



**Segmented Radial Cement Bond
W/Gamma Ray, CCL
Log**

Company	Antero Resources Corporation		
Well	Treasury Unit 1H		
Field	Marcellus		
County	Tyler		
State	WV		
	Country US		
Company	Antero Resources Corporation	Country	US
Well	Treasury Unit 1H	State	WV
Field	Marcellus	County	Tyler
County	Tyler	Country	US
State	WV		
Location:		API # : 47095025560000	Other Services
Permanent Datum	SEC	TWP	RGE
Log Measured From	R.K.B	Ground Level	Elevation
Drilling Measured From	R.K.B.	25'	K.B. D.F. G.L.
Date	13-NOV-2019		
Run Number	ONE		
Depth Driller	21539'		
Depth Logger	6620'		
Bottom Logged Interval	6620'		
Top Log Interval	Surface		
Open Hole Size	8.25"		
Type Fluid	F/W		
Density / Viscosity	8.6		
Max. Recorded Temp.	136 degF		
Estimated Cement Top	2450'		
Time Well Ready	N/A		
Time Logger on Bottom	N/A		
Equipment Number	214182		
Location	Bridgeport, WV		
Recorded By	S. Butler		
Witnessed By	Jerrako Evans		
Borehole Record			
Run Number	Bit	From	To
ONE	24"	Surface	80'
TWO	17.5"	80'	452'
THREE	12.25"	452'	2643'
FOUR	8.25"	2643'	21539'
Tubing Record			
Casing Record	Size	Mgt/ft	Top
Surface String	13.375"	54.5	Surface
Prot. String	9.625"	40	Surface
Production String	5.5"	20	Surface
Liner			Bottom

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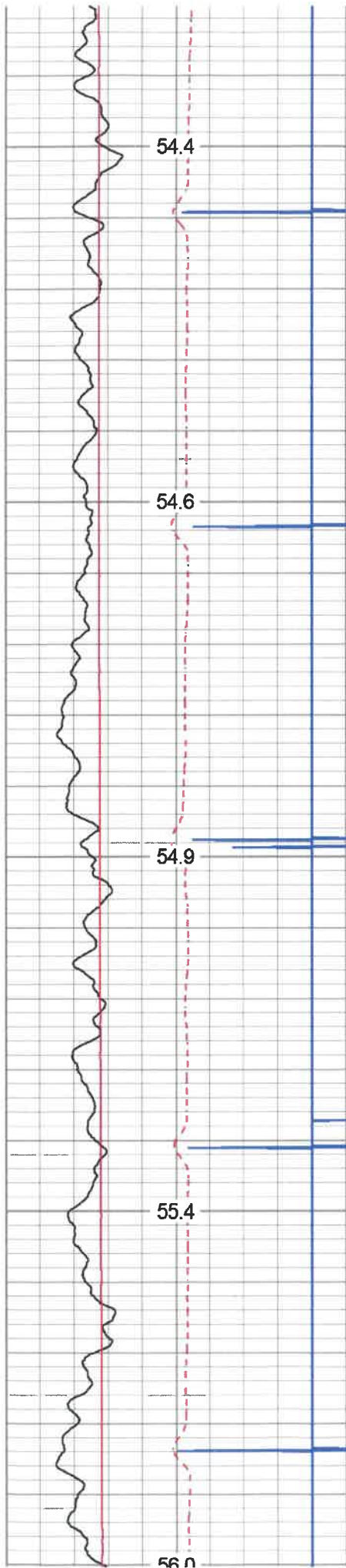
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Zero @ R.K.B. 25'
Marker Joint 5476' - 5486'
Log TD 6620'
Cement Top @ 2450'
Log Ran Under 1500 PSI



Main Pass



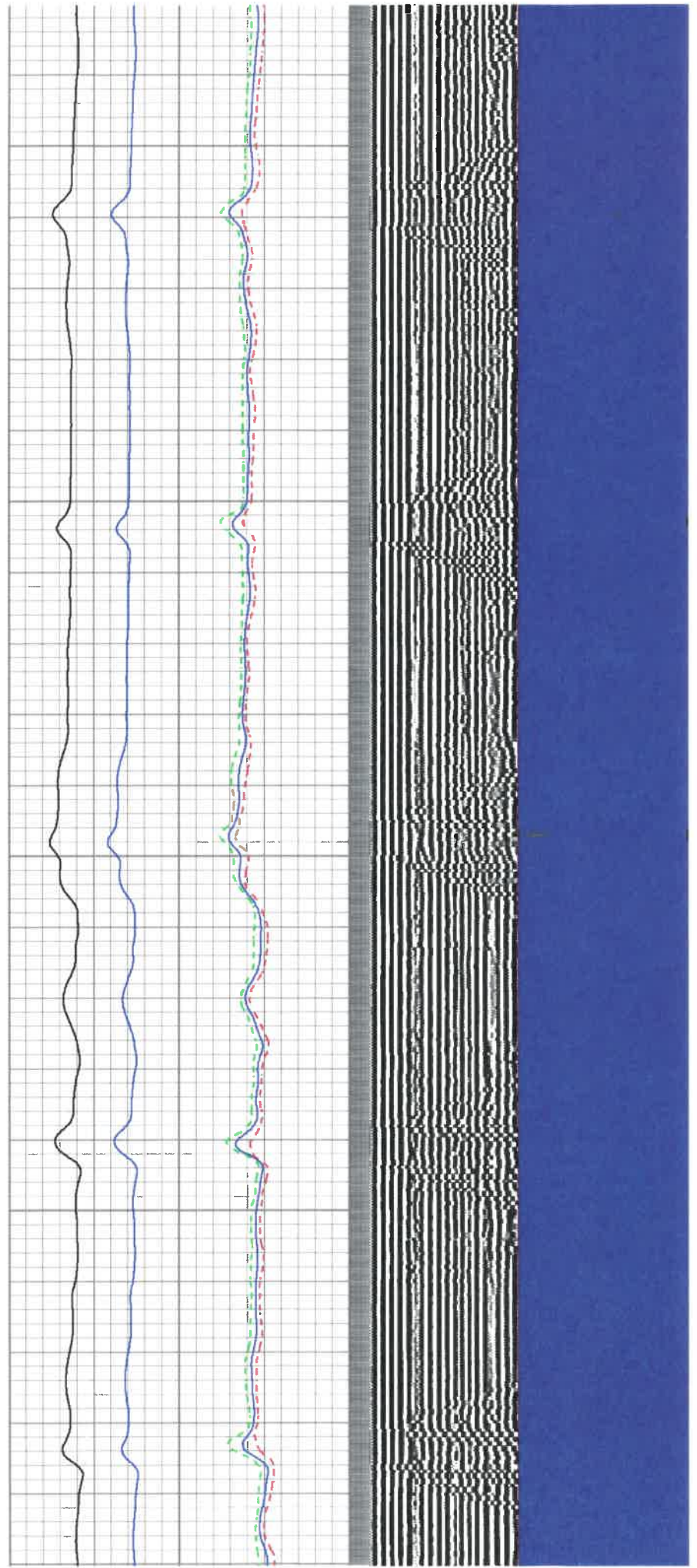
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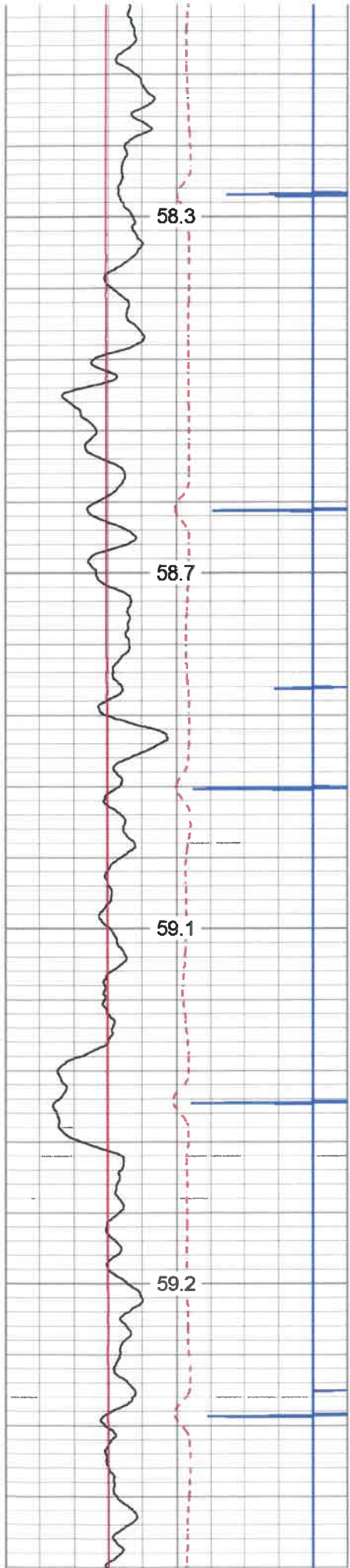
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300

350

400



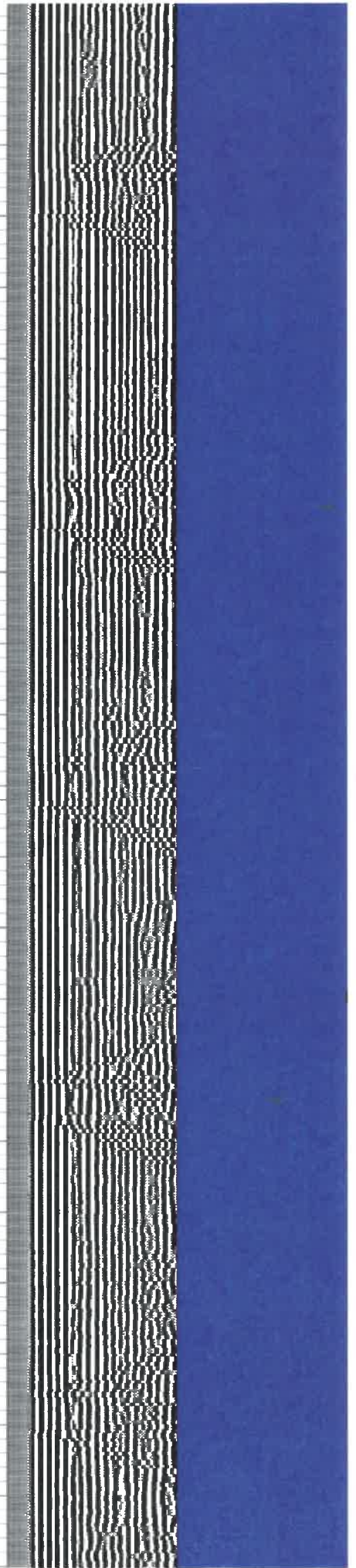
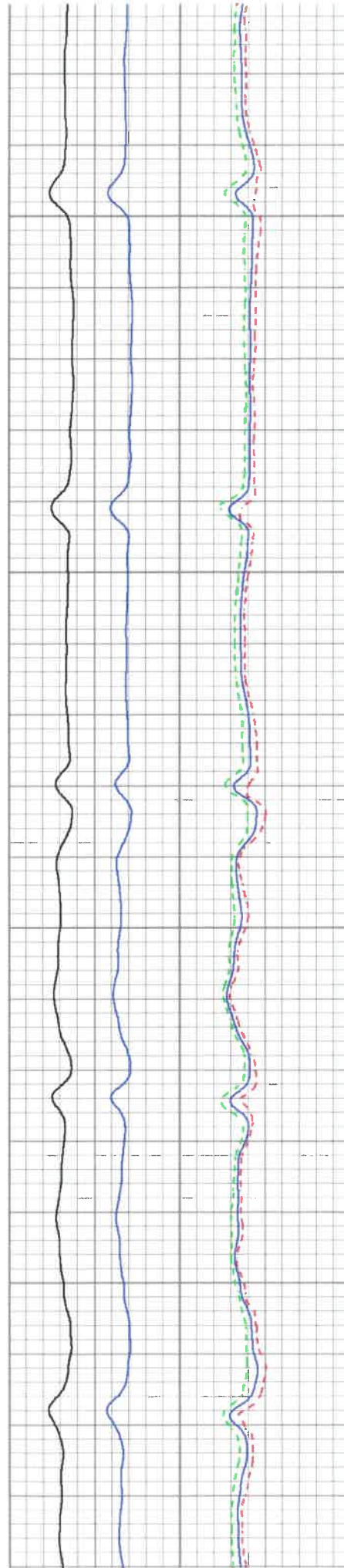


