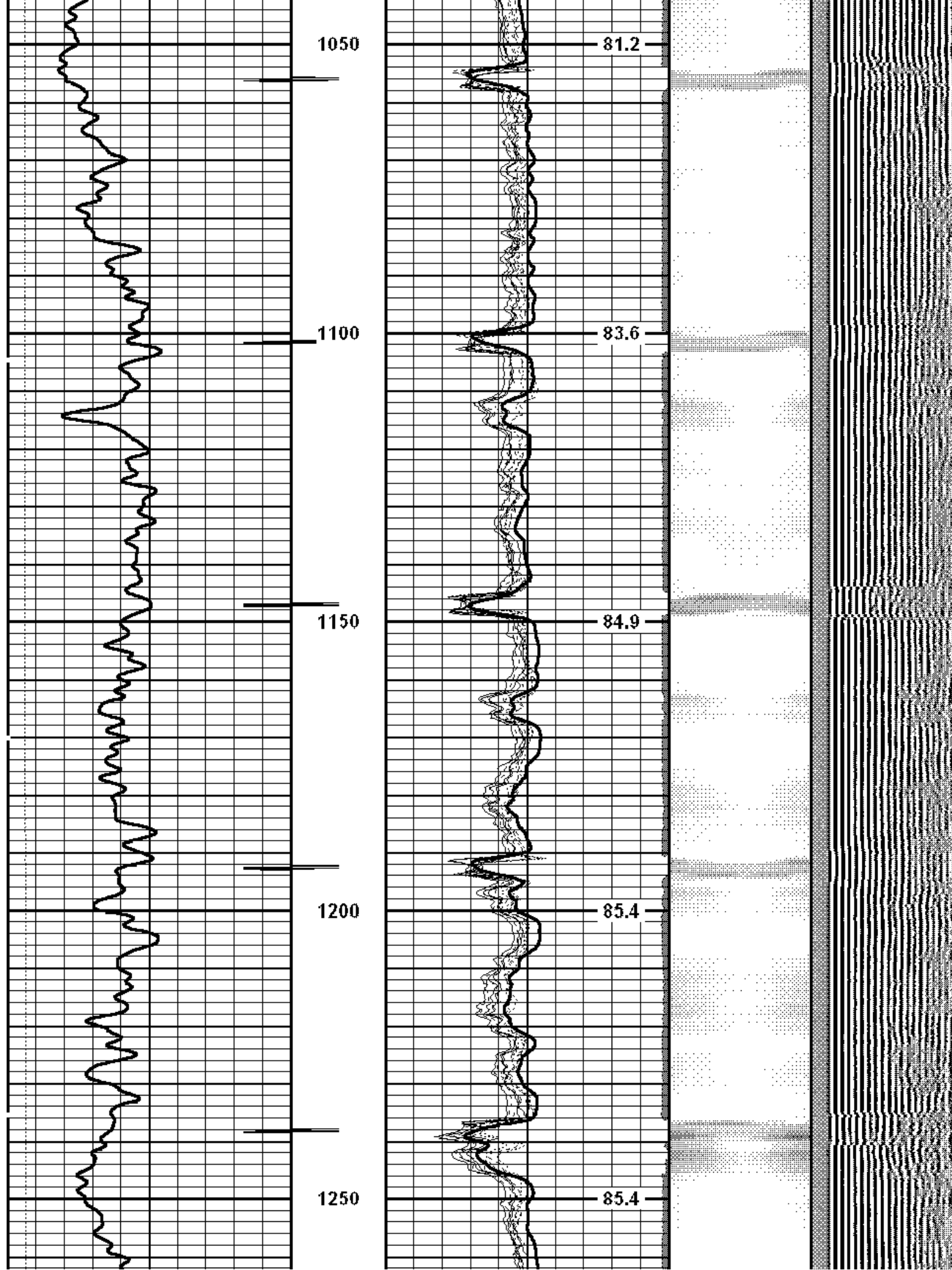


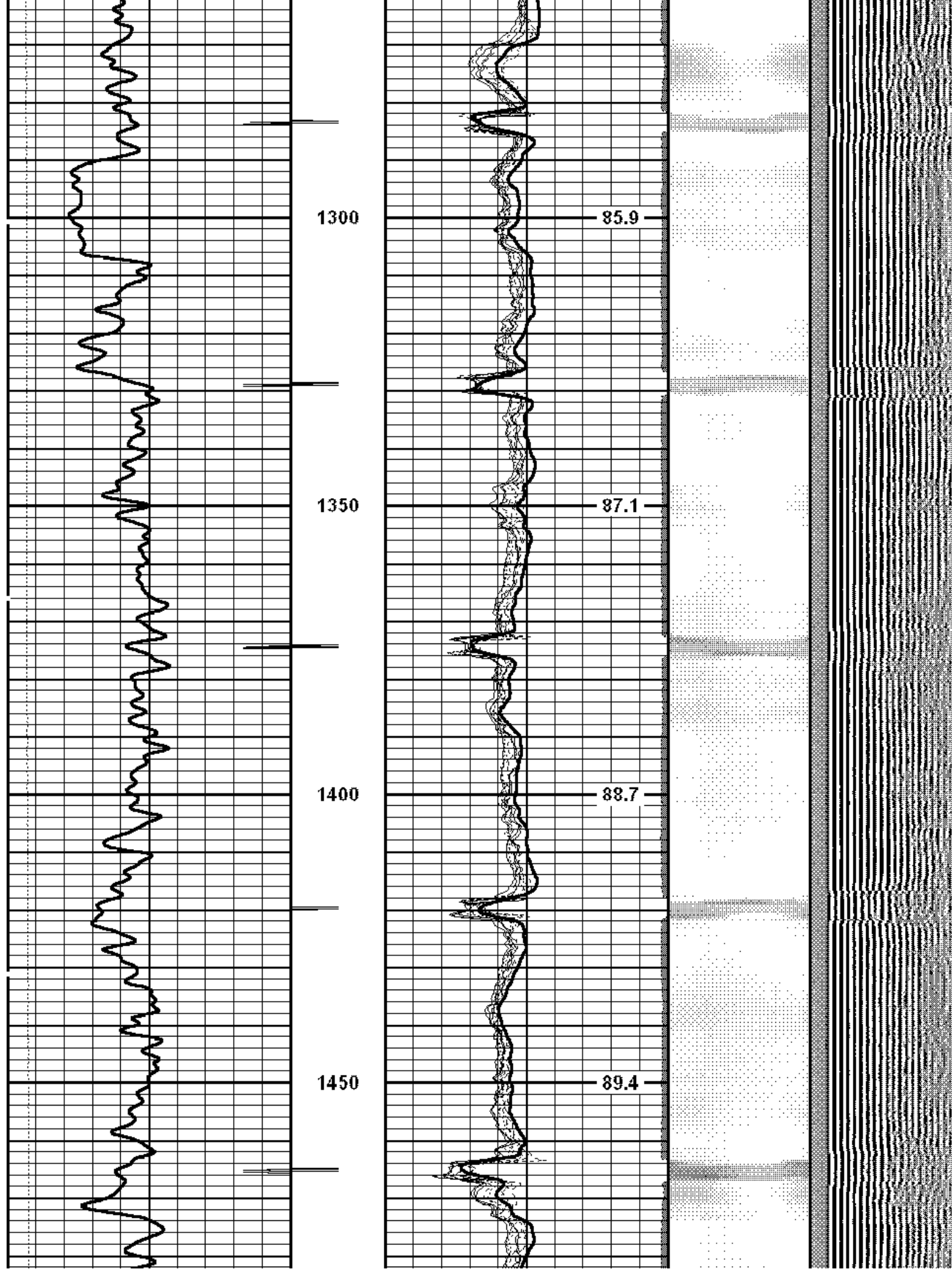




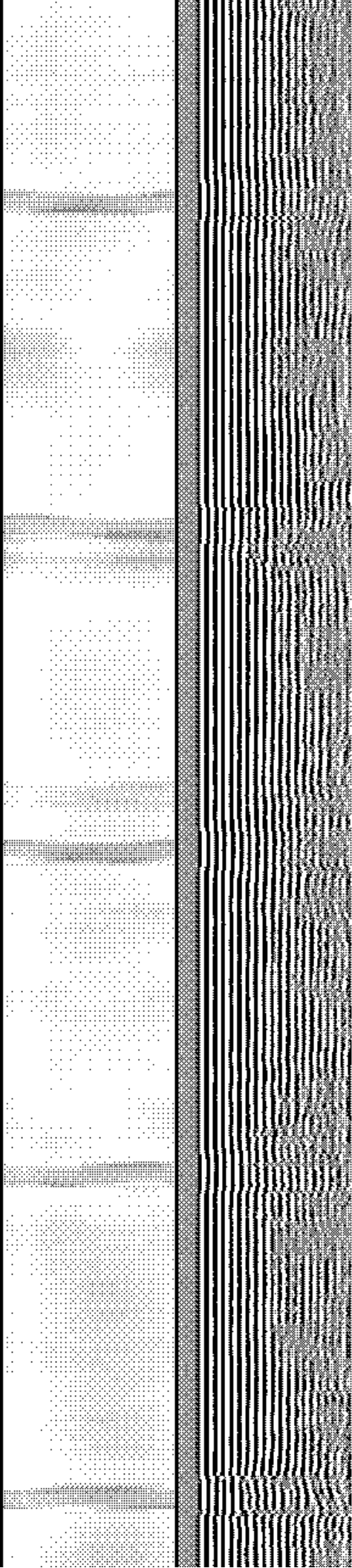
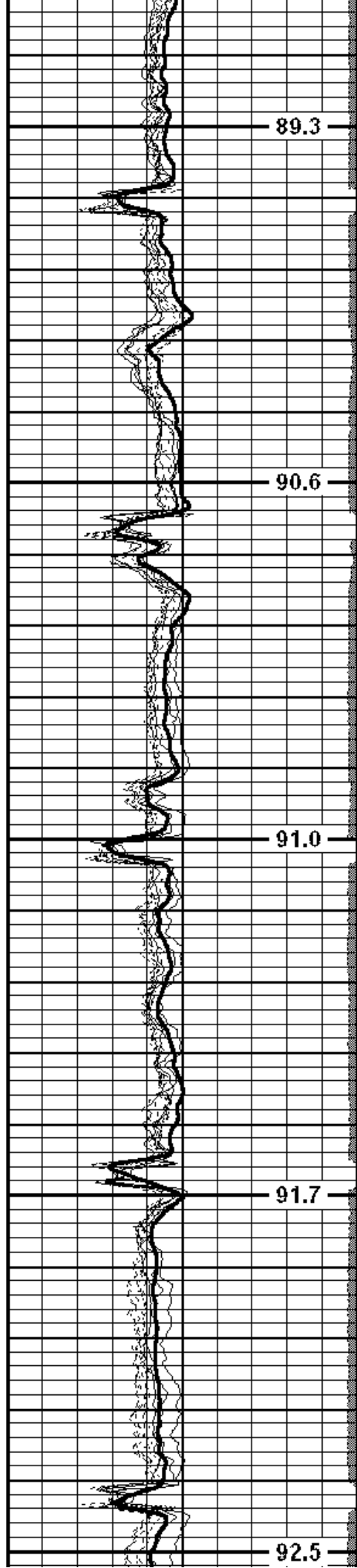
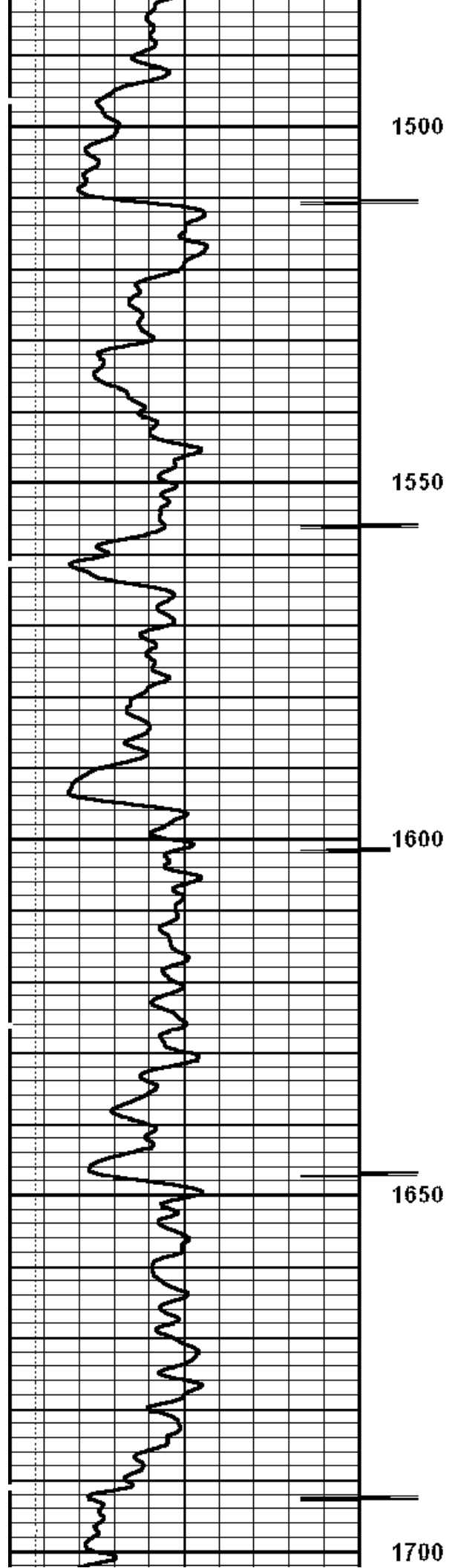


