



RADIAL SECTOR BOND LOG WITH GAMMA RAY

Peer Energy Services

Well	EDITH ANN DUCKWORTH 4C-21H-0268
Field	WATTENBERG
County	WELD
State	COLORADO

Company	ENCANA OIL & GAS USA		
Well	EDITH ANN DUCKWORTH 4C-21H-0268		
Field	WATTENBERG		
County	WELD	State	COLORADO

Location:	API # : 0512338071	Other Services
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LAT: 40.11761000
LONG: -105.00360000

SEC 16 TWP 2N RGE 68W

Permanent Datum	GL	Elevation 4,926'	Elevation
Log Measured From	KB		K.B. 4,954.5
Drilling Measured From	KB.....28'		D.F. 4,954.5
			G.L. 4,926

29-JUL-2014

ONE

9897

9897

SURF-AC

8-3/4"

WVA | EN

308

10.5

2254

U

K-PUMP IN

10

P-15

9132

FOR I MUR

LEROY HODGE

CHRIS CLENN

[illegible]

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

THANK YOU FOR USING PIONEER Energy SERVICES

Your Pioneer Energy Services Crew

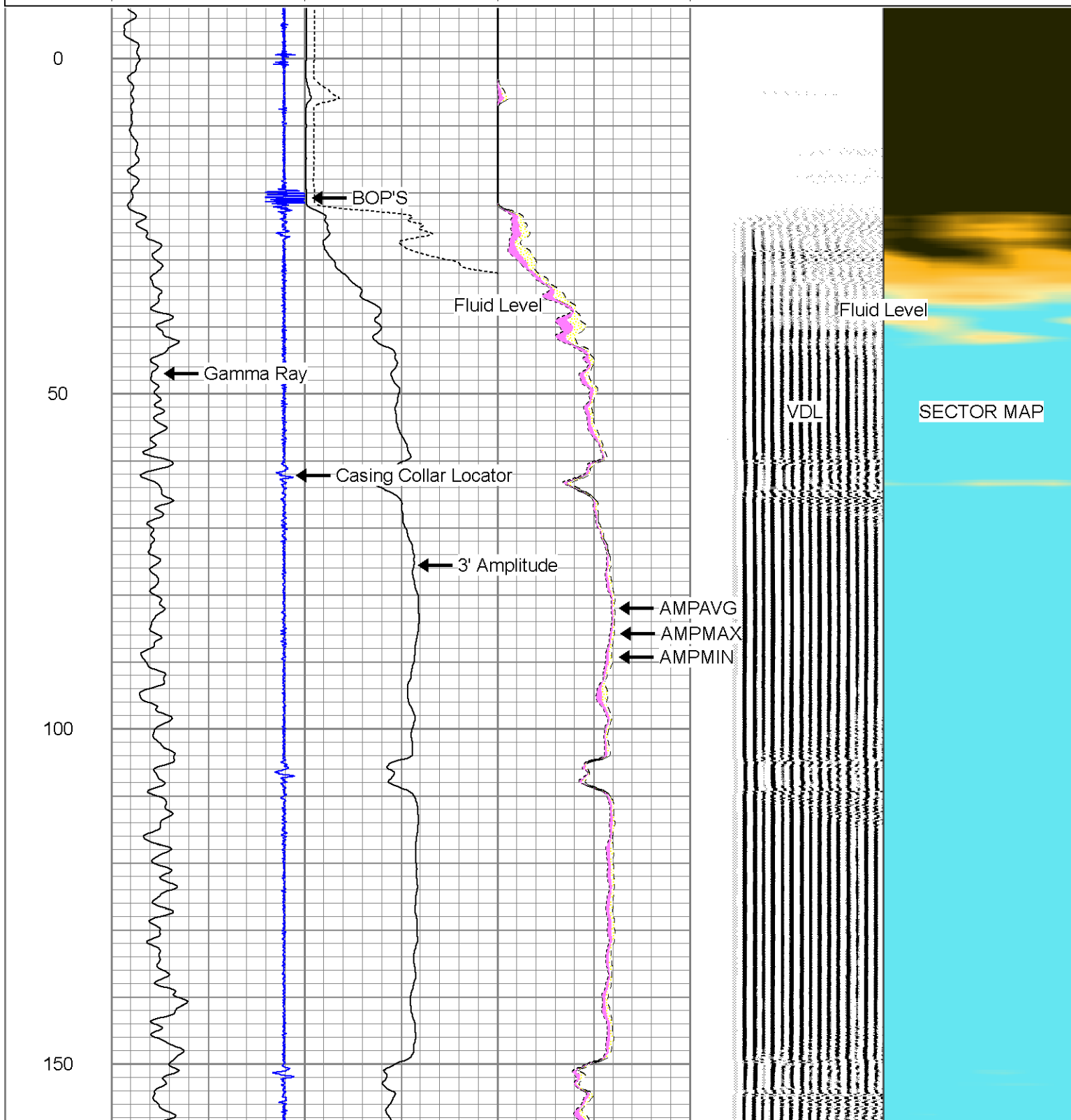
Tool Data - Services

Serial Number

Engineer: HOBBS
Operator: SPILLMAN
Operator: SALCIDO
Operator:

Database File: edith_ann_duckworth_4c-21h-0268.db
 Dataset Pathname: pass1
 Presentation Format: scbl02
 Dataset Creation: Tue Jul 29 12:20:27 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				



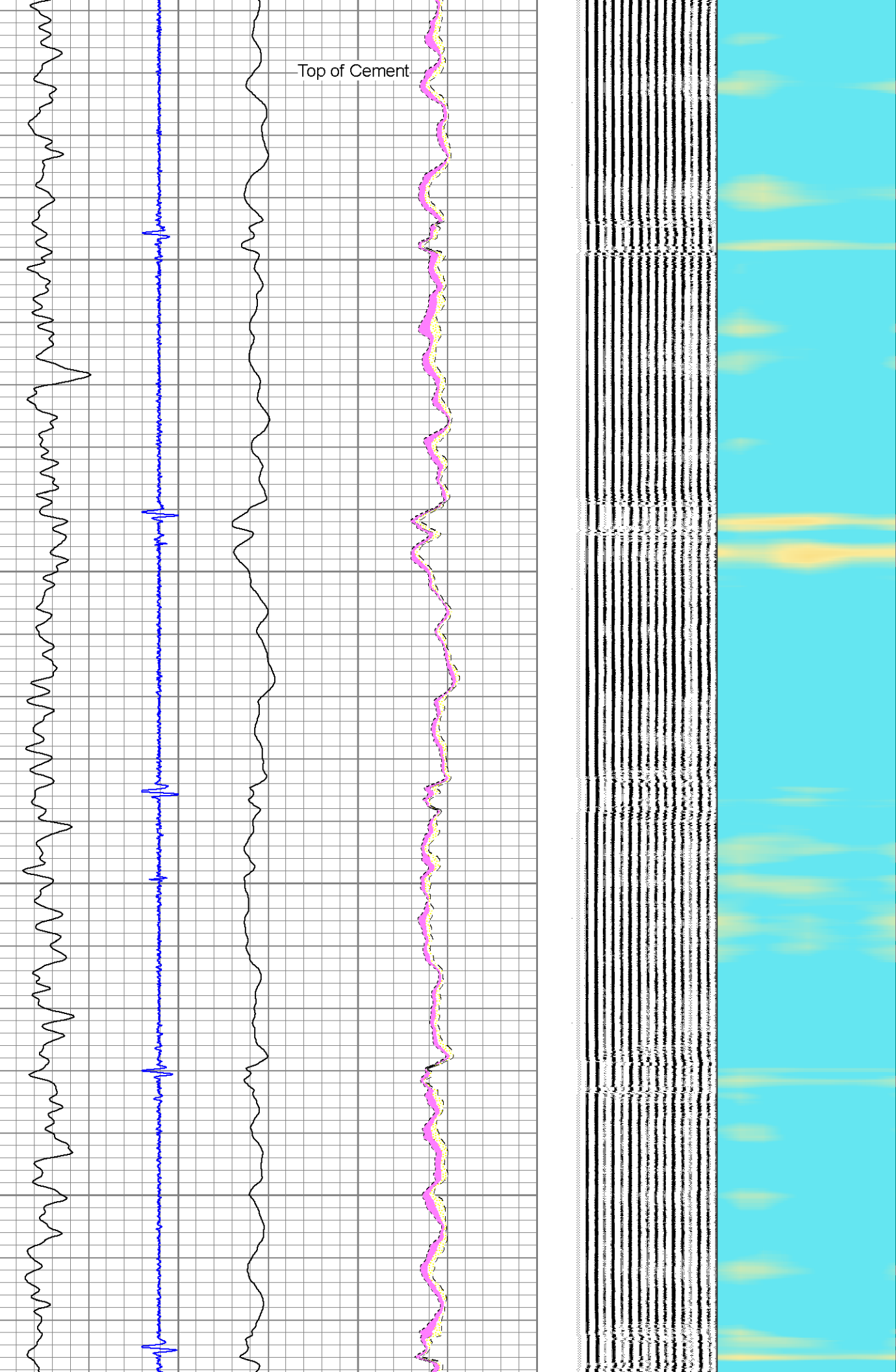
200

250

300

350

Top of Cement

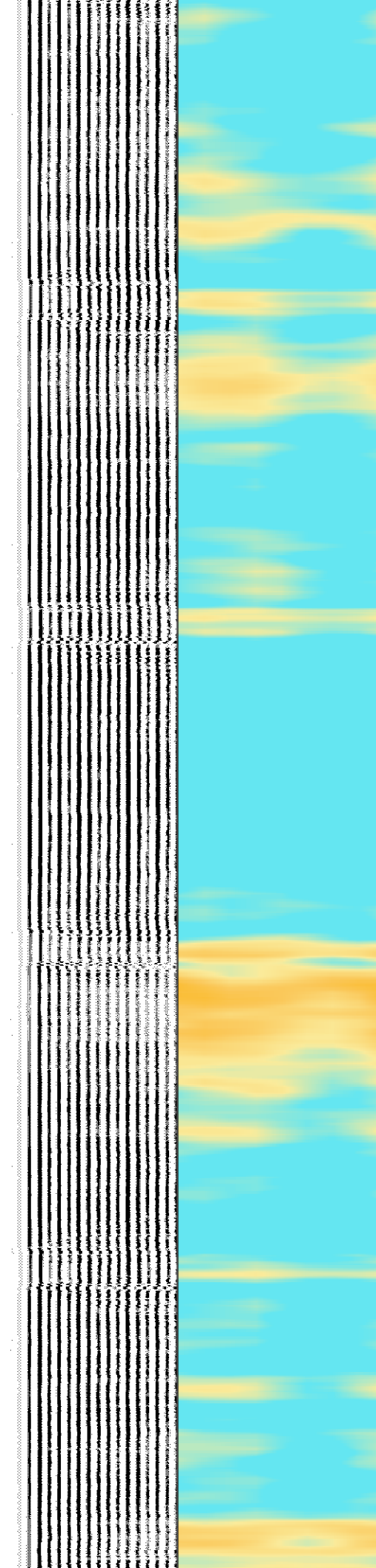
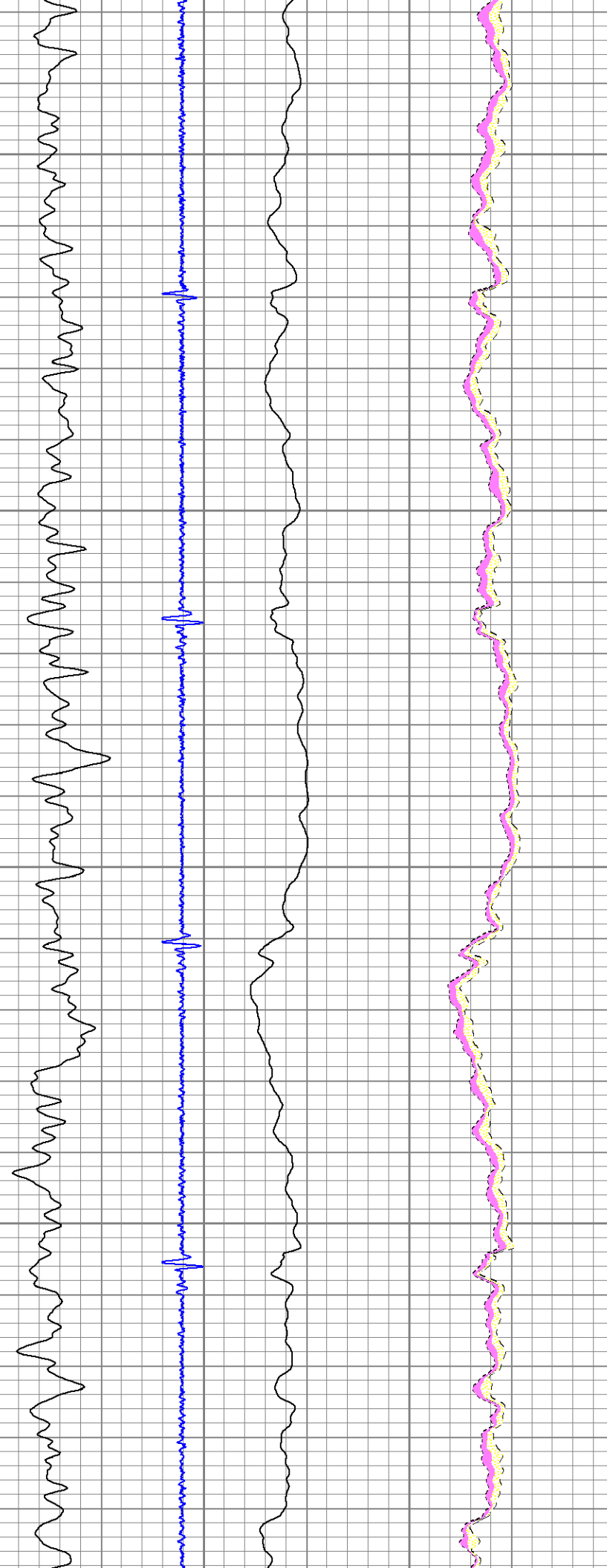


400

450

500

550



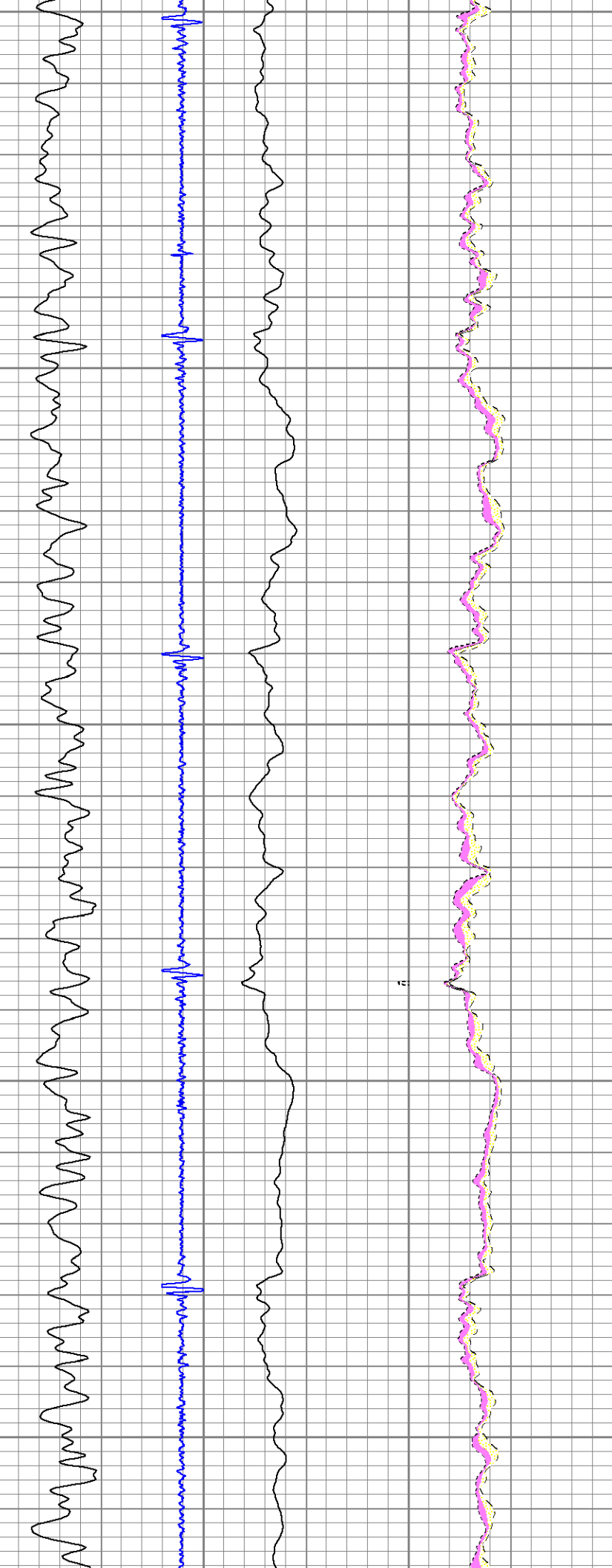
600

650

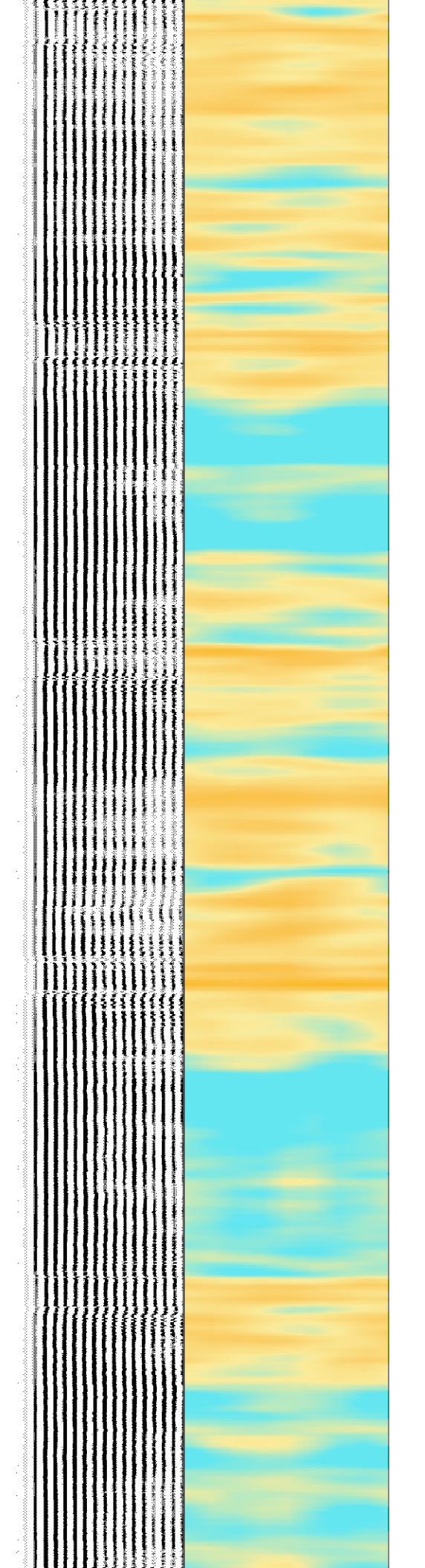
700

750

800



12

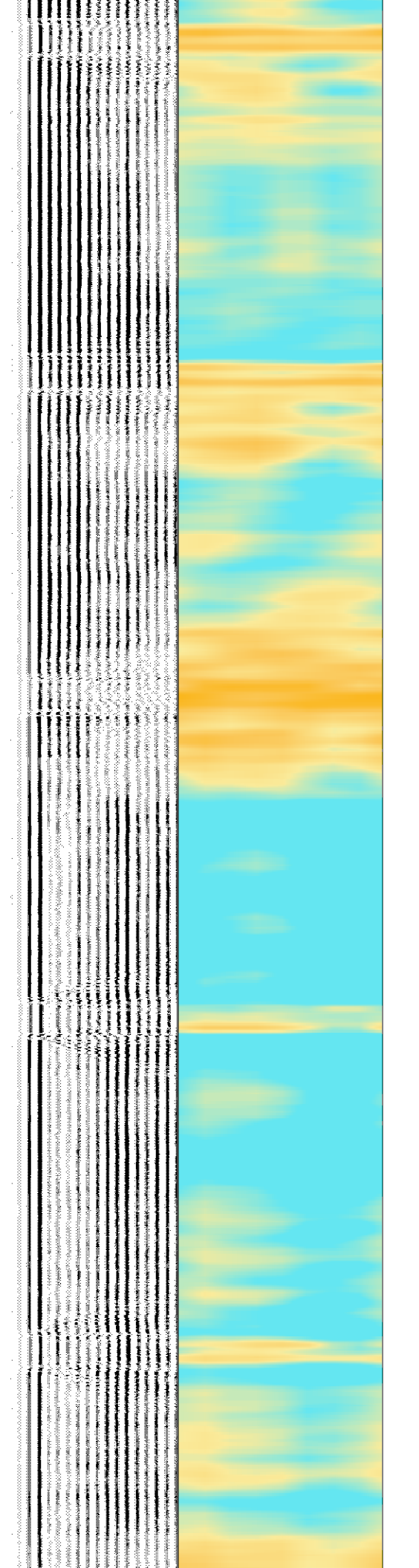
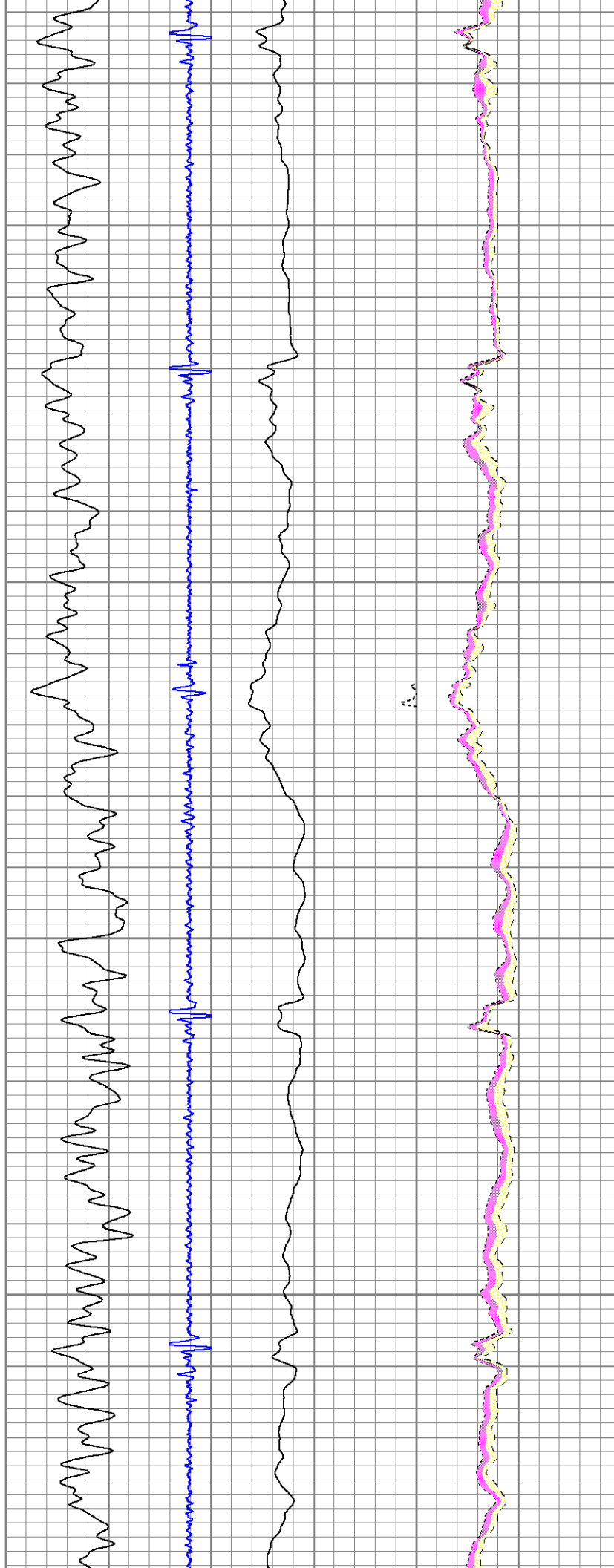


