



FILE NO:

COMPANY

TEP ROCKY MOUNTAIN LLC

WELL

YOUBERG RU 422-7

FIELD

RULISON

COUNTY

GARFIELD

STATE COLORADO

API NO:
05045232310000

Ver. 4.06

LOCATION:

SHL: 2012' FNL & 1892' FWL
BHL: 2252' FNL & 1754' FWLOTHER SERVICES
RPM

SEC 7 TWP 7S RGE 93W

PERMANENT DATUM GL ELEVATION 7339 FT
LOG MEASURED FROM KB 24 FT ABOVE P.D.
DRILL. MEAS. FROM KBELEVATIONS:
KB 7363 FT
DF
GL 7339 FT

DATE 19-SEP-2016

RUN TRIP

1 1

SERVICE ORDER

US109409

DEPTH DRILLER

9435 FT

DEPTH LOGGER

9356 FT

BOTTOM LOGGED INTERVAL

9356 FT

TOP LOGGED INTERVAL

0 FT

TIME STARTED

10:00

TIME FINISHED

12:30

OPERATOR RIG TIME

2.5 HRS

TYPE OF FLUID IN HOLE

WATER

FLUID DENSITY

NA

FLUID SALINITY

NA

FLUID LEVEL

38 FT

LOGGED CEMENT TOP

SEE LOG

WELLHEAD PRESSURE

0 PSI

MAXIMUM HOLE DEVIATION

NA

NOMINAL LOGGING SPEED

100 FMN

MAX. RECORDED TEMP.

243 DEGF

REFERENCE LOG

NA

REFERENCE LOG DATE

NA

EQUIP. NO. LOCATION

6670

GRAND JUNCT

RECORDED BY

LOHANDLEY

WITNESSED BY

CAPPLEGATE

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

CASING RECORD

SIZE WEIGHT GRADE FROM TO
4.5 IN 11.6 LB/F P-110 24 FT

REMARKS

RUN 1 TRIP 1: LOGGED RAN WITH 0 PSI AT WELLHEAD
NO BIT AND CASING RECORDS FOR BOREHOLE
BHT:243
SHOTR JOINT: 5610'
CREW: J.PENA; D.HUTCHISON; H.ALTSCHEFFEL

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	RAL	1426 XA	10124106	CENTRALIZED
1	1	GR/CCL	1355 XA	11871507	CENTRALIZED

MAIN LOG 0 PSI

ECLIPS 6.2wu1 PC-ECLIPS General Release Rel 6.2w Update 1 Fri Apr 25 10:54:53 Central Daylight Time 2014
Patches: 9

Plotted: Mon Sep 26 13:31:49 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\012g02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7.250 ft BOTTOM DEPTH: 9347.449 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
TRAVEL TIME	FILTER ()	medium (1)		"	"

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0		TOP	BOTTOM

ANALOG RAL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgpn*)	185	us	TOP	BOTTOM
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	160	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST BRK THRESHOLD (ttn*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (strn*)	-75	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	125	us	"	"
	NOISE WINDOW LENGTH	25	us	"	"

CURVE DESCRIPTION REPORT

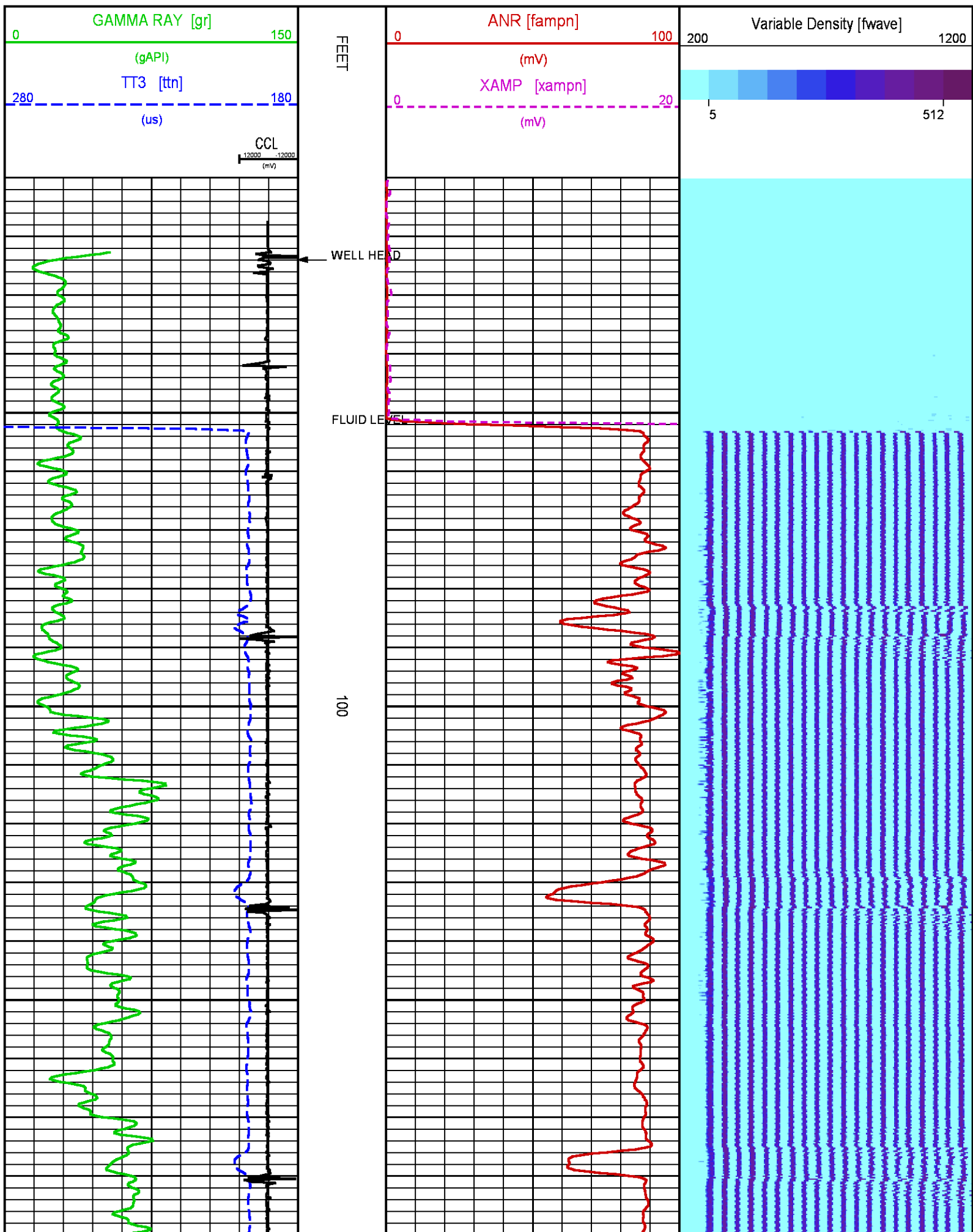
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Sep 19 10:51:02 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 19 10:51:02 2016	FAR WAVE FORM
F1:GR	Sep 19 10:51:02 2016	GAMMA RAY
F1:TTN	Sep 19 10:51:02 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

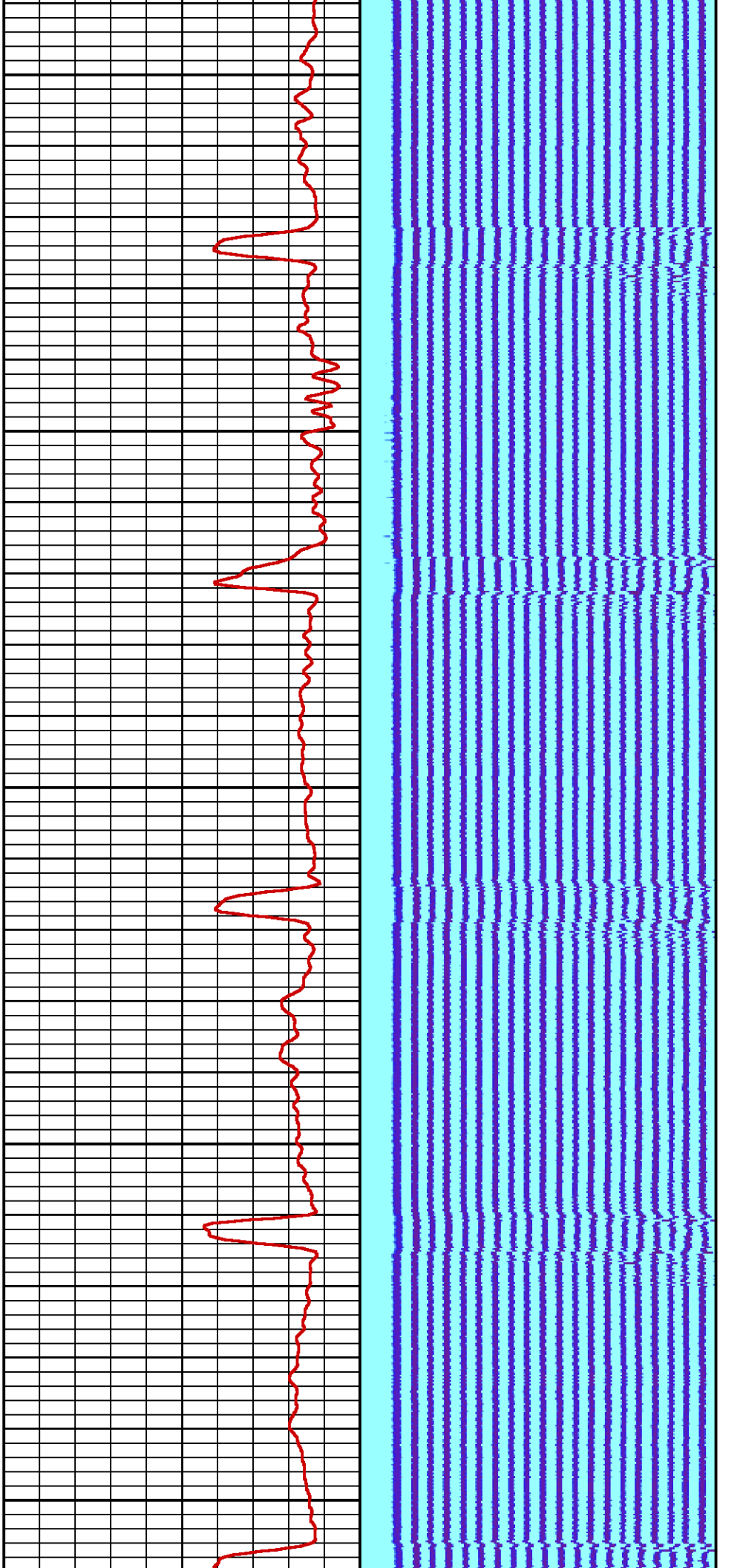
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	14.00		
FAMPN	14.00	TTN	14.00				

Presentation	: BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\ral_cbl+01-MAIN-MAIN-5.fvp.pdf [5"/100' Scale]
Plot Interval	: 10.25 - 9358.25 Feet
Data File 1	: F1 : BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\MAIN.xtf
Created On	: Sep 19 10:51:02 2016
Company	: TEP ROCKY MOUNTAIN LLC
Well	: YOUBERG RU 422-7
File	: 012g02.prm

Field : RULISON
File Interval : 7.25 - 9359.75 Feet
OCT : n012g

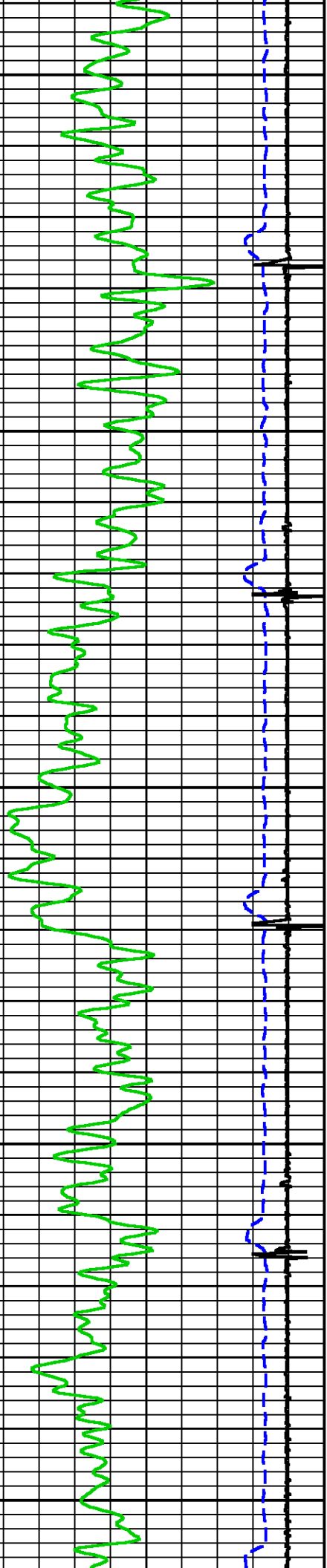


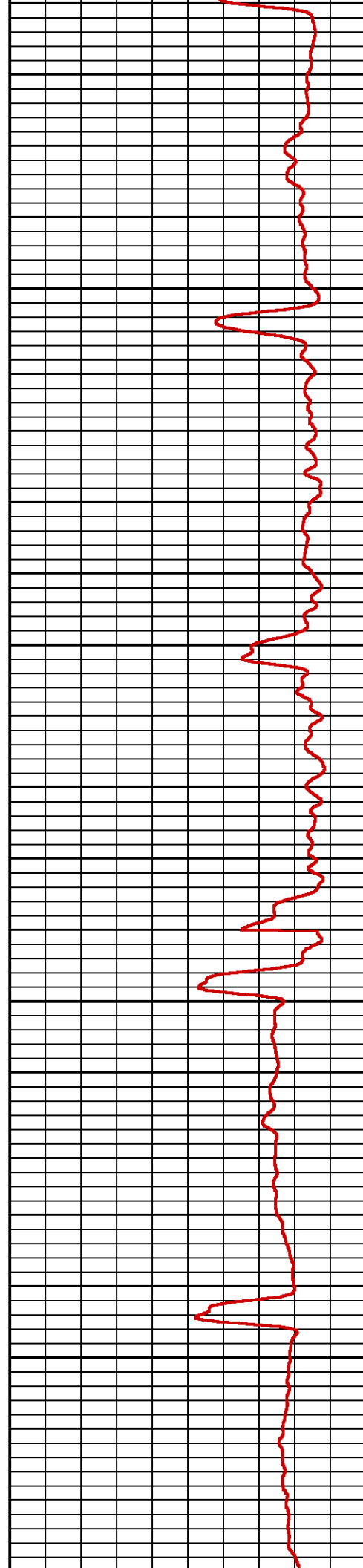
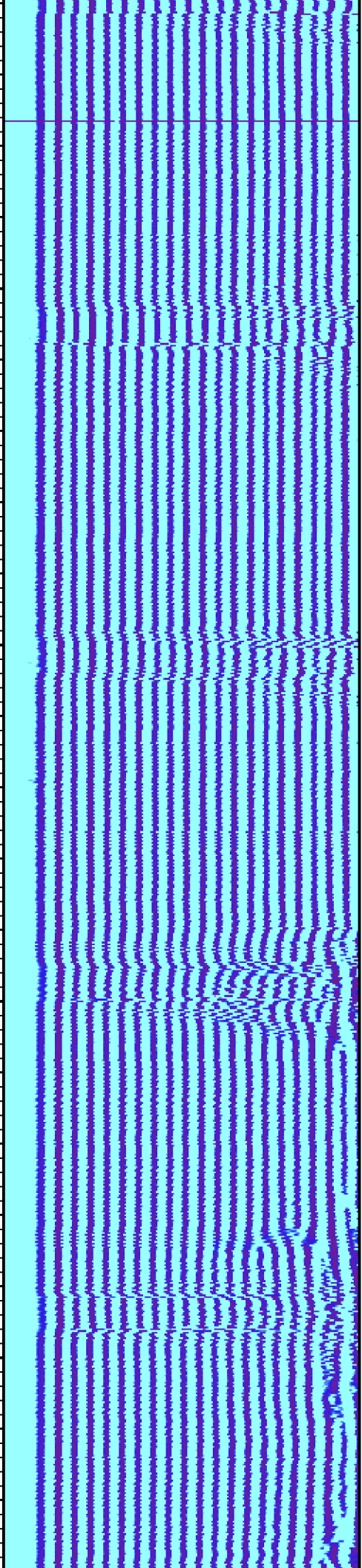


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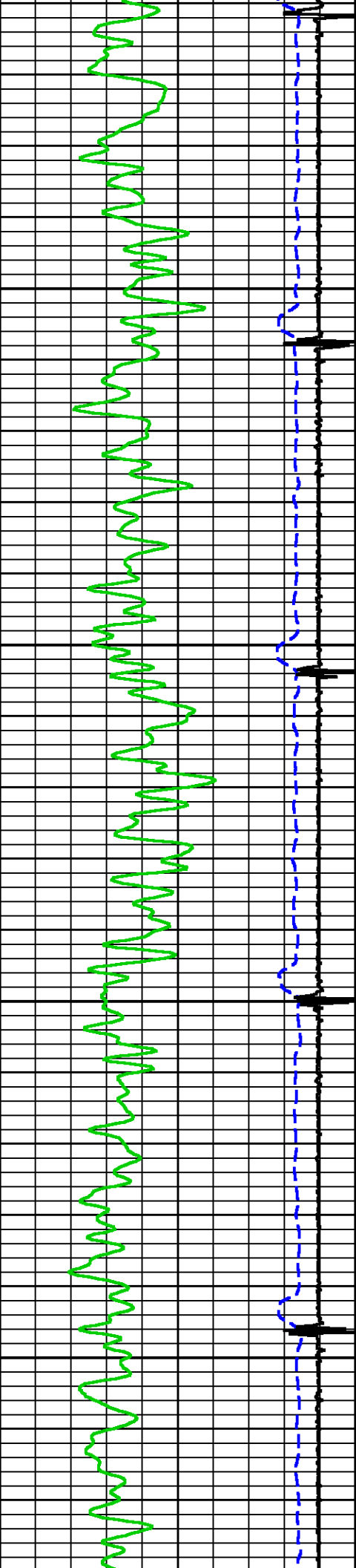
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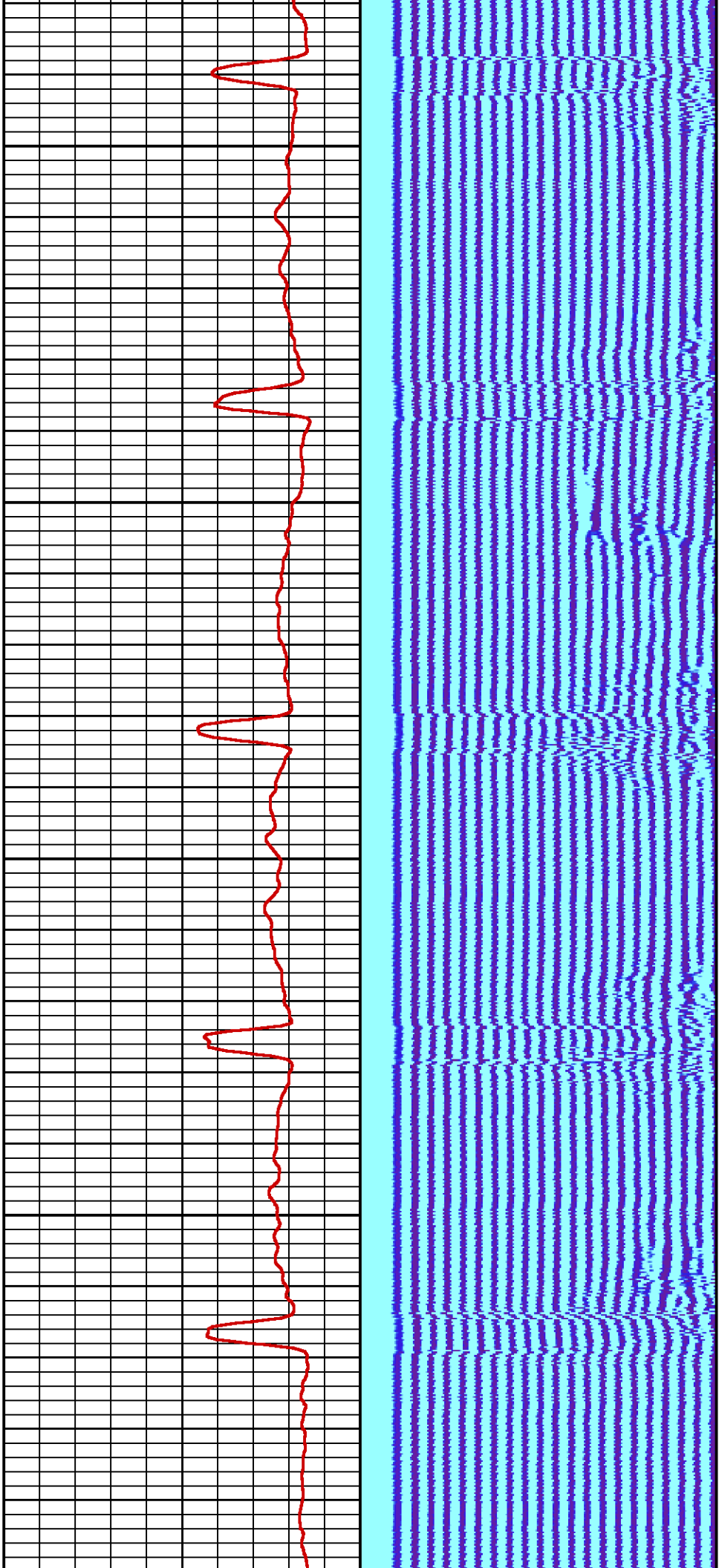




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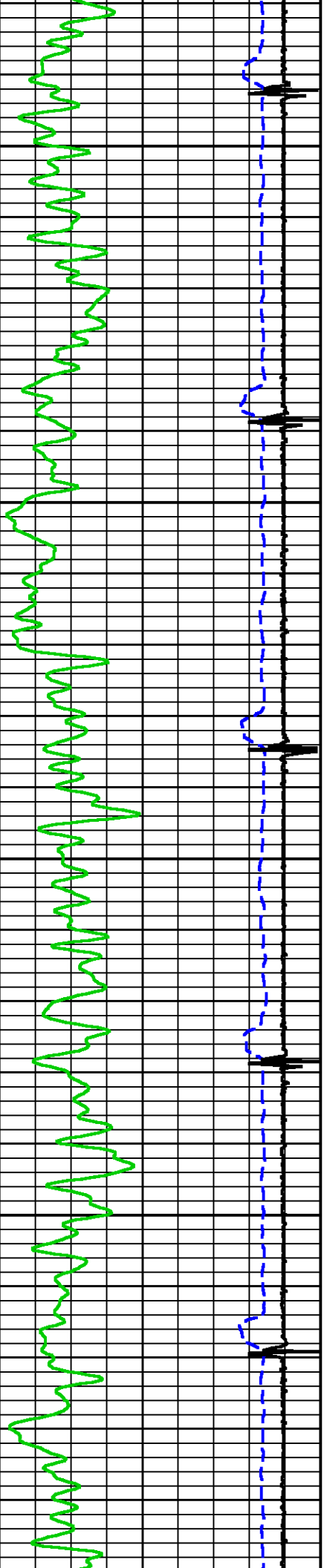
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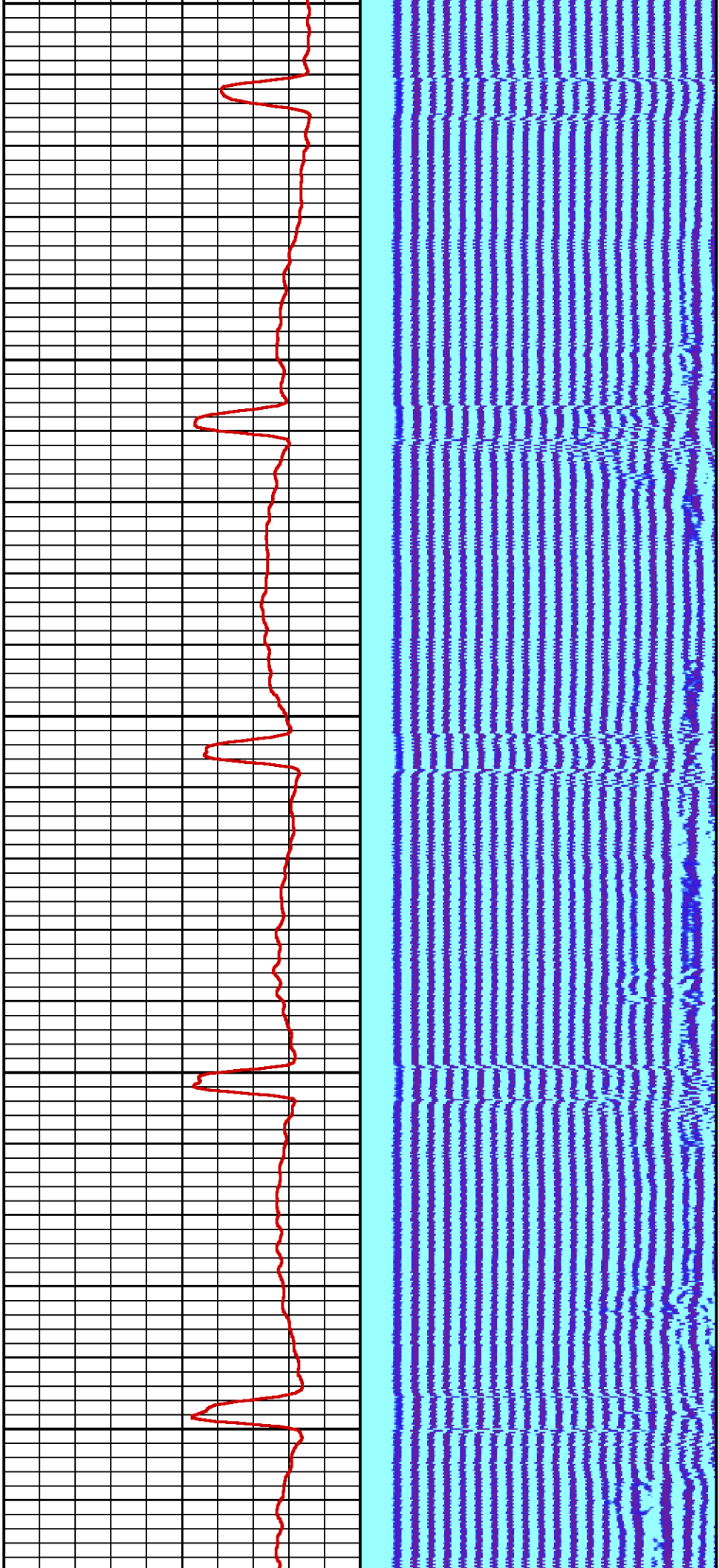




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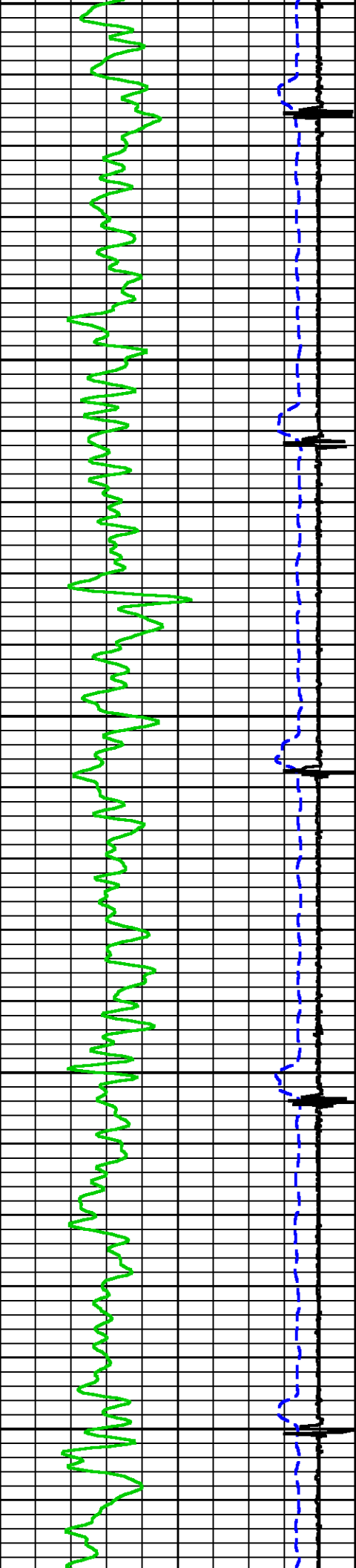
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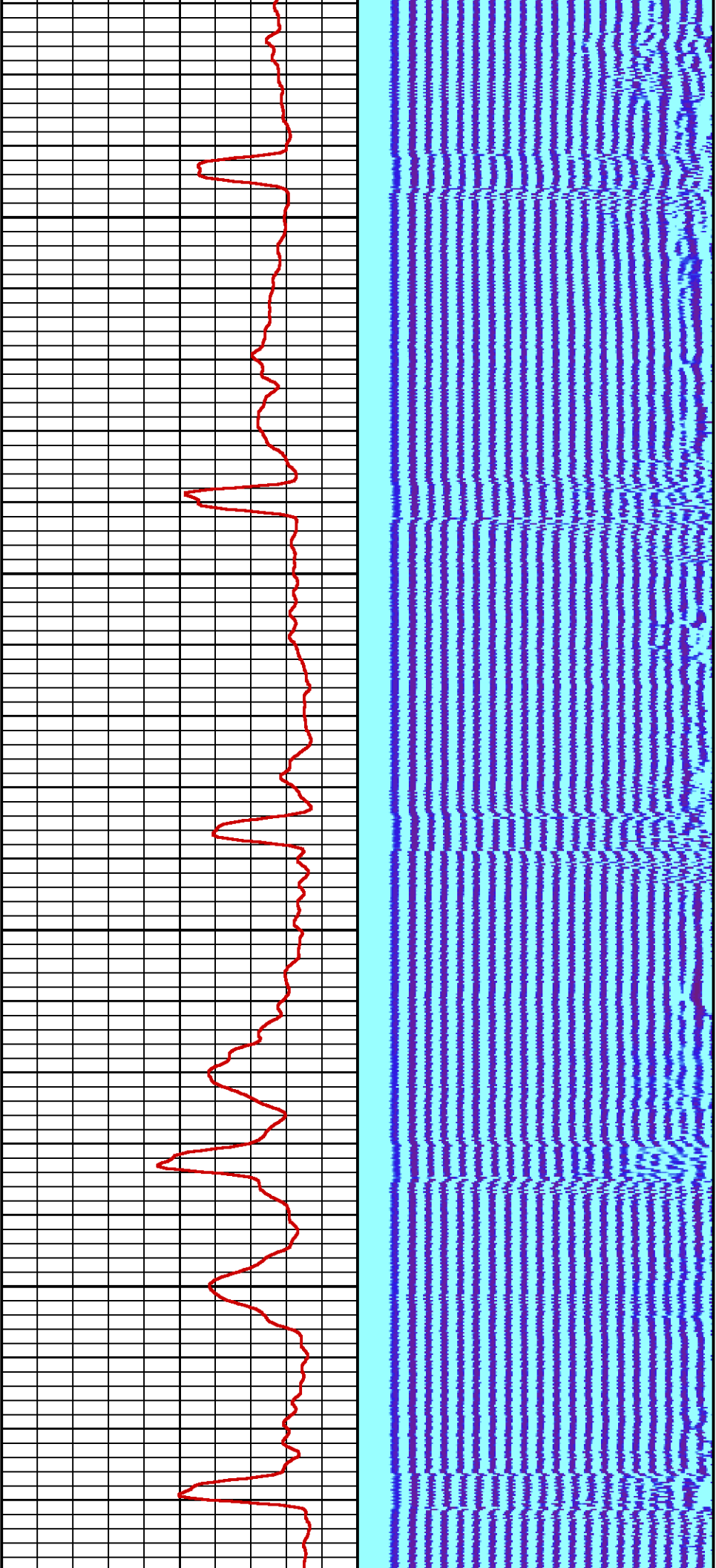




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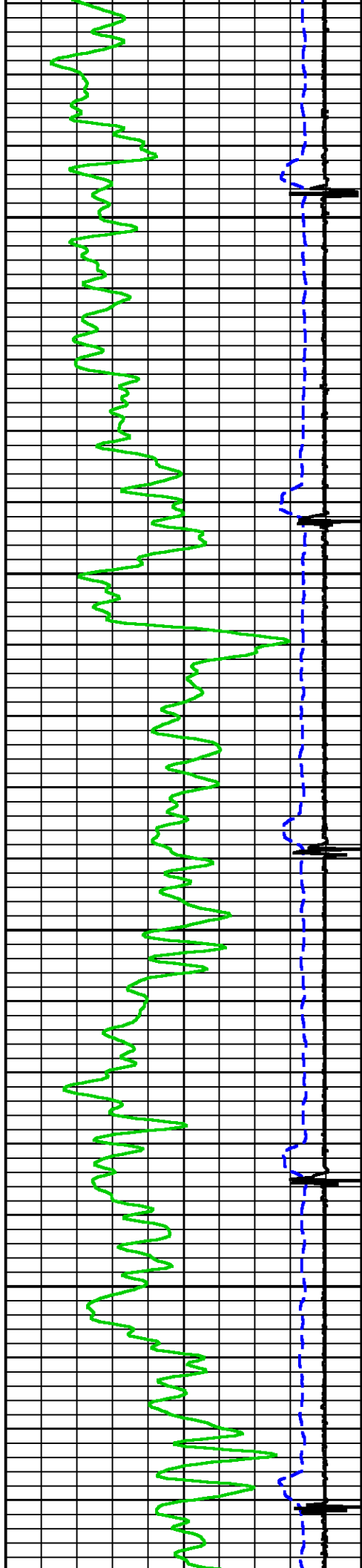
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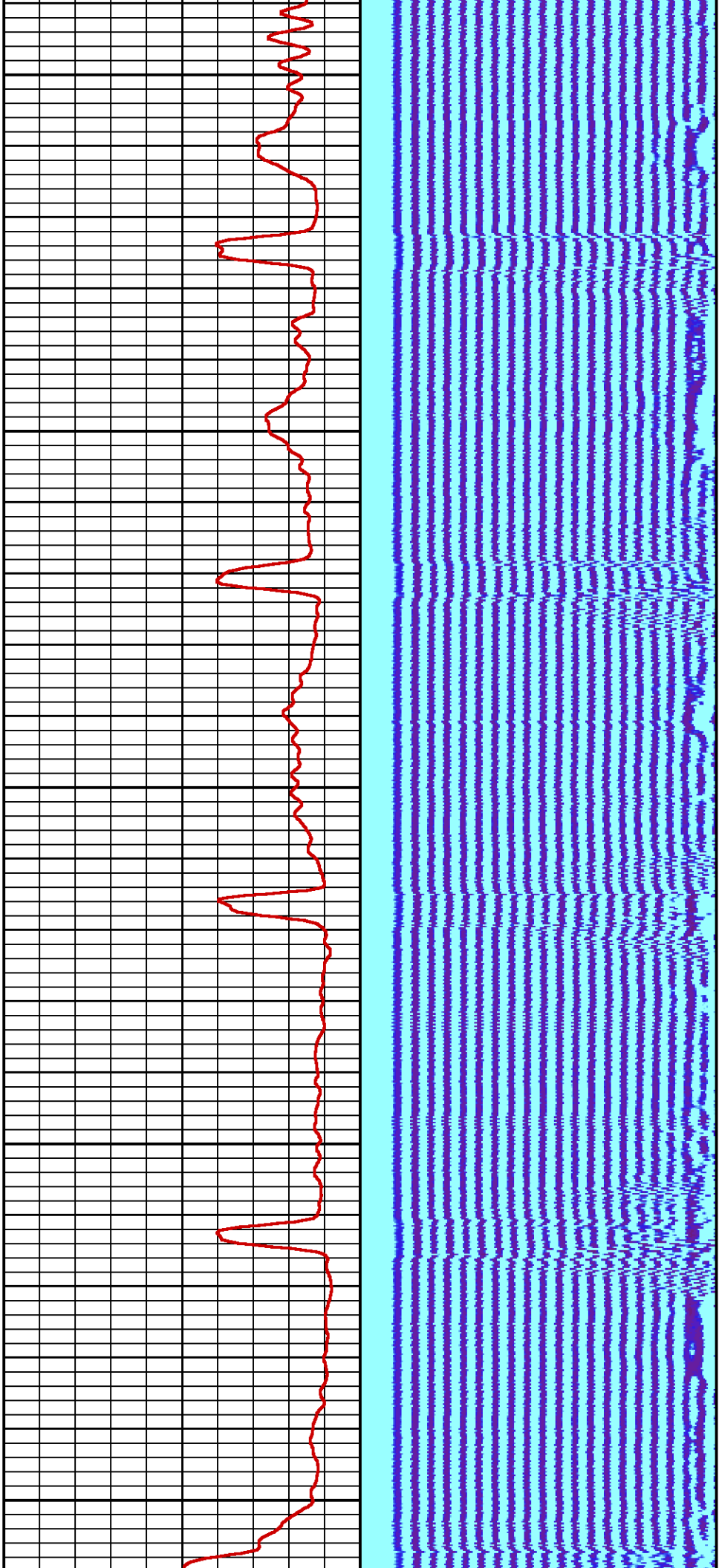




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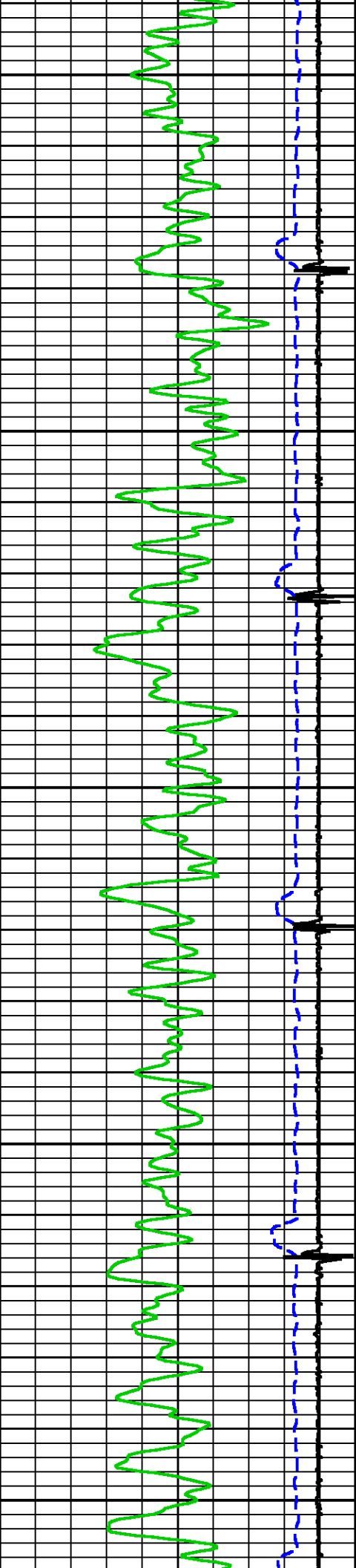


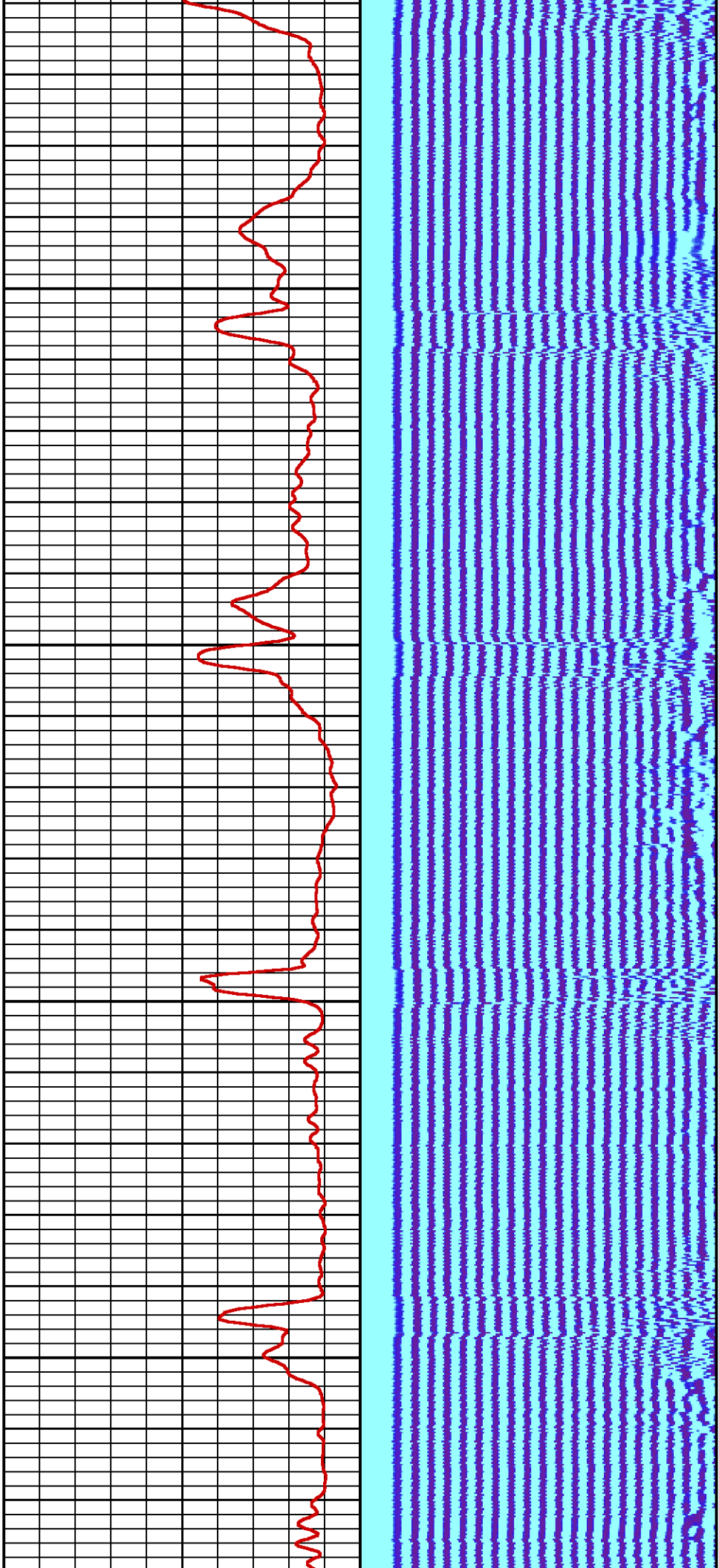


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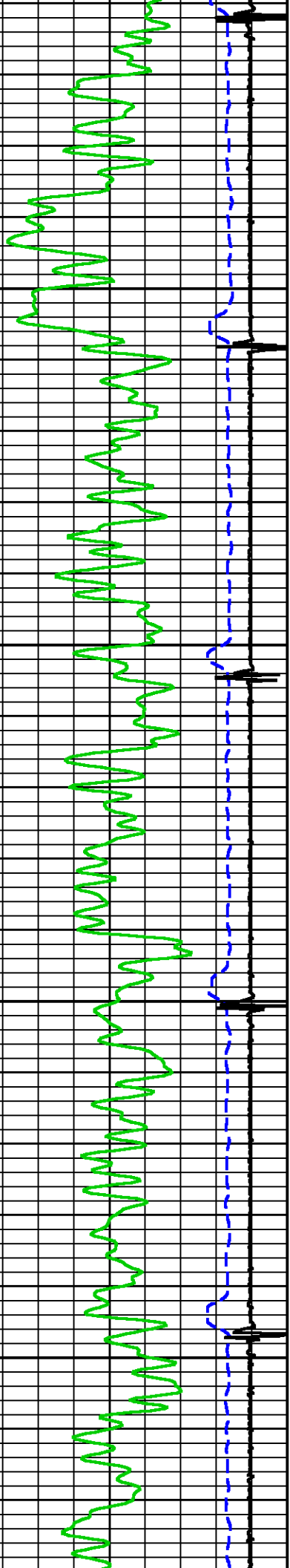
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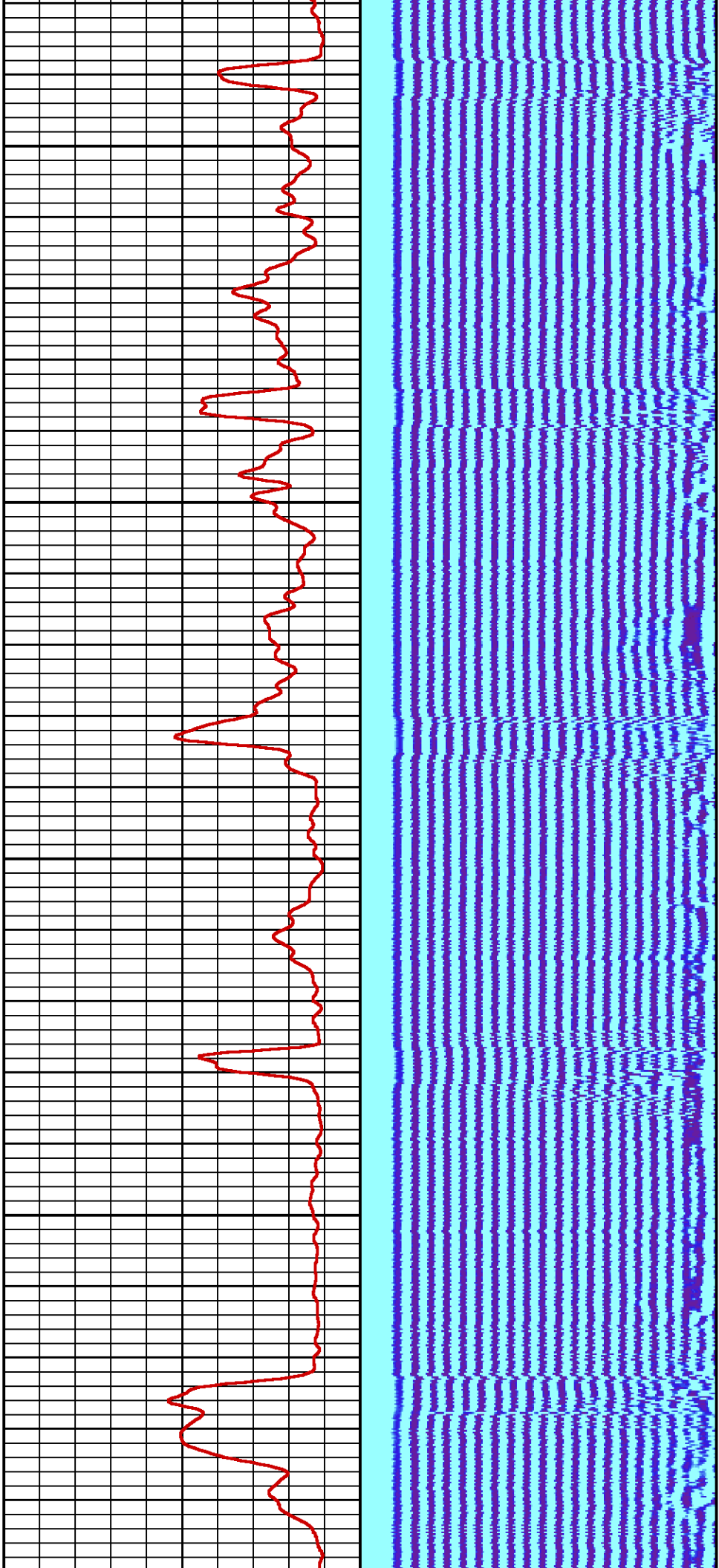




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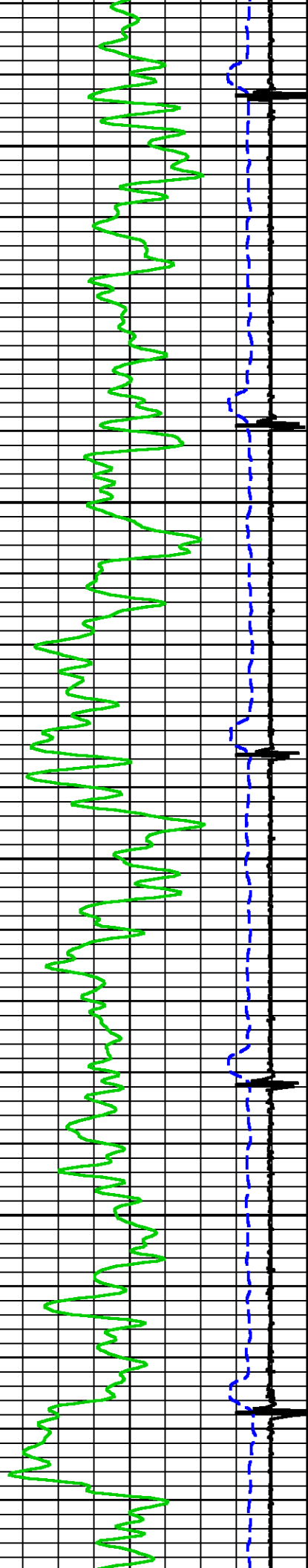
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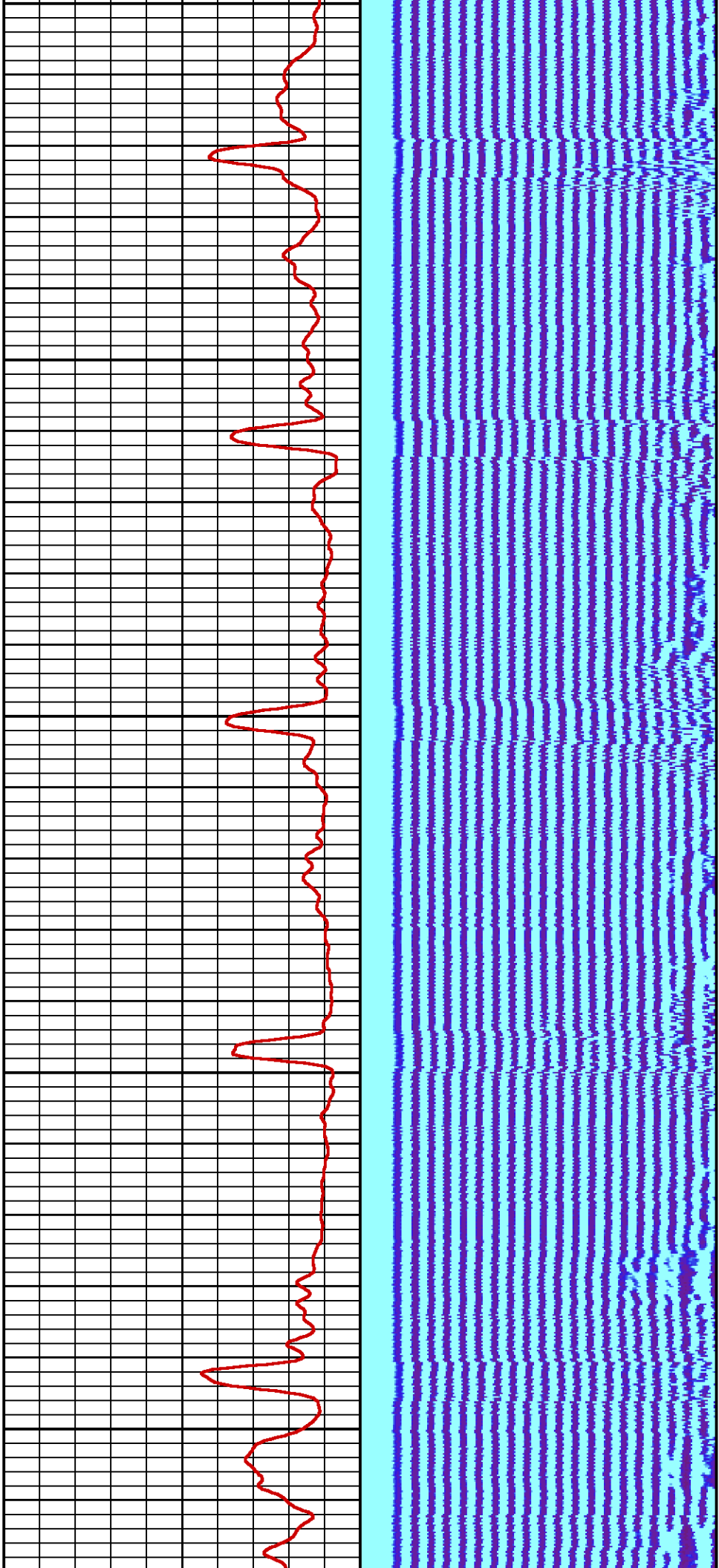




