



Radial Bond Log
Gamma-Ray & C.C.L.

Pioneer Energy Services

Company Anadarko Petroleum Corp.

Well Boyd 2N-32HZ
Field Wattenberg
County Weld State Colorado

Company **Anadarko Petroleum Corp.**
Well **Boyd 2N-32HZ**
Field **Wattenberg**
County **Weld** State **Colorado**

Location: API #: 05123377740000 Other Services
325' FSL & 2336' FEL
SEC 5 TWP 1N RGE 65W
Permanent Datum GL Elevation 4950'
Log Measured From KB
Drilling Measured From KB
Elevation 4975'
D.F. 4976'
G.L. 4950'

Date of Service	2-23-14		
Run Number	ONE		
Depth Driller or PBTD	16612'		
Depth Logger	7128'		
Bottom Log Interval	7128'		
Top Log Interval	SURFACE		
Open Hole Size	8.75"		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	NA		
Max. Recorded Temperature	218		
Max. Wellhead Pressure	2800 PSI		
Wellhead Connection	10K 7 1/16" FLANGE		
Estimated Cement Top	SURFACE		
Unit Number	P-41		
Wireline Size	9/32"		
Location	FORT MORGAN		
Recorded By	JOHN HOLLIS		
Witnessed By	MR. RICK DUNFORD		
	Size	W/Ft	Top
Tubing Record			Bottom
Surface Casing			
Production Casing	7"	26#	SURFACE
Liner Record			6395'

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services will 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 Pioneer Wireline Services's general terms and conditions set out in our current Price Schedule.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
S.O. # 2-204574

WCR 12 & WCR 41, W 4/10, N 300' INTO

THANK YOU FOR USING PIONEER WIRELINE SERVICES

Your Pioneer Wireline Services Crew

Tool Data - Services

Serial Number

Engineer: N. BIVENS
Operator: J. HOLLIS
Operator: D. BAESSLER
Operator: W. BRIGANTE, J. GATES

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	
WVF3FT	11.78		RBT-Probe (4.5040904) Prototype Probe Radii Bond Tool with Digital Telemetry	8.88	2.75	90.00
WVFCAL	11.78					
WVFS1	11.78					
WVFS2	11.78					
WVFS3	11.78					
WVFS4	11.78					
WVFS5	11.78					
WVFS6	11.78					
WVFS7	11.78					
WVFS8	11.78					
WVF5FT	10.78					
			PTS275	2.83	2.75	
CCL	3.84					
TEMP	3.14					
GR	2.30		GCT-GRCCCLTEMP (130608) Probe GCT	4.69	2.75	100.00

Dataset: 05123377740000_boyd_2n_32hz_rbl.db: field/well/run1/pass3

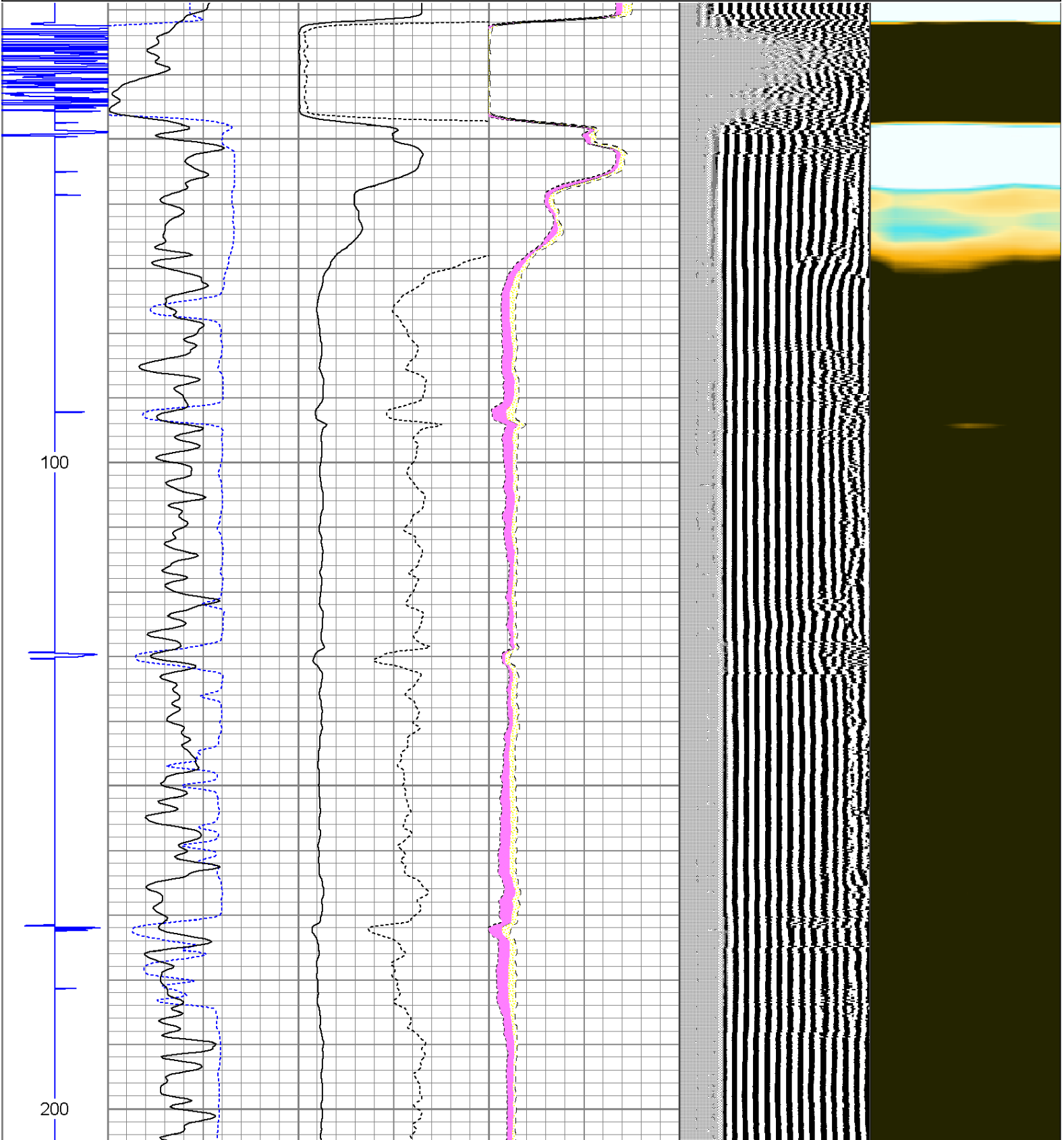
Total Length: 19.23 ft

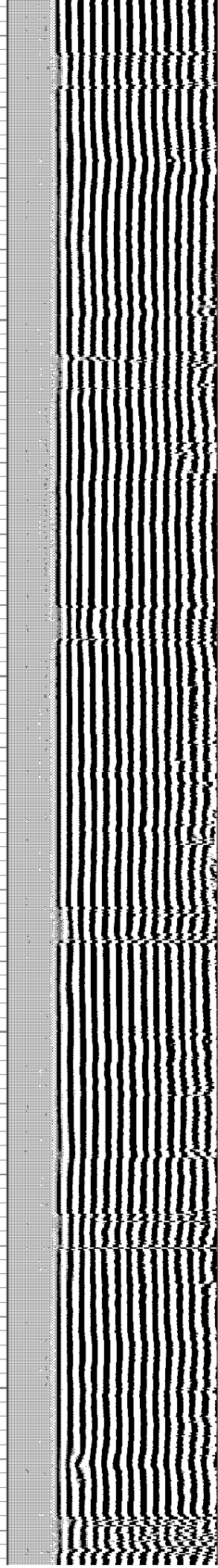
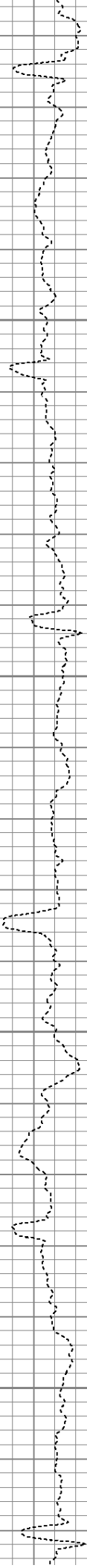
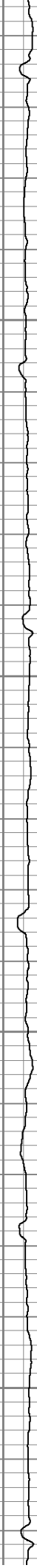
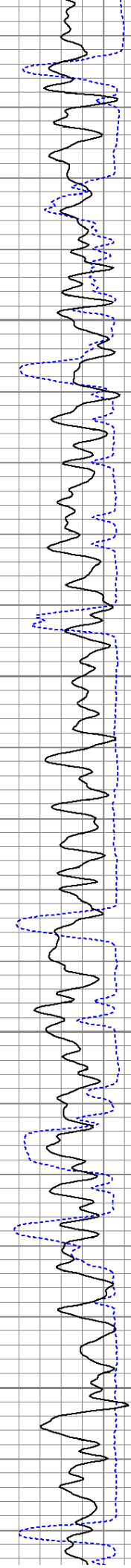
Total Weight: 190.00 lb

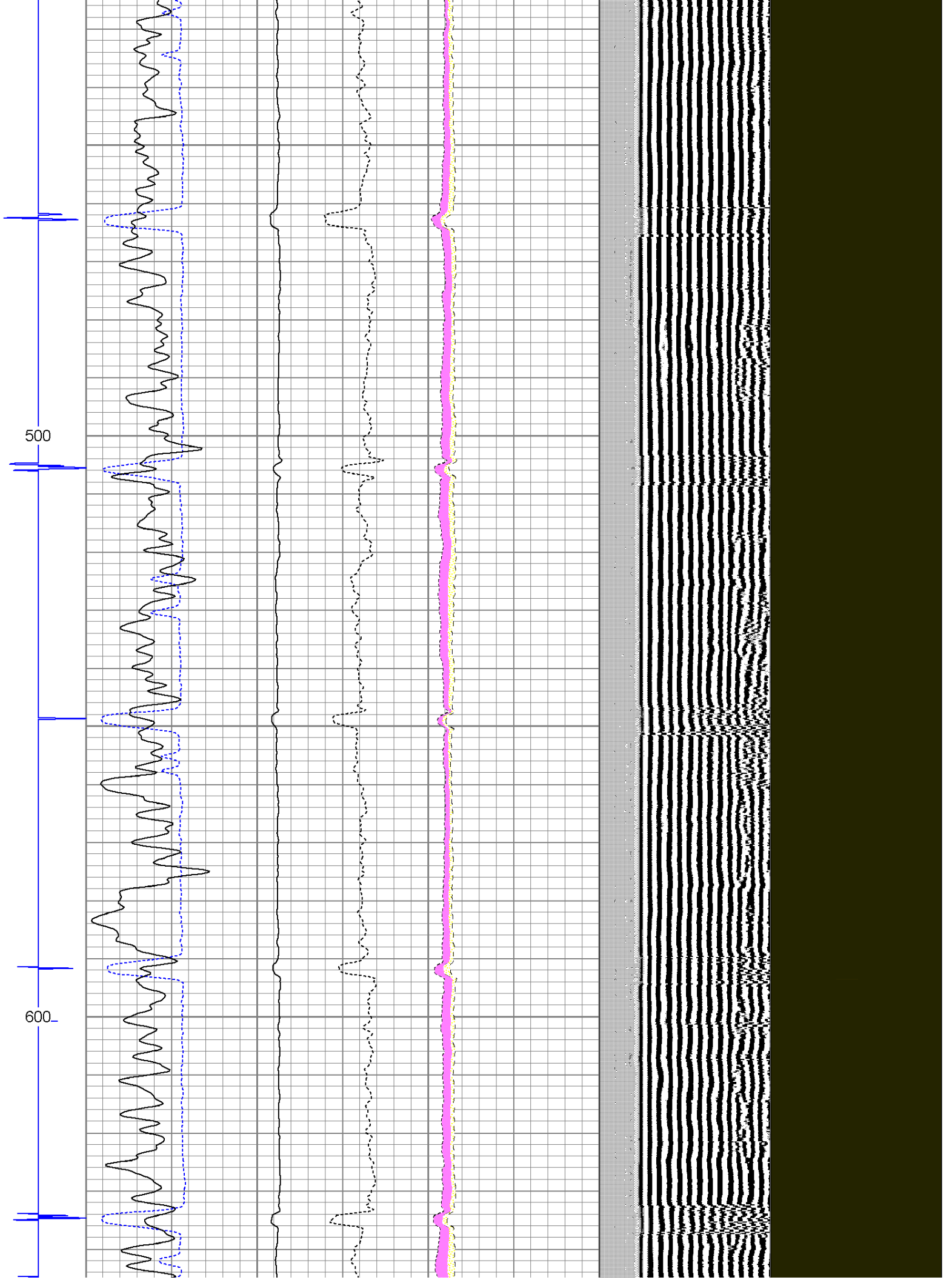
OD: 2.75 in

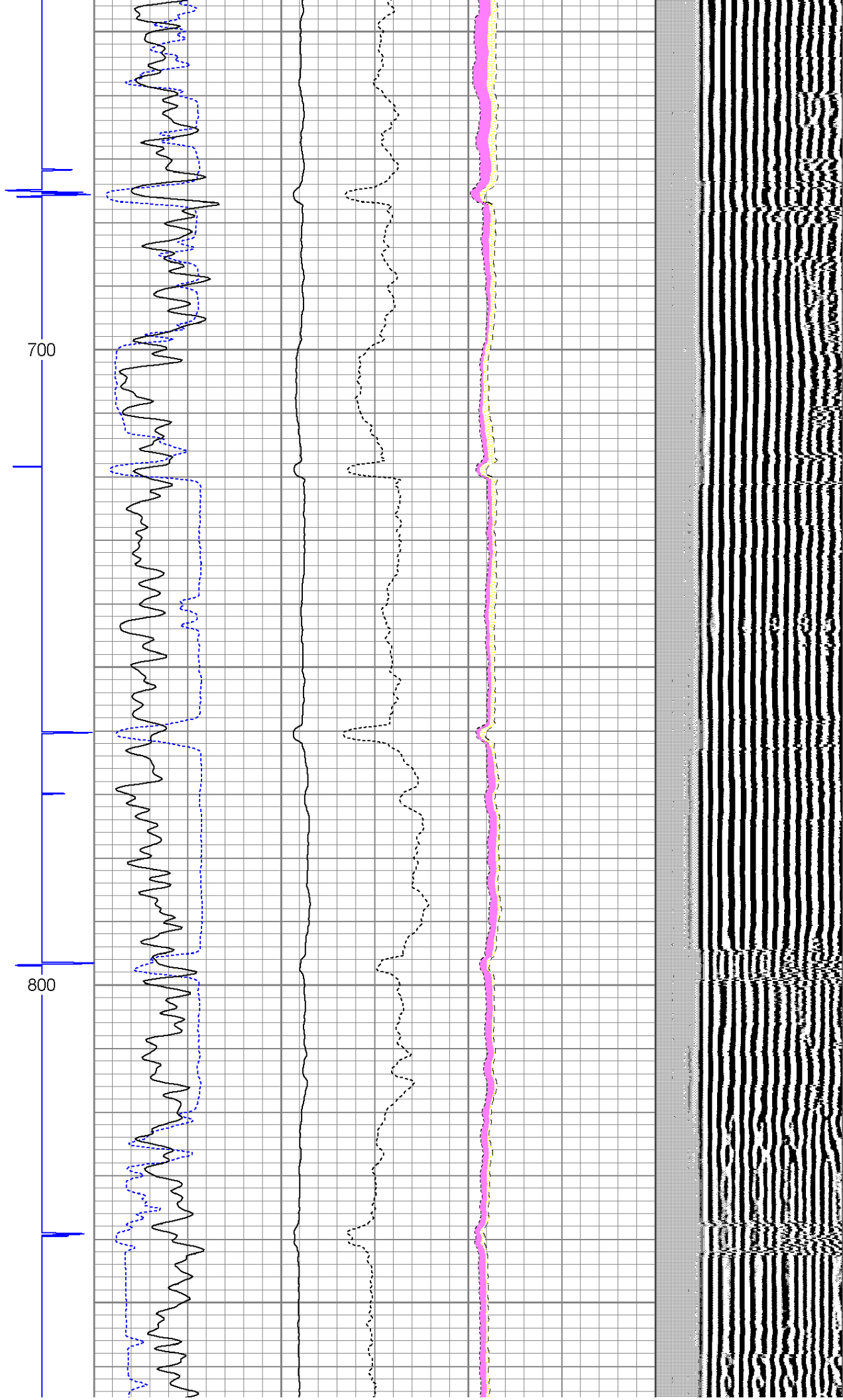
Database File: 05123377740000_boyd_2n_32hz_rbl.db
Dataset Pathname: pass3
Presentation Format: scbl02
Dataset Creation: Sun Feb 23 10:45:57 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

