



RADIAL BOND LOG  
VD/SECTOR MAP  
GAMMA/CCL

Pioneer Energy Services

Company ANADARKO PETROLEUM CO.

Well DOUTHIT 16C-27HZ

Field WATTENBERG

County WELD State COLORADO

Location: API # : 05-123-39584

1628' FSL & 416' FEL  
NESE

SEC 26 TWP 3N RGE 68W

Permanent Datum GL  
Log Measured From KB  
Drilling Measured From KB 13'

Elevation 4925'  
K.B. 4938'  
D.F. 4937'  
G.L. 4925'

Company ANADARKO PETROLEUM CO.  
Well DOUTHIT 16C-27HZ  
Field WATTENBERG  
County WELD  
State COLORADO

Date

12-NOV-2014

Run Number

ONE

Depth Driller

UNK

Depth Logger

6820'

Bottom Logged Interval

6820'

Top Log Interval

SURFACE

Open Hole Size

8-7/8"

Type Fluid

WATER

Density / Viscosity

8.33 PPG

Max. Recorded Temp.

UNK

Estimated Cement Top

SURFACE

Time Well Ready

15:30

Time Logger on Bottom

15:30

Equipment Number

75

Location

FORT MORGAN

Recorded By

TIM REESE

Witnessed By

EDGAR C.

Borehole Record

Bit

From

To

Size

Weight

From

To

Run Number

Bit

From

To

Size

Weight

From

To

Casing Record

Size

Wgt/Ft

Top

Bottom

Surface String

9-5/8"

36 #

SURFACE

1234'

Prot. String

7"

26

SURFACE

7735'

Production String

4-1/2"

11.6#

6735'

13009'

Liner

4-1/2"

11.6#

6735'

13009'

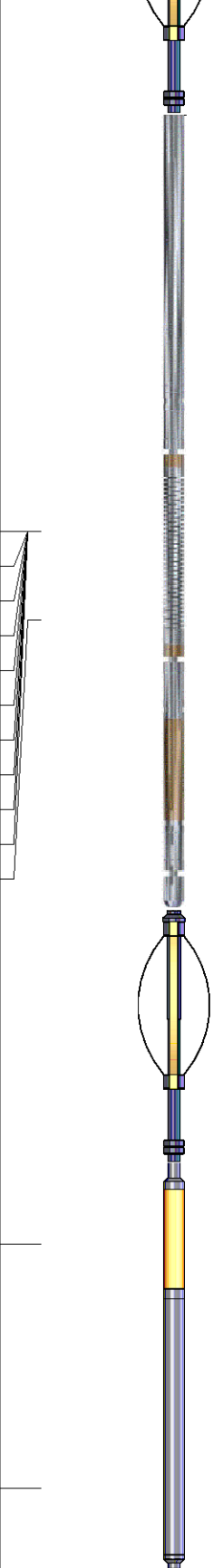
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on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

WELL LOGGED UNDER 2800 PSI

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: douthit 16c-27hz.db: field/well/run1/pass3 Total Length: 19.13 ft Total Weight: 200.00 lb O.D. 2.75 in						

Calibration Report		
Database File:	douthit 16c-27hz.db	
Dataset Pathname:	pass3	
Dataset Creation:	Wed Nov 12 15:18:51 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: 7.000 in  
 Calibration Depth: 302.245 ft

Master Calibration, performed Wed Nov 12 11:37:03 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.484	1.560	62.000	128.158	-0.080
CAL	0.013	0.722				
5'	0.013	0.531	1.560	62.000	116.599	0.068
SUM						
S1	0.013	0.463	0.000	100.000	222.319	-2.852
S2	0.013	0.505	0.000	100.000	203.230	-2.630
S3	0.013	0.533	0.000	100.000	192.251	-2.469
S4	0.013	0.539	0.000	100.000	190.096	-2.418
S5	0.013	0.511	0.000	100.000	200.539	-2.543
S6	0.013	0.481	0.000	100.000	213.517	-2.739
S7	0.013	0.466	0.000	100.000	220.565	-2.806
S8	0.013	0.442	0.000	100.000	232.701	-2.966

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	0.722	1.000	0.000

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

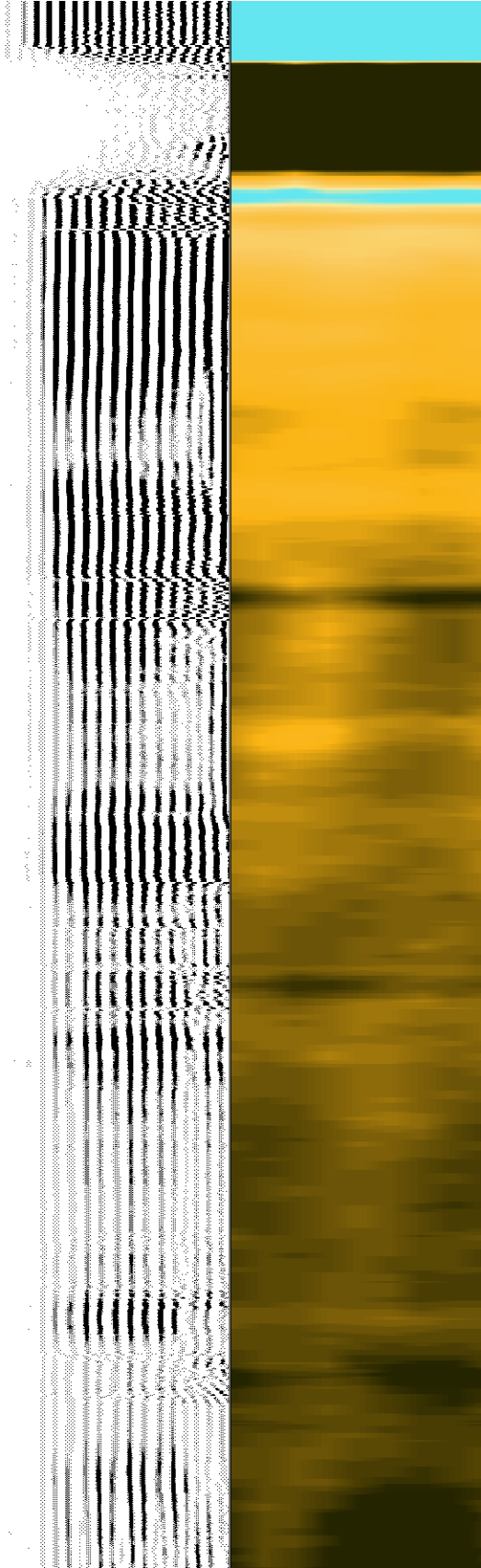
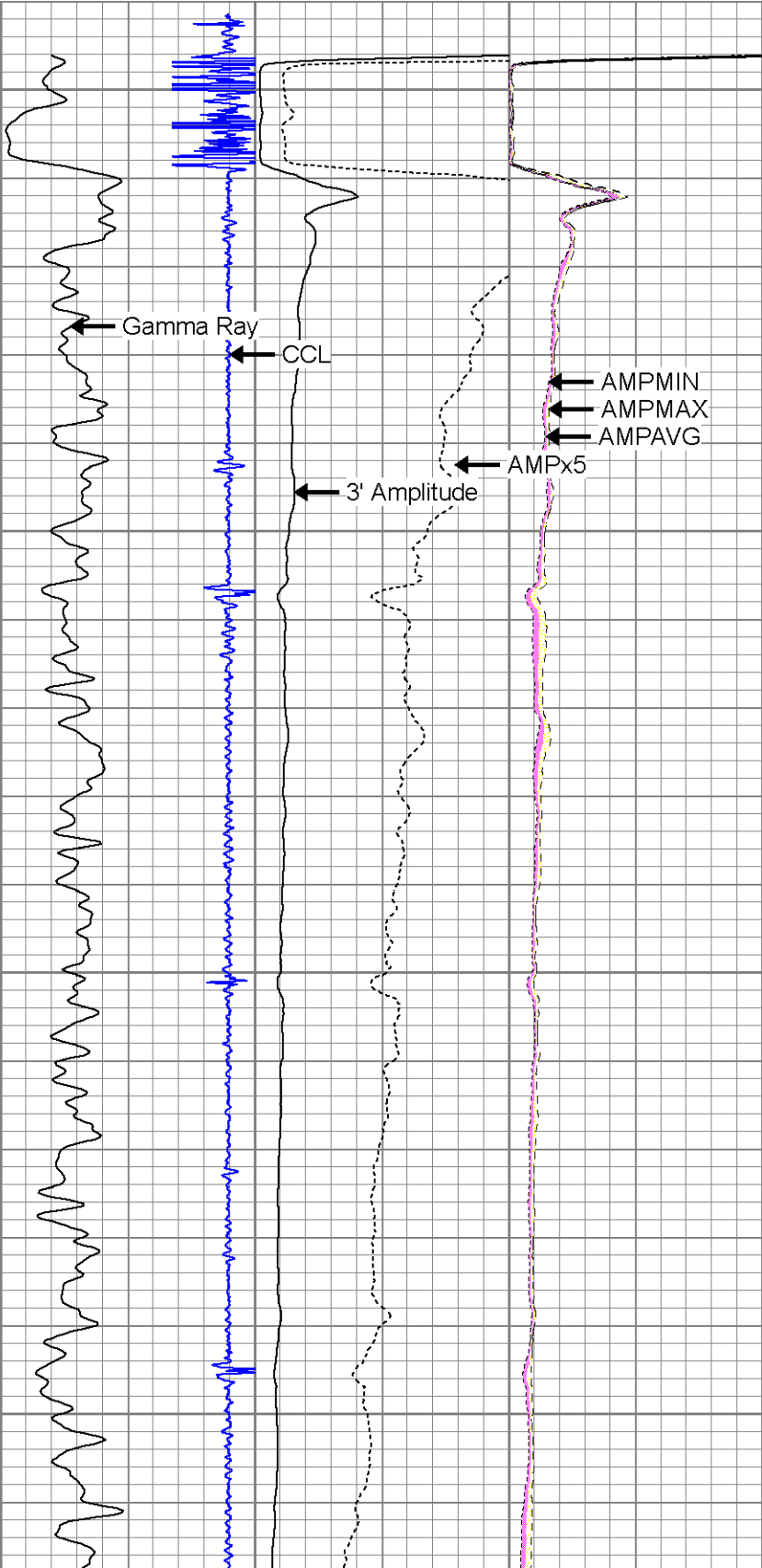
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Database File: douthit 16c-27hz.db  
Dataset Pathname: pass3  
Presentation Format: scbl02  
Dataset Creation: Wed Nov 12 15:18:51 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	0	(mV)	100	0	AMPMAX	150			10		60
0	(GAPI)	200	0	AMPx5 (mV)	20	0	AMPMIN	150				

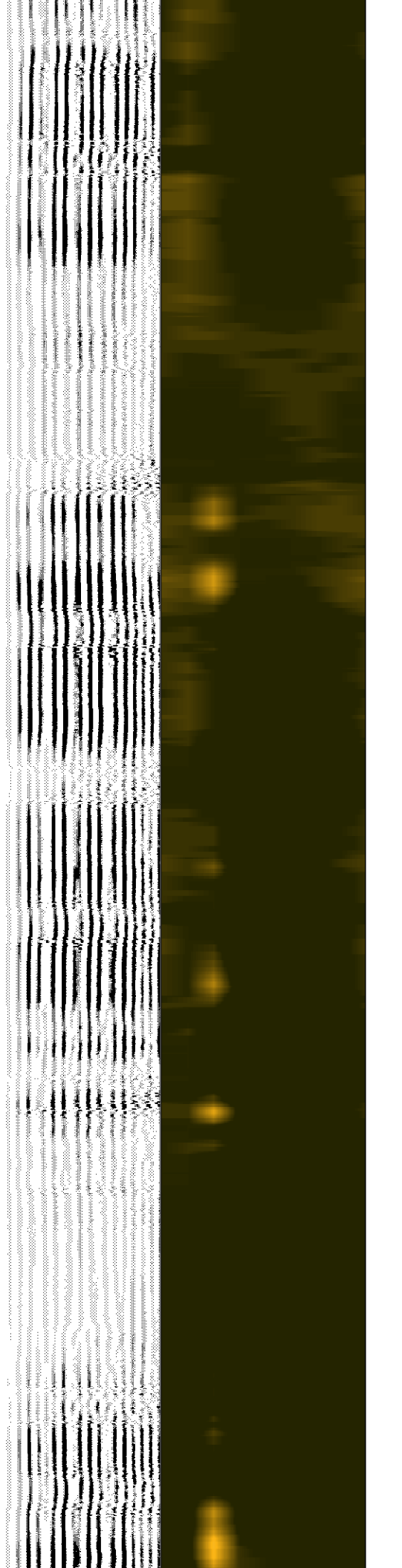
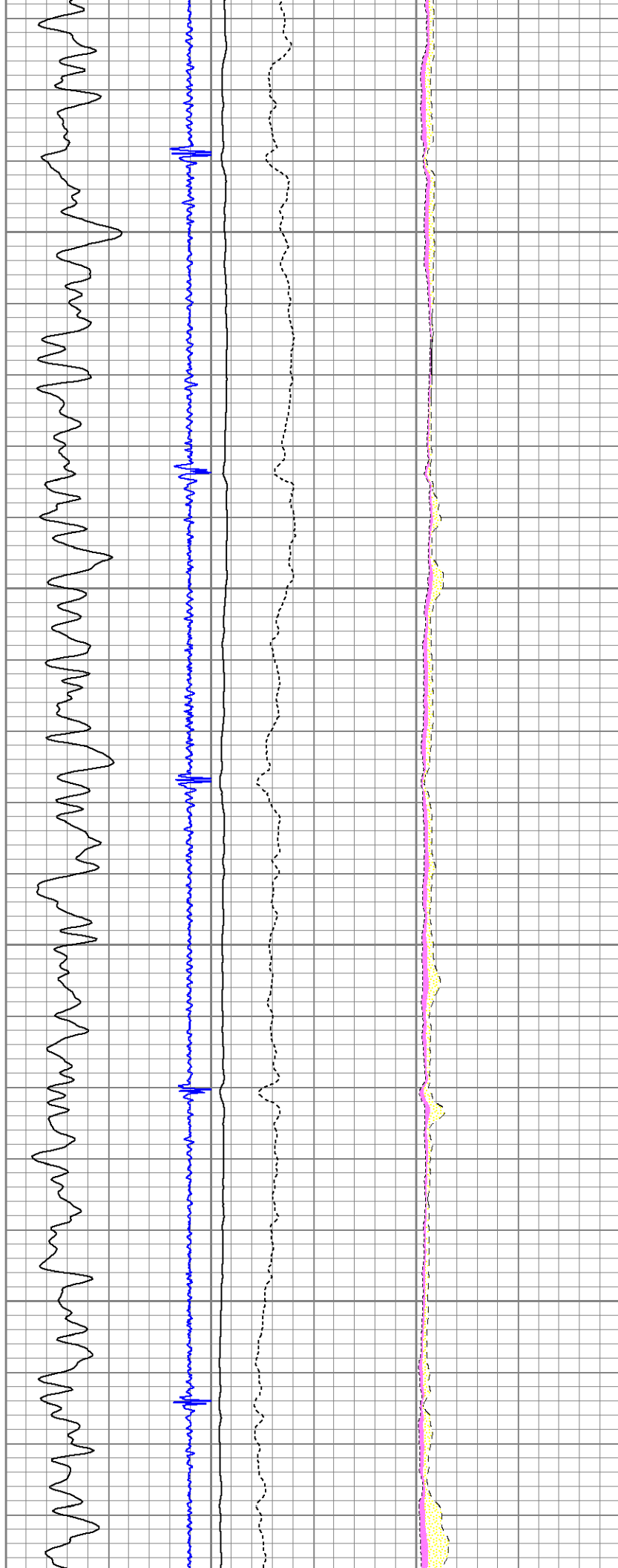
0

