



Radial Cement Bond  
Gamma Ray CCL  
Log

Company Conoco Phillips  
Well 35-34 1DH  
Field Reserve 3-65  
County Adams State Colorado

Location: API # : 0500110456  
Lat 39°45' 7" N  
Long 108° 37' 25.4"W  
Permanent Datum Ground Level Elevation N/A  
Log Measured From KB which is 26' AGL  
Drilling Measured From Kelly Bushing  
Other Services  
N/A  
Elevation  
K.B. 26'  
D.F. 26'  
G.L. 0

Company Conoco Phillips  
Well 35-34 1DH  
Field Reserve 3-65  
County Adams  
State Colorado

Date 6/20/2019

Run Number One  
Depth Driller N/A  
Depth Logger 2032'  
Bottom Logged Interval 2020'  
Top Log Interval Surface  
Open Hole Size N/A  
Type Fluid Water  
Density / Viscosity 8.33ppg  
Max. Recorded Temp. 116°  
Estimated Cement Top 800'  
Time Well Ready 16:00  
Time Logger on Bottom 16:45  
Equipment Number 200126  
Location Greeley, CO  
Recorded By Mike Nowicki  
Witnessed By Mr. Jason

Borehole Record  
Run Number Bit From To Size Weight From To

Casing Record  
Surface String Size 9.625" Wgt/Ft 36# Top Surface Bottom 2105'  
Prot. String  
Production String  
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

Radial Cement Bond Log run to a depth from 2030'.  
Main pass run from 2030' to surface  
Repeat pass run from 2030' tp 1530'



Main Pass

Database File conoccodh.db  
Dataset Pathname pass8  
Presentation Format scbl4\_5  
Dataset Creation Thu Jun 20 16:57:26 2019  
Charted by Depth in Feet scaled 1:240

409 Travel Time (usec) 309  
0 Gamma Ray (GAPI) 200  
0 Line Tension (lb) 4000

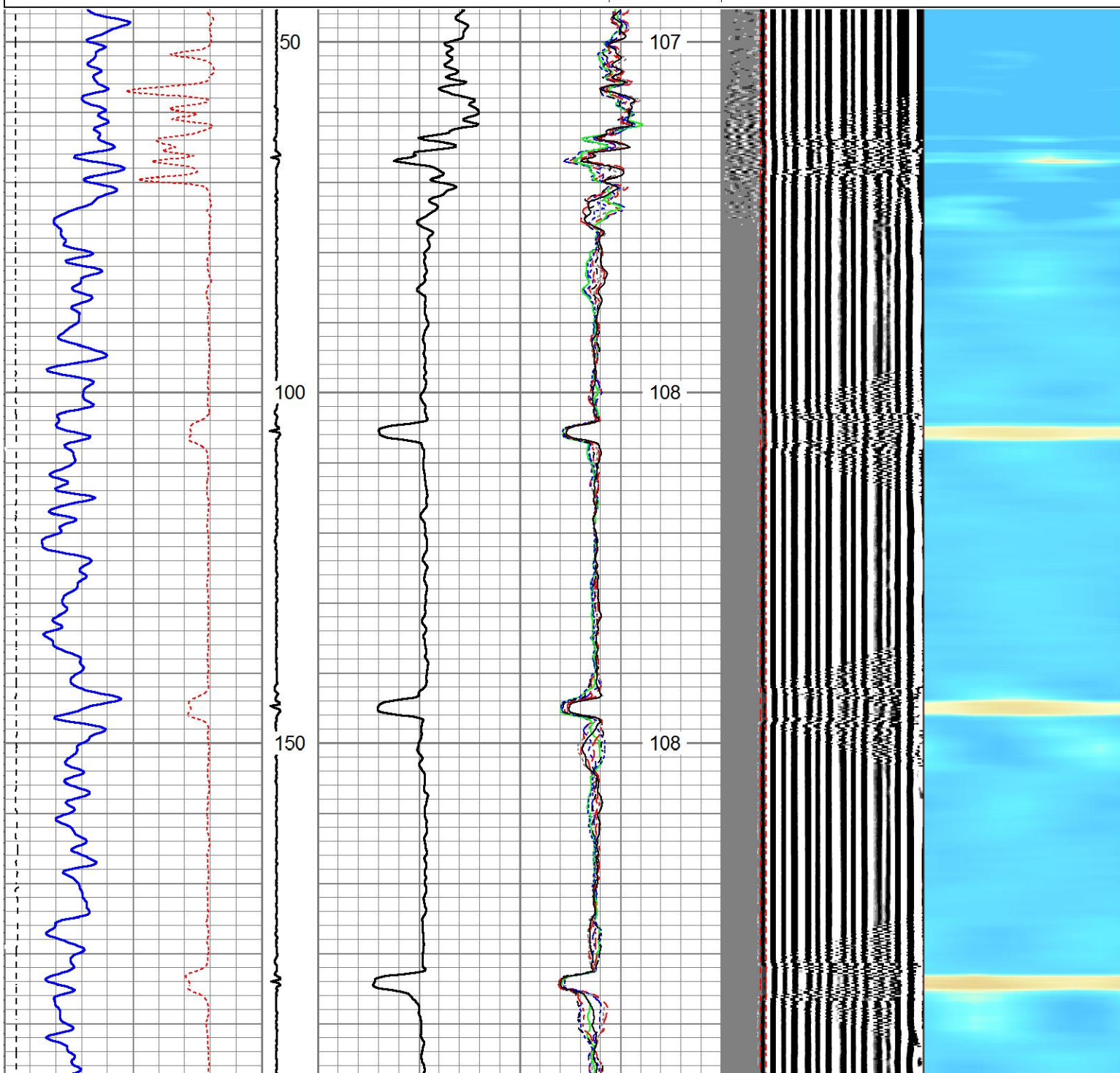
CCL

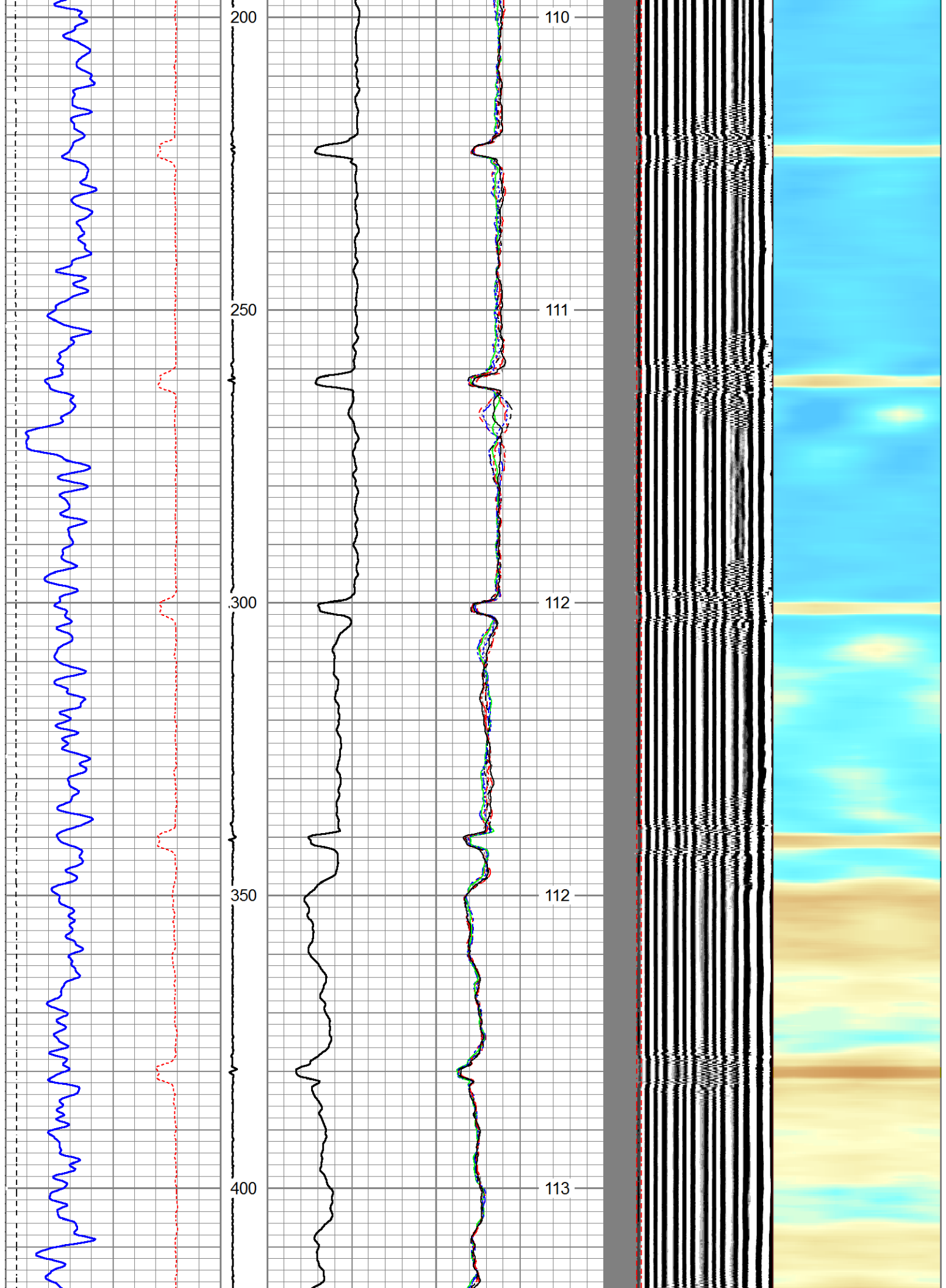
0	Amplitude (mV)	100	-5	AMPS8	150
	Amplified Amplitude		-5	AMPS7	150
0	(mV)	10	-5	AMPS6	150
0	ELTIM (sec)	100	-5	AMPS5	150
			-5	AMPS4	150
			-5	AMPS3	150
			-5	AMPS2	150
			-5	AMPS1	150

