



SEGMENTED BOND LOG

Baker Atlas

File No: EXXONMOBIL PRODUCTION COMPANY

1598 FRU 197-33A7

API No: PICEANCE CREEK

05103113990000 County RIO BLANCO State COLORADO

Location SHL 631' FSL & 2364' FEL SENSE Other Services NONE

SEC 33 TWP 15 RGE 97W

GL Elevation 6374.8 ft

KB 26.1 ft Above P. D.

Drill Measured From KELLY BUSHING

Elevations

KB 6401 ft

DF 6400 ft

GL 6374.8 ft

Date 27 FEB 2010

Run ONE

Service Order 574859

Depth Driller 8609 ft

Depth Logger 8690 ft

Bottom Logged Interval 8590 ft

Top Logged Interval 3500 ft

Time Started 06:00

Time Finished 14:00

Operator Rig Time 8 hrs

Type of Fluid in Hole DRILLING FLUID

Fluid Density W/A

Salinity W/A

Fluid Level FULL

Logged Cement Top W/A

Wellhead Pressure 0 psi

Maximum Hole Deviation W/A

Nominal Logging Speed 30 fpm

Maximum Recorded Temperature W/A

Reference Log NONE

Reference Log Date W/A

Equipment No. 4214 Location VERNAL, UT.

Recorded By J. OSTLER / J. WIESER

Witnessed By MR. JASON BERTICH

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.

Borehole Record		
Bit Size	From	To
9.625 in	SURFACE	8609 ft

Casing Record				
Size	Weight	Grade	From	To
7 in	26 lbm/ft		SURFACE	8609 ft

Remarks
THIS IS THE FIRST LOG OF THE WELL
WELL WAS LOGGED WITH 0 PSI AT THE WELL HEAD

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	OCL	2318KA	150	CENTRALIZED

	1	GR	1509XA	386	CENTRALIZED
1	1	ACOUS. ELEC.	2435XA	970	CENTRALIZED
1	1	CENT	4341XA	702	CENTRALIZED
1	1	SBT	1424XB	555	CENTRALIZED
1	1	VDL	1424PA	851	CENTRALIZED
1	1	CENT	4341XA	379	CENTRALIZED

MAIN SECTION

SBT NORMALIZATION RESULTS

CURVE	PARAMETER	VALUE	UNITS	TOP	BOTTOM	COMMENT
ATC1	seg1 cnormf1	1.179	db/ft	3492.750	8580.719	
ATC2	seg2 cnormf2	-0.421	db/ft	3492.750	8580.719	
ATC3	seg3 cnormf3	-0.649	db/ft	3492.750	8580.719	
ATC4	seg4 cnormf4	-1.735	db/ft	3492.750	8580.719	
ATC5	seg5 cnormf5	1.459	db/ft	3492.750	8580.719	
ATC6	seg6 cnormf6	0.186	db/ft	3492.750	8580.719	
ATC1	seg1 dnormf1	-0.355	db/ft	3492.750	8580.719	Good Confidence
ATC2	seg2 dnormf2	-0.404	db/ft	3492.750	8580.719	Good Confidence
ATC3	seg3 dnormf3	-0.314	db/ft	3492.750	8580.719	Good Confidence
ATC4	seg4 dnormf4	-1.399	db/ft	3492.750	8580.719	Good Confidence
ATC5	seg5 dnormf5	2.277	db/ft	3492.750	8580.719	Low Confidence
ATC6	seg6 dnormf6	0.194	db/ft	3492.750	8580.719	Good Confidence

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	89.513	mv	3473.550	8580.000
amp	fpattn	1.193	db/ft	3473.550	8580.000
atc	dbspread	4.589	db/ft	3473.550	8580.000
atc	spacing	0.654	feet	3473.550	8580.000
cemr	casing od	7.000	inches	3473.550	8580.000
cemr	casing wt	26.000	lbm/ft	3473.550	8580.000
cemr	compress	300.000	psi	3473.550	8580.000
CN	Bit Size	7.875	Inches	3492.750	8580.719

CN	Casing Thickness	0.361	Inches	3473.550	8580.000
CN	Casing/Cement Correction	No		3492.750	8580.719
CN	CN Chism	No		3492.750	8580.719
CN	Matrix	Limestone		3492.750	8580.719
CN	Salinity	0.000	ppm	3492.750	8580.719

DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-48.920	CCL					
1309XA	-42.870	GR					
2435XA	-30.250	LSN					
2435XA	-29.750	NEU	SSN				
1424XA	-19.200	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMK	AMAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
1424PA	-8.200	CHV	CYQ	SIG			