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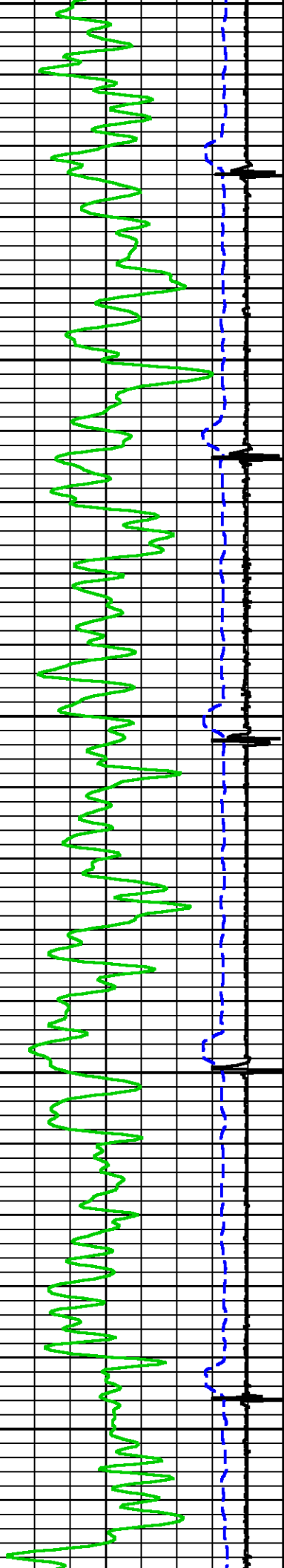
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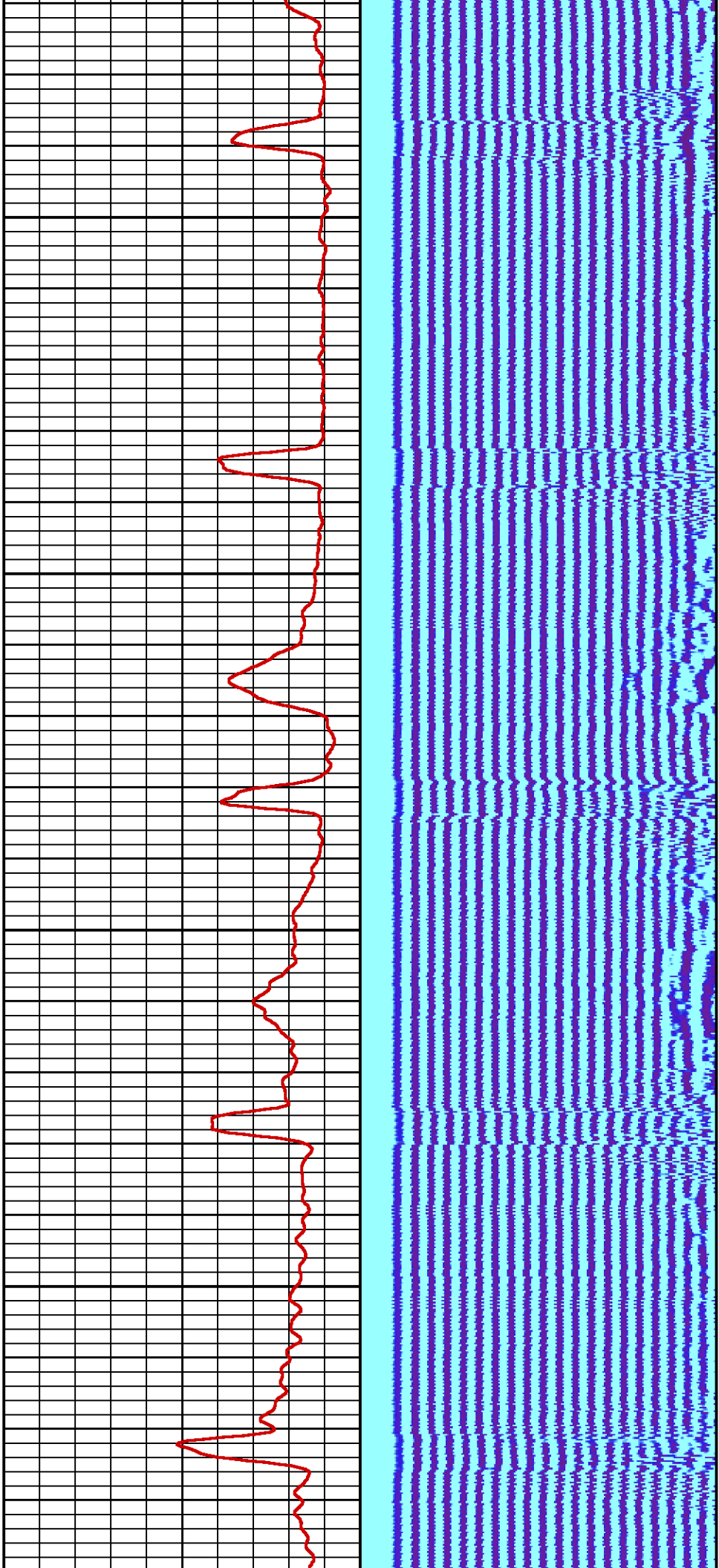




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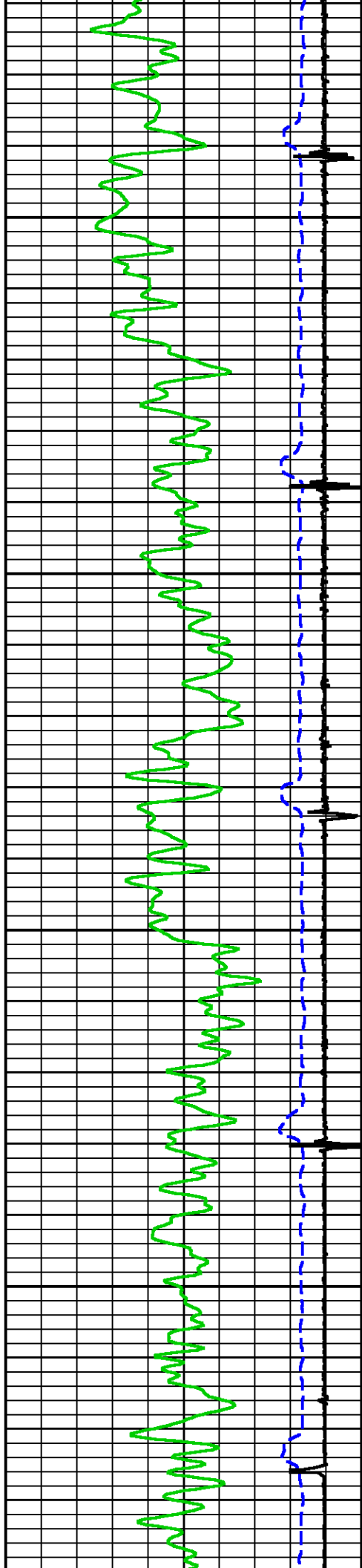
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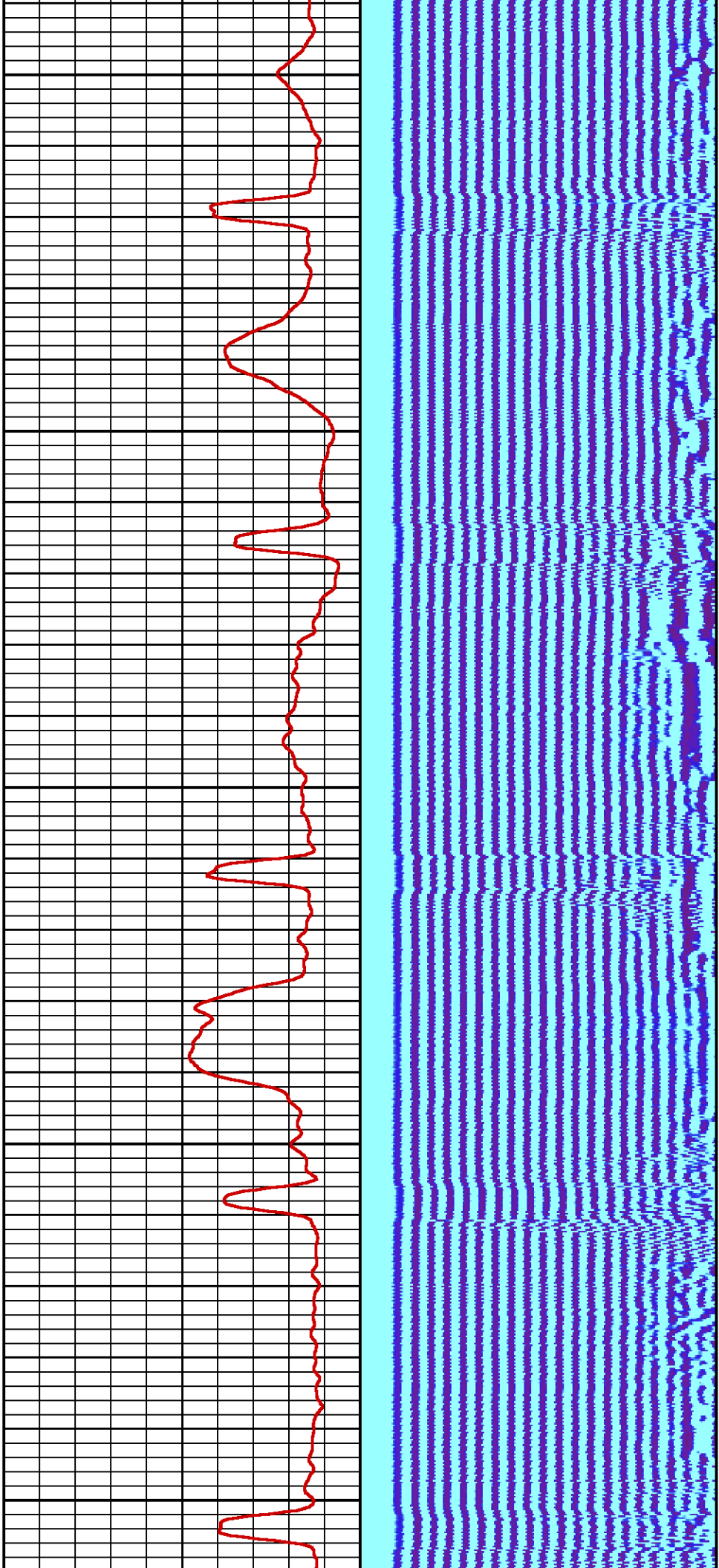




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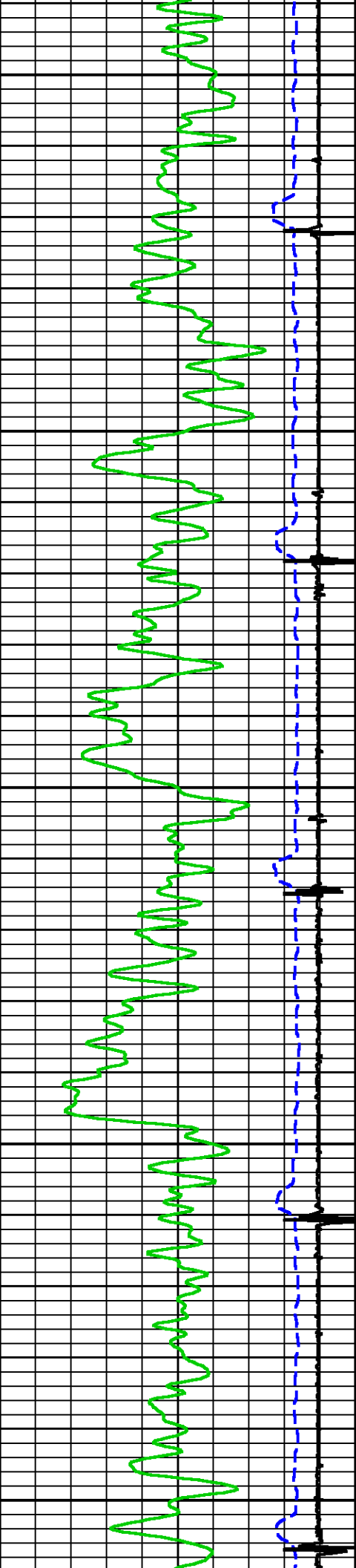


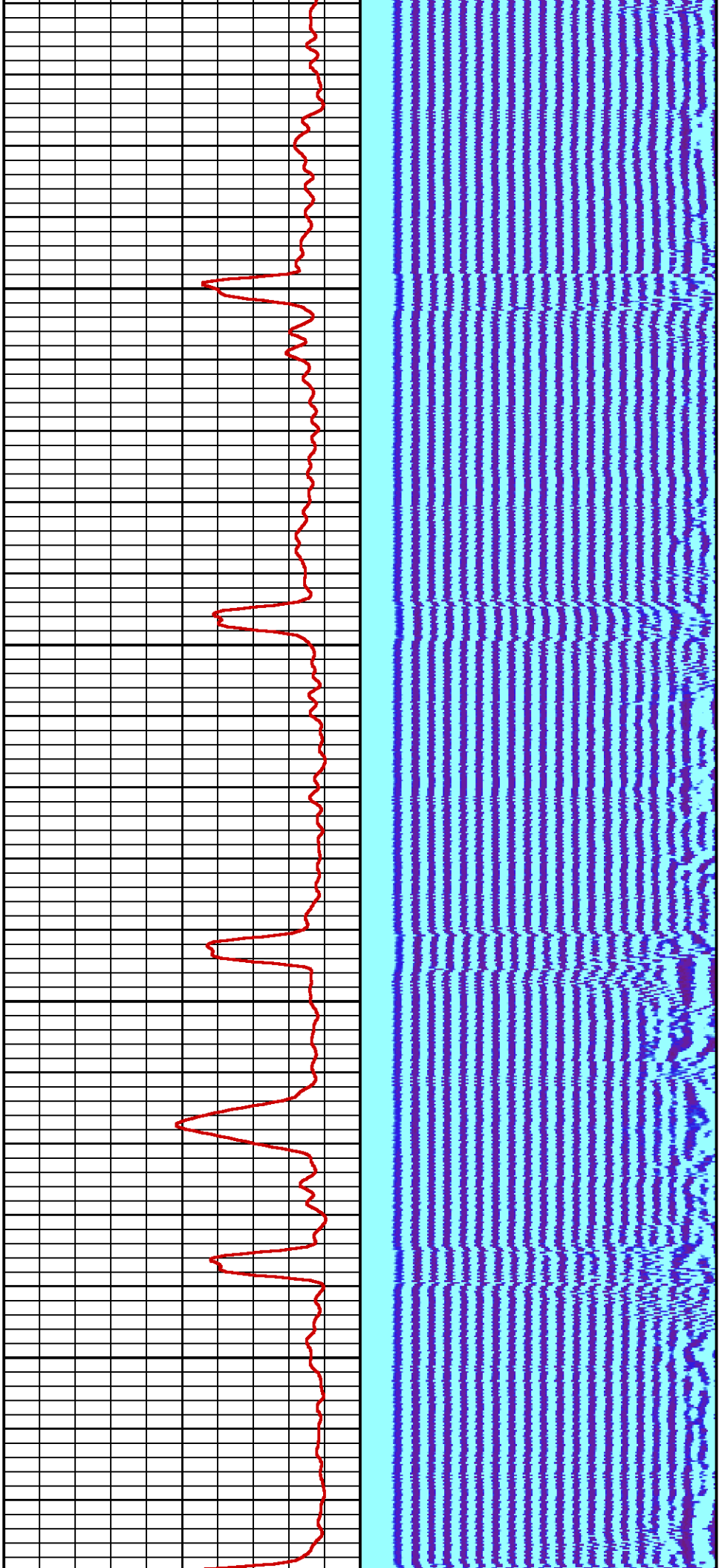


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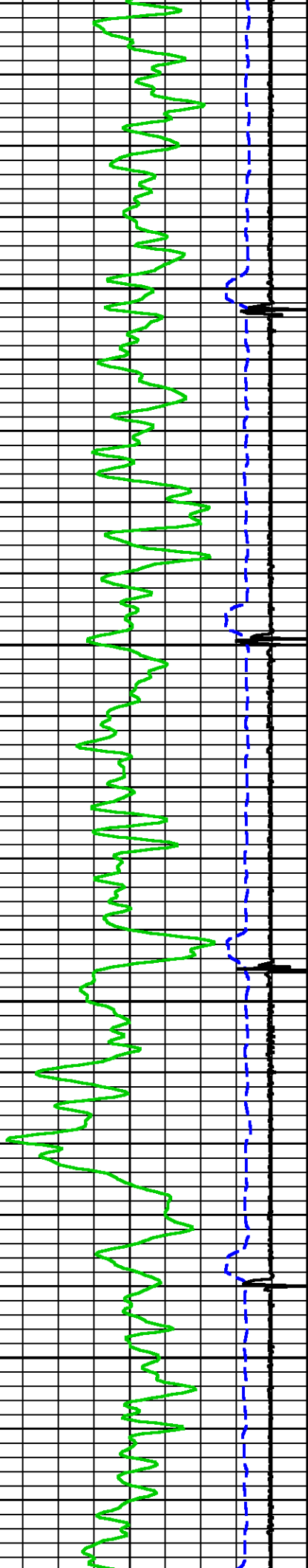
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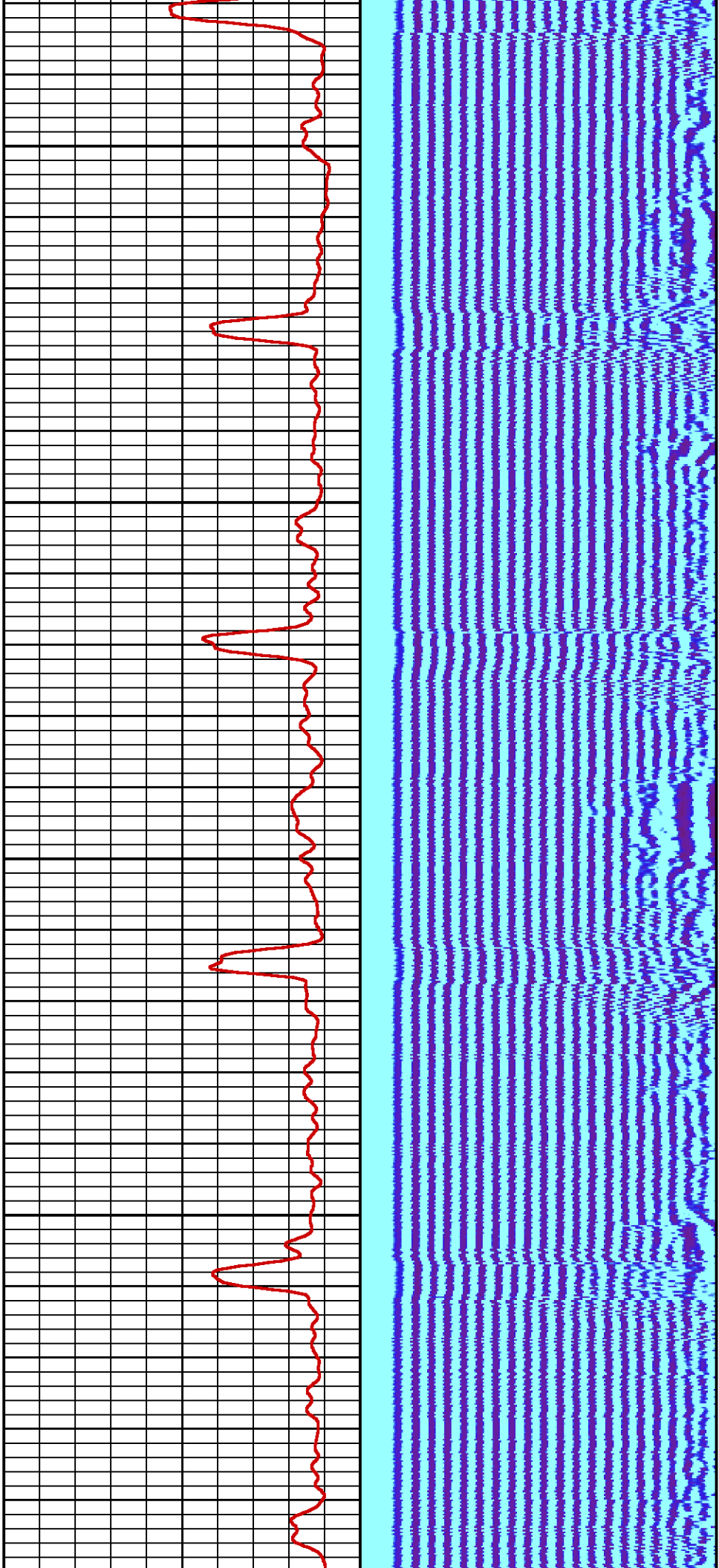




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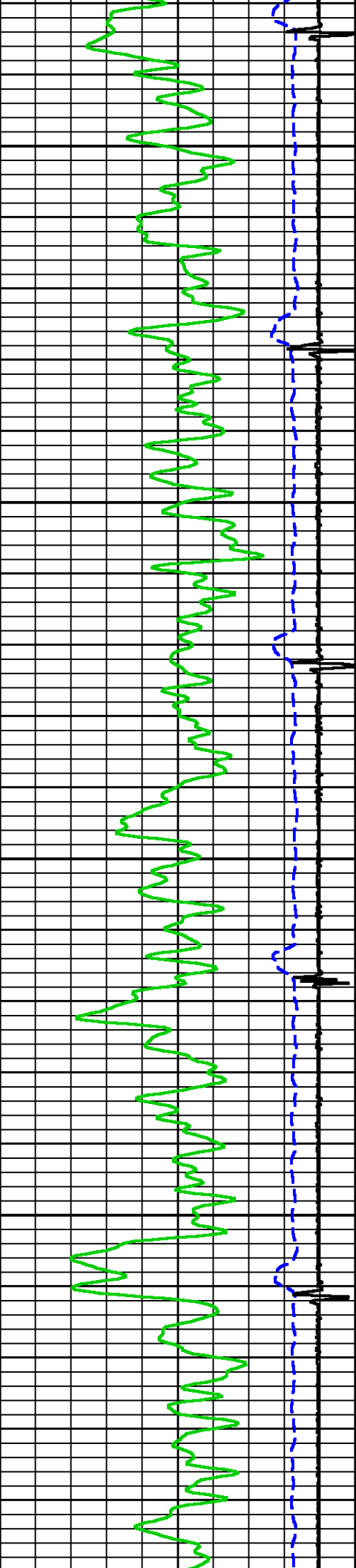
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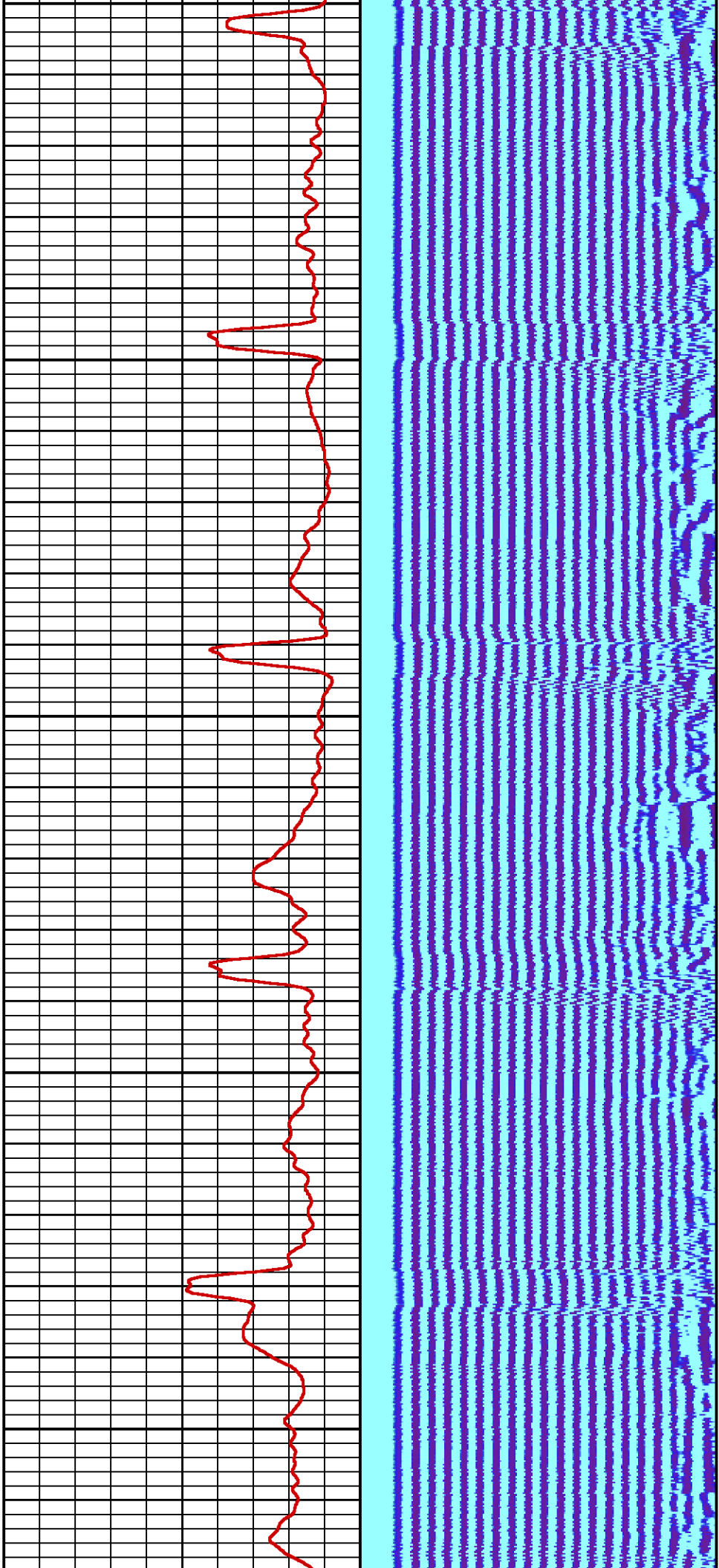




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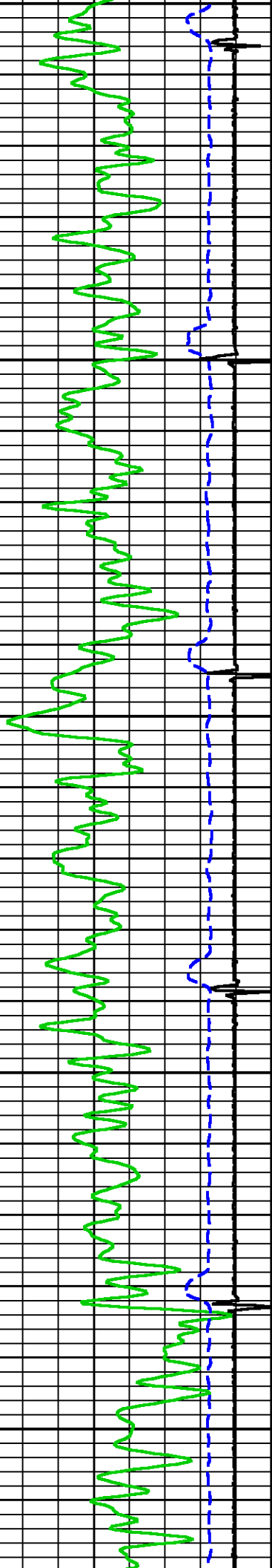
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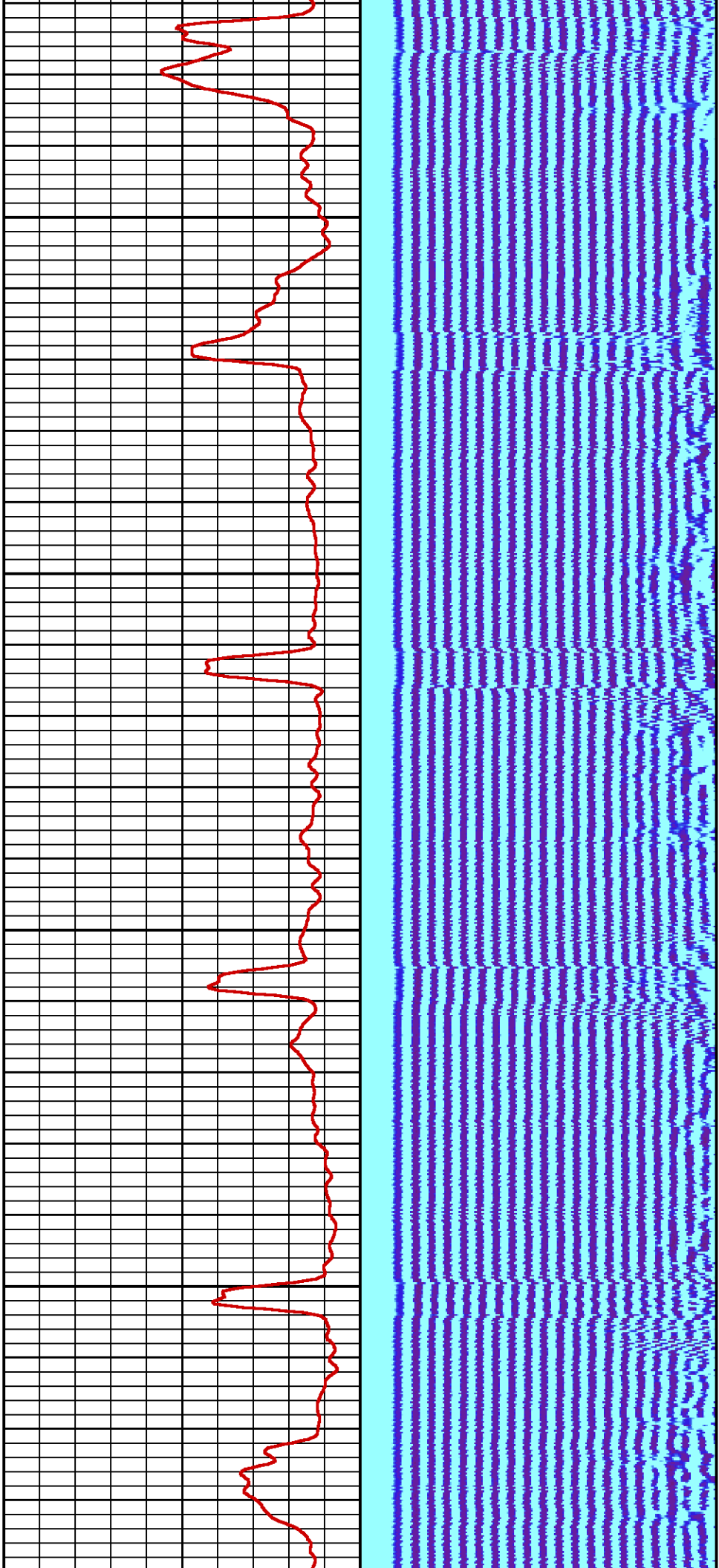




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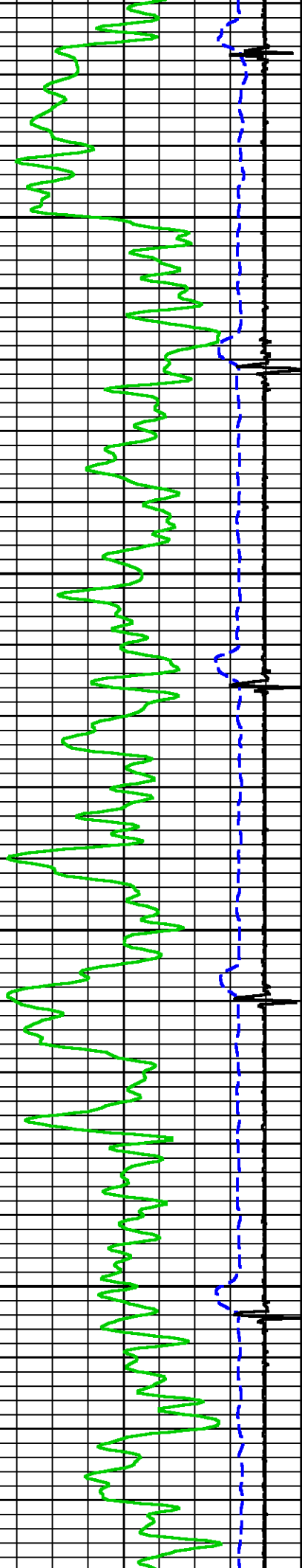
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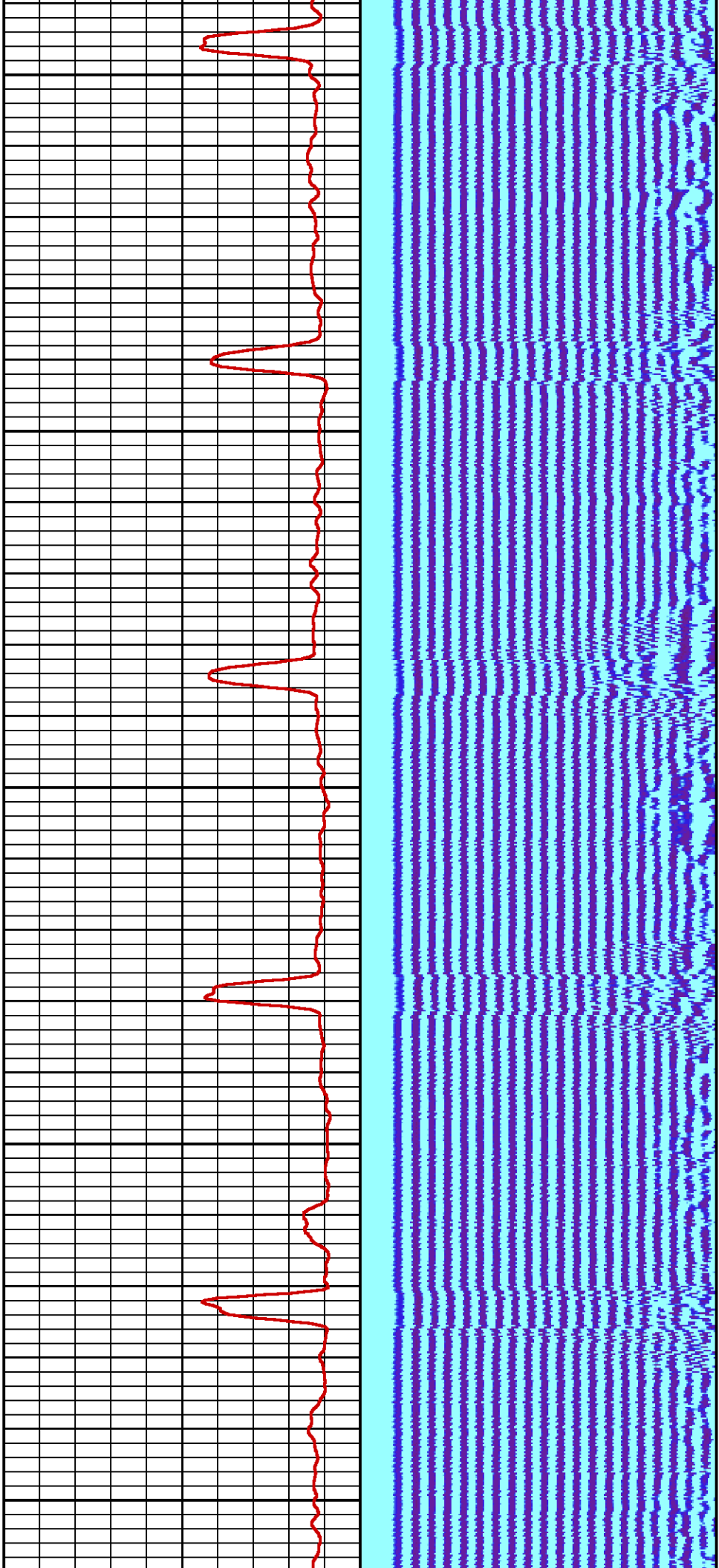




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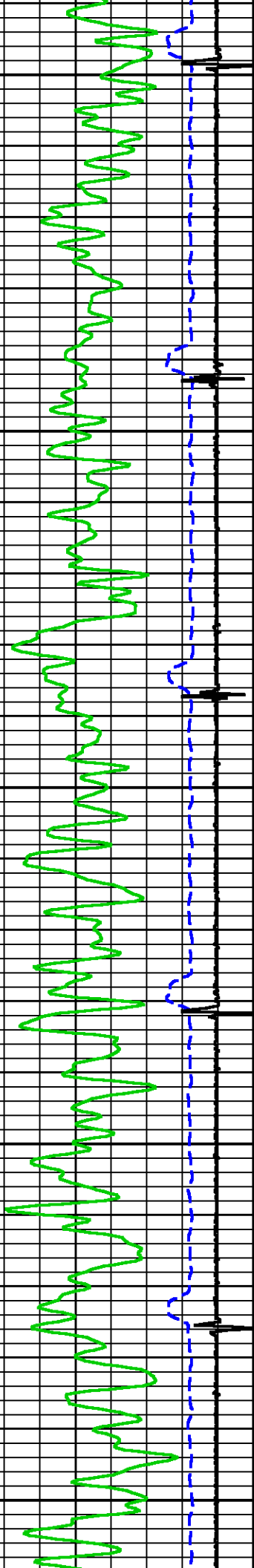


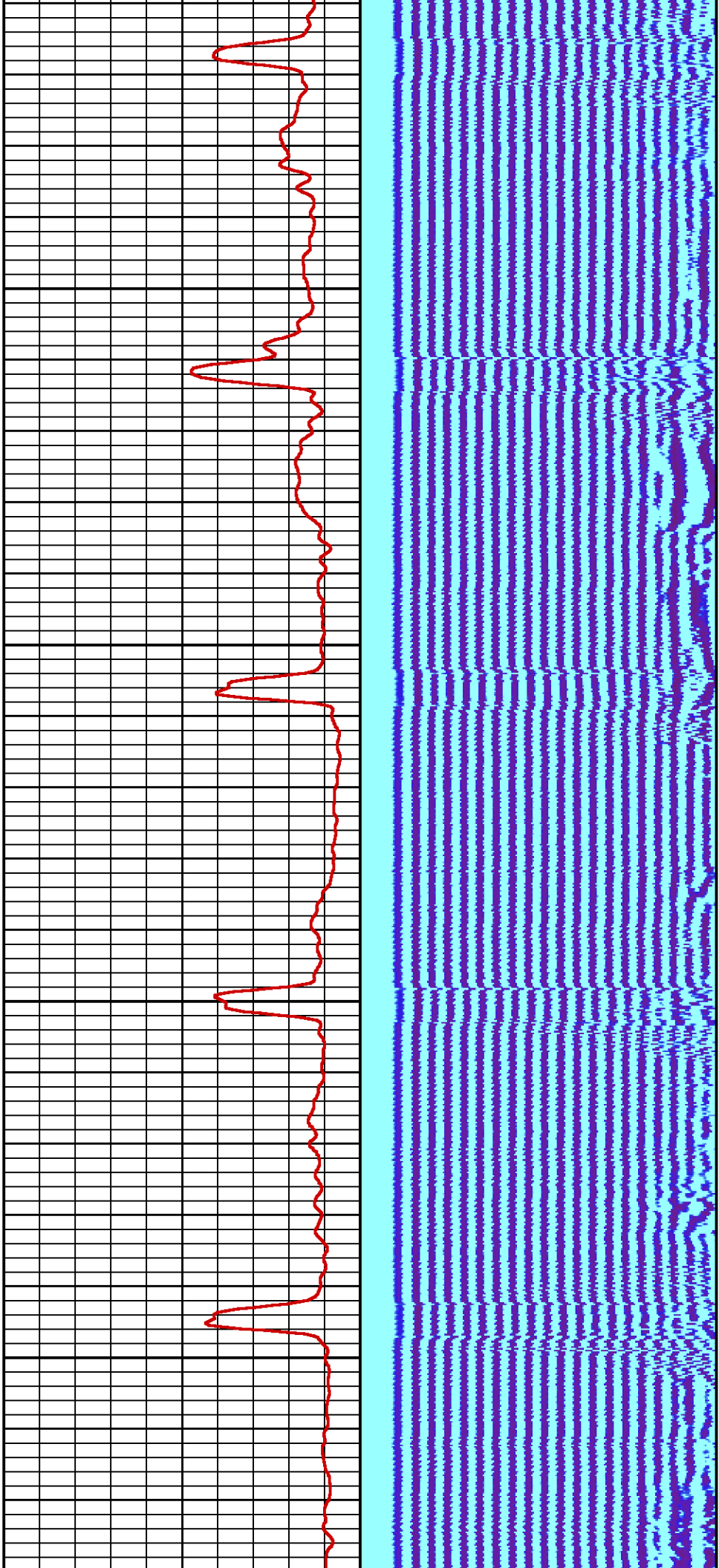


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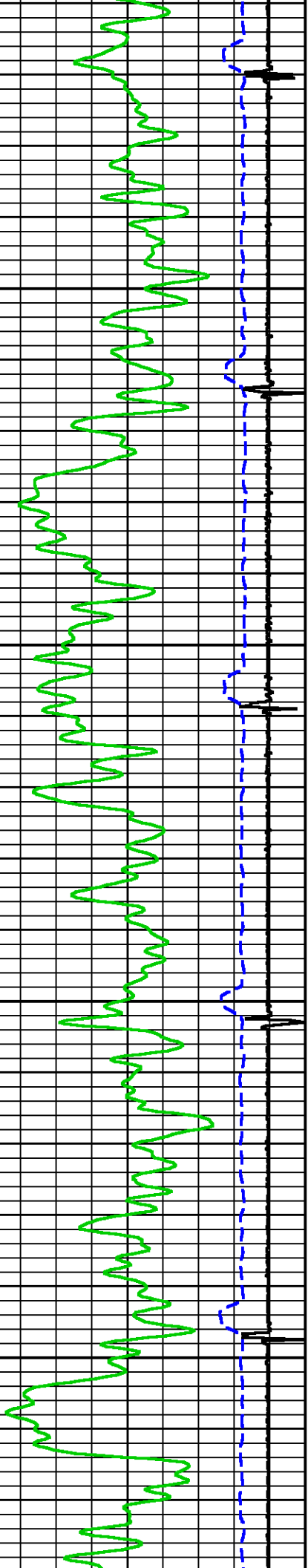
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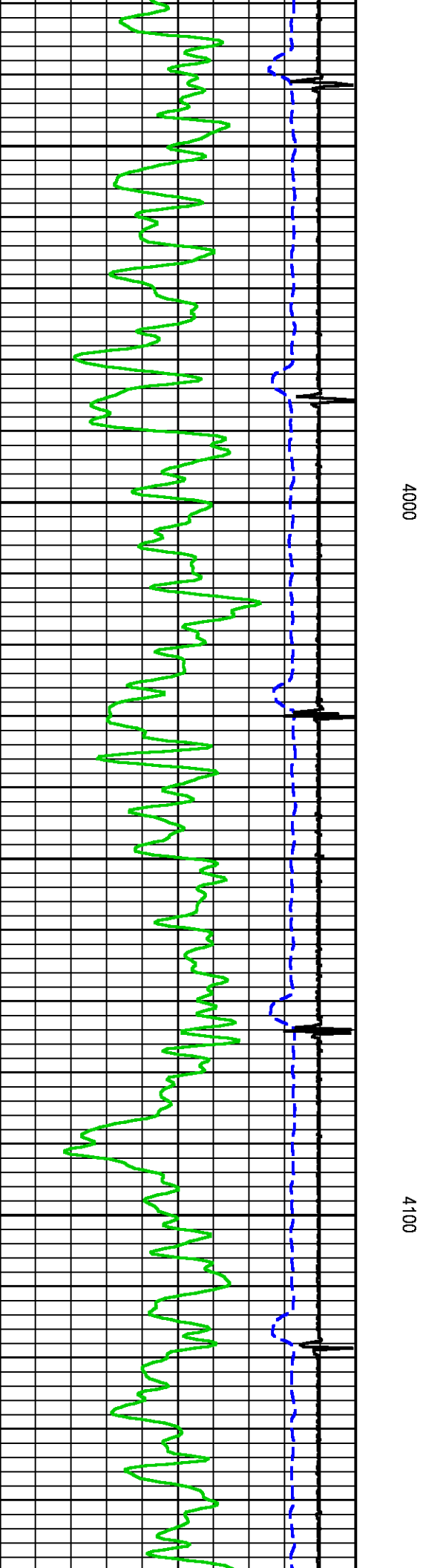
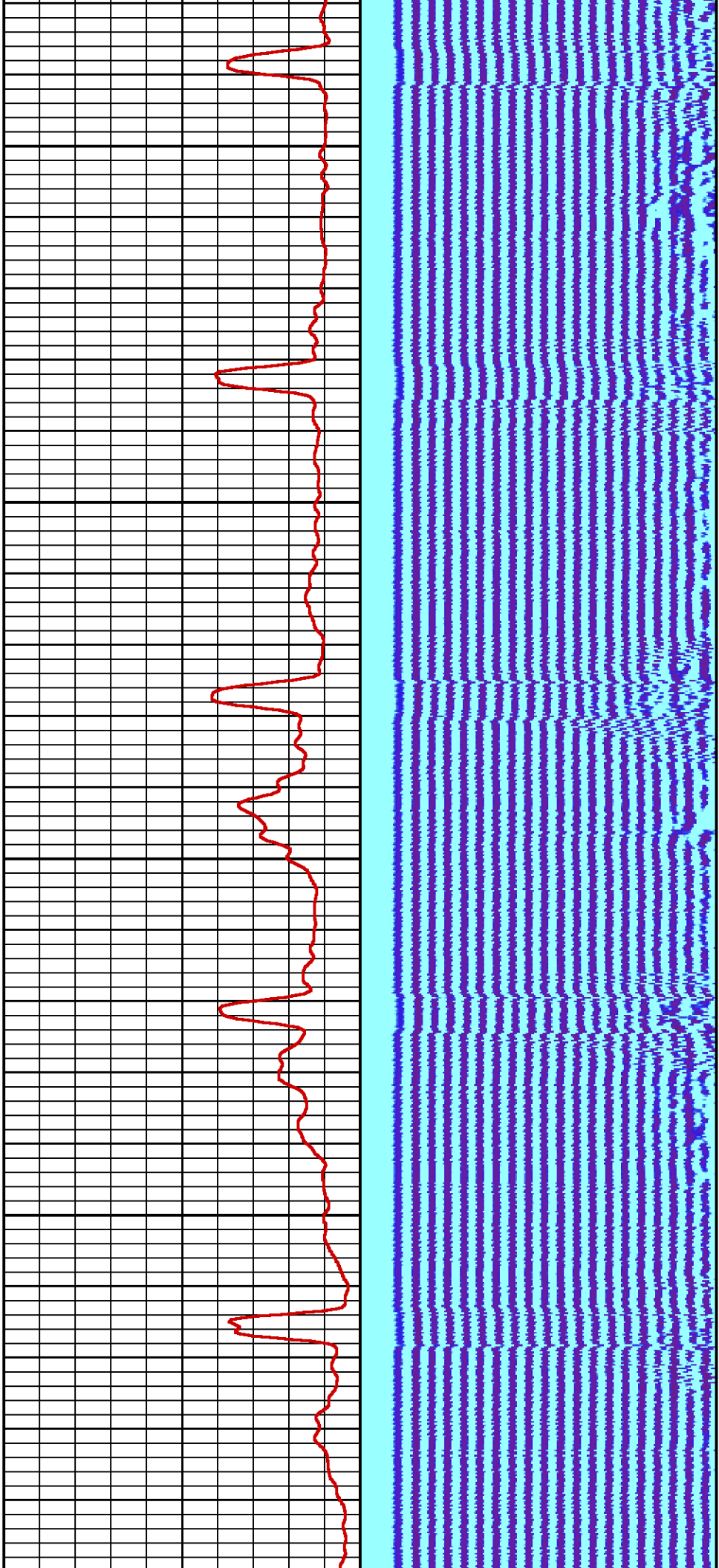


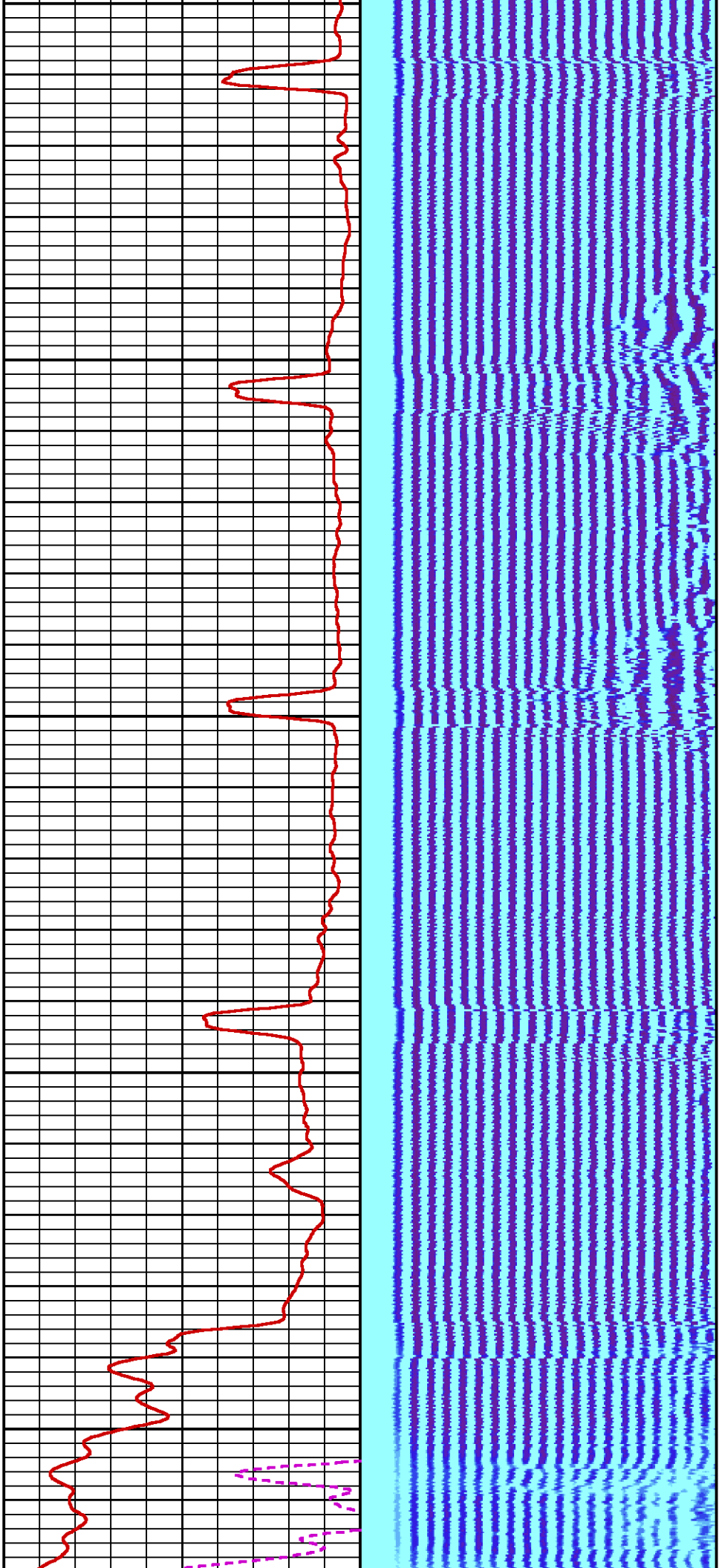


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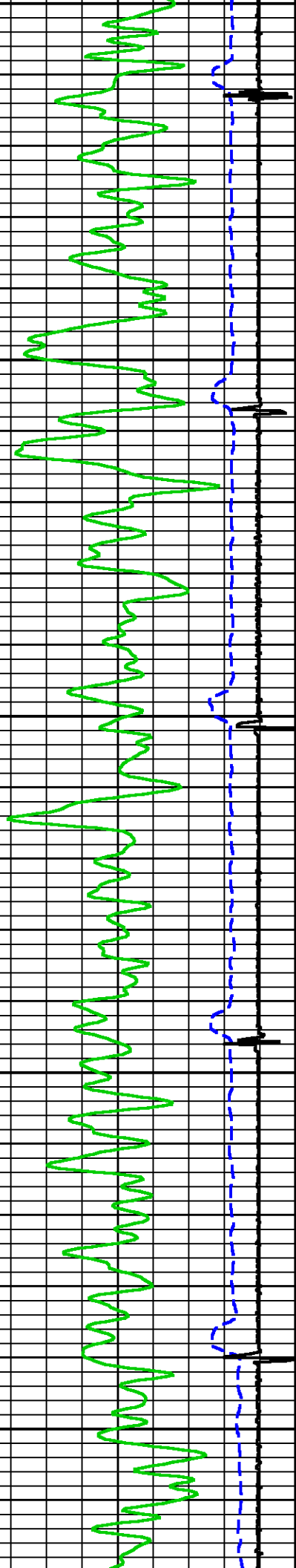


