



**NABORS**

**COMPLETION  
& PRODUCTION  
SERVICES CO.**

Gamma Ray,  
Cement Bond,  
Variable Density,  
CCL

Company Noble Energy		Company Noble Energy	
Well Larson 1	Well Larson 1		
Field Wattenberg	Field Wattenberg		
County Weld	County Weld		
State Colo	State Colo		
Location: API #: 0512312989		Other Services	
NE/NE			
SEC 32 TWP 6N RGE 64W		Elevation	
Permanent Datum	Ground Level	Elevation	4651
Log Measured From	Kelley Bushing	K.B.	4664
Drilling Measured From	Kelley Bushing	D.F.	
		G.L.	4651
Date 1-22-14			
Run Number one			
Depth Driller 7011			
Depth Logger 1513			
Bottom Logged Interval 1512			
Top Log Interval surface			
Open Hole Size			
Type Fluid water			
Density / Viscosity			
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger on Bottom			
Equipment Number 703			
Location			
Recorded By Chuck Briggs			
Witnessed By Mr. Tony Mathias			
Borehole Record		Tubing Record	
Run Number	Bit	From	To
		Size	Weight
			From
			To
Casing Record	Size	Wgt/Ft	Top
Surface String	8 5/8	24#	surface
Prot. String			
Production String	4 1/2		surface
Liner			7001.5

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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.

