



**RADIAL BOND LOG
GAMMA RAY
VDL,CCL**

Company ANTERO RESOURCES CORPORATION
Well GROUNDS 1H
Field MARCELLUS
County TYLER
State WV

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Field MARCELLUS
County TYLER State WV

Location: API #: 47095025900000

AFE A08784

SEC TWP RGE

Elevation

Elevation
K.B.
D.F.
G.L.

Date 9-6-19

Run Number 1

Depth Driller 17534'

Depth Logger 6524'

Bottom Logged Interval 6524'

Top Log Interval SURFACE

Open Hole Size N/A

Type Fluid WATER

Density / Viscosity N/A

Max. Recorded Temp. 135.8 DEG

Estimated Cement Top 1952'

Time Well Ready N/A

Time Logger on Bottom 8:15

Equipment Number 624874

Location BRIDGEPORT

Recorded By P DAVIDSON

Witnessed By R RIVERA

Borehole Record

Run Number	Bit	From	To	Size	Weight	From	To
				13 3/8	54.5	631'	0
				9 5/8	36	2636'	0
				5 1/2	23	17543'	0

Casing Record

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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.

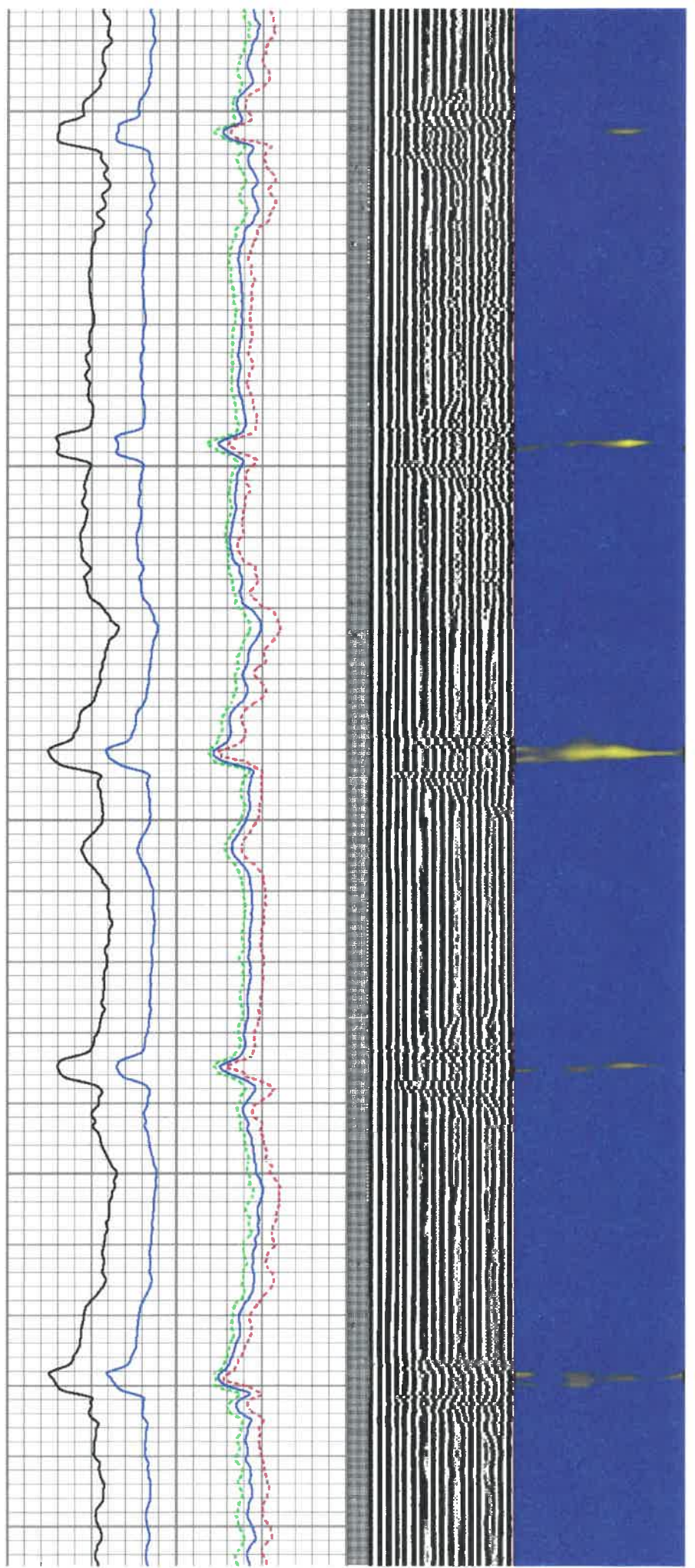
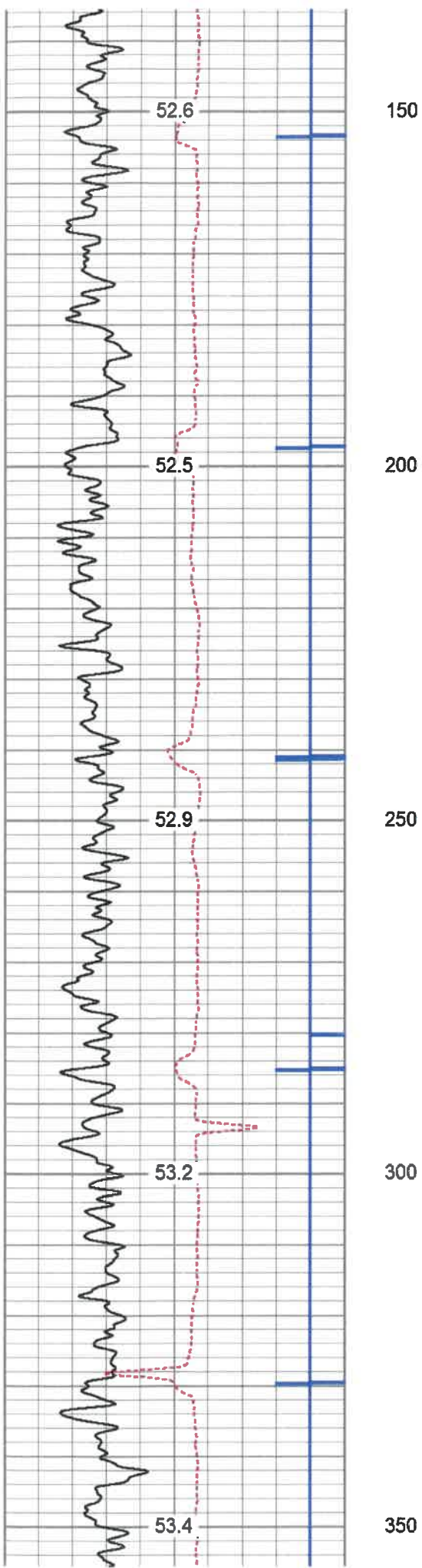
Comments

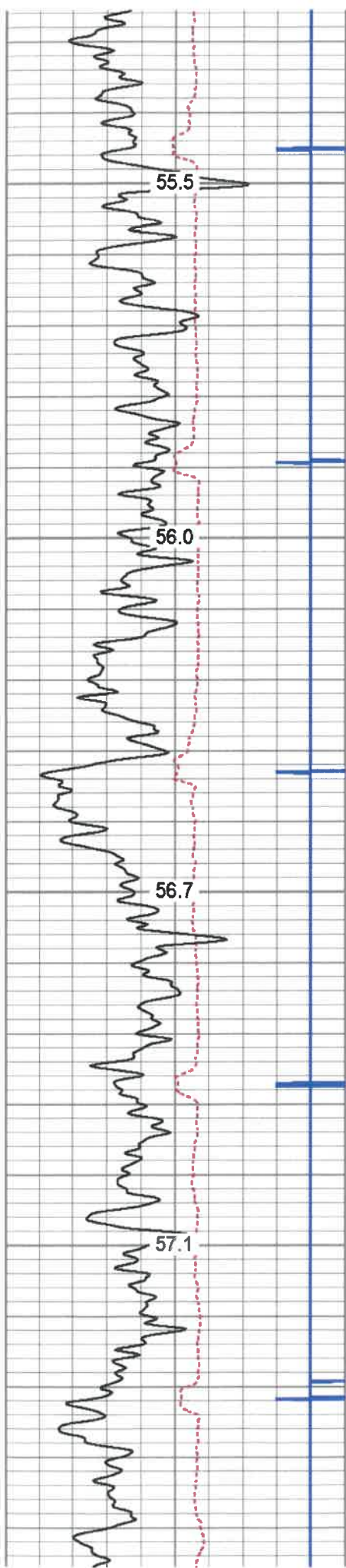
MARKER JOINT @5377'-5393'
LOG TD 6524'
CEMENT TOP @ 1952'
LOG RAN UNDER 1500 PSI

