



# RADIAL BOND LOG VDL & CCL GAMMA RAY

Company		ANADARKO PETROLEUM CORP	
Well		WIRKNER-VANCE 30N-36HZ	
Field		WATTENBERG	
County		WELD	
State		CO	
Location:		API # : 05123378850000	
SHL: 425' FSL & 851' FWL SWSW		Other Services	
Permanent Datum		GL	
Log Measured From		KB	
Drilling Measured From		KB	
SEC 36 TWP 3N RGE 67W		Elevation 4823	
CALIPER		Elevation	
K.B. 4837		D.F. 4837	
G.L. 4823			
Date		JANUARY 20, 2014	
Run Number		ONE	
Depth Driller		11690	
Depth Logger		6600	
Bottom Logged Interval		6600	
Top Log Interval		SURFACE	
Open Hole Size		8-3/4"	
Type Fluid		WATER	
Density / Viscosity		8.33 / 32	
Max. Recorded Temp.		217 F	
Estimated Cement Top		95	
Time Well Ready		ROA	
Time Logger on Bottom		1115	
Equipment Number		41	
Location		FORT MORGAN, CO	
Recorded By		LEROY HOBBS	
Witnessed By		TREVOR DANIEL	
SHAUN SCHUMAN			
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size		Weight	
From		To	
Casing Record		Size	
Surface String		9.625"	
Prot. String		7"	
Production String		4.5"	
Liner		4.5"	

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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

SO. 206047

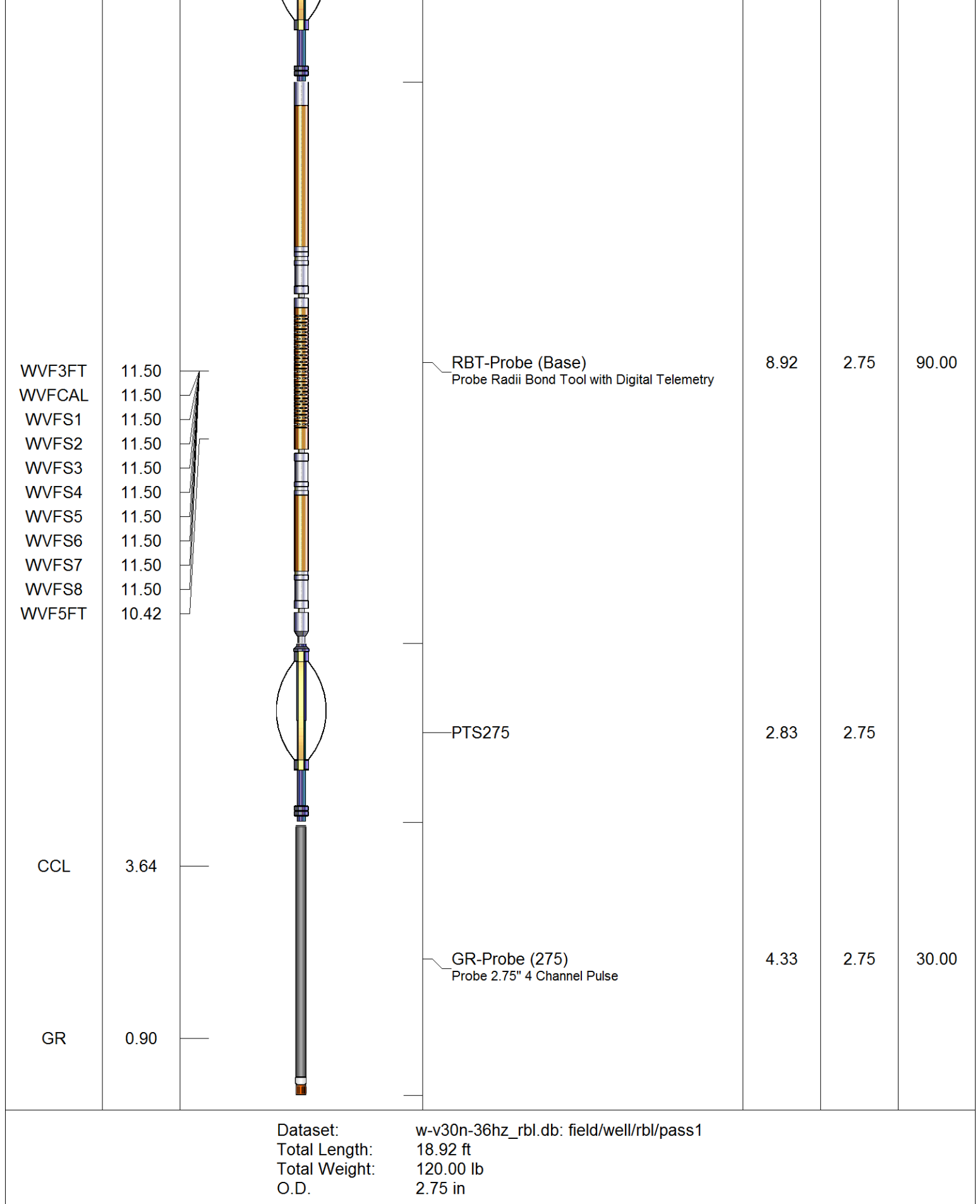
W

S O O O O O O X O N

E

THANK YOU FOR USING PIONEER ENERGY SERVICES!

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



## MAIN PASS

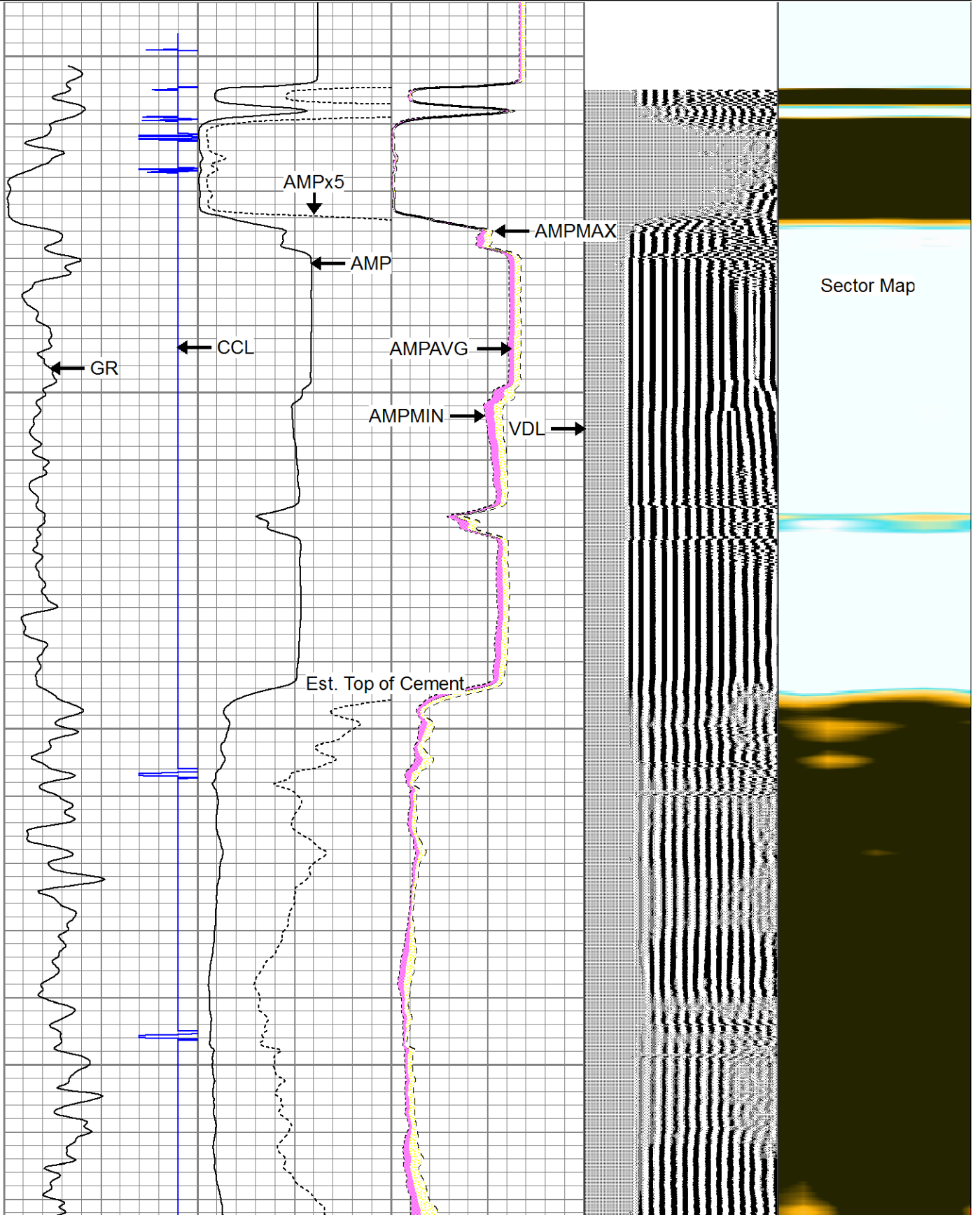
Logged w/ 2500 PSI applied at wellhead

Database File: w-v30n-36hz\_rbl.db  
 Dataset Pathname: run/main  
 Presentation Format: scbl02  
 Dataset Creation: Mon Jan 20 14:58:43 2014  
 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				25		75
						0	AMPMIN	150						

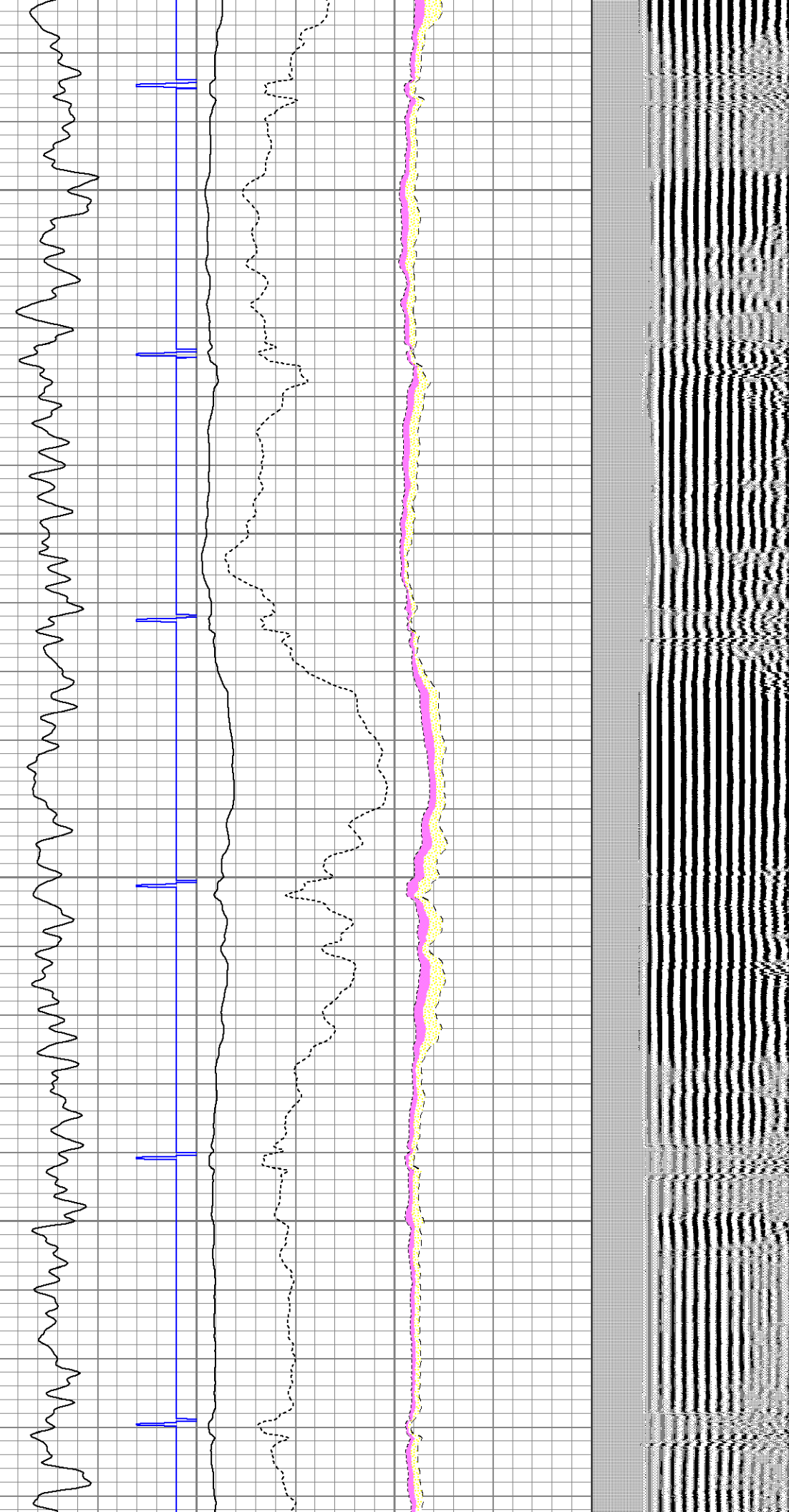
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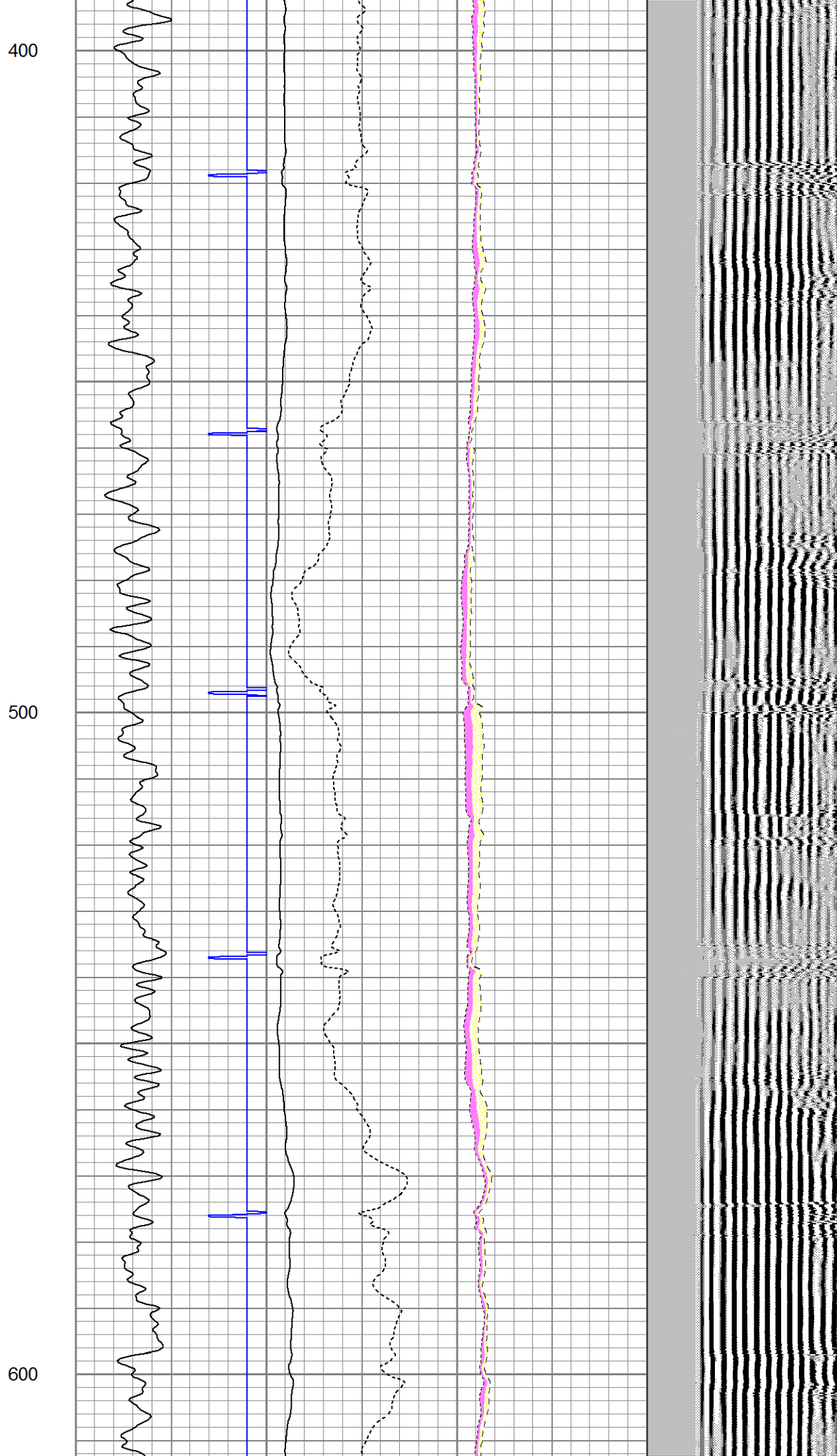
100



