



RADIAL CEMENT BOND LOG
GAMMA RAY
CCL

Company KERR-McGEE OIL & GAS ONSHORE LP
Well REYNOLDS 2-23
Field WATTENBERG
County WELD
State COLORADO

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Location: SHL: 283' FNL & 1082' FELINE/NE
LAT: 40.21780 & LONG: -104.96470
API # : 05-123-24352
Other Services
Permanent Datum GL Elevation 4930
Log Measured From KB 12'
Drilling Measured From KB
SEC 23 TWP 3N RGE 68W

Date 10-16-2014

Run Number ONE
Depth Driller 7560'
Depth Logger 3700'
Bottom Logged Interval 3700'
Top Log Interval SURFACE
Open Hole Size 7 7/8"
Type Fluid WATER
Density / Viscosity 1.0
Max. Recorded Temp. 120 Deg. F
Estimated Cement Top 2980'
Time Well Ready N/A
Time Logger on Bottom N/A
Equipment Number 4495
Location GREELEY
Recorded By M. JANDREAU
Witnessed By L. WEBB

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE							
TWO							

	Size	Wgt/Ft	Top	Bottom
Casing Record				
Surface String	8 5/8	24	0	725'
Prot. String				
Production String	4 1/2	11.6#	0	7549.
Liner				

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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.

