



RADIAL BOND LOG

Company ANTERO Well DAAGS UNIT 1H Field MARCELLUS County WETZEL State WV	<table style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">Company ANTERO</td> </tr> <tr> <td colspan="2">Well DAAGS UNIT 1H</td> </tr> <tr> <td colspan="2">Field MARCELLUS</td> </tr> <tr> <td>County WETZEL</td> <td>State WV</td> </tr> <tr> <td colspan="2">Location: API #: 47103034250000</td> </tr> <tr> <td colspan="2" style="text-align: center;"> SEC TWP RGE </td> </tr> <tr> <td>Permanent Datum</td> <td>GL Elevation 30'</td> </tr> <tr> <td>Log Measured From</td> <td>KB</td> </tr> <tr> <td>Drilling Measured From</td> <td>KB</td> </tr> <tr> <td colspan="2" style="text-align: center;">Other Services</td> </tr> <tr> <td colspan="2" style="text-align: center;">GR CCL</td> </tr> <tr> <td colspan="2" style="text-align: center;">Elevation</td> </tr> <tr> <td colspan="2">K.B. 1338'</td> </tr> <tr> <td colspan="2">D.F. 1337'</td> </tr> <tr> <td colspan="2">G.L. 1308'</td> </tr> </table>	Company ANTERO		Well DAAGS UNIT 1H		Field MARCELLUS		County WETZEL	State WV	Location: API #: 47103034250000		SEC TWP RGE		Permanent Datum	GL Elevation 30'	Log Measured From	KB	Drilling Measured From	KB	Other Services		GR CCL		Elevation		K.B. 1338'		D.F. 1337'		G.L. 1308'	
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G.L. 1308'																															
Date	JAN-16-2022																														
Run Number	ONE																														
Depth Driller	18,879'																														
Depth Logger	7324'																														
Bottom Logged Interval	7318'																														
Top Log Interval	SURFACE																														
Open Hole Size	8.50"																														
Type Fluid	PRODUCED																														
Density / Viscosity	8.3#																														
Max. Recorded Temp.	147°F																														
Estimated Cement Top	5738'																														
Time Well Ready	09:20																														
Time Logger on Bottom	09:50																														
Equipment Number	TK 111																														
Location	CHARLEROI, PA																														
Recorded By	D. JOSEPHIK																														
Witnessed By	REDGIE TAYLOR																														
Borehole Record																															
Tubing Record																															
Run Number	Bit	From	To	Size	Weight	From	To																								
Casing Record		Size	Wgt/Ft	Top	Bottom																										
Surface String		13.375"	54.5#	SURFACE	665'																										
Prot. String		9.625"	36#	SURFACE	2603'																										
Production String		5.5"	20#	SURFACE	18,859'																										
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 MARKER JOINT (6322'-6332') PER CASING TALLY

100% FREE = 71.9MV
 100% BOND = 2.2MV
 ETOC = 5738'

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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CHD	23.96		CHD-Titan Standard 1 7/16" Cable Head	1.02	1.44	1.00
CENT	22.94					



				CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
RBT HeadVolt	20.11 20.05						
Temp	17.20						
WVFS8	14.97			RBT-Probe275T (FW1312-32) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00
WVFS7	14.97						
WVFS6	14.97						
WVFS5	14.97						
WVFS4	14.97						
WVFS3	14.97						
WVFS2	14.97						
WVFS1	14.97						
WVF3FT	14.97						
WVF5FT	13.97						
CENT	10.72						
WVFCAL	10.72						
HEADVOLT	10.72			CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
GR	7.89						
CCL	6.98						
GR	5.64			GR-Probe (FW1211-86) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00
CENT	3.10						
				CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
Bull_Plug	0.27			Bull_Plug-1_7/16_GO Titan 1 7/16" Female Bull Plug	0.27	1.44	1.00

Dataset: antero_dogwood_daags1h_rcbl-1-15-22.db: field/well/RCBL/MAIN
 Total length: 23.96 ft
 Total weight: 221.00 lb
 O.D.: 2.75 in

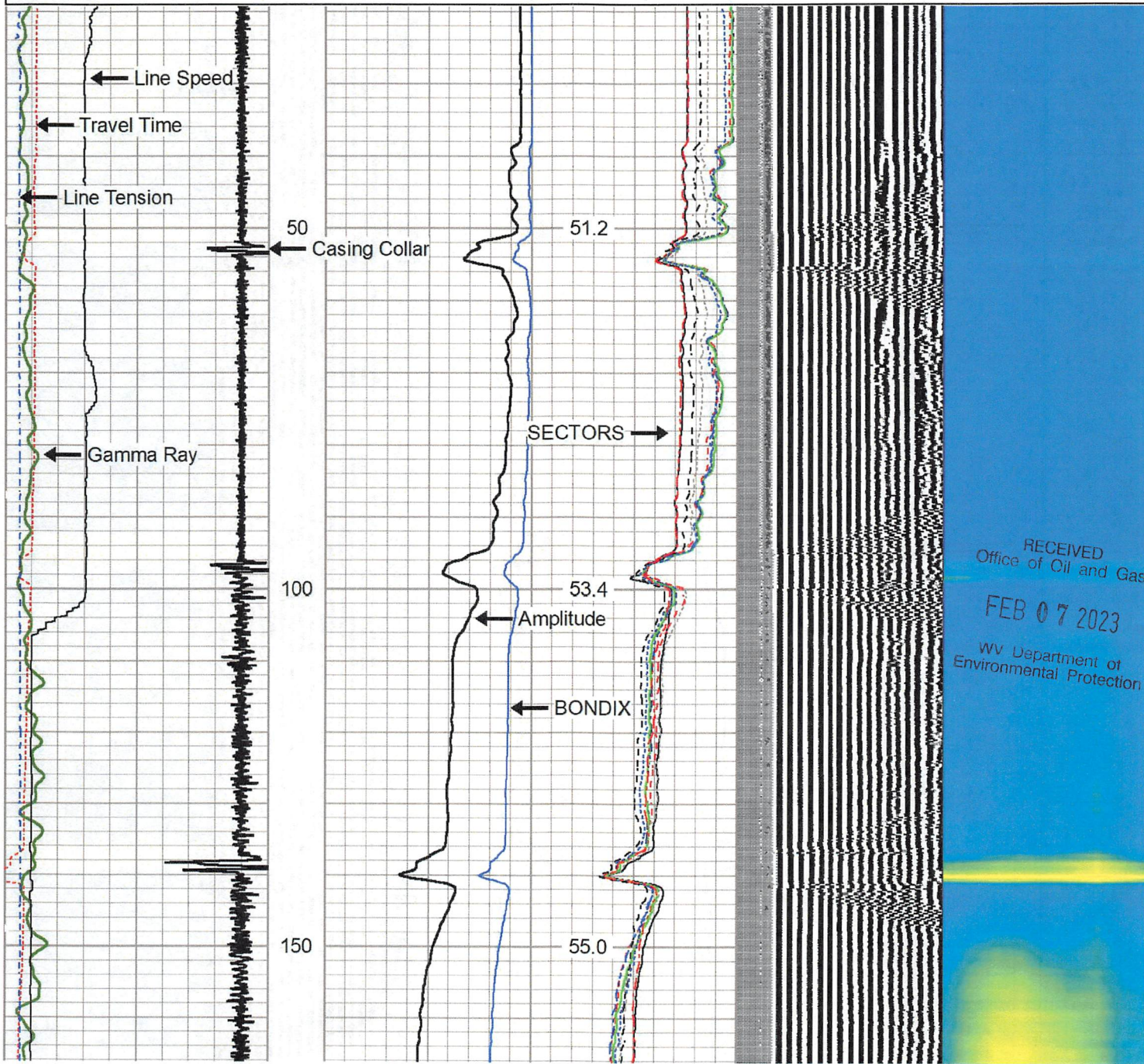


MAIN LOG

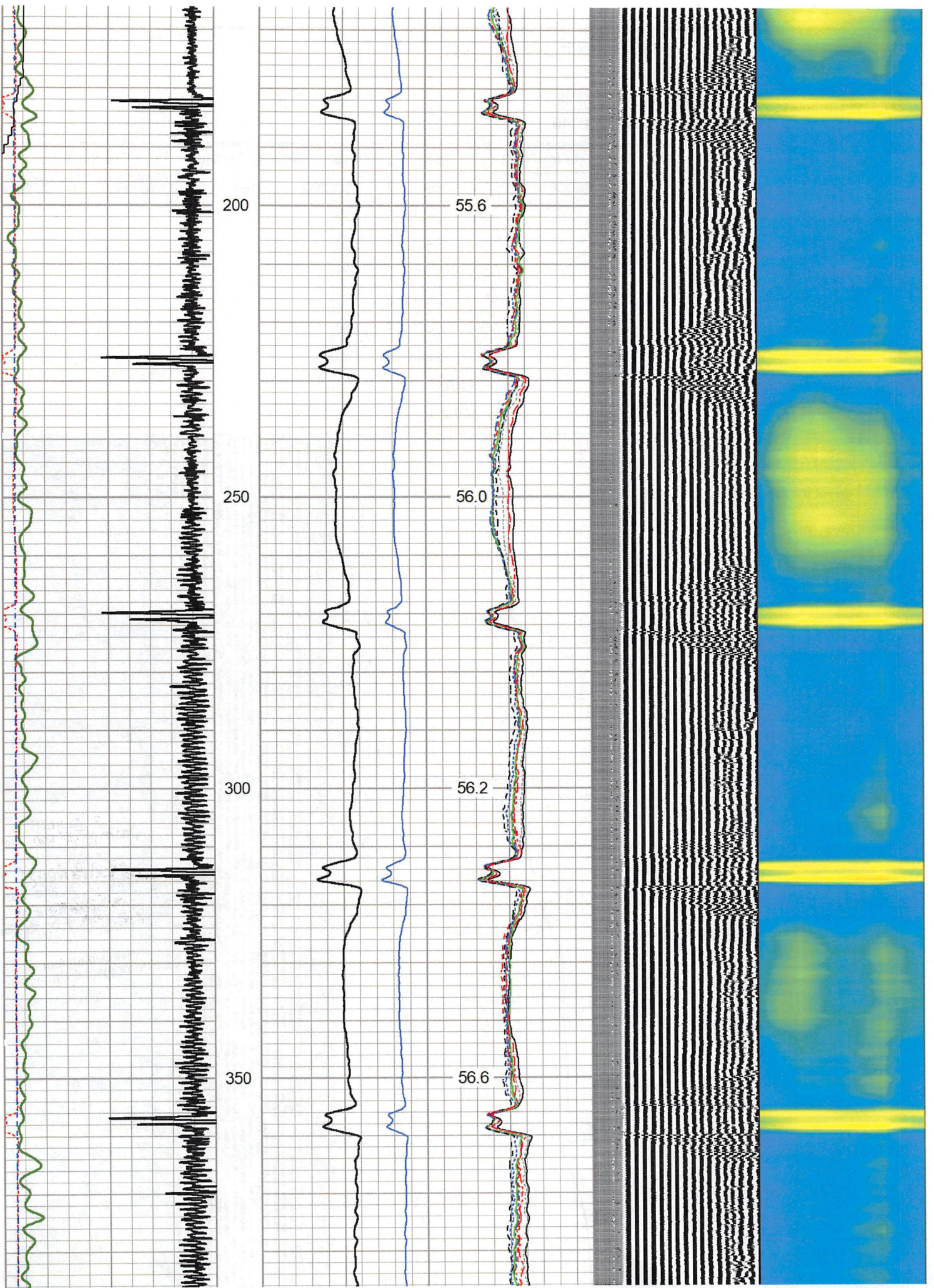
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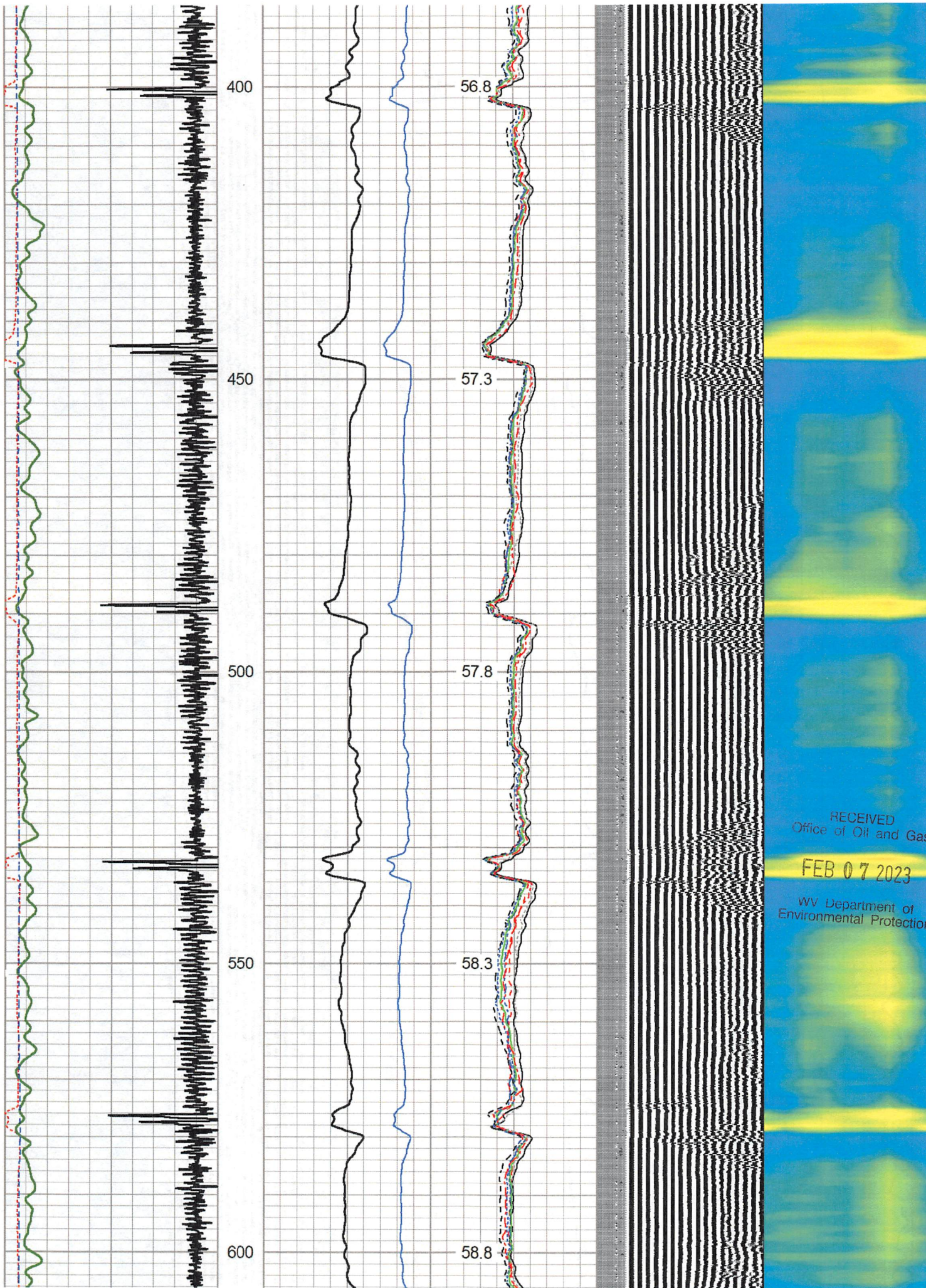
Database File antero_dogwood_daags1h_rcbl-1-15-22.db
 Dataset Pathname RCBL/MAIN
 Presentation Format rcbl 2
 Dataset Creation Sun Jan 16 10:05:13 2022
 Charted by Depth in Feet scaled 1:240

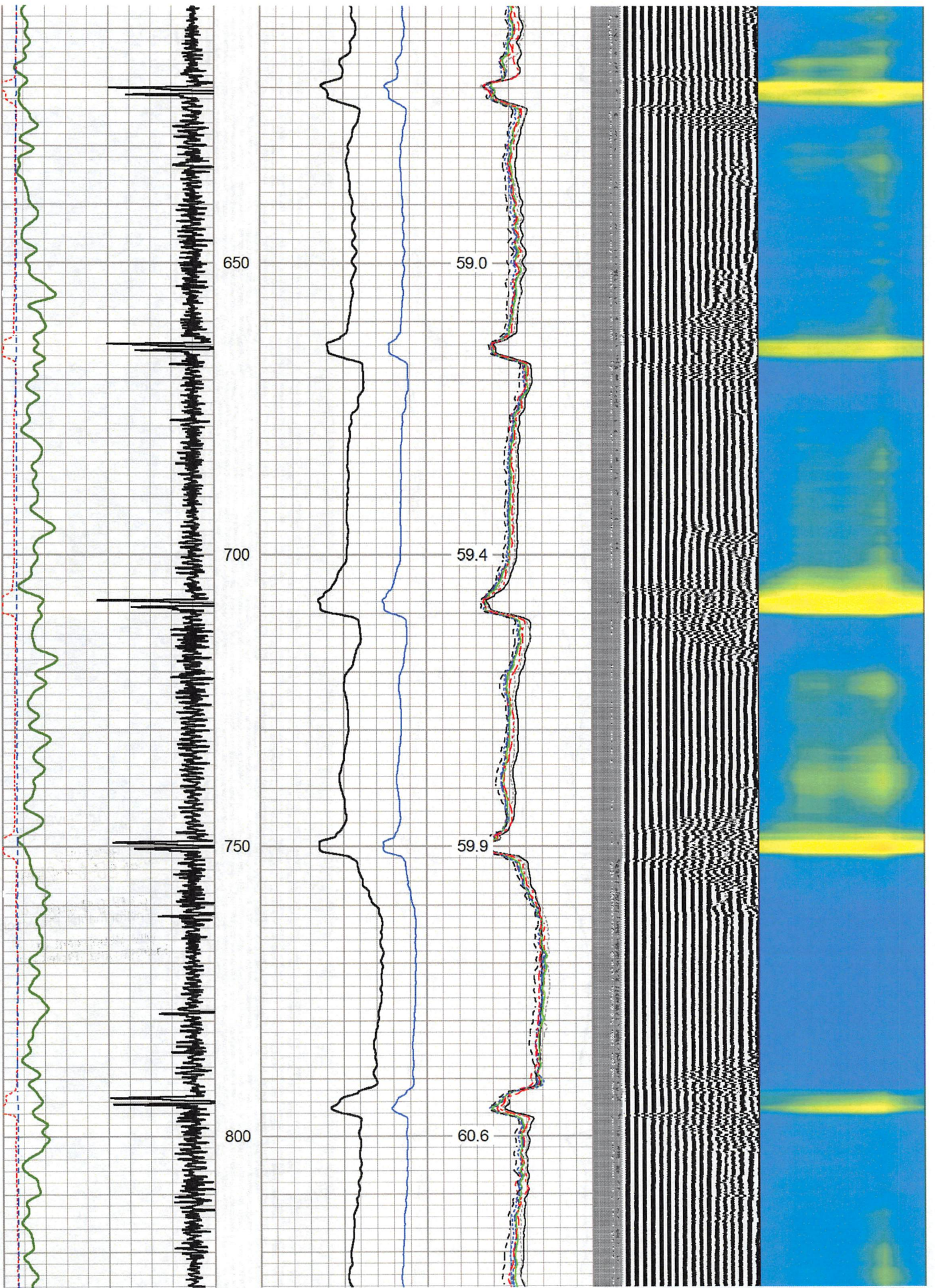
297	Travel Time (usec)	197	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1	1	BONDIX	0	-5	Sector 2	150	(usec)	1200		
0	Gamma Ray (GAPI)	150				-5	Sector 3	150				
0	Line Tension (lb)	5000				-5	Sector 4	150				
-100	LSPD (ft/min)	100				-5	Sector 5	150				
						-5	Sector 6	150				
						-5	Sector 7	150				
						-5	Sector 8	150				
							TEMP					
							(degF)					