200

300

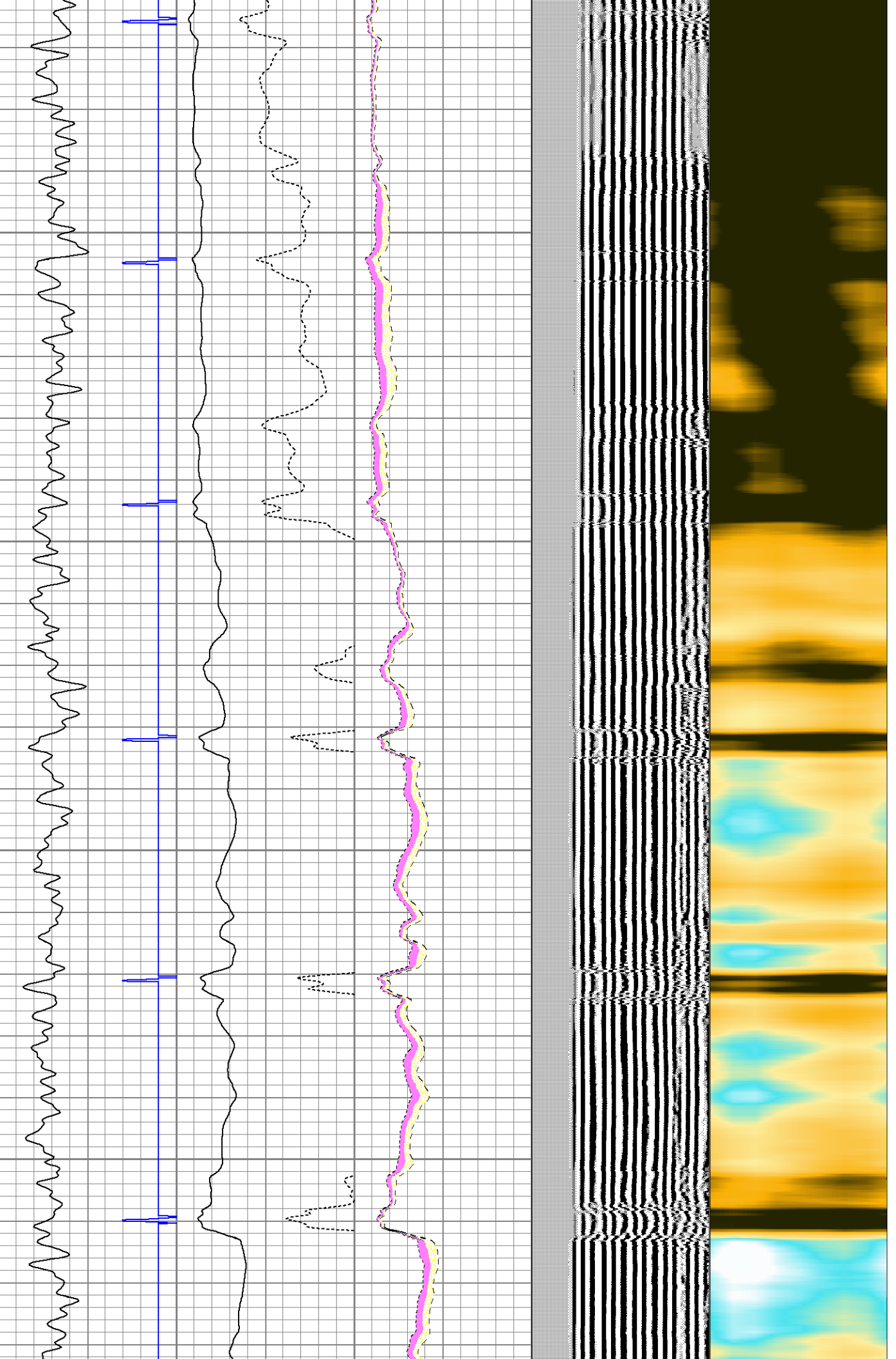


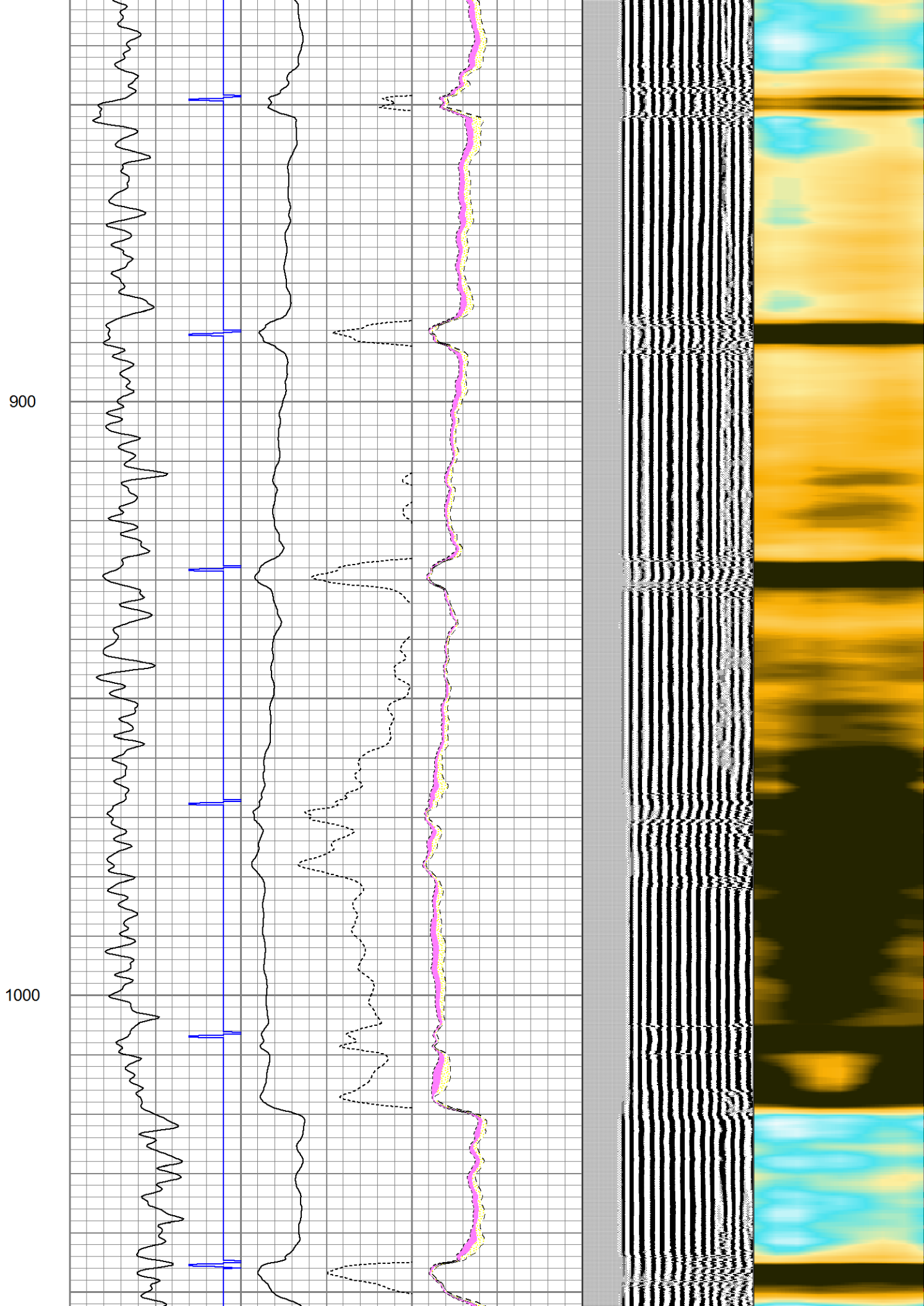




700

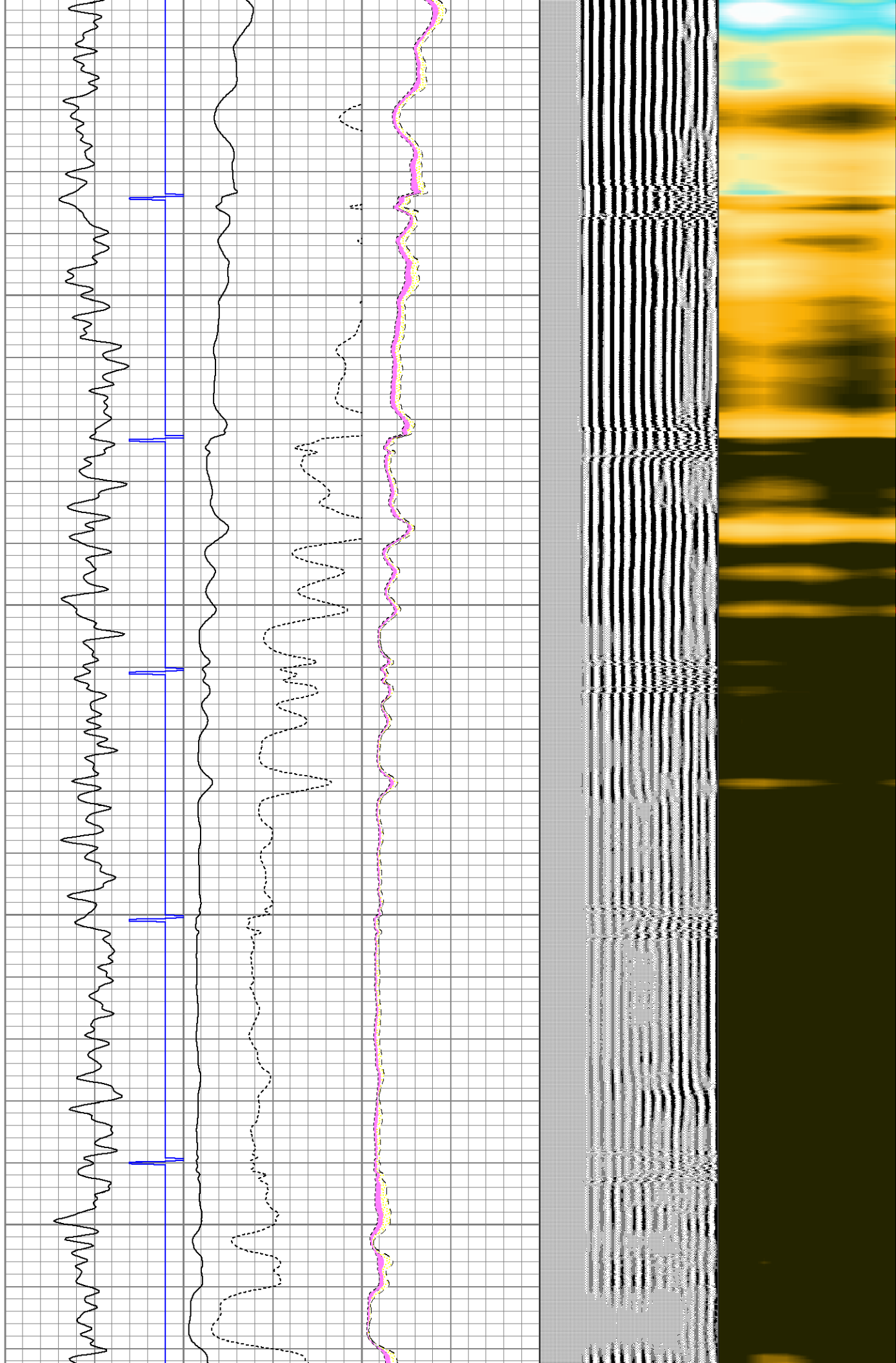
800





1100

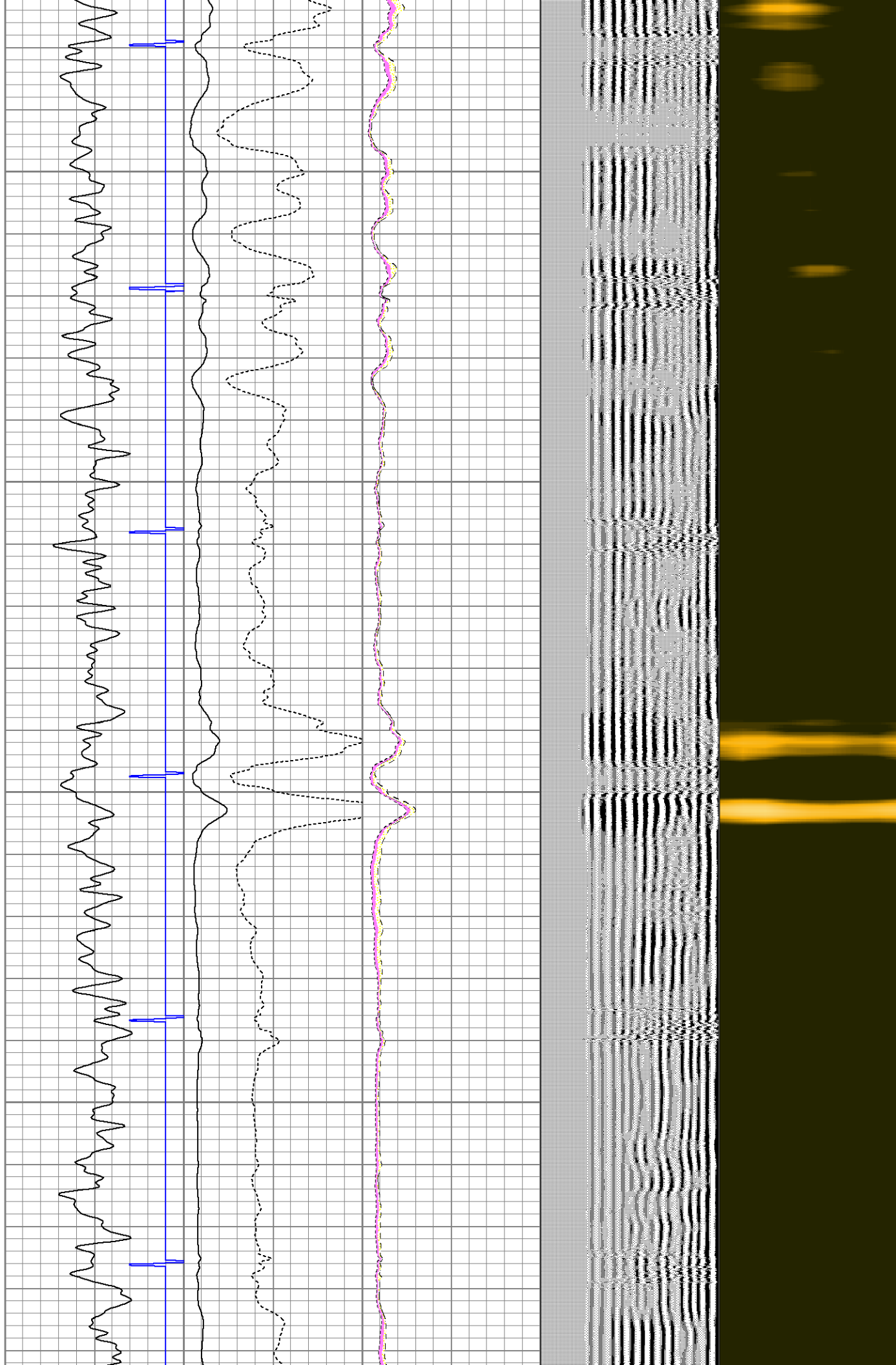
1200





1300

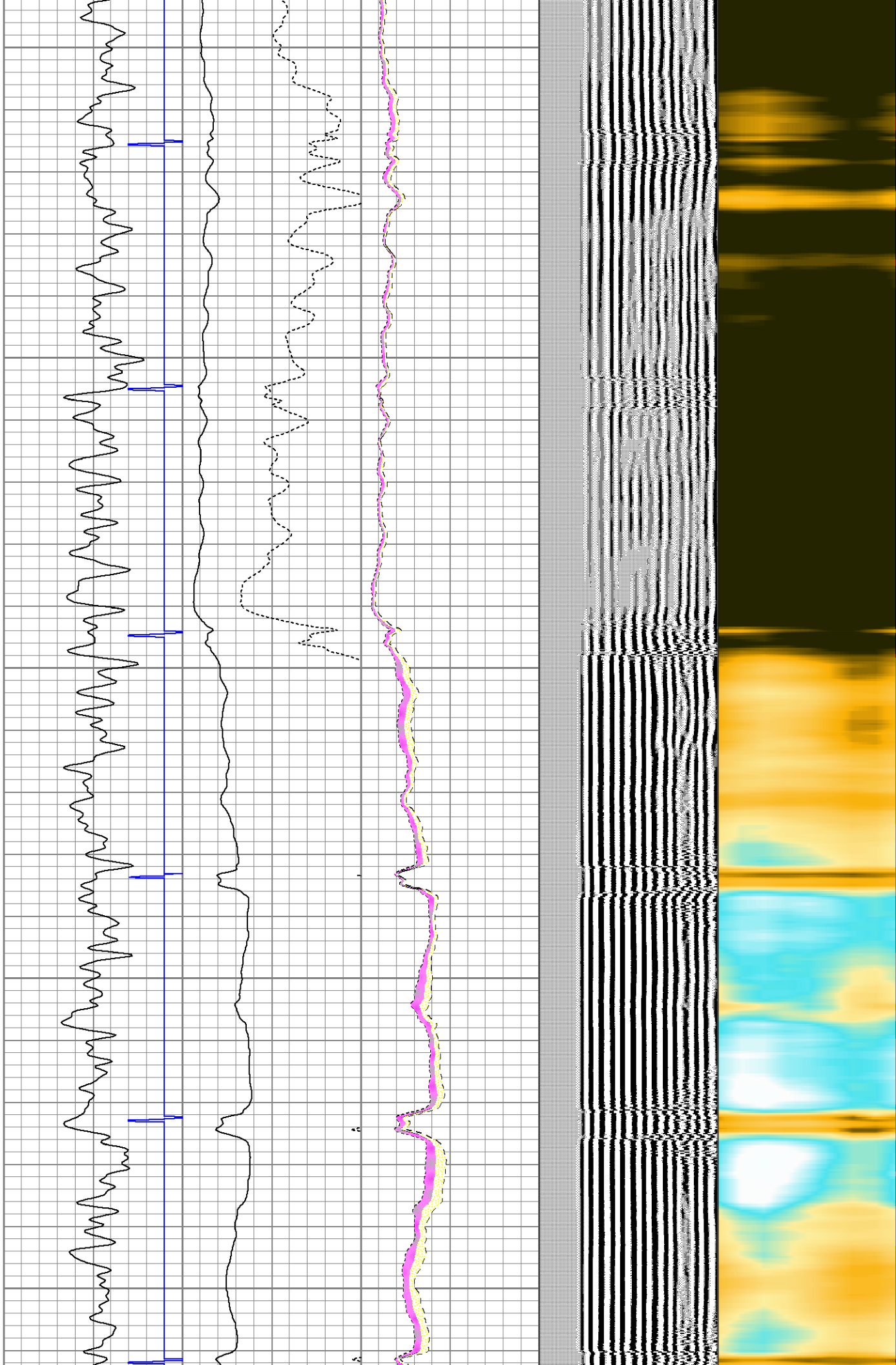
