

Pioneer Energy Services

PIONEER**RADIAL BOND LOG**
VDL & CCL
GAMMA RAY**Company** ANADARKO PETROLEUM CORP**Well** 3D #15C-21HZ**Field** WATTENBERG**County** WELD**State** CO**Location:** SHL: 250' FNL & 1009' FEL
NENE**Other Services** CALIPER

SEC 21 TWP 2N RGE 66W

Permanent Datum GL Elevation 4991

Elevation

Log Measured From KB

K.B. 5006
D.F. 5006
G.L. 4991

Drilling Measured From KB

Date

JANUARY 23, 2014

Run Number

ONE

Depth Driller

NA

Depth Logger

6955

Bottom Logged Interval

6954

Top Log Interval

SURFACE

Open Hole Size

8-3/4"

Type Fluid

WATER

Density / Viscosity

8.33 / 32

Max. Recorded Temp.

231 F

Estimated Cement Top

195

Time Well Ready

ROA

Time Logger on Bottom

1600

Equipment Number

41

Location

FORT MORGAN, CO

Recorded By

SHAUN SCHUMAN

Witnessed By

EDGER CHAVEZ

Borehole Record

Tubing Record

To

Run Number

From

To

Casing Record

Size

Wgt/Ft

Surface String

9.625"

36#

Prot. String

7"

26#

Production String

4.5"

11.6#

Liner

6886

NA

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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.

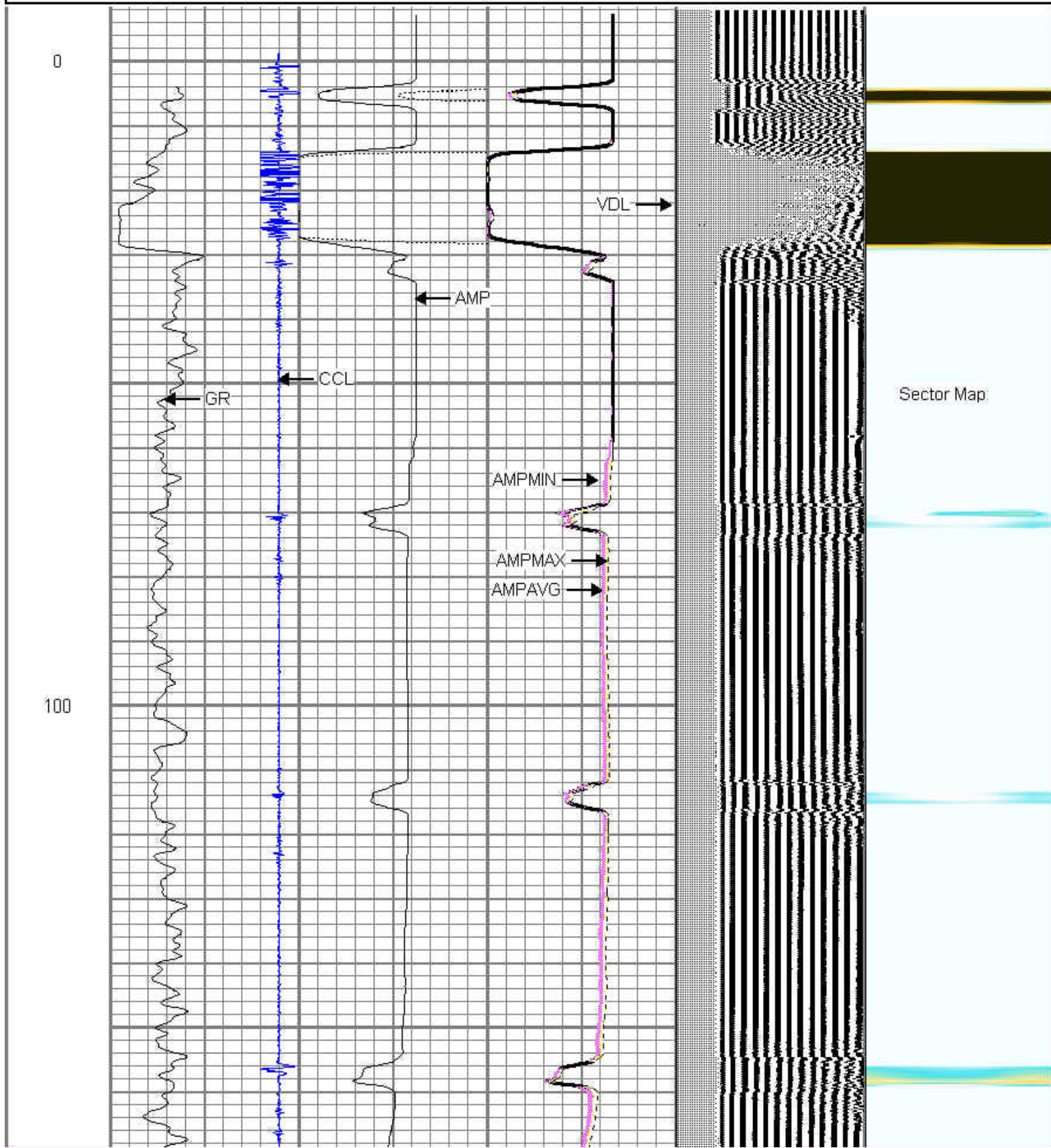
Comments

THANK YOU FOR USING PIONEER ENERGY SERVICES!

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

Database File: 3d_15c_21hz.db
 Dataset Pathname: rbl/pass1.4
 Presentation Format: scbl02
 Dataset Creation: Wed Jan 22 19:25:32 2014 by Calc SCH 120430
 Charted by: Depth in Feet scaled 1:240

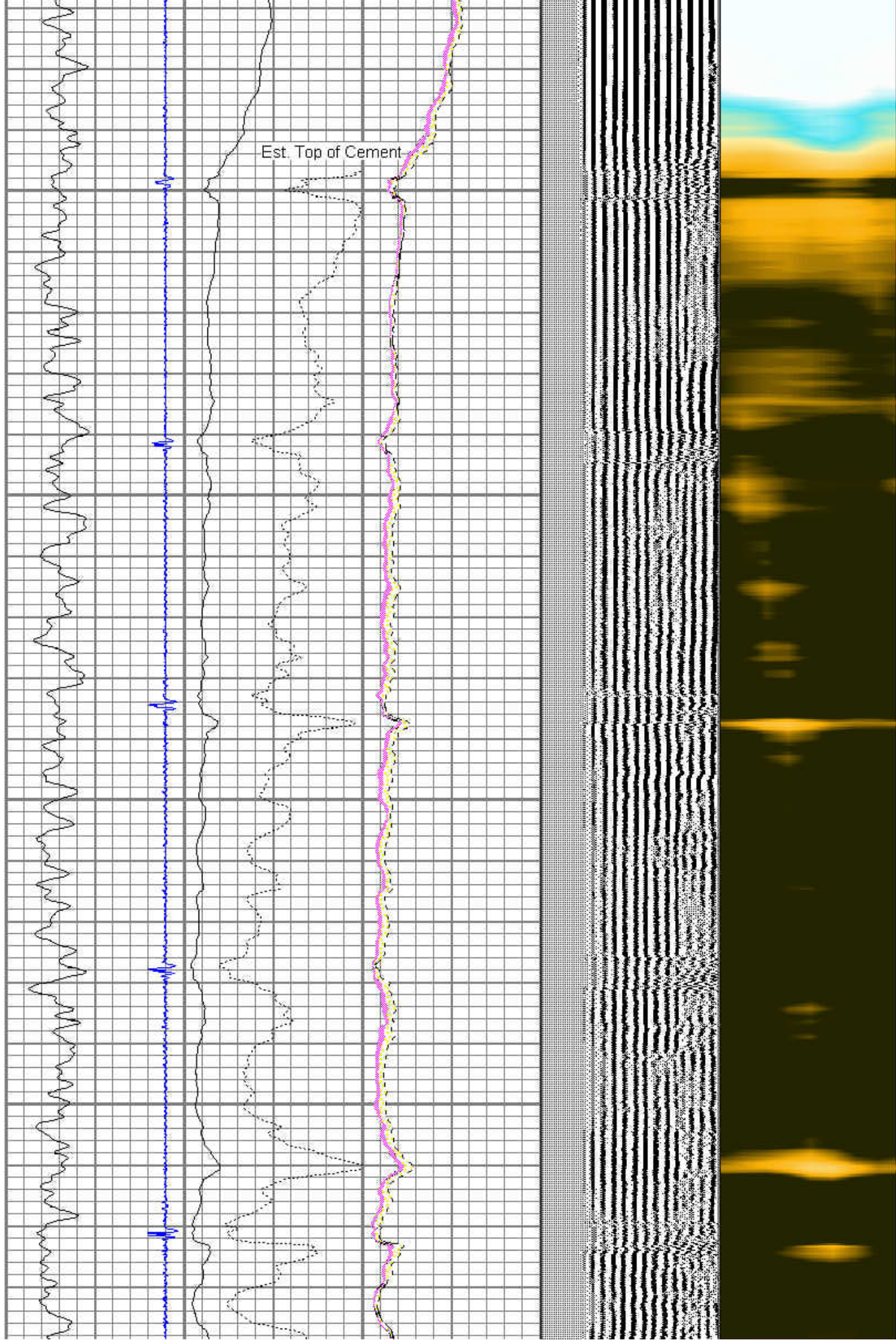
-18	CCL	2	0	AMP (mV)	100	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150				25		75
						0	AMPMIN	150						