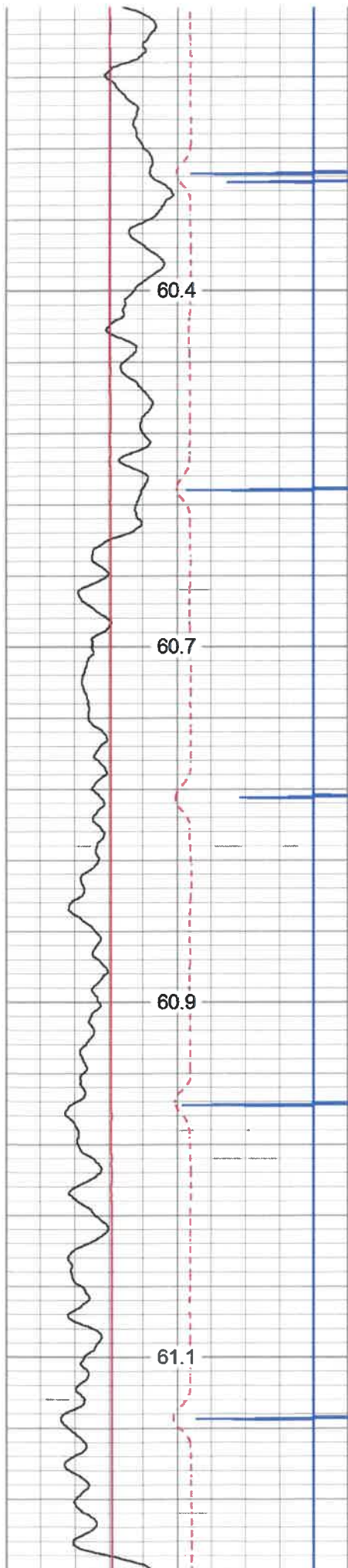
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700