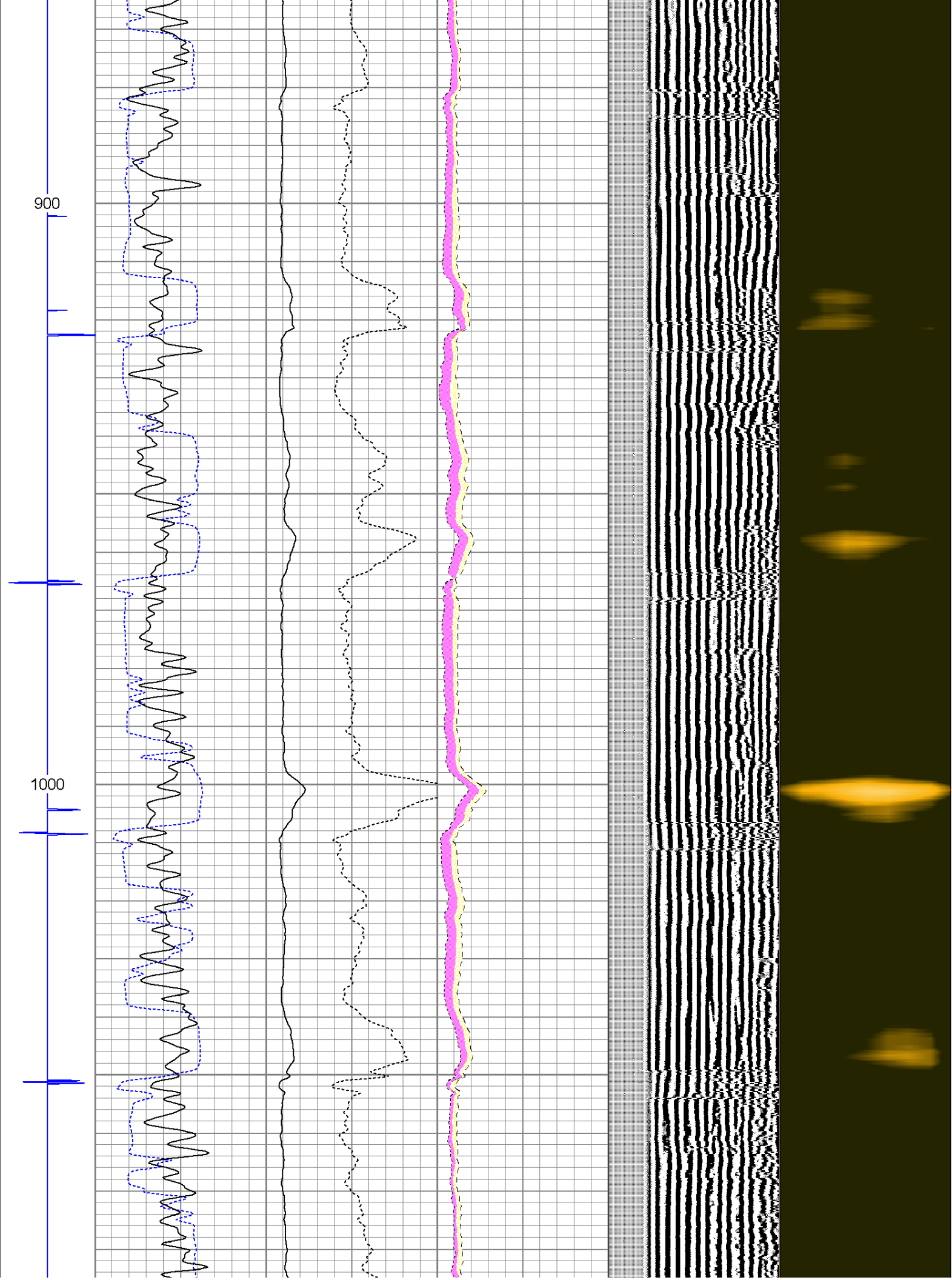
5	CCL	-5	362	TT (usec)	262	0	AMP (mV)	100	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
			0	GR (GAPI)	150	0	AMPx5 (mV)	20	0	AMPMAX	150				25		75
									0	AMPMIN	150						