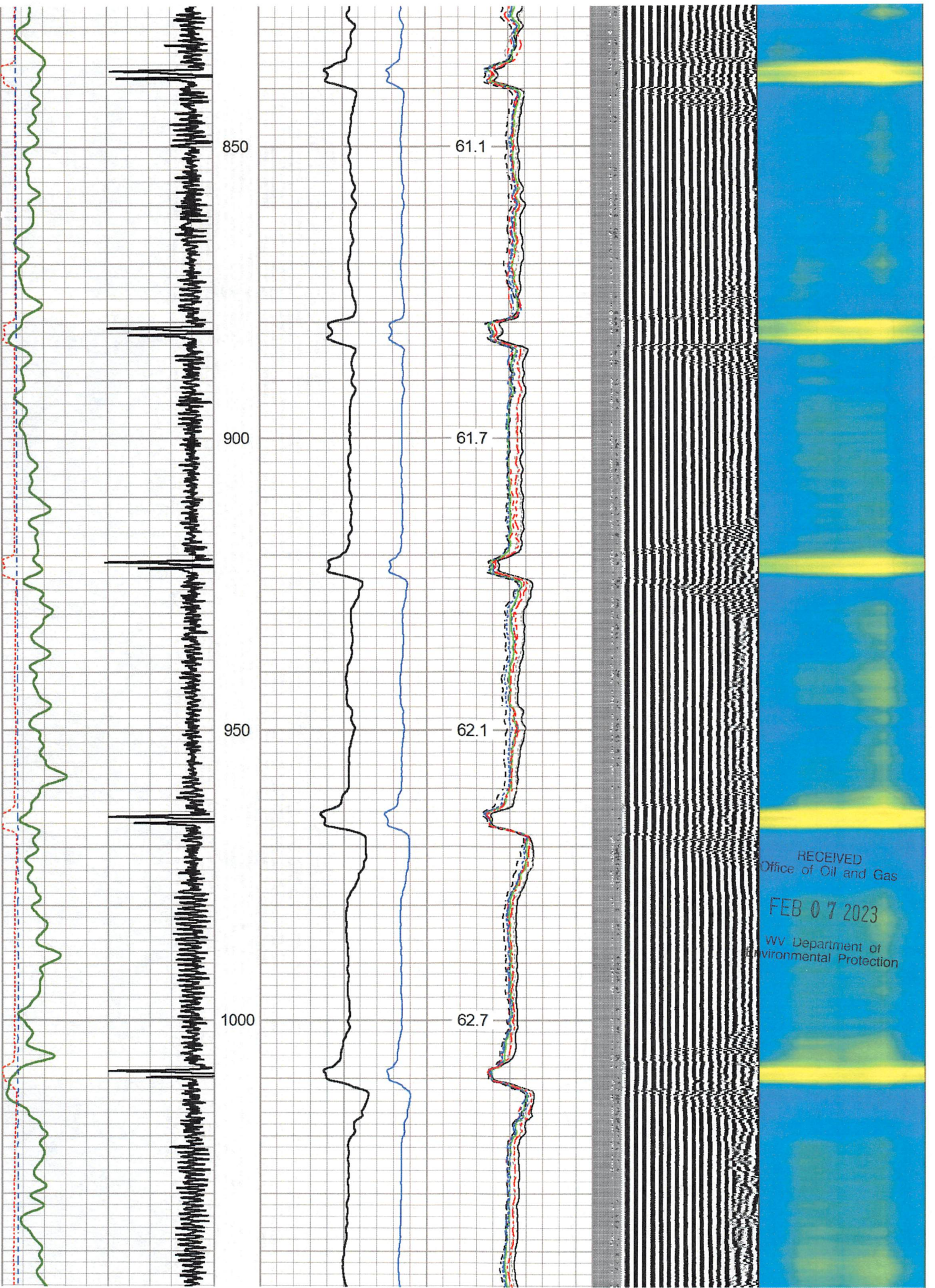


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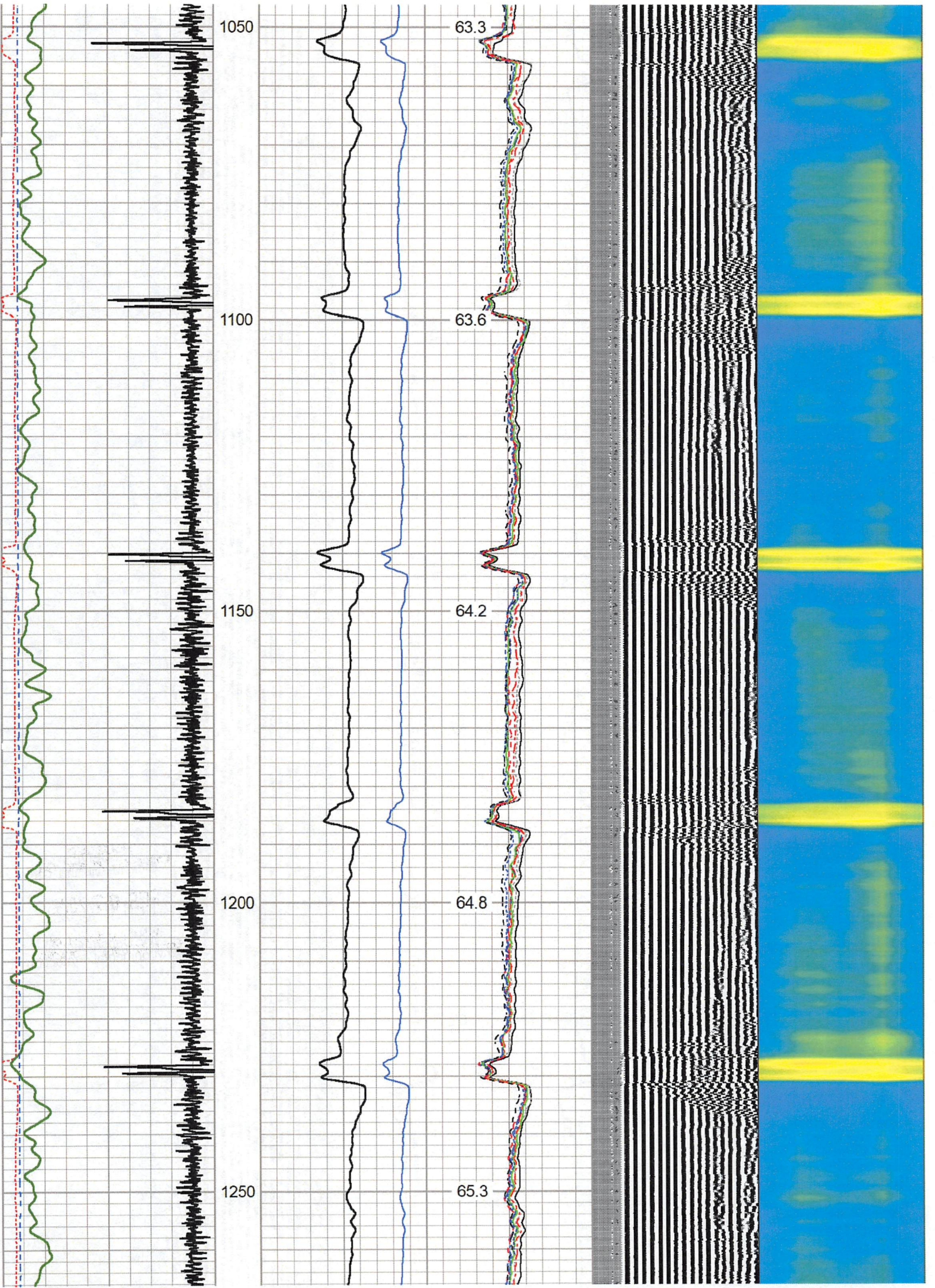


