



RADIAL SECTOR BOND LOG WITH GAMMA RAY

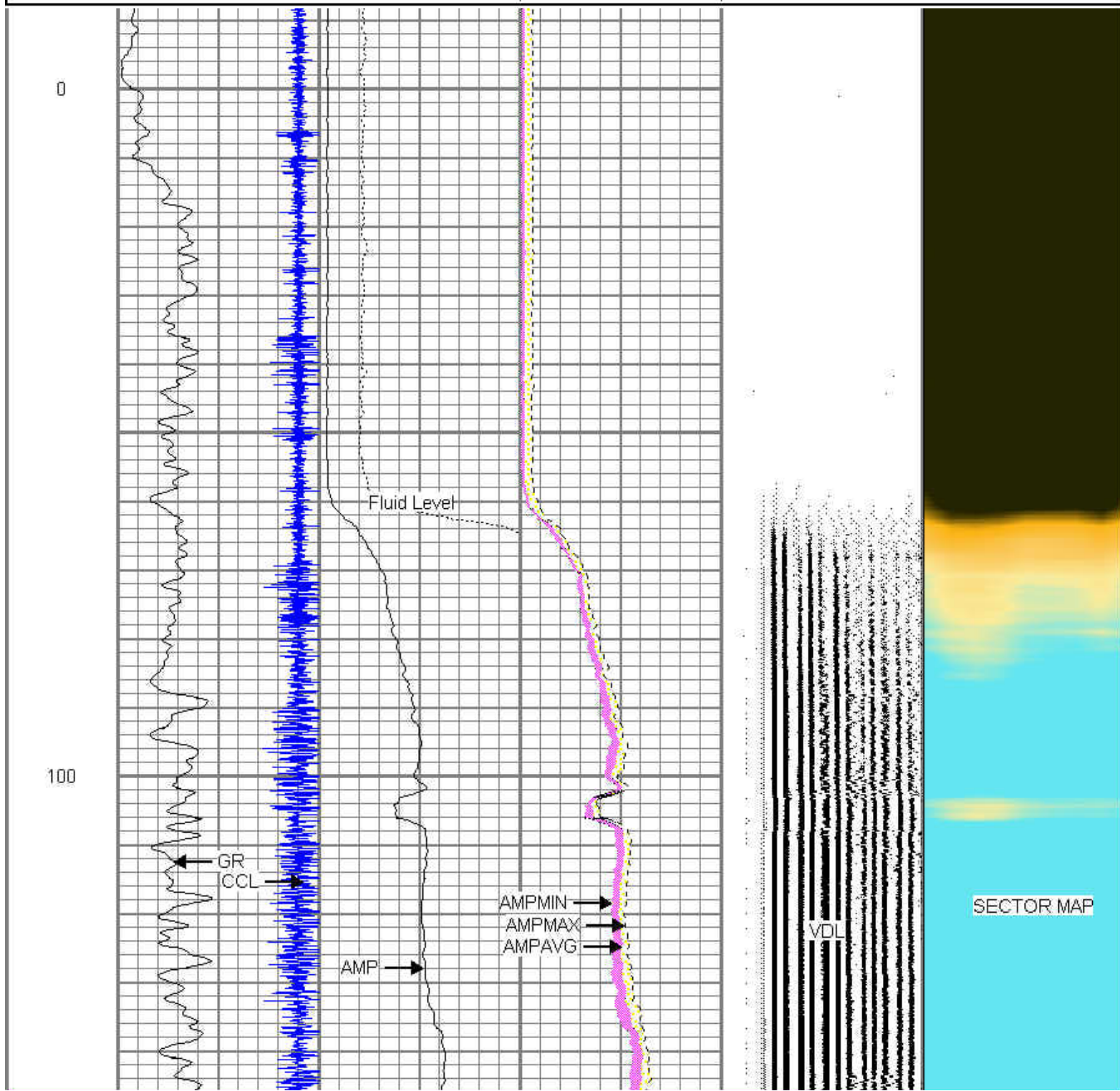
Pioneer Energy Services

Company		ENCANA OIL & GAS (USA) INC.	
Well		DRIETH 1D-6H-A368	
Field		WATTENBERG	
County		WELD	
State		CO	
Date of Service		SEPTEMBER 10, 2014	
Run Number		ONE	
Depth Driller or PBTD		11733	
Depth Logger		7539	
Bottom Log Interval		7535	
Top Log Interval		SURFACE	
Open Hole Size		8+3/4"	
Type Fluid		WBM	
Fluid Level		60	
Fluid Density		10.8 / 40	
Max. Recorded Temperature		NA	
Max. Wellhead Pressure		0	
Wellhead Connection		NA	
Estimated Cement Top		790	
Unit Number		1	
Wireline Size		9/32"	
Location		FT MORGAN, CO	
Recorded By		SCHUMAN	
Witnessed By		MR. BILL LAFORCE	
Size		Wt/Ft	
Tubing Record		Top	
Surface Casing		Bottom	
Production Casing		842	
Liner Record		7621	
4+1/2"		NA	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	10.00
			PTS275	2.83	2.75	
WWF3FT	14.44		RBT-Probe (070132) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WWFCAL	14.44					
WWFS1	14.44					
WWFS2	14.44					
WWFS3	14.44					
WWFS4	14.44					
WWFS5	14.44					
WWFS6	14.44					
WWFS7	14.44					
WWFS8	14.44					
WWF5FT	13.35					
			PTS275	2.83	2.75	
CCL	6.36					
			GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00
GR	3.63					
			2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00

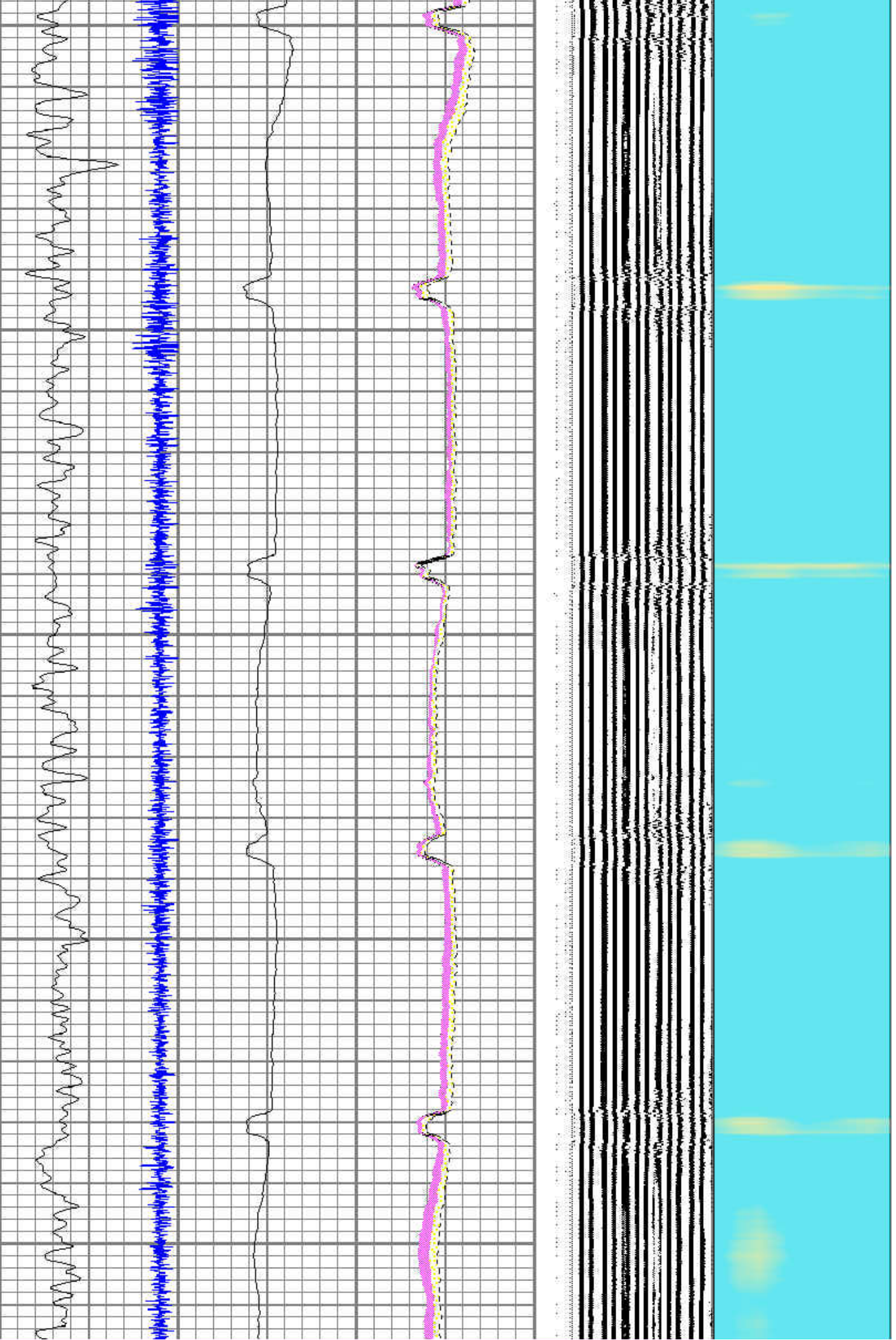
Database File: drieth_1d_6h-a368.db
 Dataset Pathname: run3/rblup.5
 Presentation Format: scbl02
 Dataset Creation: Wed Sep 10 13:50:39 2014 by Calc SCH 120430
 Charted by: Depth in Feet scaled 1:240

