



# GAMMA RAY CCL CEMENT BOND VDL SECTOR MAP

Company  
Well  
Field  
County  
State

			Elevation
Permanent Datum	GL		4888
Log Measured From	KB		K.B. 4920 D.F. 4919
Drilling Measured From	KB		G.L. 4888

Date	October 2, 2014		
Run Number	1		
Depth Driller	14375		
Depth Logger	7550		
Bottom Logged Interval	7550		
Top Log Interval	0		
Open Hole Size	8-3/4"		
Type Fluid	Drilling Mud		
Density / Viscosity	11.7 / 42		
Max. Recorded Temp.	NA		
Estimated Cement Top	580		
Time Well Ready	0900		
Time Logger on Bottom	1200		
Equipment Number	49		
Location	Ft. Morgan		
Recorded By	Shaun Stump		
Witnessed By	Ira Cox		

Borehole Record				Lubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record		Size		Wgt/Ft		Top	Bottom
Surface String							
Prot. String							
Production String		7"		26 lbs		0	7550
Liner							

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.


## Comments

### Depth Correlated to 7" Tally

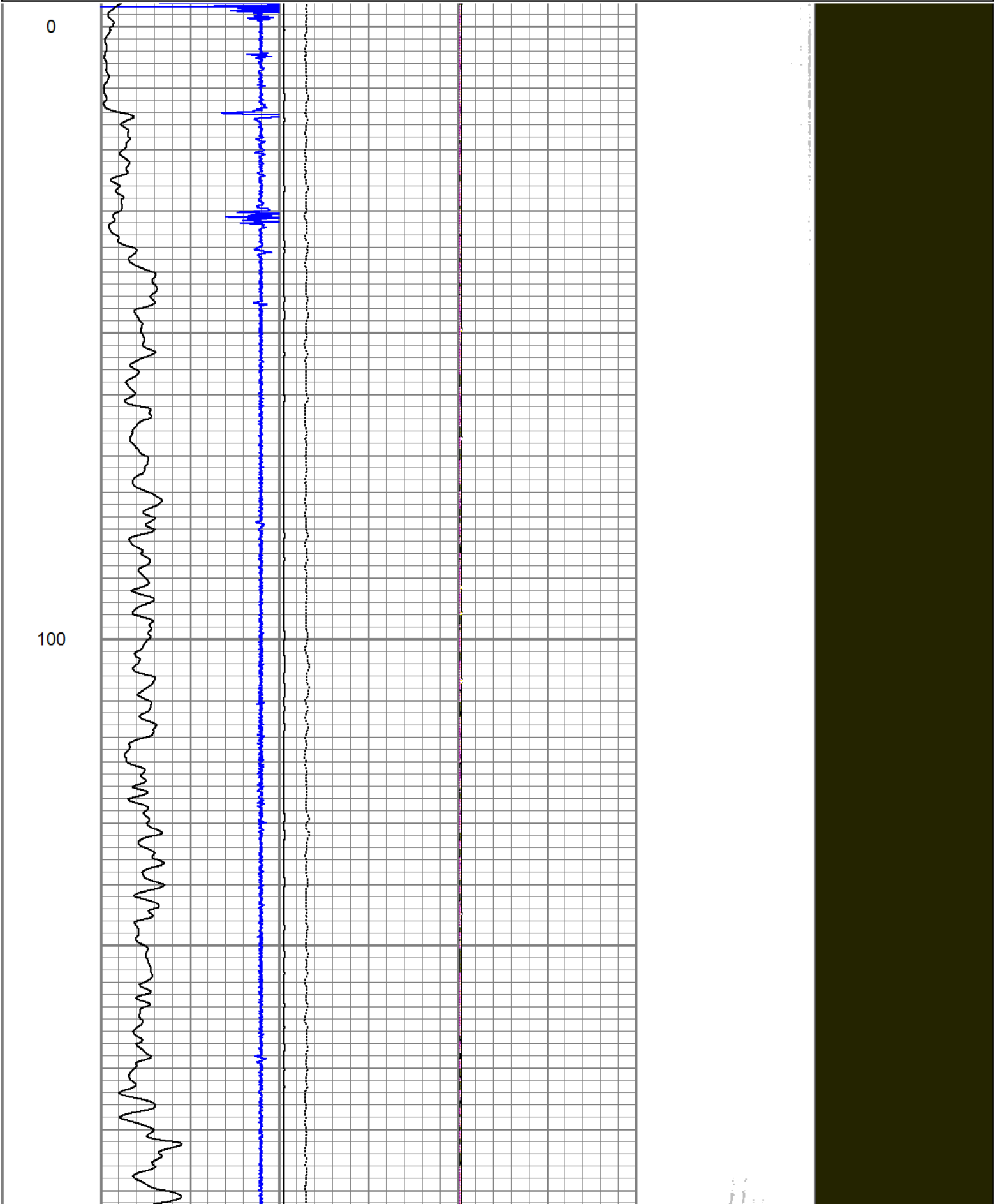
Patterson Rig 326

Thank You for using Pioneer Energy Services

SO# 2-013691

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT #2 -A (1)	2.83	2.75	20.00

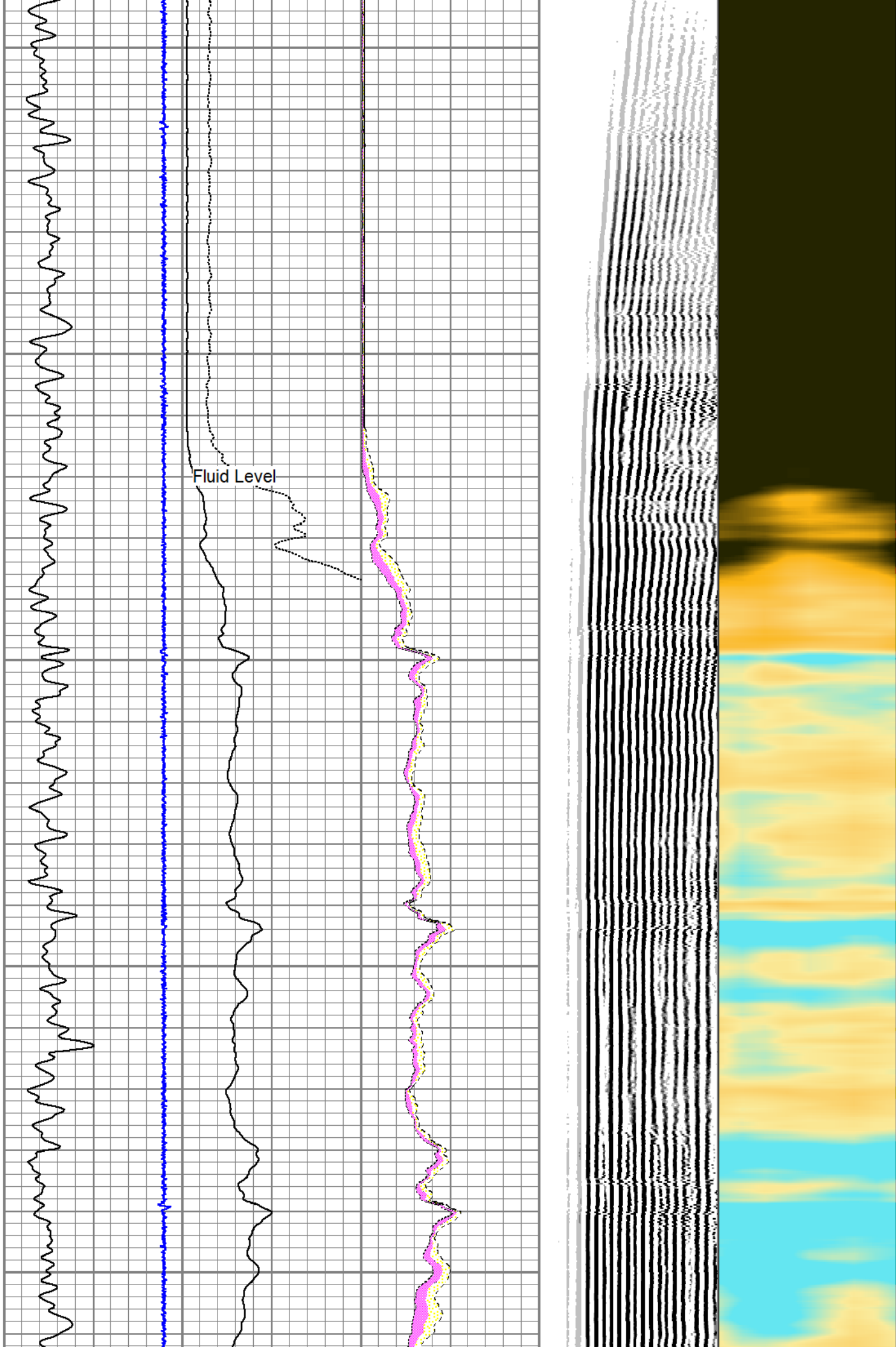

-9	CCL	1	0	AMP (mV)	100	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150				10		60
						0	AMPMIN	150						



200

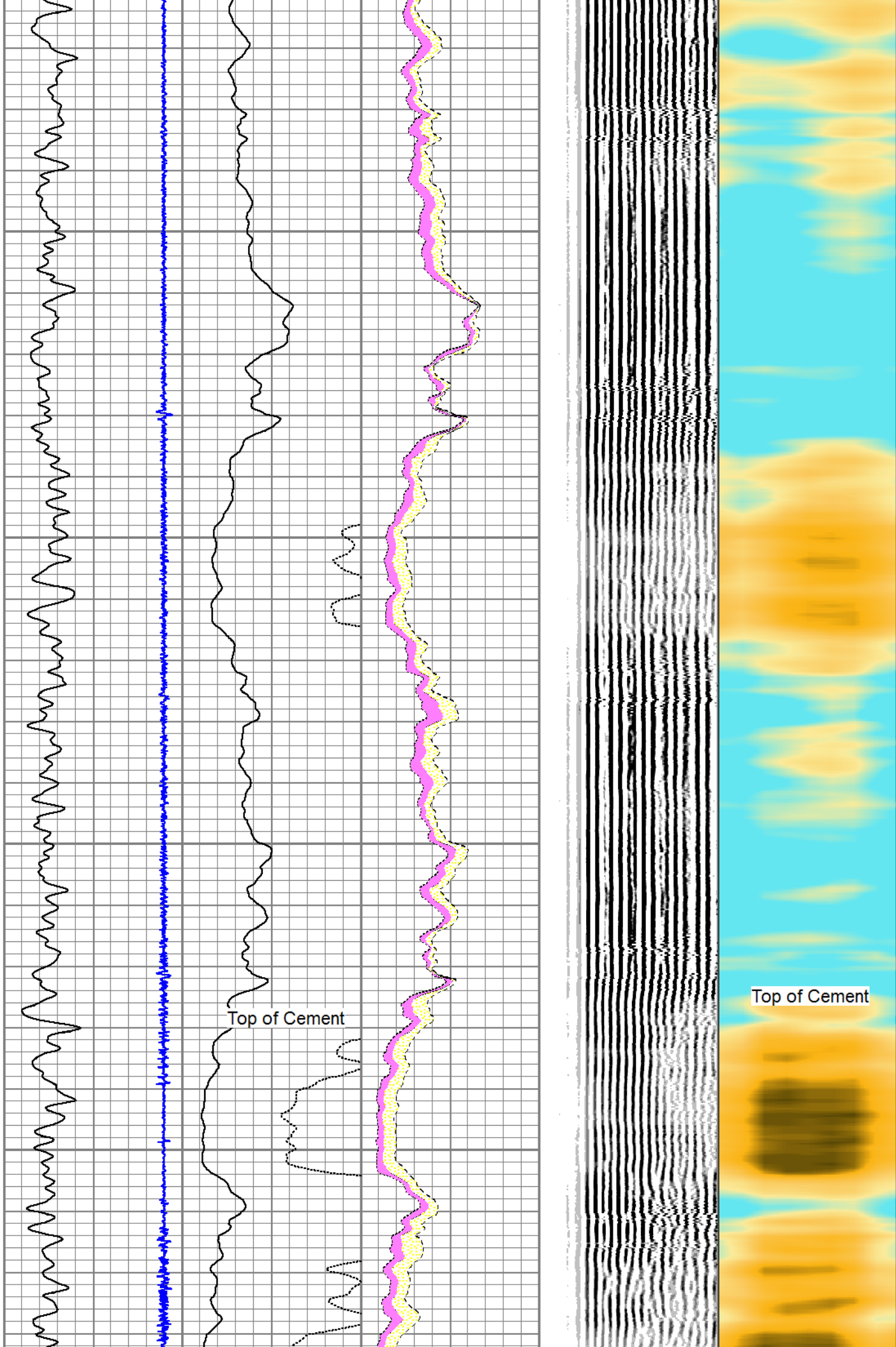
300

400



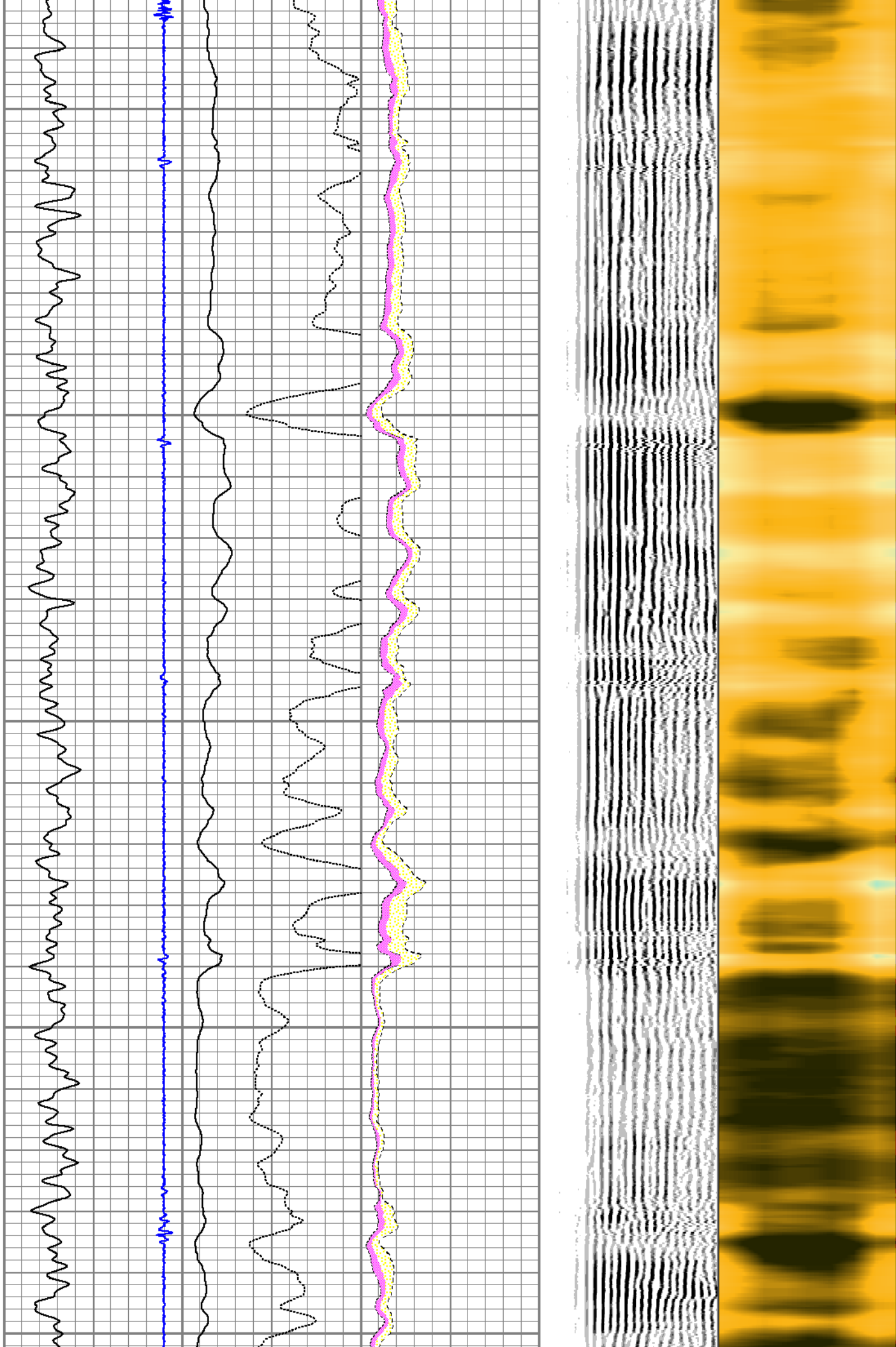
500

600



700

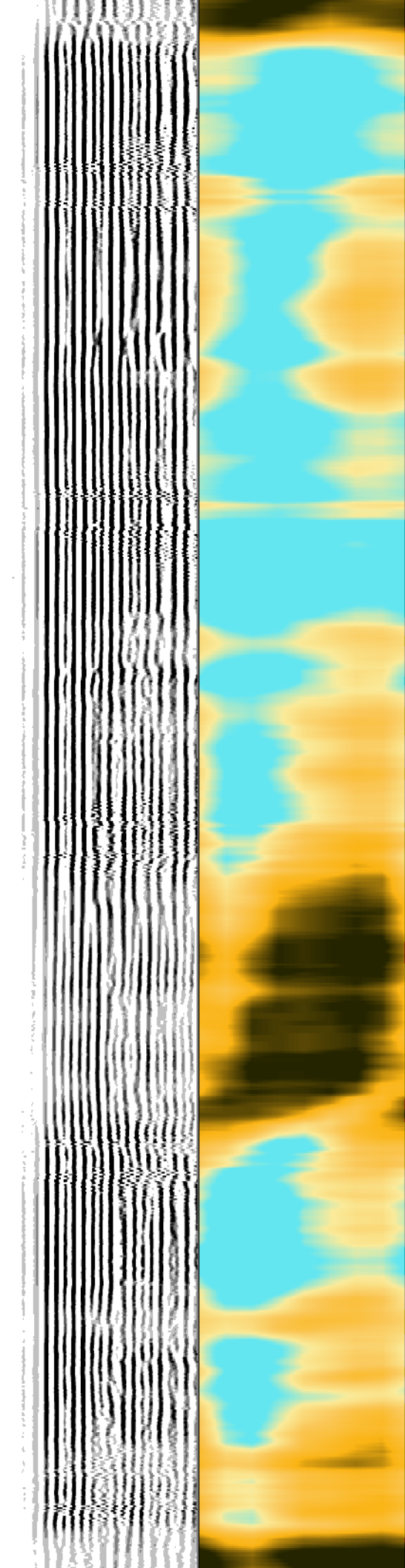
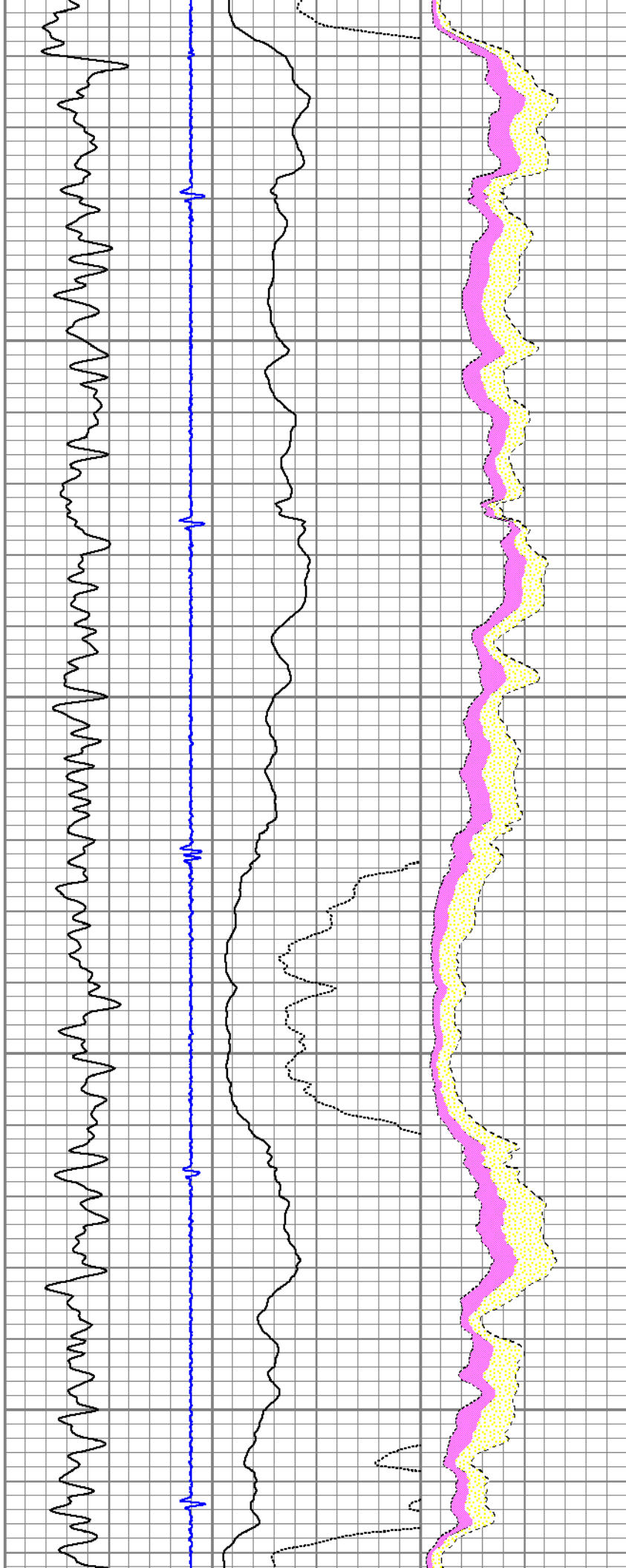
800