1400



1500

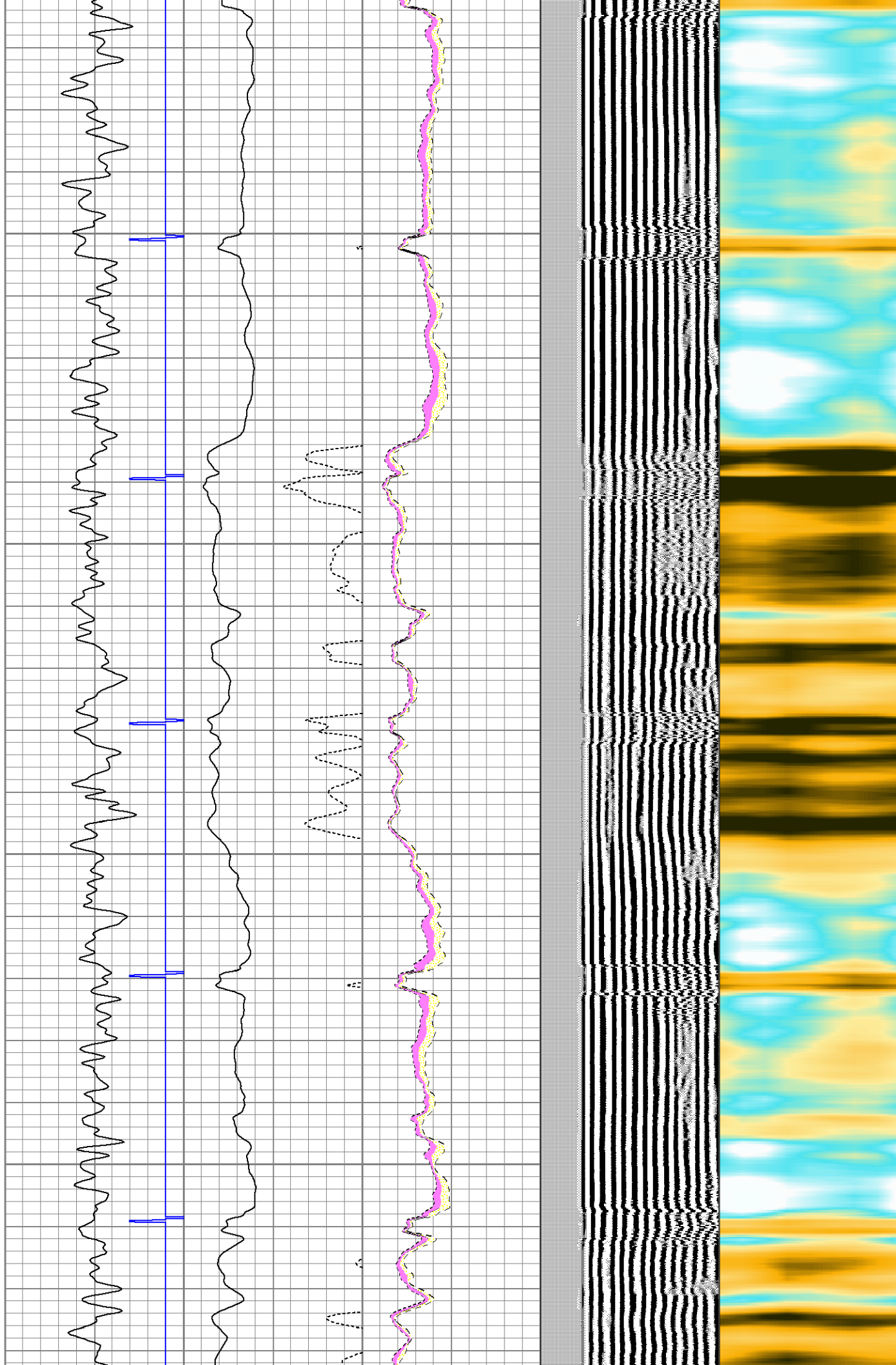
1600

1700



1800

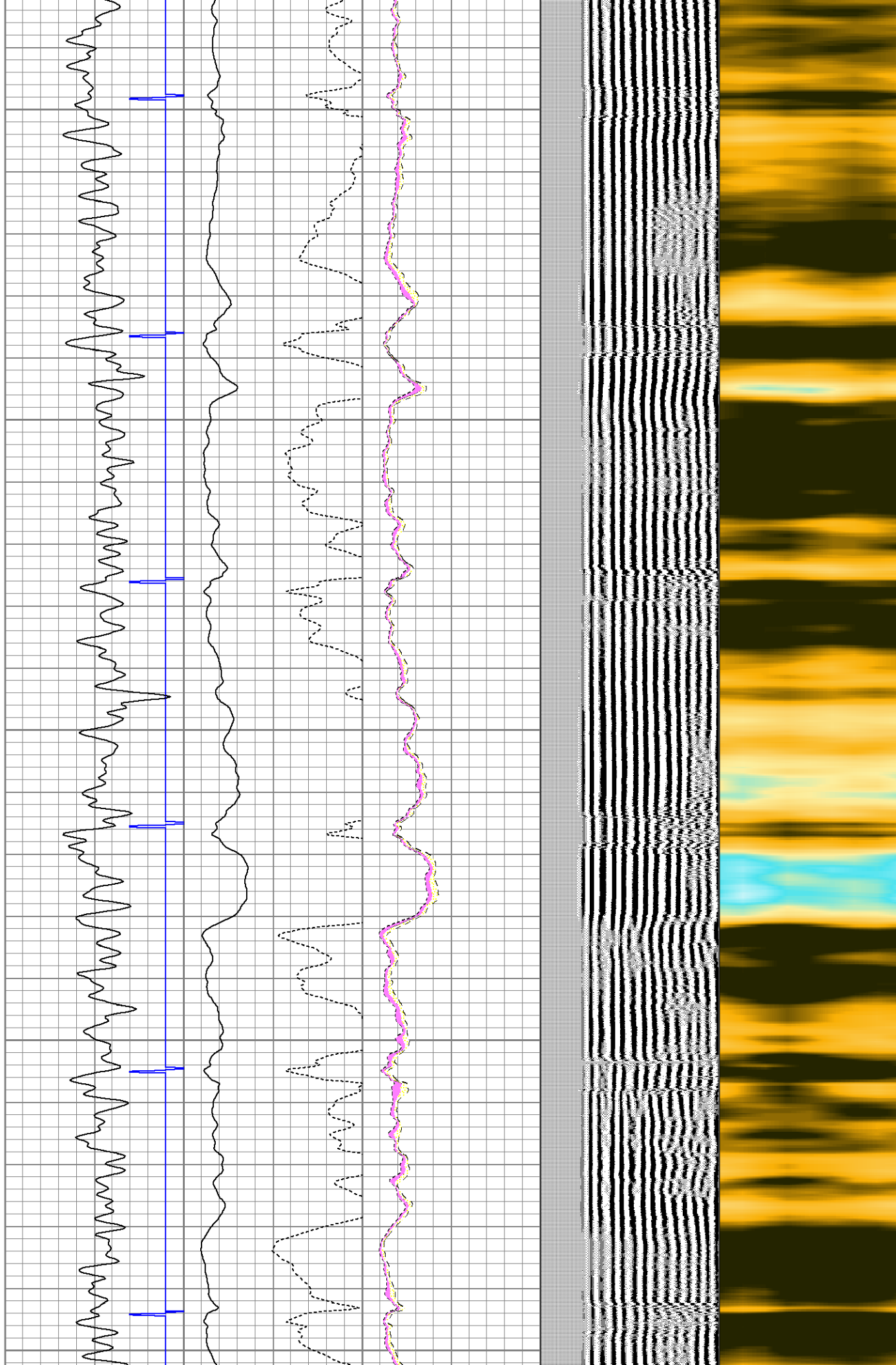
1900





2000

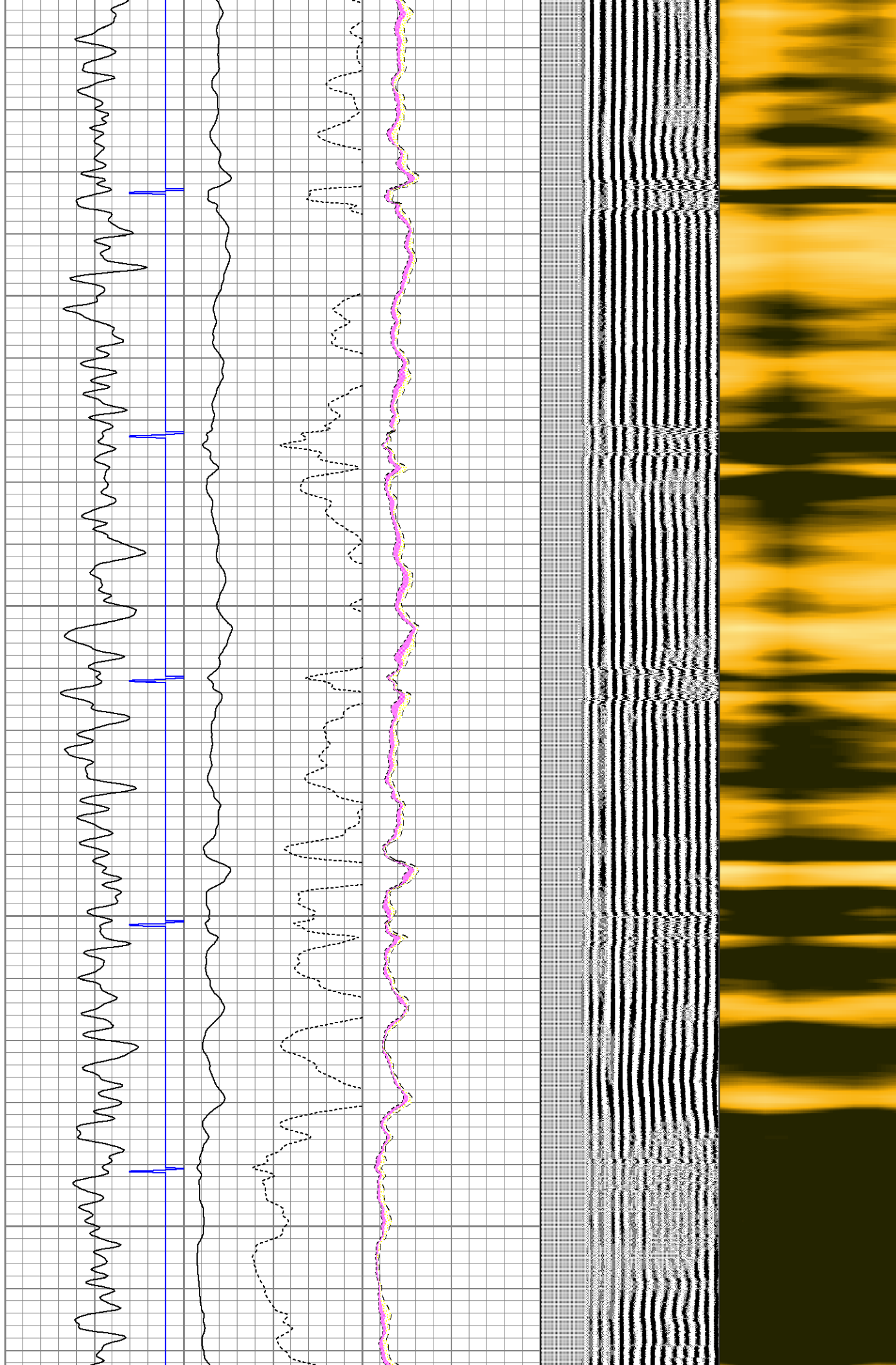
2100





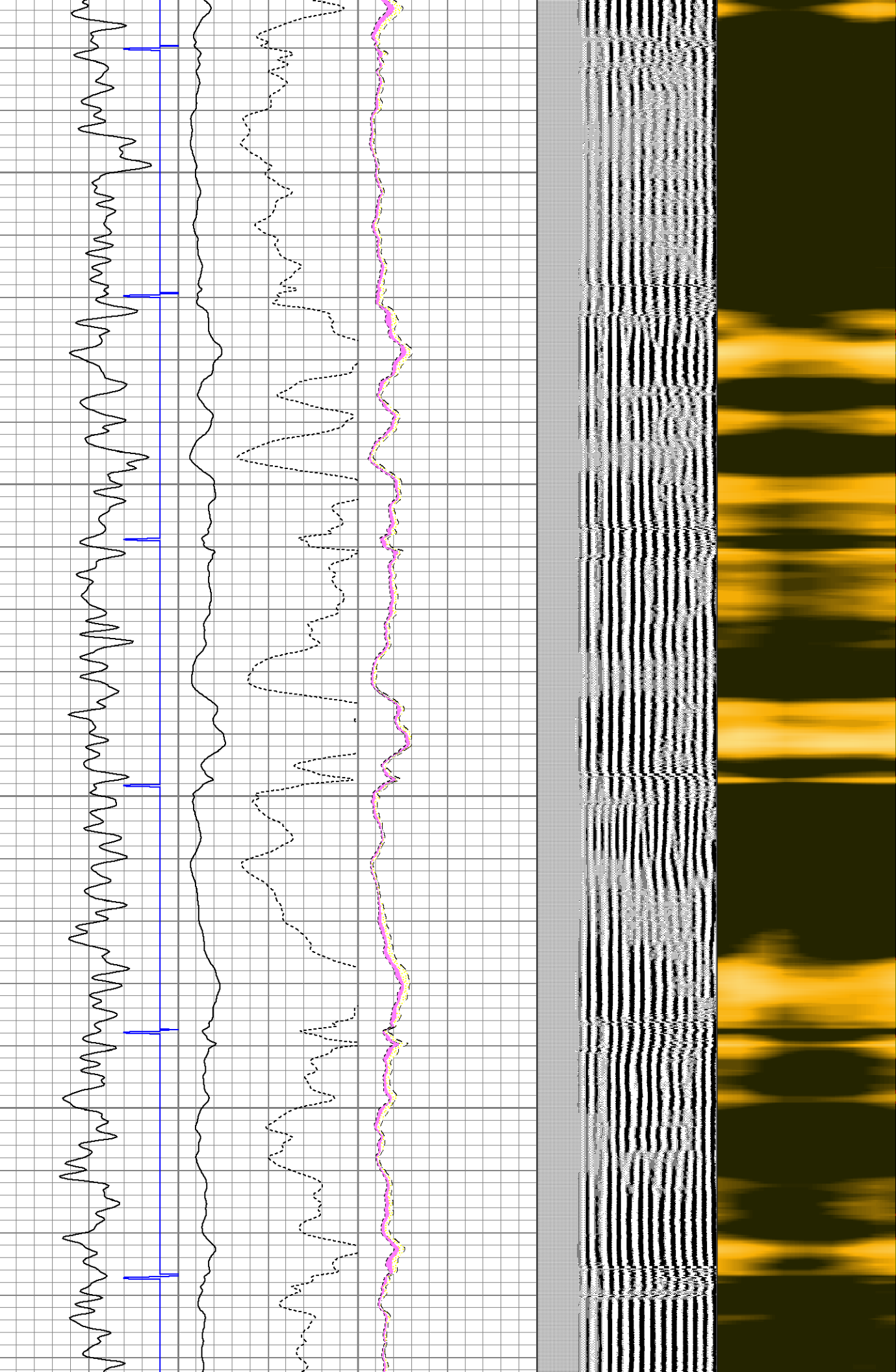
2200

2300



2400