-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						



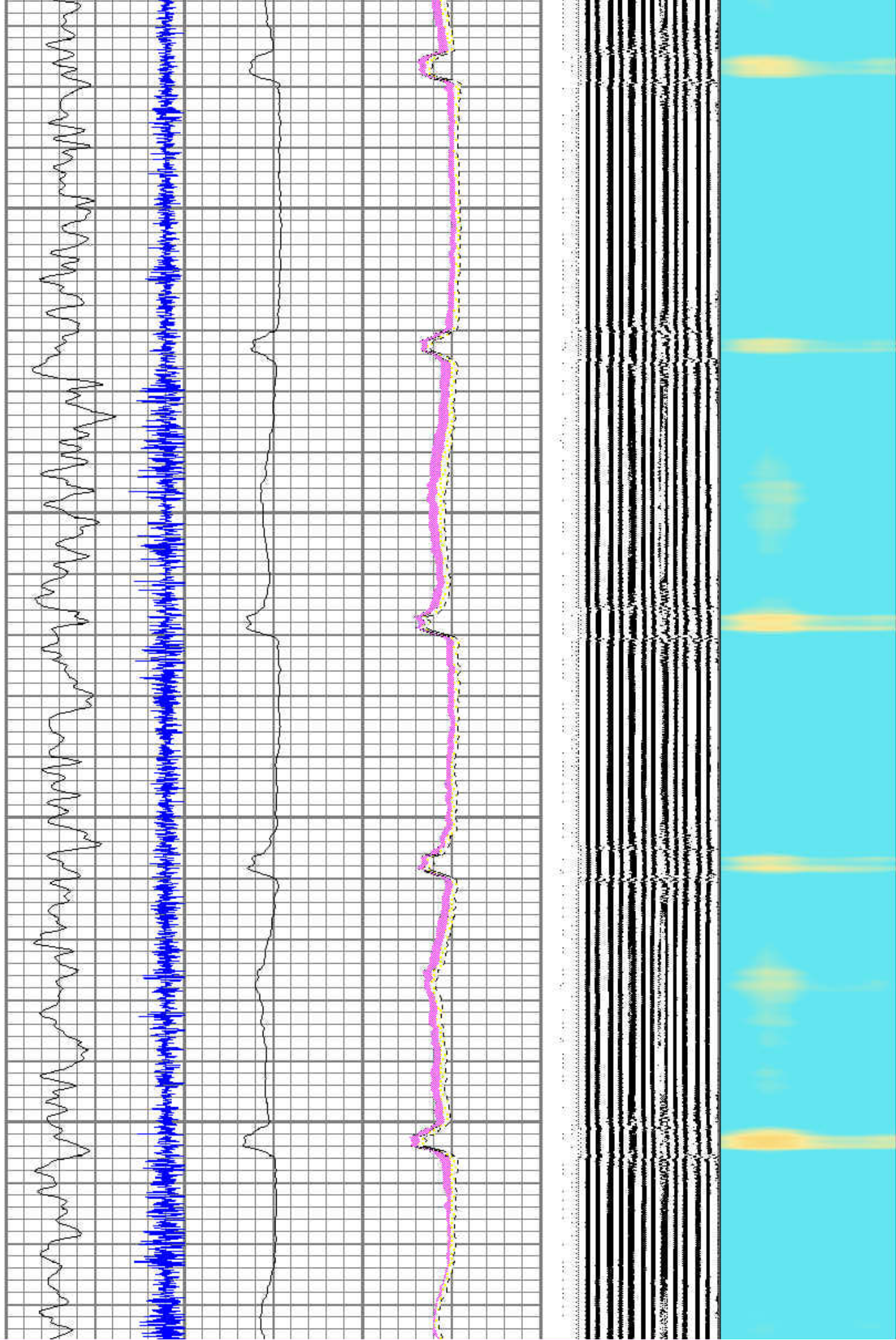
200

300



400

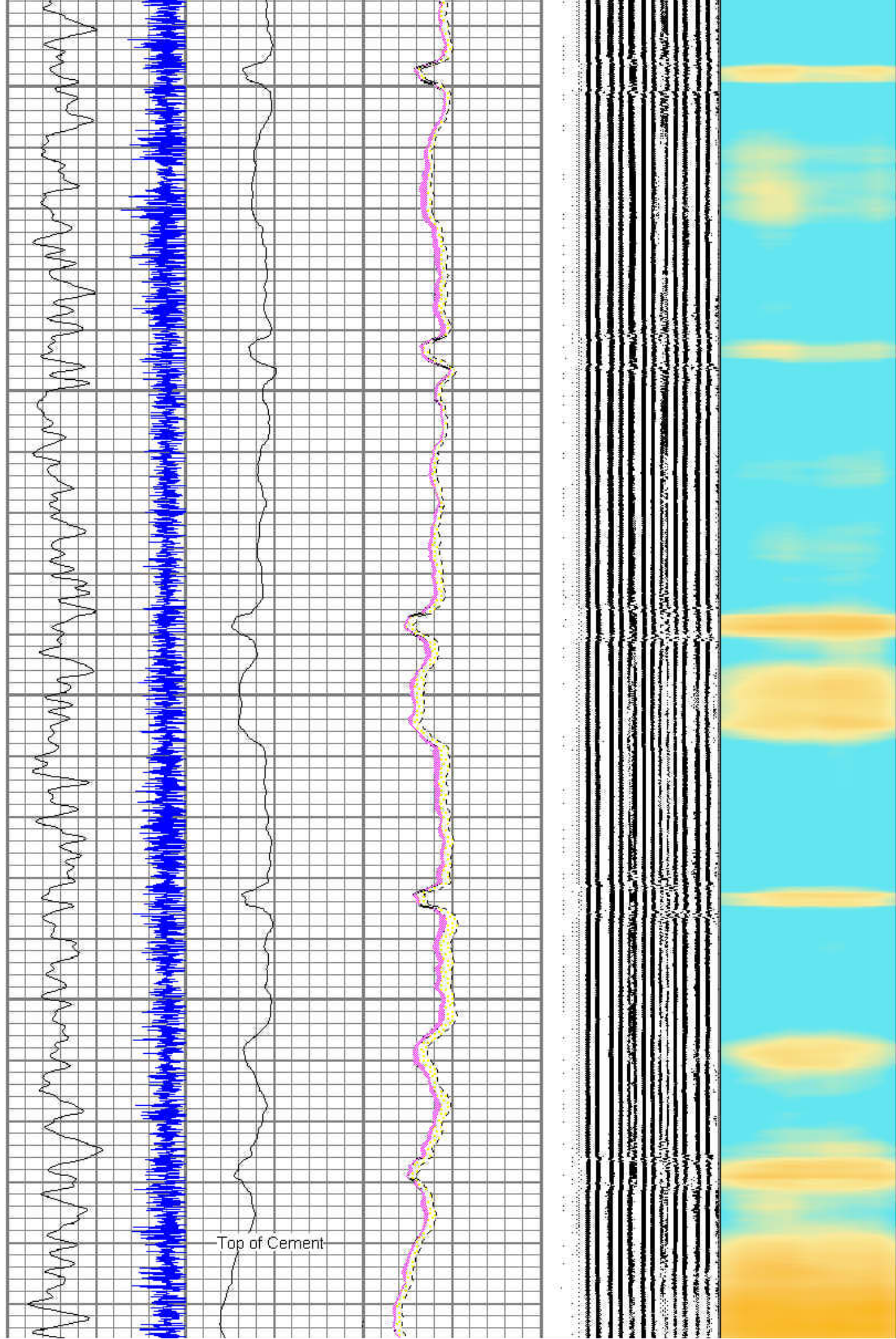
500



600

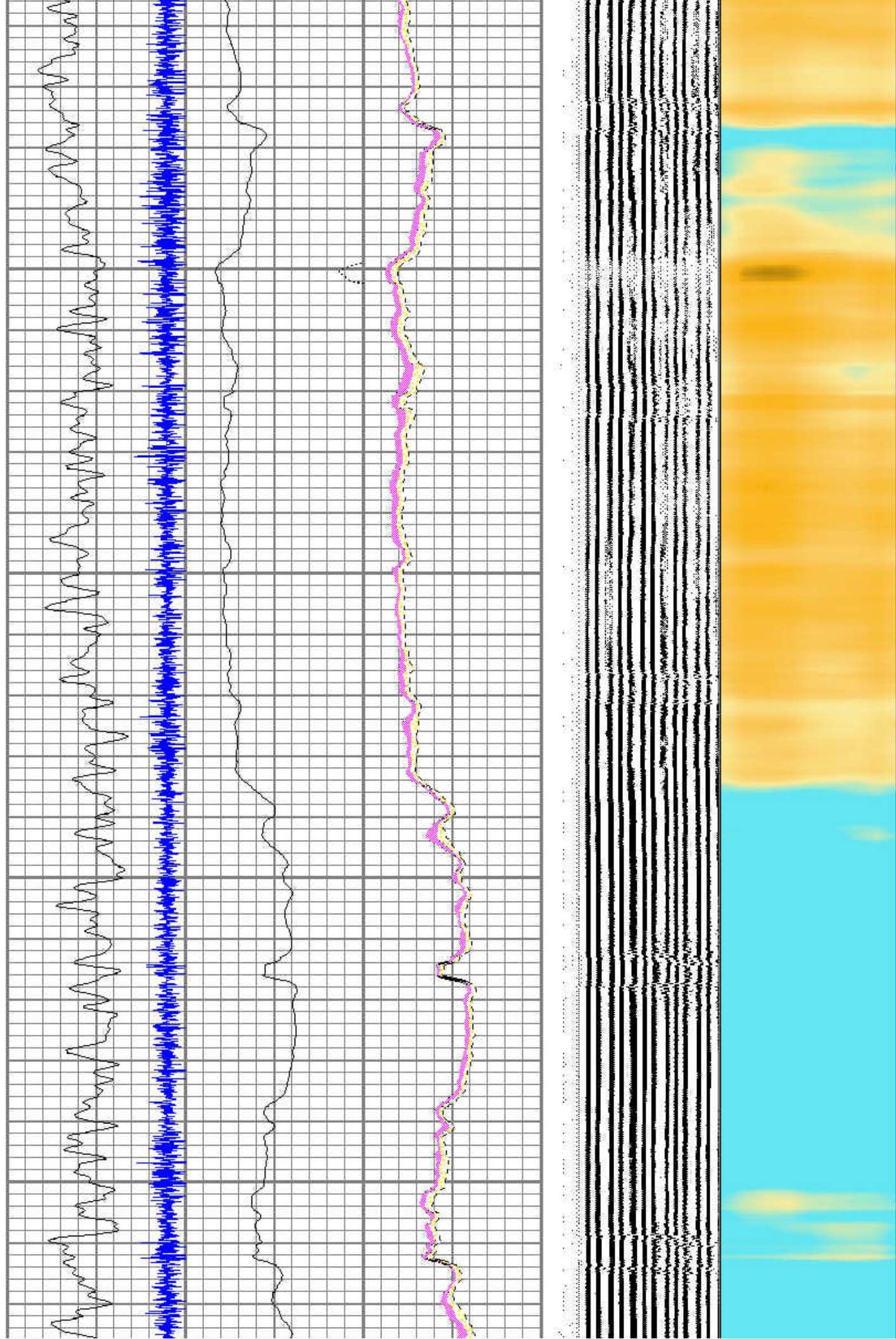
700

800



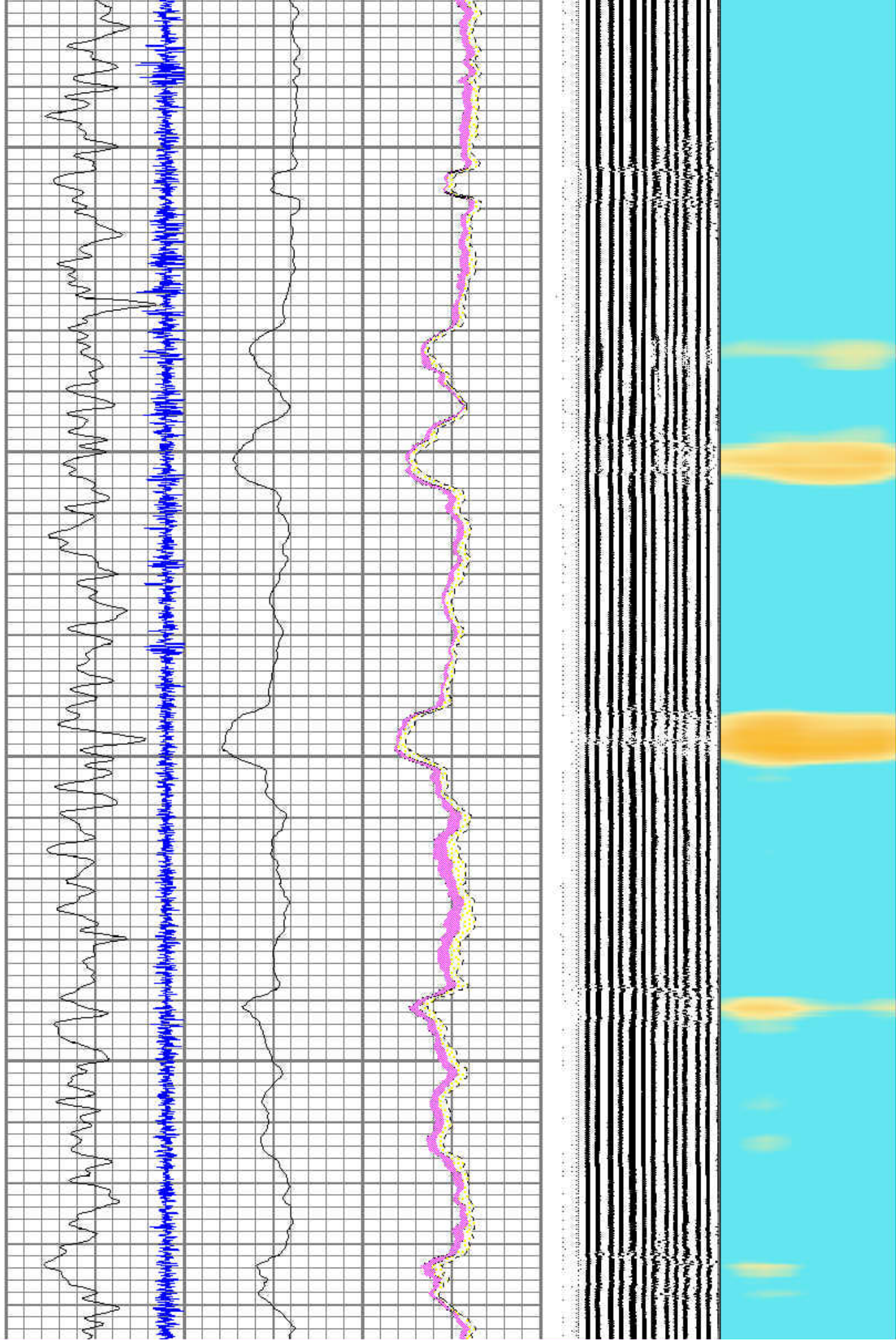
900

1000



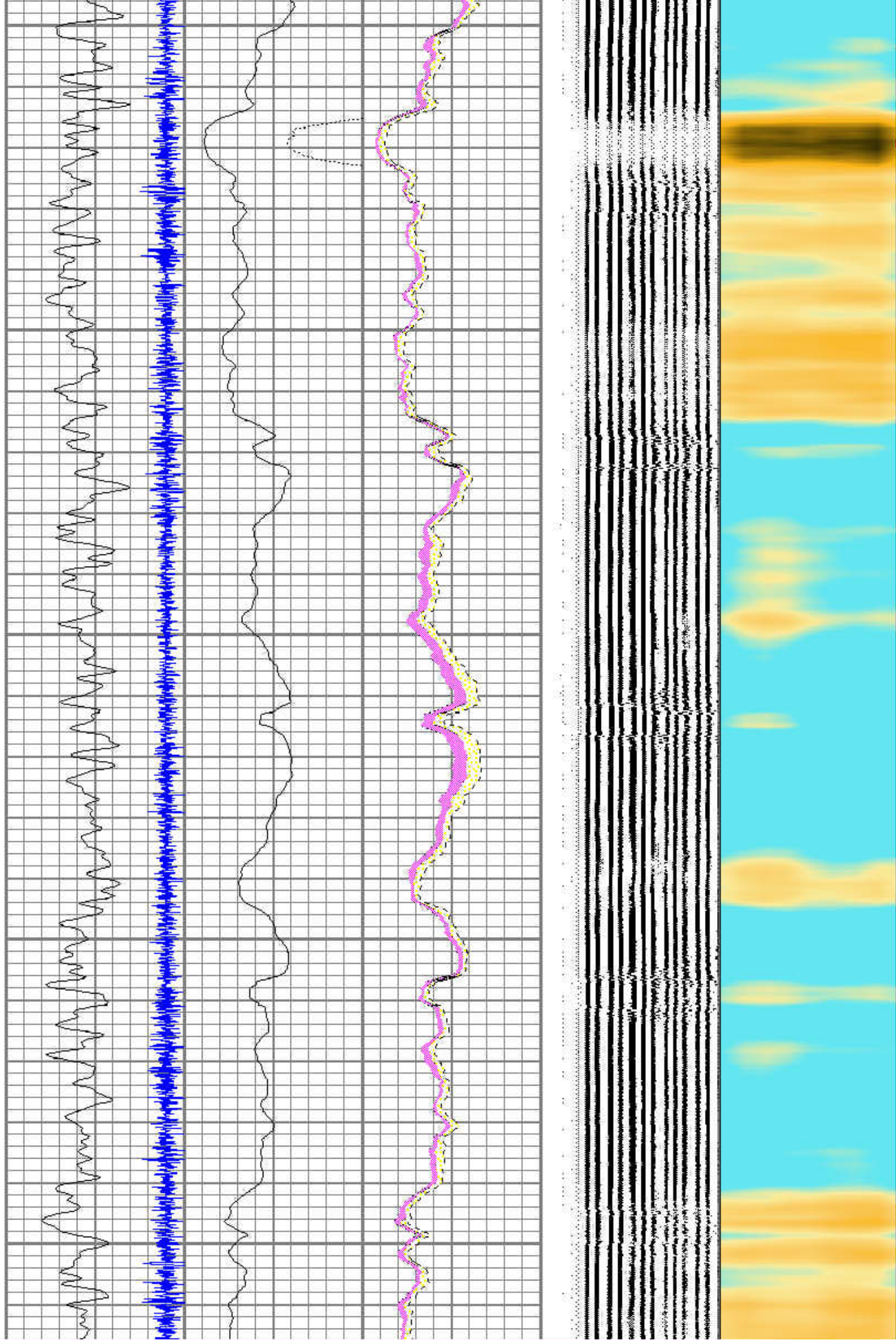
1100

1200



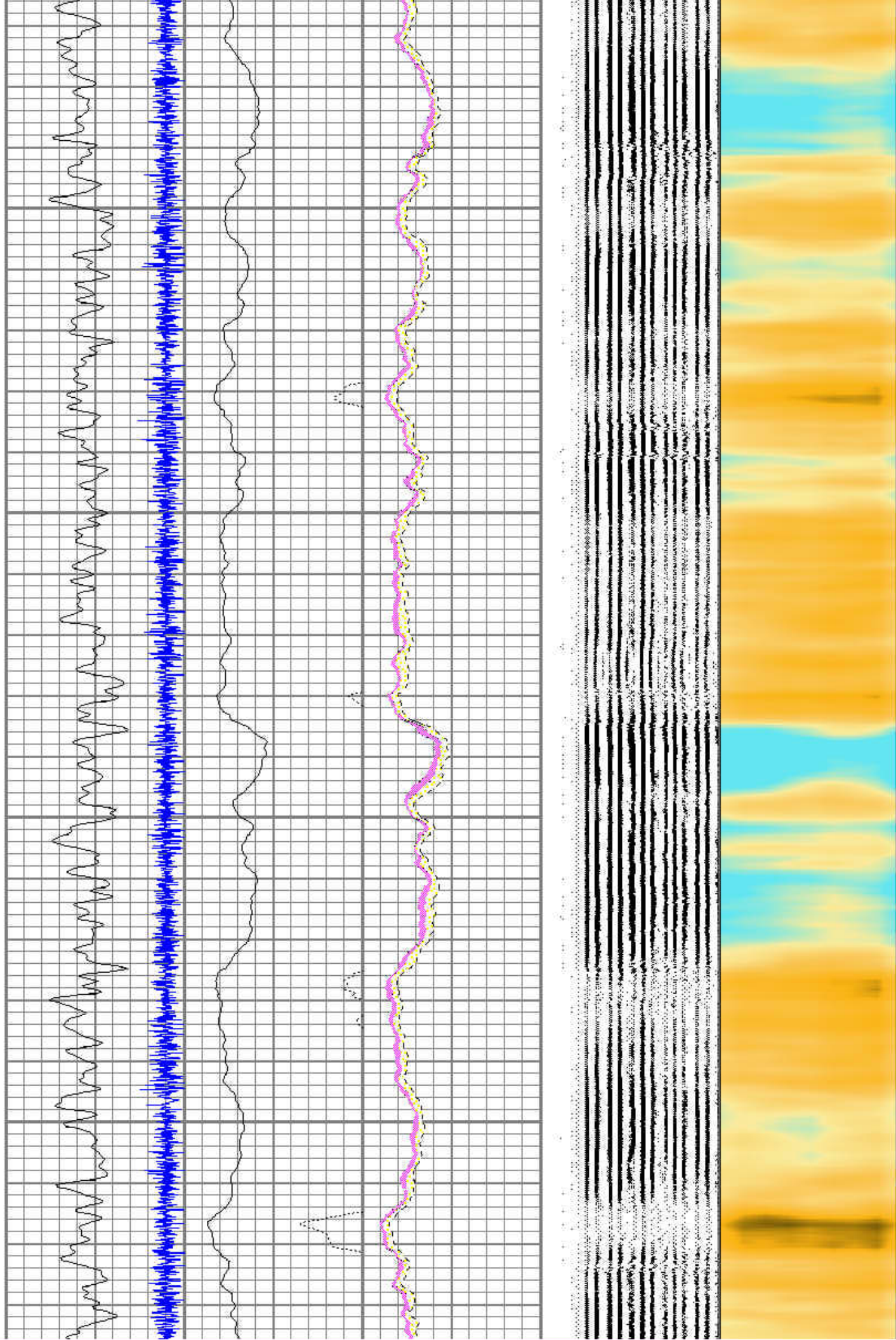
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1400