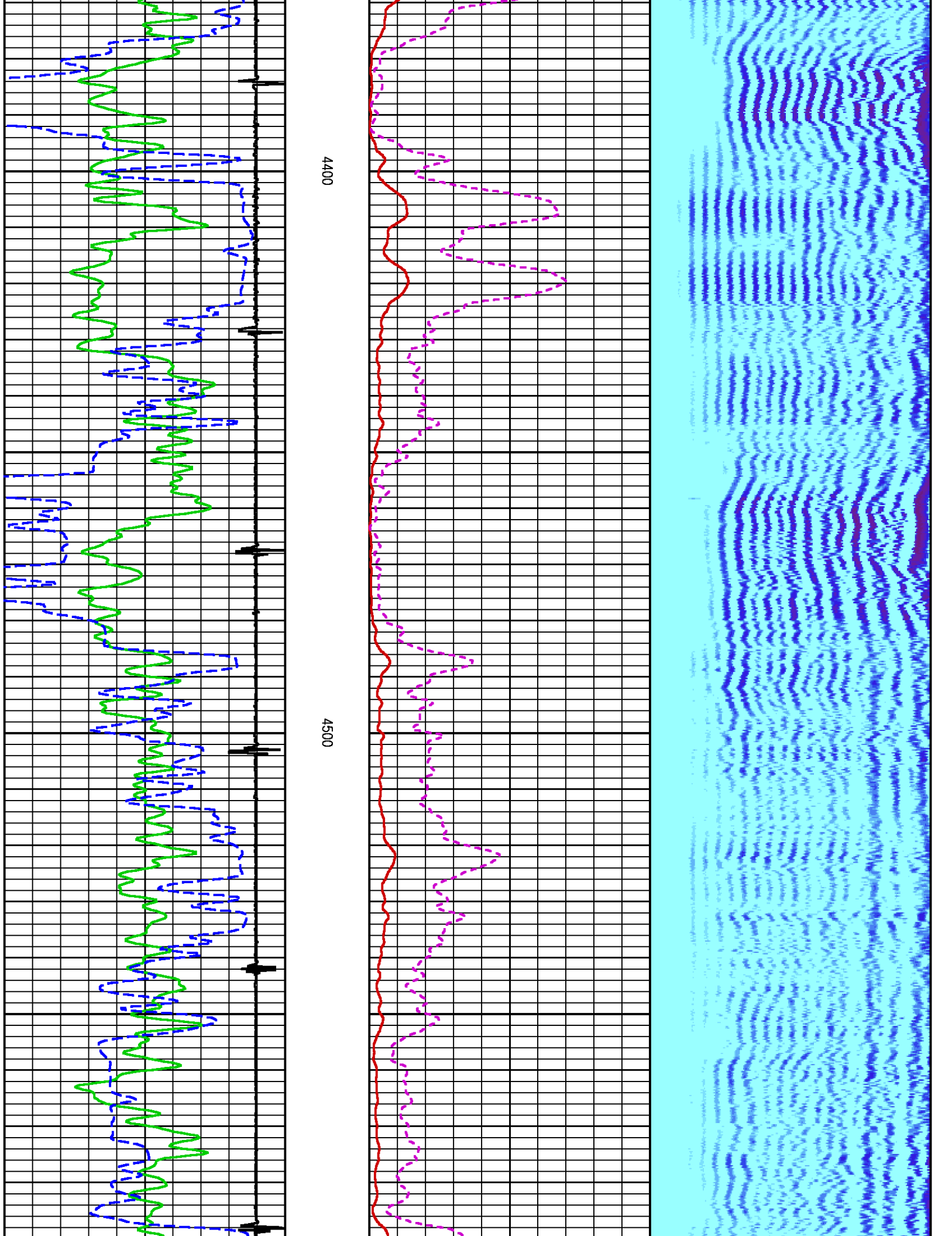


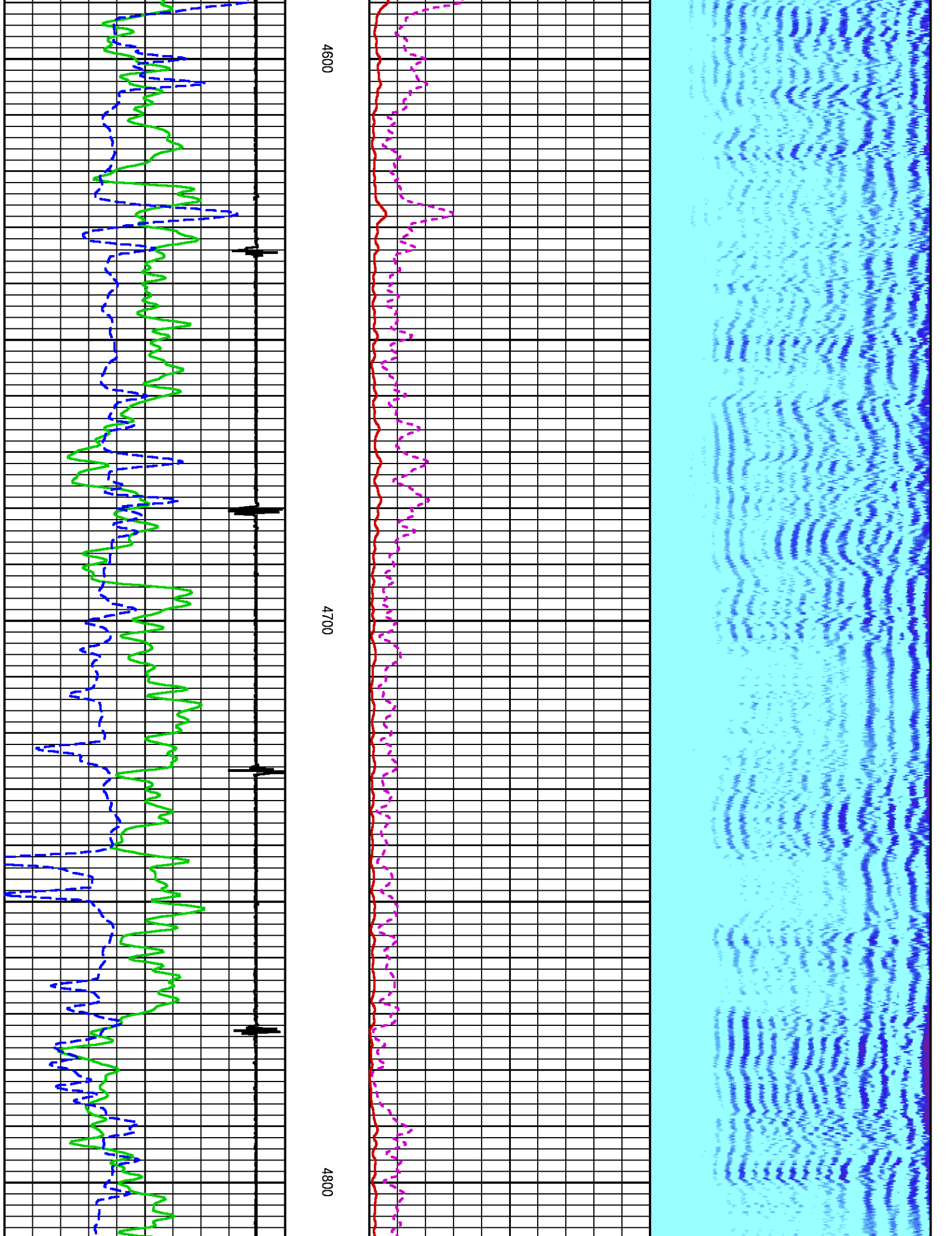


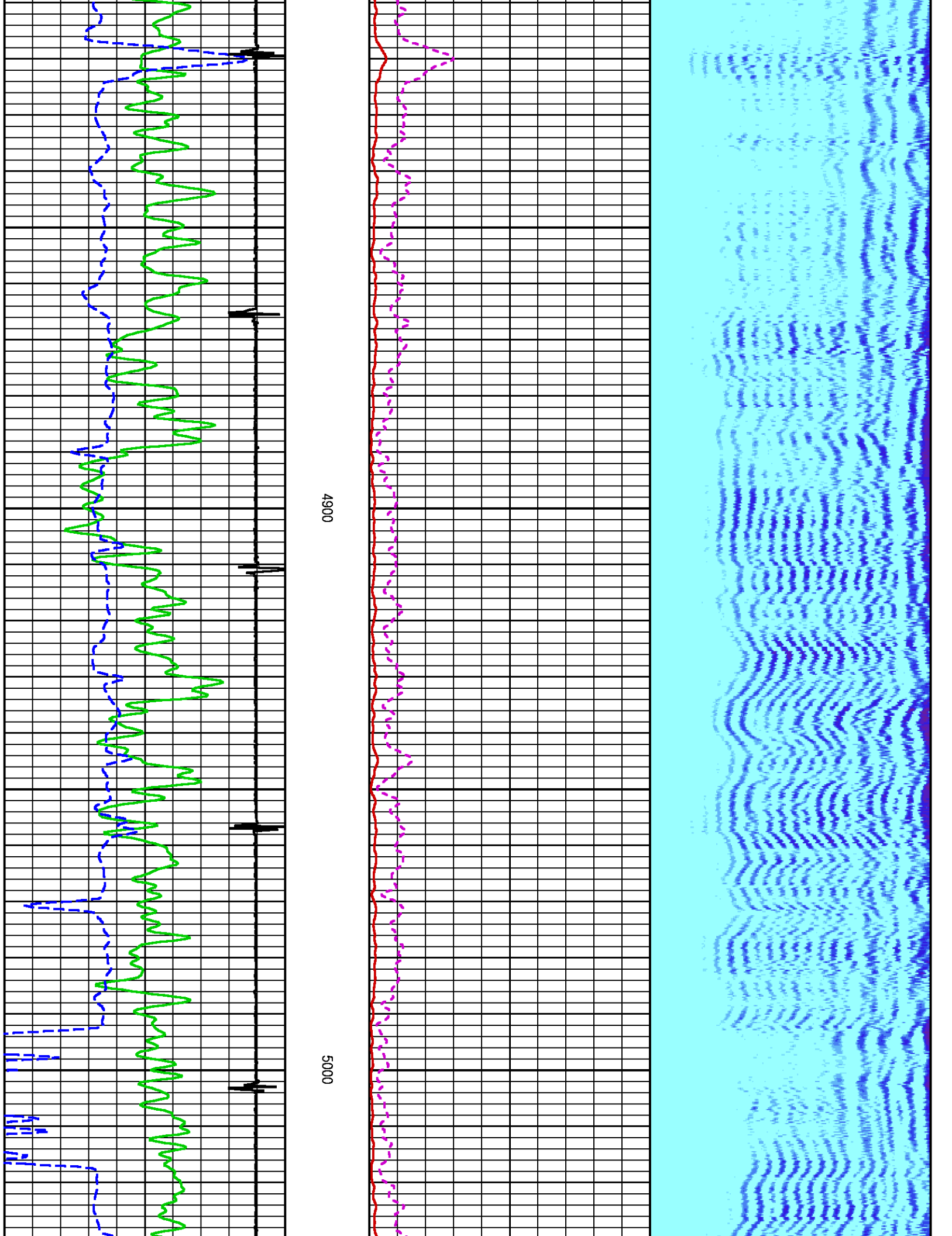
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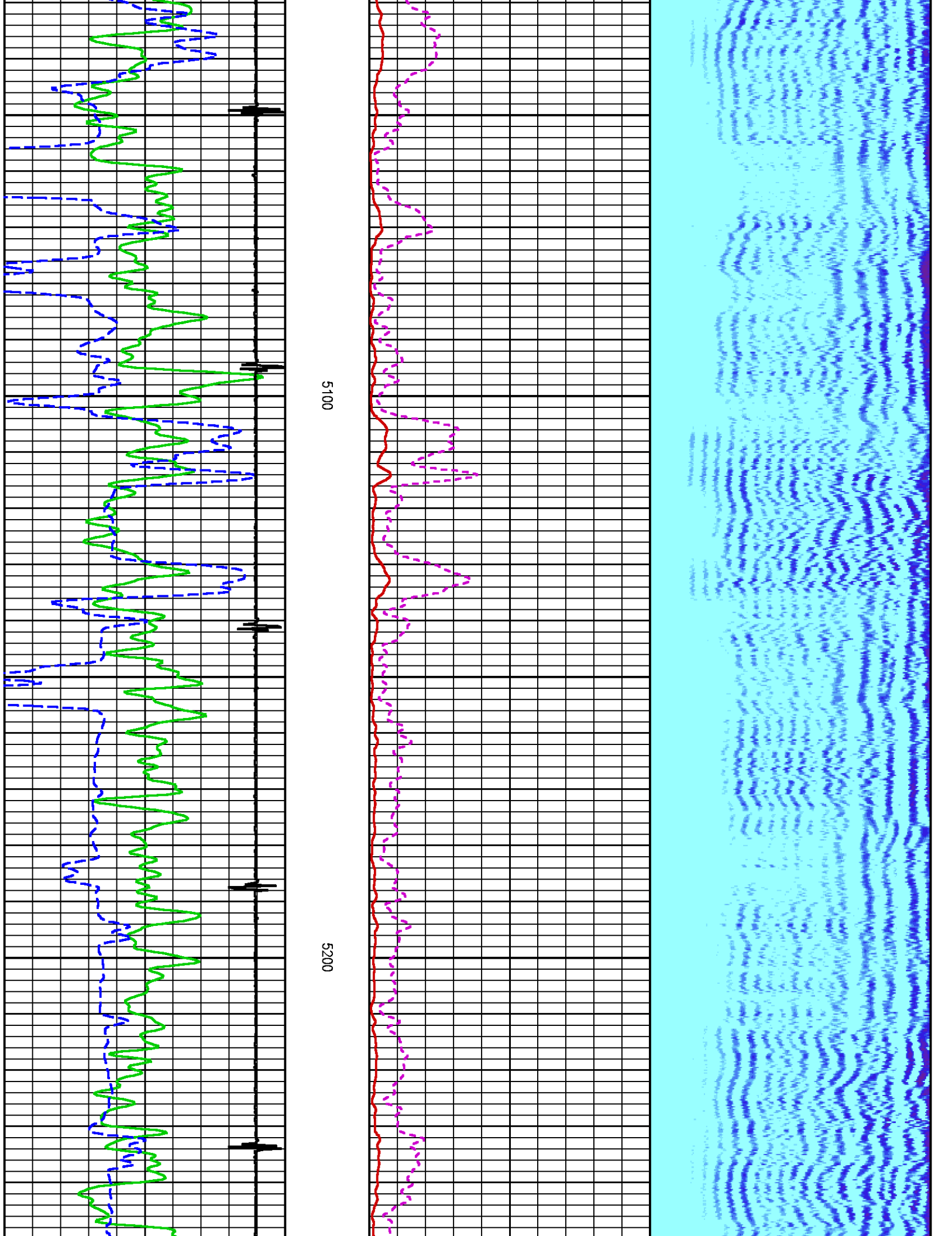
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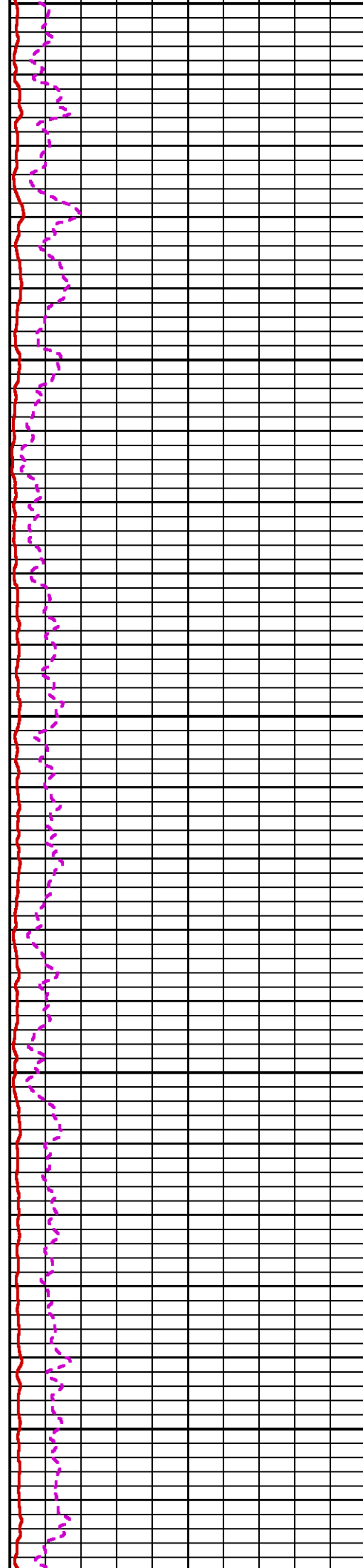
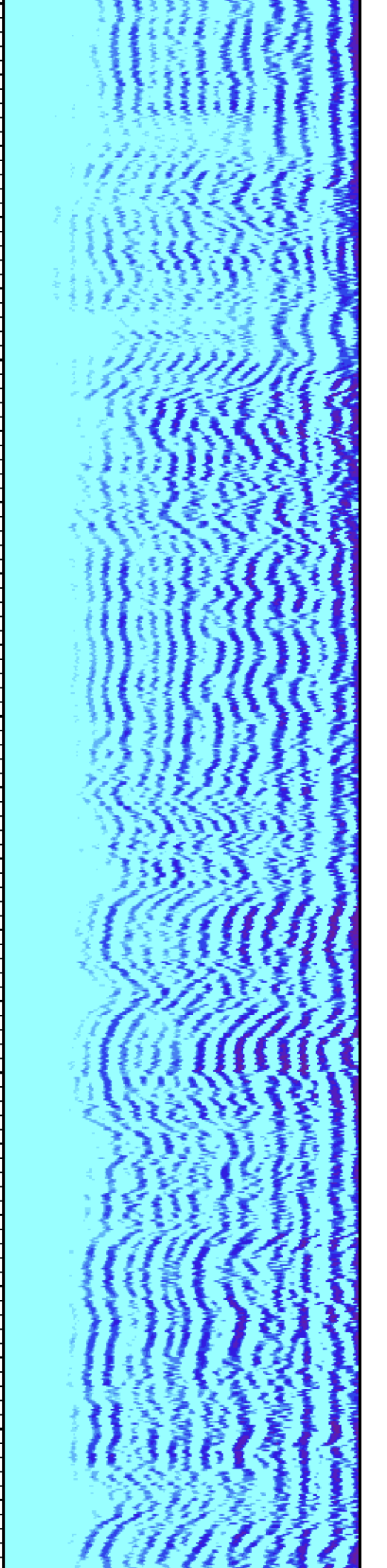






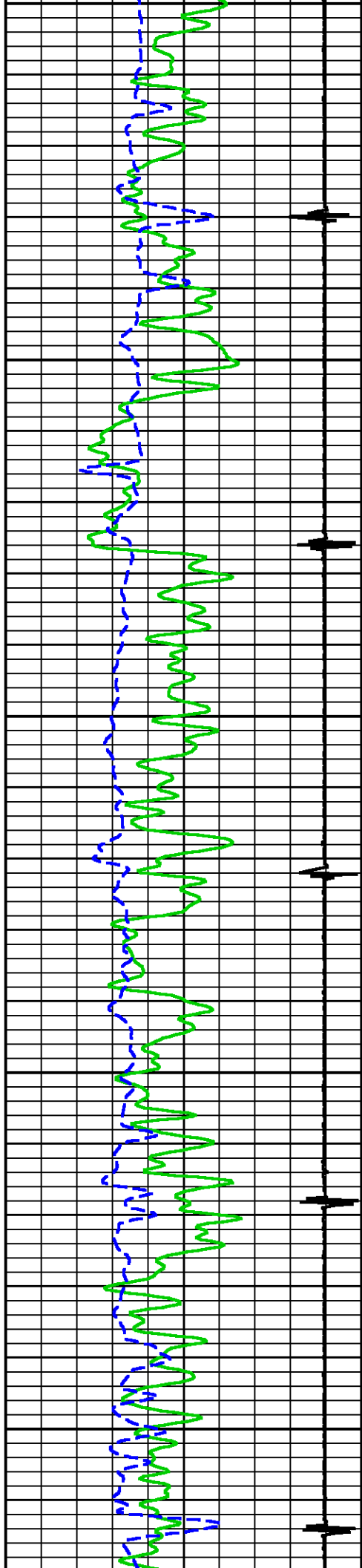


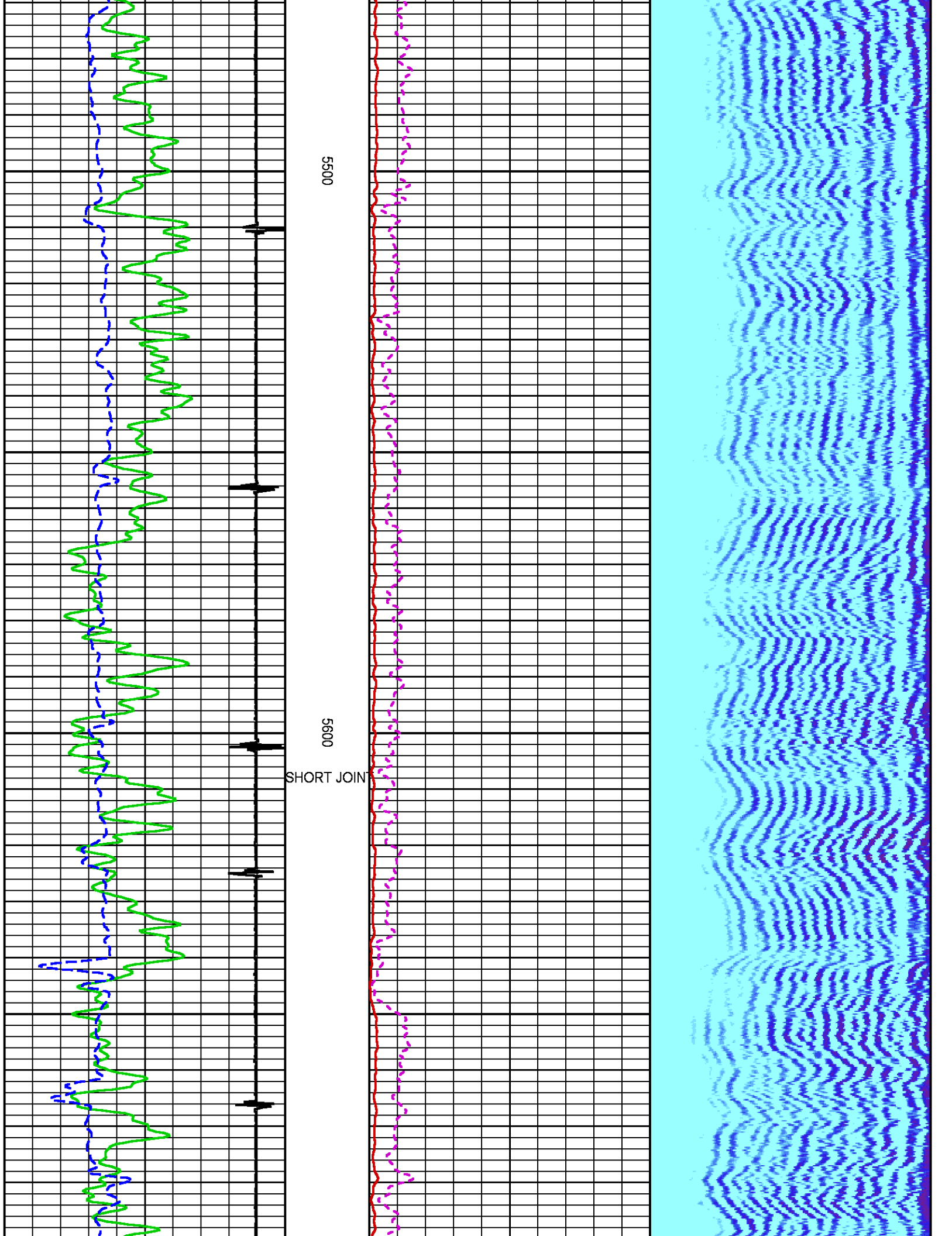


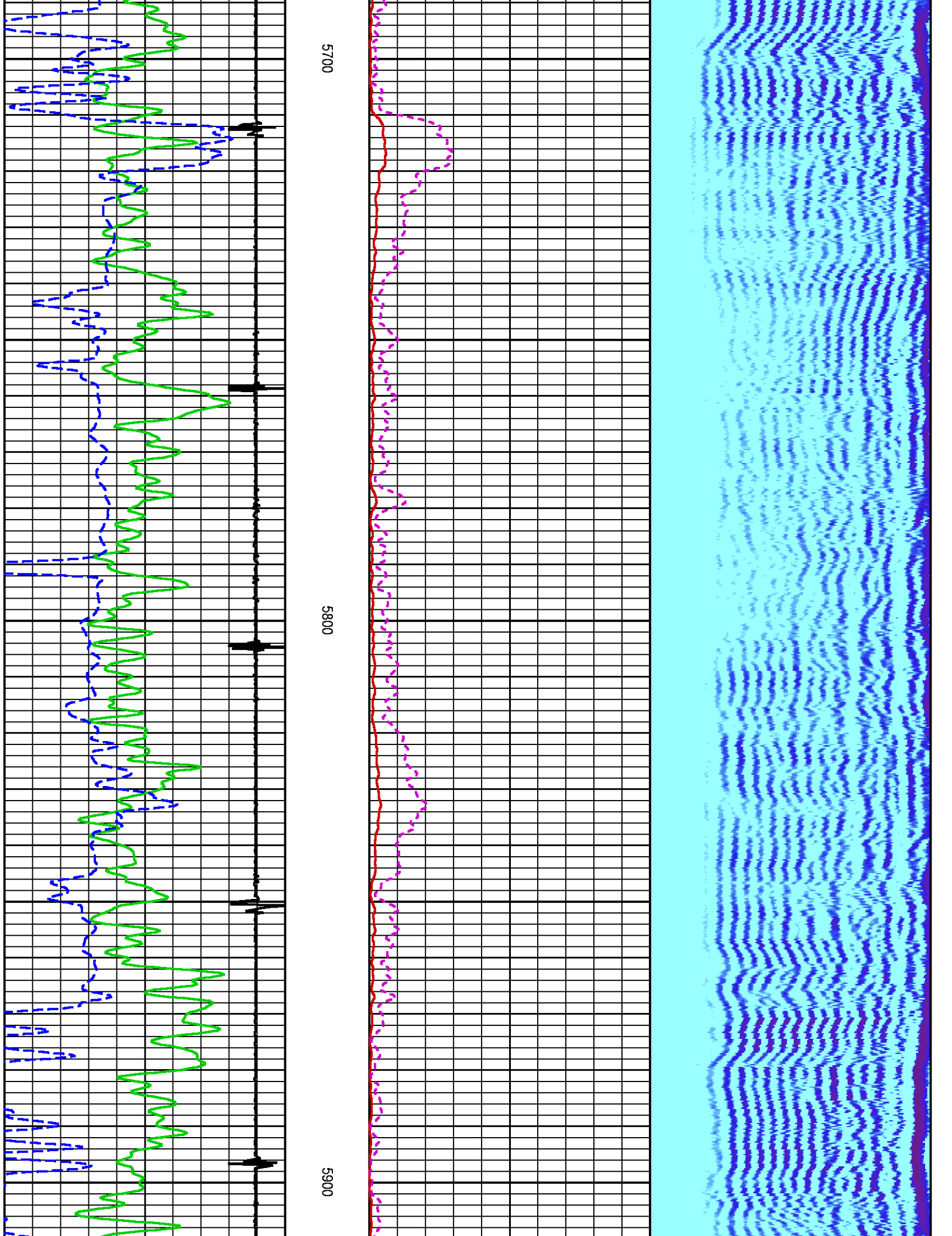


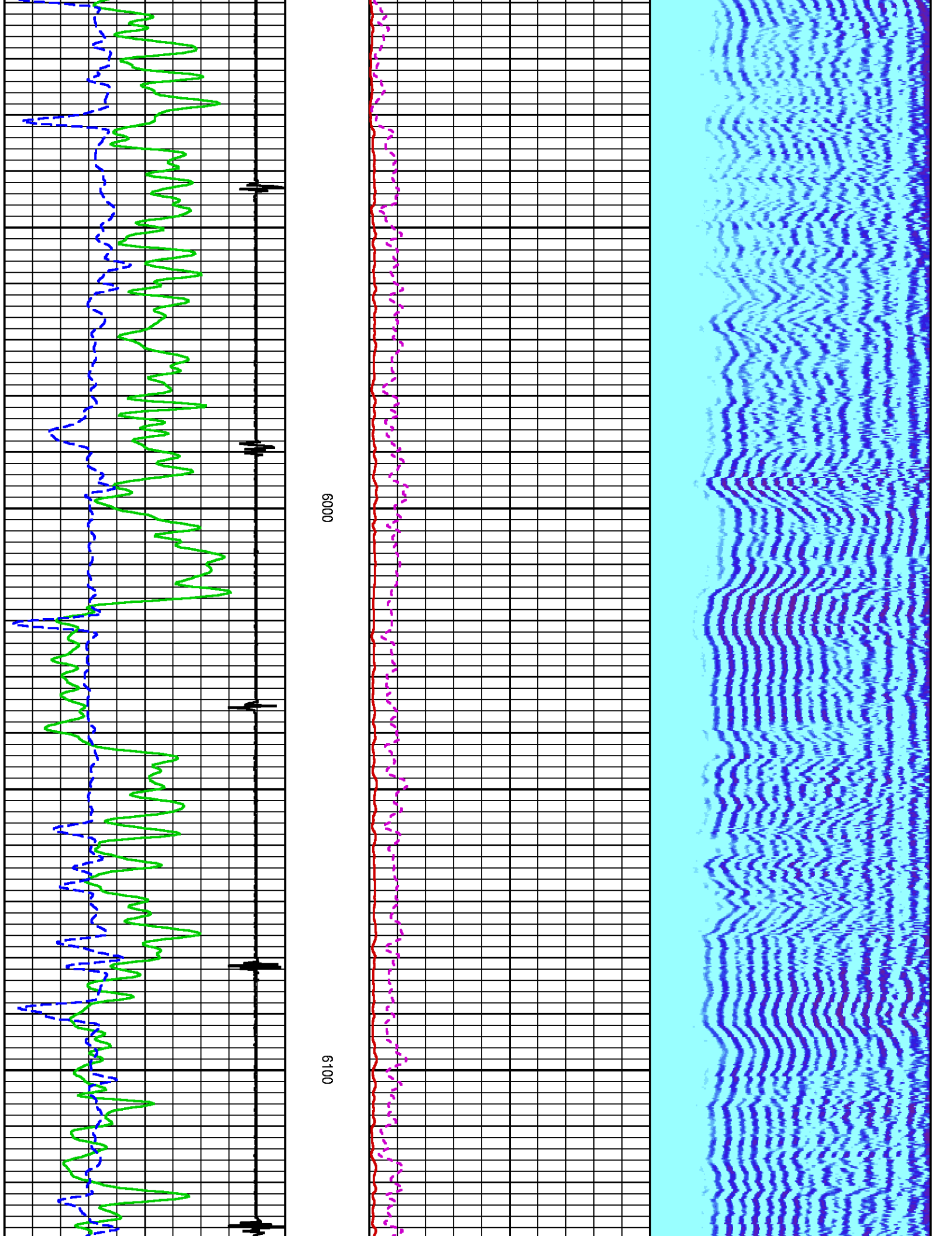
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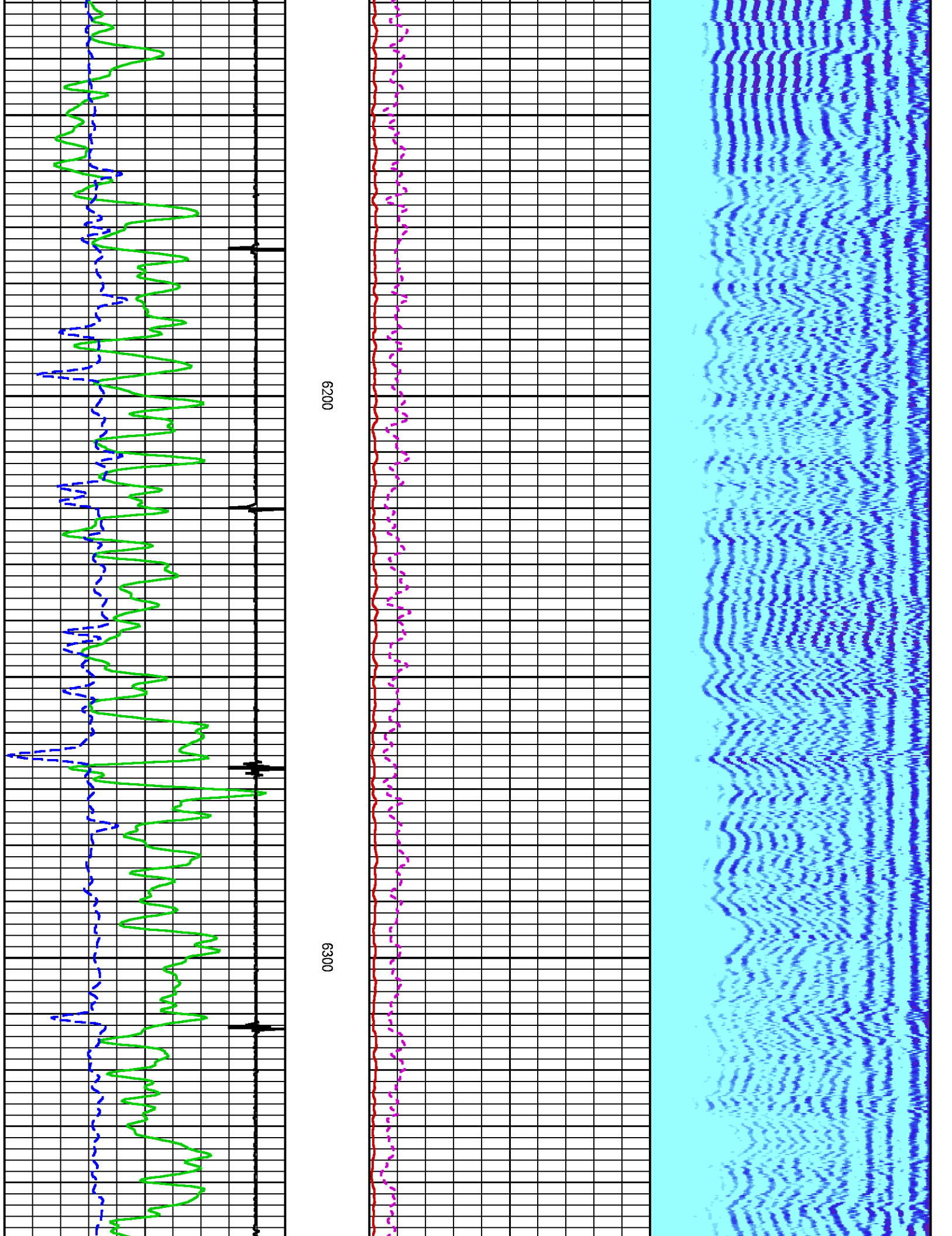
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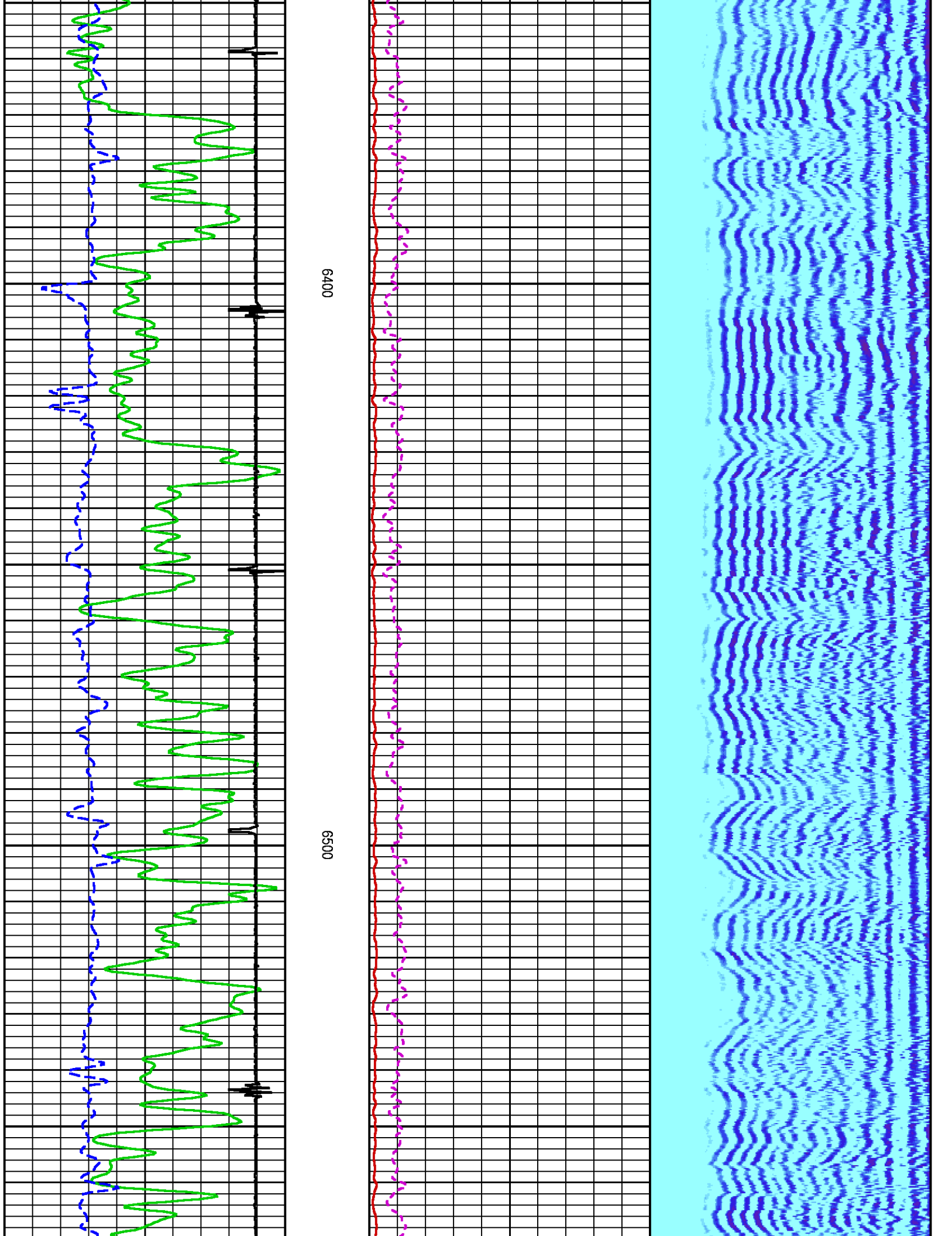






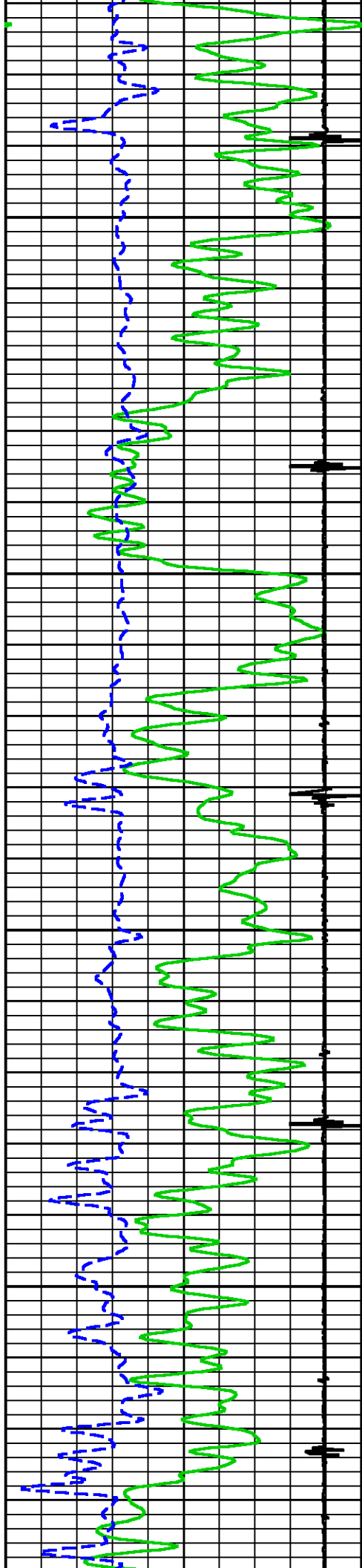






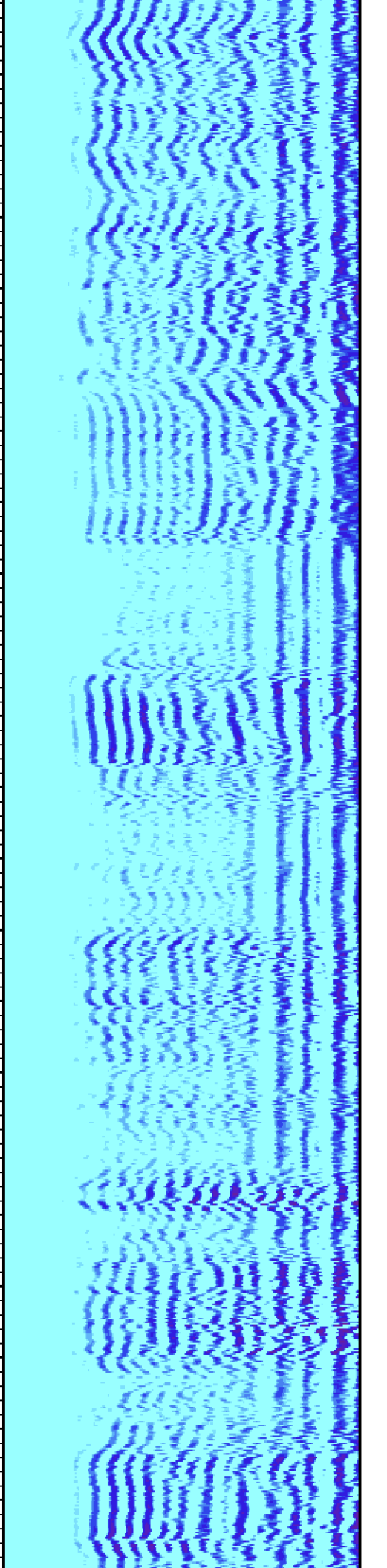
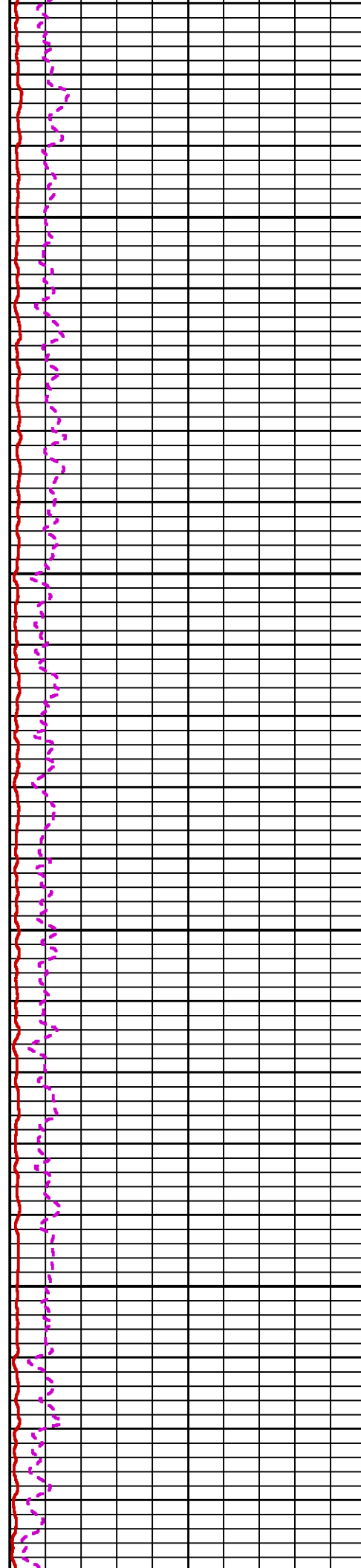
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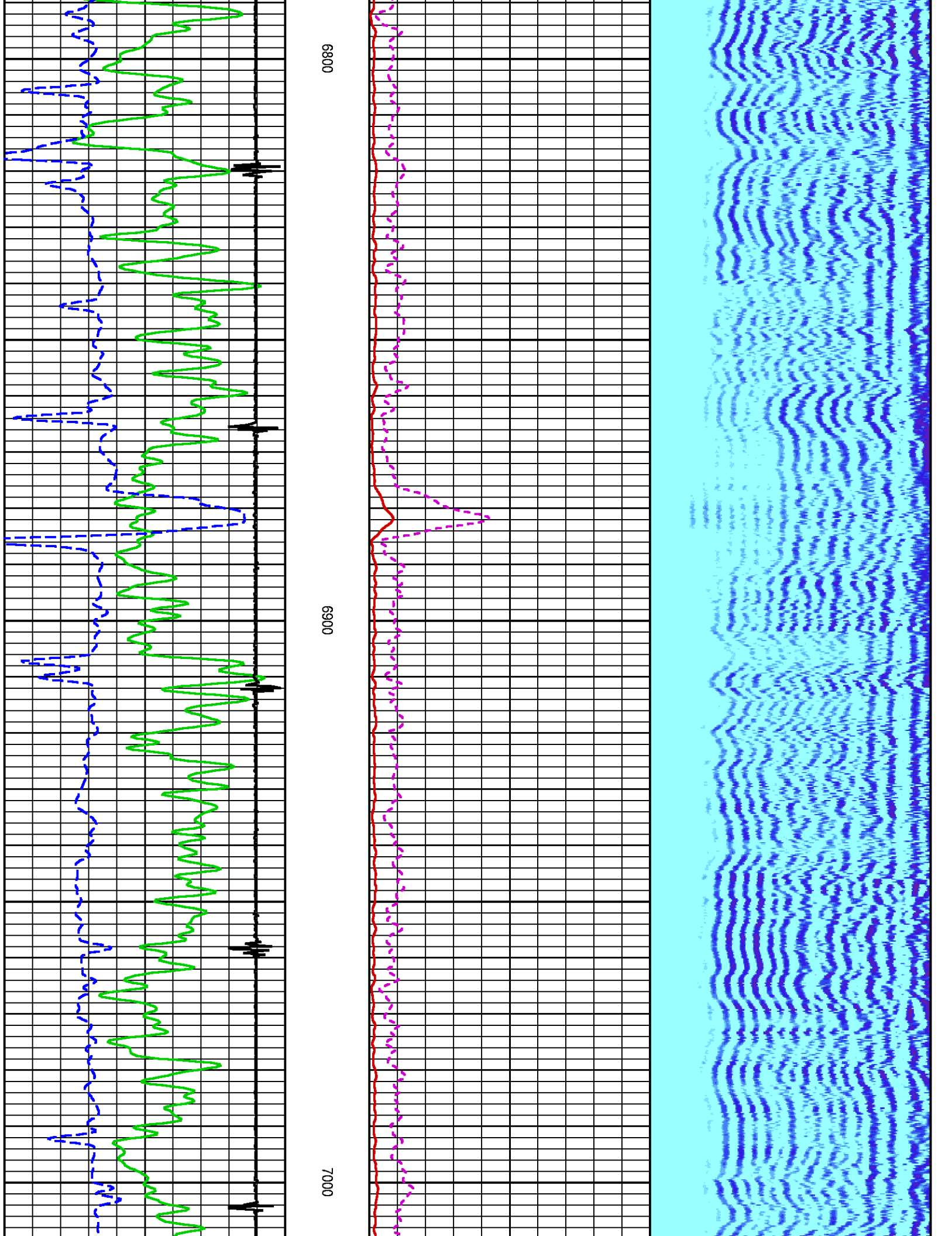
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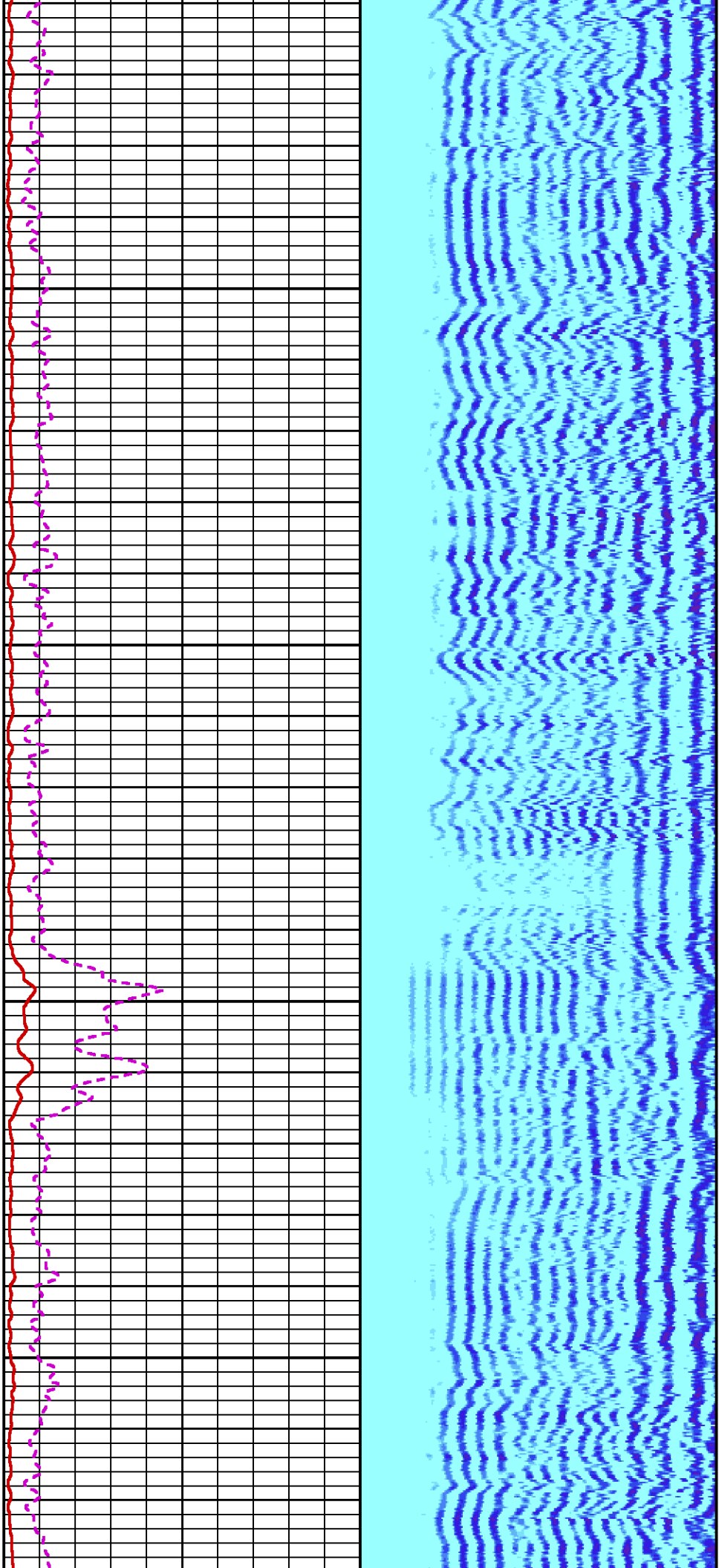


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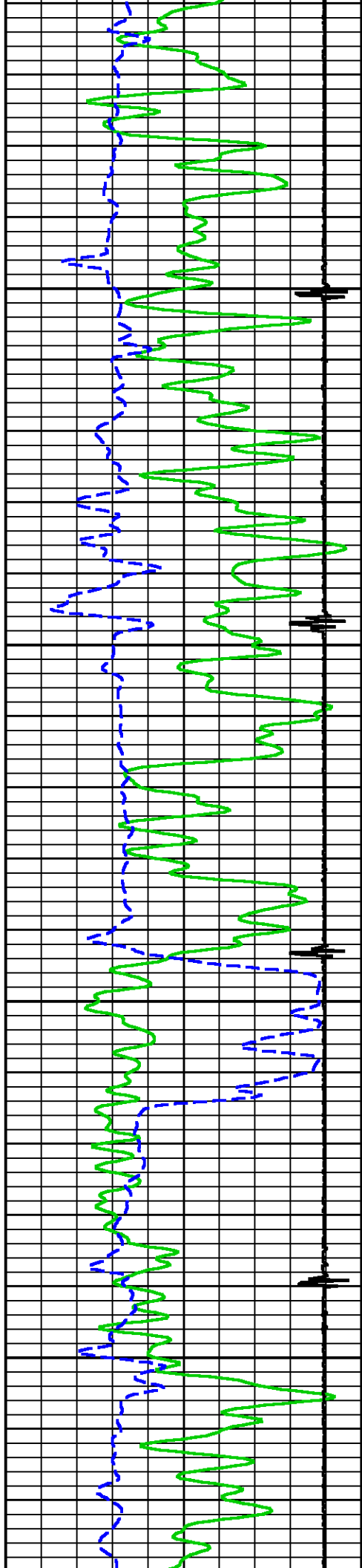