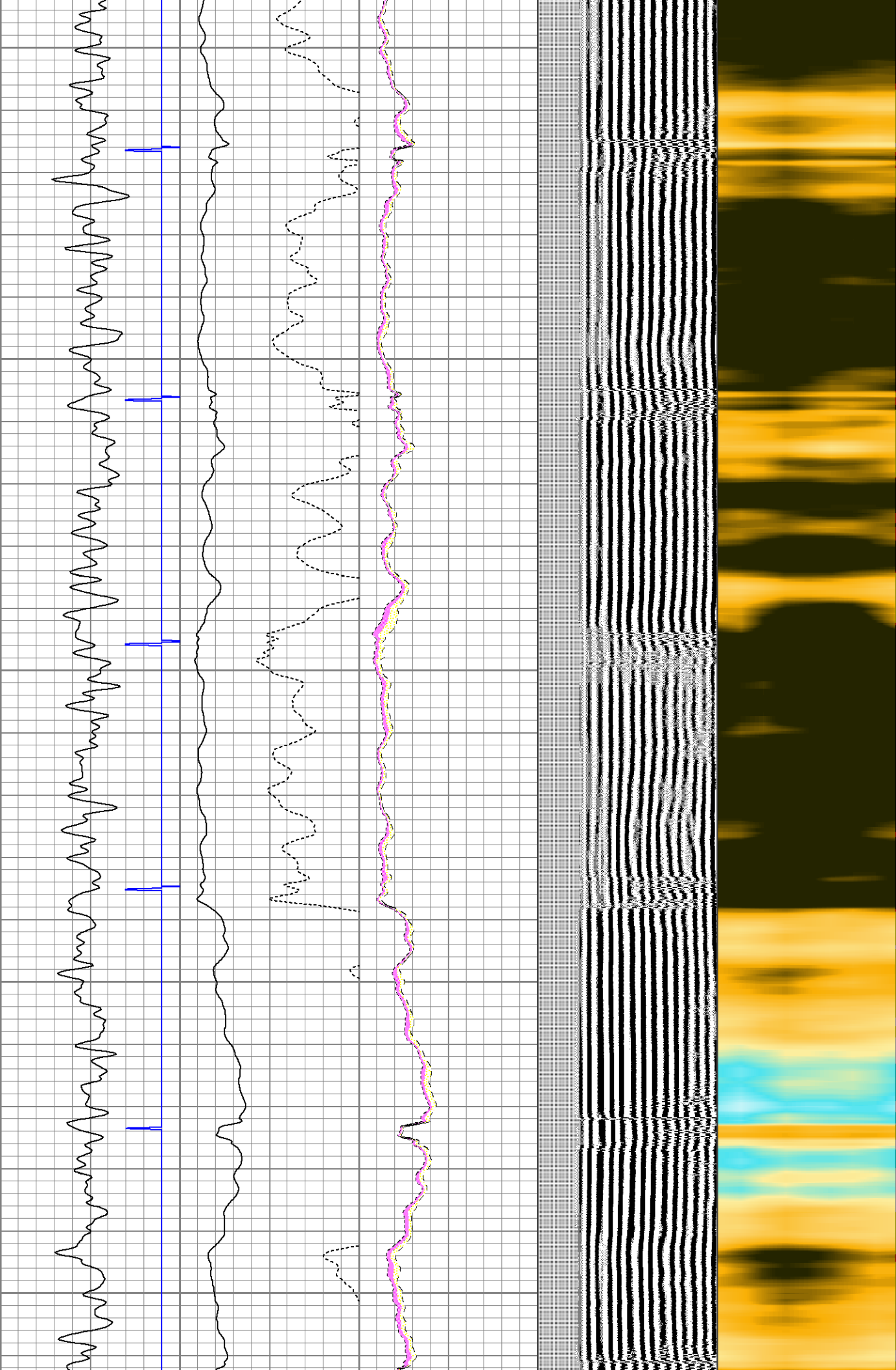
2500



2600

2700

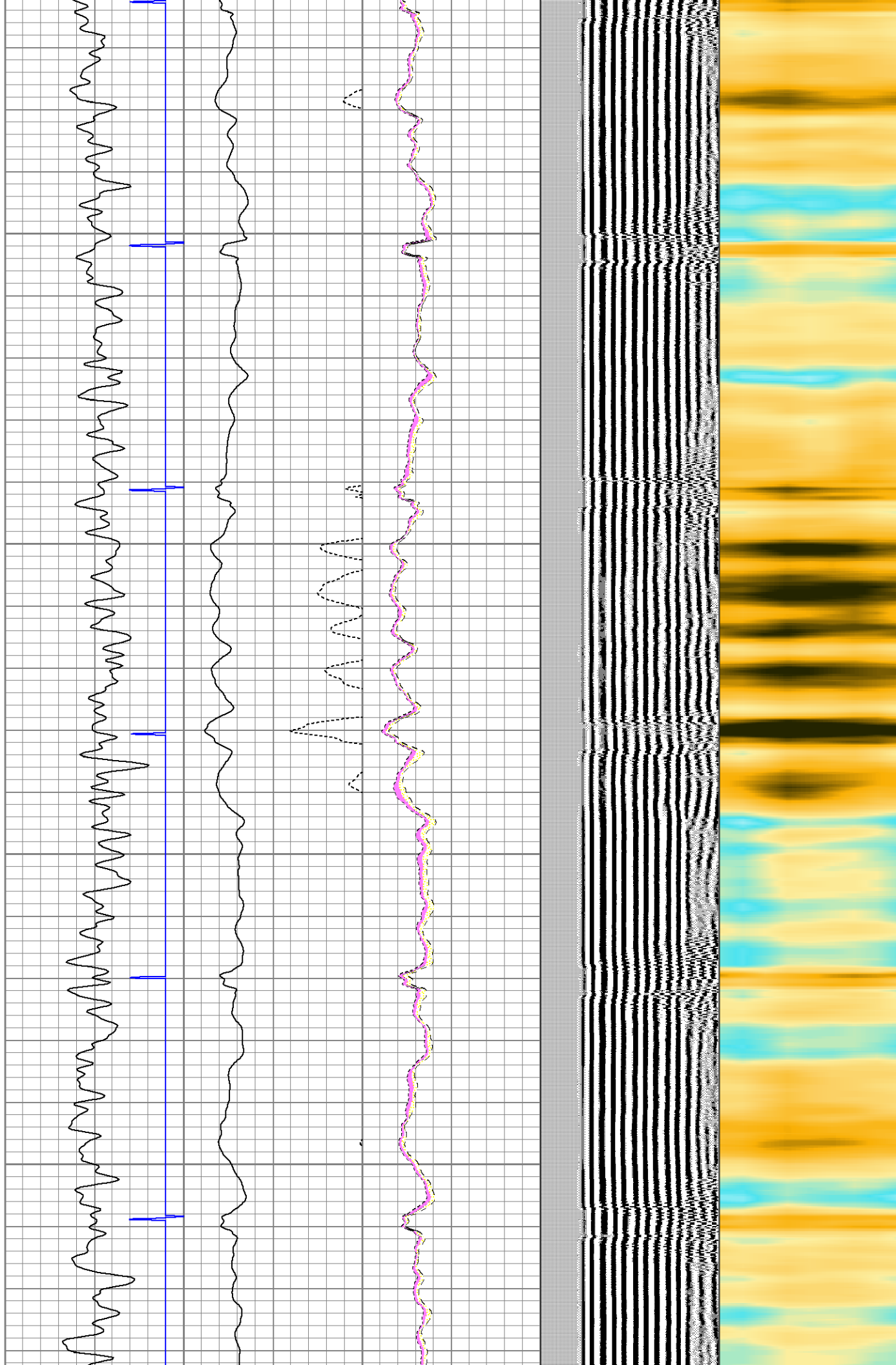
2800





2900

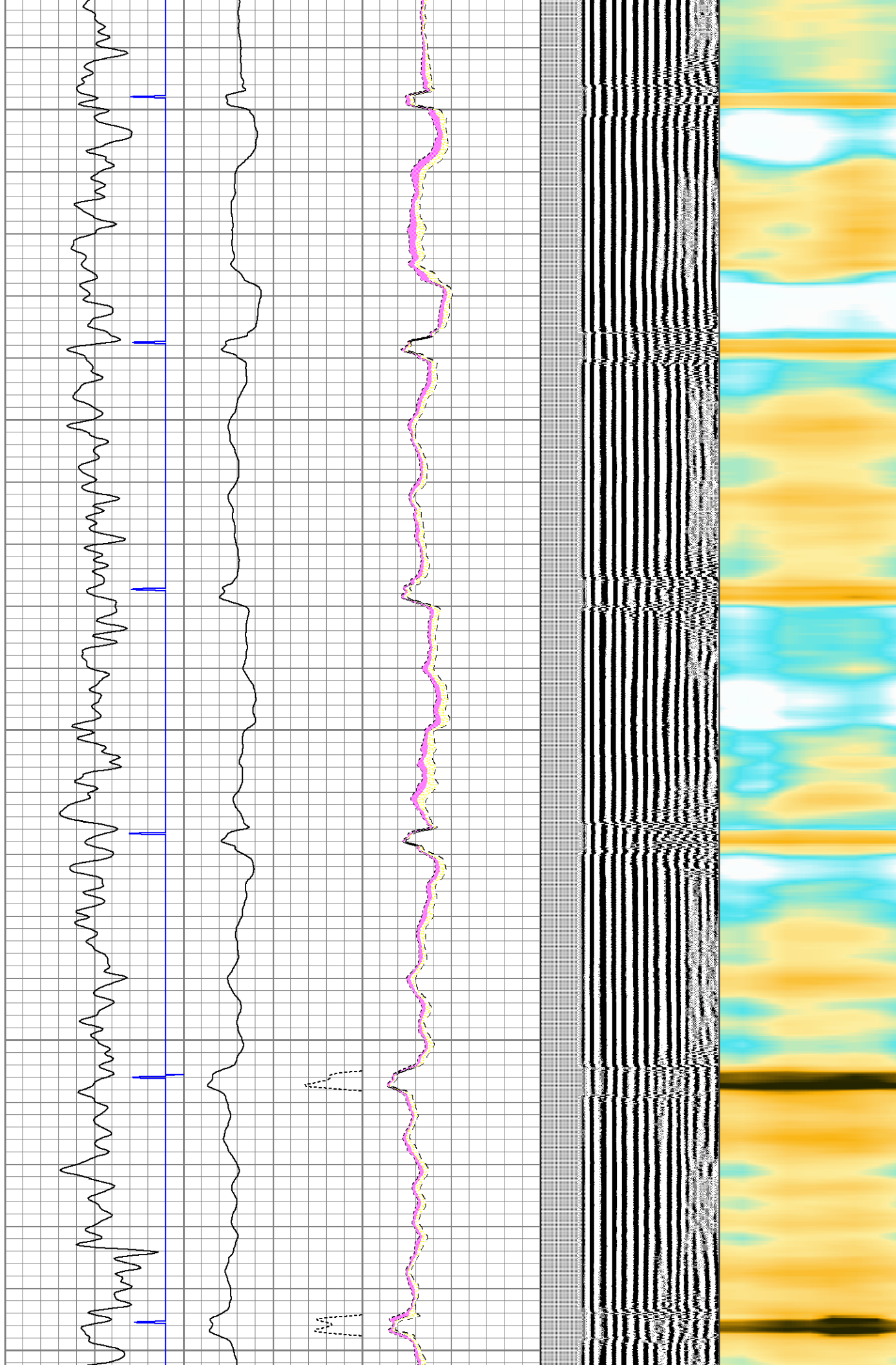
3000





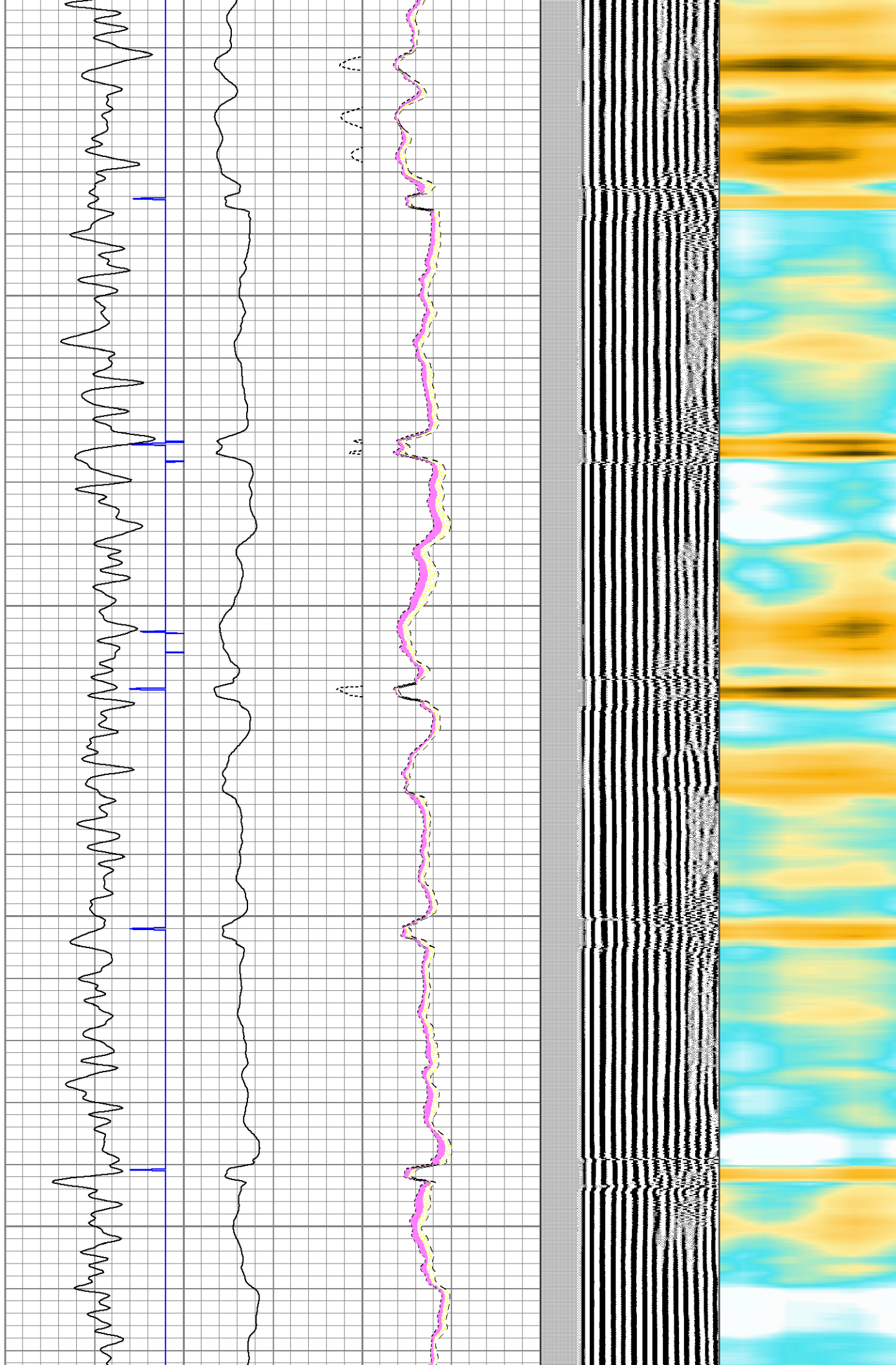
3100

3200



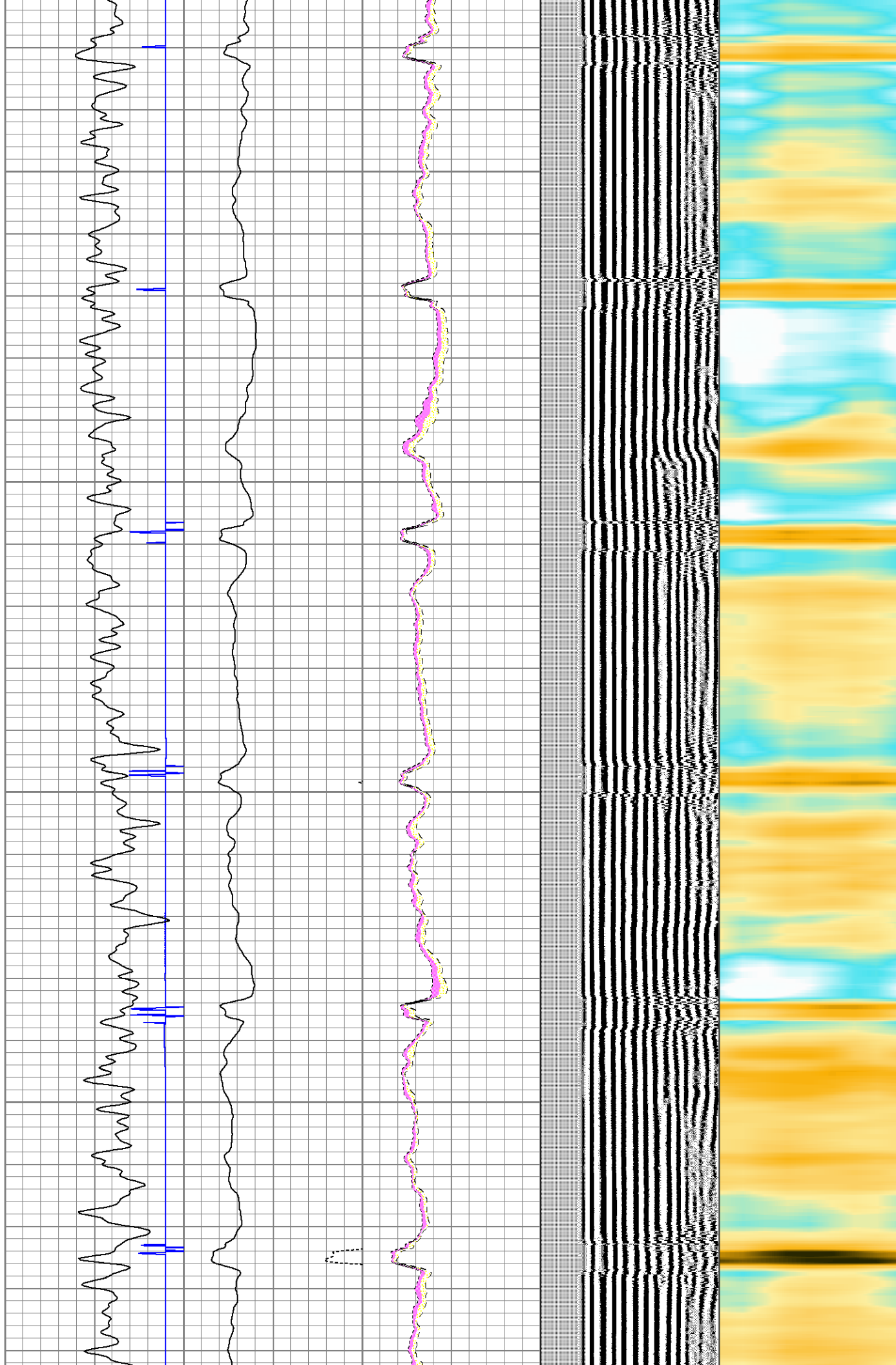
3300

