

Pioneer Energy Services

GAMMA RAY CCL
CEMENT BOND VDL
SECTOR MAP

Company	EnCana Oil & Gas (USA) Inc.	Country	USA
Well	Drieth 1A-6H-A368		
Field	Wattenberg		
County	Weld		
State	Colorado		
Location:	AP1 #: 05-123-37586	Other Services	None
Permanent Datum	GL	Elevation	5087
Log Measured From	KB		
Drilling Measured From	KB		
SEC 6	TWP 3N	RGE 68W	
SHL: 676' FNL & 434' FEL	NENE		

Date	October 14, 2014
Run Number	1
Depth Driller	11498
Depth Logger	7173
Bottom Logged Interval	7173
Top Log Interval	0
Open Hole Size	8-3/4"
Type Fluid	Drilling Mud
Density / Viscosity	10.6 / 36
Max. Recorded Temp.	NA
Estimated Cement Top	1555
Time Well Ready	1800
Time Logger on Bottom	1850
Equipment Number	49
Location	Ft. Morgan
Recorded By	Shaun Stump
Witnessed By	Denise Elrod

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record		Size		Wgt/Ft	Top	Bottom	
Surface String		9 5/8		40	0	845	
Prot. String		7		26	0	7292	
Production String							
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.

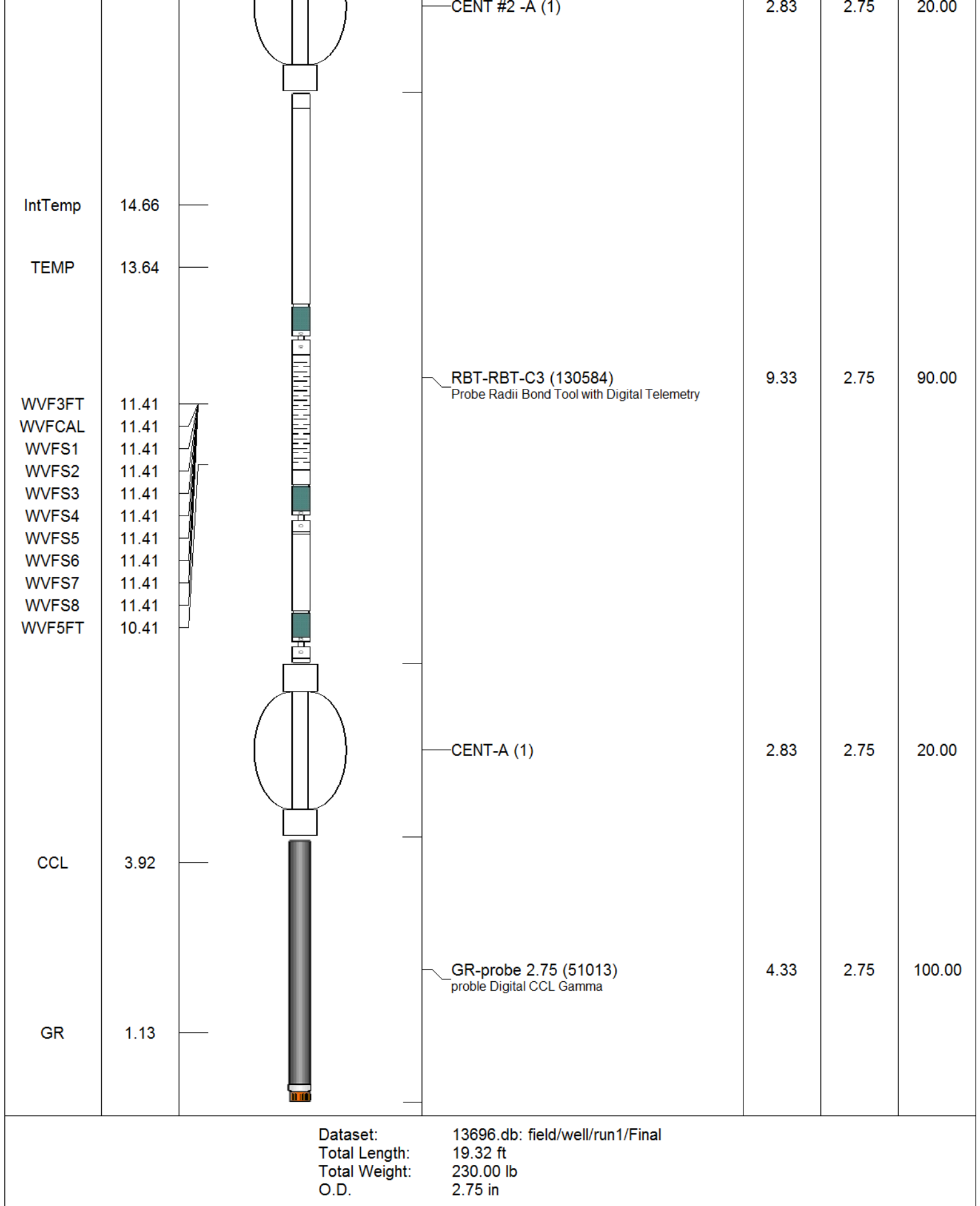
Comments

Ensign Rig 135

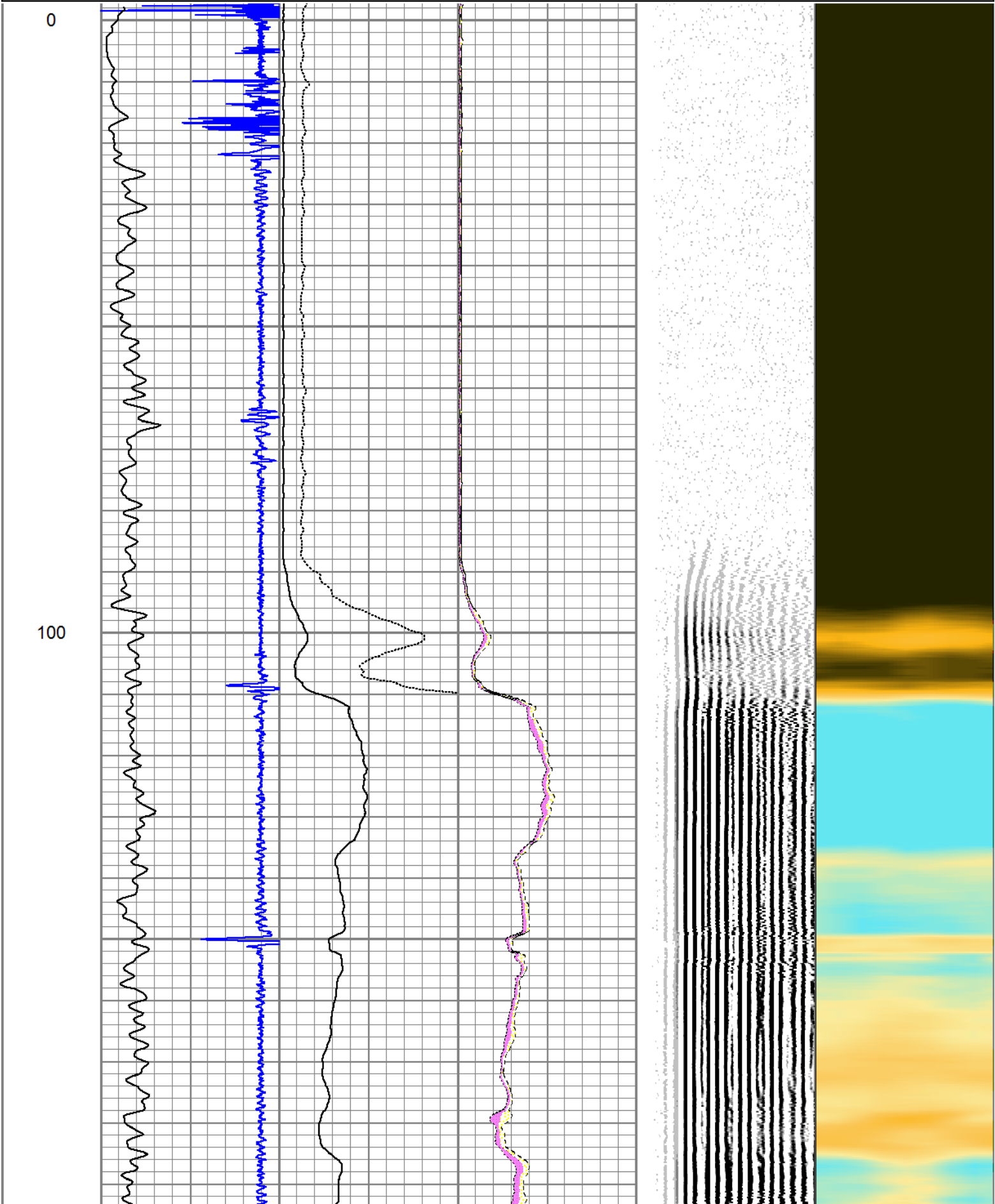
Thank You for using Pioneer Energy Services

SO# 2-013696

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



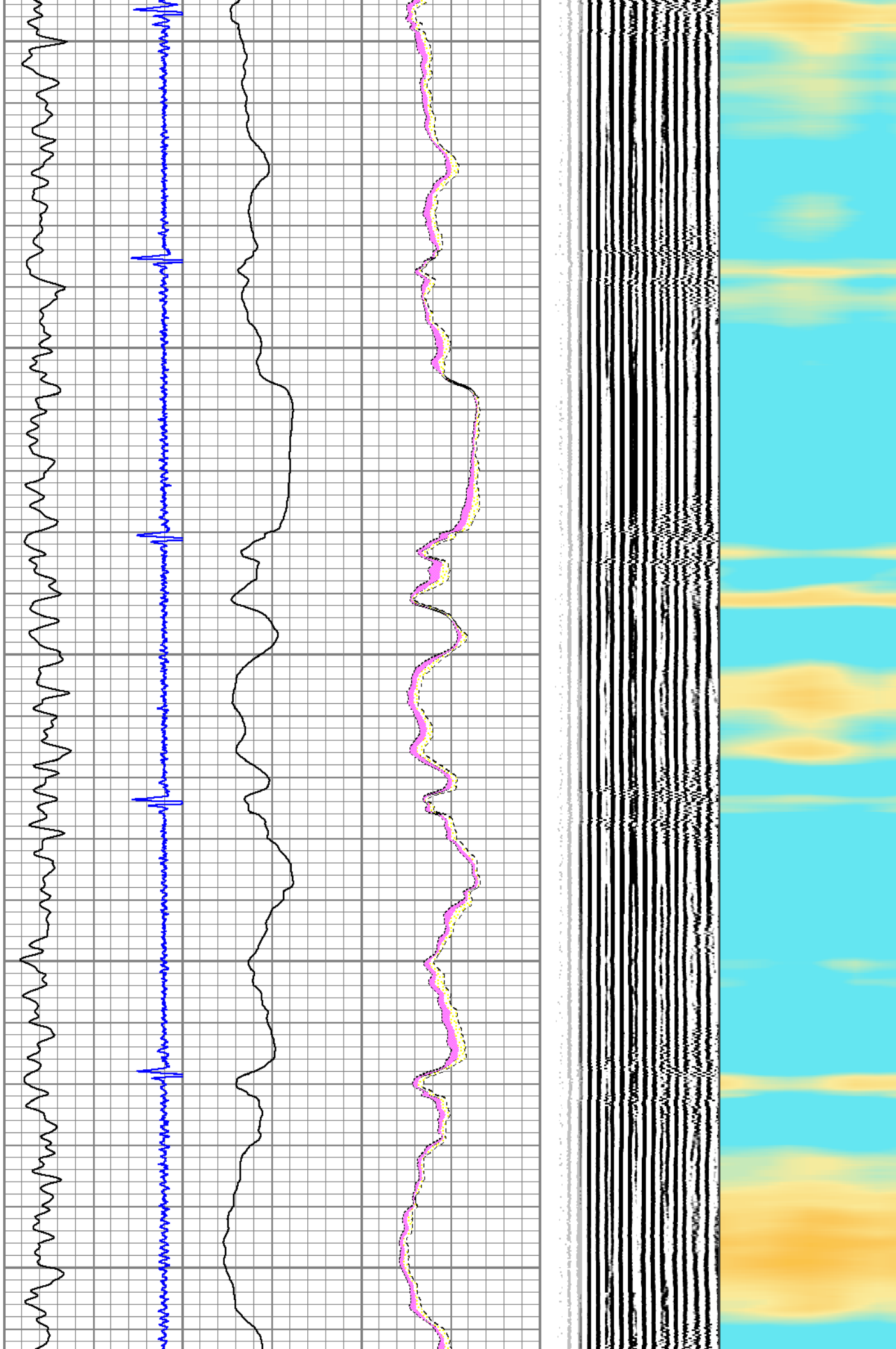
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	0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150				10		60
							0	AMPMIN	150						



