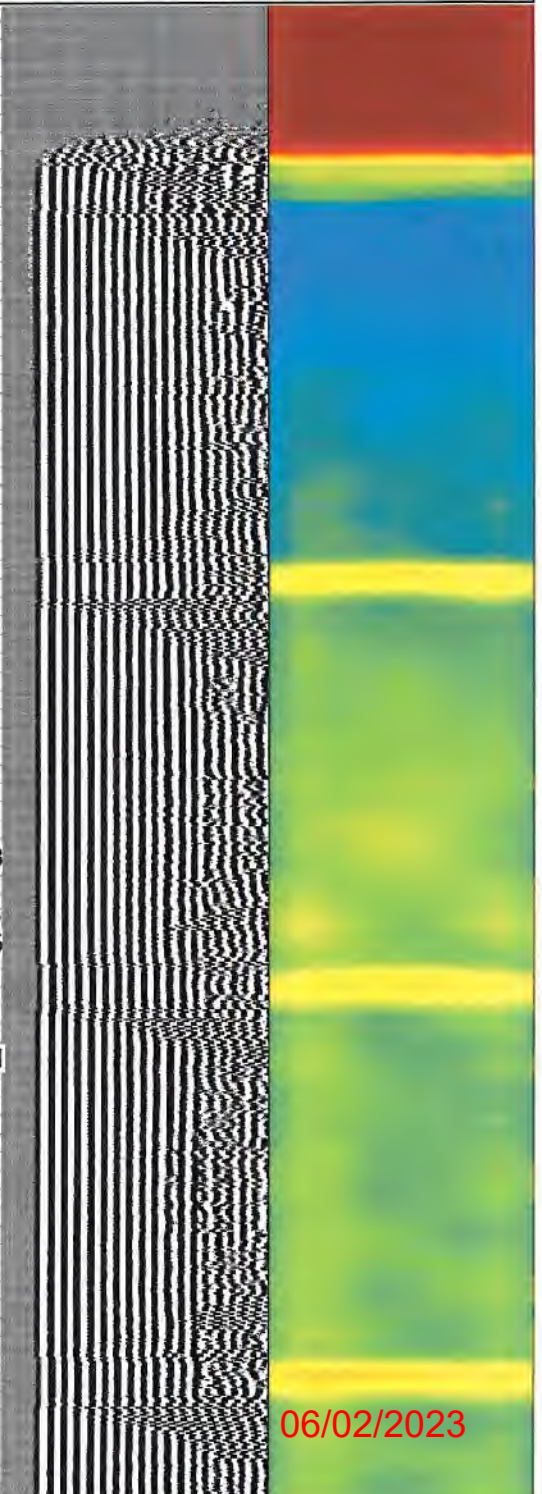
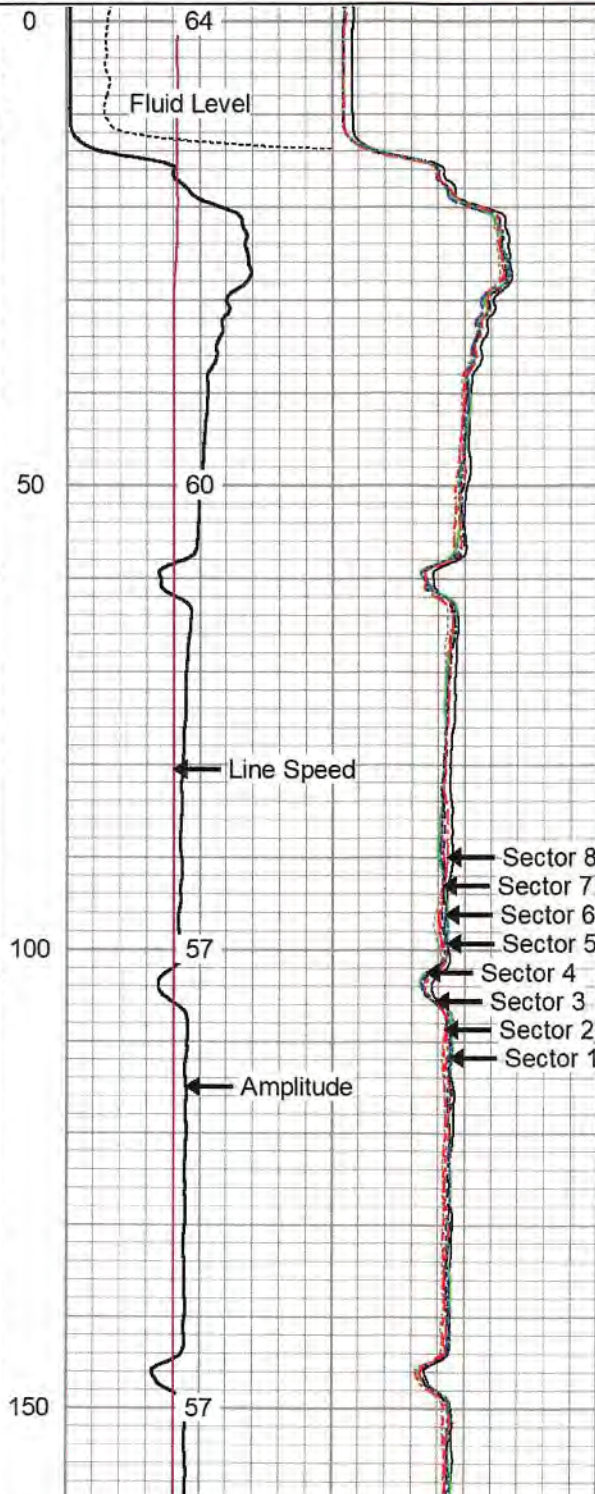
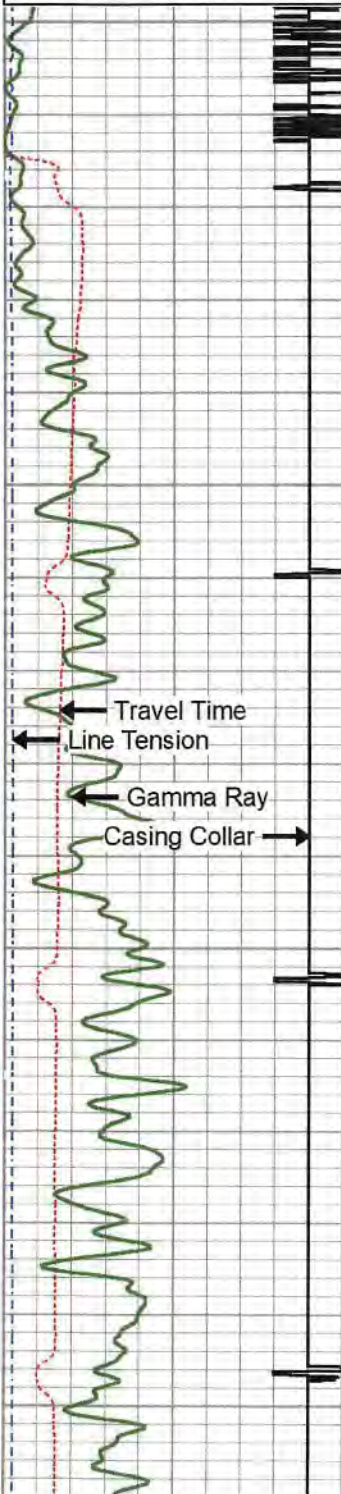


Database File antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2_2020.db
 Dataset Pathname Rabbit_Ears/Harpua_1H/RCBL_1/pass11.3
 Presentation Format 9rcbl
 Dataset Creation Sun May 03 11:07:44 2020
 Charted by Depth in Feet scaled 1:240

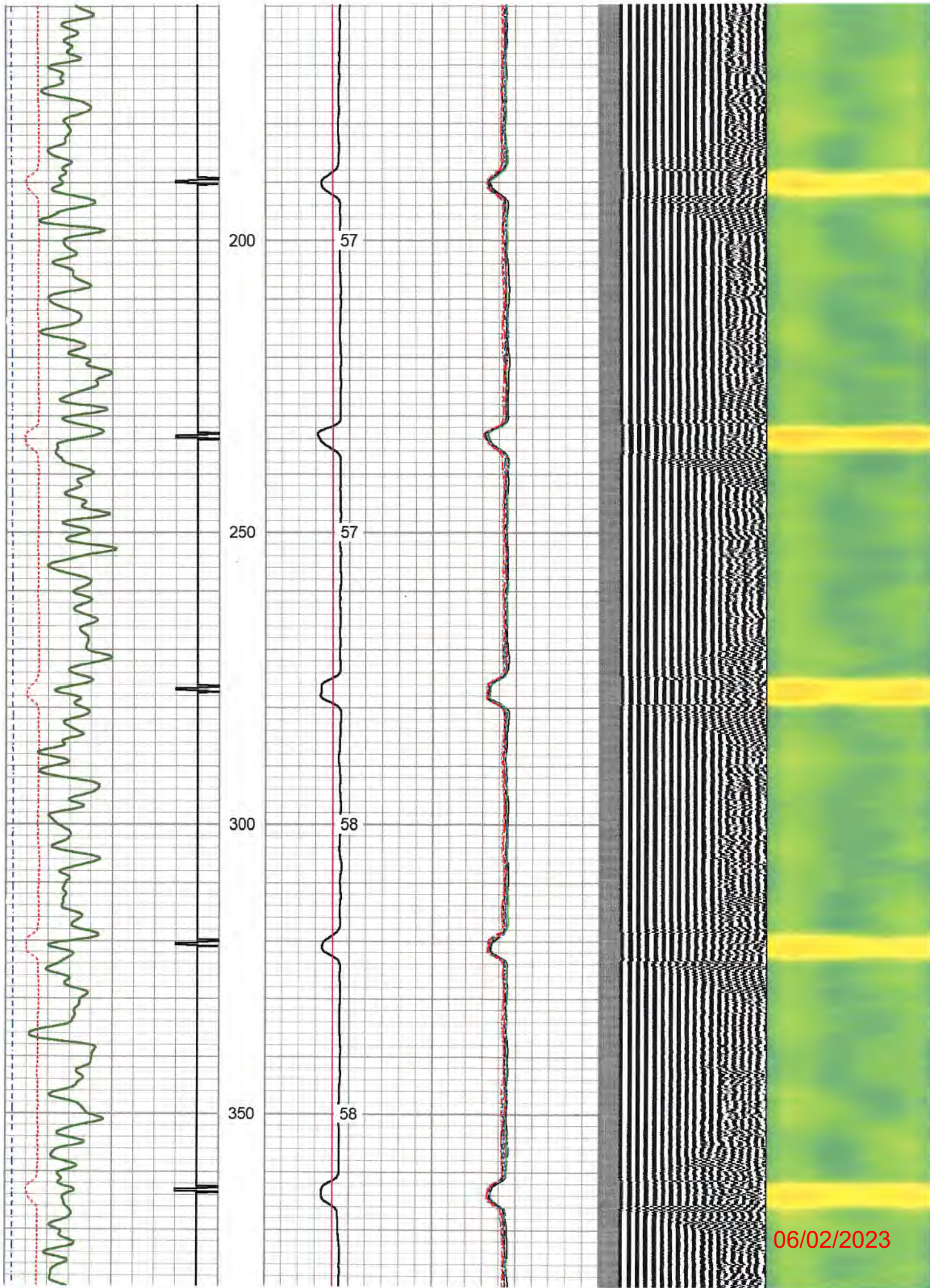
270	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

0	Amplitude (mV)	100	-5	Sector 1	150
	Amplified Amplitude		-5	Sector 2	150
0	(mV)	10	-5	Sector 3	150
	Line Speed		-5	Sector 4	150
-500	(ft/min)	500	-5	Sector 5	150
	TEMP		-5	Sector 6	150
	(degF)		-5	Sector 7	150
			-5	Sector 8	150

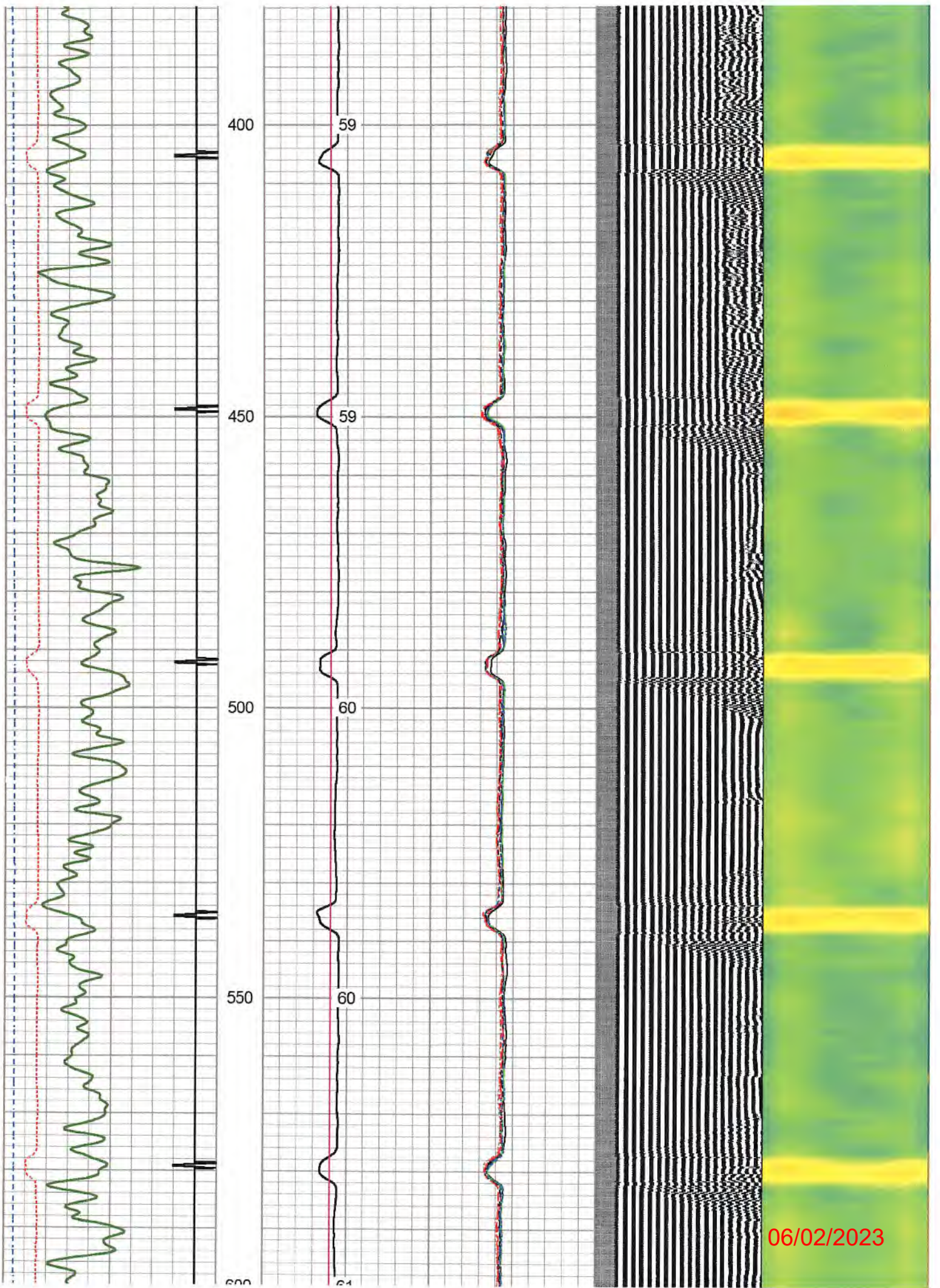
Variable Density 1 Cement Map 8
 200 (usec) 1200



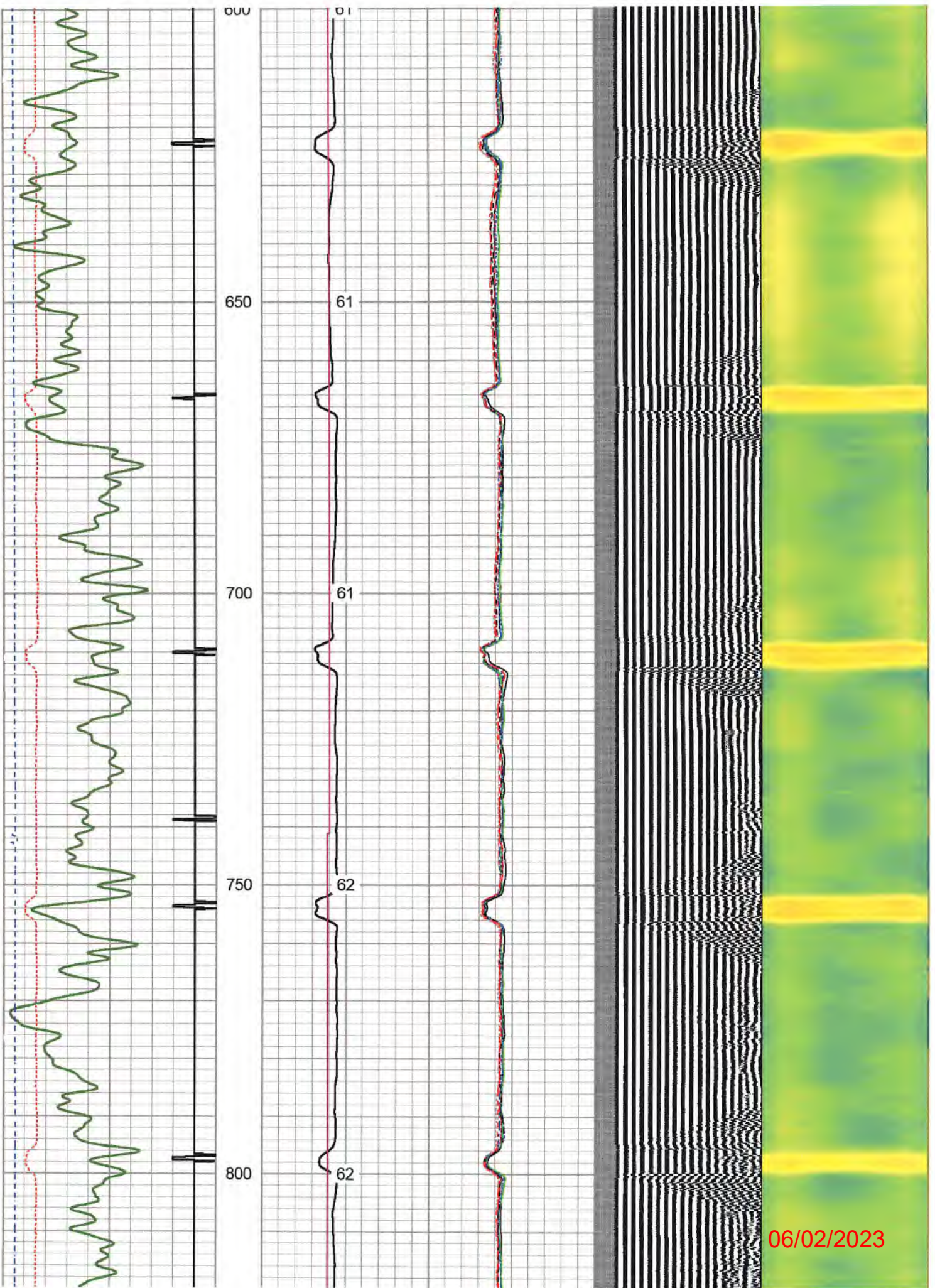
06/02/2023

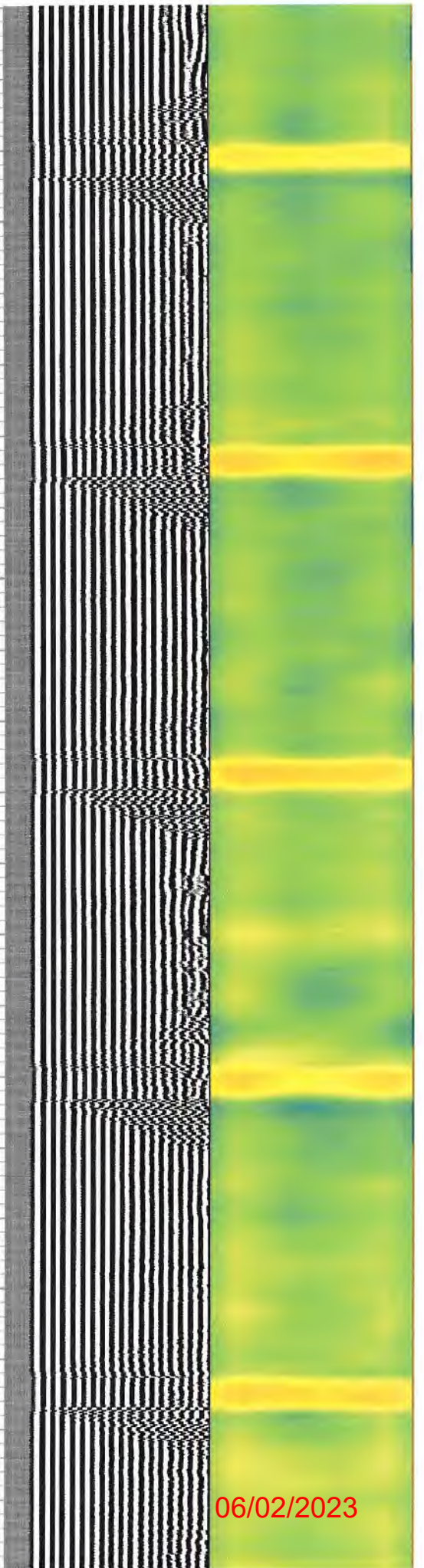
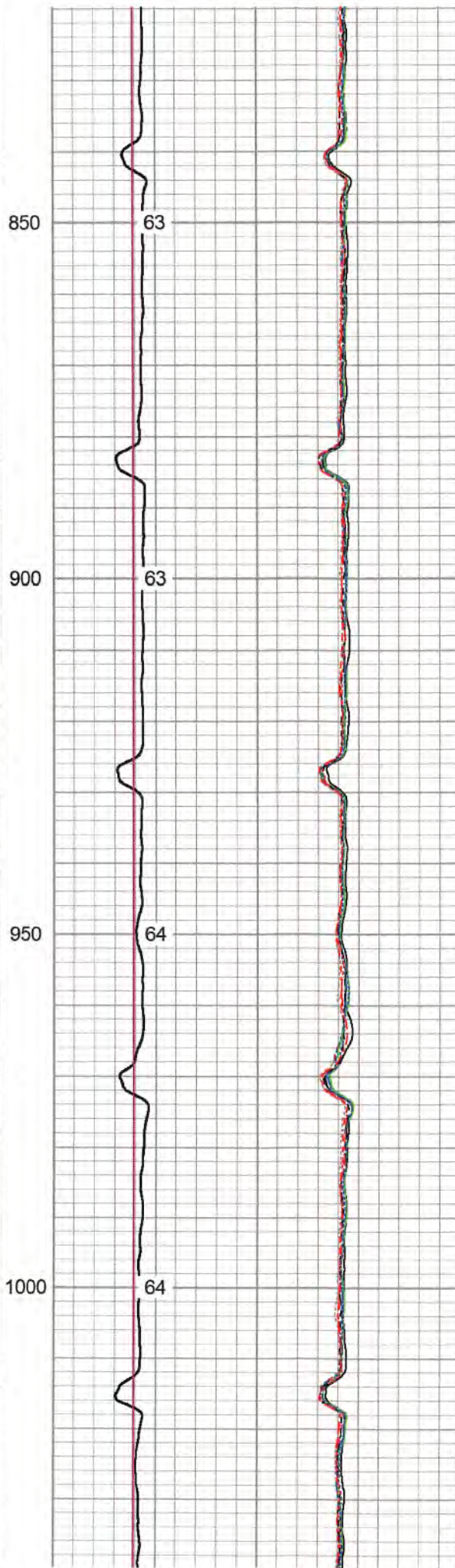
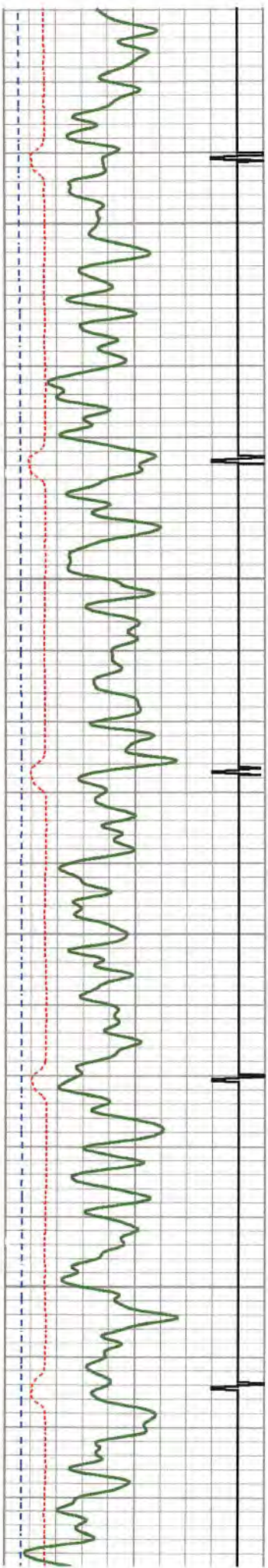


06/02/2023

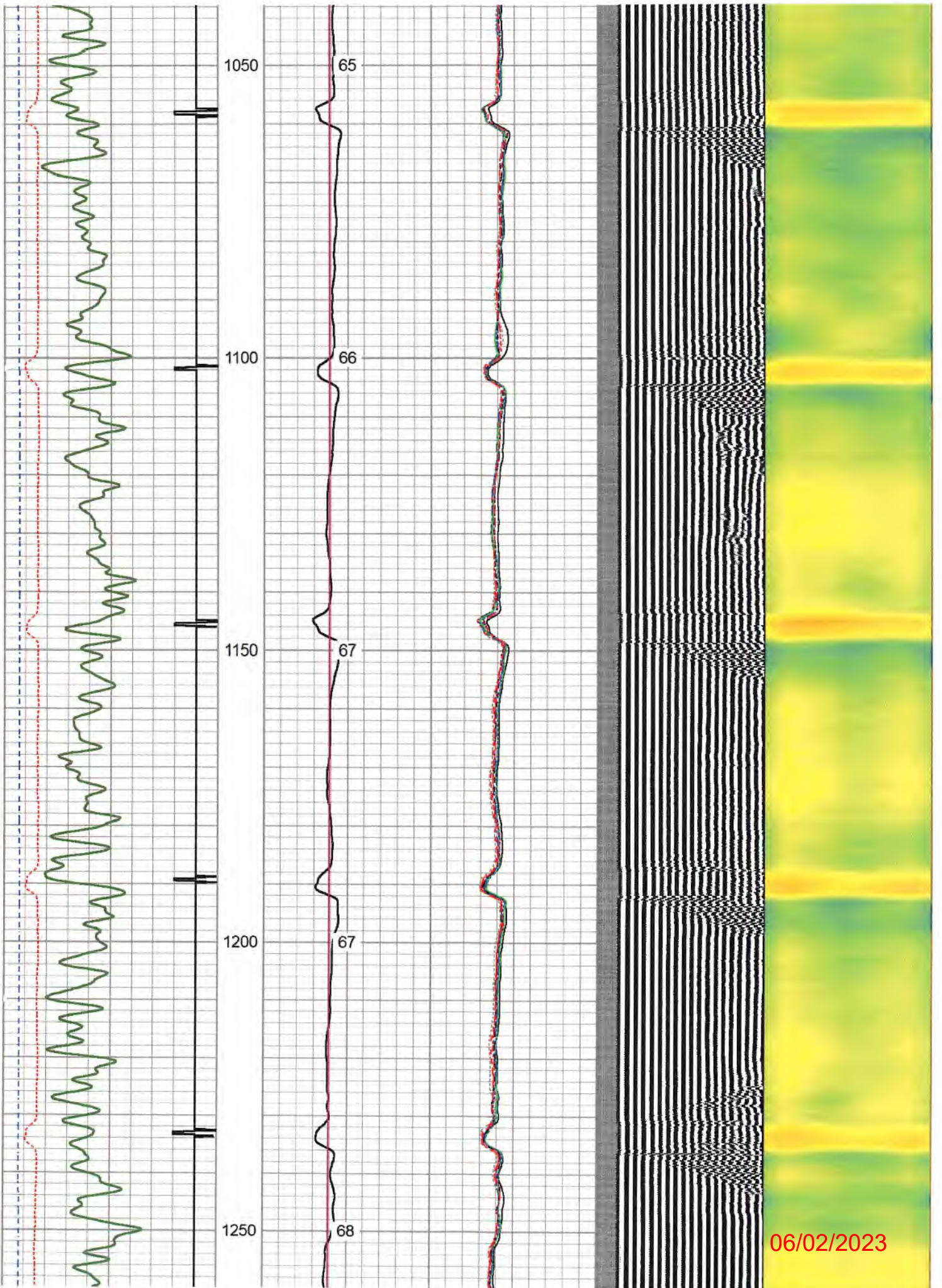


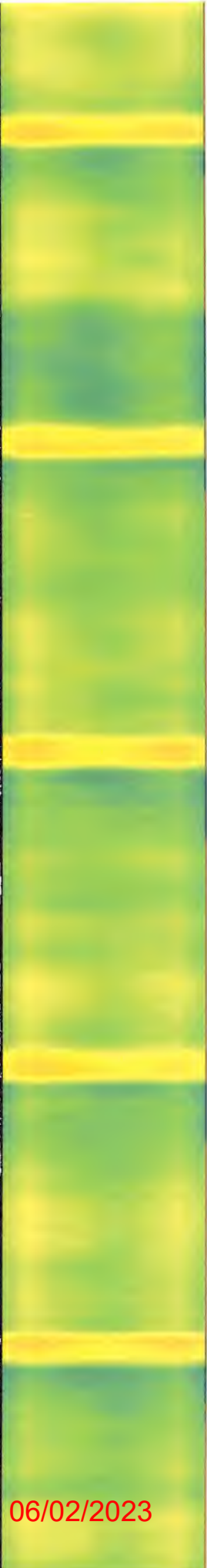
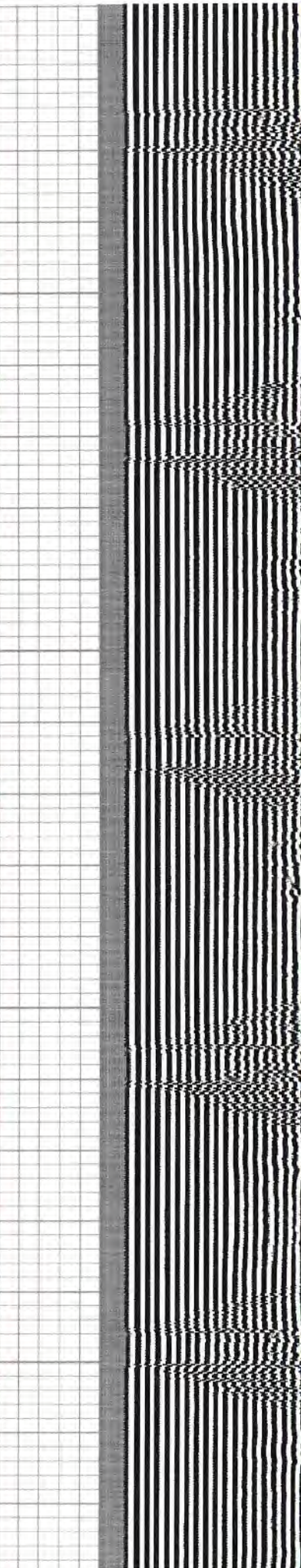
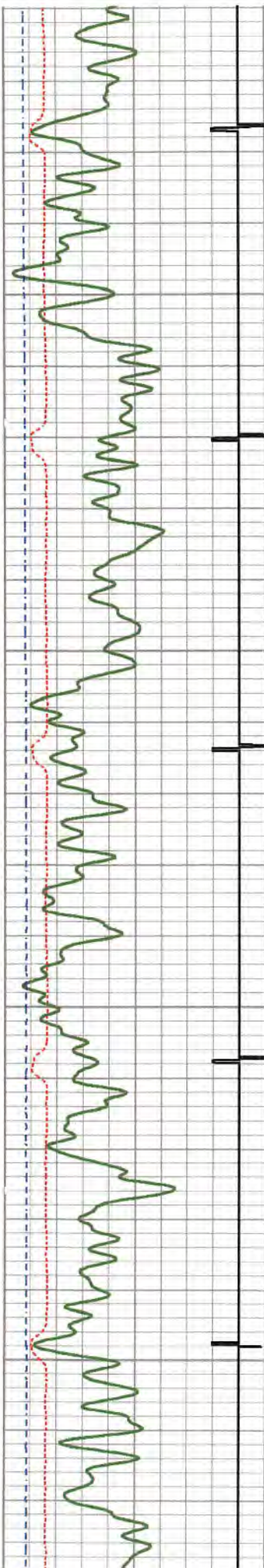
06/02/2023