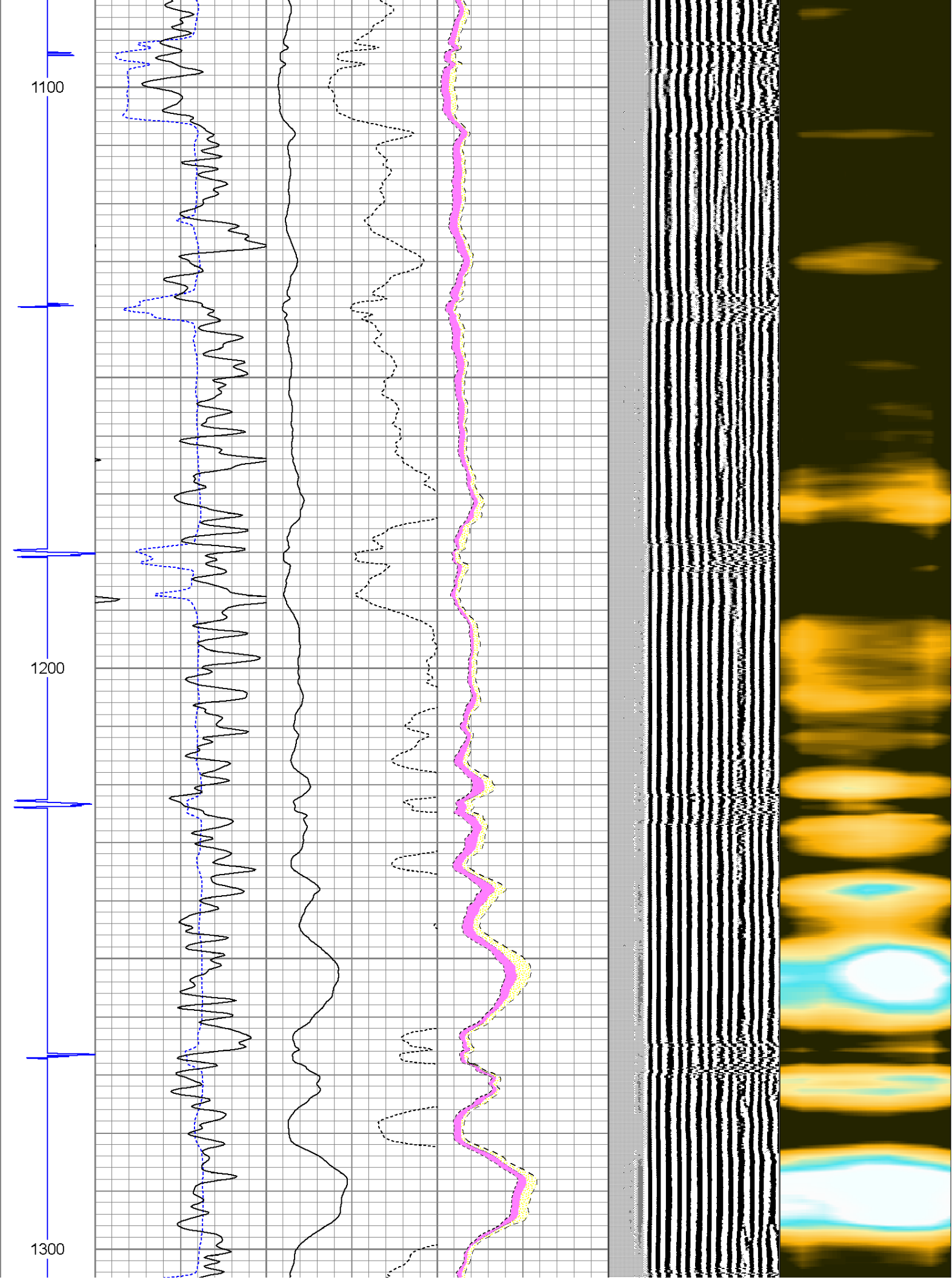


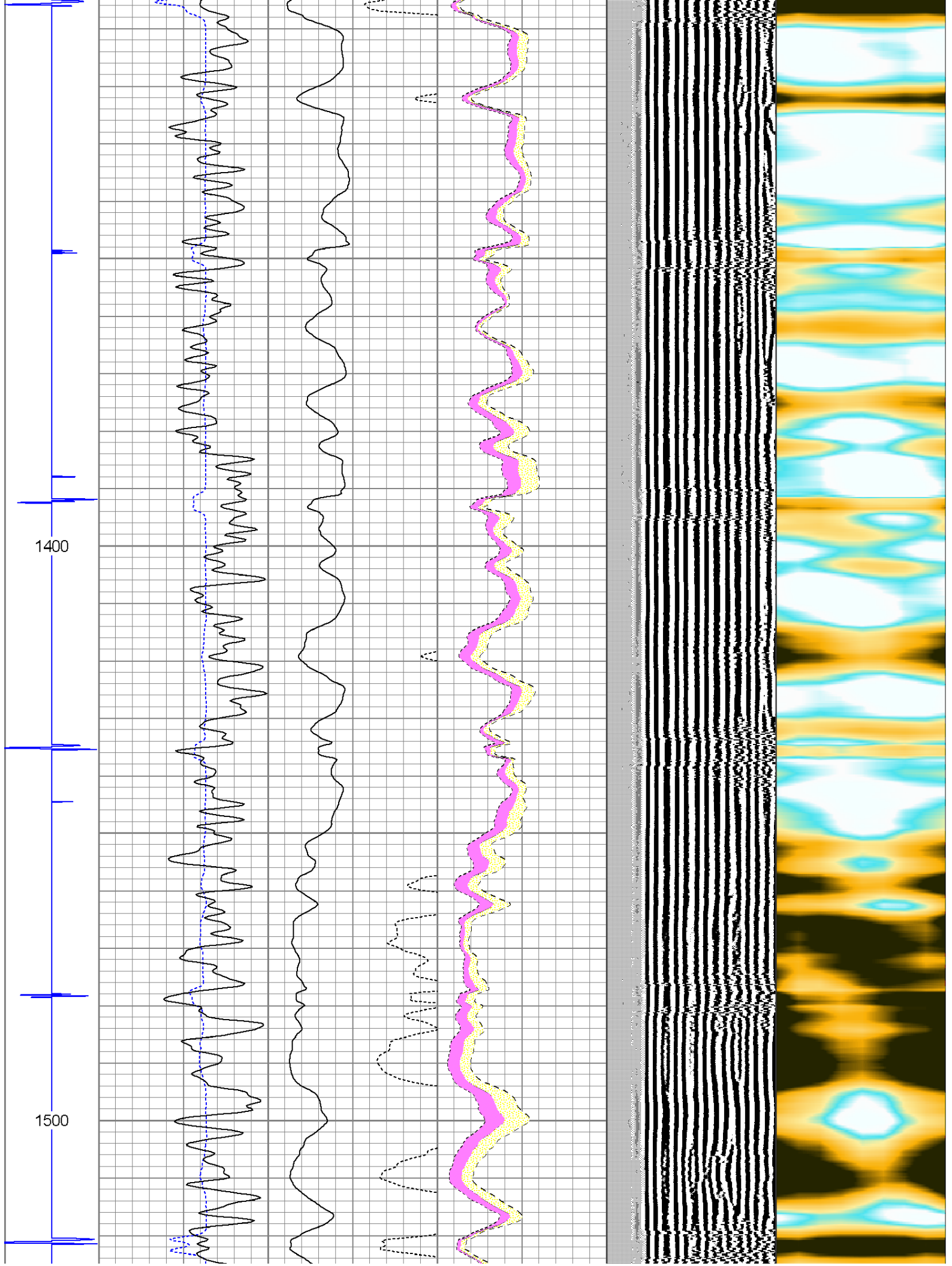


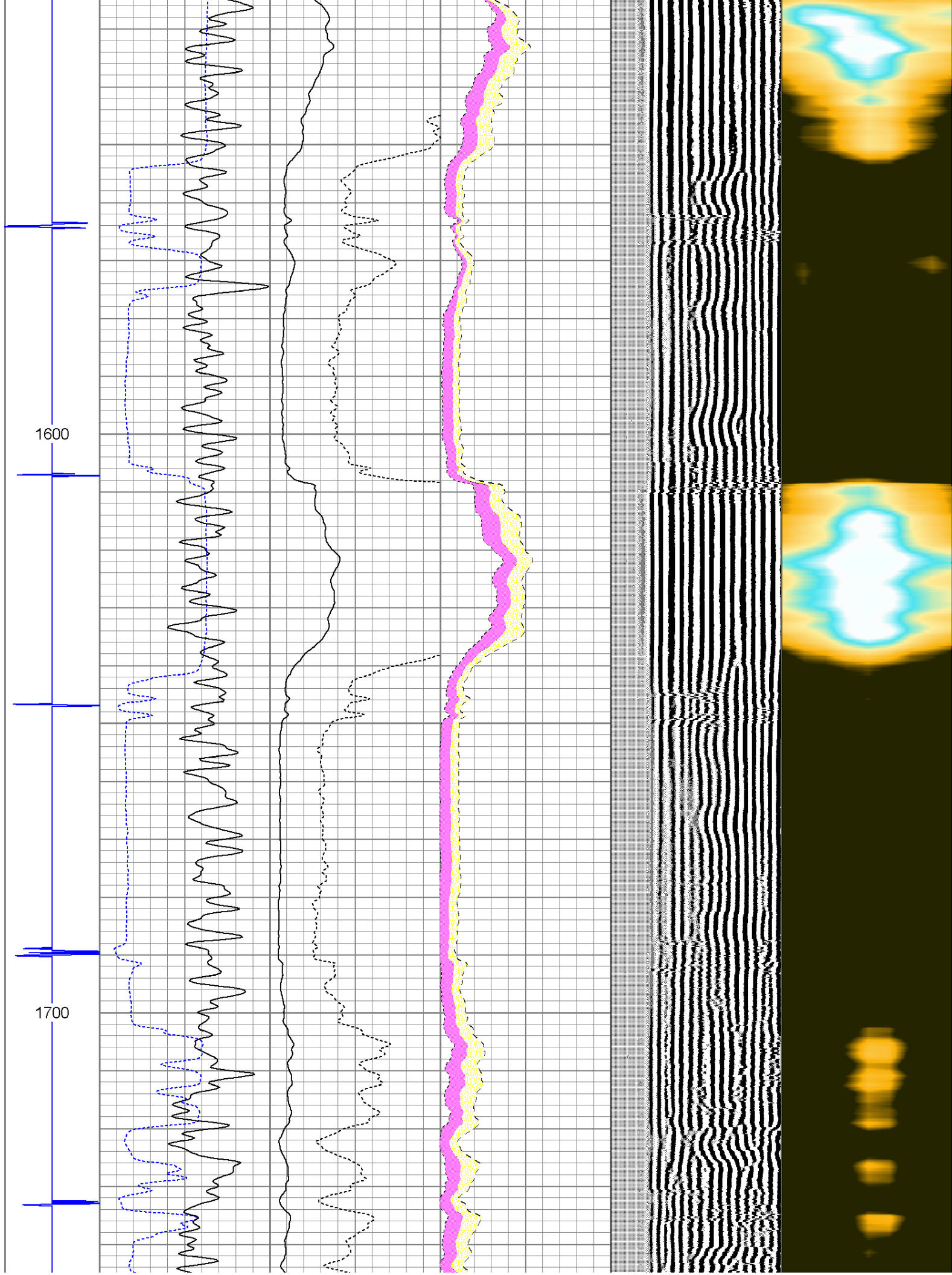


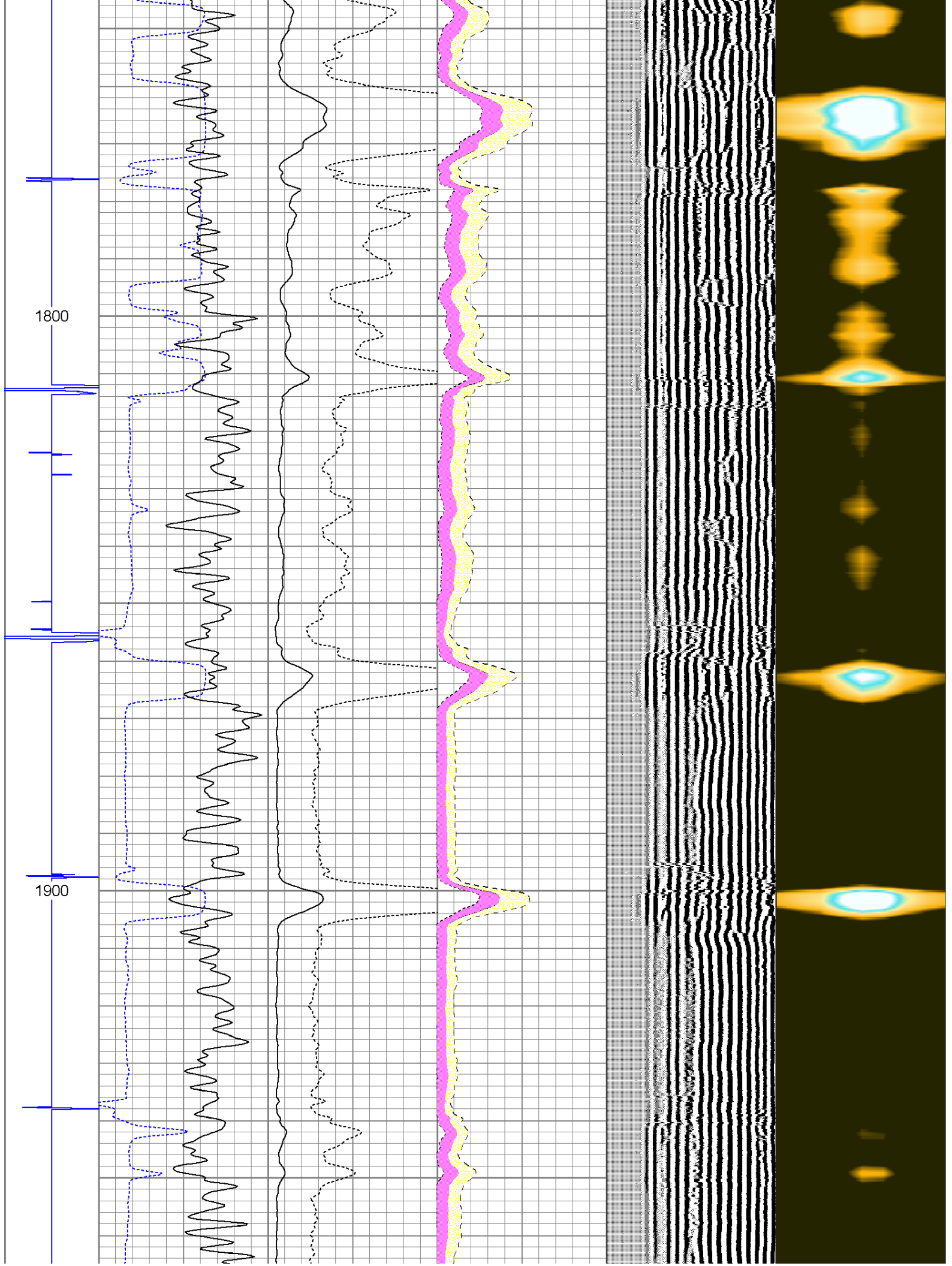


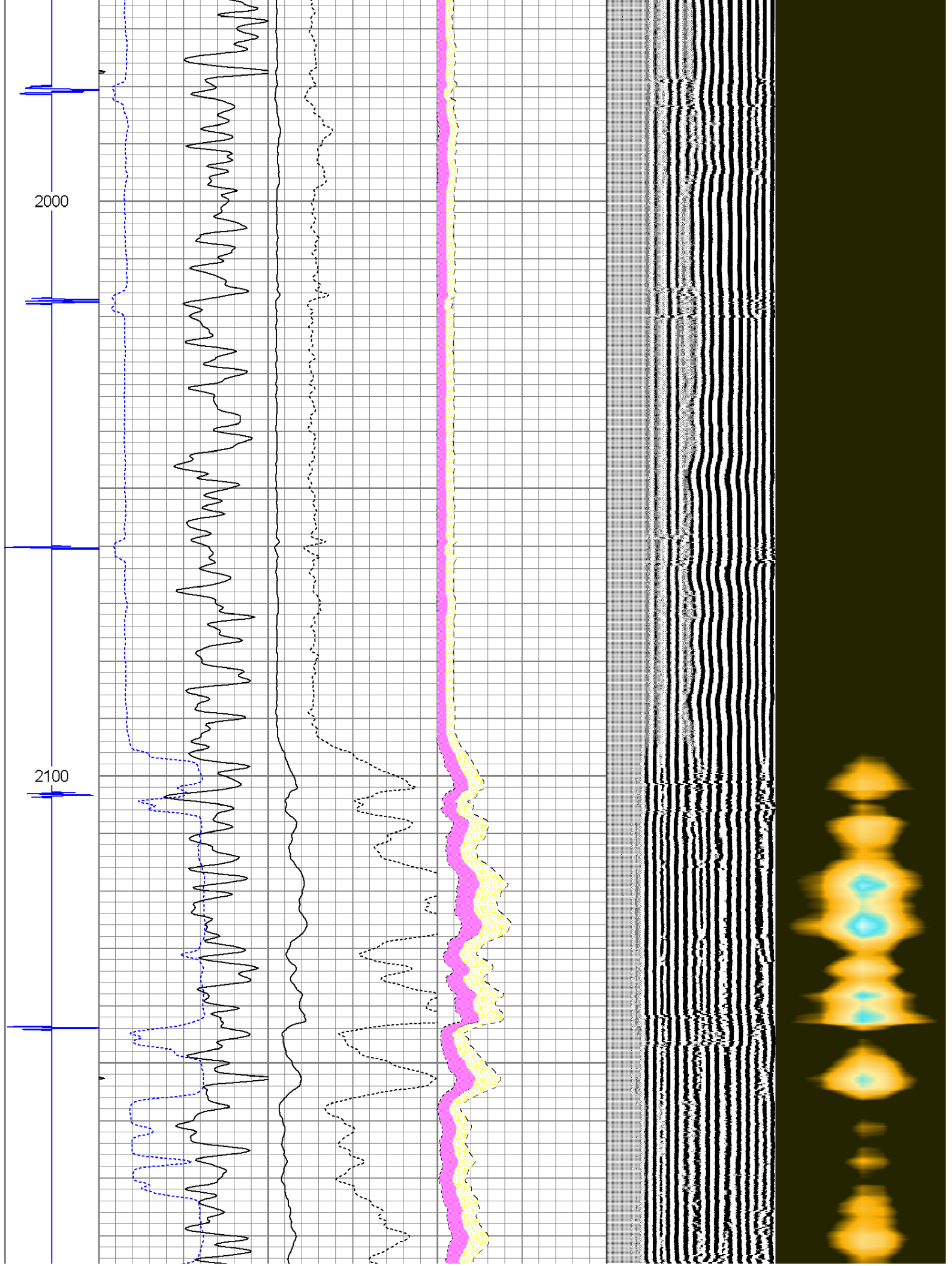


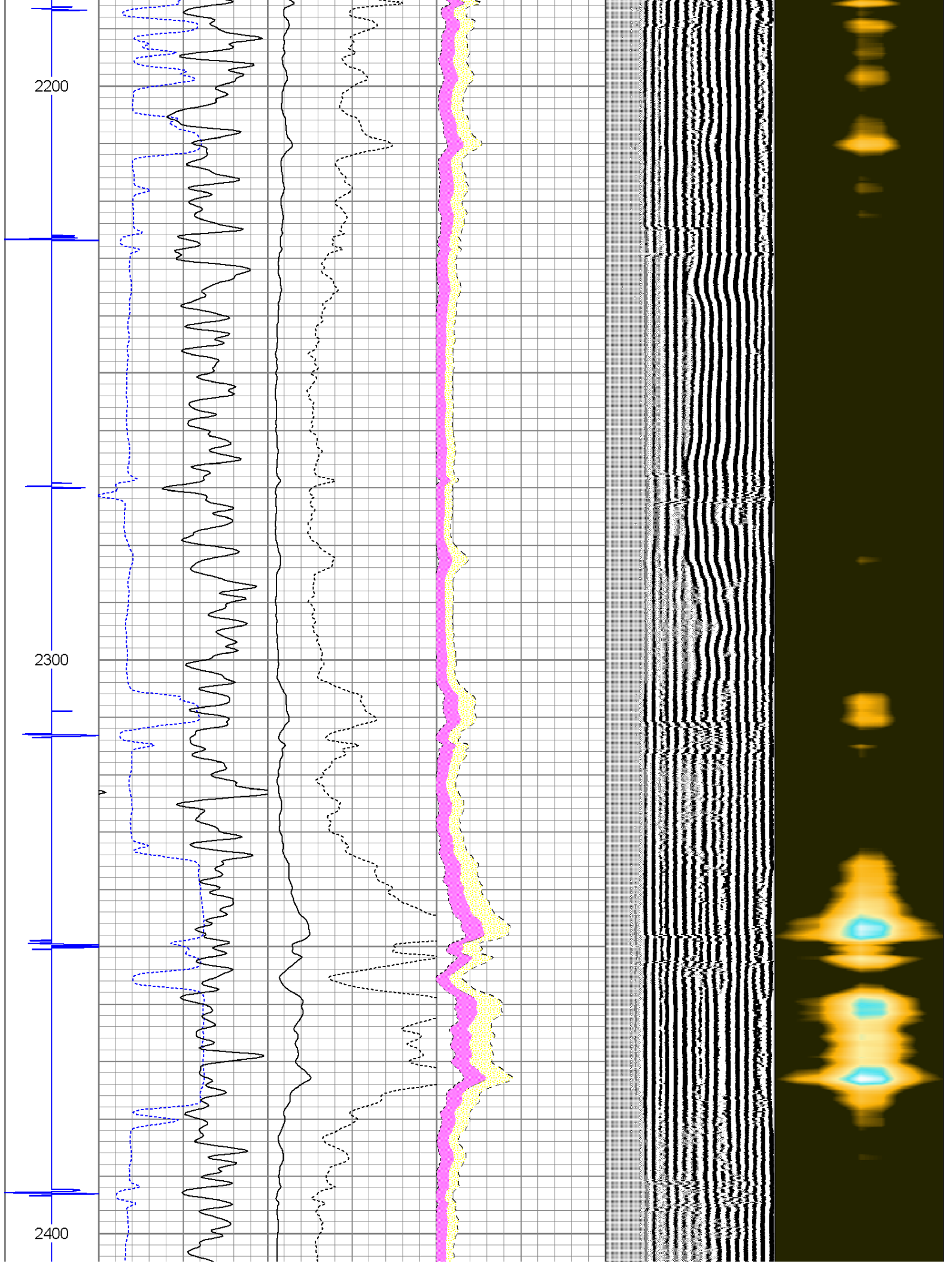