1500

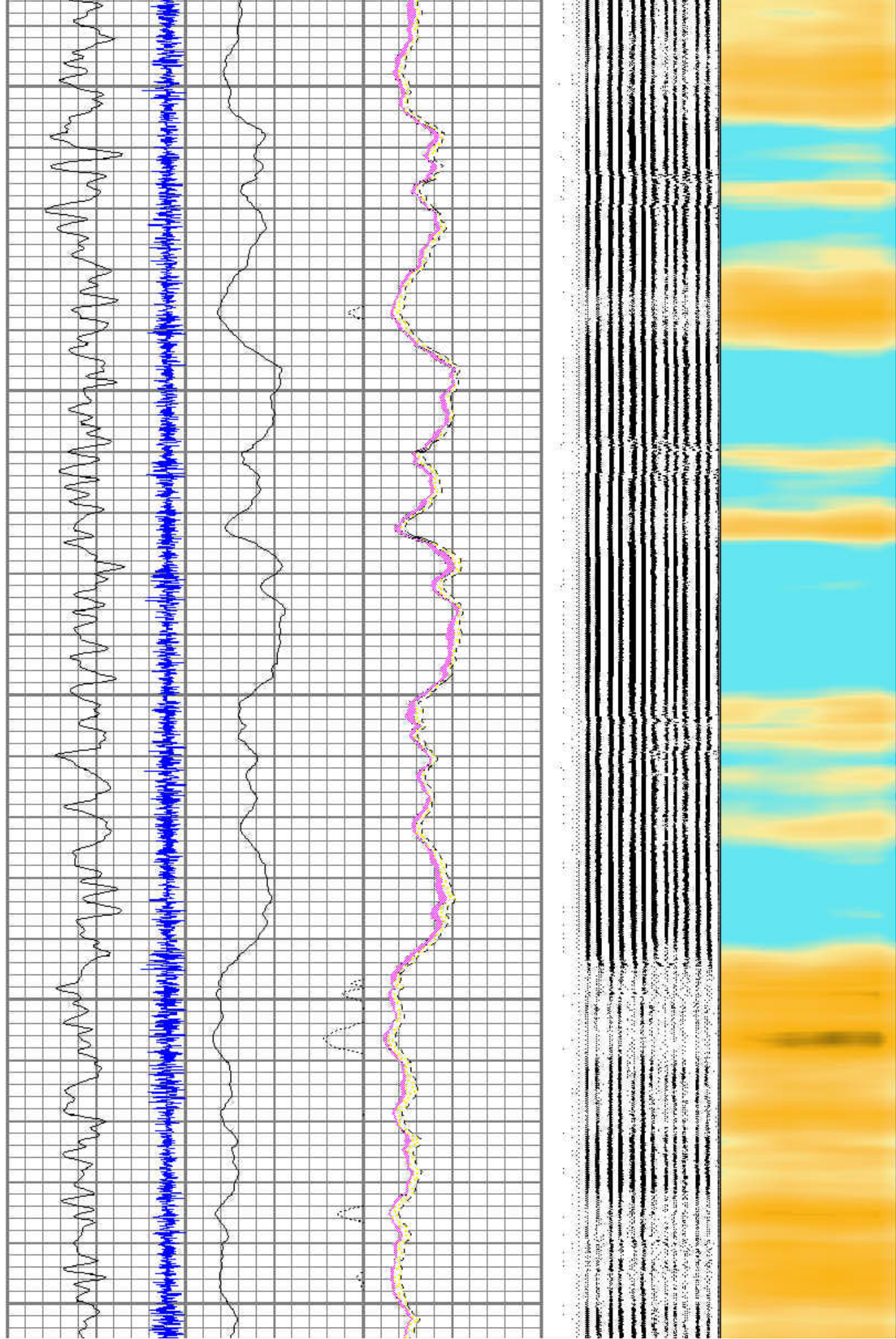
1600



1700

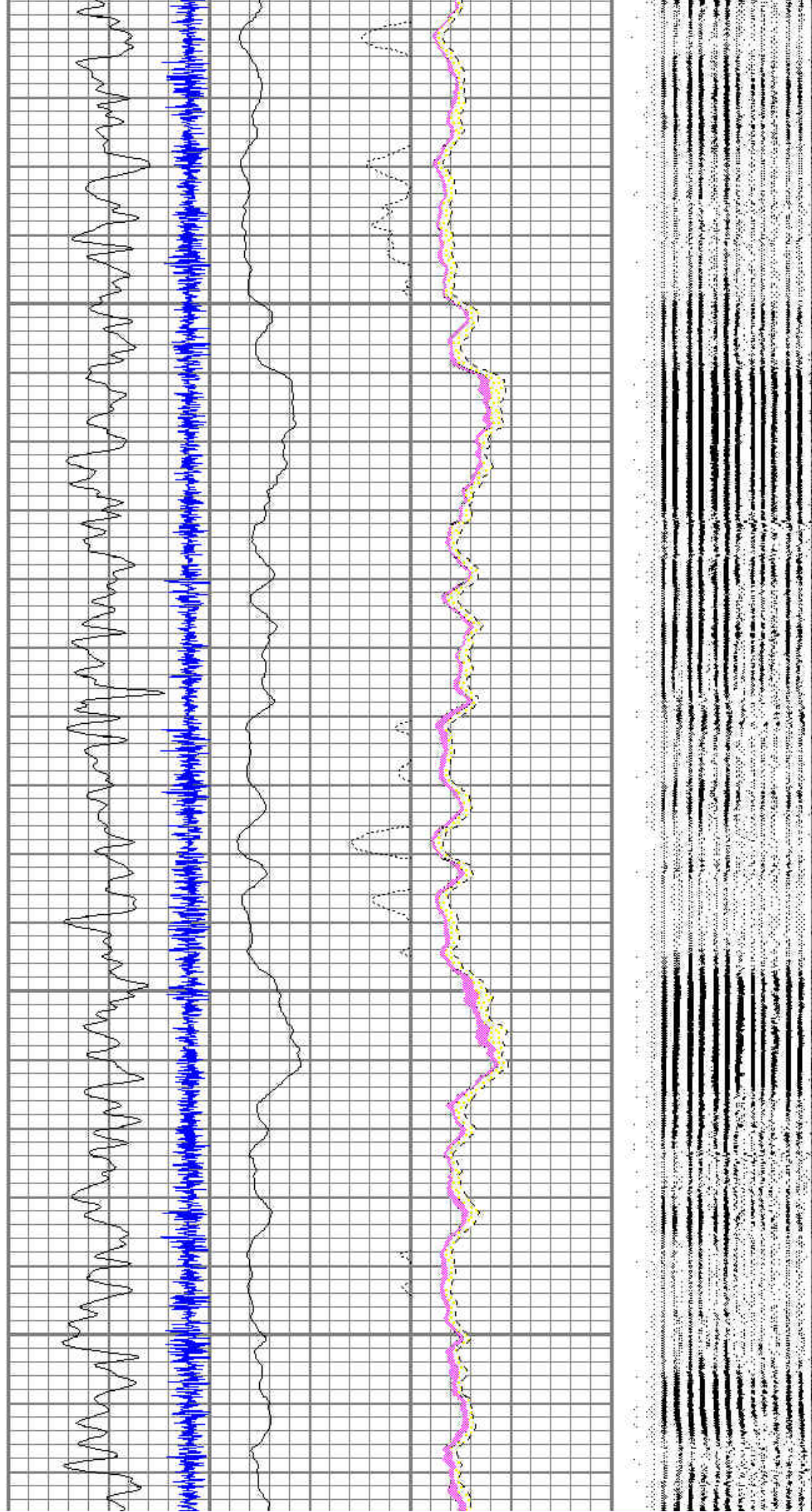
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1900



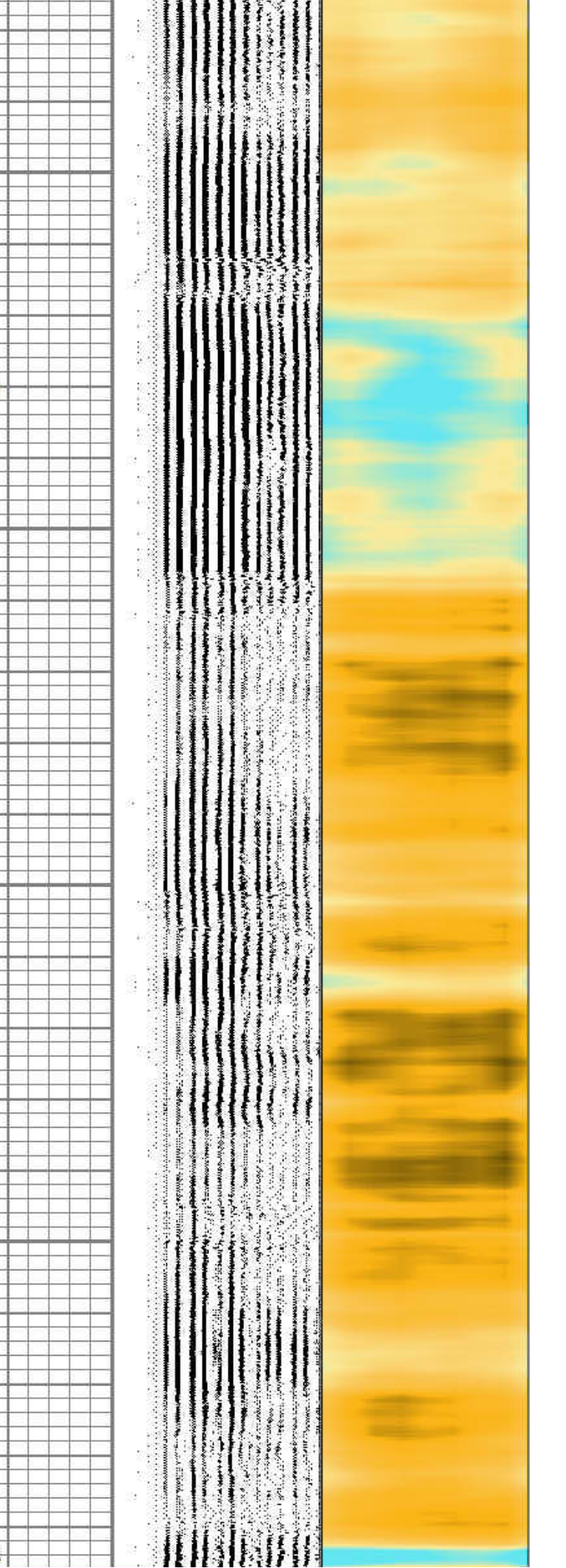
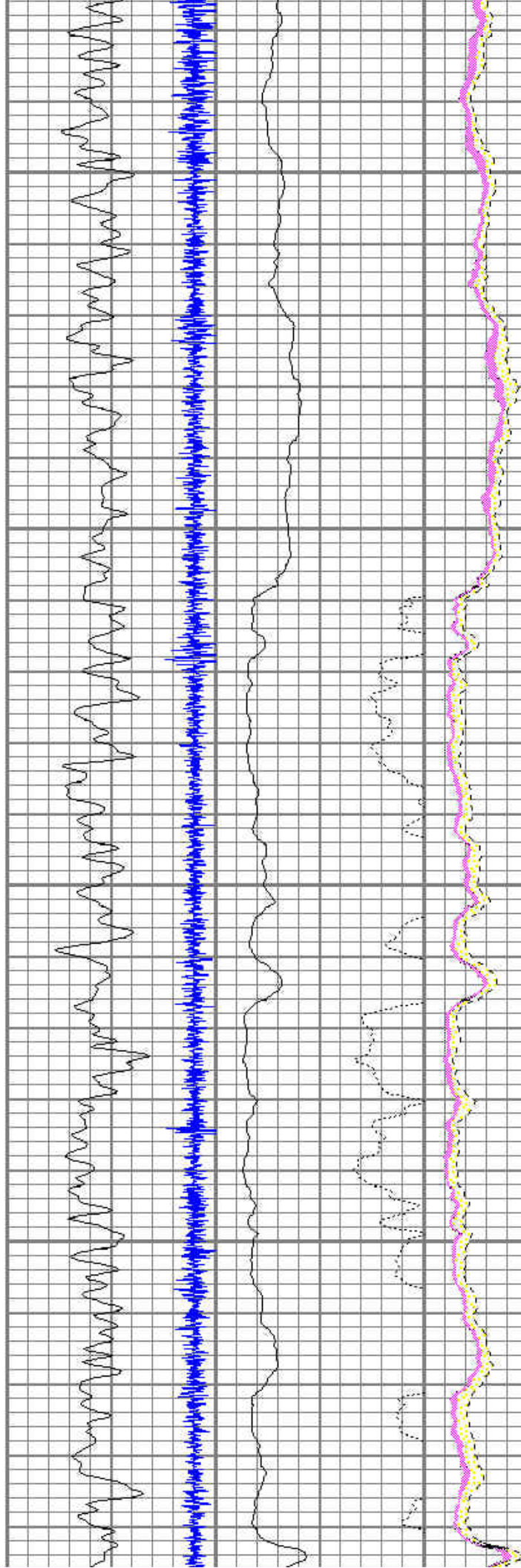
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2100