750

800



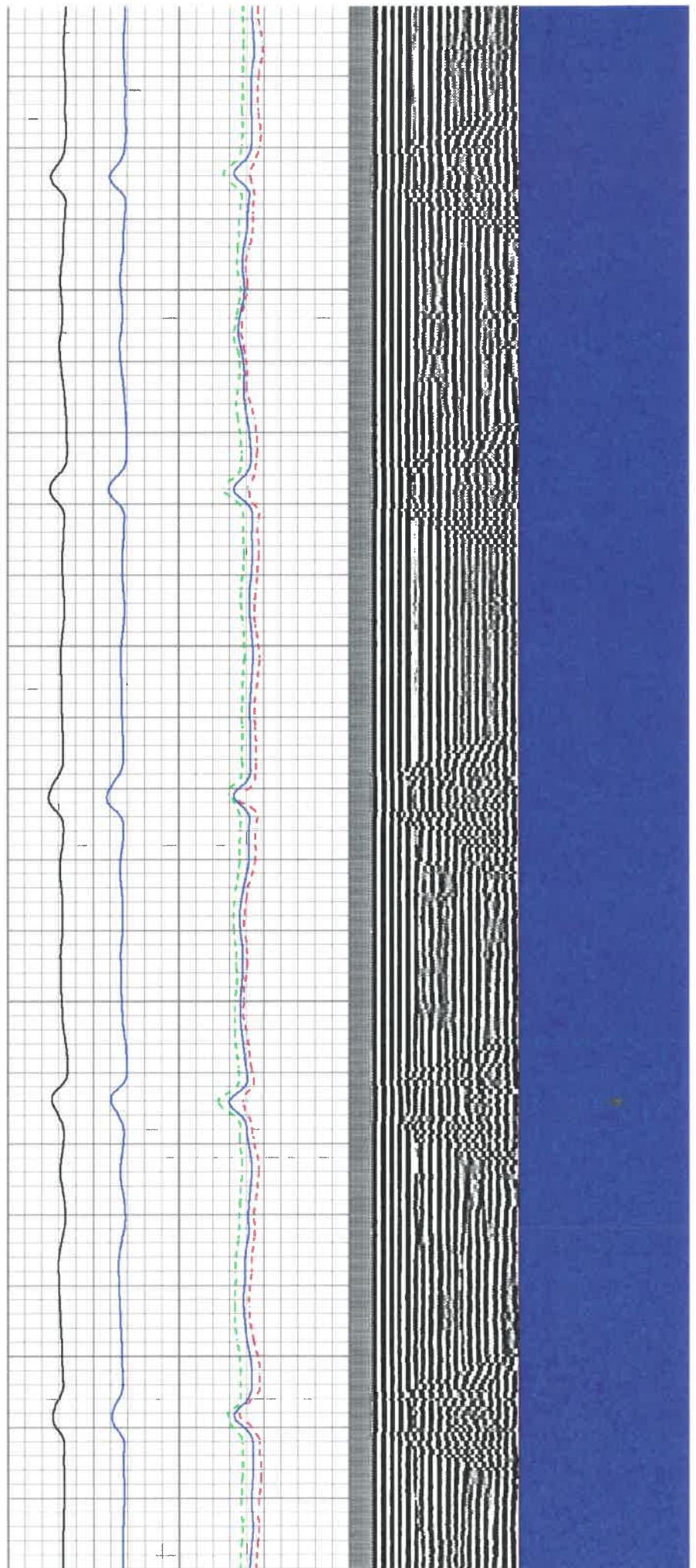


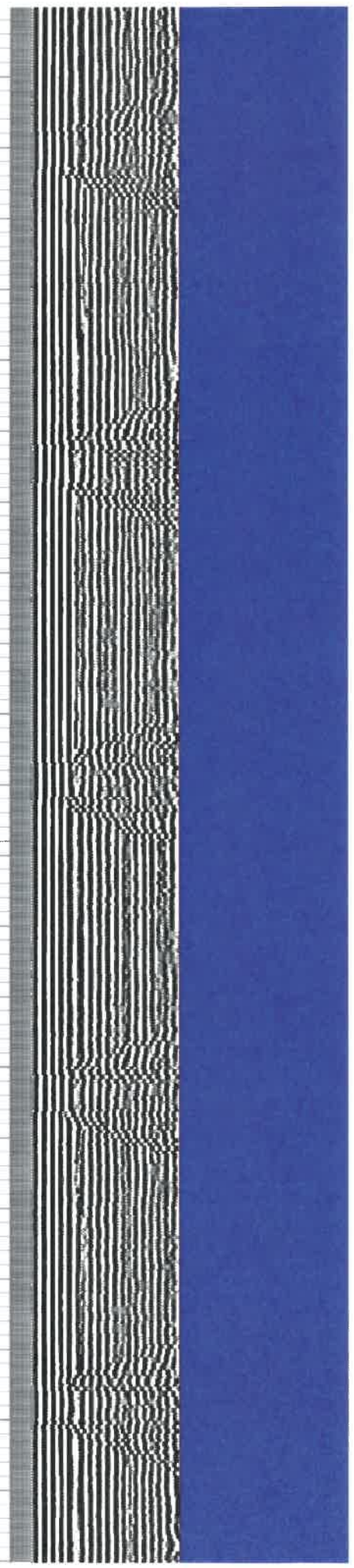
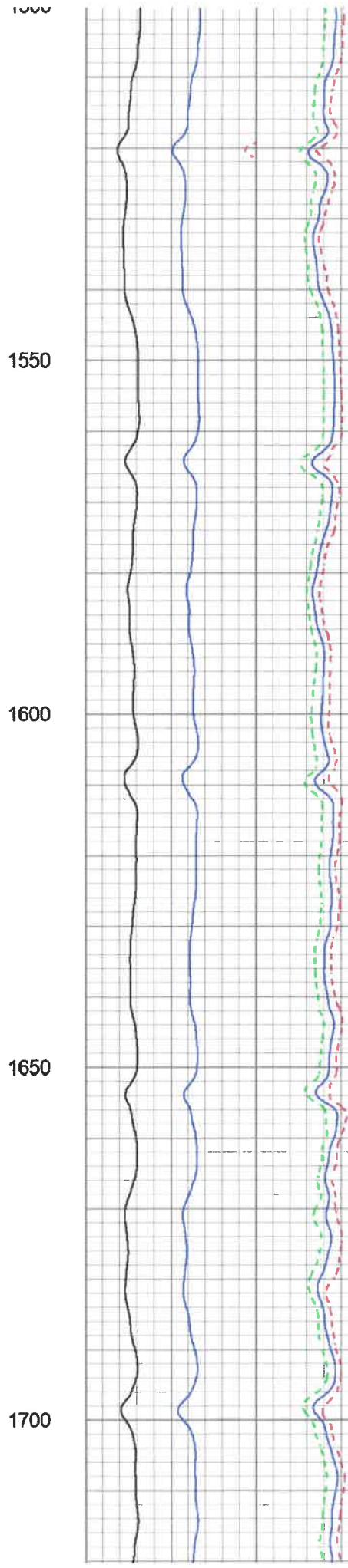
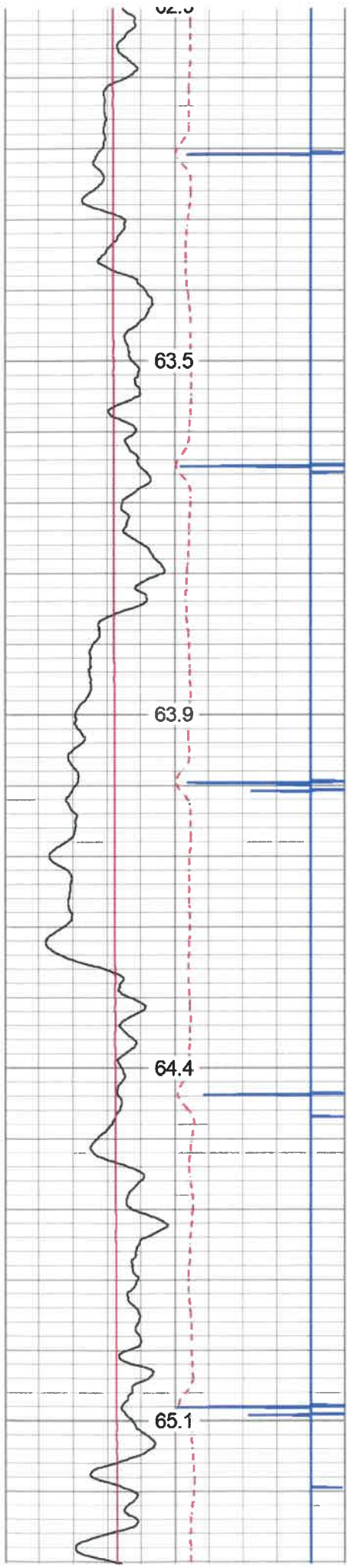
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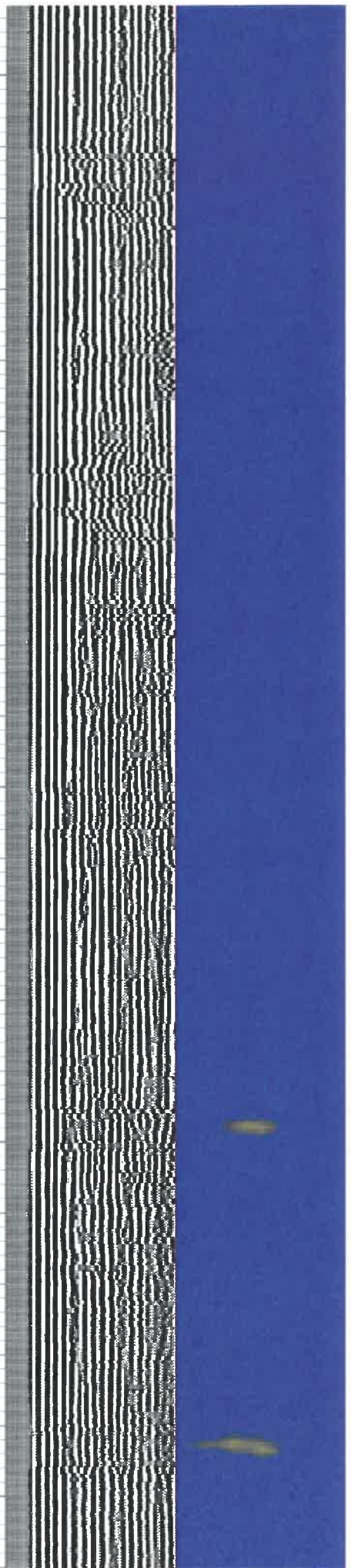
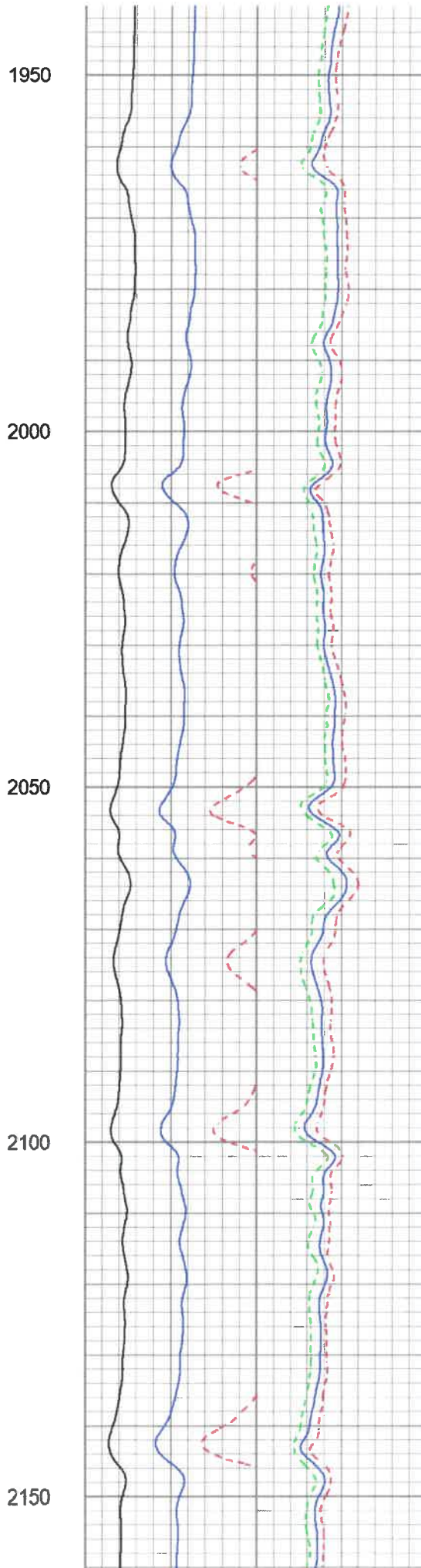
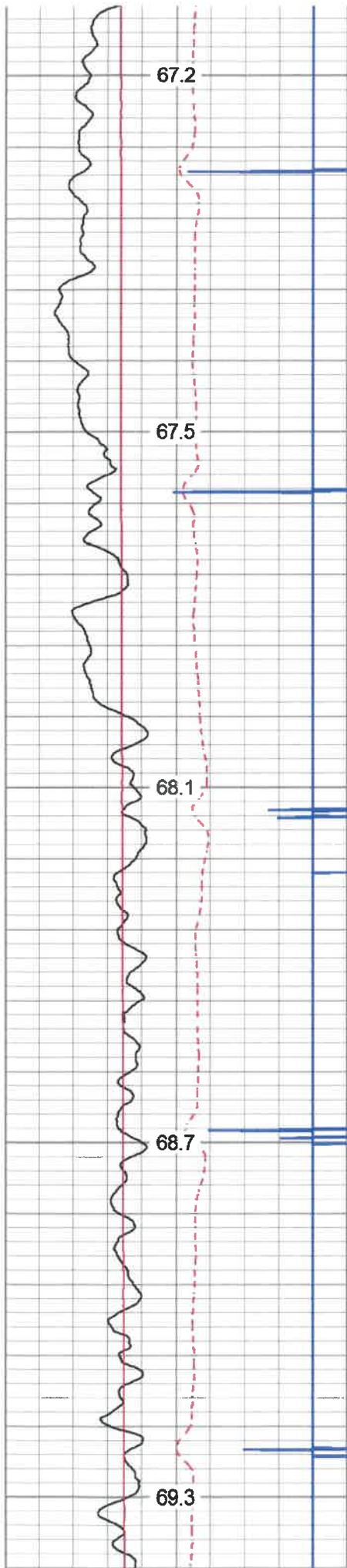
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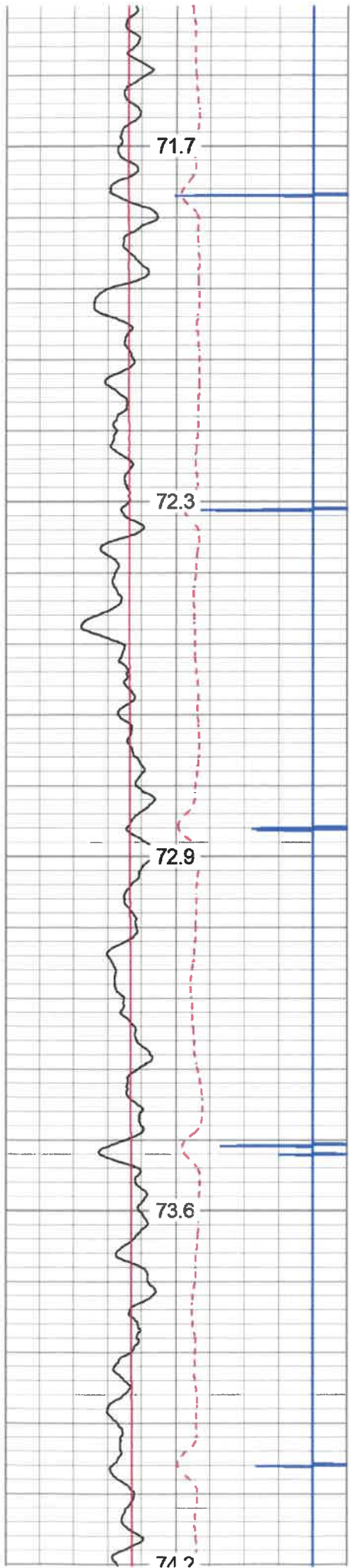
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1250









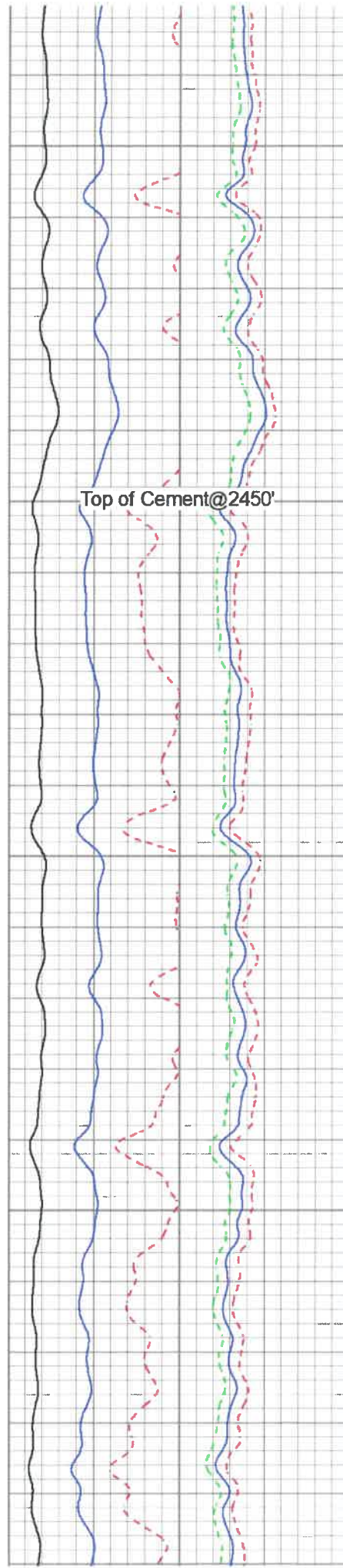
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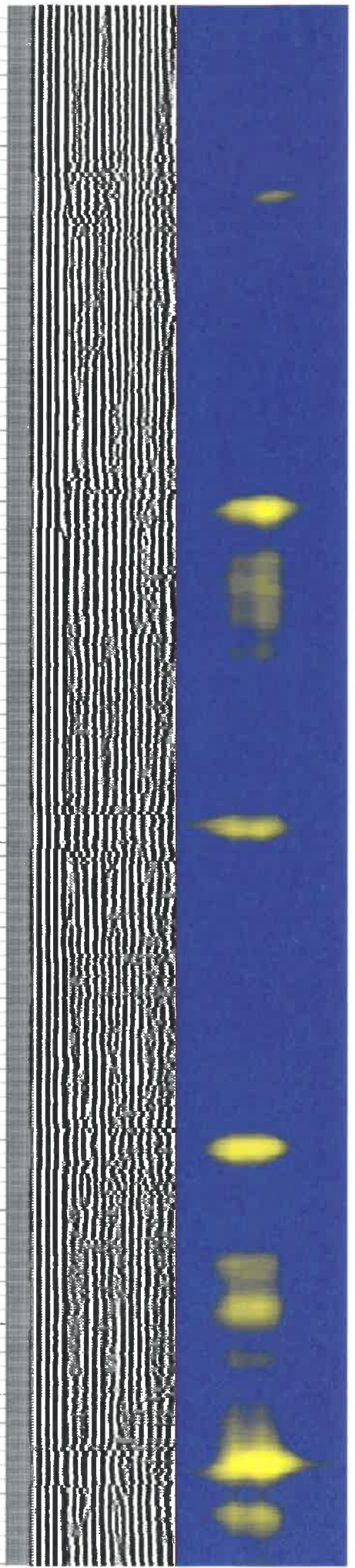
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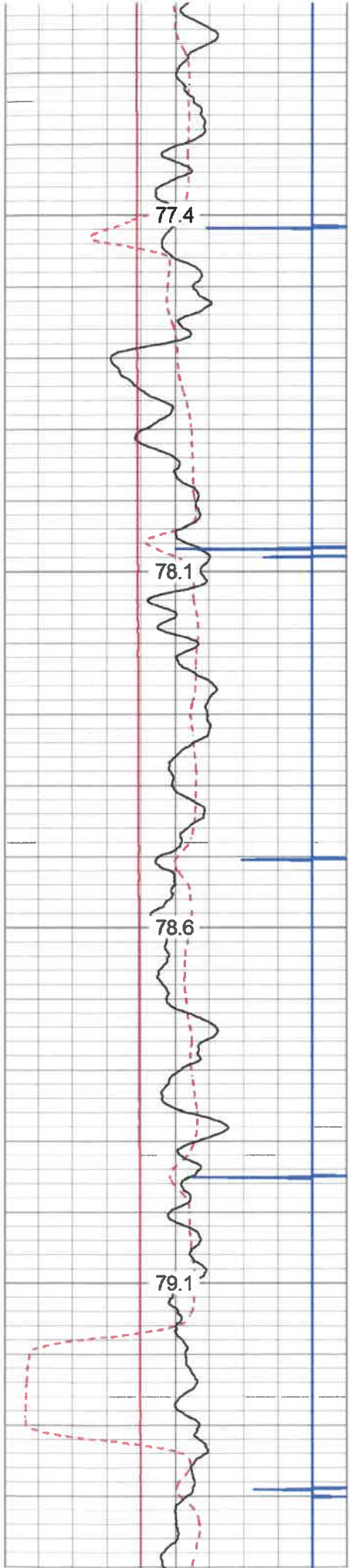
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2600