100



200

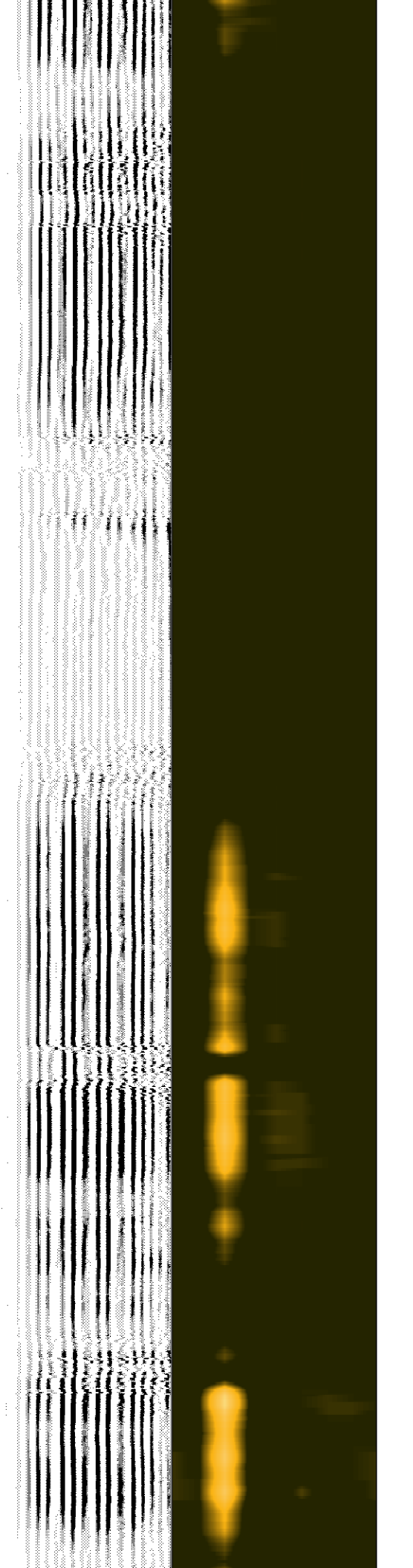
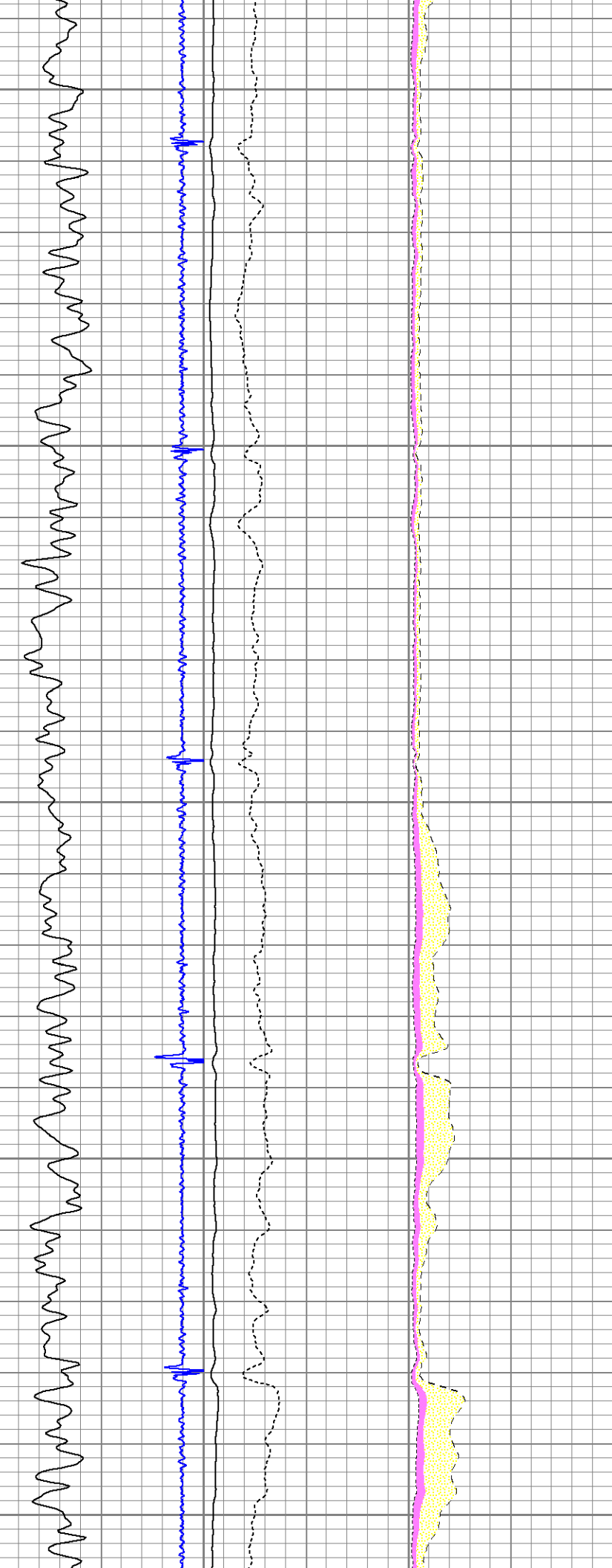
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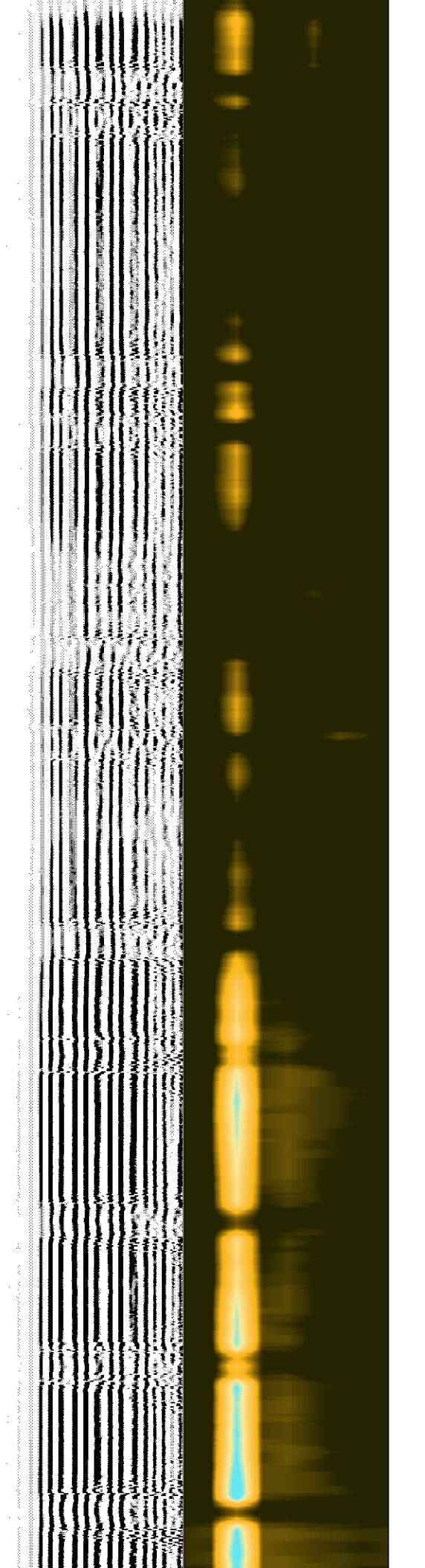
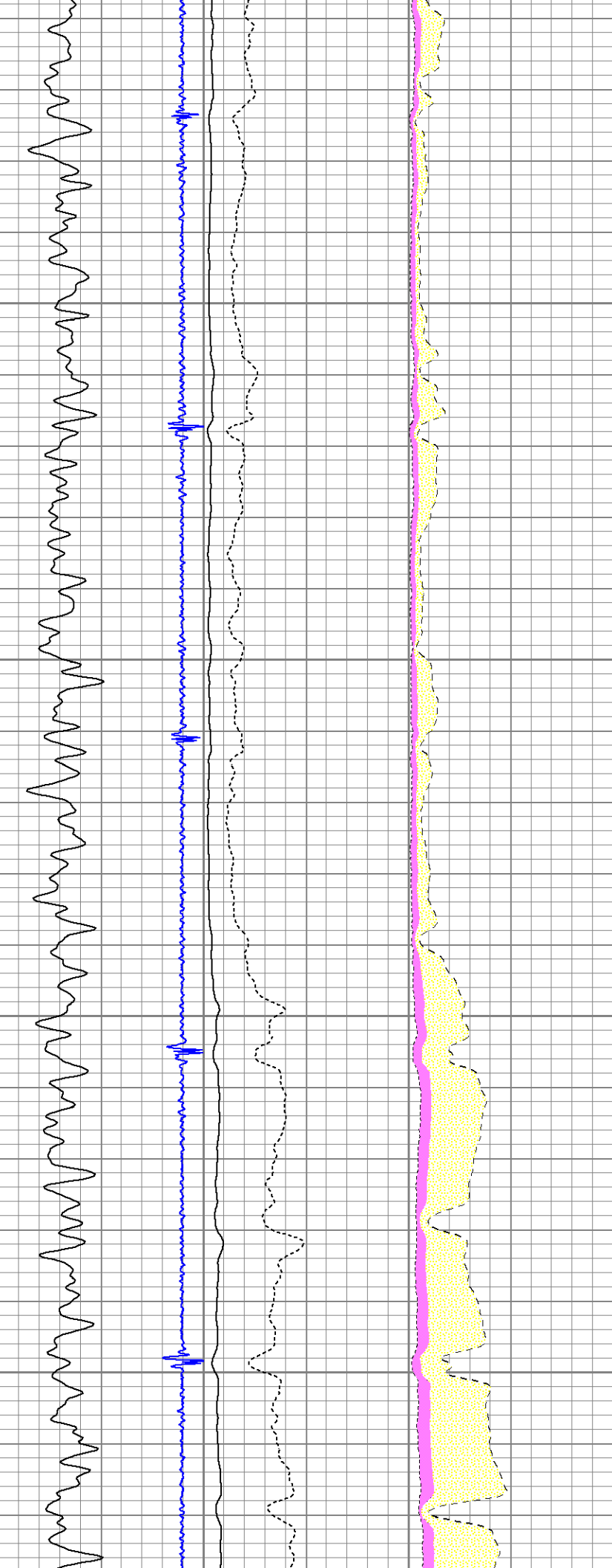
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600



