



CEMENT BOND
GAMMA RAY
CCL LOG

Pioneer Energy Services

Company	AUGUSTUS ENERGY RESOURCES, LLC	
Well	Mc CONNELL 21-23 4N47W	
Field	BUFFALO GRASS	
County	YUMA	State
State	COLORADO	
Location:	API # : 05 125 12120	Other Services
Permanent Datum	GL	Elevation 3963'
Log Measured From	K.B. 6' A.G.L.	Elevation 3969'
Drilling Measured From	K.B.	D.F. 3968'
		G.L. 3963'

Date	28-OCTOBER-2014
Run Number	ONE
Depth Driller	2943'
Depth Logger	2860'
Bottom Logged Interval	2860'
Top Log Interval	SURFACE
Open Hole Size	6.25"
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	109 DEG F OHL
Estimated Cement Top	
Time Well Ready	8:00
Time Logger on Bottom	8:30
Equipment Number	P-75
Location	FT MORGAN
Recorded By	HARPER
Witnessed By	

Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String							
Prot. String							
Production String							
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

LOG CORRELATED TO:

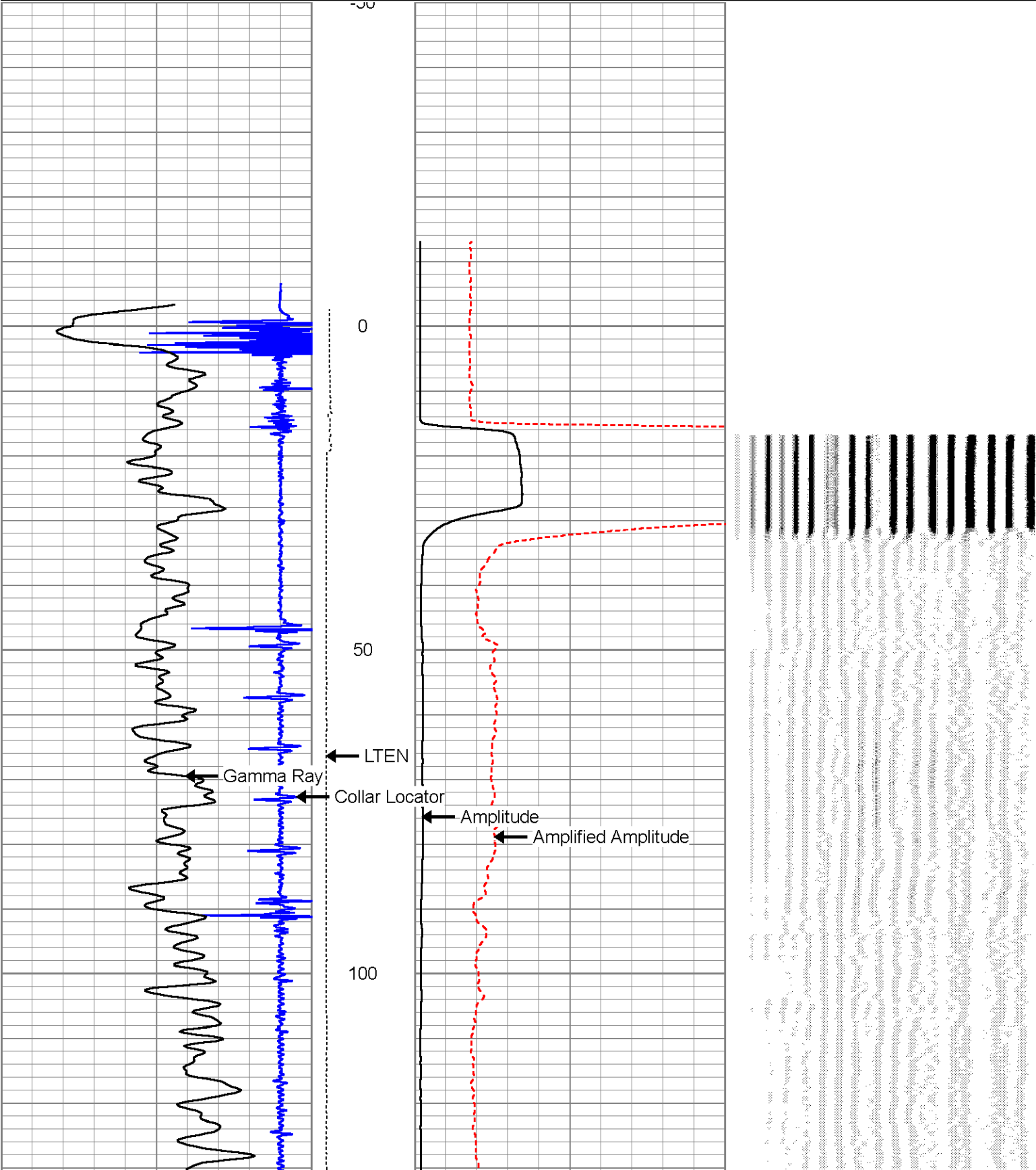
PIONEER ENERGY
HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON
DATED : OCTOBER 10-2014

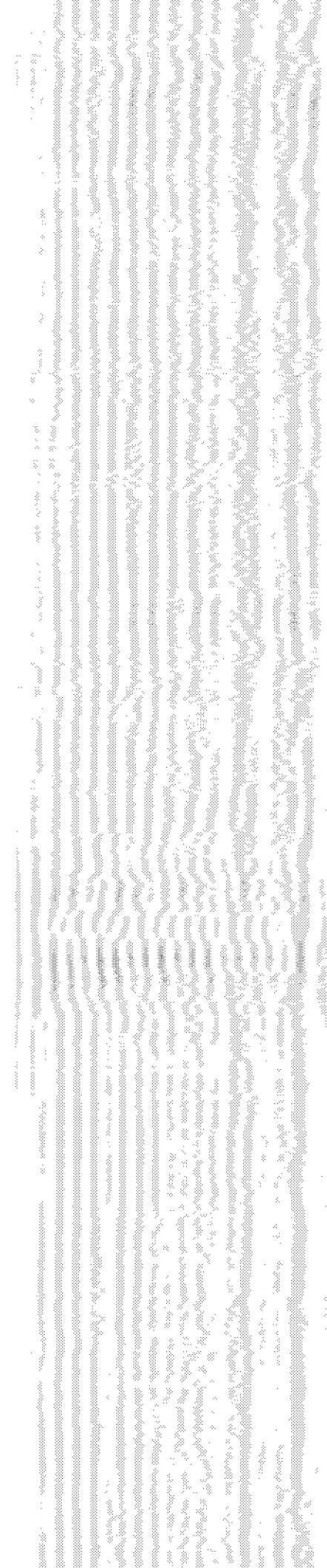
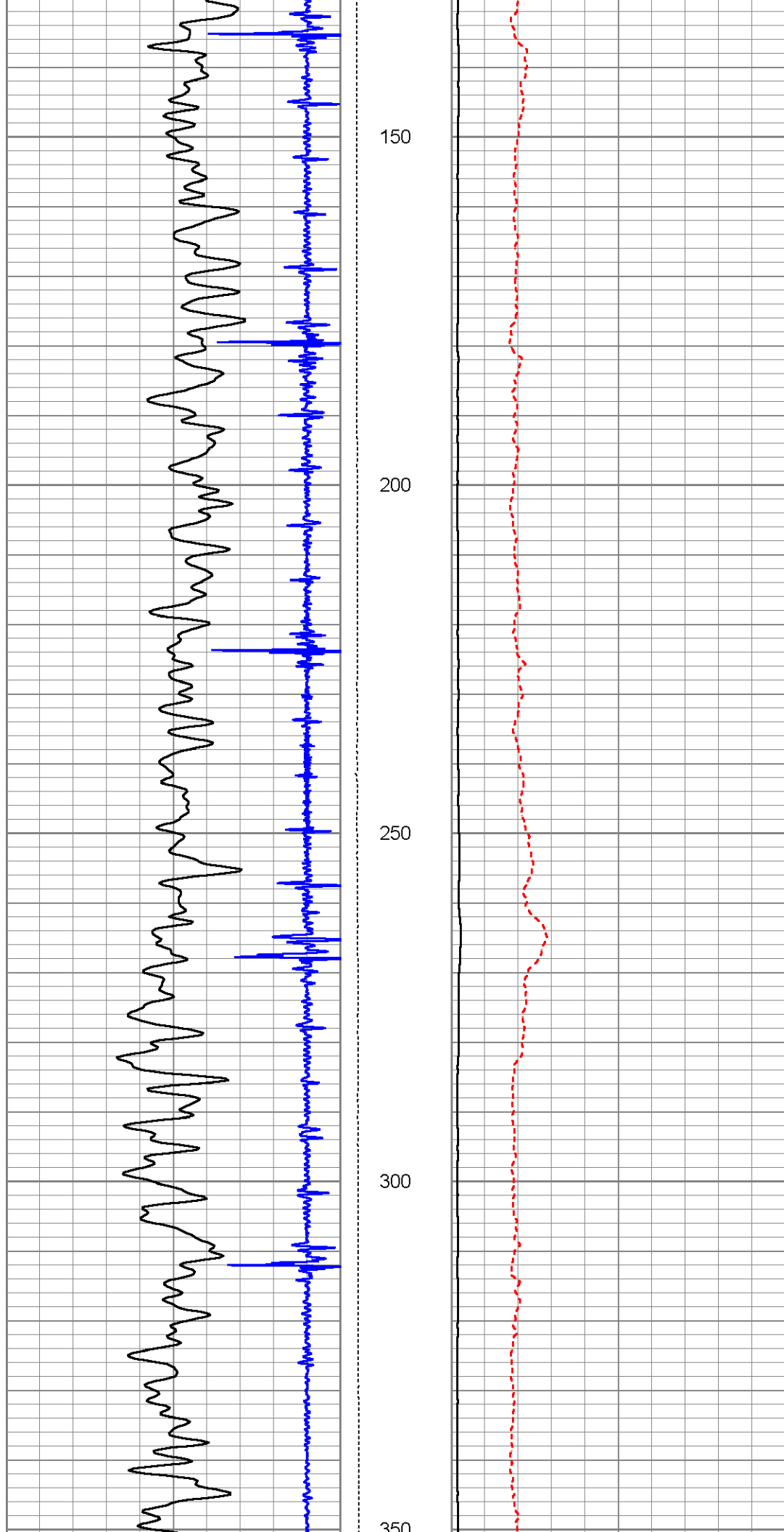
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			SDSCENT	3.00	3.25	20.00