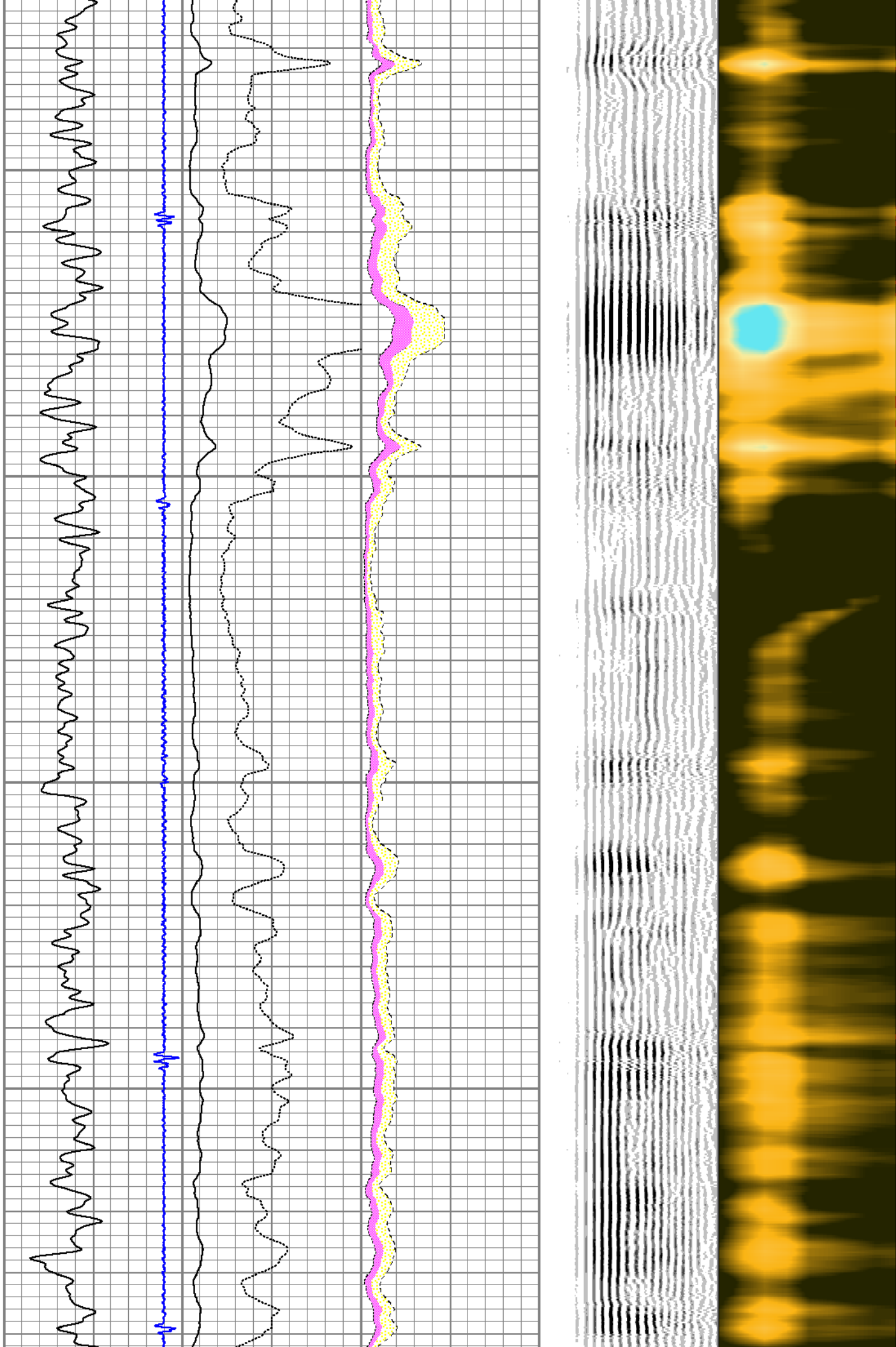
900

1000



1100

1200

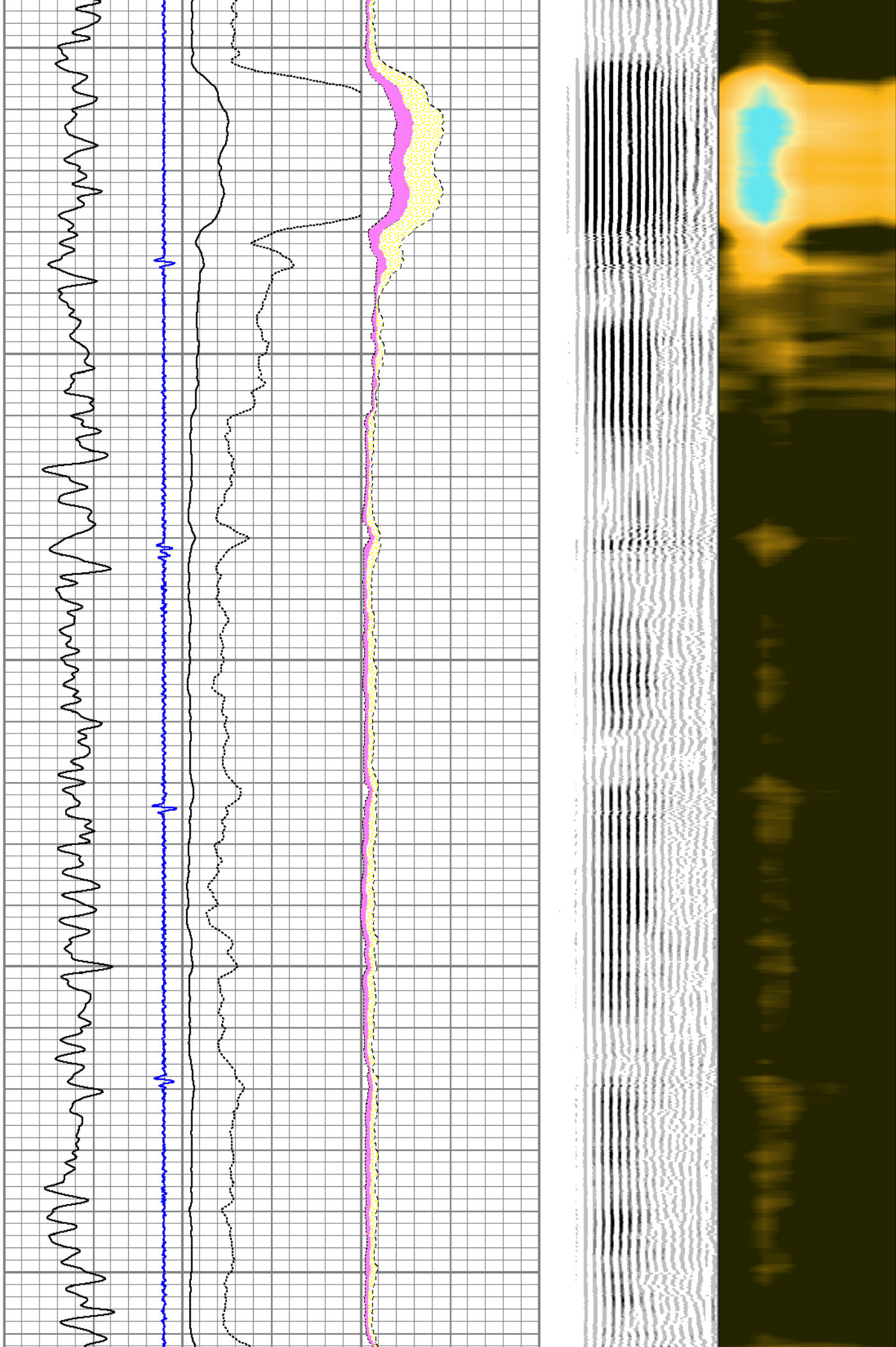




1300

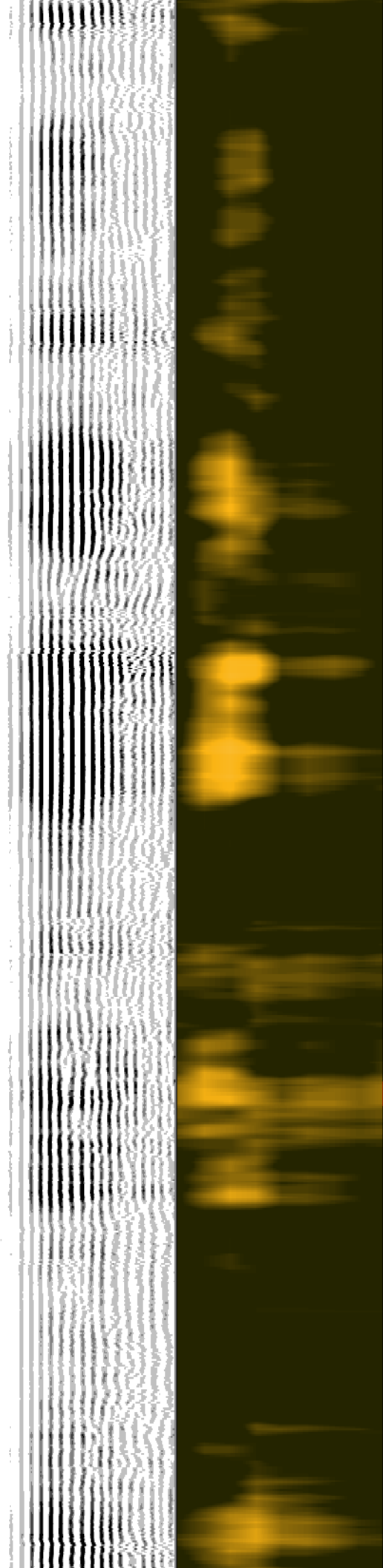
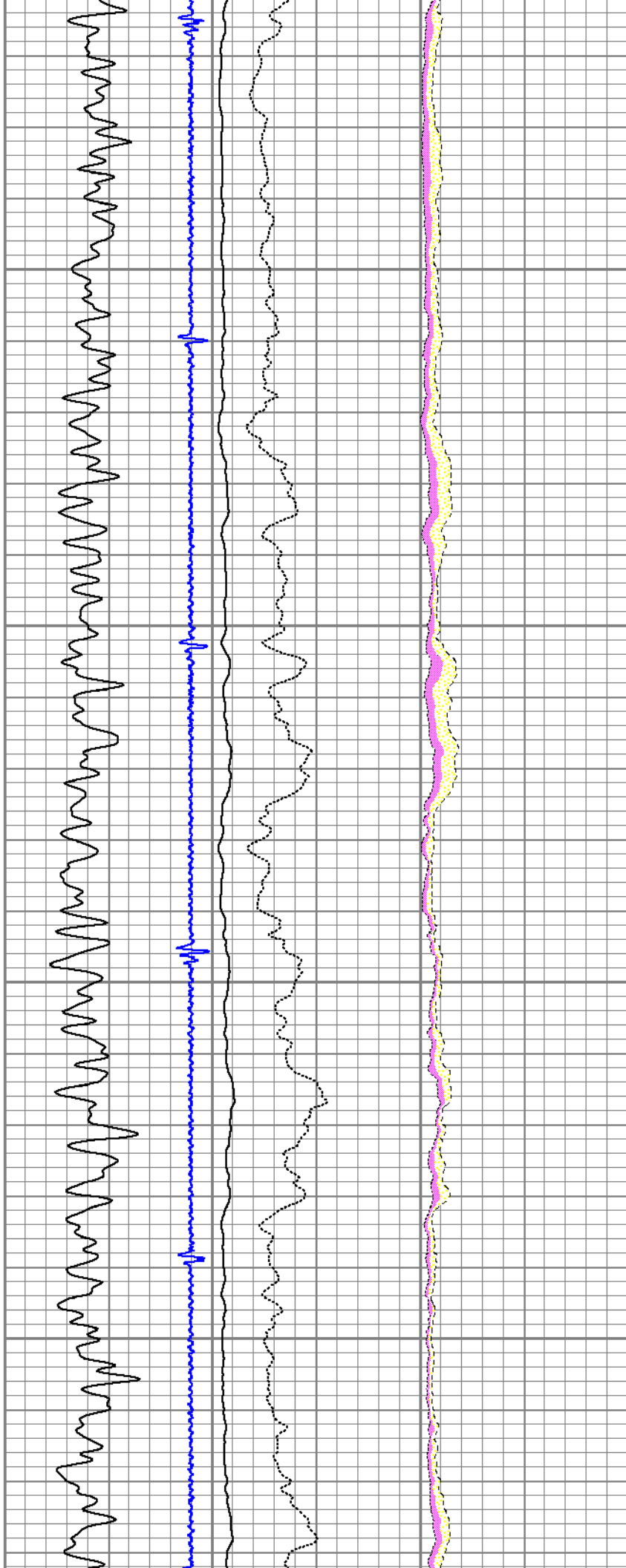
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1500



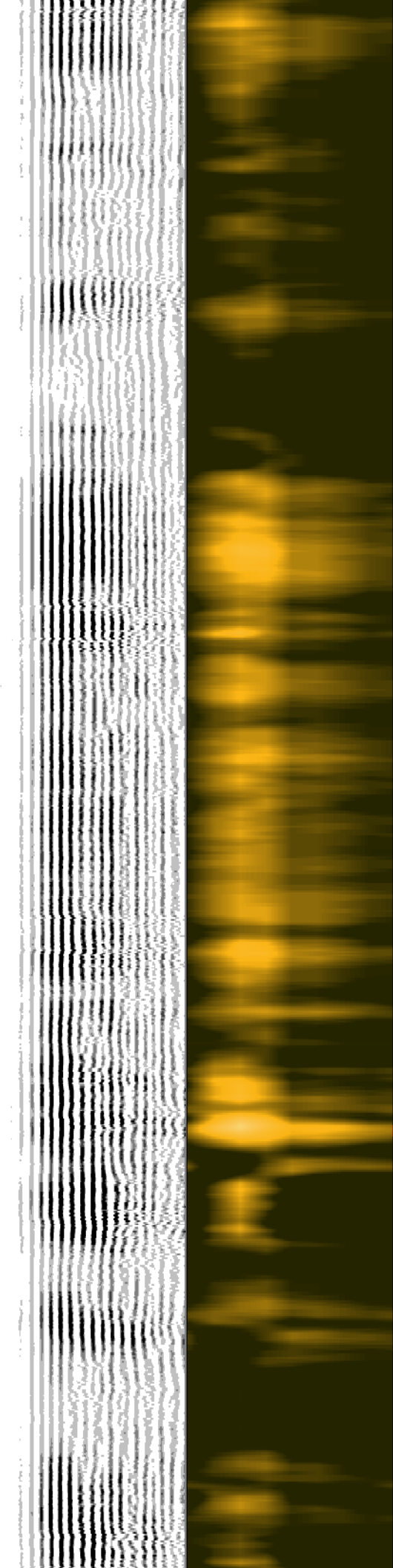
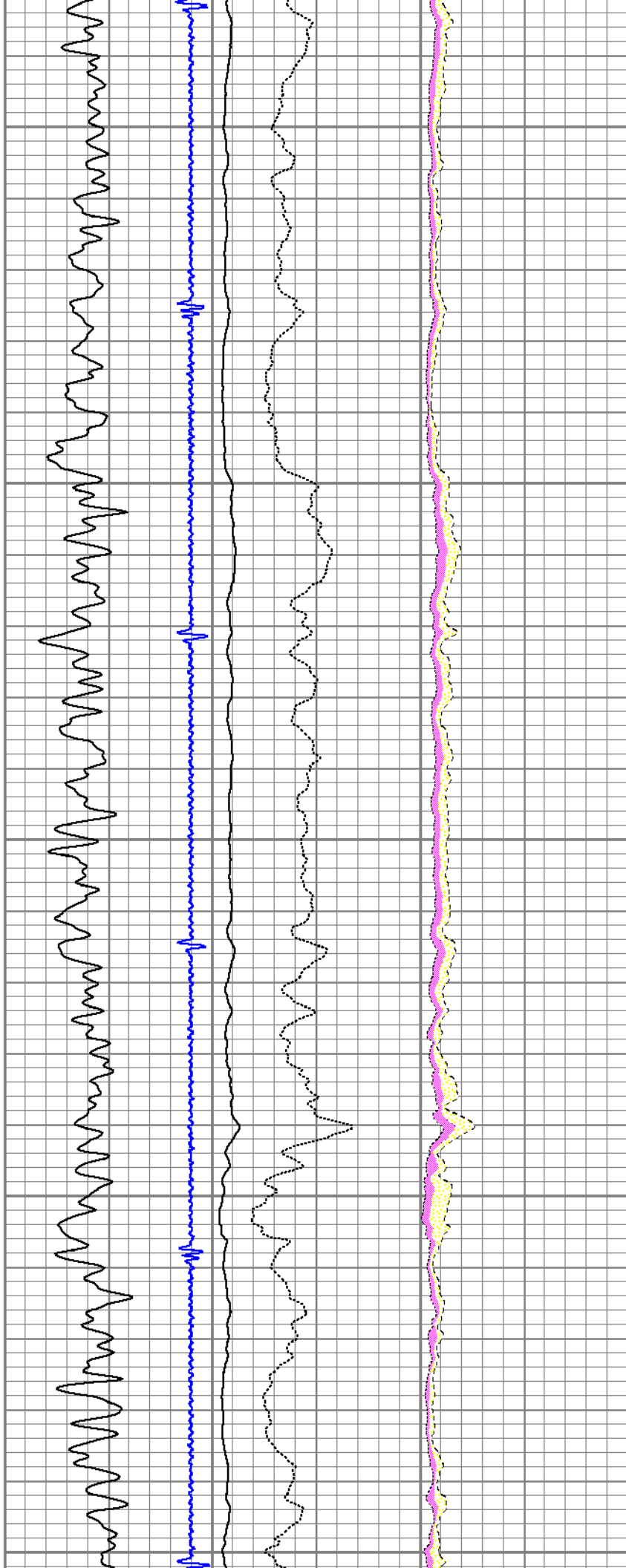
1600