Top of Cement@2450'



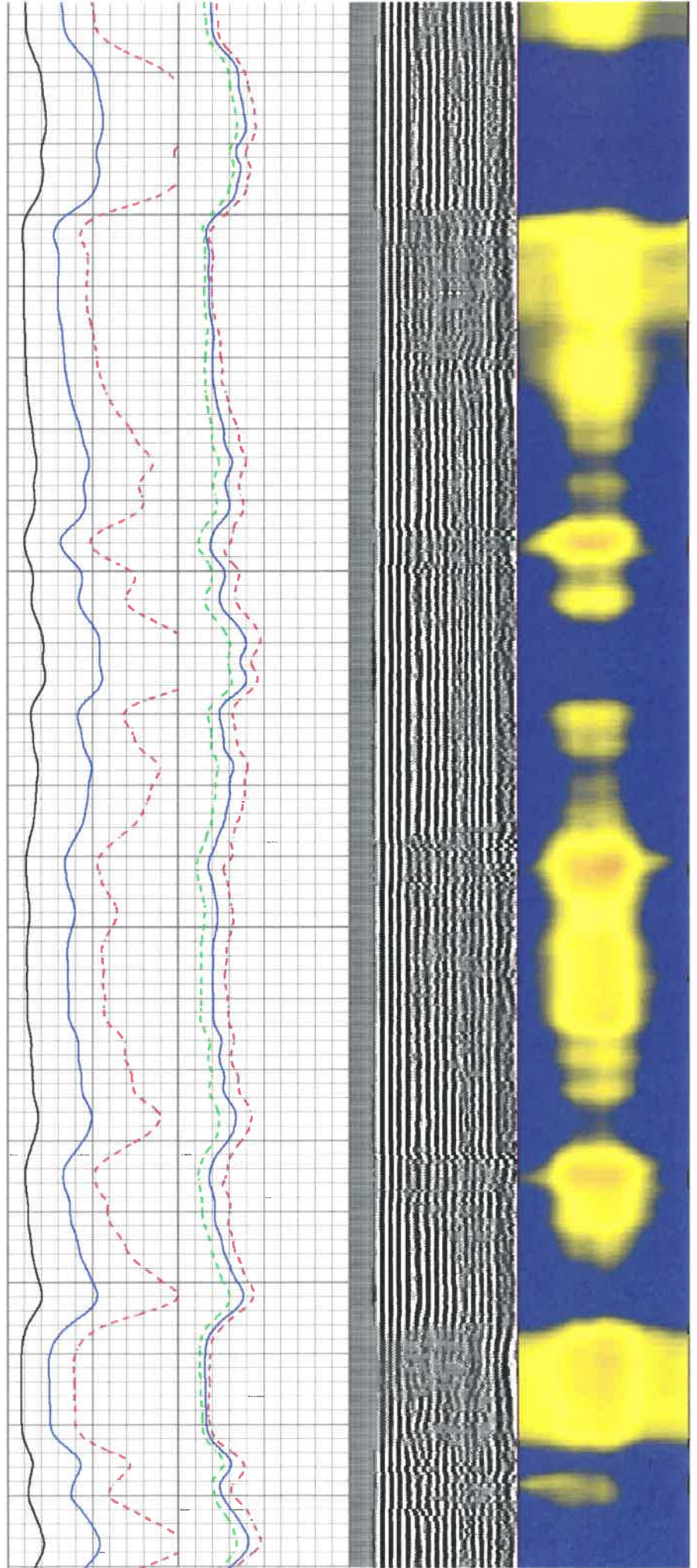


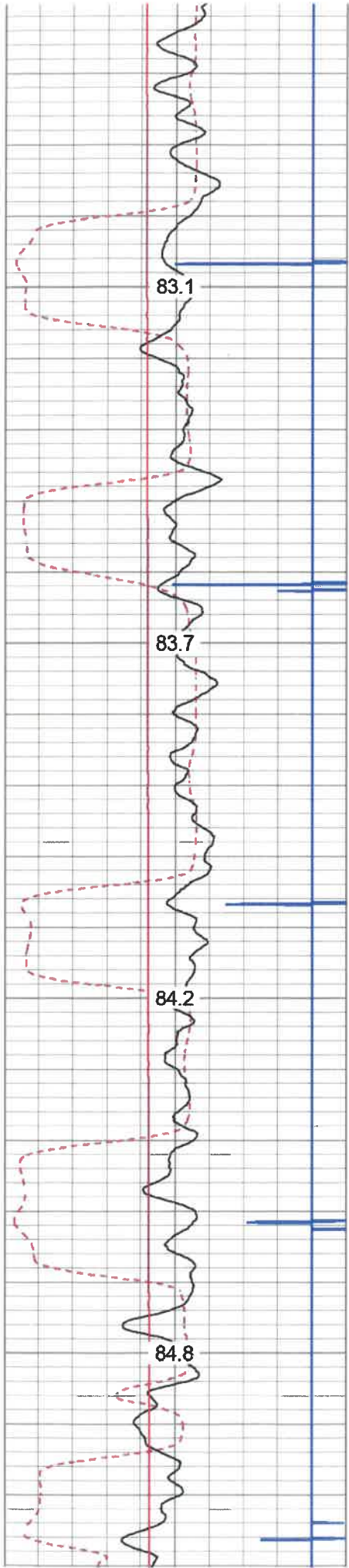
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3000