3400



3500

3600

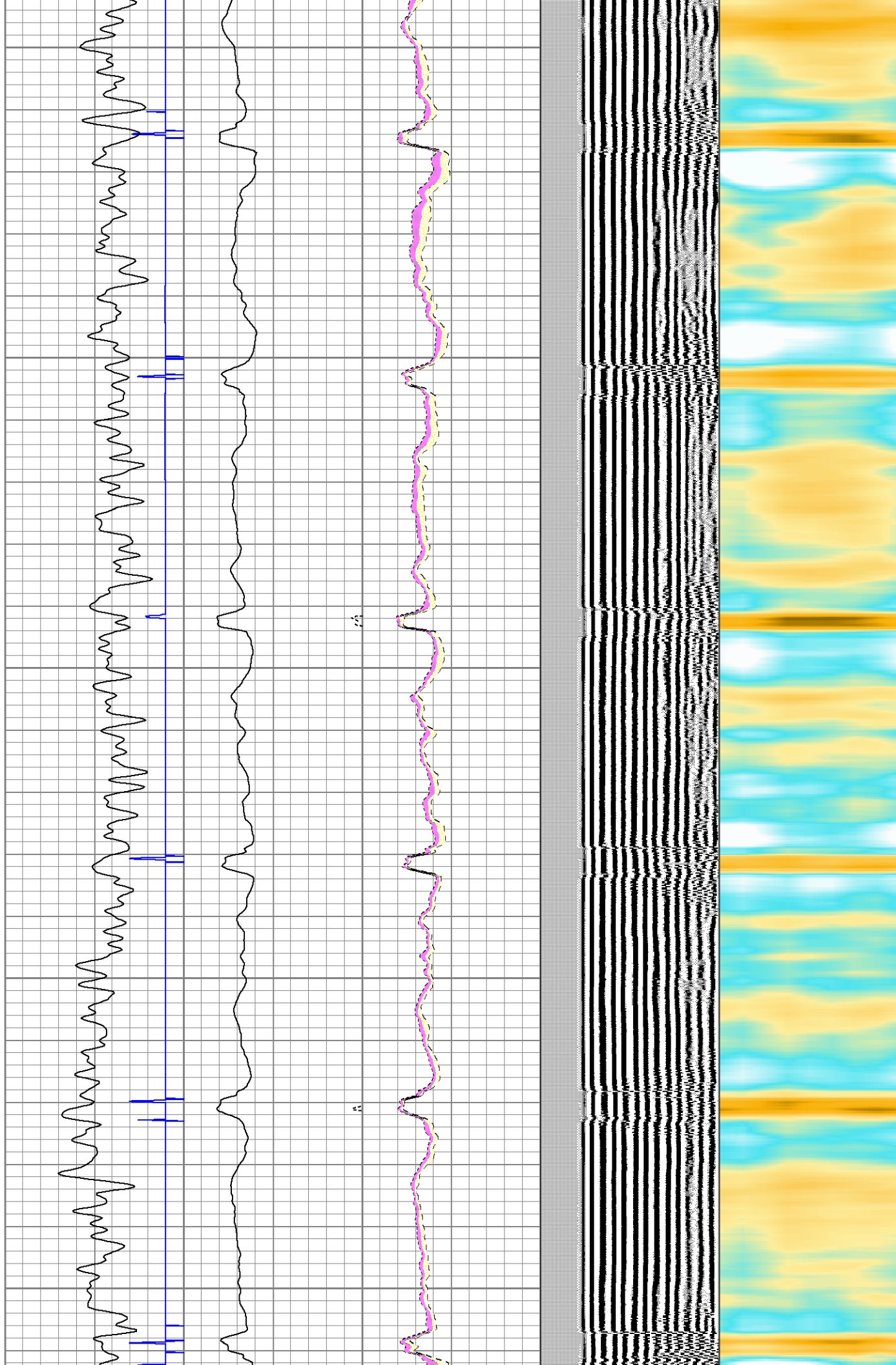




3700

3800

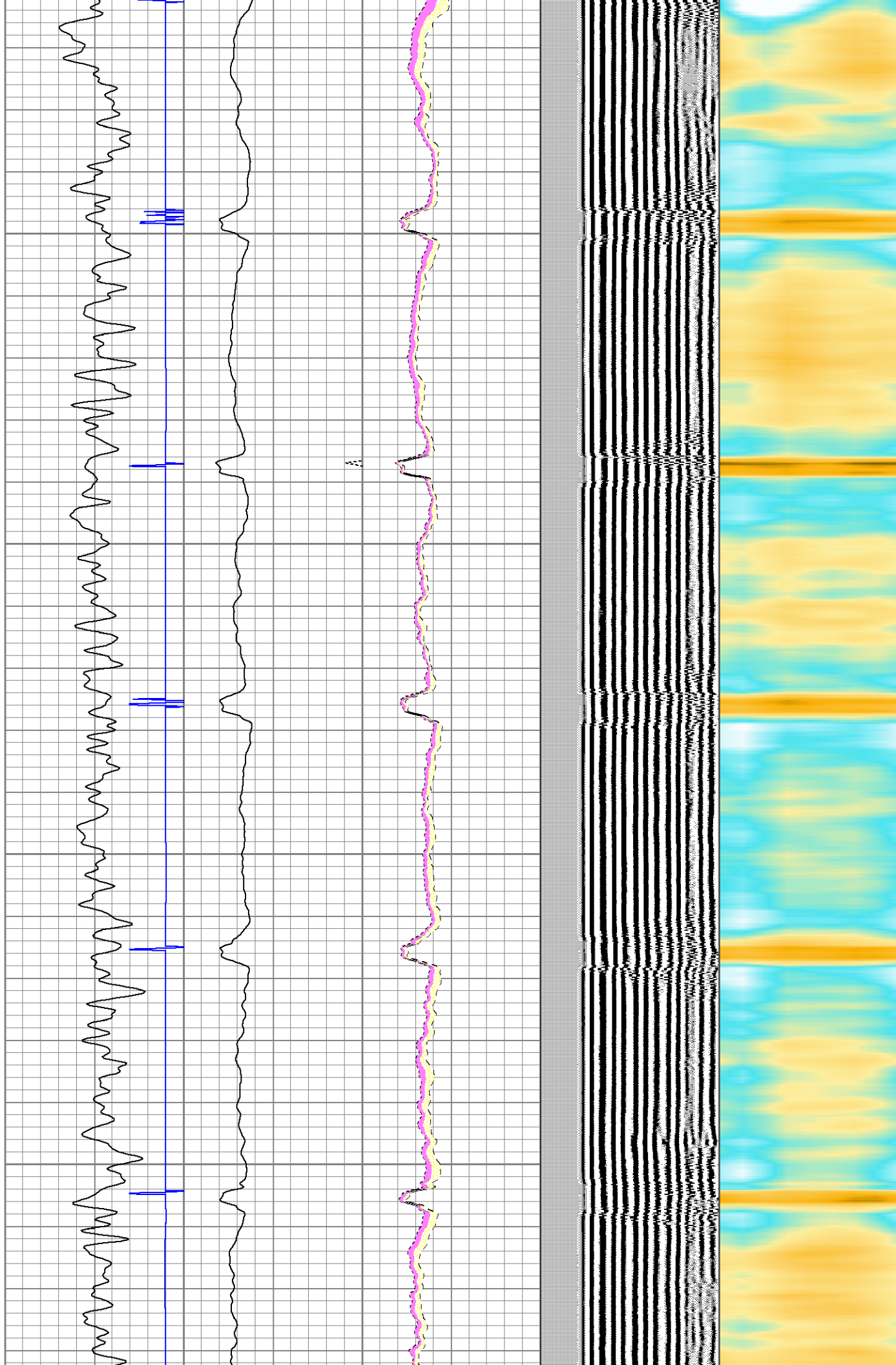
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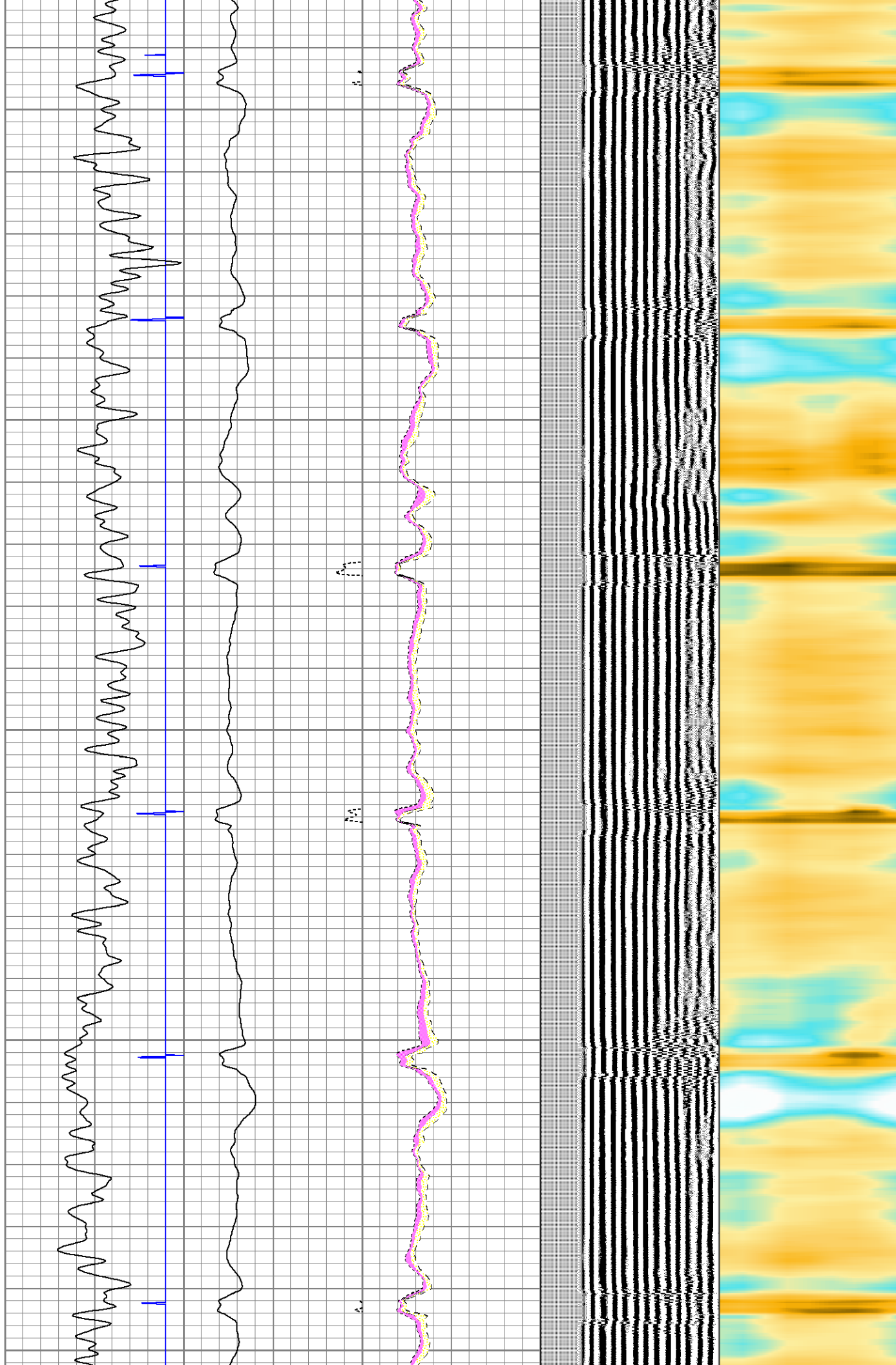
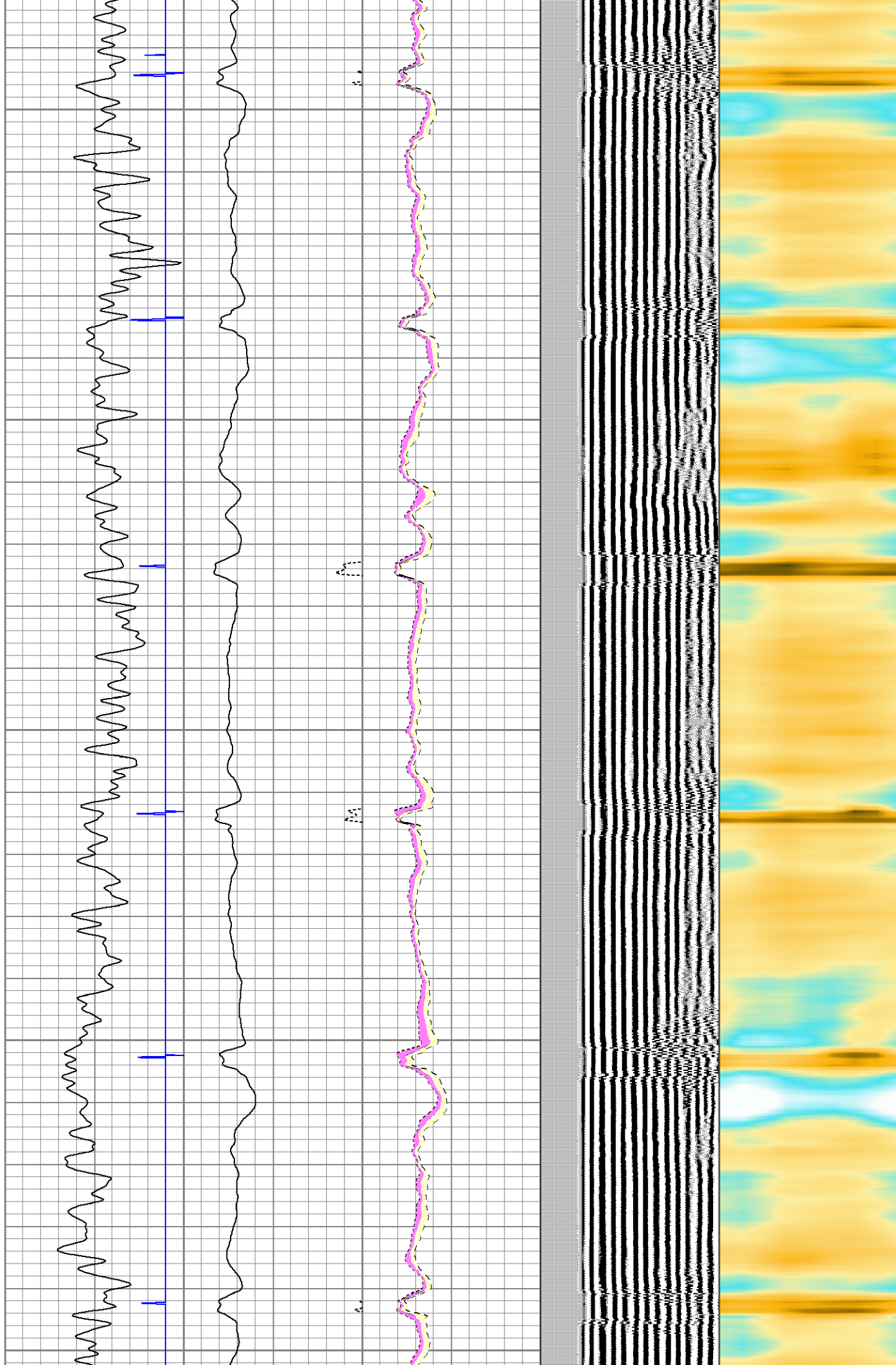