700

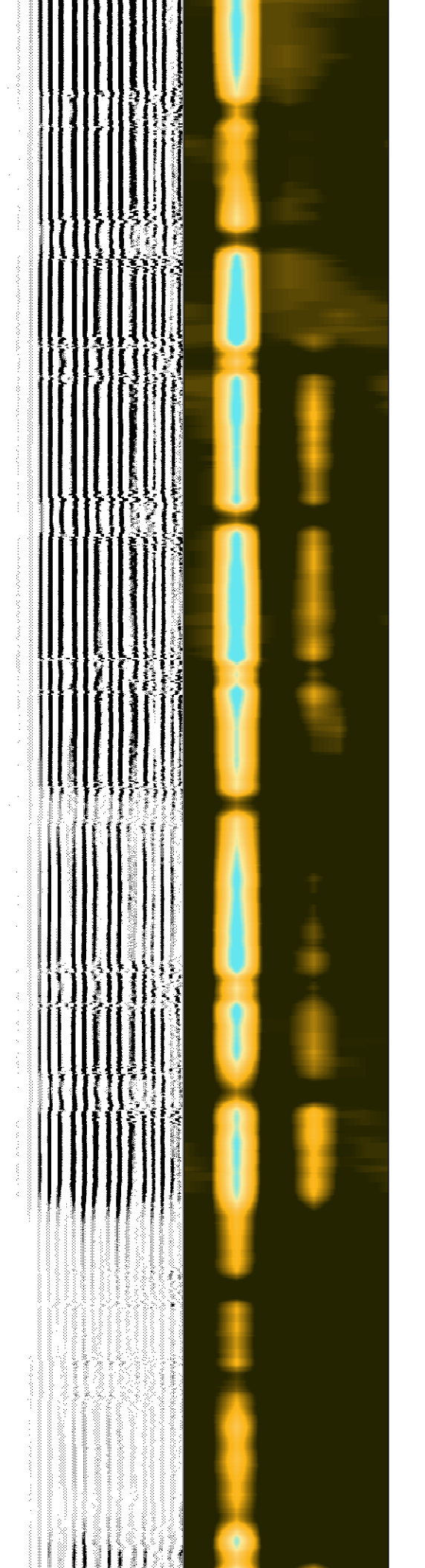
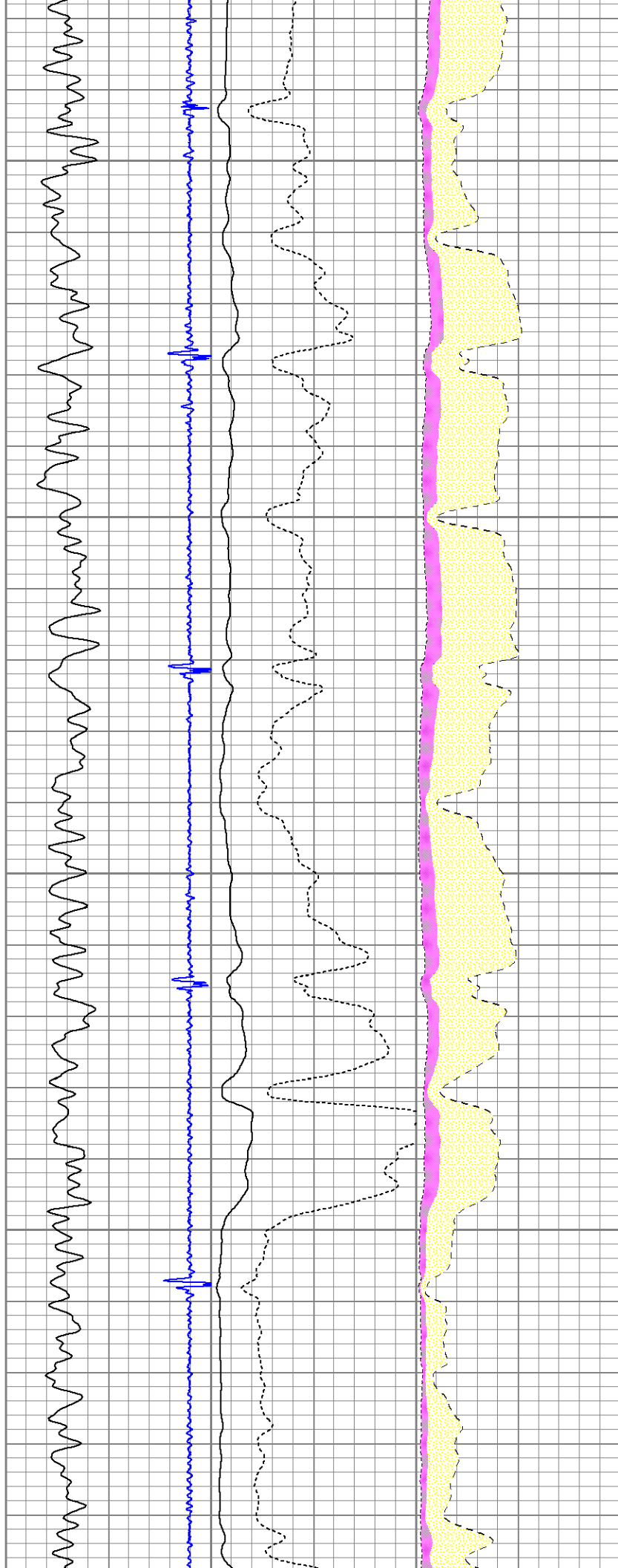
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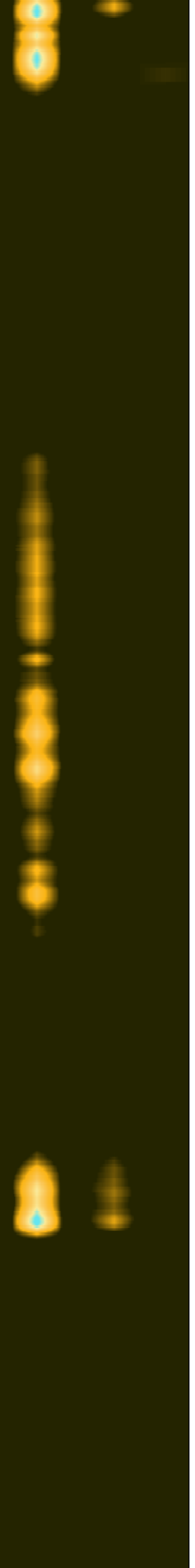
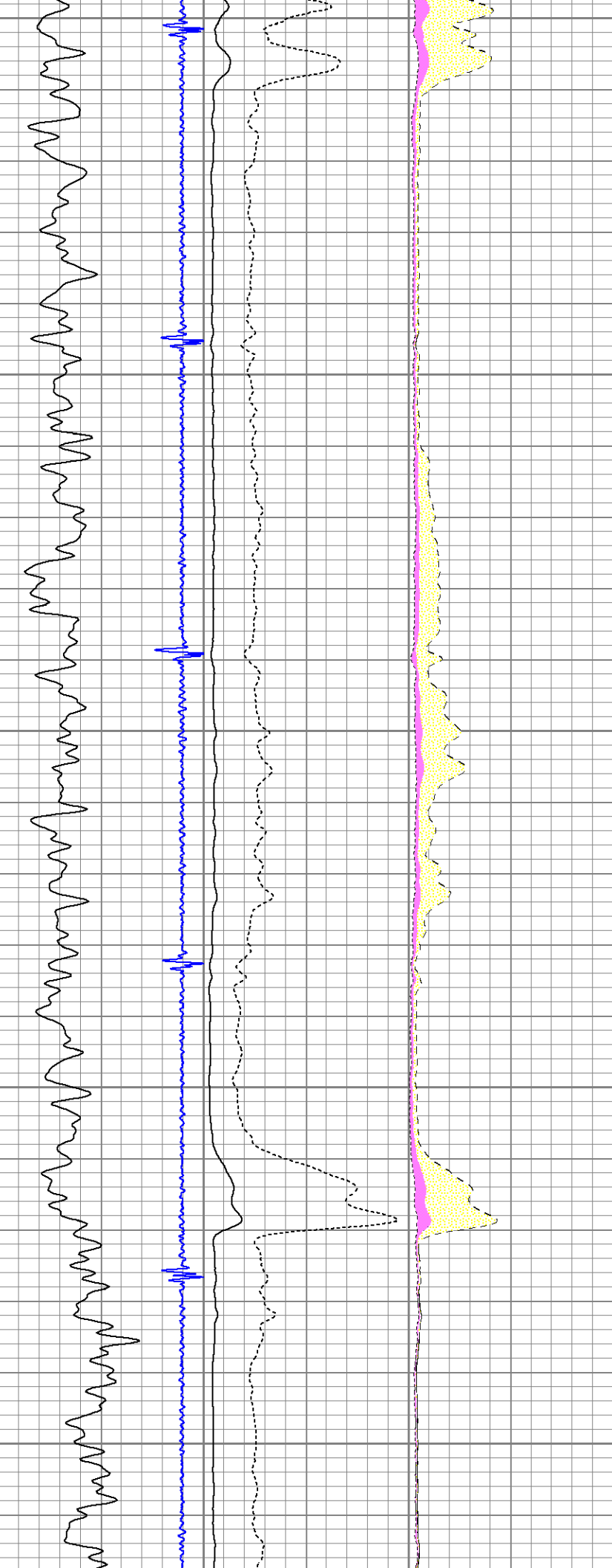
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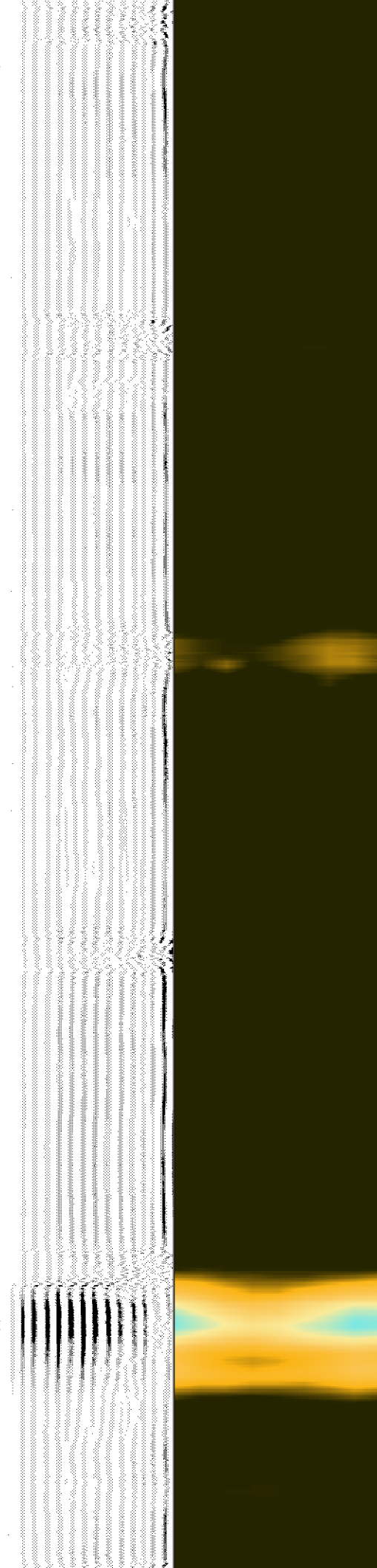
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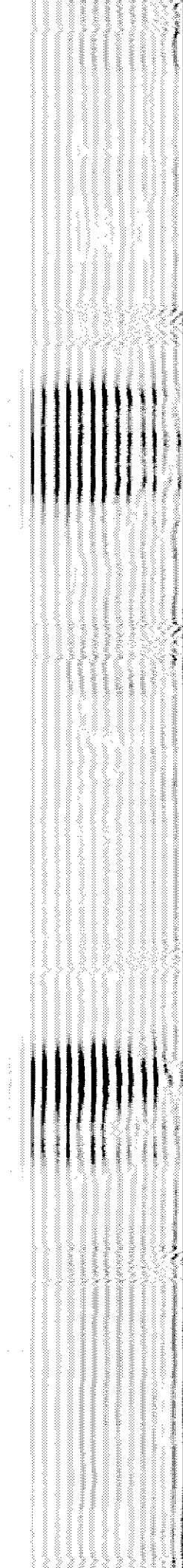
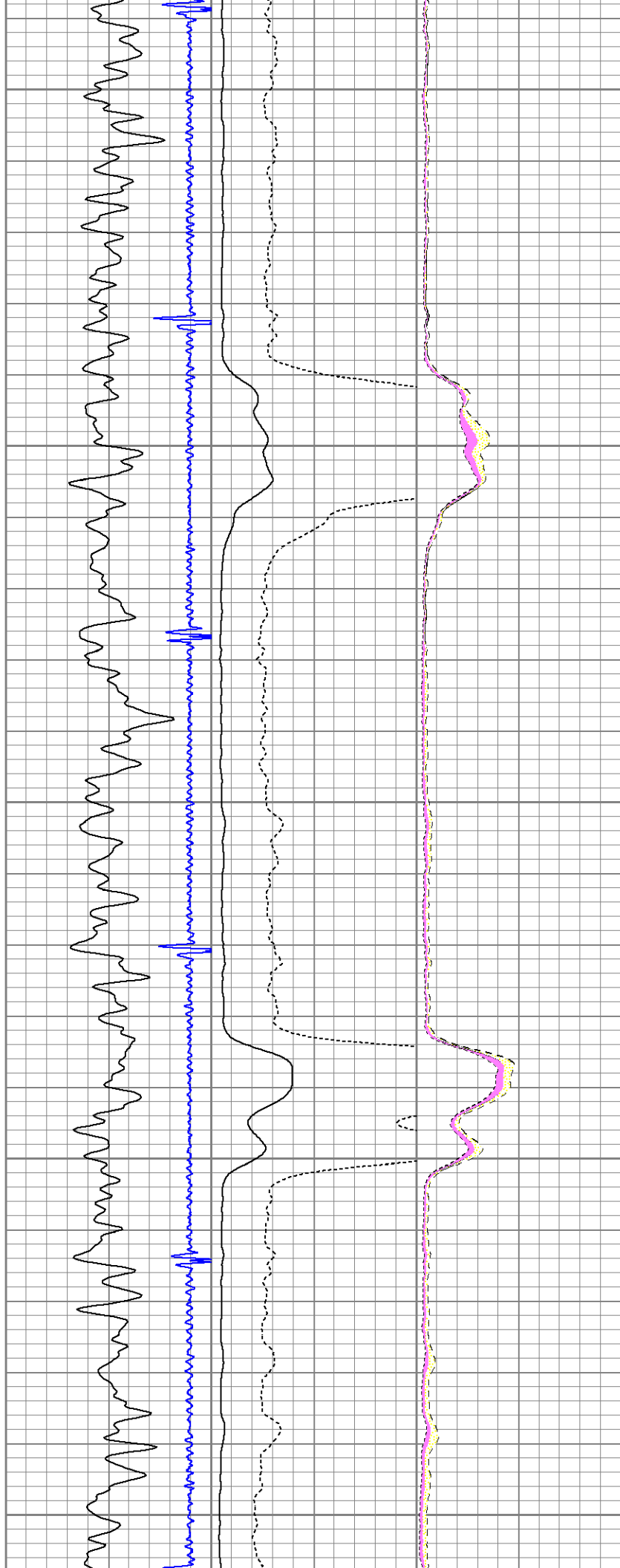
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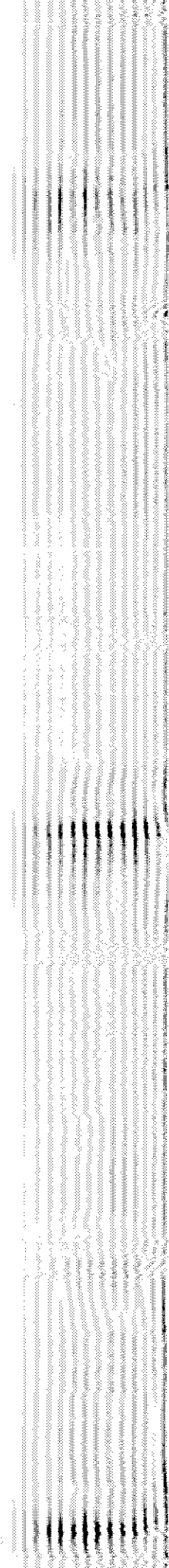
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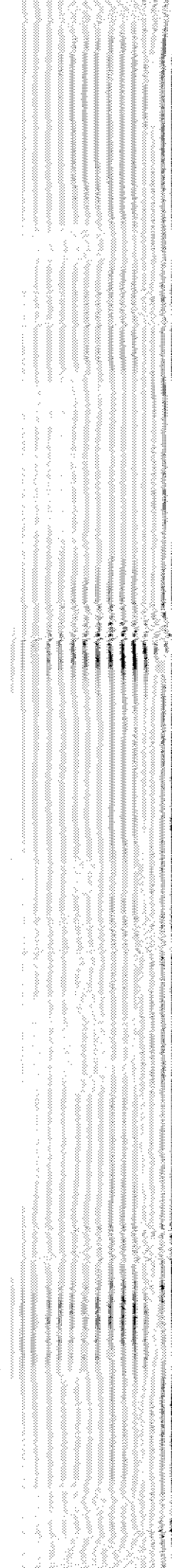
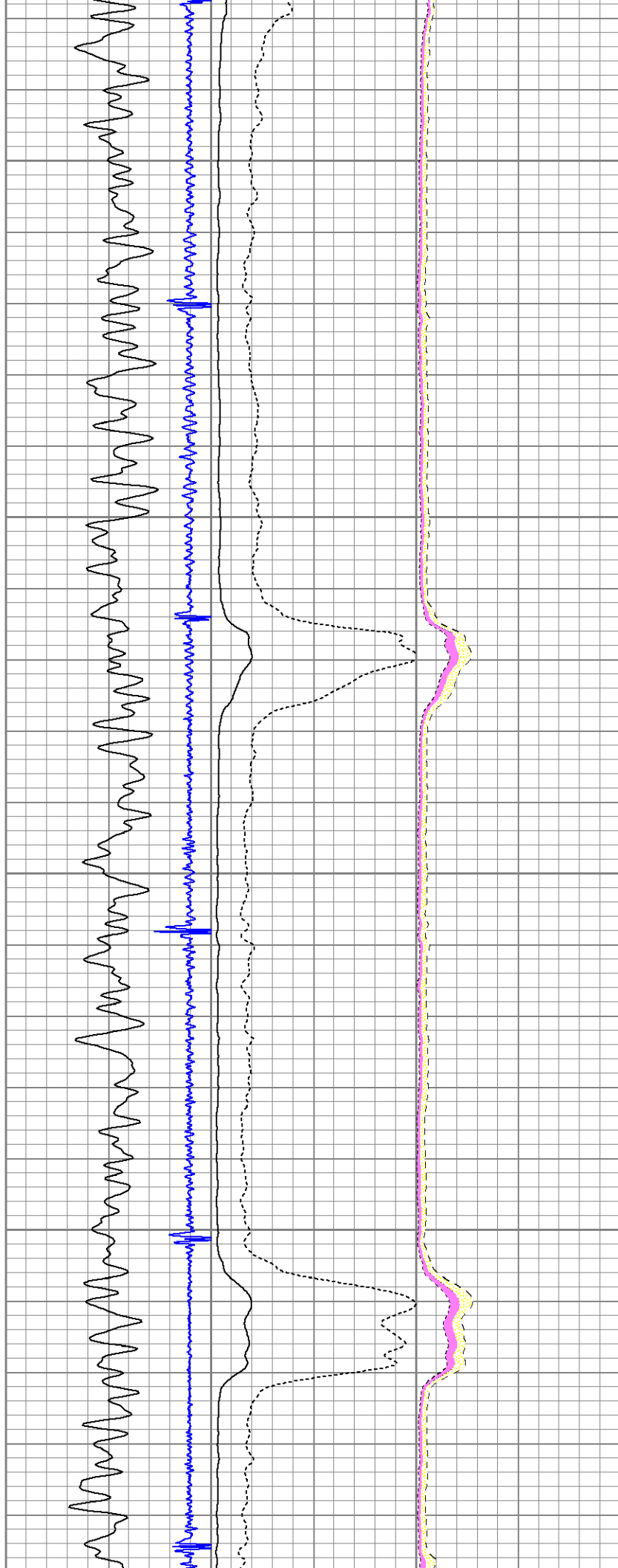
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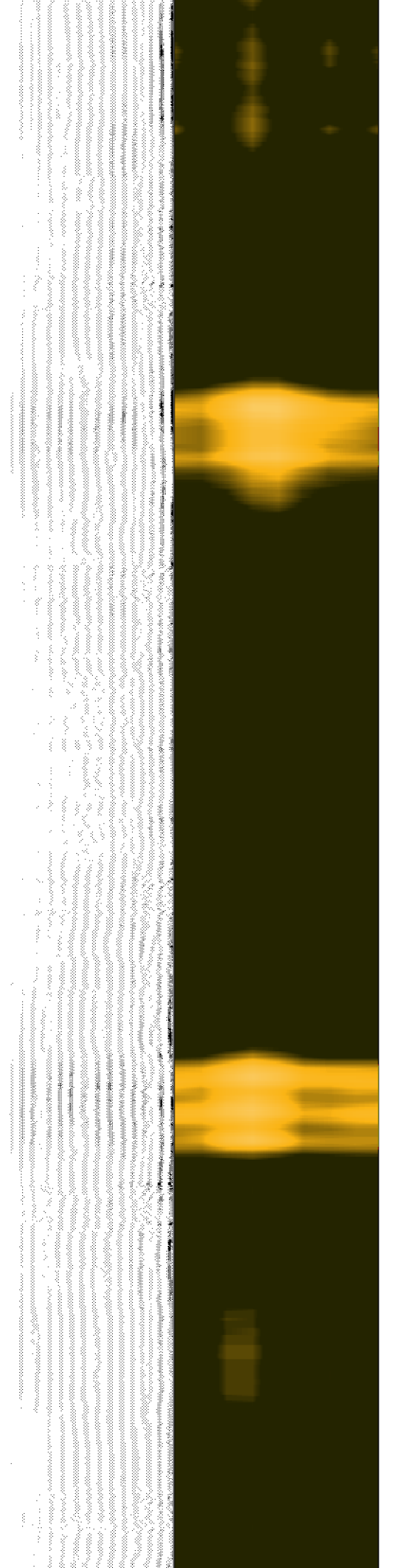
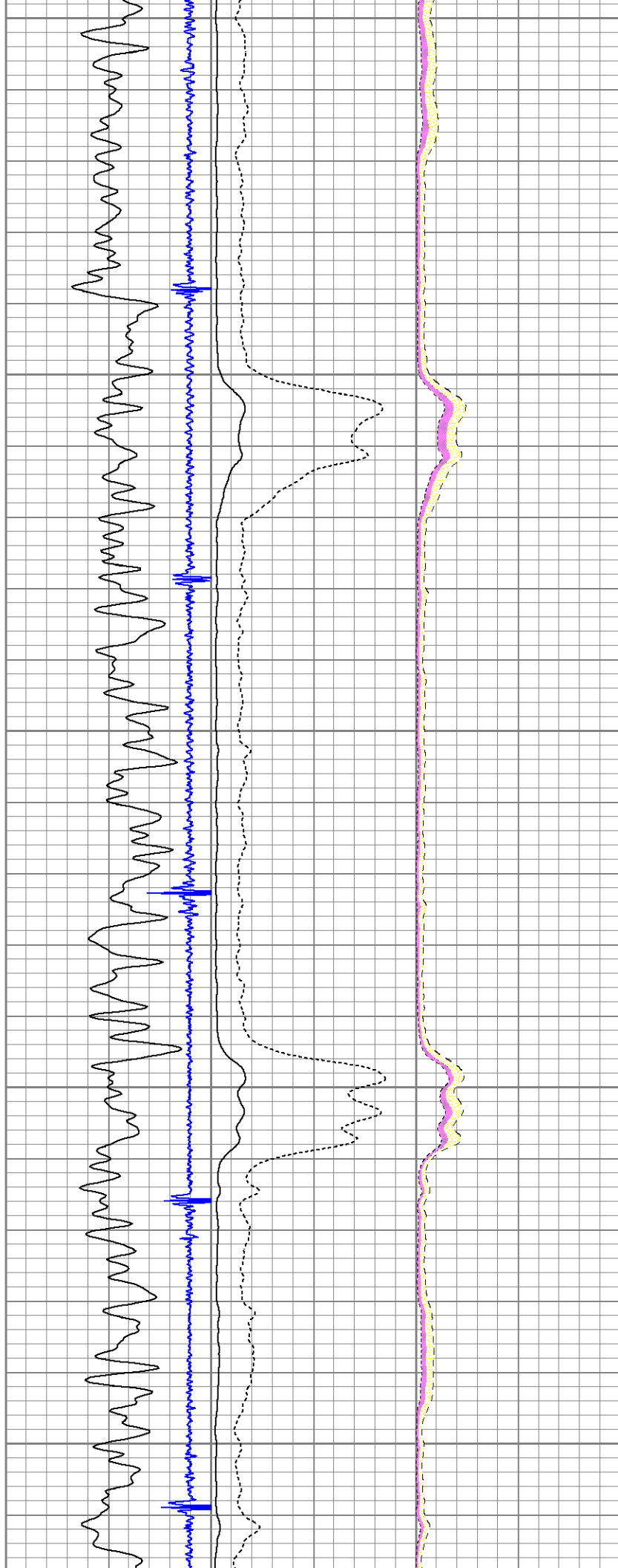
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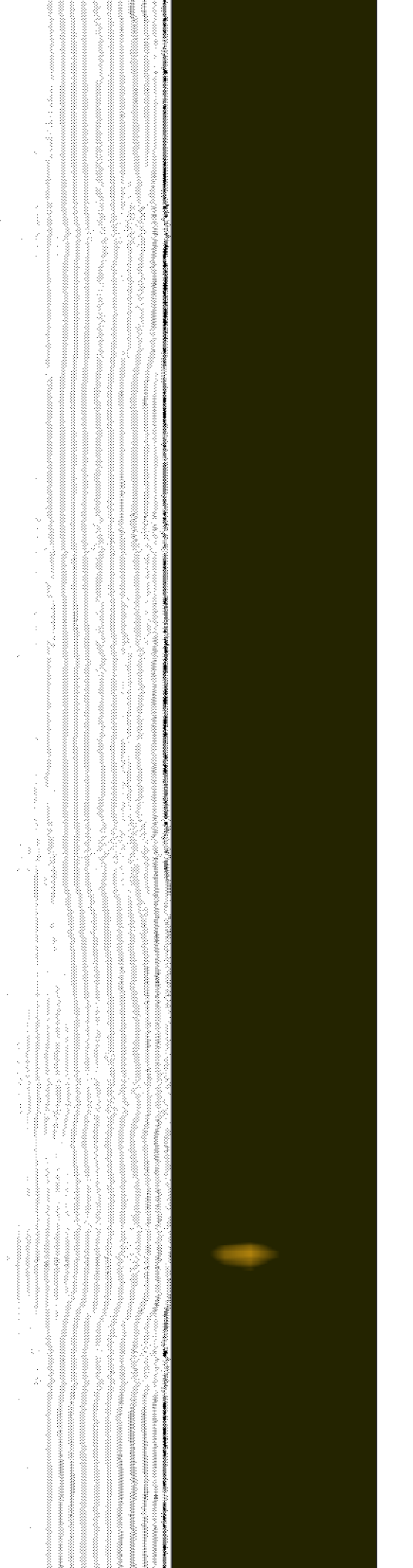
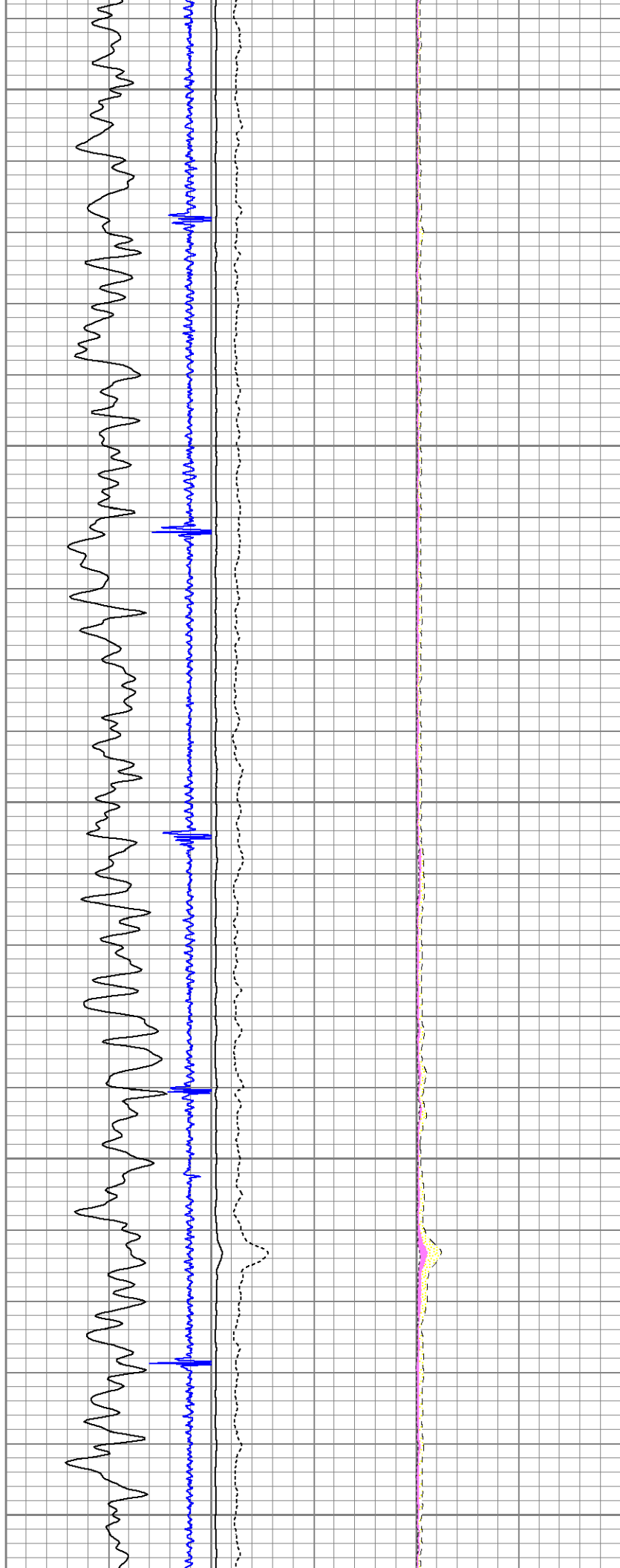