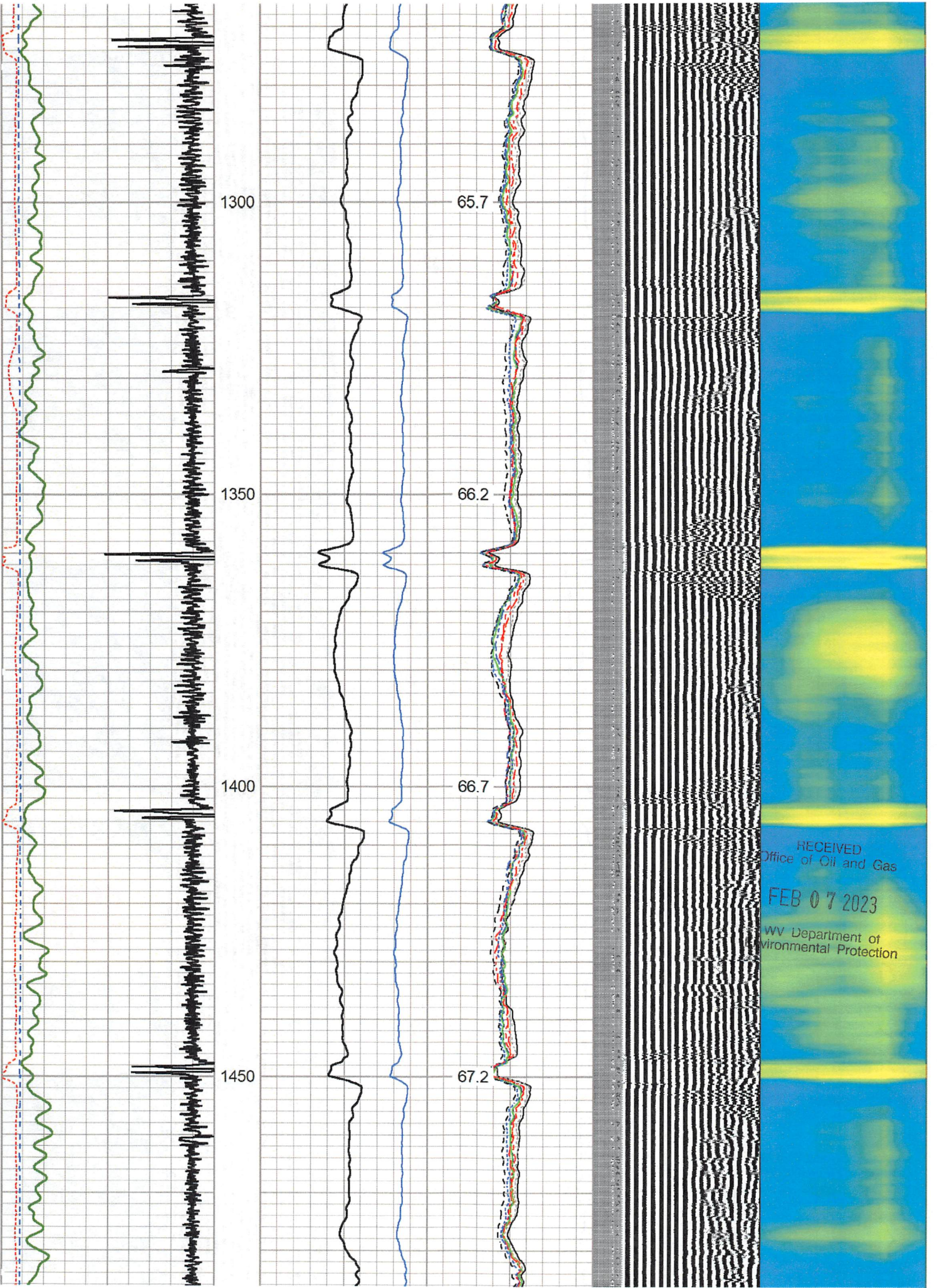




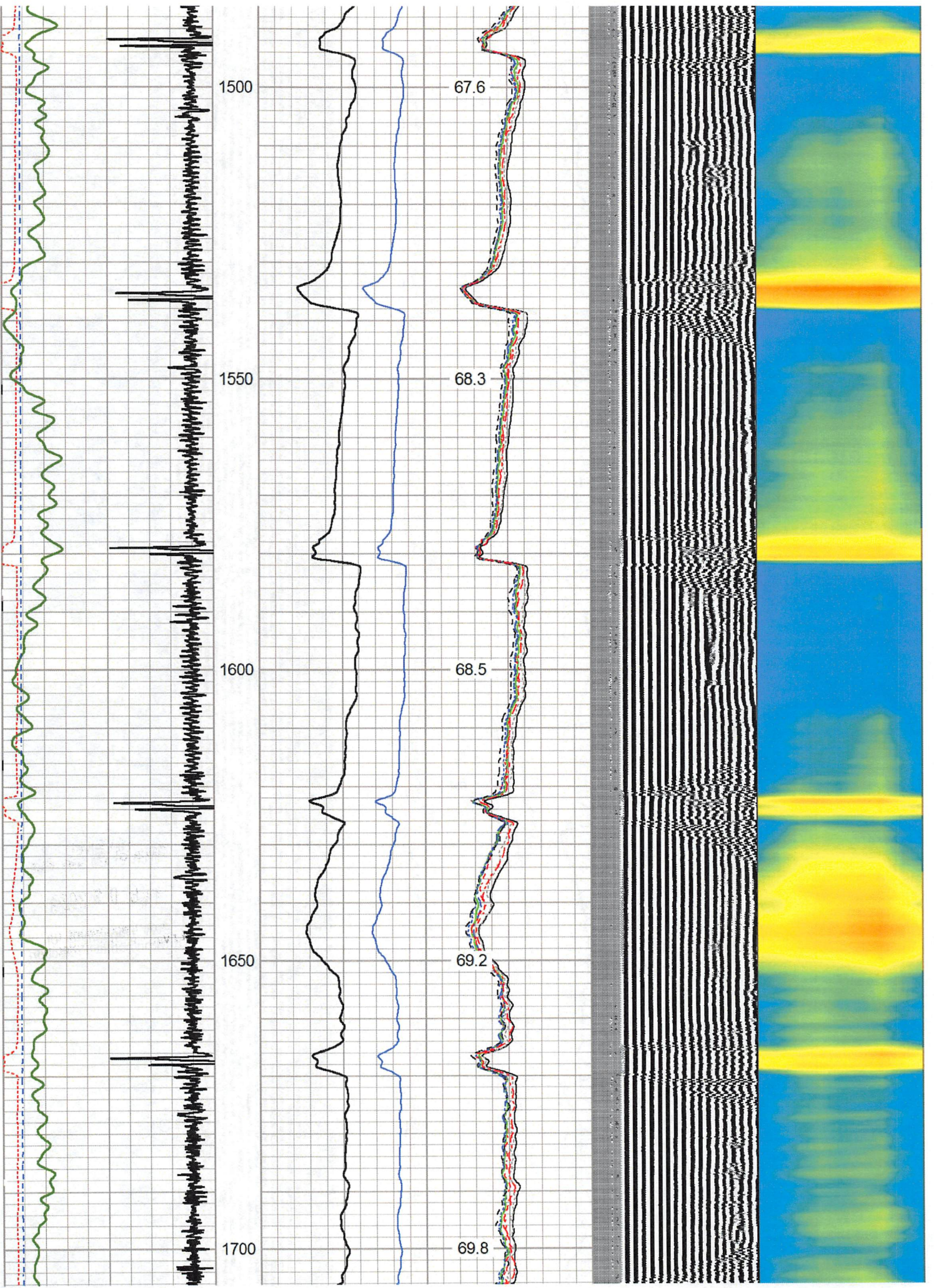


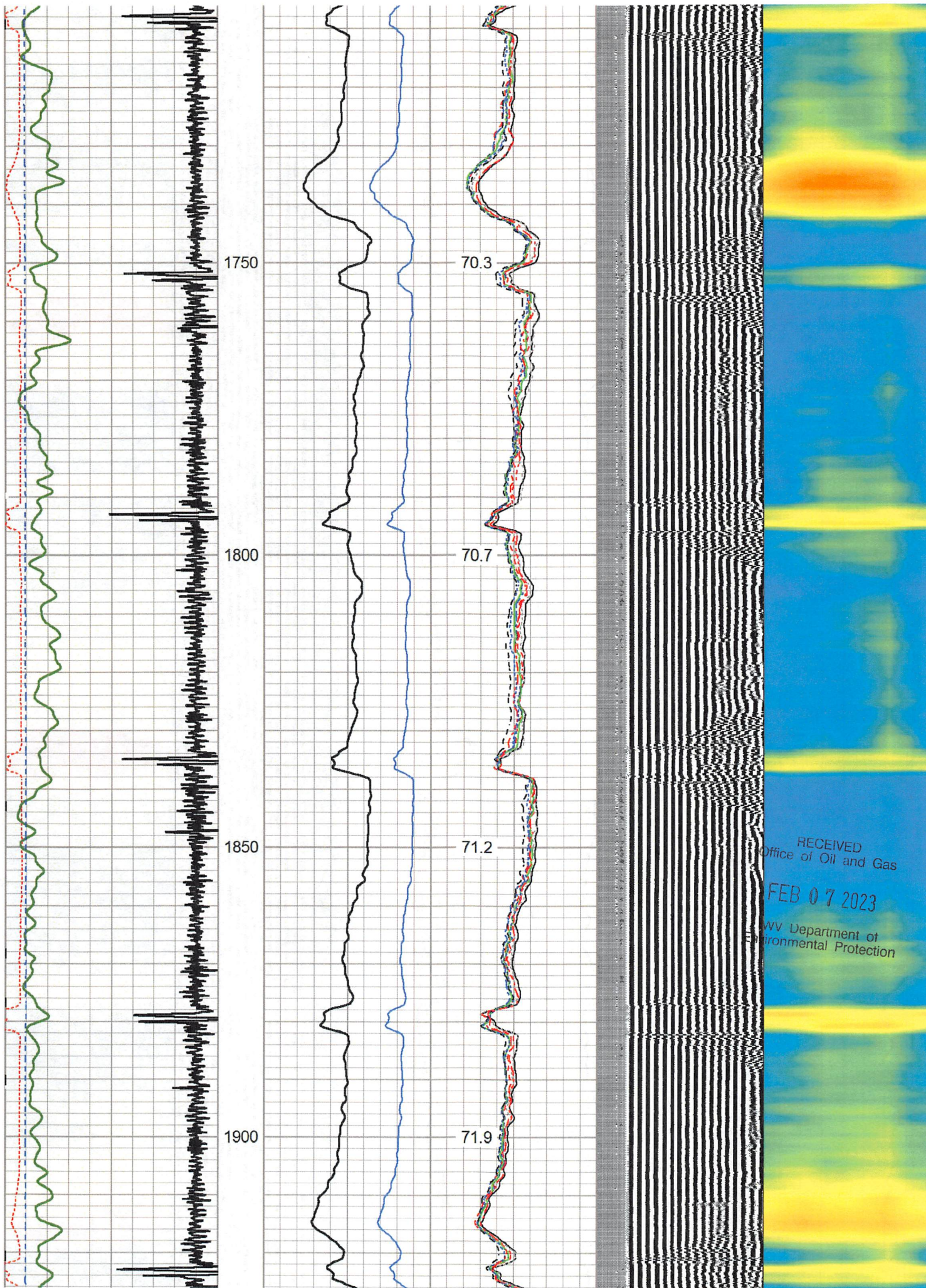
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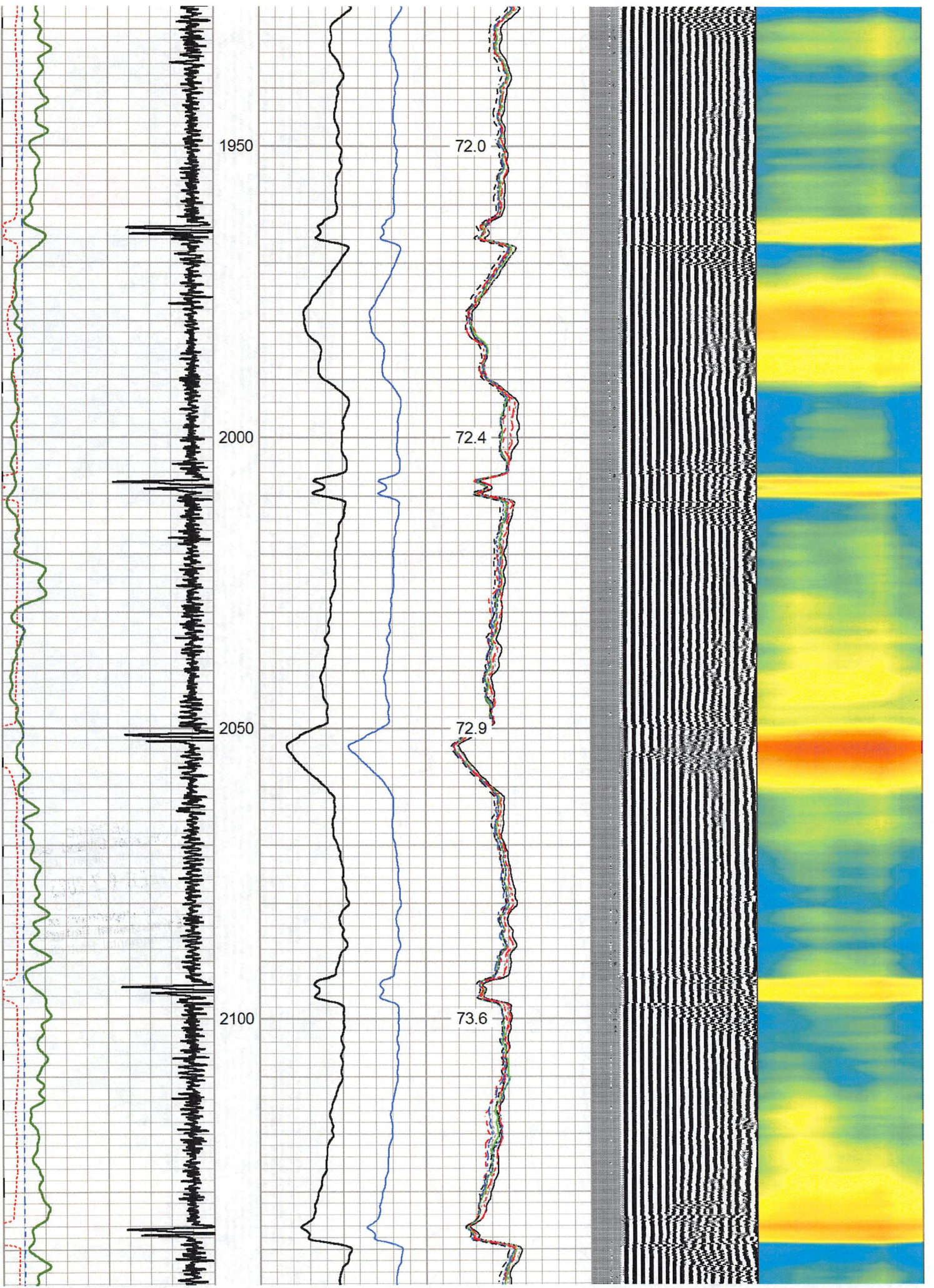


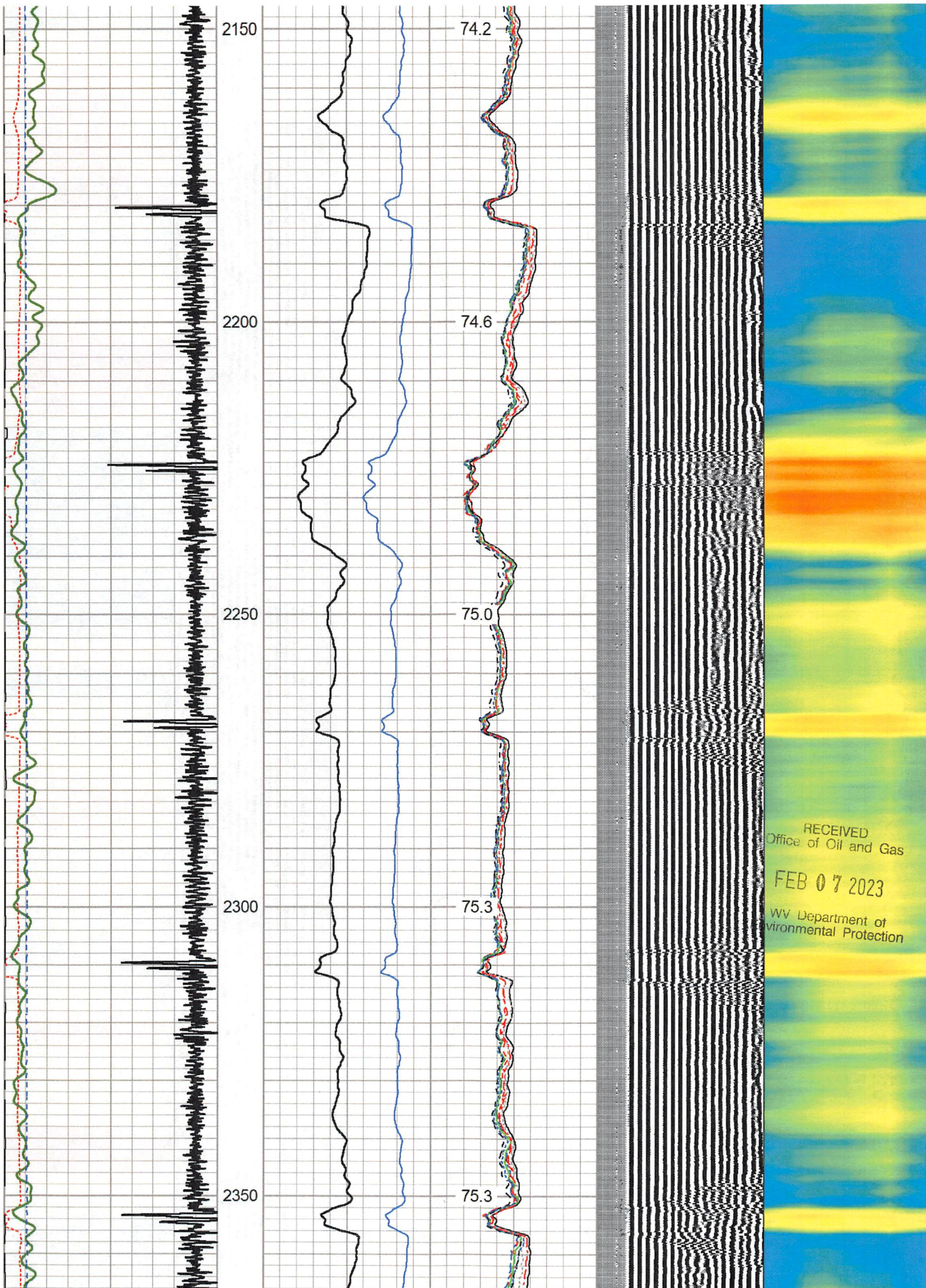
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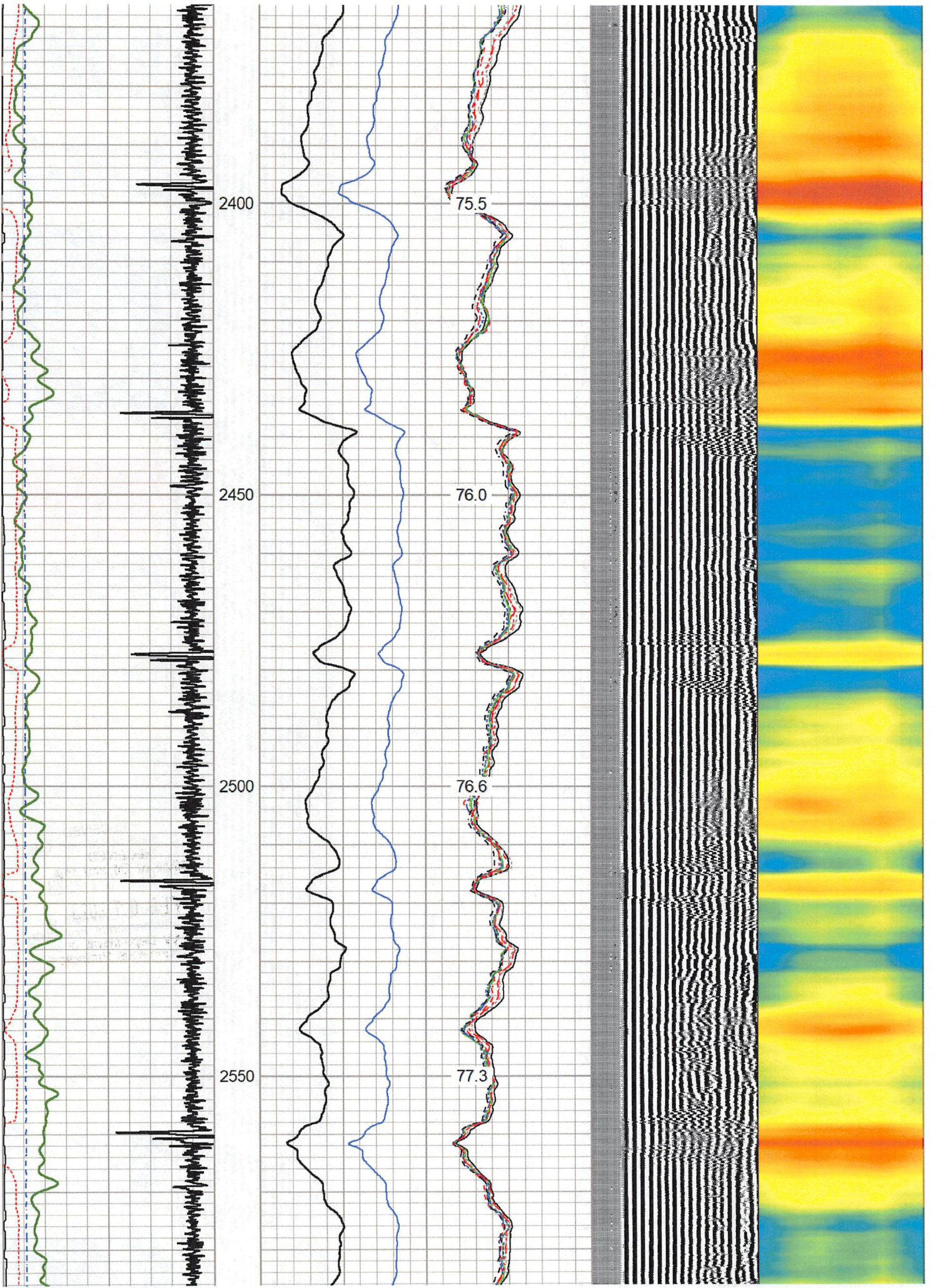