THANK YOU FOR CHOOSING KLX ENERGY



Main Pass 1500 PSI



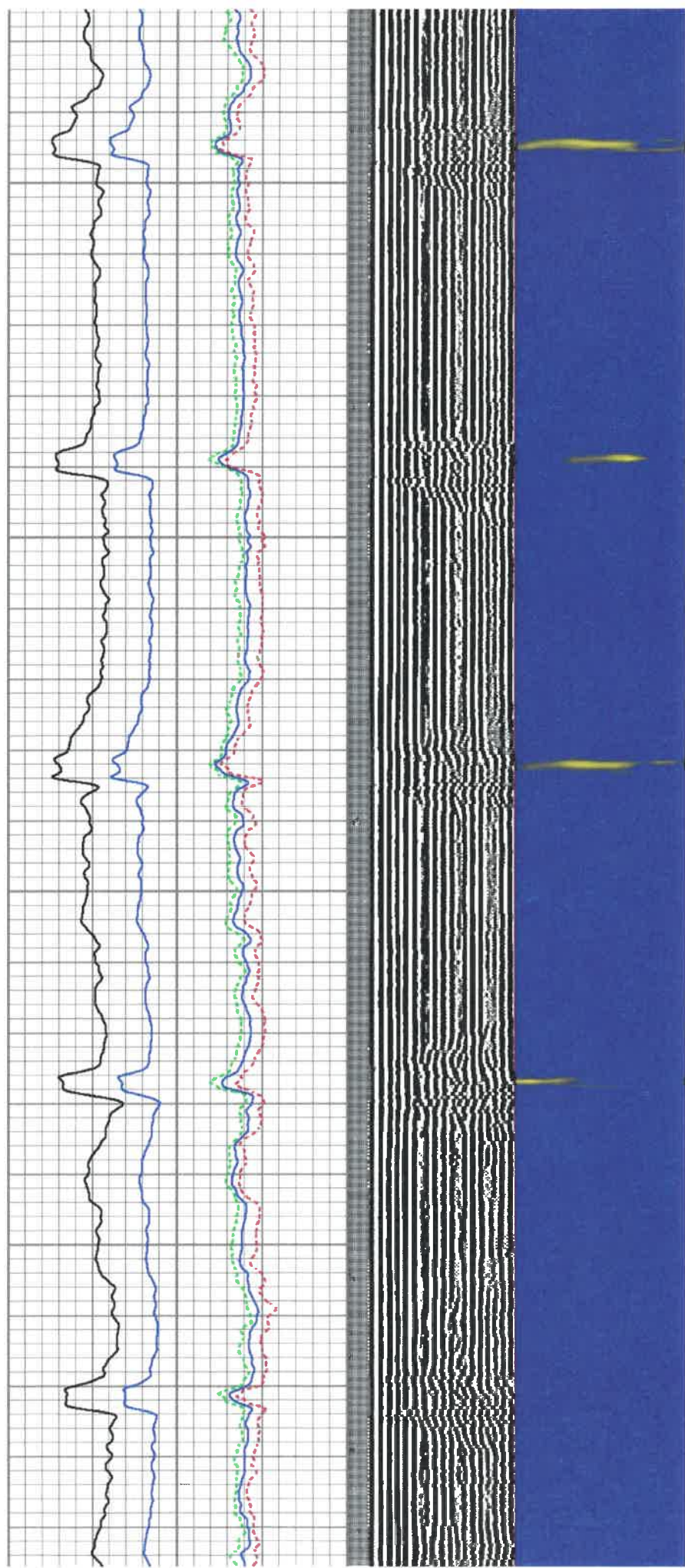


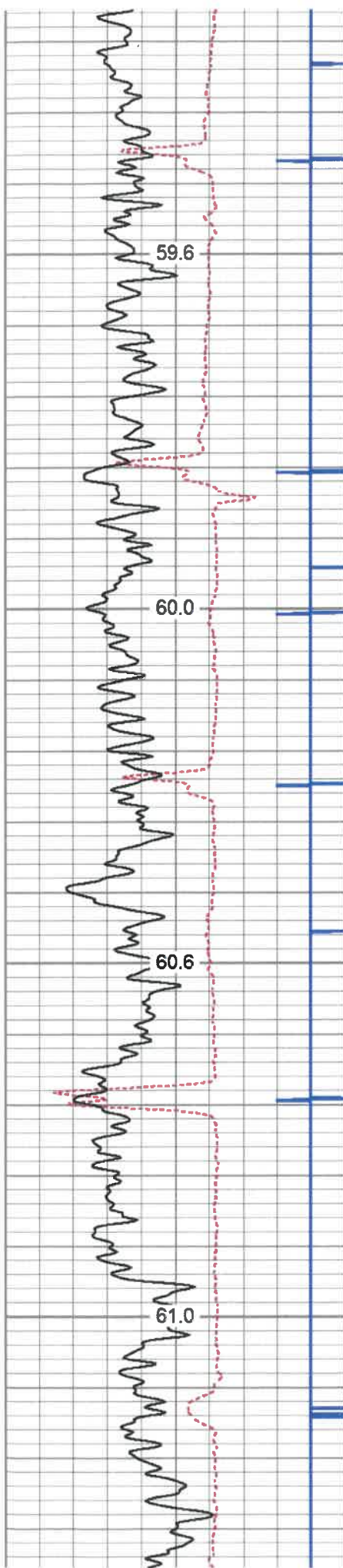
600

650

700

750



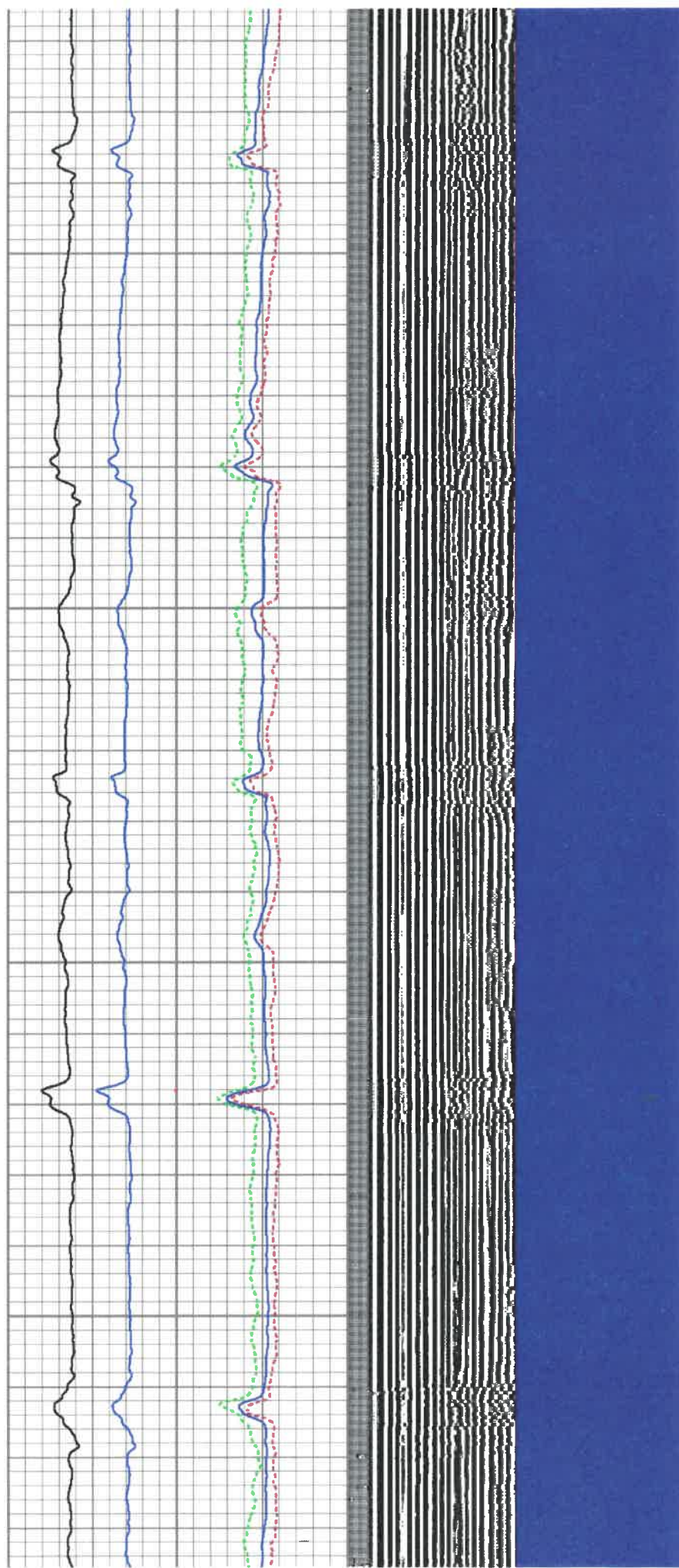


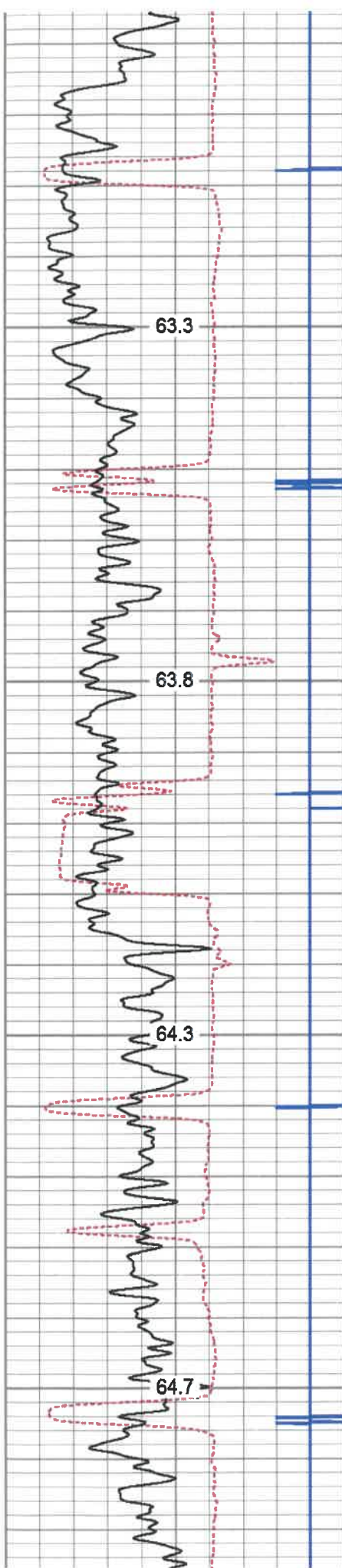
1050

1100

1150

1200



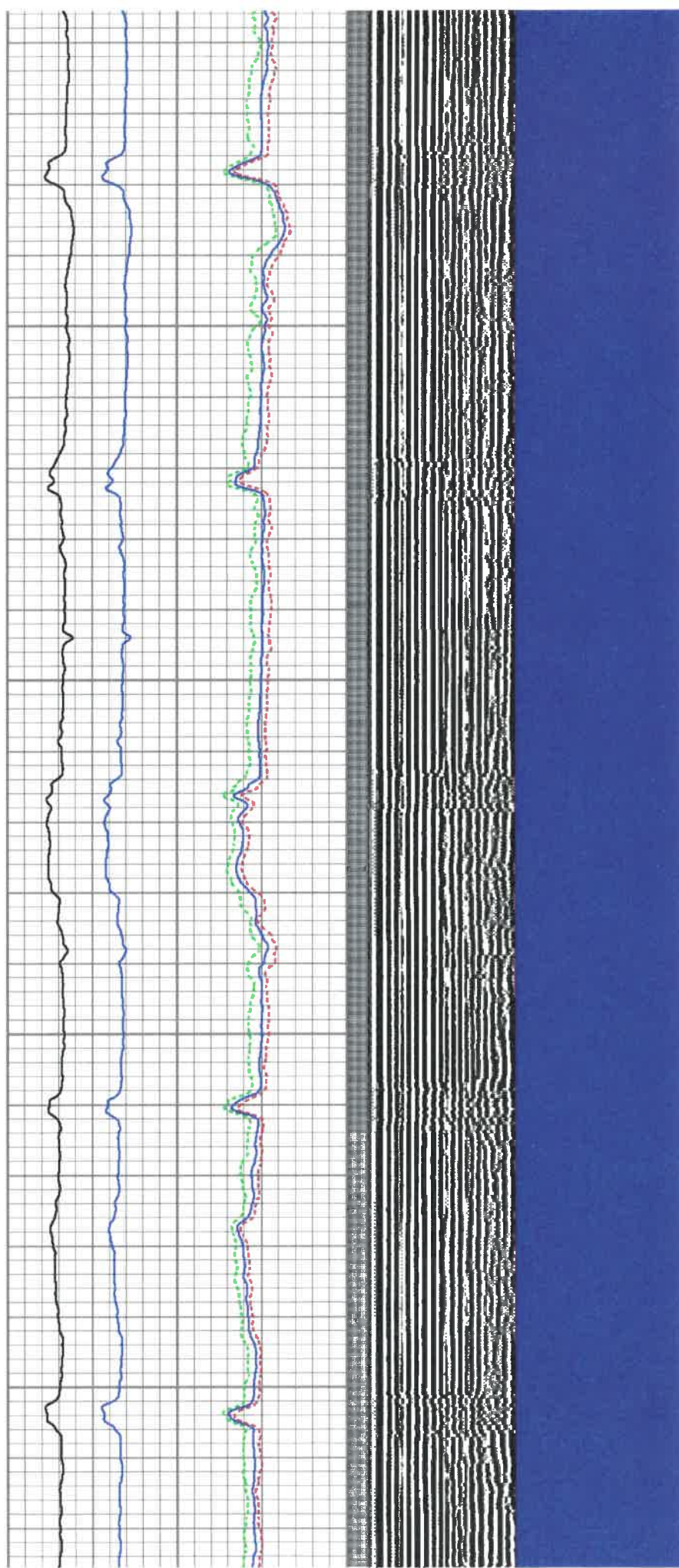


1500

