



RADIAL BOND LOG
VDL/SECTOR MAP
GAMMA/CCL

Pioneer Energy Services

Company ENCANA OIL & GAS
Well DRIETH 4D-6H-1368
Field WATTENBURG
County WELD State CO

Location: API # : 05-123-37613

Other Services

SHL: 2383' FSL & 755' FEL
BHL: 2500' FSL & 460 FWL
SEC 6 TWP 3N RGE 68W

Elevation

Permanent Datum
Log Measured From KB 30'
Drilling Measured From

Elevation 5110'
K.B. 5140'
D.F. 5139'
G.L. 5110'

Company ENCANA OIL & GAS
Well DRIETH 4D-6H-1368
Field WATTENBURG
County WELD
State CO

Date OCTOBER 10, 2014

Run Number	1		
Depth Driller	UNK		
Depth Logger	7340'		
Bottom Logged Interval	7340'		
Top Log Interval	SURFACE		
Open Hole Size	8 5/8"		
Type Fluid	DRILLING MUD		
Density / Viscosity	UNK		
Max. Recorded Temp.	NA		
Estimated Cement Top	SEE LOG		
Time Well Ready	15.00		
Time Logger on Bottom	15.30		
Equipment Number	75		
Location	FT MORGAN		
Recorded By	TIM REESE		
Witnessed By			

Borehole Record				Tubing Record			
Bit	From	To	Size	Weight	From	To	

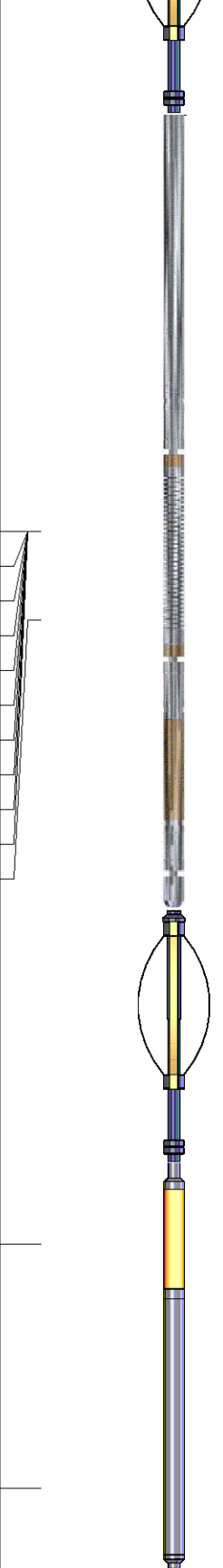
Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String				
Liner				

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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

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	

WVF3FT	11.63		RBT-Probe275 (070132) Probe Radial Bond Digital	8.92	2.75	100.00
WVFCAL	11.63					
WVFS1	11.63					
WVFS2	11.63					
WVFS3	11.63					
WVFS4	11.63					
WVFS5	11.63					
WVFS6	11.63					
WVFS7	11.63					
WVFS8	11.63					
WVF5FT	10.63					
			PTS275	2.83	2.75	
CCL	3.63					
			GR_CCL-Probe (110249) Probe Gamma CCL	4.54	2.75	100.00
GR	0.90					
Dataset: drieth 4d-6h-i368.db: field/well/run1/pass2 Total Length: 19.13 ft Total Weight: 200.00 lb O.D. 2.75 in						

Calibration Report		
Database File:	drieth 4d-6h-i368.db	
Dataset Pathname:	pass2	
Dataset Creation:	Wed Oct 15 16:09:45 2014 by Log 7.0 B1	

Gamma Ray Calibration Report

Serial Number: 110249
 Tool Model: Probe
 Performed: Sun Sep 28 17:05:25 2014

 Calibrator Value: 1.0 GAPI

 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

 Sensitivity: 1.0300 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 070132
 Tool Model: Probe275

 Calibration Casing Diameter: 4.500 in
 Calibration Depth: 5022.050 ft

Master Calibration, performed Fri Oct 10 08:00:29 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.754	1.560	81.196	107.517	0.181
CAL	0.013	0.709				
5'	0.012	0.647	1.560	81.196	125.482	0.004
SUM						
S1	0.012	0.727	0.000	100.000	139.872	-1.743
S2	0.013	0.725	0.000	100.000	140.320	-1.787
S3	0.012	0.691	0.000	100.000	147.328	-1.822
S4	0.013	0.740	0.000	100.000	137.464	-1.733
S5	0.012	0.766	0.000	100.000	132.750	-1.633
S6	0.013	0.768	0.000	100.000	132.381	-1.719
S7	0.013	0.759	0.000	100.000	133.963	-1.737
S8	0.012	0.720	0.000	100.000	141.380	-1.753

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

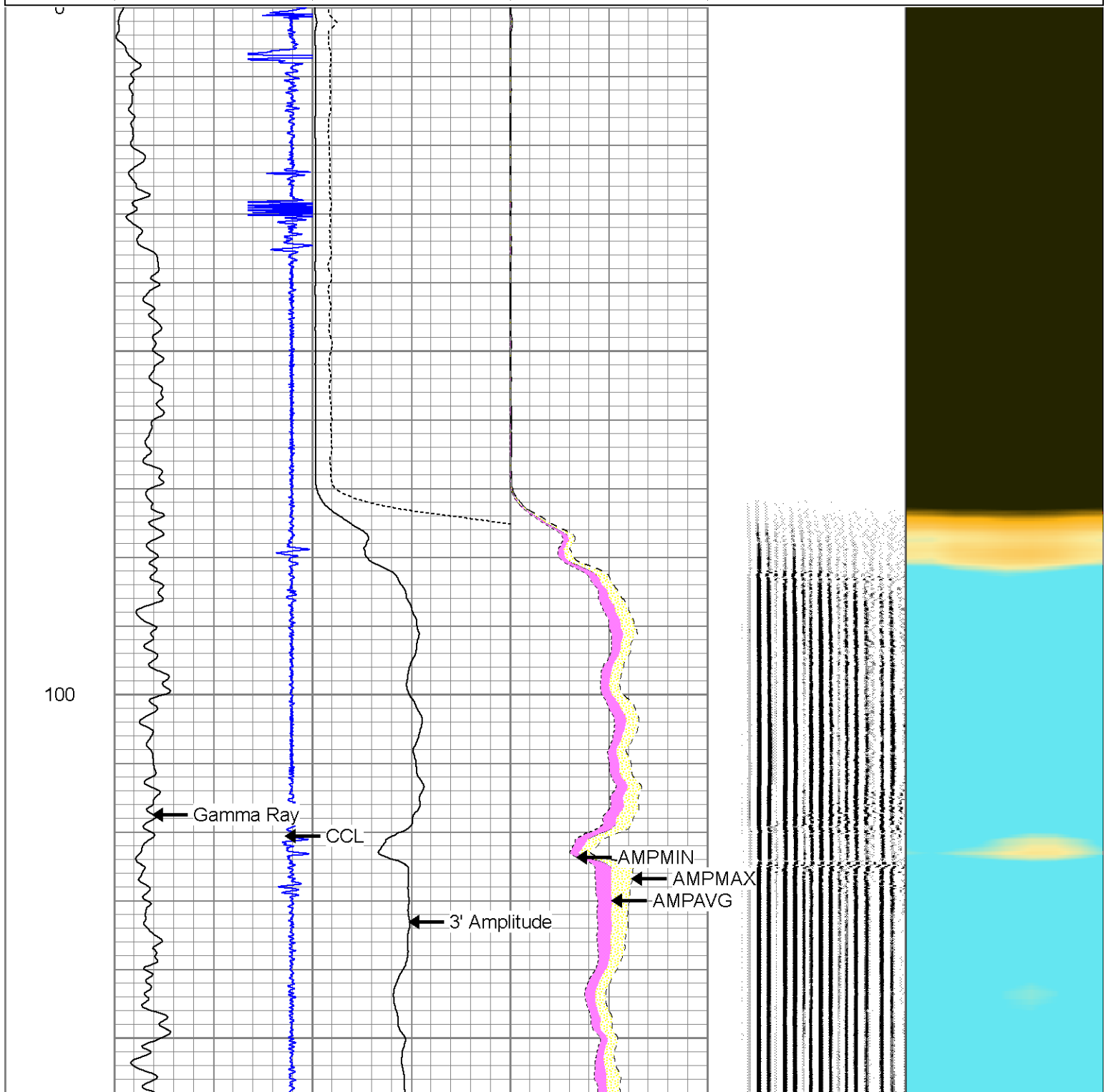
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.013	0.709	1.000	0.000

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	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

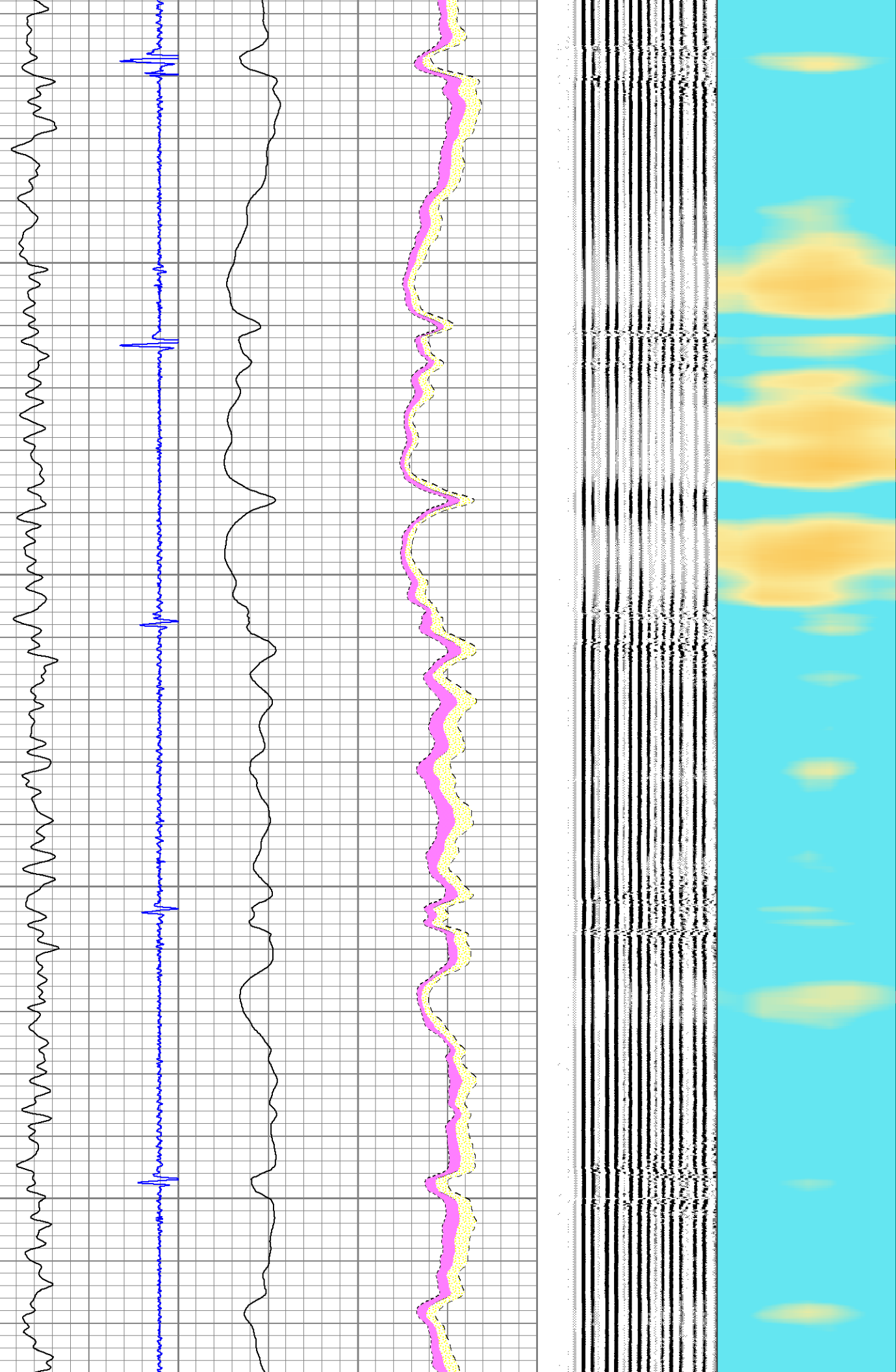
Database File: drieth 4d-6h-i368.db
 Dataset Pathname: pass2
 Presentation Format: scbl02
 Dataset Creation: Wed Oct 15 16:09:45 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

-9	CCL	1	3' Amplitude	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
	Gamma Ray		(mV)	100	0	AMPMAX	150			10		60
0	(GAPI)	200	0	AMPx5 (mV)	20	0	AMPMIN	150				