Created by : SBT, v5.0.003

Plotted by : PlotMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

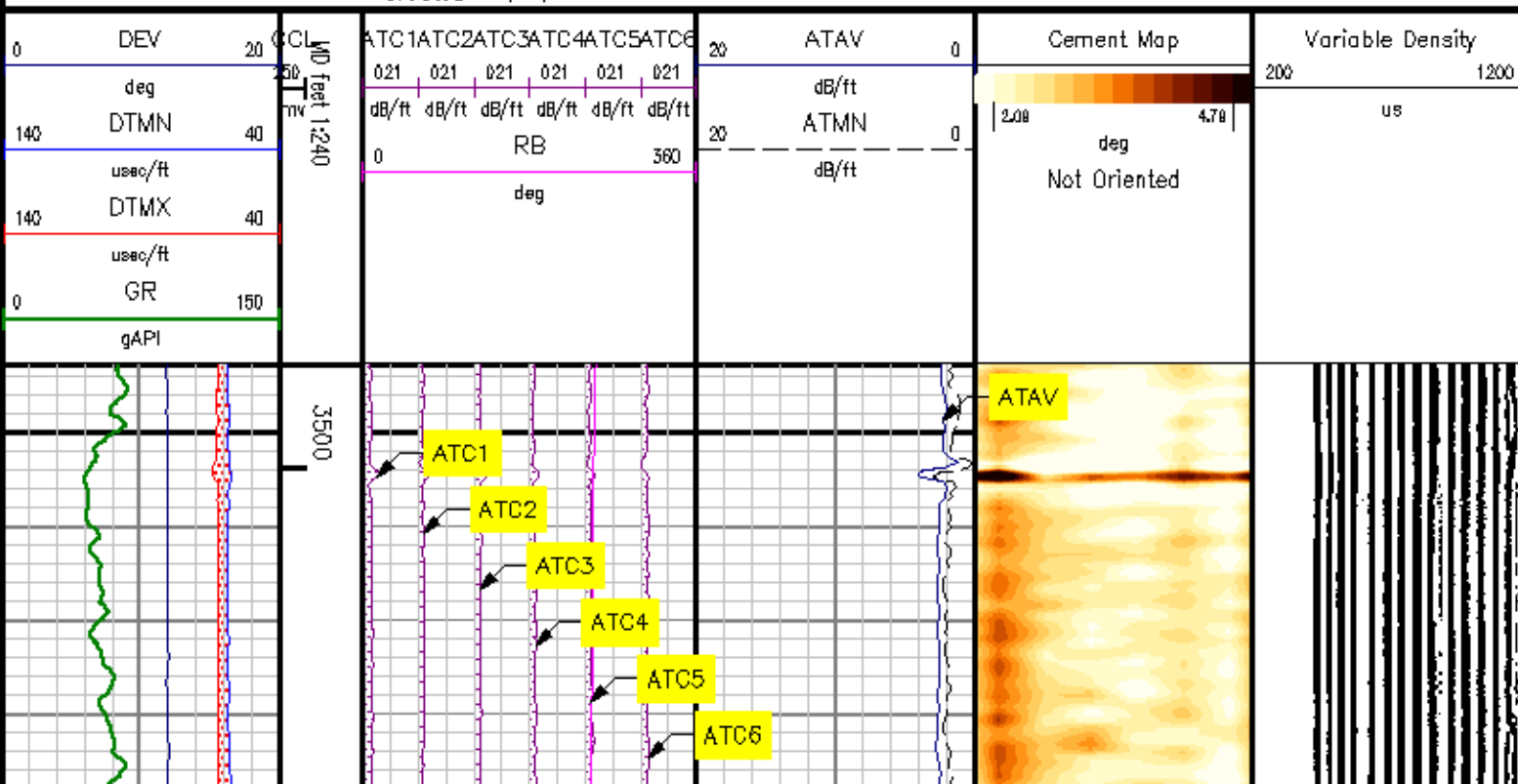
Well : FRU 197-33A7

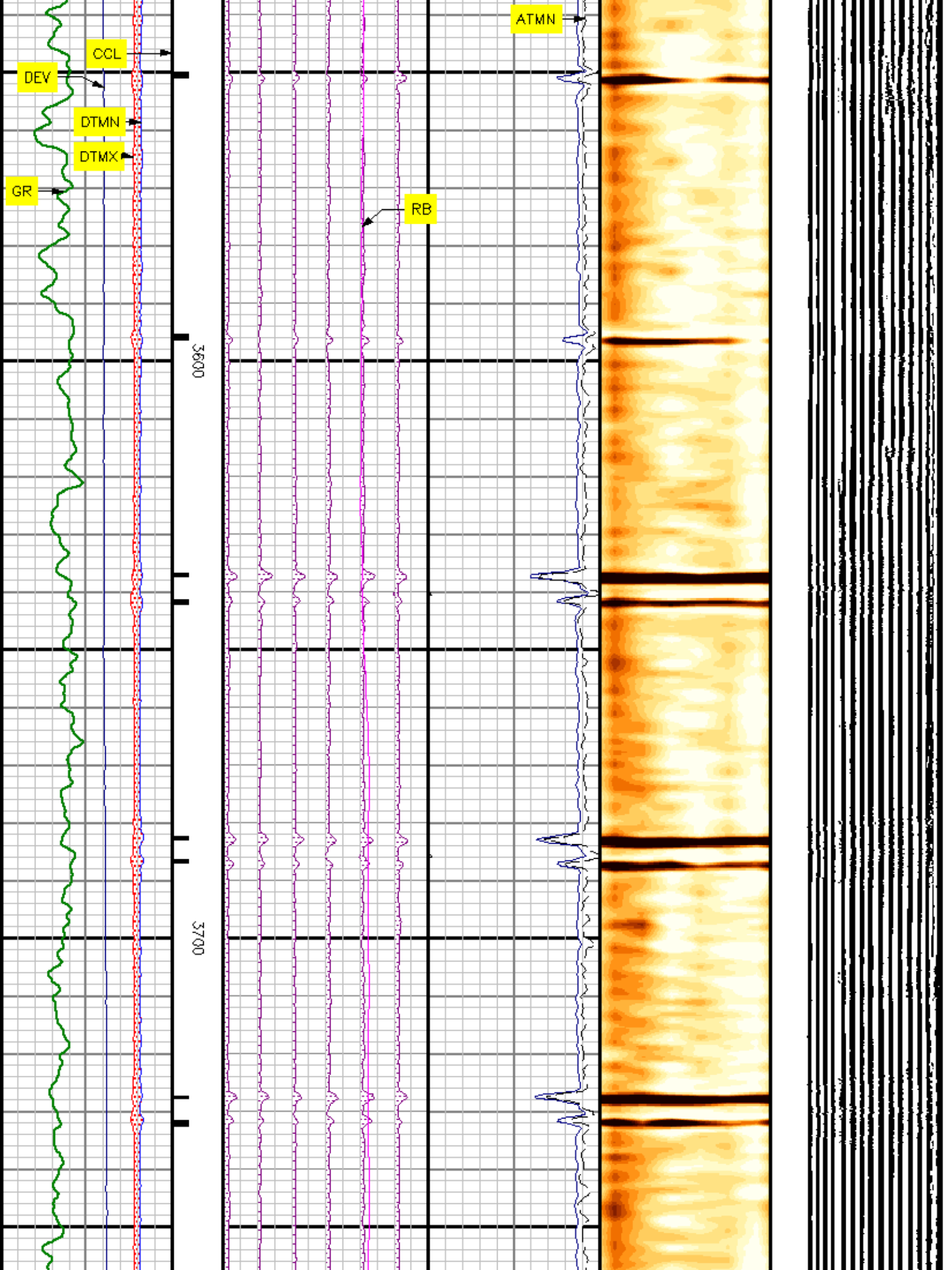
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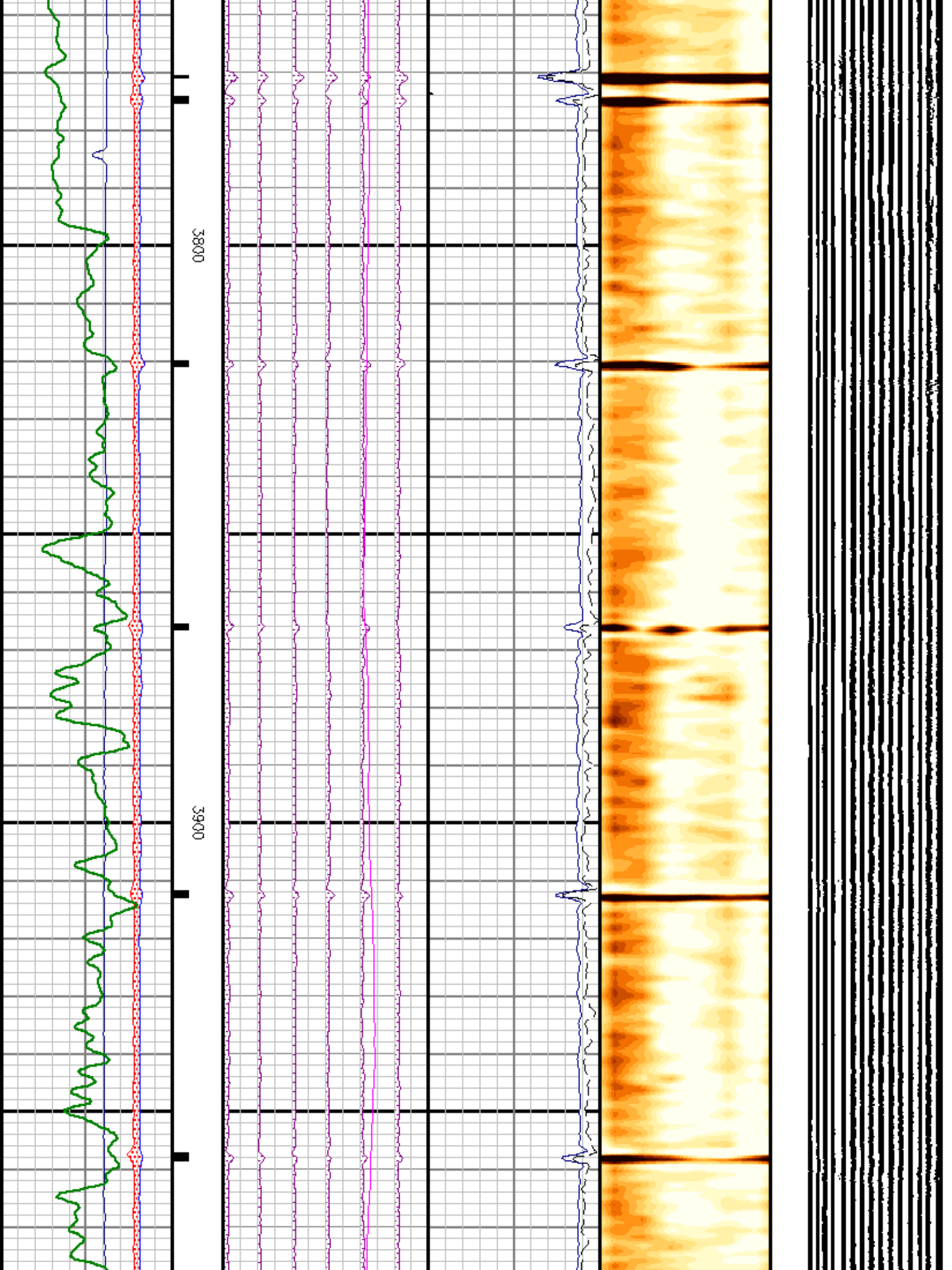
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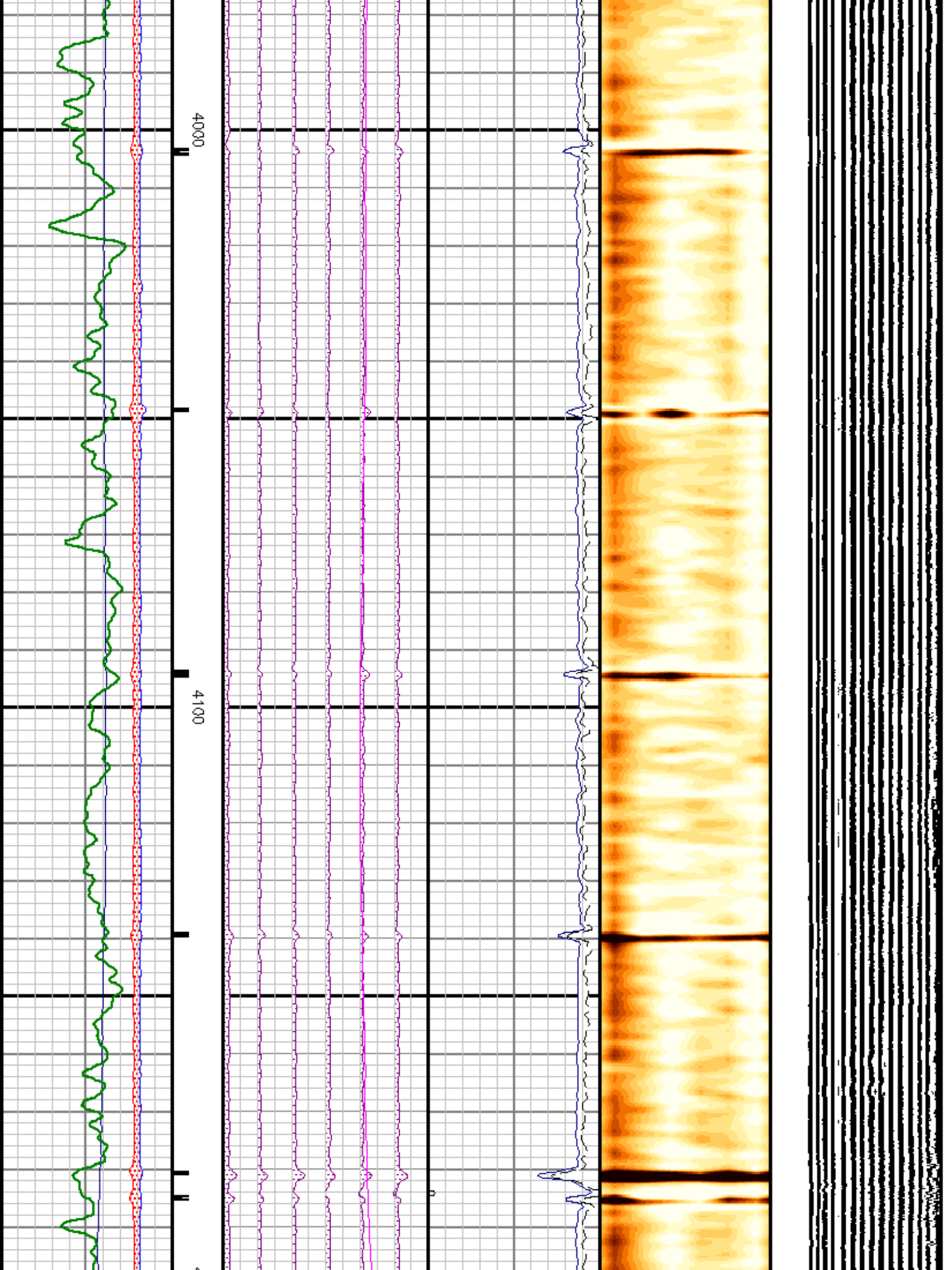
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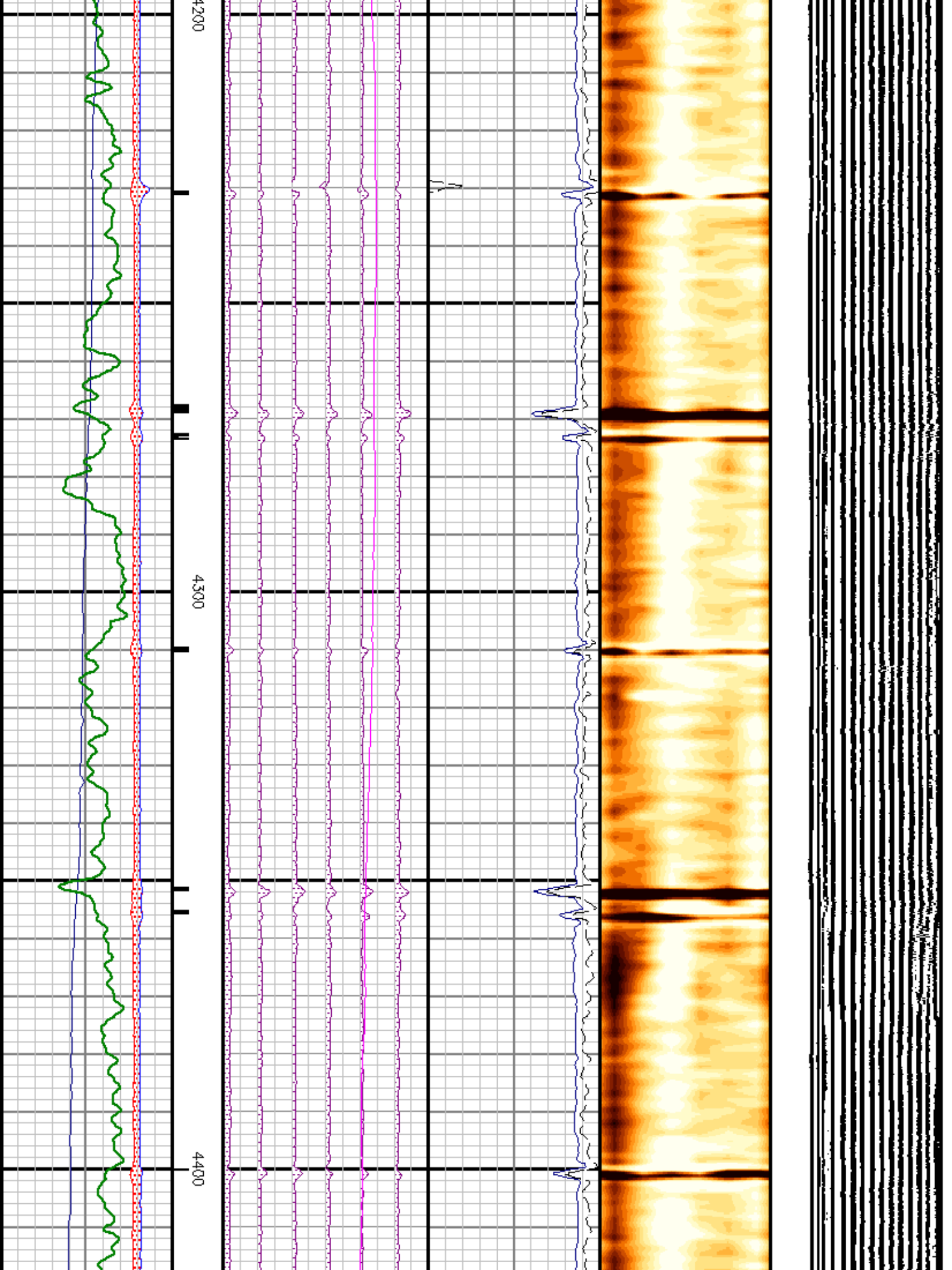
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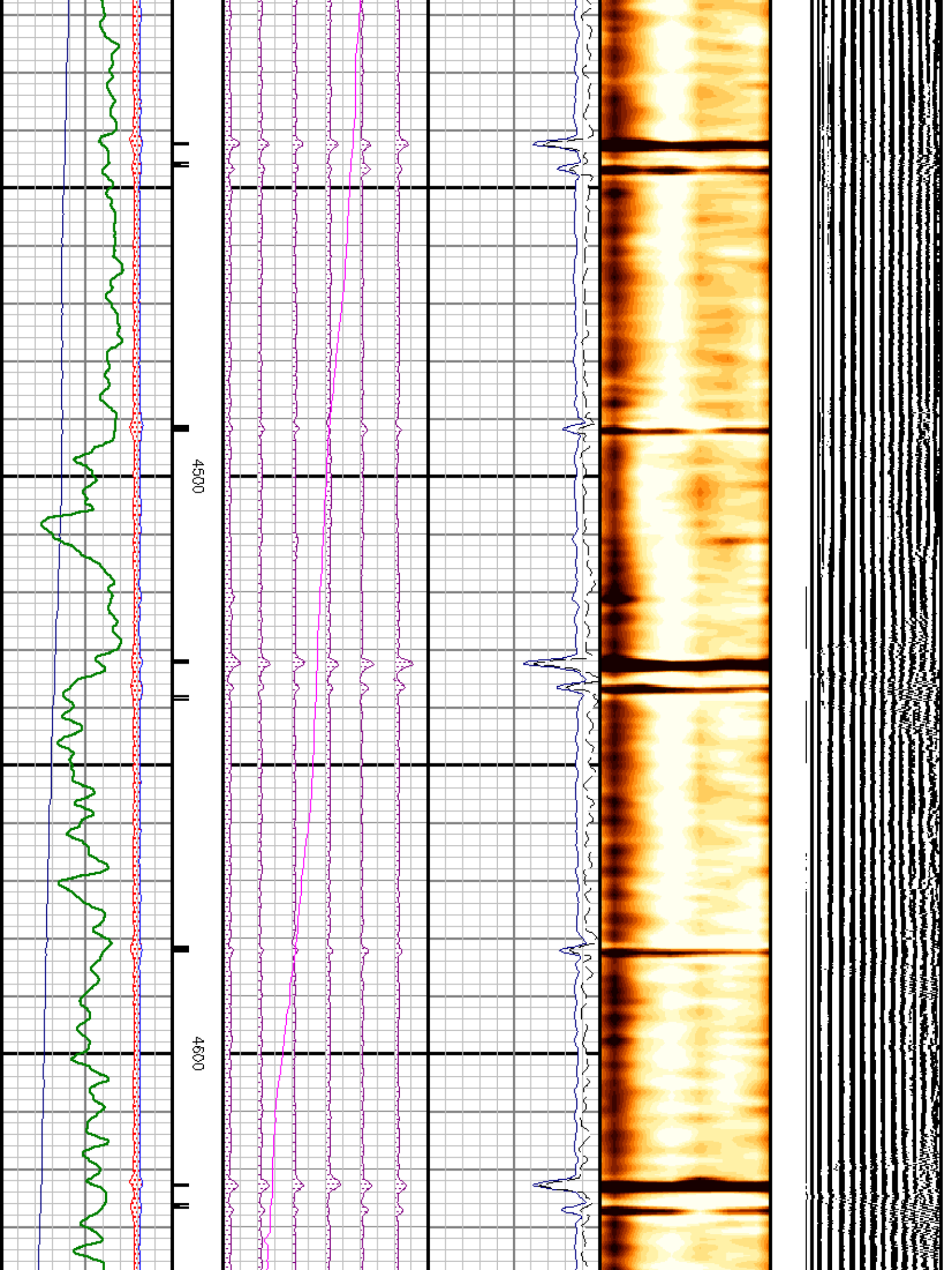