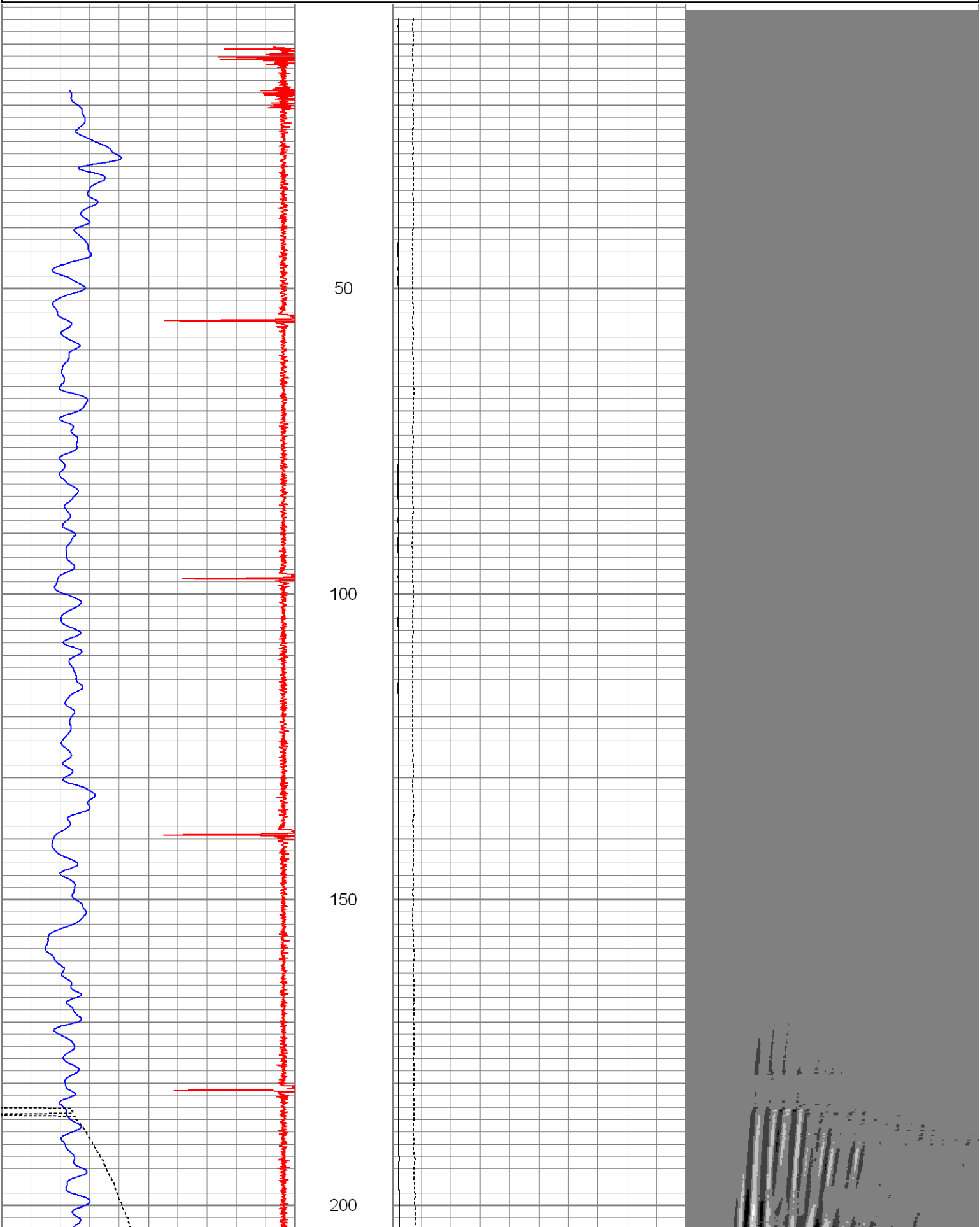
Comments

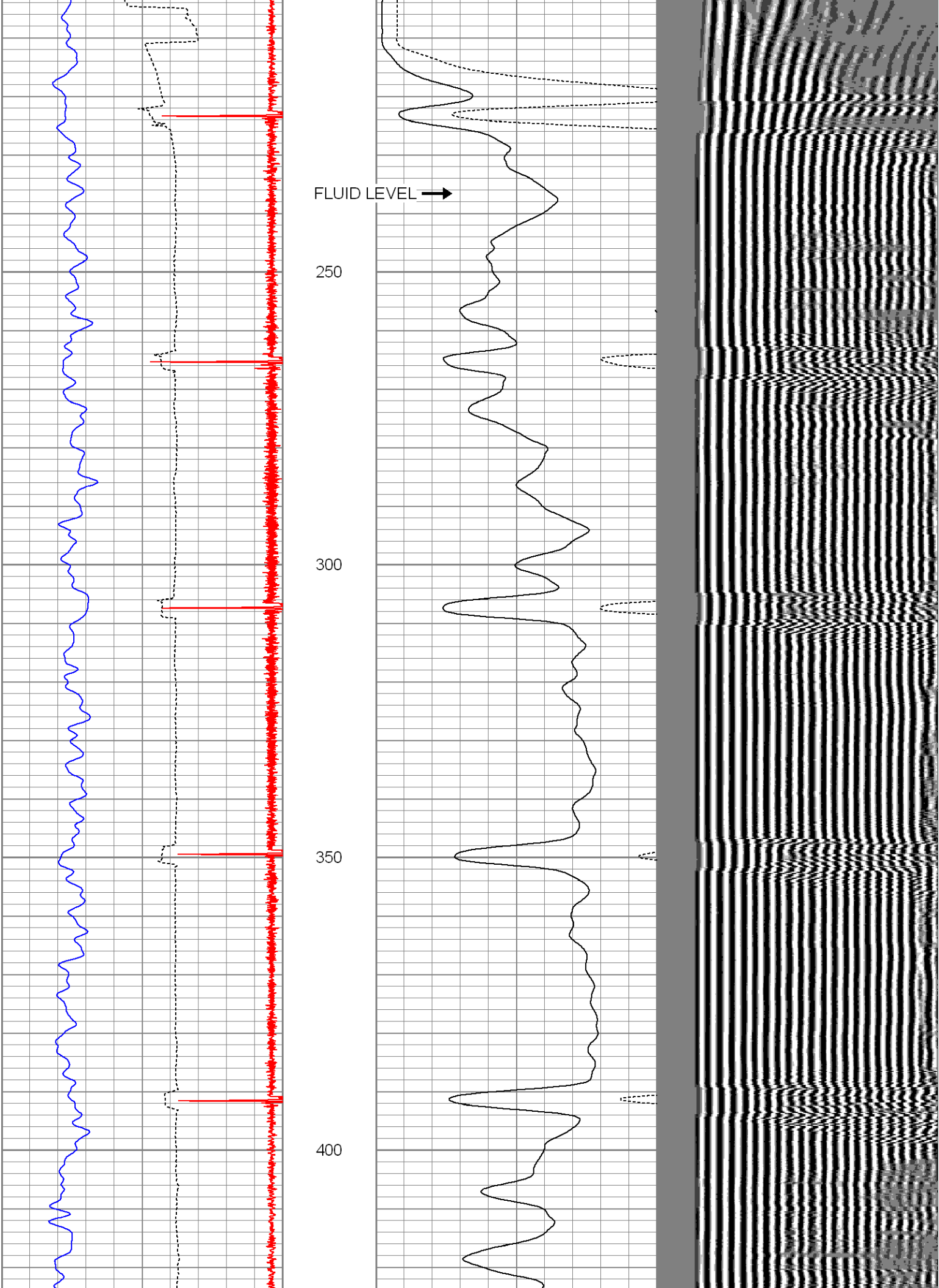
Annular fill