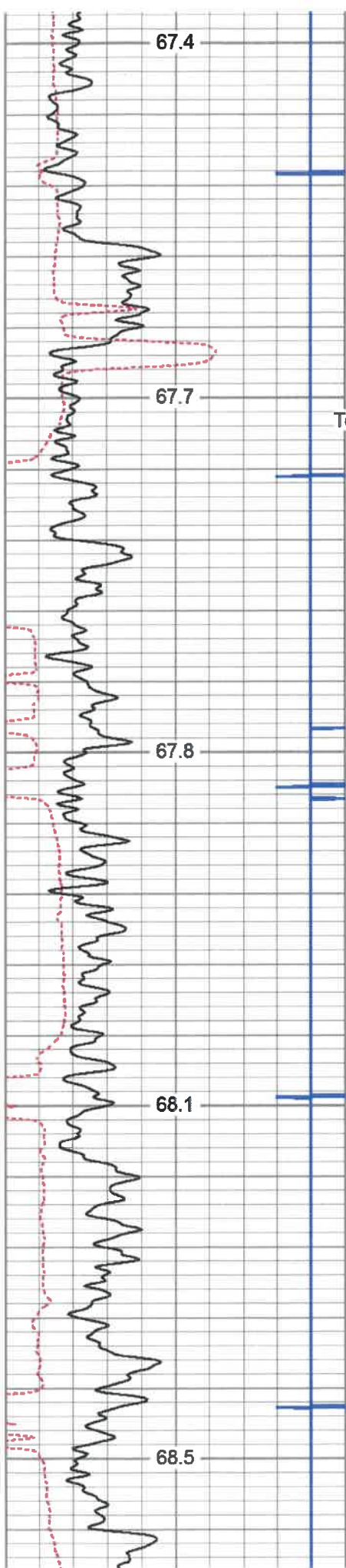
1550

1600

1650



1500
1550
1600
1650



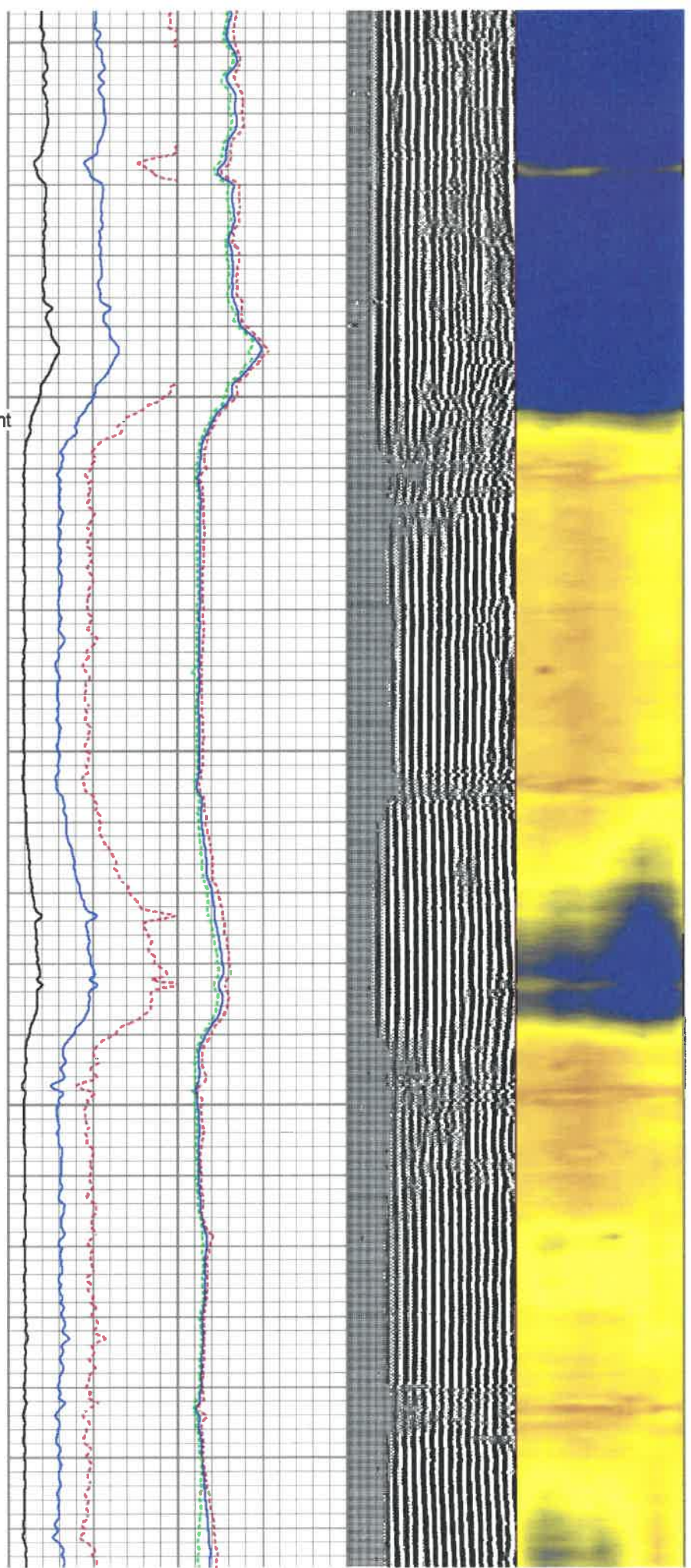
1900

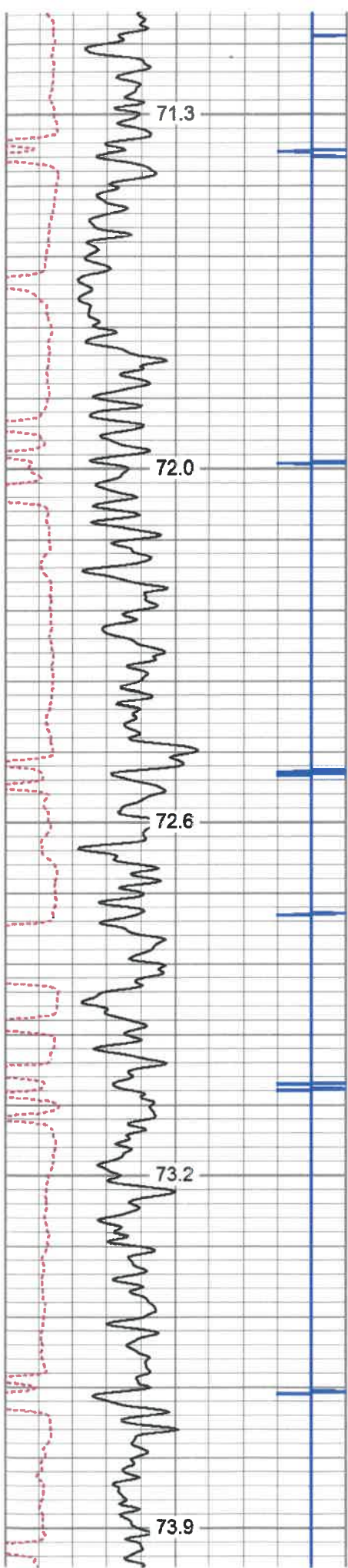
1950
Top of Cement

2000

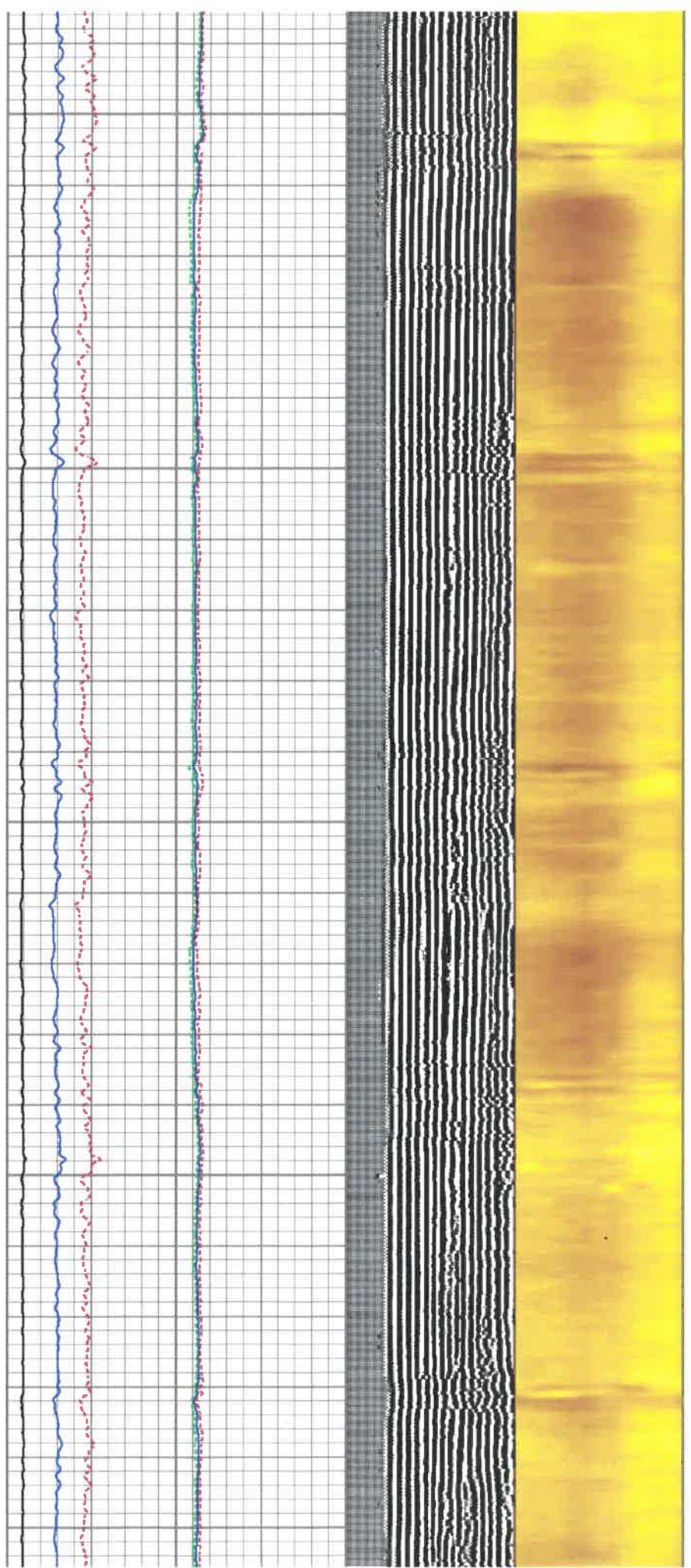
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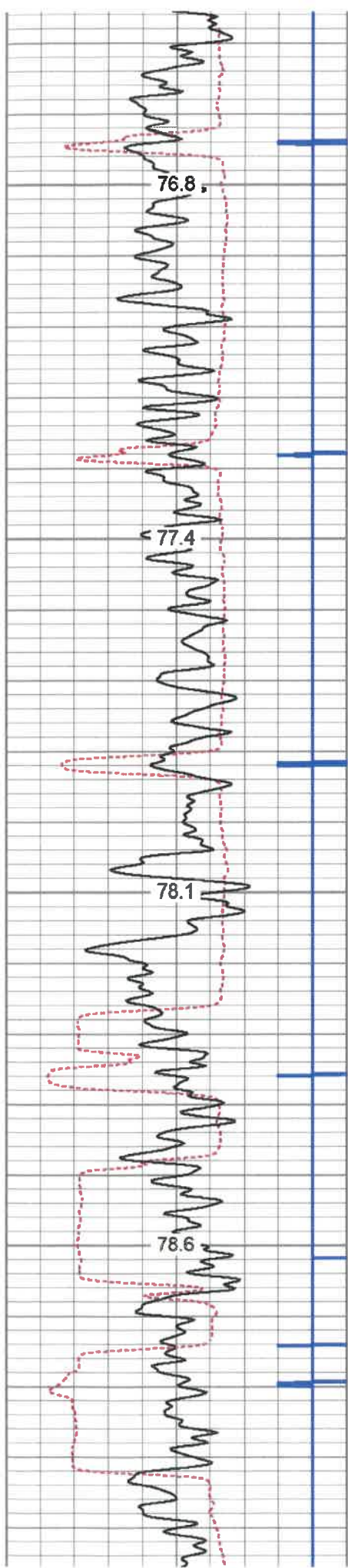
2100





