



FILE NO: COMPANY TEP ROCKY MOUNTAIN LLC

WELL YOUBERG RU 412-7

FIELD RULISON

API NO: 0504523230000 COUNTY GARFIELD STATE COLORADO

Ver. 4.06 LOCATION: SHL: 2007' FNL & 1894' FWL BHL: 2077' FNL & 521' FWL

SEC 7 TWP 7S RGE 93W OTHER SERVICES RPM

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

DATE	28-SEP-2016	
RUN	TRIP	1
SERVICE ORDER	US109463	
DEPTH DRILLER	9625 FT	
DEPTH LOGGER	9582 FT	
BOTTOM LOGGED INTERVAL	9580 FT	
TOP LOGGED INTERVAL	24 FT	
TIME STARTED	8:00	
TIME FINISHED	11:00	
OPERATOR RIG TIME	3 HRS	
TYPE OF FLUID IN HOLE	WATER	
FLUID DENSITY	NA	
FLUID SALINITY	NA	
FLUID LEVEL	54 FT	
LOGGED CEMENT TOP	SEE LOG	
WELLHEAD PRESSURE	0 PSI	
MAXIMUM HOLE DEVIATION	NA	
NOMINAL LOGGING SPEED	100 F/MIN	
MAX. RECORDED TEMP.	245 DEGF	
REFERENCE LOG	NA	
REFERENCE LOG DATE	NA	
EQUIP. NO.	LOCATION	
RECORDED BY		
WITNESSED BY		
	HL-6670	WOODWARD
	M.MENTZER	
	MR KYLE KOHL	

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
13.5 IN	0 FT	1124 FT
8.75 IN	1124 FT	9625 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	-	-	0 FT	1124 FT
4.5 IN	11.6 LB/F		0 FT	9625 FT

REMARKS

RUN 1 TRIP 1: *2 OPERATIONS IN WELL*
OPERATION 1: RAL/GR/CCL RUN CENTRALIZED

WELL LOGGED WITH 0 PSI ON WELLHEAD

BHT: 245 DEGF

SHORT JOINT: 5930' - 5952'

CREW: D.HUTCHISON, K.NUTTER, D.BARNARD

EQUIPMENT DATA			
RUN	TRIP	TOOL	SERIES NO.
		SERIAL NO.	POSITION

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	RAL	1426 XA	10417452	CENTRALIZED
1	1	GR/CCL	1355 XA	12670181	CENTRALIZED

MAIN LOG 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 9

Plotted: Wed Sep 28 12:39:29 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/TEP_YOUBERG_RU_412-7/n012g02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 1.750 ft BOTTOM DEPTH: 9576.750 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*)	179	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 28 09:03:11 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 28 09:03:11 2016	FAR WAVE FORM
F1:GR	Sep 28 09:03:11 2016	GAMMA RAY
F1:TTN	Sep 28 09:03:11 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

CURVE MEASURE POINT OFFSET

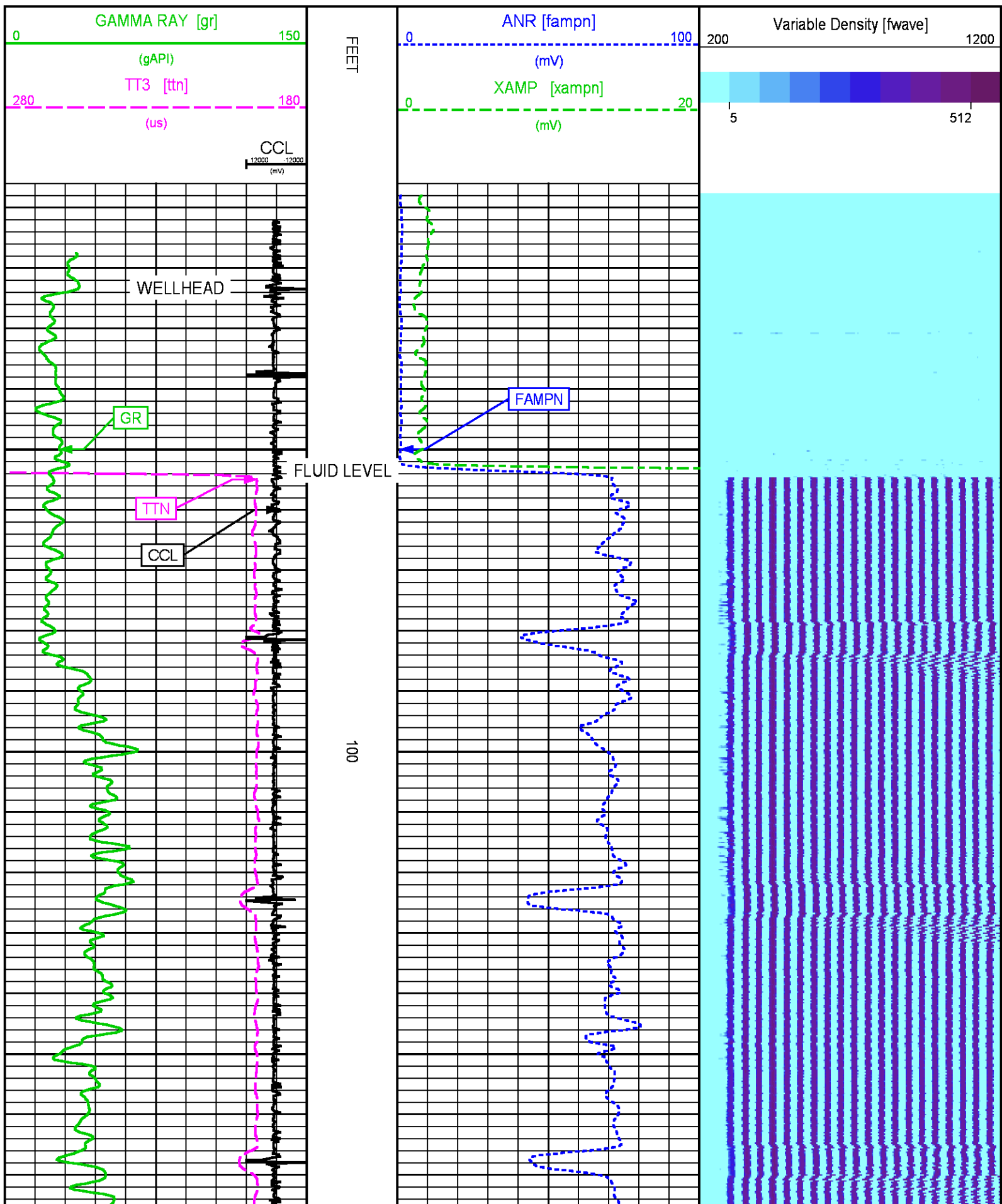
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	11.25		
FAMPN	11.25	TTN	11.25				

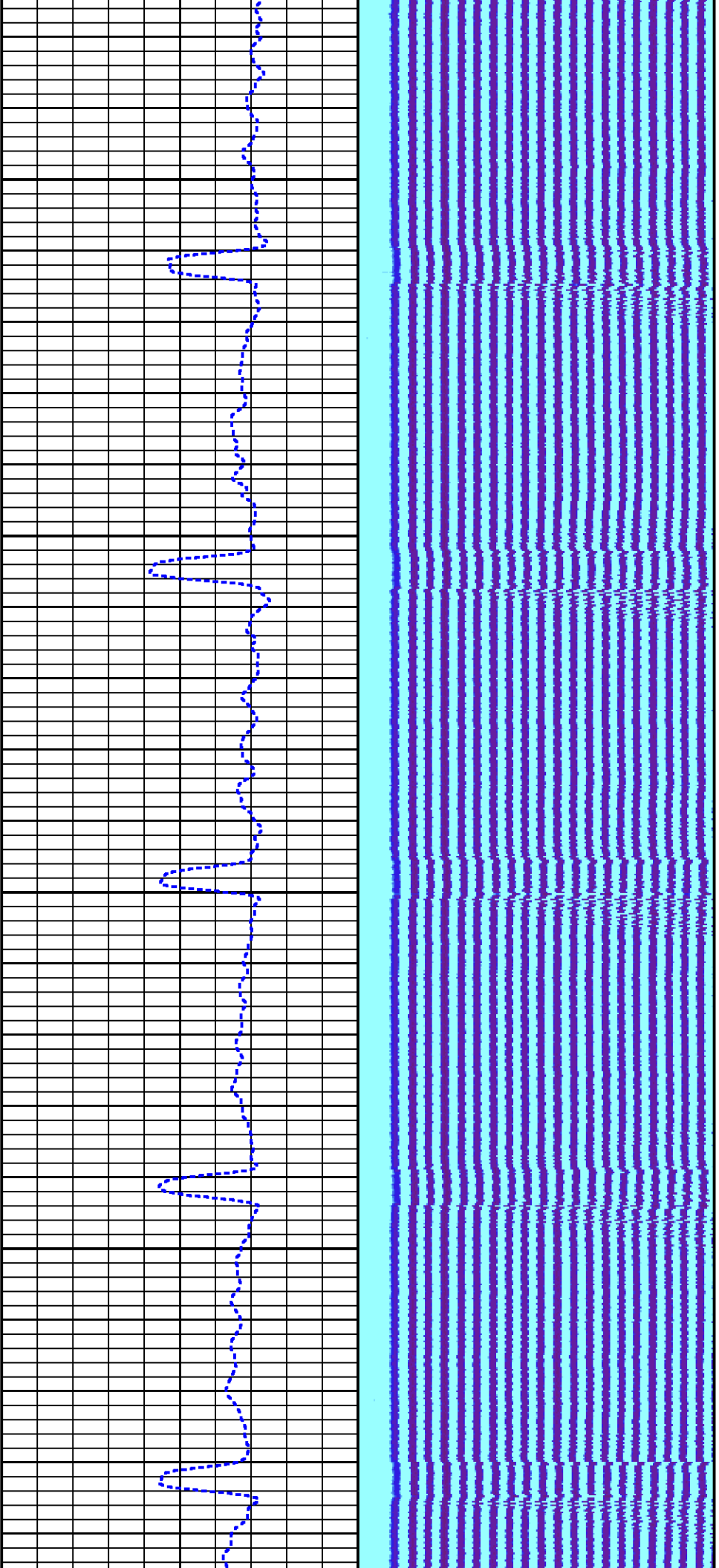
Presentation : cpu100:/dat1a/TEP_YOUBERG_RU_412-7/ral_cbl+01-MAIN-412RAL_MN-5.fvpdf [5"/100' Scale]

Plot Interval : 7.75 - 9591.5 Feet

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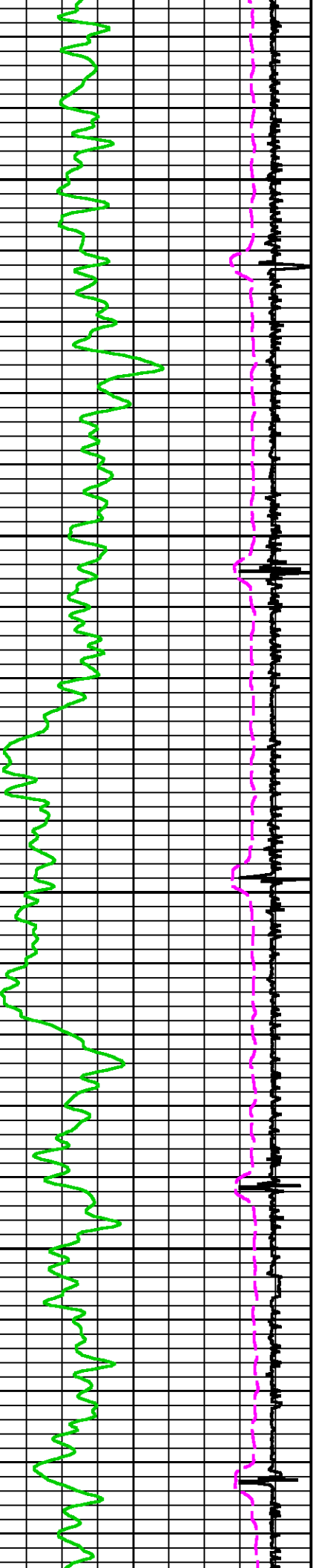
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Created On : Sep 28 09:03:11 2016
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Well : YOUNBERG RU 412-7
Field : RULISON
File Interval : 6.75 - 9593 Feet
OCT : n012g

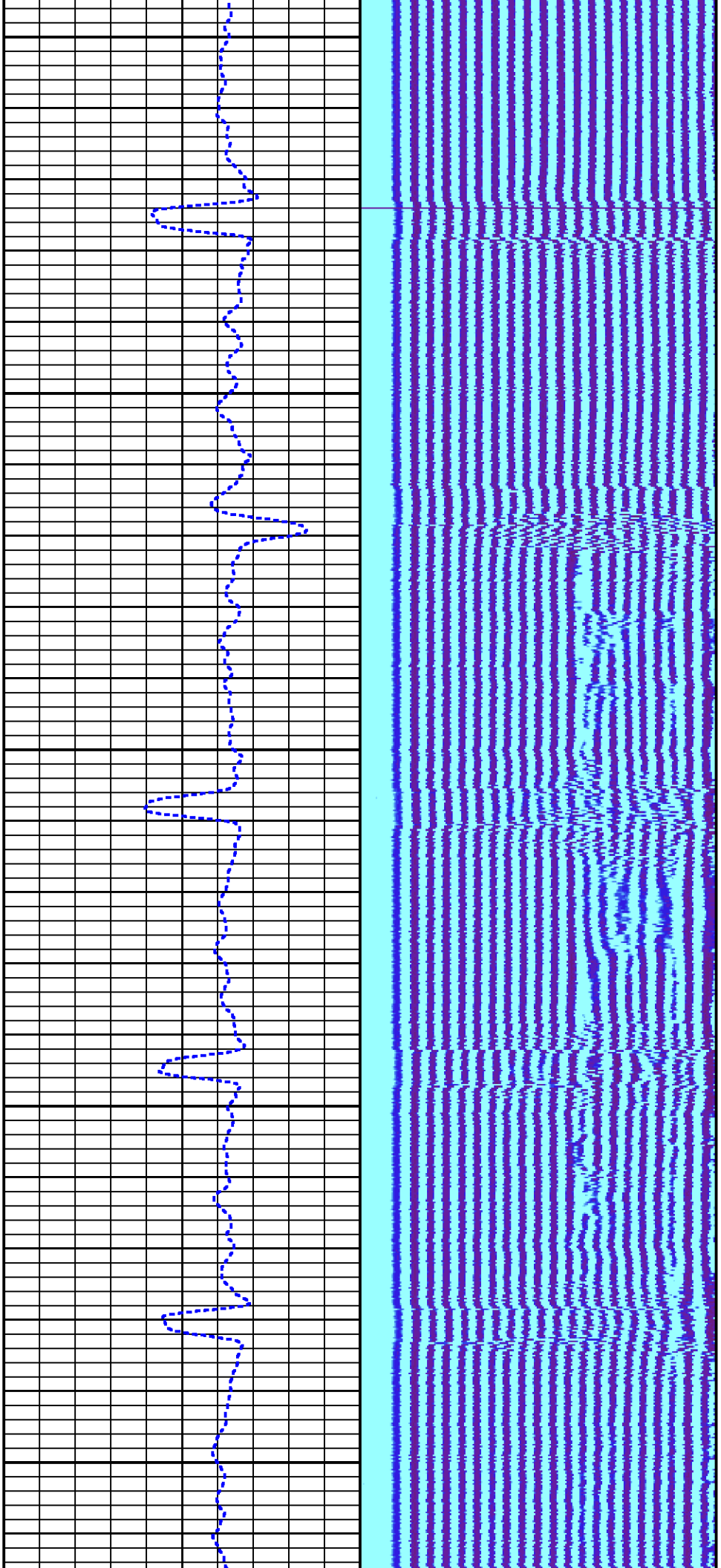




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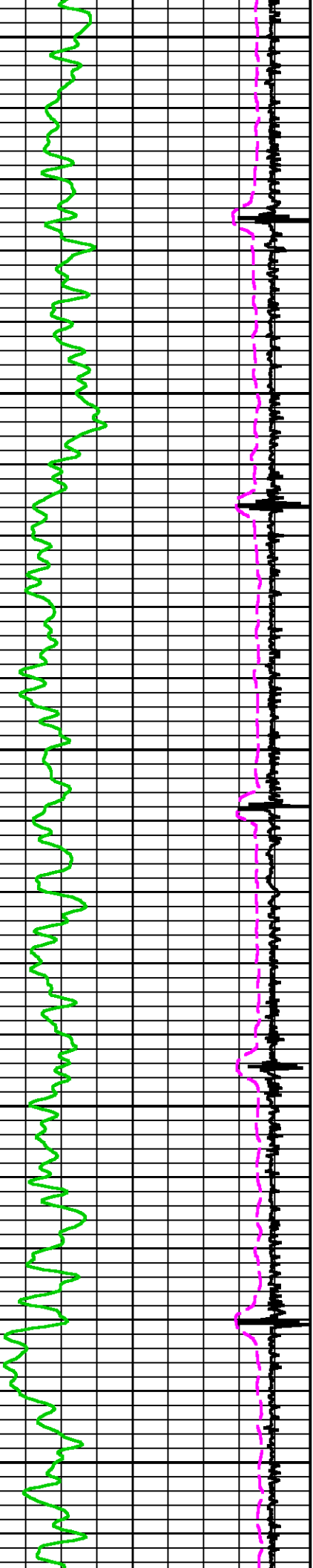


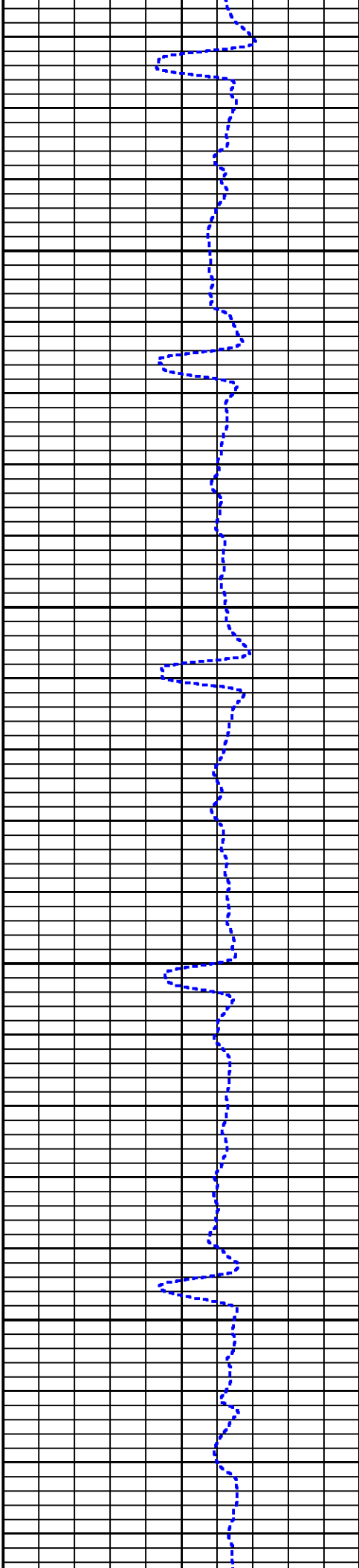
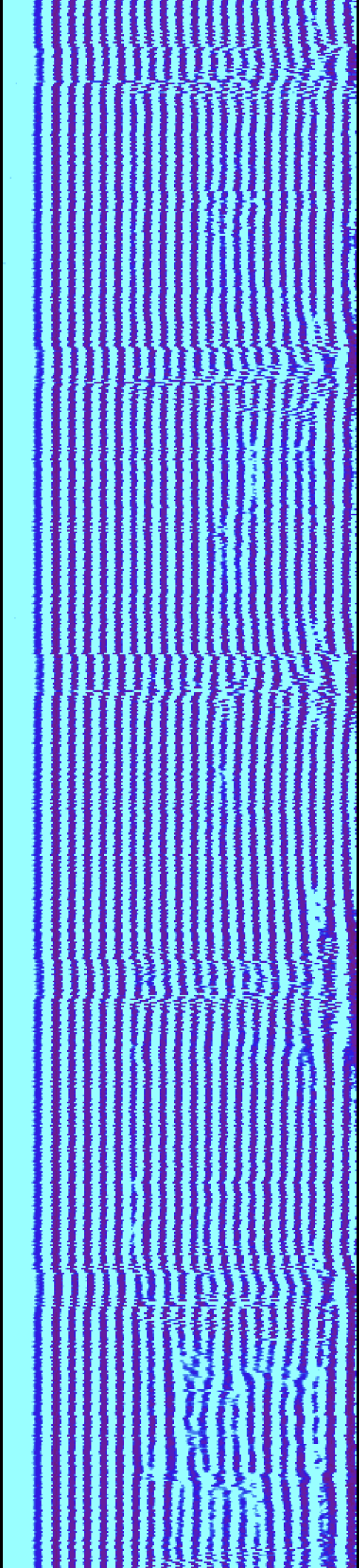


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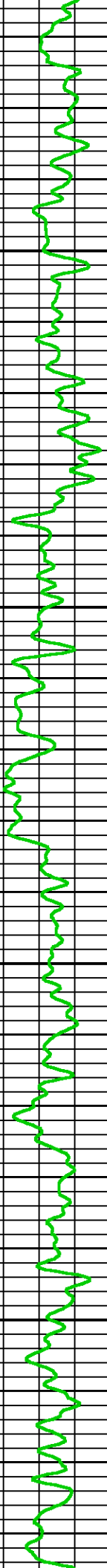
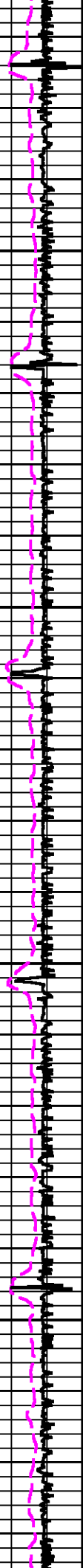
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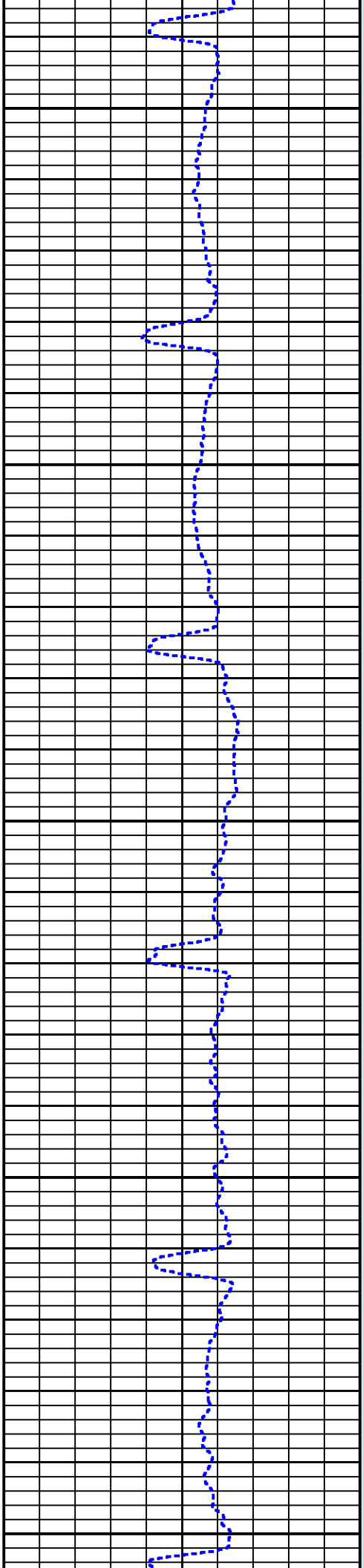
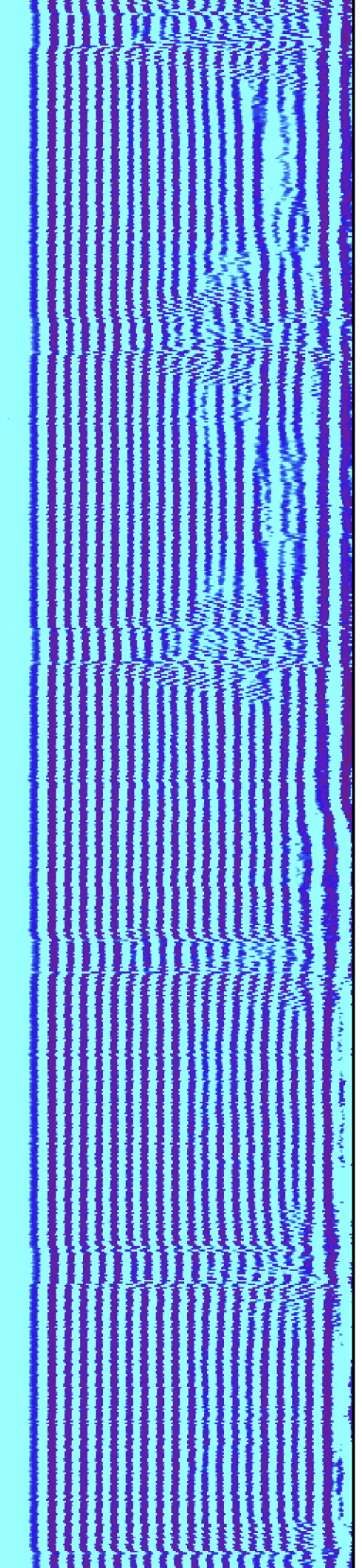




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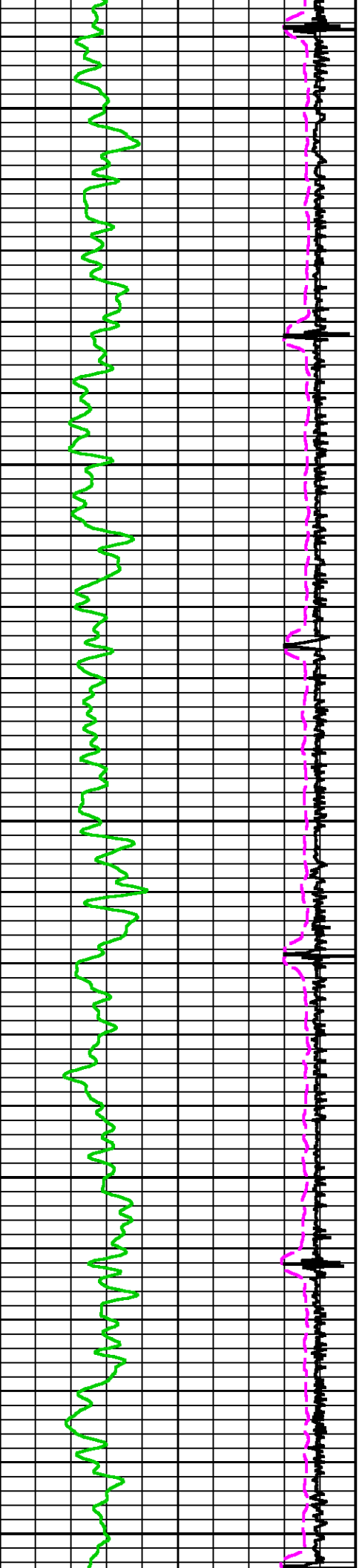
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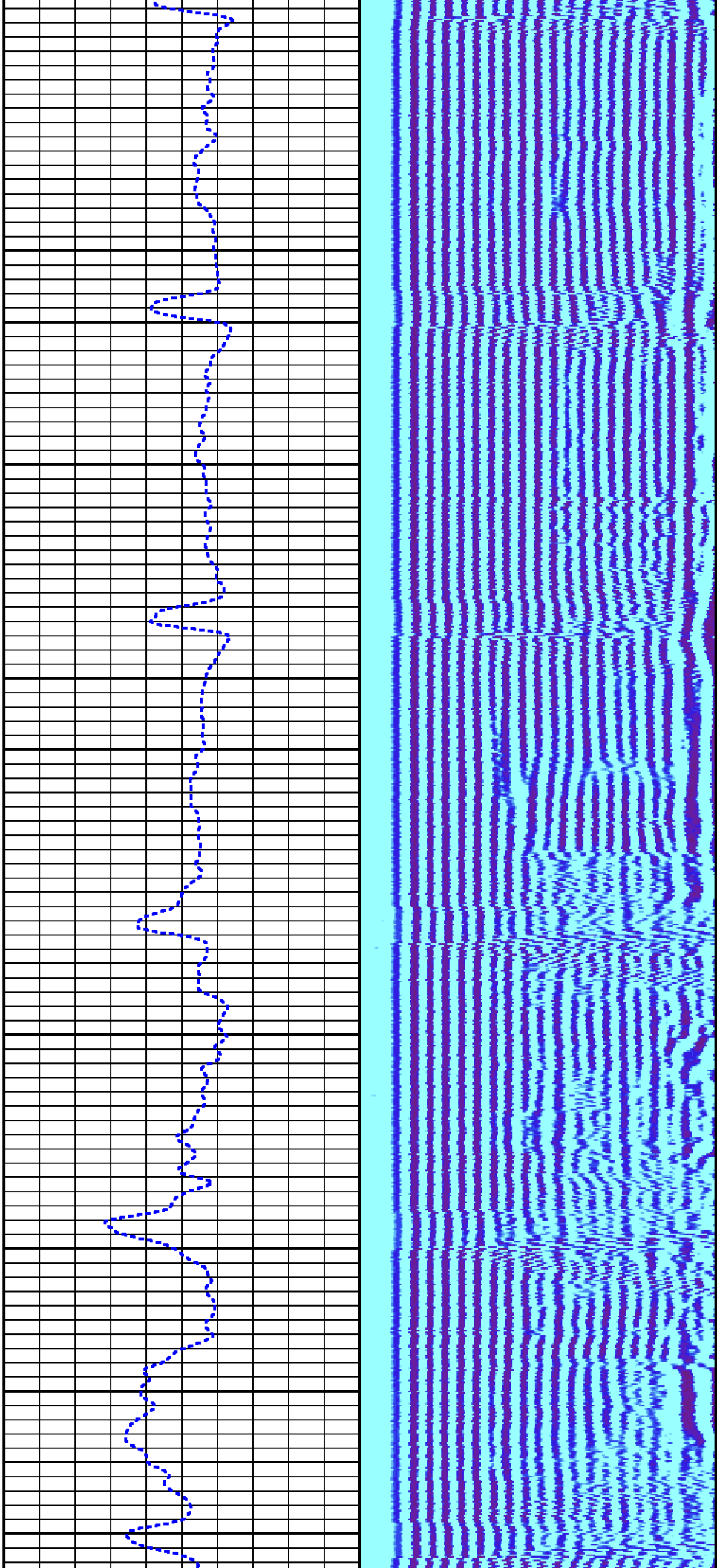




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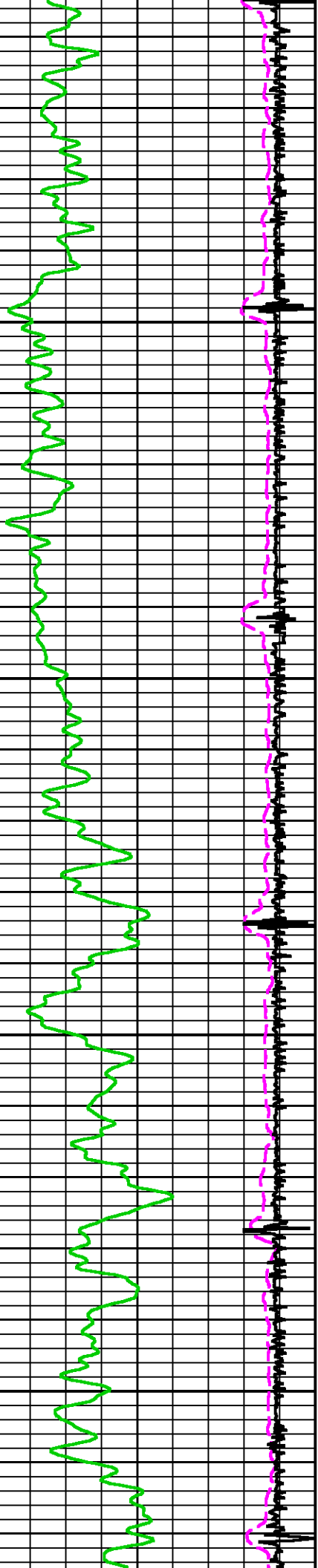
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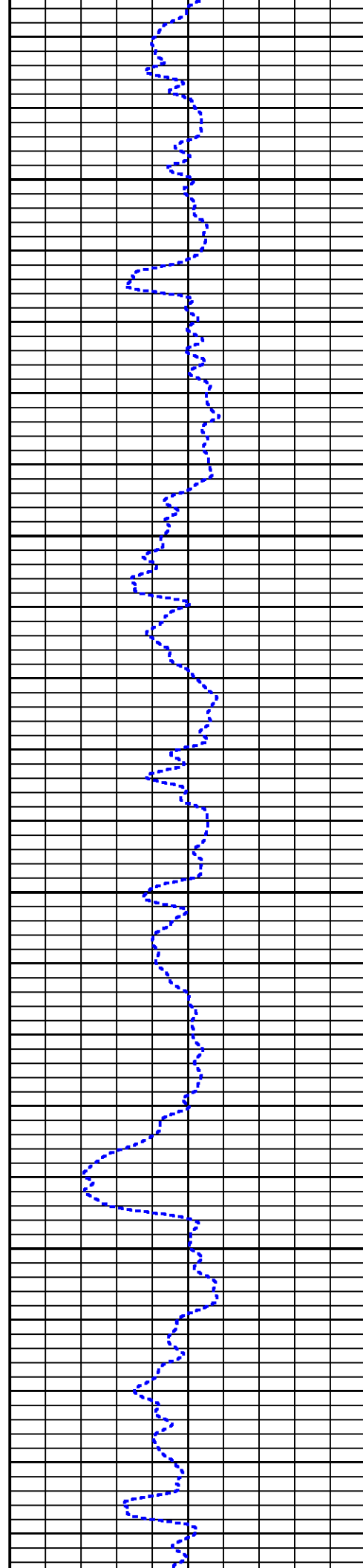
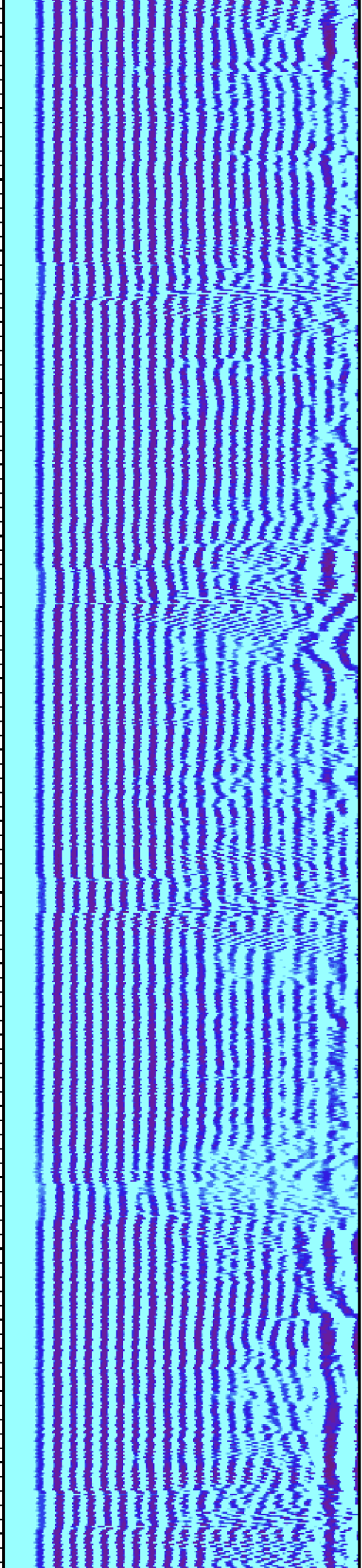