850

900

950

1000



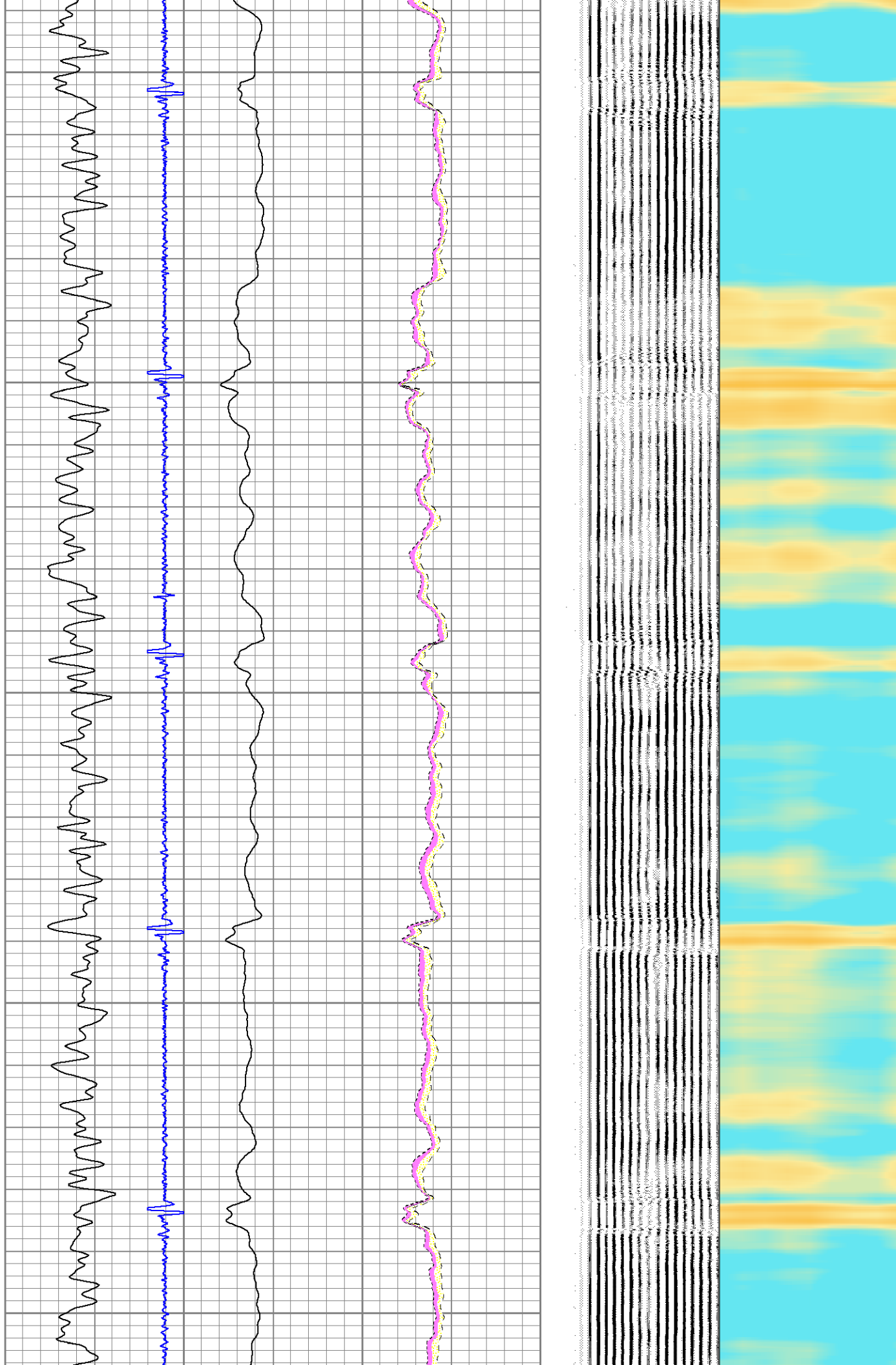
1050

1100

1150

1200

1250

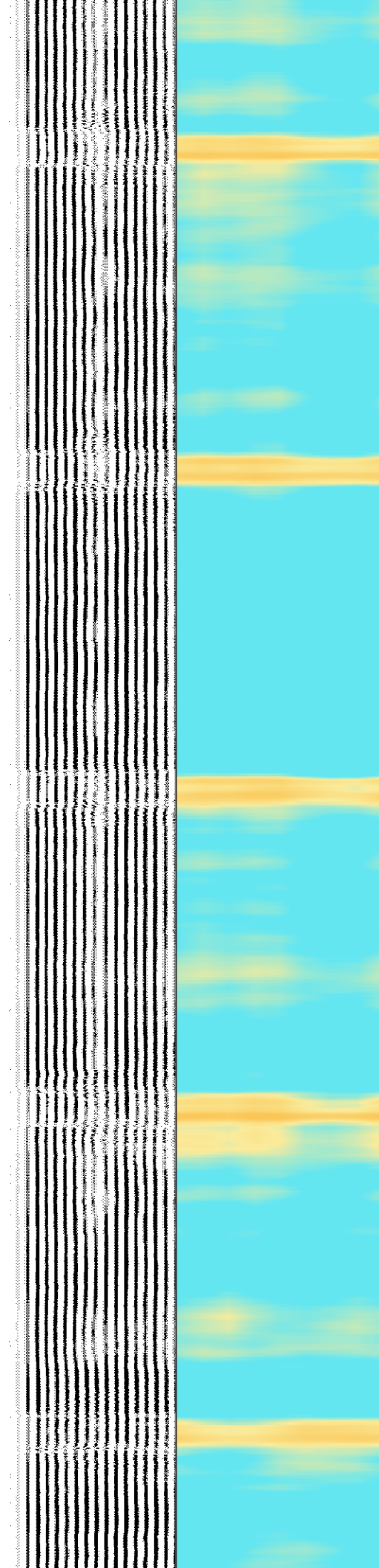
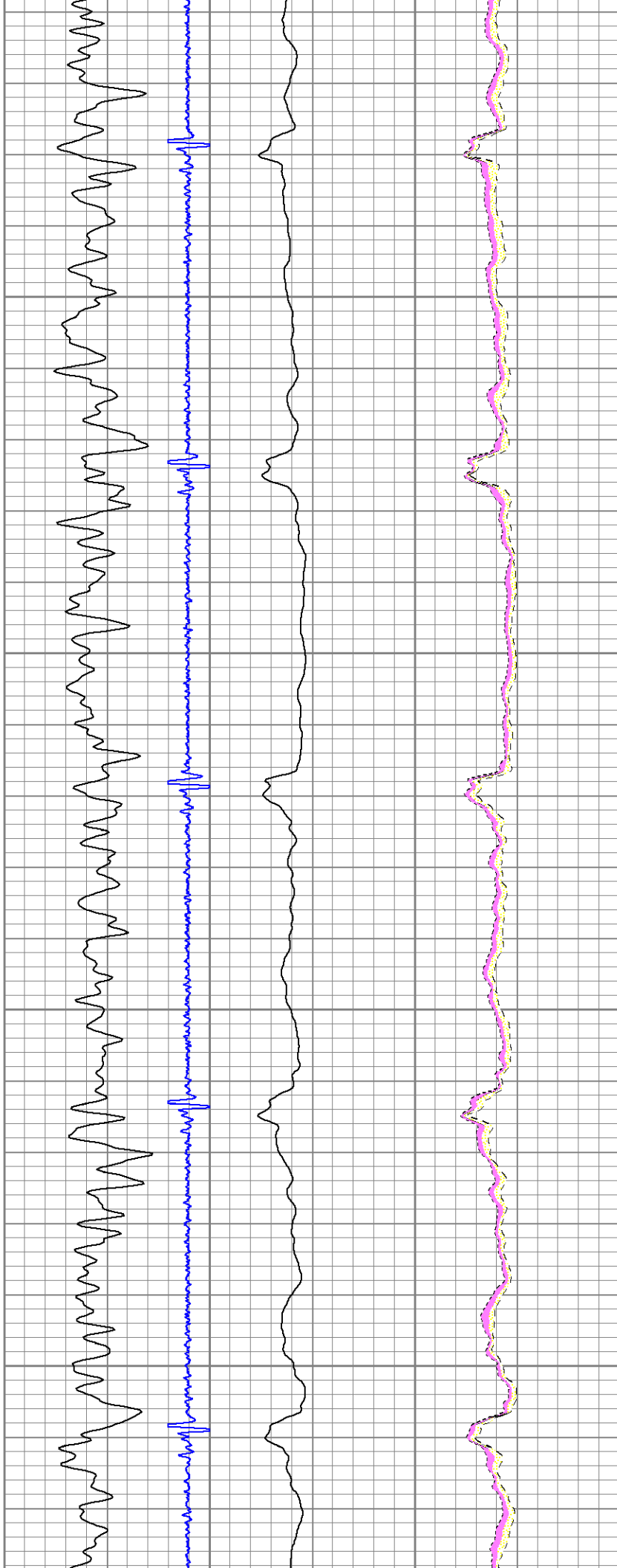


1300

1350

1400

1450

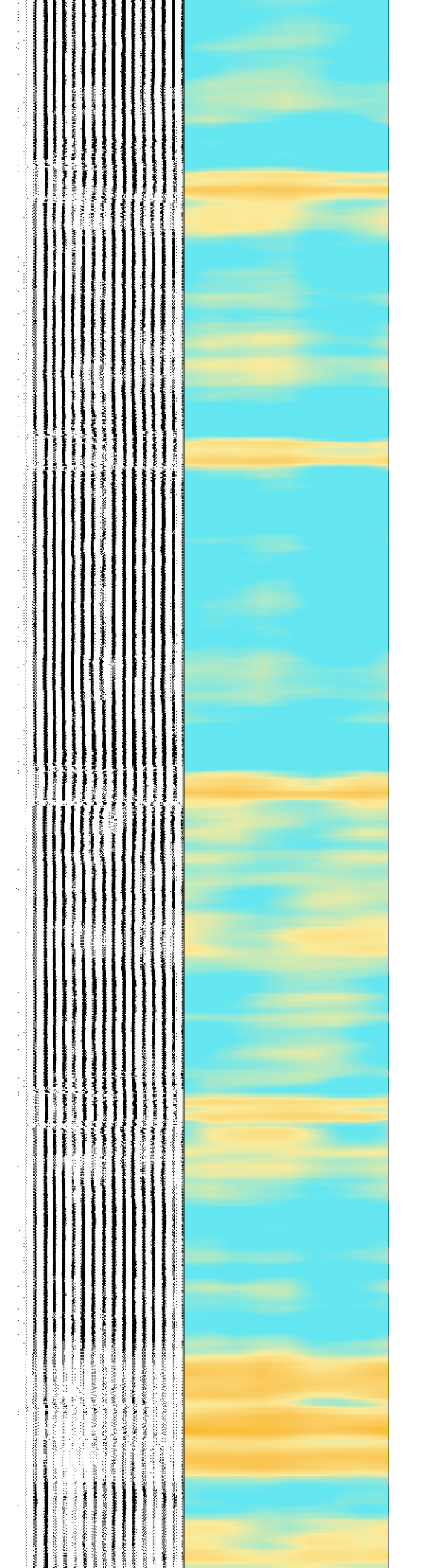
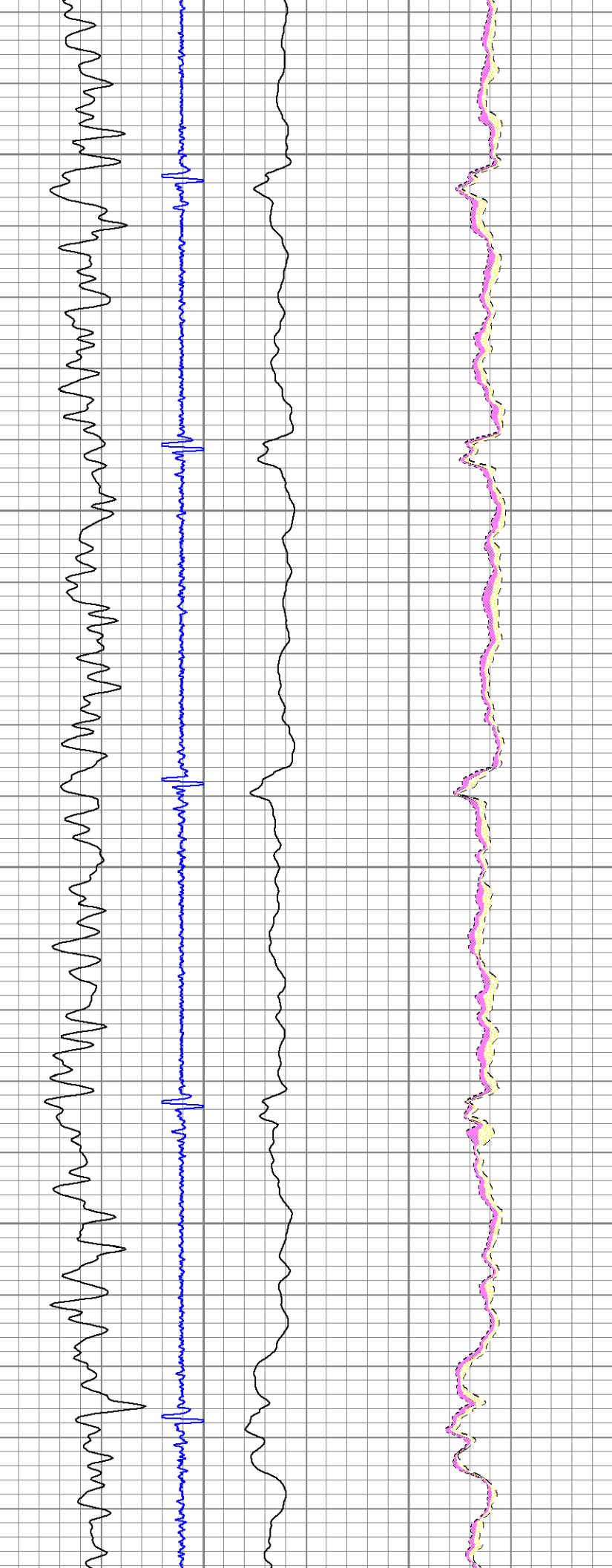


1500

1550

1600

1650



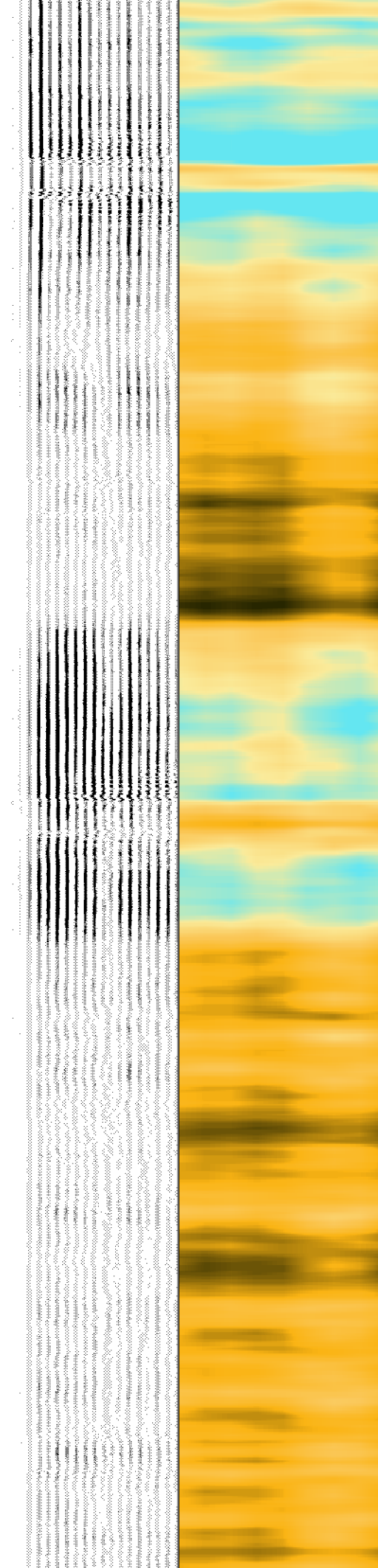
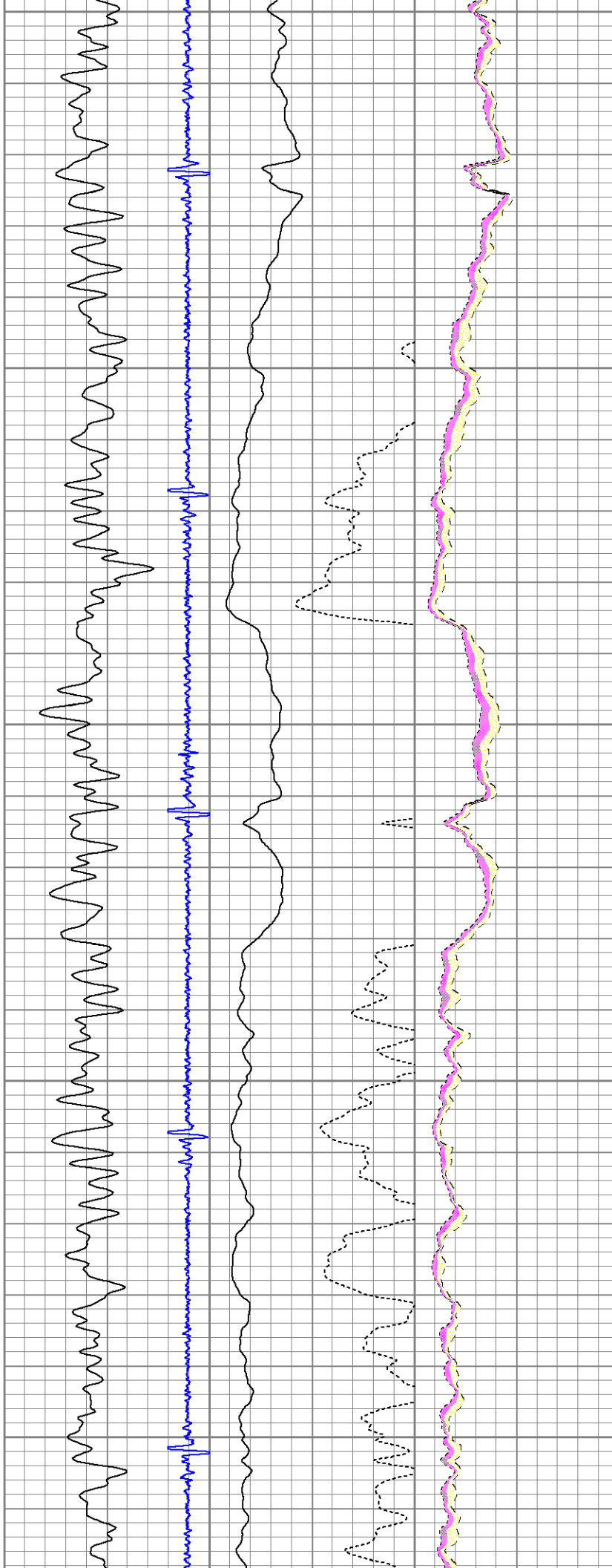
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1750

