

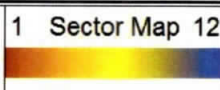


Database File e:\antero 10-23-19\telstar3h.db  
 Dataset Pathname pass7  
 Presentation Format antero1  
 Dataset Creation Thu Oct 24 13:49:37 2019  
 Charted by Depth in Feet scaled 1:240

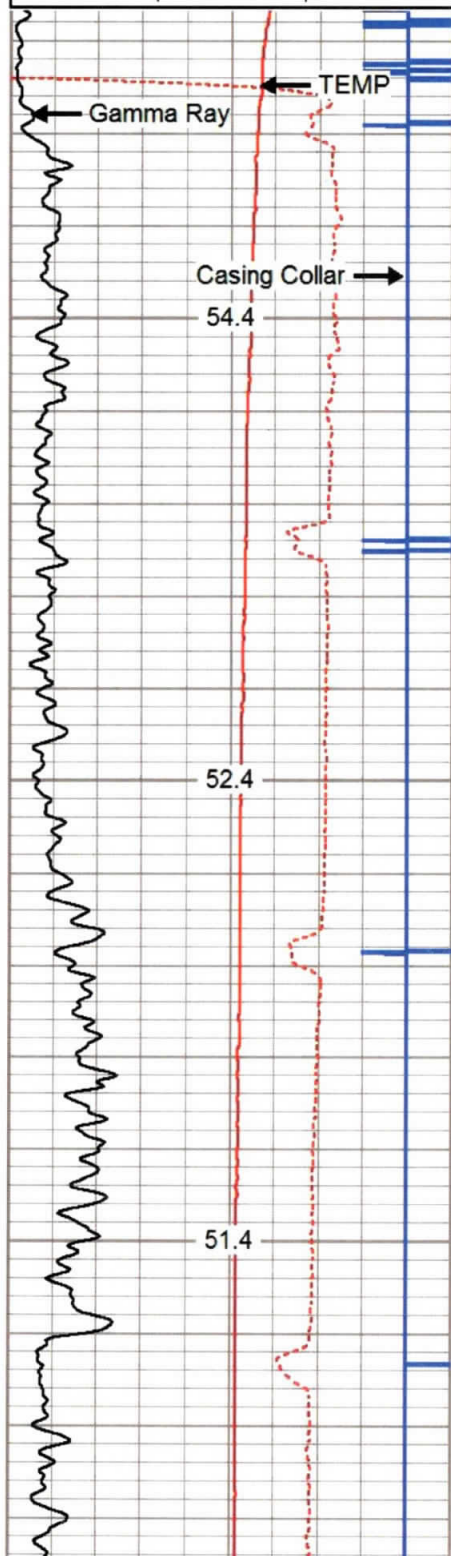
280	Travel Time (usec)	180
9	Casing Collar	-1
0	Gamma Ray (GAPI)	180
0	TEMP (degF)	100
180	GR (GAPI)	360

0	Amplitude (mV)	100
0	Amp X5 (mV)	20
1	BONDIX	0

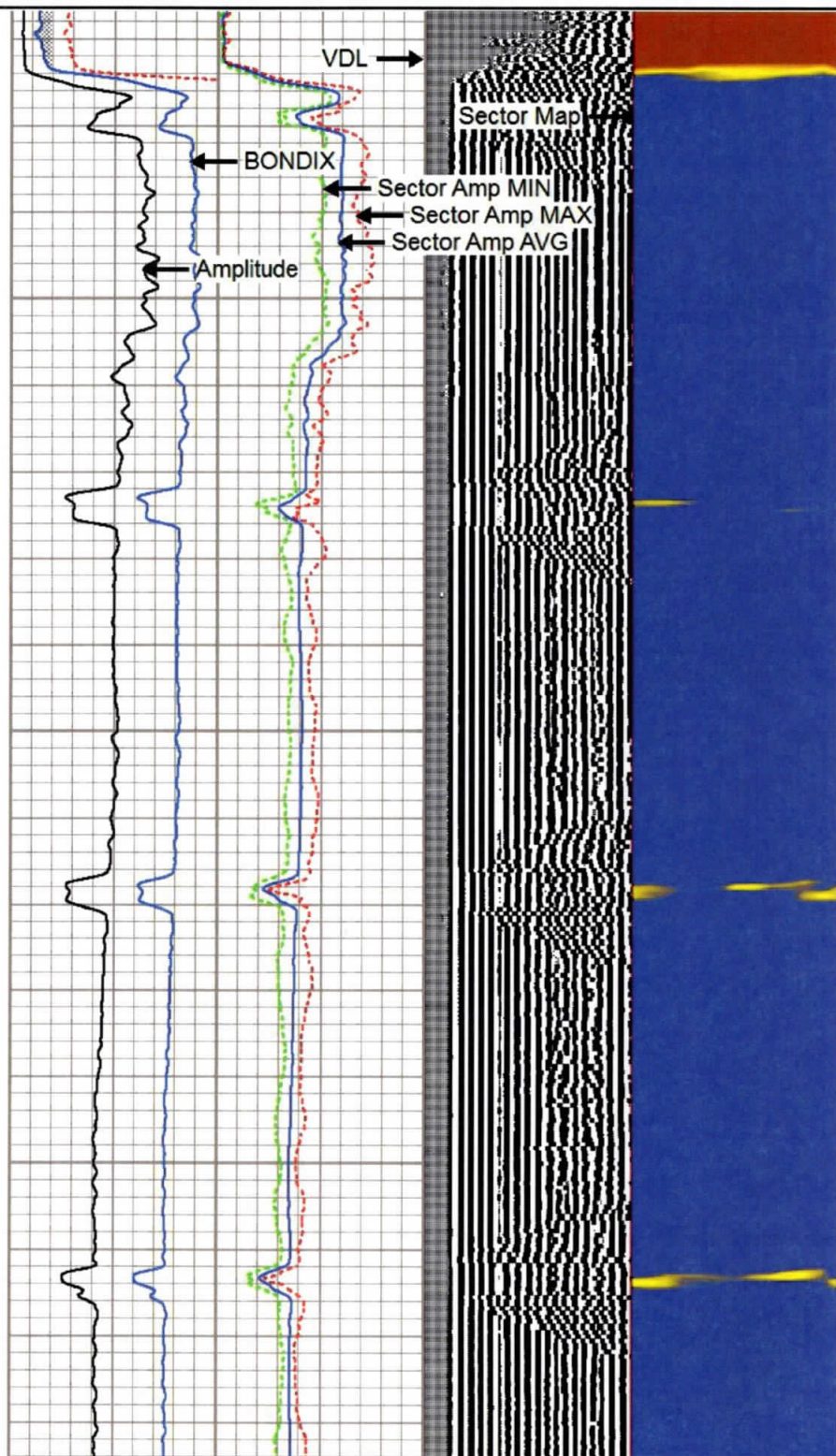
Sector Amp AVG	VDL	1	Sector Map	12
Sector Amp MAX	200 (usec)	1200		
Sector Amp MIN				

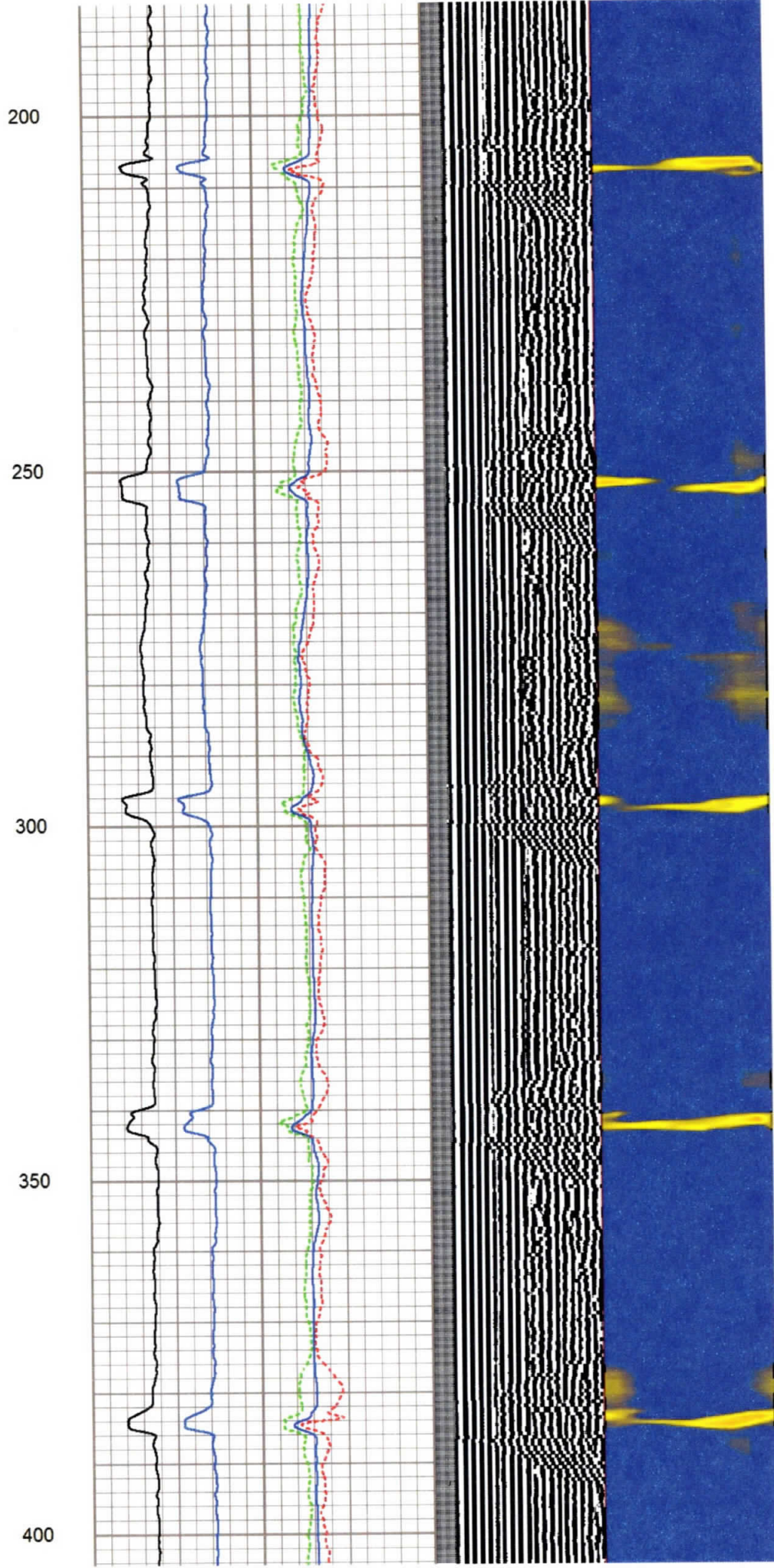
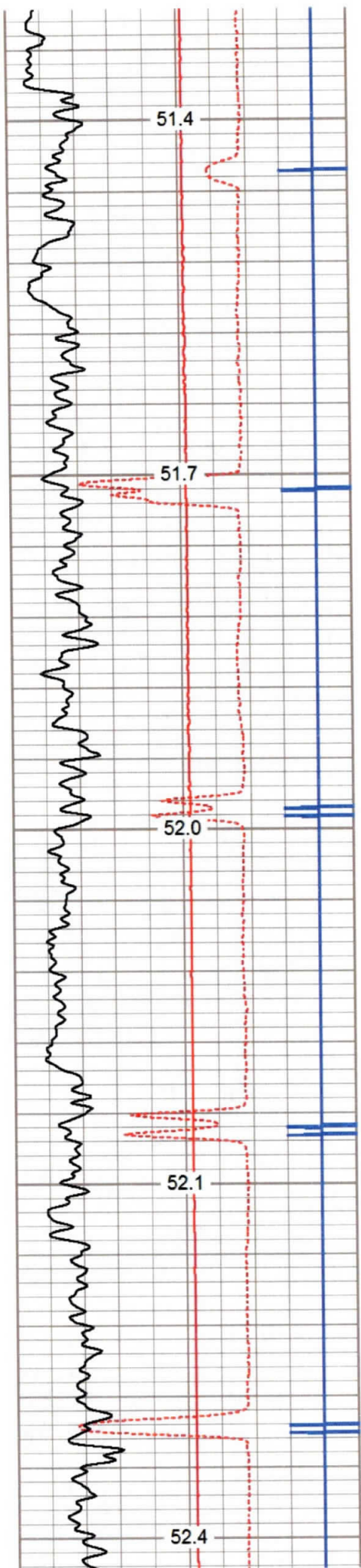


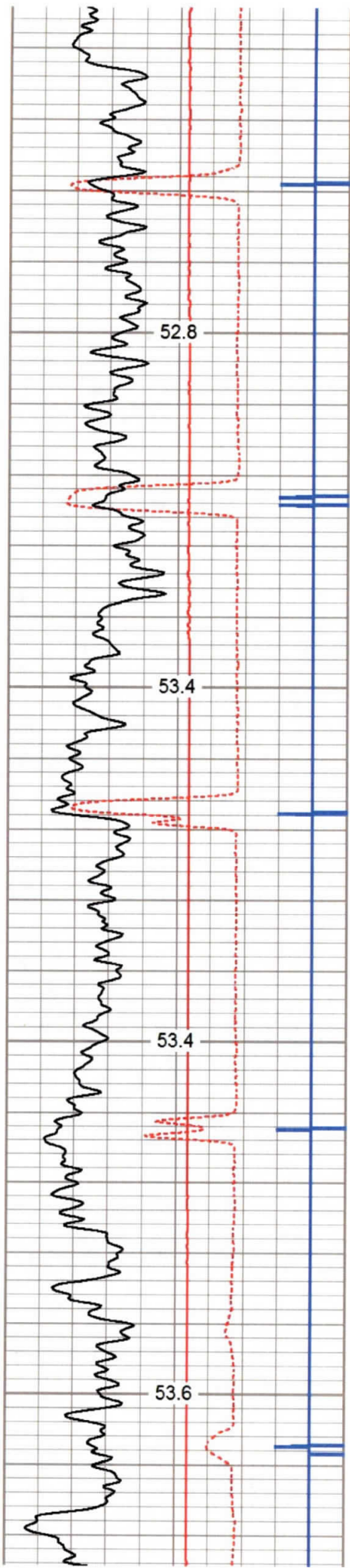
TEMP (degF)



50  
100  
150





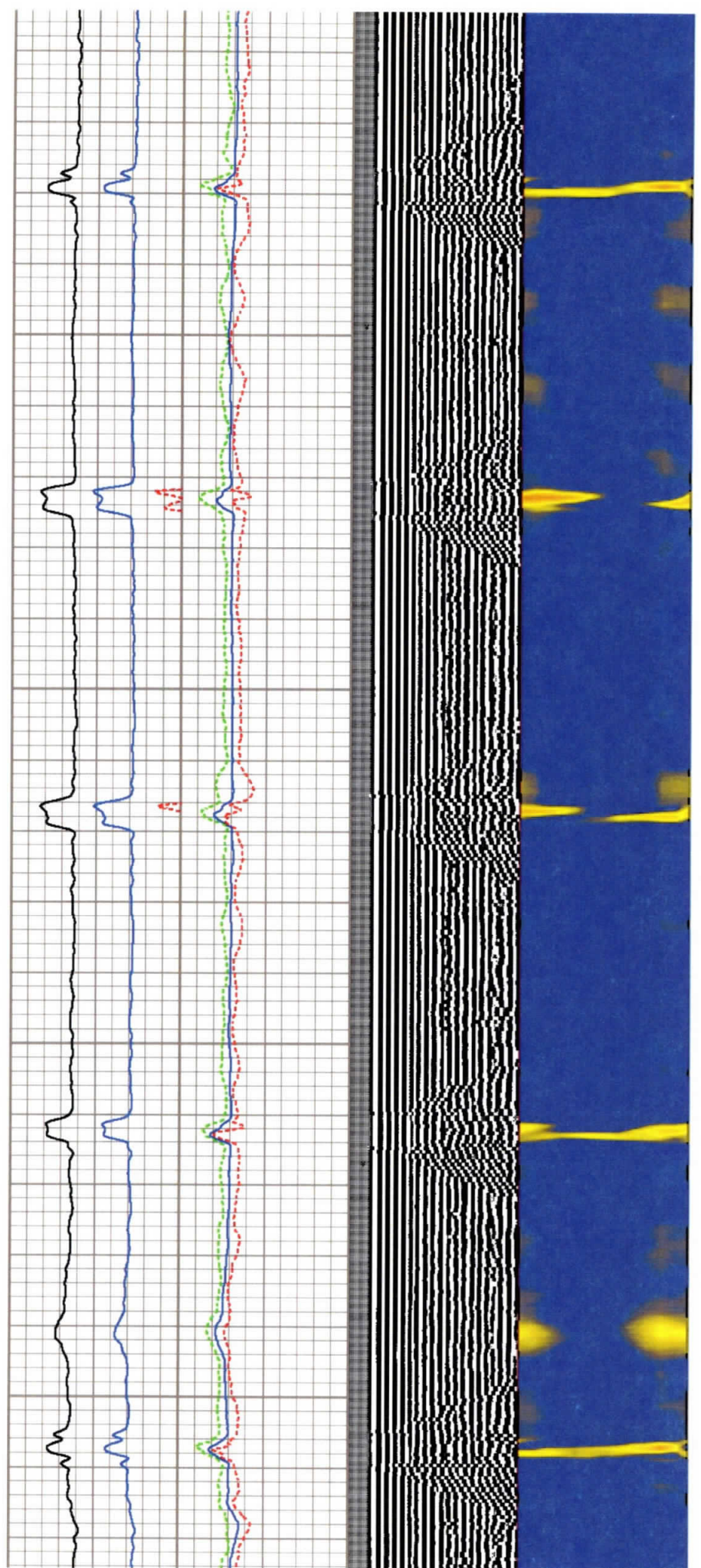


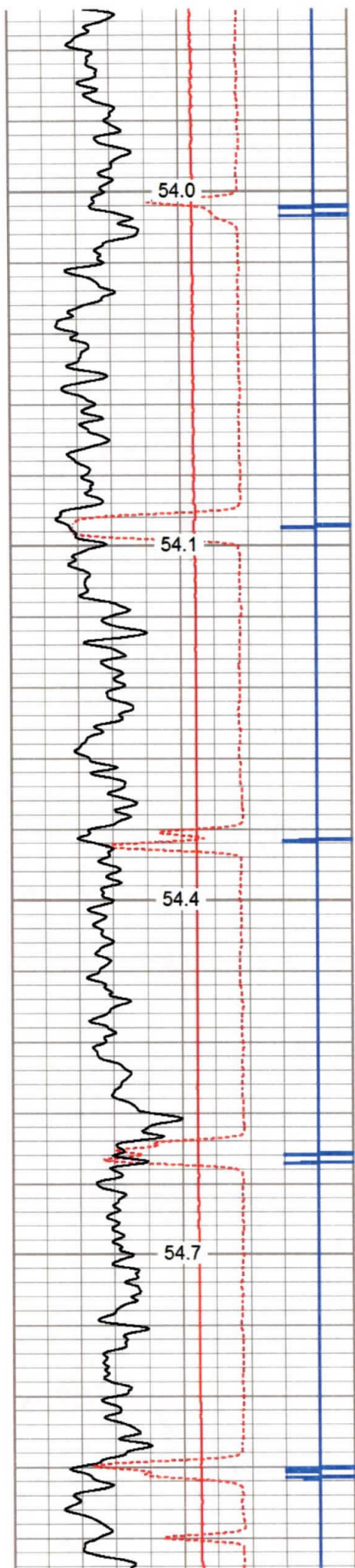
450

500

550

600



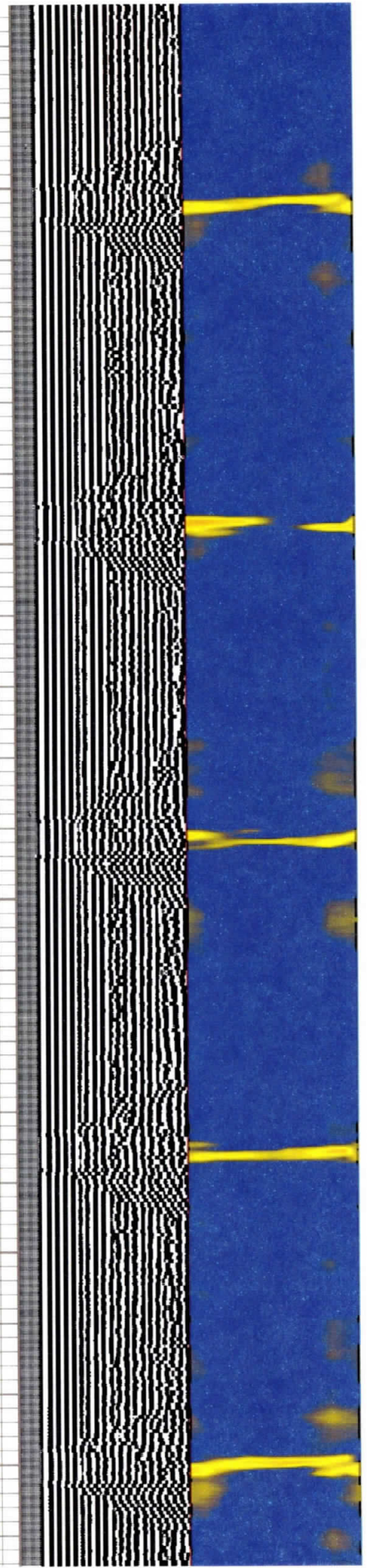
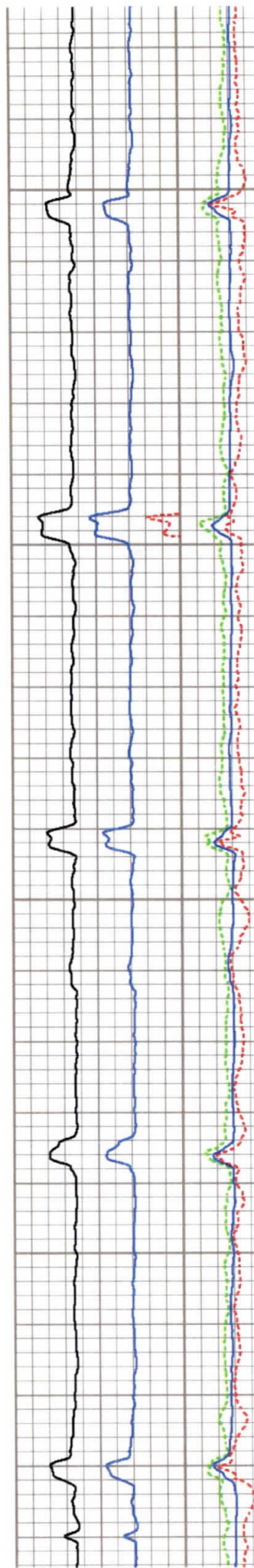