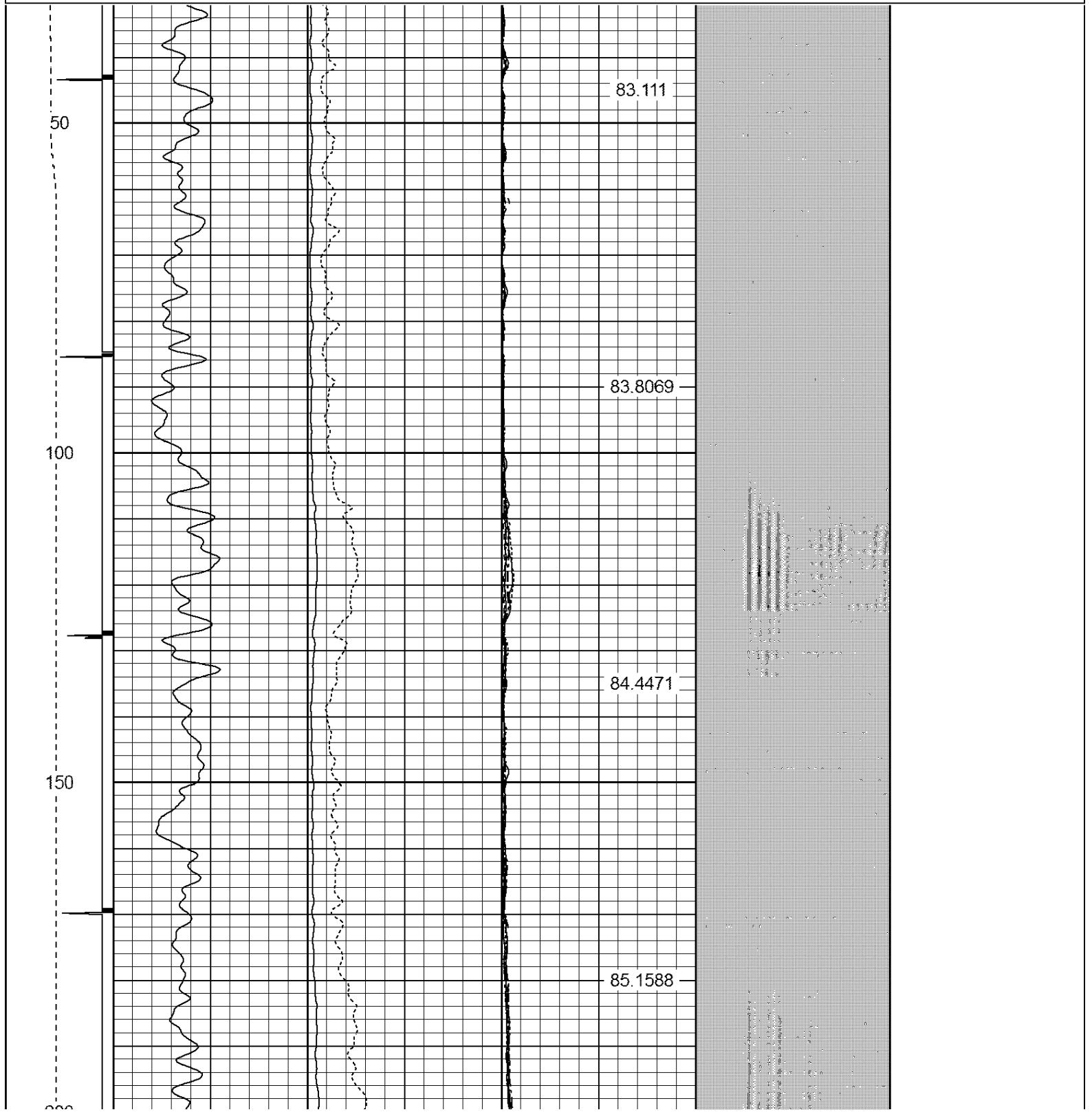
Comments

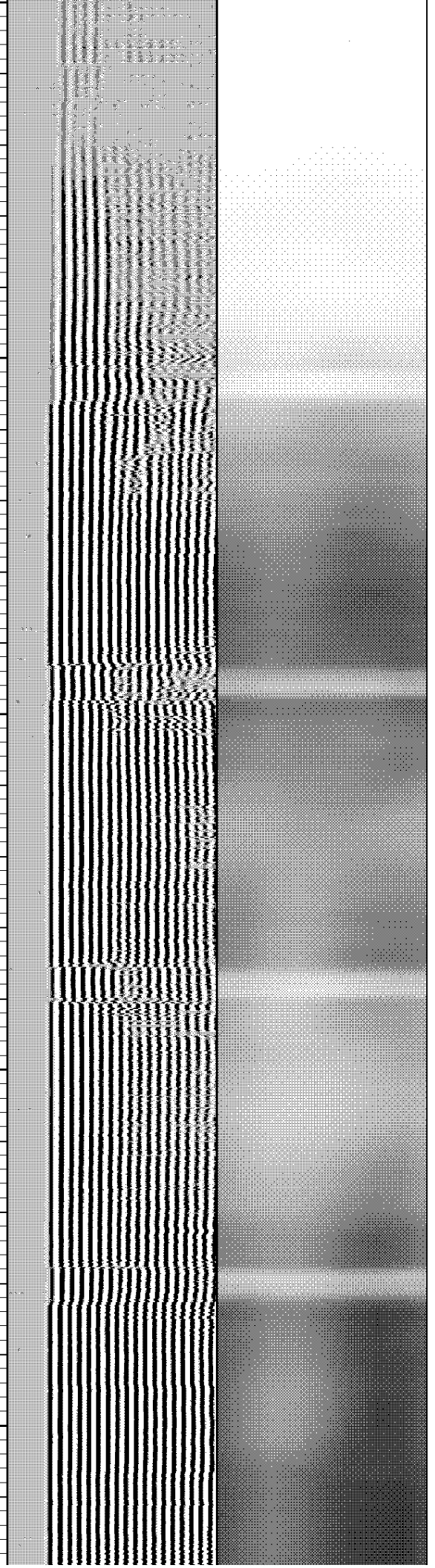