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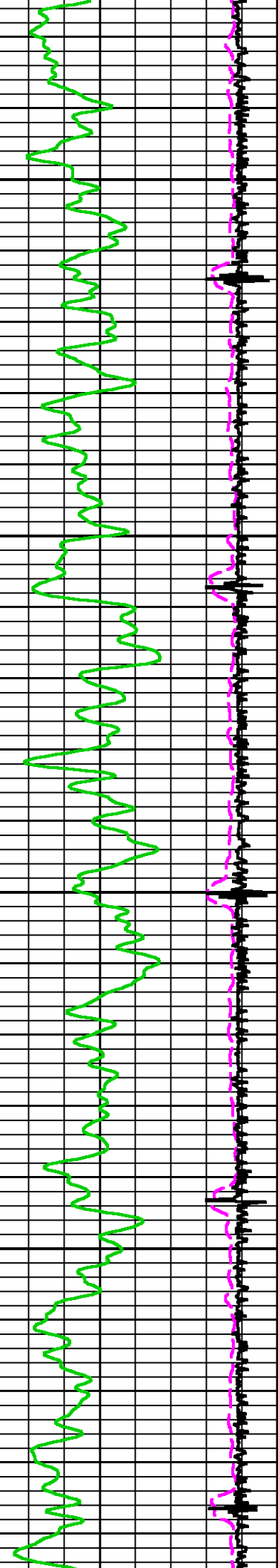
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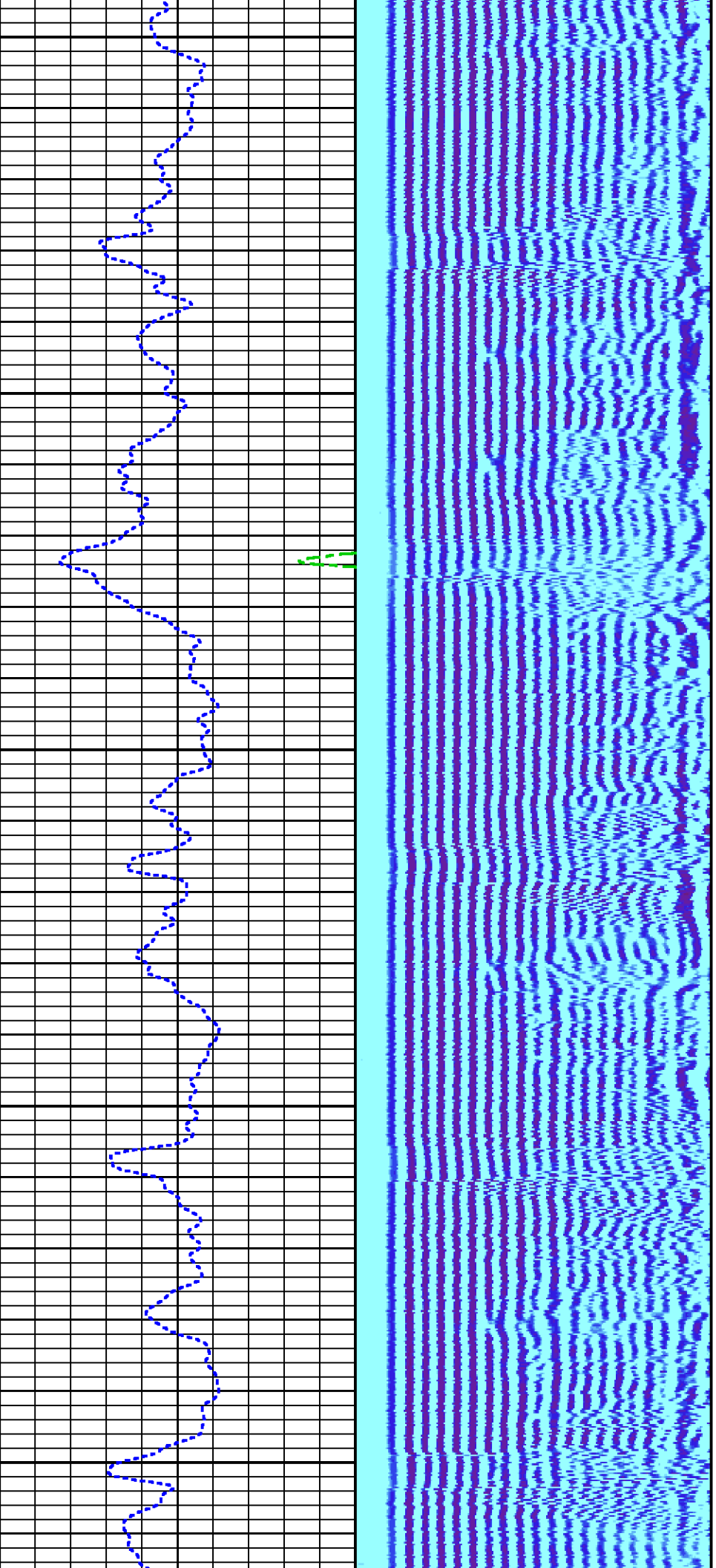




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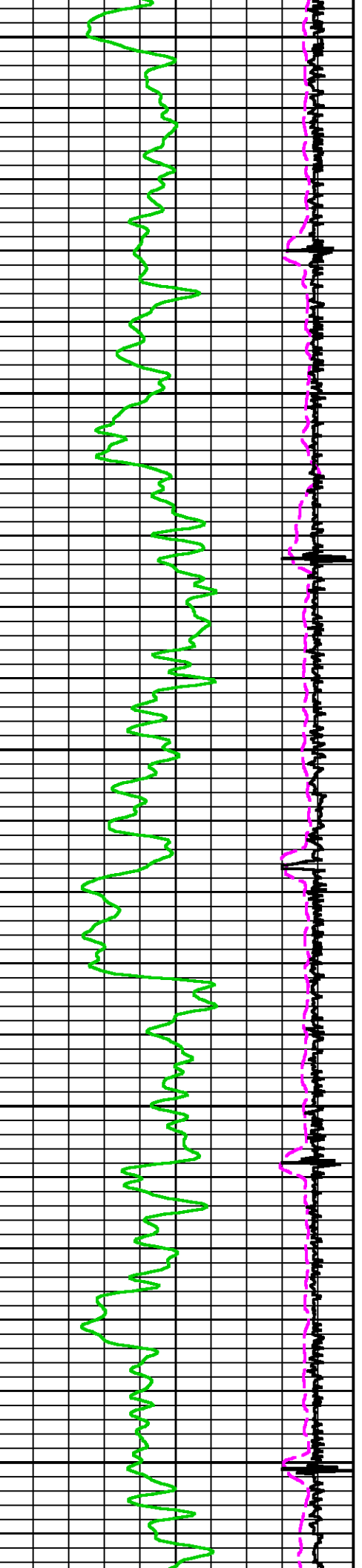


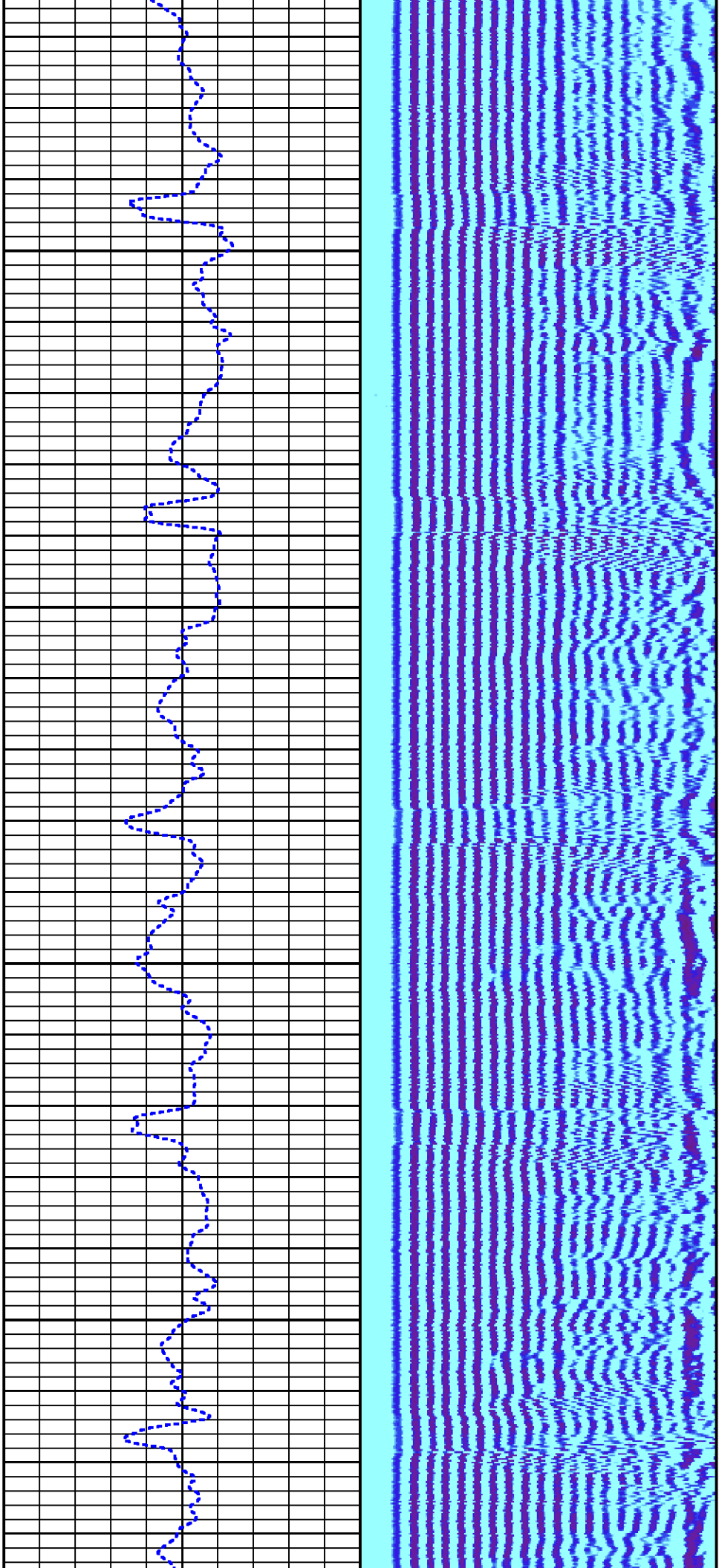


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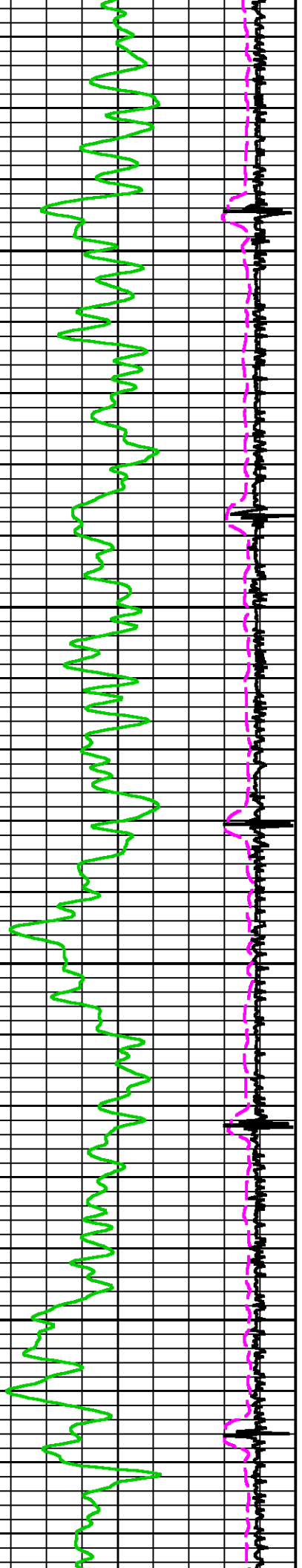
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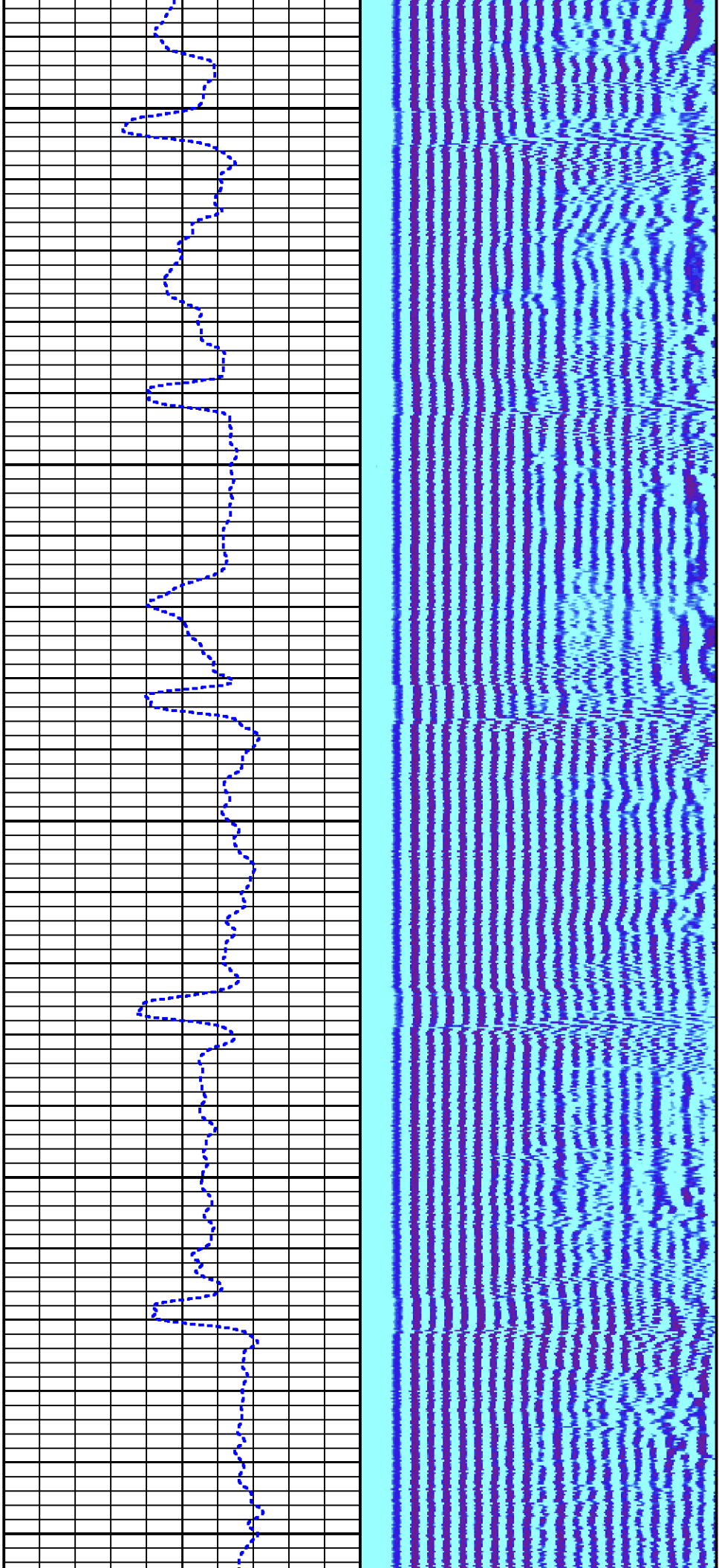




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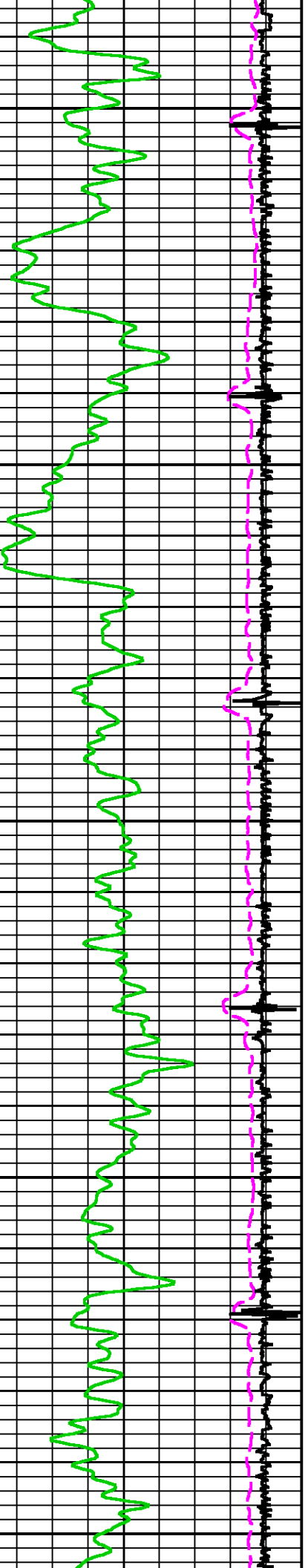
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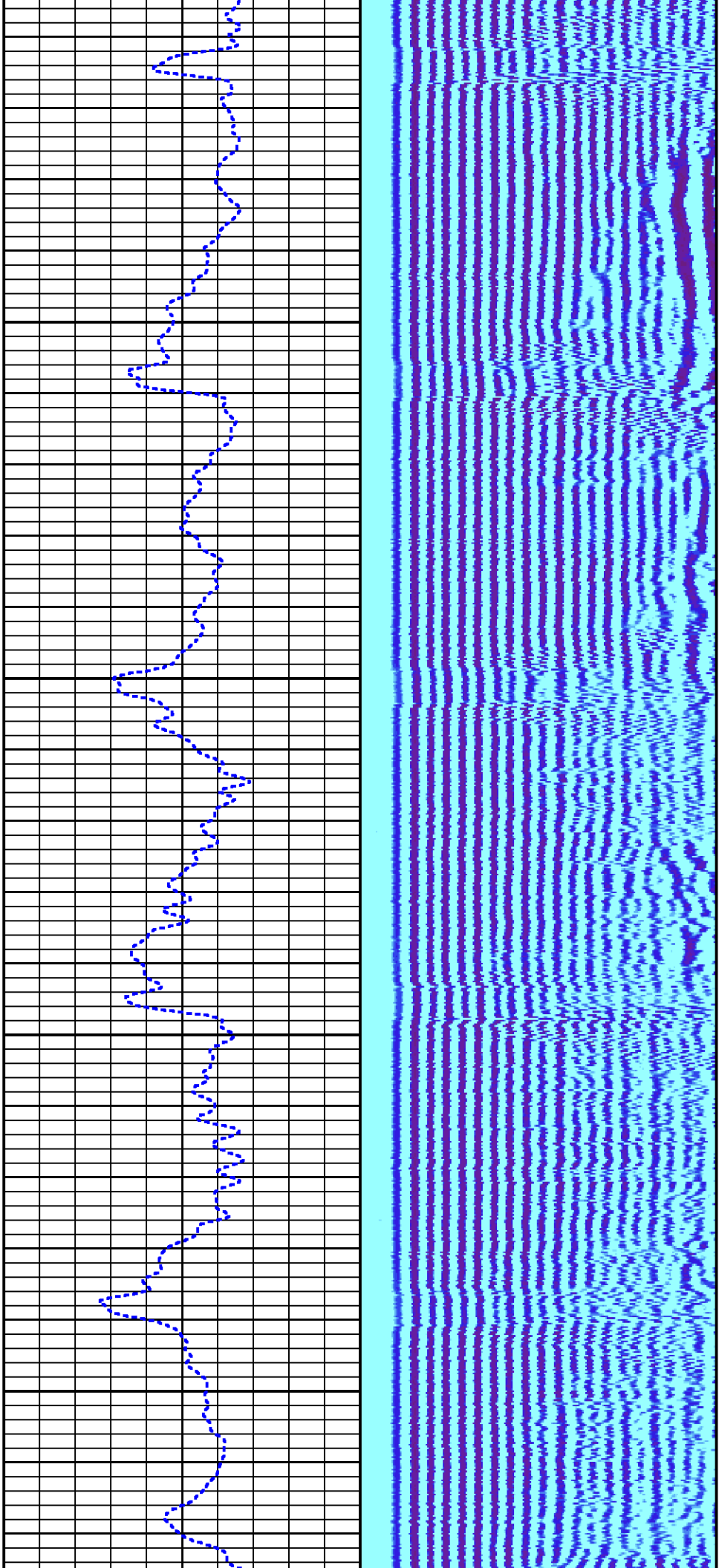




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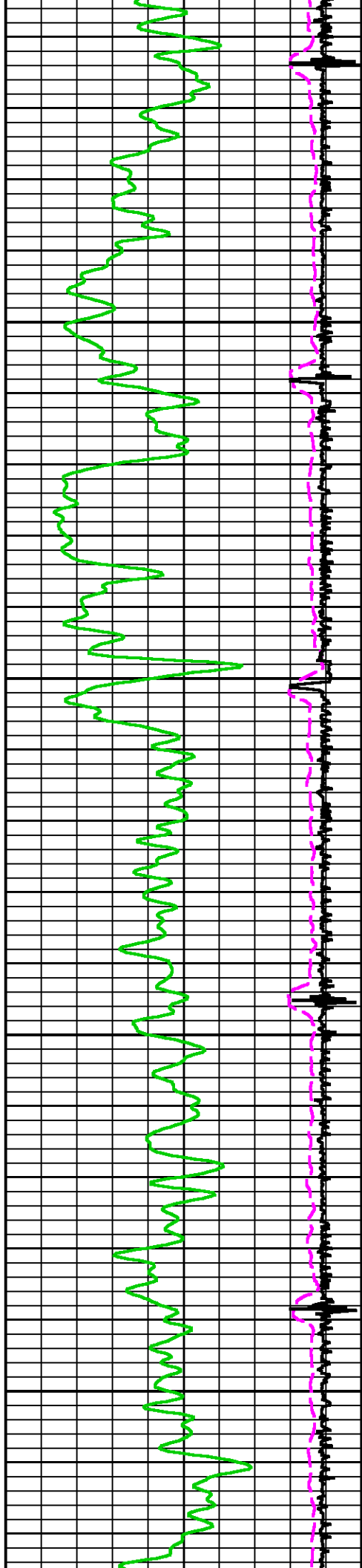
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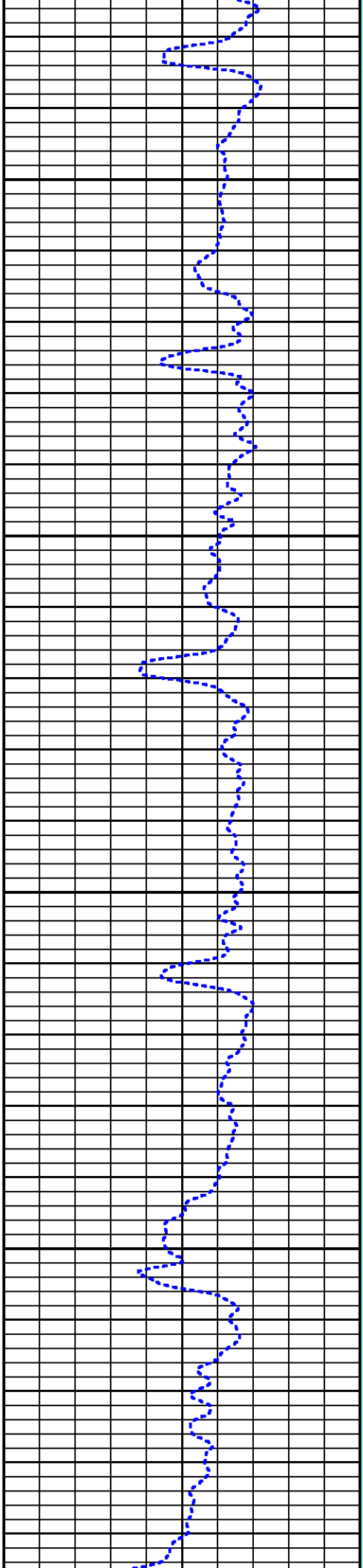
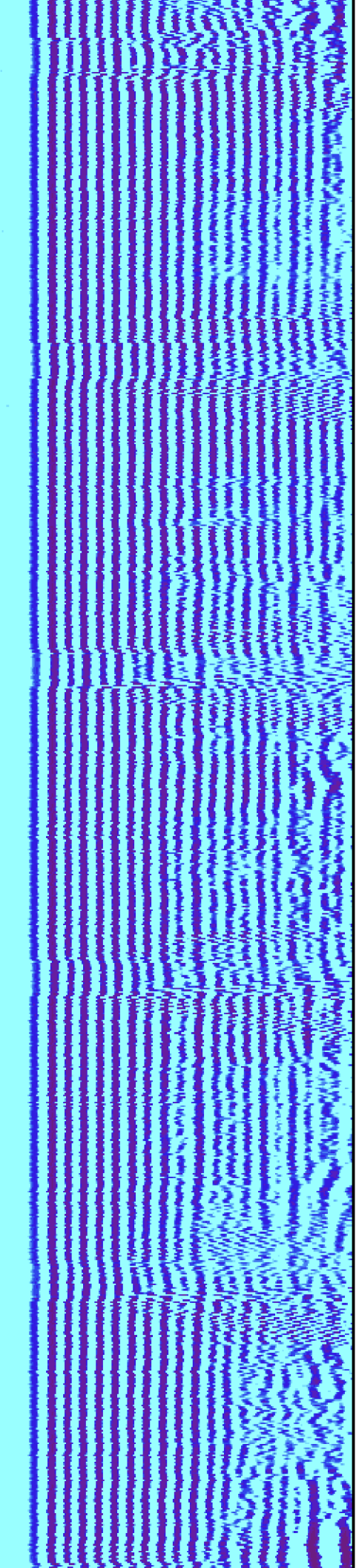




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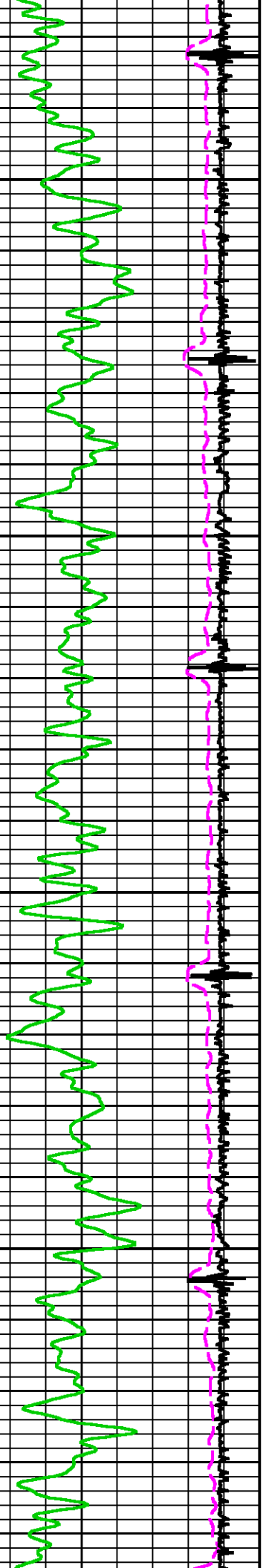
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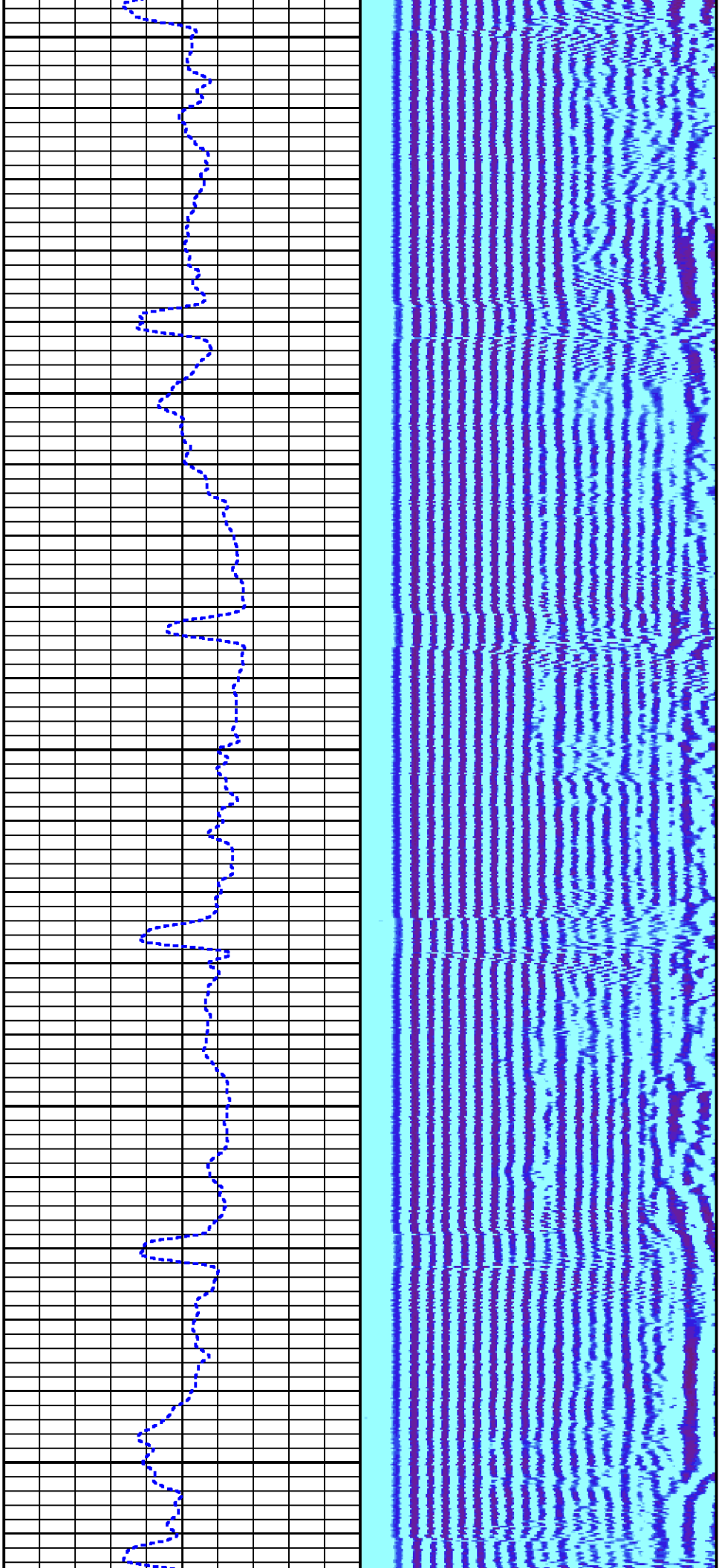




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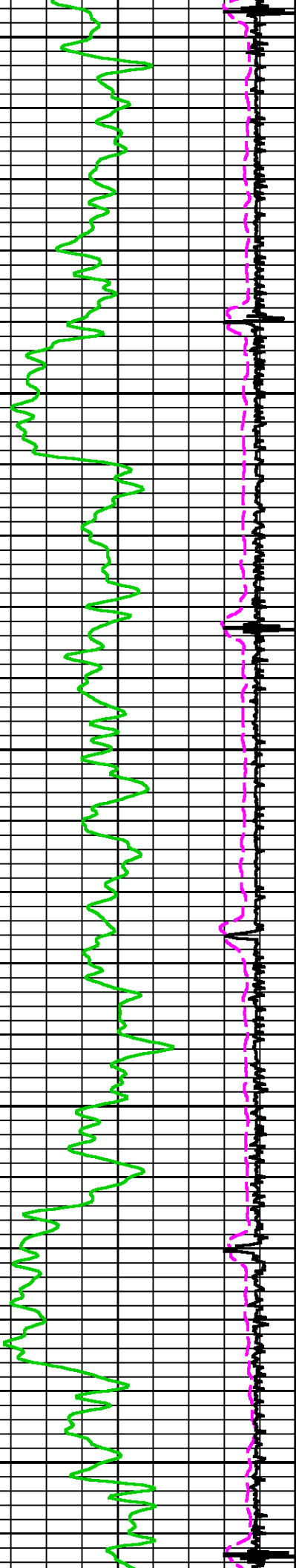


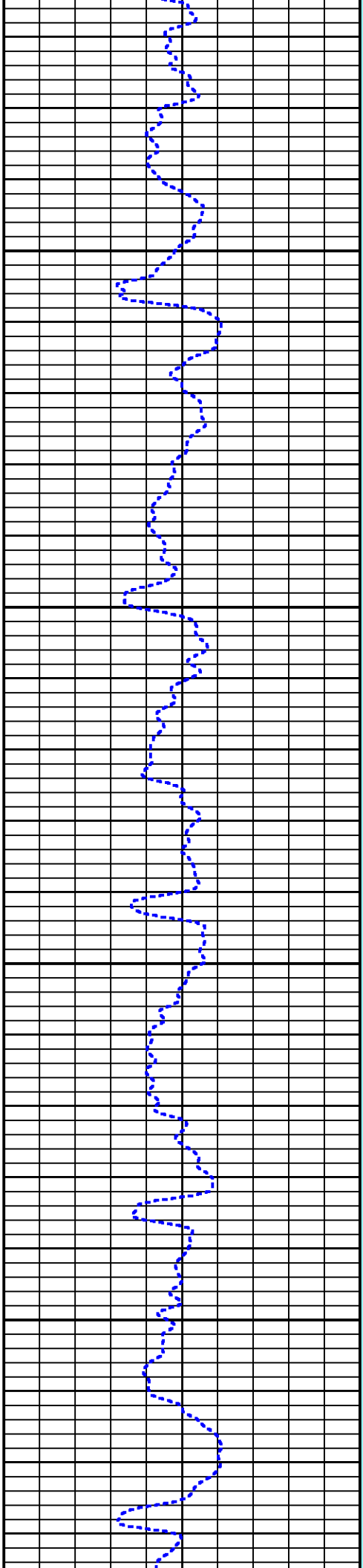
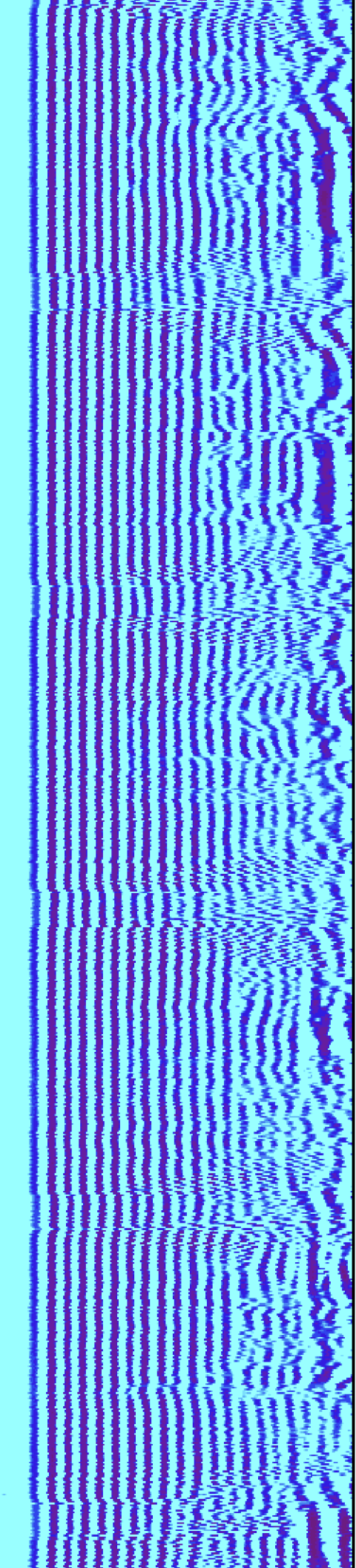


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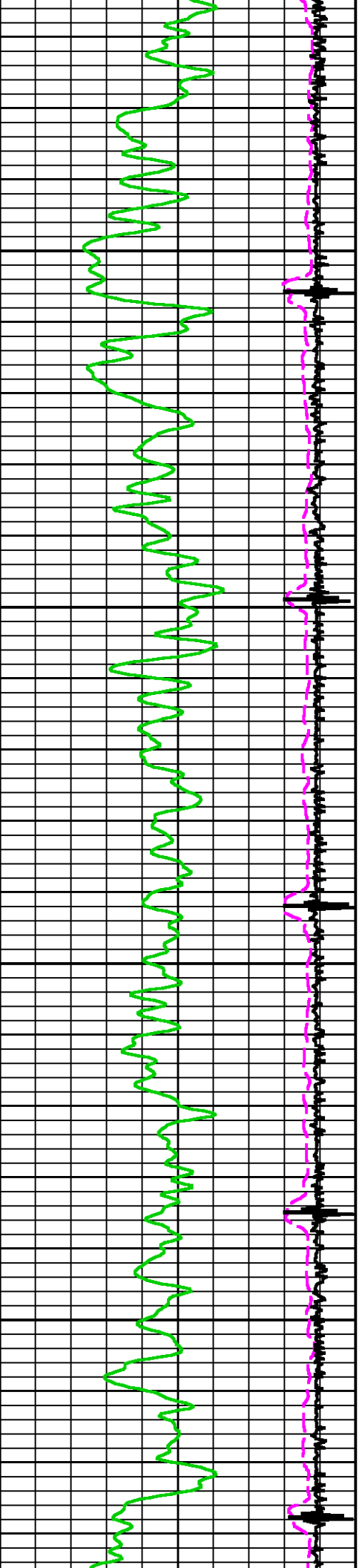
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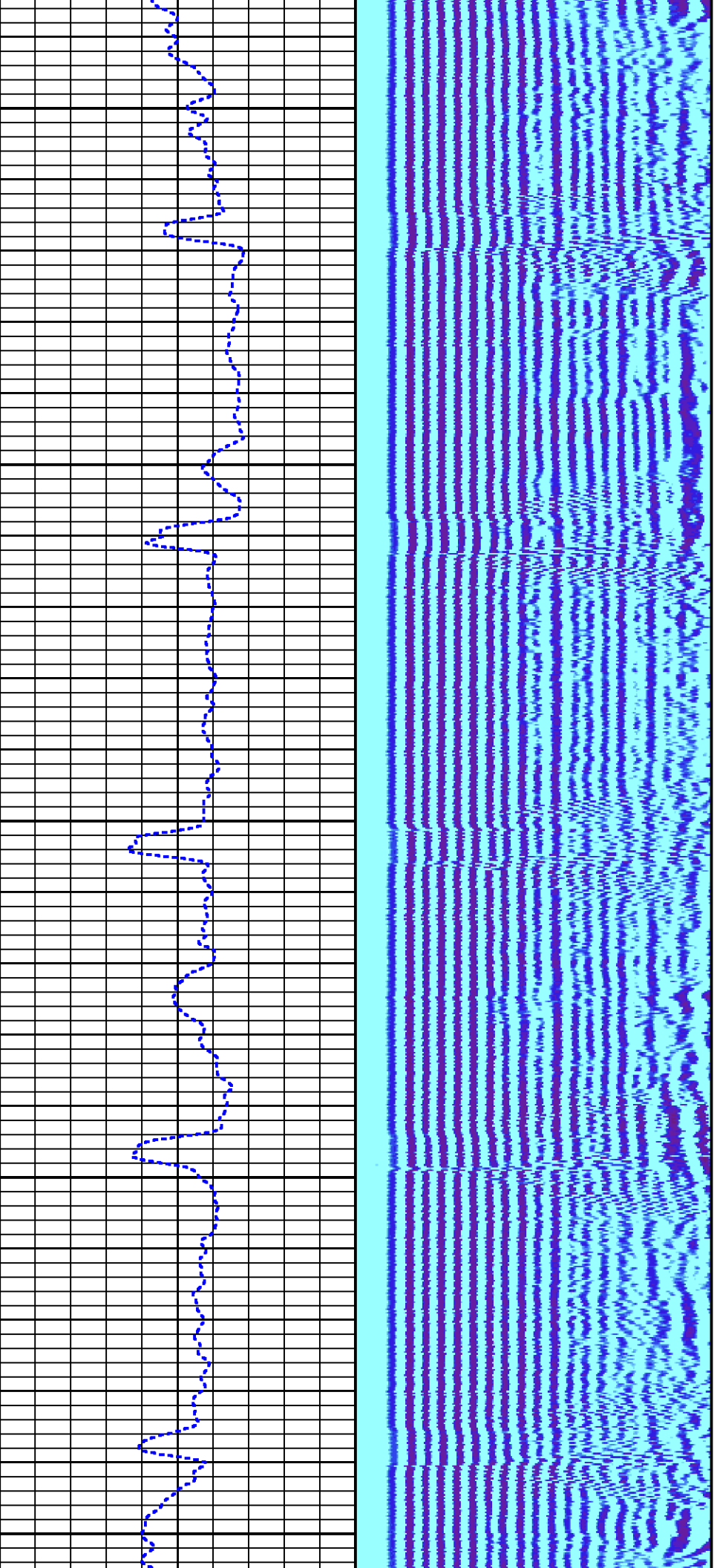