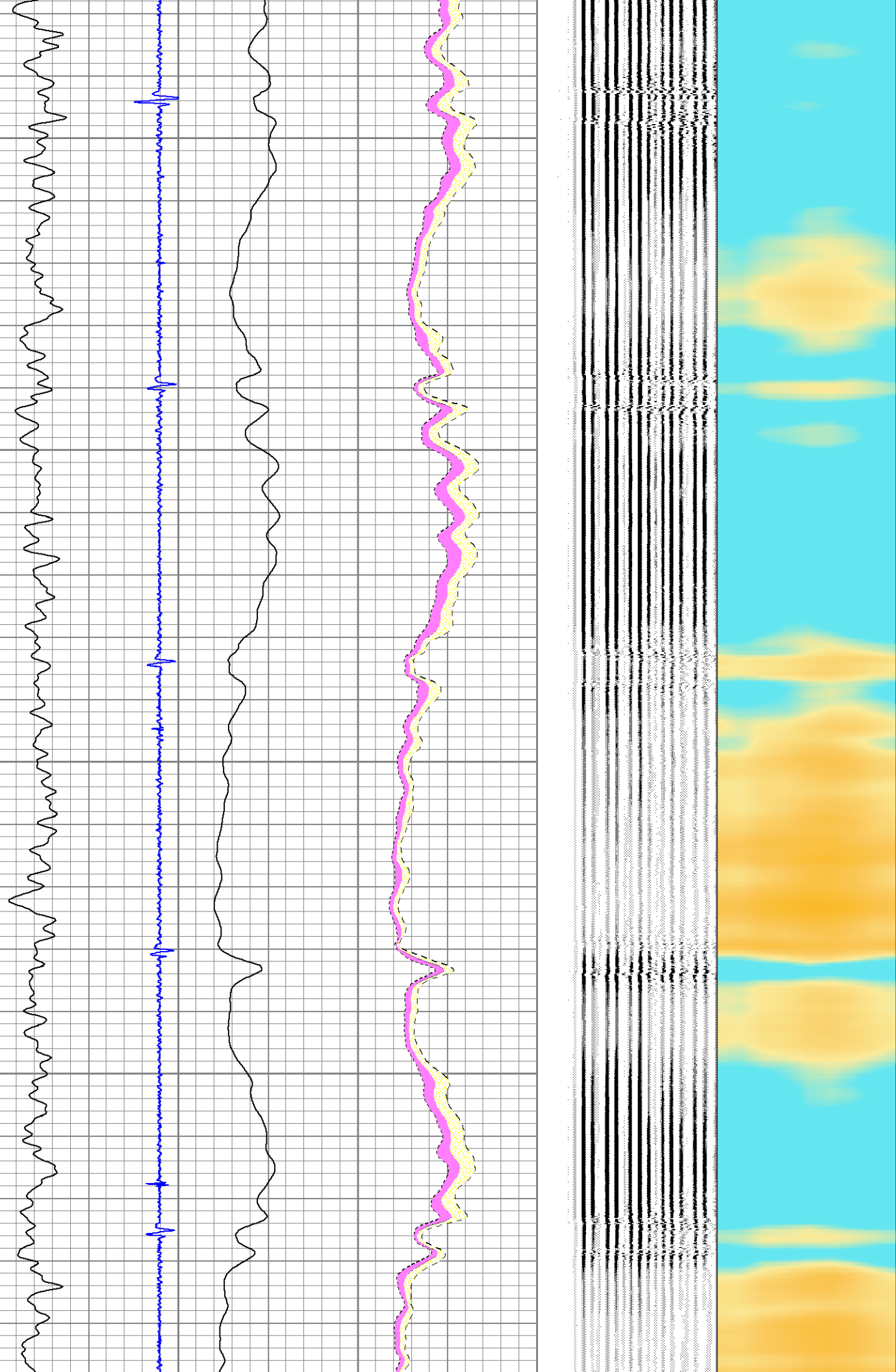
200

300



400

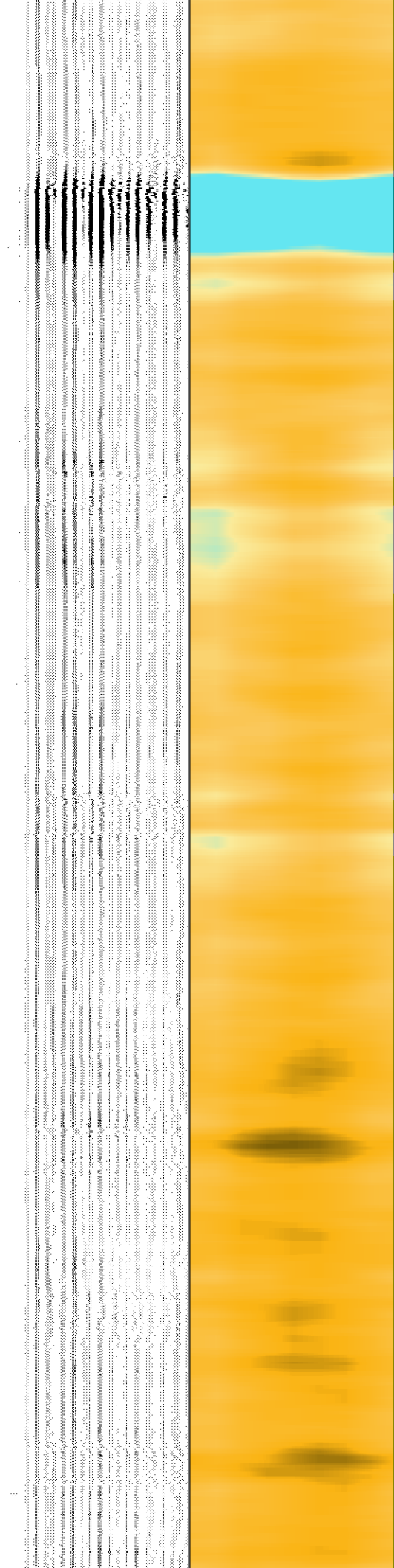
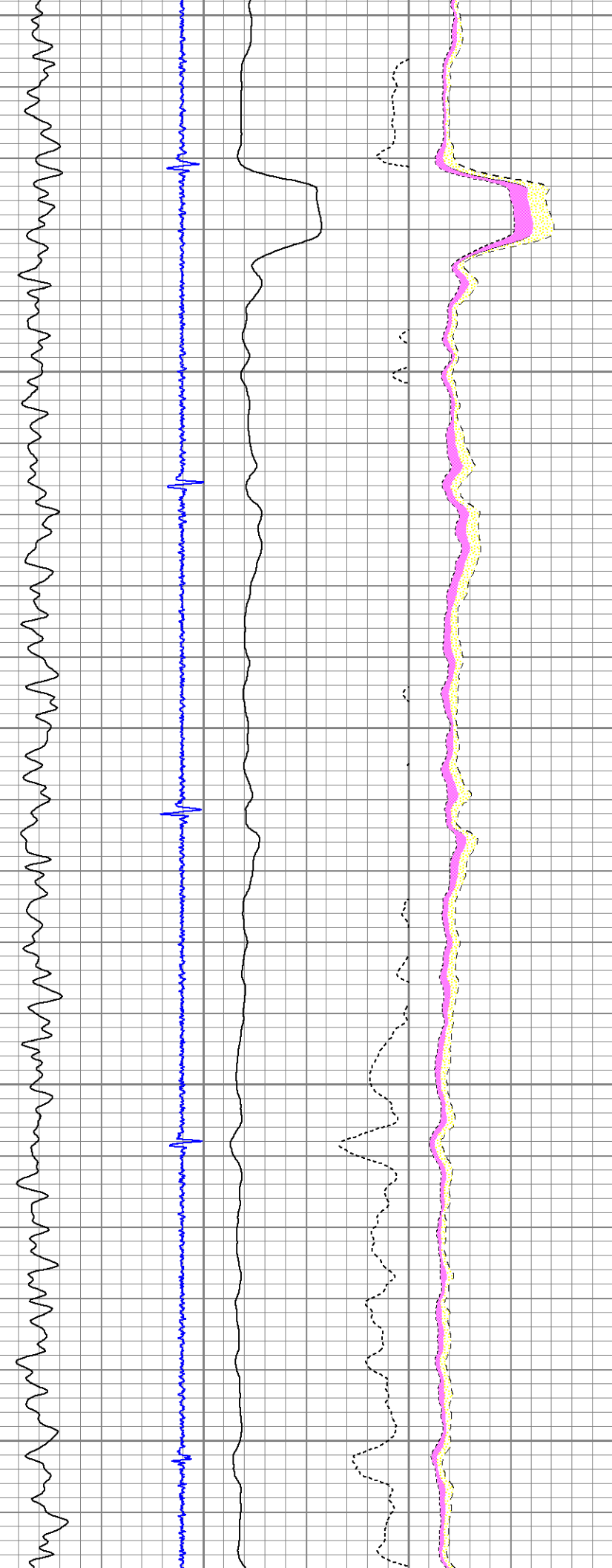
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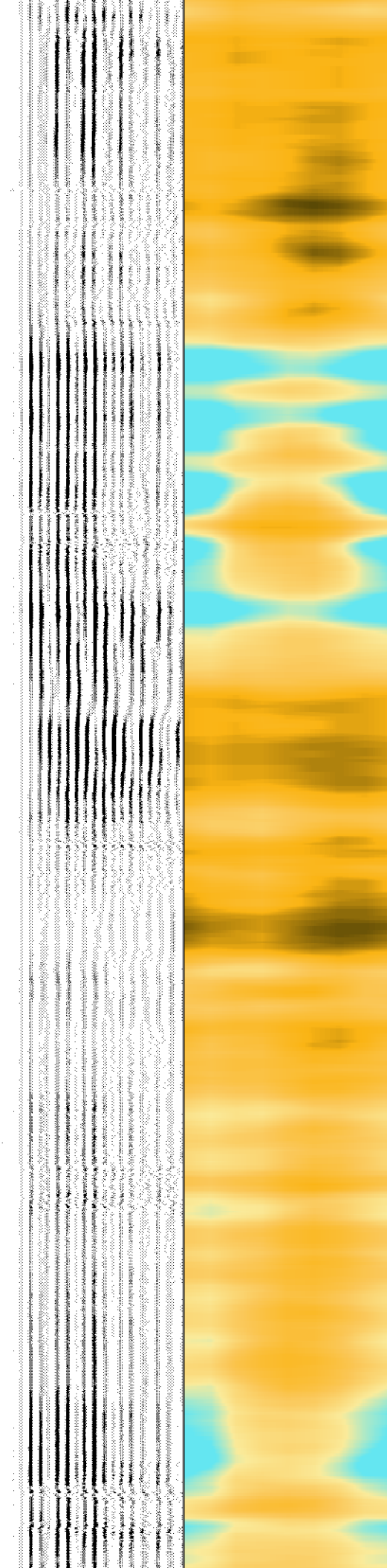
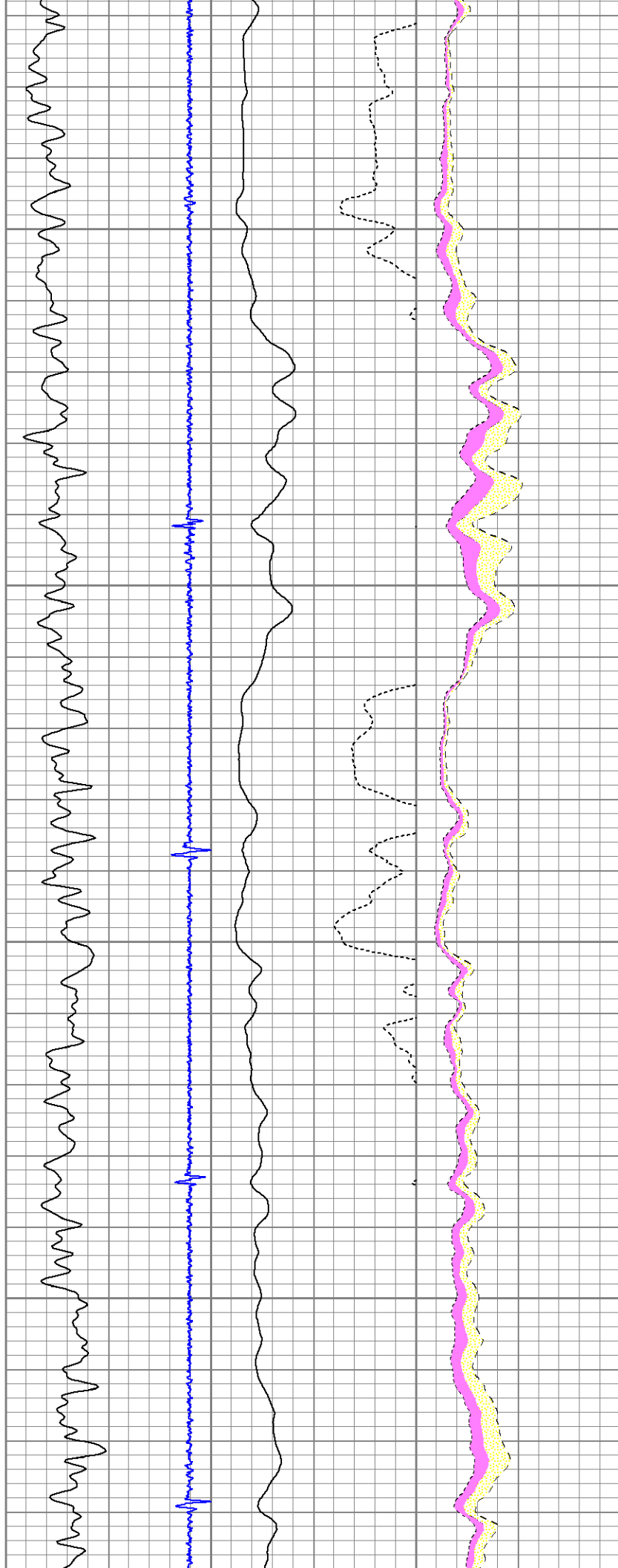
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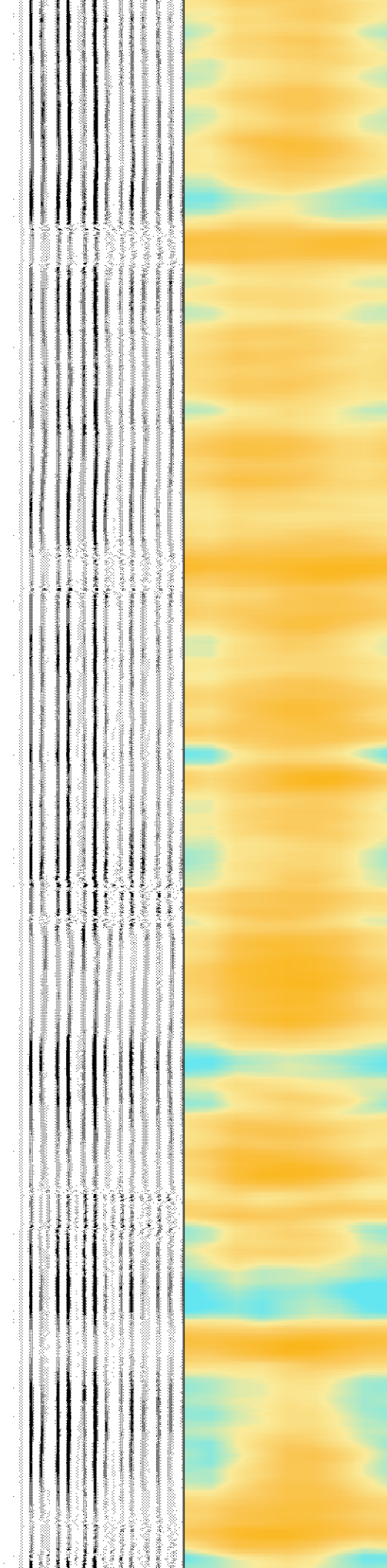
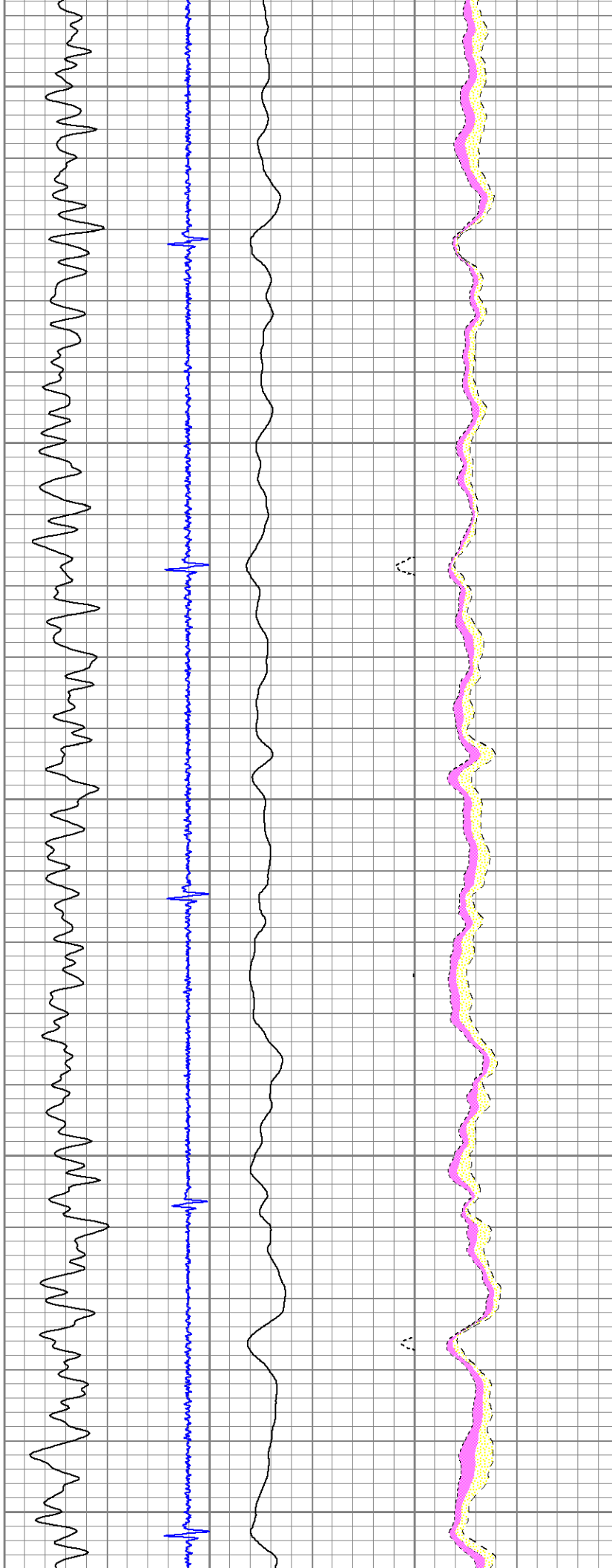
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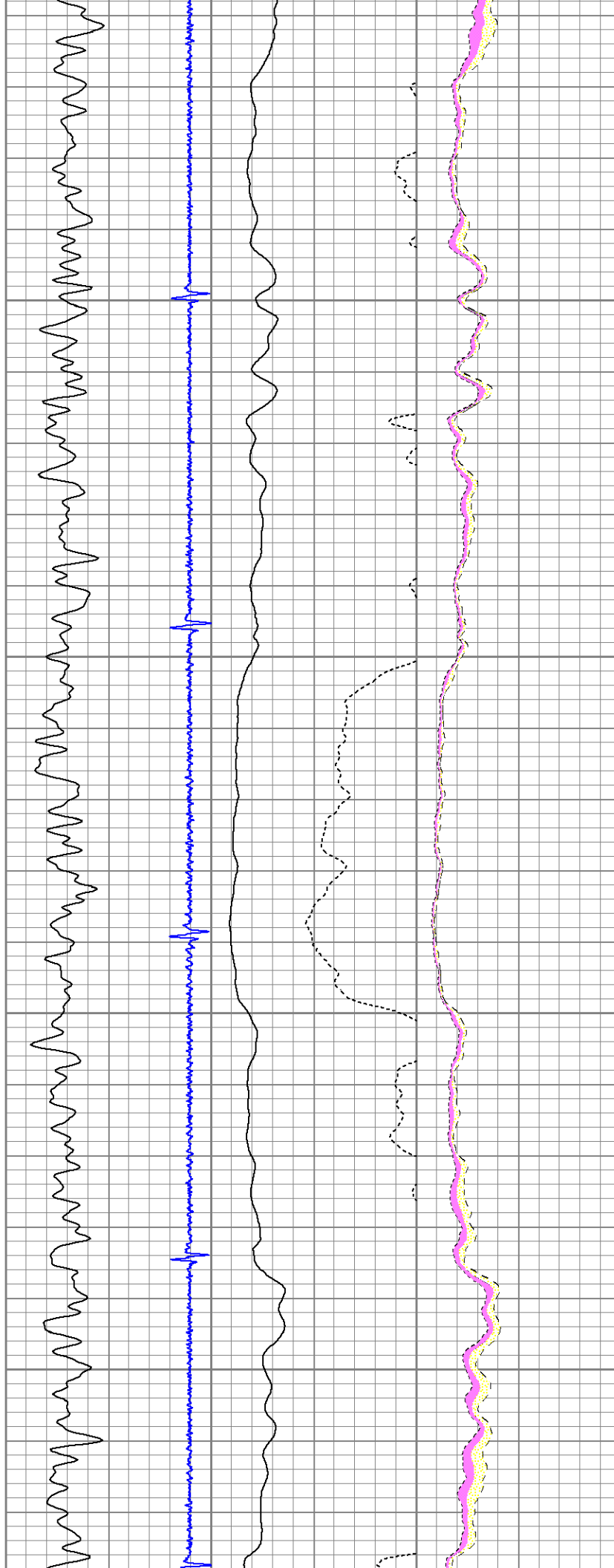
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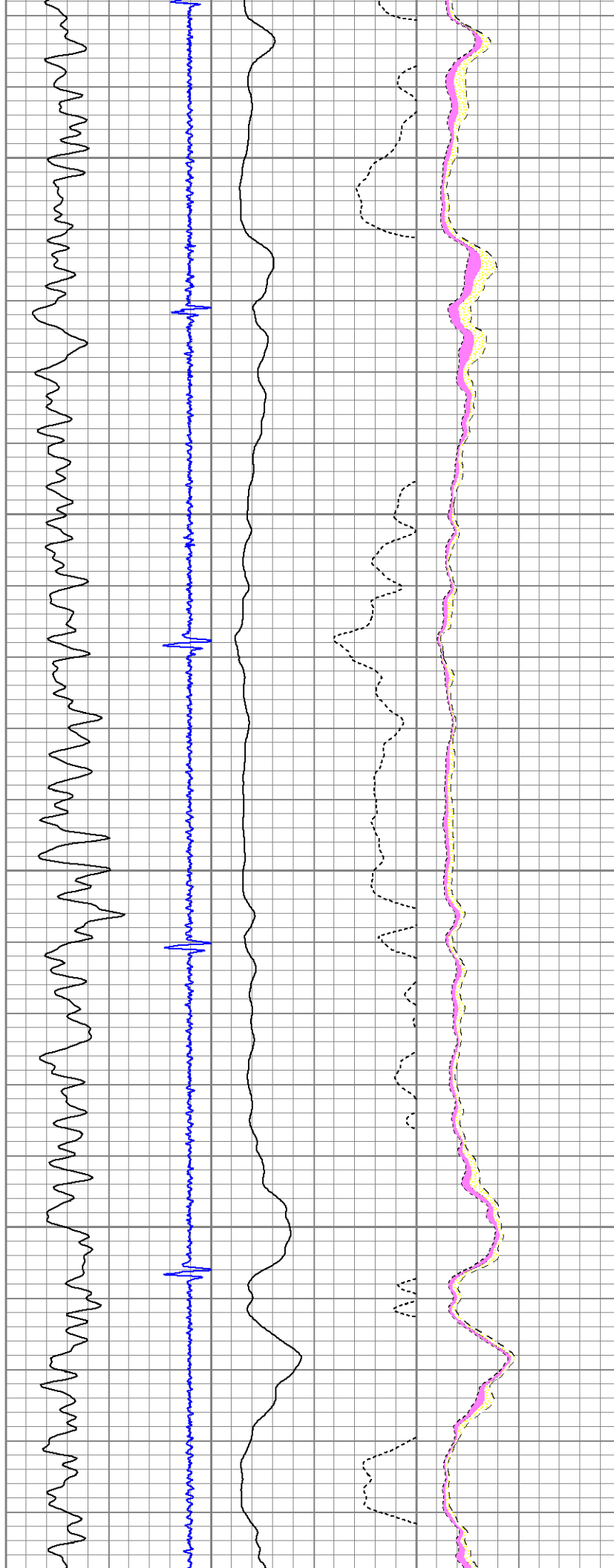