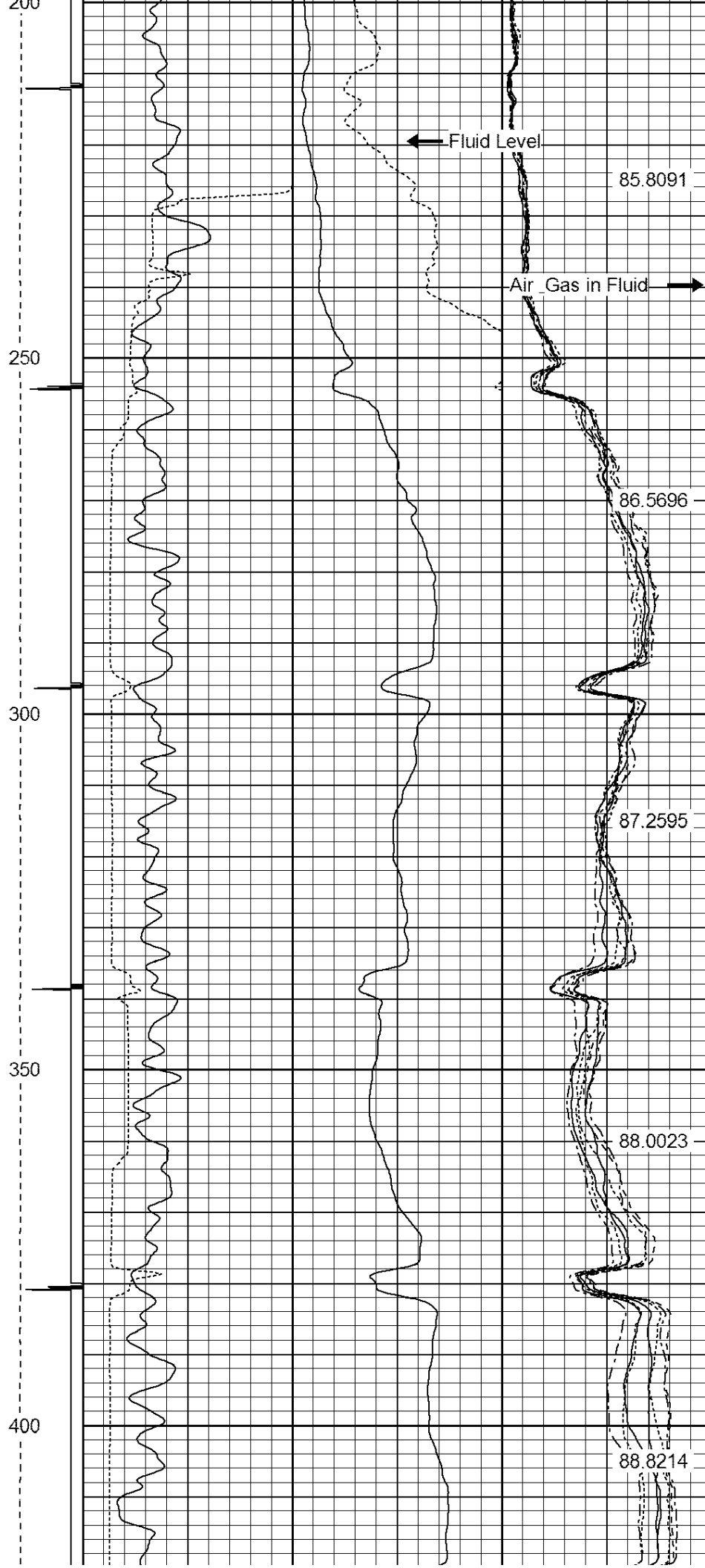
NOT CORRELATED
RAN LOG TO VERIFY CEMENT
THANK YOU FOR USING WARRIOR ENERGY SERVICES!!!!