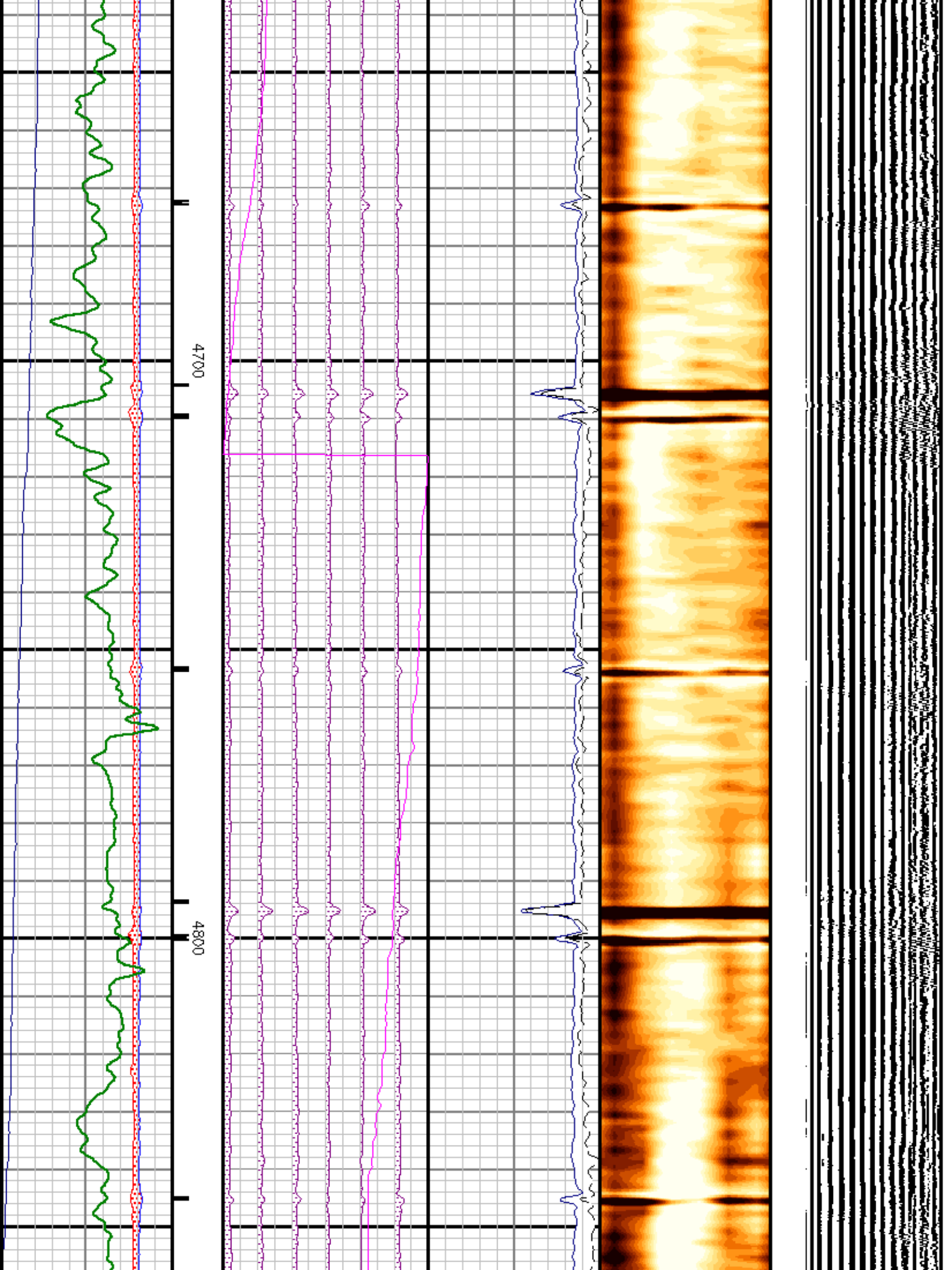


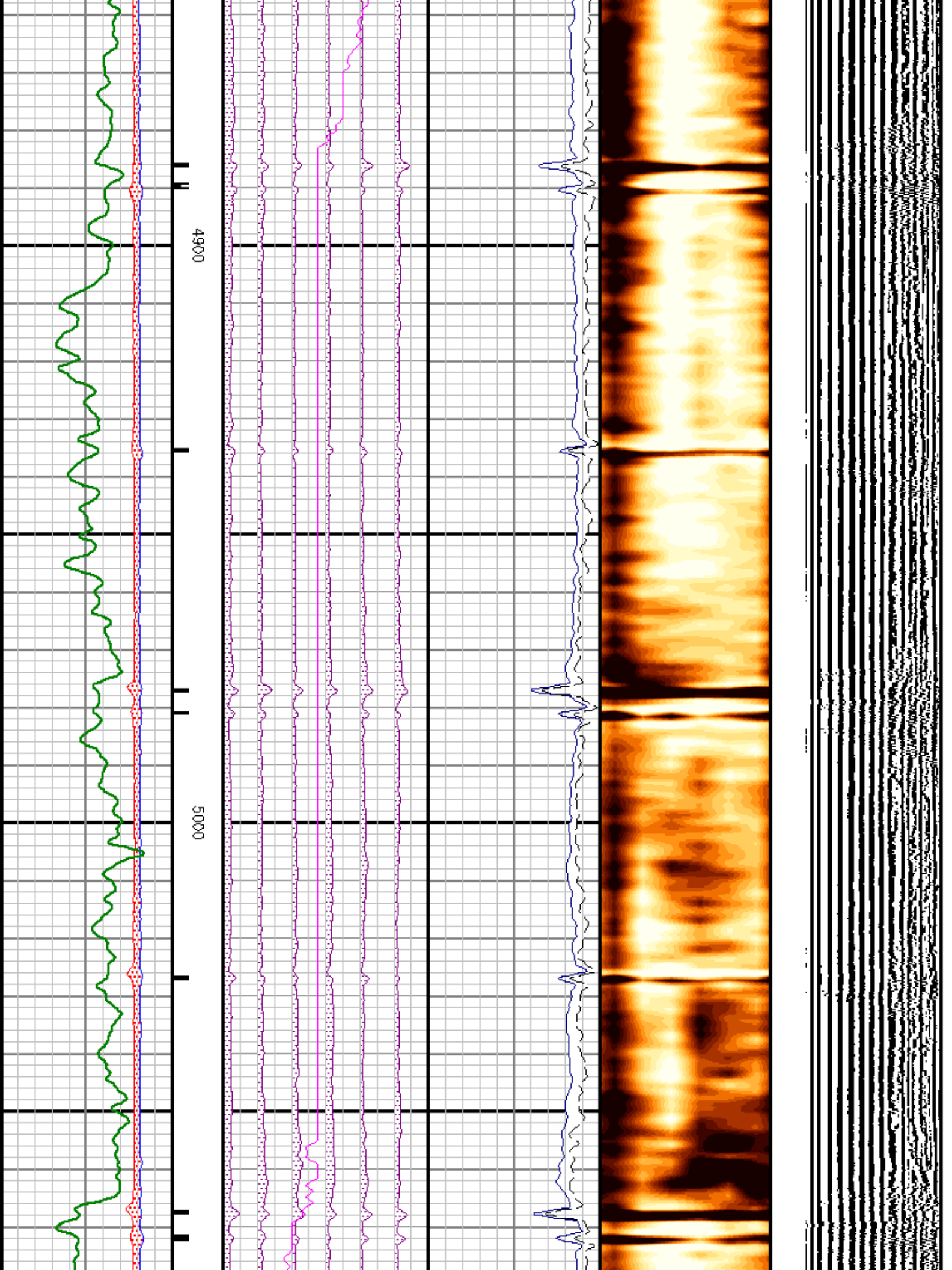


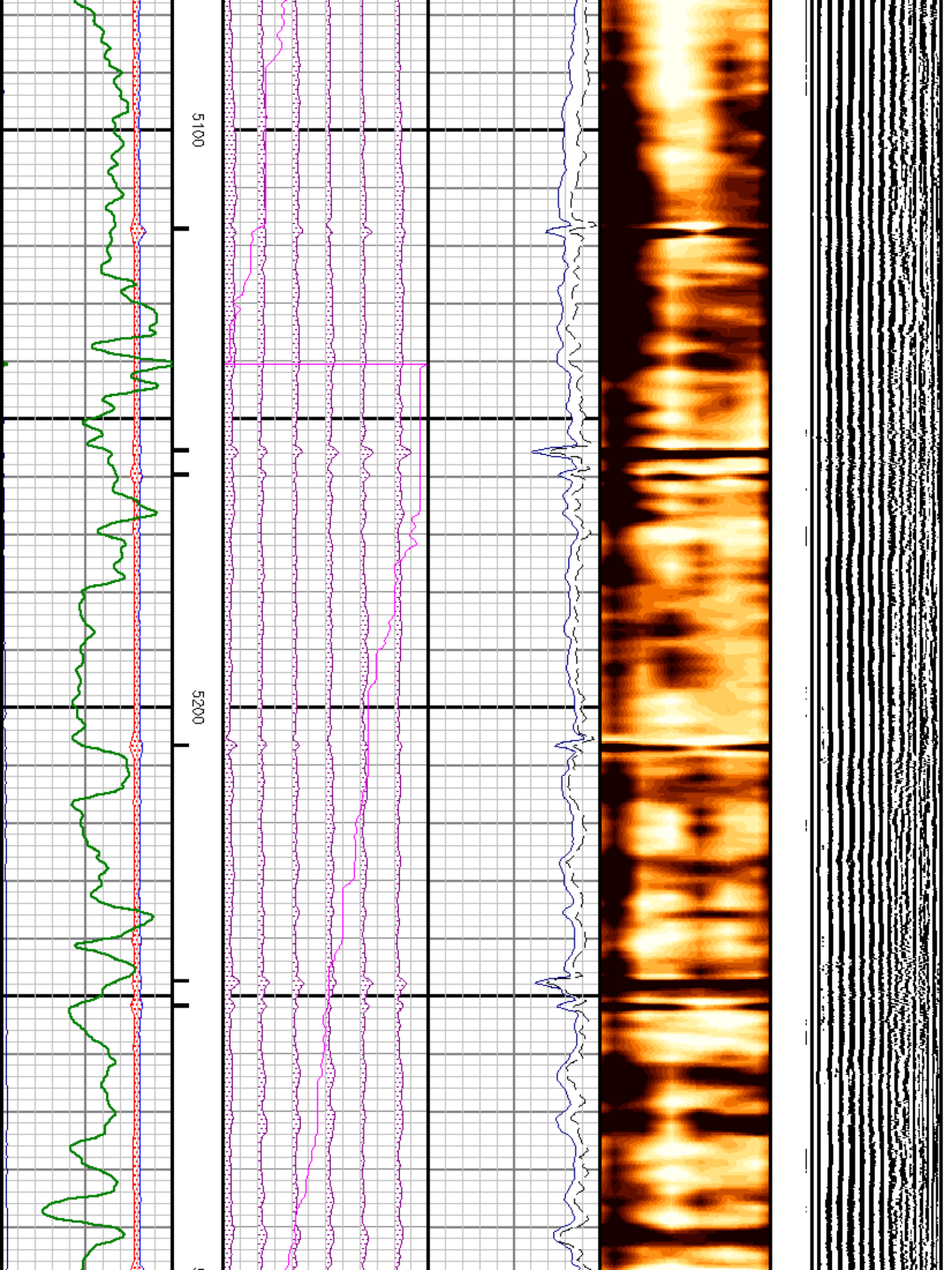


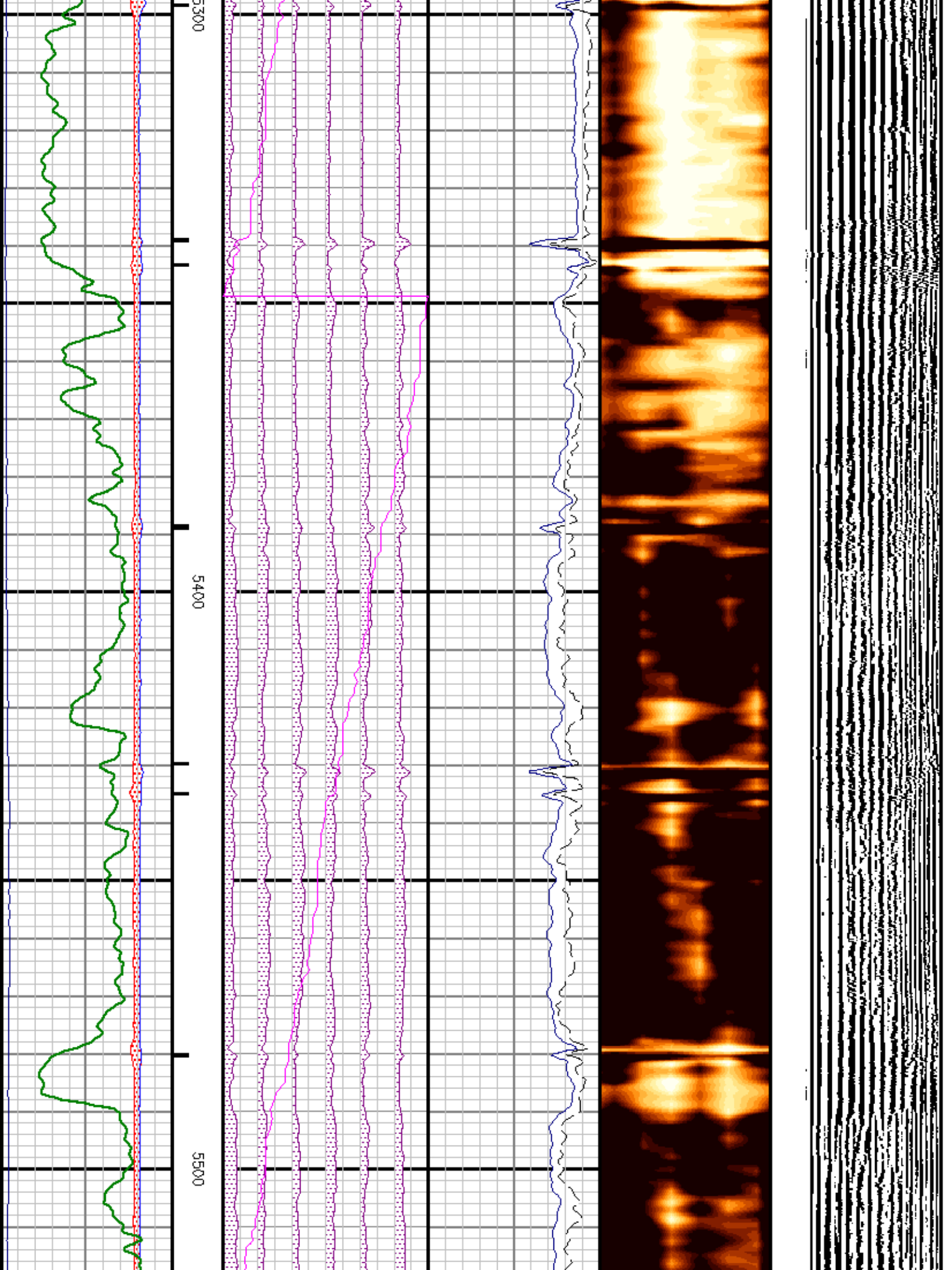


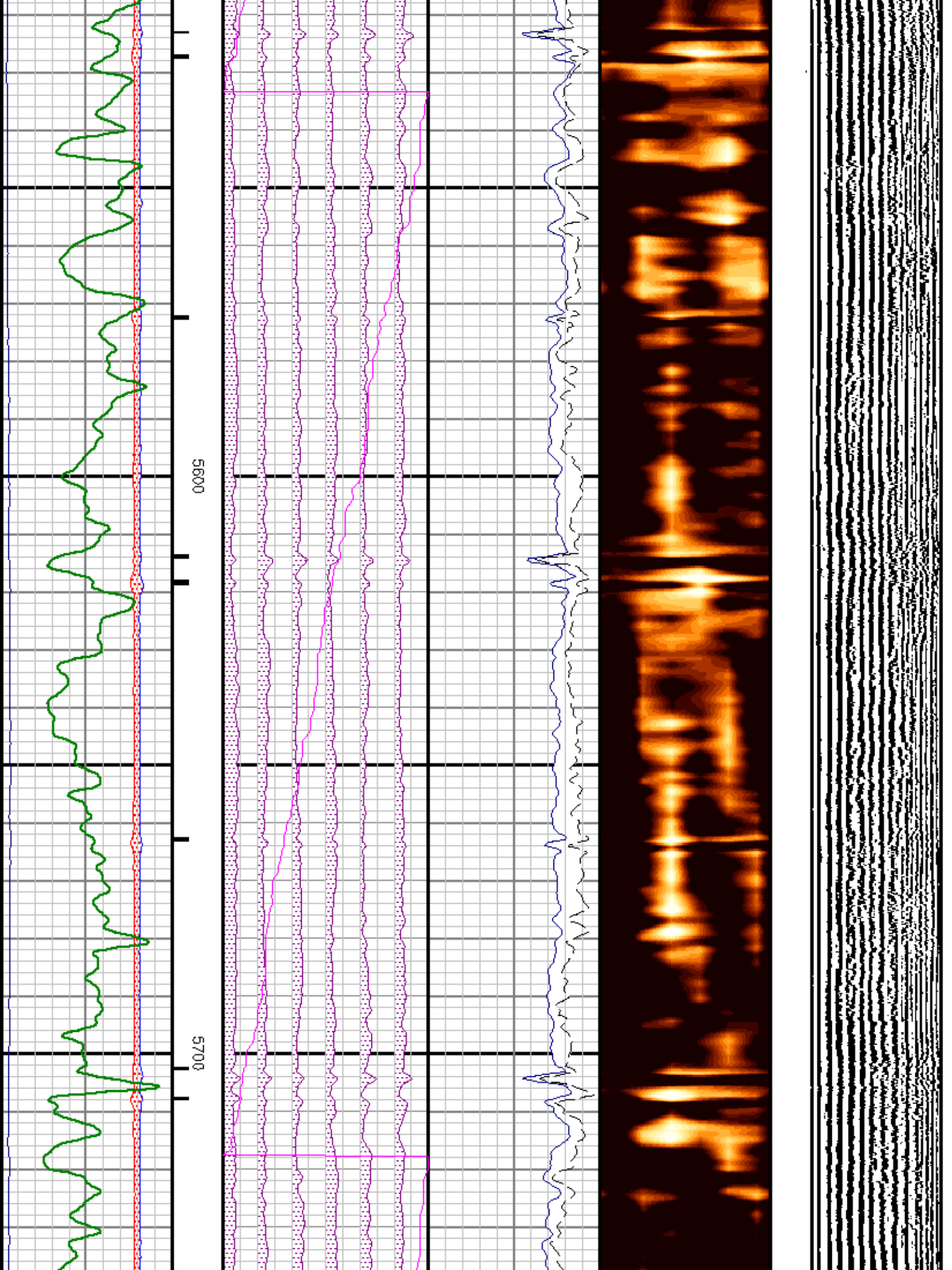