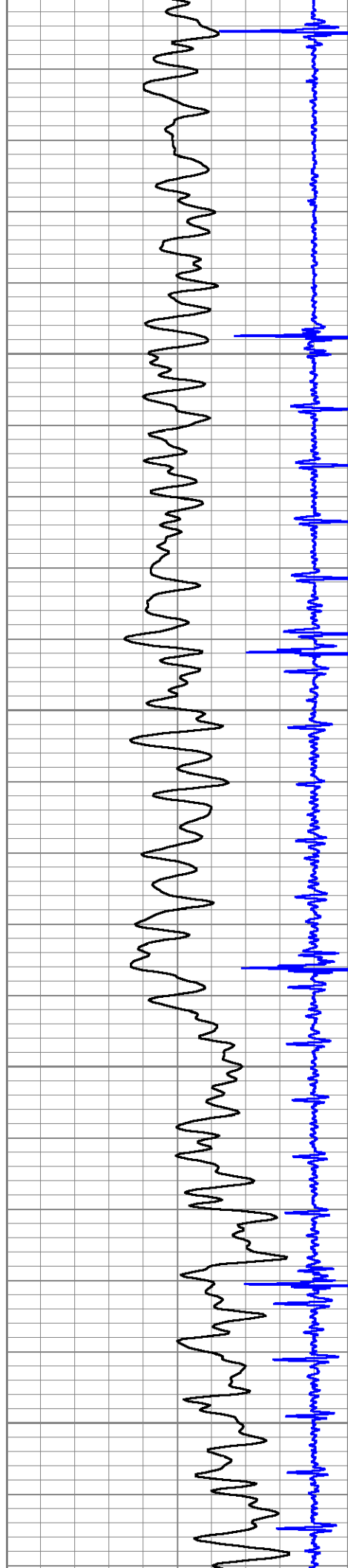
			Centralizer for testing	3.00	3.25	20.00
WVF3	12.00			8.75	2.75	60.00
WVF5	11.00		CBL-Probe (050215) Probe 2.75" Dual Receiver Bond			
			SDSCENT Centralizer for testing	3.00	3.25	20.00
CCL	3.92		CCL-Probe (275)	1.42	2.75	
GR	2.54		GR-Probe275 (030606)	3.33	2.75	57.00
Dataset: aquugustus.db: field/well/run1/pass3 Total Length: 19.50 ft Total Weight: 157.00 lb O.D. 3.25 in						

Database File: aqugustus.db
 Dataset Pathname: pass3
 Presentation Format: cbl_dr
 Dataset Creation: Tue Oct 28 09:16:23 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

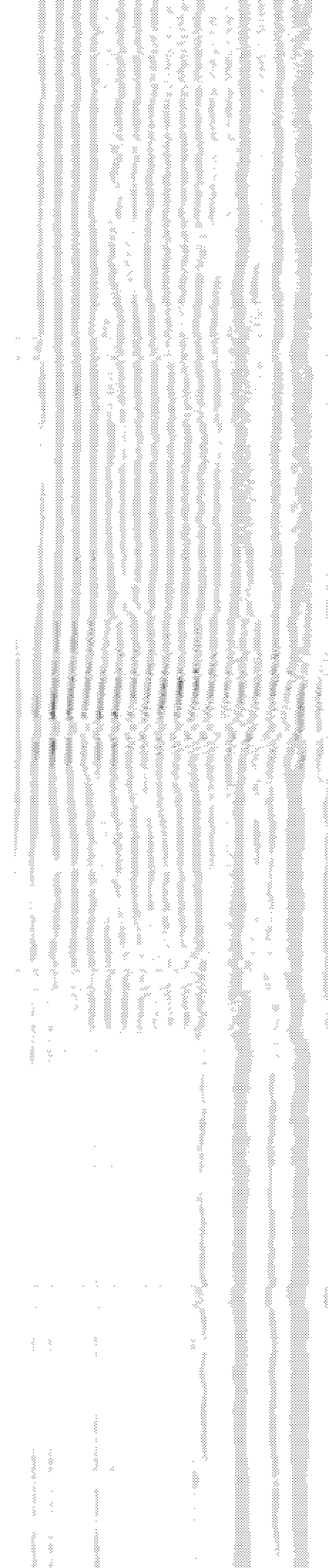
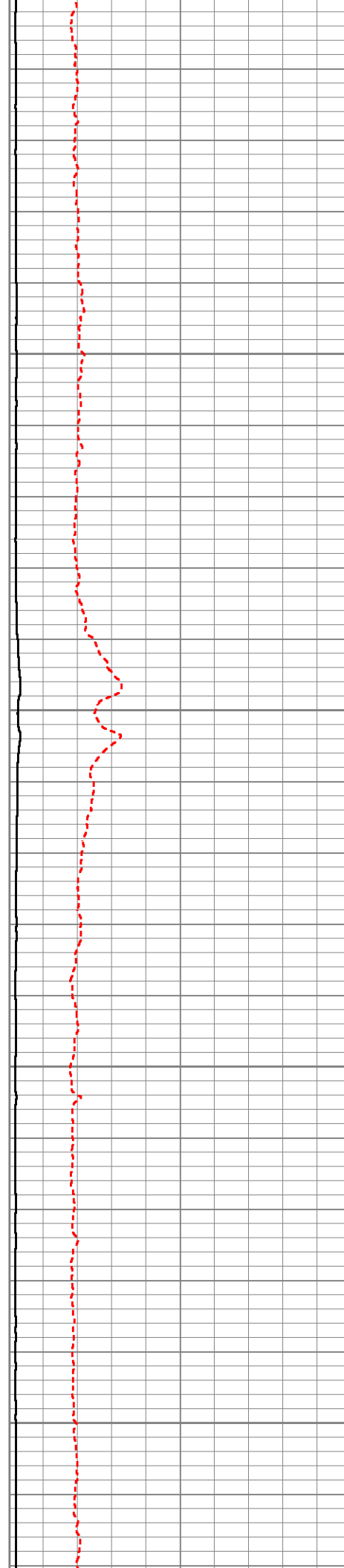
9	Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	(lb)2000	0	Amplitude (mV)	100			

