



File No:

**Company
Well
Field
County**

COLORADO

Other Services	
GAMMA RAY/NEUTRON	
MICROVERT	
Elevations	
KB N/A	
DF N/A	
GL 5203 ft	

- FOLD HERE

In making interpretations of logs, our employees will give the customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Casing Record				
Size	Weight	Grade	From	To
8.625 in	24 lbm/ft	J55	0 ft	1155 ft
5.5 in	15.5 lbm/ft	K55	0 ft	7479 ft

LOG CORRELATED TO COMPUTER PROCESSED LOG
TOP OF CEMENT NOT RECORDED DUE TO LOSS OF ACOUSTIC COUPLING.
LOG RECORDED AS PER CUSTOMER REQUEST.

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CCL	2346XA	SBT CCL	CENTRALIZED
1	1	GAMMA RAY	1339XA	10216912	CENTRALIZED
1	1	SBT	1424XA	119552	CENTRALIZED
1	1	VDL	1424PA	121855	CENTRALIZED

MAIN PASS
2548 PSI COMPRESSIVE STRENGTH

SBT NORMALIZATION RESULTS

CURVE	PARAMETER	VALUE	UNITS	TOP	BOTTOM	COMMENT
ATC1	seg1 cnormf1	-0.709	db/ft	-1.750	7445.000	
ATC2	seg2 cnormf2	-0.385	db/ft	-1.750	7445.000	
ATC3	seg3 cnormf3	2.156	db/ft	-1.750	7445.000	
ATC4	seg4 cnormf4	0.107	db/ft	-1.750	7445.000	
ATC5	seg5 cnormf5	0.652	db/ft	-1.750	7445.000	
ATC6	seg6 cnormf6	-1.820	db/ft	-1.750	7445.000	
ATC1	seg1 dnormf1	-0.223	db/ft	-1.750	7445.000	Good Confidence
ATC2	seg2 dnormf2	-0.664	db/ft	-1.750	7445.000	Good Confidence
ATC3	seg3 dnormf3	1.795	db/ft	-1.750	7445.000	Good Confidence
ATC4	seg4 dnormf4	0.187	db/ft	-1.750	7445.000	Good Confidence
ATC5	seg5 dnormf5	0.546	db/ft	-1.750	7445.000	Good Confidence
ATC6	seg6 dnormf6	-1.641	db/ft	-1.750	7445.000	Good Confidence

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	80.344	mv	-12.750	7445.500
amp	fpattn	0.577	dB/ft	-12.750	7445.500
atc	dbspread	4.749	dB/ft	-12.750	7445.500
atc	spacing	0.632	feet	-12.750	7445.500
cemr	casing od	5.500	inches	-12.750	7445.500
cemr	casing wt	15.500	lbm/ft	-12.750	7445.500
cemr	compress	2548.000	psi	-12.750	7445.500
CN	Bit Size	7.875	inches	-1.750	7445.000
CN	Casing Thickness	0.274	inches	-12.750	7445.500
CN	Casing/Cement Correction	No	.	-1.750	7445.000
CN	CN Chism	No		-1.750	7445.000
CN	Matrix	Limestone		-1.750	7445.000
CN	Salinity	0.000	ppm	-1.750	7445.000

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-35.500	CCL					
2435XA	-30.250	LSN					
2435XA	-29.750	NEU	SSN				
1309XA	-29.500	GR					
1424XA	-11.000	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMX	AMAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
1424PA	0.000	CHV	CYQ	SIG			

Created by : SBT, v5.0.003

Plotted by : PlotMgr, v5.4.504

Company : COLORADO INTERSTATE GAS

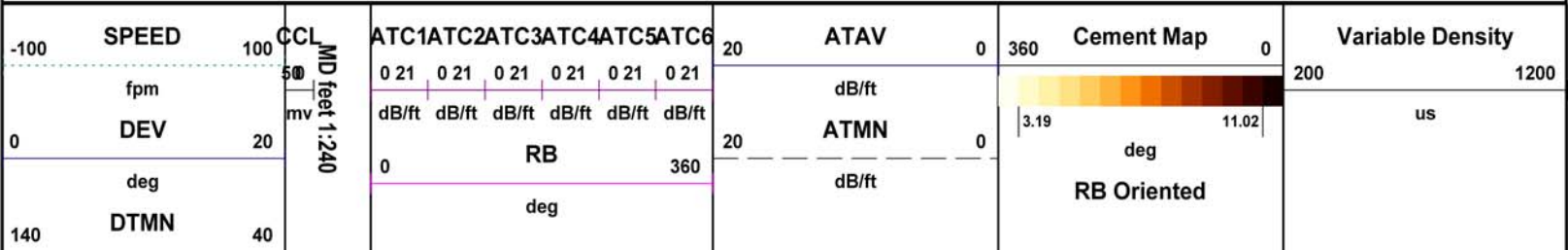
Well : TOTEM SWD 1

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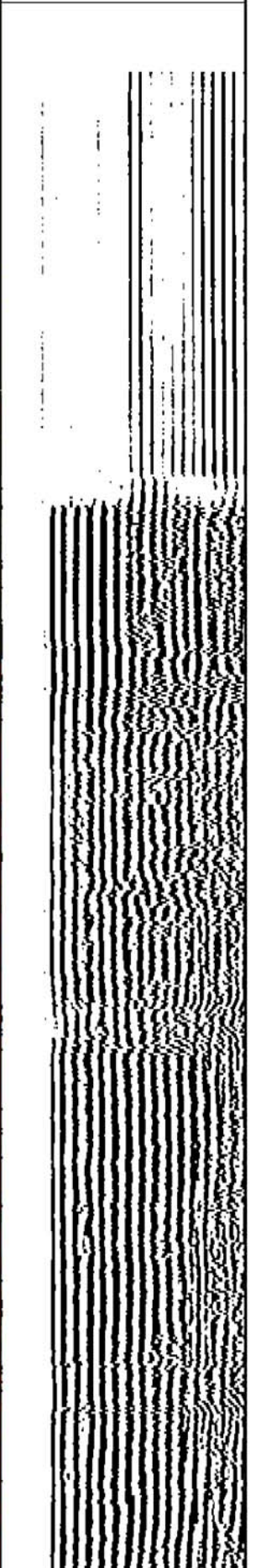
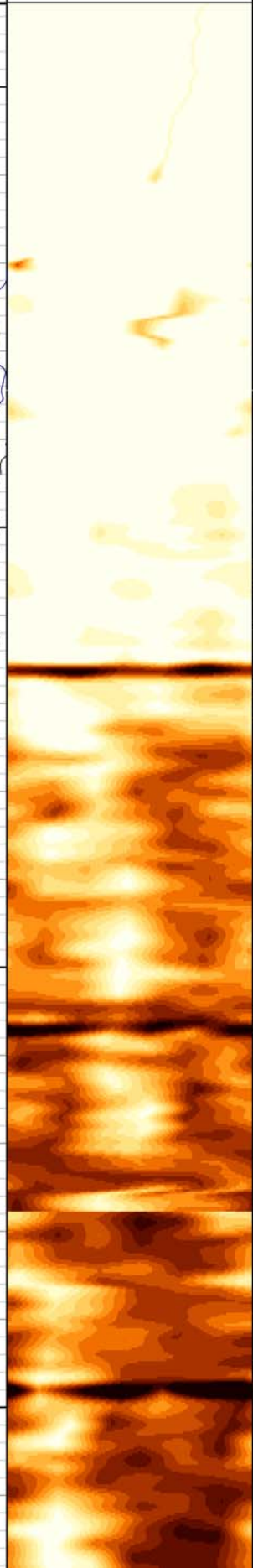
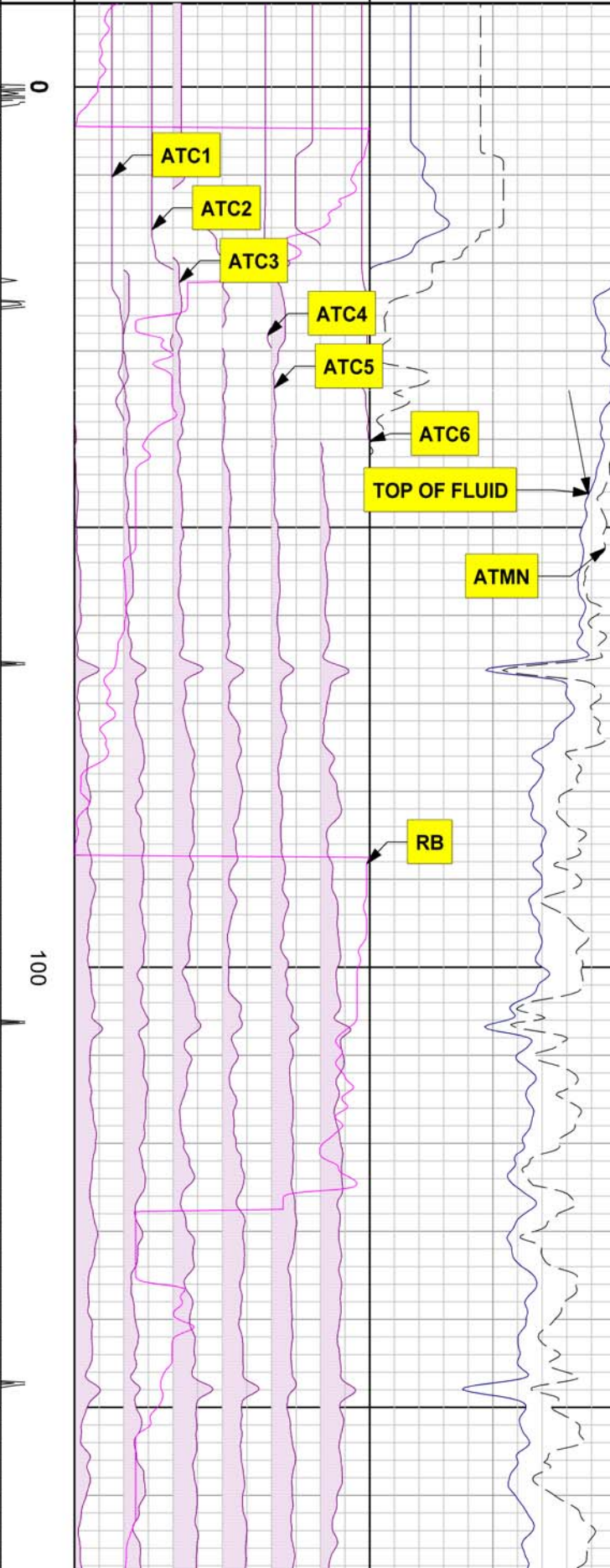
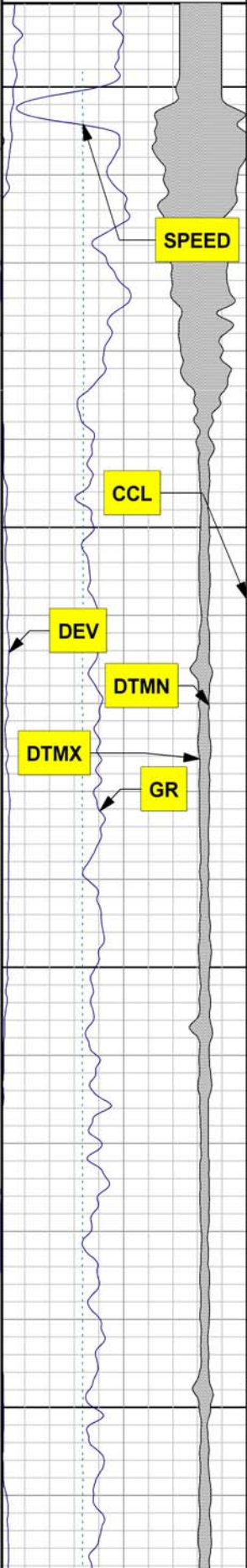
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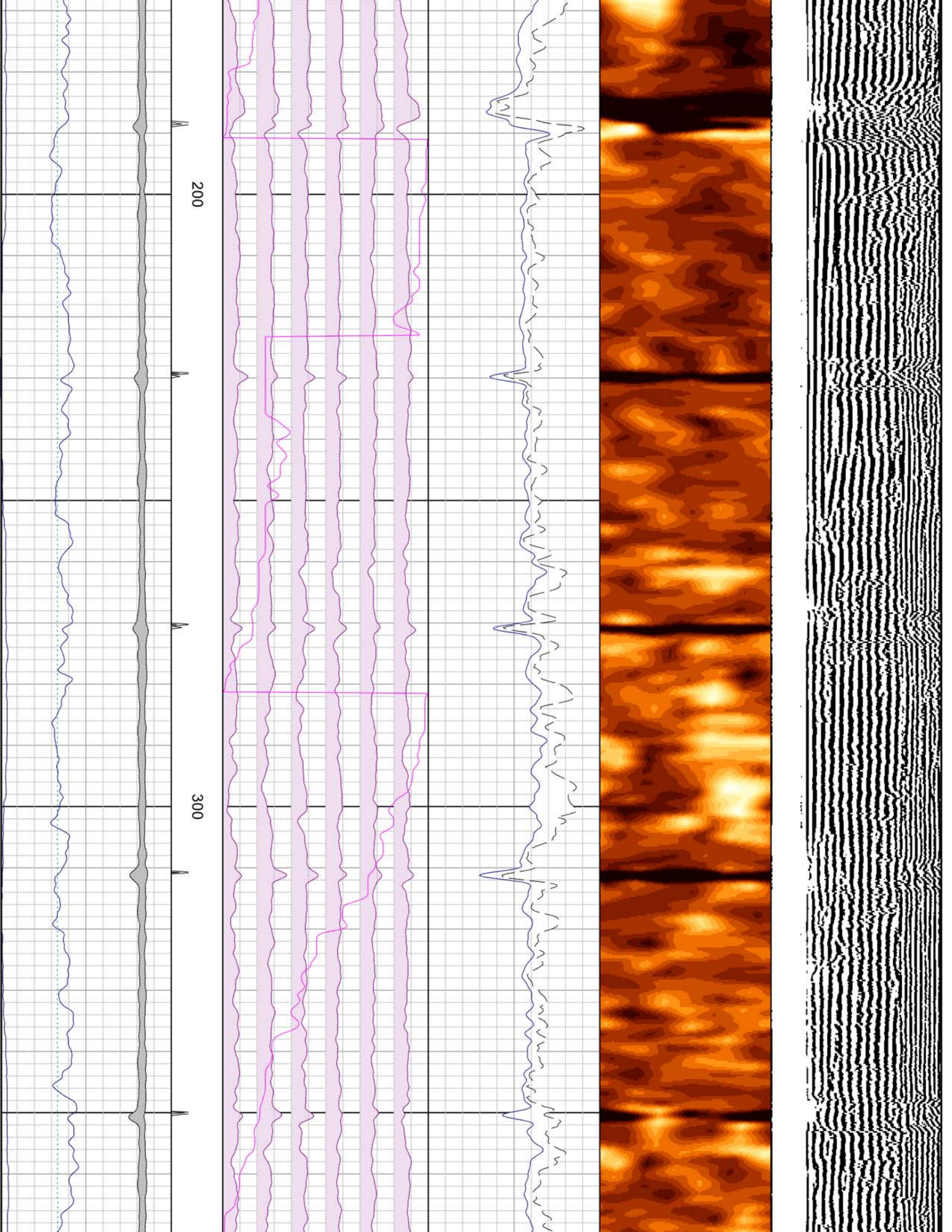
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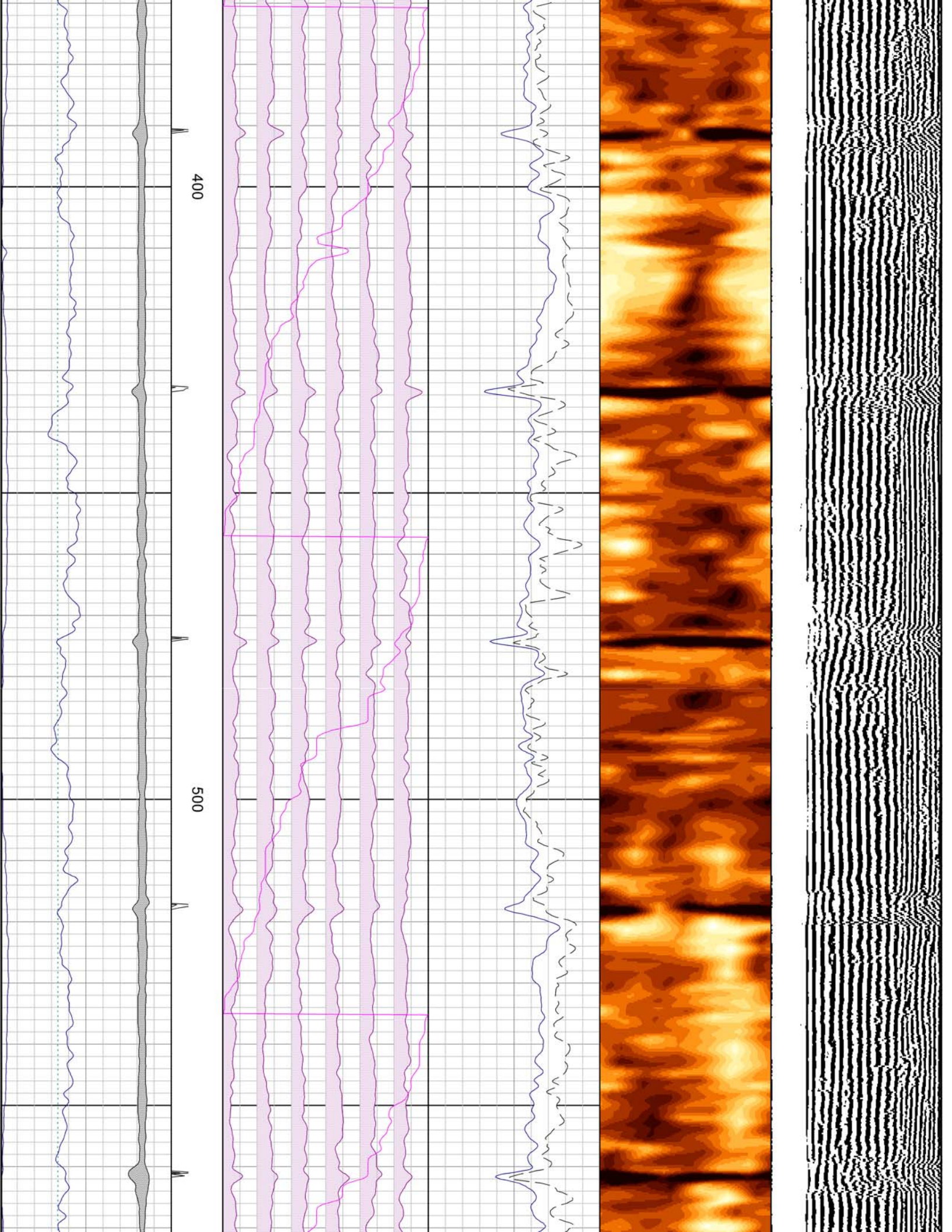
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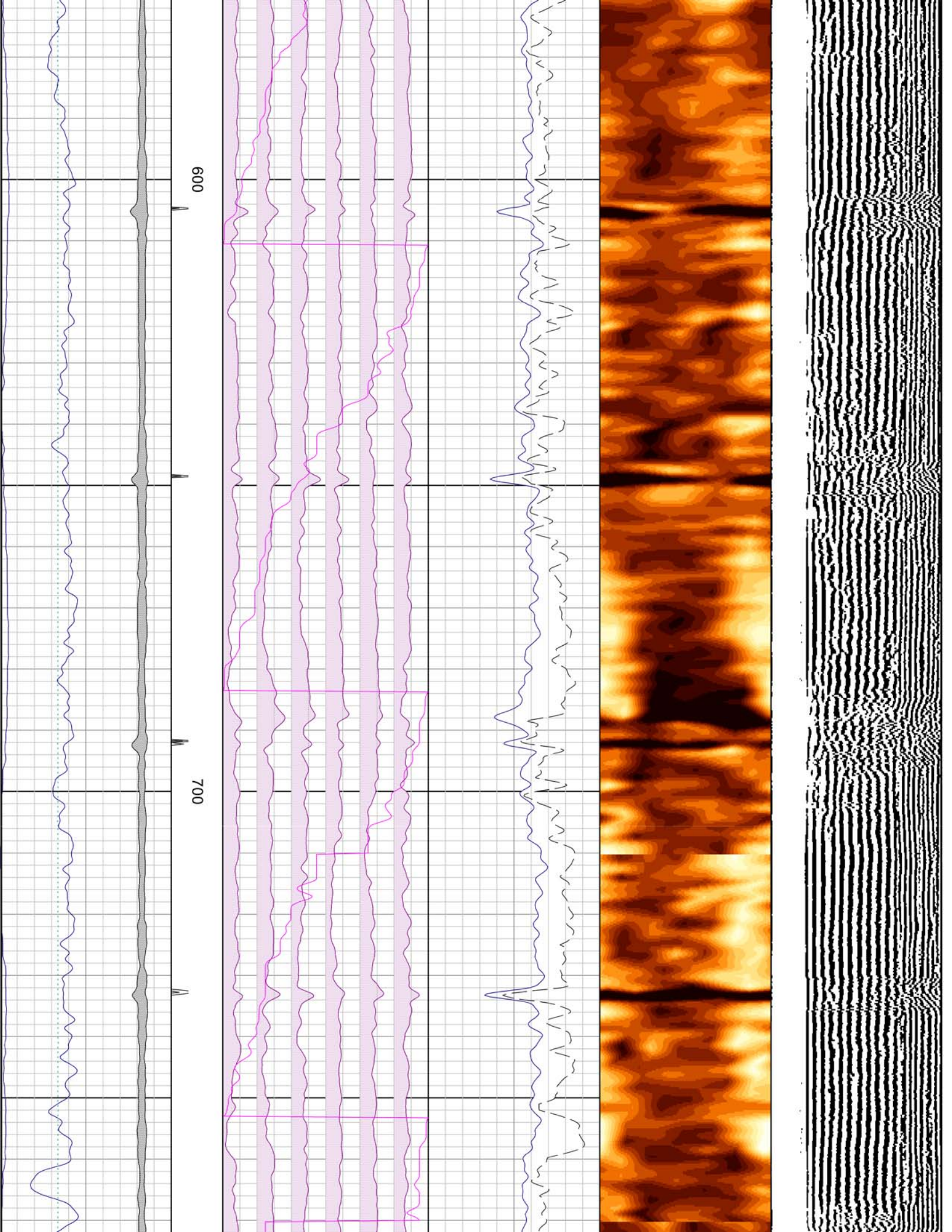