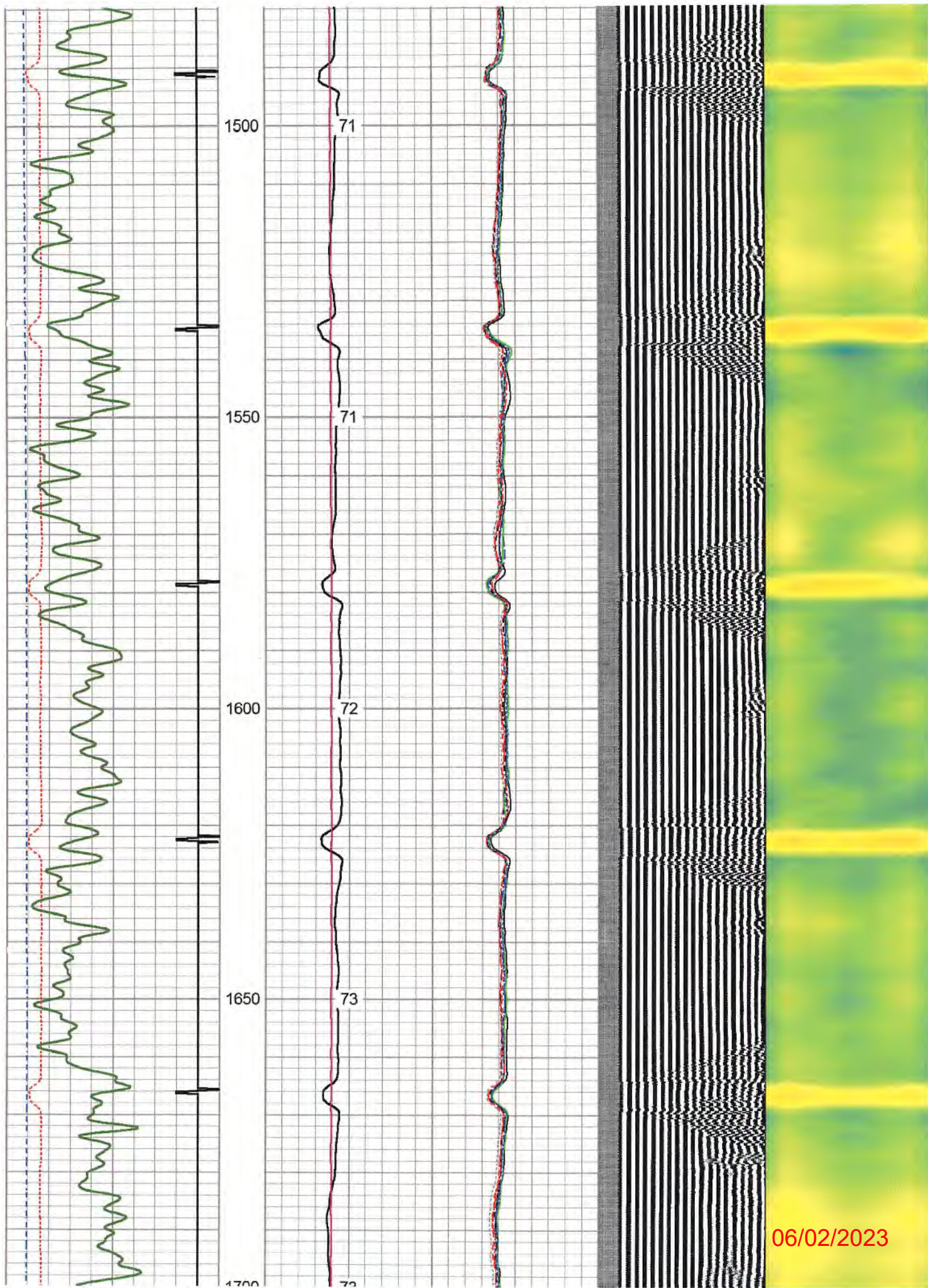


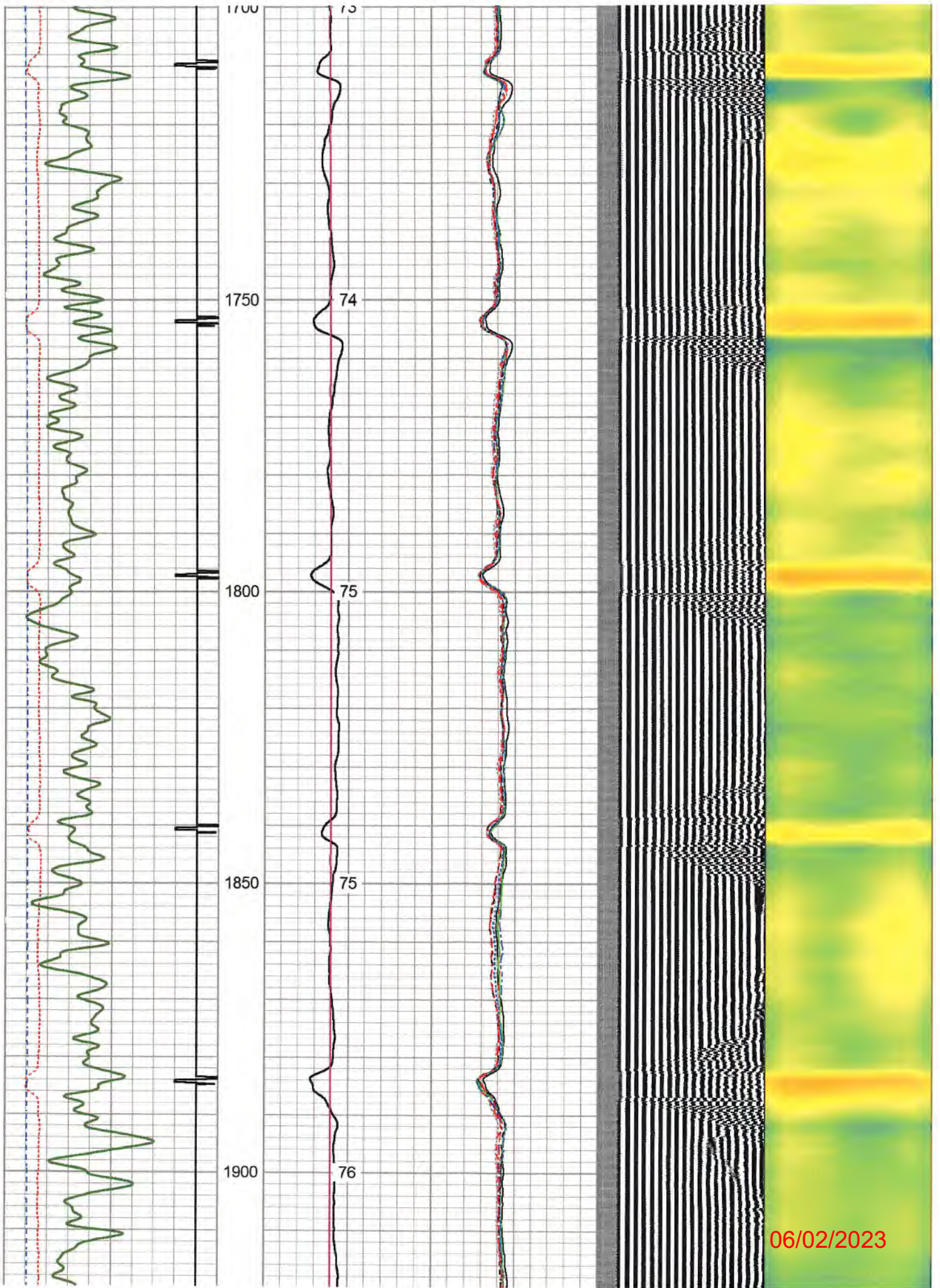
06/02/2023



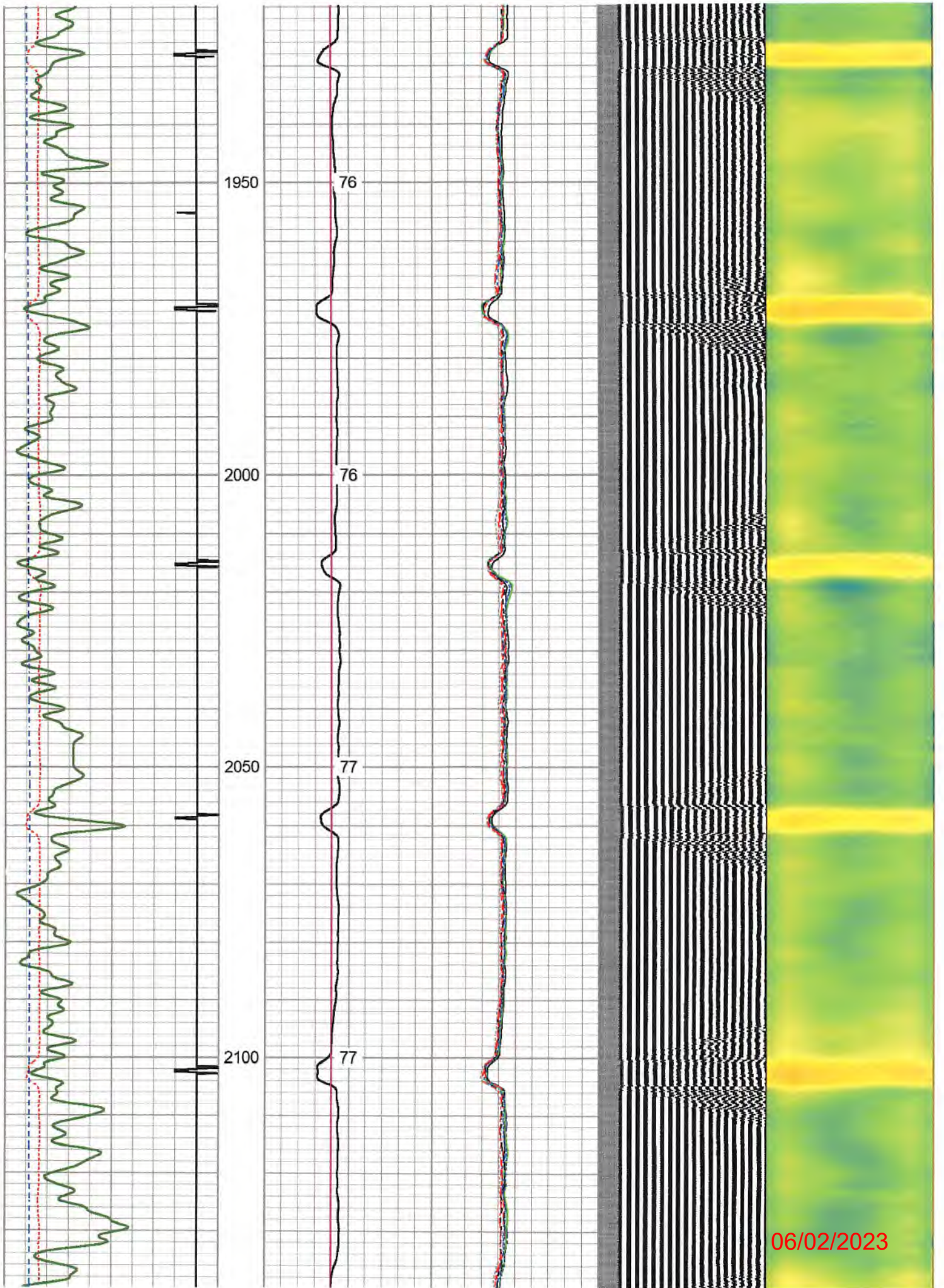


06/02/2023

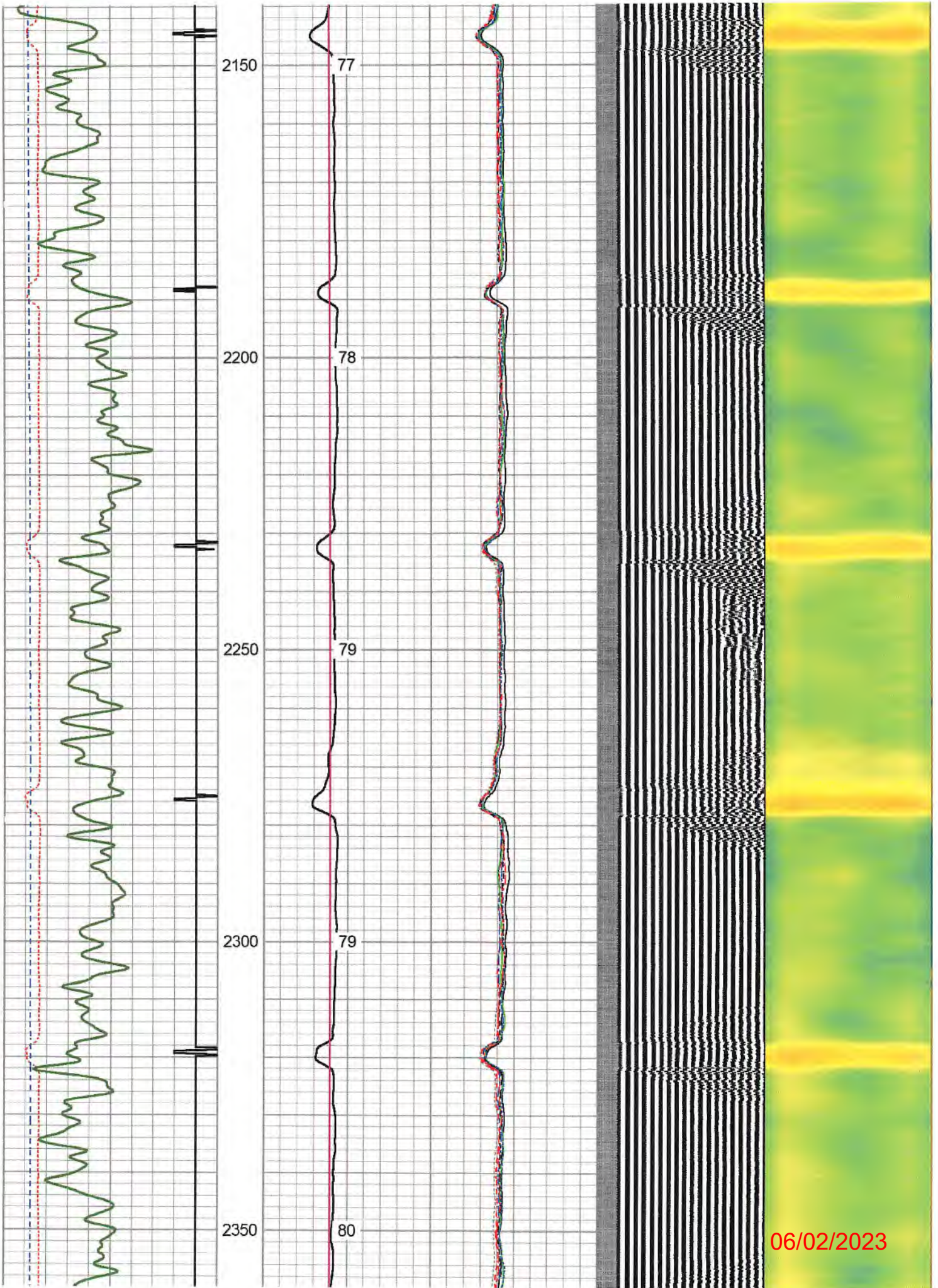




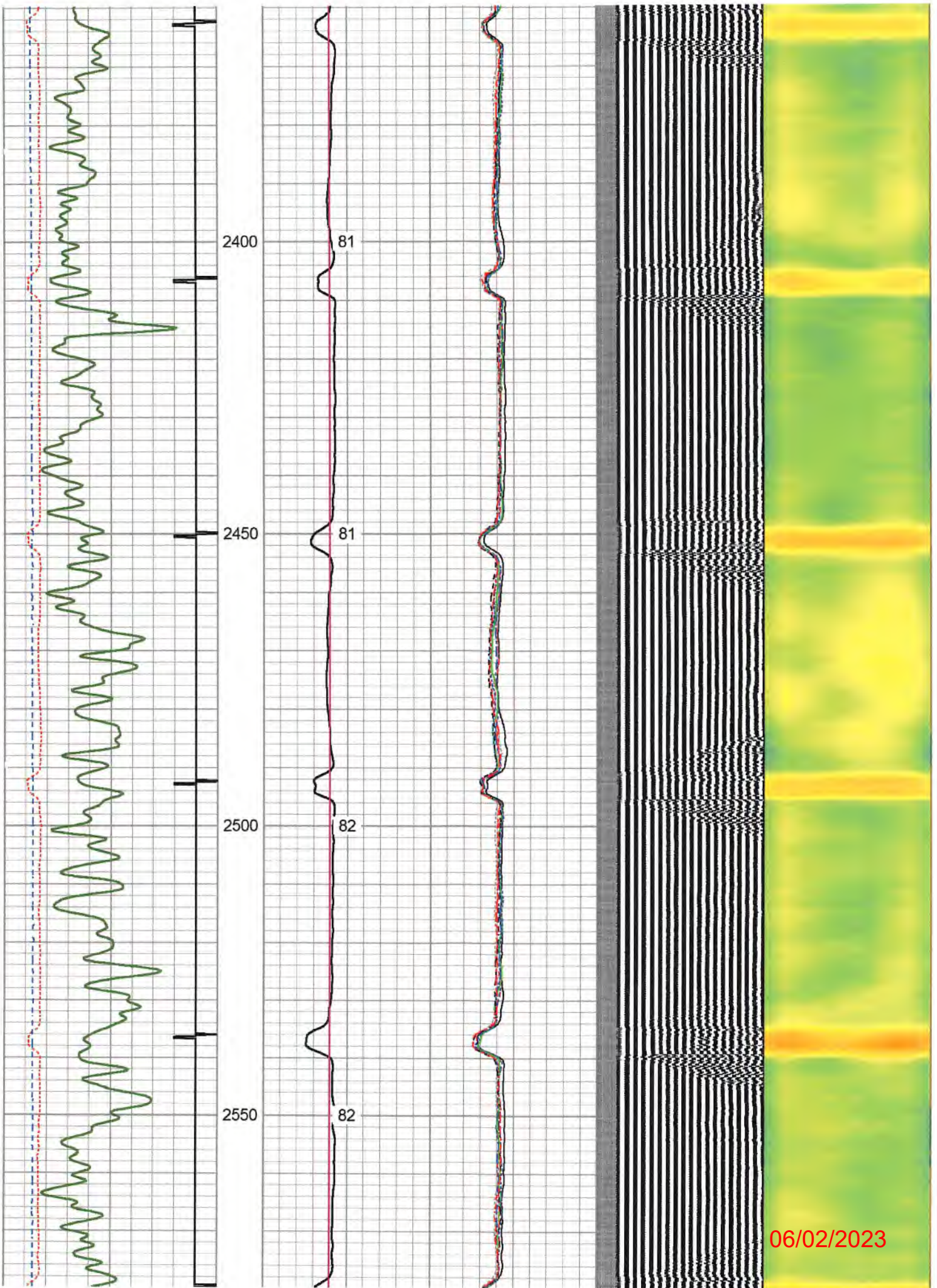
06/02/2023

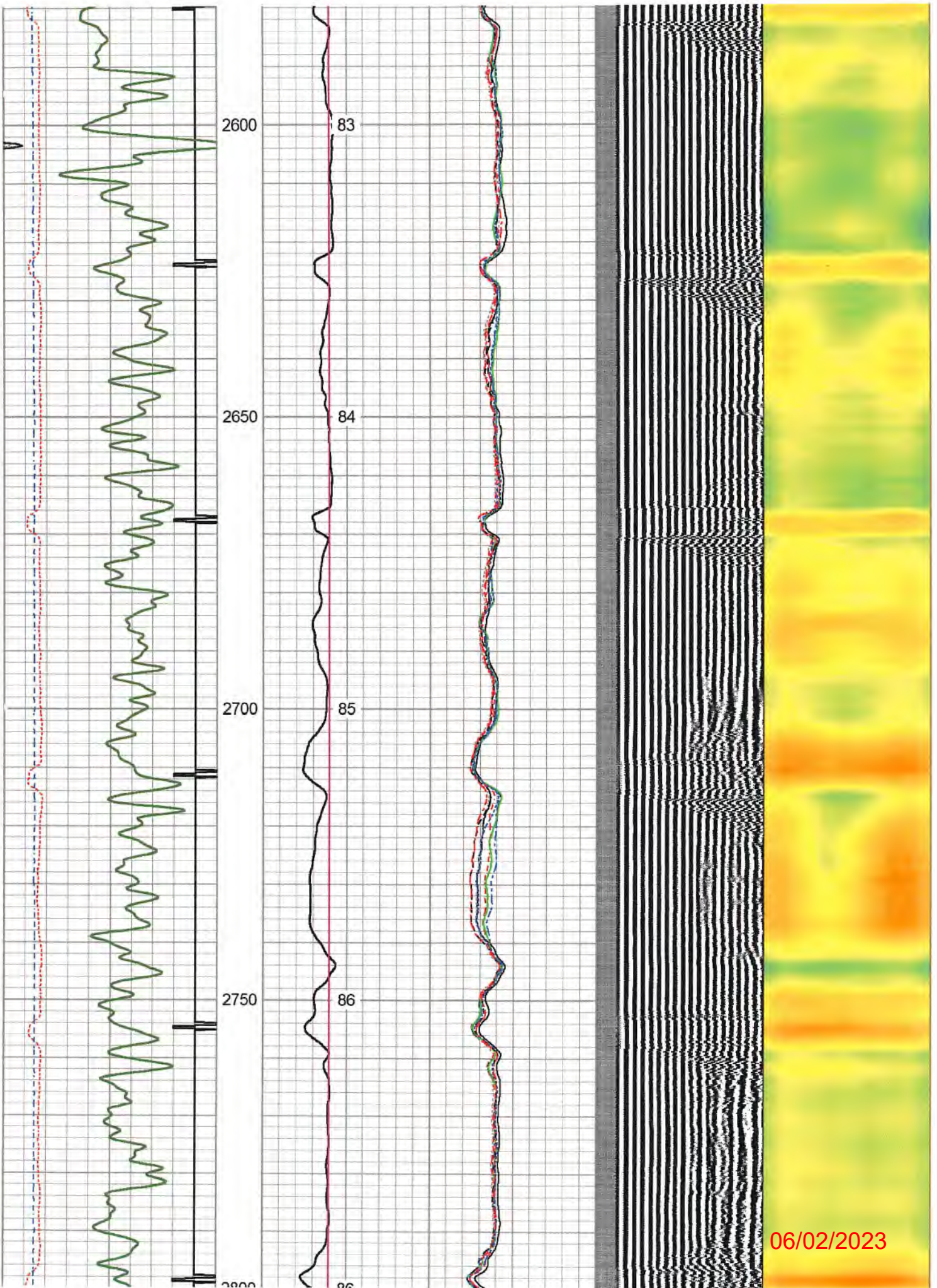


06/02/2023

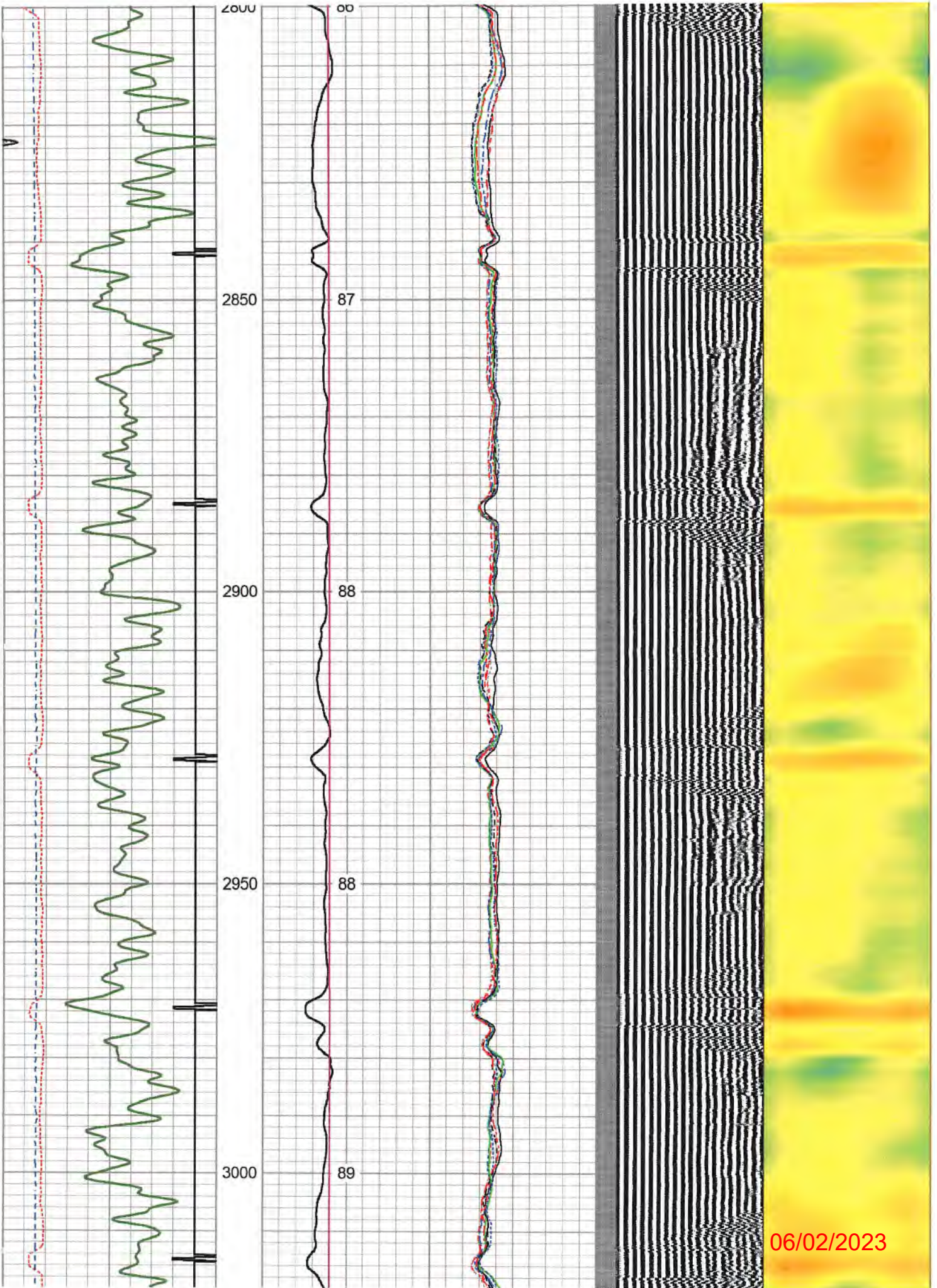


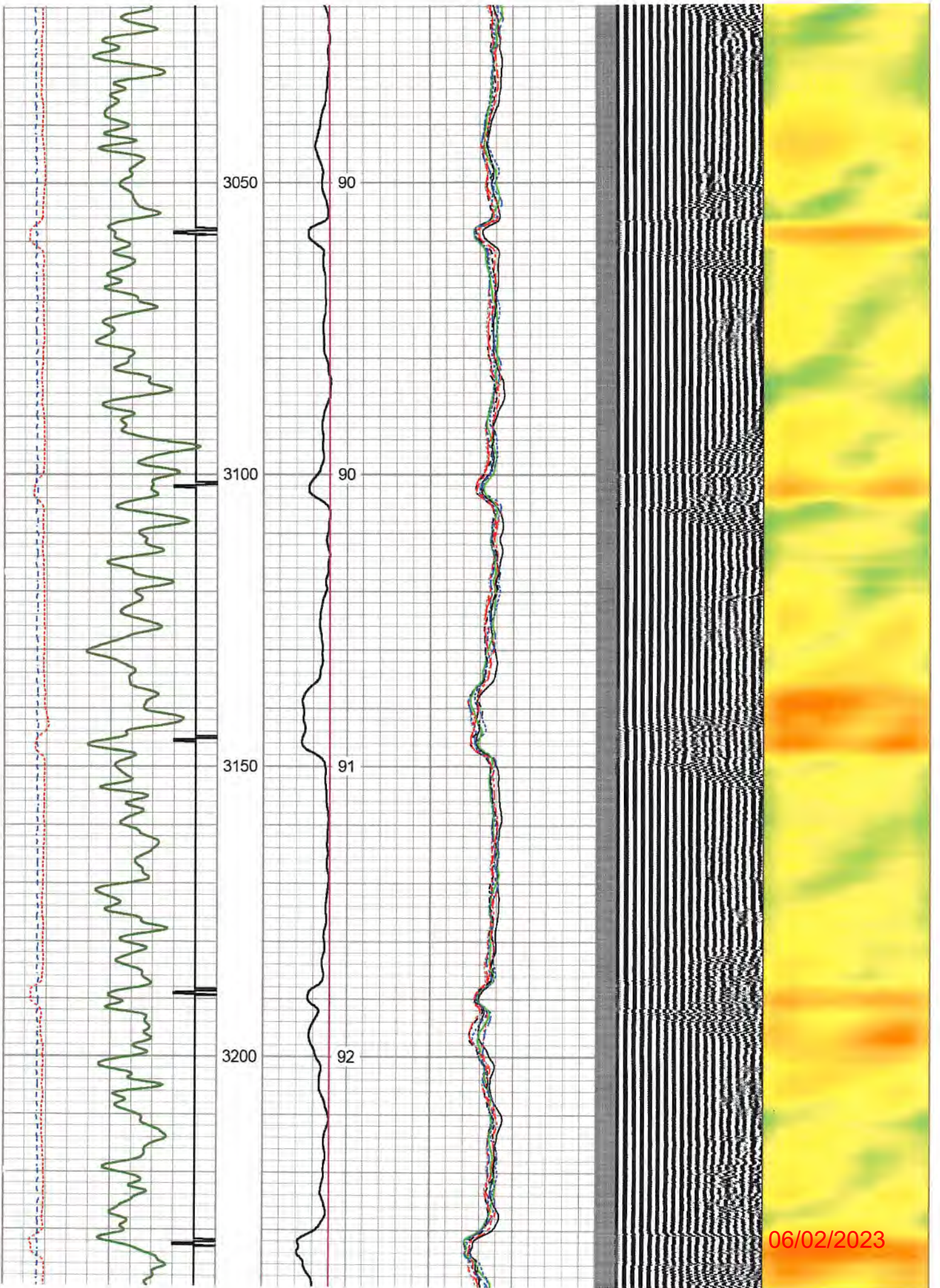
06/02/2023



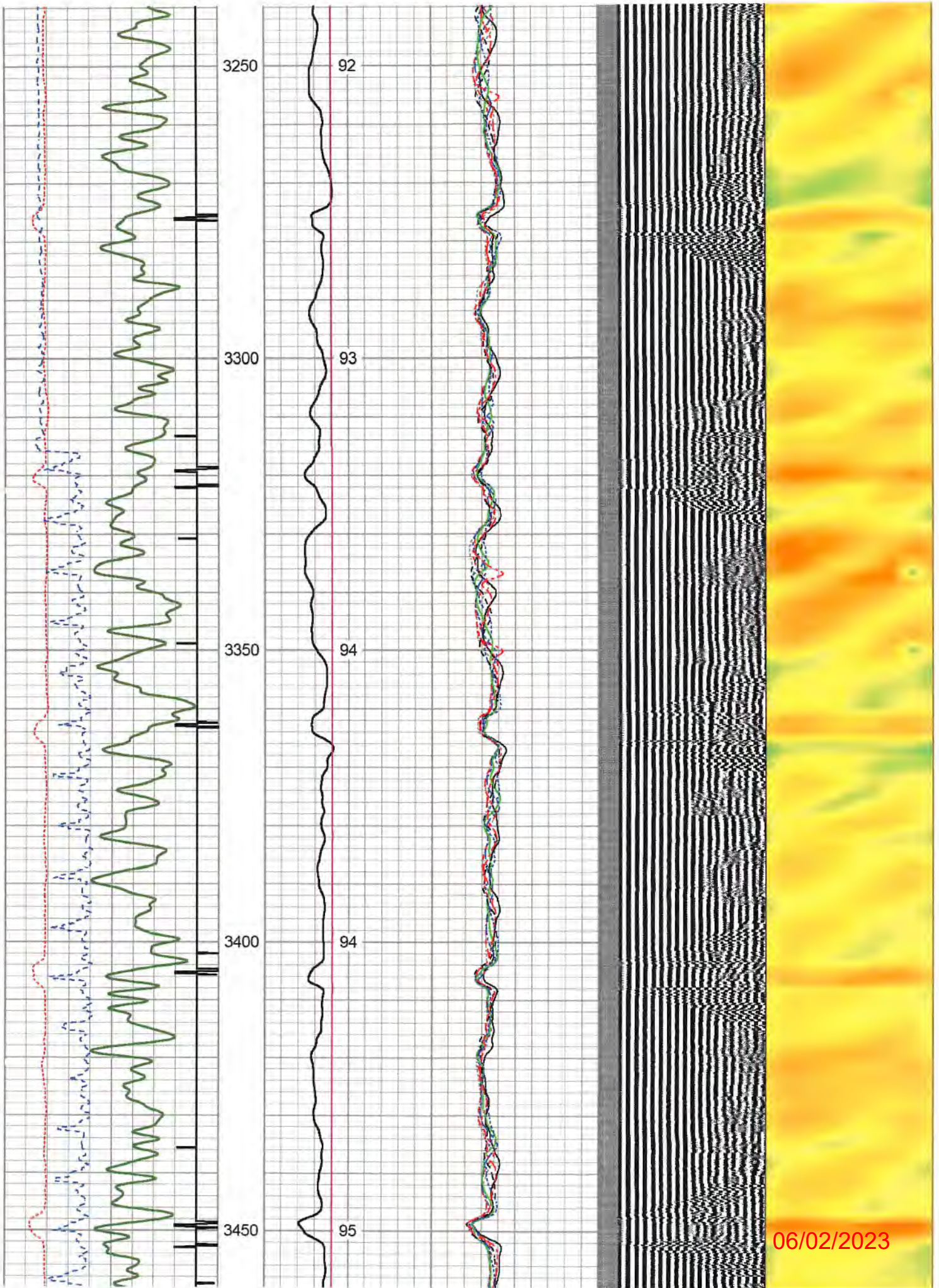


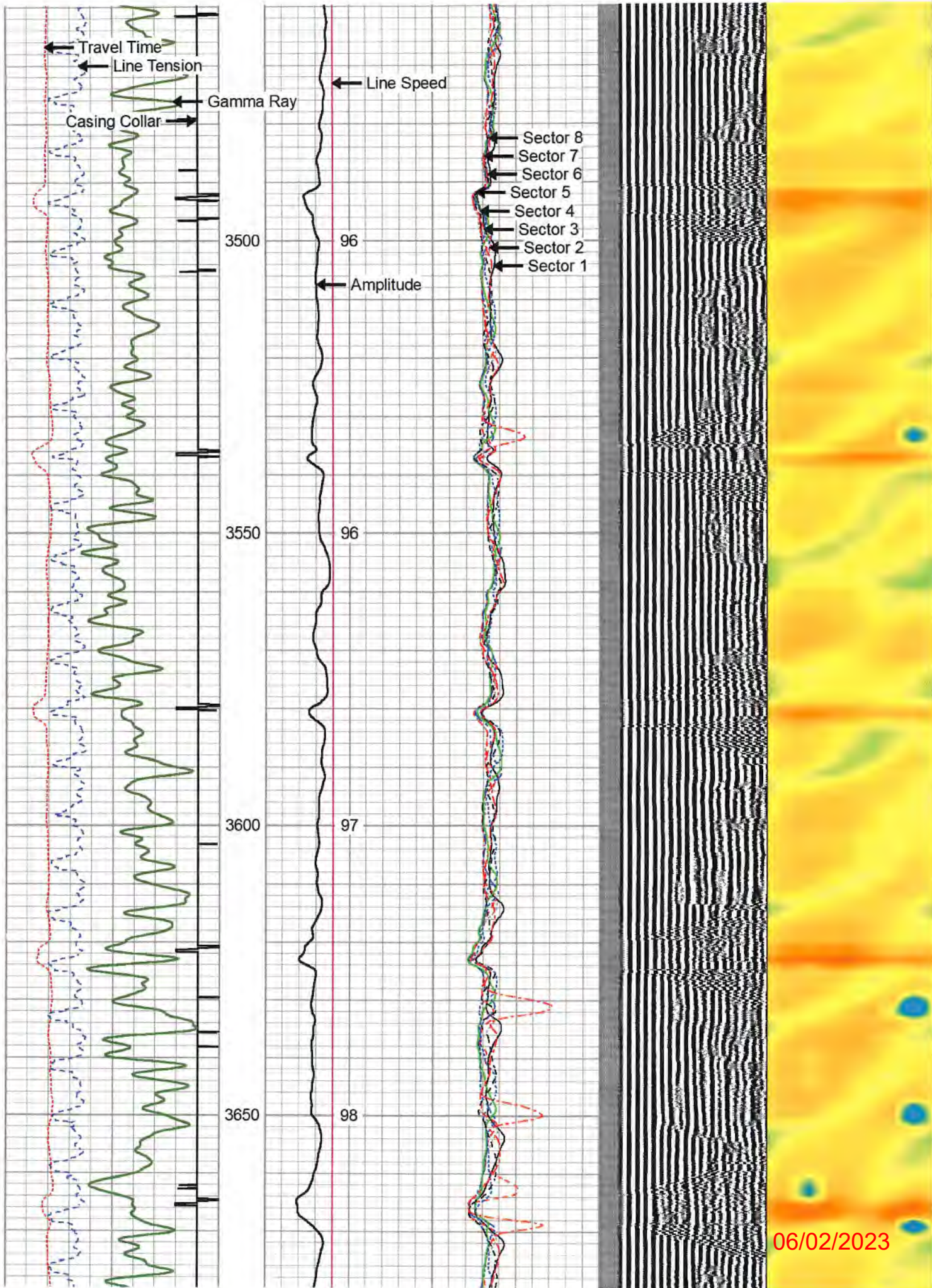
06/02/2023



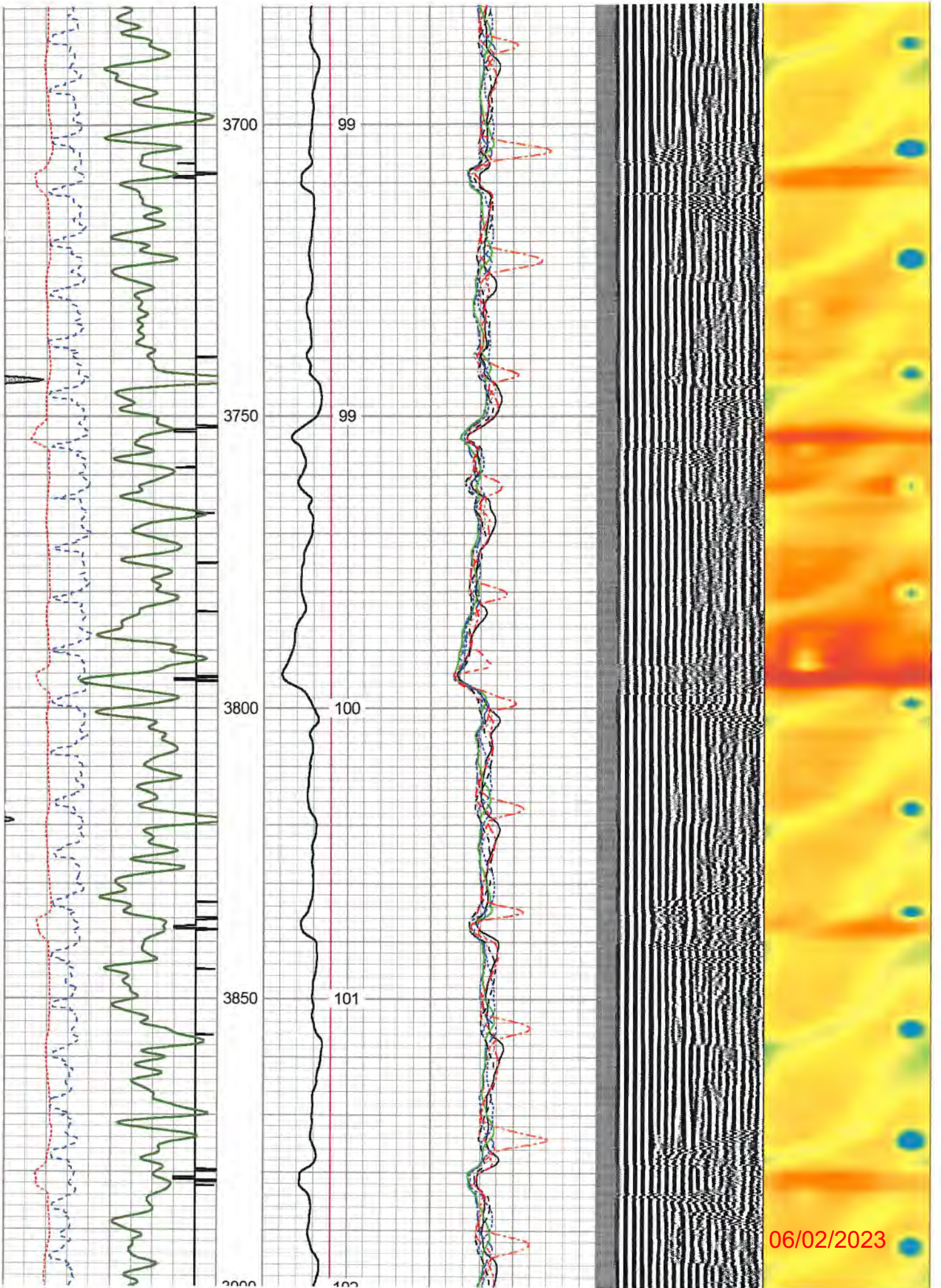