2200

2300



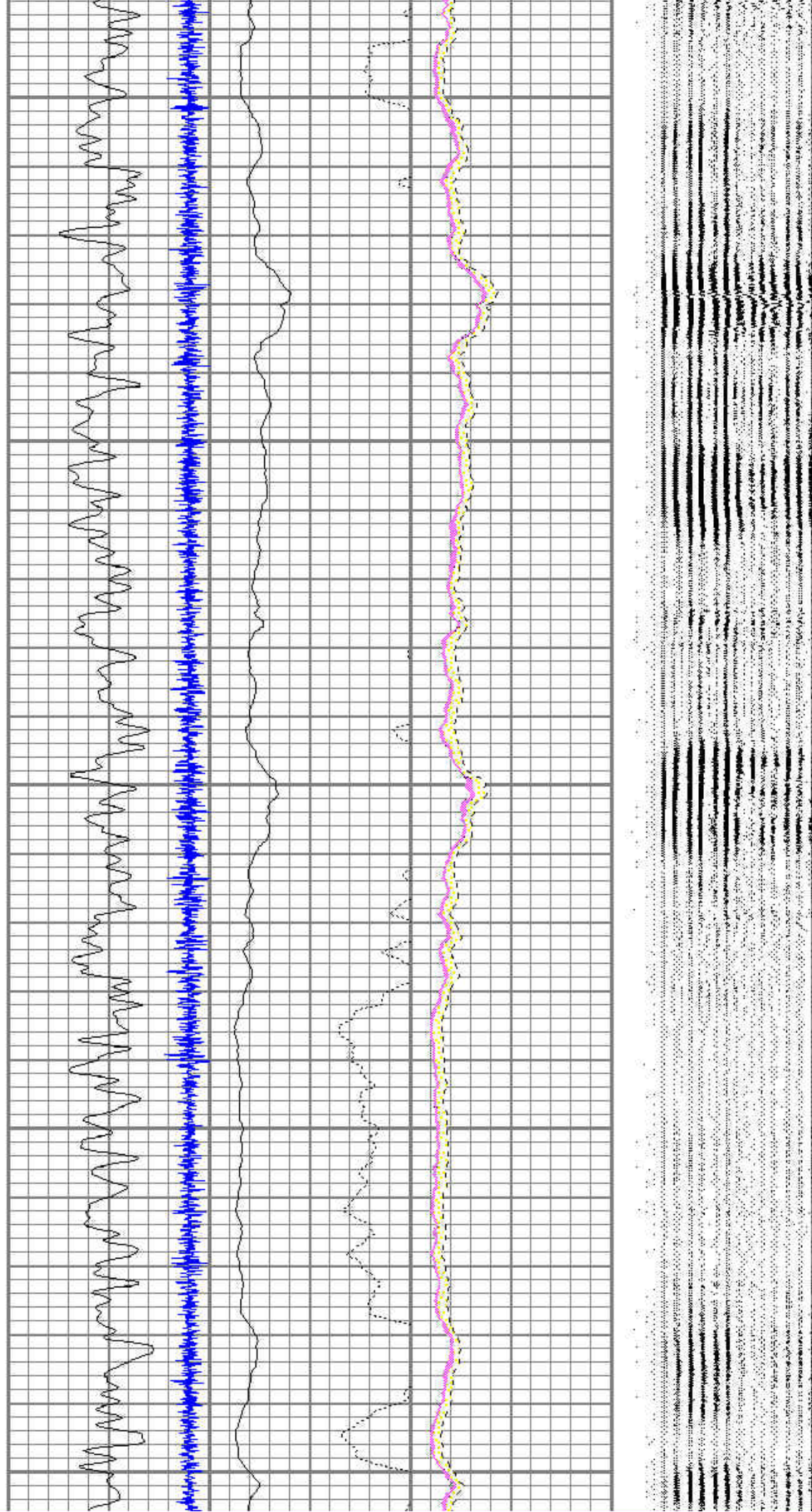
2500

2700

2800

2900

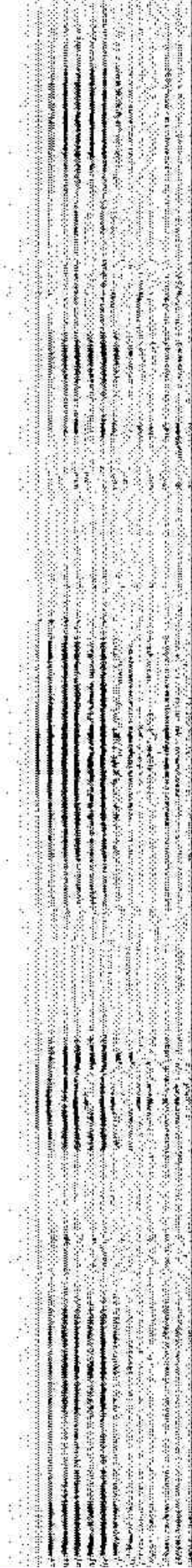
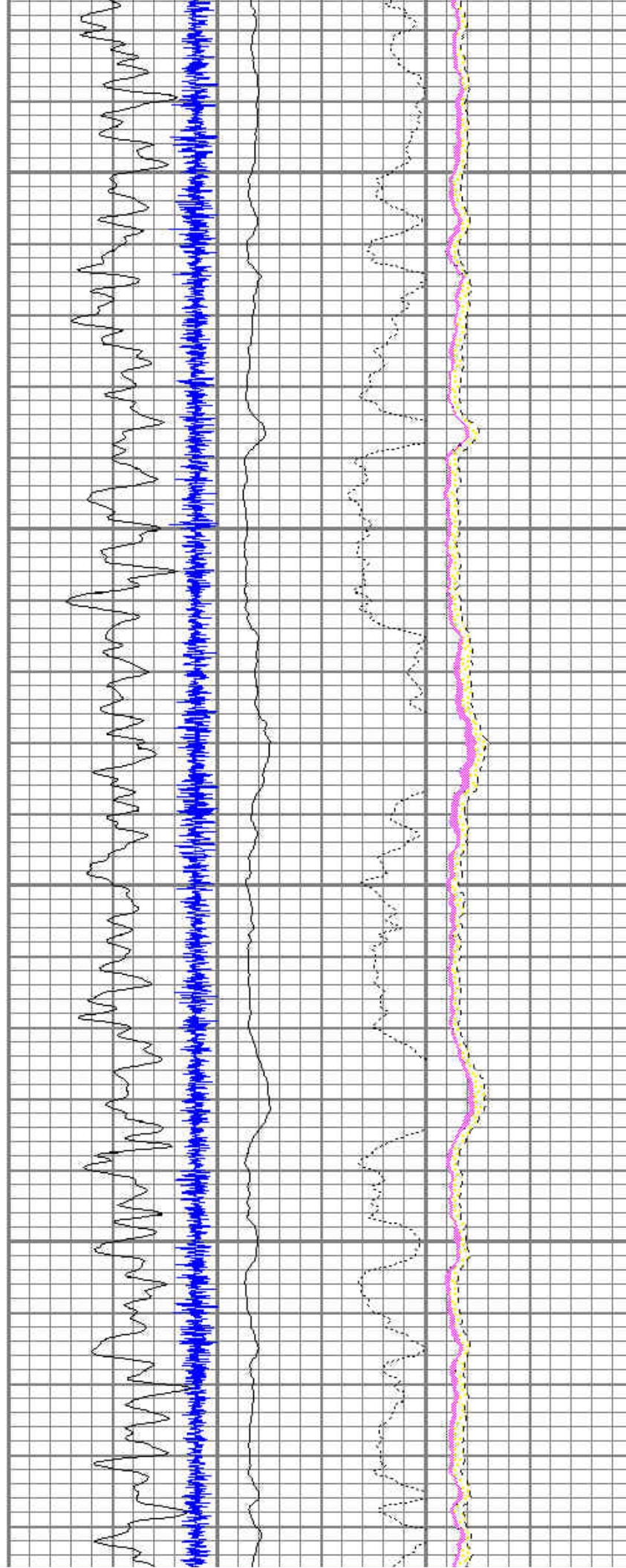
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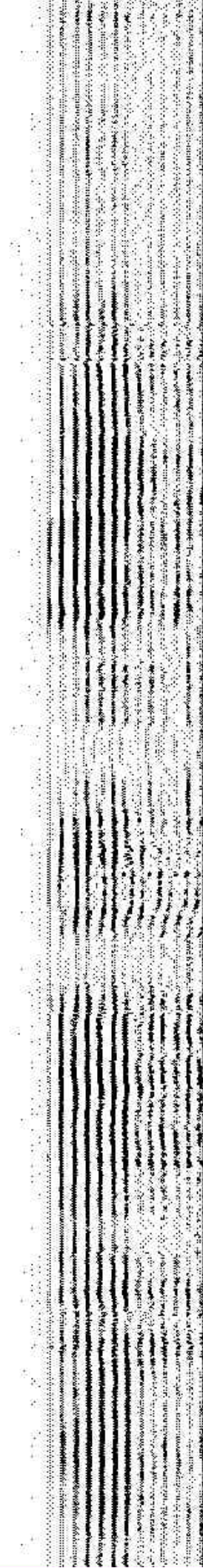
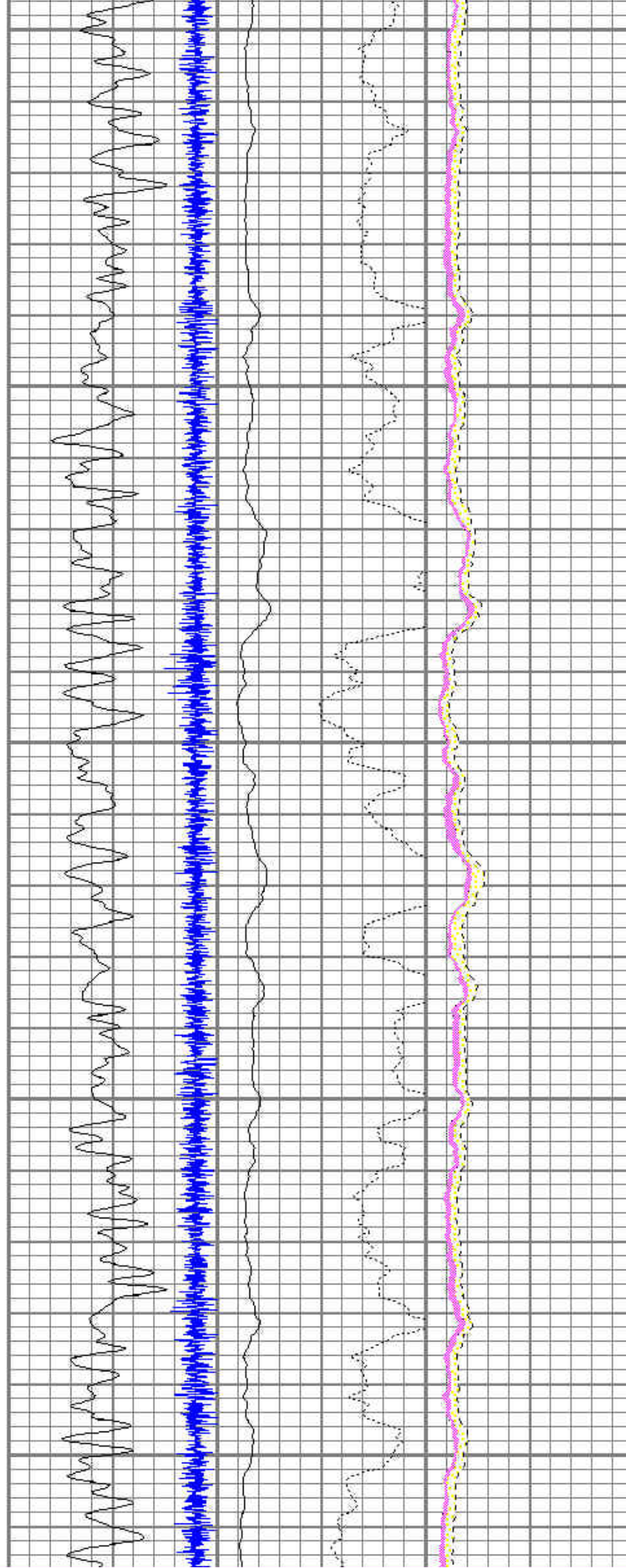
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3400



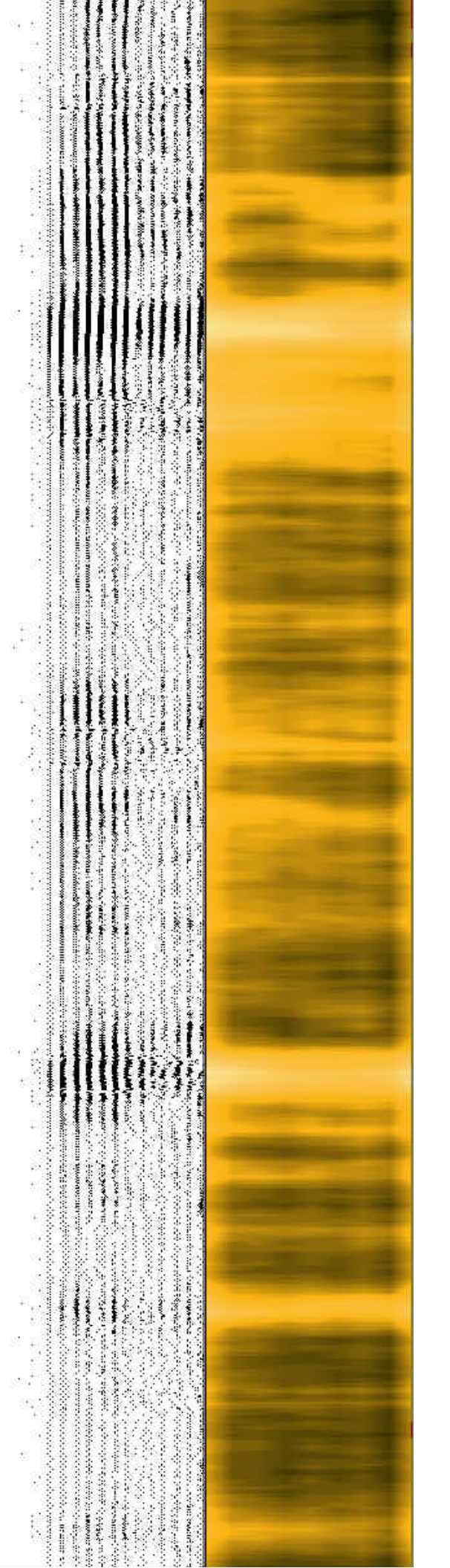
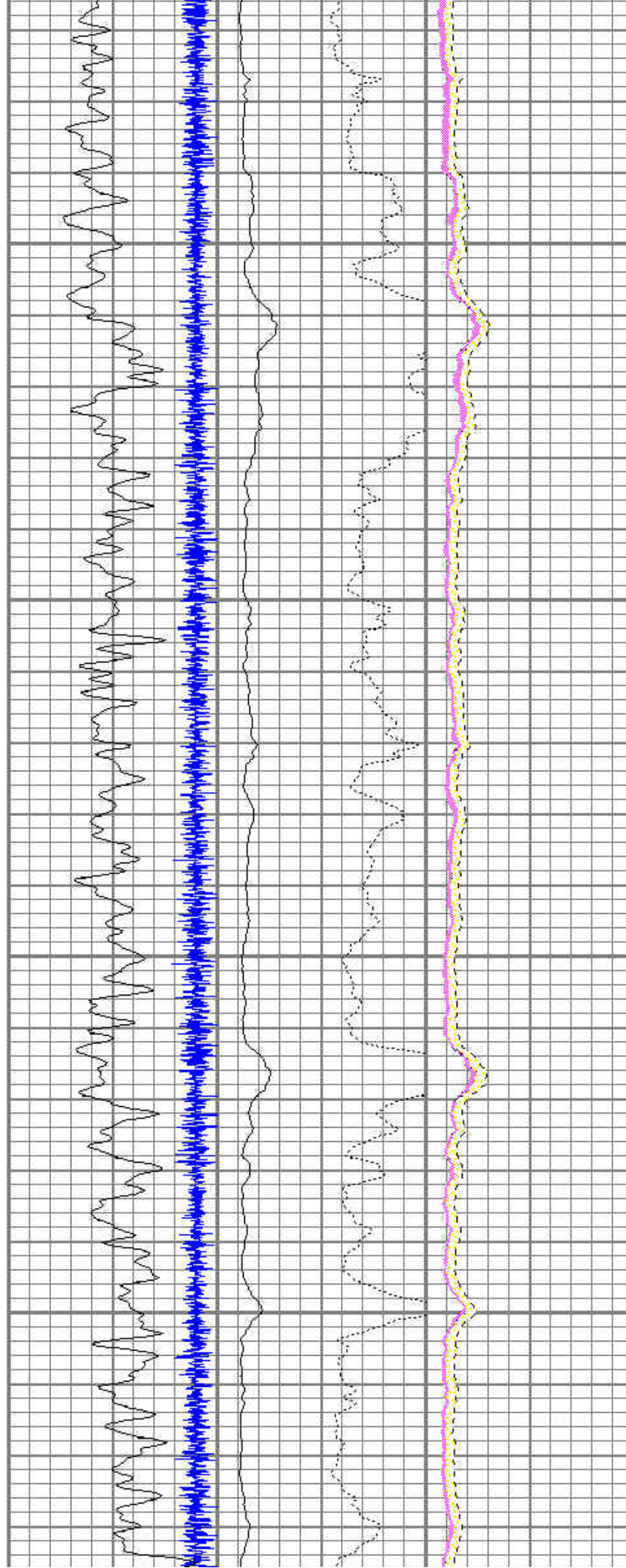
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3600



3700

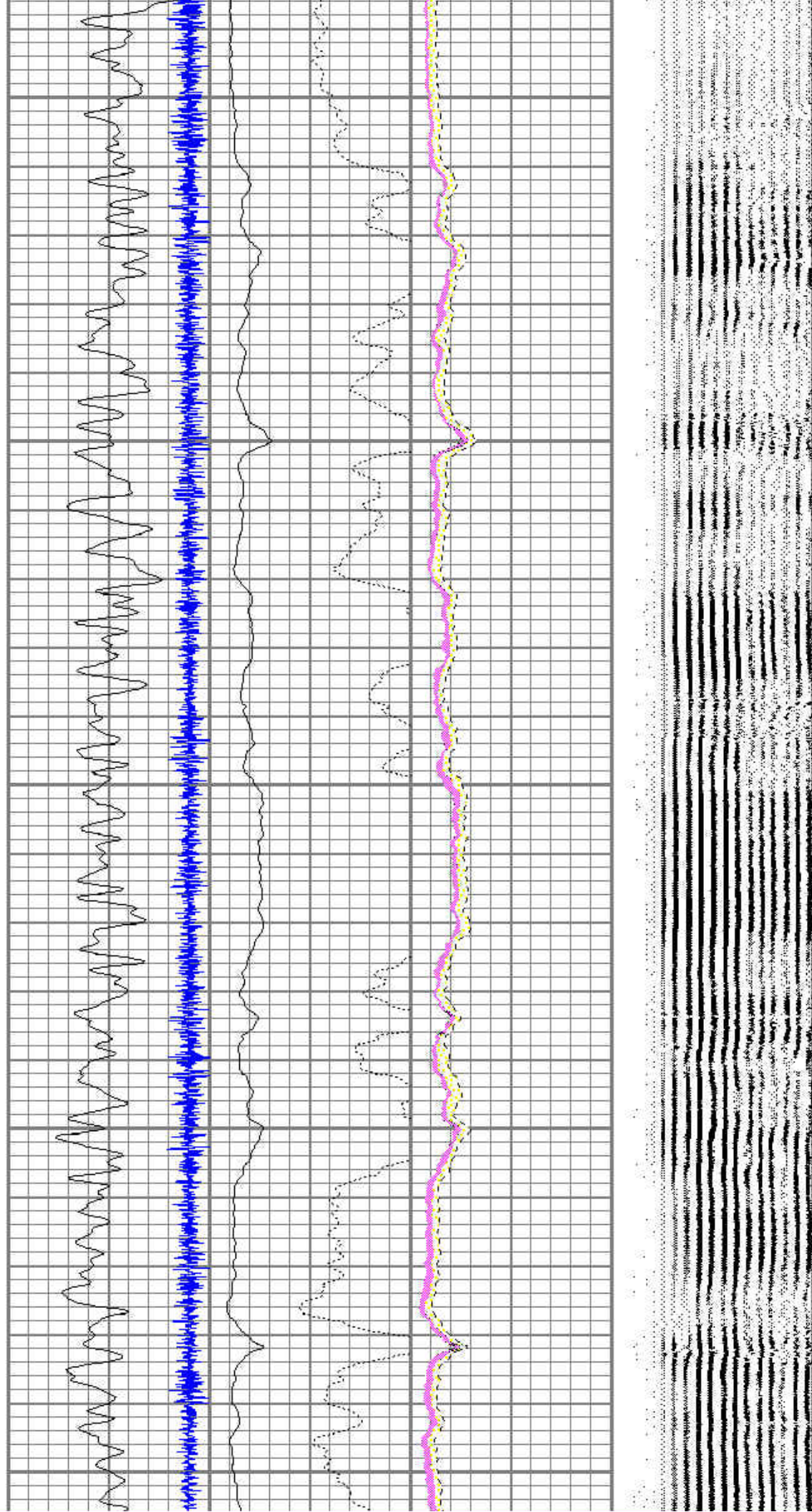
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3900