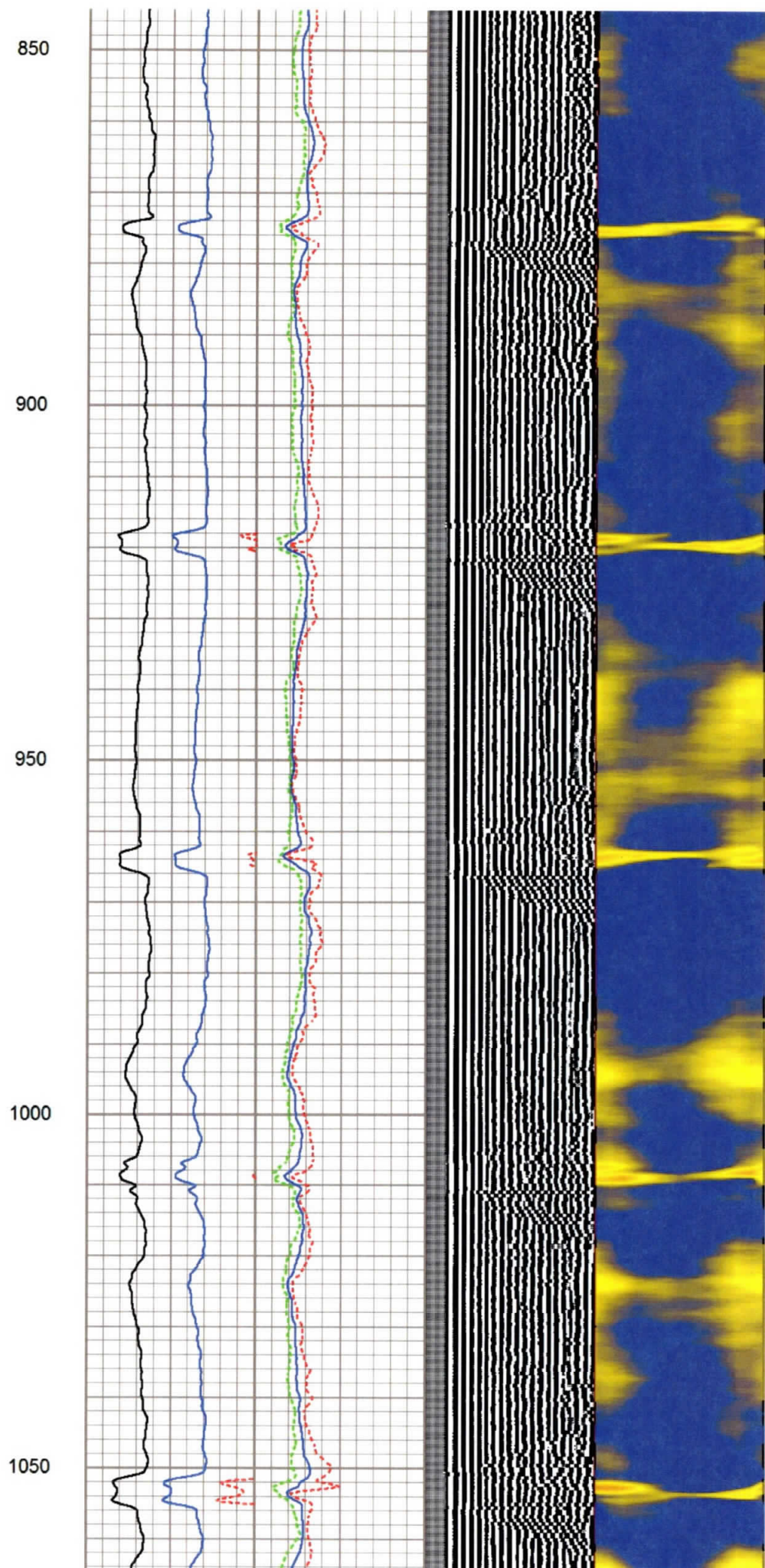
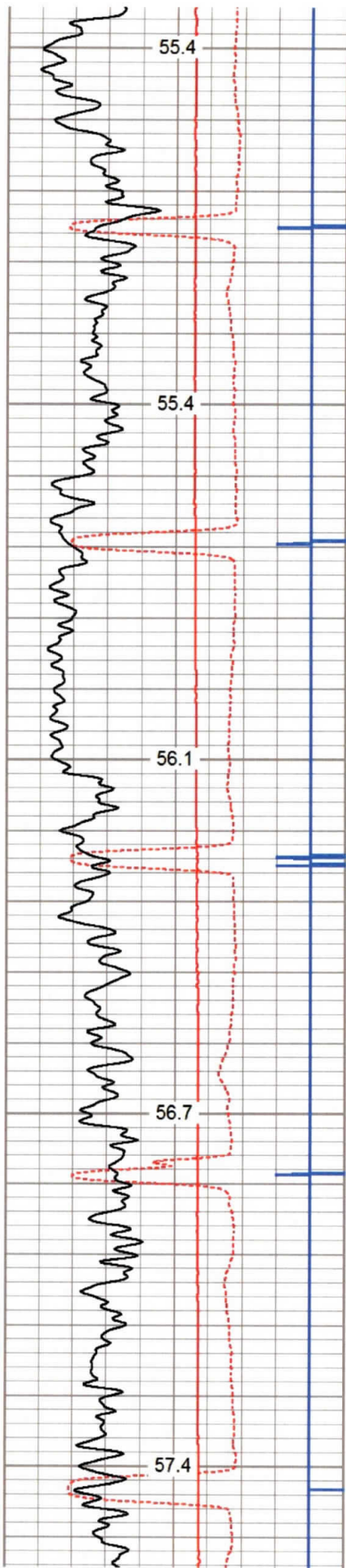
650

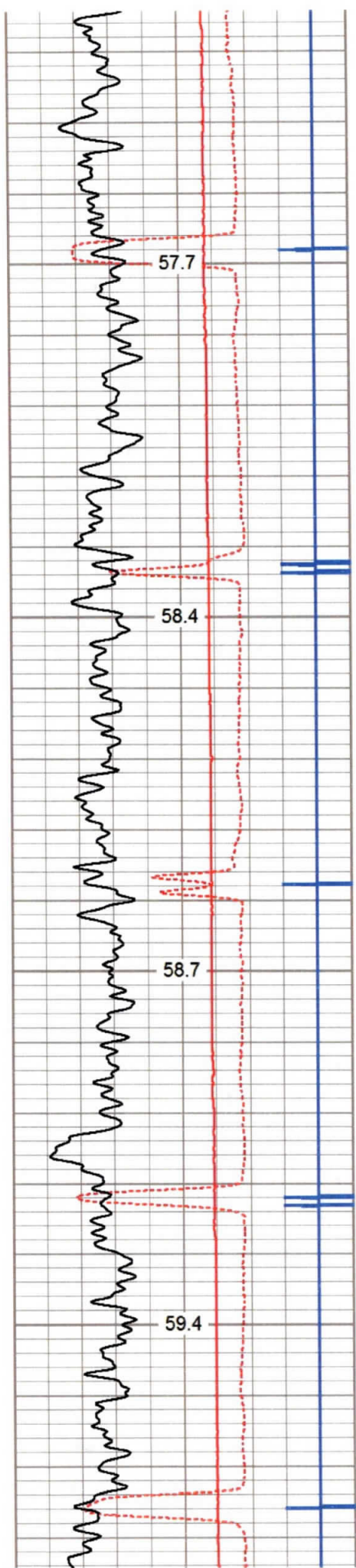
700

750

800





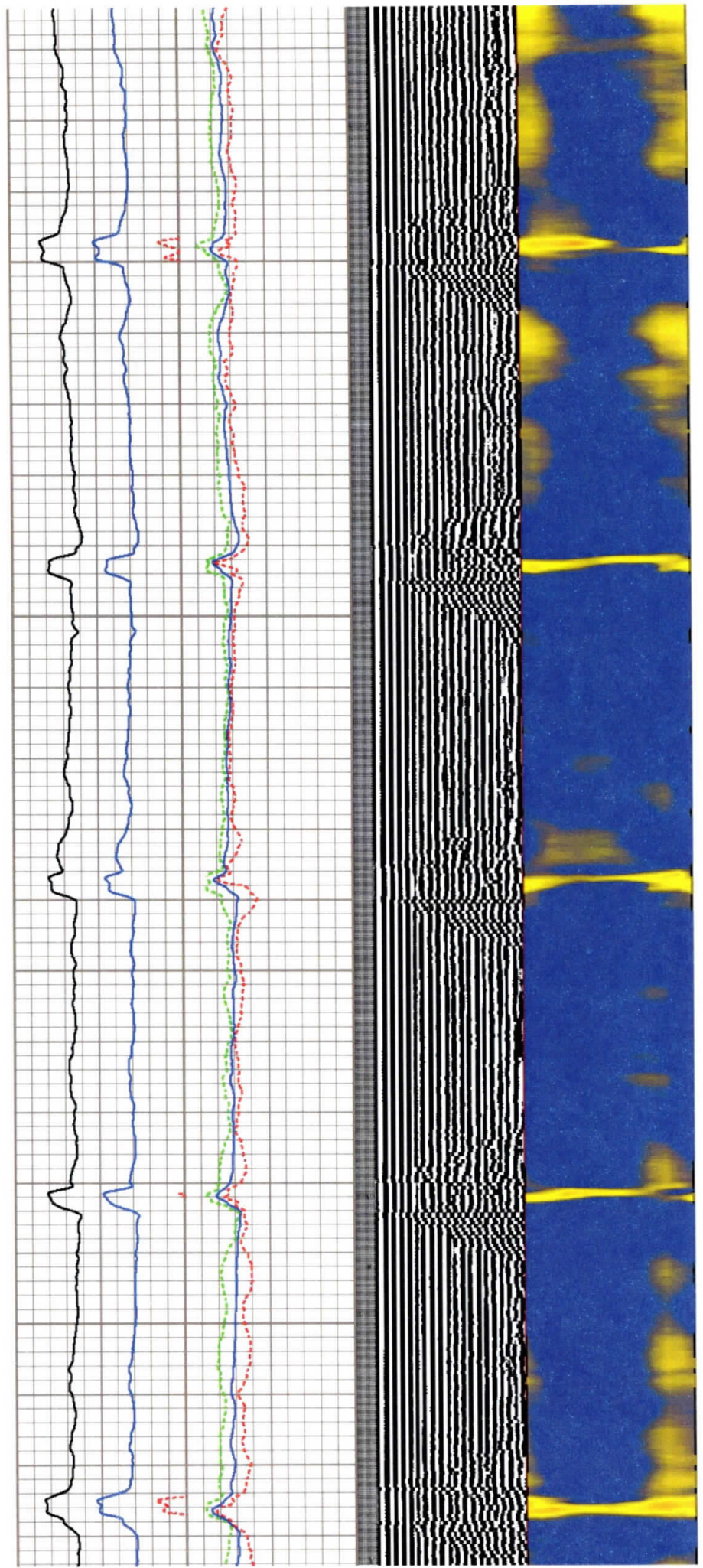


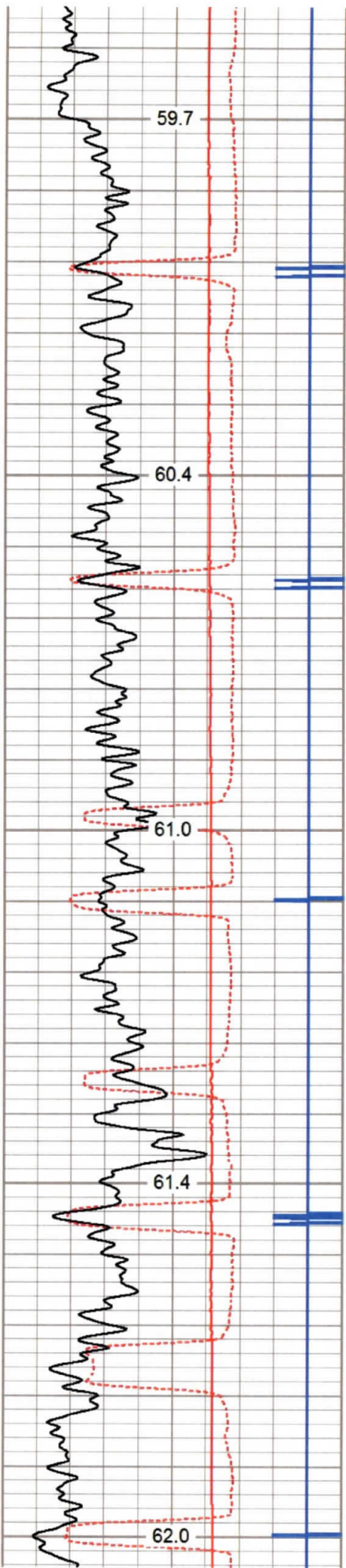
1100

1150

1200

1250





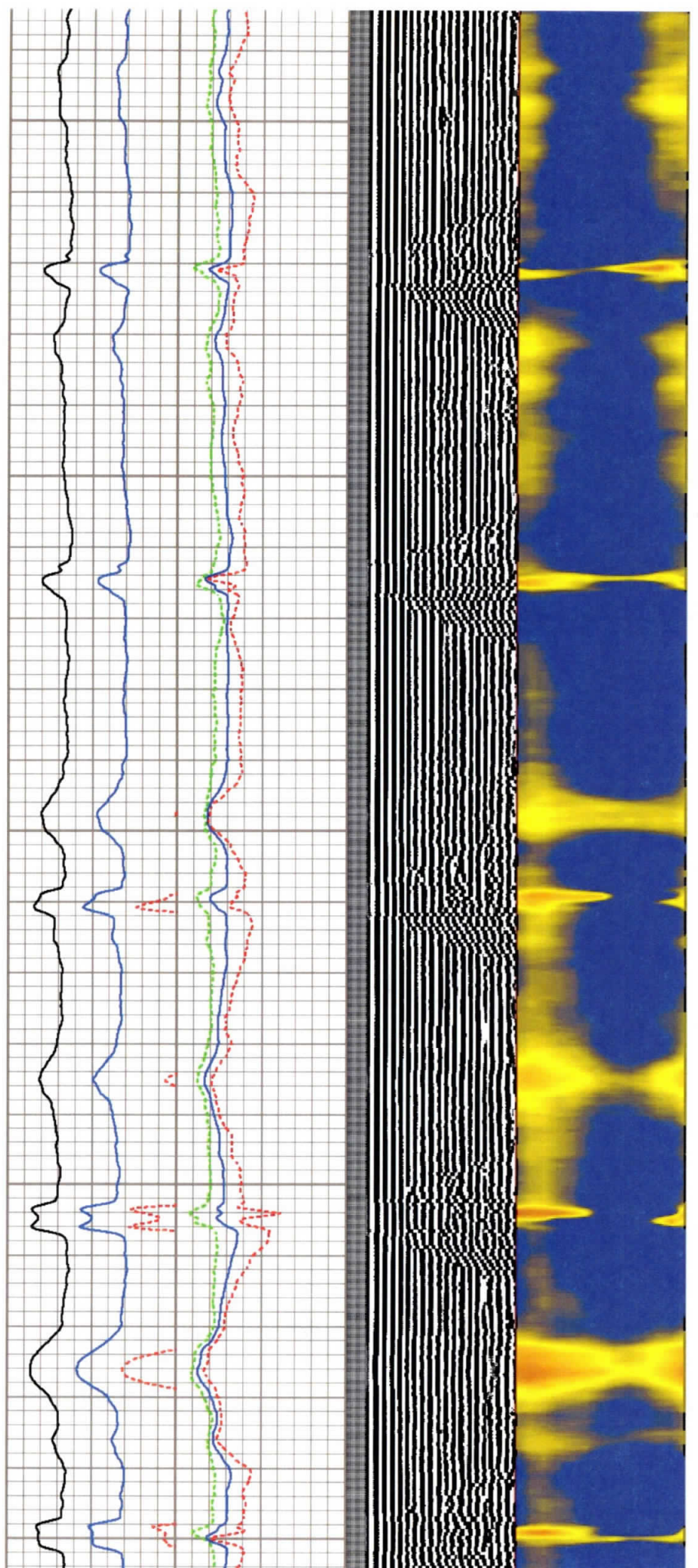
1300

1350

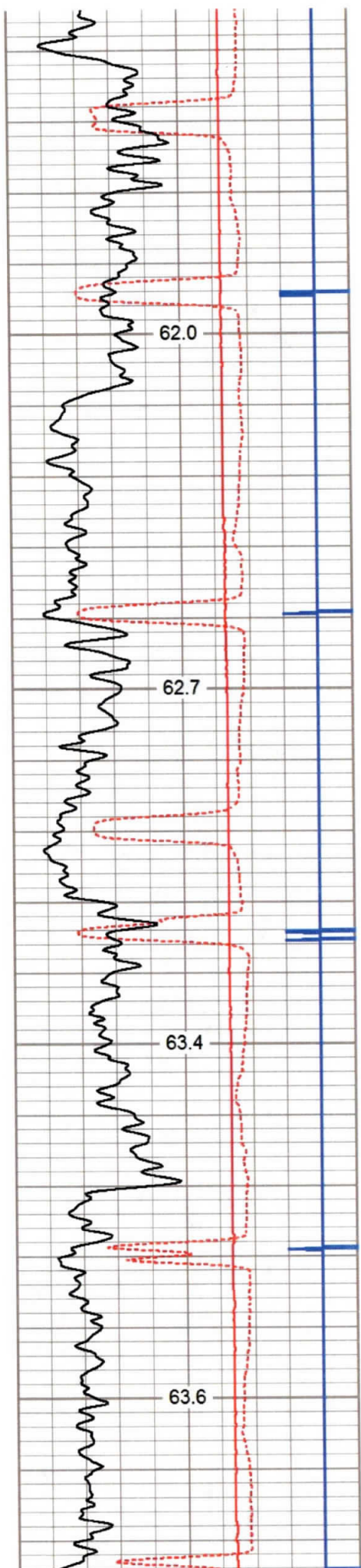
1400

1450

1500





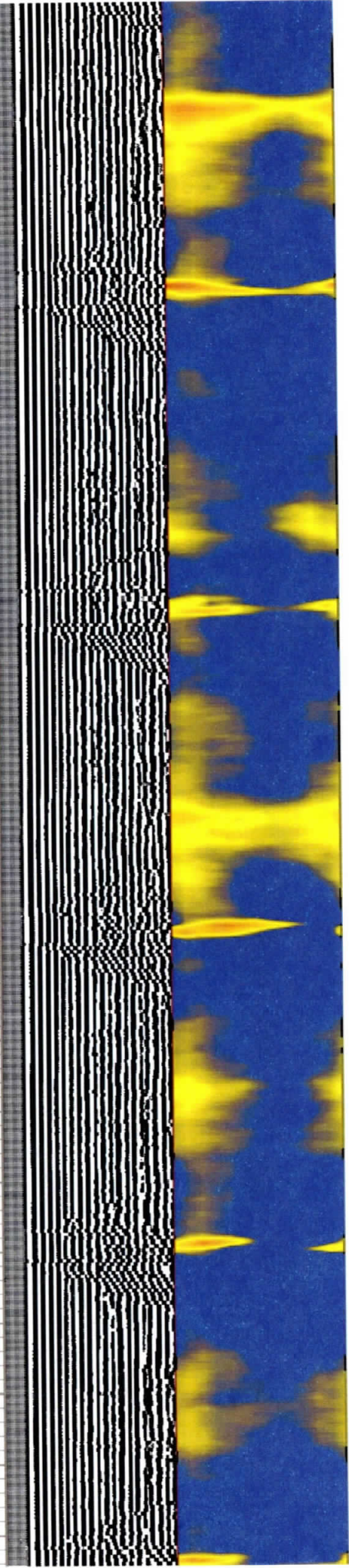
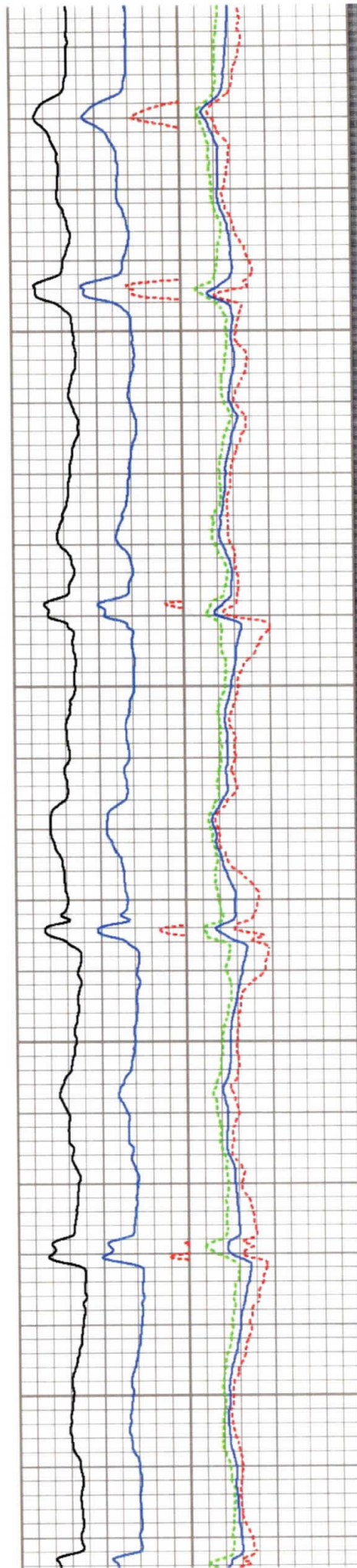


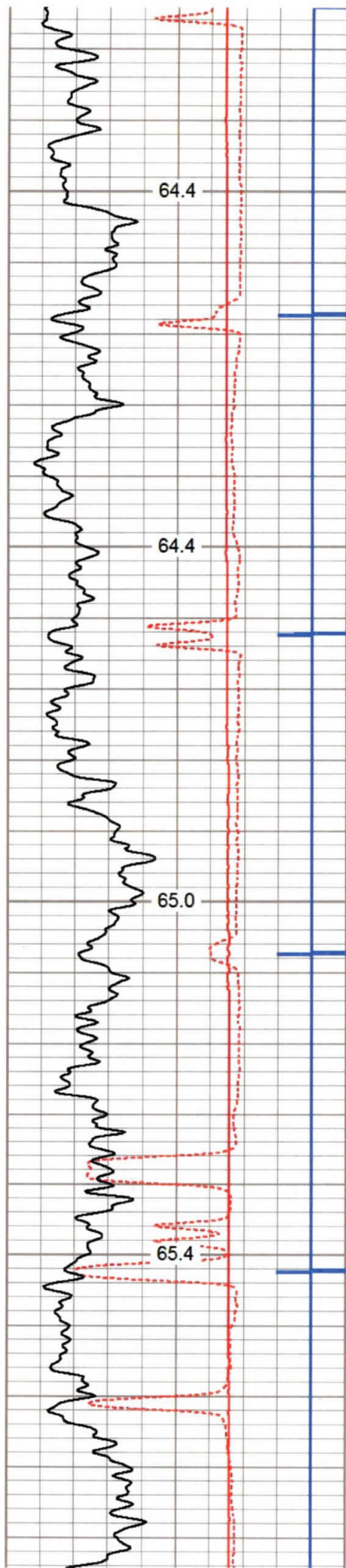
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1600