2350
2400
2450
2500
2550



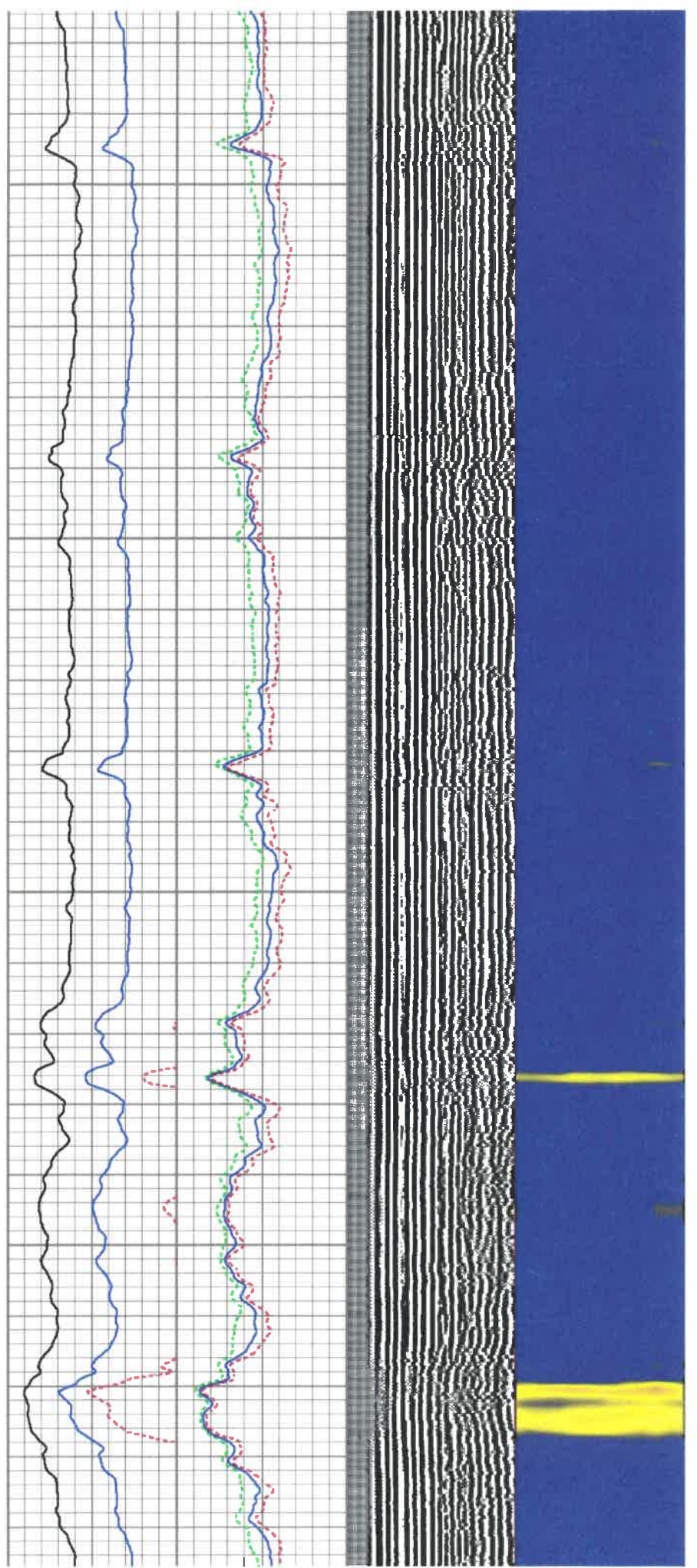


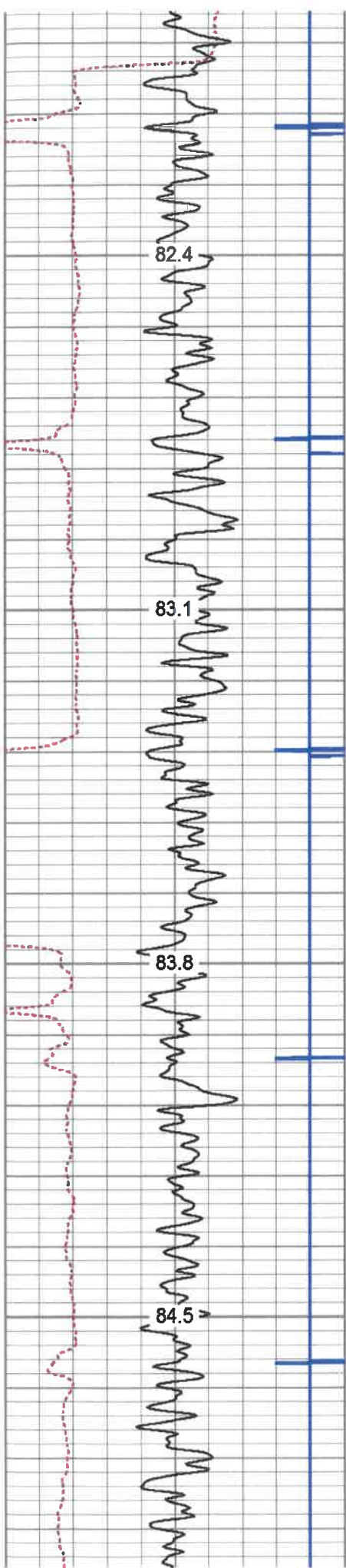
2800

2850

2900

2950





3250

3300

3350

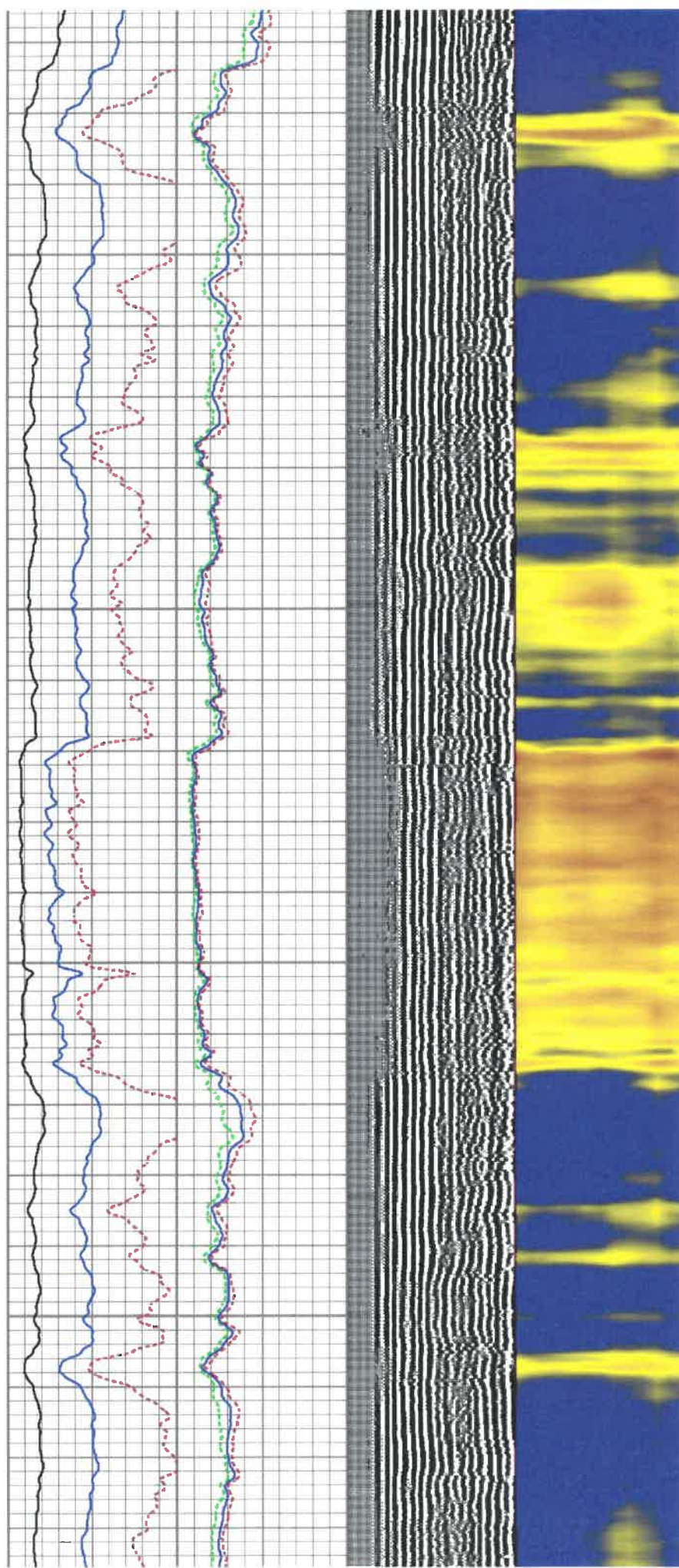
3400

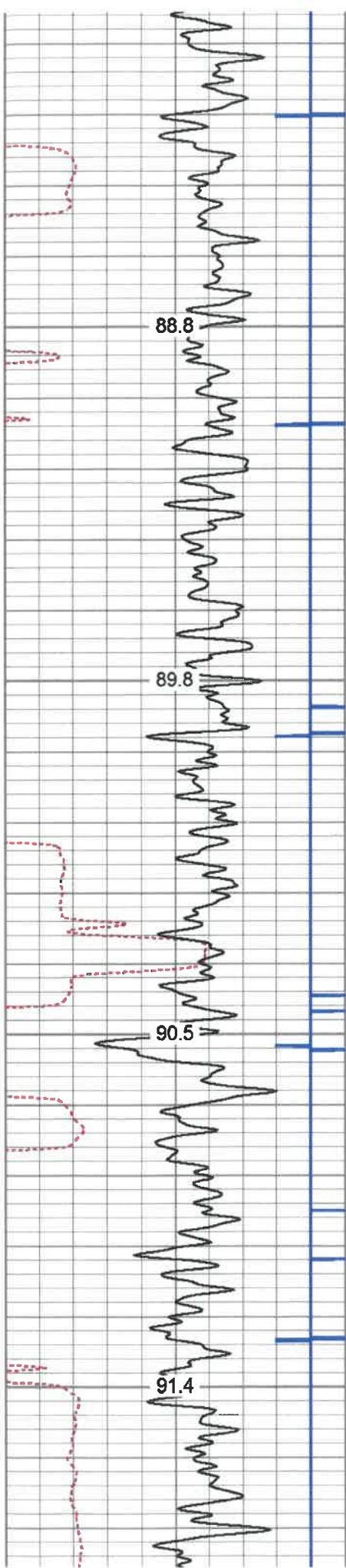
