



**RADIAL CEMENT BOND
GAMMA RAY
CCL**

Company	KERR McGEE OIL AND GAS		
Well	HSR-HOWARD 15-11A		
Field	WATTENBERG		
County	WELD	State	COLORADO
Location:	API # : 05-123-15682		Other Services
SEC 11 TWP 3N RGE 66W		SWSE	
Permanent Datum	GROUND LEVEL	Elevation	4945
Log Measured From	KB 10	K.B. 4955 D.F. 4954 G.L. 4945	
Drilling Measured From	K.B.		

Date	7-7-2014
Run Number	ONE
Depth Driller	8013
Depth Logger	1600
Bottom Logged Interval	1600
Top Log Interval	SURFACE
Open Hole Size	12.25
Type Fluid	WATER
Density / Viscosity	1.0
Max. Recorded Temp.	79 DEG F
Estimated Cement Top	228
Time Well Ready	ON ARRIVAL
Time Logger on Bottom	N/A
Equipment Number	7770
Location	GREELEY
Recorded By	J.J.BULLARD
Witnessed By	B.SMITH

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25	10	559				
TWO	8.875	559	8013				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.63"	24#	10	559
Prot. String				
Production String	4.5"	11.6#	10	8013
Liner				

<<< 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

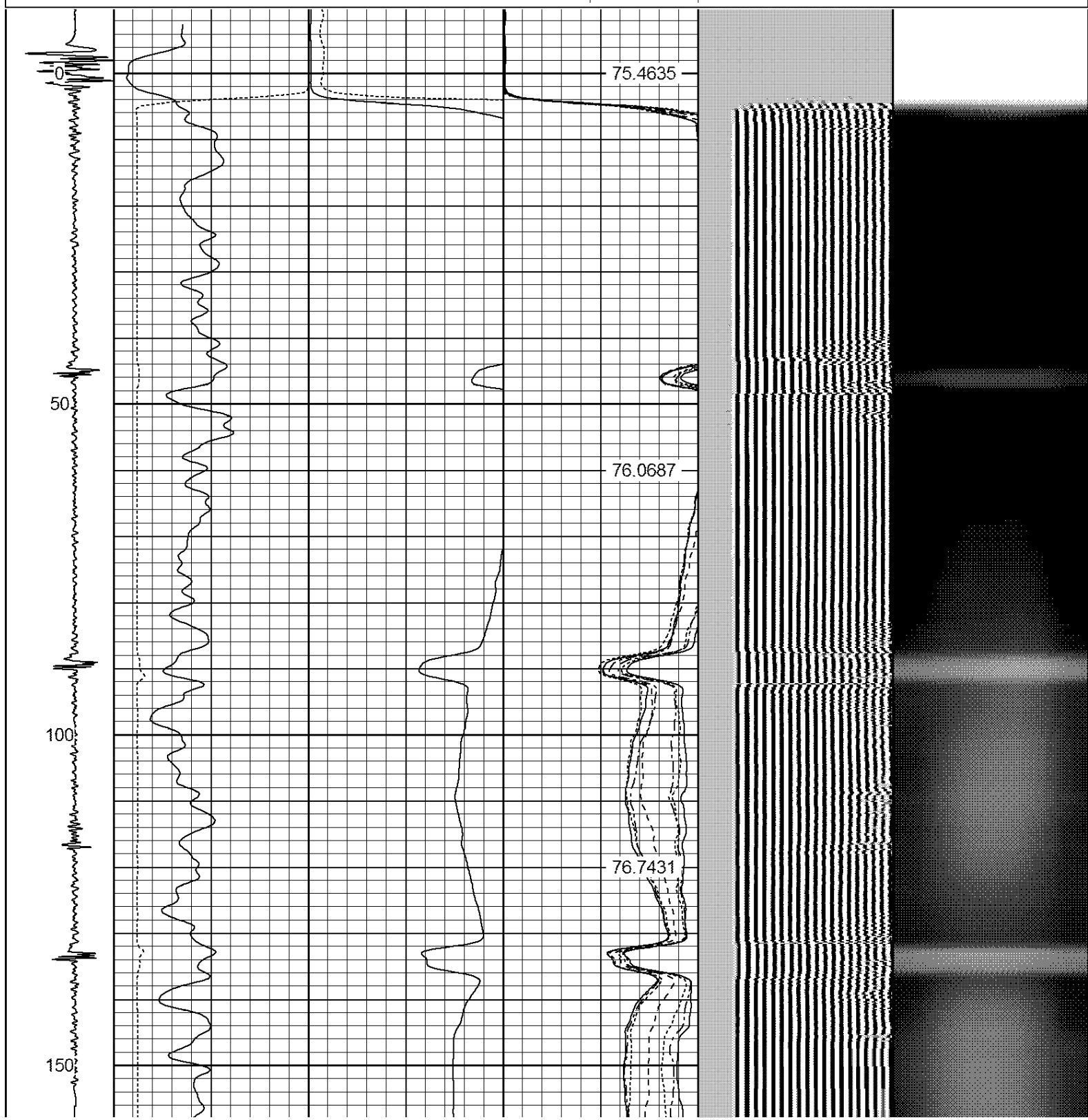
RAN CBL TO VERIFY CEMENT BOND

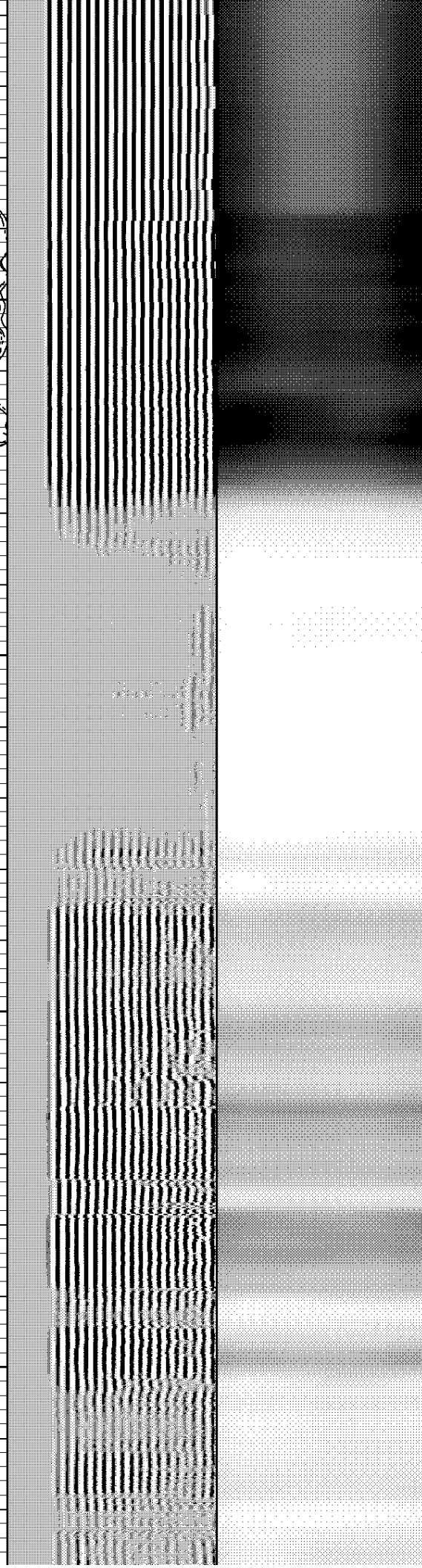
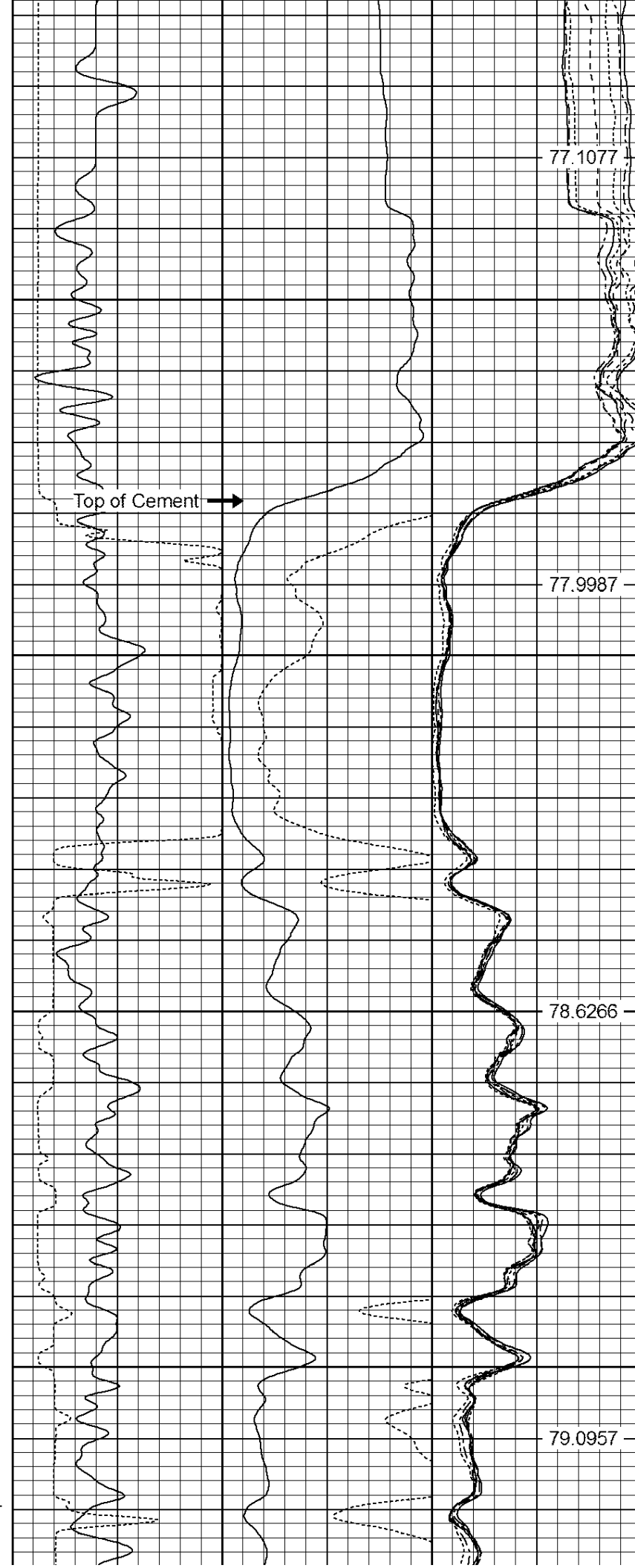
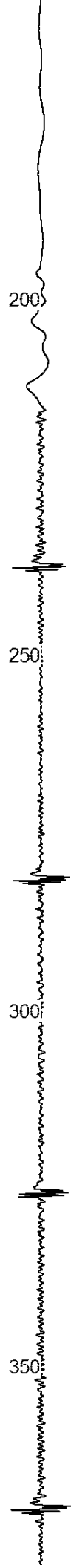
THANK YOU FOR USING WARRIOR!!!!