1650

1700



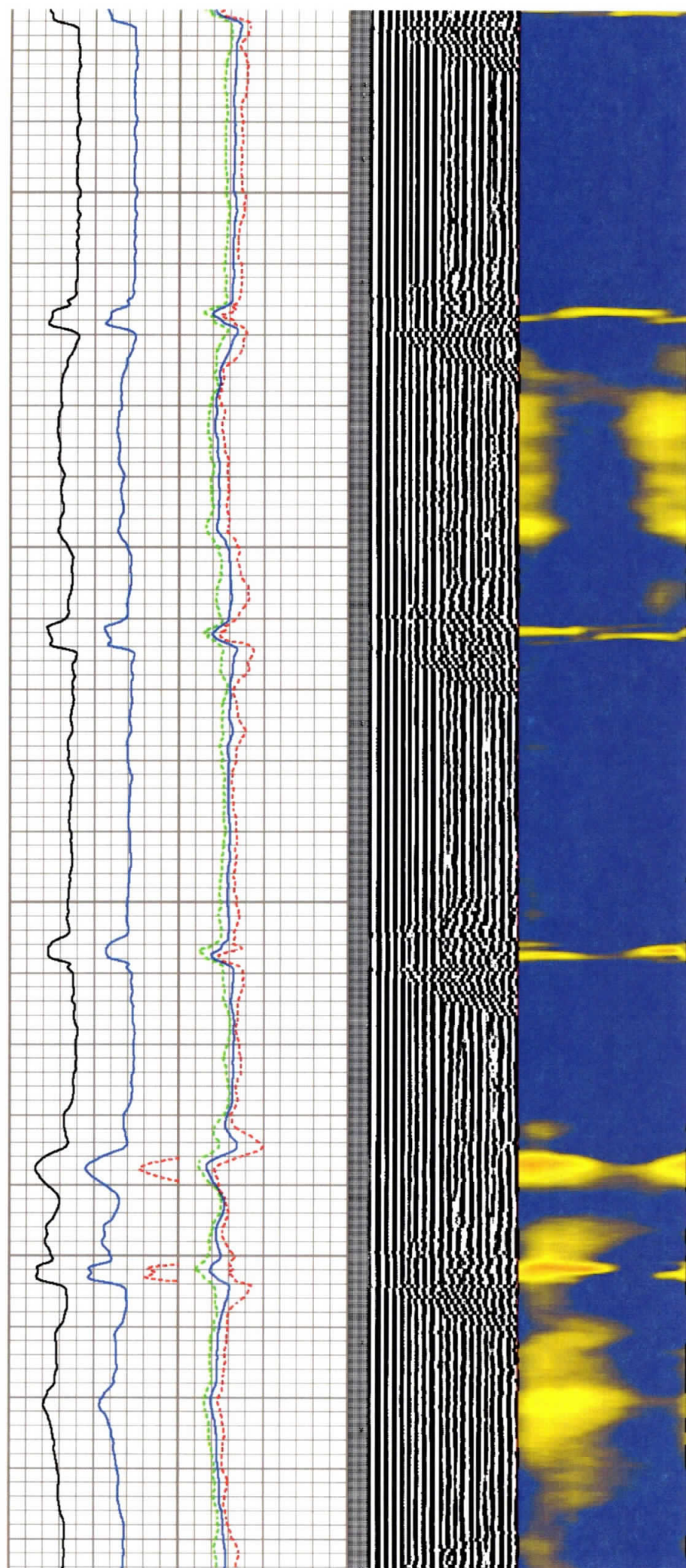


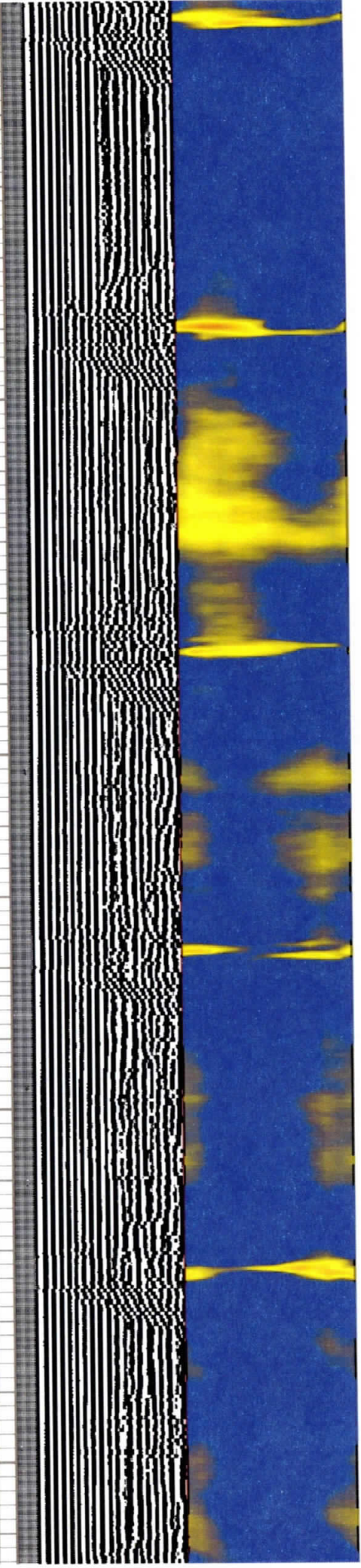
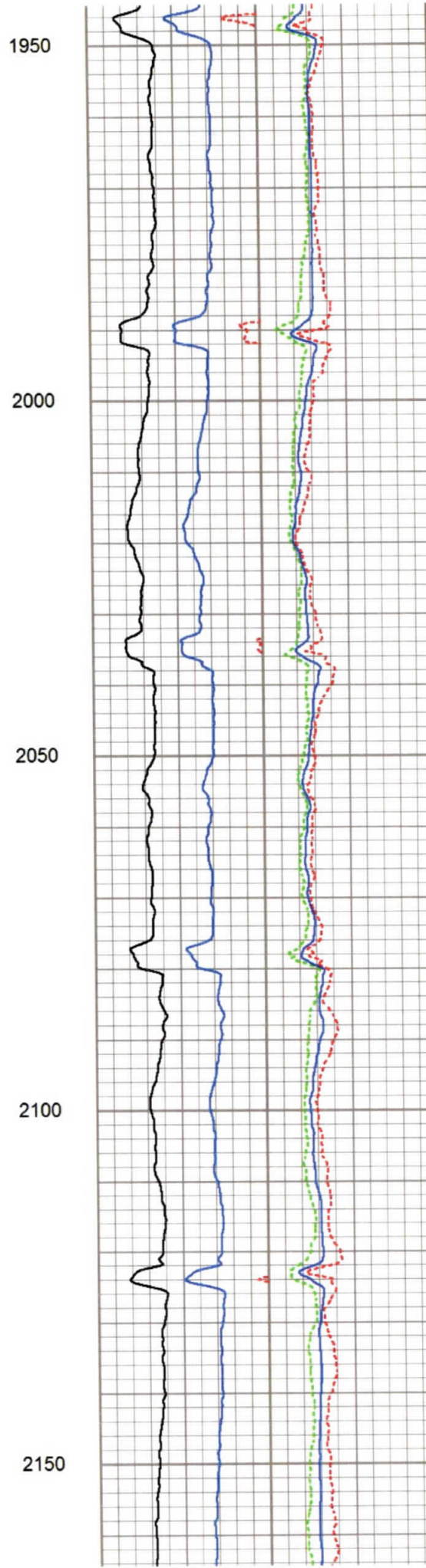
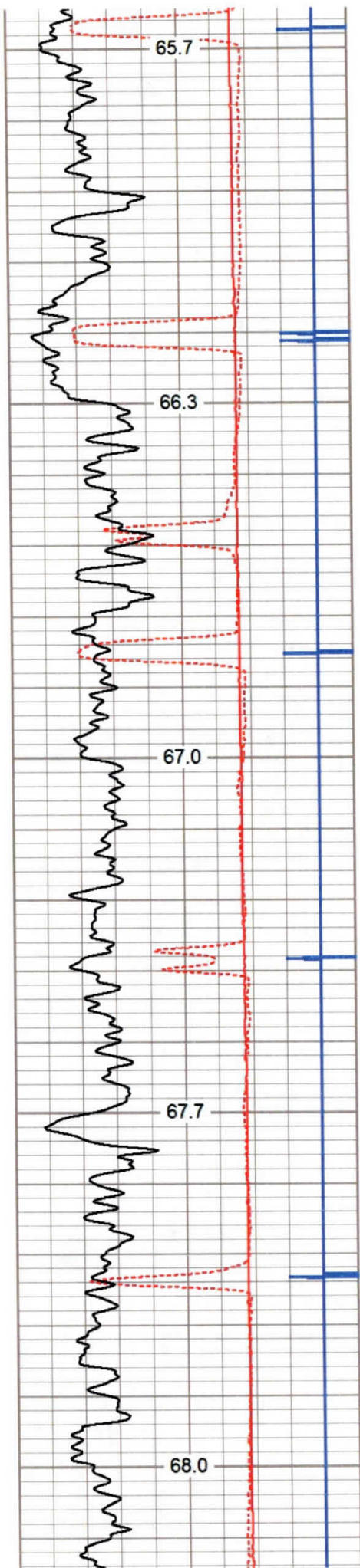
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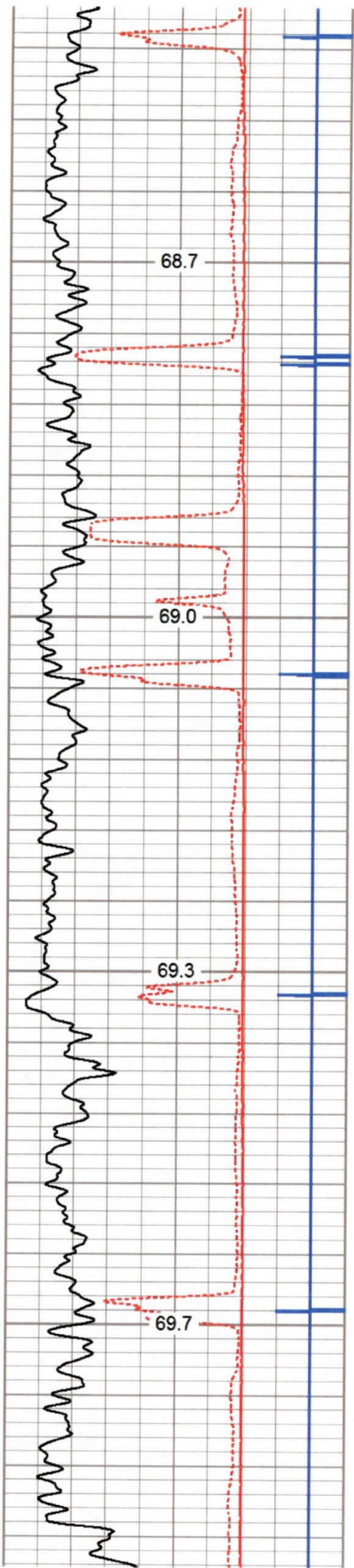
1800

1850

1900





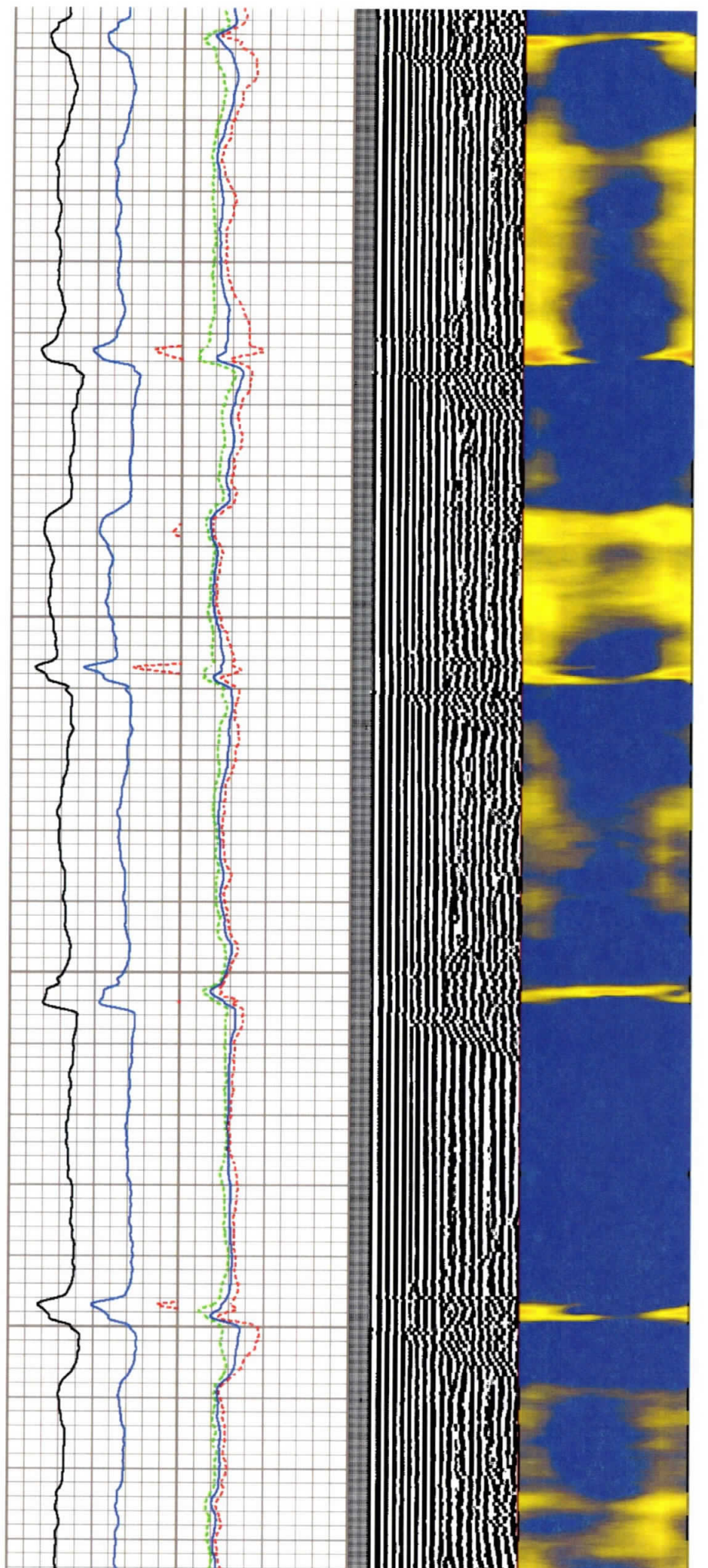


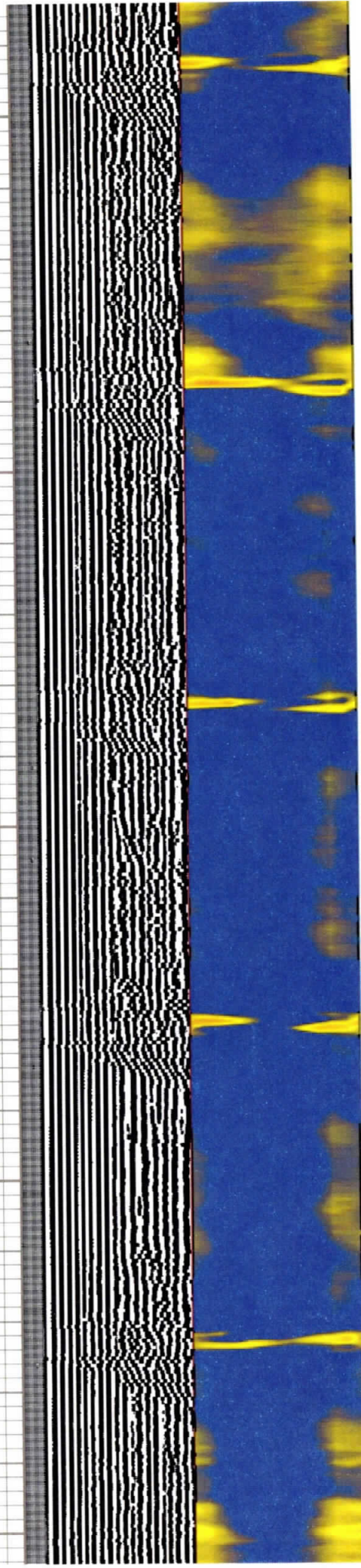
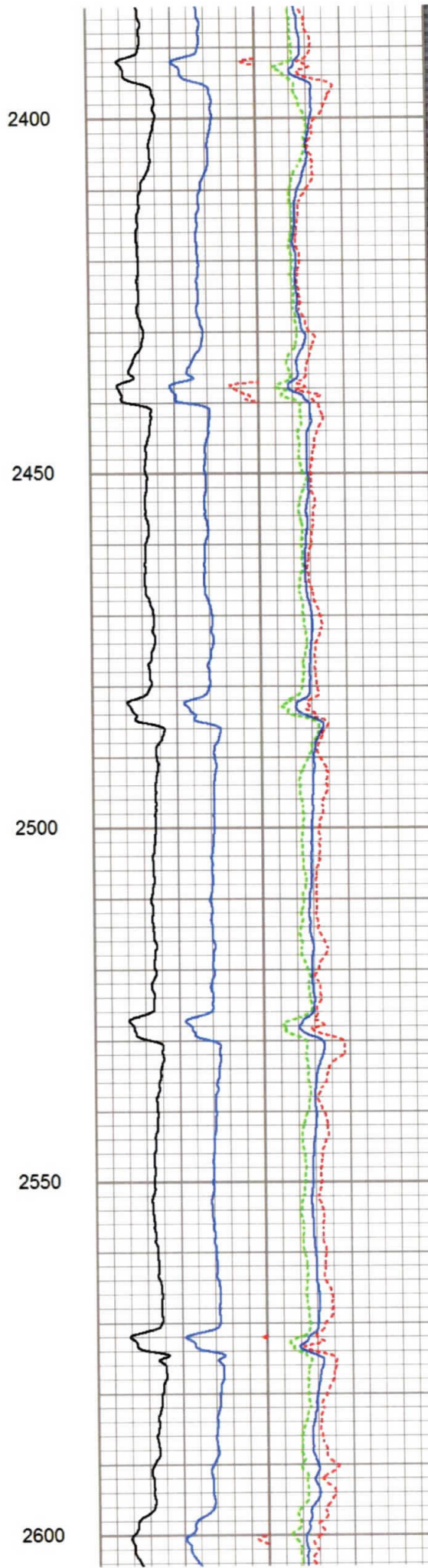
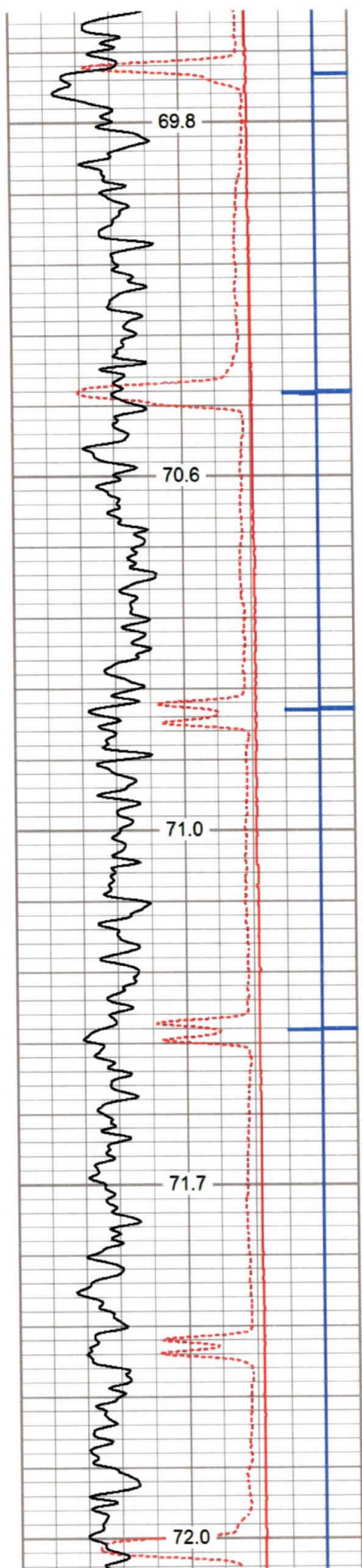
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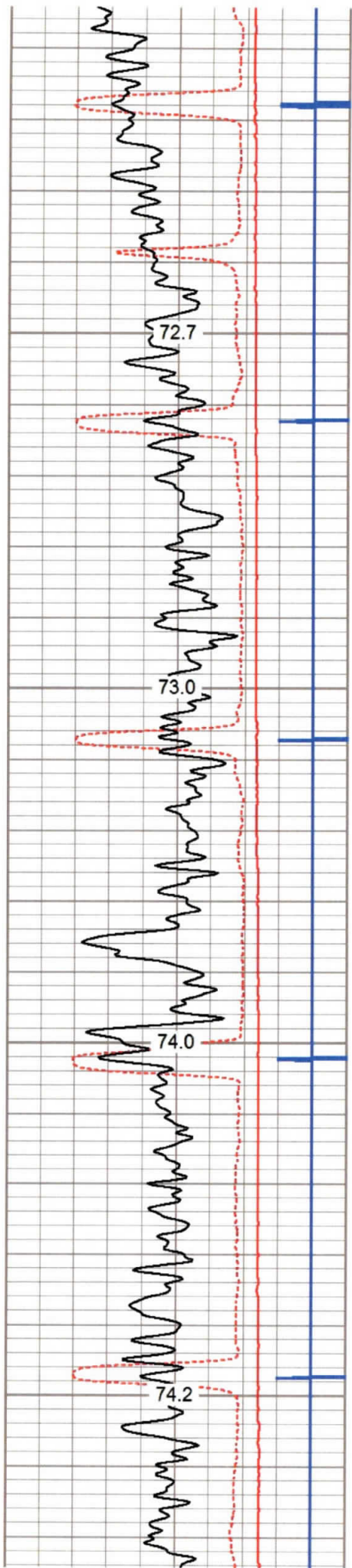
2250

2300

2350





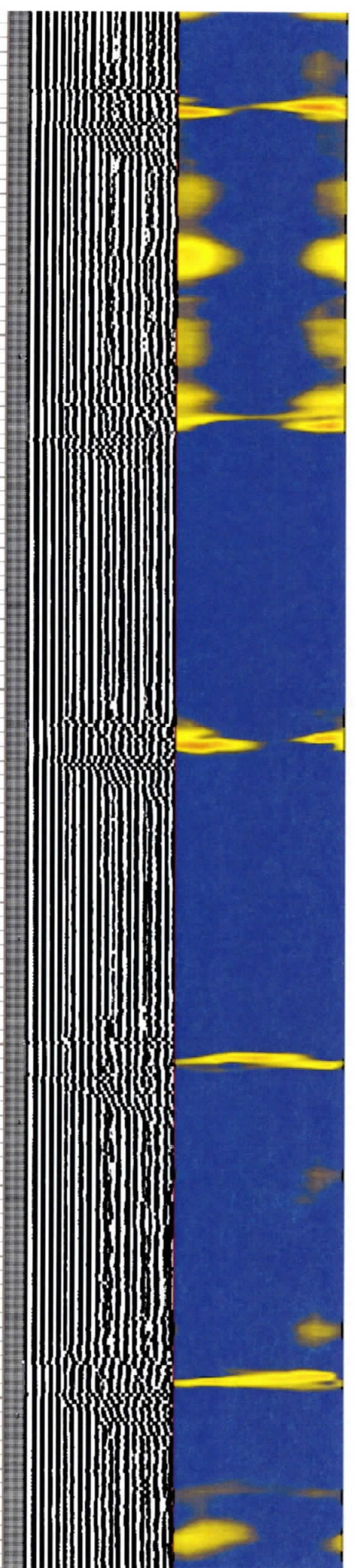
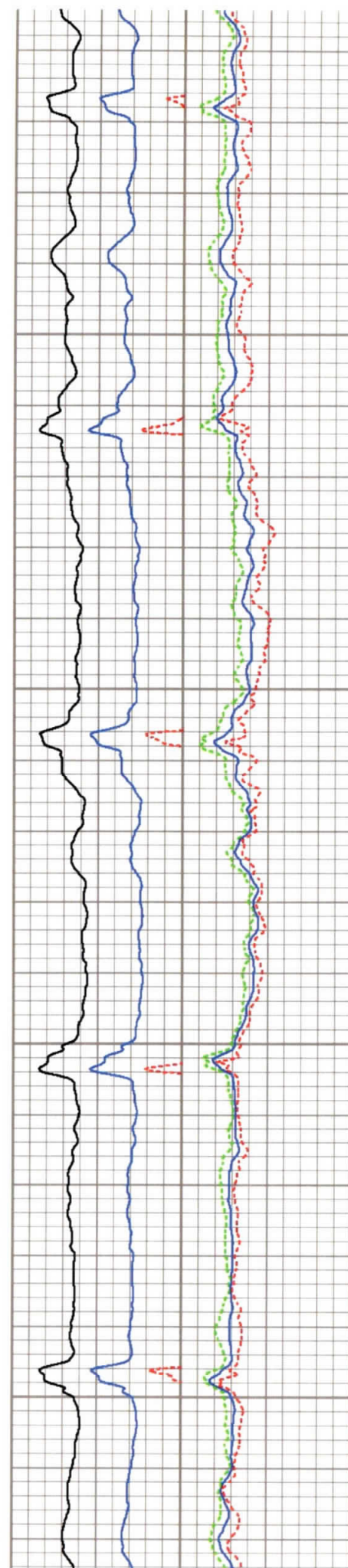


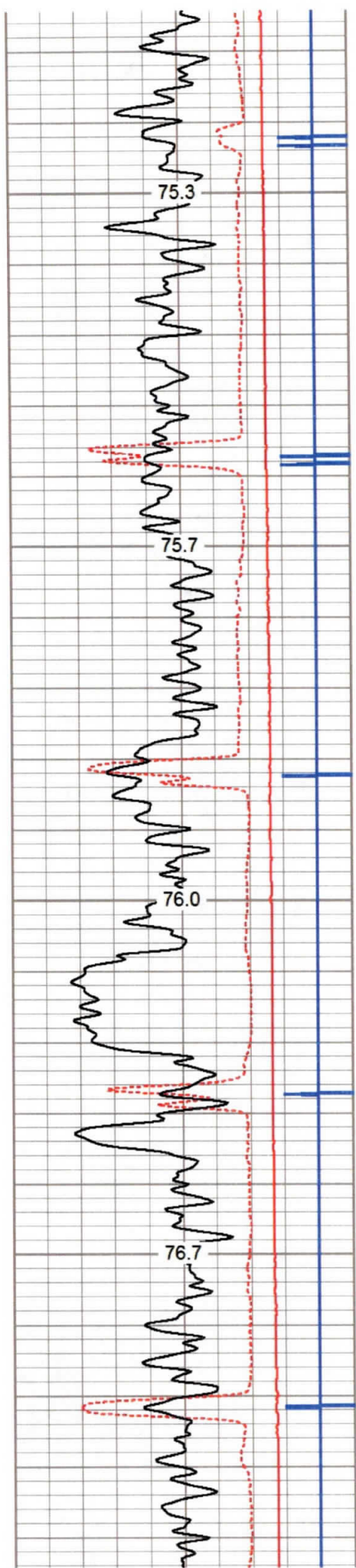
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2700