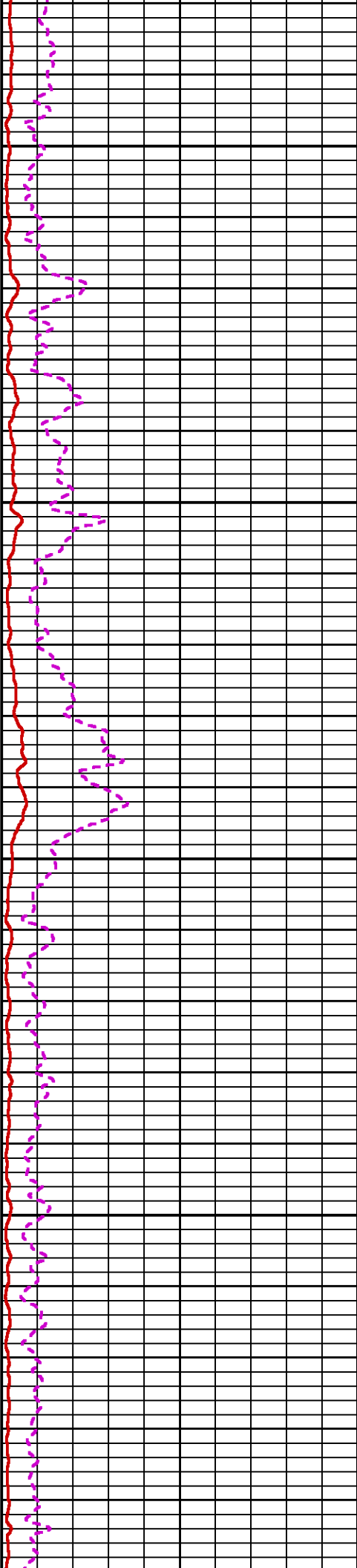
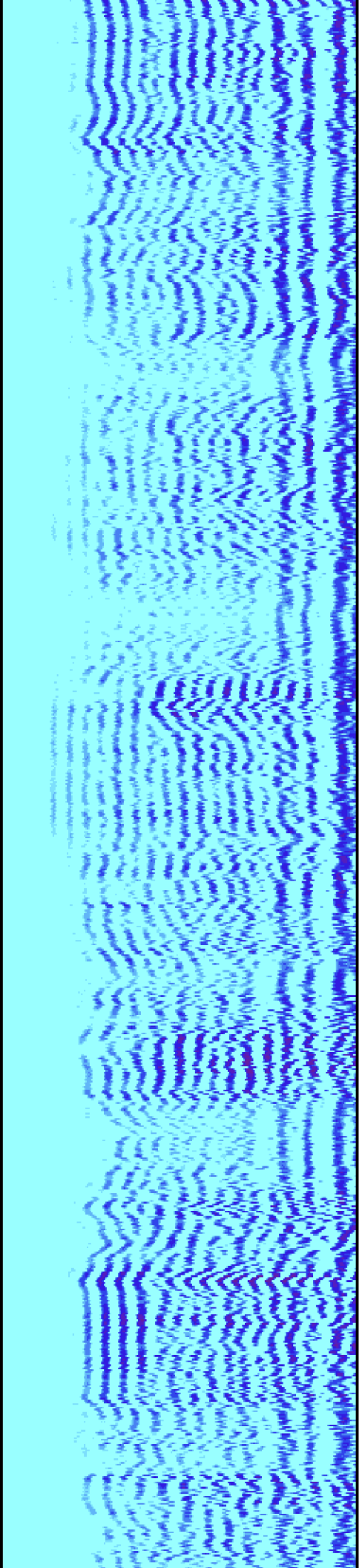




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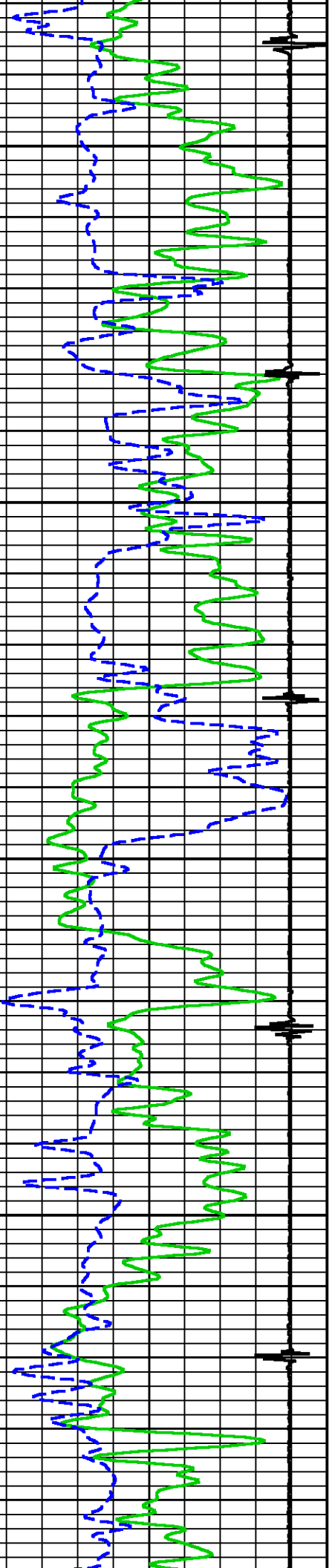
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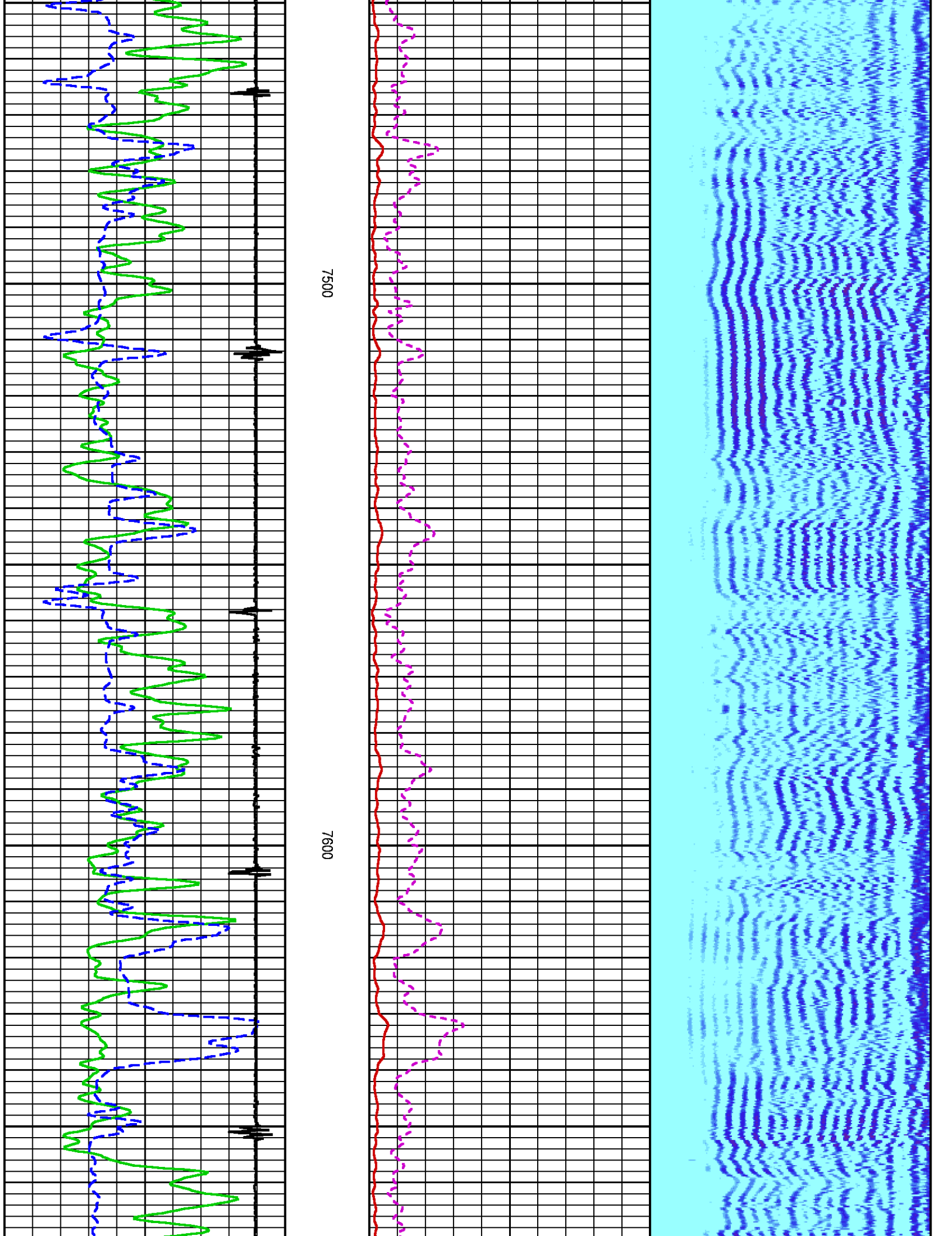


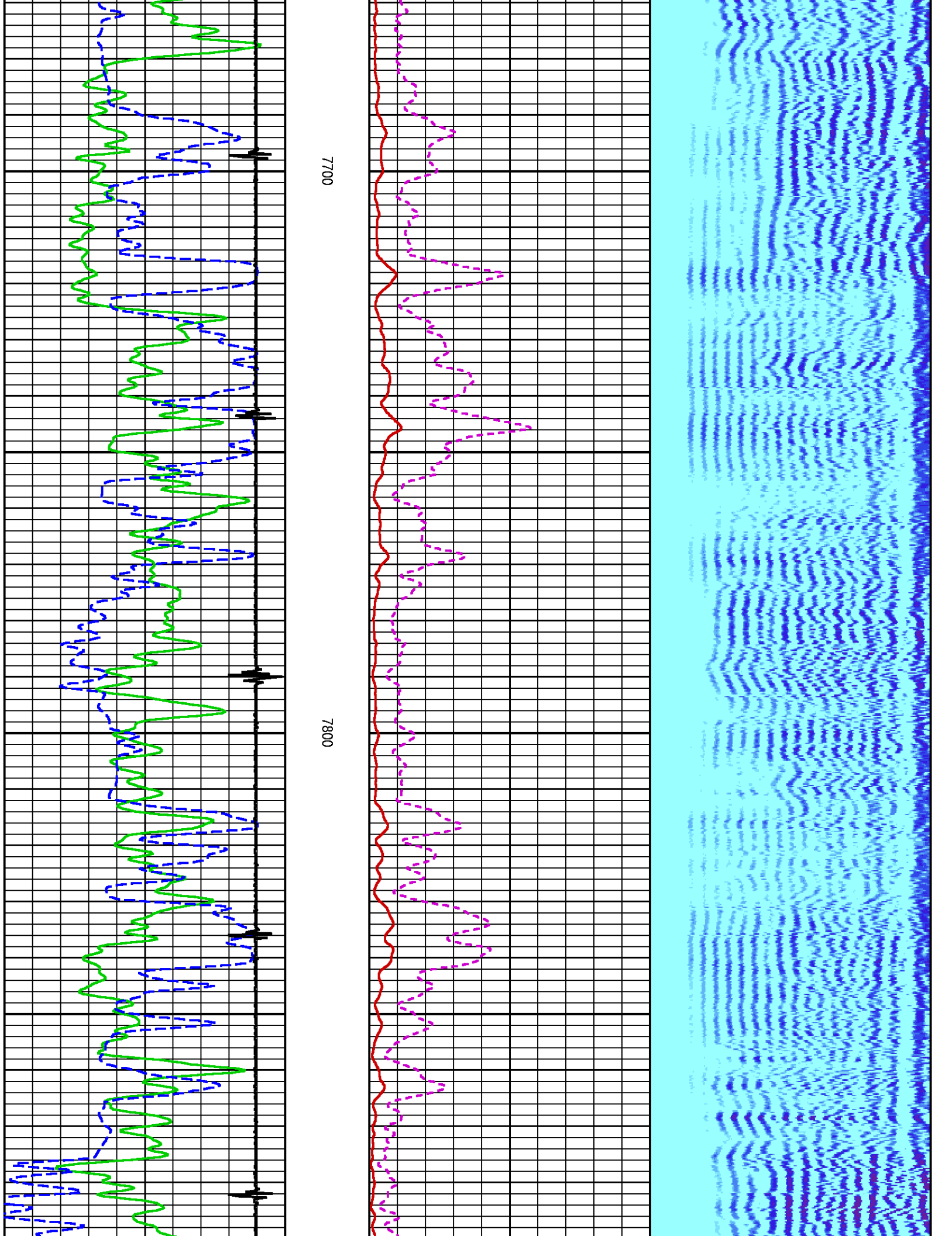


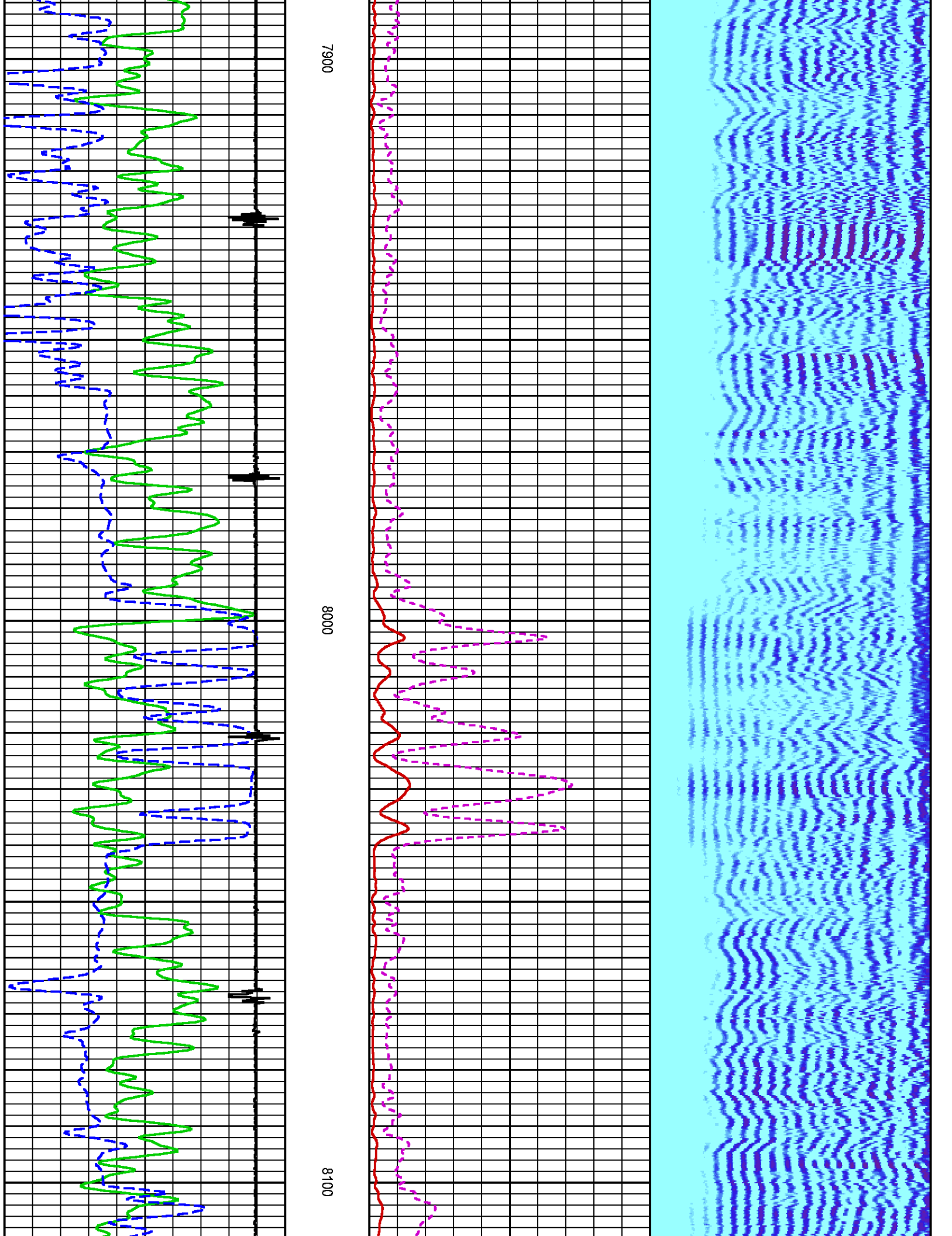
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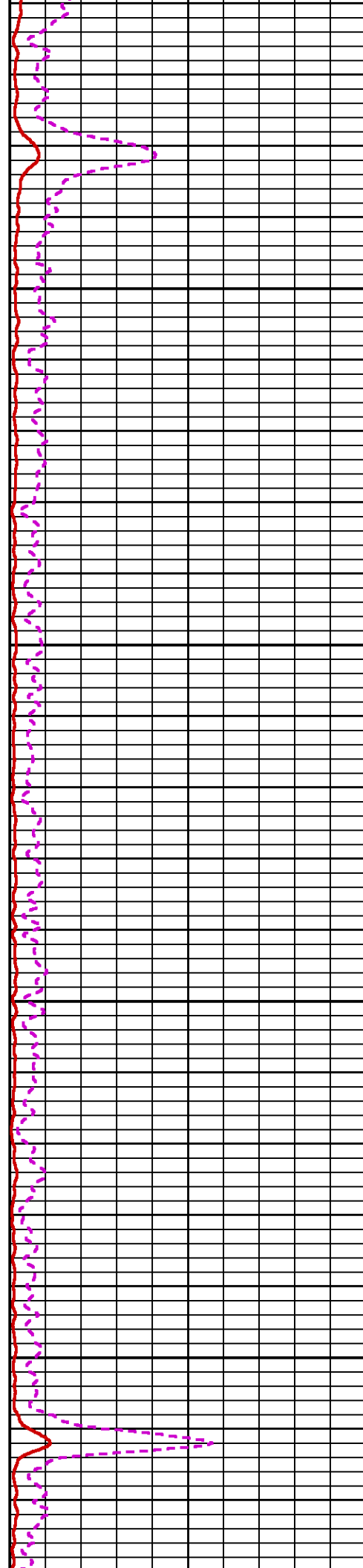
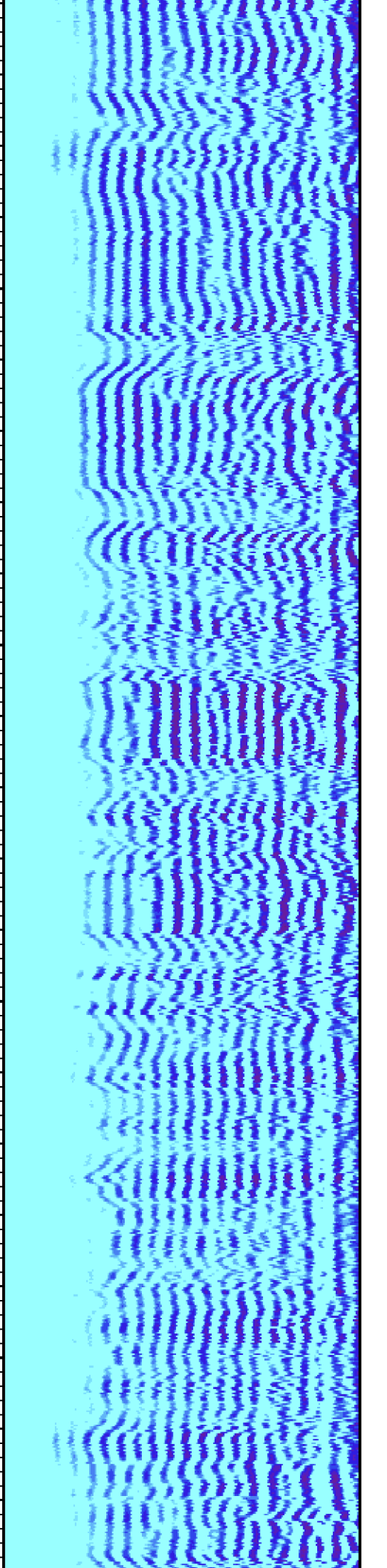
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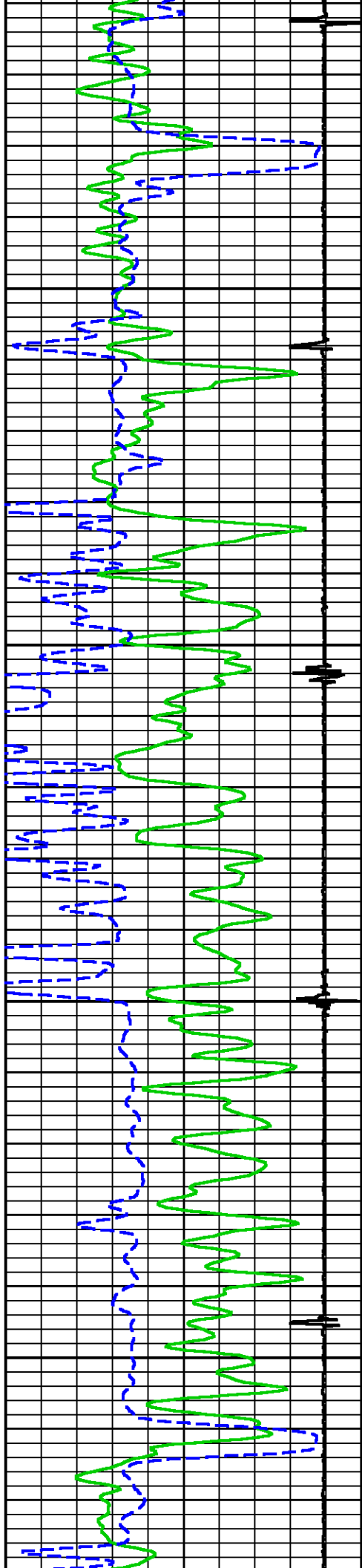


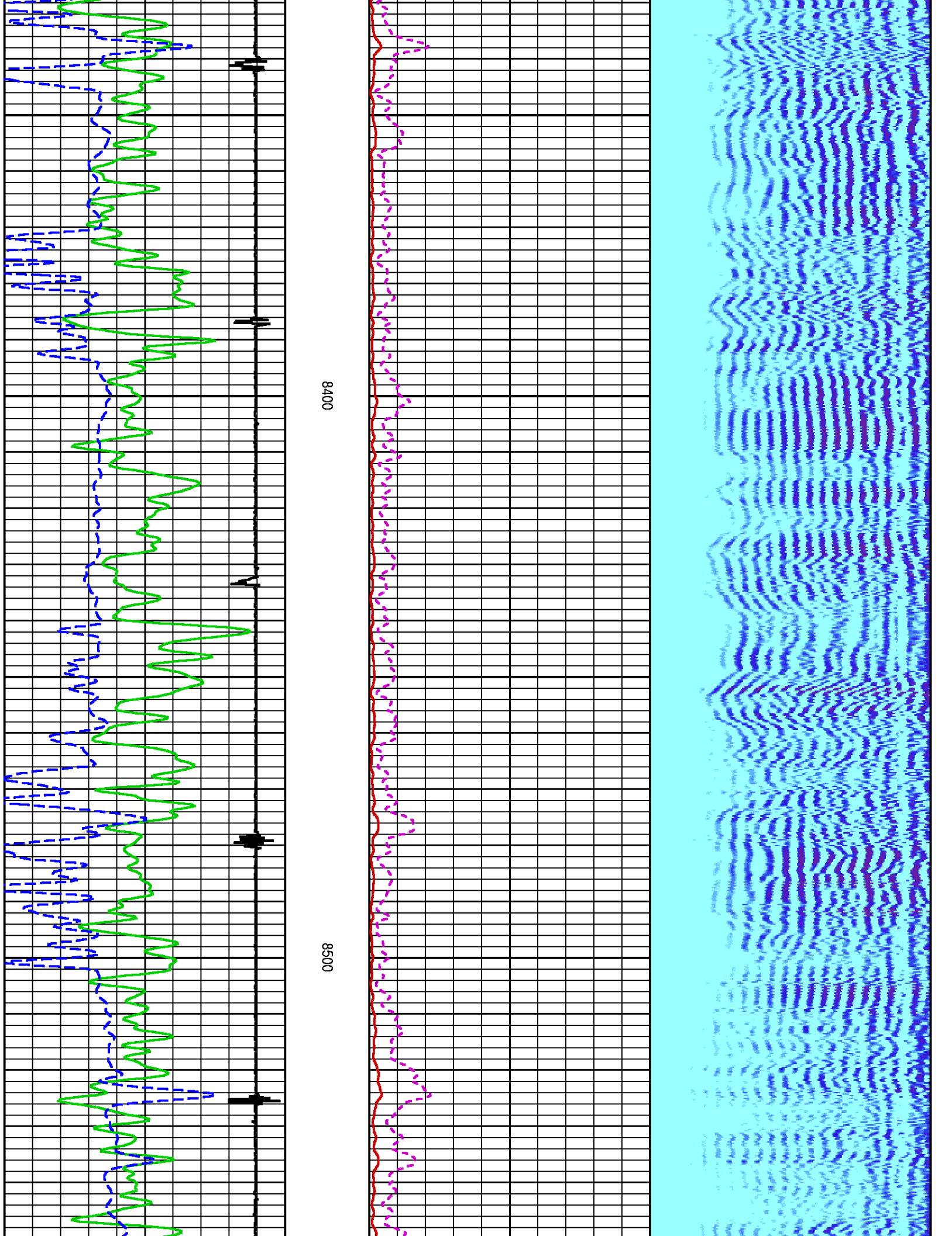


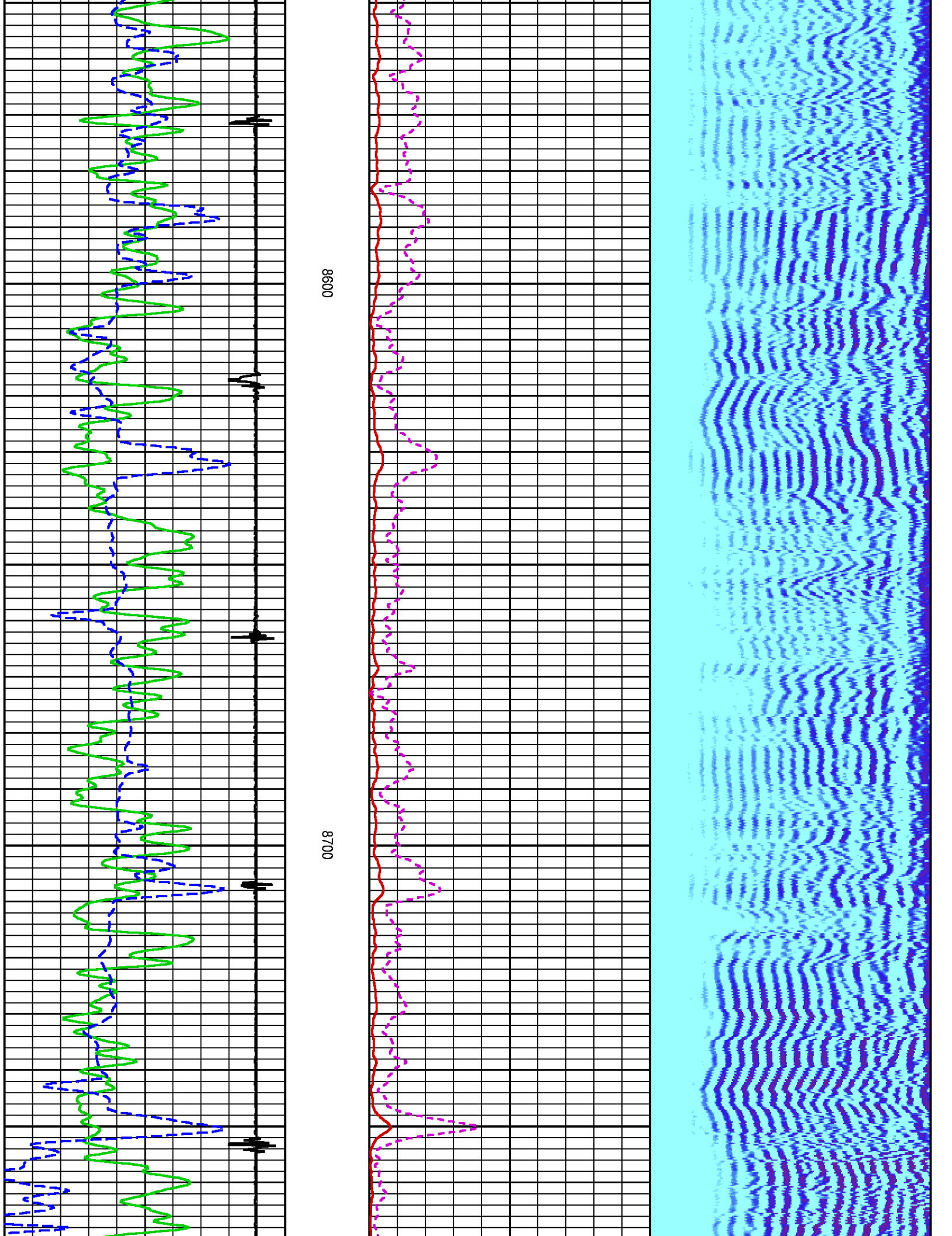


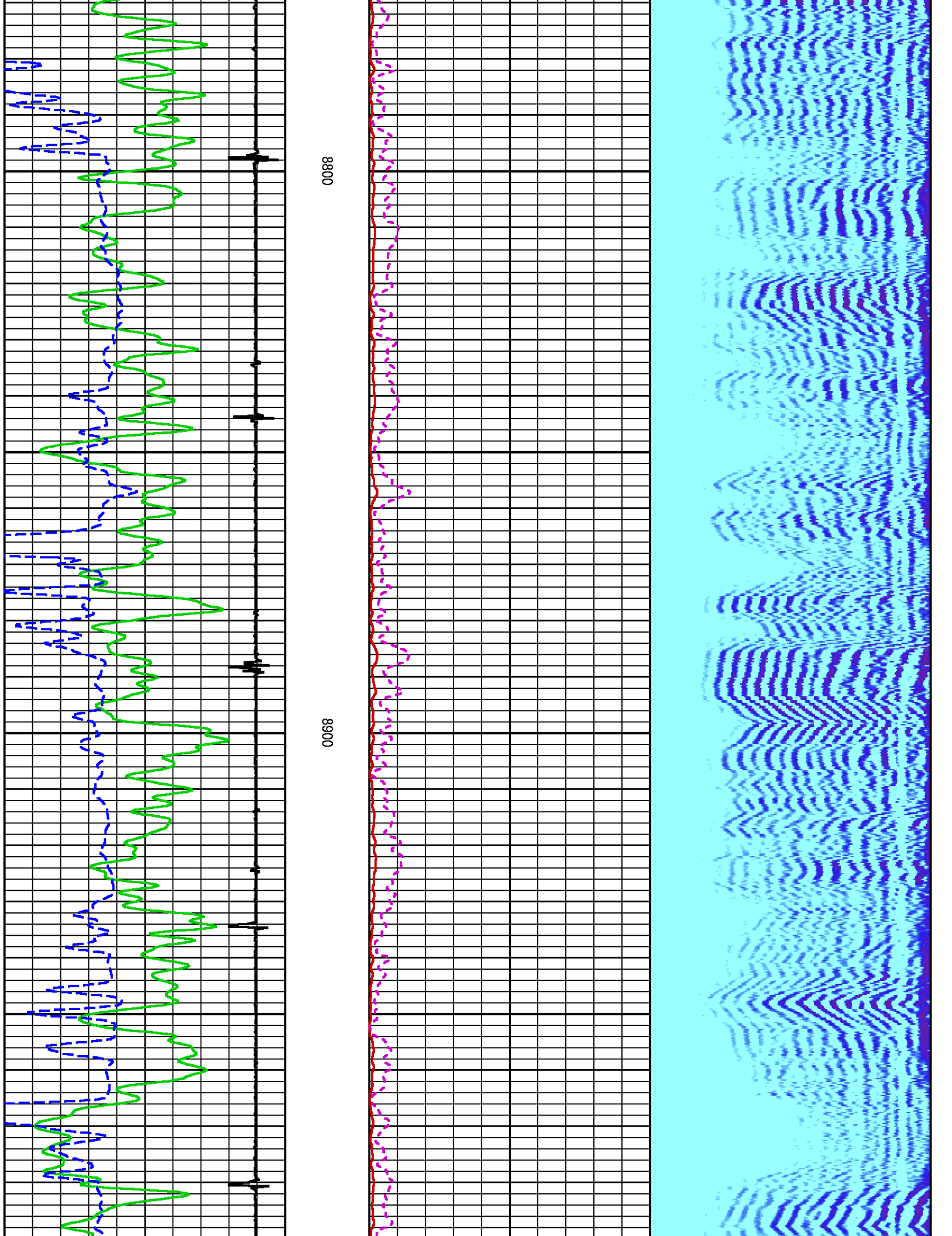
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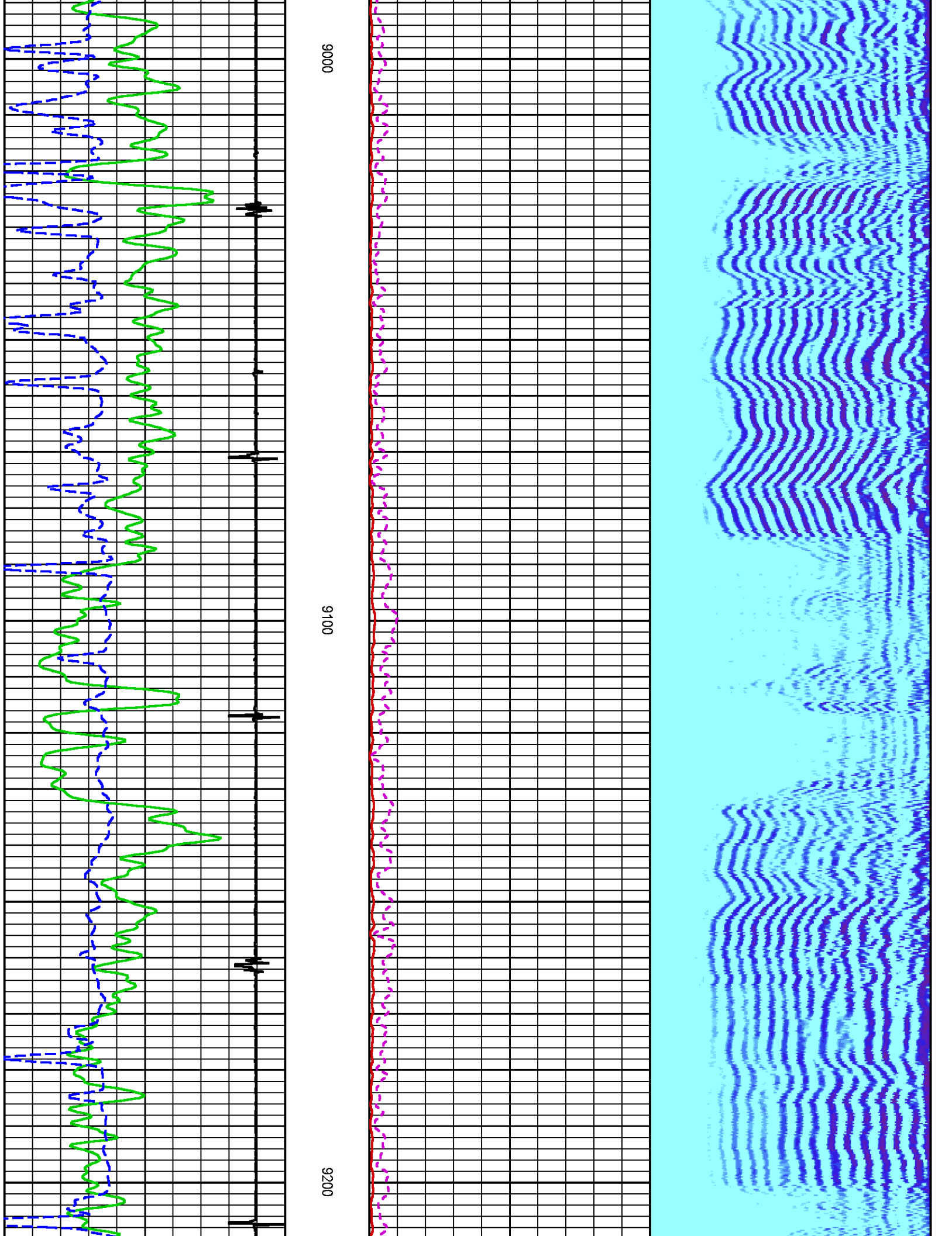
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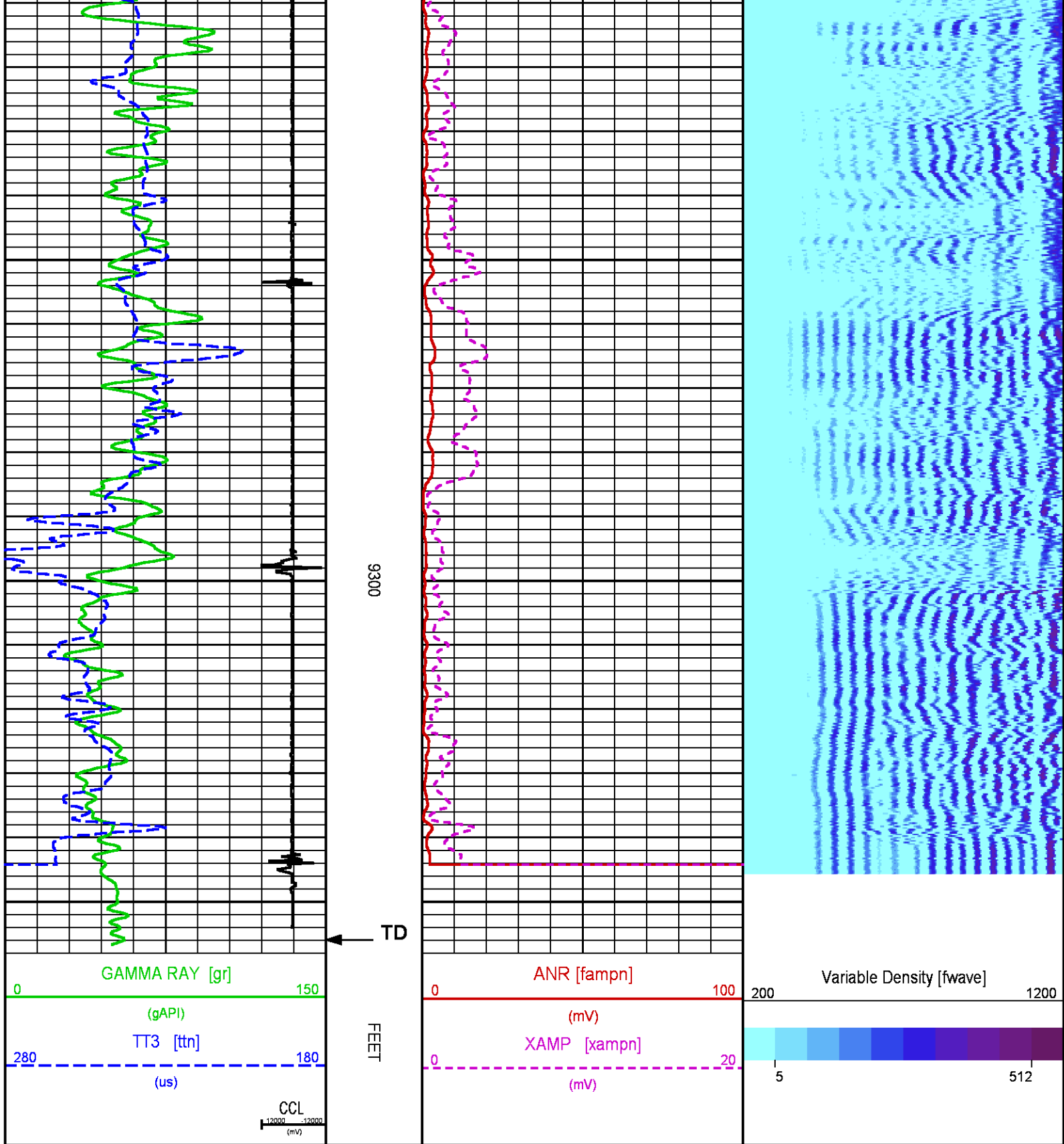












REPEAT LOG 0 PSI

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\012g01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9049.250 ft BOTTOM DEPTH: 9343.750 ft

SYMMETRIC FILTER				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
GR	FILTER ()	medium (1)		TOP BOTTOM
AMPLITUDE	FILTER ()	medium (1)		" "
TRAVEL TIME	FILTER ()	medium (1)		" "

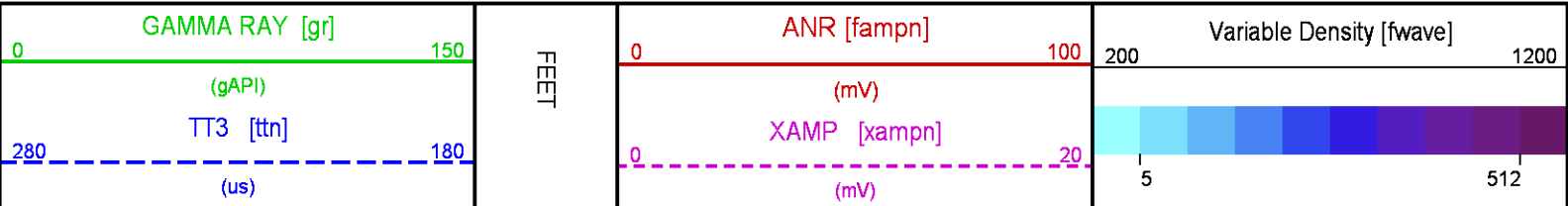
RAL CCL PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
CCL FLOOR	CCL FLOOR	0		TOP BOTTOM

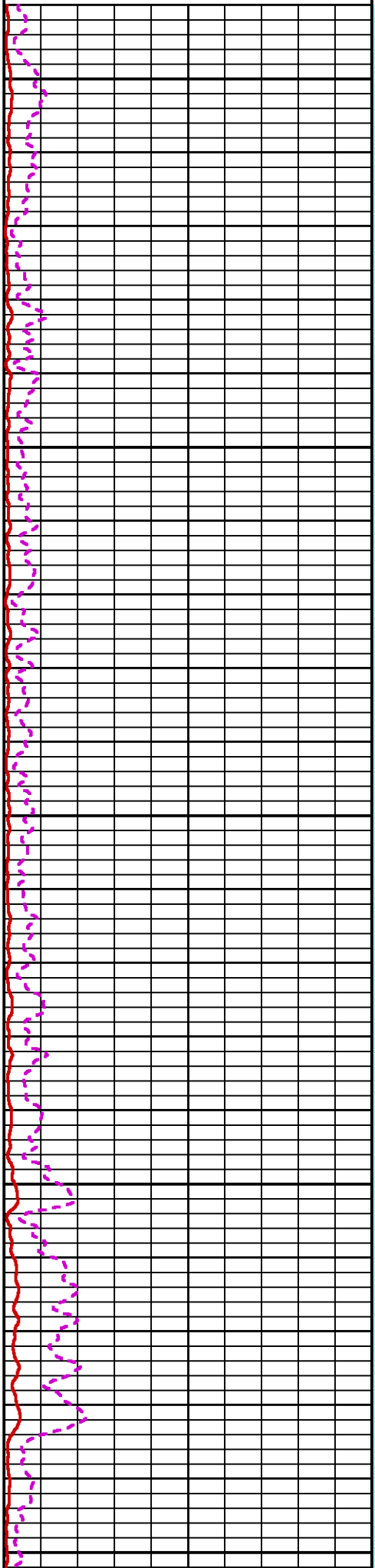
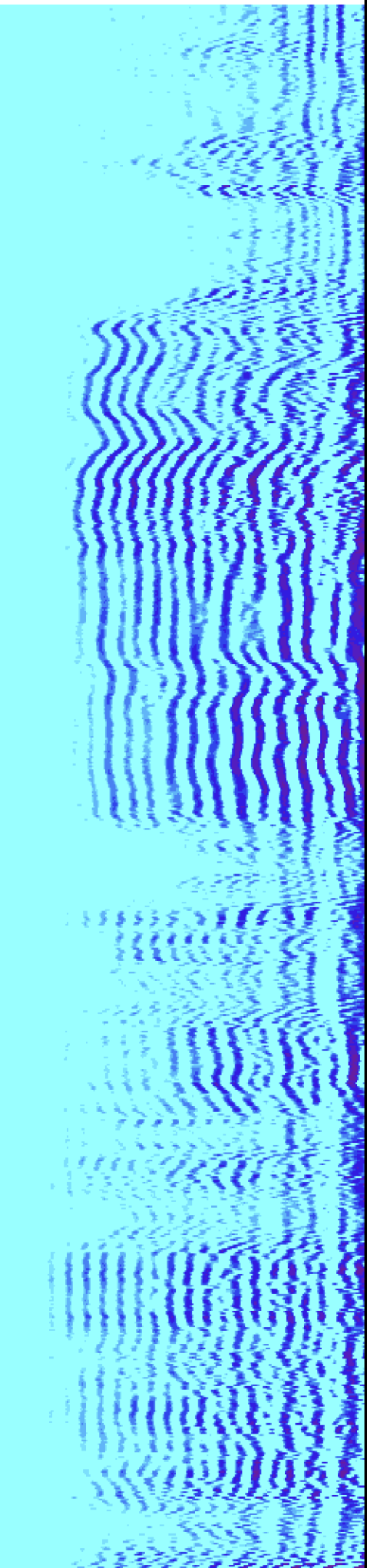
ANALOG RAL PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgpn*)	185	us	TOP BOTTOM
	AMP WINDOW LENGTH	25	us	" "
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	160	us	" "
	TT WINDOW LENGTH	500	us	" "
	FIRST BRK THRESHOLD (ttn*)	4	mV	" "
RAL CASING PARAMETERS	PPT NEAR	200.391	us	" "
RAL TOOL DELAY	TOOL DELAY (strn*)	-75	us	" "
BASELINE NOISE (NEAR)	NOISE WINDOW START	125	us	" "
	NOISE WINDOW LENGTH	25	us	" "

CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Sep 19 10:44:20 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 19 10:44:20 2016	FAR WAVE FORM
F1:GR	Sep 19 10:44:20 2016	GAMMA RAY
F1:TTN	Sep 19 10:44:20 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	14.00		
FAMPN	14.00	TTN	14.00				

Presentation	: BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\ral_cbl+01-REPEAT-REPEAT-5.fvpdf [5"/100' Scale]
Plot Interval	: 9090 - 9358.25 Feet
Data File 1	: F1 : BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\REPEAT.xtf
Created On	: Sep 19 10:44:20 2016
Company	: TEP ROCKY MOUNTAIN LLC
Well	: YOUBERG RU 422-7
Field	: RULISON
File Interval	: 9051.25 - 9359.75 Feet
OCT	: n012g

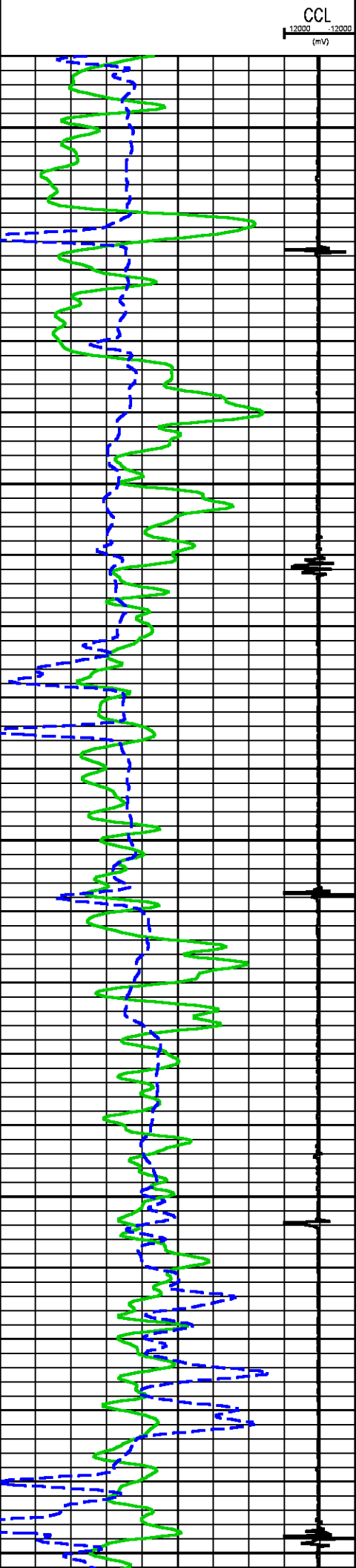


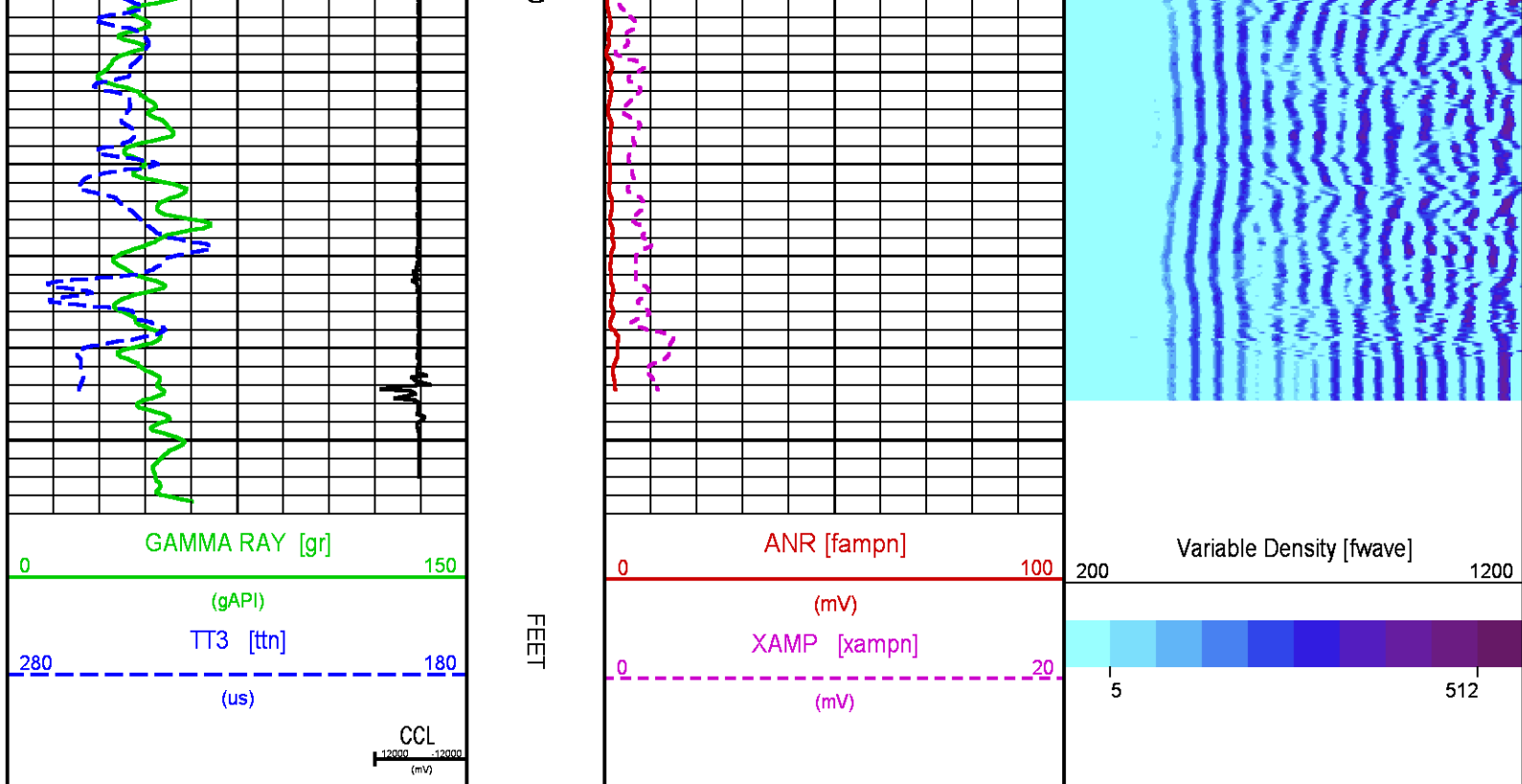


9100

9200

9300





SECONDARY MAIN 0 PSI

ECLIPS 6.2wu1 PC-ECLIPS General Release Rel 6.2w Update 1 Fri Apr 25 10:54:53 Central Daylight Time 2014
Patches: 9