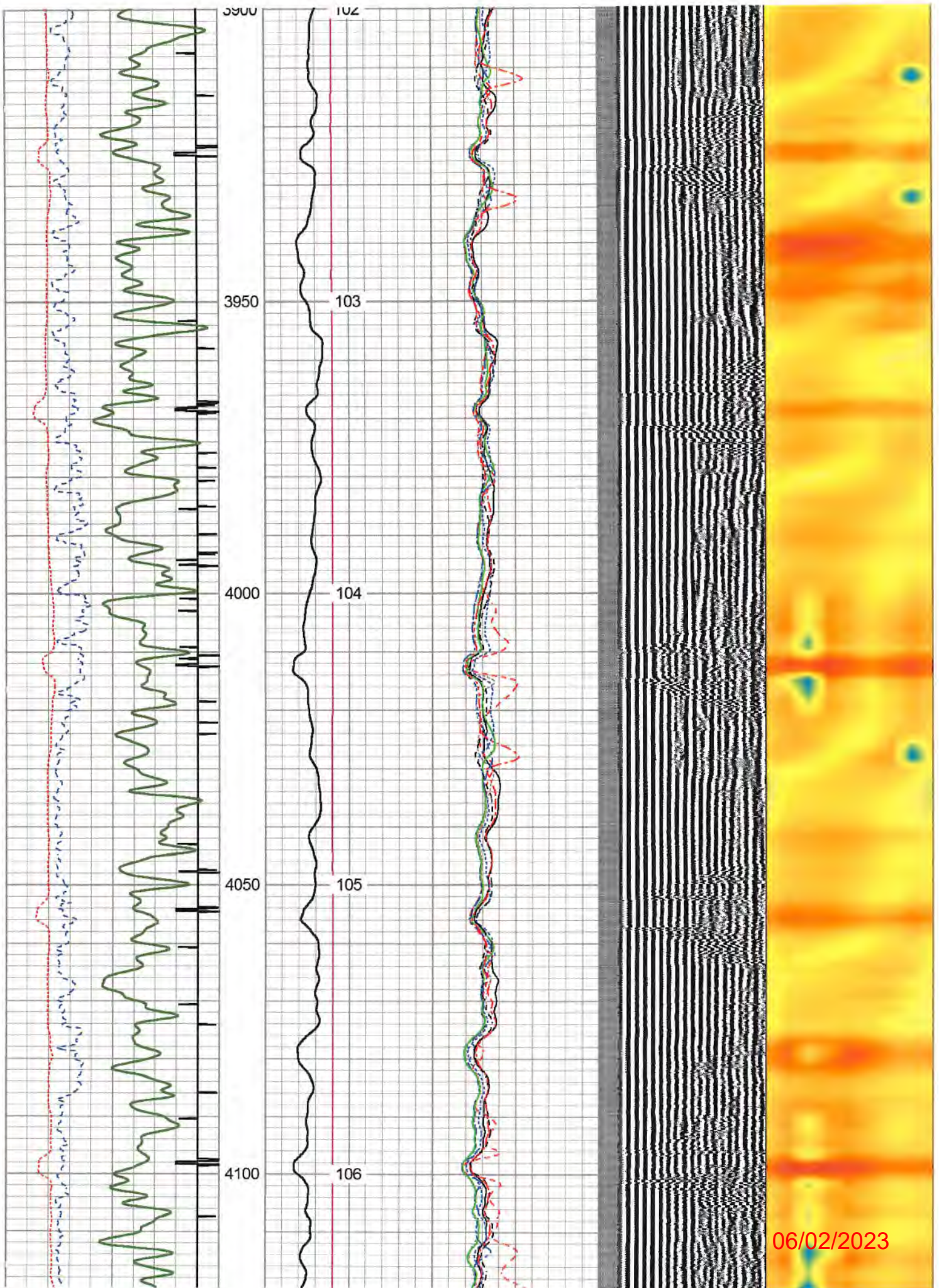
06/02/2023



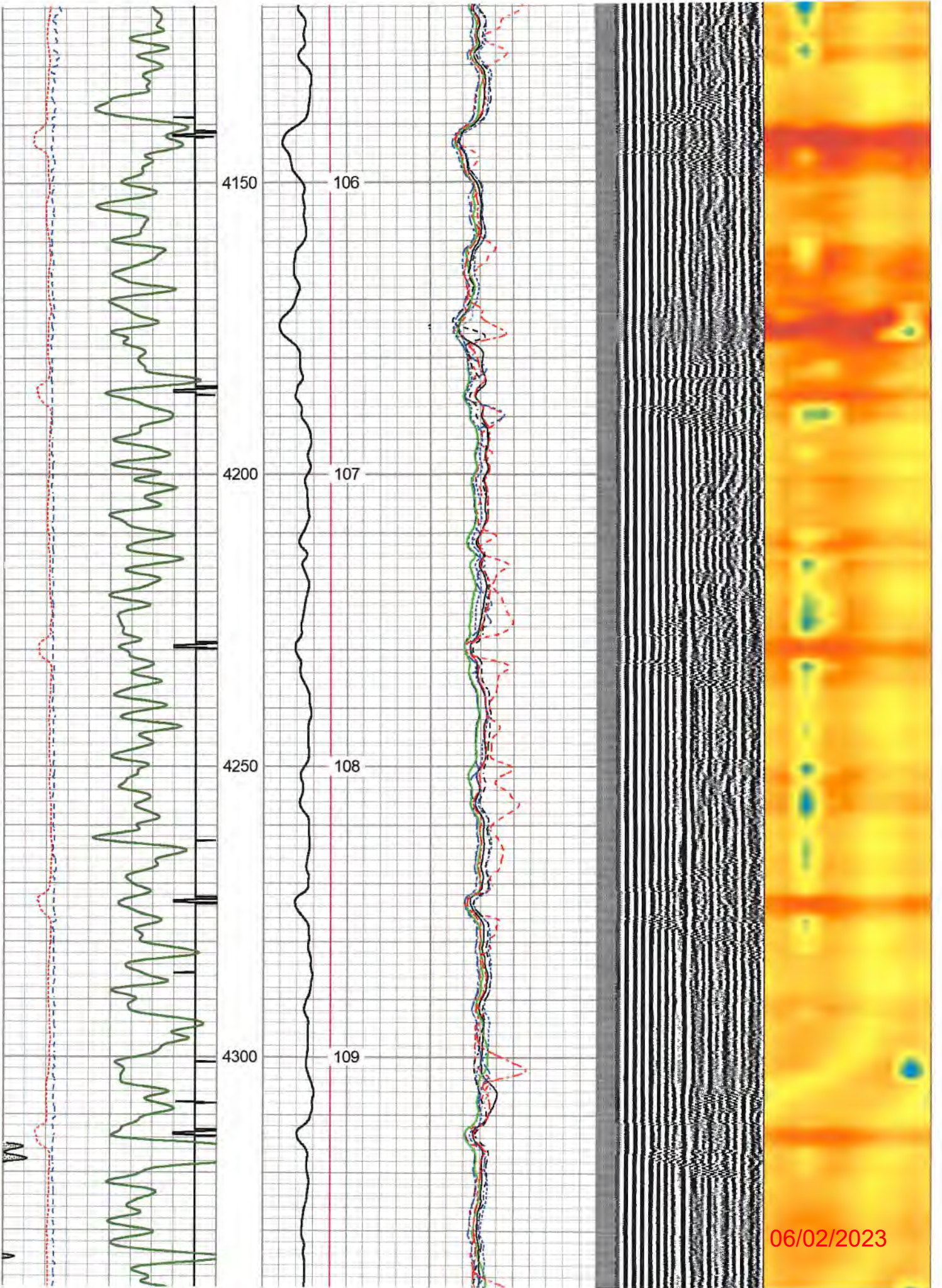


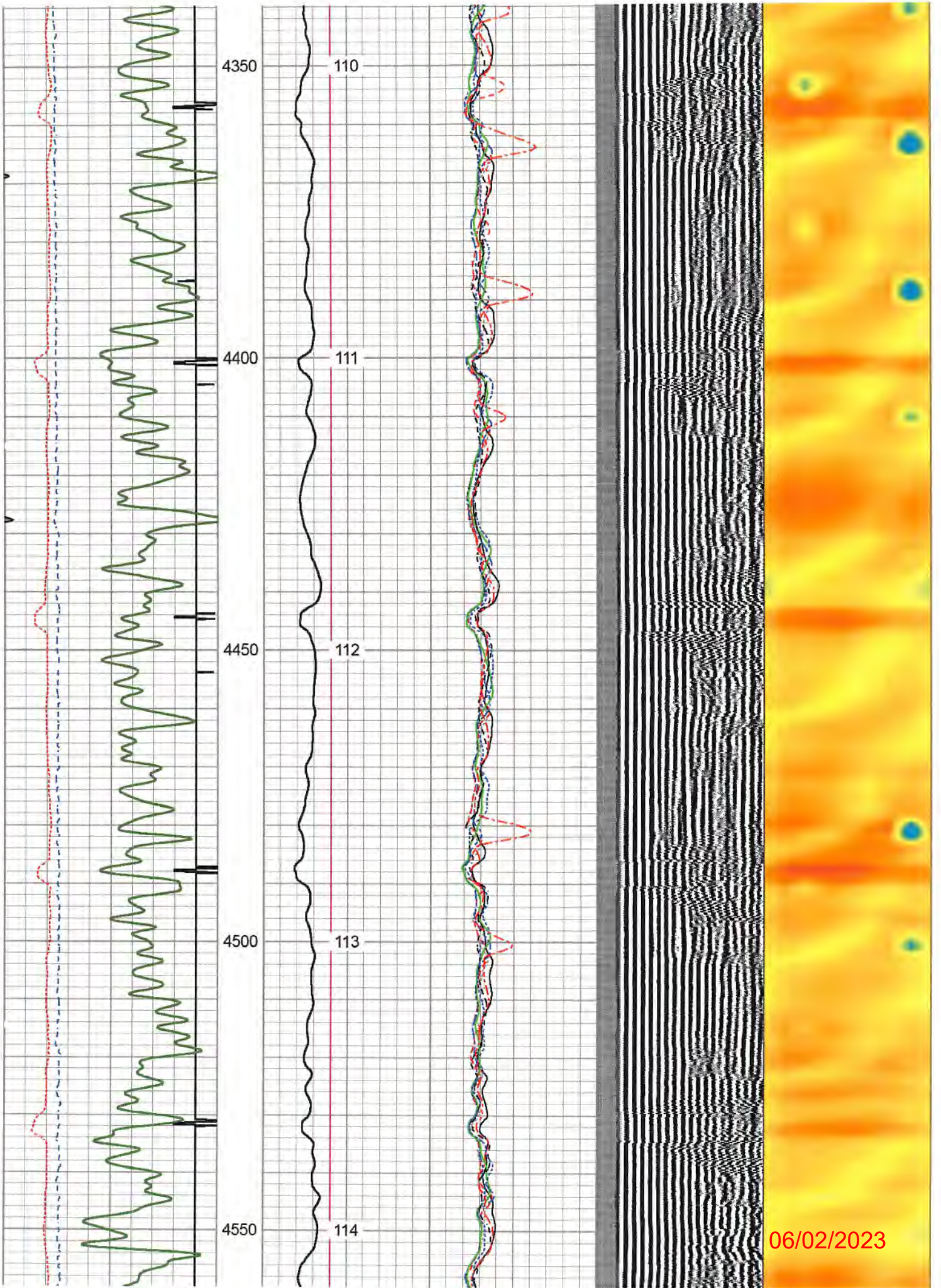
06/02/2023

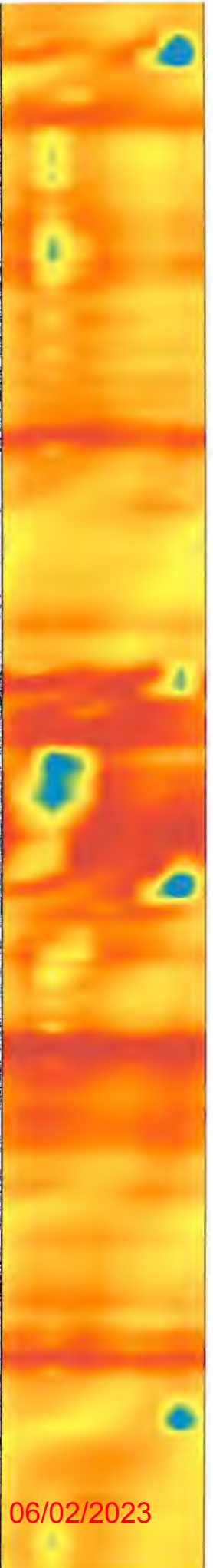
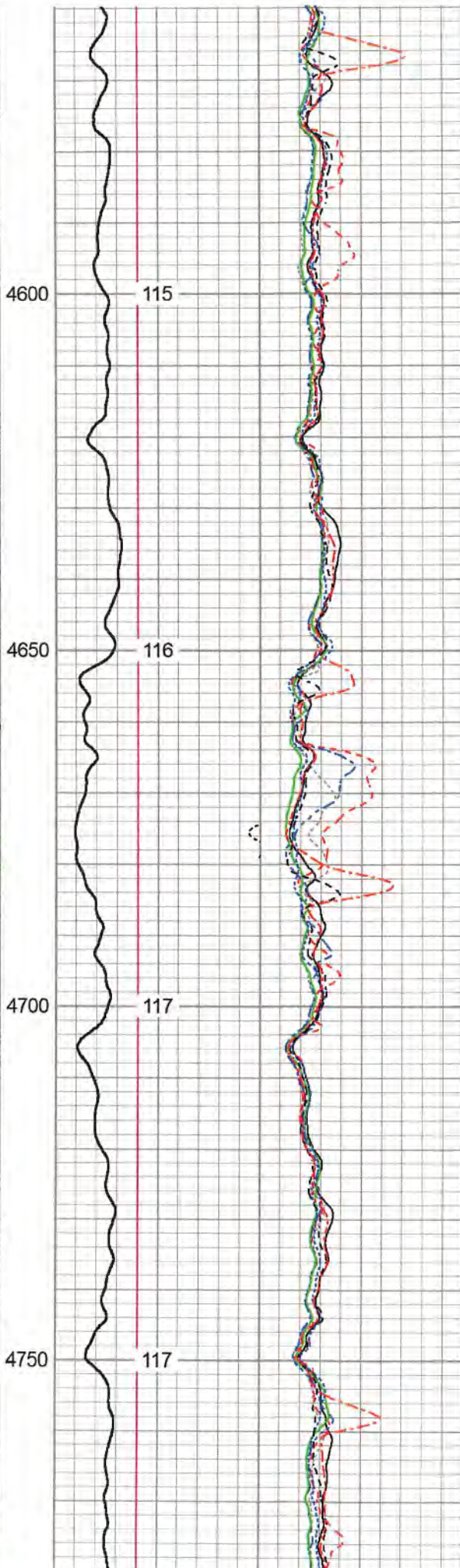
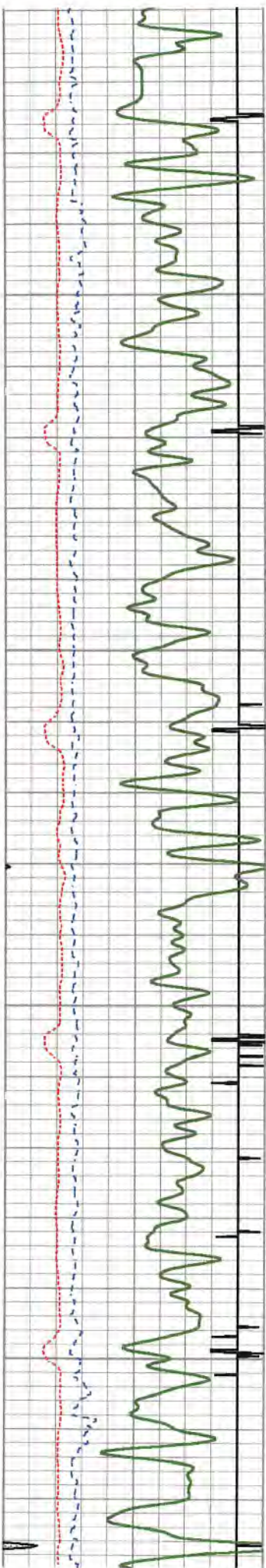




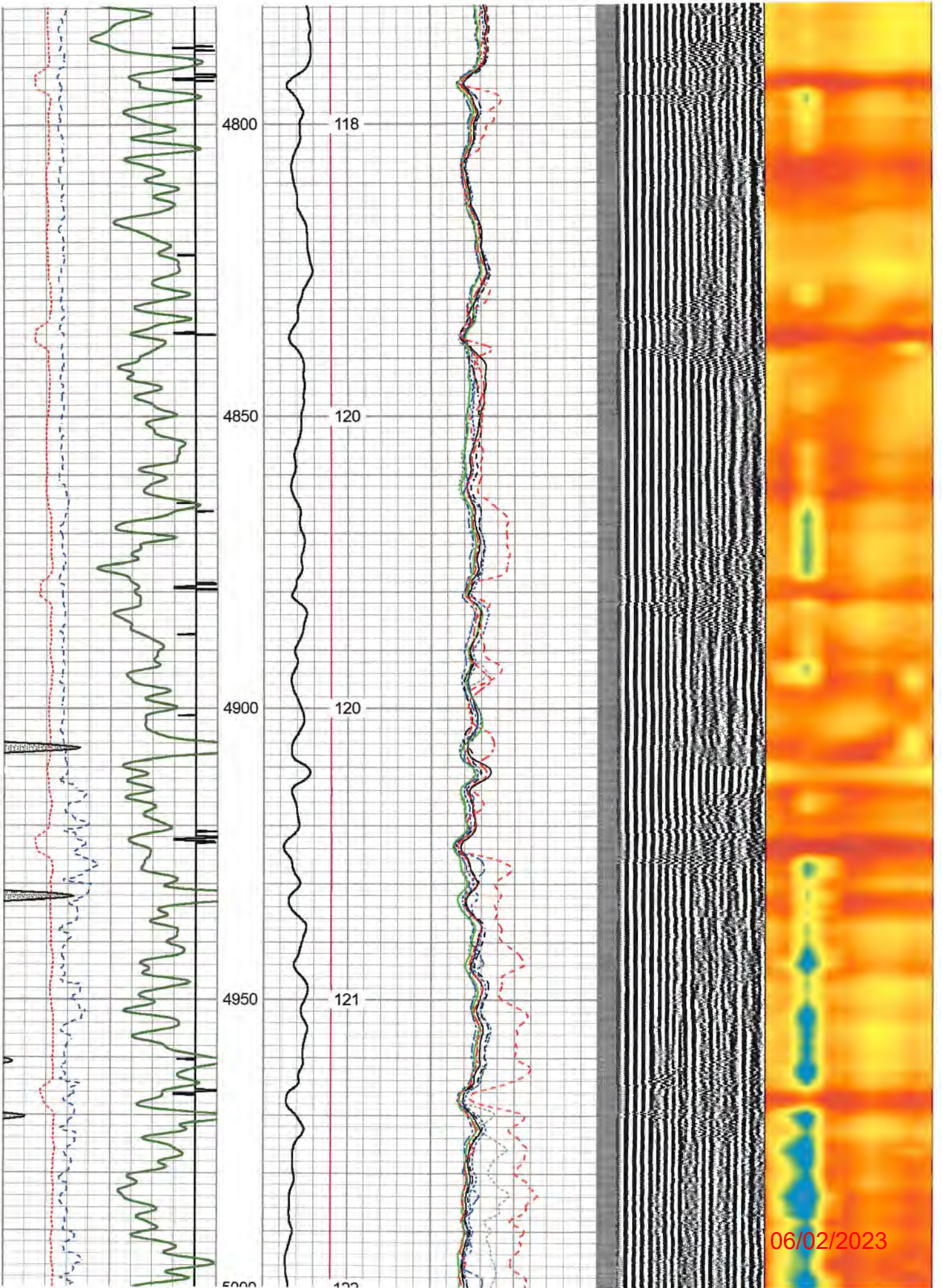
06/02/2023



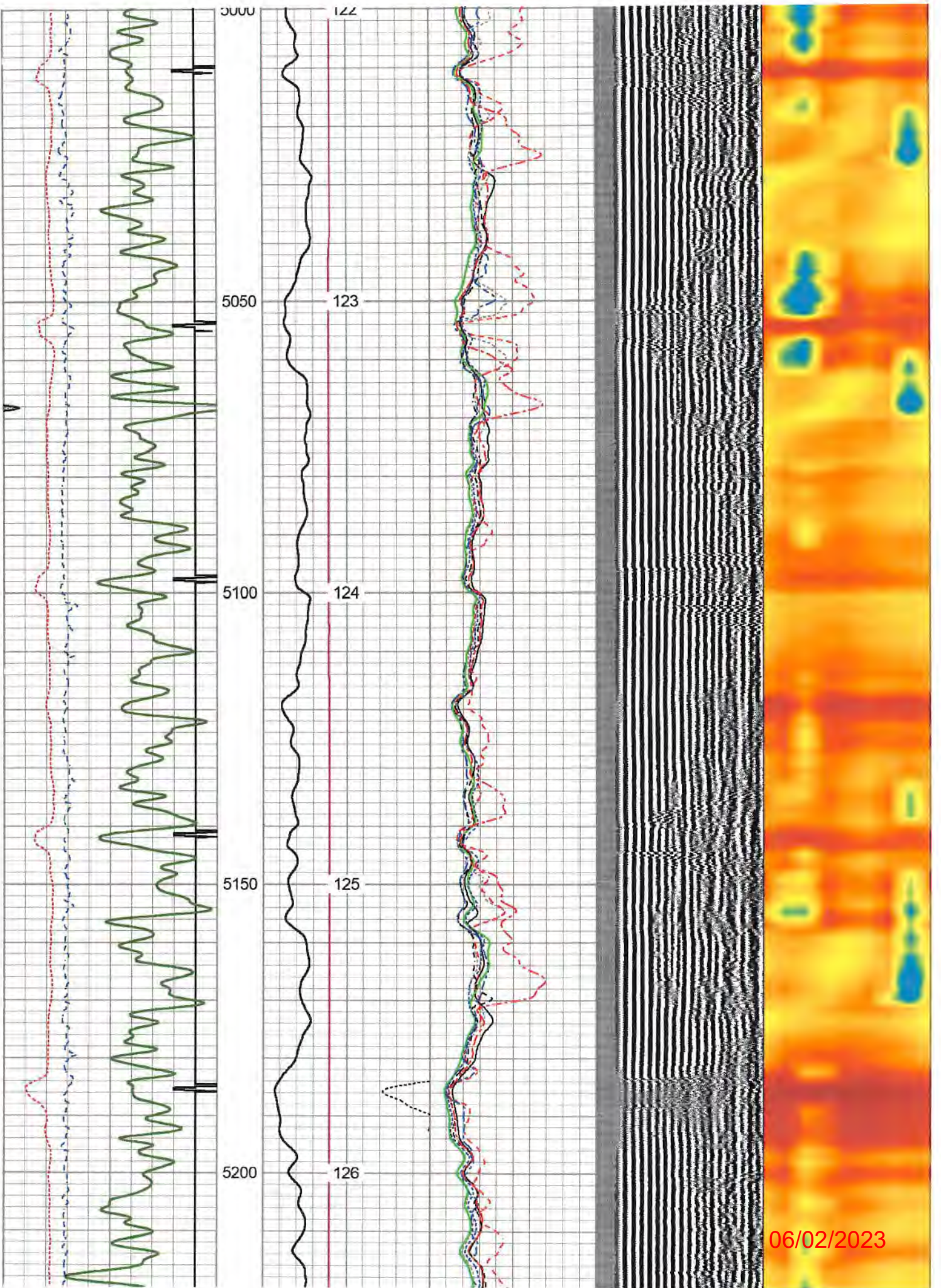




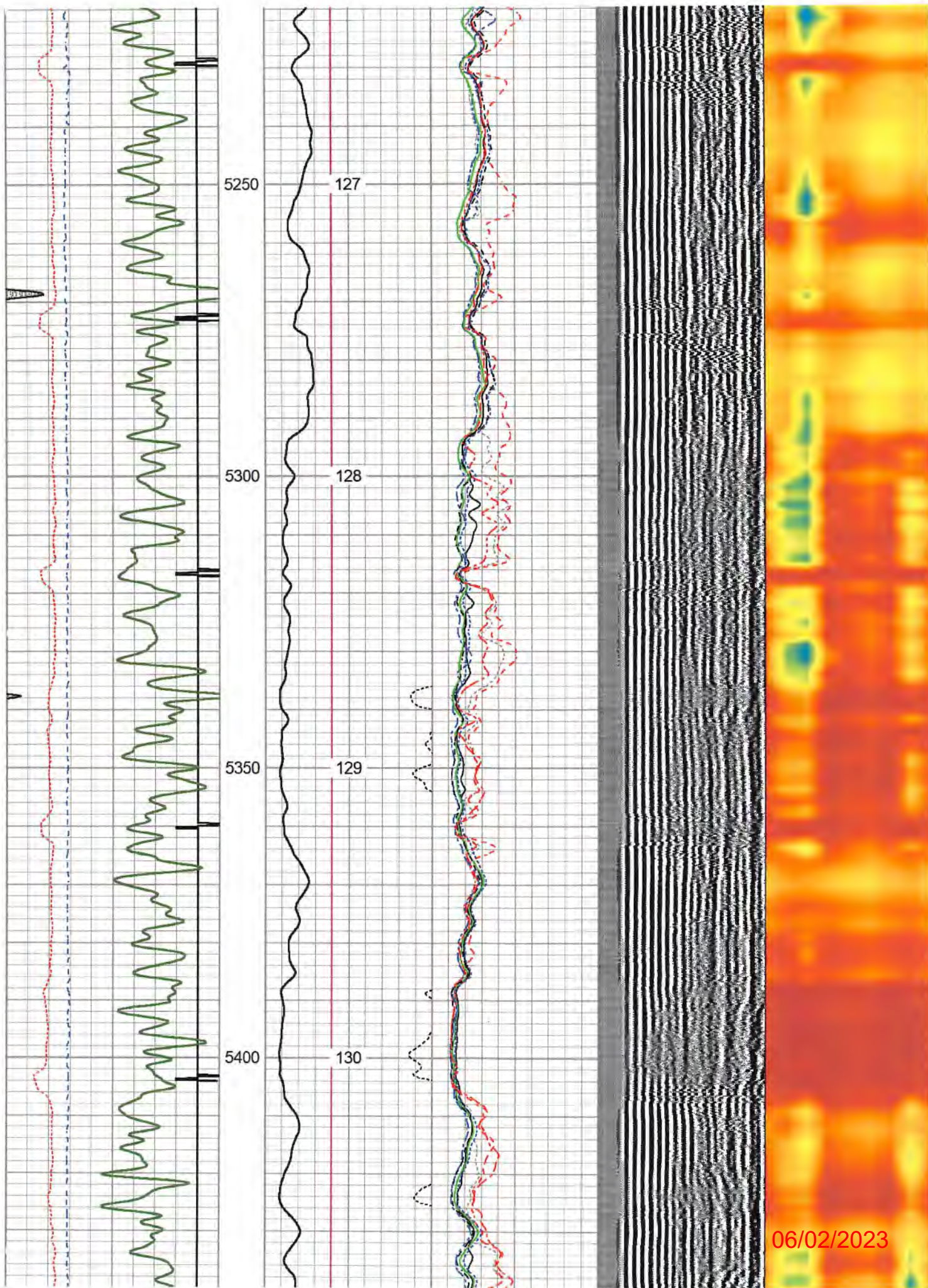
06/02/2023



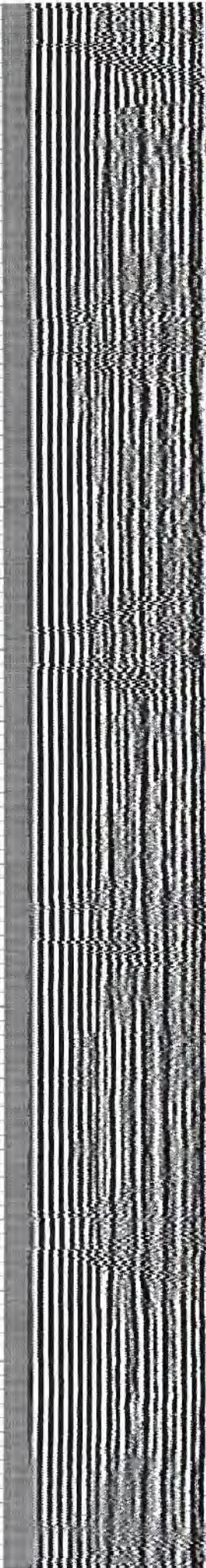
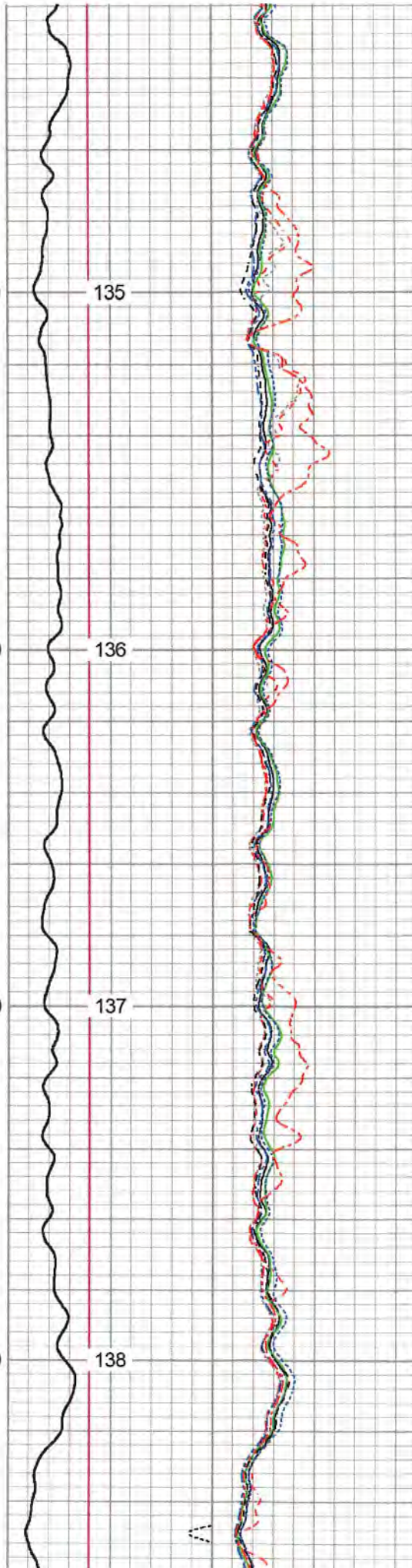
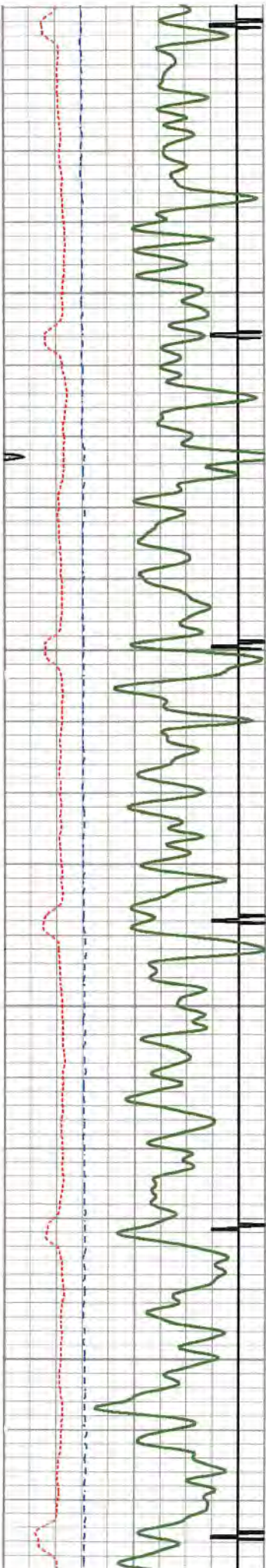
06/02/2023