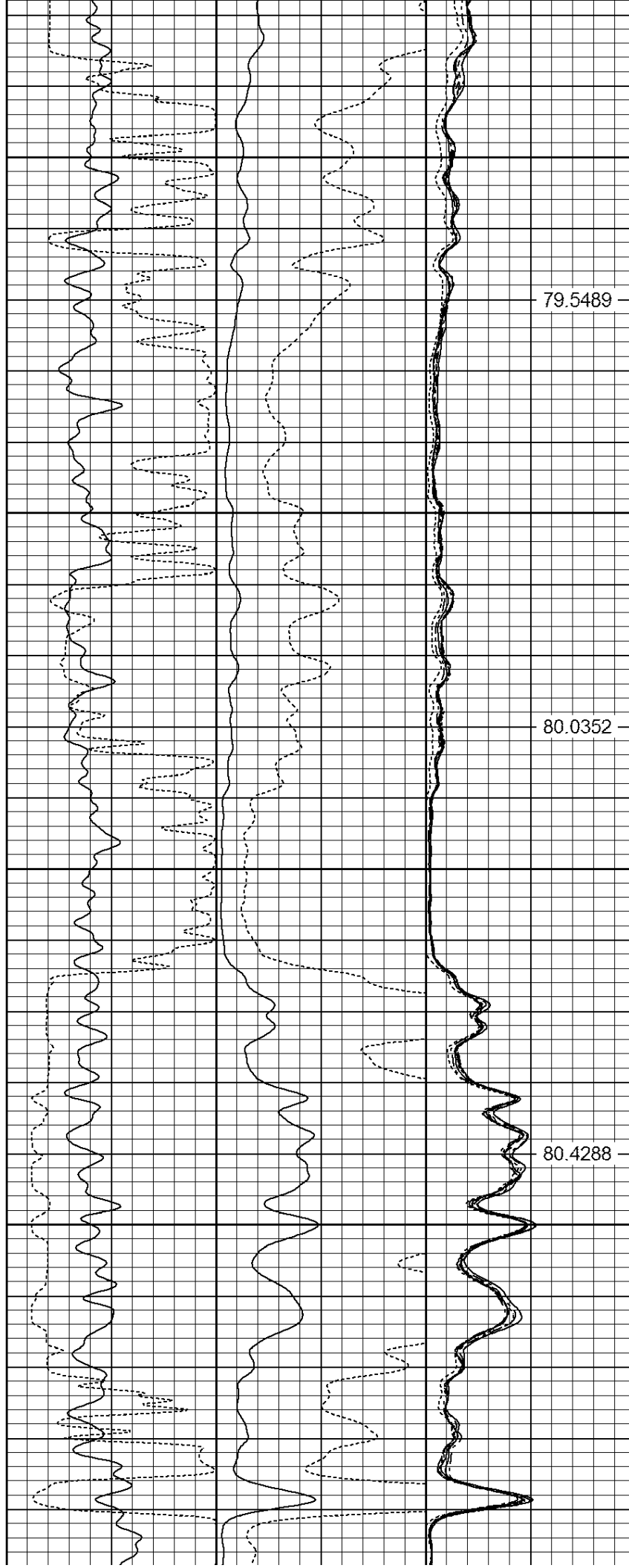
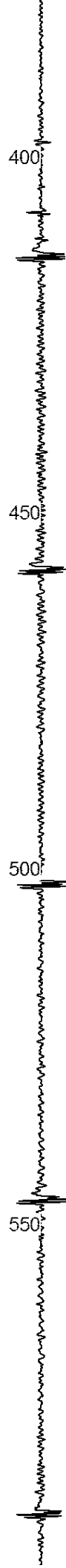
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HEADVOLT	16.25					

IntTemp	14.83					
WVF3FT	11.58		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	11.58					
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					
CCL	3.64		CENT-Probe (PT_MONO2)	3.00	2.75	35.00
GR	0.90		GR-Probe (275) Probe 2.75"	4.33	2.75	30.00
Dataset: Total Length: Total Weight: O.D.			hsr-howard 15-11a.db: field/well/run1/pass2 16.25 ft 155.00 lb 2.75 in			