200

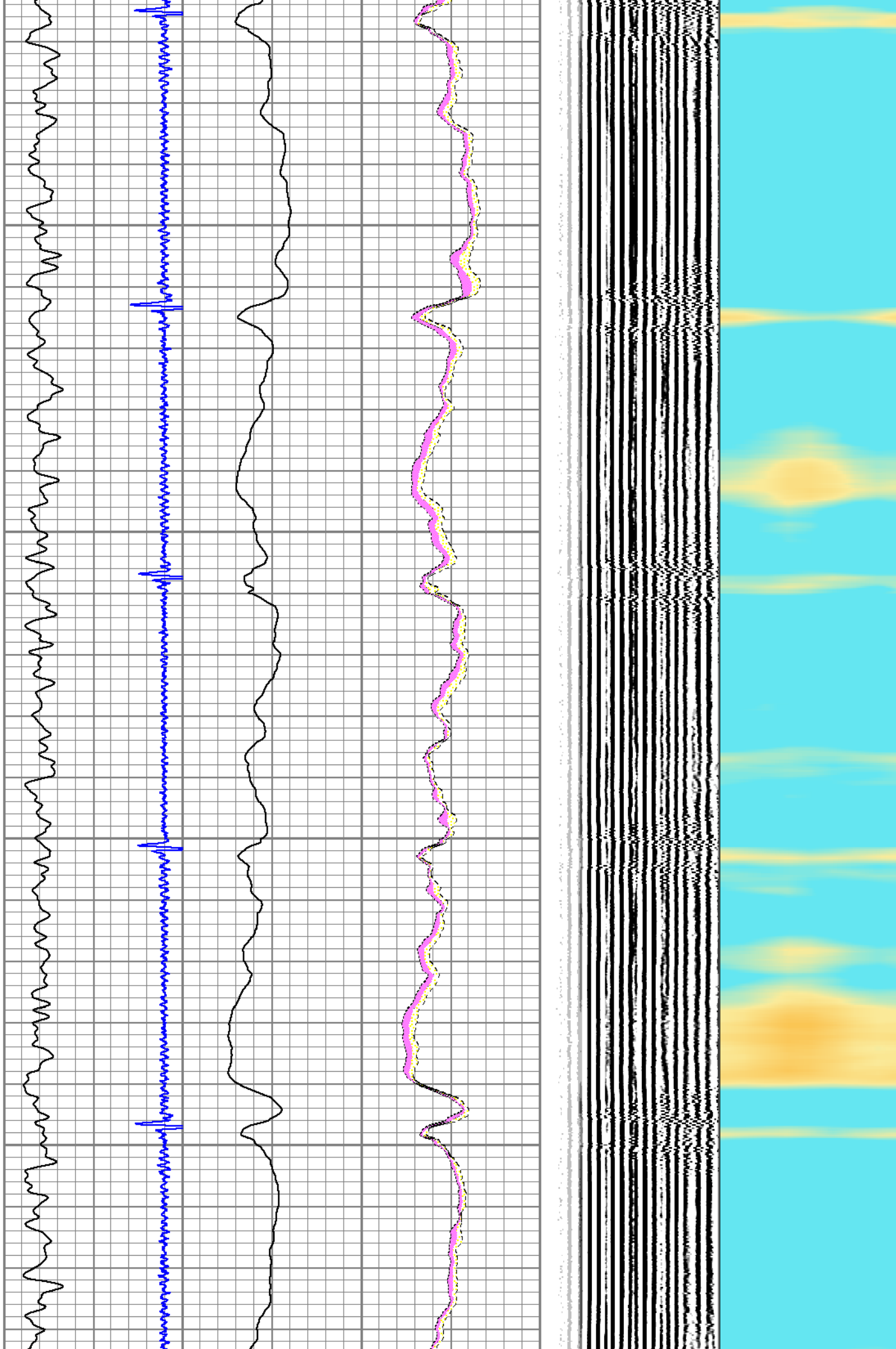
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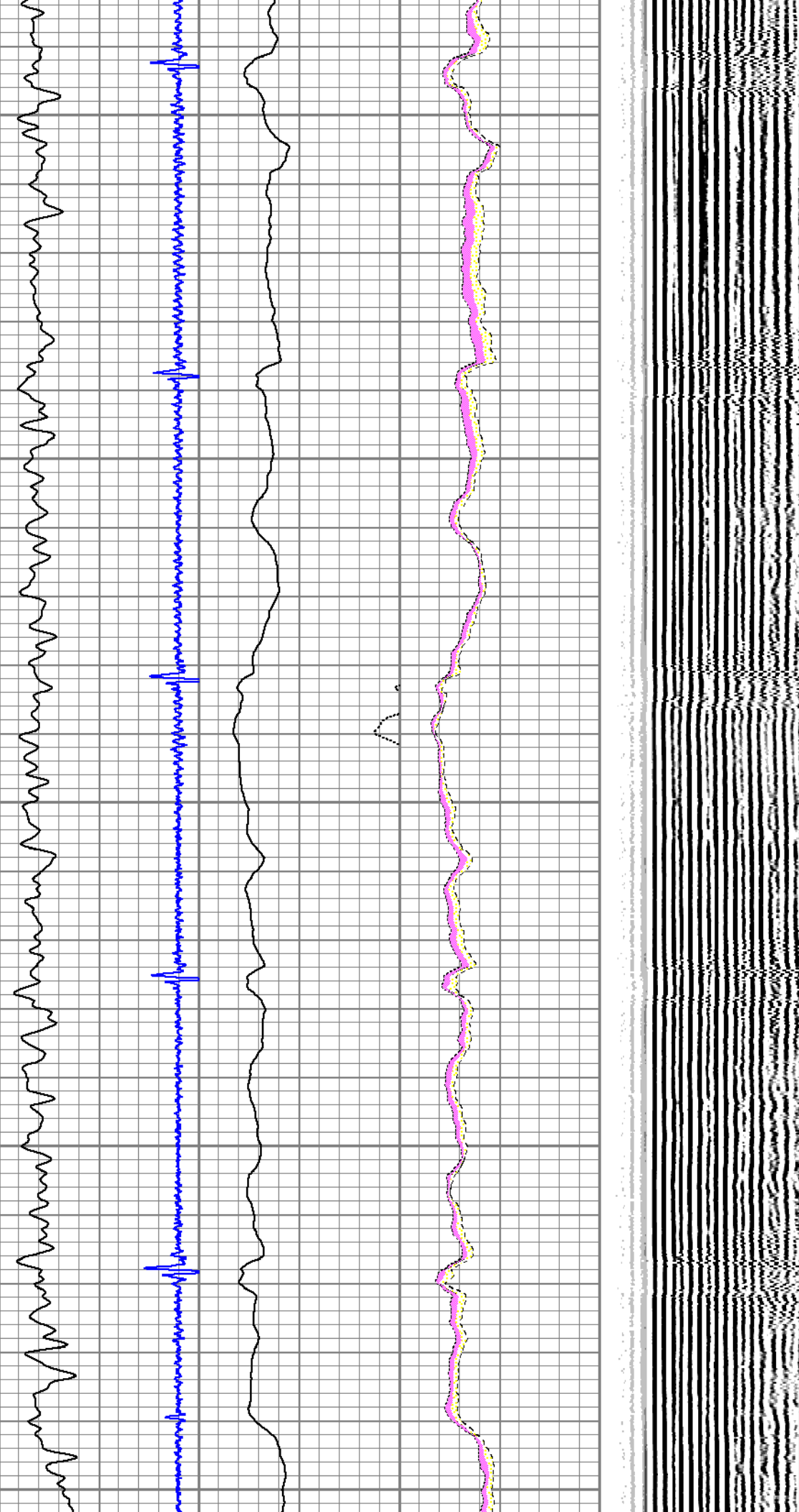
400



500

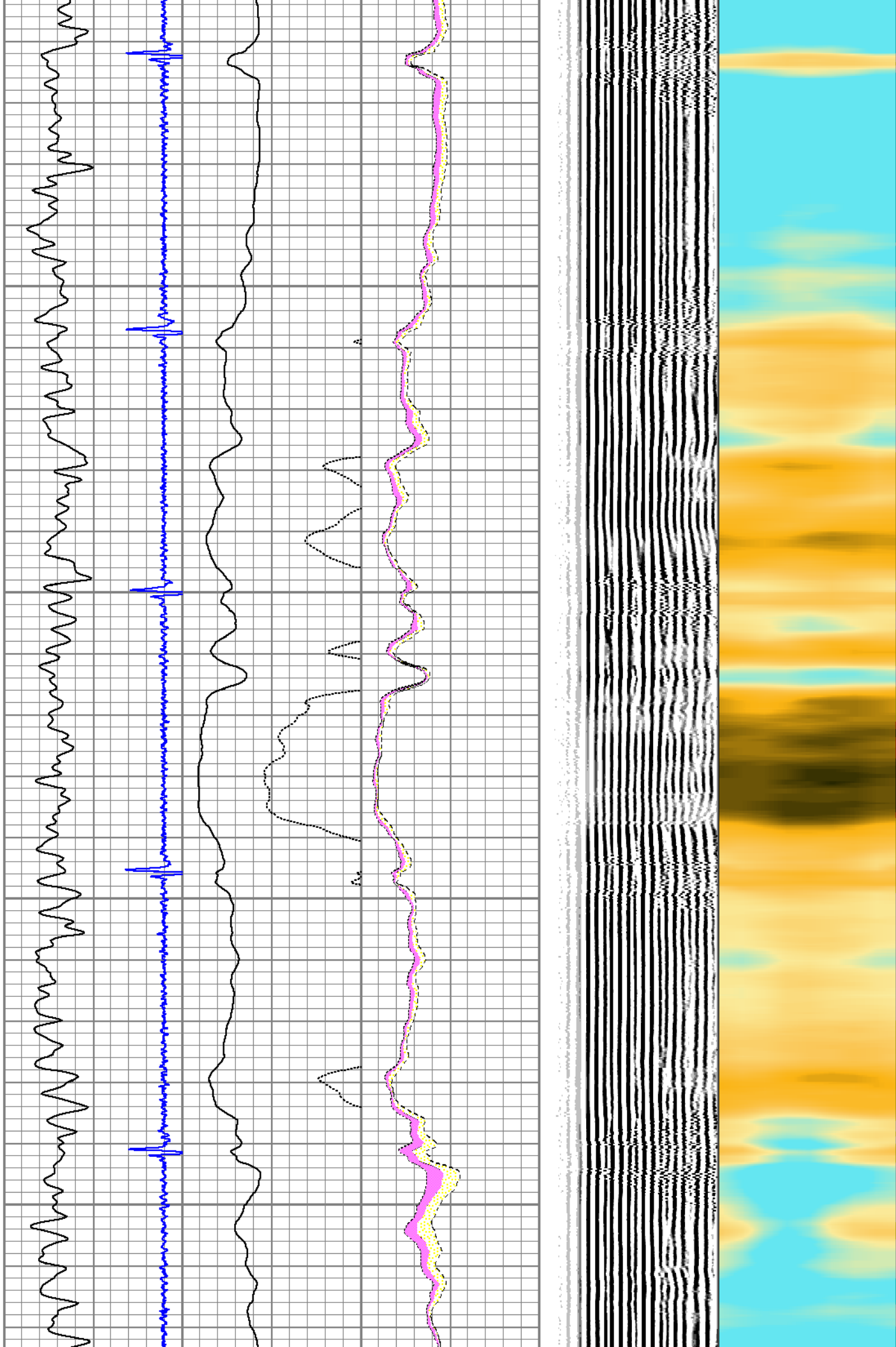
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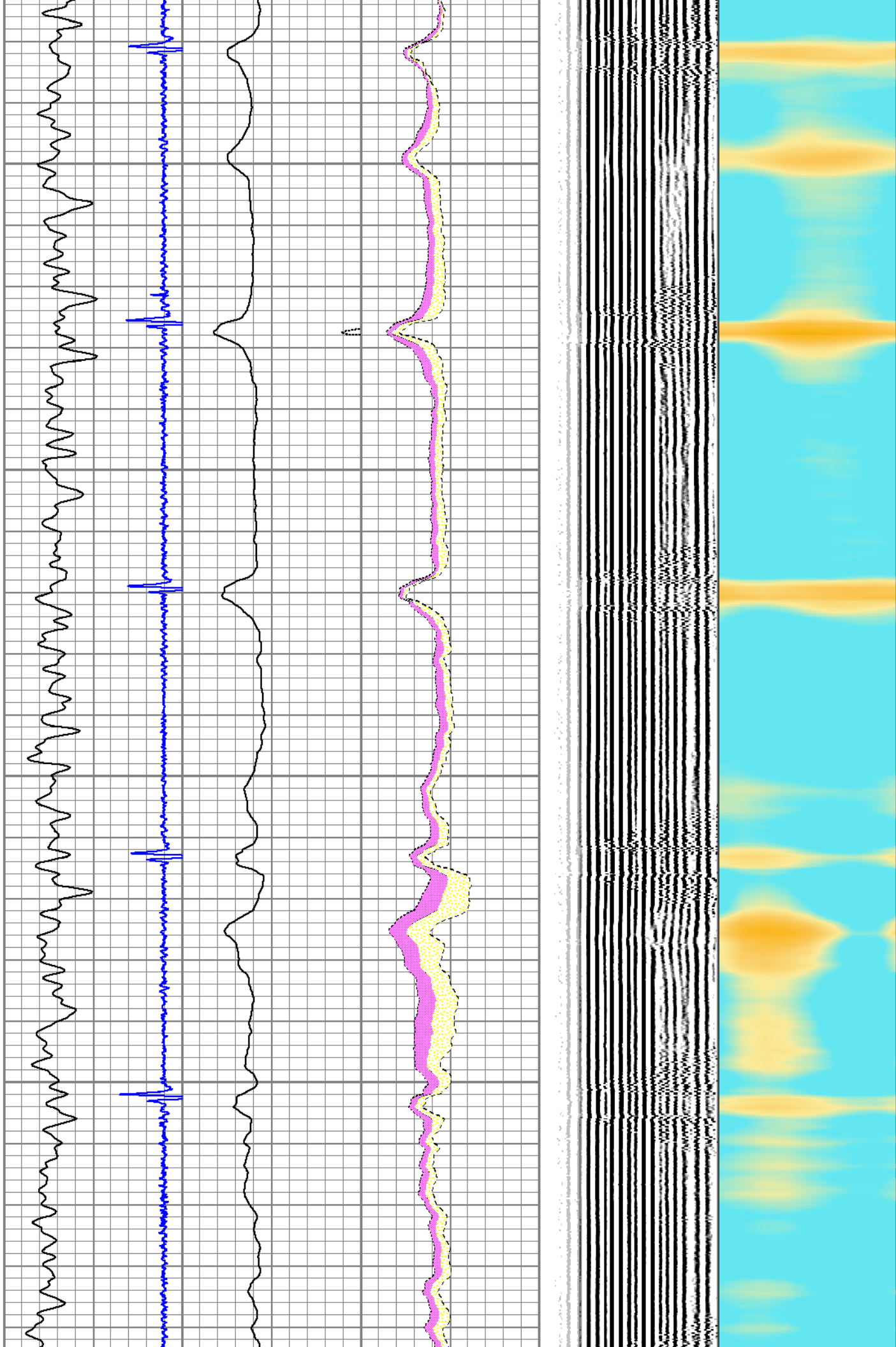
900