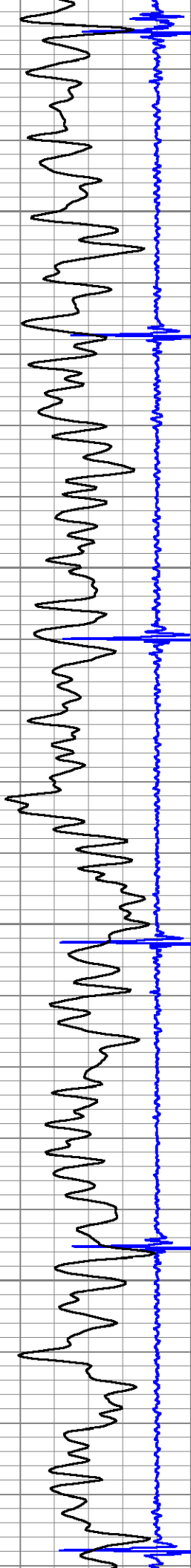






330
400
450
500
550



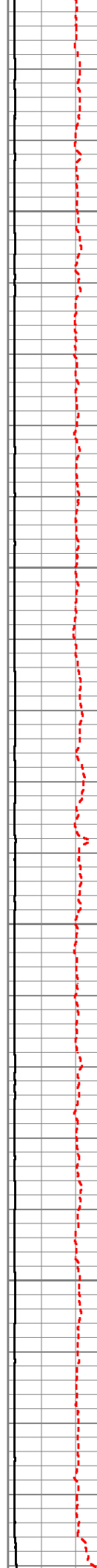


600

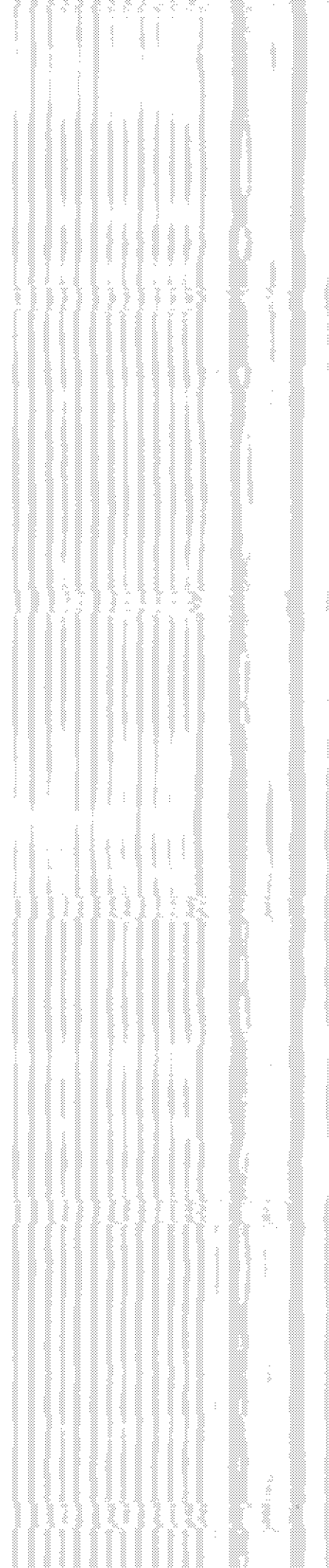
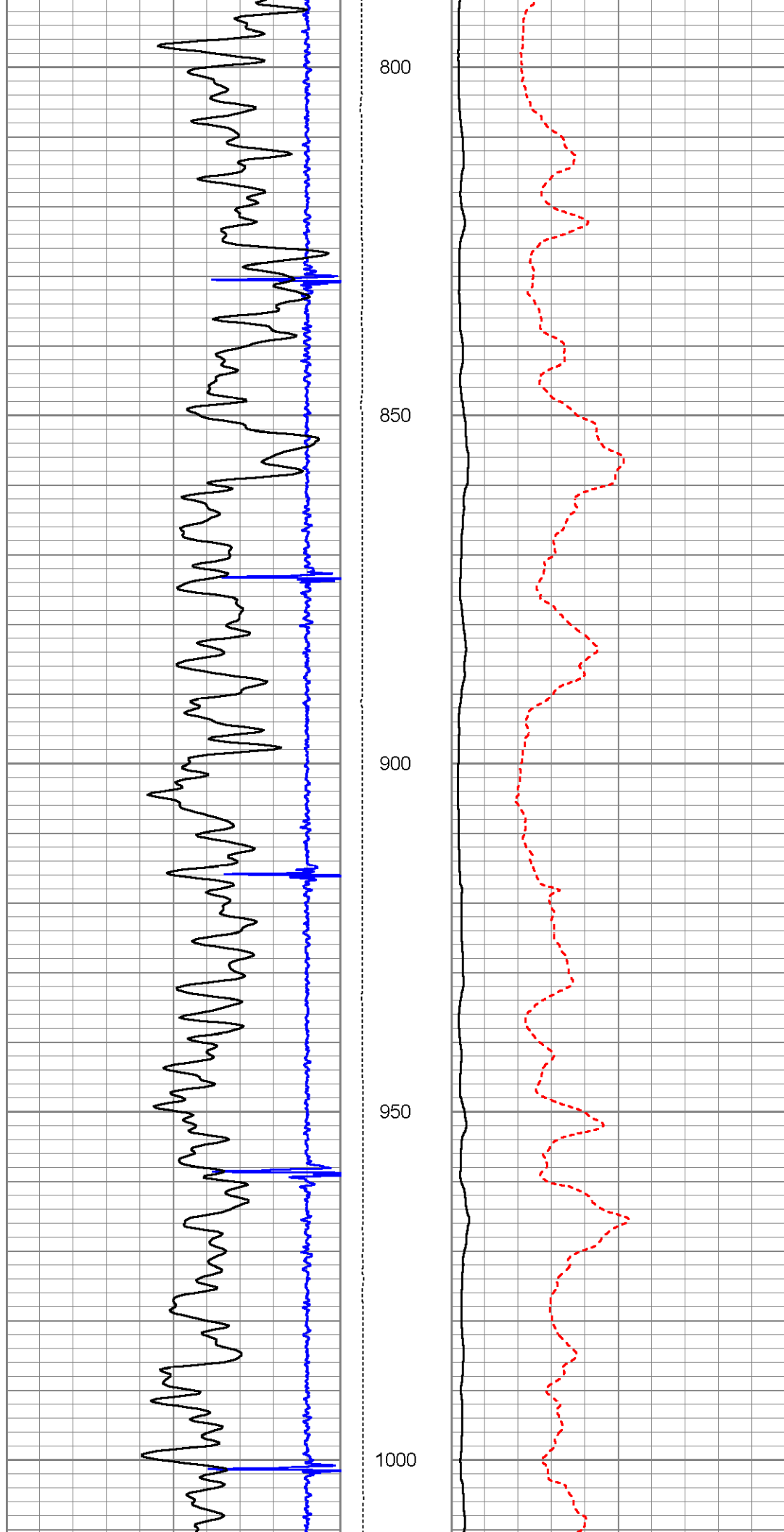
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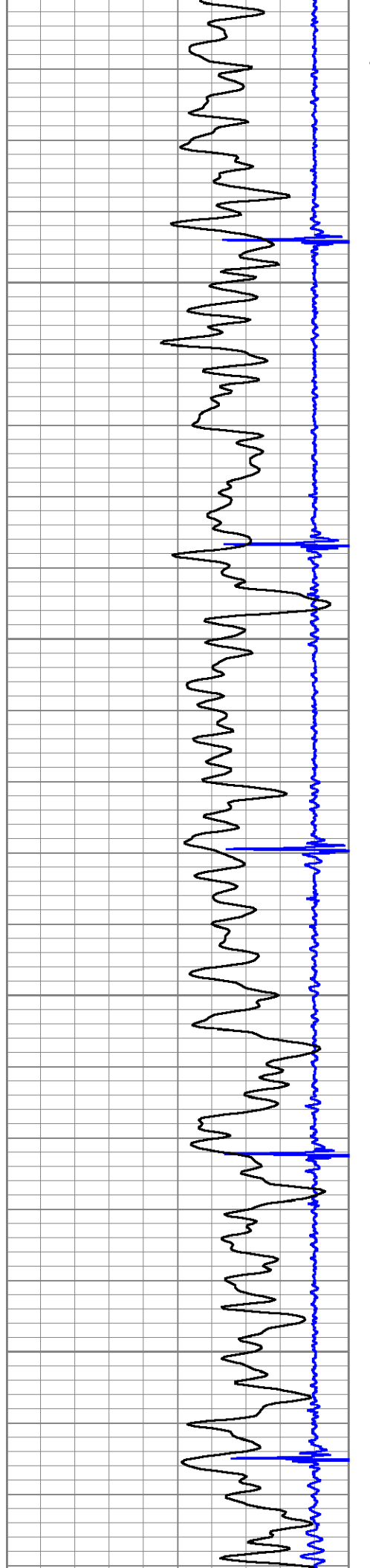
700

750



Time (s)	Amplitude (V)	Frequency (Hz)	Phase (deg)	Power (W)
0.0	0.0	0.0	0.0	0.0
0.1	0.1	1.0	0.0	0.01
0.2	0.2	2.0	0.0	0.04
0.3	0.3	3.0	0.0	0.09
0.4	0.4	4.0	0.0	0.16
0.5	0.5	5.0	0.0	0.25
0.6	0.6	6.0	0.0	0.36
0.7	0.7	7.0	0.0	0.49
0.8	0.8	8.0	0.0	0.64
0.9	0.9	9.0	0.0	0.81
1.0	1.0	10.0	0.0	1.00
1.1	1.1	11.0	0.0	1.21
1.2	1.2	12.0	0.0	1.44
1.3	1.3	13.0	0.0	1.69
1.4	1.4	14.0	0.0	1.96
1.5	1.5	15.0	0.0	2.25
1.6	1.6	16.0	0.0	2.56
1.7	1.7	17.0	0.0	2.89
1.8	1.8	18.0	0.0	3.24
1.9	1.9	19.0	0.0	3.61
2.0	2.0	20.0	0.0	4.00
2.1	2.1	21.0	0.0	4.41
2.2	2.2	22.0	0.0	4.84
2.3	2.3	23.0	0.0	5.29
2.4	2.4	24.0	0.0	5.76
2.5	2.5	25.0	0.0	6.25
2.6	2.6	26.0	0.0	6.76
2.7	2.7	27.0	0.0	7.29
2.8	2.8	28.0	0.0	7.84
2.9	2.9	29.0	0.0	8.41
3.0	3.0	30.0	0.0	9.00
3.1	3.1	31.0	0.0	9.61
3.2	3.2	32.0	0.0	10.24
3.3	3.3	33.0	0.0	10.89
3.4	3.4	34.0	0.0	11.56
3.5	3.5	35.0	0.0	12.25
3.6	3.6	36.0	0.0	12.96
3.7	3.7	37.0	0.0	13.69
3.8	3.8	38.0	0.0	14.44
3.9	3.9	39.0	0.0	15.21
4.0	4.0	40.0	0.0	16.00
4.1	4.1	41.0	0.0	16.81
4.2	4.2	42.0	0.0	17.64
4.3	4.3	43.0	0.0	18.49
4.4	4.4	44.0	0.0	19.36
4.5	4.5	45.0	0.0	20.25
4.6	4.6	46.0	0.0	21.16
4.7	4.7	47.0	0.0	22.09
4.8	4.8	48.0	0.0	23.04
4.9	4.9	49.0	0.0	24.01
5.0	5.0	50.0	0.0	25.00