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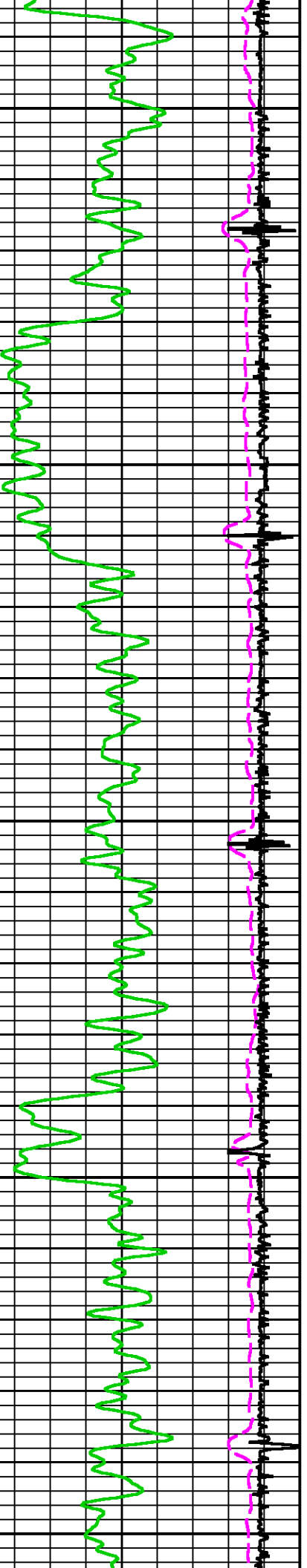
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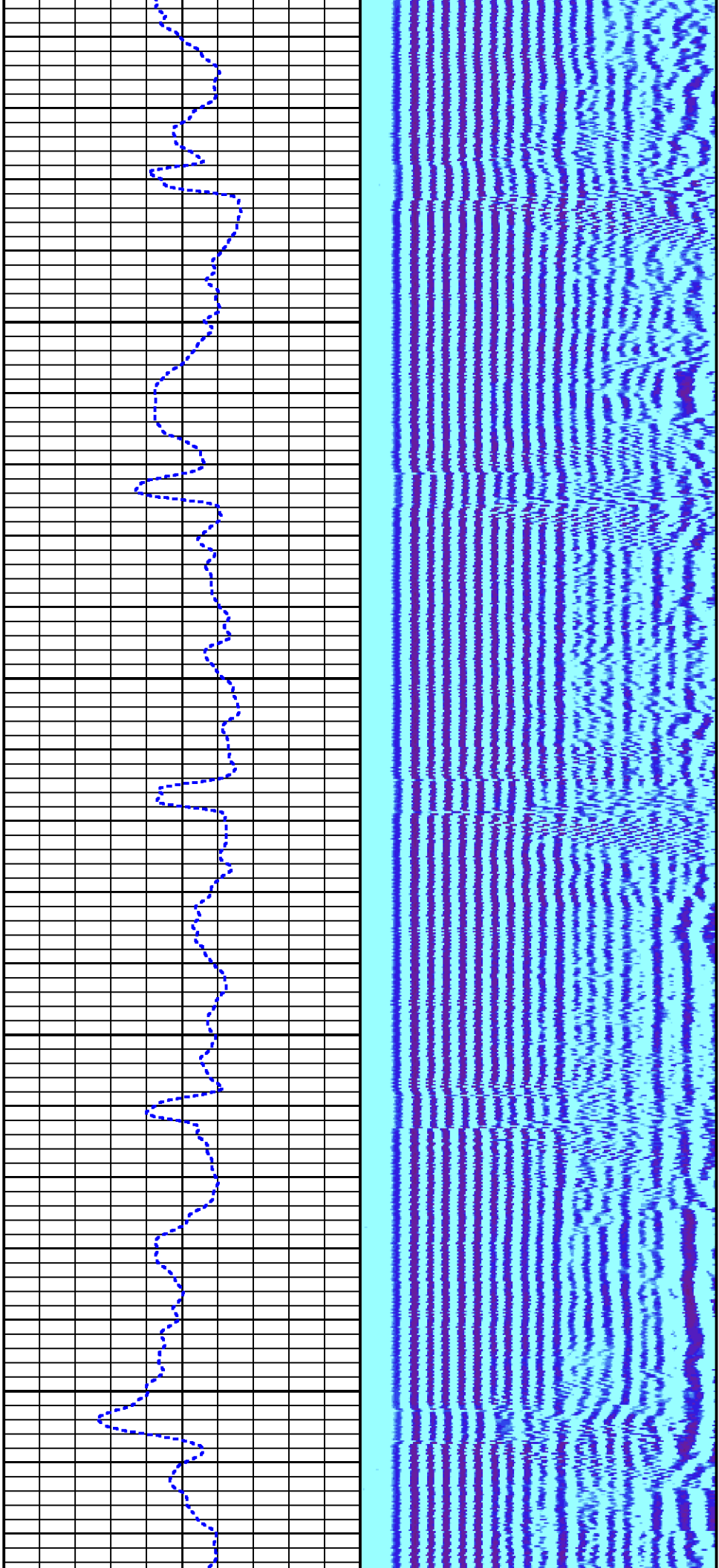




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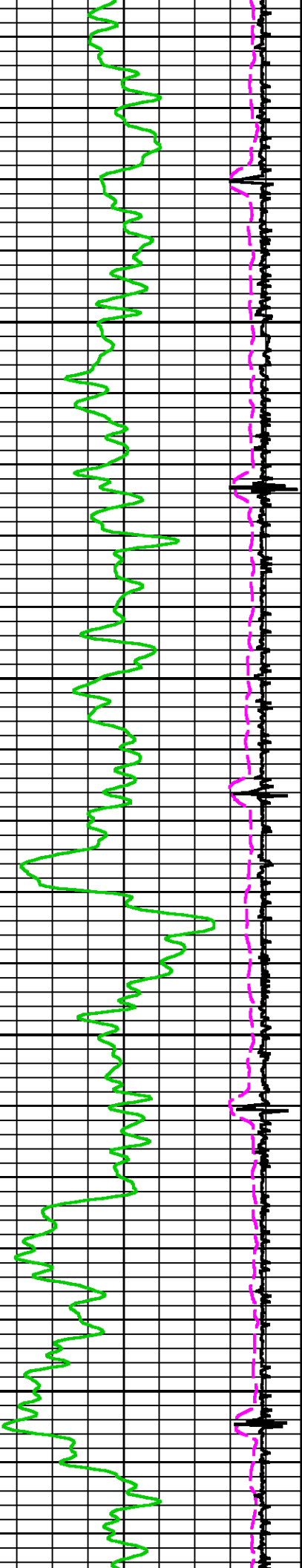
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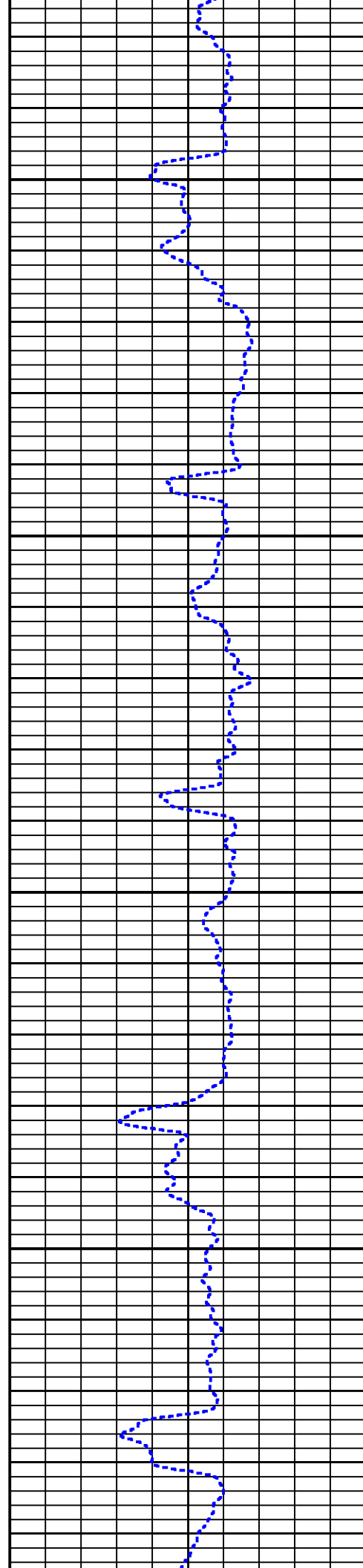
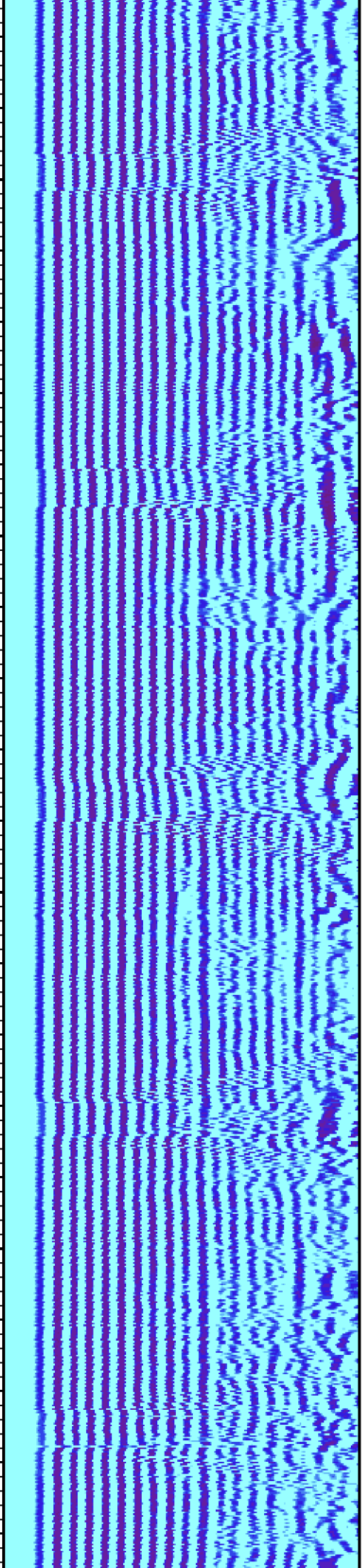




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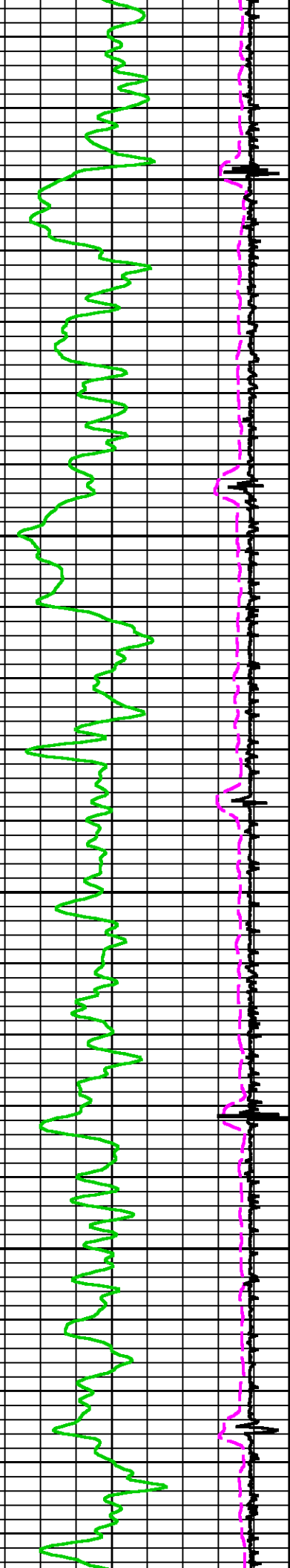
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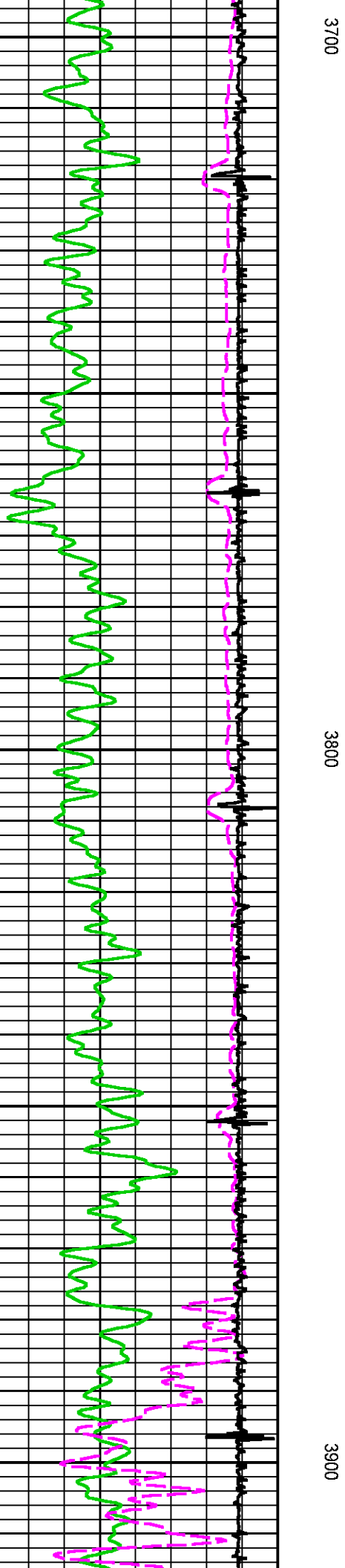
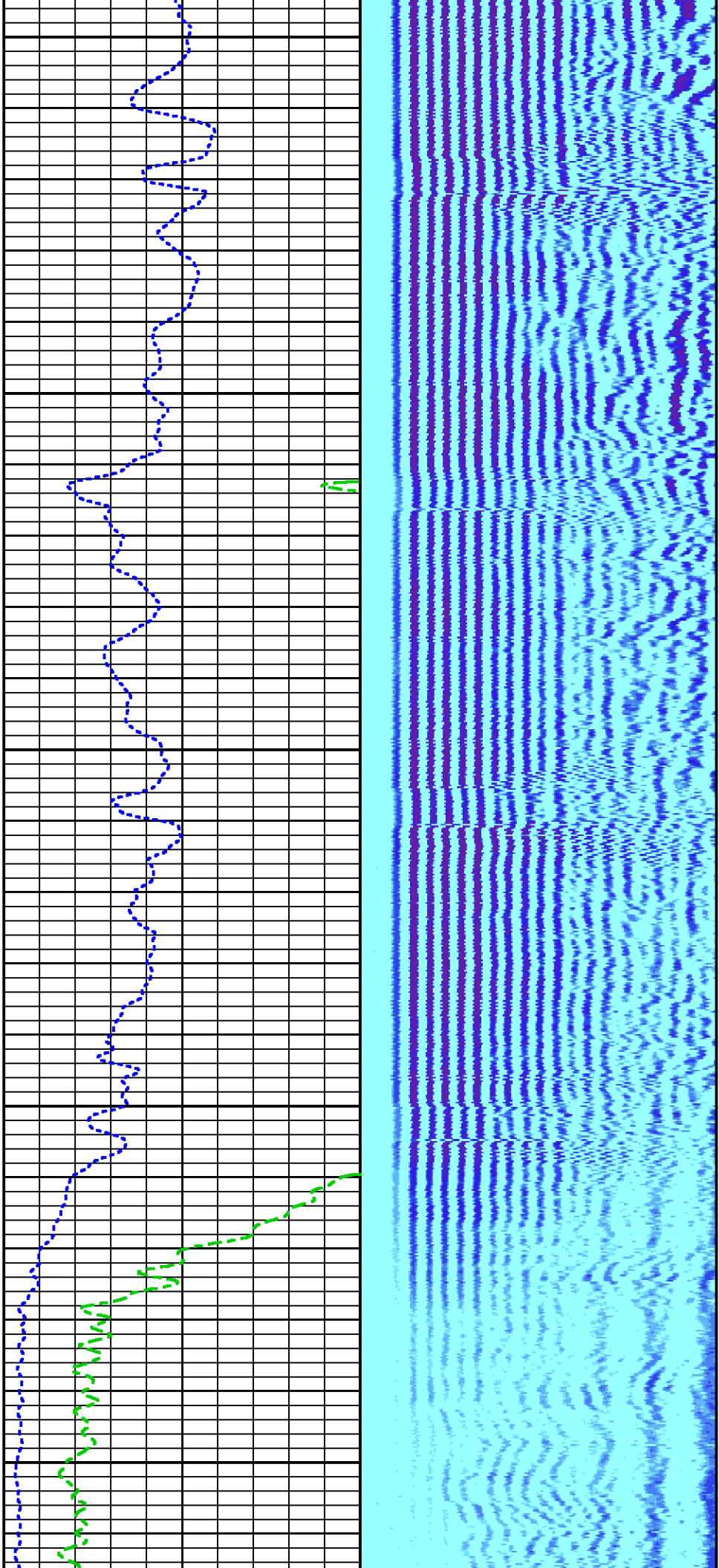


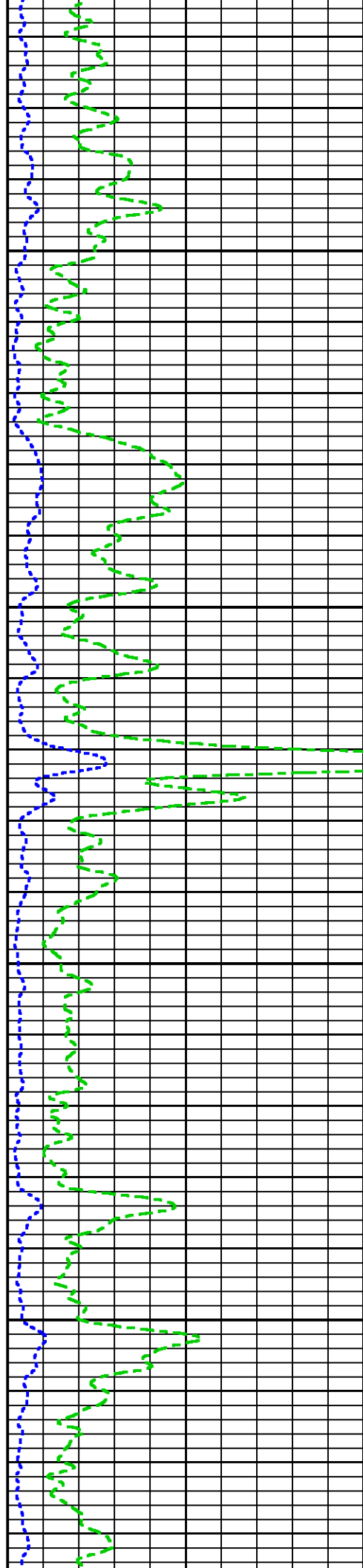
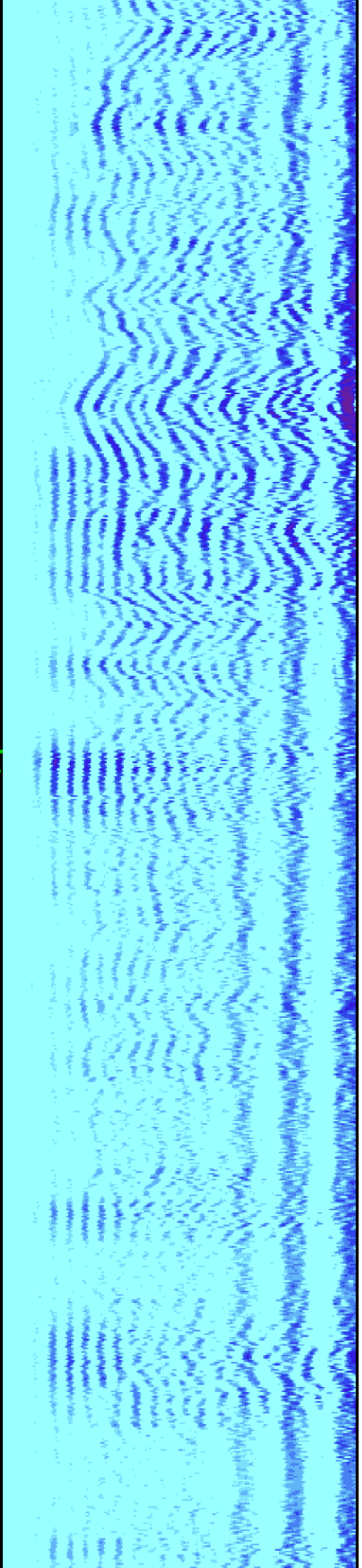


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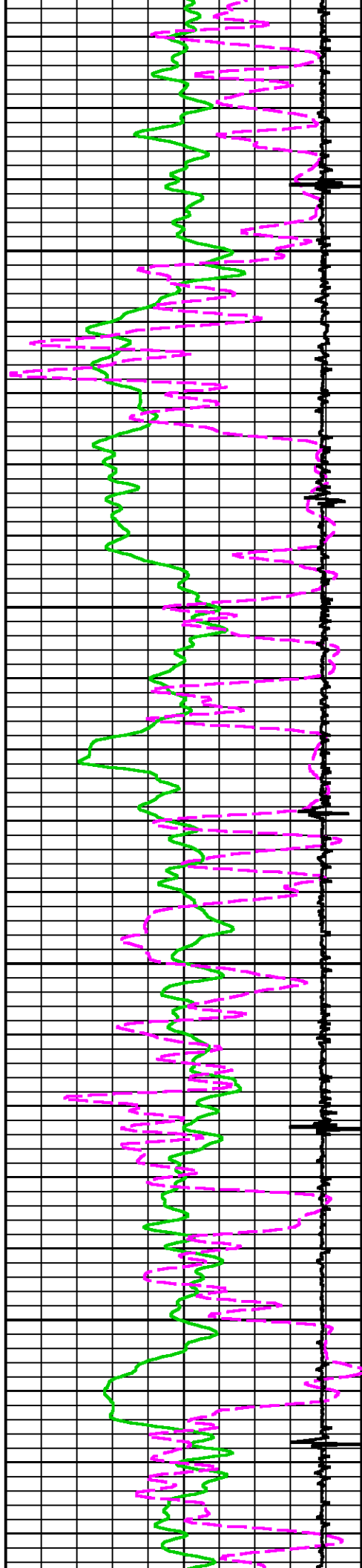


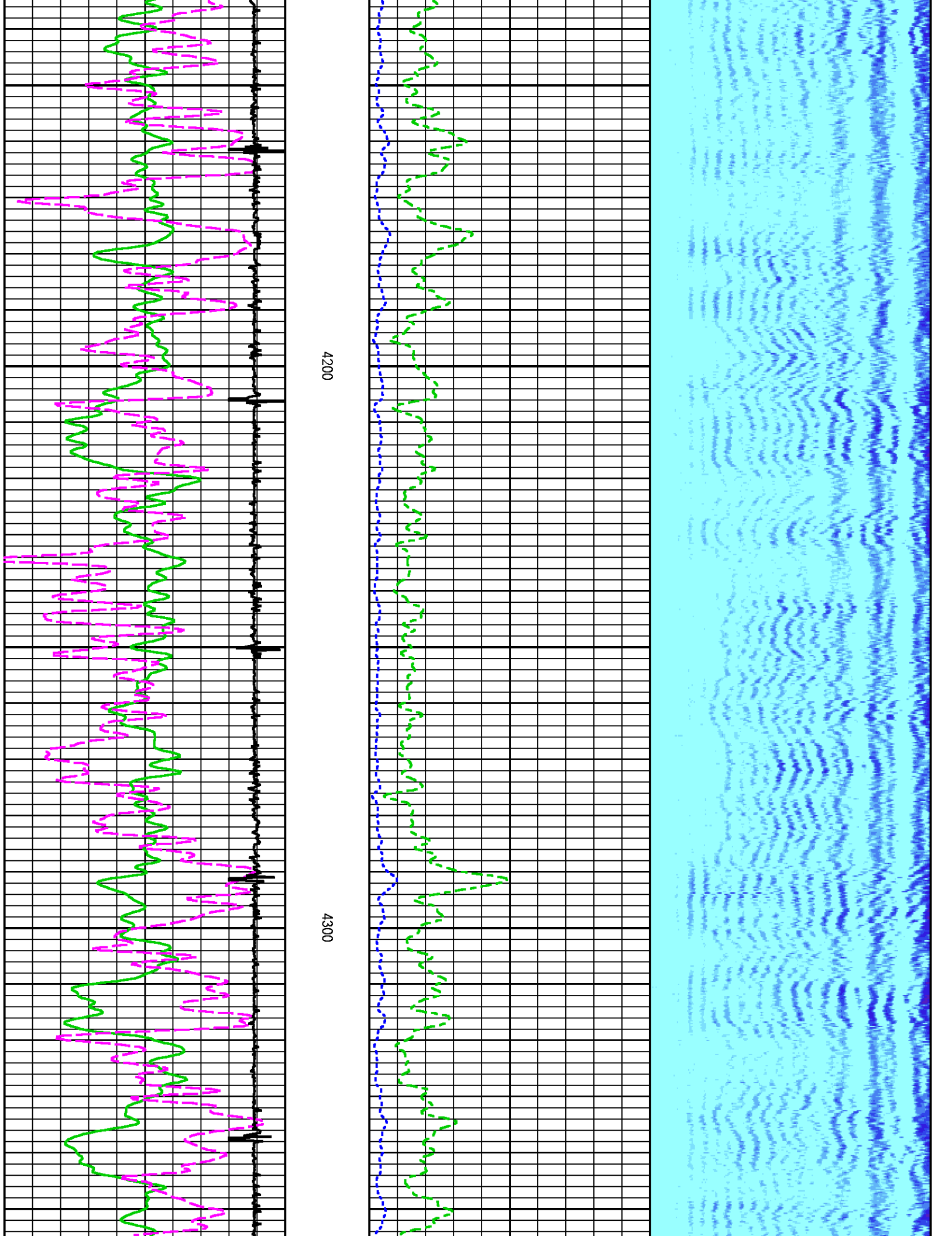


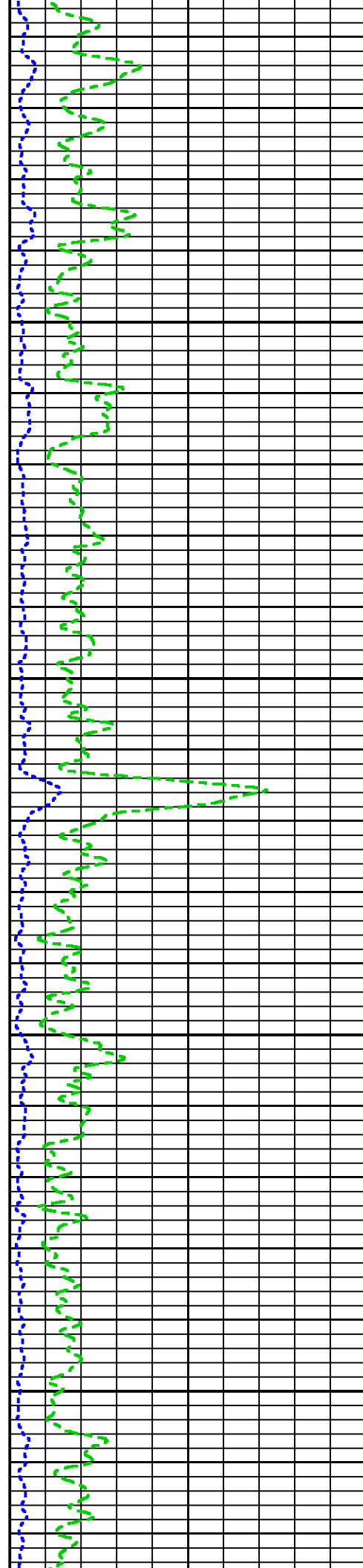
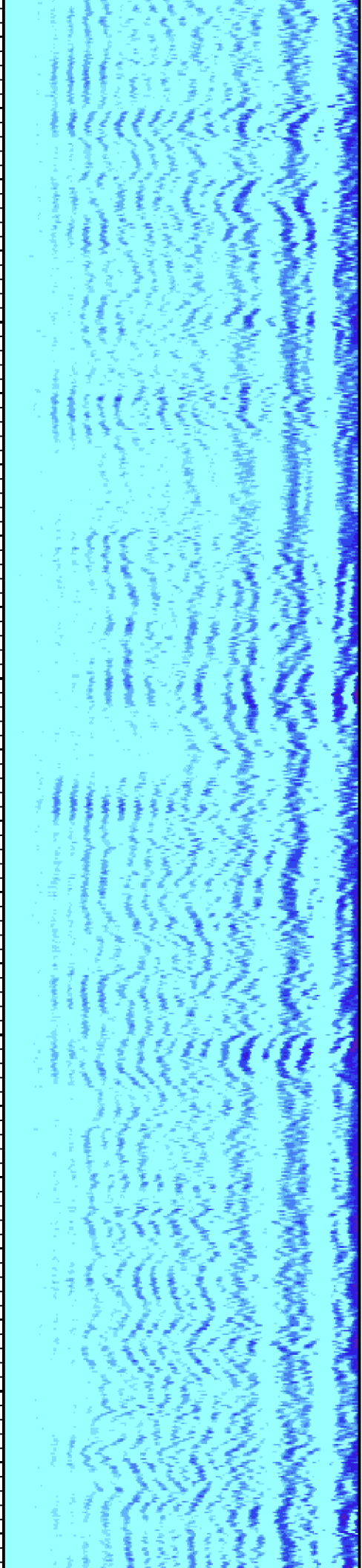


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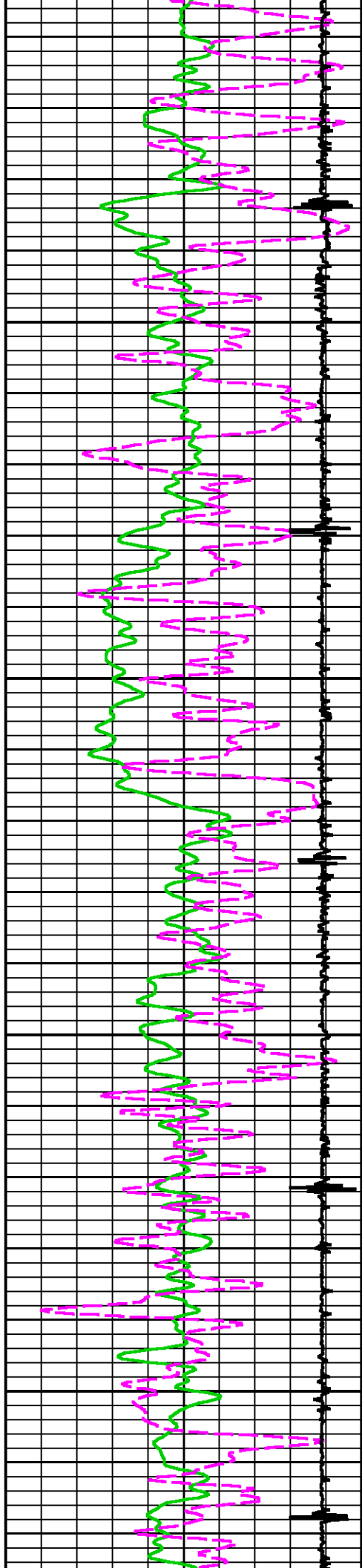


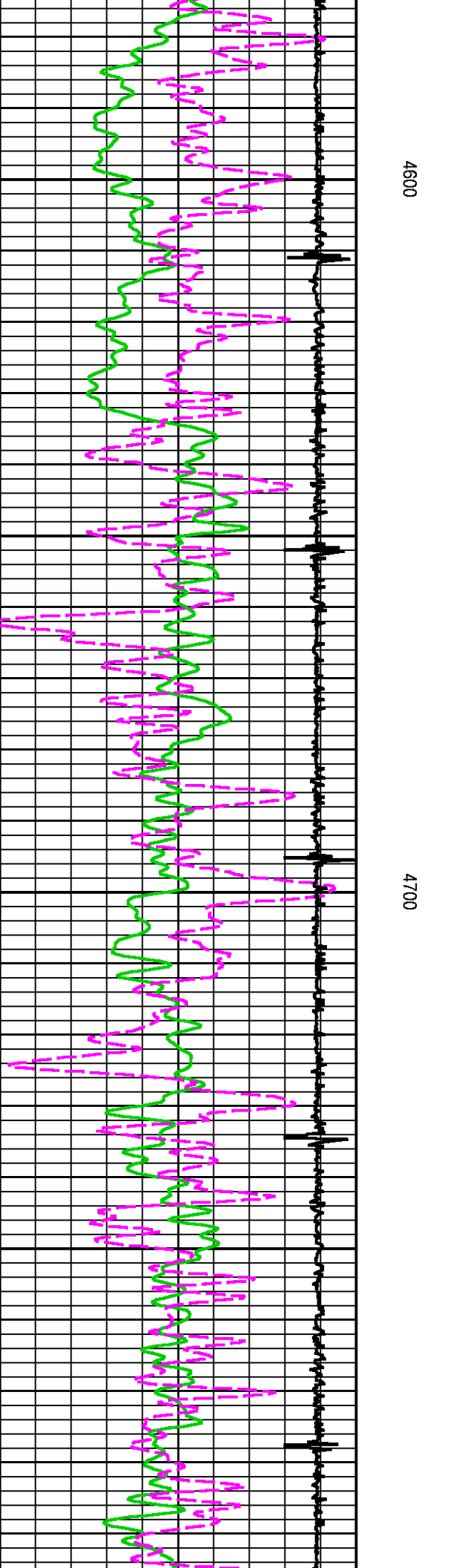
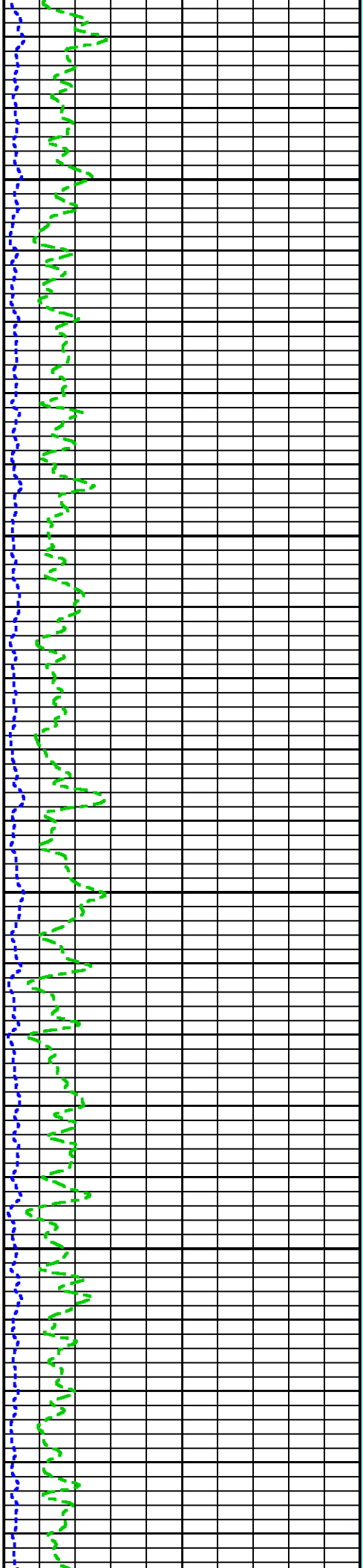
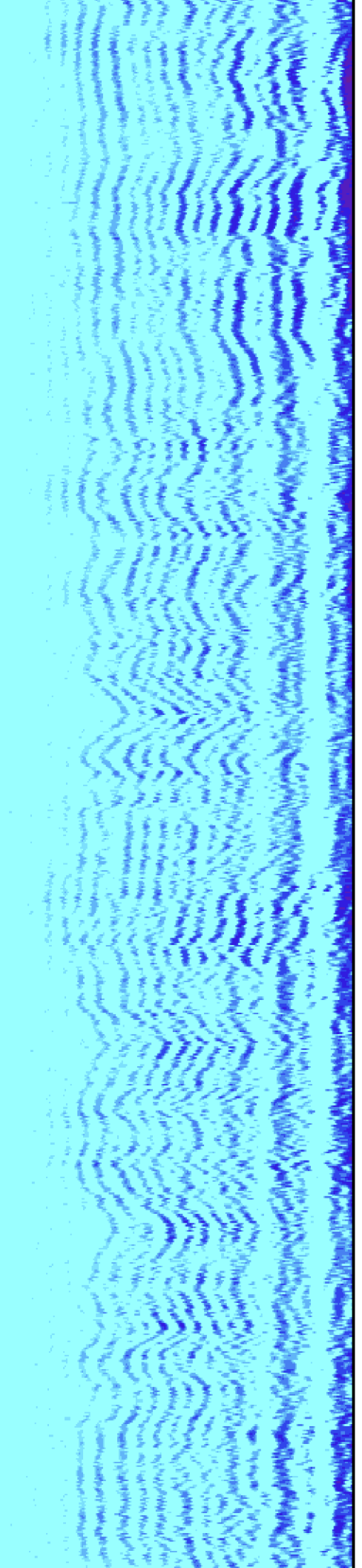