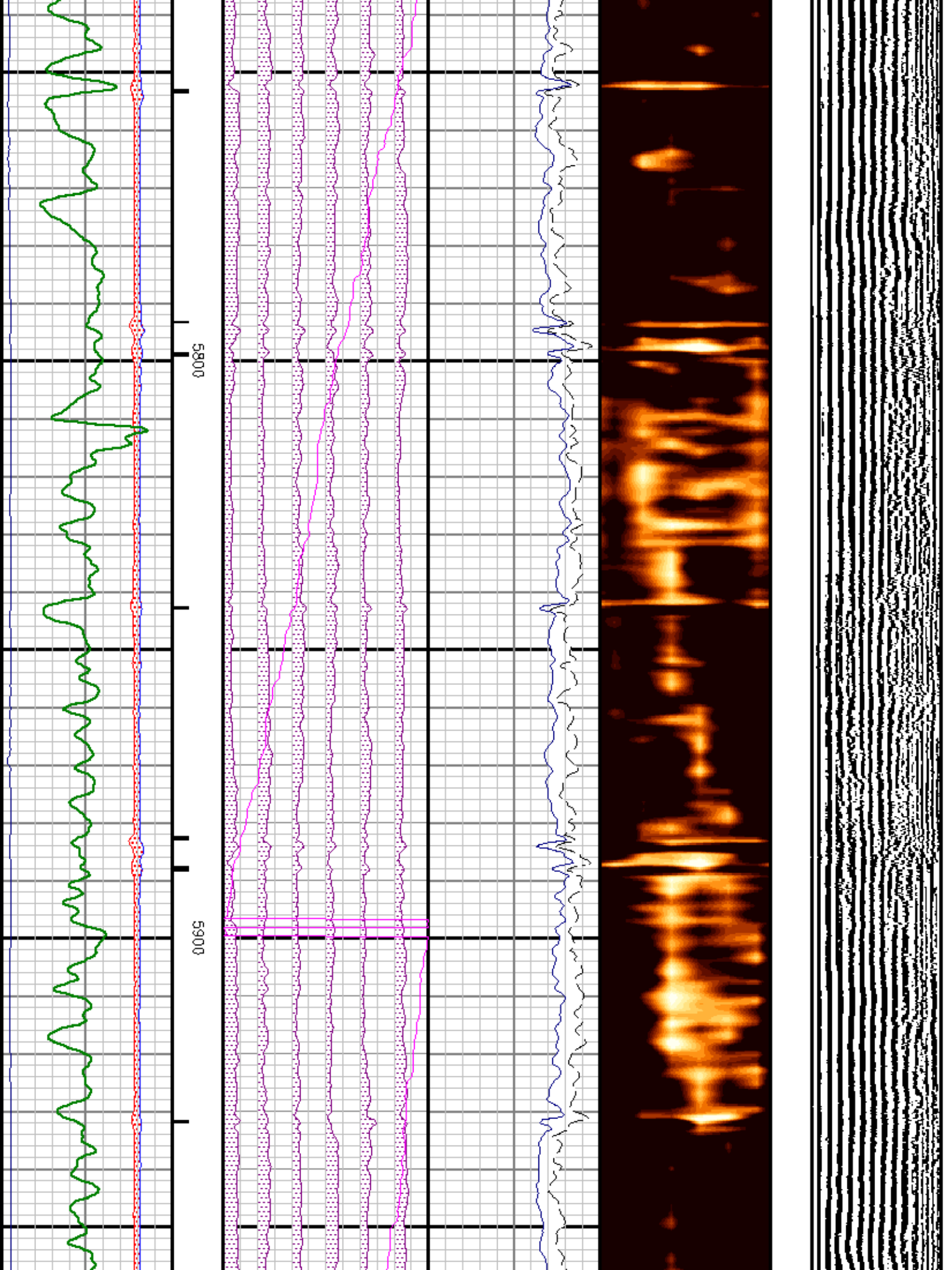


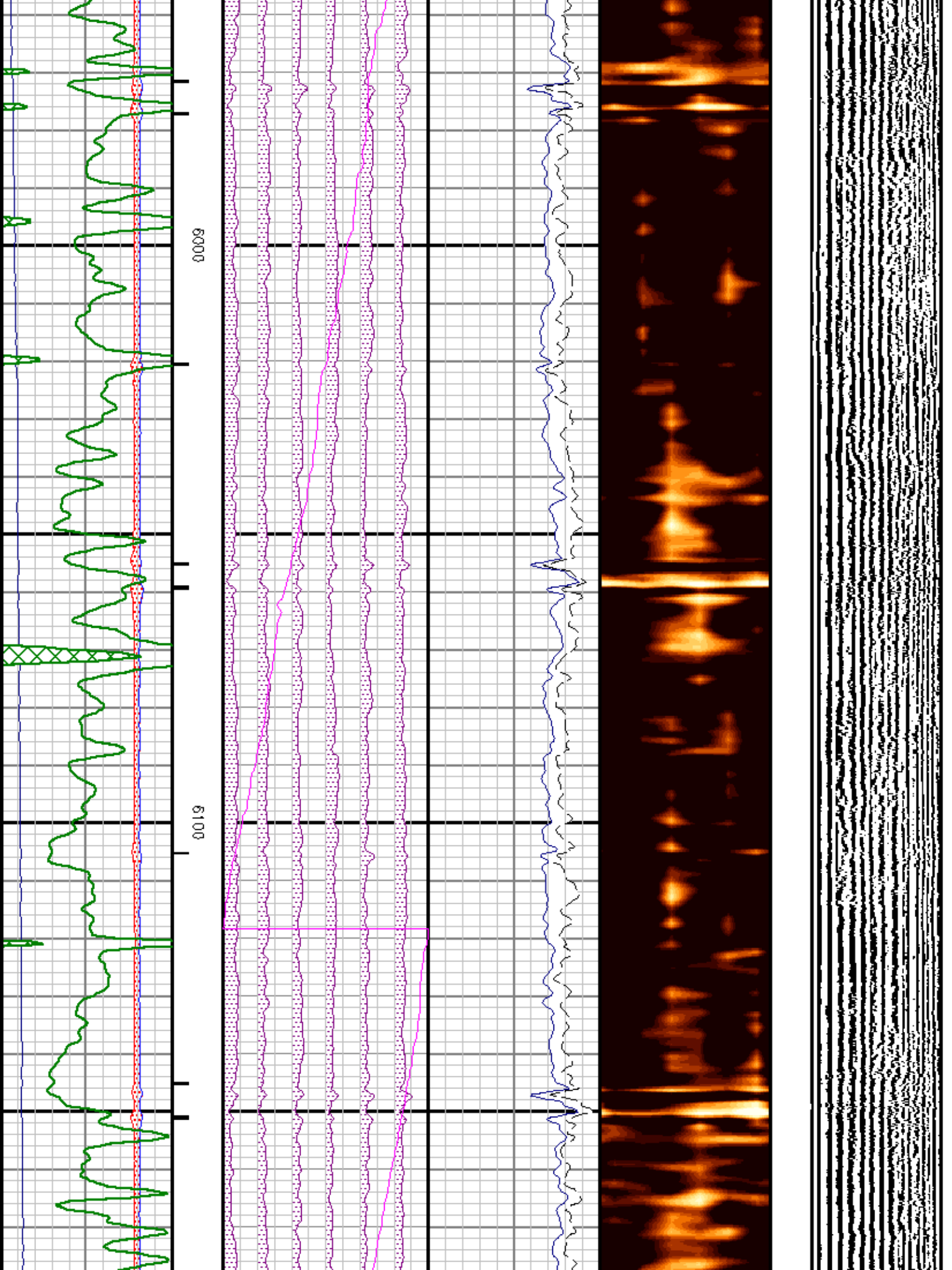


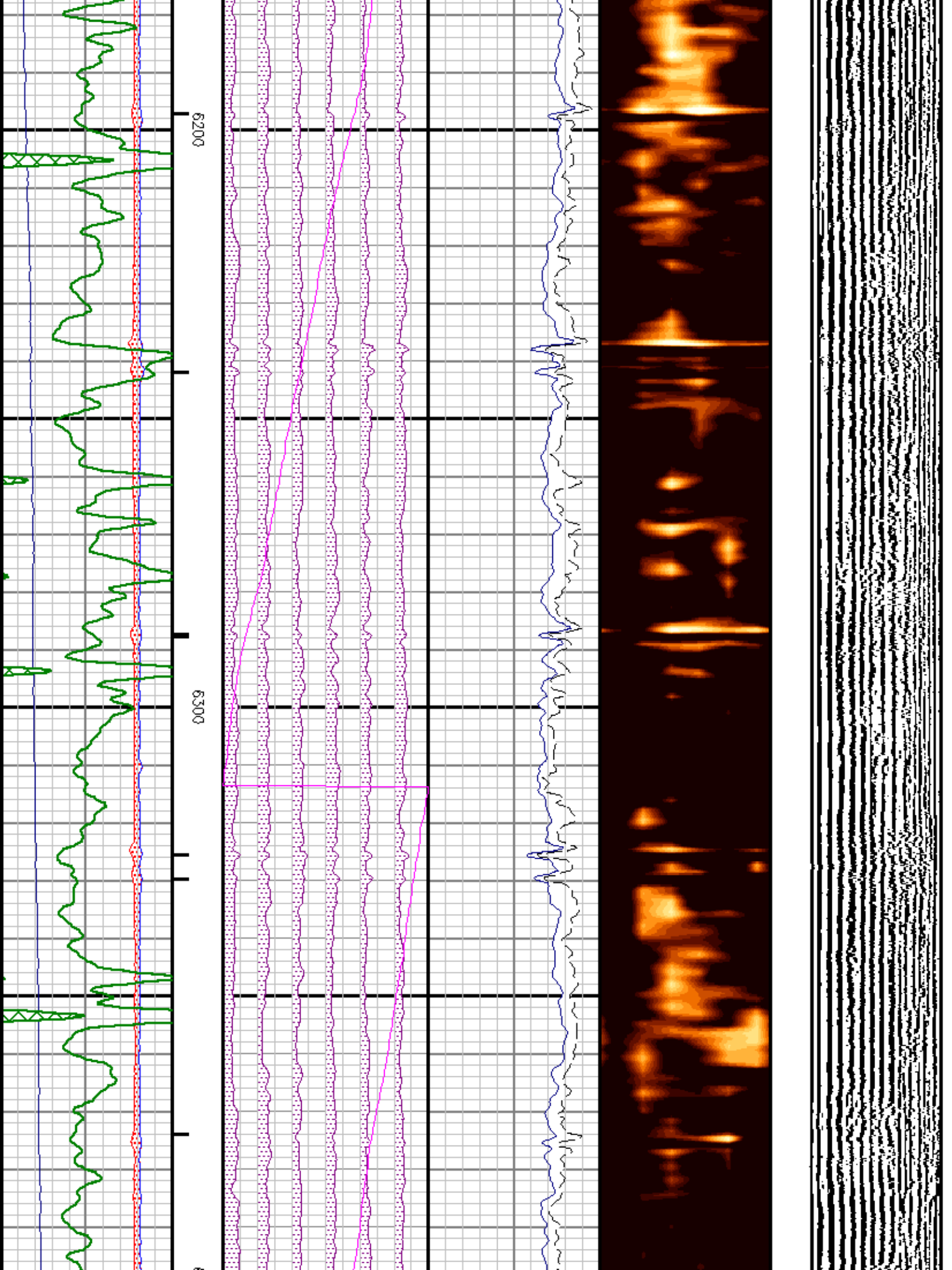


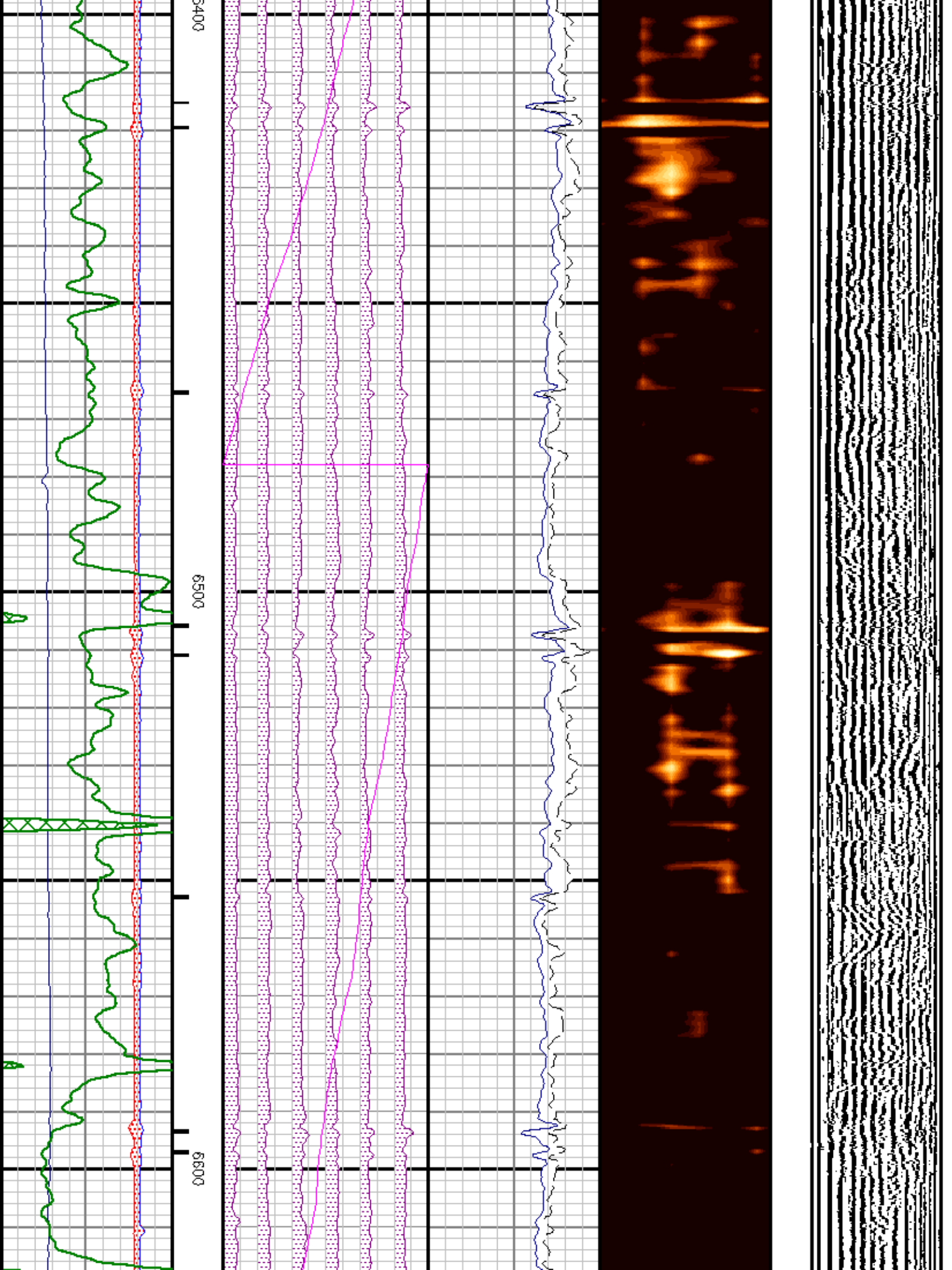