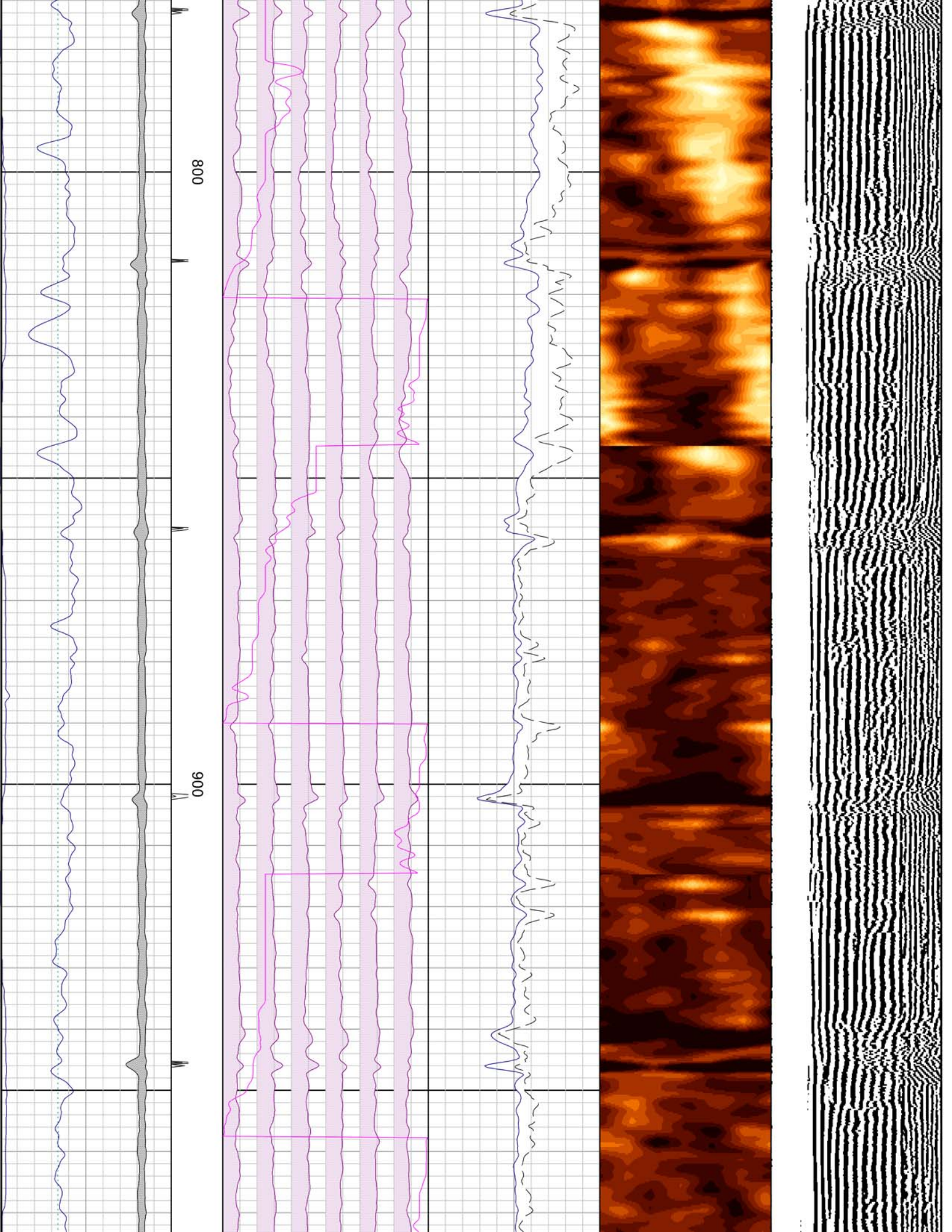
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usec/ft		
0	GR	150
gAPI		

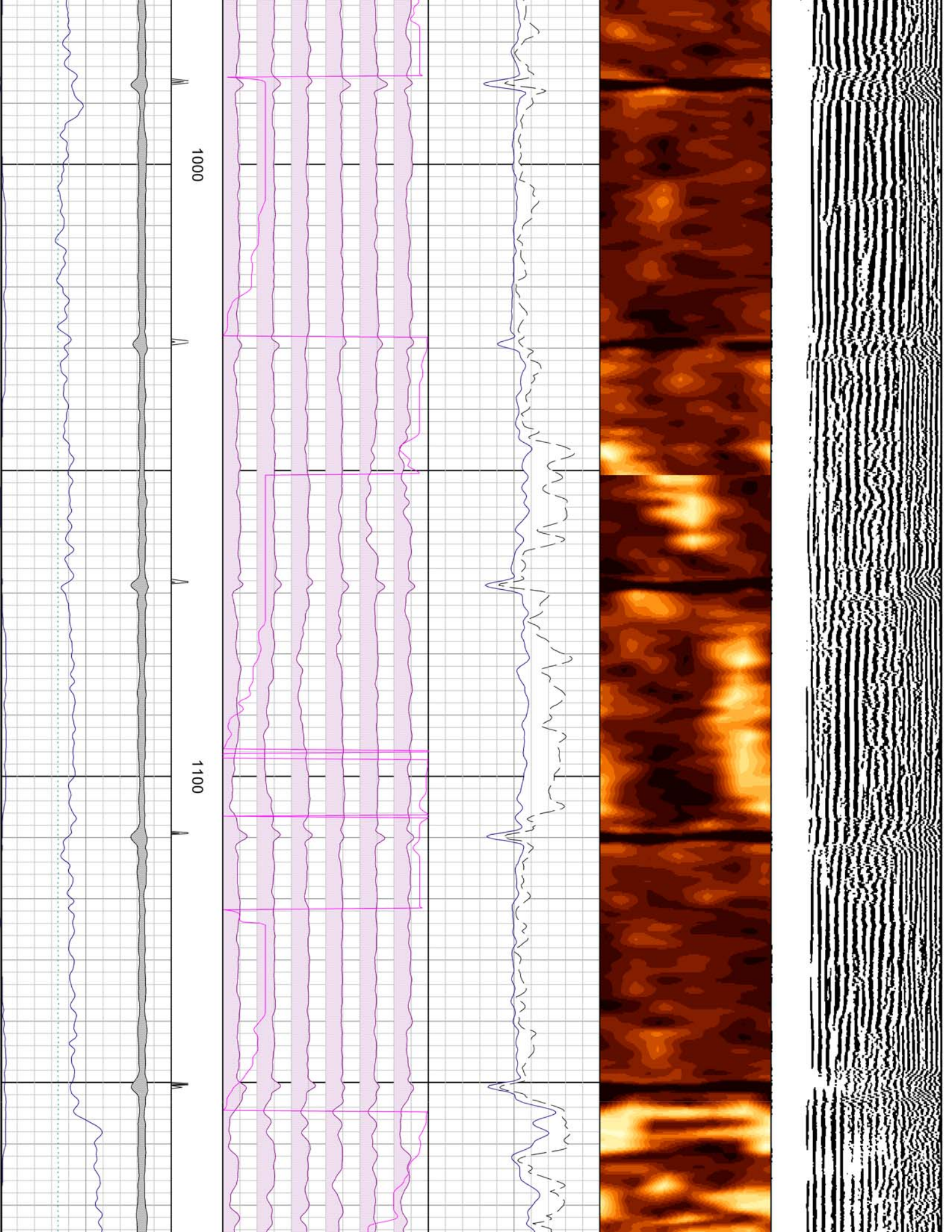


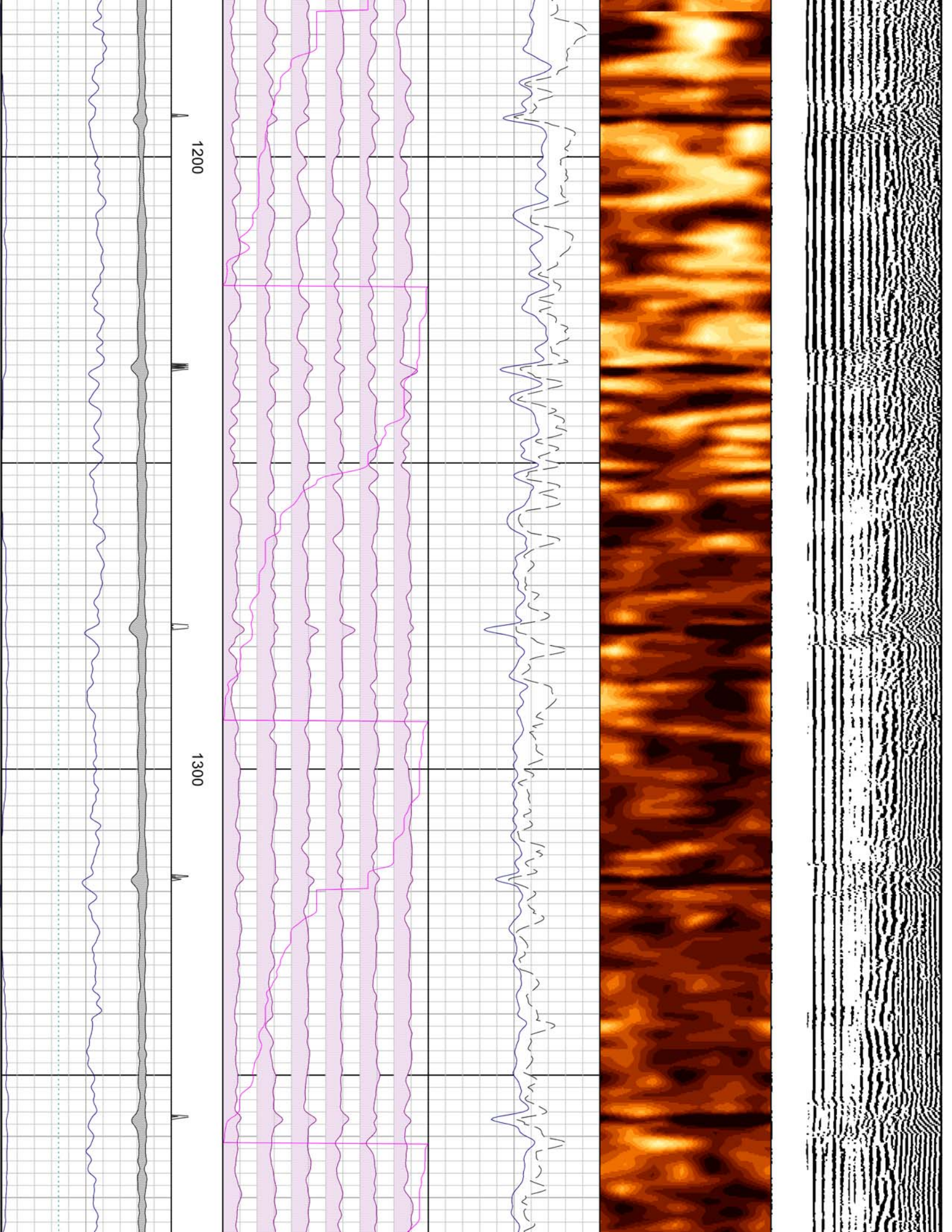


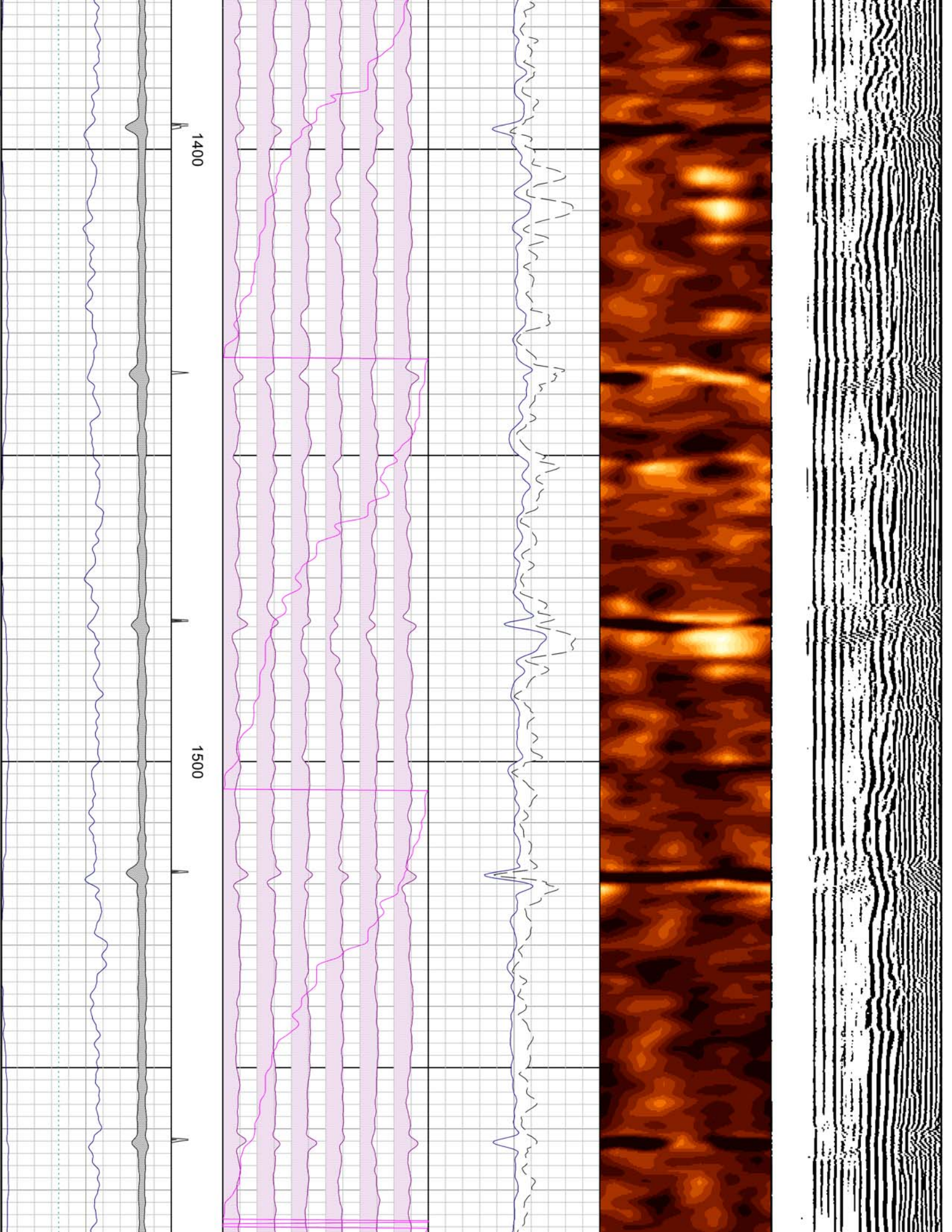


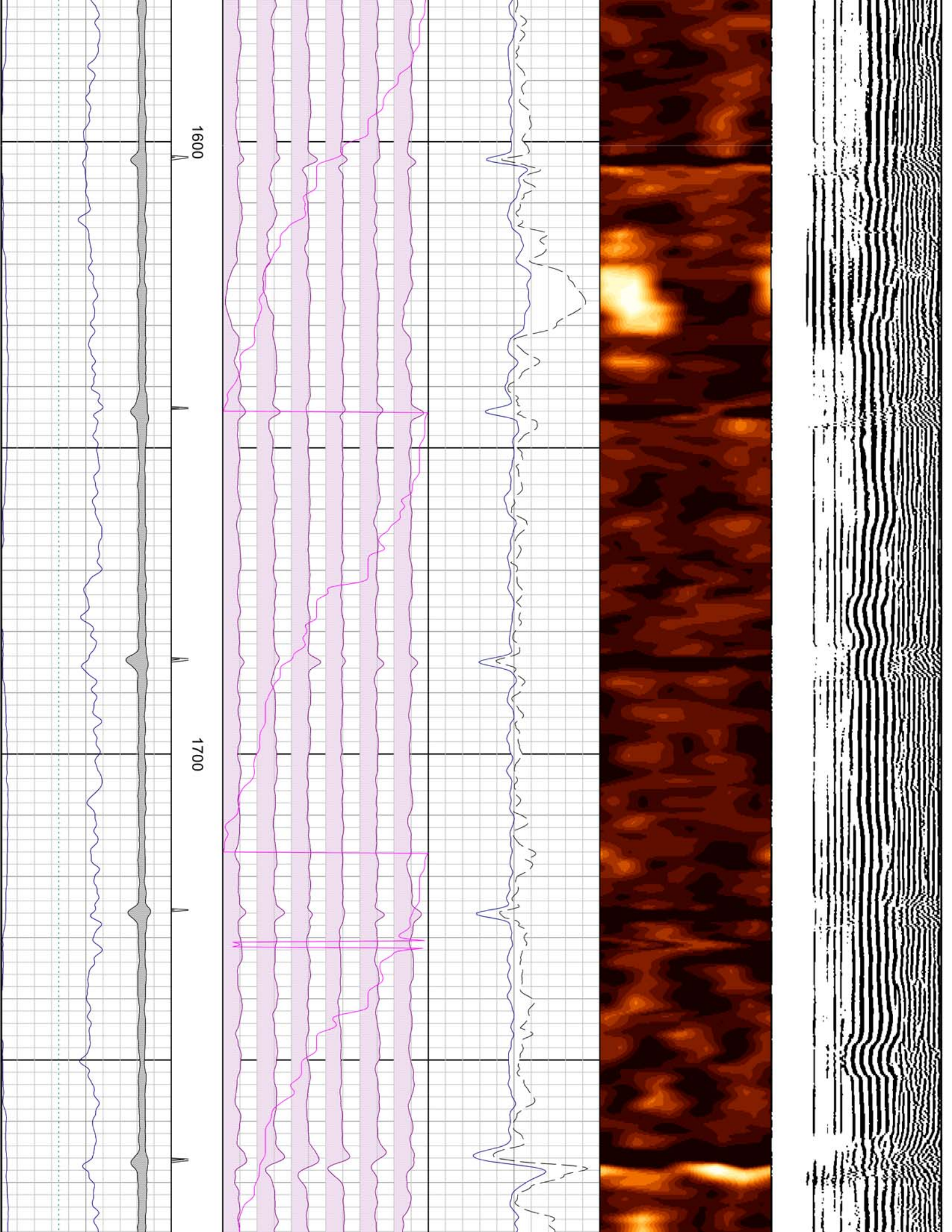


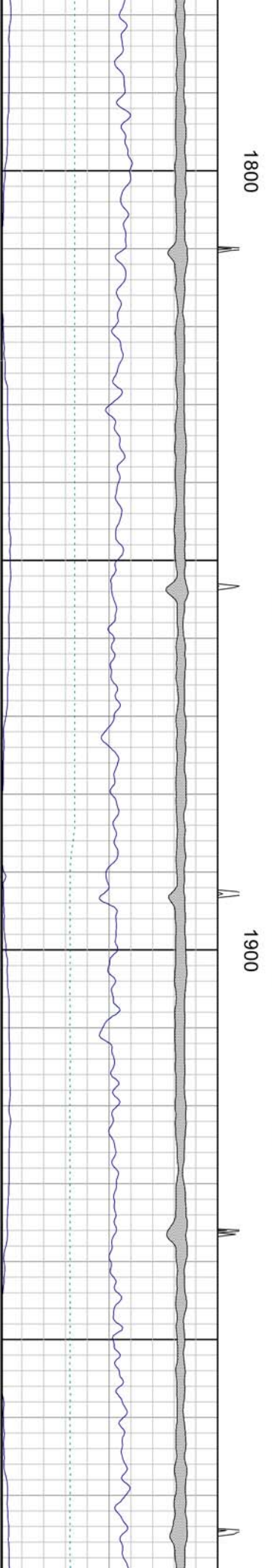
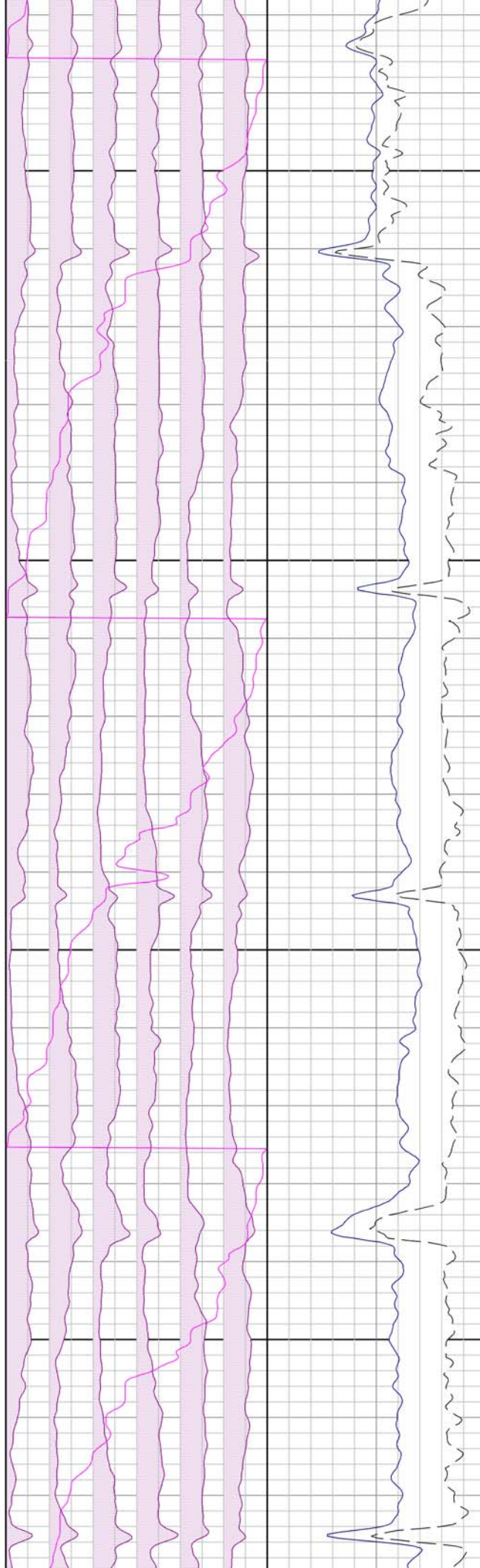
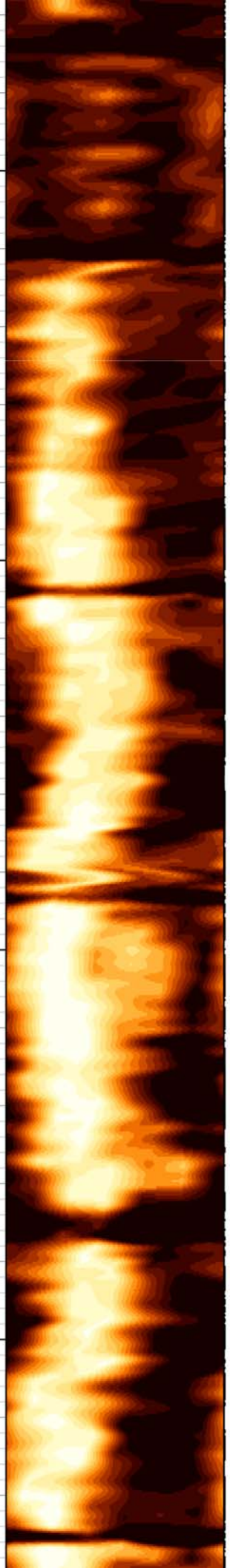
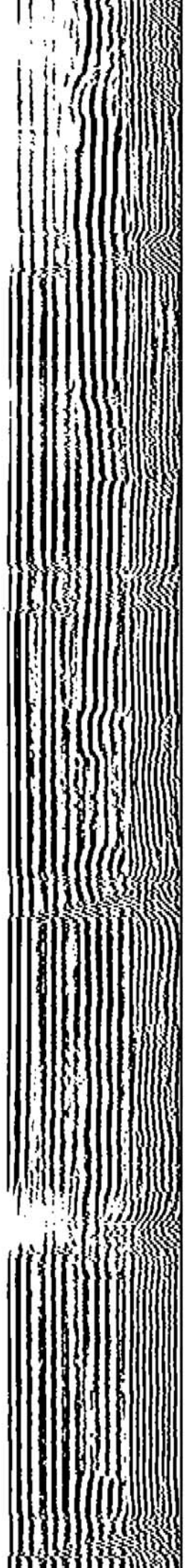


