



CEMENT EVALUATION LOG RADI SECTOR TOOL FINAL PRINT

Company	CATAMOUNT ENERGY PARTNERS		
Well	JAQUES #9		
Field	IGNACIO BLANCO		
County	LA PLATA		
State	COLORADO		
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Well	JAQUES #9		
Field	IGNACIO BLANCO		
County	LA PLATA		
State	COLORADO		
Location:	API #: 05-067-10021		Other Services
2111' FNL & 1711' FWL			
SEC 27	TWP 33N	RGE 8W	
Permanent Datum	GL	Elevation	7031
Log Measured From	RKB 11'		
Drilling Measured From	KB		
		Elevation	
		K.B. 7042	
		D.F. 7040	
		G.L. 7031	

Date	7/29/18
Run Number	1
Depth Driller	4248
Depth Logger	4117
Bottom Logged Interval	PBRD-SURF
Top Log Interval	SURF
Open Hole Size	7-7/8"
Type Fluid	H2O
Density / Viscosity	
Max. Recorded Temp.	
Estimated Cement Top	
Time Well Ready	1:45 PM
Time Logger on Bottom	2:00 PM
Equipment Number	D6
Location	
Recorded By	ETHAN RISLEY
Witnessed By	MARK WOLFE

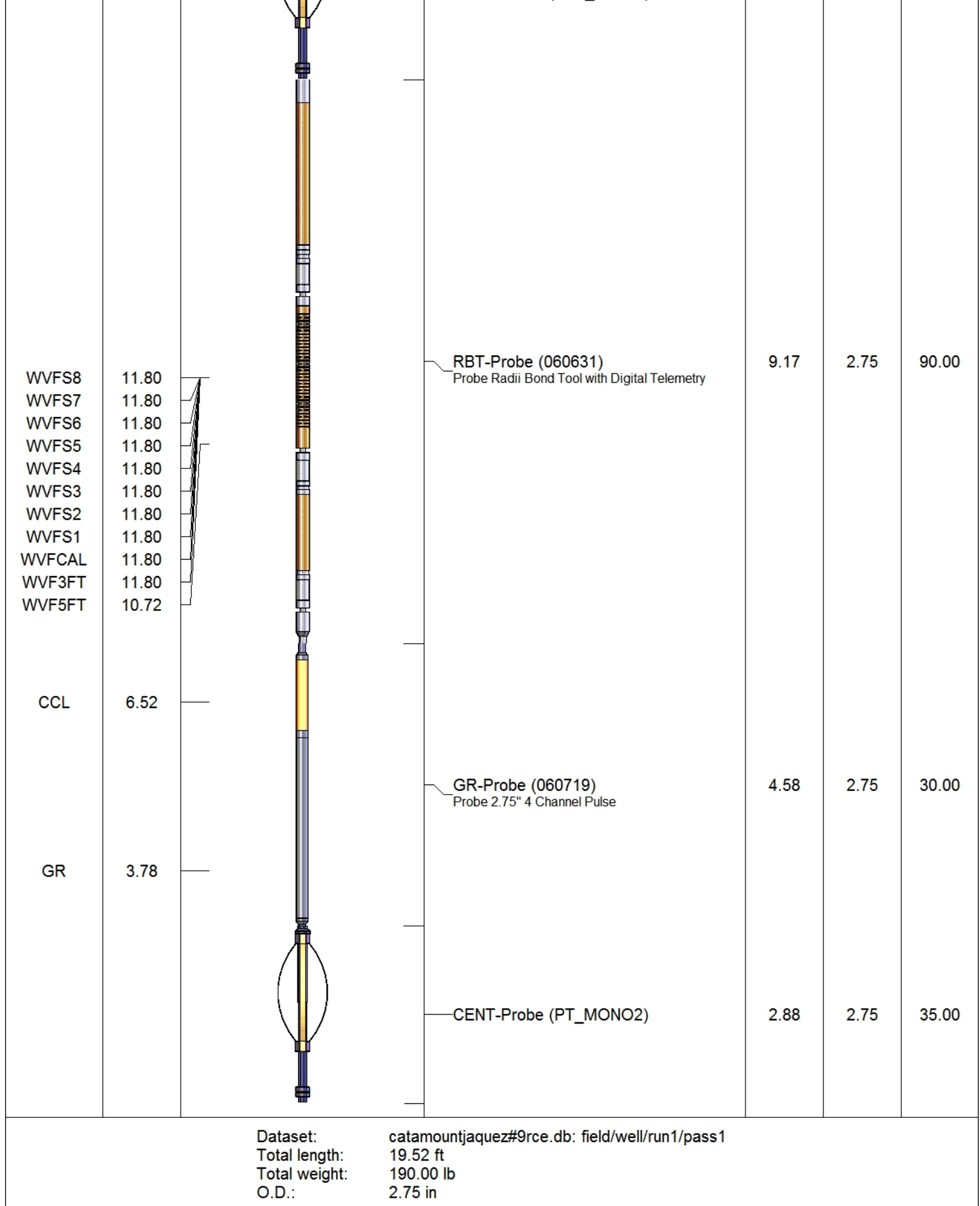
Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String	8-5/8"	23#	0	512'			
Prod. String	5-1/2"	17#	0	4232'			
Production String							
Lineer							

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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.

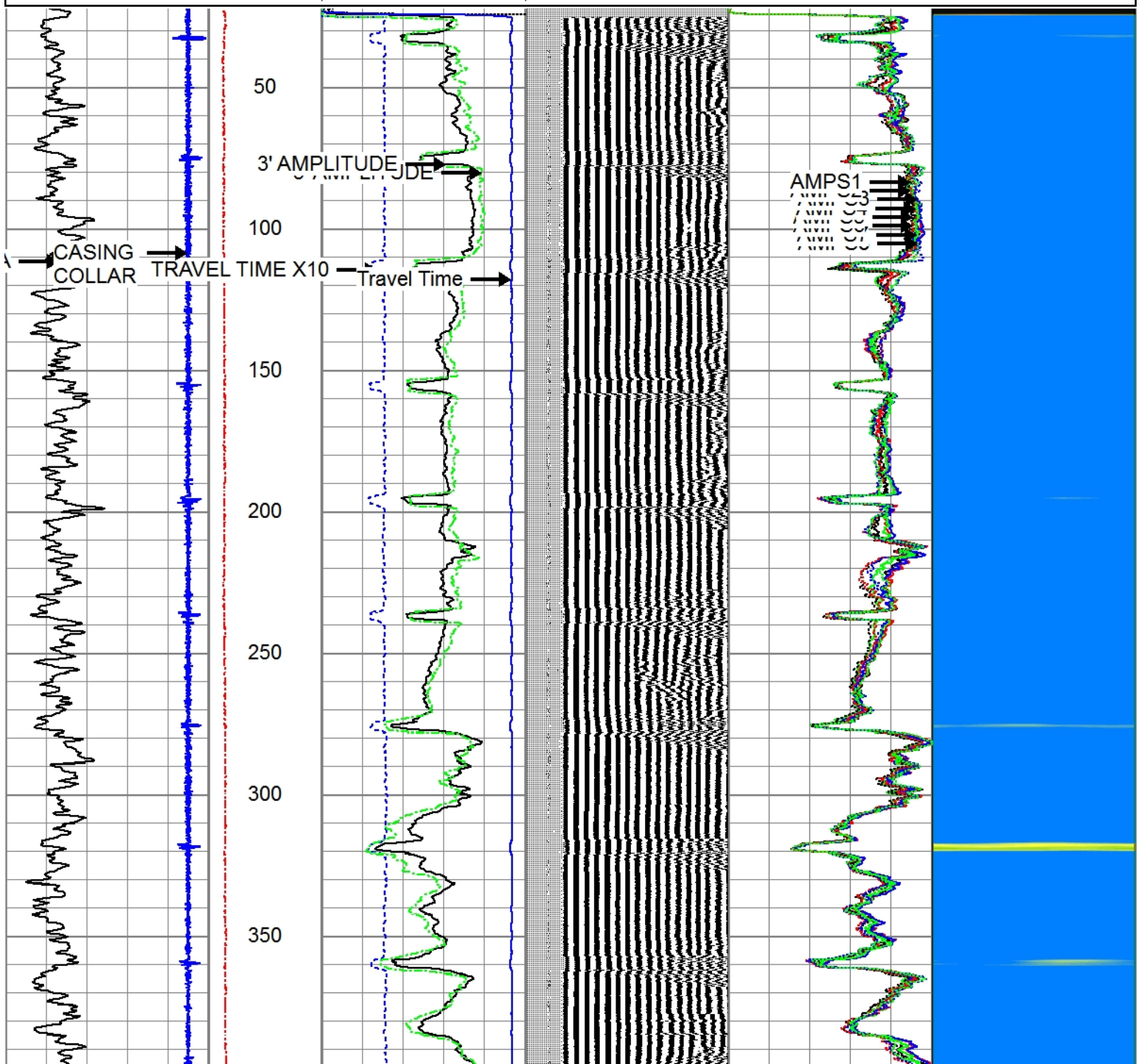
Comments

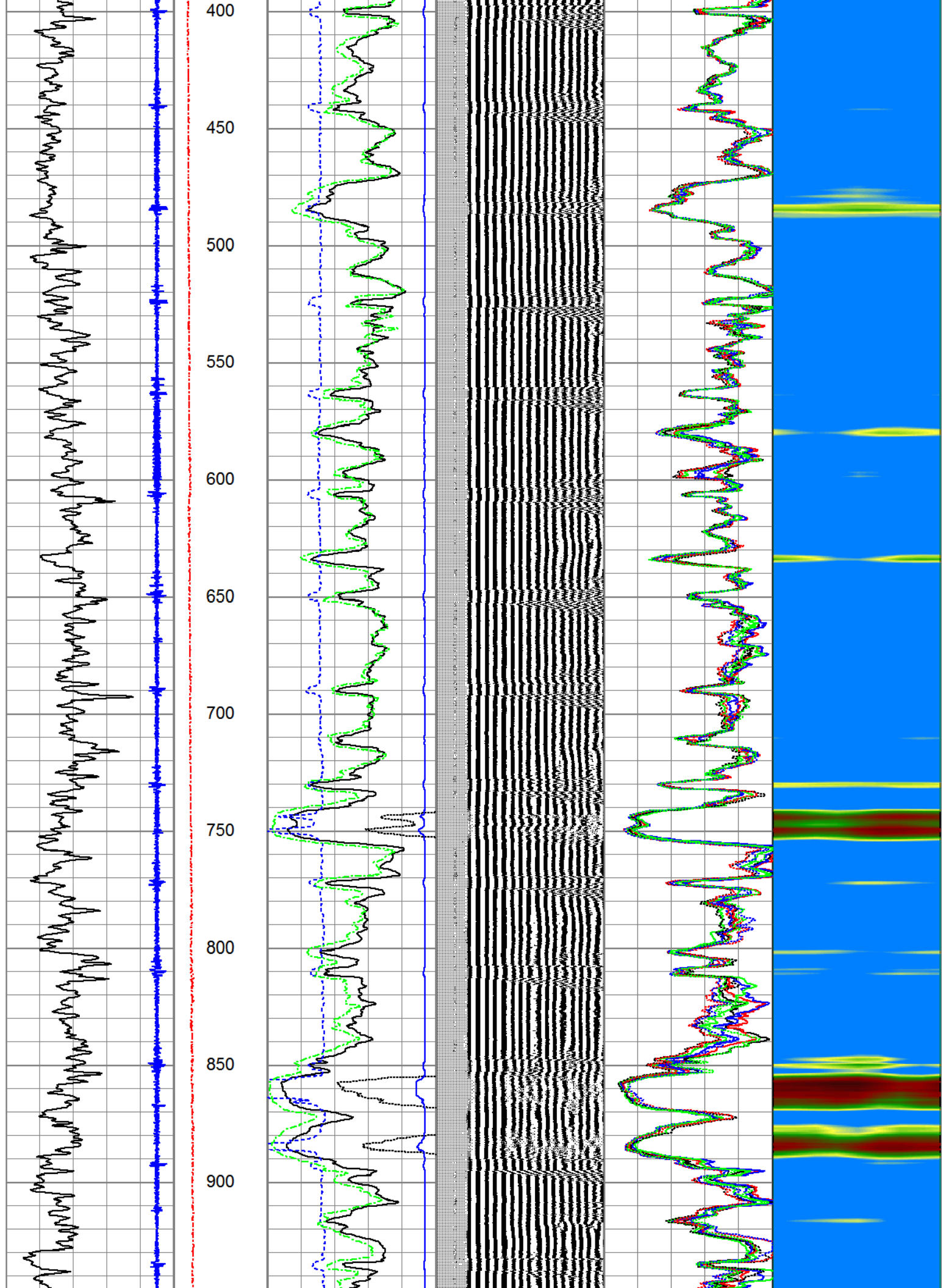
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CENT-Probe (PTS_MONO)	2.88	2.75	35.00