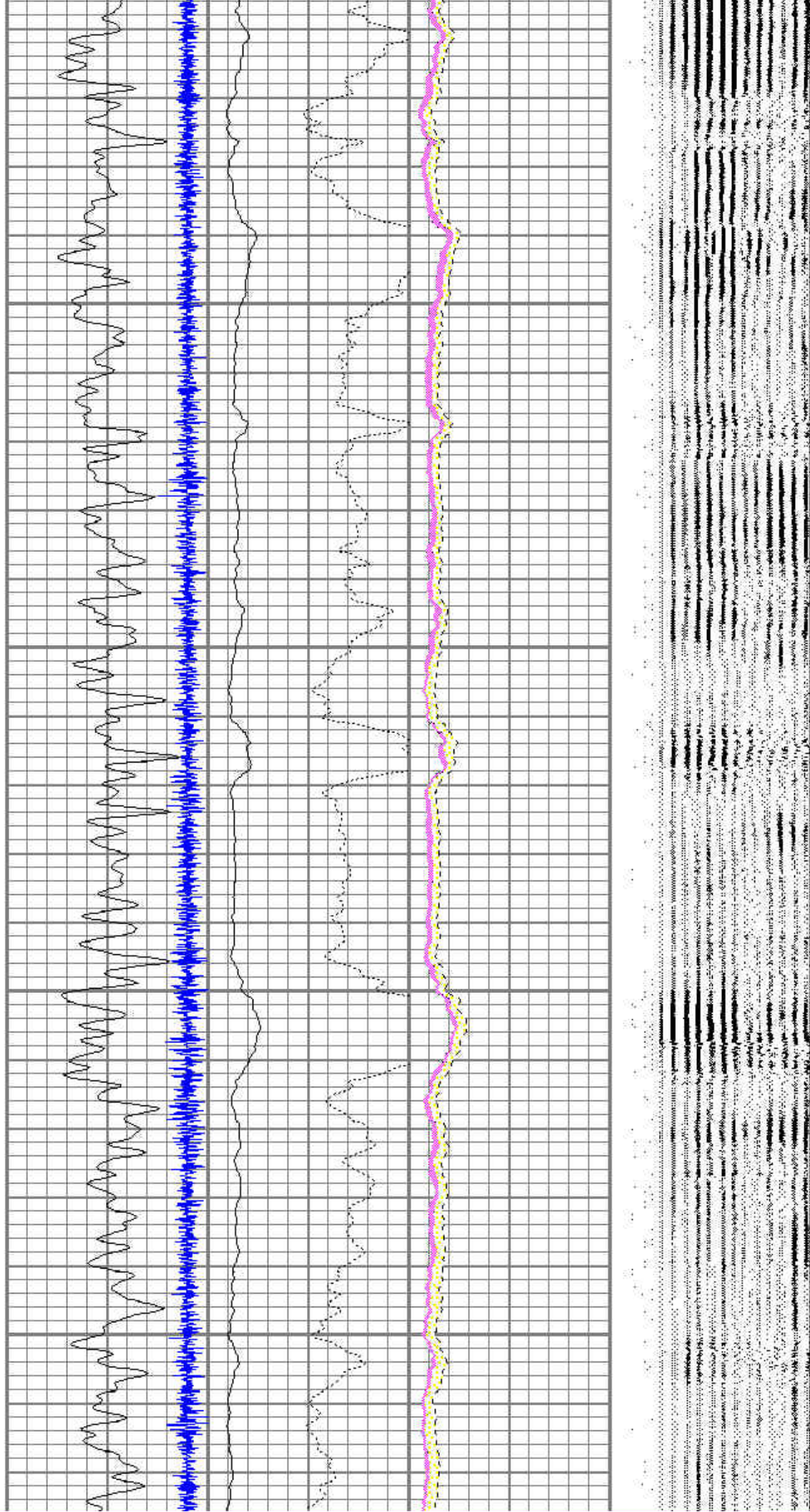
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4100



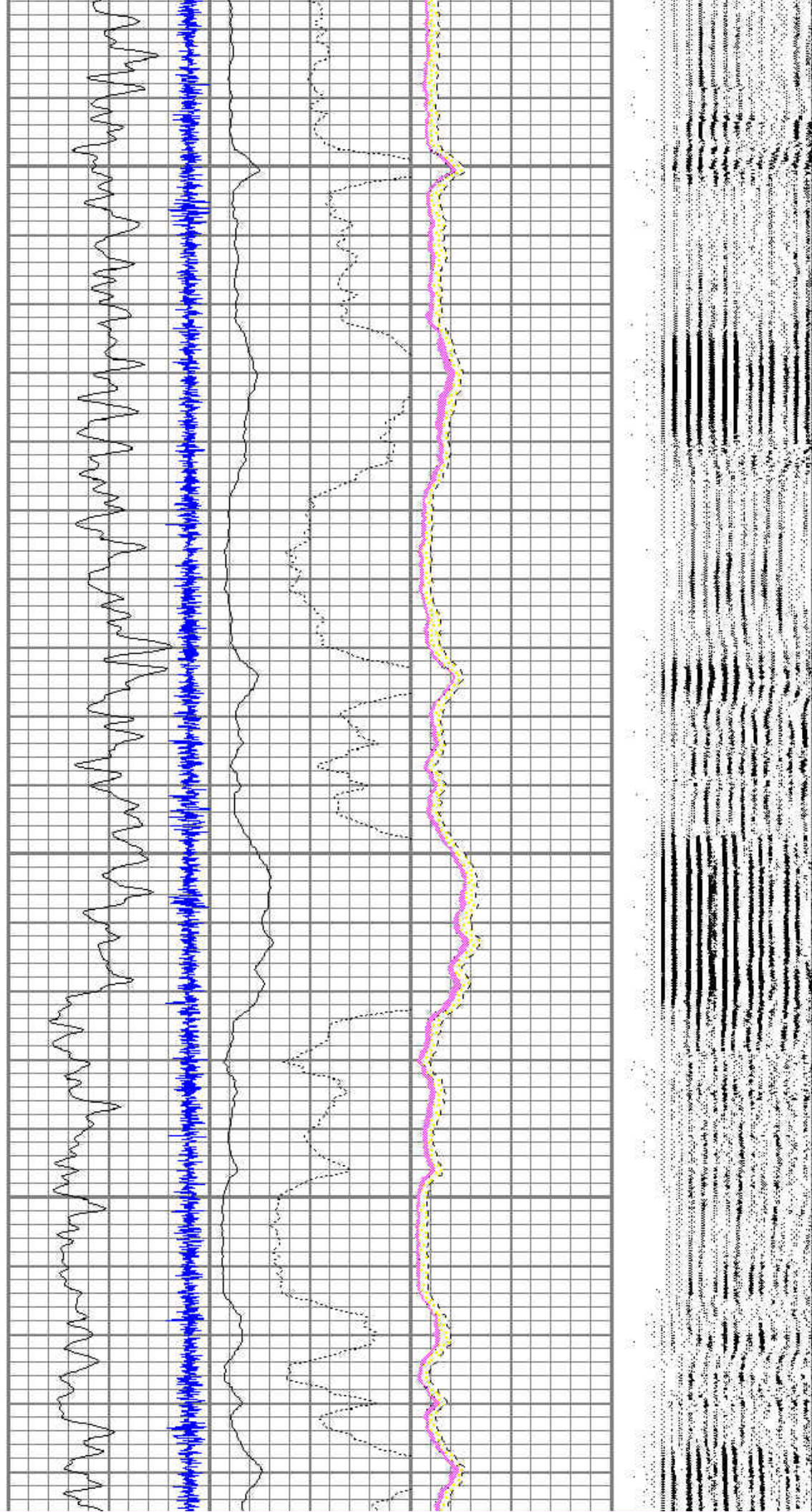
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4300

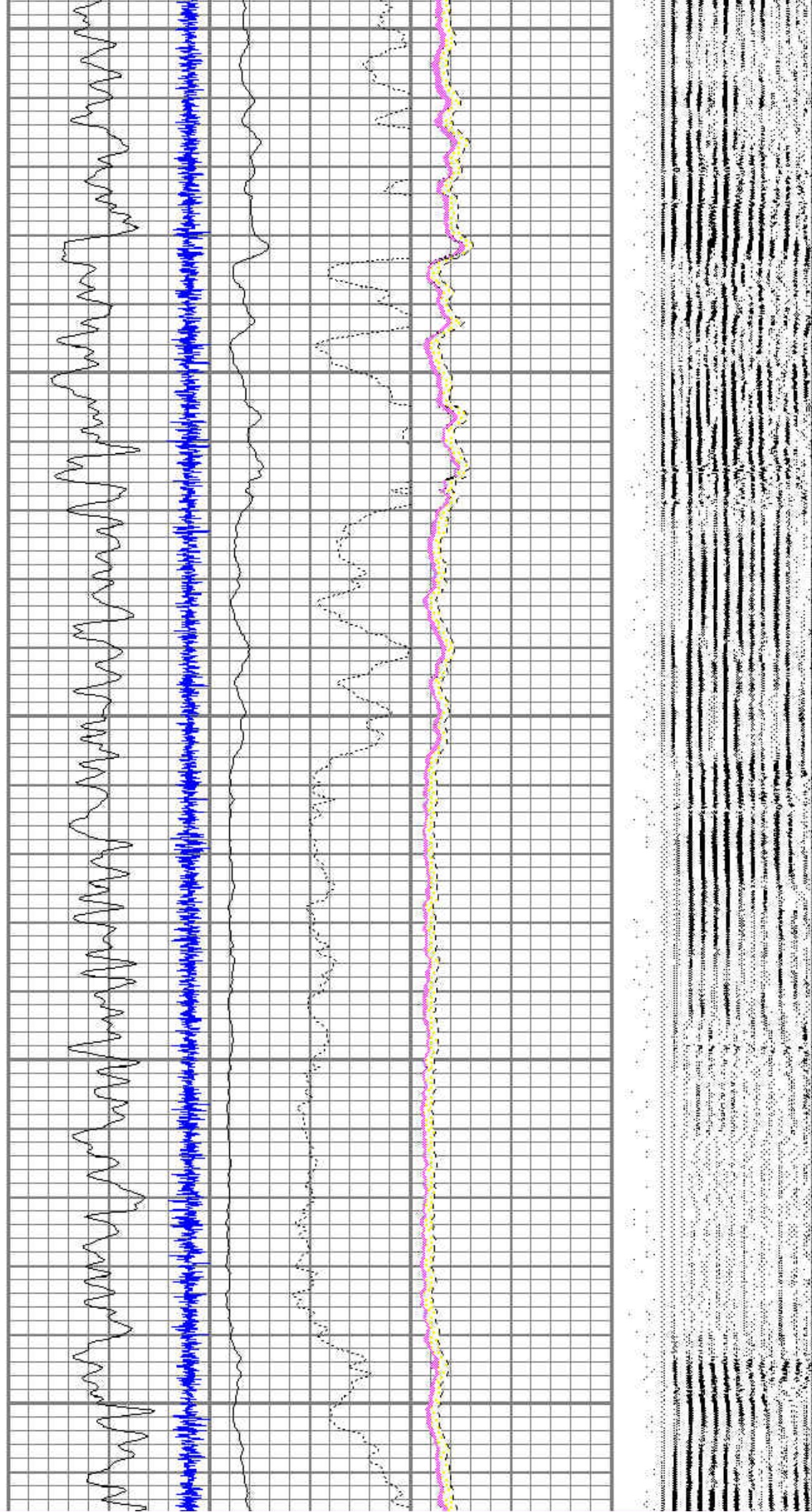


4400

4500

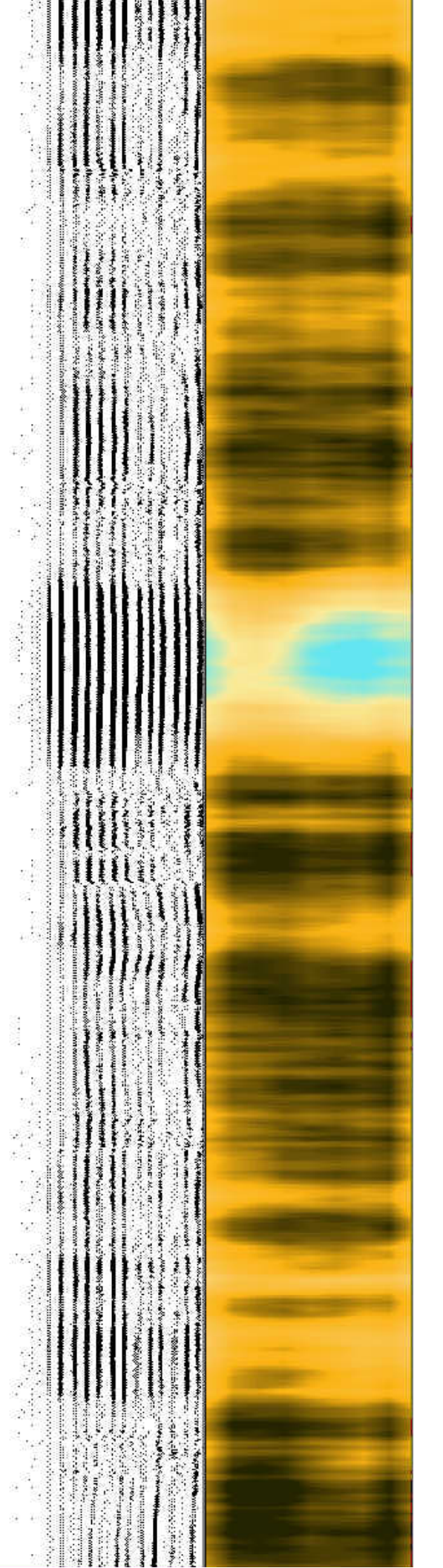
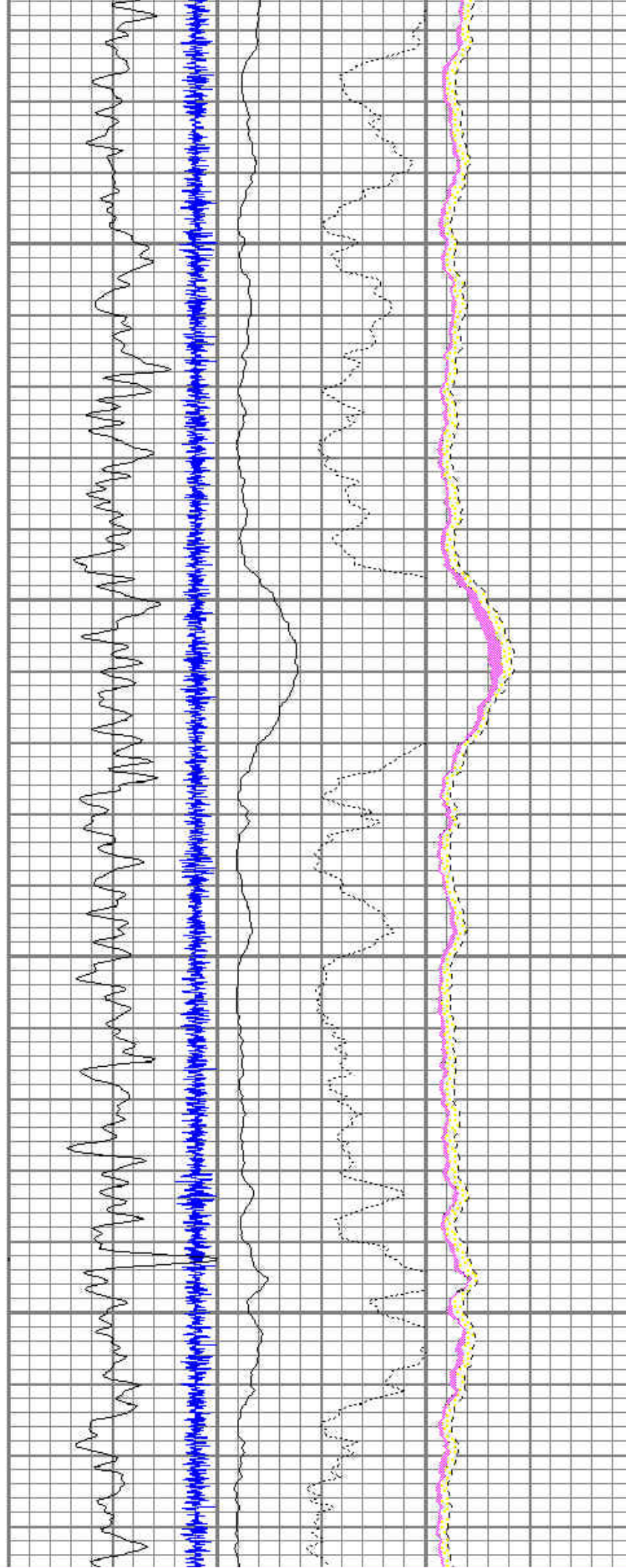