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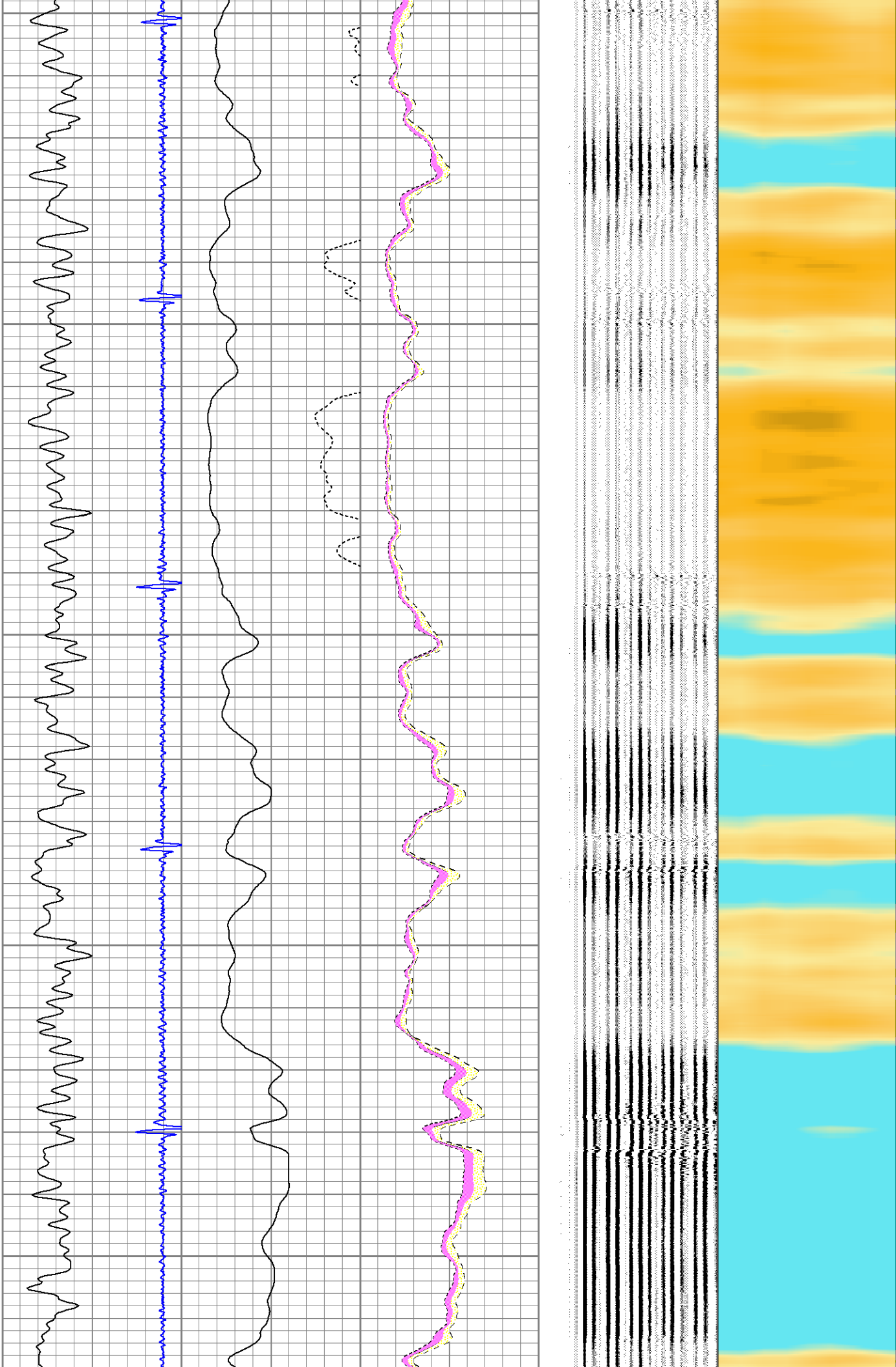
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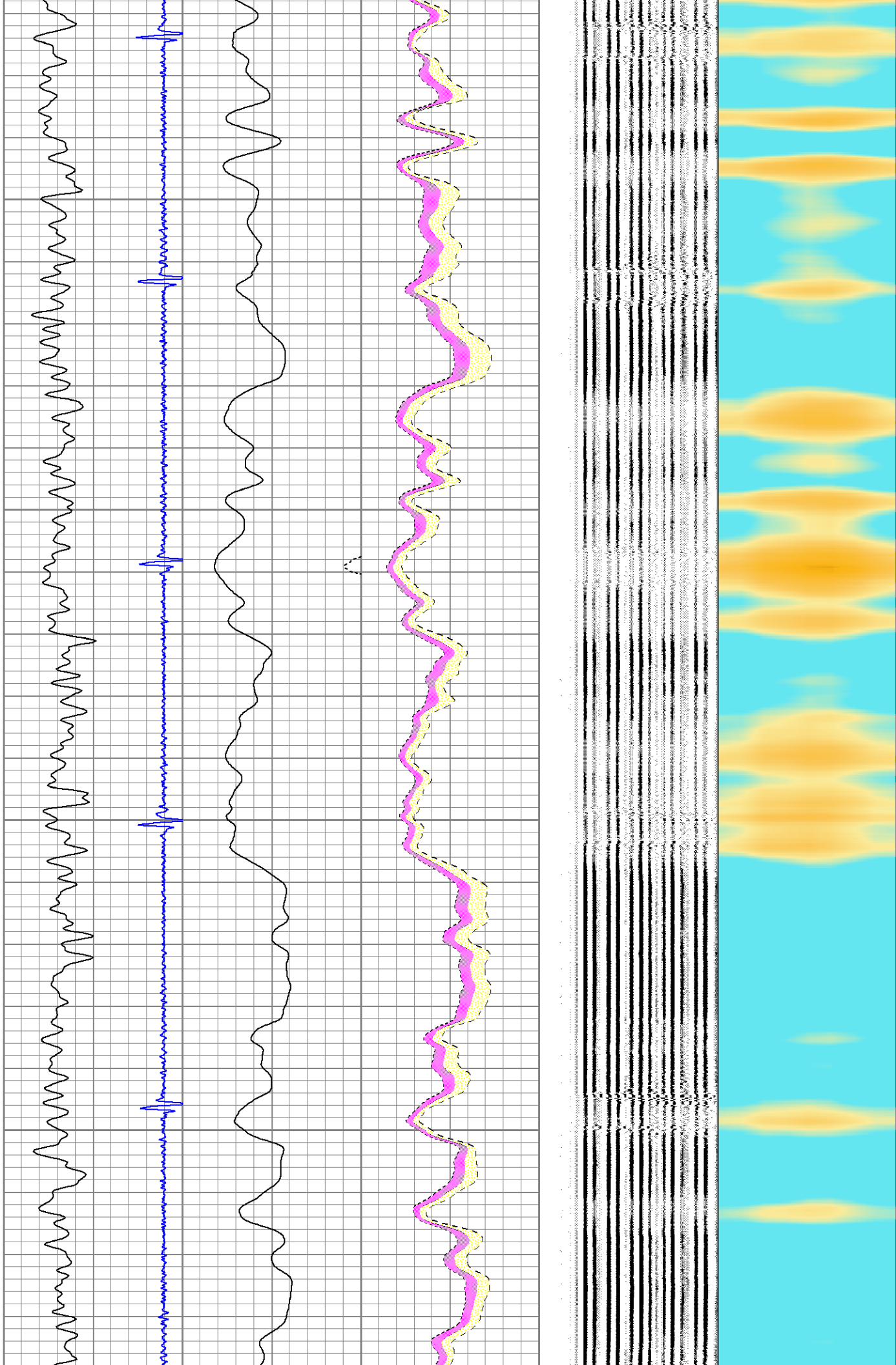
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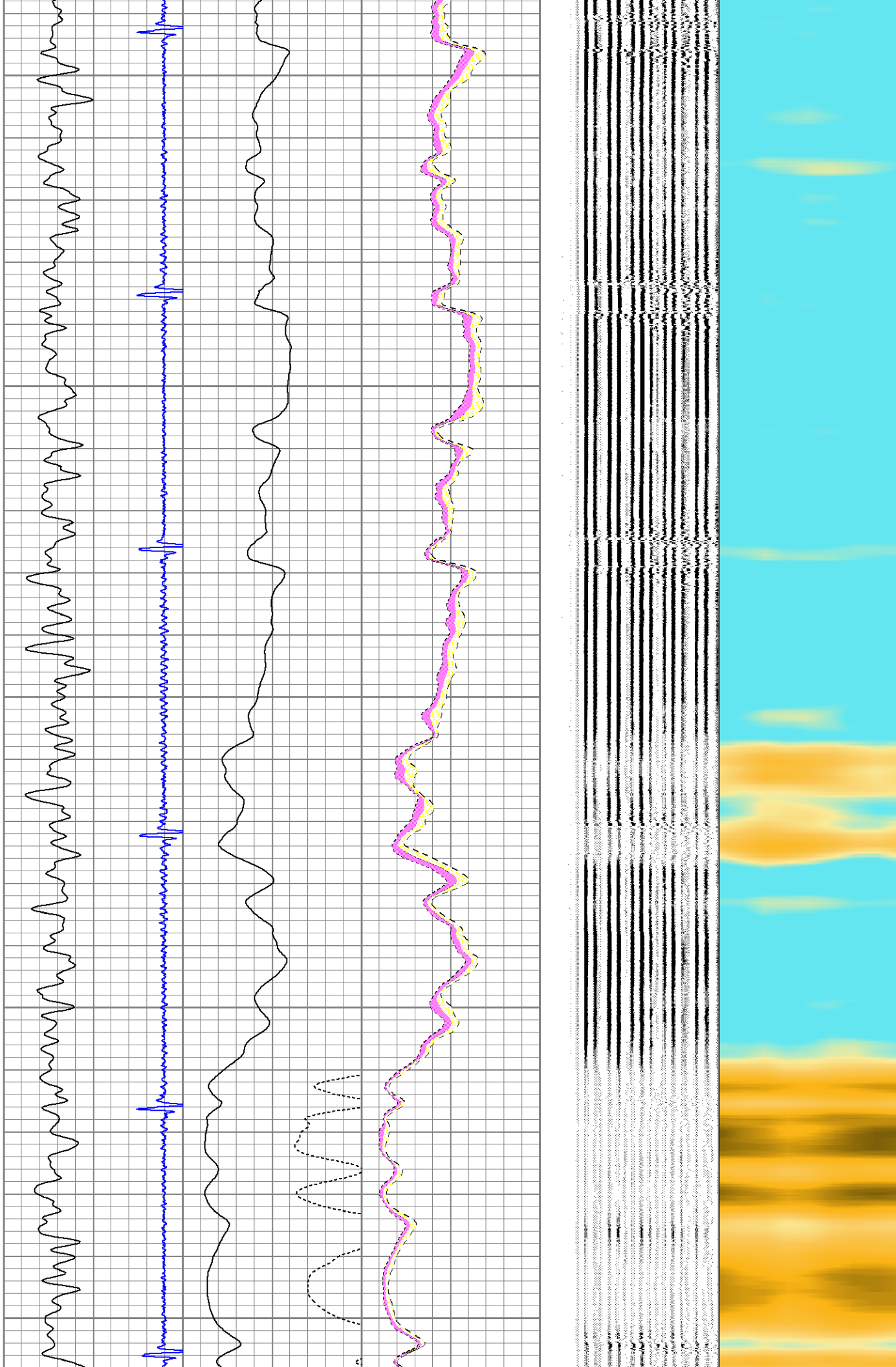
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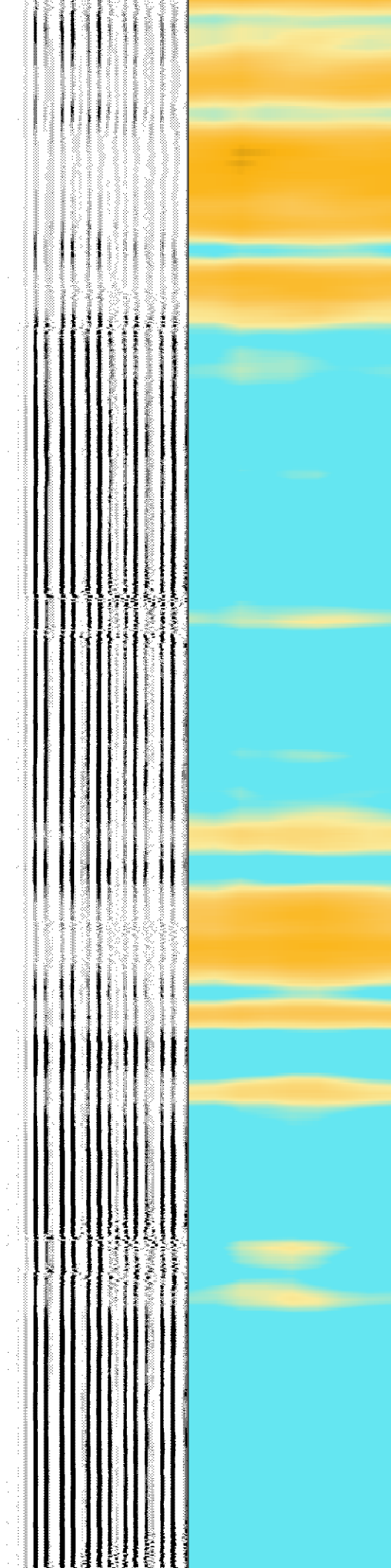
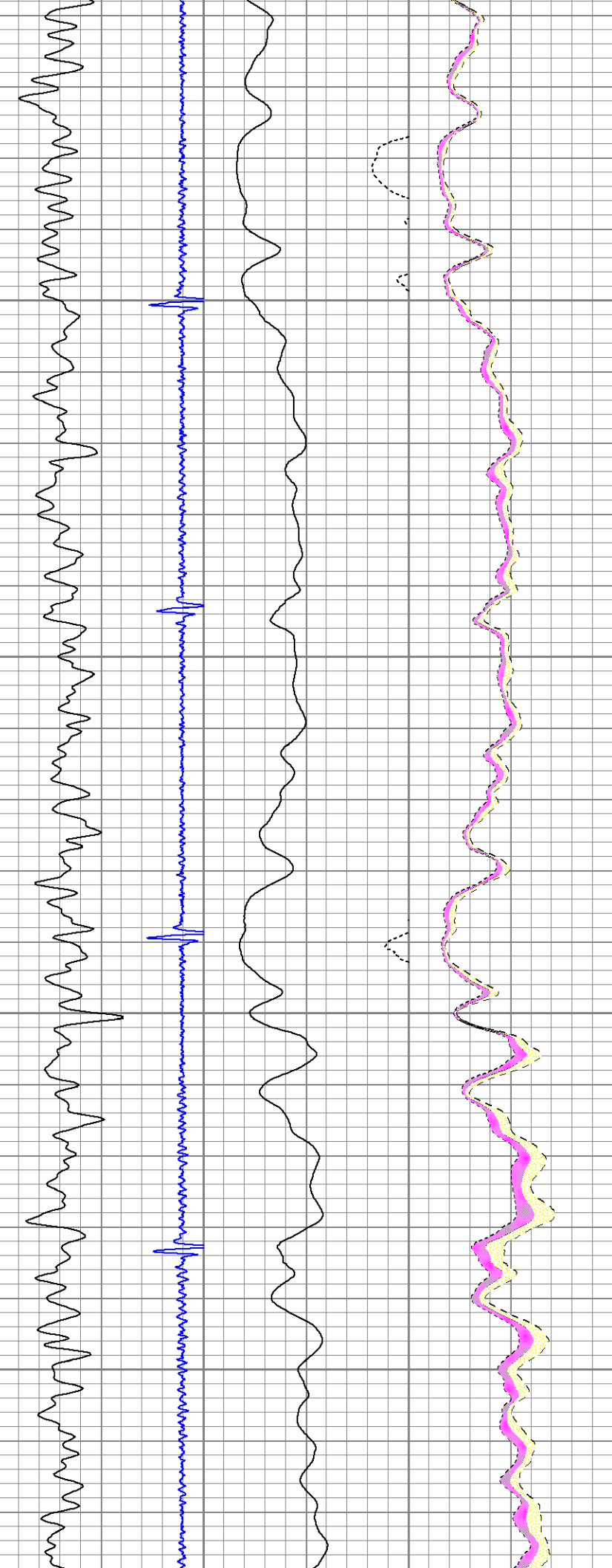
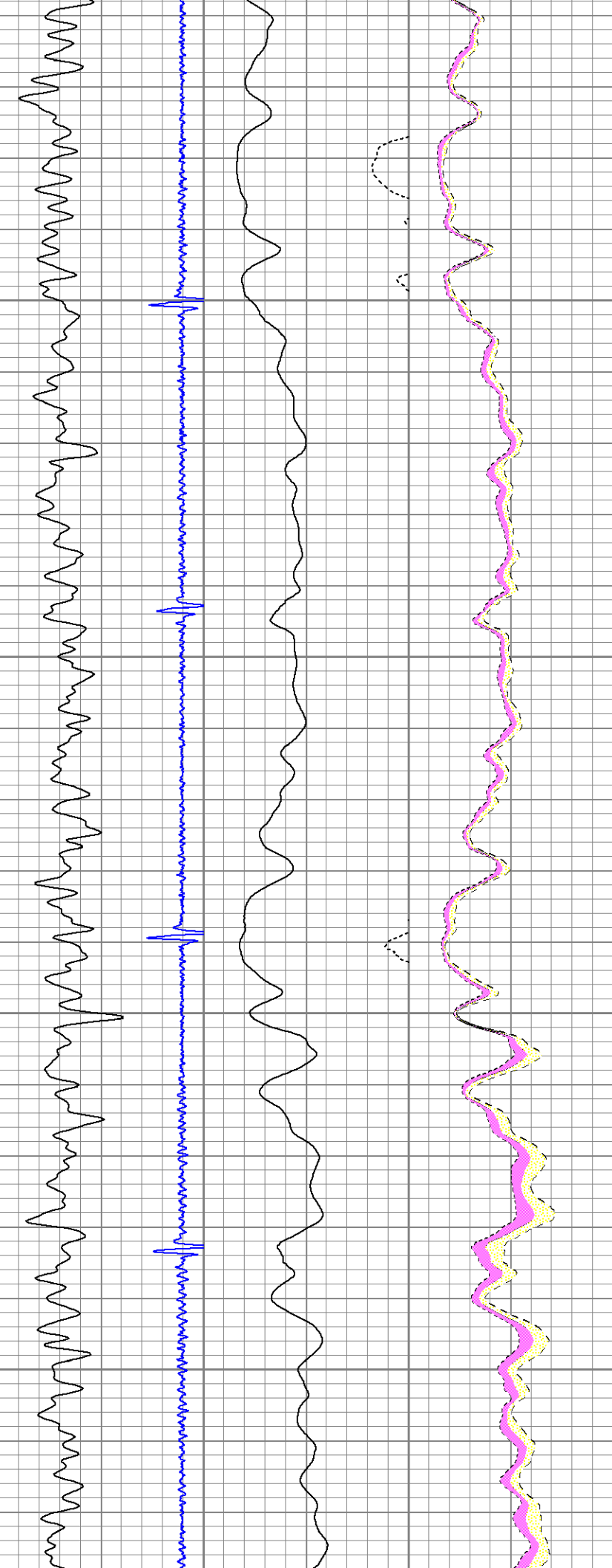
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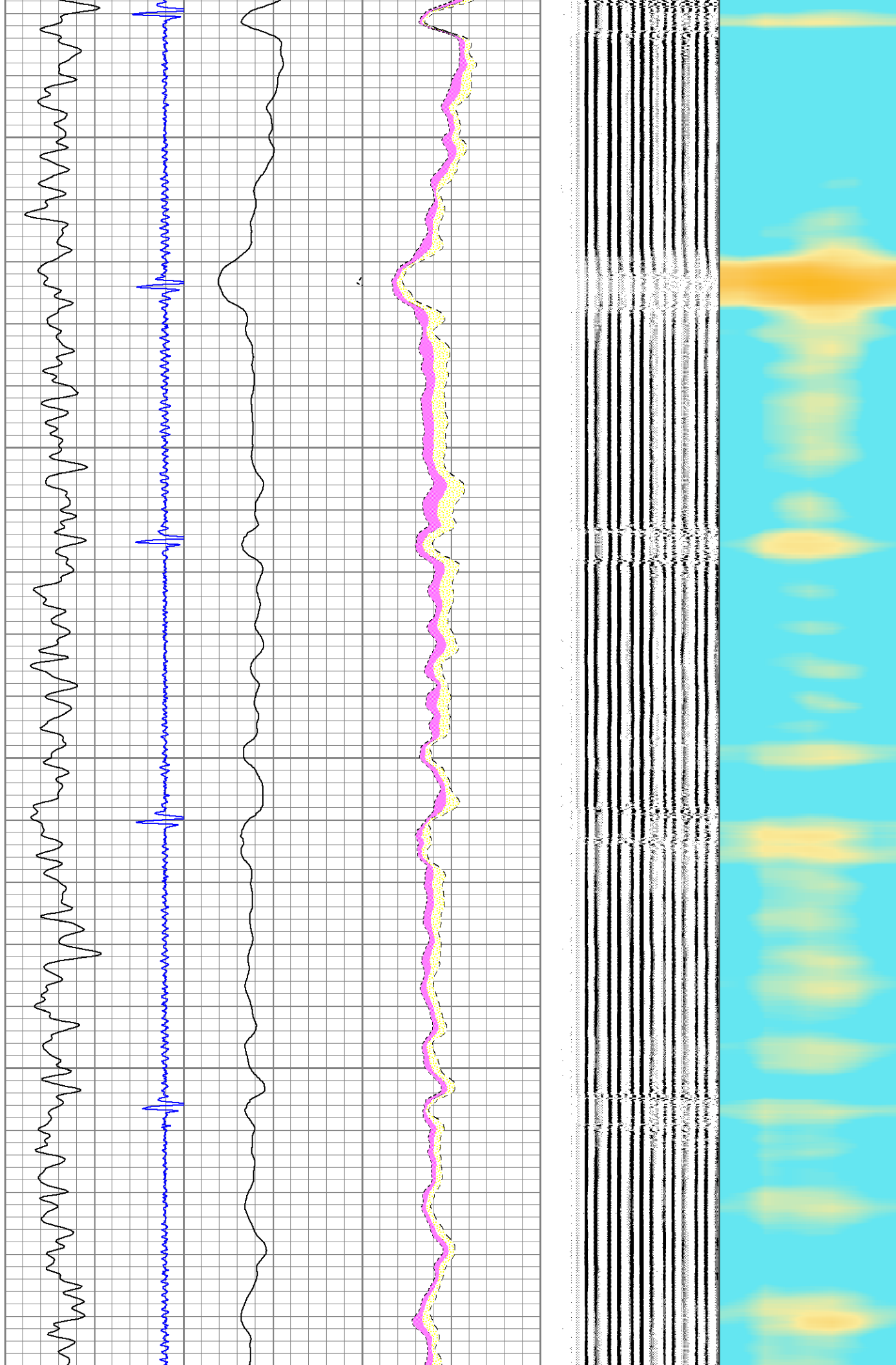
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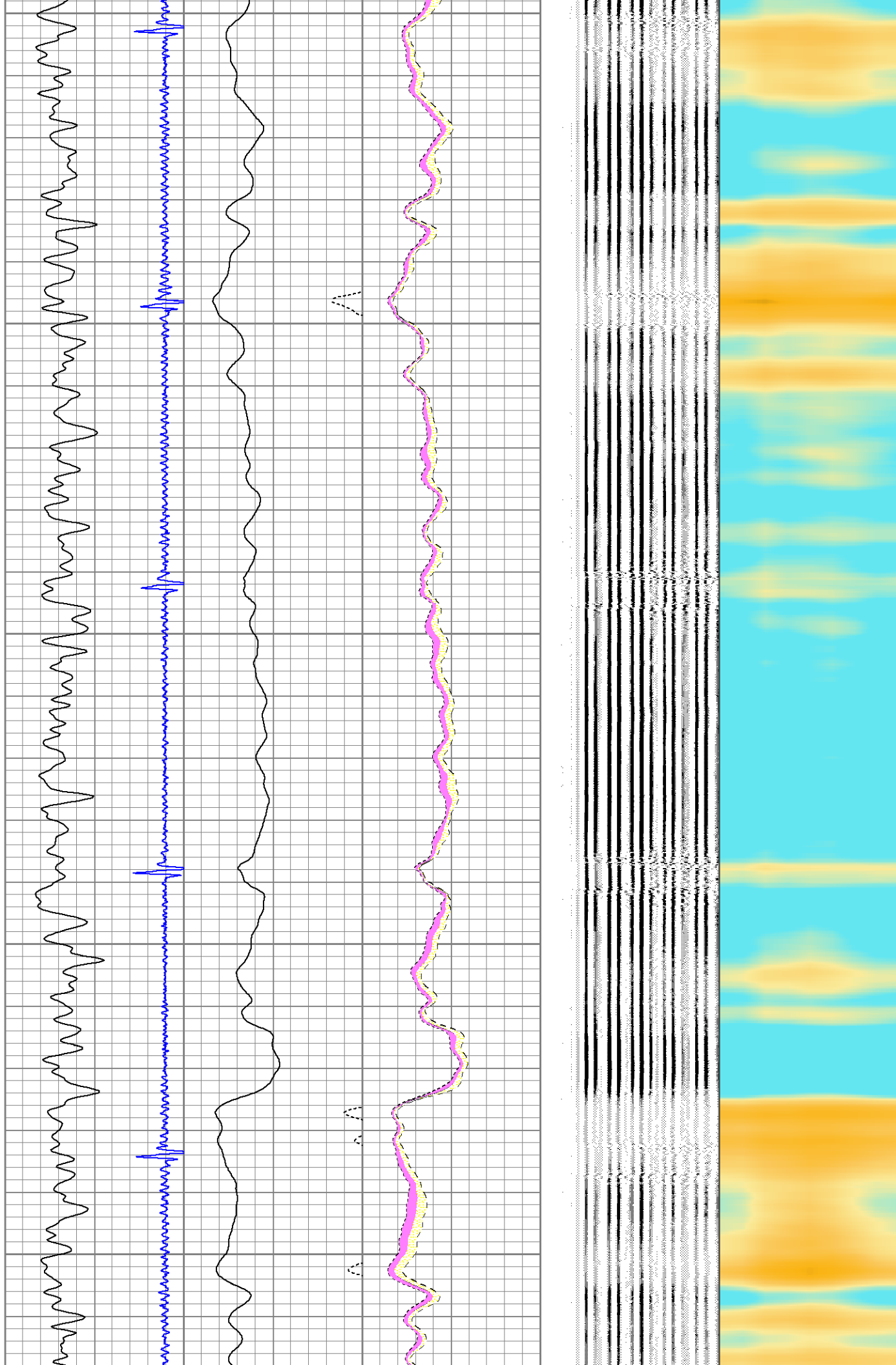