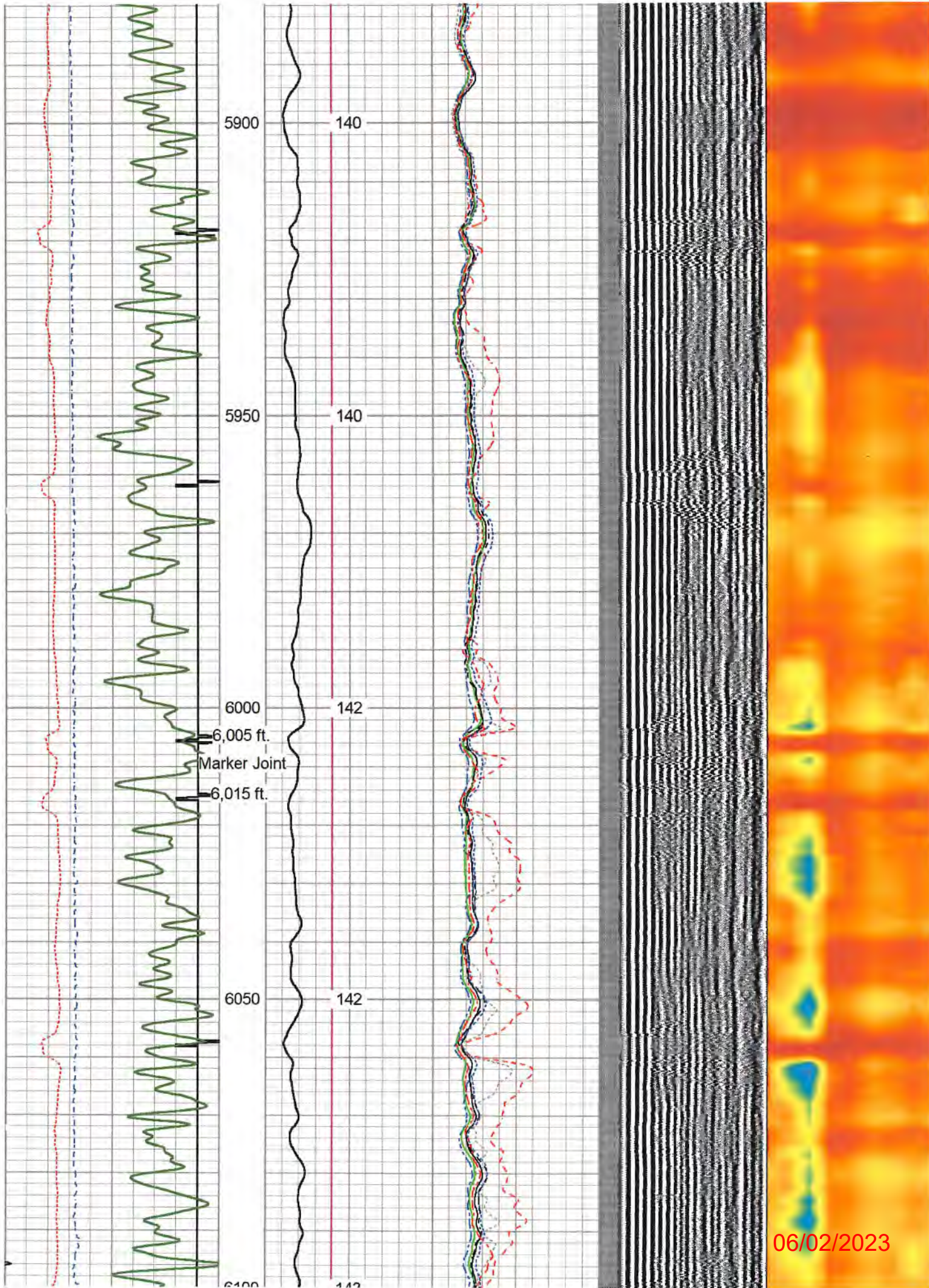
06/02/2023



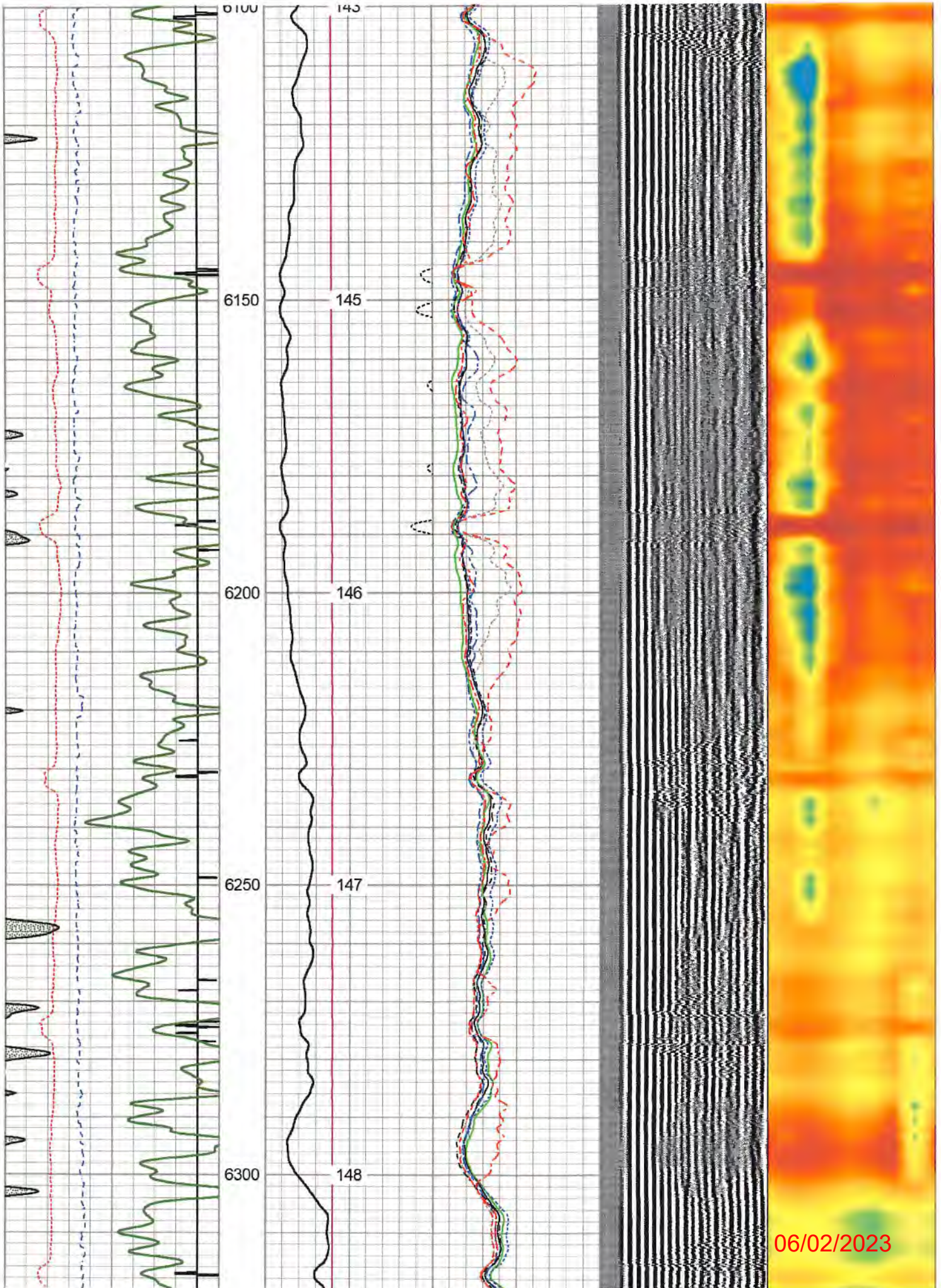
06/02/2023



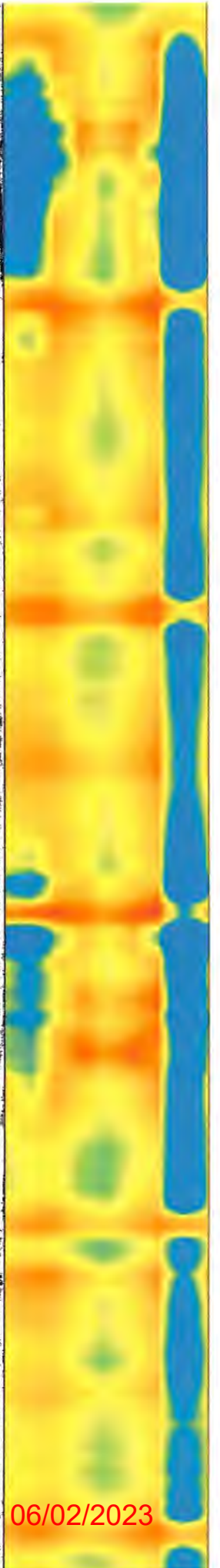
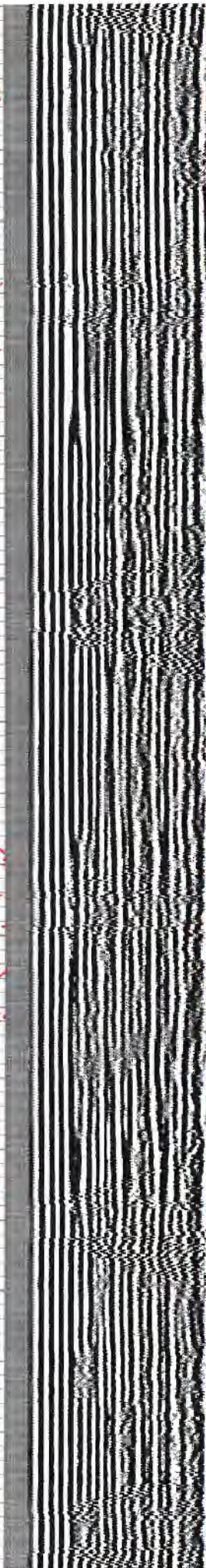
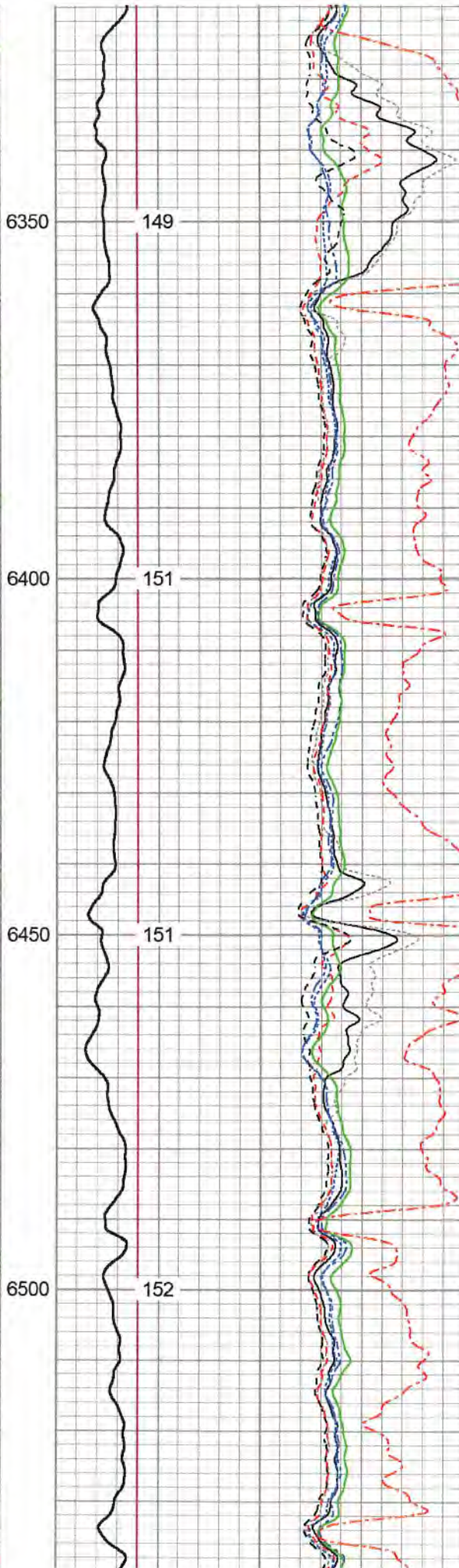
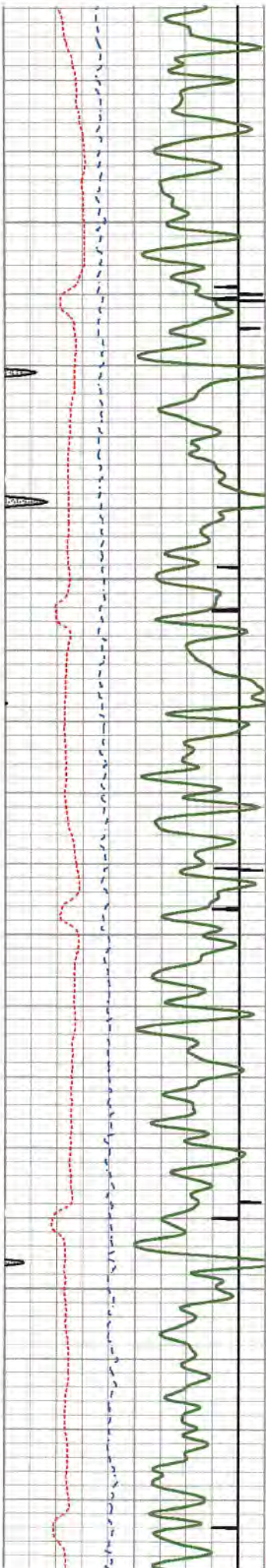
06/02/2023



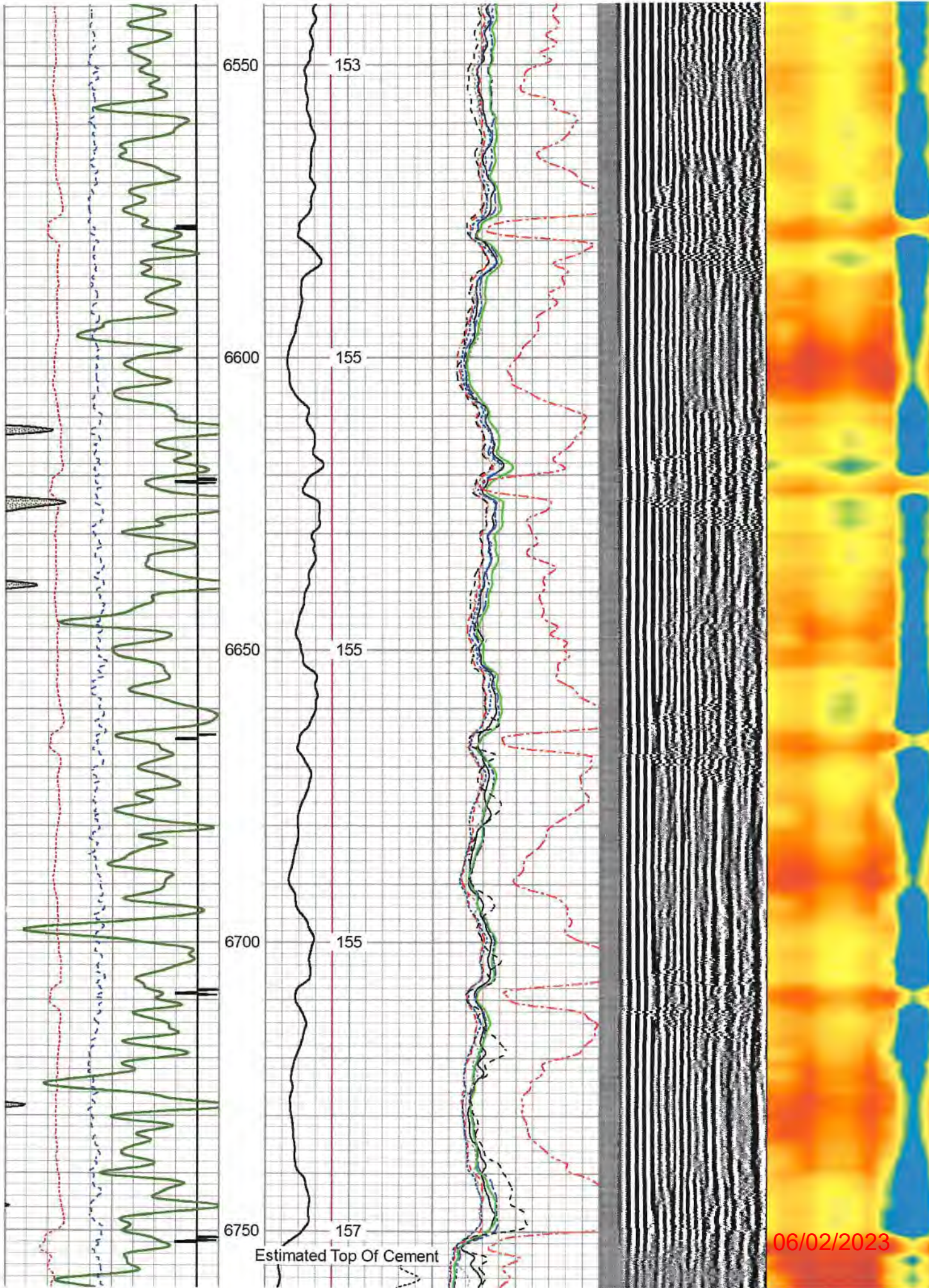
06/02/2023

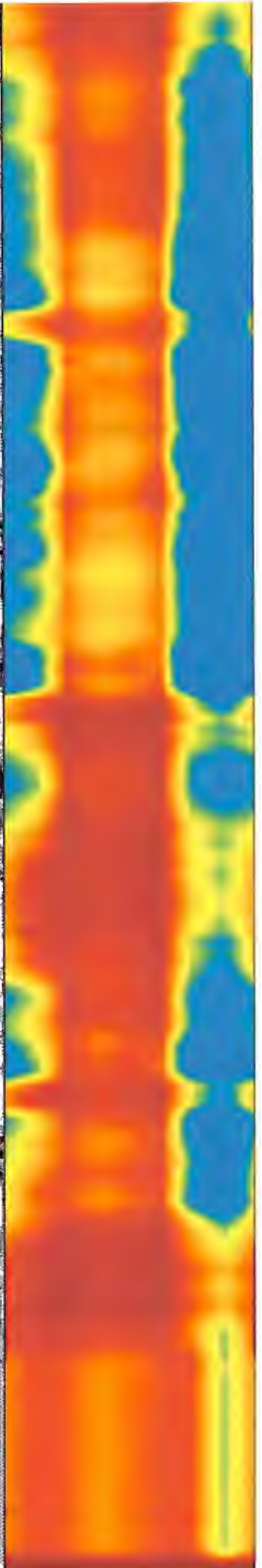
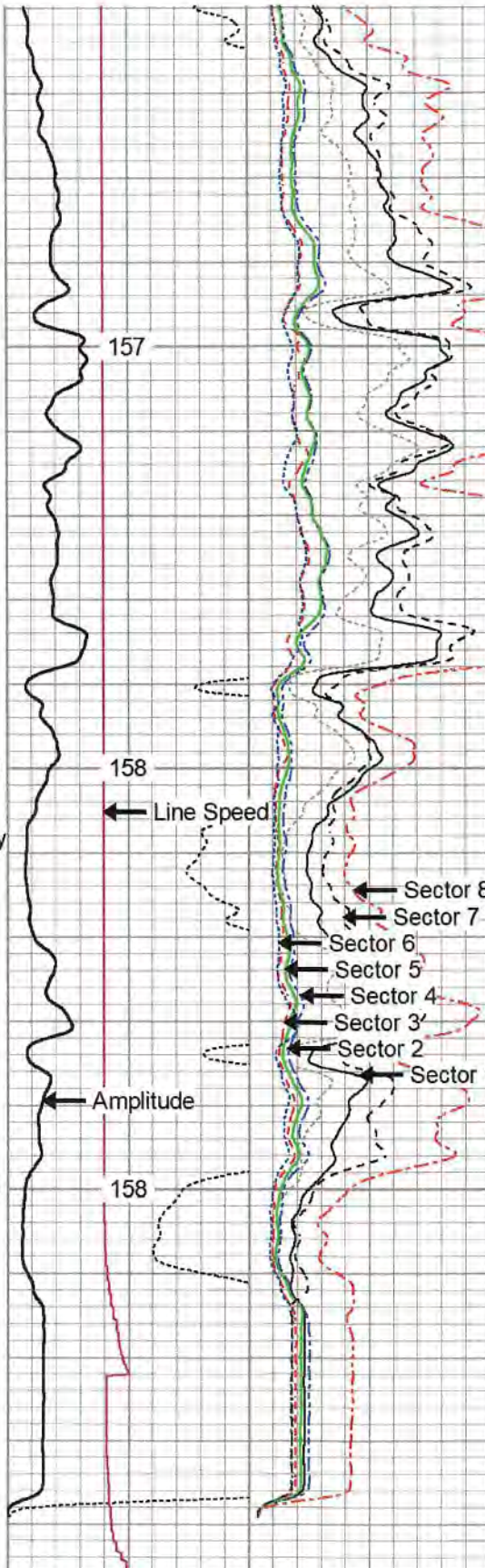
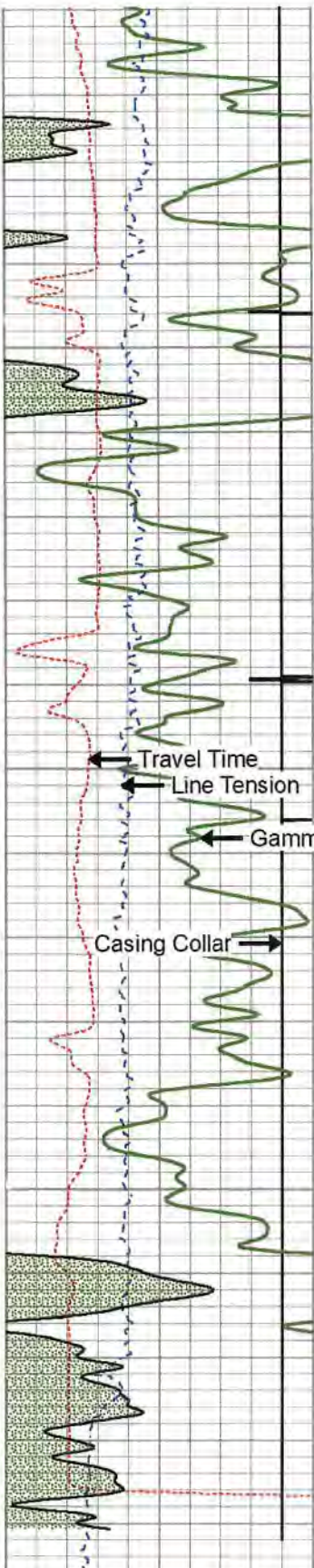


06/02/2023



06/02/2023





270	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

0	Amplitude (mV)	100	-5	Sector 1	150
	Amplified Amplitude		-5	Sector 2	150
0	(mV)	10	-5	Sector 3	150
	Line Speed		-5	Sector 4	150
-500	(ft/min)	500	-5	Sector 5	150
	TEMP		-5	Sector 6	150
	(degF)		-5	Sector 7	150

Variable Density	1	Cement Map	8
200	(usec)		

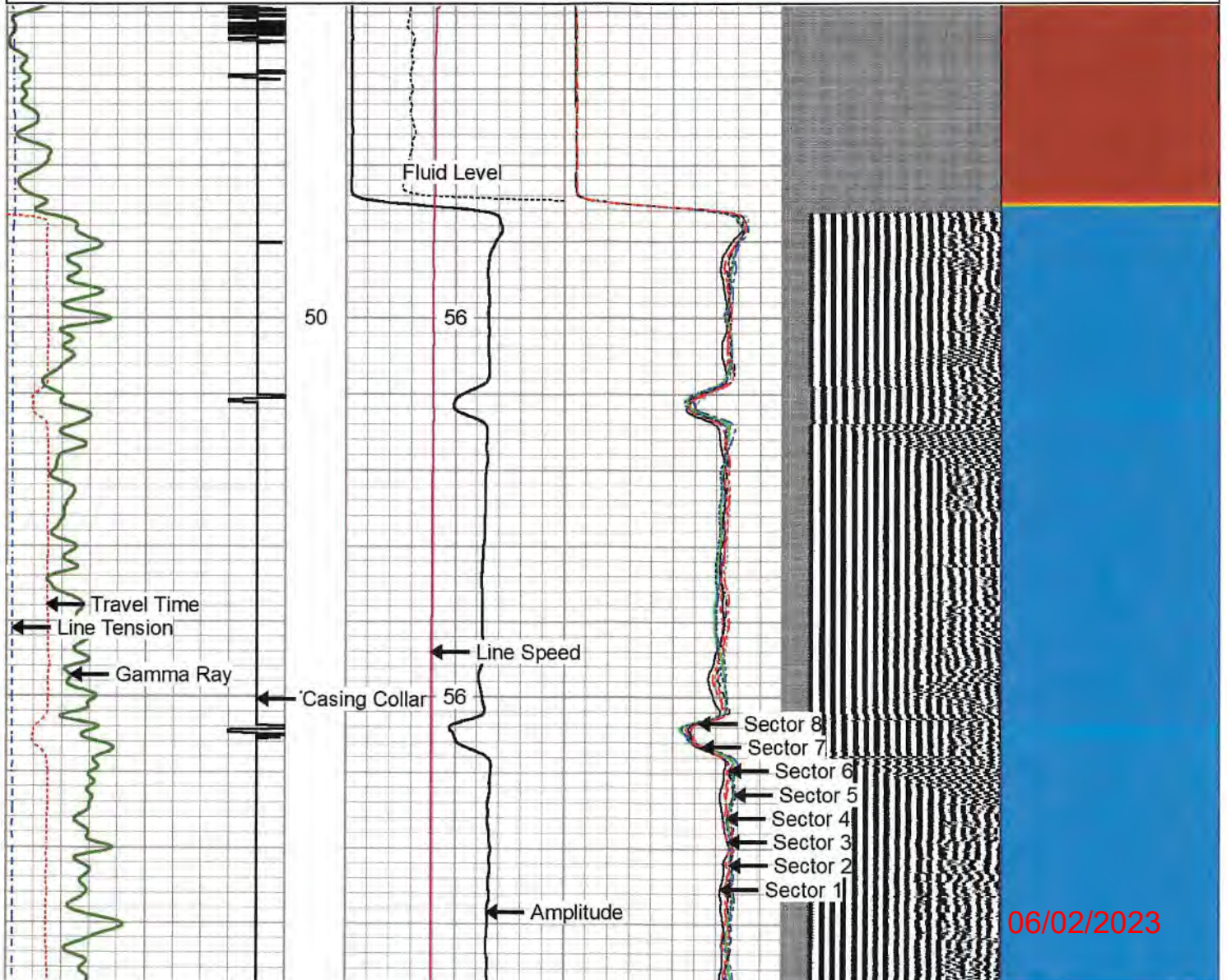
06/02/2023

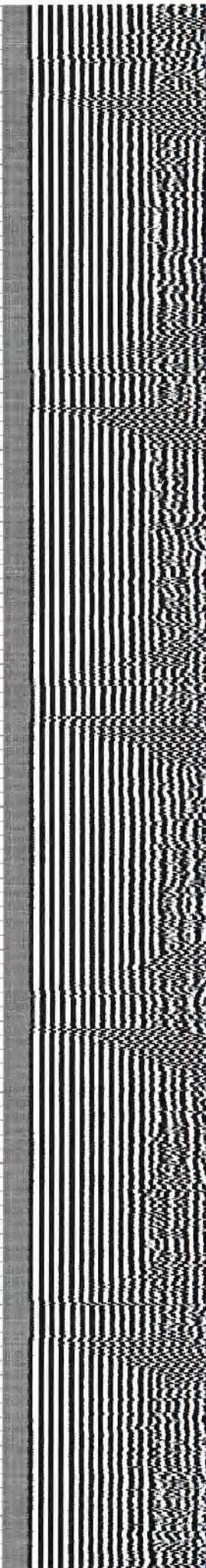
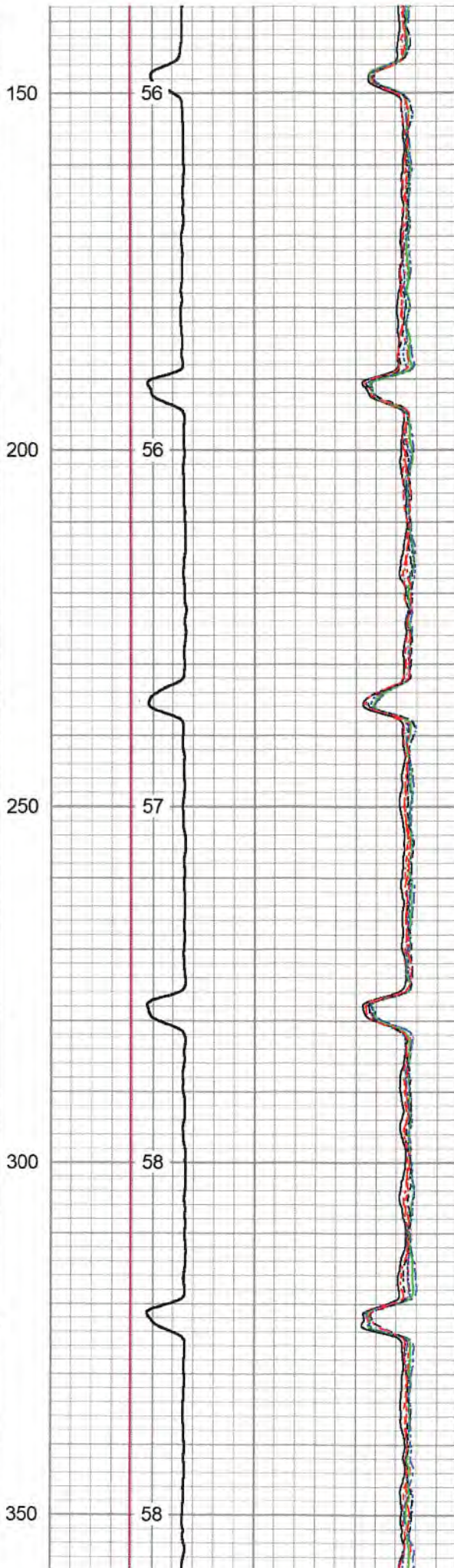
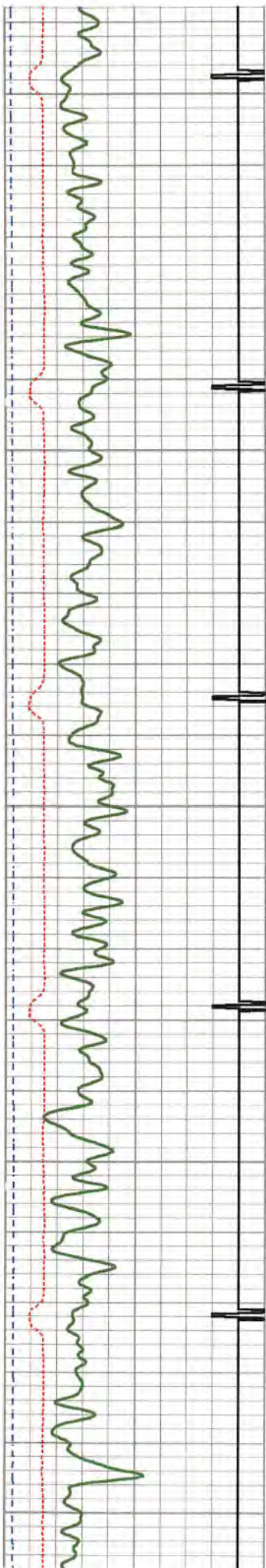