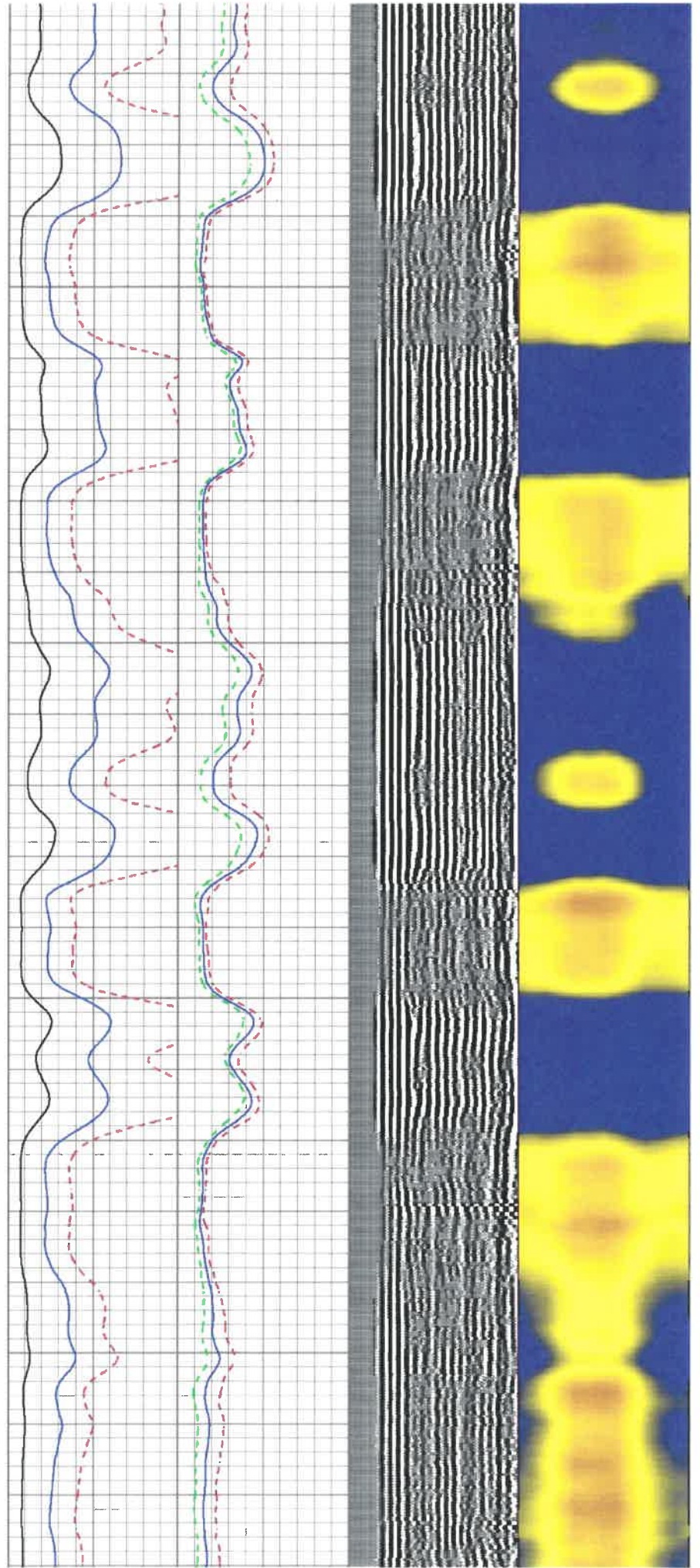


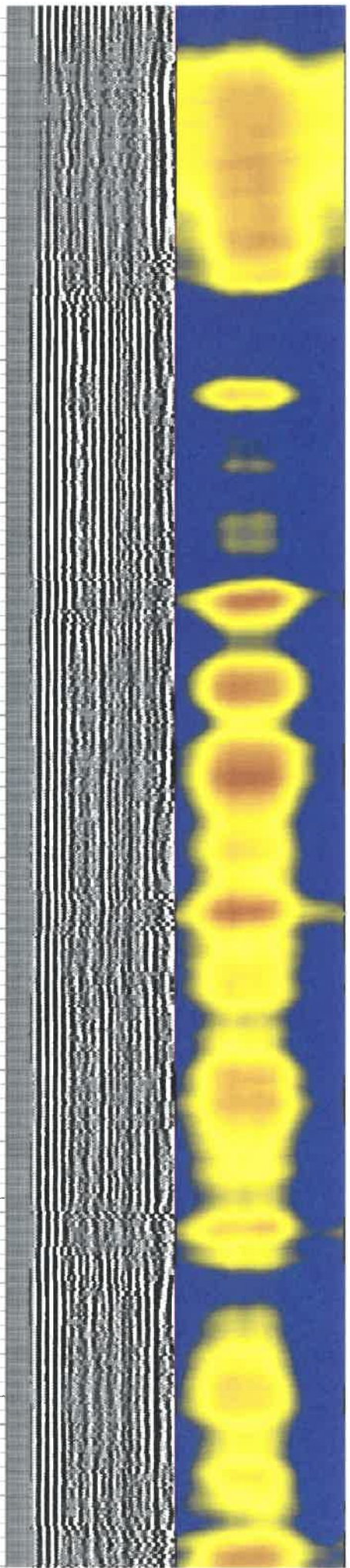
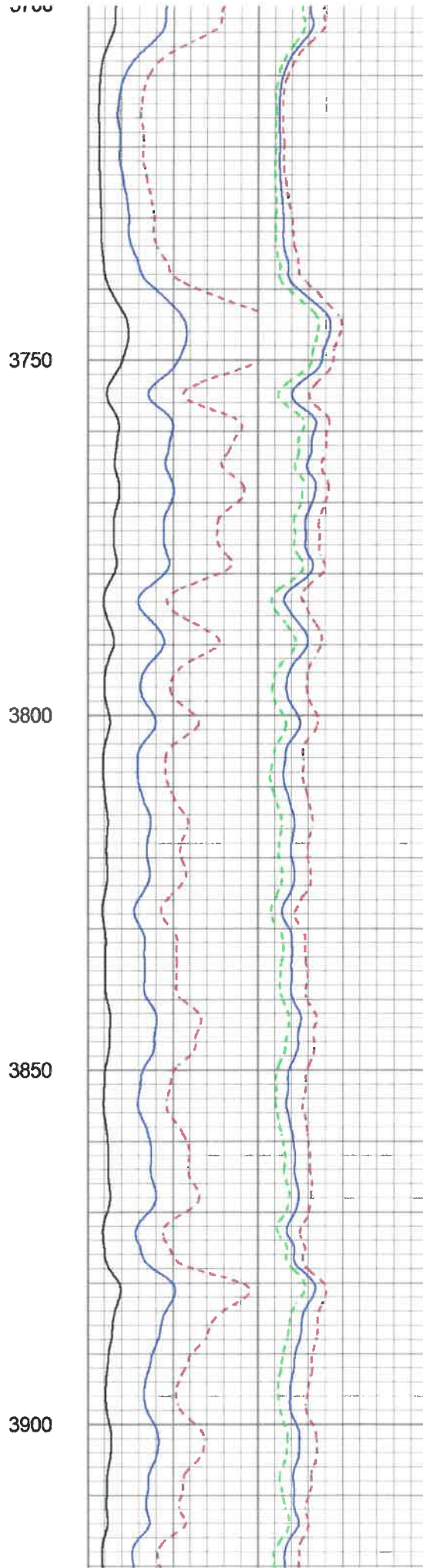
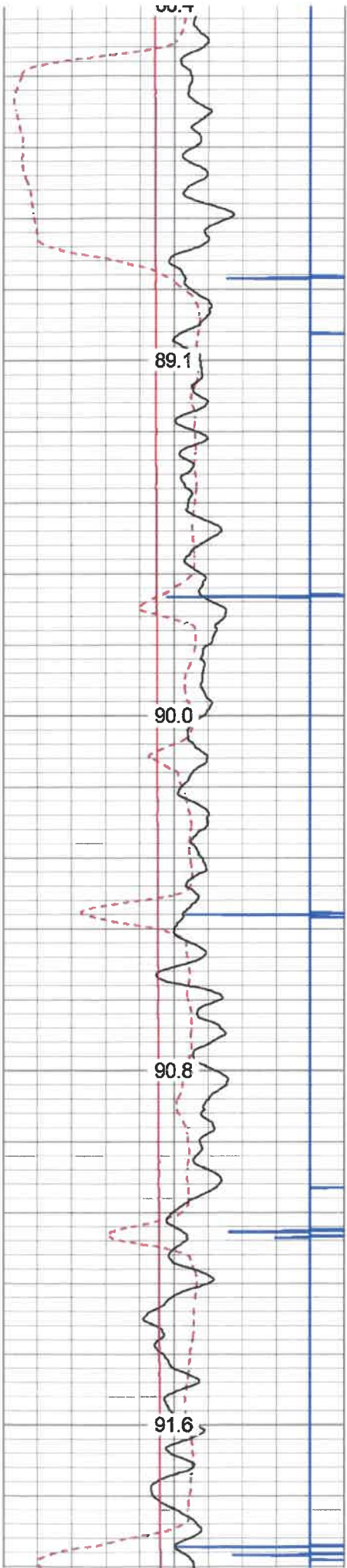
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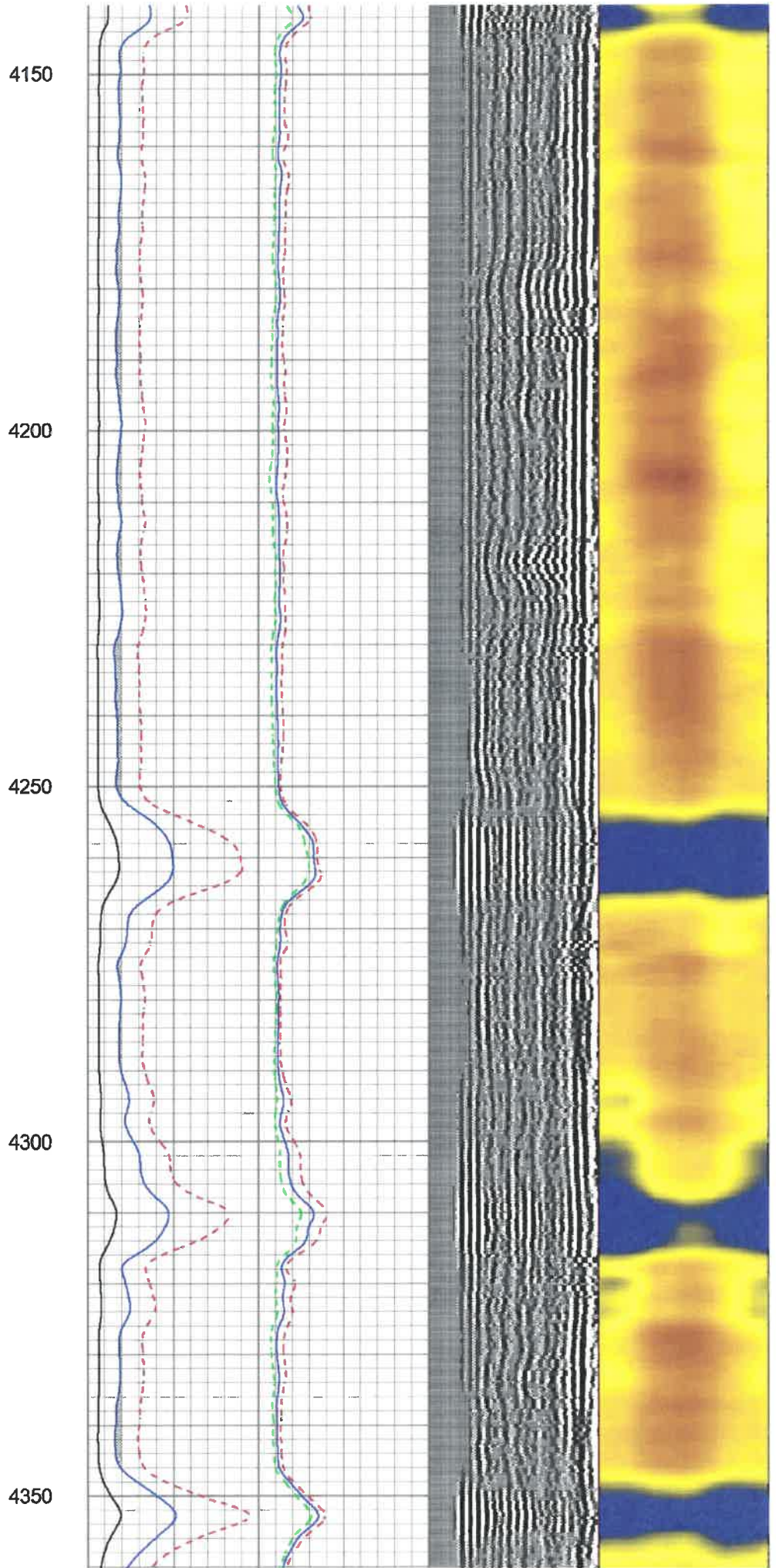
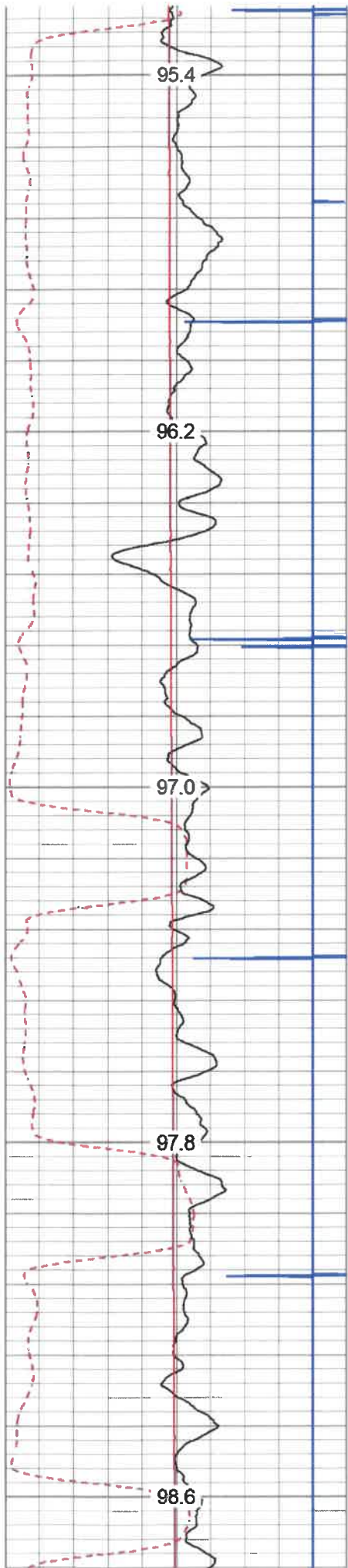