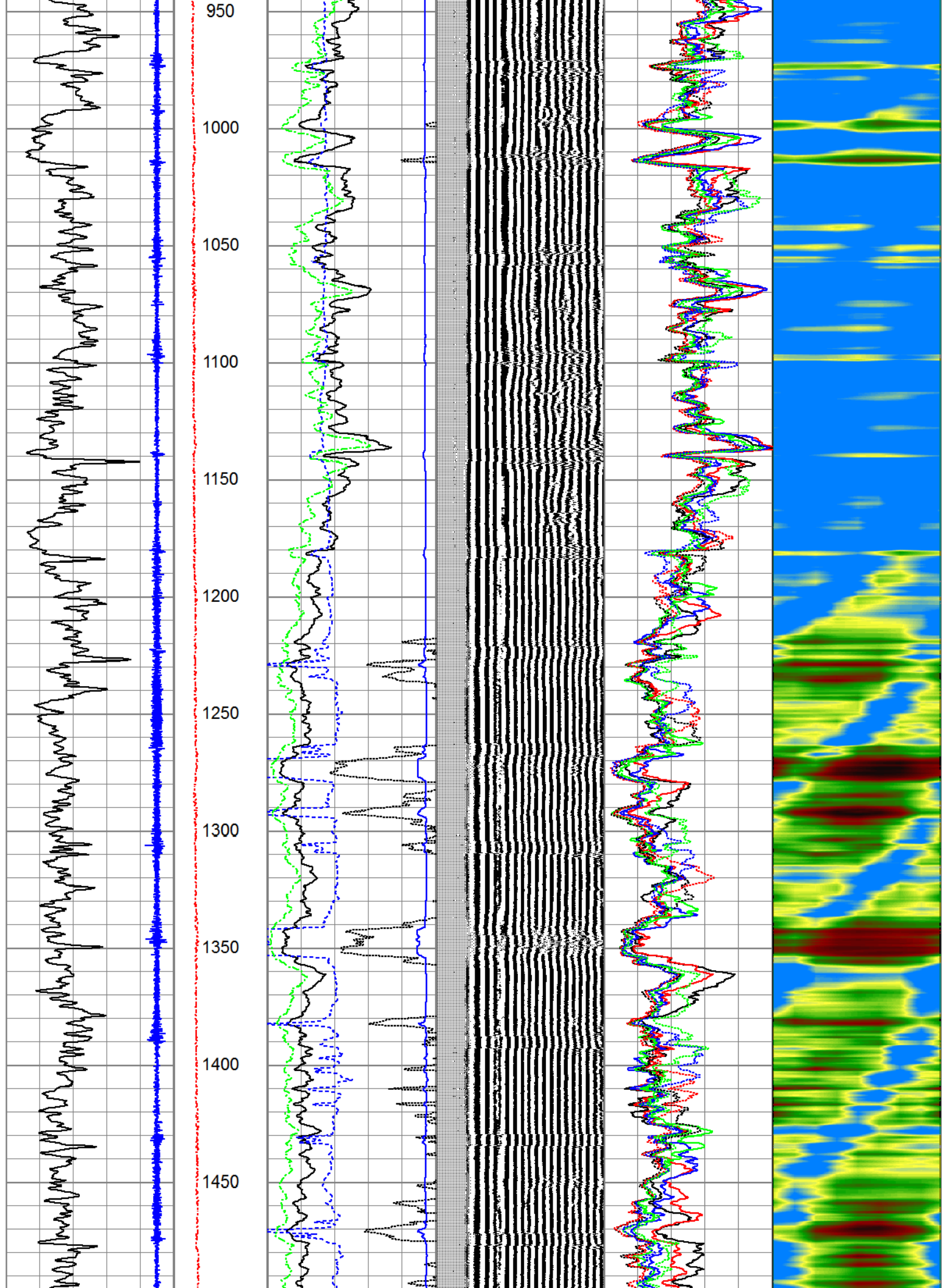


Database File catamountjaquez#9rce.db
 Dataset Pathname pass1
 Presentation Format rst5inplo
 Dataset Creation Sun Jul 29 14:10:40 2018
 Charted by Depth in Feet scaled 1:600

GAMMA RAY		LTEN	3' AMPLITUDE		200	VDL	1200	0	AMPS1	100	1	Cement Map	8
0	(GAPI)	200	0	(mV)	100			0	AMPS2	100	4		45
CASING COLLAR		0	0 AMP X5 (mV) 20					0	AMPS3	100			
-9	1	3000	TRAVEL TIME X10					0	AMPS4	100			
			300 (usec) 200					0	AMPS5	100			
			5' AMPLITUDE					0	AMPS6	100			
			0 (mV) 100					0	AMPS7	100			
			Travel Time					0	AMPS8	100			
			1200 (usec) 200										





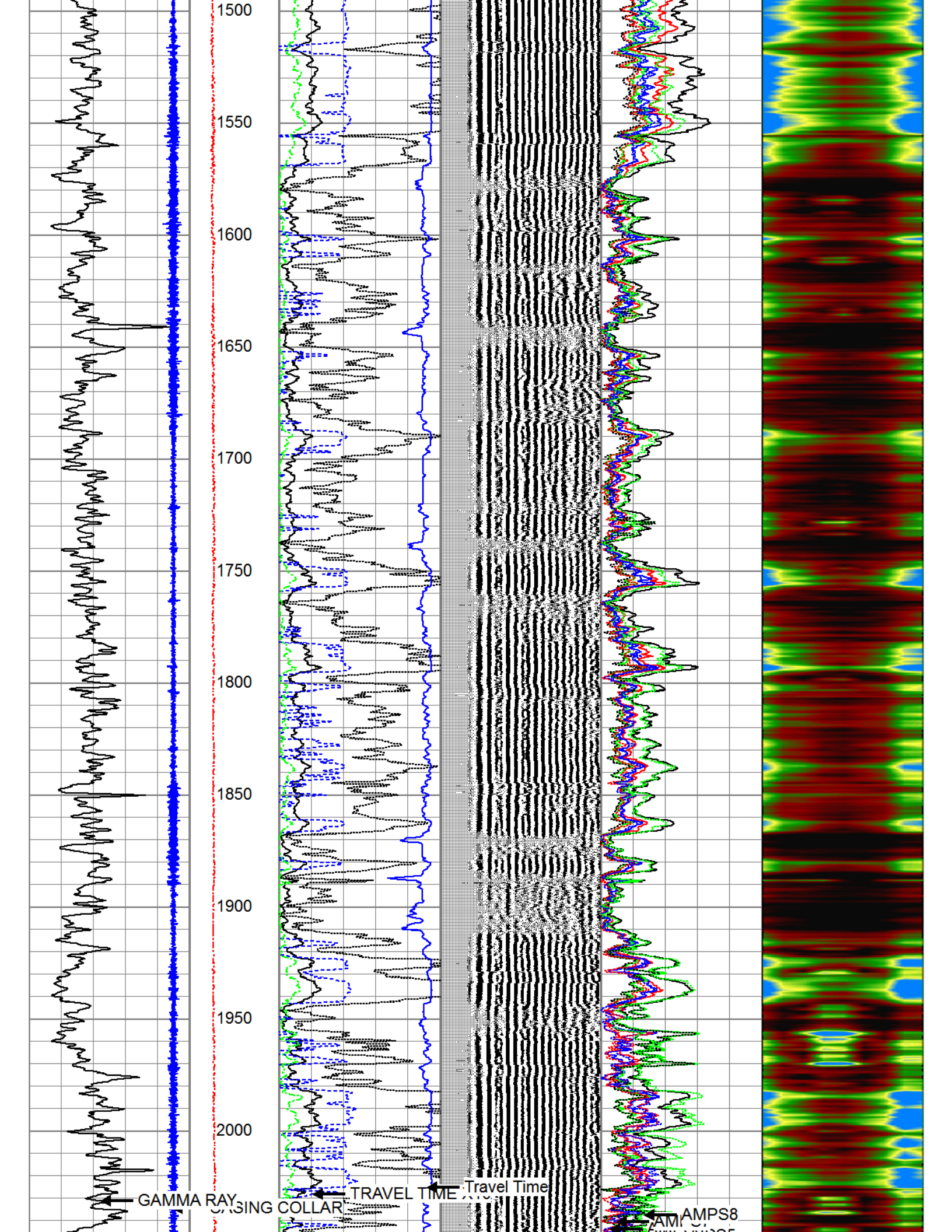


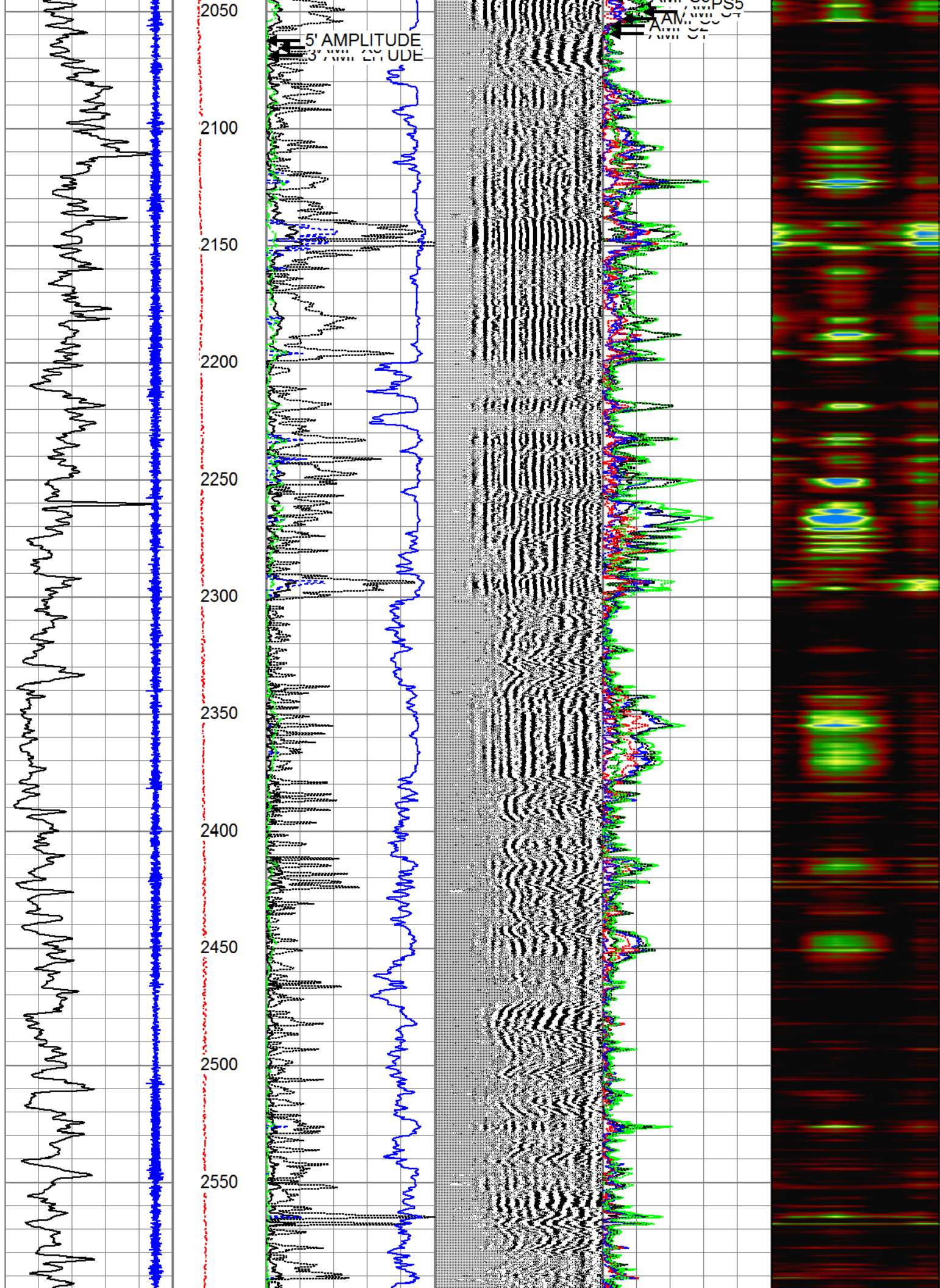
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000