1800

1850

1900

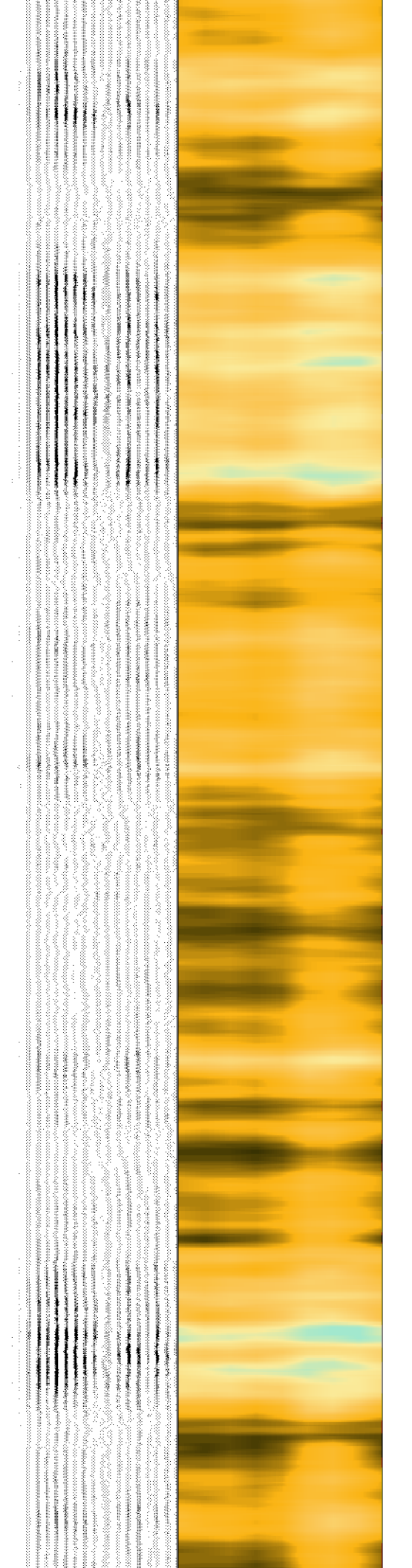
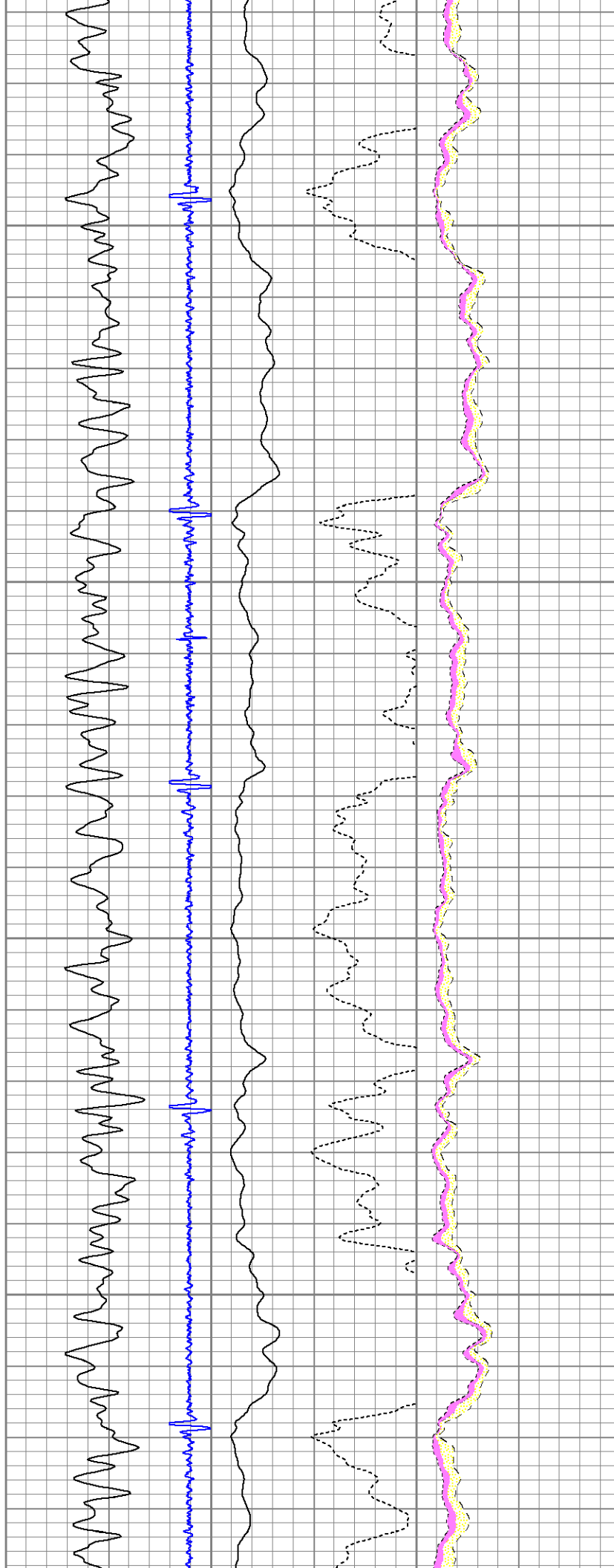


1950

2000

2050

2100



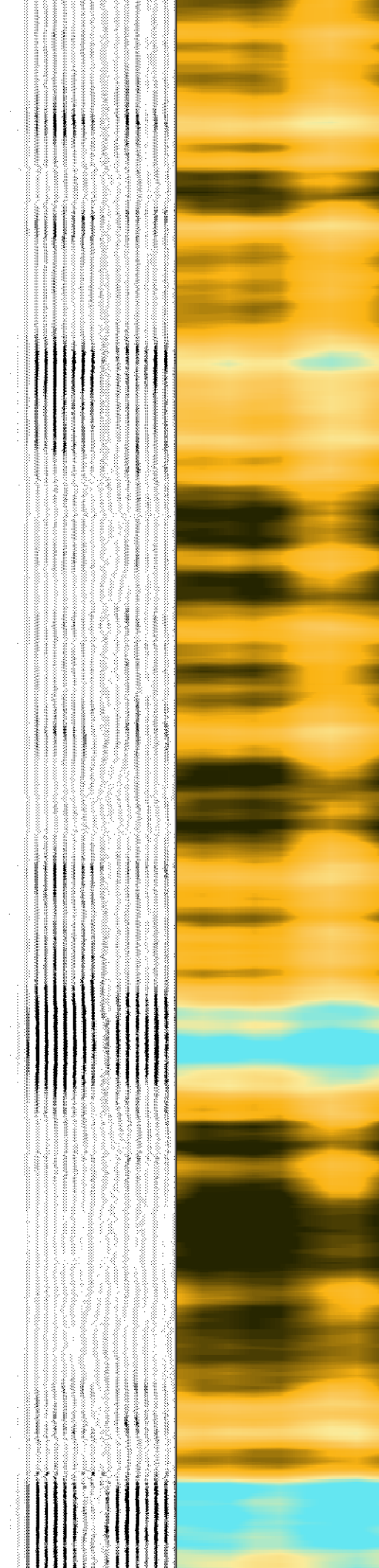
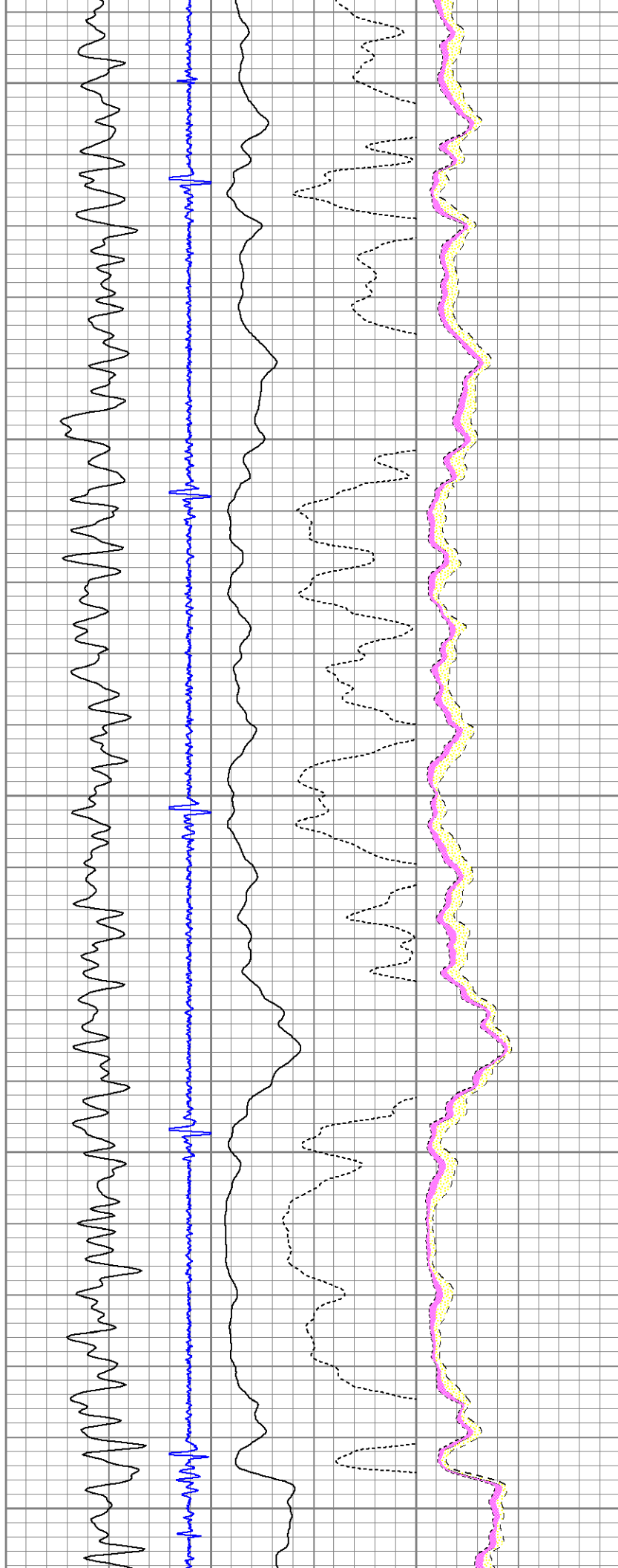
2150

2200

2250

2300

2350

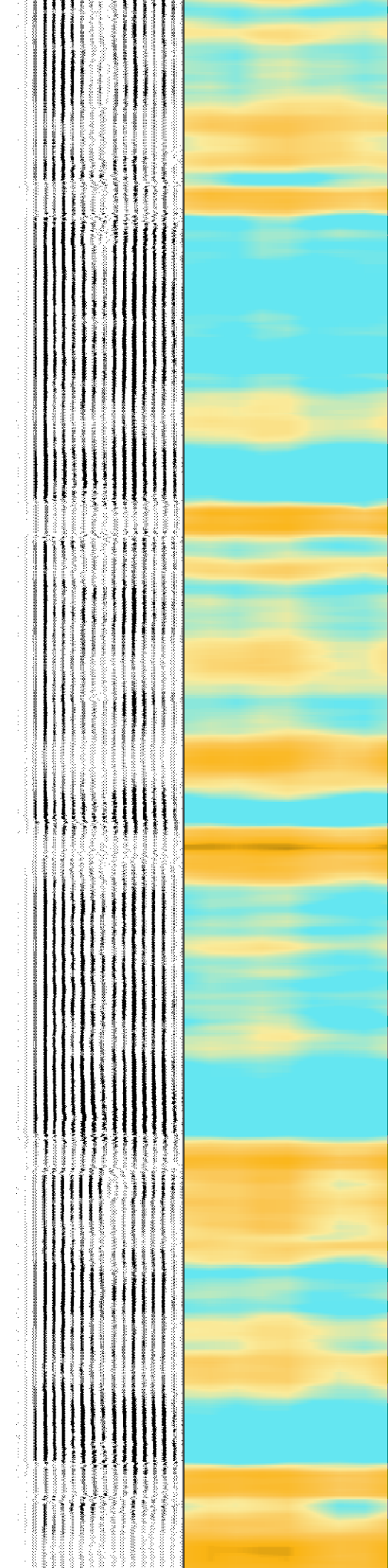
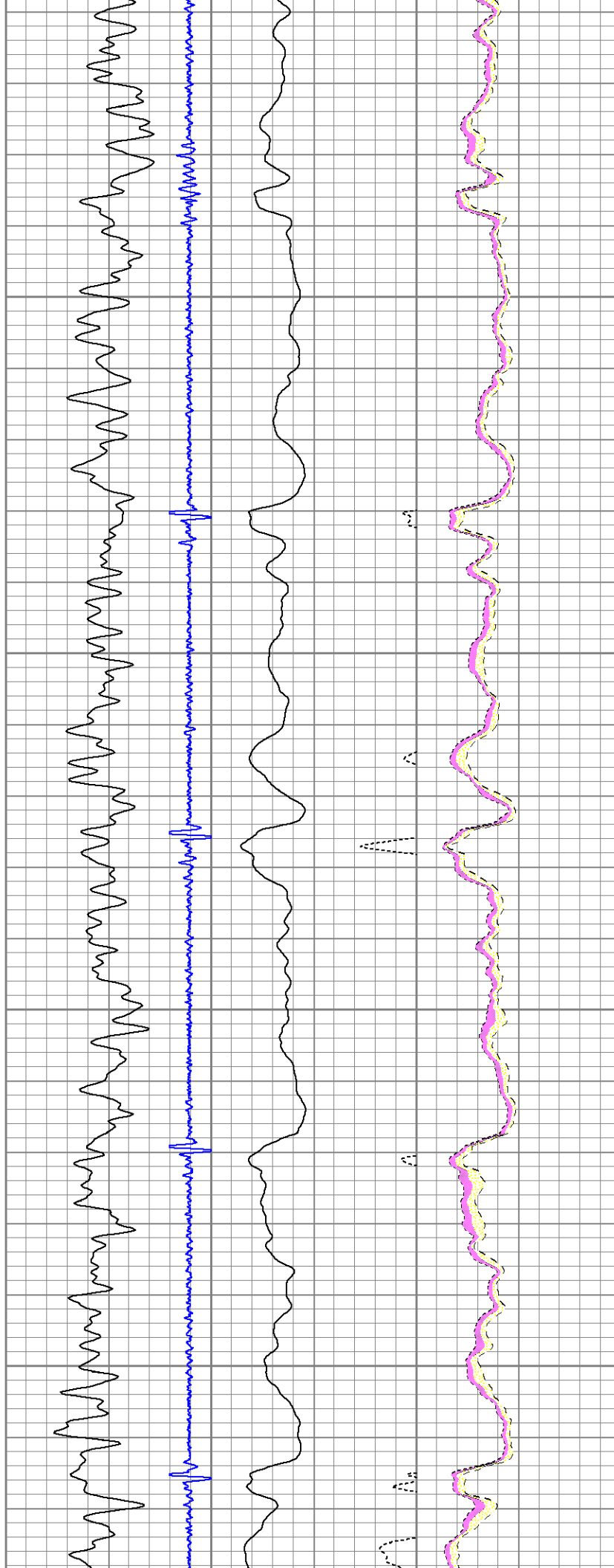


2400

2450

2500

2550

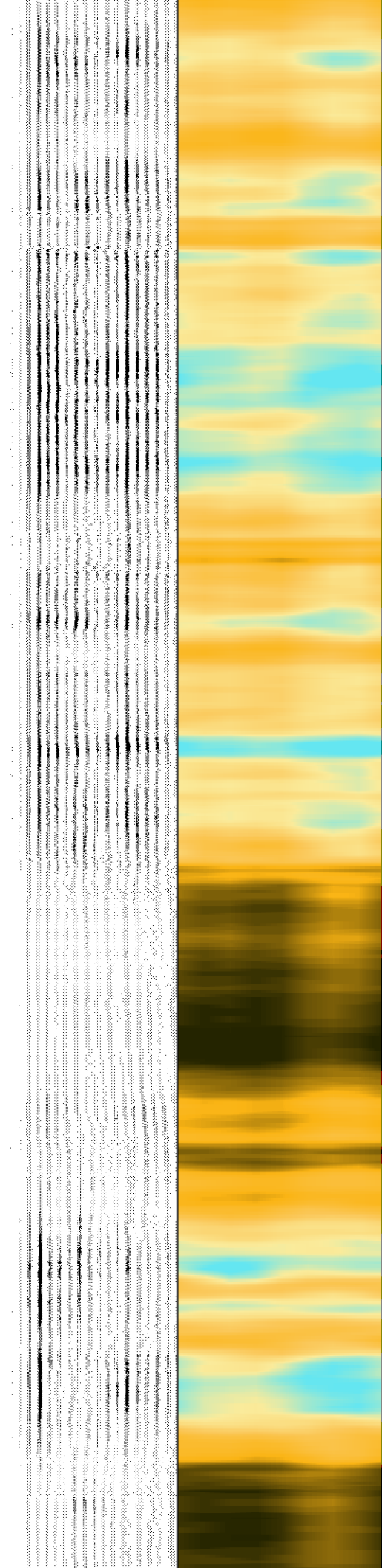
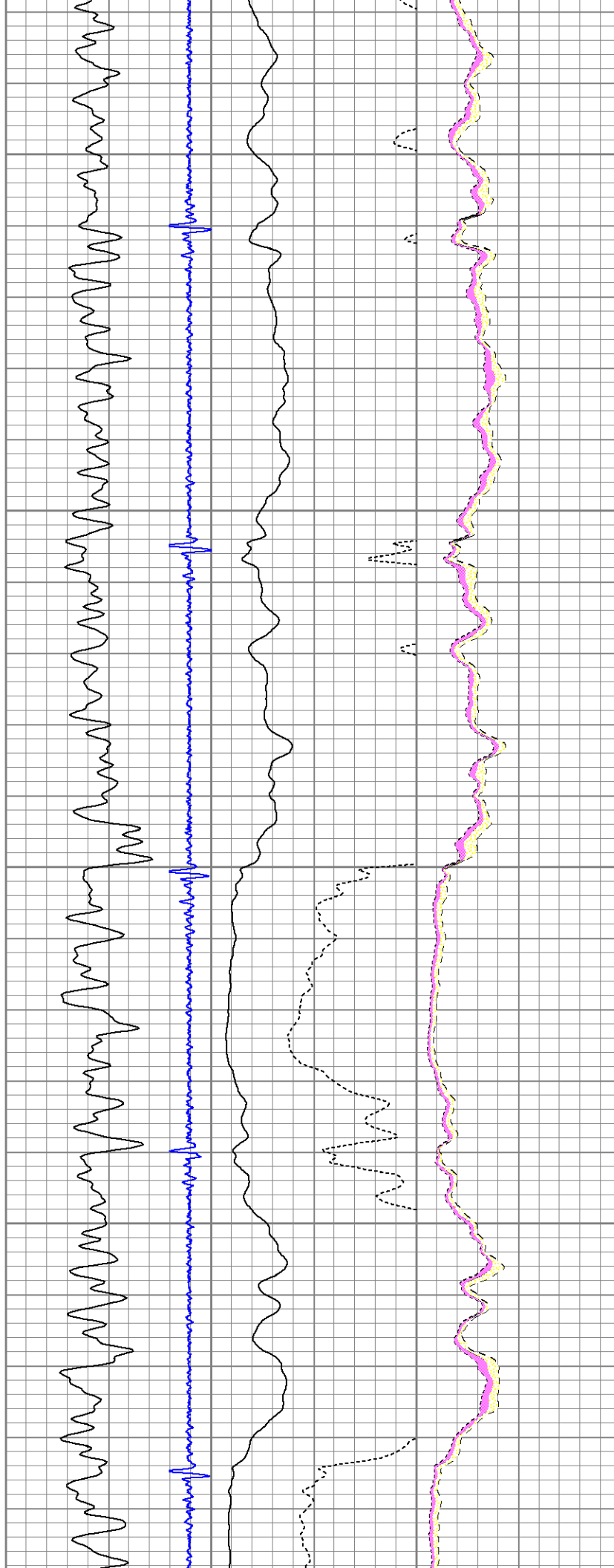