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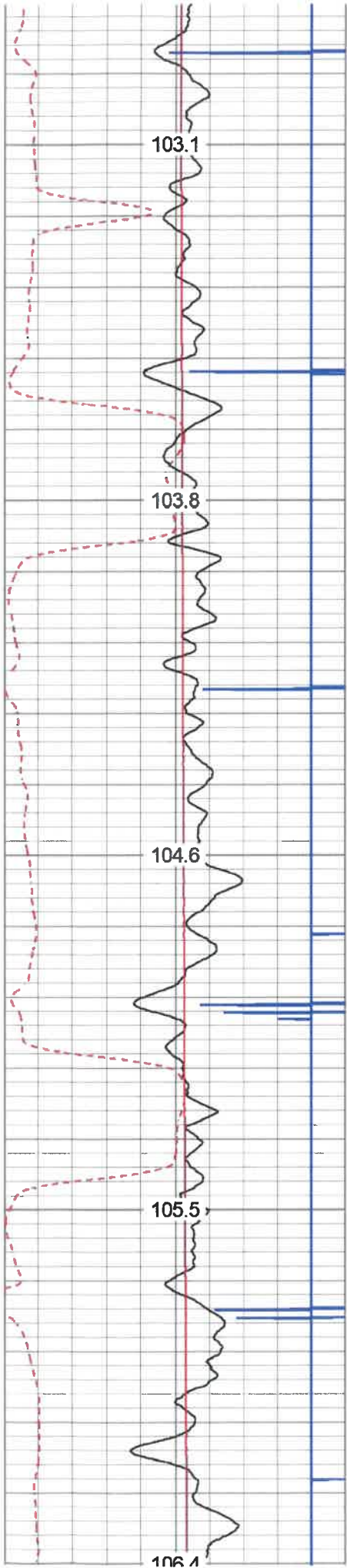
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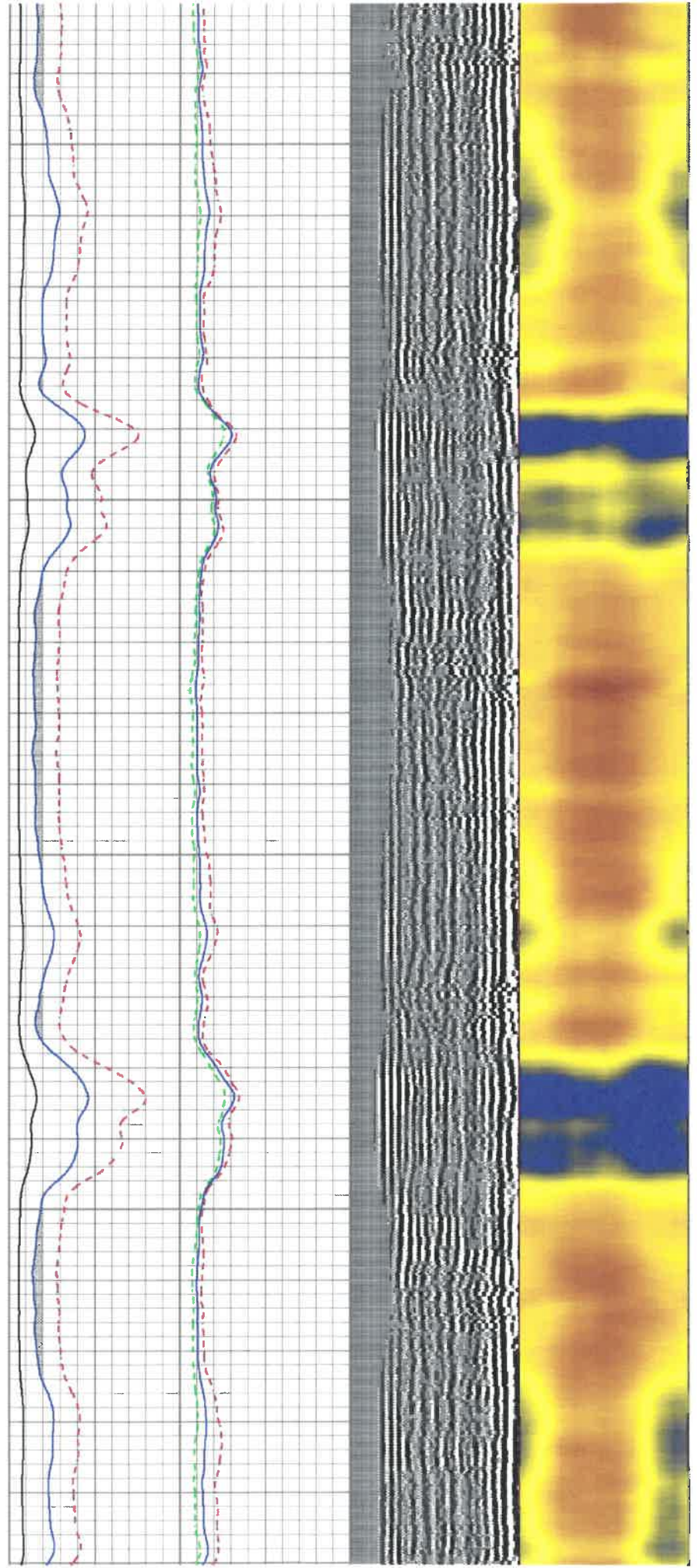
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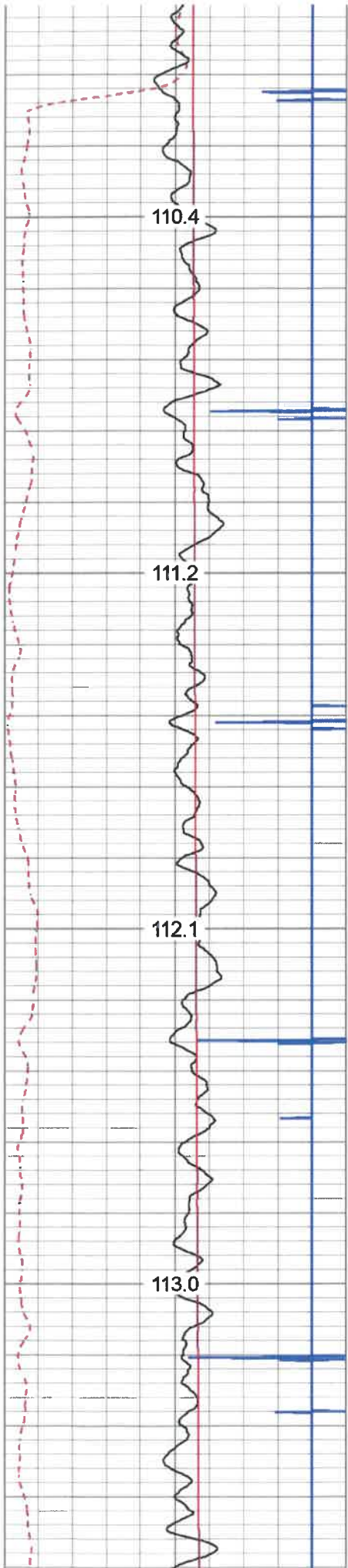
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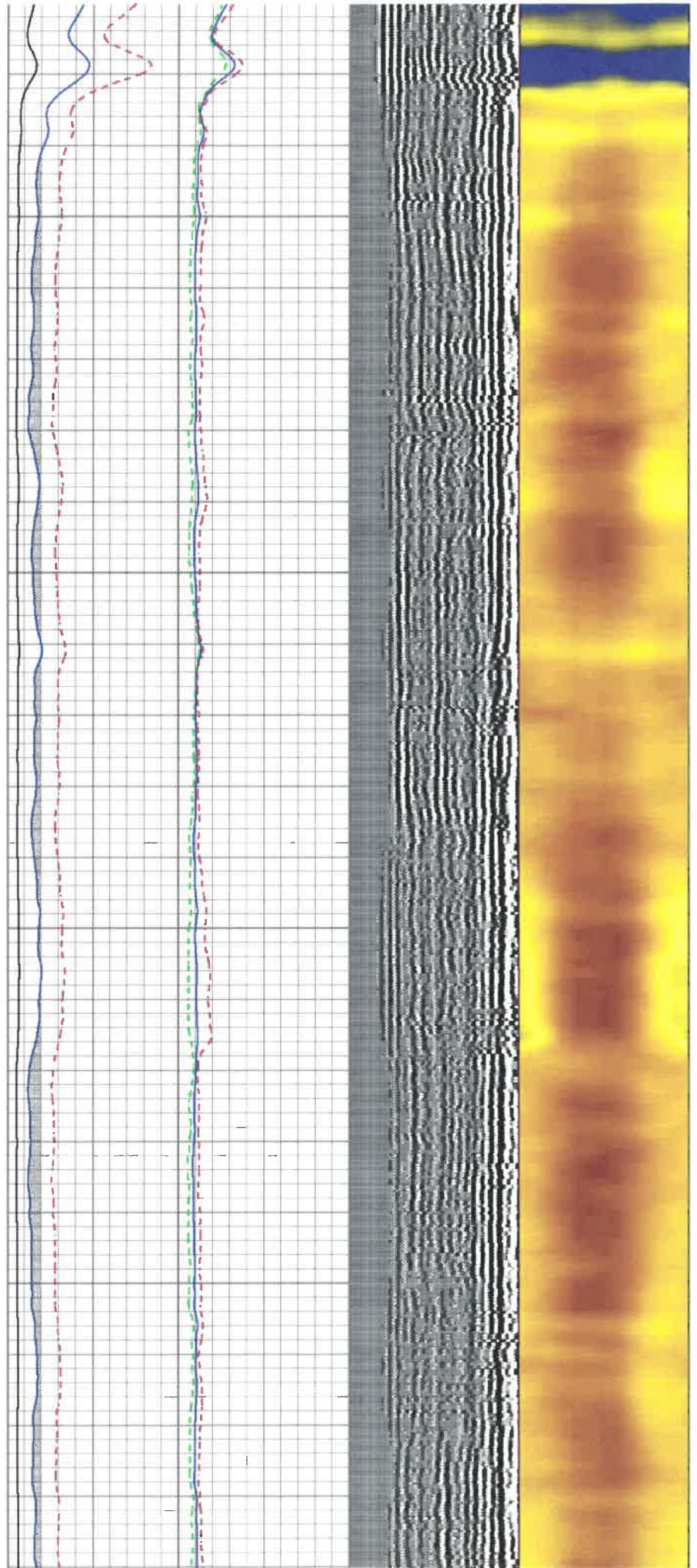