82.4

83.1

83.8

84.5



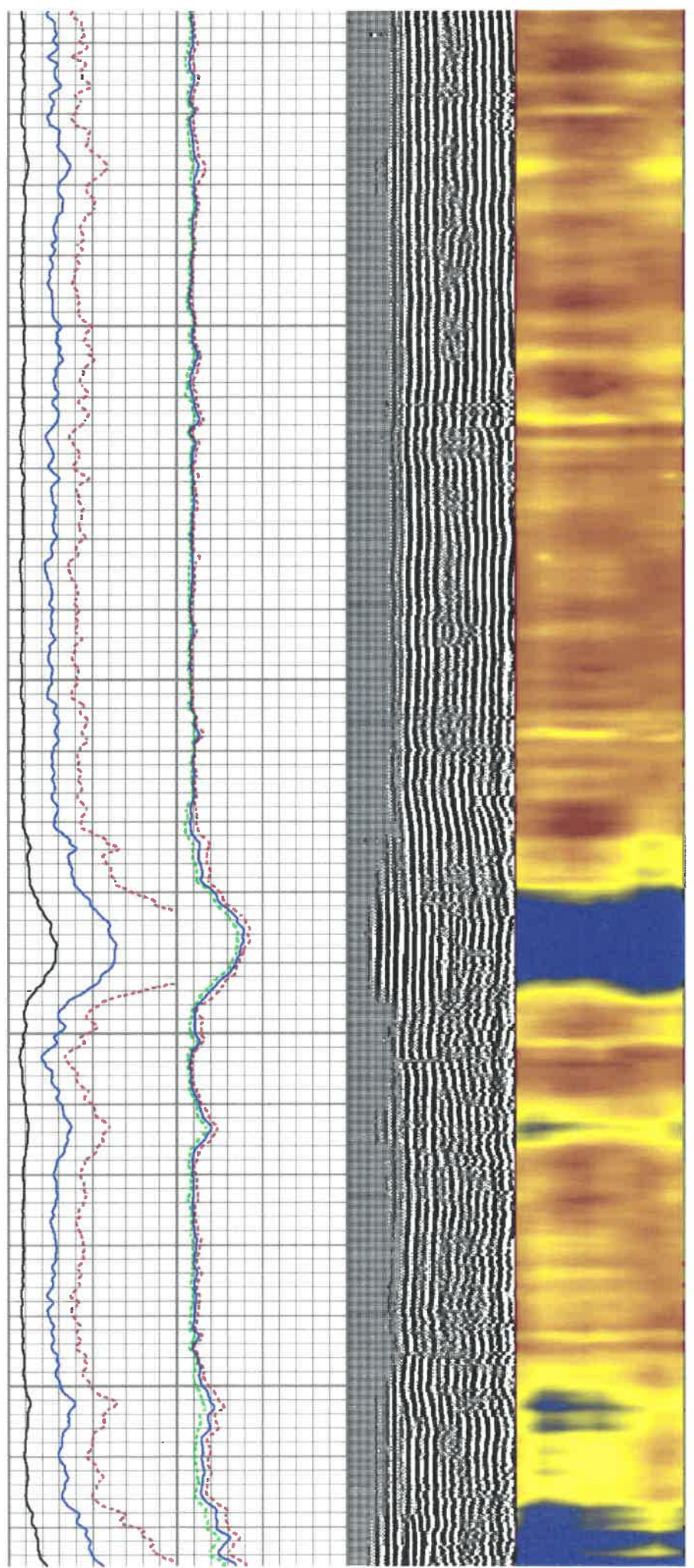


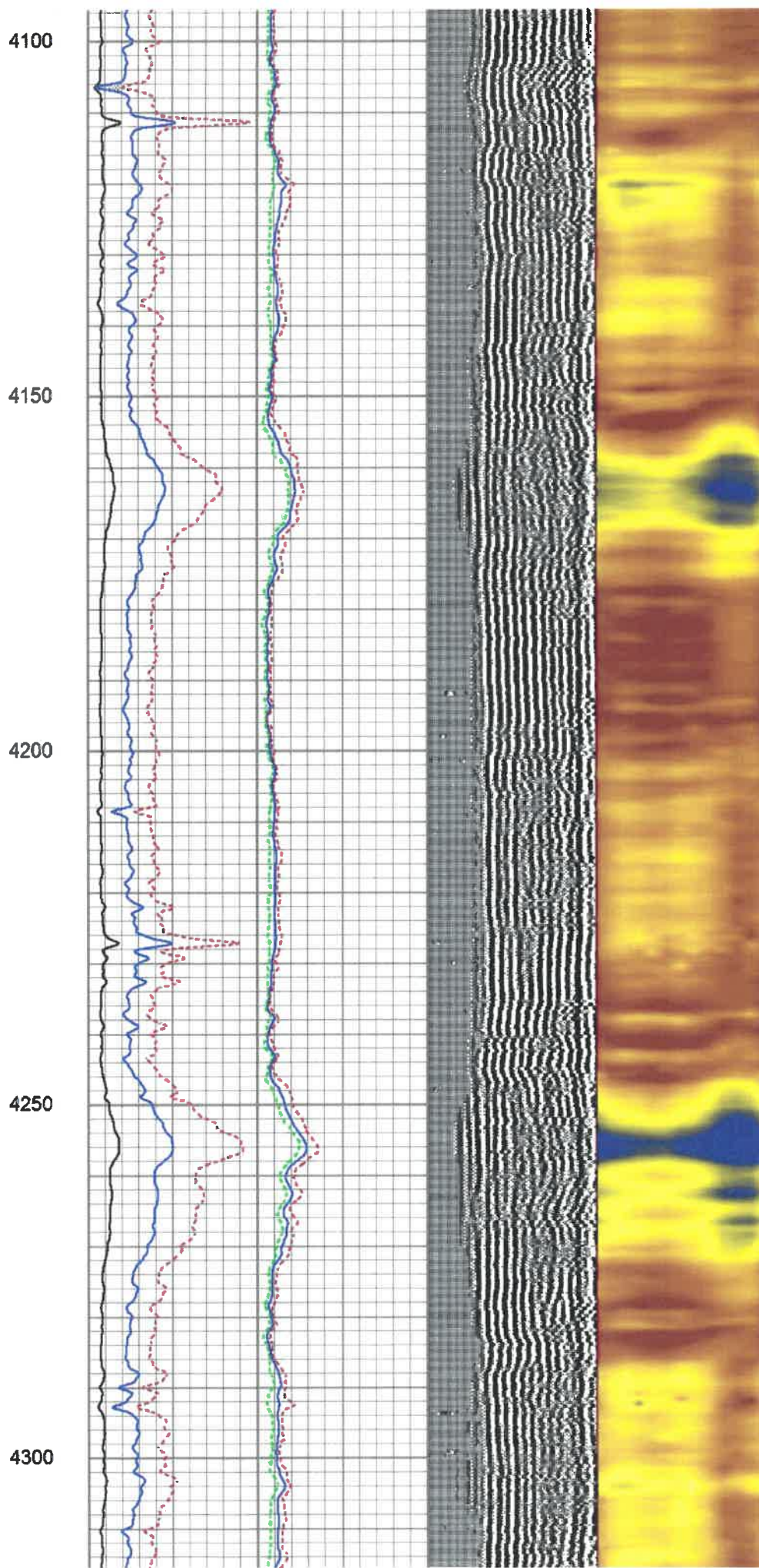
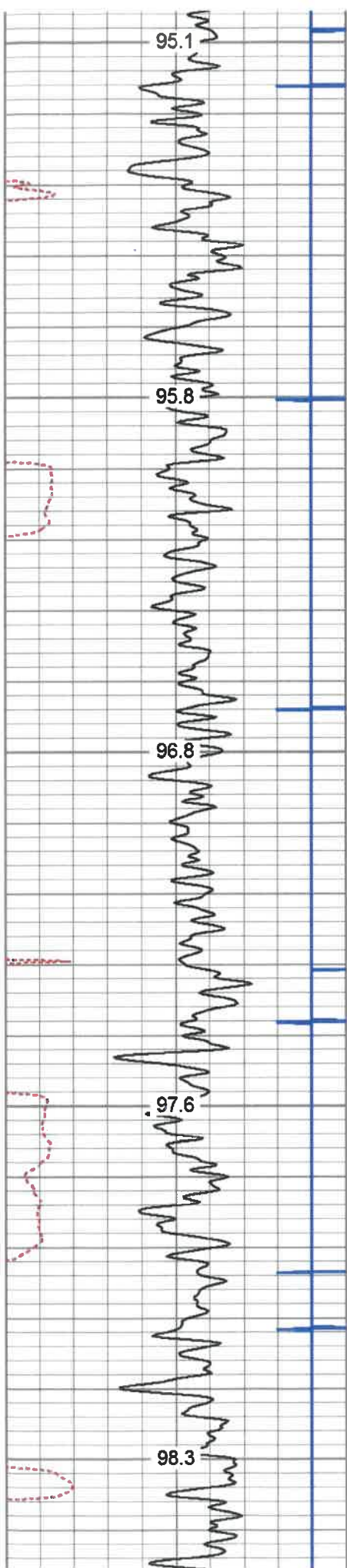
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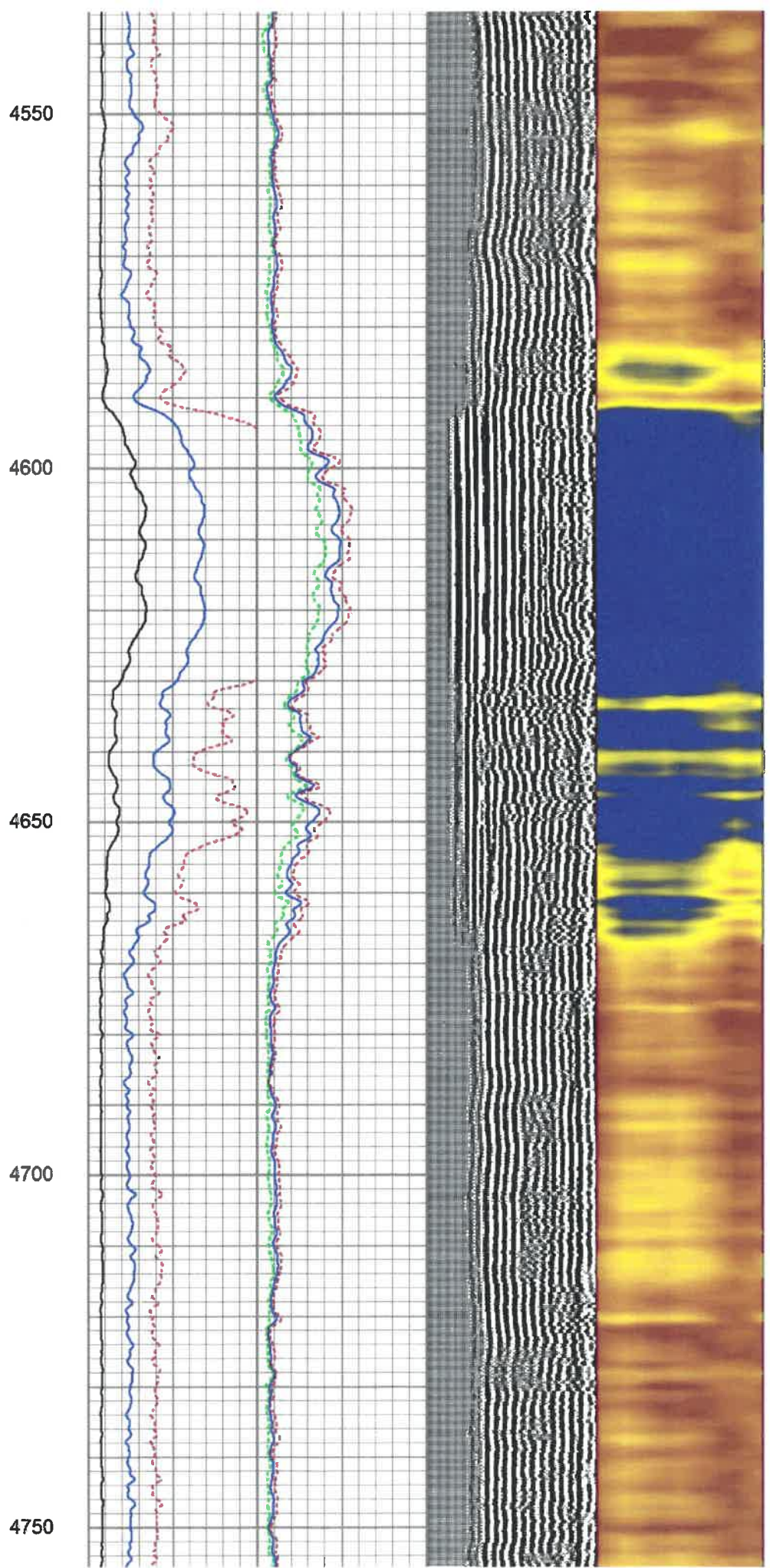