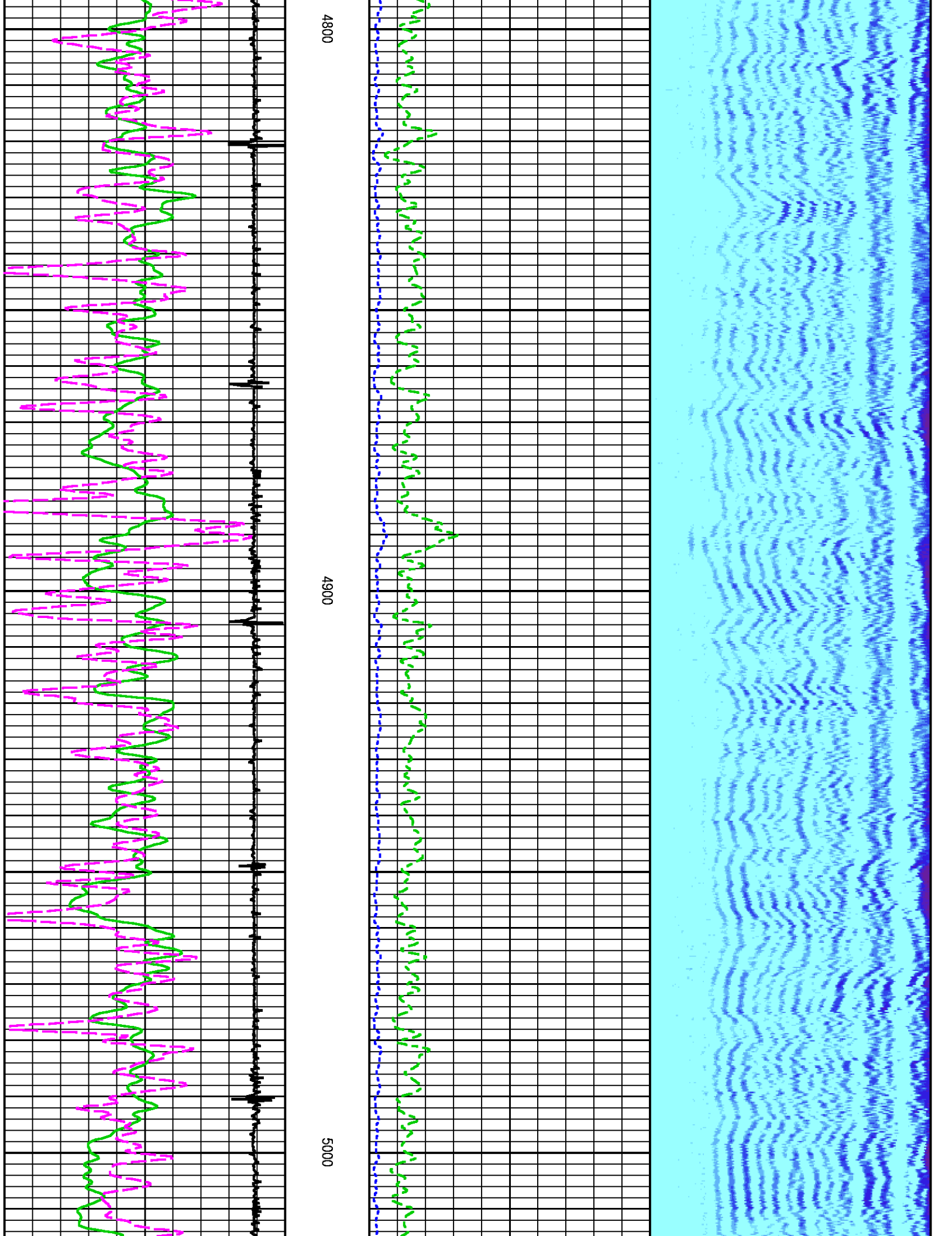


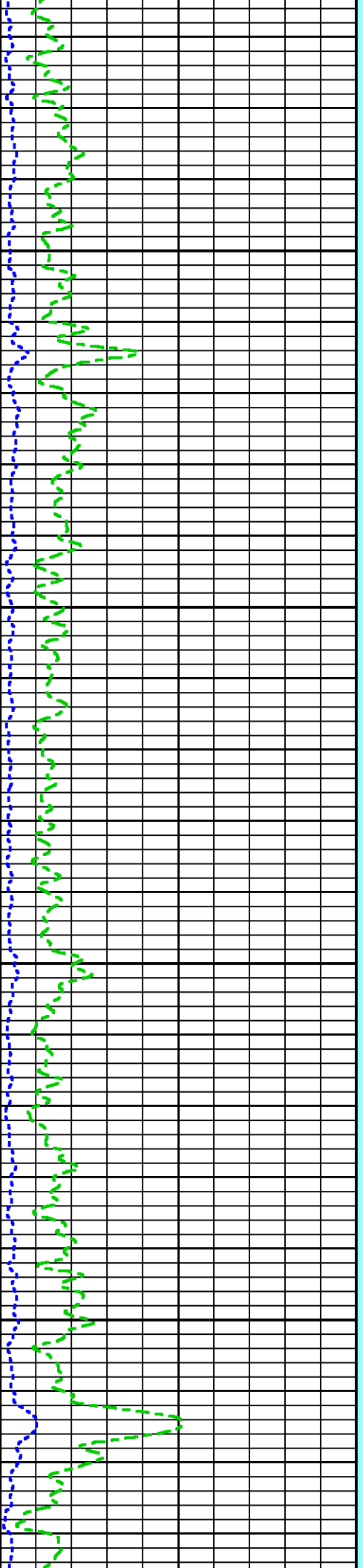
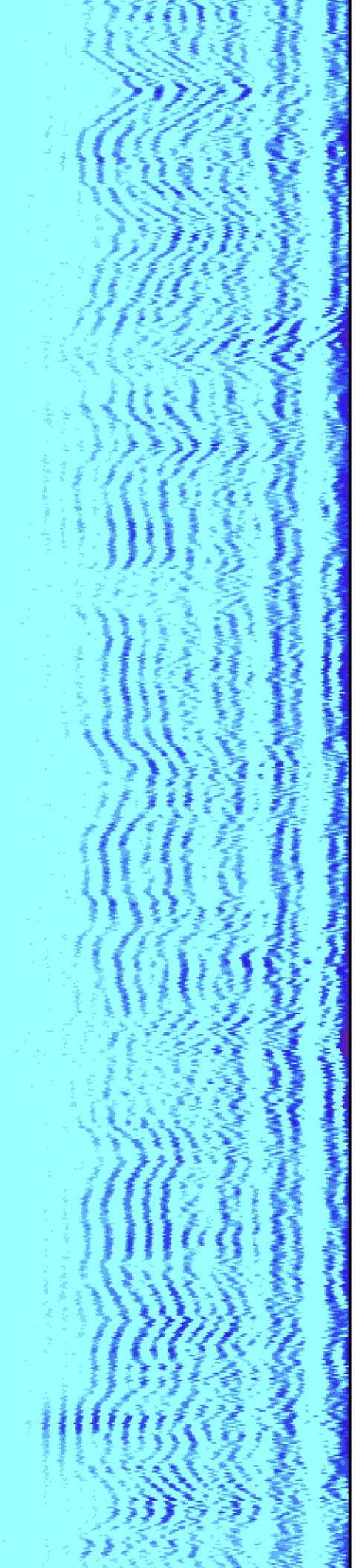
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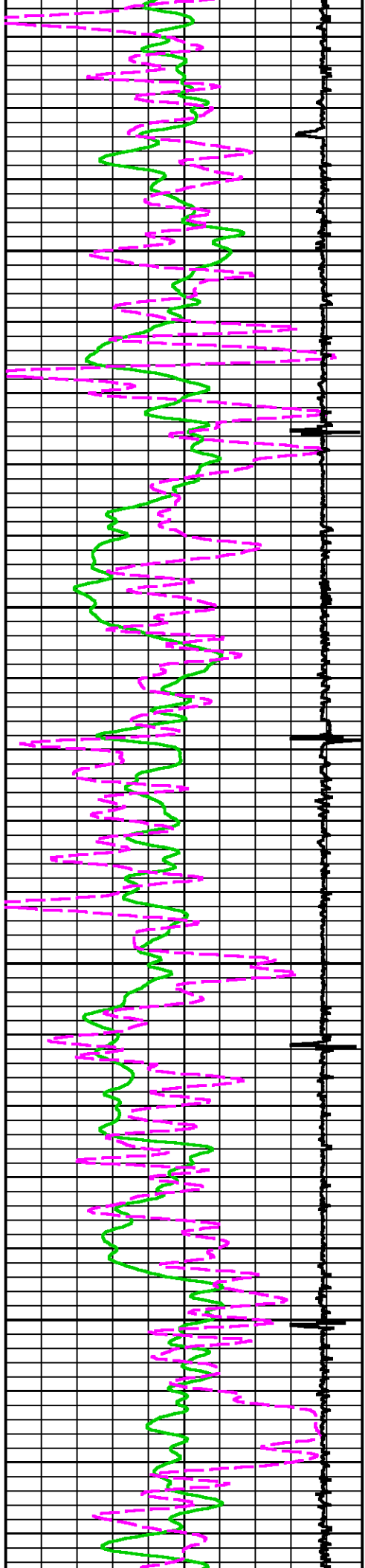


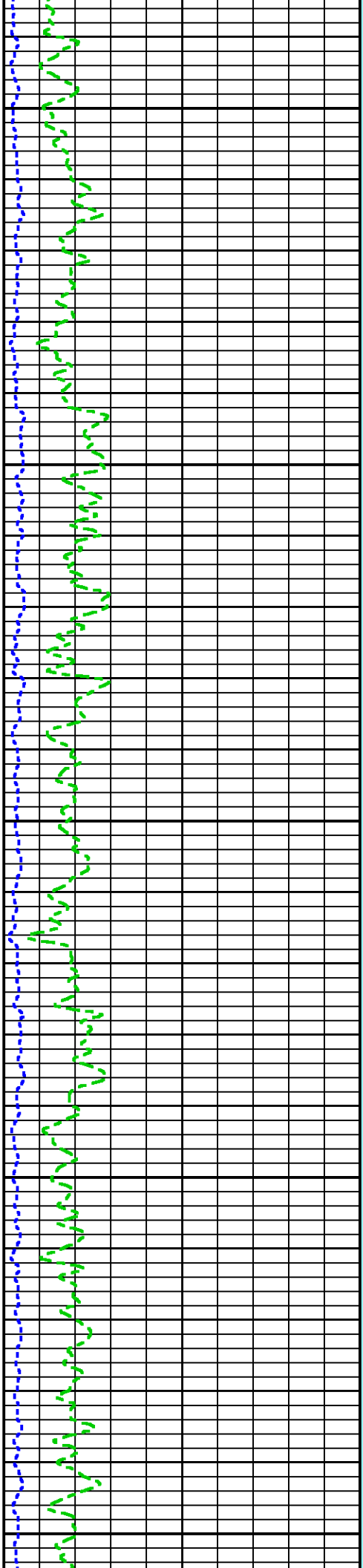
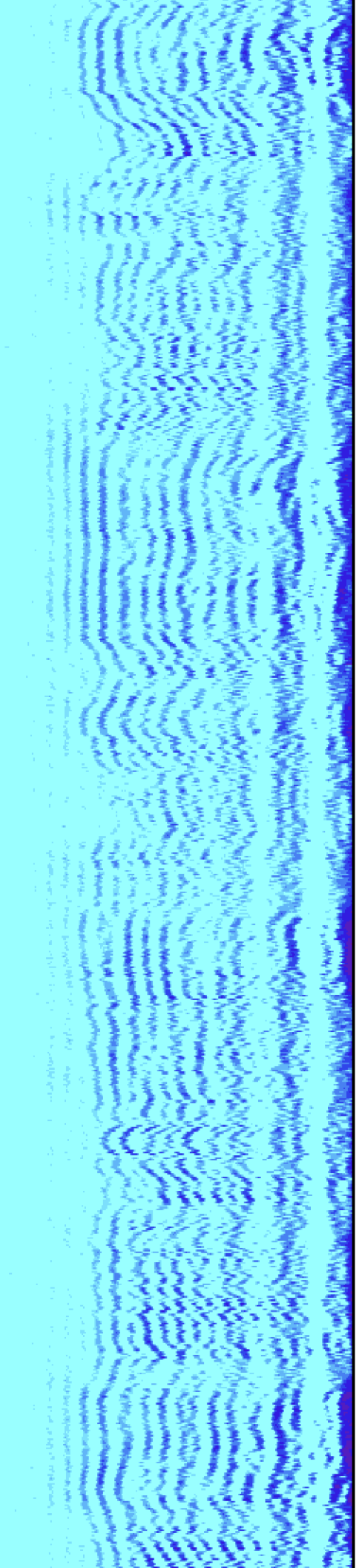




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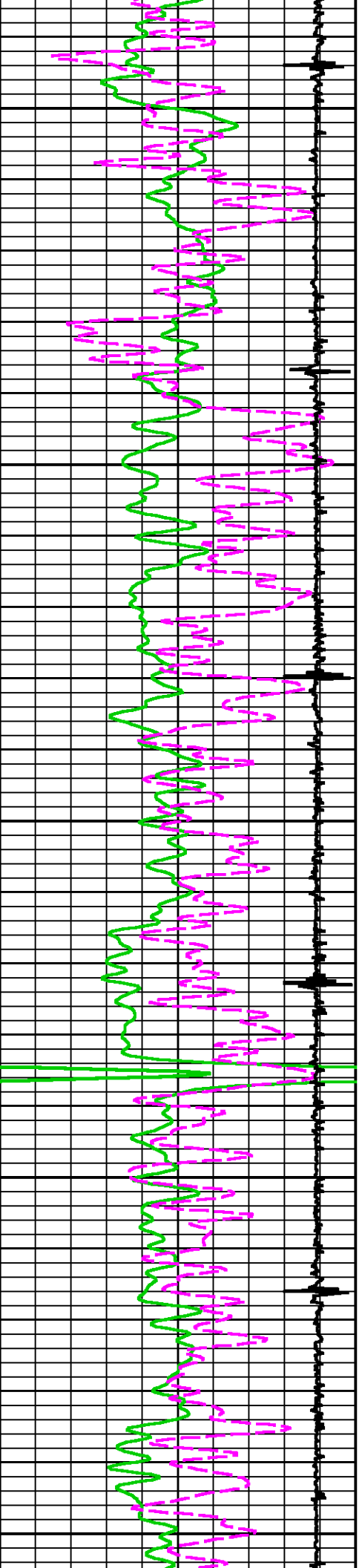
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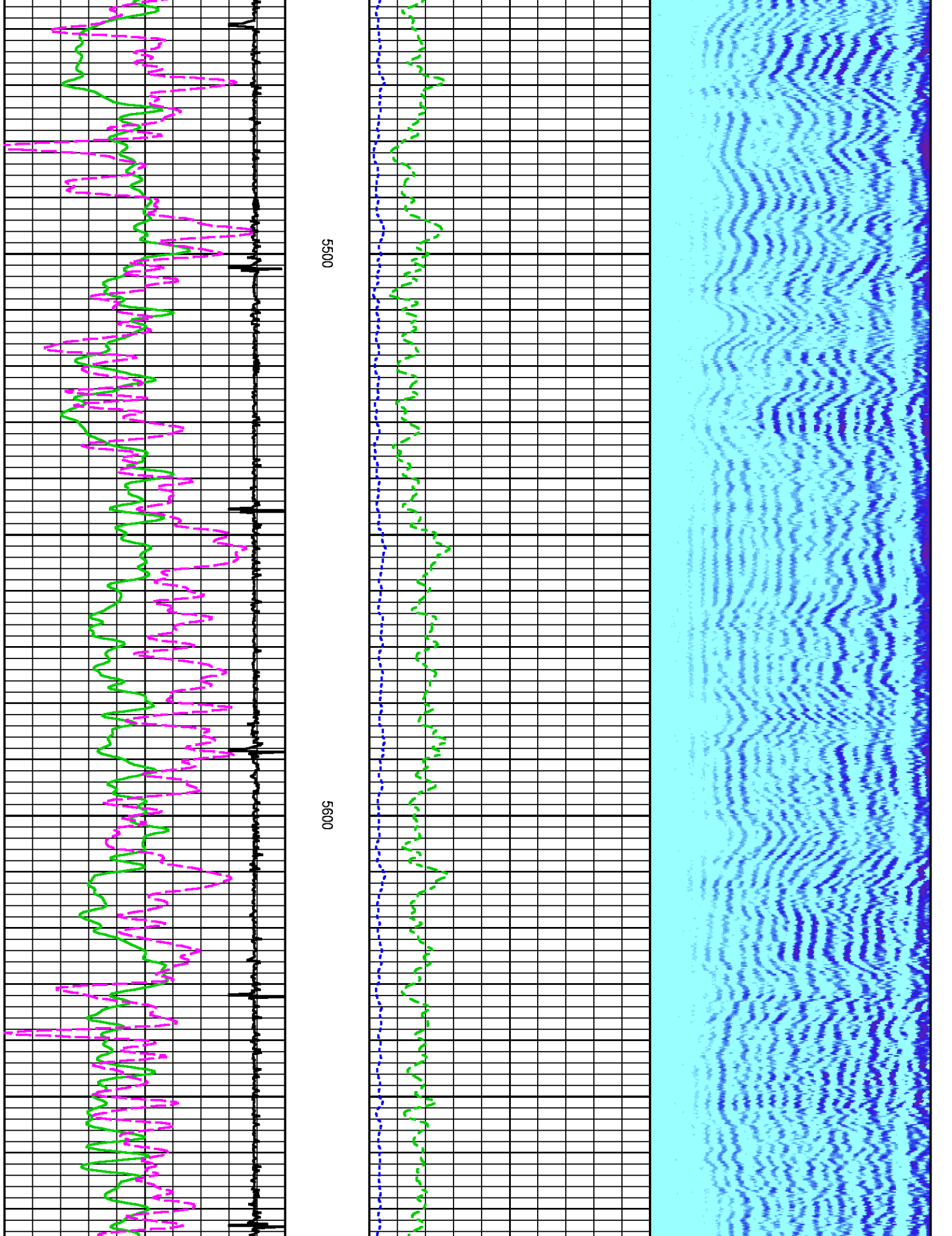


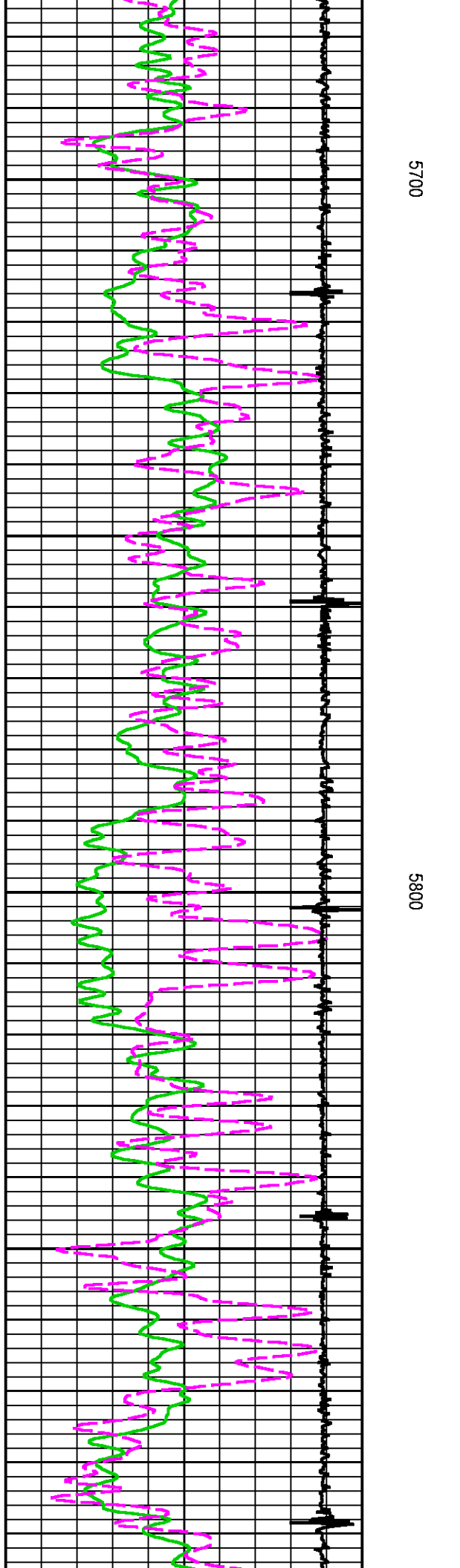
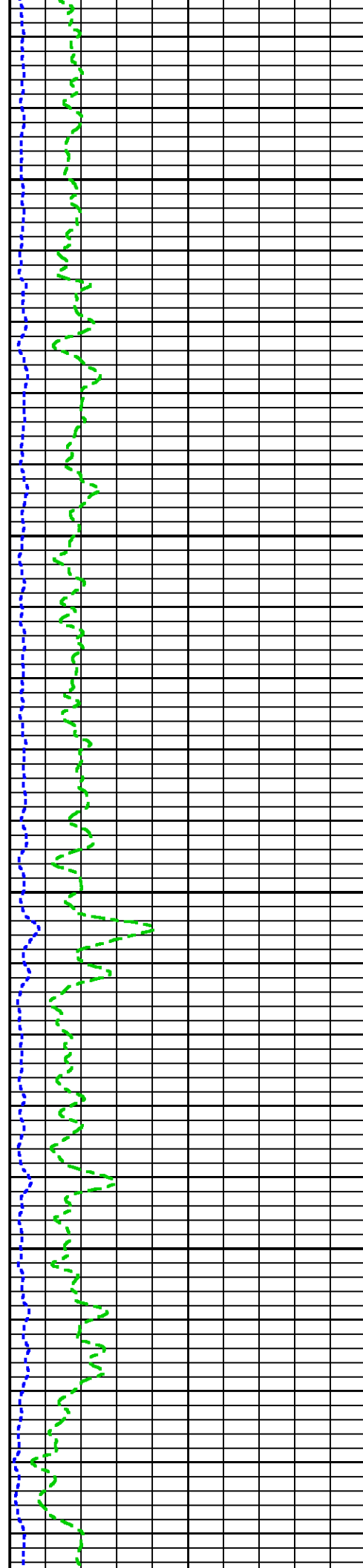
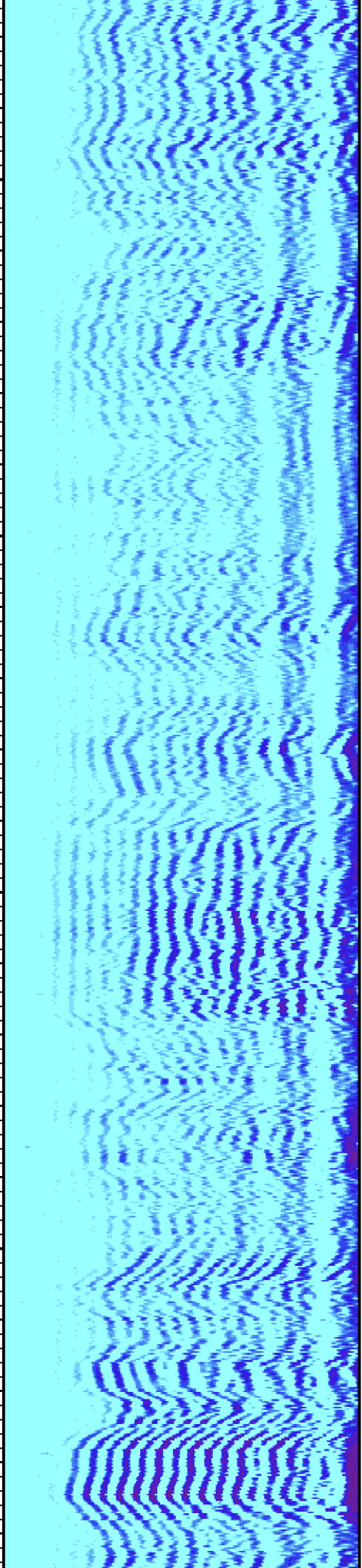


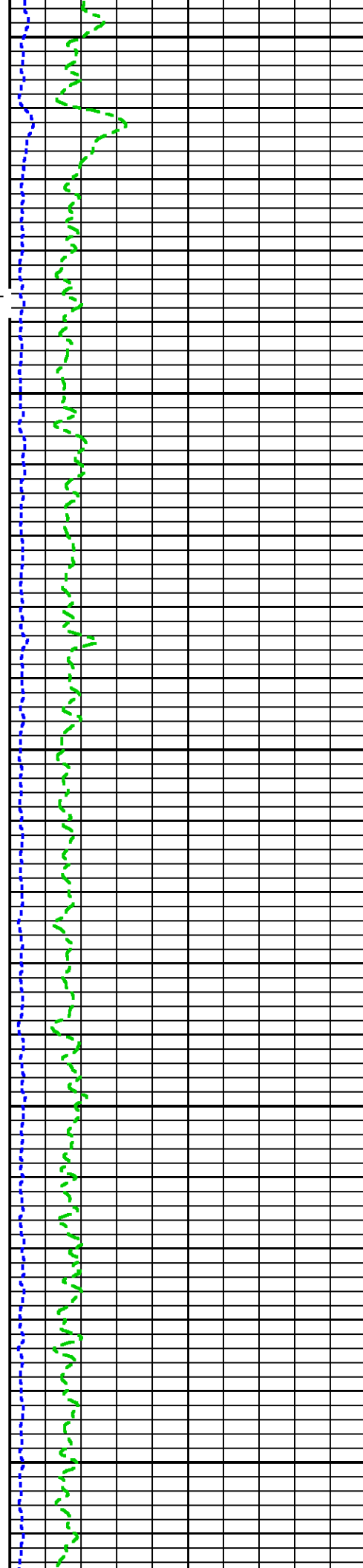
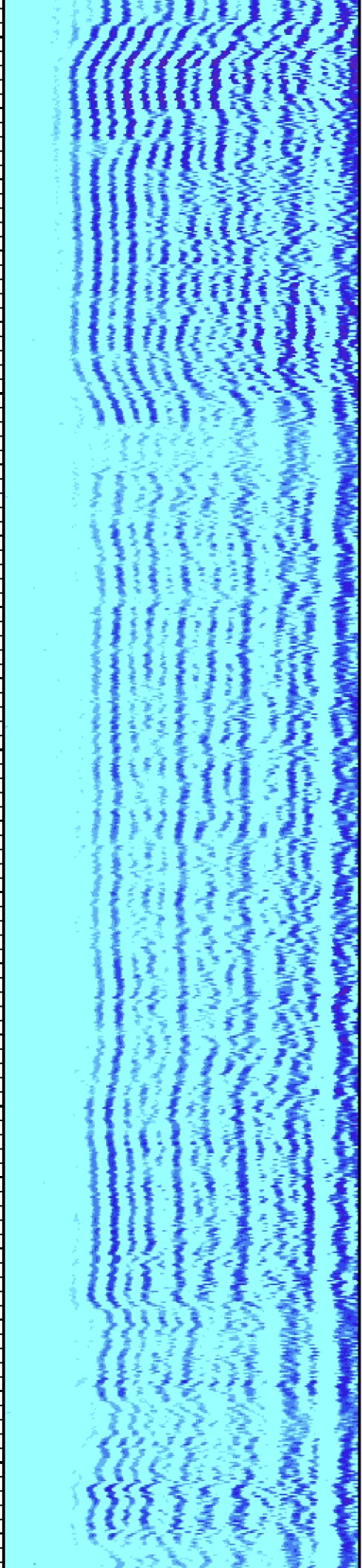
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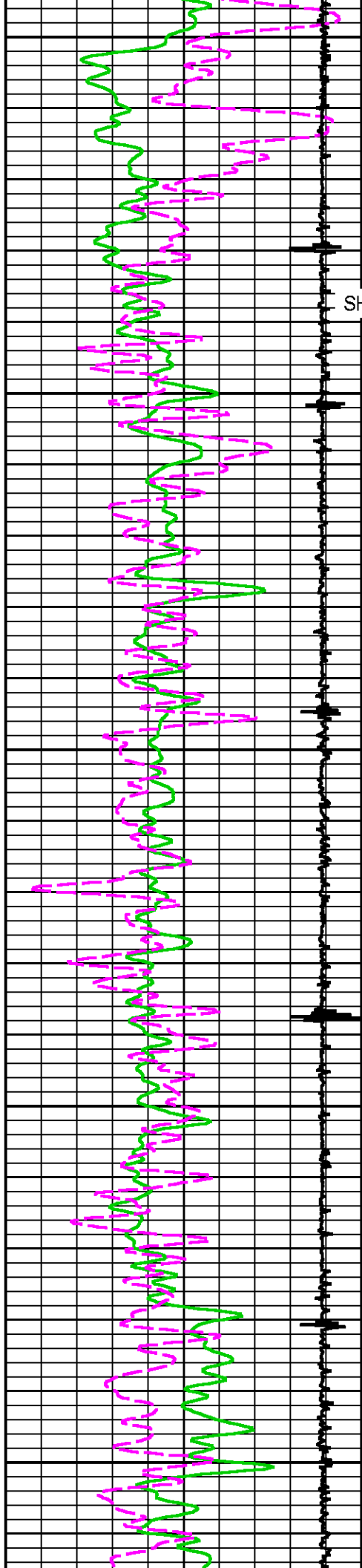


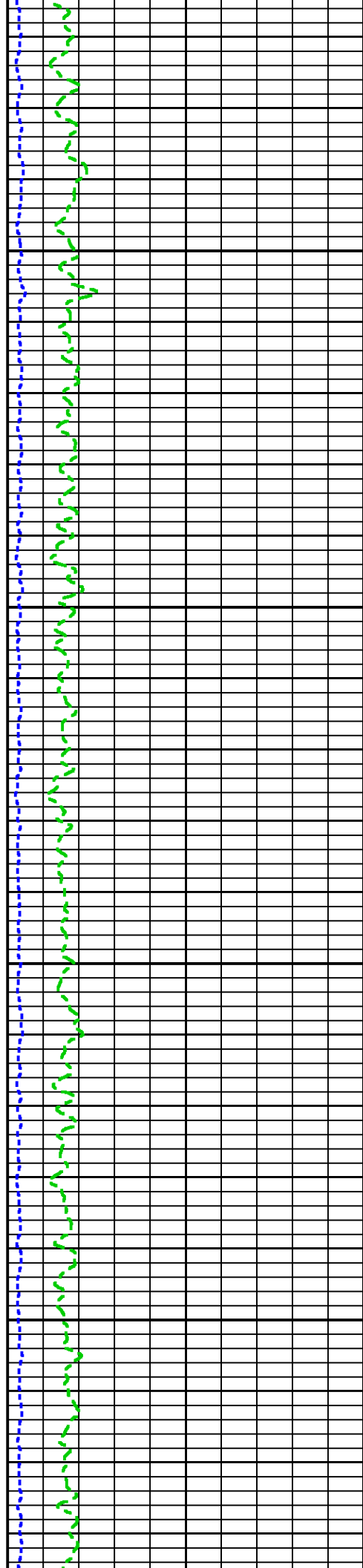
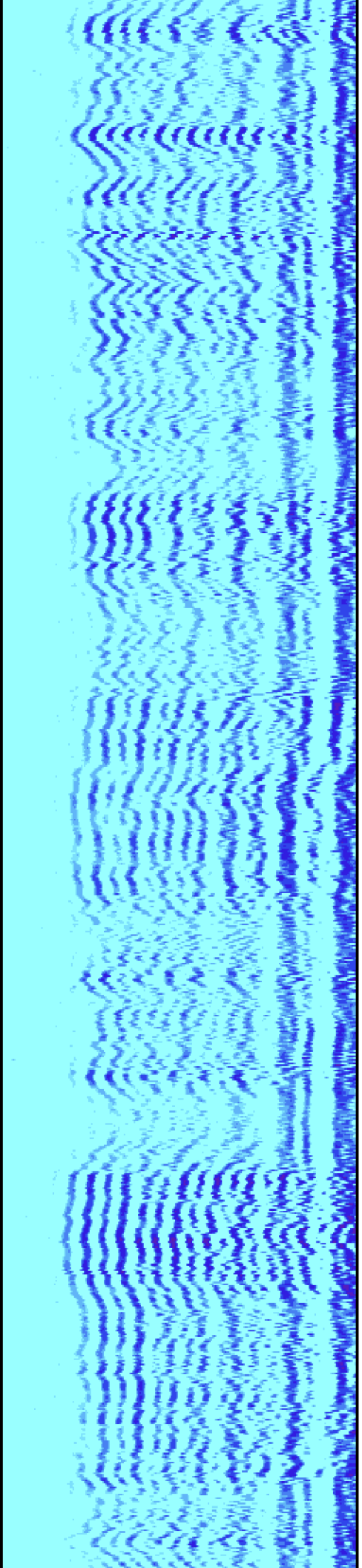
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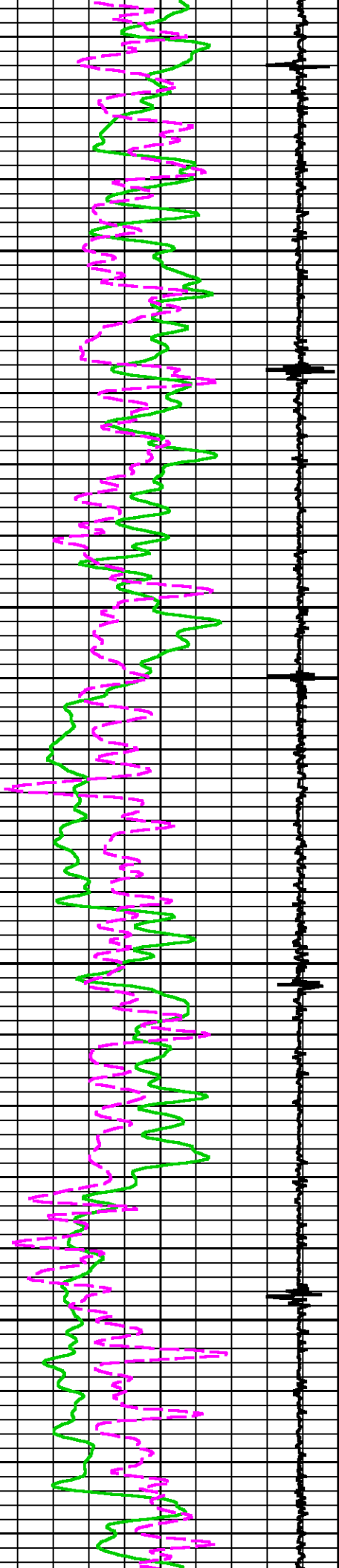
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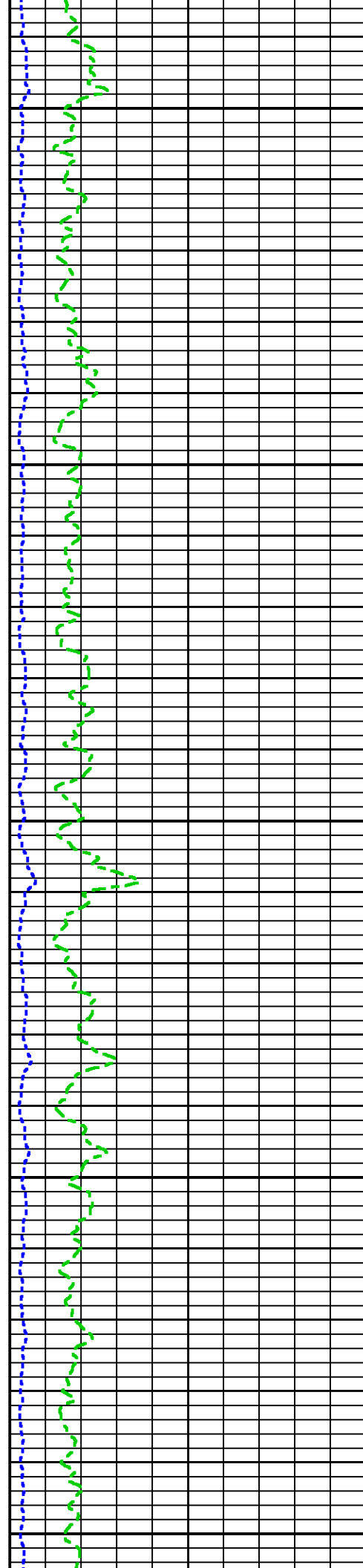
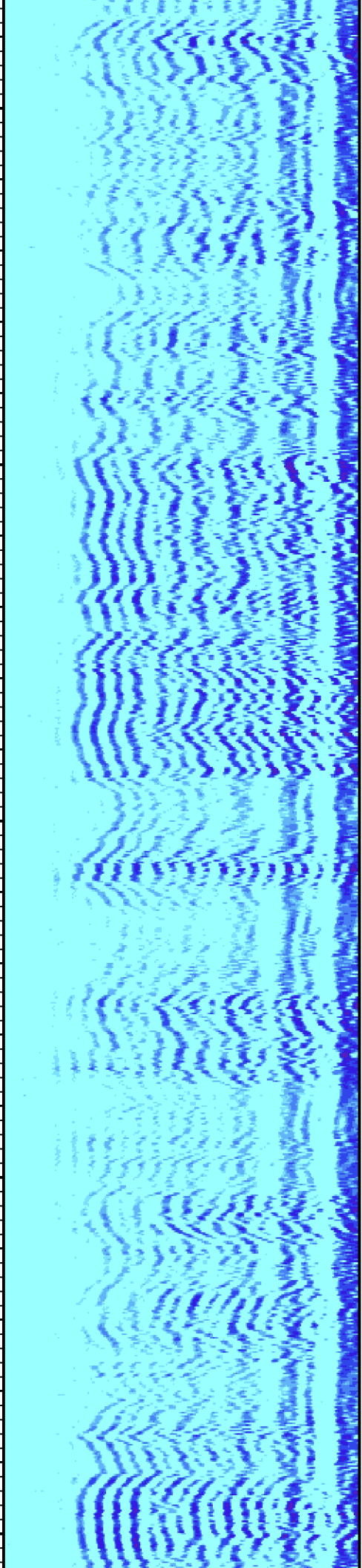