Temp  
(degF)

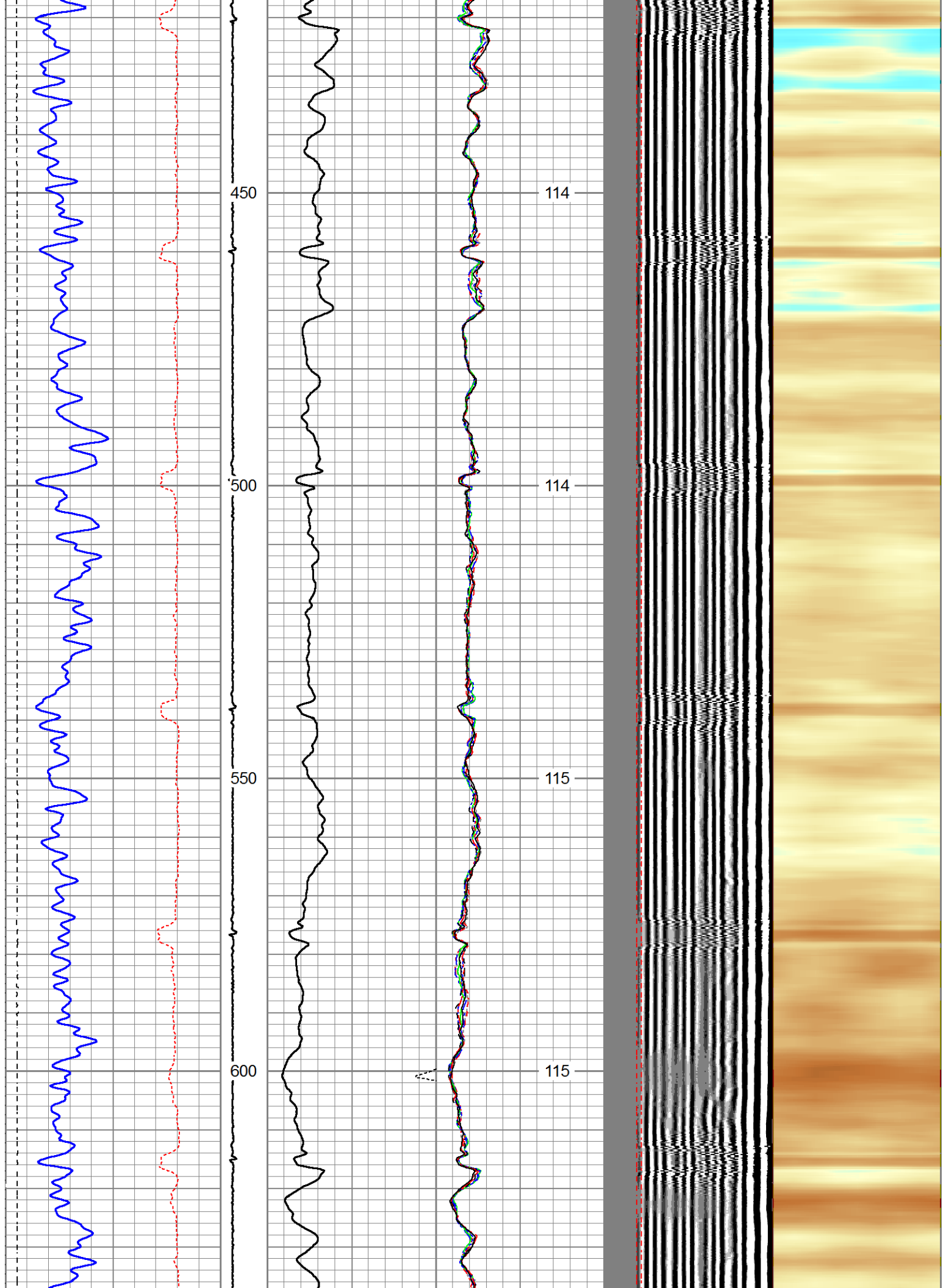
200 VDL (usec) 1200 Cement Map

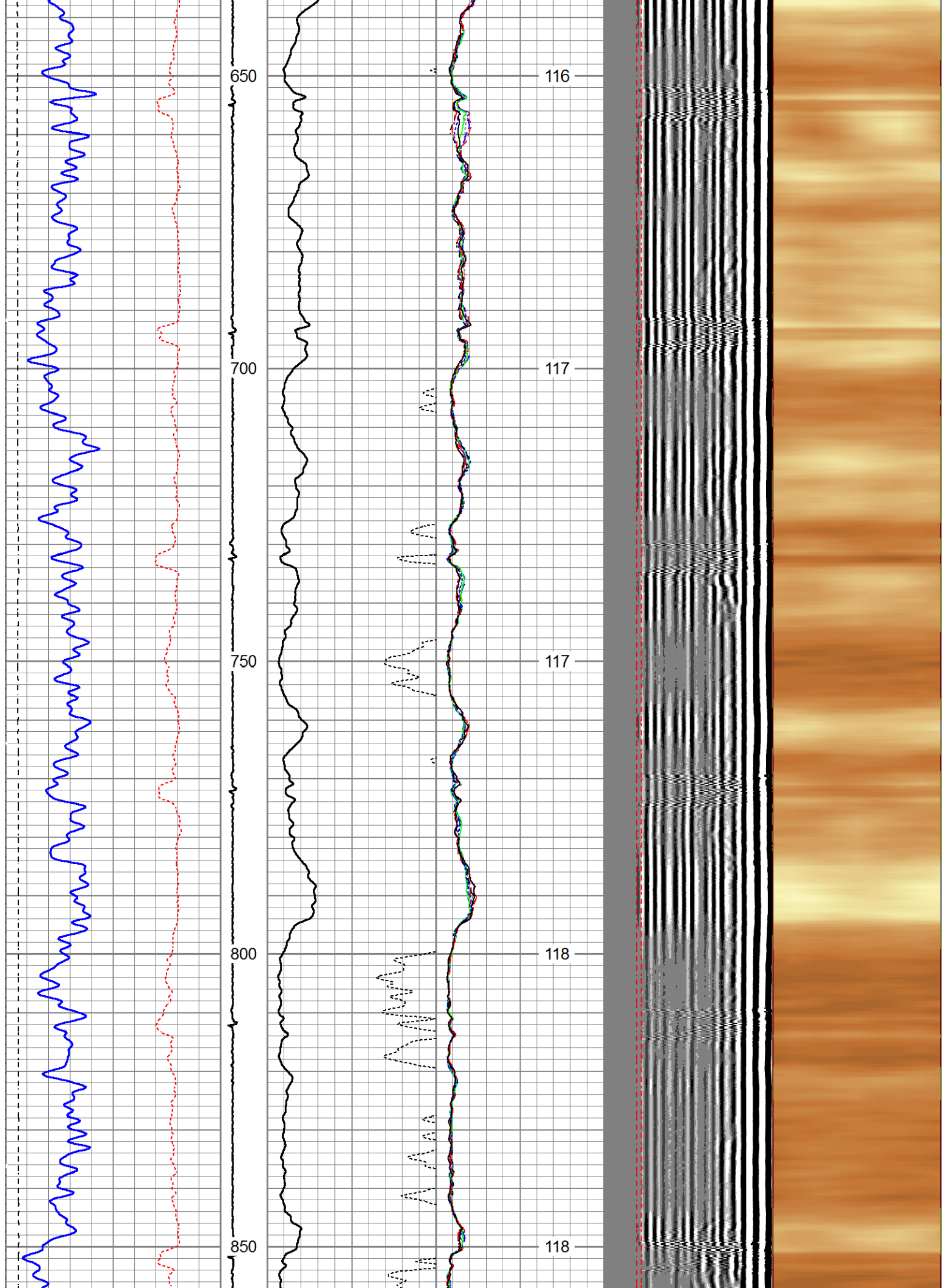