Main Pass 0 PSI

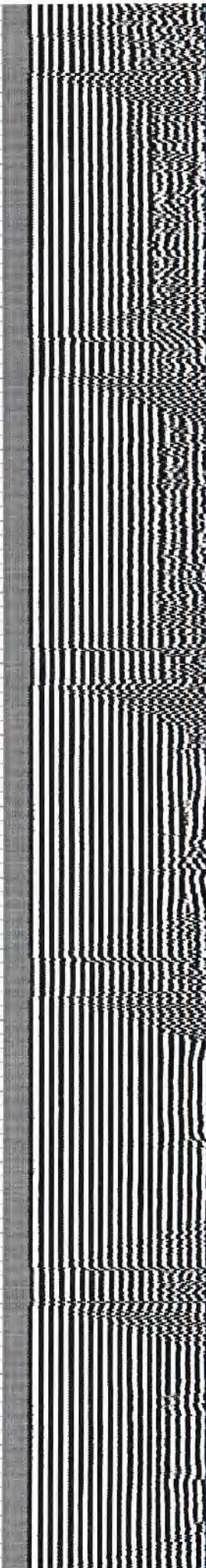
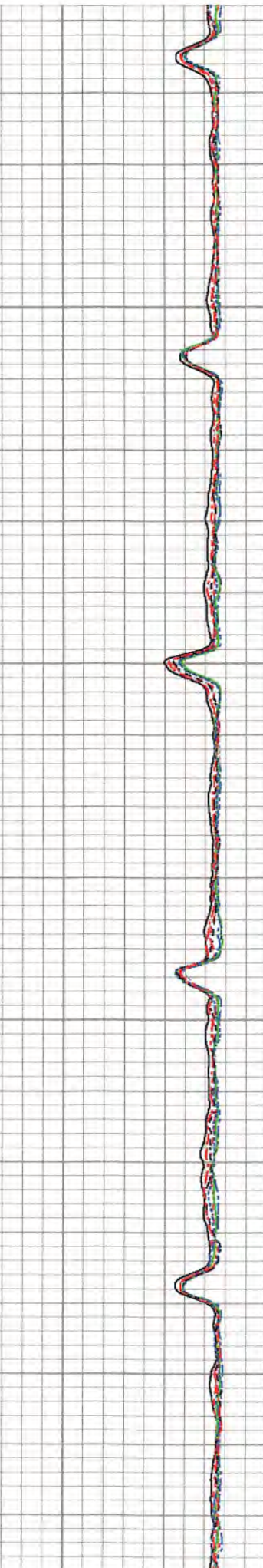
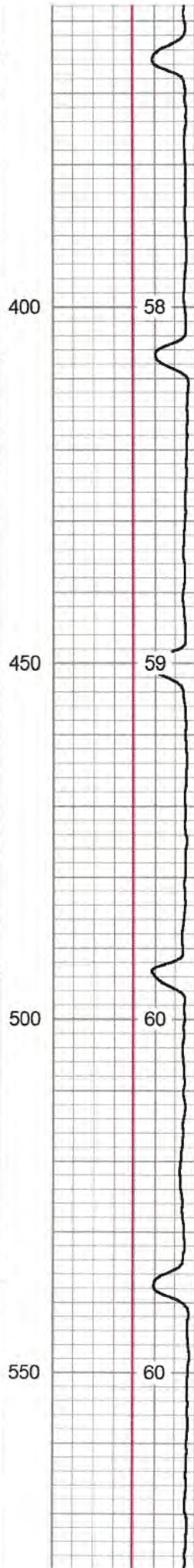
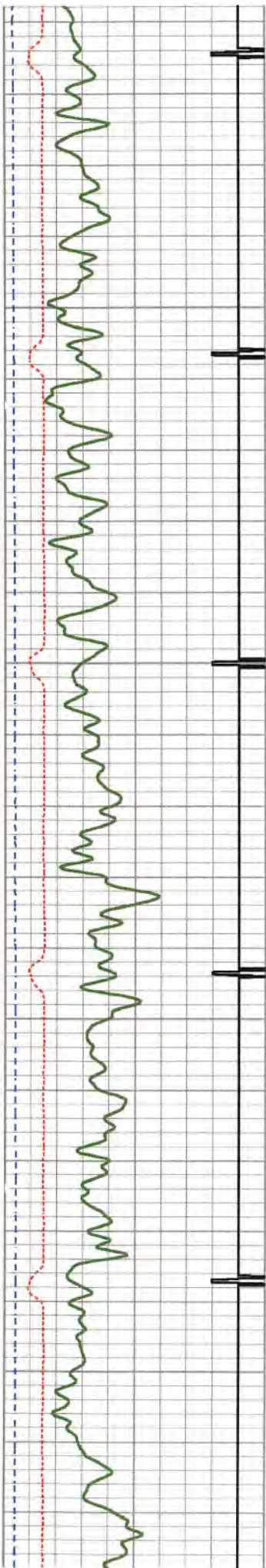
Database File antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2_2020.db
 Dataset Pathname Rabbit_Ears/Harpua_1H/RCBL_1/pass5.2
 Presentation Format 9rcbl
 Dataset Creation Sat May 02 11:27:18 2020
 Charted by Depth in Feet scaled 1:240

270 Travel Time (usec) 200	0 Amplitude (mV) 100	-5 Sector 1 150	Variable Density	1 Cement Map 8
9 Casing Collar -1	Amplified Amplitude	-5 Sector 2 150	200 (usec) 1200	
0 Gamma Ray (GAPI) 150	0 (mV) 10	-5 Sector 3 150		
0 Line Tension (lb) 5000	Line Speed	-5 Sector 4 150		
	-500 (ft/min) 500	-5 Sector 5 150		
	TEMP	-5 Sector 6 150		
	(degF)	-5 Sector 7 150		
		-5 Sector 8 150		

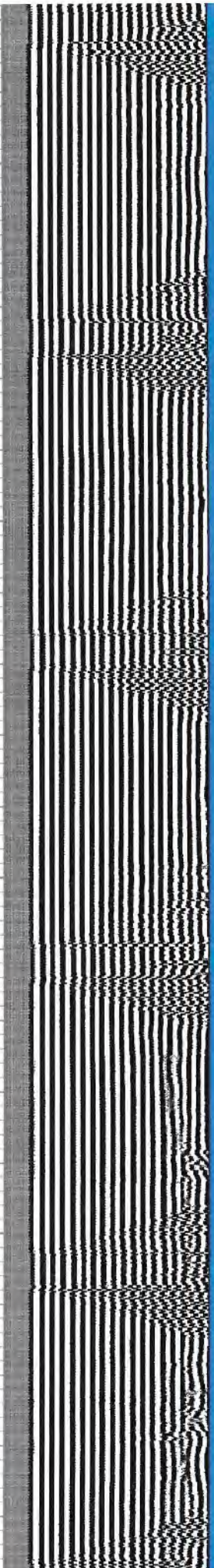
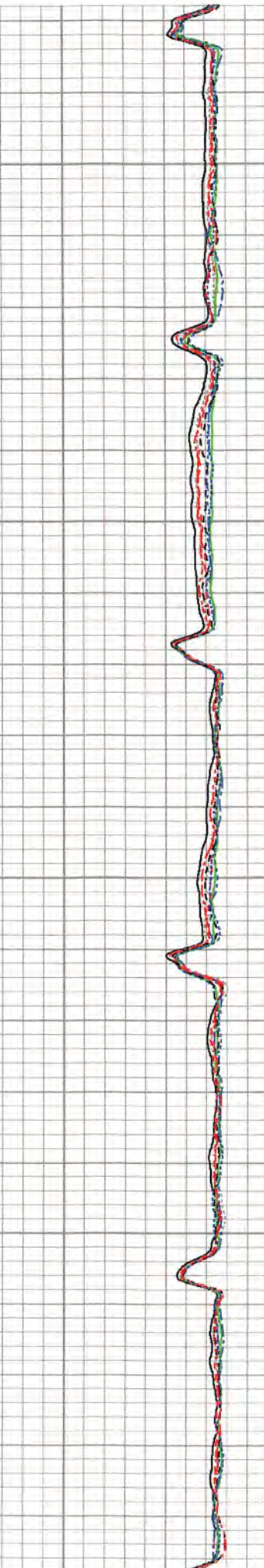
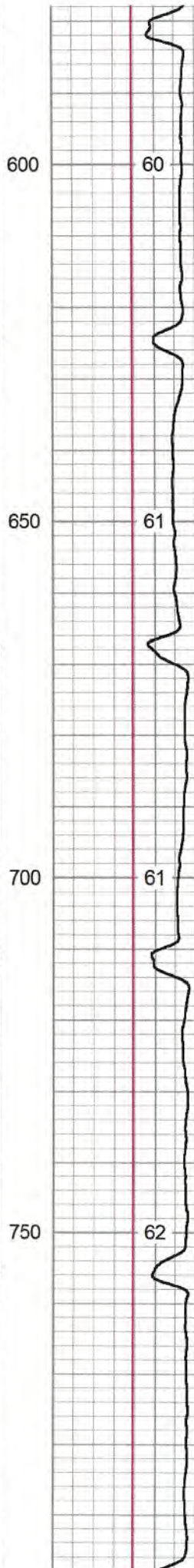
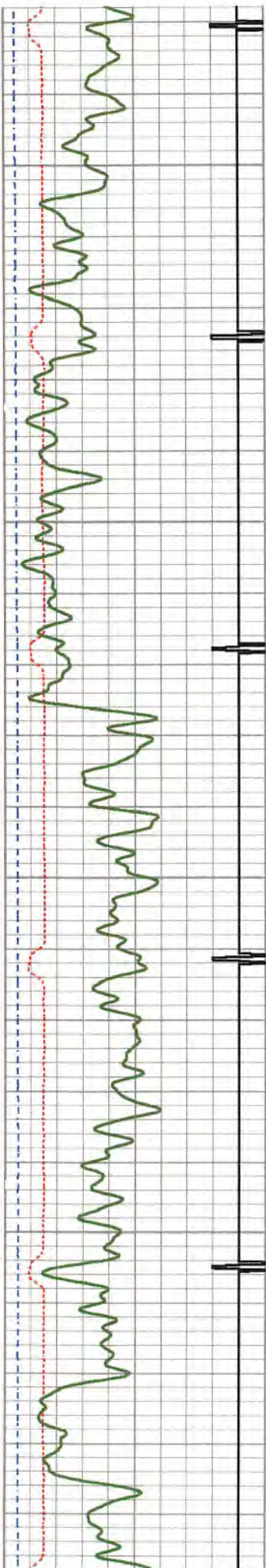




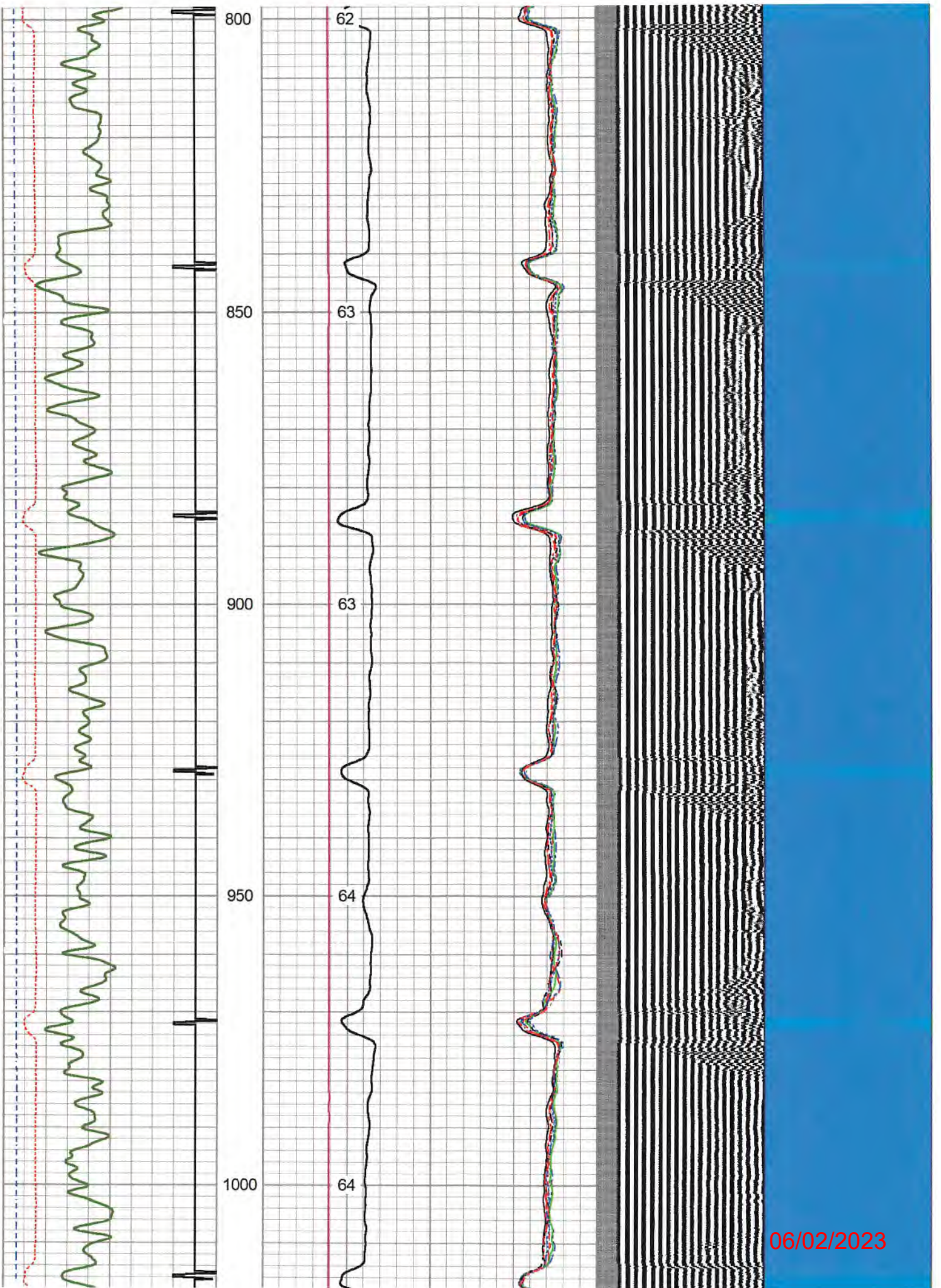
06/02/2023

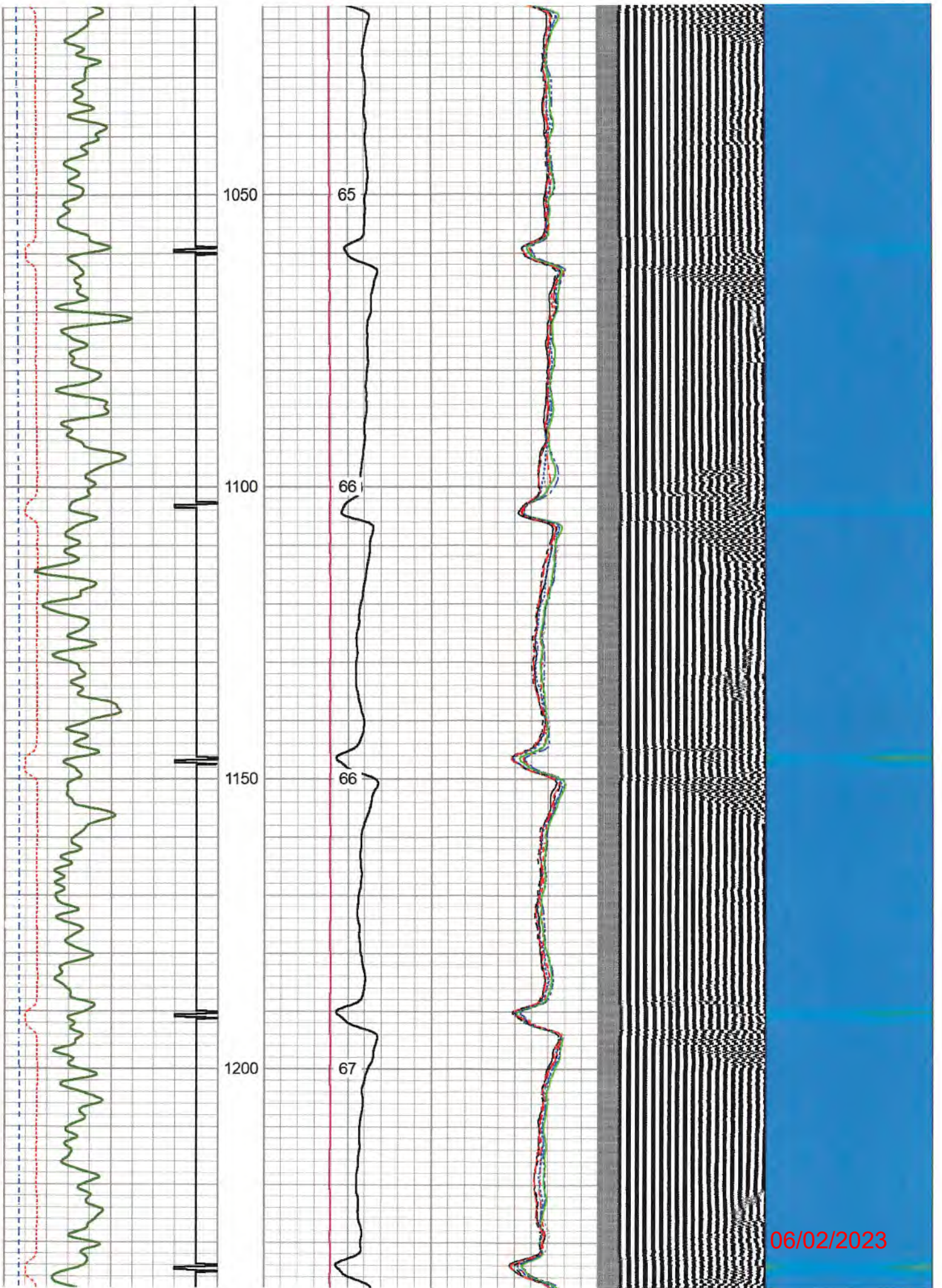


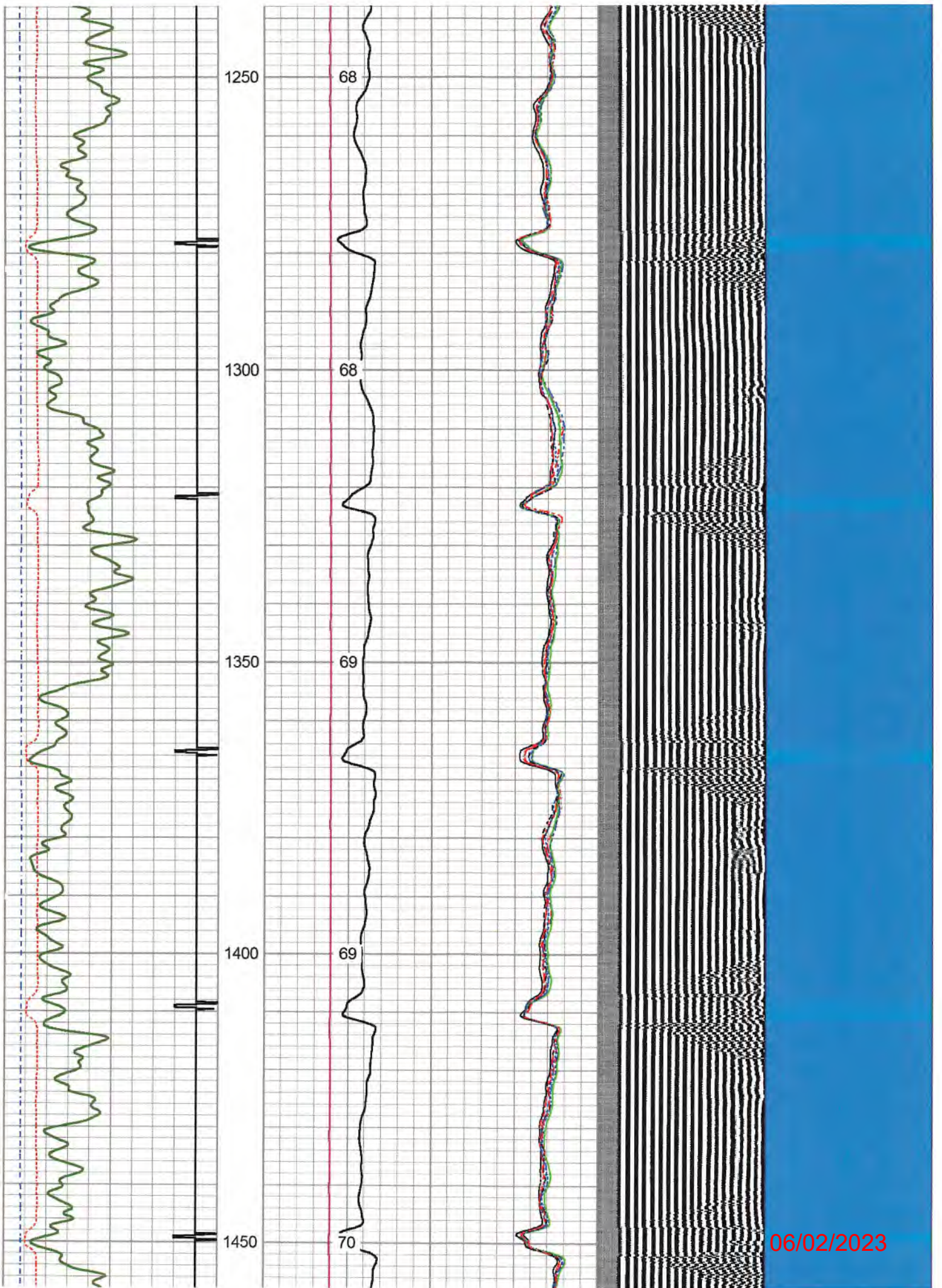
06/02/2023

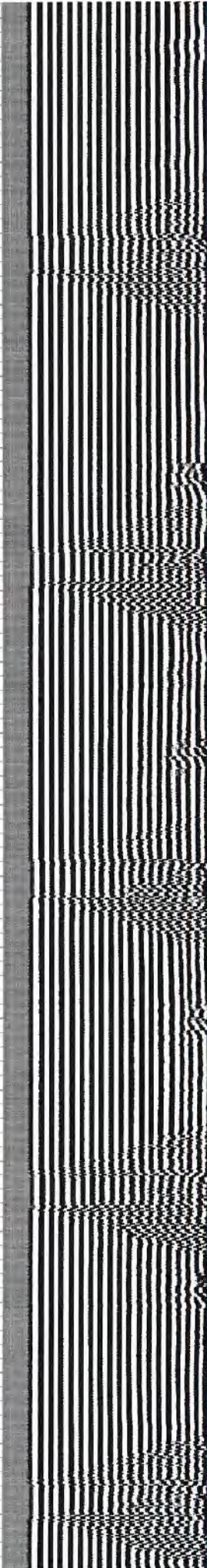
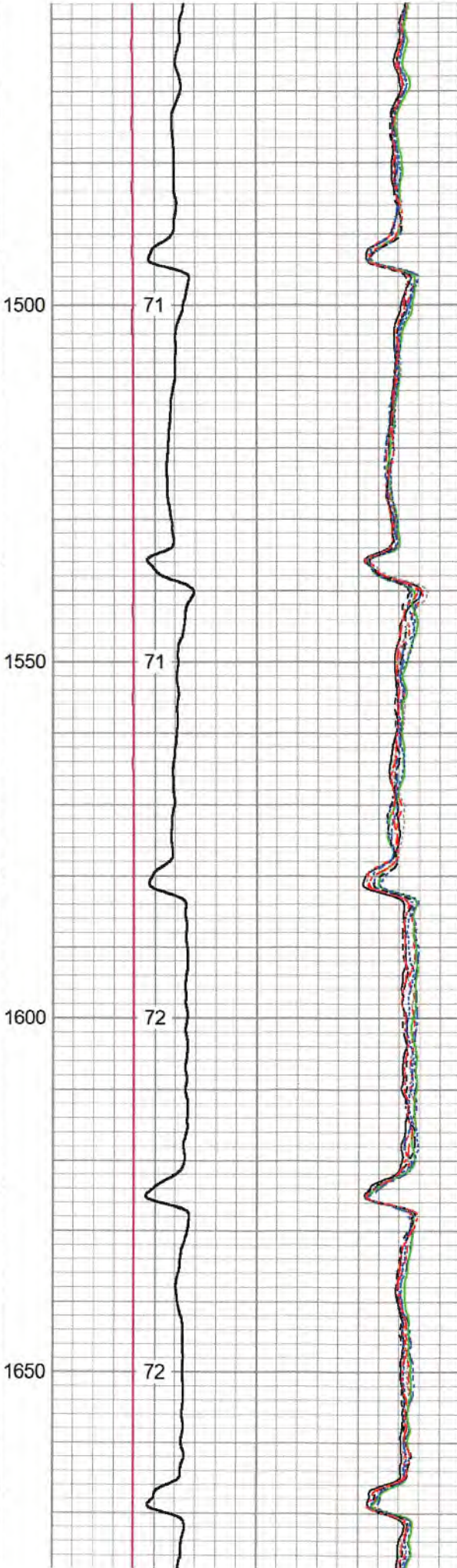
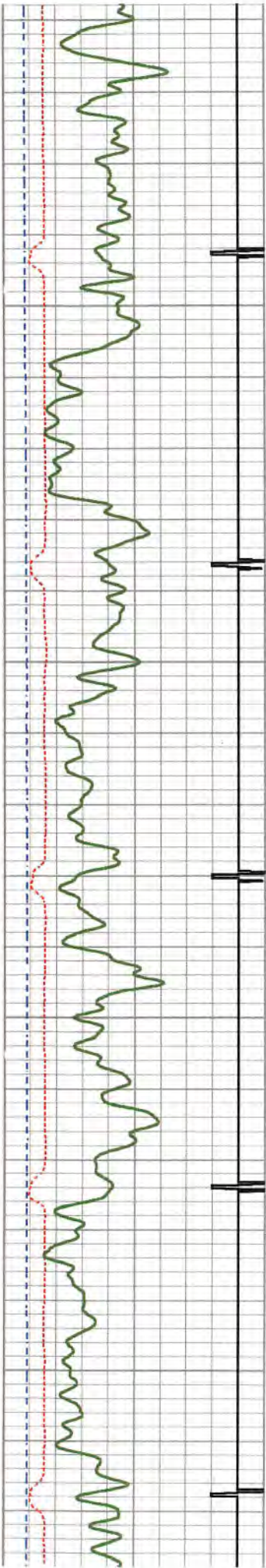


06/02/2023

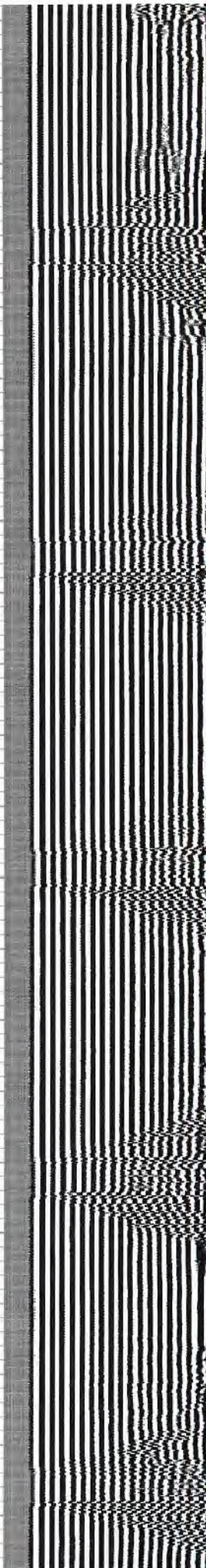
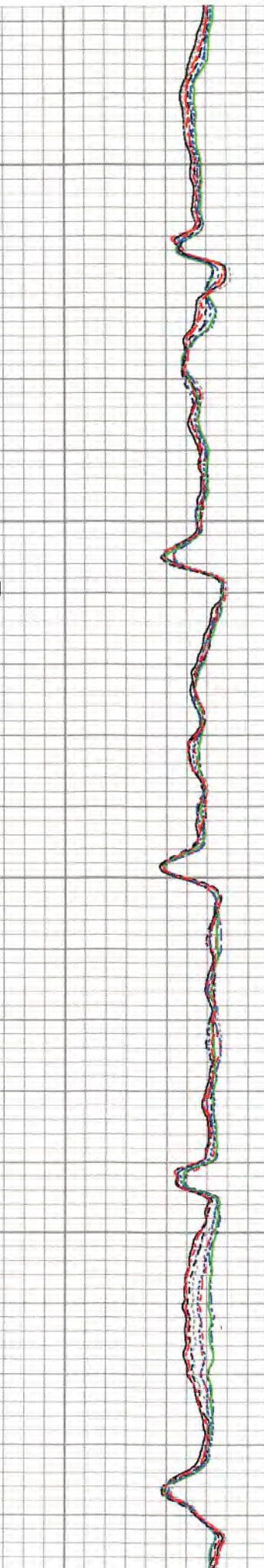
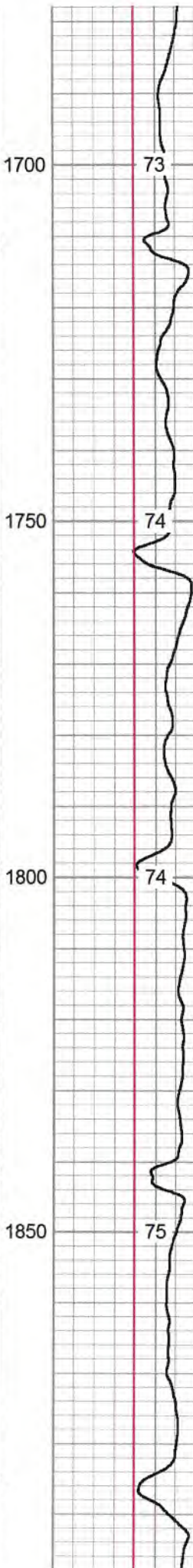
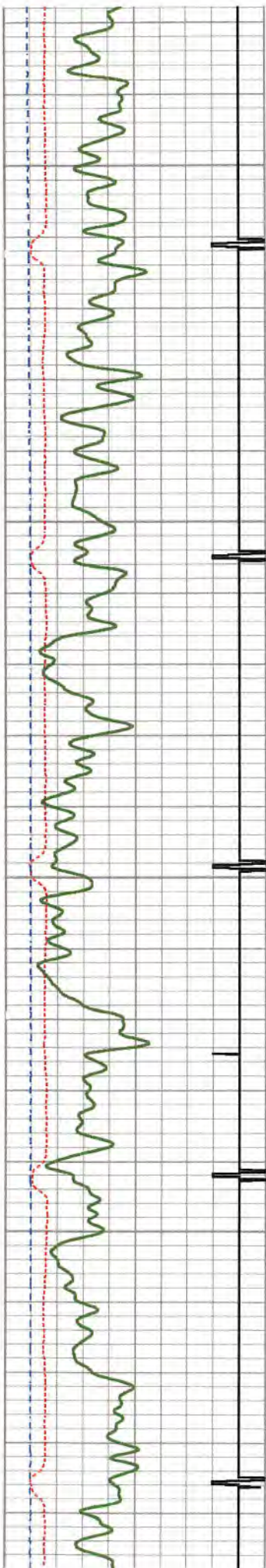