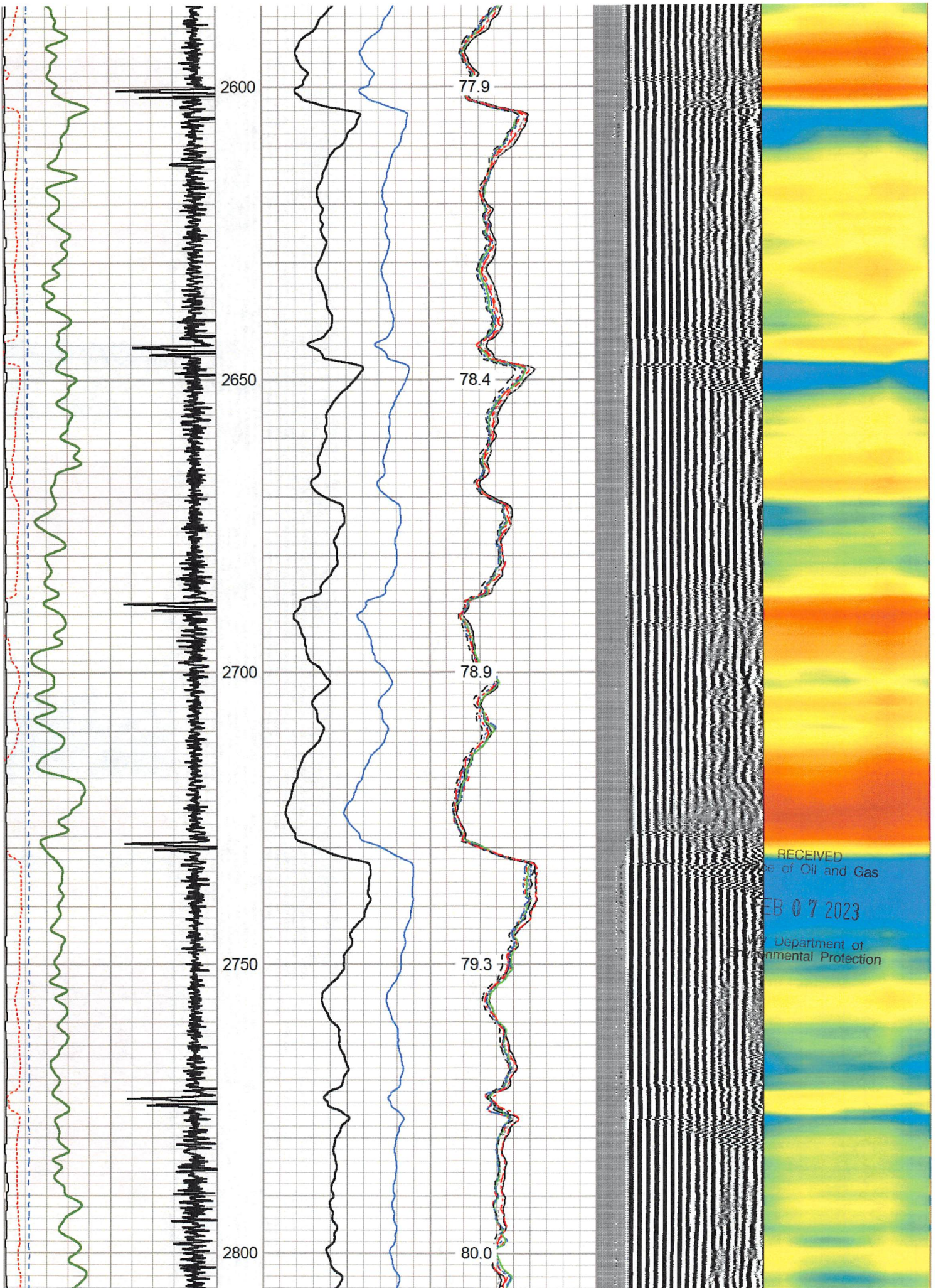


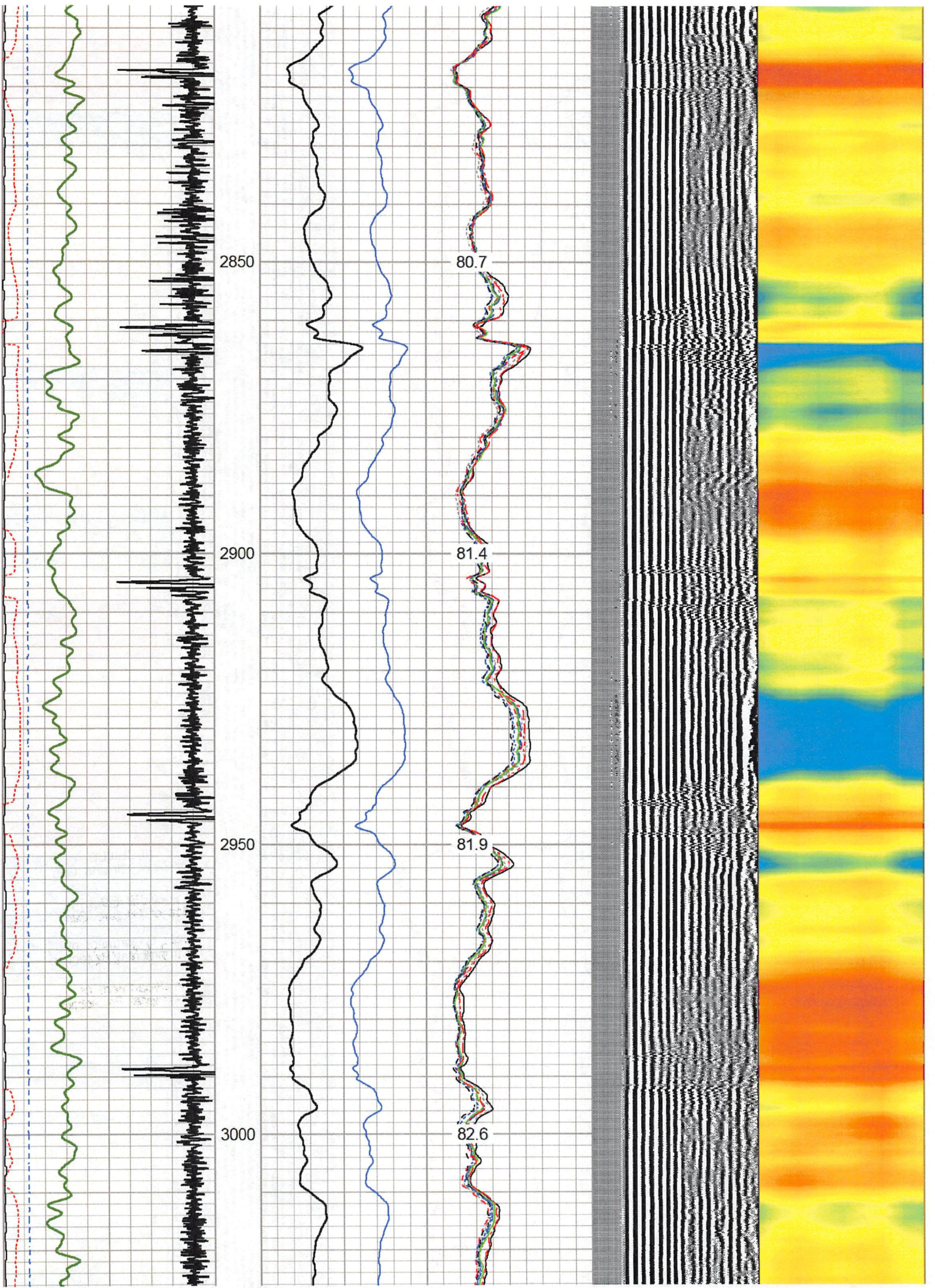
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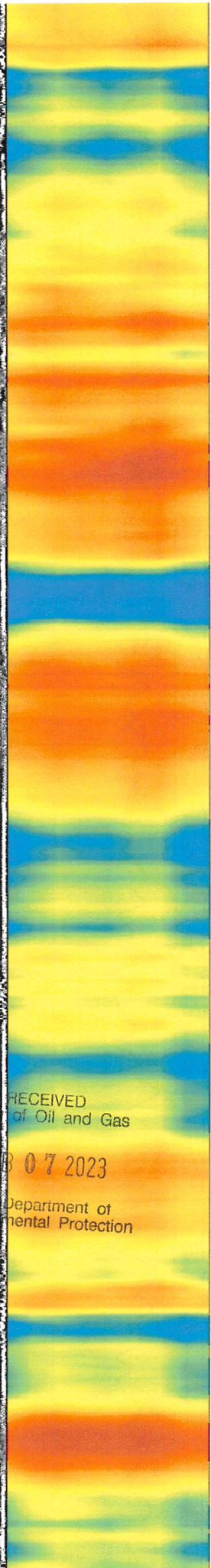
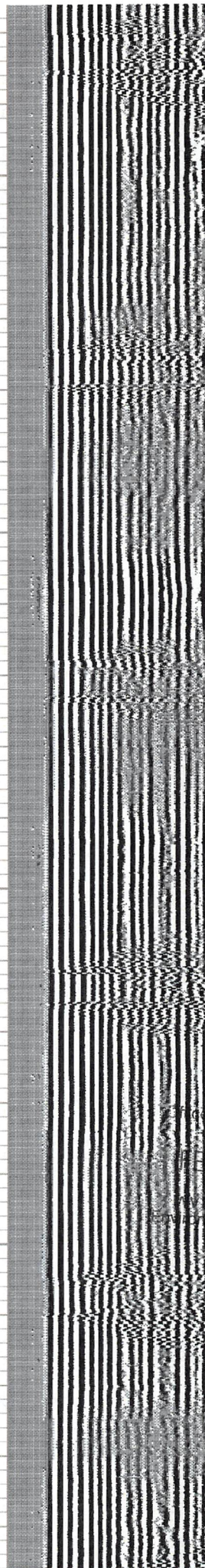
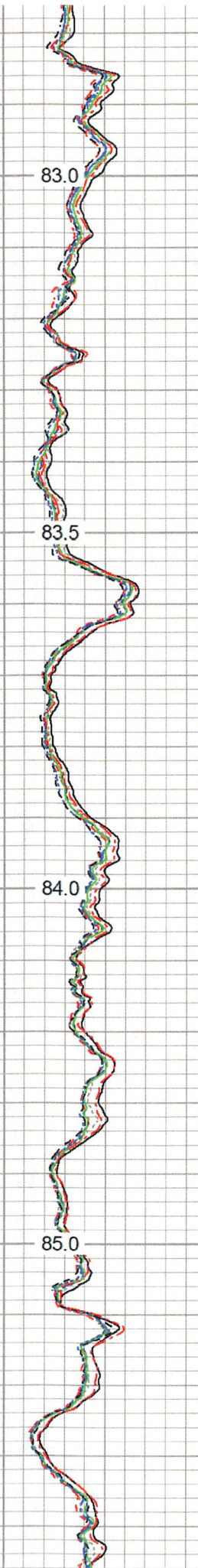
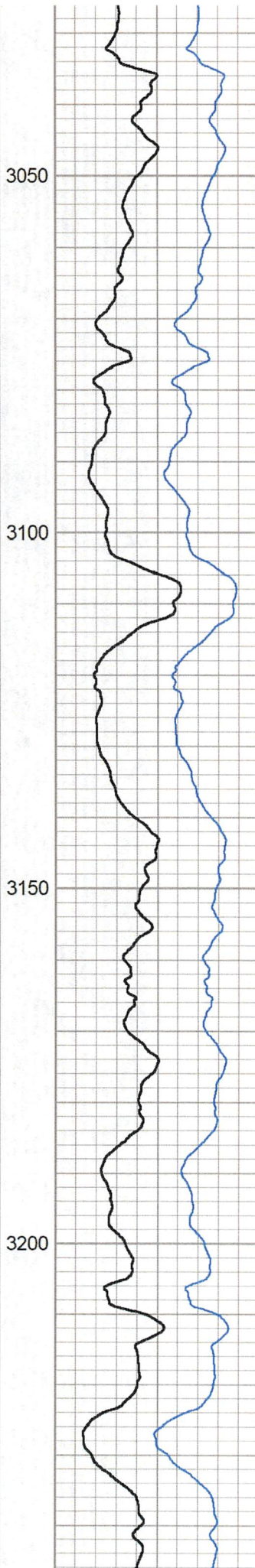
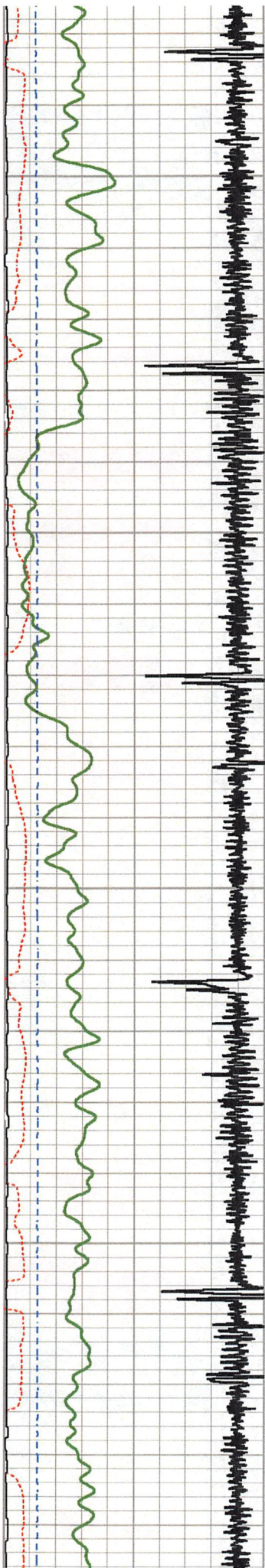
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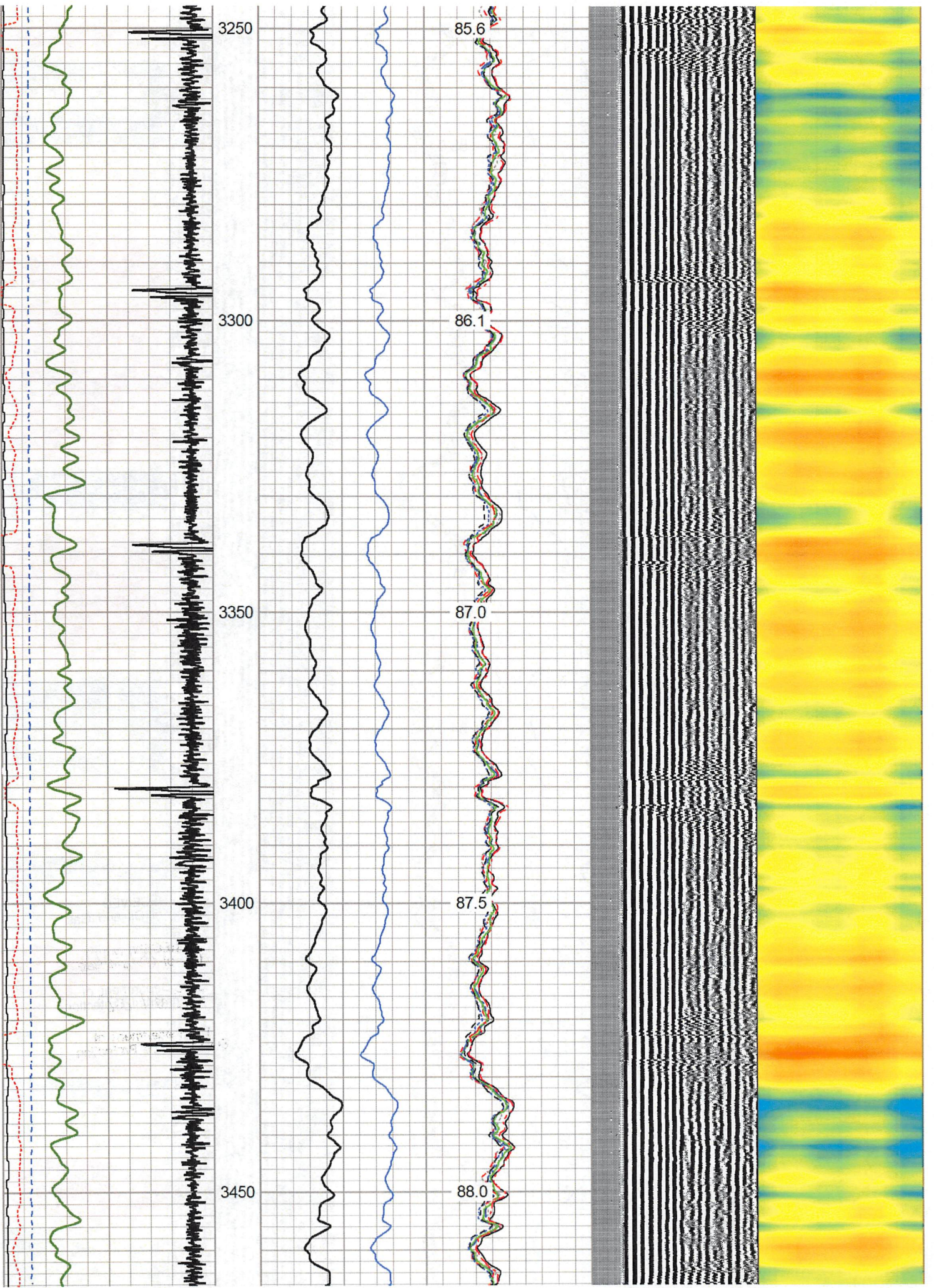