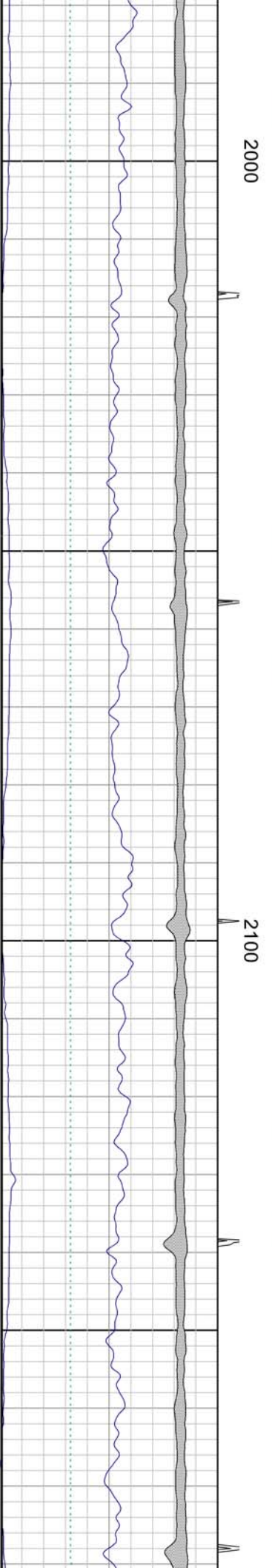
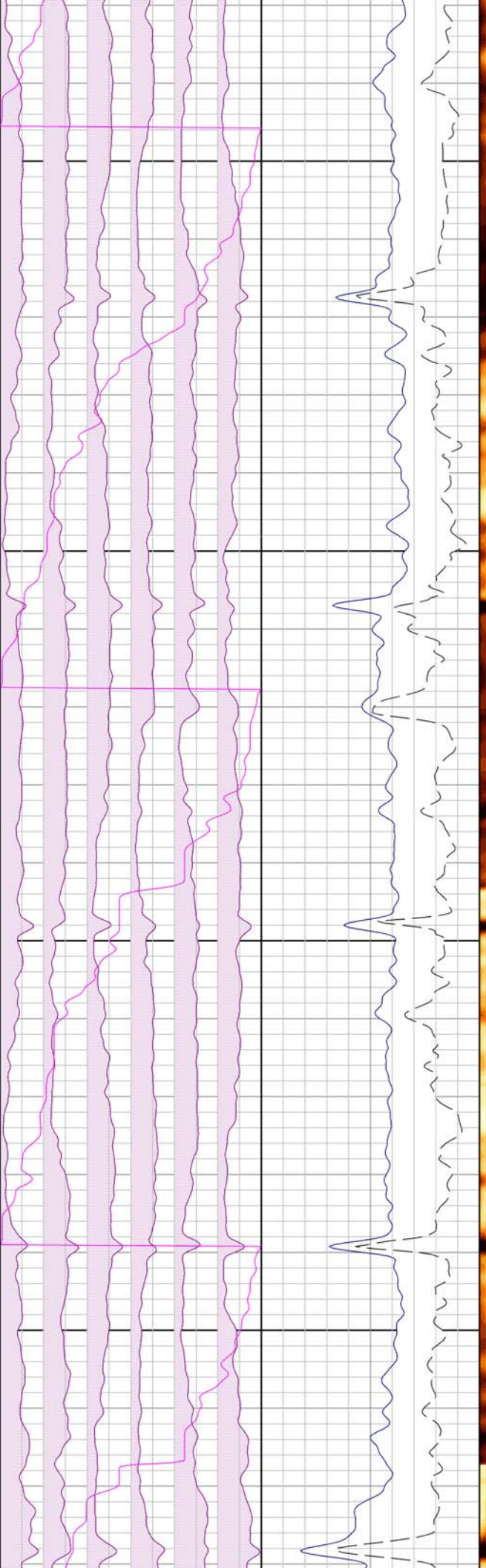
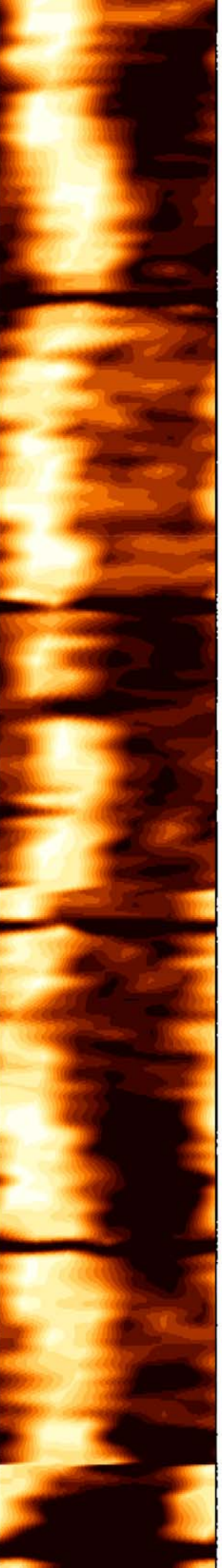


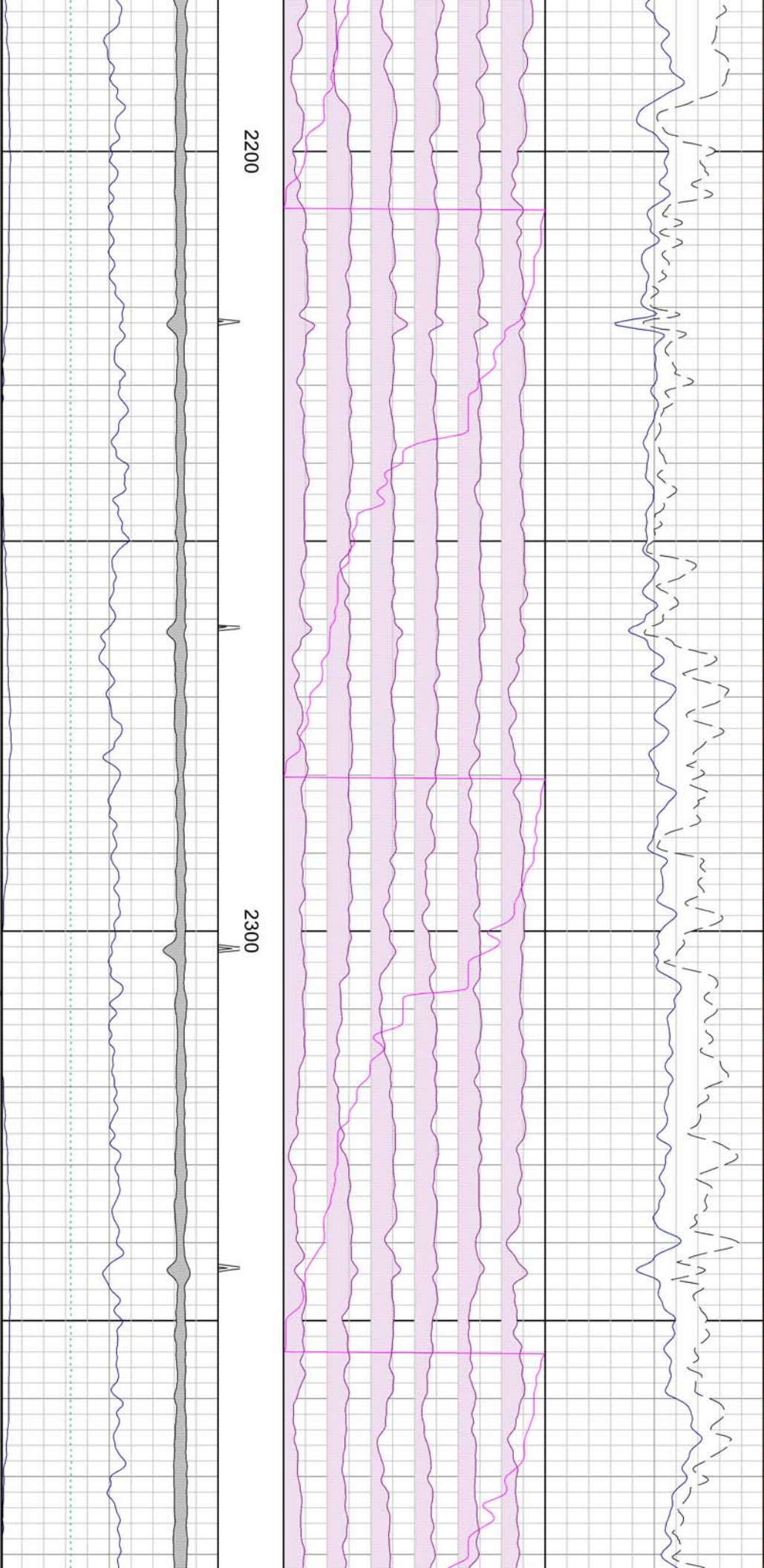
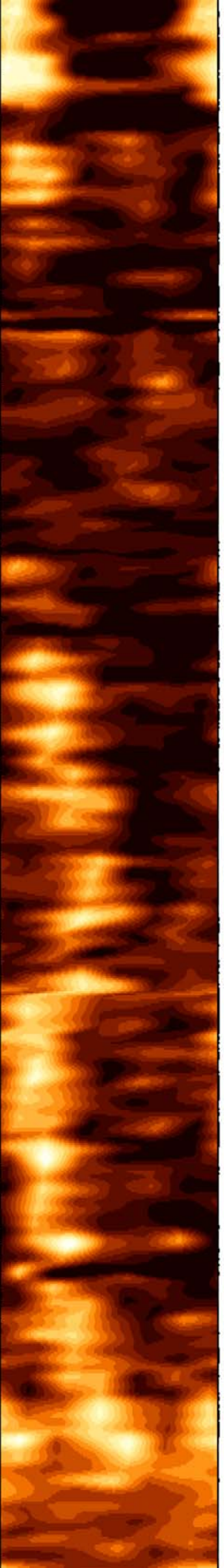
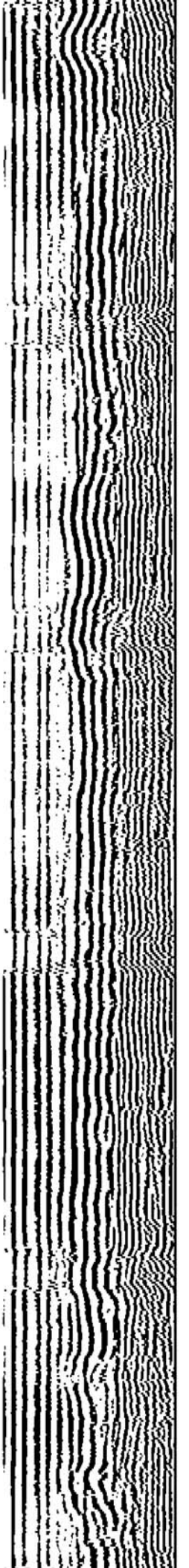


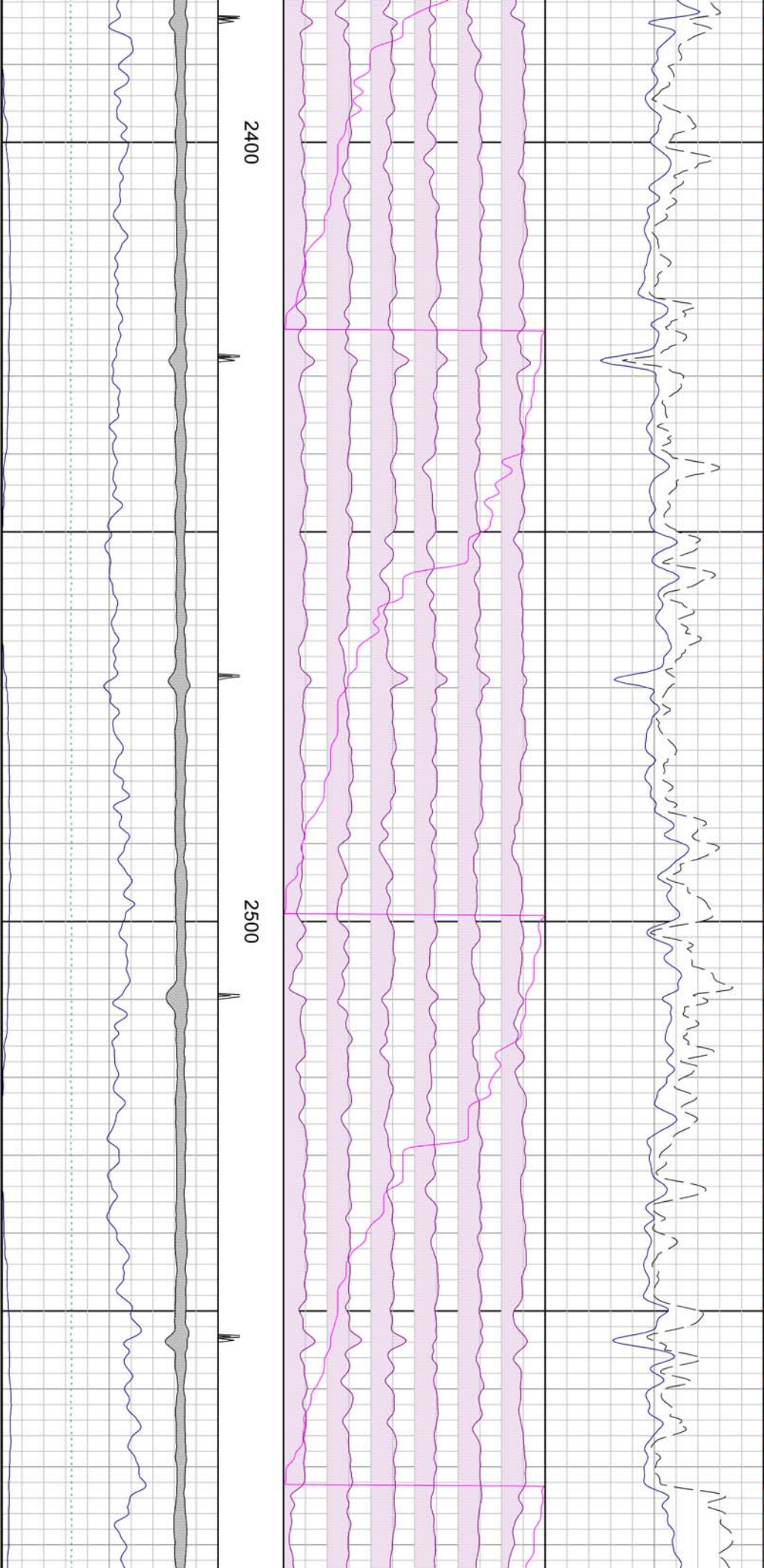
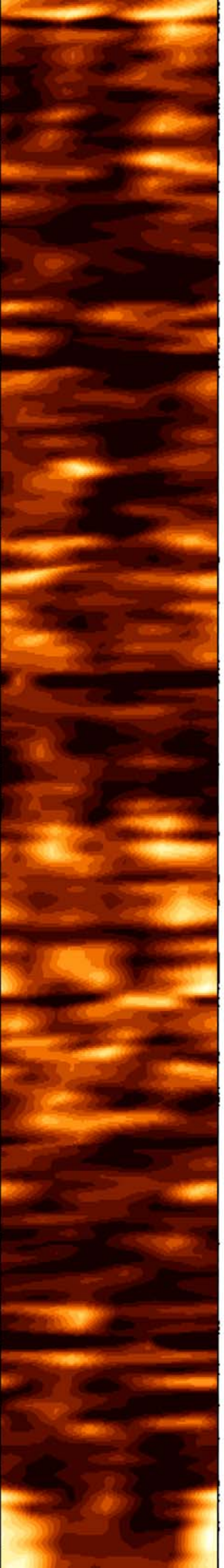
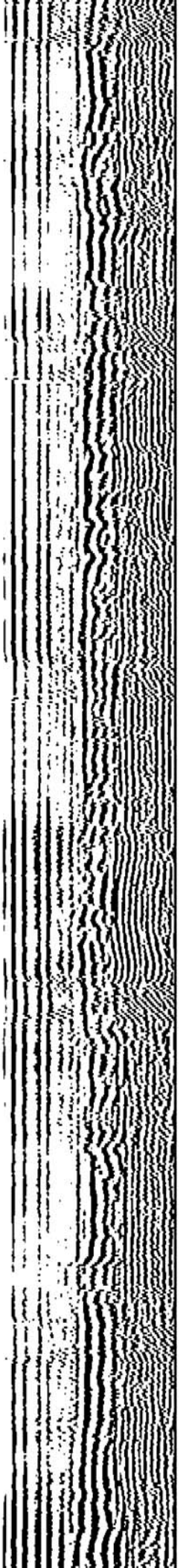