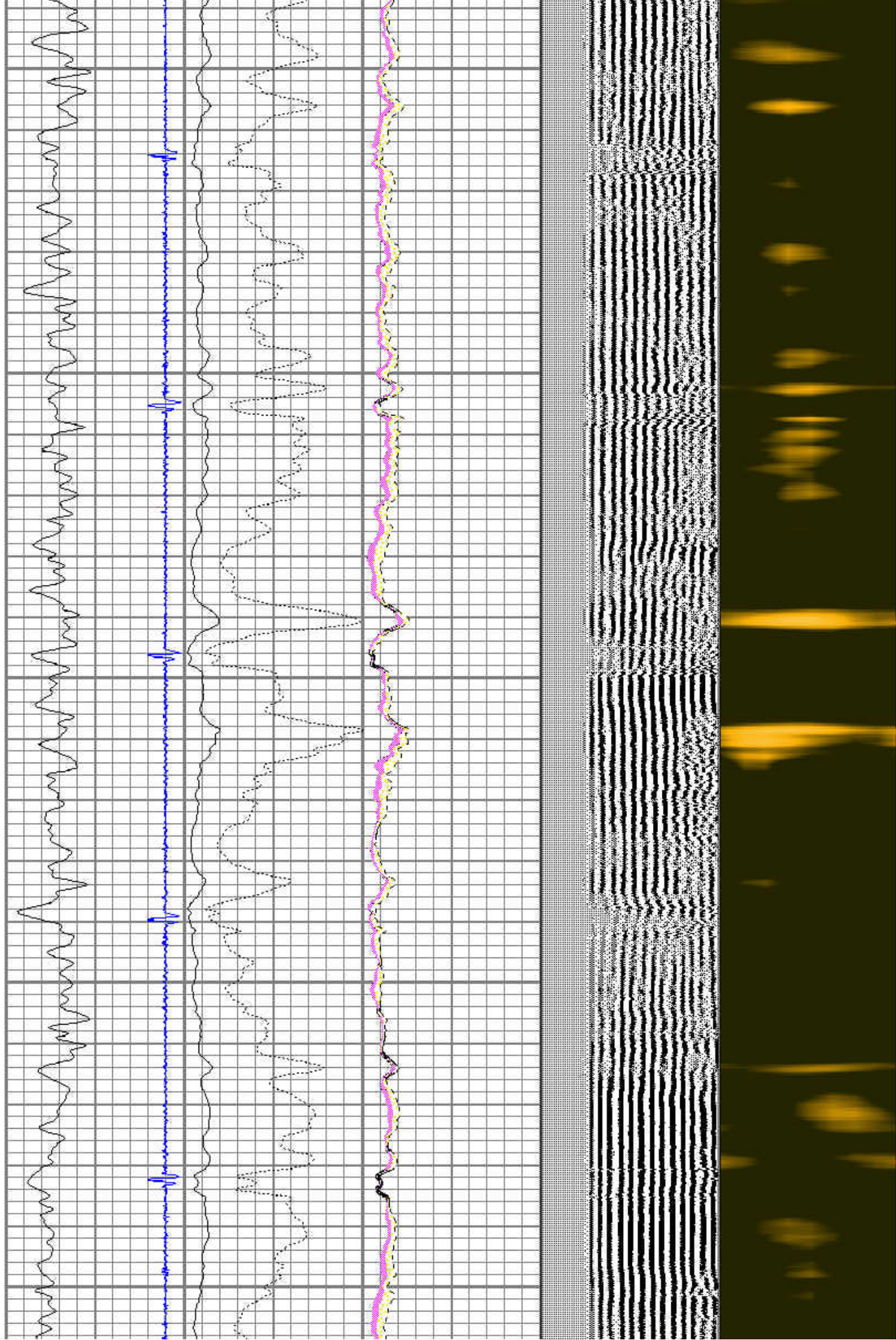


200

300

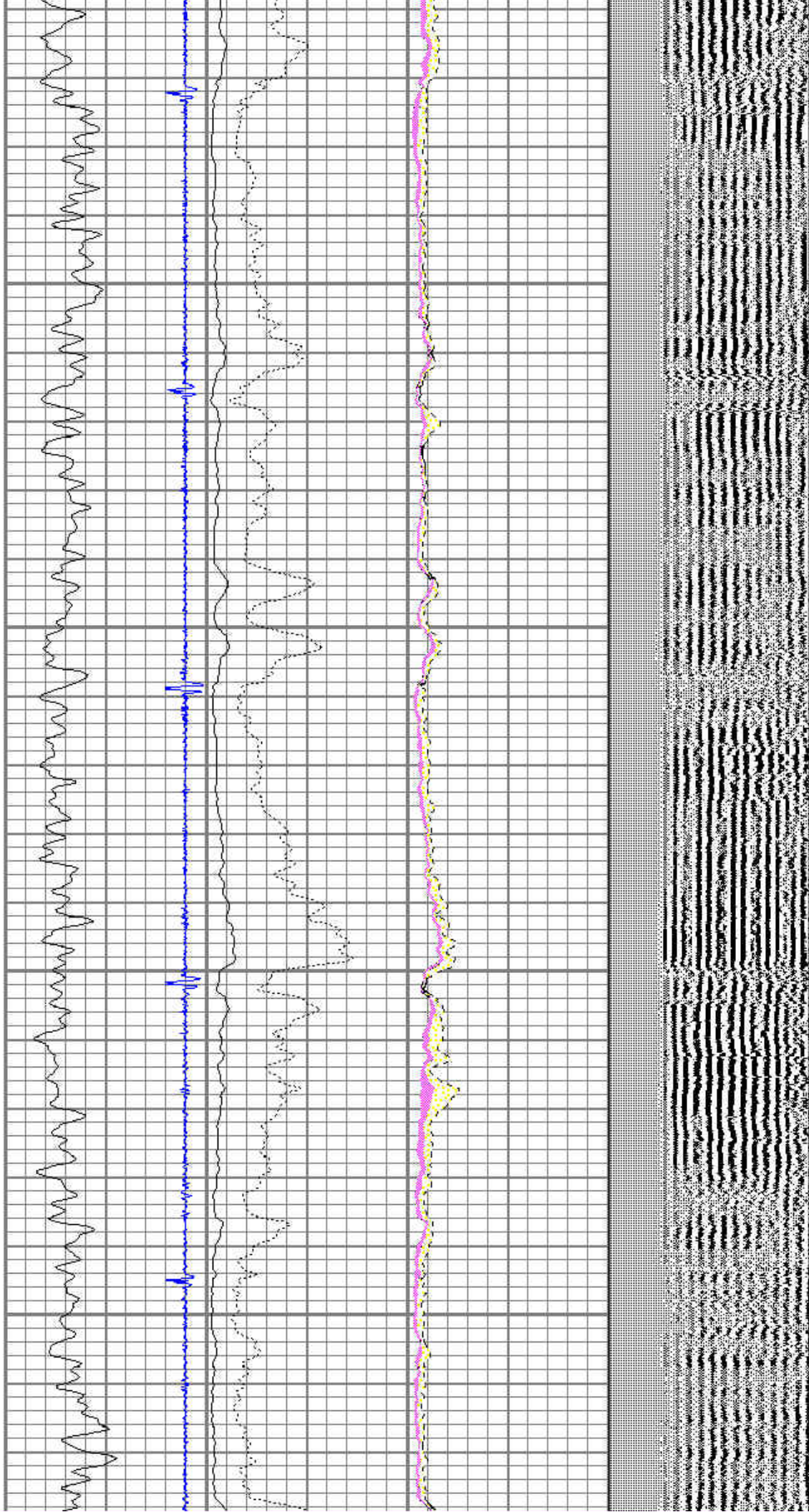
Est. Top of Cement





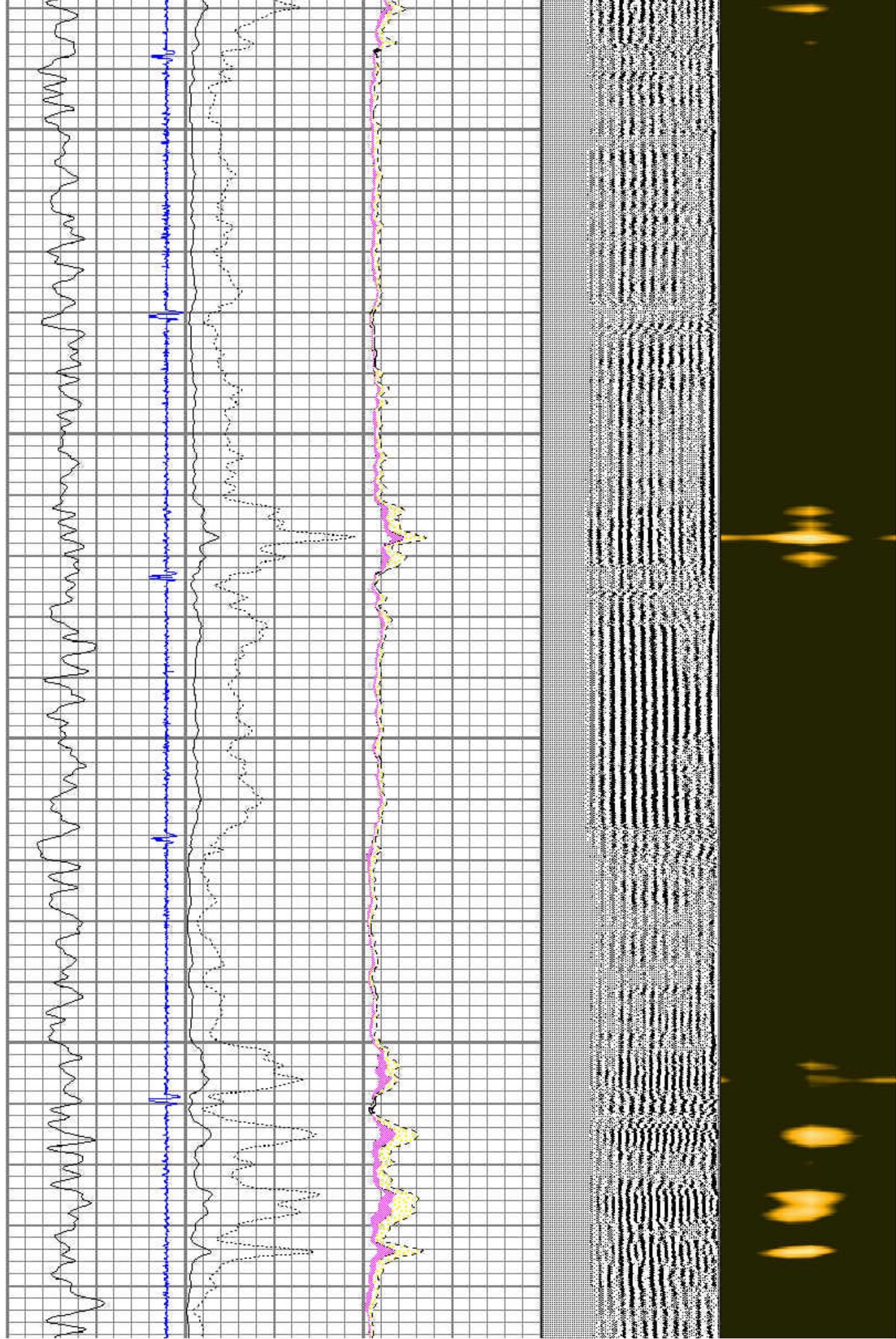
700

800



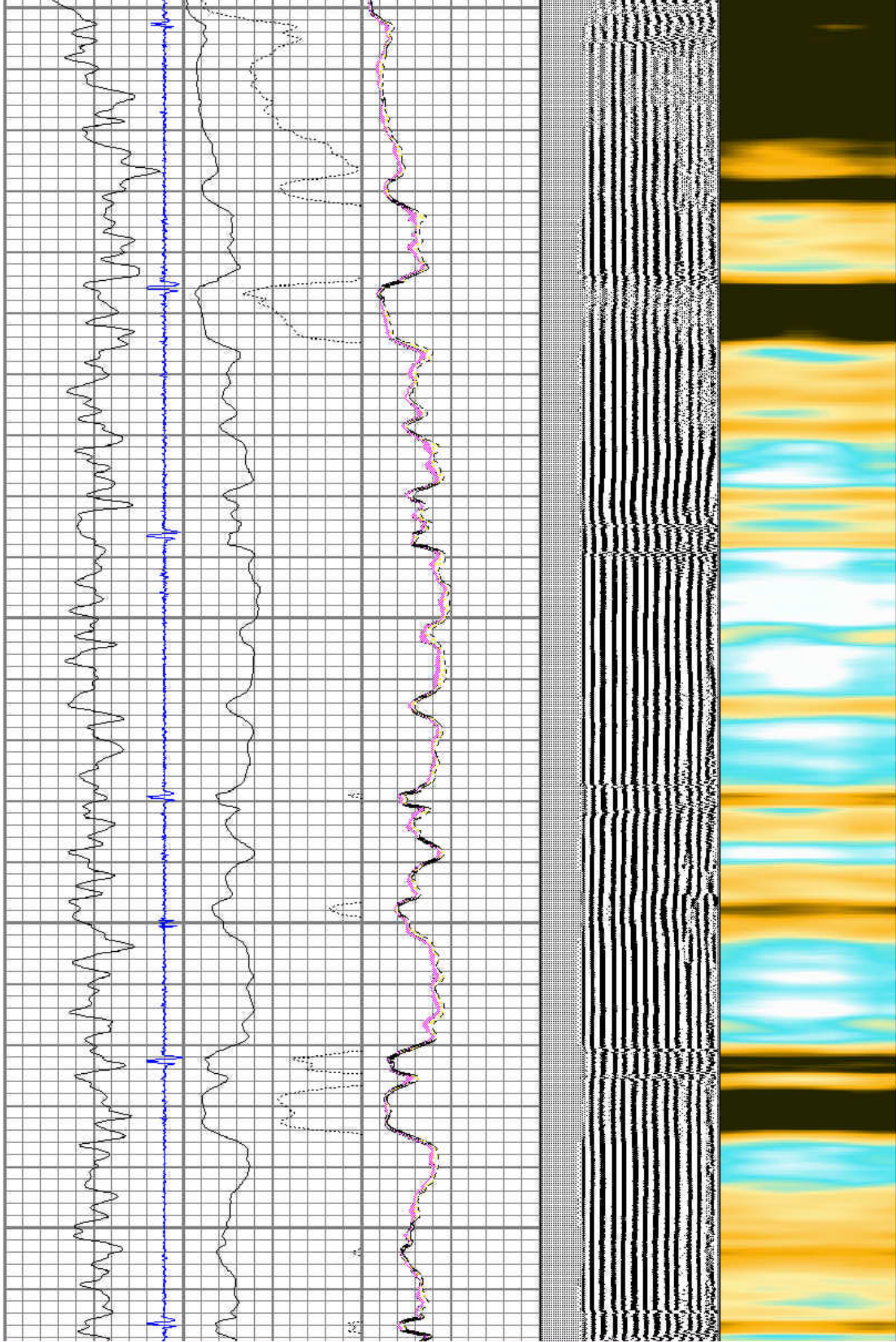
900

1000



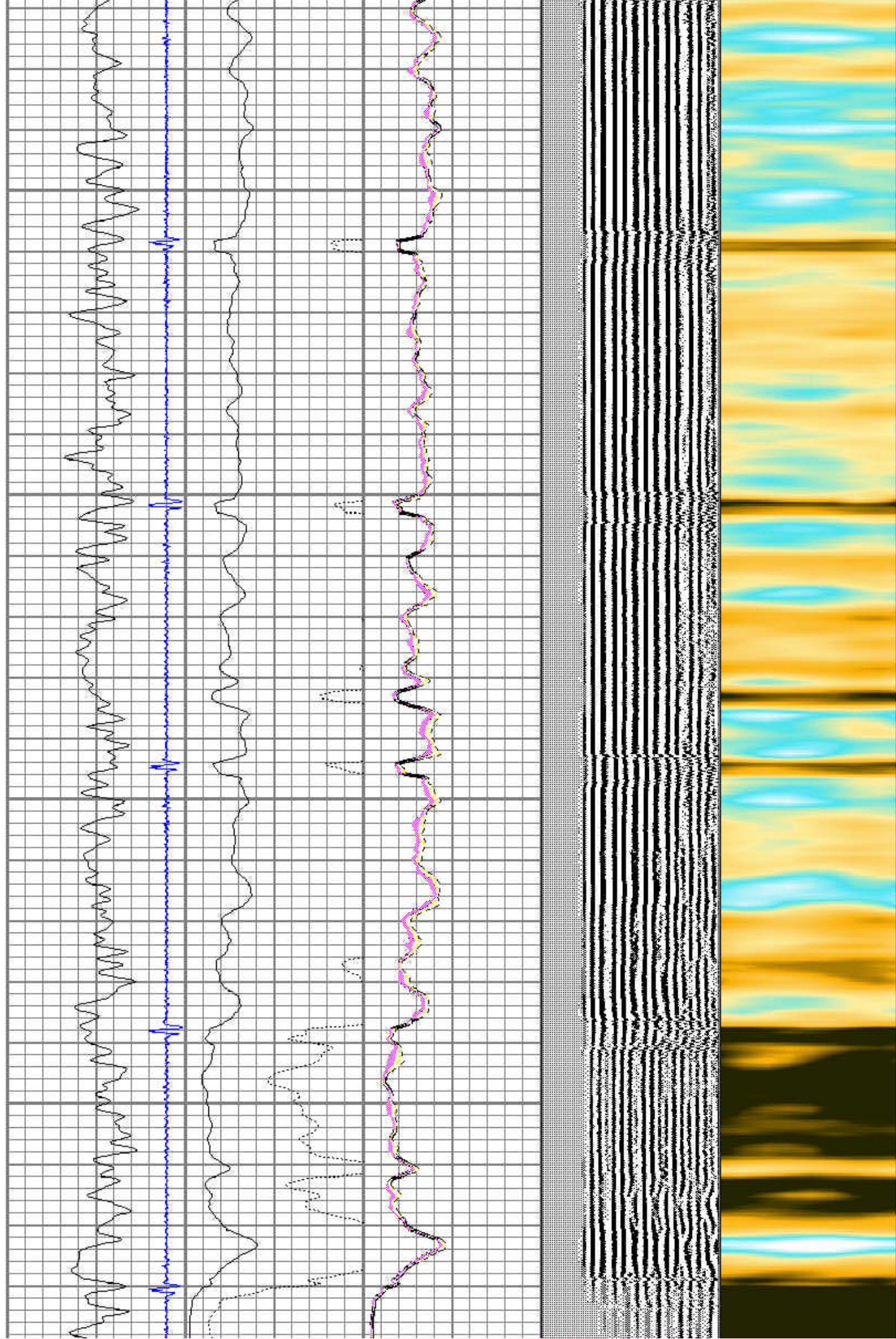
1100

1200



1300

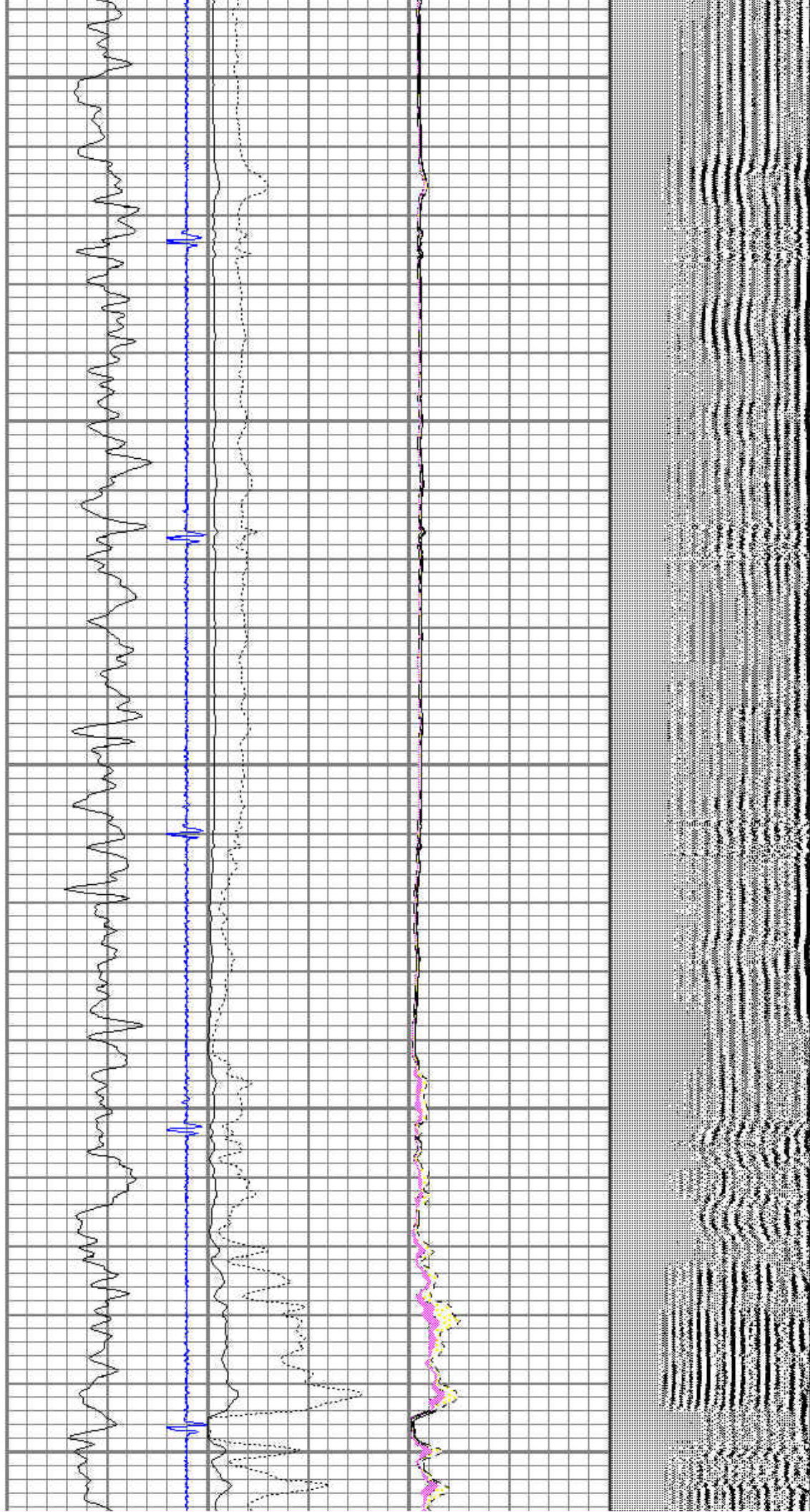
1400



1500

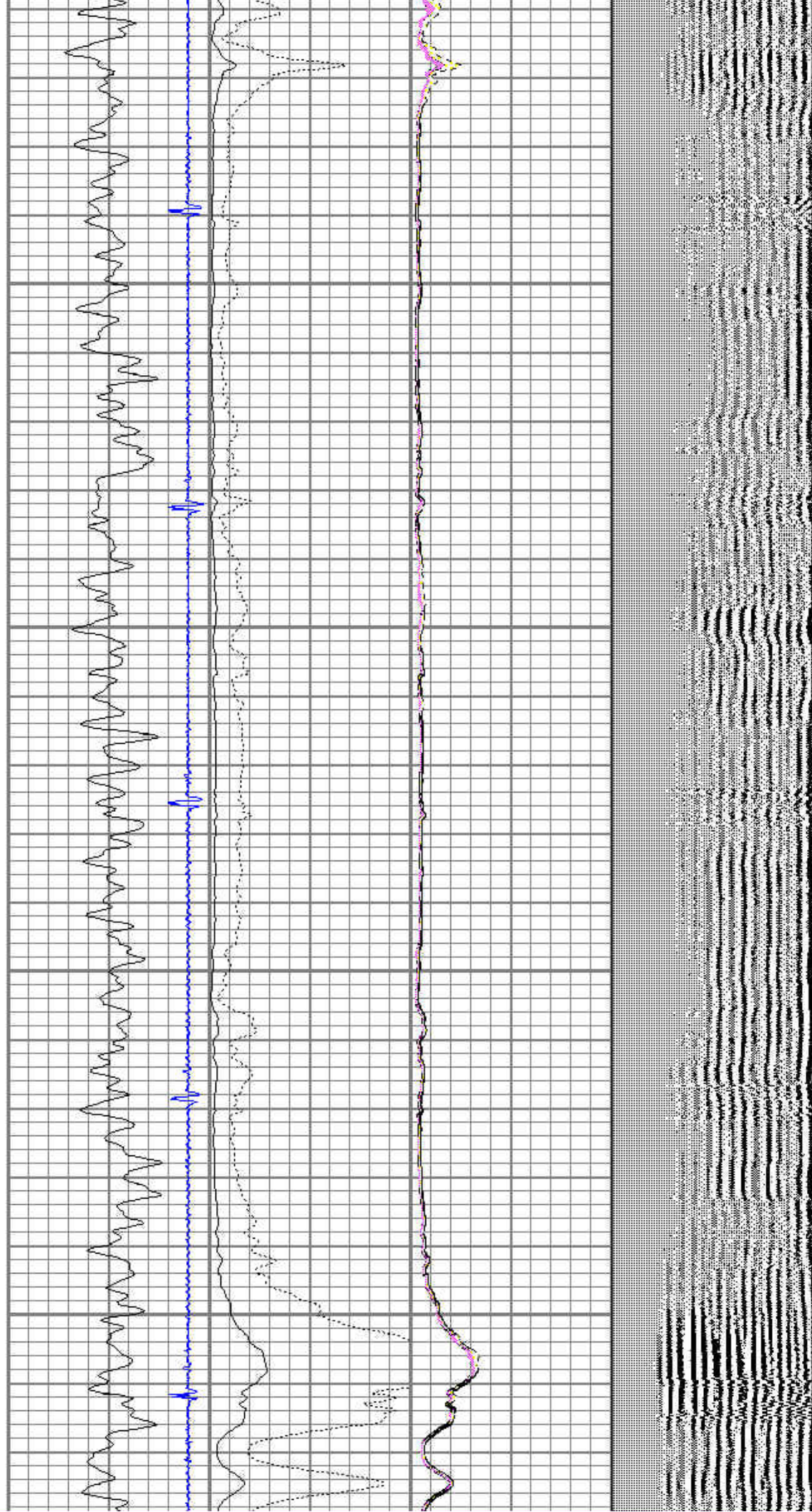
1600

1700