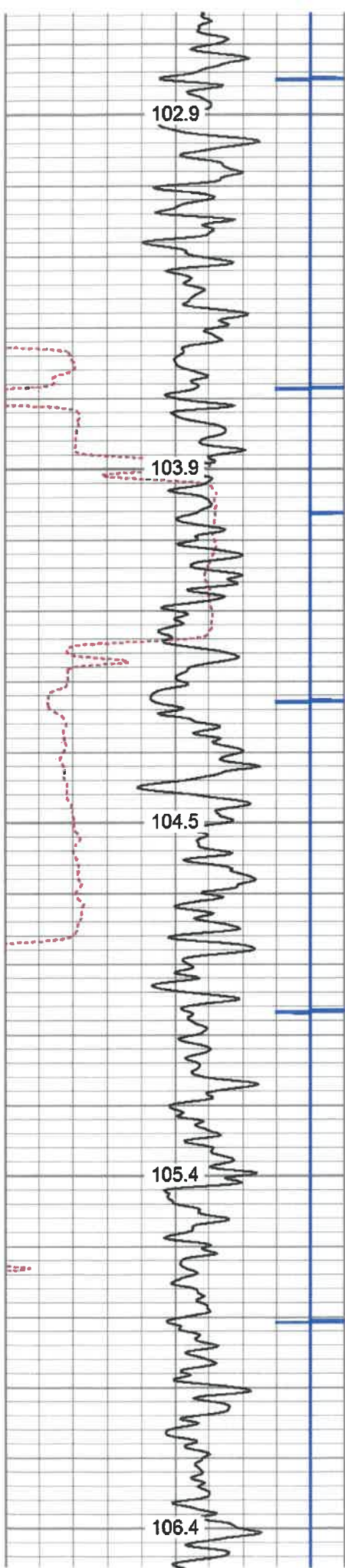
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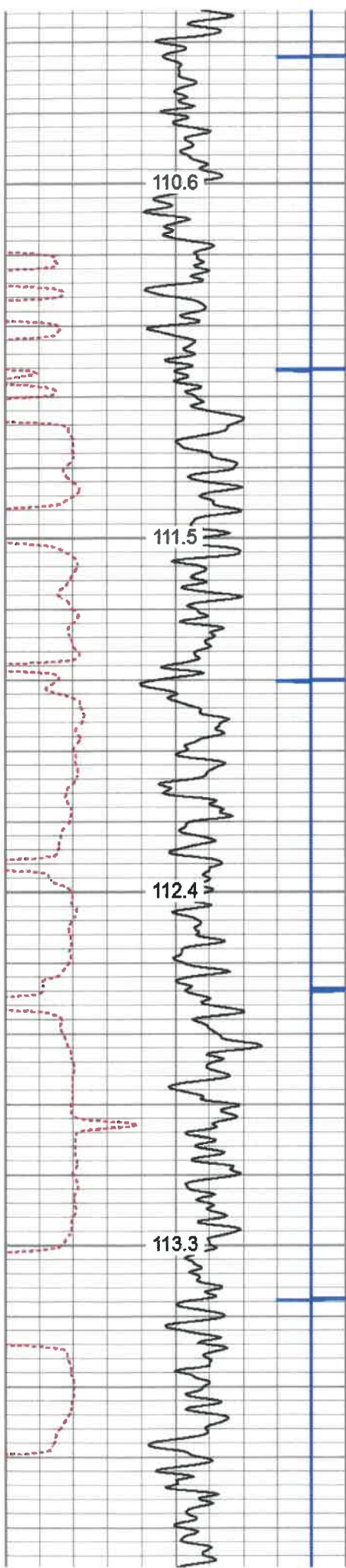
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3850