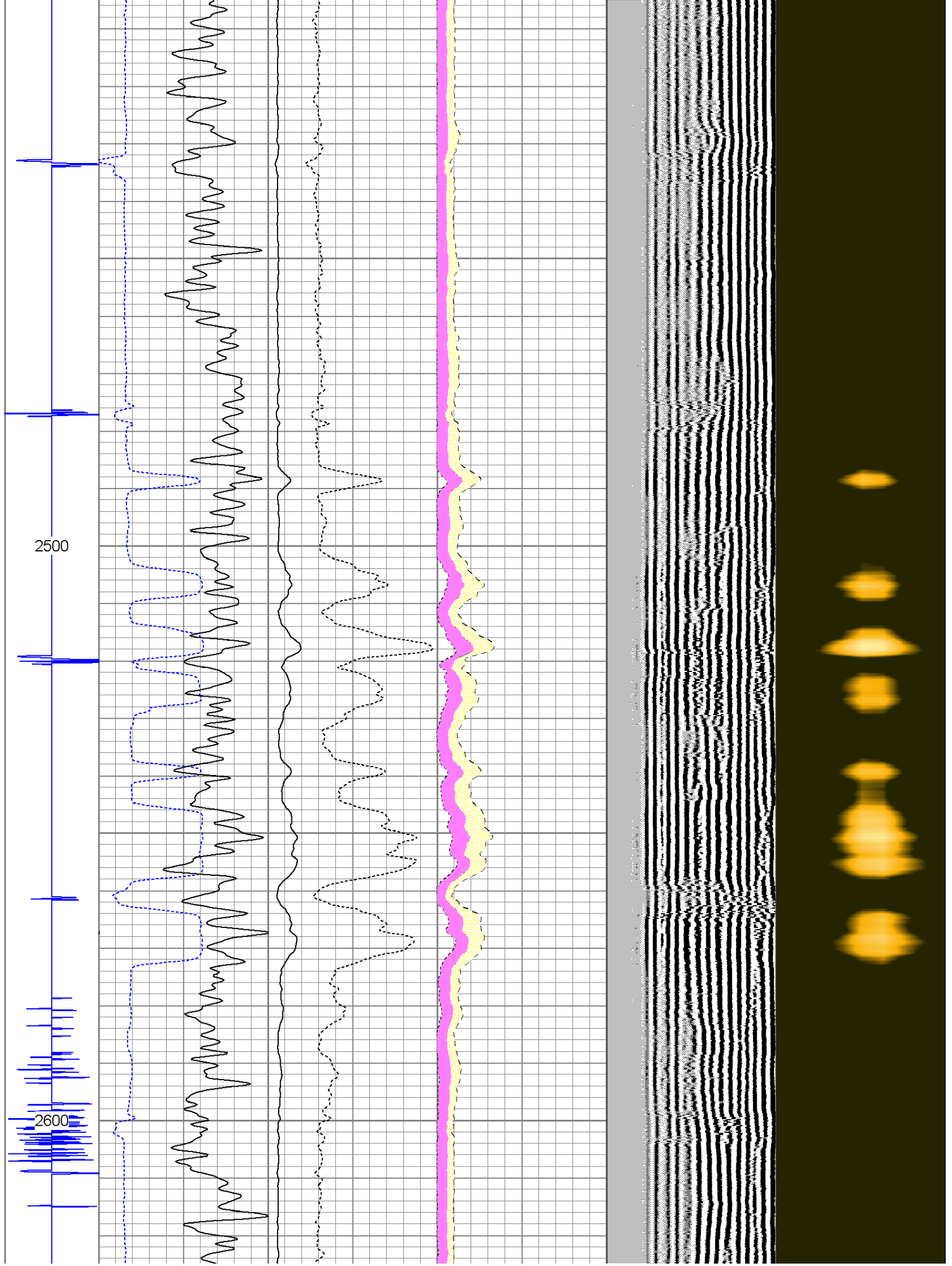


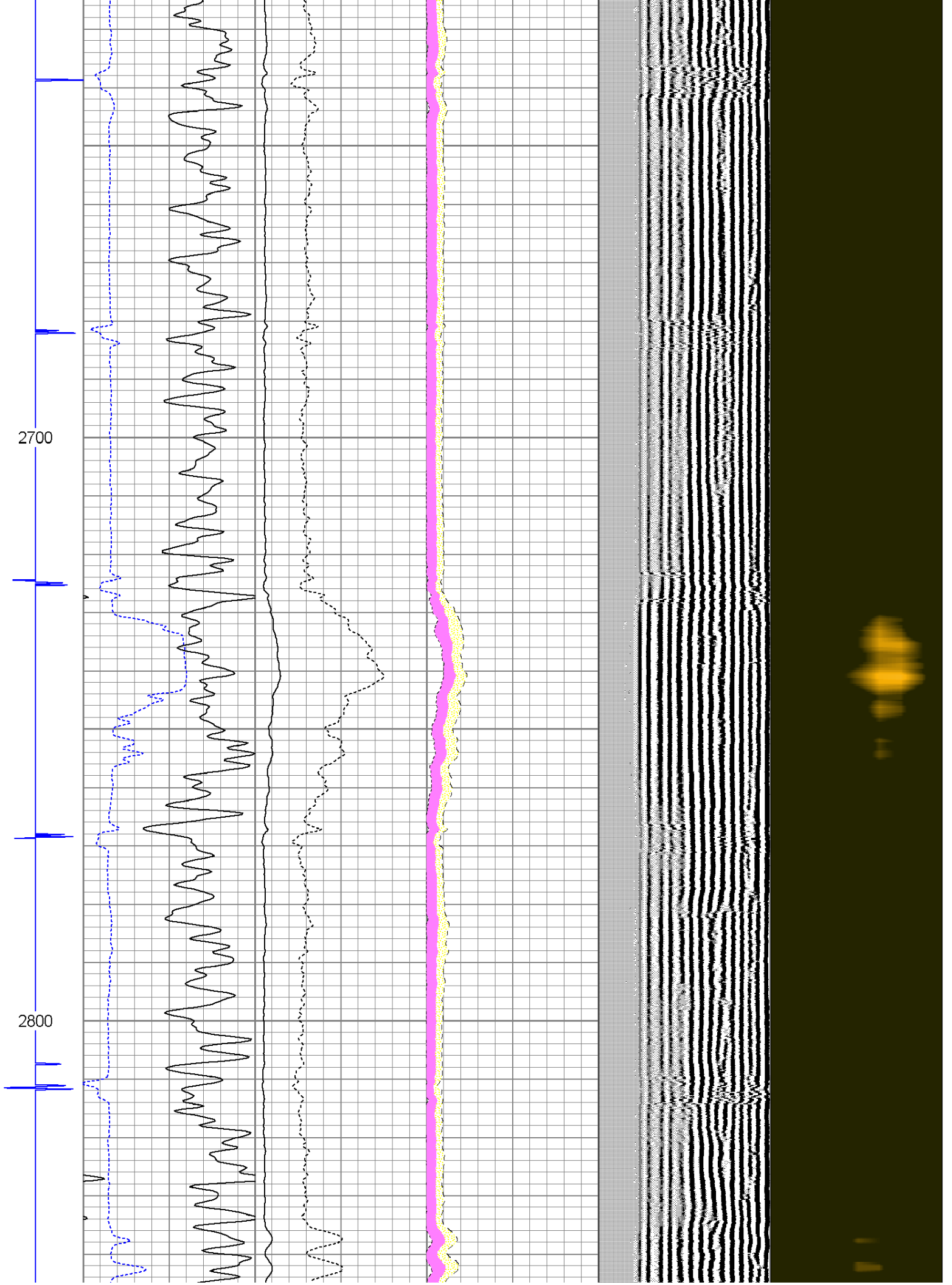


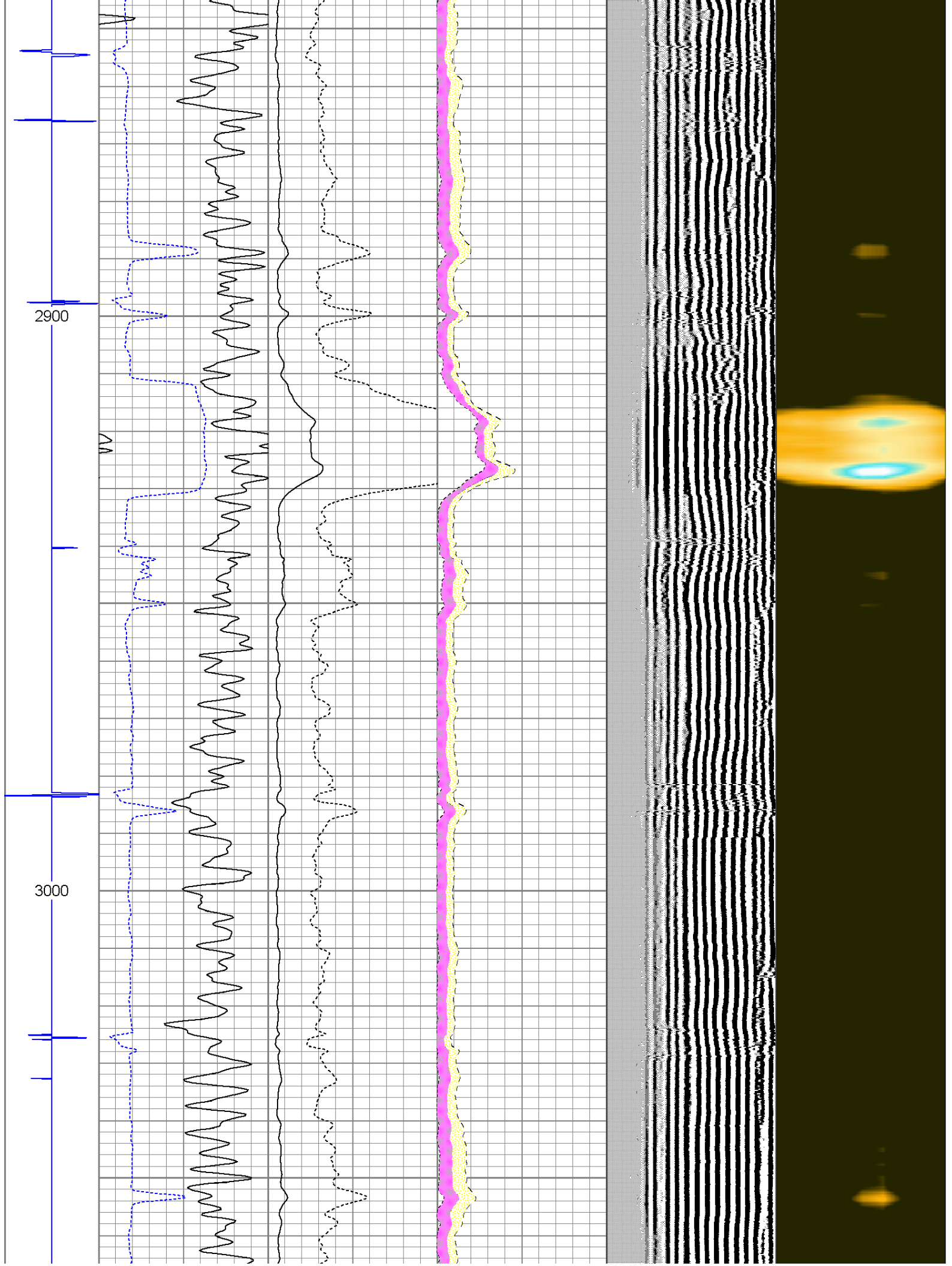


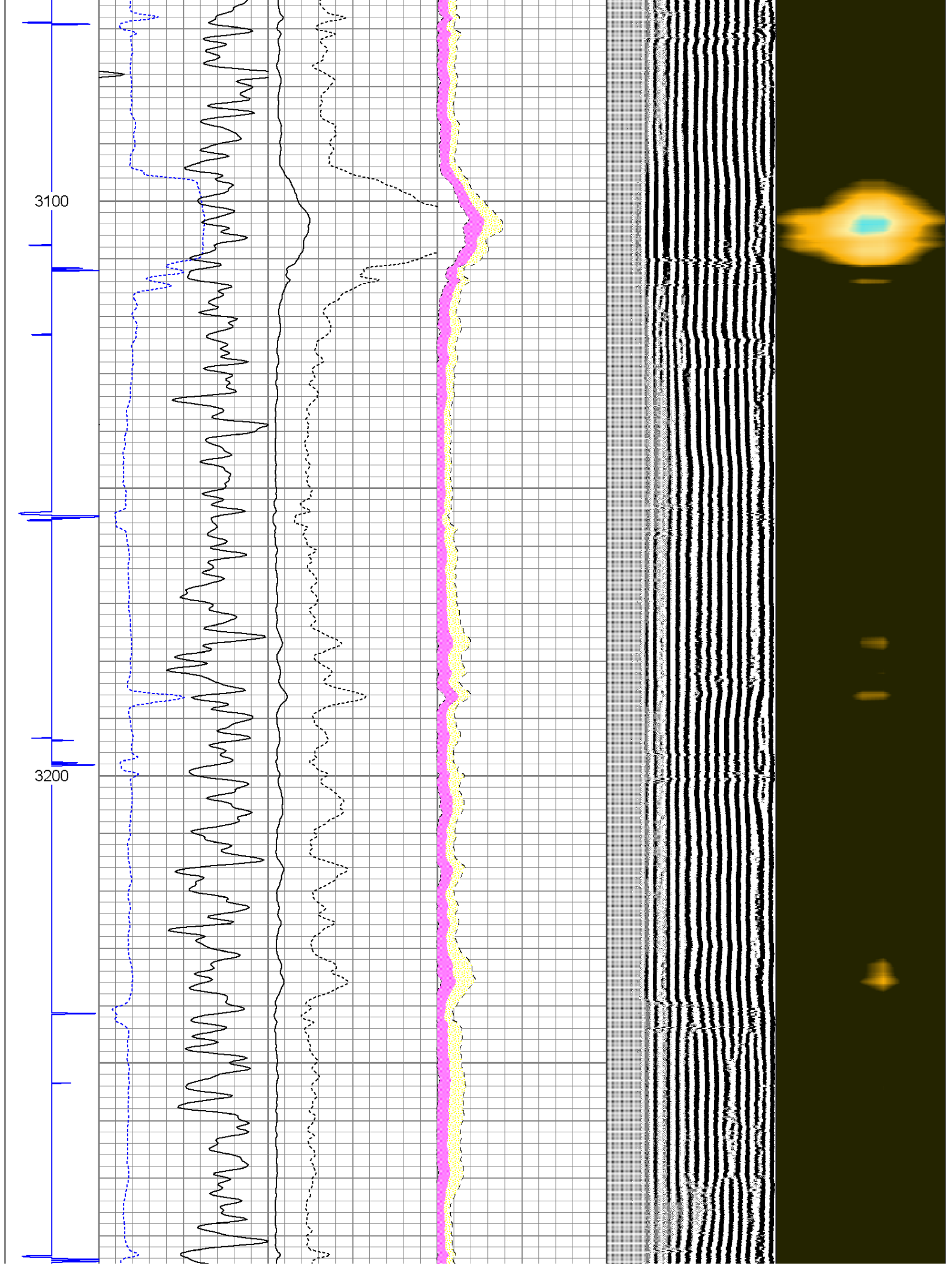


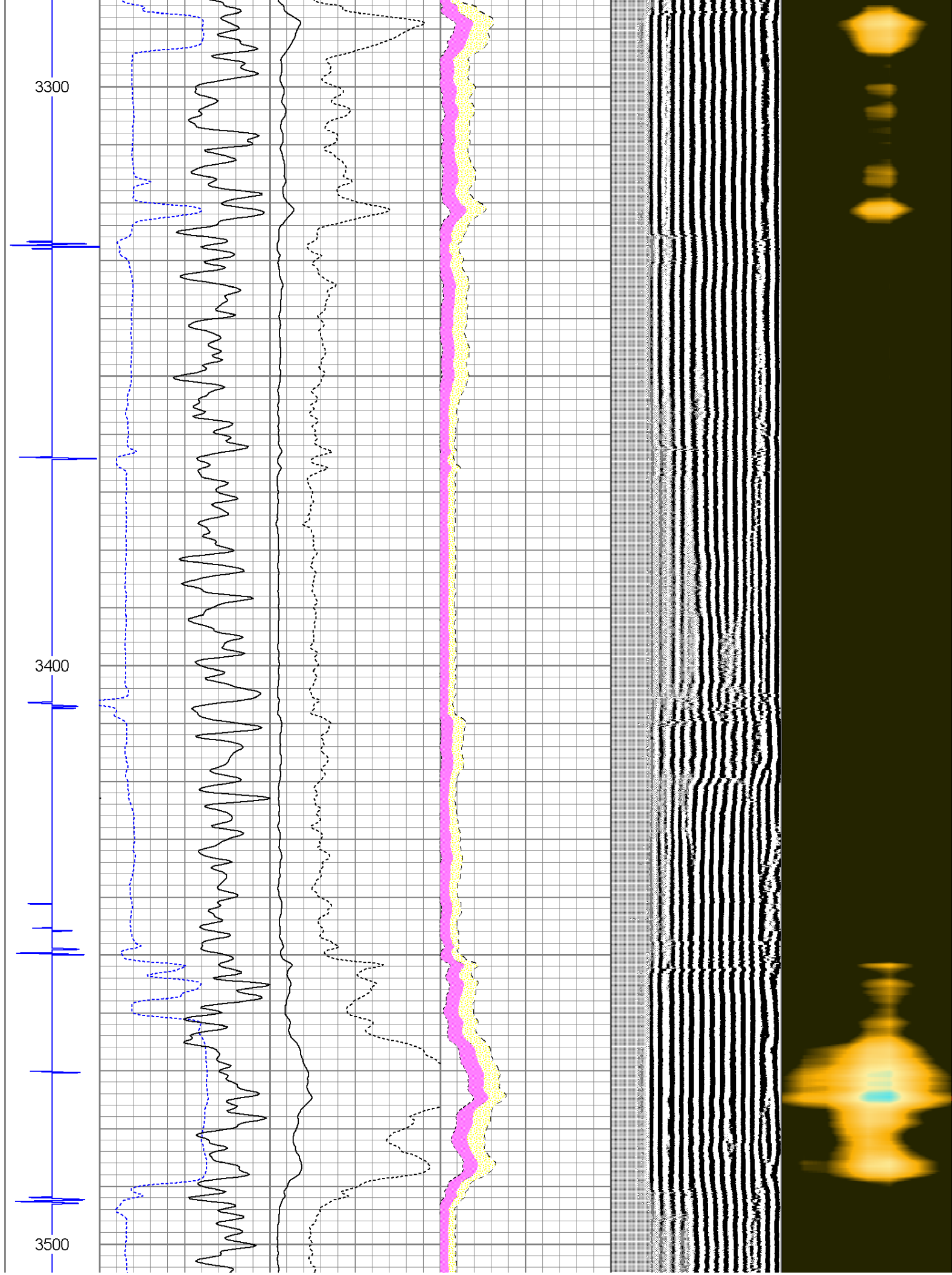