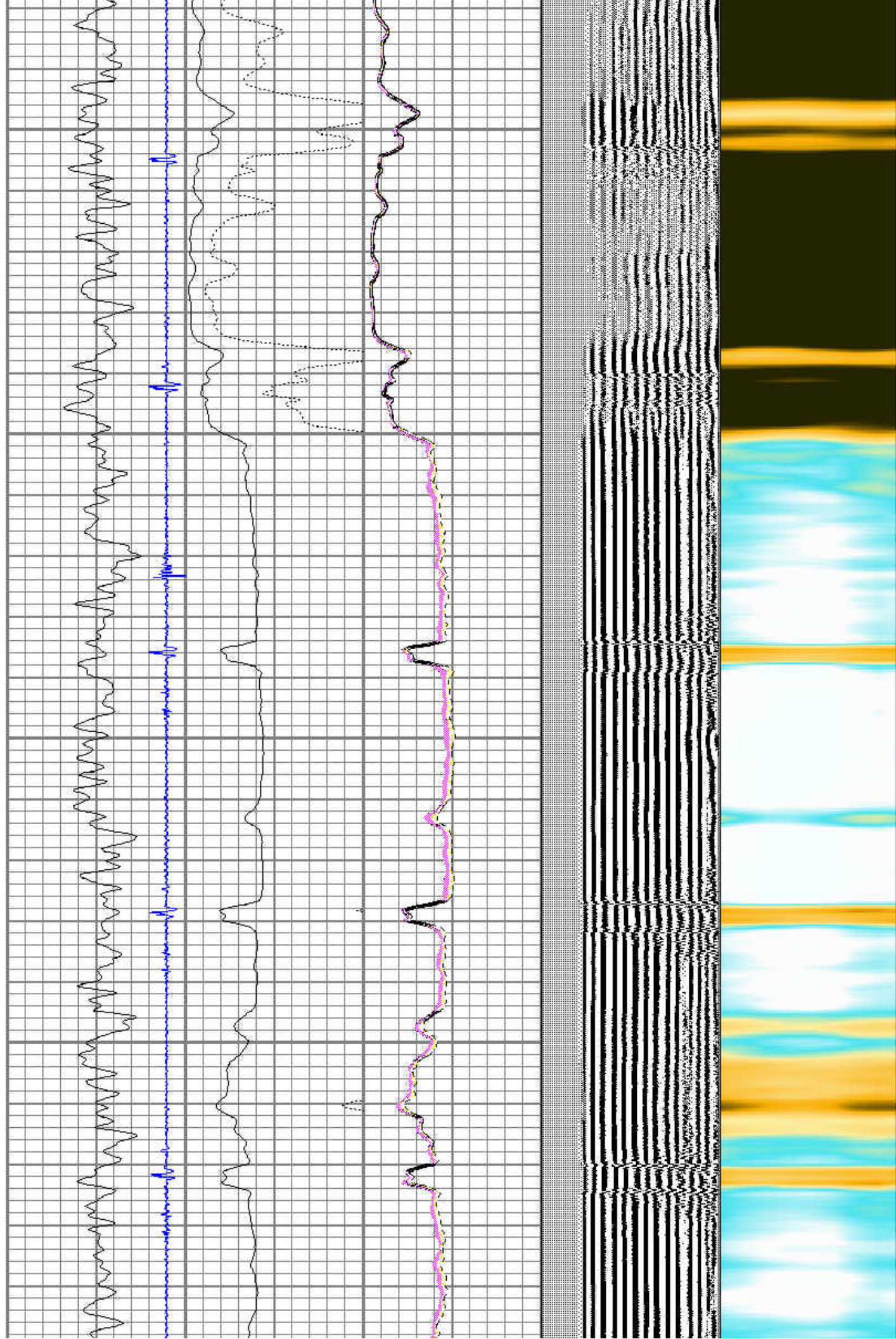
1800

1900



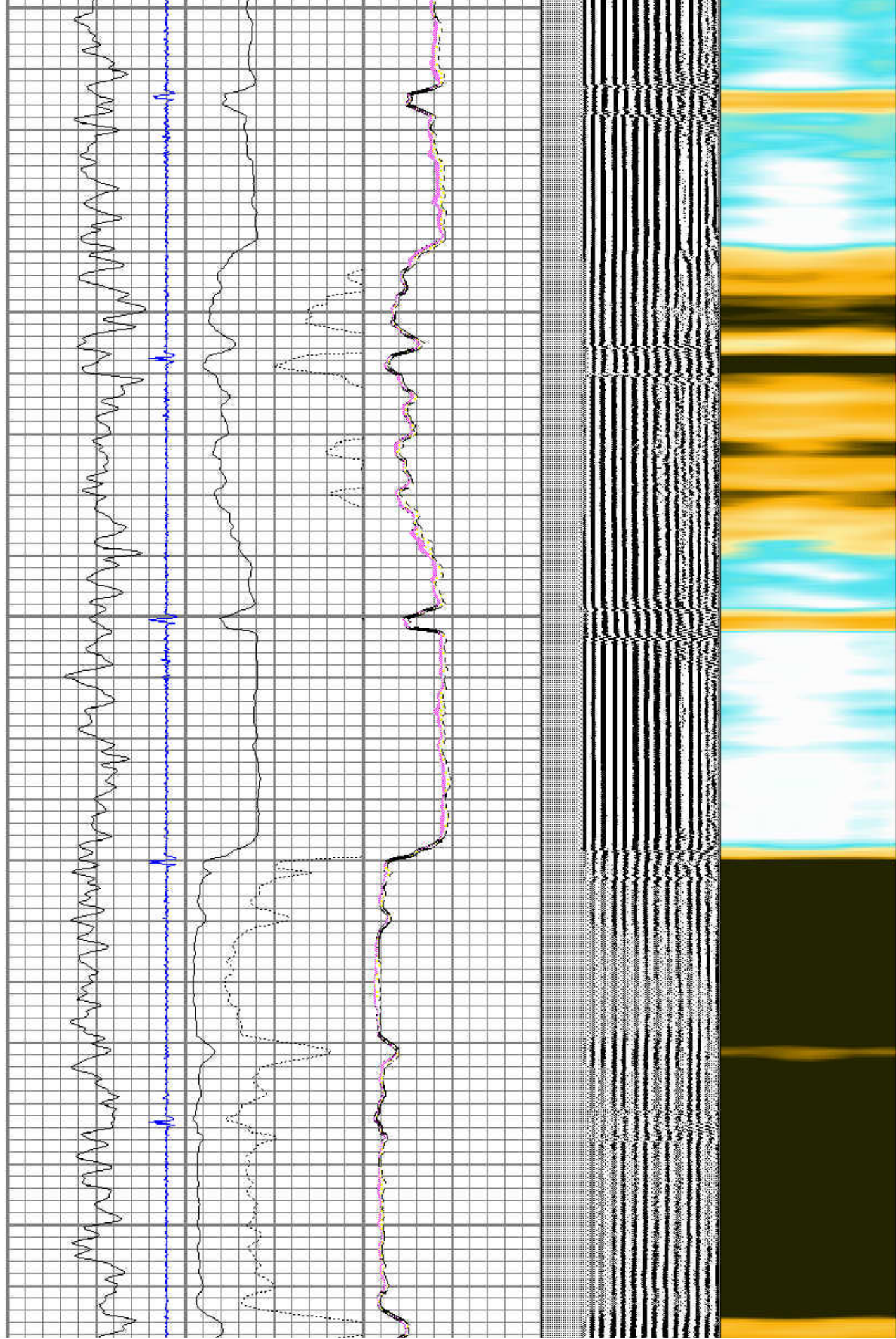
2000

2100



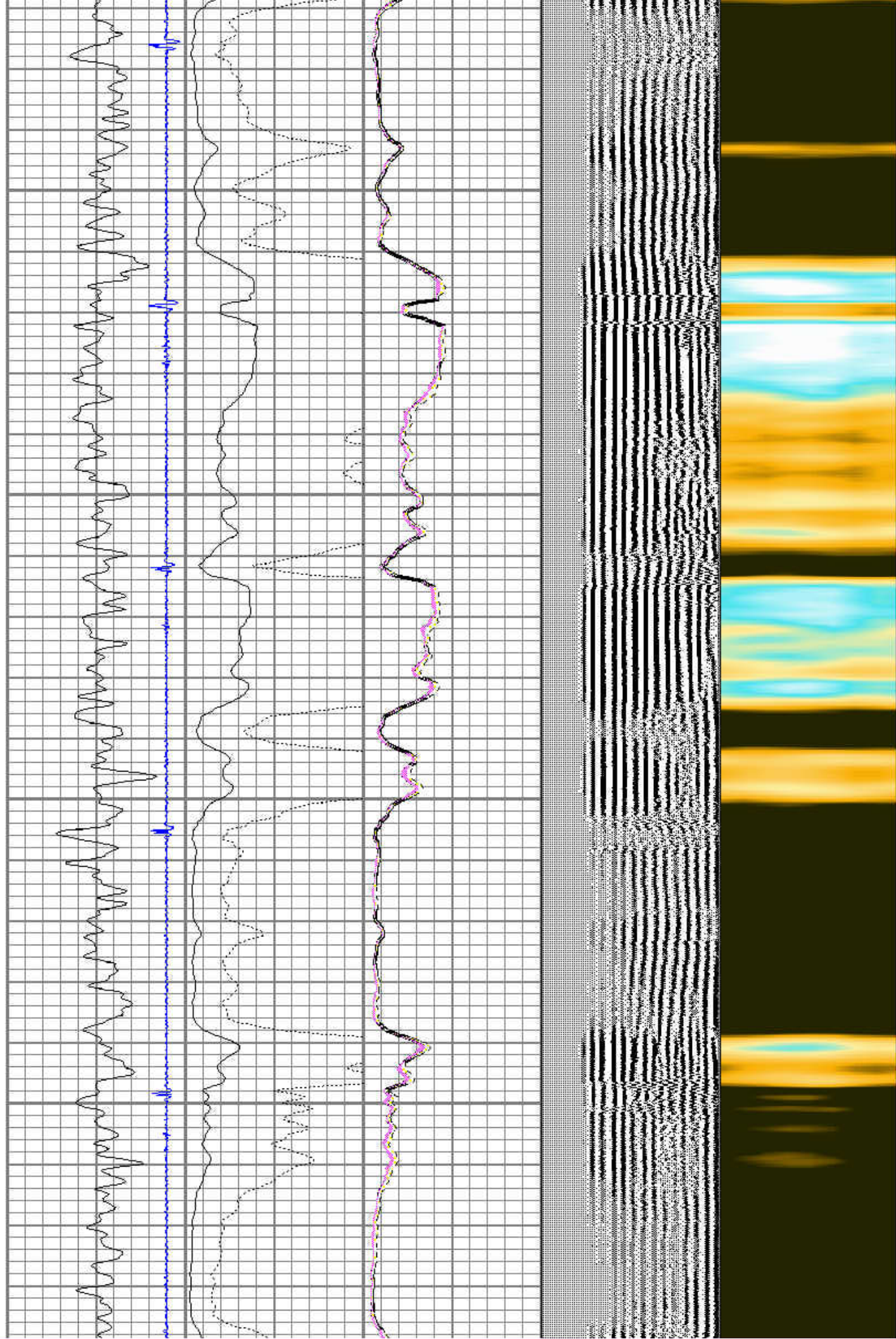
2200

2300



2400

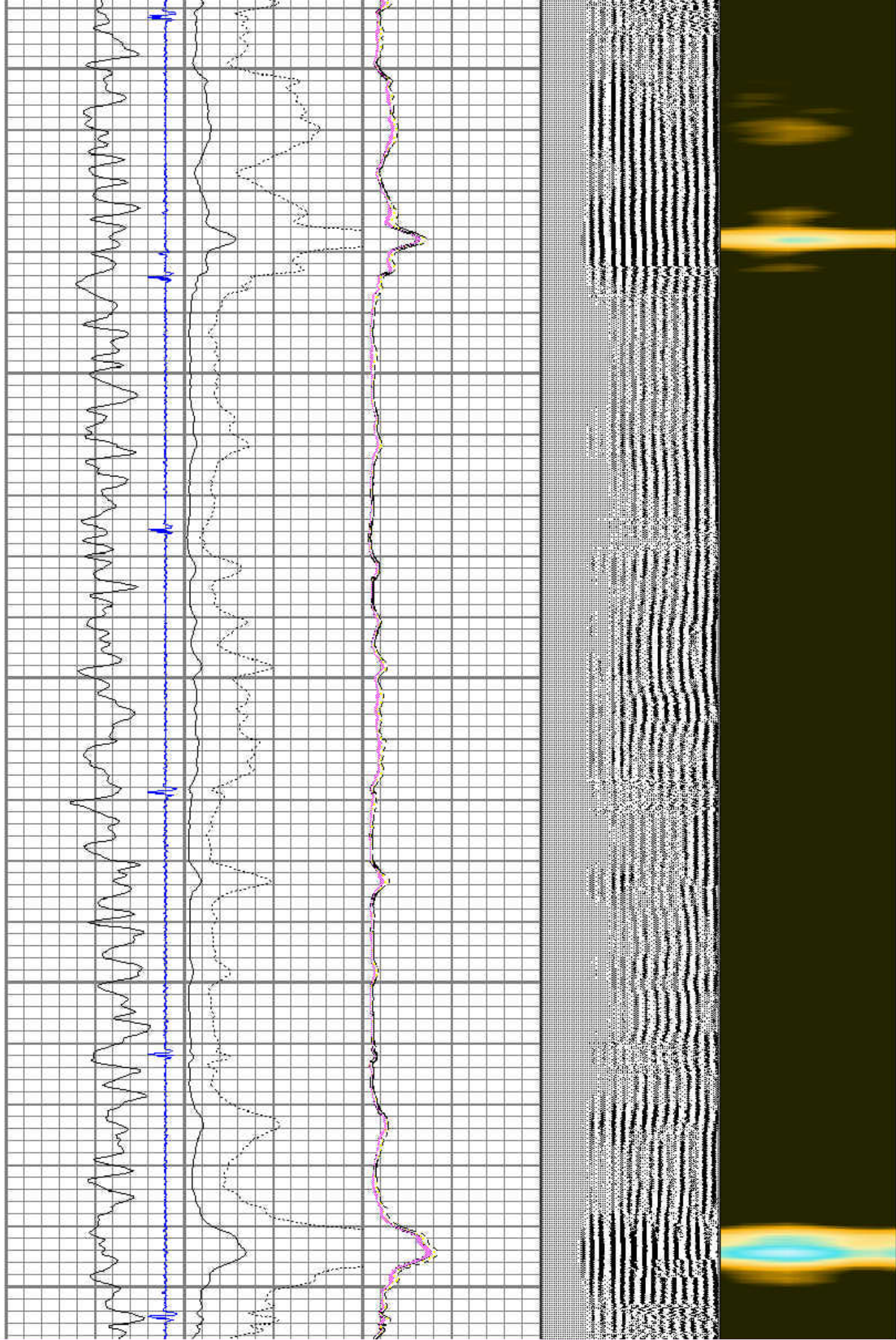
2500



2600

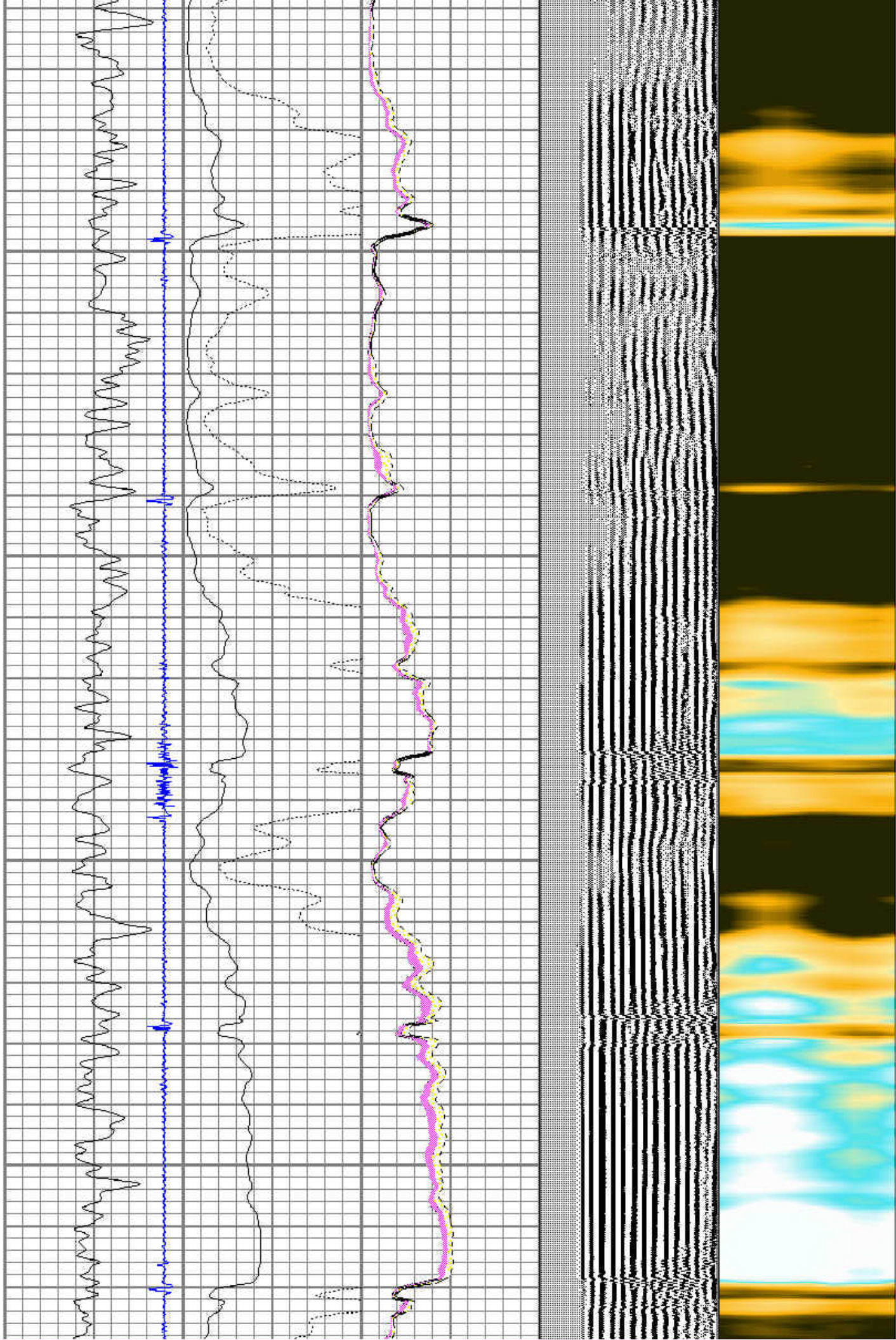
2700

2800



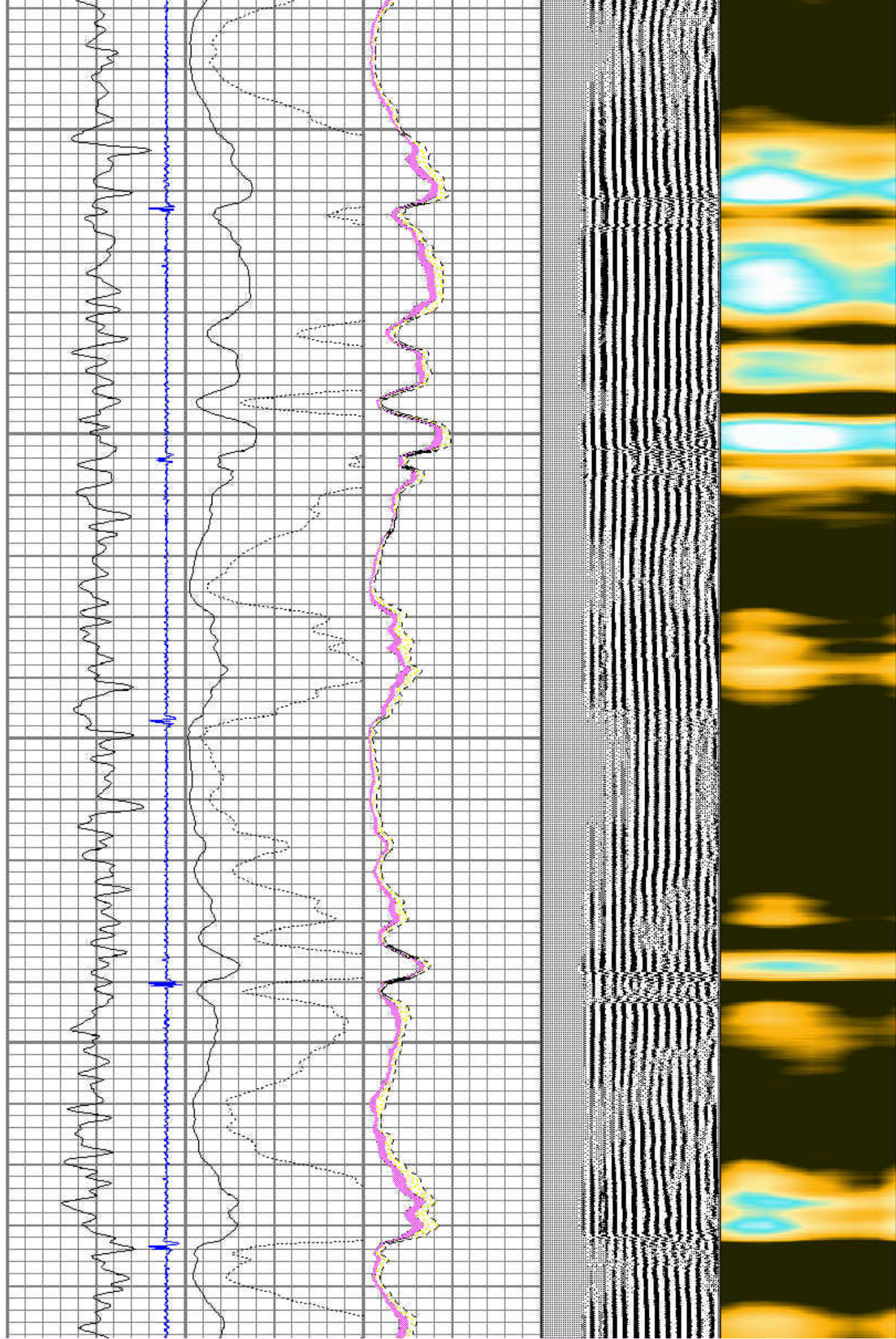
2900

3000



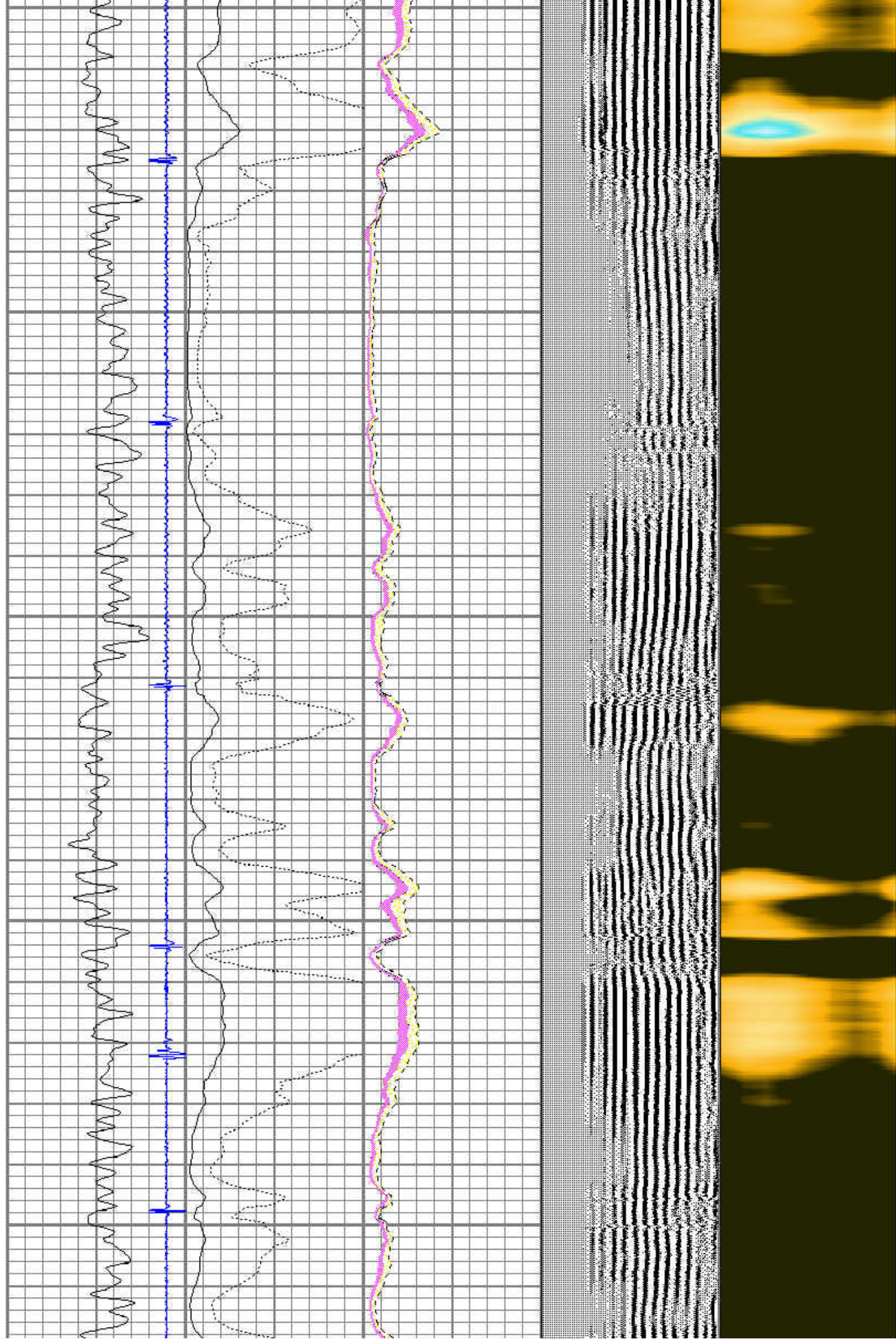
3100

3200



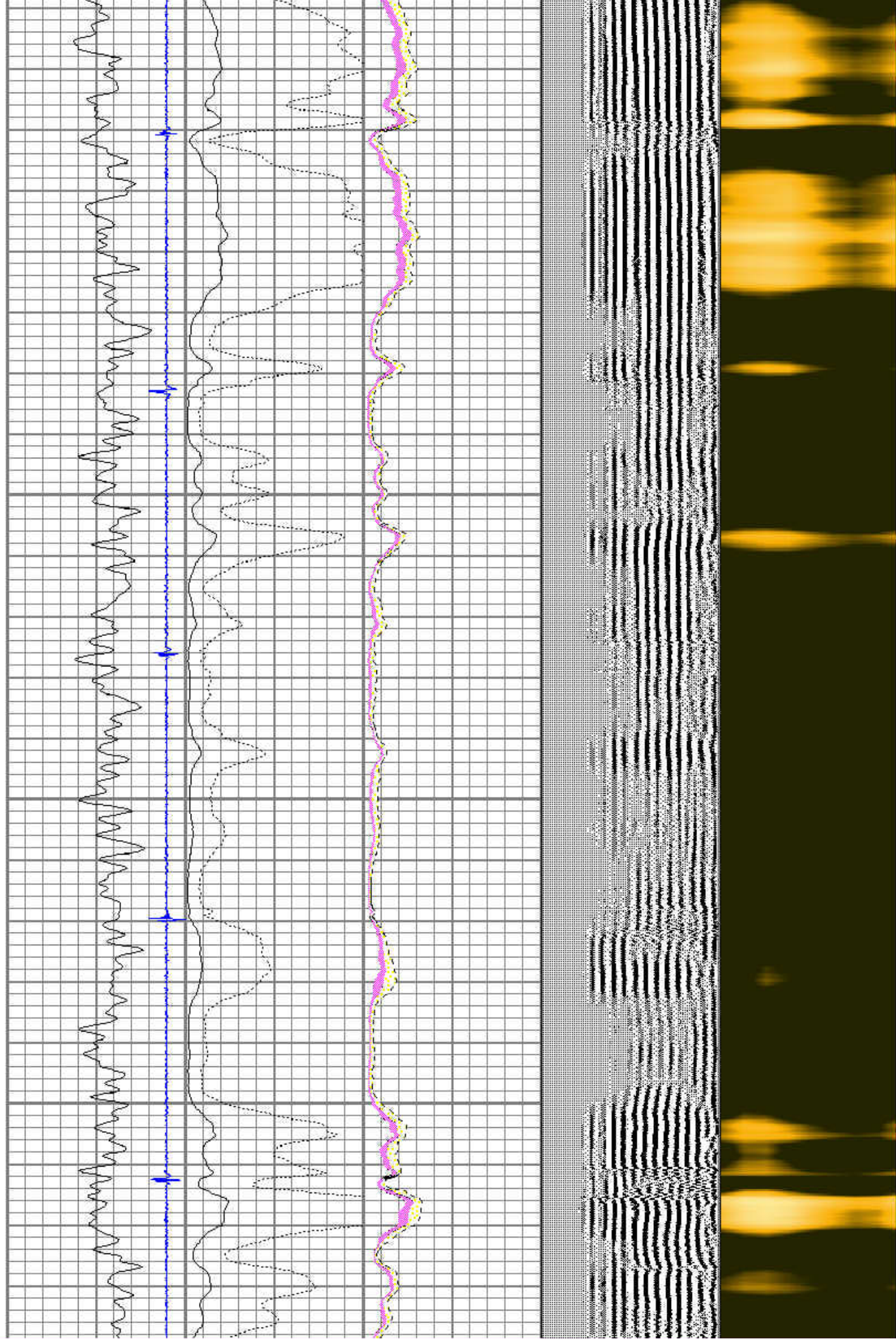