2600

2650

2700

2750



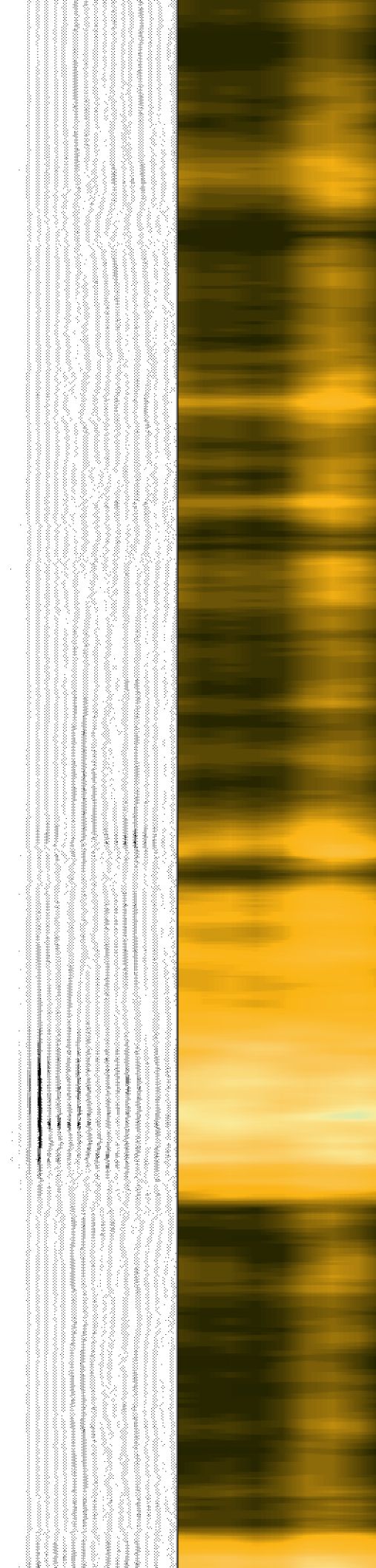
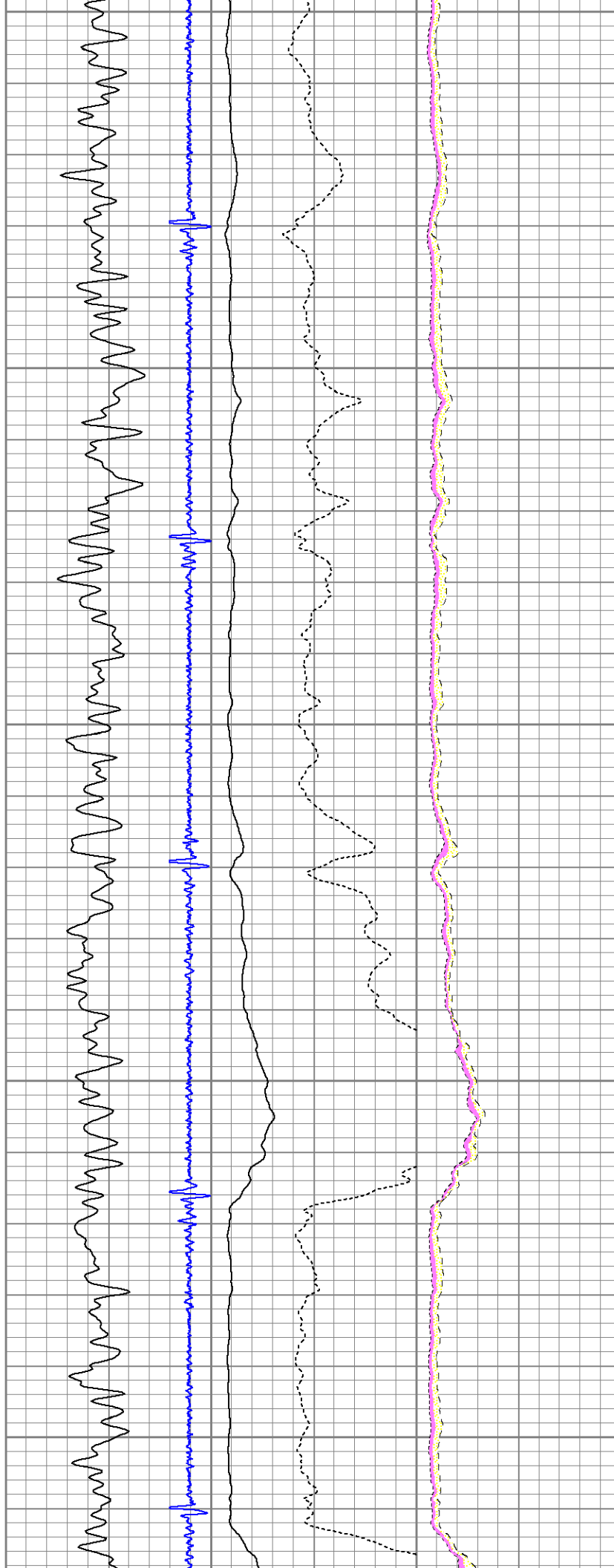
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2850

2900

2950

3000

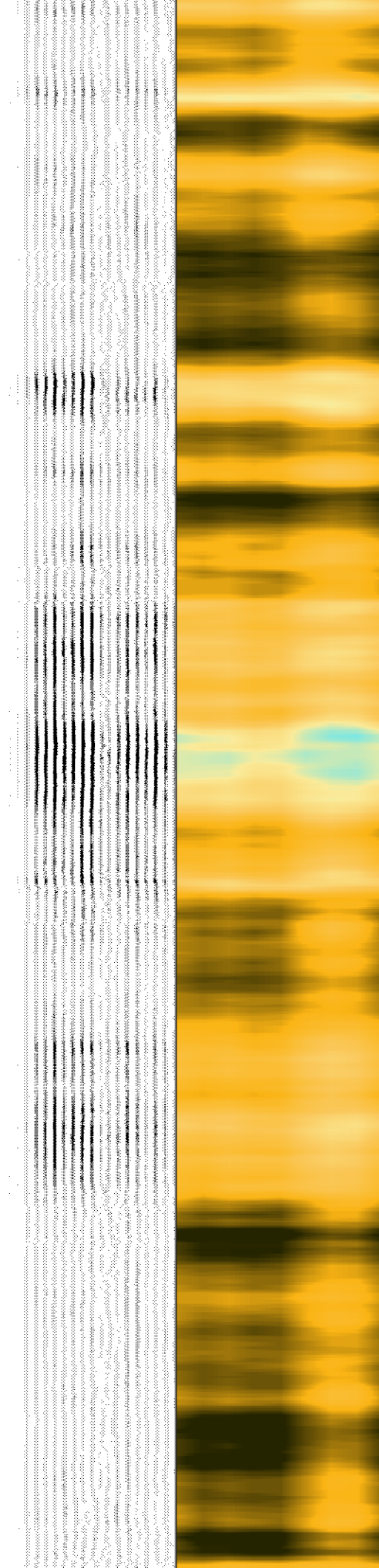
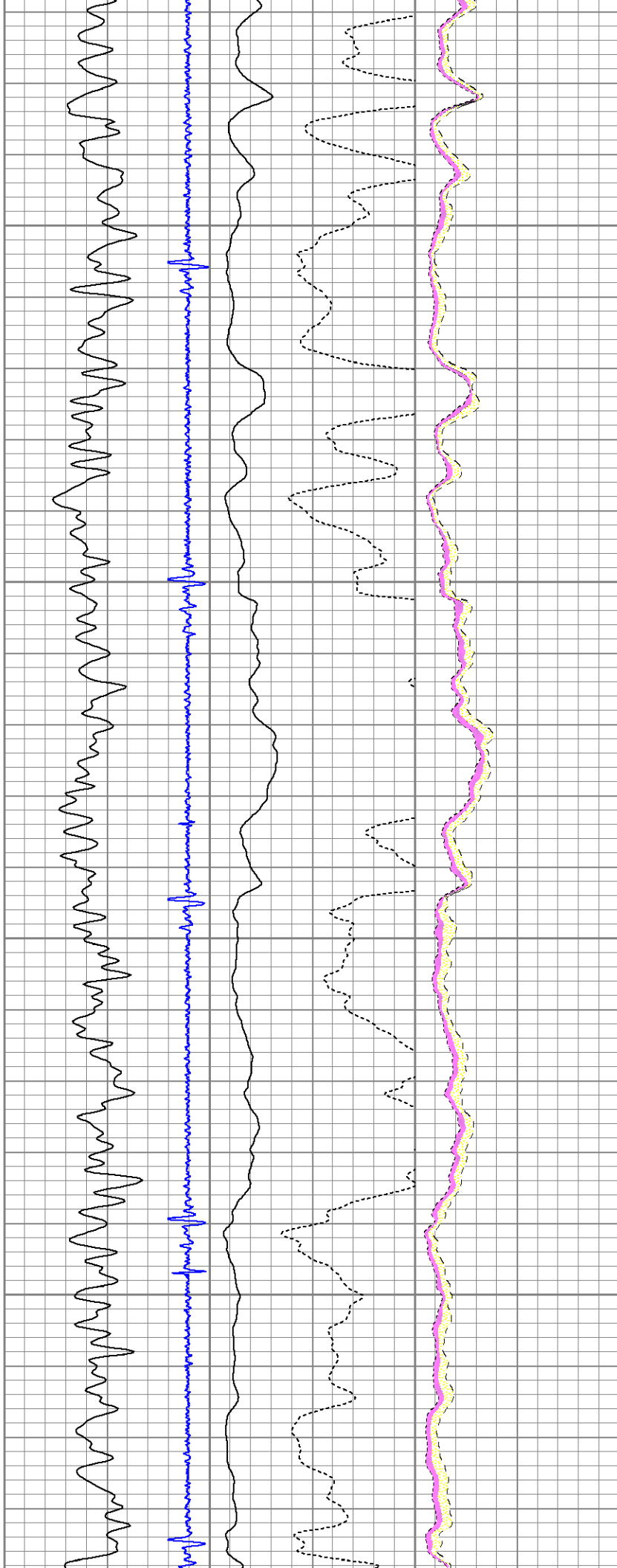


3050

3100

3150

3200



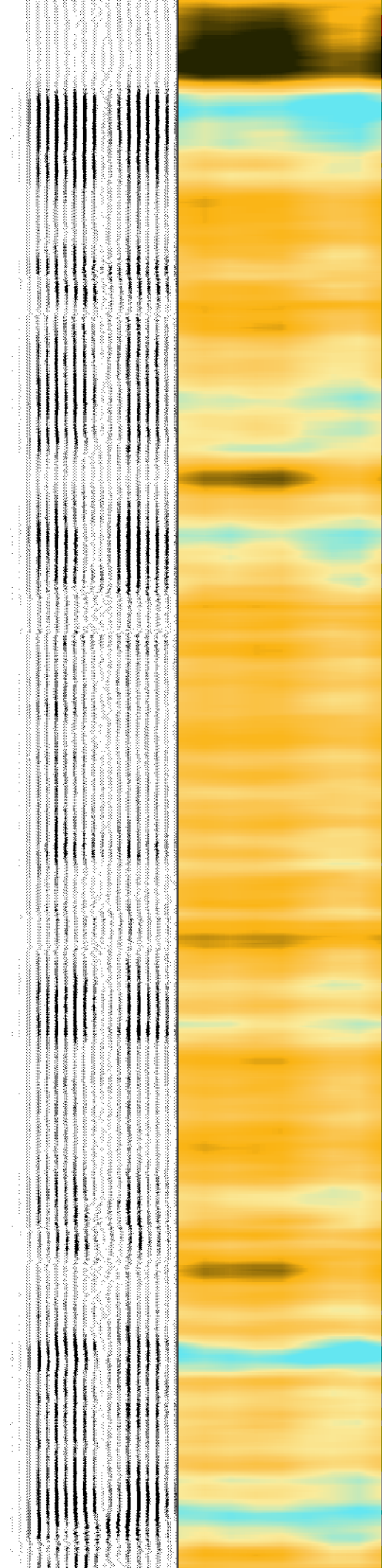
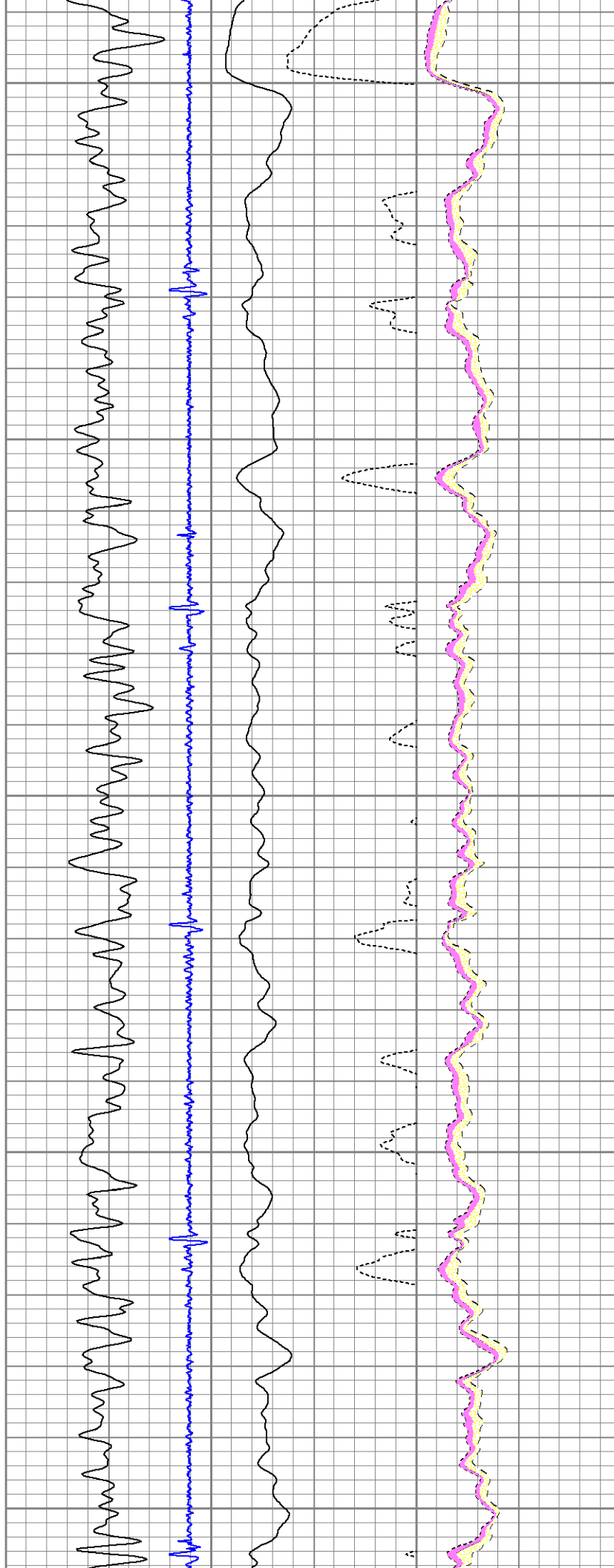
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3300

3350

3400

3450

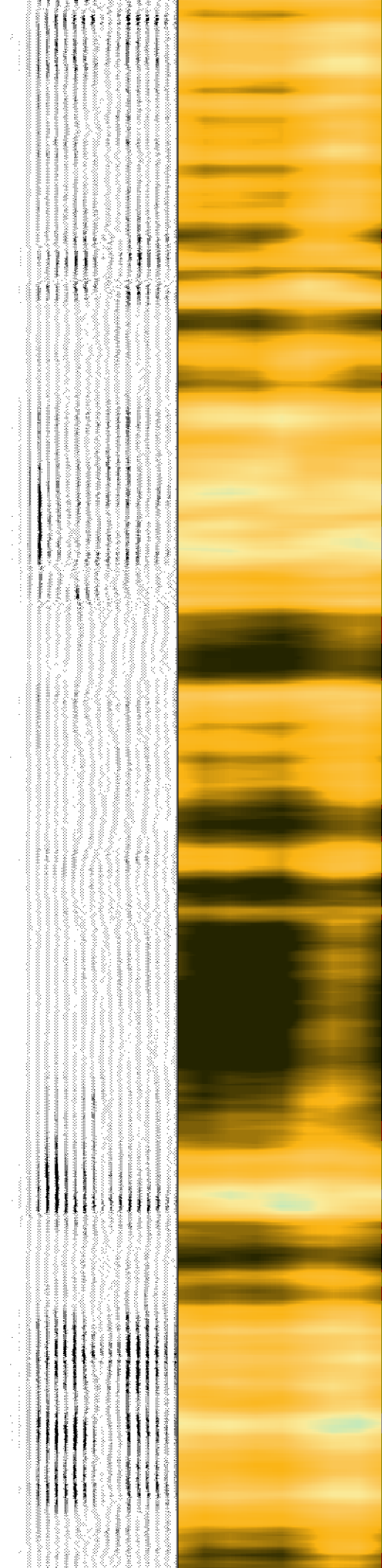
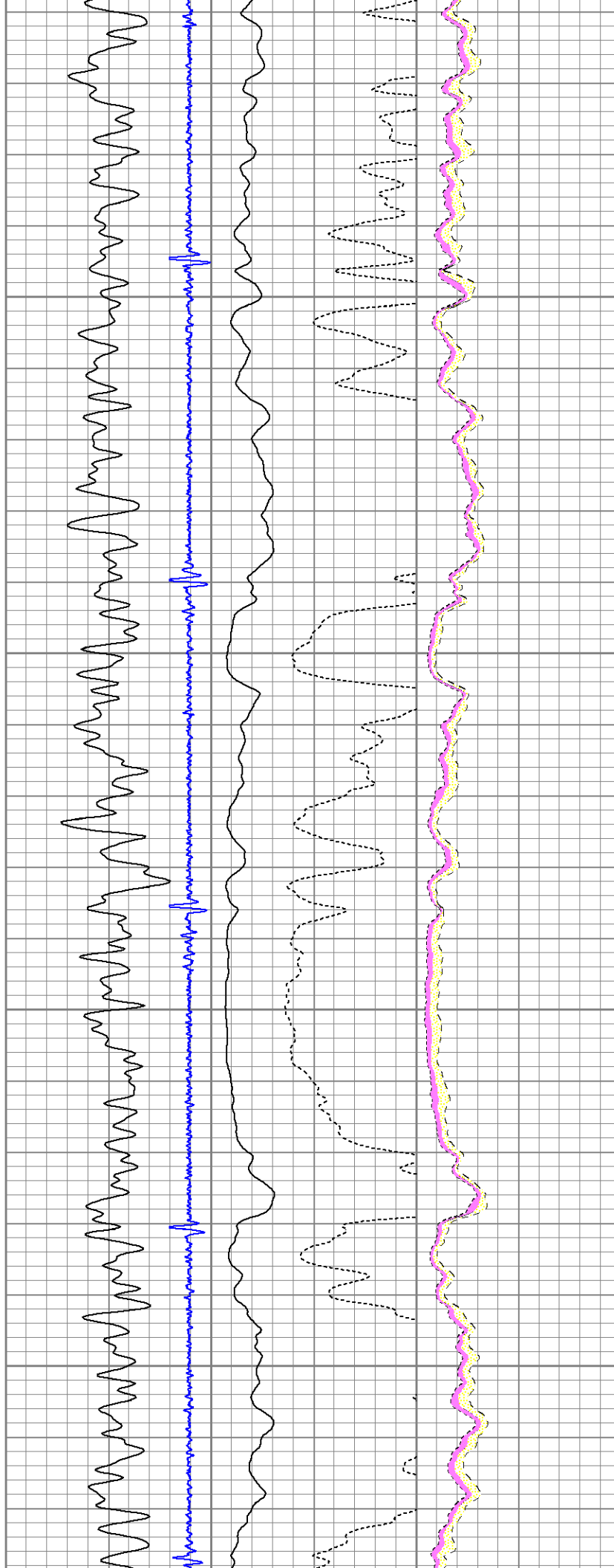