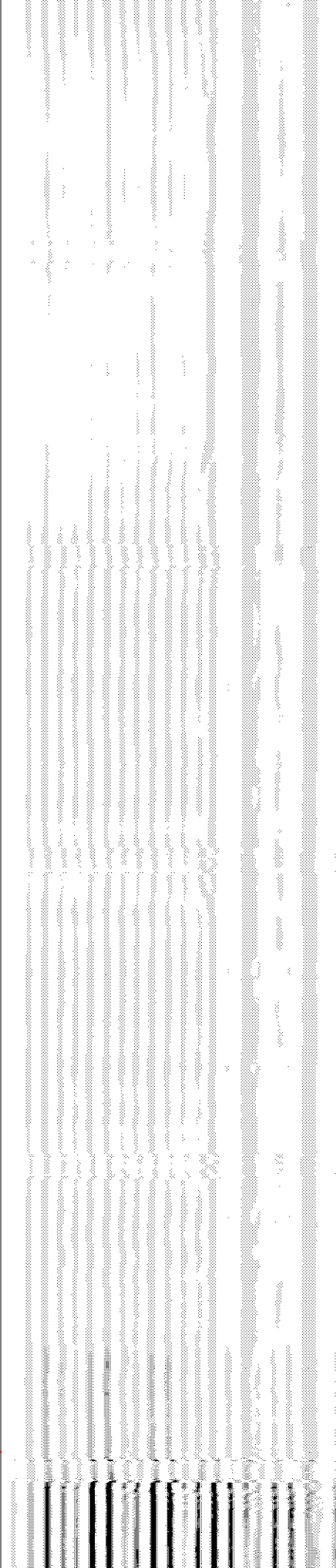
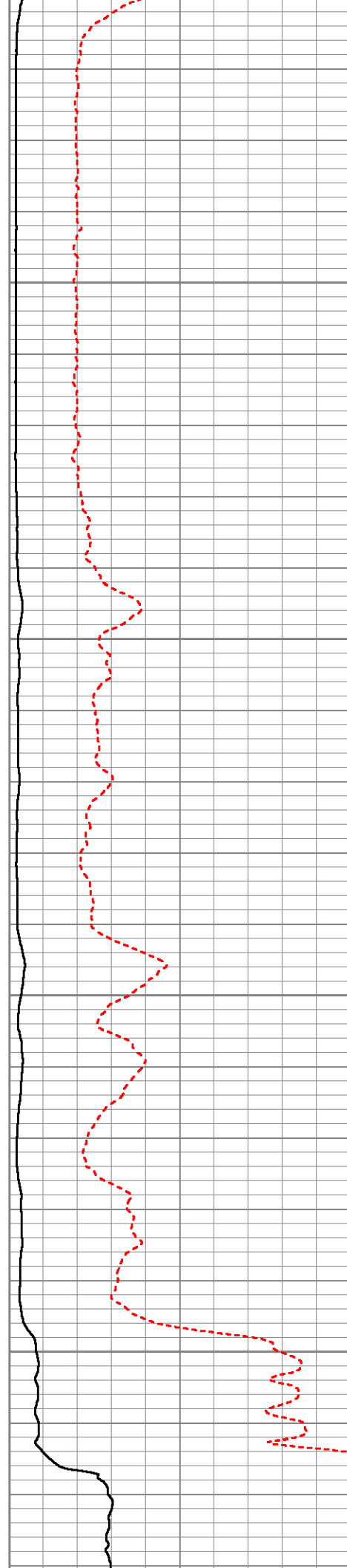


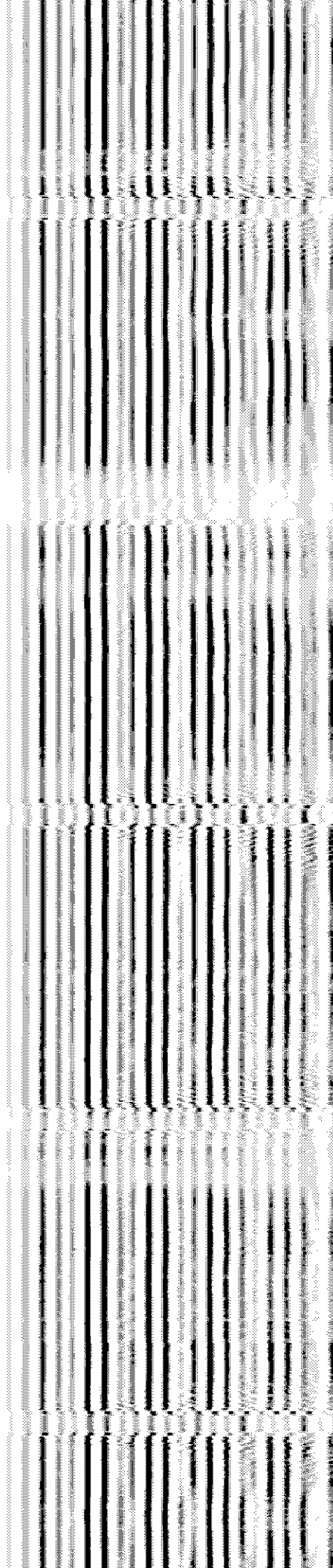
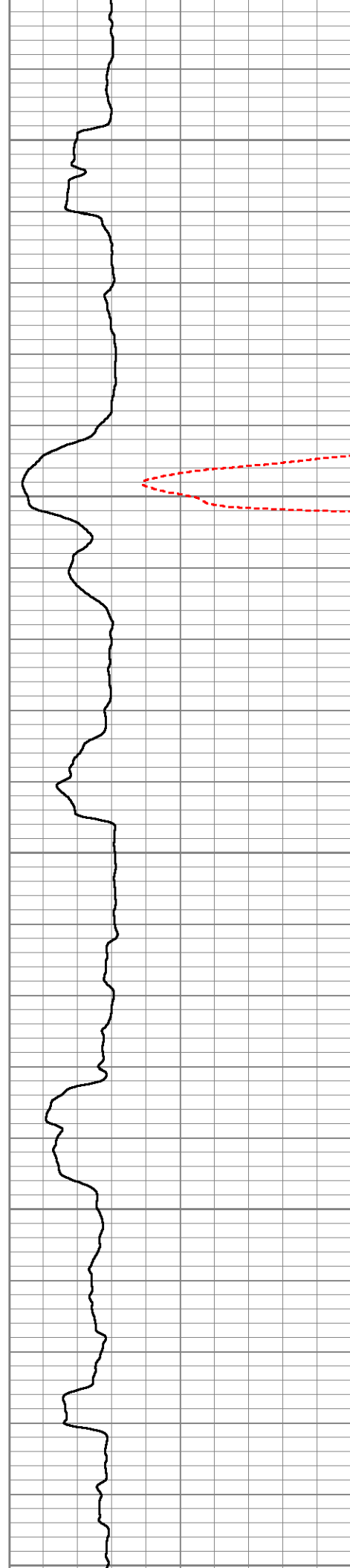
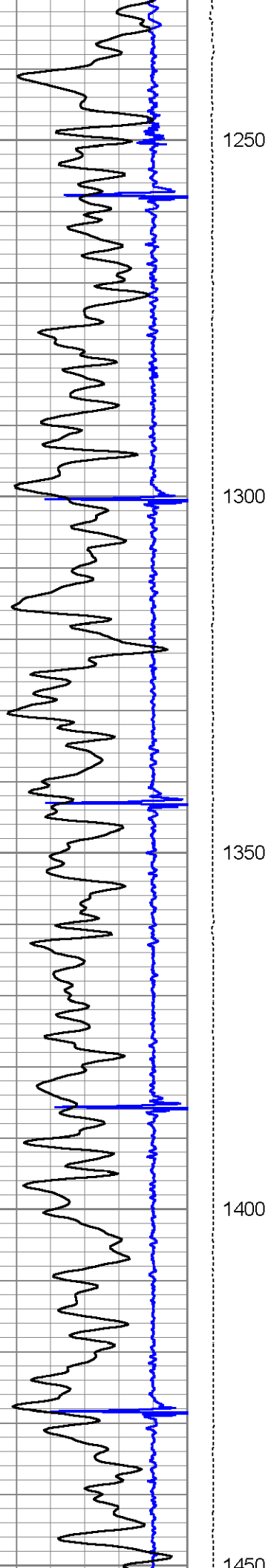
1050