4700



4800

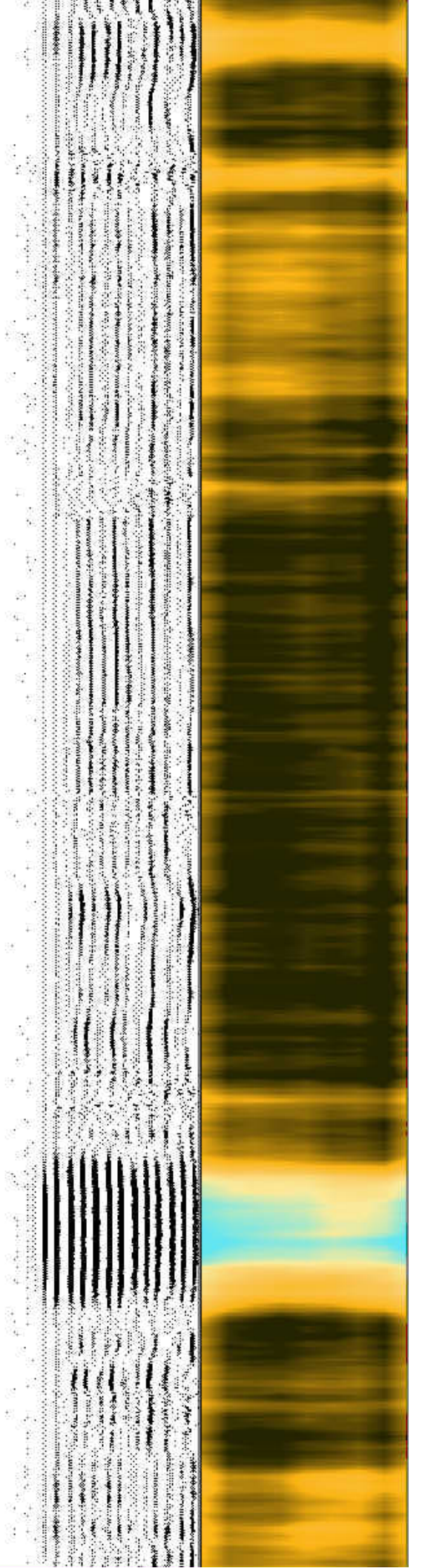
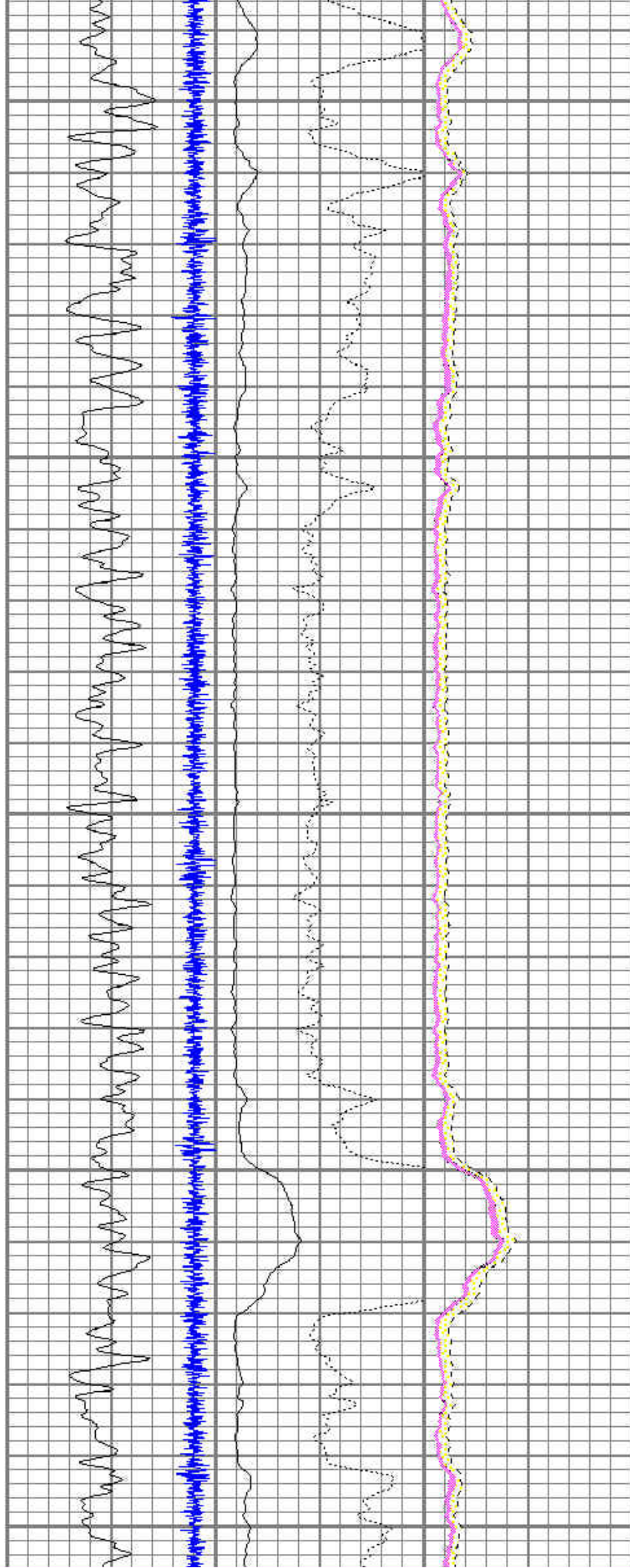
4900



5000

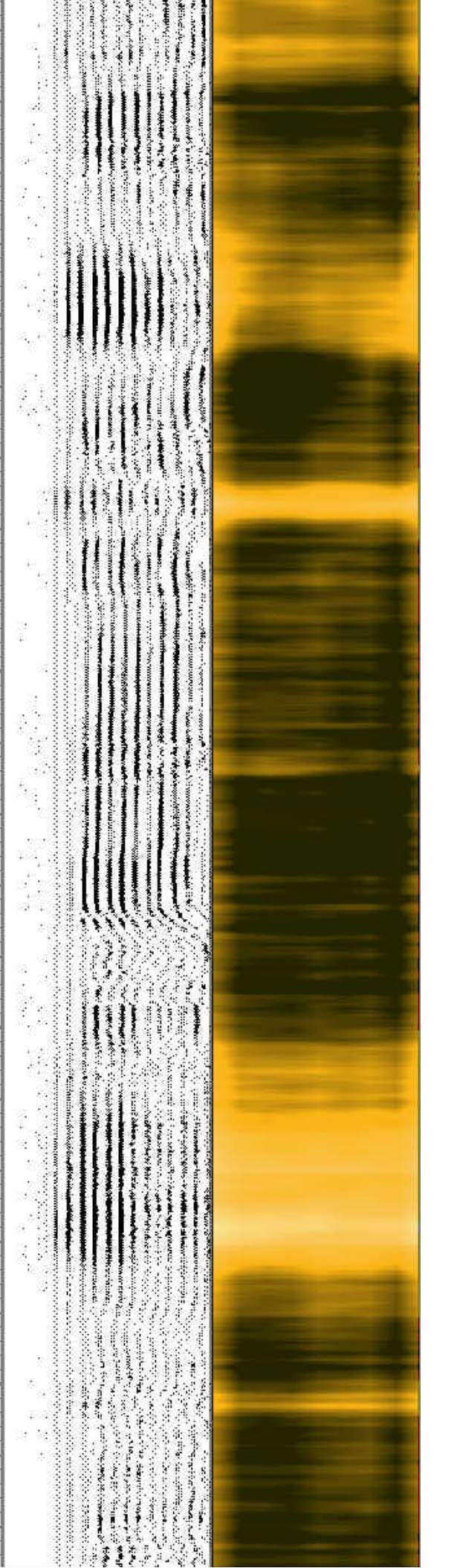
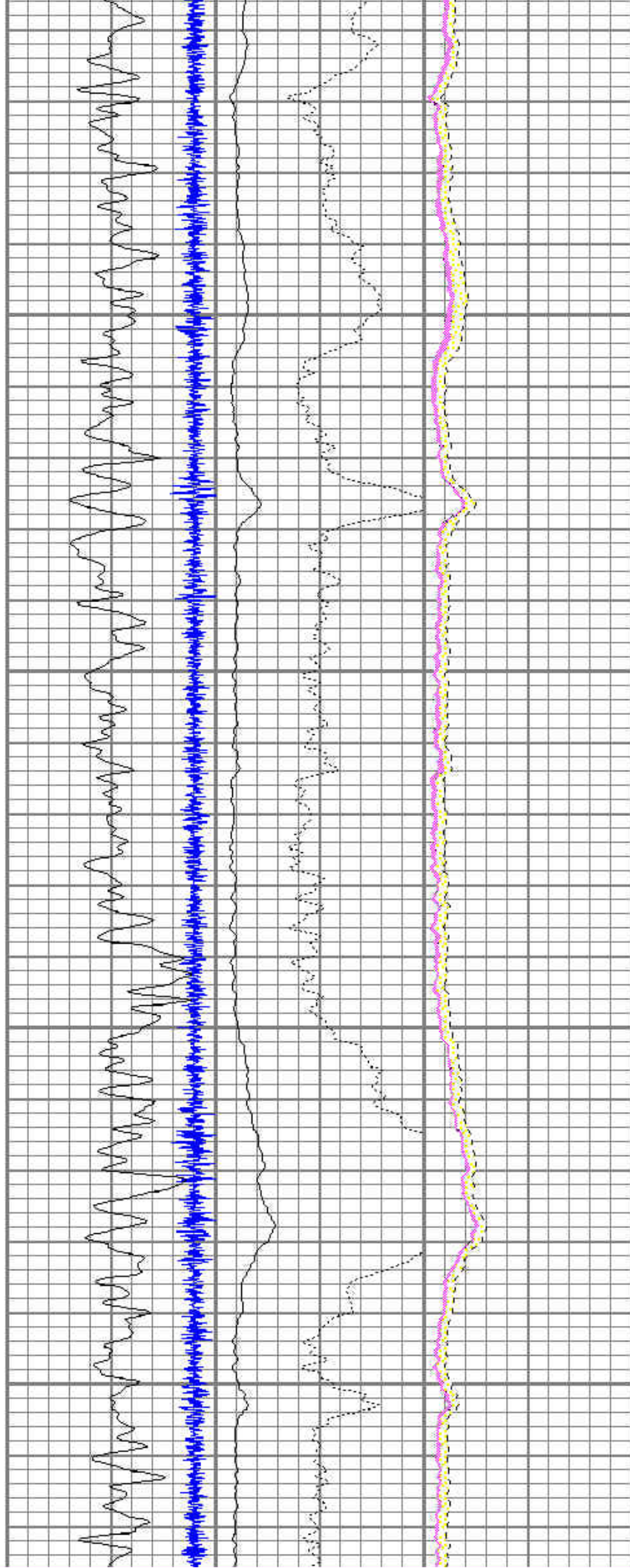
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5200



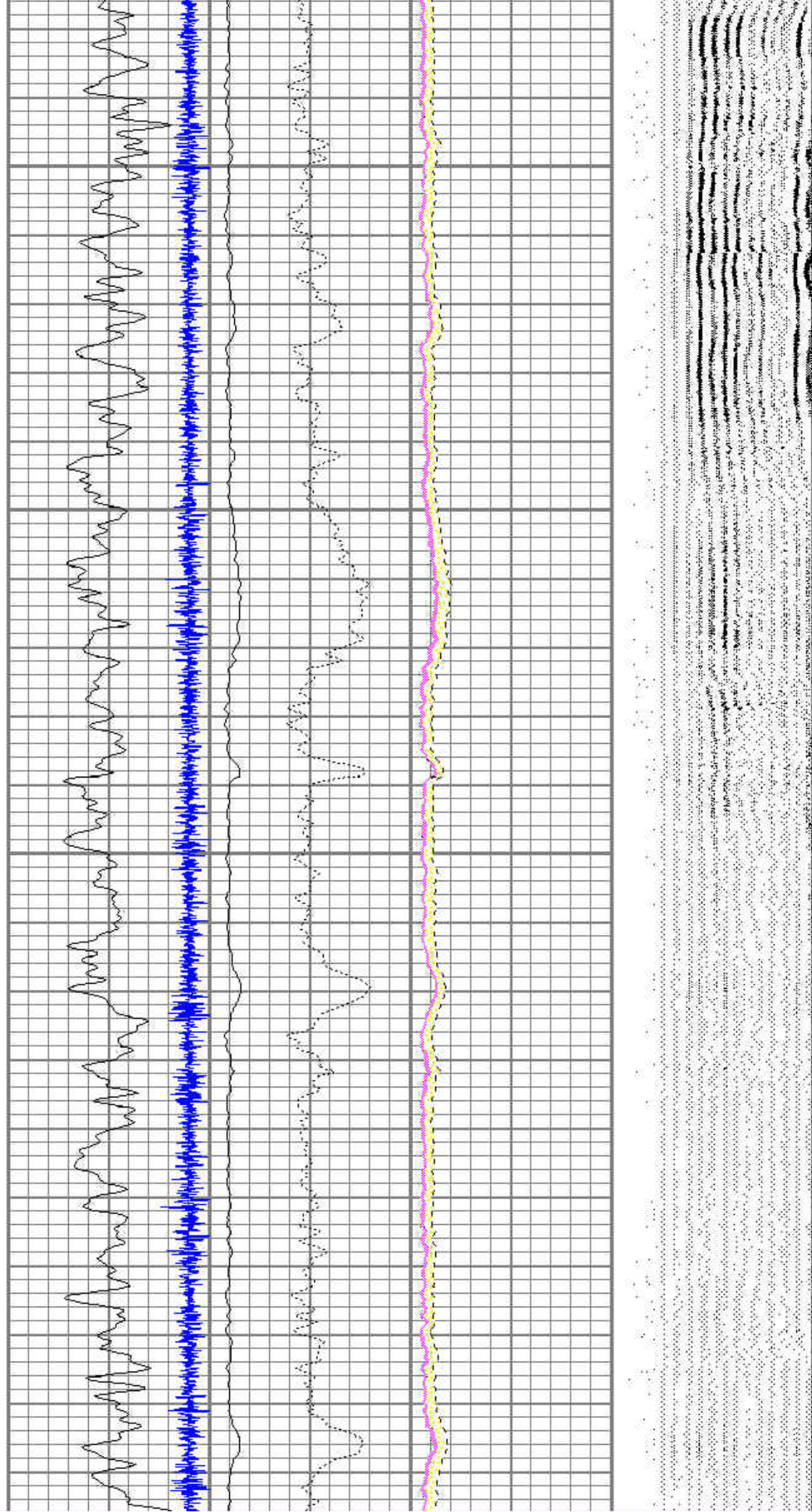
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5400



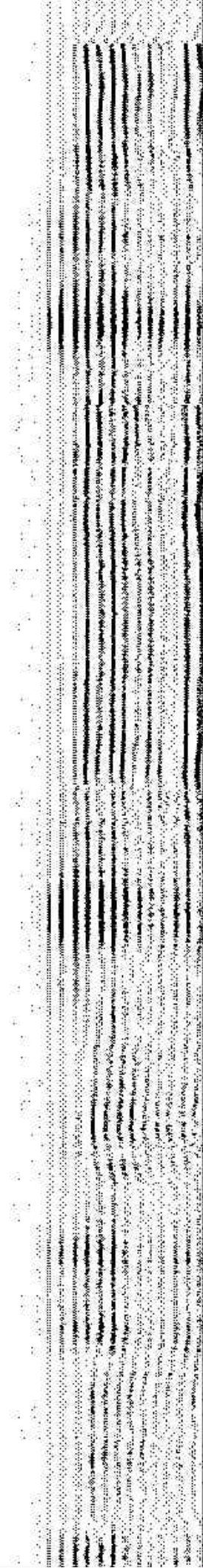
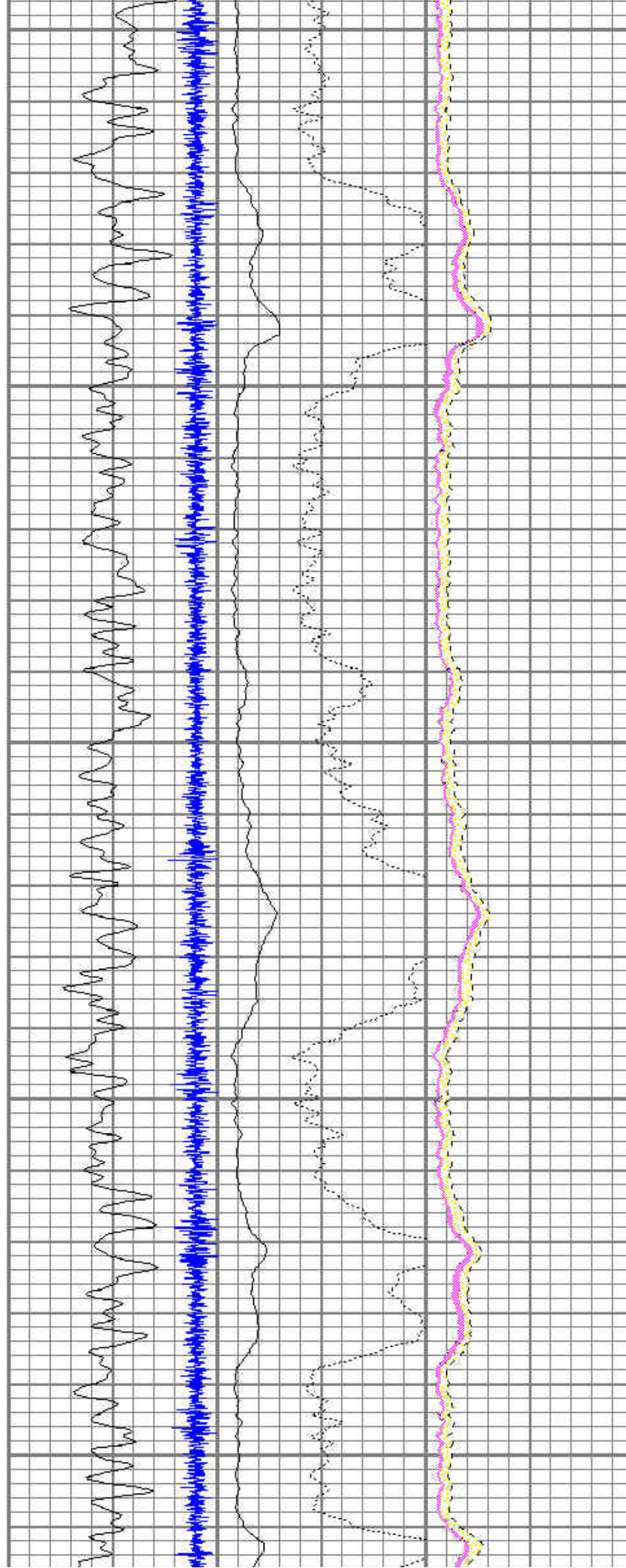
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5600