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: reynolds 2-23.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)	800	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8
LSPD (ft/min)	0		0	GR (cps)	200	0	AMPx5 (mV)	20	0	AMPS2	100			1			
	200		200	GR (cps)	400			0	AMPS4	100							
	0								0	AMPS5	100						
									0	AMPS6	100						
									0	AMPS7	100						
0		250							0	AMPS8	100						
											IntTemp (degF)						





450

89.5654

500

90.3245

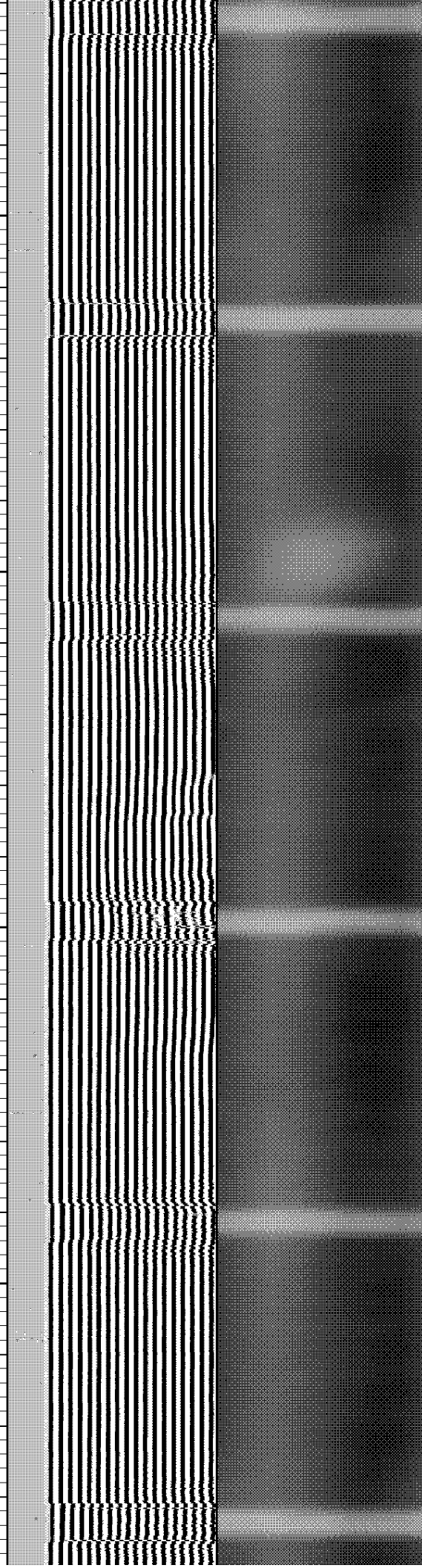
550

91.1684

600

91.8628

92.5912



650

700

750

800

850

93.3908

94.0857

94.9261

95.6046

96.3689

900

950

1000

1050

97.0443

97.8937

98.4938

99.2019

99.2500

1100

1150

1200

1250

1300

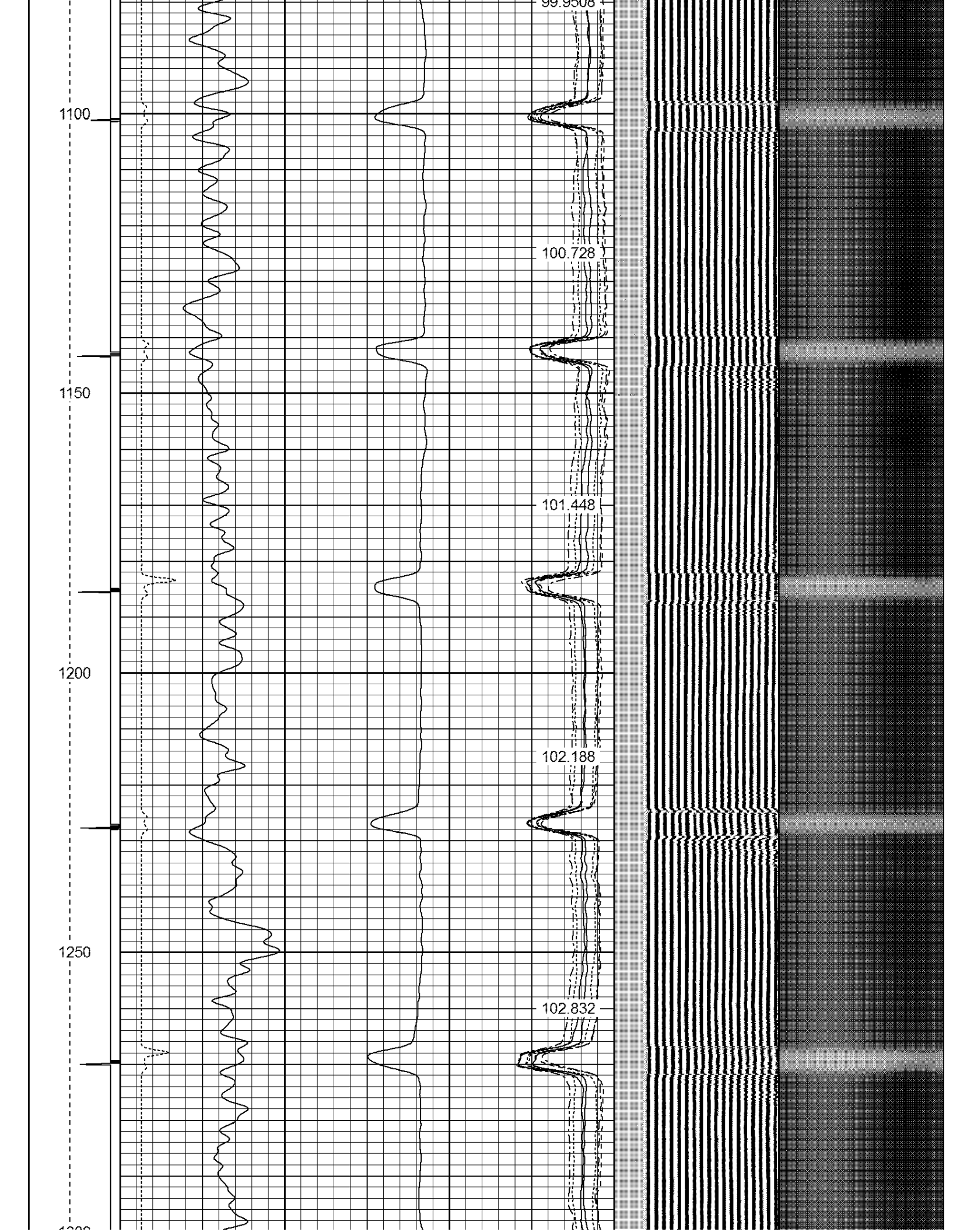
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100.728