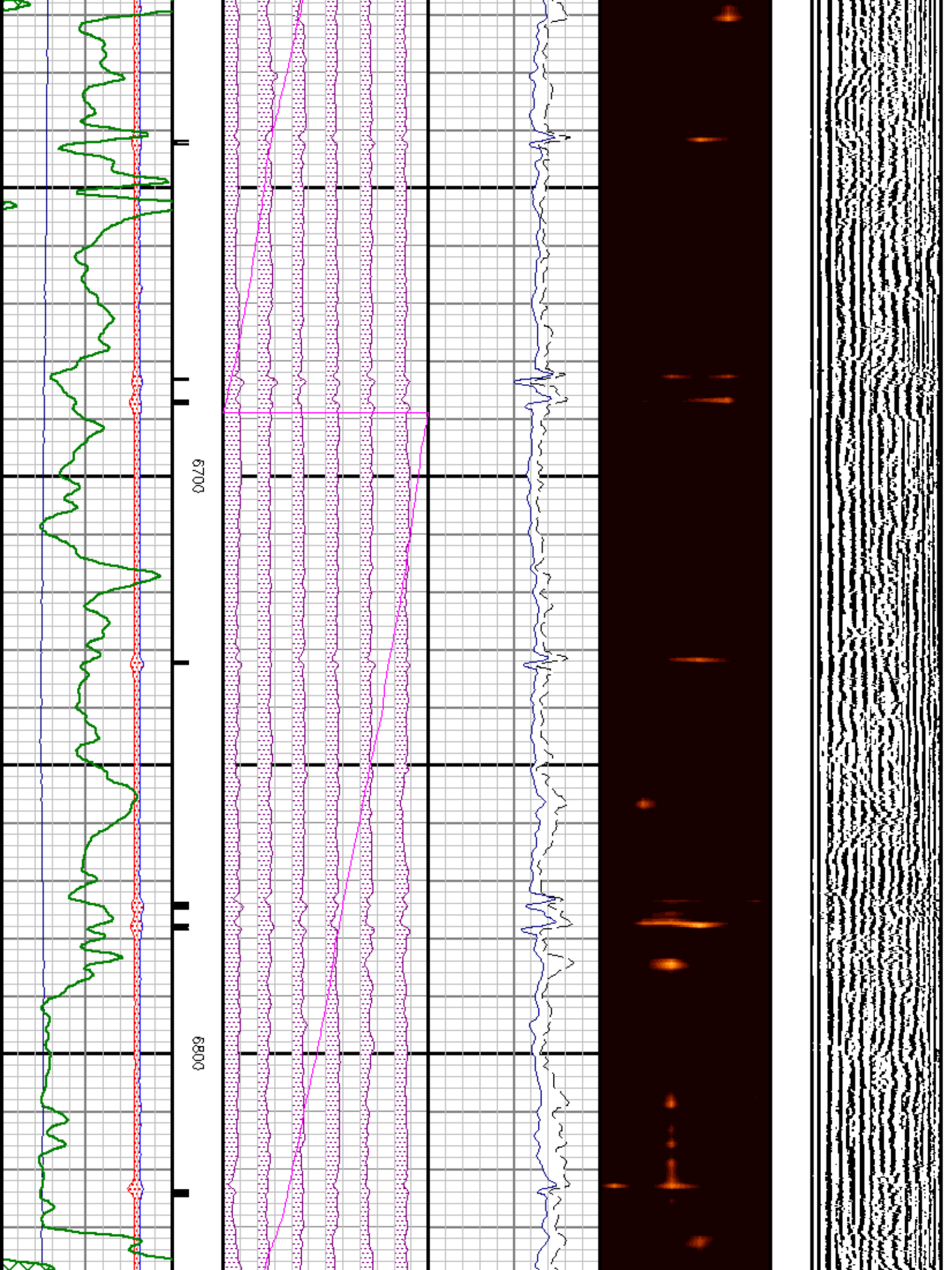


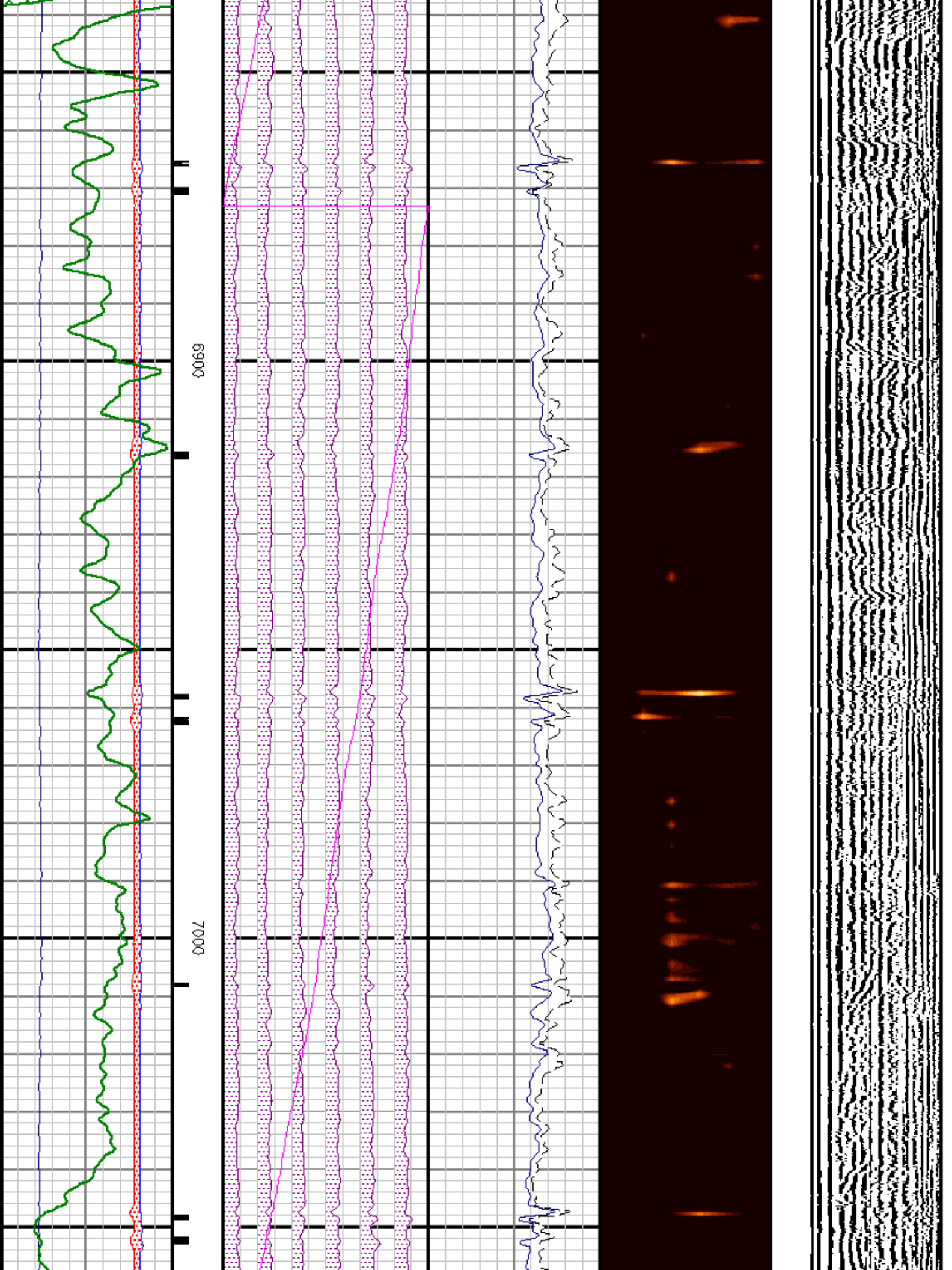


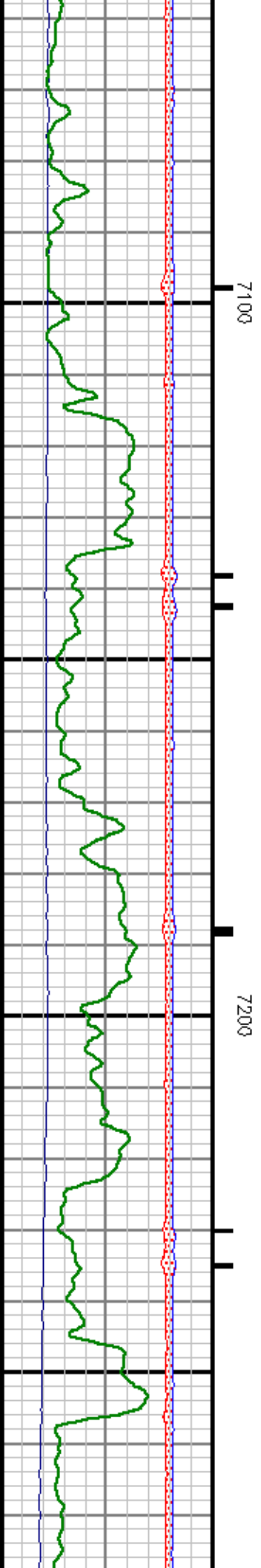
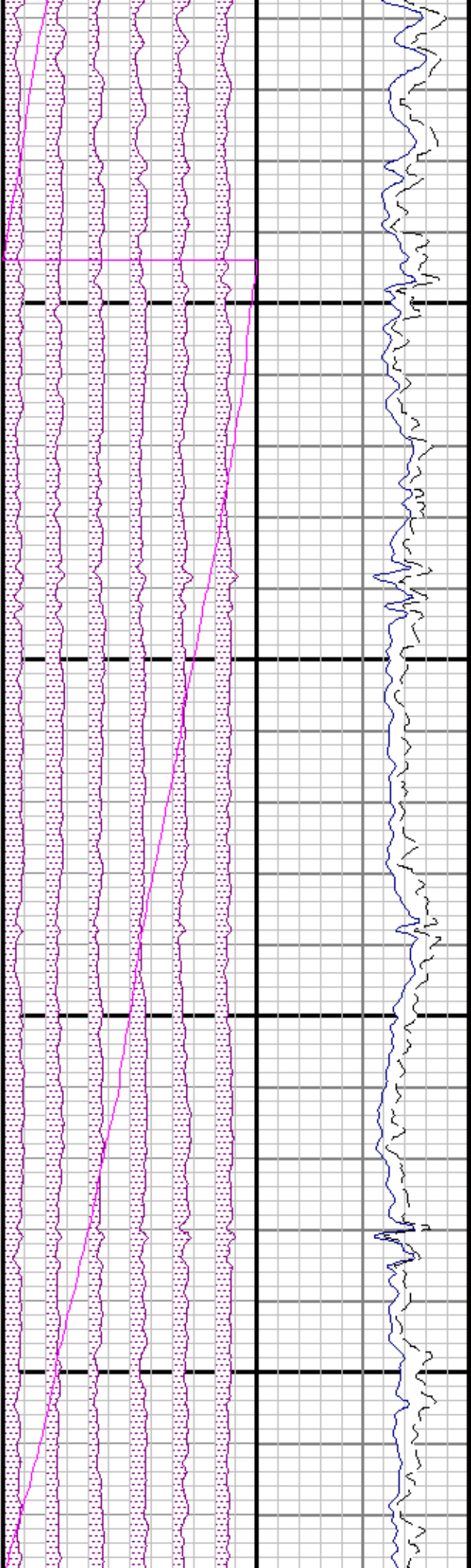
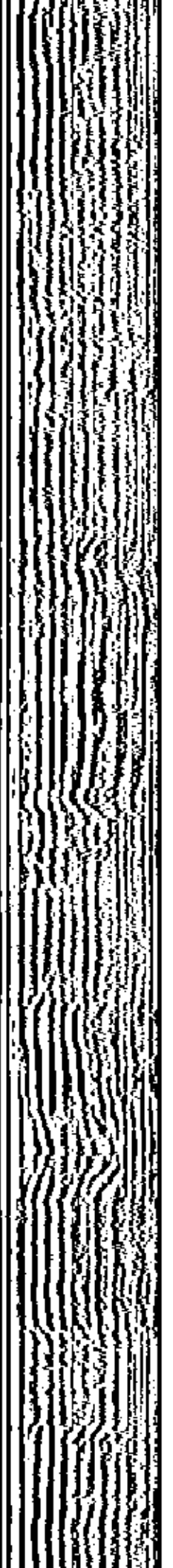