2750

2800



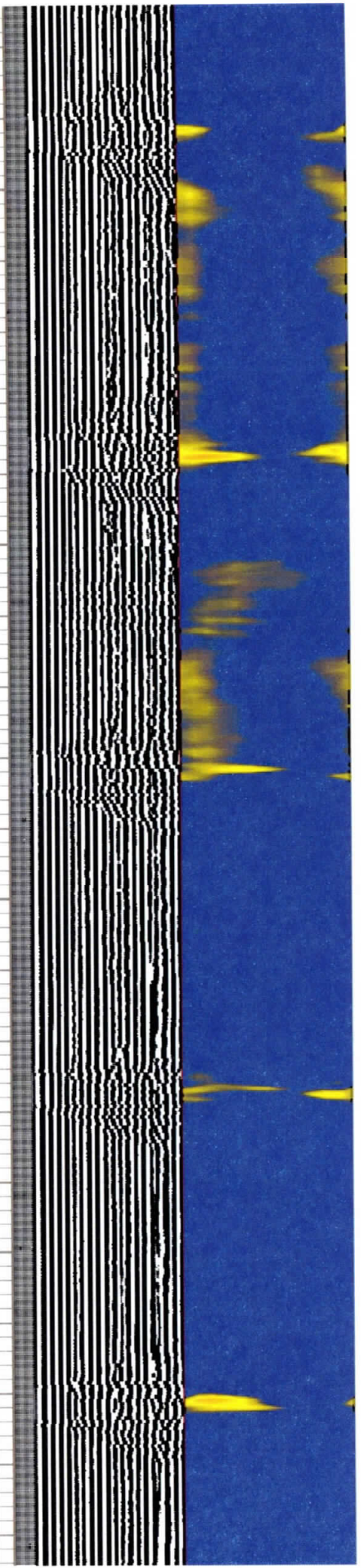
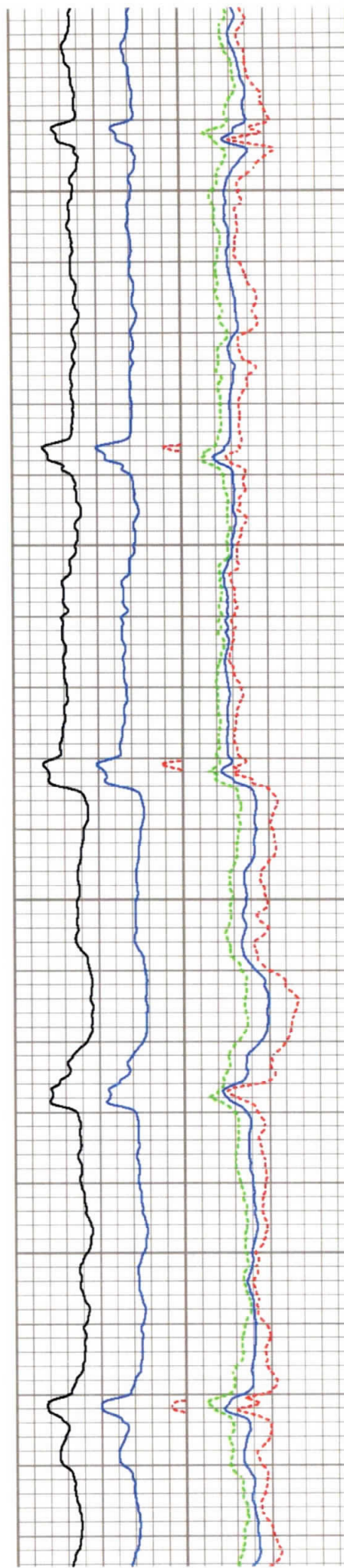


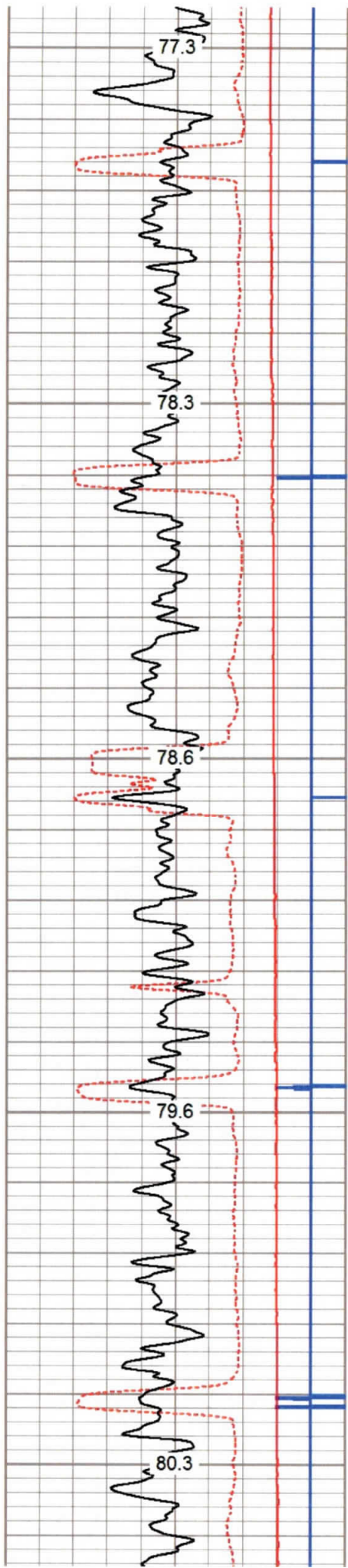
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2900

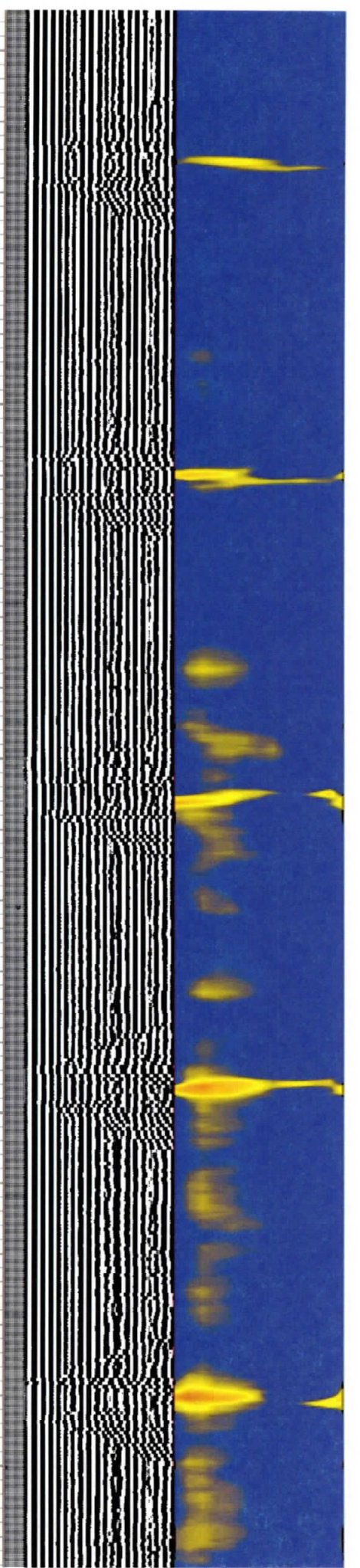
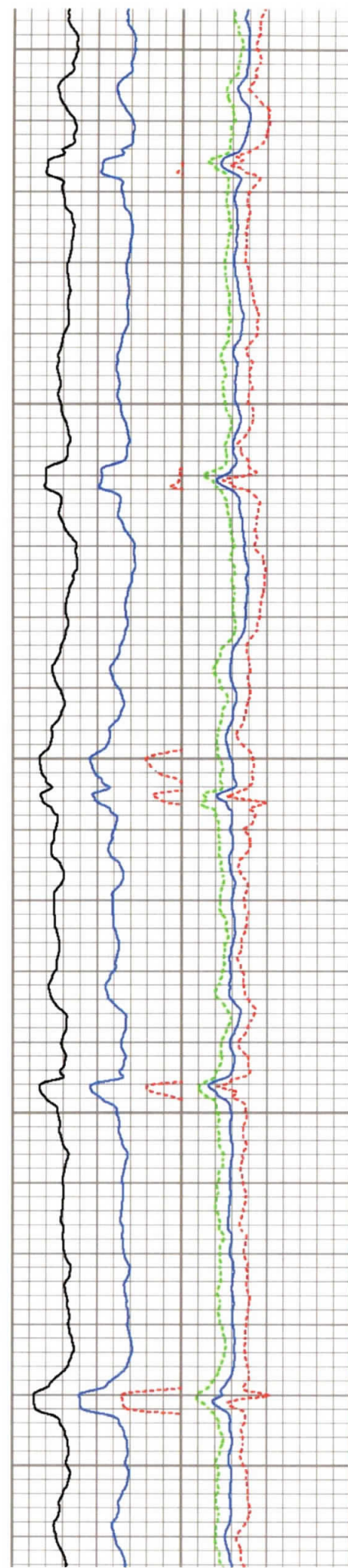
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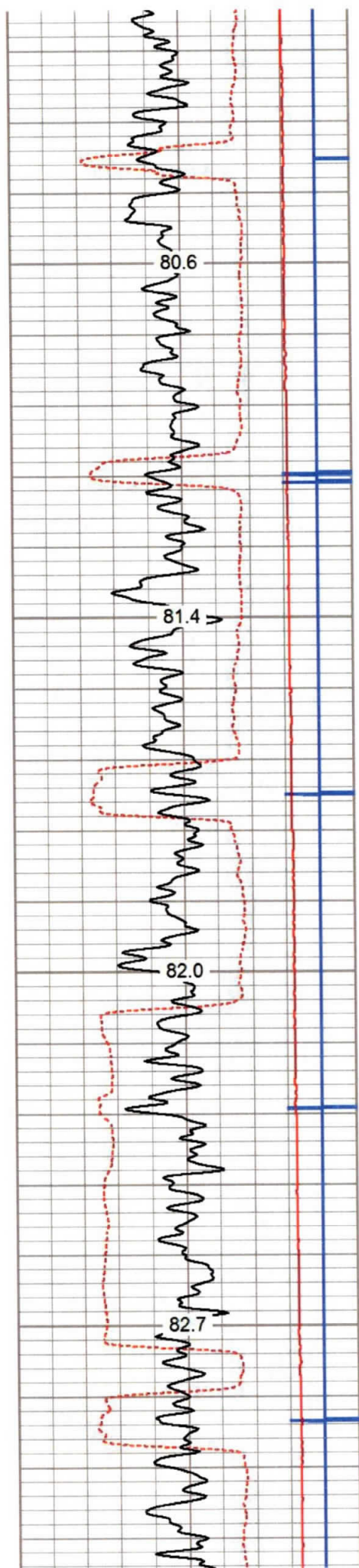




3050  
3100  
3150  
3200  
3250





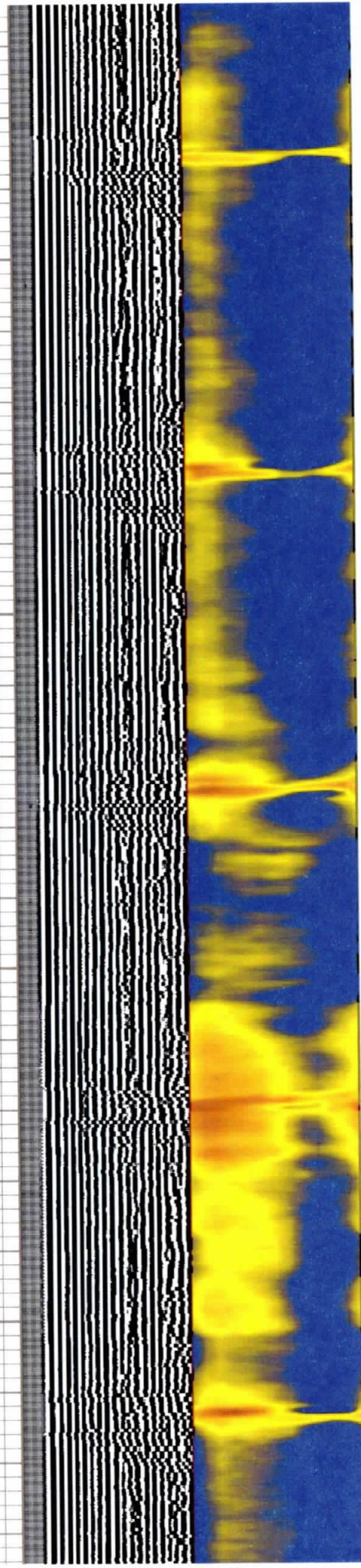
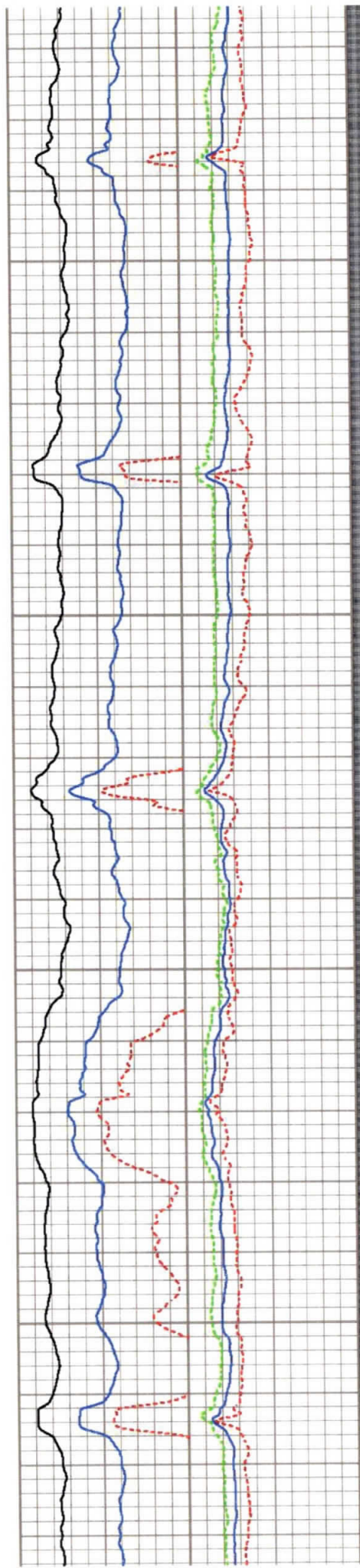


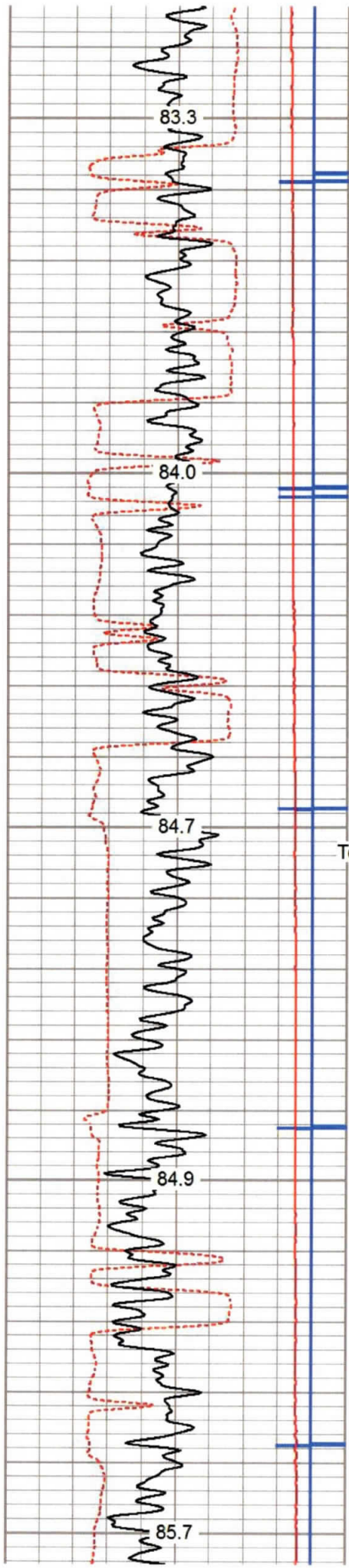
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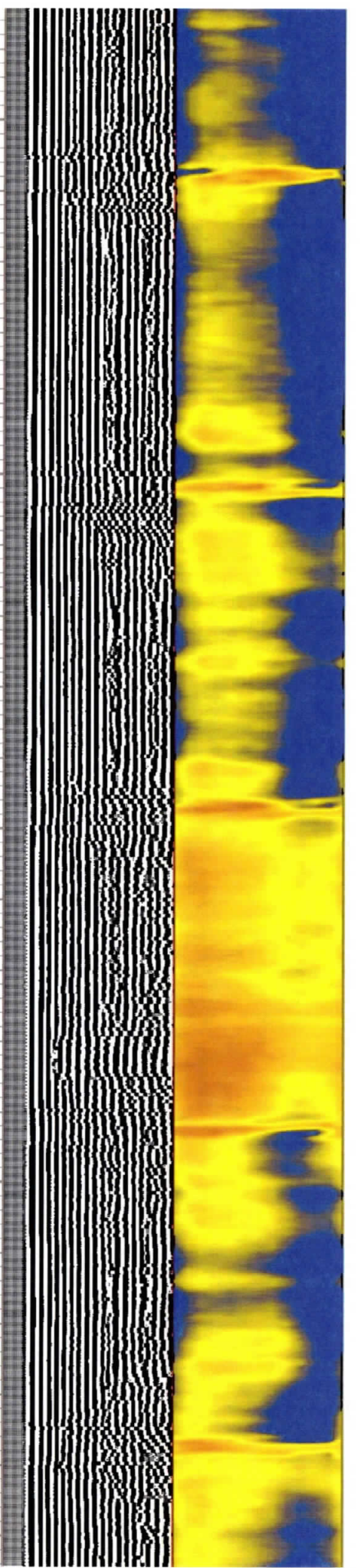
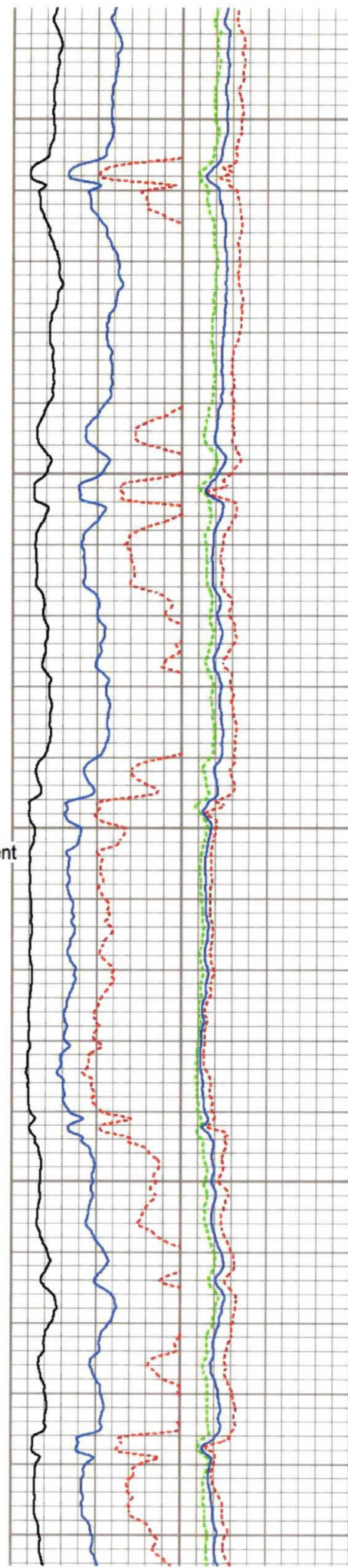
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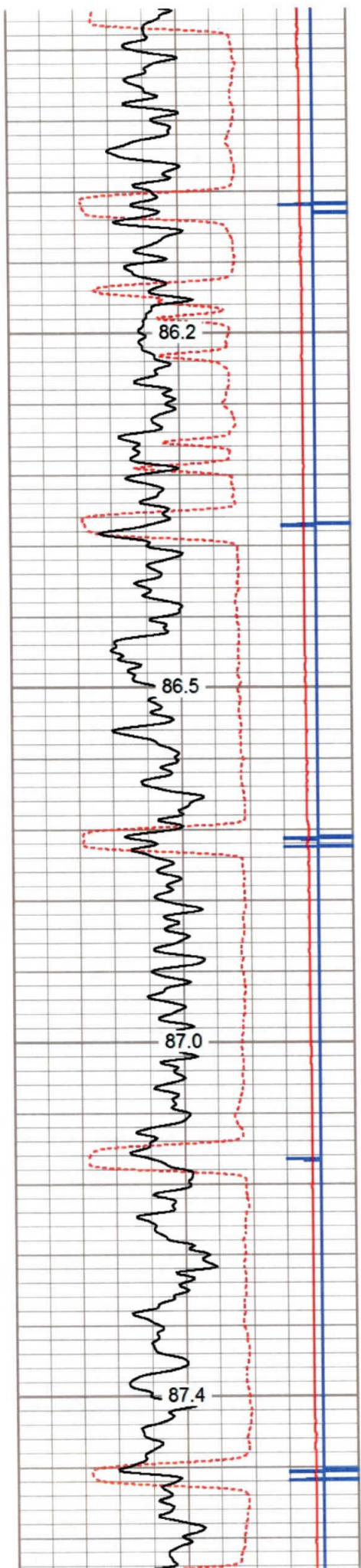




3500  
3550  
3600  
3650  
3700

Top of Cement



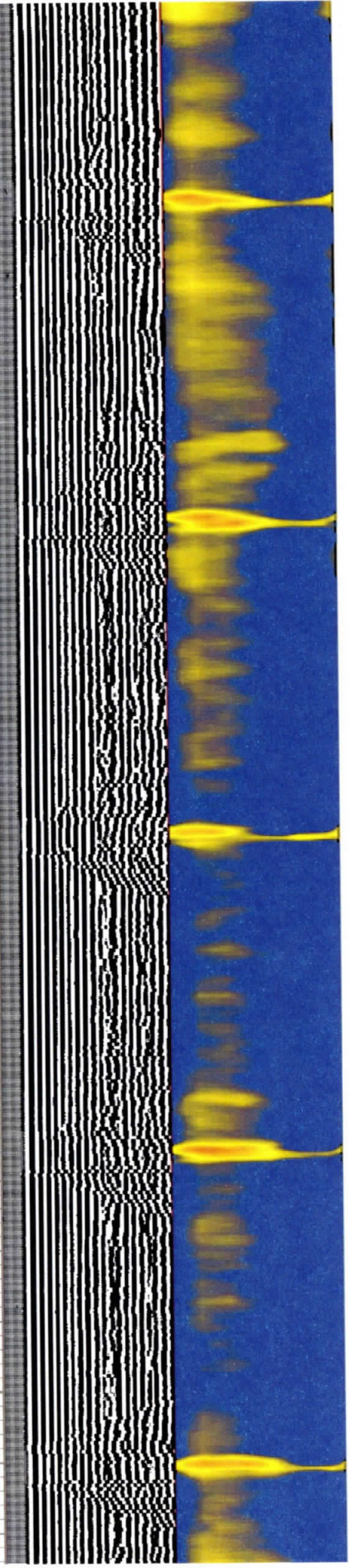
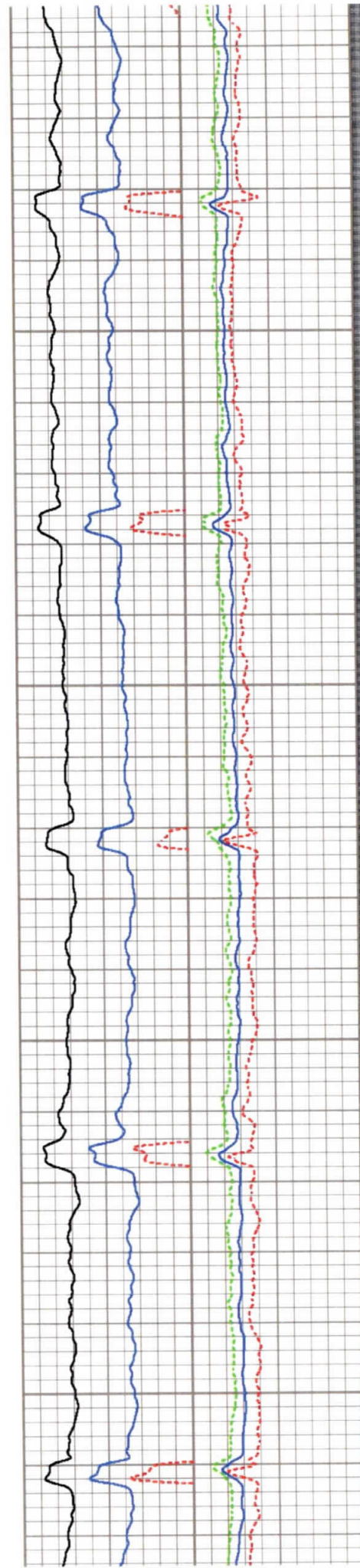