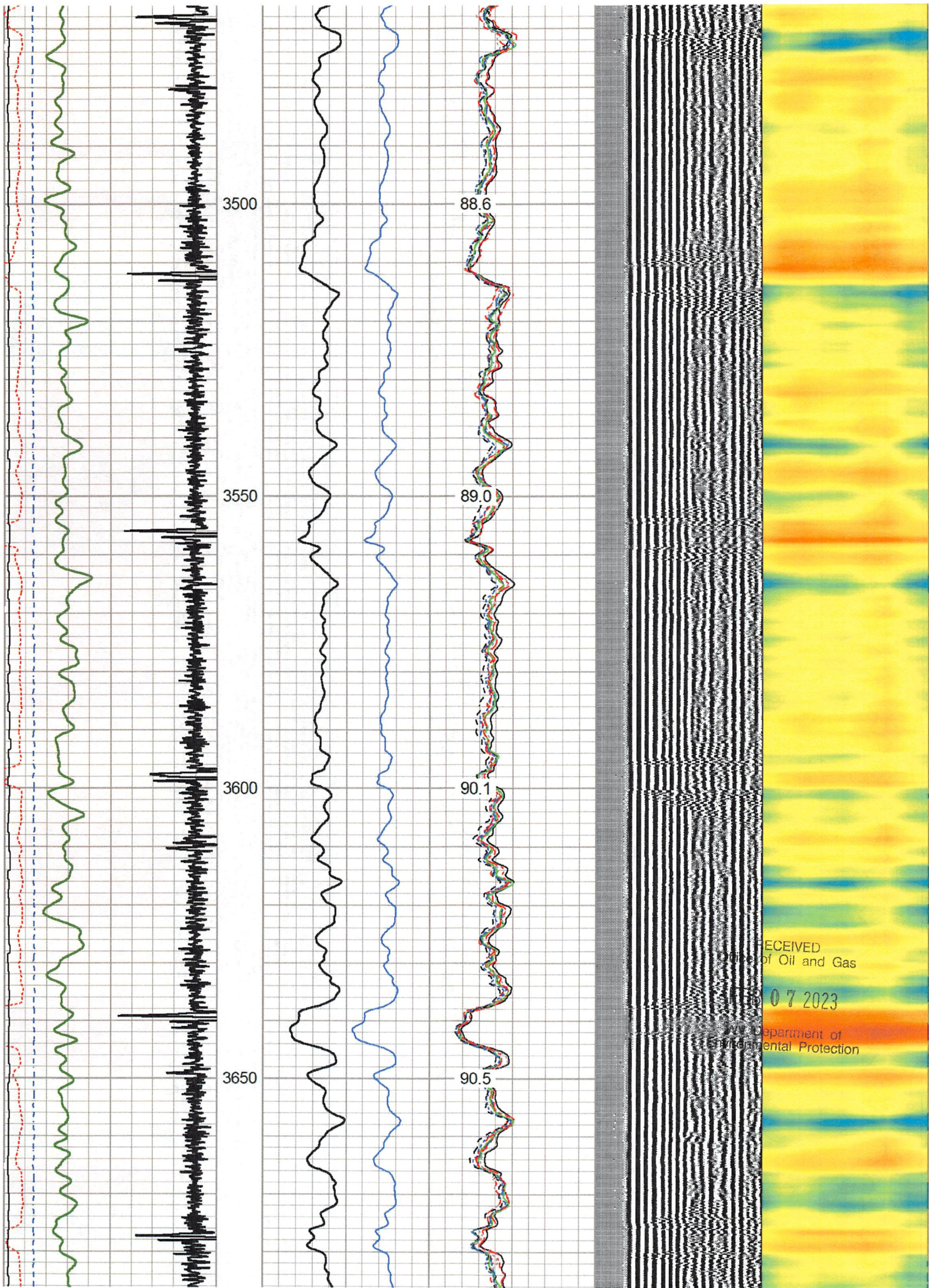


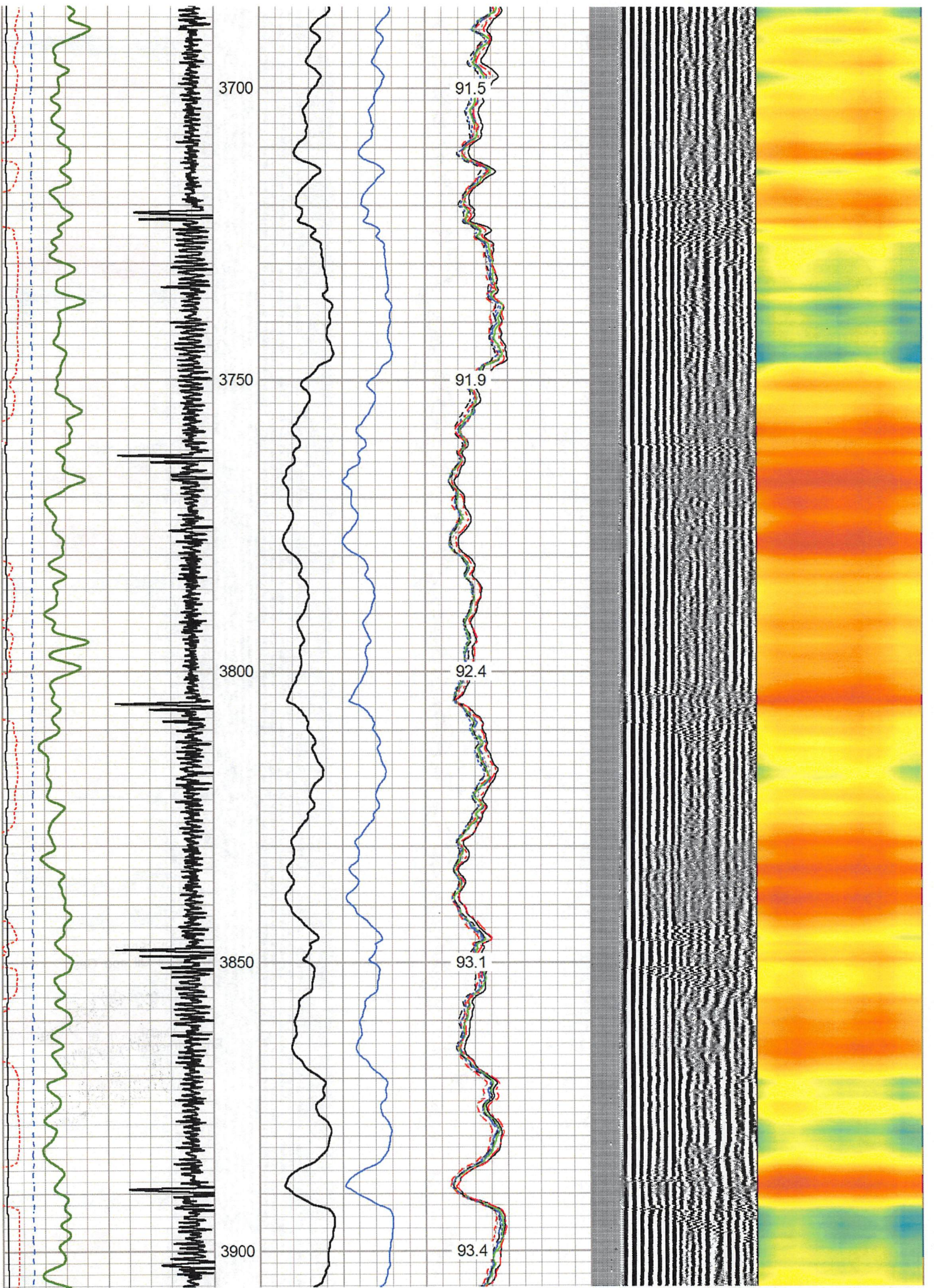
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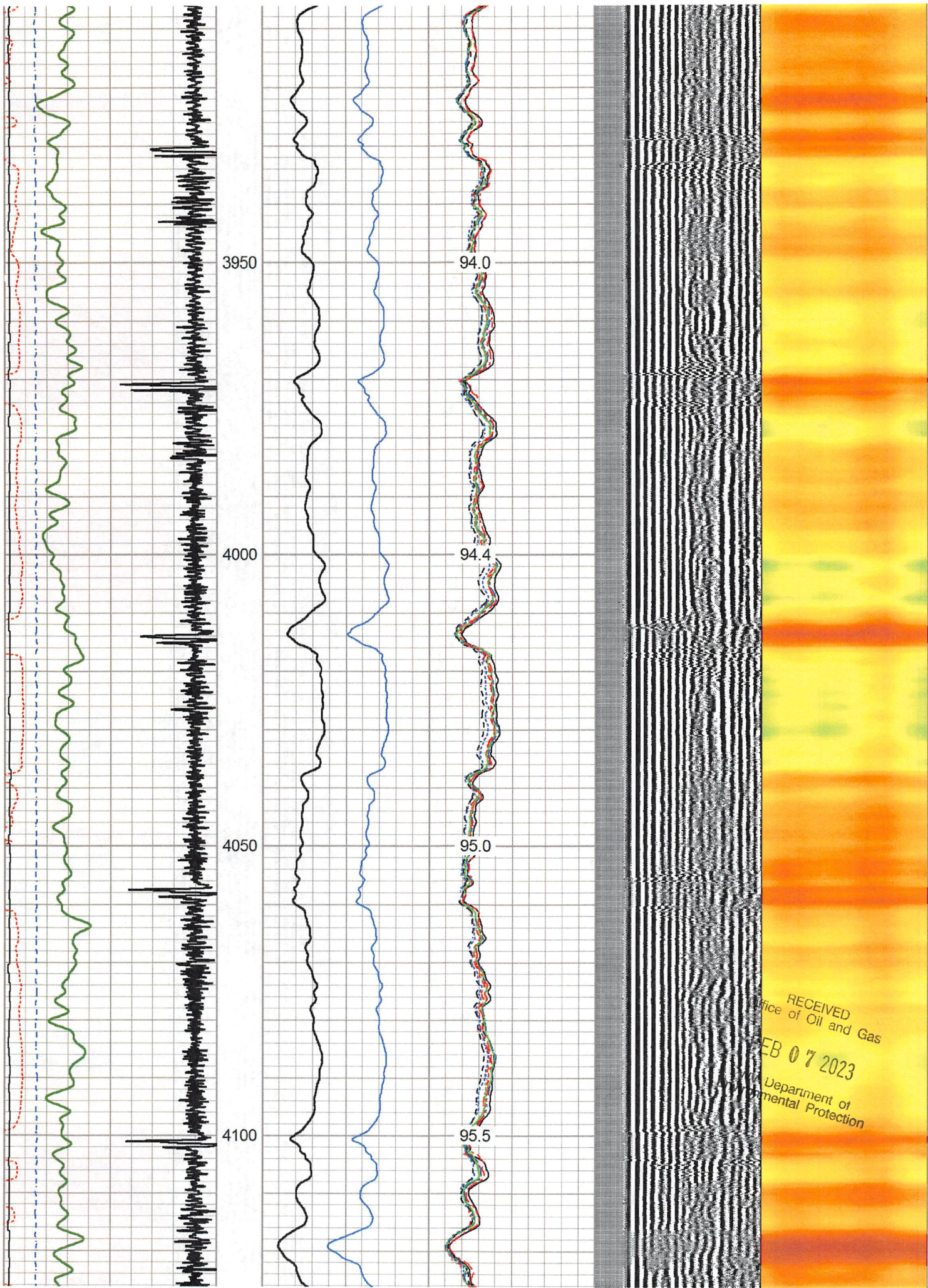
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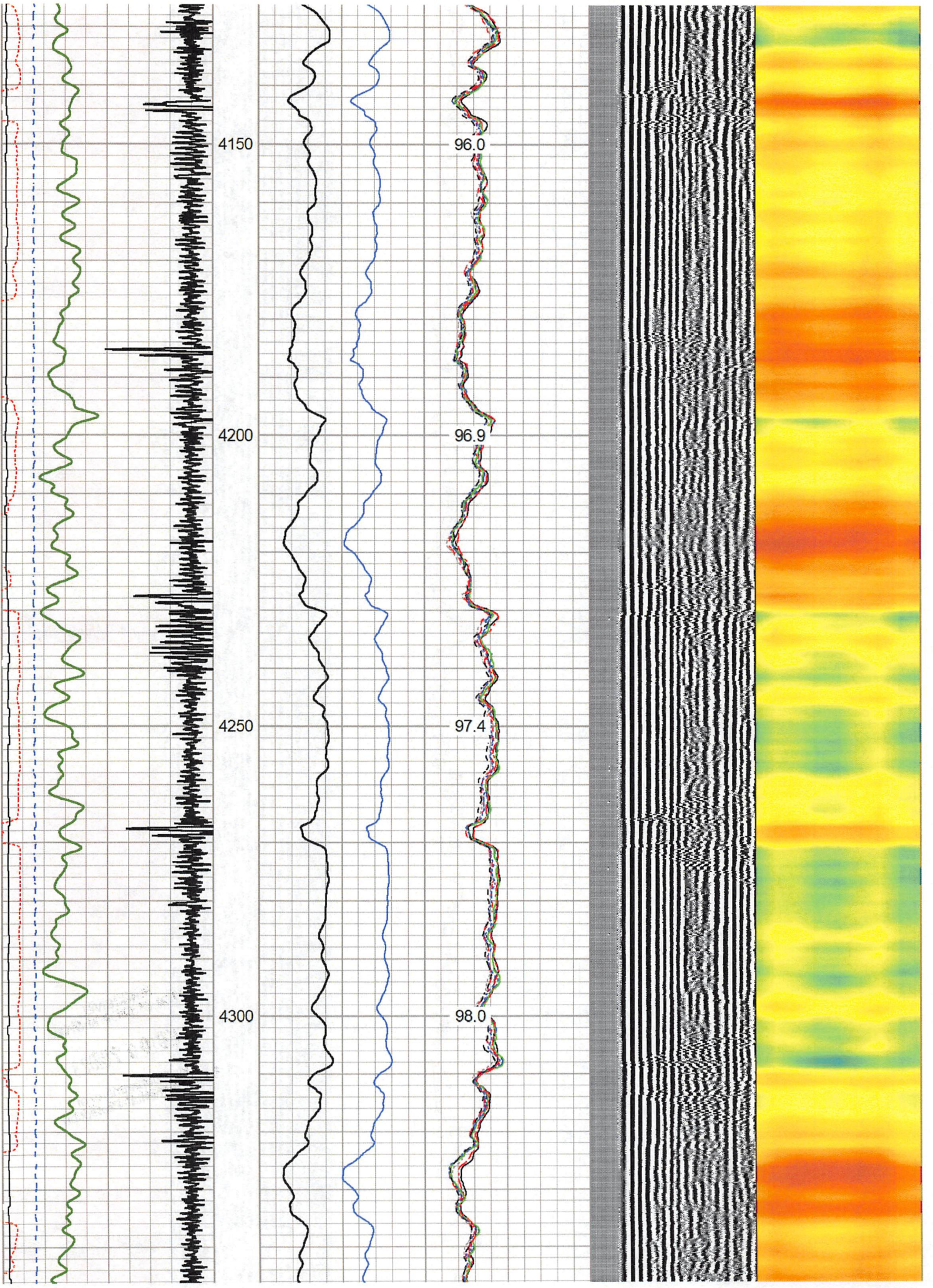
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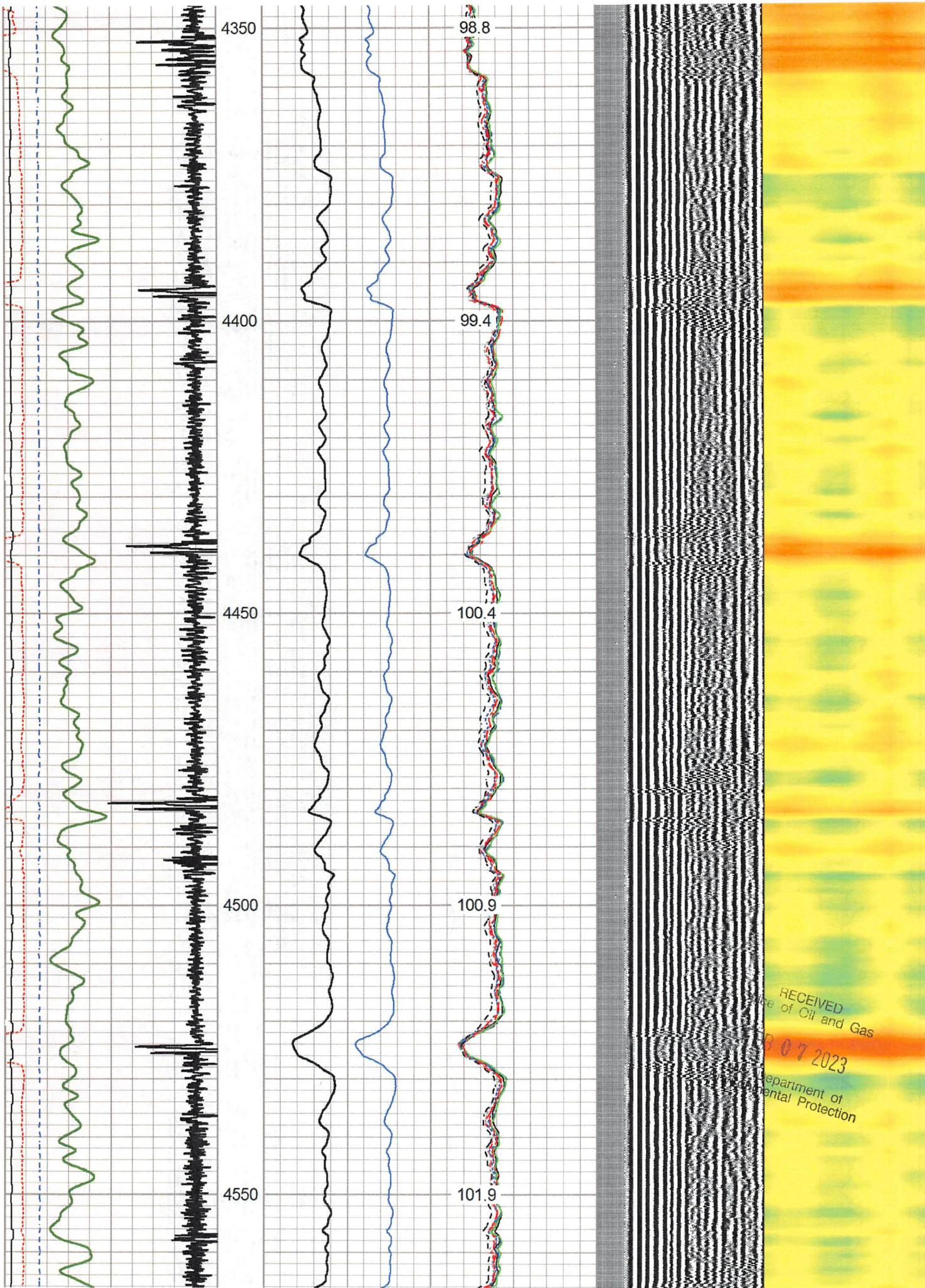