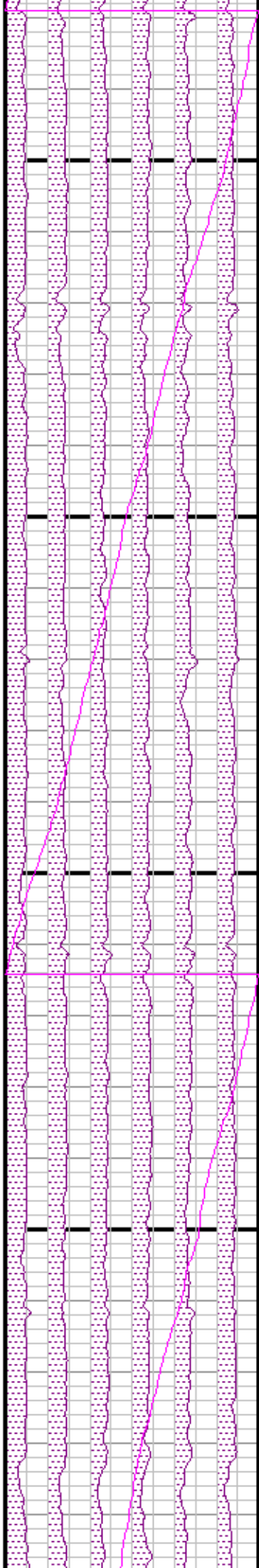
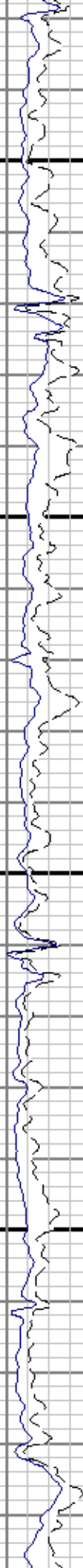
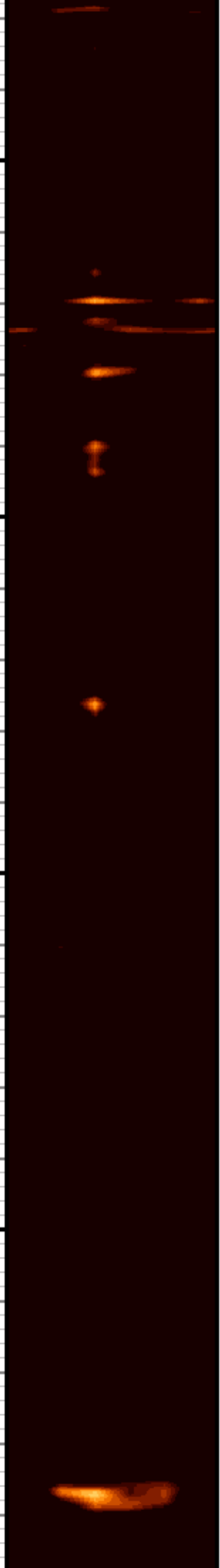
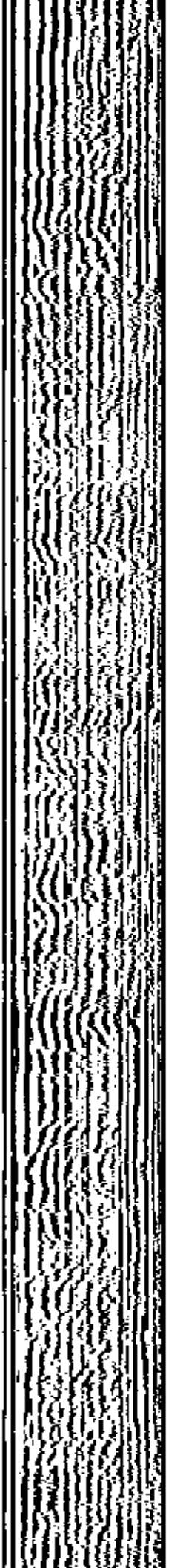






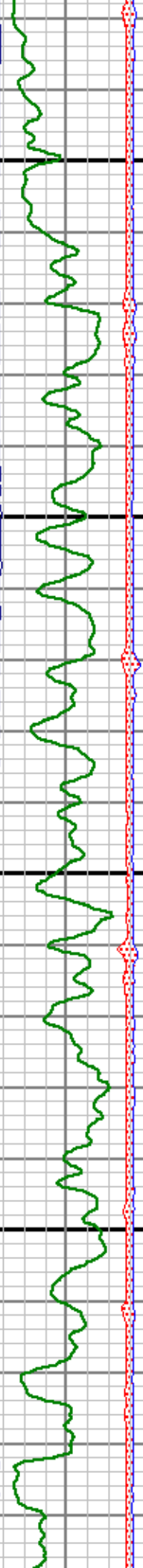


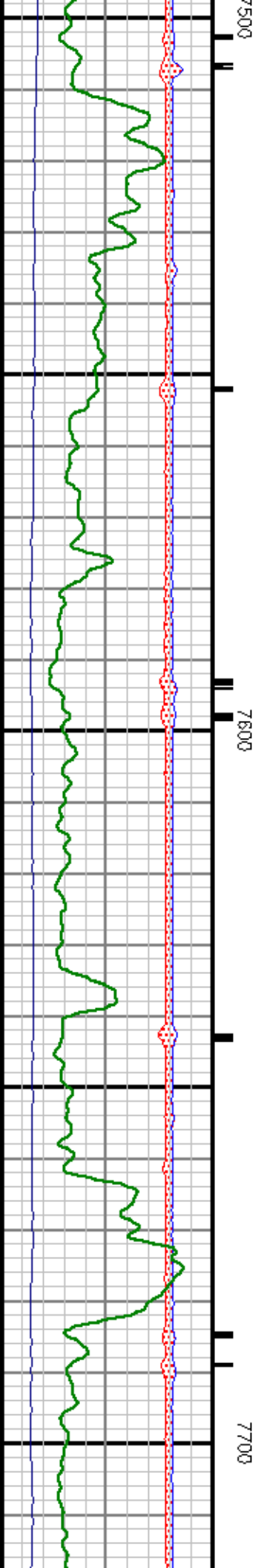
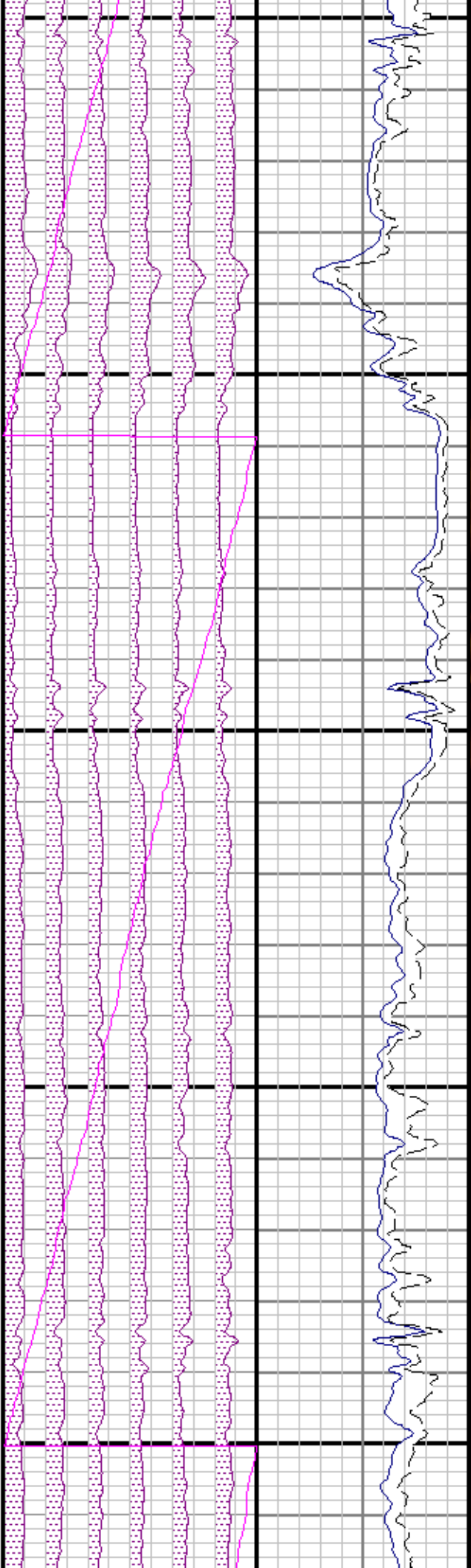
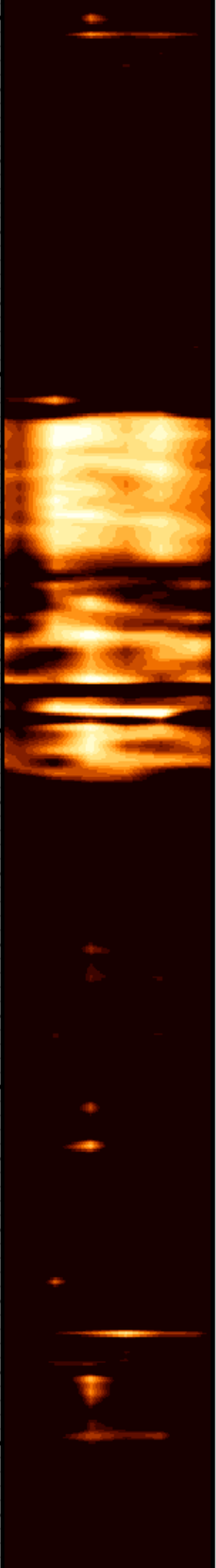
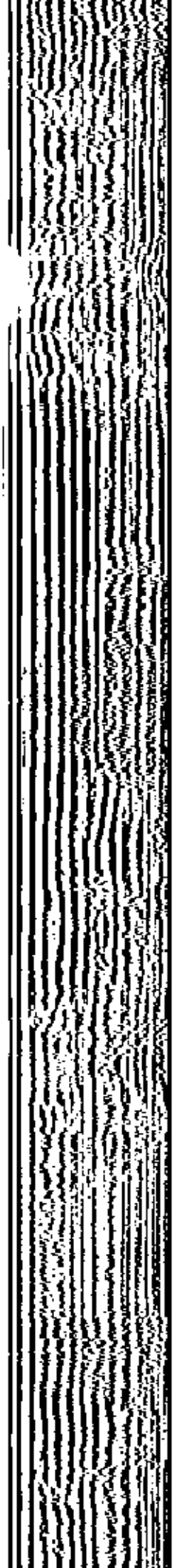