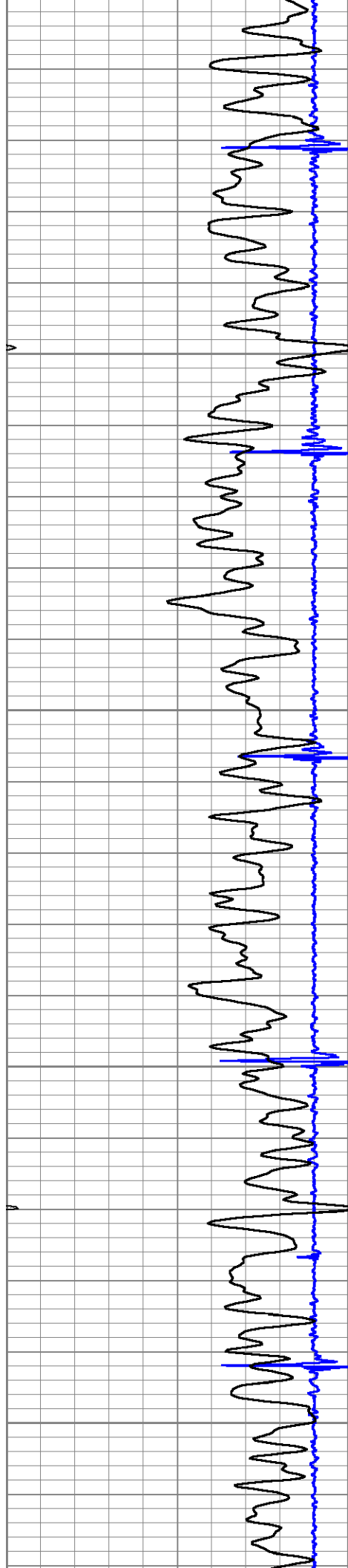
1100

1150

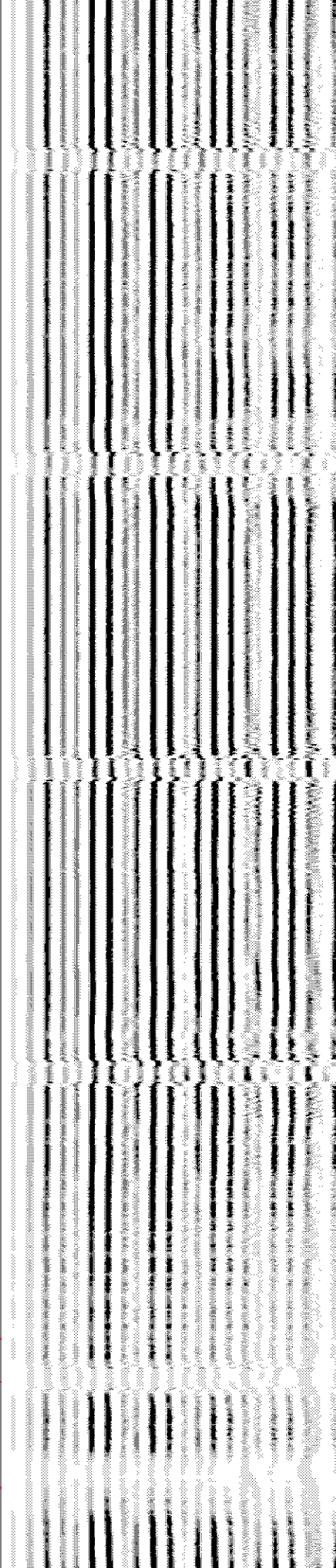
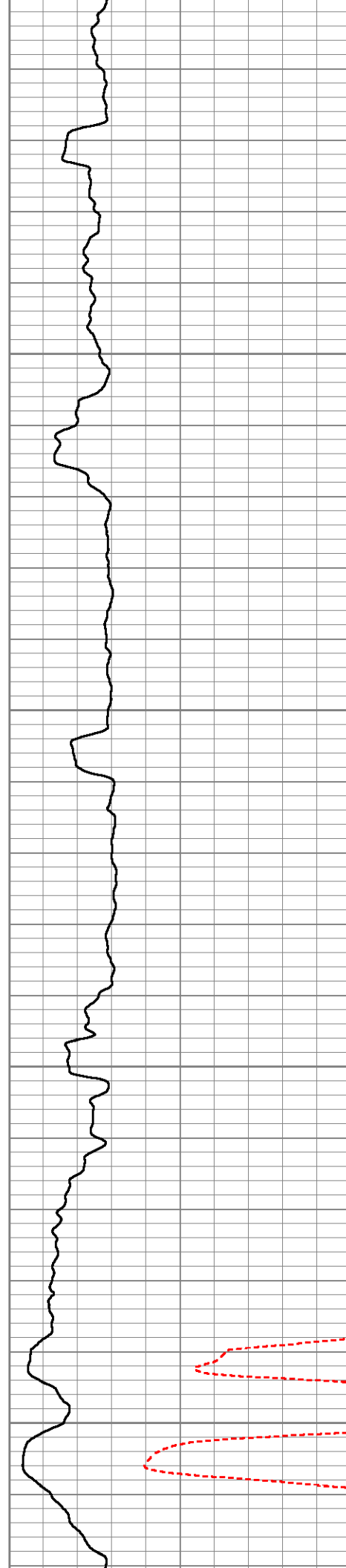
1200

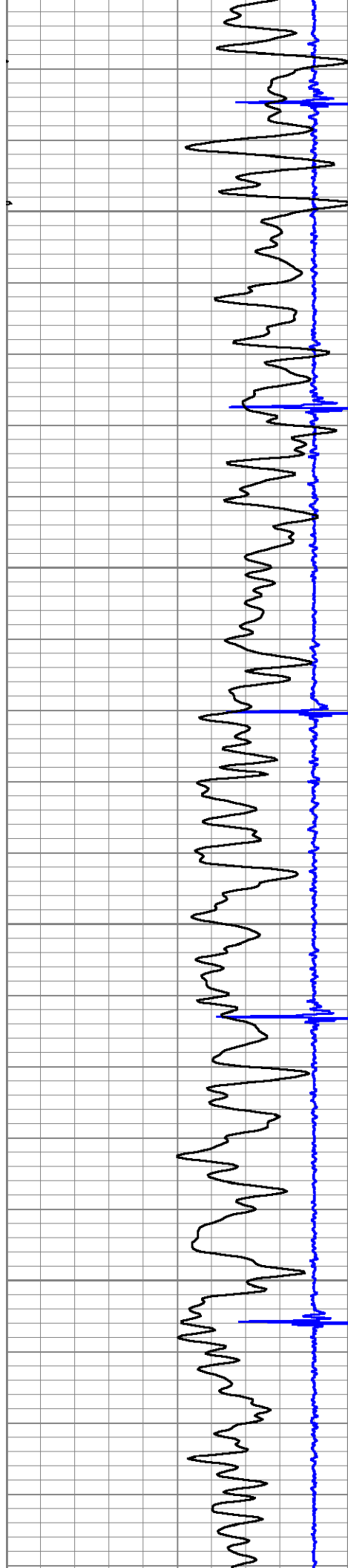






1430
1500
1550
1600
1650



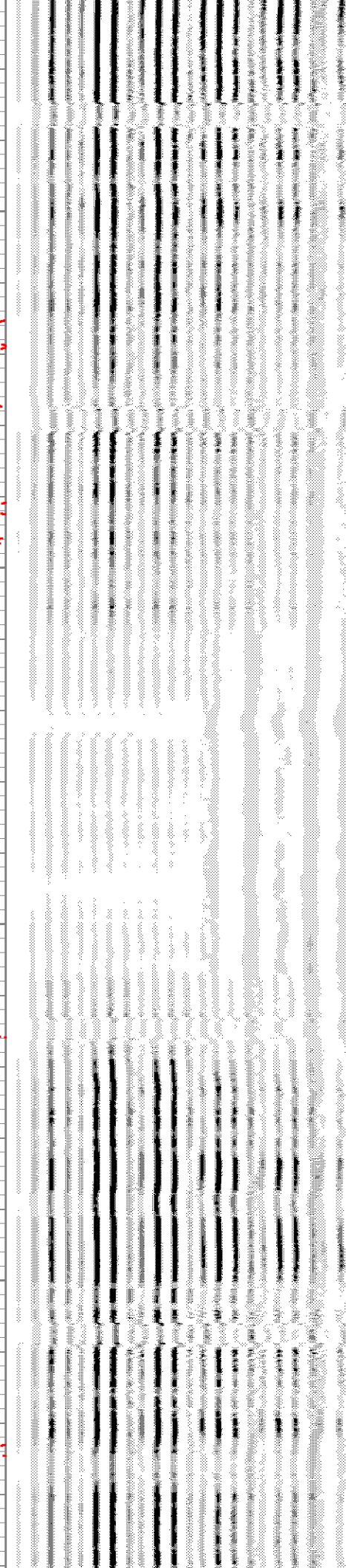