-9	CCL	5	200	TT (usec)	800	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8
LSPD			0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPS2	100				1		100
(ft/min)			200	GR (GAPI)	400				0	AMPS4	100						
0	250								0	AMPS5	100						
									0	AMPS6	100						
									0	AMPS7	100						
									0	AMPS8	100						
										IntTemp							
										(degF)							



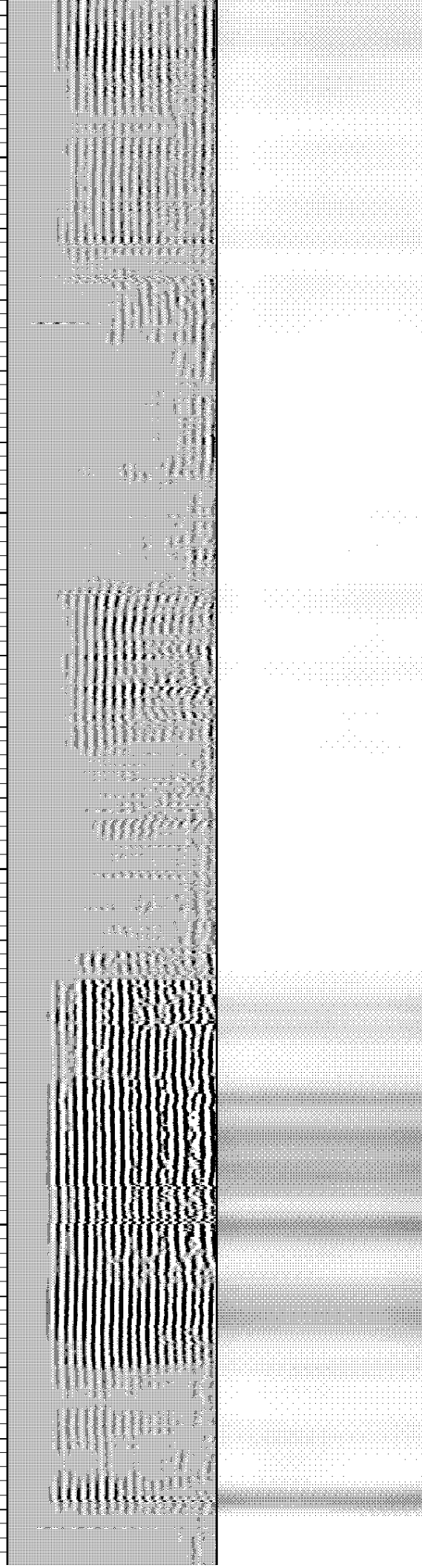




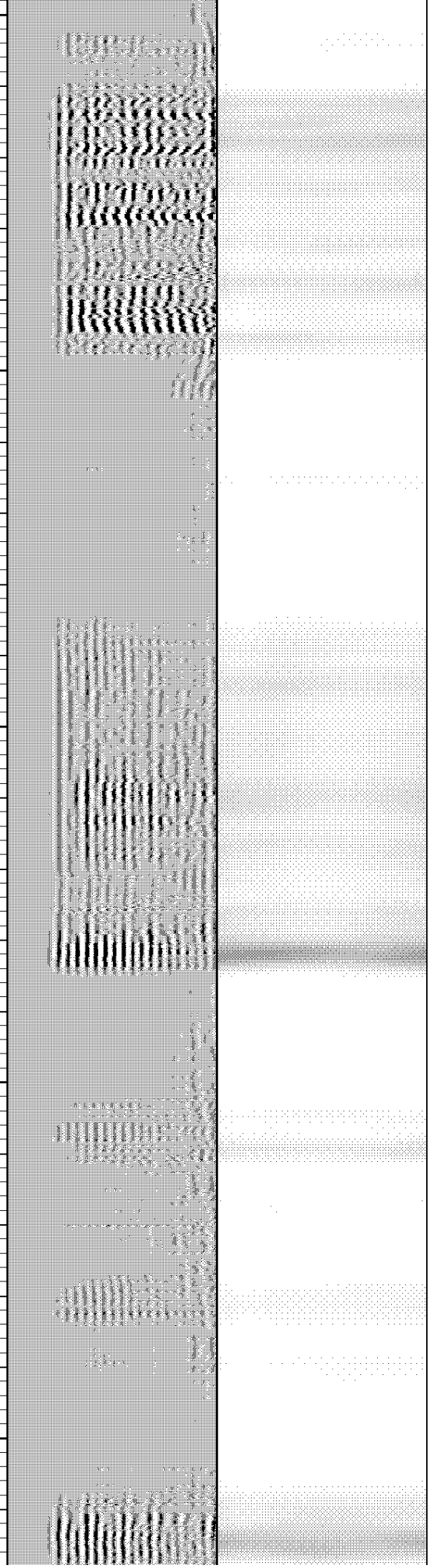
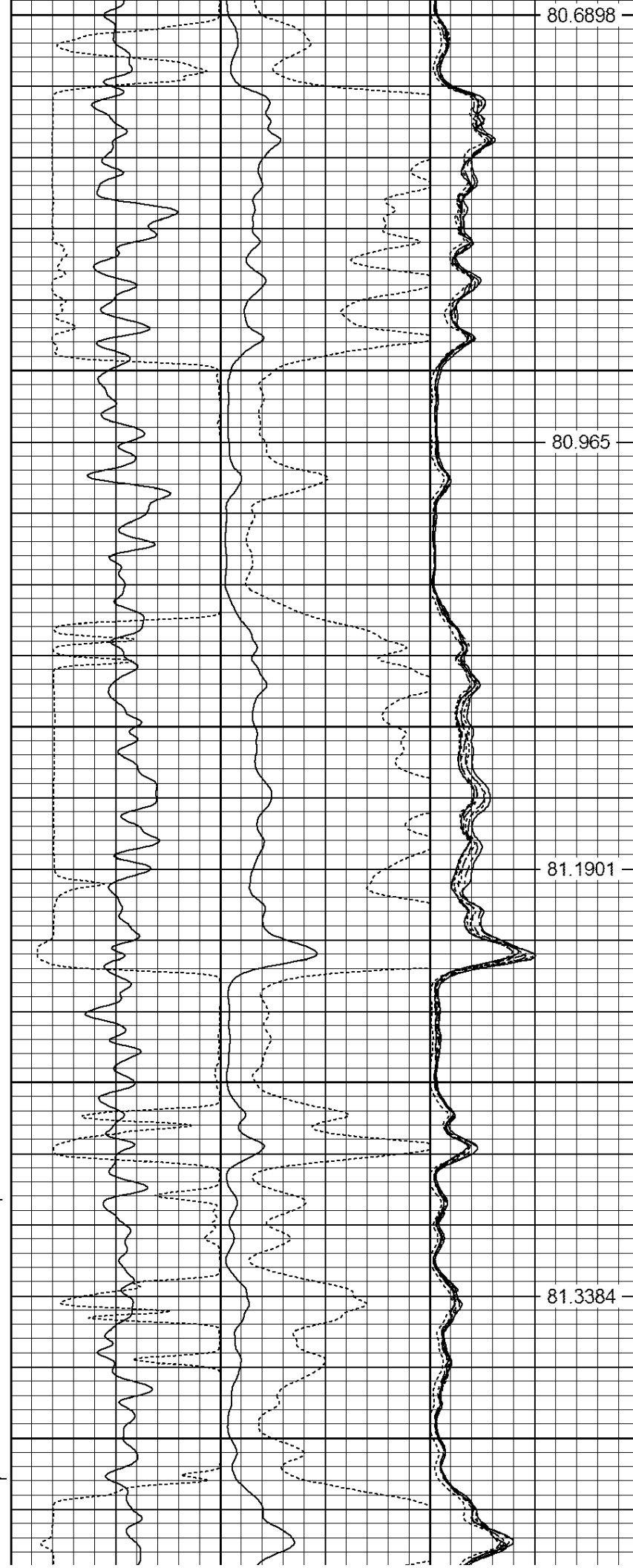
79.5489