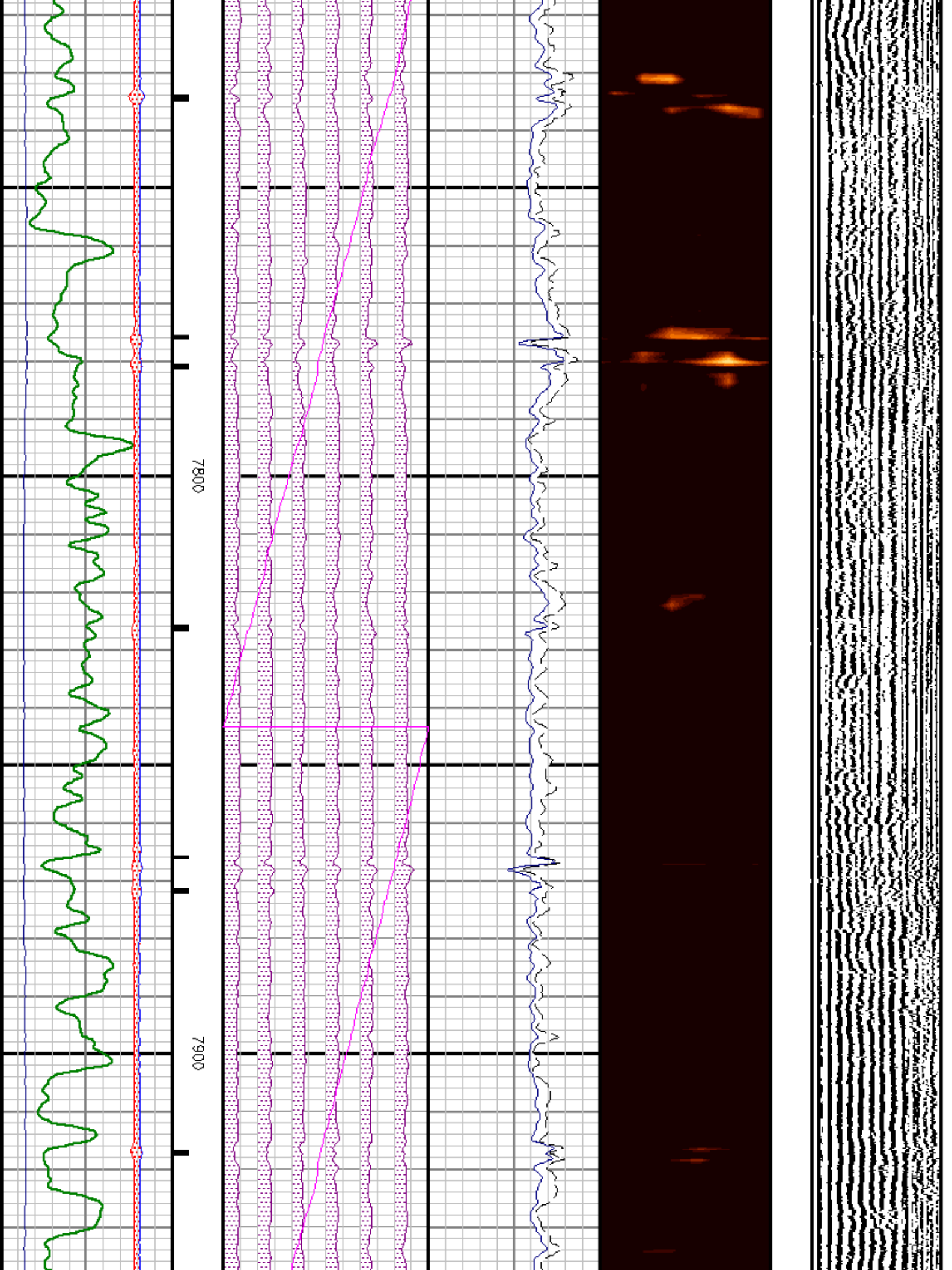


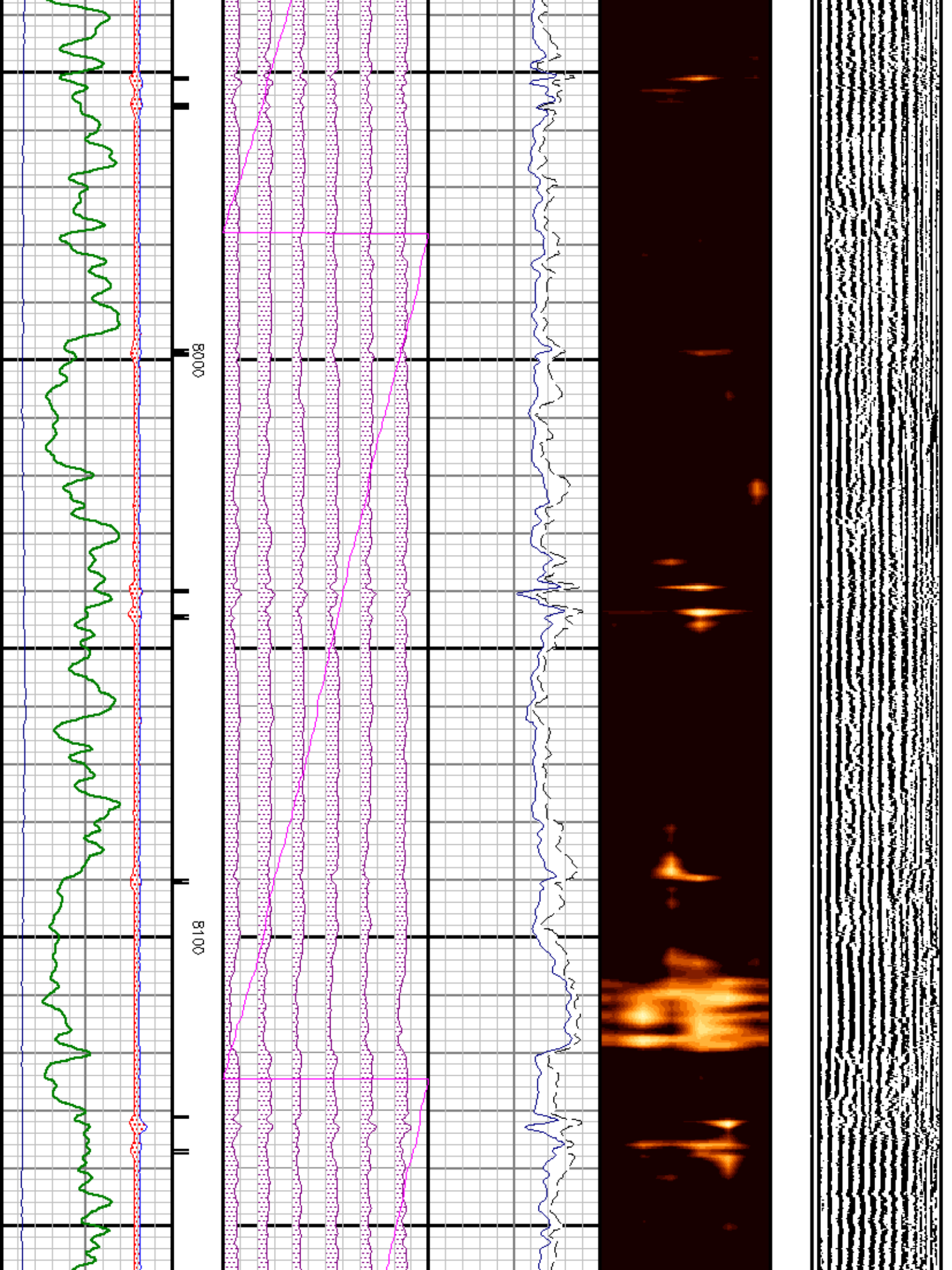
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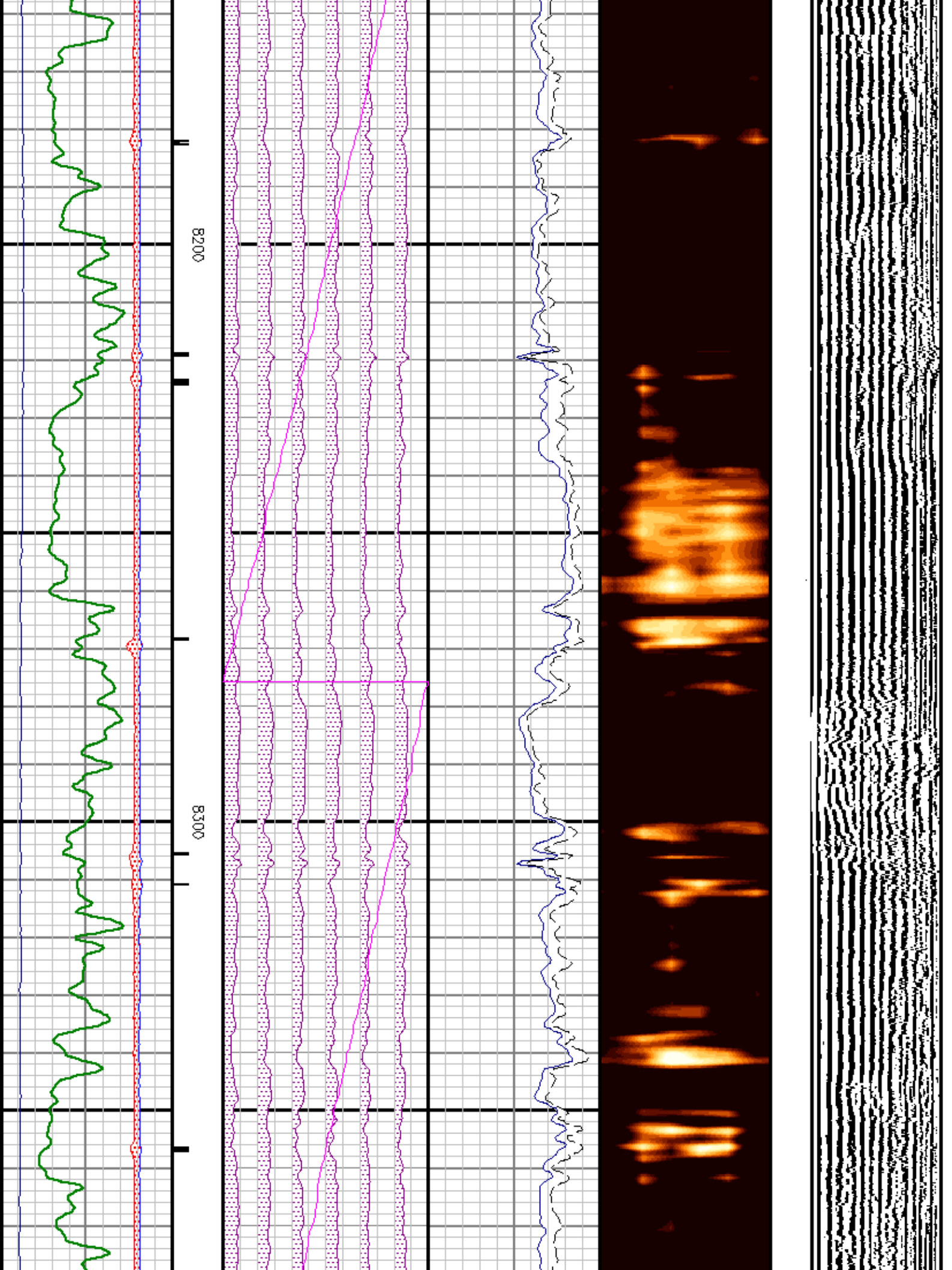
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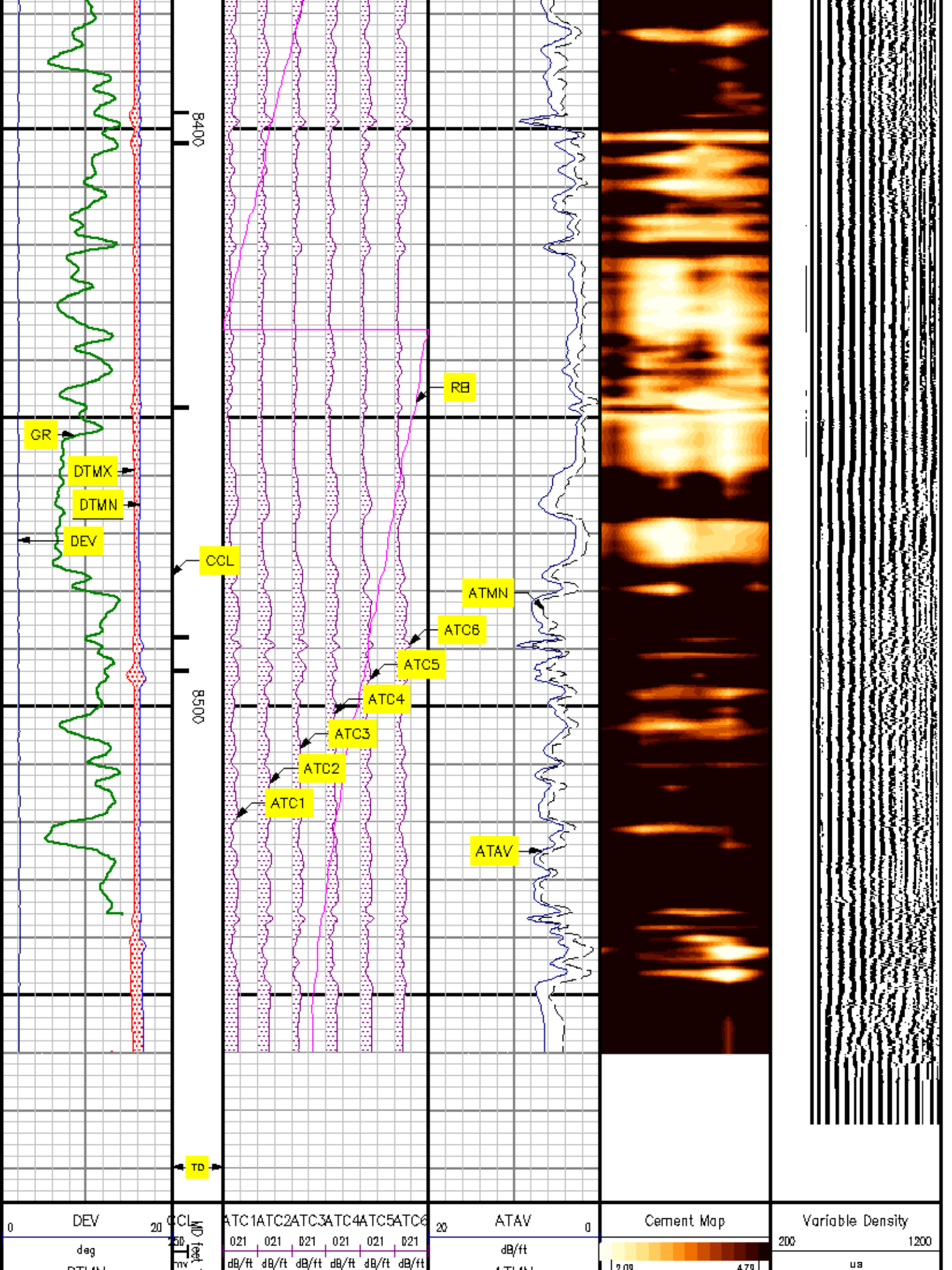












140	DTMN	40	1240	0	RB	360	20	ATMN	0	deg	Not Oriented
140	usec/ft	40			deg			dB/ft			
	DTMX										
0	usec/ft	150									
	GR										
	gAPI										

REPEAT SECTION

SBT NORMALIZATION RESULTS

CURVE	PARAMETER	VALUE	UNITS	TOP	BOTTOM	COMMENT
ATC1	seg1 cnormf1	1.179	db/ft	3500.000	3902.000	
ATC2	seg2 cnormf2	-0.421	db/ft	3500.000	3902.000	
ATC3	seg3 cnormf3	-0.649	db/ft	3500.000	3902.000	
ATC4	seg4 cnormf4	-1.735	db/ft	3500.000	3902.000	
ATC5	seg5 cnormf5	1.459	db/ft	3500.000	3902.000	
ATC6	seg6 cnormf6	0.166	db/ft	3500.000	3902.000	
ATC1	seg1 dnormf1	0.439	db/ft	3500.000	3902.000	Good Confidence
ATC2	seg2 dnormf2	0.330	db/ft	3500.000	3902.000	Good Confidence
ATC3	seg3 dnormf3	-0.702	db/ft	3500.000	3902.000	Good Confidence
ATC4	seg4 dnormf4	-1.502	db/ft	3500.000	3902.000	Good Confidence
ATC5	seg5 dnormf5	1.608	db/ft	3500.000	3902.000	Good Confidence
ATC6	seg6 dnormf6	-0.174	db/ft	3500.000	3902.000	Good Confidence

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	69.513	mv	3480.800	3902.000
amp	fpattn	1.193	db/ft	3480.800	3902.000
atc	dbspread	4.589	db/ft	3480.800	3902.000
atc	spacing	0.654	feet	3480.800	3902.000
cemr	casing od	7.000	inches	3480.800	3902.000
cemr	casing wt	26.000	lbm/ft	3480.800	3902.000
cemr	compress	300.000	psi	3480.800	3902.000
CN	Bit Size	7.875	inches	3500.000	3902.000

CN	Casing Thickness	0.361	inches	3480.800	3902.000
CN	Casing/Cement Correction	No		3500.000	3902.000
CN	CN Chism	No		3500.000	3902.000
CN	Matrix	Limestone		3500.000	3902.000
CN	Salinity	0.000	ppm	3500.000	3902.000

DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-48.920	CCL					
1309XA	-42.870	GR					
2435XA	-30.250	LSN					
2435XA	-29.750	NEU	SSN				
1424XA	-19.200	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMX	AMAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
1424PA	-8.200	CHV	CYQ	SIG			