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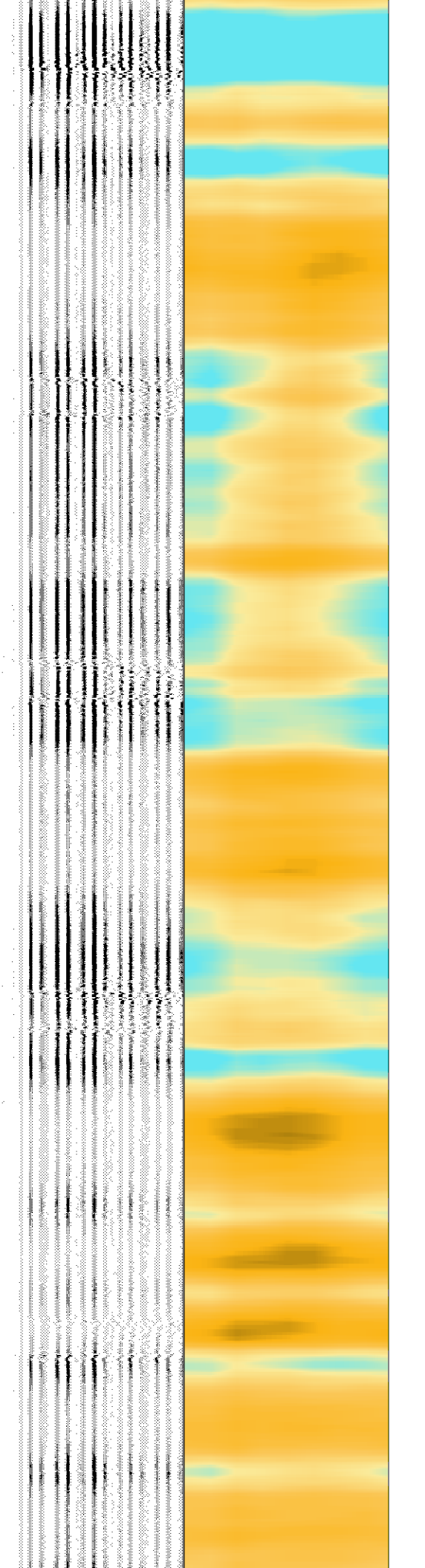
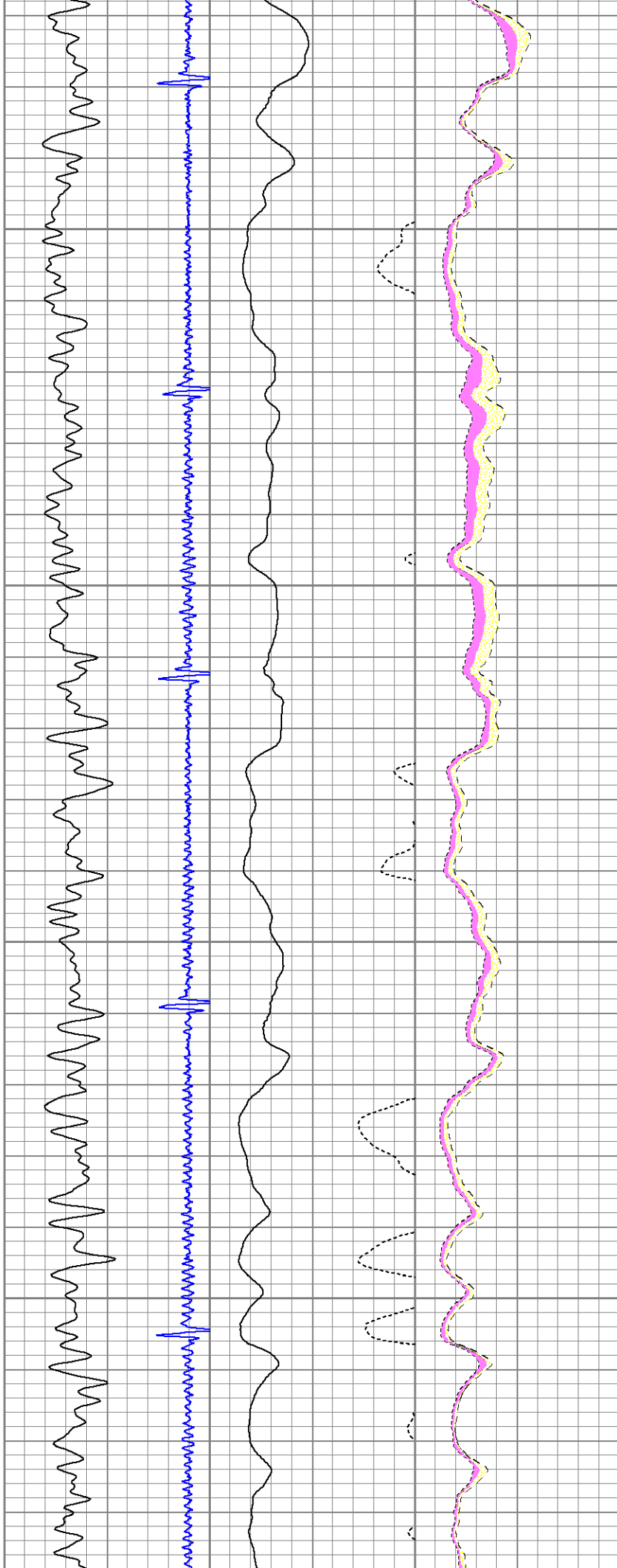