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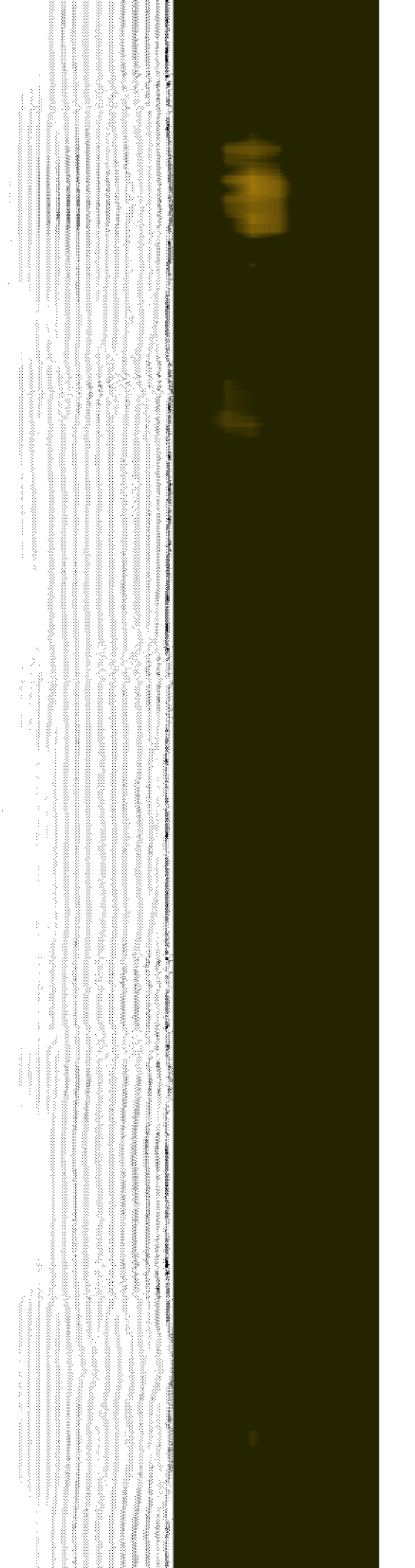
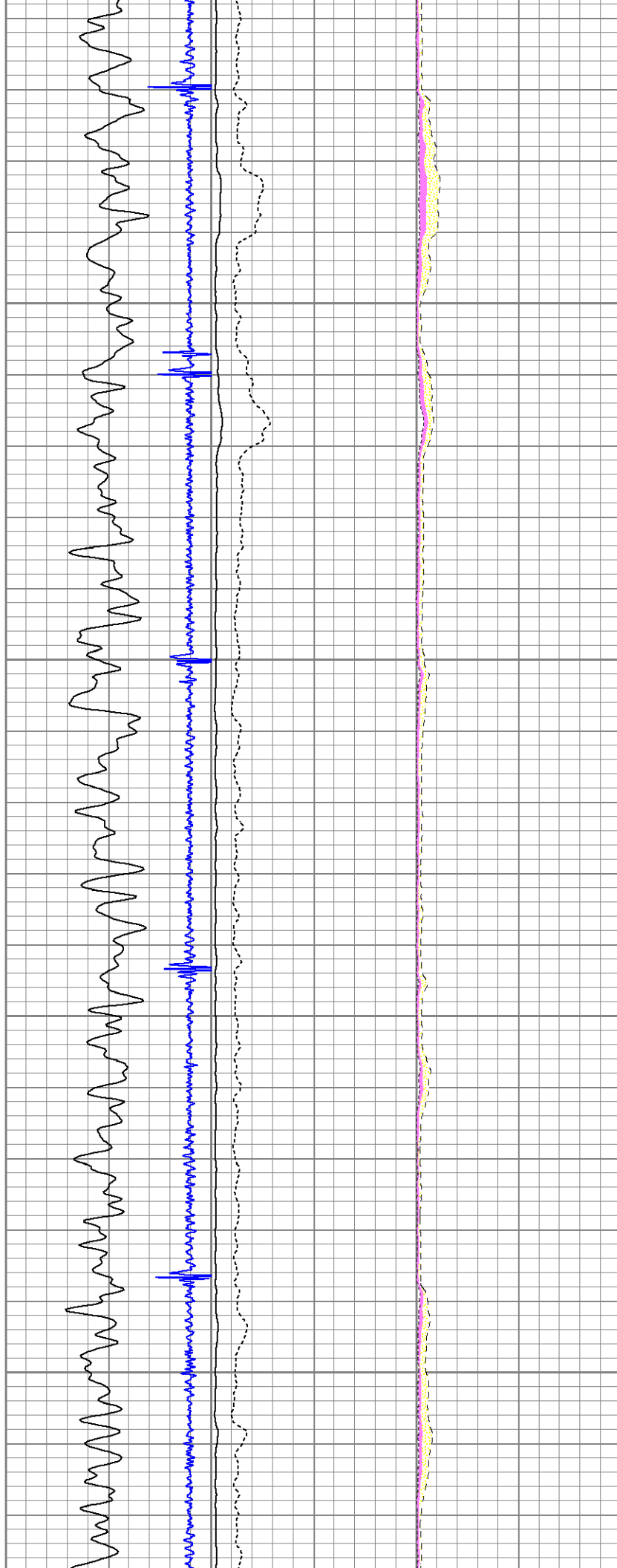
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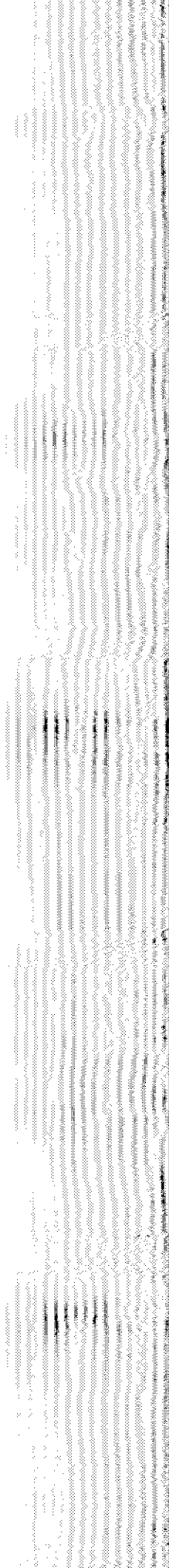
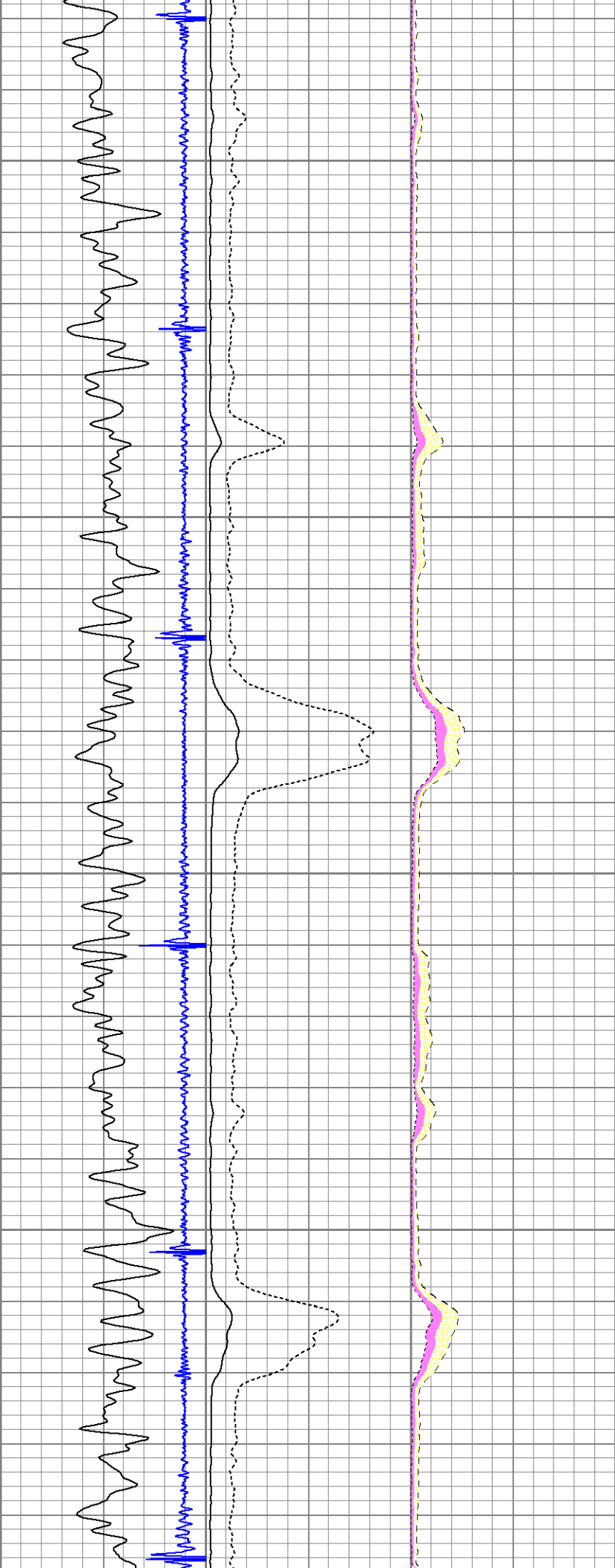
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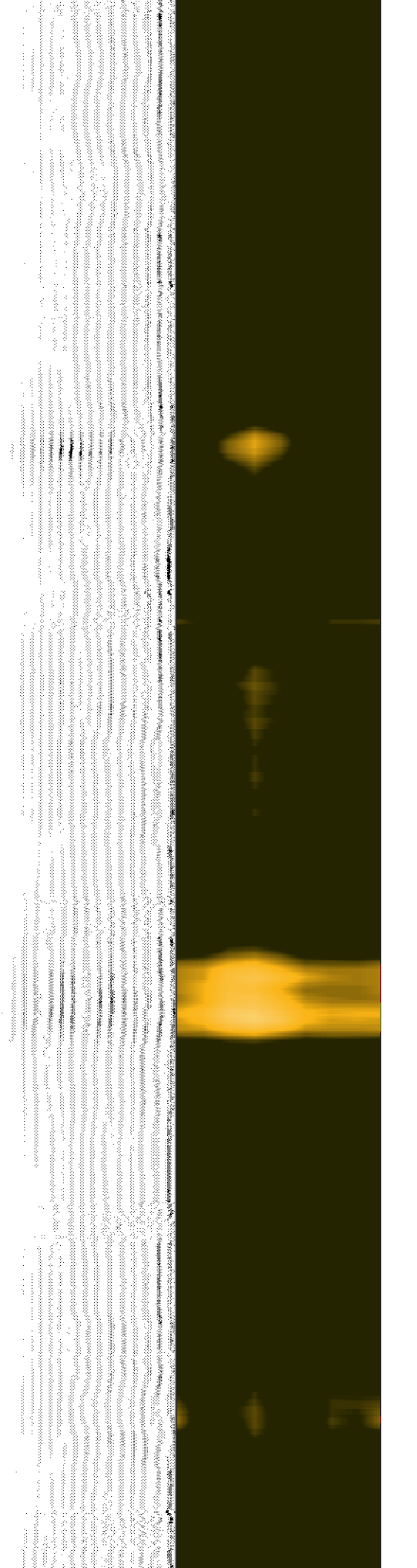
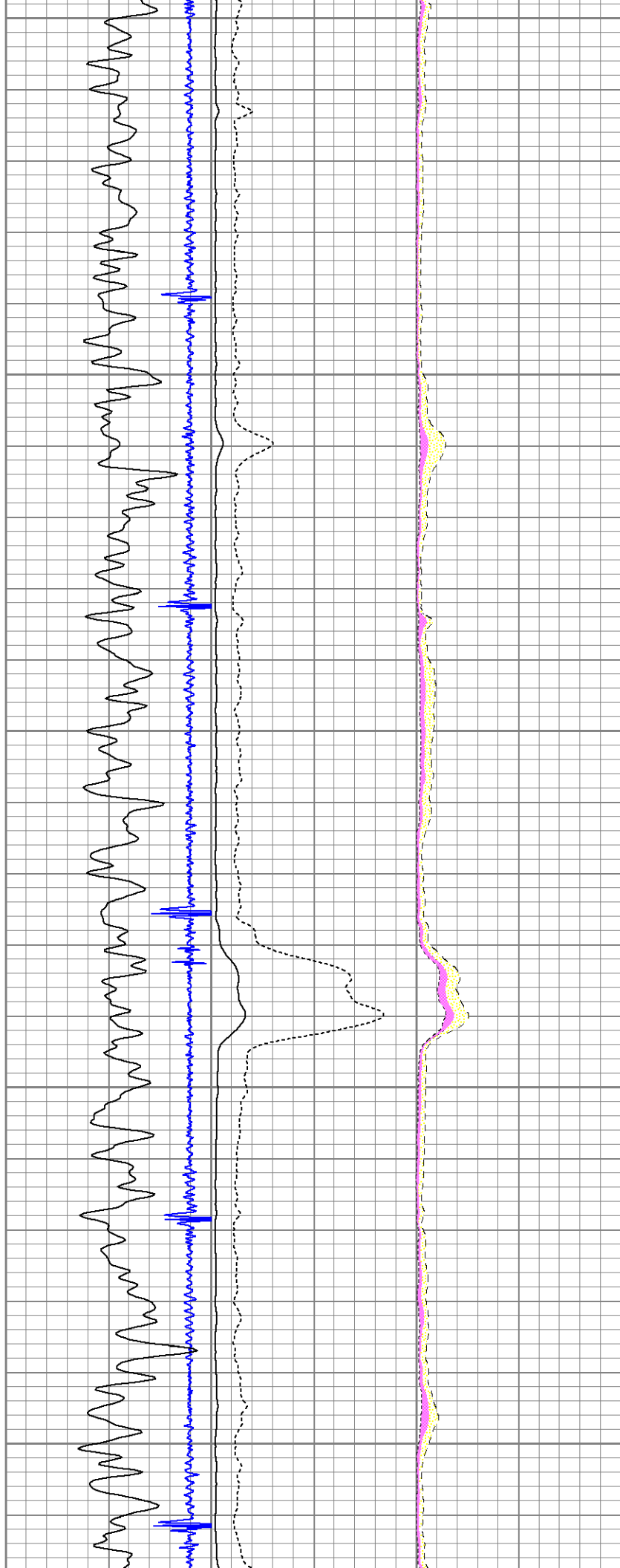
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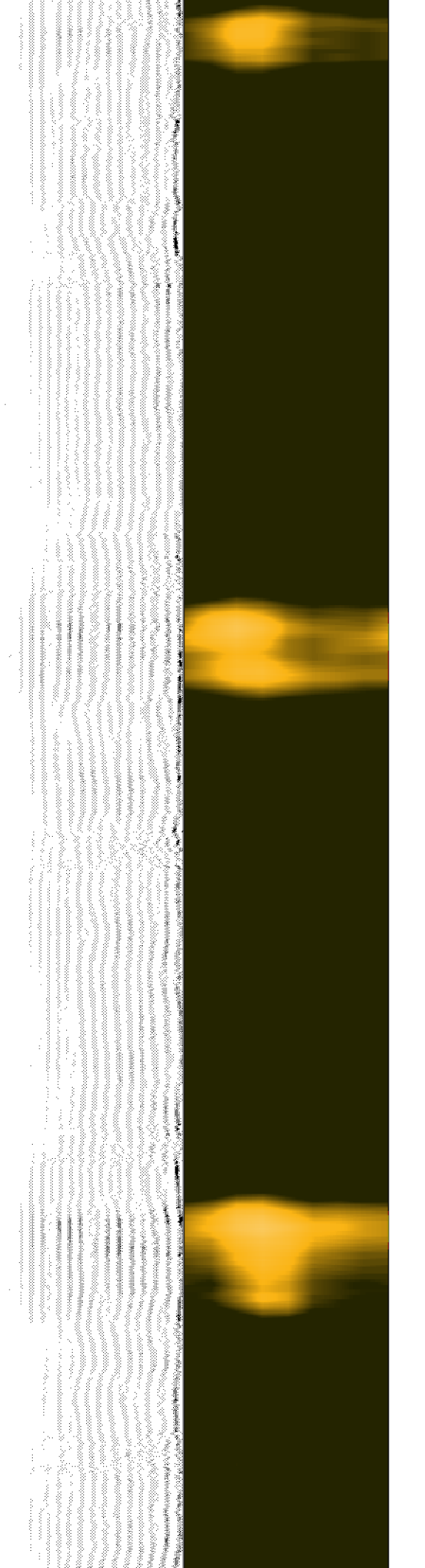
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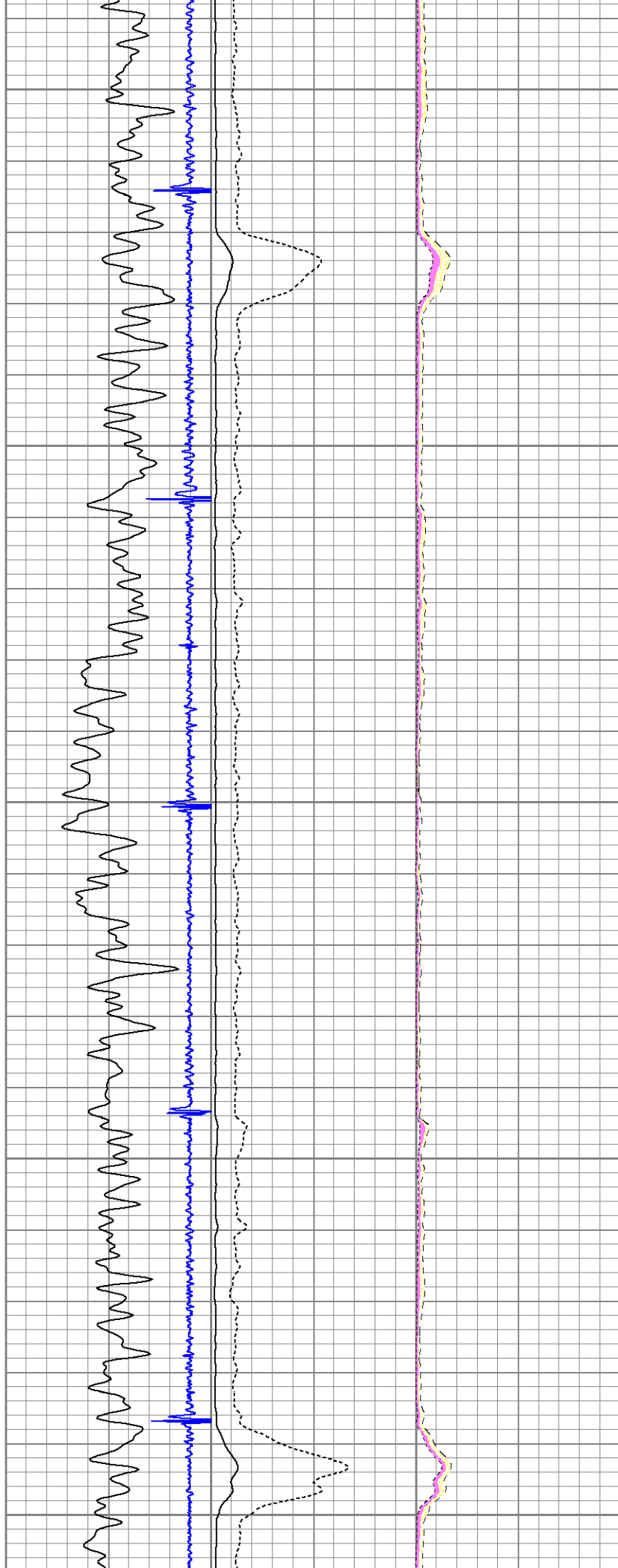
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3900