1700



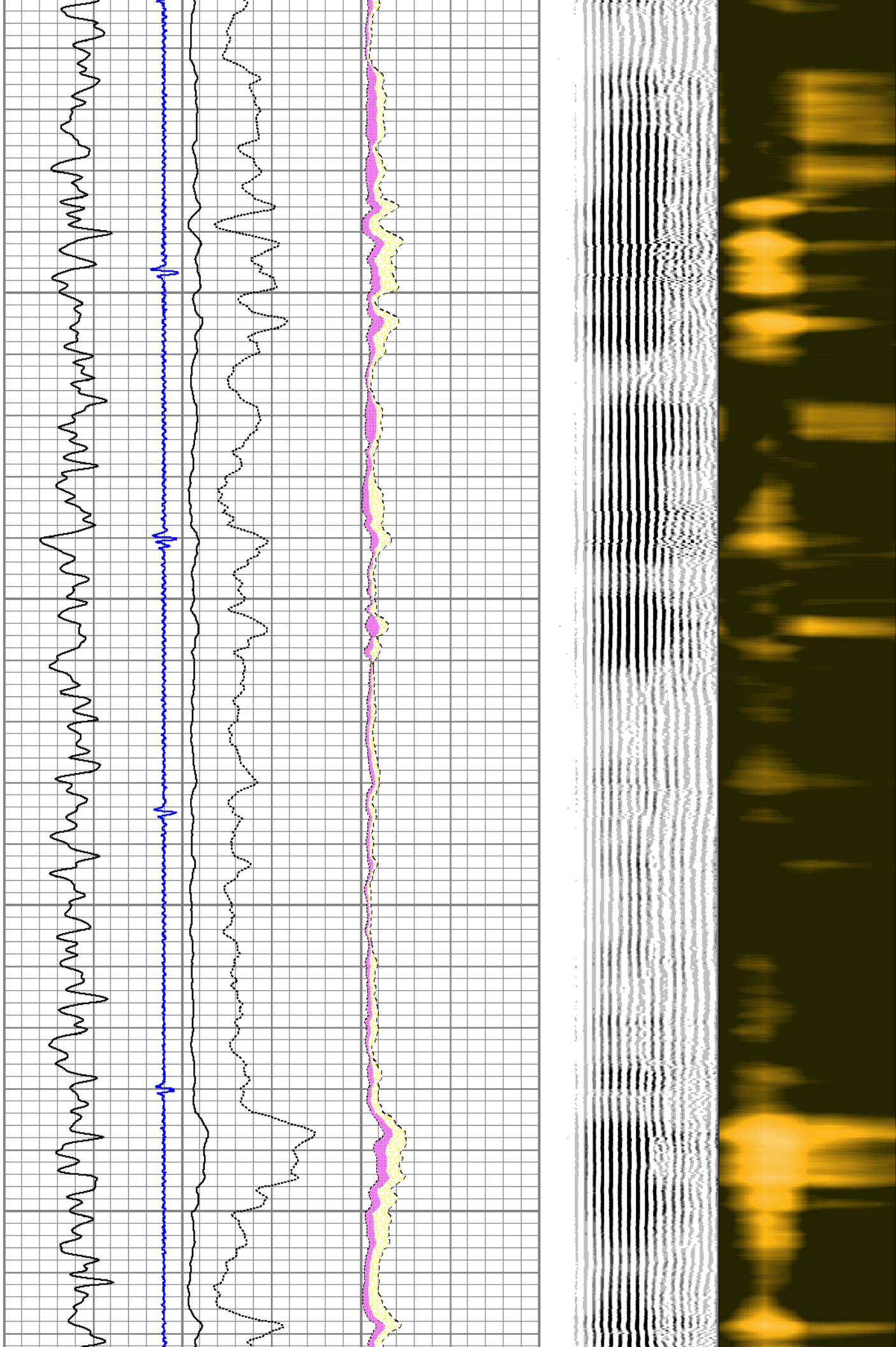
1800

1900



2000

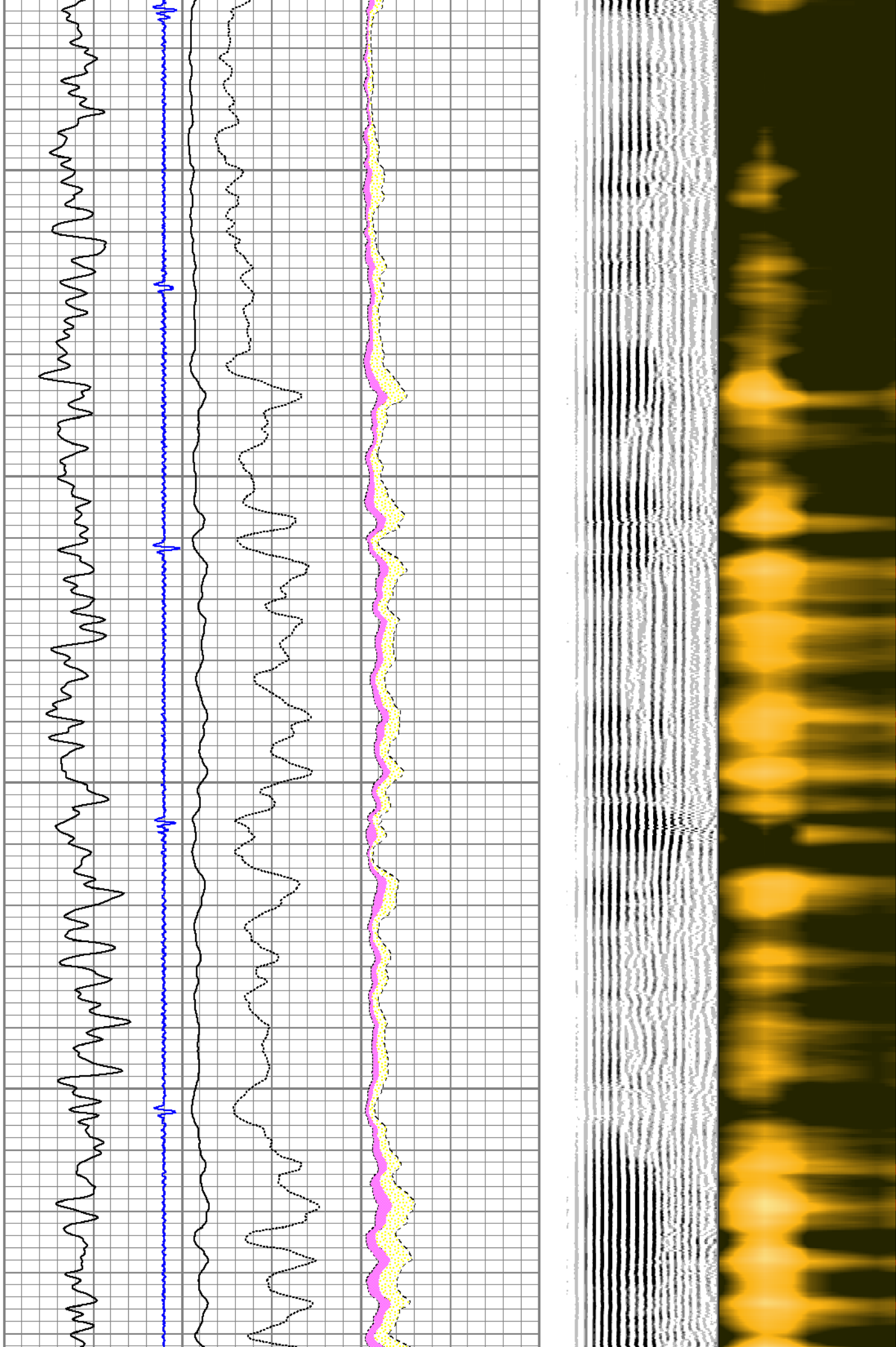
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2200

2300

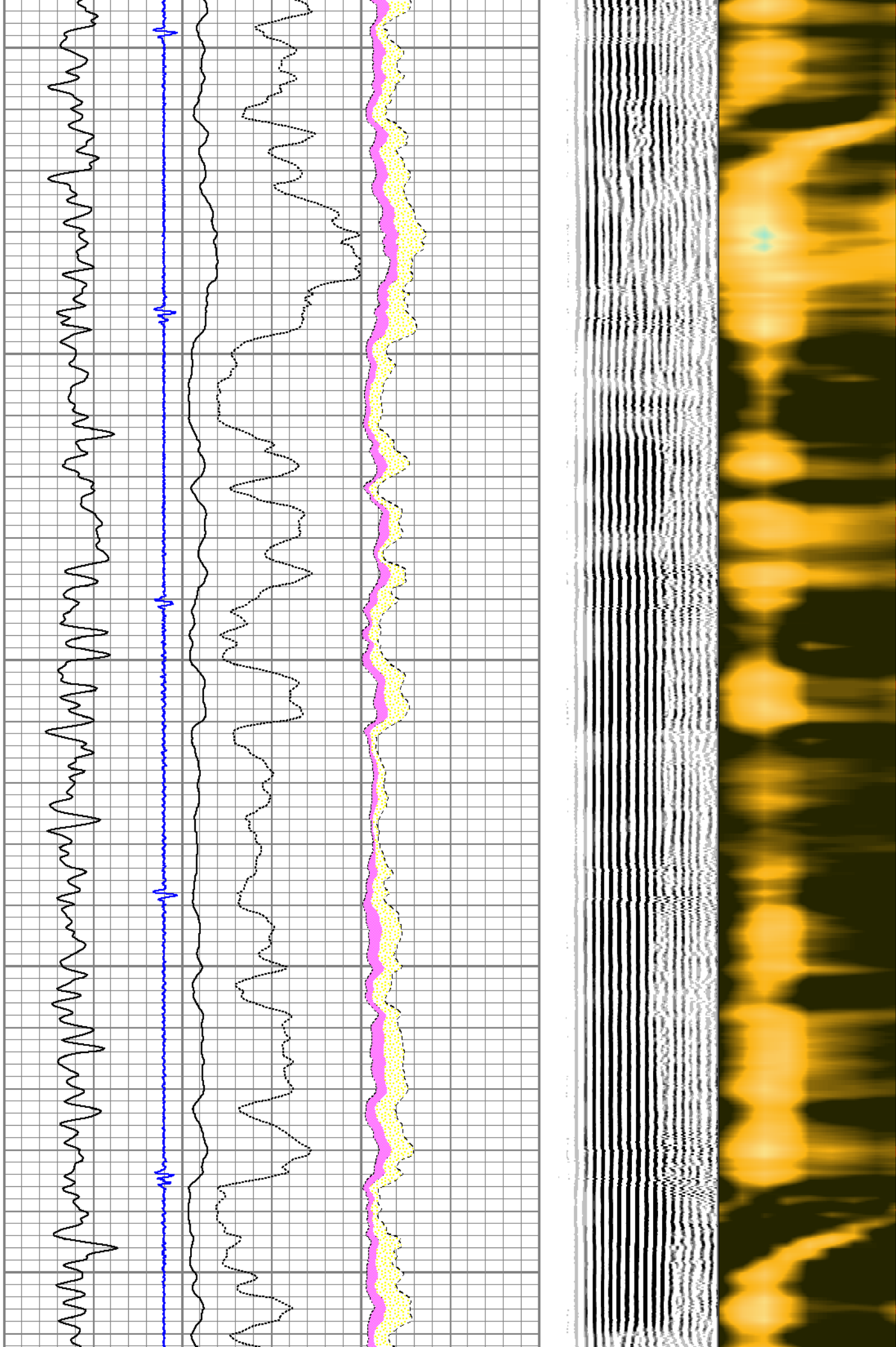




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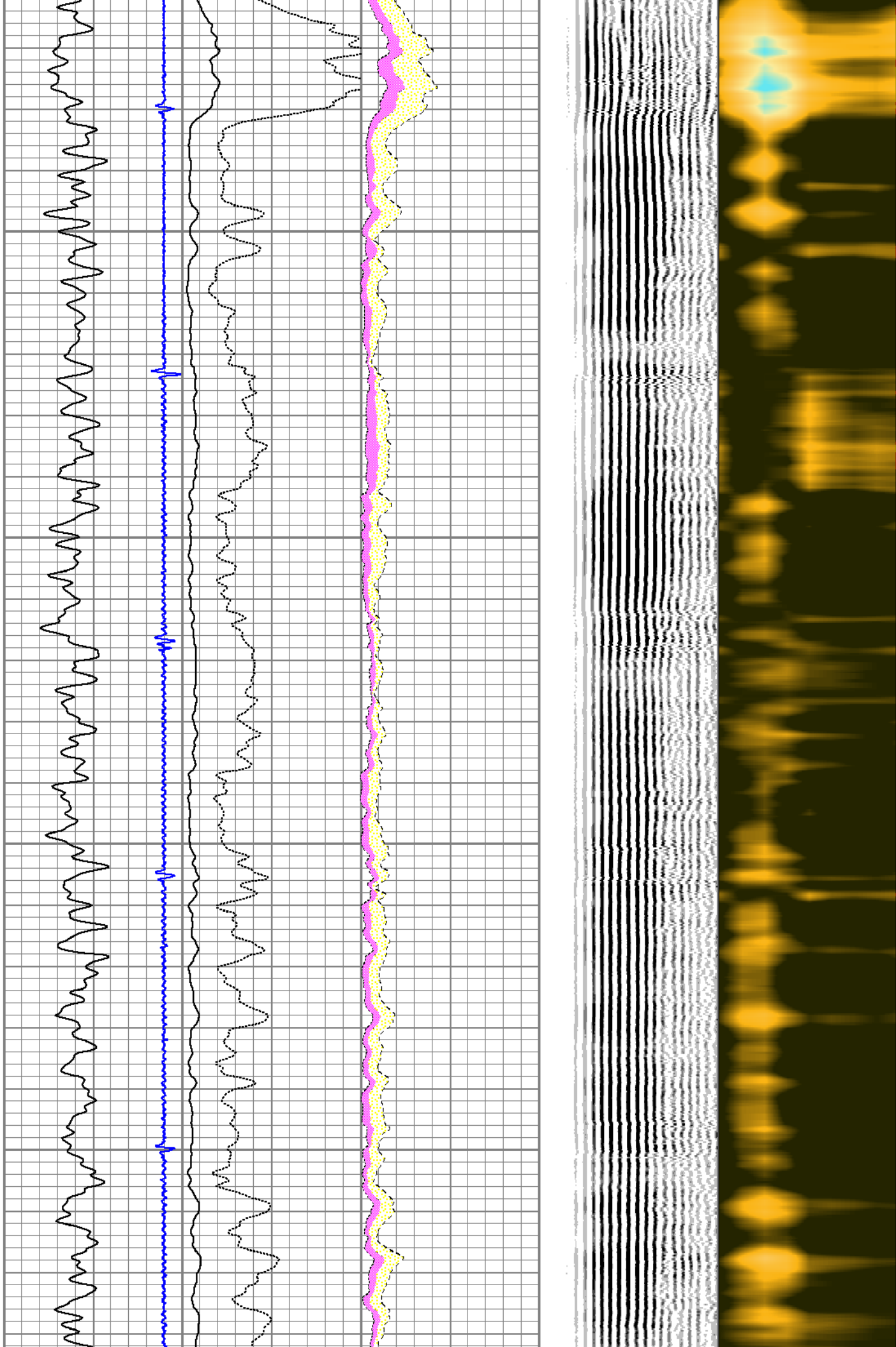
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2600