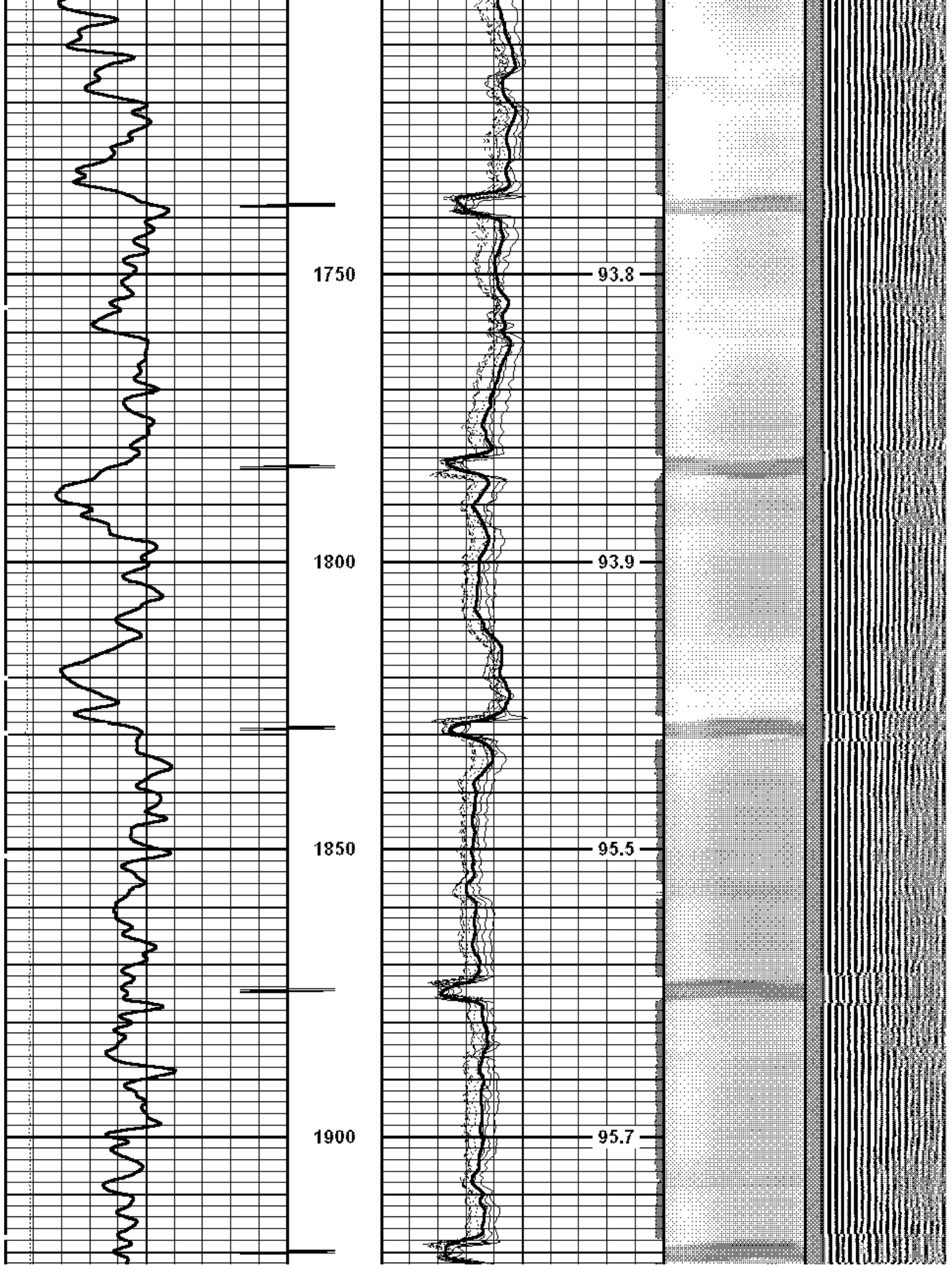


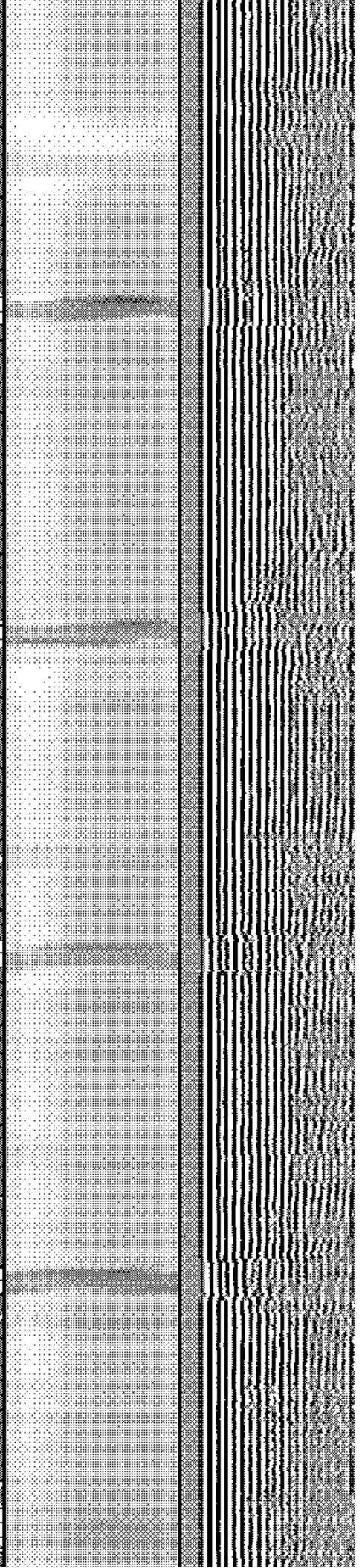
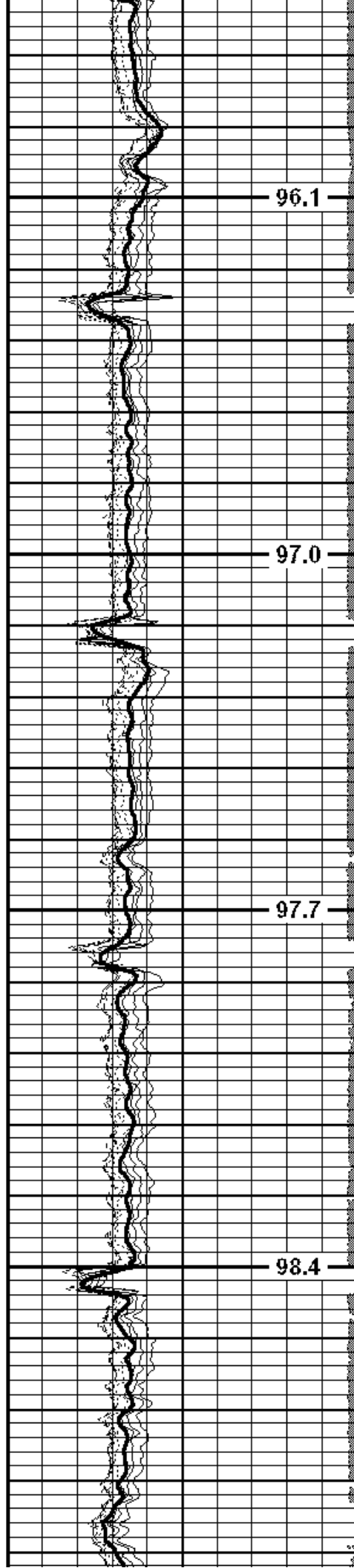
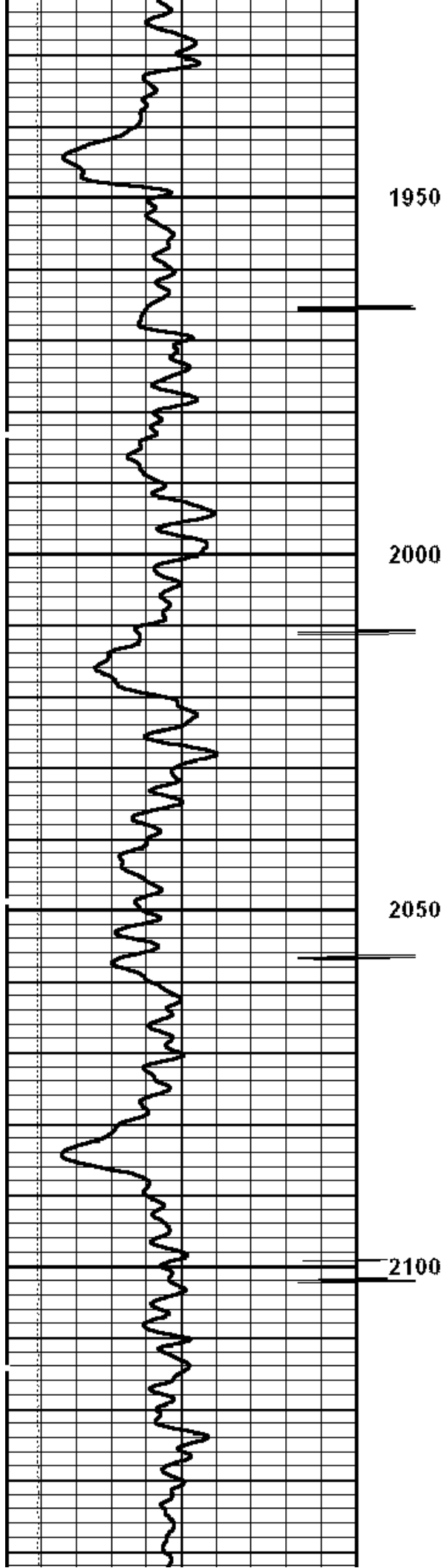