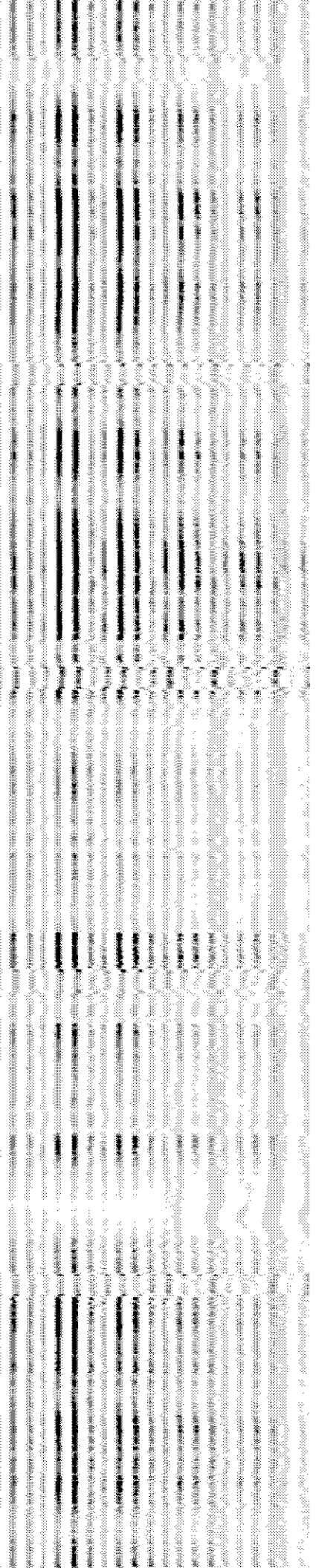
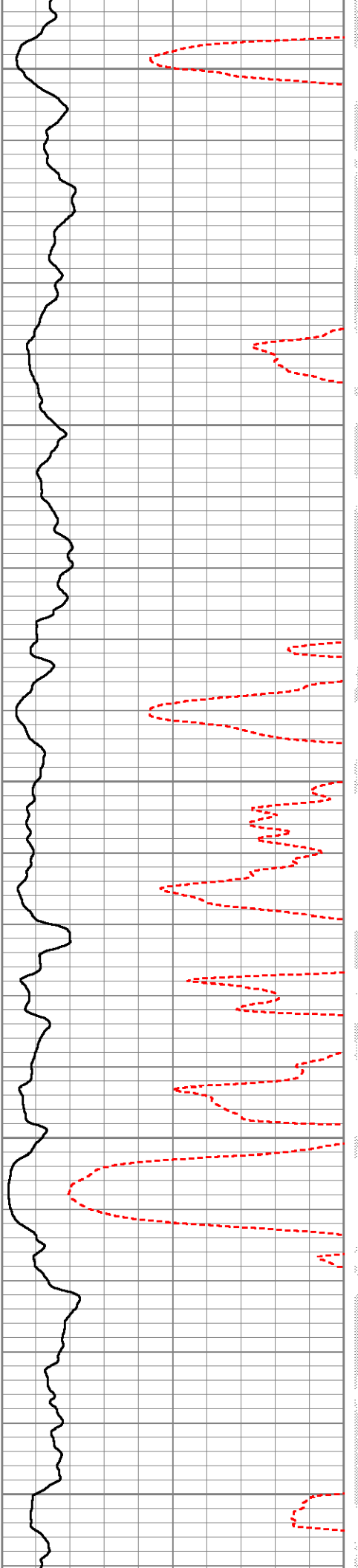
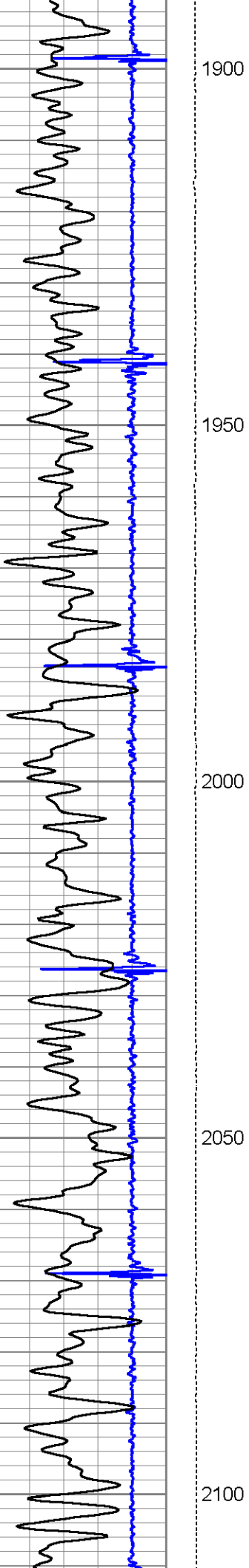
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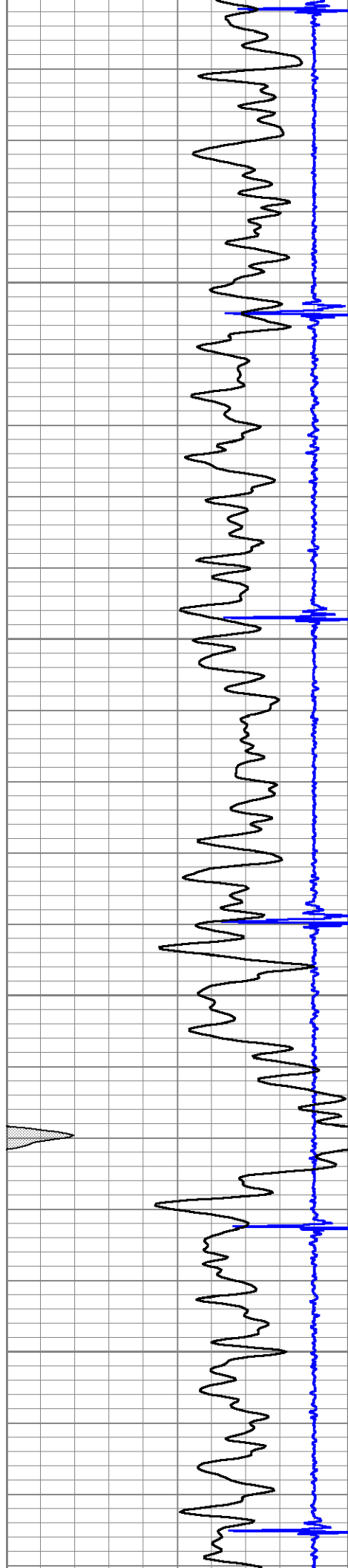
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1800