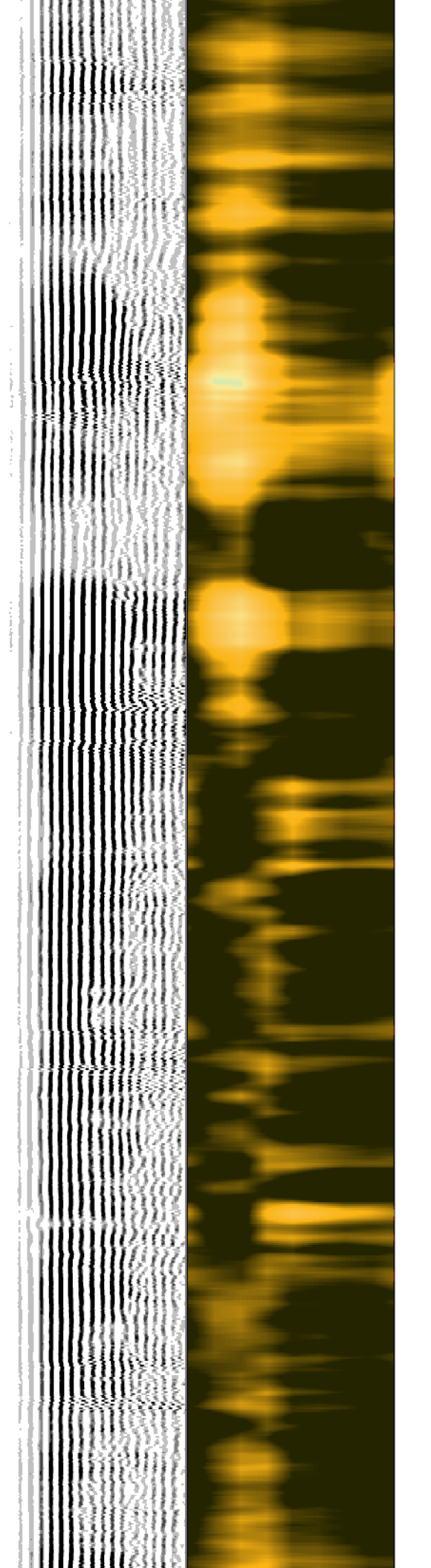
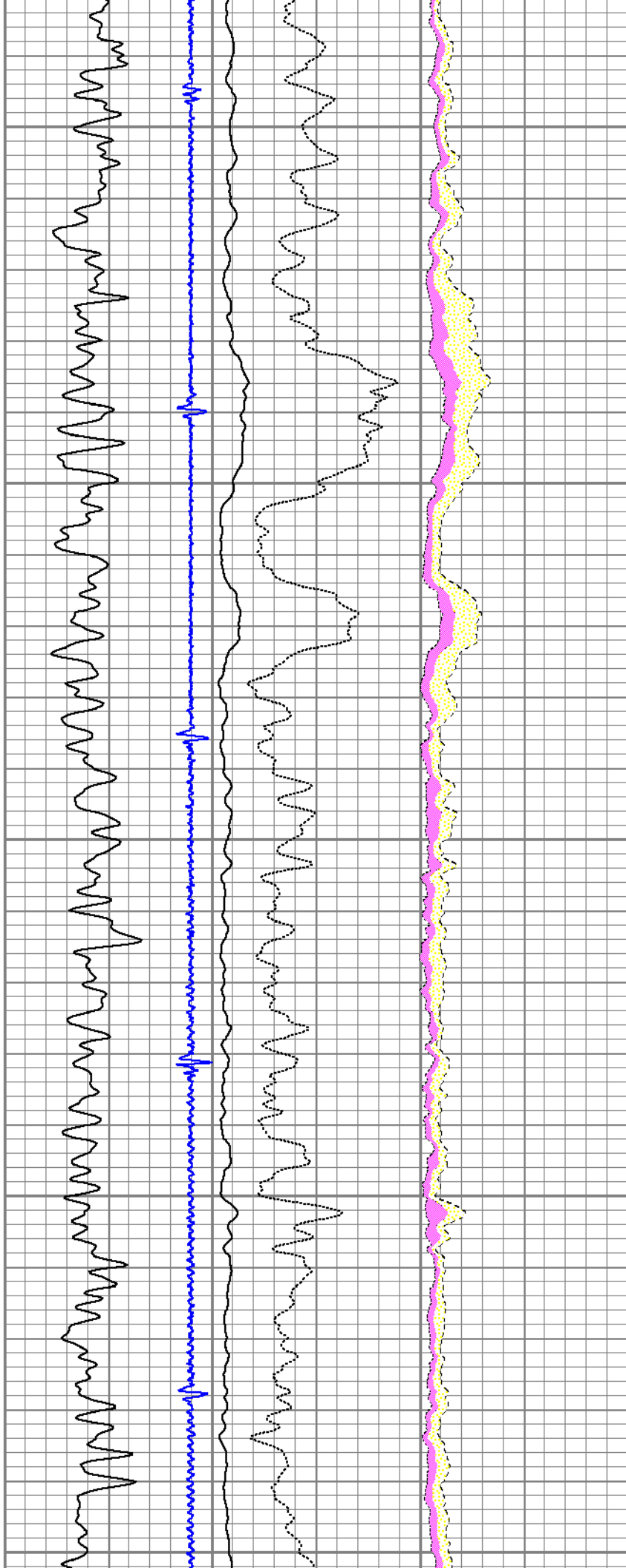
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2800



2900

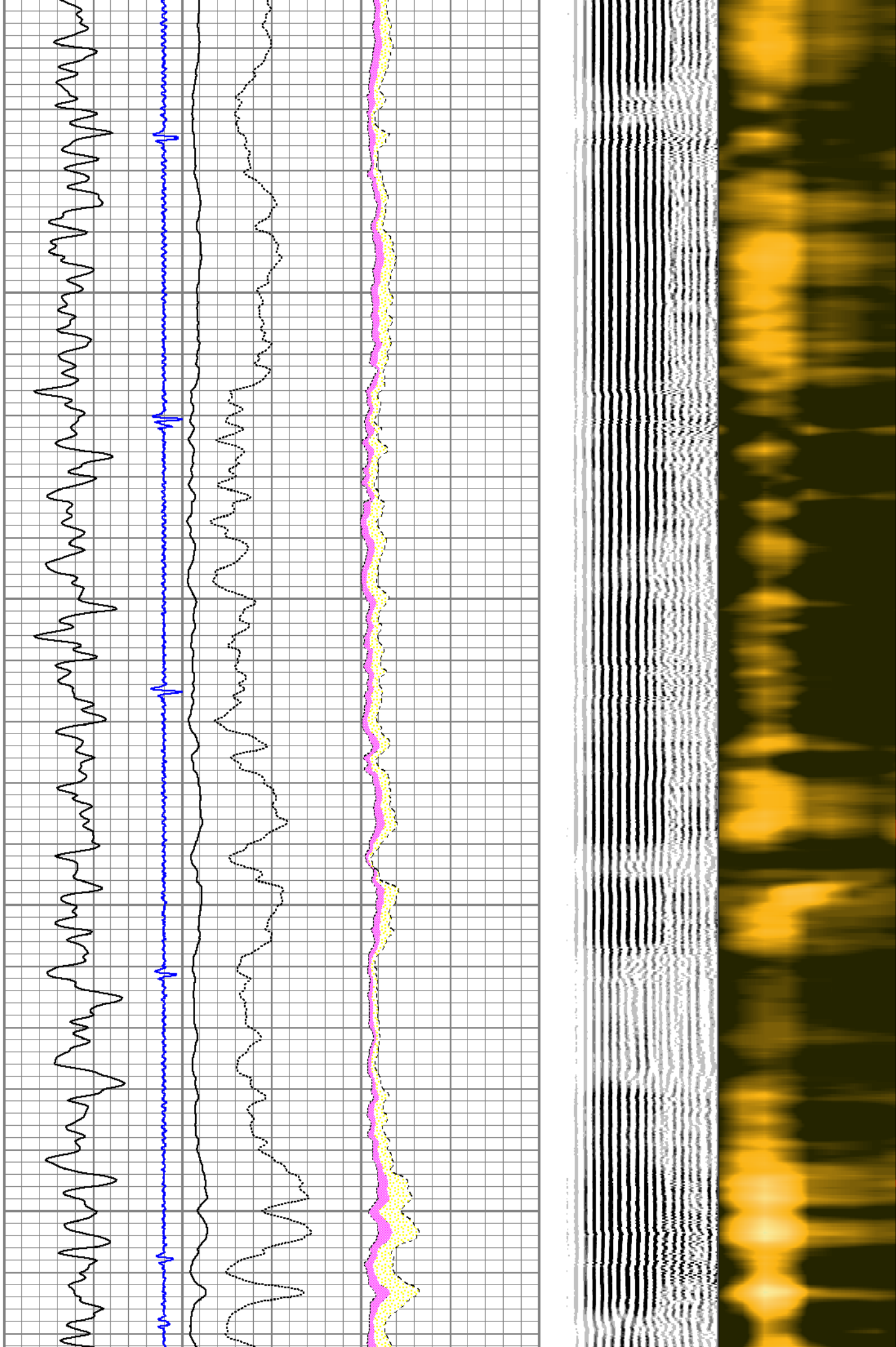
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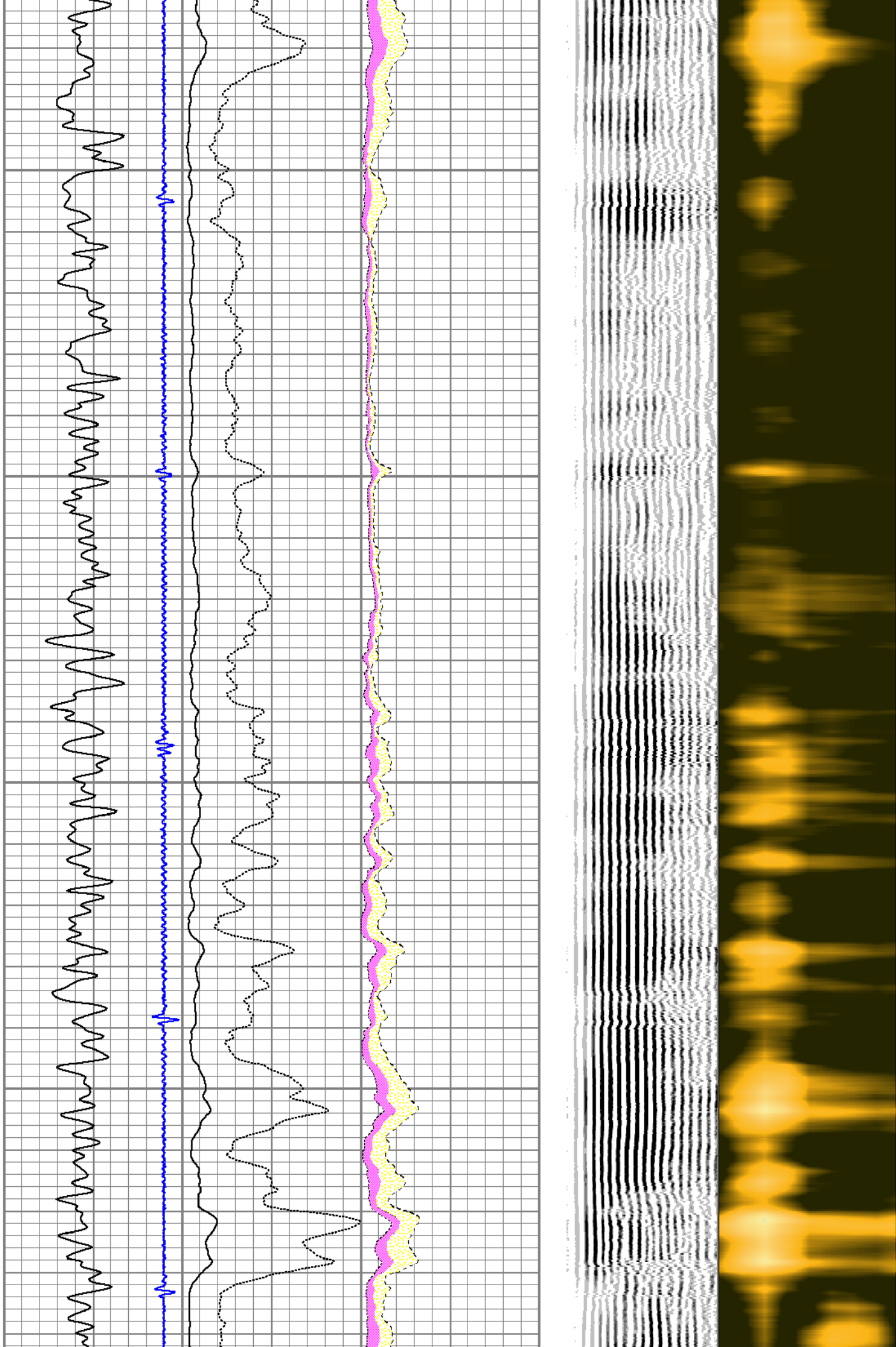
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3200



3300

3400

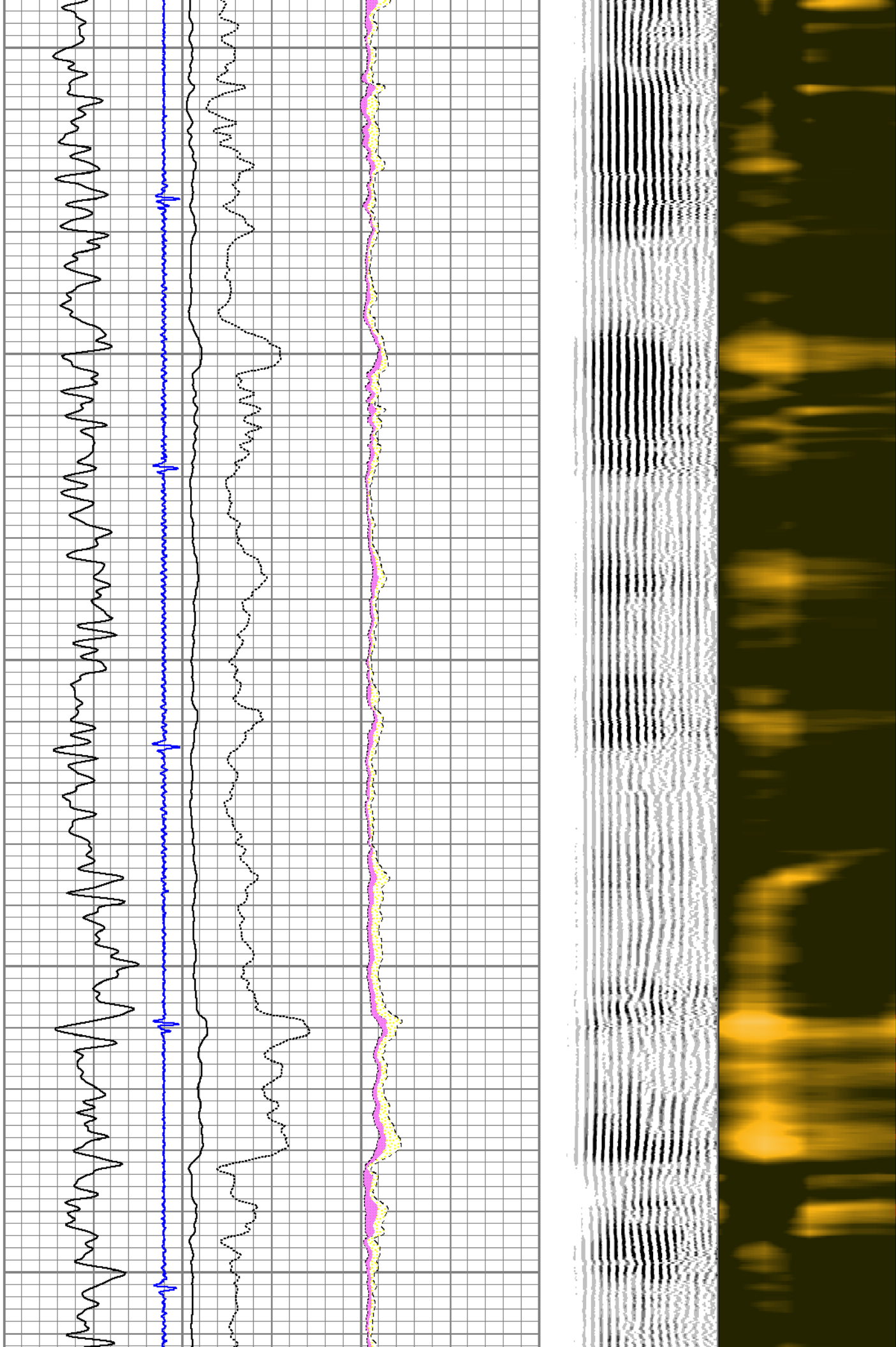




3500

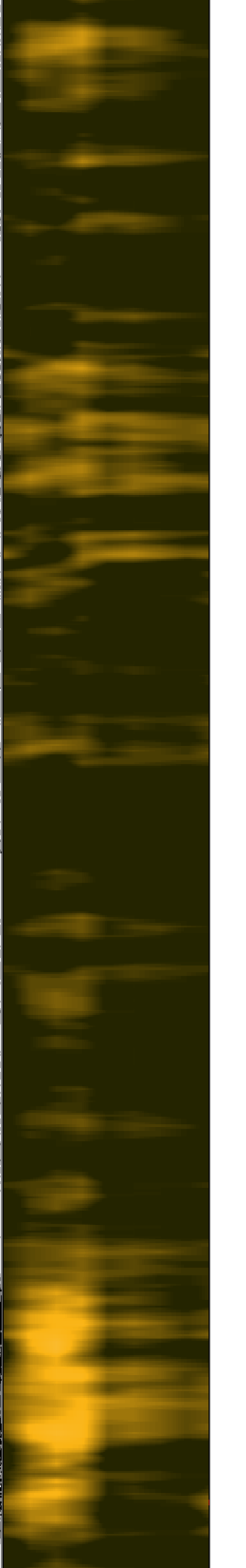
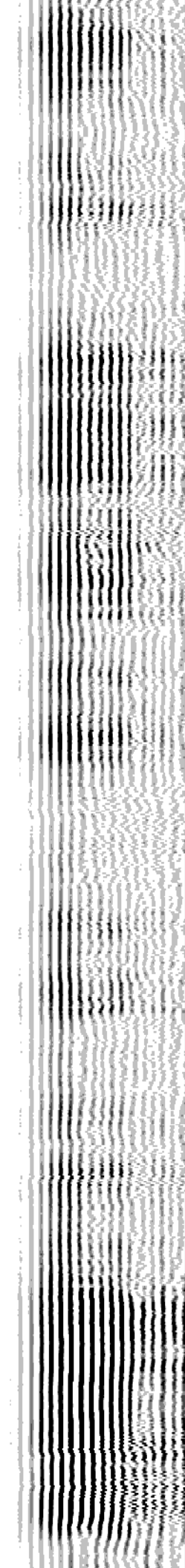
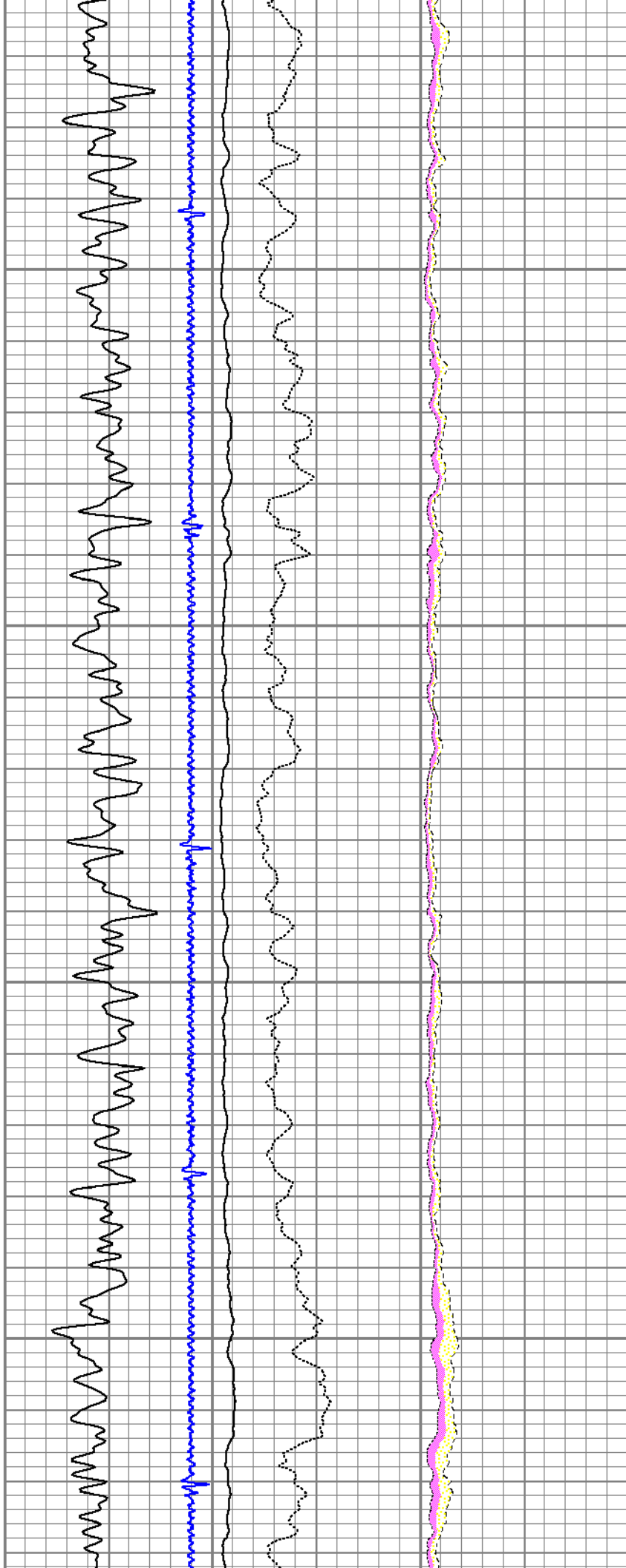
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3700