4000

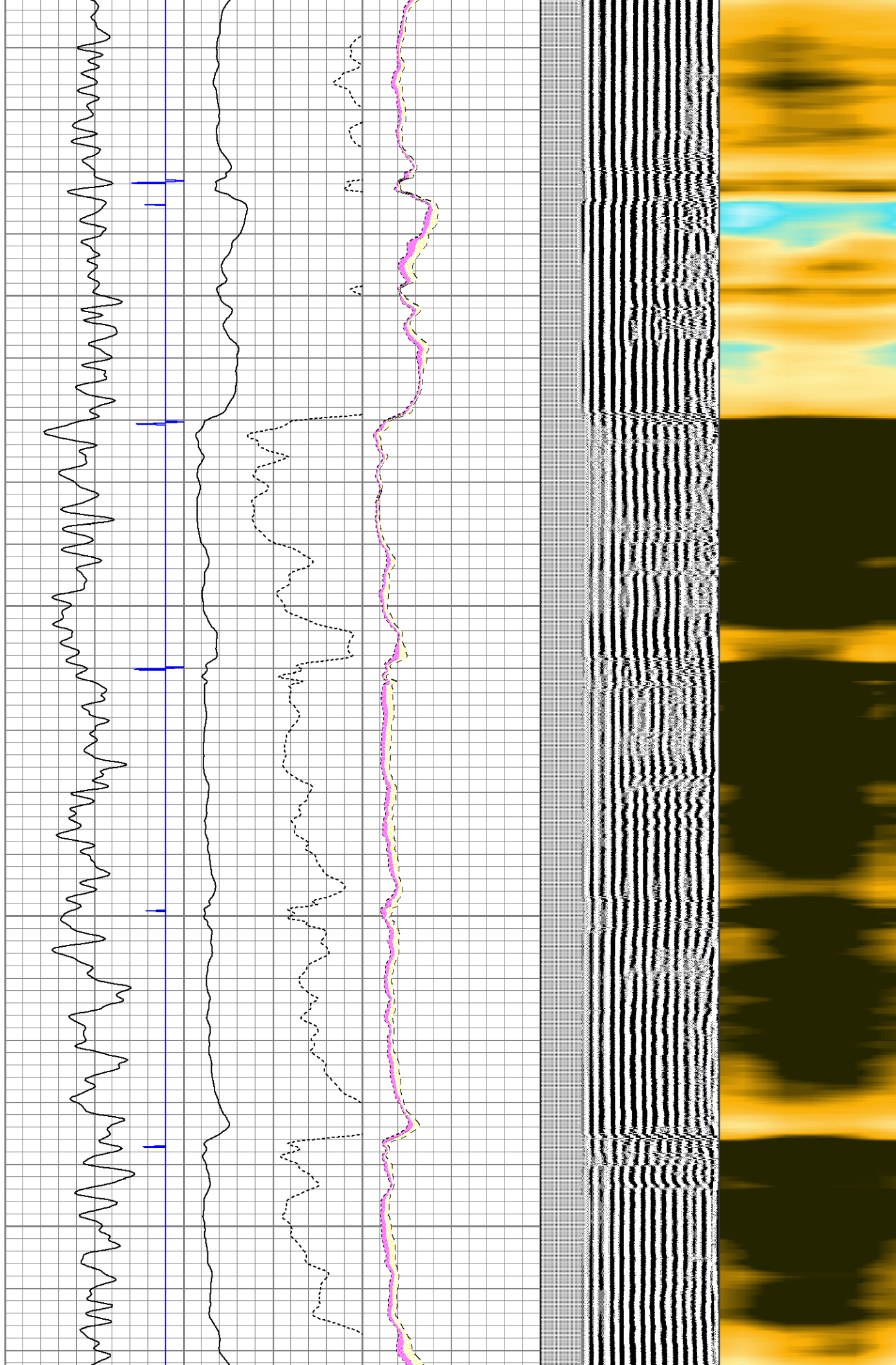
4100





4400

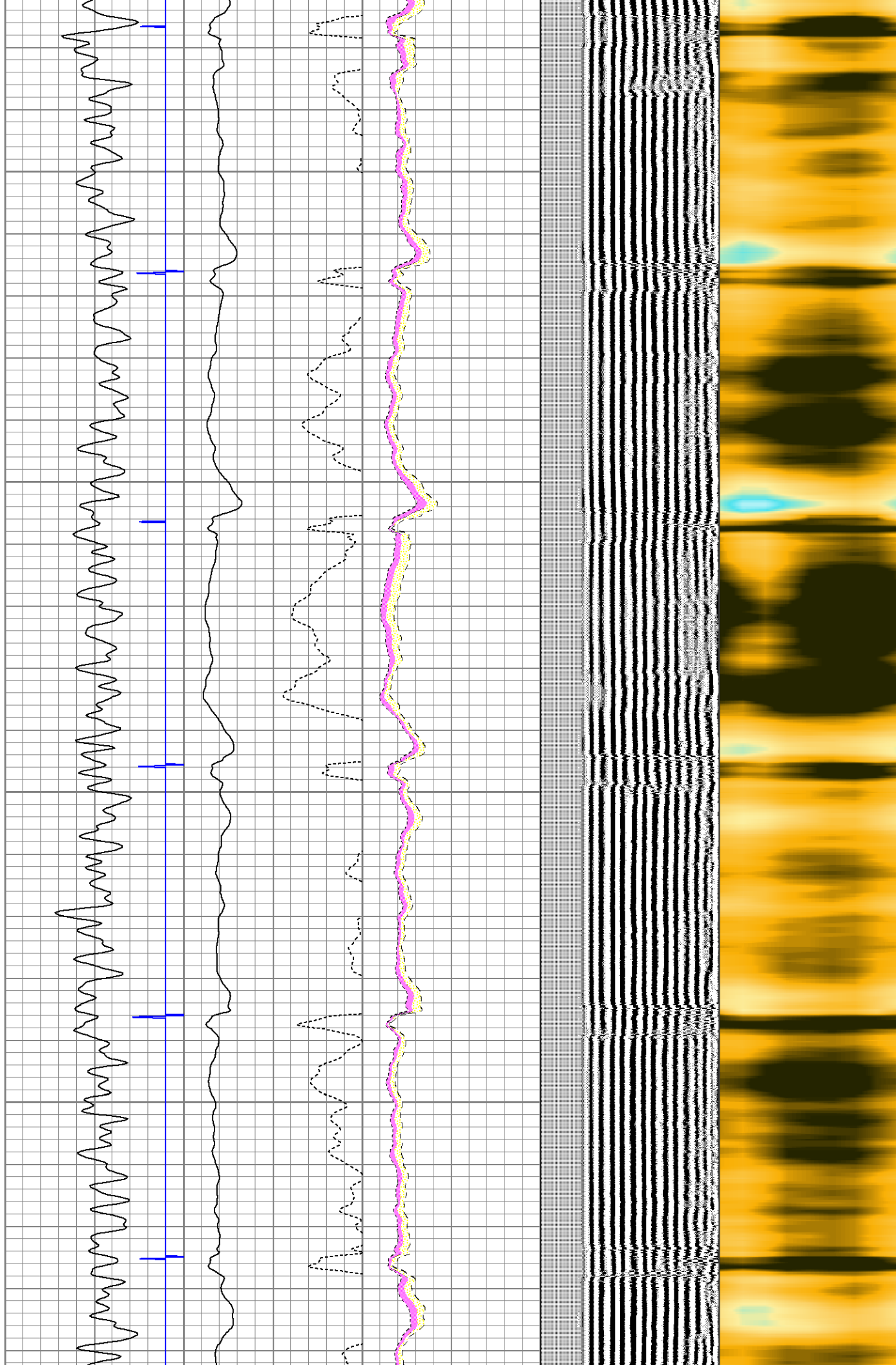
4500





4600

4700

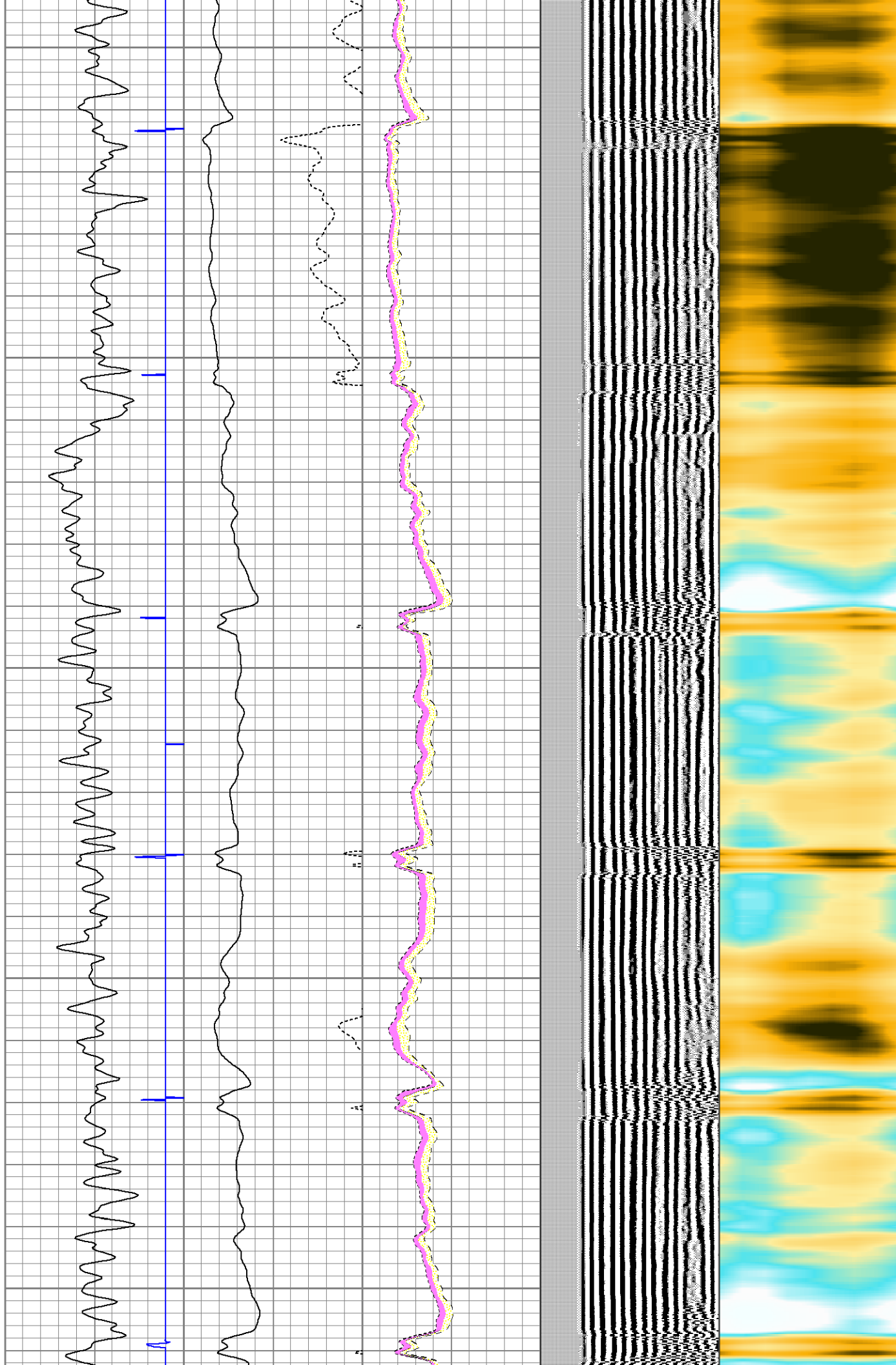




4800

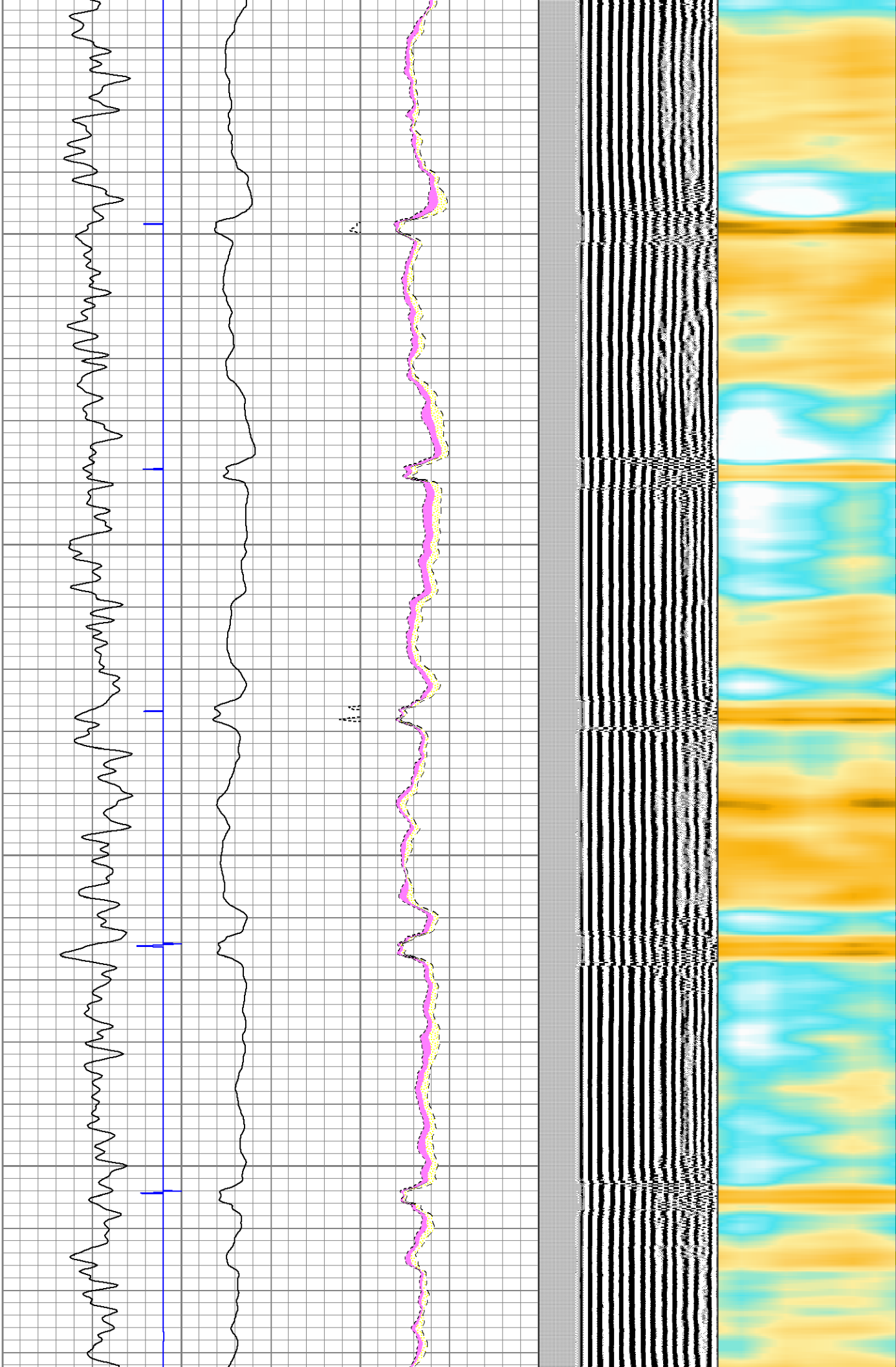