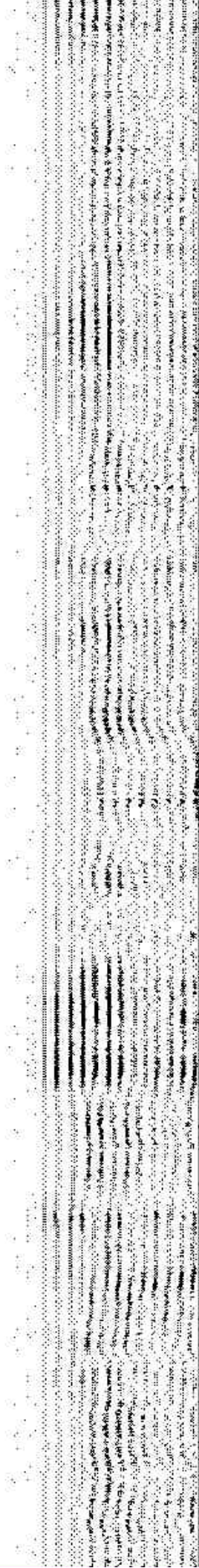
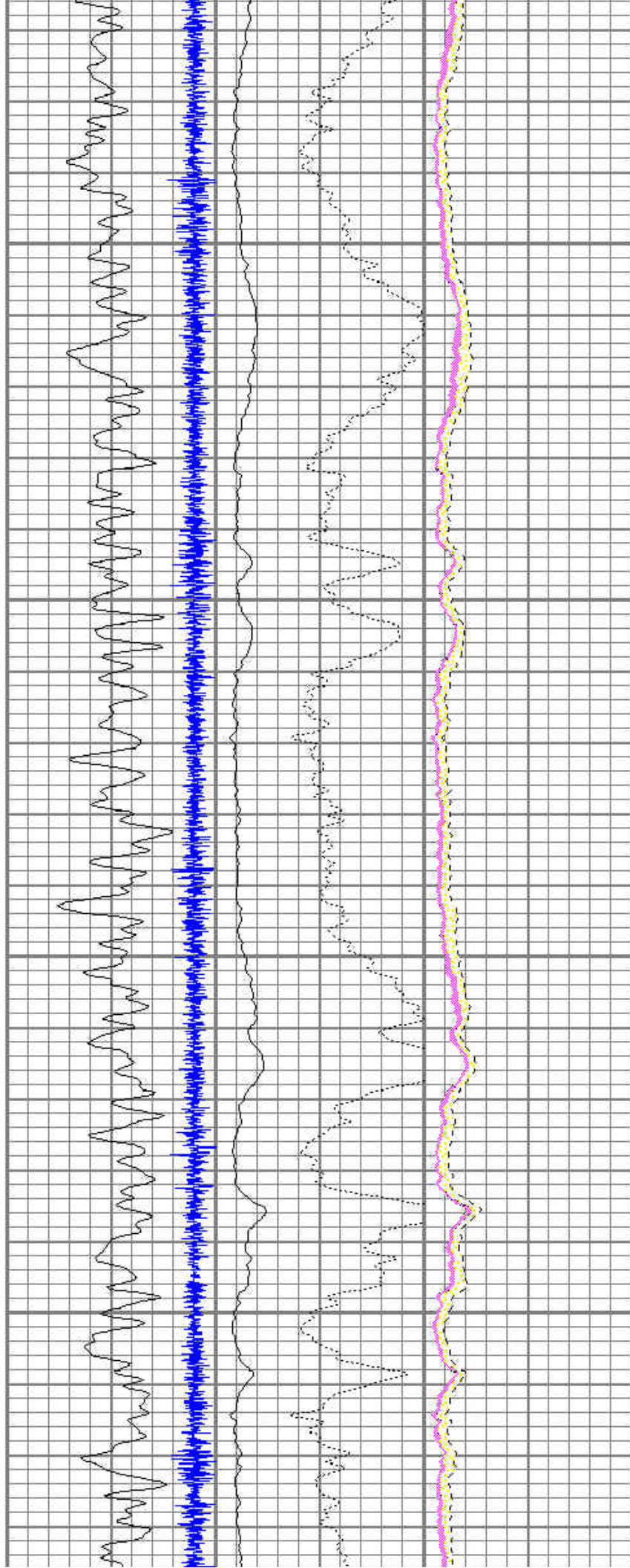
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5800



5900

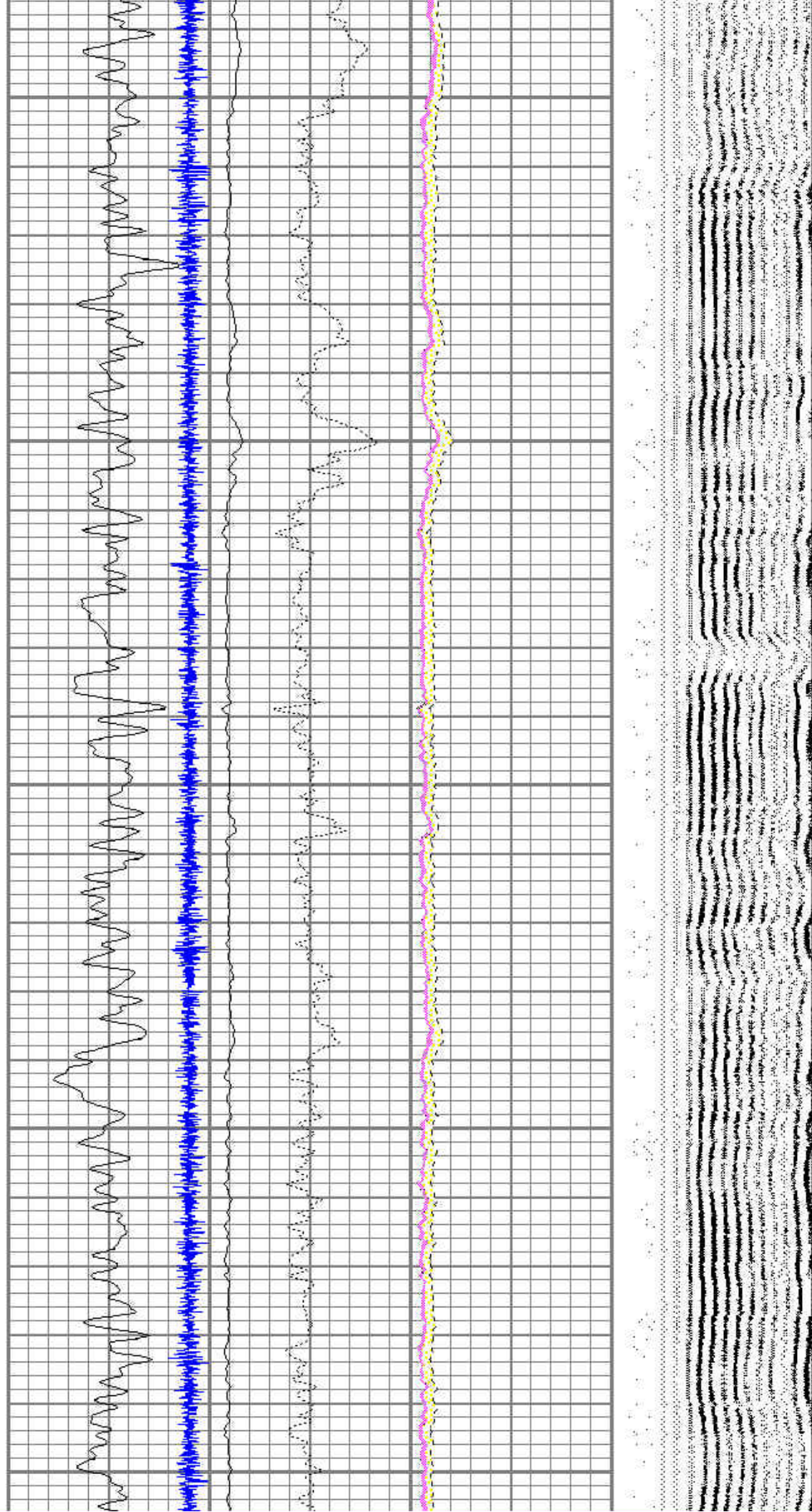
6000



6100

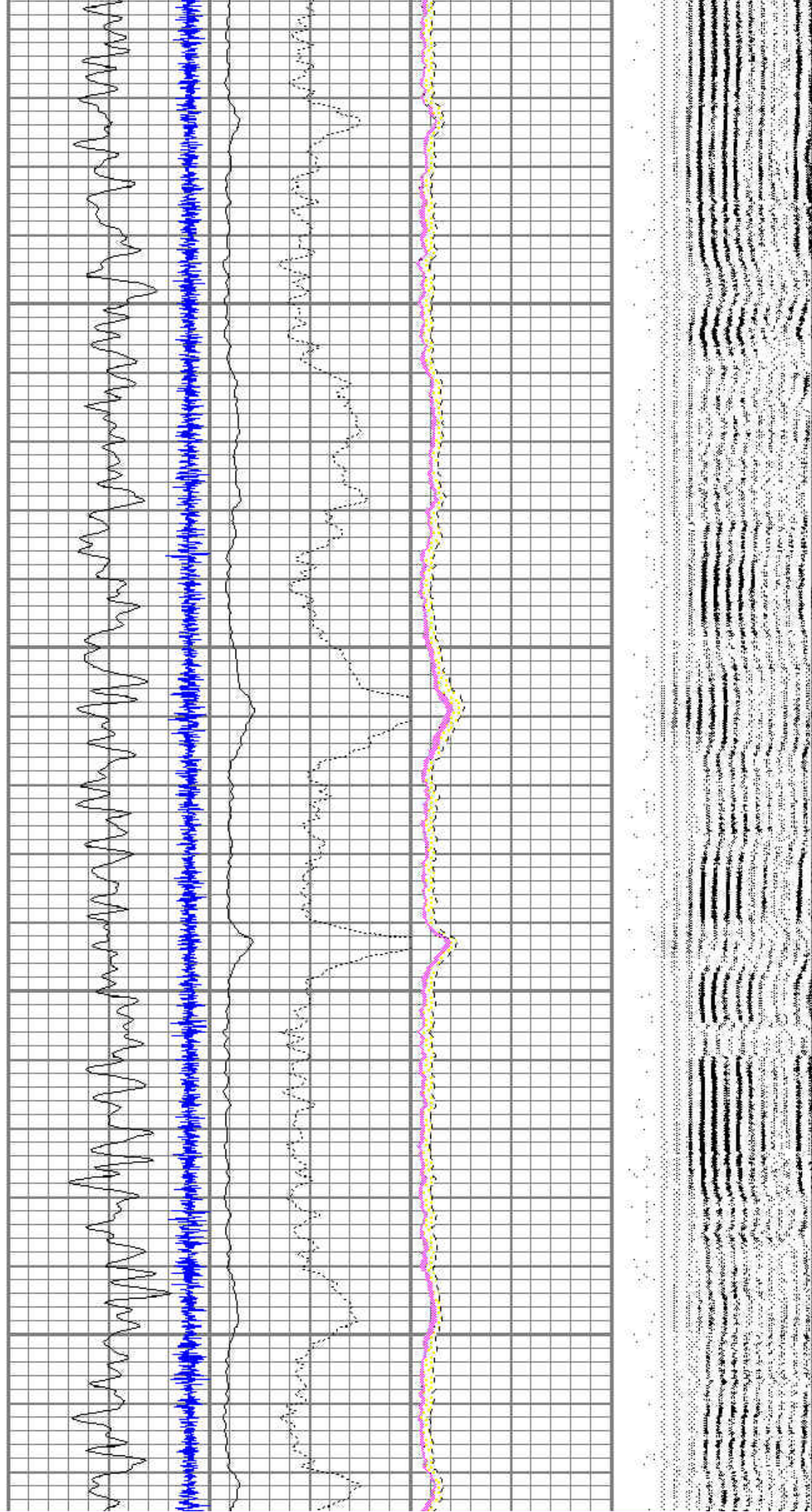
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6300



6400

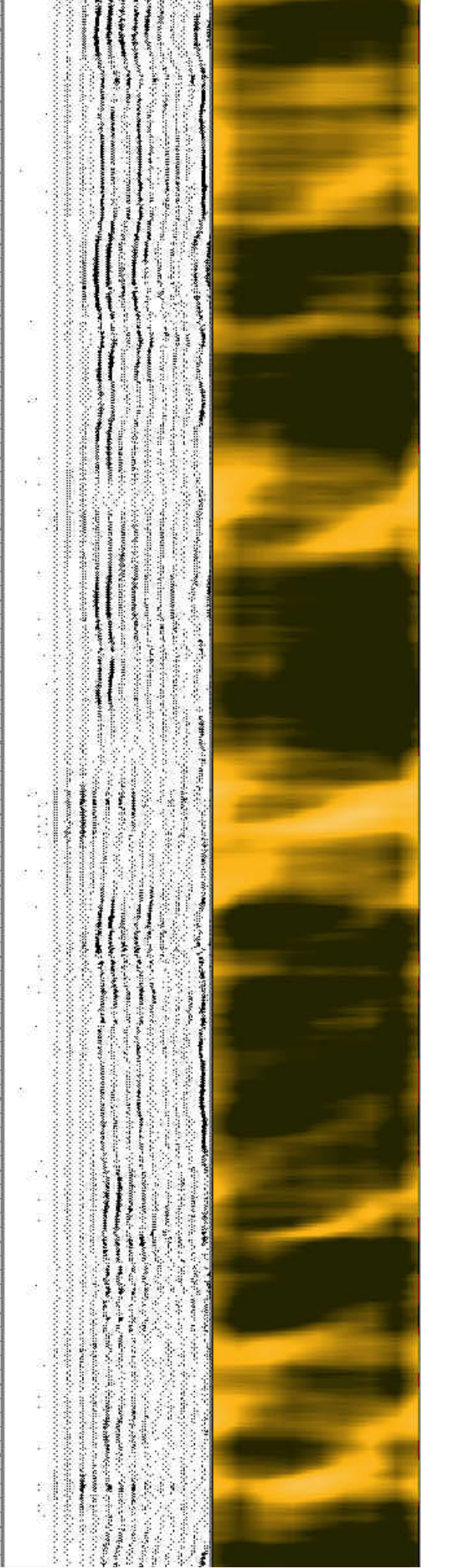
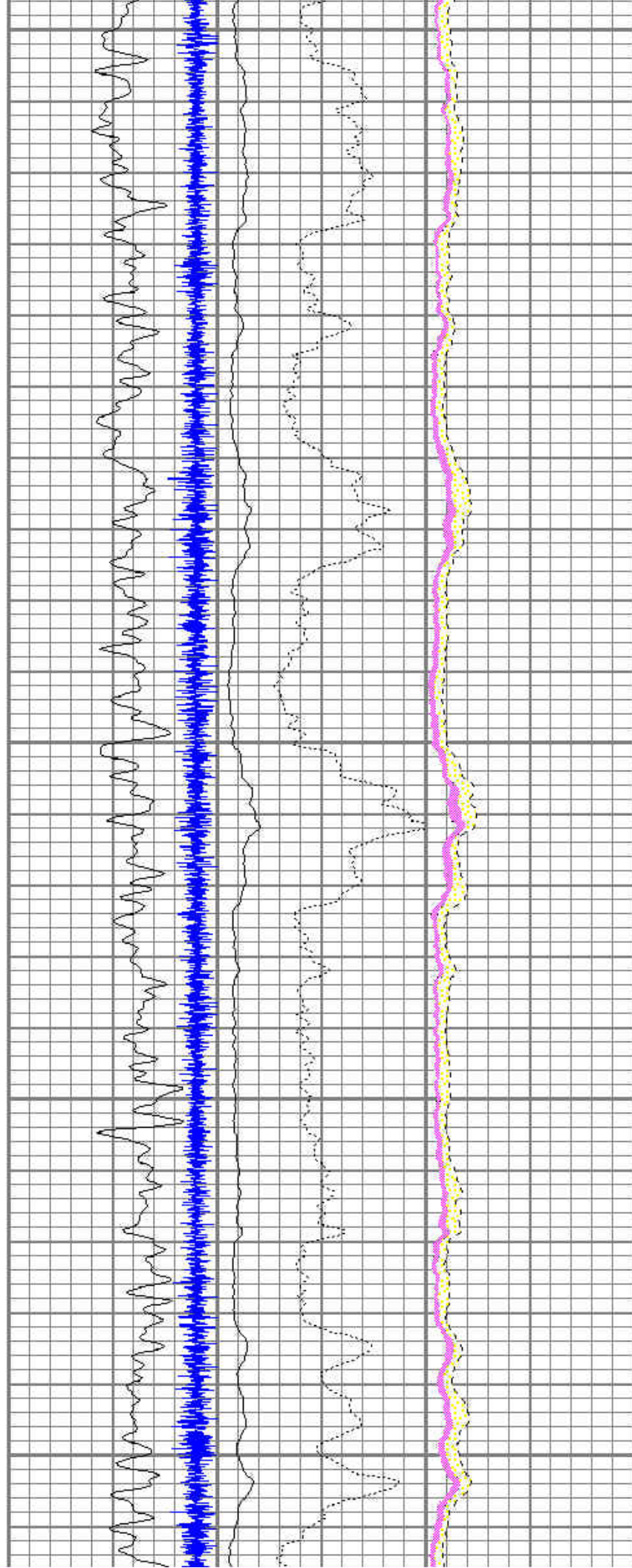
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6700