3300

3400



3500

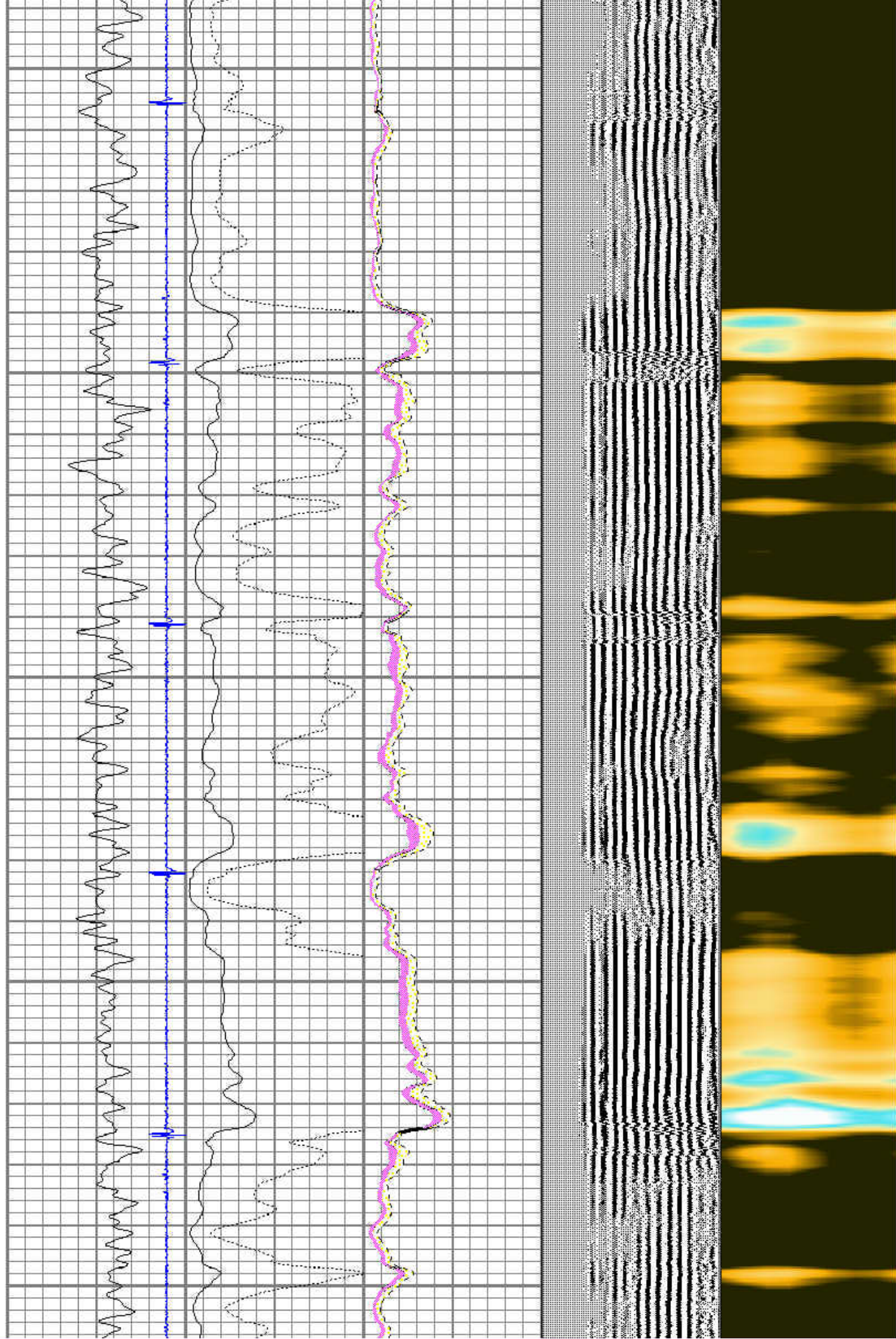
3600



3700

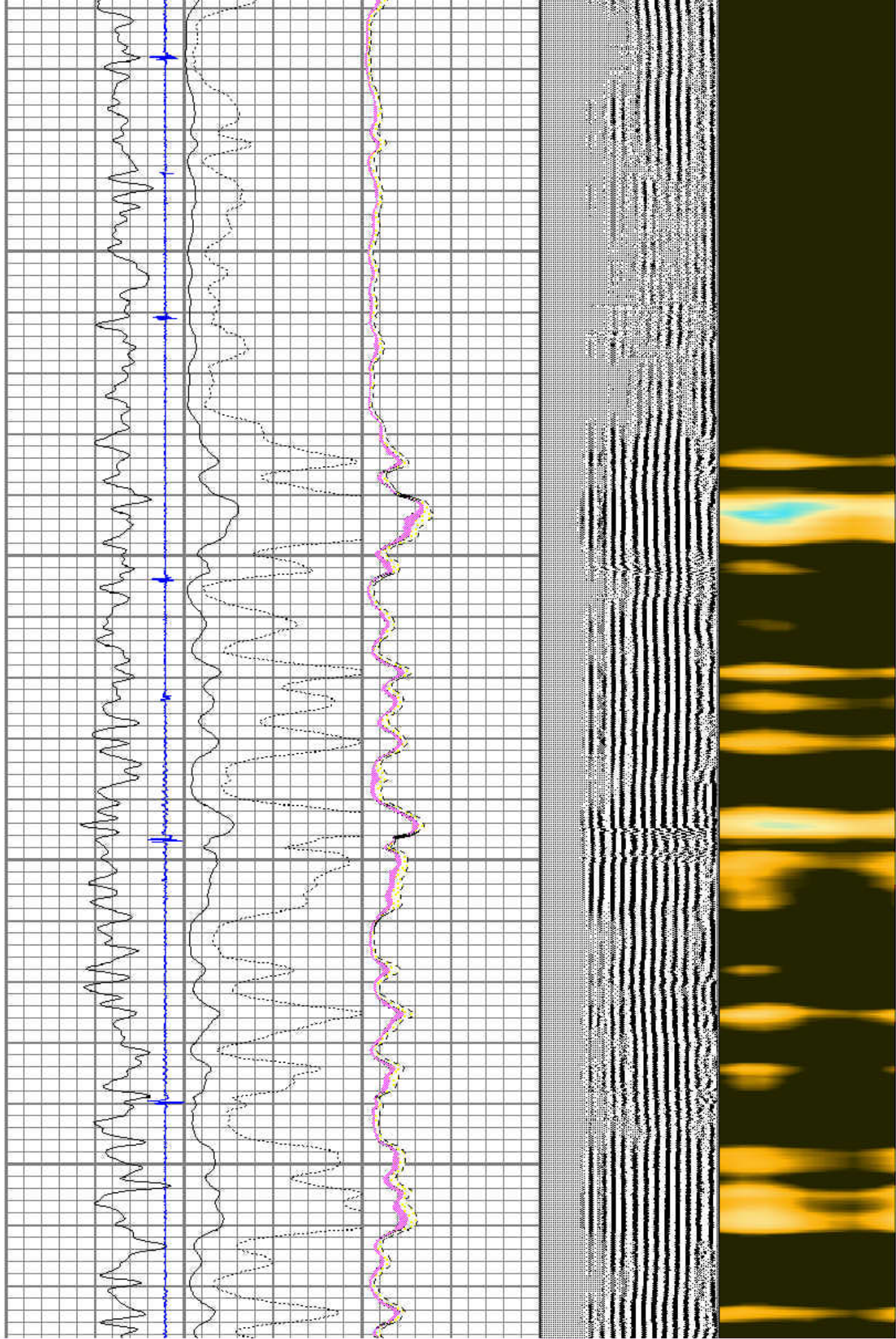
3800

3900



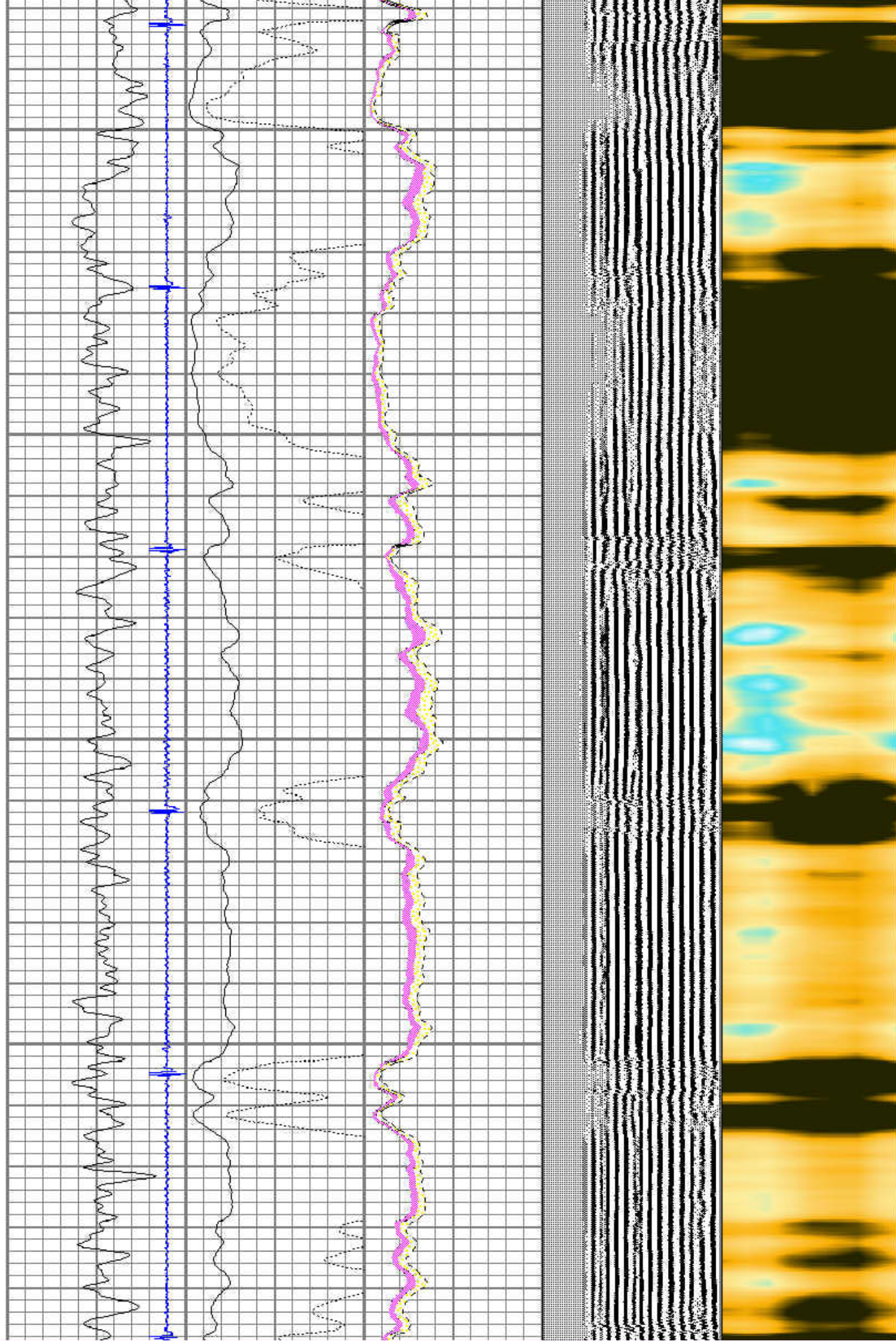
4000

4100



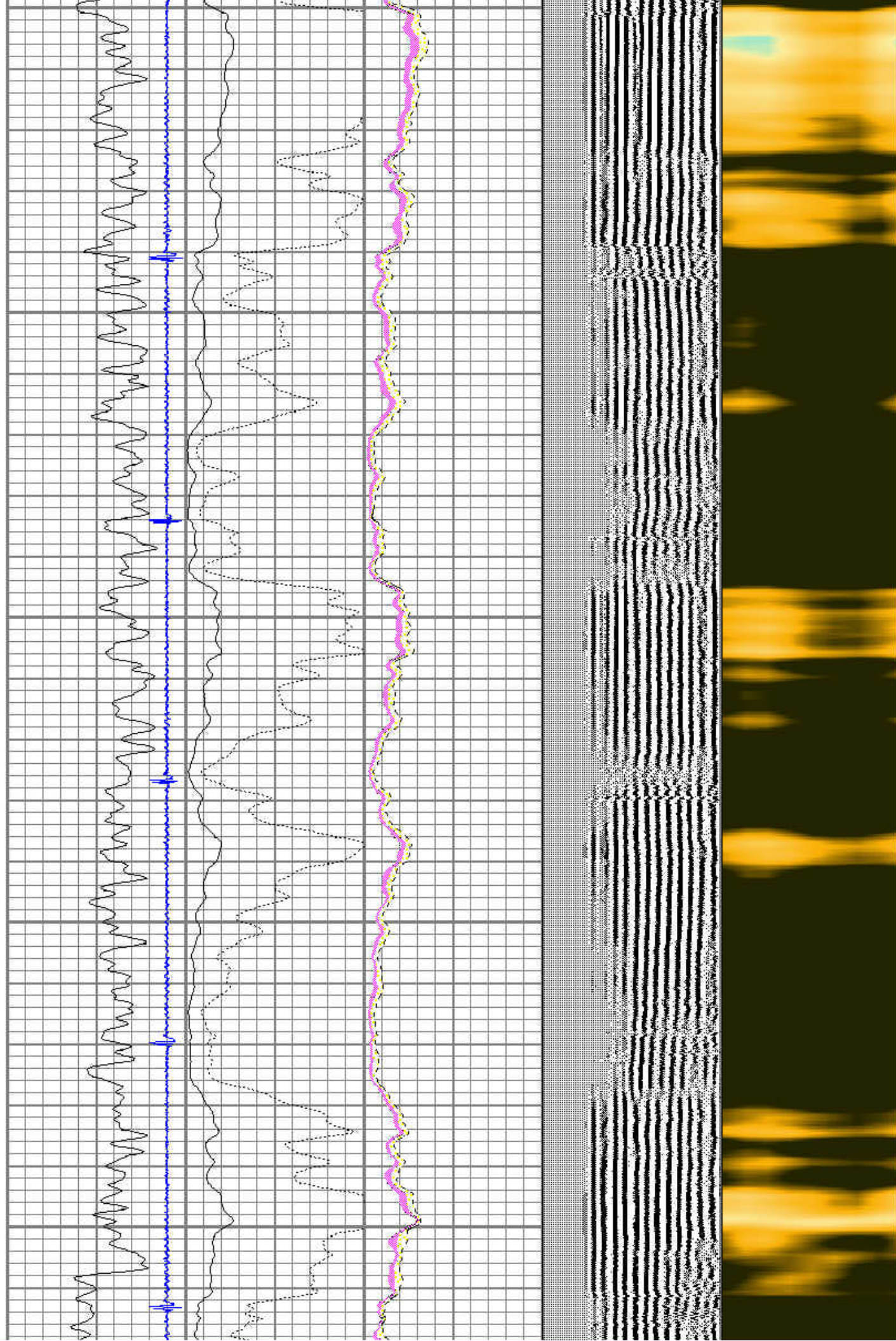
4200

4300



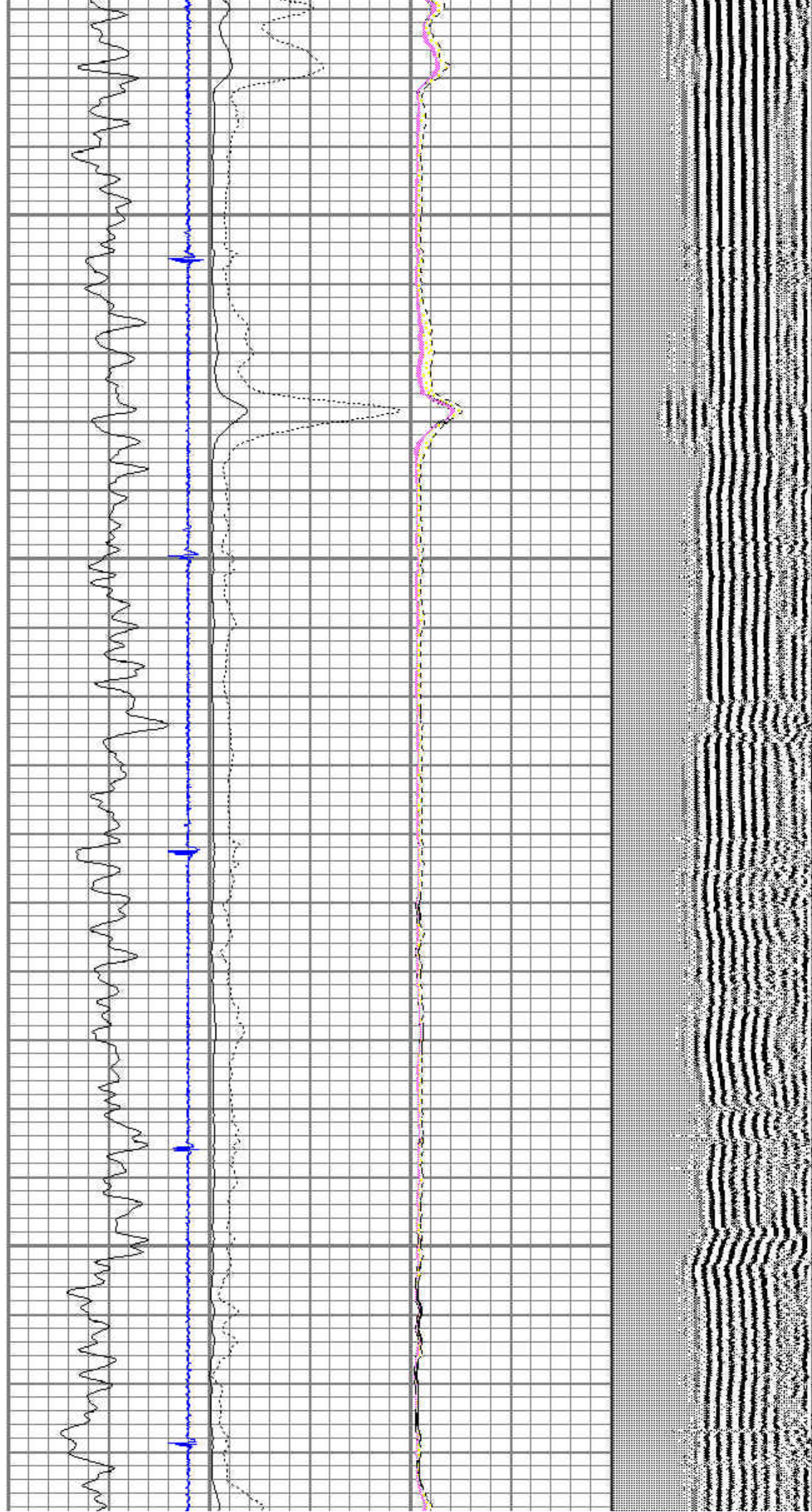
4400

4500



4600

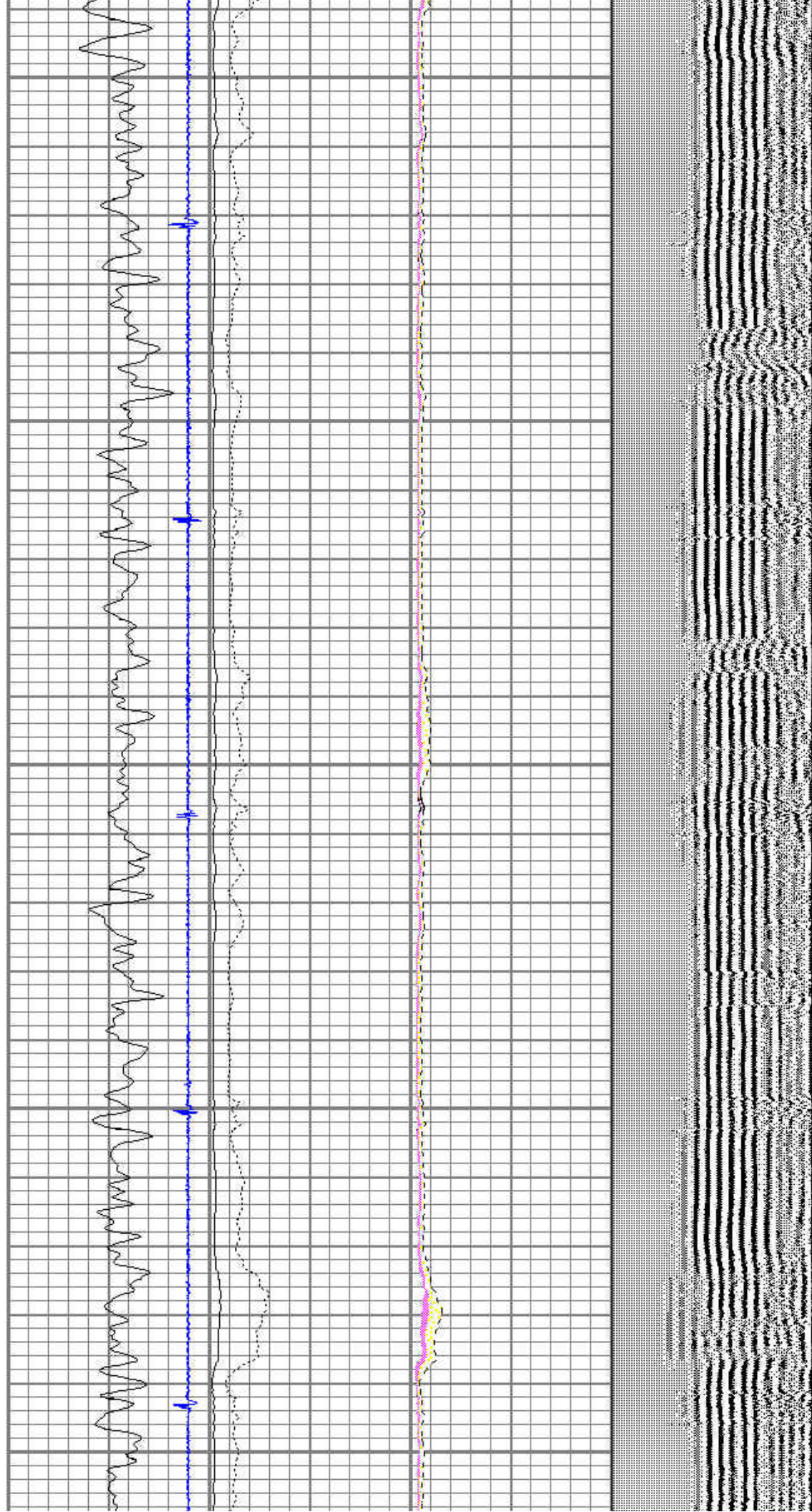
4700



4800

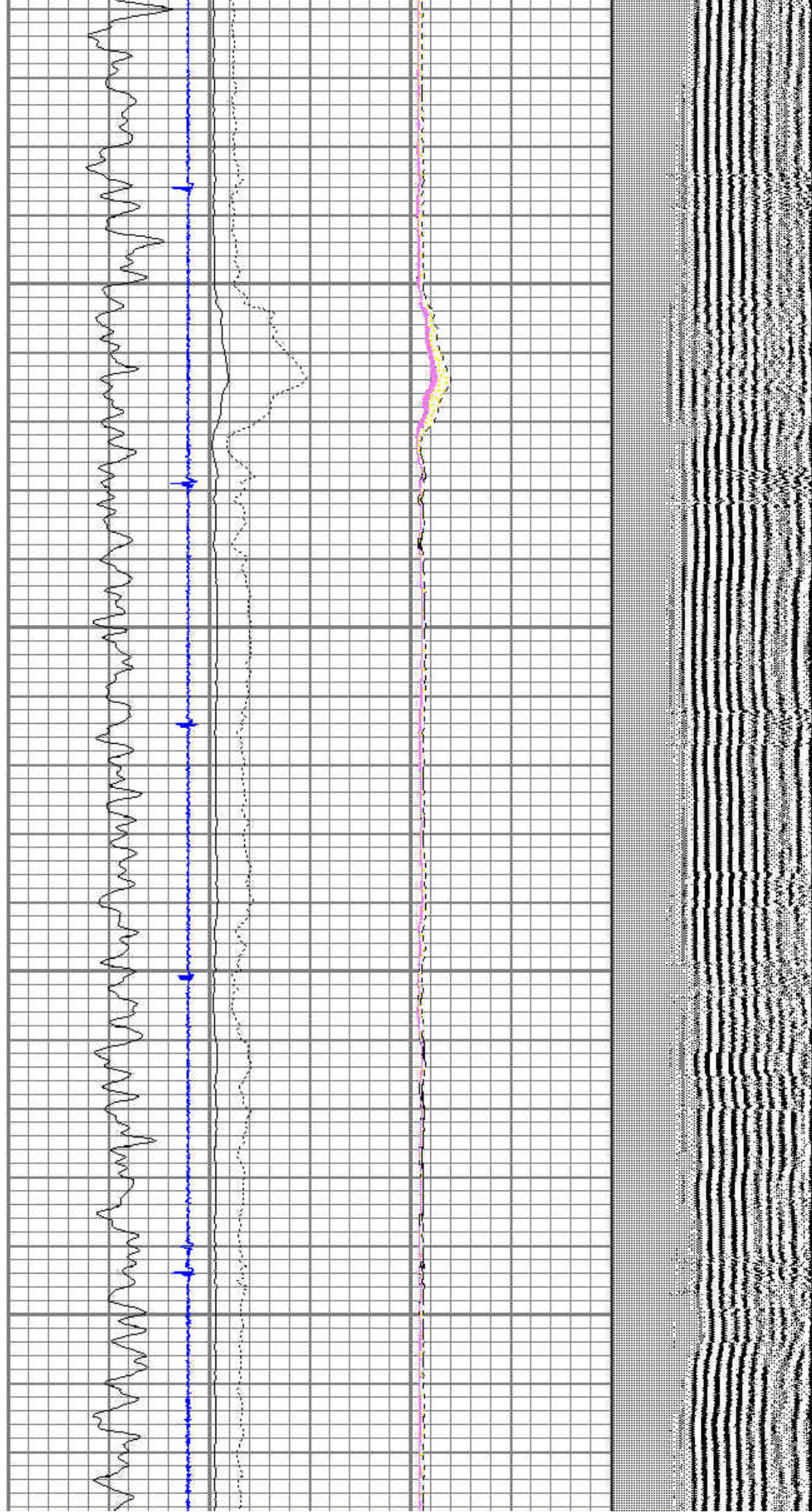
4900

5000