Created by : SBT, v5.0.003

Plotted by : PlotMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

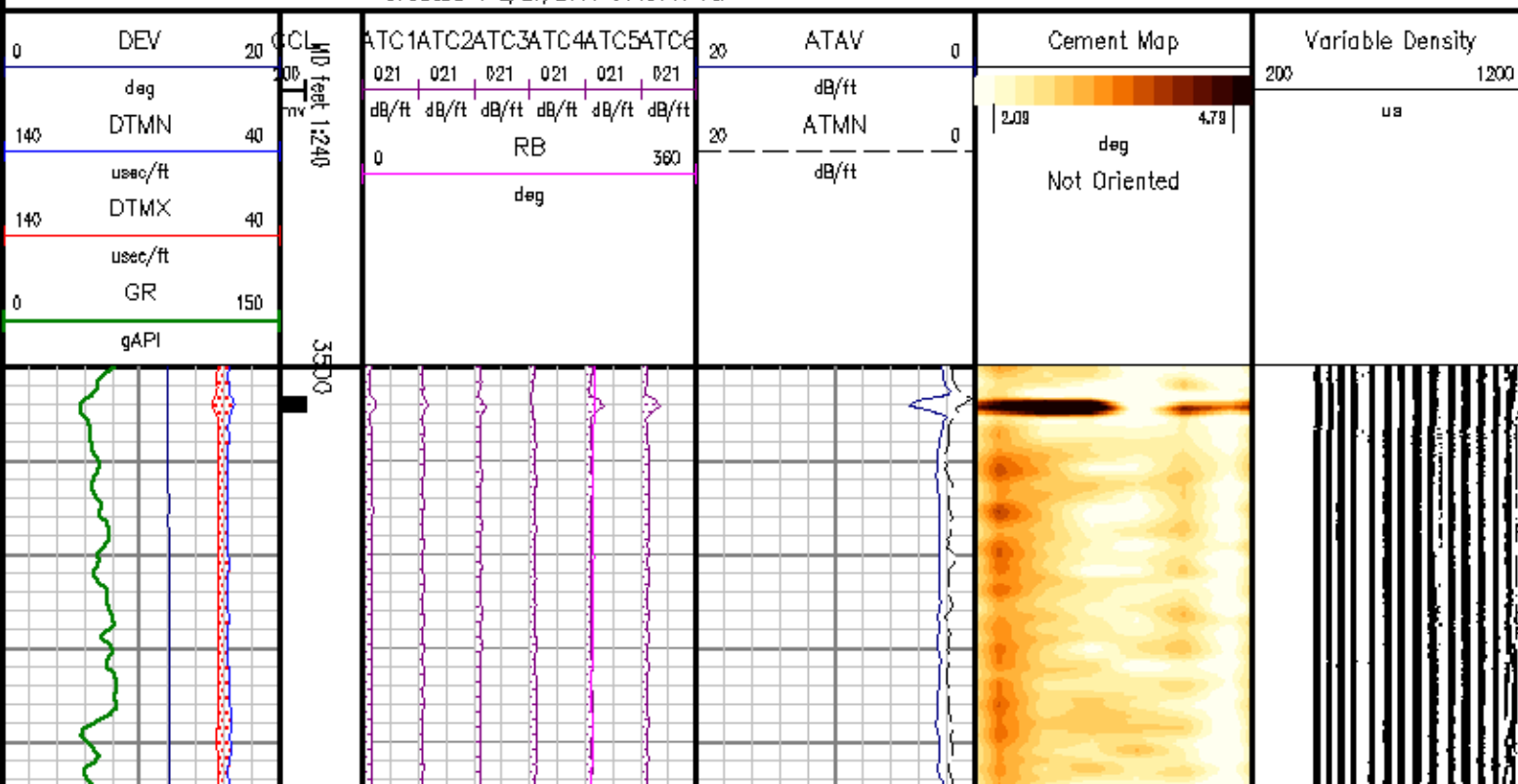
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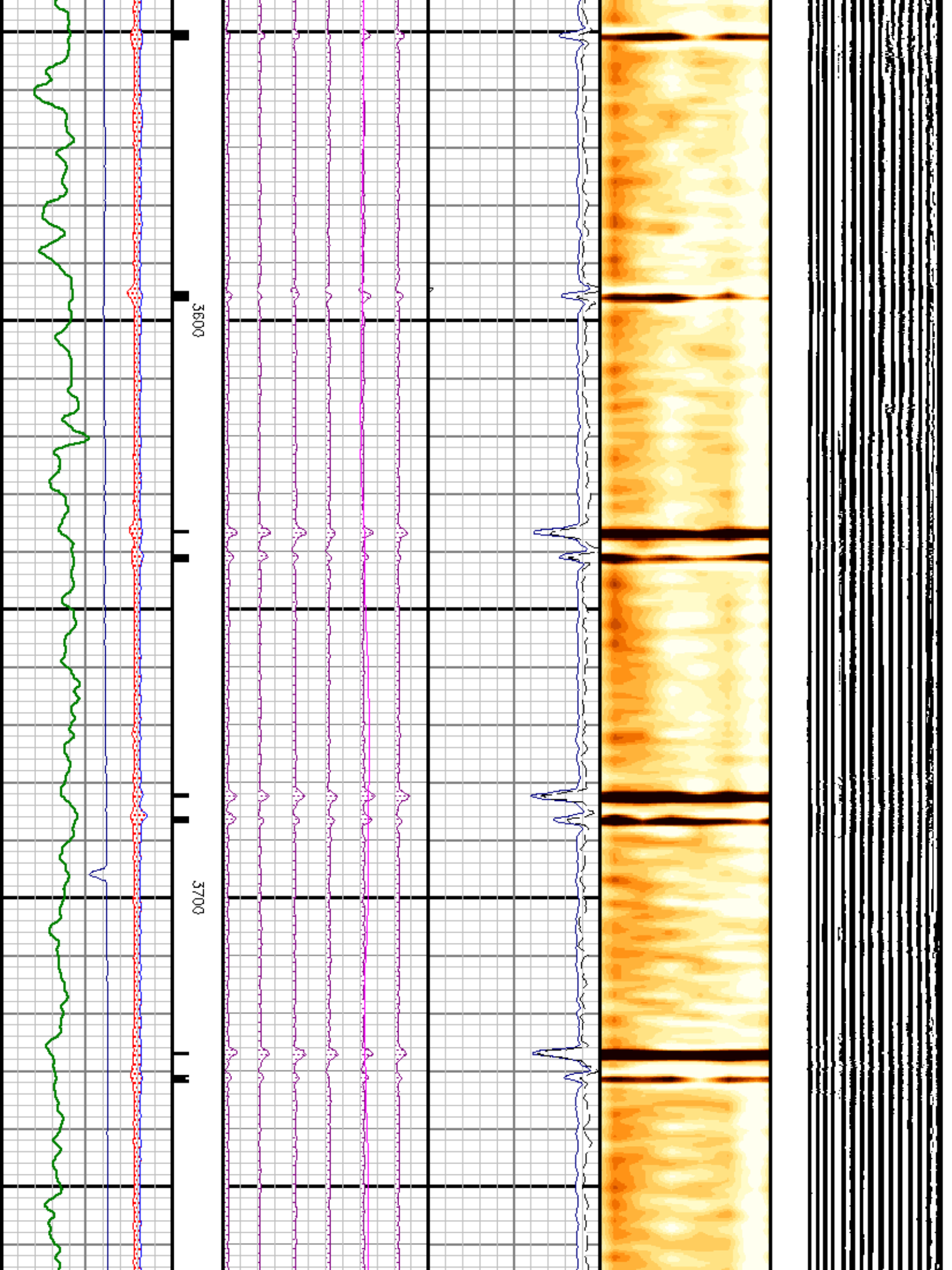
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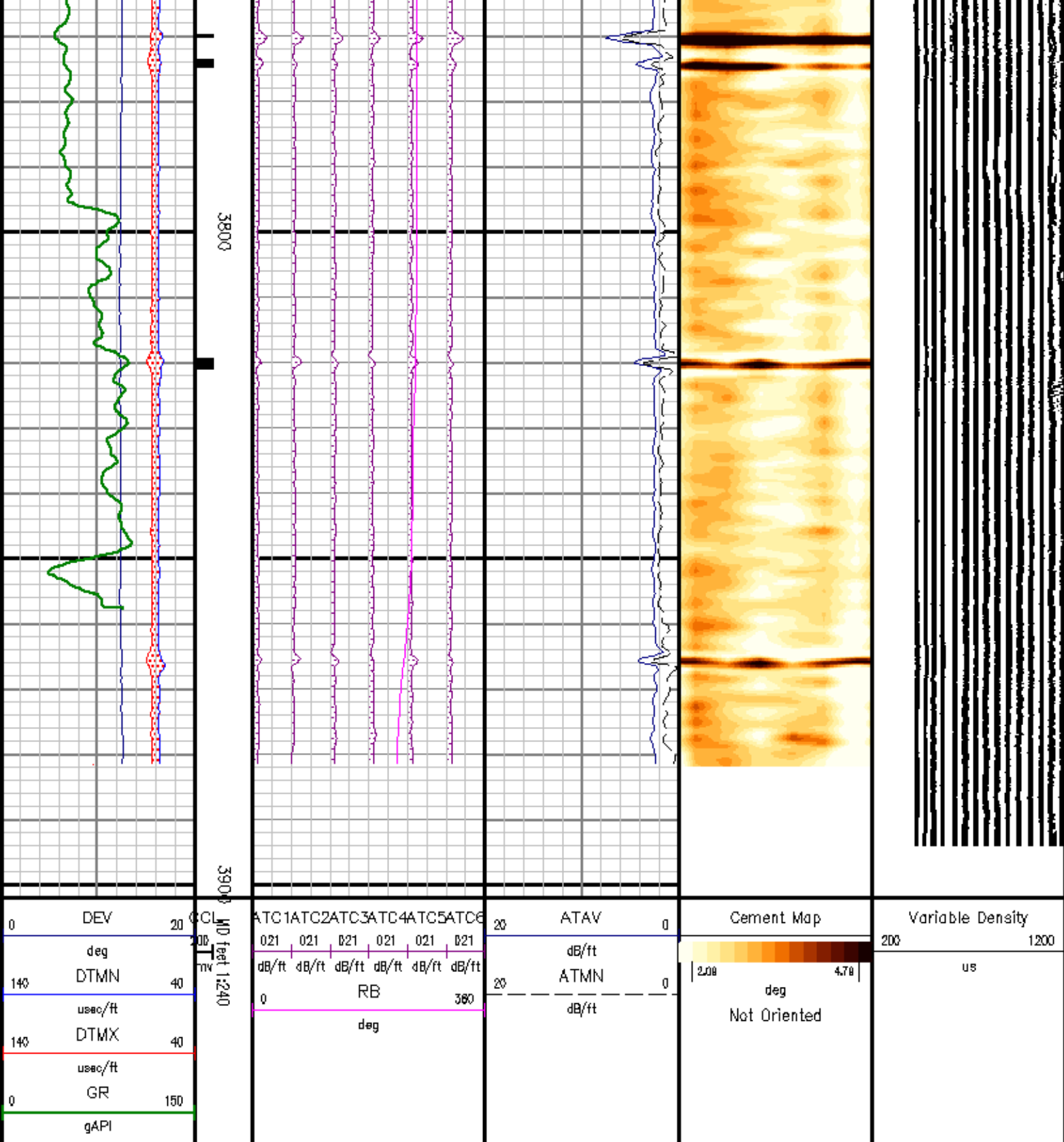
Mode : PlotMgr 5.4.504

Interval : 3500.00 - 3902.00 feet UP

Created : 2/27/2010 3:48:40 PM







CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\Z37F2.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED:	Wed Feb 24 21:48:26 2010	TOOL SERIES:	1309XA	ASSET:	737	SEQ:	F2
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K DA612	54.98	251.89	0.762	41.88	191.88	150.00	

Verification File: C:\case\calver\GR\Z37F2.vp

PRIMARY VERIFICATION

DATE/TIME PERFORMED:	Wed Feb 24 21:51:40 2010	TOOL SERIES:	1309XA	ASSET:	737	SEQ:	F2
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K DA612	55.44	251.96	0.762	42.24	191.93	149.70	

RB

Calibration File: C:\case\calver\RB\555F2.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED:	Wed Feb 24 21:15:24 2010	TOOL SERIES:	1424XA	ASSET:	555	SEQ:	F2
	X-Att [row]	Y-Att [row]	RB [deg]	X-Max [deg]	Y-Max [deg]	OFFSET [deg]	
PAD 2	-124.00	-451.50	0.00				
PAD 3	-459.40	-90.20	63.59	-475.34	467.69	-74.88	

Verification File: C:\case\calver\RB\555F2.vp

PRIMARY VERIFICATION

DATE/TIME PERFORMED:	Wed Feb 24 21:20:13 2010	TOOL SERIES:	1424XA	ASSET:	555	SEQ:	F2
	Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6	
RB [deg]	301.54	0.54	63.58	119.32	181.45	239.76	

PAD

Verification File: C:\case\calver\PAD\555F2.VK

DATE/TIME PERFORMED:	Wed Feb 24 21:21:41 2010	TOOL SERIES:	1424XA	ASSET:	555	SEQ:	F2
	Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6	

Noise Level
PAD Sensitivity

3.95
350.20

3.25
487.20

4.18
596.30

2.97
567.70

3.15
551.00

3.17
556.75

TOOL DIAGRAM

OTA SHORT CABLE HEAD

CCL

Series 2318XA
Mnemonic CCL

GAMMA RAY

Series 1309XA
Mnemonic GR
Diameter 3.63"
Weight 120.00 lb
Length 6.51'
Measure Point 1.33' GR MP
Temp Rating 400.00 °F
Press Rating 20000.00 PSI

ACOUSTIC DIGITIZER

Series 1633EA
Mnemonic AC
Diameter 3.38"
Weight 133.00 lb
Length 8.00'
Temp Rating 400.00 °F
Press Rating 20000.00 PSI

4 ARM BOW SPRING CENTRALIZER

Series 4341XA
Mnemonic CENT
Diameter 3.38"
Weight 84.00 lb
Length 4.12'

SEGMENTED BOND TOOL

Series 1424XB
Mnemonic SBT
Diameter 3.38"
Length 17.33'



50.77'
CCL MP 48.92'
GR MP 42.87'

Length 17.35
Measure Point 7.11' PAD MP

PAD MP 19.20'

SEGMENTED BOND TOOL VDL SUB

Series 1424PA
Mnemonic SBT
Diameter 3.38"
Weight 108.00 lb
Length 7.89'
Measure Point 4.00' VDL MP
Temp Rating 350.00 °F
Press Rating 20000.00 PSI

VDL MP 8.20'

4 ARM BOW SPRING CENTRALIZER

Series 4341XA
Mnemonic CENT
Diameter 3.38"
Weight 84.00 lb
Length 4.12'

0.00'

Total Length: 50.77'
Total Weight: Not Available
Max Diameter: 0' 3.63"



Company EXXONMOBIL PRODUCTION COMPANY

Well FRU 197-33A7

Field PICEANCE CREEK

County RIO BLANCO State COLORADO

File No:

1998

API No:

05103113990000

Location

SHL: 831' FSL & 2364' FEL SWSE

Elevations

KB 6401 ft

DF 6400 ft

GL 6374.9 ft

SEC 33 TWP 1S RGE 87W

Baker Atlas

05103113990000