1000



1100

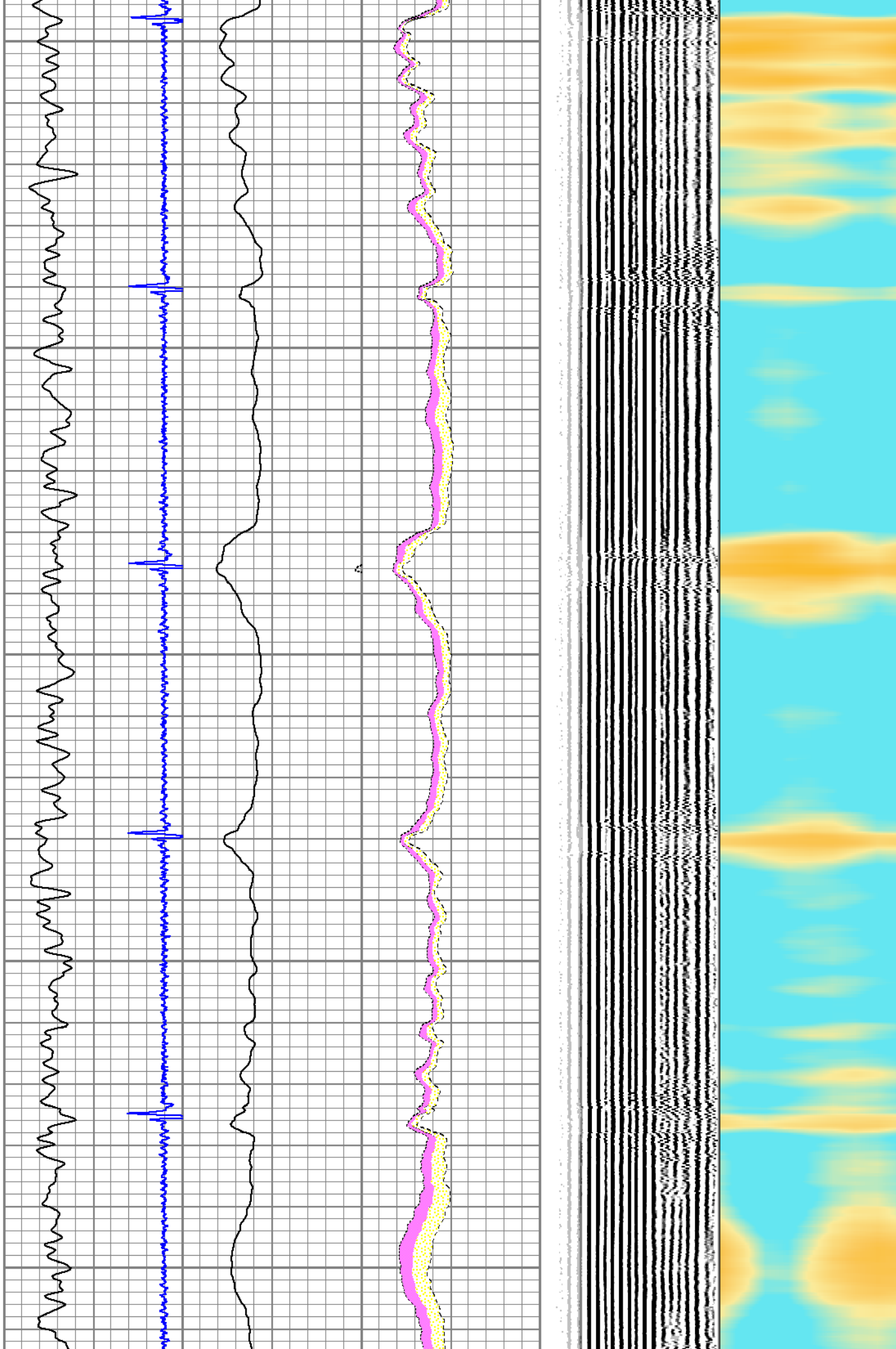
1200



1300

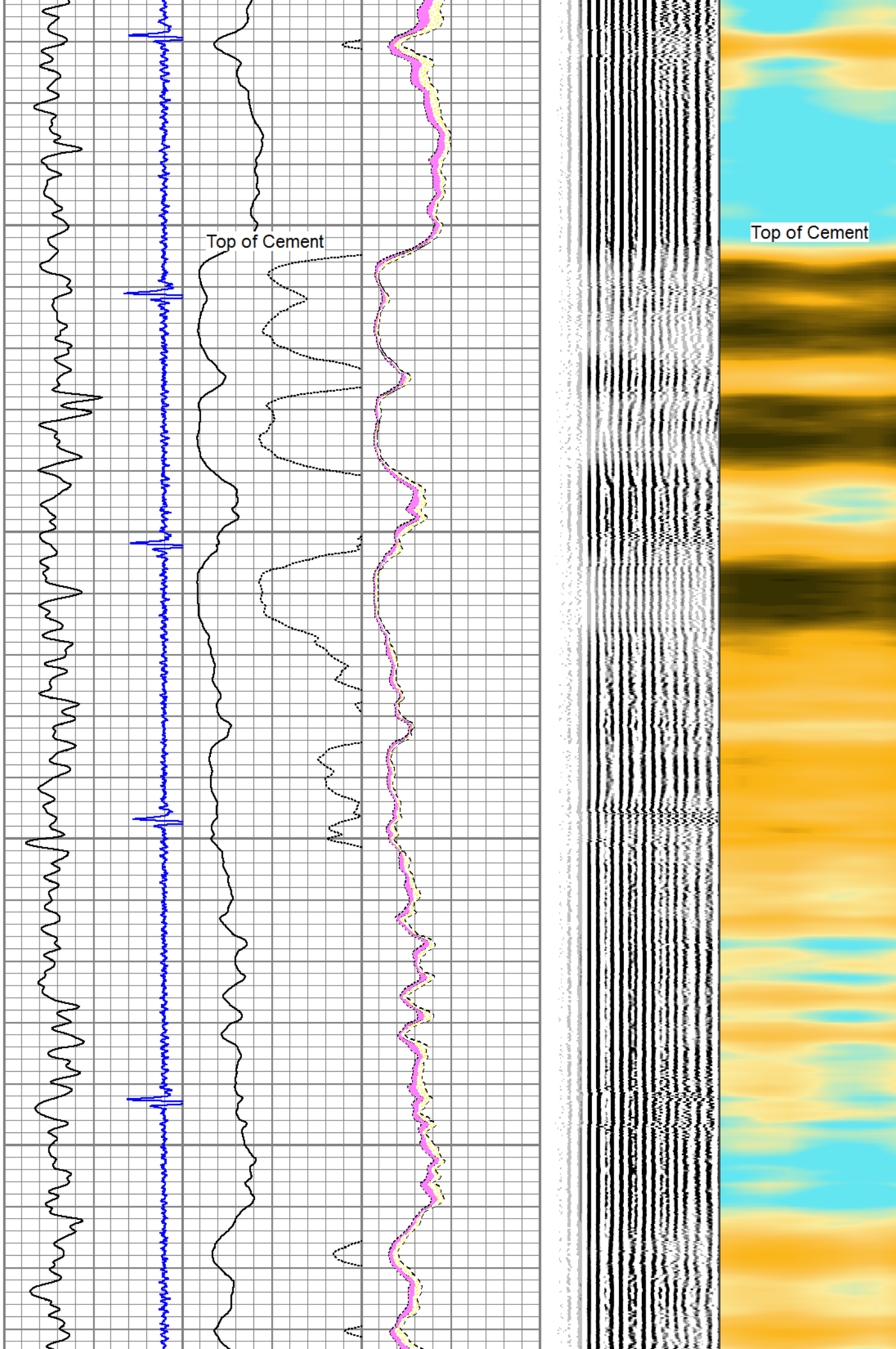
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1500



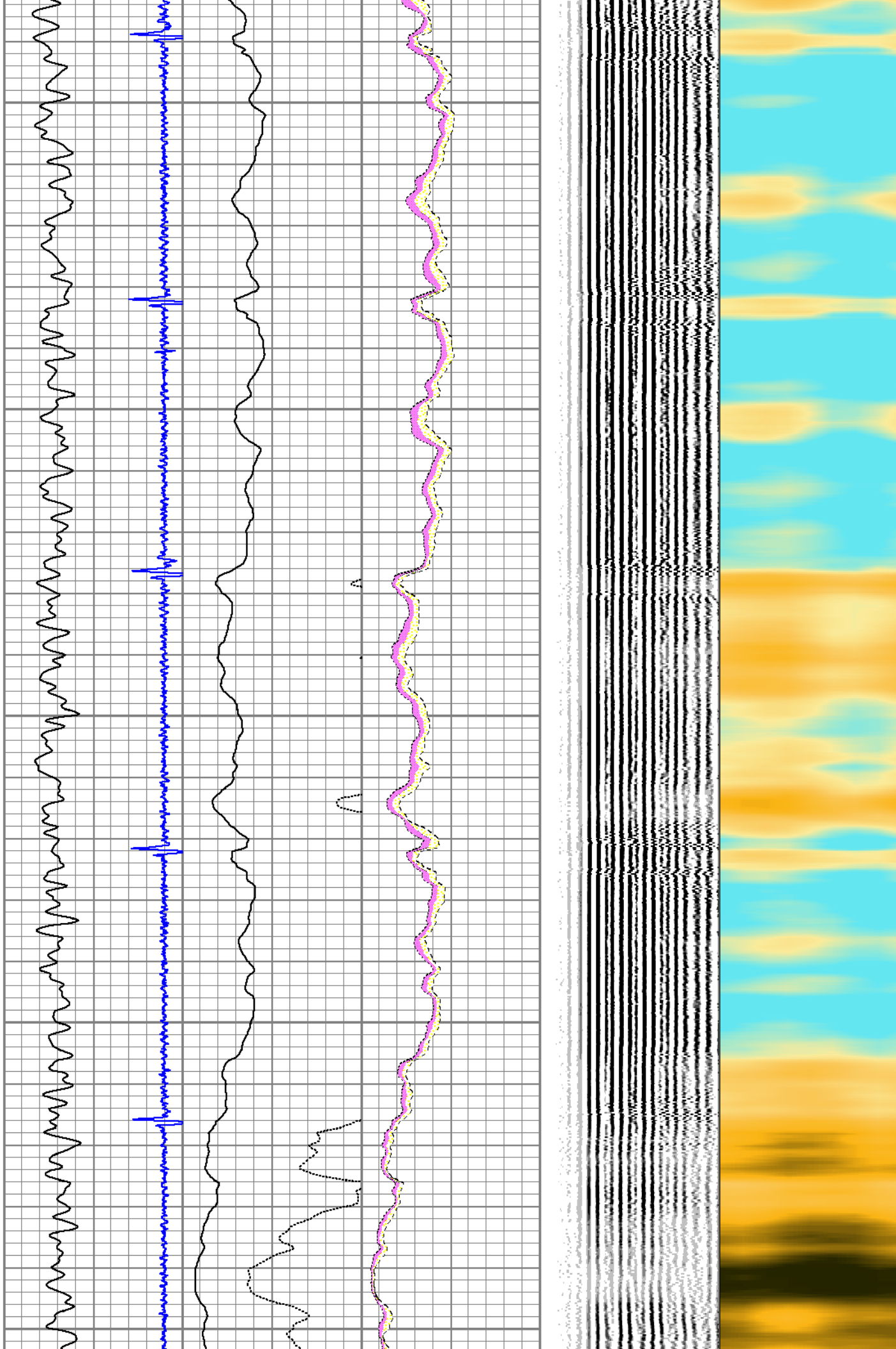
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1700



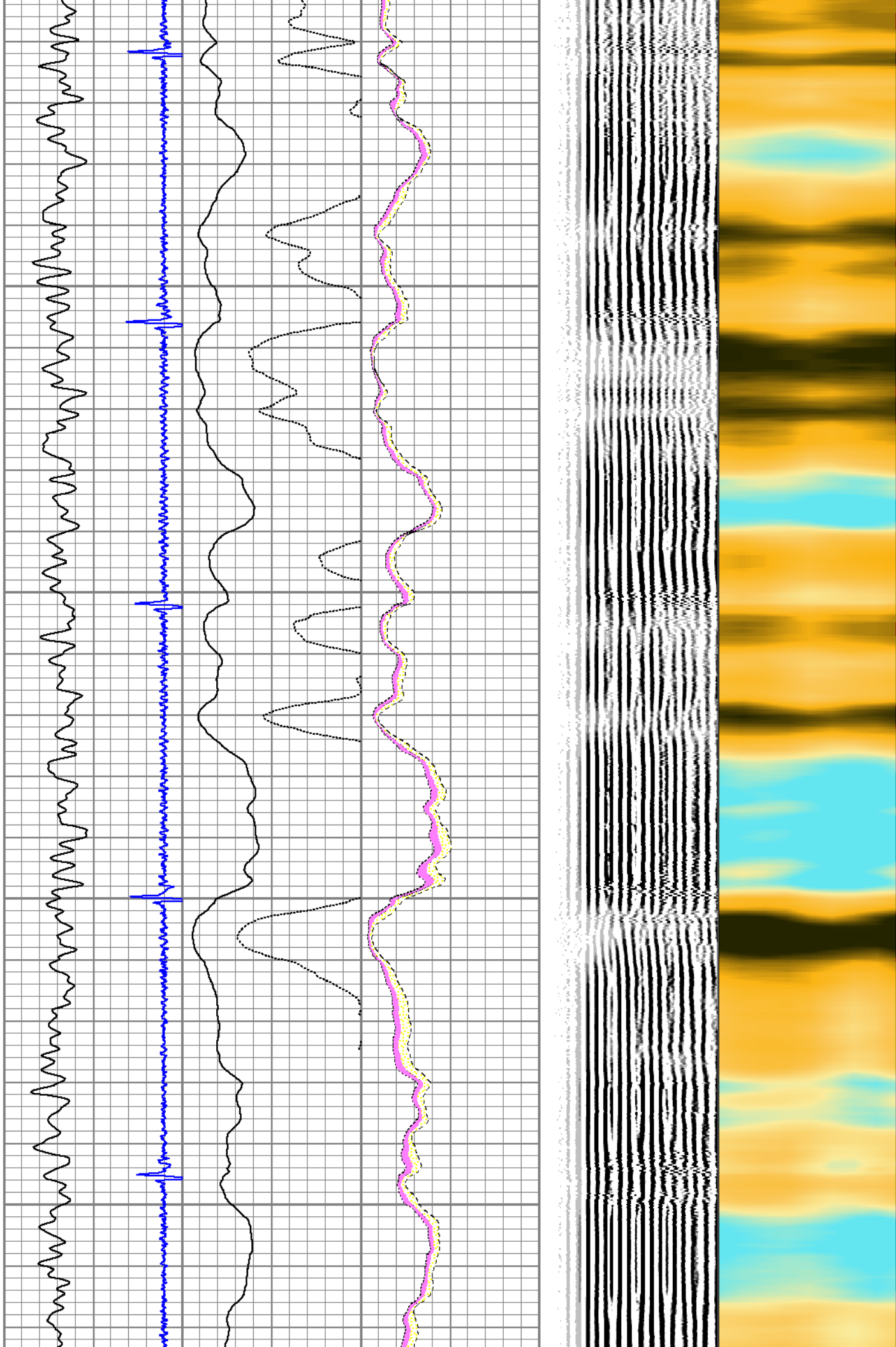
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1900



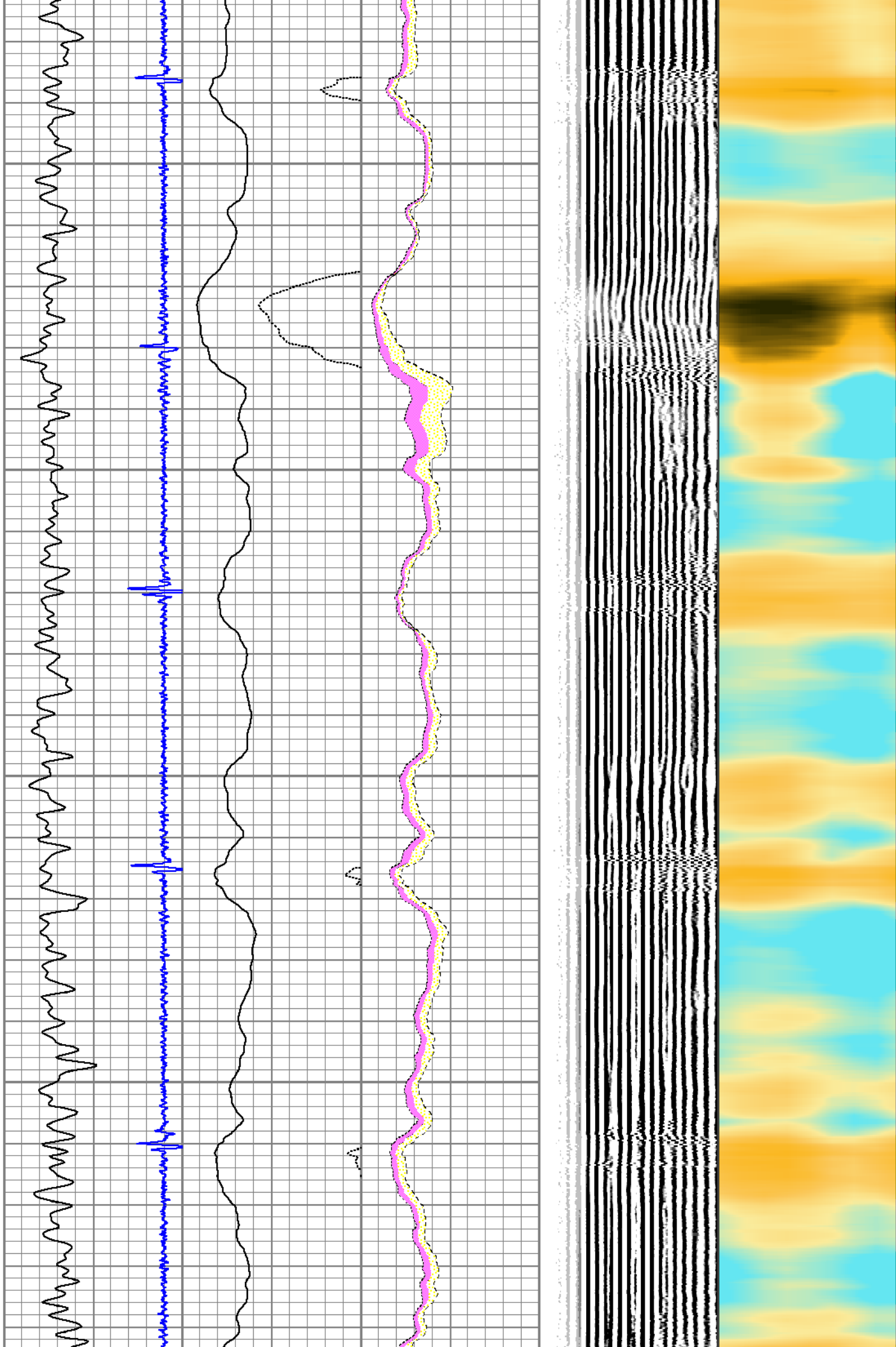
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2200