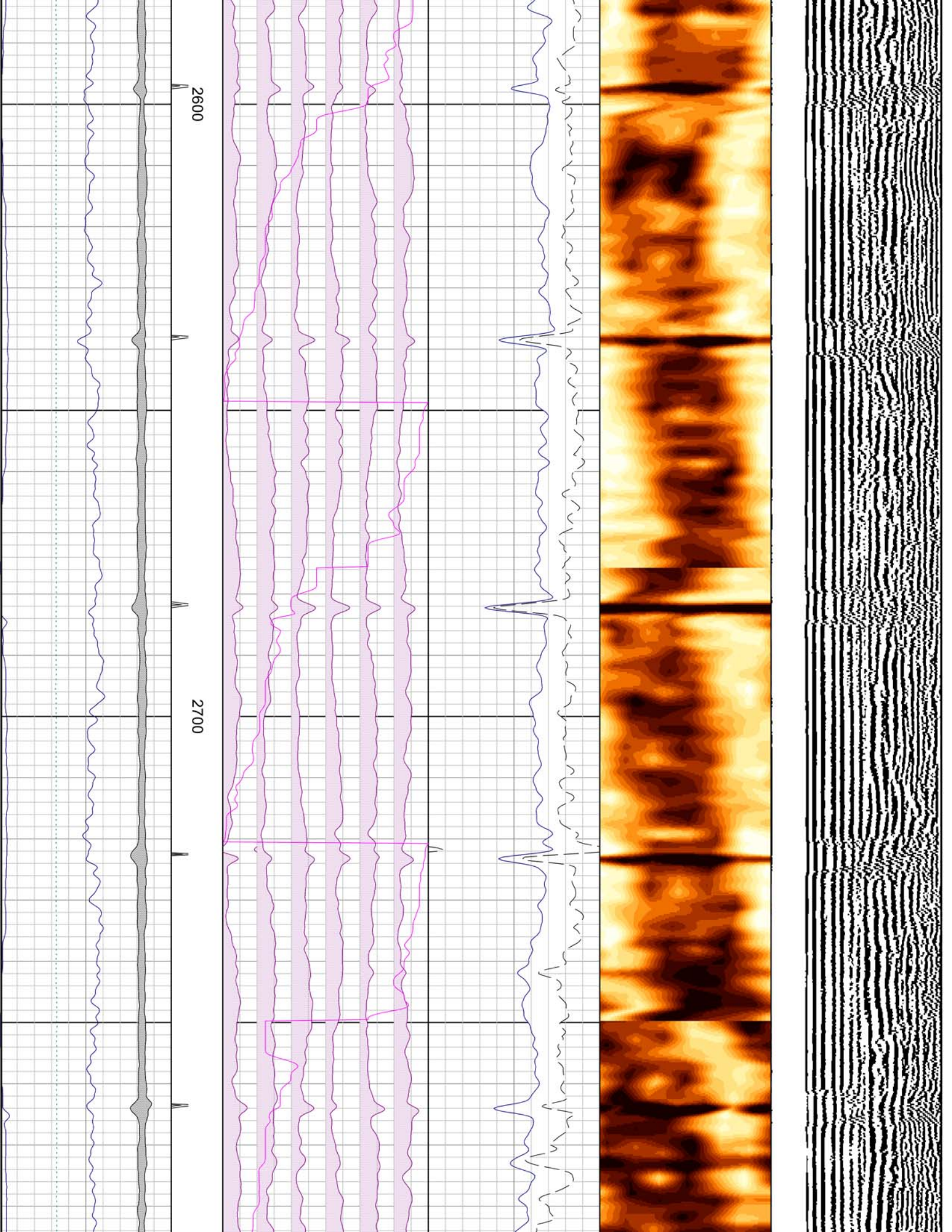


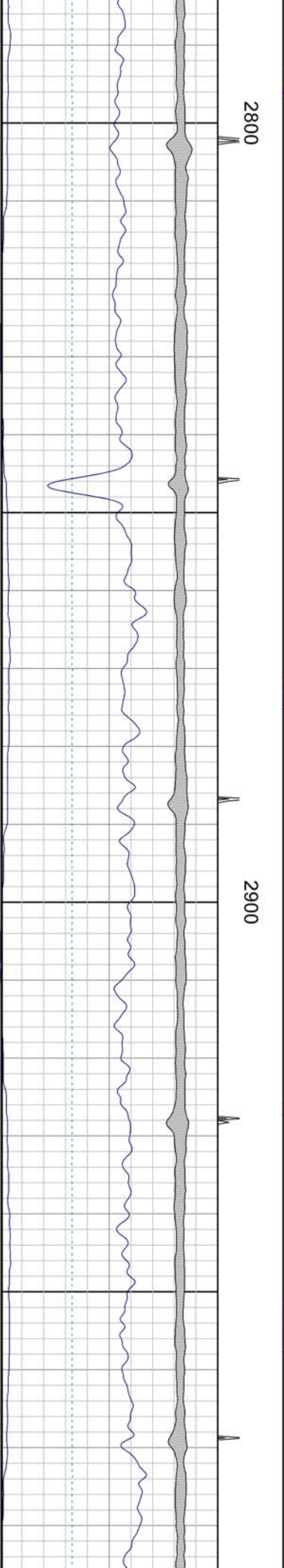
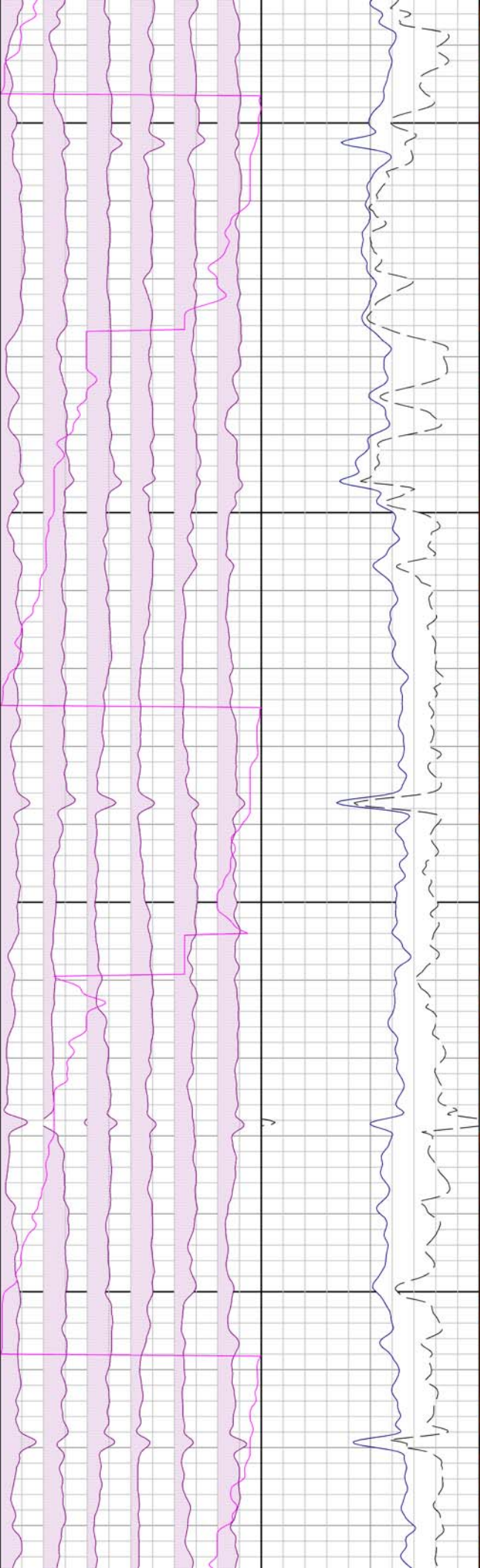
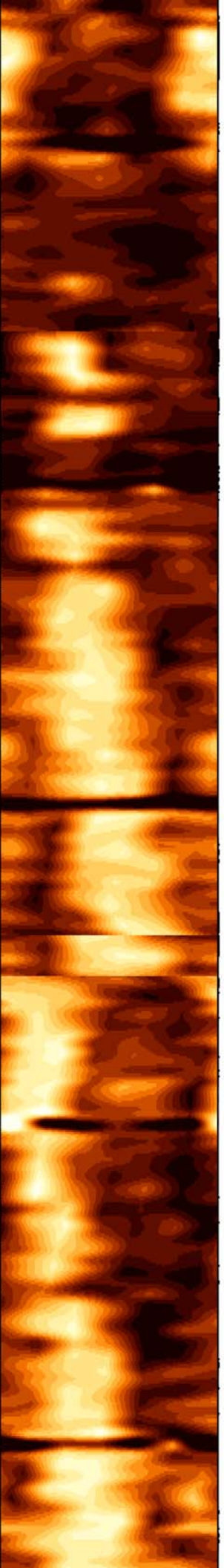
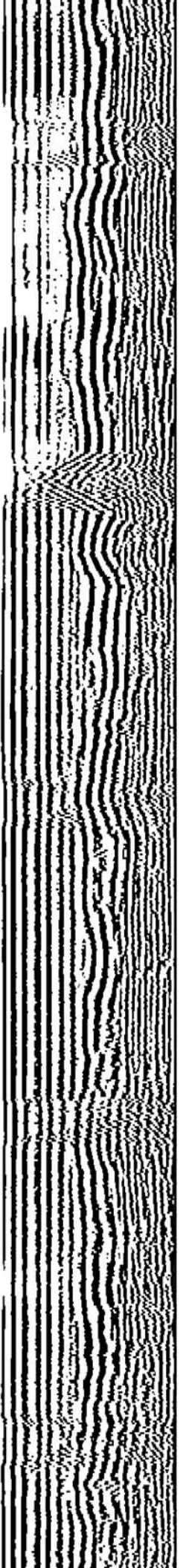


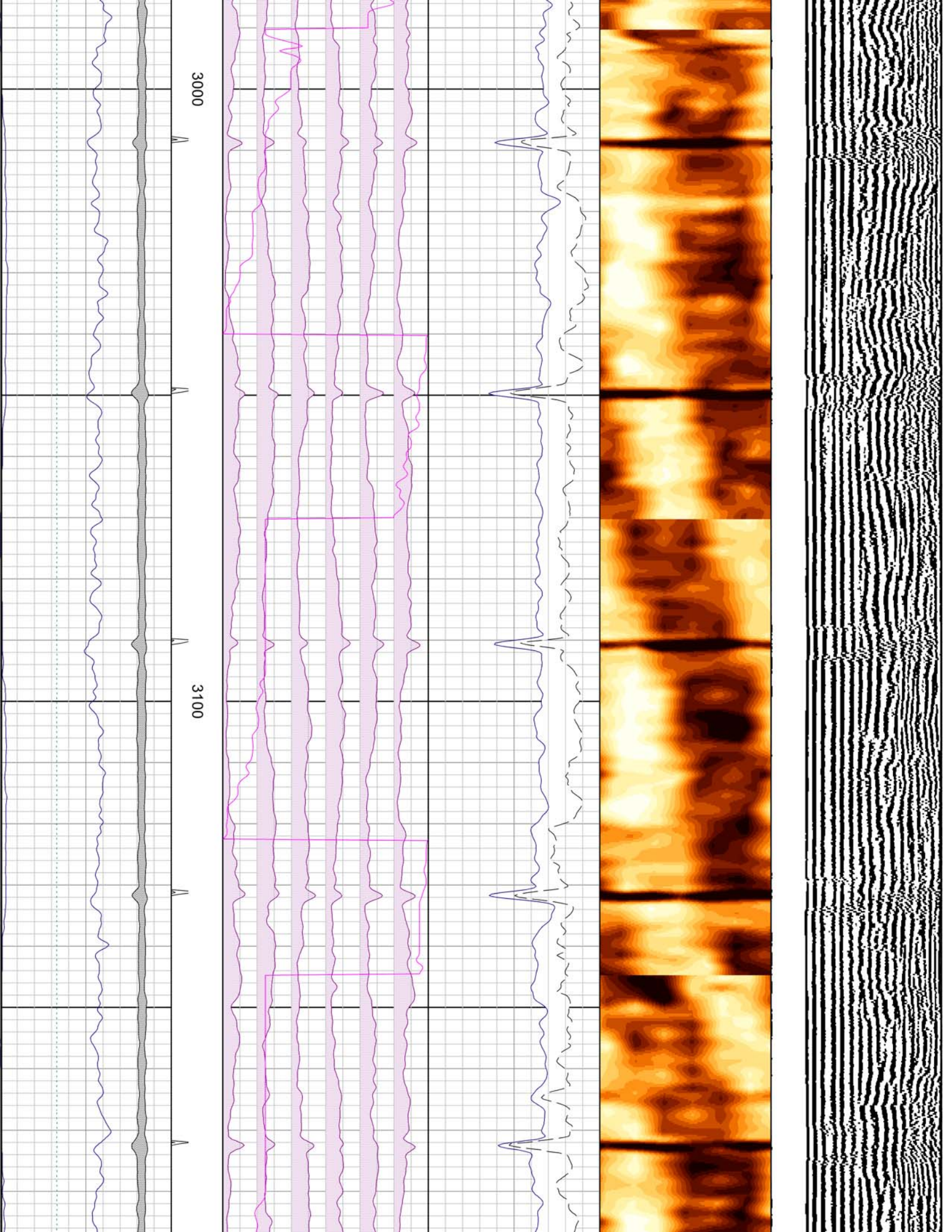


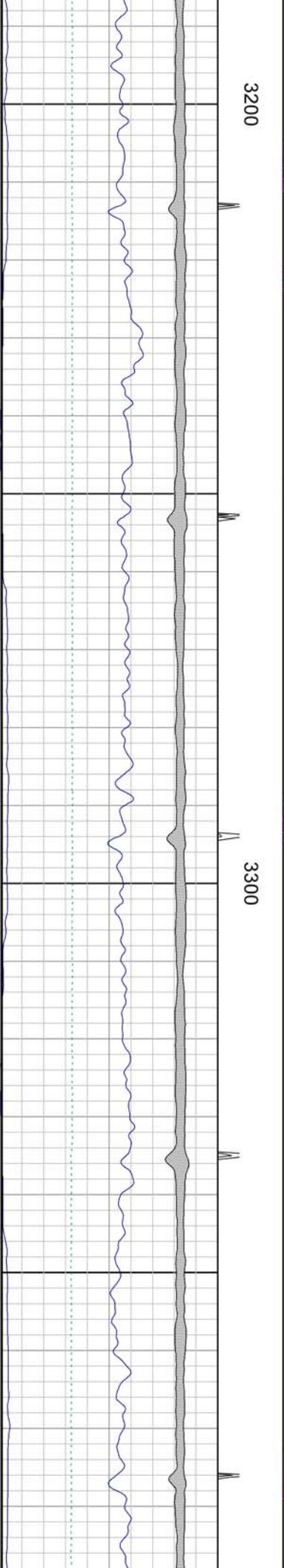
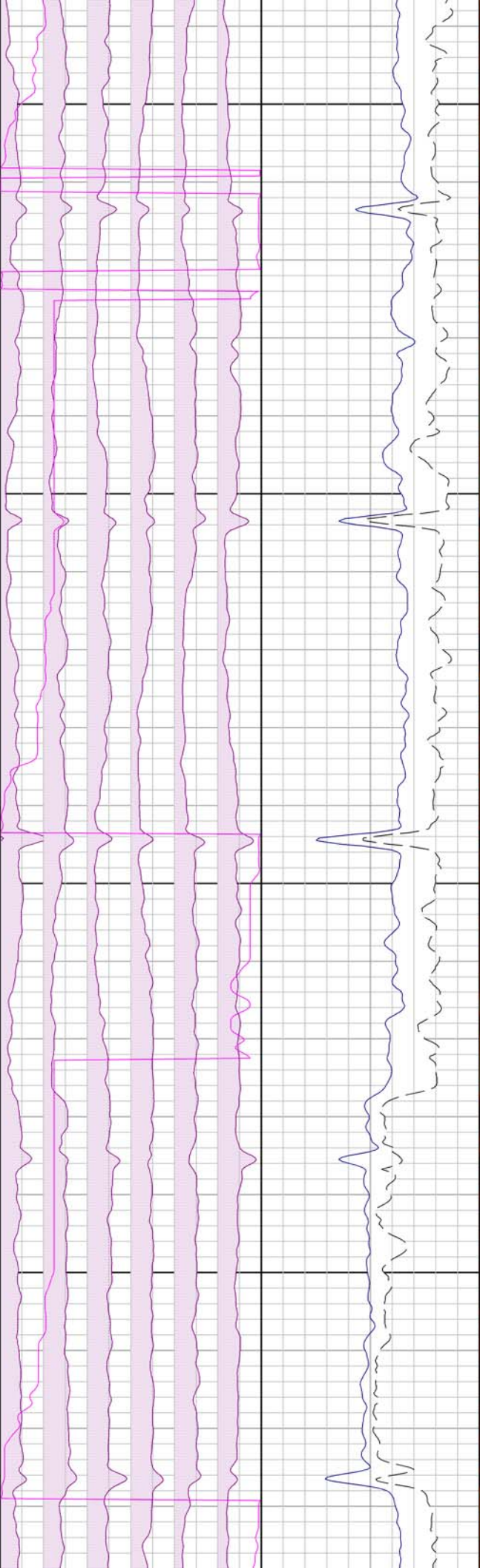
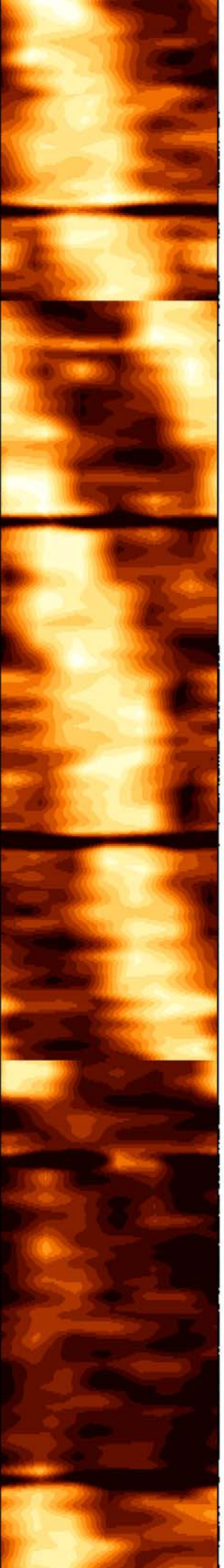
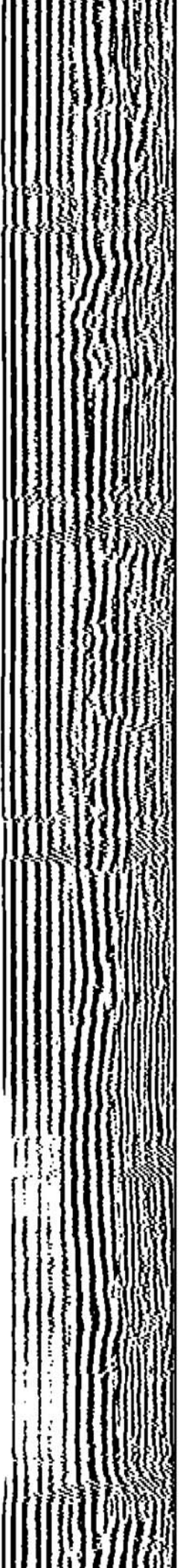