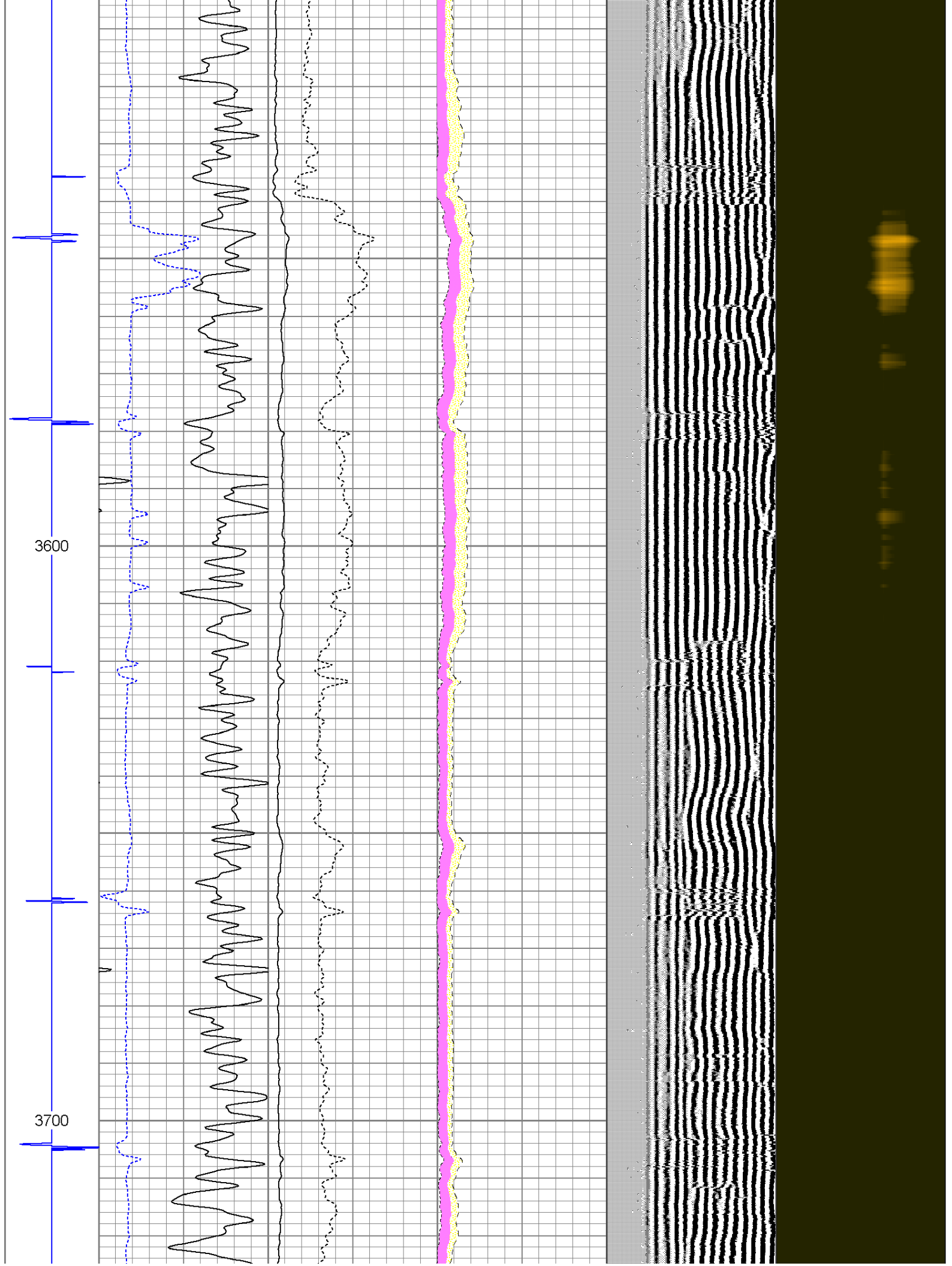


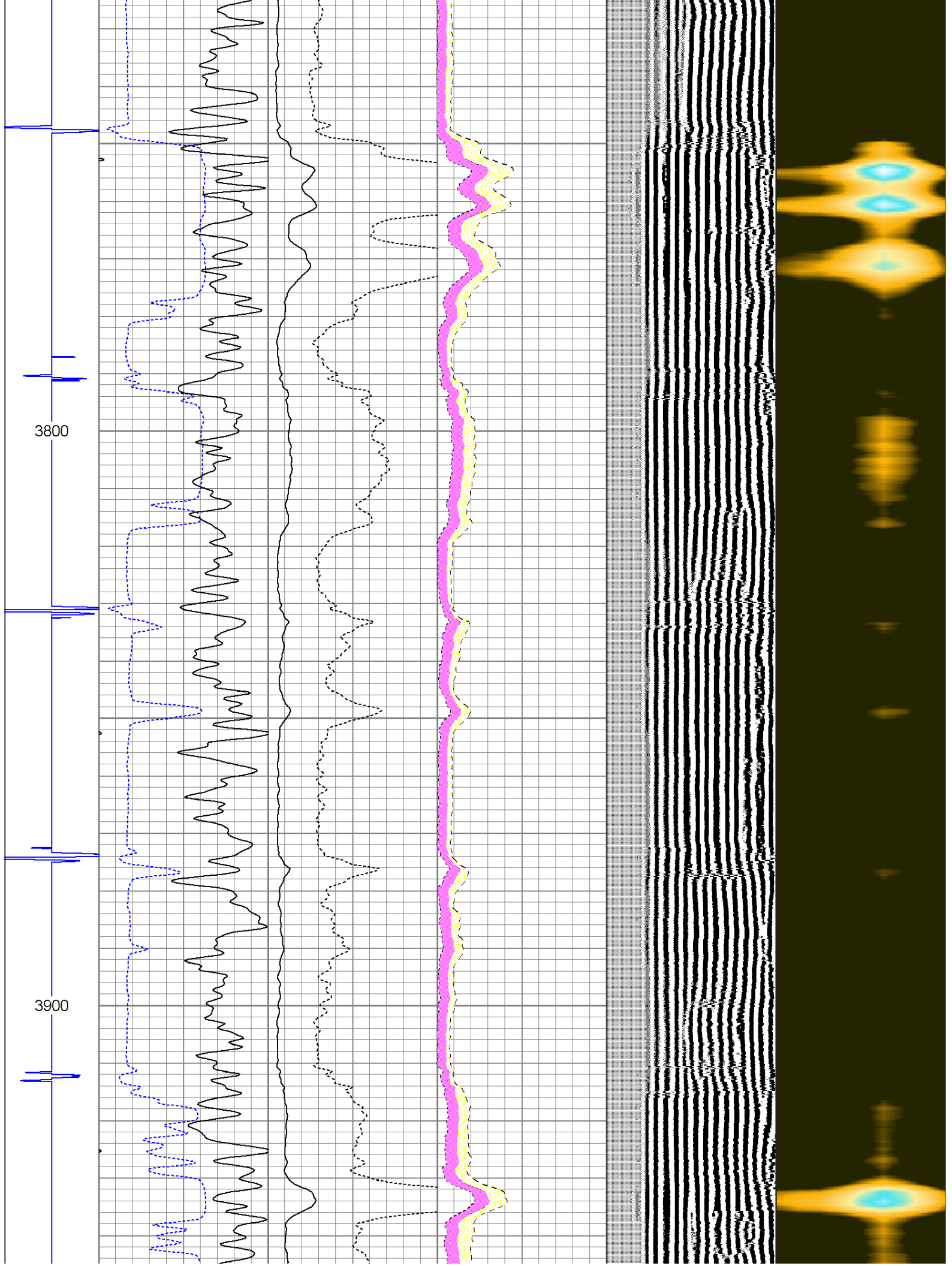


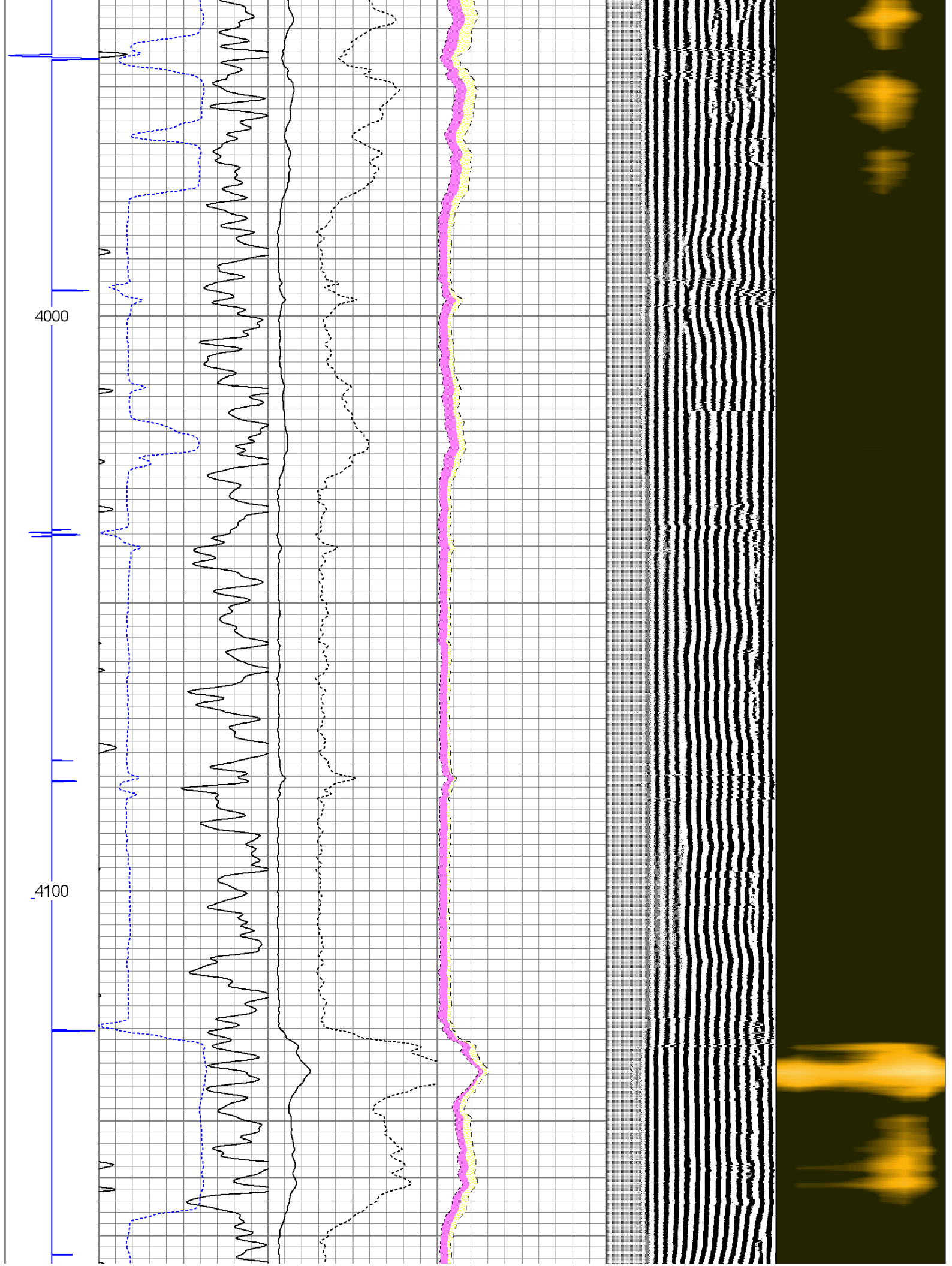


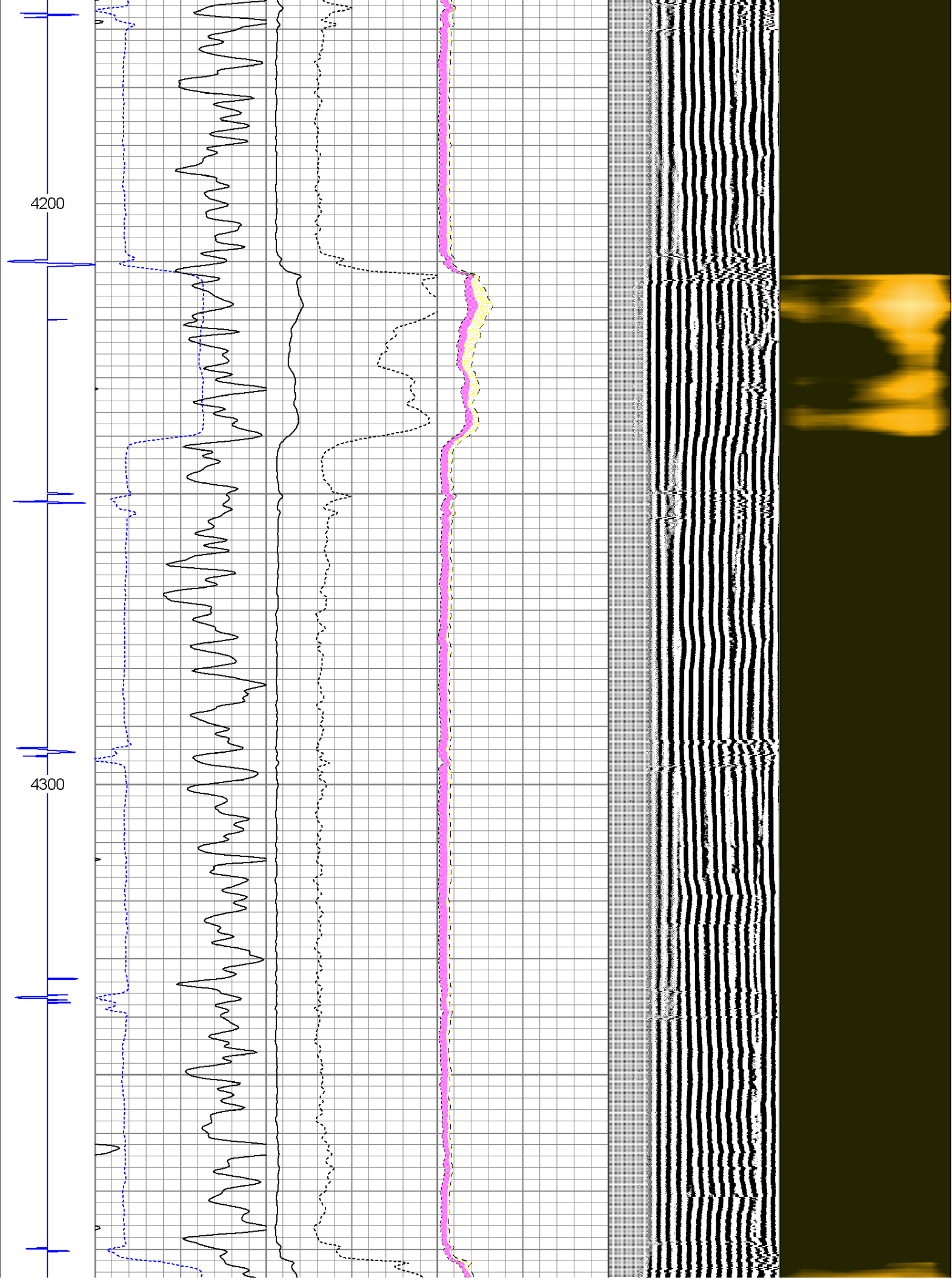








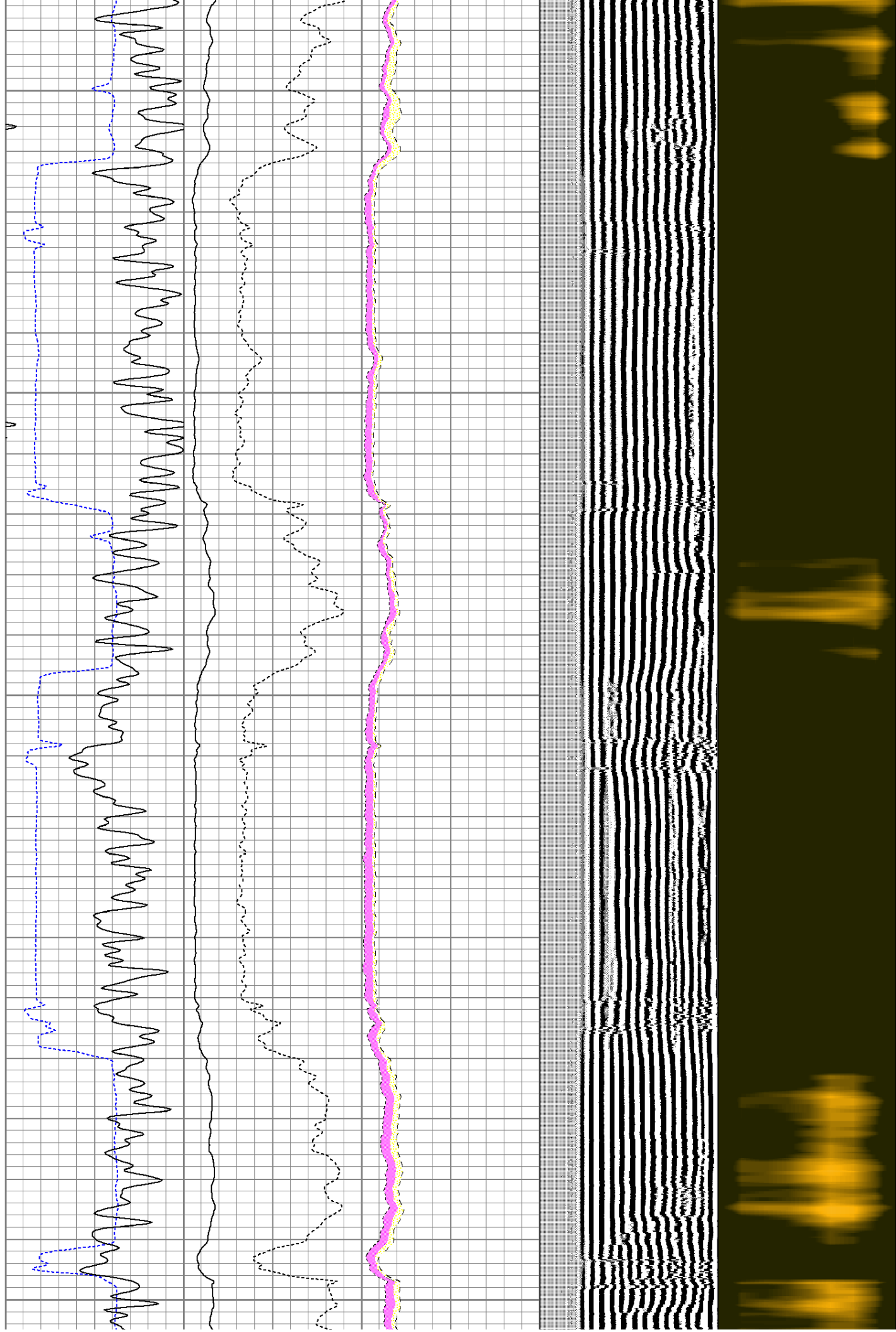