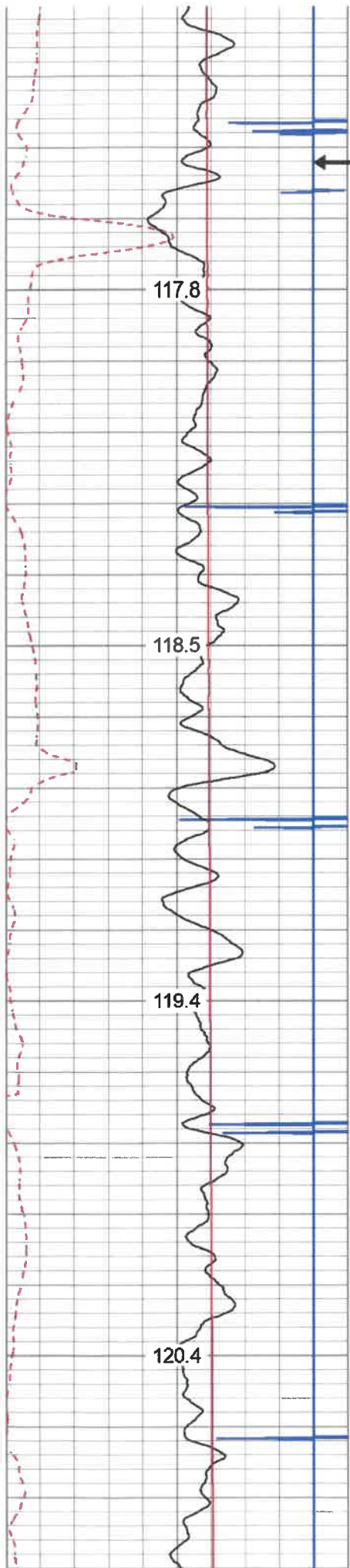
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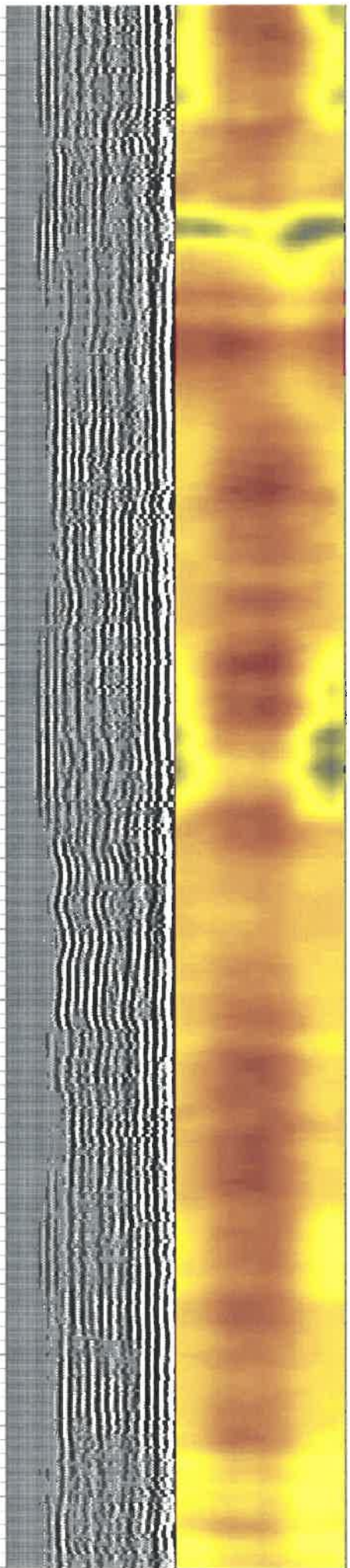
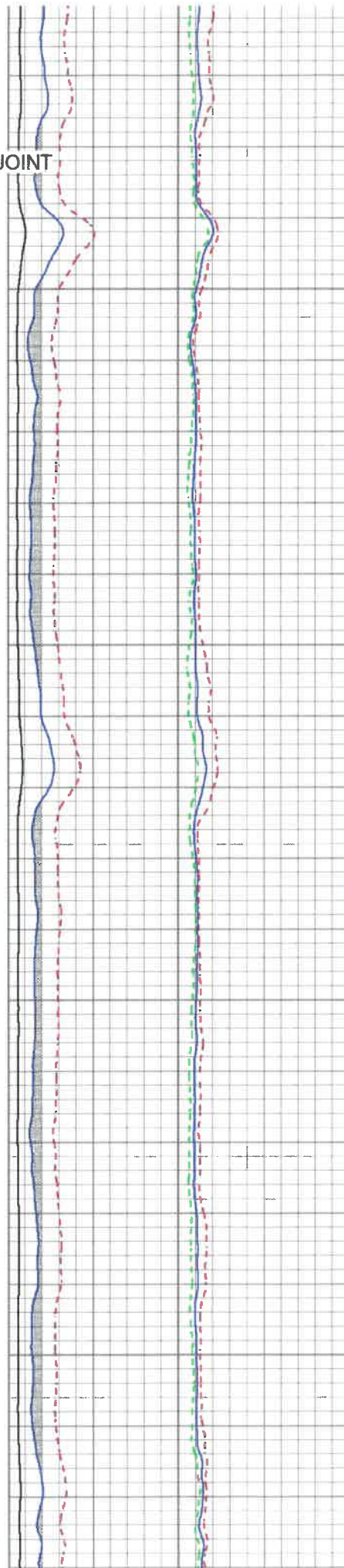
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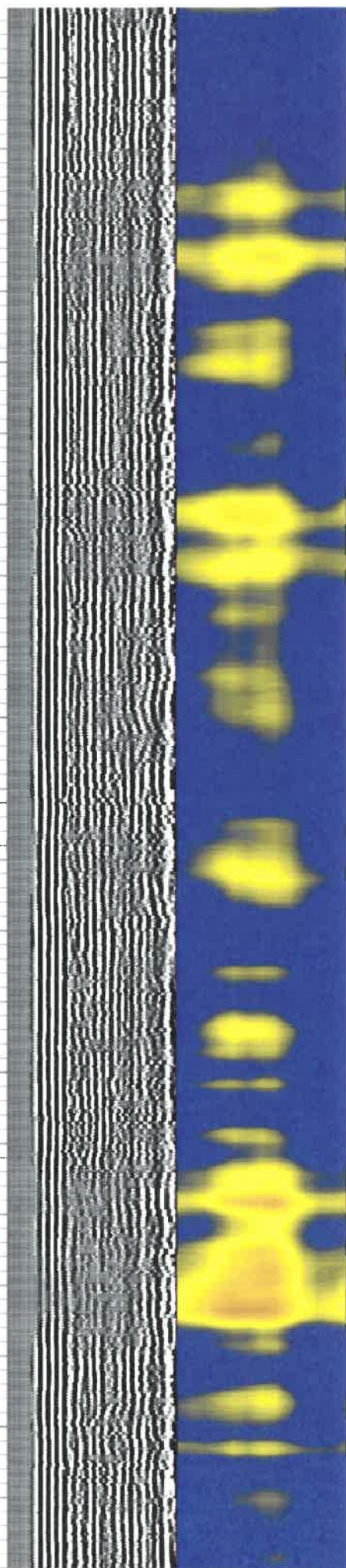
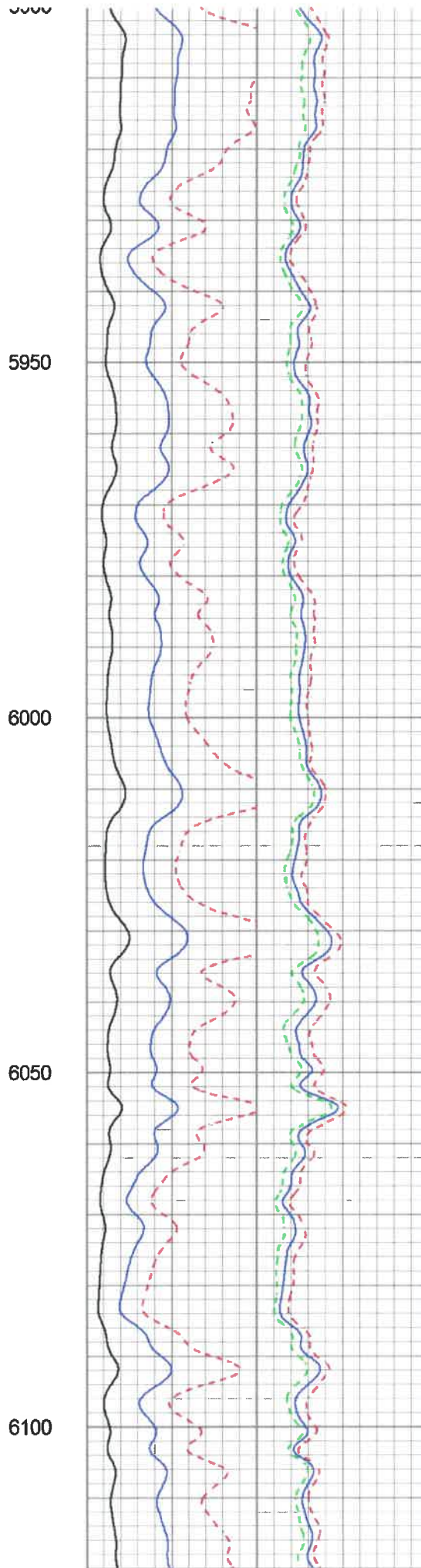
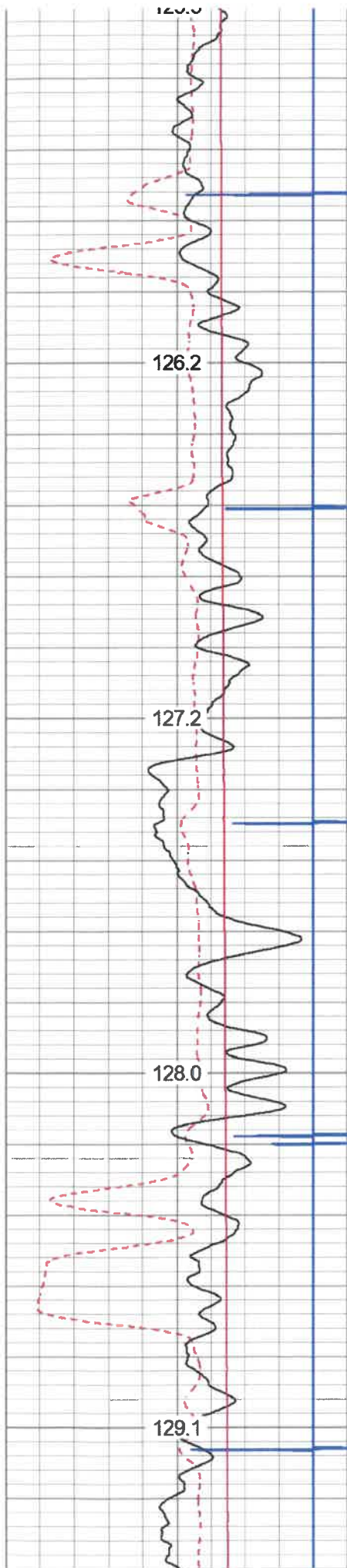
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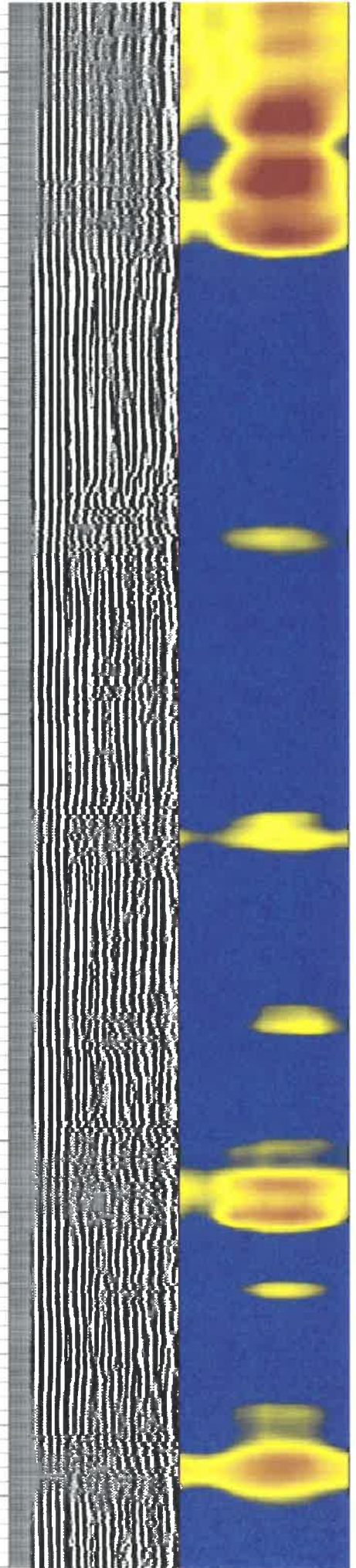
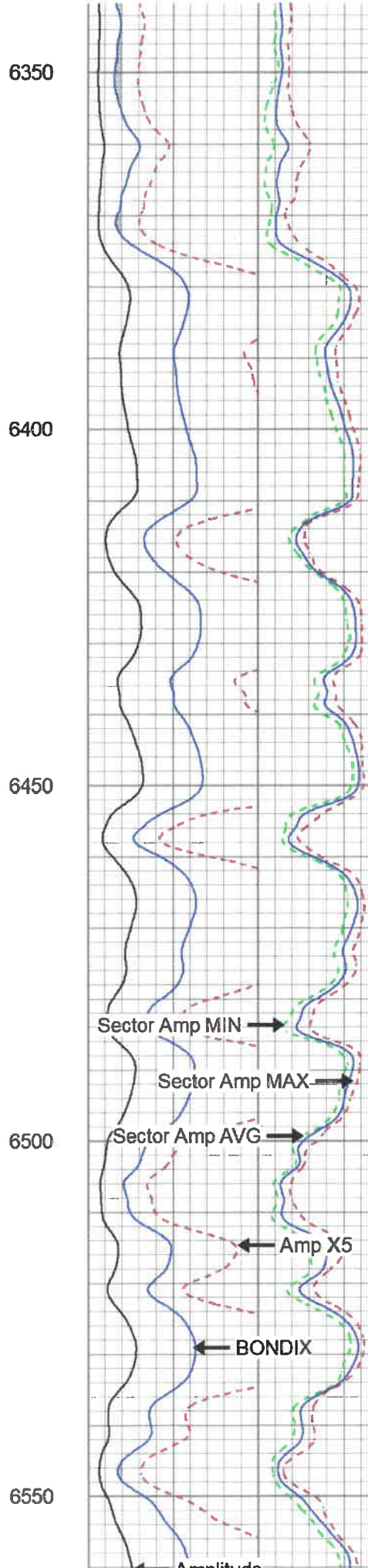
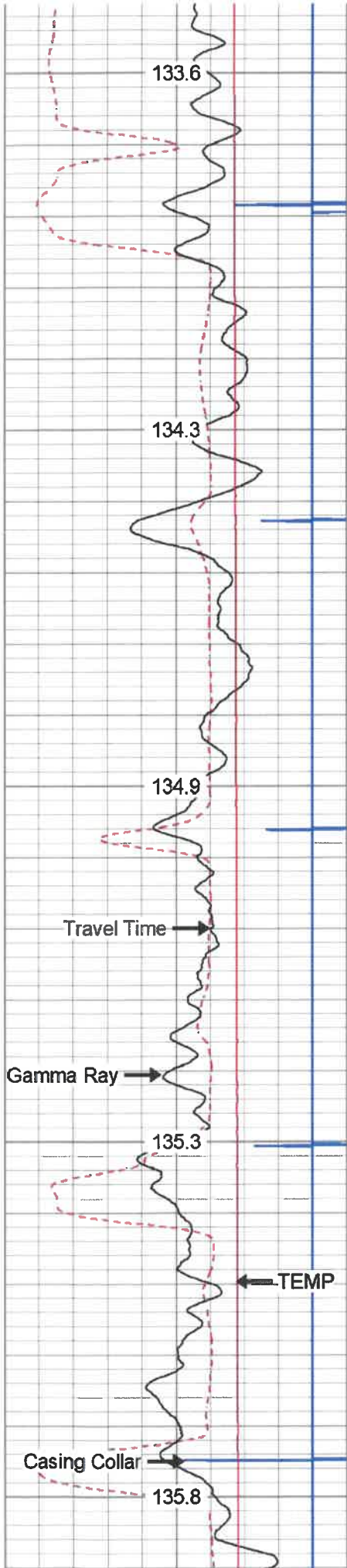
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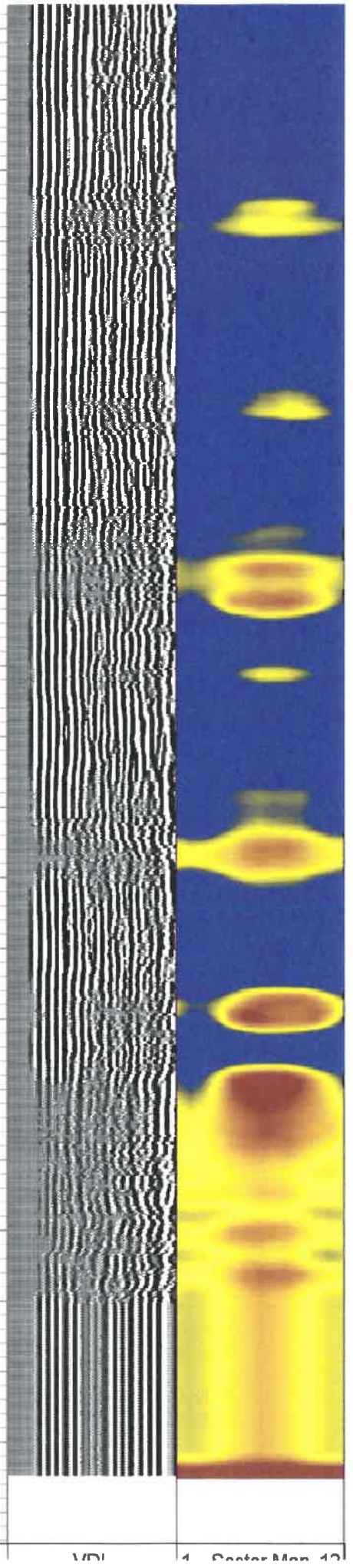
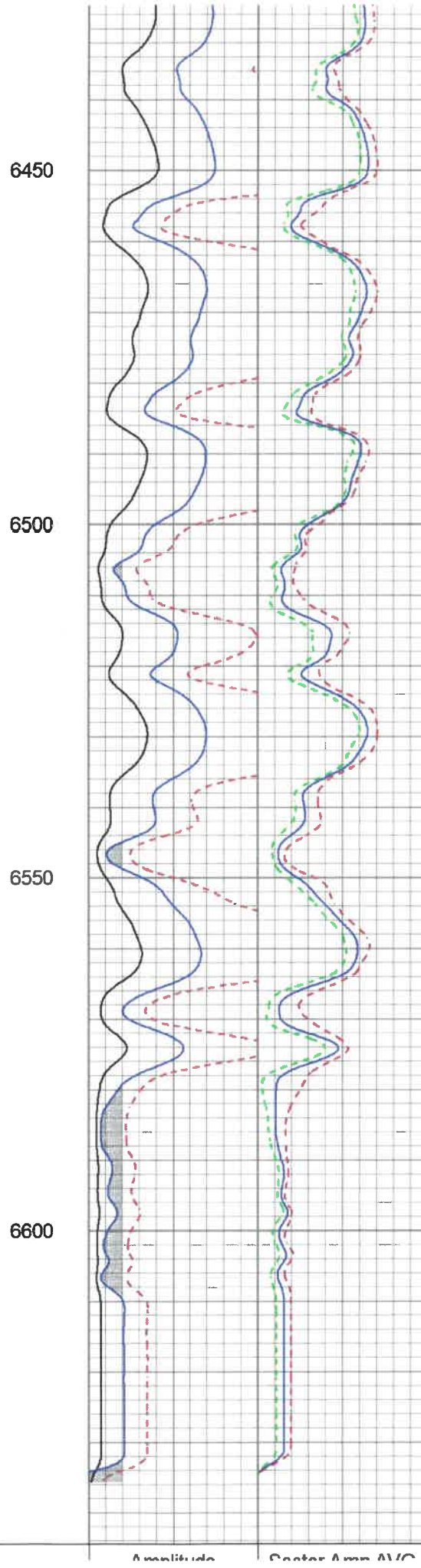
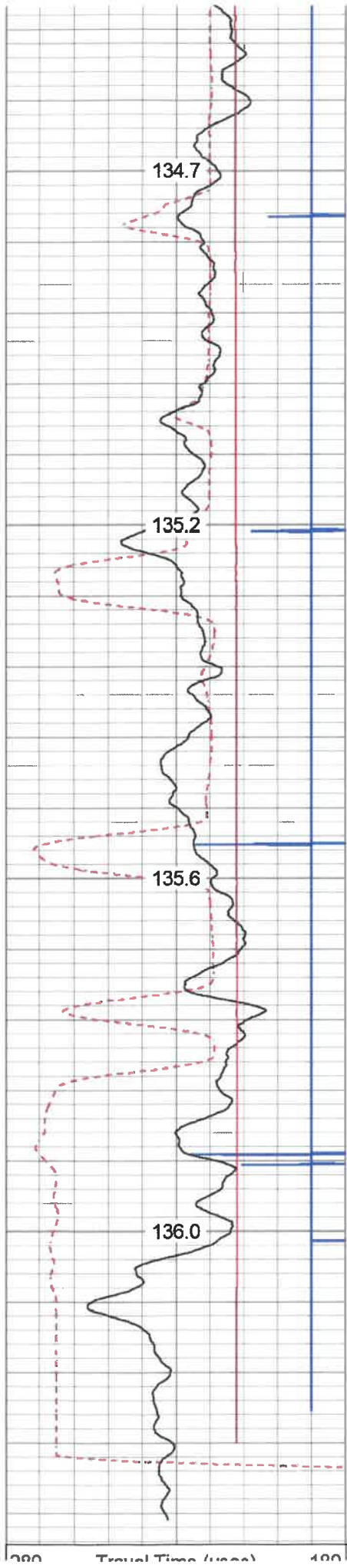
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Amplitude