1850





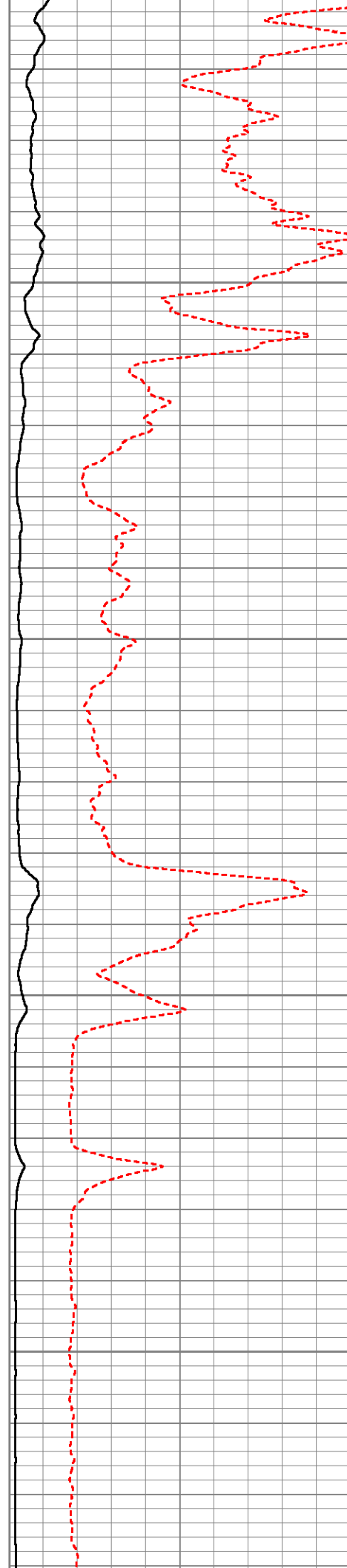


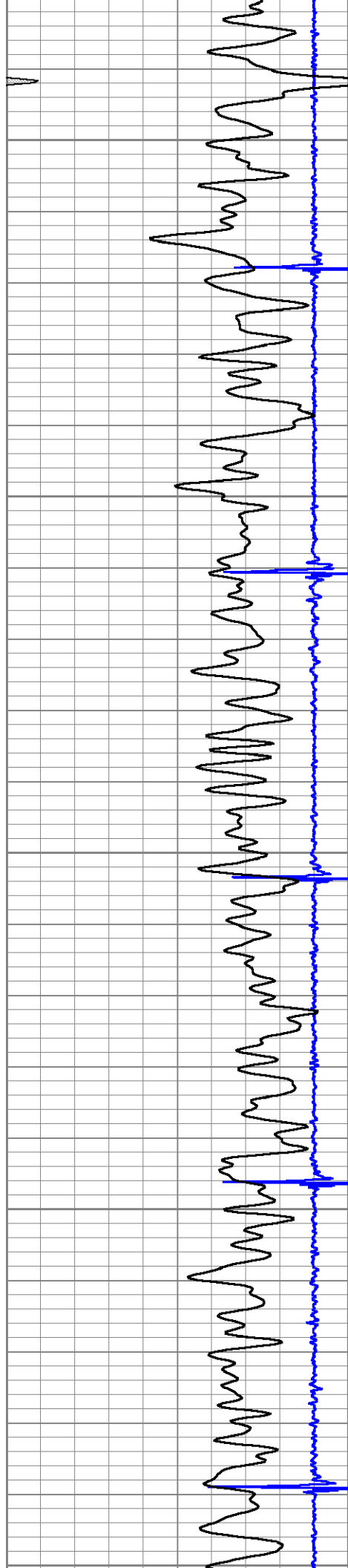
2150

2200

2250

2300





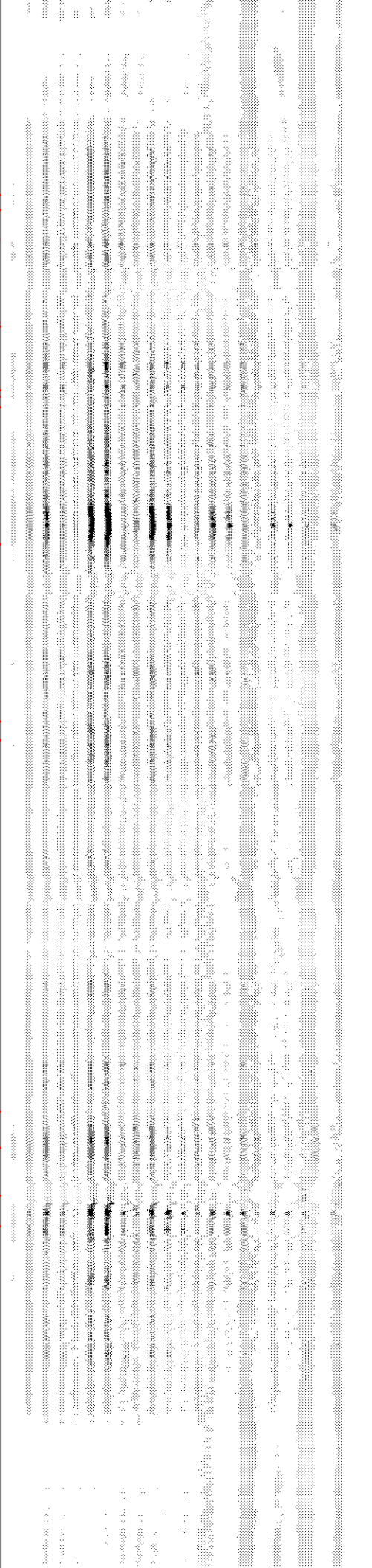
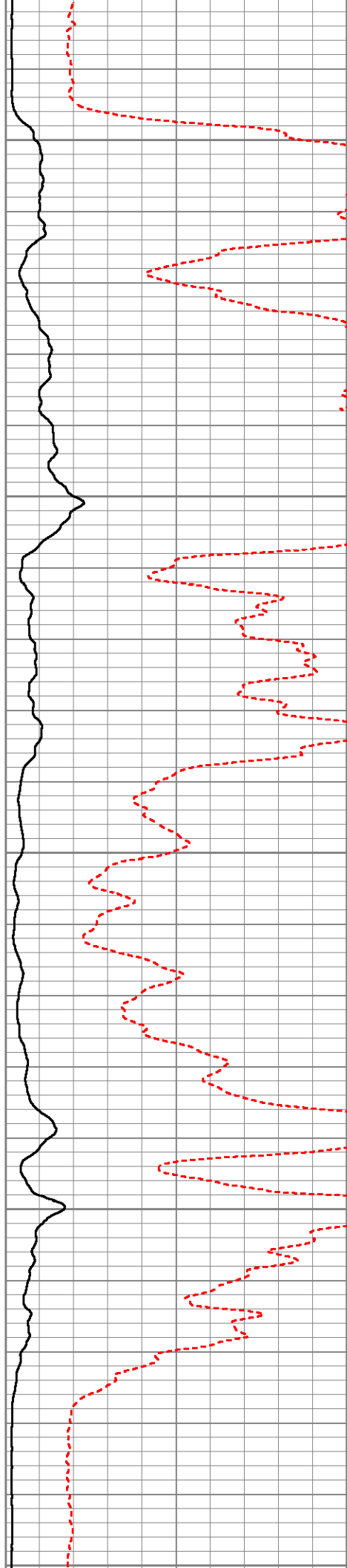
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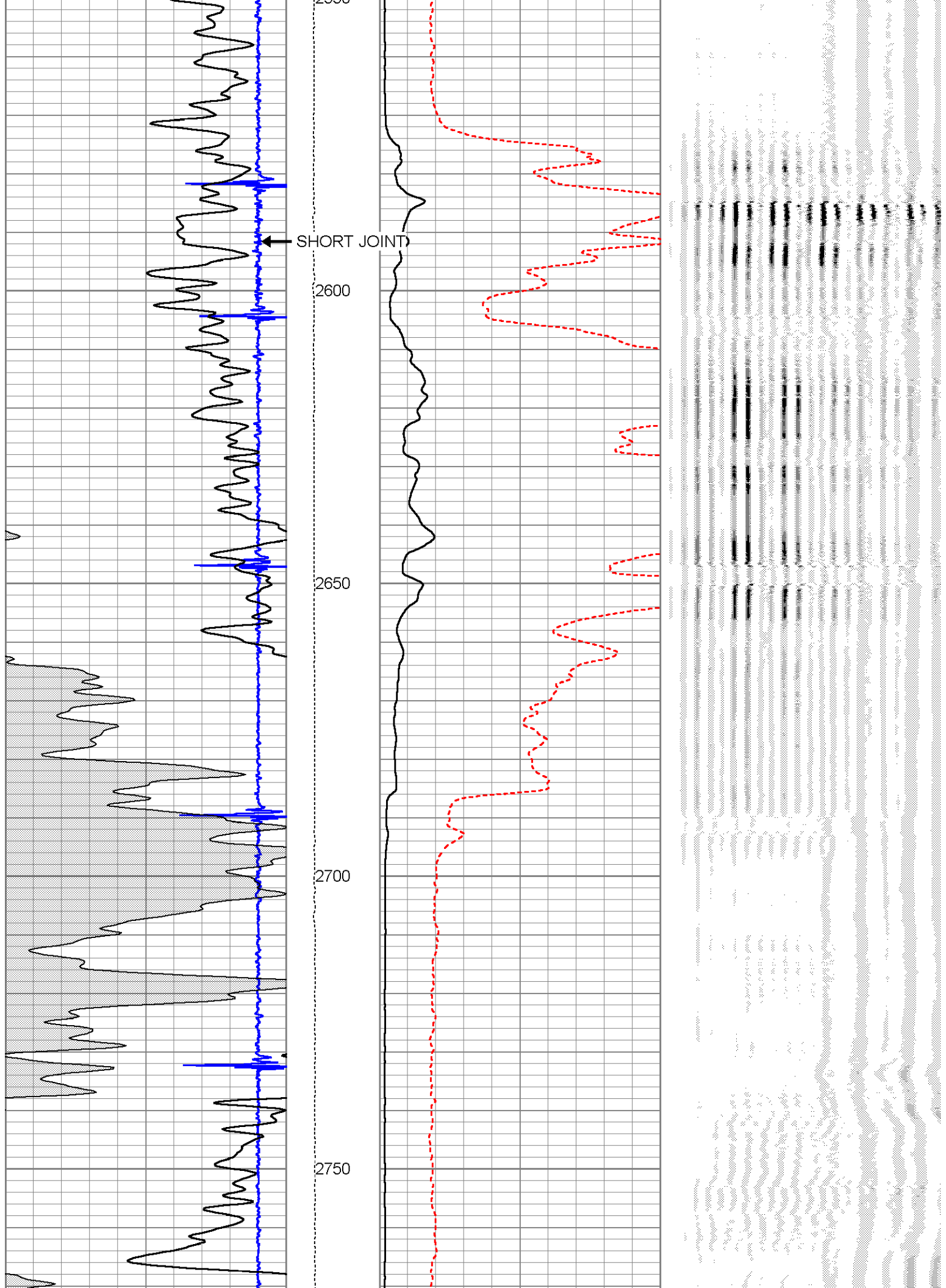
2400