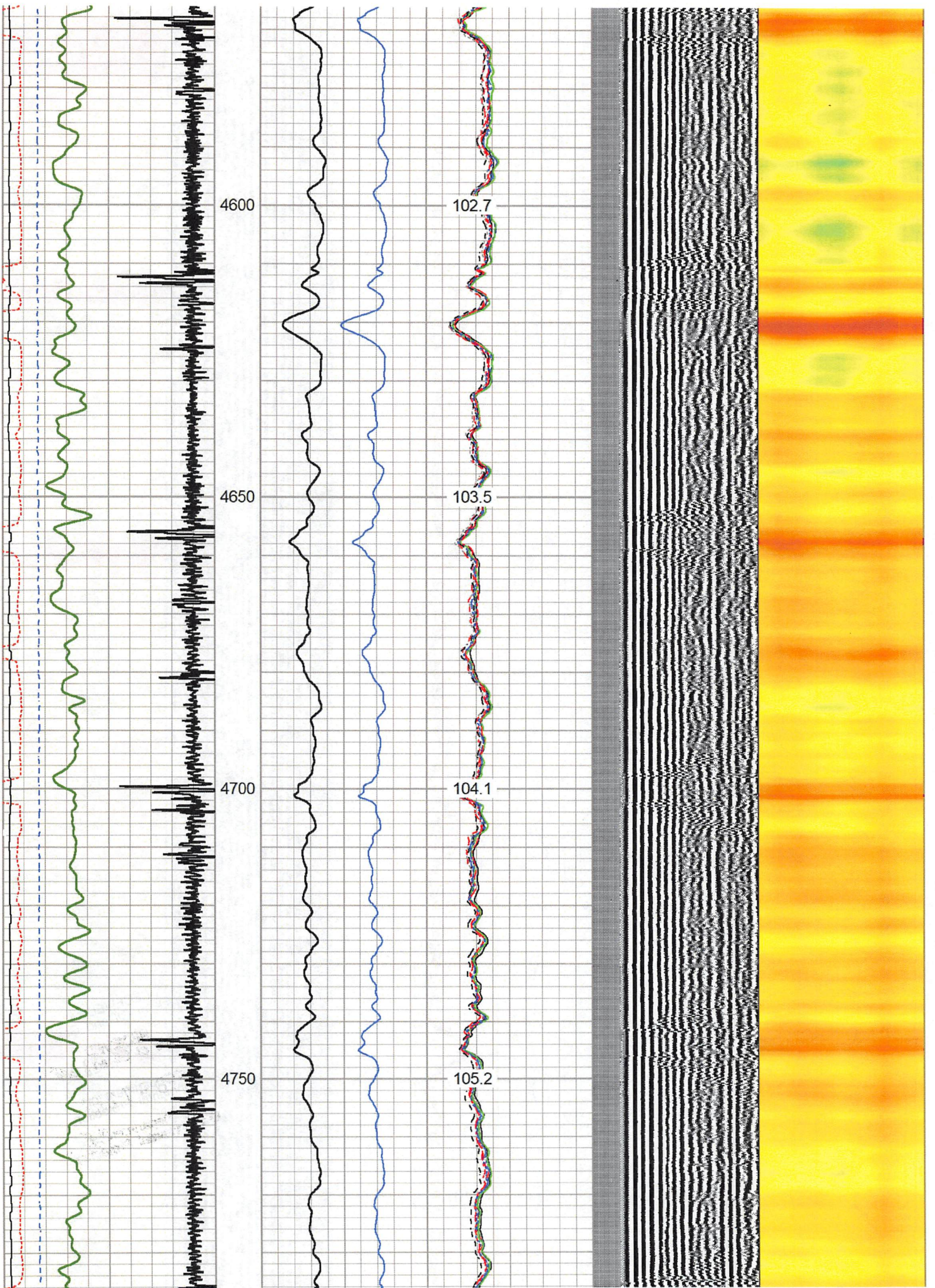


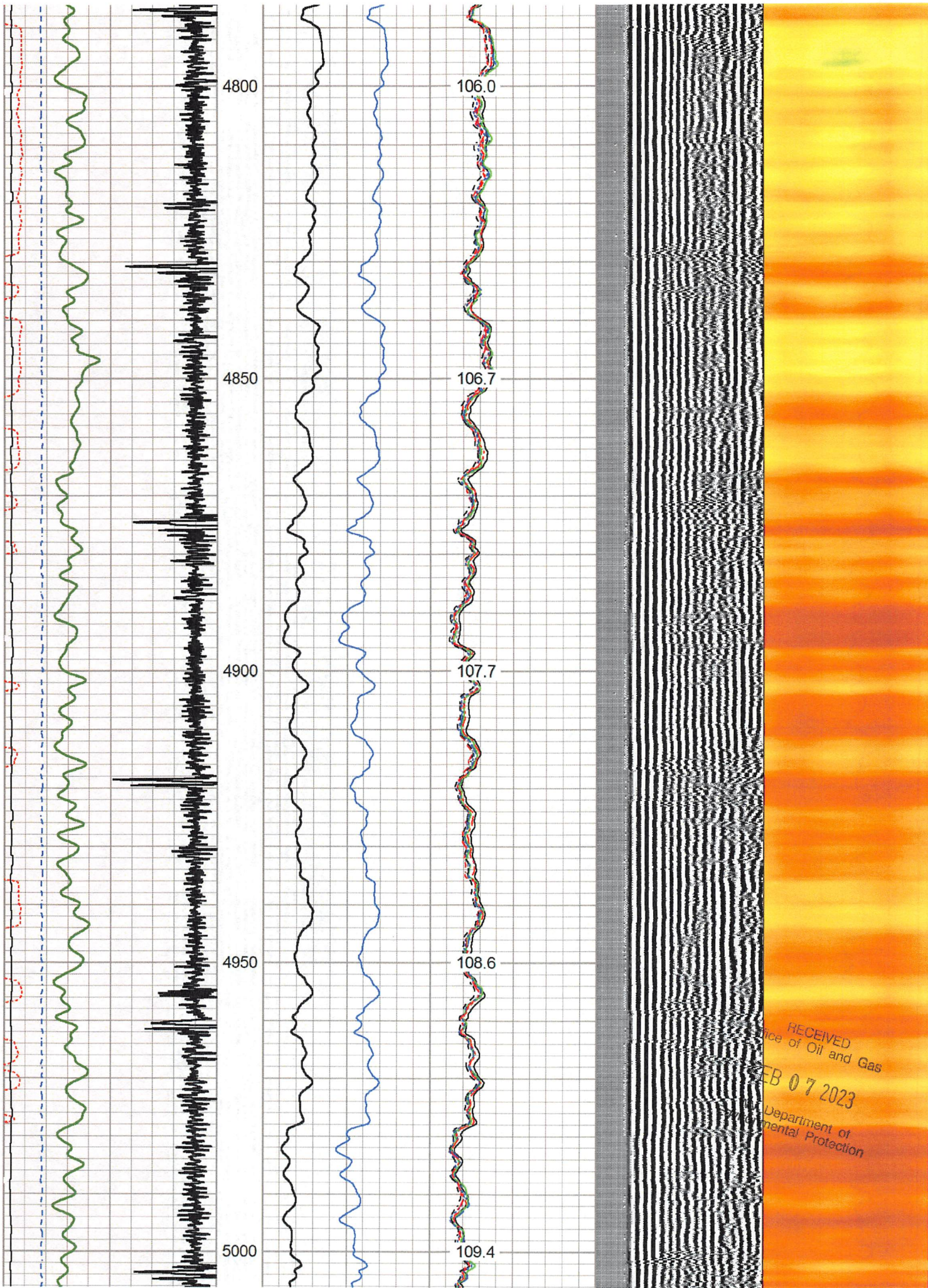


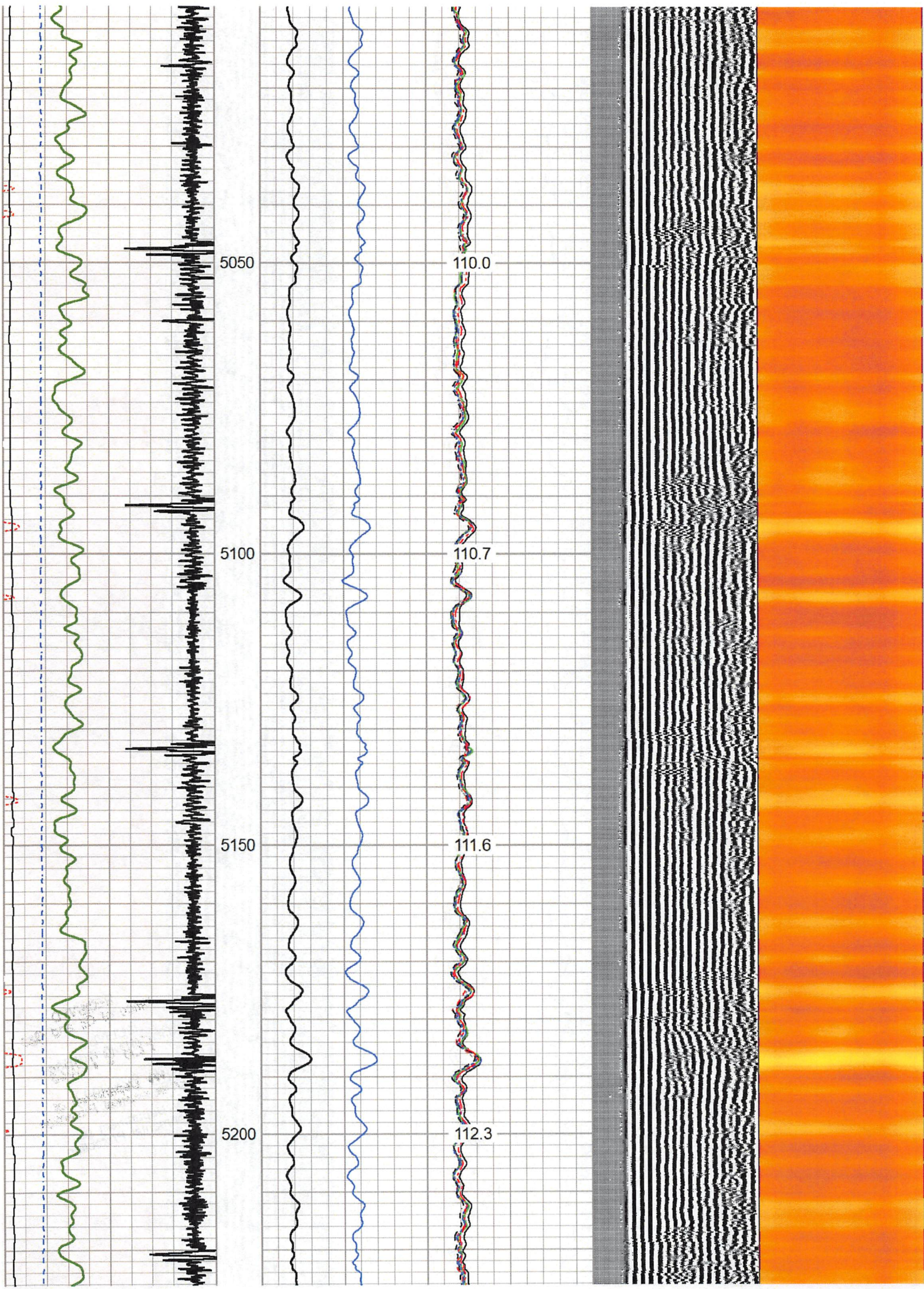


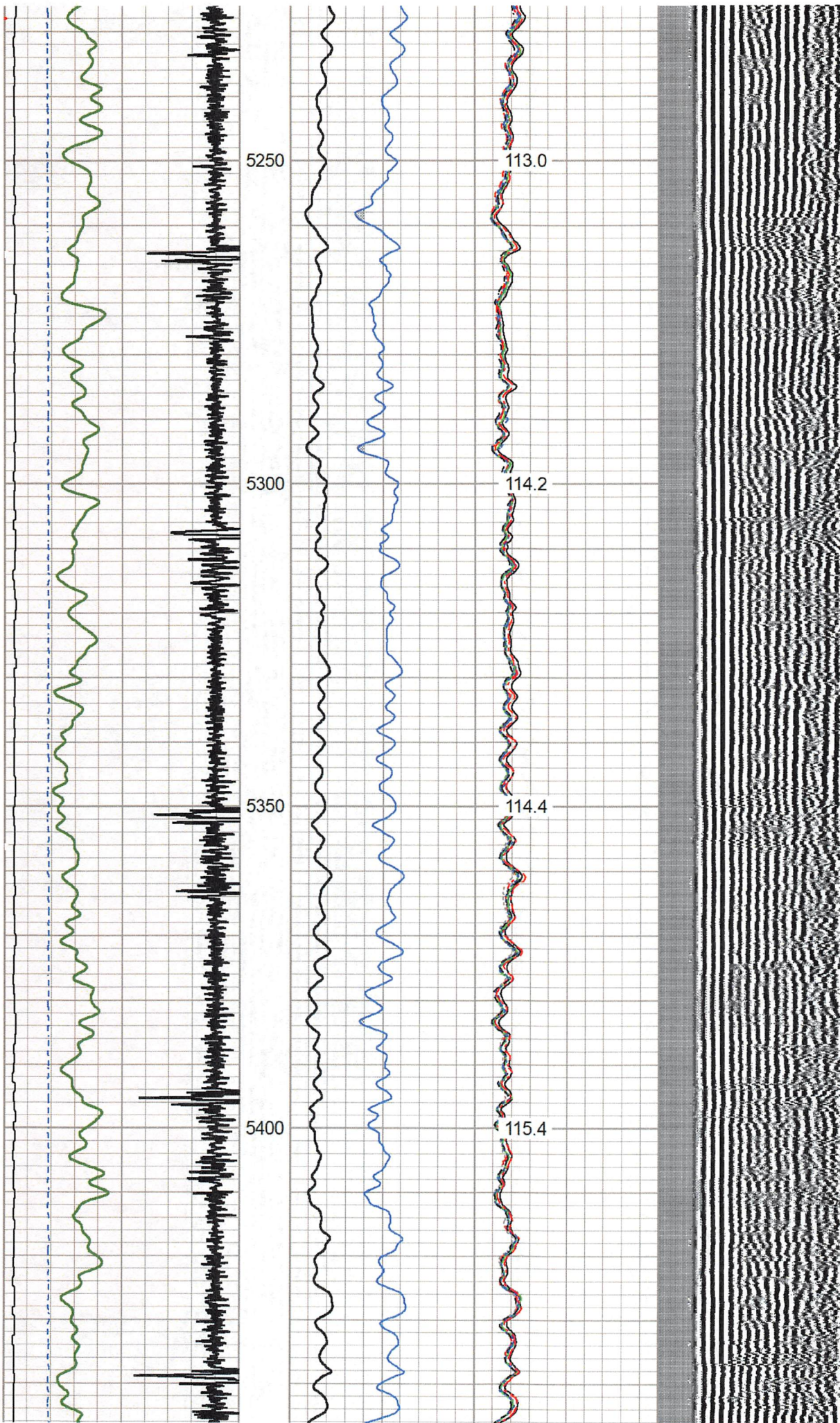




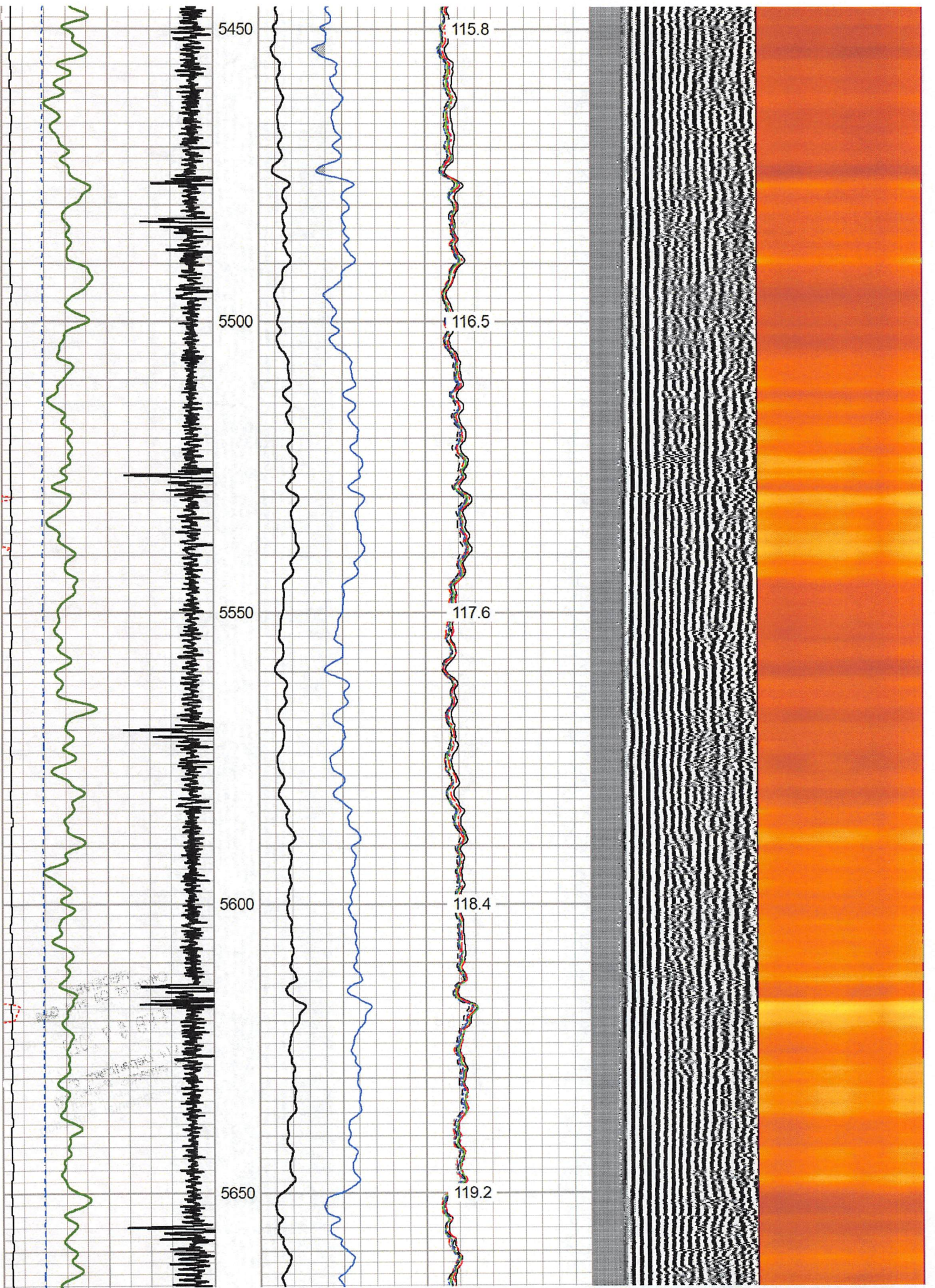


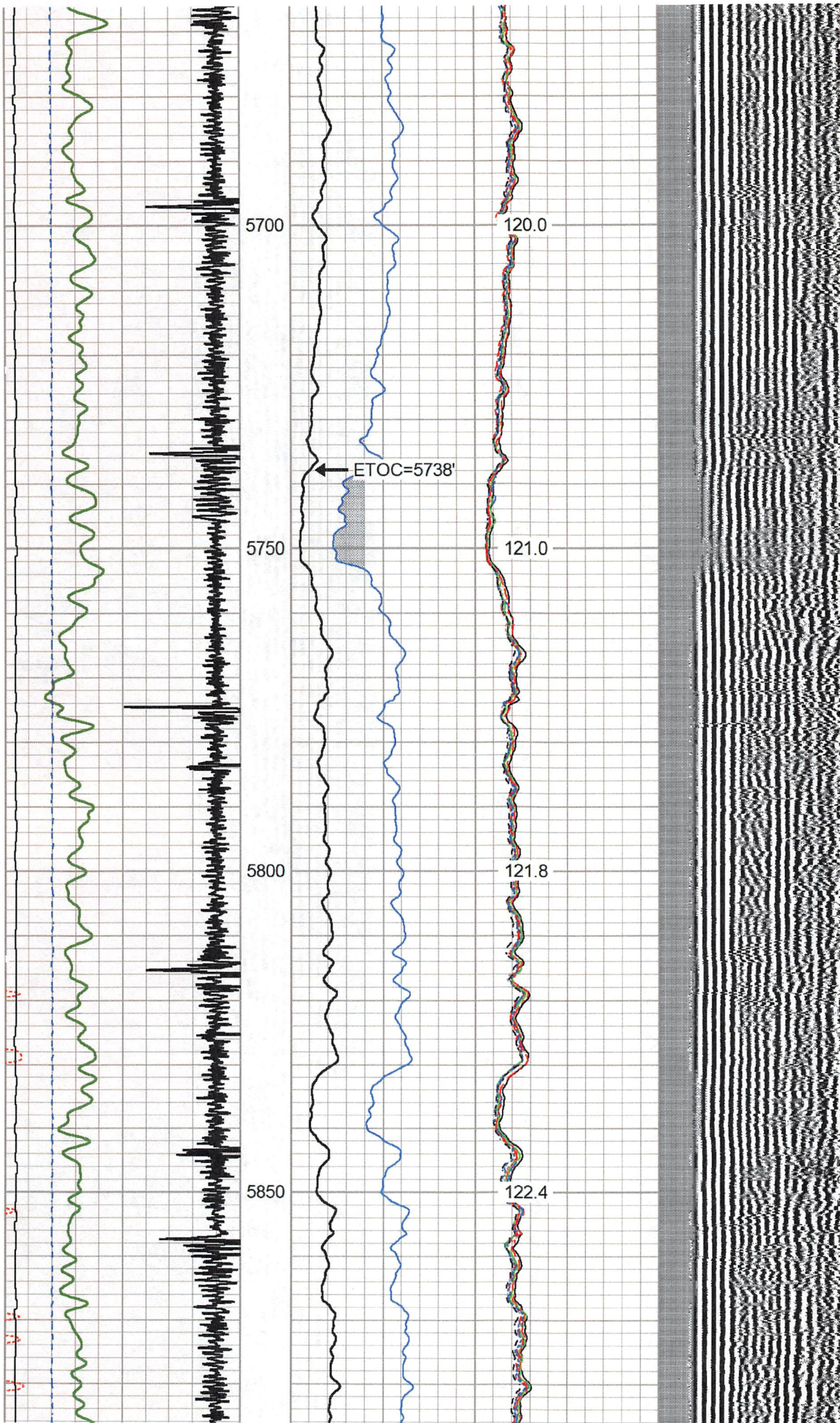




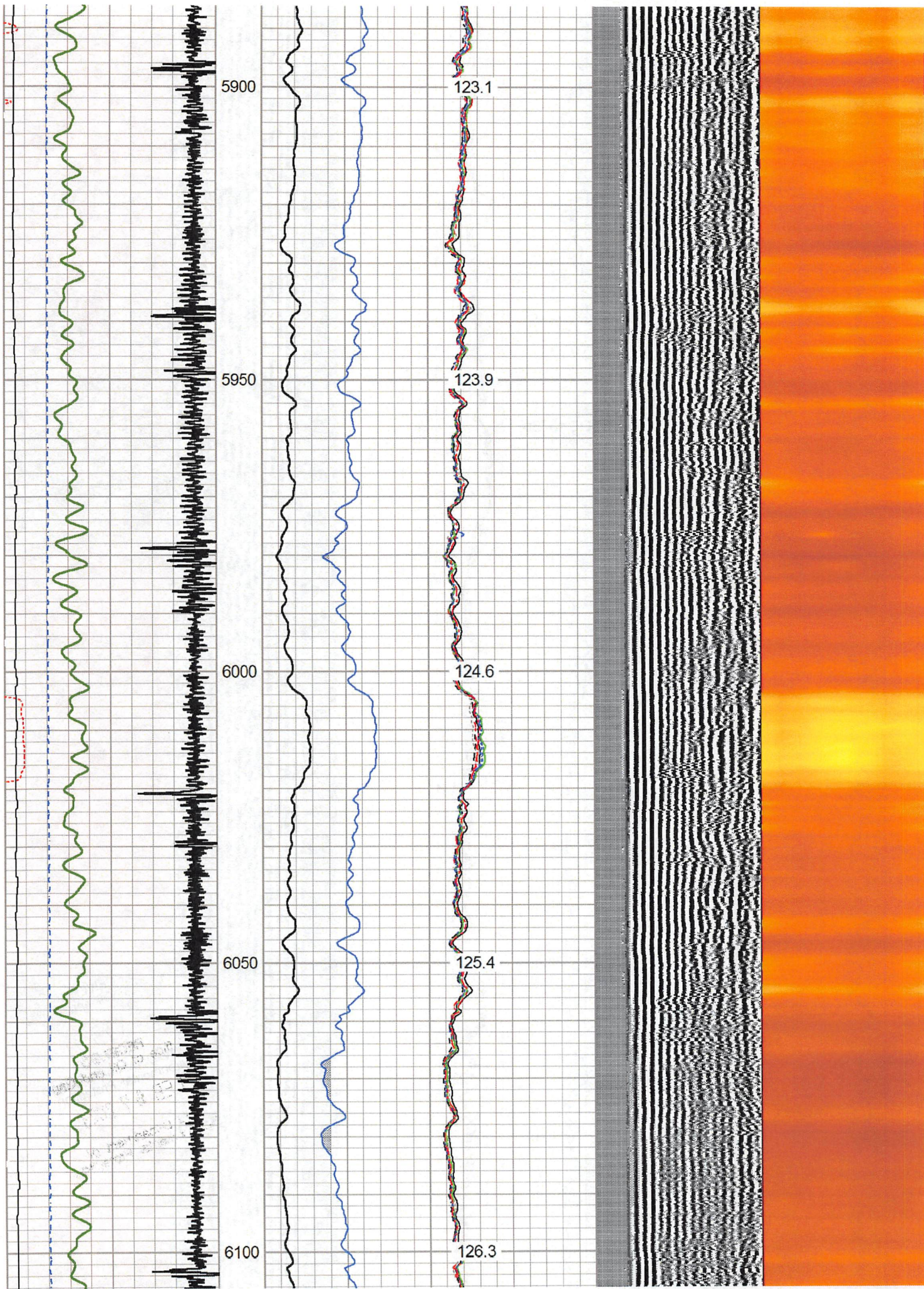