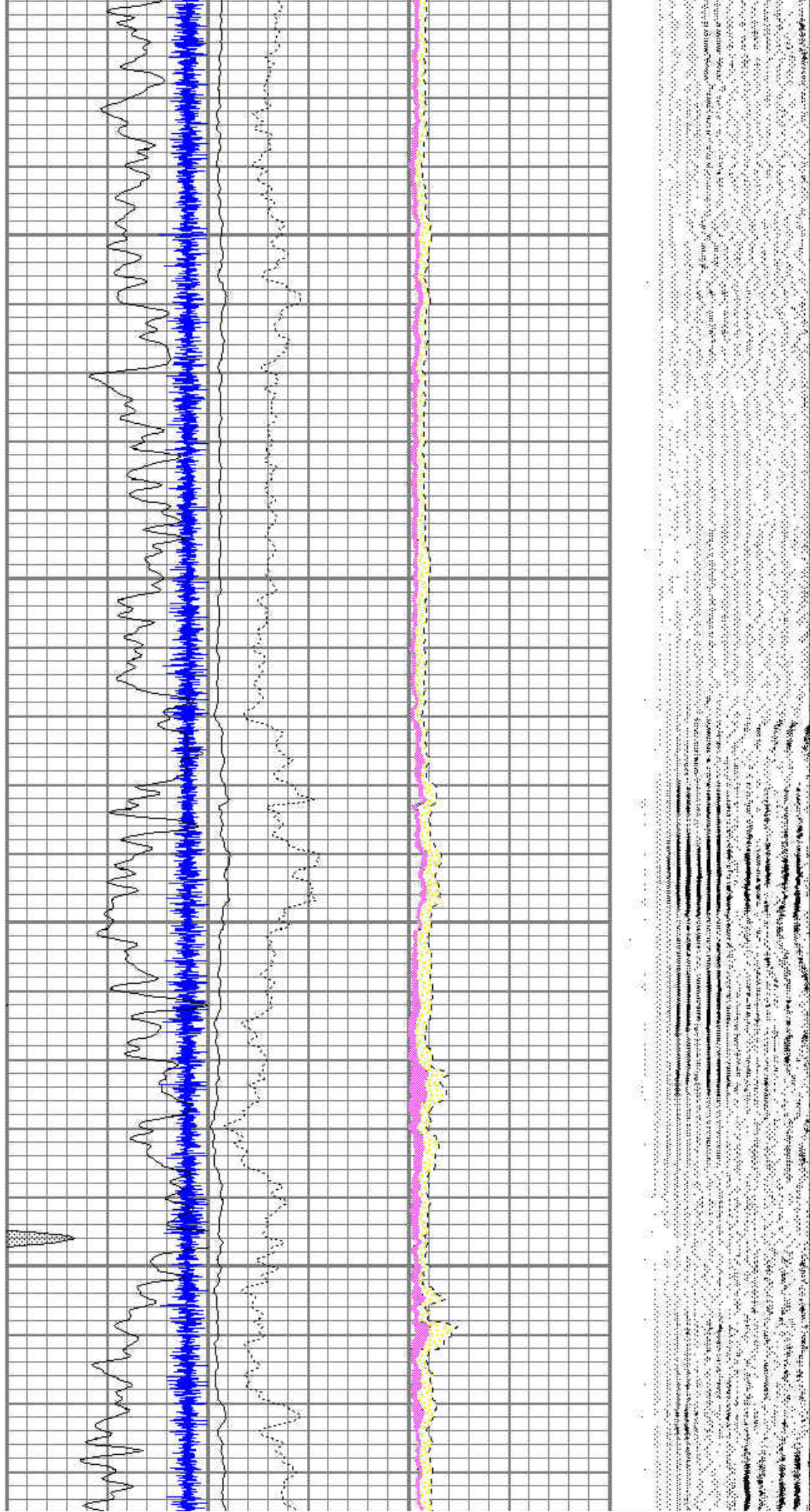
6800

6900



7000

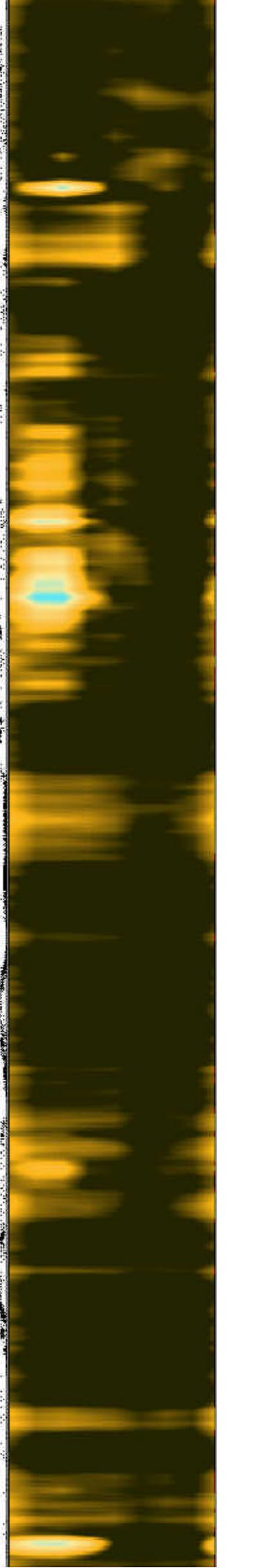
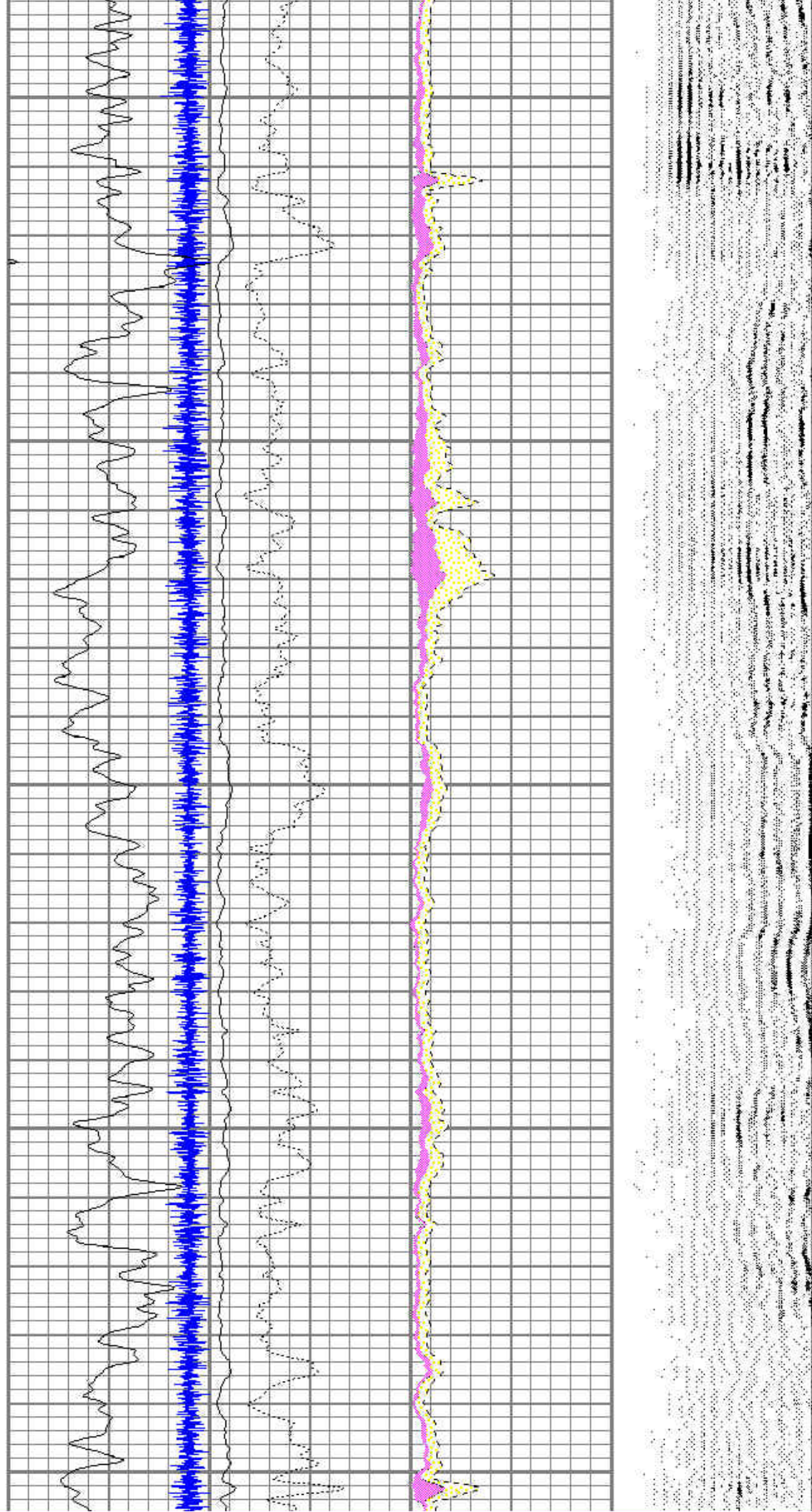
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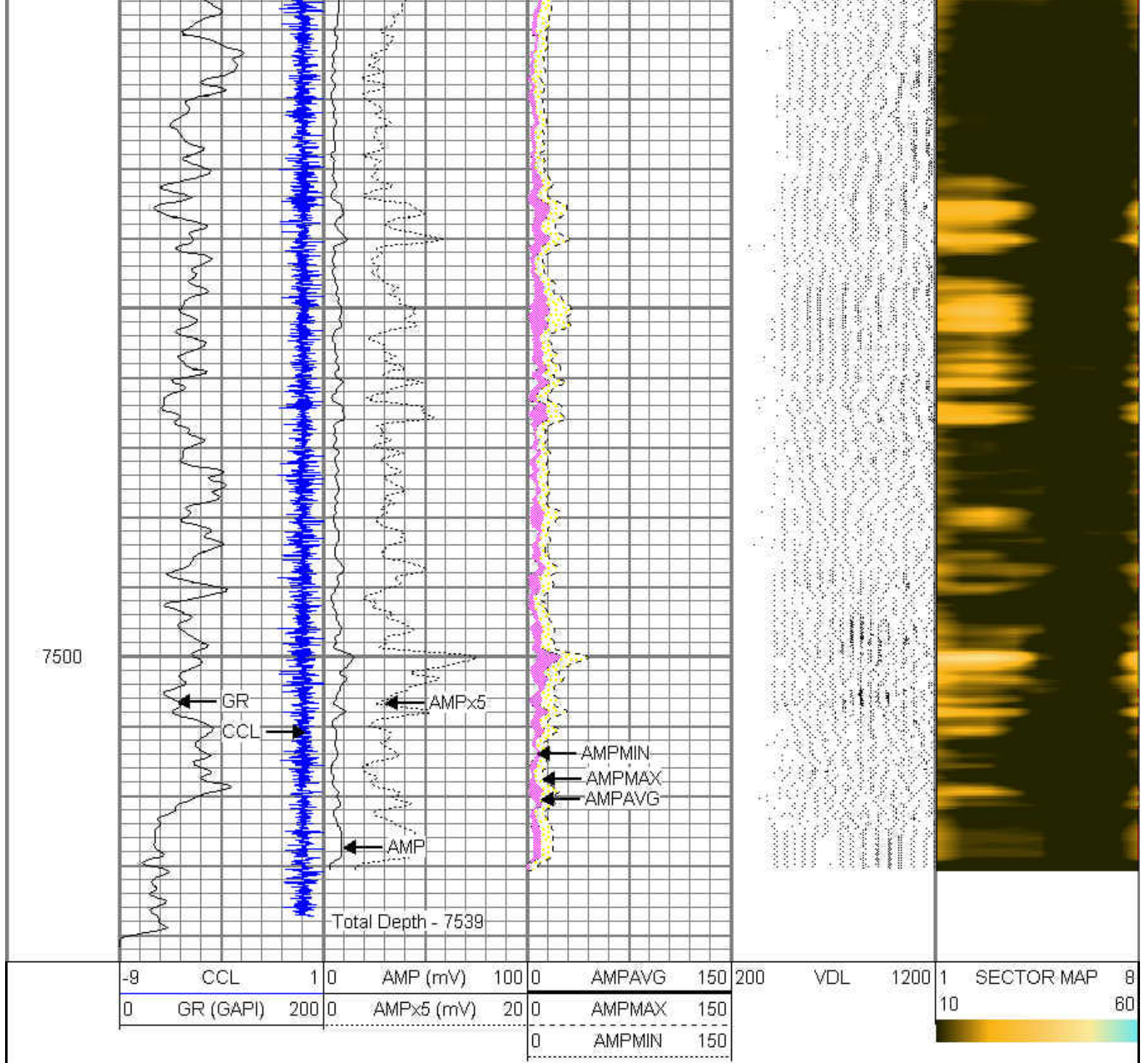


7200

7300

7400





Calibration Report

Database File: drieth_1d_6h-a368.db
 Dataset Pathname: rbl
 Dataset Creation: Wed Sep 10 11:11:34 2014 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Fri Jul 04 19:57:30 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	070132	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	2949.101	ft

Master Calibration, performed Wed Sep 10 07:51:03 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.018	0.534	1.000	71.921	137.812	-1.503
CAL	1.525	0.753				
5'	0.033	0.423	1.000	71.921	181.887	-4.948
SUM						
S1	0.096	0.535	0.000	100.000	227.619	-21.845
S2	0.011	0.513	0.000	100.000	199.222	-2.104
S3	0.012	0.506	0.000	100.000	202.572	-2.443
S4	0.011	0.520	0.000	100.000	196.573	-2.188
S5	0.019	0.539	0.000	100.000	192.617	-3.729
S6	0.020	0.559	0.000	100.000	185.726	-3.752
S7	0.019	0.569	0.000	100.000	181.834	-3.509
S8	0.018	0.556	0.000	100.000	186.017	-3.342

Internal Reference Calibration, performed Wed Wed Sep 10 10:10:09 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	1.525	0.753	1.000	0.000

Air Zero Calibration, performed Wed Sep 10 11:09:27 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.012		0.000			0.008
5'	0.010		0.000			0.022
SUM						
S1	0.016		0.000			0.080
S2	0.015		0.000			-0.004
S3	0.015		0.000			-0.003
S4	0.016		0.000			-0.005
S5	0.013		0.000			0.006
S6	0.013		0.000			0.007
S7	0.012		0.000			0.007
S8	0.013		0.000			0.005

Log Variables

Database: C:\Warrior\Data\drieth_1d_8h-a368.db
Dataset: field/well/run3/rblup

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 203	BOREID in 7.875				