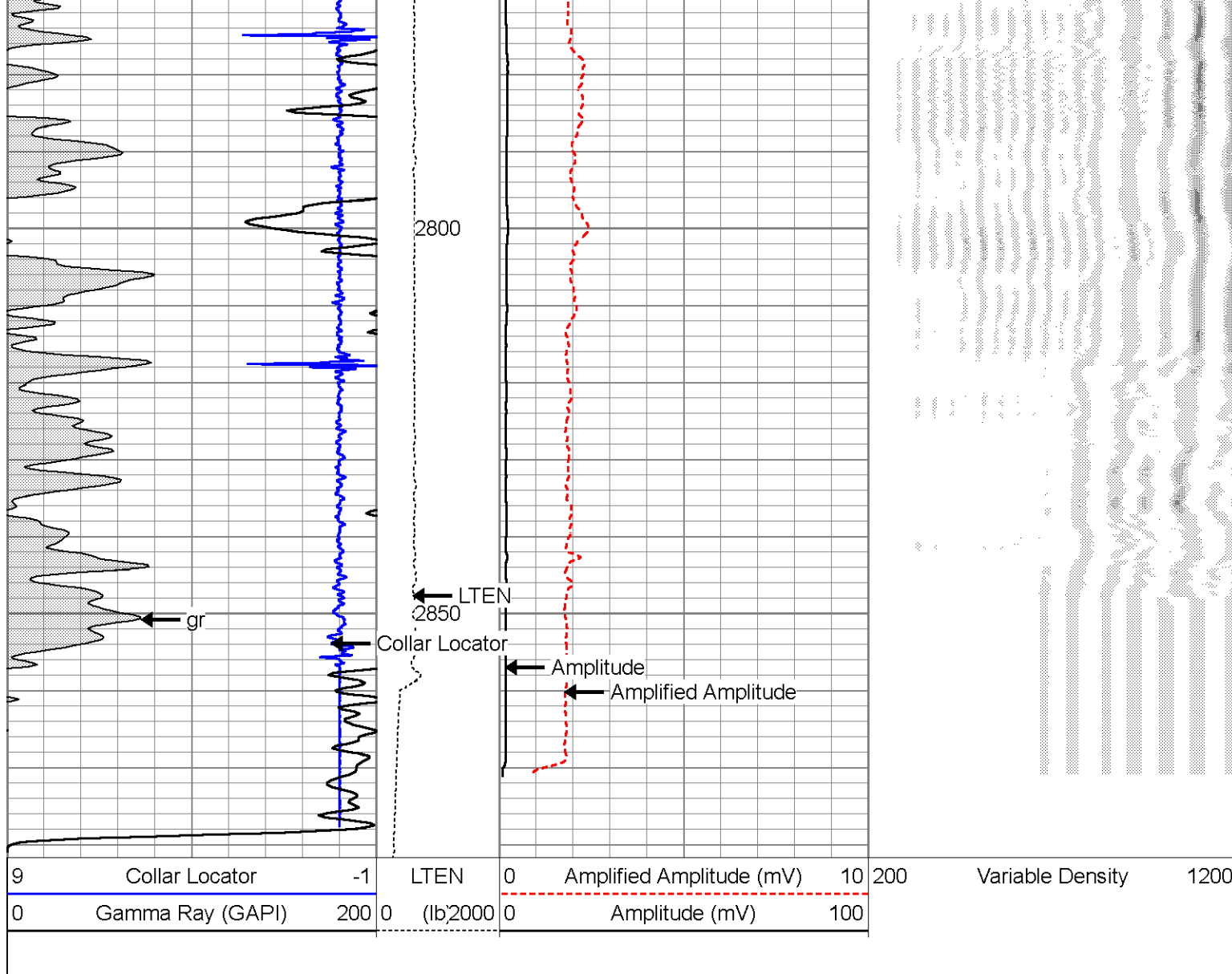
2450

2500

2550







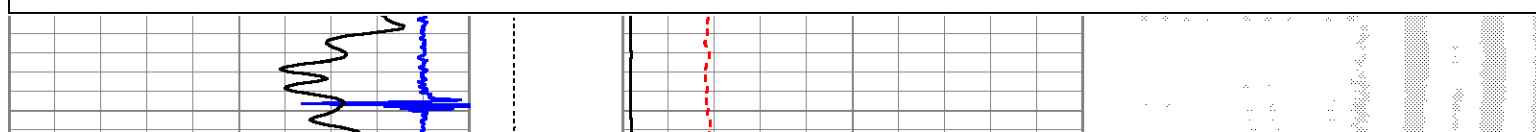
MAIN PASS

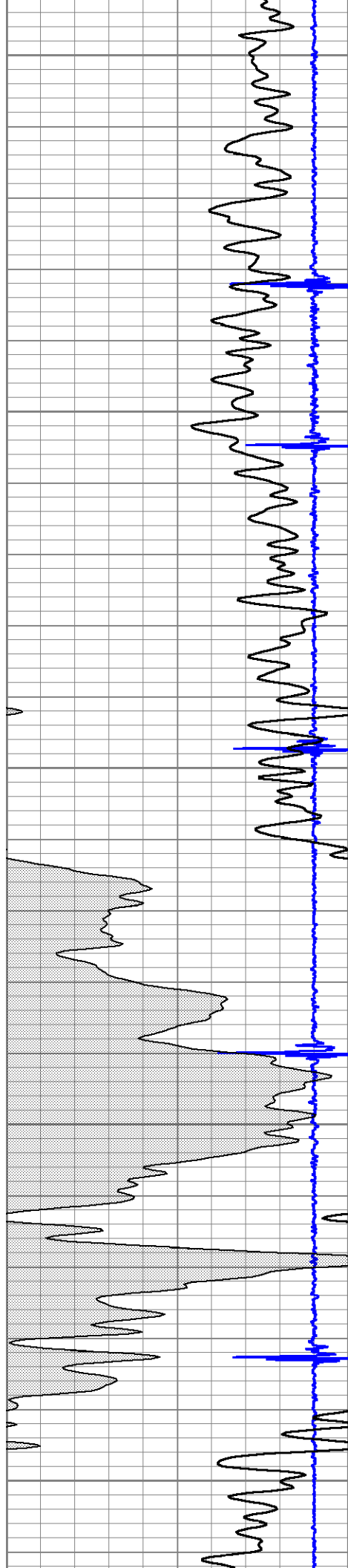


REPEAT PASS

Database File: aquugustus.db
 Dataset Pathname: pass2
 Presentation Format: cbl_dr
 Dataset Creation: Tue Oct 28 09:05:53 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	10	200	Variable Density	1200
0	Gamma Ray (GAPI)	200	0	(lb)2000	0	Amplitude (mV)	100		





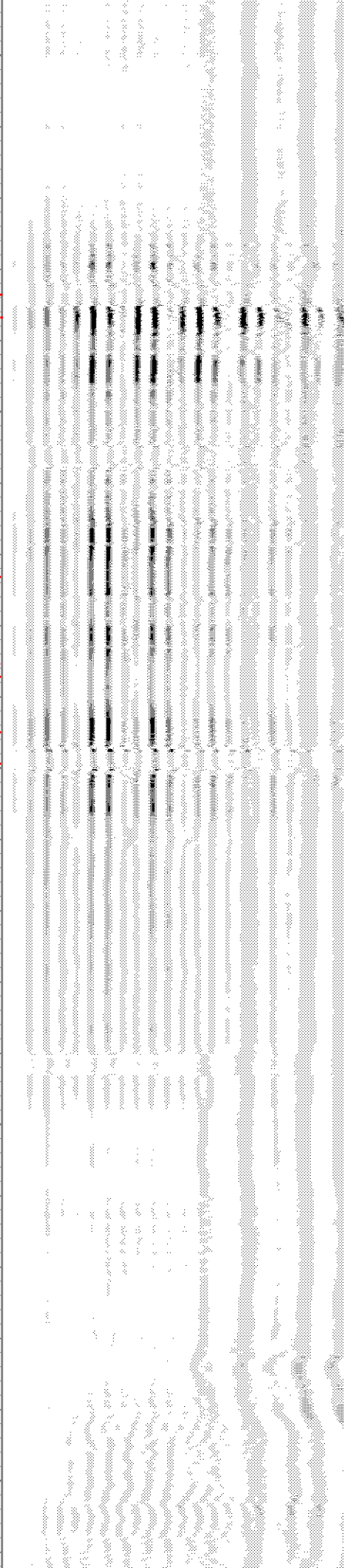
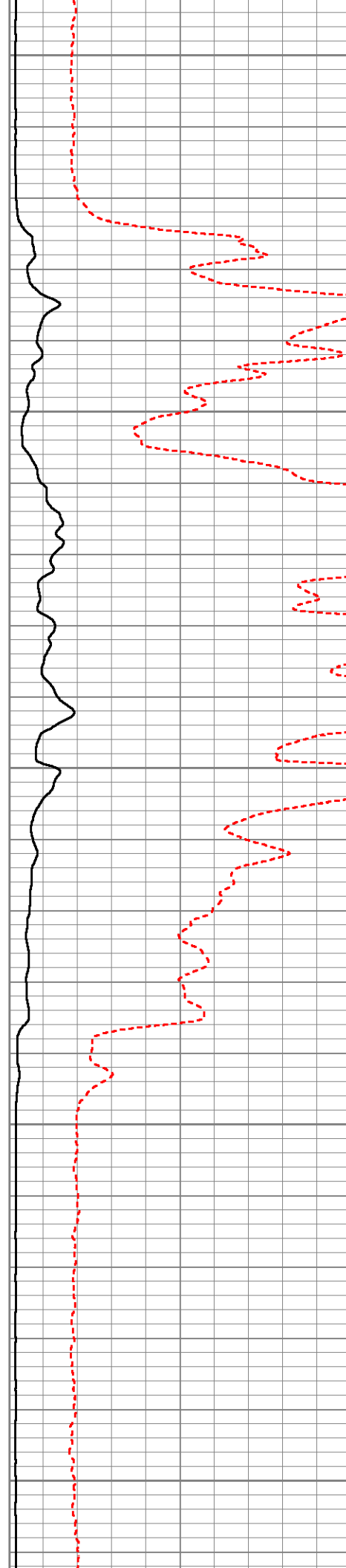
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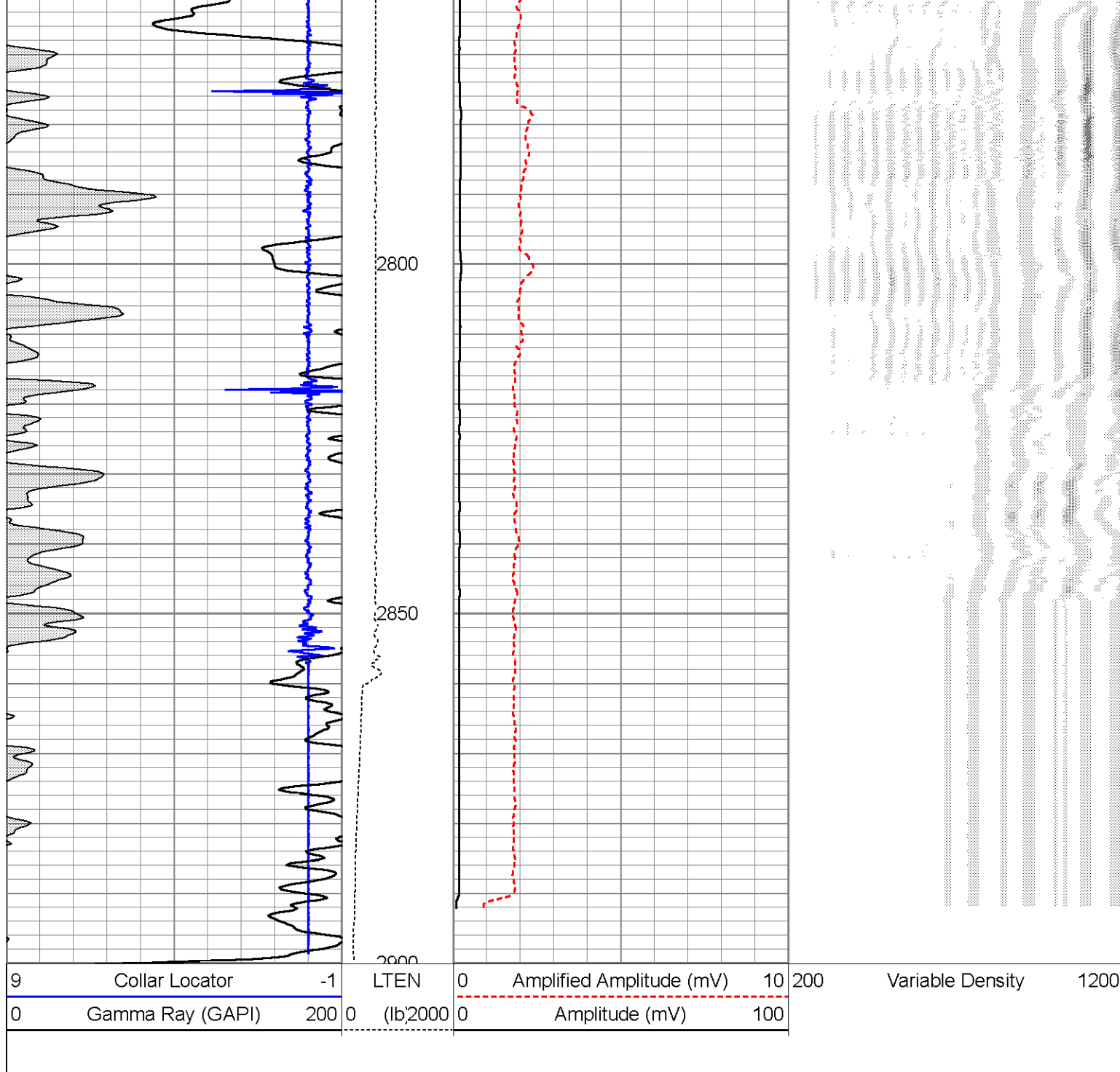
2600

2650

2700

2750





REPEAT PASS

Calibration Report

Database File: aquustus.db
 Dataset Pathname: pass3
 Dataset Creation: Tue Oct 28 09:16:23 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number: 030606
 Tool Model: Probe275
 Performed: Mon Feb 03 13:47:27 2014

Calibrator Value: 1.0 GAPI

Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	050215		
Tool Model:	Probe		
Performed:	Mon May 12 14:25:31 2014		
Depth:	2648.69	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0	0	V
Reading in Free Pipe:	1.13401	0.740796	V
Gain:	70.8073	109.607	
Offset:	0.9	0	