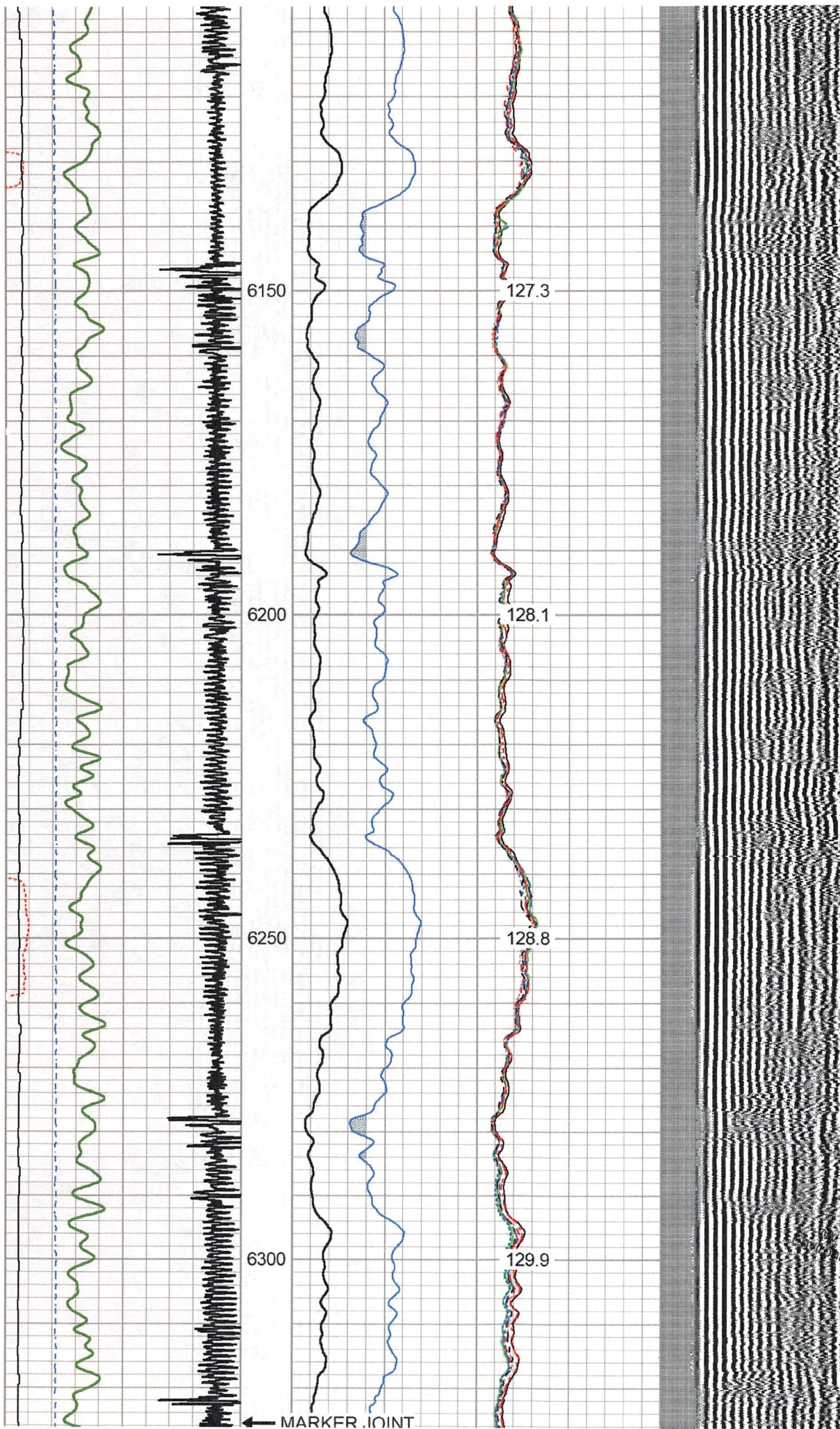
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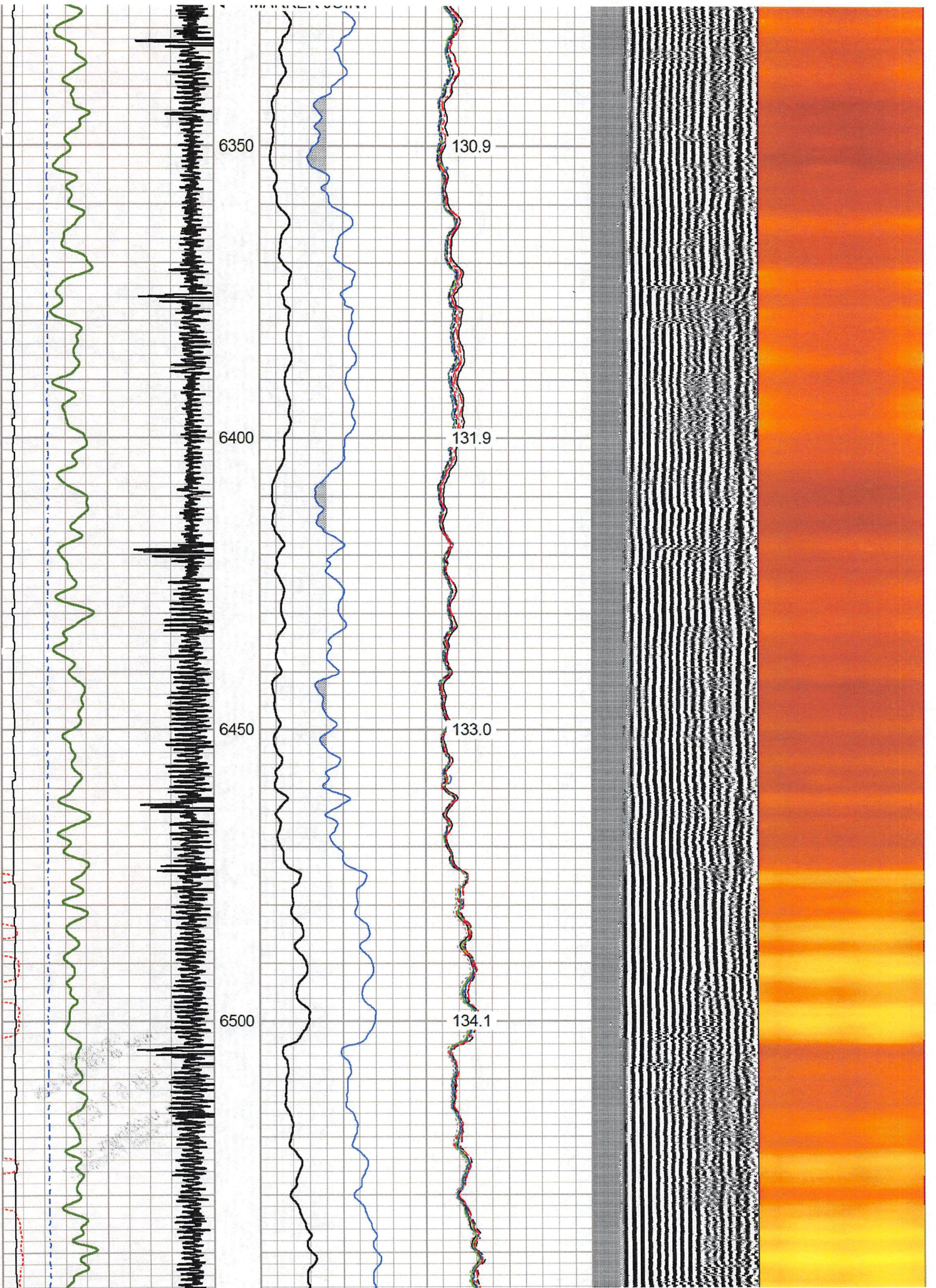


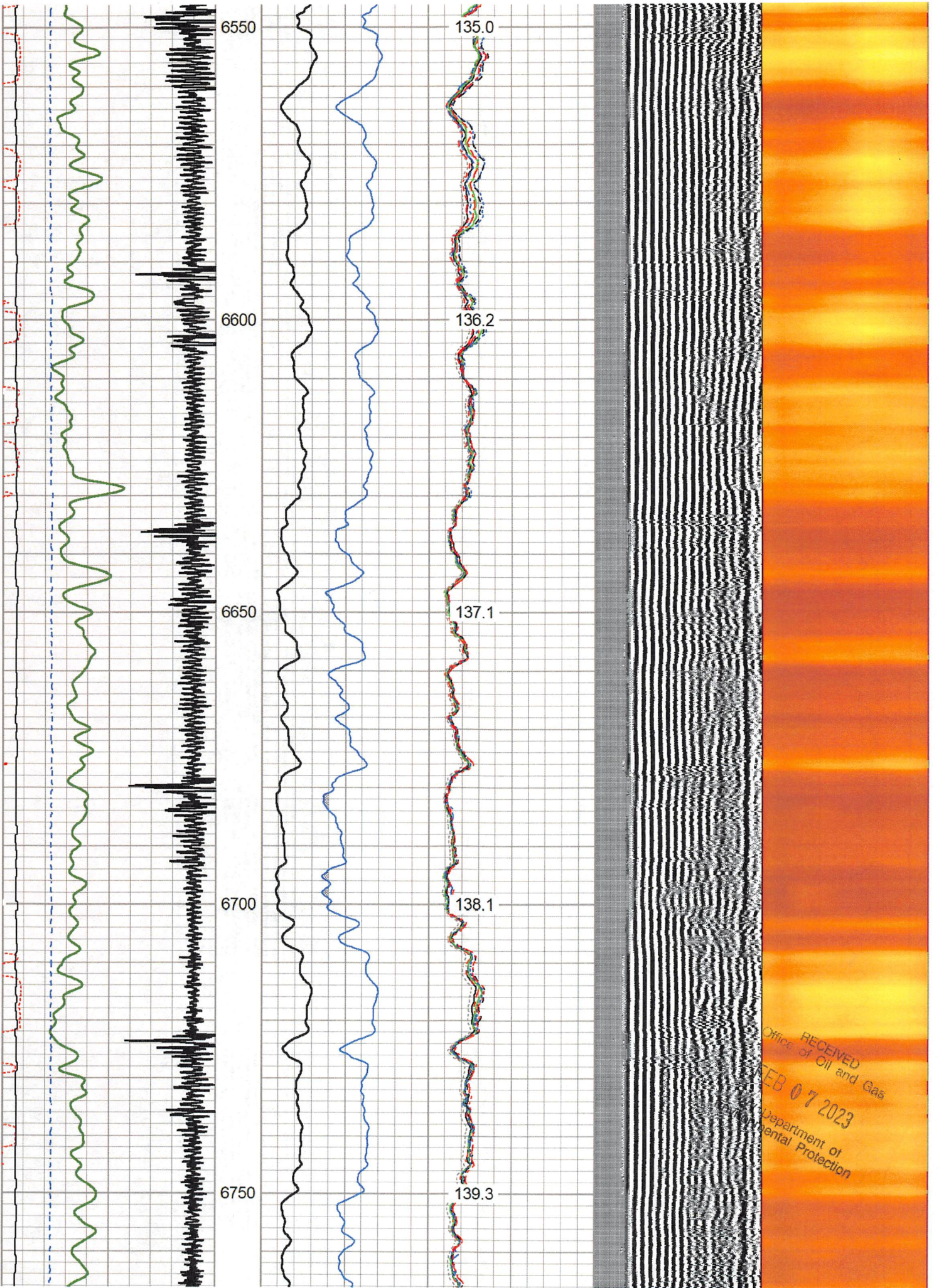
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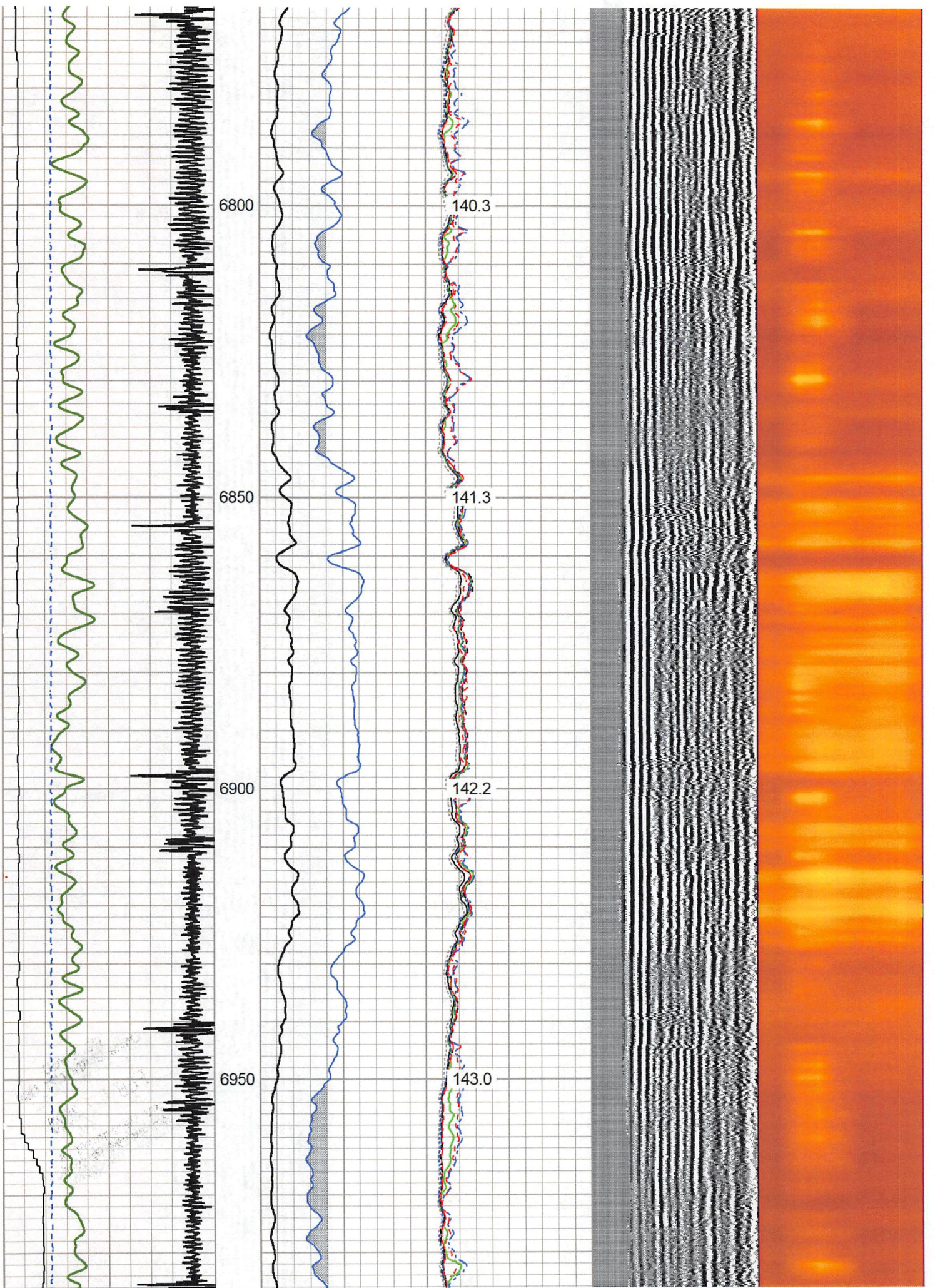