3500

3550

3600

3650

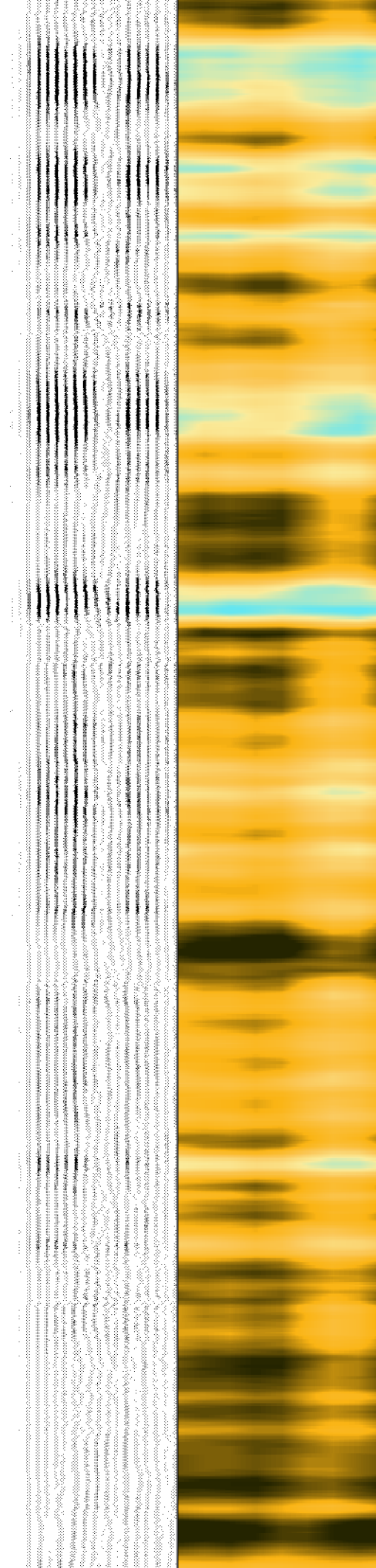
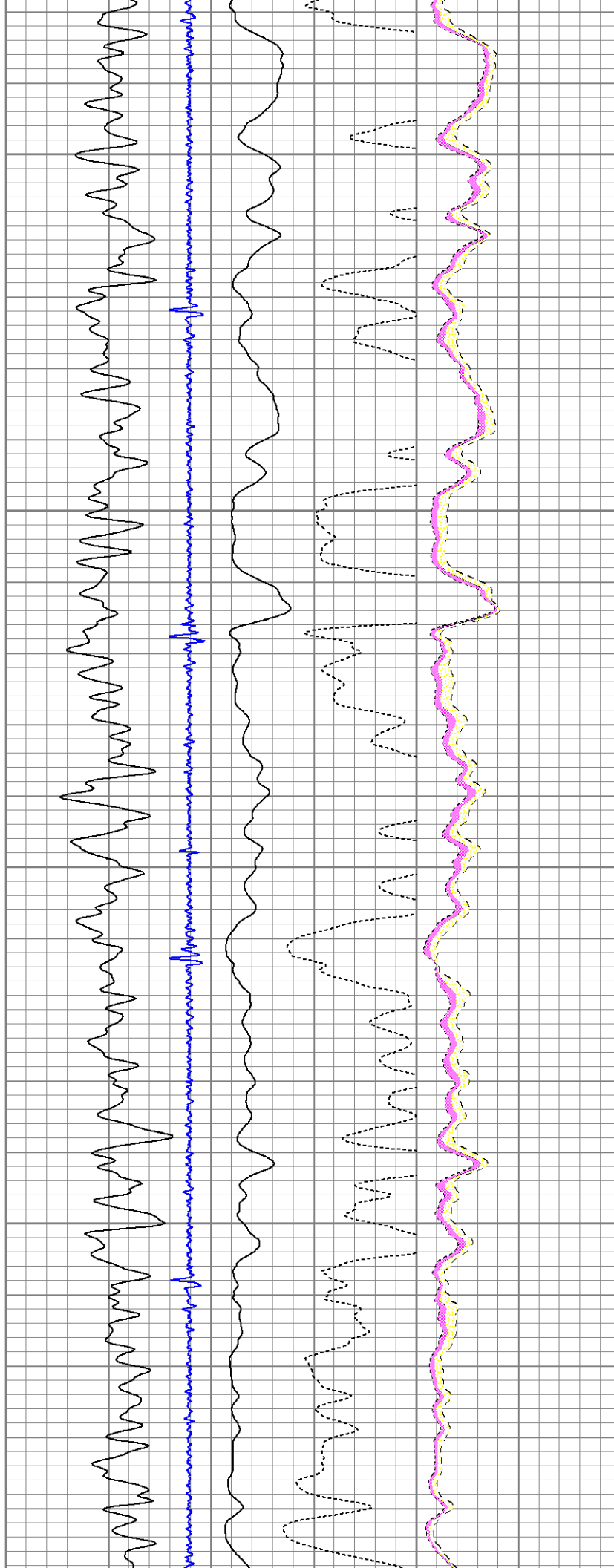


3700

3750

3800

3850



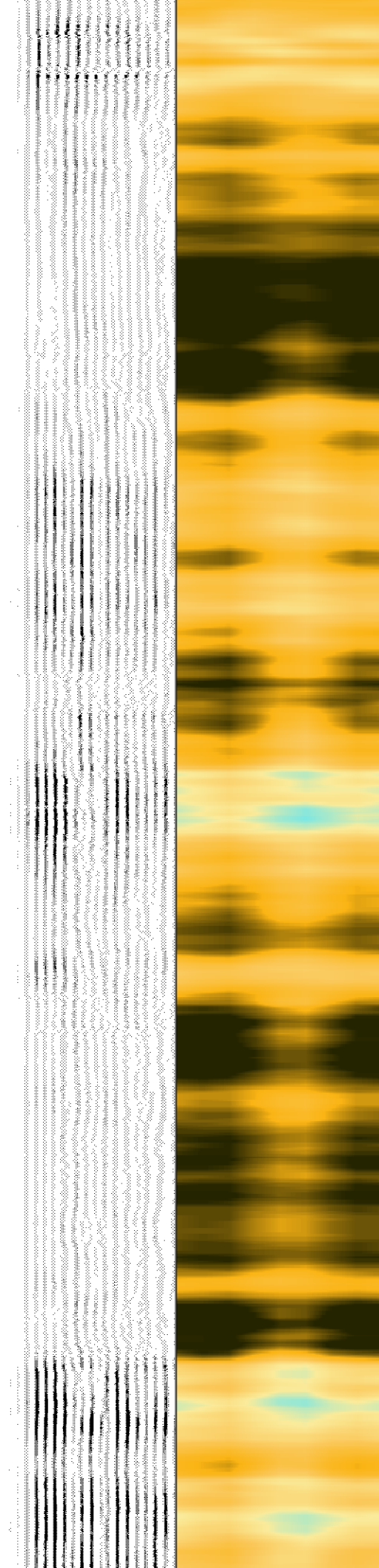
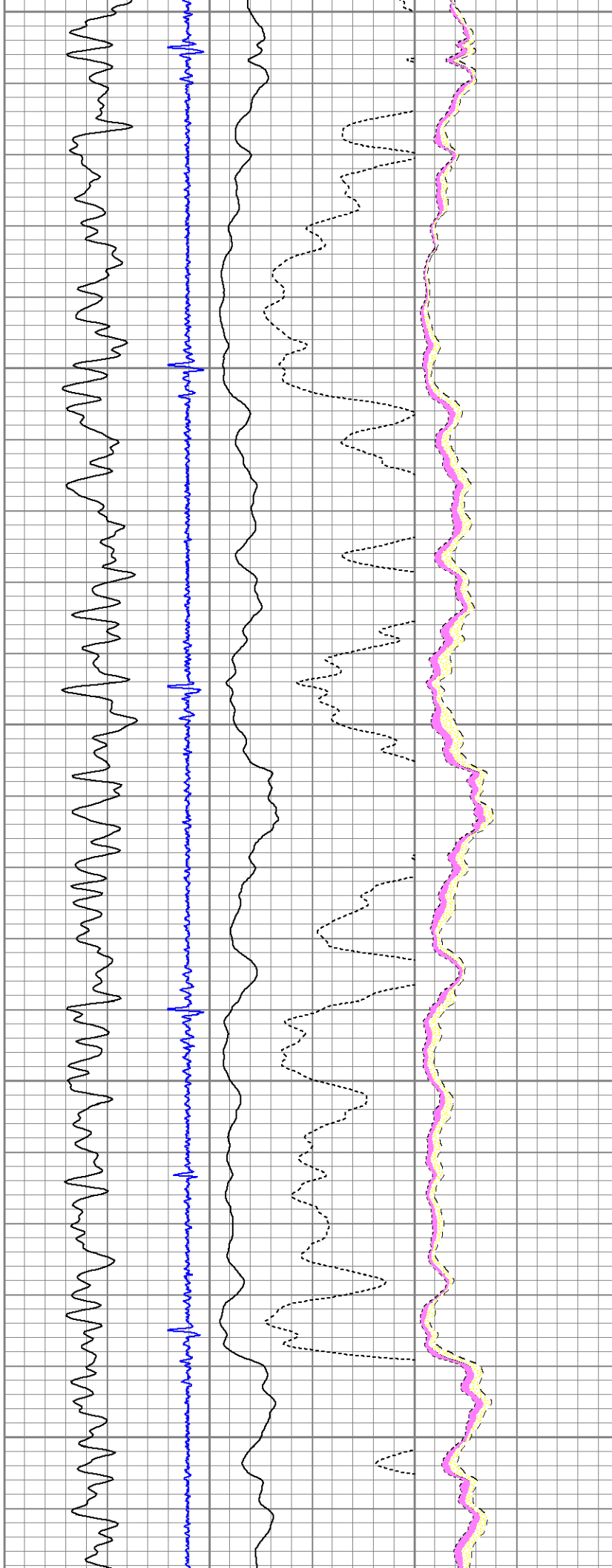
3900

3950

4000

4050

4100

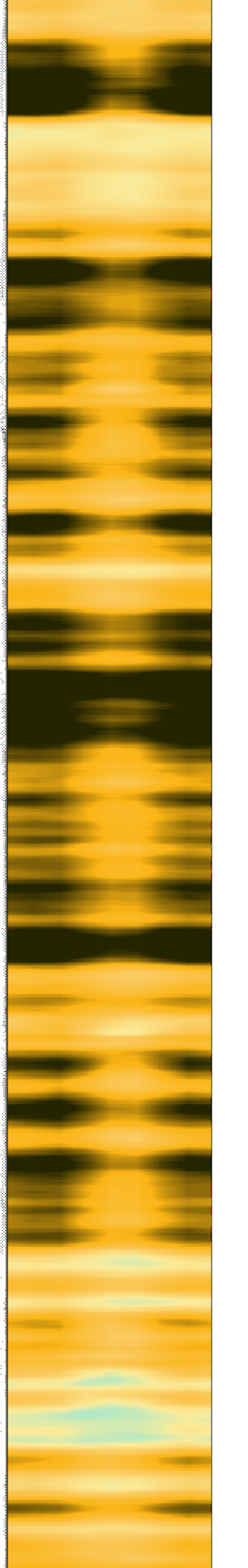
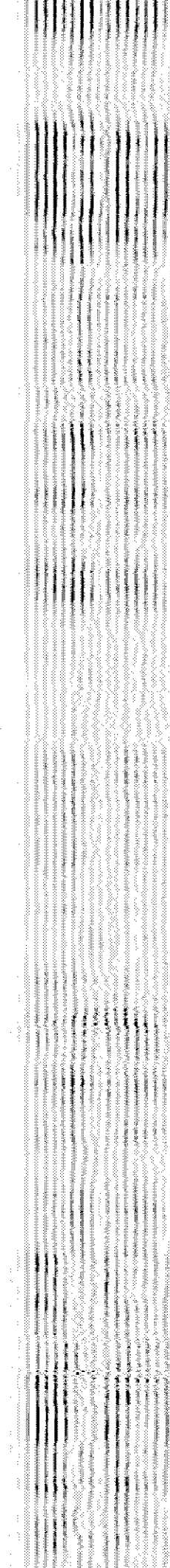
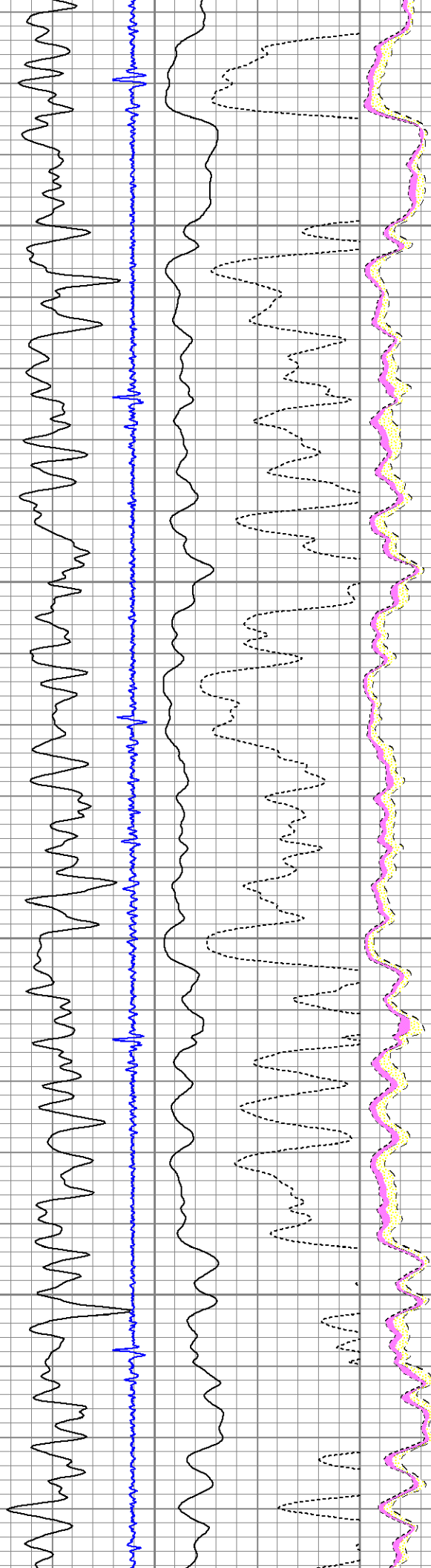


4150

4200

4250

4300



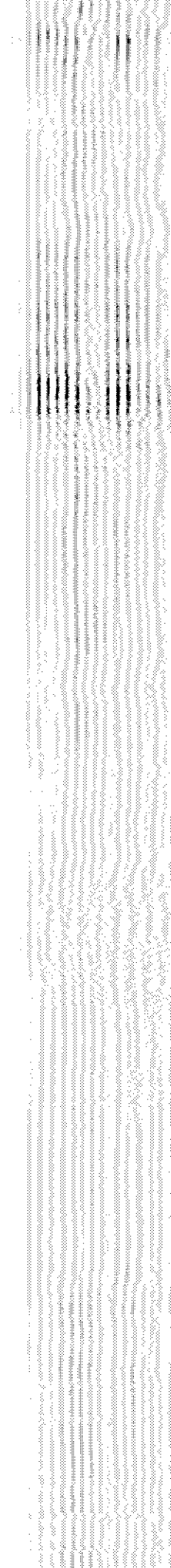
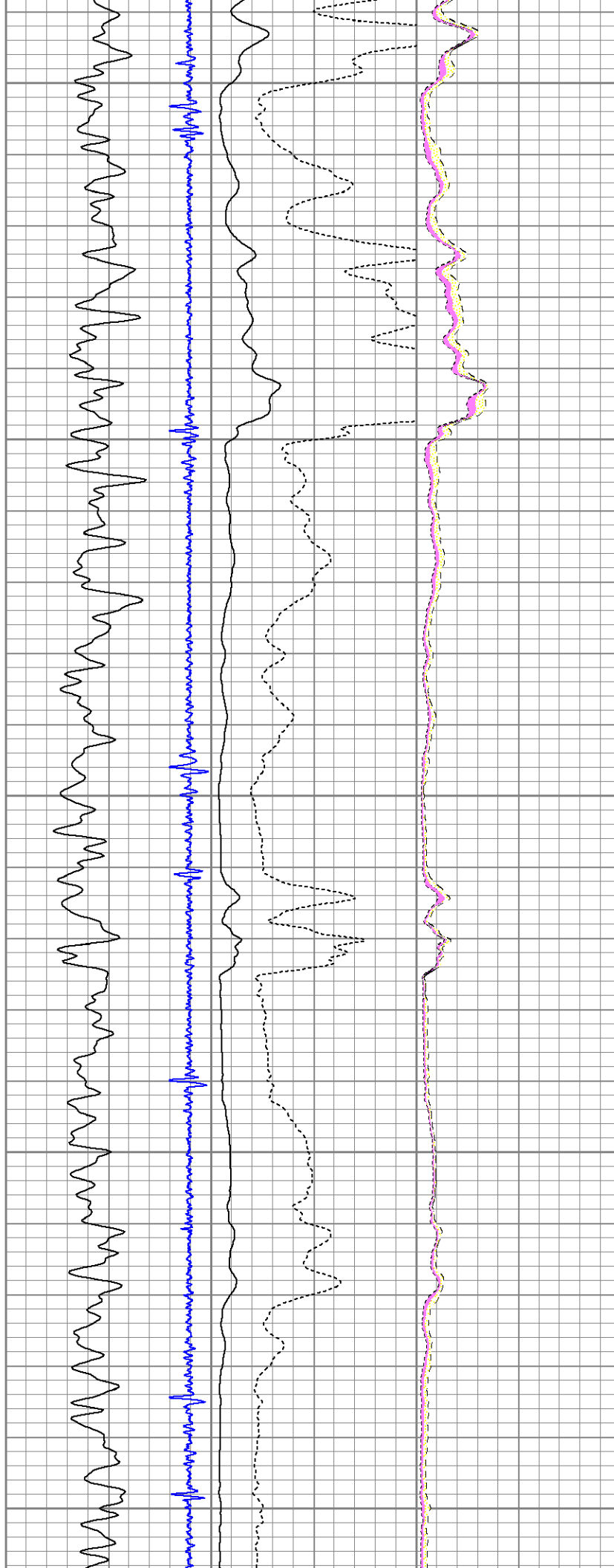
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4500

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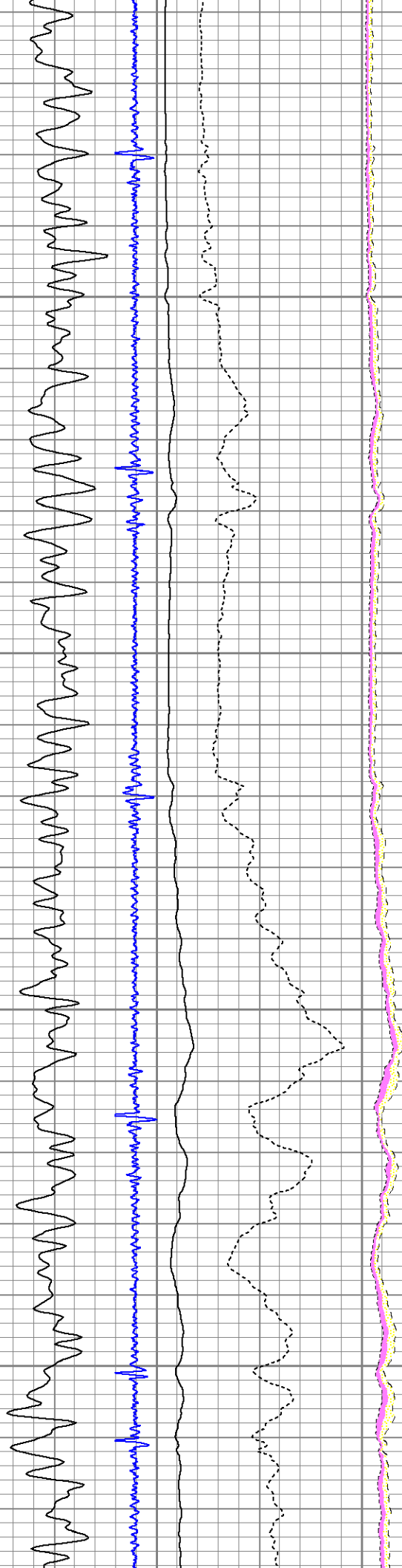


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4700

4750

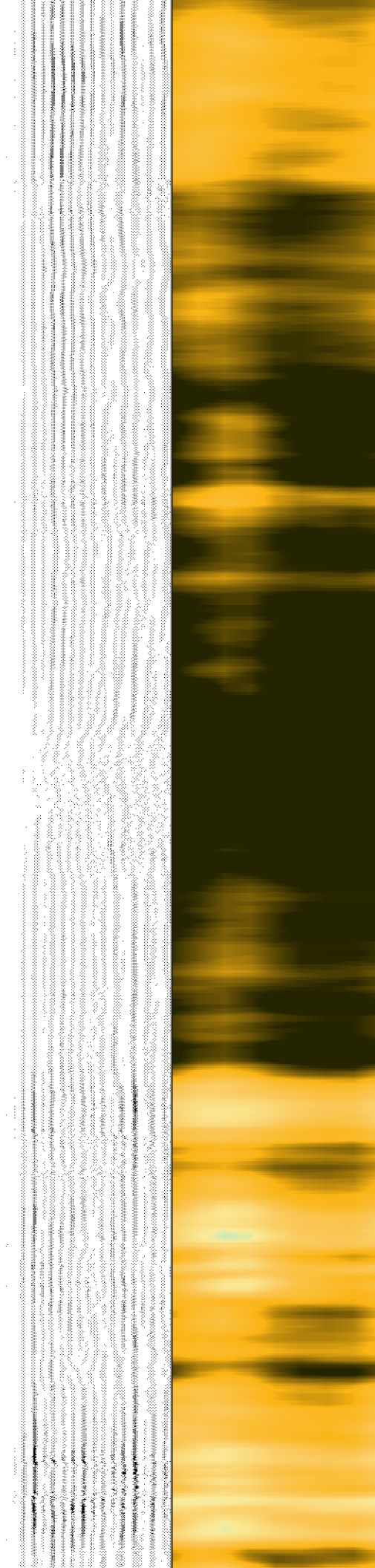
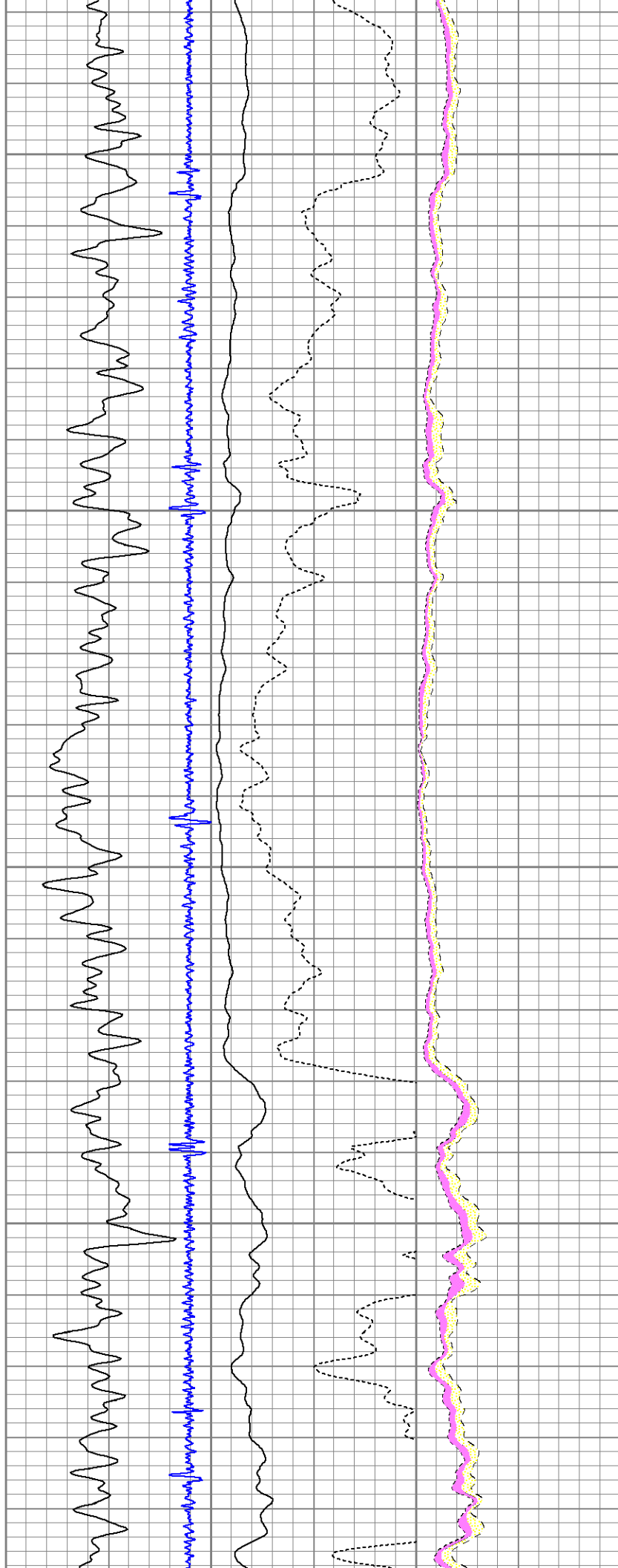