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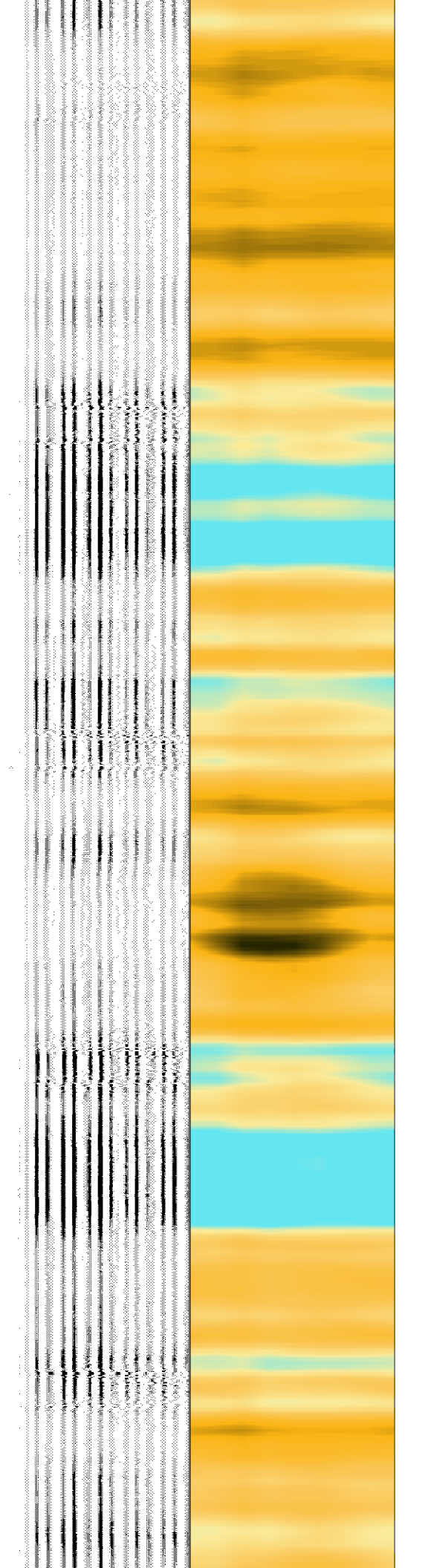
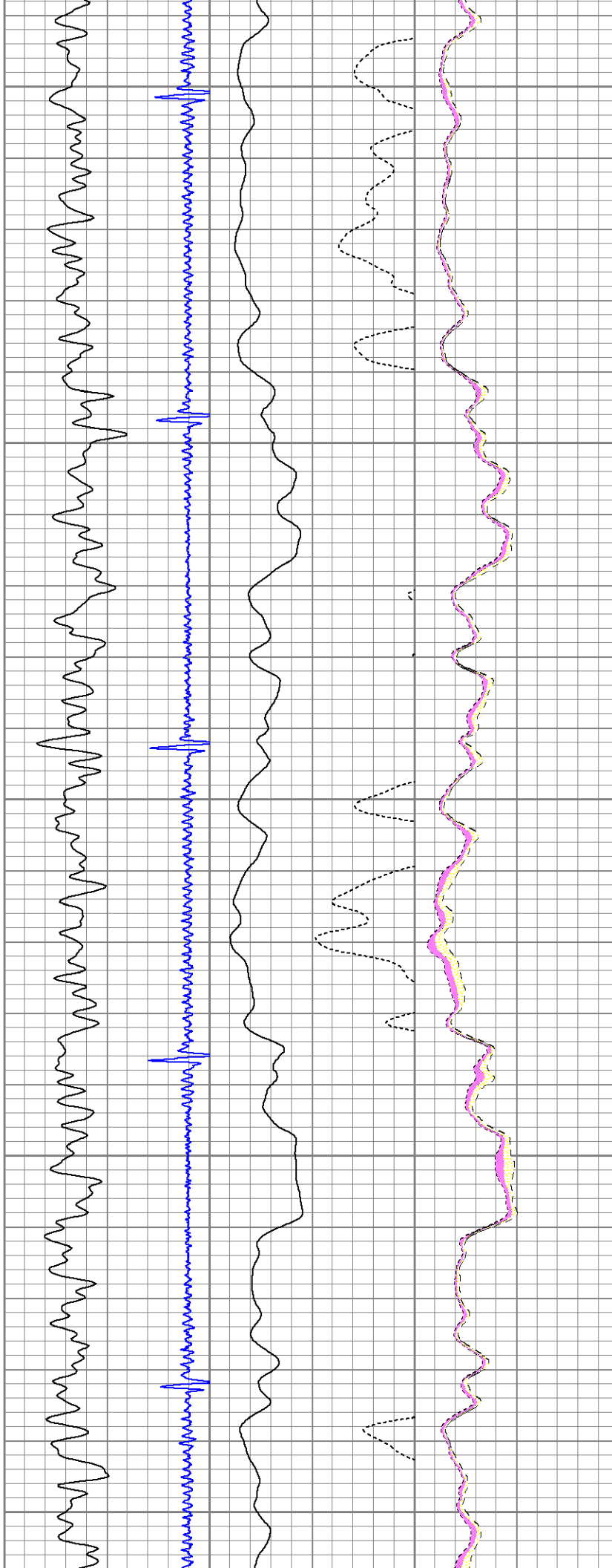
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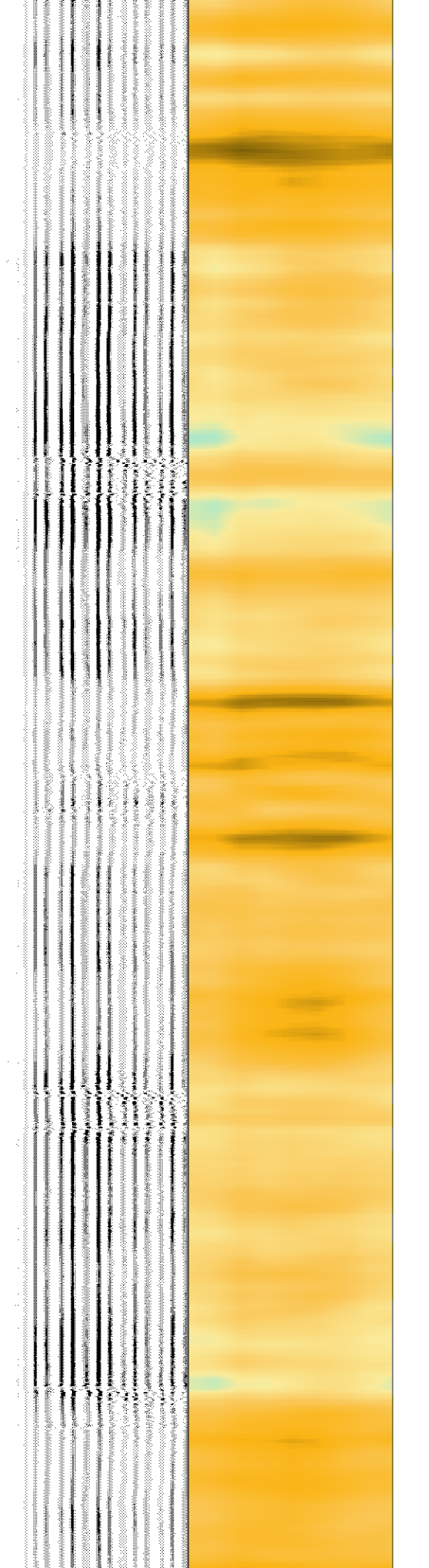
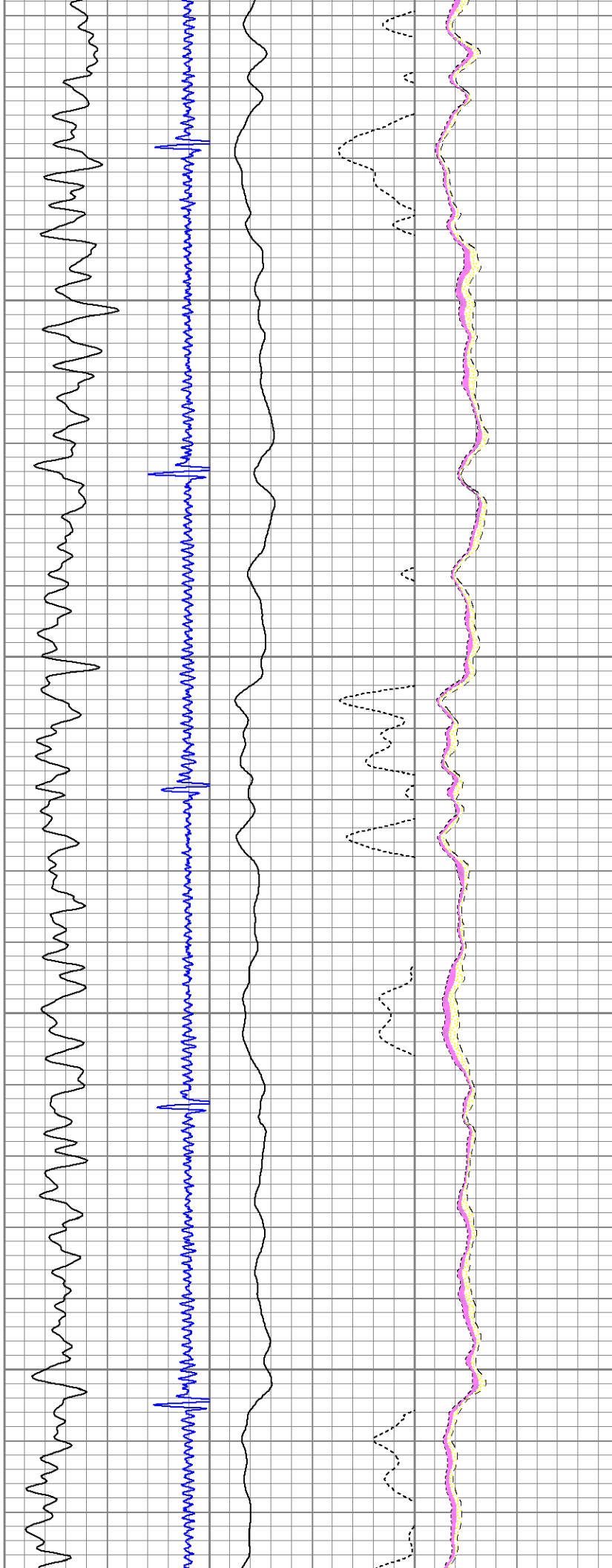
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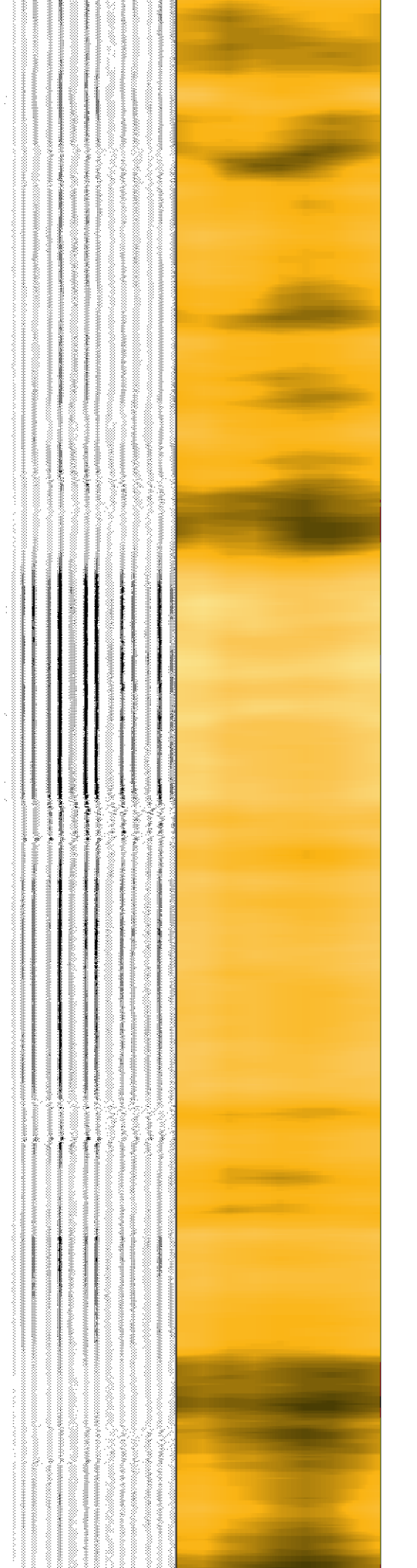
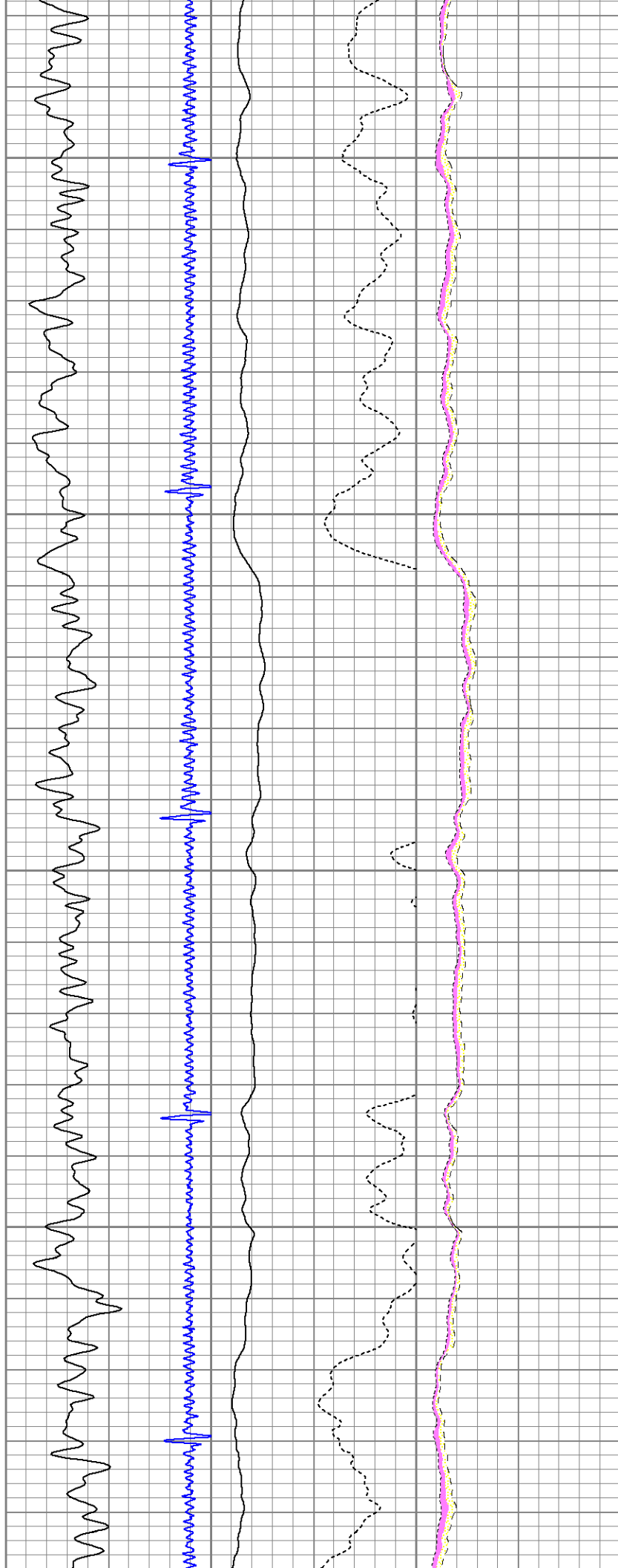
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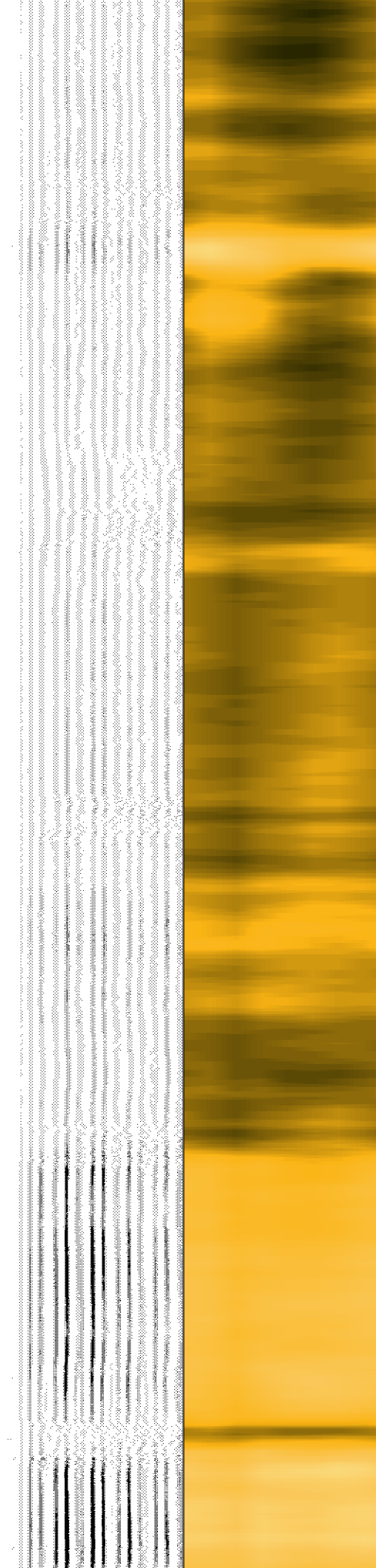
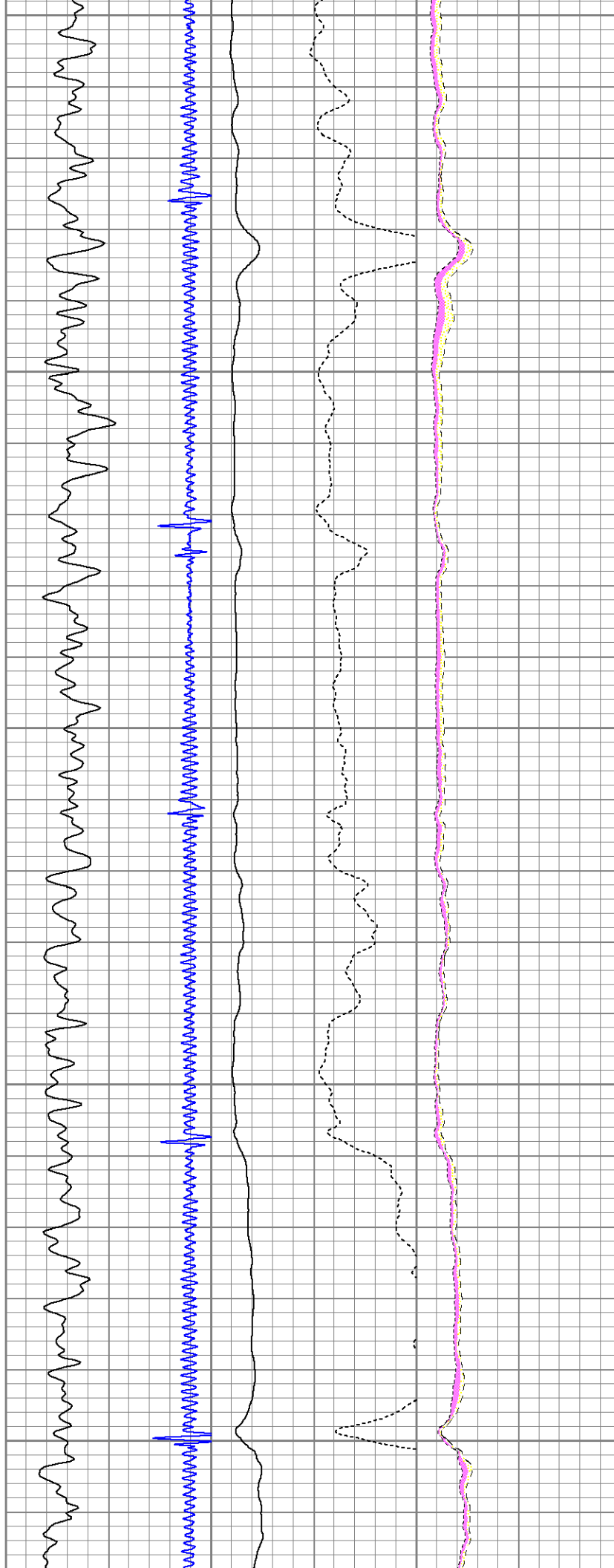
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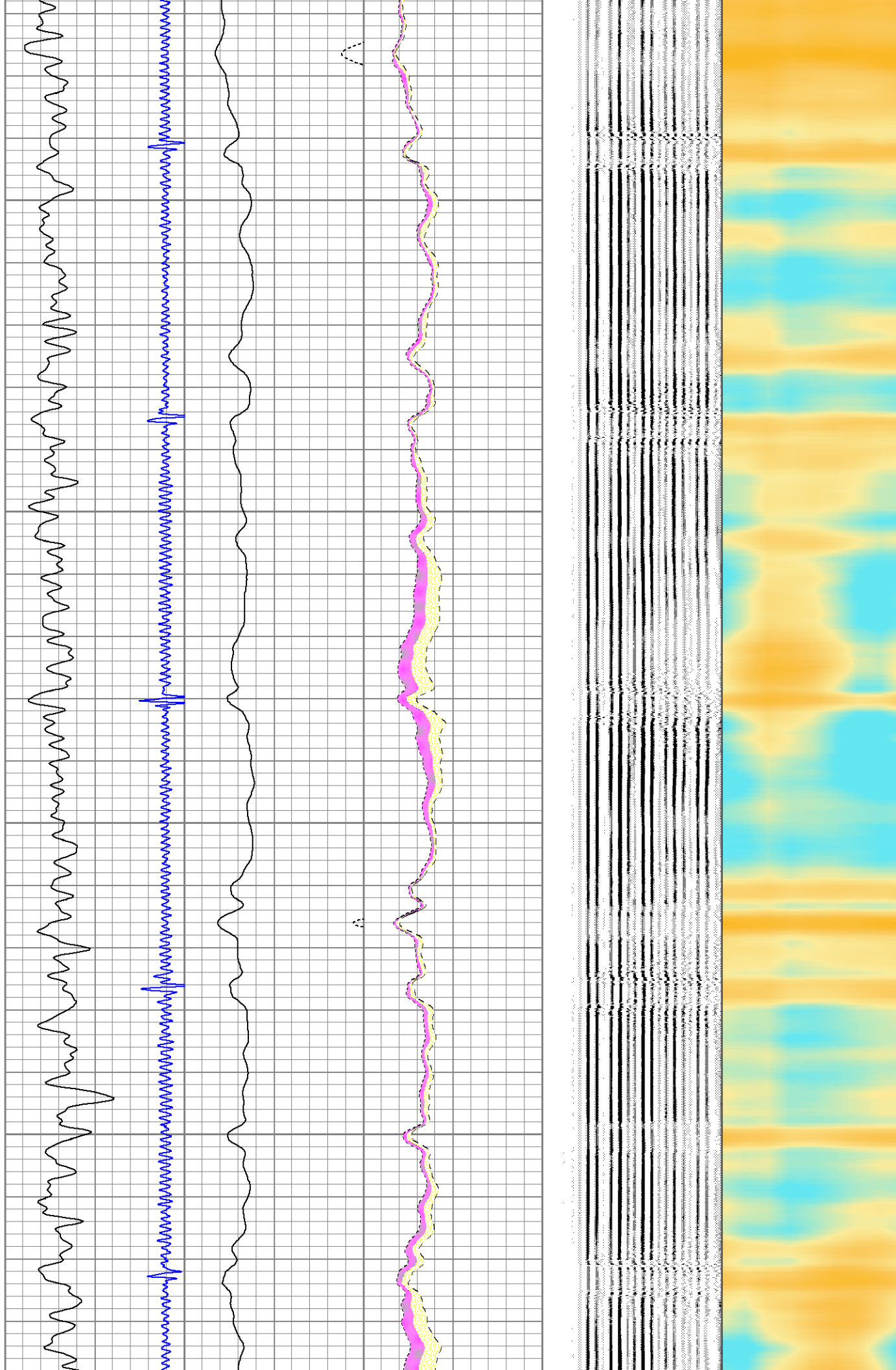
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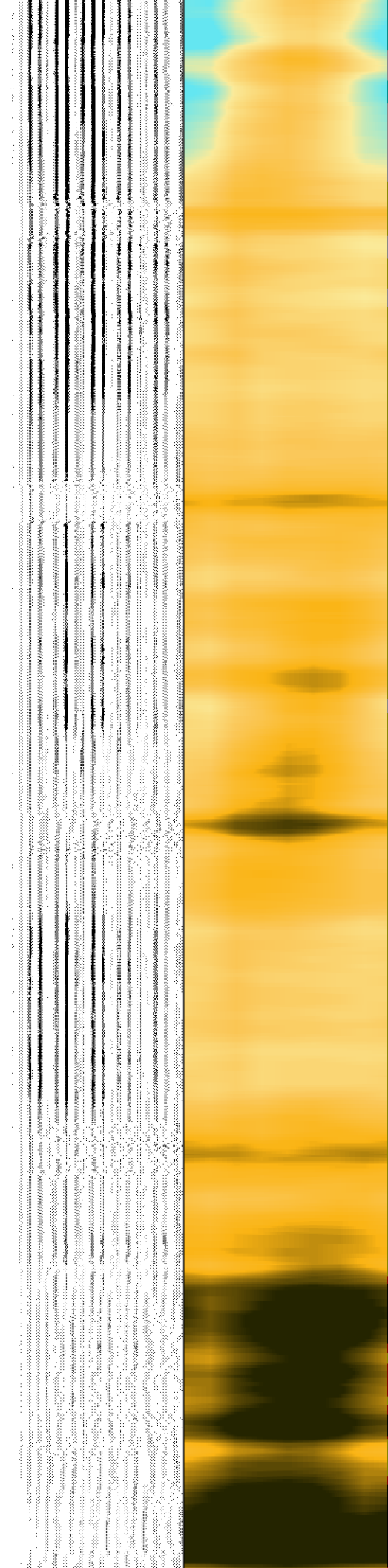
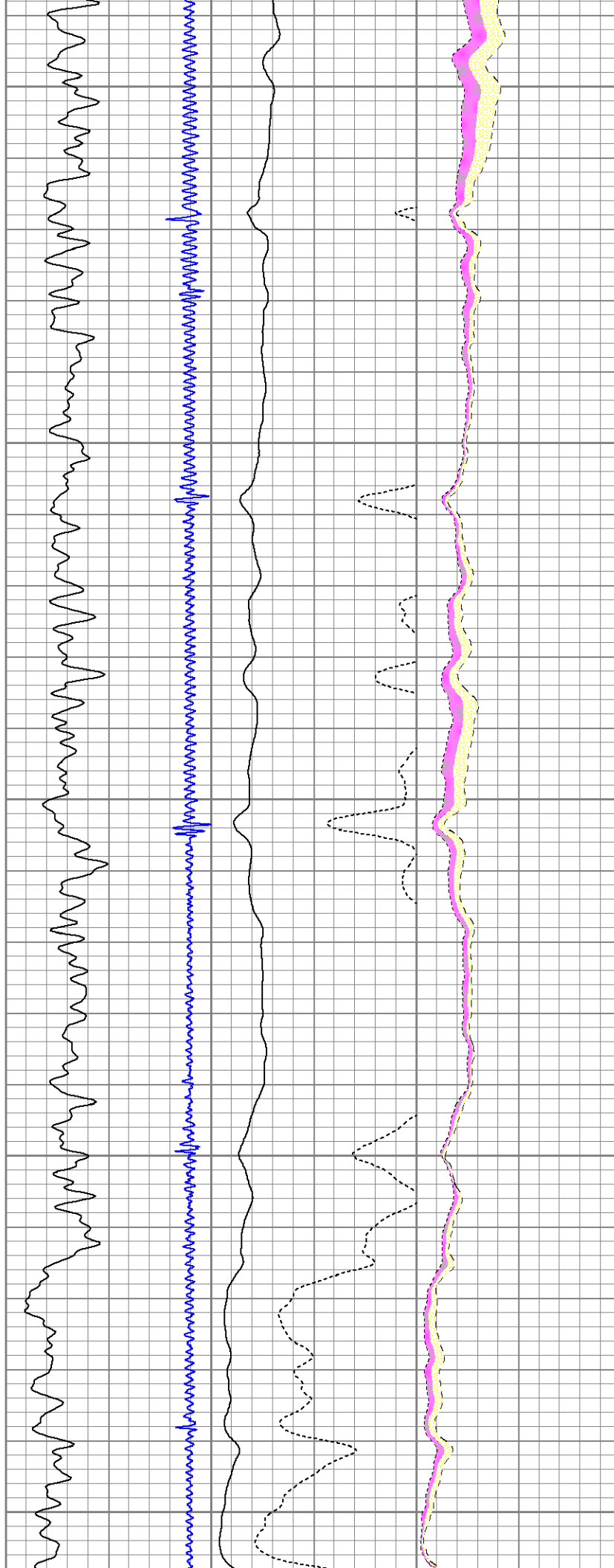