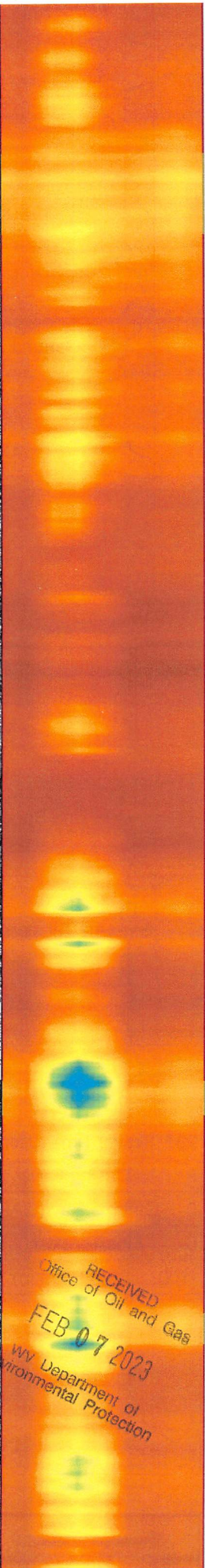
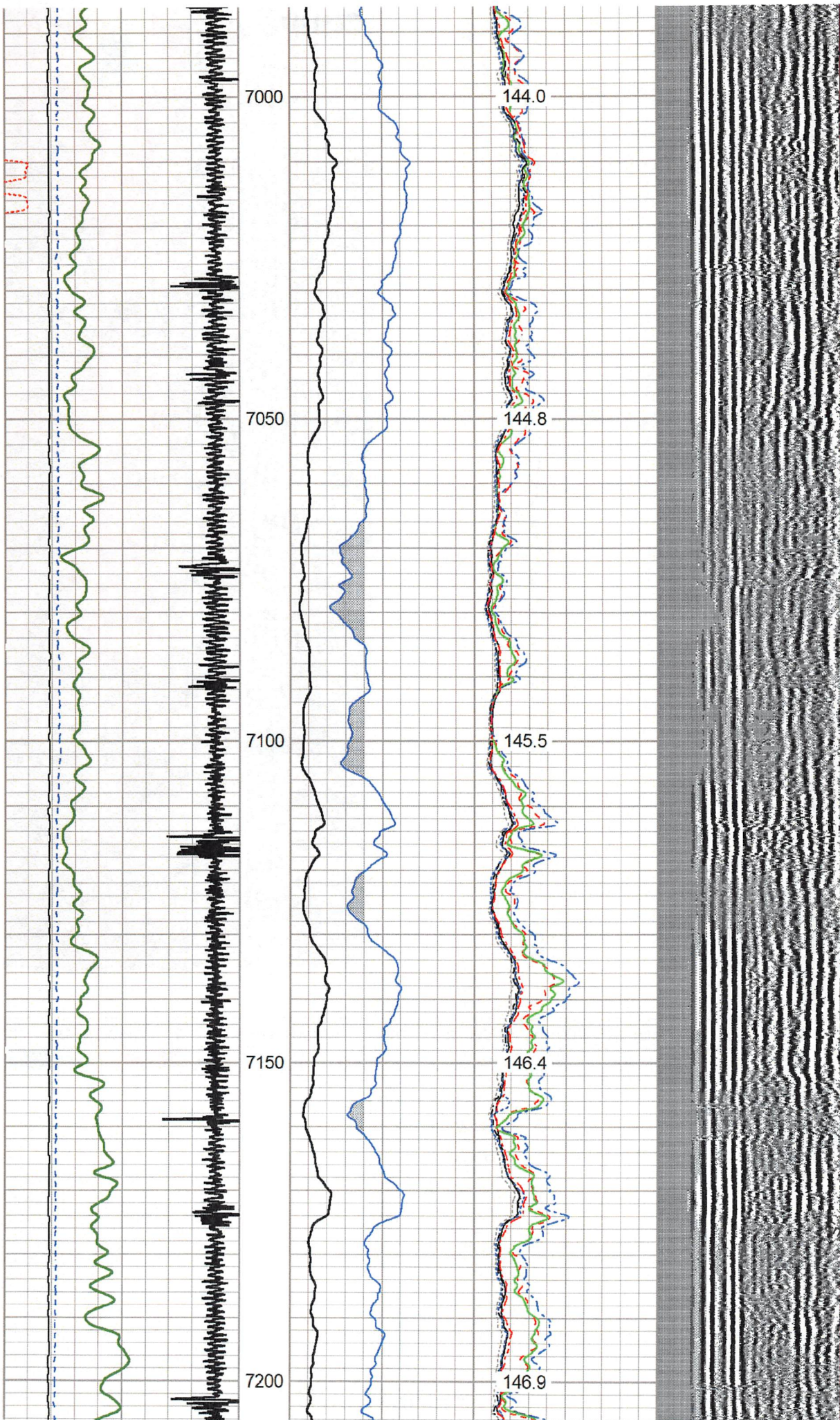


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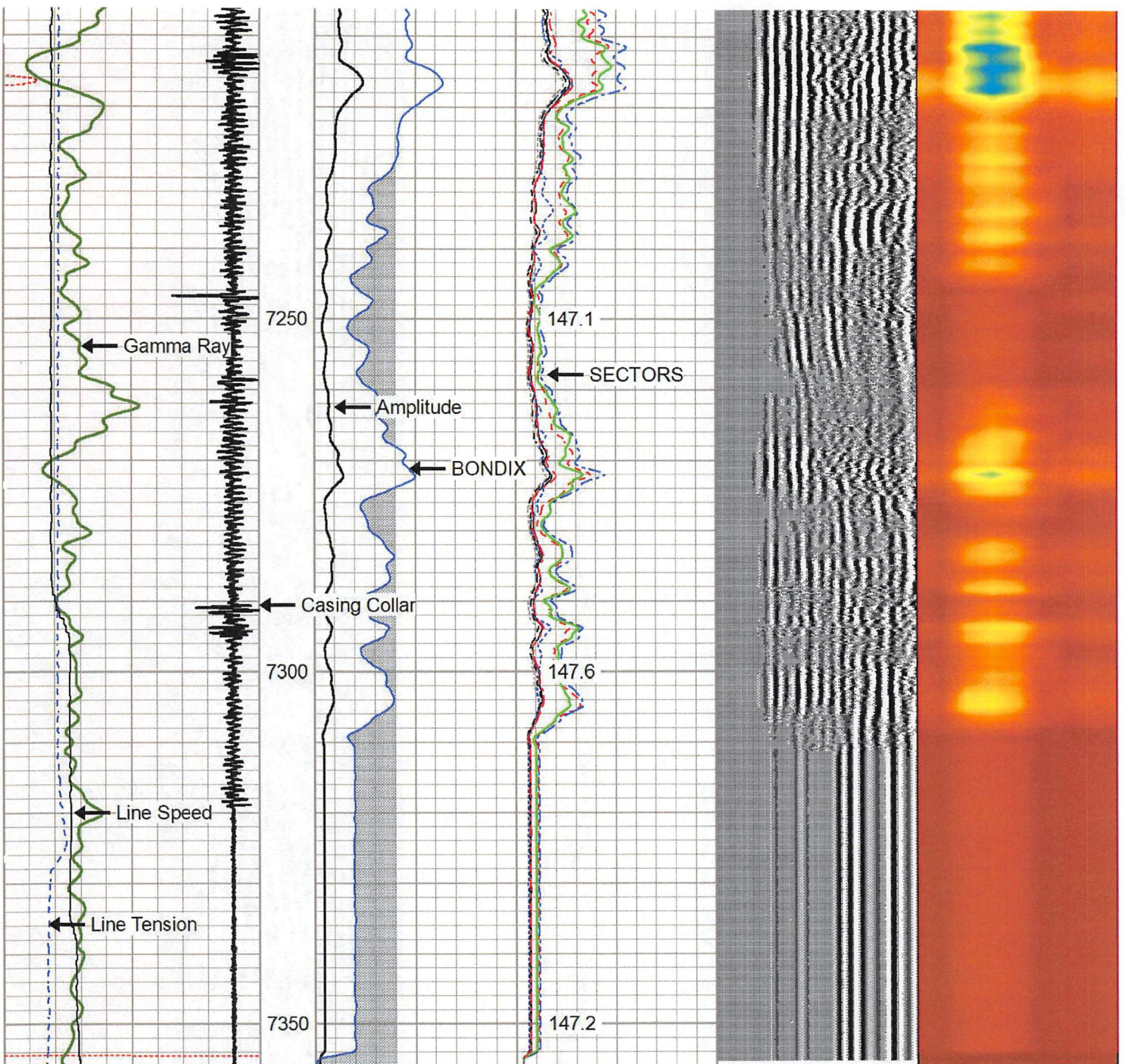








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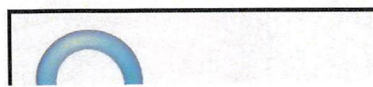


297	Travel Time (usec)	197
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000
-100	LSPD (ft/min)	100

0	Amplitude (mV)	100	-5	Sector 1	150
1	BONDIX	0	-5	Sector 2	150
			-5	Sector 3	150
			-5	Sector 4	150
			-5	Sector 5	150
			-5	Sector 6	150
			-5	Sector 7	150
			-5	Sector 8	150

Variable Density	1	Cement Map	8
(usec)	200		1200

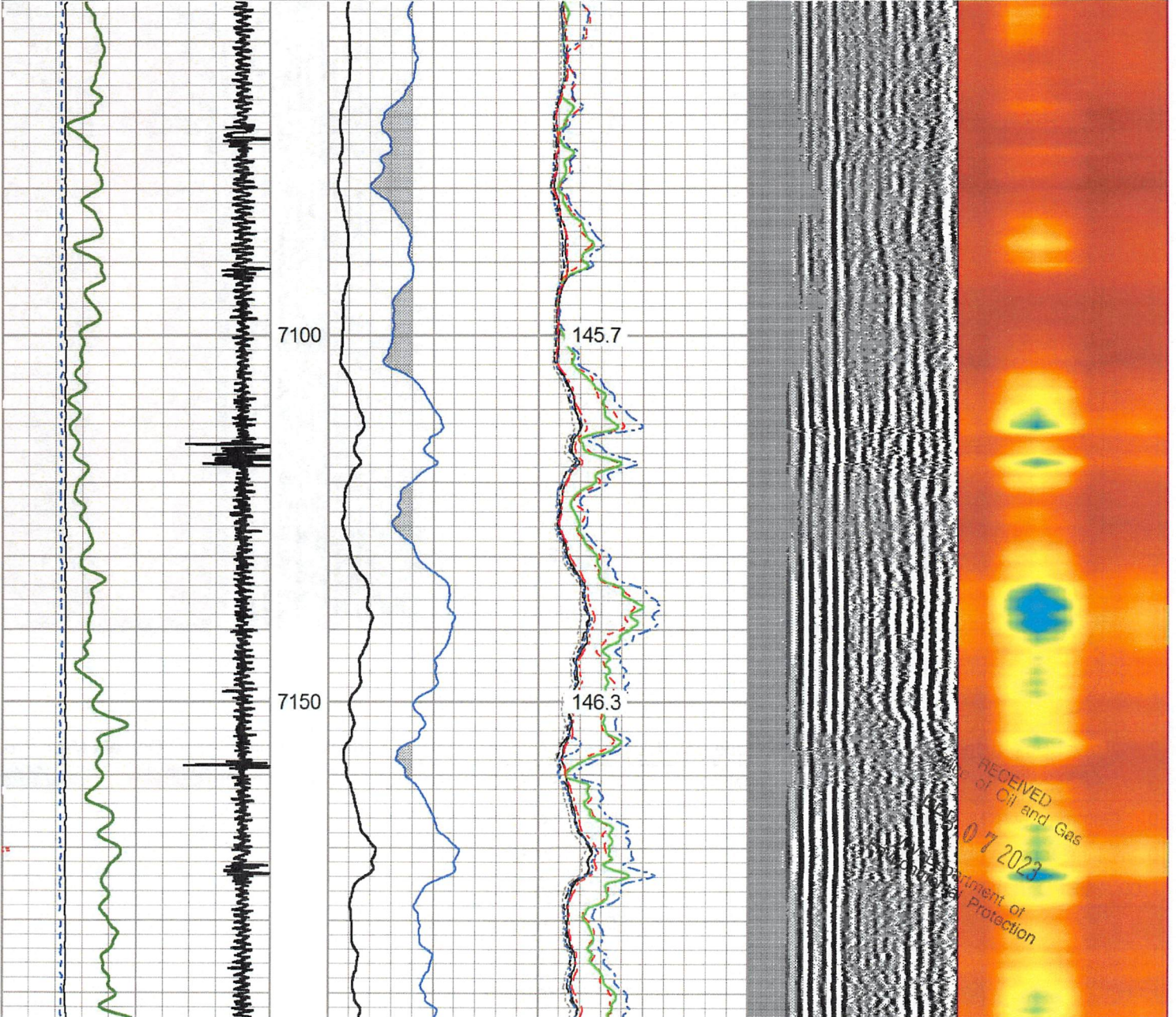
TEMP
(degF)

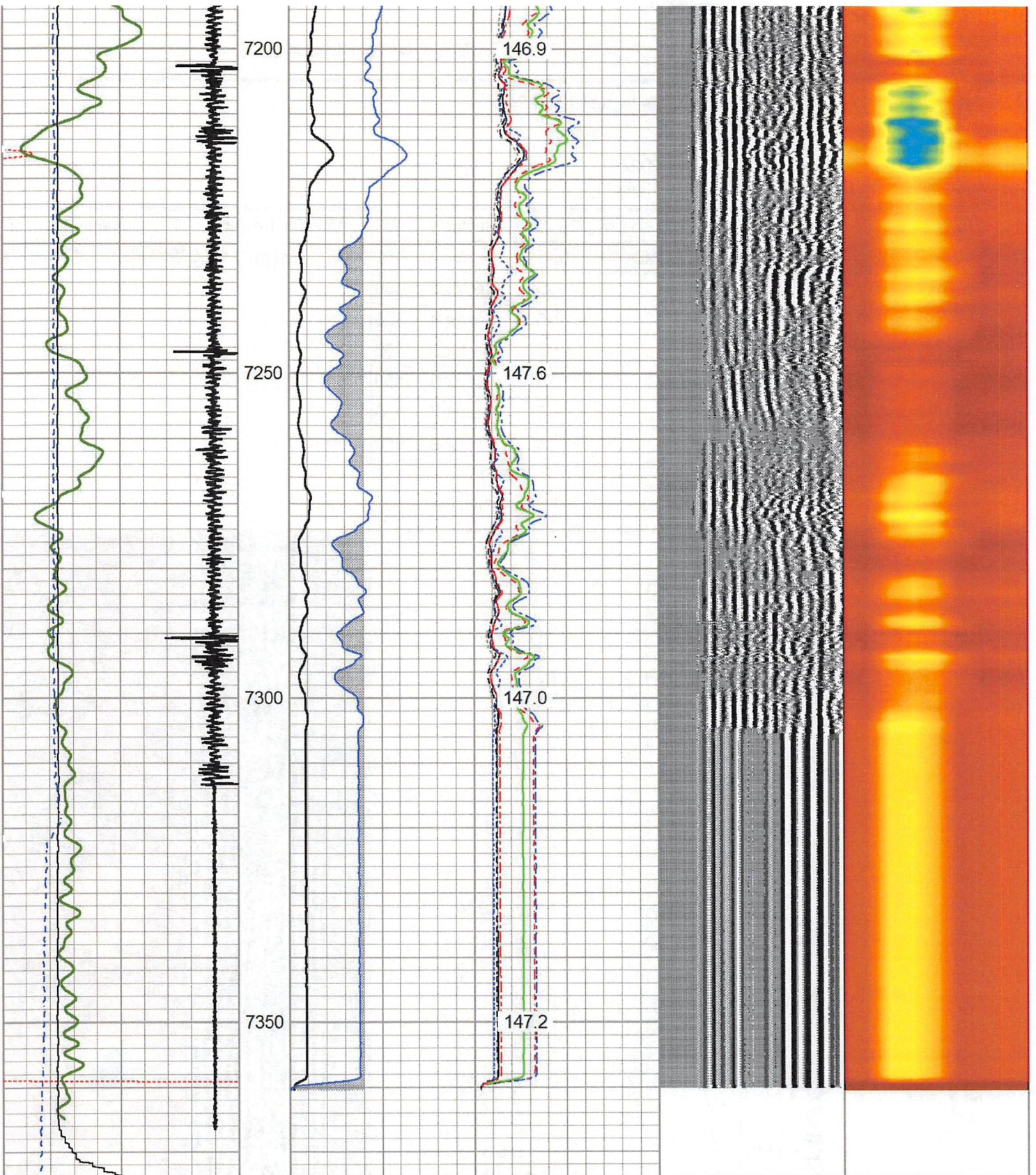


REPEAT LOG

Database File antero_dogwood_daags1h_rcbl-1-15-22.db
 Dataset Pathname RCBL/REPEAT
 Presentation Format rcbl 2
 Dataset Creation Sun Jan 16 09:50:37 2022
 Charted by Depth in Feet scaled 1:240

297	Travel Time (usec)	197	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1	1	BONDIX	0	-5	Sector 2	150	(usec)	1200		
0	Gamma Ray (GAPI)	150				-5	Sector 3	150				
0	Line Tension (lb)	5000				-5	Sector 4	150				
-100	LSPD (ft/min)	100				-5	Sector 5	150				
						-5	Sector 6	150				
						-5	Sector 7	150				
						-5	Sector 8	150				
							TEMP					
							(degF)					





297	Travel Time (usec)	197
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000
-100	LSPD (ft/min)	100

0	Amplitude (mV)	100	-5	Sector 1	150
1	BONDIX	0	-5	Sector 2	150
			-5	Sector 3	150
			-5	Sector 4	150
			-5	Sector 5	150
			-5	Sector 6	150
			-5	Sector 7	150
			-5	Sector 8	150

Variable Density
200 (usec) 1200

1 Cement Map 8



TEMP
(degF)

Log Variables

DatabaseC:\ProgramData\Warrior\Data\antero_dogwood_daags1h_rcbl-1-15-22.db
Dataset field/well/RCBL/MAIN/_vars_

Top - Bottom

BHTEMP_Src TEMP	BOREID in 7.875	BOTTEMP degF 100	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 20	MAXAMPL mV 71.9	MINAMPL mV 2.2
MINATTN db/ft 0.8	PERFS No	PPT usec 261	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_dogwood_daags1h_rcbl-1-15-22.db
Dataset Pathname RCBL/MAIN
Dataset Creation Sun Jan 16 10:05:13 2022

Gamma Ray Calibration Report

Serial Number: FW1211-86
Tool Model: Probe
Performed: Sun Aug 29 01:22:07 2021

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1312-32
Tool Model: Probe275T

Calibration Casing Diameter: 5.500 in
Calibration Depth: 778.675 ft

Master Calibration, performed Sun Jan 16 09:25:12 2022:

	Raw (v)		Calibrated (mv)		Gain	Offset
	Zero	Cal	Zero	Cal		
3'	-0.001	1.688	2.200	71.921	41.275	2.248
CAL	-0.001	0.862				
5'	-0.001	1.981	2.200	71.921	35.179	2.240
SUM						
S1	-0.001	2.080	0.000	100.000	48.064	0.049

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S2	-0.001	1.797	0.000	100.000	55.609	0.062
S3	-0.001	1.571	0.000	100.000	63.621	0.069
S4	-0.001	1.505	0.000	100.000	66.416	0.076
S5	-0.001	1.477	0.000	100.000	67.669	0.083
S6	-0.001	1.559	0.000	100.000	64.104	0.077
S7	-0.001	1.860	0.000	100.000	53.725	0.068
S8	-0.001	2.073	0.000	100.000	48.213	0.061

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.001	0.862	1.000	0.000

Air Zero Calibration, performed Sat Jan 15 12:04:54 2022:

	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



Company ANTERO
 Well DAAGS UNIT 1H
 Field MARCELLUS
 County WETZEL
 State WV

01/15/2022 12:05:00
 01/15/2022 12:05:00
 01/15/2022 12:05:00
 01/15/2022 12:05:00