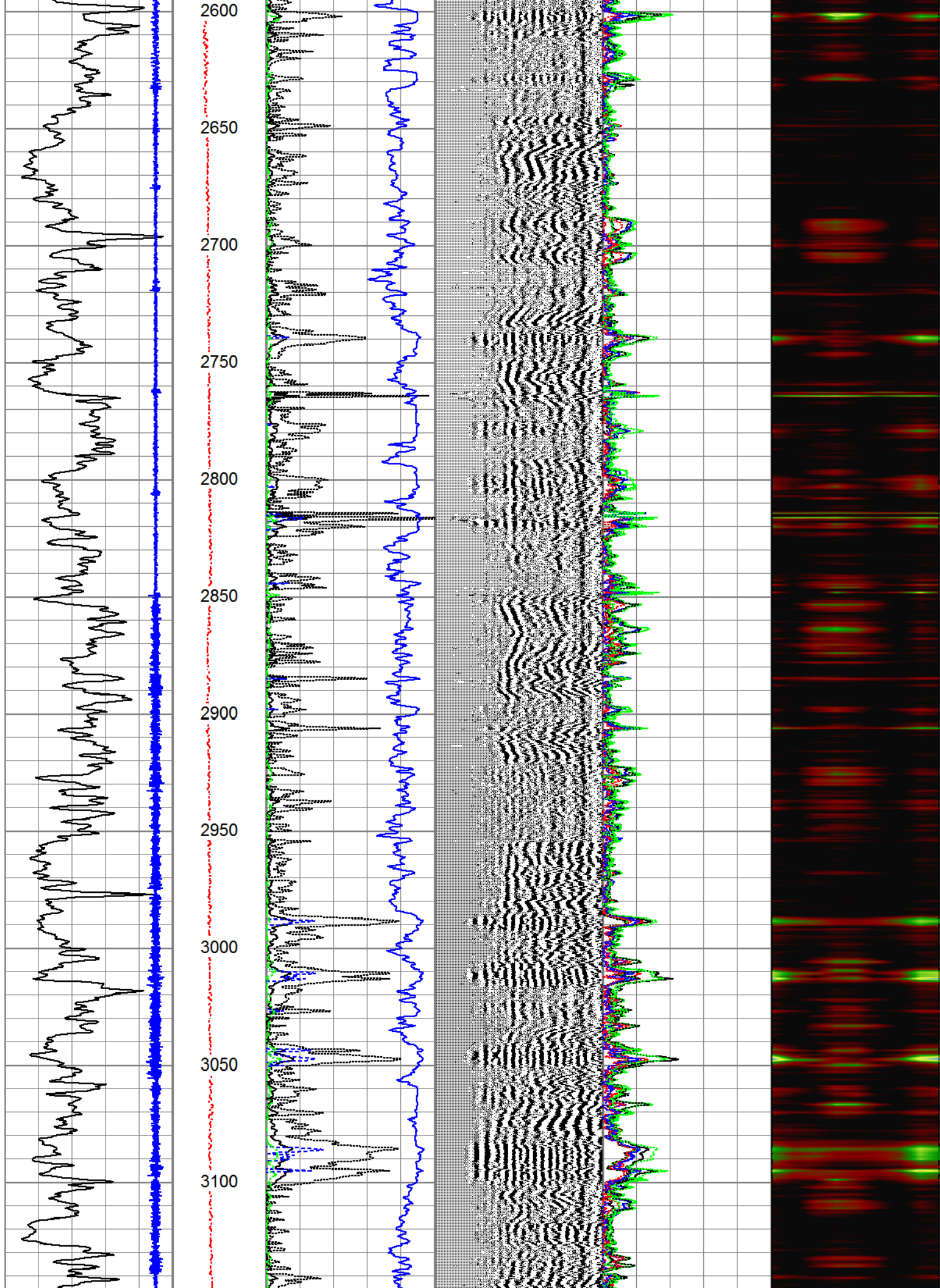
GAMMA RAY LOGGING COLLAR

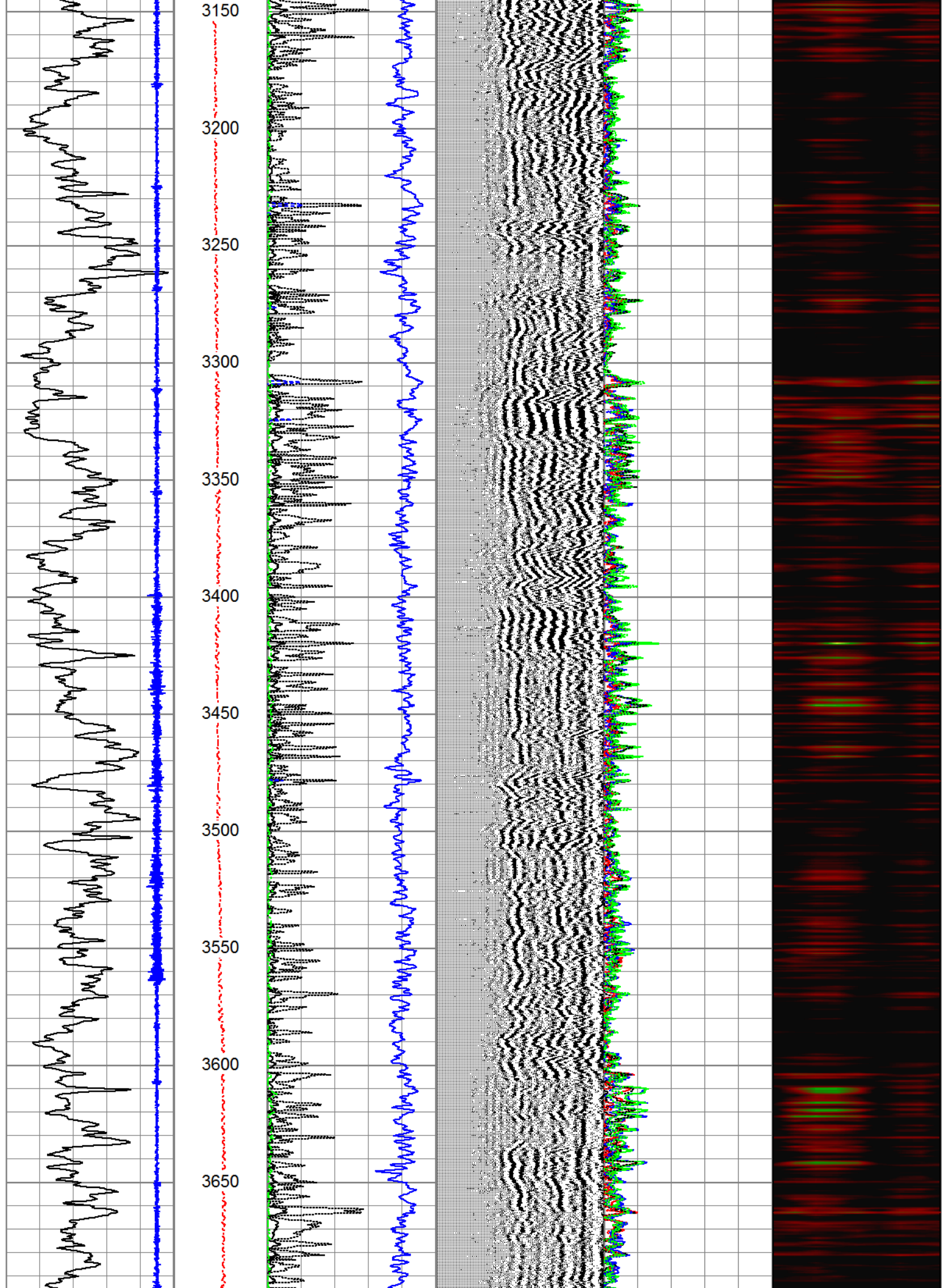
TRAVEL TIME

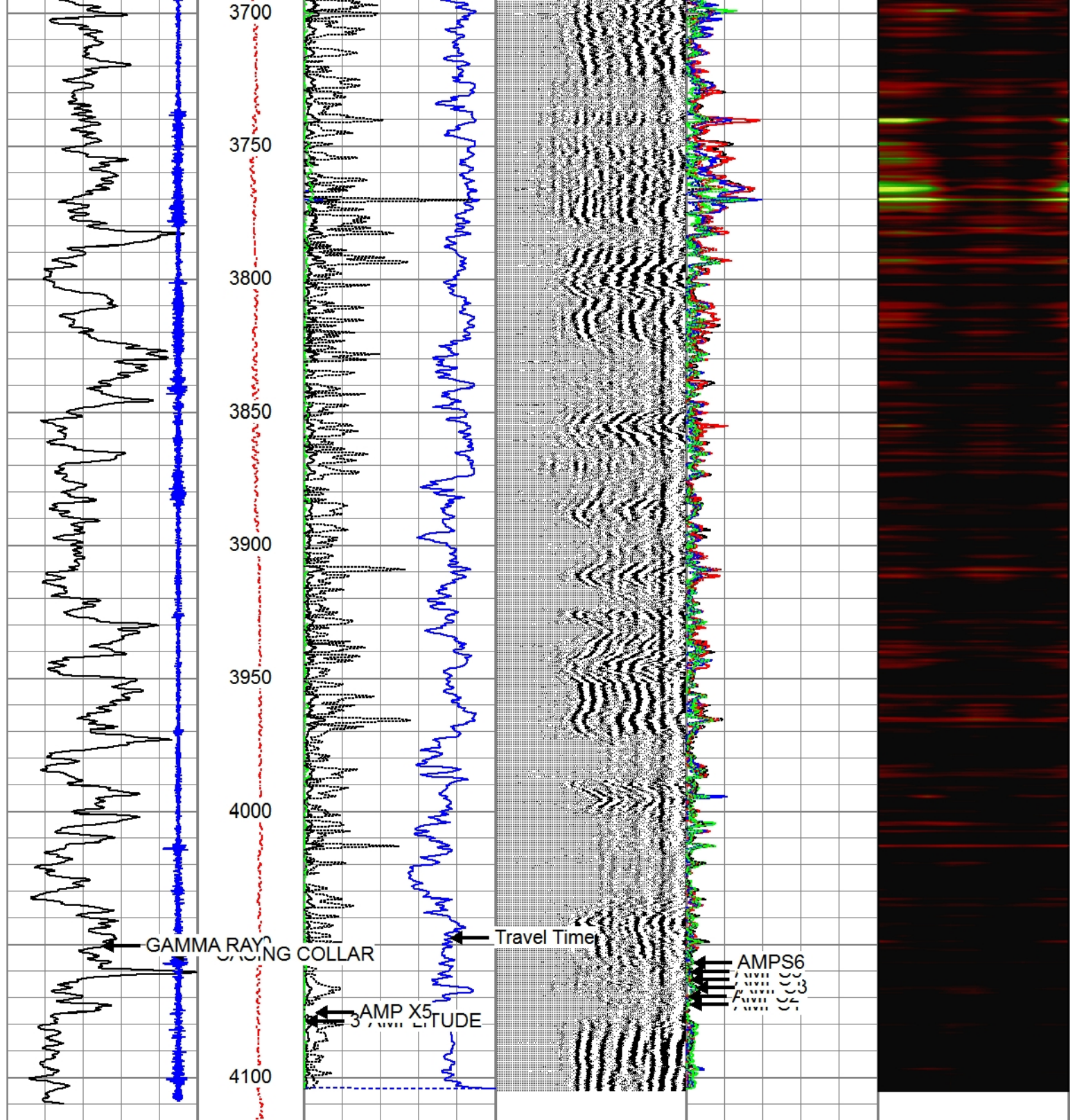
AMAMPS8
10/2005







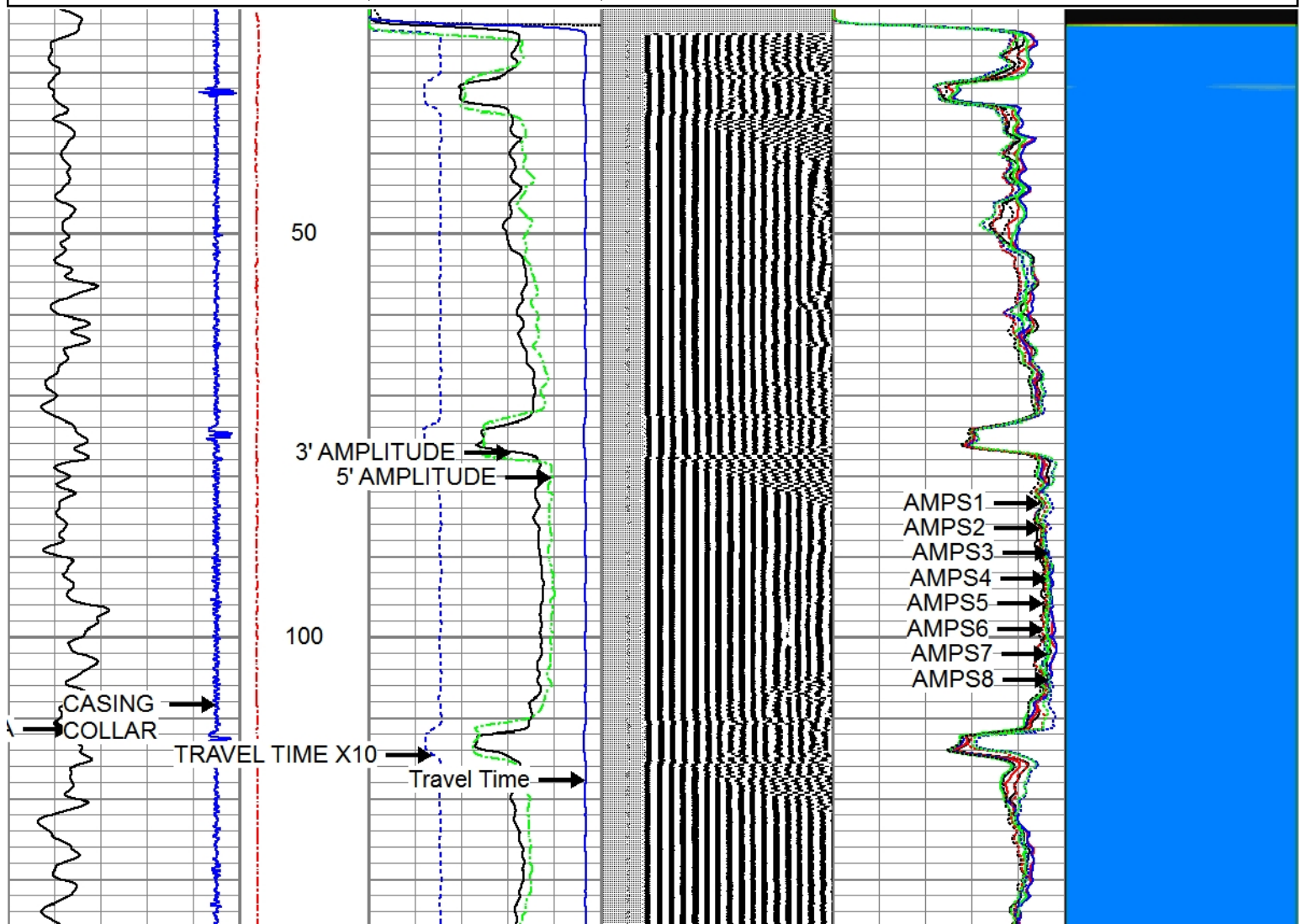


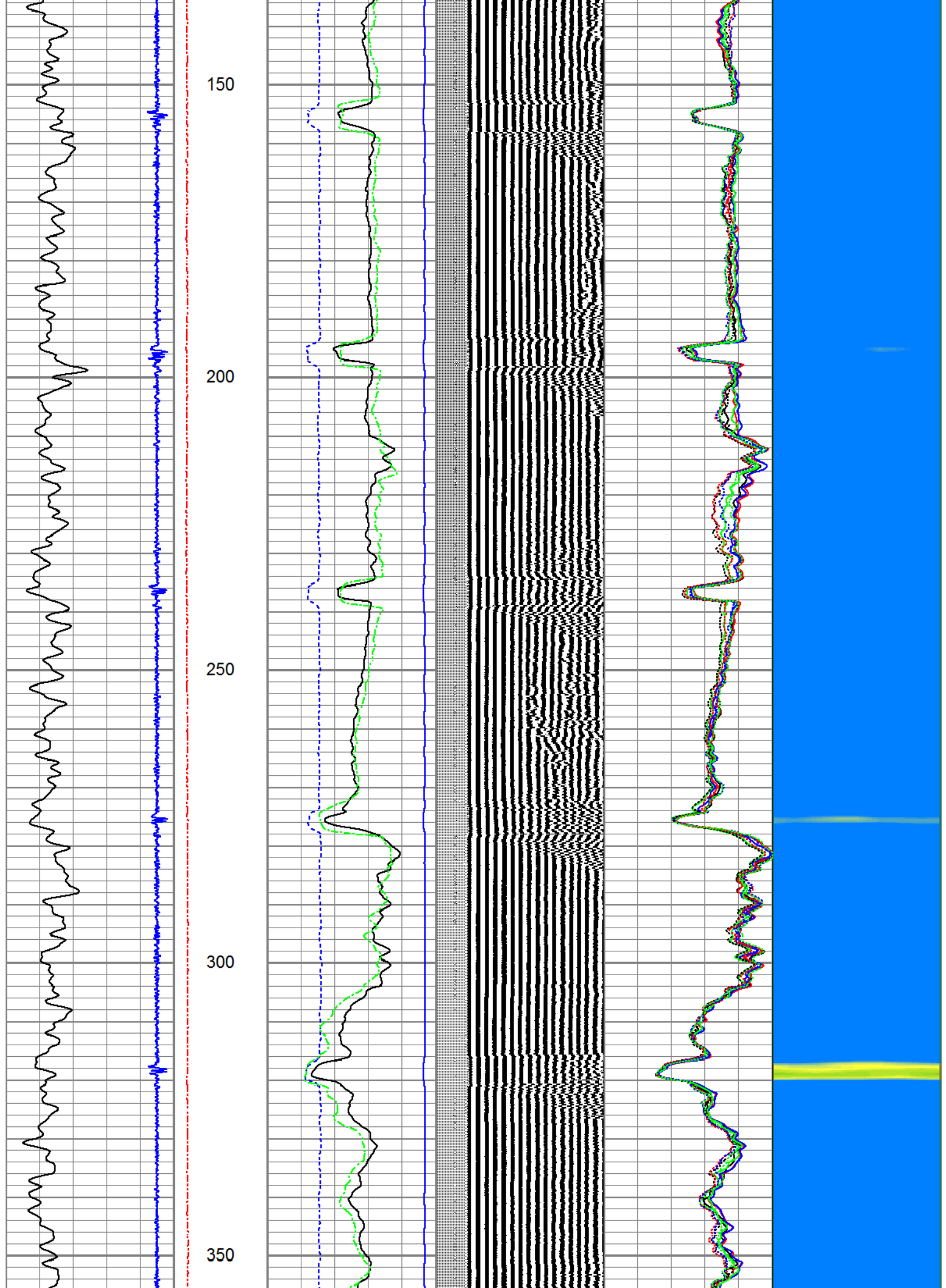


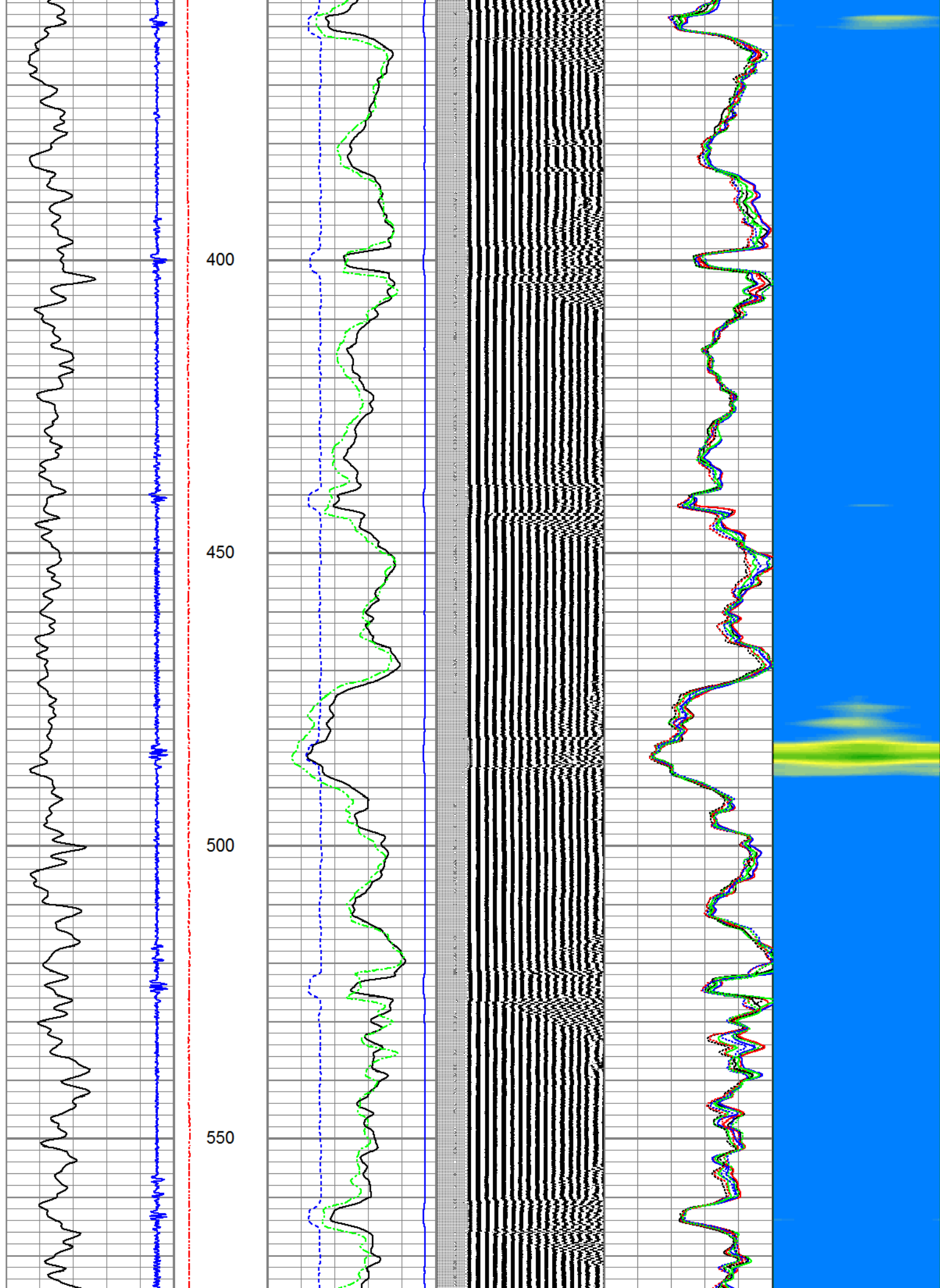
GAMMA RAY (GAPI)	LTEN (lb)	3' AMPLITUDE (mV)	200	VDL	1200	0	AMPS1	100	1	Cement Map	8
CASING COLLAR	0	0	100			0	AMPS2	100	4		45
-9	3000	0	20			0	AMPS3	100			
1		TRAVEL TIME X10				0	AMPS4	100			
		300 (uSec)	200			0	AMPS5	100			
		5' AMPLITUDE				0	AMPS6	100			
		0 (mV)	100			0	AMPS7	100			
		Travel Time				0	AMPS8	100			
		1200 (uSec)	200								