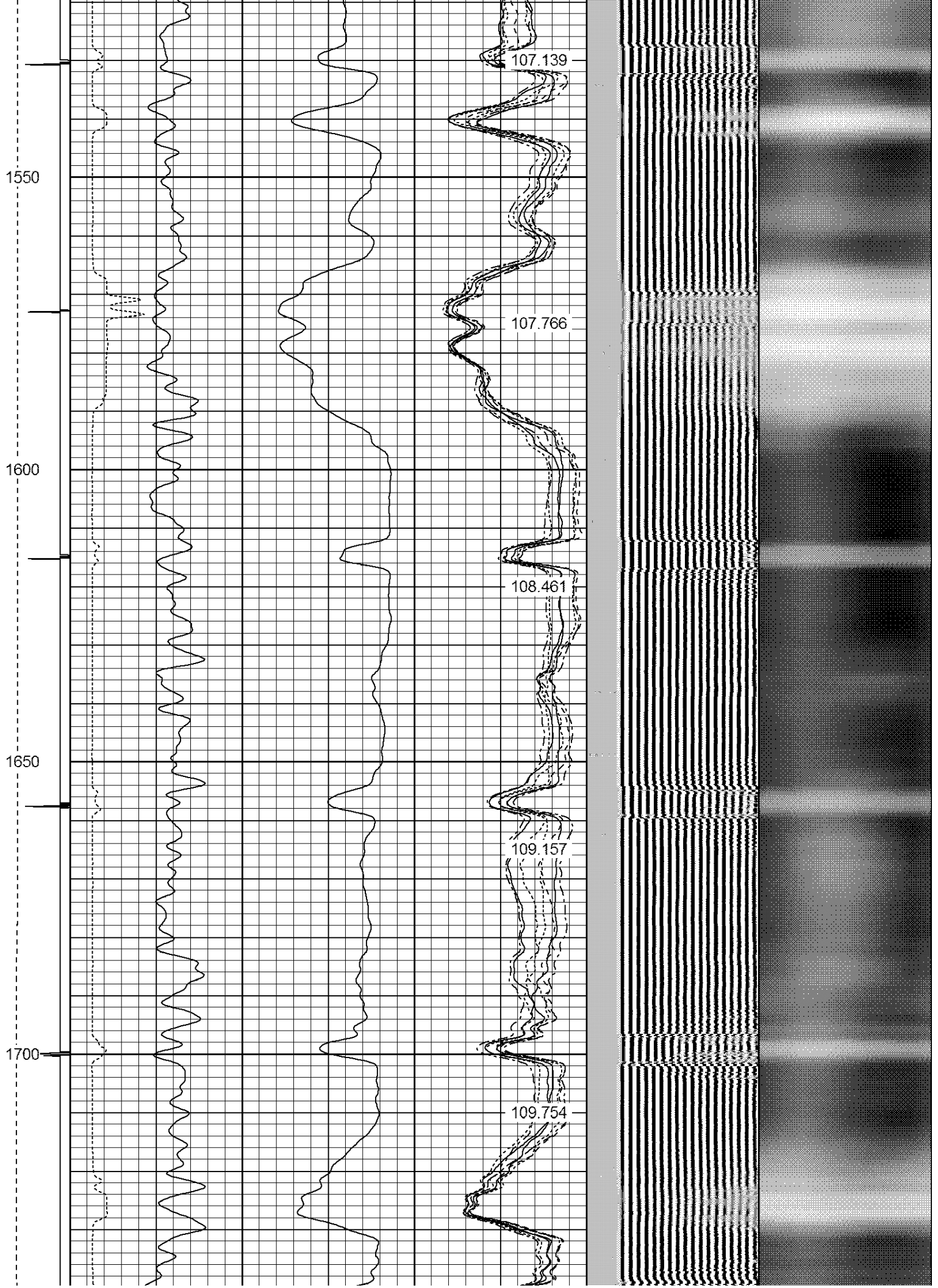
101.448

102.188

102.832







1750

1800

1850

1900

1950

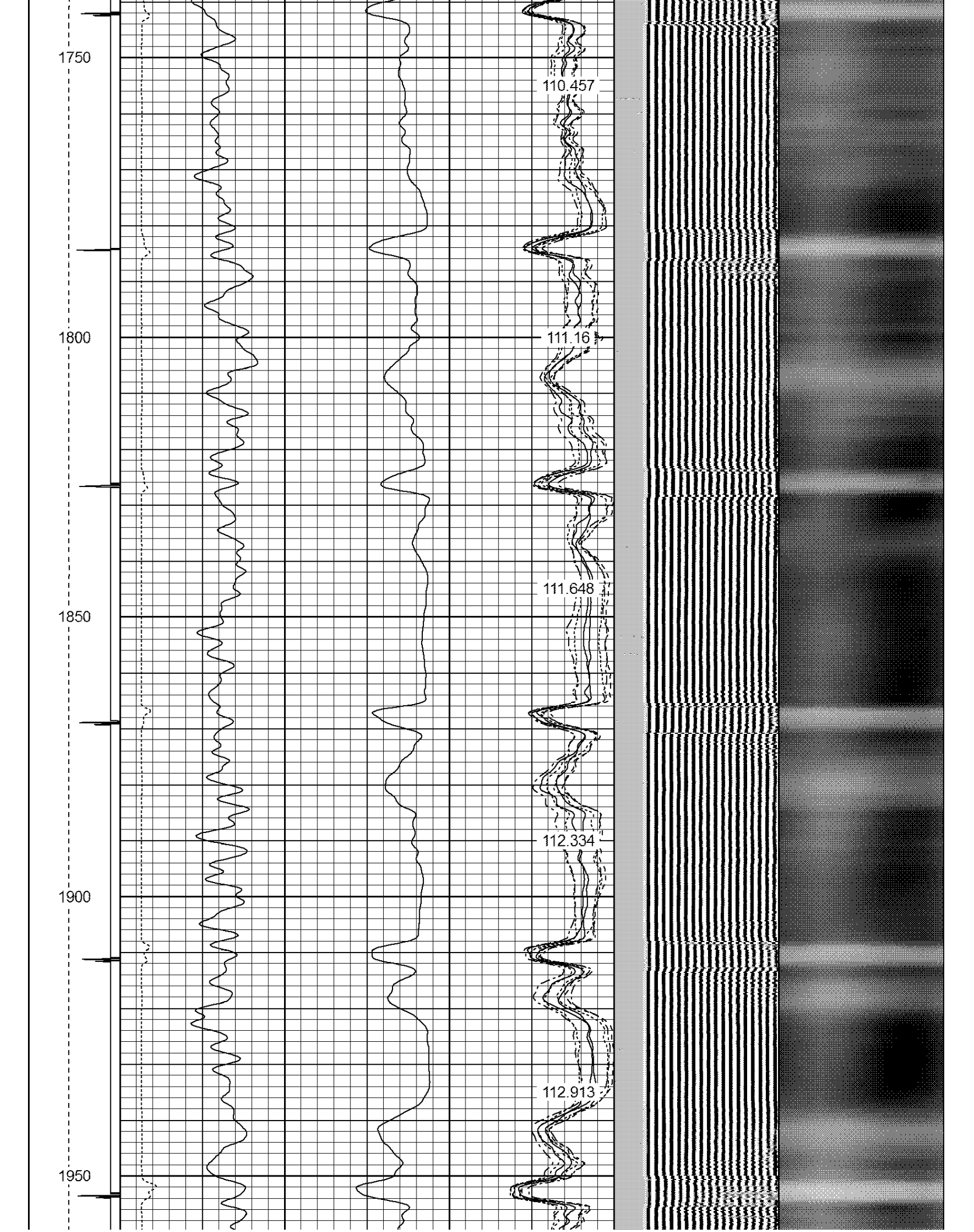
110.457

111.16

111.648

112.334

112.913





2200

2250

2300