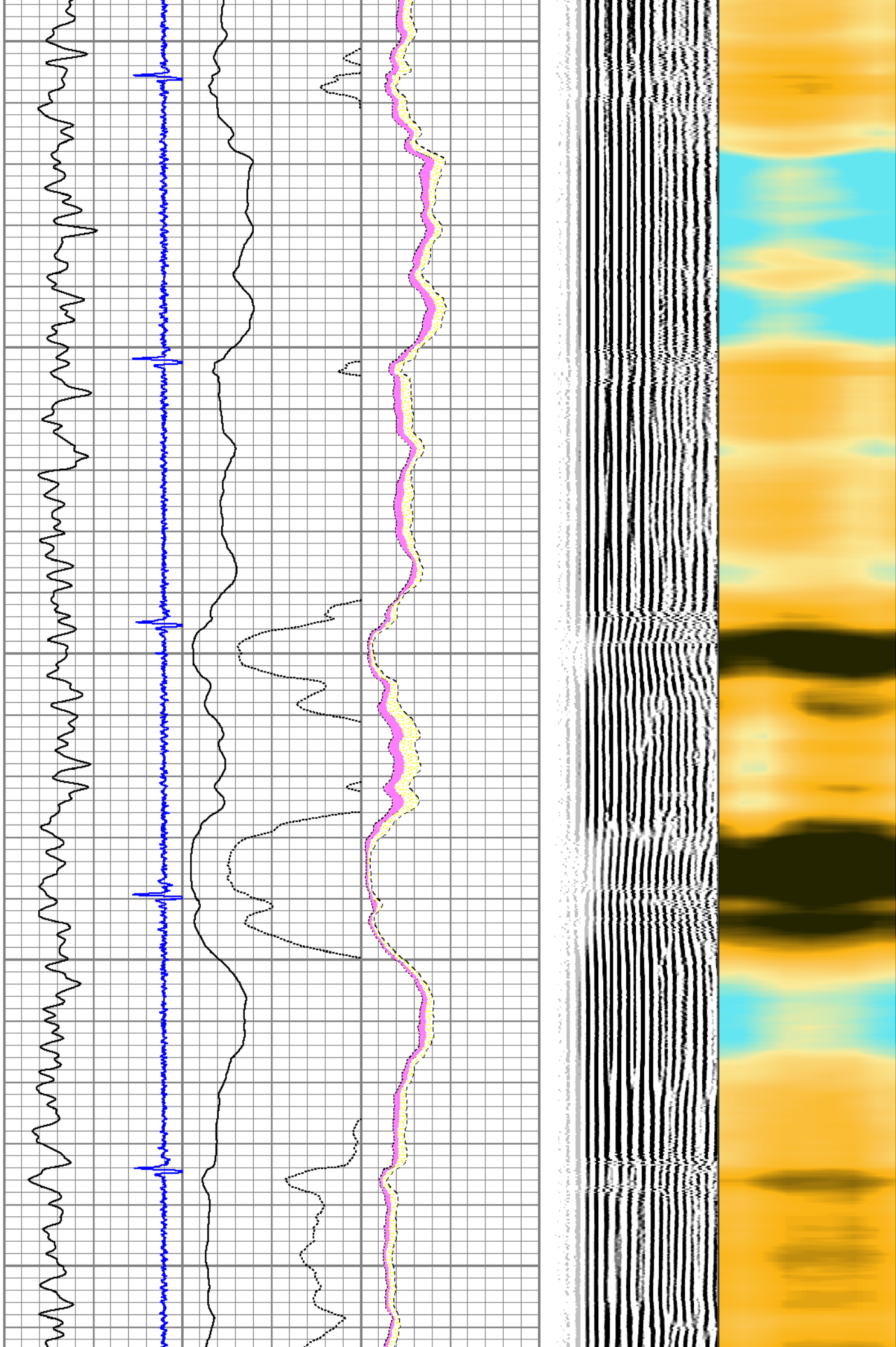
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2400

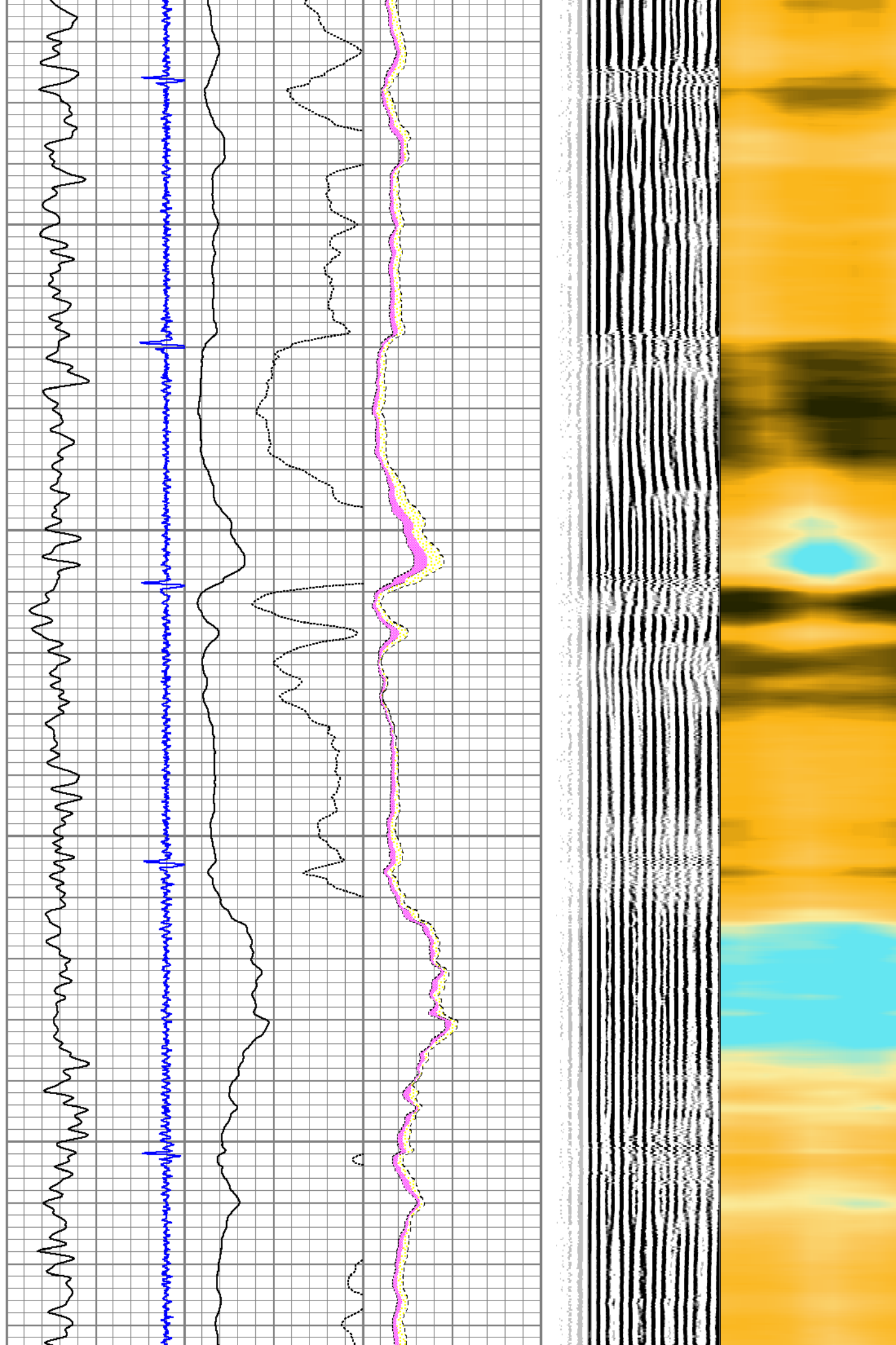
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2600



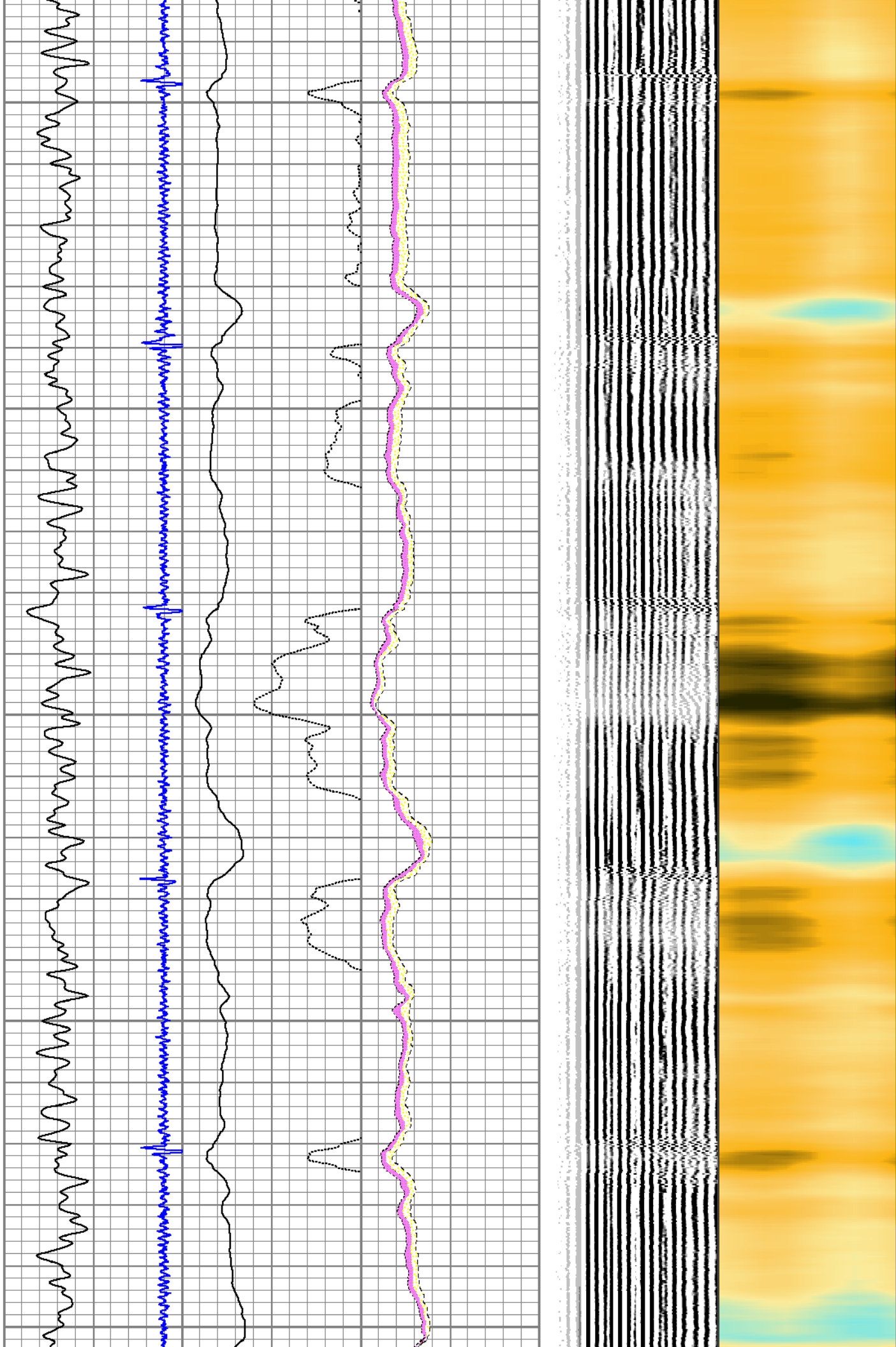
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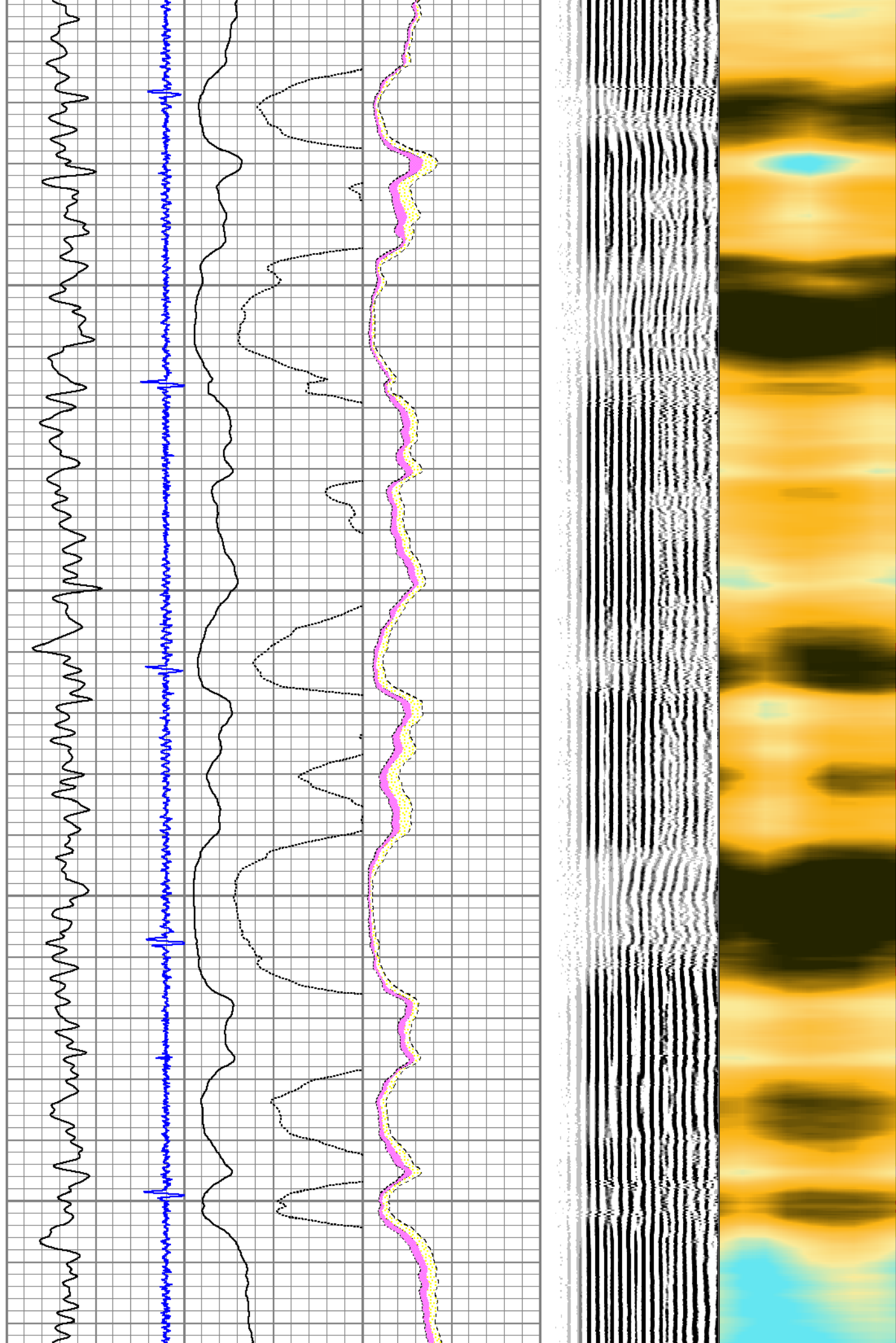