4800

4850

4900

4950



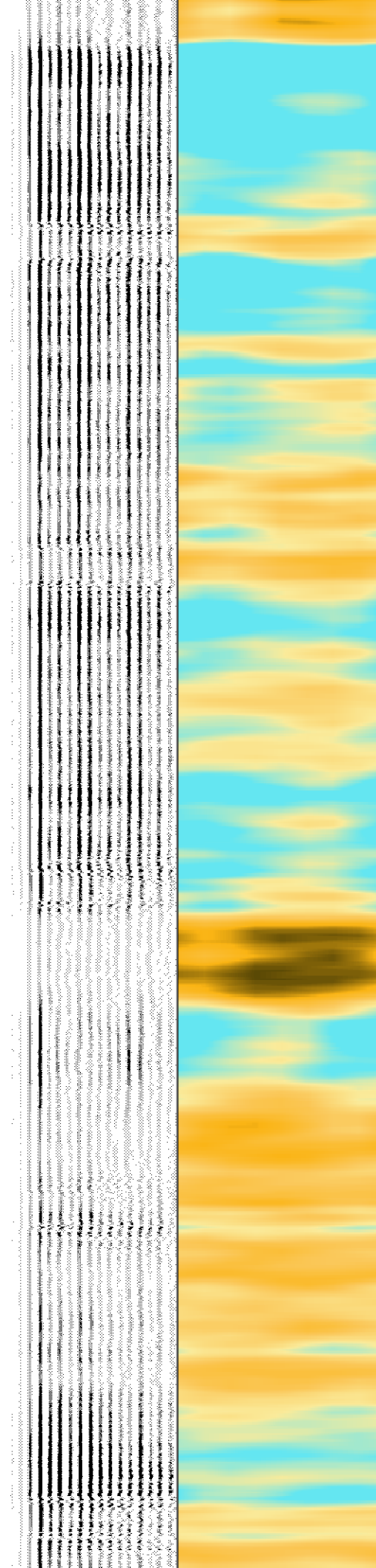
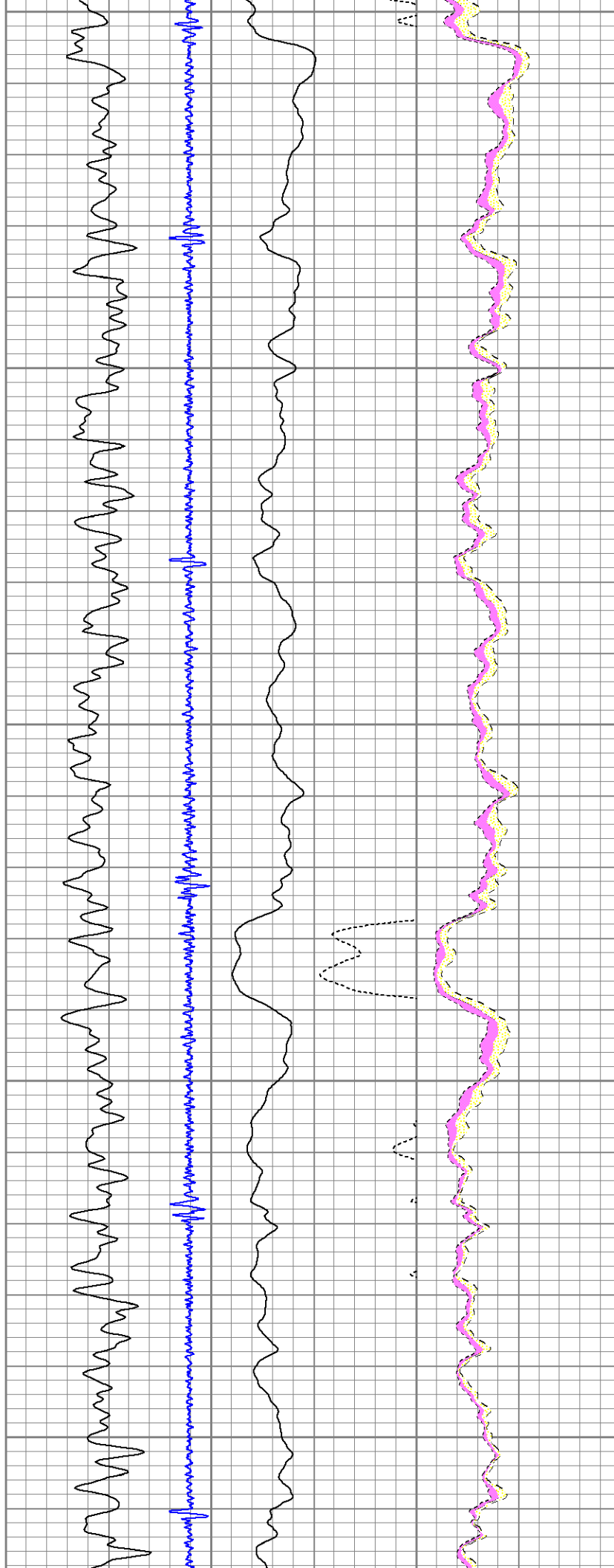
5000

5050

5100

5150

5200

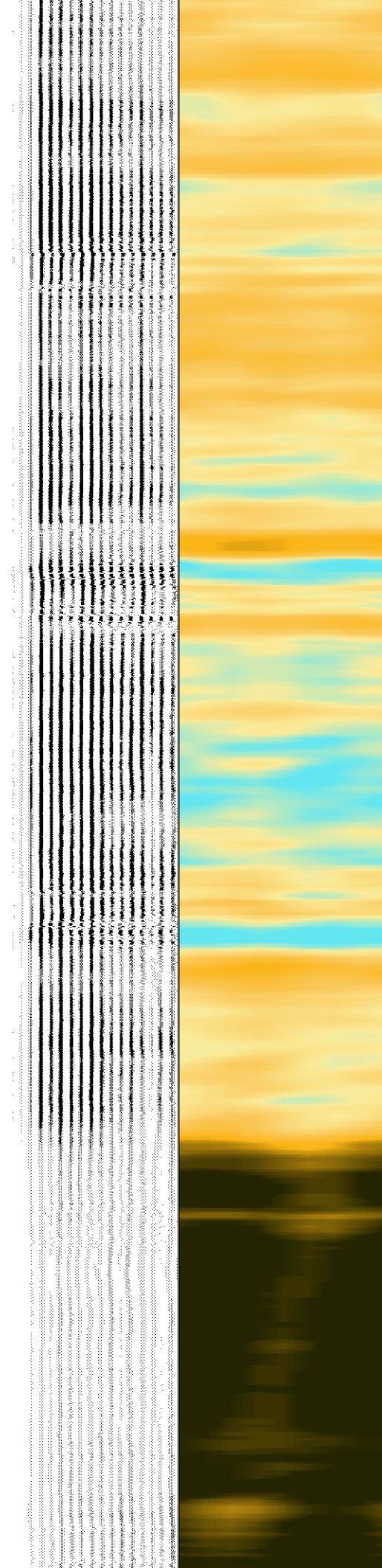
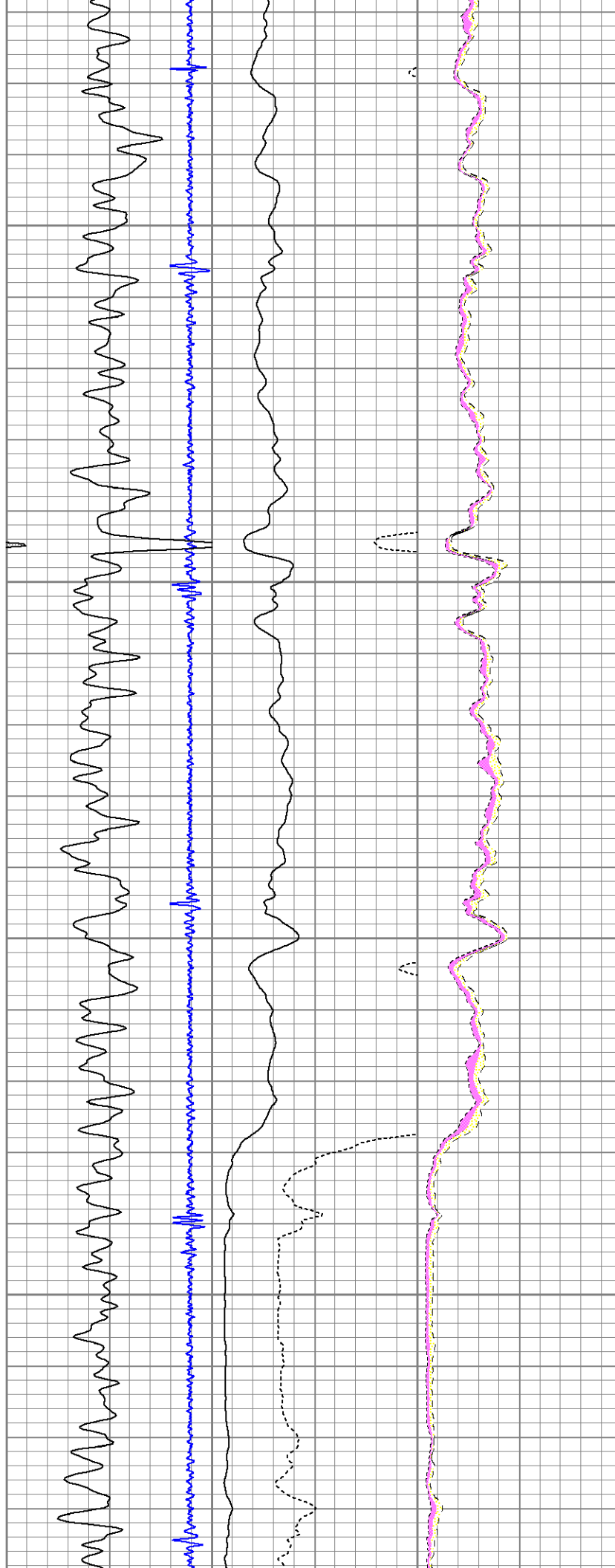


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5300

5350

5400



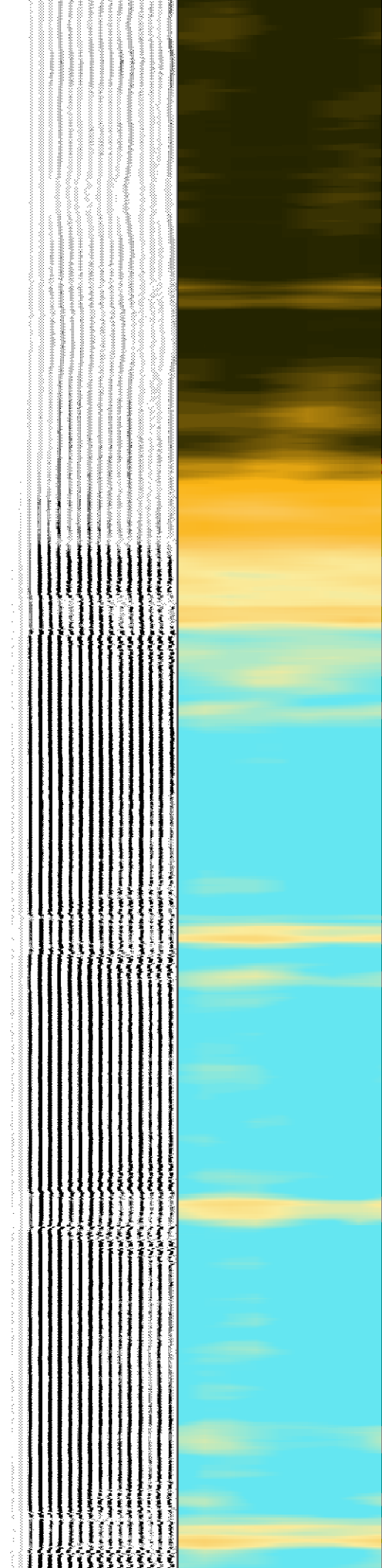
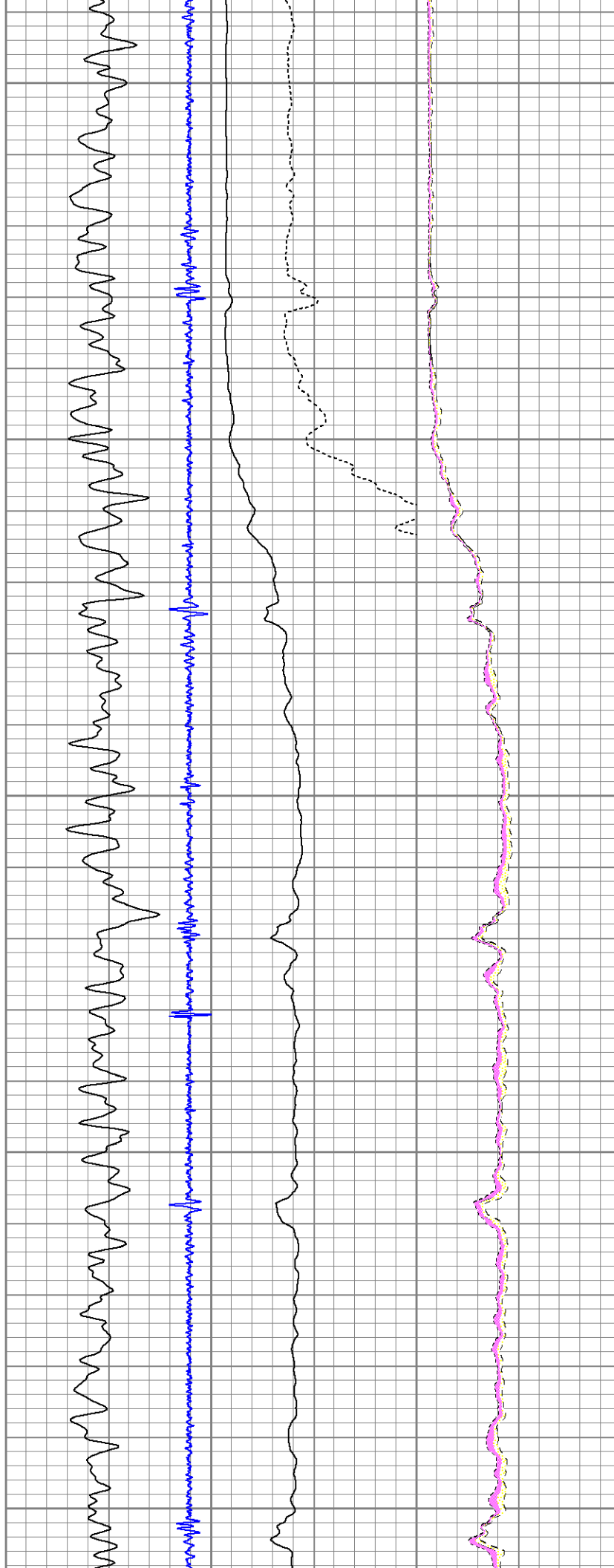
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5600

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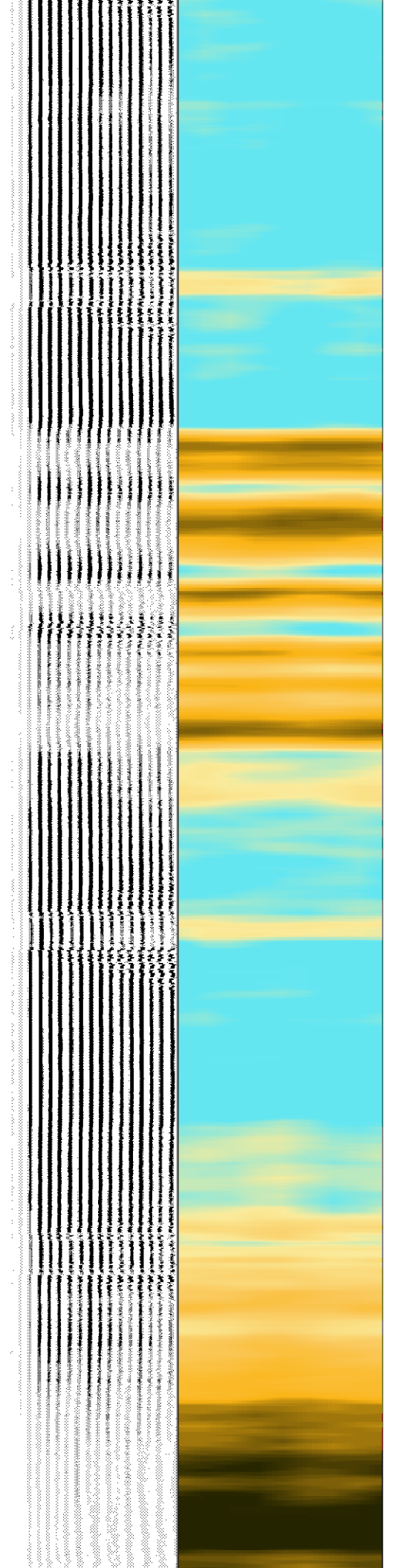
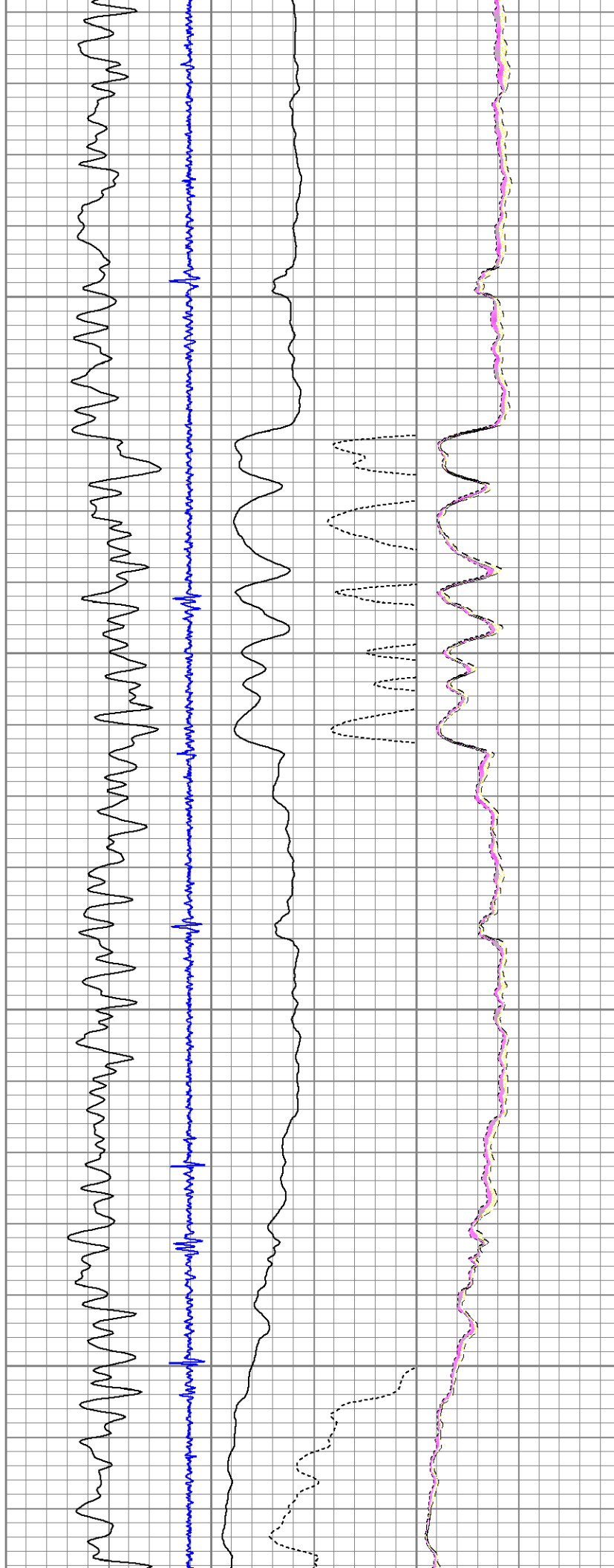