1. The first part of the document is a title page. It contains the title of the document, the author's name, and the date of the document.

2. The second part of the document is an abstract. It provides a brief summary of the main points of the document.

3. The third part of the document is an introduction. It provides background information on the topic and states the purpose of the document.

4. The fourth part of the document is the main body. It contains the main text of the document, which is divided into several sections.

5. The fifth part of the document is a conclusion. It summarizes the main findings of the document and provides recommendations.

6. The sixth part of the document is a bibliography. It lists the sources of information used in the document.

7. The seventh part of the document is an appendix. It contains additional information that is related to the main text but is not essential for understanding the main points.

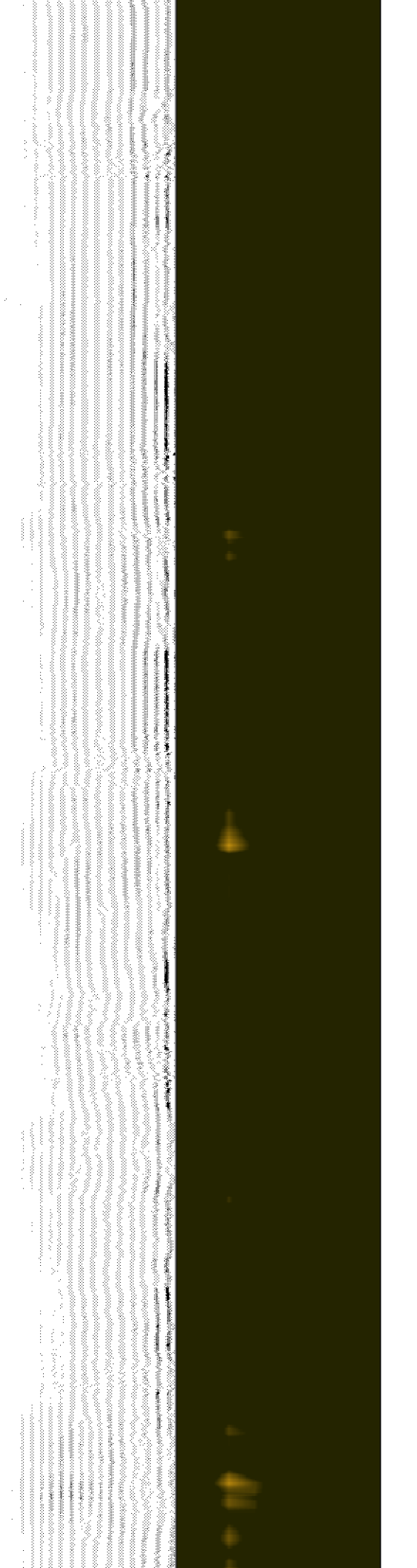
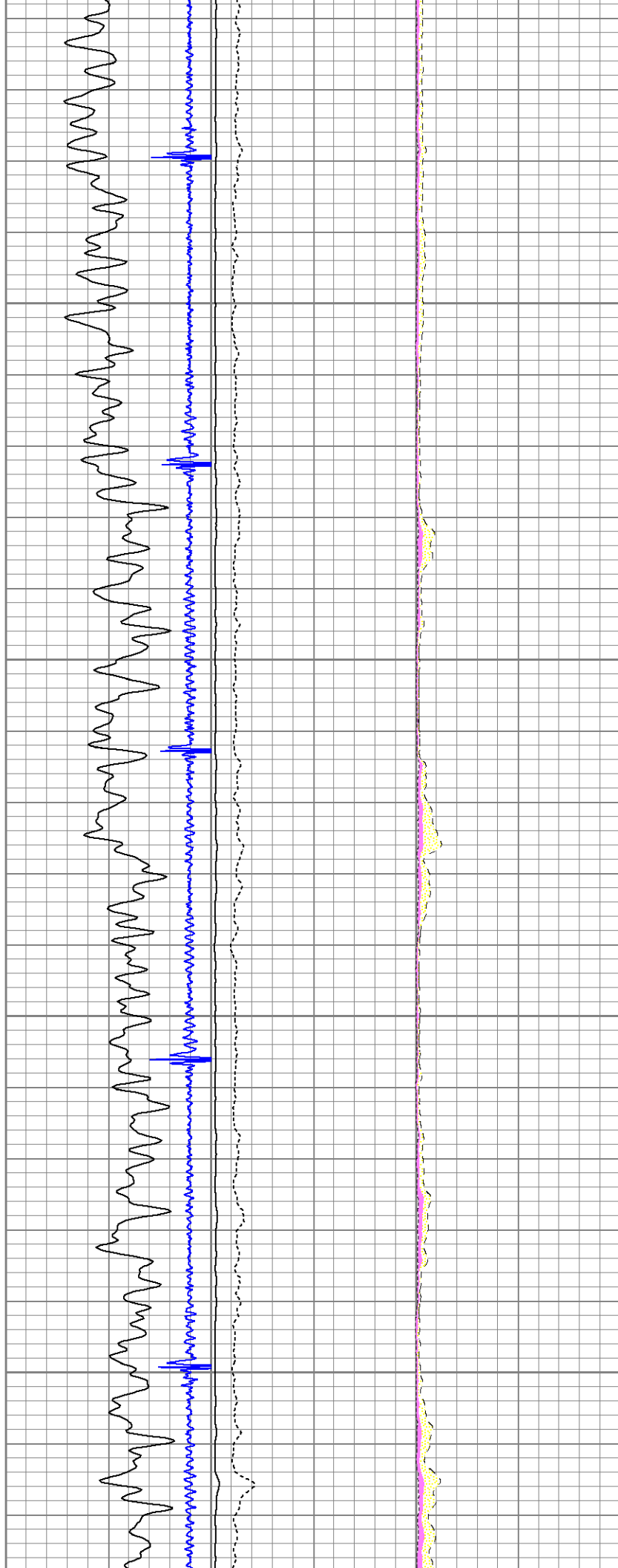
8. The eighth part of the document is a glossary. It defines the key terms used in the document.

9. The ninth part of the document is an index. It provides a list of the main topics and subtopics covered in the document.

10. The tenth part of the document is a list of figures and tables. It provides a list of the visual elements included in the document.