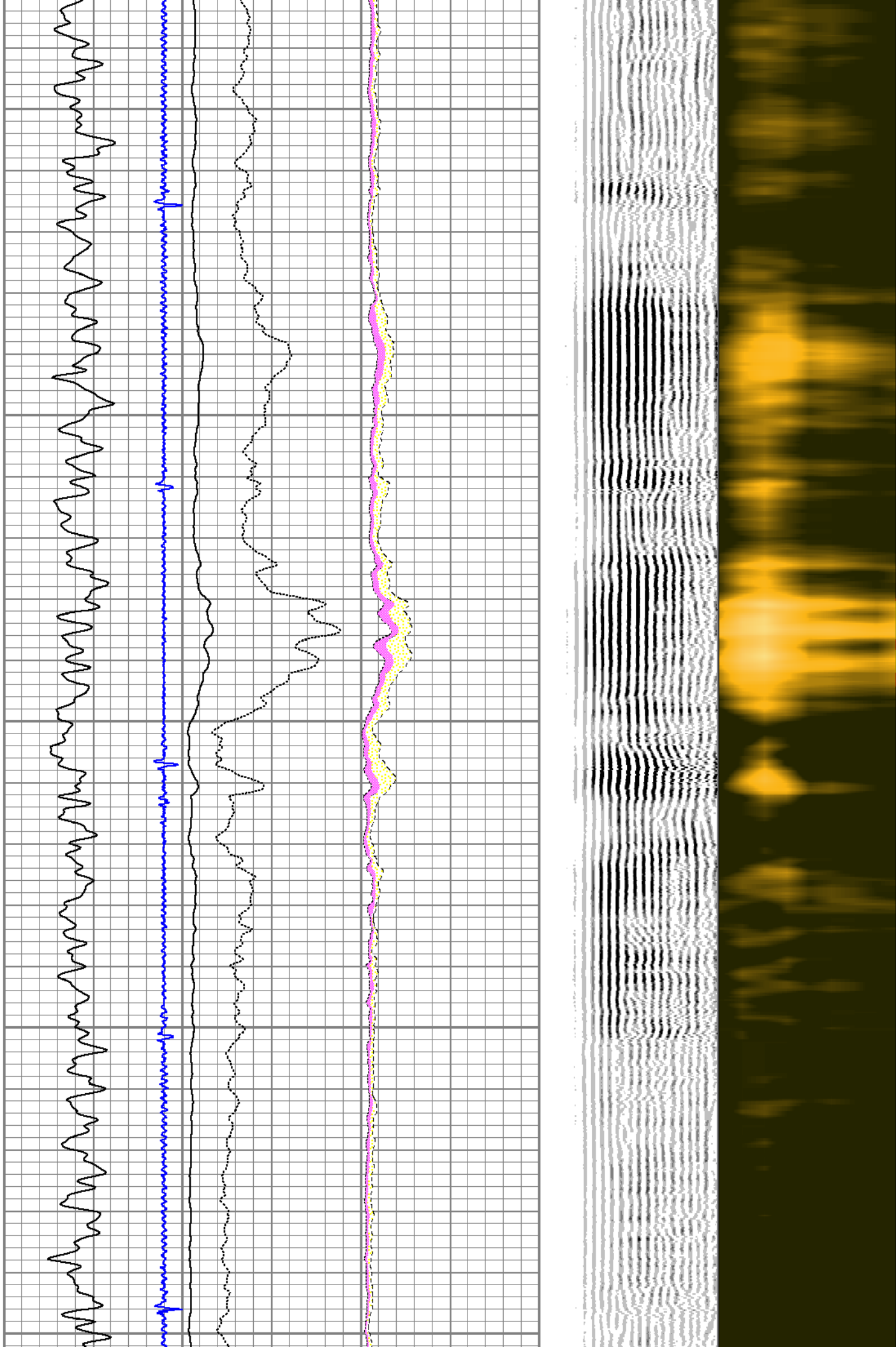
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3900



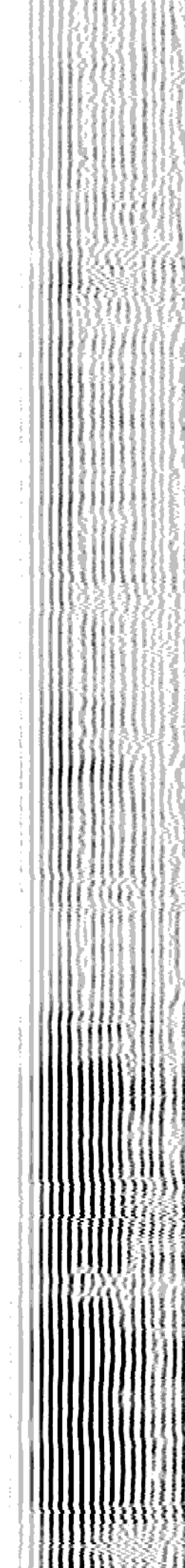
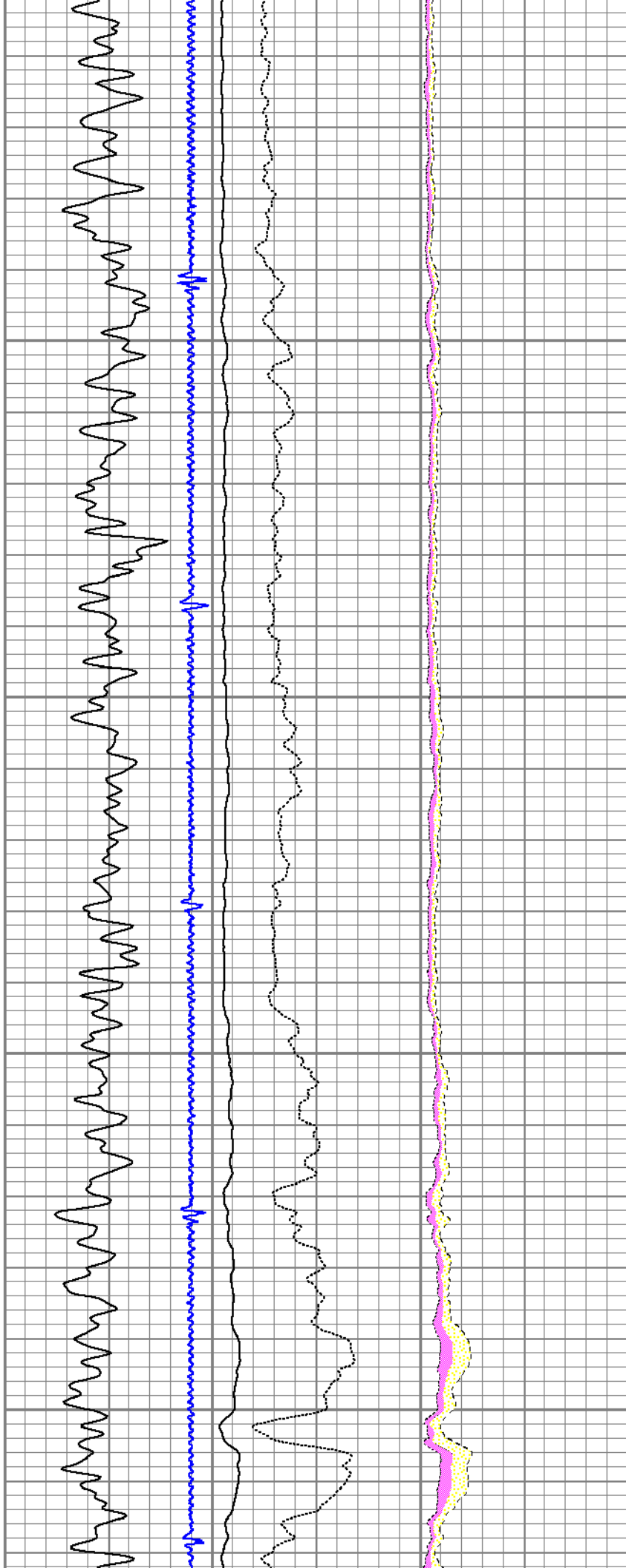
4000

4100



4200

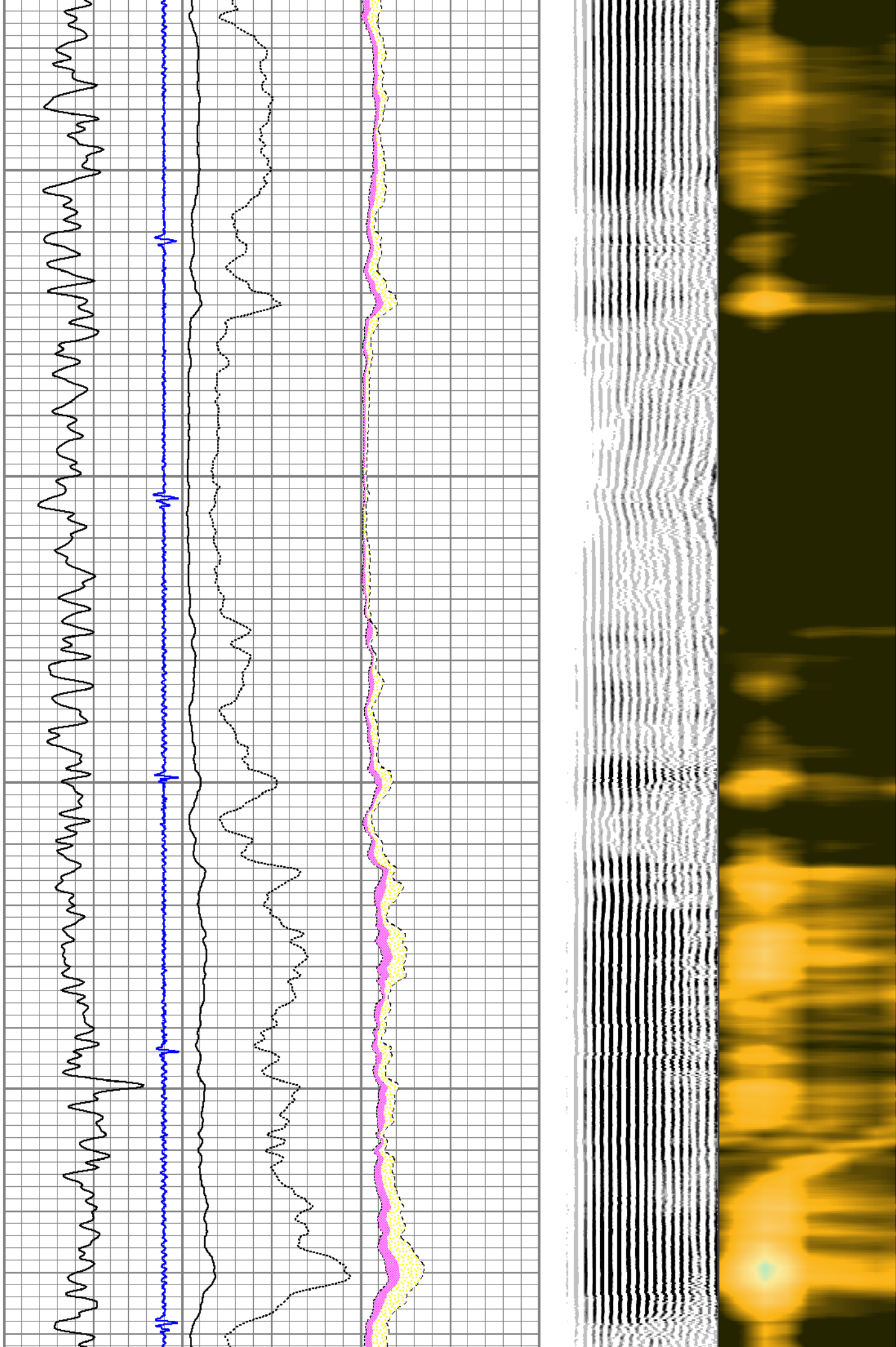
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4400

4500

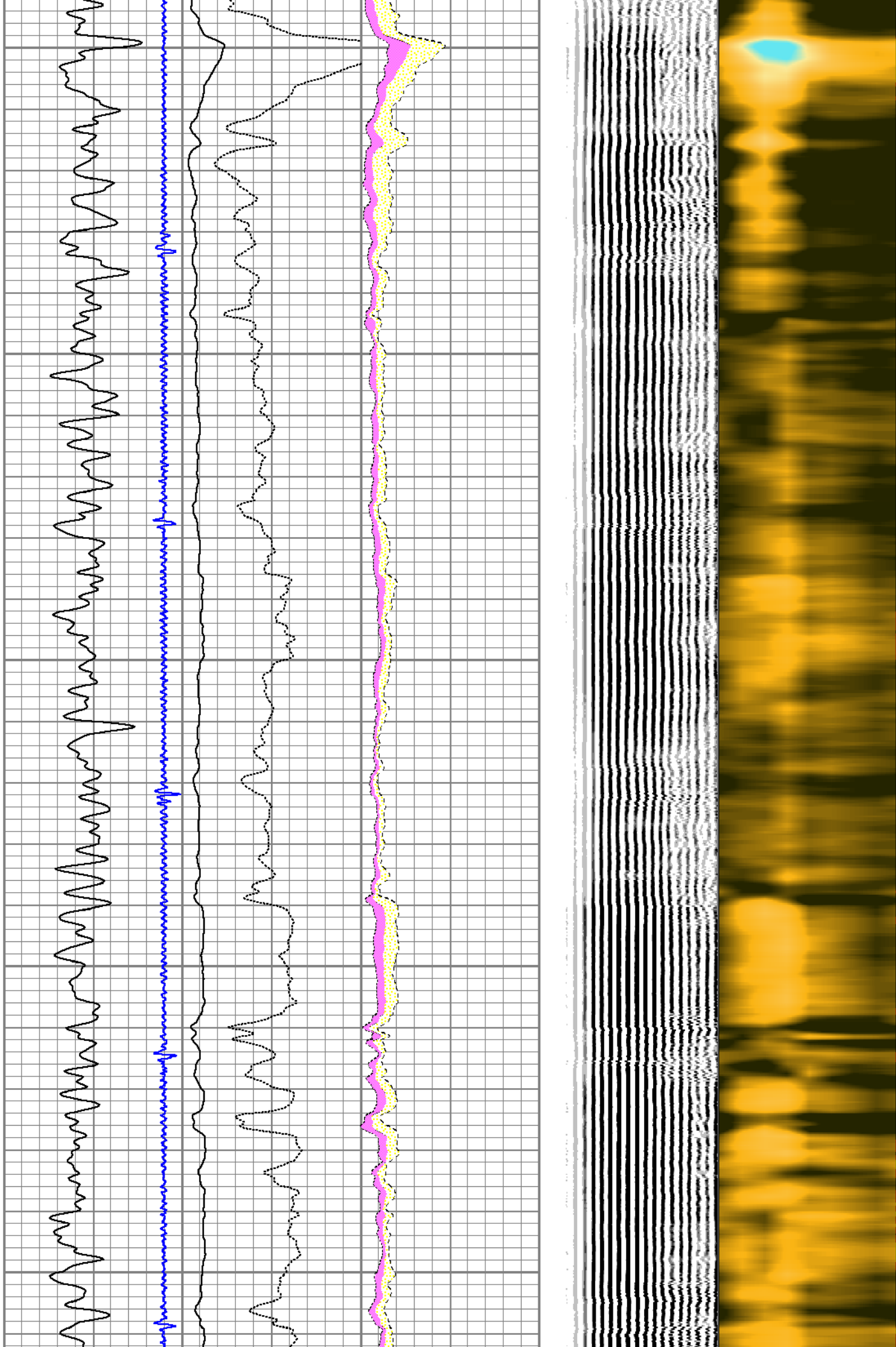




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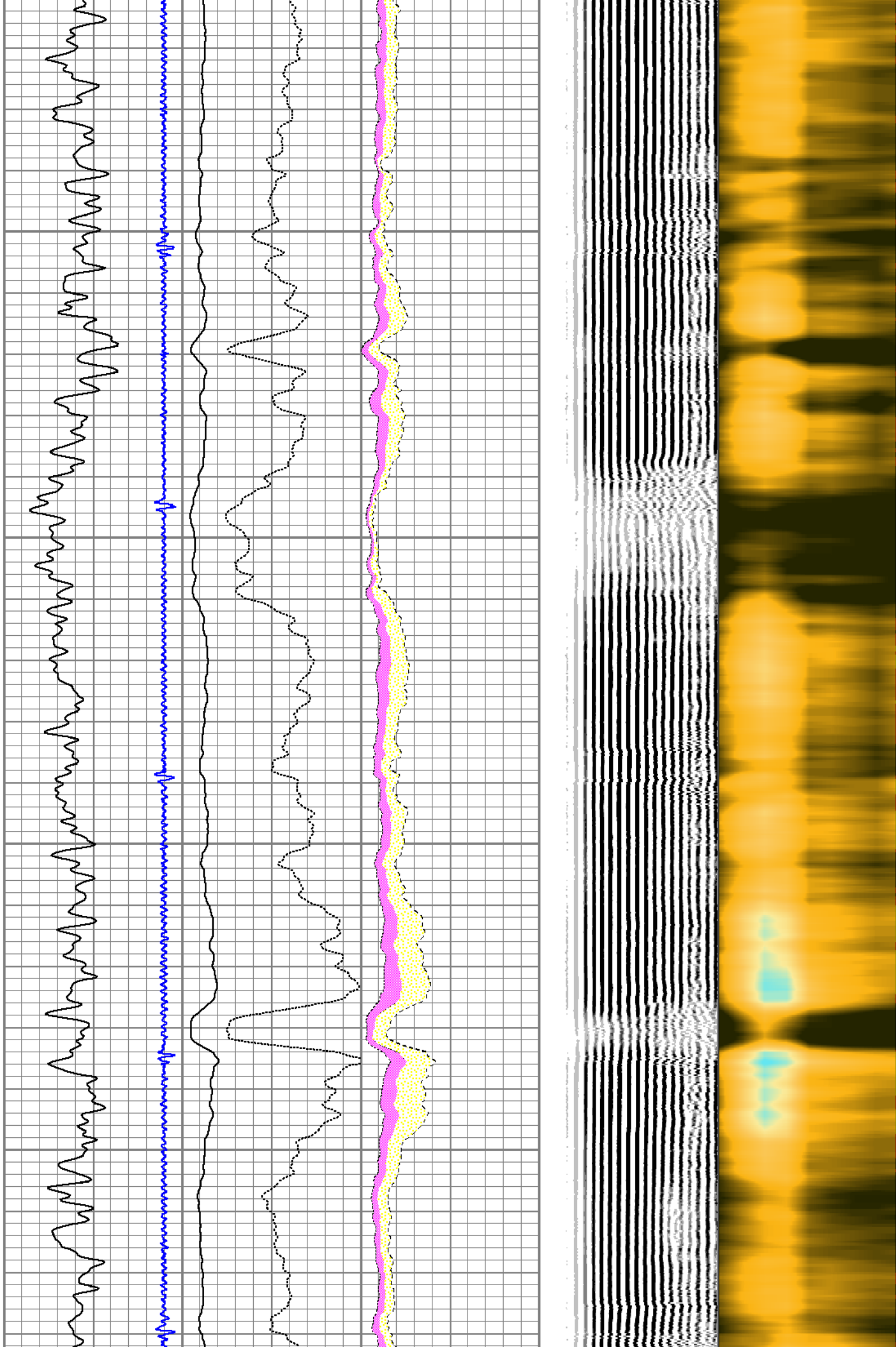
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4800