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5800

5850

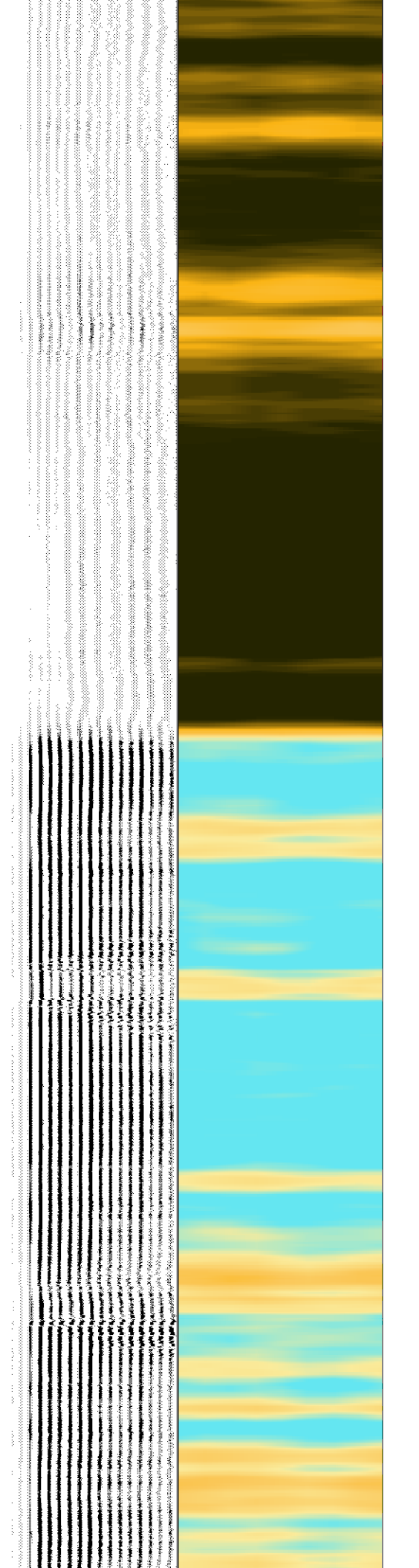
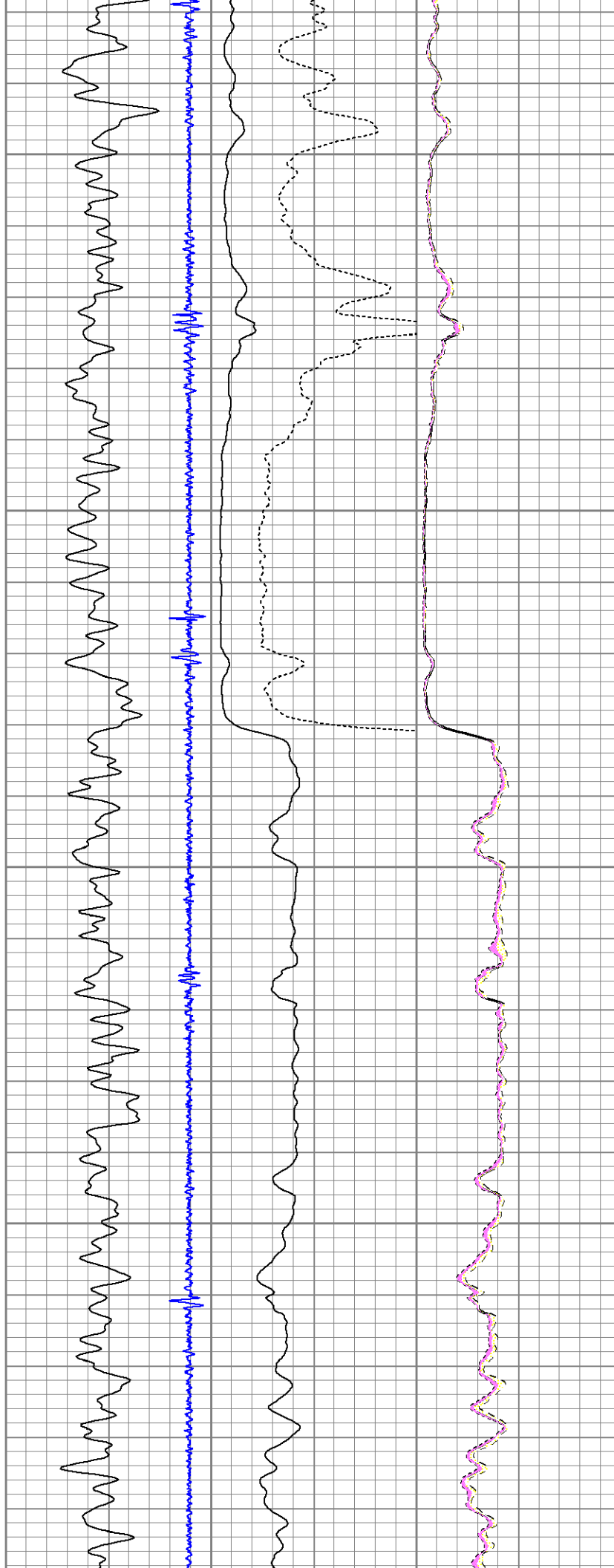


5900

5950

6000

6050



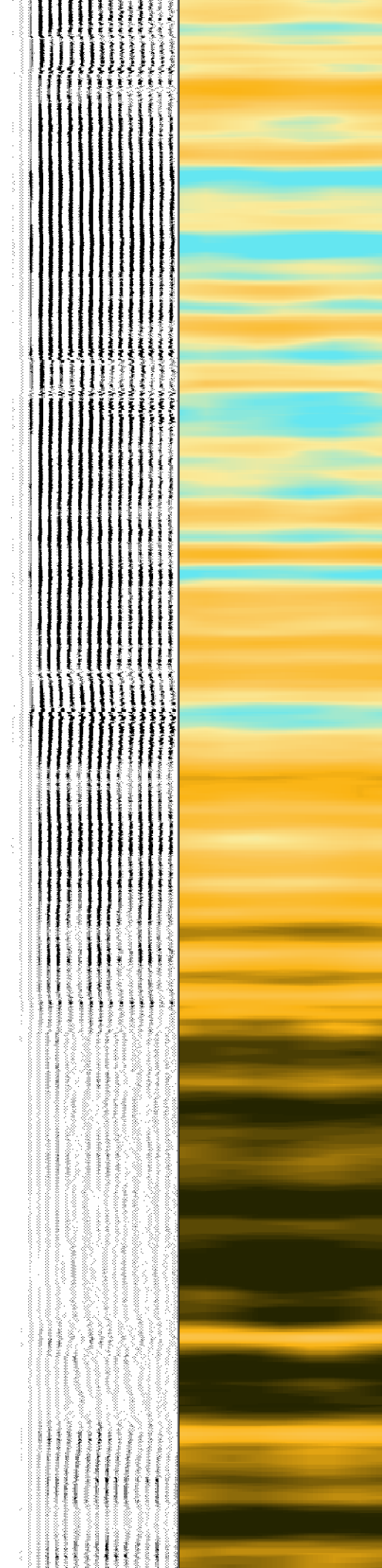
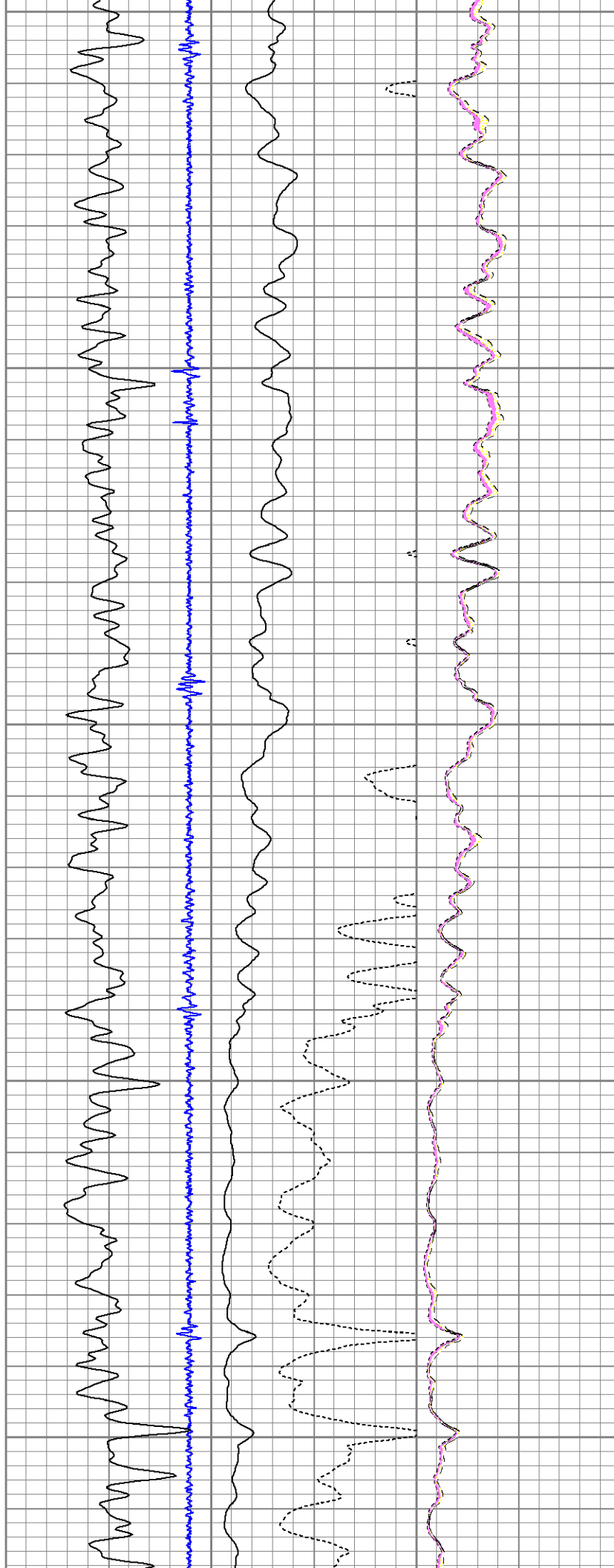
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6150

6200

6250

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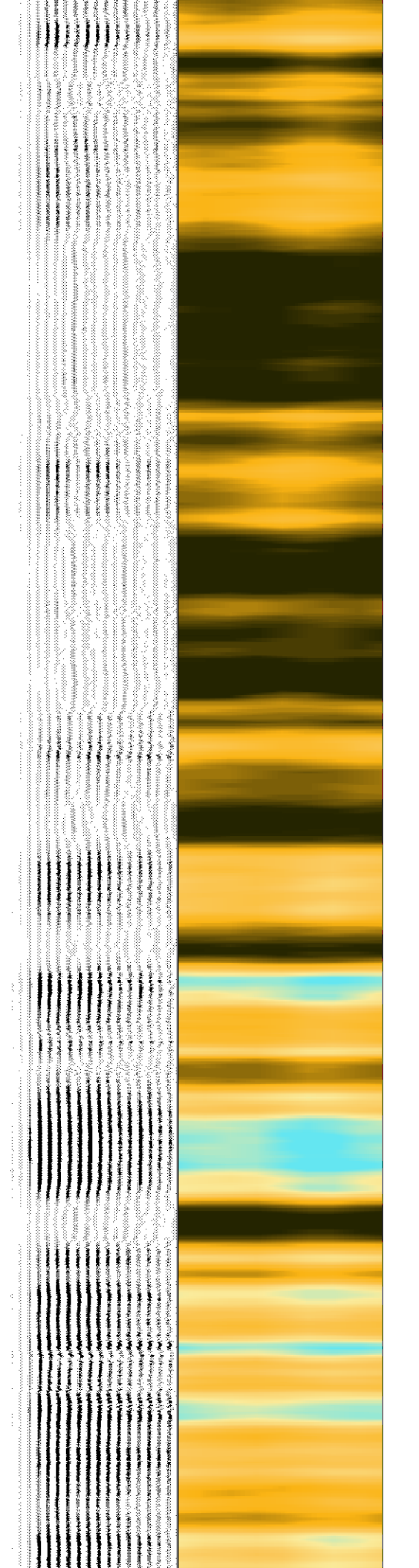
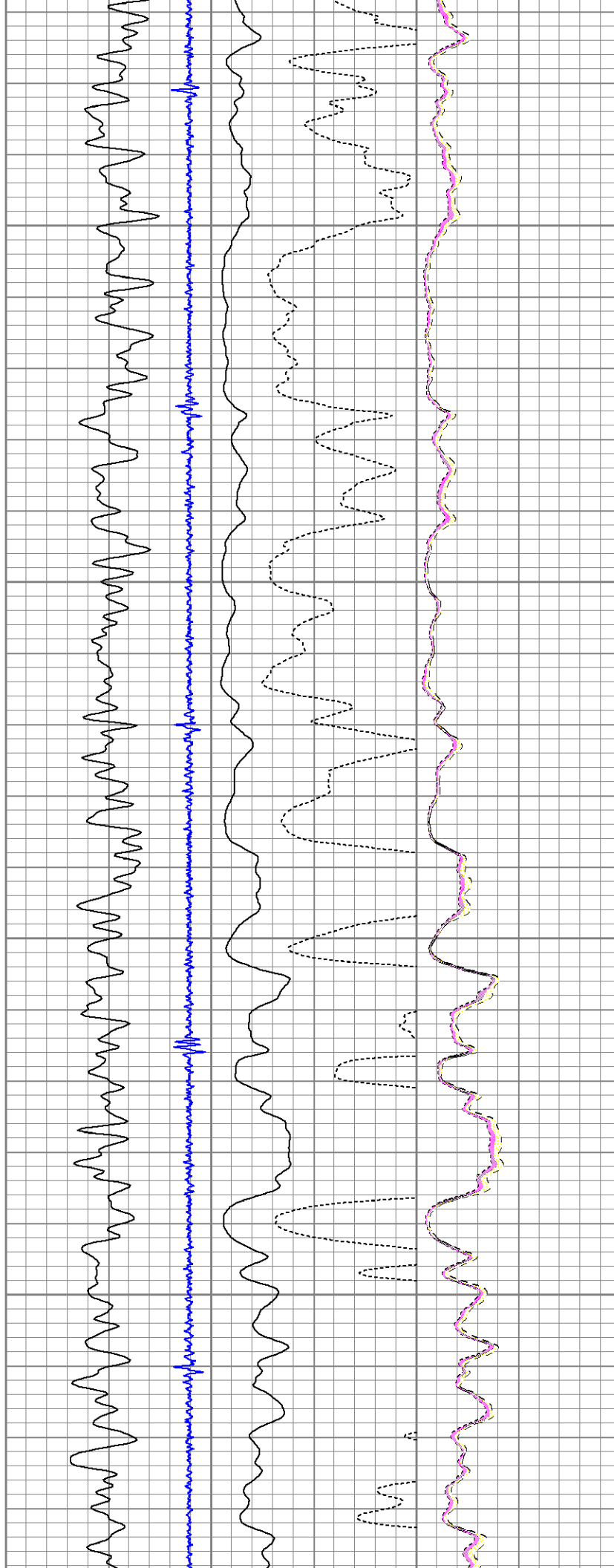


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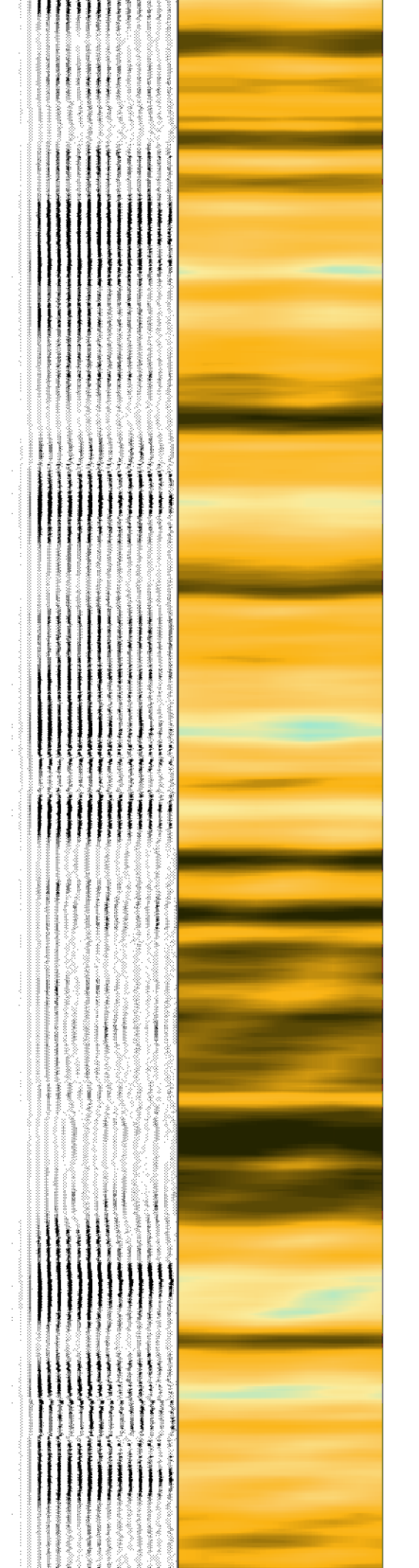
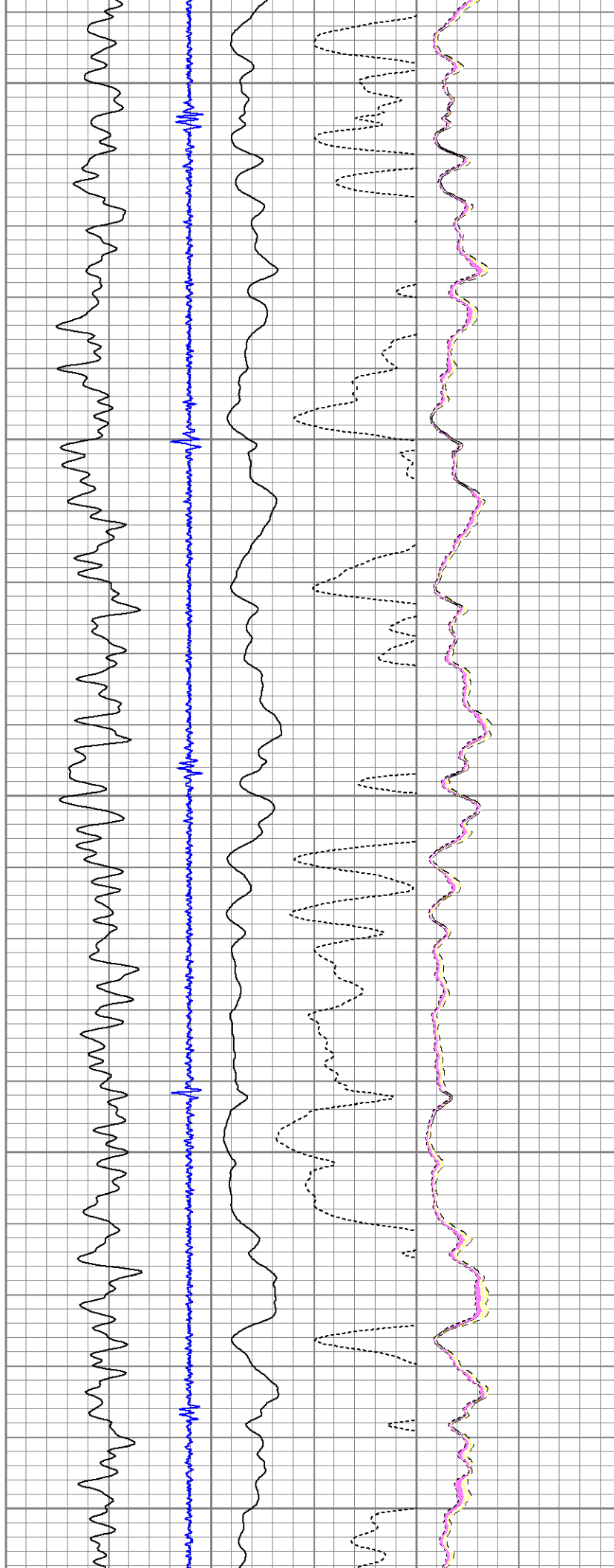
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6700