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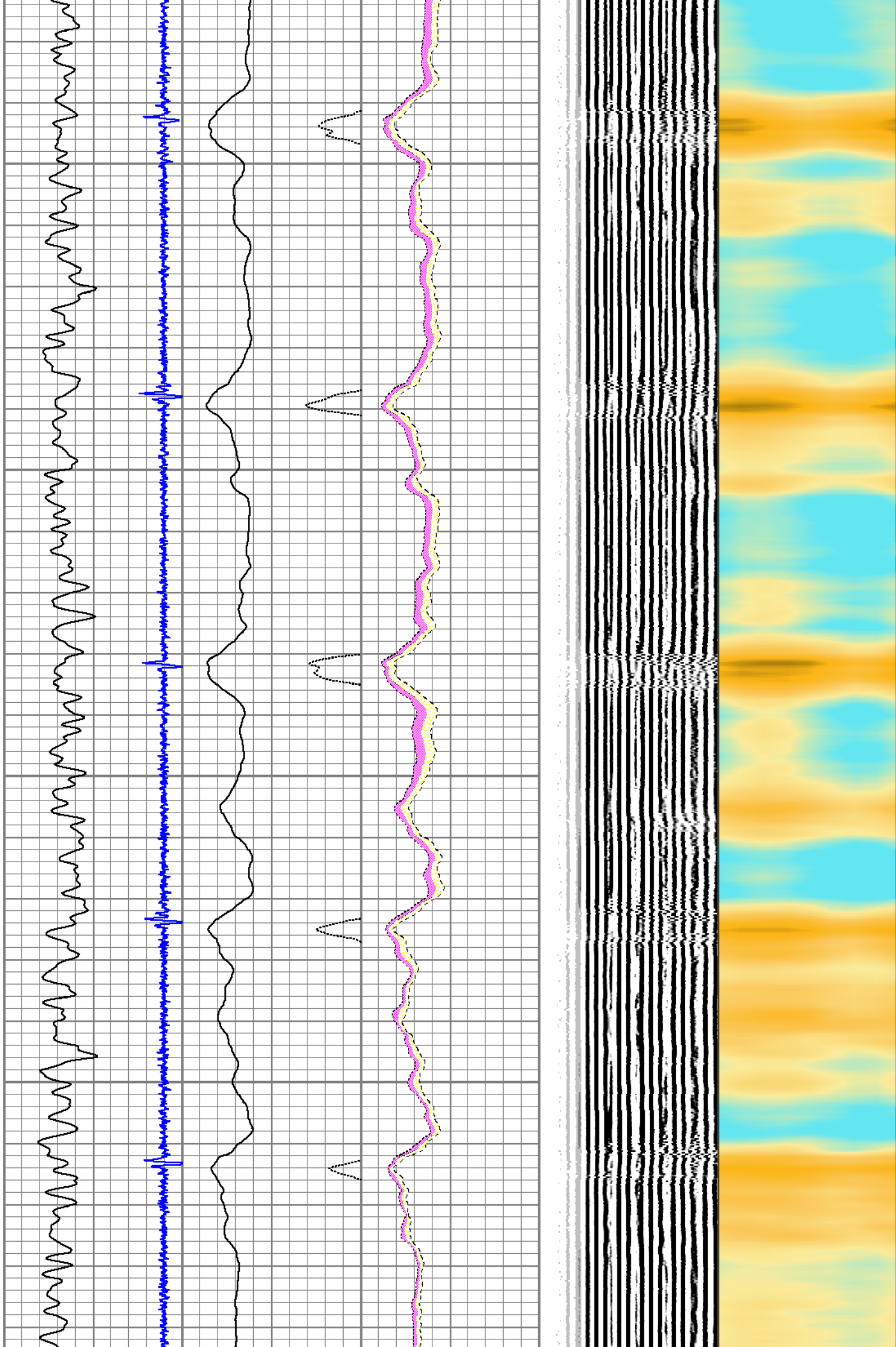


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3300

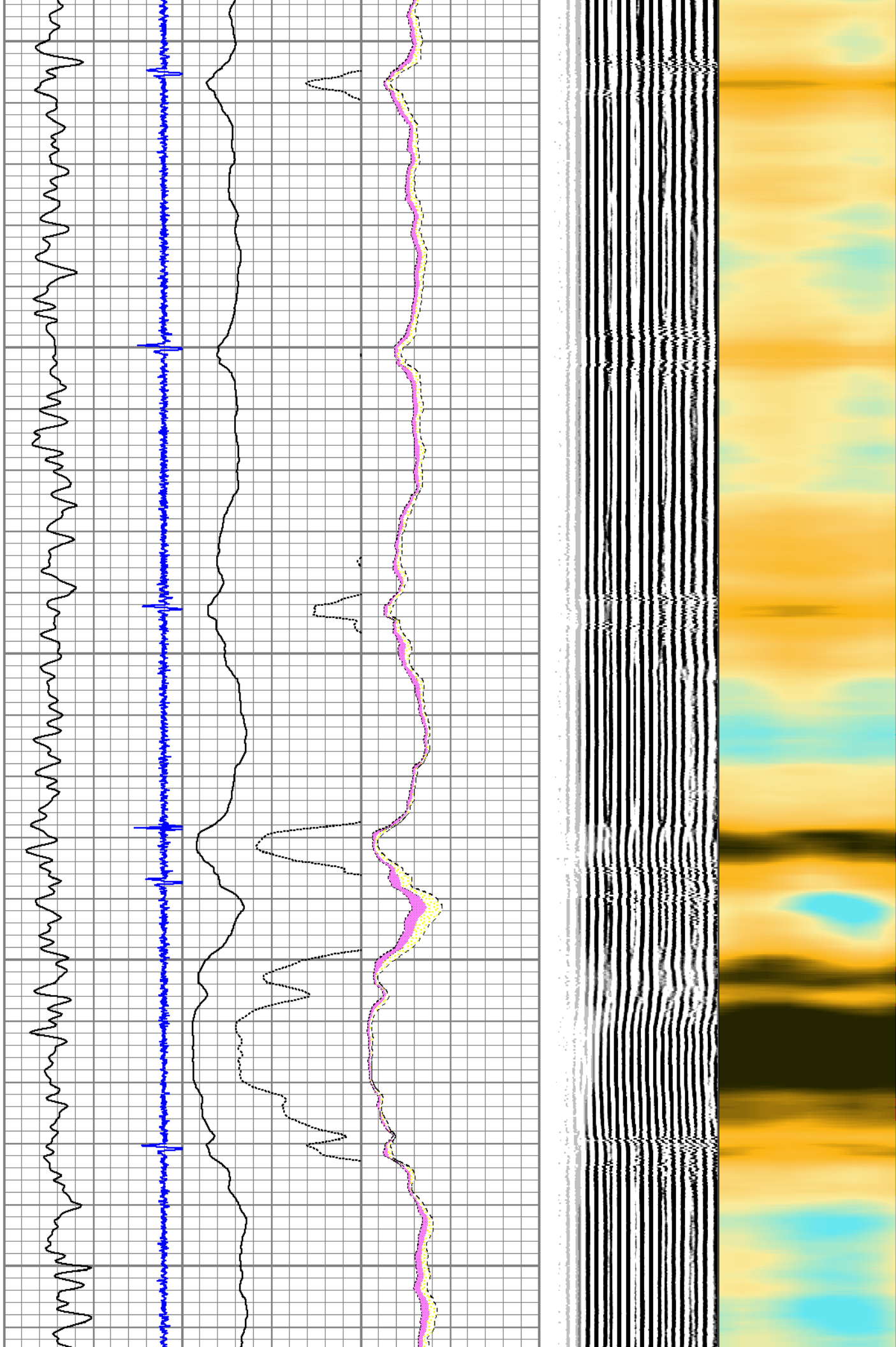
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3500

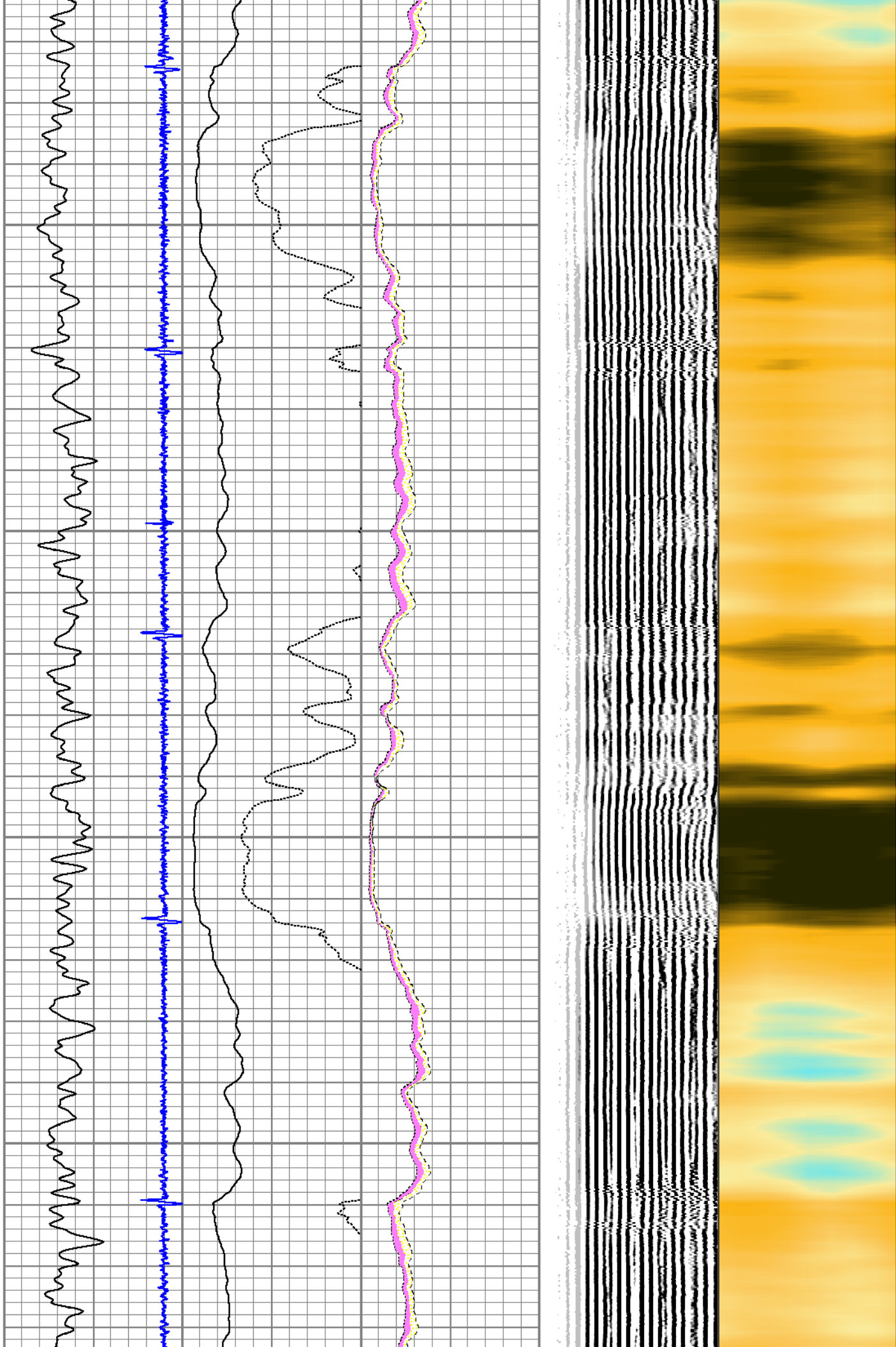
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3700



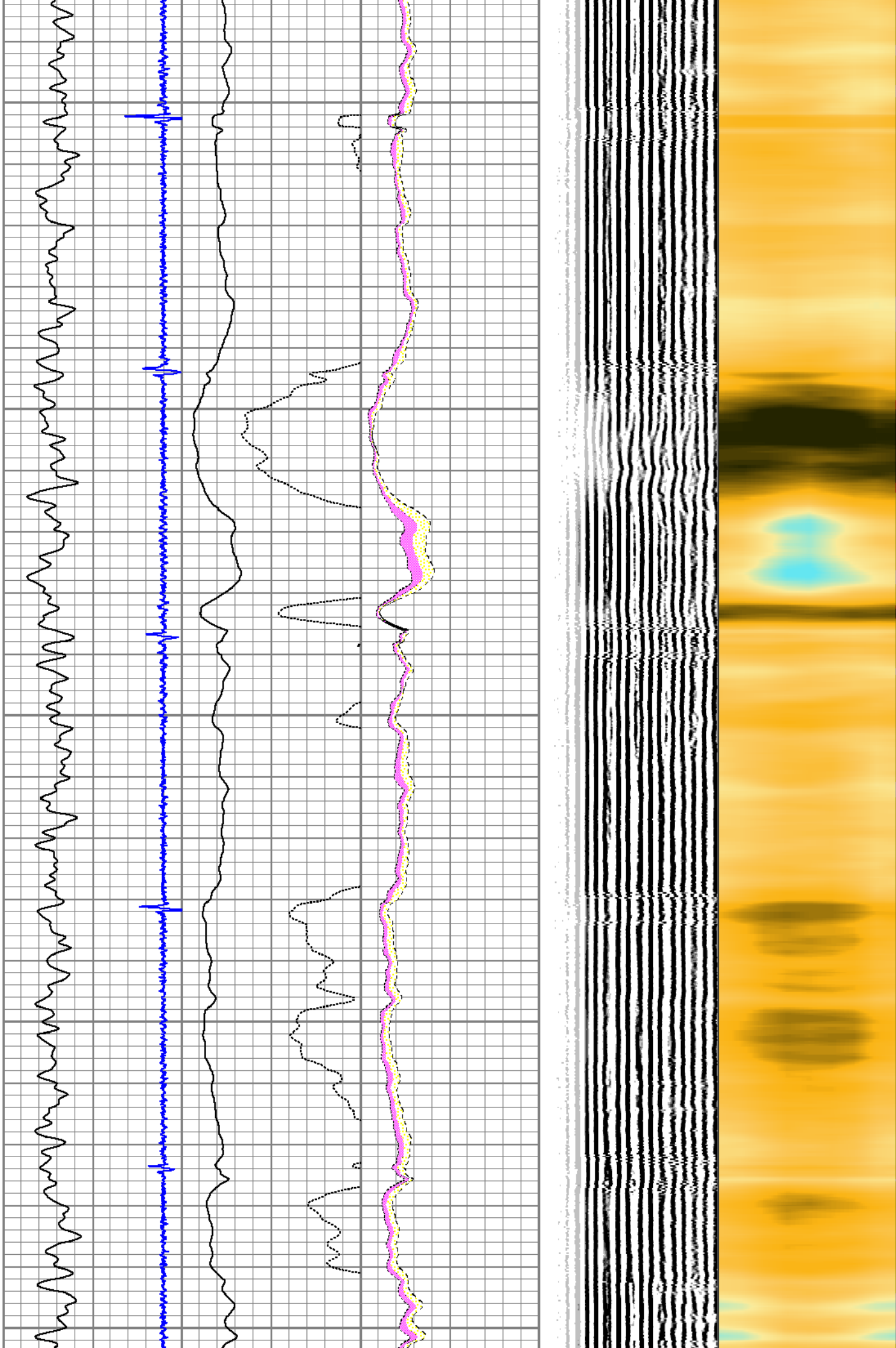
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3900