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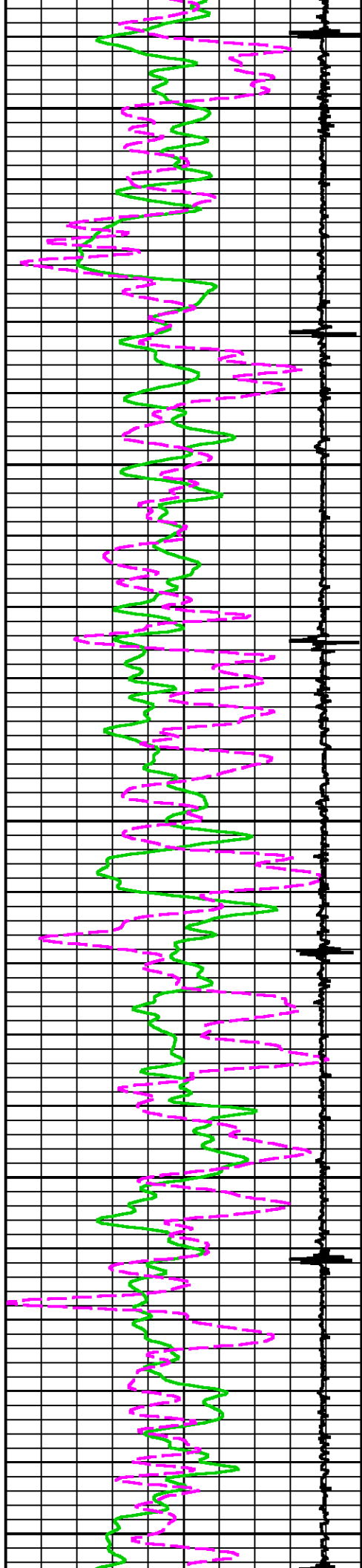
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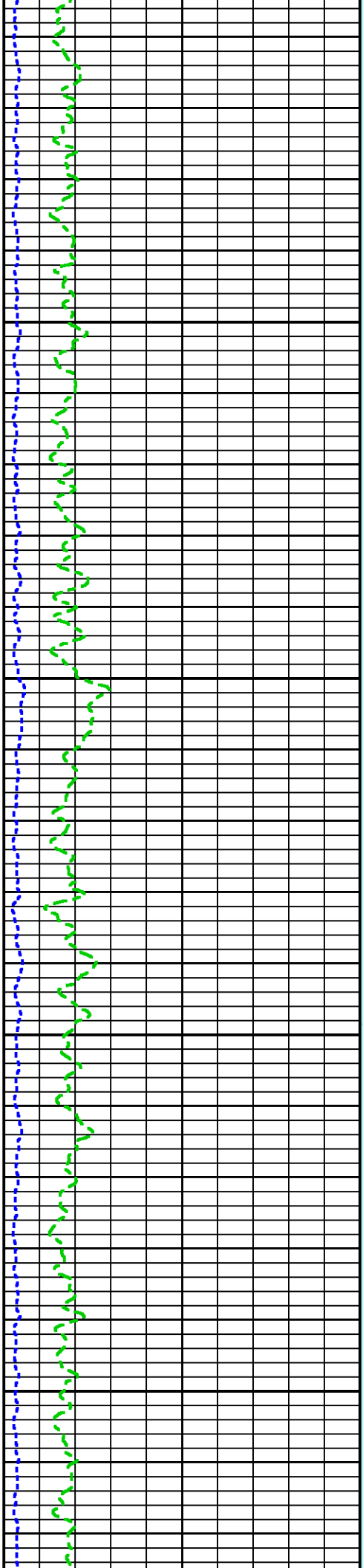
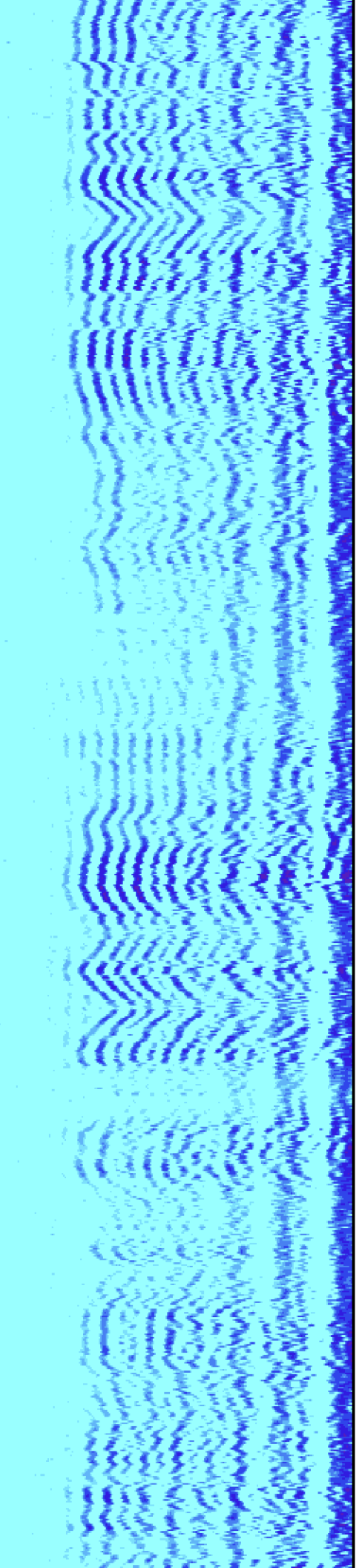




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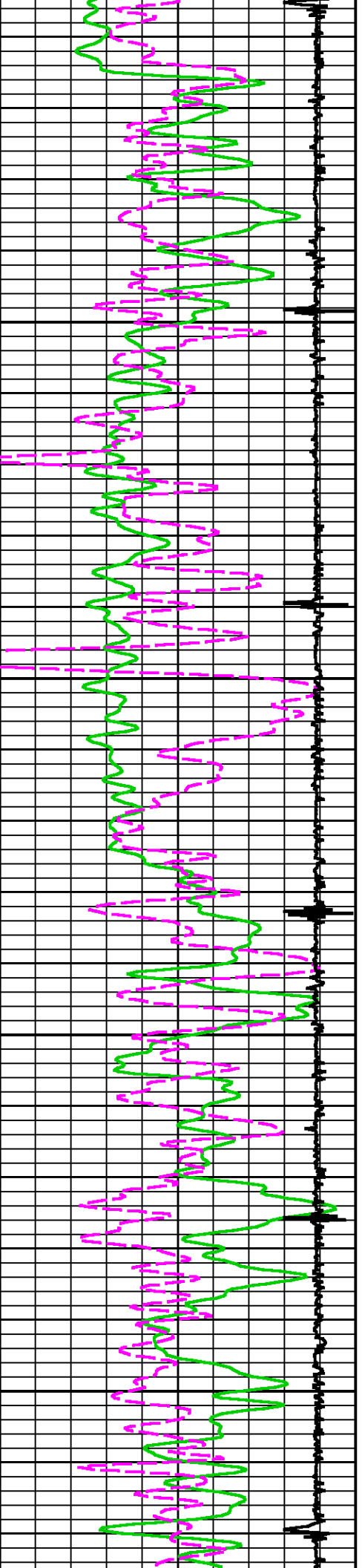
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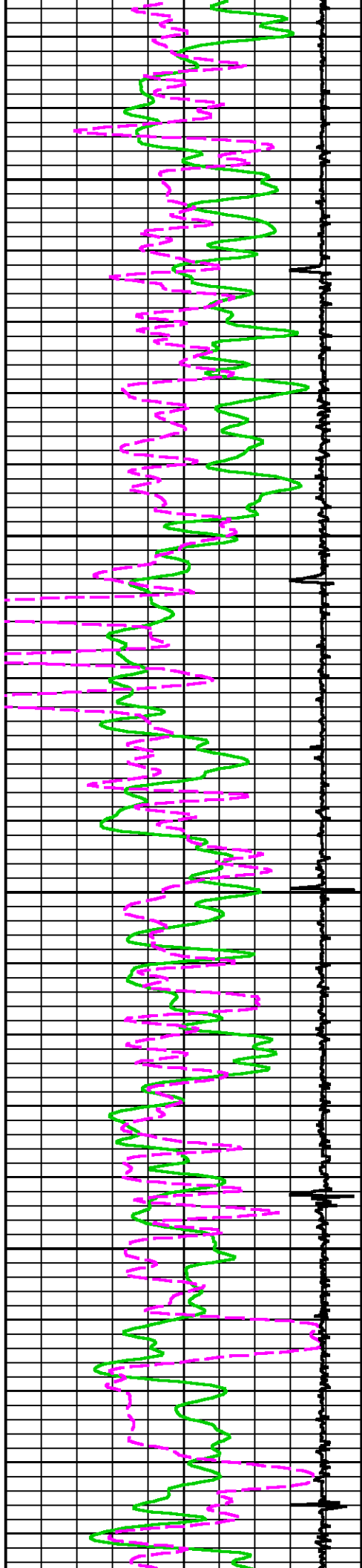




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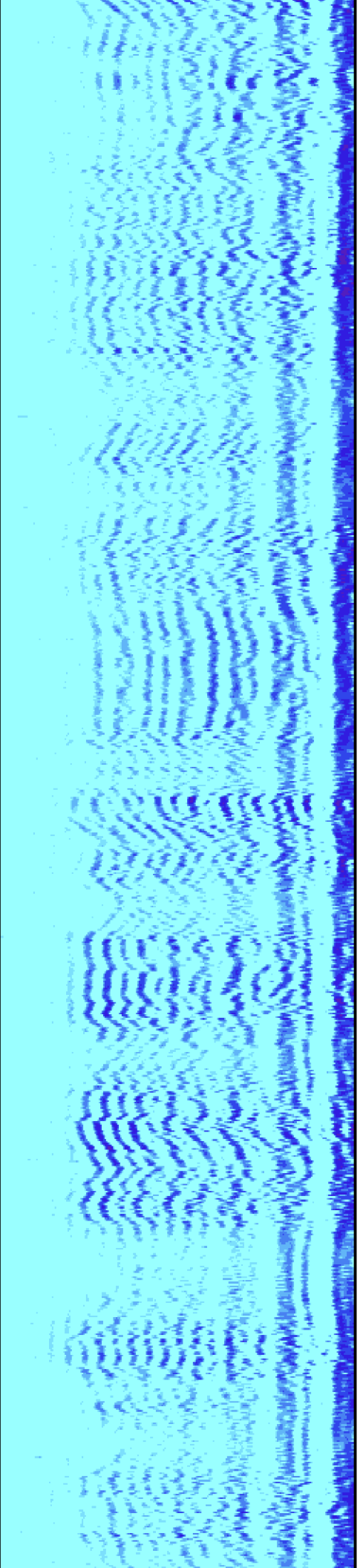
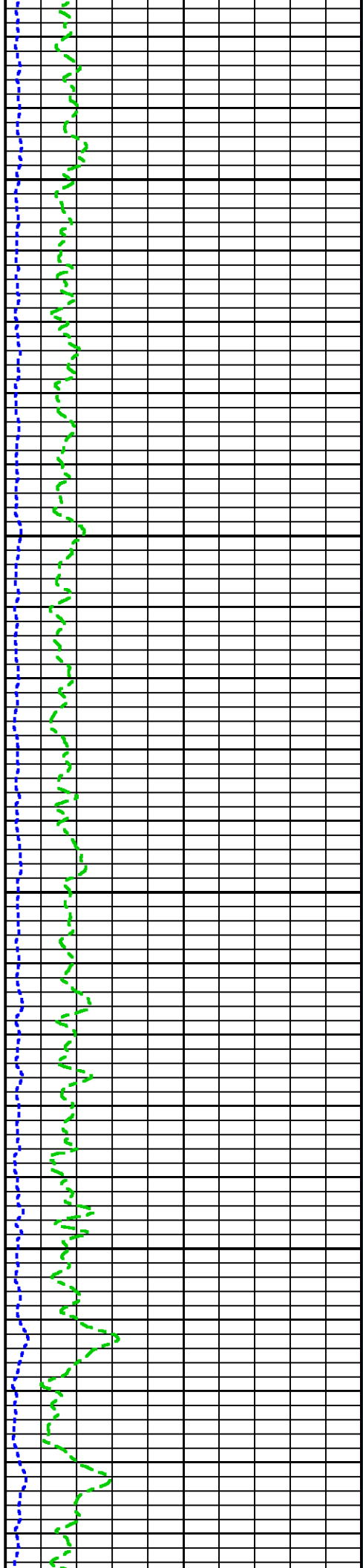
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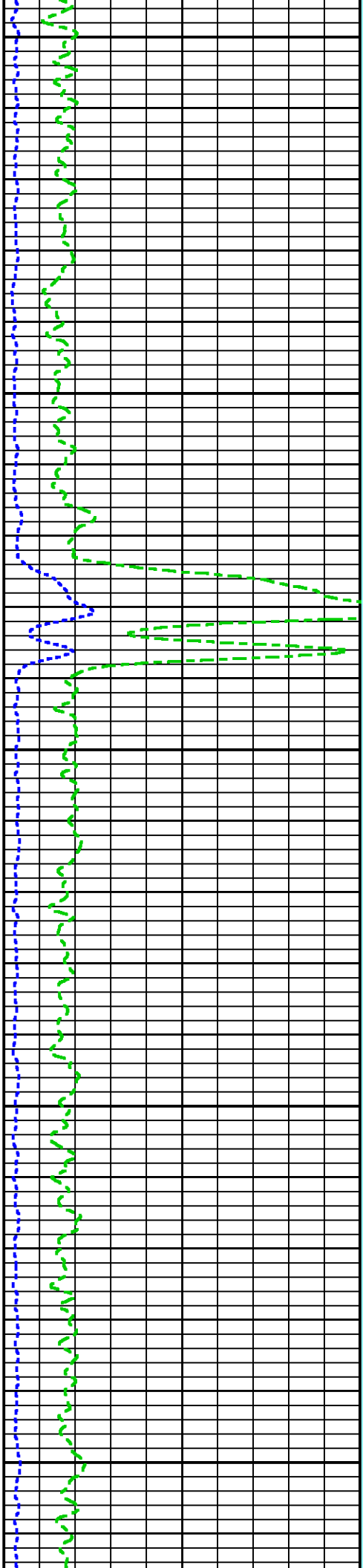
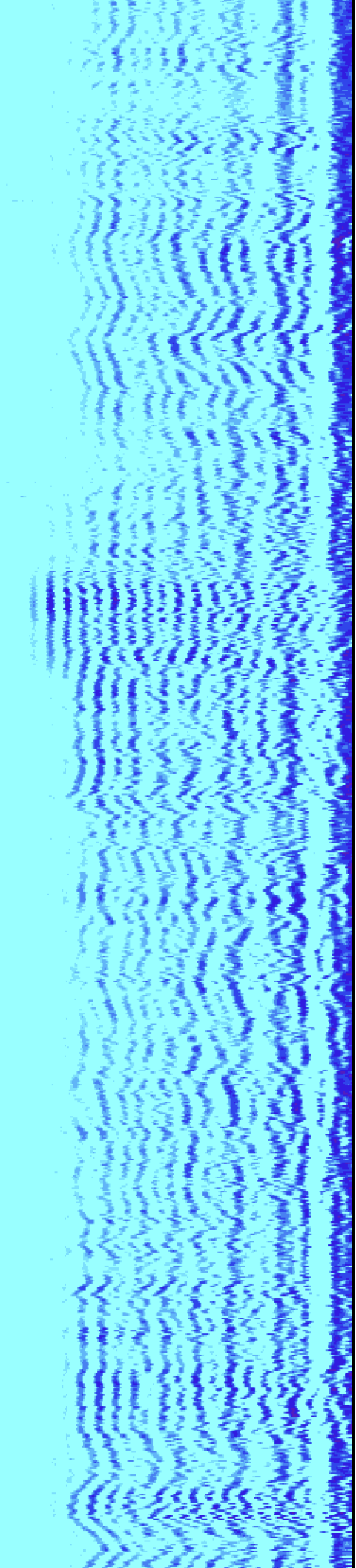




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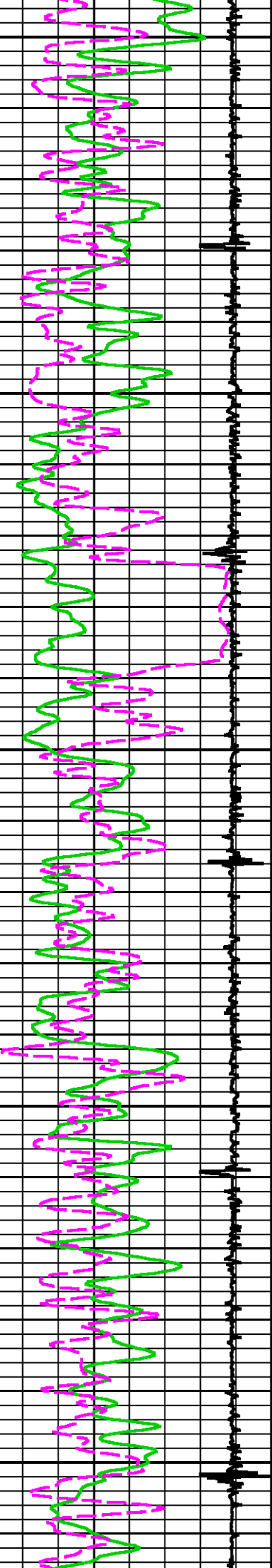


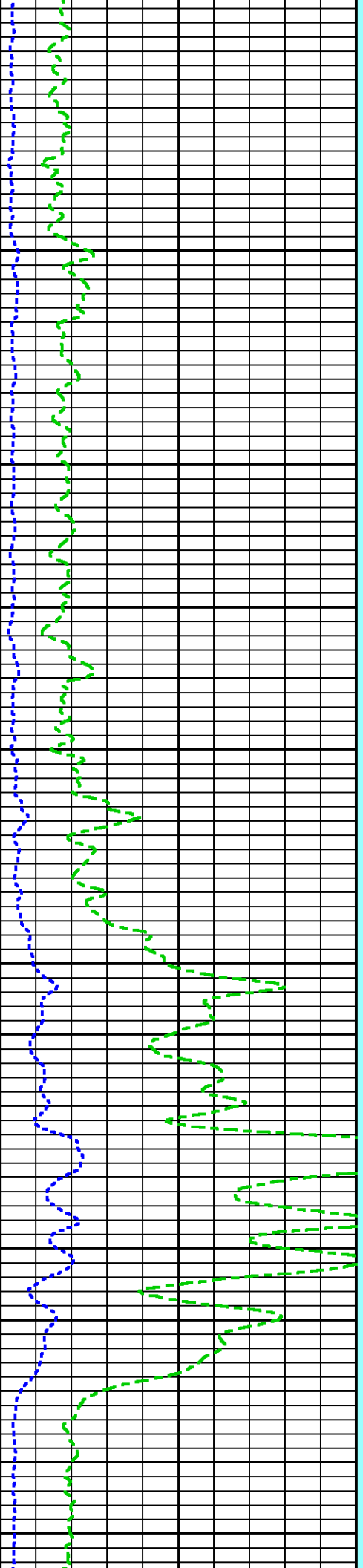
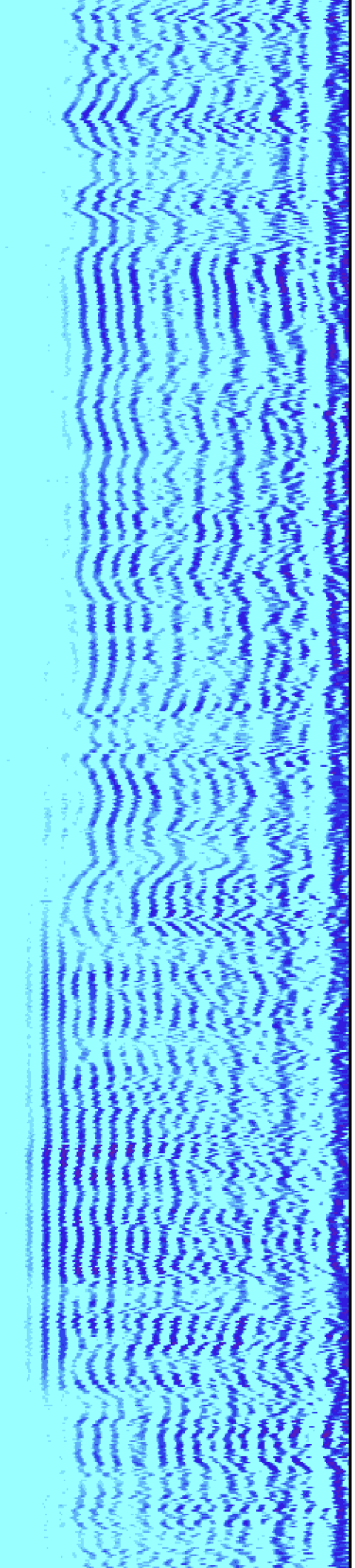


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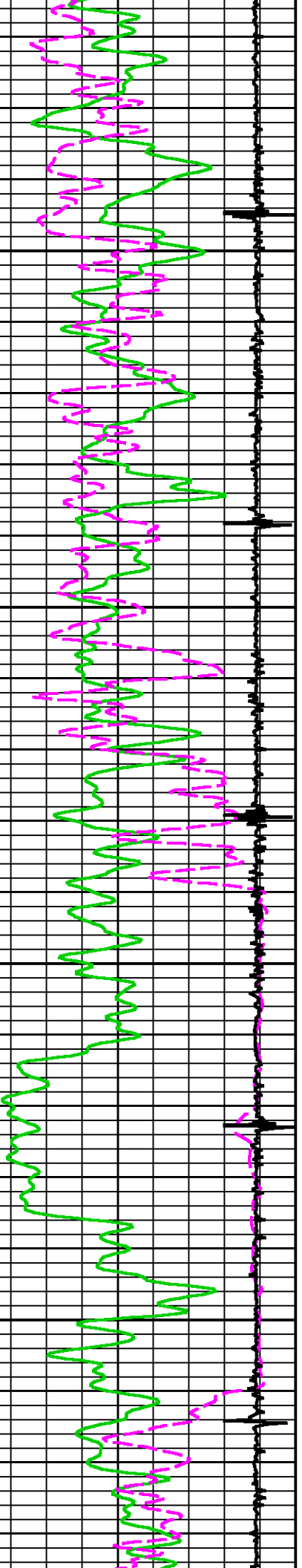
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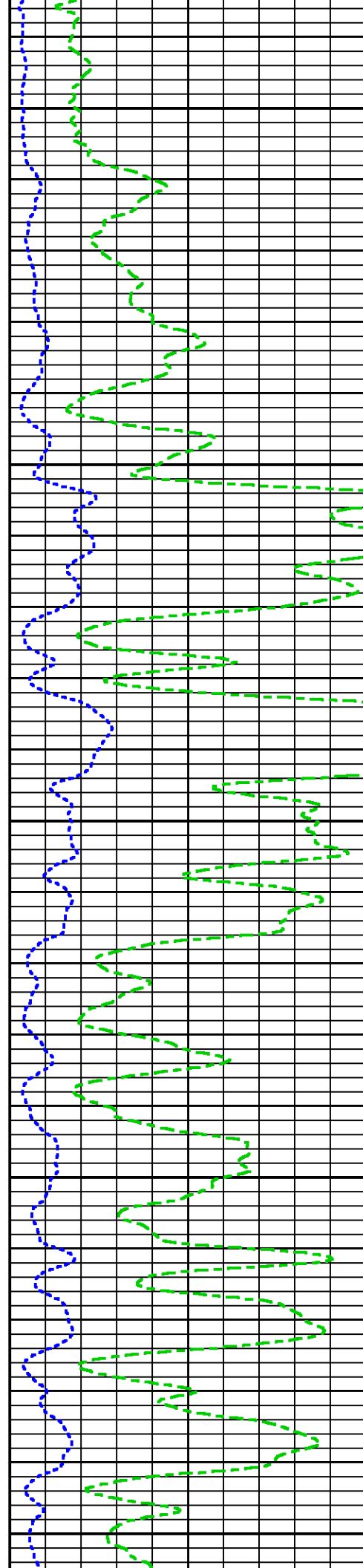
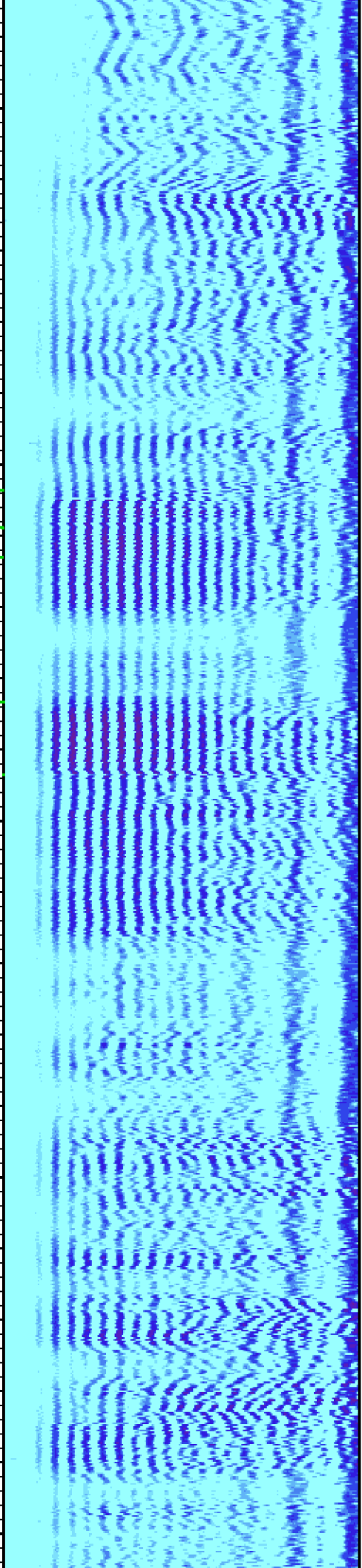




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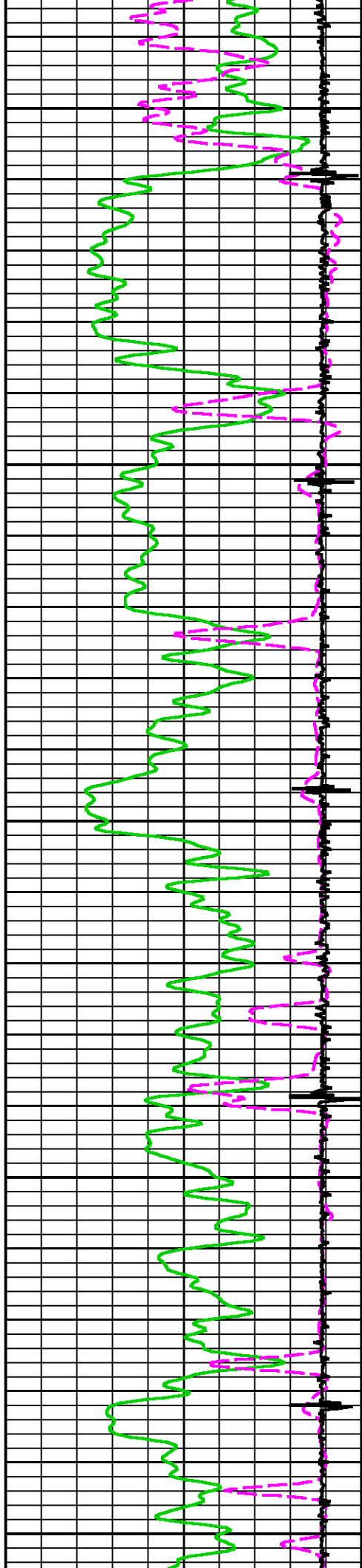
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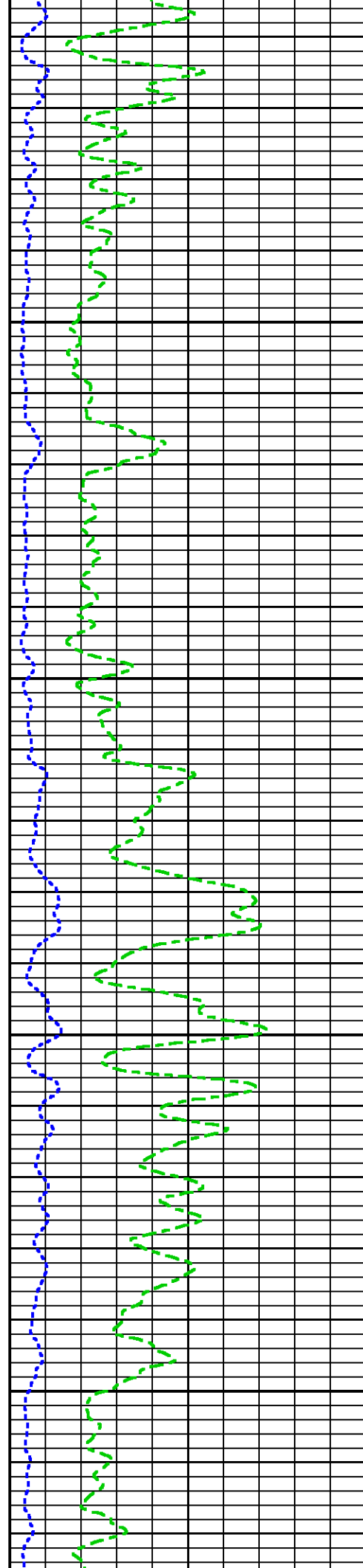
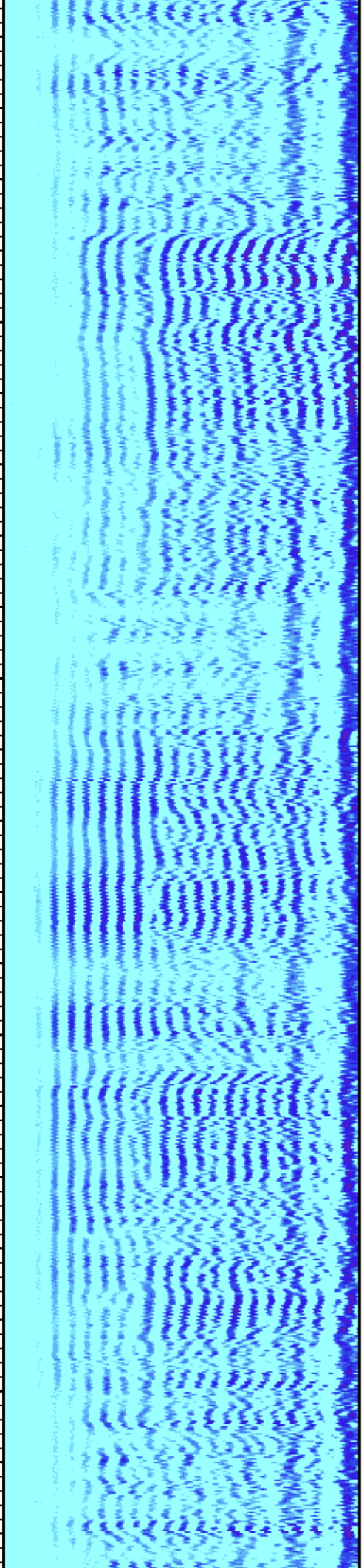




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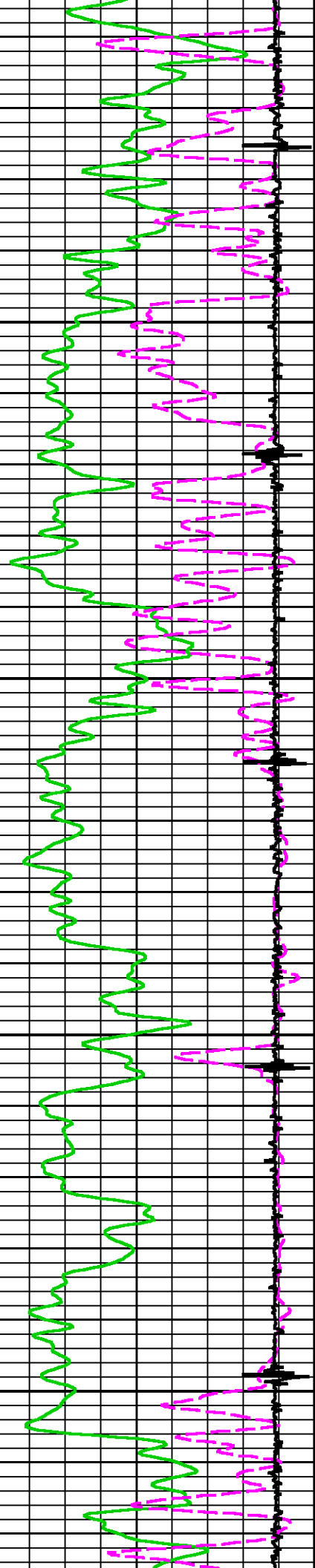
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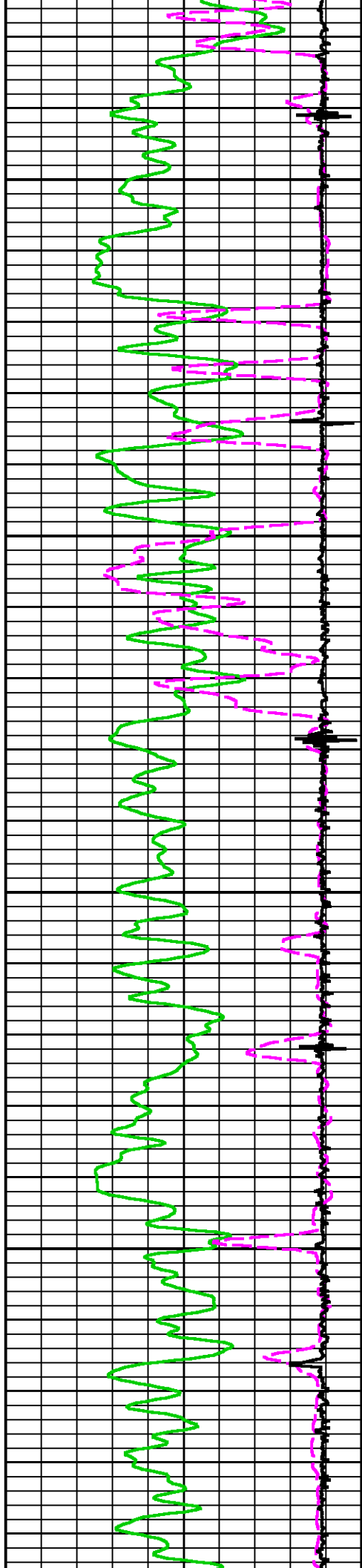