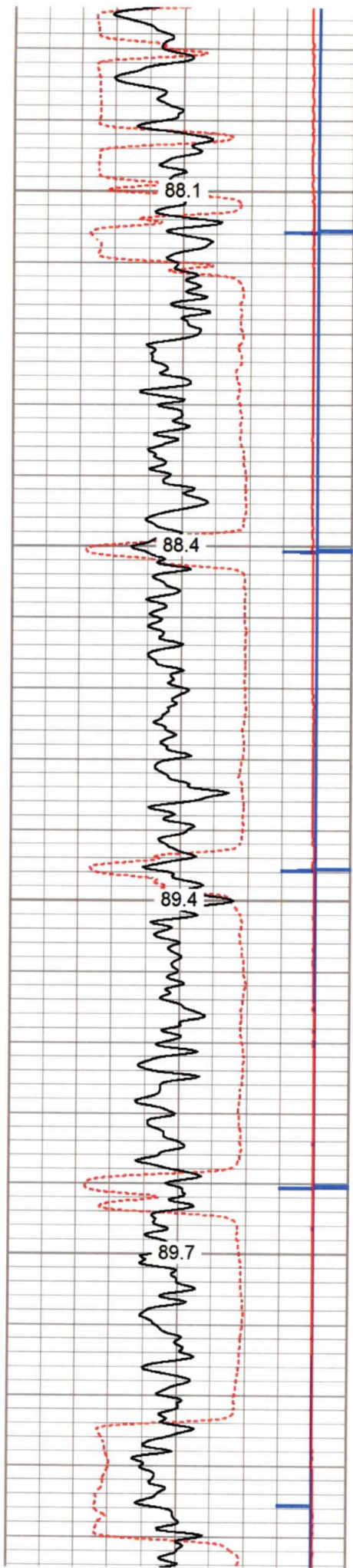
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3800

3850

3900



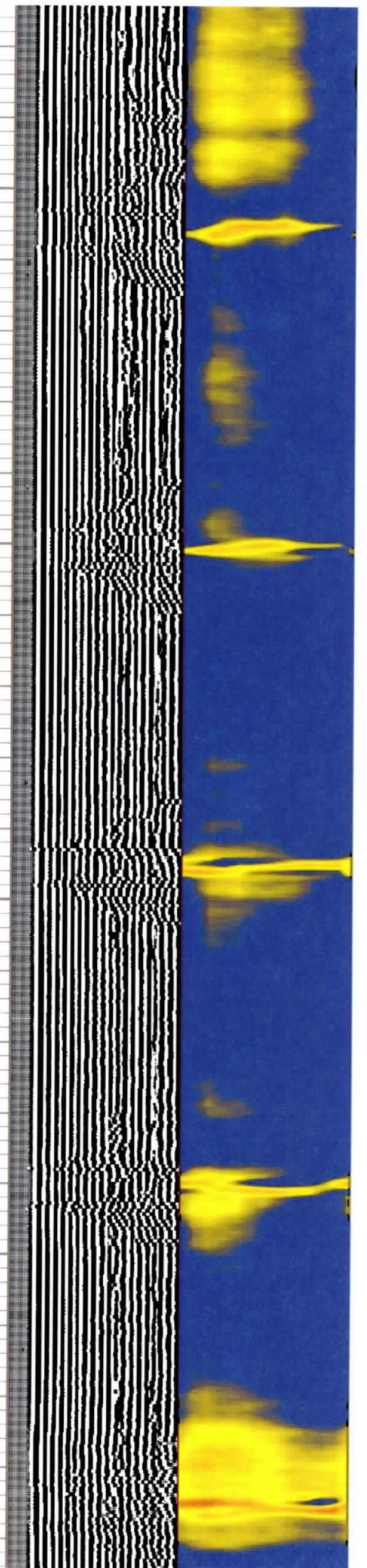
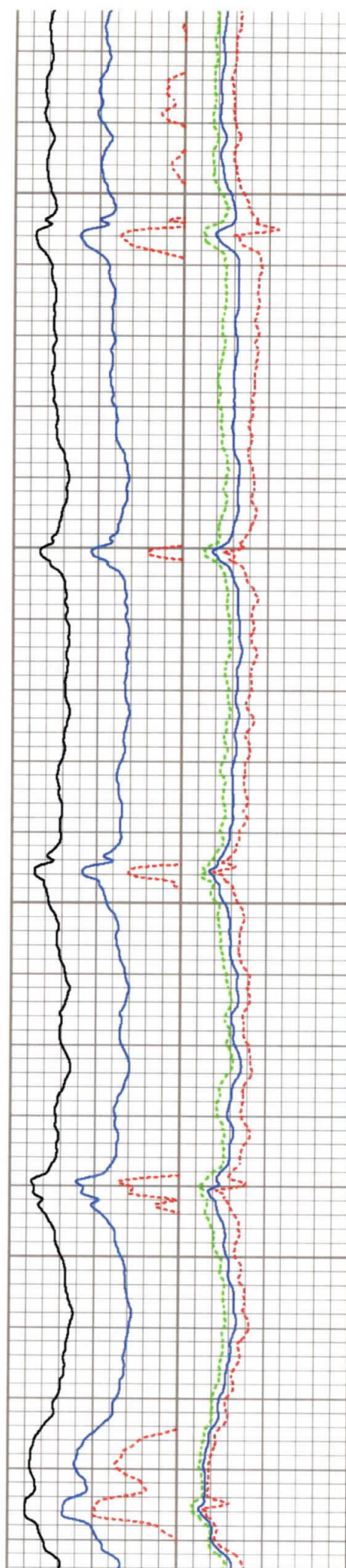


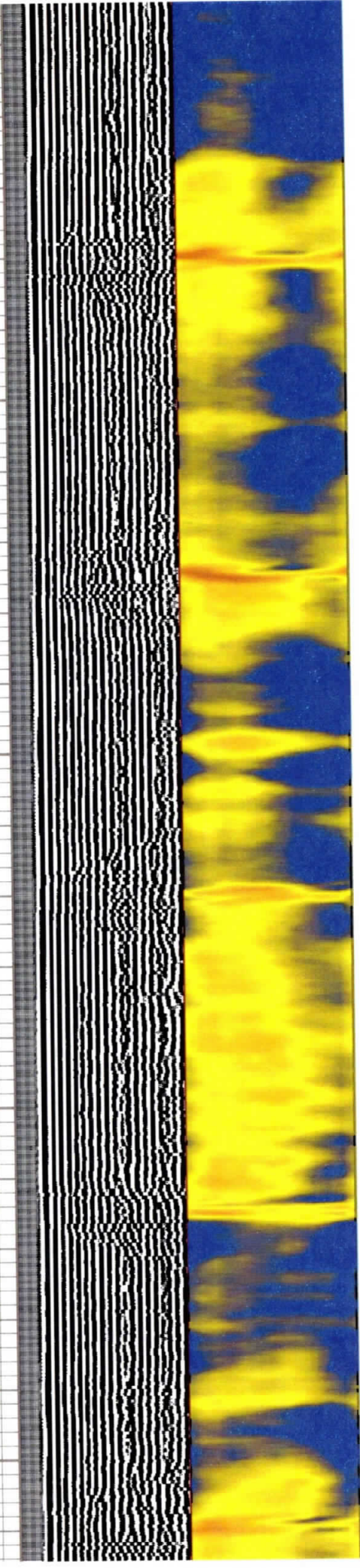
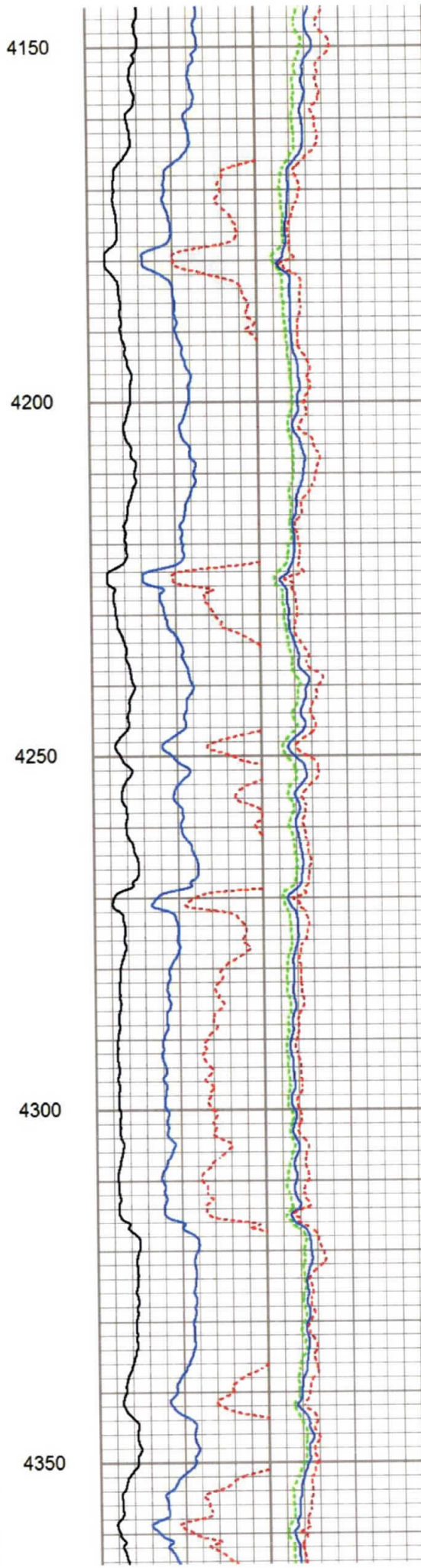
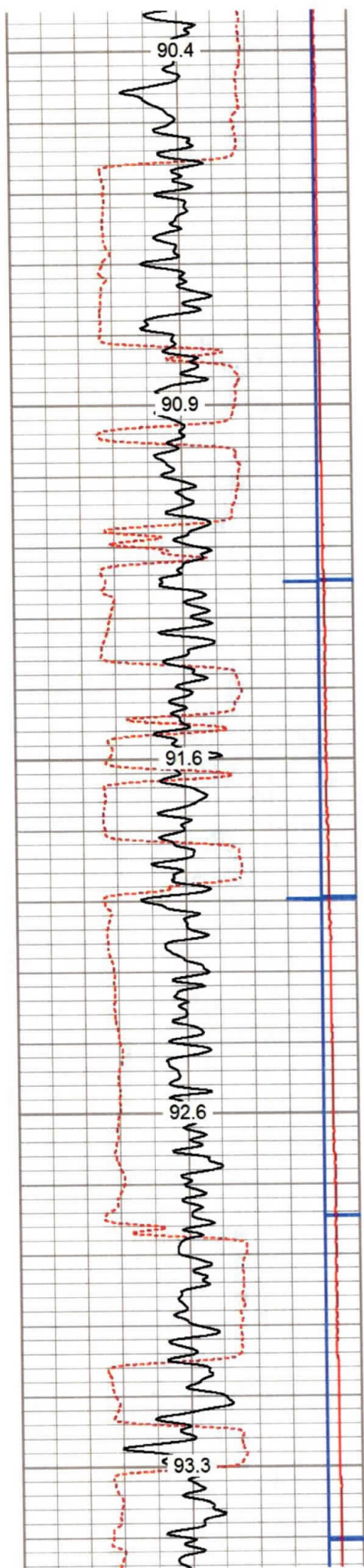
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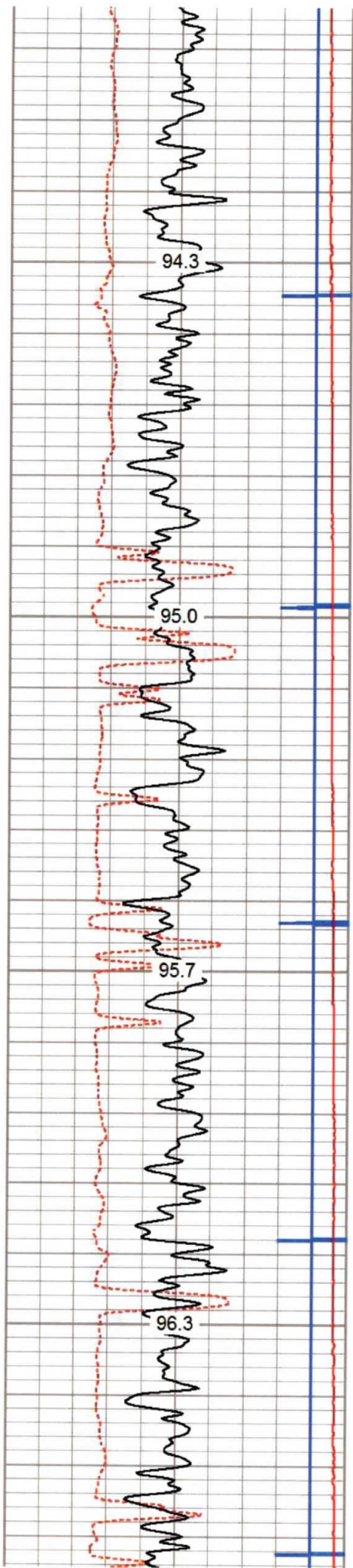
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4050

4100





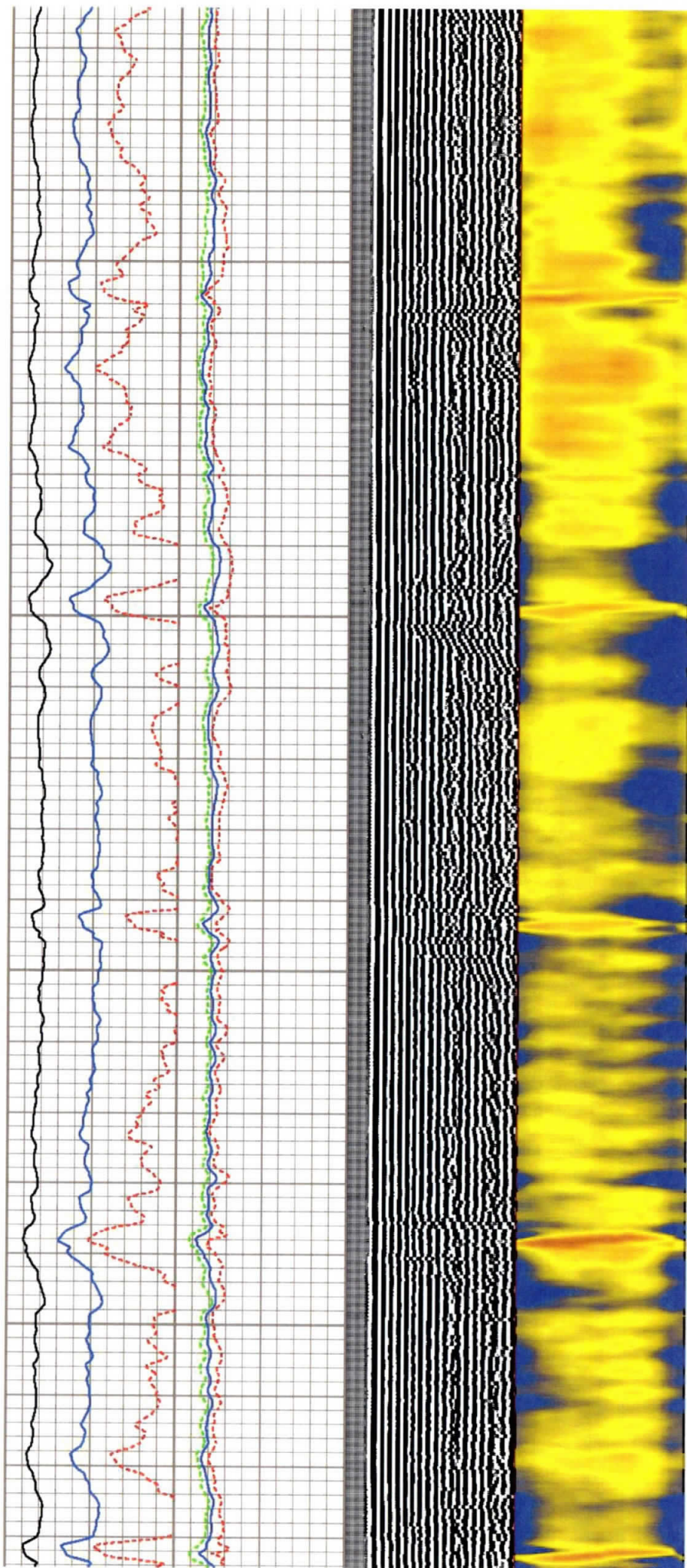


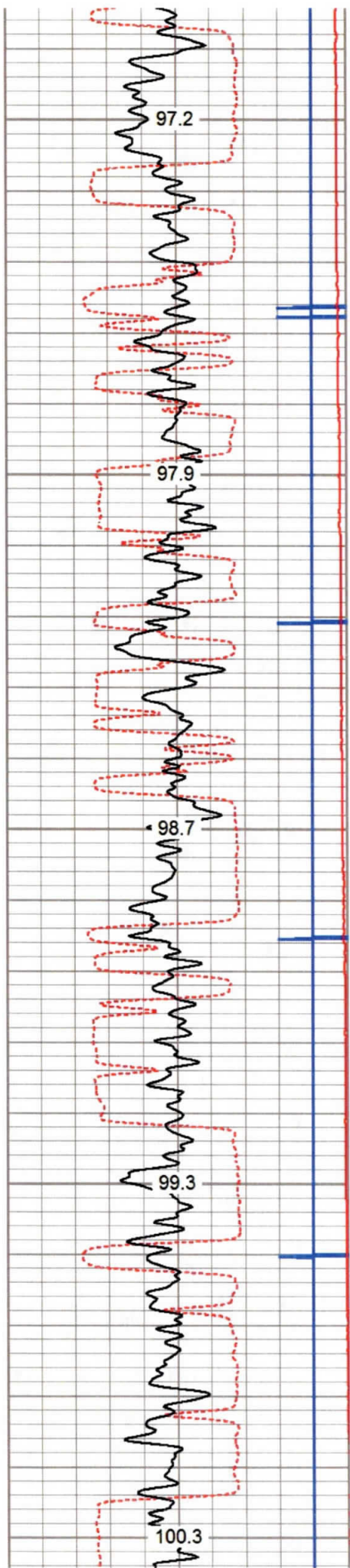
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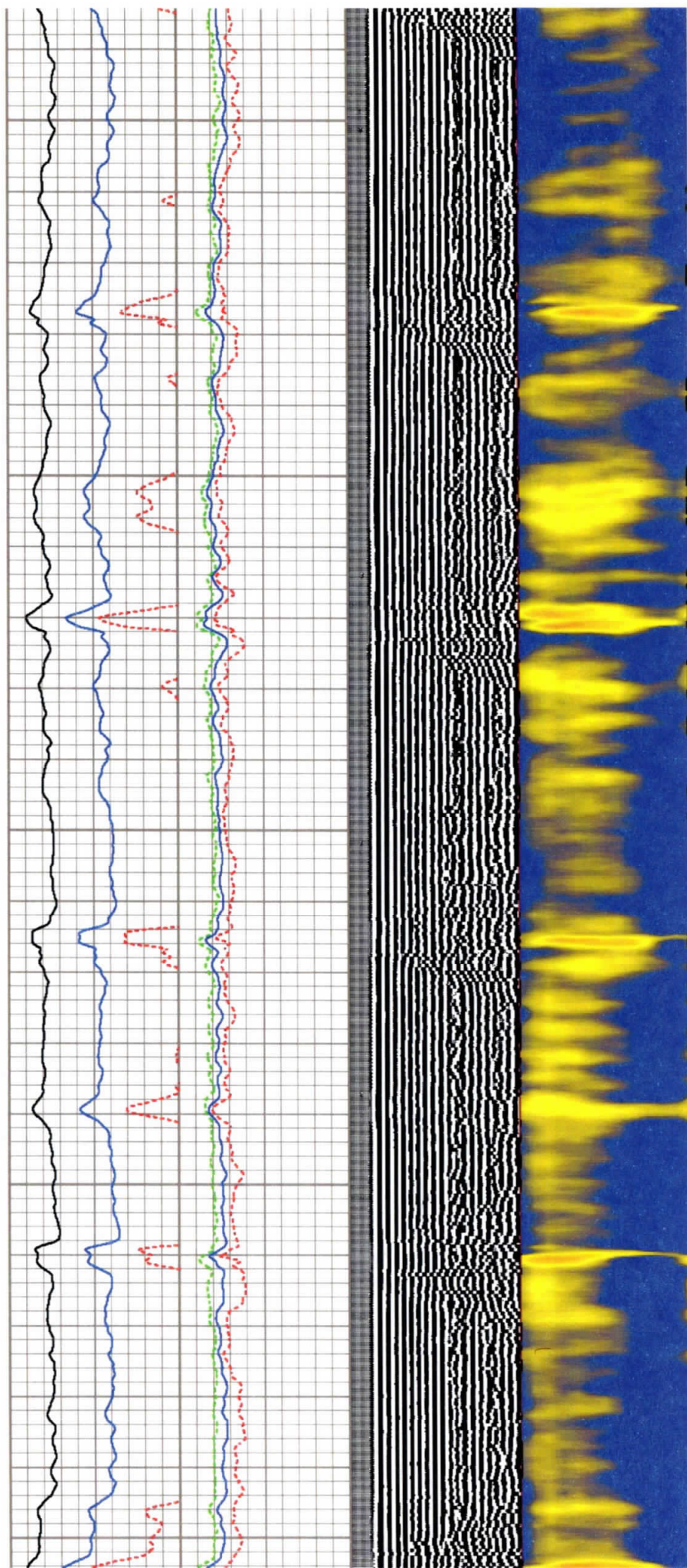
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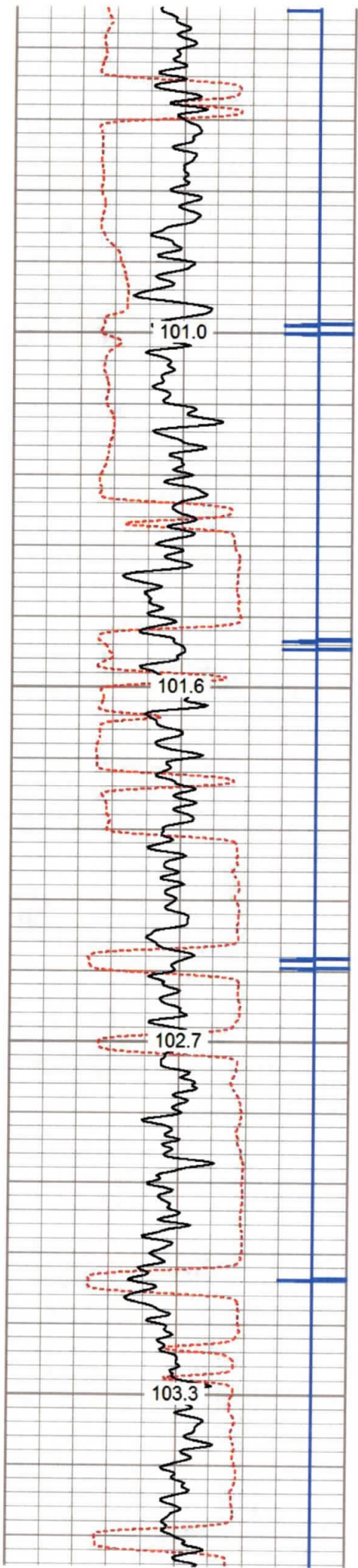
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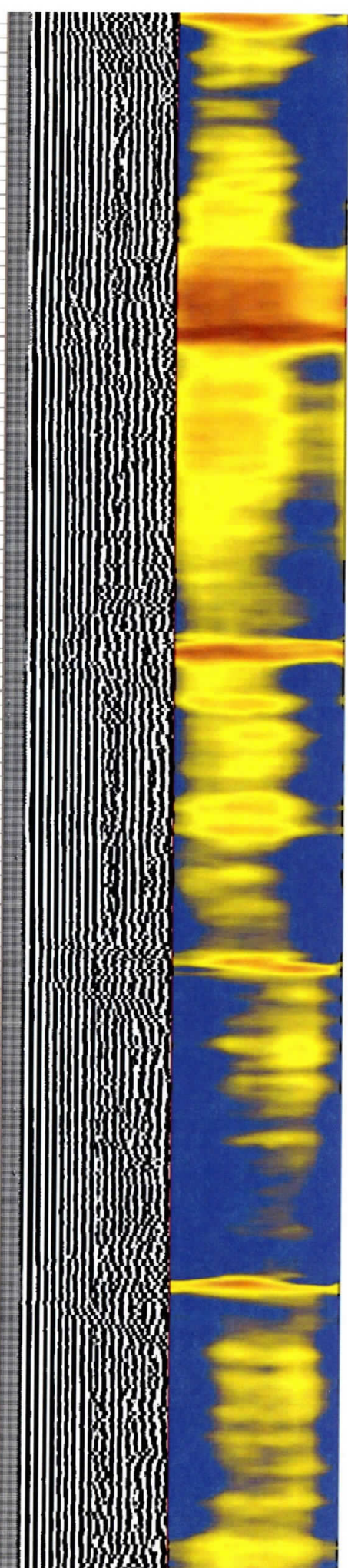
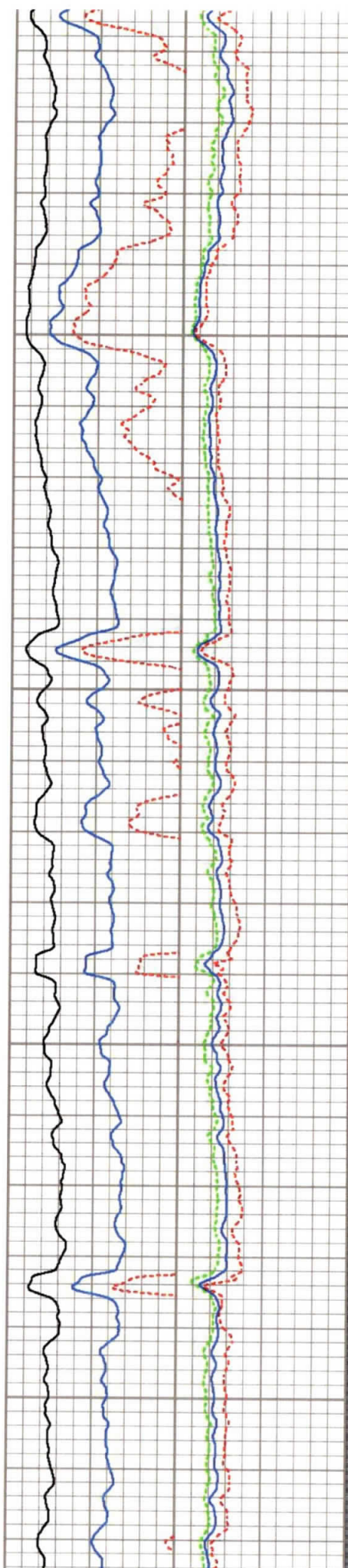