2350

2400

116.135

116.604

117.037

117.451

117.831

2400

2450

2500

2550

2600

118.183

118.538

118.816

119.112

119.354



2650

2700

2750

2800

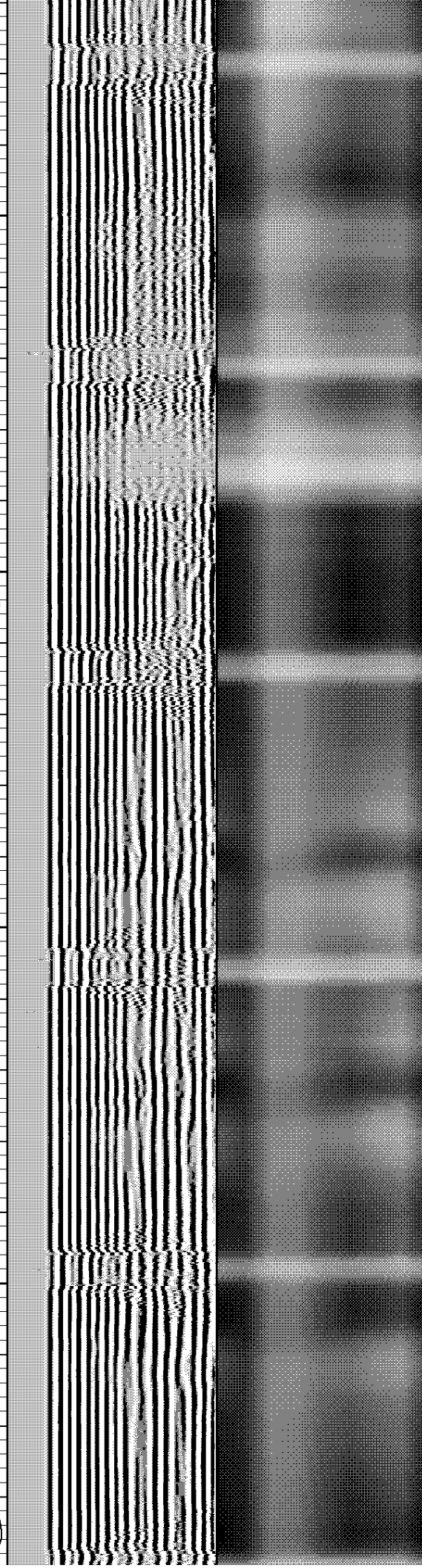
119.586