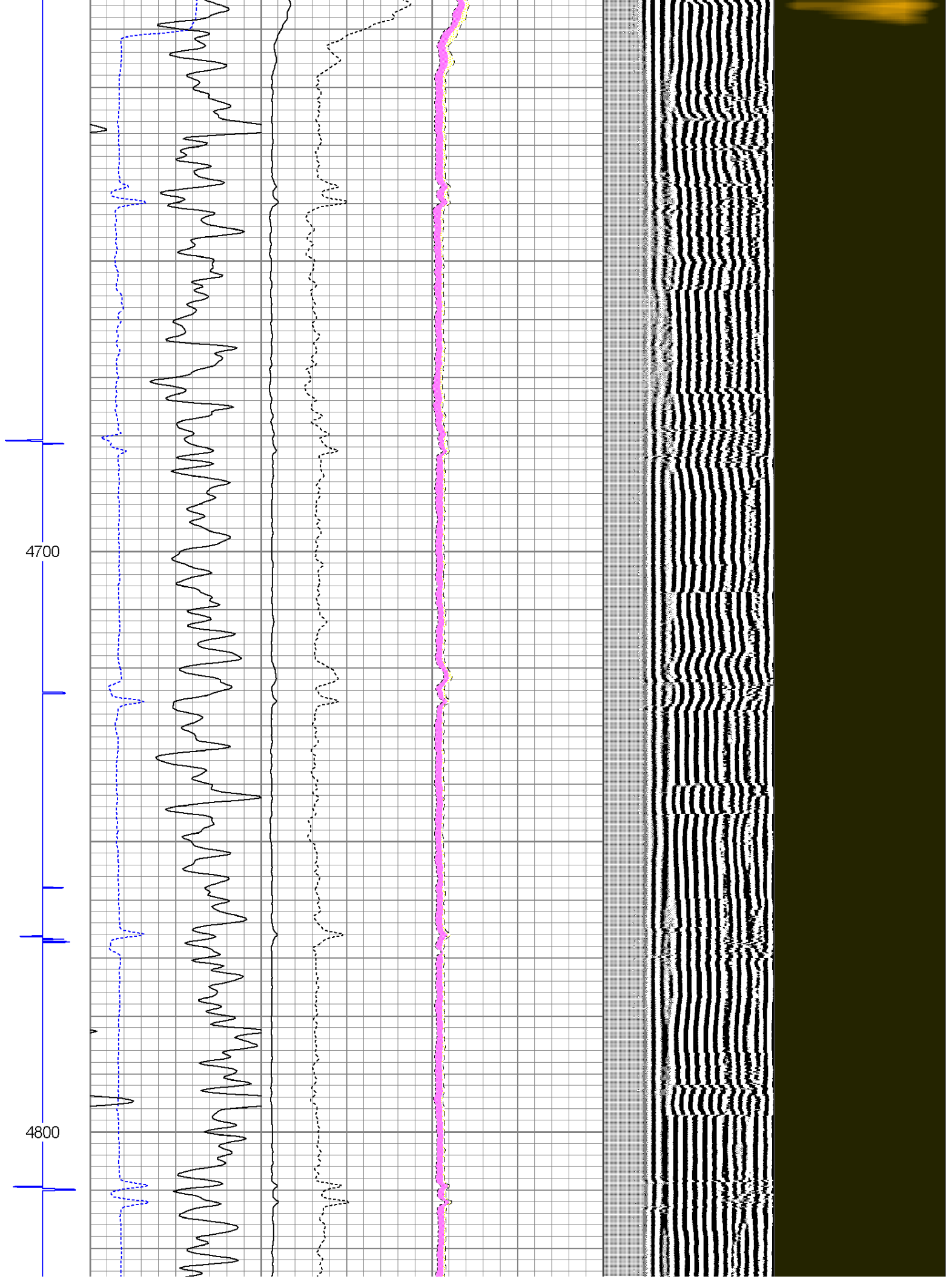


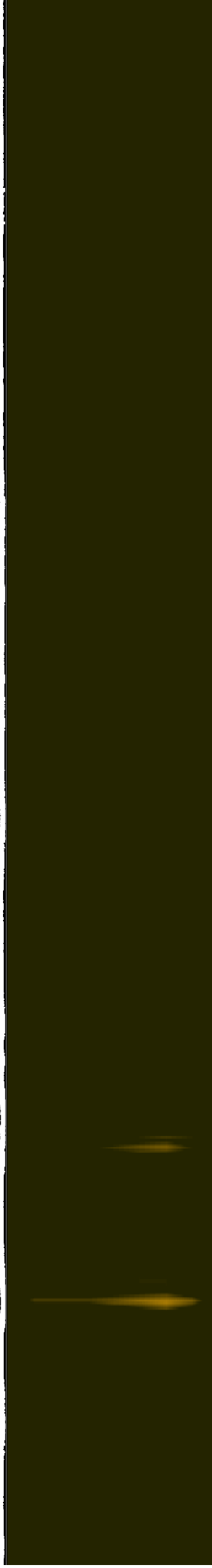
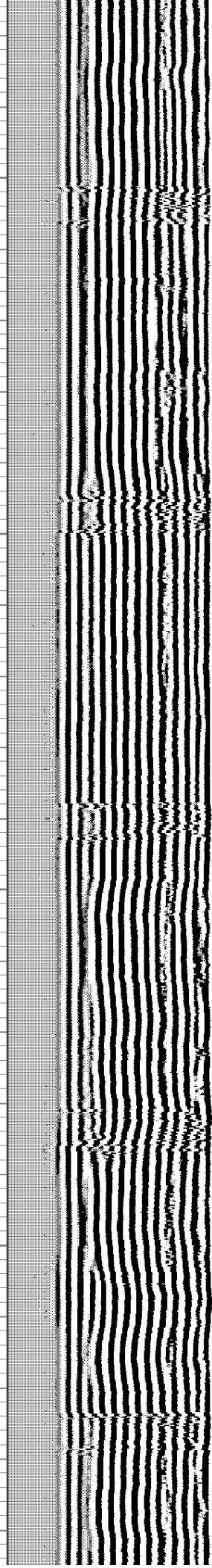
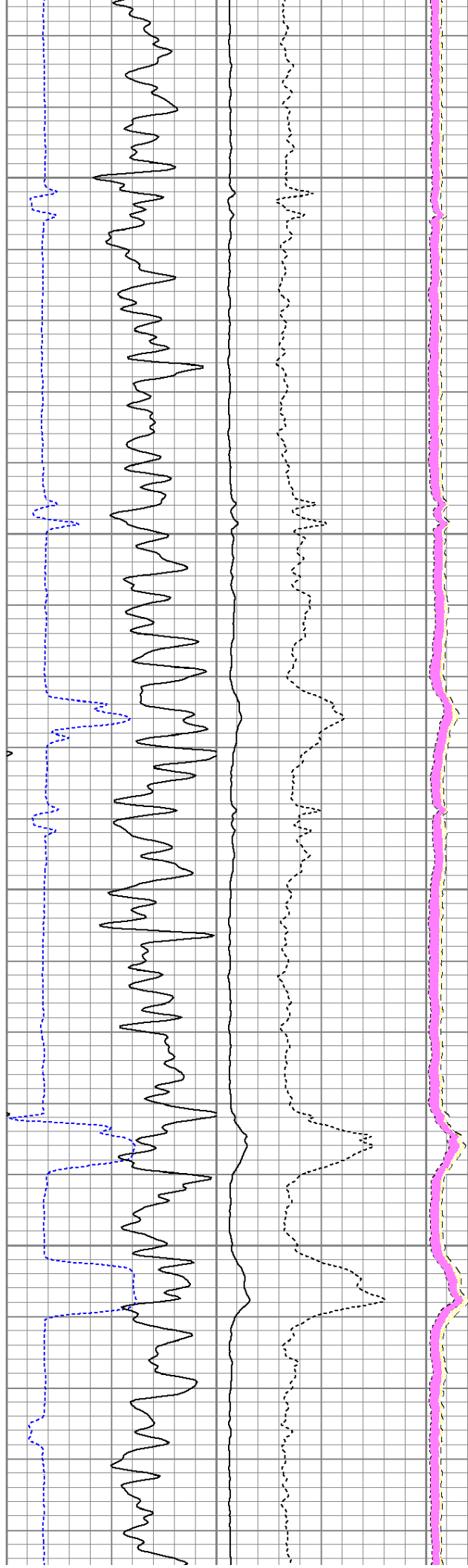
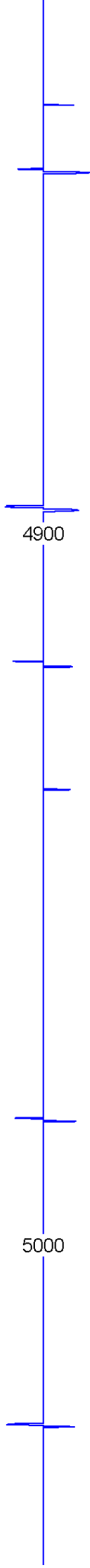
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