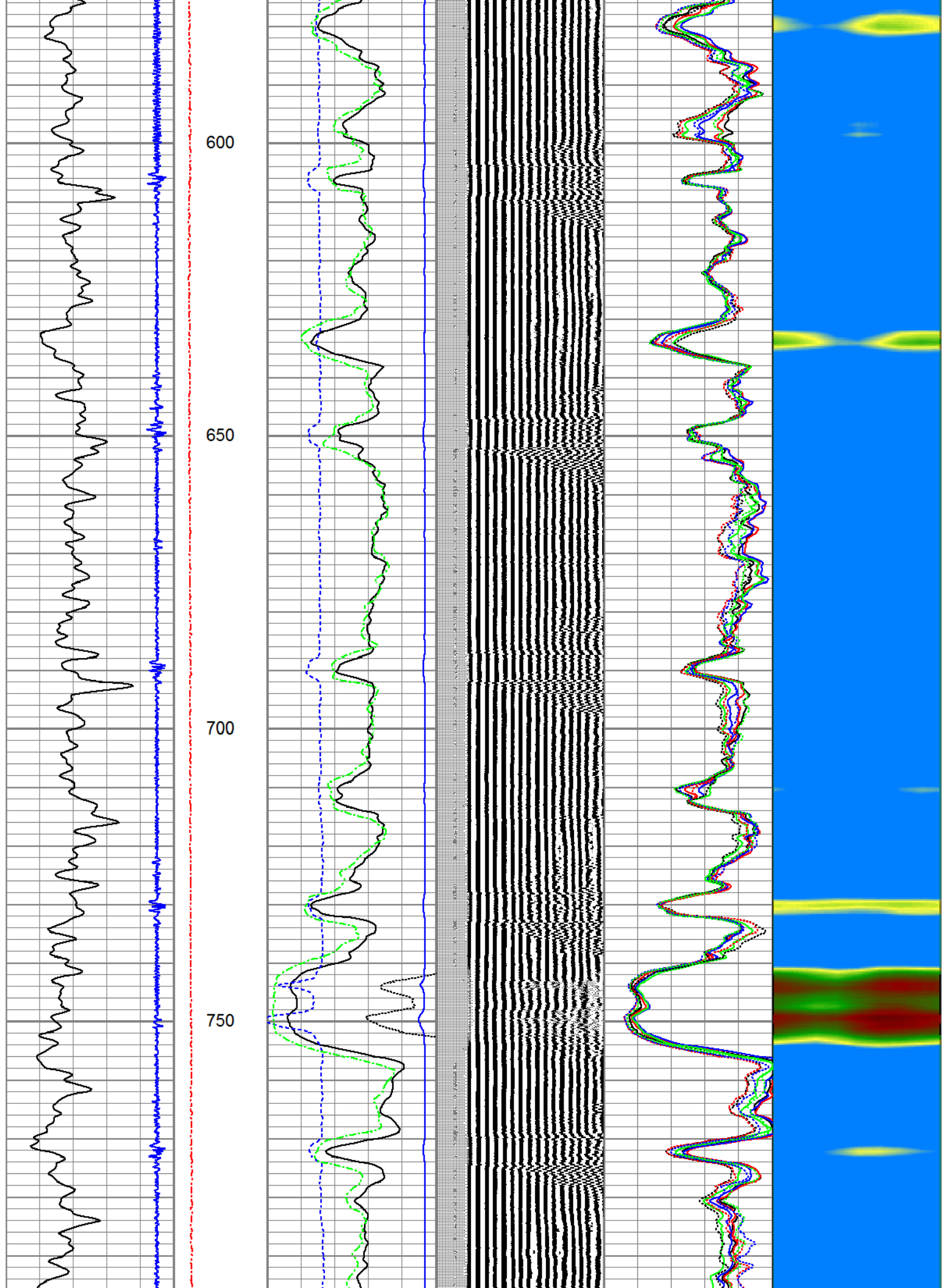
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 Dataset Pathname pass1
 Presentation Format rst5inplo
 Dataset Creation Sun Jul 29 14:10:40 2018
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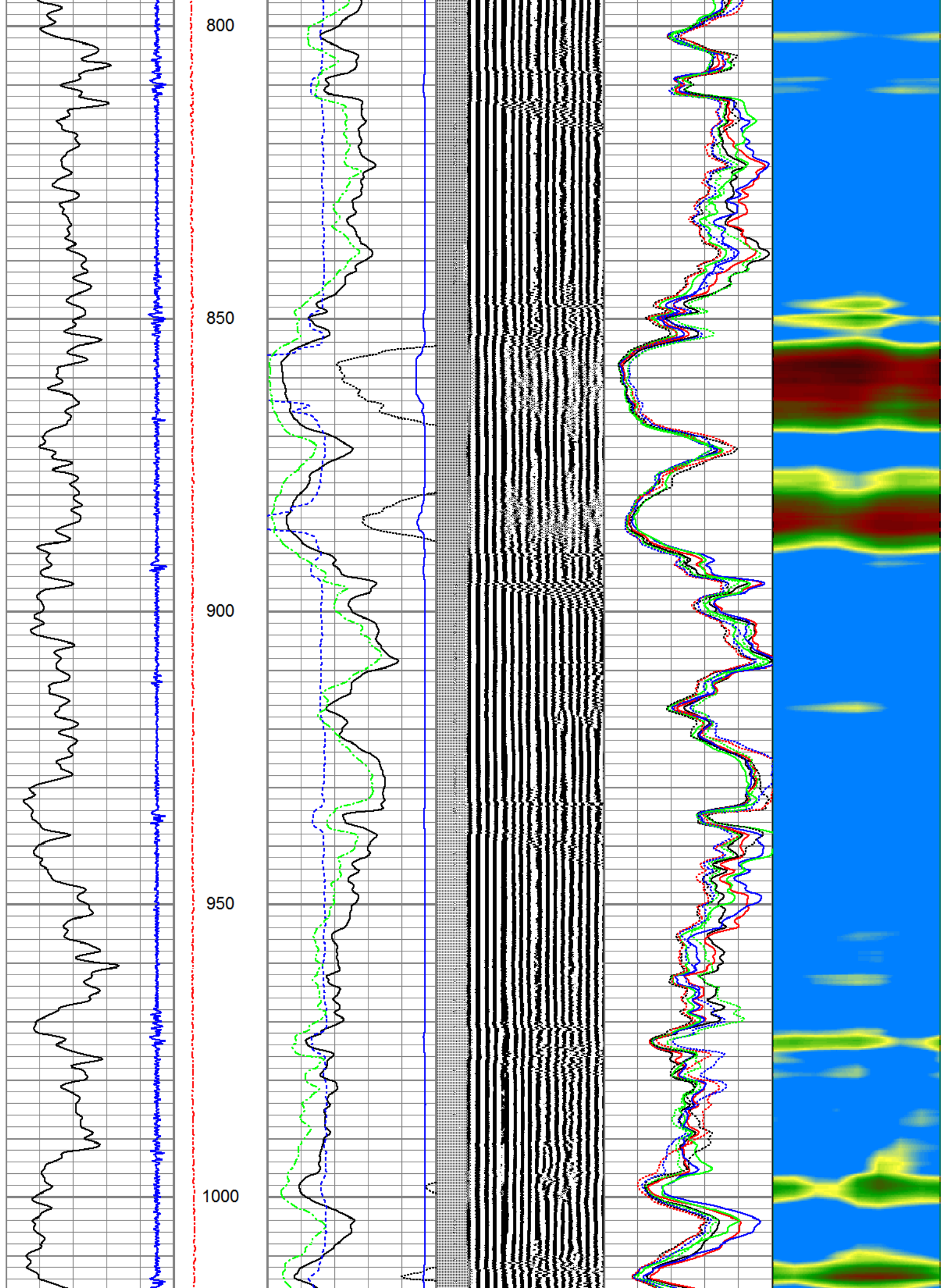
GAMMA RAY	LTEN	3' AMPLITUDE	200	VDL	1200	0	AMPS1	100	1	Cement Map	8
0 (GAPI) 200	(lb)	0 (mV) 100				0	AMPS2	100	4		45
CASING COLLAR	0 3000	0 AMP X5 (mV) 20				0	AMPS3	100			
-9 1		TRAVEL TIME X10				0	AMPS4	100			
		300 (usec) 200				0	AMPS5	100			
		5' AMPLITUDE				0	AMPS6	100			
		0 (mV) 100				0	AMPS7	100			
		Travel Time				0	AMPS8	100			
		1200 (usec) 200									