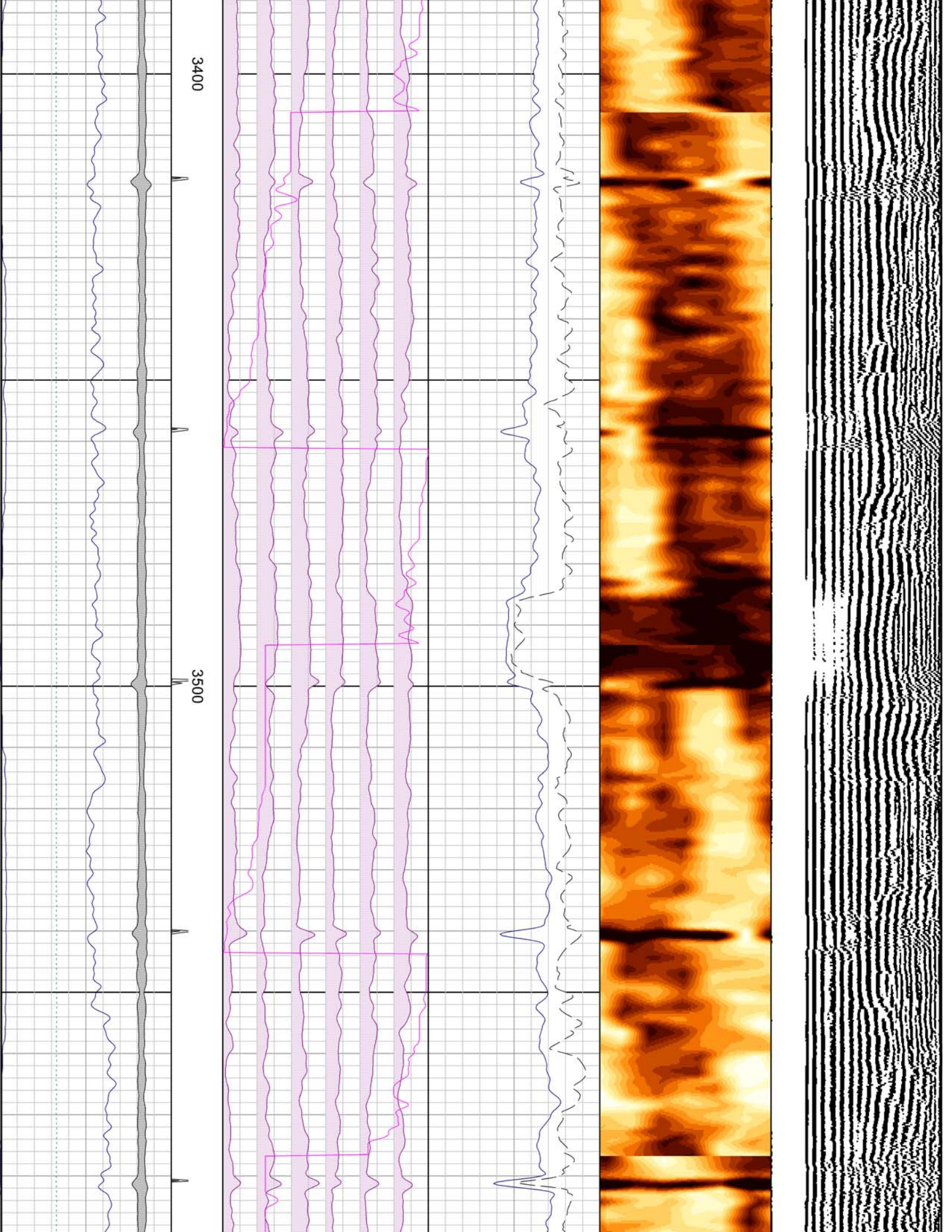


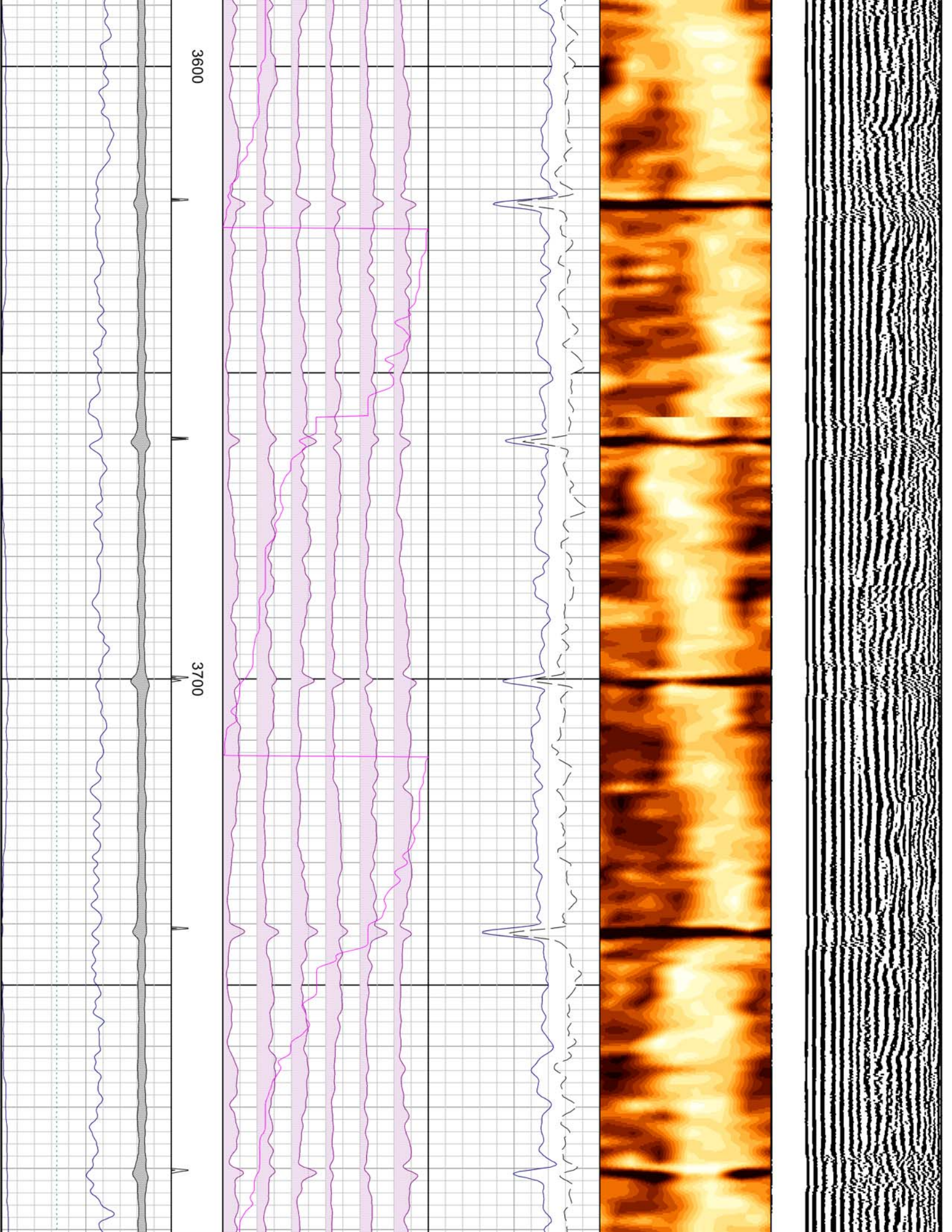


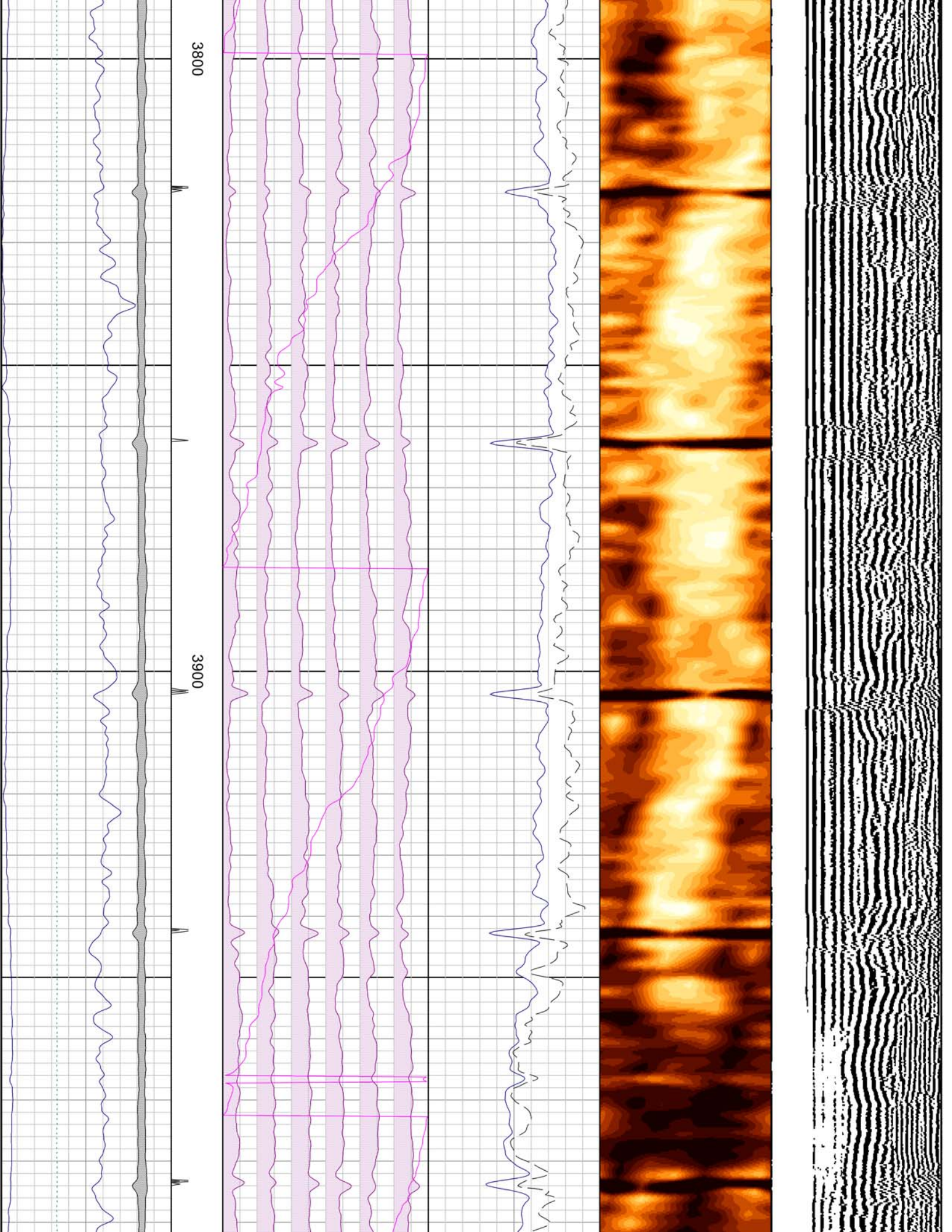


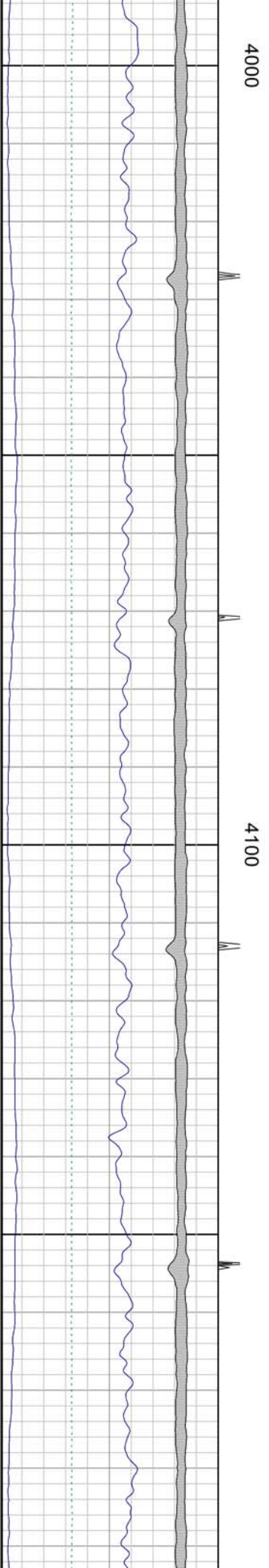
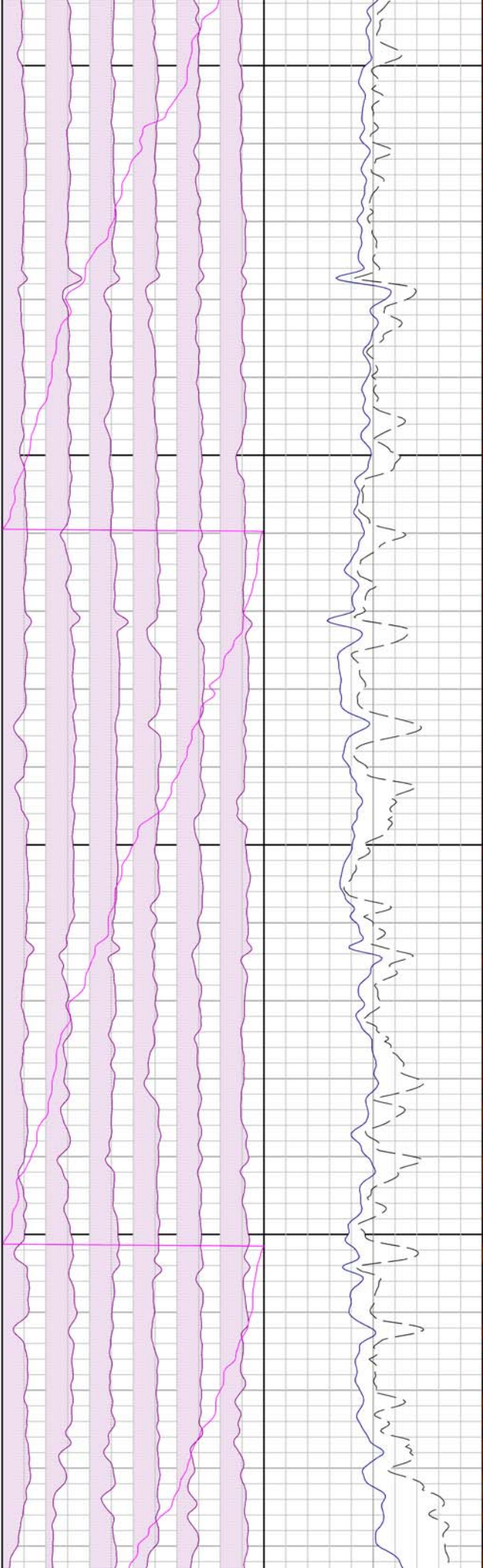
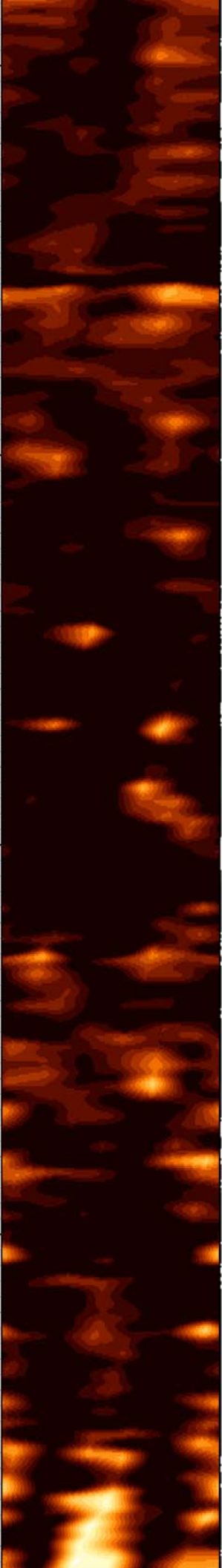
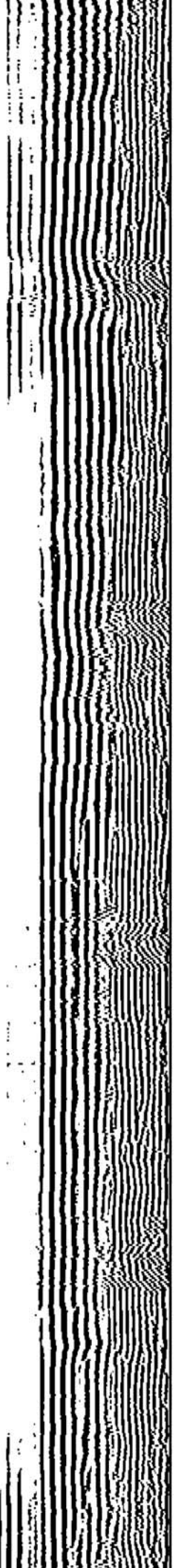