Plotted: Mon Sep 26 13:41:14 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\Users\altshant\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\012g02.prm
LOGGING MODE: DEPTH: UP
TOP DEPTH: 7.250 ft BOTTOM DEPTH: 9347.449 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
TRAVEL TIME	FILTER ()	medium (1)		"	"

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0		TOP	BOTTOM

ANALOG RAL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgp1*)	185	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	185	us	"	"
	AMP WINDOW START (fgp3*)	185	us	"	"
	AMP WINDOW START (fgp4*)	185	us	"	"
	AMP WINDOW START (fgp5*)	185	us	"	"
	AMP WINDOW START (fgp6*)	185	us	"	"

	AMP WINDOW START (fgp7*)	185	us	"	"
	AMP WINDOW START (fgp8*)	185	us	"	"
	AMP WINDOW START (fgpn*)	185	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	160	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST BRK THRESHOLD (ttn*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (str1*)	-75	us	"	"
	TOOL DELAY (str2*)	-75	us	"	"
	TOOL DELAY (str3*)	-75	us	"	"
	TOOL DELAY (str4*)	-75	us	"	"
	TOOL DELAY (str5*)	-75	us	"	"
	TOOL DELAY (str6*)	-75	us	"	"
	TOOL DELAY (str7*)	-75	us	"	"
	TOOL DELAY (str8*)	-75	us	"	"
BASELINE NOISE (NEAR)	TOOL DELAY (strn*)	-75	us	"	"
	NOISE WINDOW START	125	us	"	"
	NOISE WINDOW LENGTH	25	us	"	"

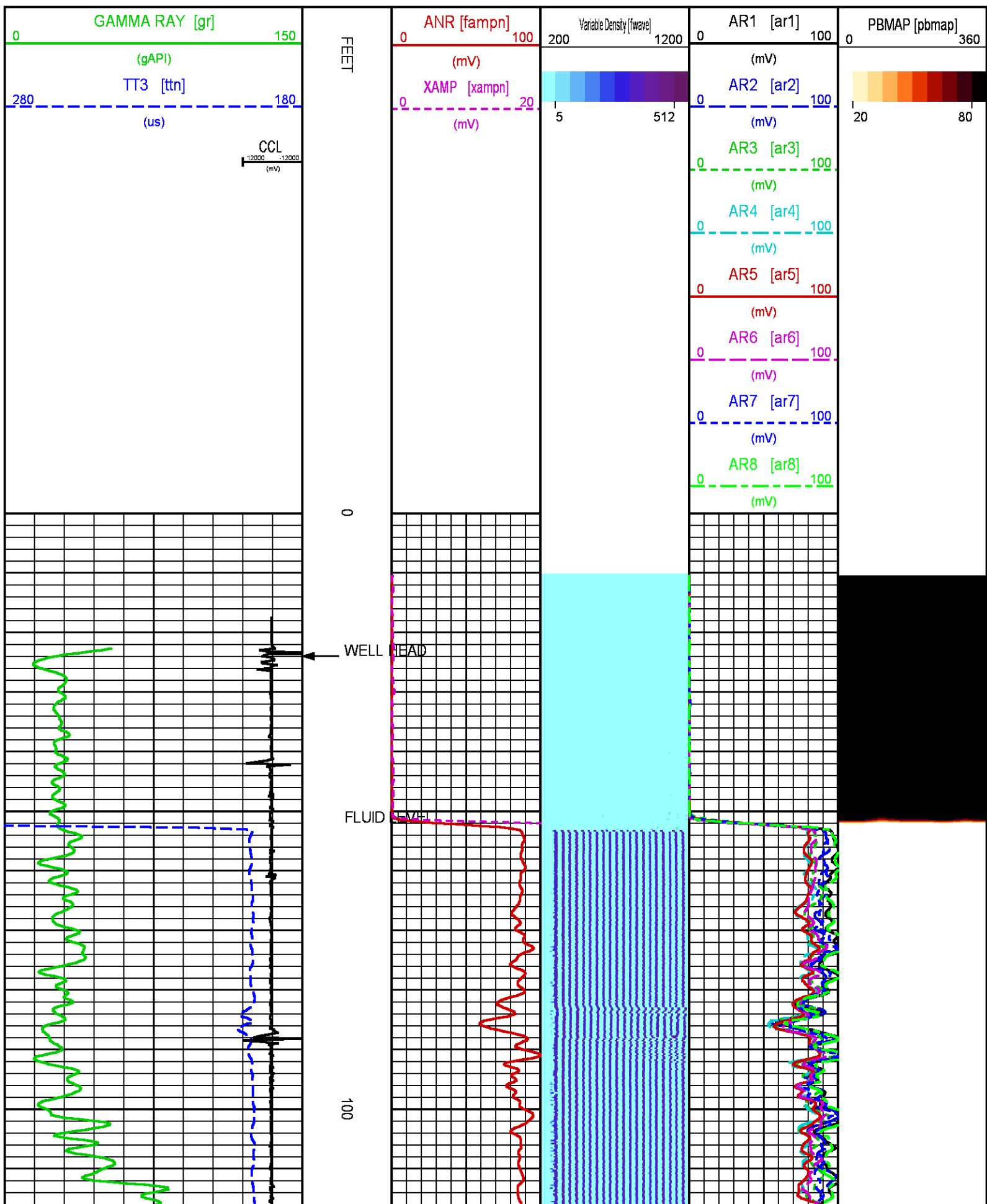
PERCENT BOND CEMENT MAP					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
RAL FREE PIPE AMPLITUDE	FREE AMP REC 1	80	mV	TOP	BOTTOM
	FREE AMP REC 2	80	mV	"	"
	FREE AMP REC 3	80	mV	"	"
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"
	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"
	FREE AMP REC 8	80	mV	"	"
RAL FULL BOND AMPLITUDE	FULL BOND AMP REC 1	2	mV	"	"
	FULL BOND AMP REC 2	2	mV	"	"
	FULL BOND AMP REC 3	2	mV	"	"
	FULL BOND AMP REC 4	2	mV	"	"
	FULL BOND AMP REC 5	2	mV	"	"
	FULL BOND AMP REC 6	2	mV	"	"
	FULL BOND AMP REC 7	2	mV	"	"
	FULL BOND AMP REC 8	2	mV	"	"

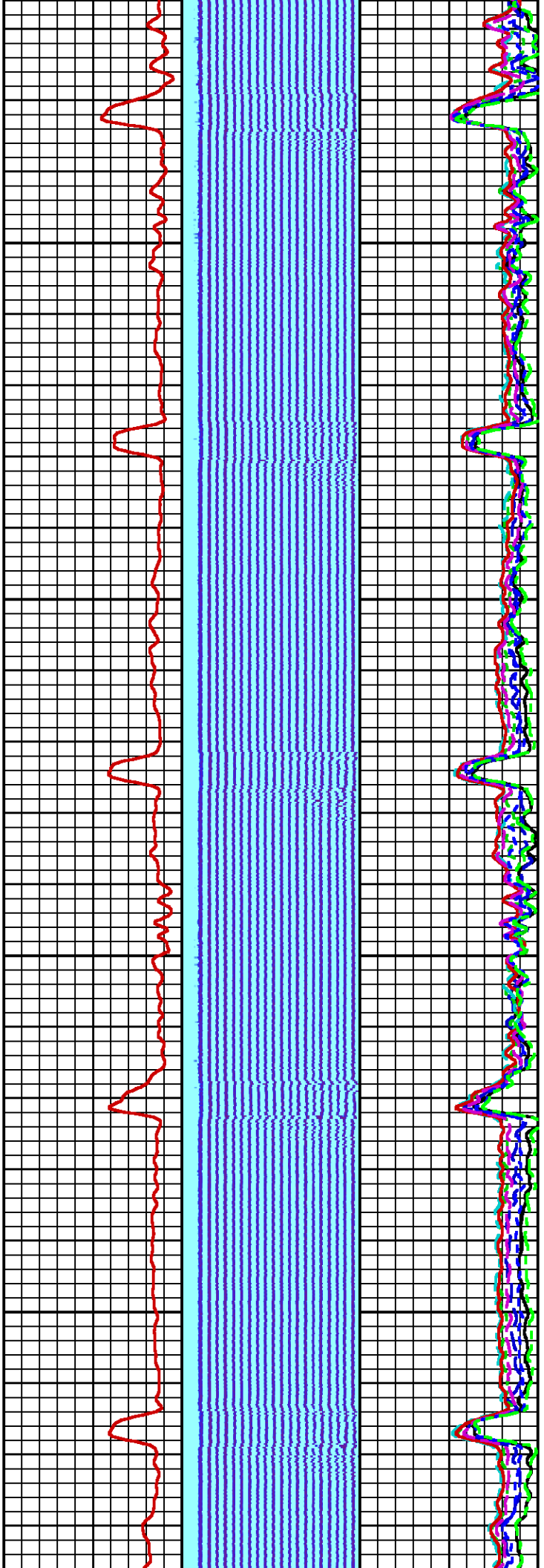
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R1
F1:AR2	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R2
F1:AR3	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R3
F1:AR4	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R4
F1:AR5	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R5
F1:AR6	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R6
F1:AR7	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R7
F1:AR8	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE T-R8
F1:CCL	Sep 19 10:51:02 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 19 10:51:02 2016	FAR WAVE FORM
F1:GR	Sep 19 10:51:02 2016	GAMMA RAY
F1:PBMAP	Sep 19 10:51:02 2016	PERCENT BOND CEMENT MAP
F1:TTN	Sep 19 10:51:02 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 19 10:51:02 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	14.00	AR5	14.00	CCL	5.75	XAMPN	14.00
AR2	14.00	AR6	14.00	FAMPN	14.00		
AR3	14.00	AR7	14.00	GR	1.75		
AR4	14.00	AR8	14.00	TTN	14.00		

Presentation	: BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\ral_all+01-SECONDARY-MAIN-5.fvpdf [5"/100' Scale]
Plot Interval	: 0 - 9358.5 Feet
Data File 1	: F1 : BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\MAIN.xtf
Created On	: Sep 19 10:51:02 2016

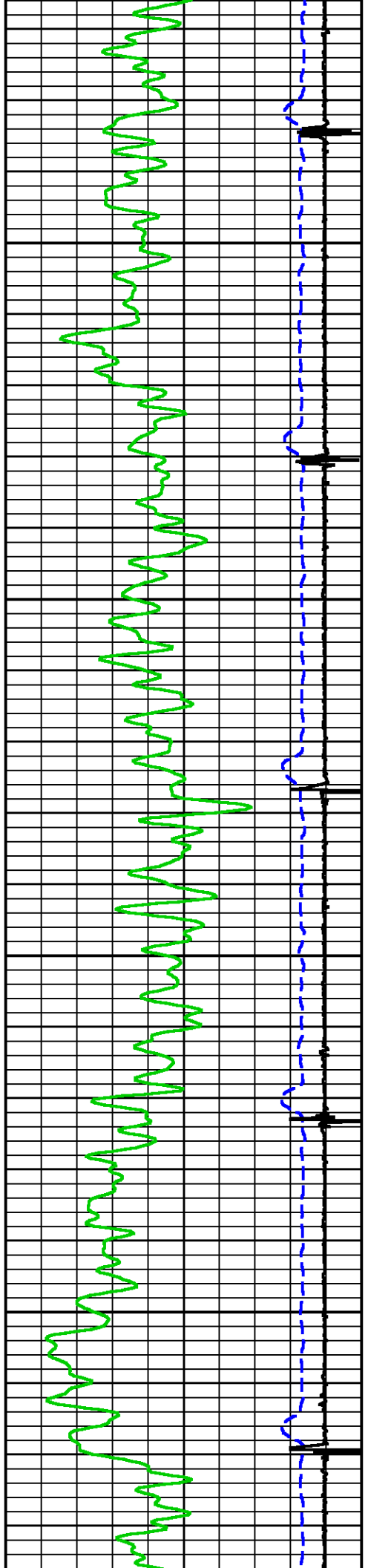
Created On : Sep 19 10:51:02 2010
Company : TEP ROCKY MOUNTAIN LLC
Well : YOUNBERG RU 422-7
Field : RULISON
File Interval : 7.25 - 9359.75 Feet
OCT : n012g

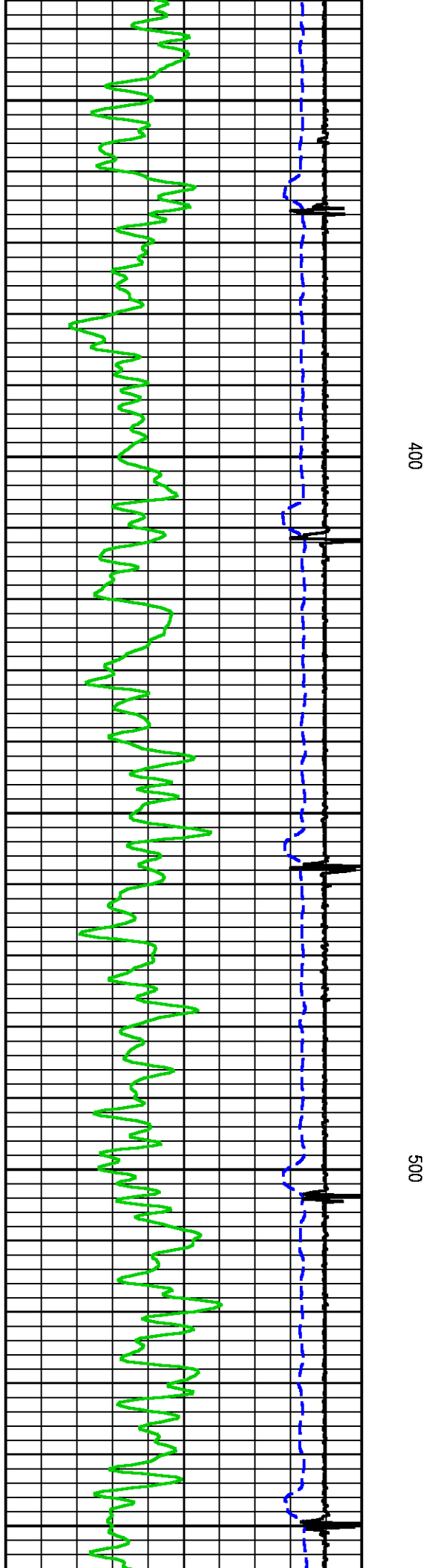
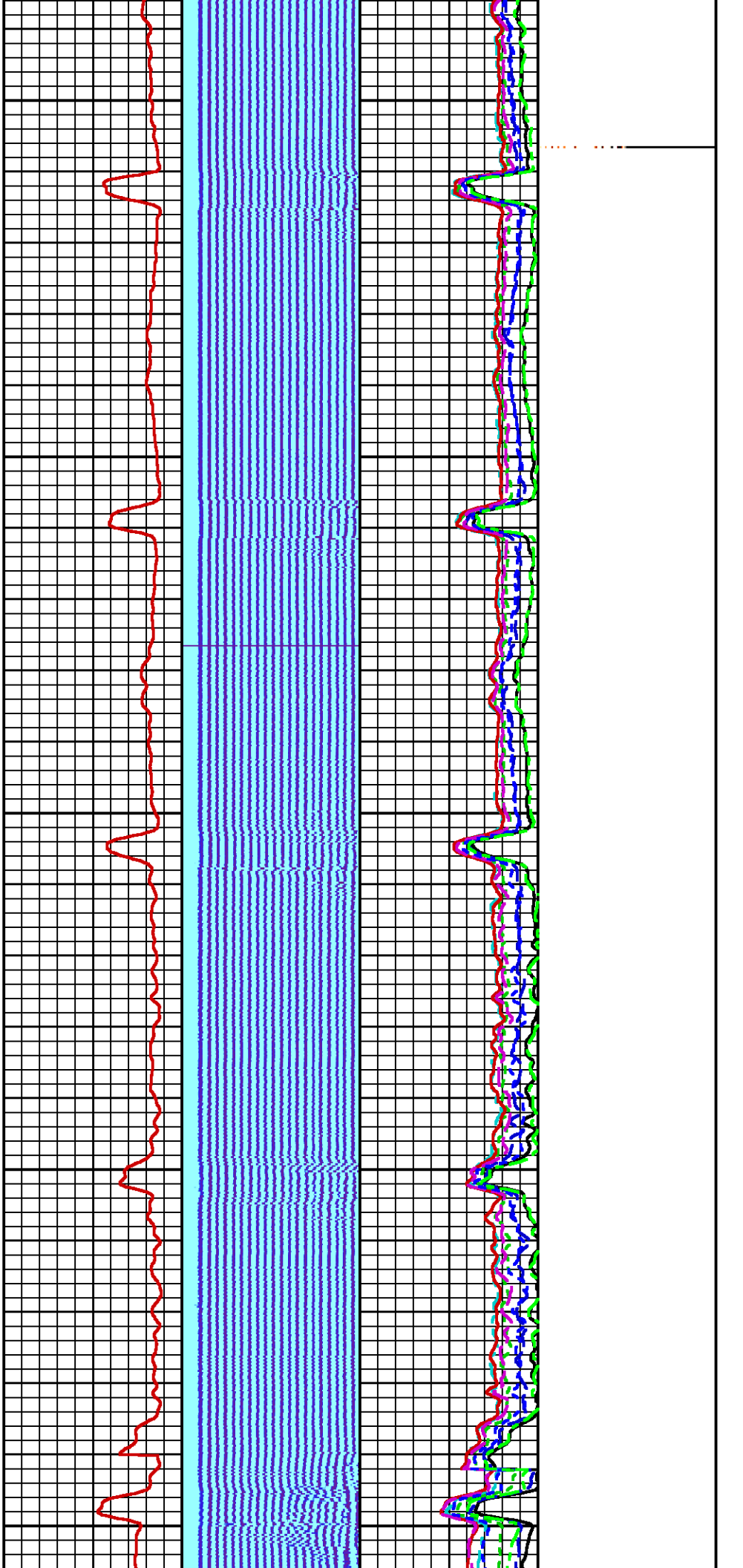