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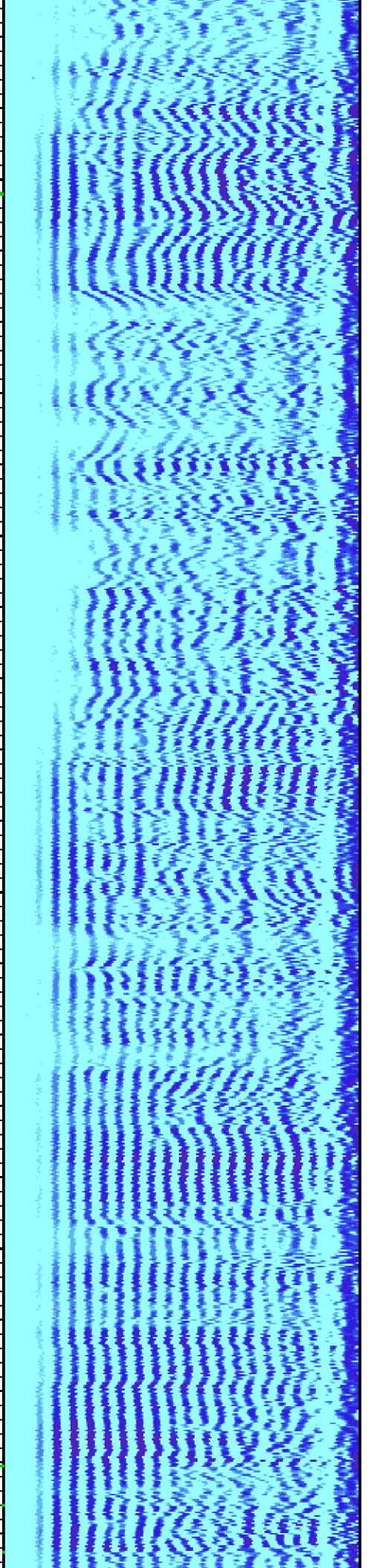
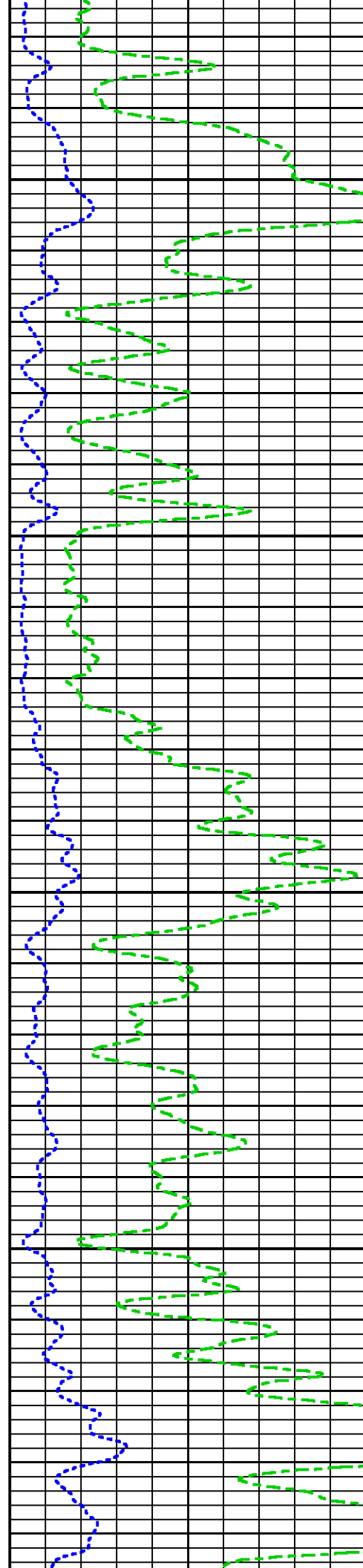
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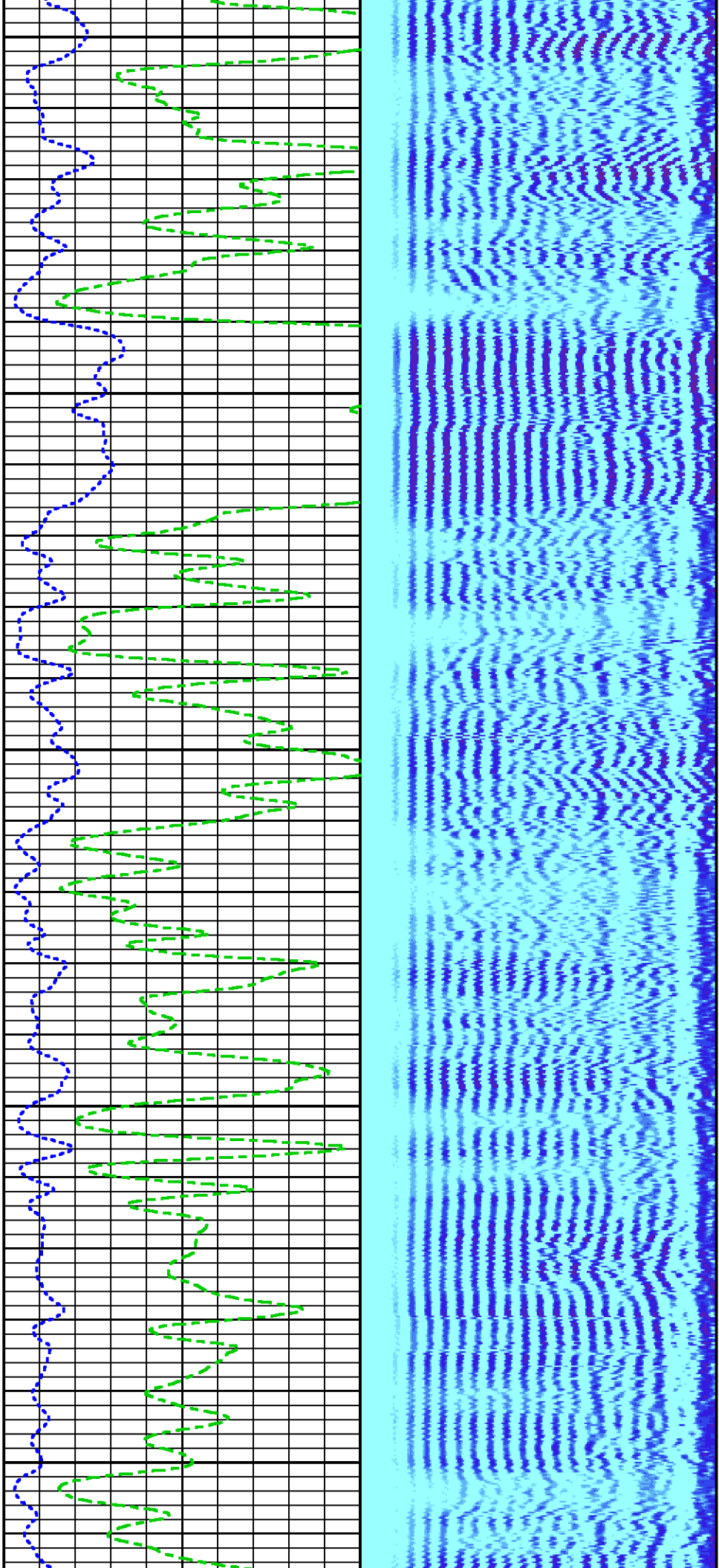




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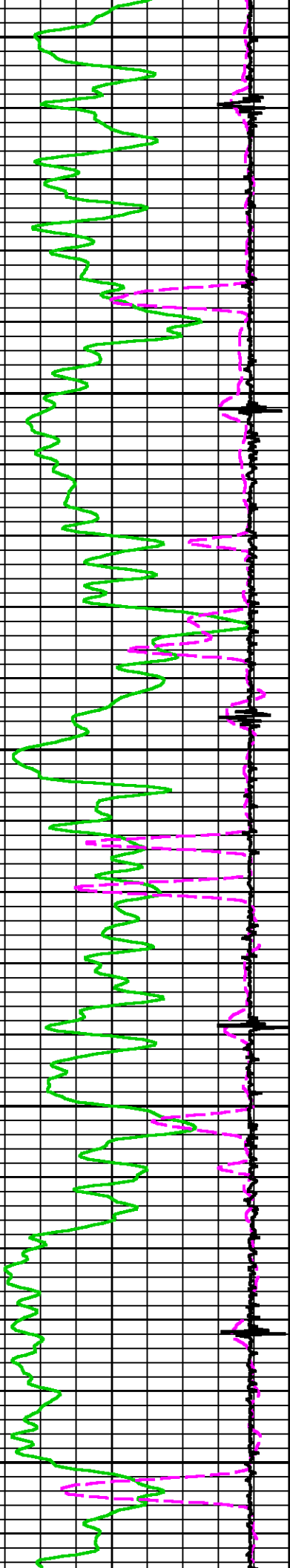


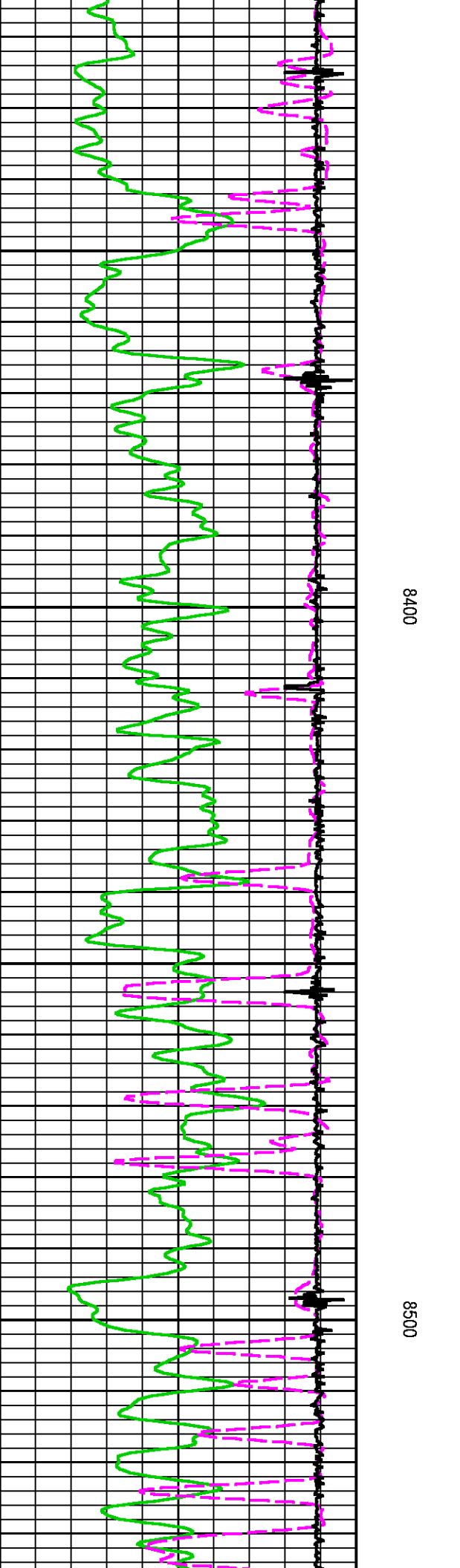
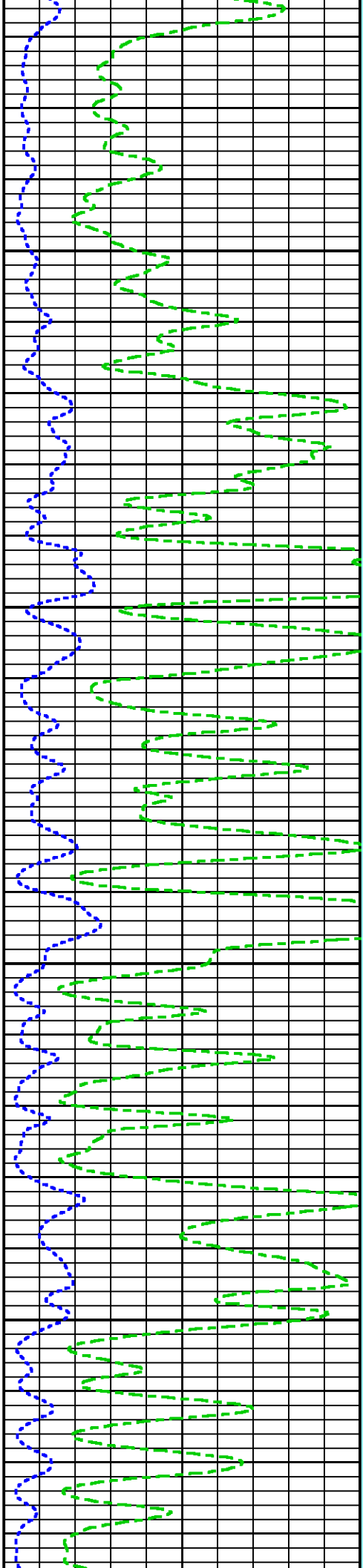
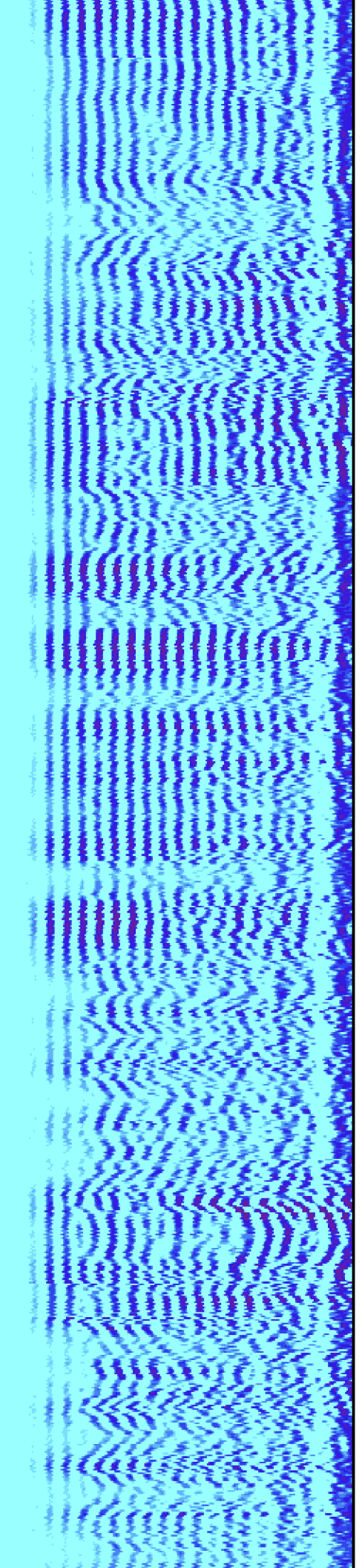


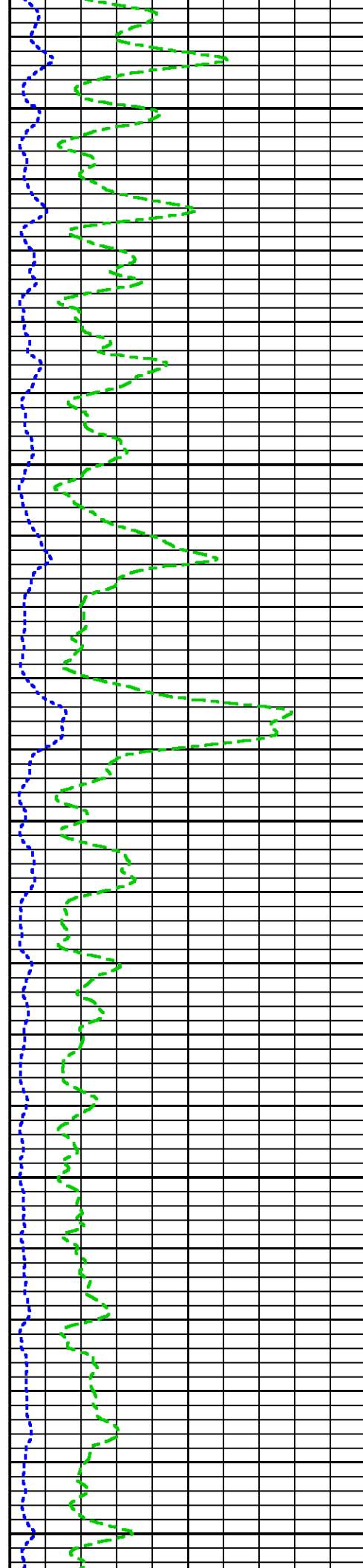
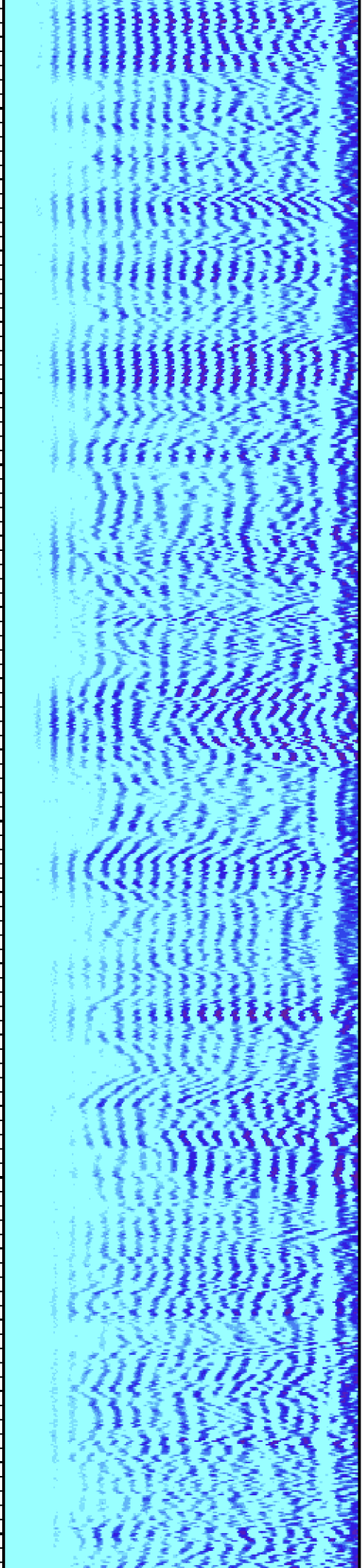
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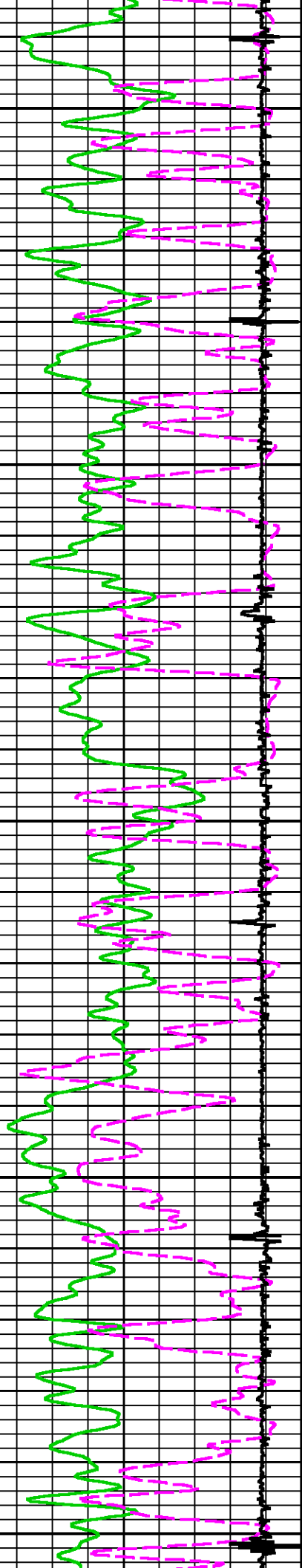


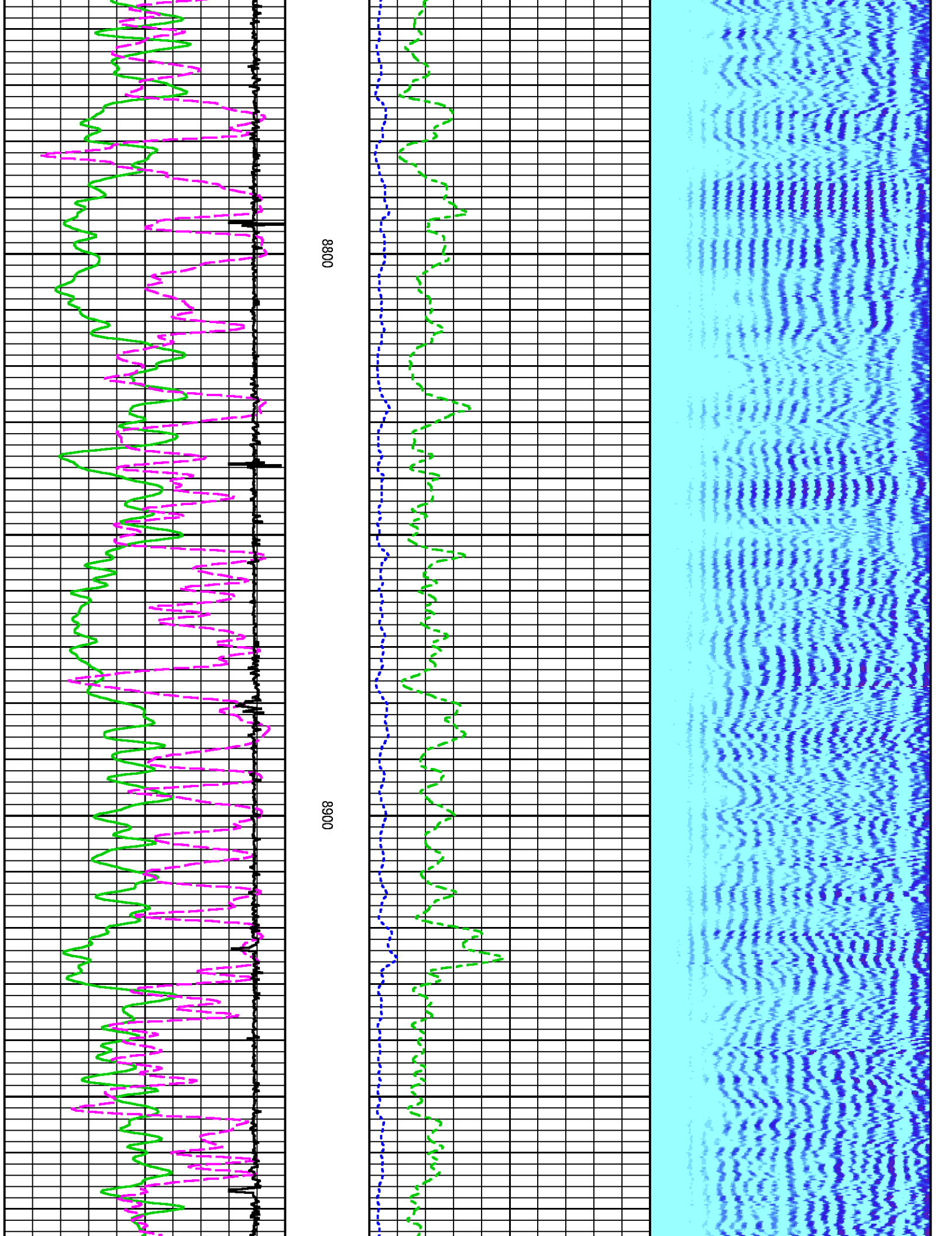


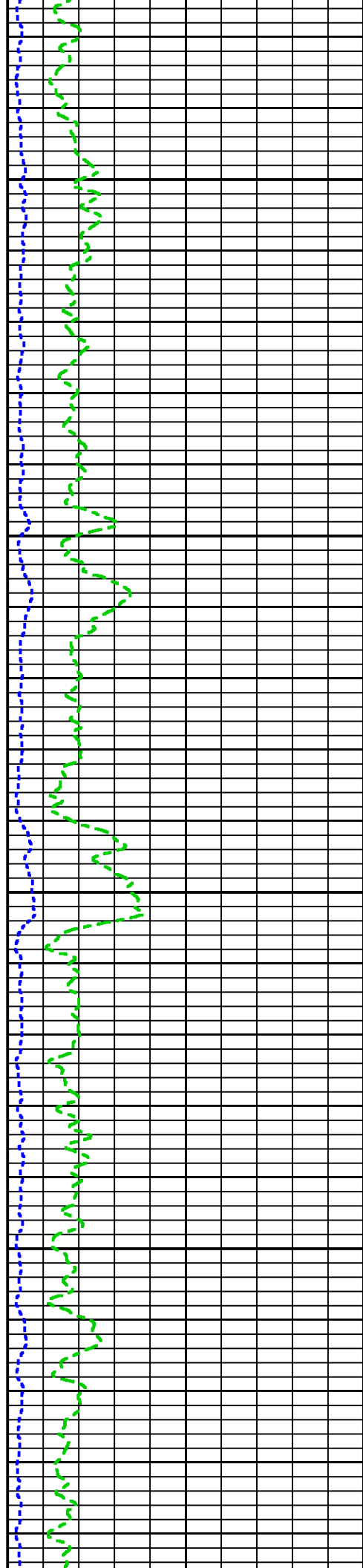
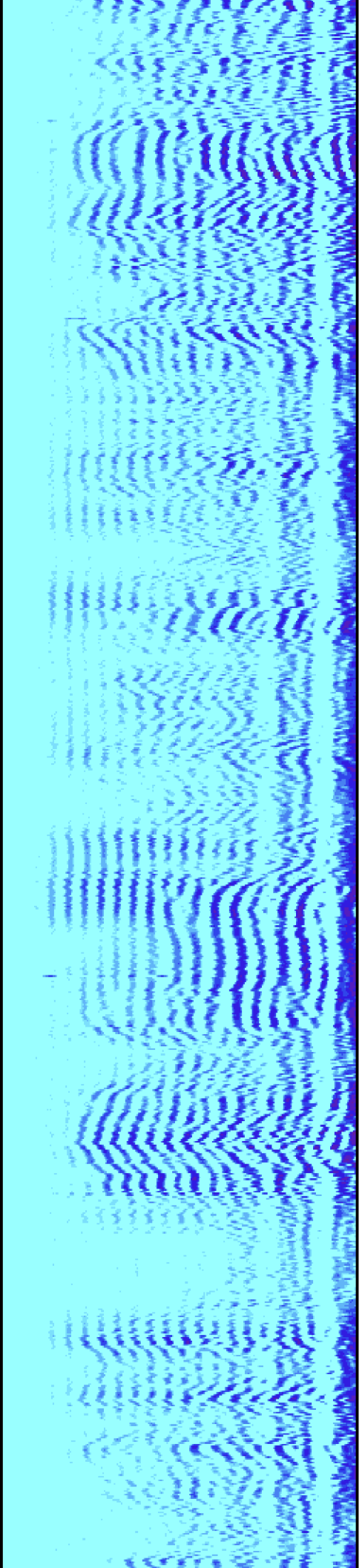


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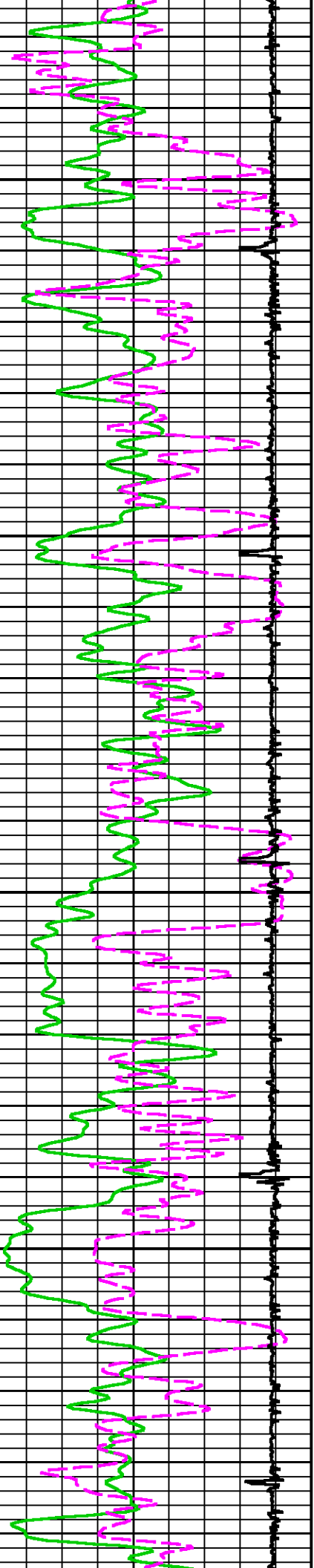


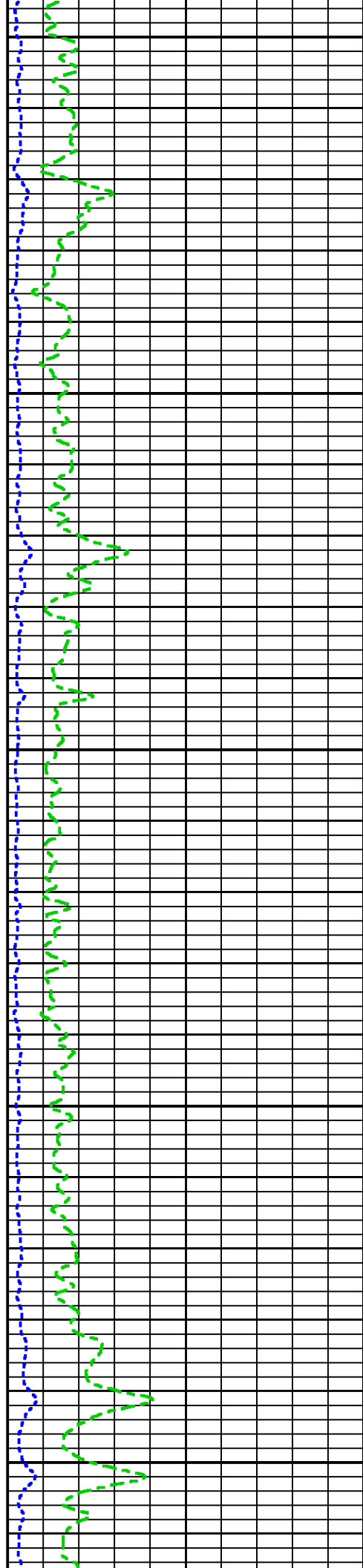
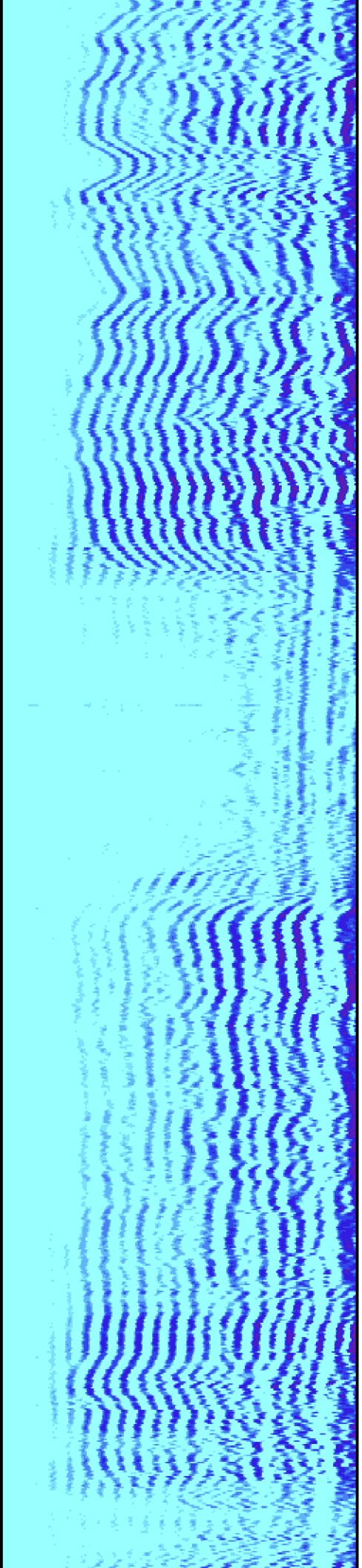




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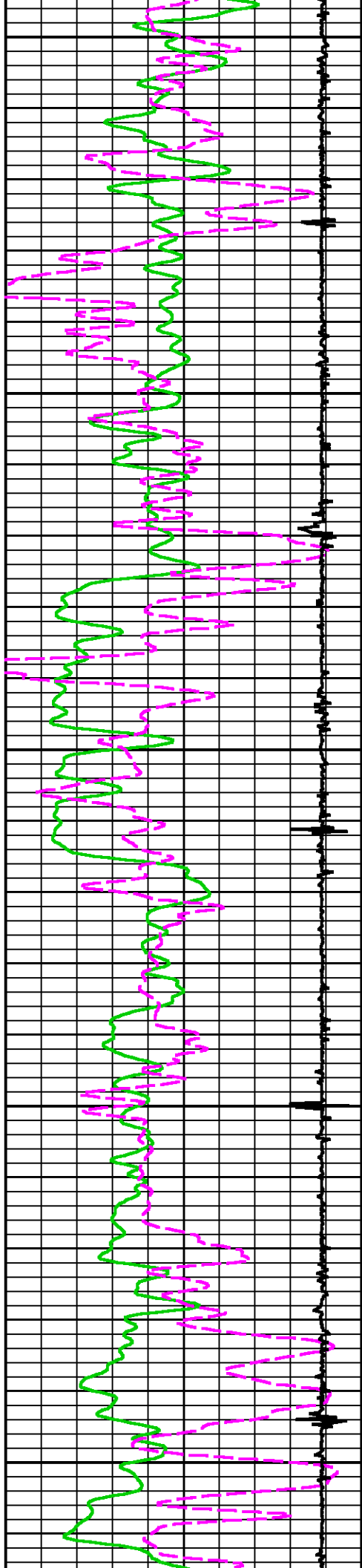


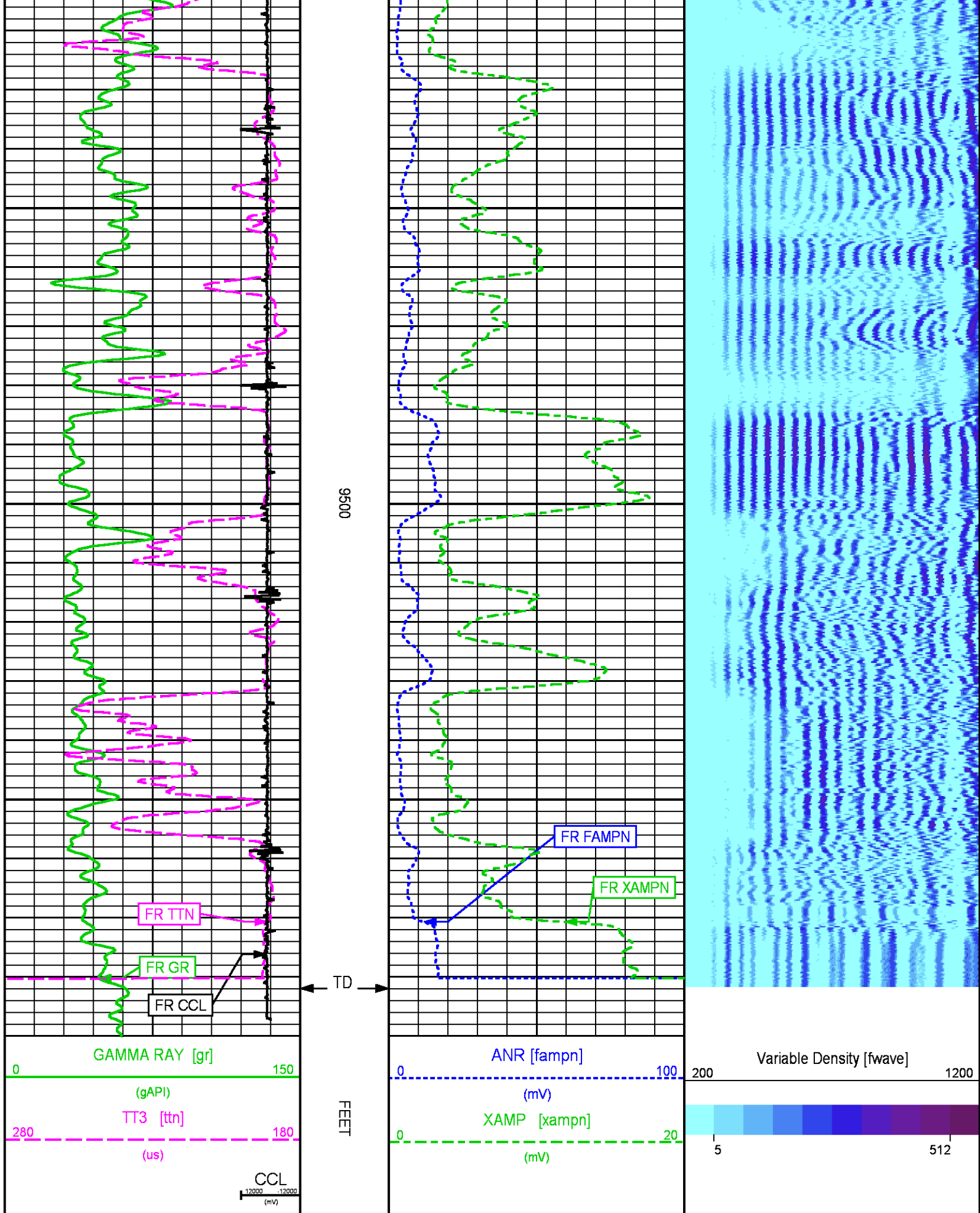


9200

9300

9400





REPEAT LOG 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 9

Plotted: Wed Sep 28 10:12:42 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/TEP_YOUBERG_RU_412-7/n012g01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9288.750 ft BOTTOM DEPTH: 9578.750 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*)	179	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

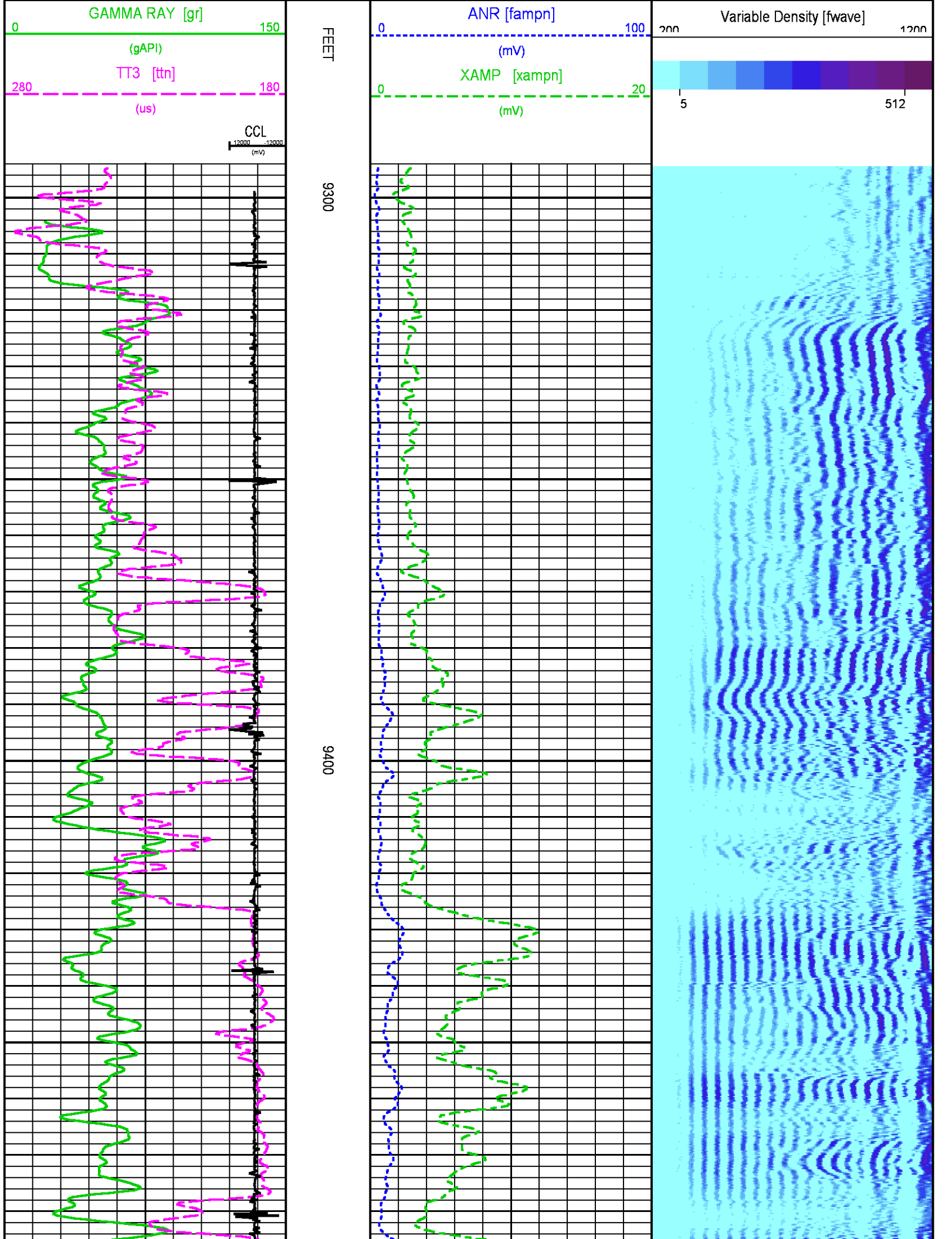
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Sep 28 08:55:39 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 28 08:55:39 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 28 08:55:39 2016	FAR WAVE FORM
F1:GR	Sep 28 08:55:39 2016	GAMMA RAY
F1:TTN	Sep 28 08:55:39 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 28 08:55:39 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