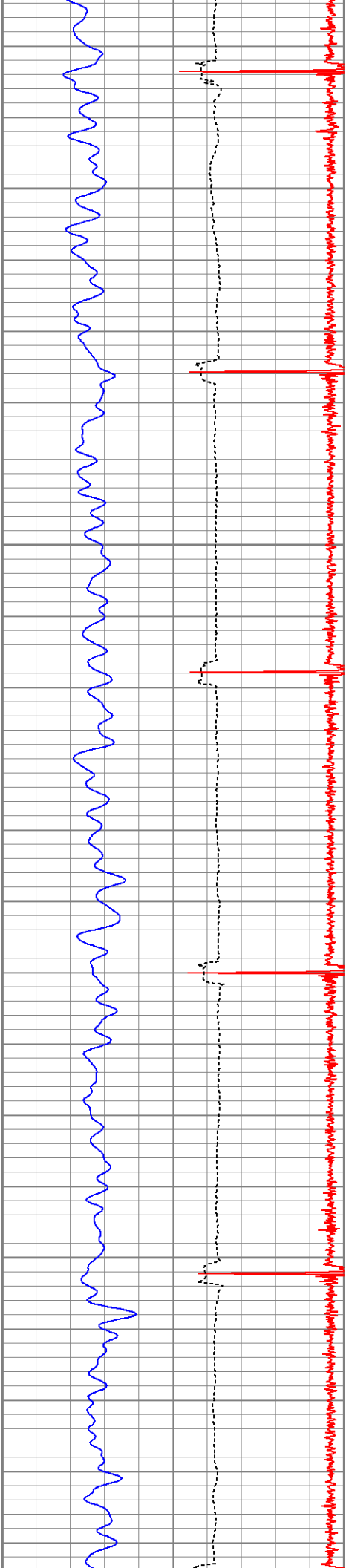
8	CCL	-0.3
0	Gamma Ray (GAPI)	200
340	TT3 (usec)	200

0	Amplified Amplitude (mV)	30