119.742

119.949

120.041

120.15



2850

2900

2950

3000

3050

120.137

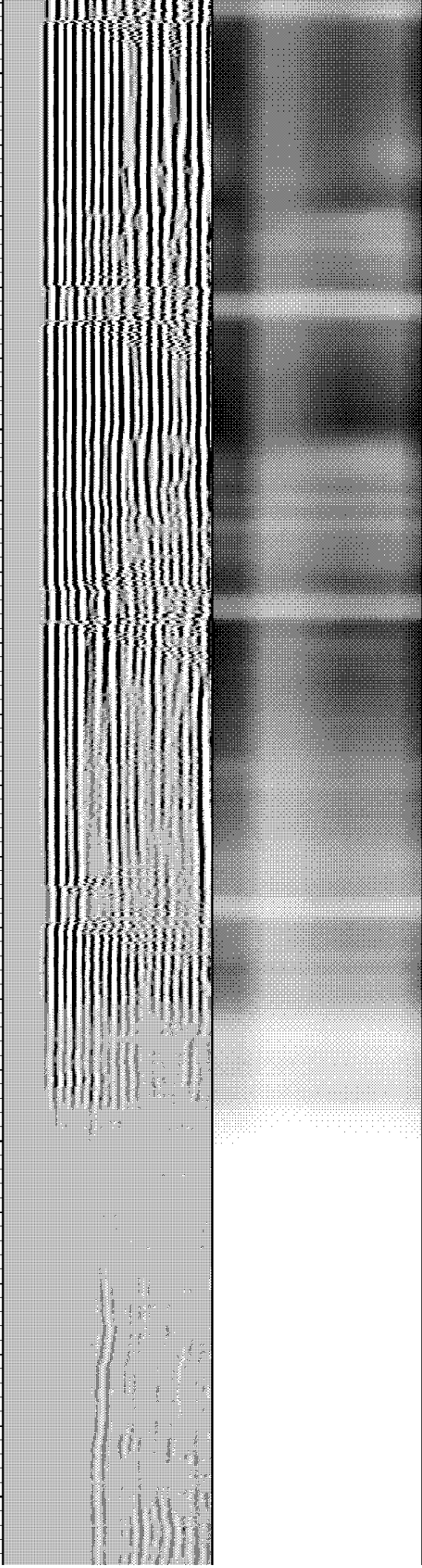
120.168

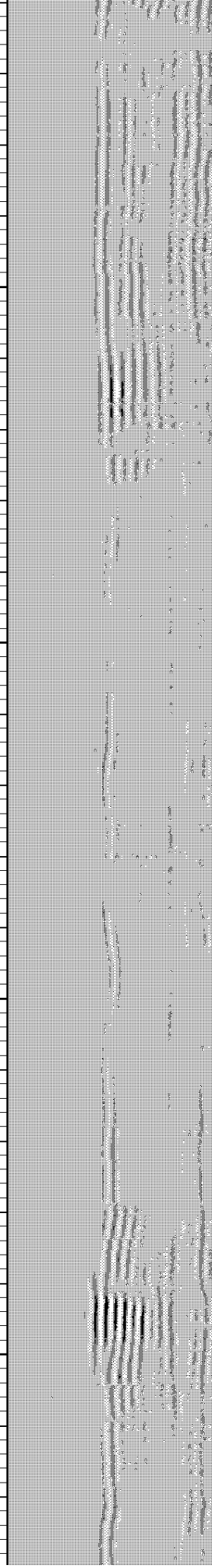
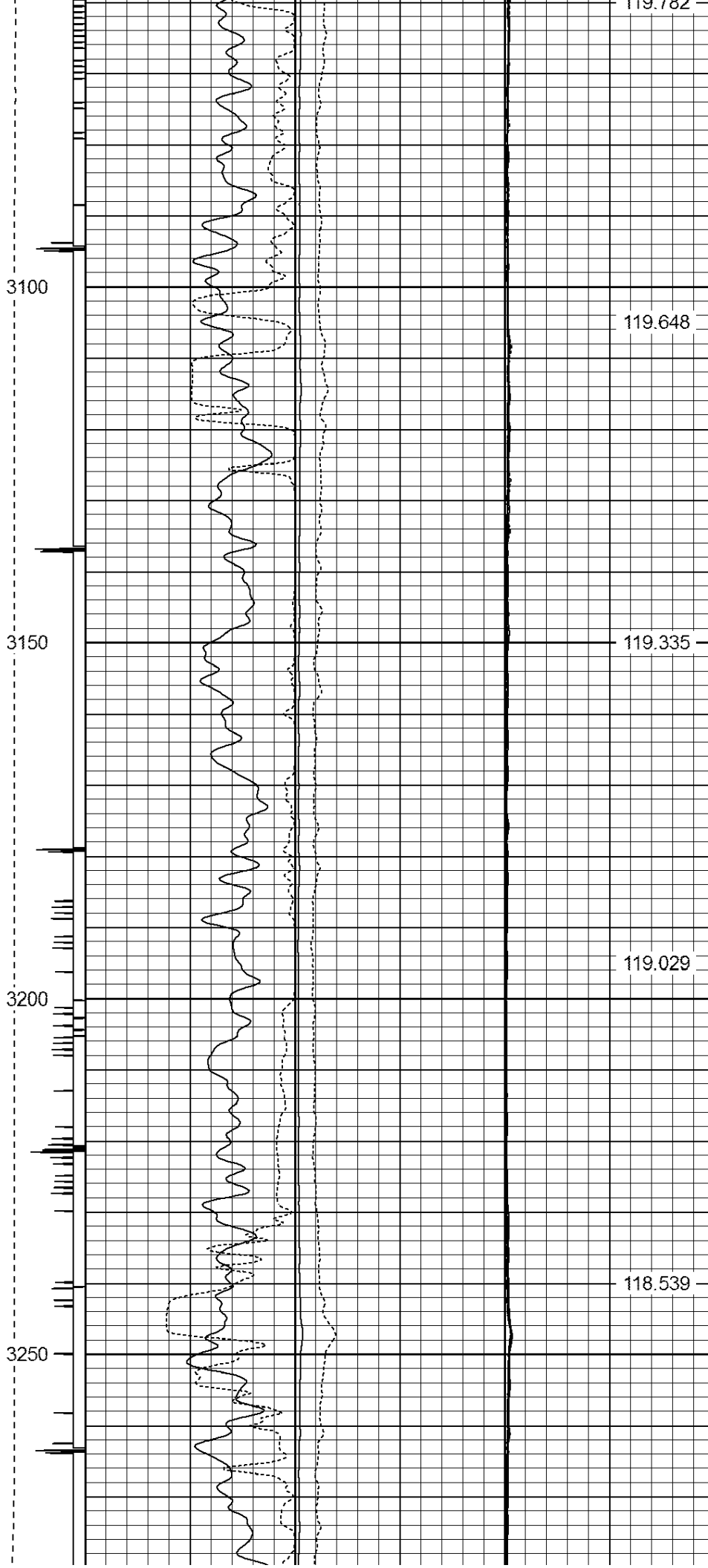
120.17