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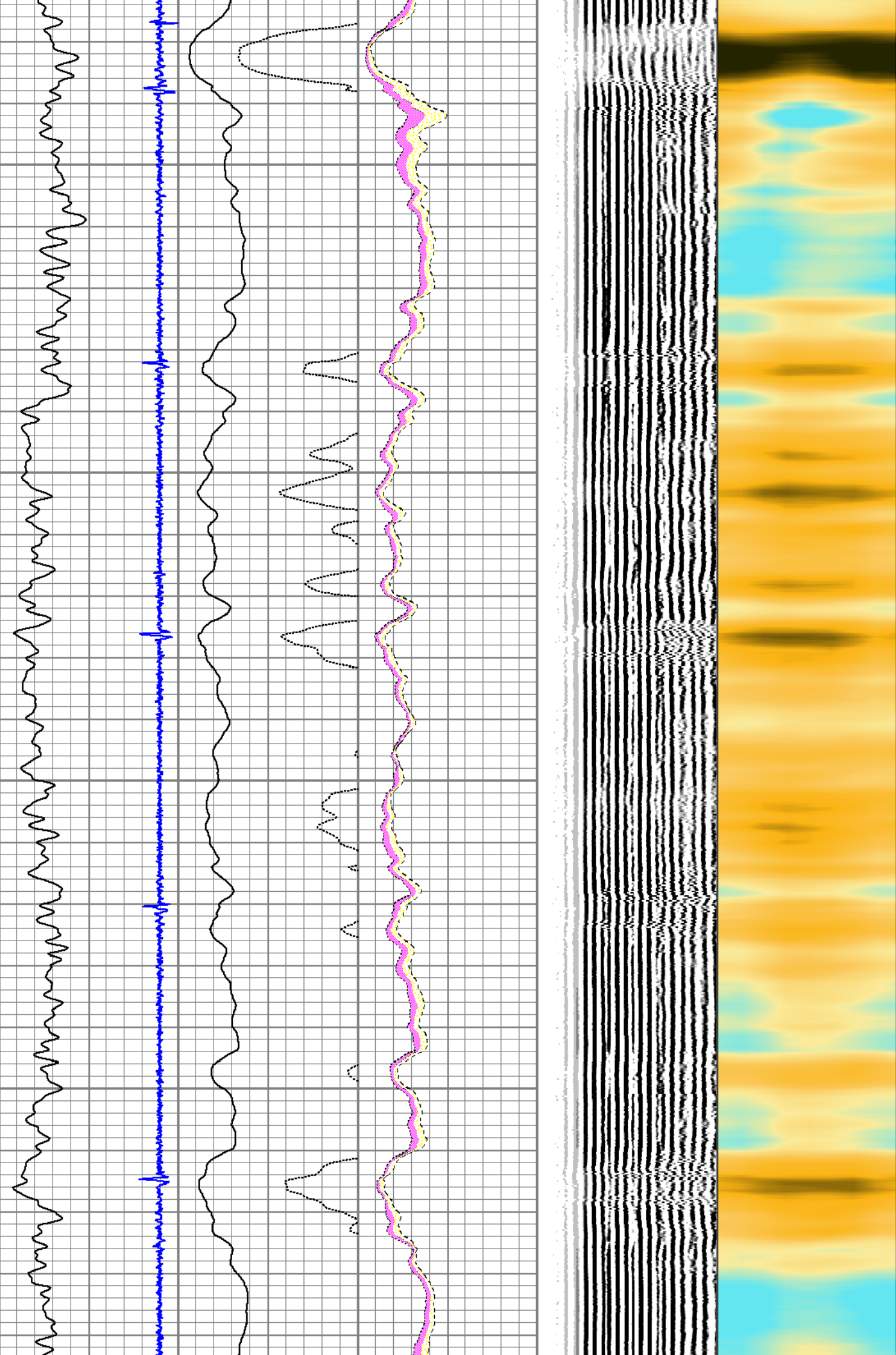
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4300

4400

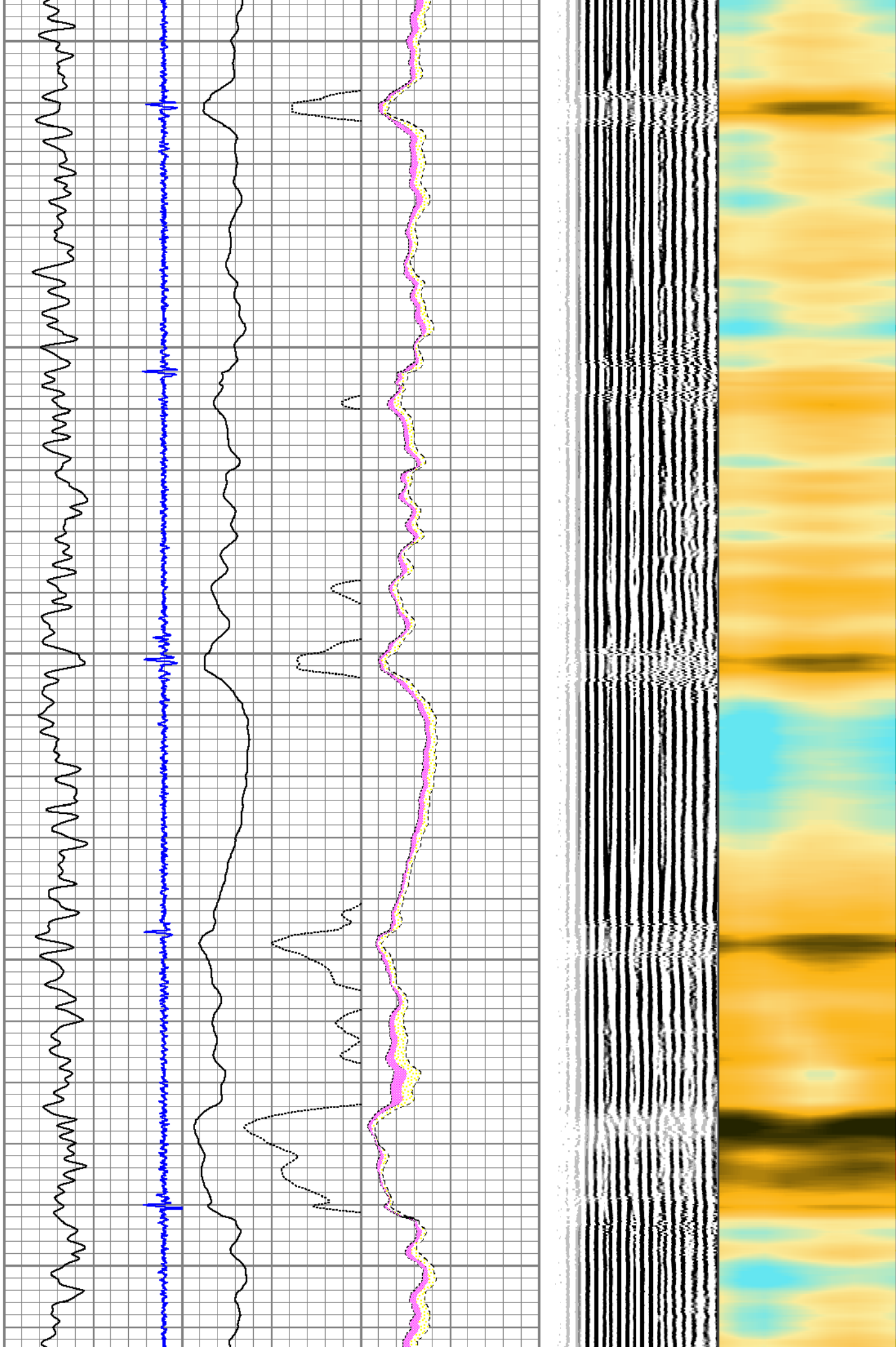
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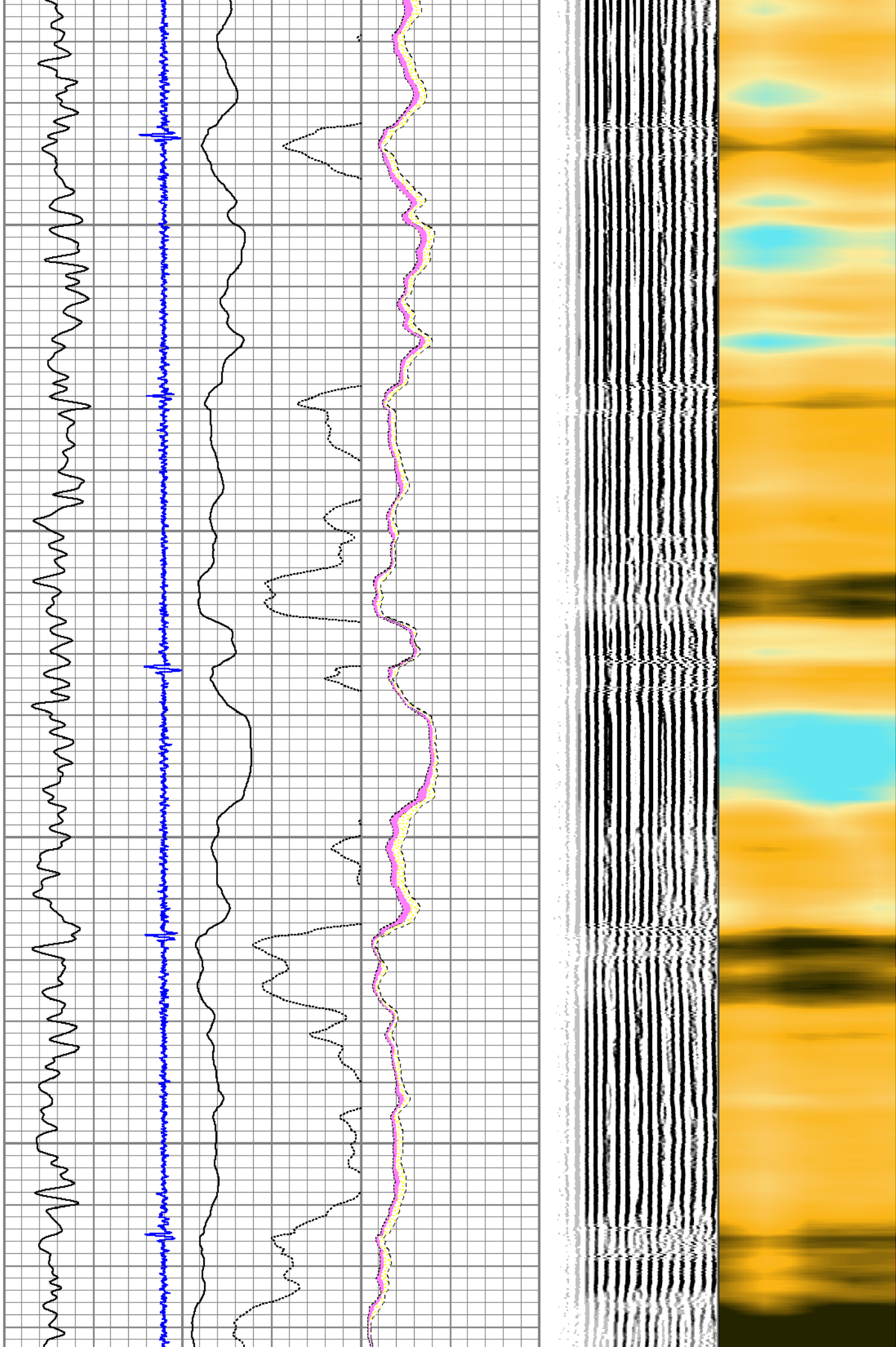
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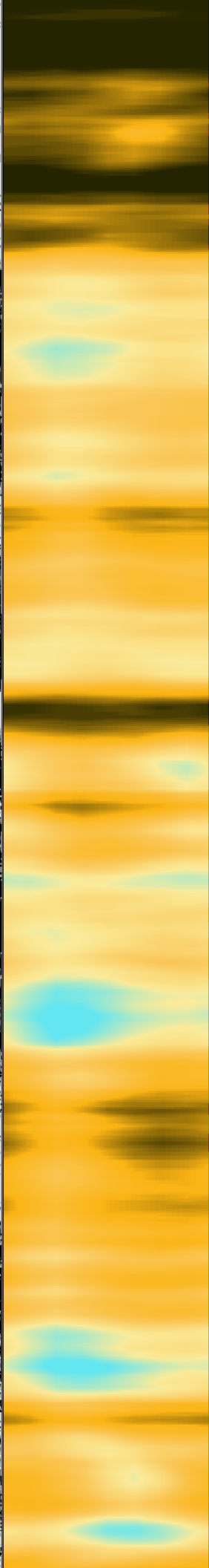
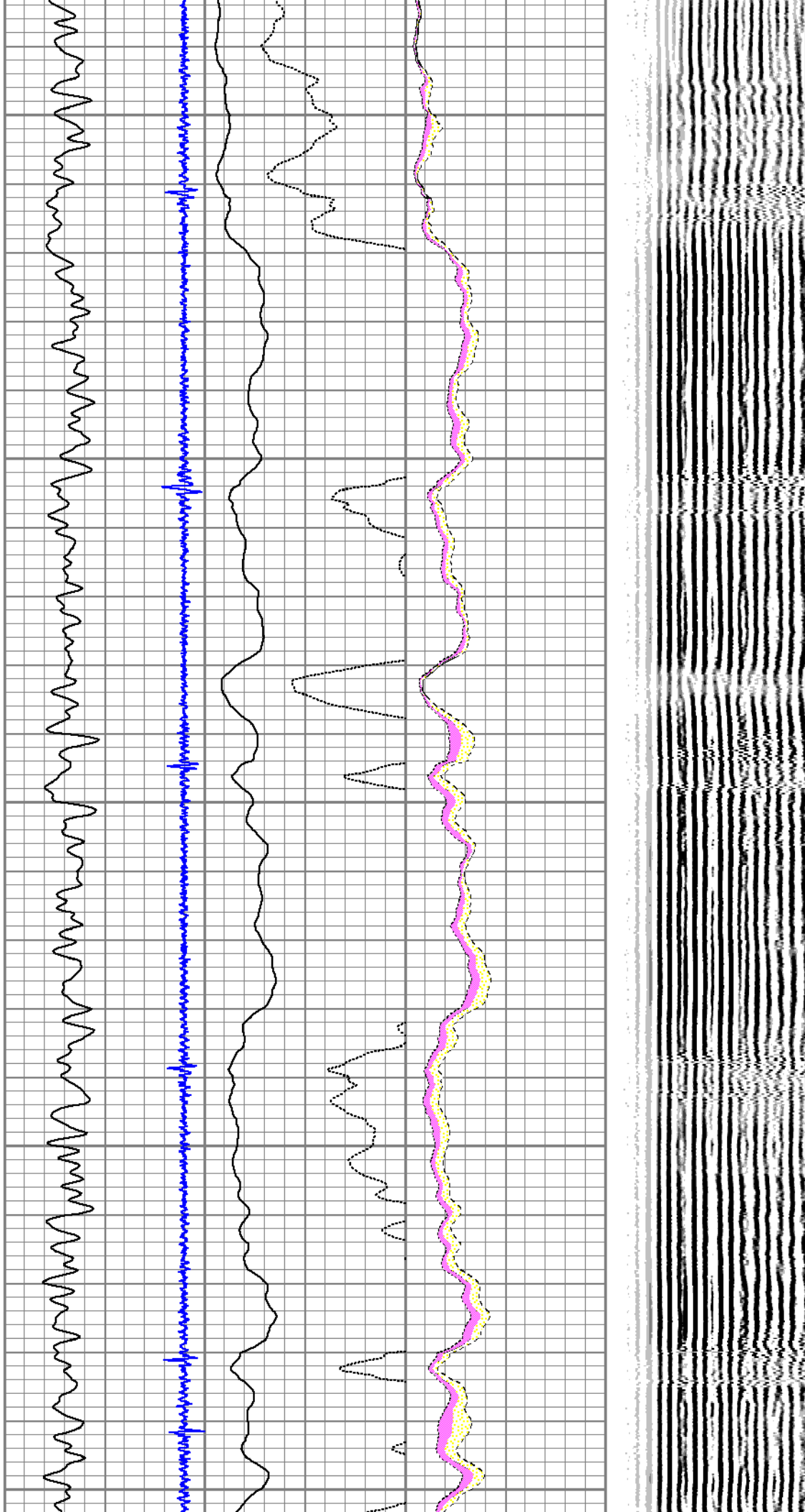
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4900