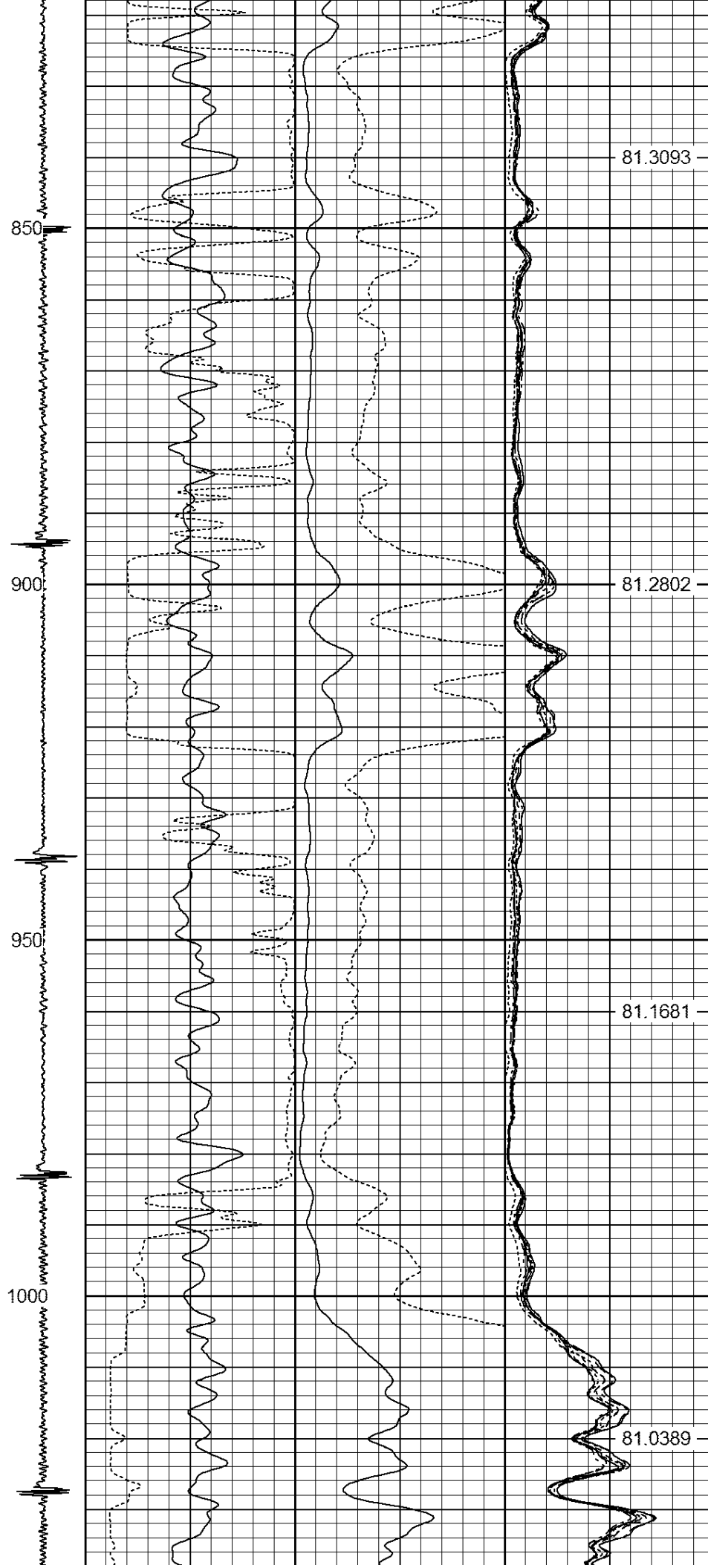
80.0352

80.4288

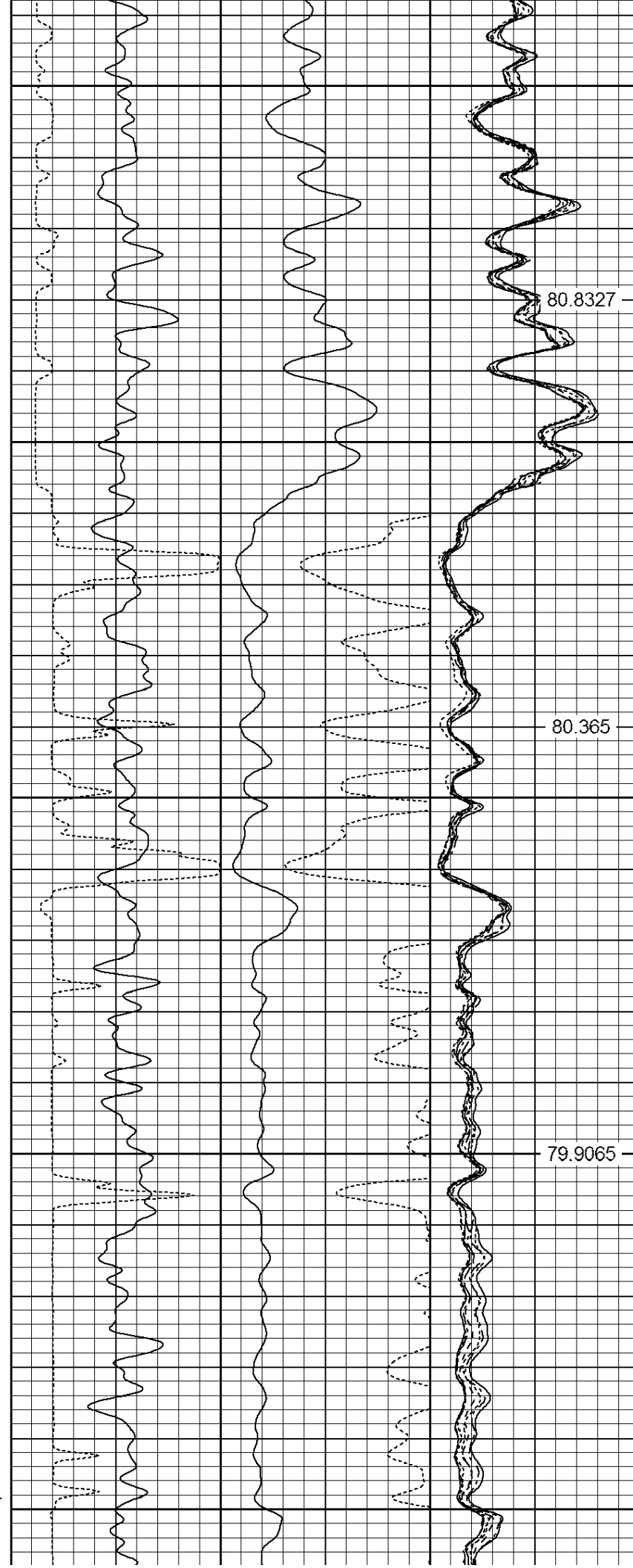


600
650
700
750
800