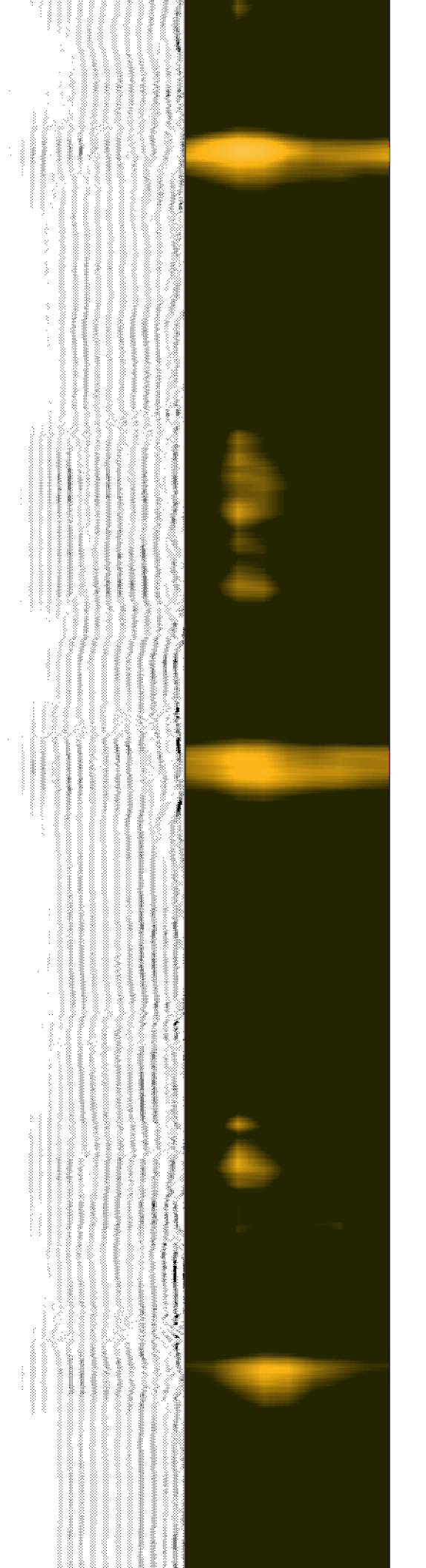
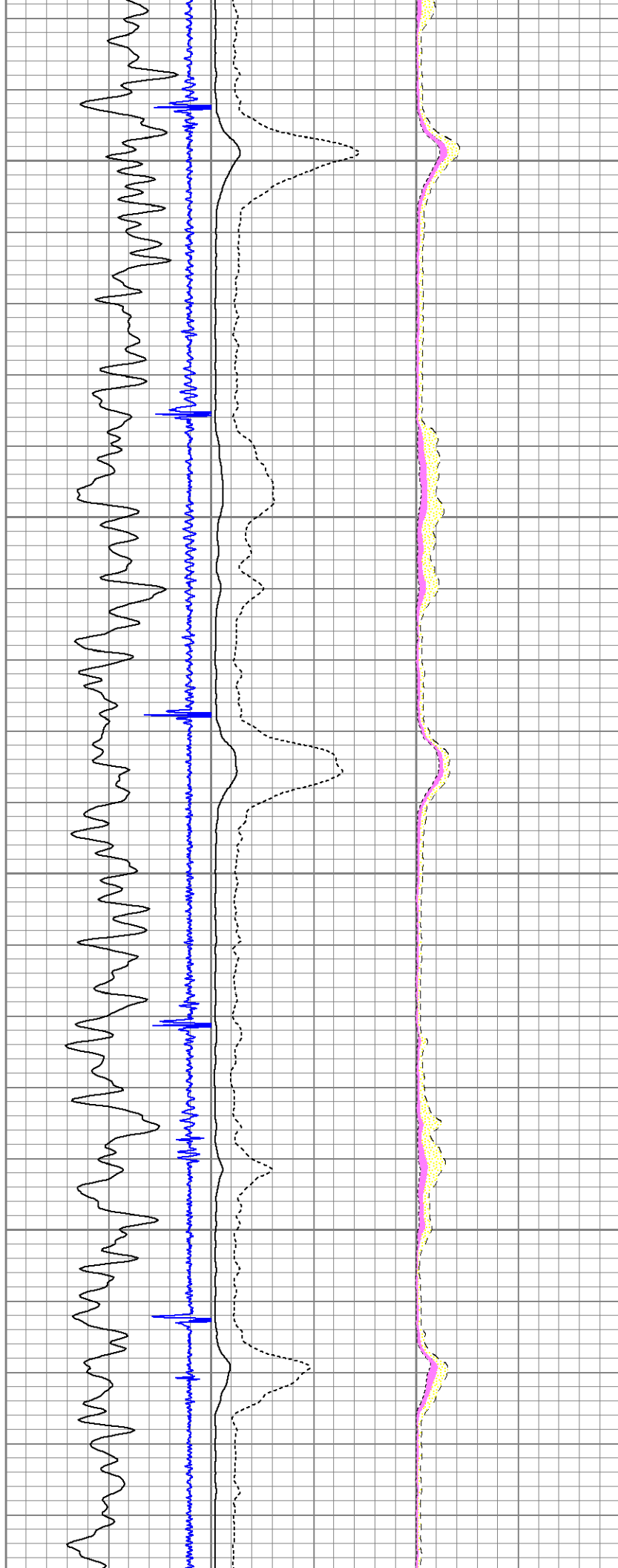
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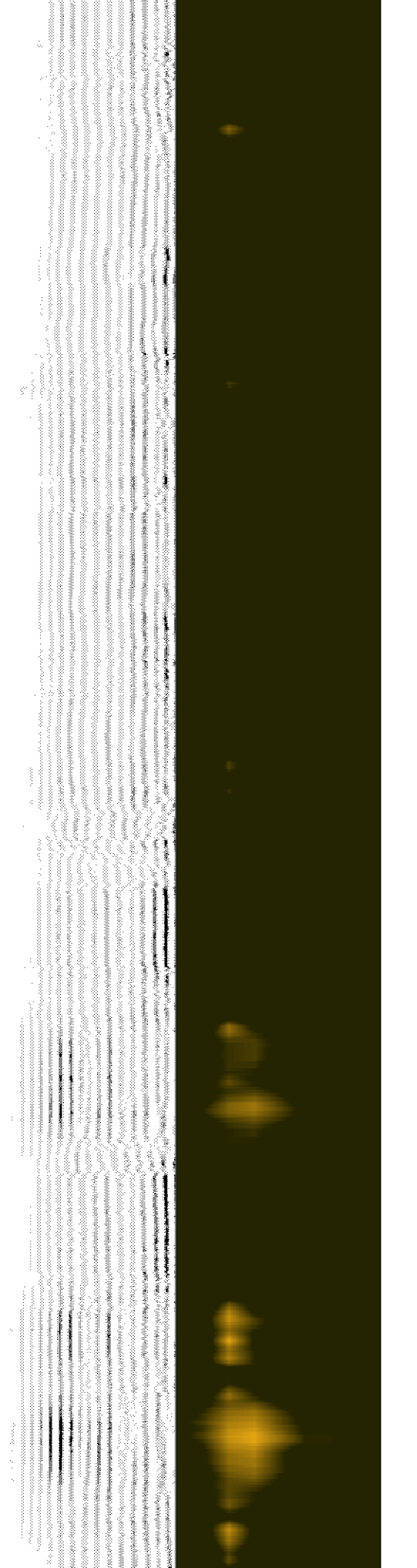
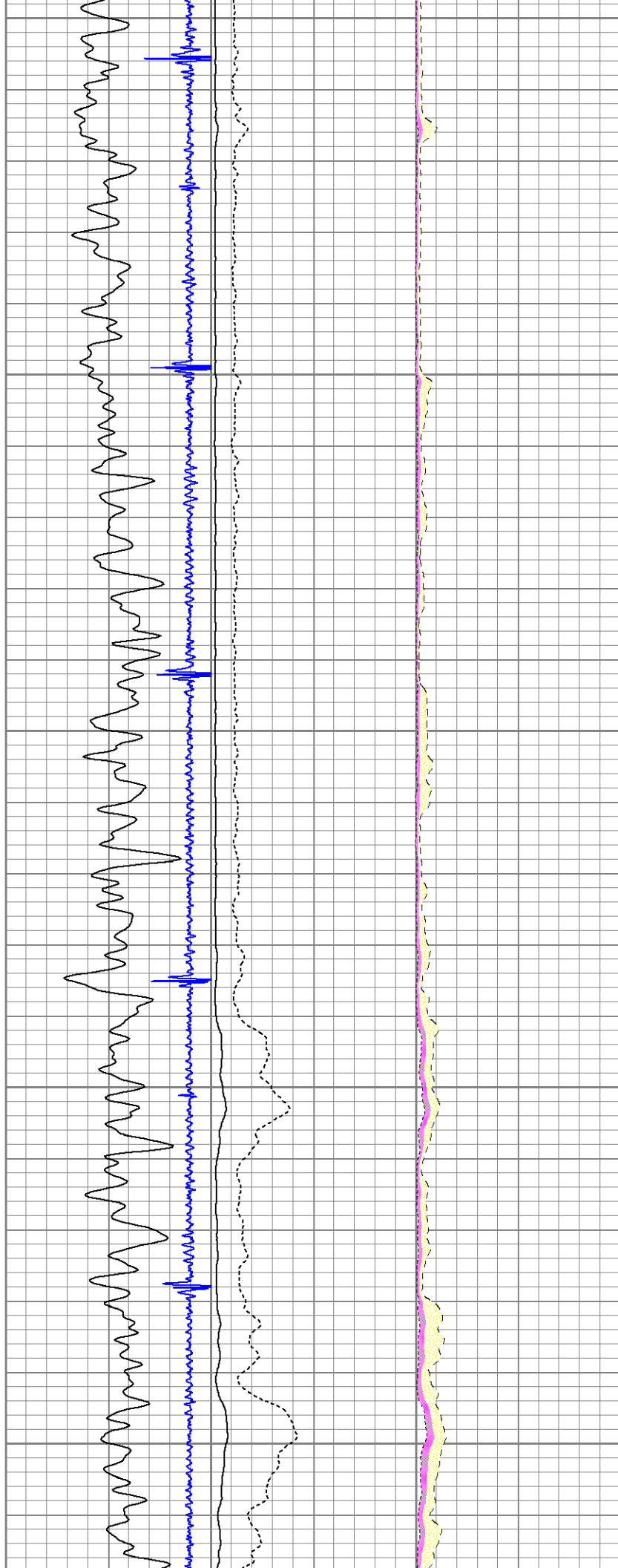
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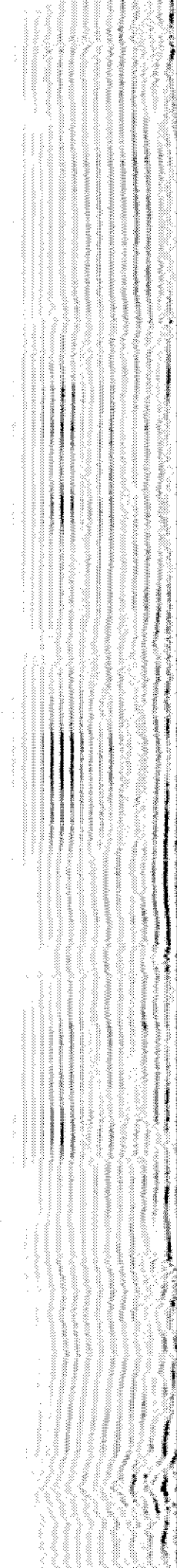
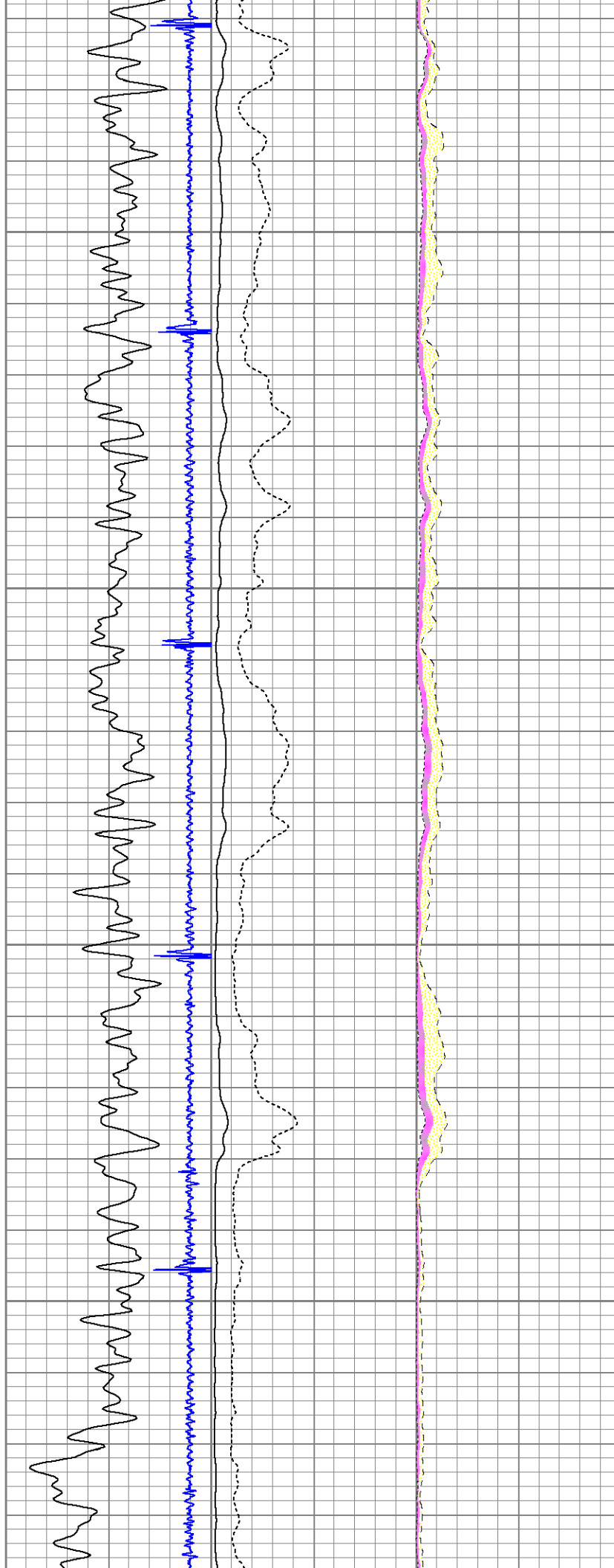
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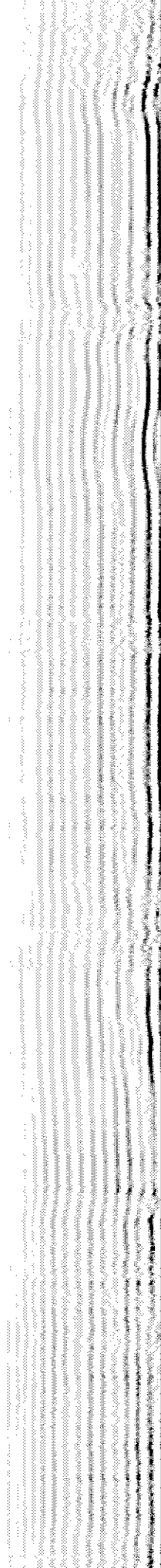
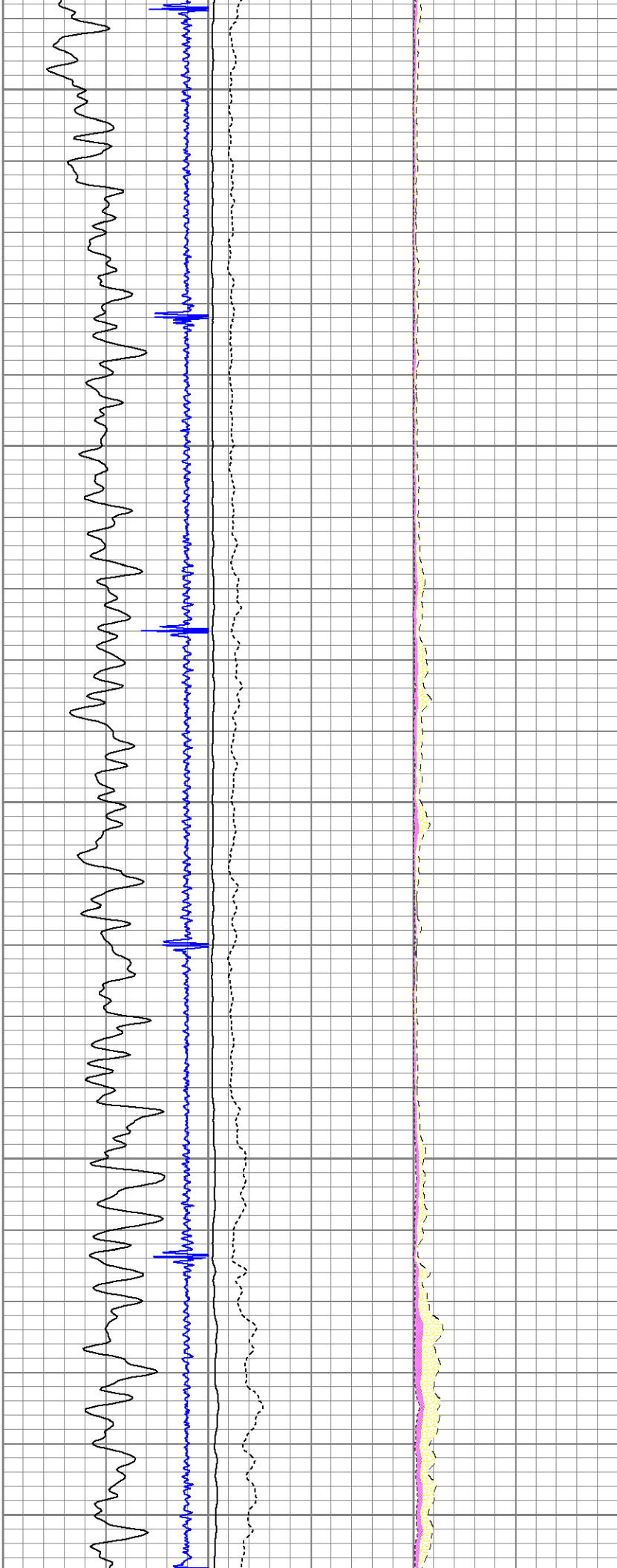