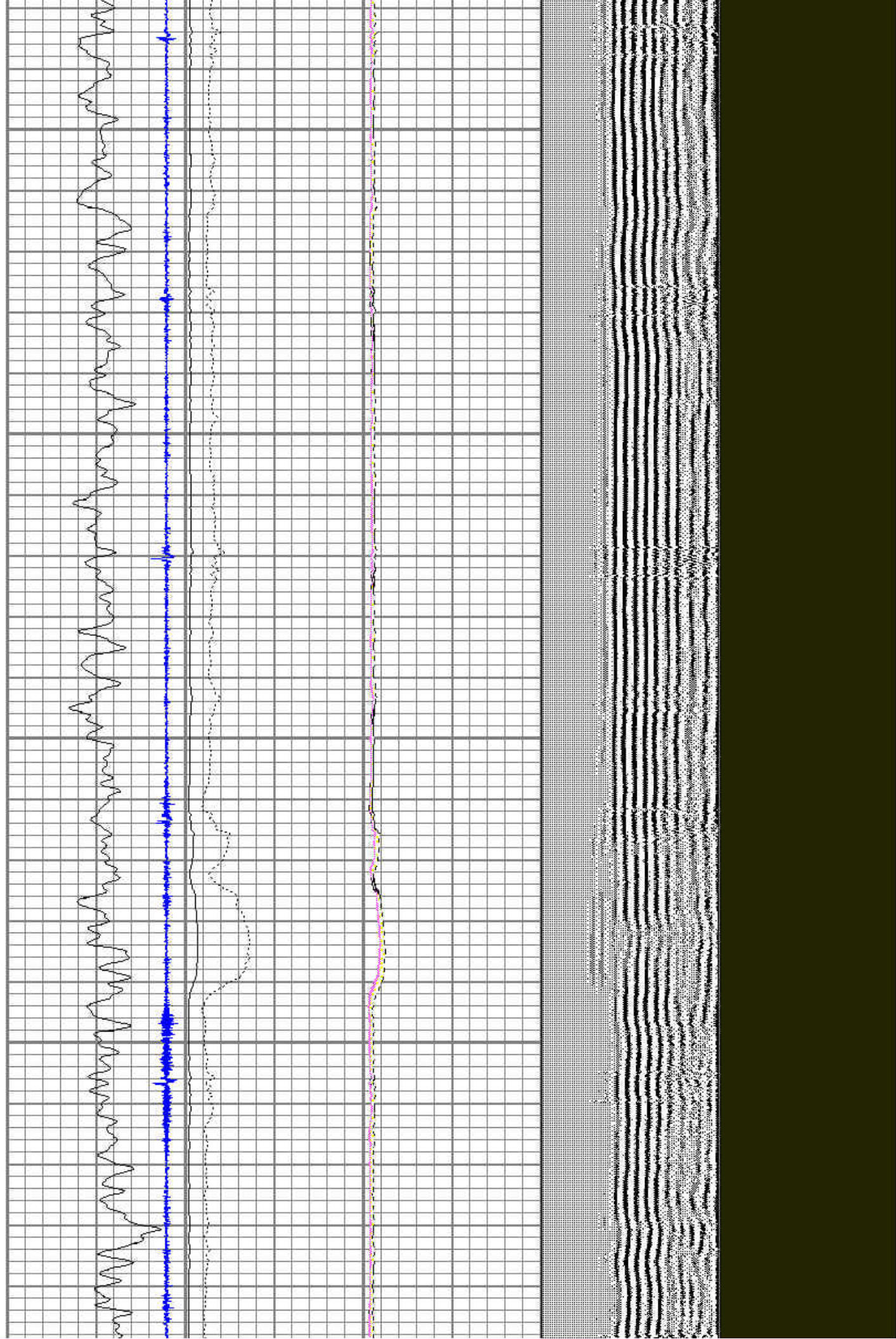
5100

5200



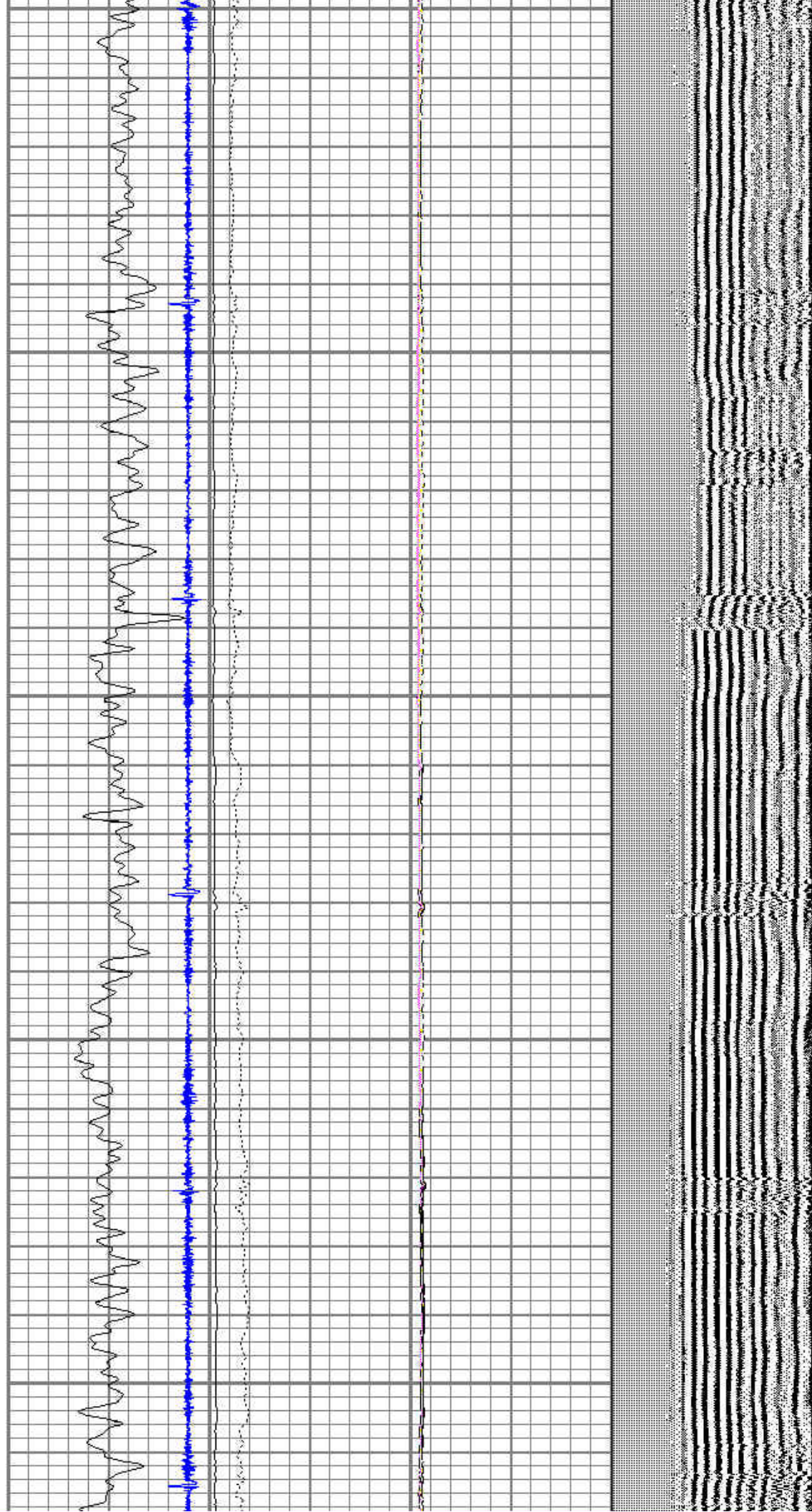
5300

5400



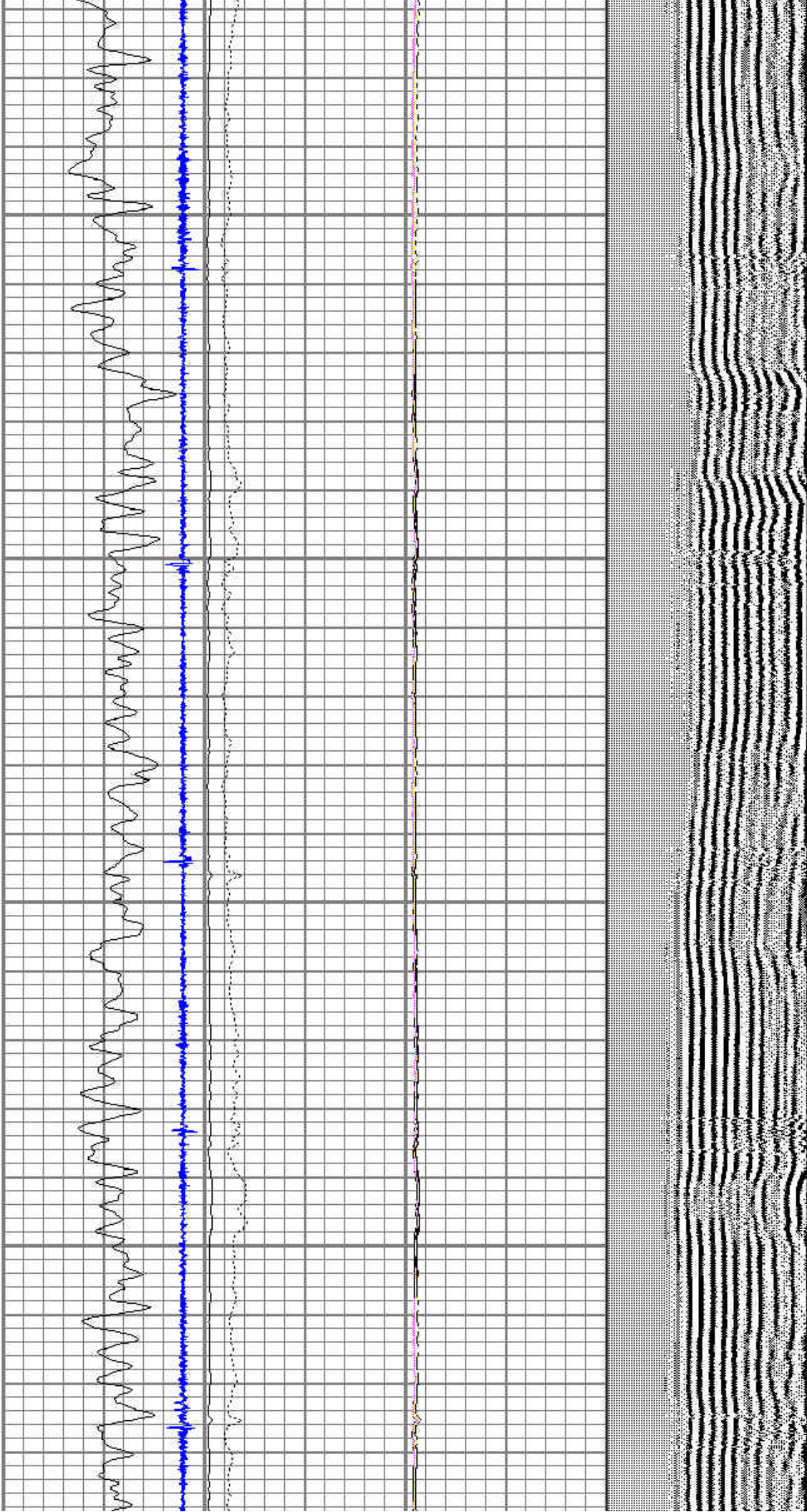
5500

5600



5700

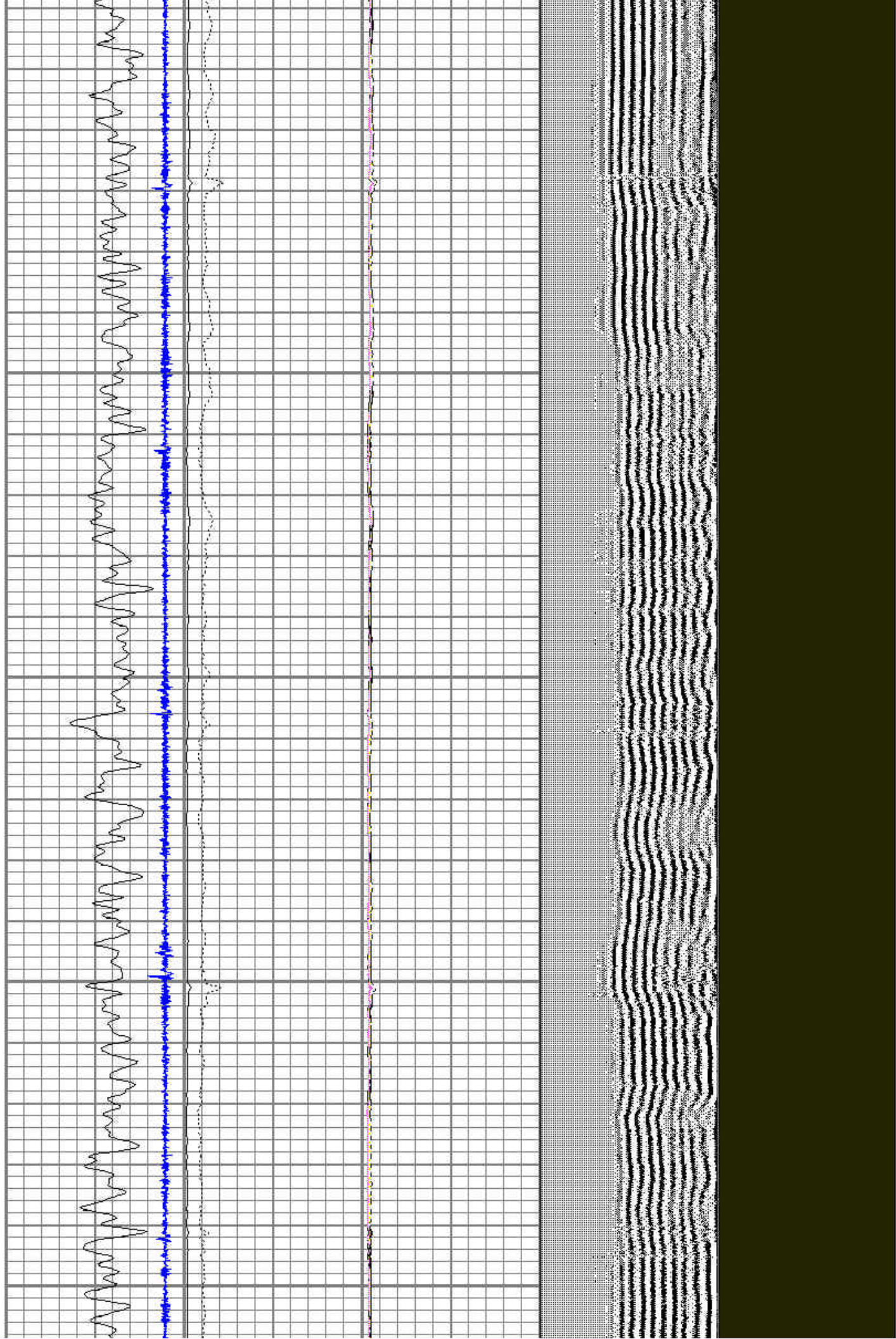
5800



5900

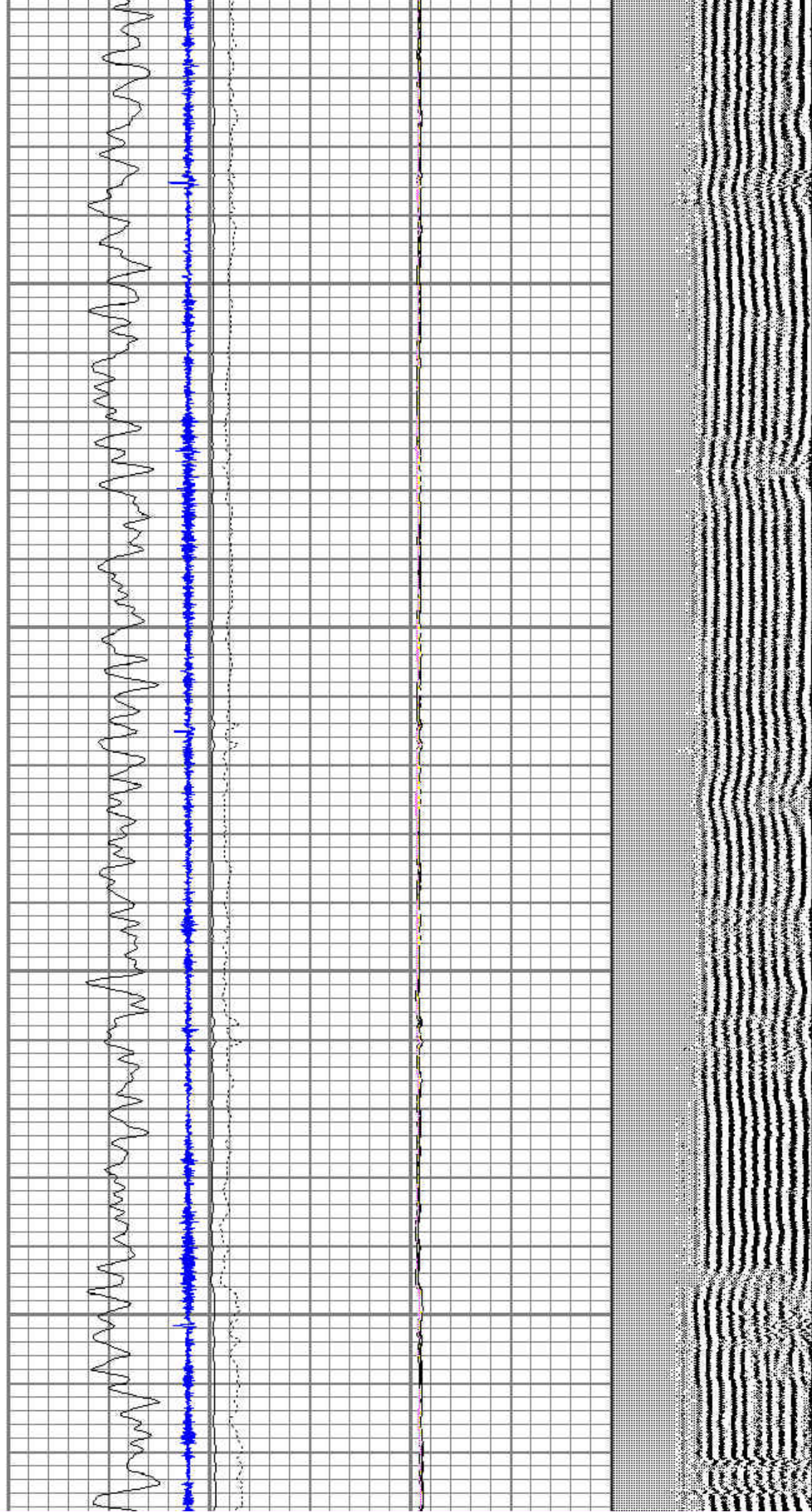
6000

6100



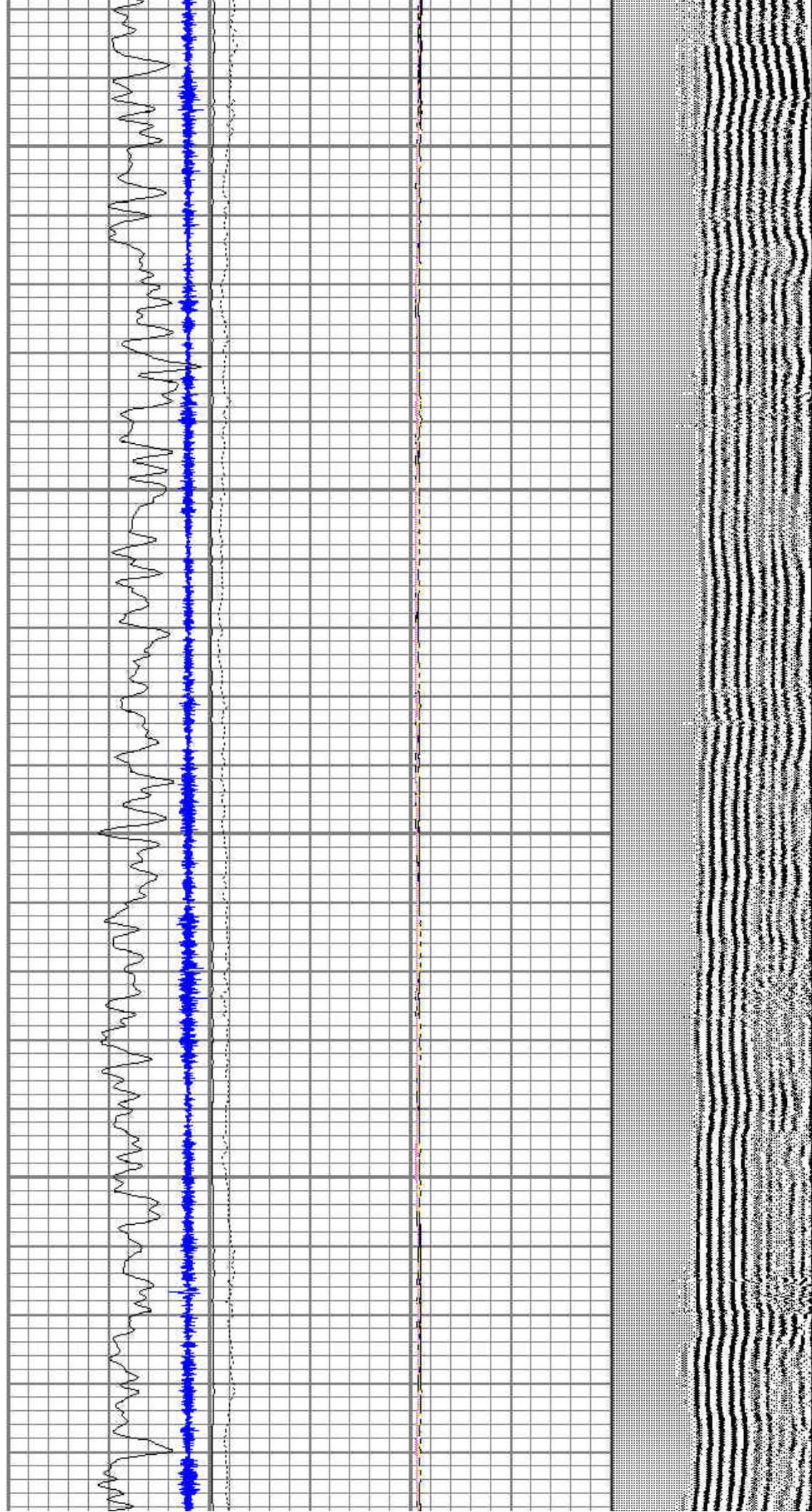
6200

6300



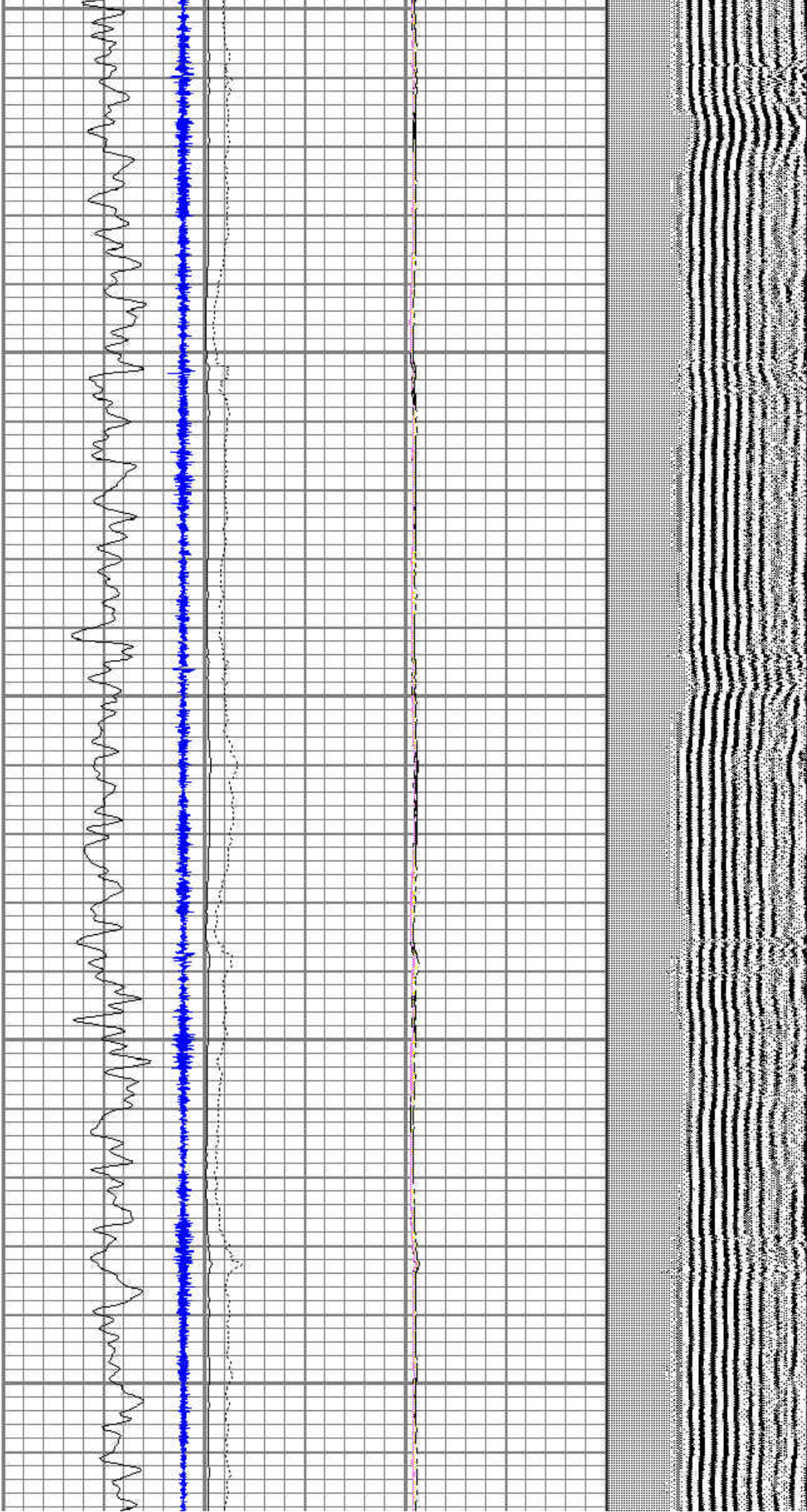
6400

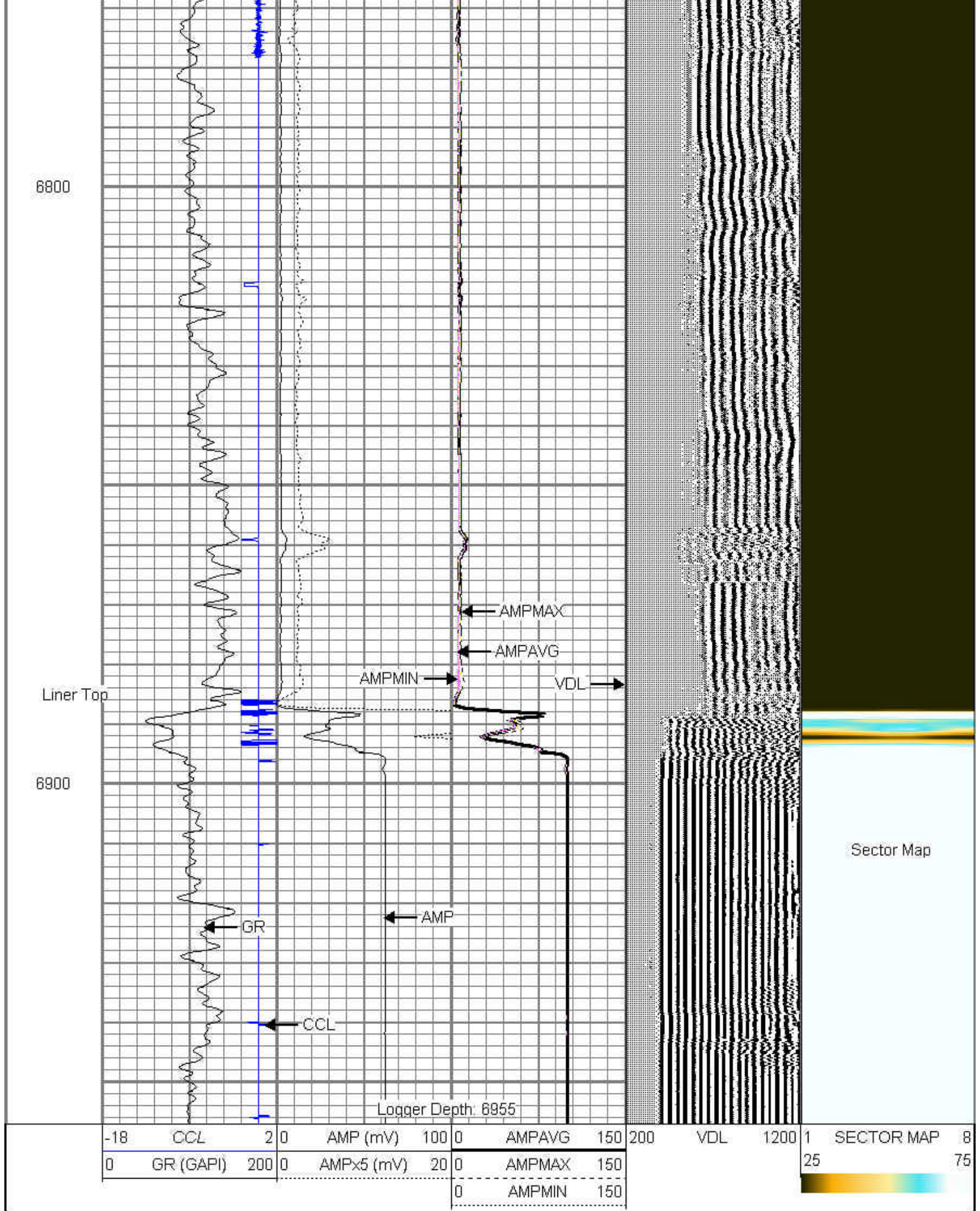