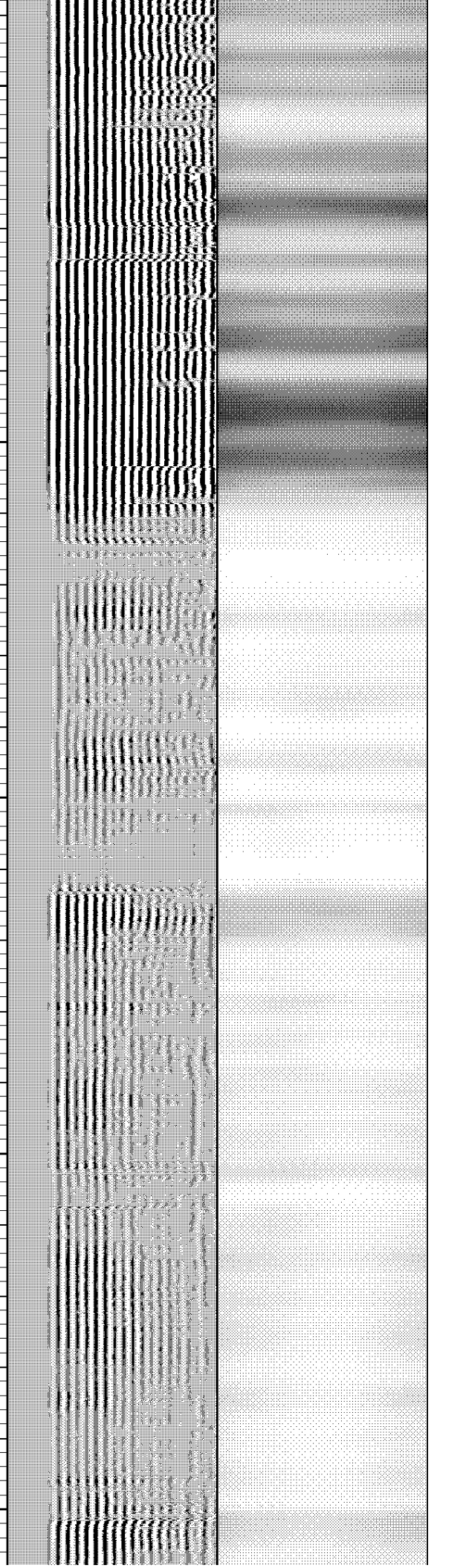
1050
1100
1150
1200
1250

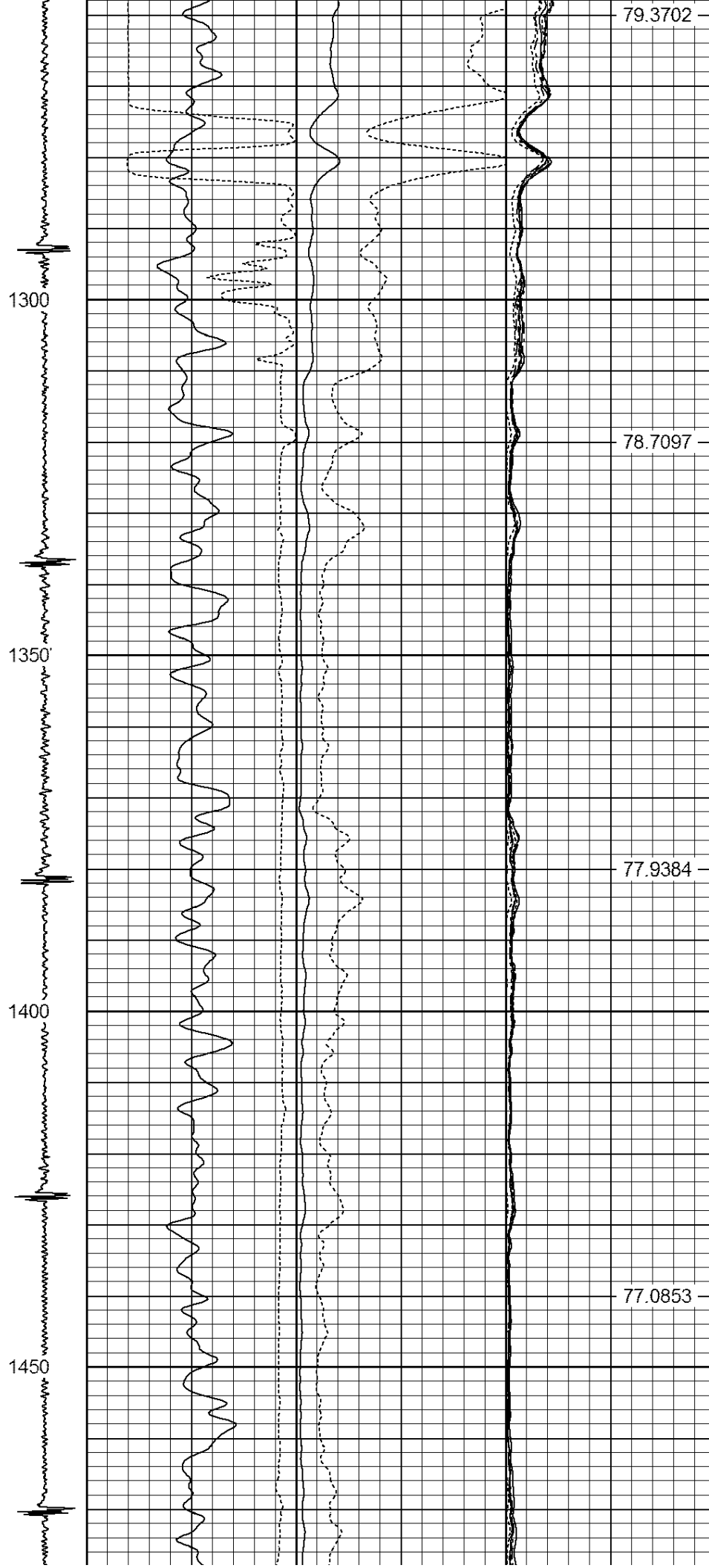