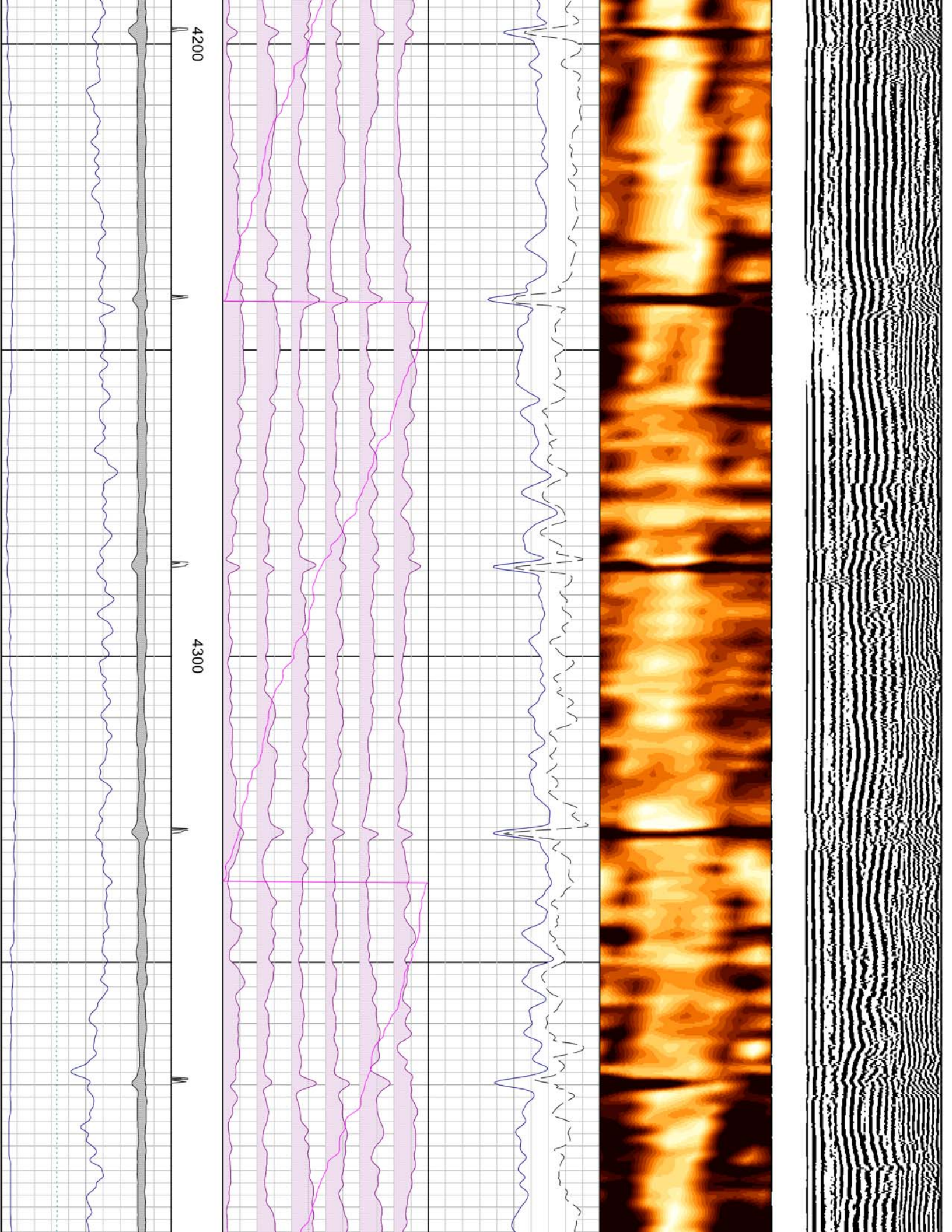


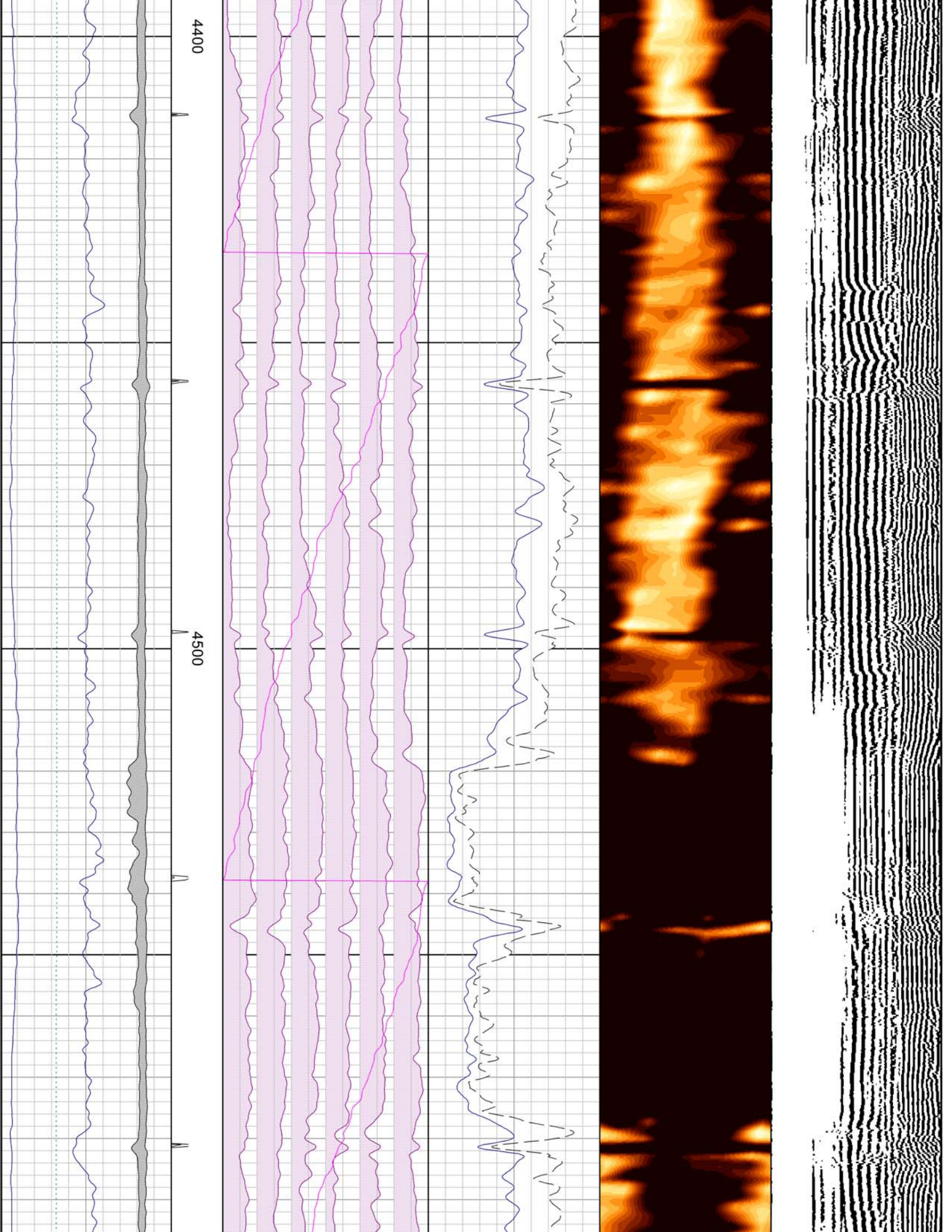


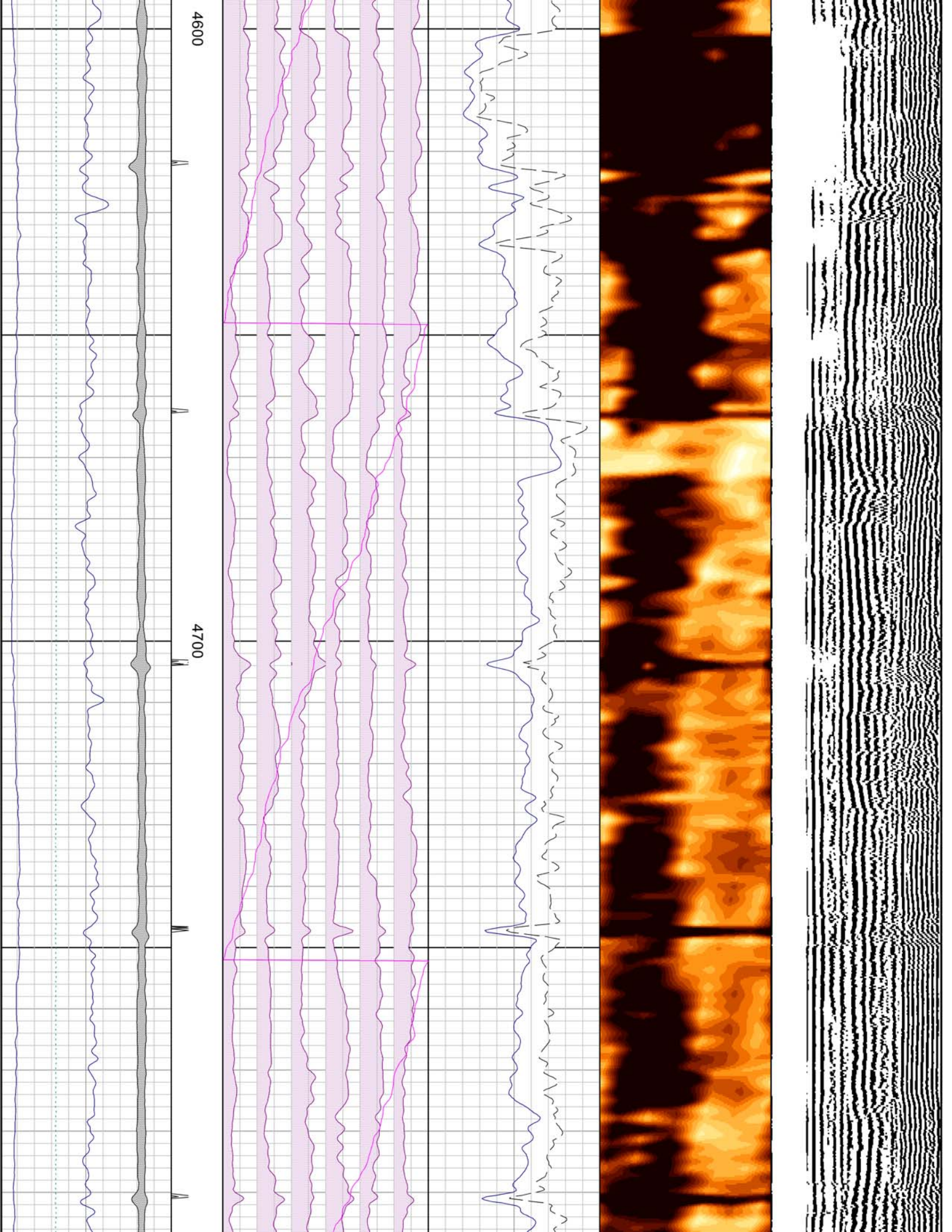


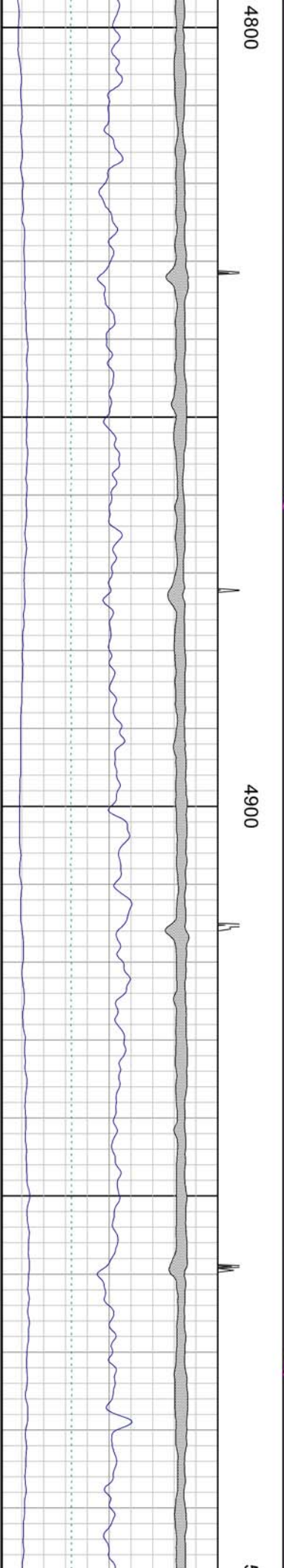
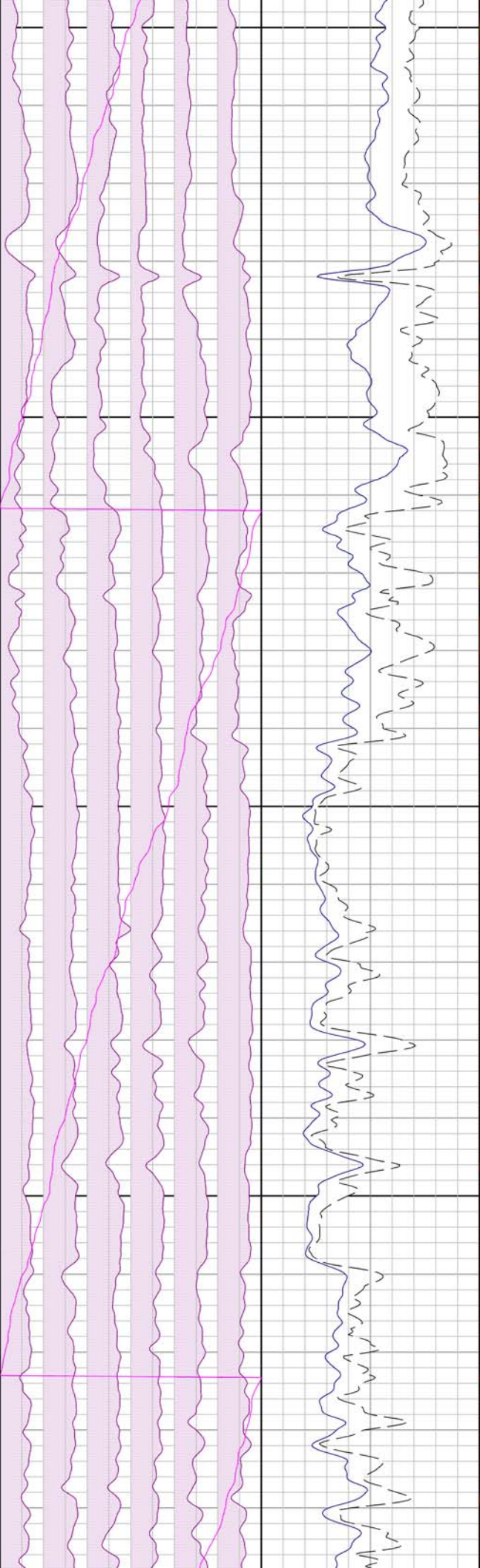
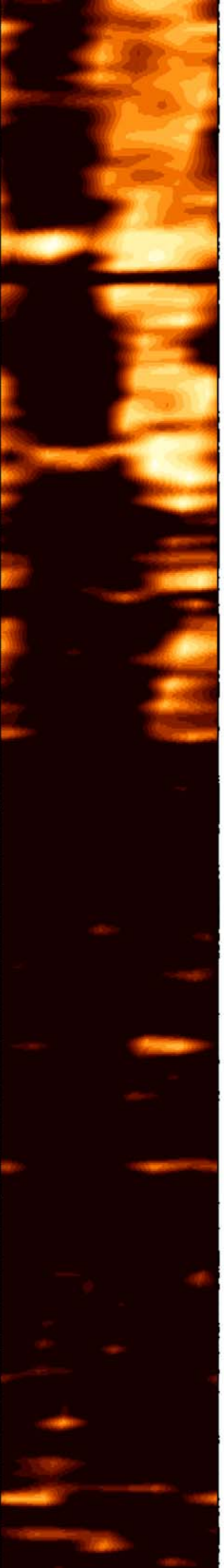
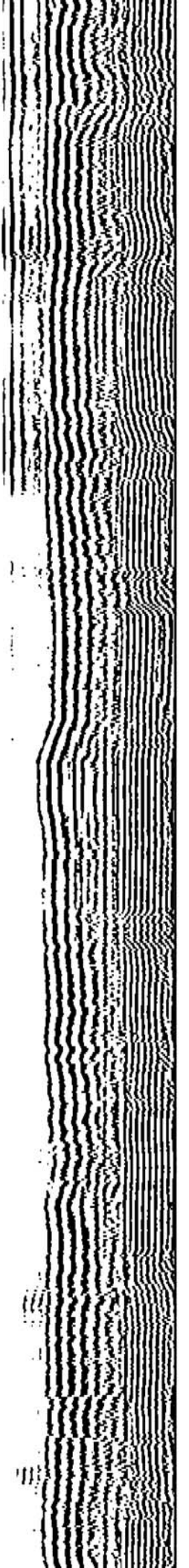


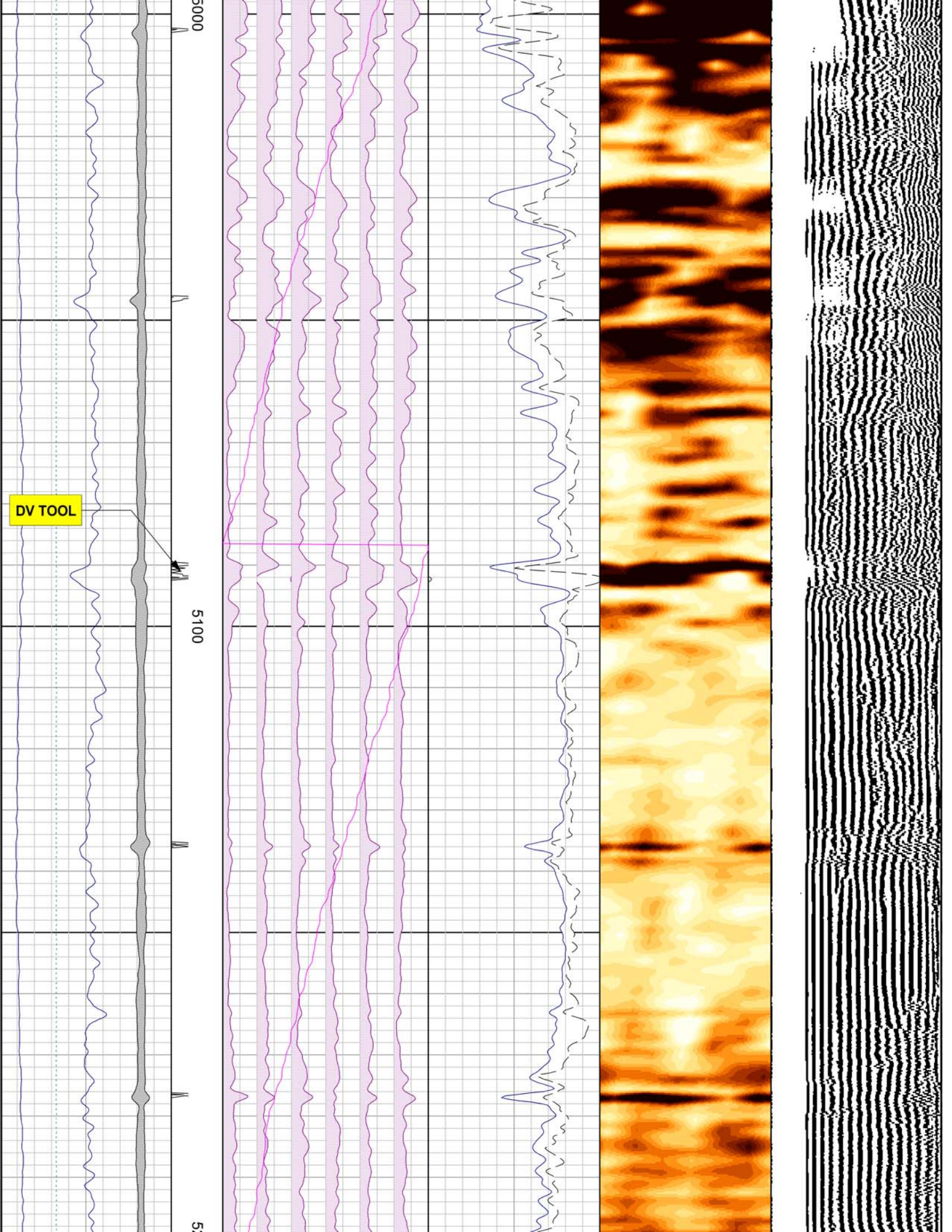


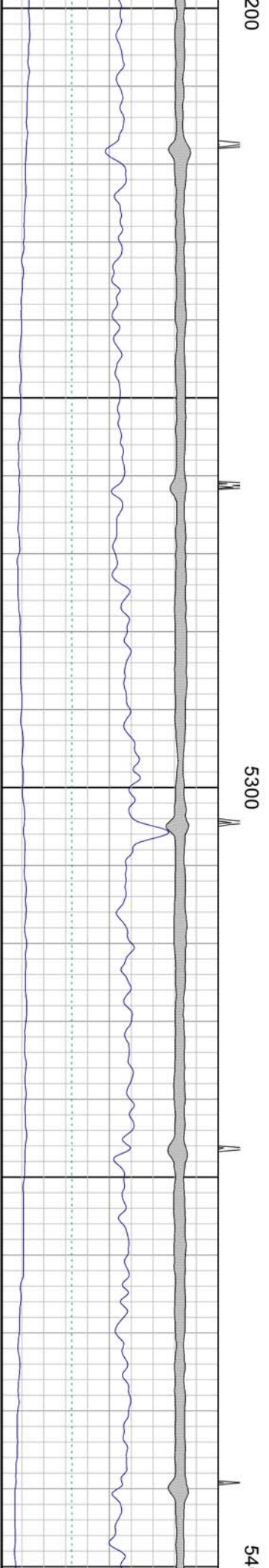
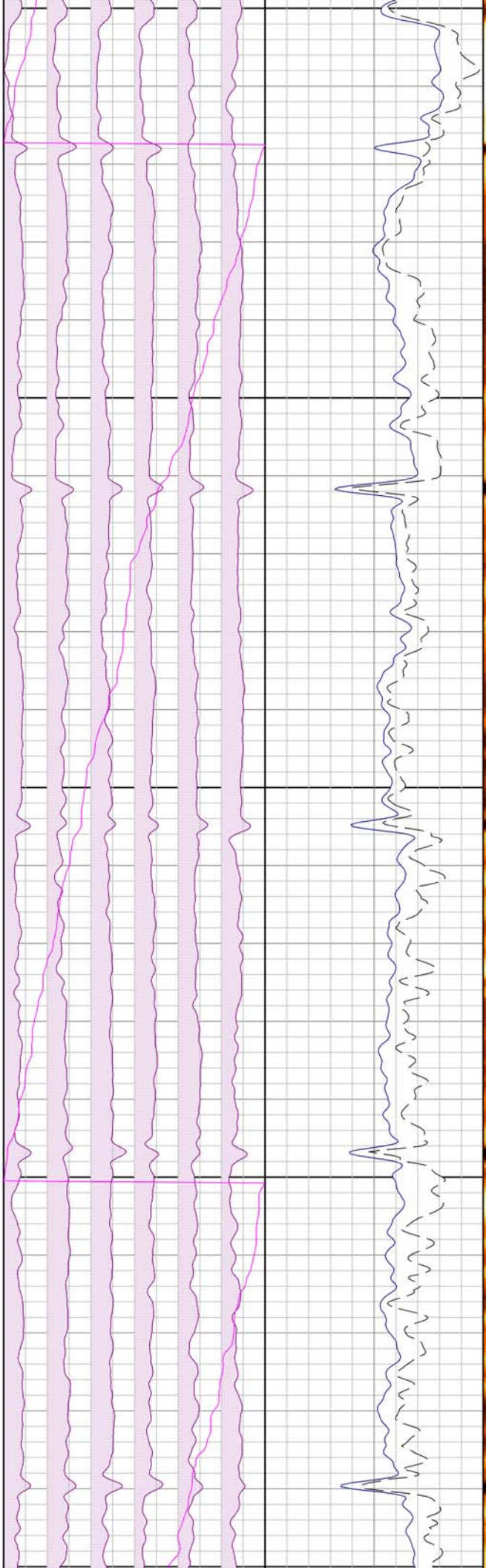
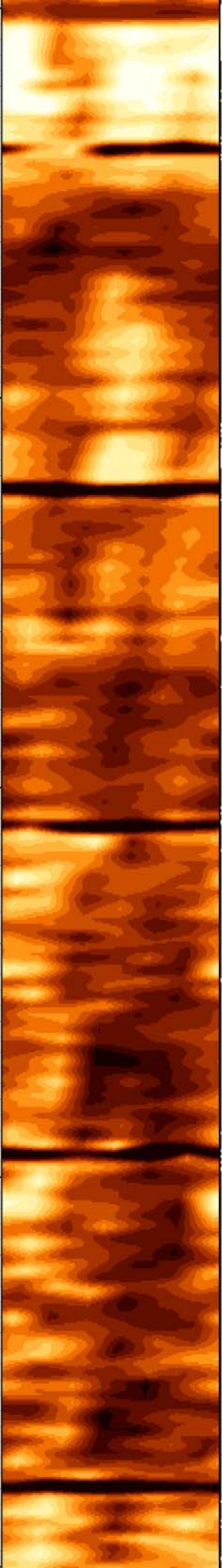
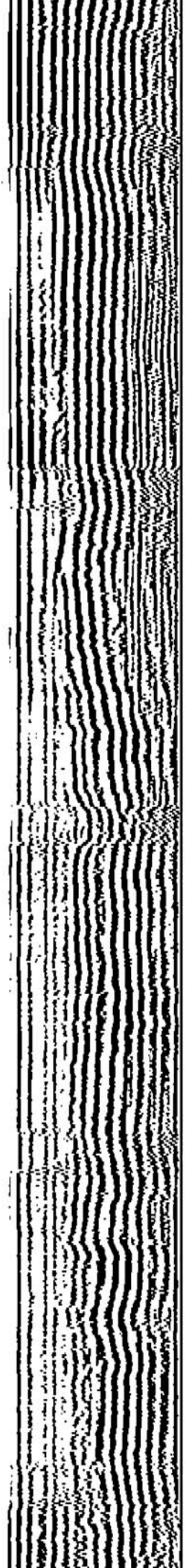