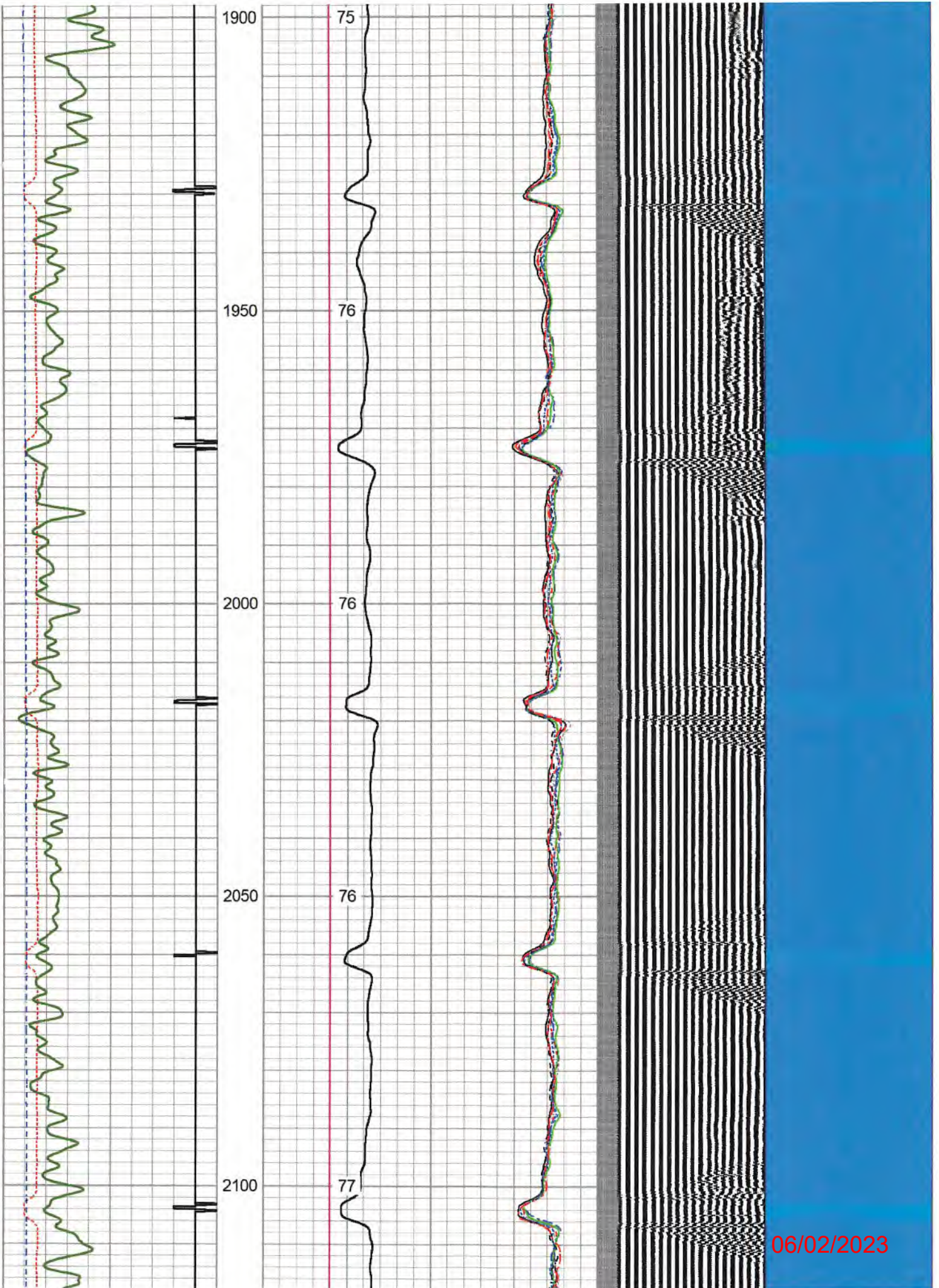


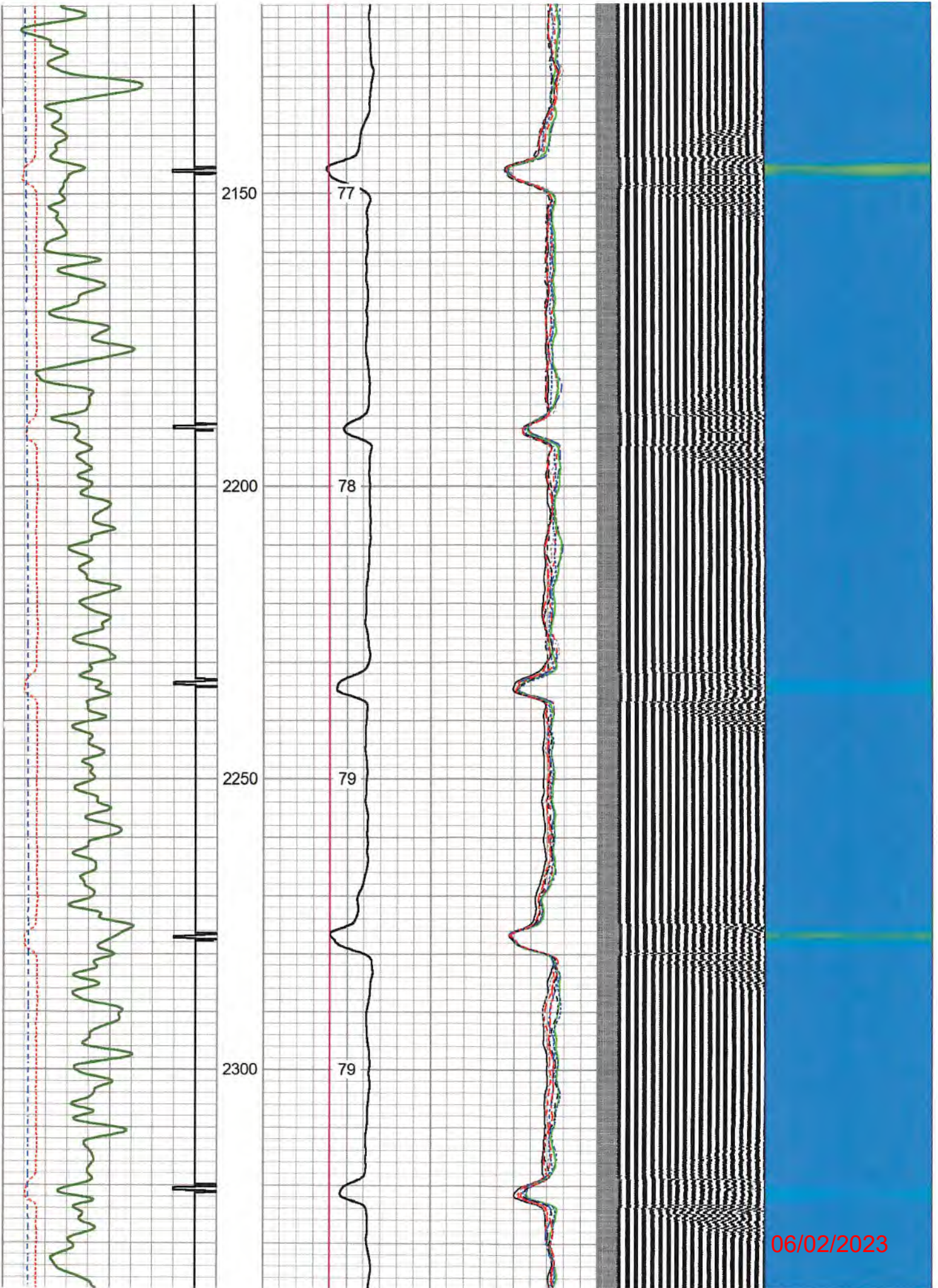


06/02/2023

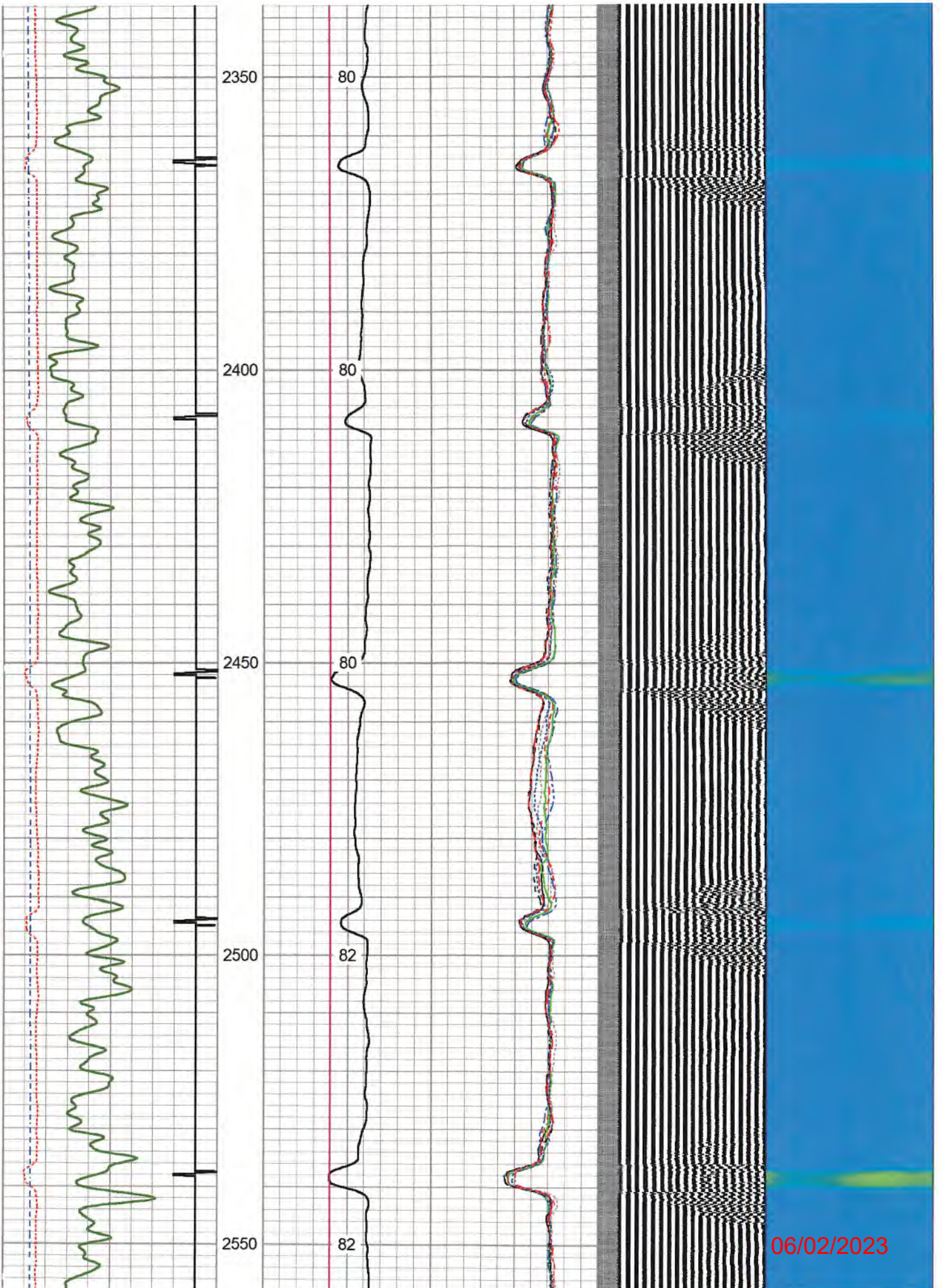


06/02/2023

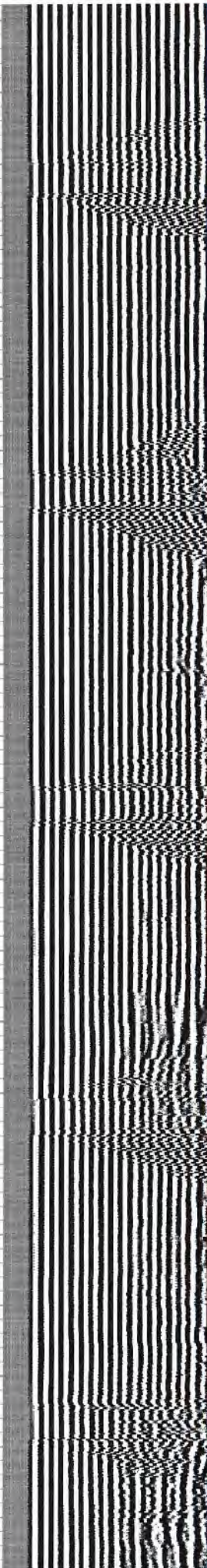
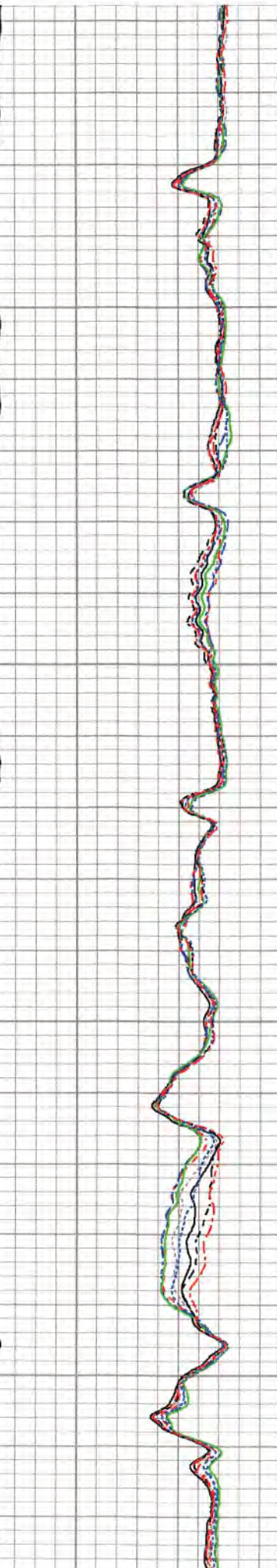
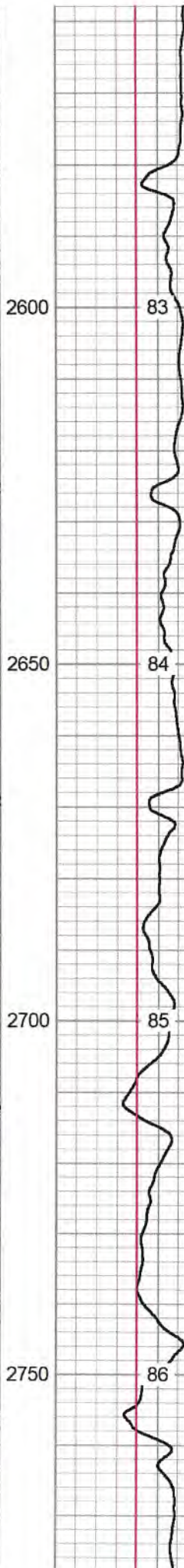
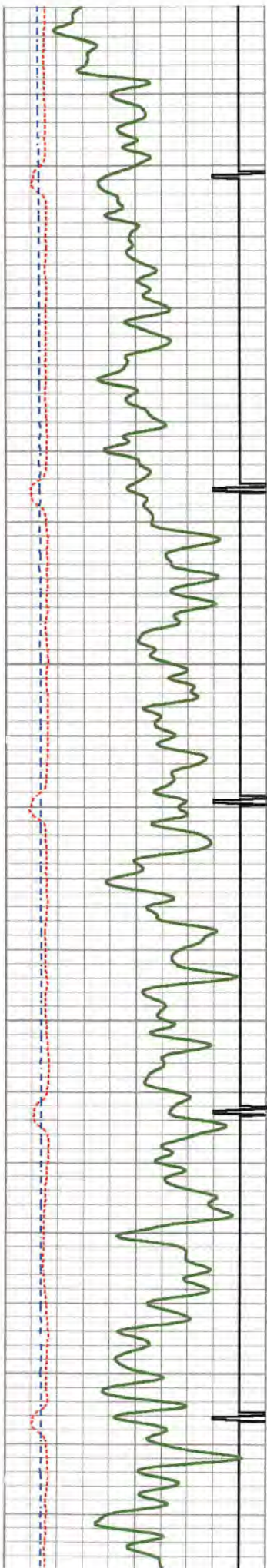