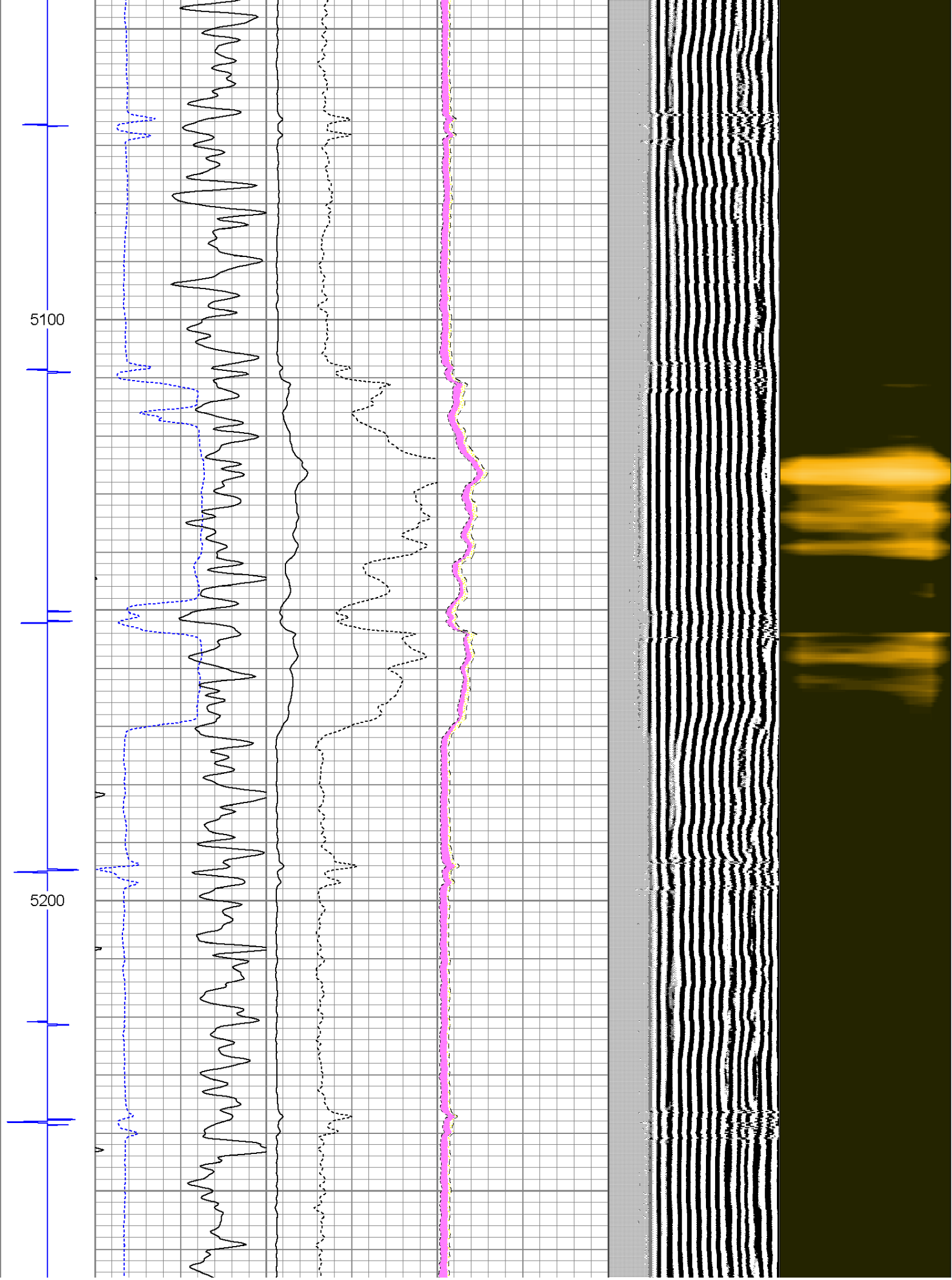
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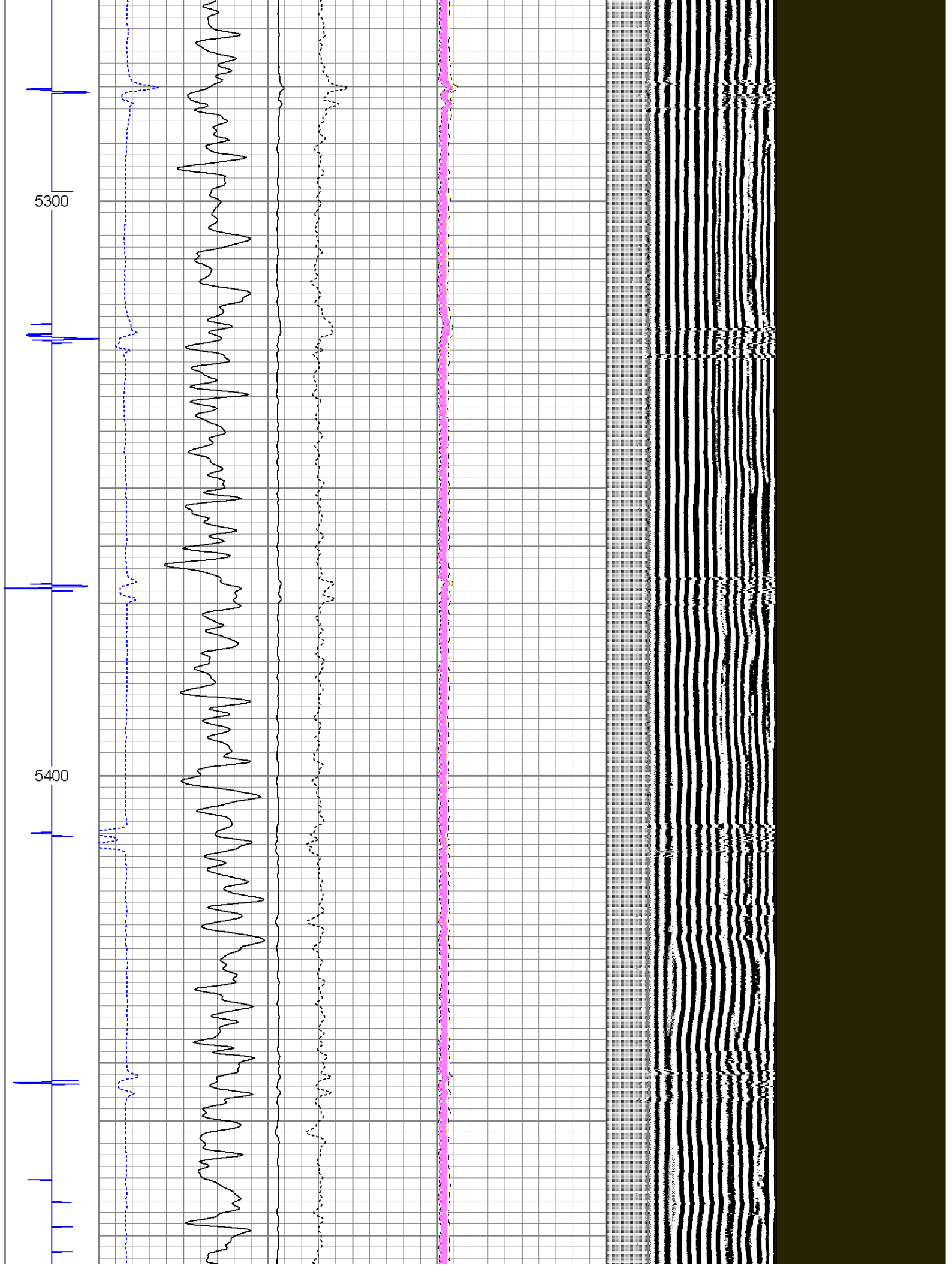
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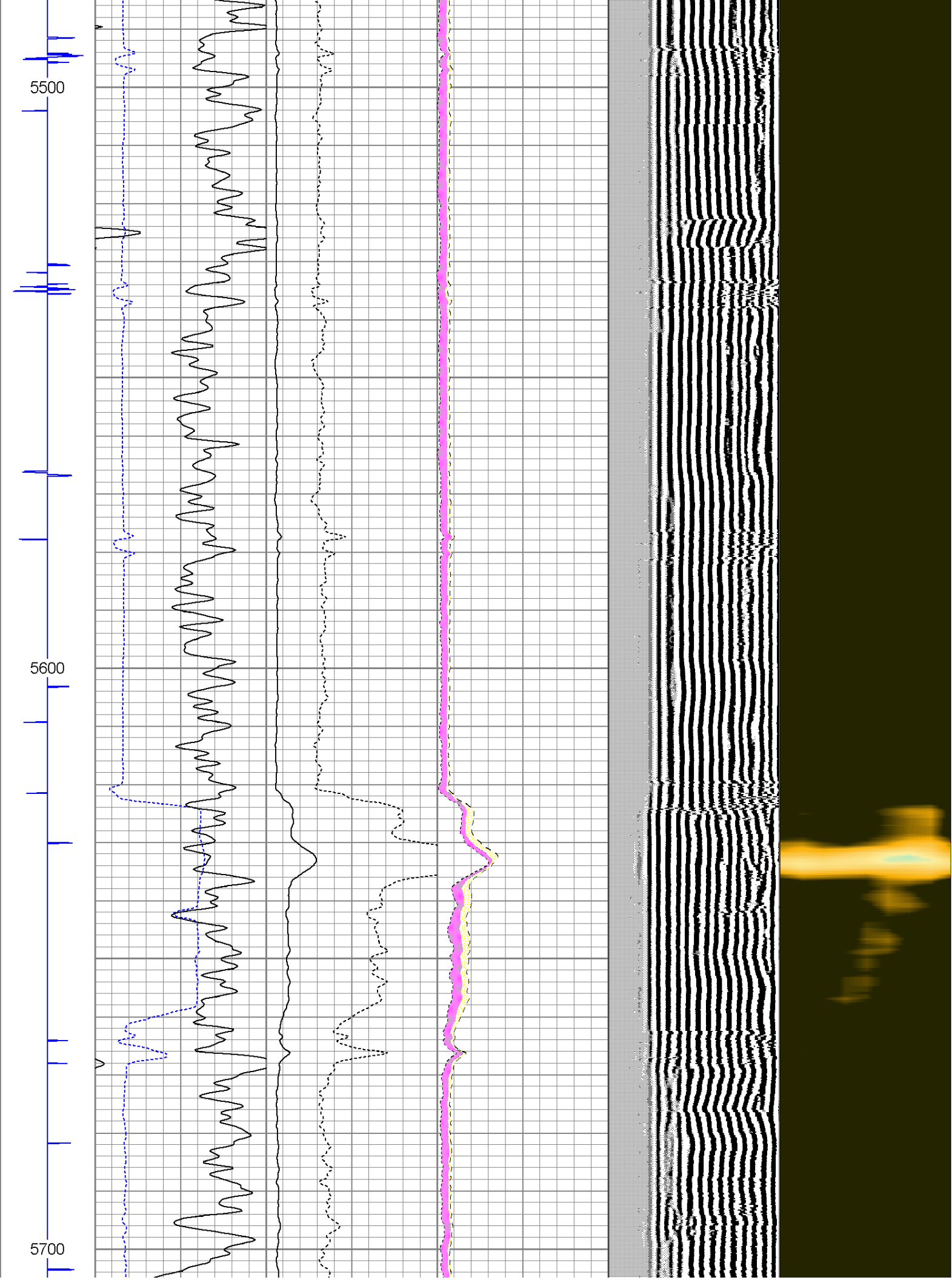