Free Pipe Gate



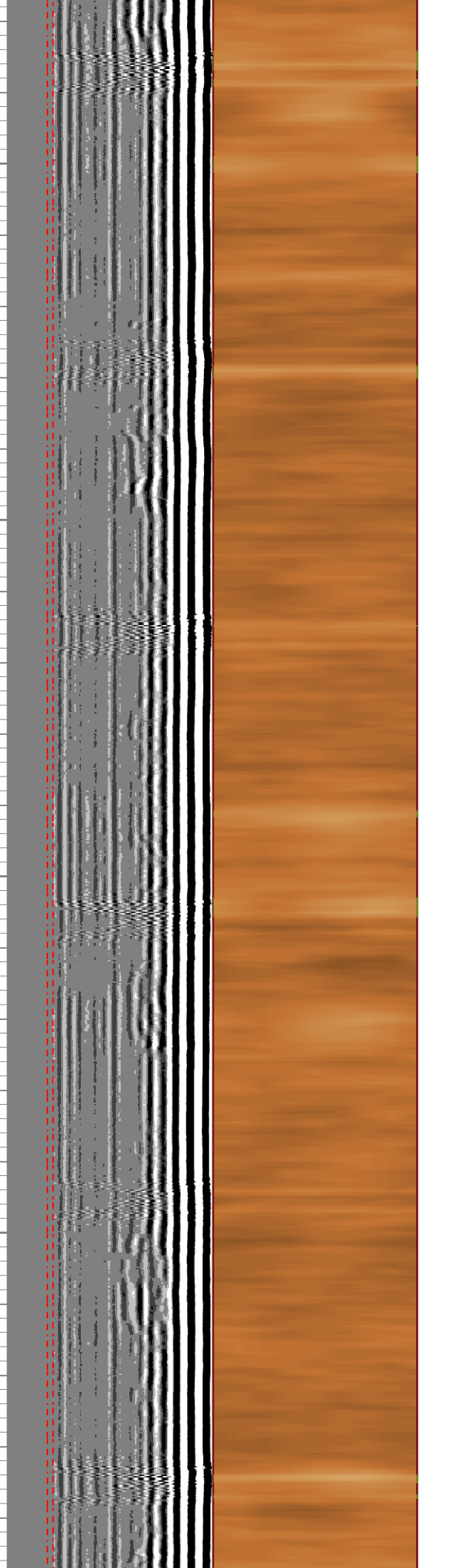
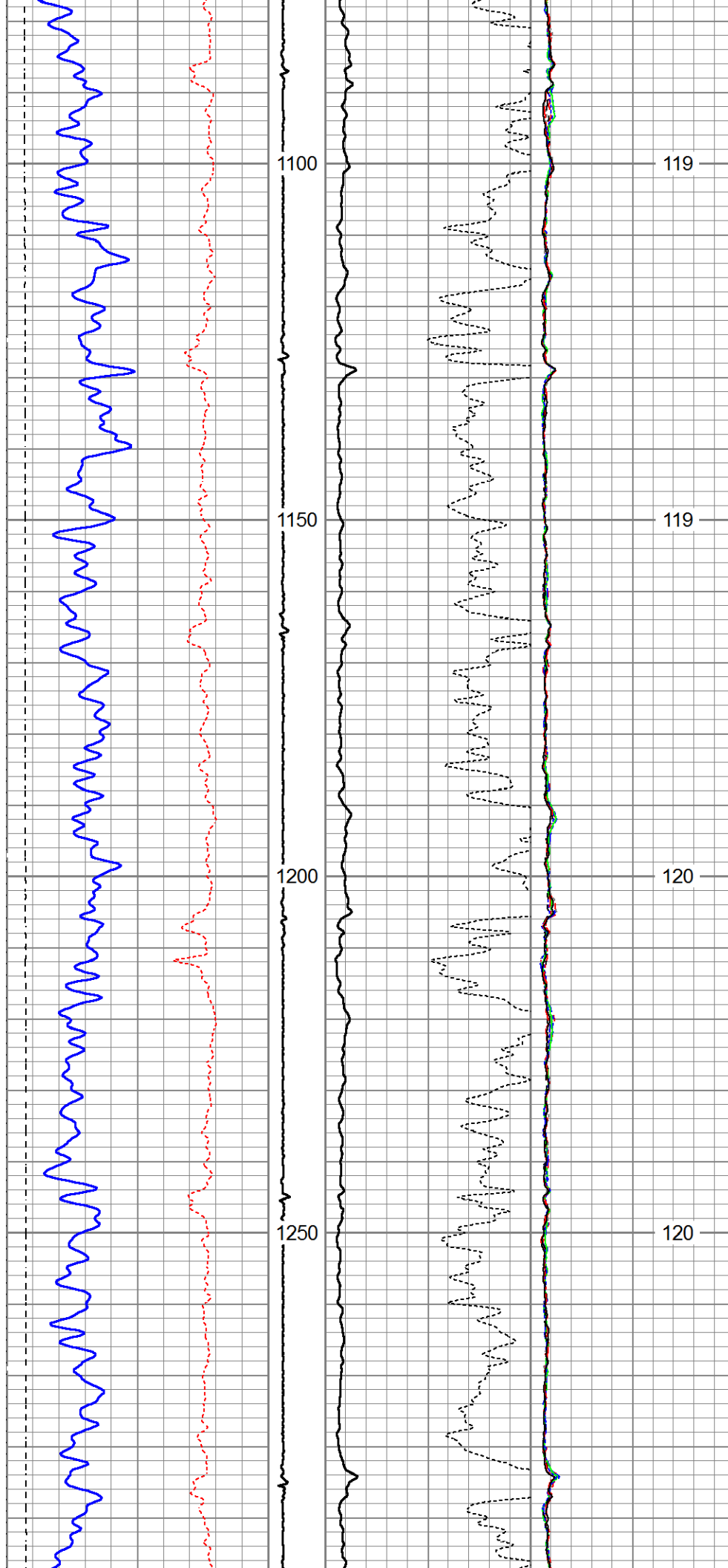