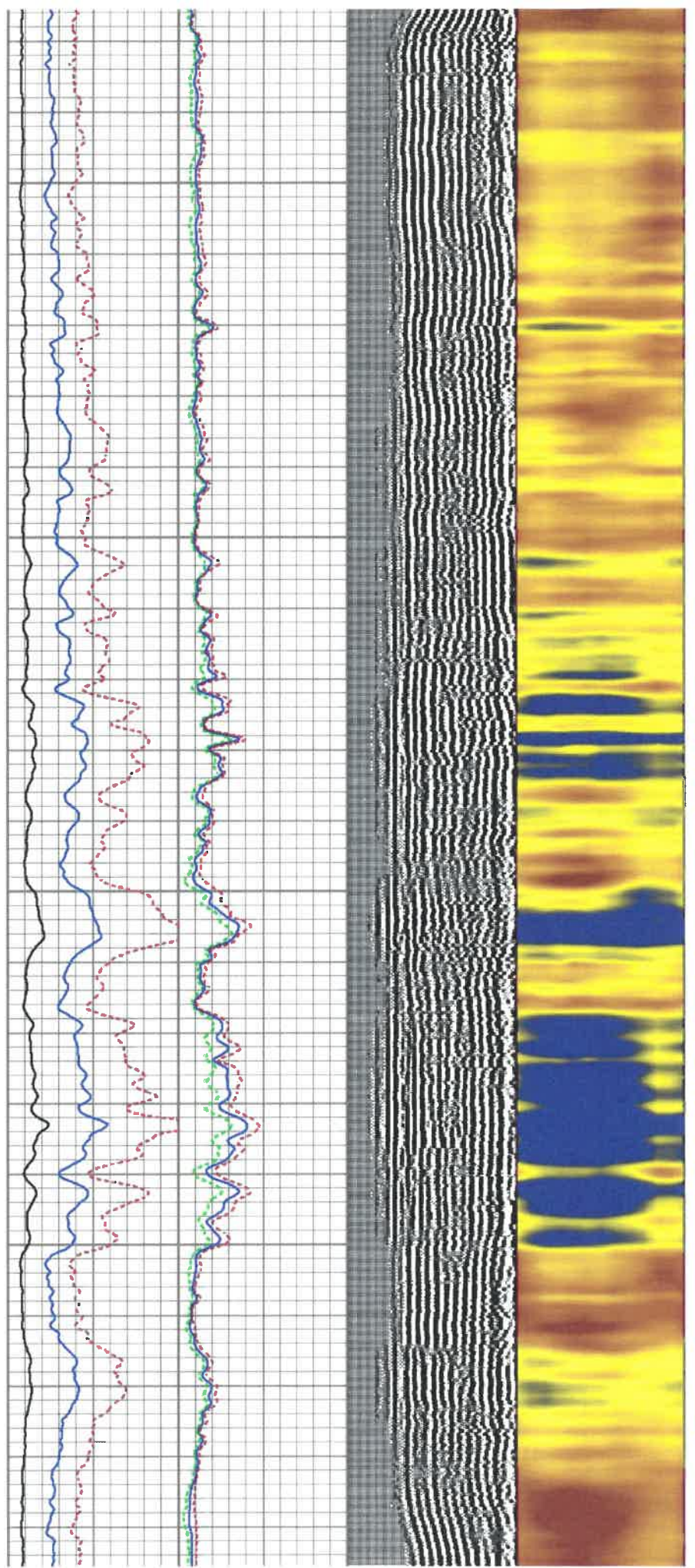


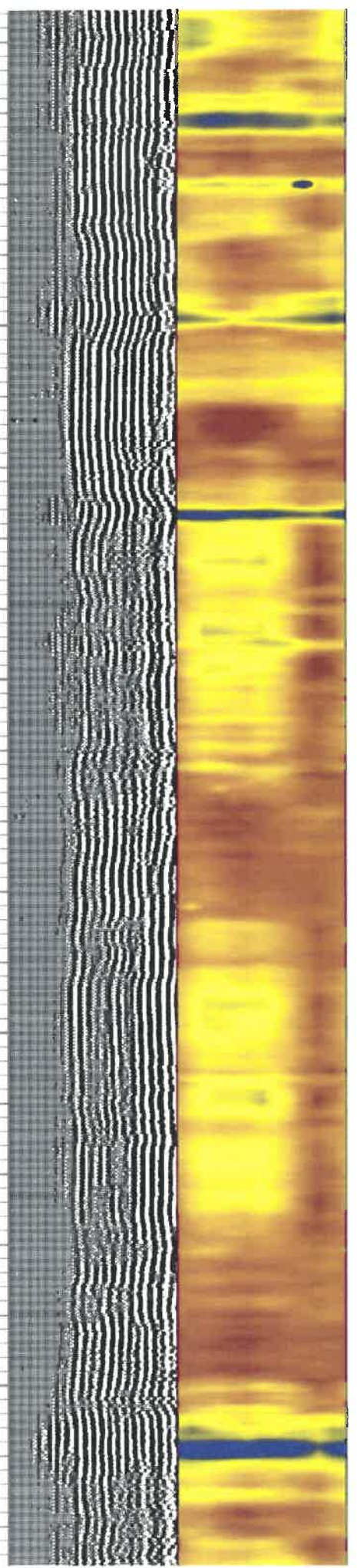
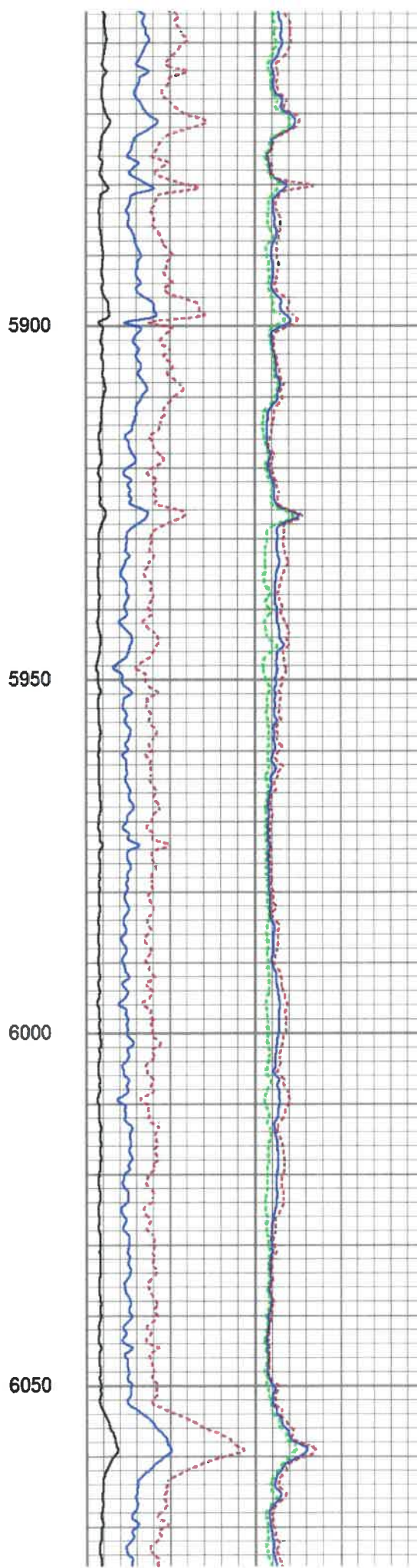
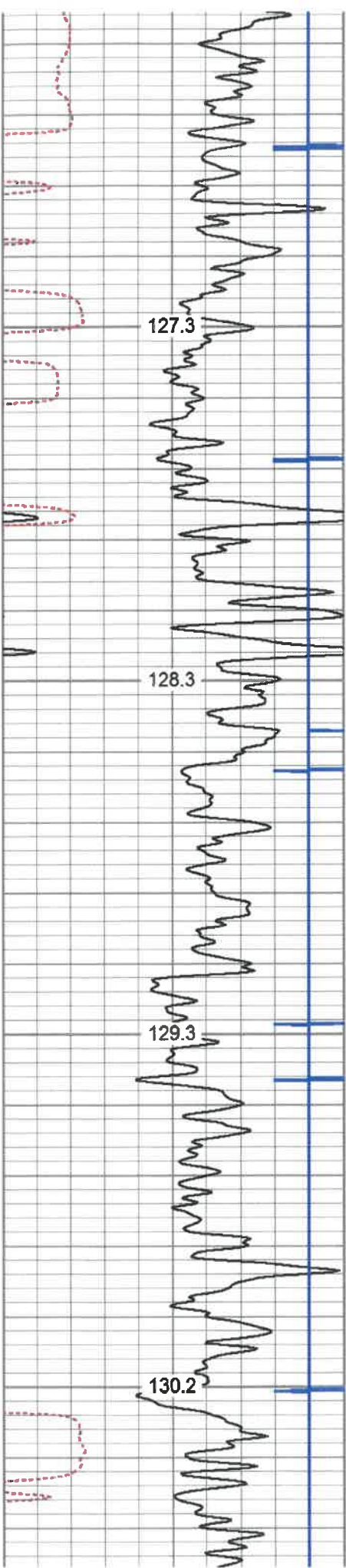
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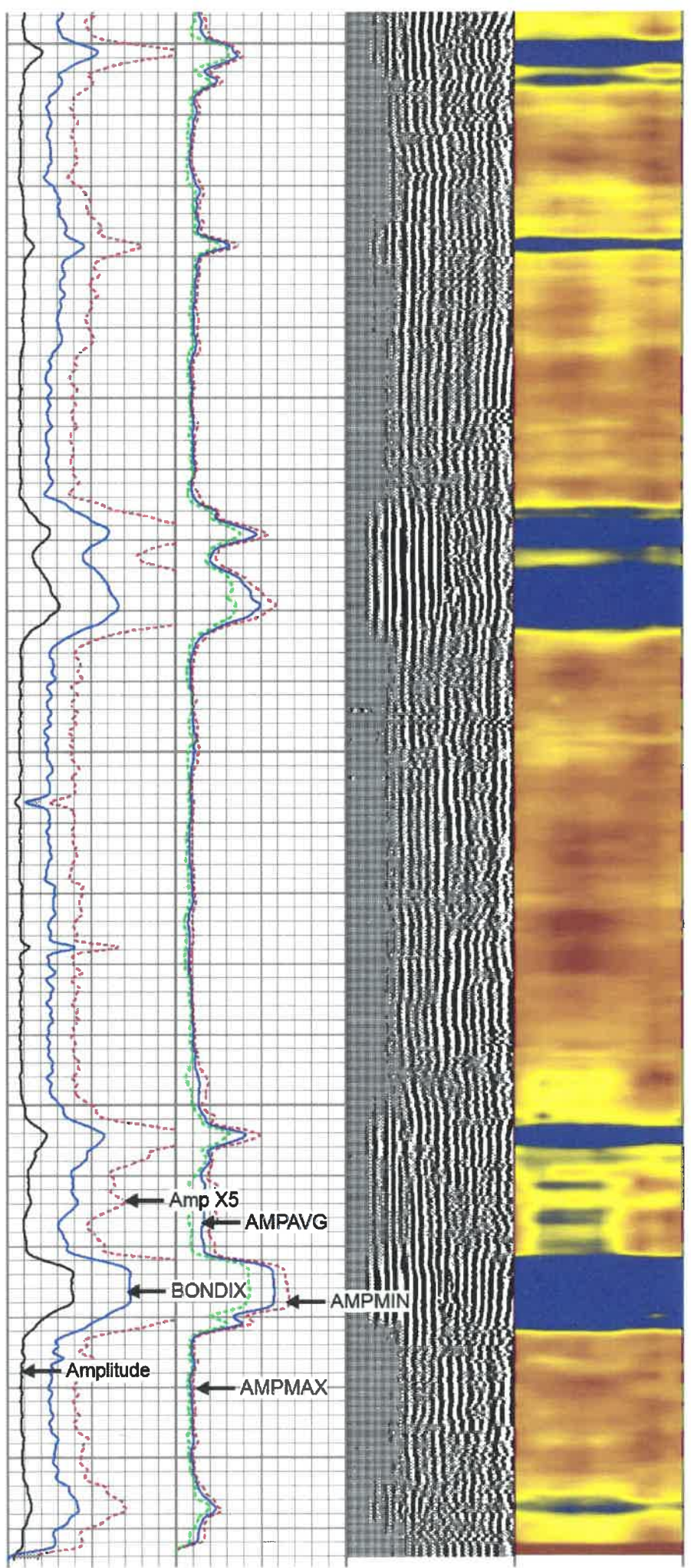
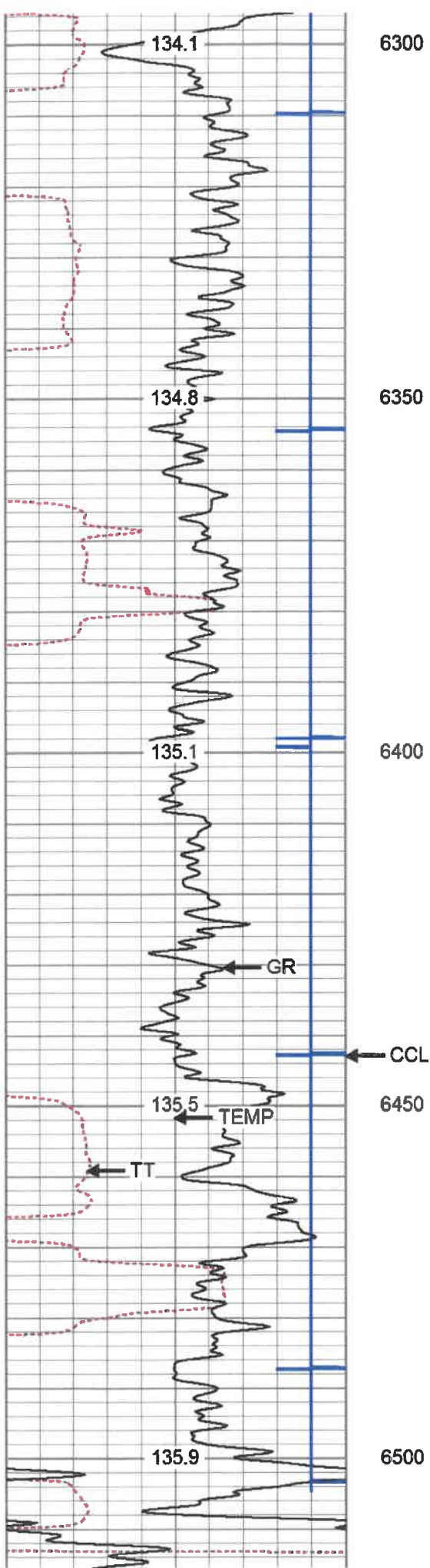
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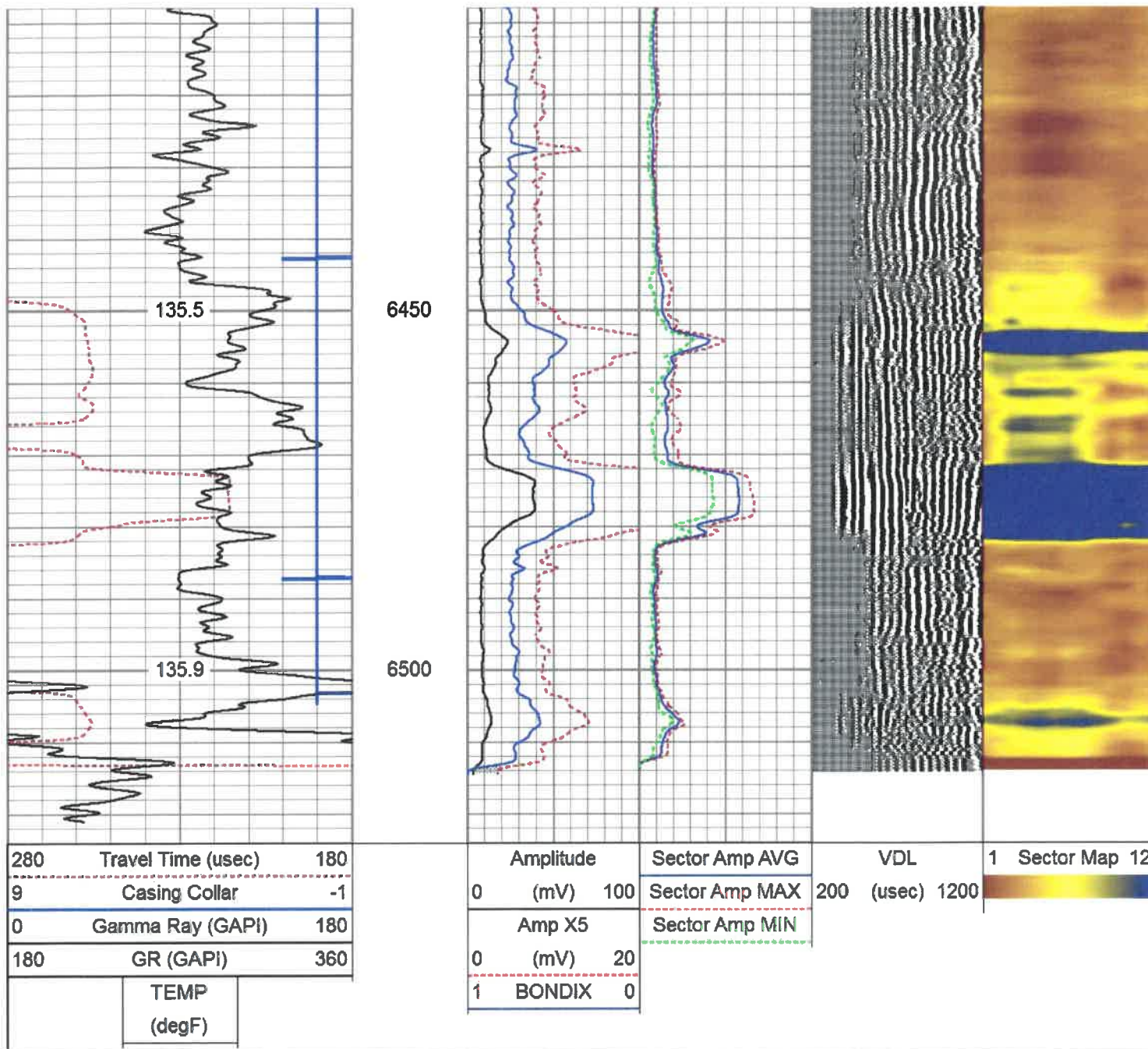
5100

5150









Log Variables

Database: C:\ProgramData\Warrior\Data\grounds1h.db
 Dataset: field/well/run1/pass4/_vars_

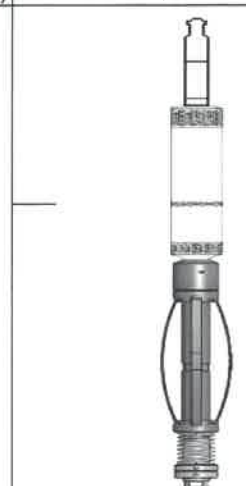
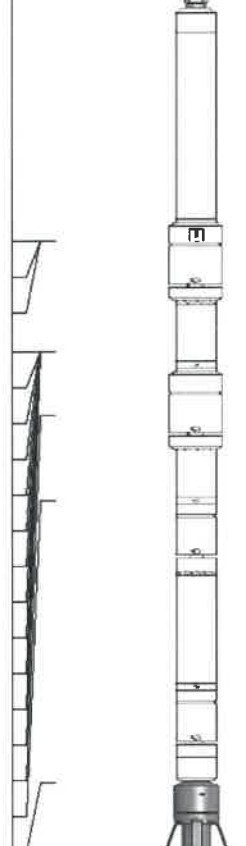
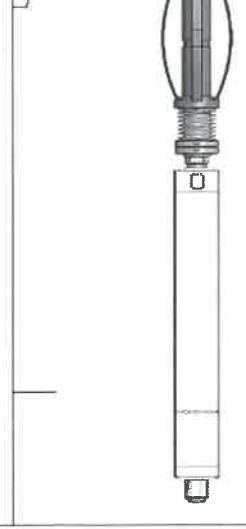
Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL
TEMP	in 7.875	degF 100	in 5.5	in 0	lb/ft 23	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 : Casing Weight

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	19.20		Titan-1.4375 1 7/16 Titan Type II Cable Head	1.03	1.44	5.00
			CCL-312tekco (101) Tekco 3 1/8" 450 Deg. "F" SmCo Logging CCL	1.82	3.12	25.00
			Tek-2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
TEMP	13.04		SCBL-Tek12 (T12_01) Tekco 400 Deg F 12 Sector RIB with Temp	9.13	3.25	135.00
WVFSYNC	13.04					
WVFCAL	13.04					
WVFS12	11.75					
WVFS11	11.75					
WVFS10	11.75					
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					
GR	1.31		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
			Titan-1.4375_Cap Titan 1 7/16" Cap	0.27	1.44	1.00
		Dataset:	grounds1h.db: field/well/run1/pass4			
		Total length:	21.37 ft			
		Total weight:	256.00 lb			
		O.D.:	3.25 in			