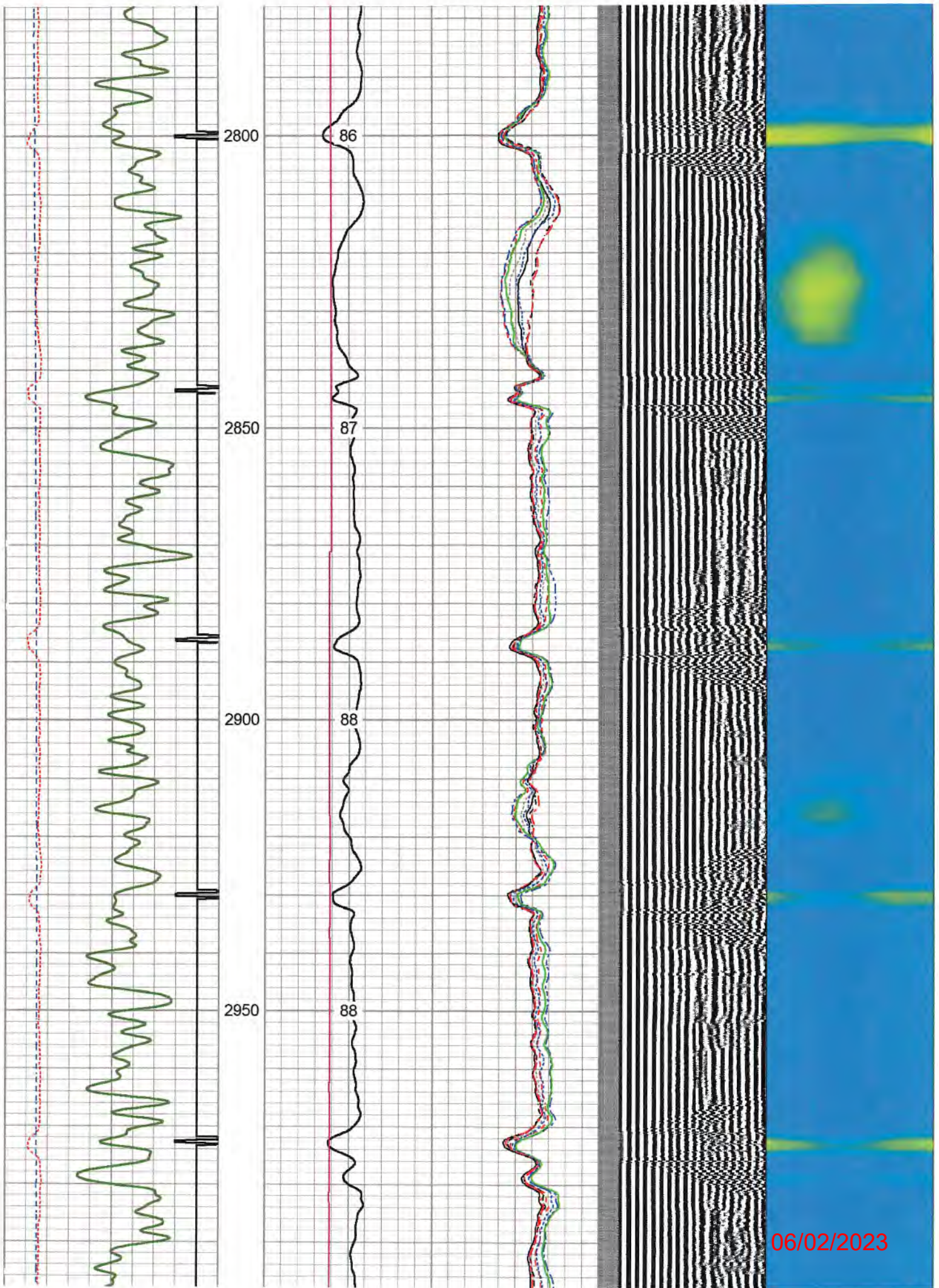
06/02/2023



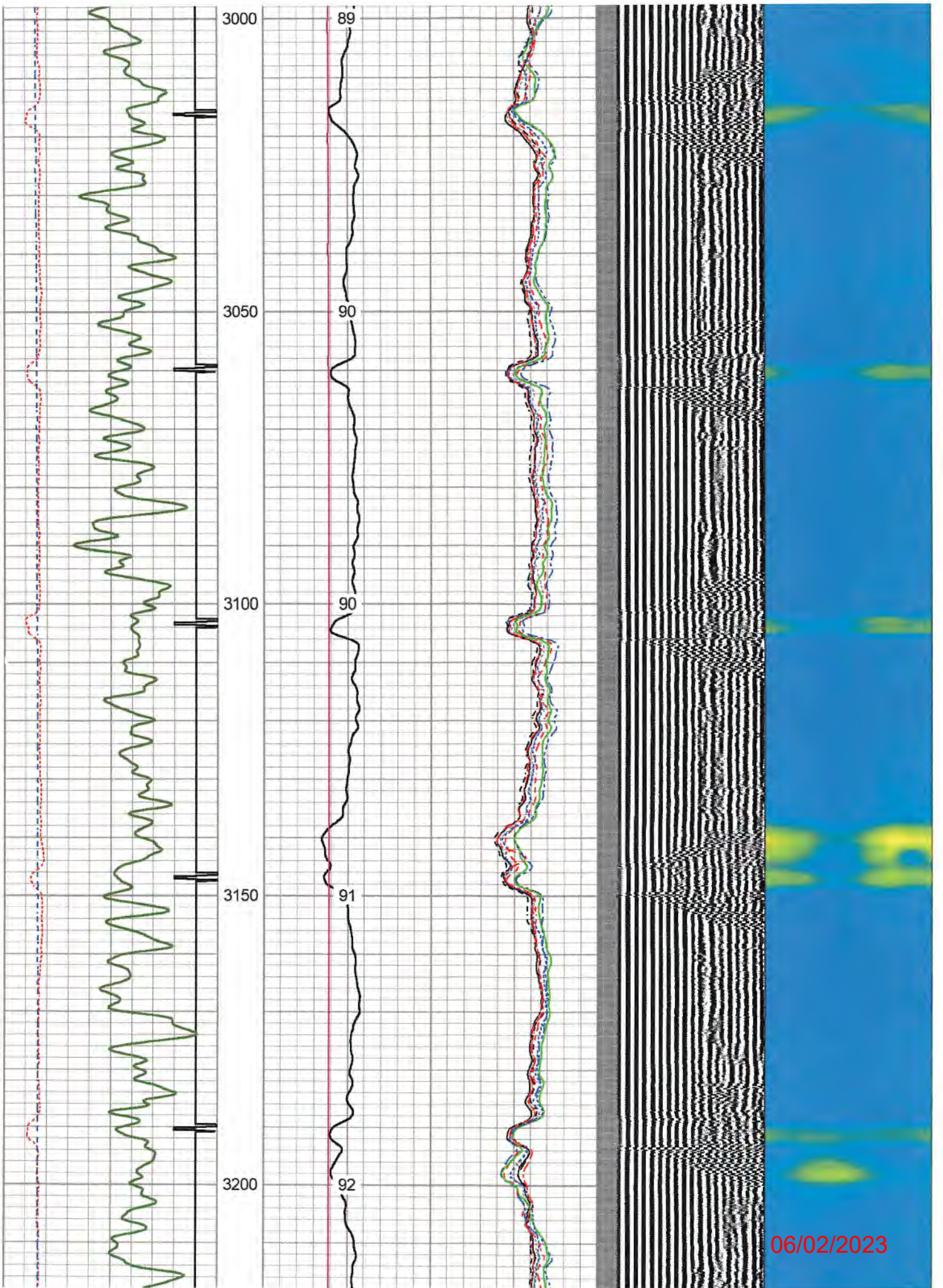
06/02/2023

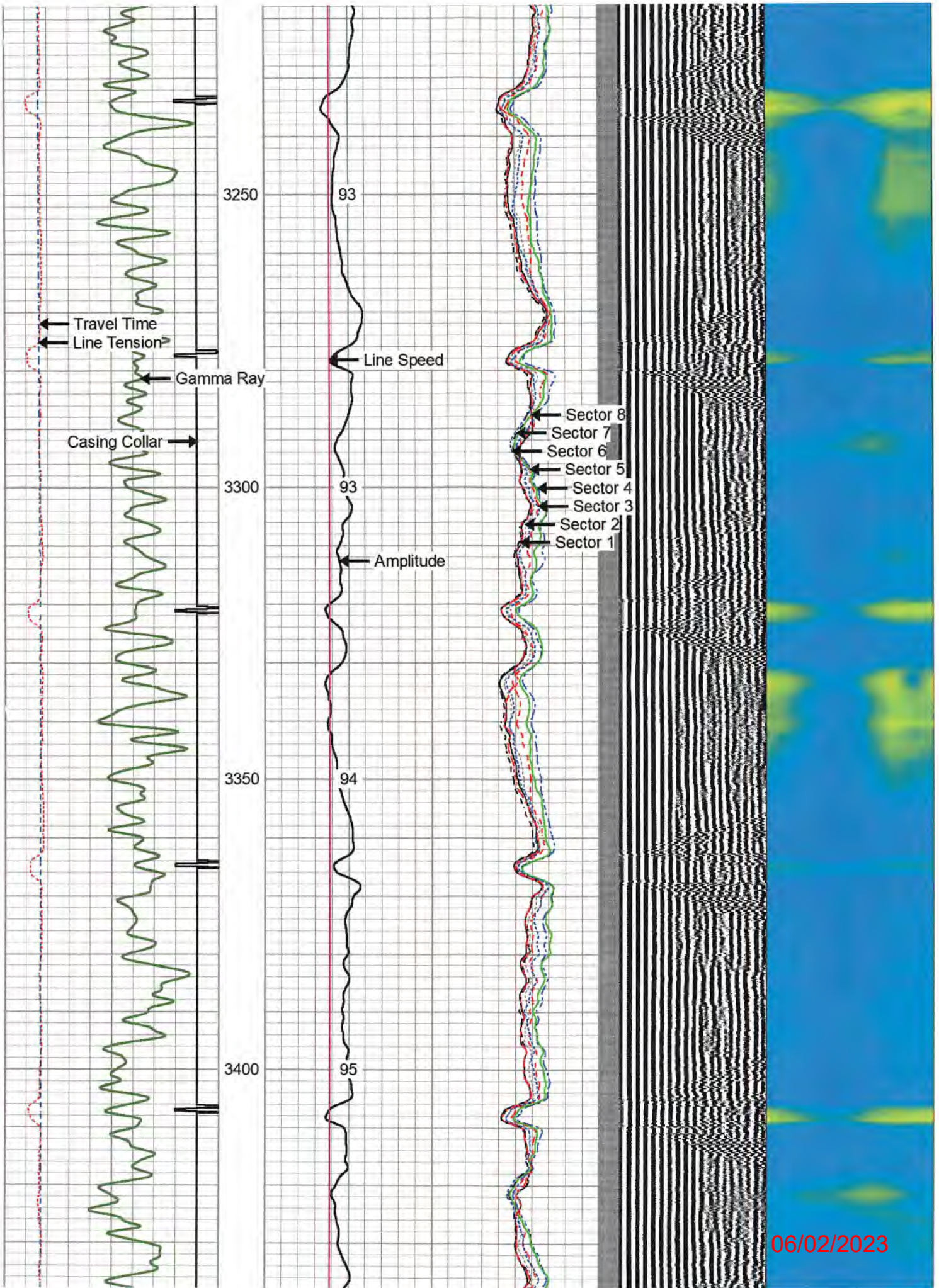


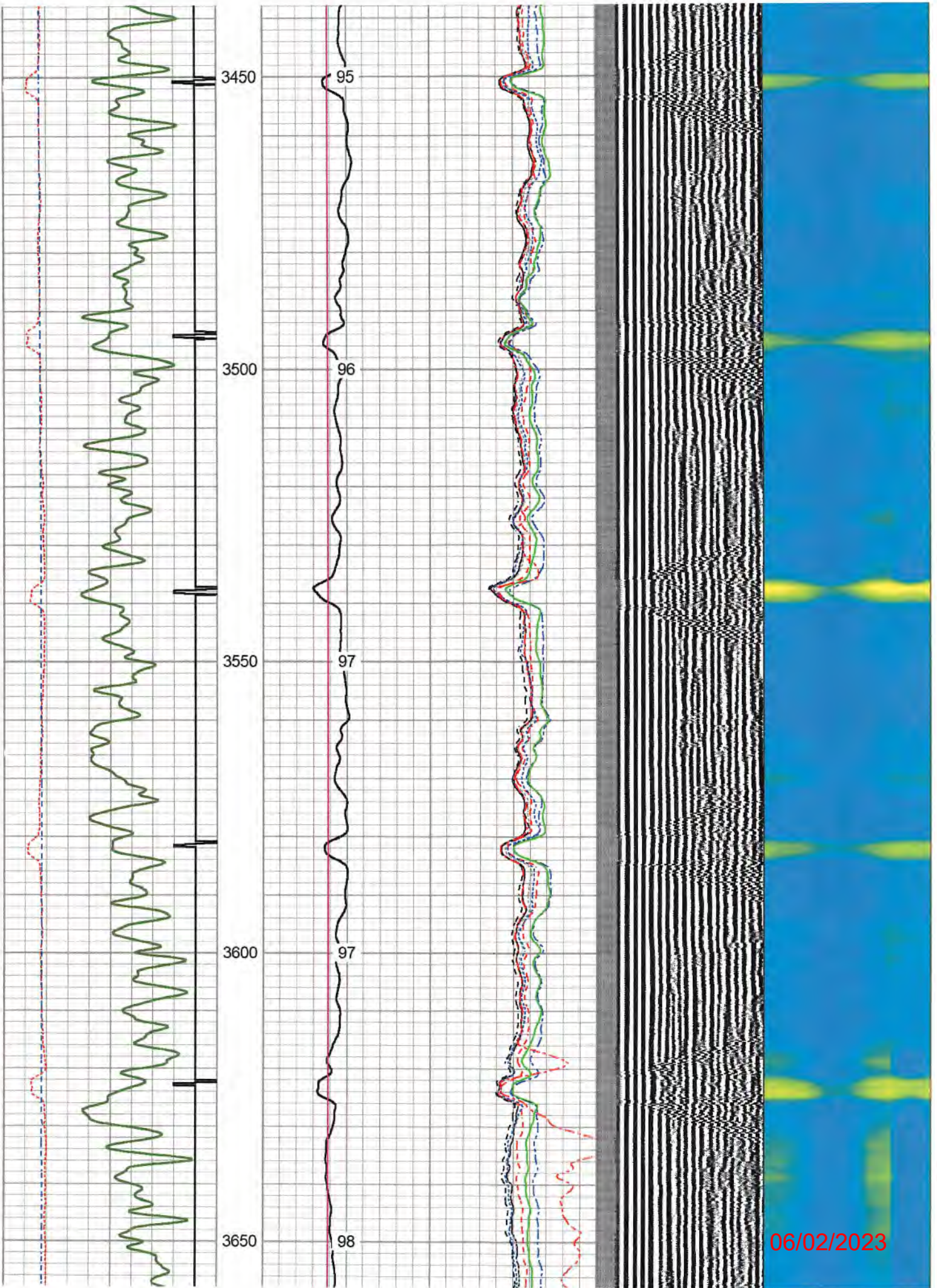
06/02/2023



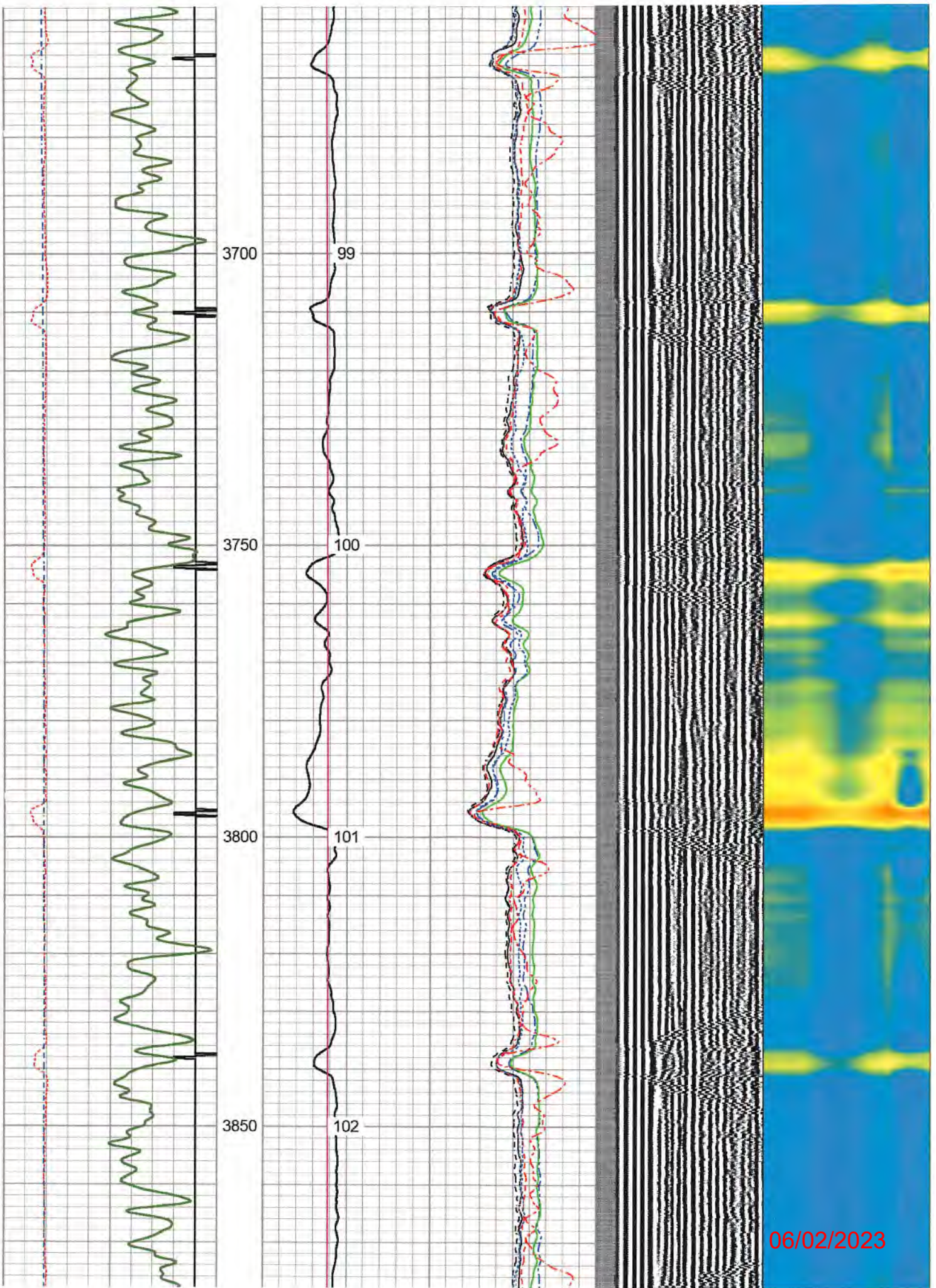
06/02/2023



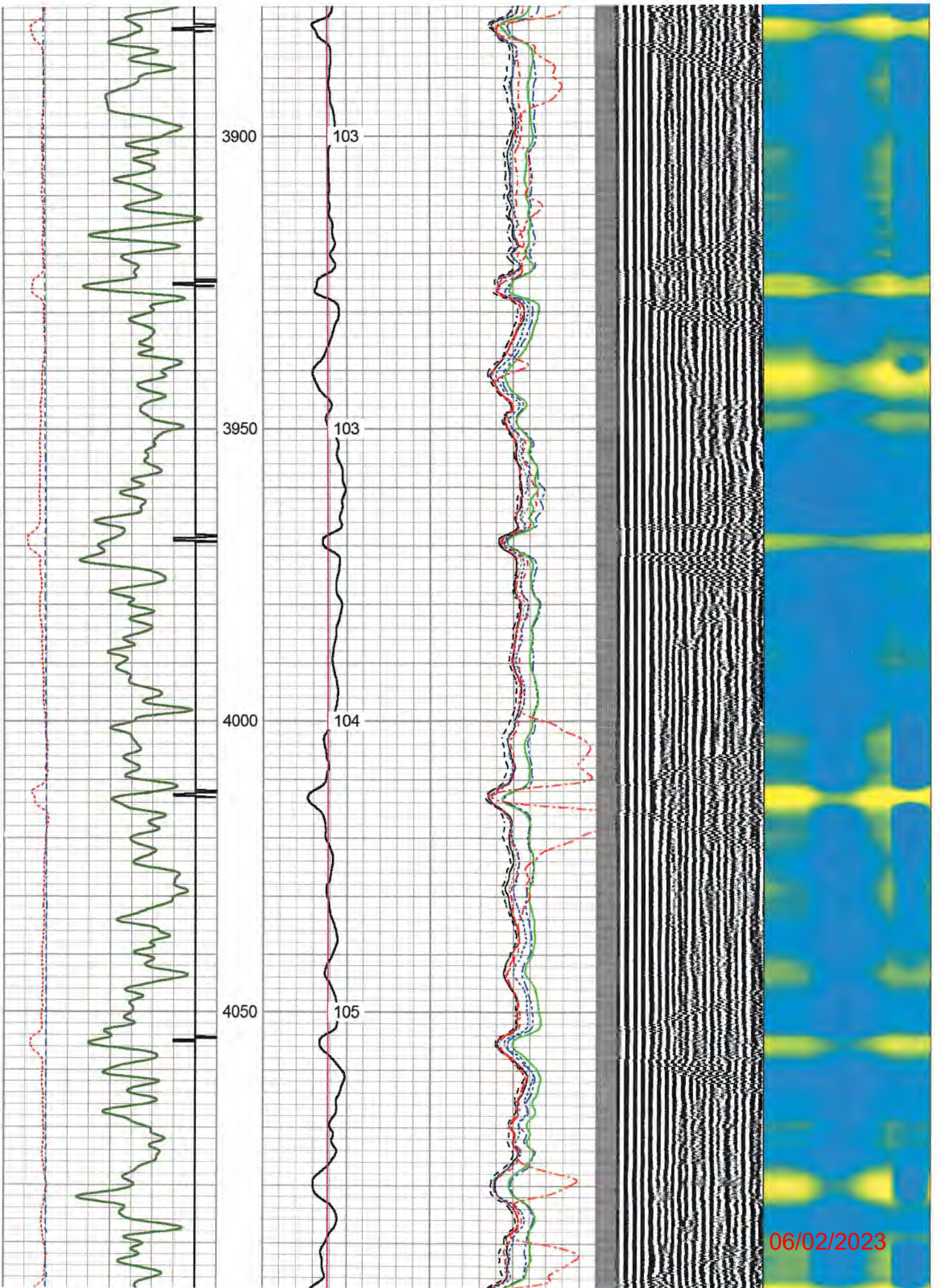




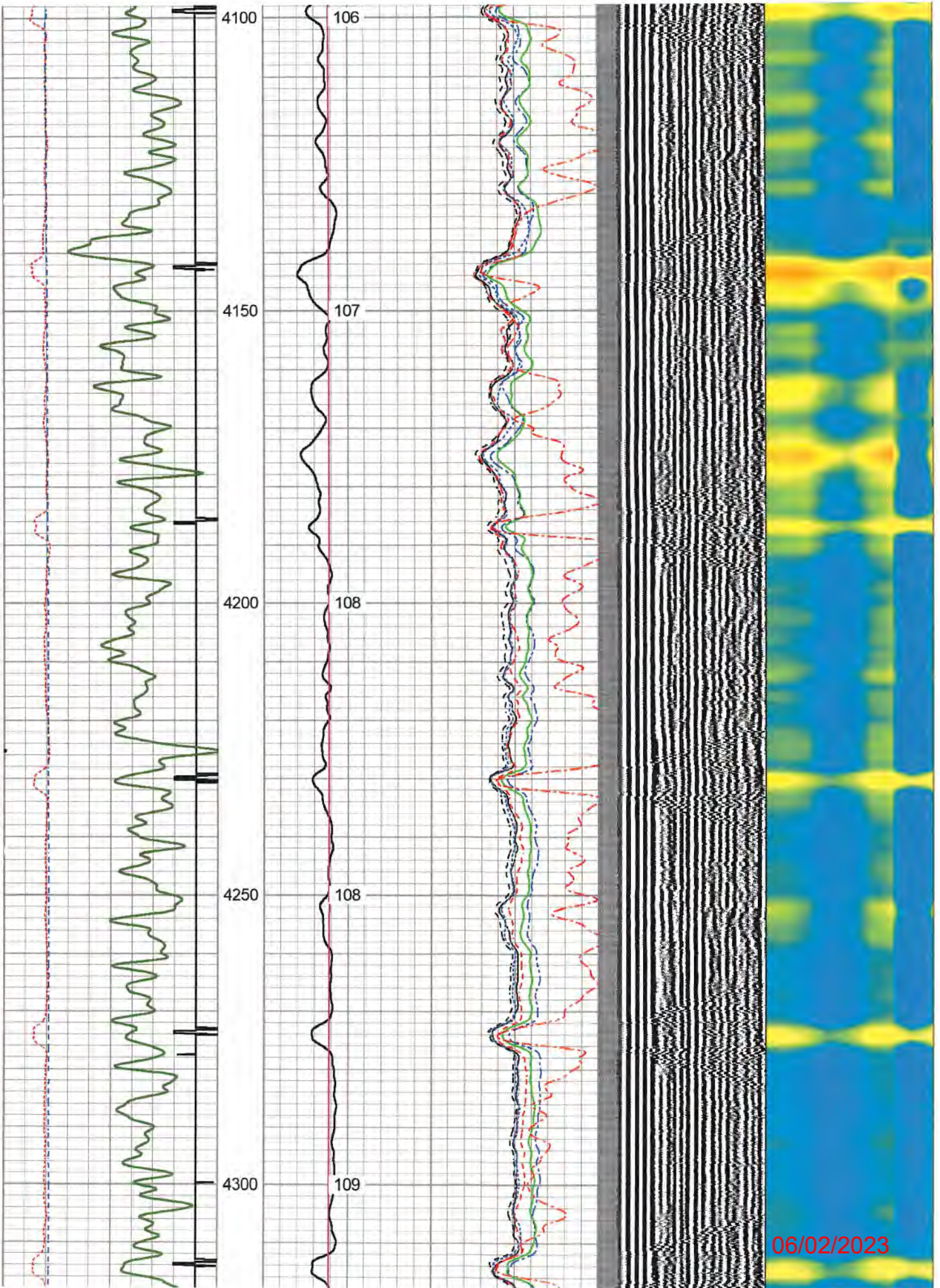
06/02/2023



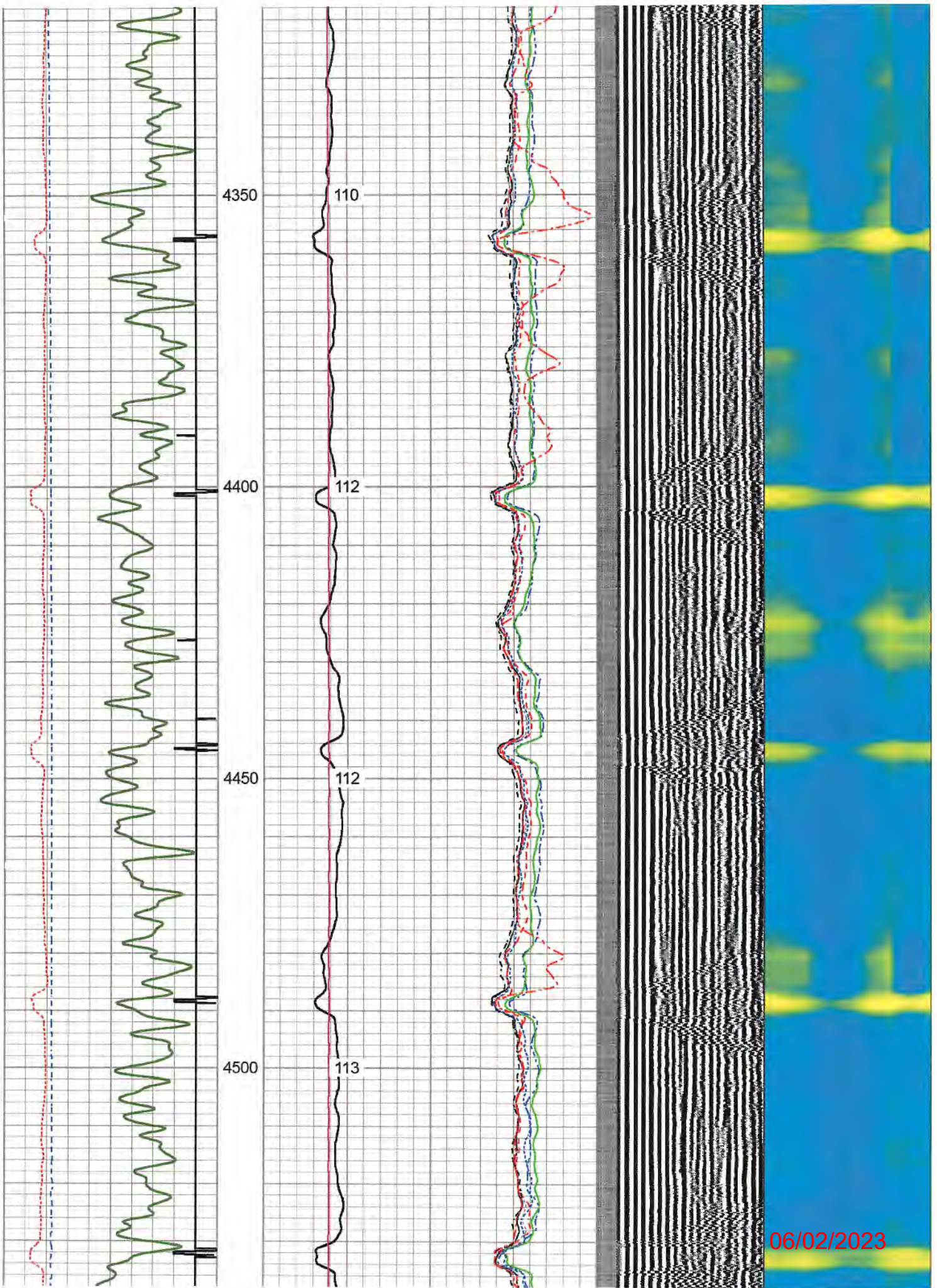
06/02/2023



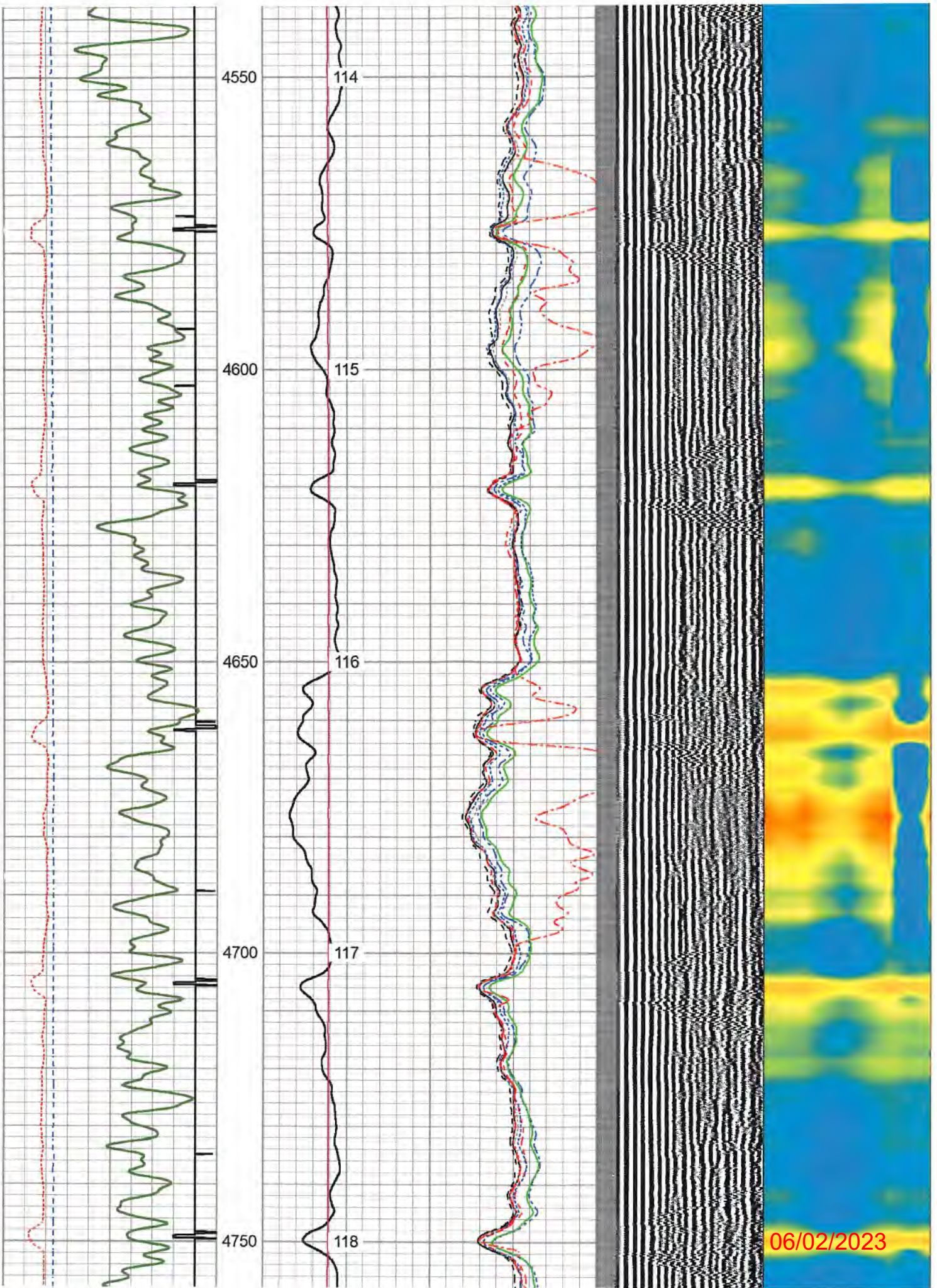
06/02/2023

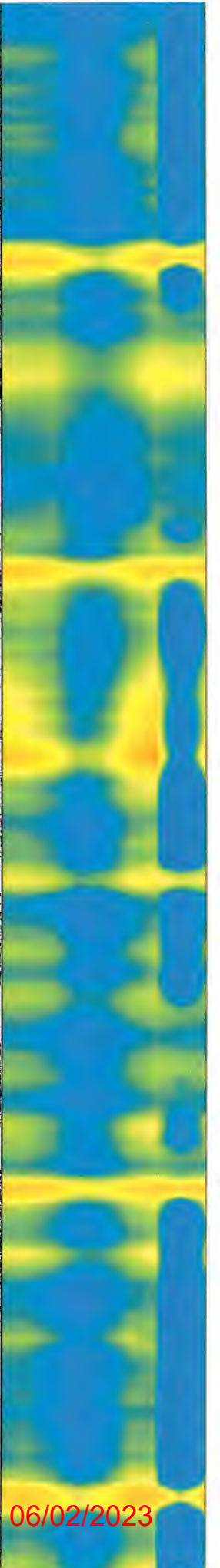
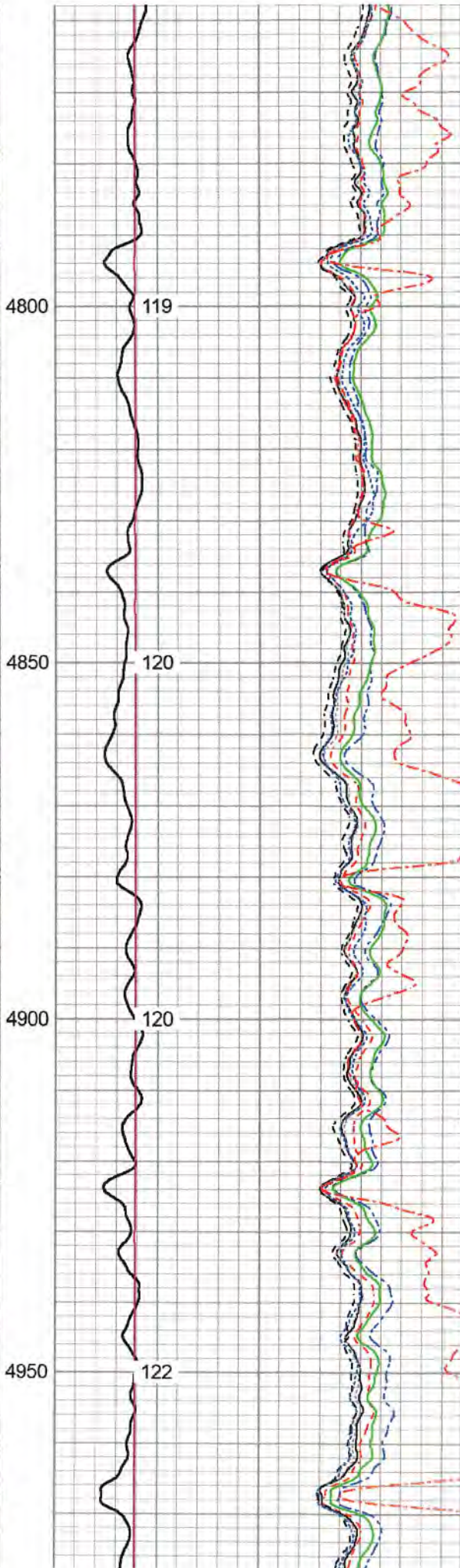
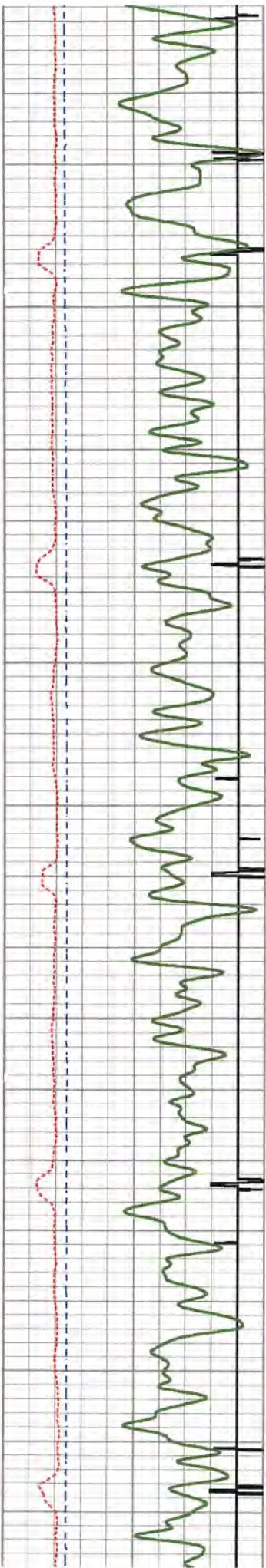