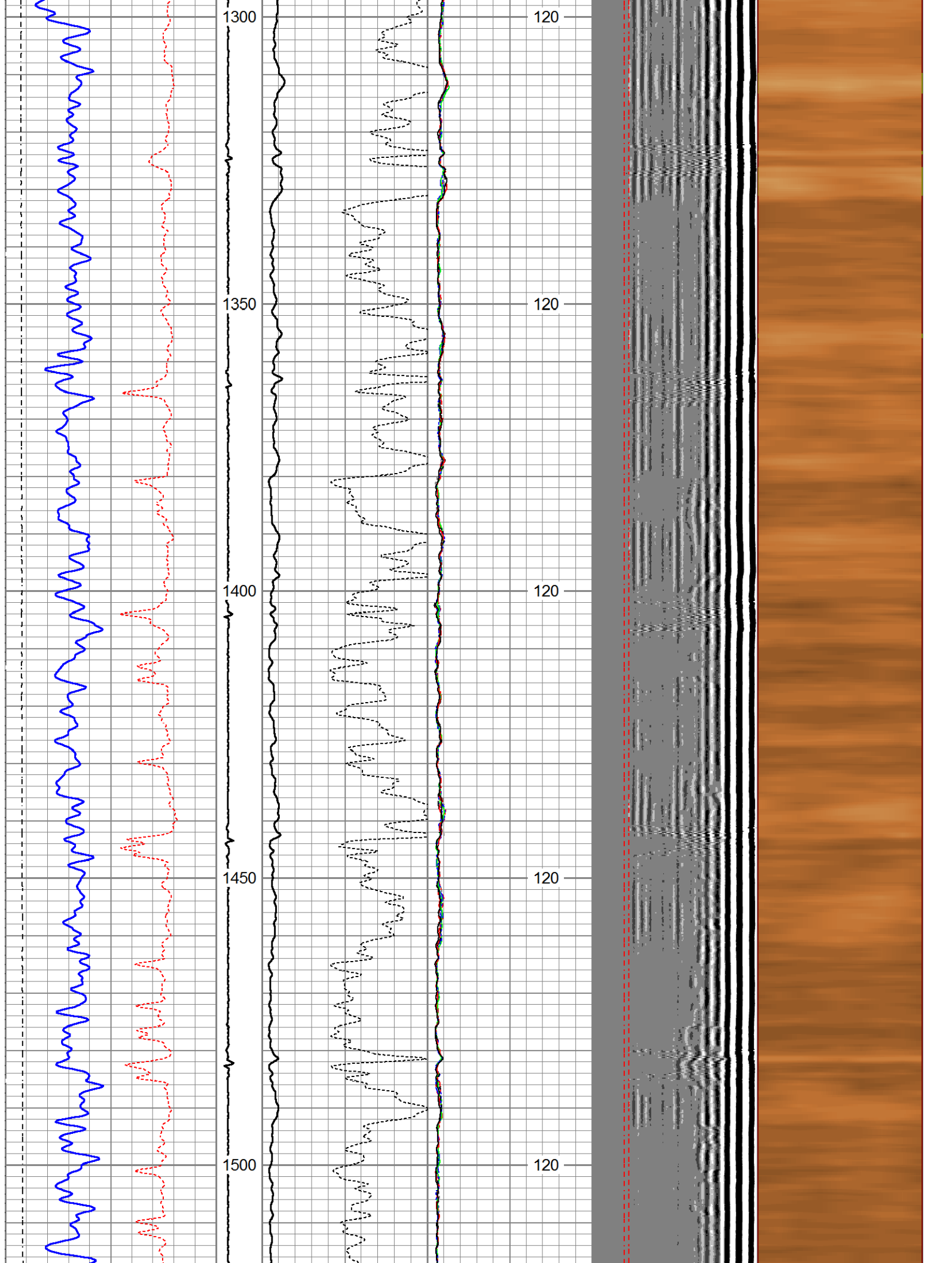




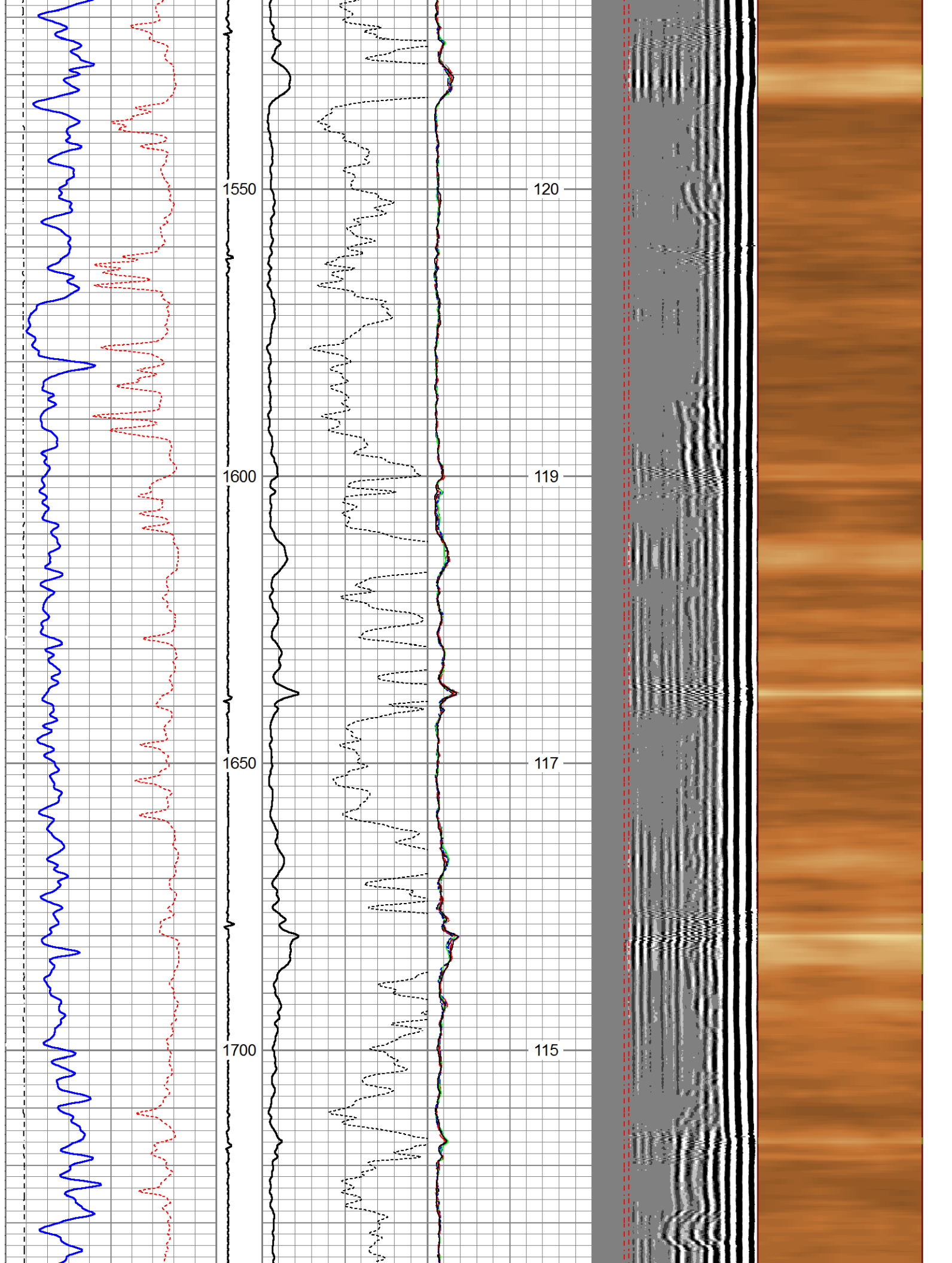


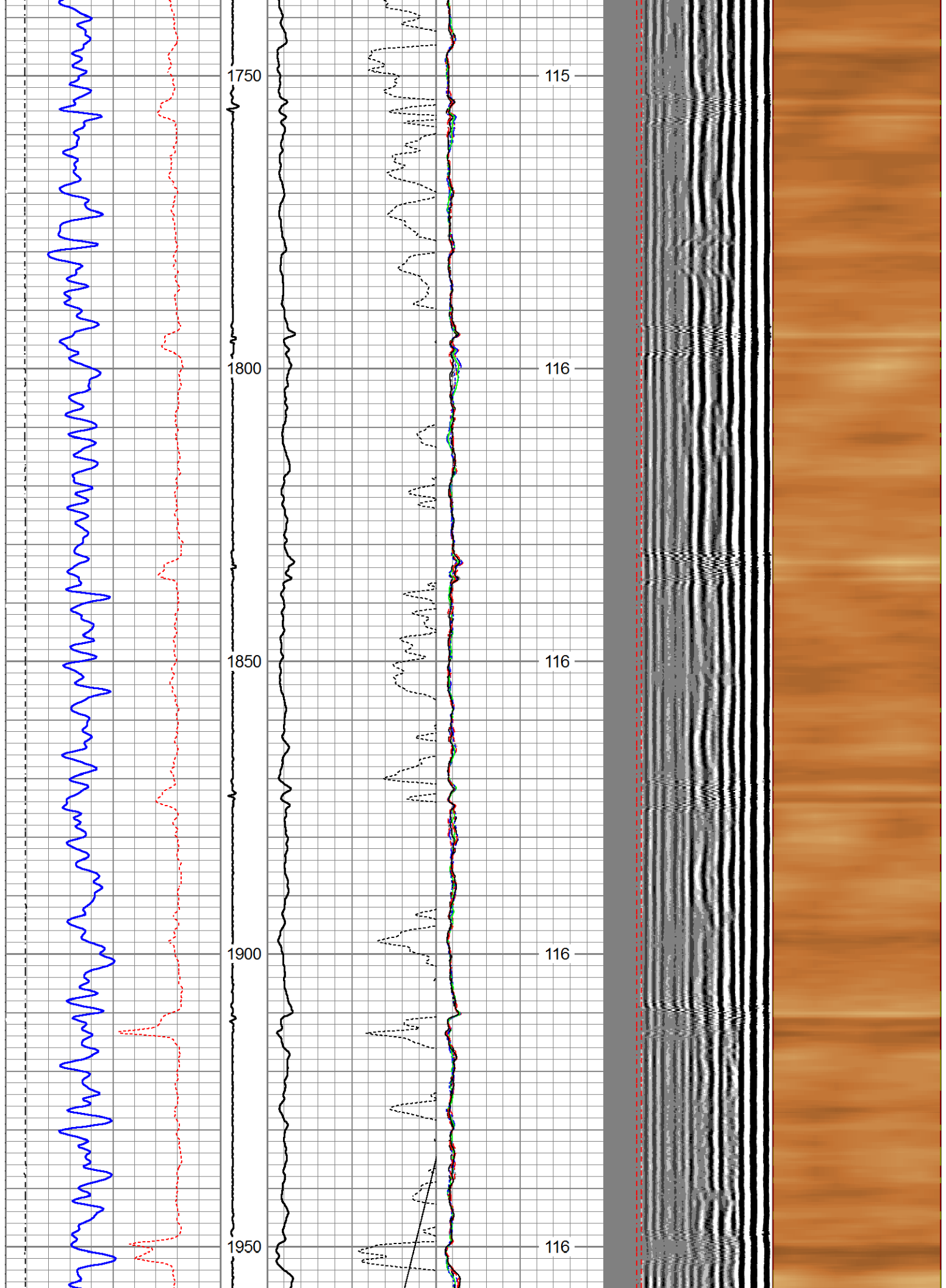


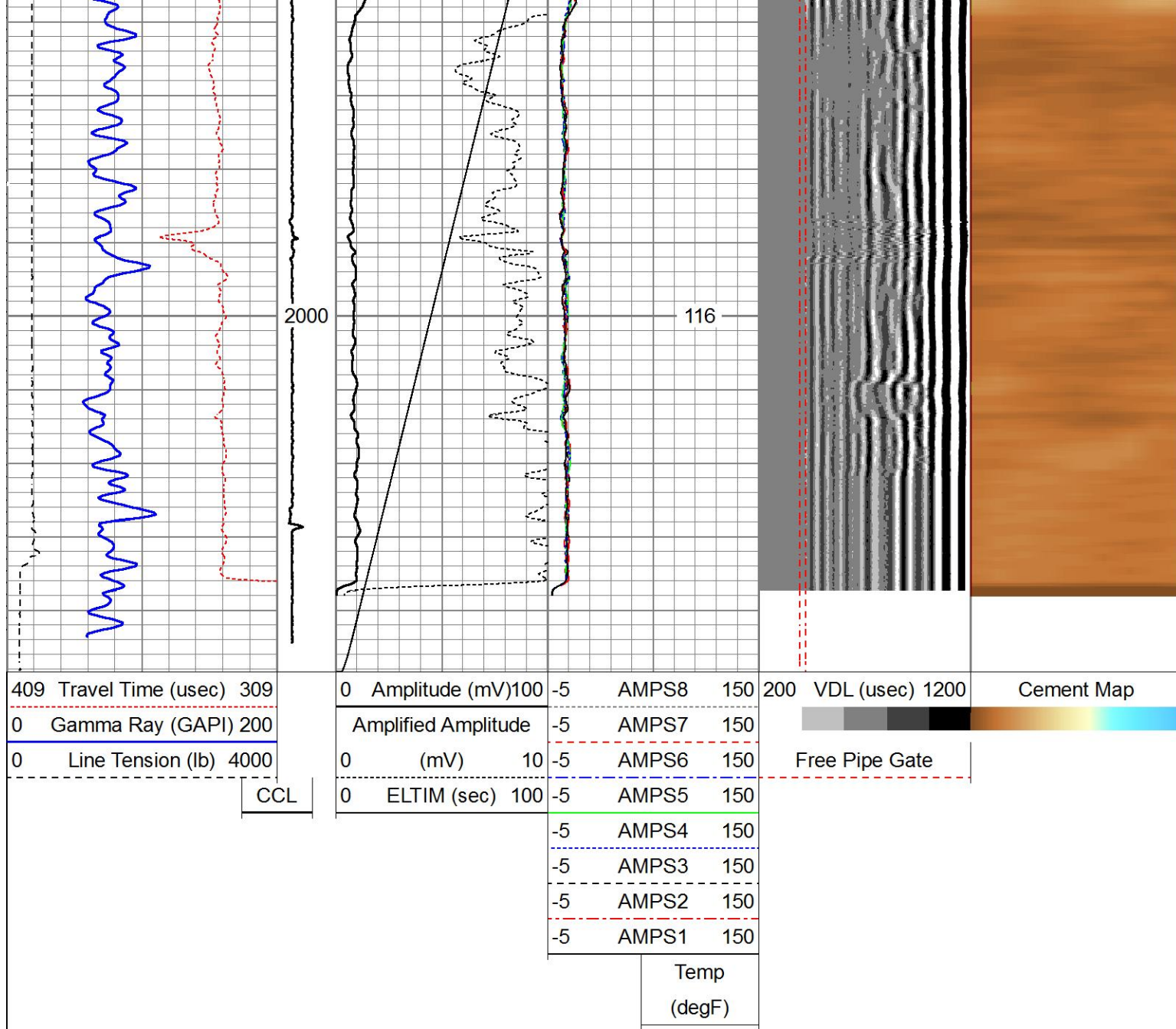