5000

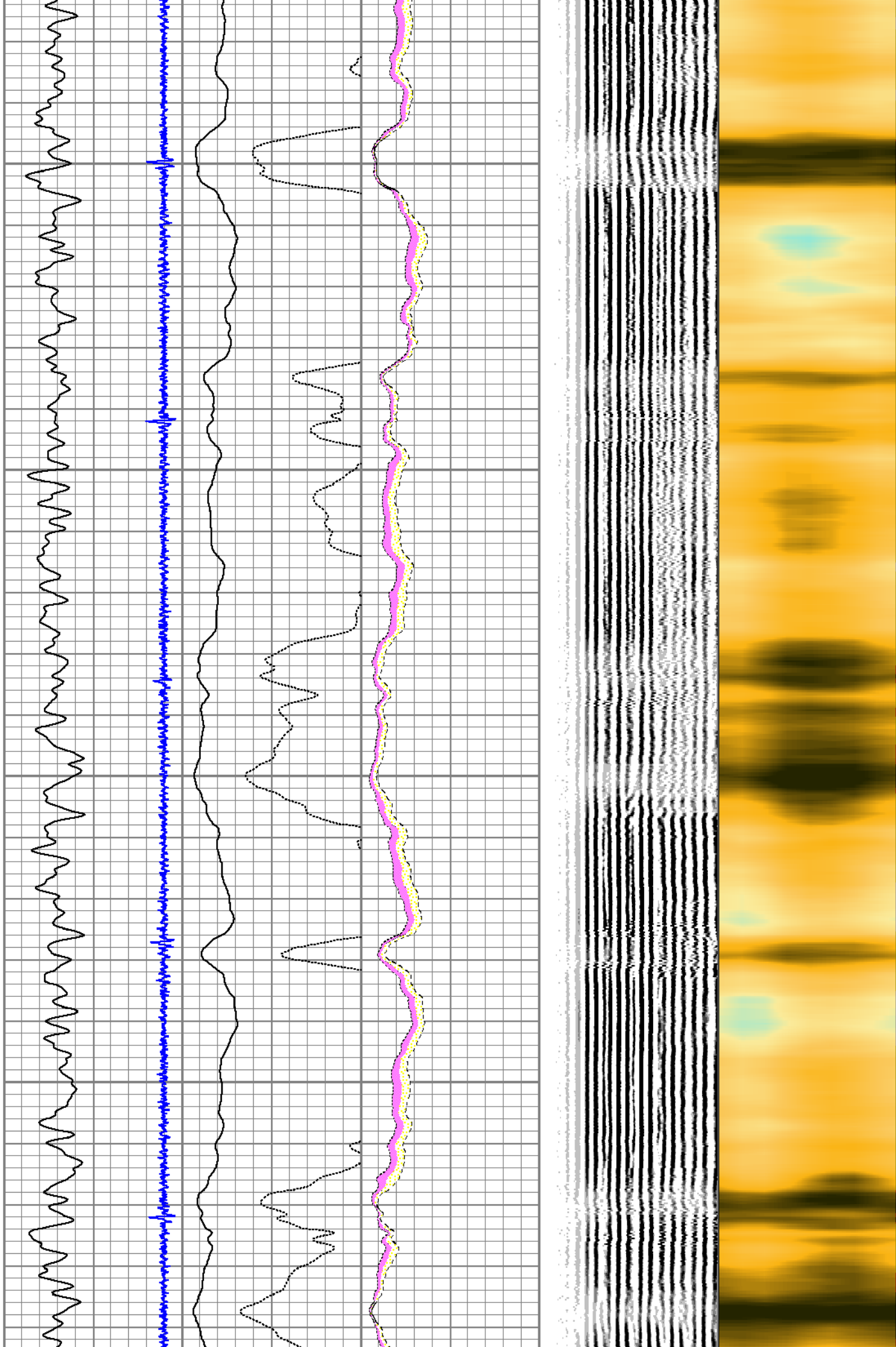


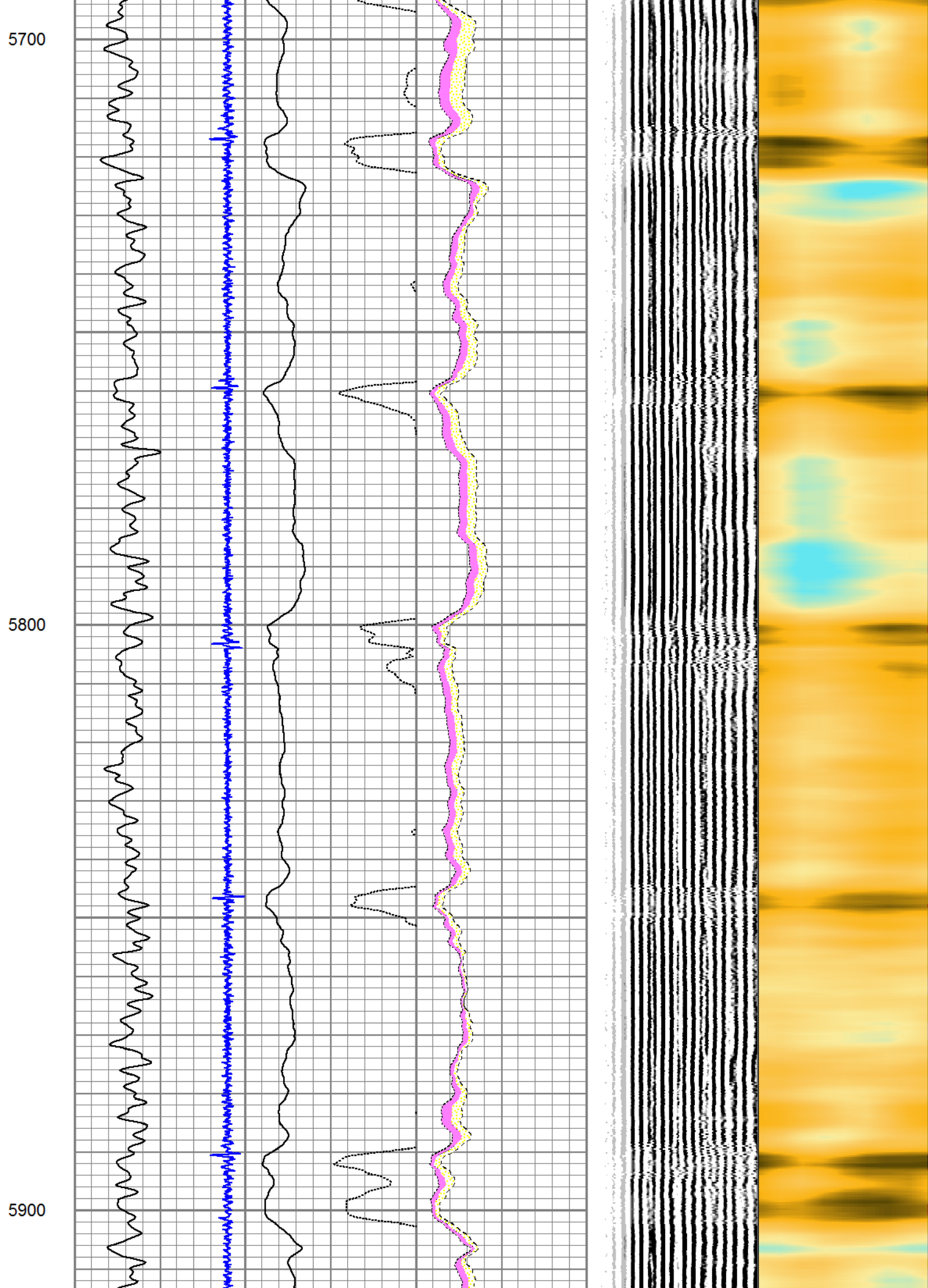


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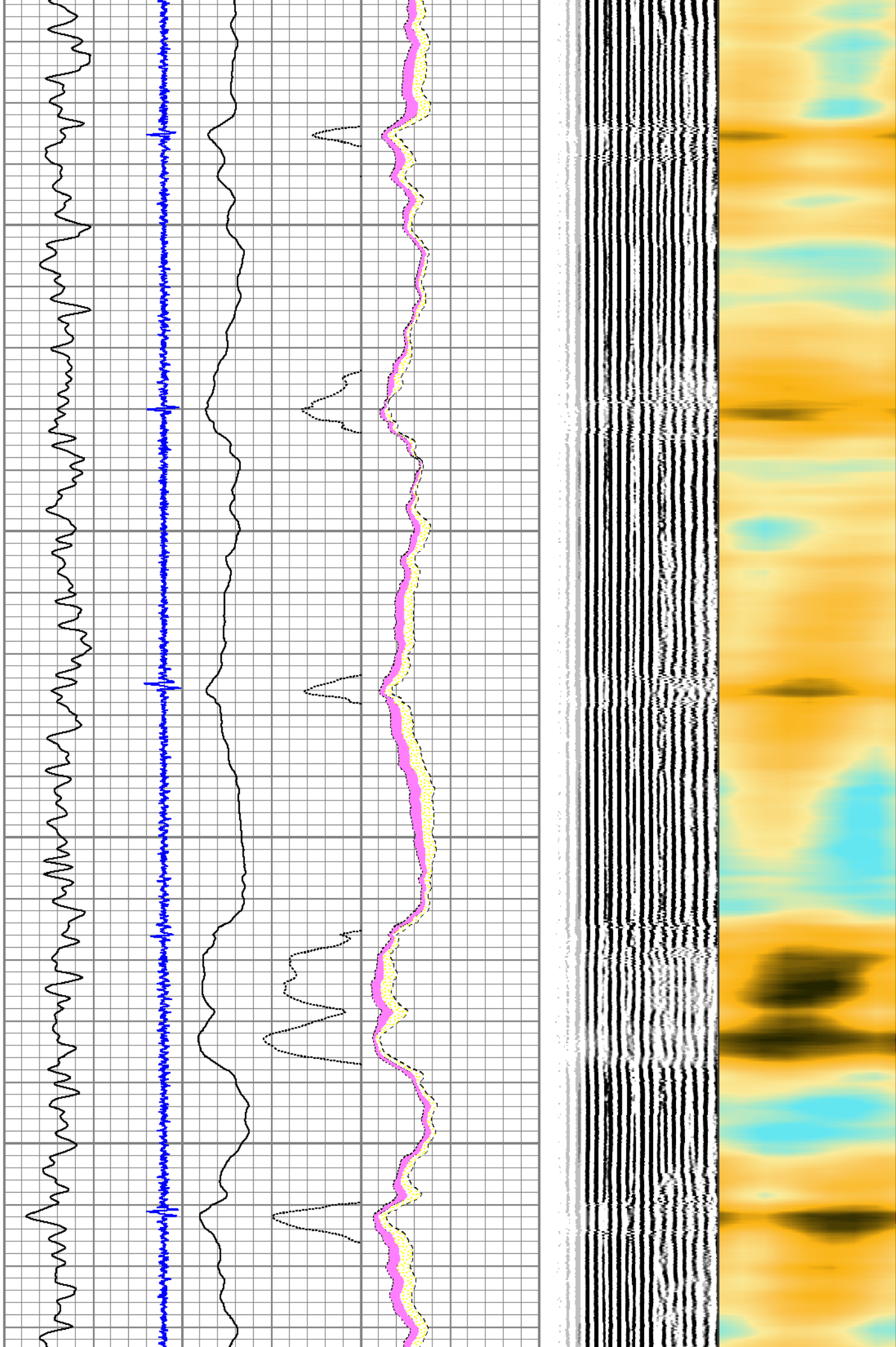
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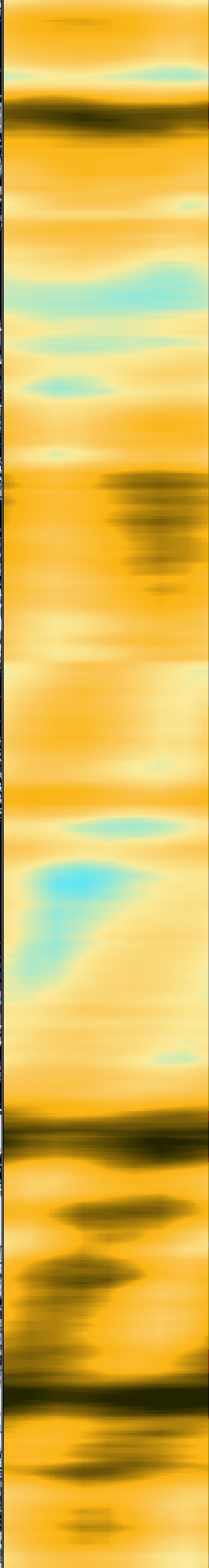
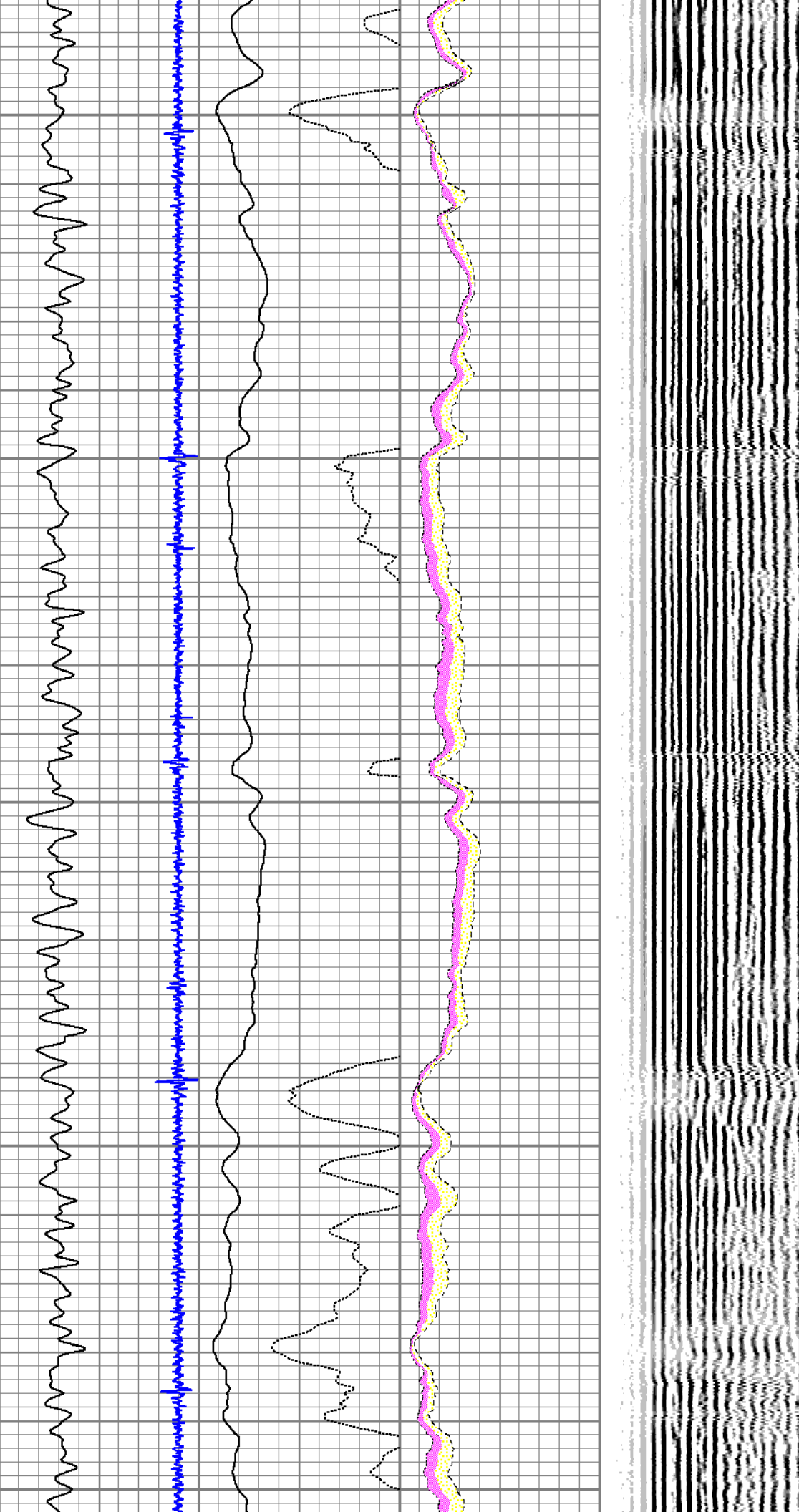