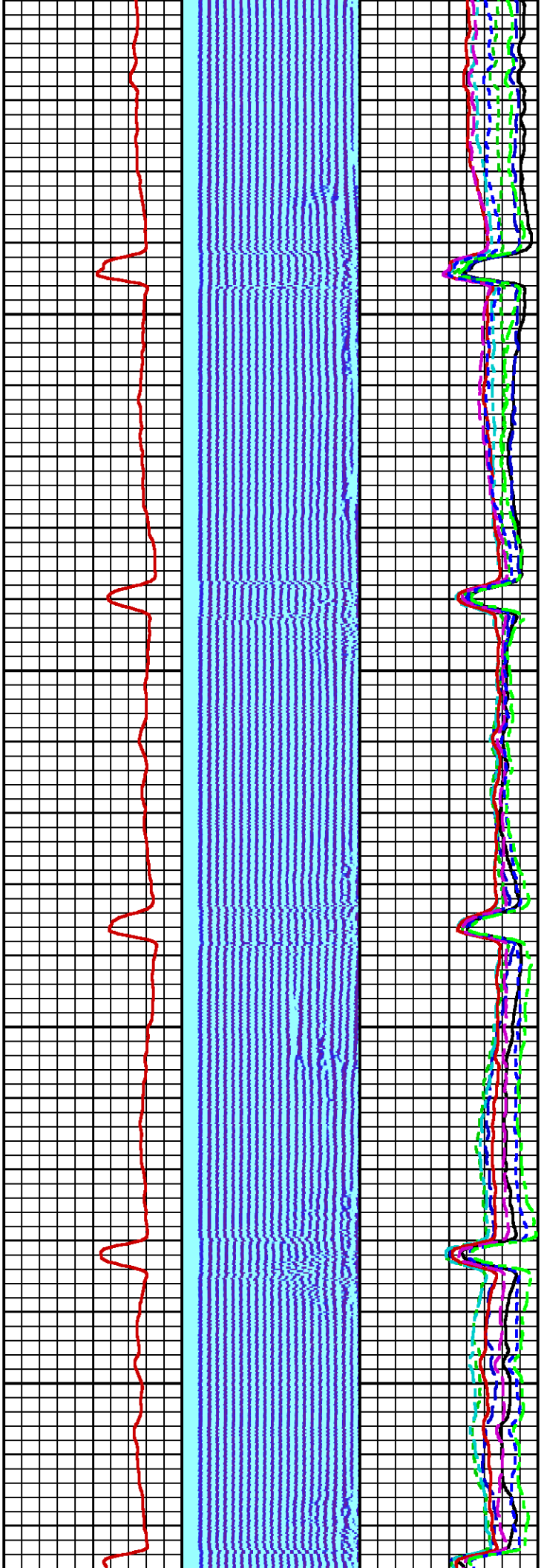


200

300

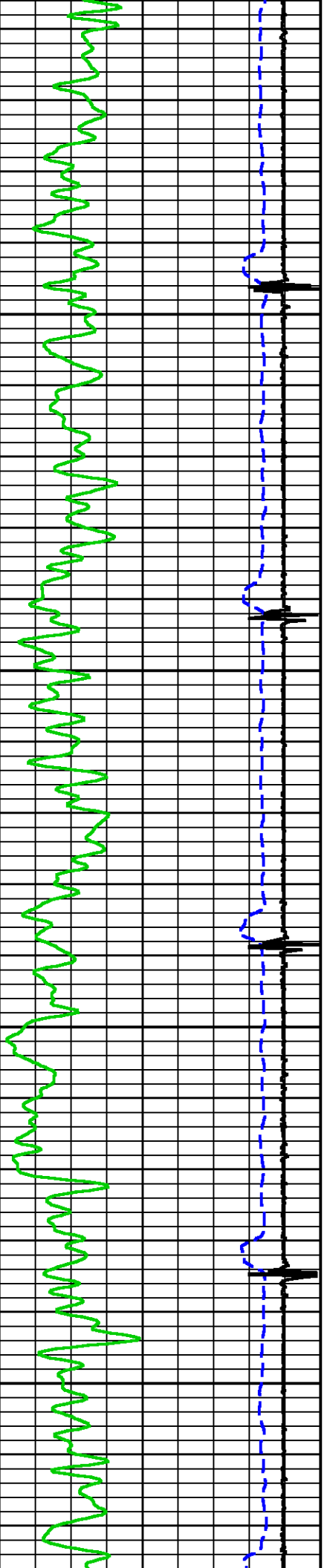


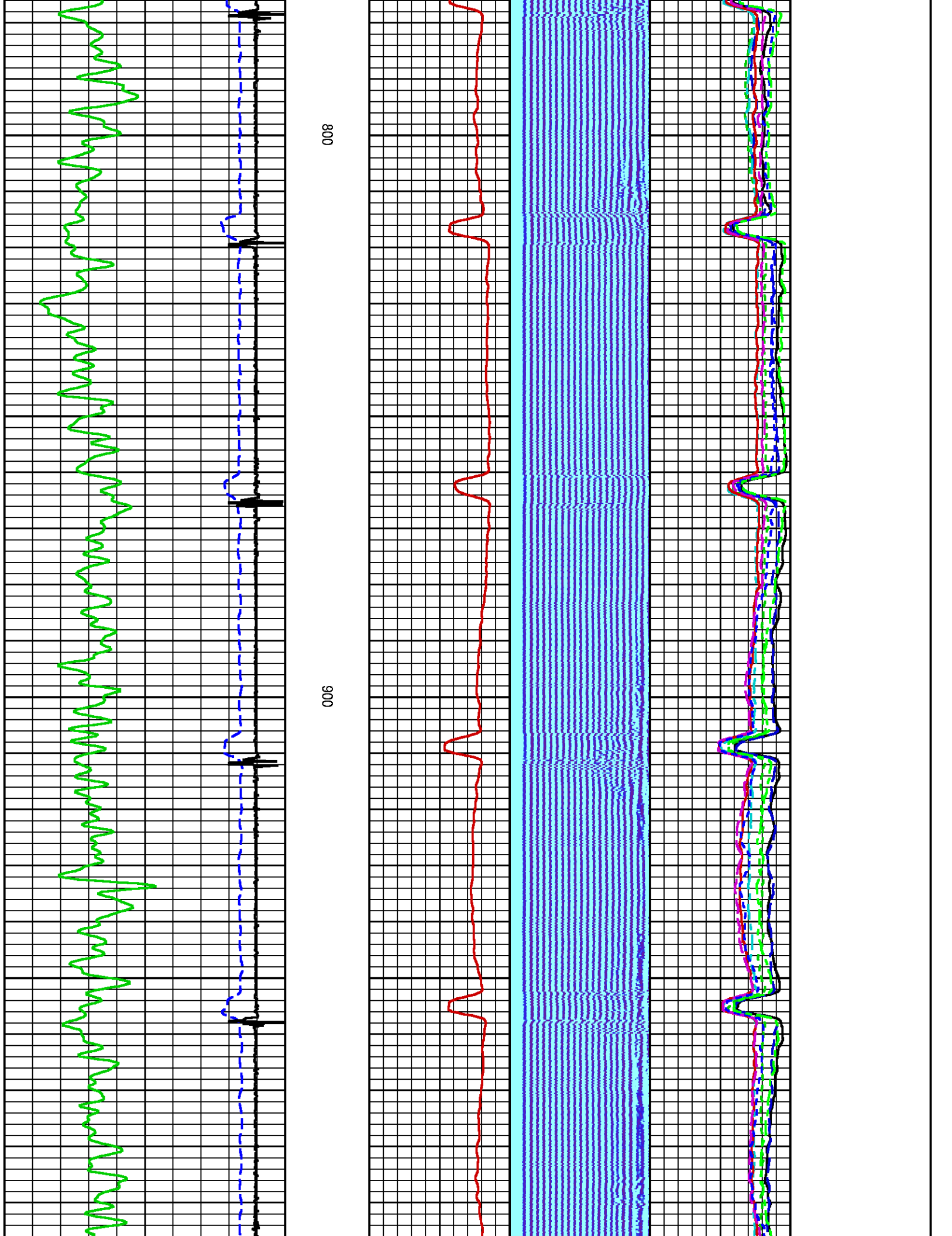


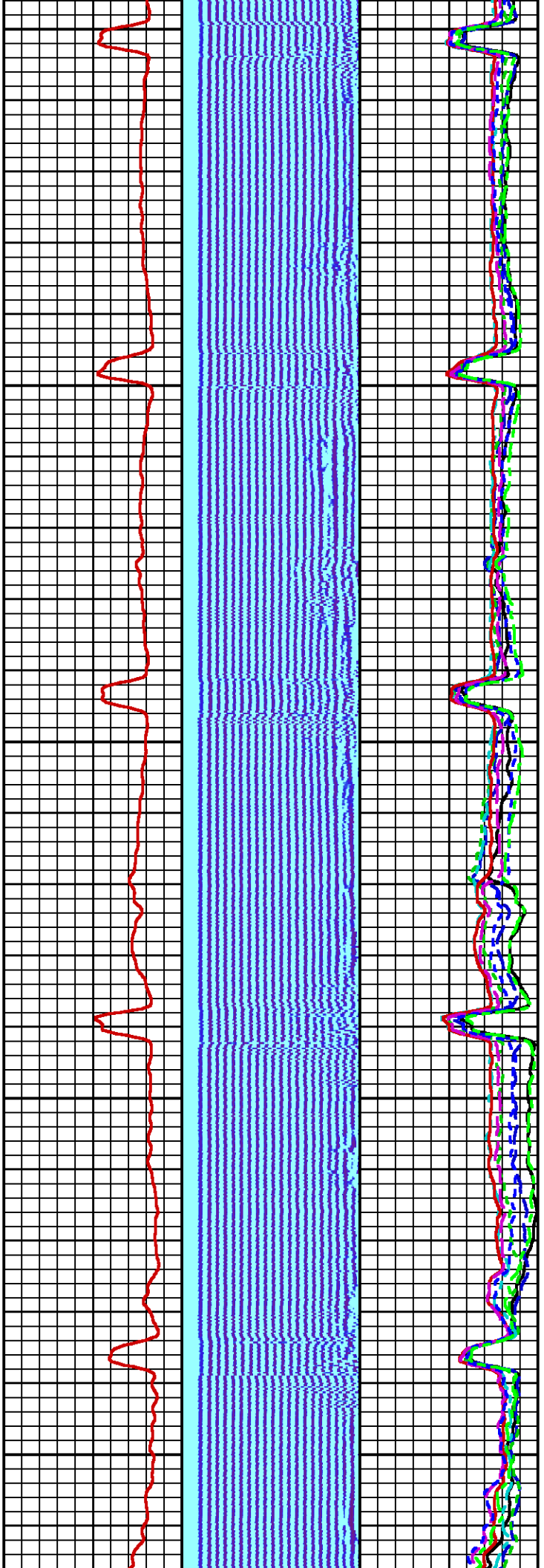


600

700



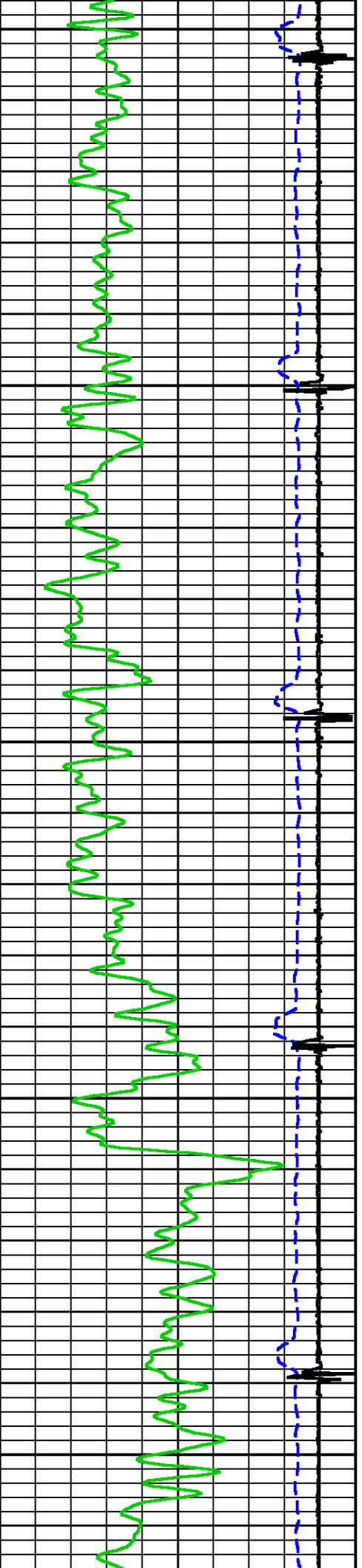


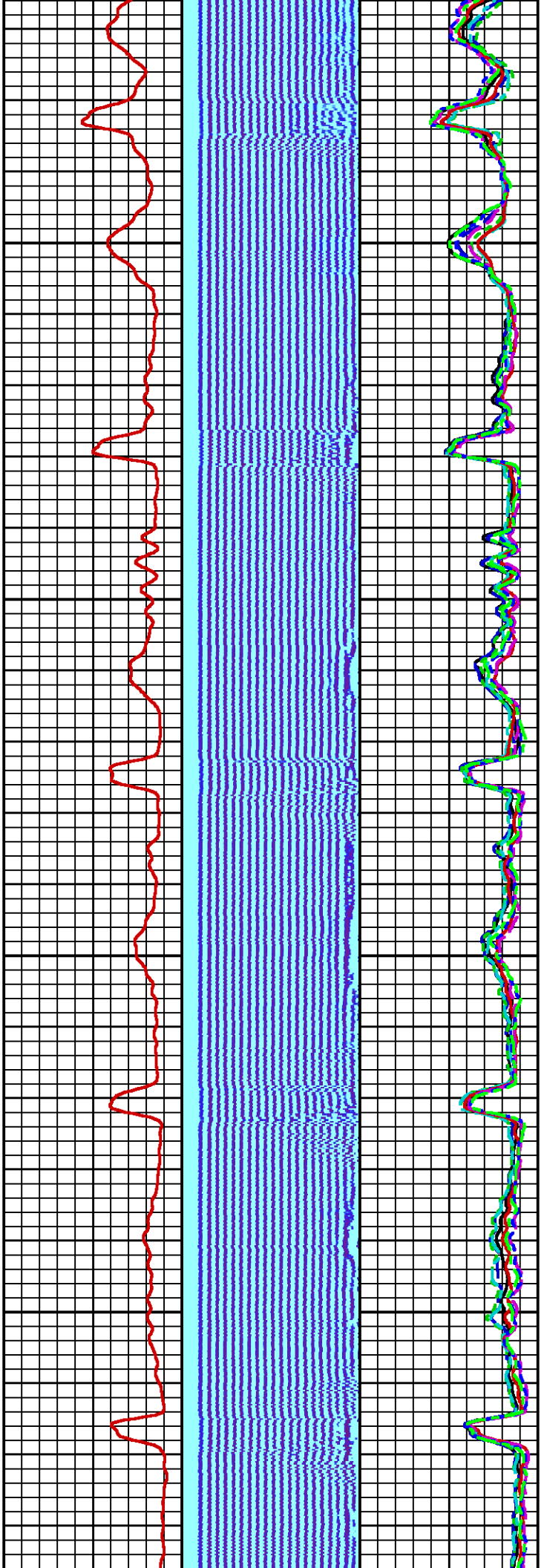


1000

1100

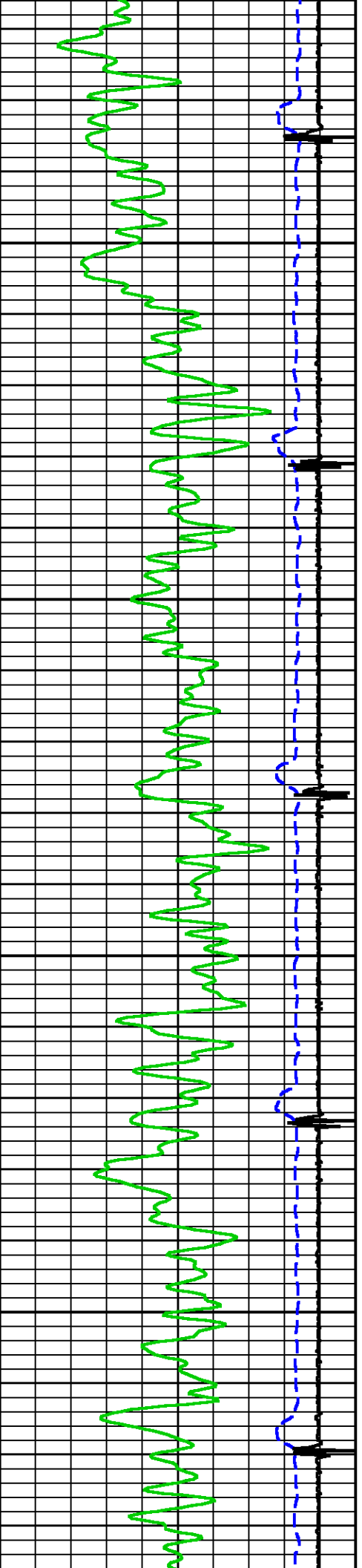
1200

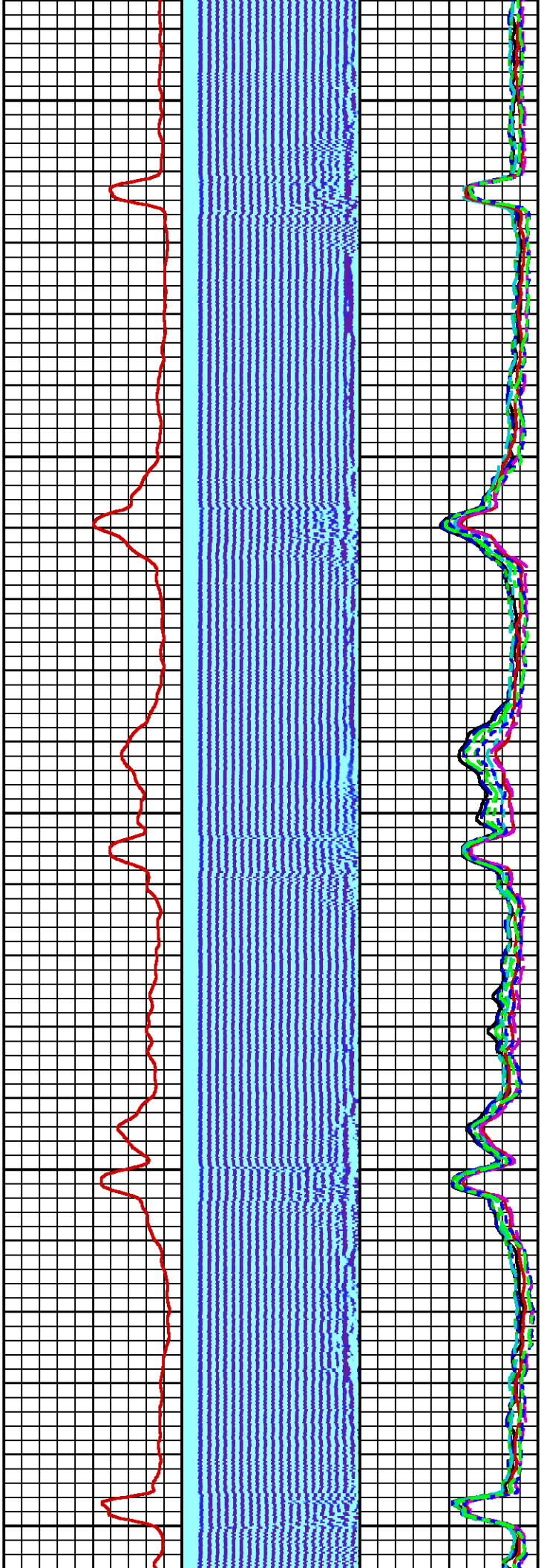




1300

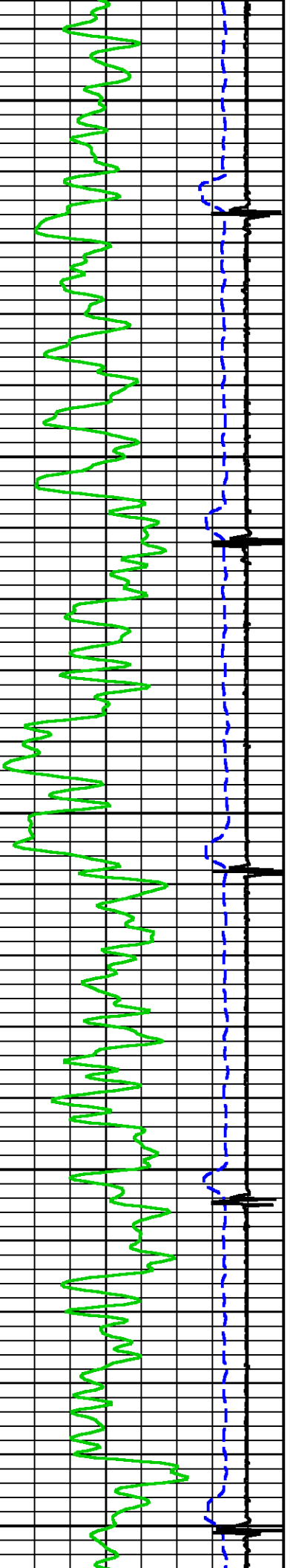
1400

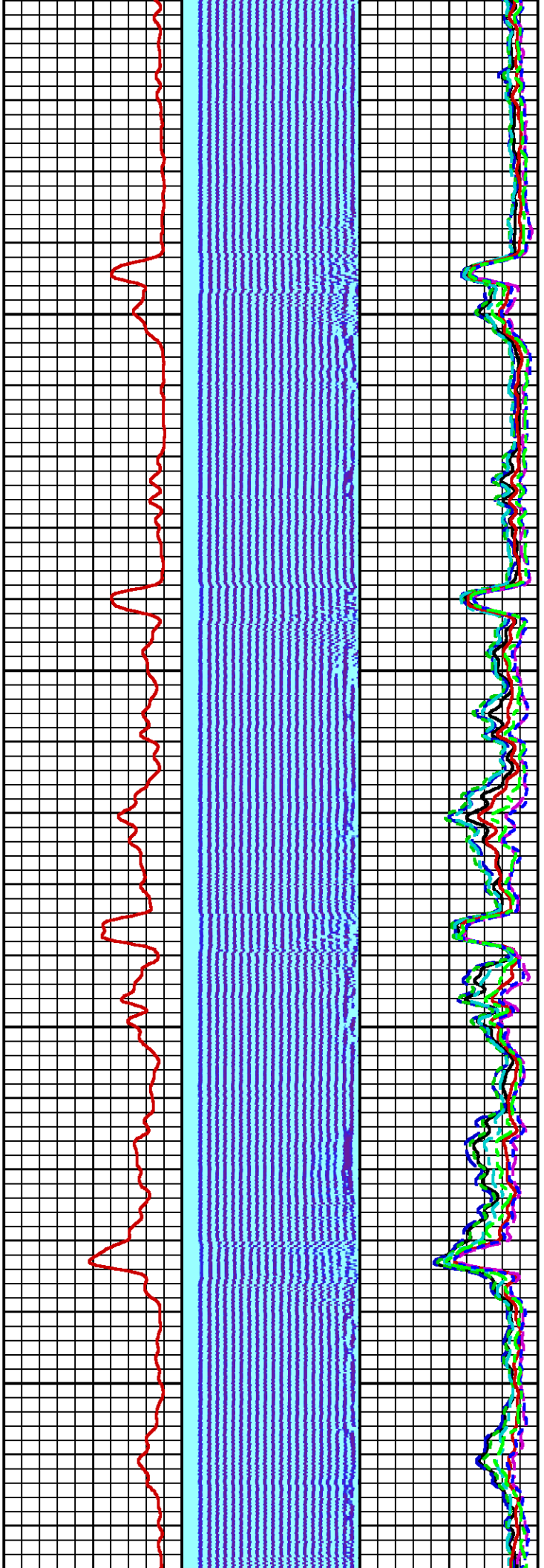




1500

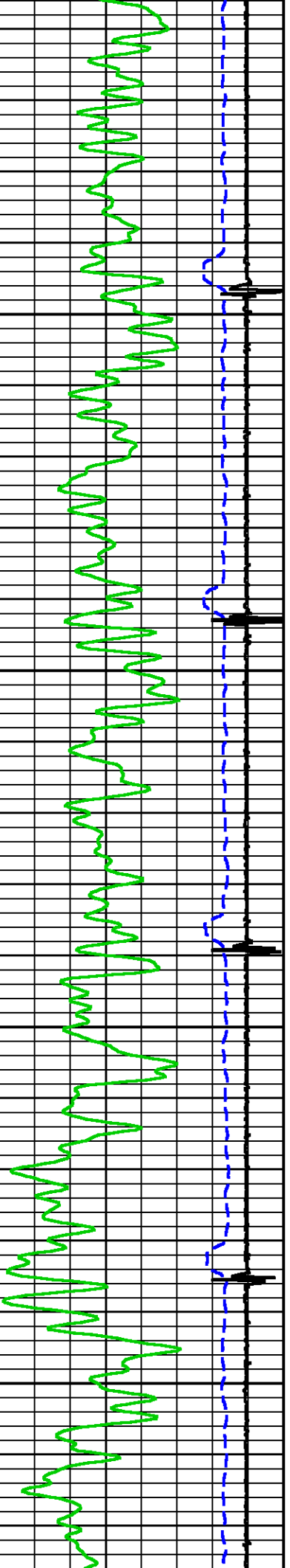
1600

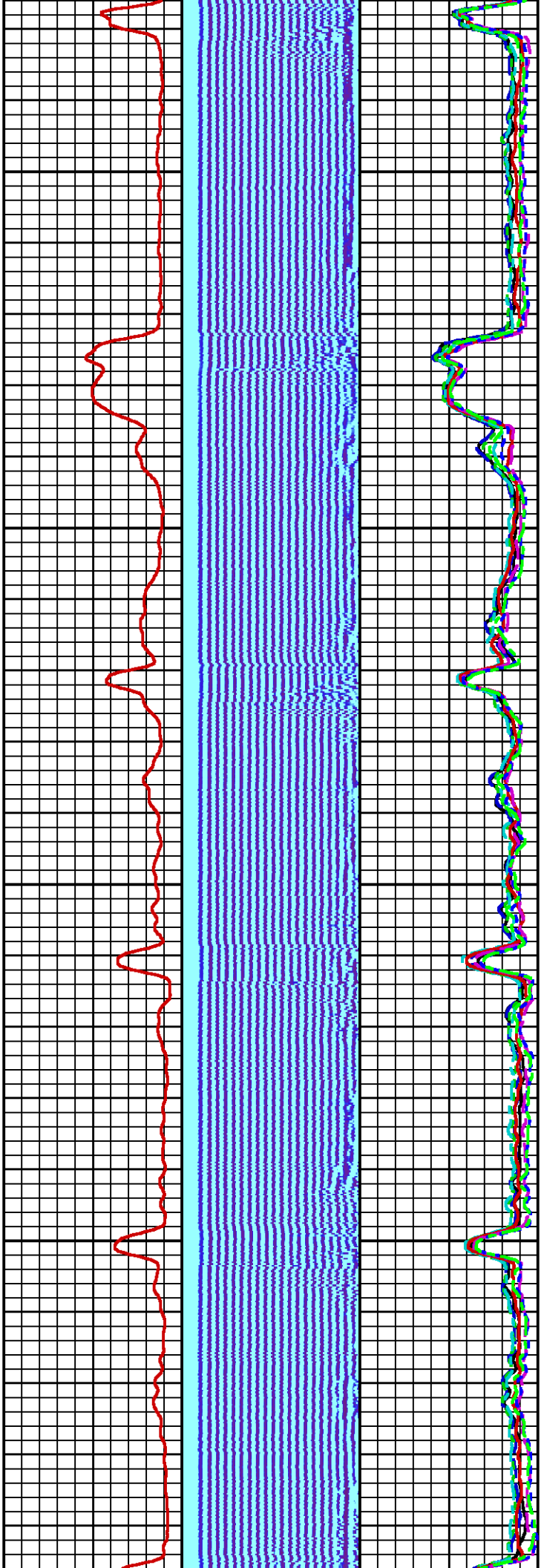




1700

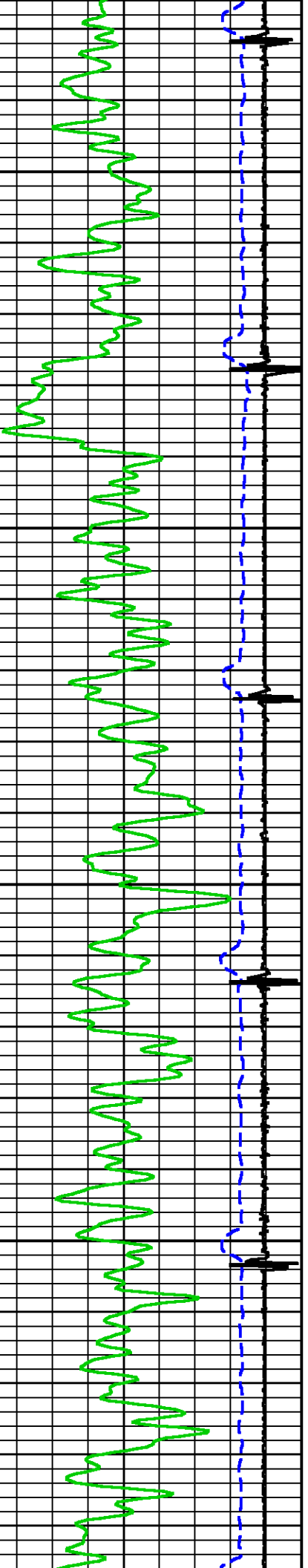
1800

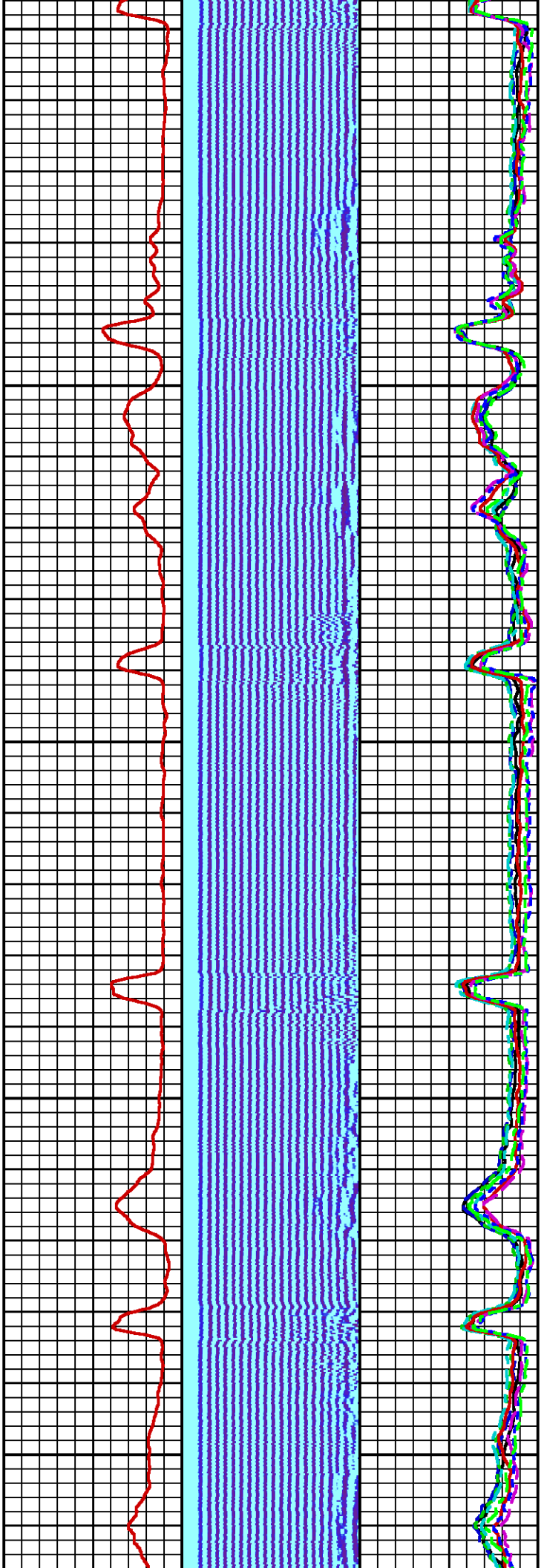




1900

2000

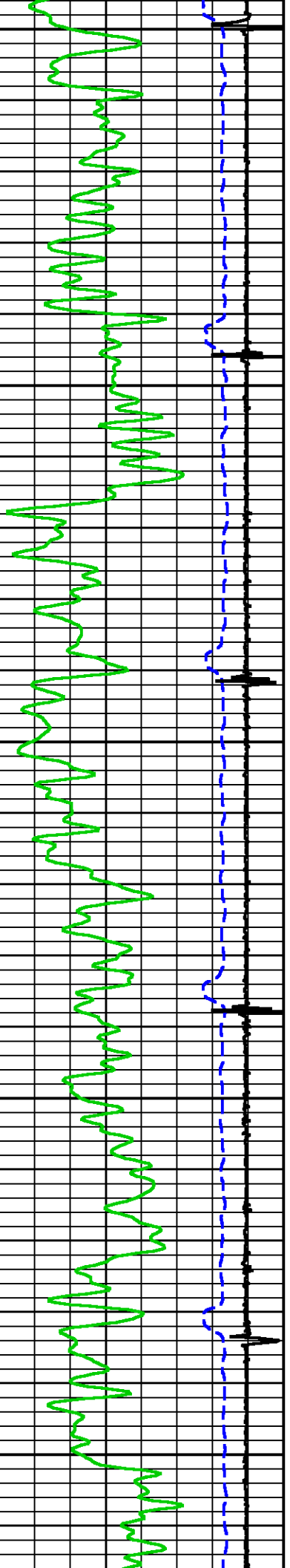


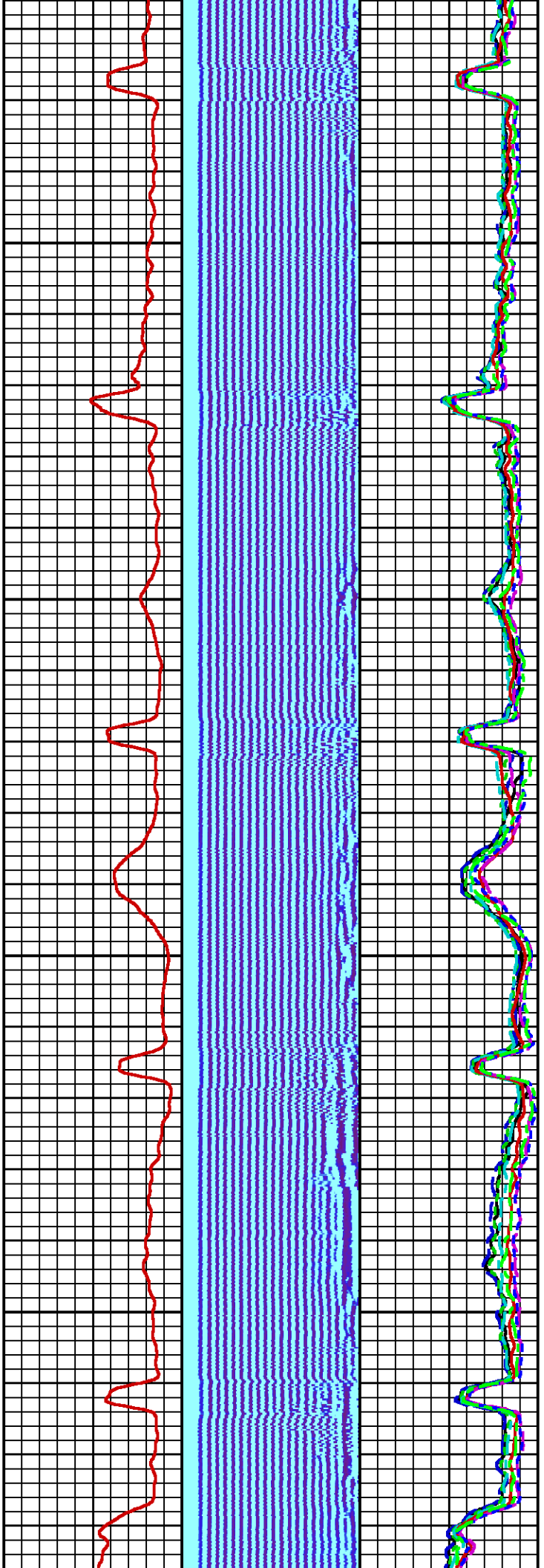


2100

2200

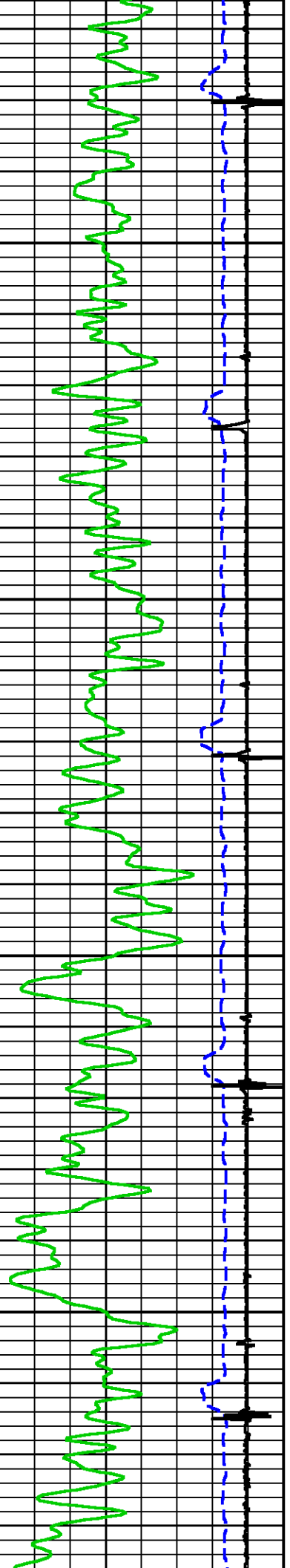
2300

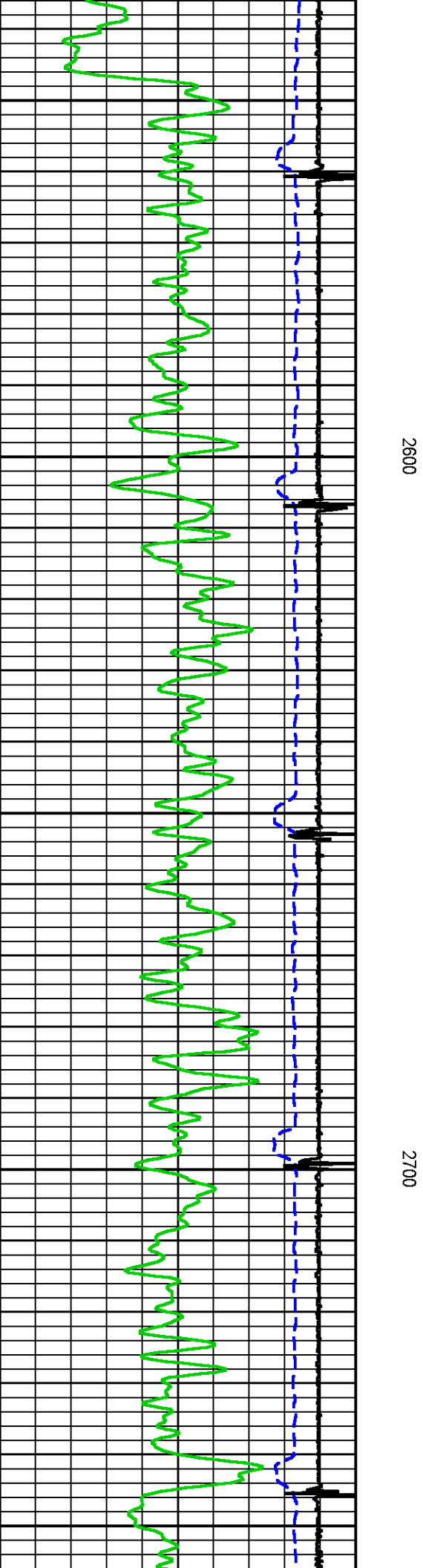
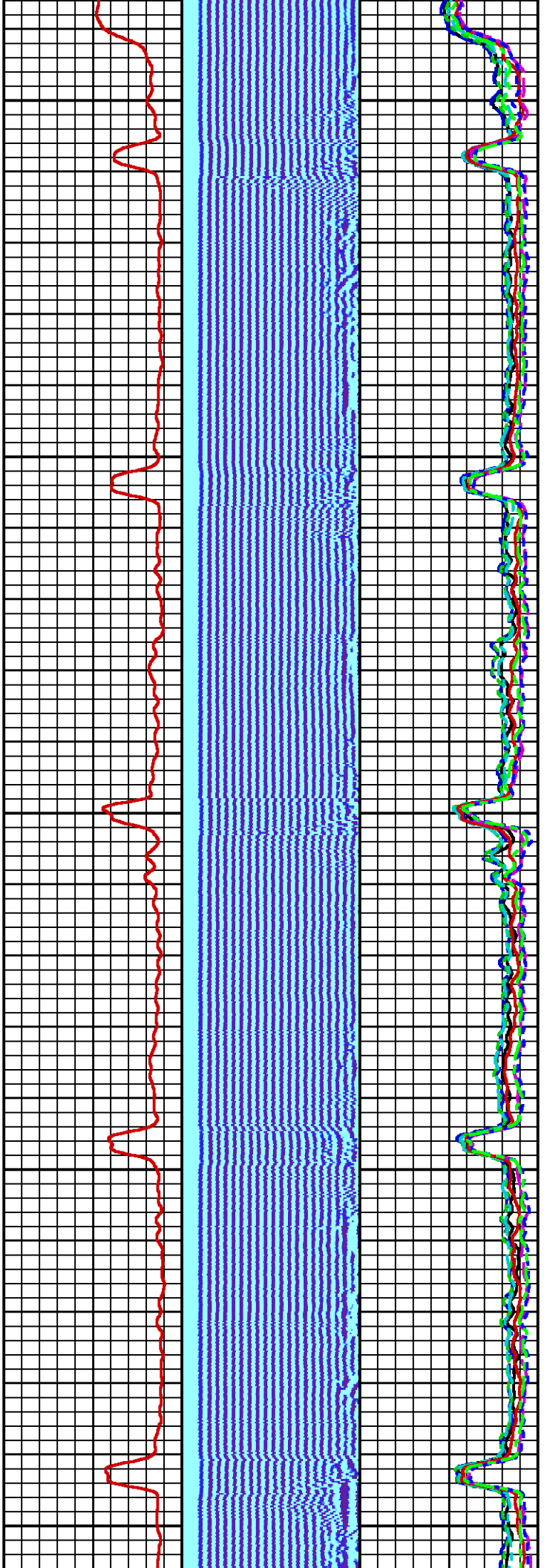


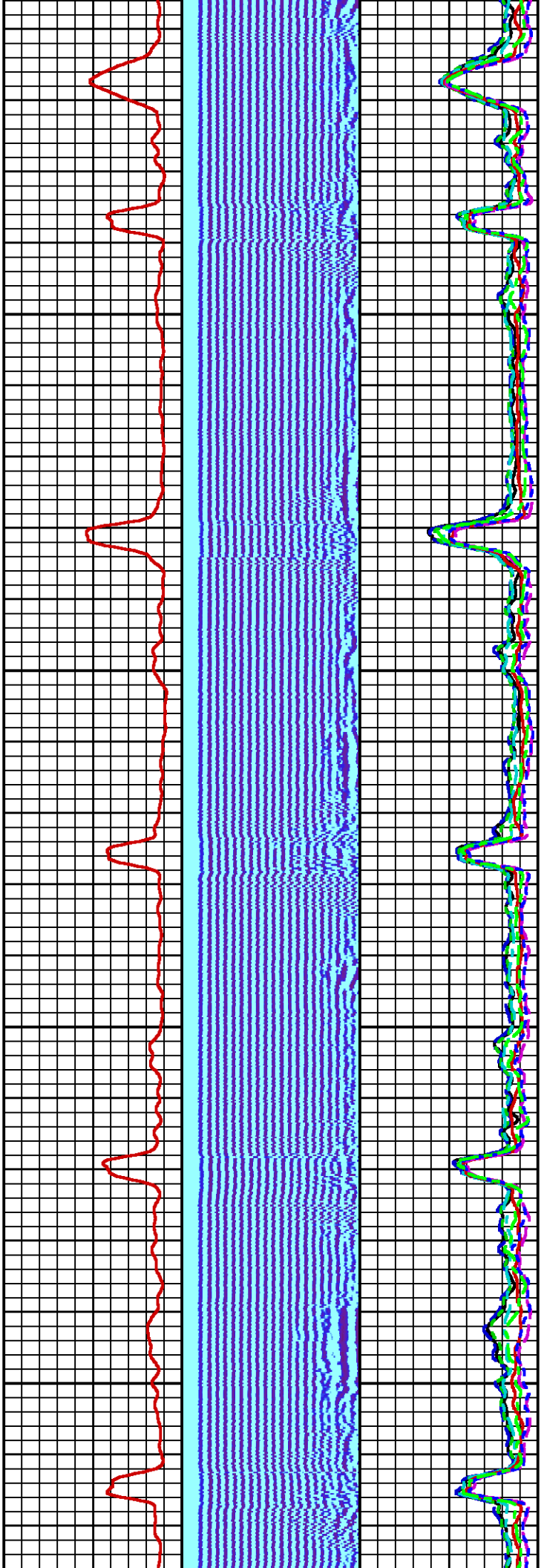


2400

2500

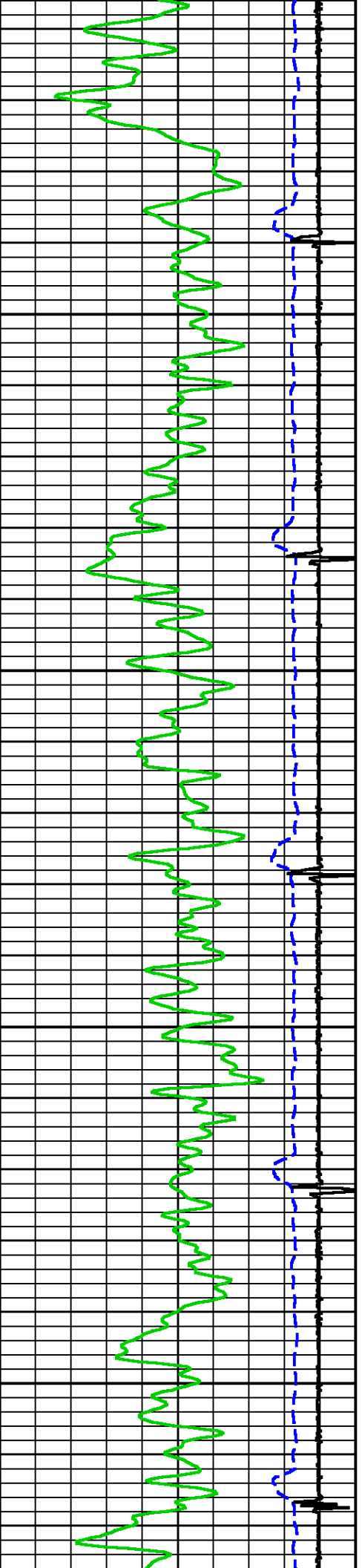


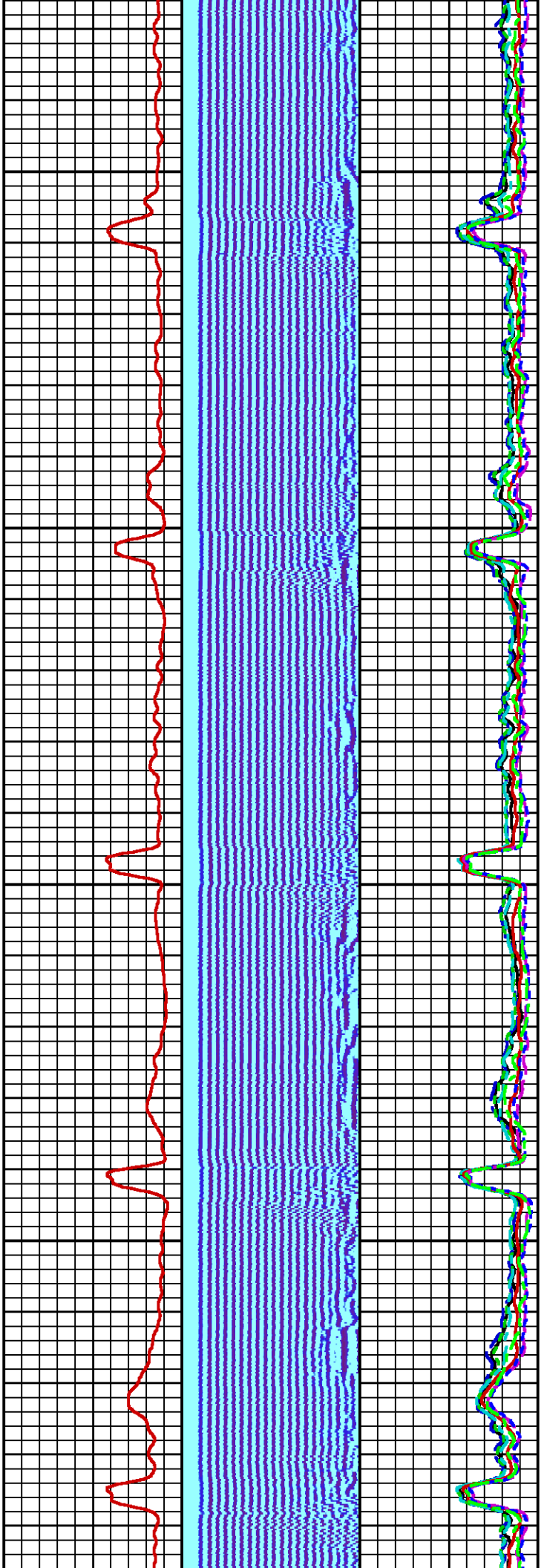




2800

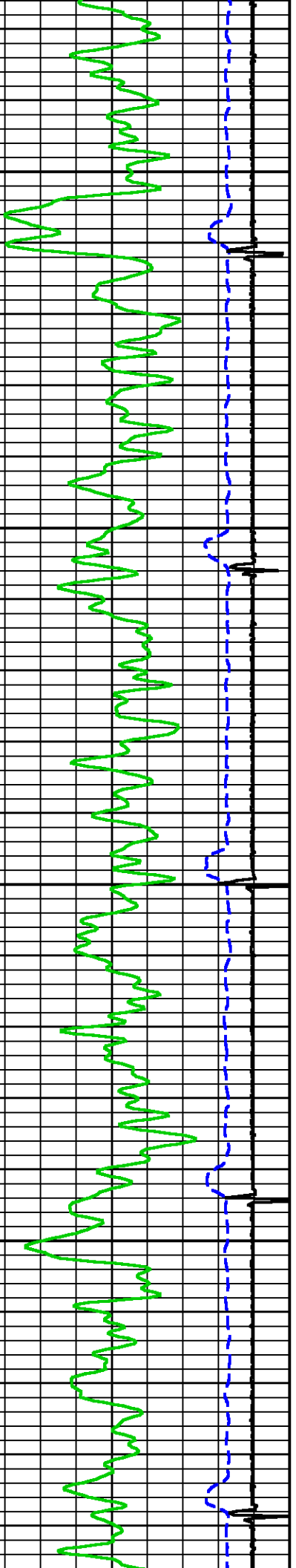
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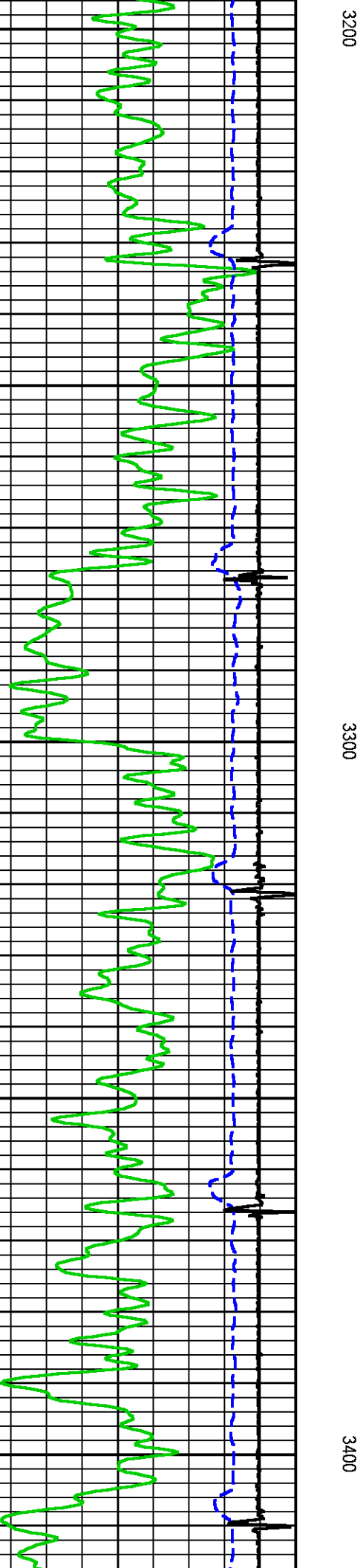
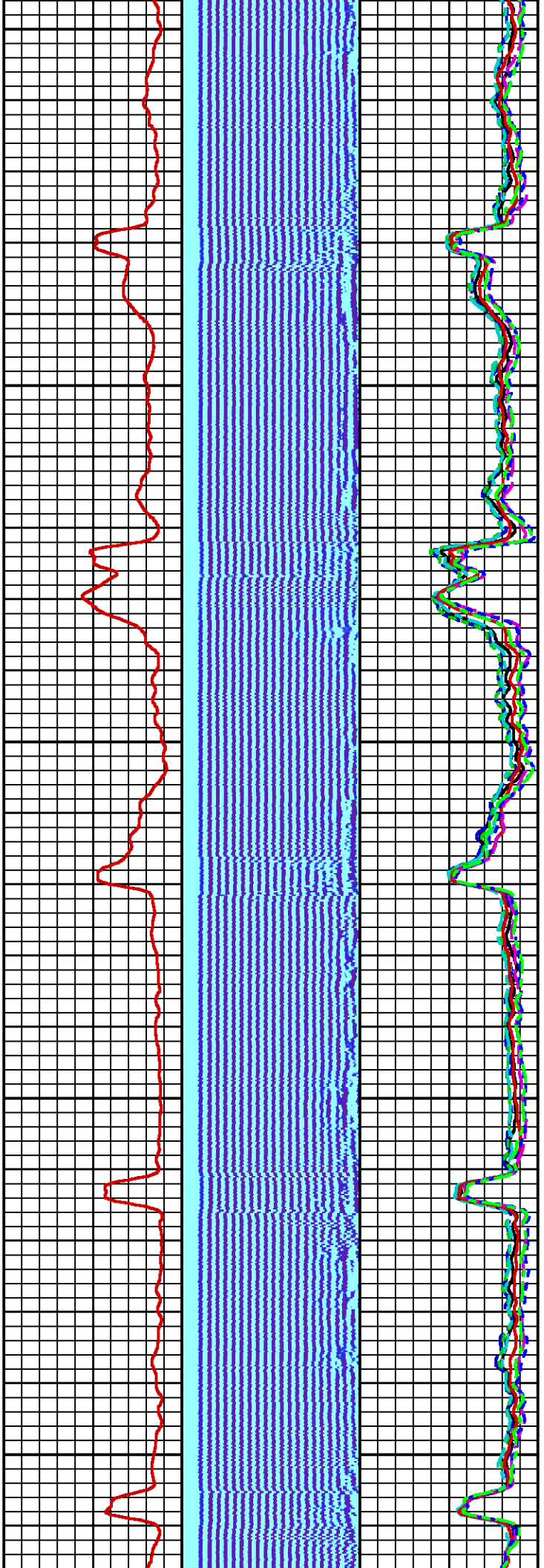


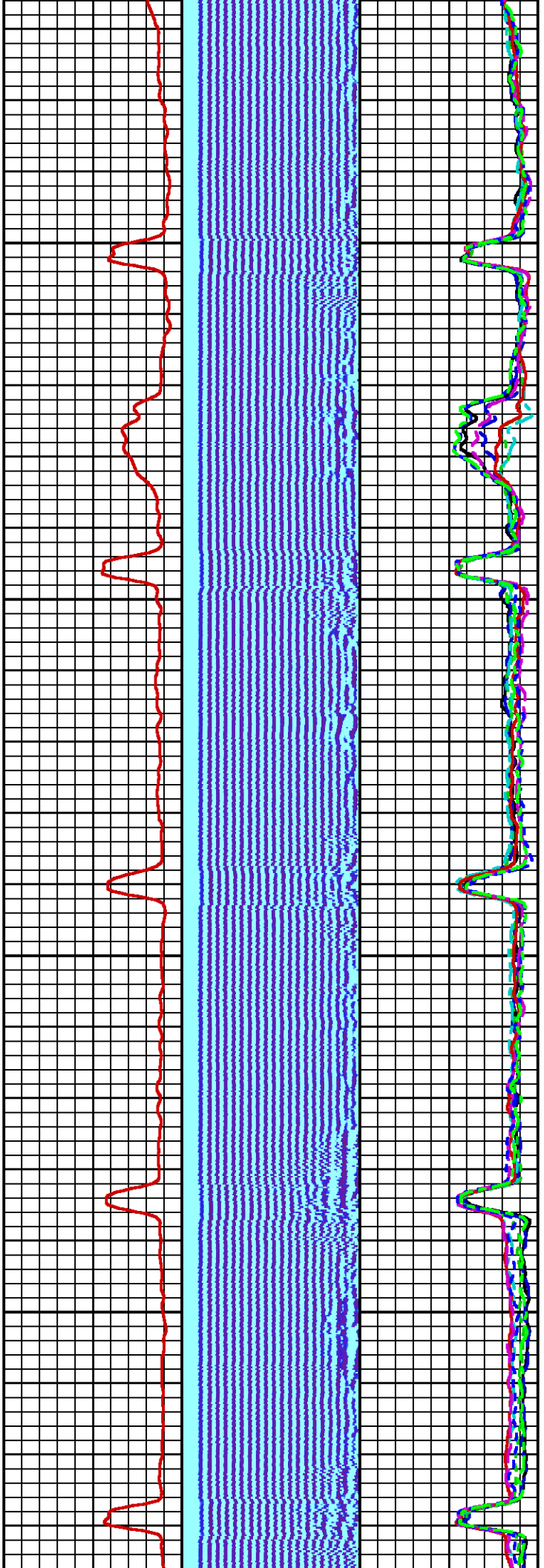


3000

3100

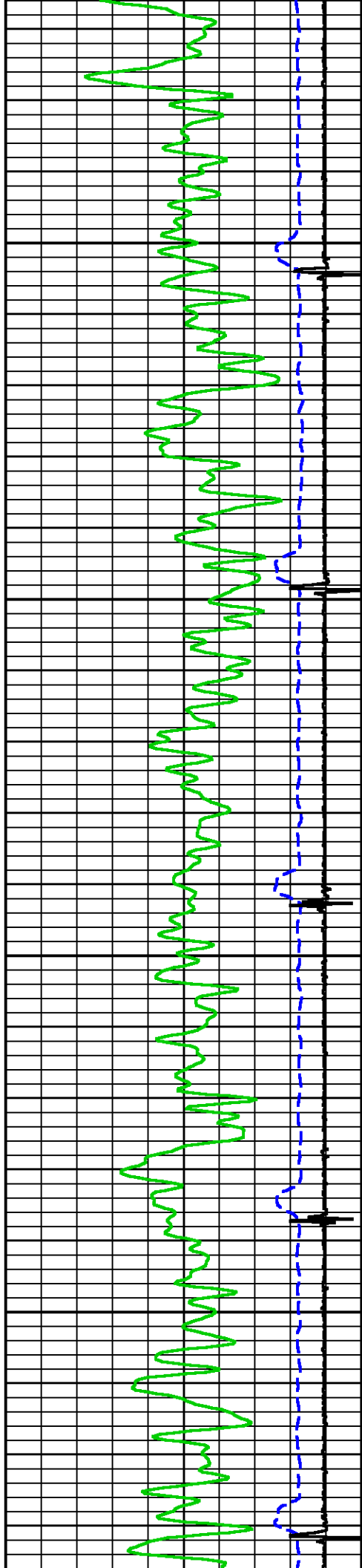


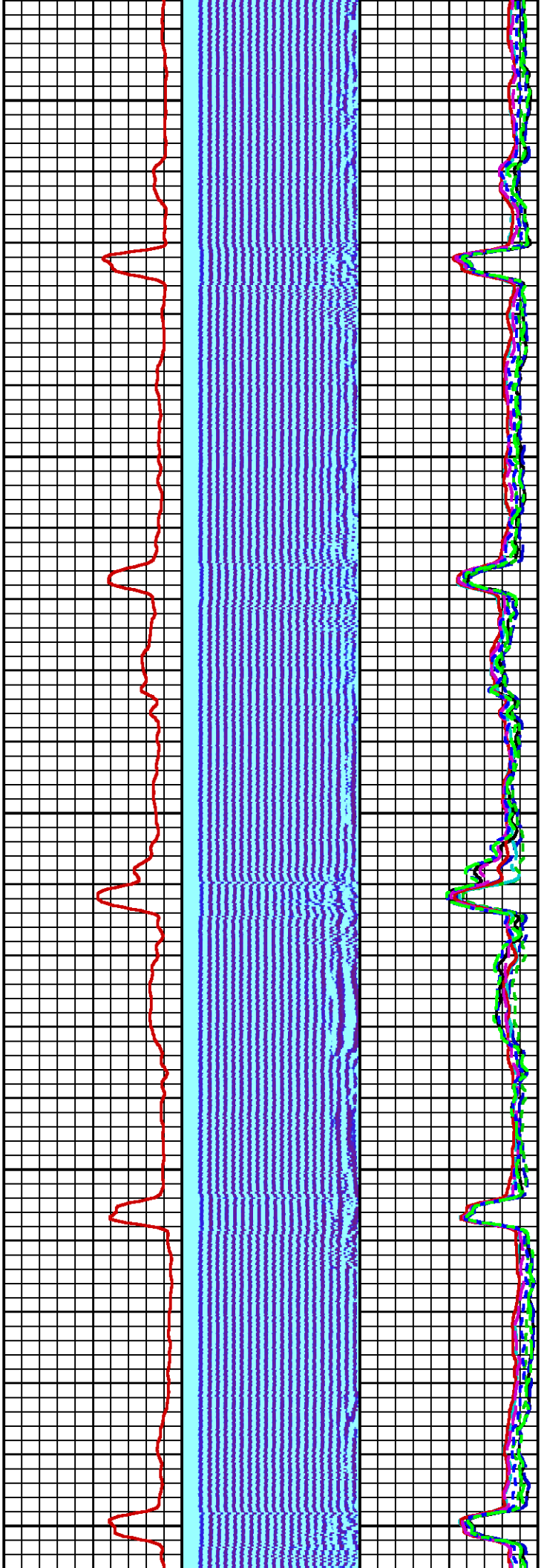




3500

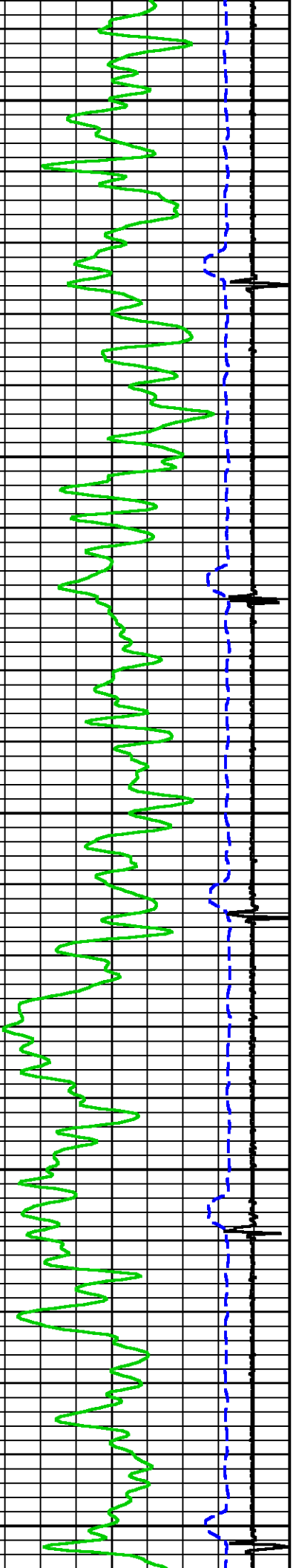
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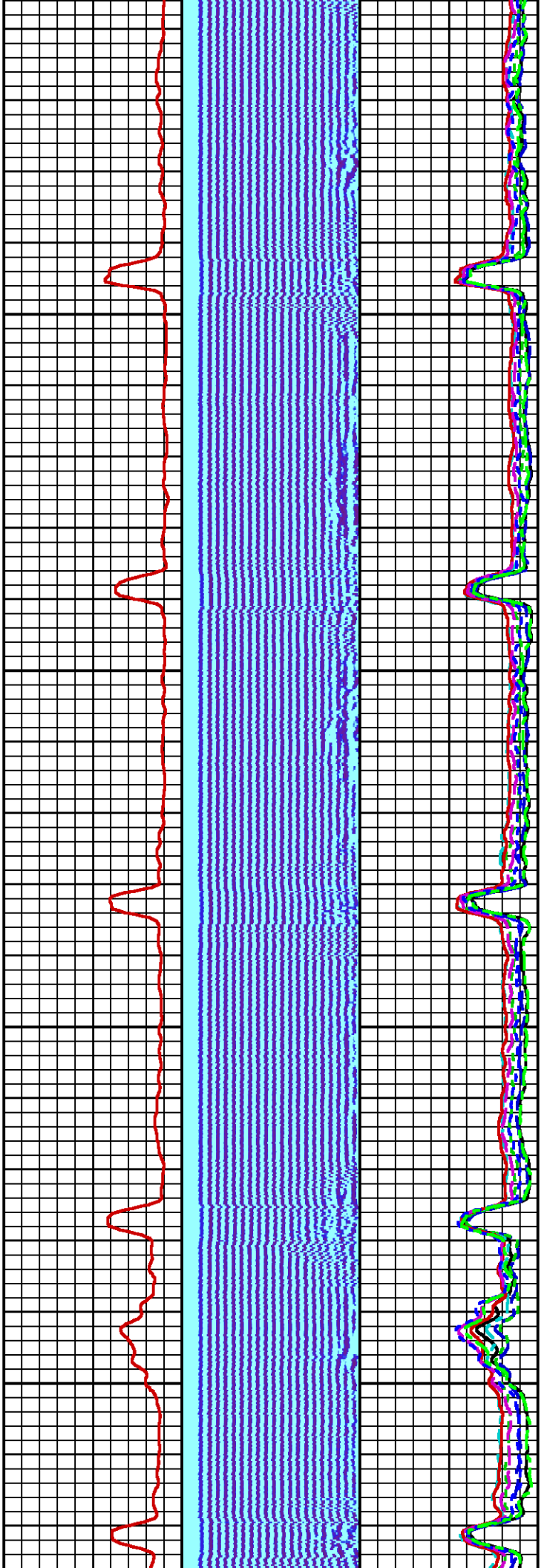




3700

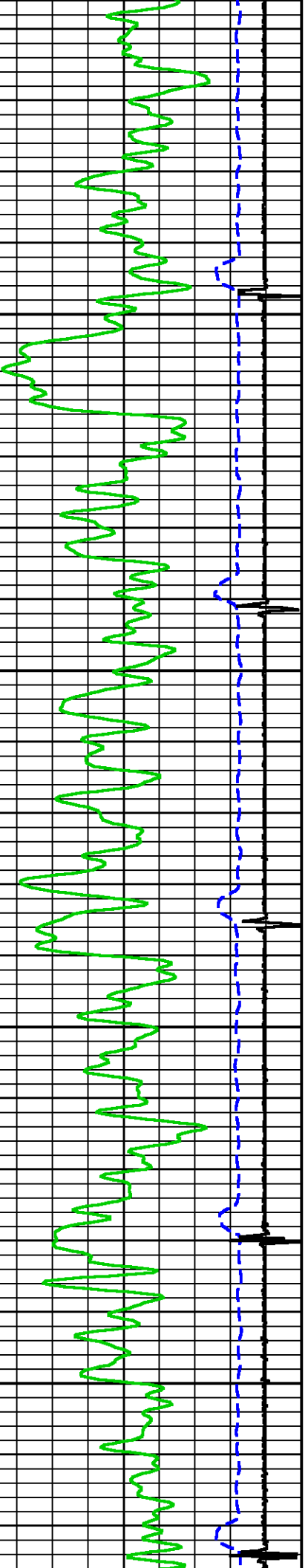
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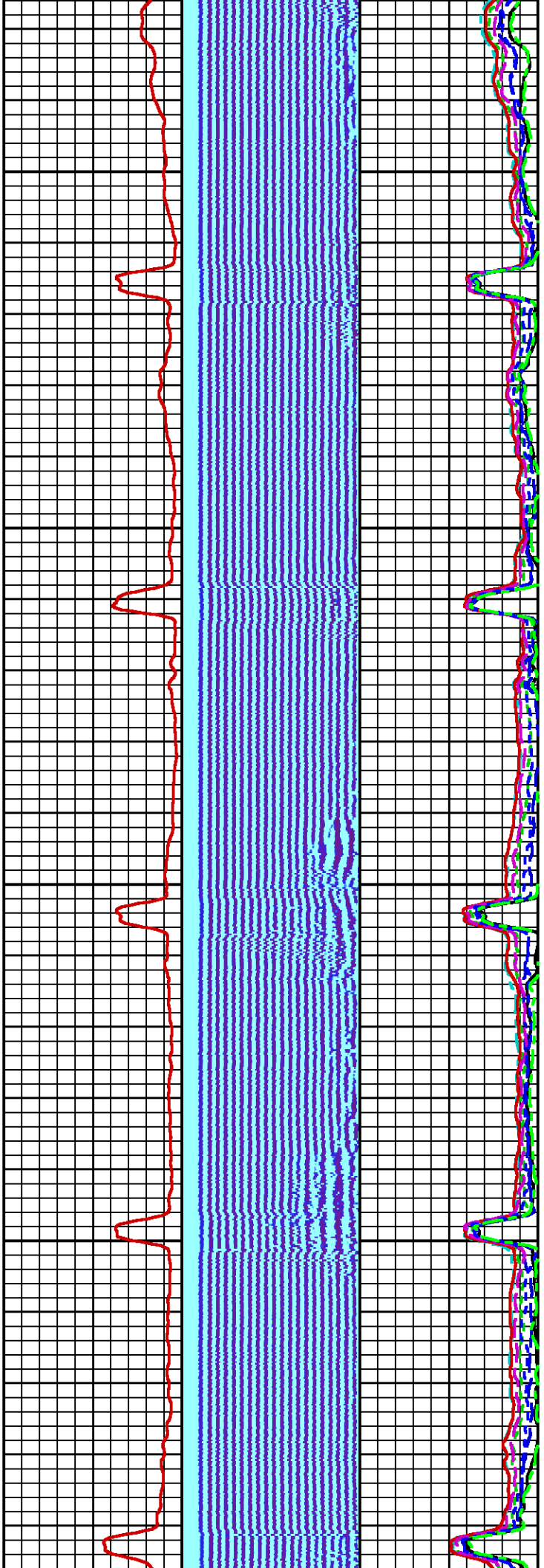




3900

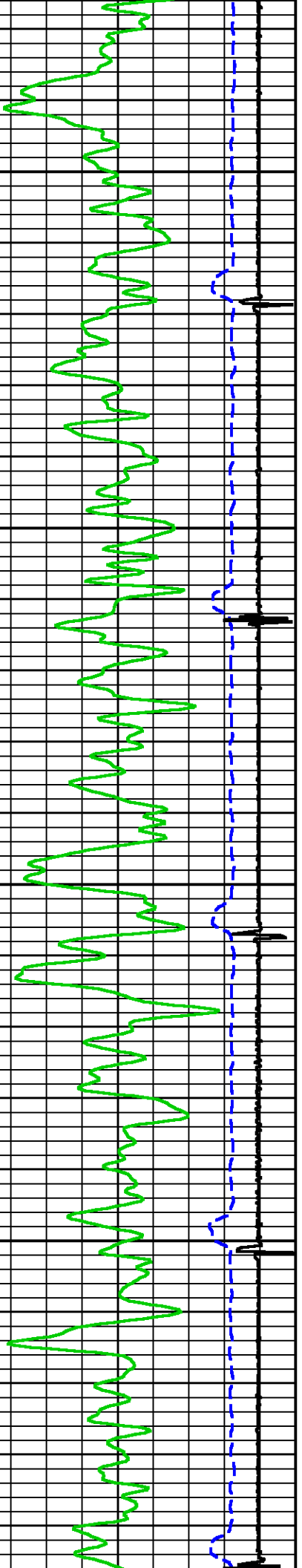
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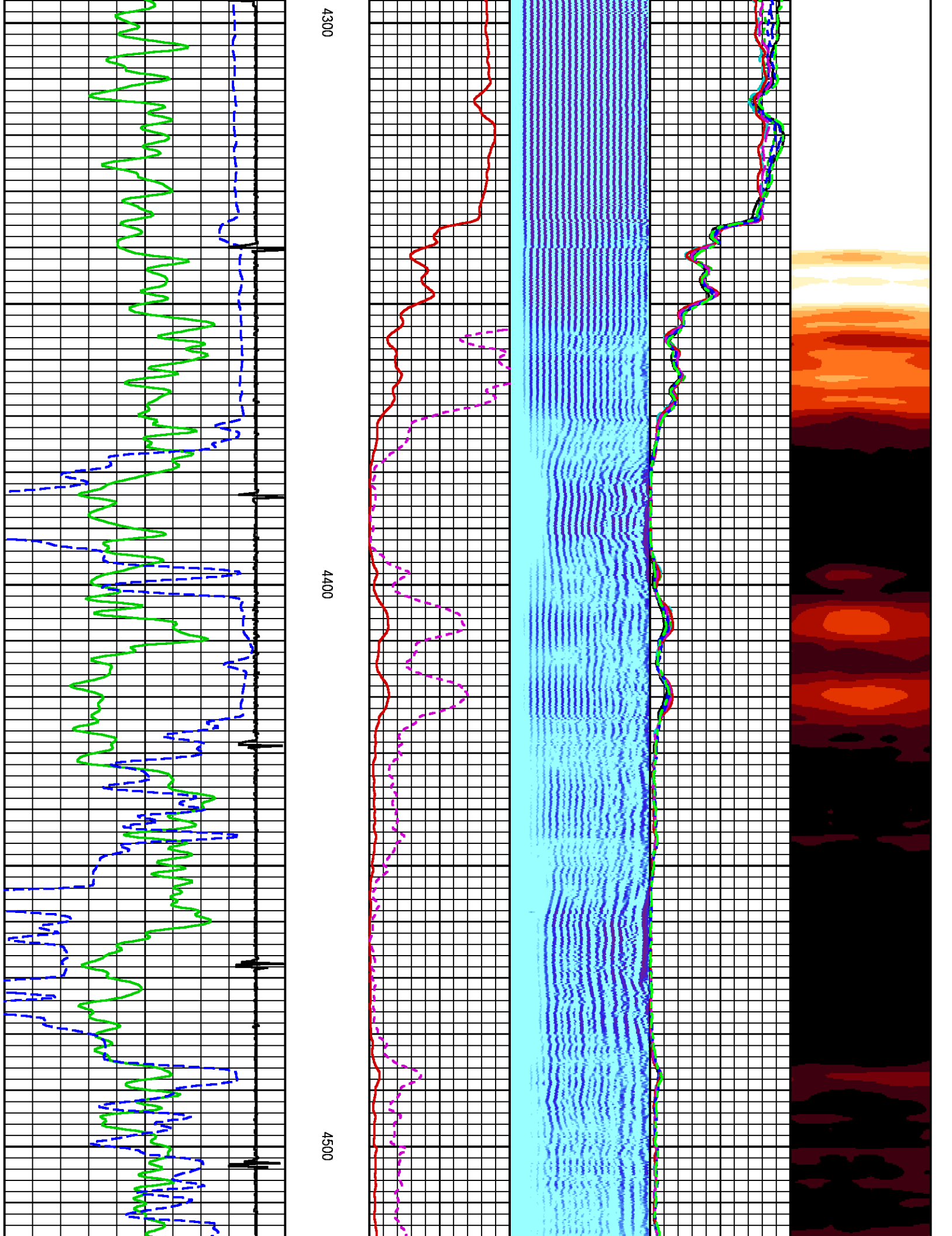


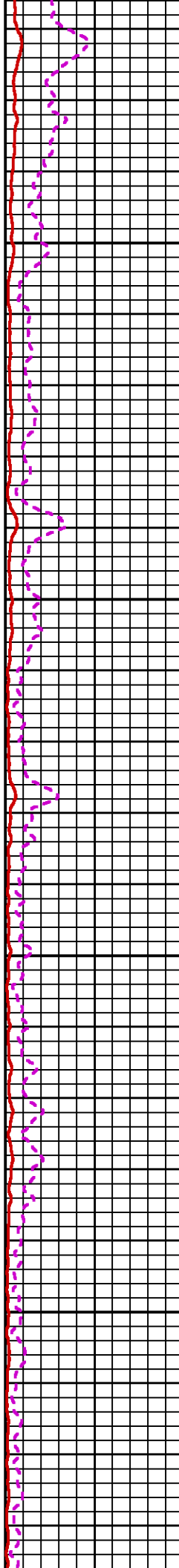
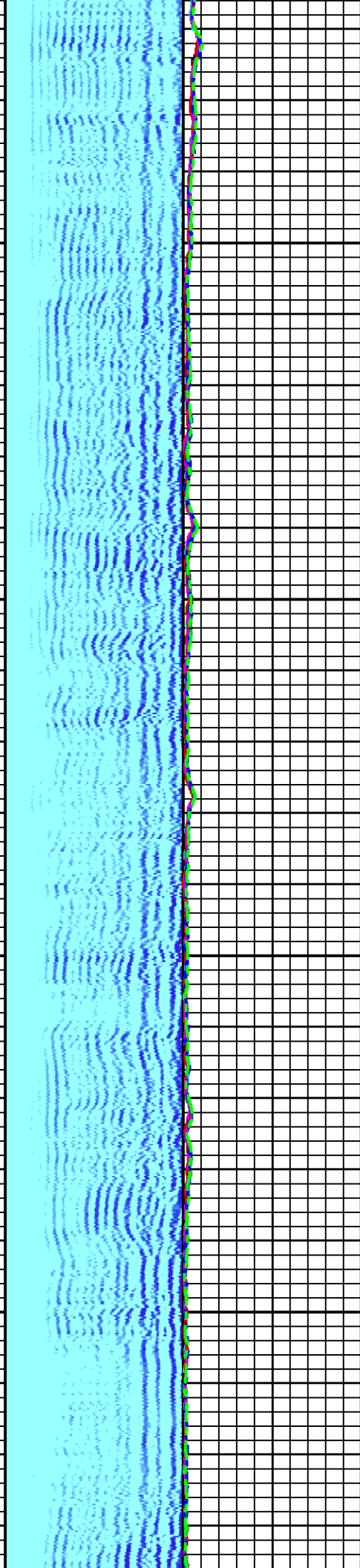