4600  
4650  
4700  
4750  
4800

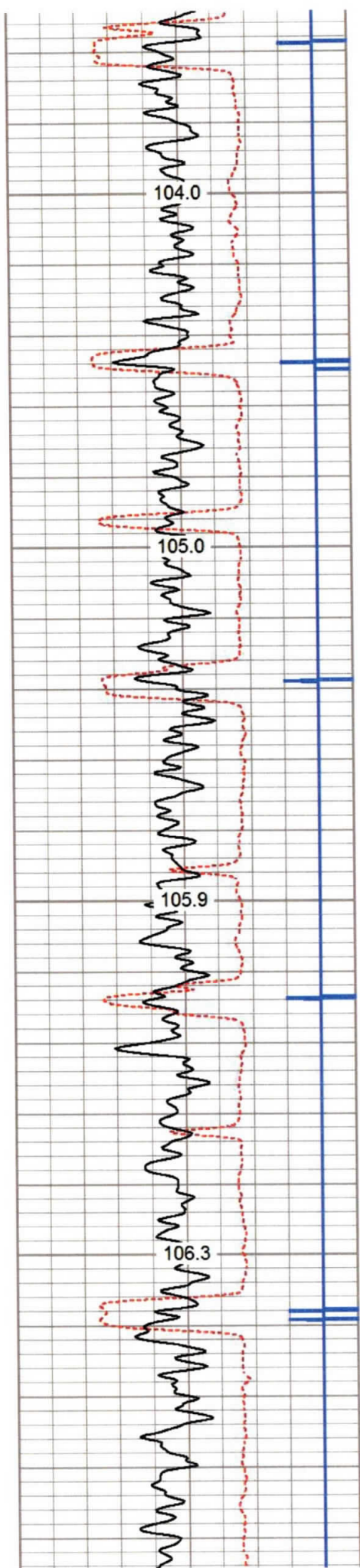




4850  
4900  
4950  
5000





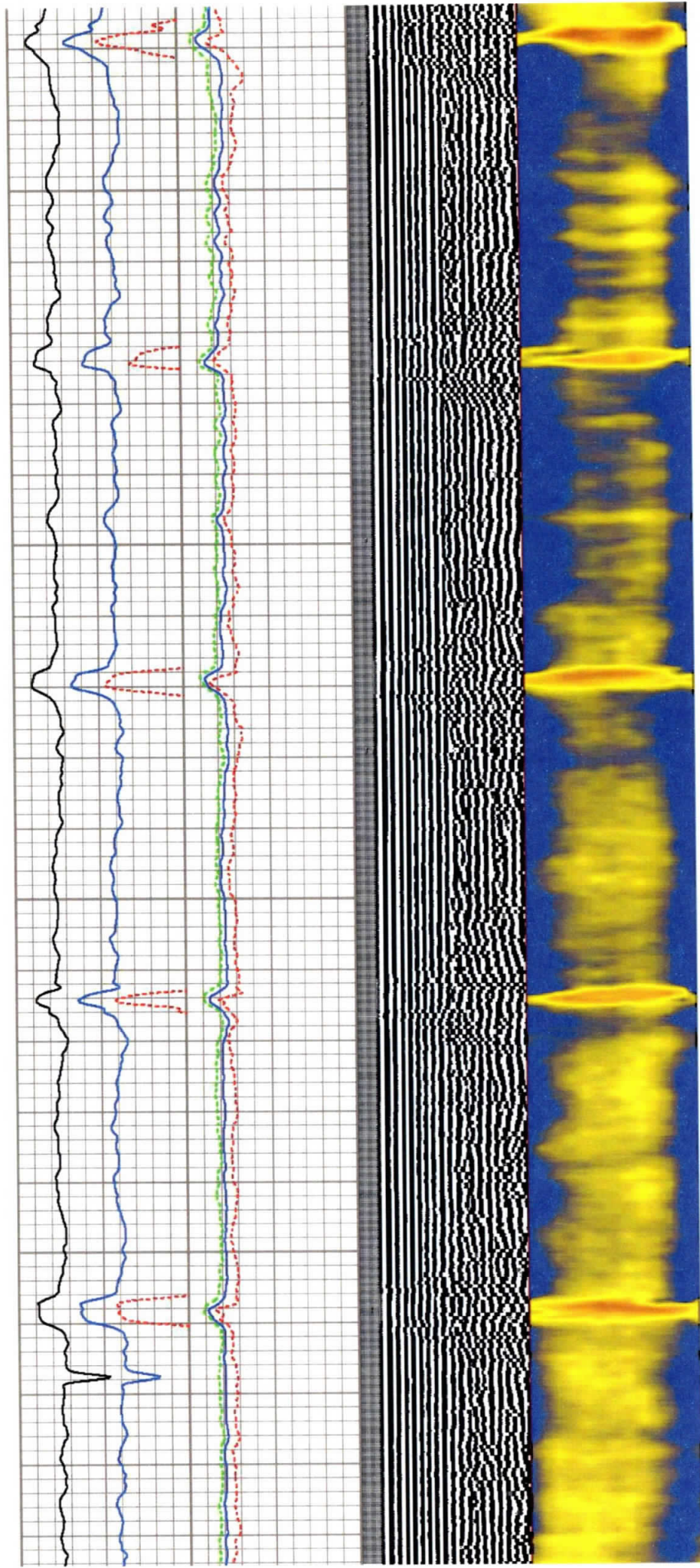


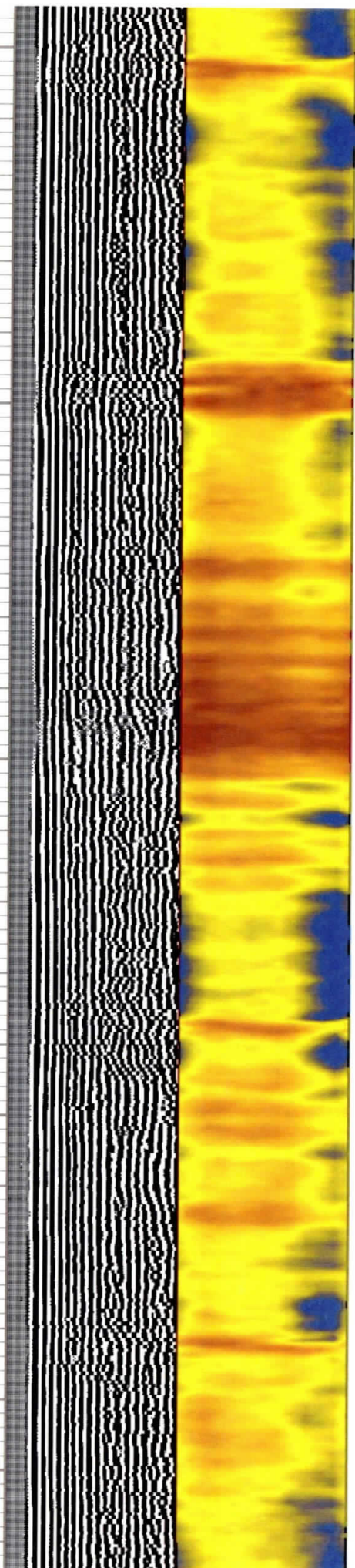
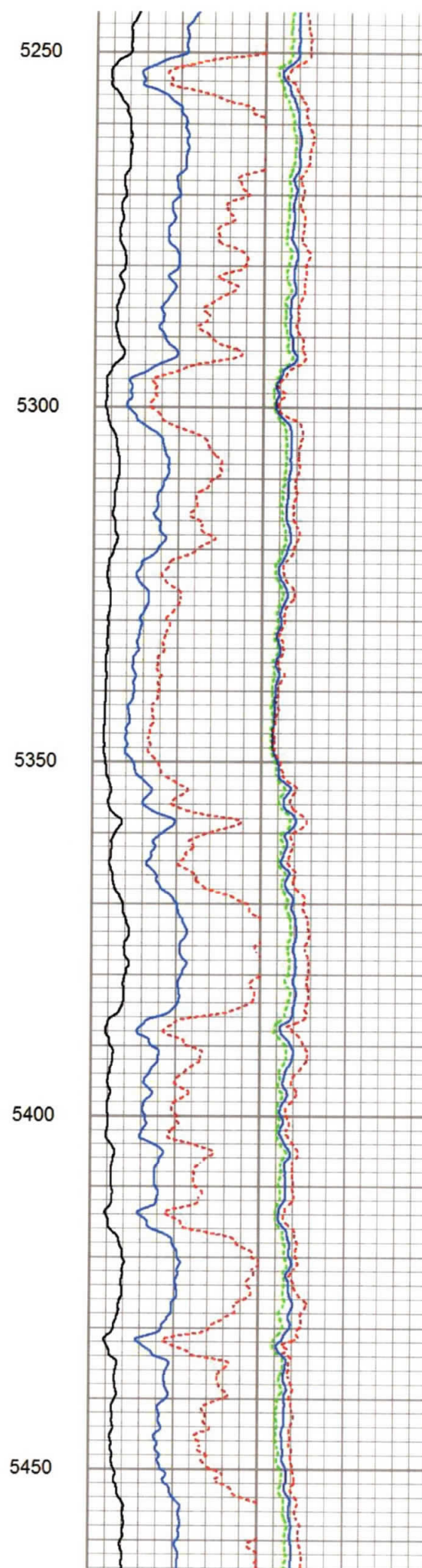
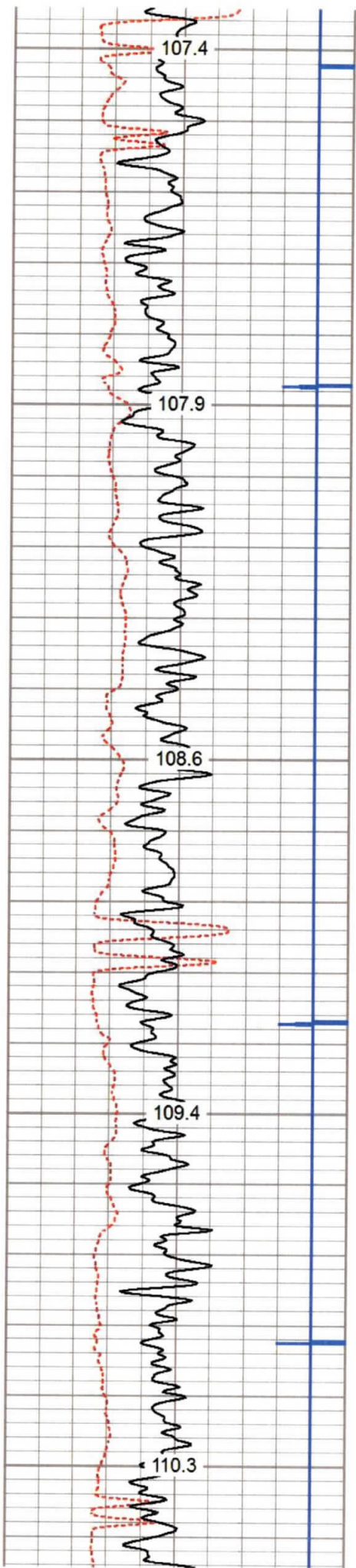
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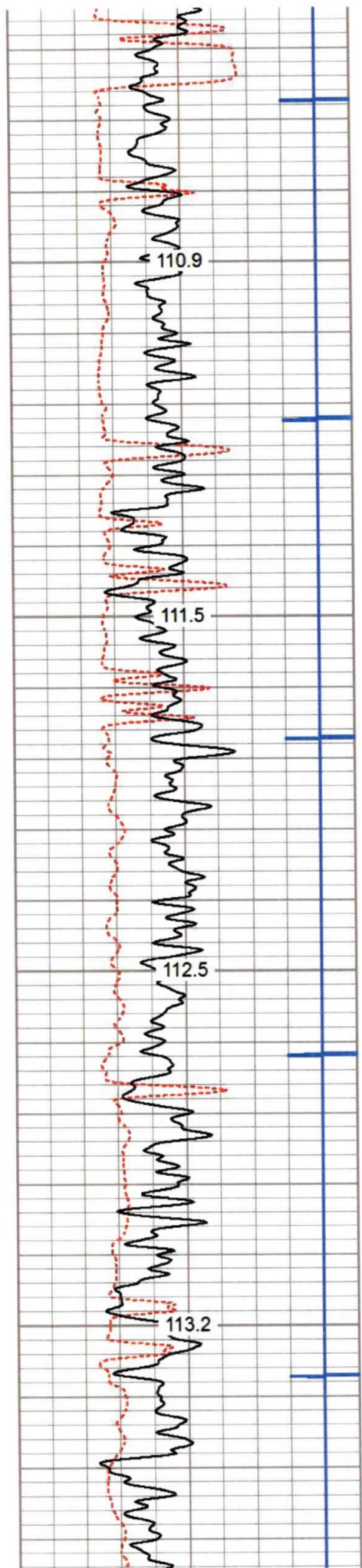
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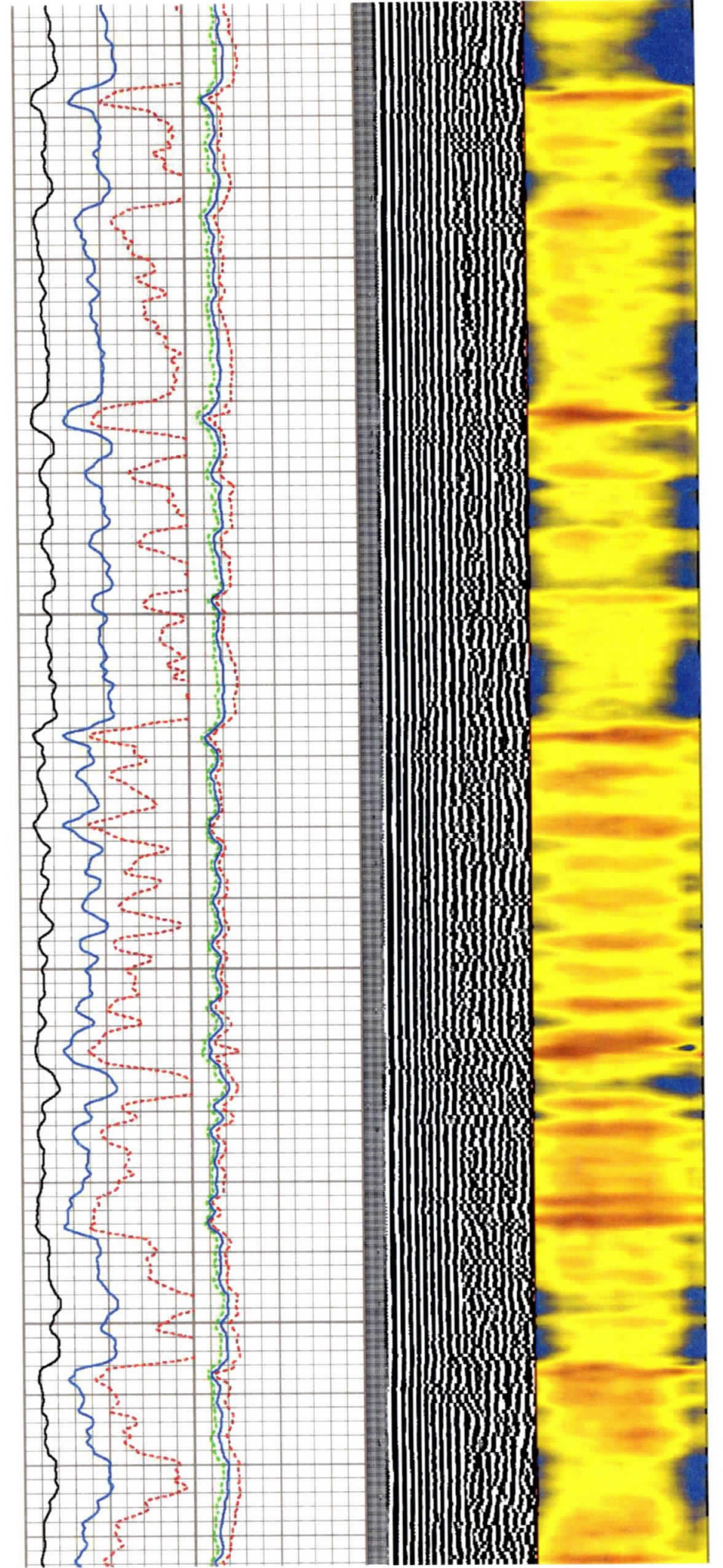
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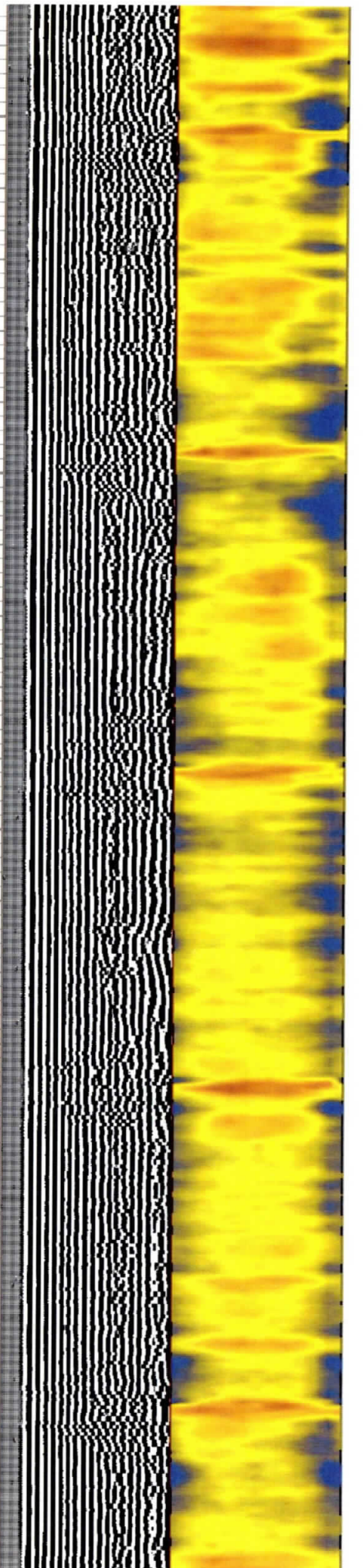
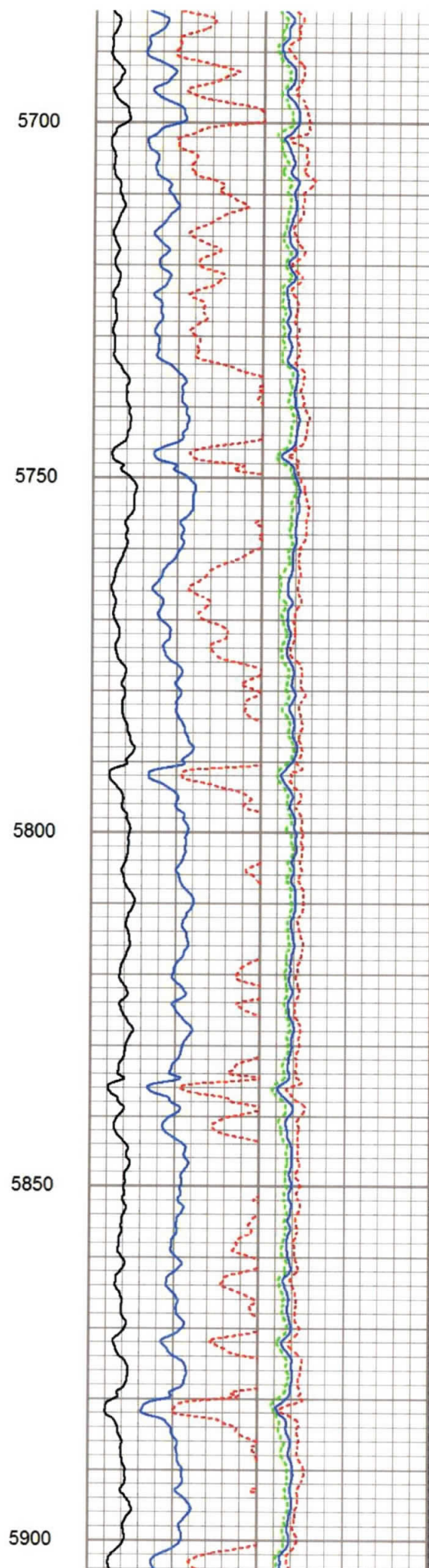
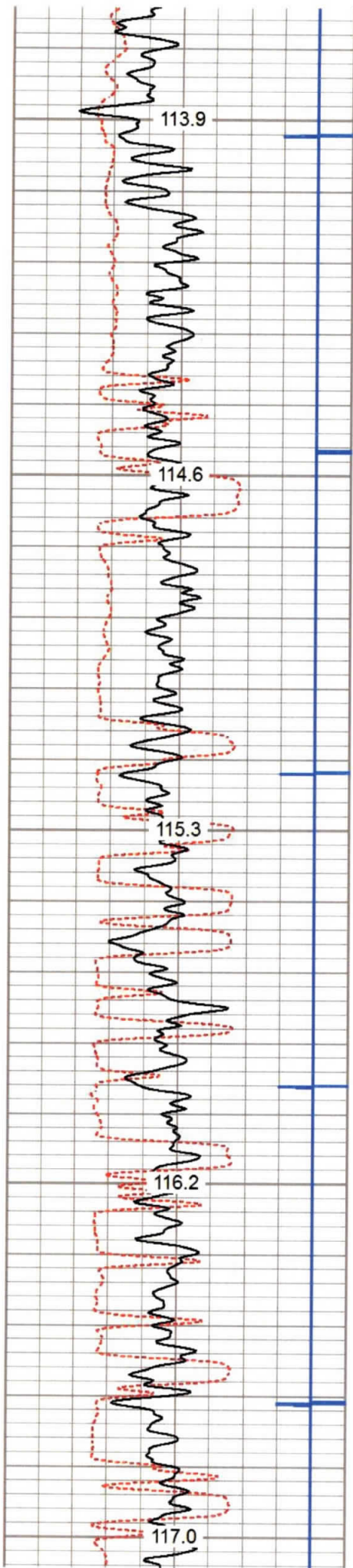