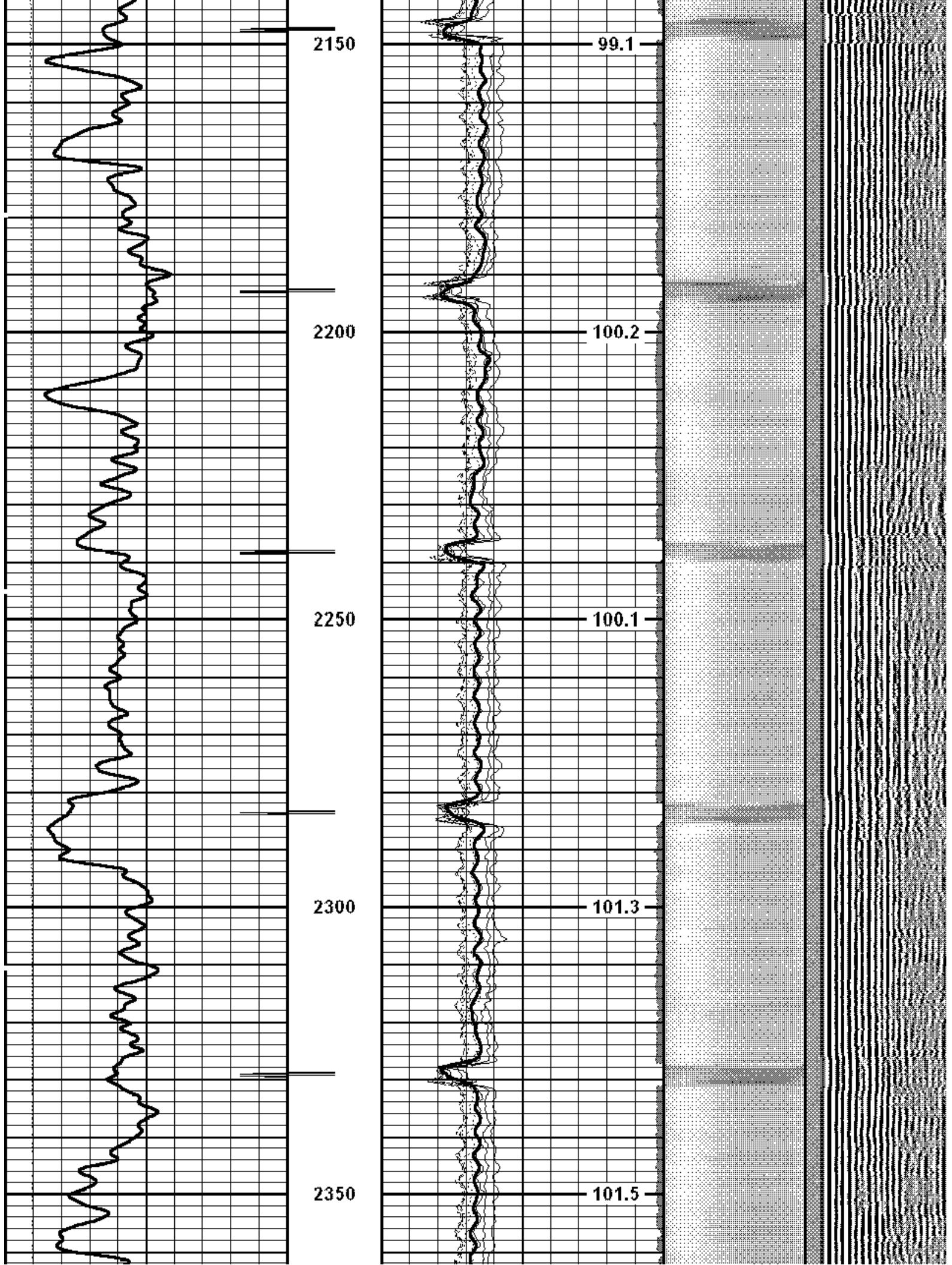


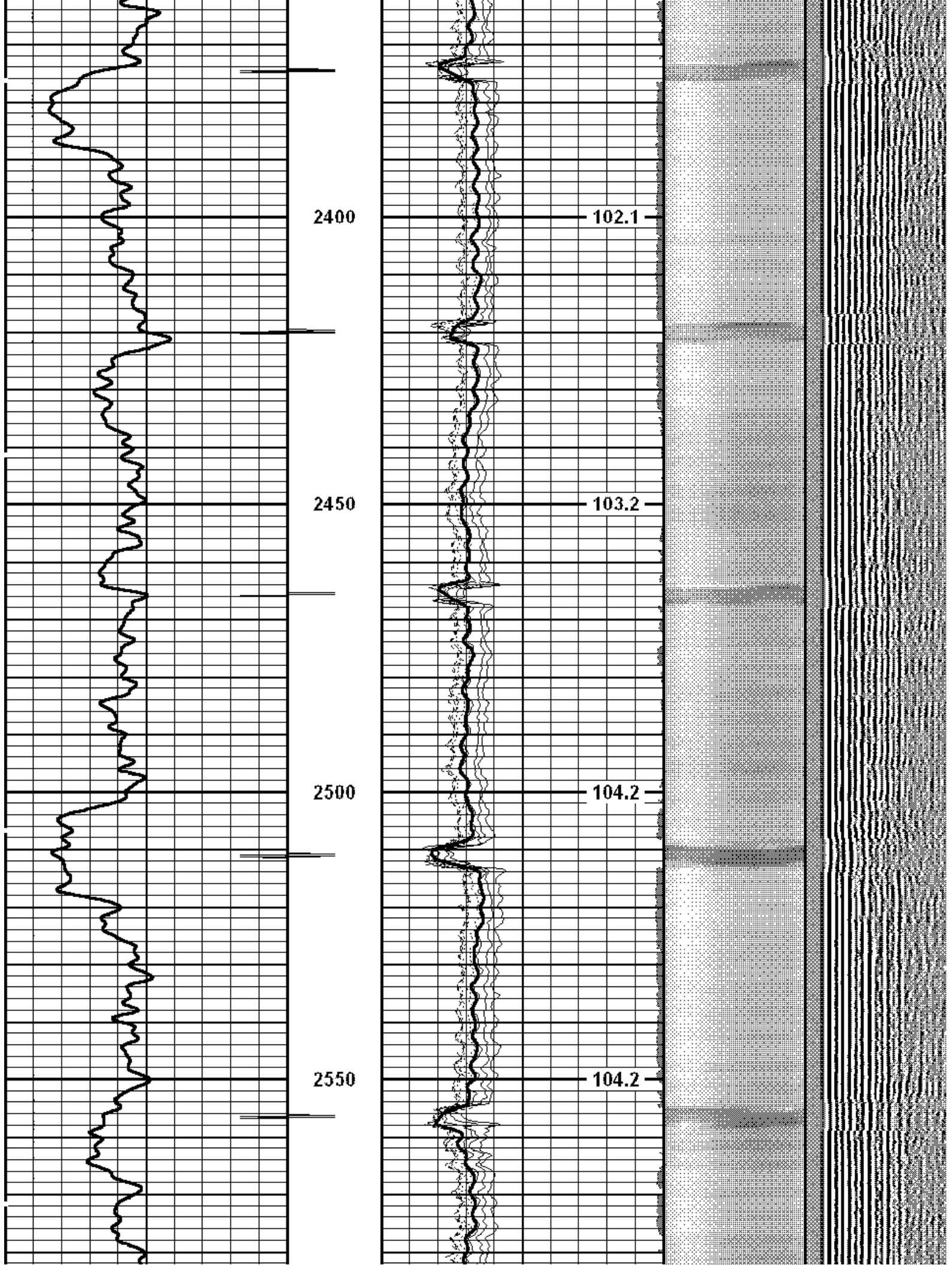




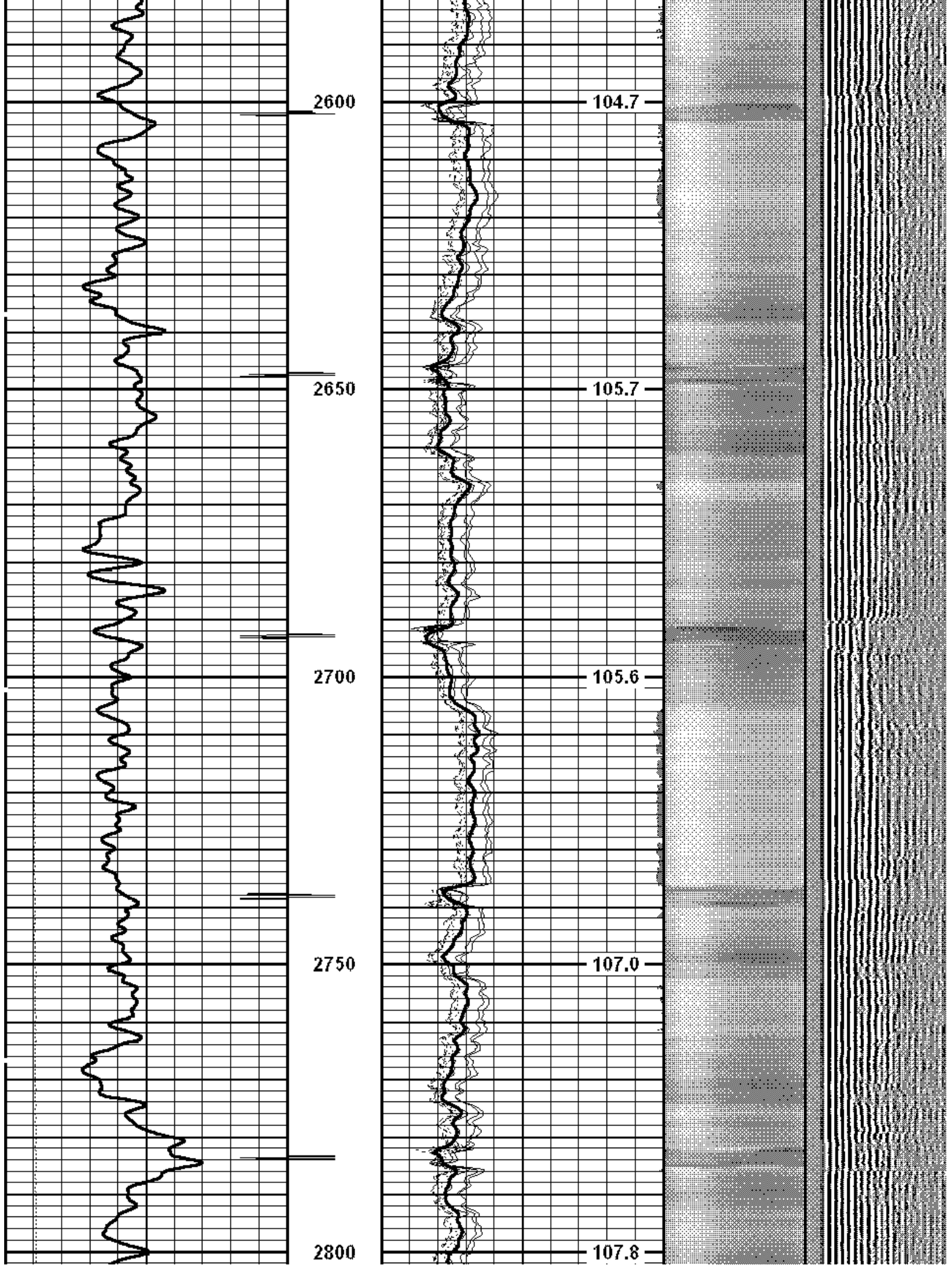


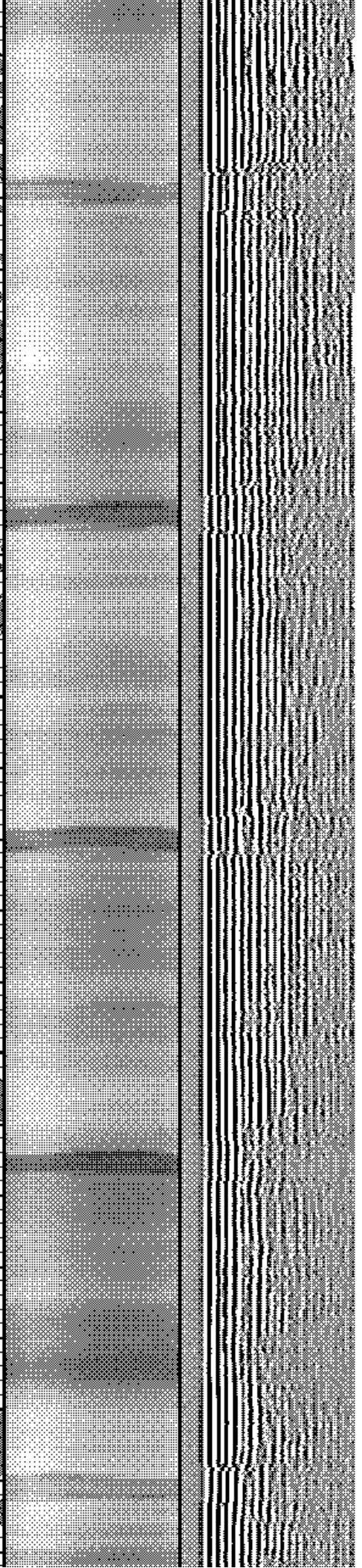
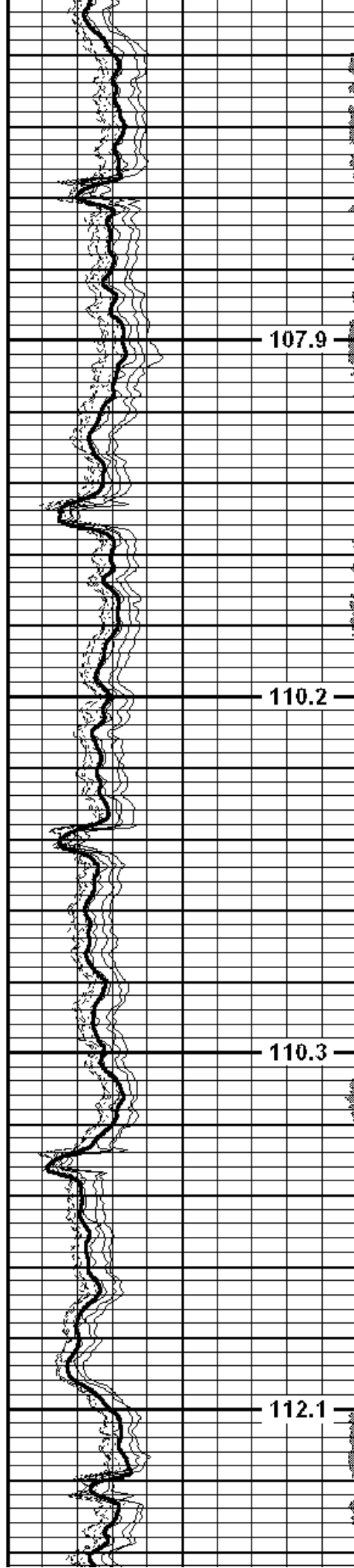
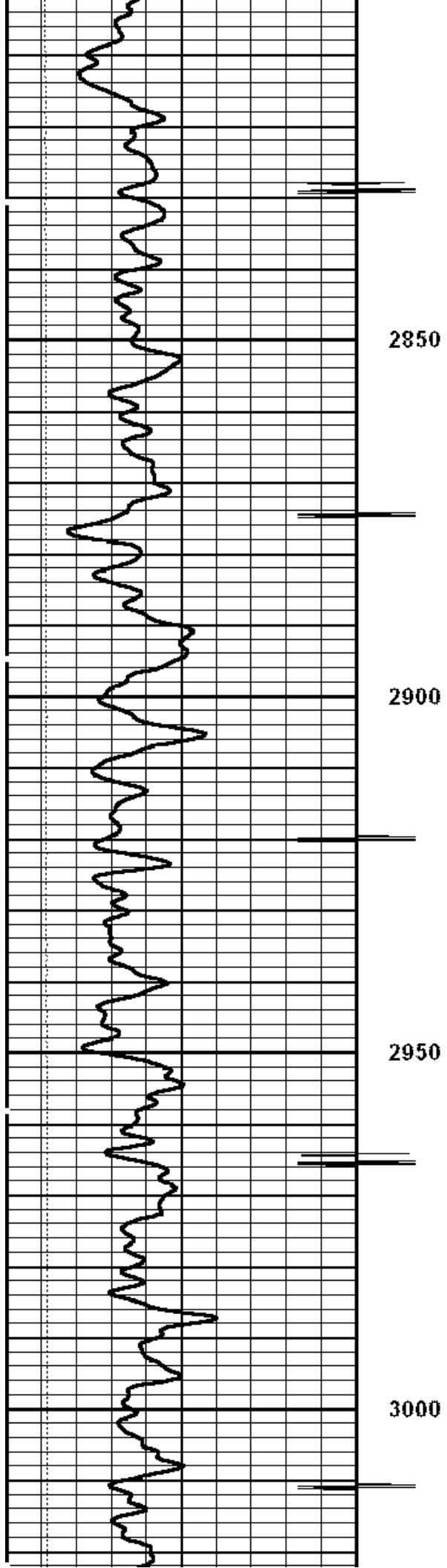