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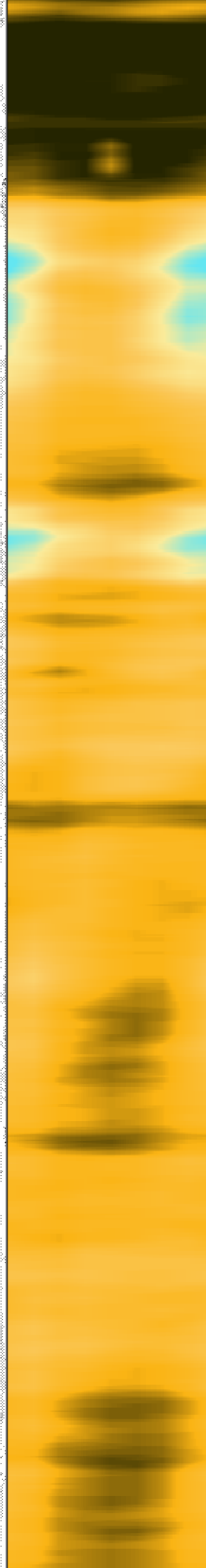
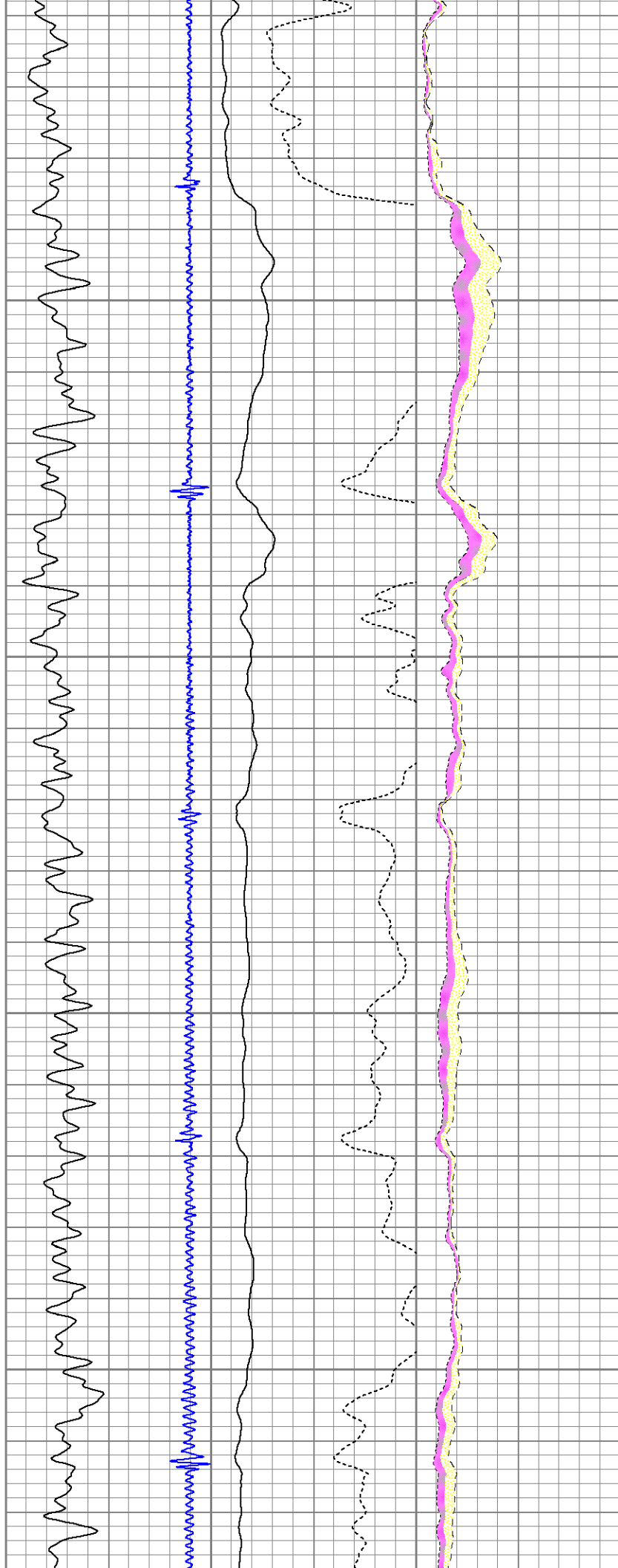
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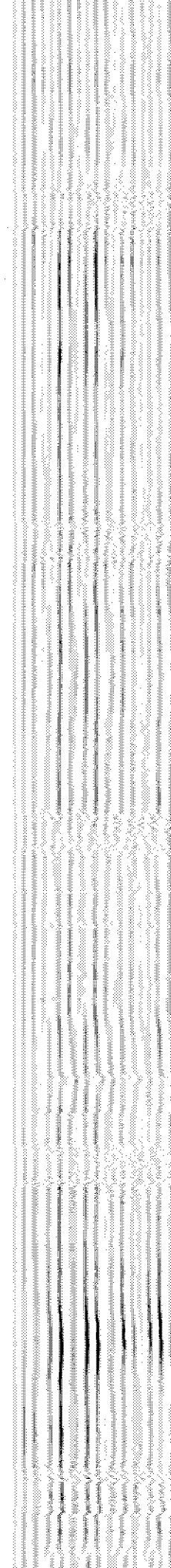
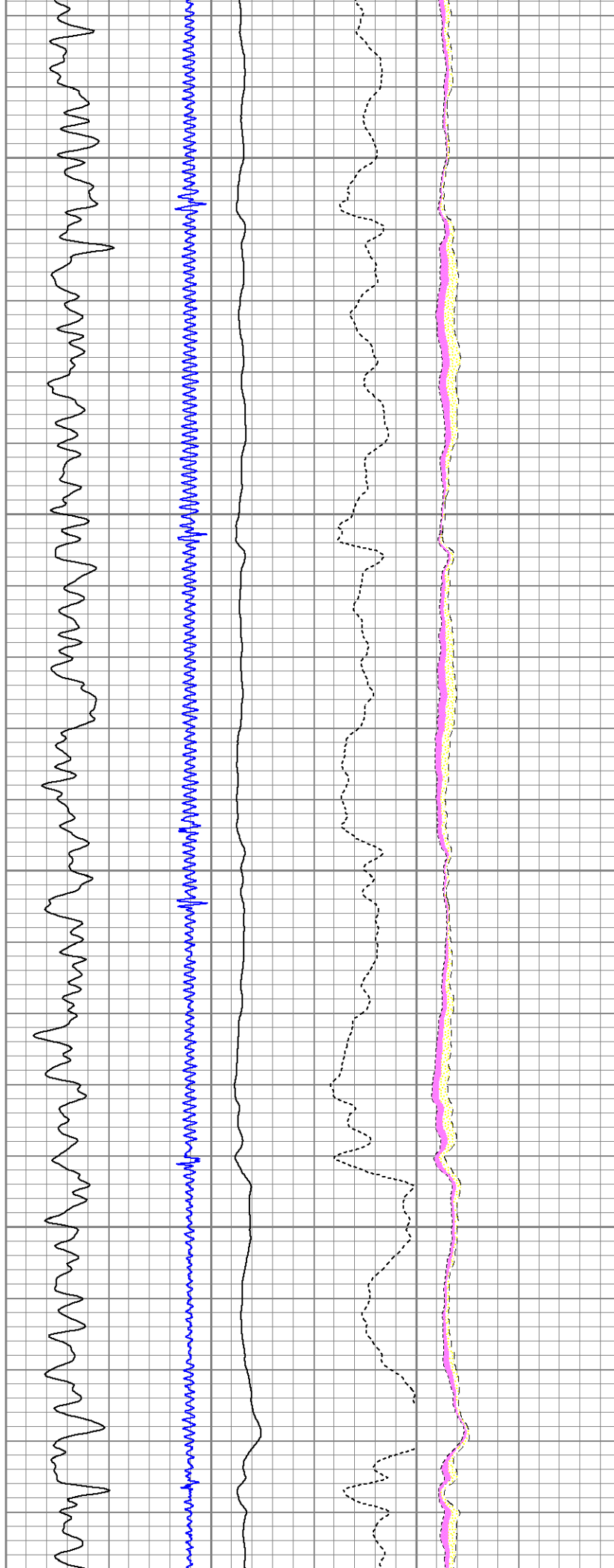