0	Amplitude (mV)	100

200 V D L 1200





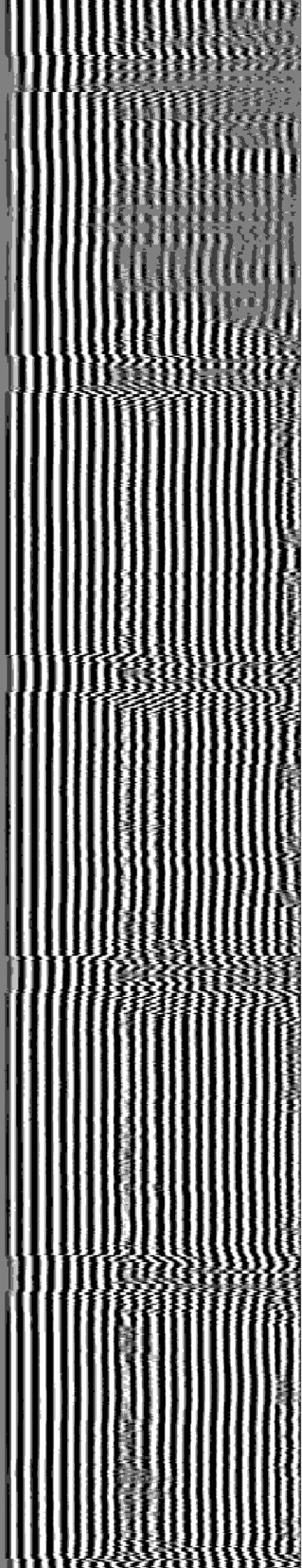
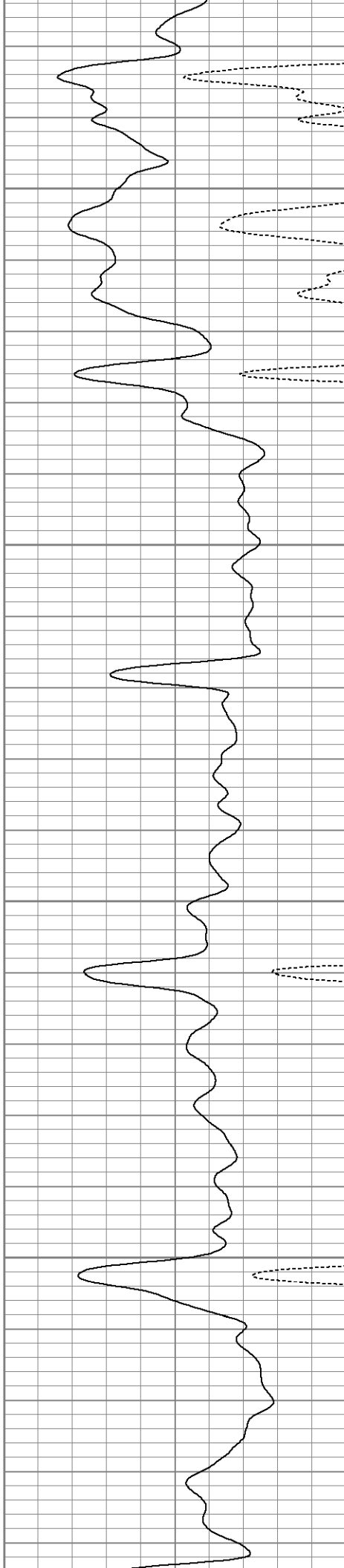