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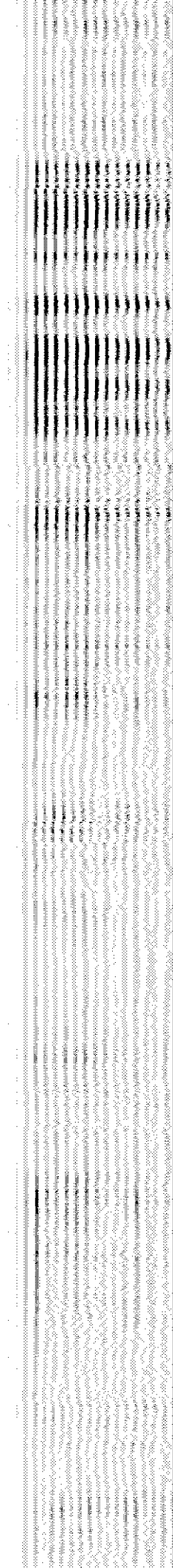
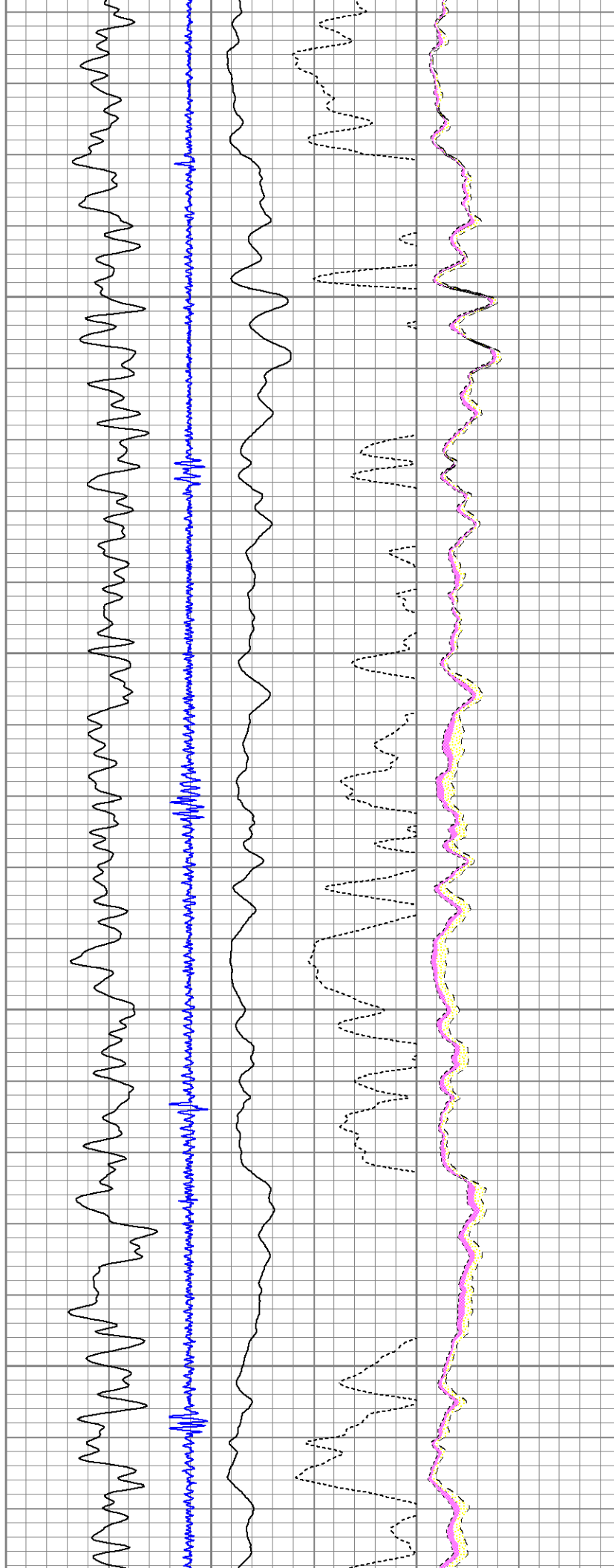


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6850

6900

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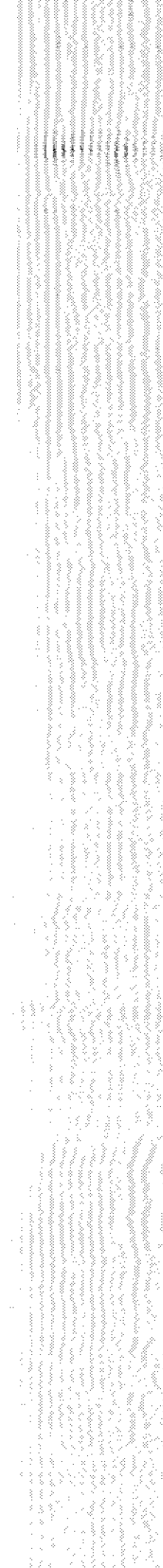
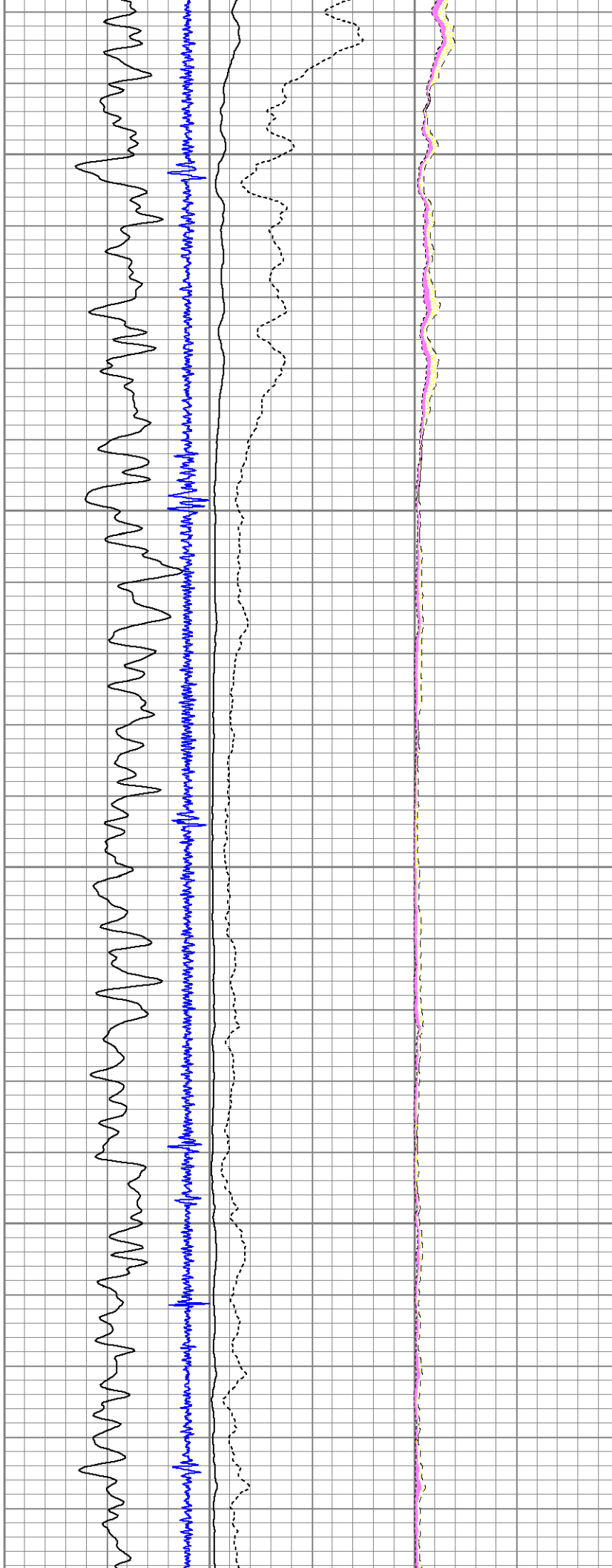


7000

7050

7100

7150



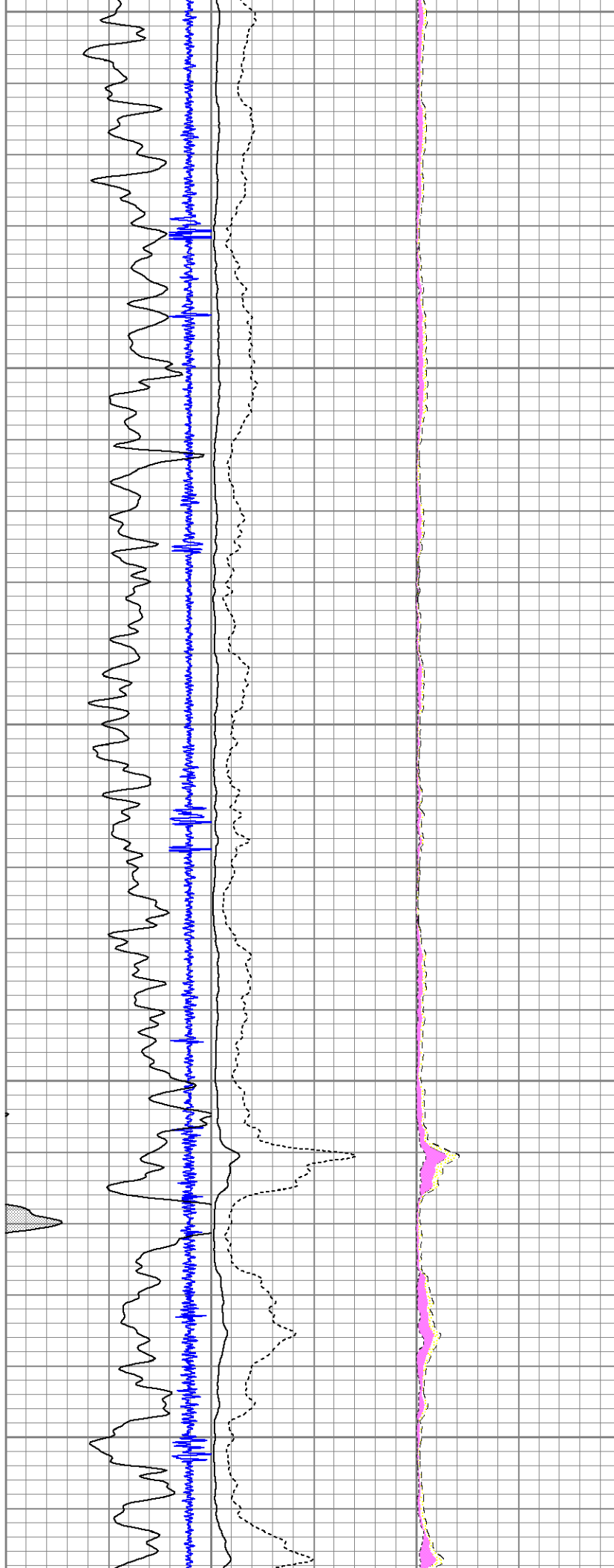
7200

7250

7300

7350

7400

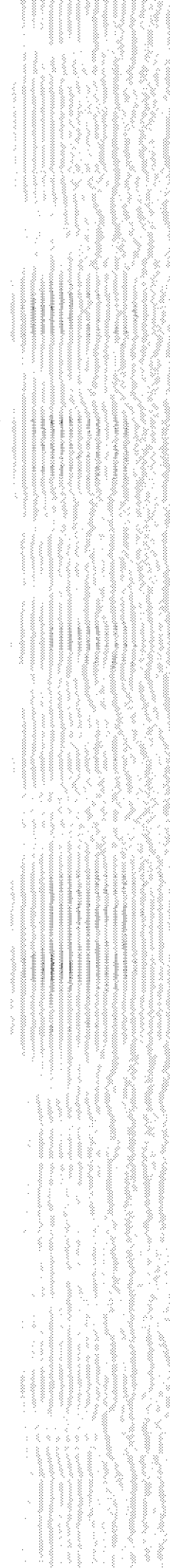
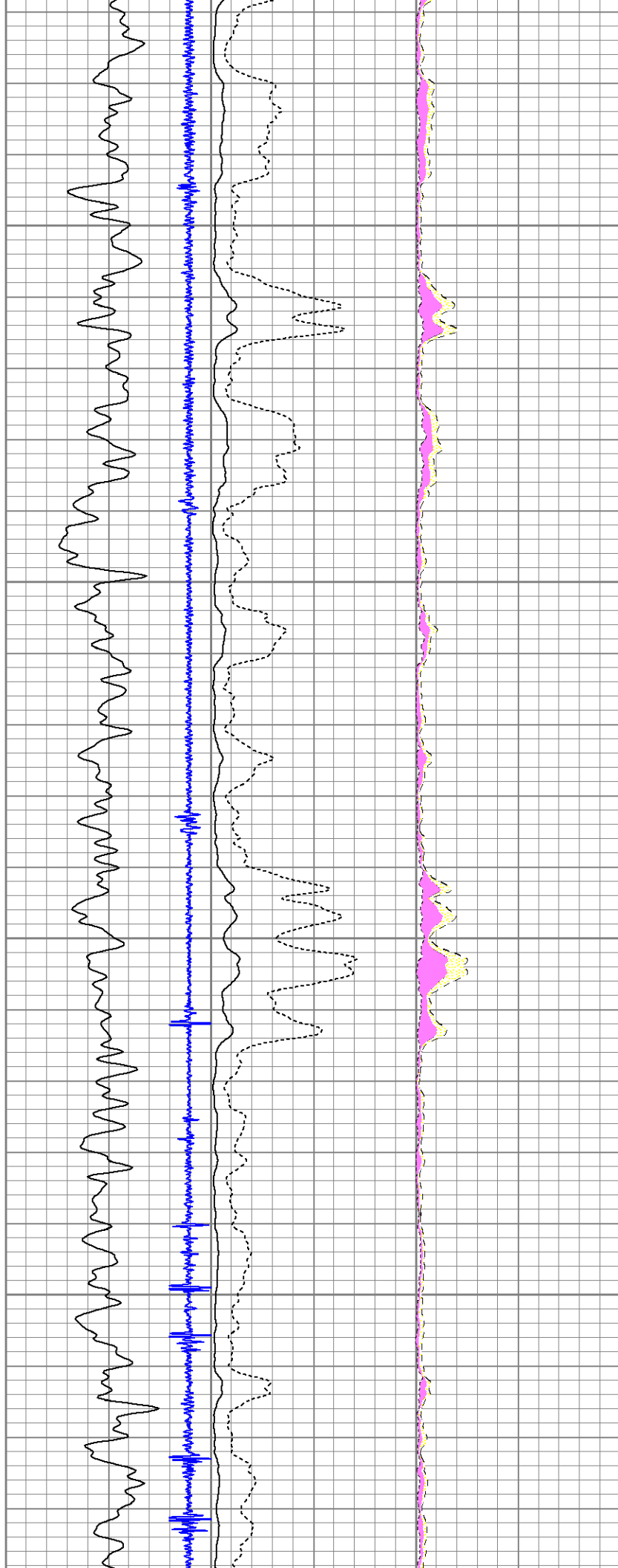


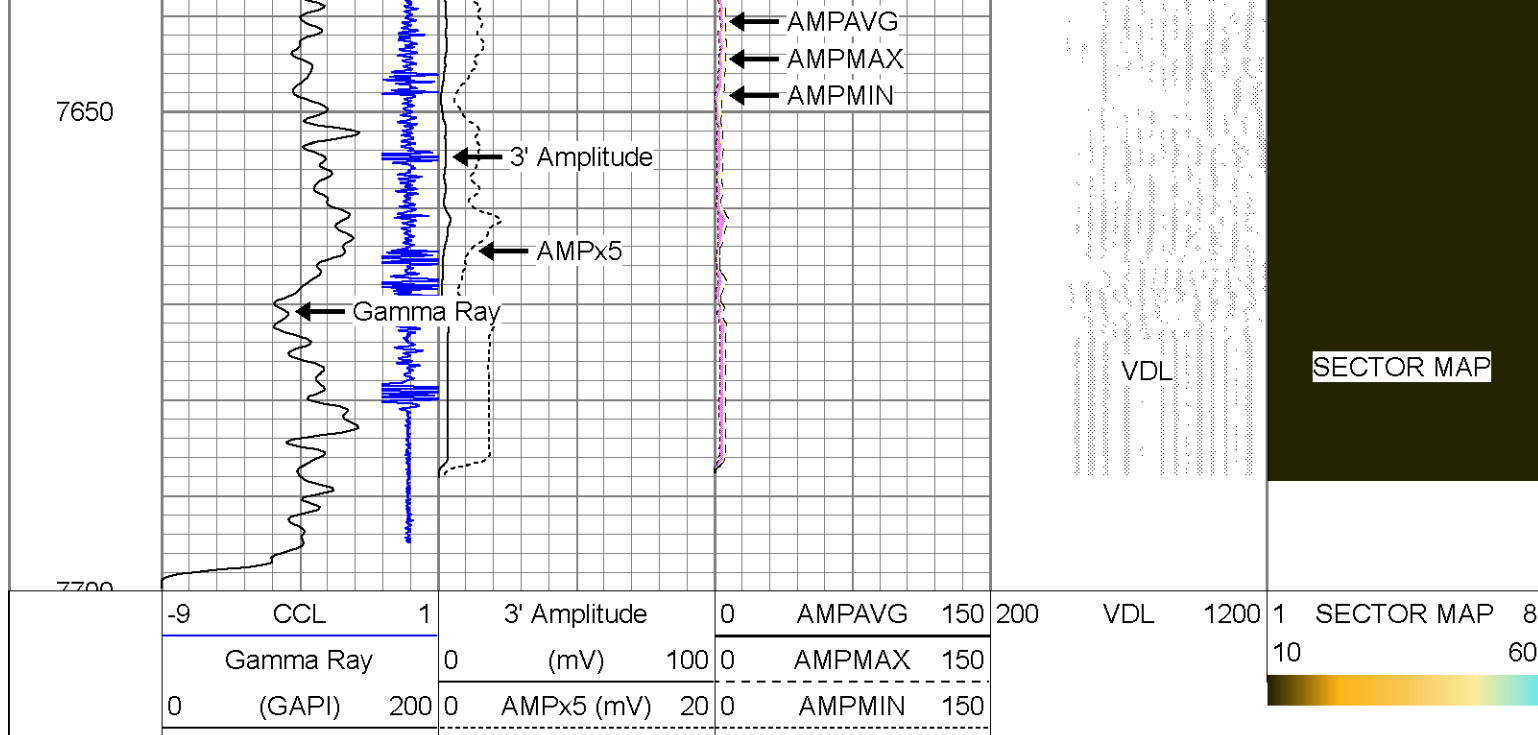
7450

7500

7550

7600





ENCANA OIL & GAS USA

EDITH ANN DUCKWORTH 4C-21H-0268

Calibration Report

Database File: edith_ann_duckworth_4c-21h-0268.db
 Dataset Pathname: pass1
 Dataset Creation: Tue Jul 29 12:20:27 2014 by Log 7.0 B1

Temperature Calibration Report

Serial Number: 0001
 Tool Model: 1.375TEMP
 Performed: Mon Jun 23 08:05:16 2014

	Reference	Reading
Low Reference:	56.00 degF	596.00 cps
High Reference:	100.00 degF	1200.00cps

Gain: 0.07
 Offset: 12.58
 Delta Spacing: 2

Gamma Ray Calibration Report

Serial Number: 111211
 Tool Model: Probe
 Performed: Fri May 16 11:10:50 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: Base

Tool Model:

Probe

Calibration Casing Diameter:

7.000

in

Calibration Depth:

146.512

ft

Master Calibration, performed Tue Jul 29 11:49:30 2014:

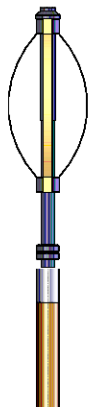
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	1.737	1.000	62.165	35.483	0.527
CAL	0.012	0.520				
5'	0.013	1.929	1.000	62.165	31.937	0.573
SUM						
S1	0.013	1.699	0.000	95.000	56.373	-0.754
S2	0.013	1.716	0.000	95.000	55.811	-0.743
S3	0.013	1.739	0.000	95.000	55.049	-0.733
S4	0.013	1.809	0.000	95.000	52.903	-0.706
S5	0.013	1.838	0.000	95.000	52.078	-0.695
S6	0.013	1.828	0.000	95.000	52.357	-0.700
S7	0.013	1.790	0.000	95.000	53.454	-0.708
S8	0.013	1.733	0.000	95.000	55.229	-0.730

Internal Reference Calibration, performed Wed Aug 21 11:08:58 2013:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.012	0.520	1.000	0.000

Air Zero Calibration, performed Mon Dec 09 06:54:41 2013:

	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	

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

Tool Name	Start Depth (ft)	End Depth (ft)	Tool Length (ft)	Tool Weight (lb)	Tool O.D. (in)
WVF3FT	12.96	12.96	0.00	0.00	0.00
WVFCAL	12.96	12.96	0.00	0.00	0.00
WVFS1	12.96	12.96	0.00	0.00	0.00
WVFS2	12.96	12.96	0.00	0.00	0.00
WVFS3	12.96	12.96	0.00	0.00	0.00
WVFS4	12.96	12.96	0.00	0.00	0.00
WVFS5	12.96	12.96	0.00	0.00	0.00
WVFS6	12.96	12.96	0.00	0.00	0.00
WVFS7	12.96	12.96	0.00	0.00	0.00
WVFS8	12.96	12.96	0.00	0.00	0.00
WVF5FT	11.88	11.88	0.00	0.00	0.00
CCL	4.88	4.88	0.00	0.00	0.00
GR	2.15	2.15	0.00	0.00	0.00
TEMP	0.08	0.08	0.00	0.00	0.00

Dataset: edith_ann_duckworth_4c-21h-0268.db: field/well/run1/pass1

Total Length: 20.38 ft

Total Weight: 220.00 lb

O.D.: 2.75 in

RBT-Probe (Base)
Probe Radii Bond Tool with Digital Telemetry

PTS275

GR_CCL-Probe (111211)
Probe Gamma CCL

TEMP-1.375TEMP (0001)
Temperature Tool

8.92	2.75	90.00
2.83	2.75	100.00
4.54	2.75	30.00
1.25	1.38	30.00