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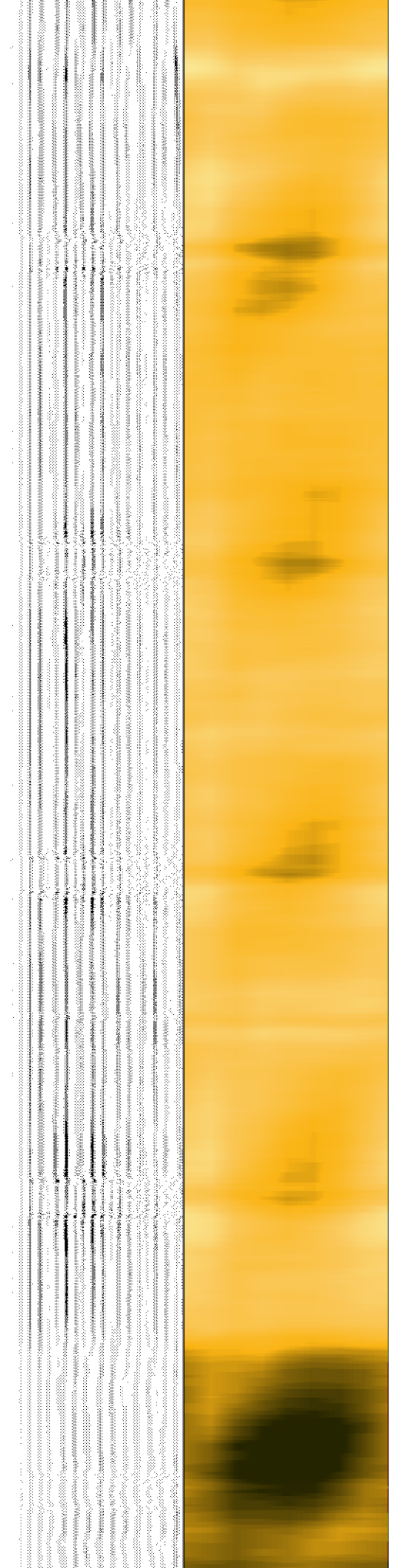
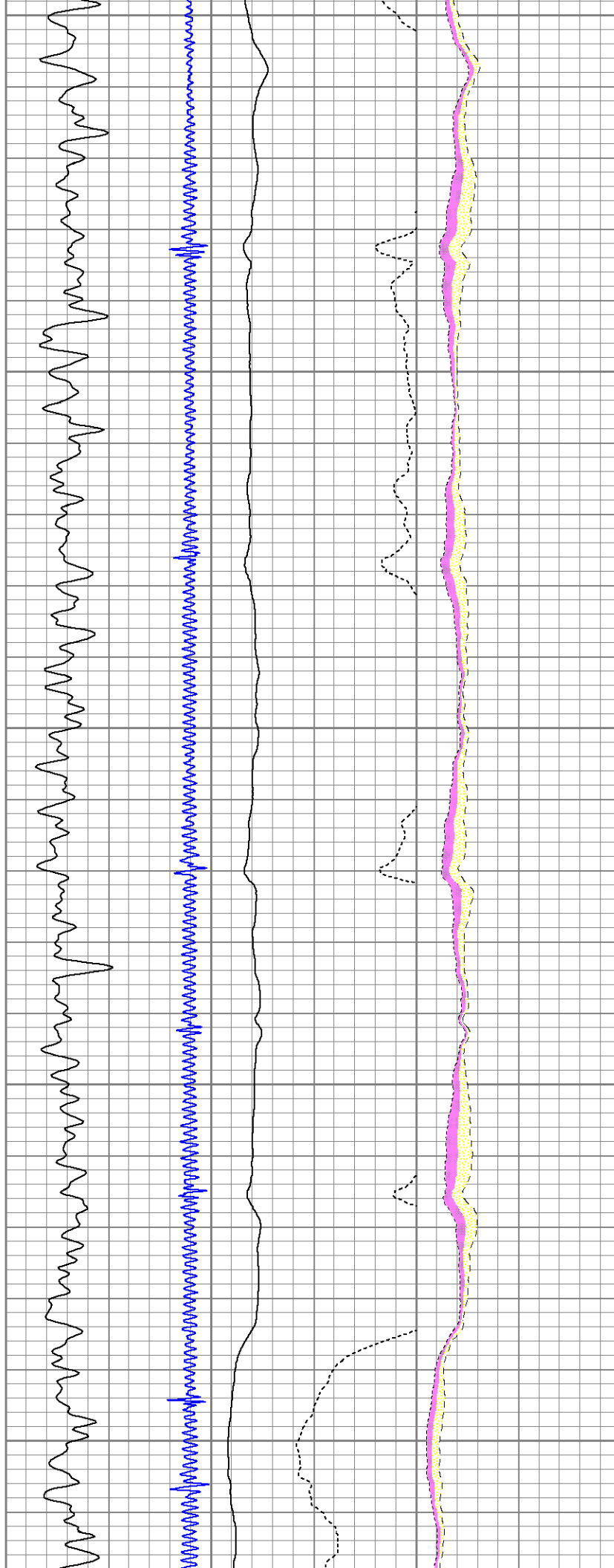
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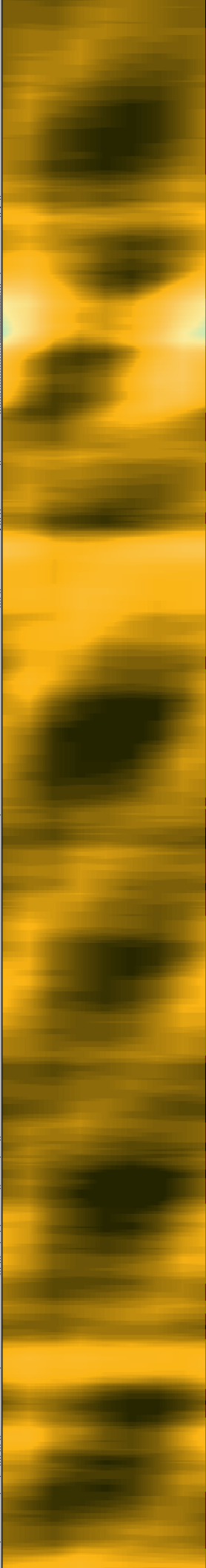
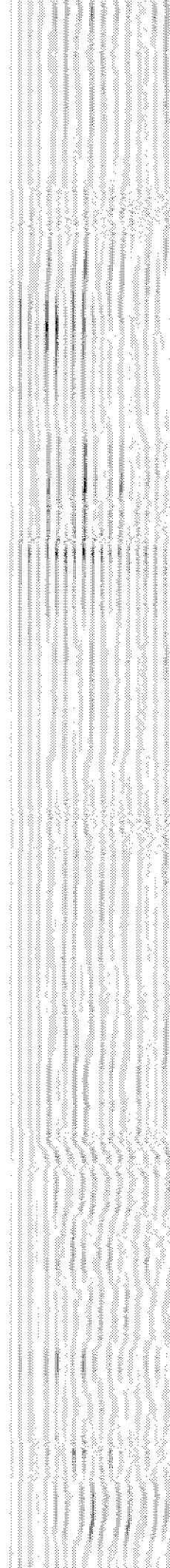
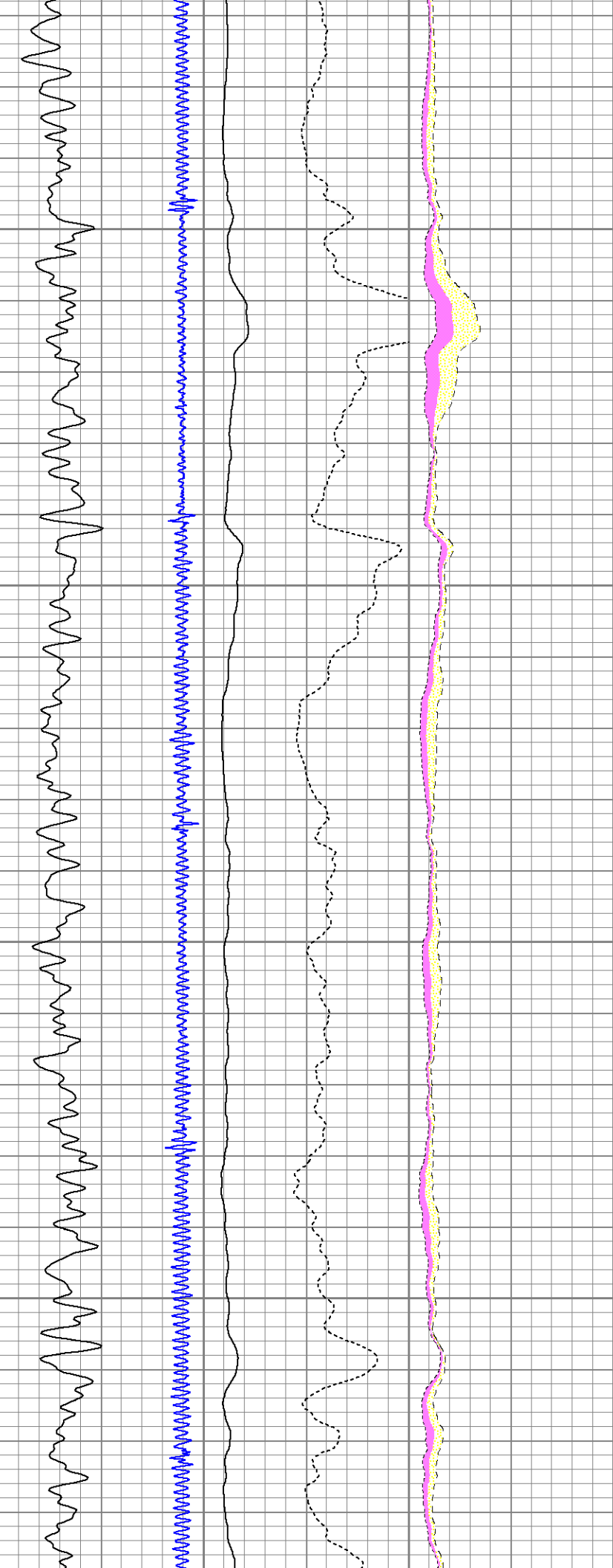
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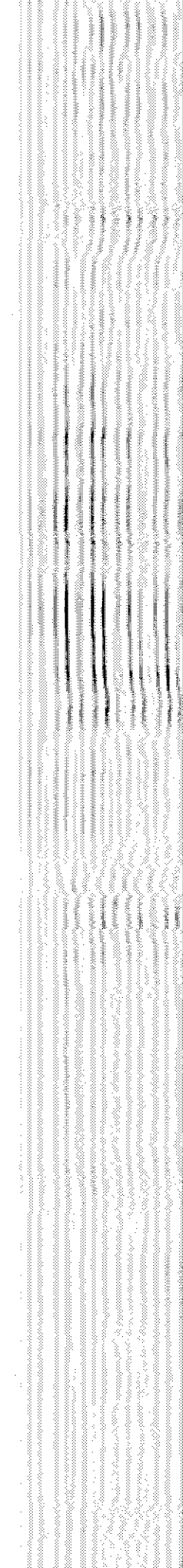
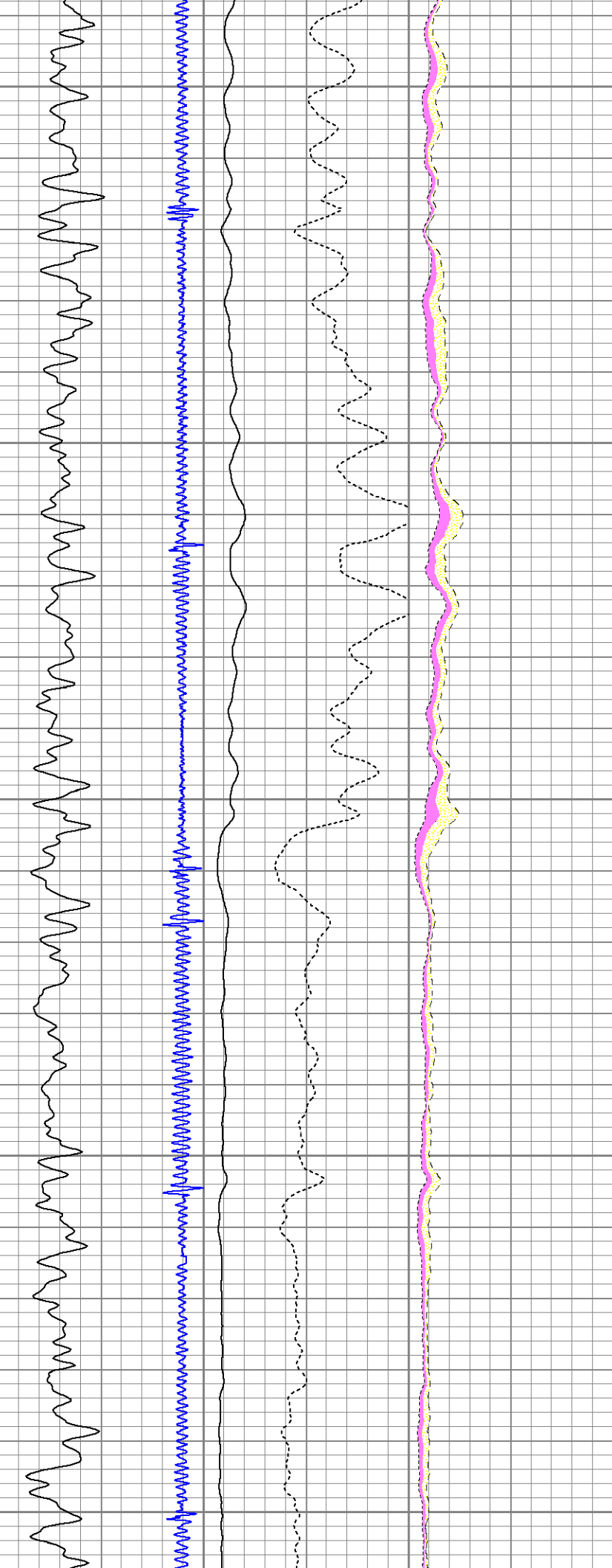
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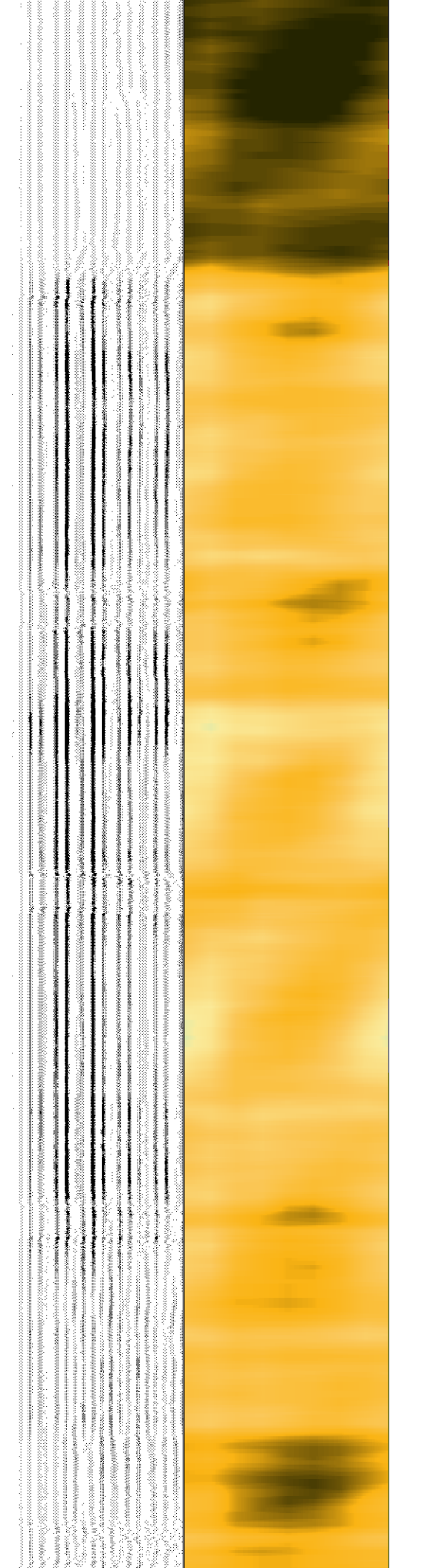
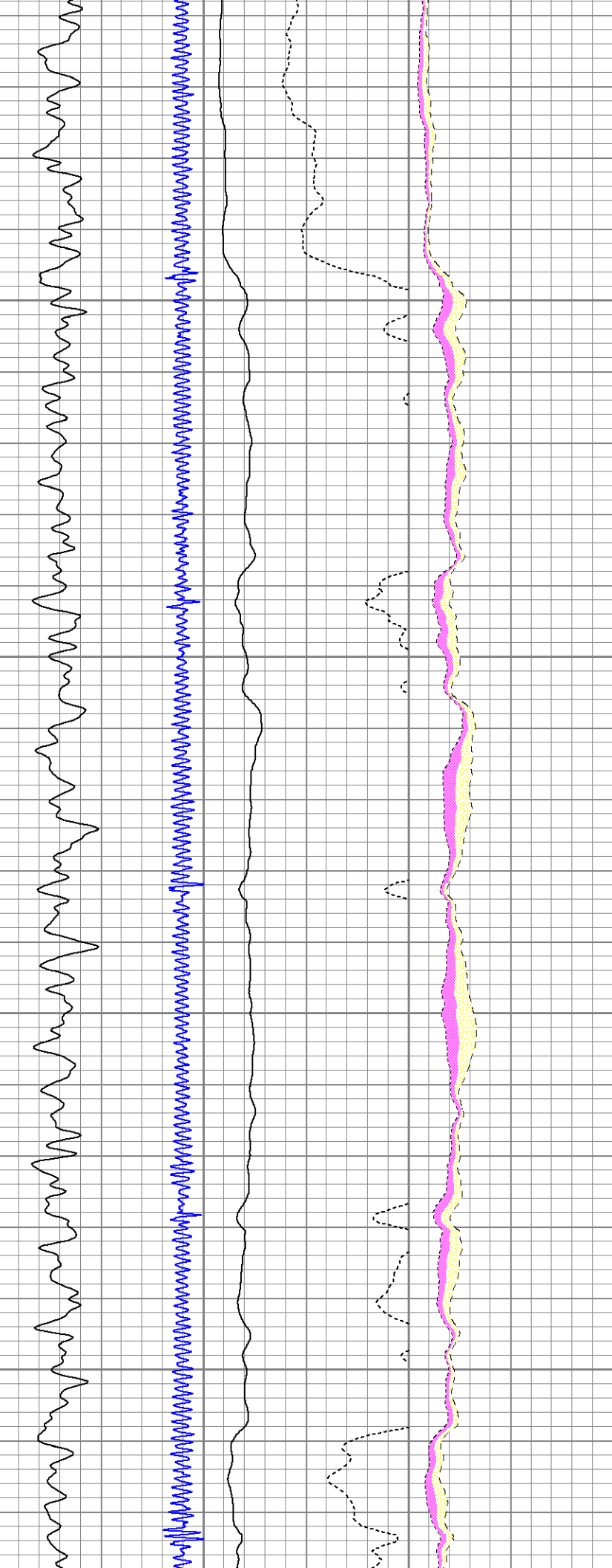
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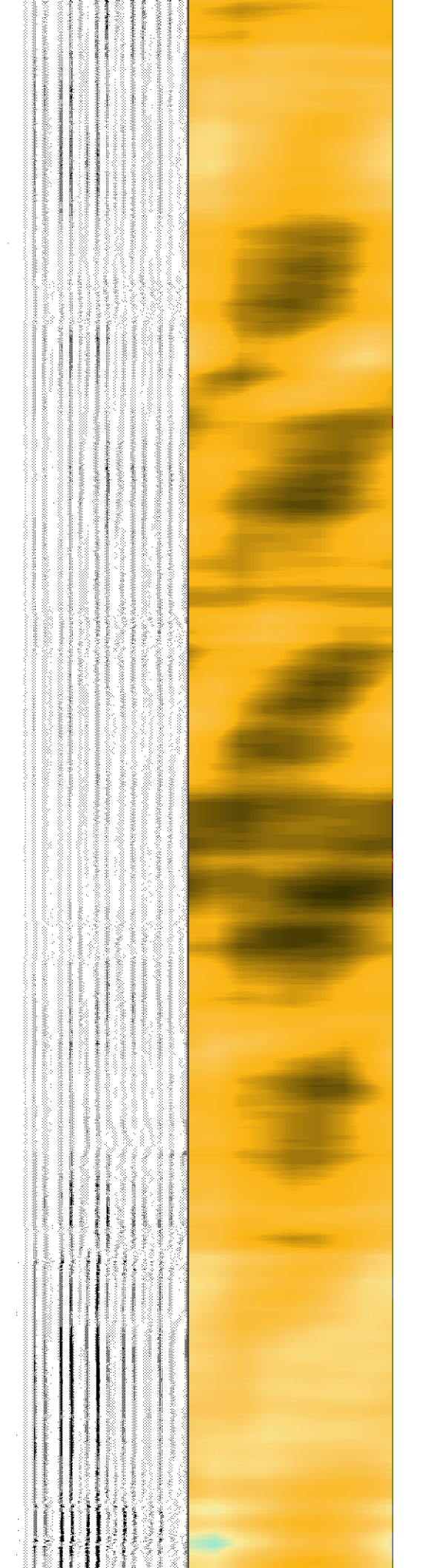
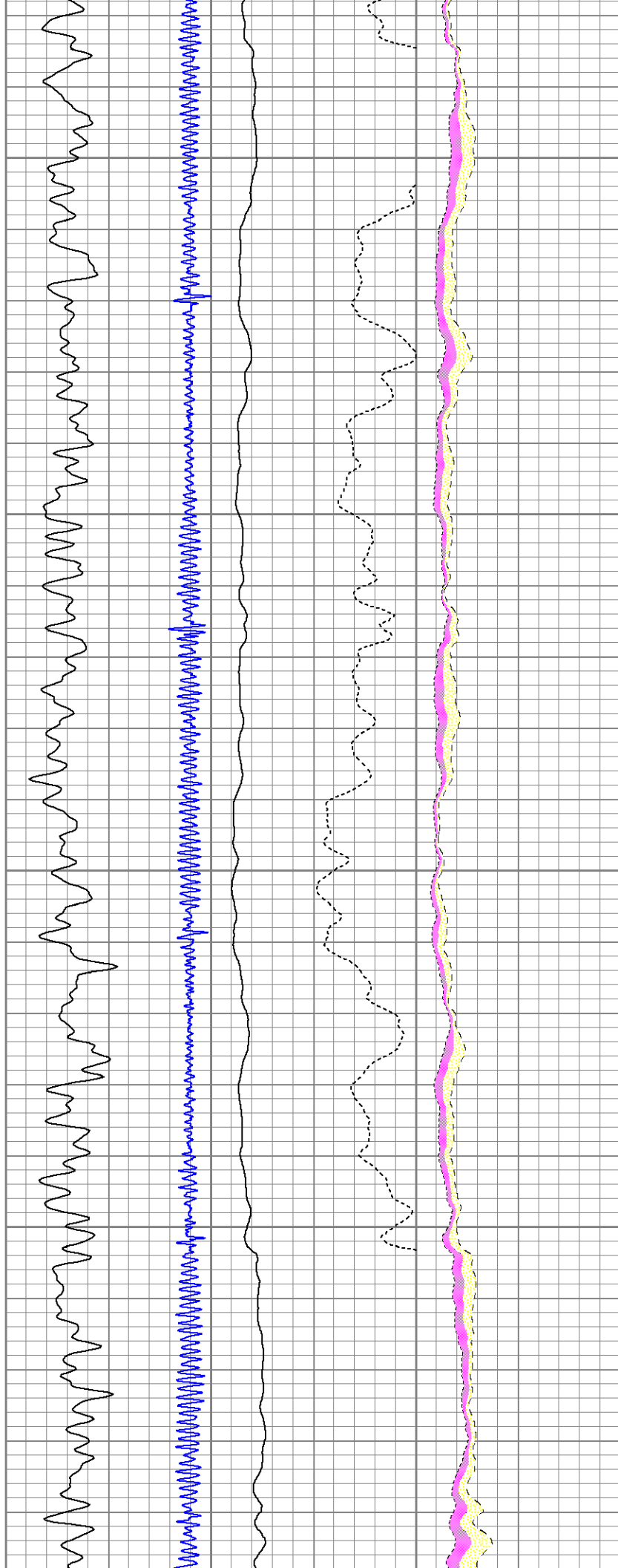
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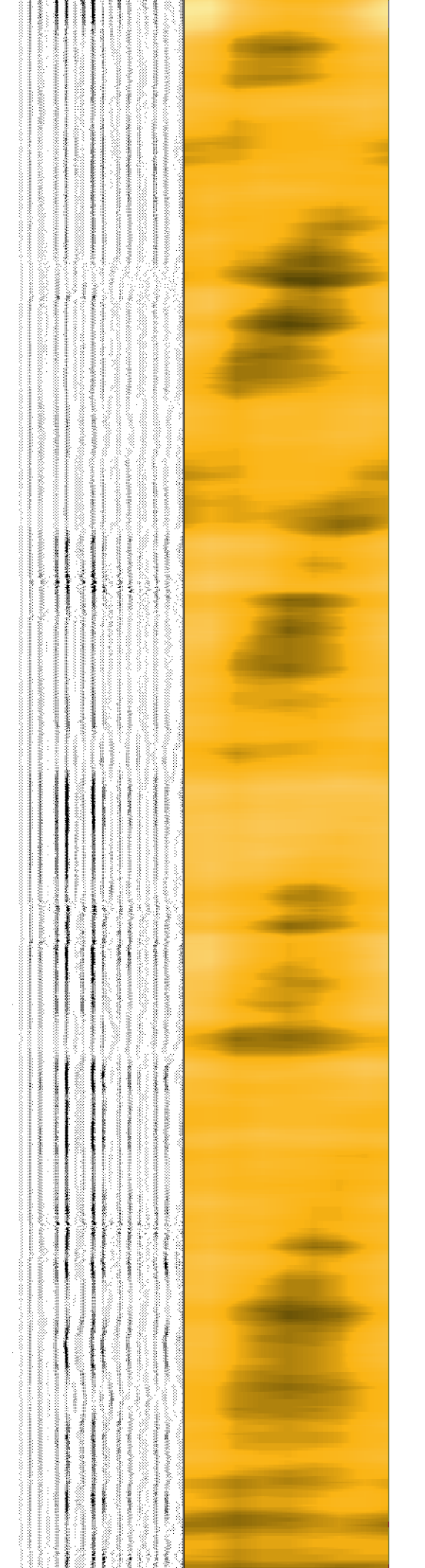