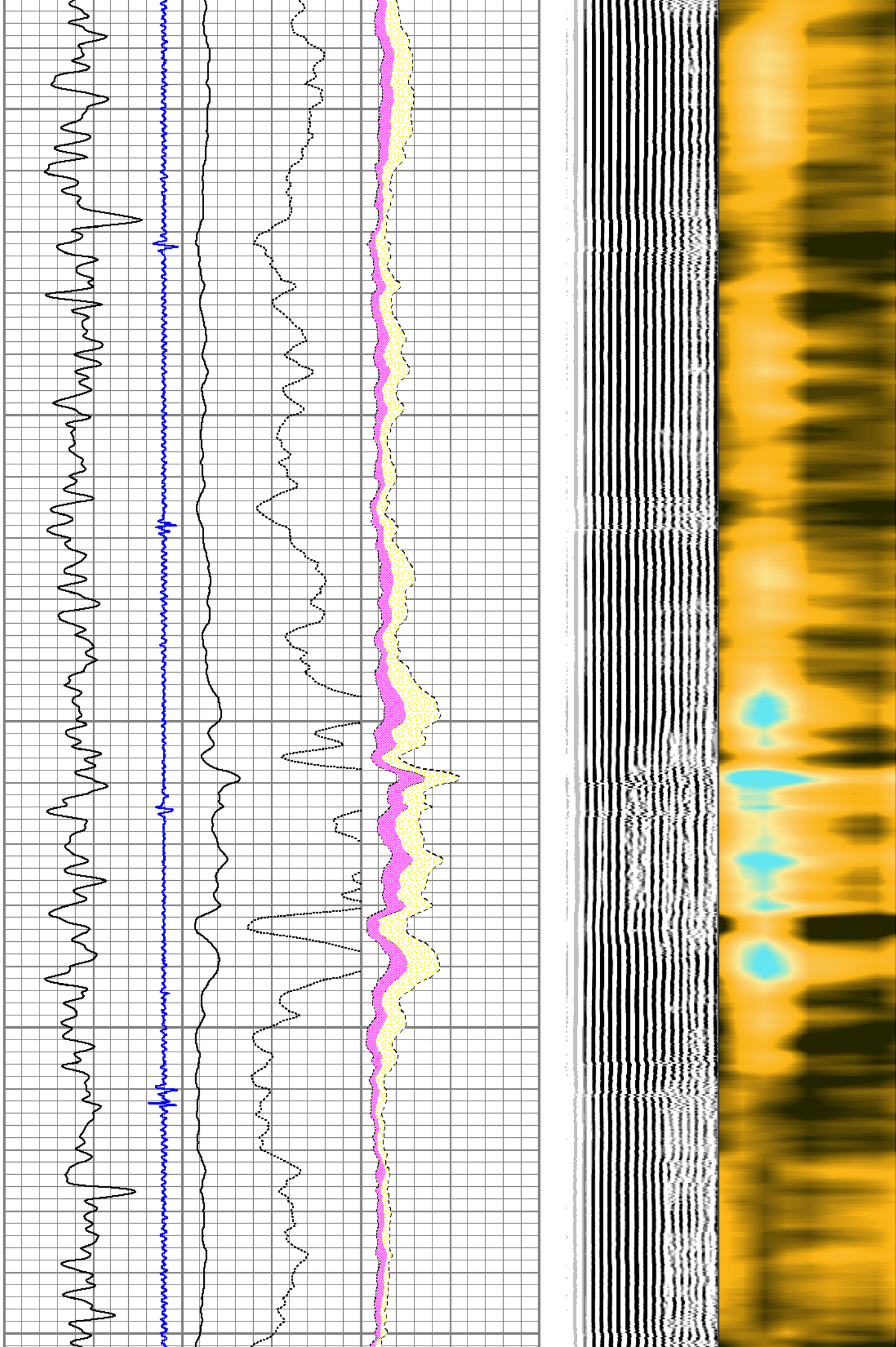
4900

5000



5100

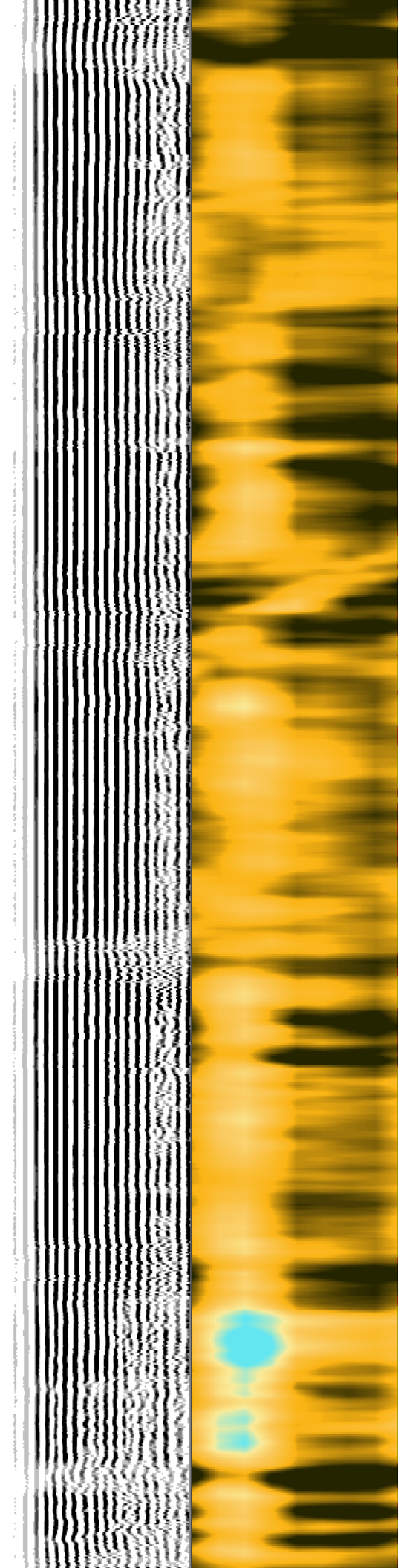
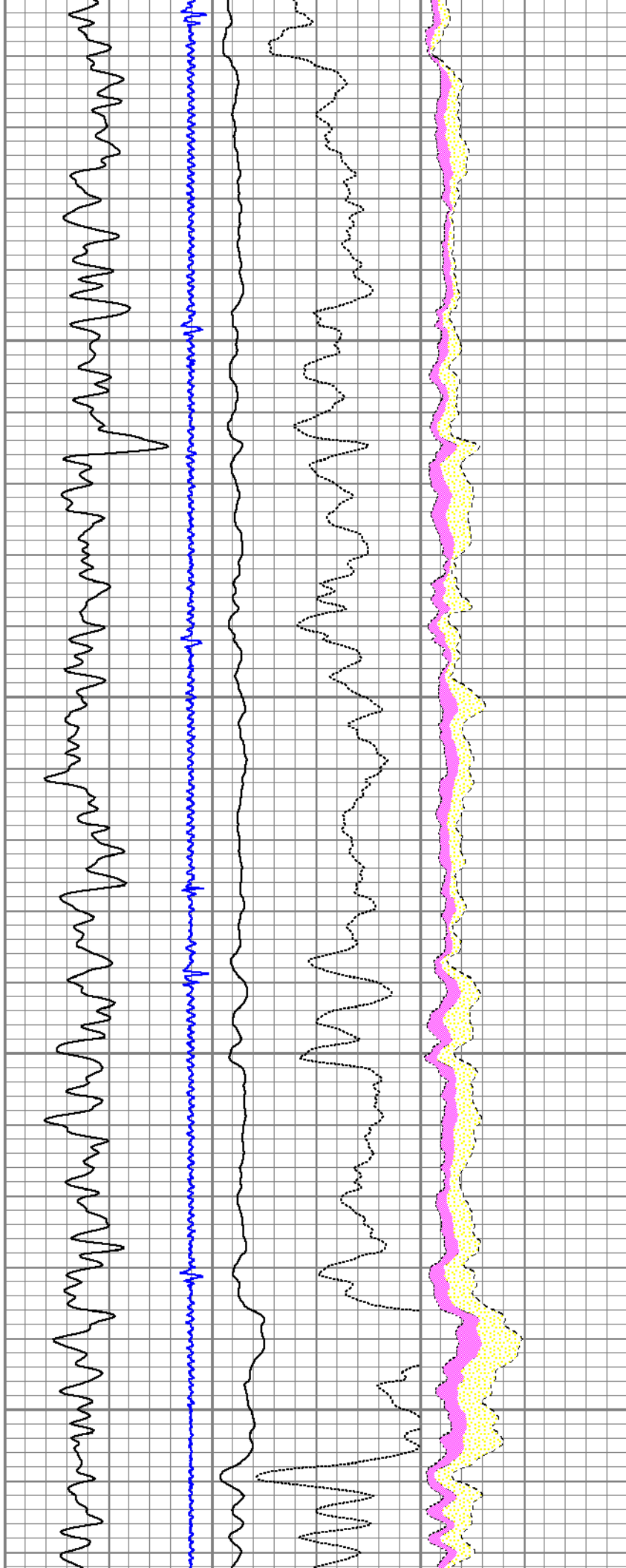
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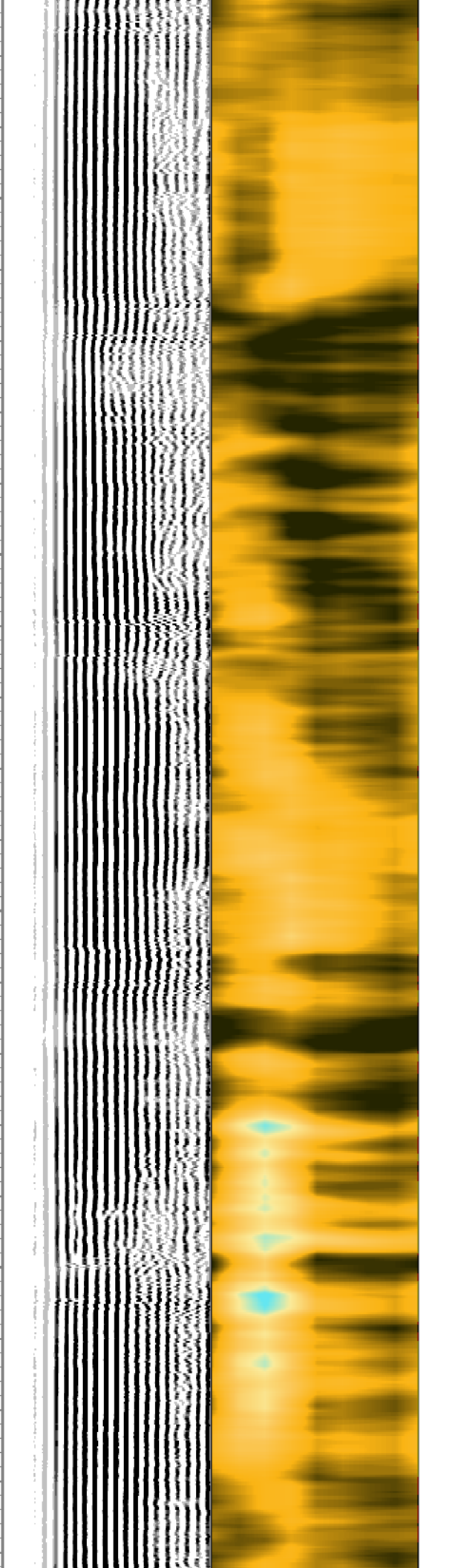
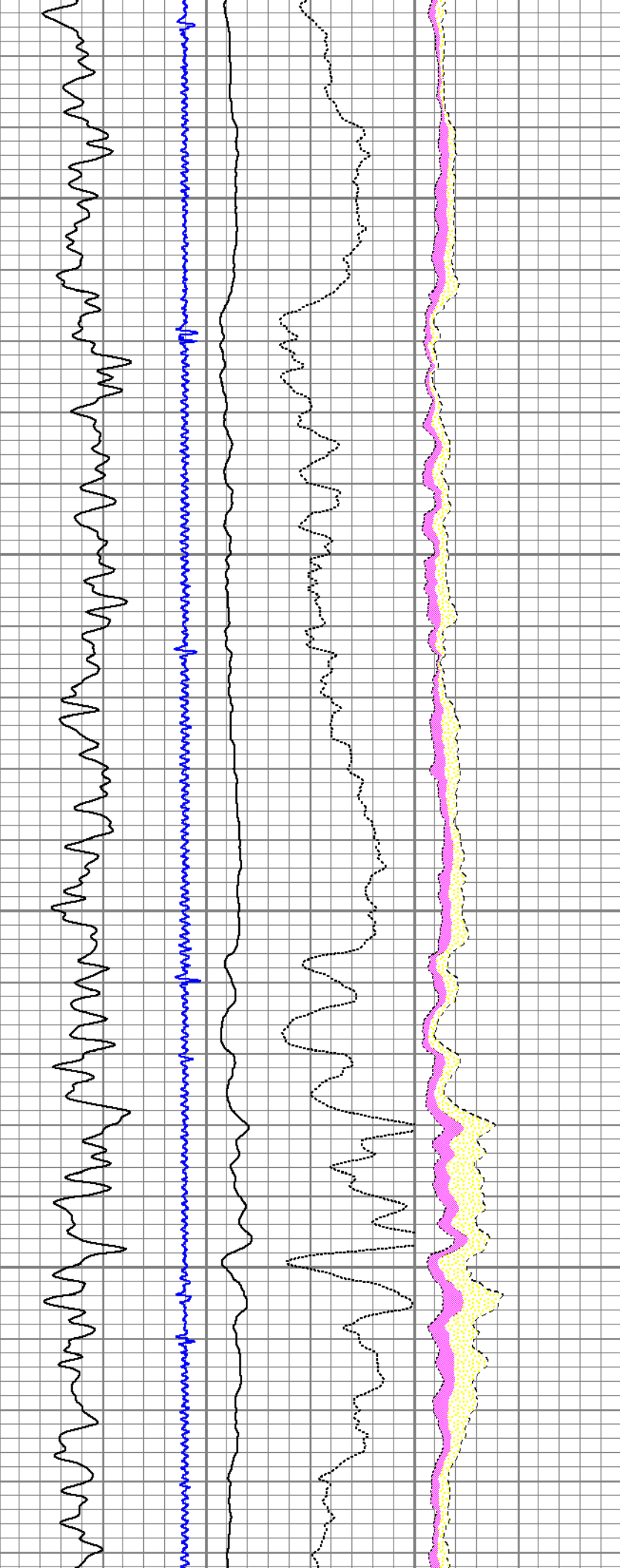




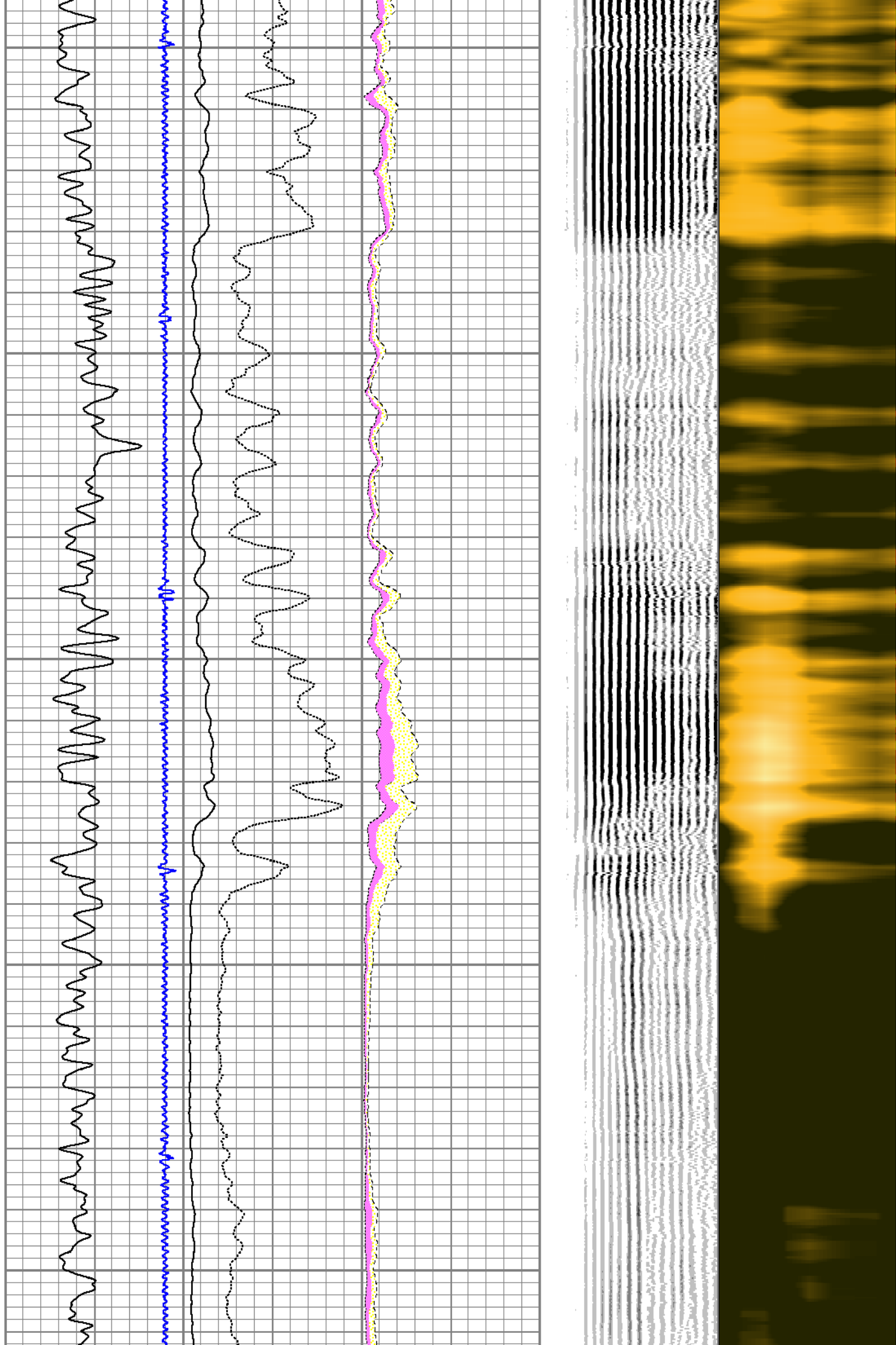
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5400