4900

5000

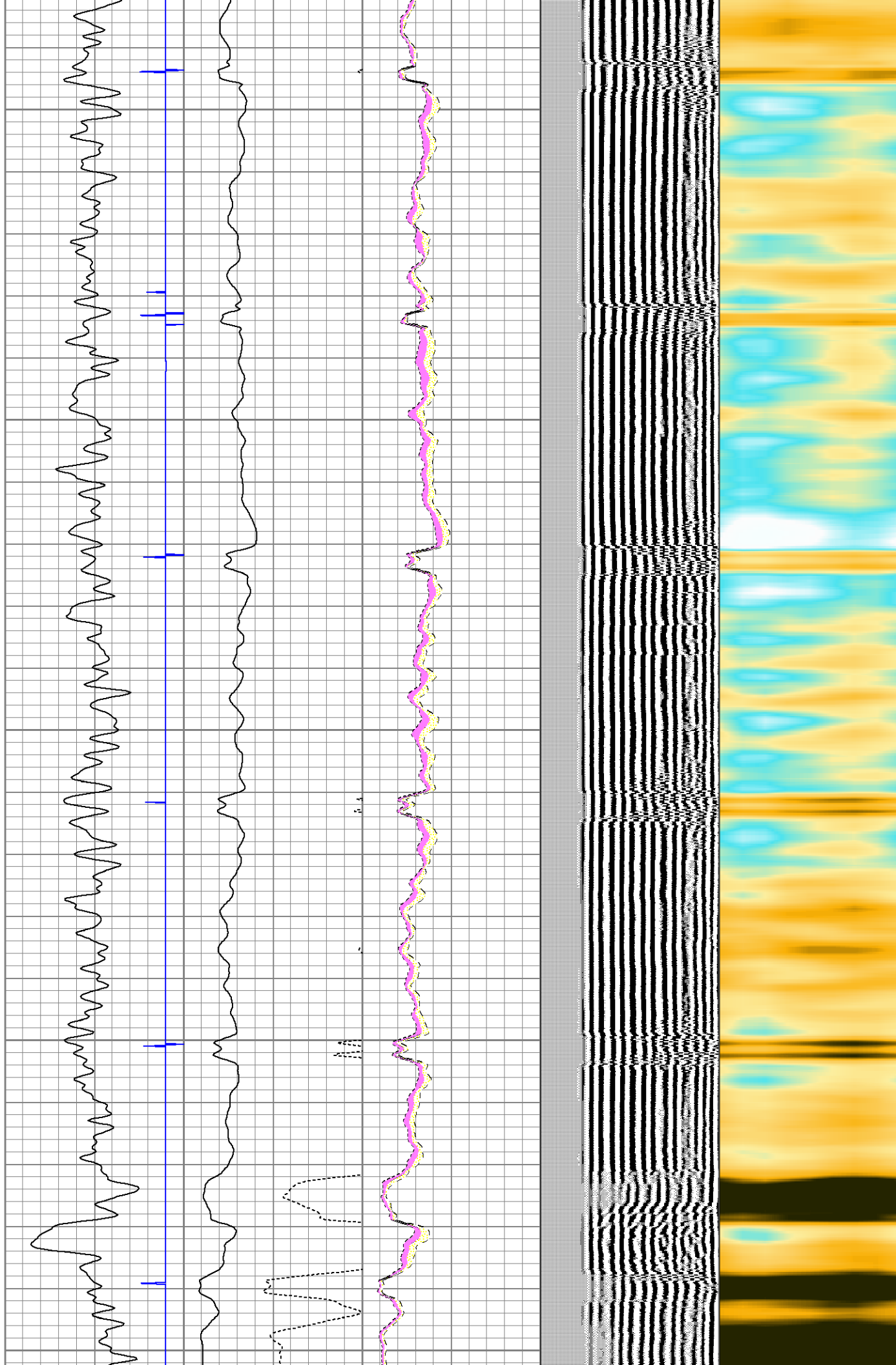


5100

5200



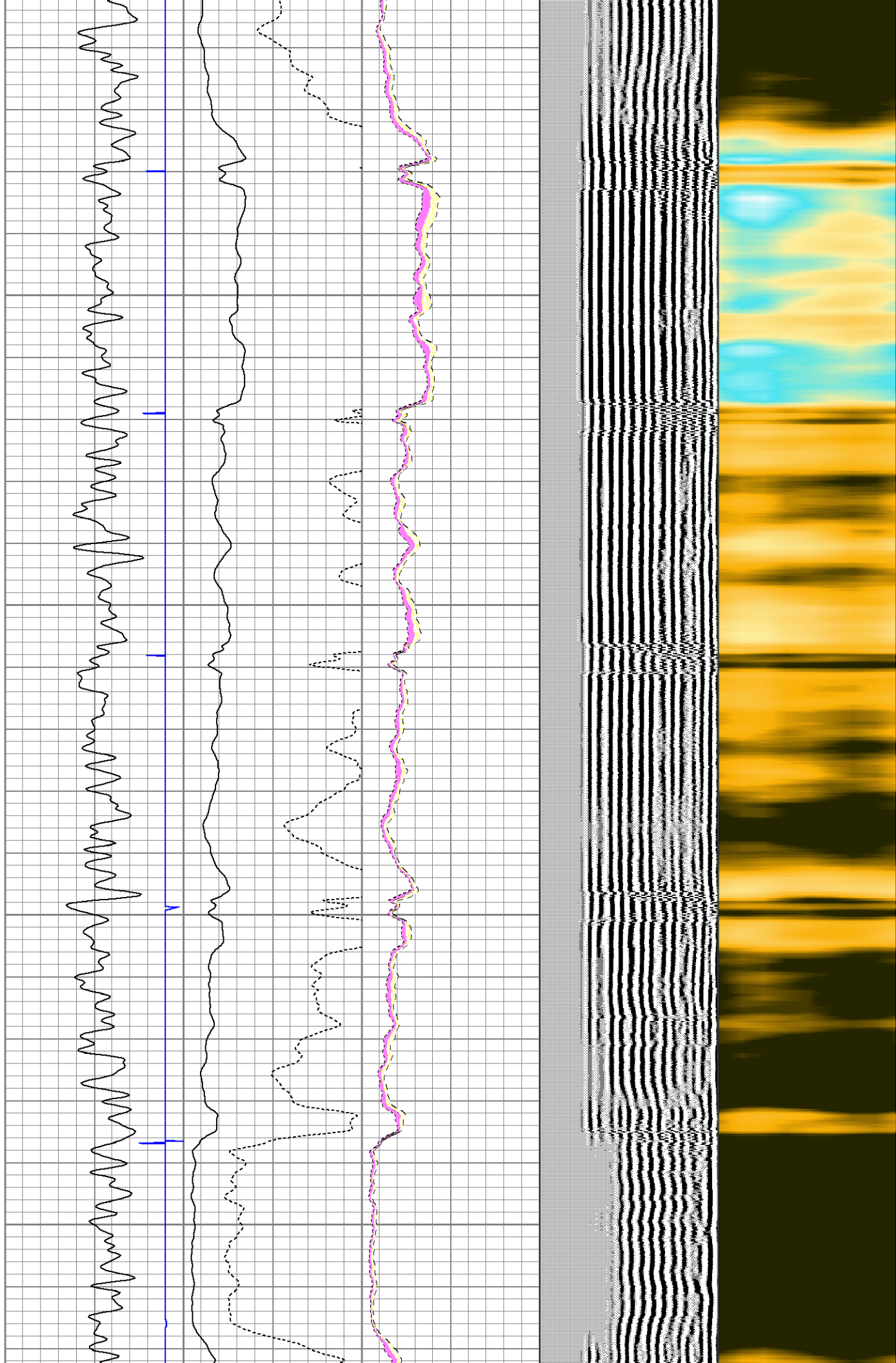
5400





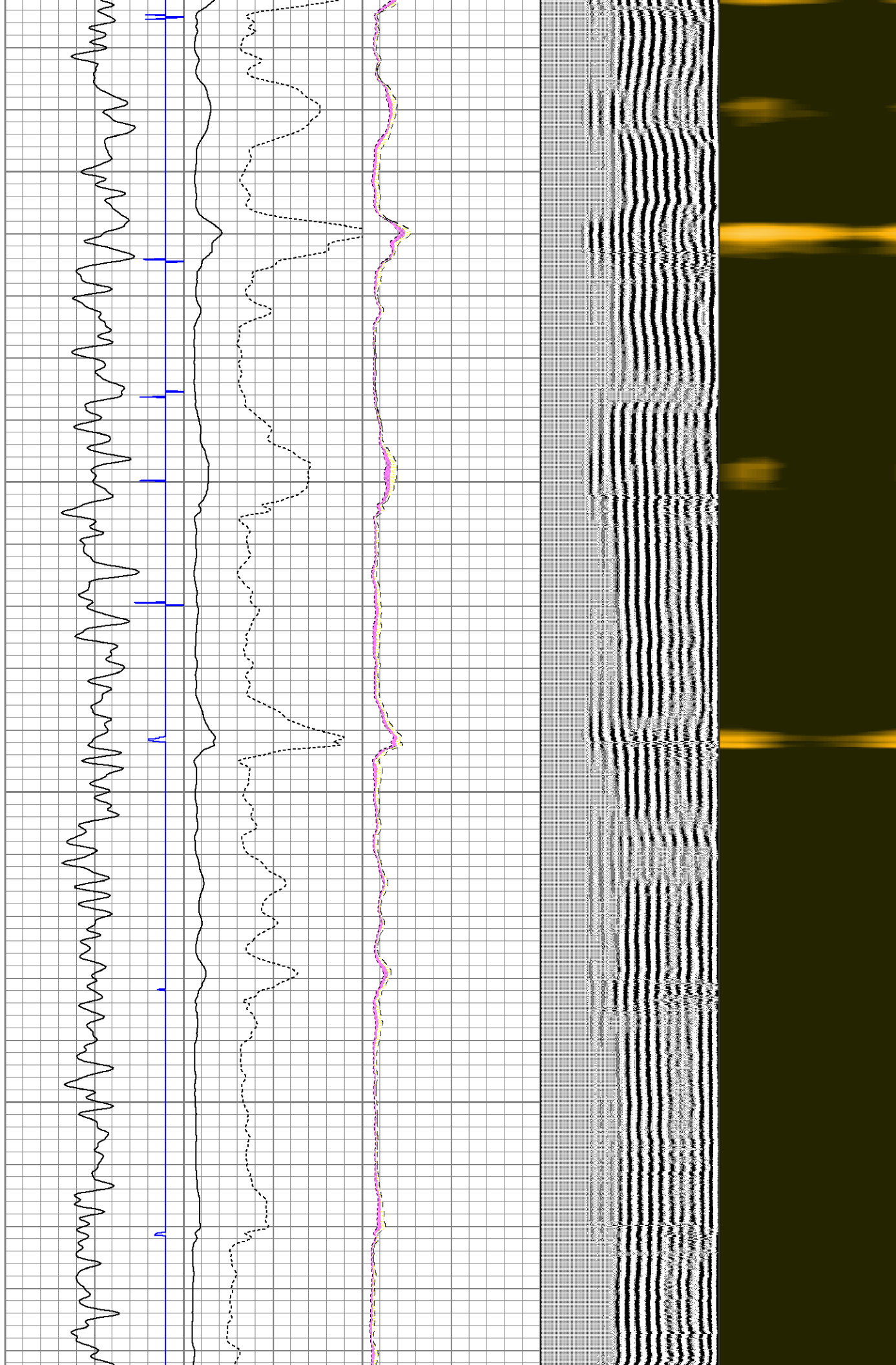
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5600