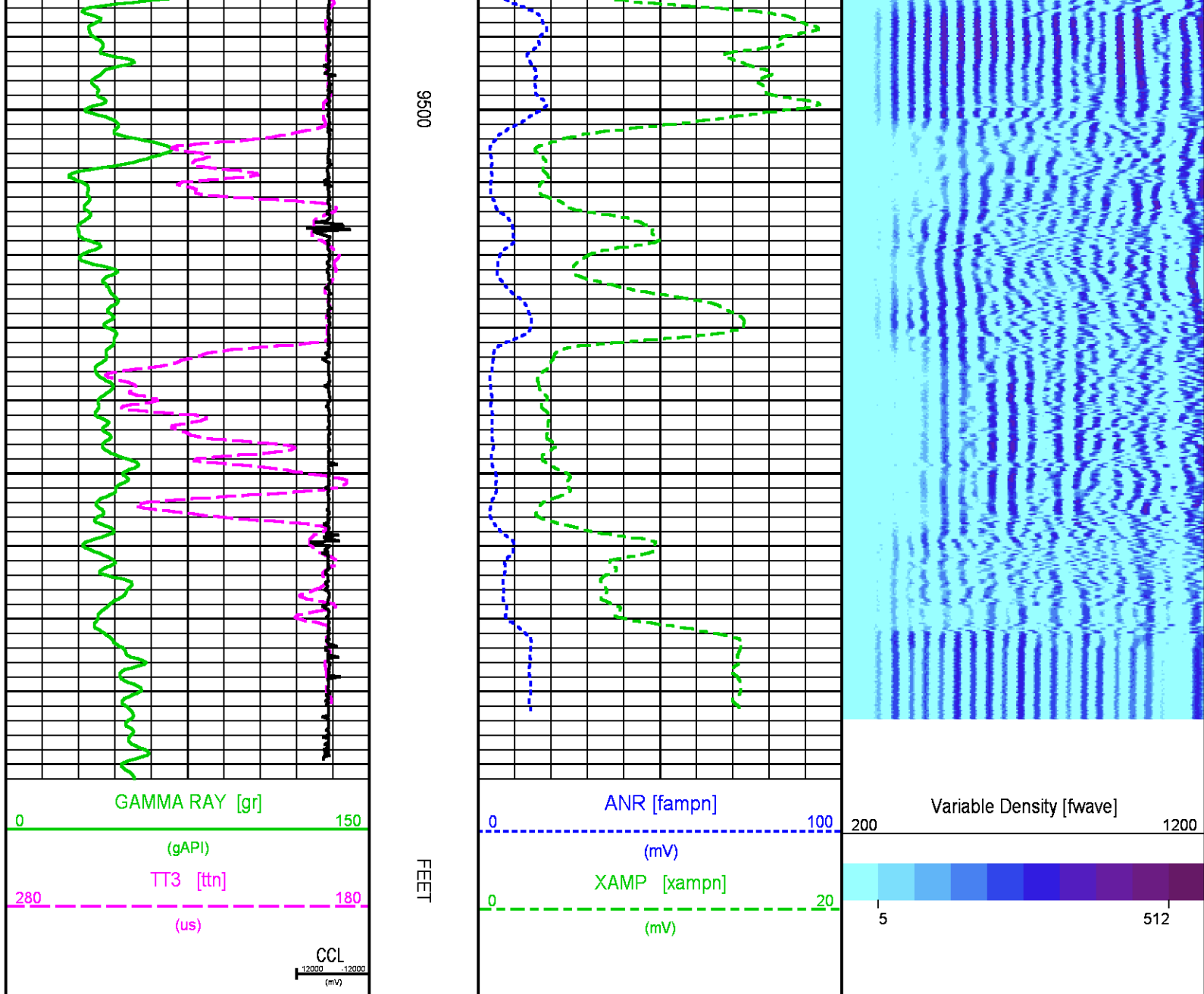
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	11.25		
FAMPN	11.25	TTN	11.25				

Presentation : cpu100:ral_cbl+01-REPEAT-412_RAL_RPT-5.fvpdf [5"/100' Scale]
Plot Interval : 9278.25 - 9577.25 Feet

Data File 1 : F1 : cpu100:/dat1a/TEP_YOUBERG_RU_412-7/412_RAL_RPT.xtf
Created On : Sep 28 08:55:39 2016
Company : TEP ROCKY MOUNTAIN LLC
Well : YOUBERG RU 412-7
Field : RULISON
File Interval : 9277.25 - 9578.75 Feet
OCT : n012g





SECONDARY MAIN 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 9

Plotted: Wed Sep 28 12:38:49 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/TEP_YOUBERG_RU_412-7/n012g02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 1.750 ft BOTTOM DEPTH: 9576.750 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*)	179	us	TOP	1598.750
		178	us	1598.750	1601.250
		176	us	1601.250	BOTTOM
	AMP WINDOW START (fgp2*)	183	us	TOP	1617.250
		182	us	1617.250	1625.500
		181	us	1625.500	1630.500
		179	us	1630.500	1636.750
		176	us	1636.750	BOTTOM
	AMP WINDOW START (fgp3*)	183	us	TOP	1608.250
		182	us	1608.250	1611.250
		181	us	1611.250	1612.250
		178	us	1612.250	BOTTOM
	AMP WINDOW START (fgp4*)	183	us	TOP	1580.750
		182	us	1580.750	BOTTOM
	AMP WINDOW START (fgp5*)	183	us	TOP	BOTTOM
	AMP WINDOW START (fgp6*)	183	us	"	"
	AMP WINDOW START (fgp7*)	183	us	"	"
	AMP WINDOW START (fgp8*)	179	us	"	"
	AMP WINDOW START (fgpn*)	179	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	"	"

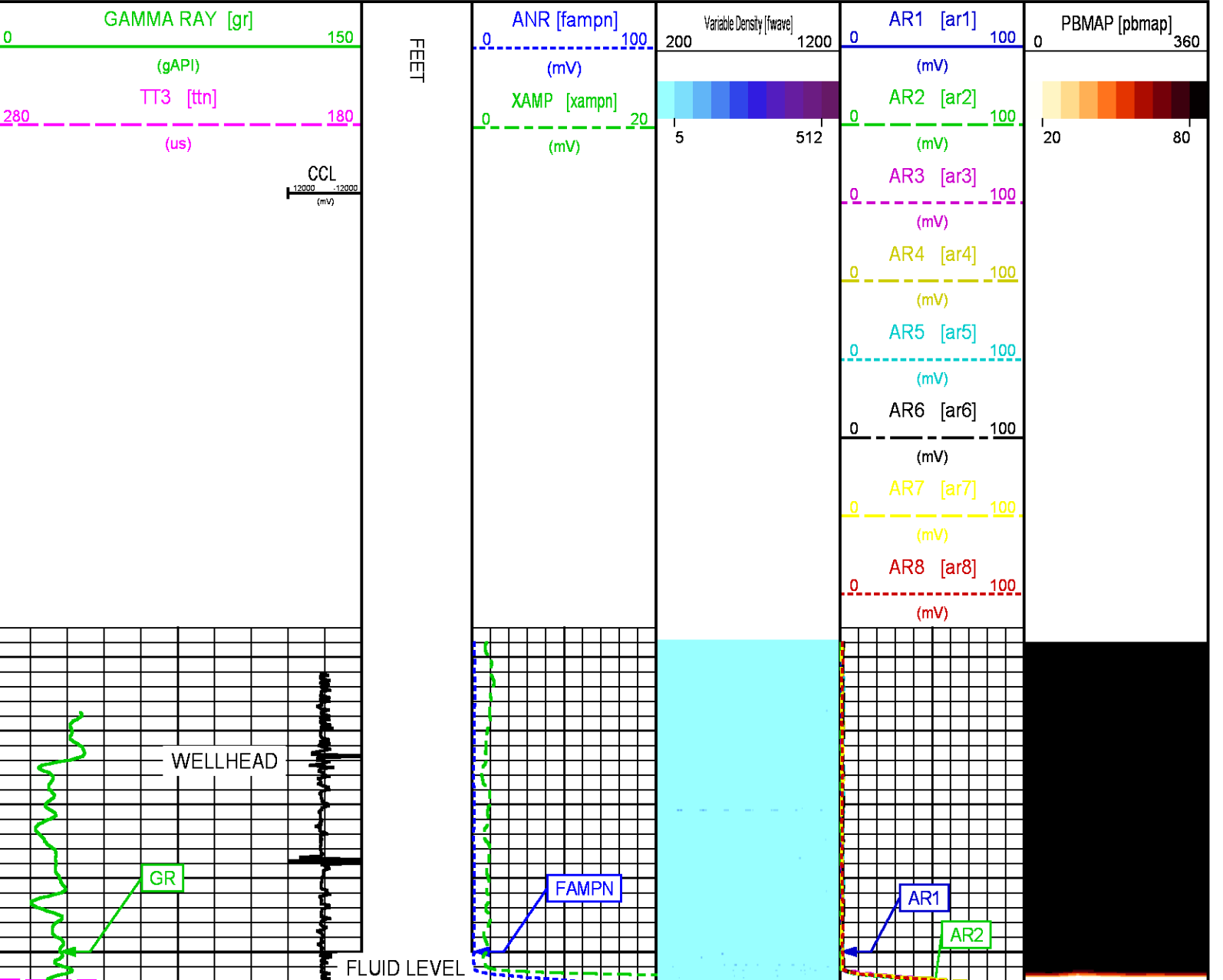
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R1
F1:AR2	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R2
F1:AR3	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R3
F1:AR4	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R4
F1:AR5	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R5
F1:AR6	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R6

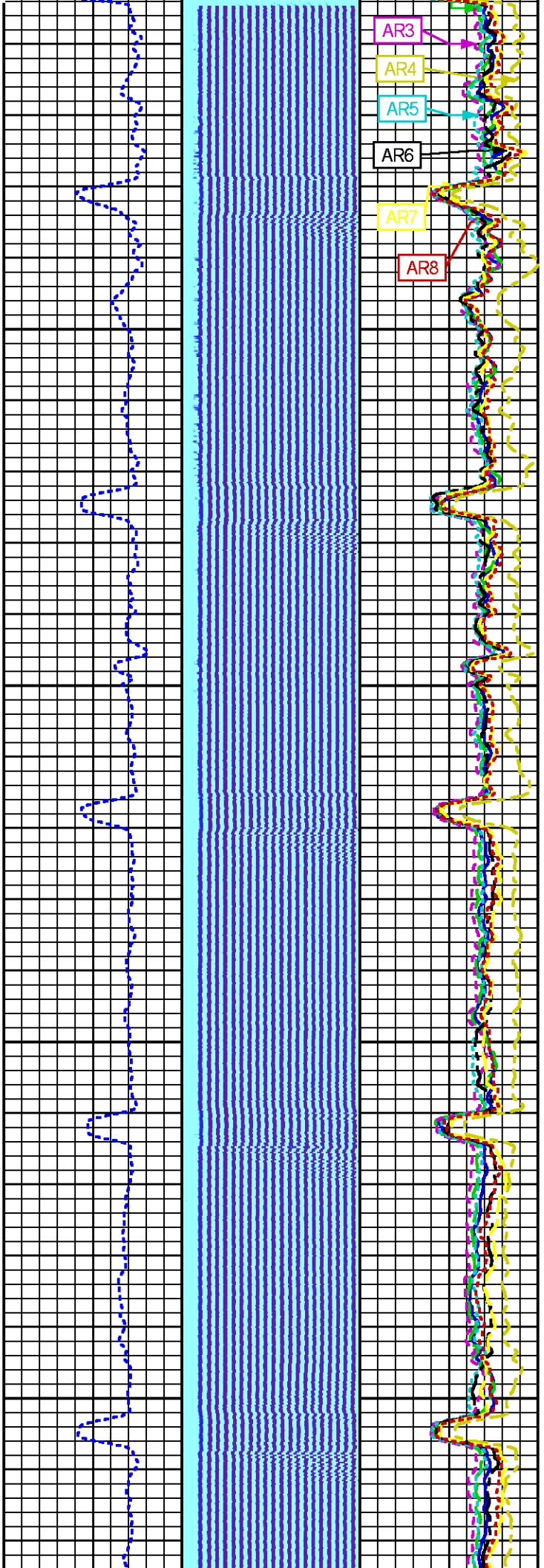
F1:AR7	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R7
F1:AR8	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE T-R8
F1:CCL	Sep 28 09:03:11 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 28 09:03:11 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 28 09:03:11 2016	FAR WAVE FORM
F1:GR	Sep 28 09:03:11 2016	GAMMA RAY
F1:PBMAP	Sep 28 09:03:11 2016	PERCENT BOND CEMENT MAP
F1:TTN	Sep 28 09:03:11 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 28 09:03:11 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	11.25	AR5	11.25	CCL	5.75	XAMPN	11.25
AR2	11.25	AR6	11.25	FAMPN	11.25		
AR3	11.25	AR7	11.25	GR	1.75		
AR4	11.25	AR8	11.25	TTN	11.25		

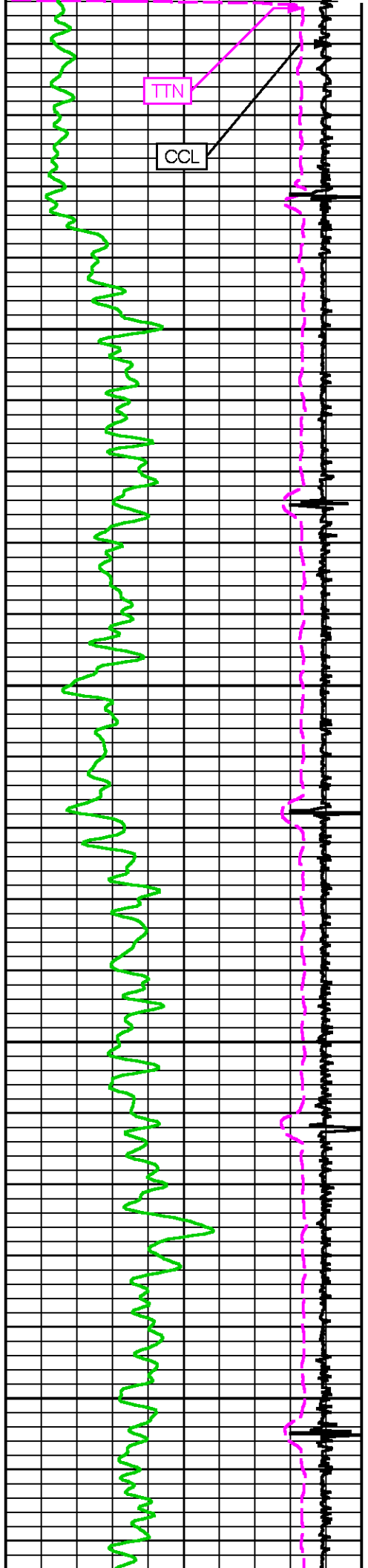
Presentation	: cpu100:/dat1a/TEP_YOUBERG_RU_412-7/ral_all+01-SECONDARY-412RAL_MN-5.fvpdf [5"/100' Scale]
Plot Interval	: 7.75 - 9591.75 Feet
Data File 1	: F1 : cpu100:/dat1a/TEP_YOUBERG_RU_412-7/412RAL_MN.xtf
Created On	: Sep 28 09:03:11 2016
Company	: TEP ROCKY MOUNTAIN LLC
Well	: YOUBERG RU 412-7
Field	: RULISON
File Interval	: 6.75 - 9593 Feet
OCT	: n012g

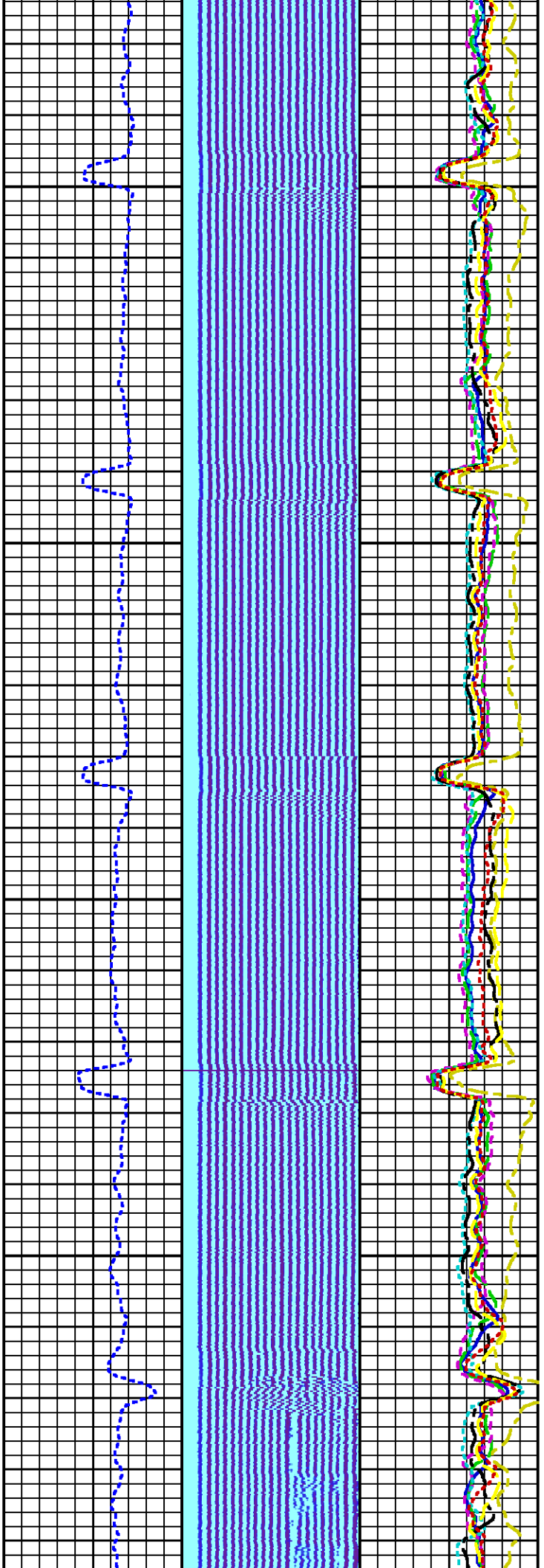




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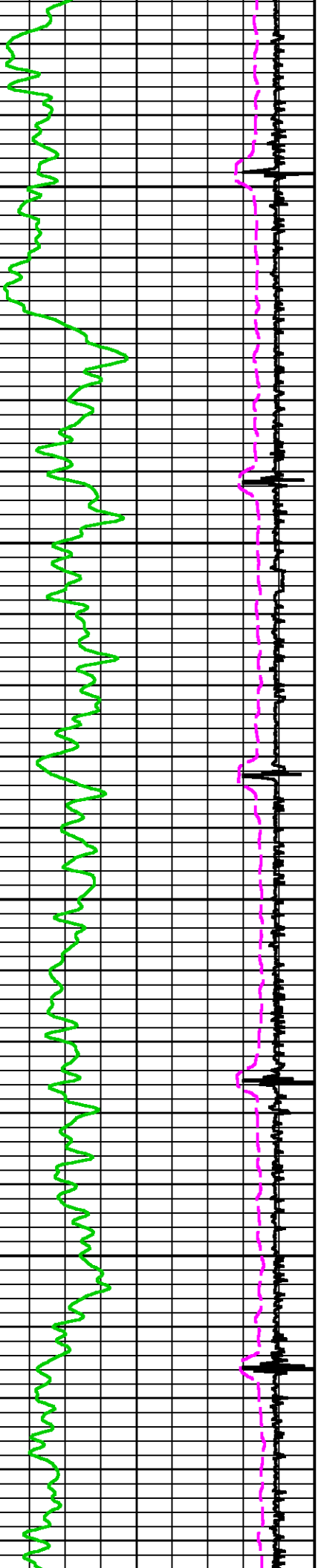
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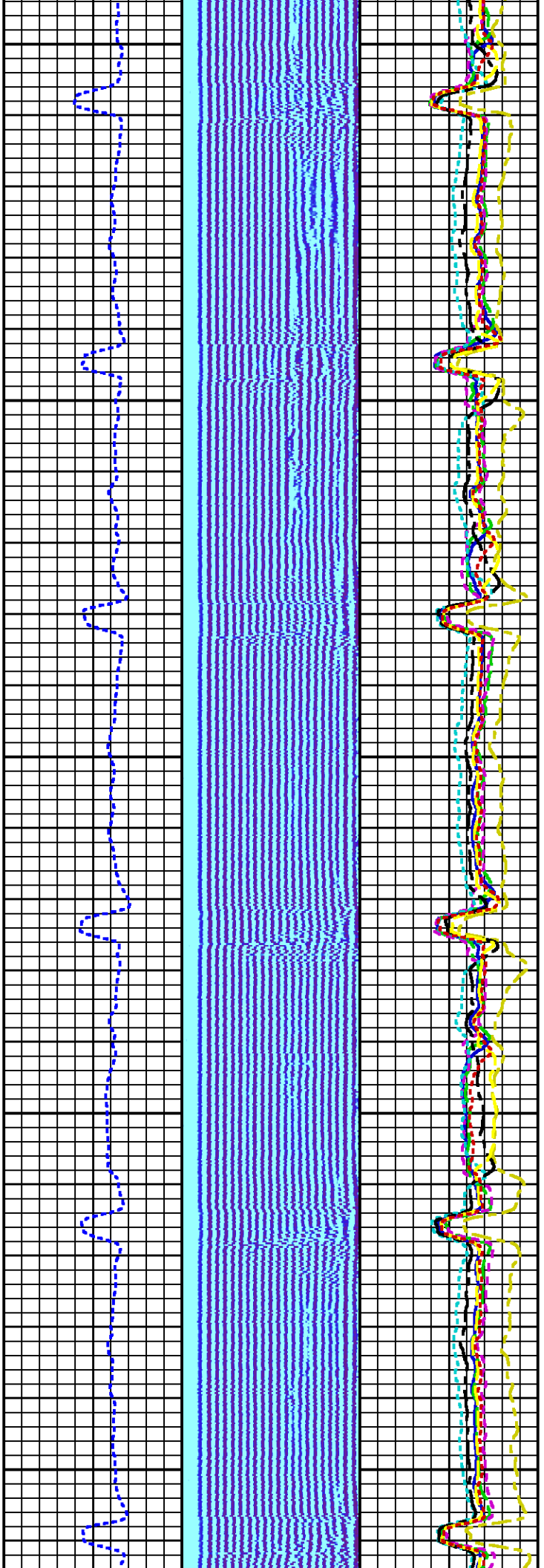




300

400

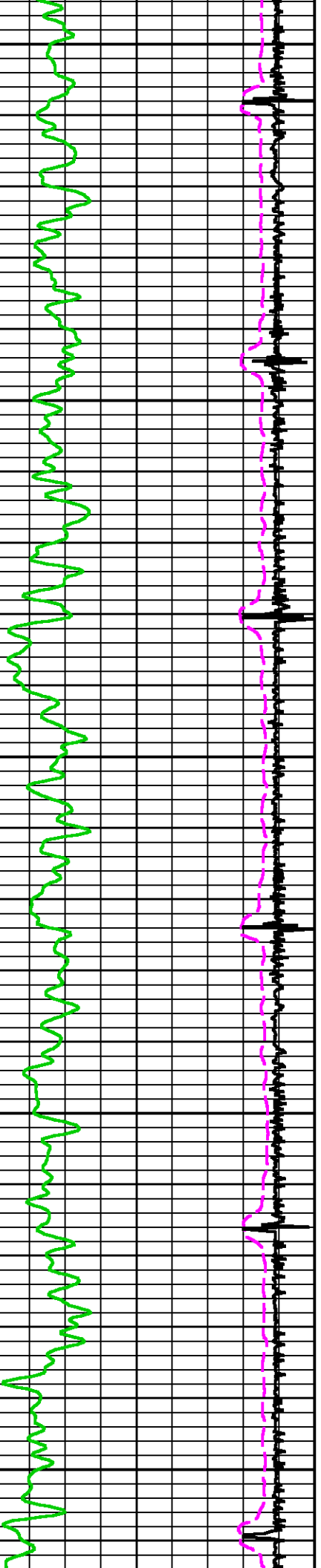


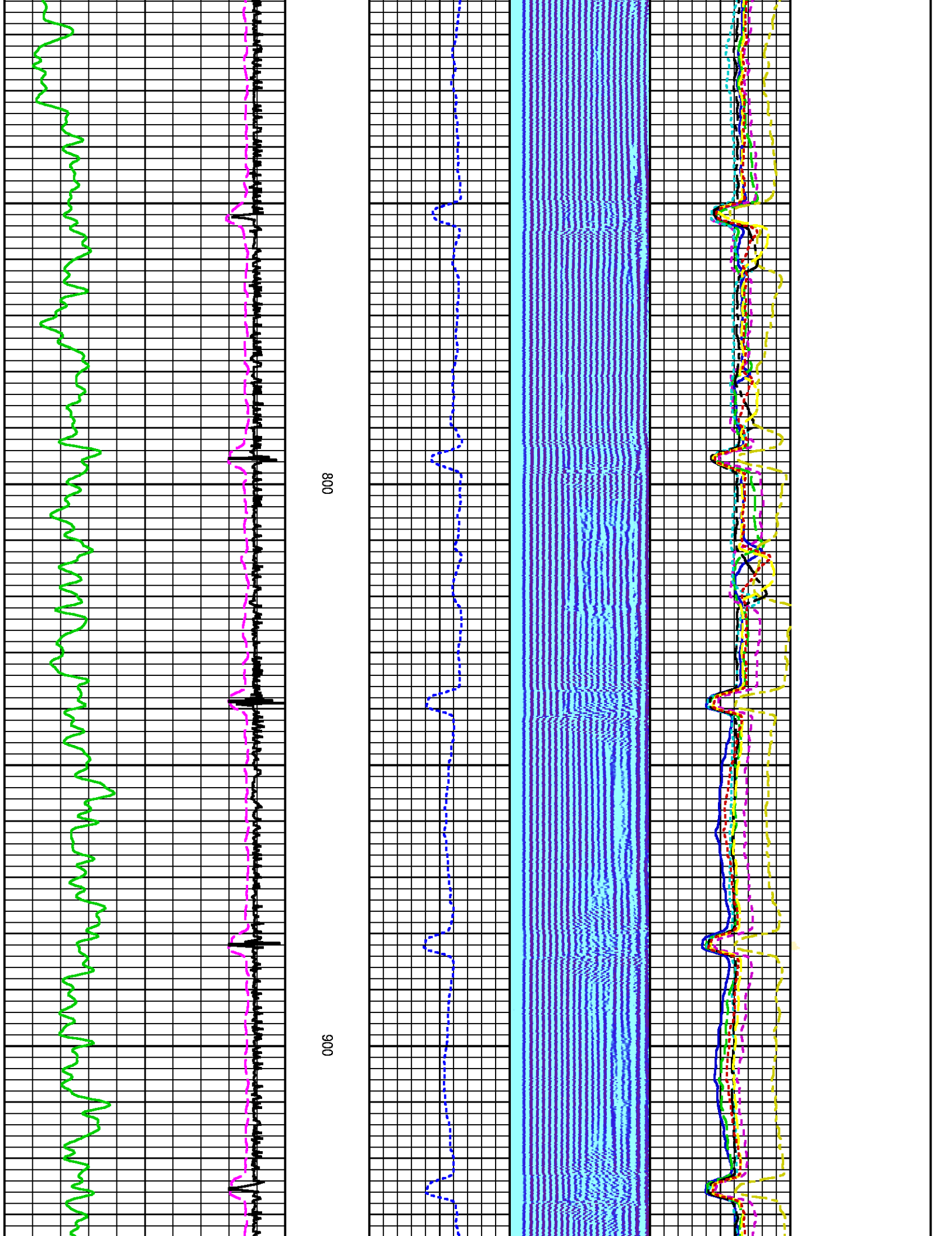


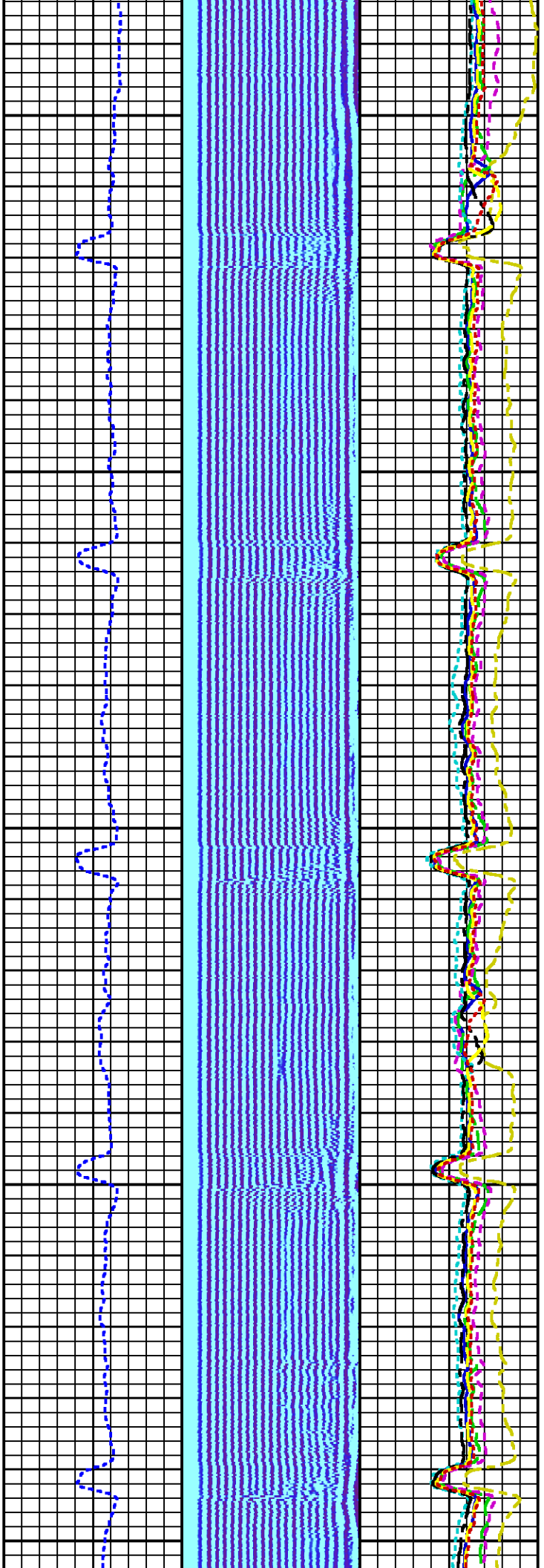
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600