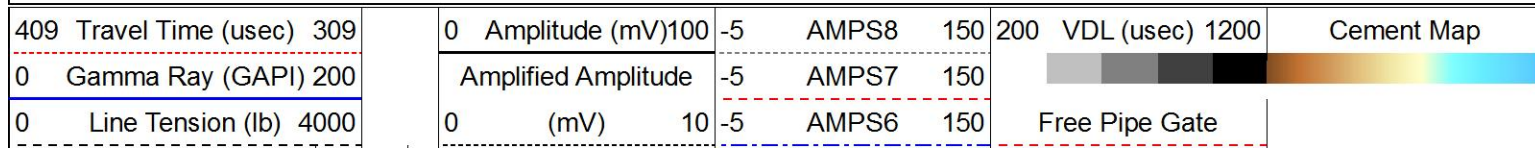




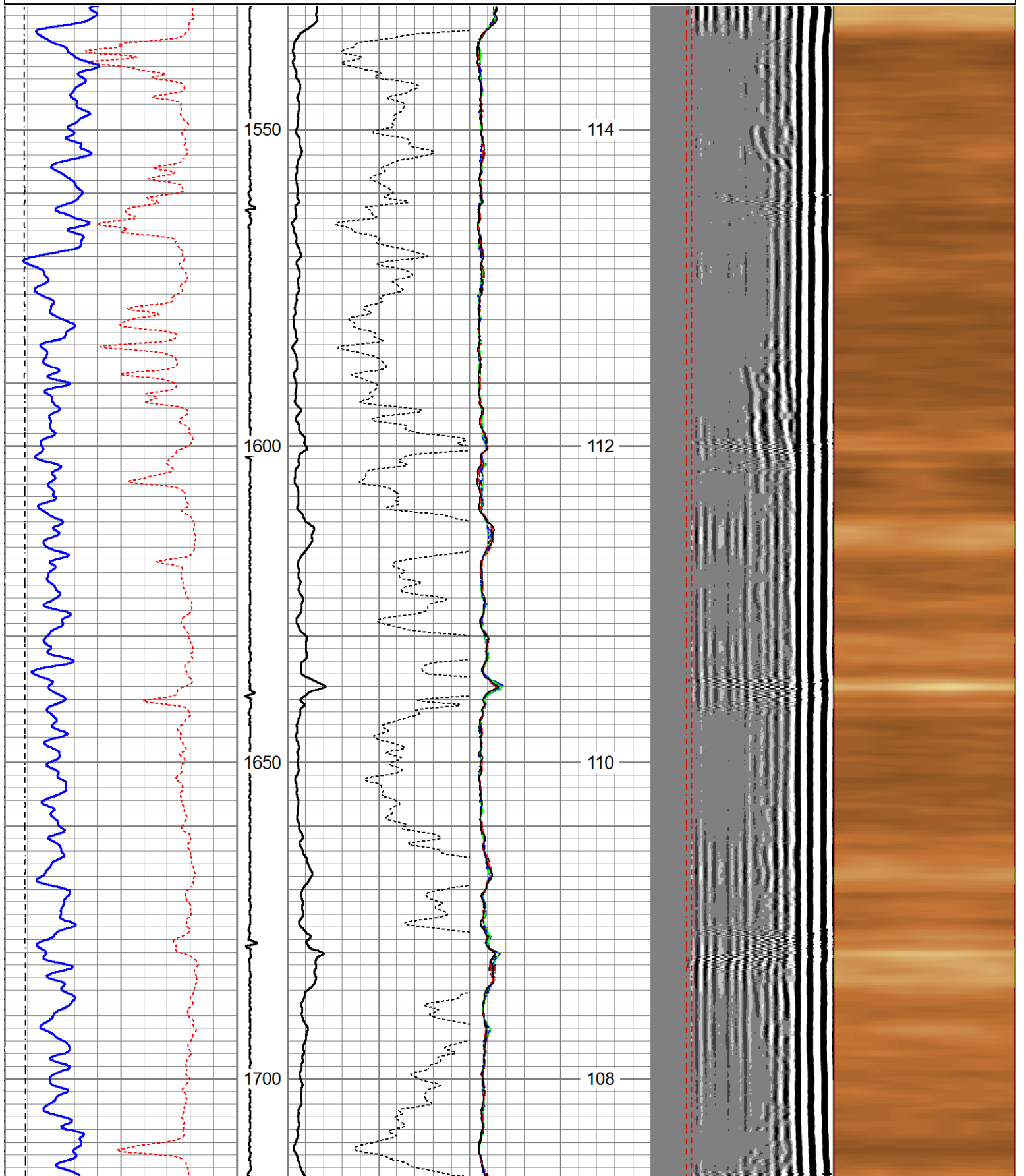
## Main Pass

## Repeat Pass

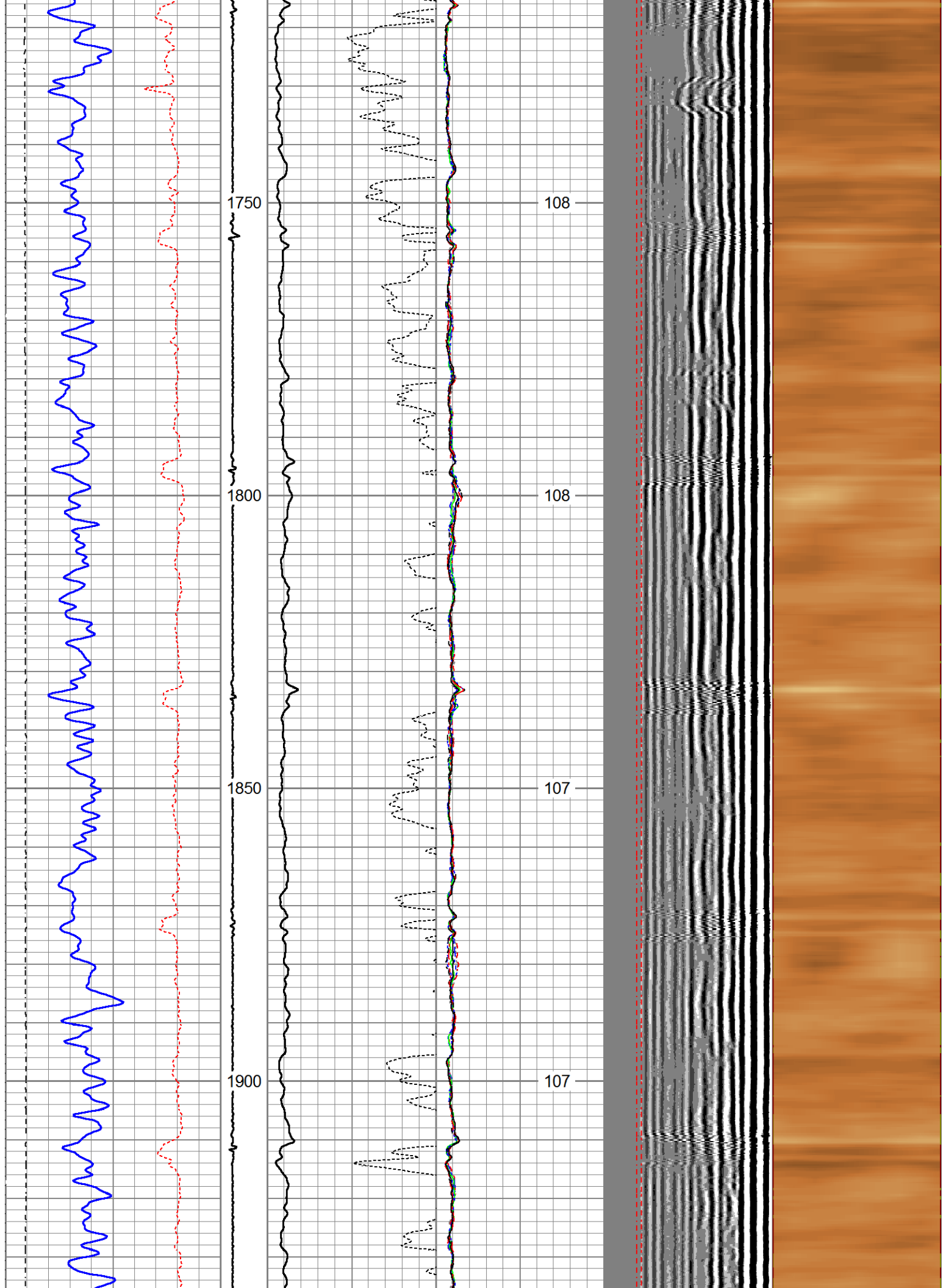
Database File	conoccodh.db
Dataset Pathname	pass6
Presentation Format	scbl4_5
Dataset Creation	Thu Jun 20 16:47:03 2019
Charted by	Depth in Feet scaled 1:240