5700

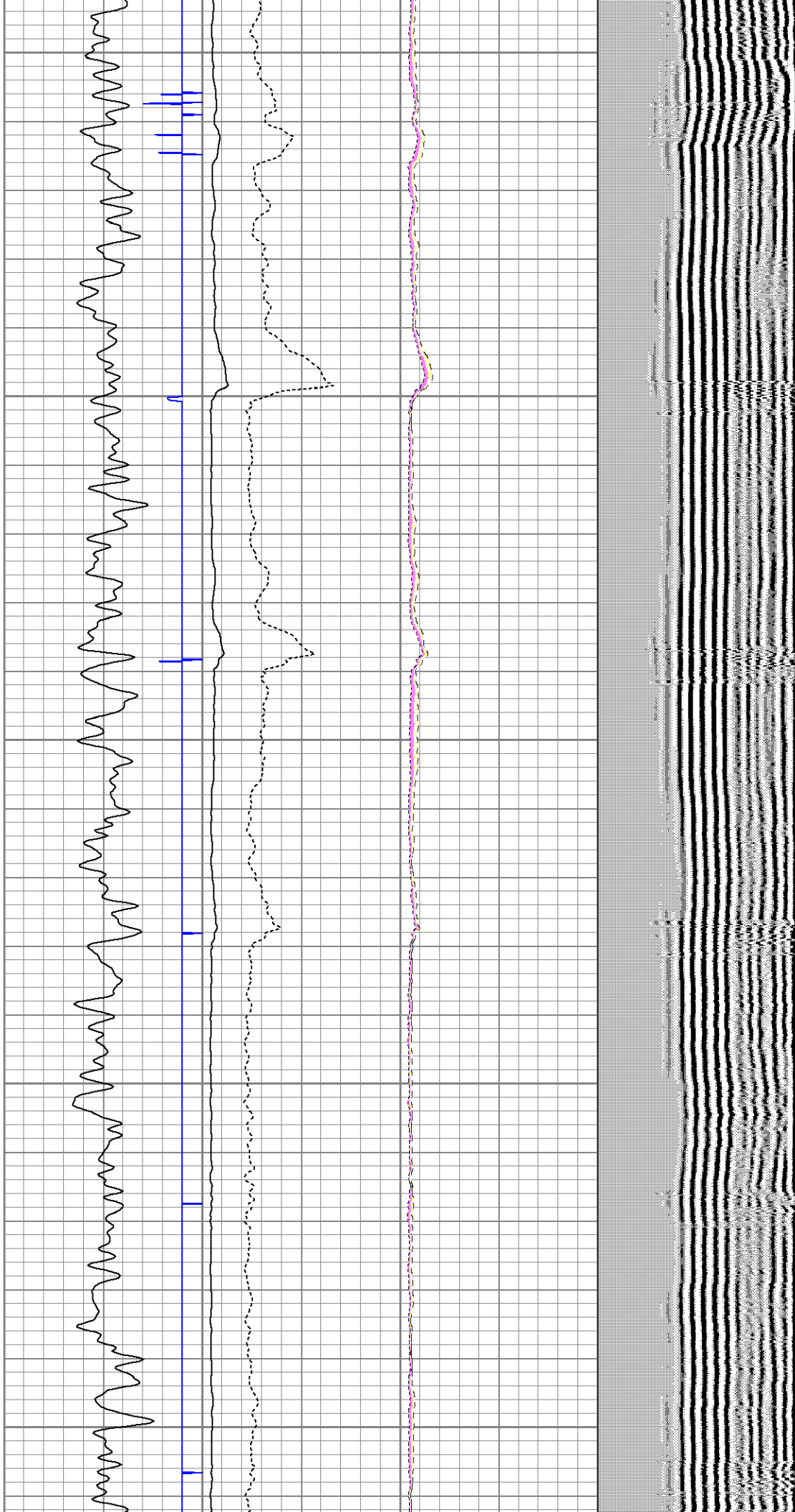
5800



5900

6000

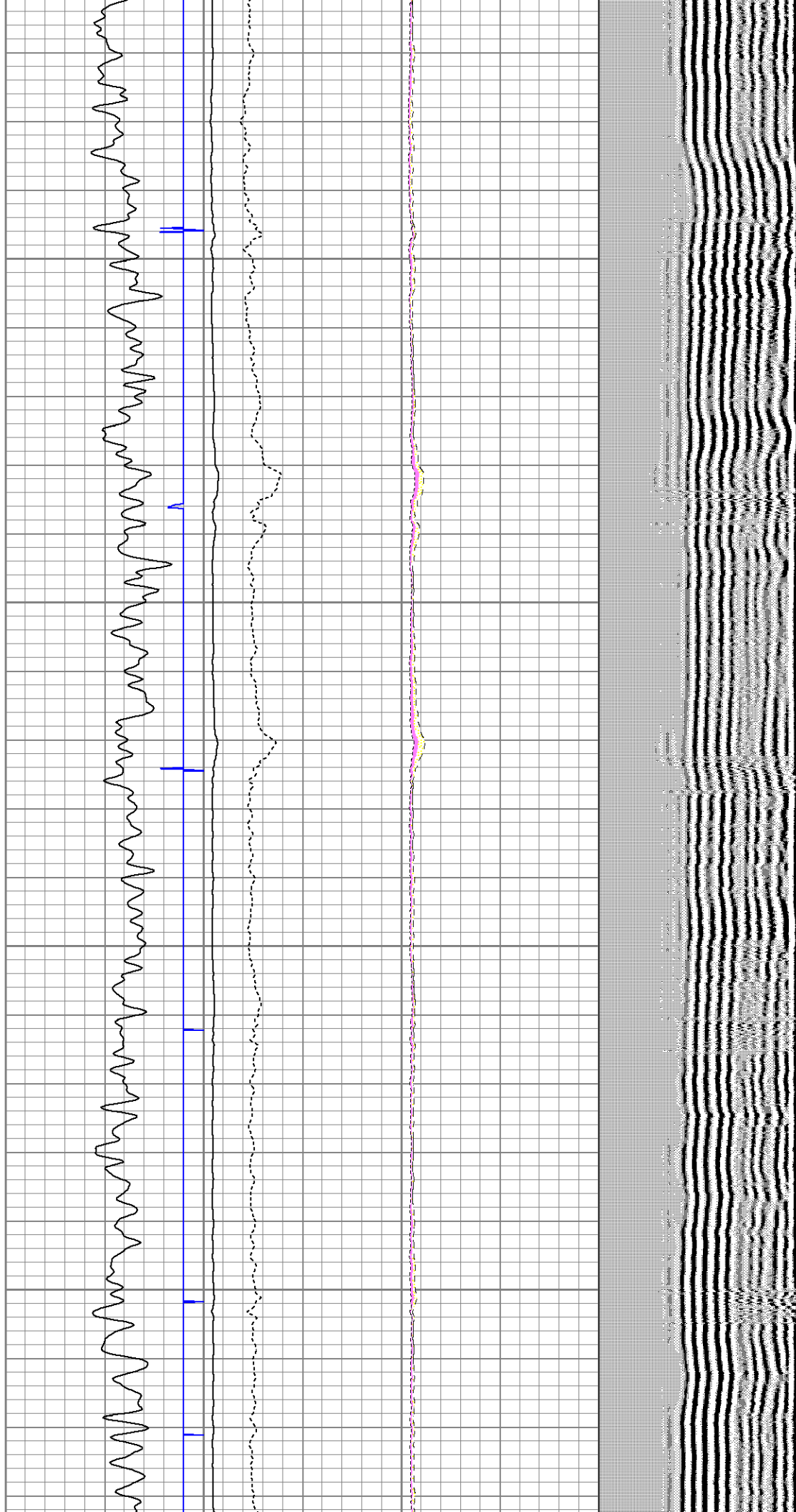
6100





6200

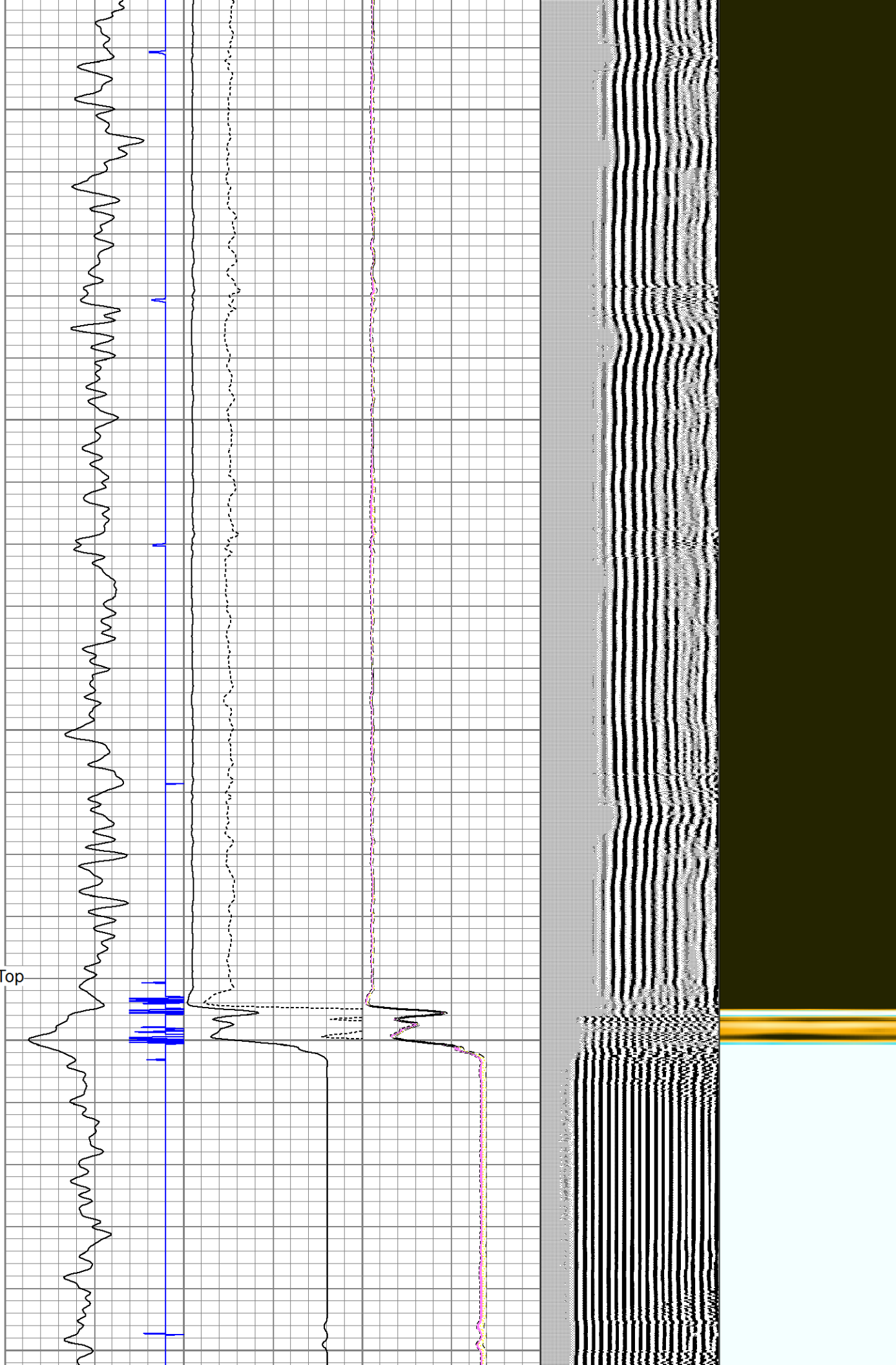
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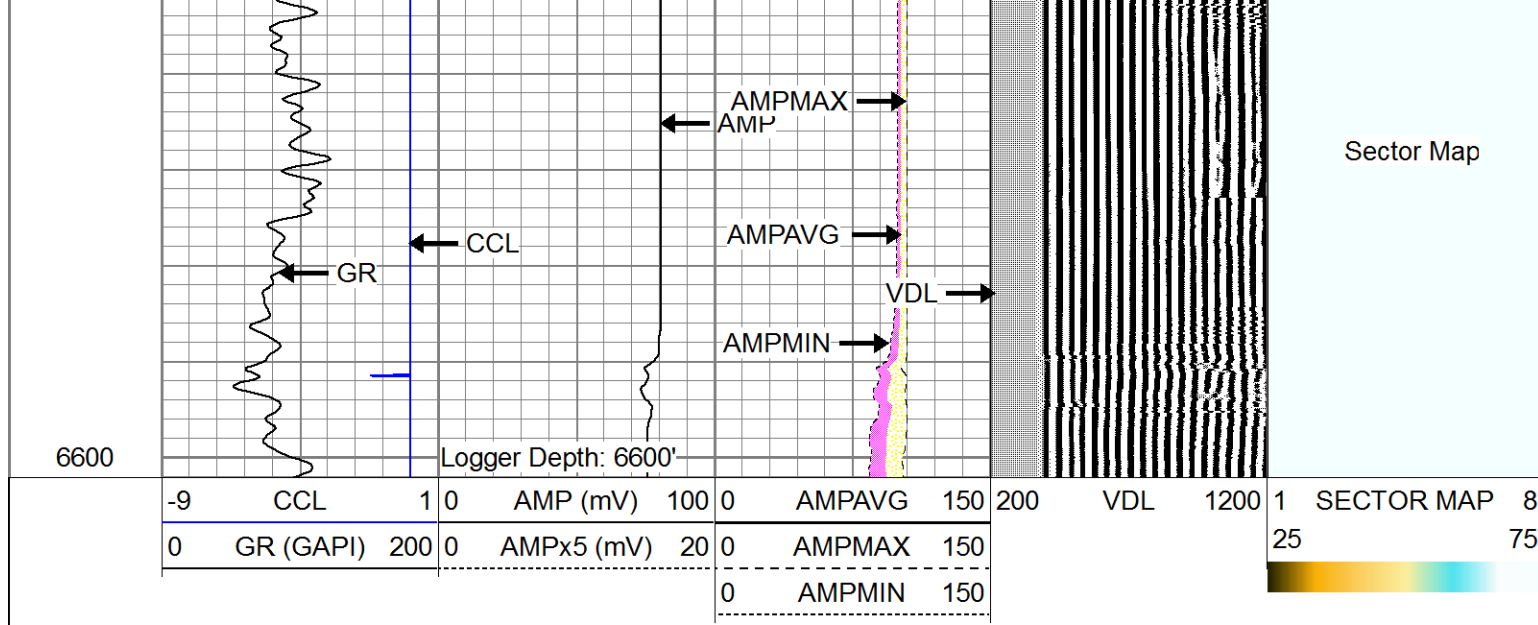


6400

Liner Top

6500





### Calibration Report

Database File: w-v30n-36hz\_rbl.db  
 Dataset Pathname: rbl/pass1  
 Dataset Creation: Mon Jan 20 10:44:07 2014 by Log SCH 120430

### Gamma Ray Calibration Report

Type / Serial: Probe / 275

#### SHOP CALIBRATION

Mon Jan 13 08:00:19 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:	Base
Tool Model:	Probe
Calibration Casing Diameter:	7.000 in
Calibration Depth:	0.000 ft

Master Calibration, performed Mon Jan 13 13:25:58 2014:

Raw (v)

Calibrated (mv)

Results



	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.028	2.499	0.000	62.165	24.603	0.687
CAL	-0.008	1.857				
5'	-0.022	2.499	0.000	62.165	24.665	0.532
SUM						
S1	-0.052	2.429	0.000	100.000	40.310	2.093
S2	-0.031	2.384	0.000	100.000	41.423	1.265
S3	-0.038	2.411	0.000	100.000	40.827	1.548
S4	-0.031	2.499	0.000	100.000	39.535	1.211
S5	-0.032	2.499	0.000	100.000	39.517	1.255
S6	-0.026	2.499	0.000	100.000	39.614	1.013
S7	-0.021	2.499	0.000	100.000	39.679	0.851
S8	-0.031	2.475	0.000	100.000	39.904	1.242

Internal Reference Calibration, performed Tue Jan 14 09:36:50 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.008	1.857	1.000	0.000

Air Zero Calibration, performed Tue Jan 14 09:33:12 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	



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Field WATTENBERG  
County WELD  
State CO