6500



6600

6700





Calibration Report

Database File: 3d_15c_21hz.db
 Dataset Pathname: rbl/pass1

Gamma Ray Calibration Report

Type / Serial:

Probe / 275

SHOP CALIBRATION

Mon Jan 20 12:11:16 2014

Background	Counts/Sec.	Gain	Offset	Jig	Units
Calibrator	35.0				cps
	160.0				cps
		1.0000			GAPI/cps

PRIMARY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:
Tool Model:Base
ProbeCalibration Casing Diameter:
Calibration Depth:7.000
598.000in
ft

Master Calibration, performed Wed Jan 22 18:18:11 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.012	1.748	1.500	62.165	33.000	0.500
CAL	0.012	0.418				
5'	0.013	1.799	1.500	62.165	33.966	1.072
SUM						
S1	0.013	1.761	0.000	100.000	57.206	-0.725
S2	0.013	1.841	0.000	100.000	54.700	-0.709
S3	0.013	1.898	0.000	100.000	53.037	-0.682
S4	0.012	1.901	0.000	100.000	52.947	-0.656
S5	0.012	1.848	0.000	100.000	54.484	-0.674
S6	0.012	1.801	0.000	100.000	55.886	-0.675
S7	0.012	1.724	0.000	100.000	58.410	-0.714
S8	0.012	1.699	0.000	100.000	59.294	-0.725

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	0.418	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



Company

ANADARKO PETROLEUM CORP

Well

3D #15C-21HZ

Field

WATTENBERG

County

WELD

State

CO