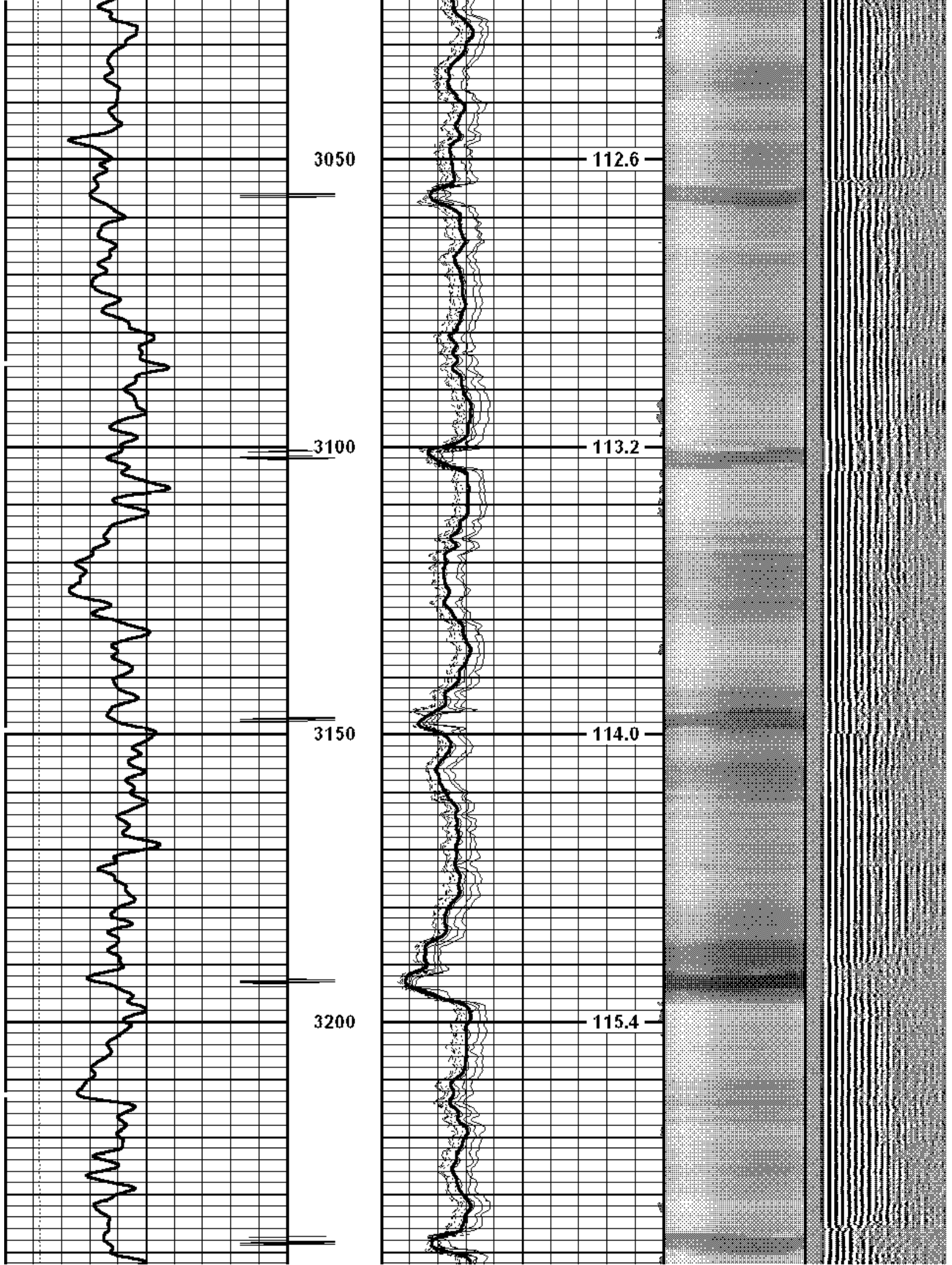




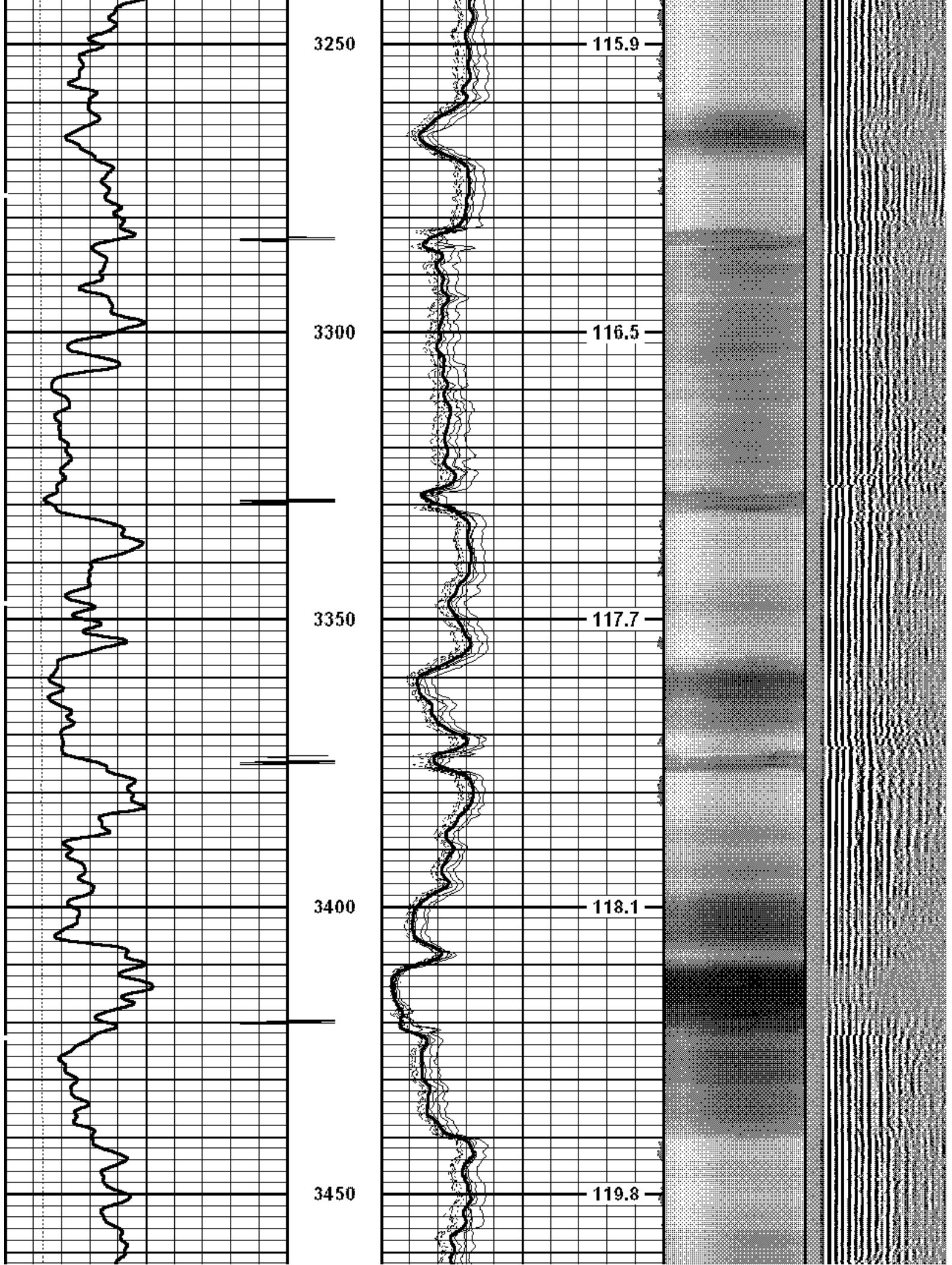


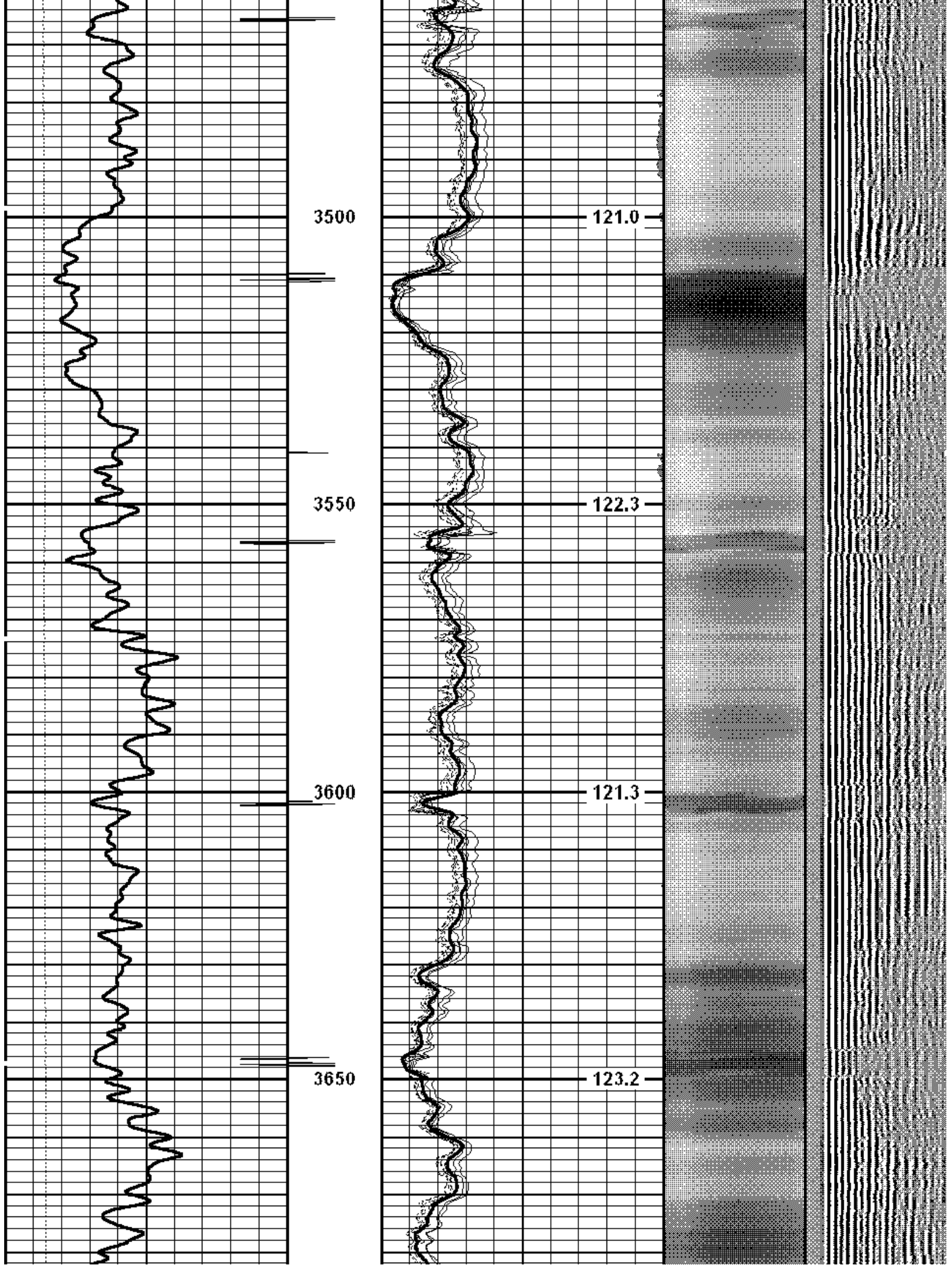


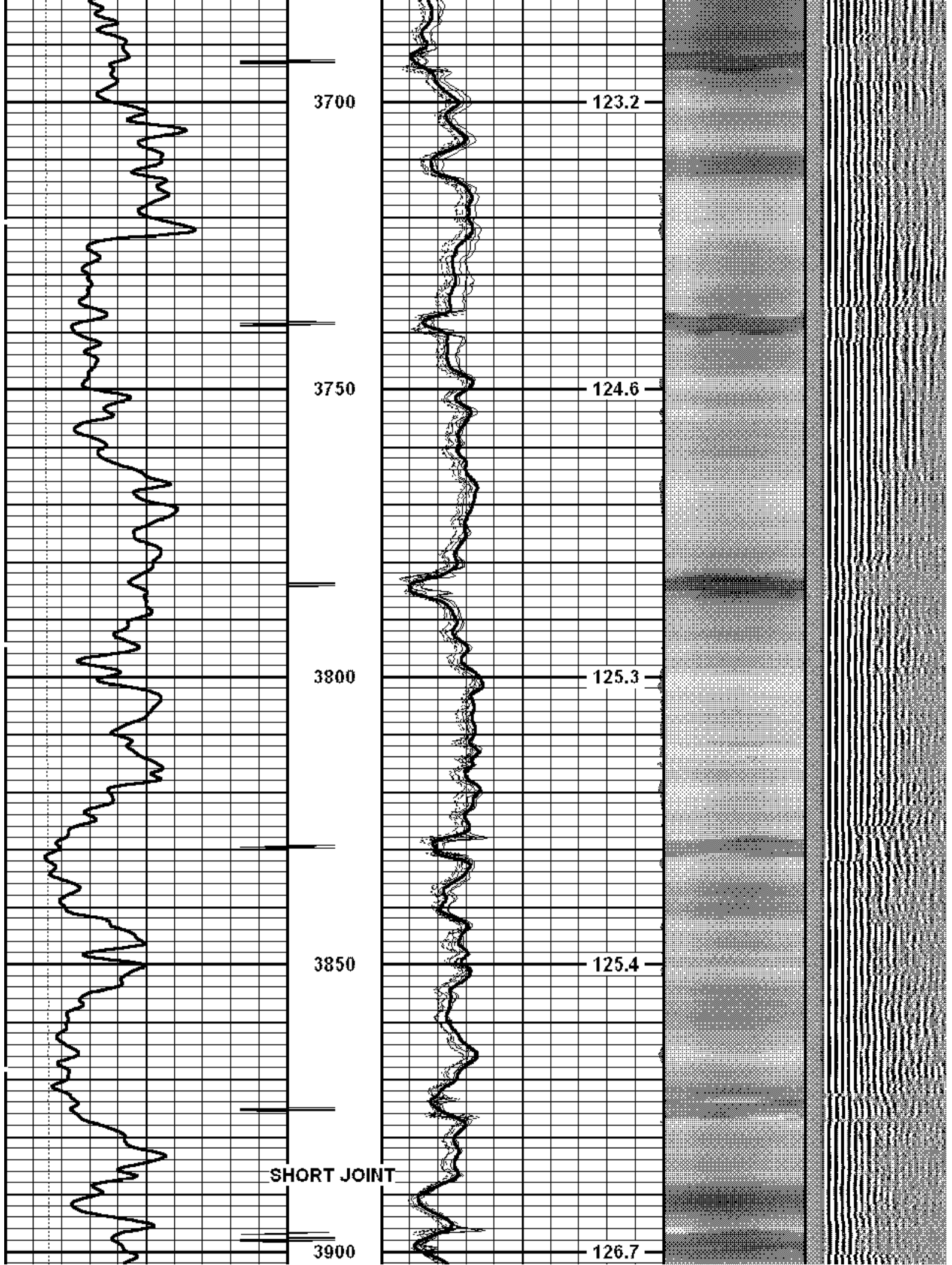


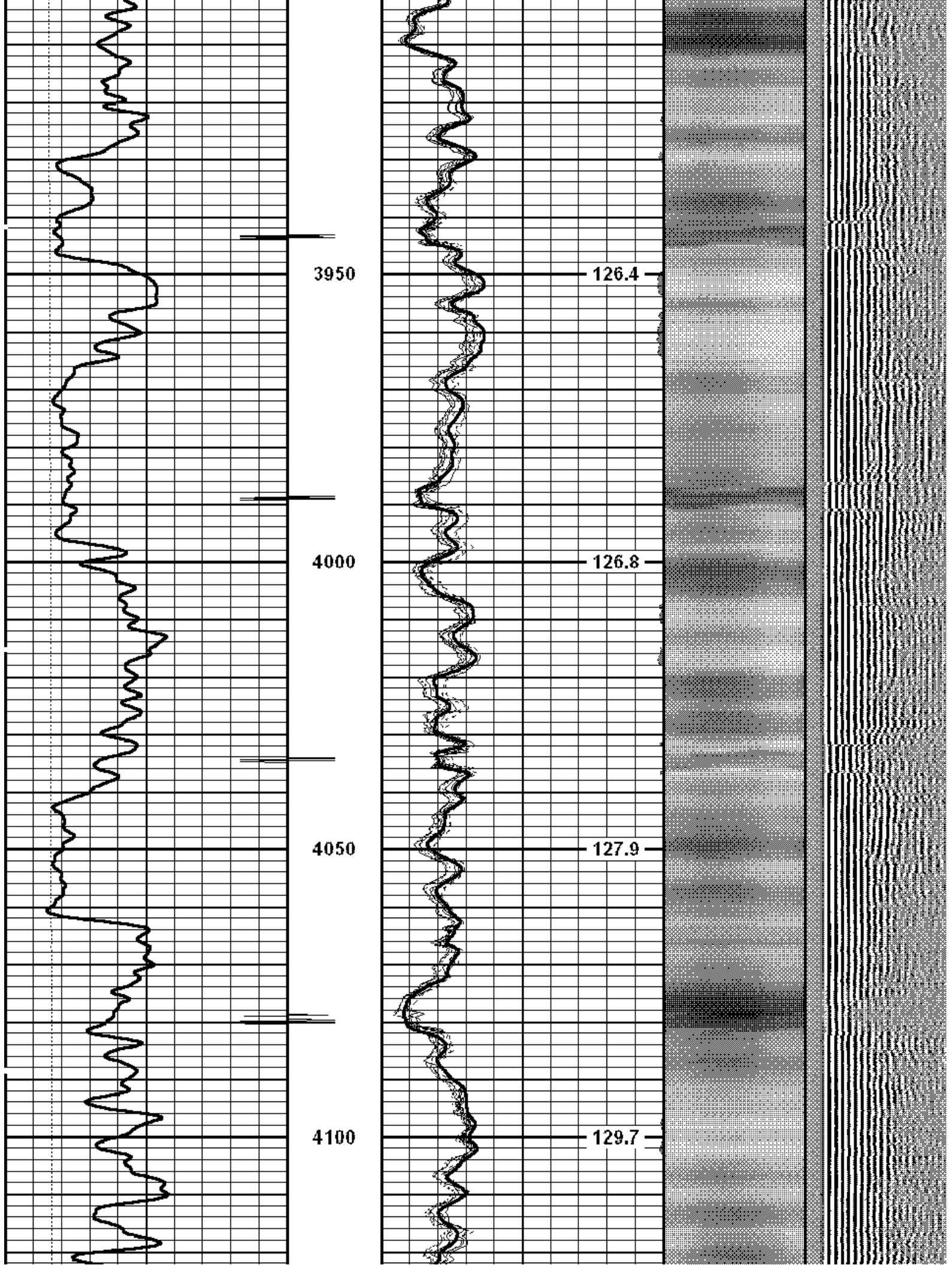




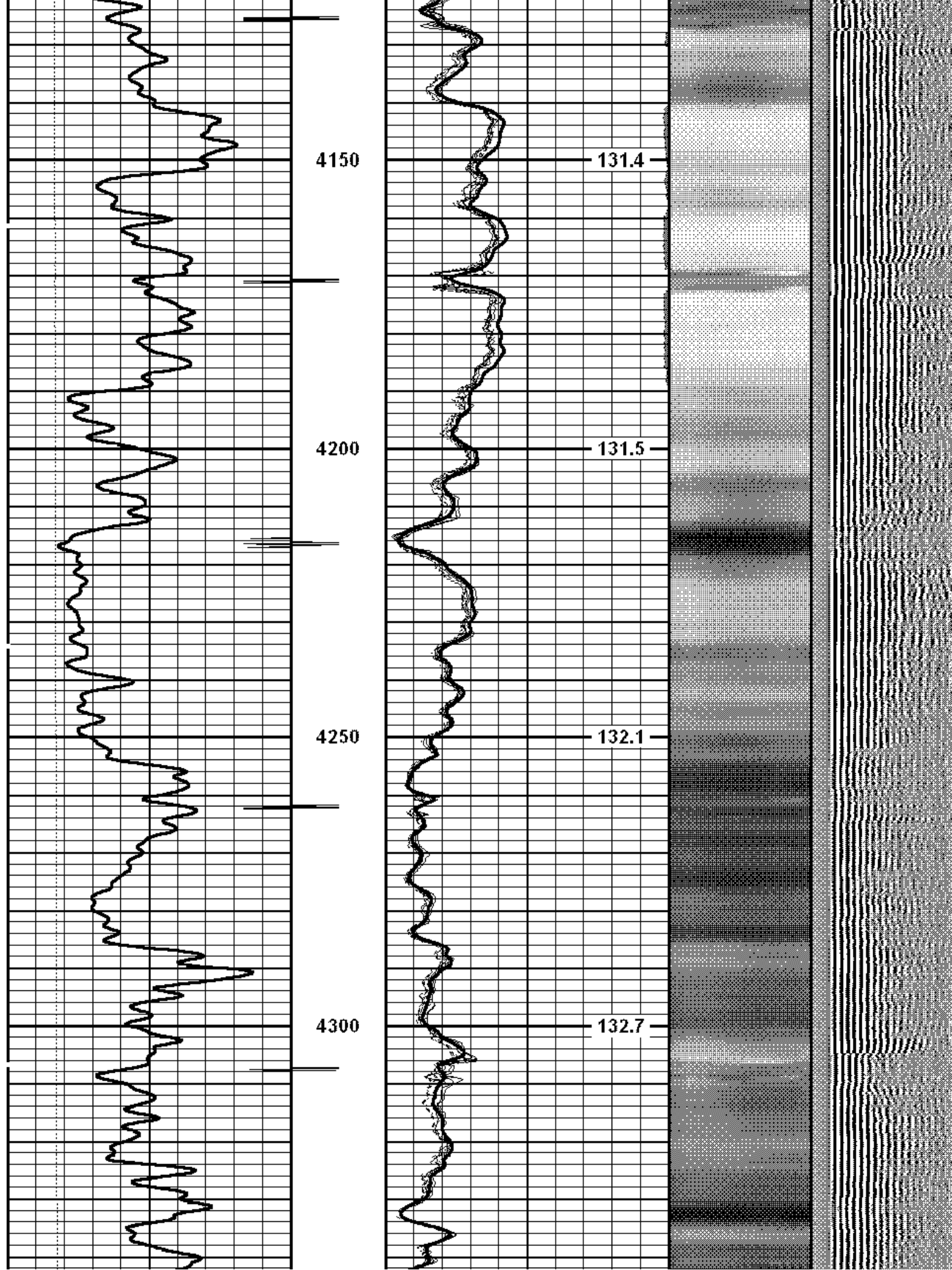


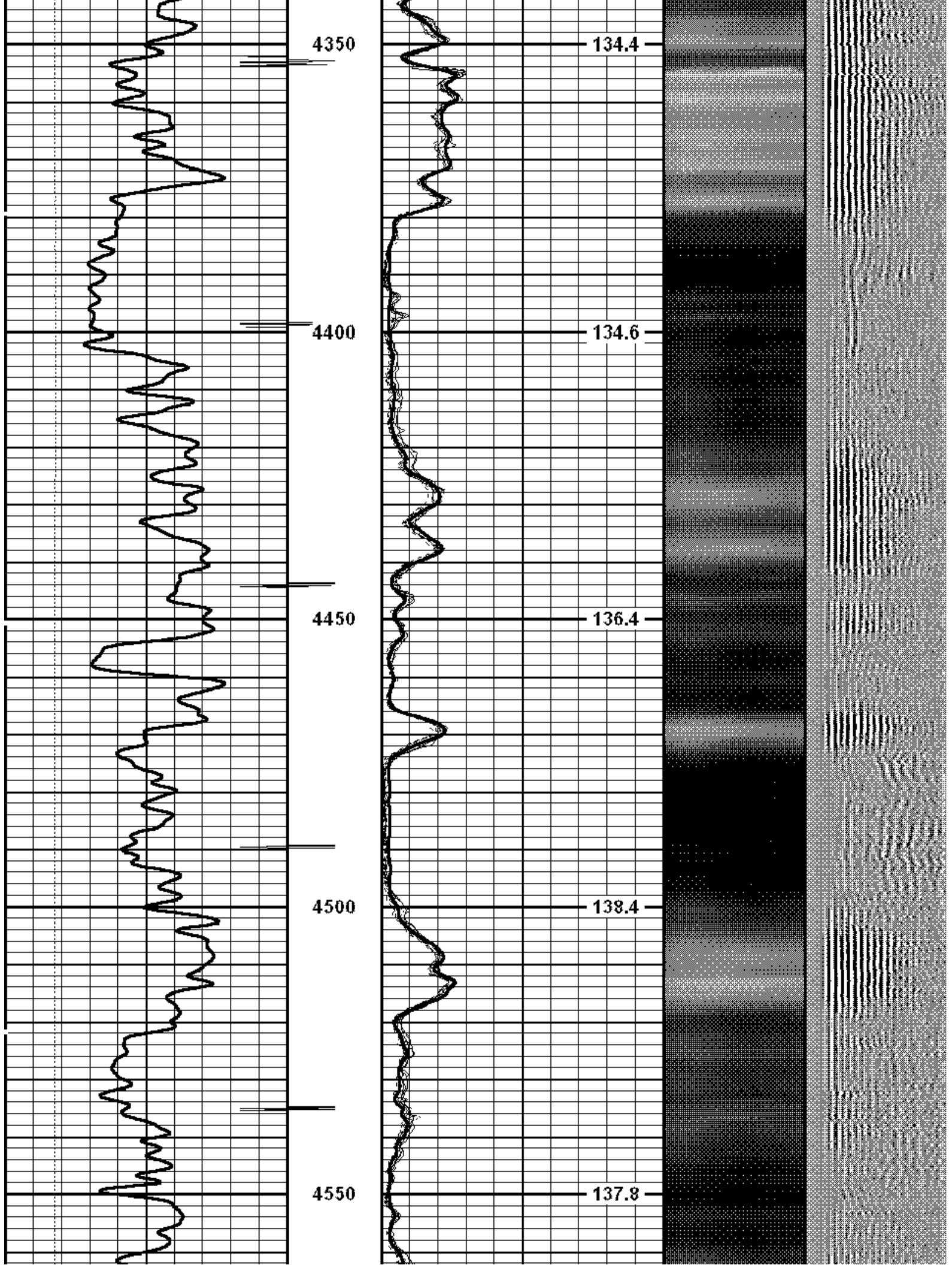


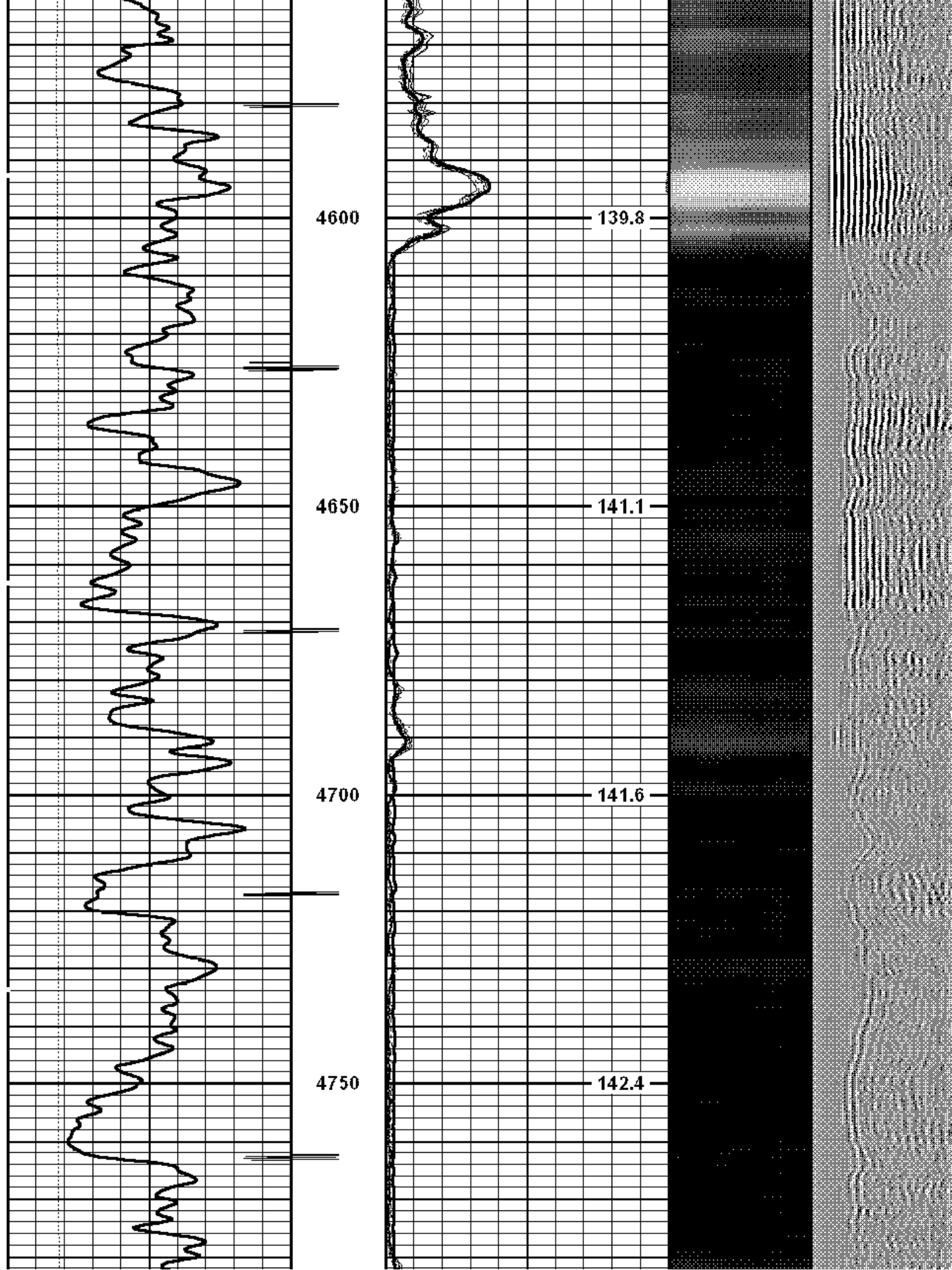