Top of Cement

119.996

119.700





3300

3350

3400

3450

3500

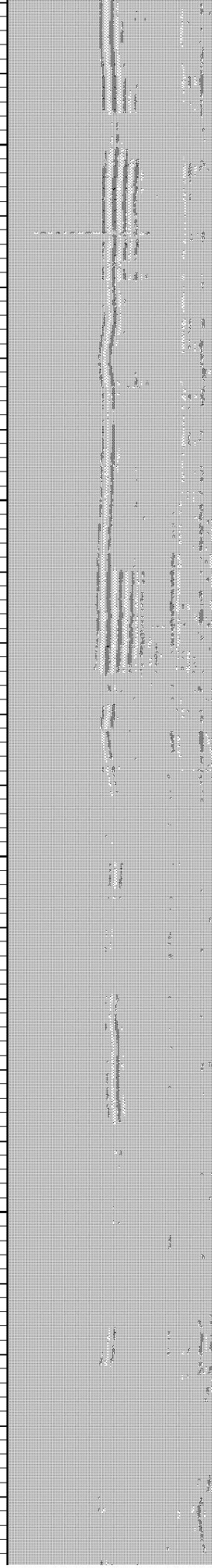
117.959

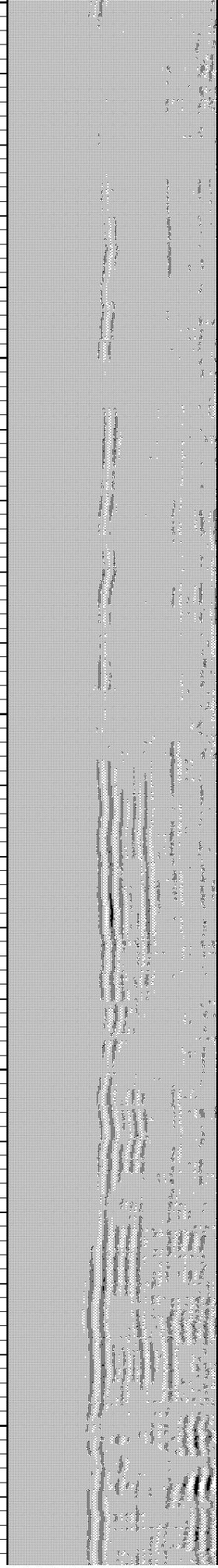
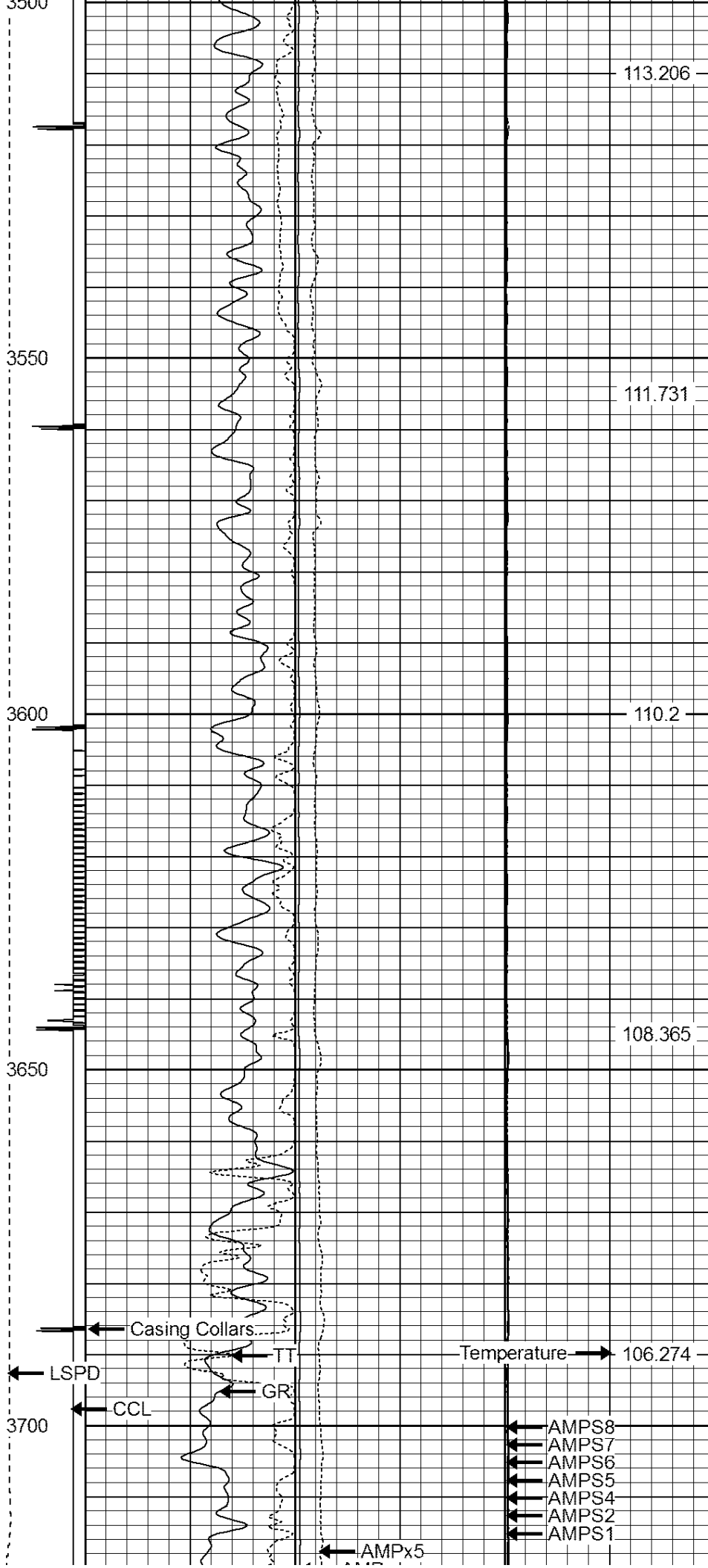
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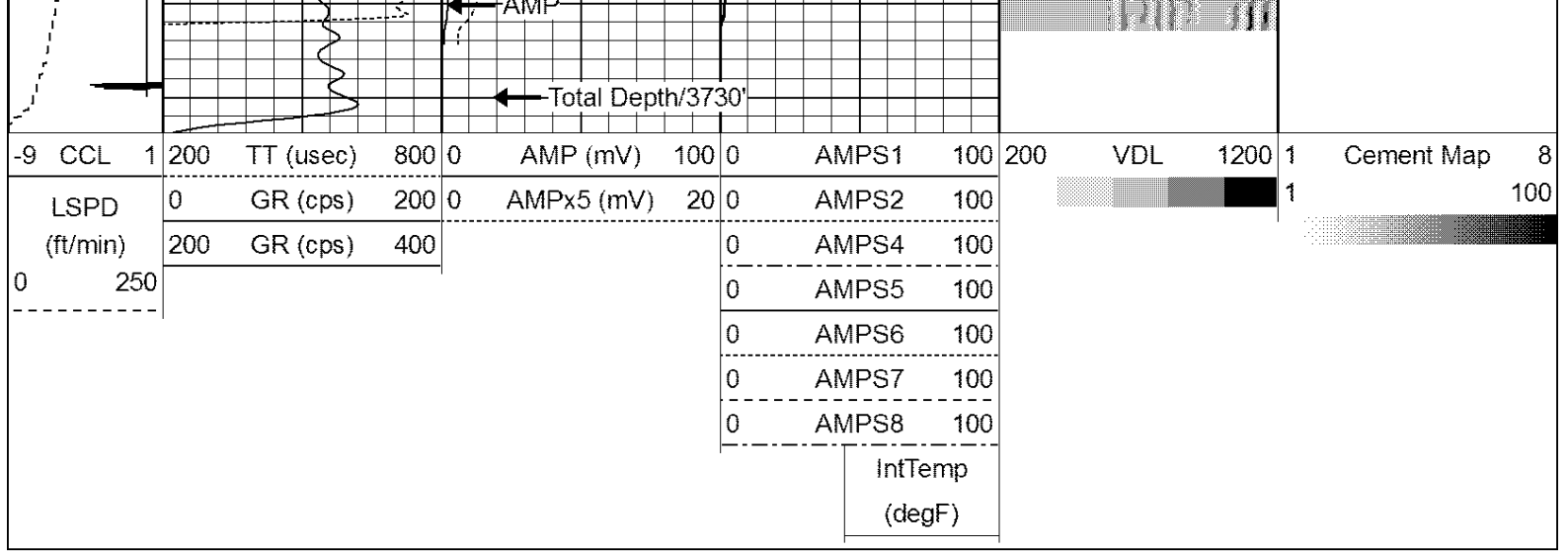
116.422

115.446

114.379









WARRIOR

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