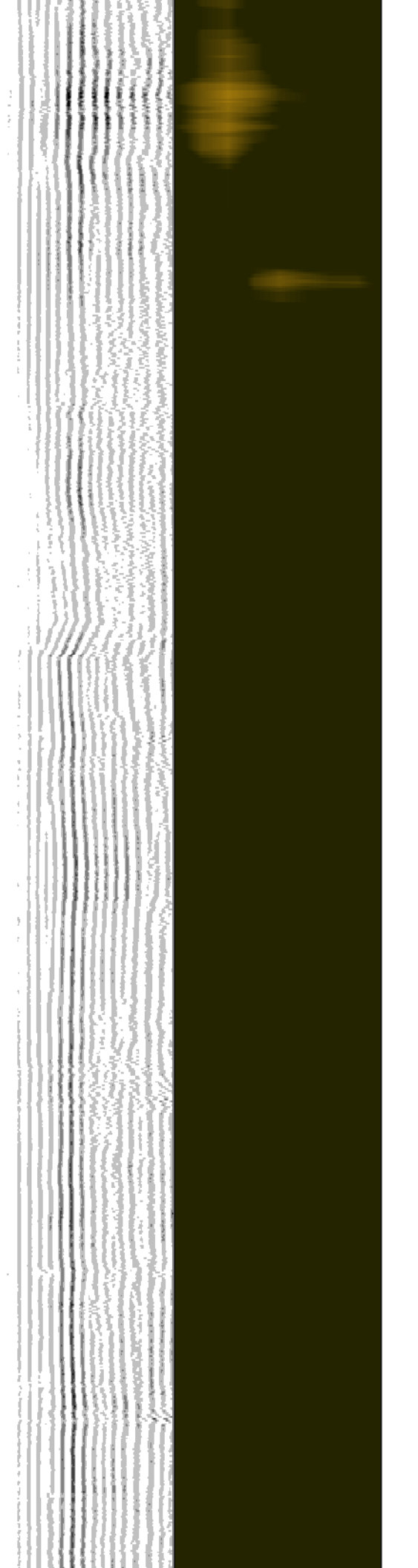
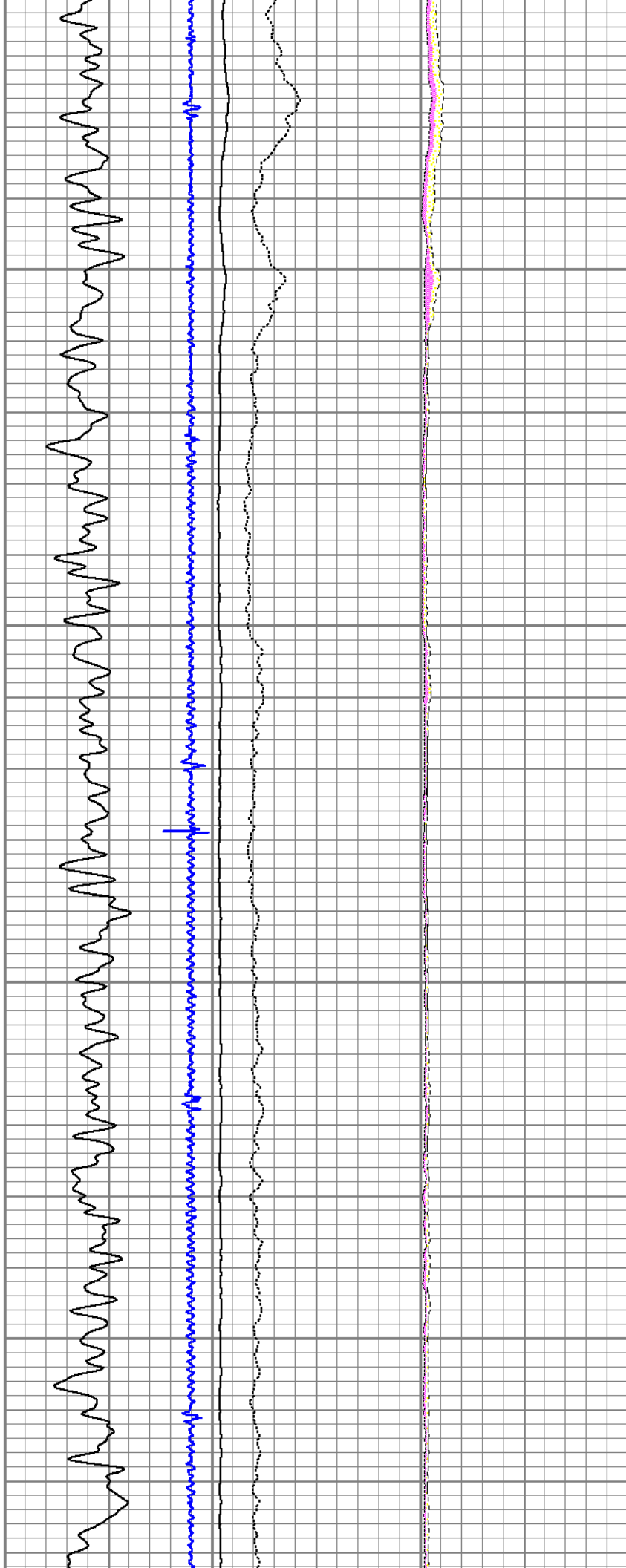




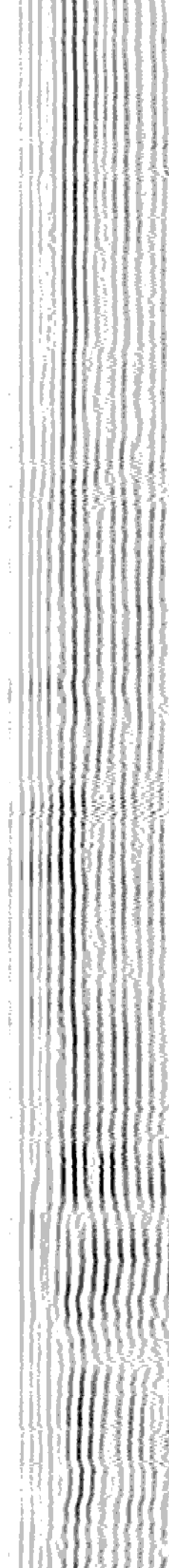
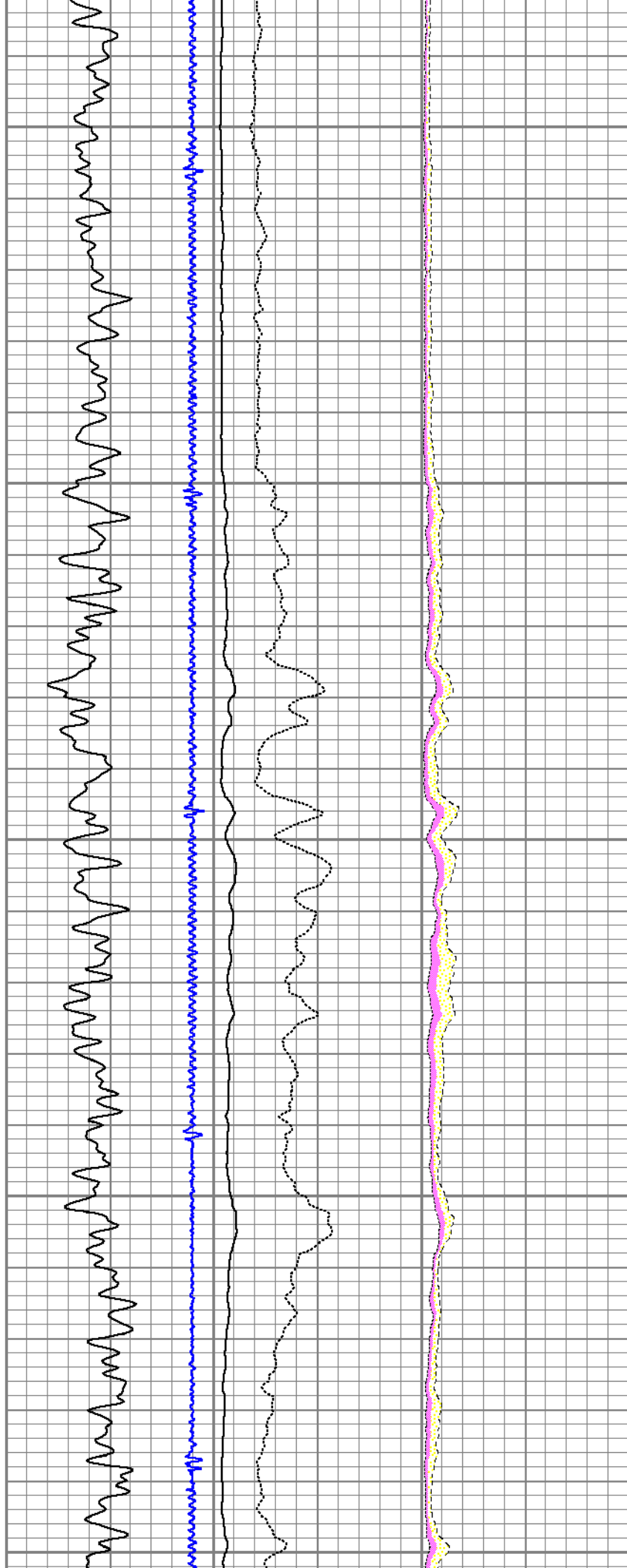


6000

6100

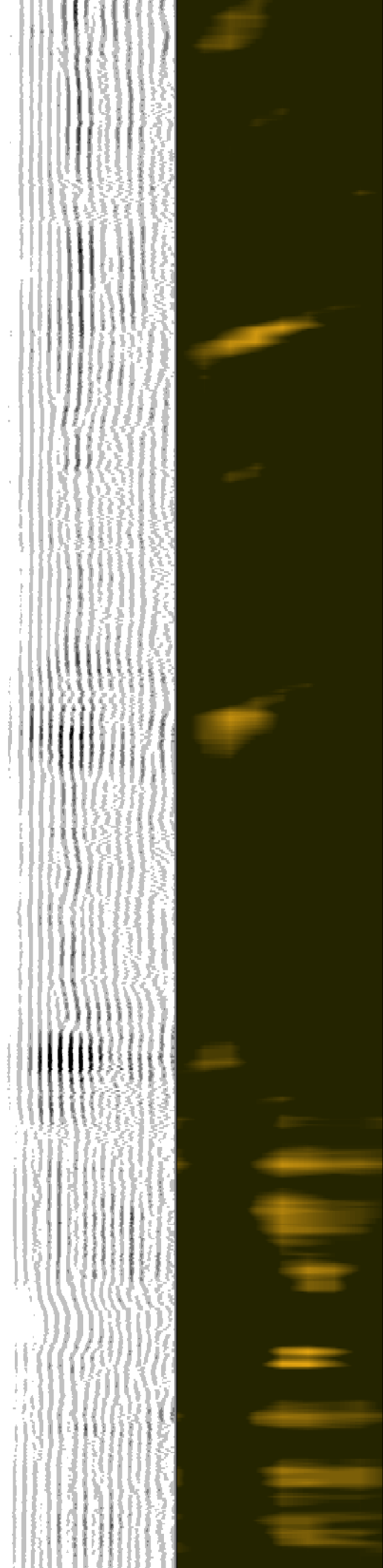


6300



6400

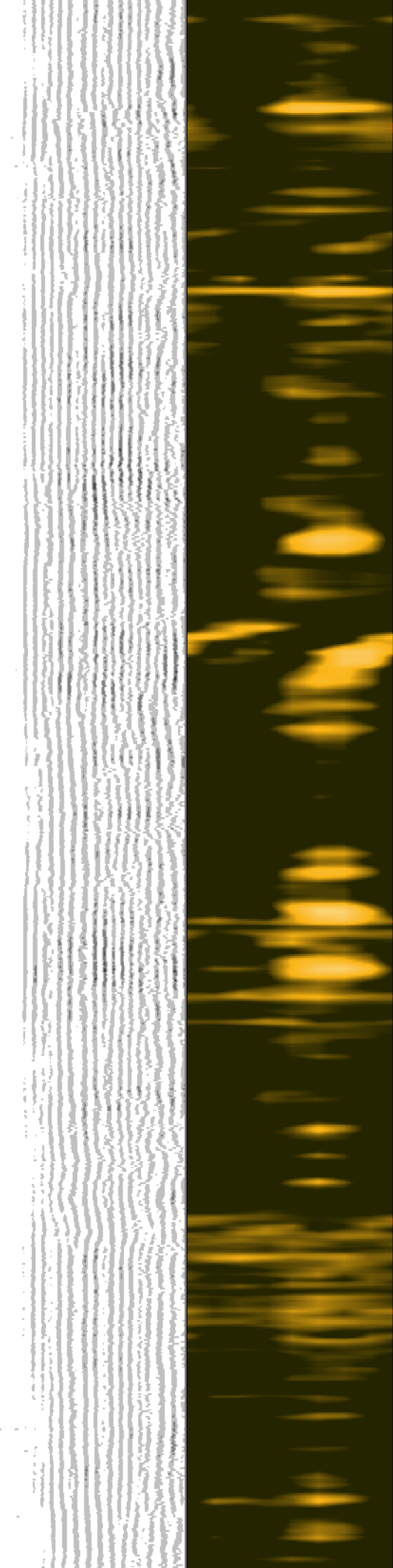
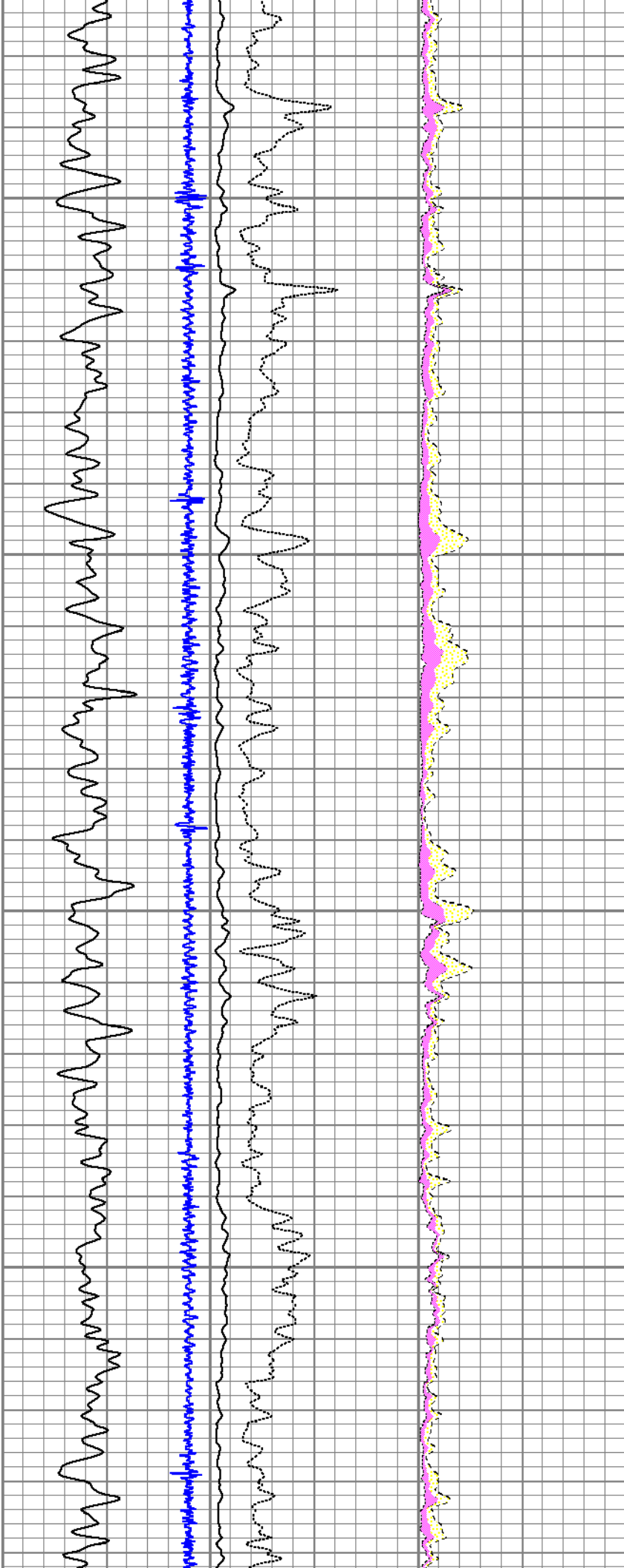
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6600