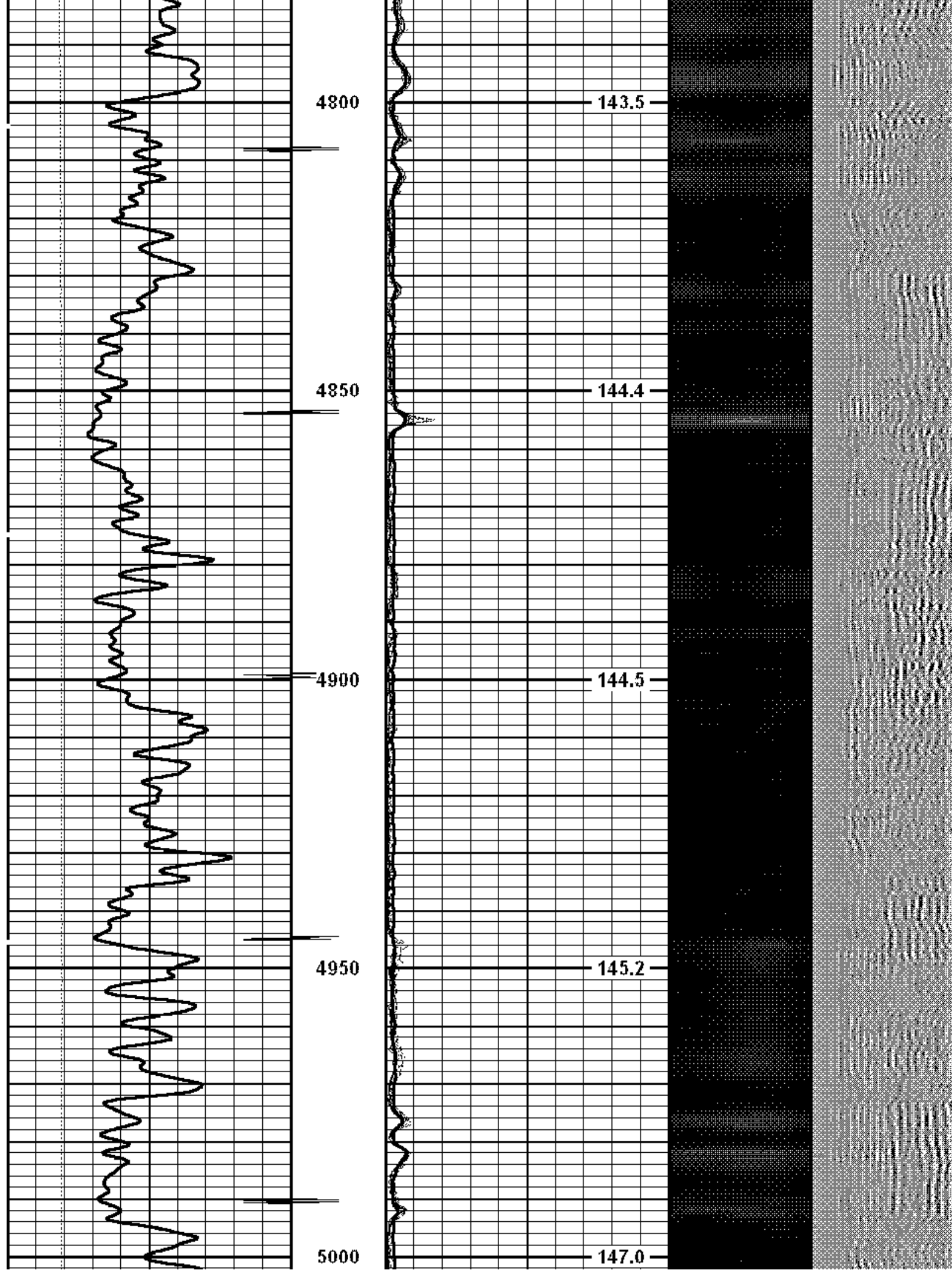




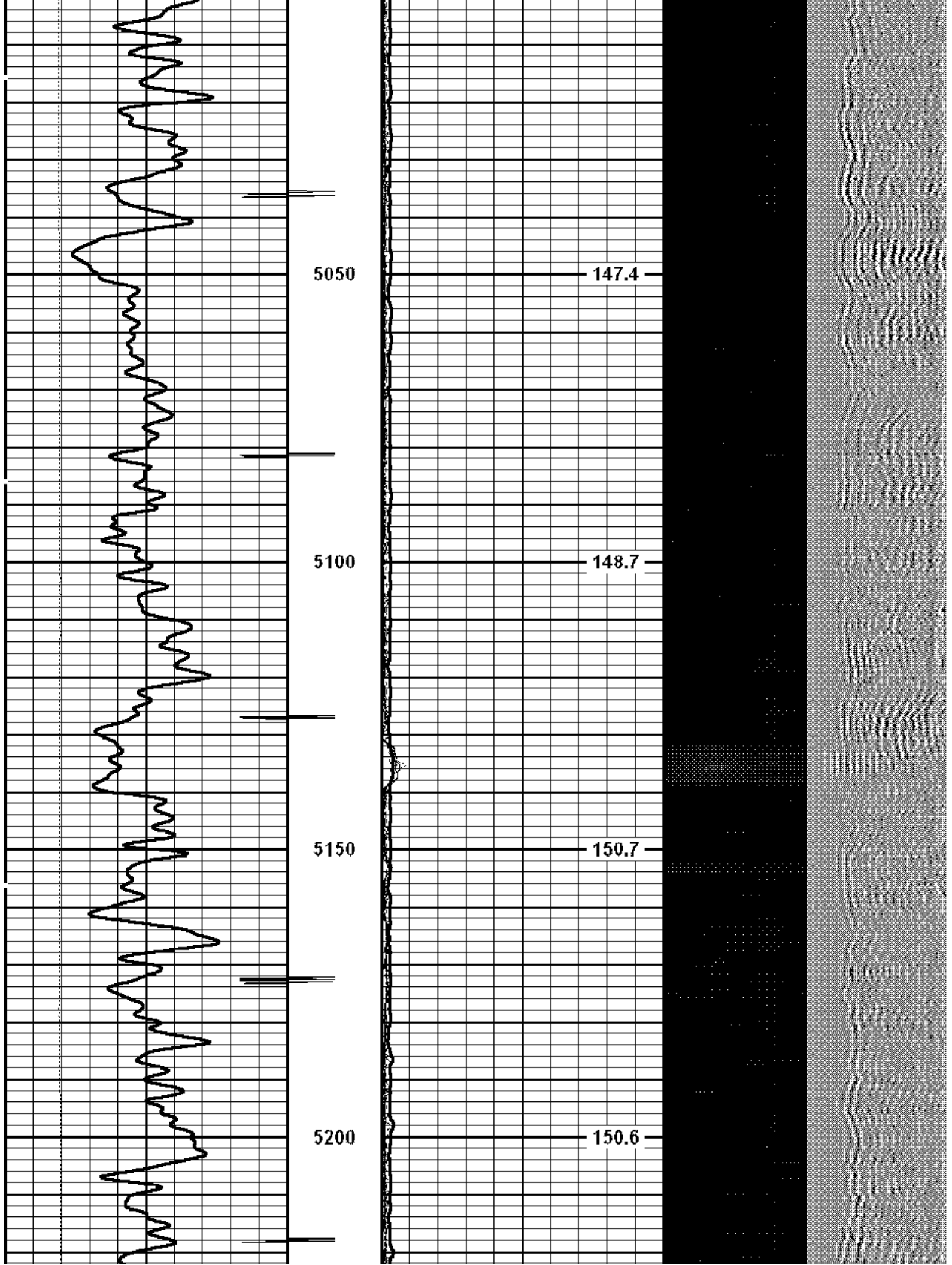


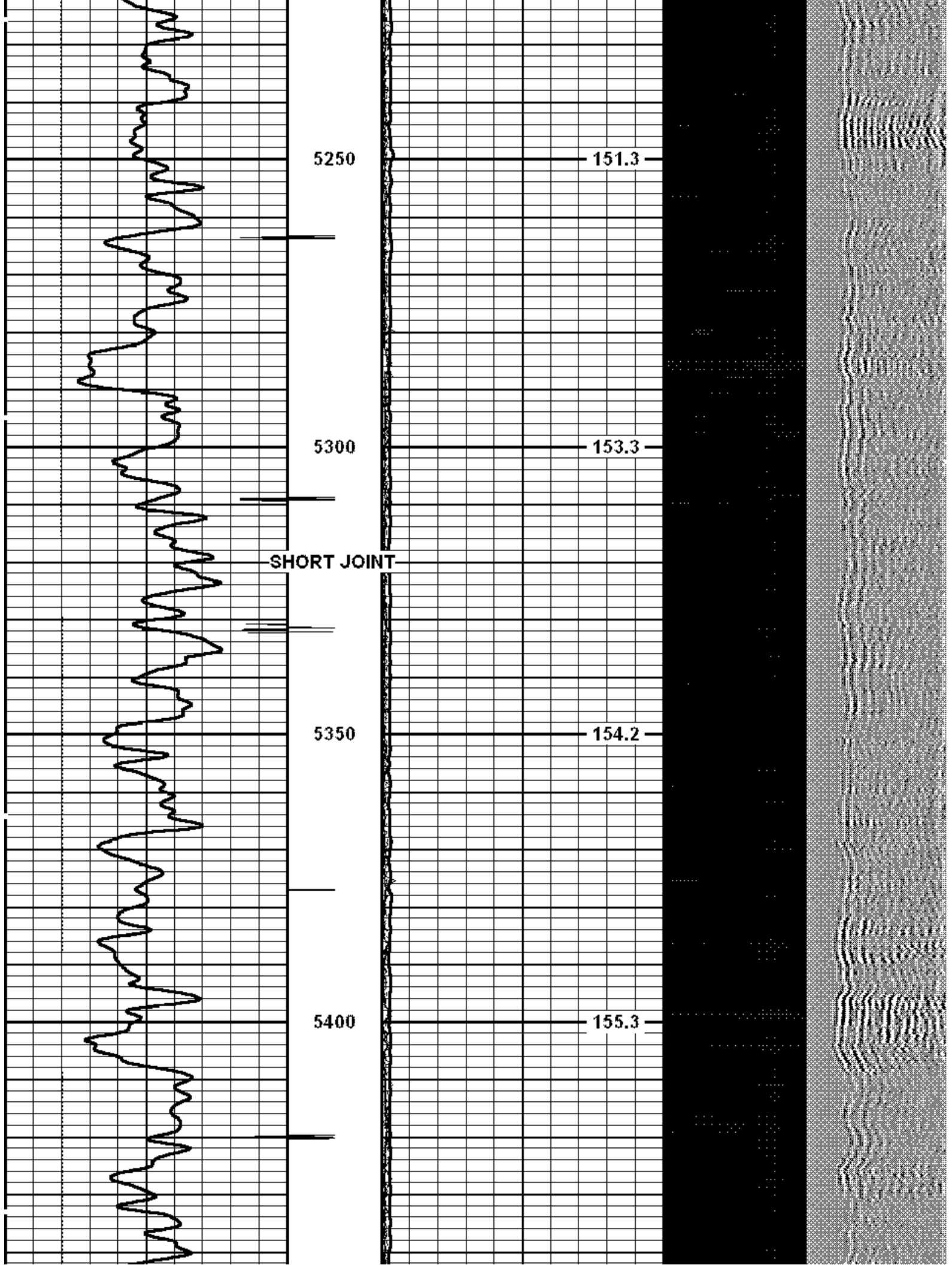


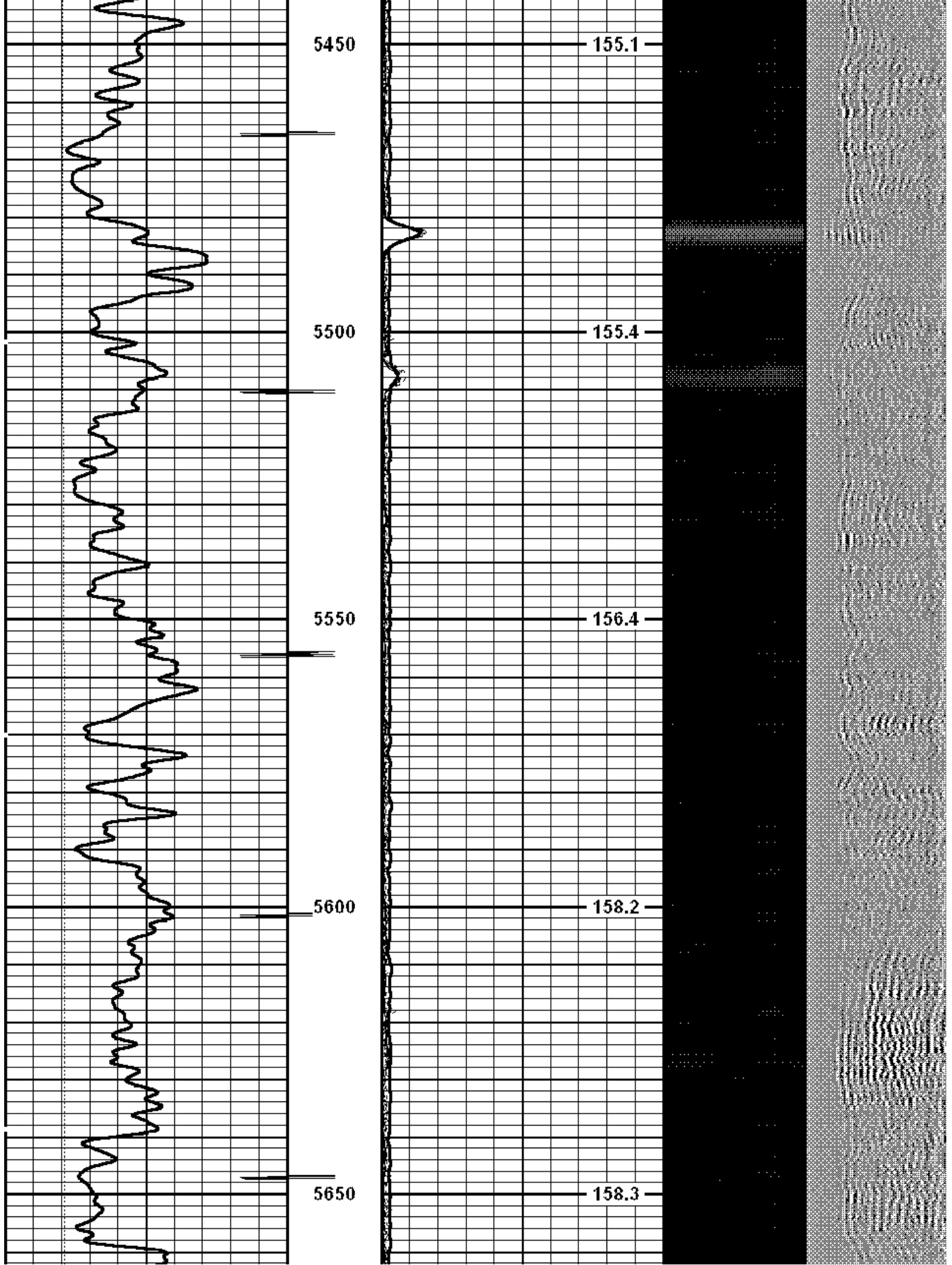


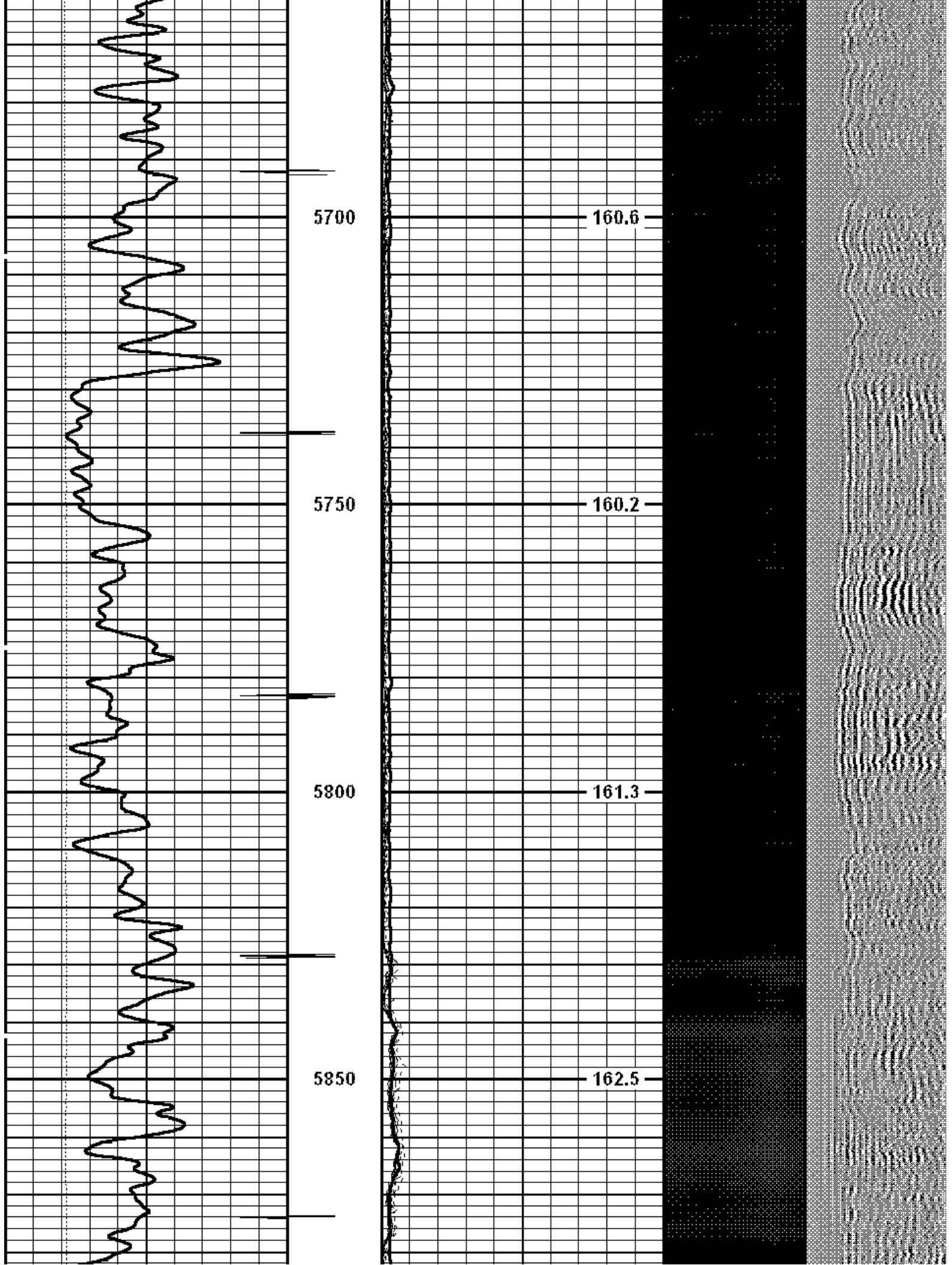


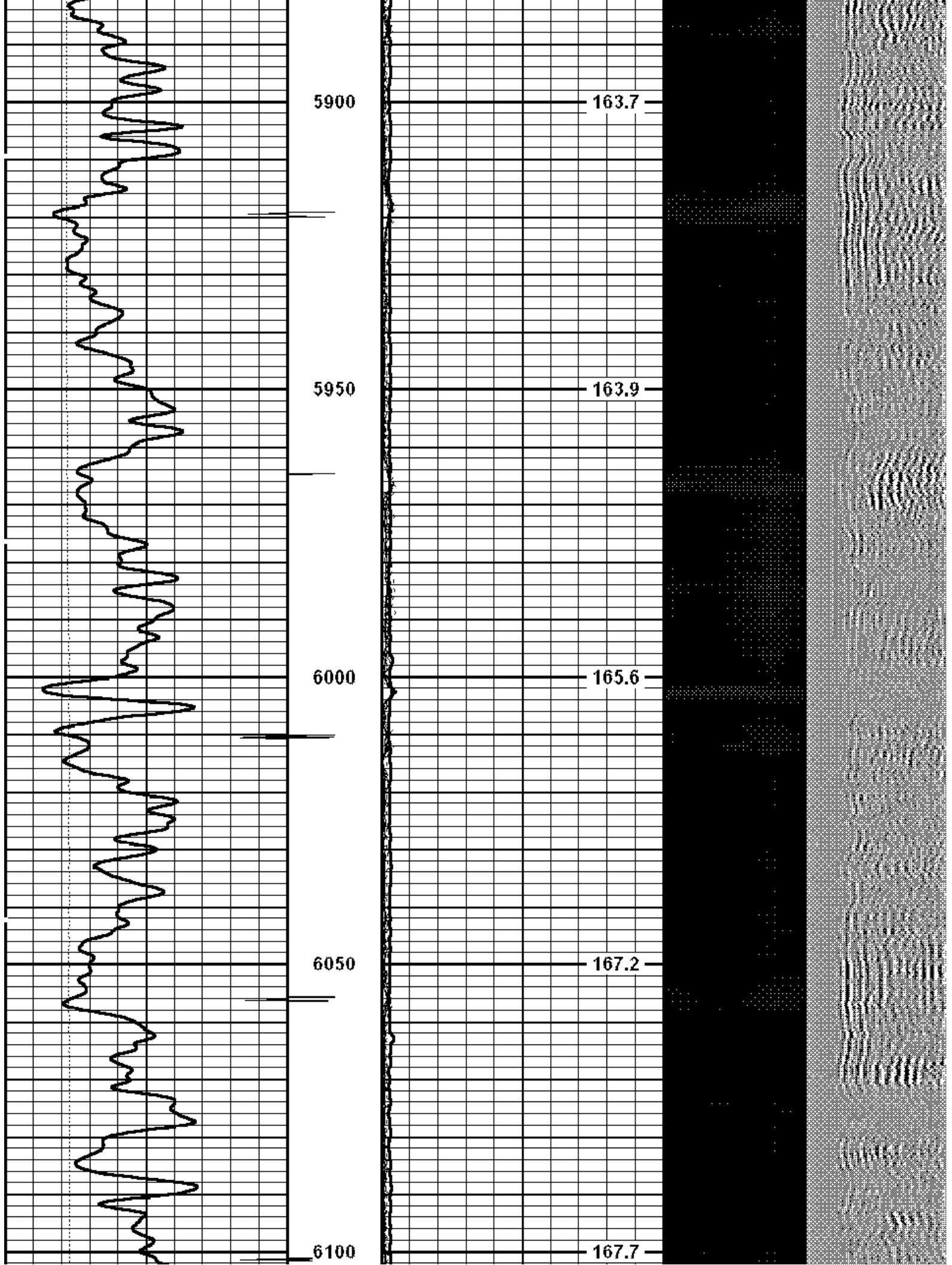


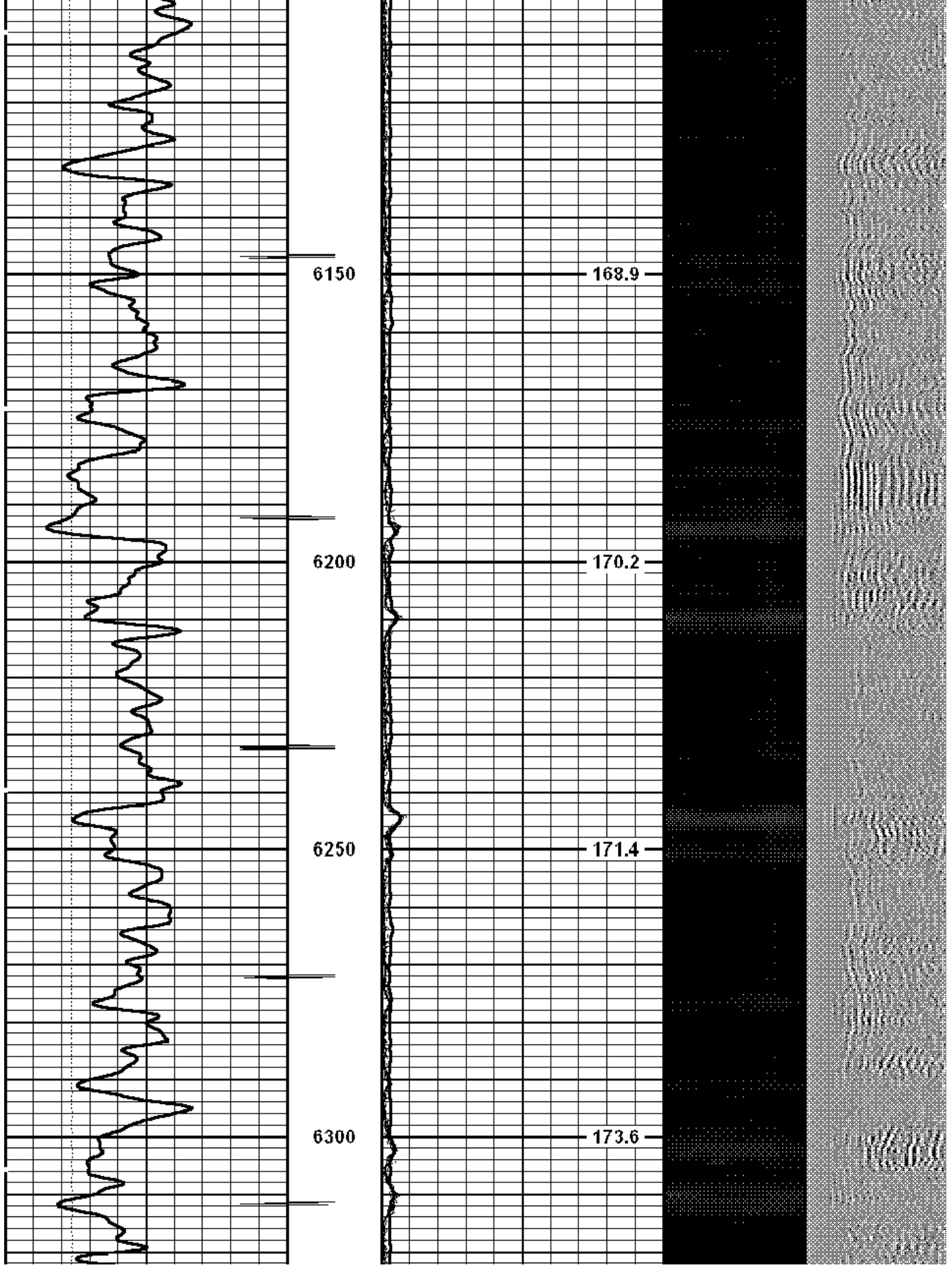


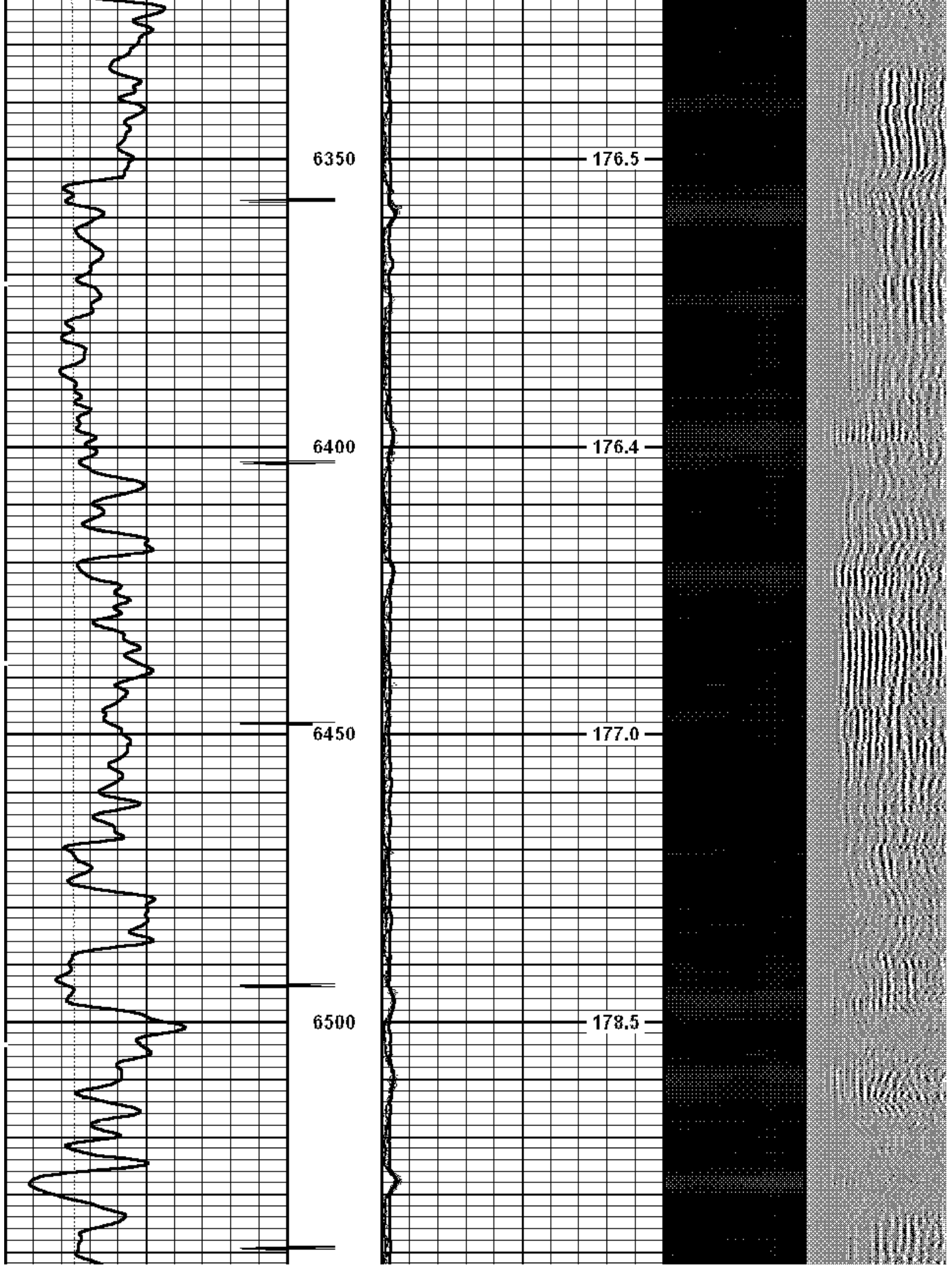