4100

4200

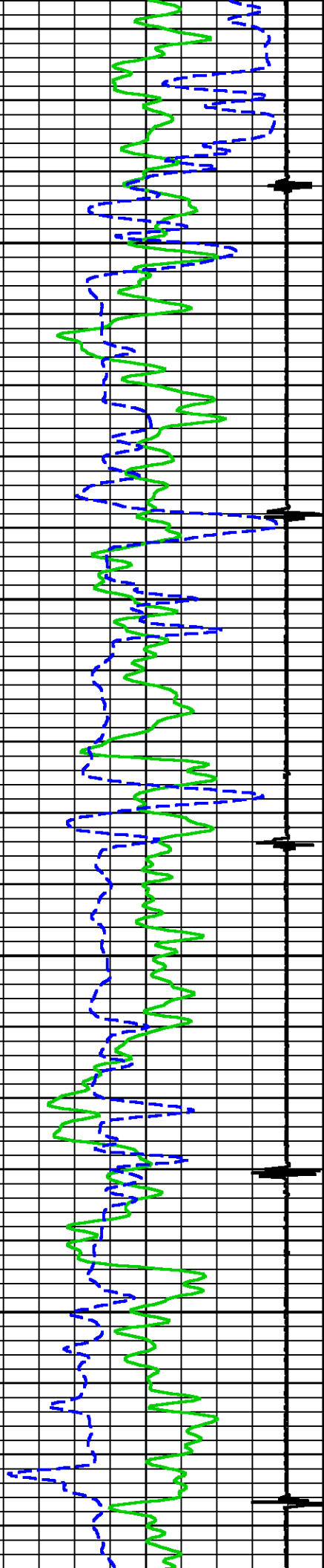


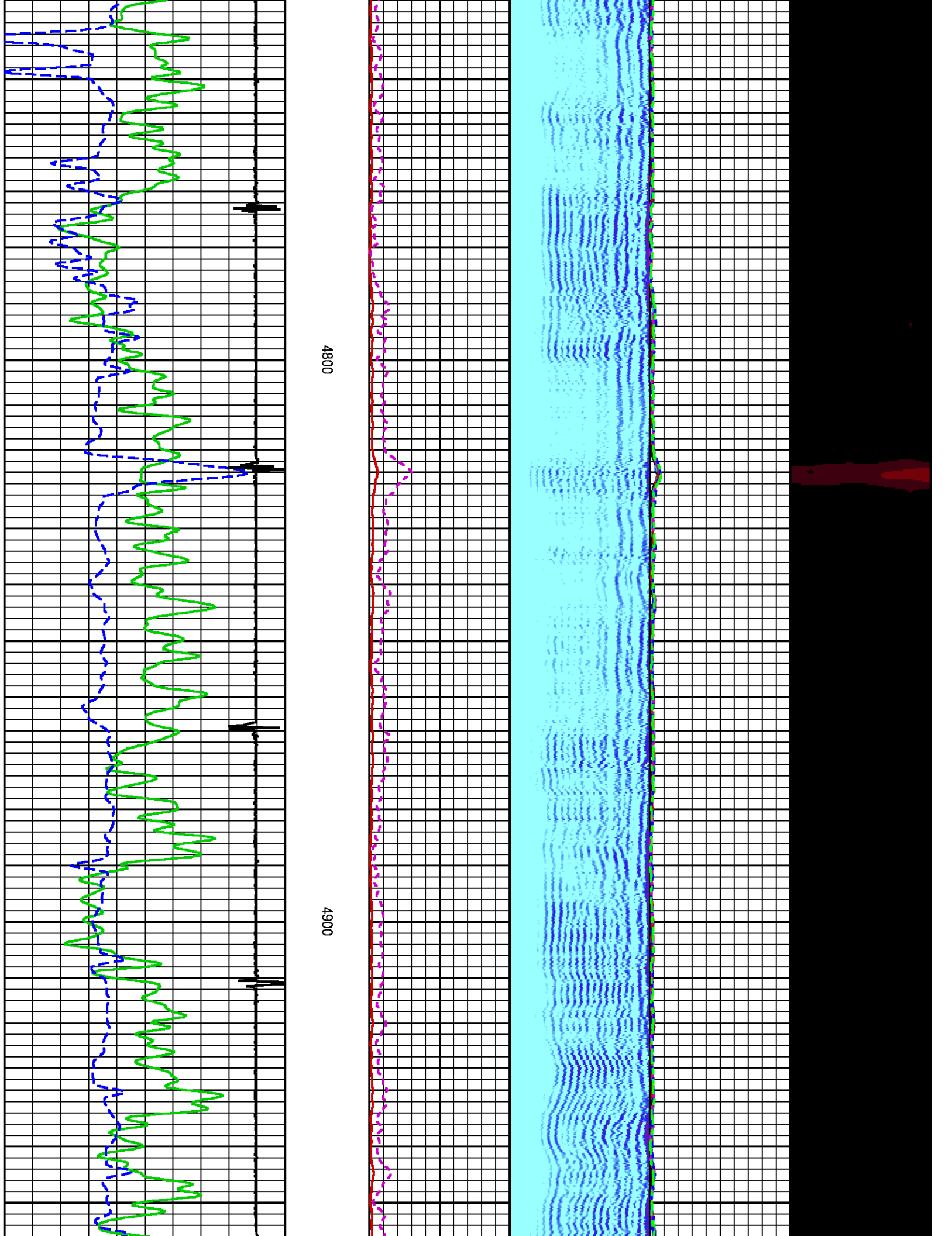


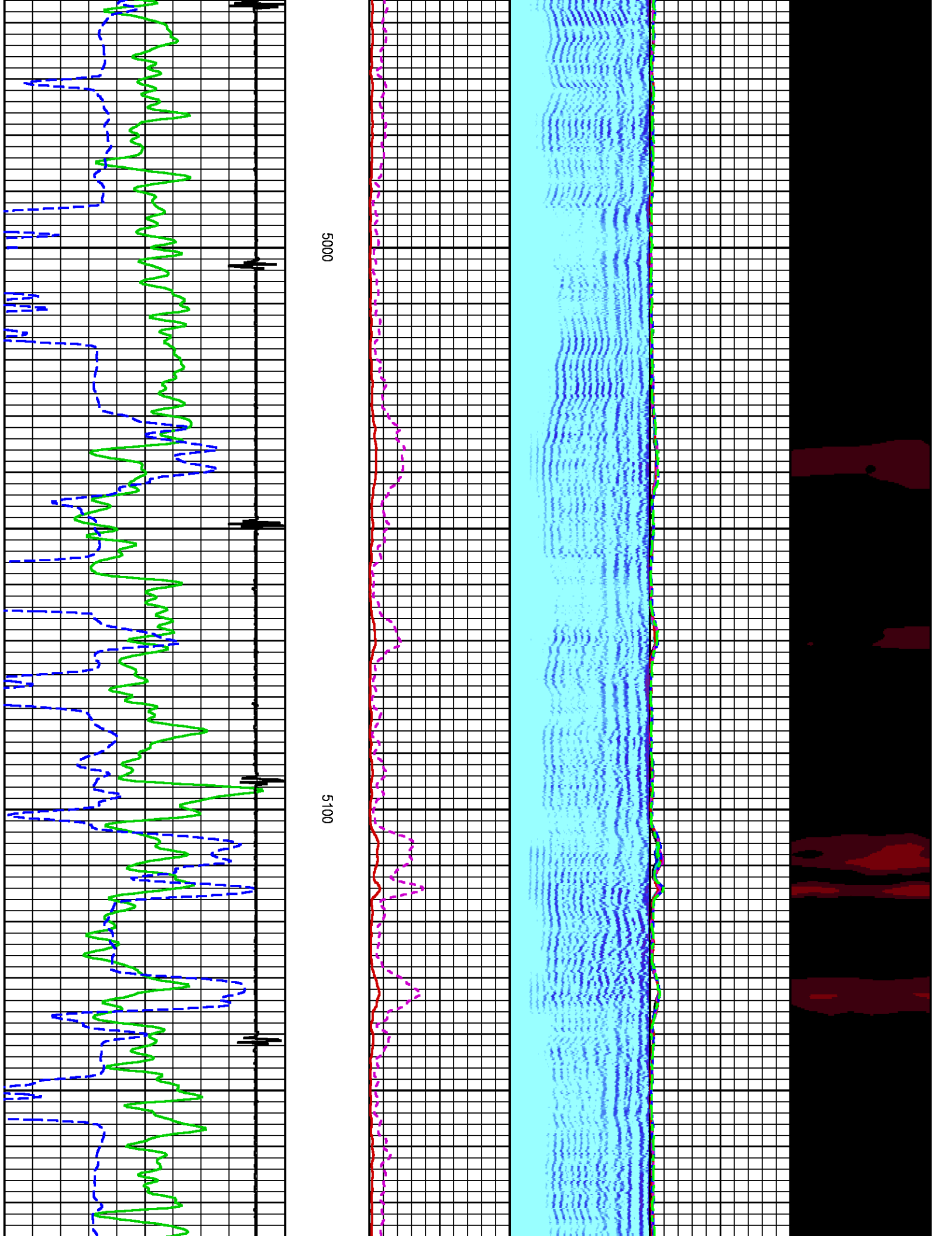


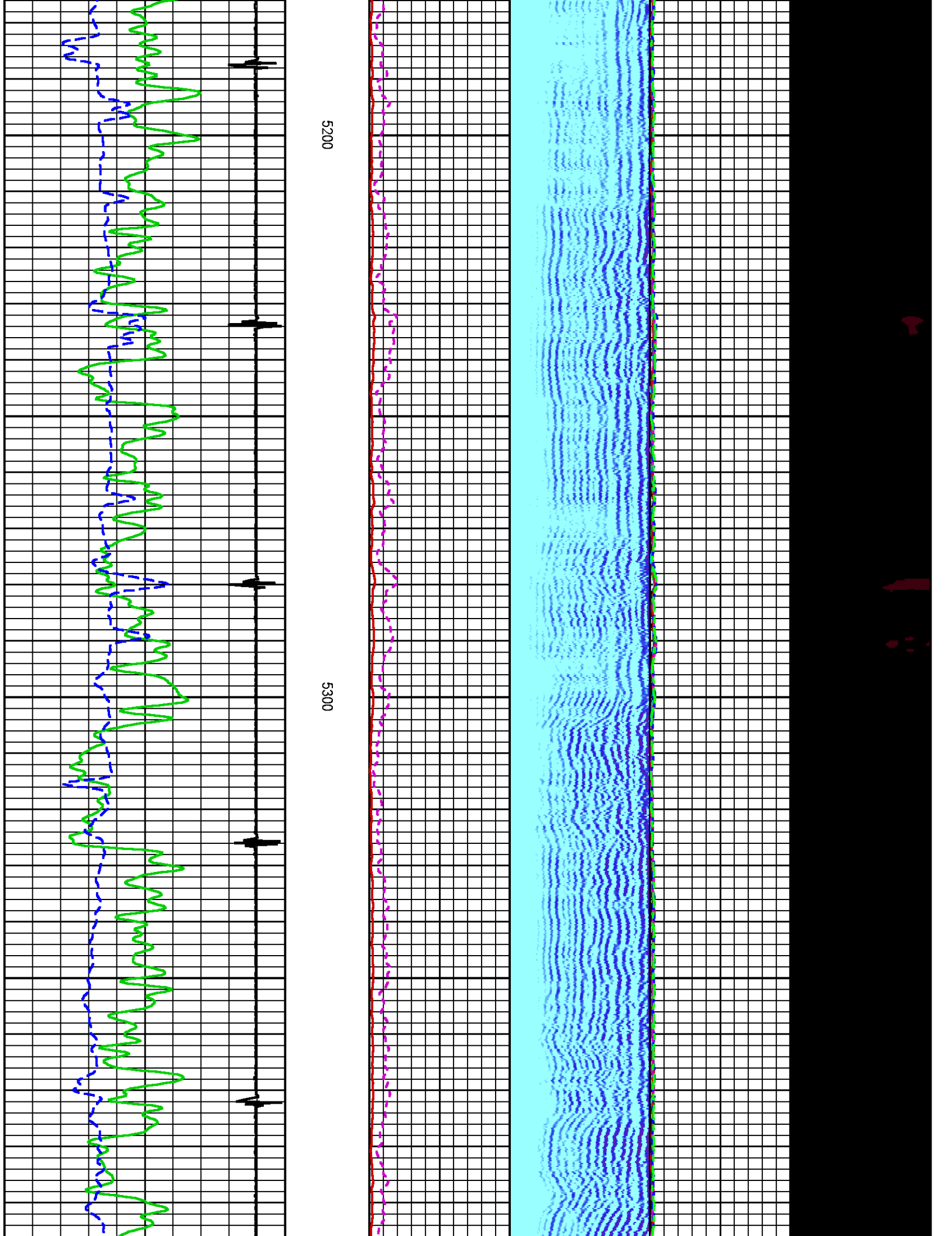
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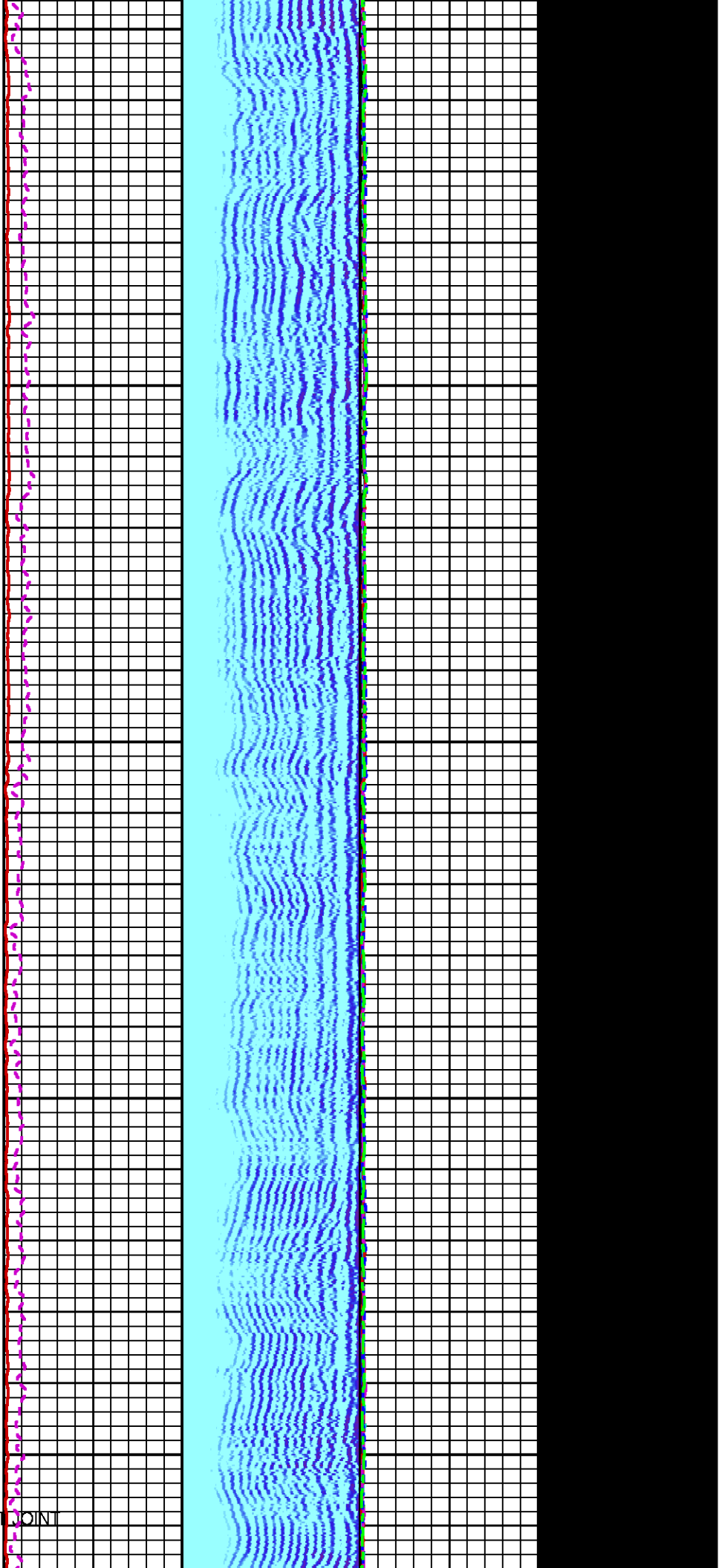
4700









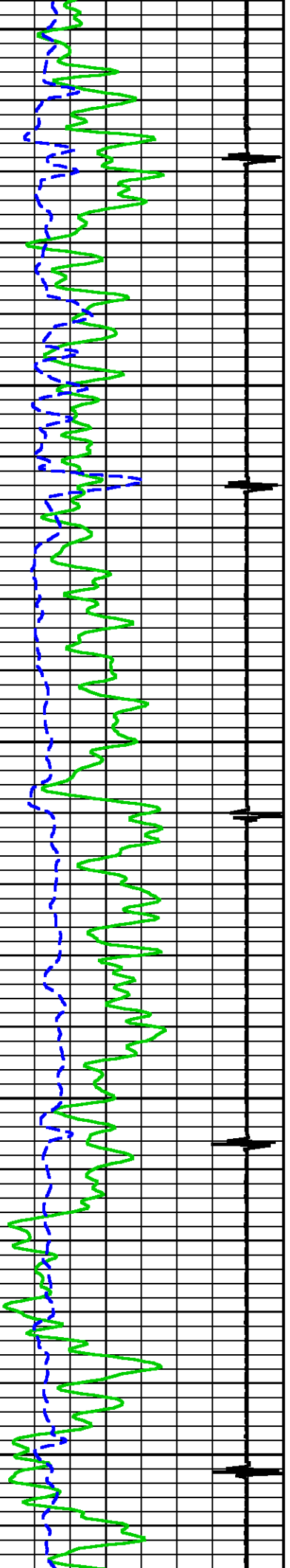


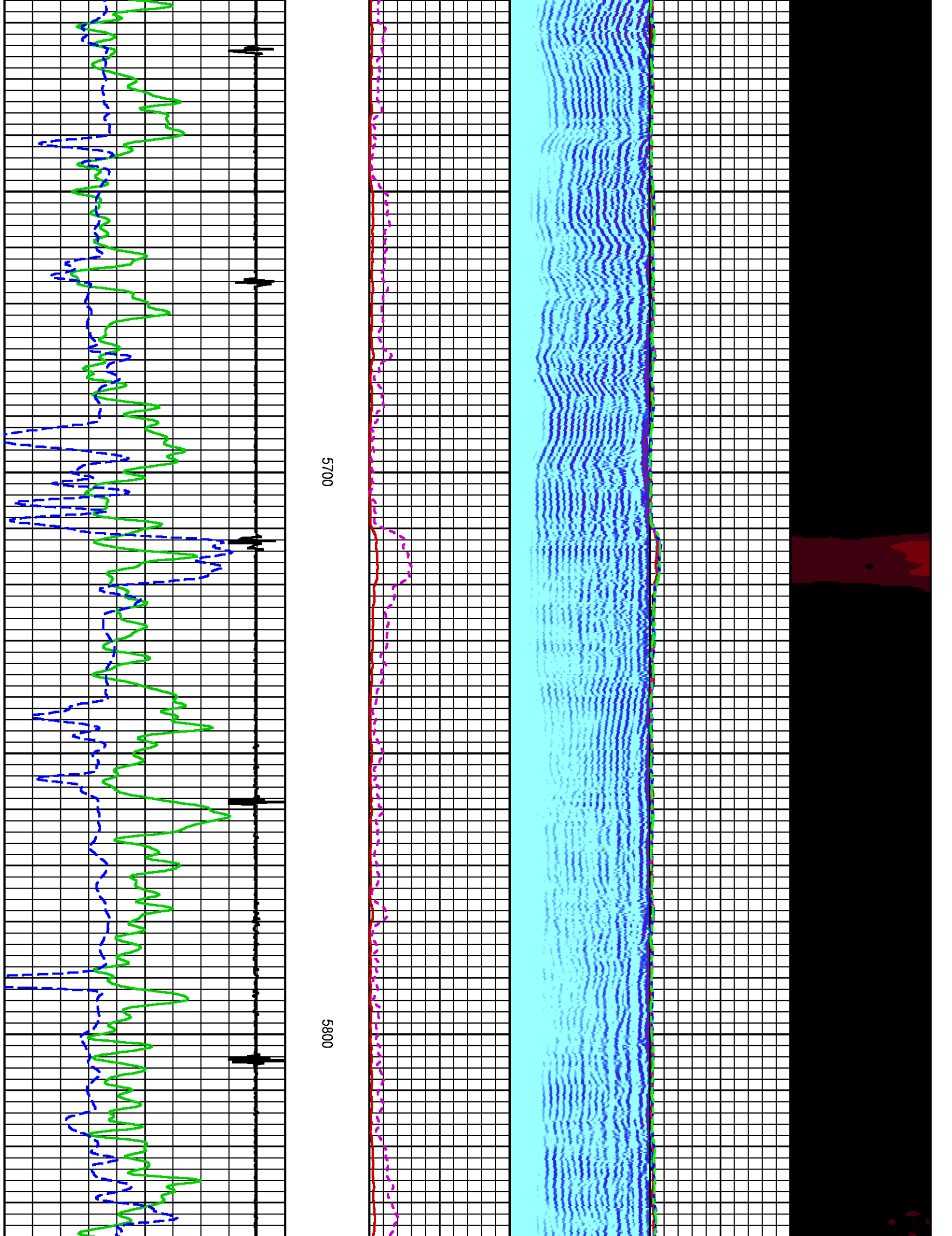
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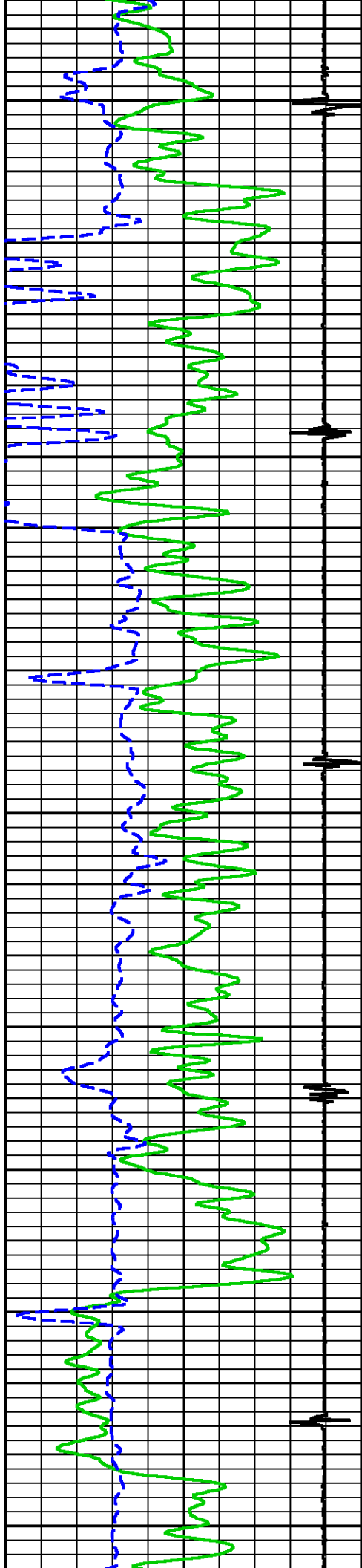
5500

5600

SHORT POINT

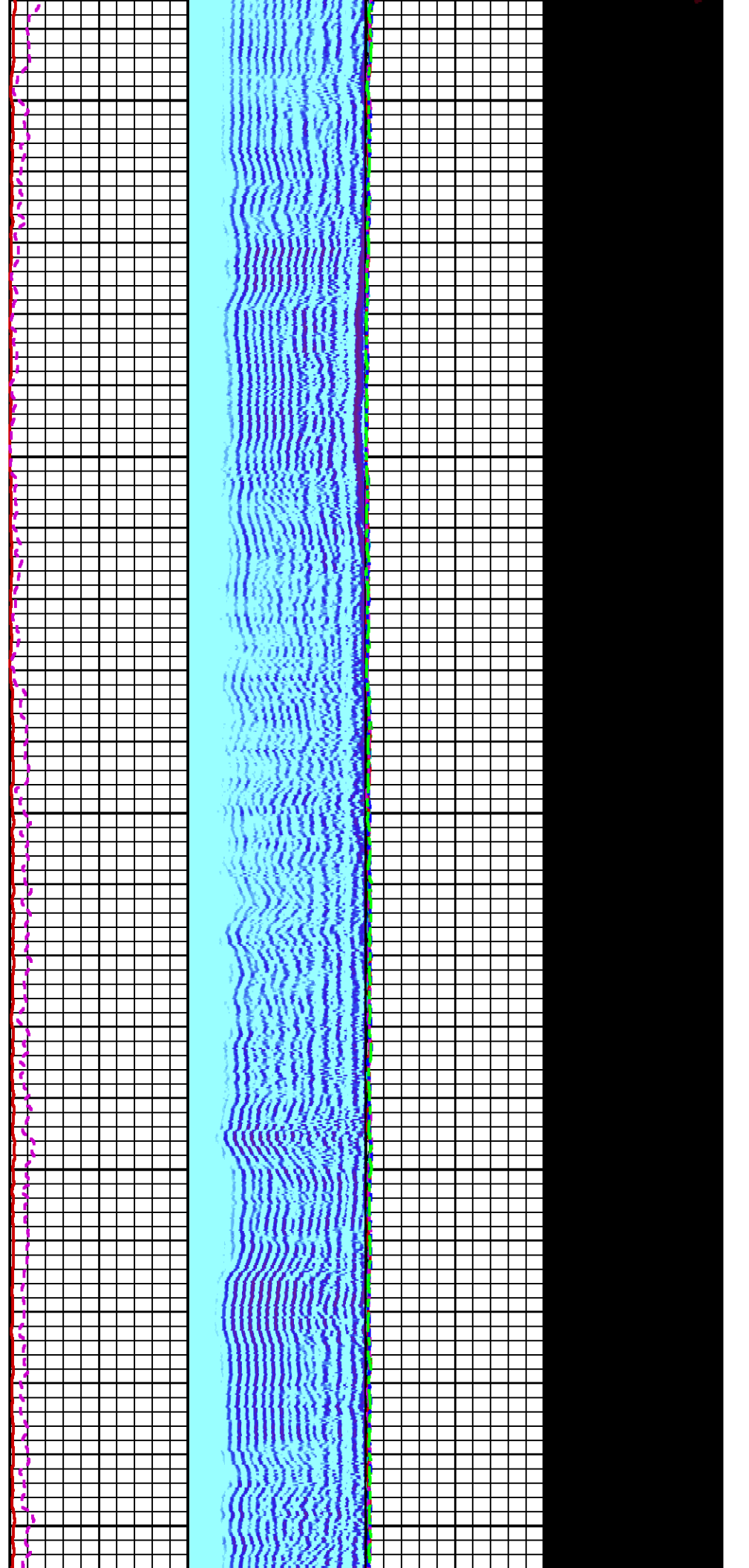


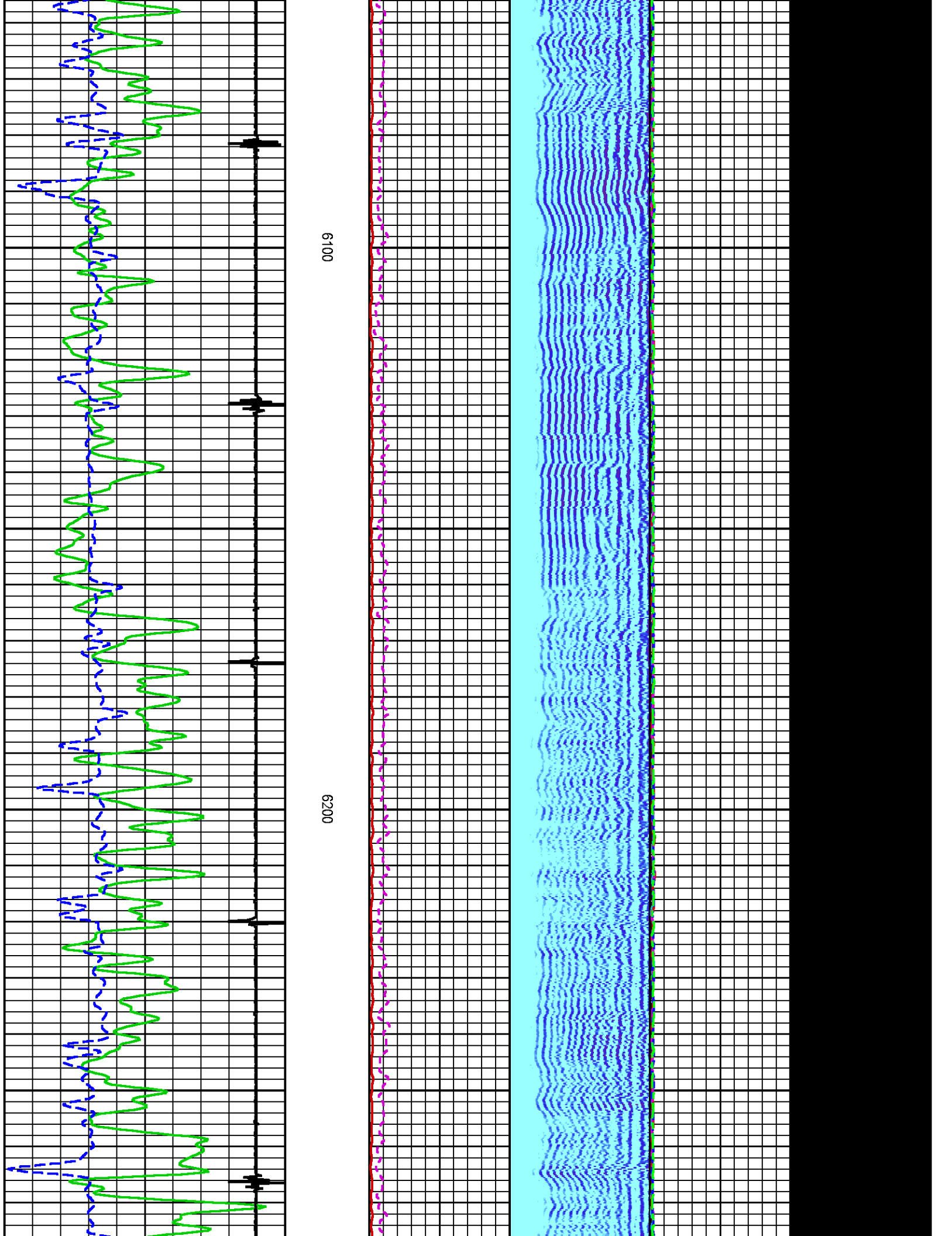


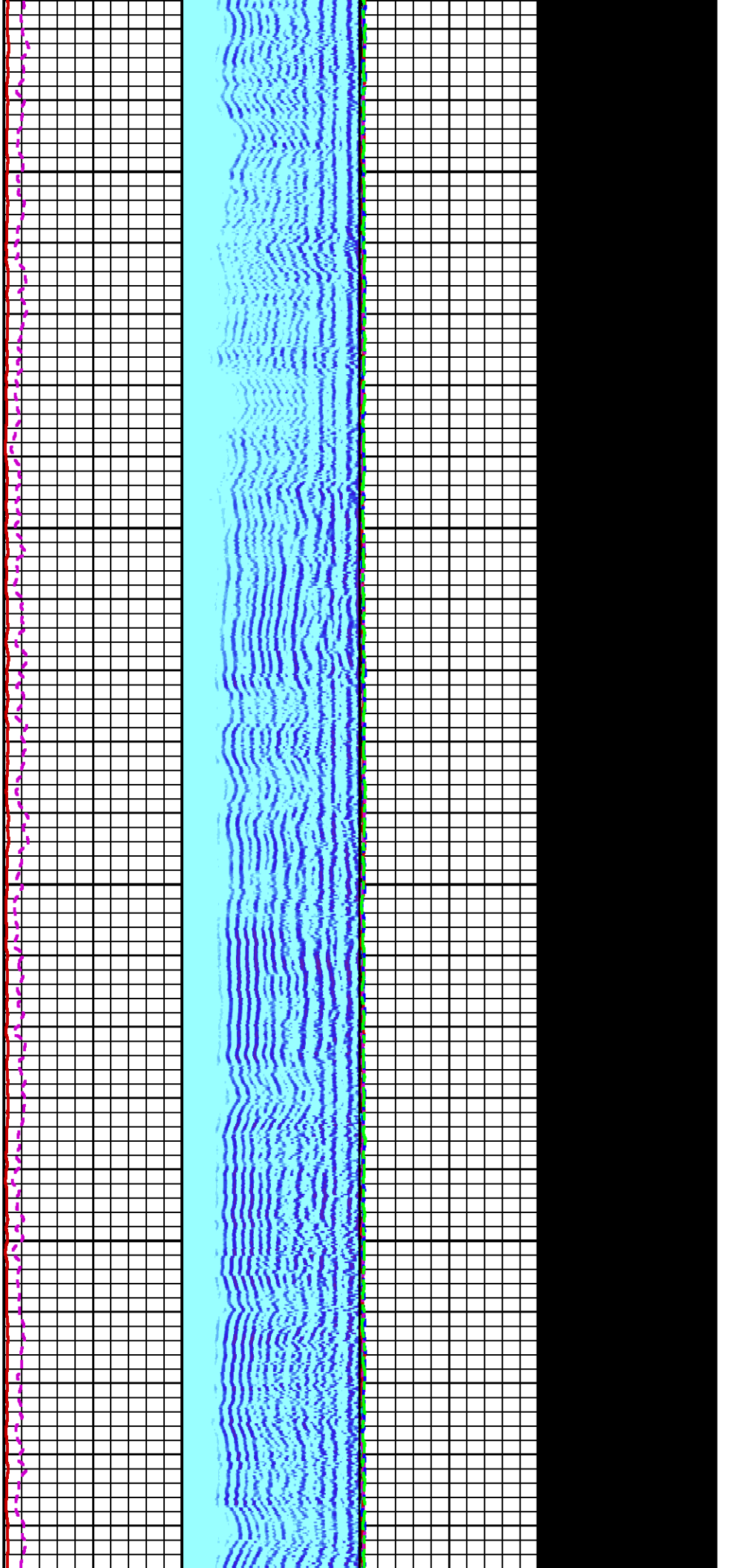


5900

6000

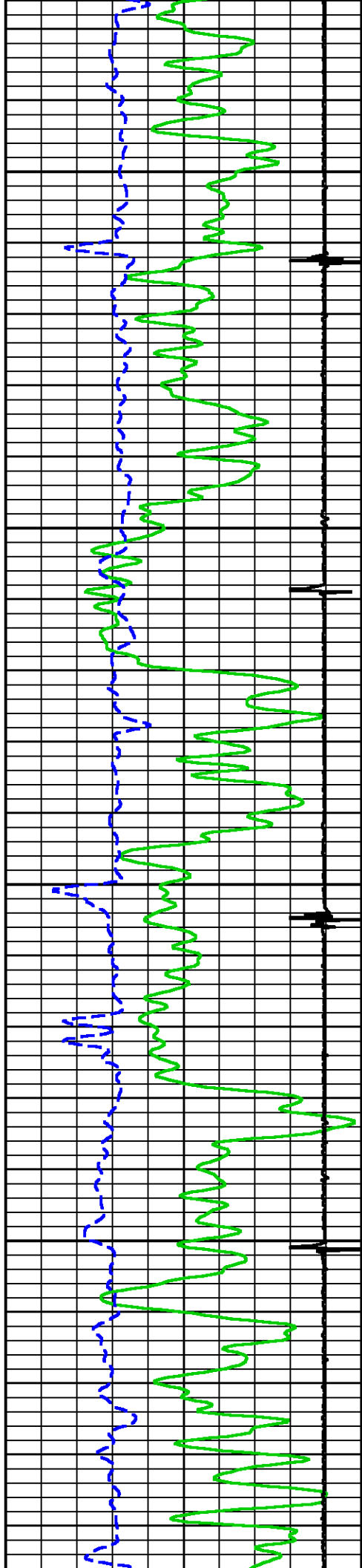


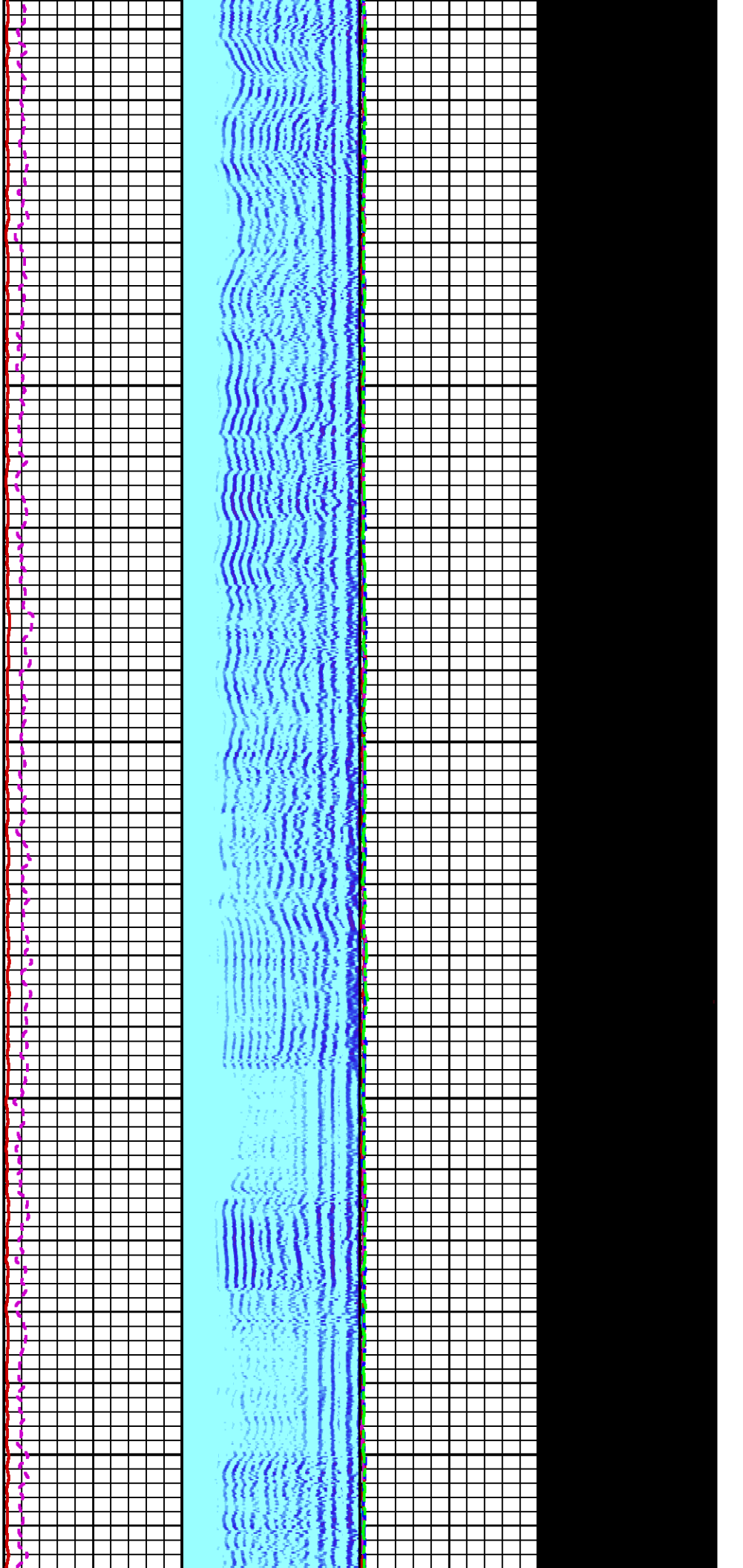




6300

6400

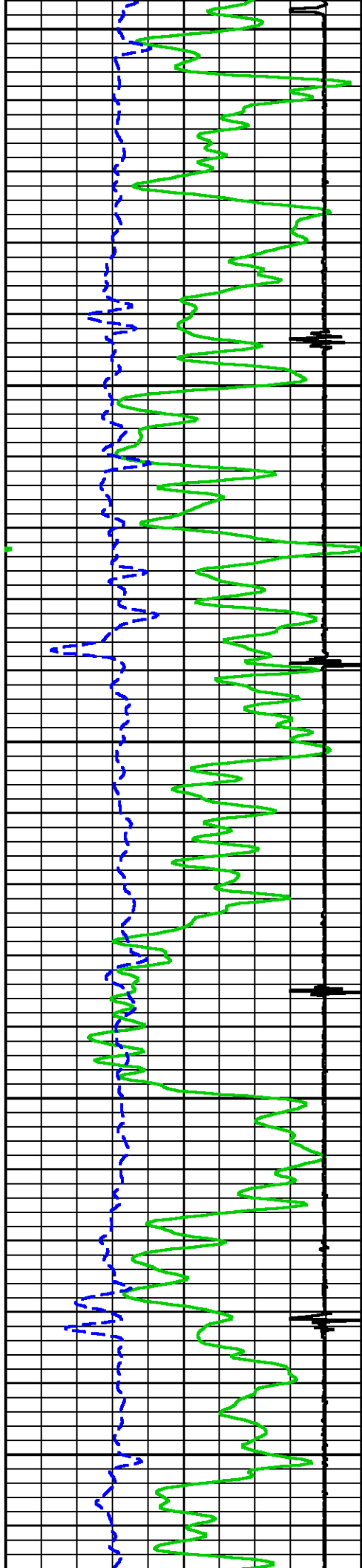


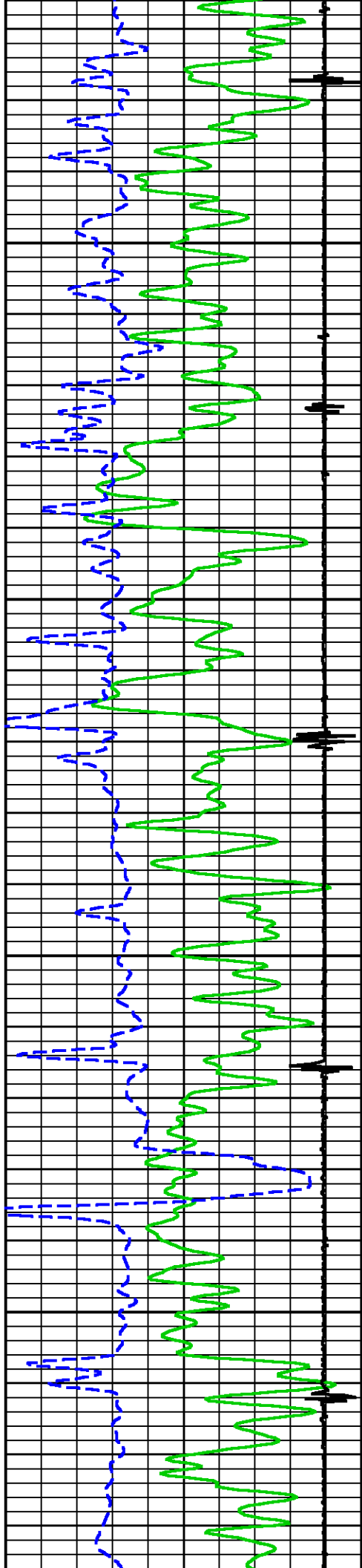


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6600

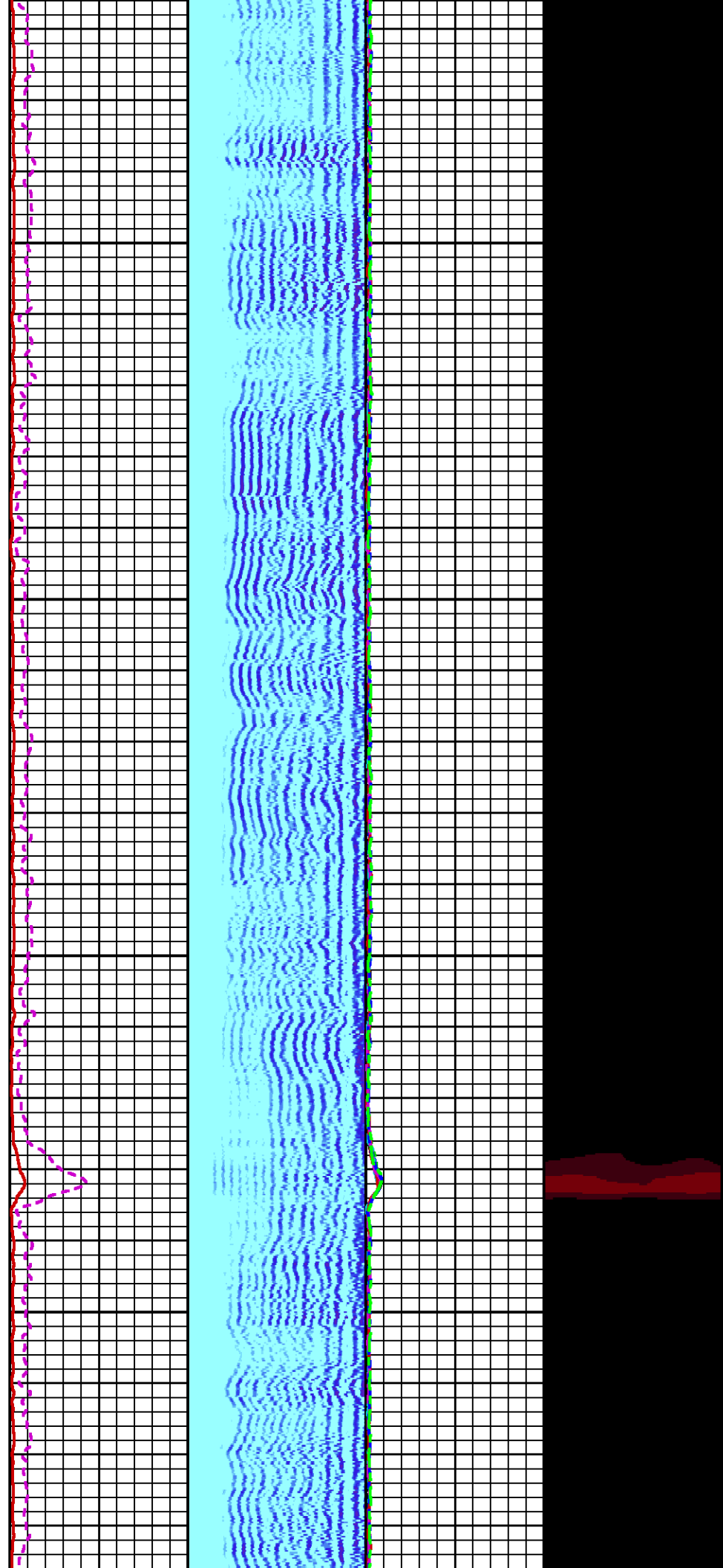
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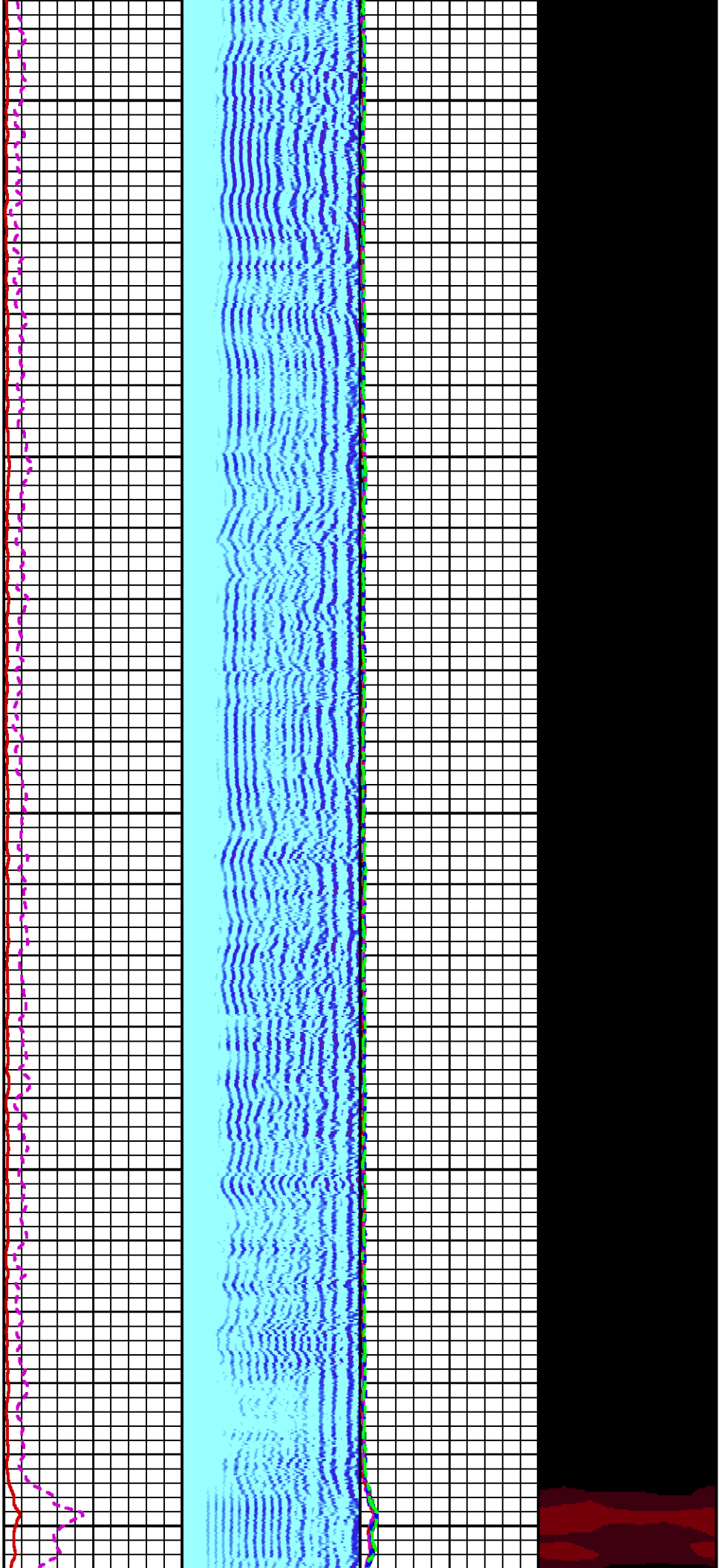




6800

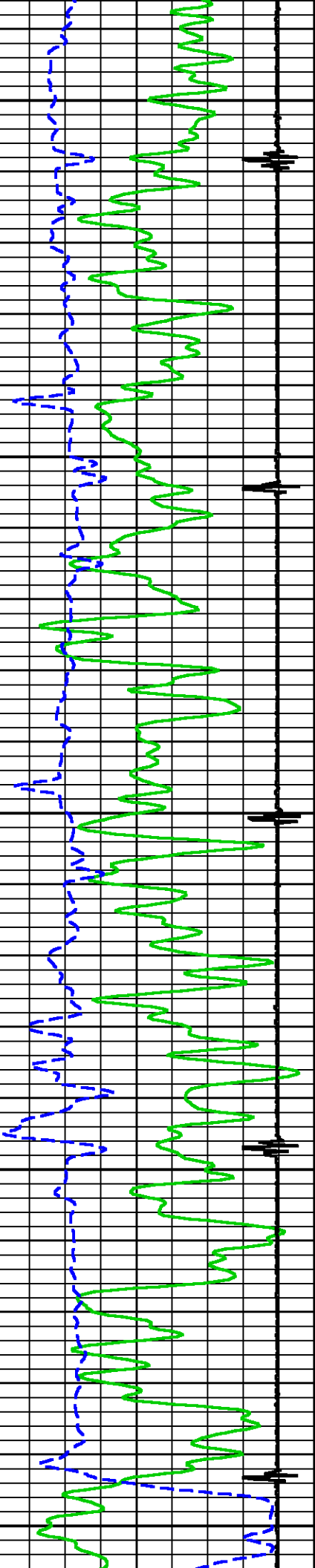
6900

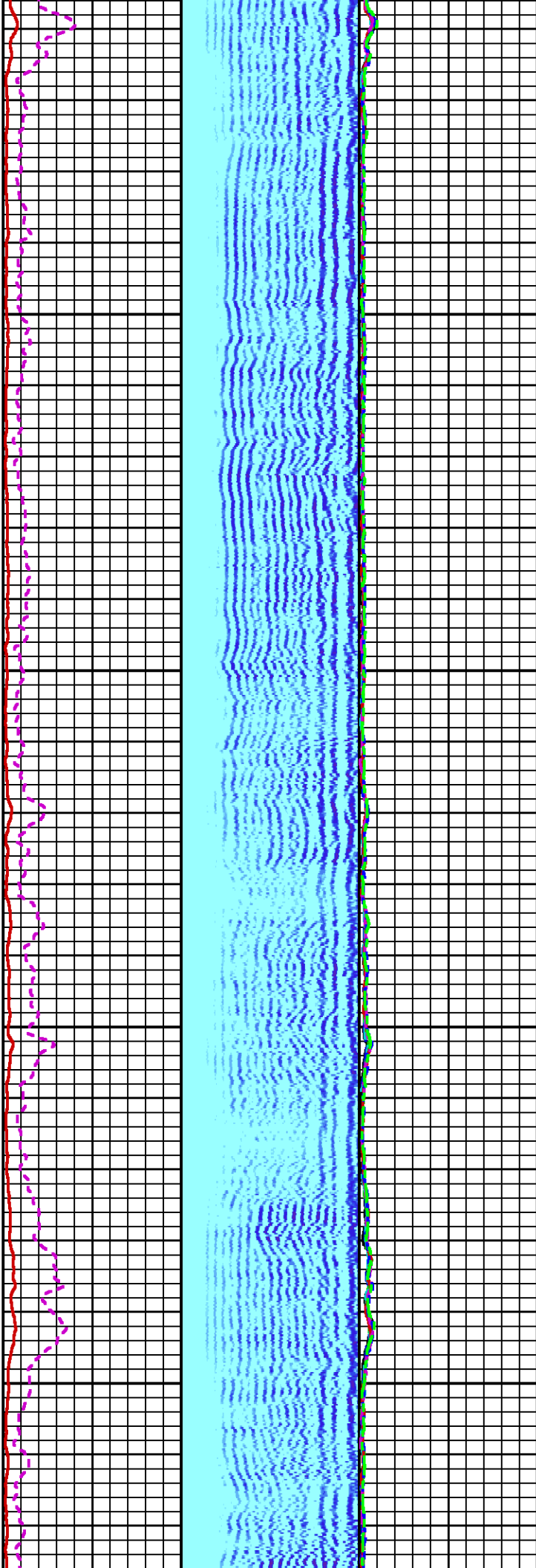




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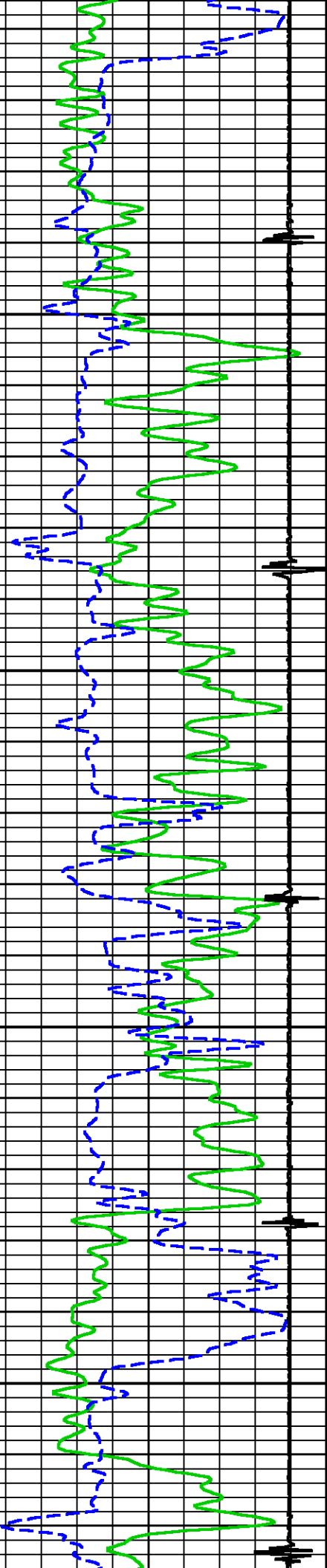
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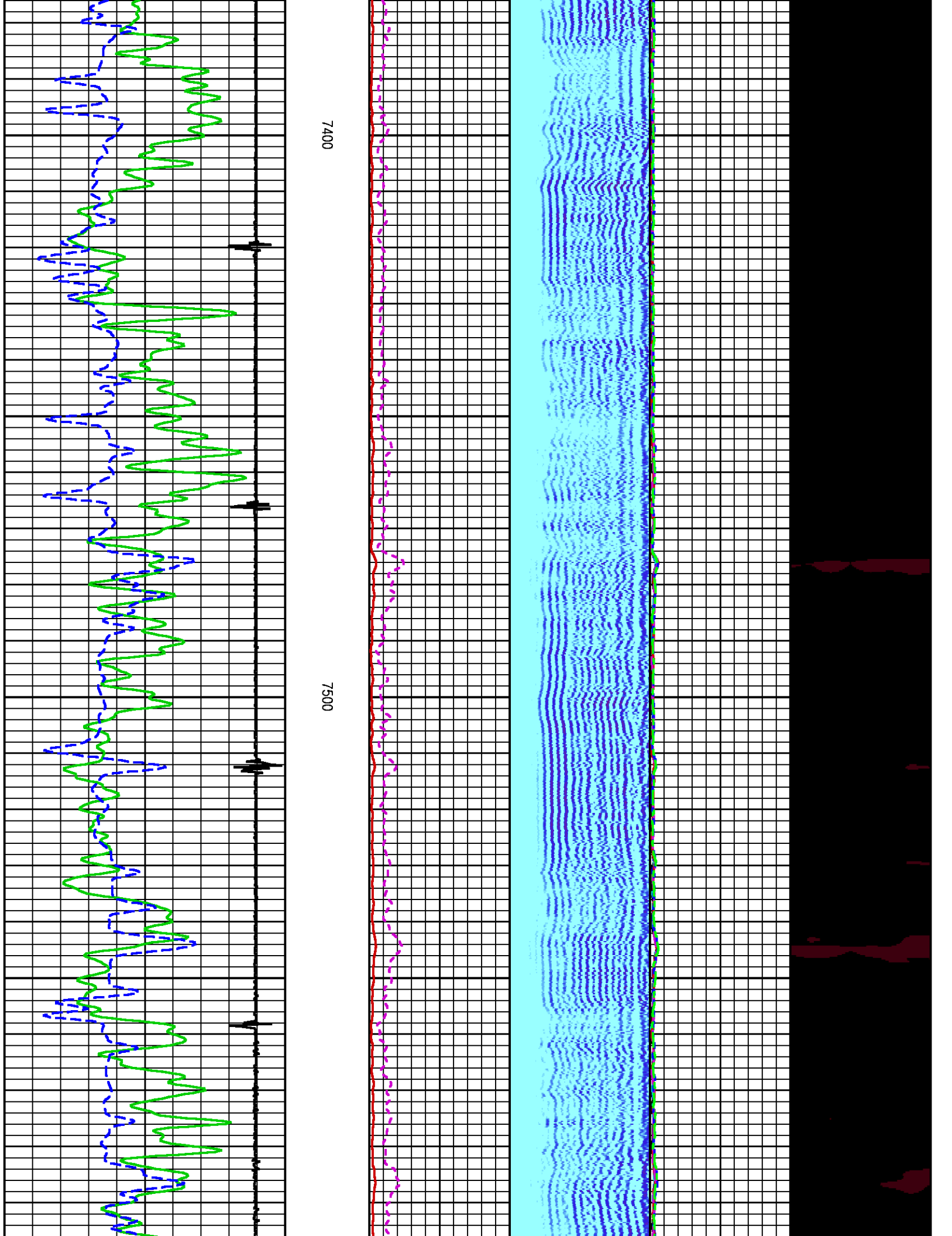