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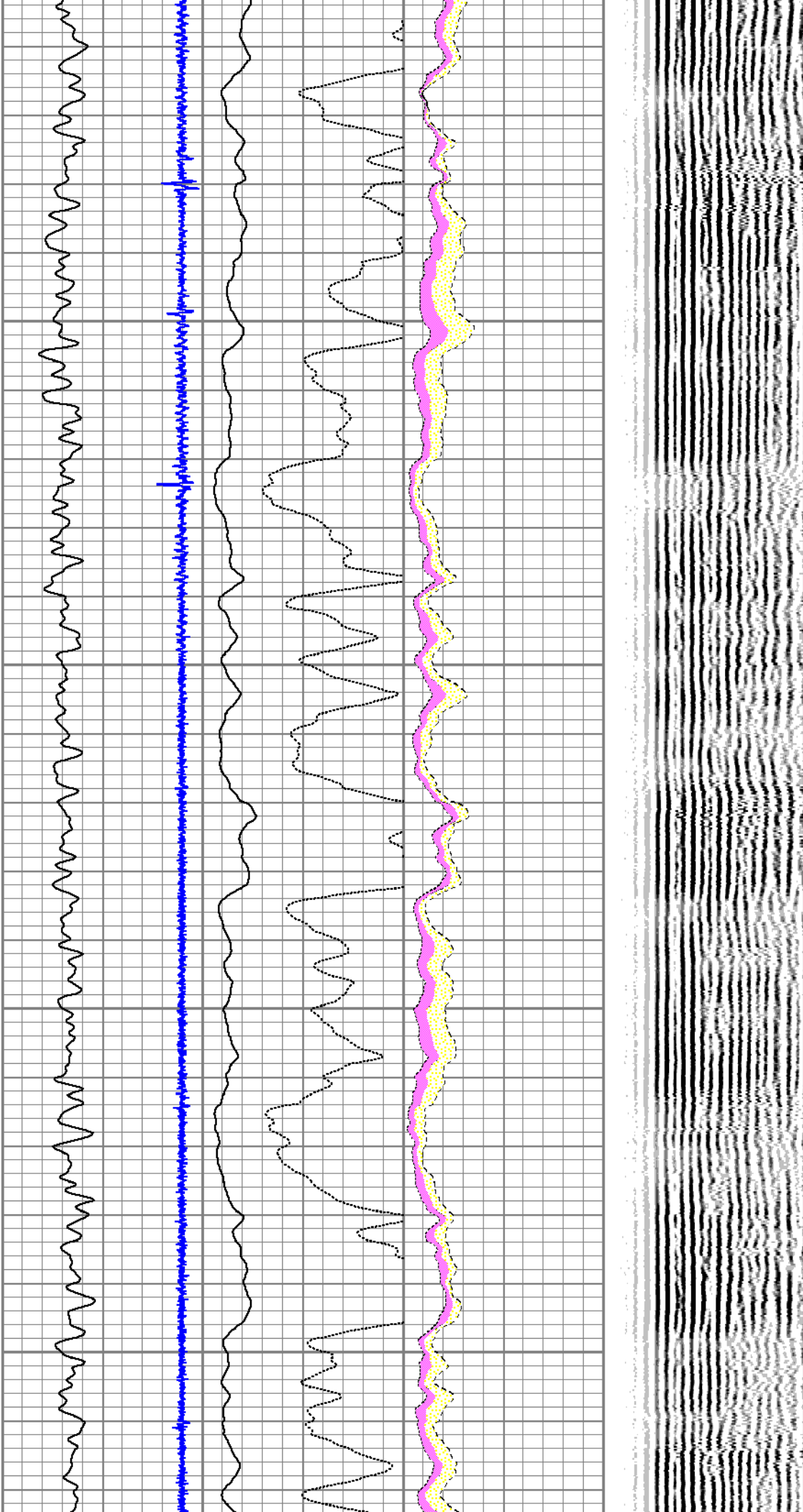
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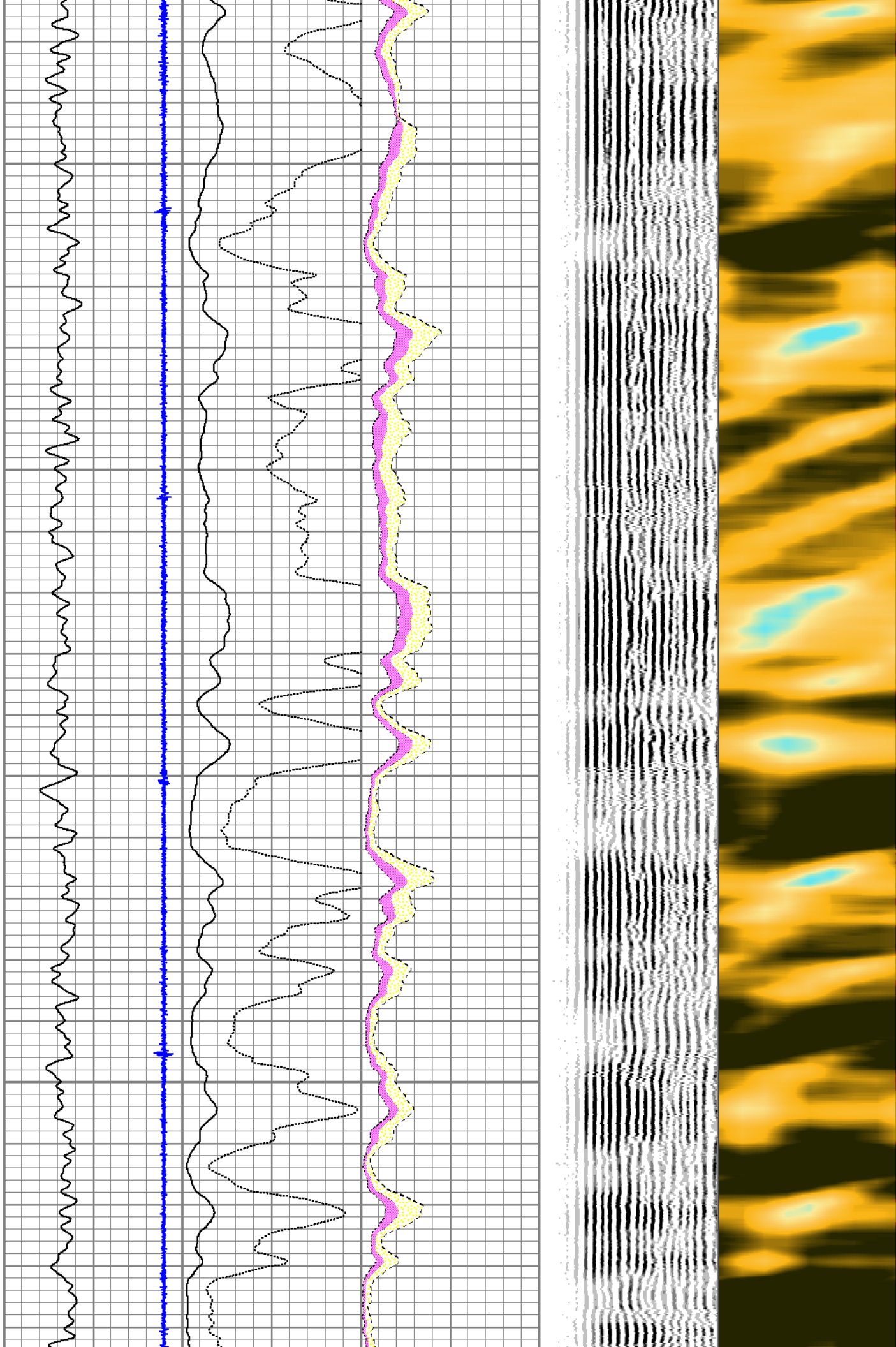
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6500



6600

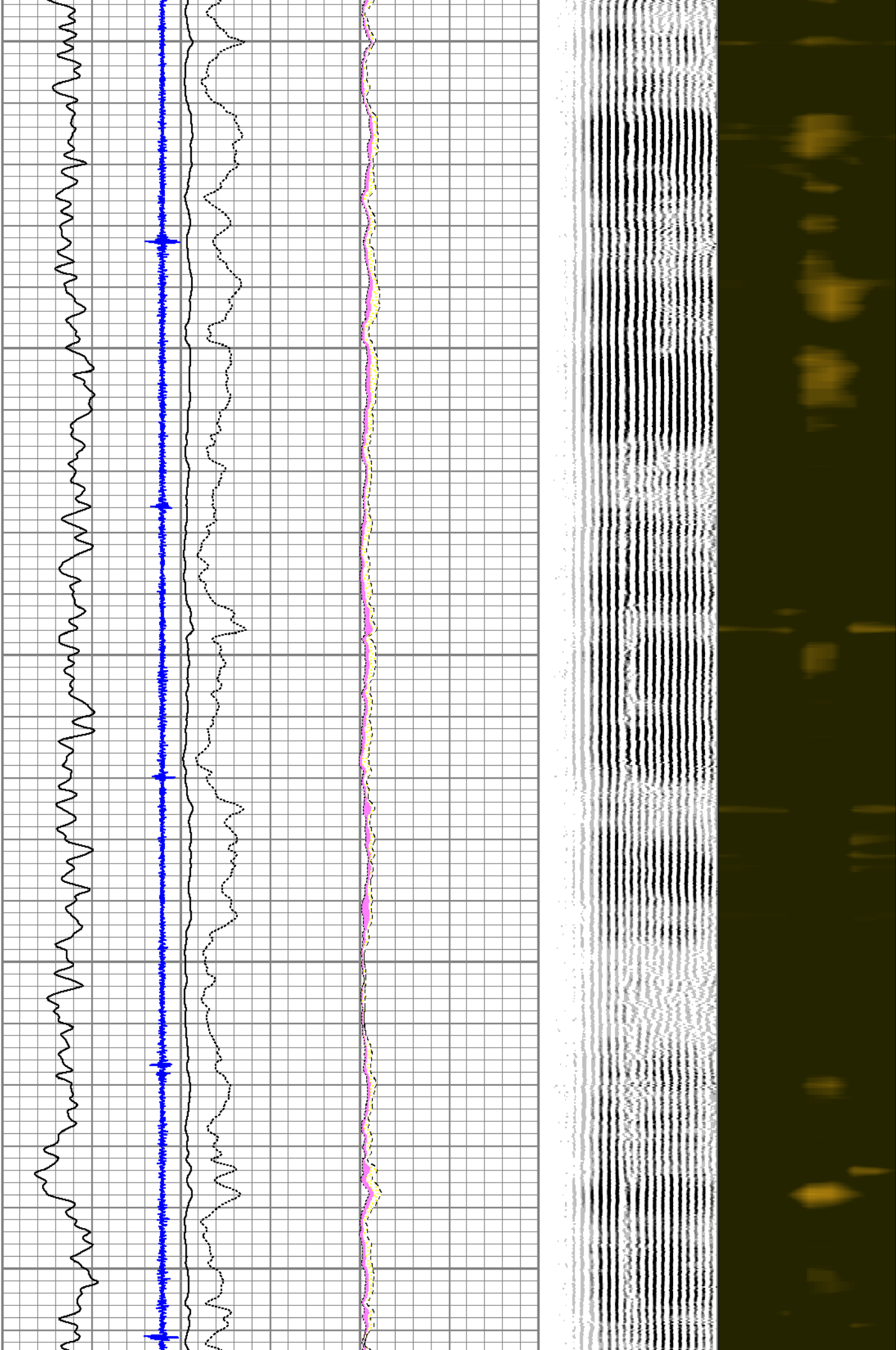
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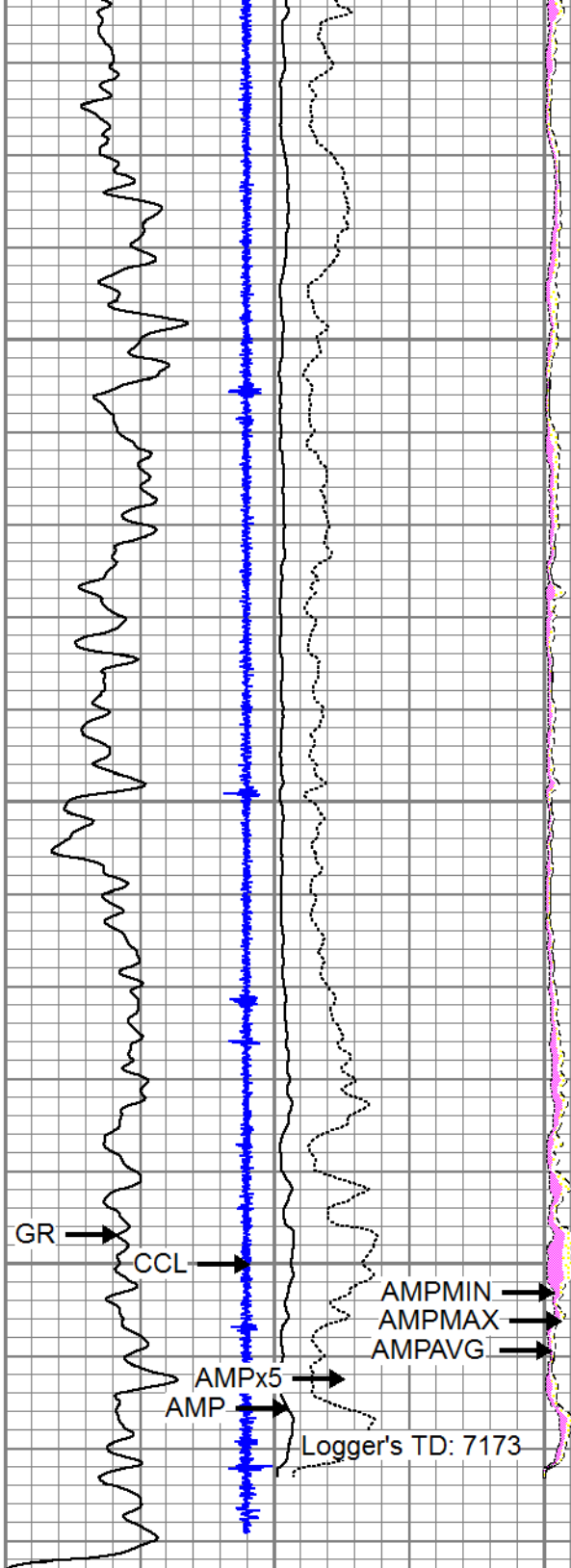
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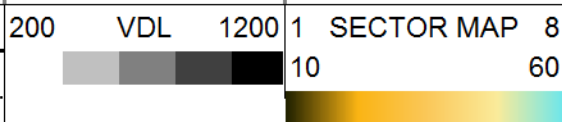
7000



7100



-9	CCL	1	0	AMP (mV)	100	0	AMPAVG	150
0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150
						0	AMPMIN	150



Calibration Report

Database File: 13696.db
 Dataset Pathname: pass2
 Dataset Creation: Tue Oct 14 18:53:14 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: 130584
 Tool Model: RBT-C3

 Calibration Casing Diameter: 7.000 in
 Calibration Depth: 145.996 ft

Master Calibration, performed Tue Oct 07 01:26:47 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.012	0.378	1.500	62.165	69.000	-0.570
CAL	0.012	1.029				
5'	0.012	0.239	1.500	62.165	70.000	-1.811
SUM						
S1	0.010	0.384	0.000	100.000	102.000	-2.698
S2	0.012	0.425	0.000	100.000	101.000	-3.023
S3	0.012	0.441	0.000	100.000	102.500	-2.894
S4	0.012	0.420	0.000	100.000	103.000	-3.034
S5	0.012	0.378	0.000	100.000	104.000	-3.372
S6	0.010	0.352	0.000	100.000	105.000	-2.925
S7	0.012	0.346	0.000	100.000	102.000	-3.679
S8	0.012	0.362	0.000	100.000	103.000	-3.547

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	0.012	1.029	1.000	0.000

Air Zero Calibration, performed Mon Sep 08 11:38:23 2014:

	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: 130584
 Tool Model: RBT-C3
 Performed: Wed Aug 13 16:18:33 2014

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF
Gain:	0.77	
Offset:	15.00	
Delta Spacing	1	

Log Variables

Database: C:\Warrior\Data\13696.db
 Dataset: field/well/run1/pass2

Top - Bottom

PPT usec 0	CASEWGHT lb/ft 26	MAXAMPL mV 0	MINAMPL mV 1.5	MINATTN db/ft 0.08	CASEOD in 7	PERFS 0
TDEPTH ft 0	BOTTEMP degF 207	BOREID in 7.875				