06/02/2023

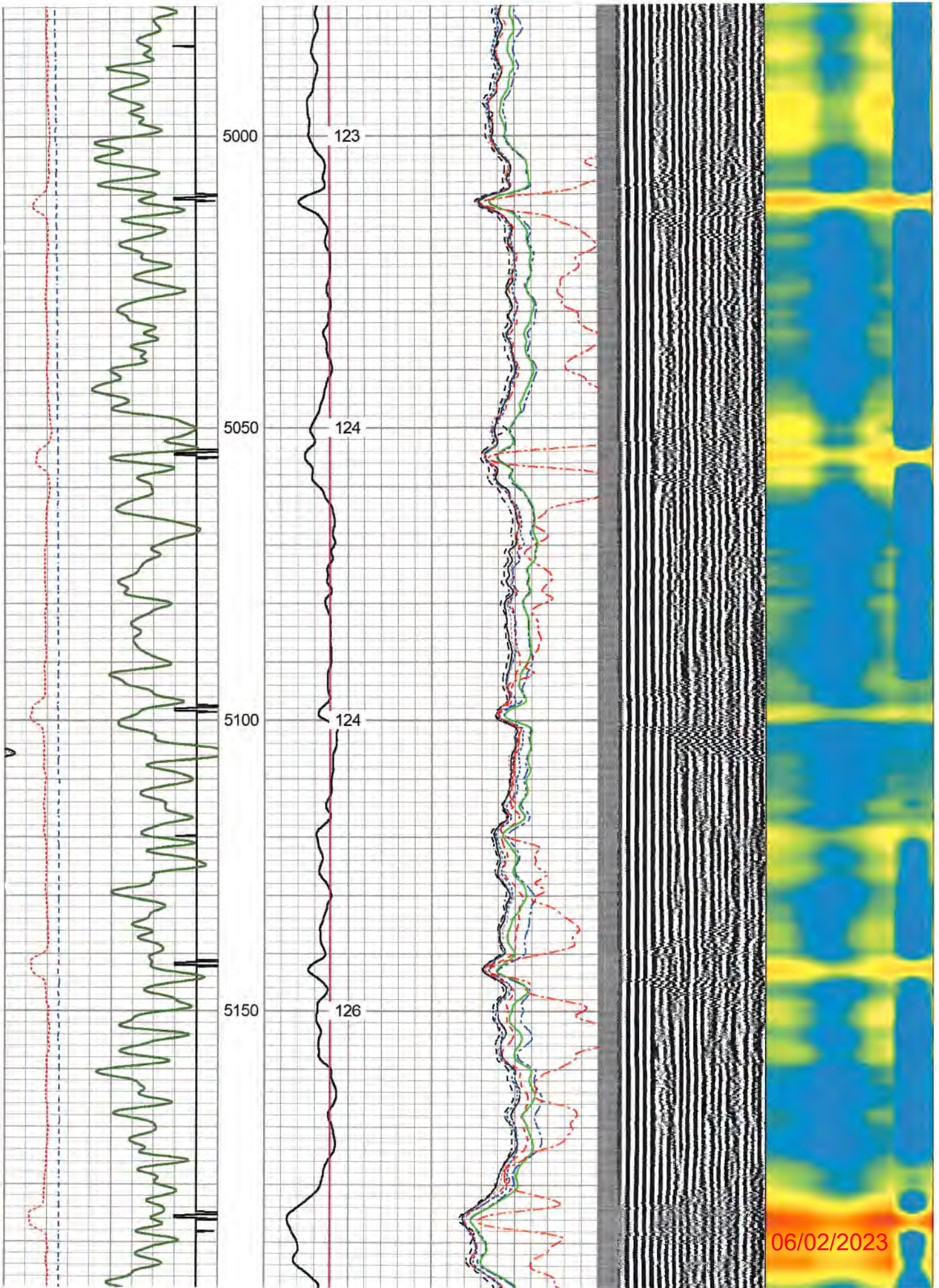


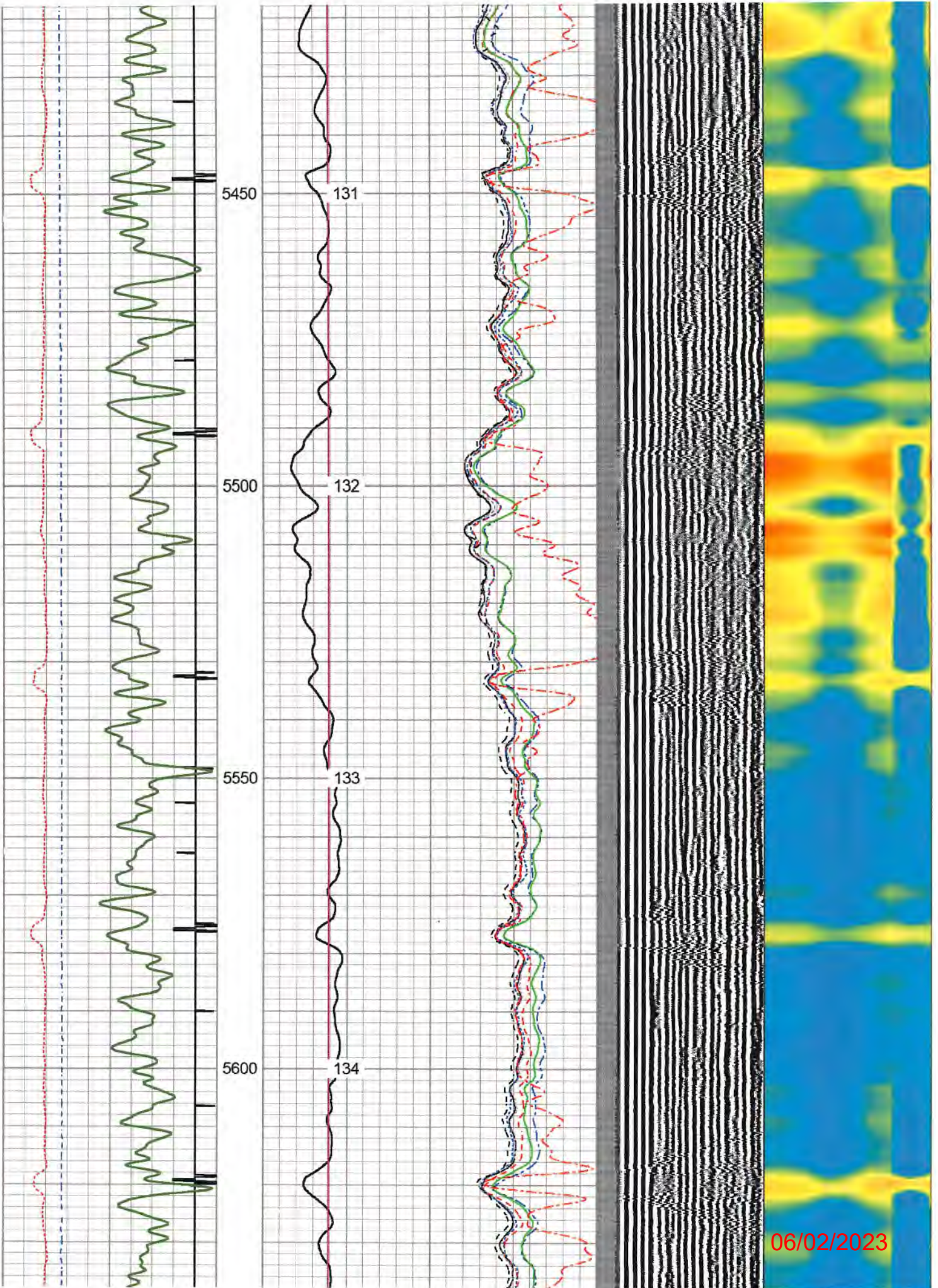
06/02/2023



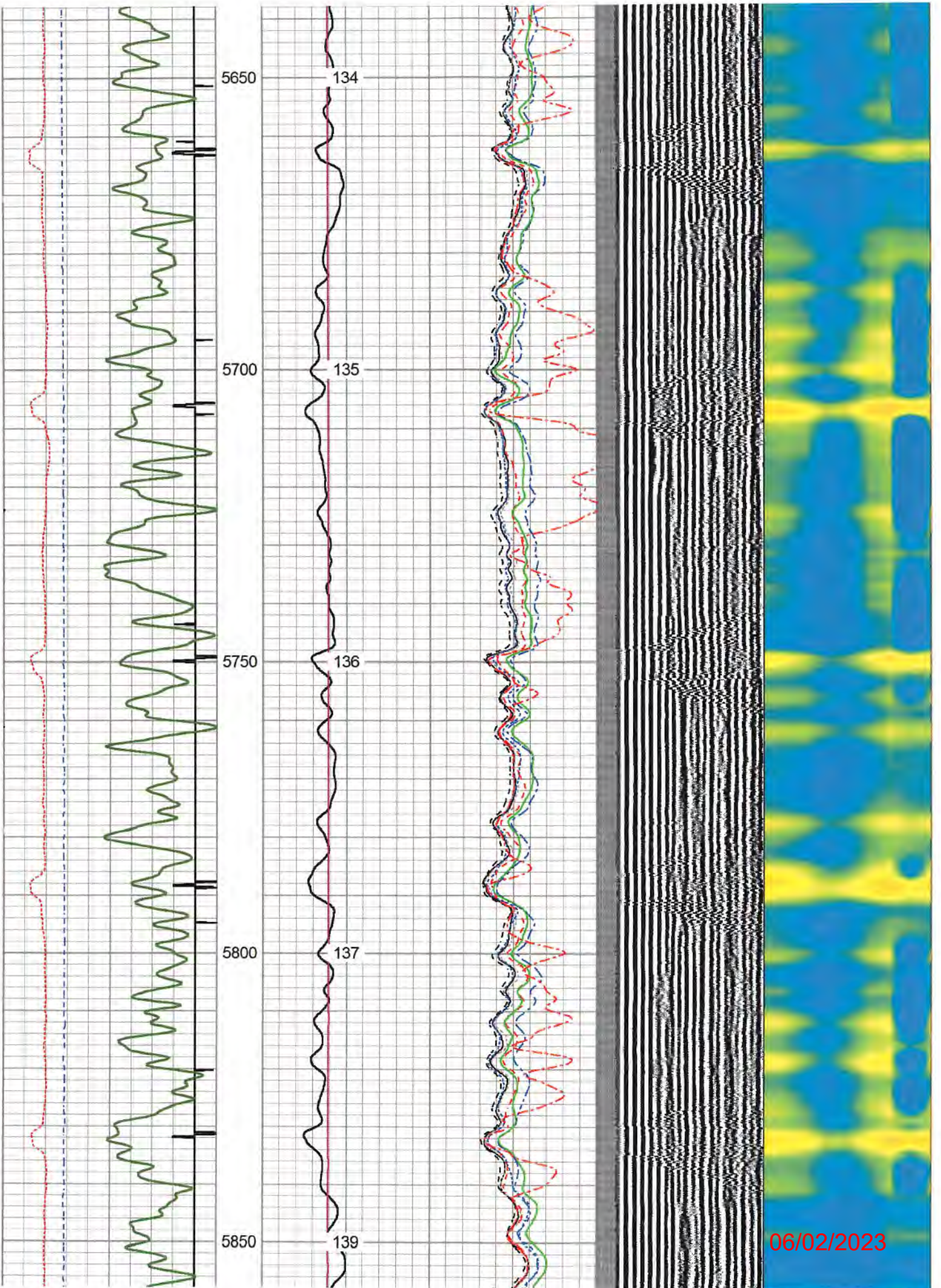


06/02/2023

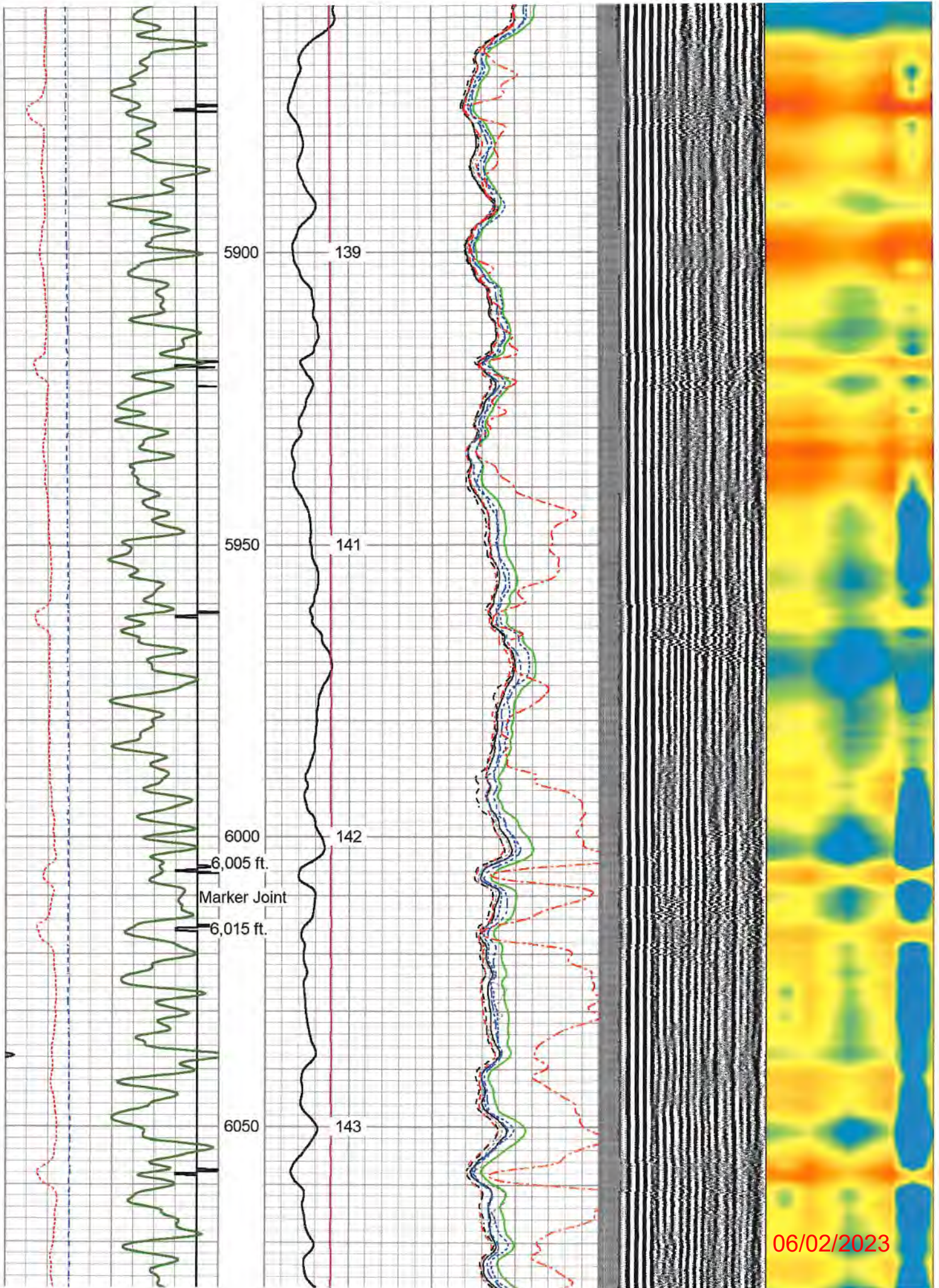




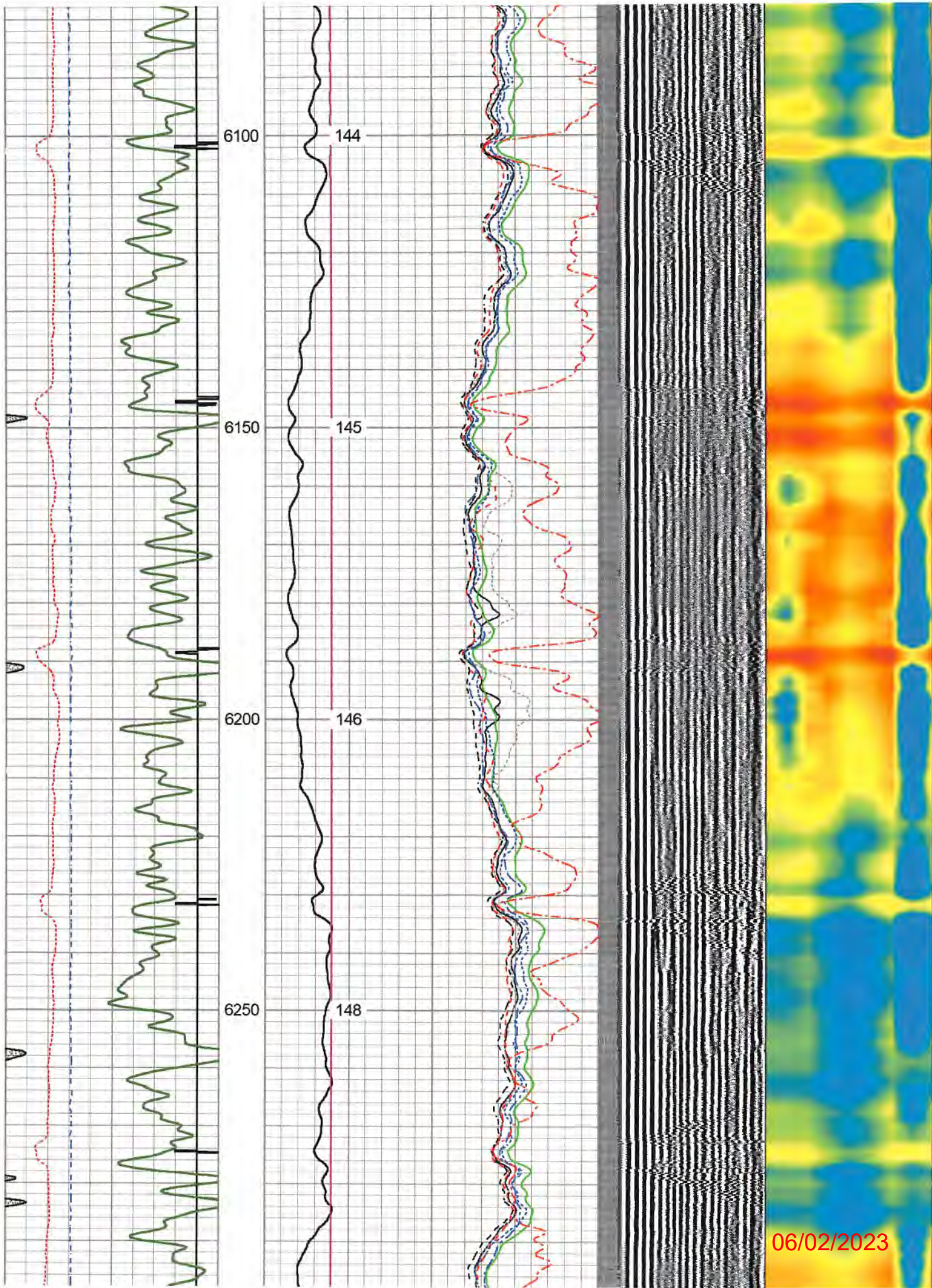
06/02/2023



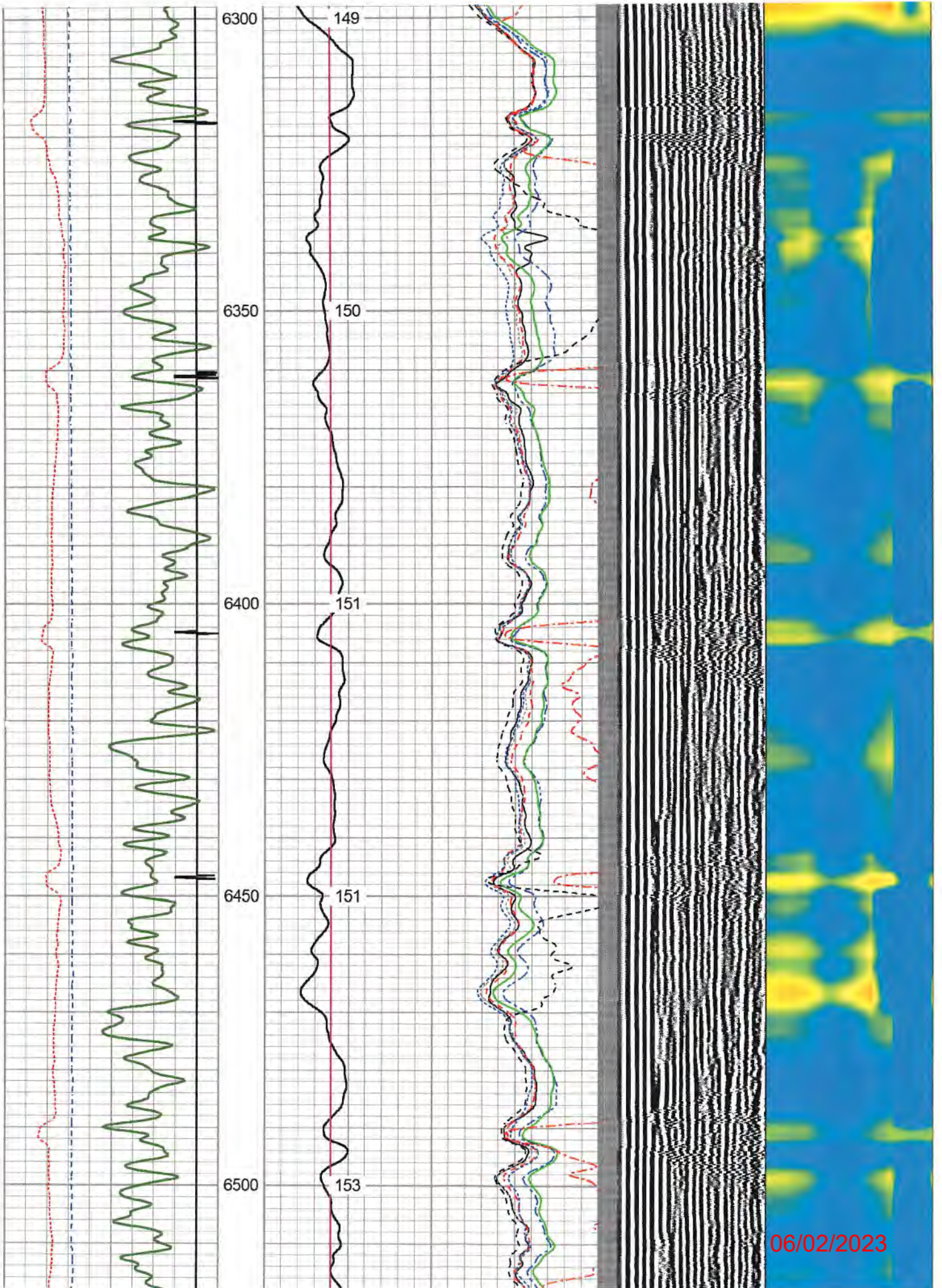
06/02/2023



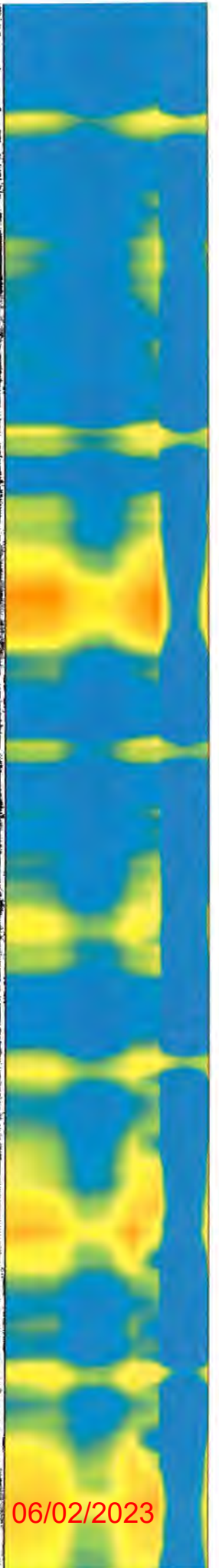
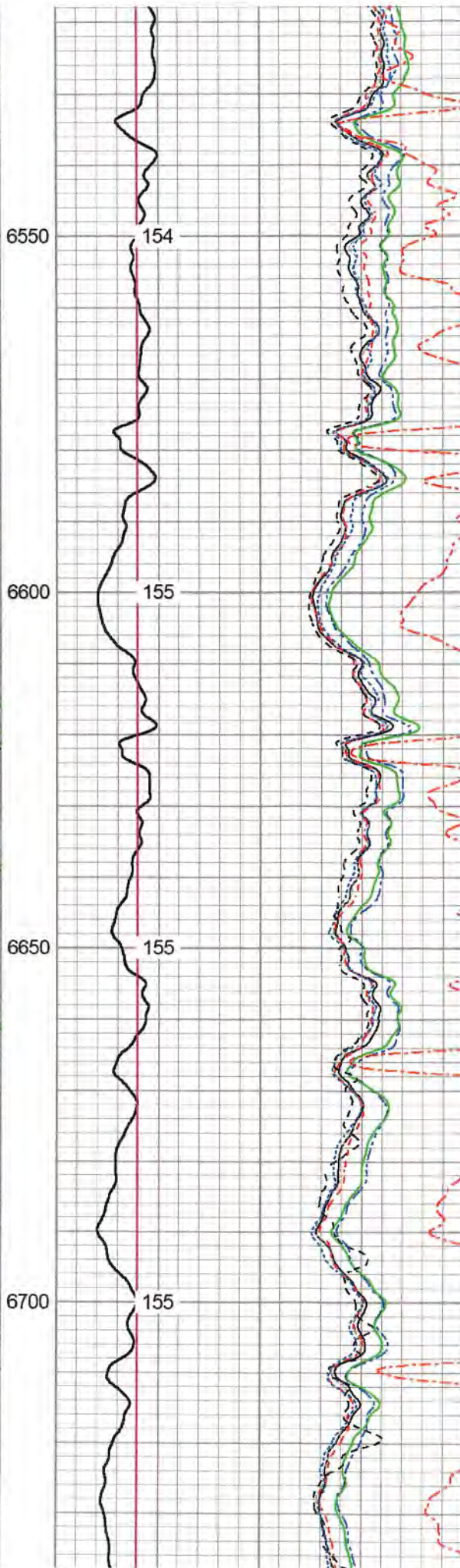
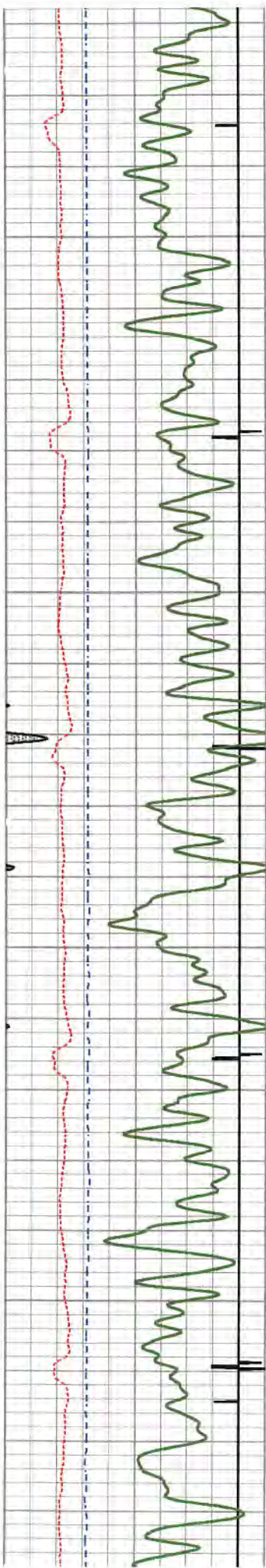
06/02/2023



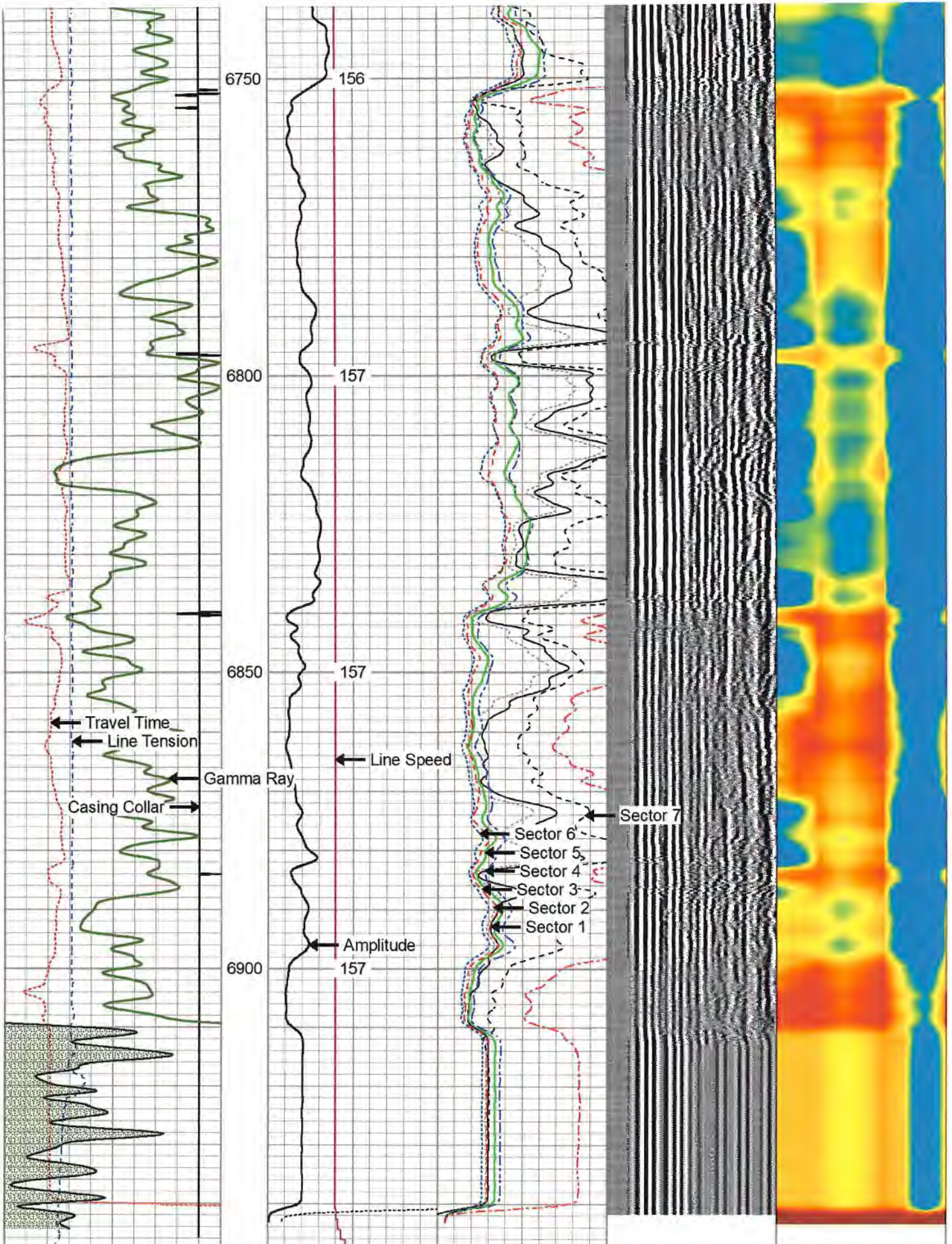
06/02/2023



06/02/2023



06/02/2023



270	Travel Time (usec)	200	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1		Amplified Amplitude	-5		Sector 2	150	200 (usec)	1200		

06/02/2023

0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

0	(mV)	10	-5	Sector 3	150
	Line Speed		-5	Sector 4	150
-500	(ft/min)	500	-5	Sector 5	150
	TEMP		-5	Sector 6	150
	(degF)		-5	Sector 7	150
			-5	Sector 8	150



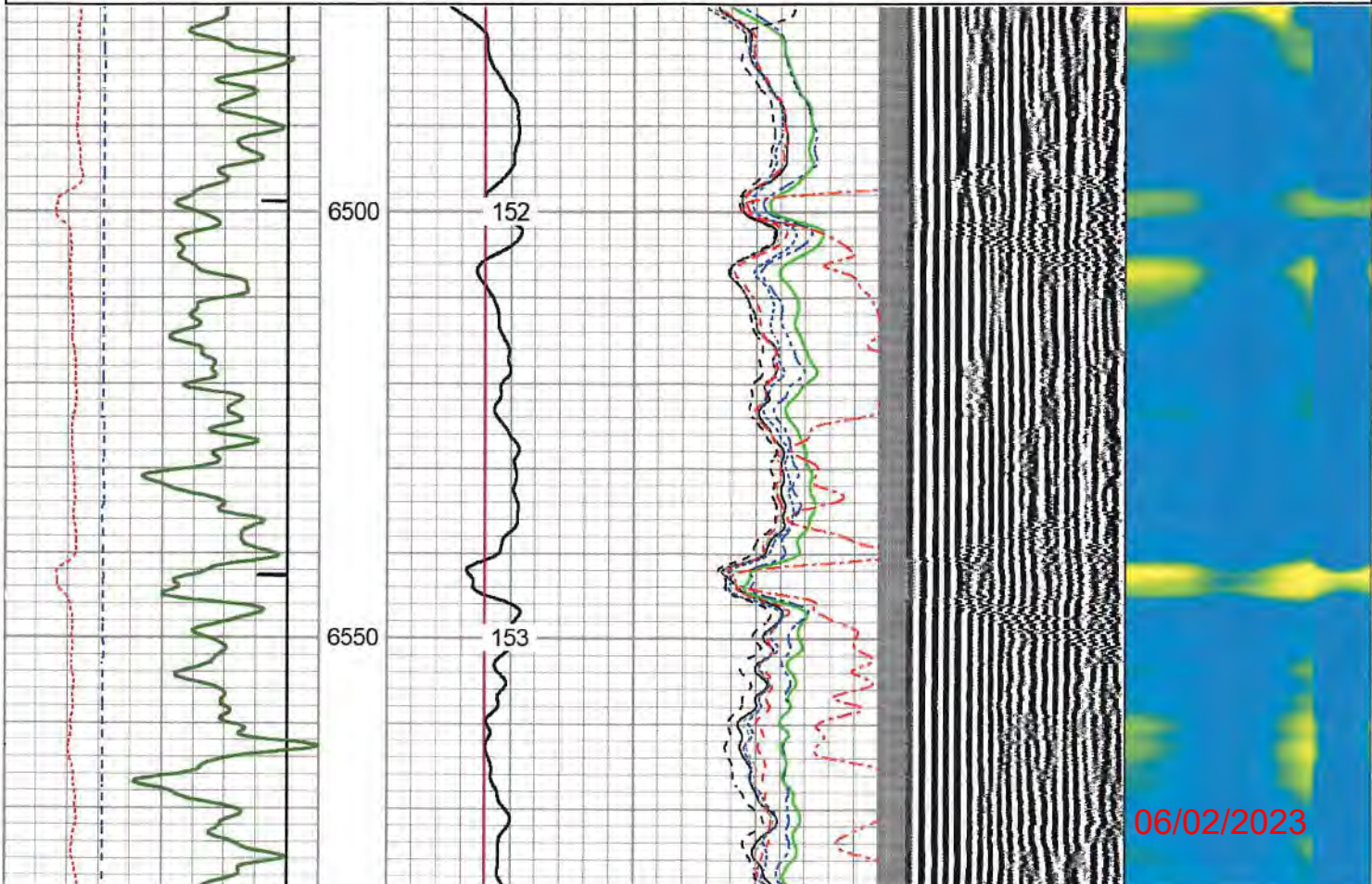
Repeat Pass 0 PSI

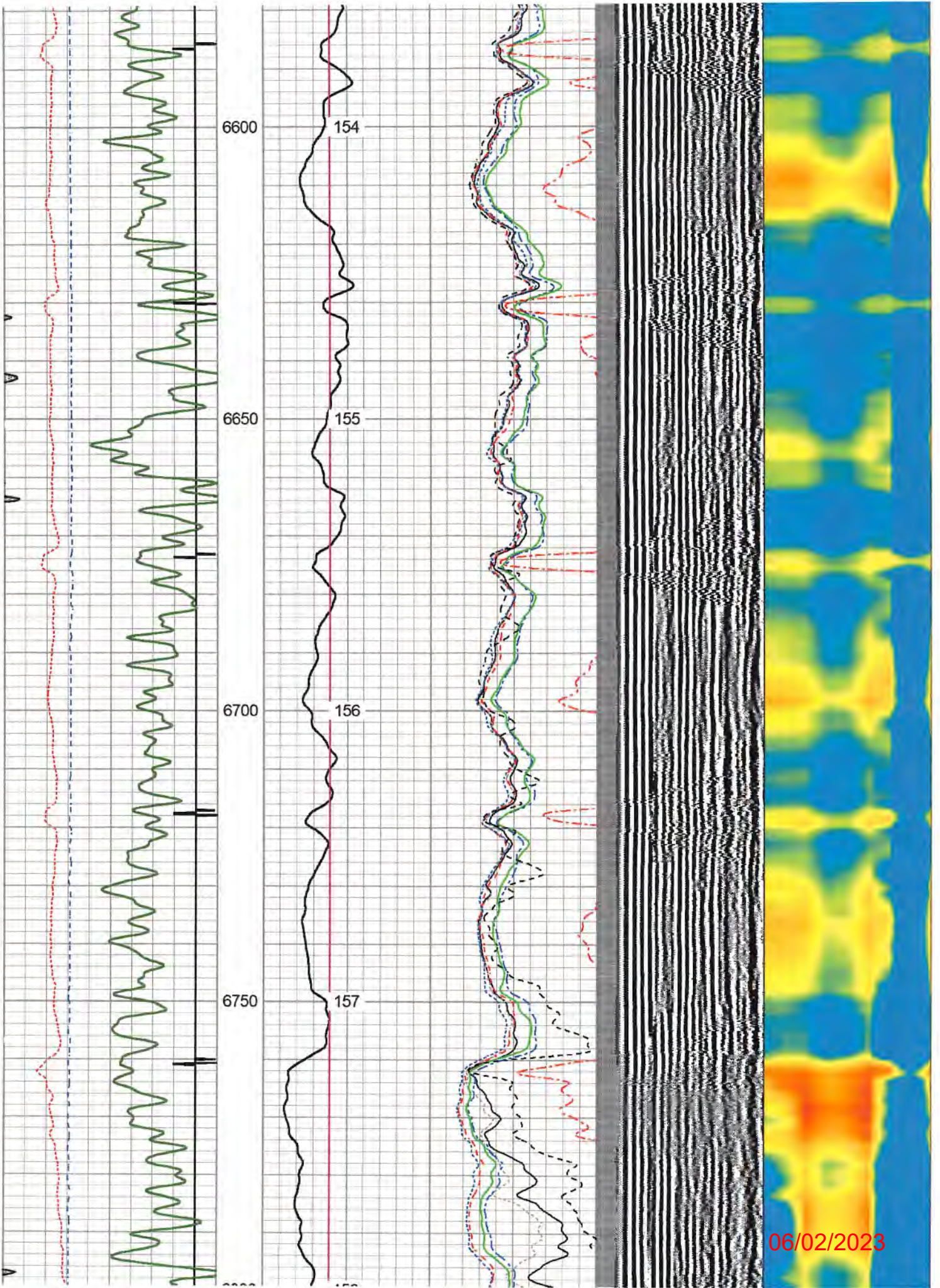
Database File antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2_2020.db
 Dataset Pathname Rabbit_Ears/Harpua_1H/RCBL_1/pass3
 Presentation Format 9rcbl
 Dataset Creation Sat May 02 09:18:29 2020
 Charted by Depth in Feet scaled 1:240

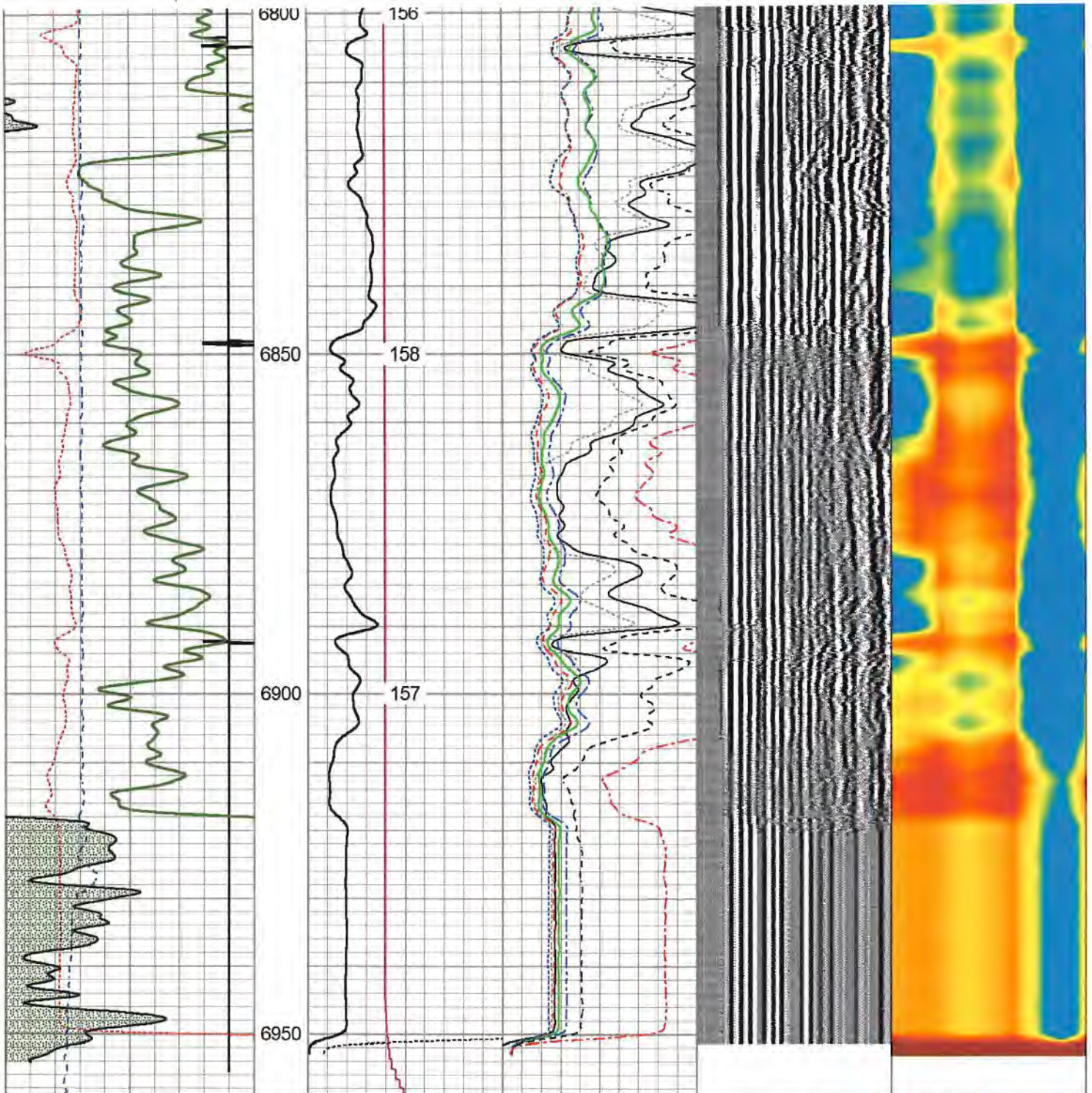
270	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

0	Amplitude (mV)	100	-5	Sector 1	150
	Amplified Amplitude		-5	Sector 2	150
0	(mV)	10	-5	Sector 3	150
	Line Speed		-5	Sector 4	150
-500	(ft/min)	500	-5	Sector 5	150
	TEMP		-5	Sector 6	150
	(degF)		-5	Sector 7	150
			-5	Sector 8	150

Variable Density 1 Cement Map 8
 200 (usec) 1200







270	Travel Time (usec)	200	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1		Amplified Amplitude		-5	Sector 2	150	200 (usec)			
0	Gamma Ray (GAPI)	150	0	(mV)	10	-5	Sector 3	150				
0	Line Tension (lb)	5000		Line Speed		-5	Sector 4	150				
				(ft/min)	500	-5	Sector 5	150				
				TEMP		-5	Sector 6	150				
				(degF)		-5	Sector 7	150				
						-5	Sector 8	150				

Log Variables

DatabaseC:\ProgramData\Warrrior\Data\antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2
 Dataset Rabbit_Ears/Harpua_1H/RCBL_1/pass5.2/_vars_ 06/02/2023

Top - Bottom

BHTEMP_Src TEMP	BOREID in 7.875	BOTTEMP degF 150	CASEOD in 5.5	CASETHCK in 0.415	CASEWGHT lb/ft 23	MAXAMPL mV 72	MINAMPL mV 3.4
MINATTN db/ft 9.6	PERFS No	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0			

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Calibration Report

Database File antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2_2020.db
Dataset Pathname Rabbit_Ears/Harpua_1H/RCBL_1/pass5.2
Dataset Creation Sat May 02 11:27:18 2020

Gamma Ray Calibration Report

Serial Number: FW1211-86
Tool Model: Probe
Performed: Thu Dec 19 22:27:19 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.8000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1312-32
Tool Model: Probe275T

Calibration Casing Diameter: 5.500 in
Calibration Depth: 2401.717 ft

Master Calibration, performed Sat May 02 08:59:43 2020:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.016	0.445	3.400	71.921	127.926	0.827
CAL	1.011	1.012				
5'	0.015	0.415	3.400	71.921	131.208	0.829
SUM						
S1	0.050	0.480	3.400	100.000	225.013	-7.944
S2	0.009	0.435	3.400	100.000	226.578	1.461
S3	0.007	0.440	3.400	100.000	222.739	1.945
S4	0.006	0.447	3.400	100.000	219.222	2.022
S5	0.006	0.454	3.400	100.000	215.649	2.192
S6	0.007	0.460	3.400	100.000	212.962	2.009
S7	0.005	0.454	3.400	100.000	215.052	2.290
S8	0.008	0.453	3.400	100.000	217.218	0.945



06/02/2023

Internal Reference Calibration, performed (Not Performed):


	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	1.011	1.012	1.000	0.000

Air Zero Calibration, performed Sat May 02 08:40:59 2020:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00
			CENT-Overbody Antelope (SP-919-0233)	1.67	4.88	5.00
Temp	11.27		RBT-Probe275T (FW1312-32) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00
WVFS8	9.03					
WVFS7	9.03					
WVFS6	9.03					
WVFS5	9.03					
WVFS4	9.03					
WVFS3	9.03					
WVFS2	9.03					
WVFS1	9.03					
WVF3FT	9.03					
WVF5FT	8.03					

06/02/2023

HeadVolt	4.78					
WVFCAL	4.78					
CCL	3.88					
GR	2.54		GR-Probe (FW1211-86) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00
			CENT-Overbody Antelope (SP-919-0233)	1.67	4.88	5.00

Dataset: antero_gamehengeeast_harpua1h_rcbl_nineenergy_may_2_2020.db: Rabbit_Ears/Harpua_1H/RCBL_1/pass5.2
 Total length: 15.17 ft
 Total weight: 162.00 lb
 O.D.: 4.88 in

	Company	Antero Resources
	Well	Harpua 1H
	Field	Rabbit Ears
	County	Tyler
	State	West Virginia