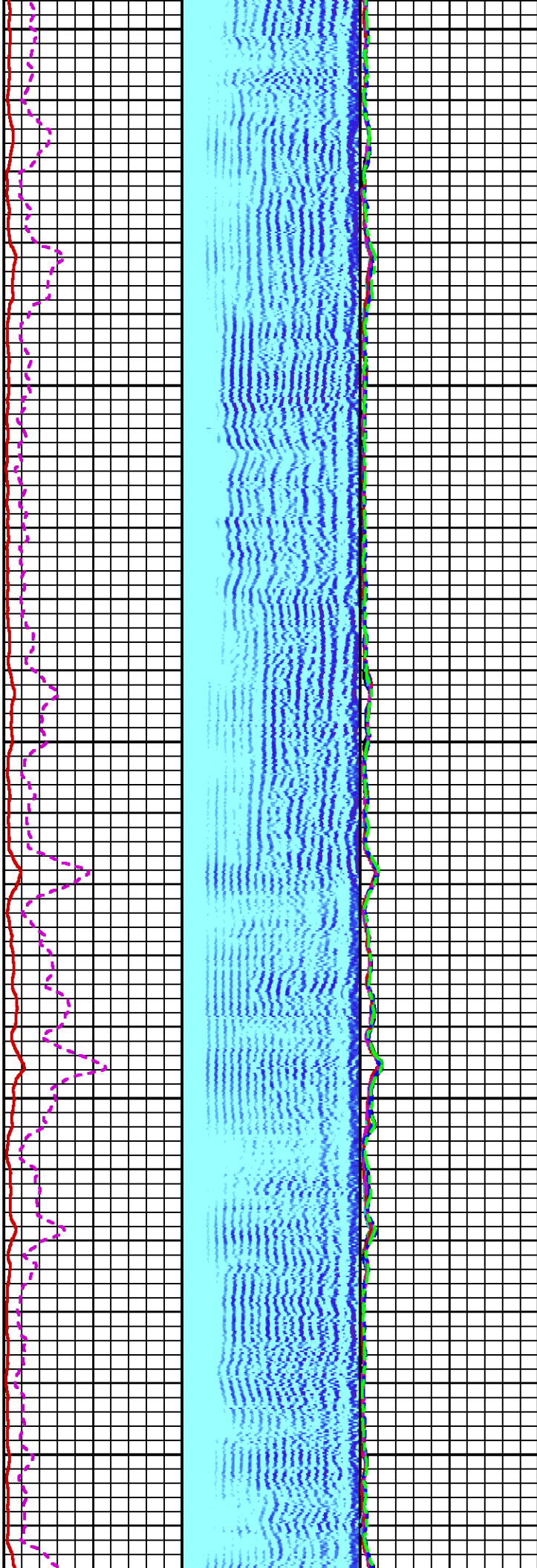


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7300



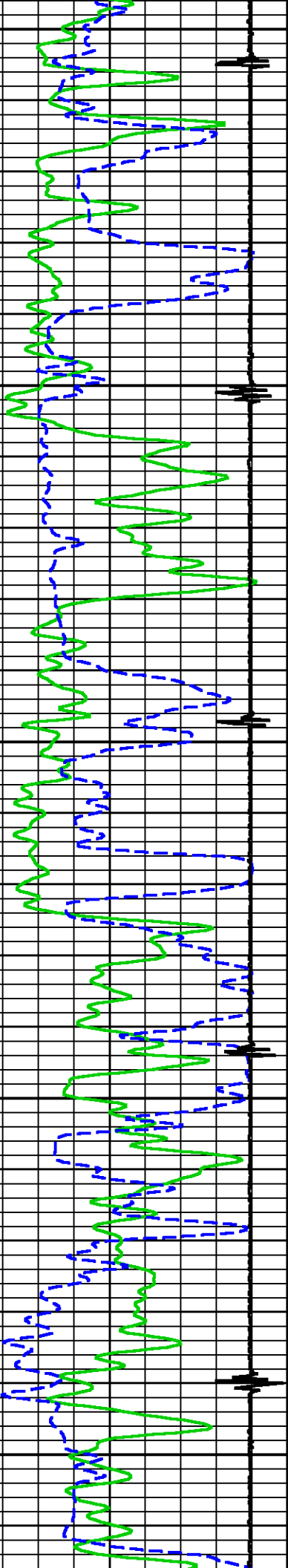


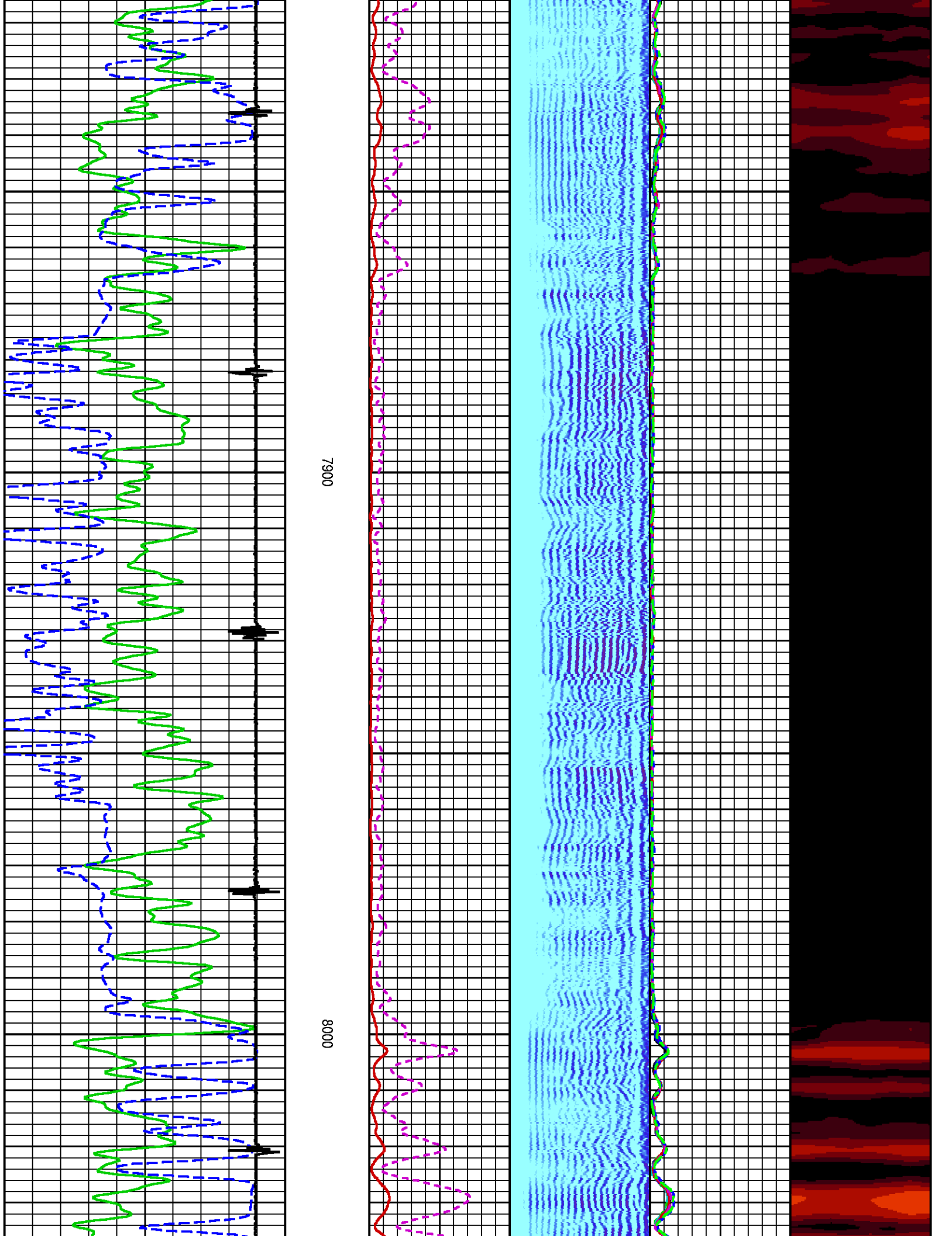


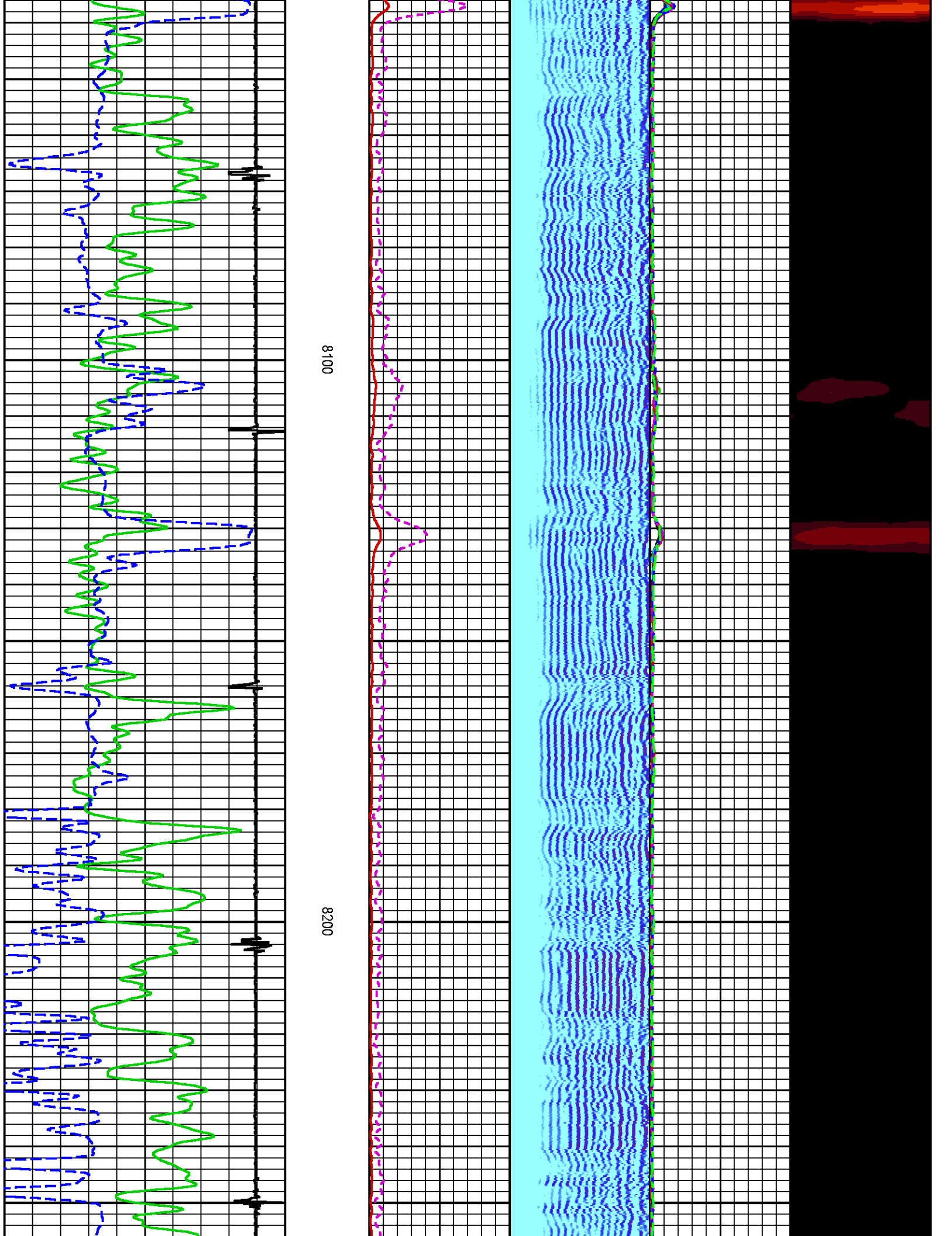
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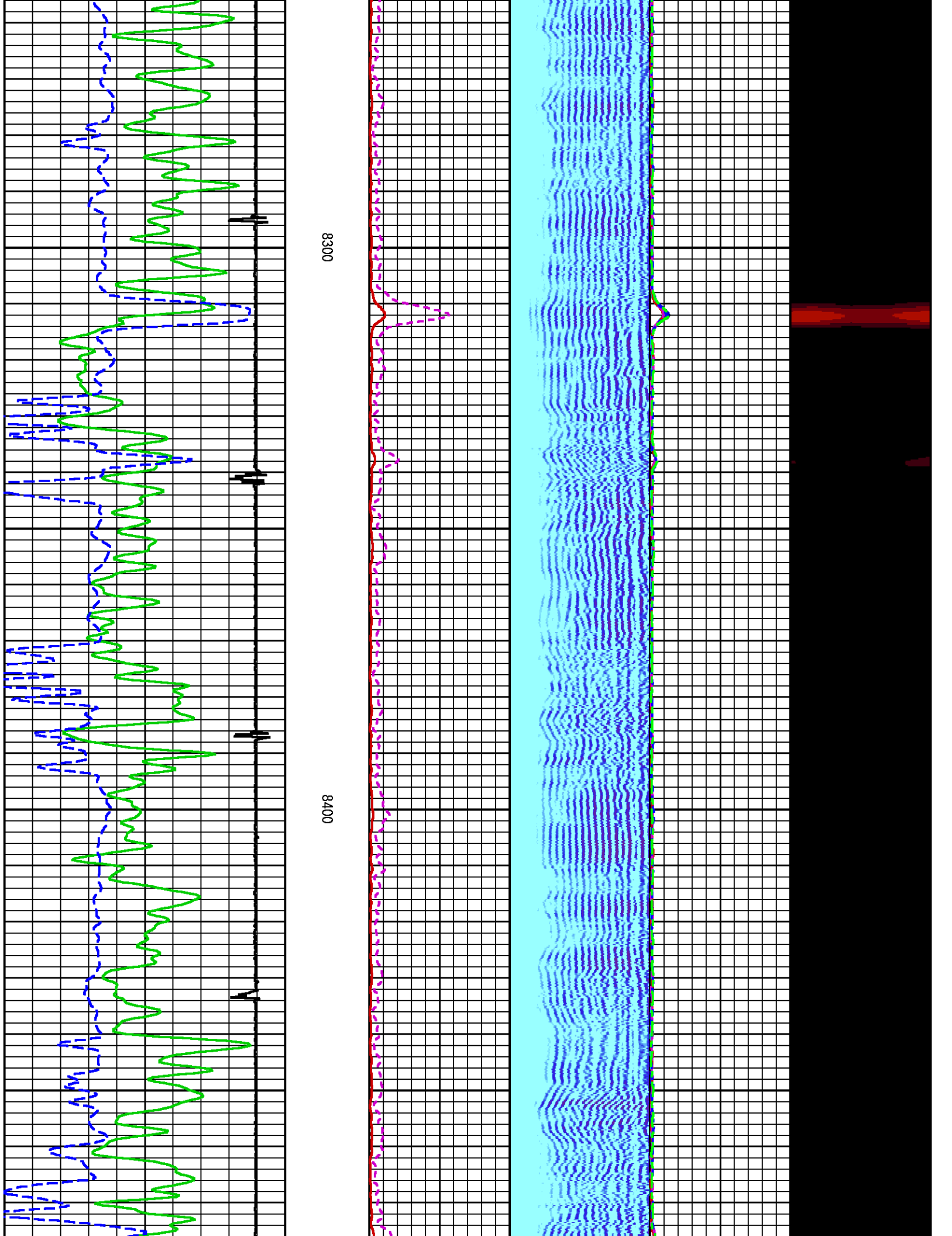
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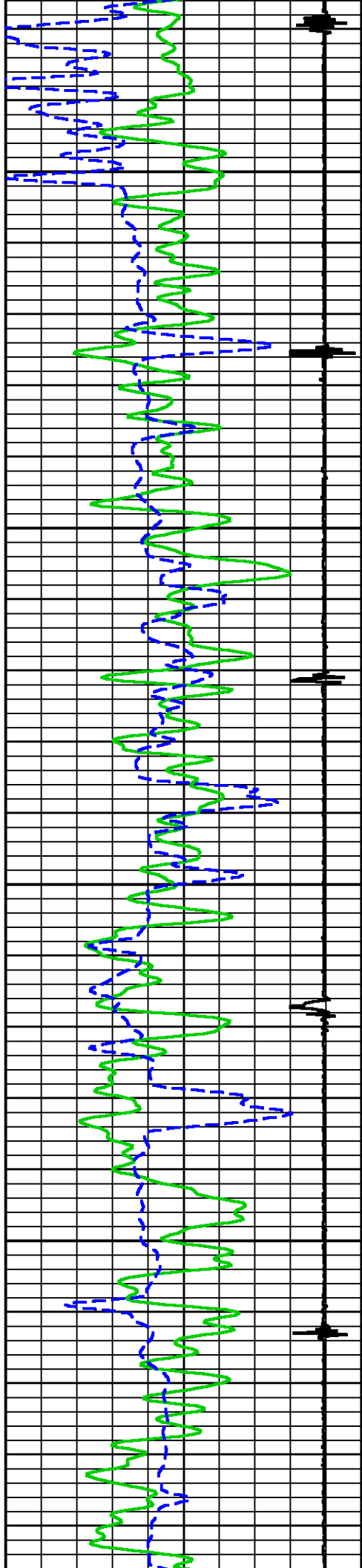
7800





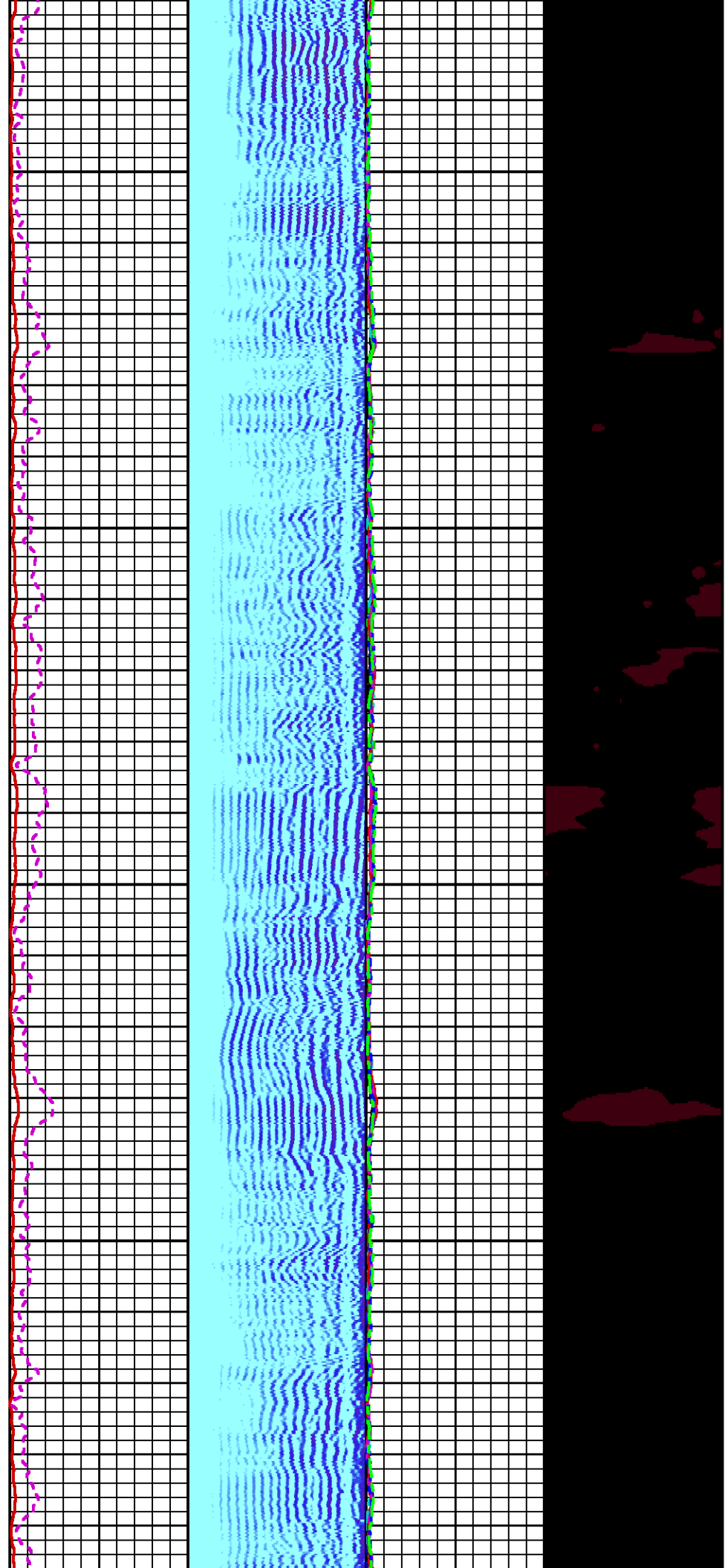


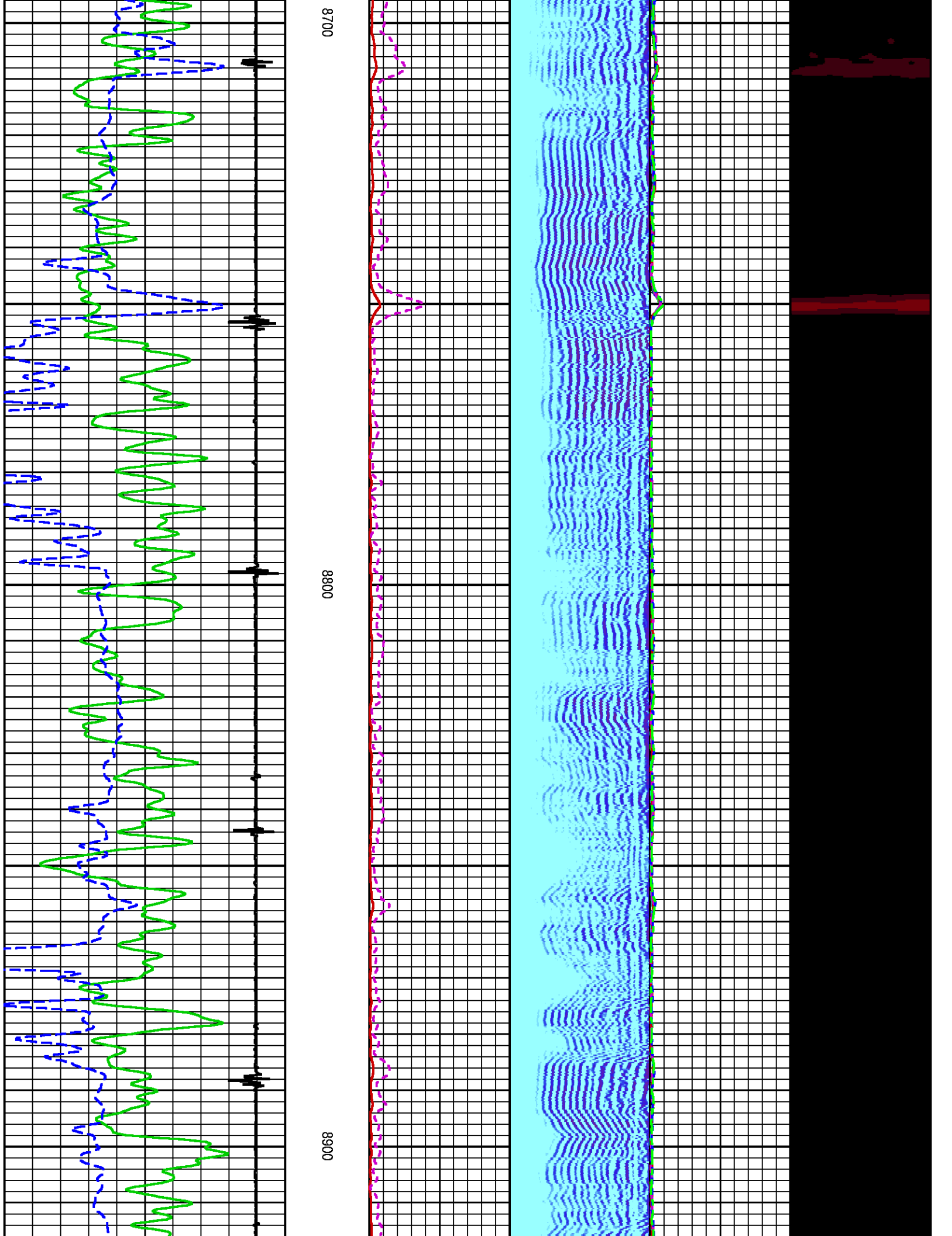


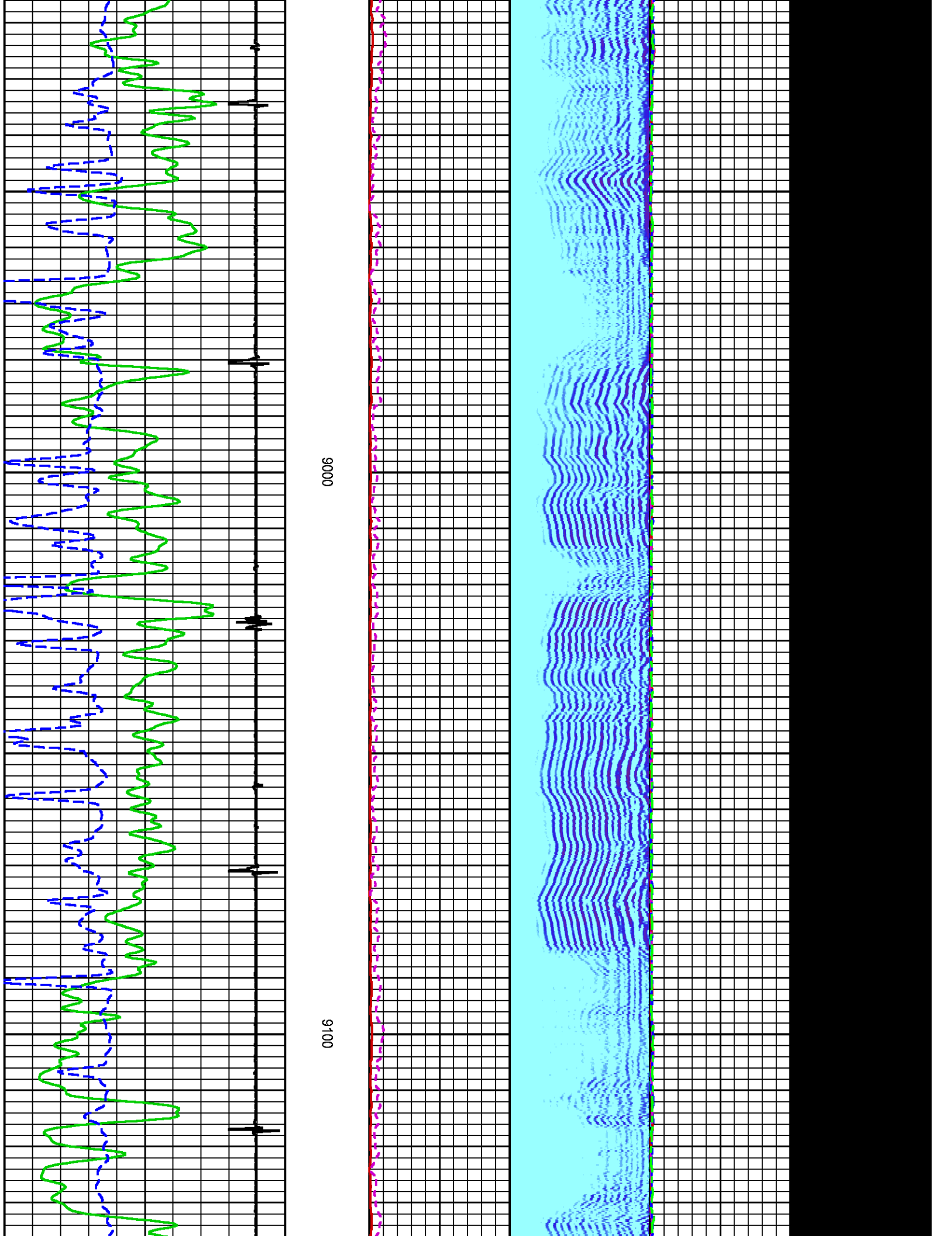


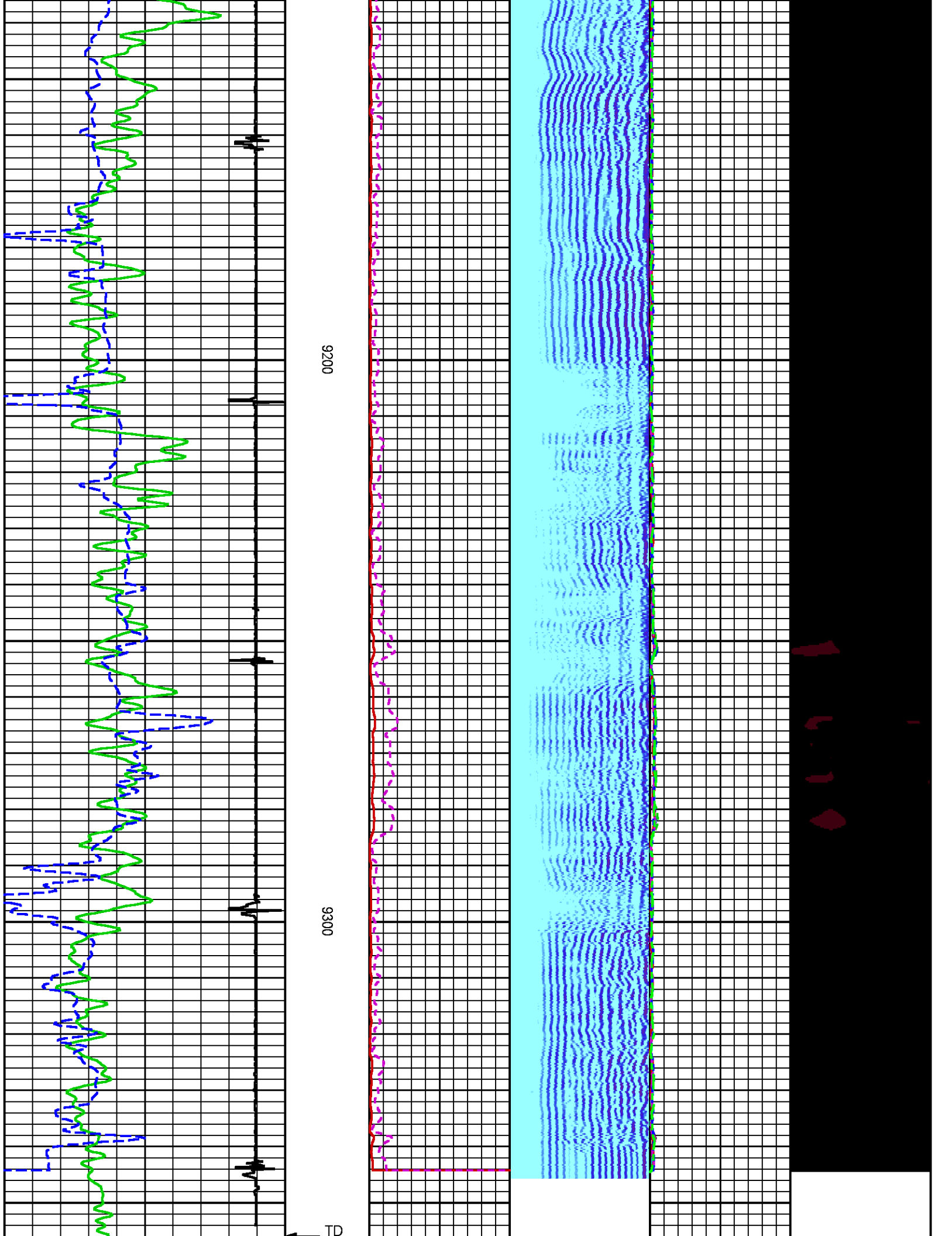
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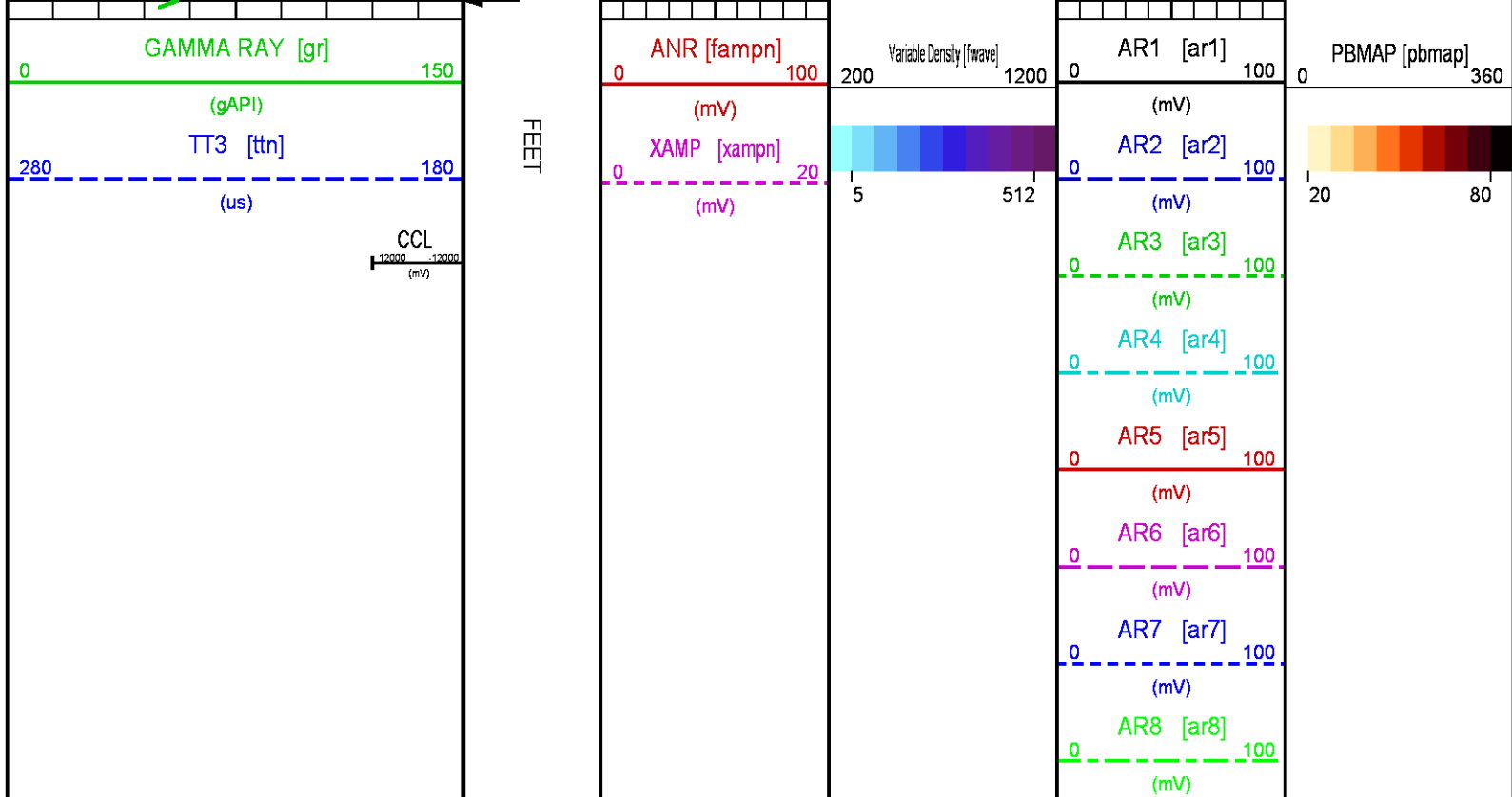
8600











SECONDARY PRESENTATION 0 PSI

ECLIPS 6.2wu1 PC-ECLIPS General Release Rel 6.2w Update 1 Fri Apr 25 10:54:53 Central Daylight Time 2014
Patches: 9

Plotted: Mon Sep 26 13:44:06 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\012g01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9049.250 ft BOTTOM DEPTH: 9343.750 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
TRAVEL TIME	FILTER ()	medium (1)		"	"

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0		TOP	BOTTOM

ANALOG RAL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgp1*)	185	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	185	us	"	"
	AMP WINDOW START (fgp3*)	185	us	"	"
	AMP WINDOW START (fgp4*)	185	us	"	"
	AMP WINDOW START (fgp5*)	185	us	"	"

	AMP WINDOW START (fgp6*)	185	us	"	"
	AMP WINDOW START (fgp7*)	185	us	"	"
	AMP WINDOW START (fgp8*)	185	us	"	"
	AMP WINDOW START (fgpn*)	185	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	160	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST BRK THRESHOLD (ttn*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (str1*)	-75	us	"	"
	TOOL DELAY (str2*)	-75	us	"	"
	TOOL DELAY (str3*)	-75	us	"	"
	TOOL DELAY (str4*)	-75	us	"	"
	TOOL DELAY (str5*)	-75	us	"	"
	TOOL DELAY (str6*)	-75	us	"	"
	TOOL DELAY (str7*)	-75	us	"	"
	TOOL DELAY (str8*)	-75	us	"	"
	TOOL DELAY (strn*)	-75	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	125	us	"	"
	NOISE WINDOW LENGTH	25	us	"	"

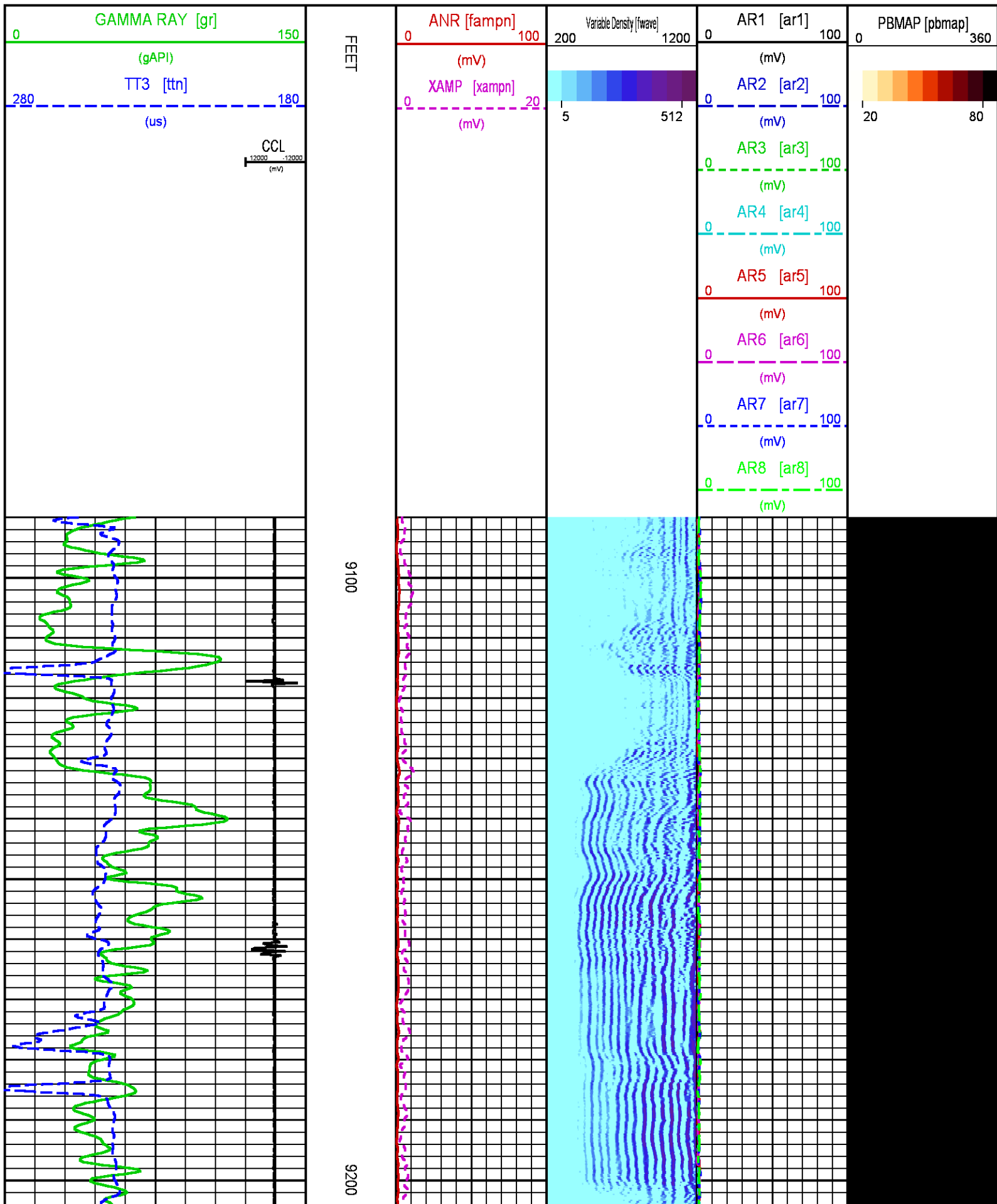
PERCENT BOND CEMENT MAP					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
RAL FREE PIPE AMPLITUDE	FREE AMP REC 1	80	mV	TOP	BOTTOM
	FREE AMP REC 2	80	mV	"	"
	FREE AMP REC 3	80	mV	"	"
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"
	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"
	FREE AMP REC 8	80	mV	"	"
RAL FULL BOND AMPLITUDE	FULL BOND AMP REC 1	2	mV	"	"
	FULL BOND AMP REC 2	2	mV	"	"
	FULL BOND AMP REC 3	2	mV	"	"
	FULL BOND AMP REC 4	2	mV	"	"
	FULL BOND AMP REC 5	2	mV	"	"
	FULL BOND AMP REC 6	2	mV	"	"
	FULL BOND AMP REC 7	2	mV	"	"
	FULL BOND AMP REC 8	2	mV	"	"

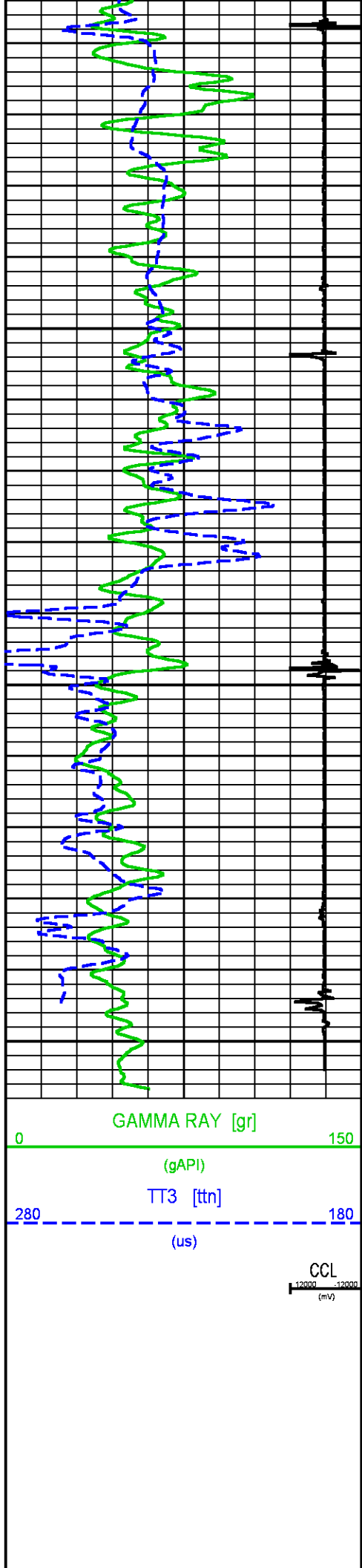
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R1
F1:AR2	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R2
F1:AR3	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R3
F1:AR4	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R4
F1:AR5	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R5
F1:AR6	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R6
F1:AR7	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R7
F1:AR8	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE T-R8
F1:CCL	Sep 19 10:44:20 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 19 10:44:20 2016	FAR WAVE FORM
F1:GR	Sep 19 10:44:20 2016	GAMMA RAY
F1:PBMAP	Sep 19 10:44:20 2016	PERCENT BOND CEMENT MAP
F1:TTN	Sep 19 10:44:20 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 19 10:44:20 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	14.00	AR5	14.00	CCL	5.75	XAMPN	14.00
AR2	14.00	AR6	14.00	FAMPN	14.00		
AR3	14.00	AR7	14.00	GR	1.75		
AR4	14.00	AR8	14.00	TTN	14.00		

Presentation	: BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\ral_all+01-SECONDARY-REPEAT-5.fvpdf [5"/100' Scale]
Plot Interval	: 9090 - 9358.5 Feet
Data File 1	: F1 : BHIG4VGZW1:C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\REPEAT.xtf

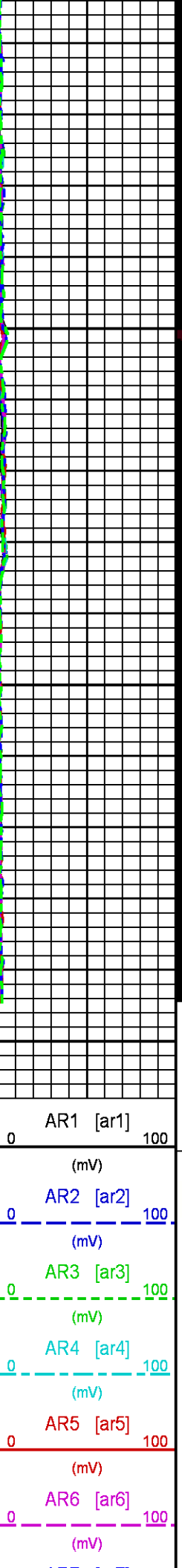
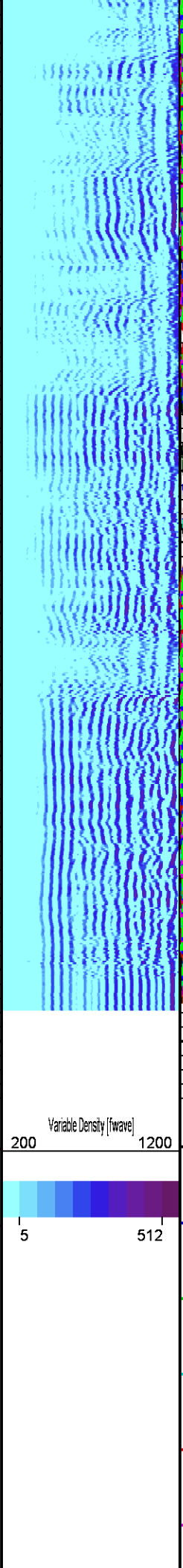
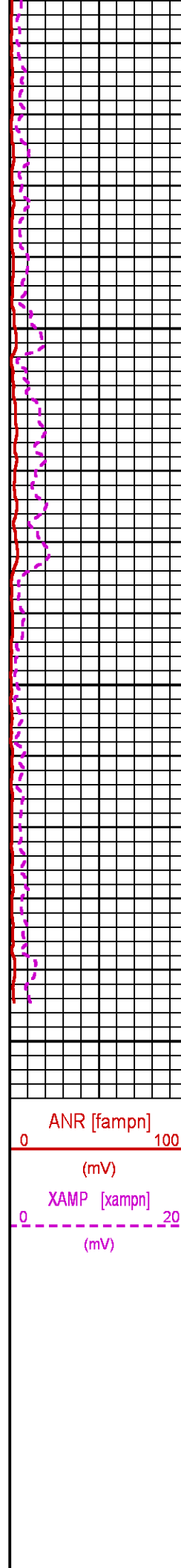
Created On : Sep 19 10:44:20 2016
Company : TEP ROCKY MOUNTAIN LLC
Well : YOUNBERG RU 422-7
Field : RULISON
File Interval : 9051.25 - 9359.75 Feet
OCT : n012g





9300

FEET



AR7 [ar7]
0 100
(mV)
AR8 [ar8]
0 100
(mV)

CALIBRATION / VERIFICATION SUMMARY

Source File: C:\Users\altshan\Documents\Jobs\Sept_16\New folder\TEP_YOUBERG_RU_422_7\nd12g1p1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA10124106

DATE/TIME PERFORMED: Mon Sep 19 10:04:32 2016

UNIT #: 3880TA HL6670

	NEAR (mV)			RADIAL (mV)			FAR (mV)				
TARGETS	100.00			100.00			150.00				
	NEAR	R1	R2	R3	R4	R5	R6	R7	R8	FAR	CAL
ZERO (mV)	-0.13	-0.02	-0.16	0.06	-0.05	-0.09	-0.08	-0.29	0.01	-0.05	-0.18
AMP FLUID (mV)	97	98	97	97	96	96	97	97	98	122	96
TT (us)	215	214	214	215	215	215	214	213	215	322	214
M FACTOR	1.02	1.02	1.02	1.04	1.04	1.04	1.03	1.02	1.02	1.23	1.04

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA10124106

DATE/TIME PERFORMED: Mon Sep 19 10:06:29 2016

DAYS SINCE CAL: 0

UNIT #: 3880TA HL6670

CABLE #: 6670ML 6670SL

	NEAR (mV)	R1 (mV)	R2 (mV)	R3 (mV)	R4 (mV)	R5 (mV)	R6 (mV)	R7 (mV)	R8 (mV)	FAR (mV)	CAL (mV)
ZERO	-0.12	-0.21	-0.11	-0.06	0.00	-0.11	-0.08	0.14	-0.28	-0.15	-0.03
AMP AIR	100.10	100.32	100.00	100.56	100.38	100.46	100.28	99.63	100.51	151.13	100.30
	SHOP			SHOP			WIRELINE				
	M FACTOR			A FACTOR			FACTOR				
	1.04			0.00			1.00				

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA11871507

DATE/TIME PERFORMED: Fri Sep 02 09:17:59 2016

UNIT #: 3880TA HL6670

CALB JIG #: 4702NKWA-612

	BACKGROUND (cts)	CALBTR ON (cts)	GR DIFF (cts/As)	MULT	BACKGROUND (gAPI)	CALBTR ON (gAPI)	CALBTR (gAPI)
GR	49.60	195.60	146.0	1.027	50.96	200.96	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA11871507

DATE/TIME PERFORMED: Fri Sep 02 09:19:17 2016

UNIT #: 3880TA HL6670

VERI JIG #: 4702NKWA-612

	BACKGROUND (cts)	CALBTR ON (cts)	MULT	BACKGROUND (gAPI)	CALBTR ON (gAPI)	DIFF. (gAPI)
GR	50.49	193.29	1.027	51.87	198.58	146.71
						140.00 140.00

INSTRUMENT CONFIGURATION

CABLEHEAD

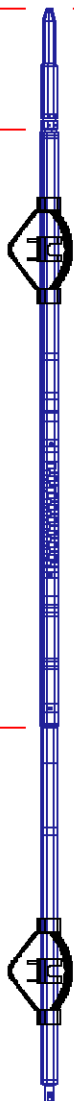
Diameter : 2.75"
Length : 2.25"
Weight : 10 lbs
Series : CABL234

RADIAL BOND TOOL

Diameter : 2.75"
Length : 11.17'
Weight : 126 lbs
Series : 1426XA
Mnemonic : RAL
Measure Point: 4.21': NEAR RCVR
Measure Point: 3.25': FAR RCVR

RAL GR/TEMP/CCL/CHV DETECTOR

Diameter : 2.75"
Length : 6.96'
Weight : 85 lbs
Series : 1355XA
Mnemonic : RAL
Measure Point: 5.79': CCL
Measure Point: 1.67': GR
Measure Point: 0.17': TEMP



20.38'

NEAR RCVR 11.17'



FAR RCVR 10.21'

CCL 5.79'

GR 1.67'

TEMP 0.17'

TOTAL LENGTH: 20.38'
TOTAL WEIGHT: 235 lbs
MAX DIAMETER: 0'4.00"

 BAKER HUGHES 	COMPANY <u>TEP ROCKY MOUNTAIN LLC</u> WELL <u>YOUBERG RU 422-7</u> FIELD <u>RULISON</u> COUNTY <u>GARFIELD</u> STATE <u>COLORADO</u>	FILE NO: _____ API NO: <u>05045232310000</u>	
	LOCATION: SHL: 2012' FNL & 1892' FWL BHL: 2252' FNL & 1754' FWL SEC <u>7</u> TWP <u>7S</u> RGE <u>93W</u>	ELEVATIONS: KB 7363 FT DF GL 7339 FT	
	DATE <u>19-SEP-2016</u>		