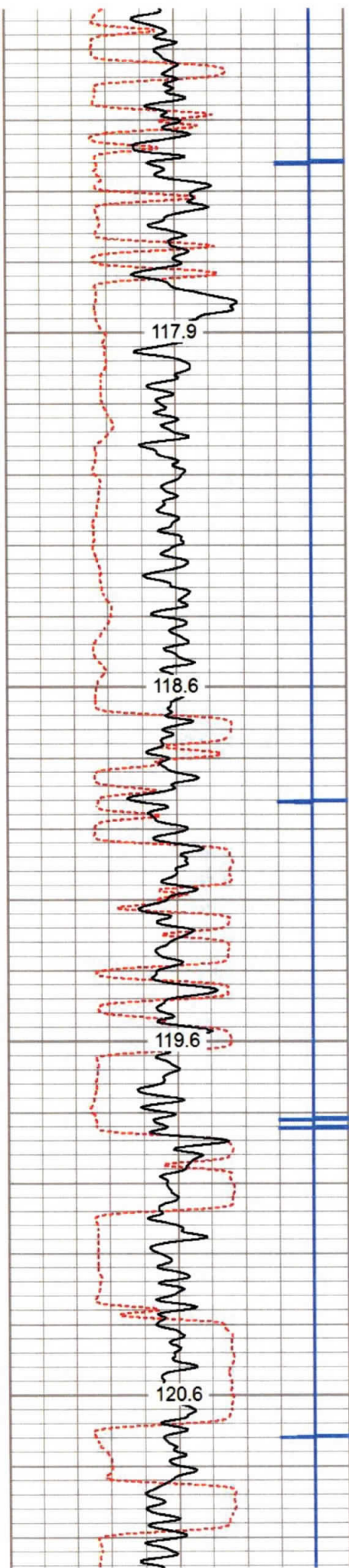




5500  
5550  
5600  
5650





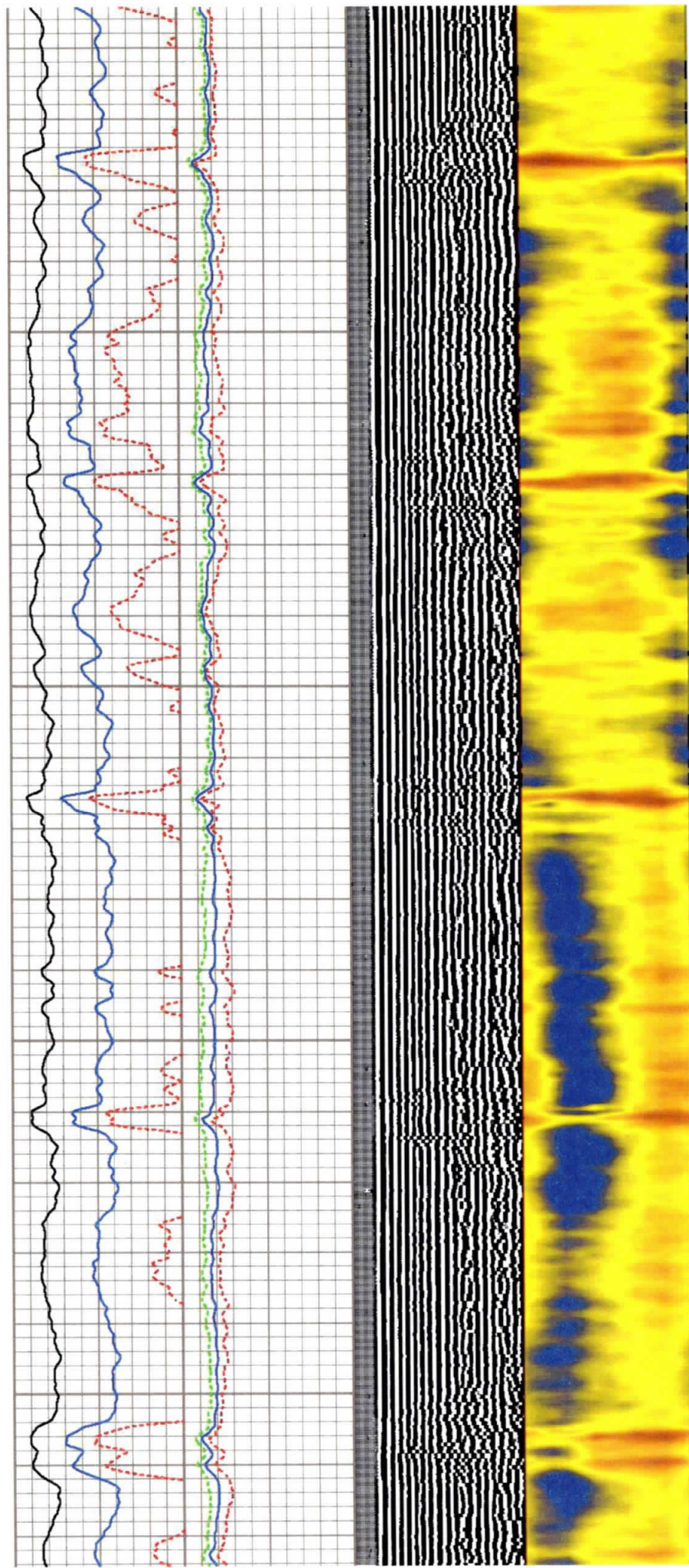


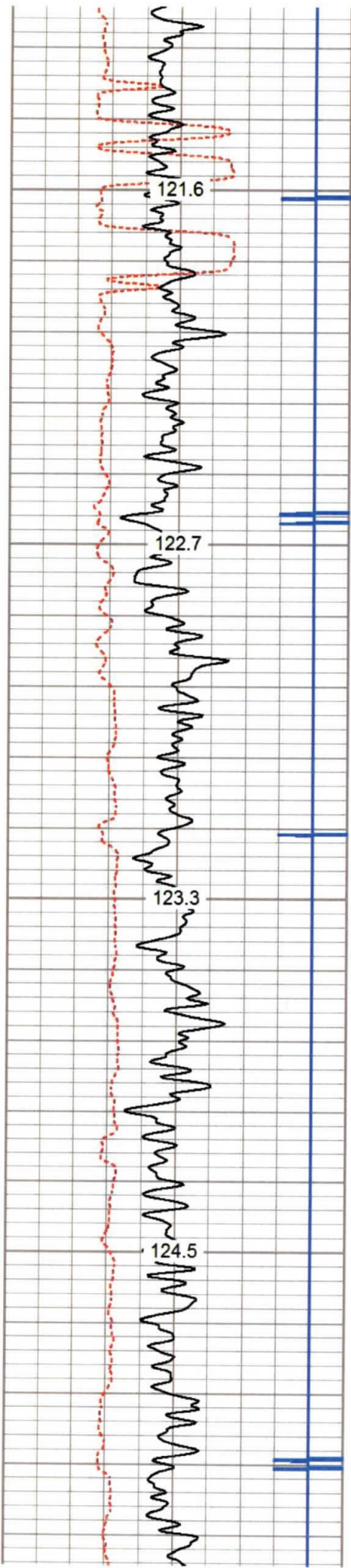
5950

6000

6050

6100



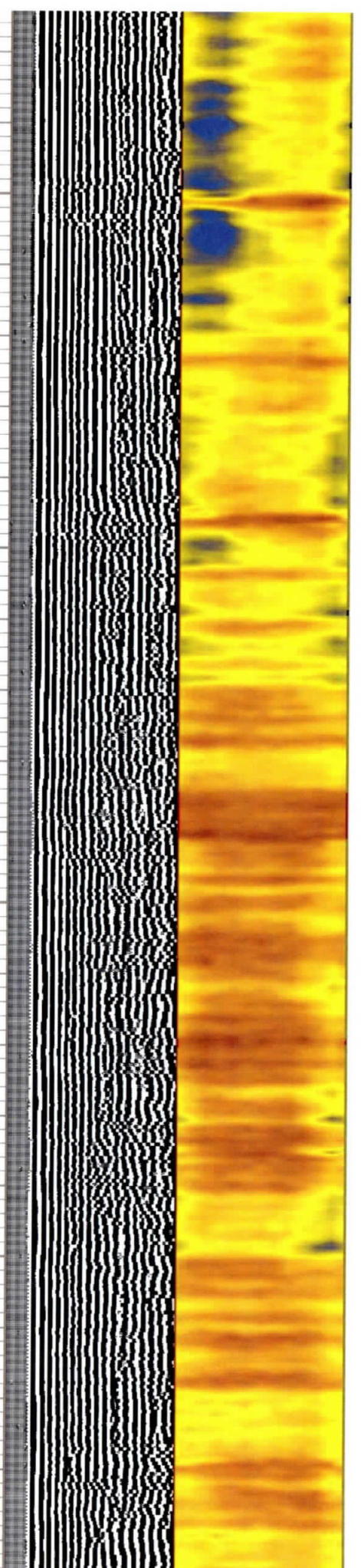
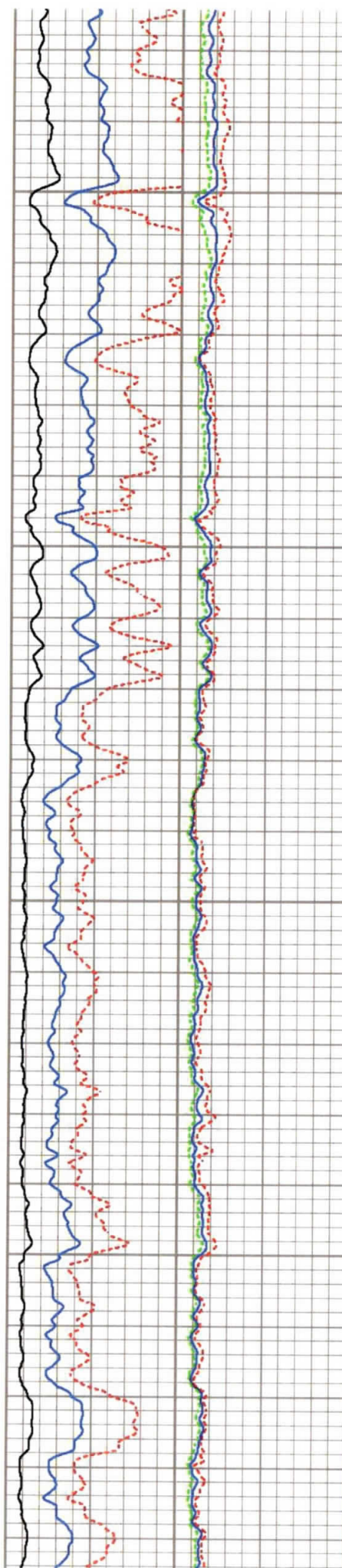


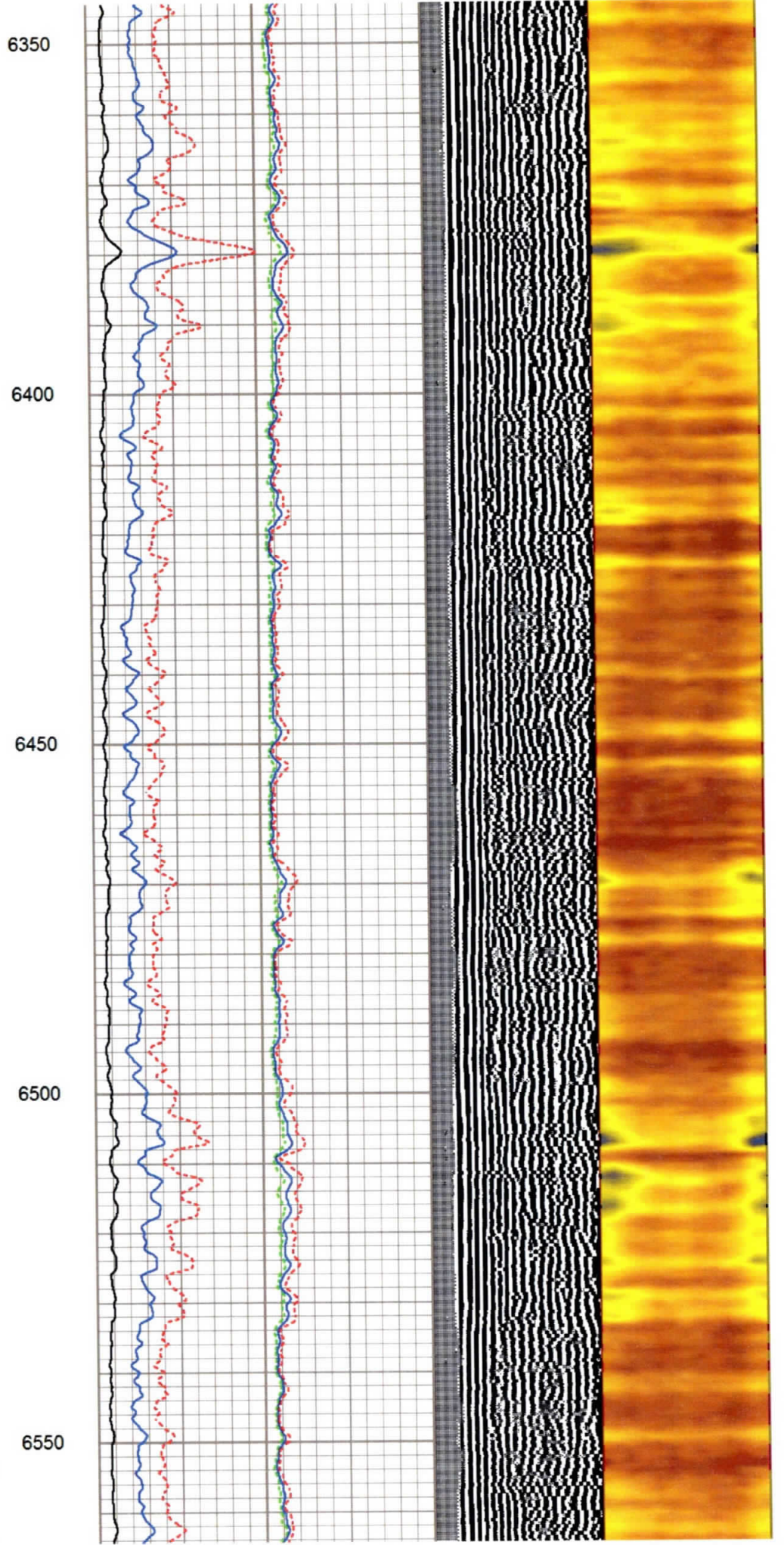
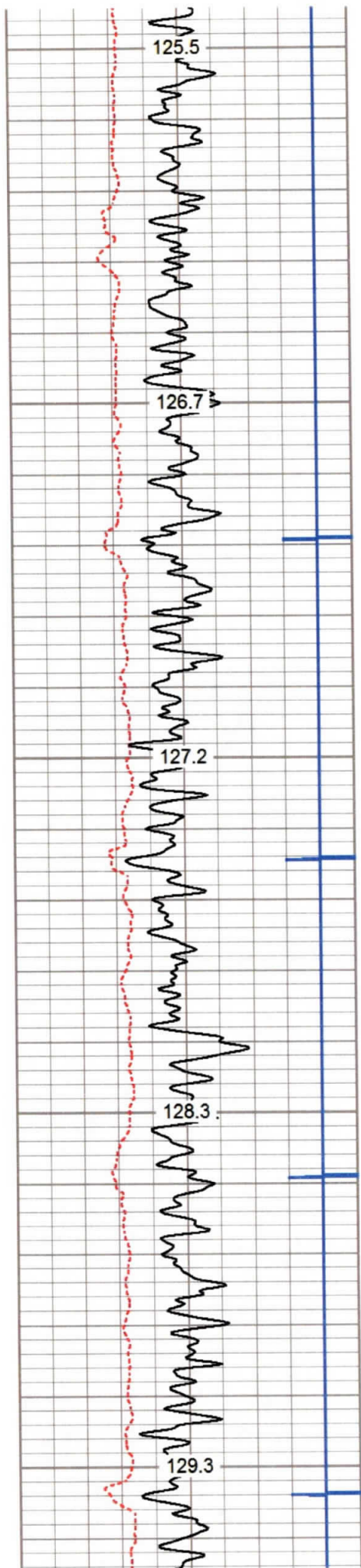
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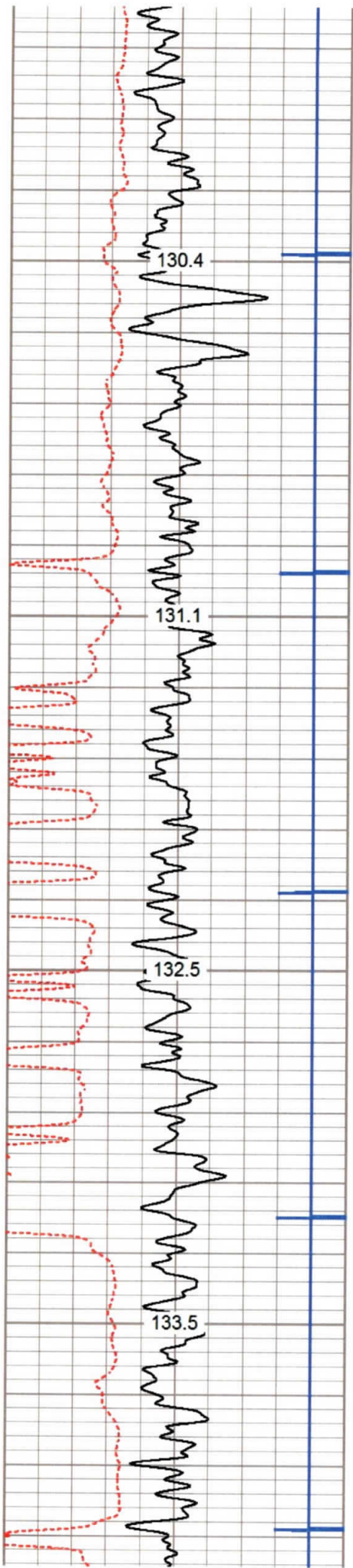
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6250

6300





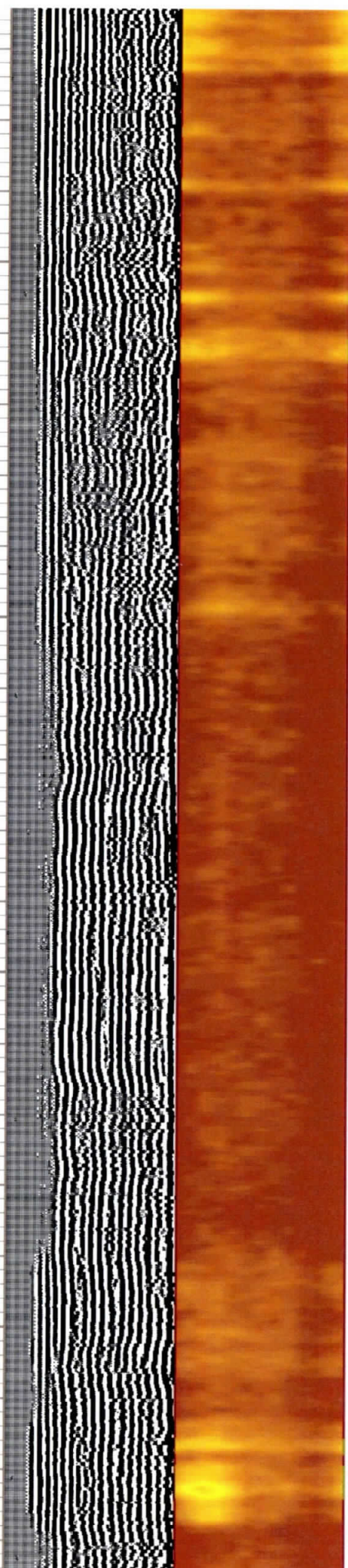
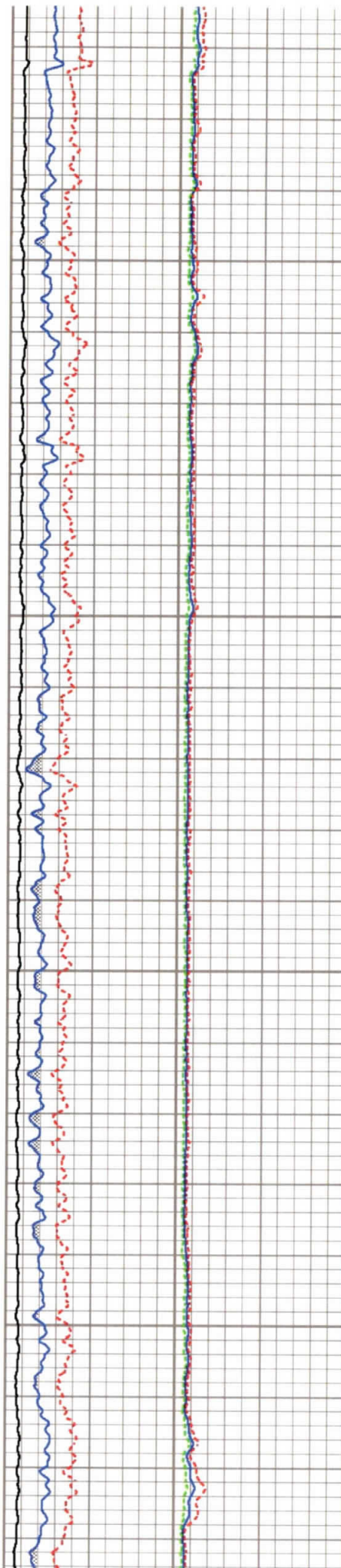