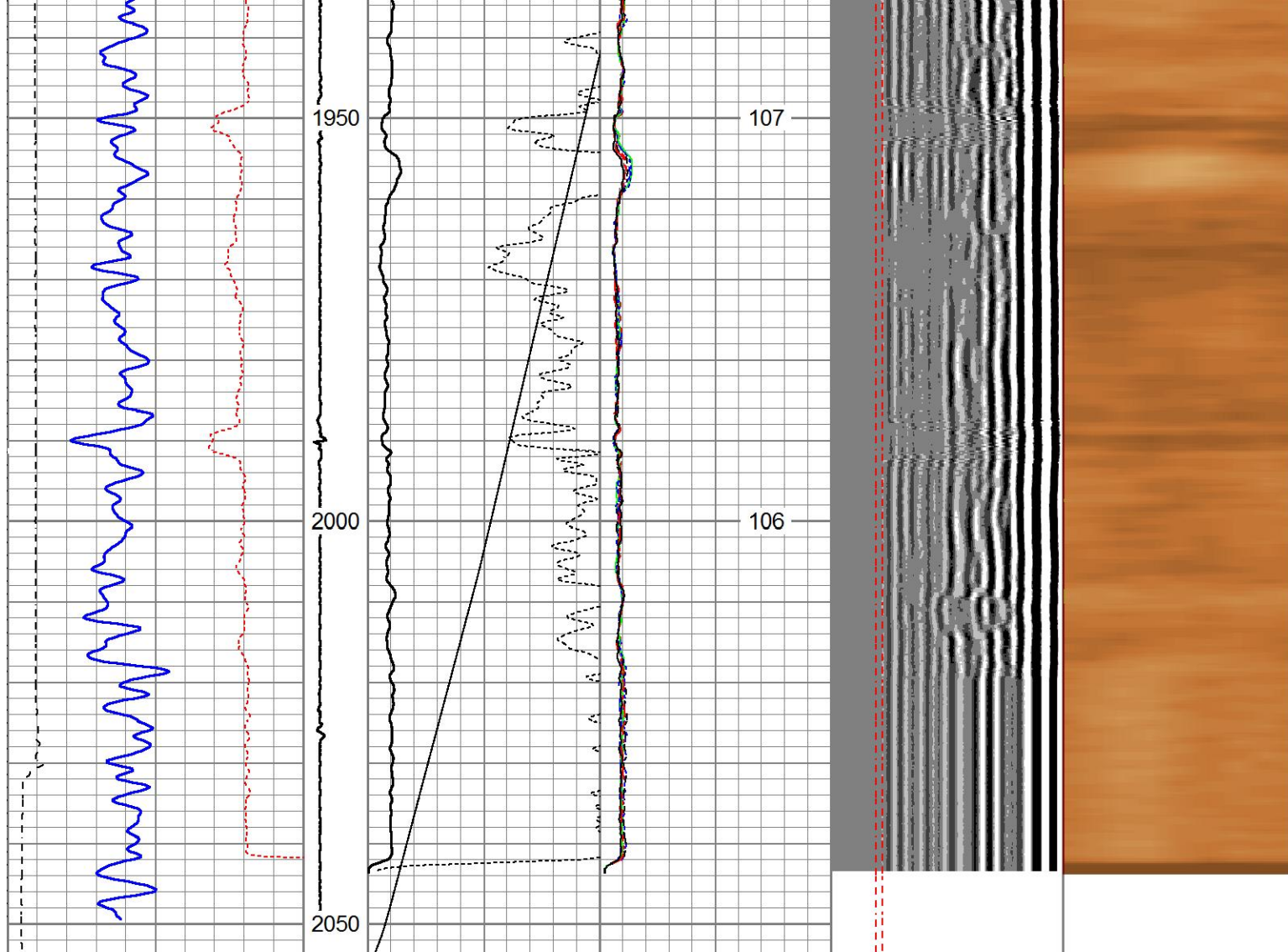


CCL	0	ELTIM (sec)	100	-5	AMPS5	150
				-5	AMPS4	150
				-5	AMPS3	150
				-5	AMPS2	150
				-5	AMPS1	150
					Temp	(degF)







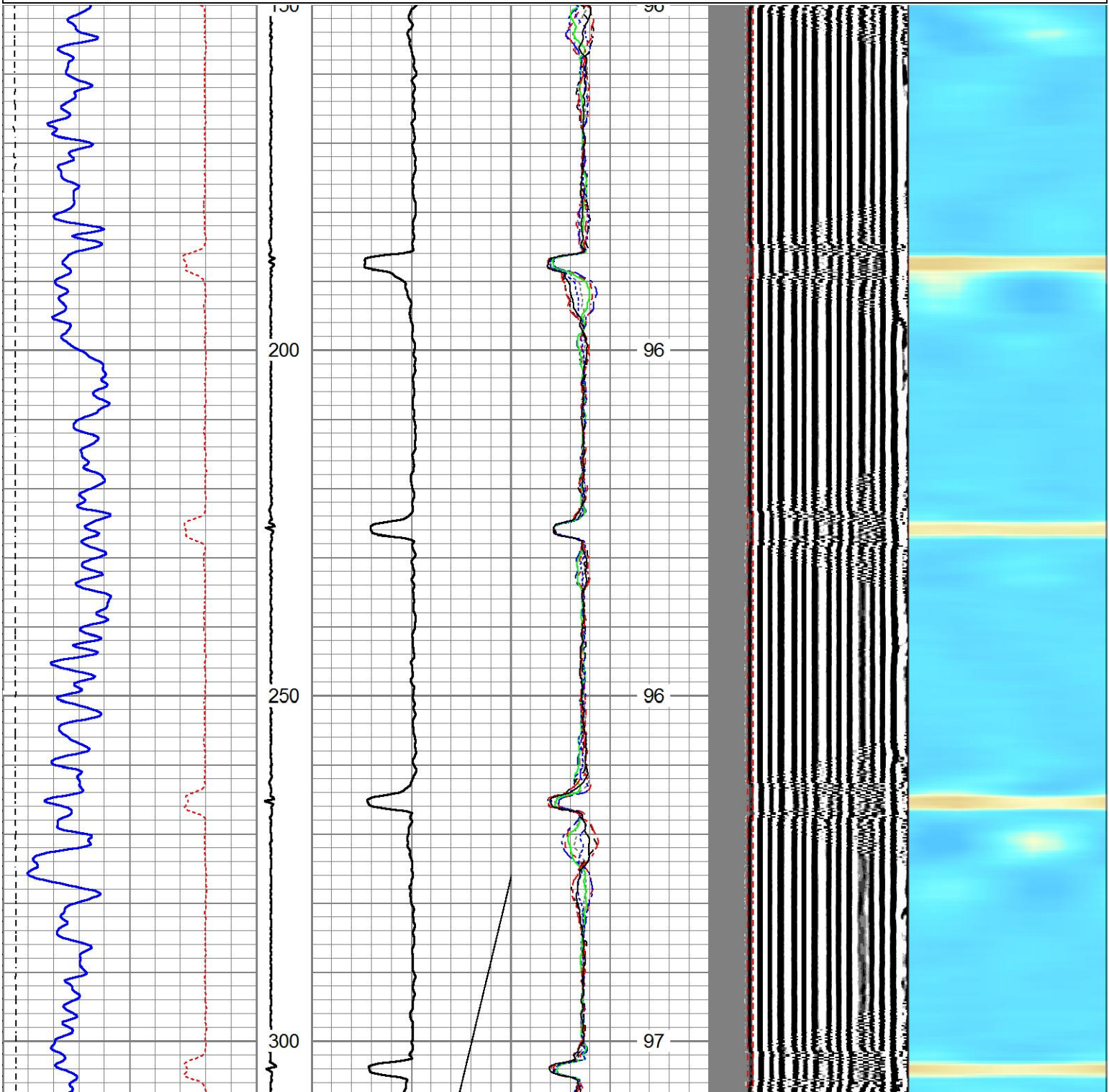


409	Travel Time (usec)	309	0	Amplitude (mV)	100	-5	AMPS8	150	200	VDL (usec)	1200	Cement Map
0	Gamma Ray (GAPI)	200		Amplified Amplitude		-5	AMPS7	150				
0	Line Tension (lb)	4000	0	(mV)	10	-5	AMPS6	150				
			0	ELTIM (sec)	100	-5	AMPS5	150				
						-5	AMPS4	150				
						-5	AMPS3	150				
						-5	AMPS2	150				
						-5	AMPS1	150				
							Temp					
							(degF)					