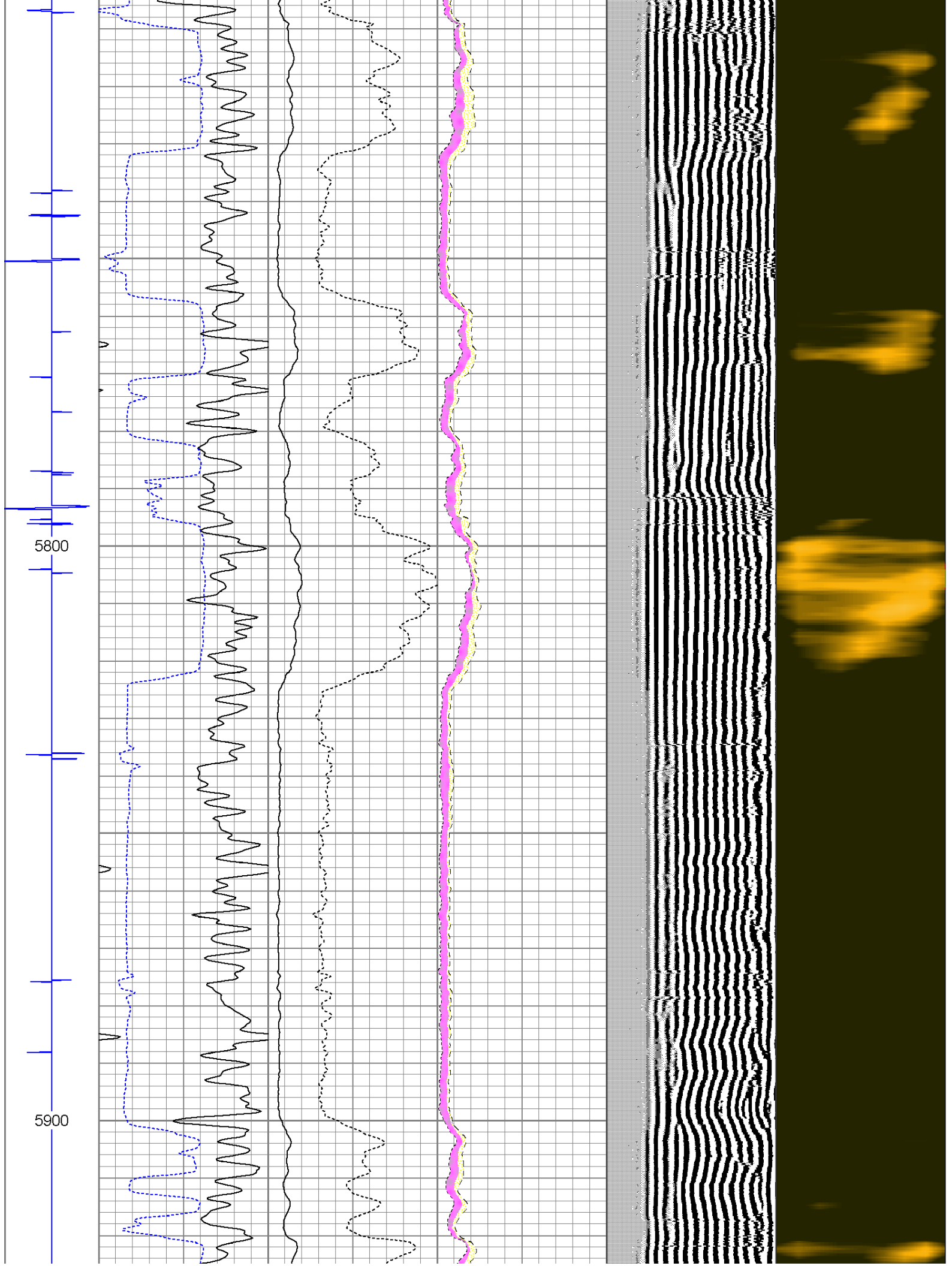


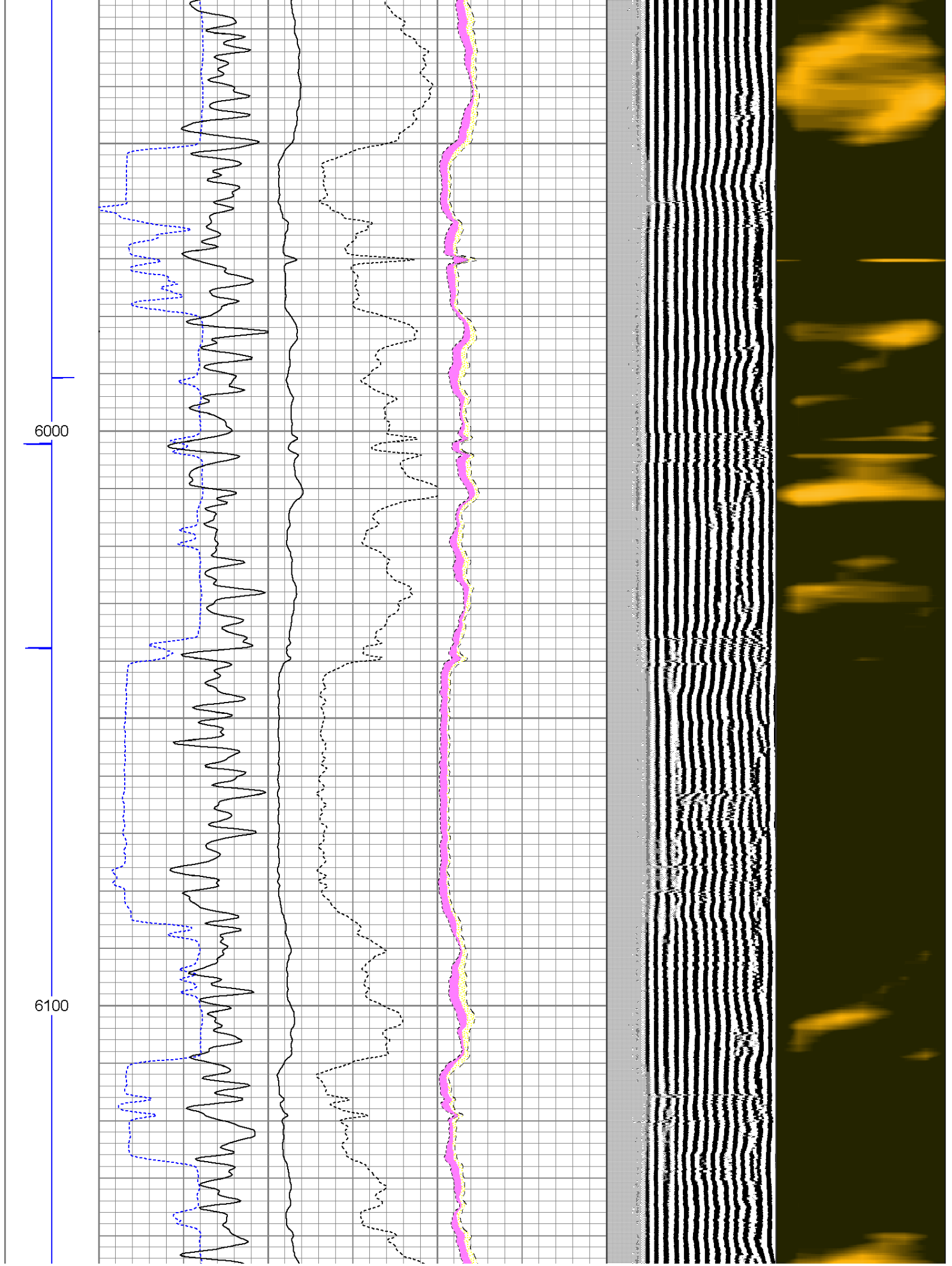






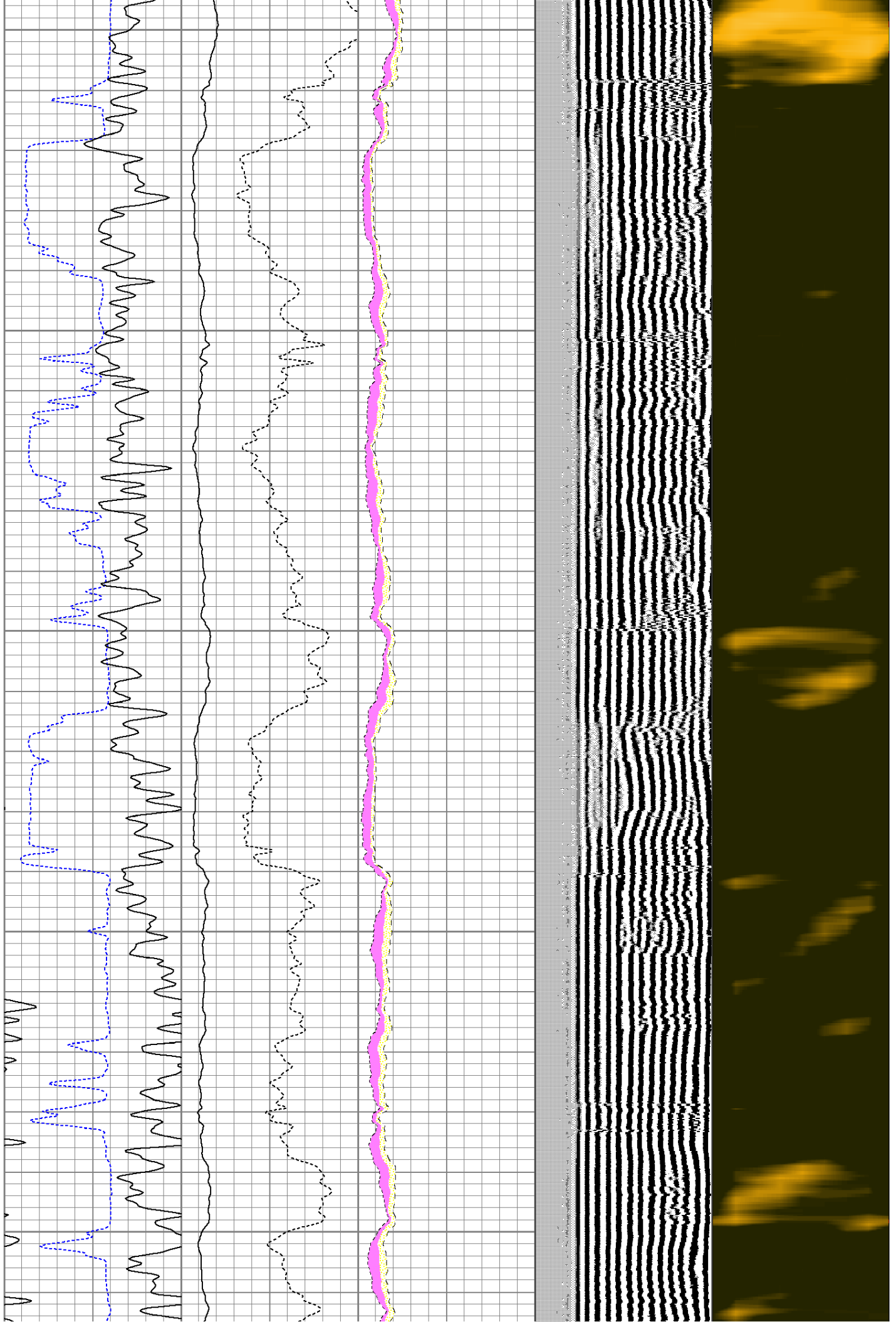


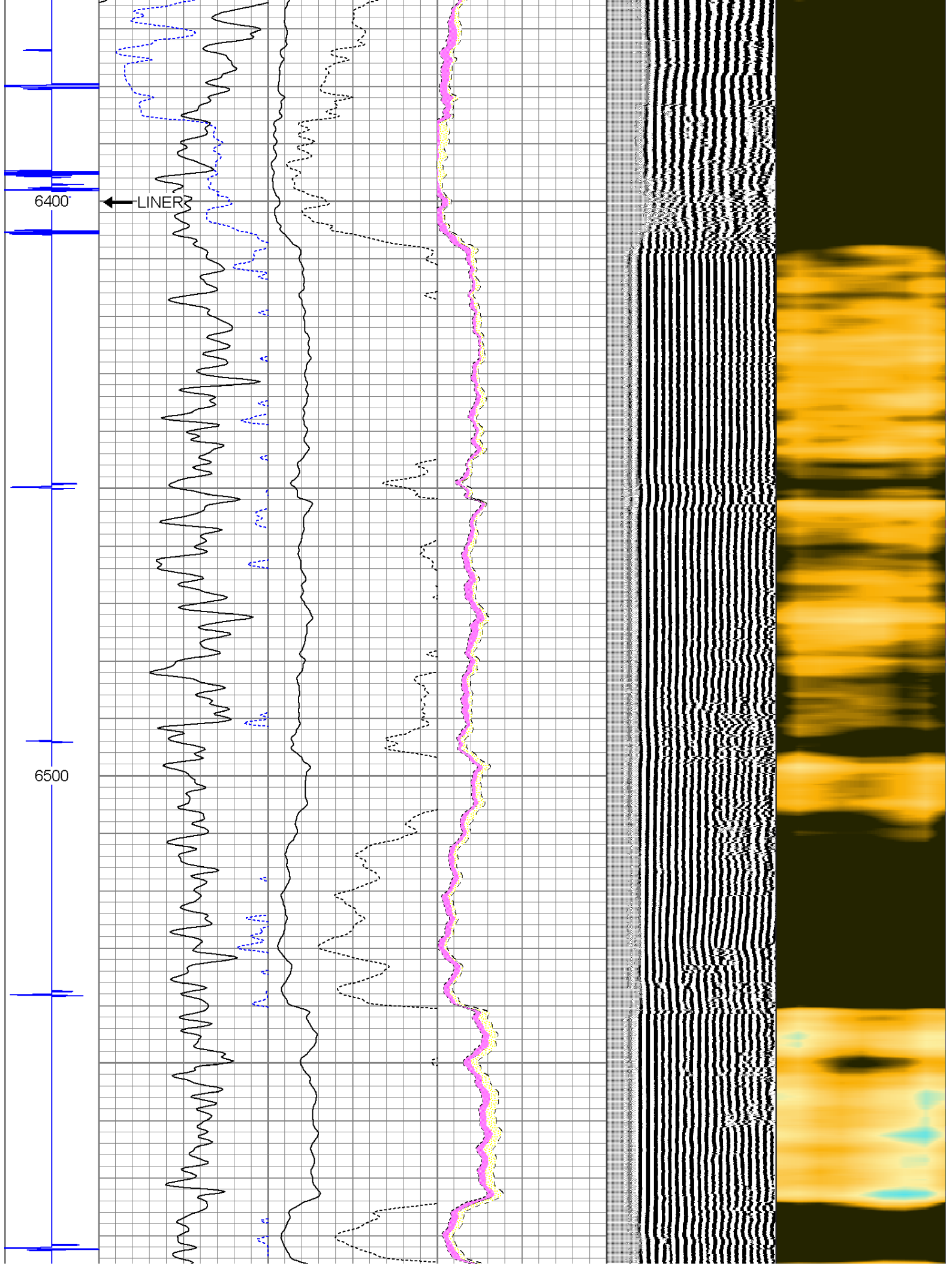


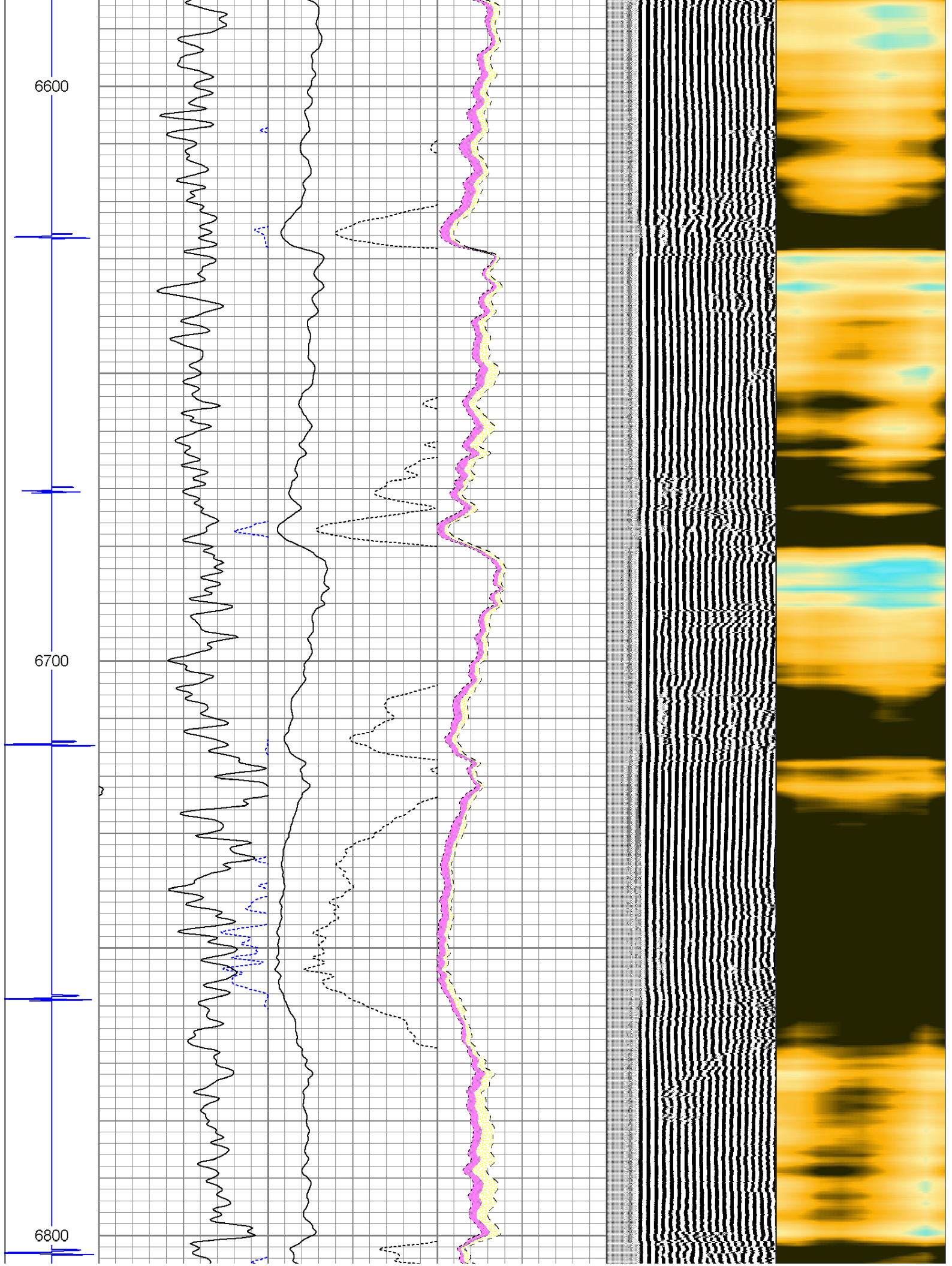


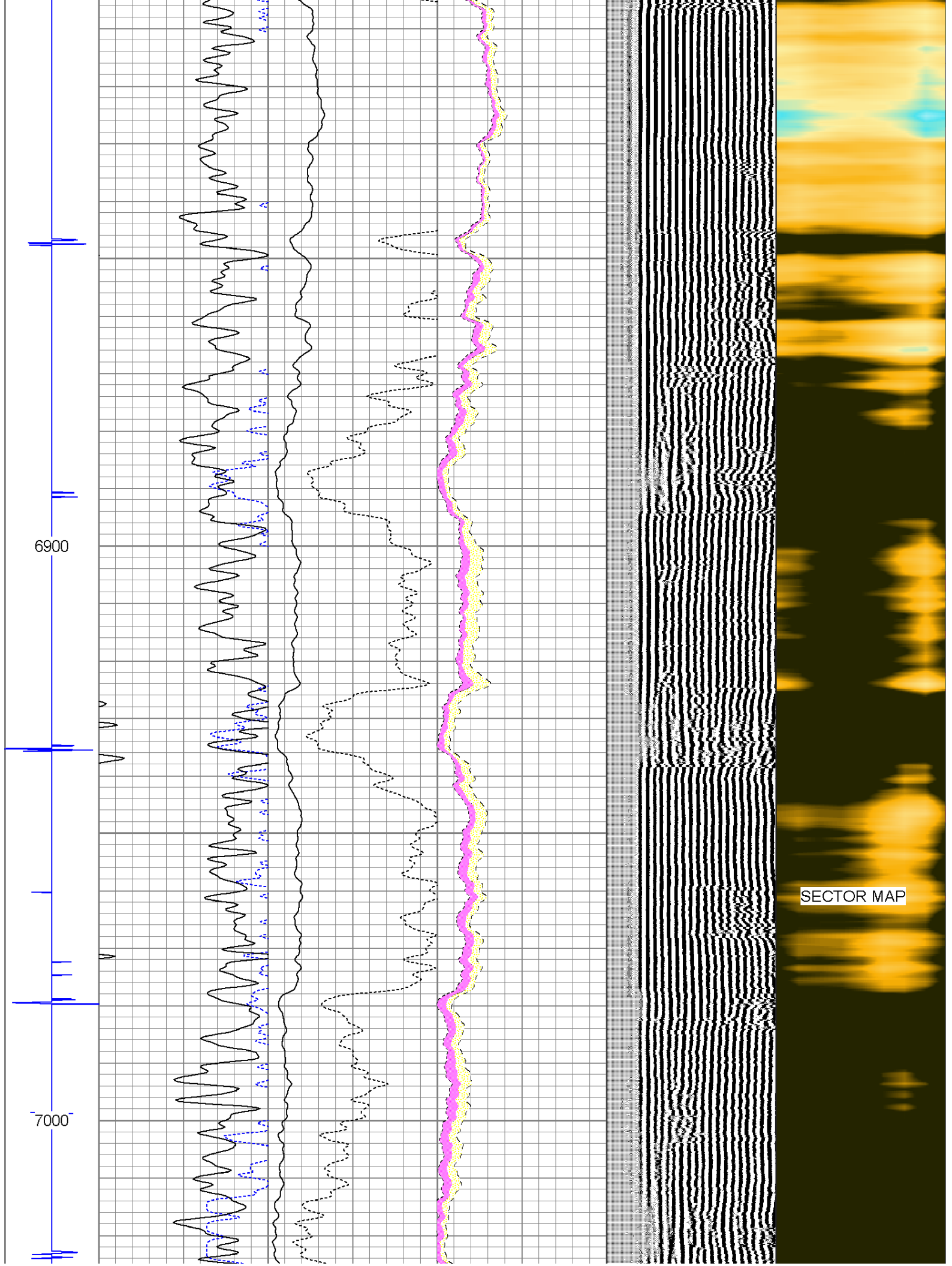
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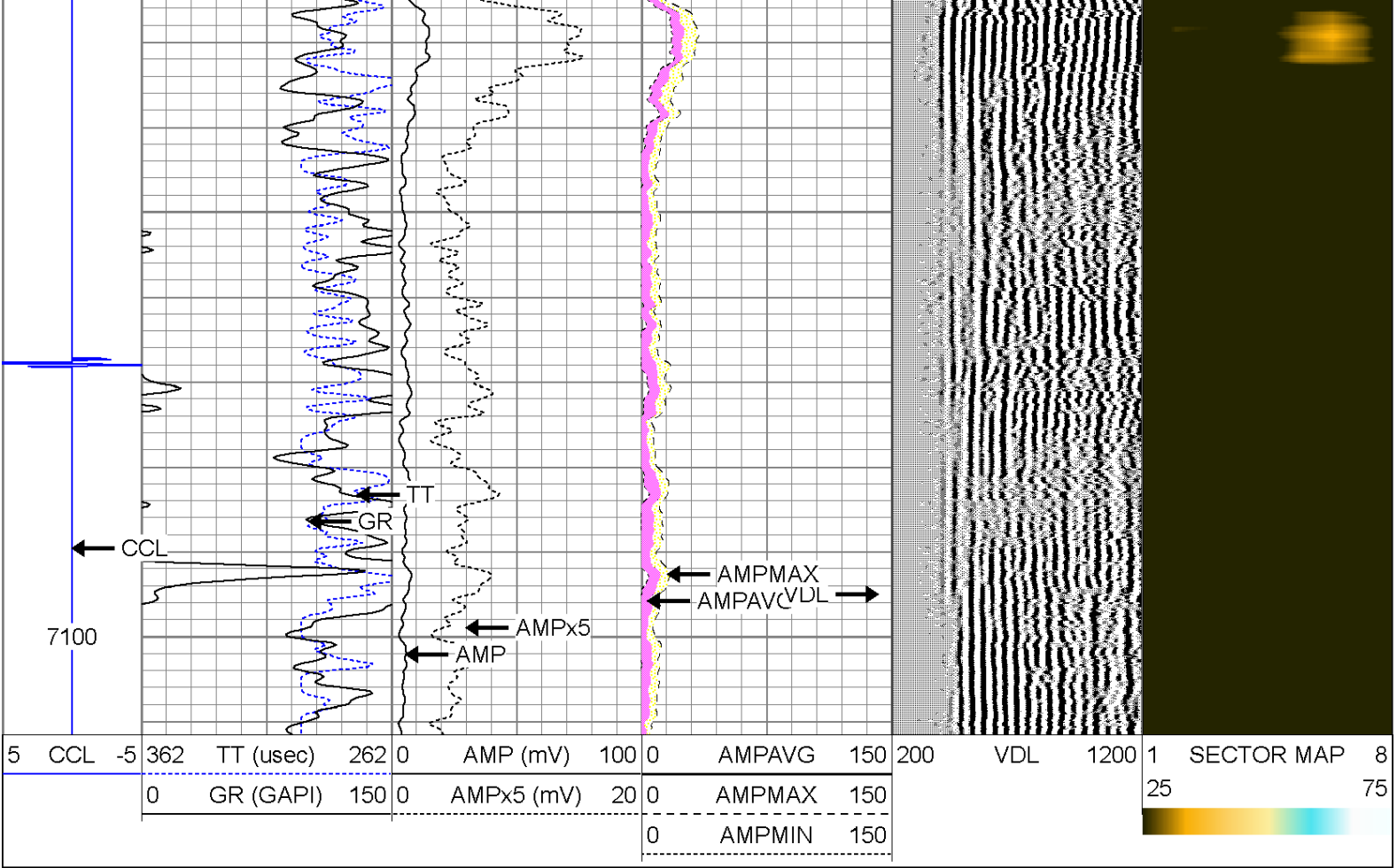








SECTOR MAP



Calibration Report		
Database File:	05123377740000_boyd_2n_32hz_rbl.db	
Dataset Pathname:	pass3	
Dataset Creation:	Sun Feb 23 10:45:57 2014 by Log 7.0 B1	
Gamma Ray Calibration Report		
Serial Number:	130608	
Tool Model:	GRCCLTEMP	
Performed:	Sun Jun 13 13:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps
Temperature Calibration Report		
Serial Number:	130608	
Tool Model:	GRCCLTEMP	
Performed:	Thu Aug 15 07:56:46 2013	
	Reference	Reading
Low Reference:	100.00 degF	6509.65cps
High Reference:	350.00 degF	27350.70ps
Gain:	0.01	
Offset:	21.91	
Delta Spacing	1	
Segmented Cement Bond Log Calibration Report		

Serial Number: 4.5040904
Tool Model: Probe

Calibration Casing Diameter: 7.000 in
Calibration Depth: 209.875 ft

Master Calibration, performed Sun Feb 23 10:14:28 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.020	2.336	1.000	62.165	26.409	0.480
CAL	0.007	2.499				
5'	0.013	0.023	1.000	62.165	6224.404	-82.428
SUM						
S1	0.152	2.230	0.000	100.000	48.113	-7.300
S2	0.011	2.345	0.000	100.000	42.843	-0.459
S3	0.011	2.437	0.000	100.000	41.221	-0.459
S4	0.014	2.479	0.000	100.000	40.582	-0.586
S5	0.017	2.456	0.000	100.000	41.004	-0.712
S6	0.019	2.383	0.000	100.000	42.314	-0.815
S7	0.021	2.294	0.000	100.000	43.988	-0.925
S8	0.022	2.215	0.000	100.000	45.600	-1.013

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	0.007	2.499	1.000	0.000

Air Zero Calibration, performed Thu Feb 23 11:04:07 2012:

	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	