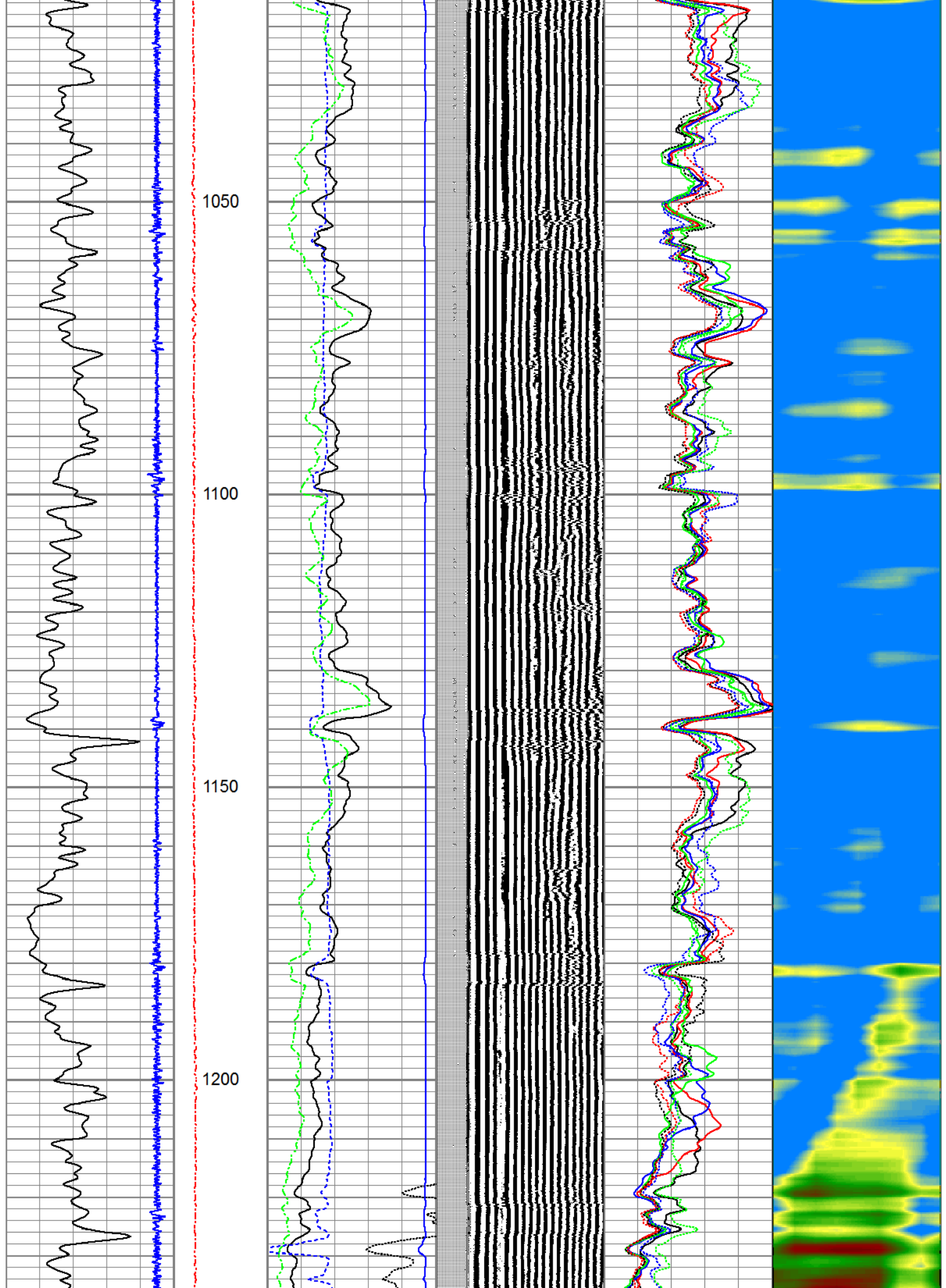


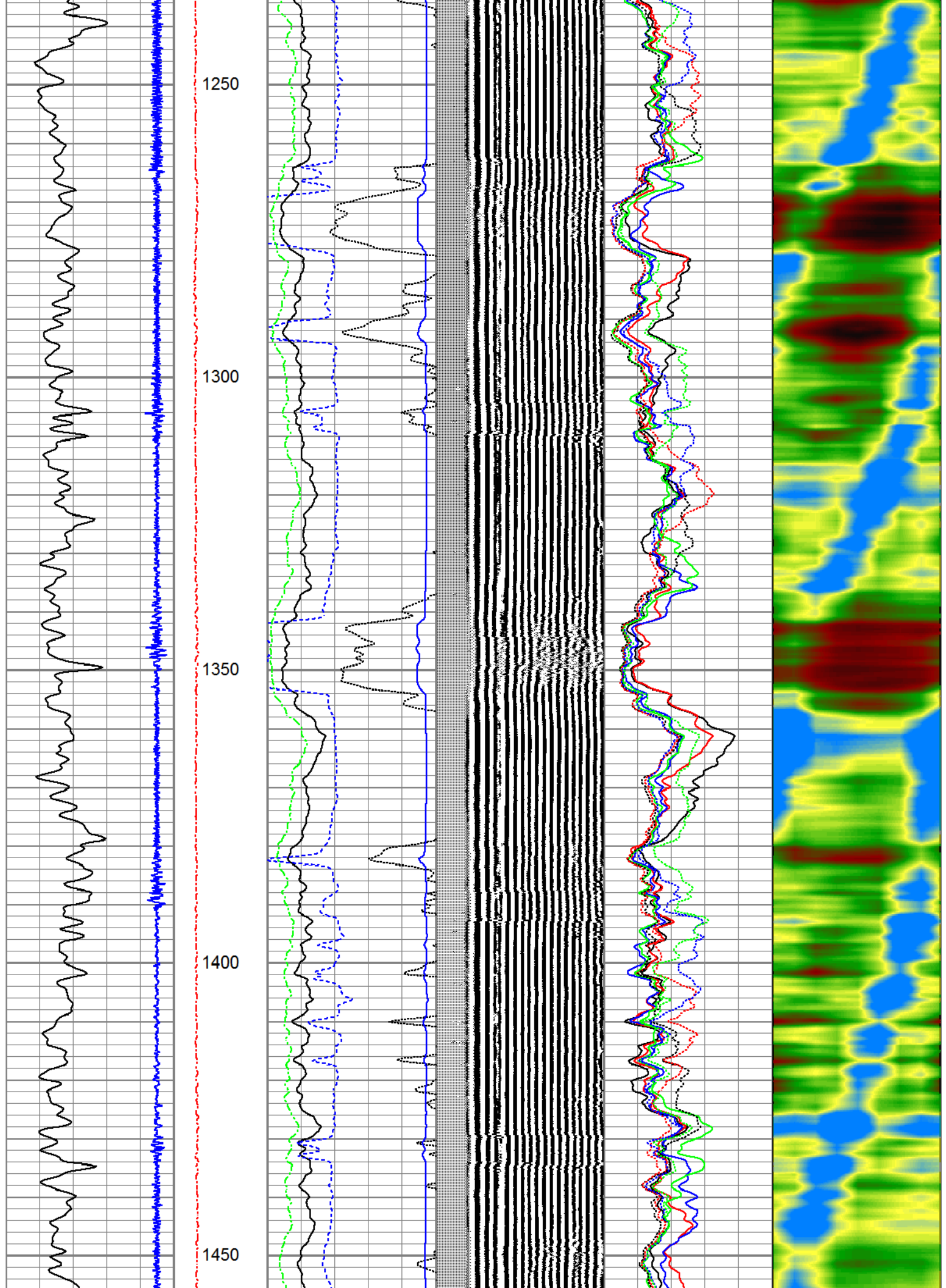


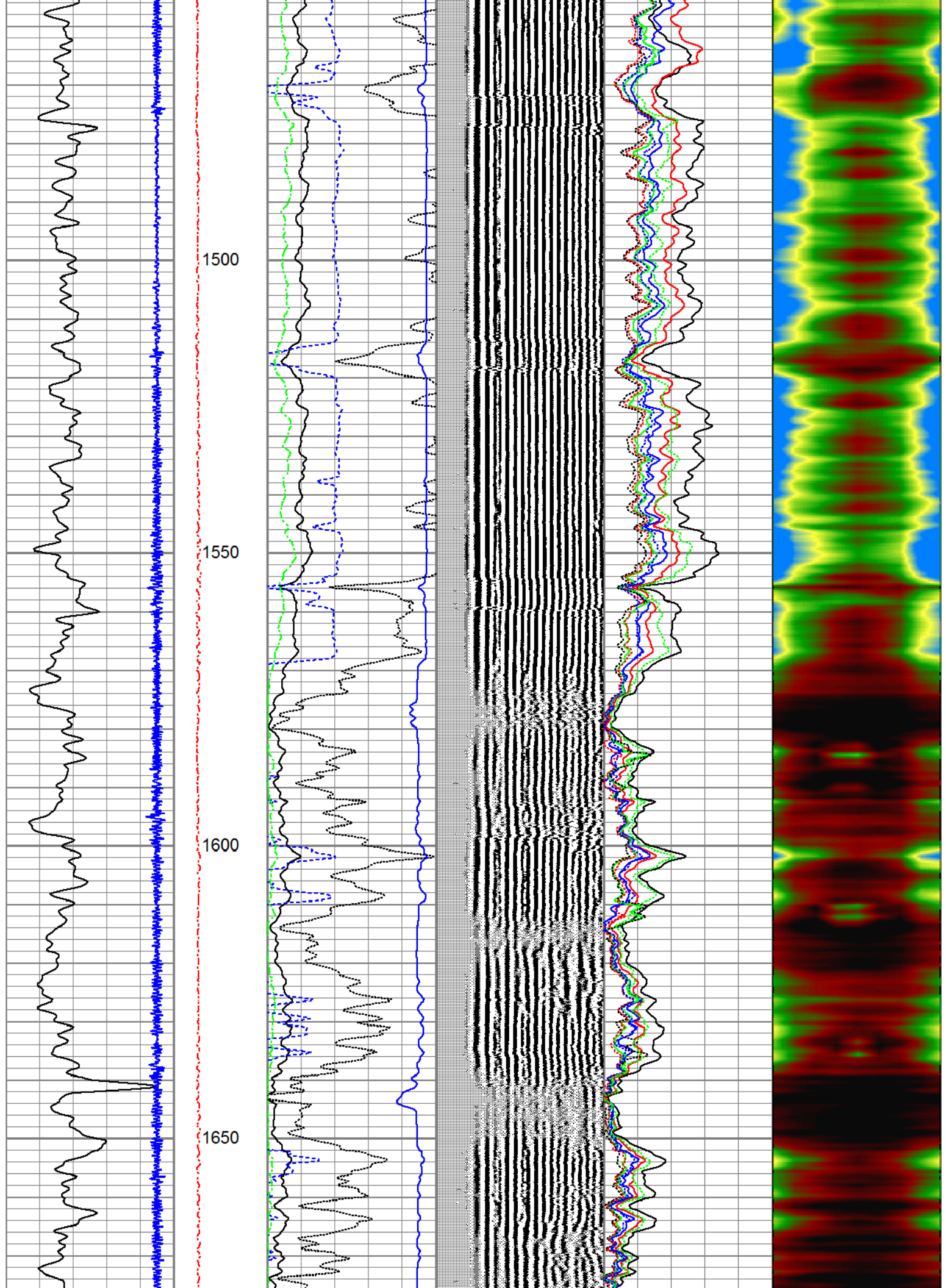


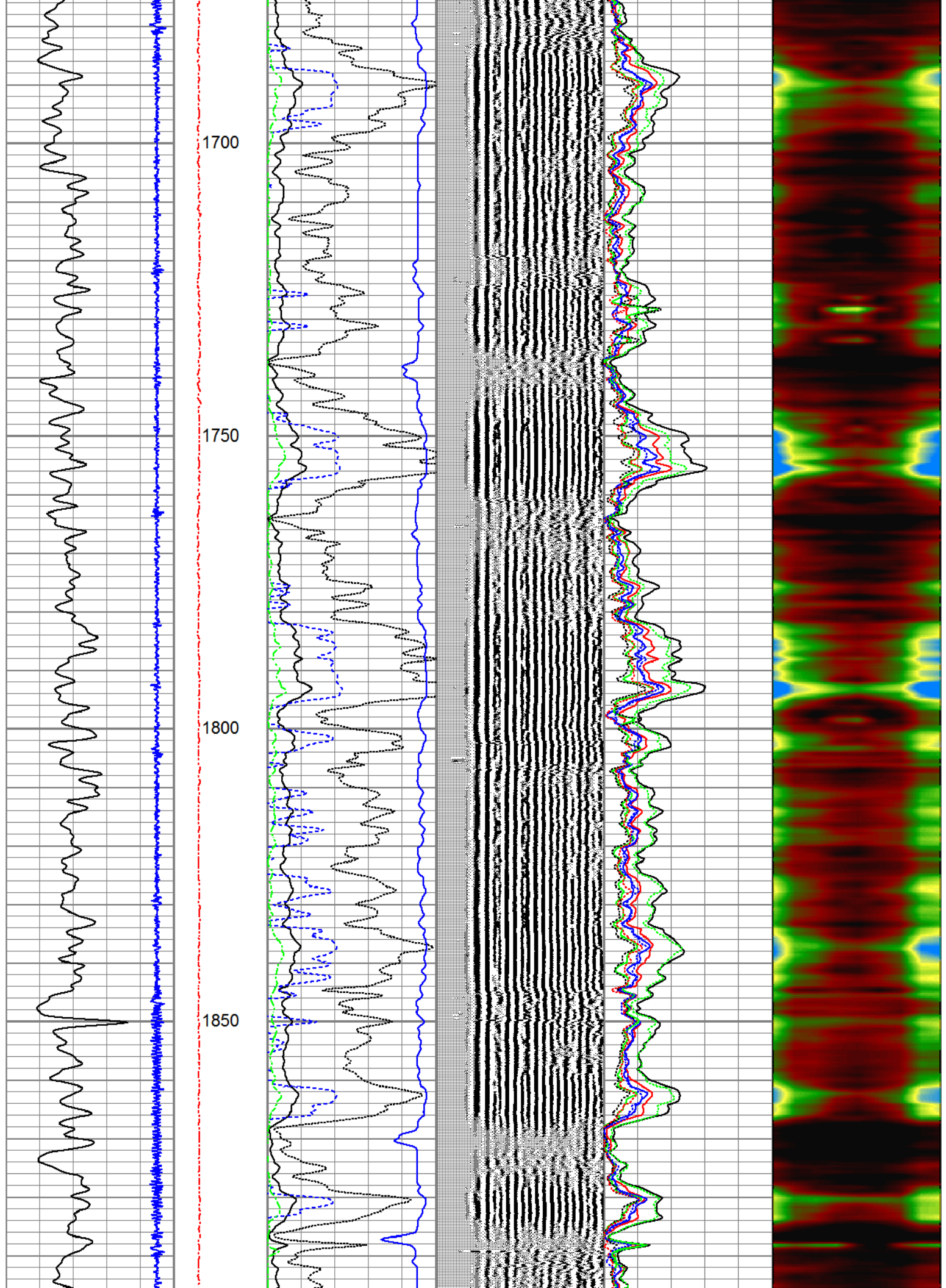


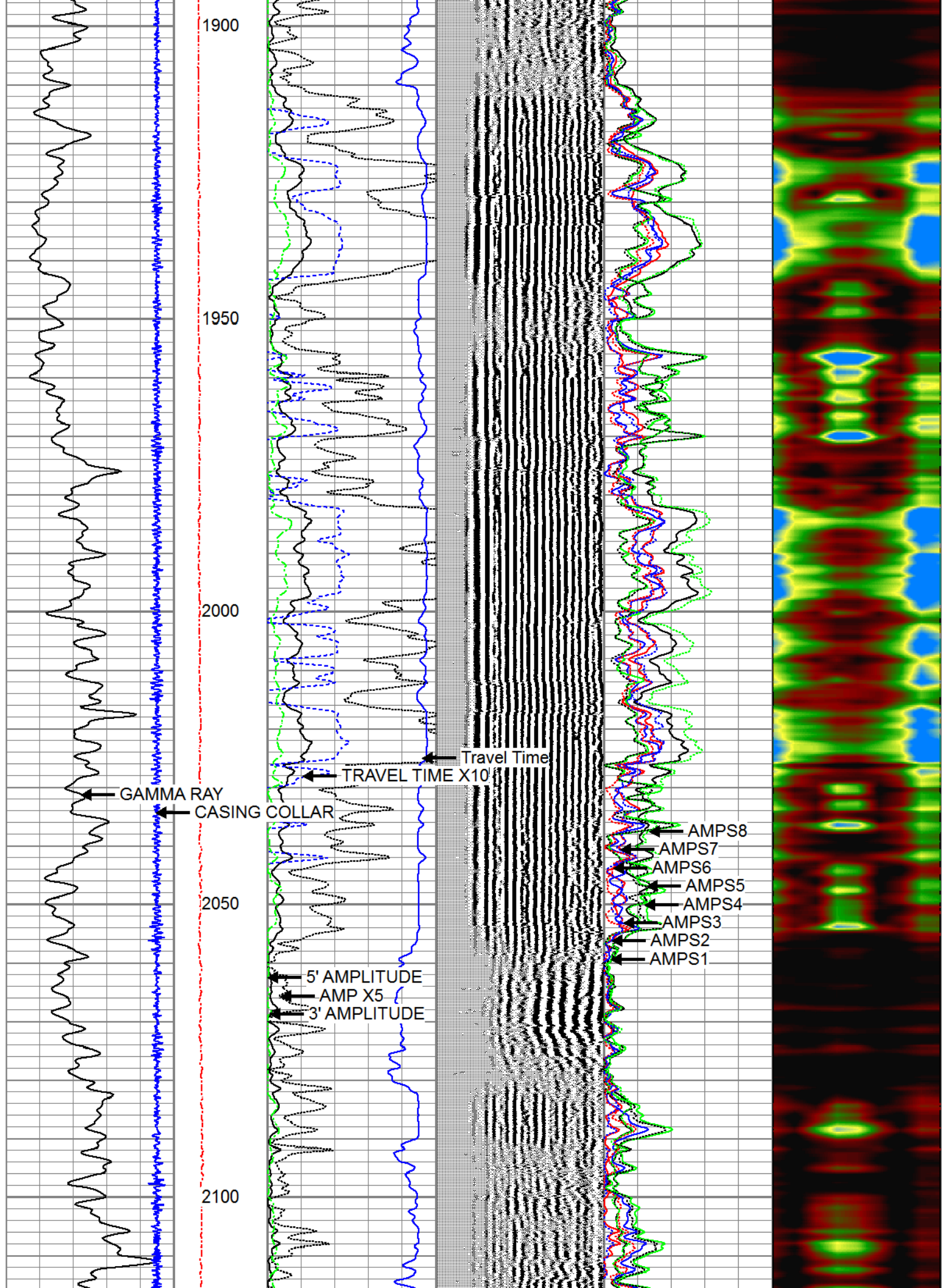


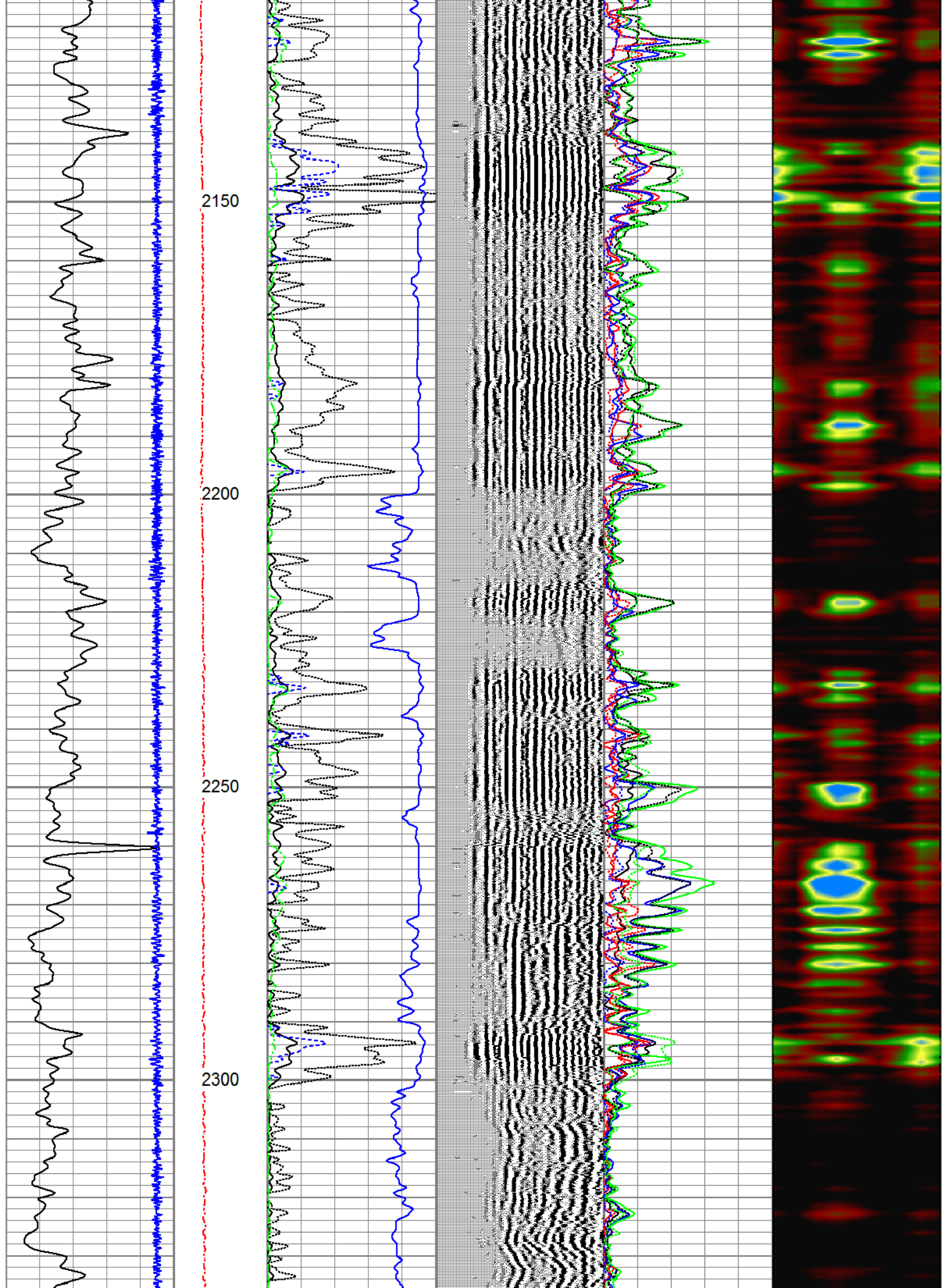


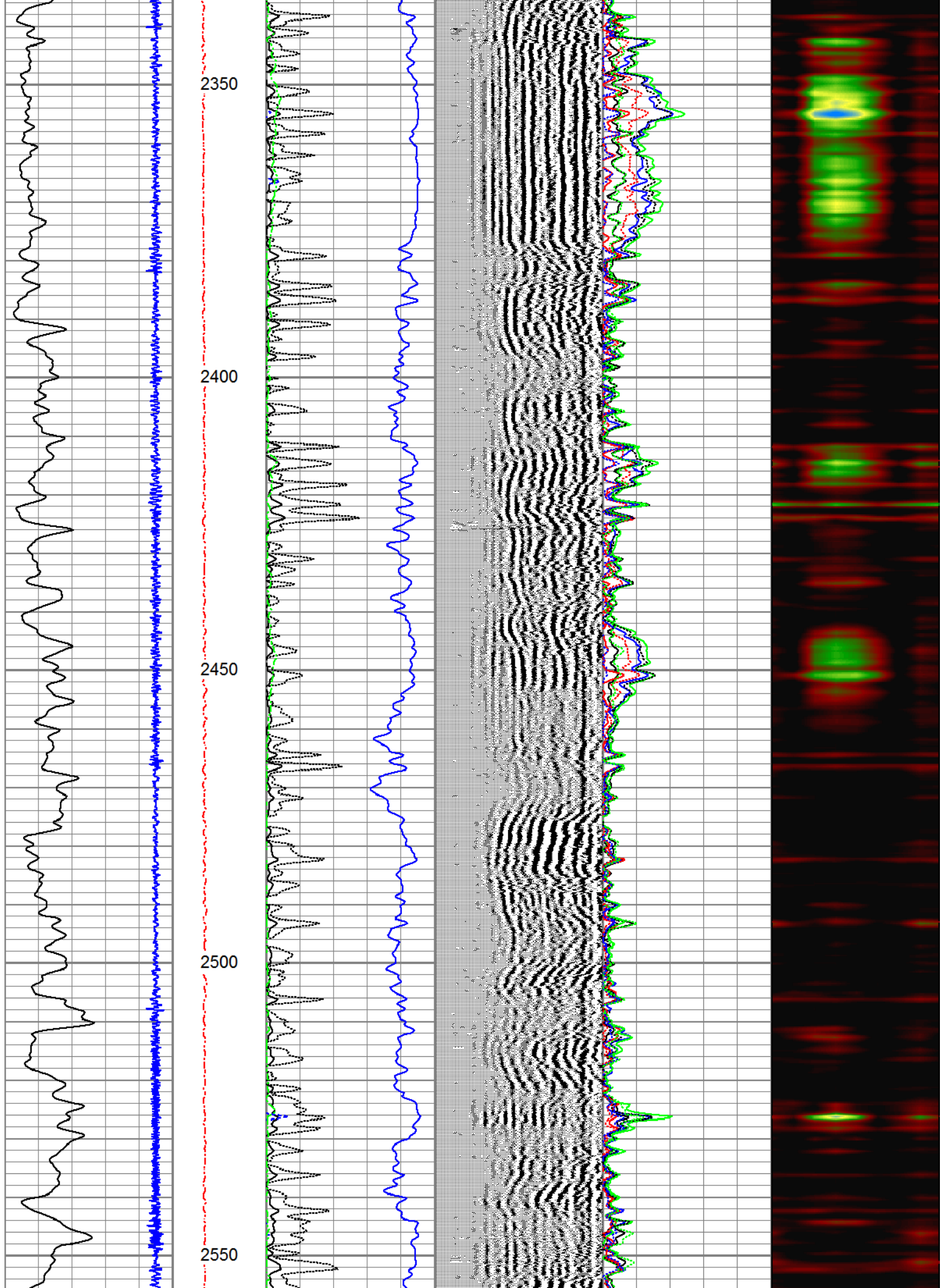


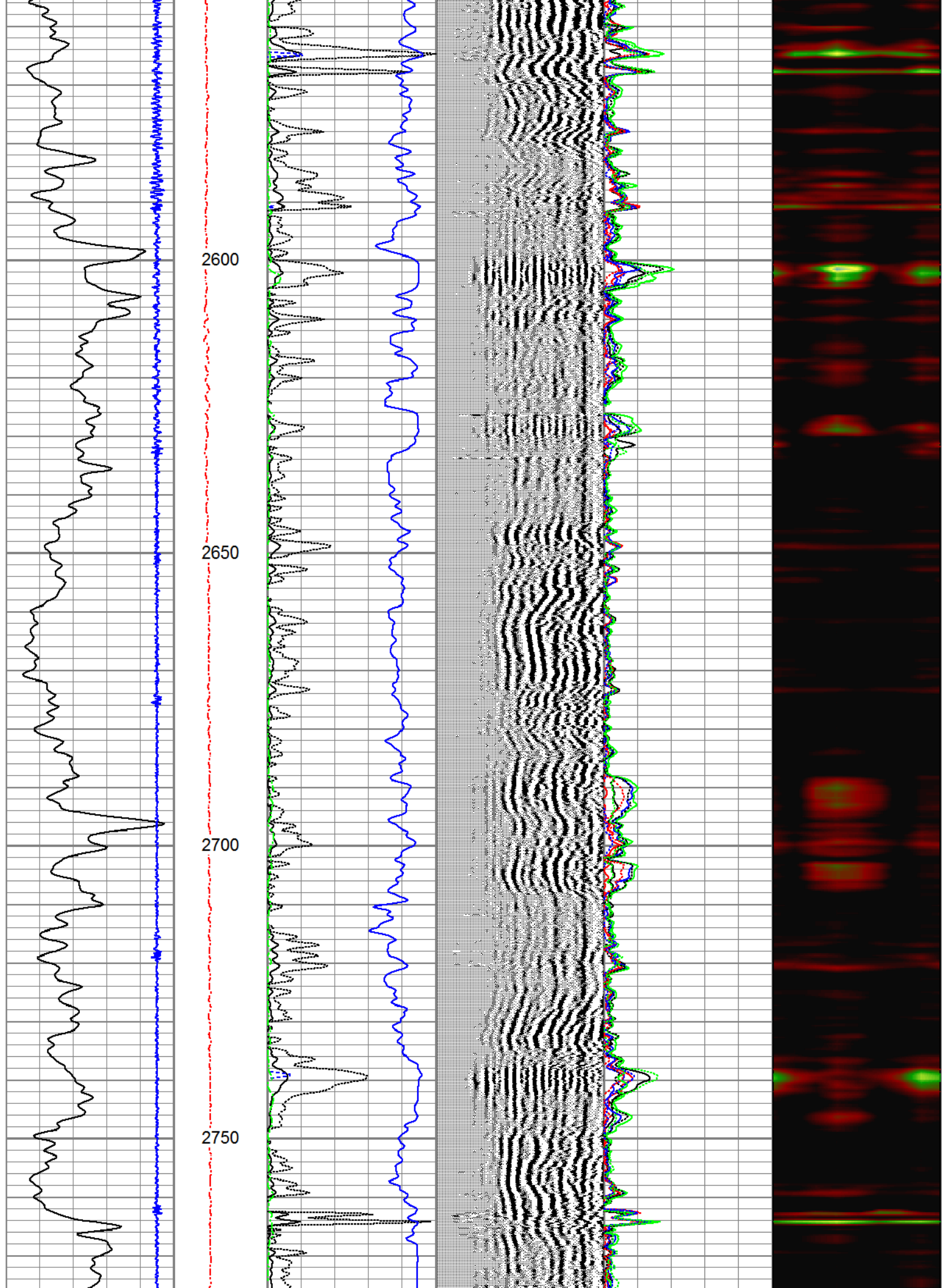


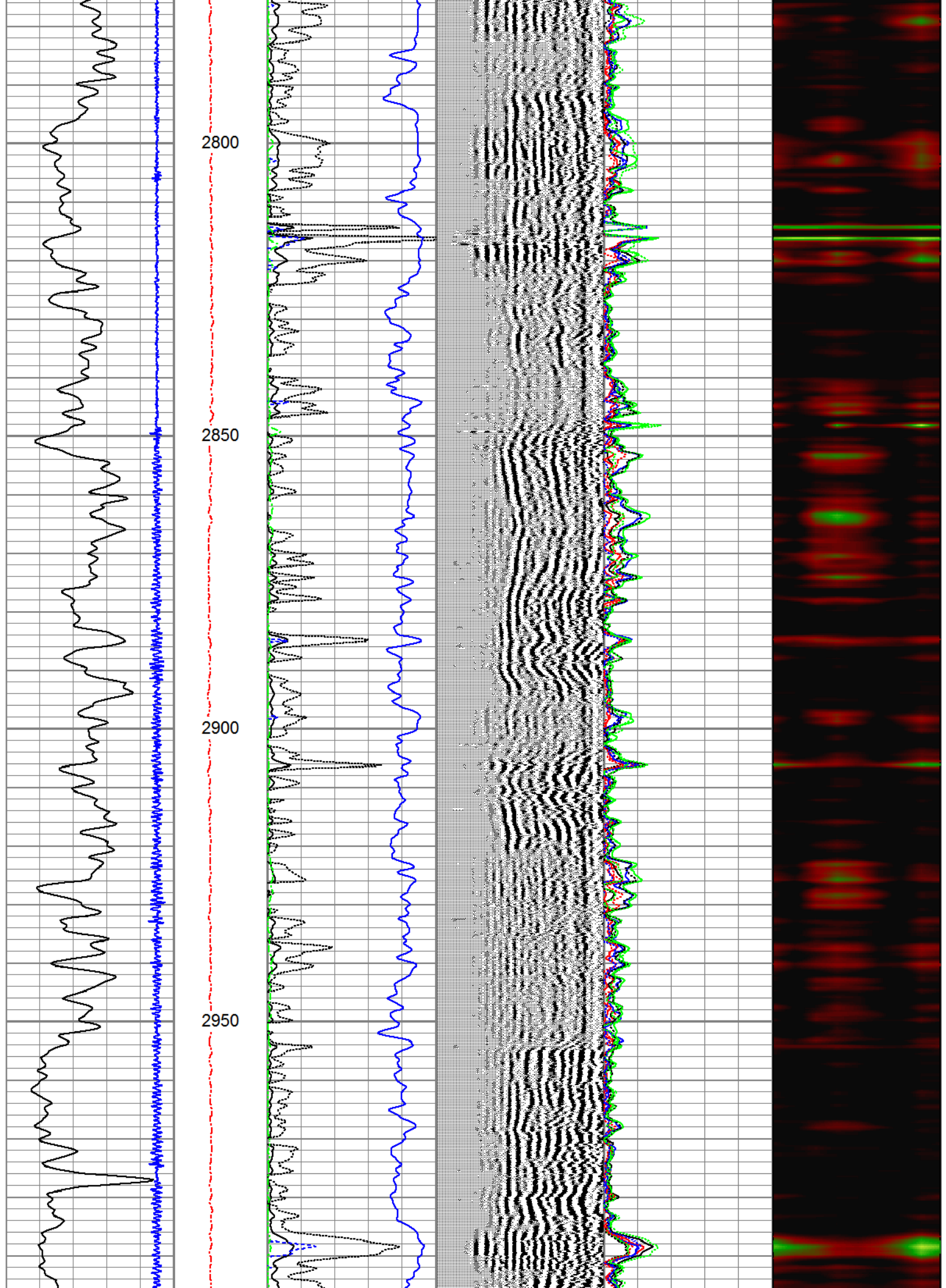