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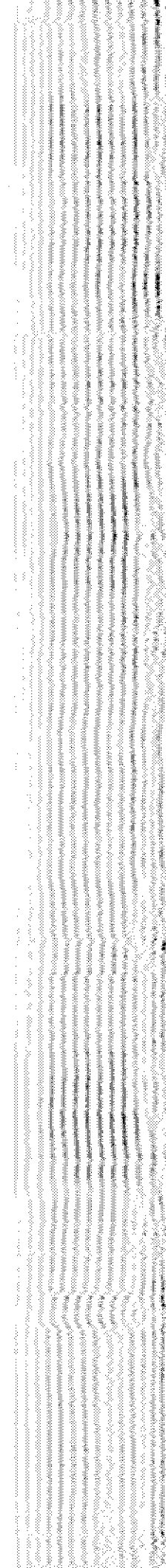
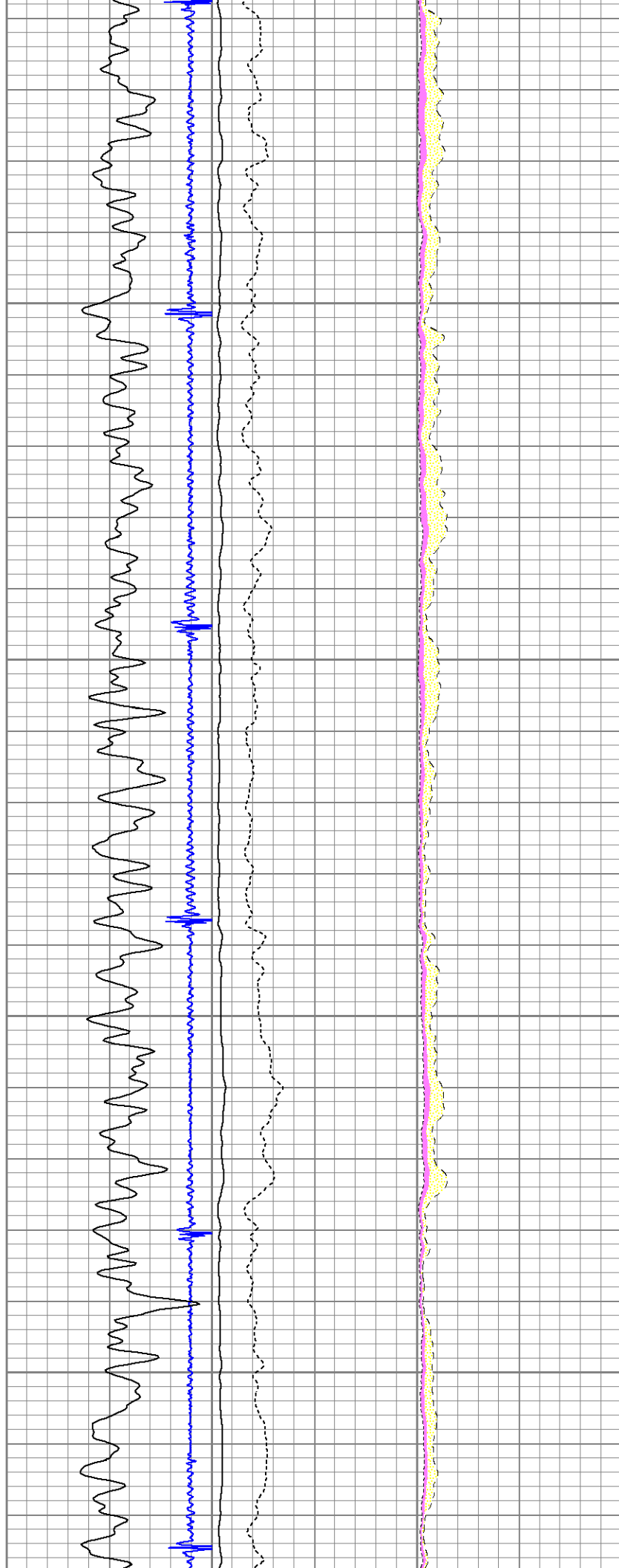
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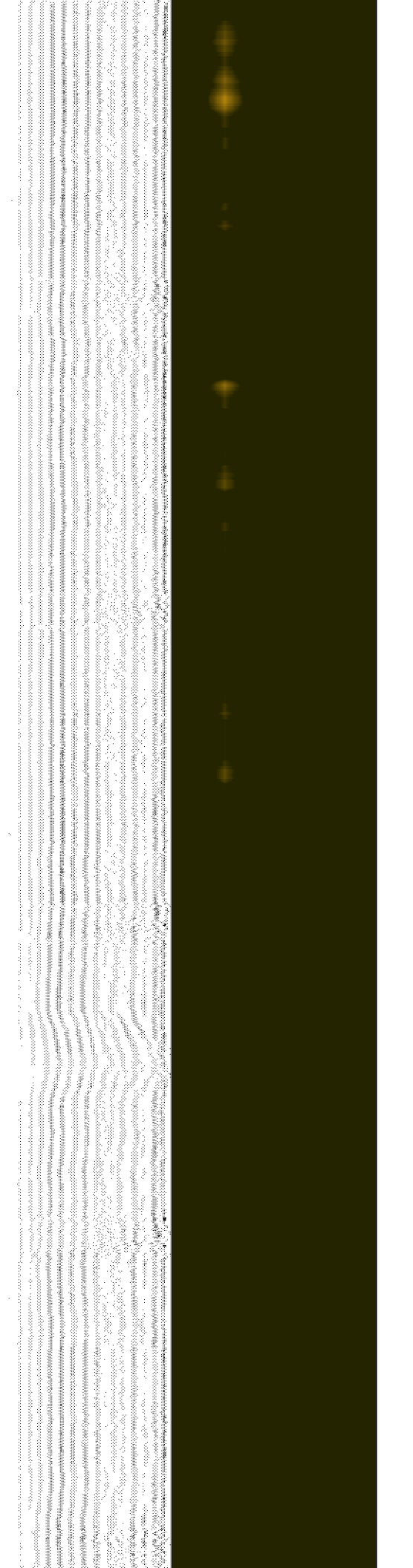
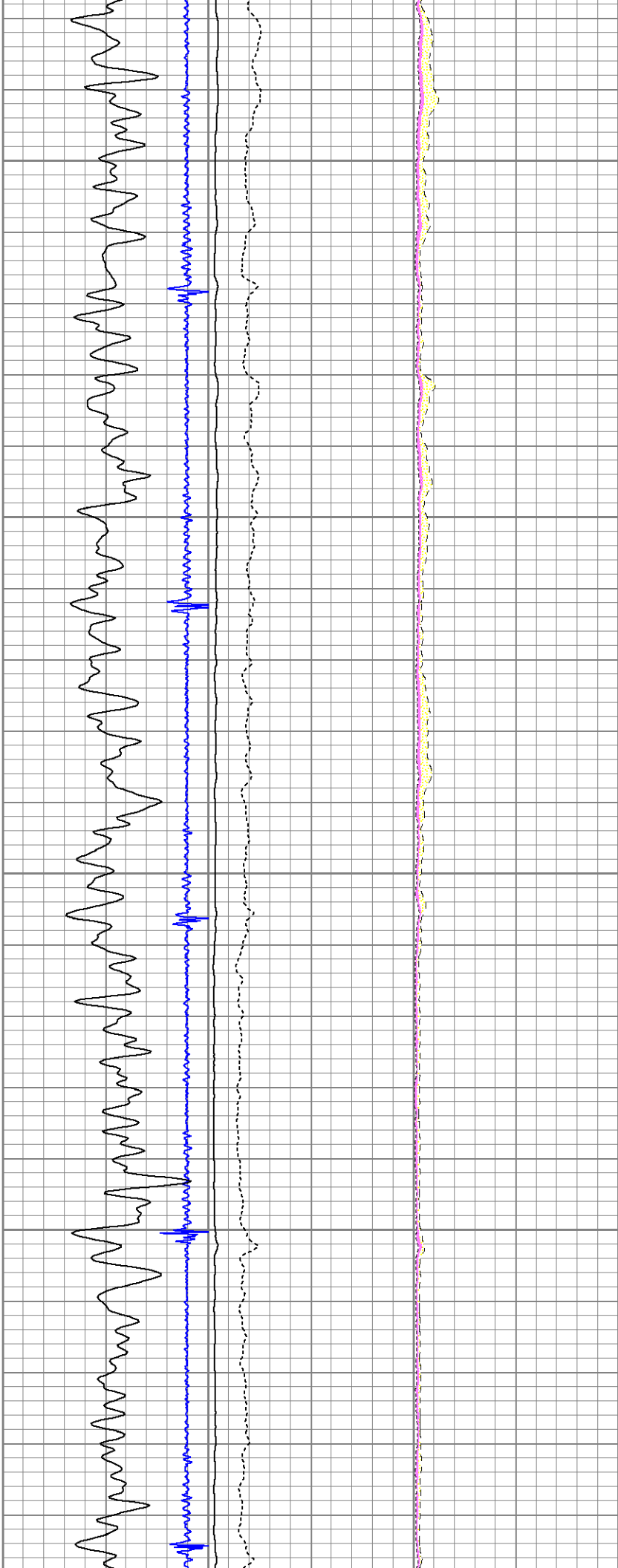
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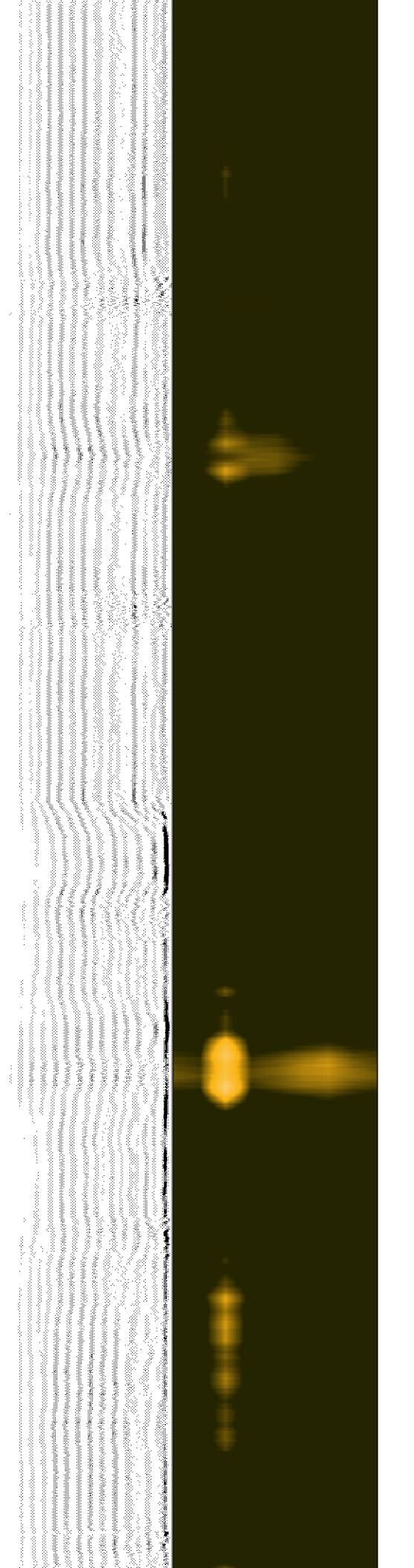
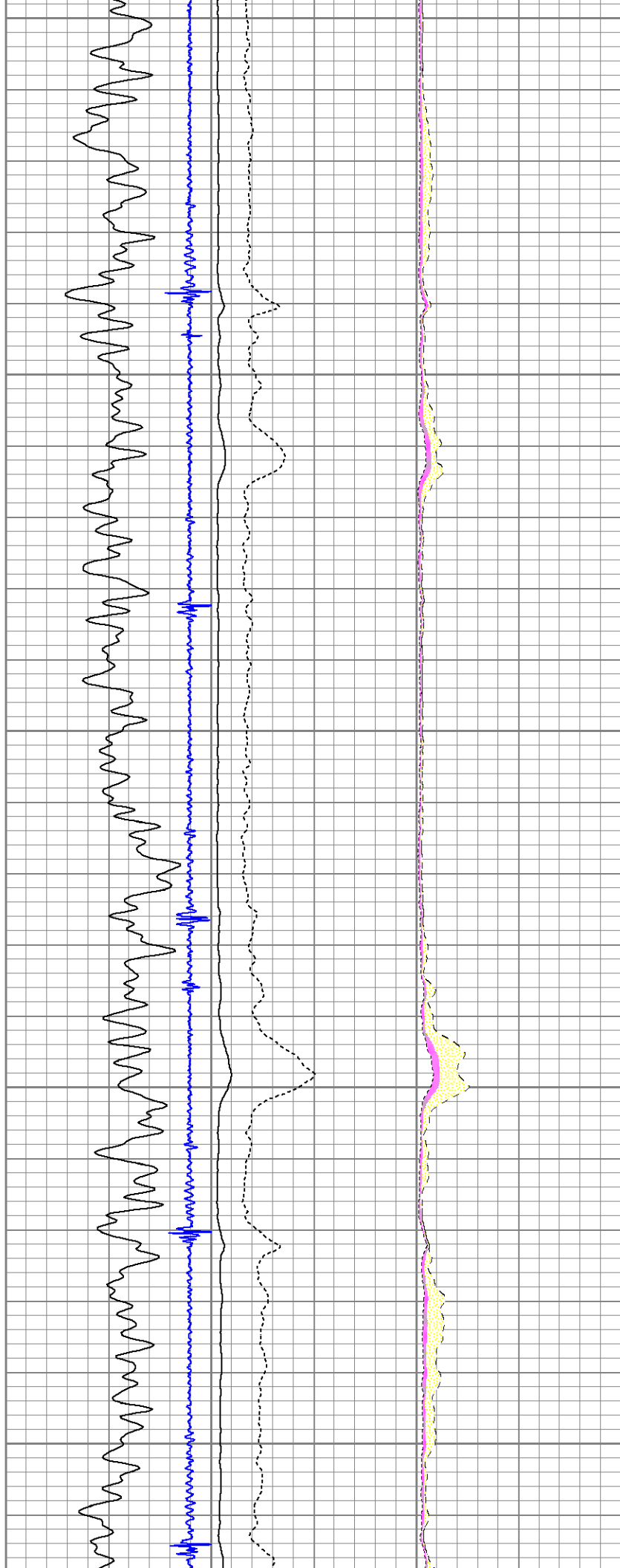
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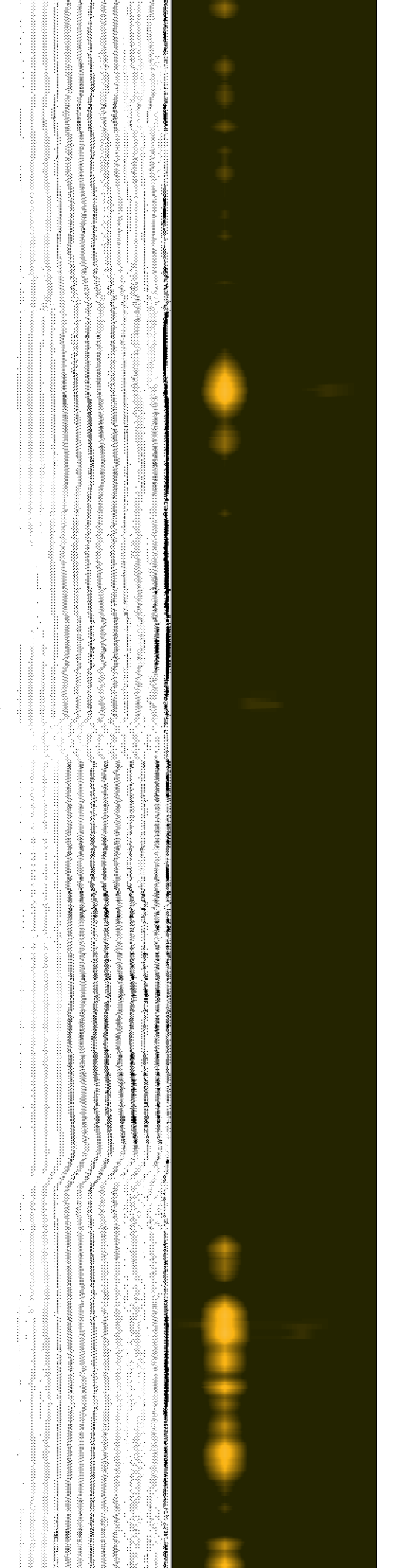
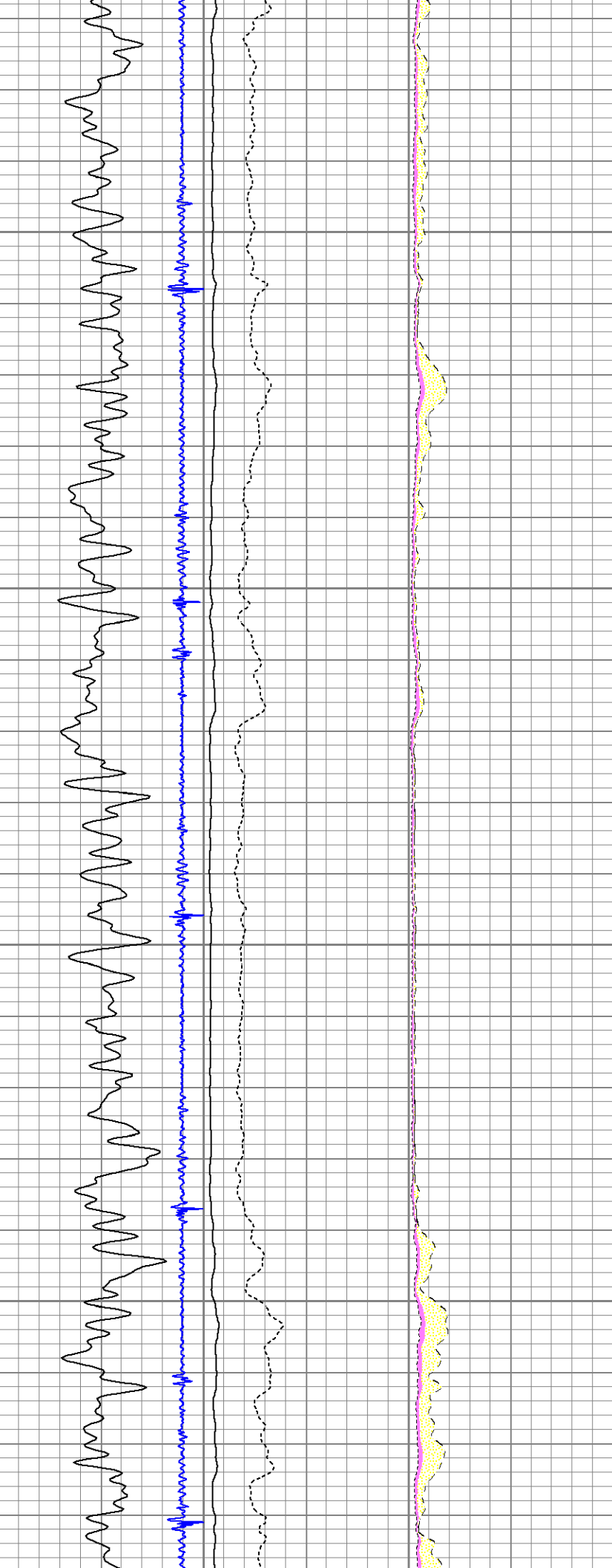
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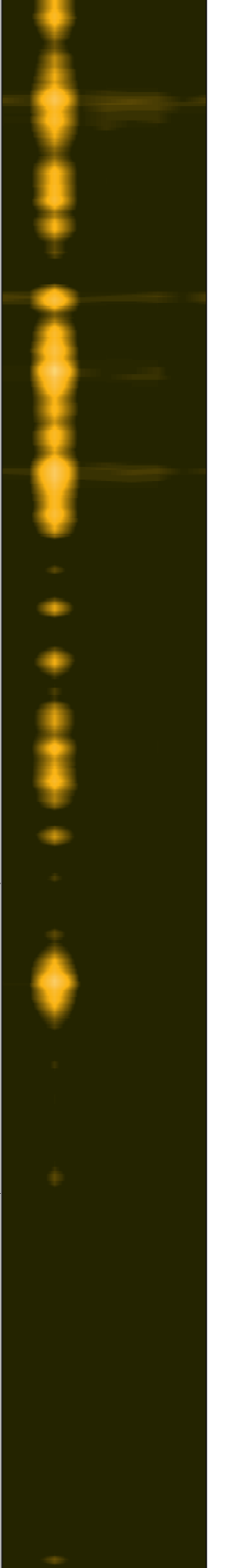
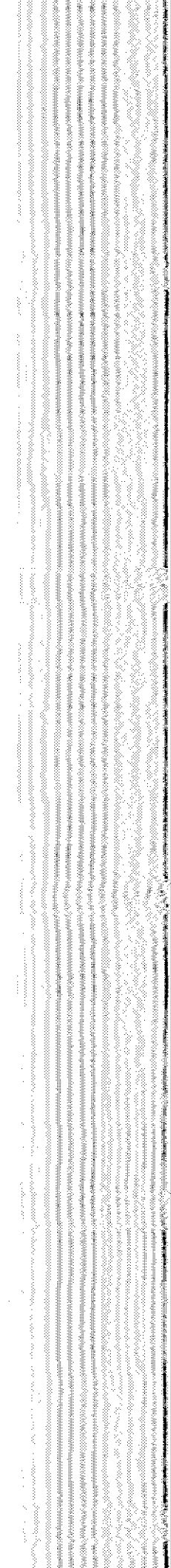