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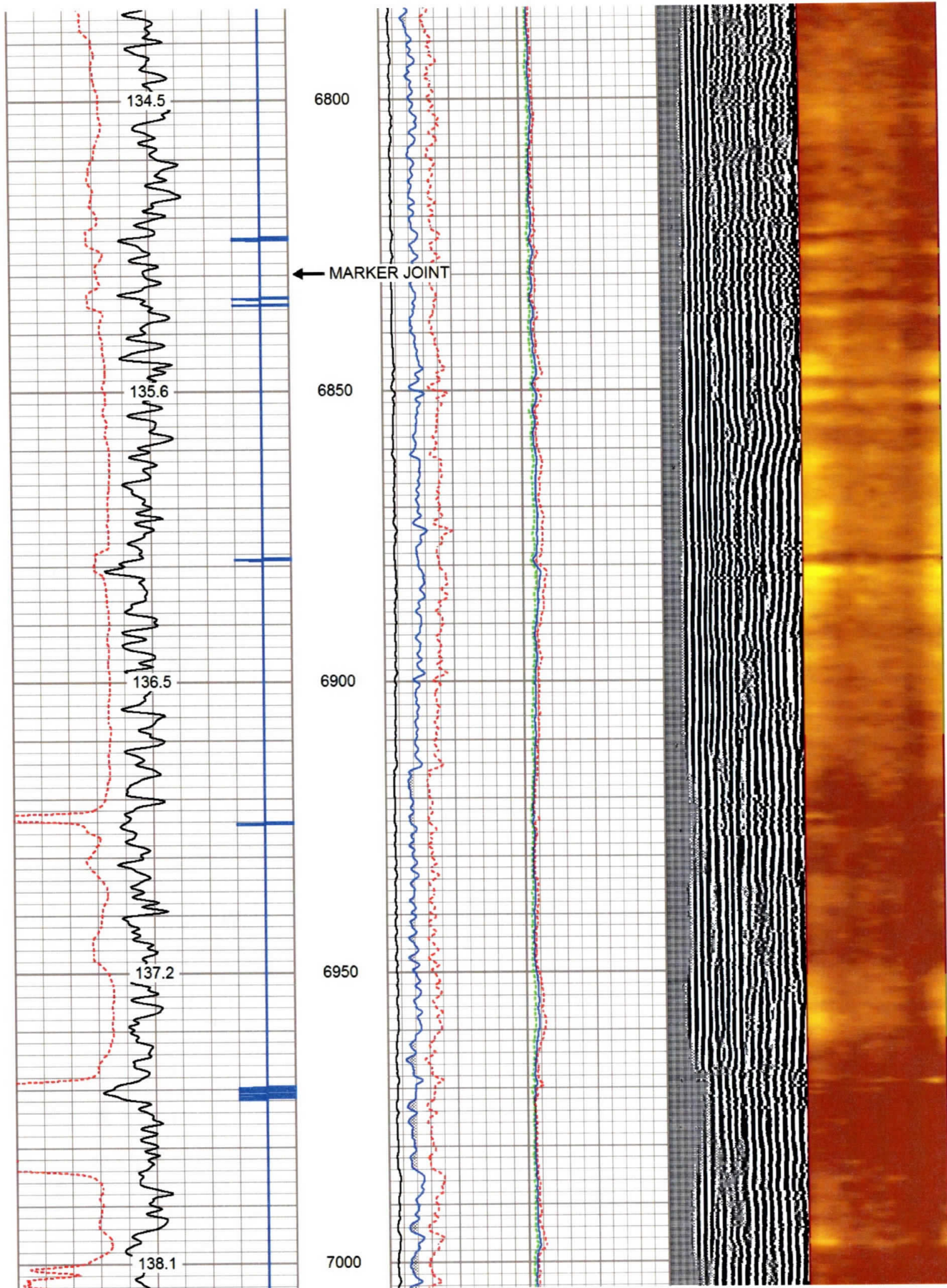
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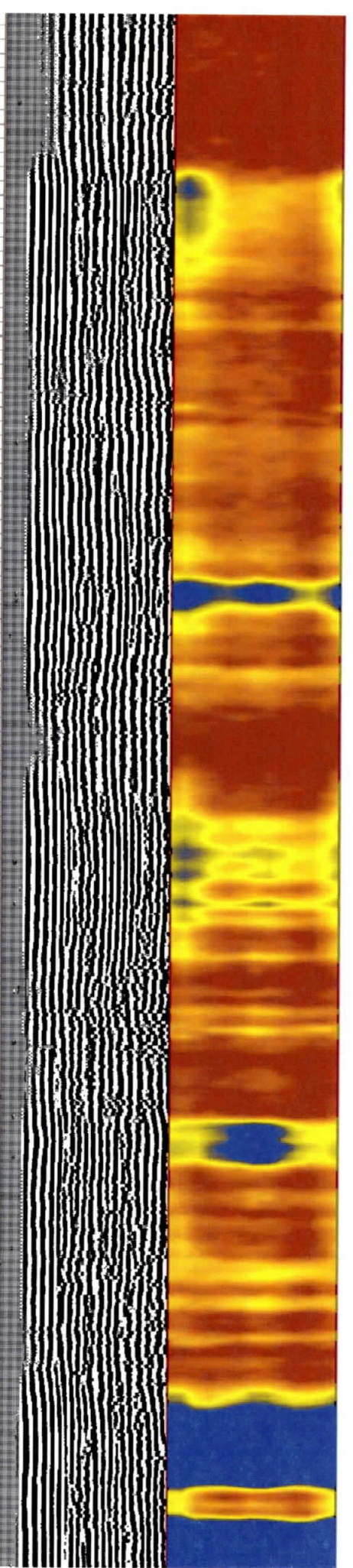
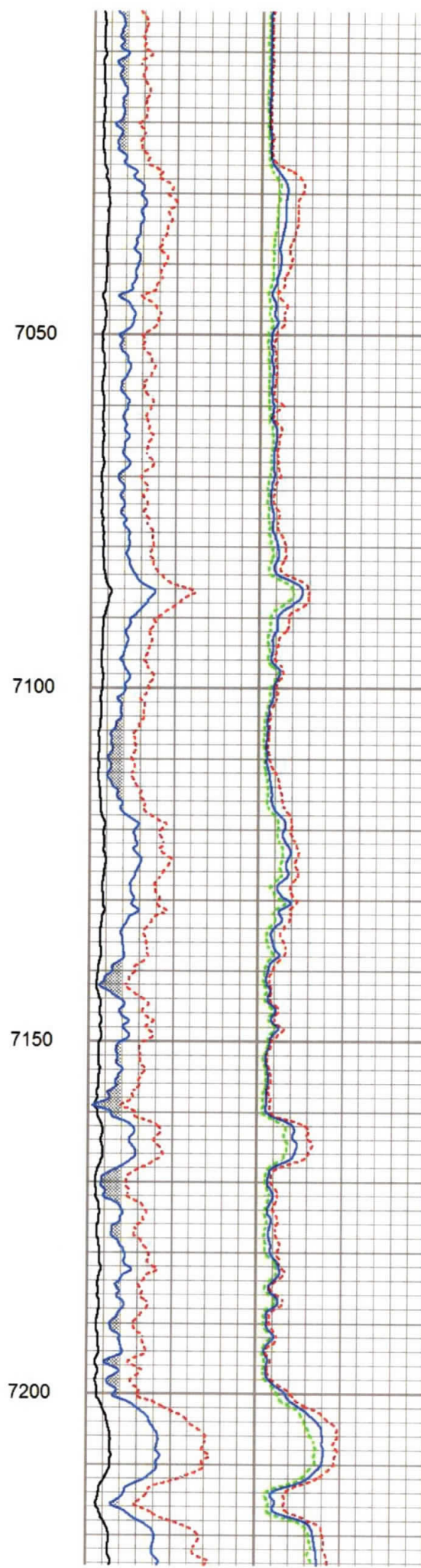
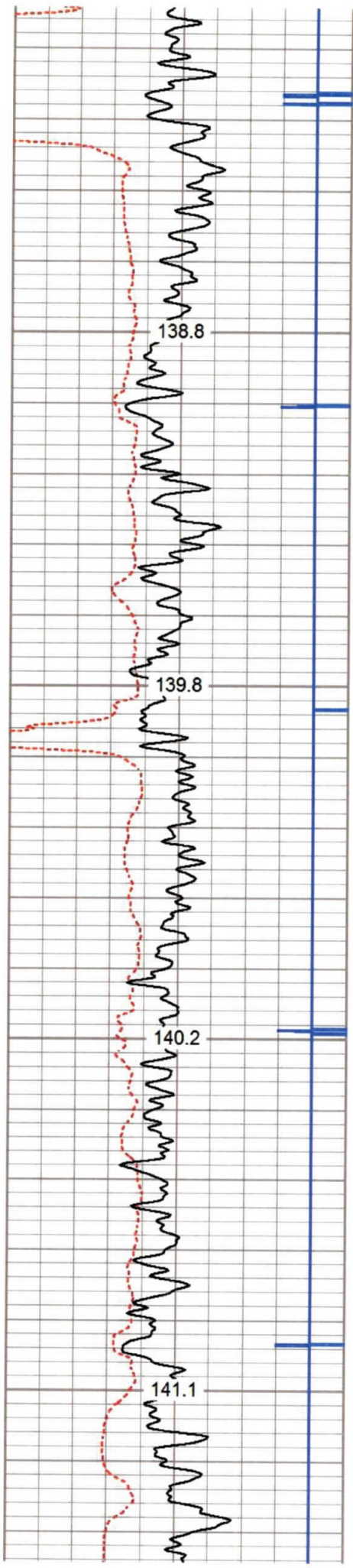
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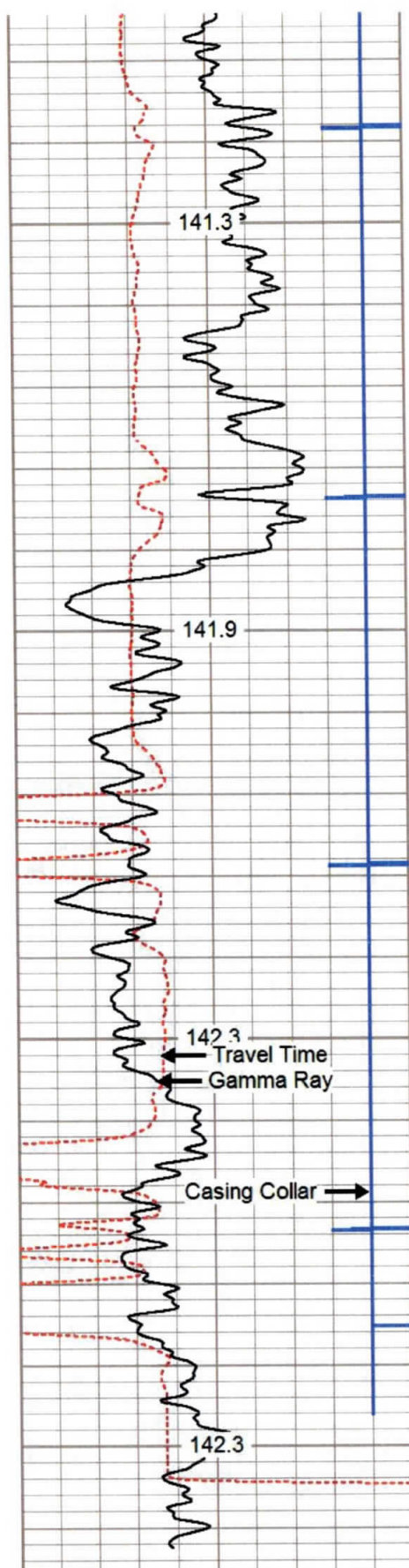
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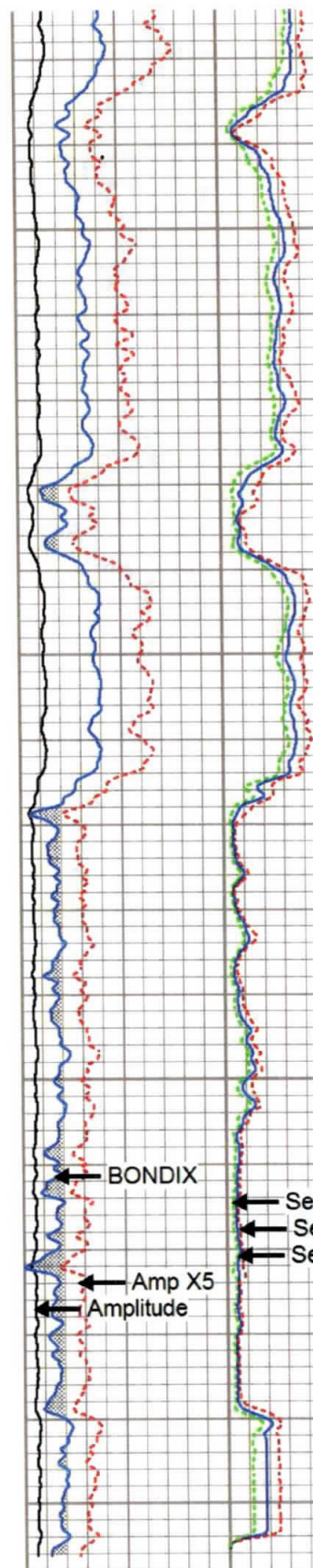






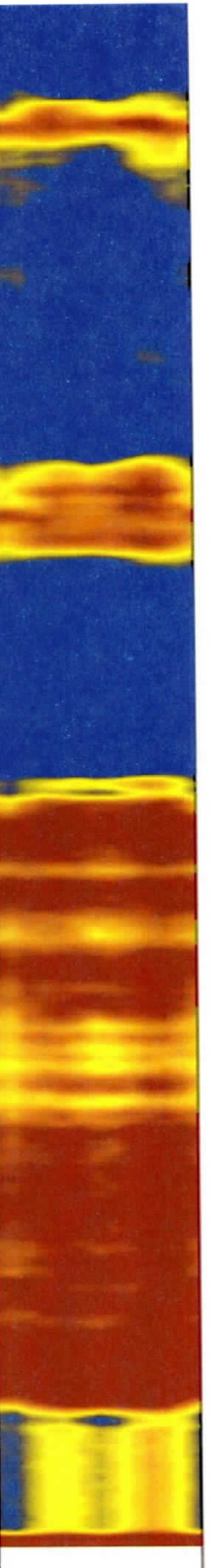
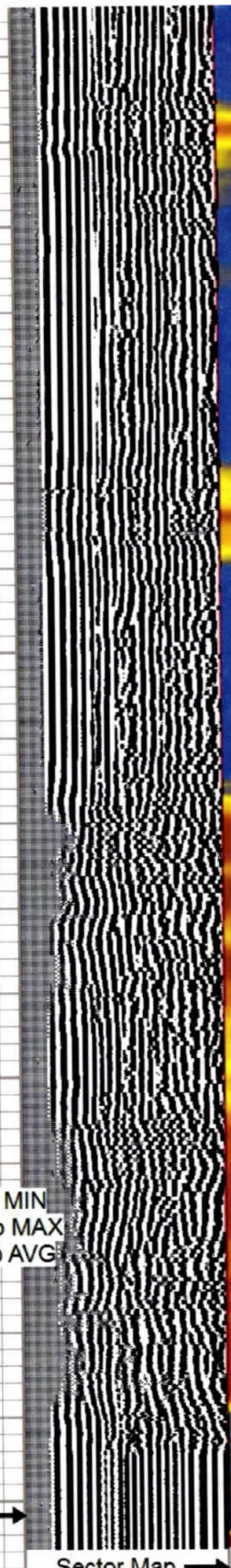


7250  
7300  
7350  
7400



Sector Amp MIN  
Sector Amp MAX  
Sector Amp AVG

VDL



Sector Map

280	Travel Time (usec)	180
9	Casing Collar	-1
0	Gamma Ray (GAPI)	180
0	TEMP (degF)	100
180	GR (GAPI)	360

0	Amplitude (mV)	100
0	Amp X5 (mV)	20
1	BONDIX	0

200	VDL (usec)	1200
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1 Sector Map 12

TEMP

(degF)



# REPEAT PASS

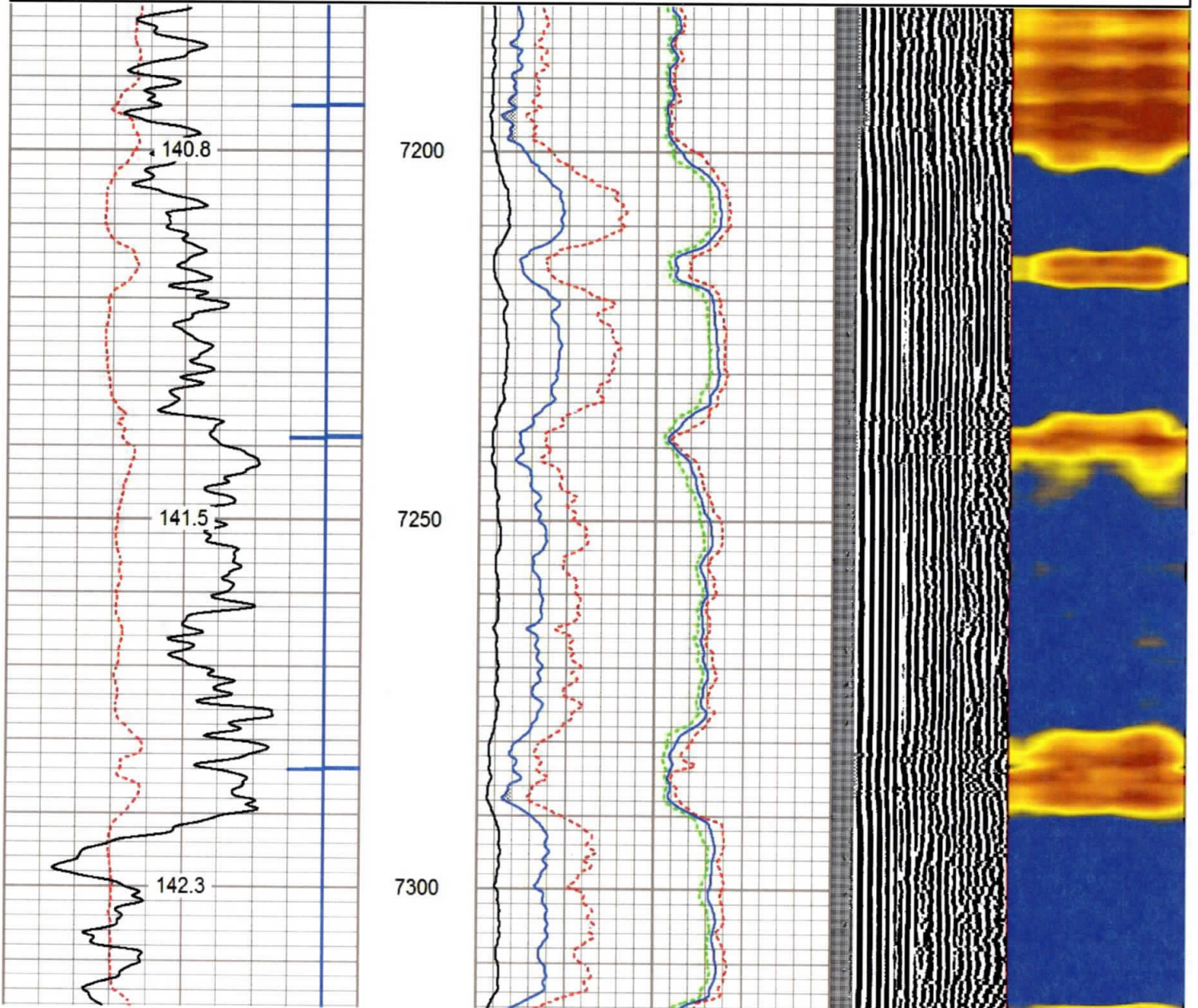
Database File e:\antero 10-23-19\telstar3h.db  
 Dataset Pathname pass6  
 Presentation Format antero1  
 Dataset Creation Thu Oct 24 13:08:12 2019  
 Charted by Depth in Feet scaled 1:240

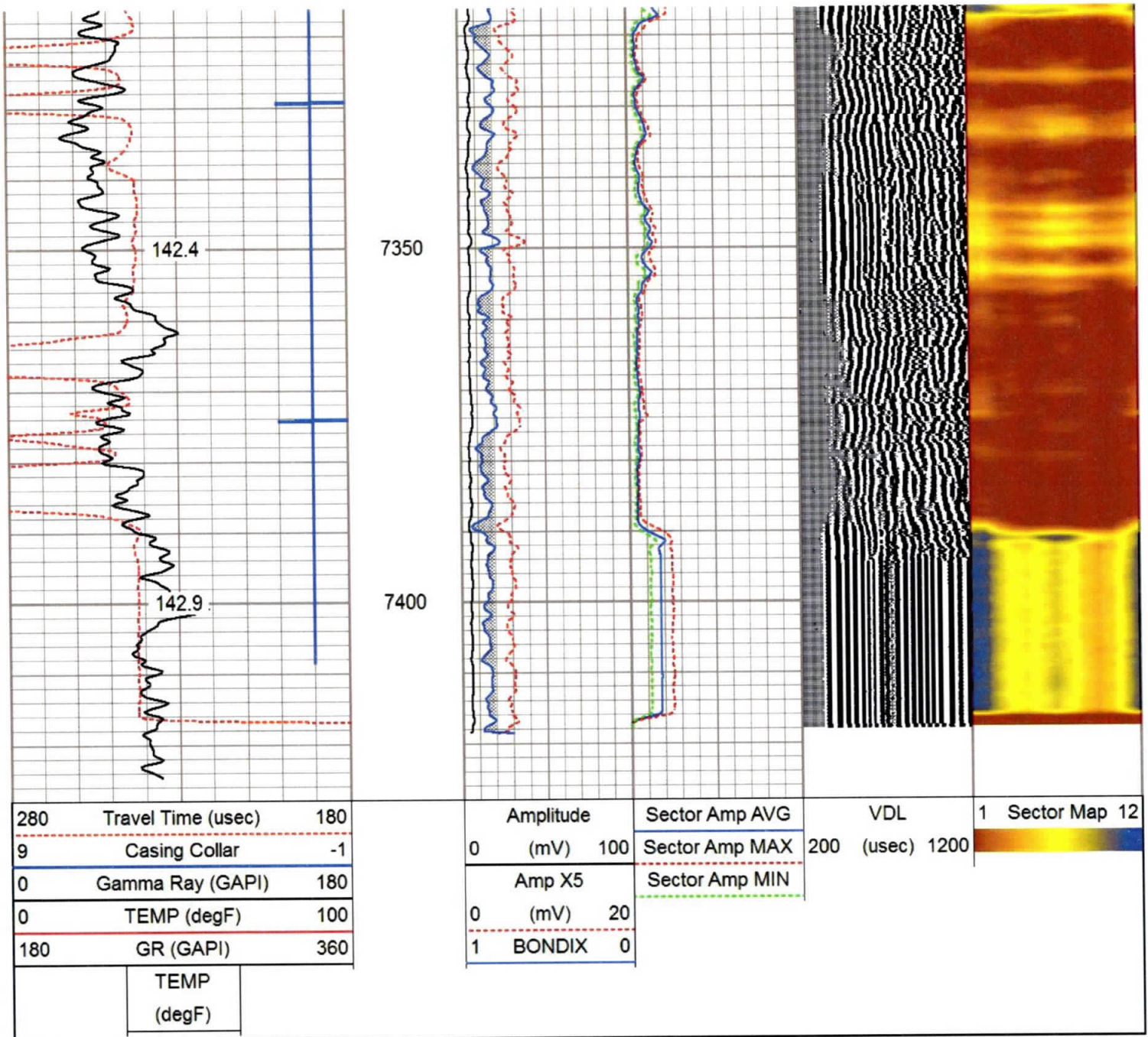
280	Travel Time (usec)	180
9	Casing Collar	-1
0	Gamma Ray (GAPI)	180
0	TEMP (degF)	100
180	GR (GAPI)	360

TEMP
(degF)

Amplitude	Sector Amp AVG
0 (mV) 100	Sector Amp MAX 200 (usec) 1200
Amp X5	Sector Amp MIN
0 (mV) 20	
1 BONDIX 0	

VDL 1 Sector Map 12





## Log Variables

DatabaseE:\ANTERO 10-23-19\telstar3h.db  
Dataset field/well/run1/pass7/\_vars\_

### Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL
TEMP	in 7.875	degF 100	in 5.5	in 0	lb/ft 20	mV 71.9
MINAMPL	MINATTN	PERFS	PPT	SRFTEMP	TDEPTH	
mV 3.5	db/ft 0.8	No	uSec 219	degF 0	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 : Casina Weiaht

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

Calibration Report

Database File E:\ANTERO 10-23-19\telstar3h.db  
 Dataset Pathname pass7  
 Dataset Creation Thu Oct 24 13:49:37 2019

Gamma Ray Calibration Report

Serial Number: 0111  
 Tool Model: Tek-Co 2 3/4  
 Performed: Thu Oct 24 08:41:06 2019  
 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: T12\_01  
 Tool Model: Tek12  
 Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 57.275 ft

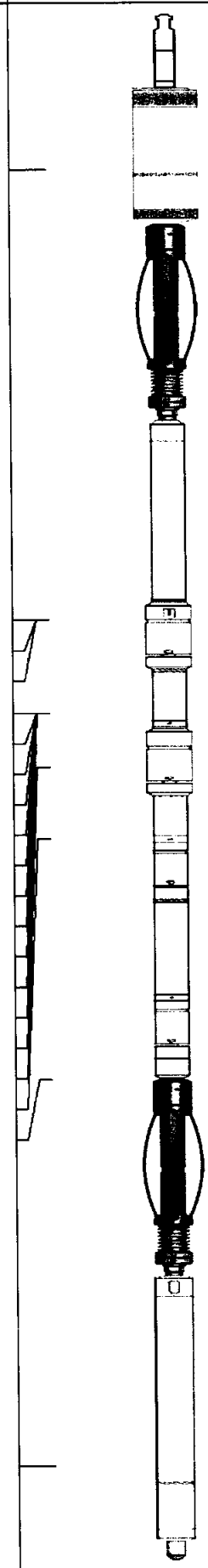
Master Calibration, performed Thu Oct 24 13:31:44 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.006	0.919	3.500	71.921	50.880	5.245
CAL	0.630	0.627				
5'	-0.001	1.035	3.500	71.921	40.761	4.381
SUM						
S1	0.000	1.103	0.000	100.000	56.543	-0.001
S2	0.000	1.088	0.000	100.000	61.007	-0.001
S3	0.000	1.122	0.000	100.000	64.737	-0.001
S4	0.000	1.089	0.000	100.000	72.448	-0.001
S5	0.000	1.045	0.000	100.000	71.838	-0.001
S6	0.000	0.965	0.000	100.000	74.574	-0.001
S7	0.000	0.897	0.000	100.000	76.604	-0.001
S8	0.000	0.821	0.000	100.000	77.230	-0.001
S9	0.000	0.802	0.000	100.000	76.037	-0.001
S10	0.000	0.932	0.000	100.000	63.640	-0.001
S11	0.000	1.003	0.000	100.000	56.910	-0.001
S12	0.000	1.091	0.000	100.000	55.333	-0.001

Temperature Calibration Report

Serial Number: T12\_01  
 Tool Model: Tek12  
 Performed: Fri Oct 22 17:21:06 2010

	Reference	Reading
Low Reference:	0.00 degF	0.00 usec
High Reference:	1.00 degF	1.00 usec
Gain:	0.33	
Offset:	0.00	
Delta Spacing	2	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
			Titan-1.4375 1 7/16 Titan Type II Cable Head	1.03	1.44	5.00	
CCL	19.28		CCL-450tekco (450) Tekco 4 1/2" 450 Deg. "F" SmCo Logging CCL	1.87	4.50	80.00	
			Tek-2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00	
TEMP	13.04						
WVFSYNC	13.04						
WVFCAL	13.04						
WVFS12	11.75						
WVFS11	11.75						
WVFS10	11.75			SCBL-Tek12 (T12_01) Tekco 400 Deg F 12 Sector RIB with Temp	9.13	3.25	135.00
WVFS9	11.75						
WVFS8	11.75						
WVFS7	11.75						
WVFS6	11.75						
WVFS5	11.75						
WVFS4	11.75						
WVFS3	11.75						
WVFS2	11.75						
WVFS1	11.75						
WVF3FT	11.00						
WVF5FT	10.00						
WVFTEMP	6.67						
			Tek-2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00	
			GR-Tek-Co 2 3/4 (0111) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00	
GR	1.31						
			Titan-1.4375_Cap Titan 1 7/16" Cap	0.27	1.44	1.00	

Dataset: telstar3h.db: field/well/run1/pass7  
 Total length: 21.42 ft  
 Total weight: 311.00 lb  
 O.D.: 4.50 in



Company	ANTERO RESOURCES CORPORATION	
Well	TELSTAR UNIT 3H	
Field	MARCELLUS	
County	DODDRIDGE	
State	W.V.	Country USA