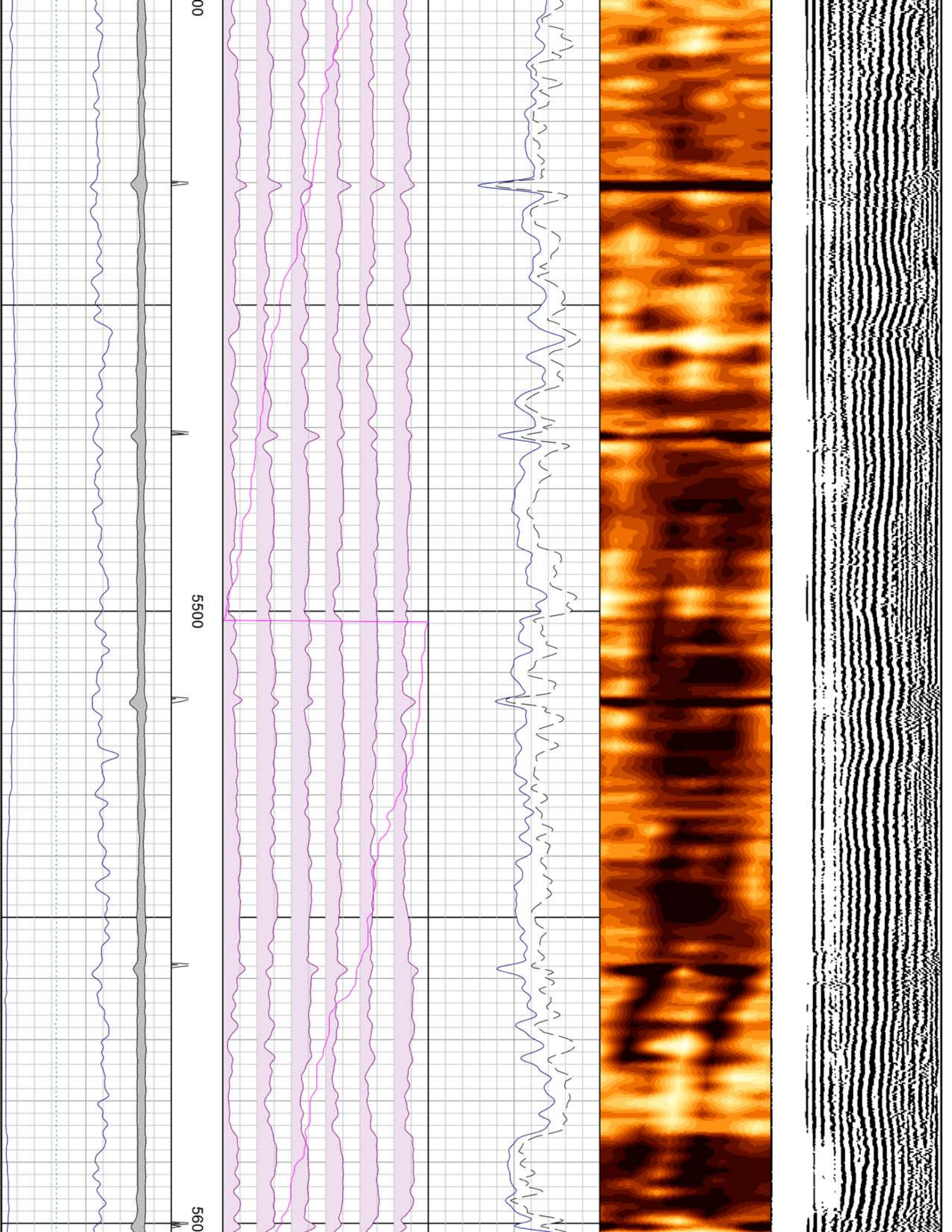


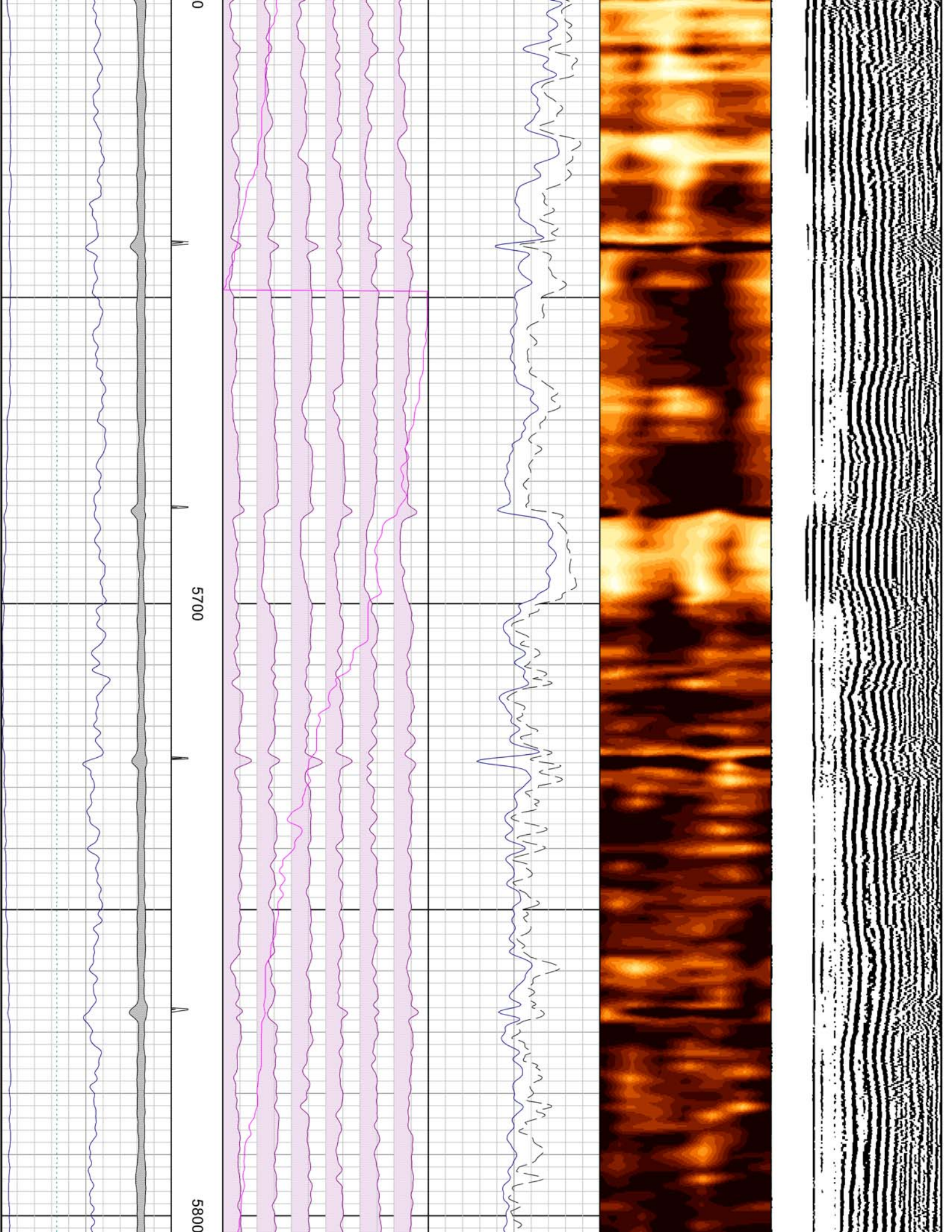


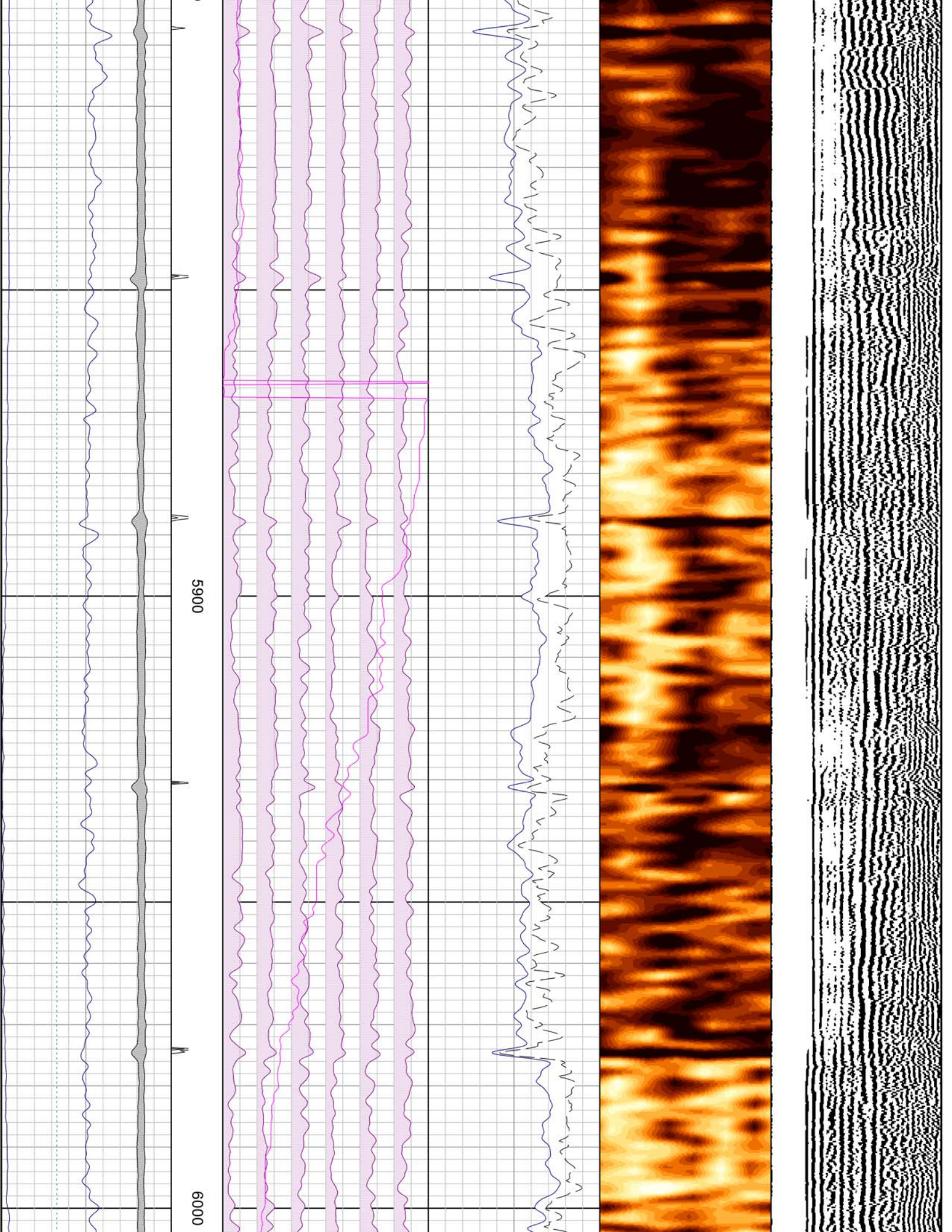


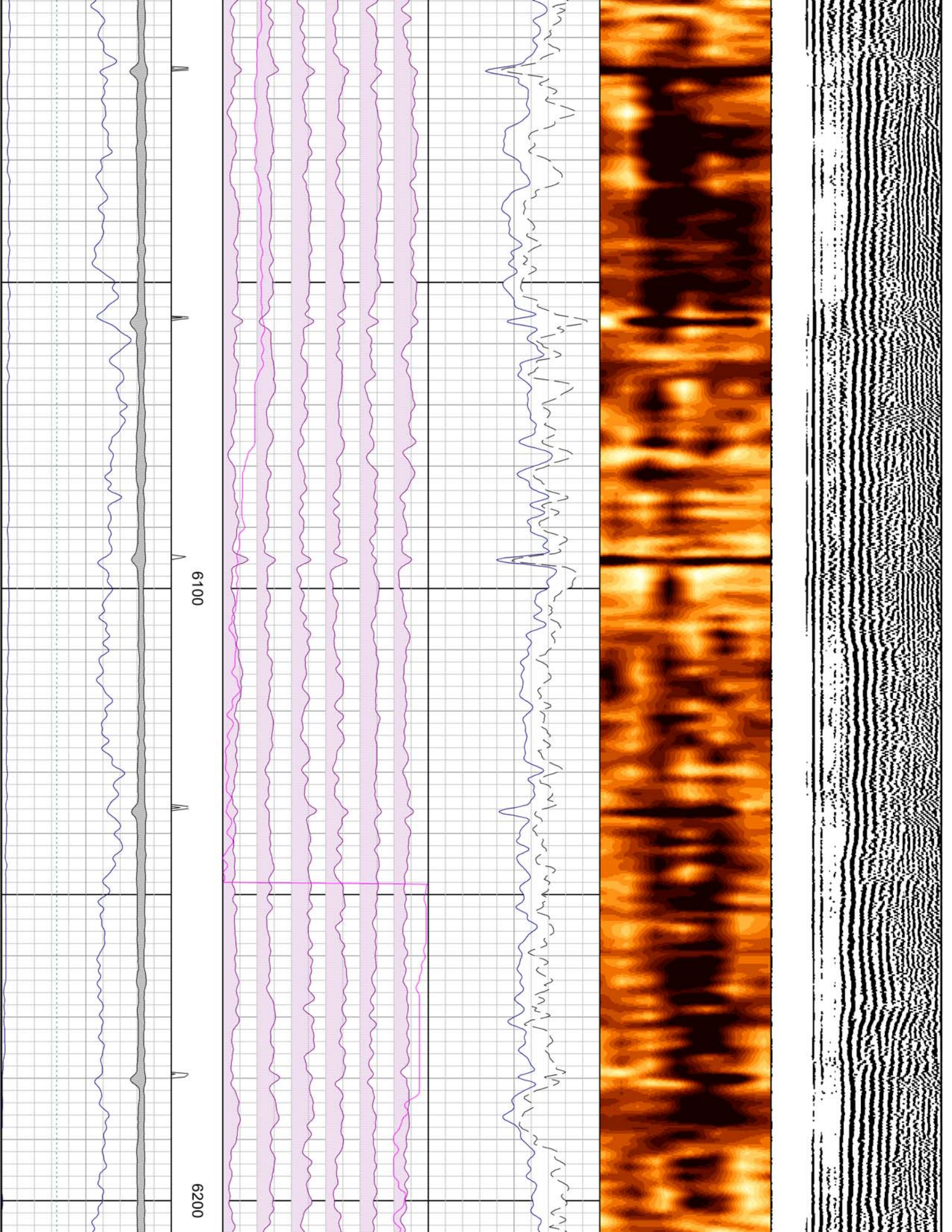


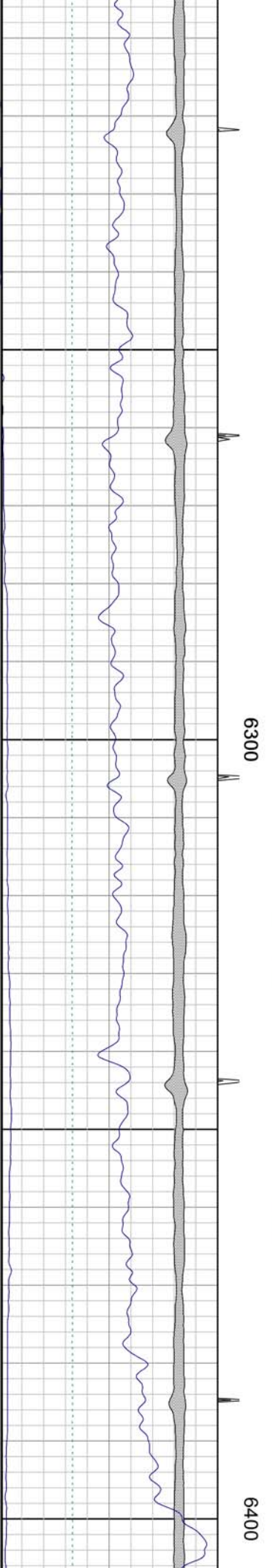
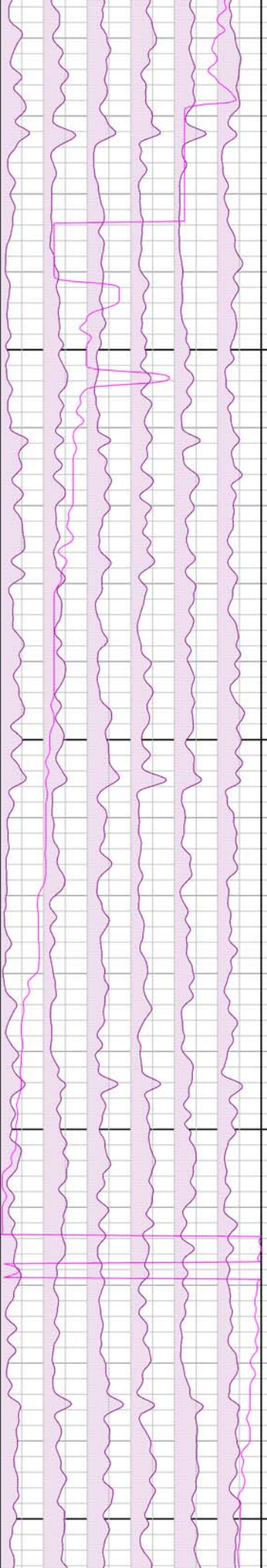
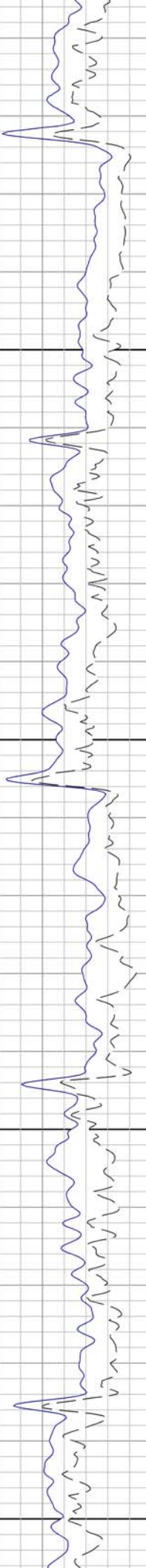
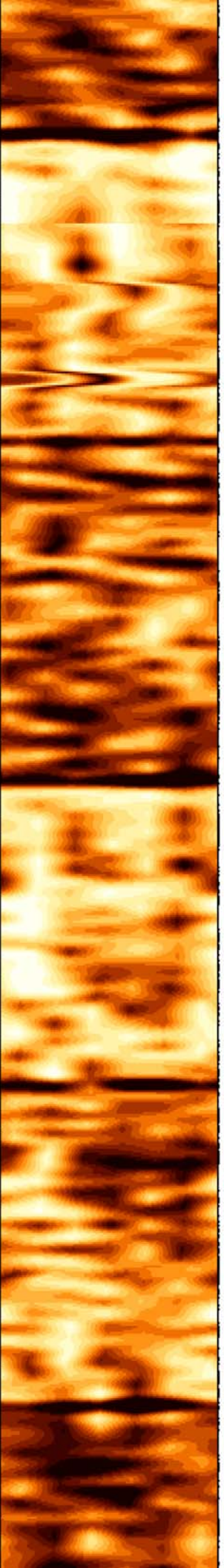