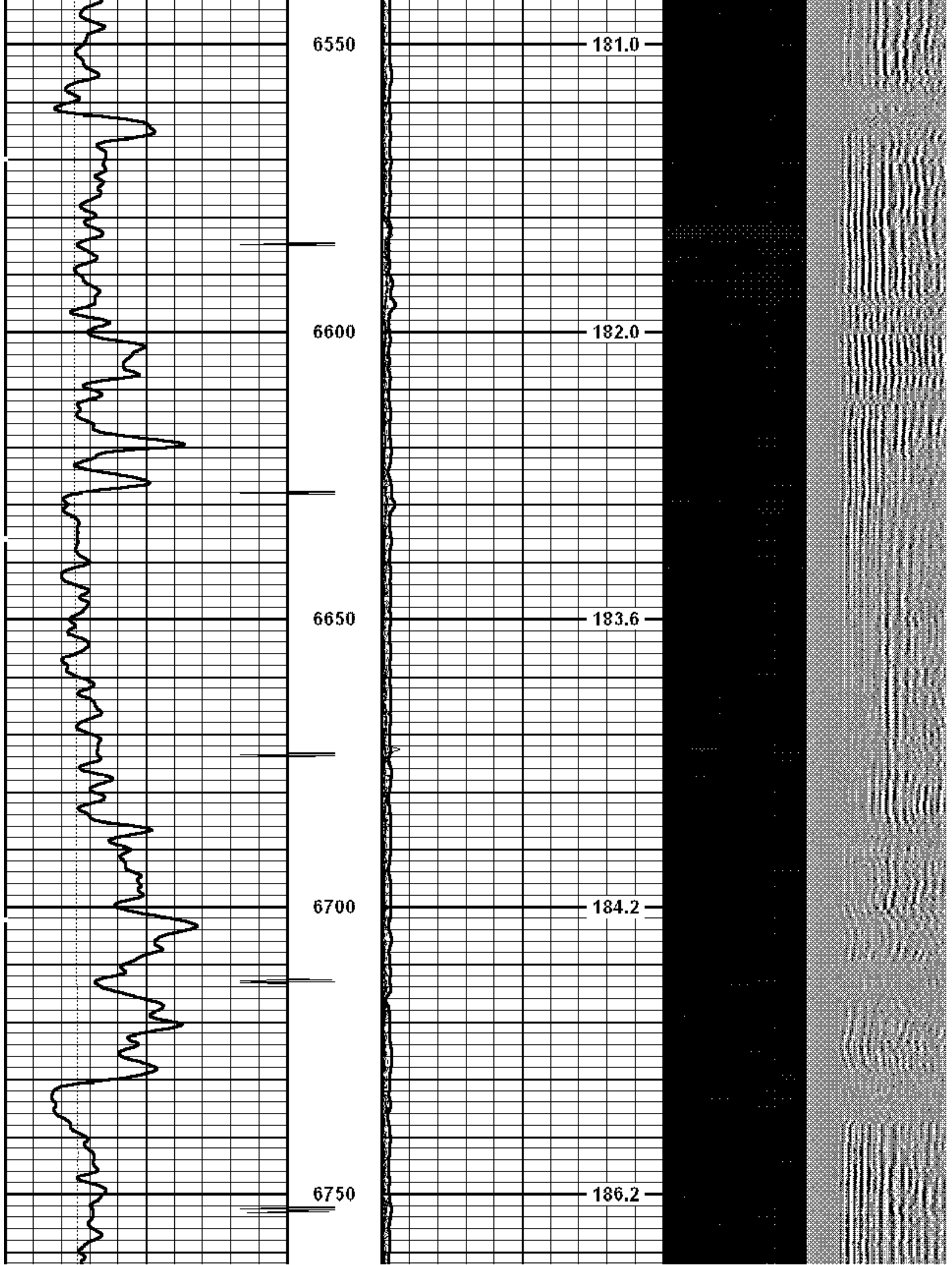




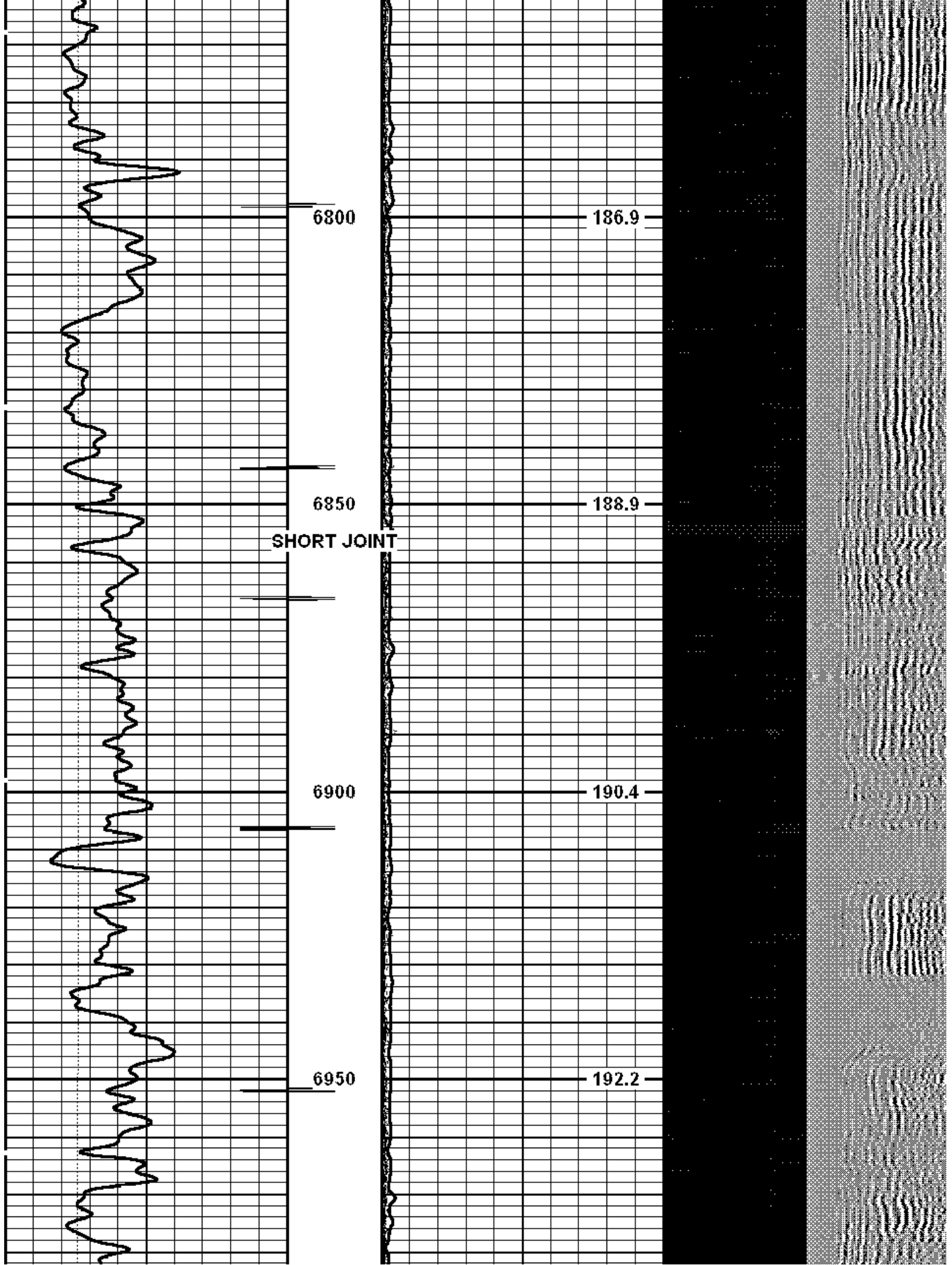


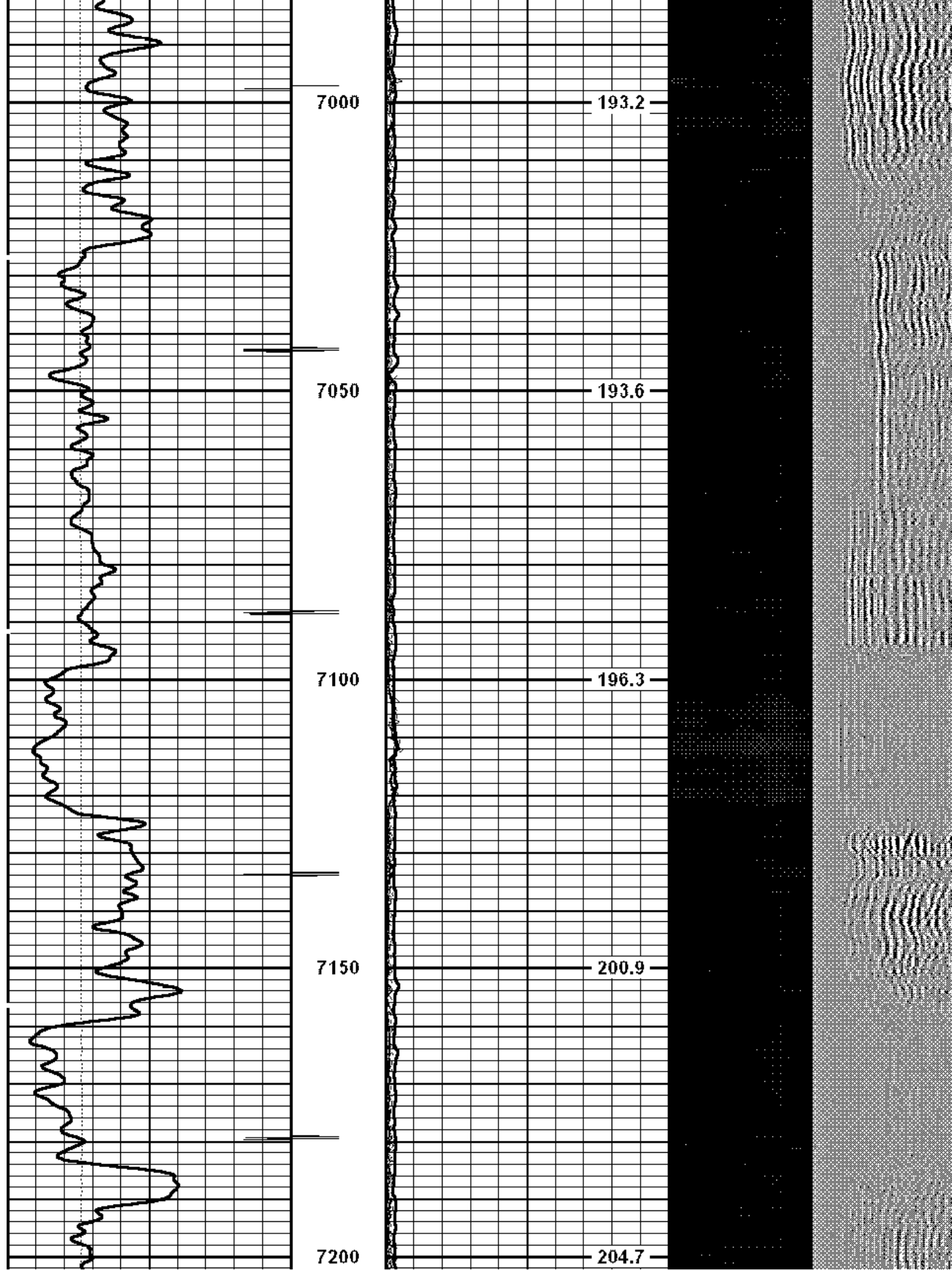


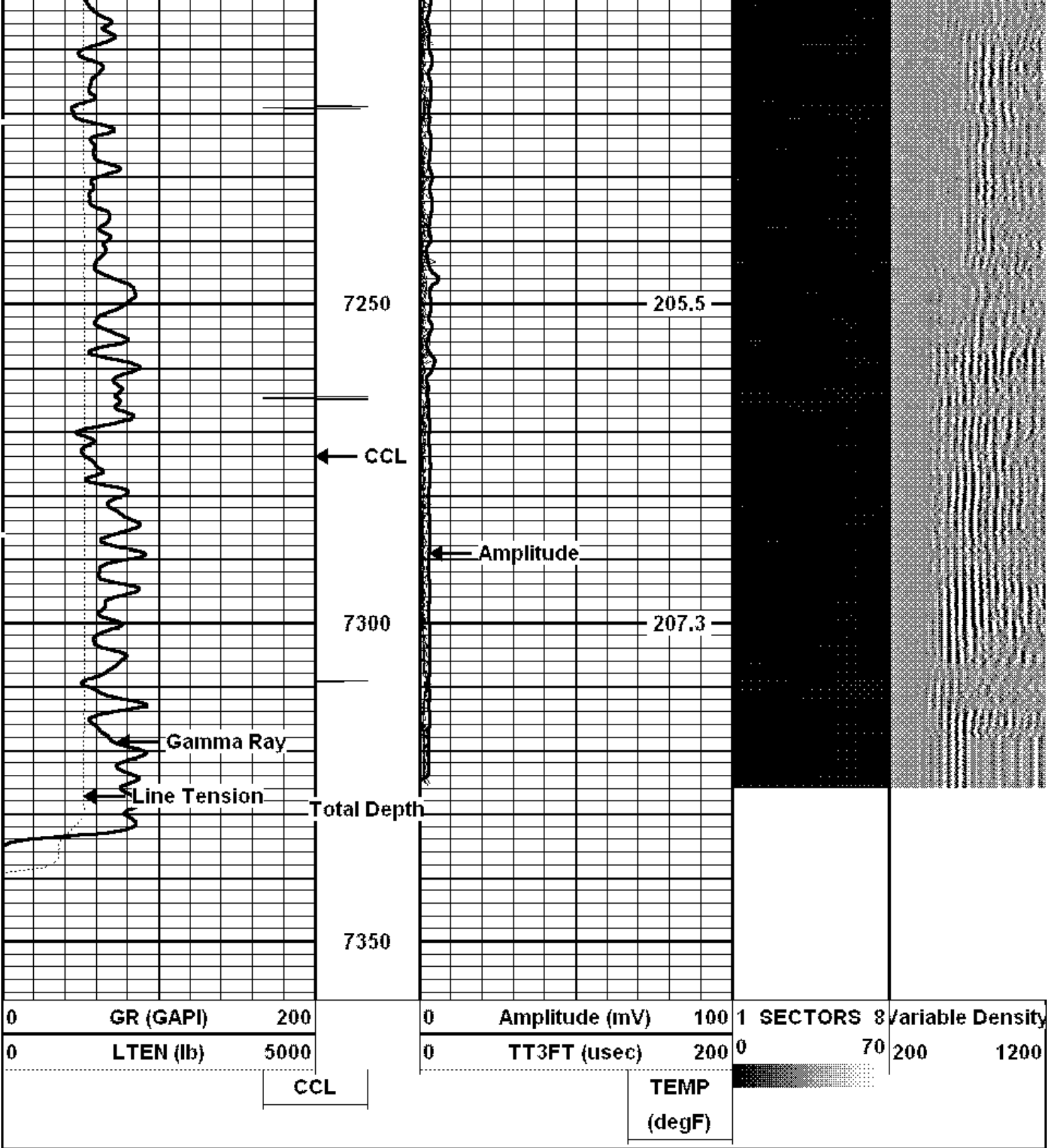












Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
TITAN				1.02	1.44	1.00
CCL	21.68		SNDx_CCL-SNDx_3_13_CCL (000001) CSS Gamma Ray/CCL (CCL Section)	1.92	3.13	11.02

			SONDEX	2.71	2.75	32.00
WVFS3FT	13.92					
WVFS1	13.92		SNDX_RBT-007 (000003) Radial Bond Tool - Analog 3 1/8	9.47	3.13	140.00
WVFS2	13.92					
WVFS3	13.92					
WVFS4	13.92					
WVFS5	13.92					
WVFS6	13.92					
WVFS7	13.92					
WVFS8	13.92					
WVFS5FT	12.92					
			SONDEX	2.71	2.75	32.00
GR	5.17		SNDX_GR-SNDX_3_13_GR (000001) Sondex Production Gamma Ray	2.94	3.13	22.05
			_TEMP-SNDX_TEMP (SNDX_TEMP_01) Sondex Production Temperature Tool	3.14	1.63	10.00
TEMP	0.58					
Dataset: mcln c23.db: field/well/run1/pass3 Total Length: 23.90 ft Total Weight: 248.07 lb O.D.: 3.13 in						



Company	ANTERO RESOURCES PICEANCE CORP.
Well	McLIN C 23
Field	MAMM CREEK
County	GARFIELD
State	COLORADO