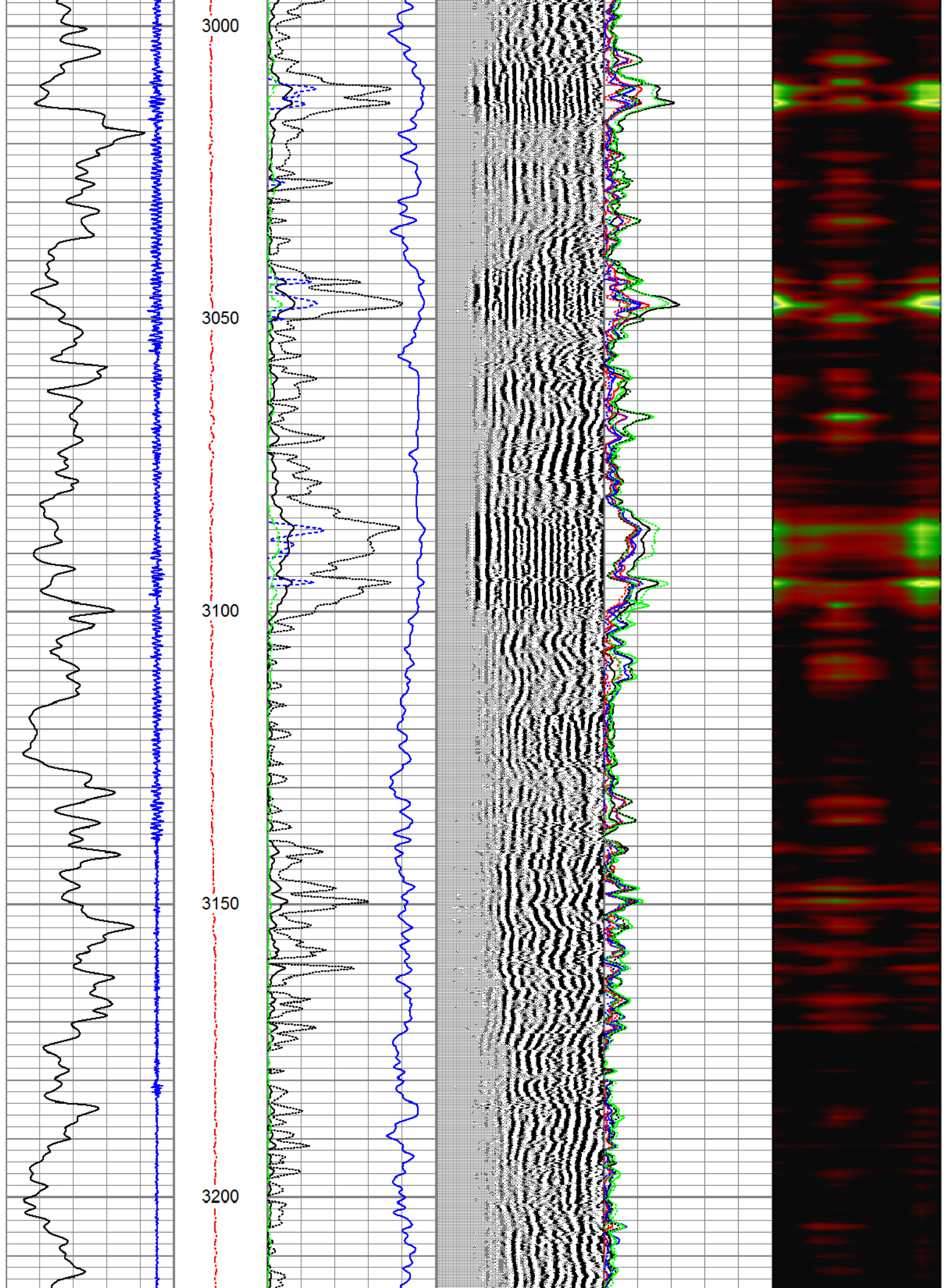


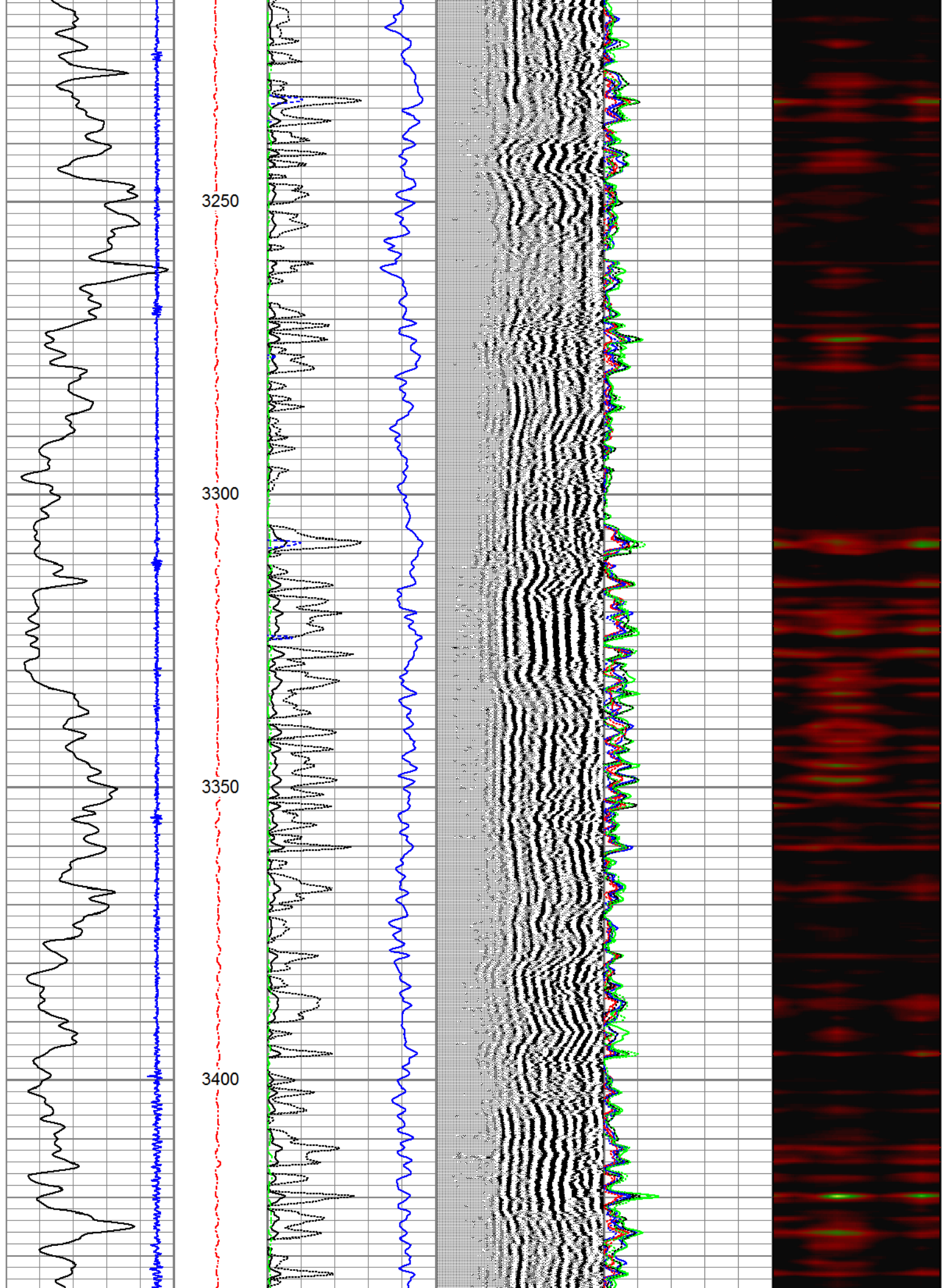


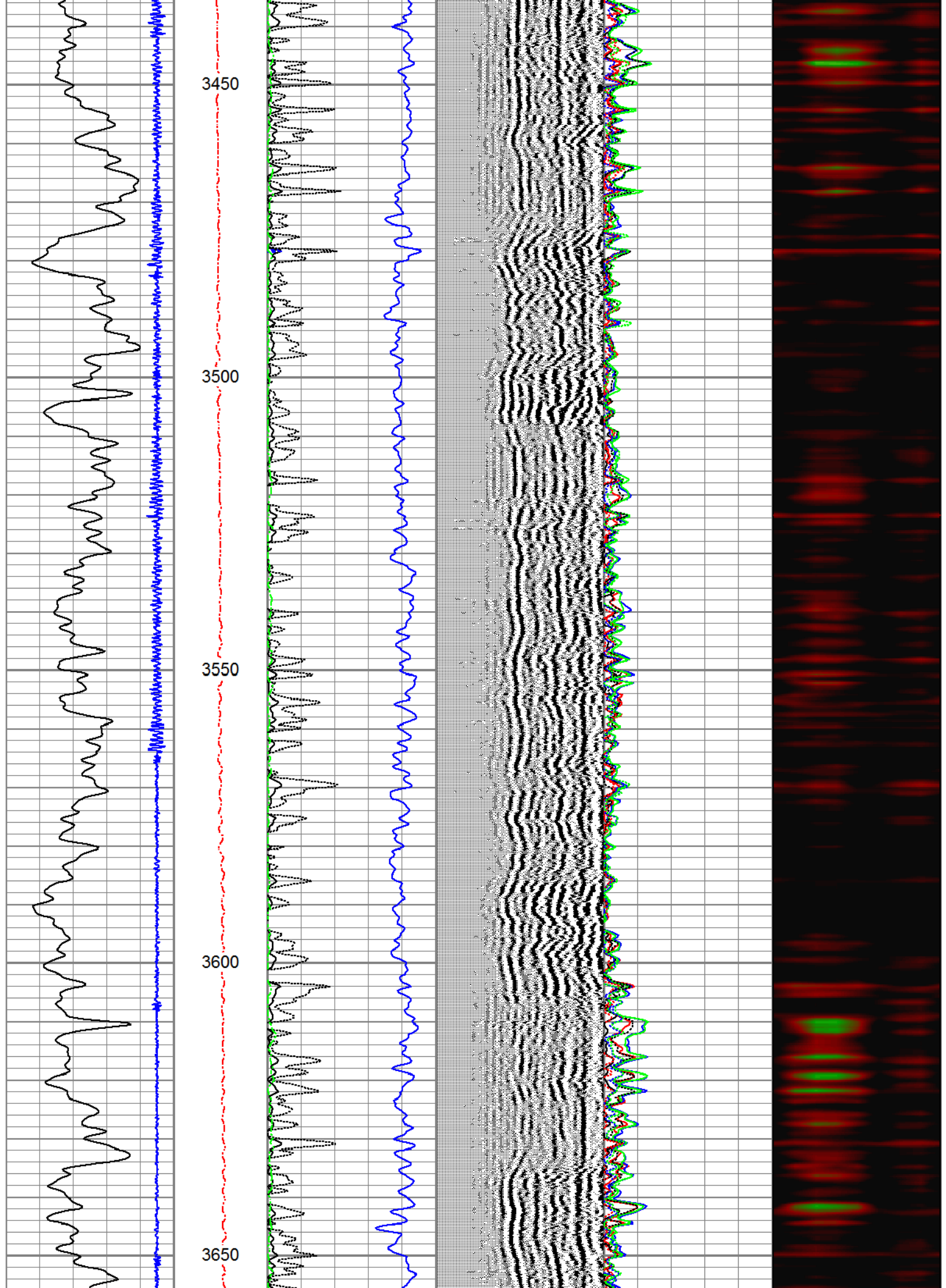


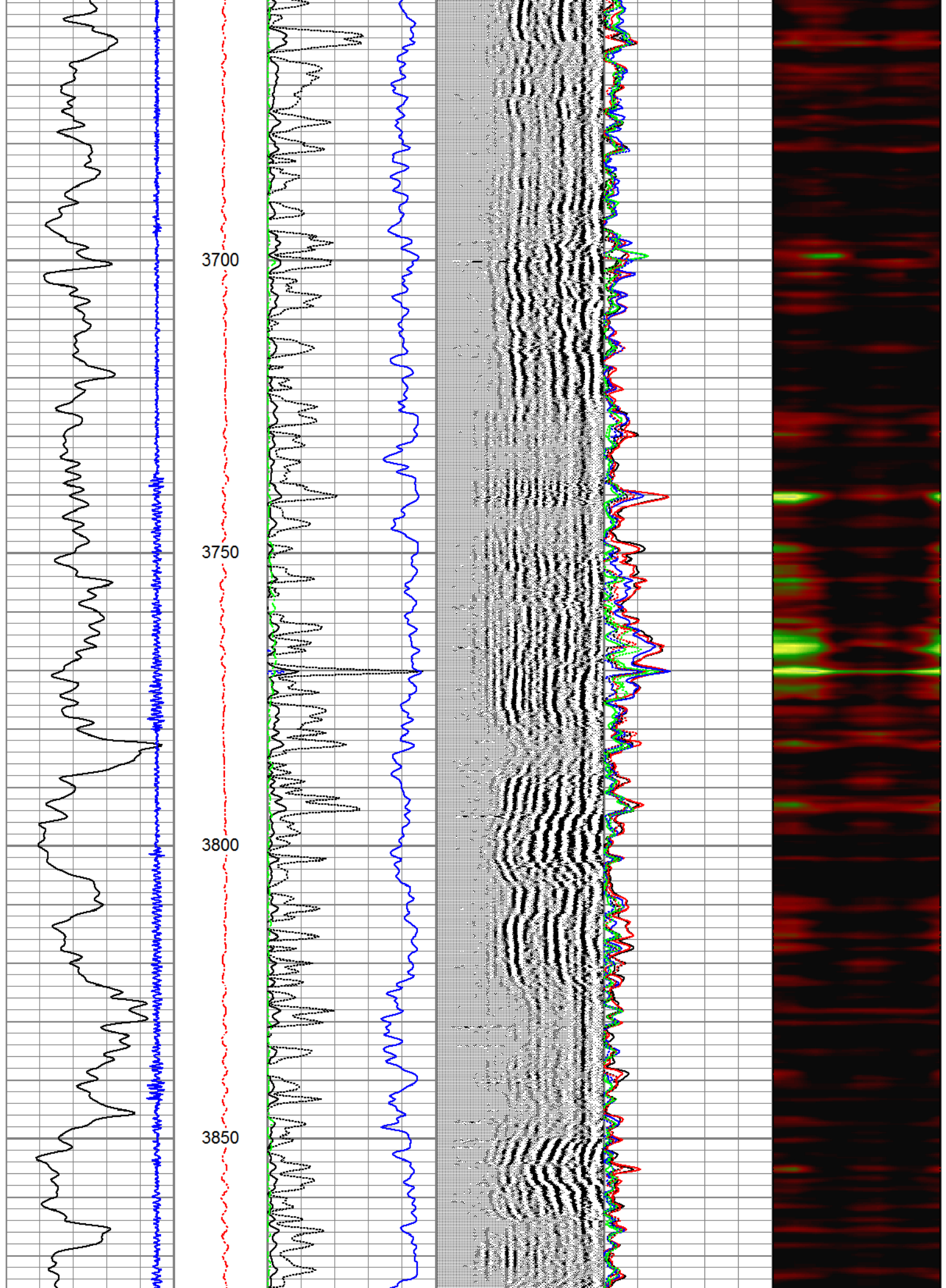












3900

3950

4000

GAMMA RAY

CASING COLLAR

Travel Time

AMP X5

3' AMPLITUDE

AMPS6

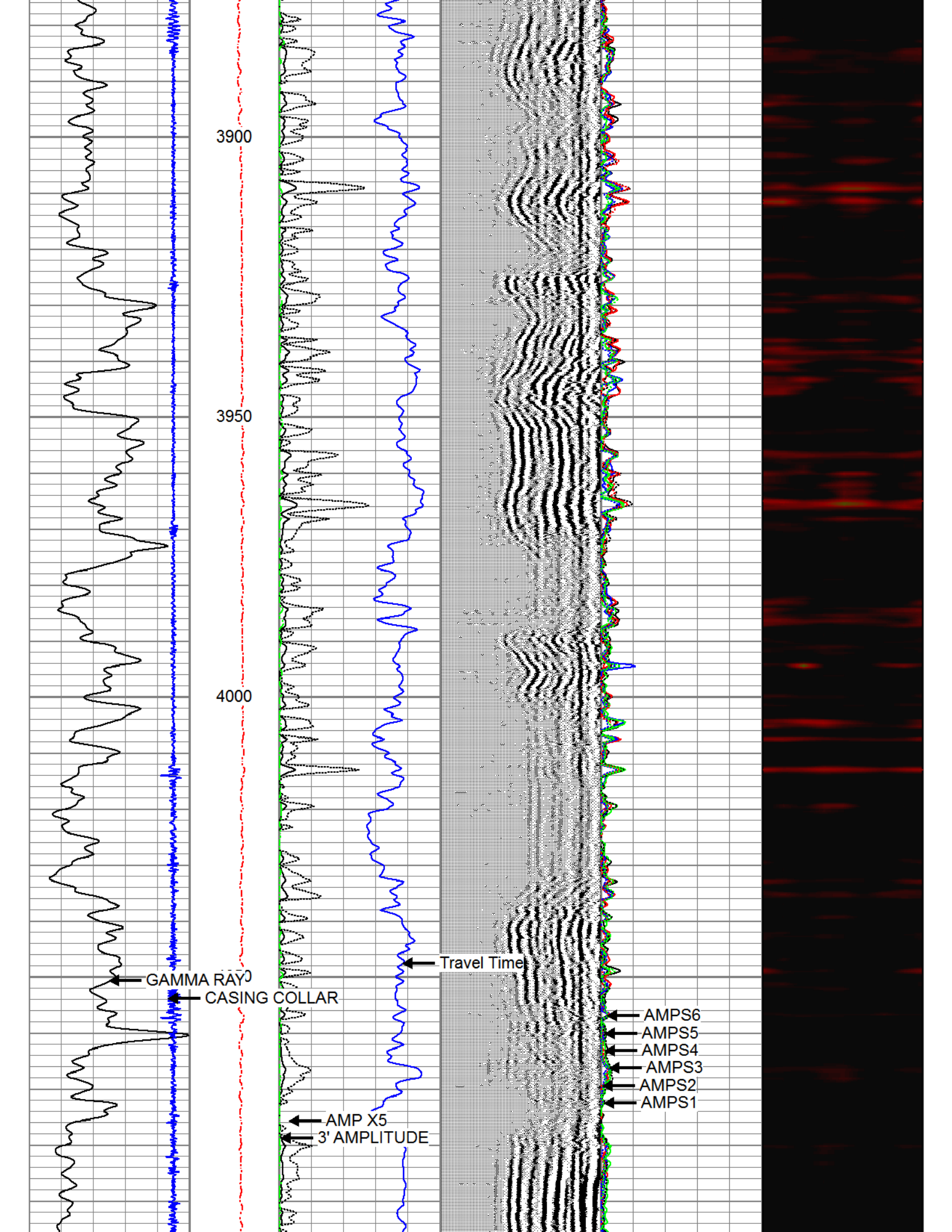
AMPS5

AMPS4

AMPS3

AMPS2

AMPS1



S1	0.020	0.462	0.000	91.000	270.000	-0.020
S2	0.008	0.462	0.000	91.000	200.423	-1.600
S3	0.006	0.475	0.000	91.000	194.037	-1.225
S4	0.007	0.504	0.000	91.000	183.064	-1.260
S5	0.006	0.516	0.000	91.000	178.372	-1.015
S6	0.004	0.492	0.000	91.000	186.545	-0.797
S7	0.004	0.455	0.000	91.000	201.626	-0.770
S8	0.005	0.443	0.000	91.000	207.381	-0.959

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.478	0.478	1.000	0.000

Air Zero Calibration, performed Sun Jul 29 13:56:46 2018:

	Raw (v)		Calibrated (v)		Results
	Zero		Zero		Offset
3'	0.009		0.000		-0.004
5'	0.009		0.000		0.000
SUM					
S1	0.032		0.000		-0.009
S2	0.006		0.000		0.002
S3	0.008		0.000		-0.002
S4	0.009		0.000		-0.002
S5	0.010		0.000		-0.004
S6	0.012		0.000		-0.007
S7	0.010		0.000		-0.006
S8	0.008		0.000		-0.003