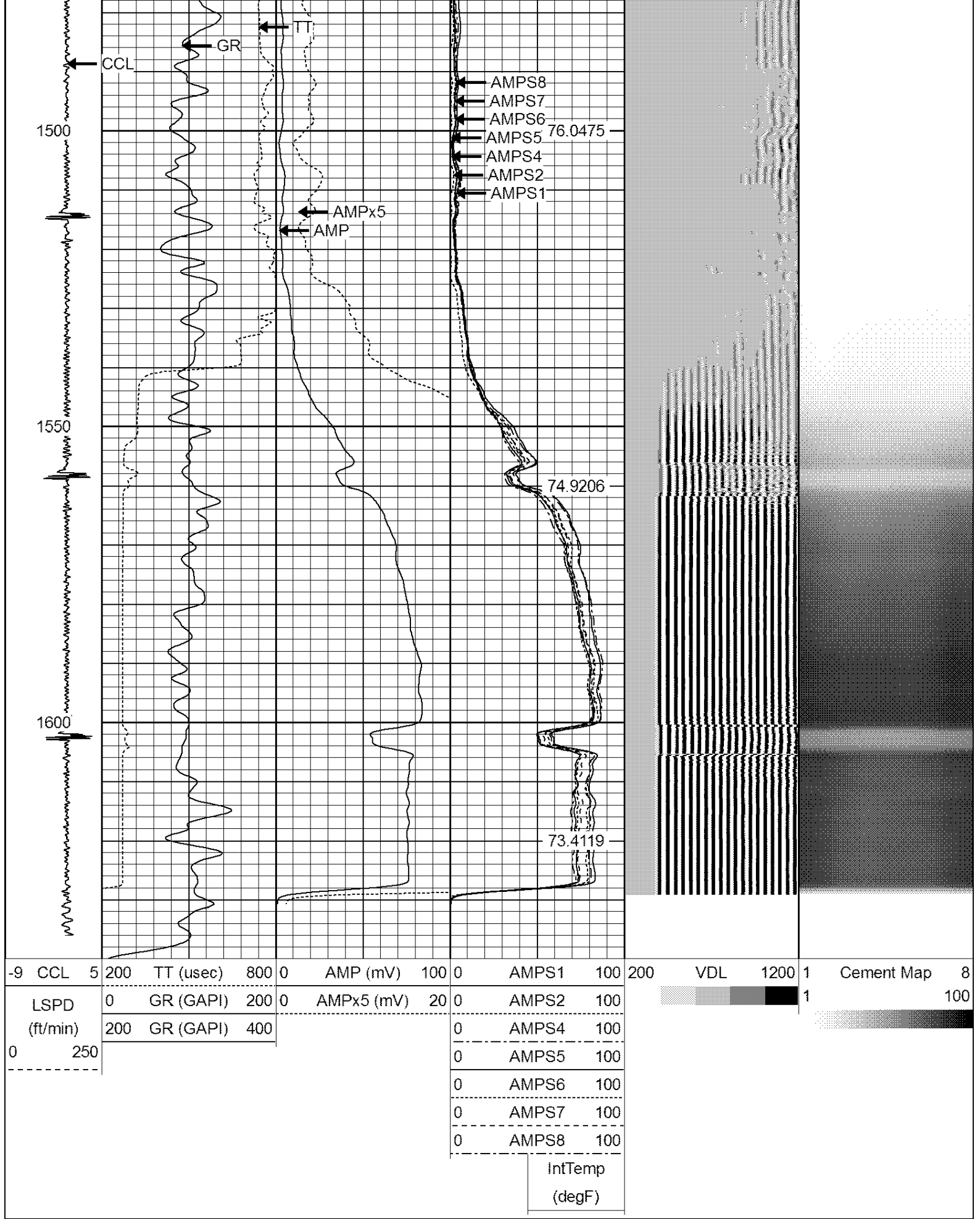
80.8327

80.365

79.9065









Well	HSR-HOWARD 15-11A
Field	WATTENBERG
County	WELD
State	COLORADO