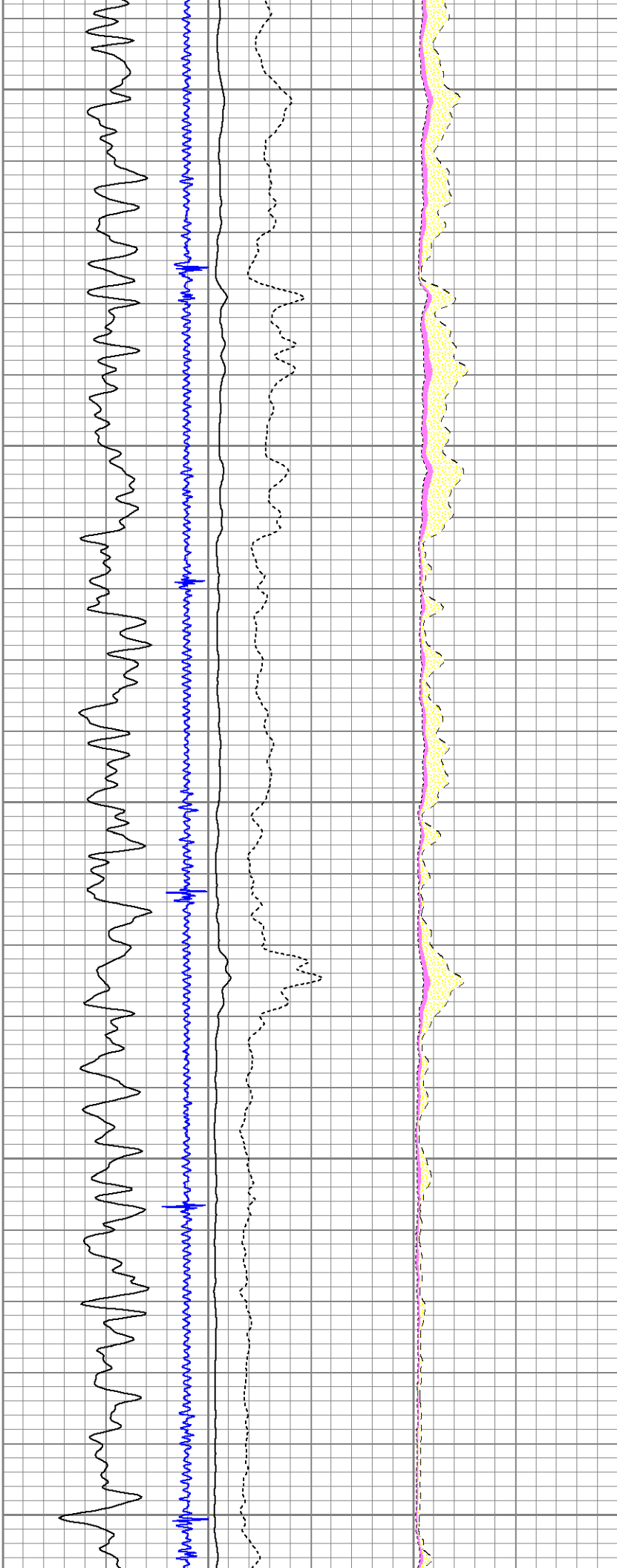
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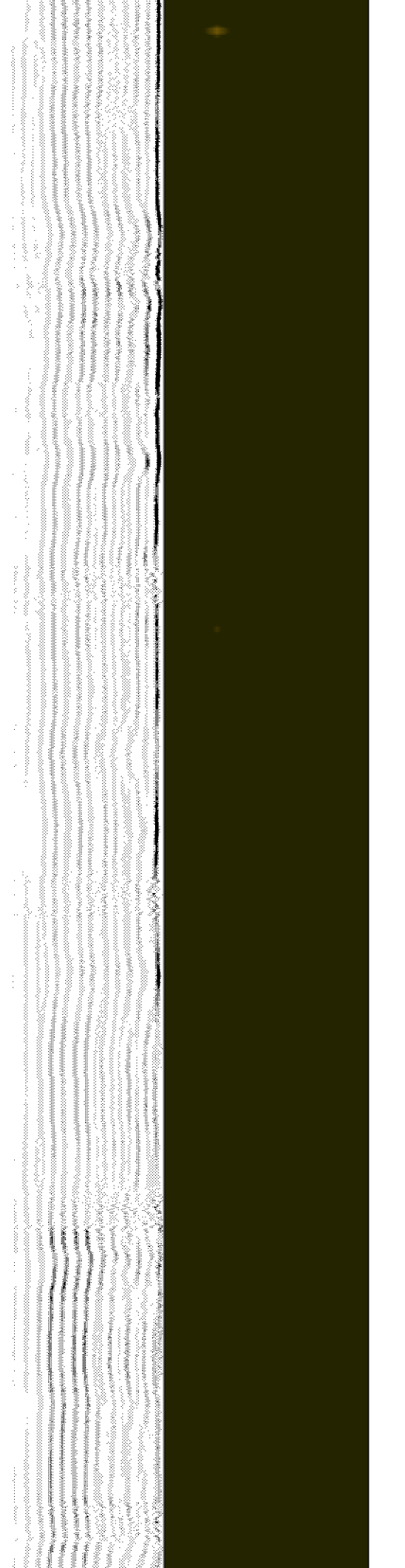
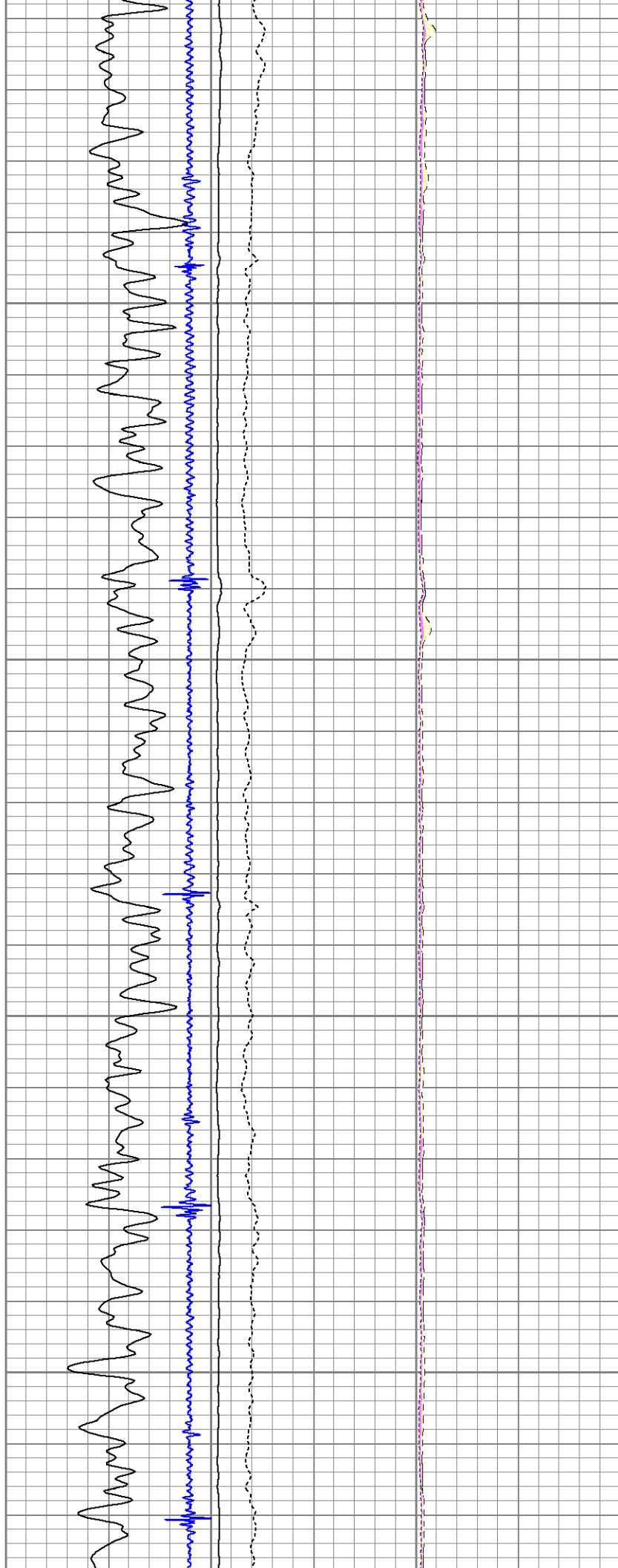
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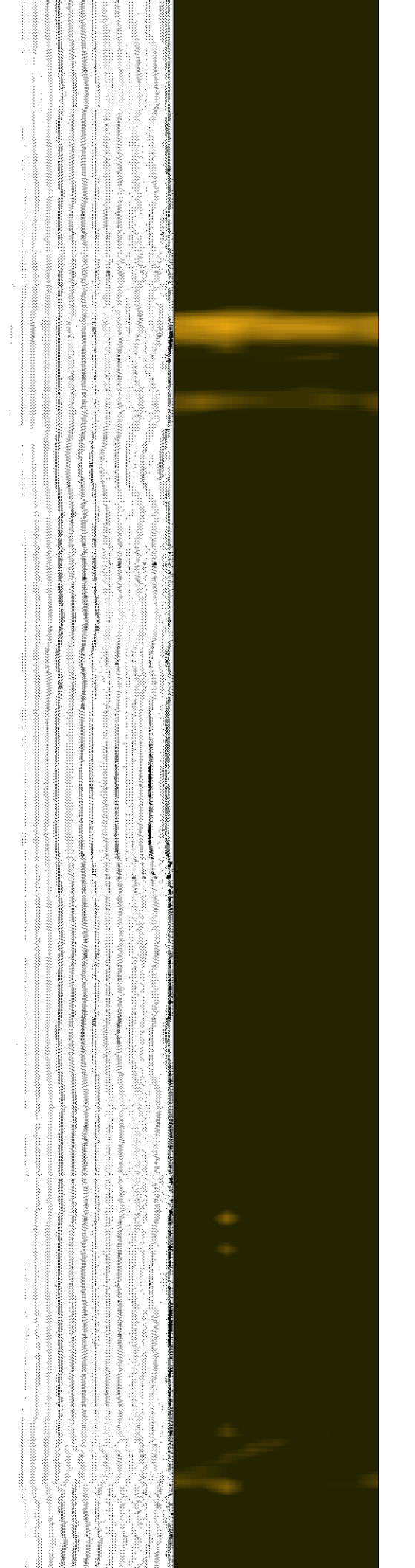
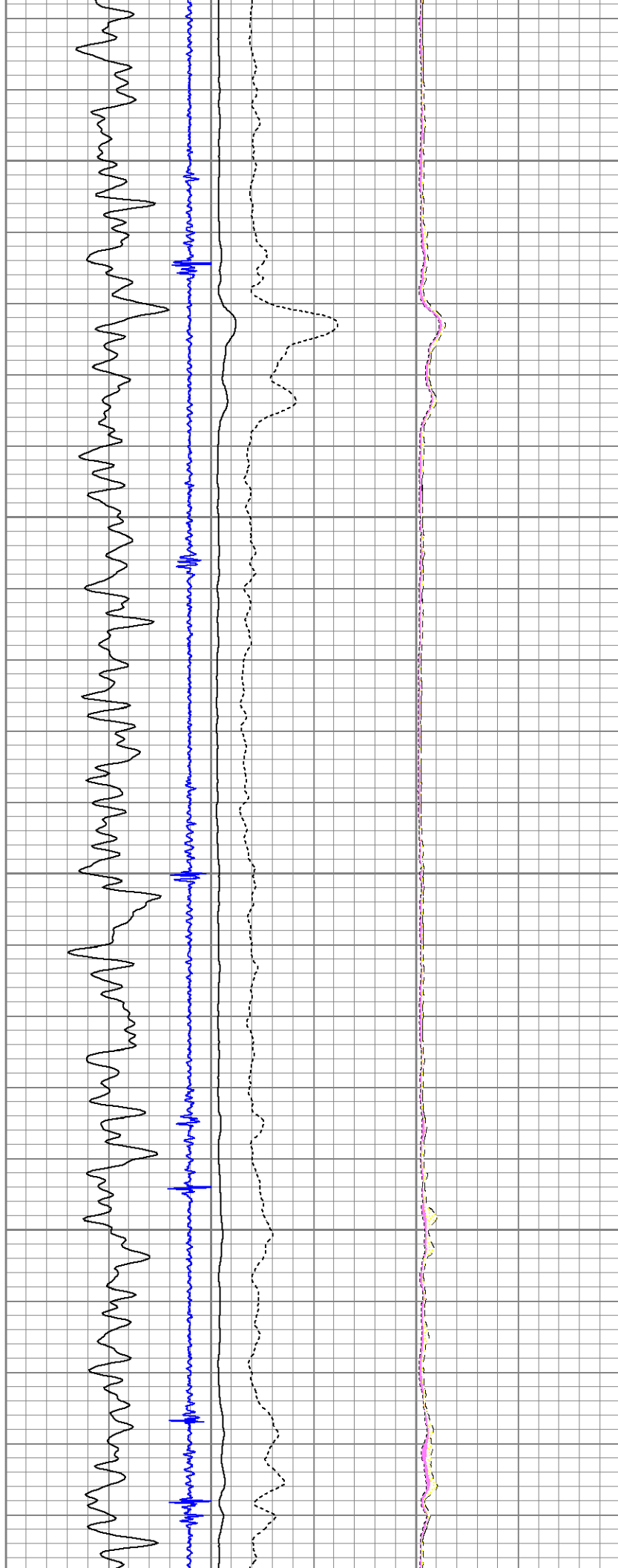
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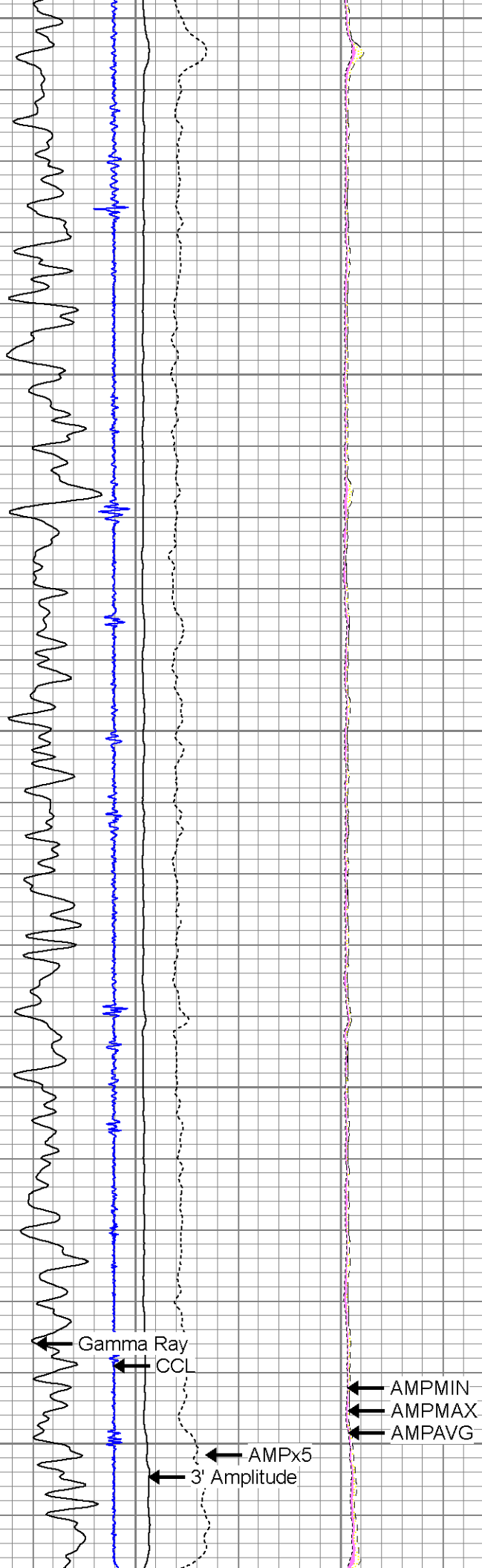
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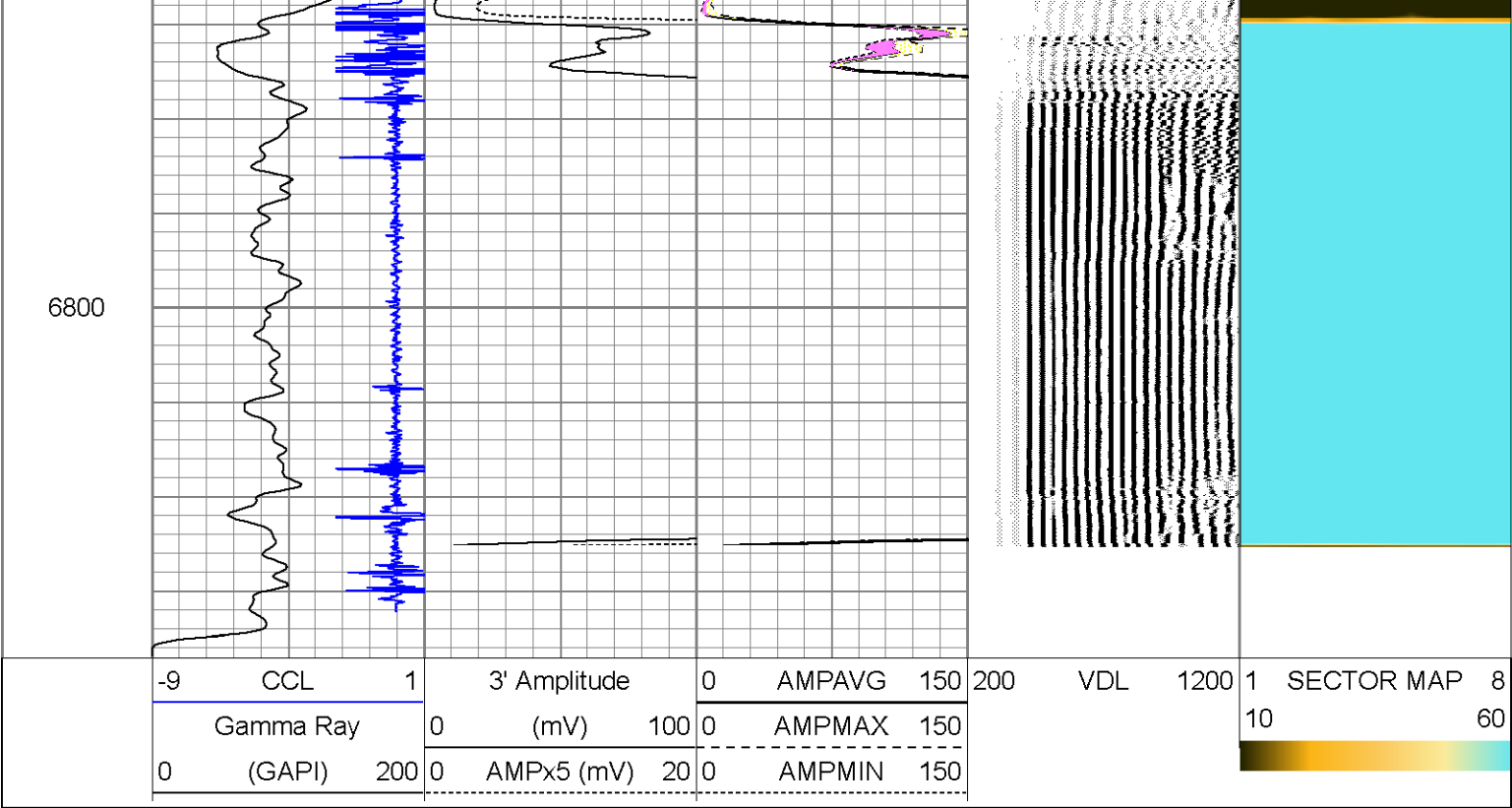
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6600

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Company ANADARKO PETROLEUM CO.  
Well DOUTHIT 16C-27HZ  
Field WATTENBERG  
County WELD  
State COLORADO