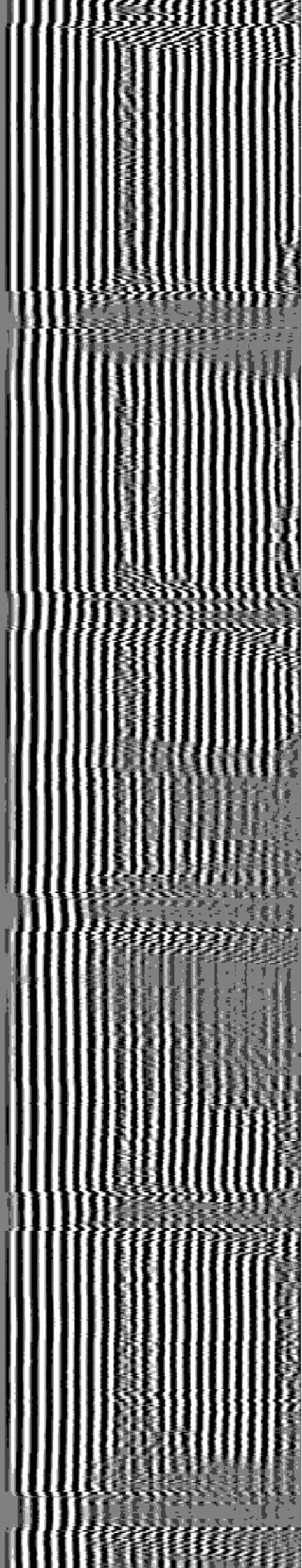
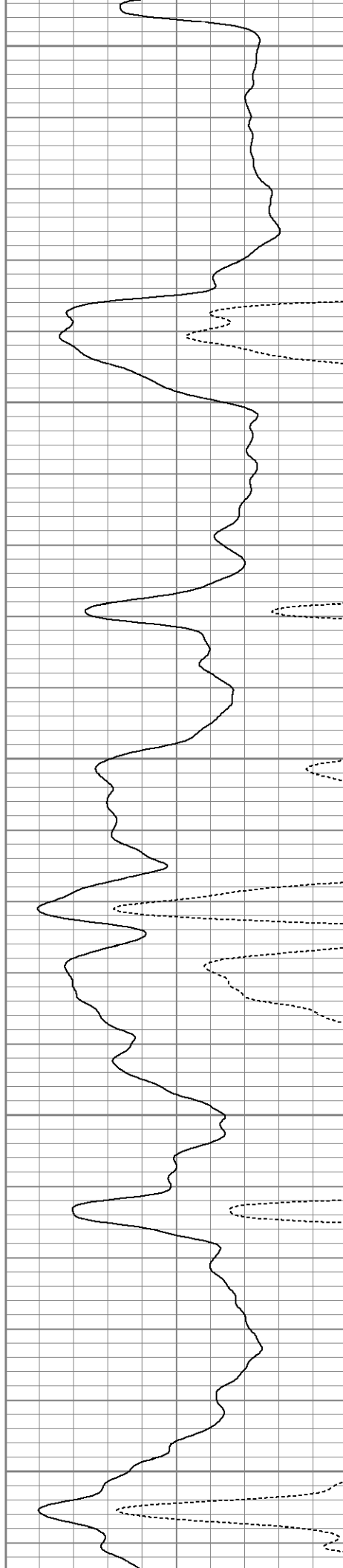
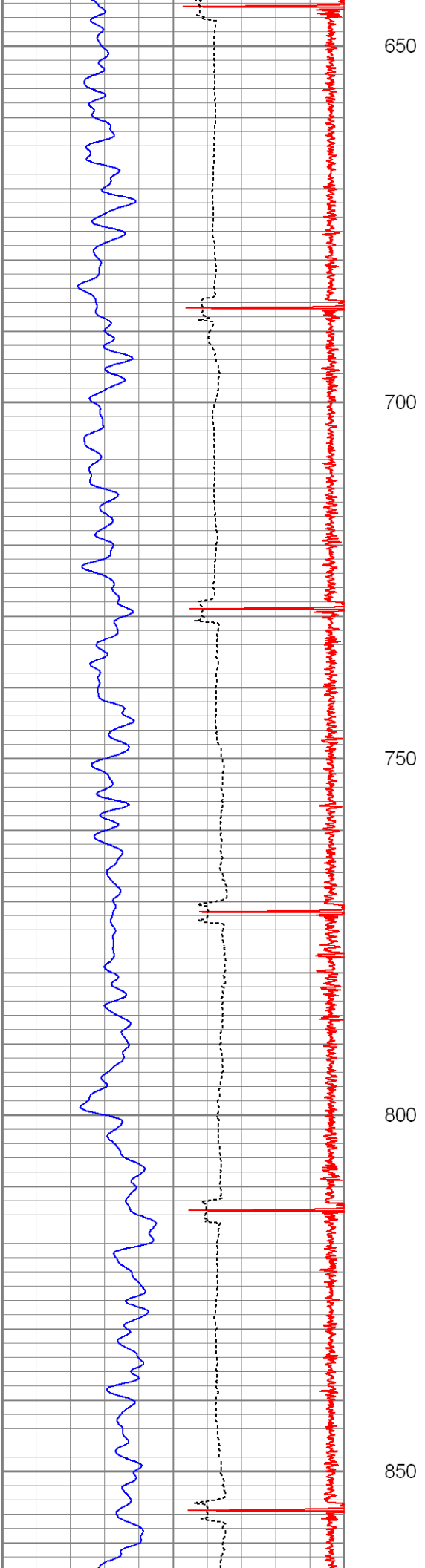
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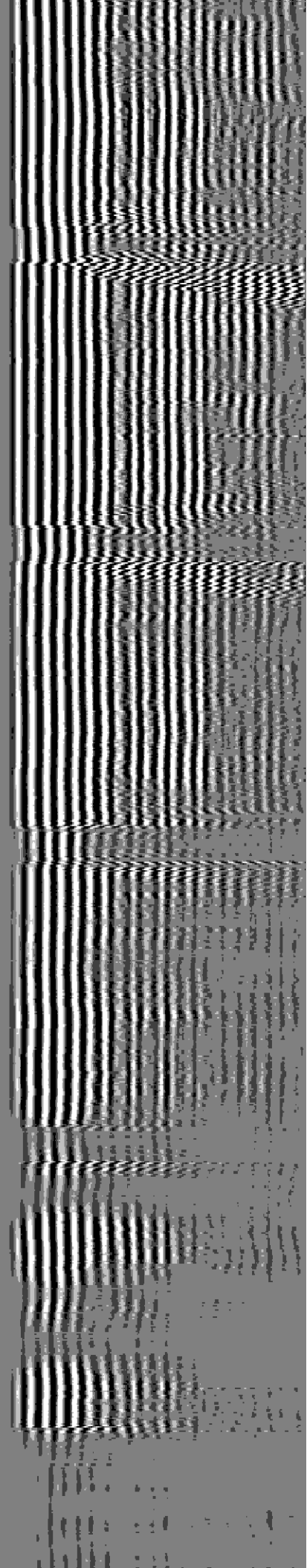
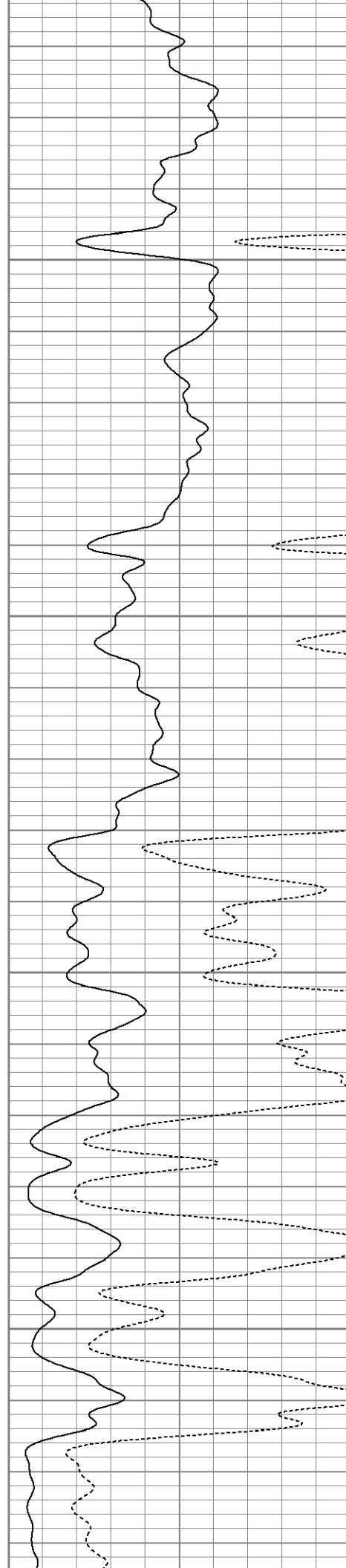
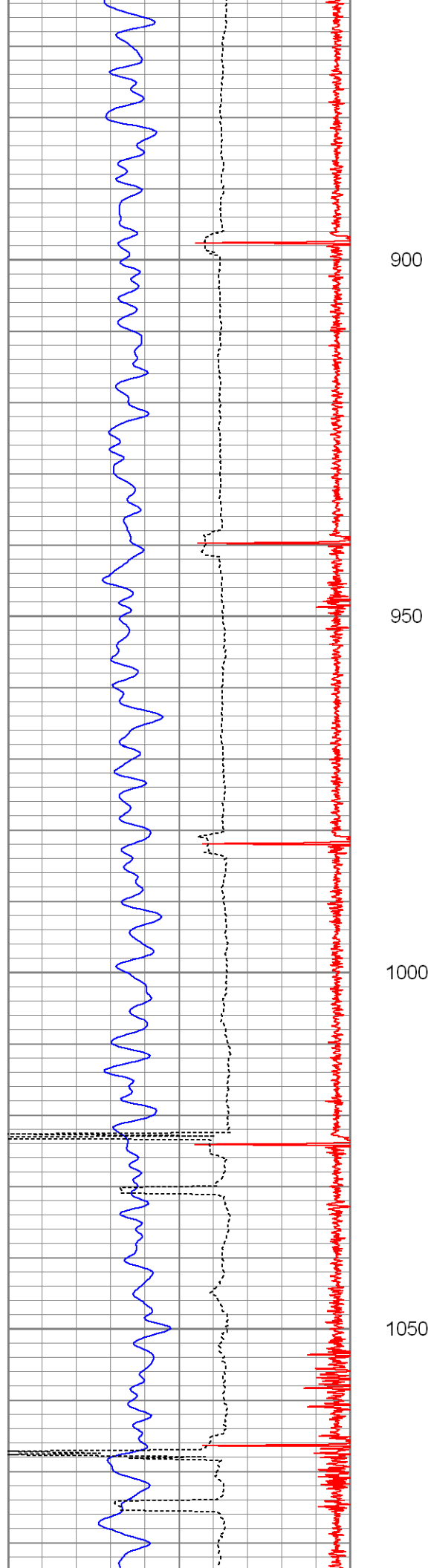