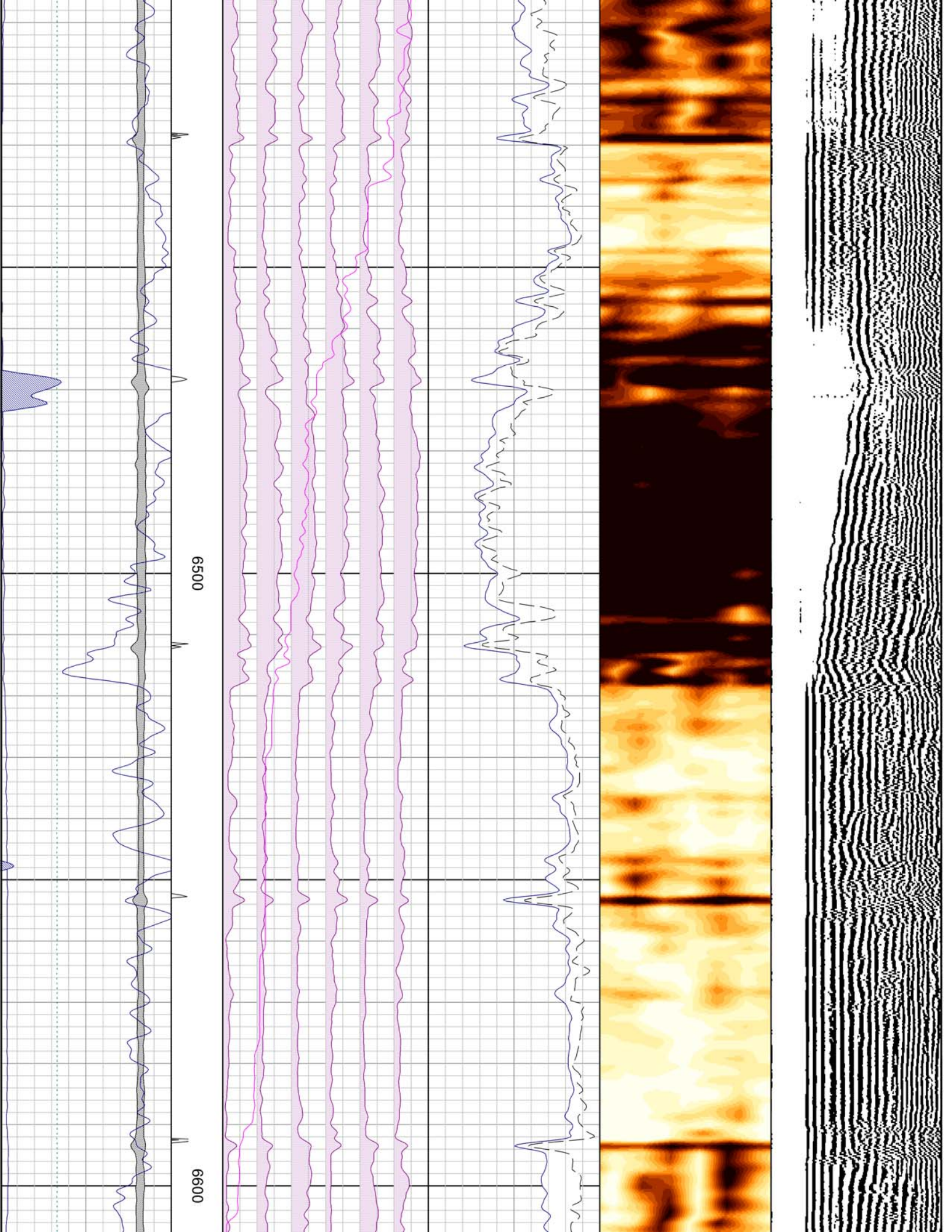


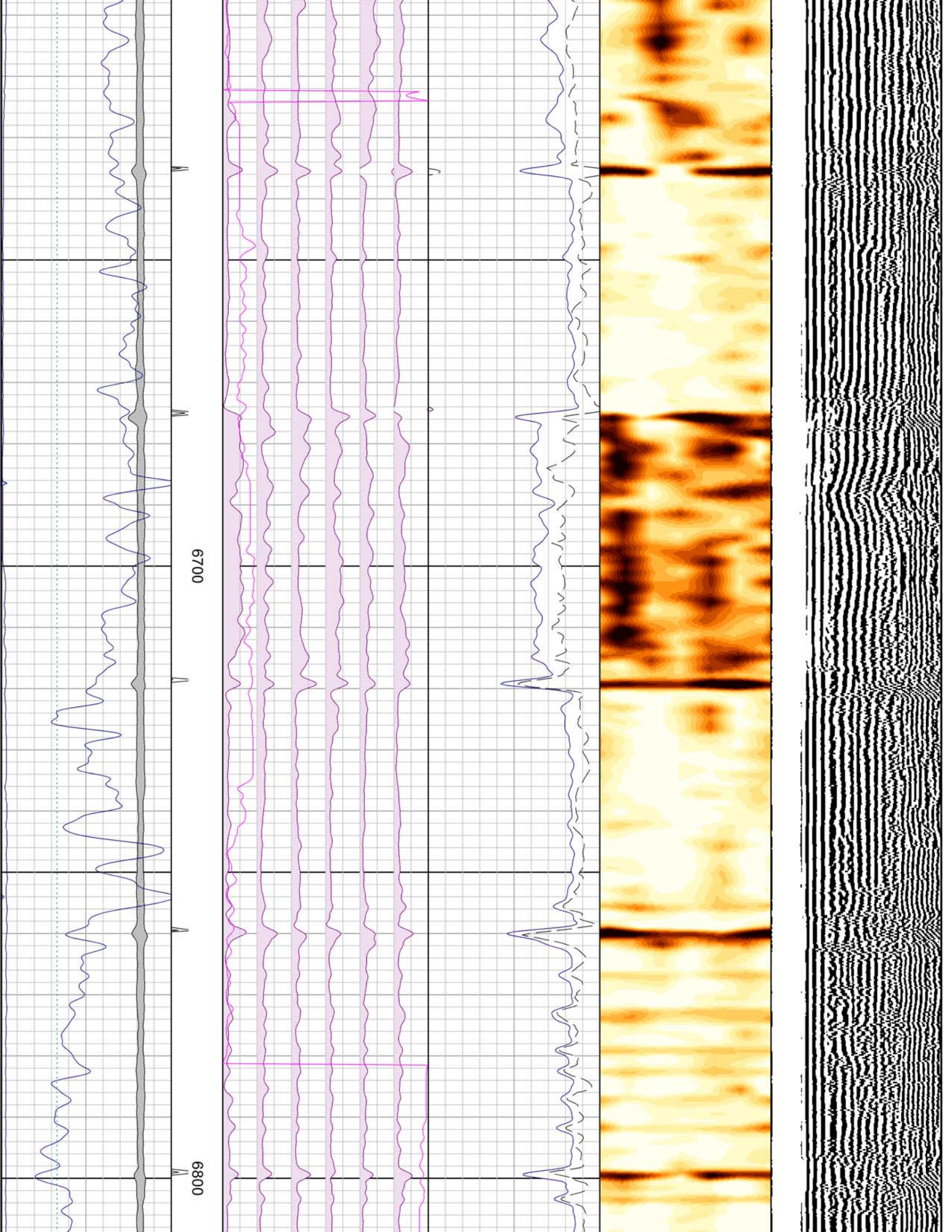


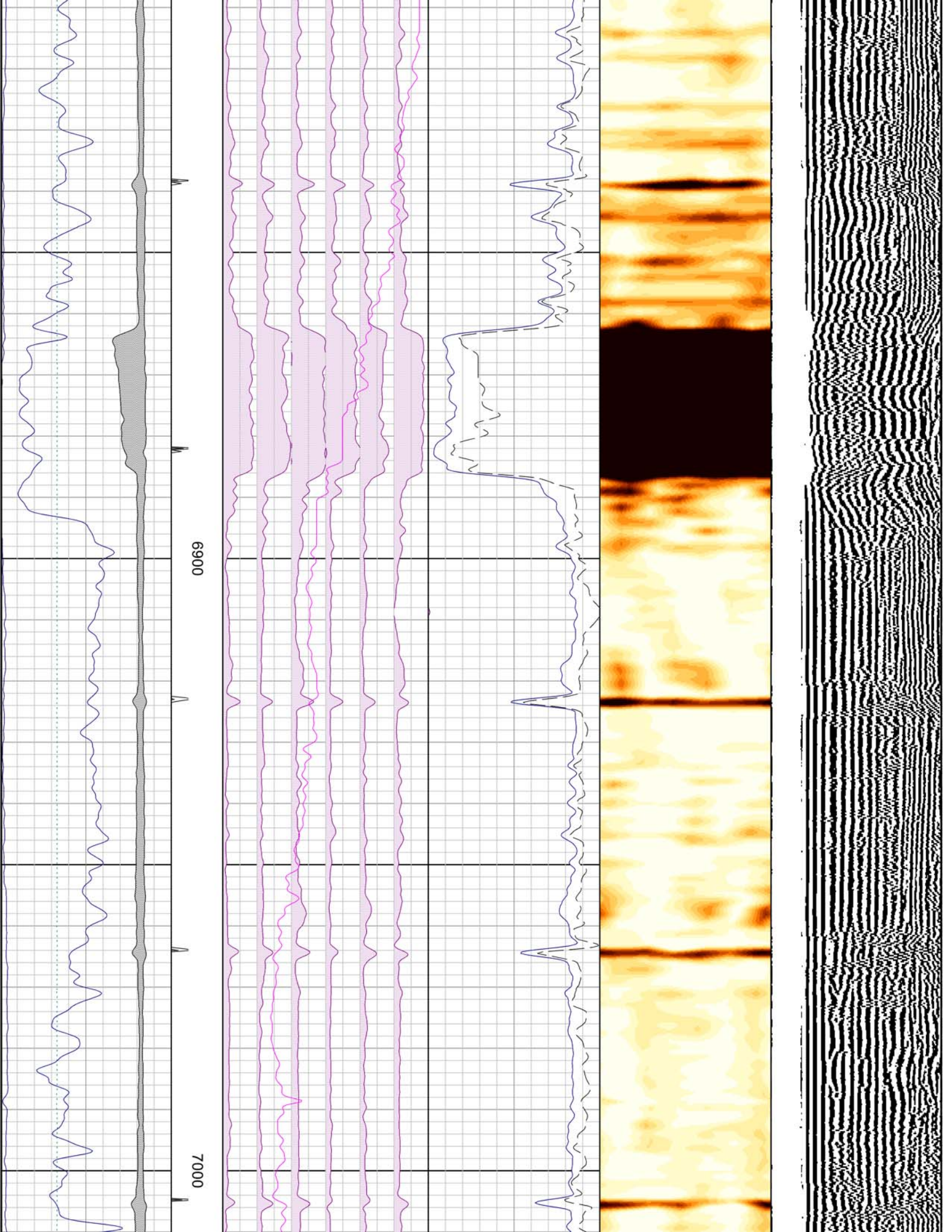


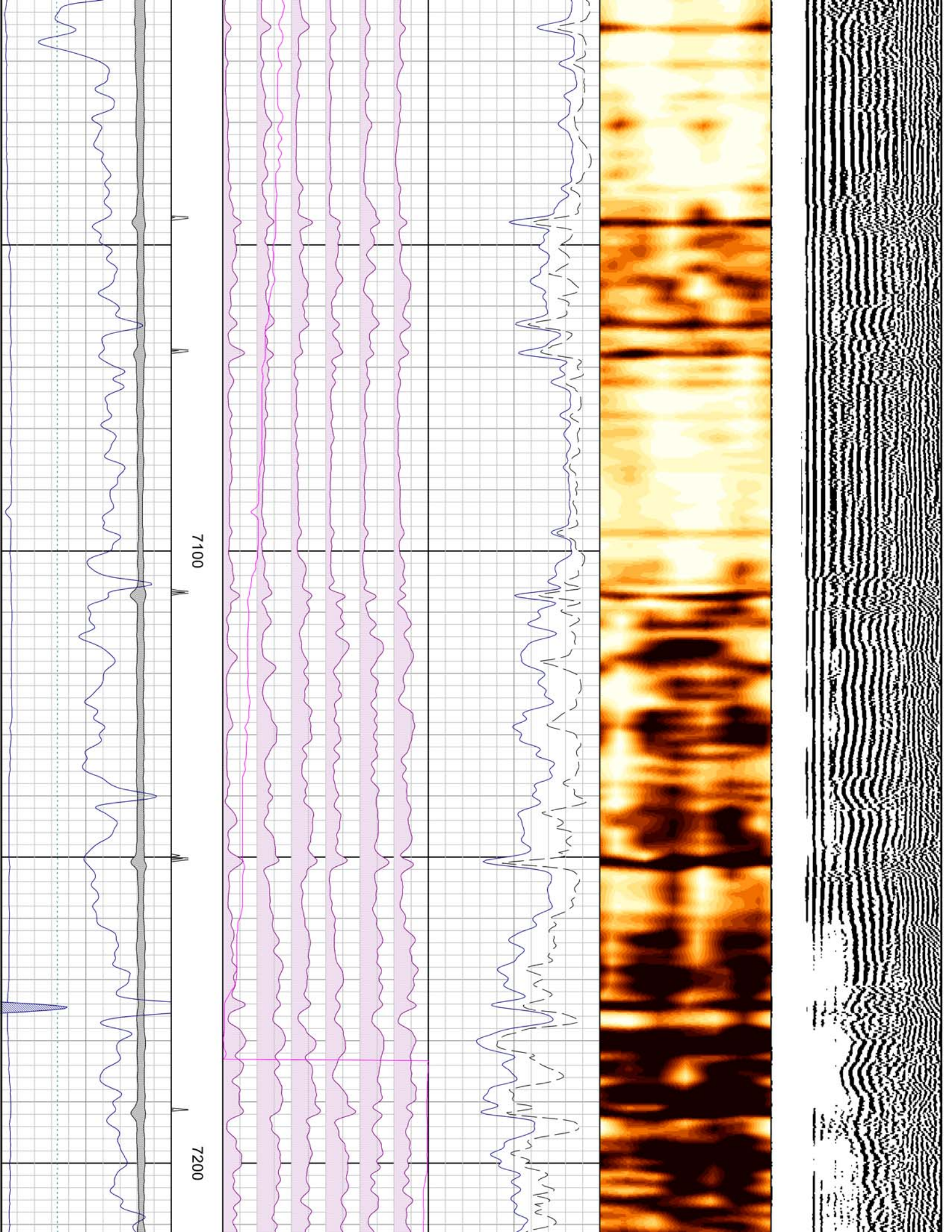


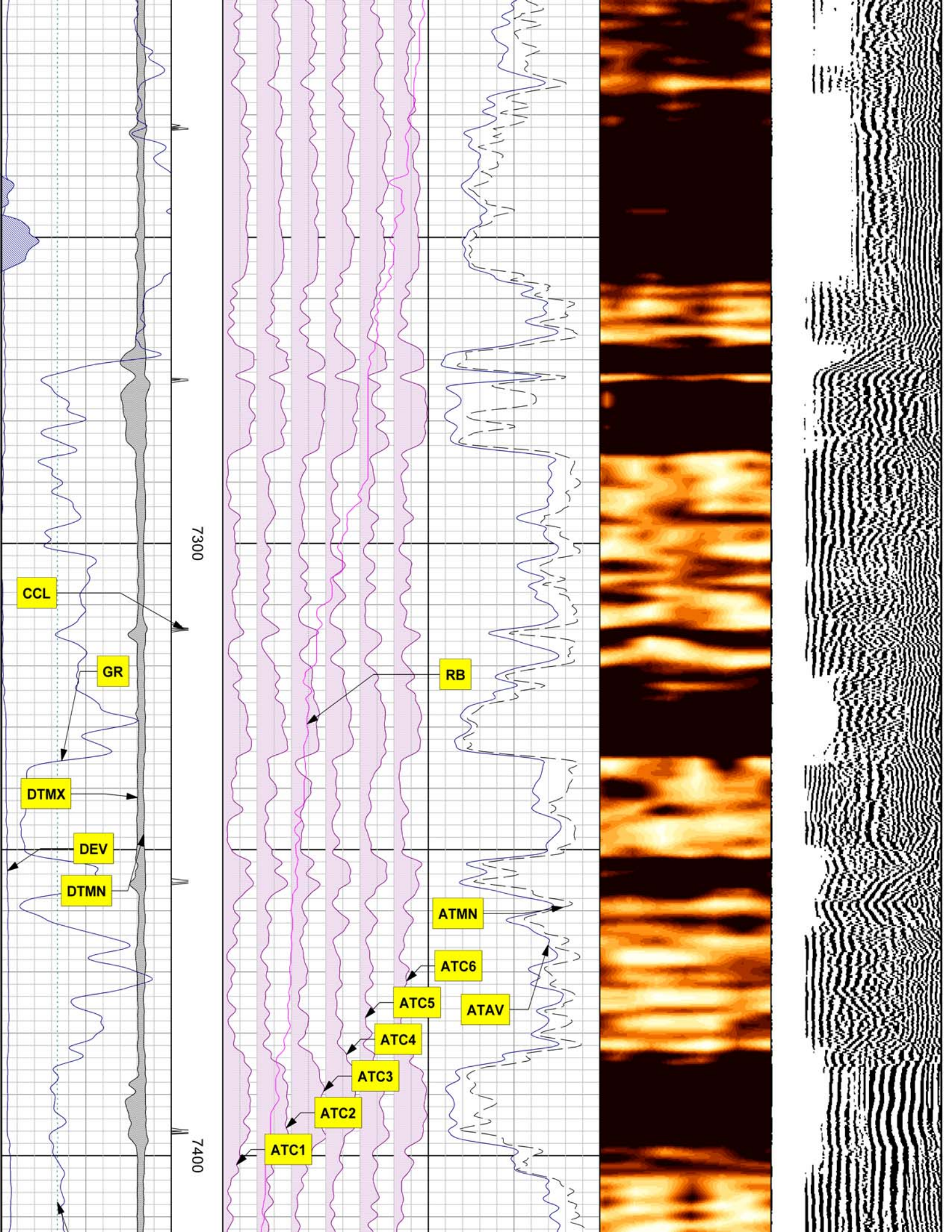












SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	80.344	mv	7194.277	7443.500
amp	fpattn	0.577	dB/ft	7194.277	7443.500
atc	dbspread	4.749	dB/ft	7194.277	7443.500
atc	spacing	0.632	feet	7194.277	7443.500
cemr	casing od	5.500	inches	7194.277	7443.500
cemr	casing wt	15.500	lbm/ft	7194.277	7443.500
cemr	compress	2548.000	psi	7194.277	7443.500
CN	Bit Size	7.875	inches	7205.277	7443.465
CN	Casing Thickness	0.274	inches	7194.277	7443.500
CN	Casing/Cement Correction	No		7205.277	7443.465
CN	CN Chism	No		7205.277	7443.465
CN	Matrix	Limestone		7205.277	7443.465
CN	Salinity	0.000	ppm	7205.277	7443.465

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-35.500	CCL					
2435XA	-30.250	LSN					
2435XA	-29.750	NEU	SSN				
1309XA	-29.500	GR					
1424XA	-11.000	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMX	AMAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
1424PA	0.000	CHV	CYQ	SIG			

Created by : SBT, v5.0.003

Plotted by : PlotMgr, v5.4.504

Company : COLORADO INTERSTATE GAS

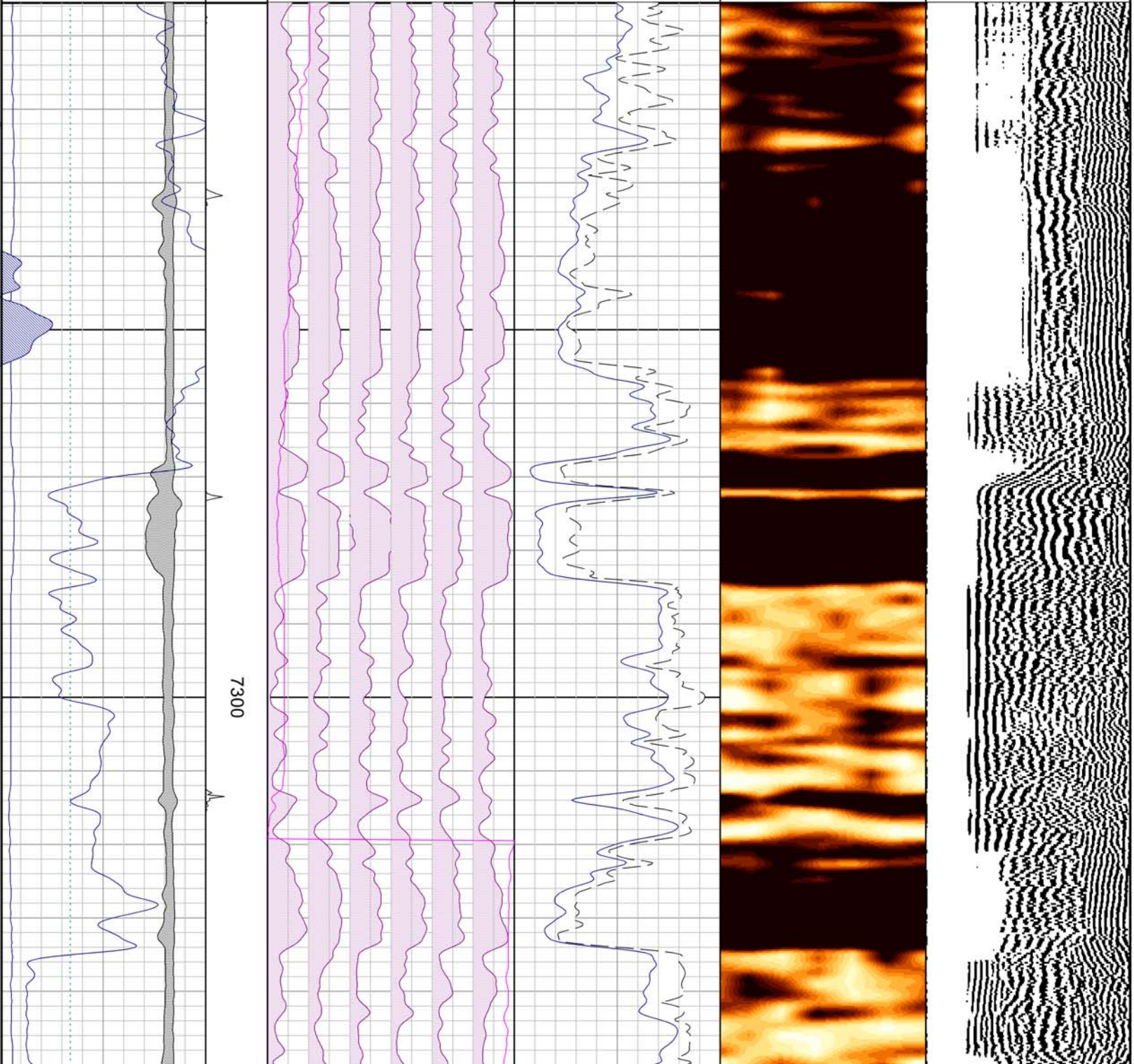
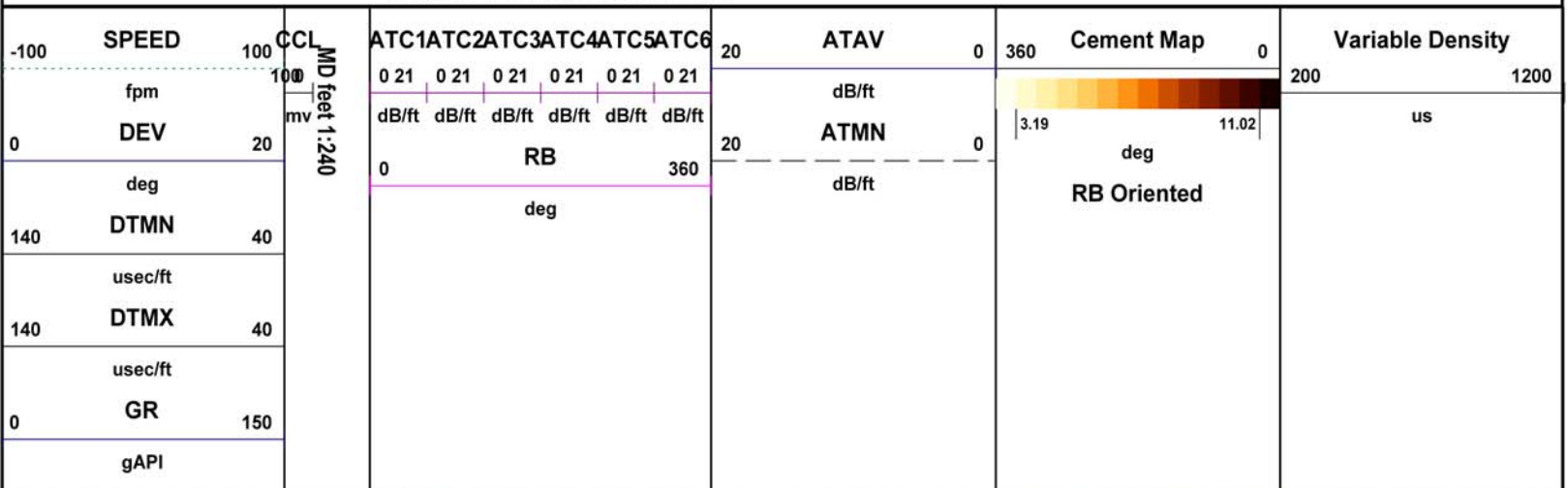
Well : TOTEM SWD 1

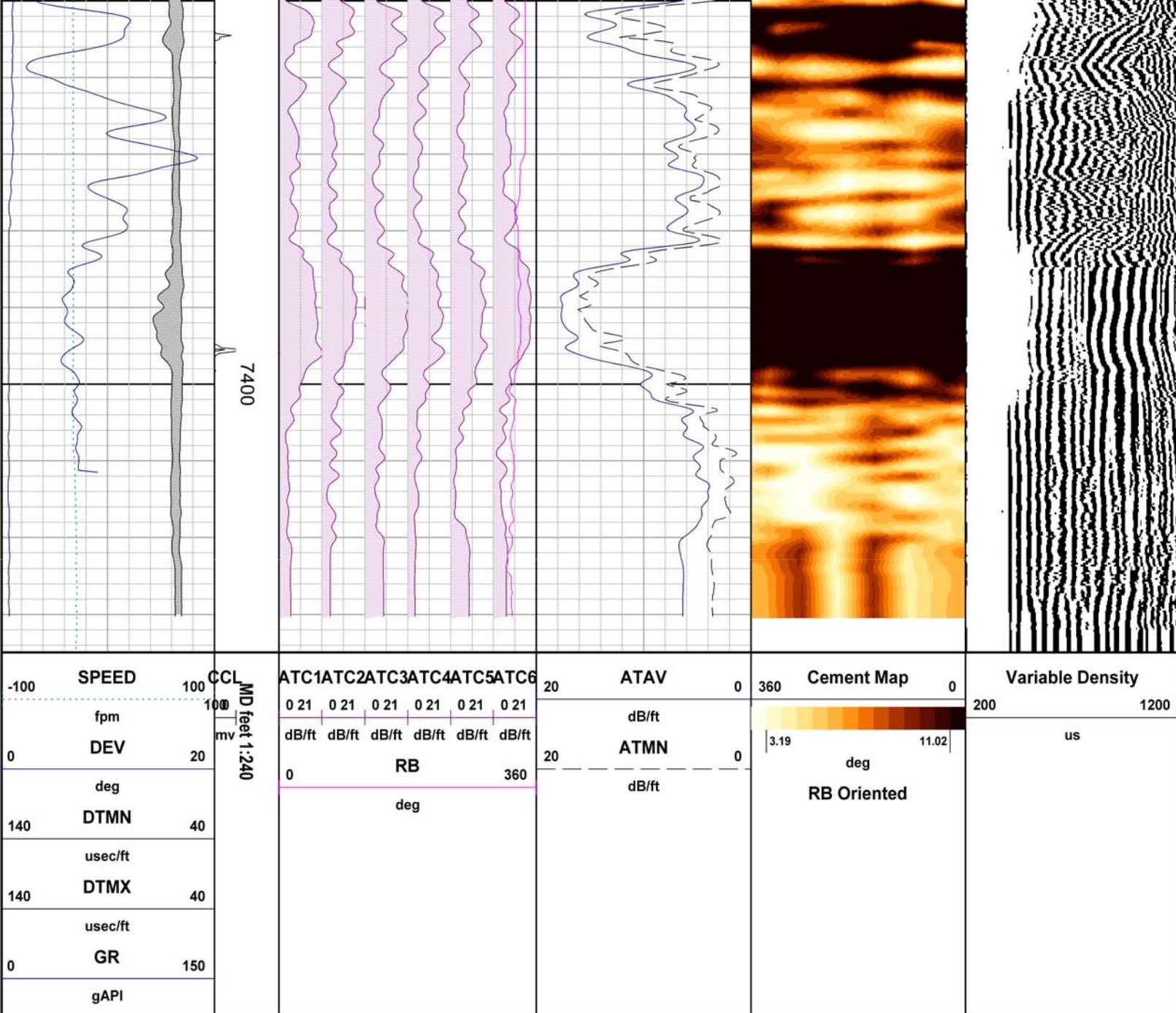
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Mode : PlotMgr 5.4.504

Interval : 7205.50 - 7435.00 feet UP

Created : 1/17/2009 8:39:33 AM





CALIBRATION SUMMARY

GAMMA RAY

DATE/TIME PERFORMED: Tue Mar 25 11:15:18 2008 TOOL SERIES: 1339XA ASSET: 10216912 SEQ: bg

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA-496	37.44	209.31	0.873	32.68	182.68	150.00

Verification File: C:\case\calver\GR\10216912bg.vp

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Tue Mar 25 11:21:43 2008 TOOL SERIES: 1339XA ASSET: 10216912 SEQ: bg

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA-496	39.33	206.47	0.873	34.33	180.20	145.87

RB

Calibration File: C:\case\calver\RB\119552bg.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Mar 25 10:59:07 2008 TOOL SERIES: 1424XA ASSET: 119552 SEQ: bg

	X-Att [raw]	Y-Att [raw]	RB [deg]	X-Max [deg]	Y-Max [deg]	OFFSET [deg]
PAD 2	-113.80	-411.40	0.00			
PAD 3	-410.10	-106.00	60.04	-423.42	427.11	-74.41

Verification File: C:\case\calver\RB\119552bg.vp

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Tue Mar 25 11:03:10 2008 TOOL SERIES: 1424XA ASSET: 119552 SEQ: bg

	Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6
RB [deg]	300.65	1.15	59.78	119.22	180.14	240.05

PAD

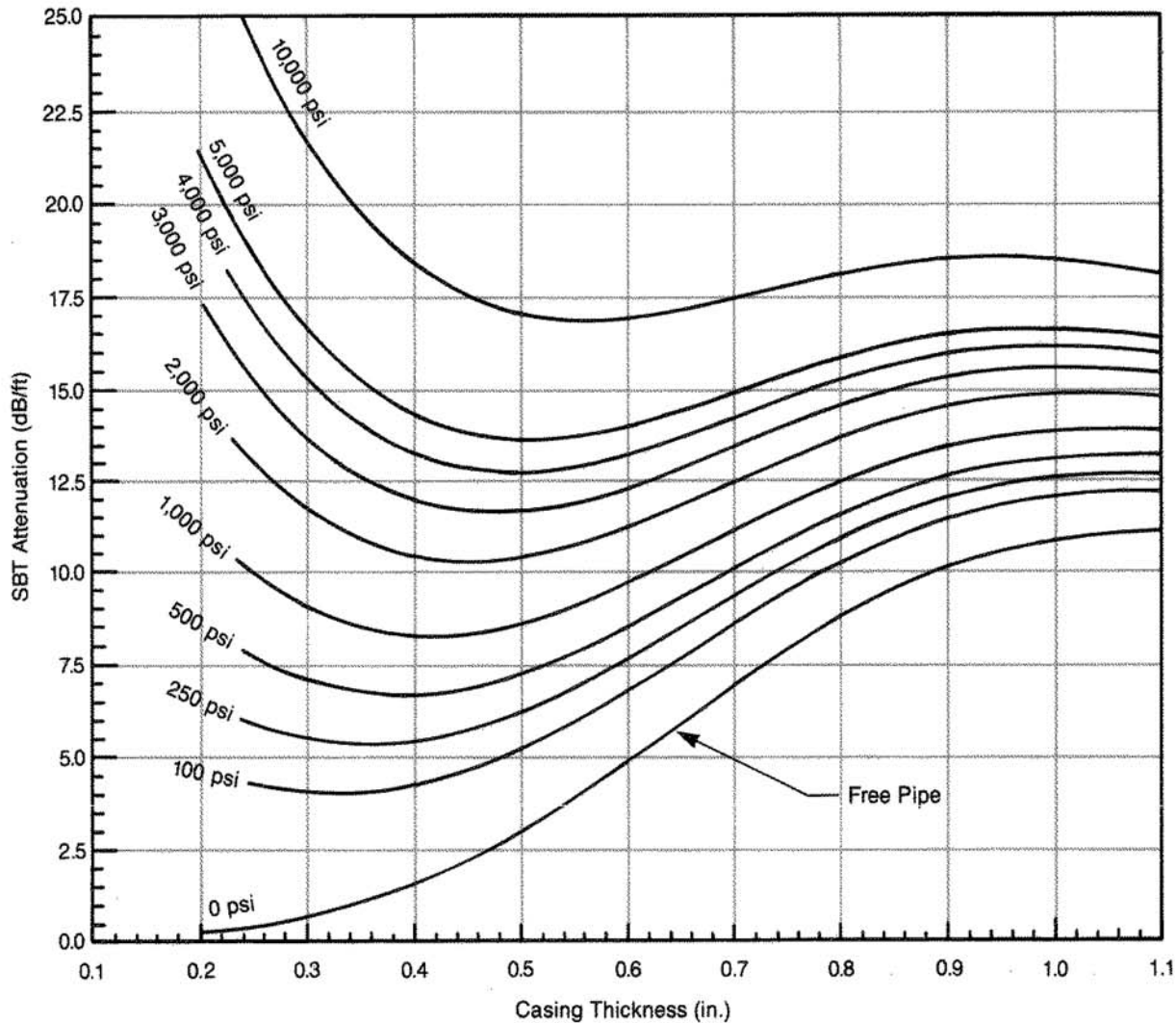
Verification File: C:\case\calver\PAD\11955238.VK

DATE/TIME PERFORMED: Thu Jan 15 13:39:59 2009 TOOL SERIES: 1424XA ASSET: 119552 SEQ: 38

Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6
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Noise Level	7.90	3.30	6.75	3.30	5.75	3.00
PAD Sensitivity	173.40	196.10	54.50	151.70	222.85	229.05

Cement Compressive Strength from Segmented Bond Tool Log



This chart is intended to provide an estimate of the compressive strength of bonded cement using the attenuation readings from the Segmented Bond Tool (SBT™) log.

Enter the chart on the left with the attenuation in dB/ft, while at the same time entering the casing wall thickness (in.) from the bottom of the chart. The point at which the two lines intersect is the estimated compressive strength (psi) of the bonded cement.



Company
Well
Field
County

COLORADO INTERSTATE GAS
TOTEM SWD 1
TOTEM
ADAMS State COLORADO

File No:
552139
API No:
05-001-09680

Location

Elevations

KB N/A

DE N/A

Baker Atlas

CASE

CHS

SEC 7 TWP 2S RGE 62W

DT 10/11
GL 5203 ft