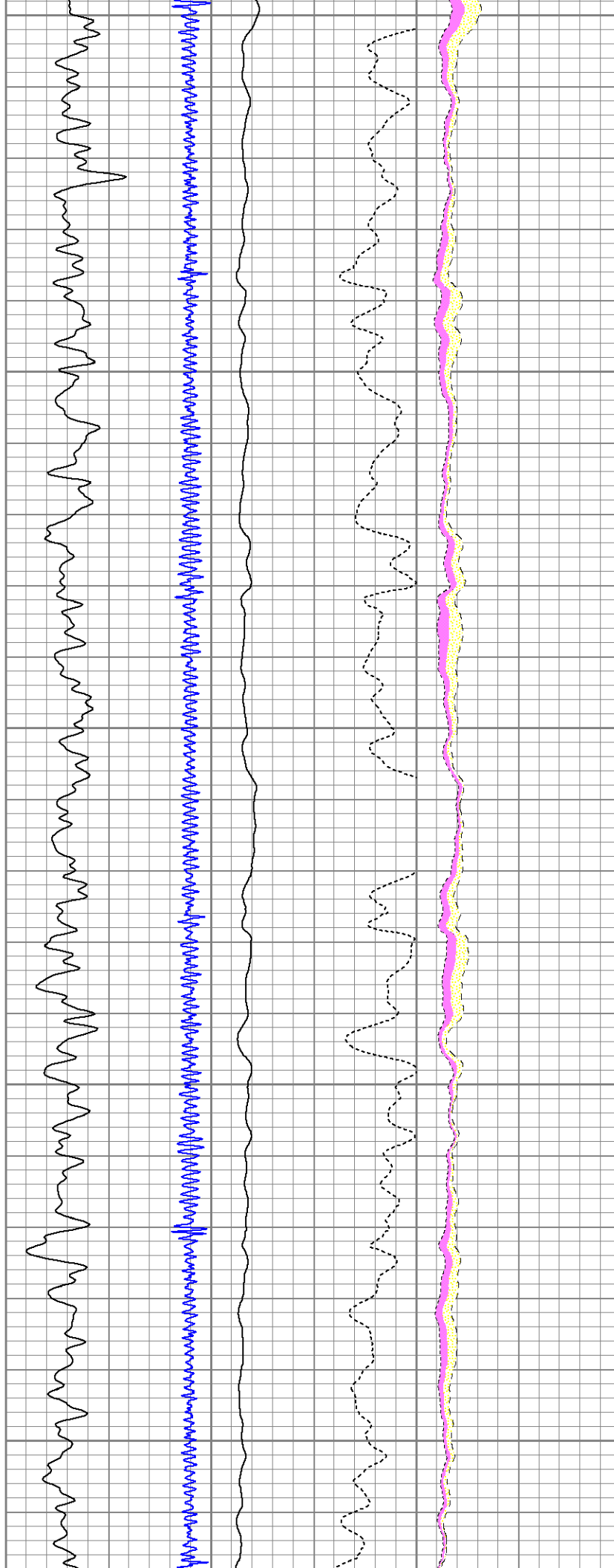
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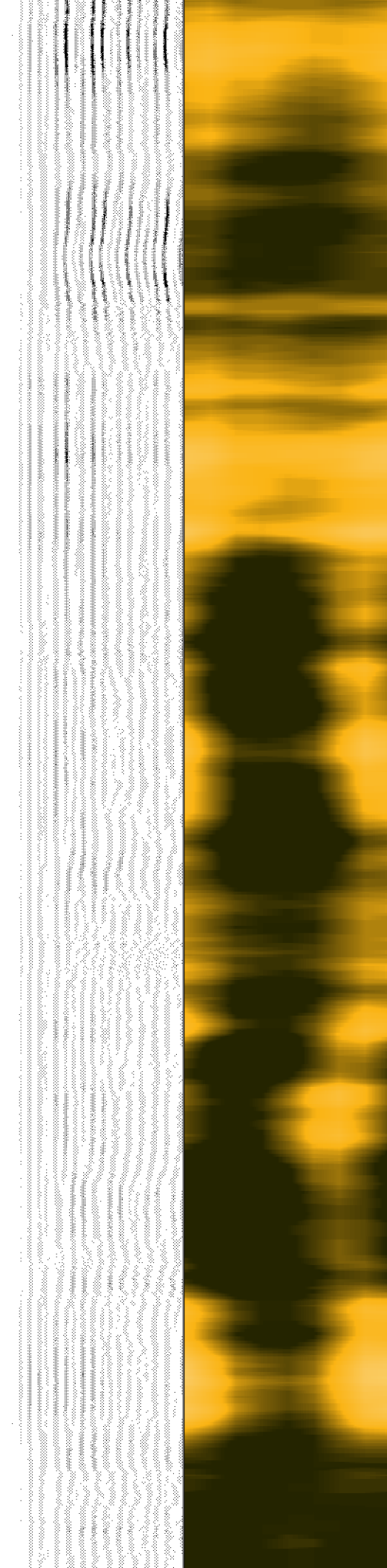
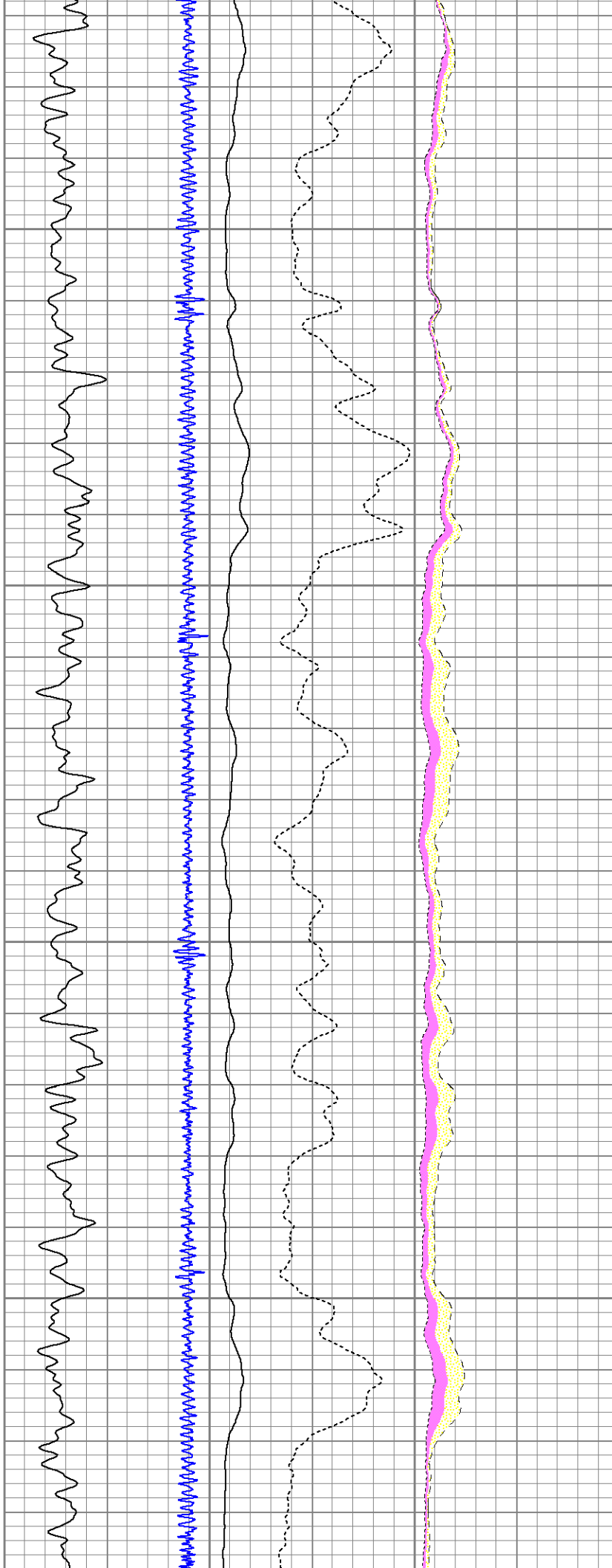
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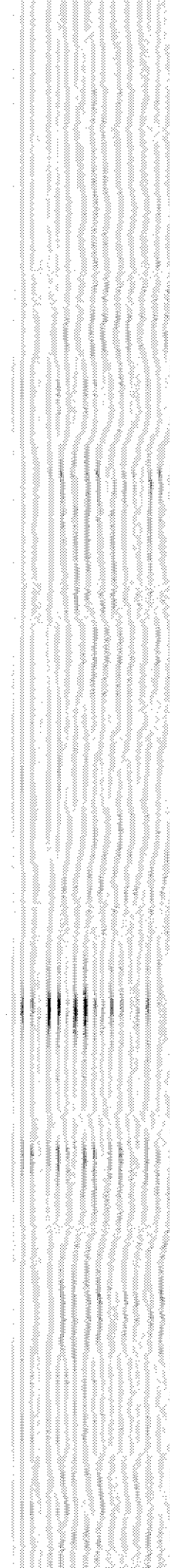
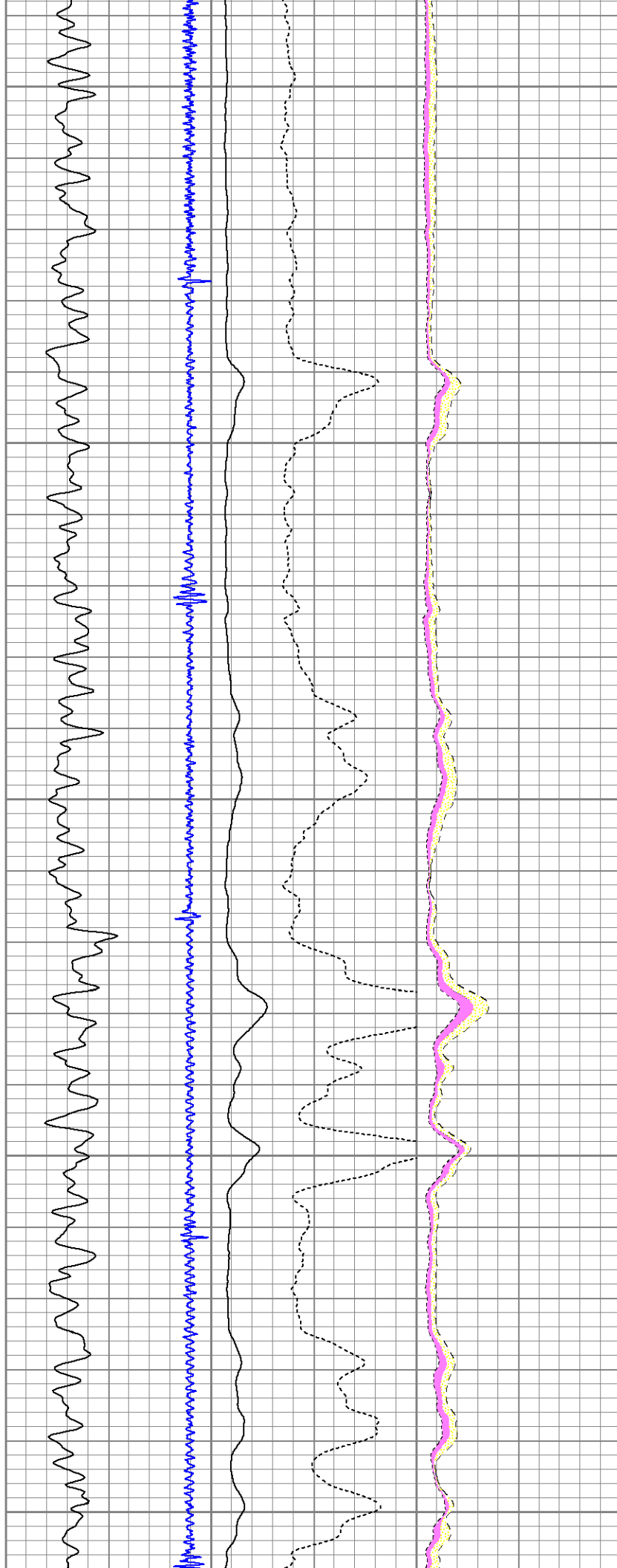
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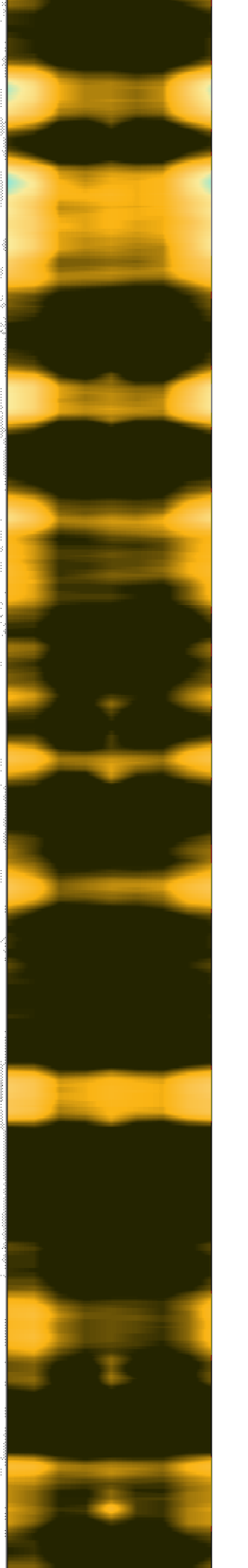
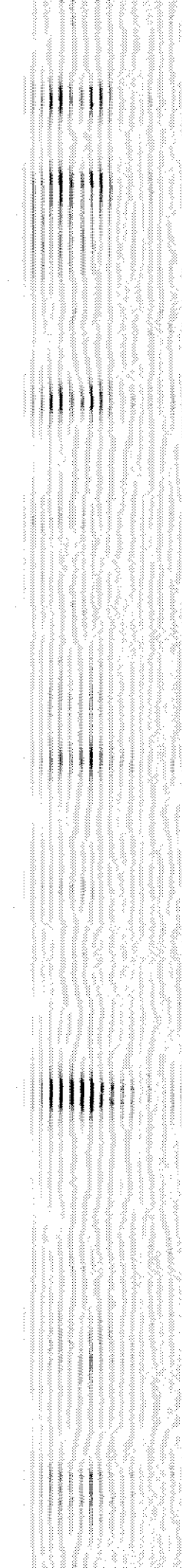
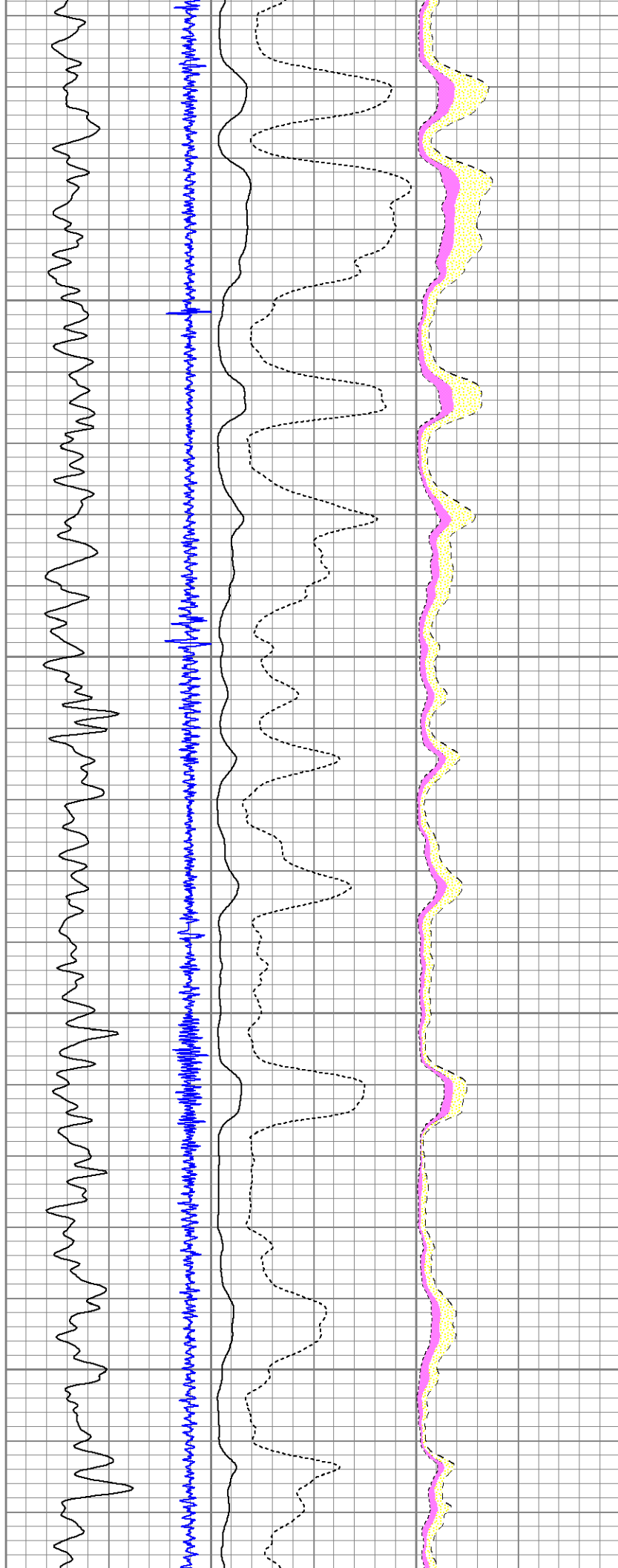
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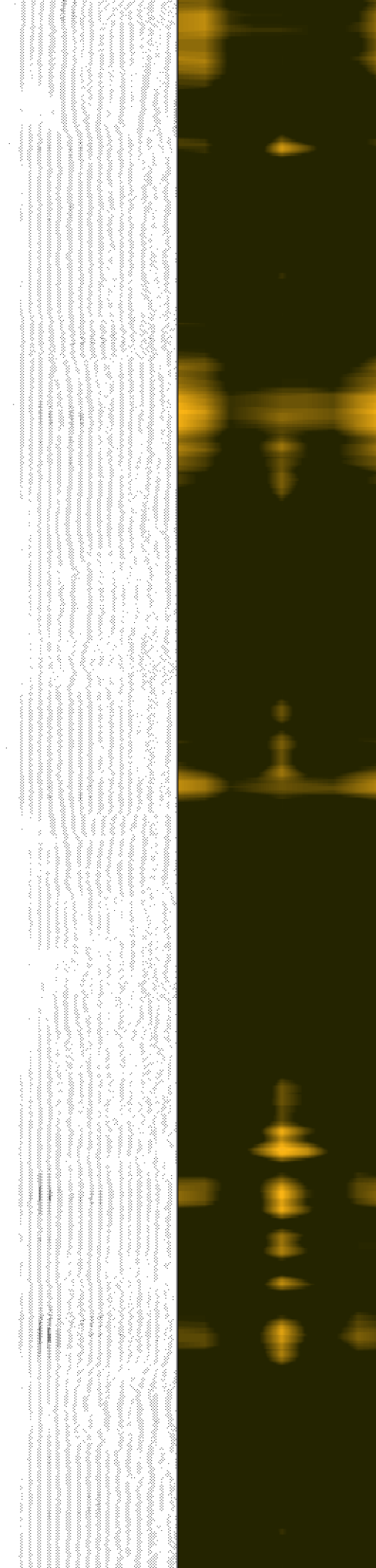
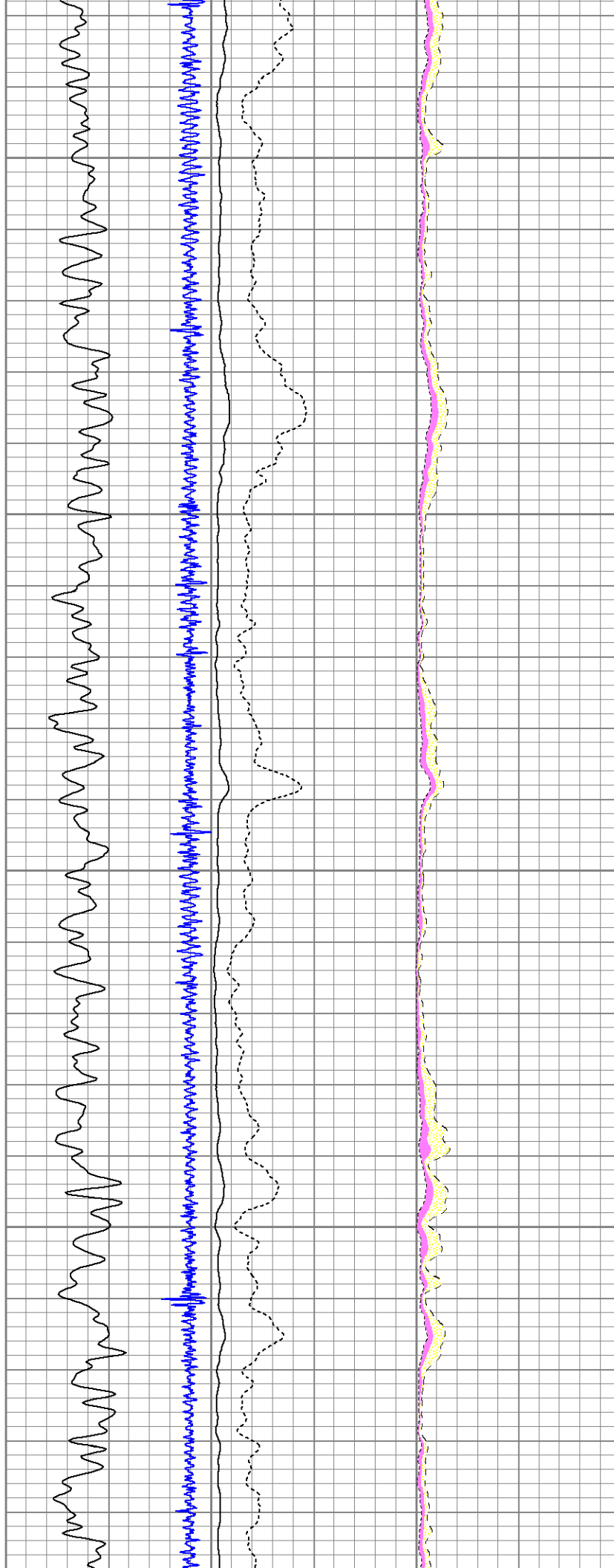
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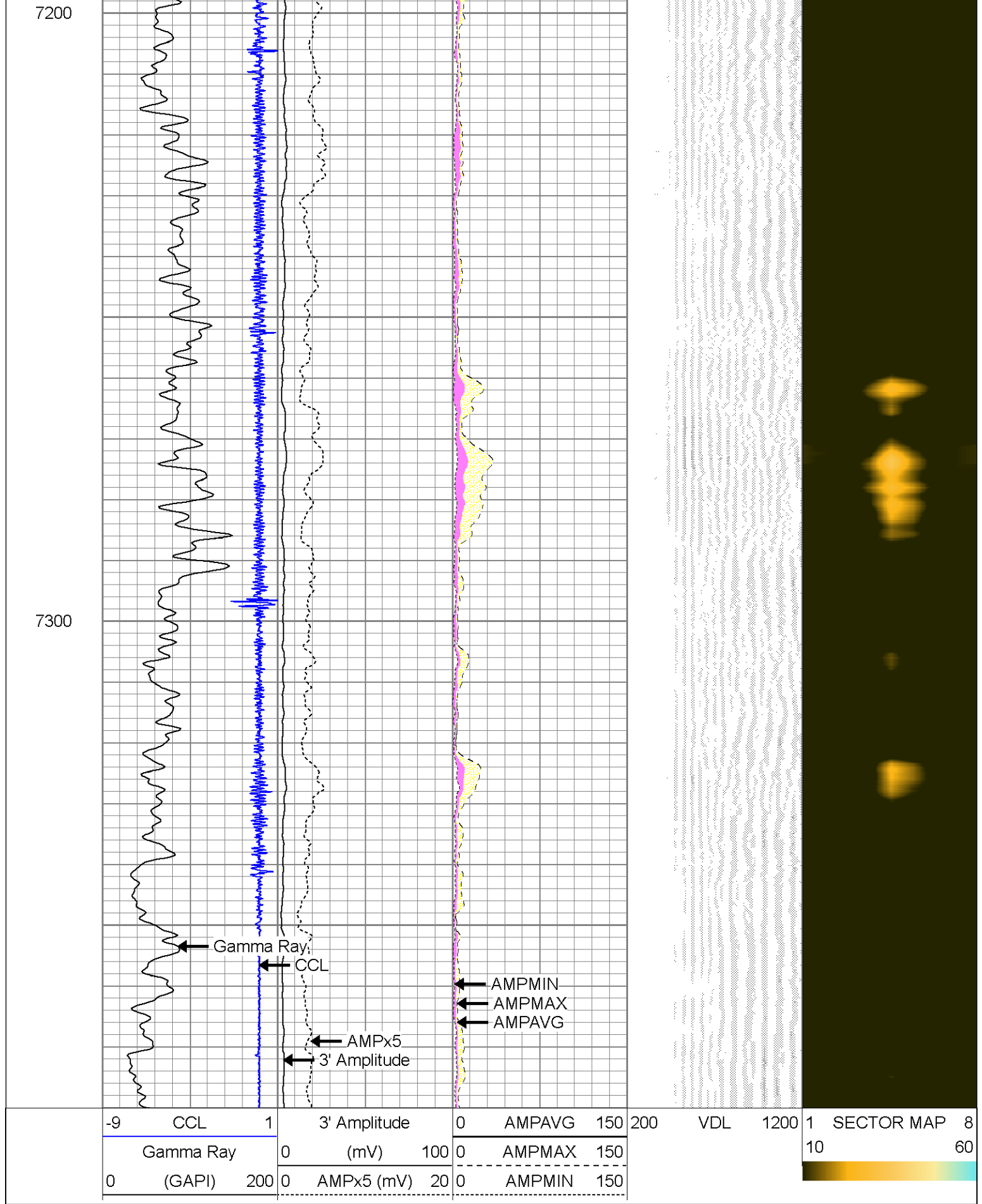
6900



7000

7100





PIONEER

Pioneer Energy Services

Address

County WELD

State CO