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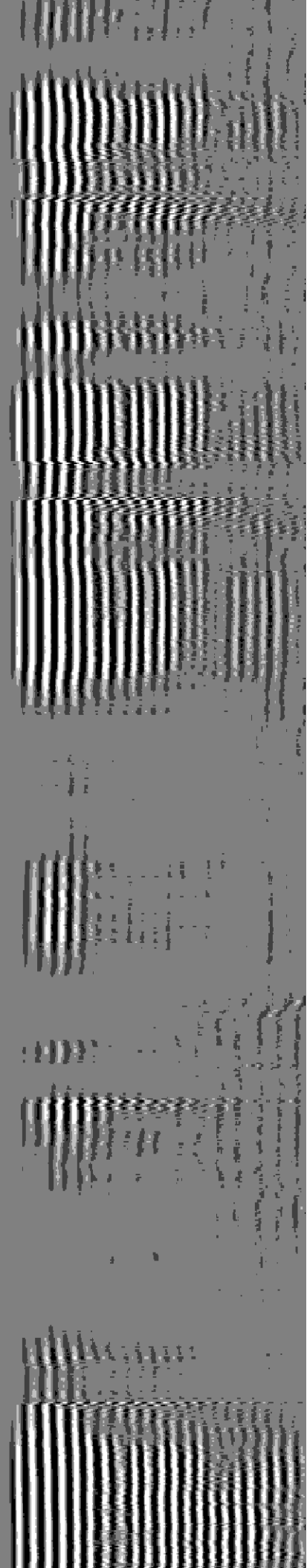
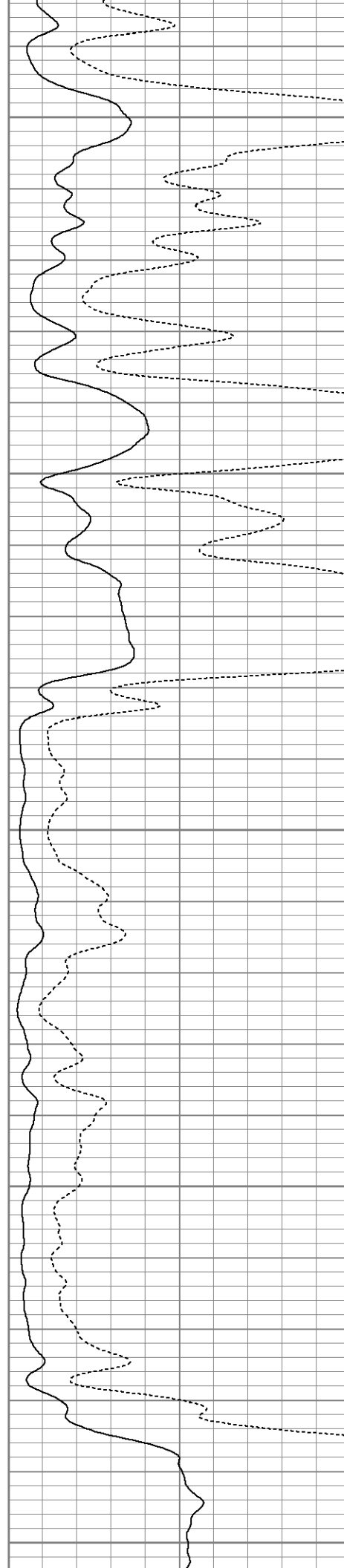
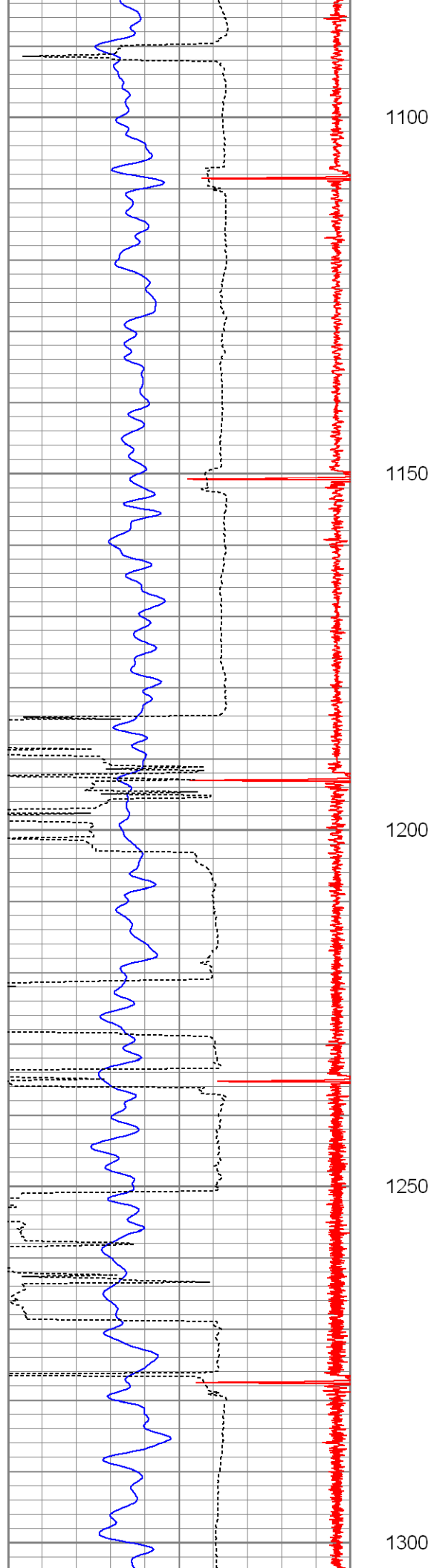
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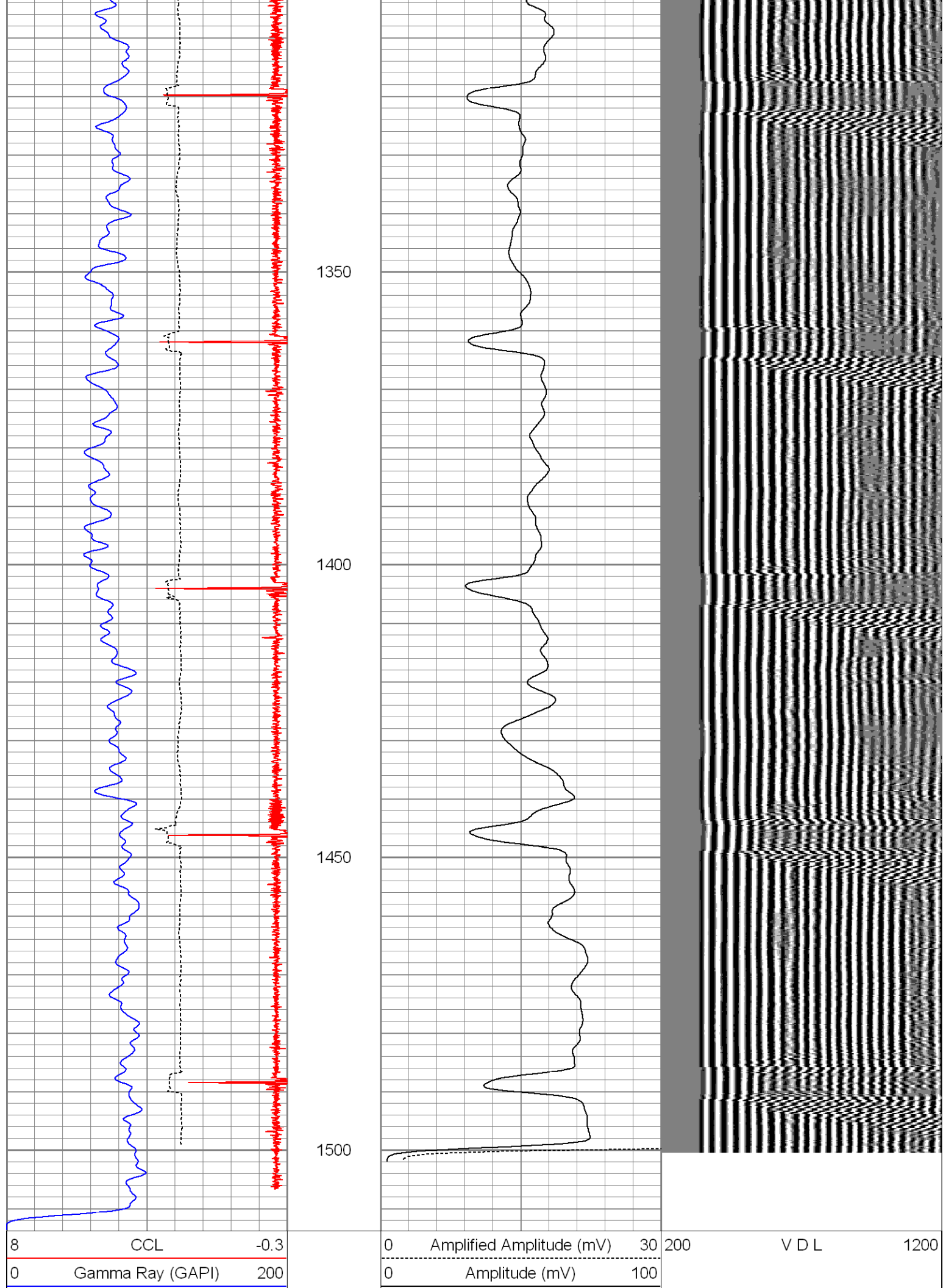














### Calibration Report

Database File: laron1cbl.db  
Dataset Pathname: pass9  
Dataset Creation: Wed Jan 22 15:04:38 2014 by Log Open-Cased 071220

#### Gamma Ray Calibration Report

Serial Number:	tit/temp		
Tool Model:	temp/tit		
Performed:	Tue Oct 26 11:14:53 2010		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.8000	GAPI/cps	

#### Cement Bond Log Calibration Report

Serial Number:	TEKCO-01		
Tool Model:	TEKCO-1x2		
Performed:	Wed Jan 22 15:01:51 2014		
Depth:	1503.74	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.5	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.00720215	-0.00703125	V
Reading in Free Pipe:	0.59082	0.523608	V
Gain:	90	153.016	
Offset:	2.4598	1.07589	