	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.037	1.186	3.500	71.921	59.551	1.270
CAL	0.012	0.565				
5'	0.006	1.204	3.500	71.921	57.152	3.131
SUM						
S1	0.036	2.122	0.000	100.000	47.939	-1.716
S2	0.037	2.152	0.000	100.000	47.263	-1.729
S3	0.037	2.296	0.000	100.000	44.276	-1.637
S4	0.037	2.341	0.000	100.000	43.409	-1.609
S5	0.037	2.321	0.000	100.000	43.778	-1.606
S6	0.036	2.366	0.000	100.000	42.913	-1.536
S7	0.037	2.266	0.000	100.000	44.866	-1.674
S8	0.034	2.224	0.000	100.000	45.674	-1.562
S9	0.039	2.224	0.000	100.000	45.772	-1.777
S10	0.038	2.205	0.000	100.000	46.166	-1.776
S11	0.036	2.151	0.000	100.000	47.283	-1.702
S12	0.037	2.136	0.000	100.000	47.657	-1.781

Temperature Calibration Report

Serial Number: IOL40-05
 Tool Model: Tek12
 Performed: Wed Jul 31 10:53:14 2013

	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)
CCL	18.93		CCL-312tekcc (I08X3-01) 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	12.77					
WVFS12	11.48		SCBL-Tek12 (IOL40-05) Tekco 400 Deg F 12 Sector RIB with Temp	9.13	3.25	135.00
WVFS11	11.48					
WVFS10	11.48					
WVFS9	11.48					
WVFS8	11.48					