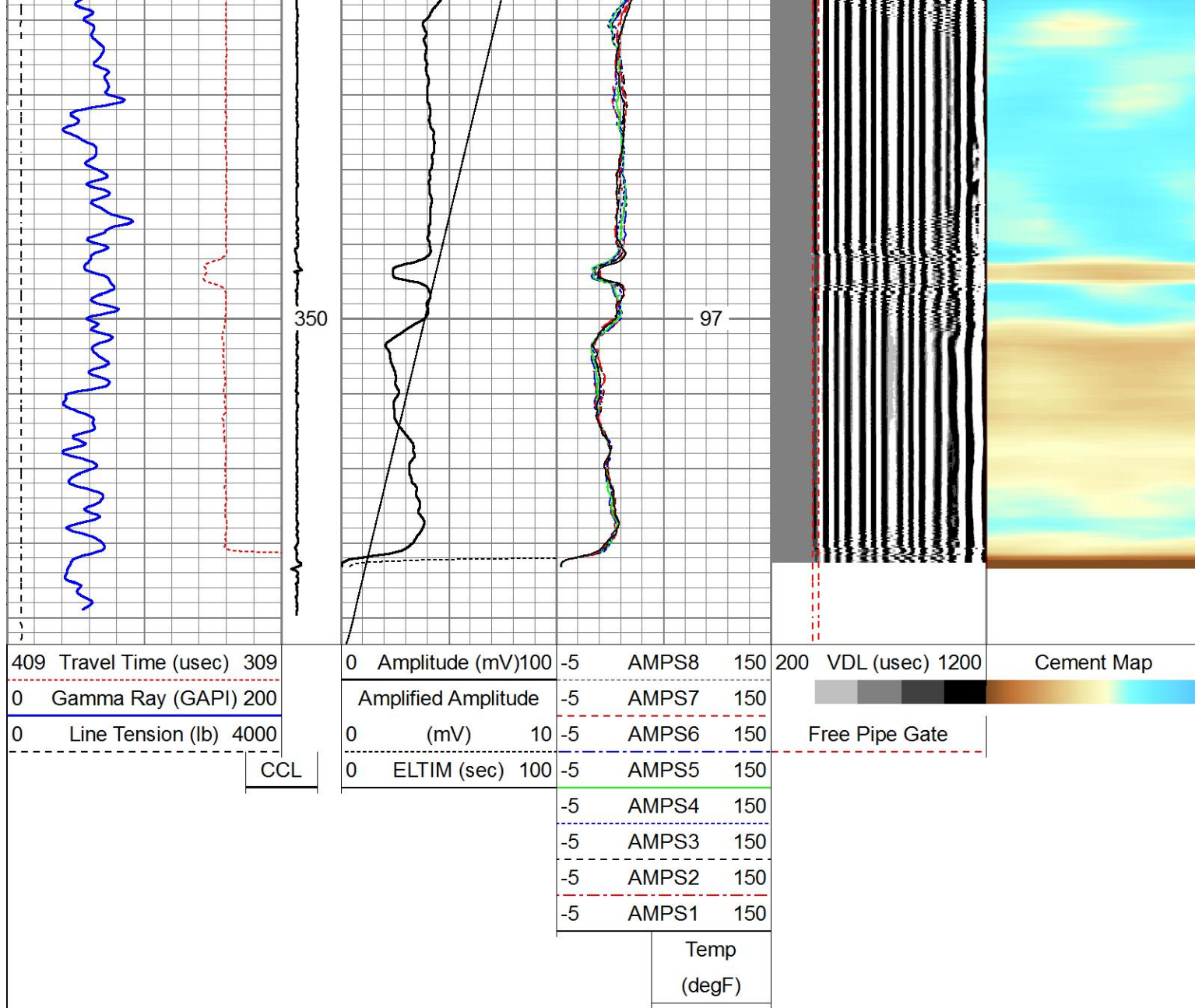
Repeat Pass

Free Pipe Pass

409	Travel Time (usec)	309	0	Amplitude (mV)	100	-5	AMPS8	150	200	VDL (usec)	1200	Cement Map
0	Gamma Ray (GAPI)	200		Amplified Amplitude		-5	AMPS7	150				
0	Line Tension (lb)	4000	0	(mV)	10	-5	AMPS6	150		Free Pipe Gate		
			0	ELTIM (sec)	100	-5	AMPS5	150				
						-5	AMPS4	150				
						-5	AMPS3	150				
						-5	AMPS2	150				
						-5	AMPS1	150				
							Temp					
							(degF)					







## Free Pipe Pass

Log Variables

DatabaseC:\ProgramData\Warrior\Data\conoccodh.db  
Dataset field/well/run1/pass8/\_vars\_

Top - Bottom							
BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL	MINAMPL
TEMP	in	degF	in	in	lb/ft	mV	mV
	9.625	116	9.625	0.352	36	51	1
MINATTN	PERFS	PPT	SRFTEMP	TDEPTH			
db/ft		uSec	degF	ft			
0.8	No	0	0	0			

Variable Description

BHTEMP\_Src : BHTEMP Input Source Selector  
BOREID : Borehole I.D.

MINAMPL : Minimum Amplitude  
MINATTN : Minimum Attenuation



BOTTEMP : Bottom Hole Temperature  
 CASEOD : Casing O.D.  
 CASETHCK : Casing Thickness  
 CASEWGHT : Casing Weight  
 MAXAMPL : Maximum Amplitude

PERFS : Perforation Flag  
 PPT : Predicted Pipe Time  
 SRFTEMP : Surface Temperature  
 TDEPTH : Total Depth

### Calibration Report

Database File      conoccodh.db  
 Dataset Pathname   pass1  
 Dataset Creation    Thu Jun 20 16:23:40 2019

#### Gamma Ray Calibration Report

Serial Number:      FW1806-018  
 Tool Model:          GCT275  
 Performed:          Fri Mar 08 12:57:12 2019  
  
 Calibrator Value:      1.0                  GAPI  
  
 Background Reading:    0.0                  cps  
 Calibrator Reading:    1.0                  cps  
  
 Sensitivity:            0.9000              GAPI/cps

#### Radial Cement Bond Calibration Report

Serial Number:      FW1803-063  
 Tool Model:          Probe275C  
  
 Calibration Casing Diameter:    9.625              in  
 Calibration Depth:            148.480            ft

Master Calibration, performed Thu Jun 20 14:16:19 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.400	1.000	51.280	126.986	0.485
CAL	0.013	0.848				
5'	0.011	0.412	1.000	51.280	125.390	-0.405
SUM						
S1	0.010	0.340	0.000	51.300	155.205	-1.504
S2	0.011	0.335	0.000	51.300	158.340	-1.738
S3	0.012	0.337	0.000	51.300	158.006	-1.952
S4	0.013	0.341	0.000	51.300	156.395	-2.075
S5	0.014	0.359	0.000	51.300	148.845	-2.108
S6	0.014	0.366	0.000	51.300	145.753	-2.092
S7	0.011	0.351	0.000	51.300	150.811	-1.629
S8	0.013	0.340	0.000	51.300	156.862	-2.055

Internal Reference Calibration, performed Thu Jun 20 11:59:56 2019:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.013	0.848	1.000	0.000

#### Temperature Calibration Report

Serial Number:      FW1803-063  
 Tool Model:          Probe275C

Performed:	(Not Performed)	
	Reference	Reading
Low Reference:	0.000	0.000
High Reference:	1.000	1.000
Gain:	1.000	
Offset:	0.000	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-1.4375CHD Titan Cable Head 1 7/16	1.00	1.44	10.00
			CENT-Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
WVFS8	11.90		RBT-Probe275C (FW1803-063) Probe 2 3/4" Radial Cement Bond w/Temperature	8.75	2.75	
WVFS7	11.90					
WVFS6	11.90					
WVFS5	11.90					
WVFS4	11.90					
WVFS3	11.90					
WVFS2	11.90					
WVFS1	11.90					
WVFCAL	11.90					
WVF3FT	11.90					
WVF5FT	10.90					
Temp	7.65					
			CENT-Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
CCL\$2	3.81					
CCL\$1	3.81					
GCT_Temp	3.26					
GR	2.39		GCT-GCT275 (FW1806-018) Probe GR-CCL w/Temp	4.77	2.75	



Dataset:	conoccodh.db: field/well/run1/pass1
Total length:	20.27 ft
Total weight:	50.00 lb
O.D.:	2.75 in

Company Conoco Phillips

Well 35-34 1DH

Field Reserve 3-65

County Adams

State Colorado



Radial Cement Bond  
Gamma Ray CCL  
Log