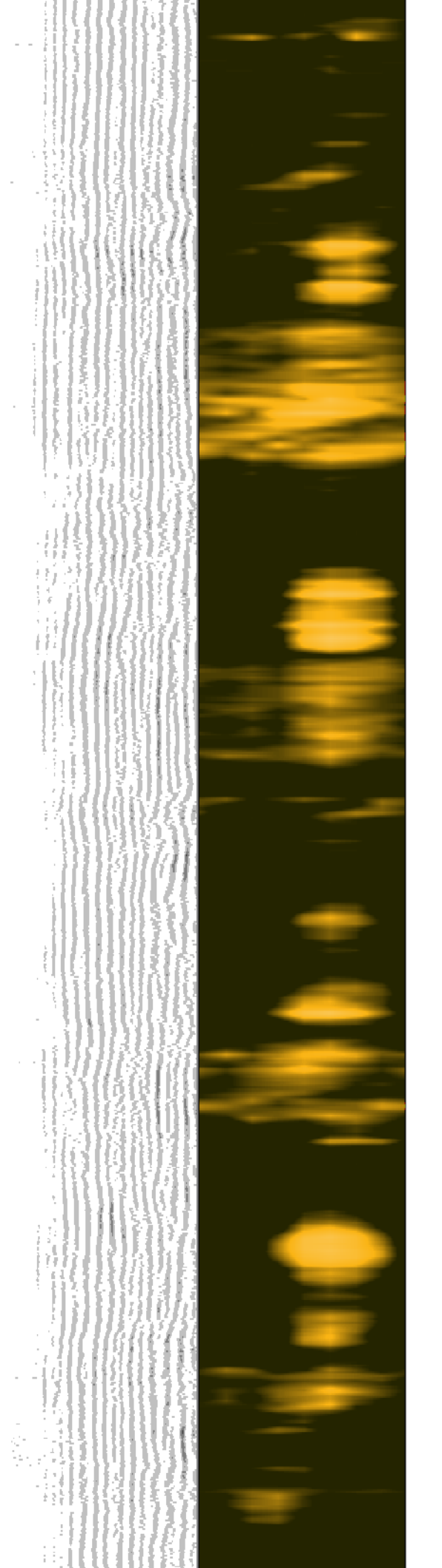
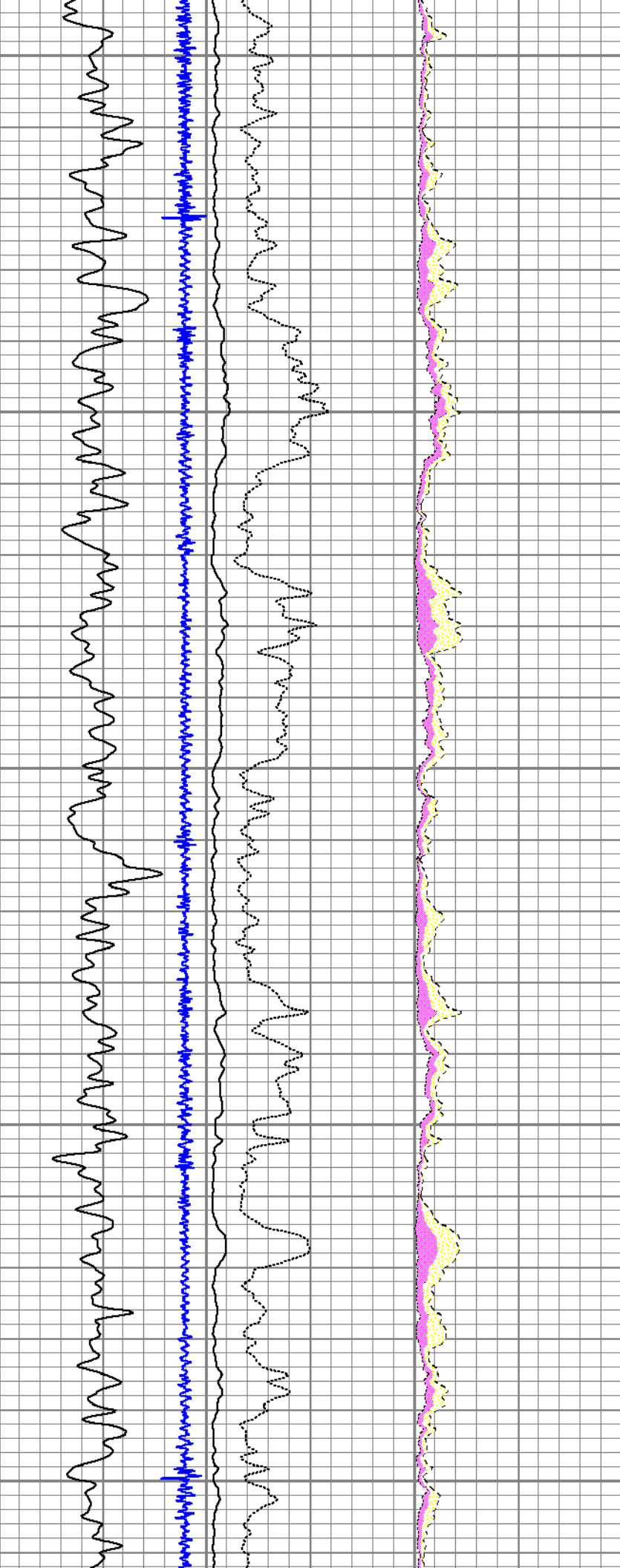
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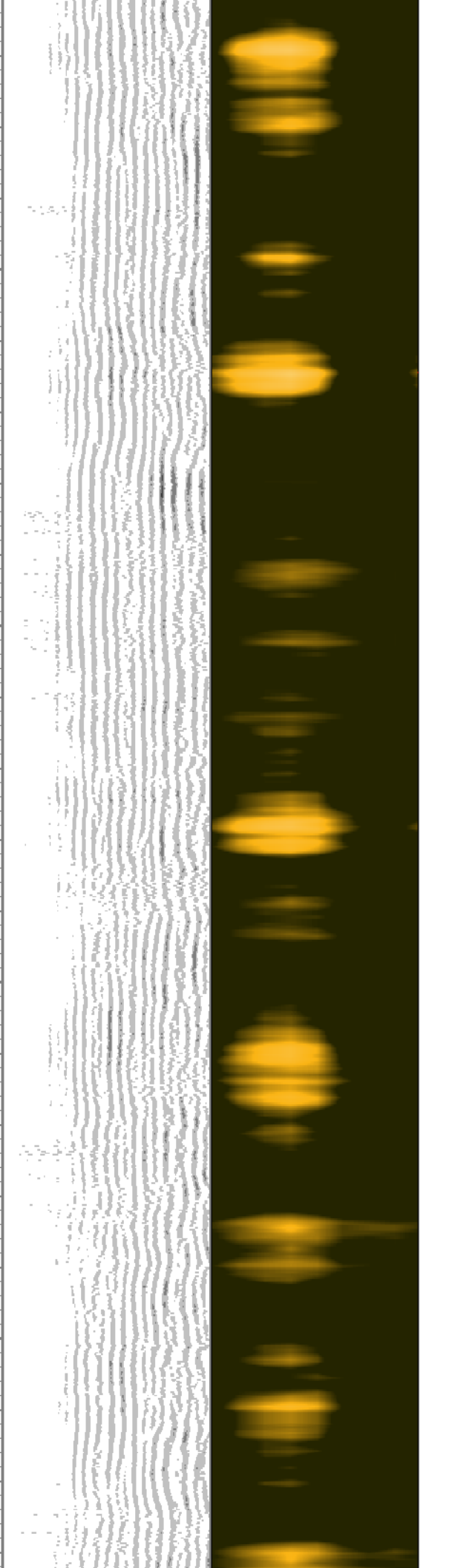
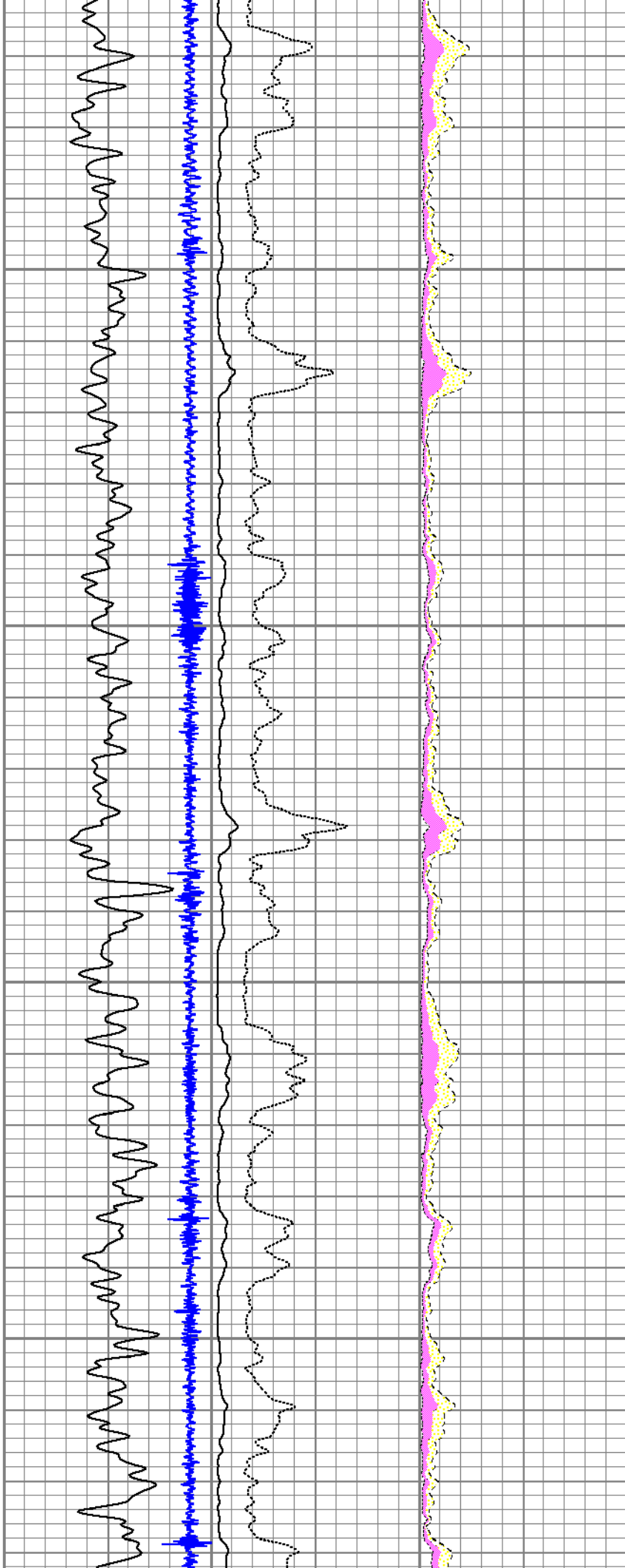
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7000



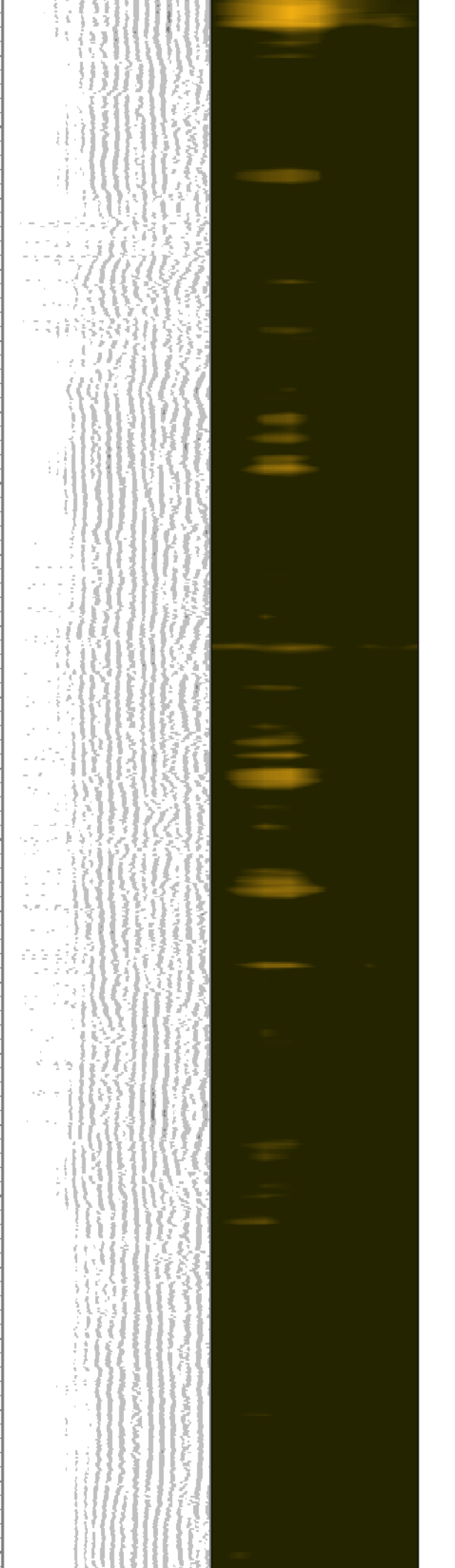
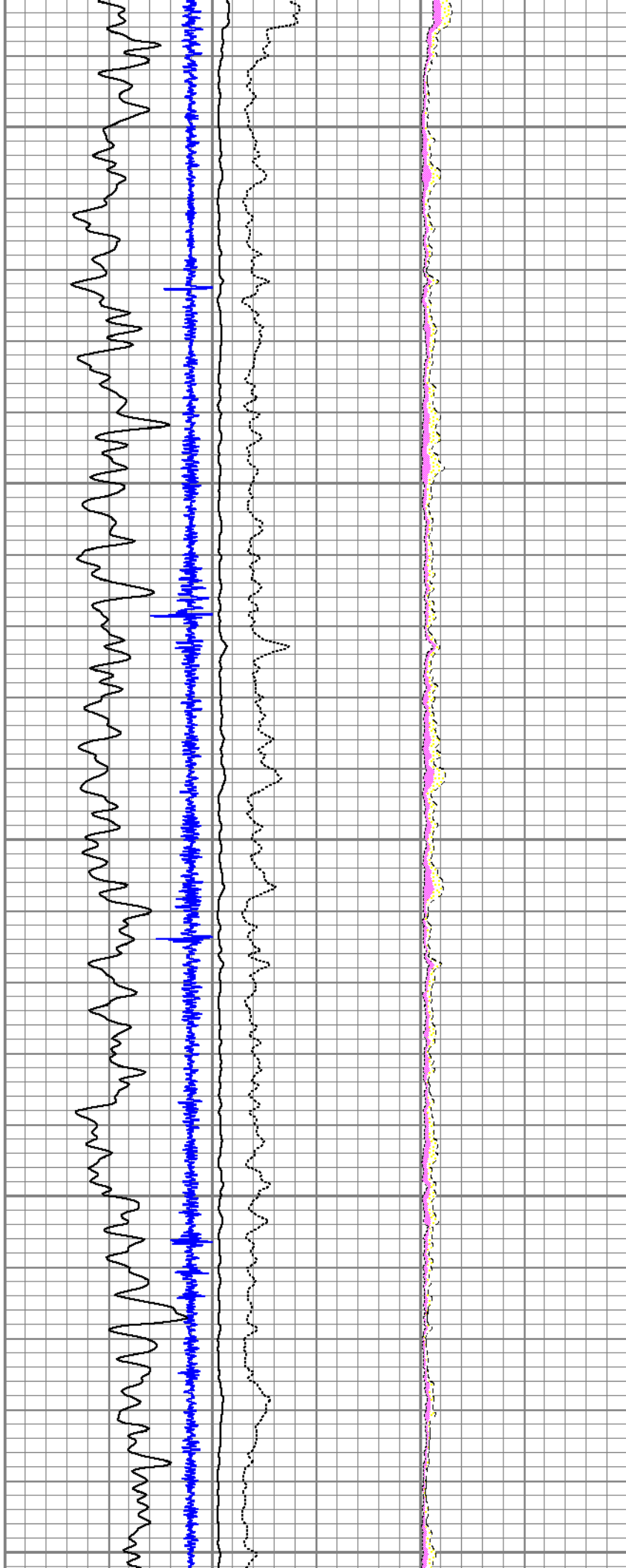
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7200

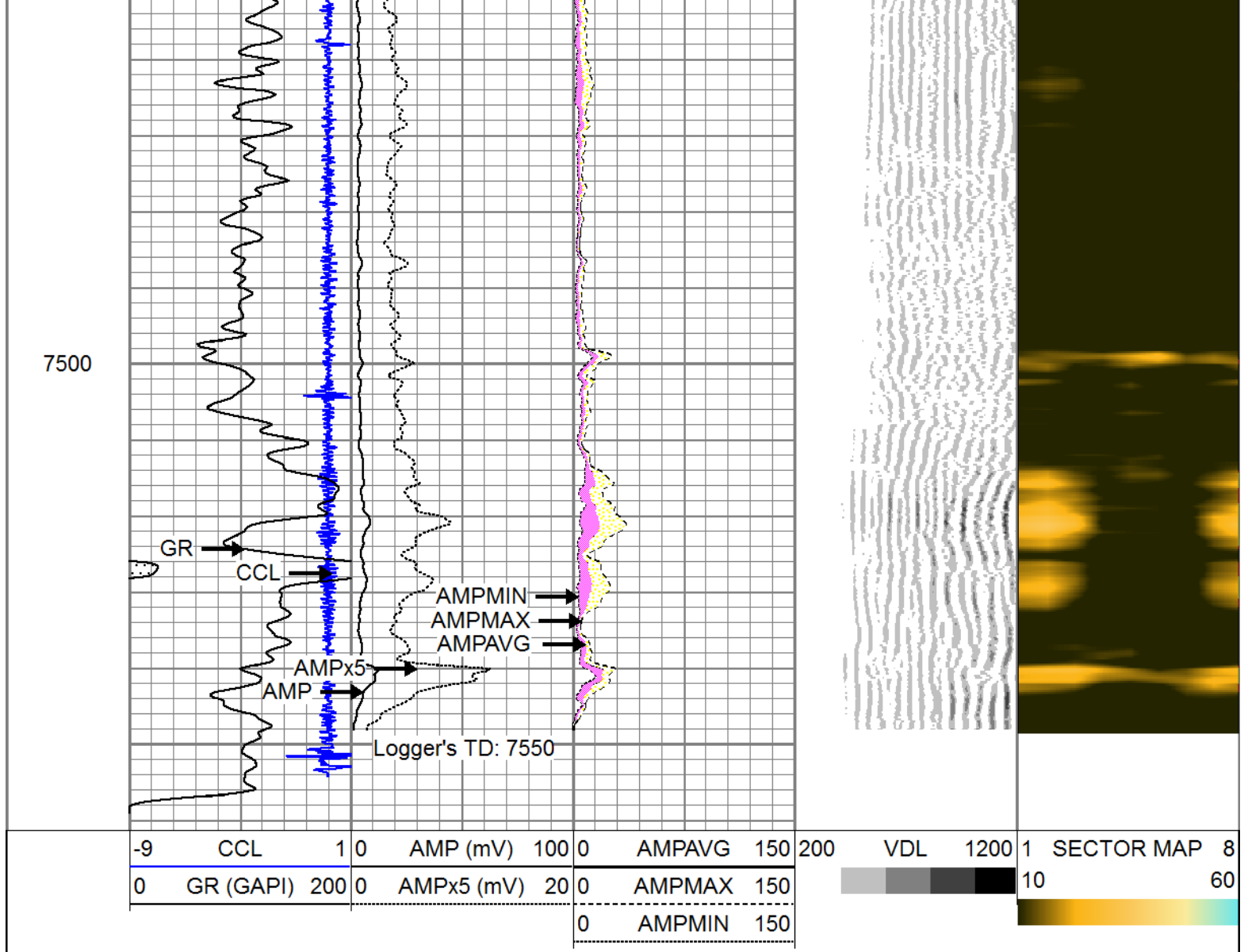


7300

7400







### Calibration Report

Database File: 13691.db  
 Dataset Pathname: pass2  
 Dataset Creation: Thu Oct 02 11:26:31 2014 by Log 0

### Gamma Ray Calibration Report

Serial Number: 51013  
 Tool Model: probe 2.75  
 Performed: Thu Feb 23 11:03:07 2012

Calibrator Value: 1400.0 GAPI

Background Reading: 26.8 cps  
 Calibrator Reading: 1120.0 cps

Sensitivity: 0.9000 GAPI/cps

### Segmented Cement Bond Log Calibration Report

Serial Number: 11206  
 Tool Model: RBT-C3

Calibration Casing Diameter: 4.500 in  
 Calibration Depth: 274.969 ft

Master Calibration, performed Fri Sep 12 15:56:12 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.012	0.657	1.500	81.196	123.647	-0.020
CAL	0.013	0.883				
5'	0.012	0.558	1.500	81.196	145.965	-0.296
SUM						
S1	0.010	0.638	0.000	100.000	159.412	-1.650
S2	0.012	0.669	0.000	100.000	152.197	-1.878
S3	0.012	0.696	0.000	100.000	146.322	-1.797
S4	0.012	0.718	0.000	100.000	141.787	-1.748
S5	0.012	0.712	0.000	100.000	142.877	-1.767
S6	0.012	0.686	0.000	100.000	148.468	-1.845
S7	0.012	0.639	0.000	100.000	159.542	-1.975
S8	0.012	0.630	0.000	100.000	161.971	-2.001

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	0.883	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	

#### Temperature Calibration Report

Serial Number: 11206  
Tool Model: RBT-C3  
Performed: Thu Oct 02 05:05:17 2014

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF

Gain: 0.86  
Offset: 5.50  
Delta Spacing: 1