700

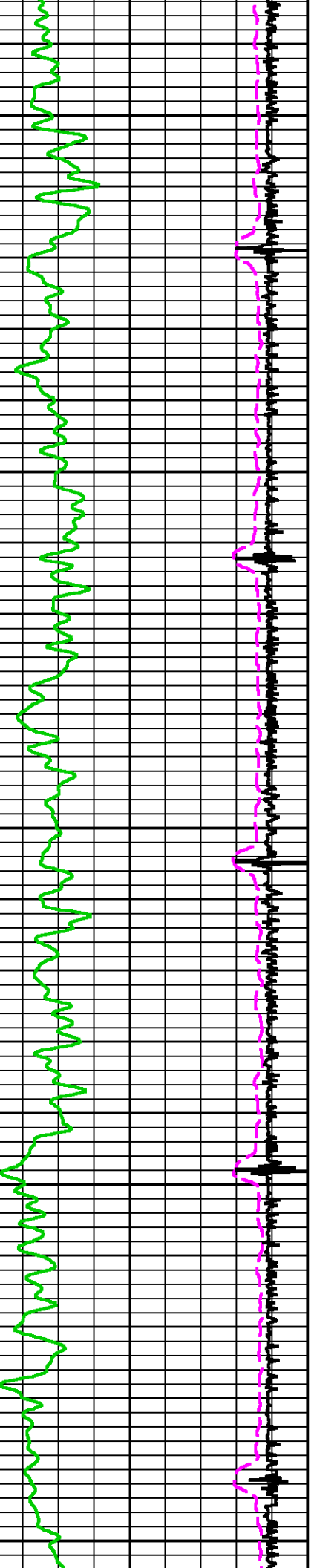


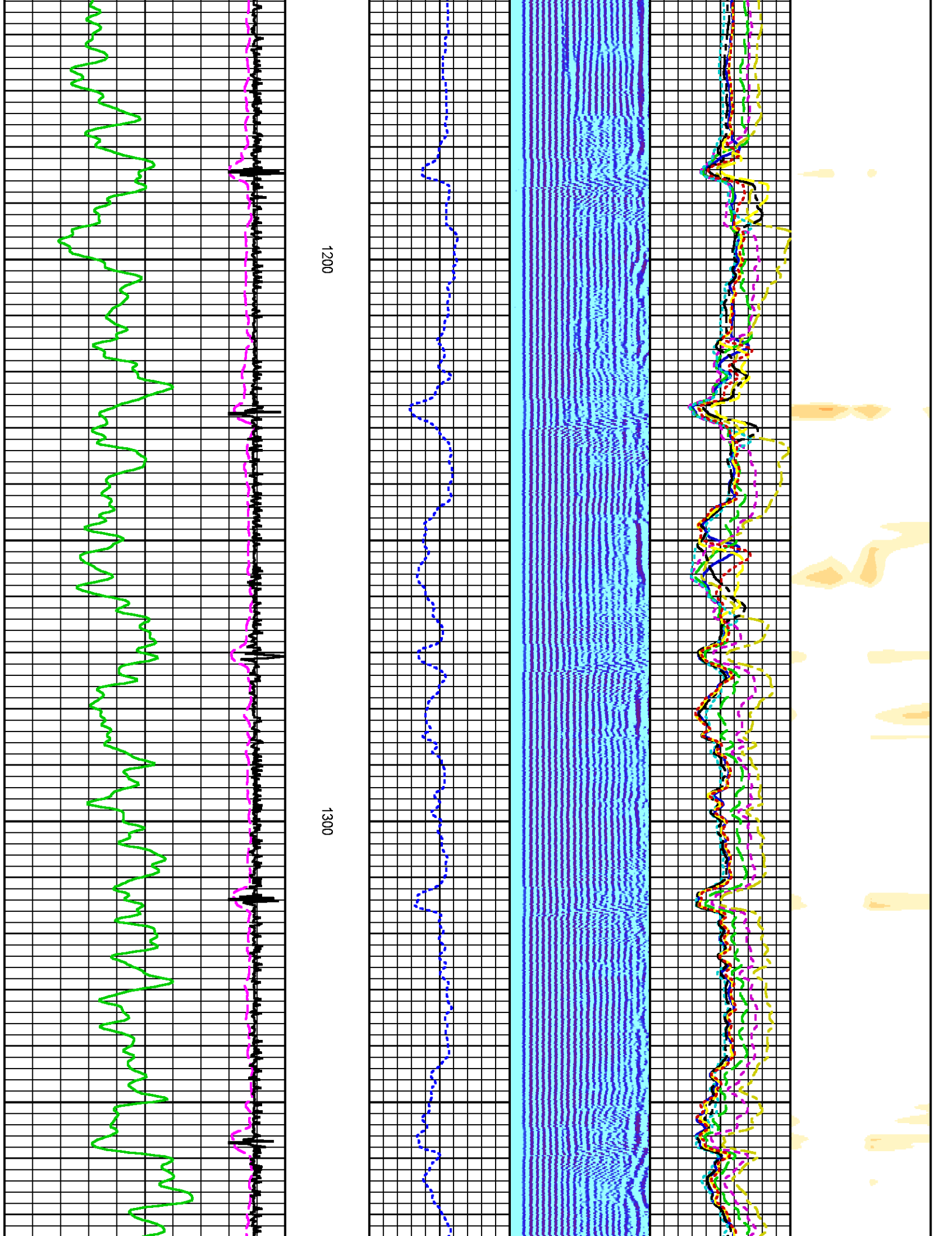


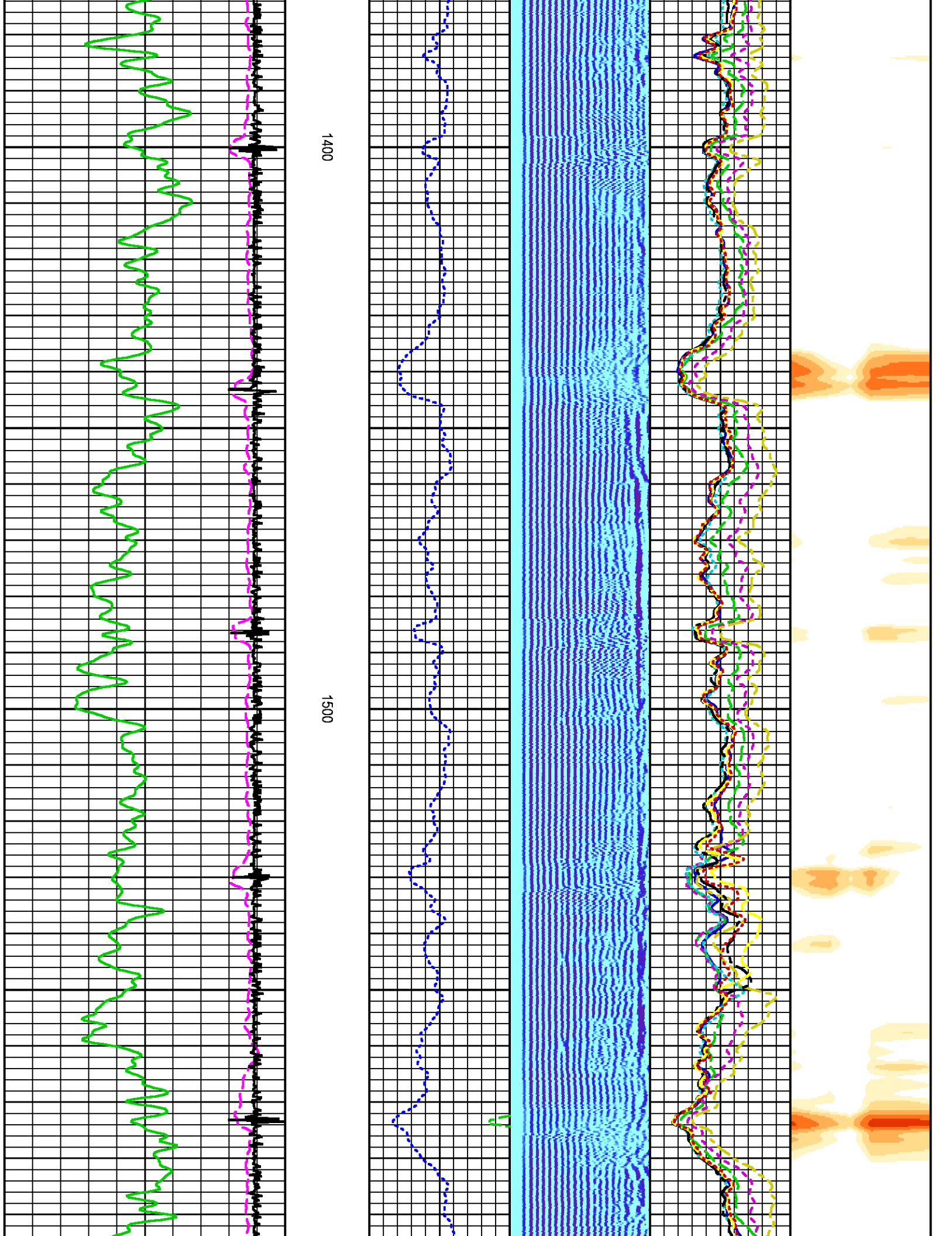


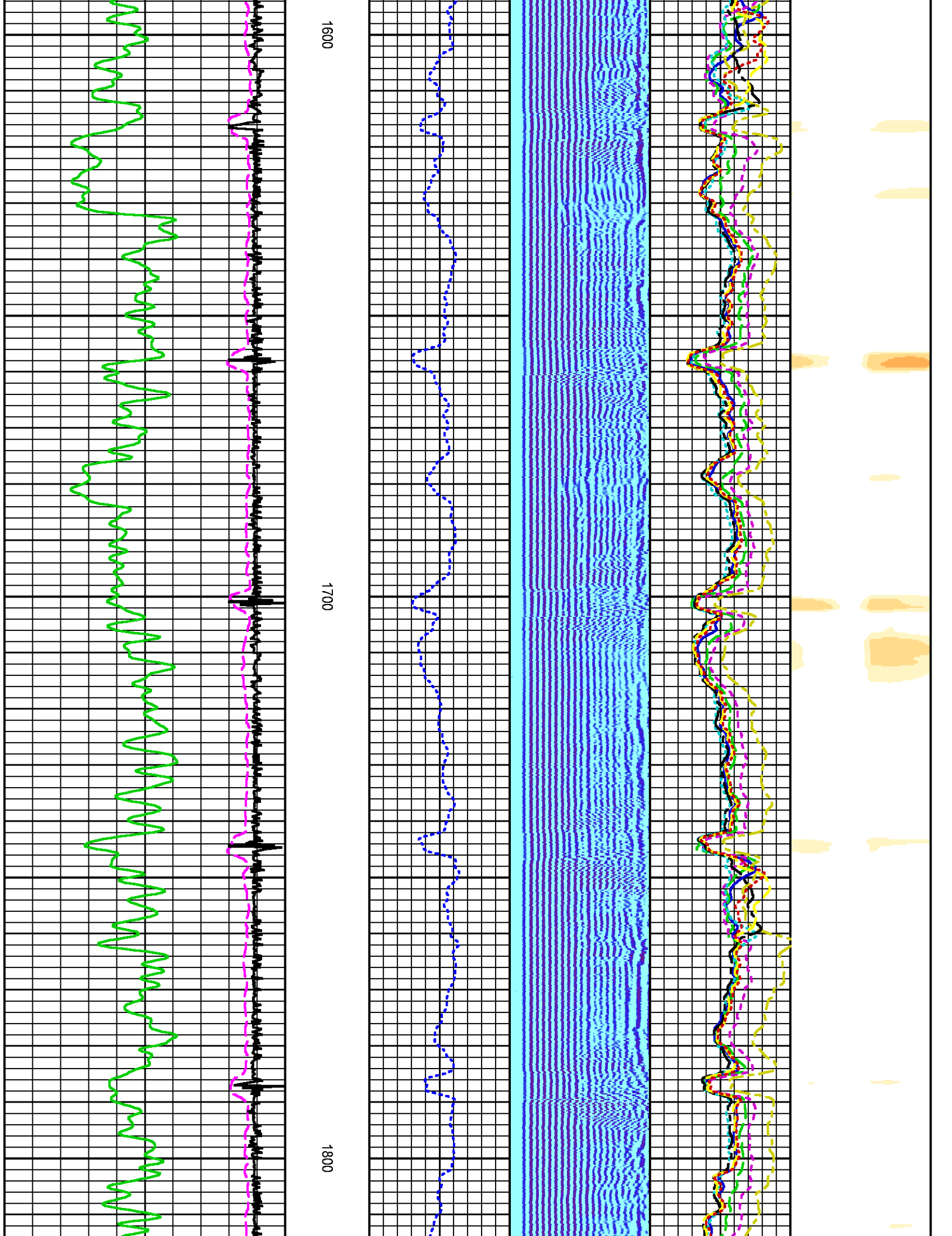
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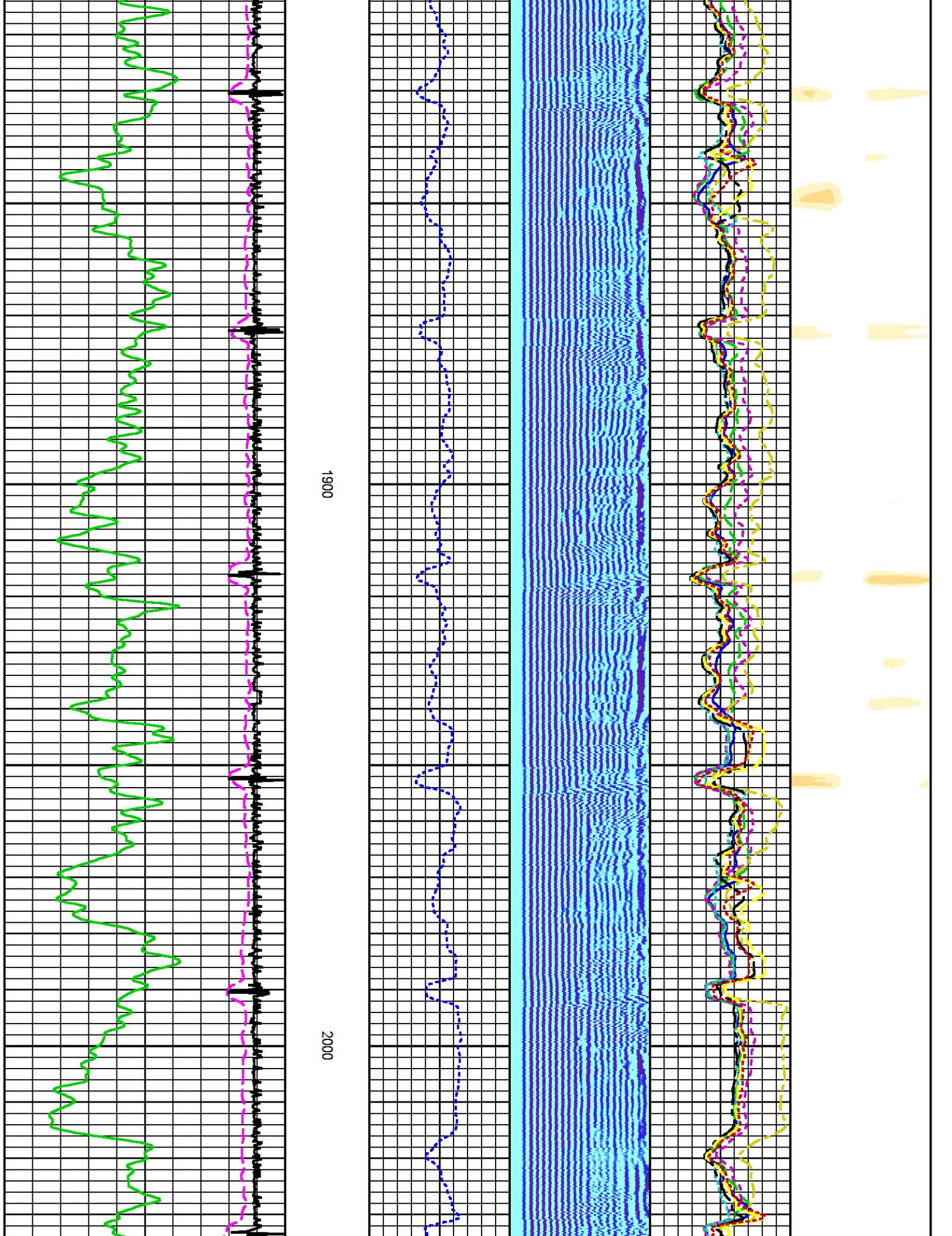
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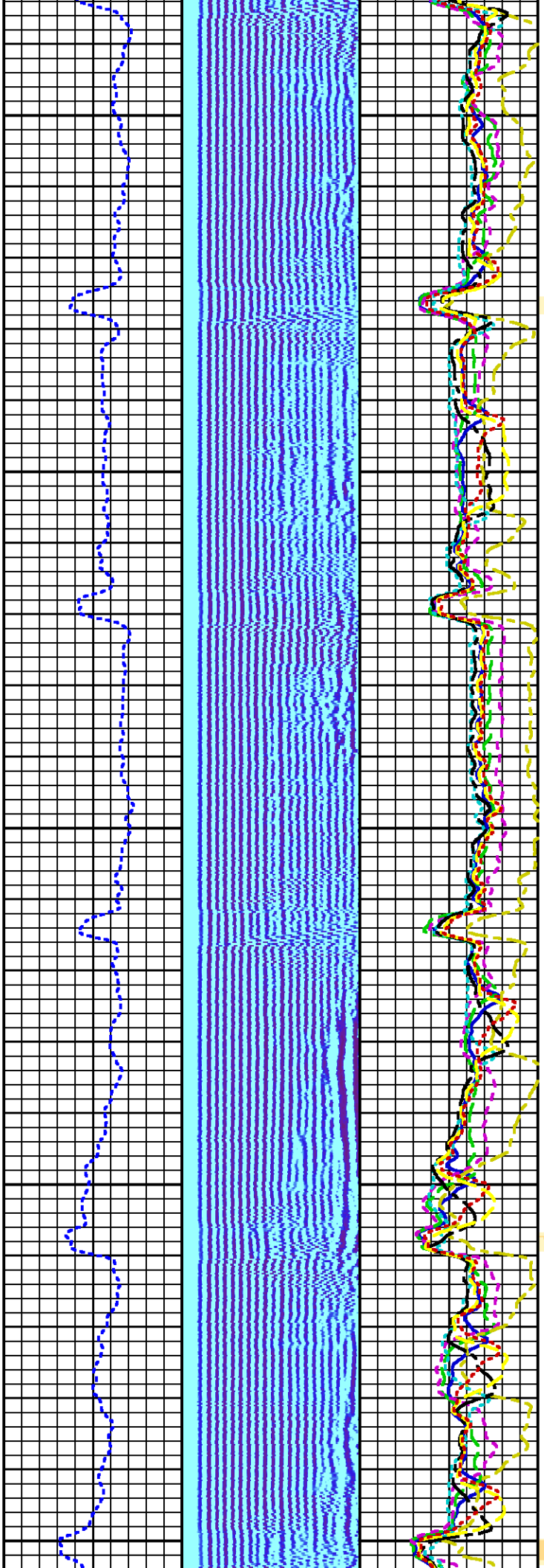






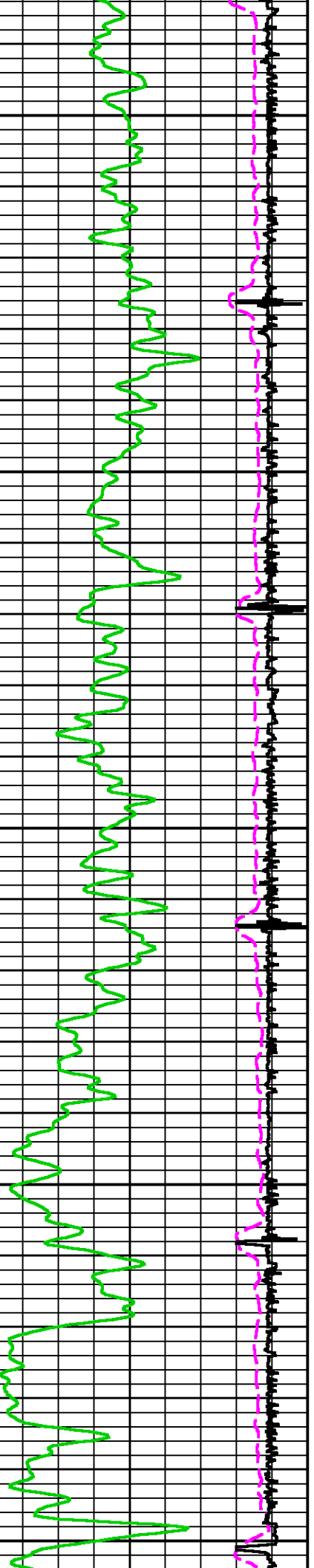


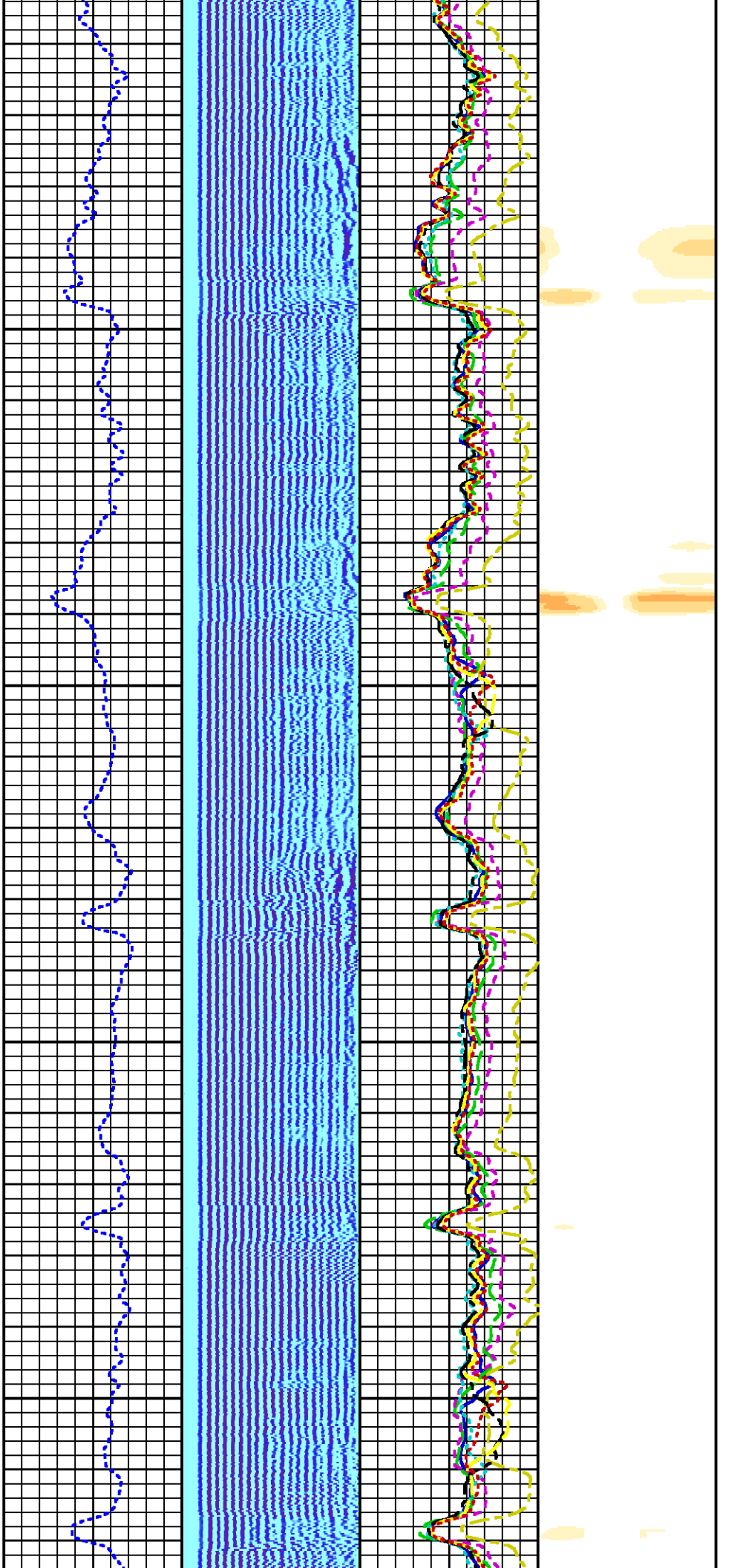




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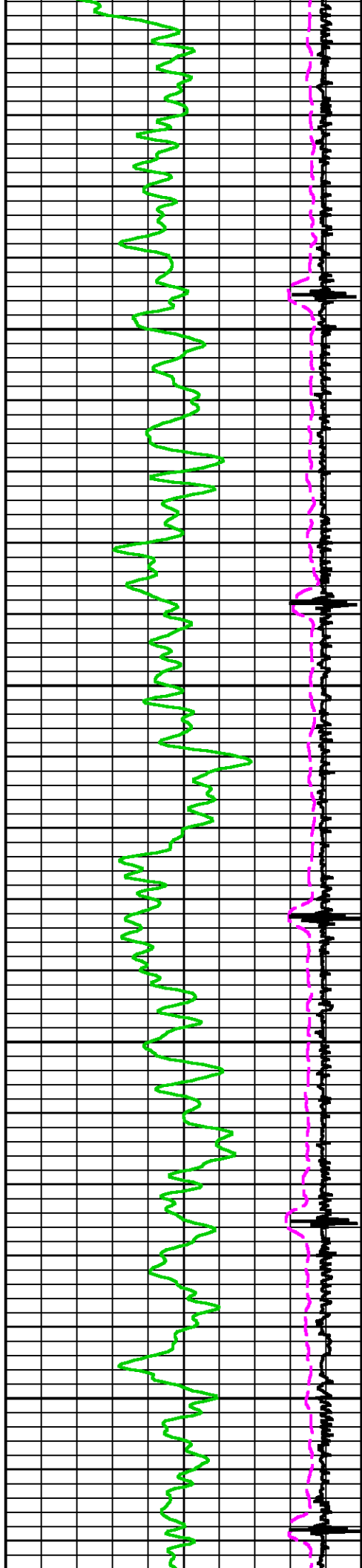
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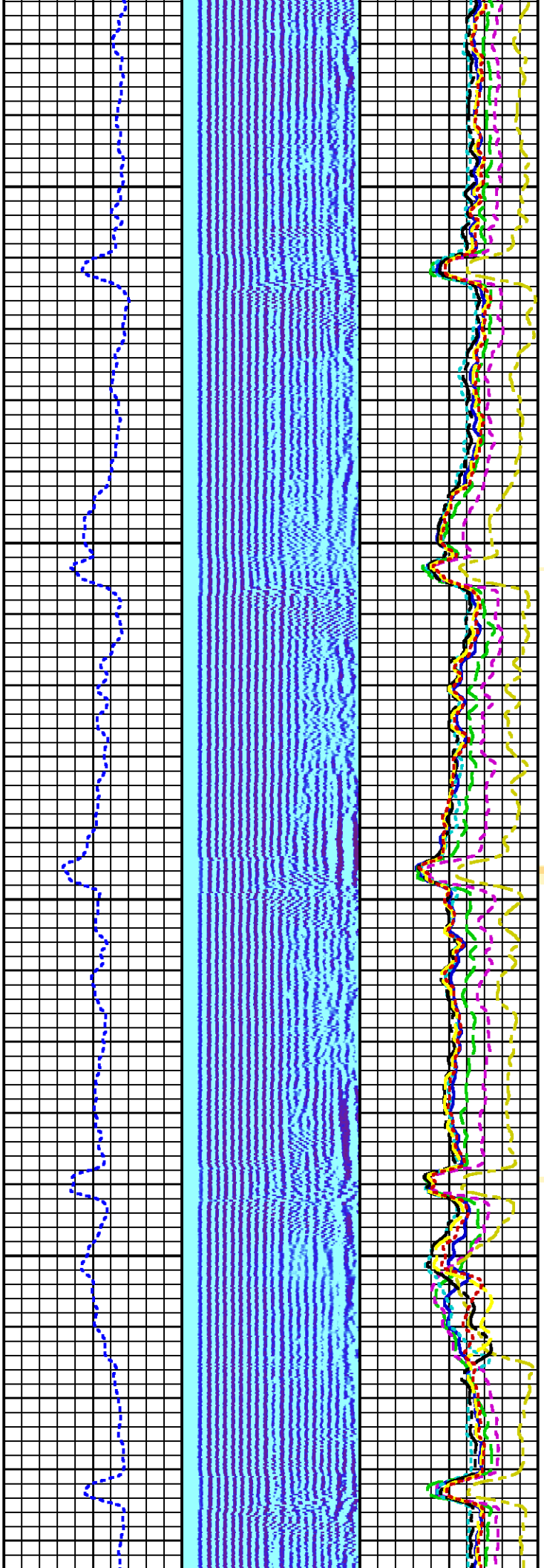




2300

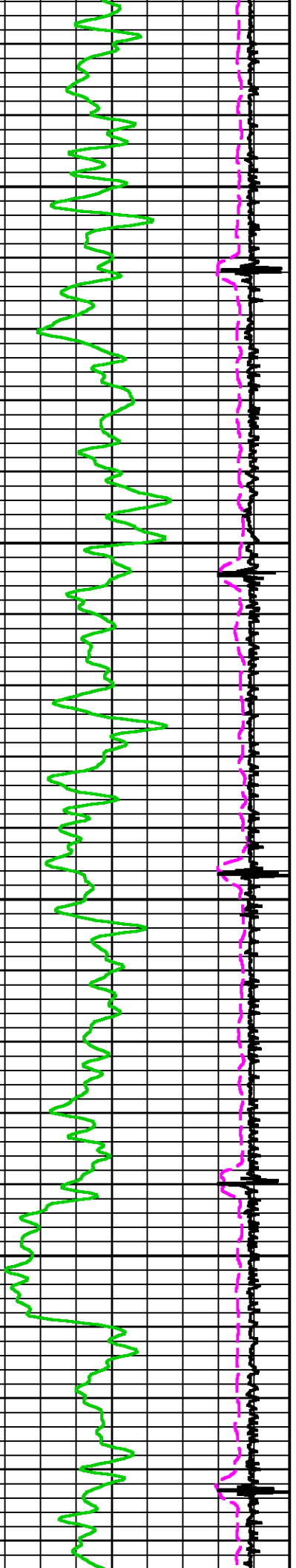
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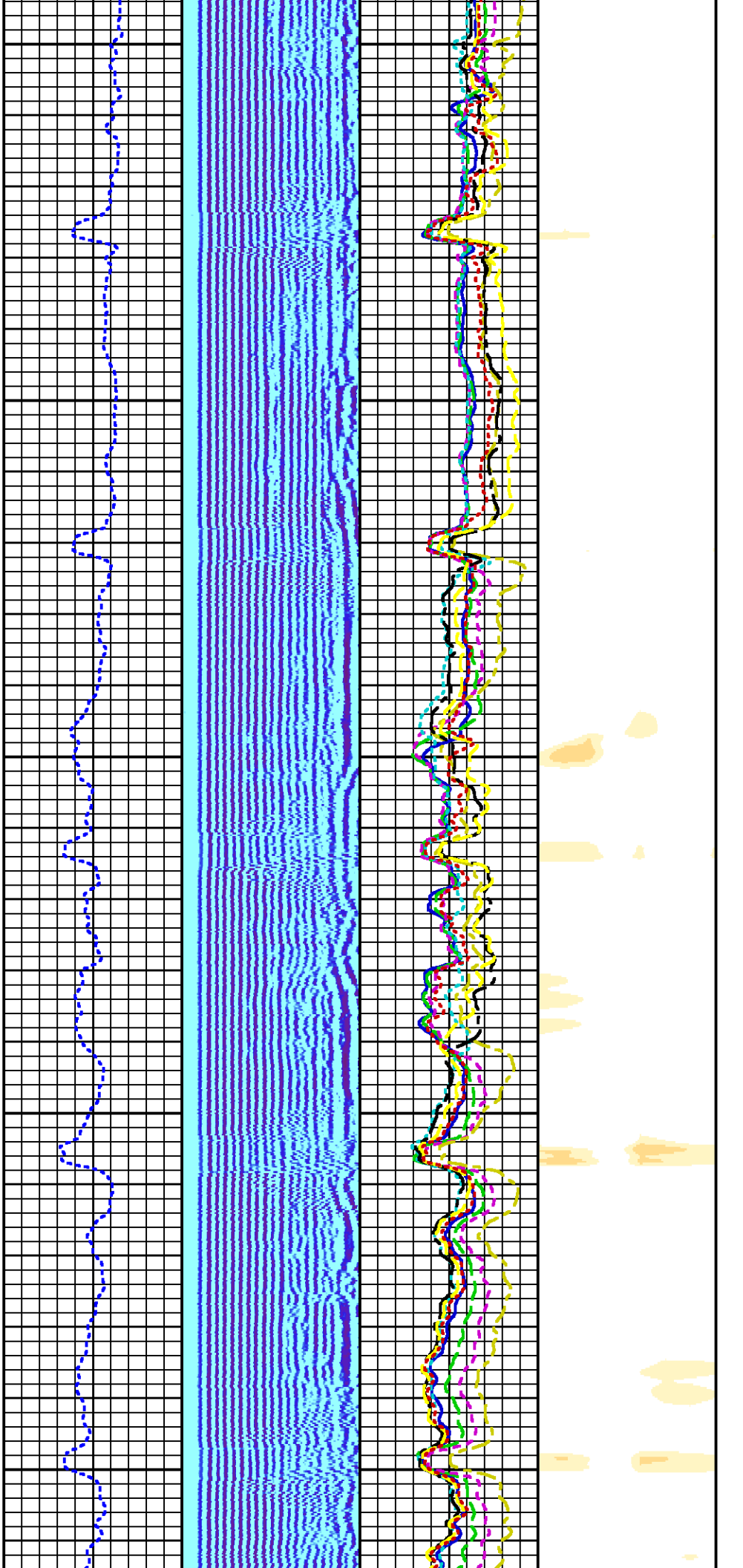




2500

2600

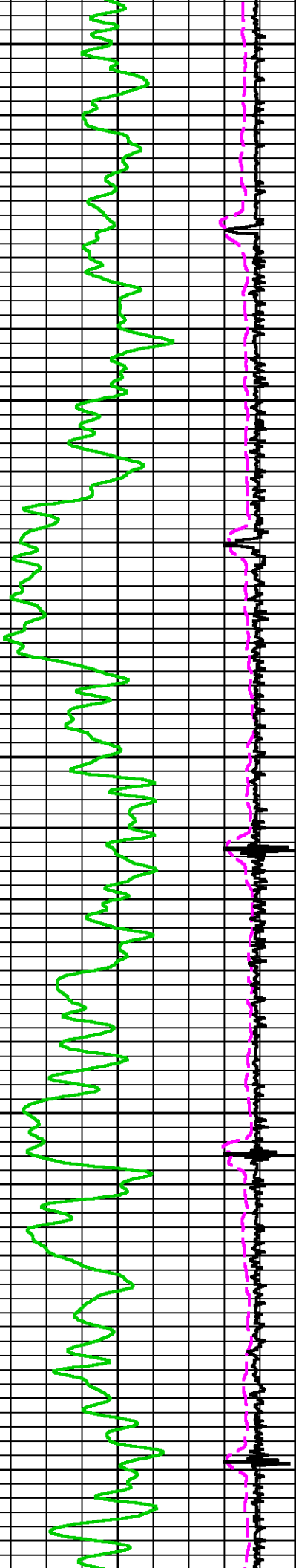


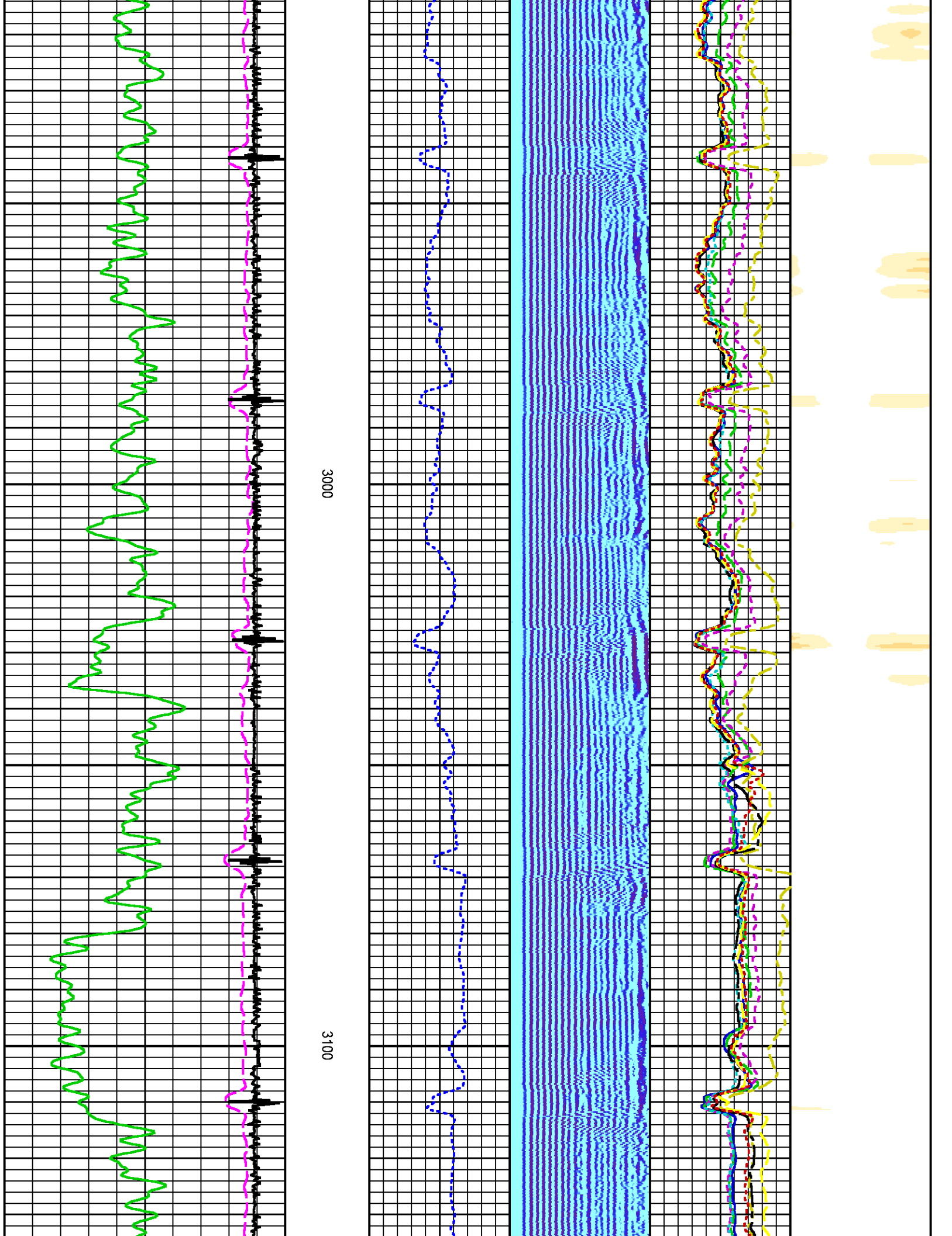


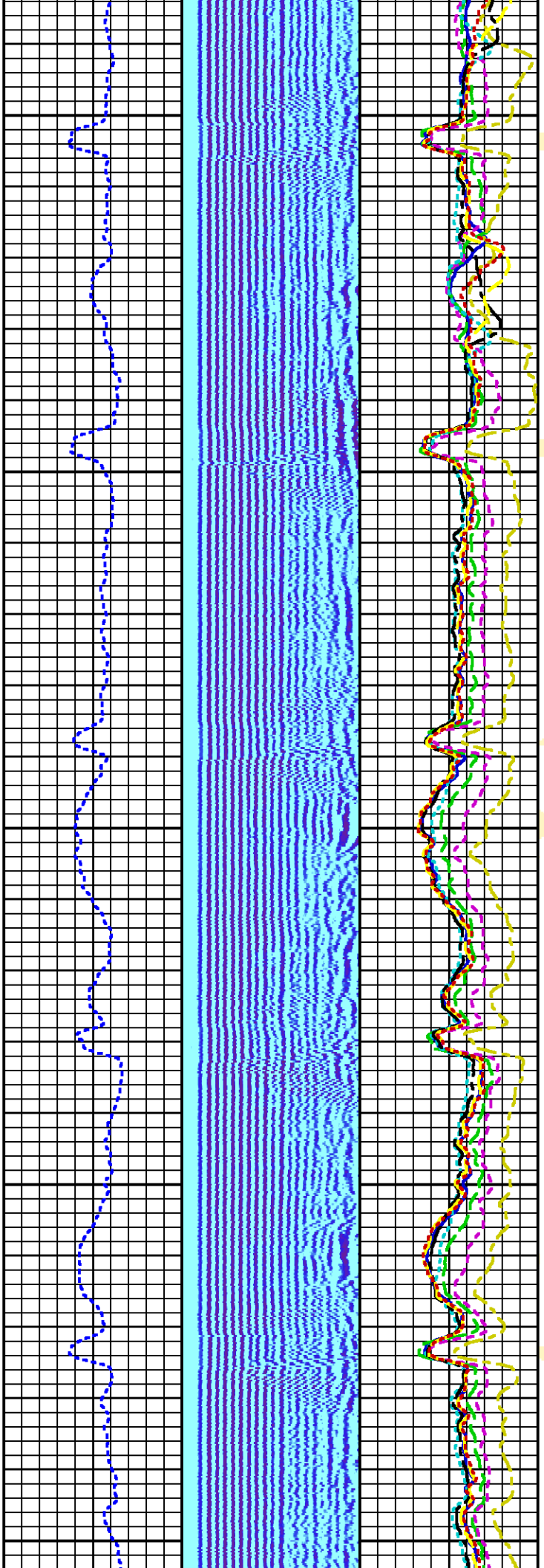
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2900

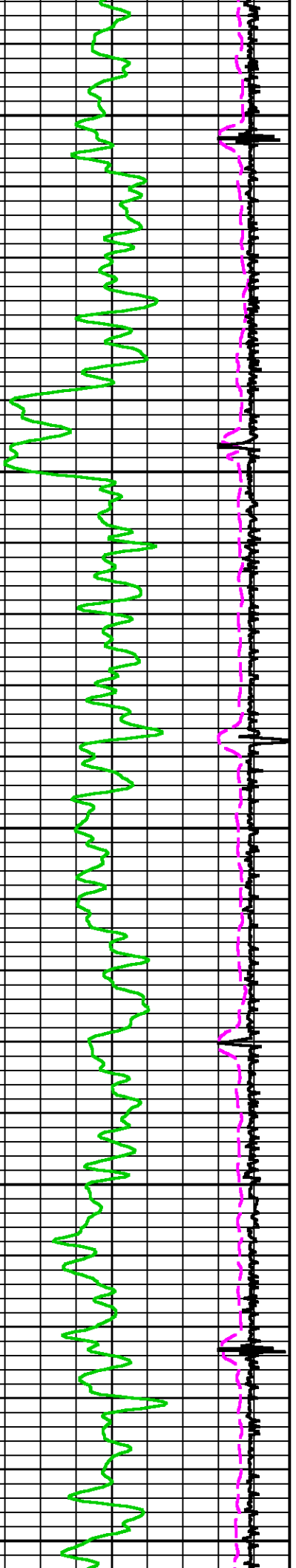


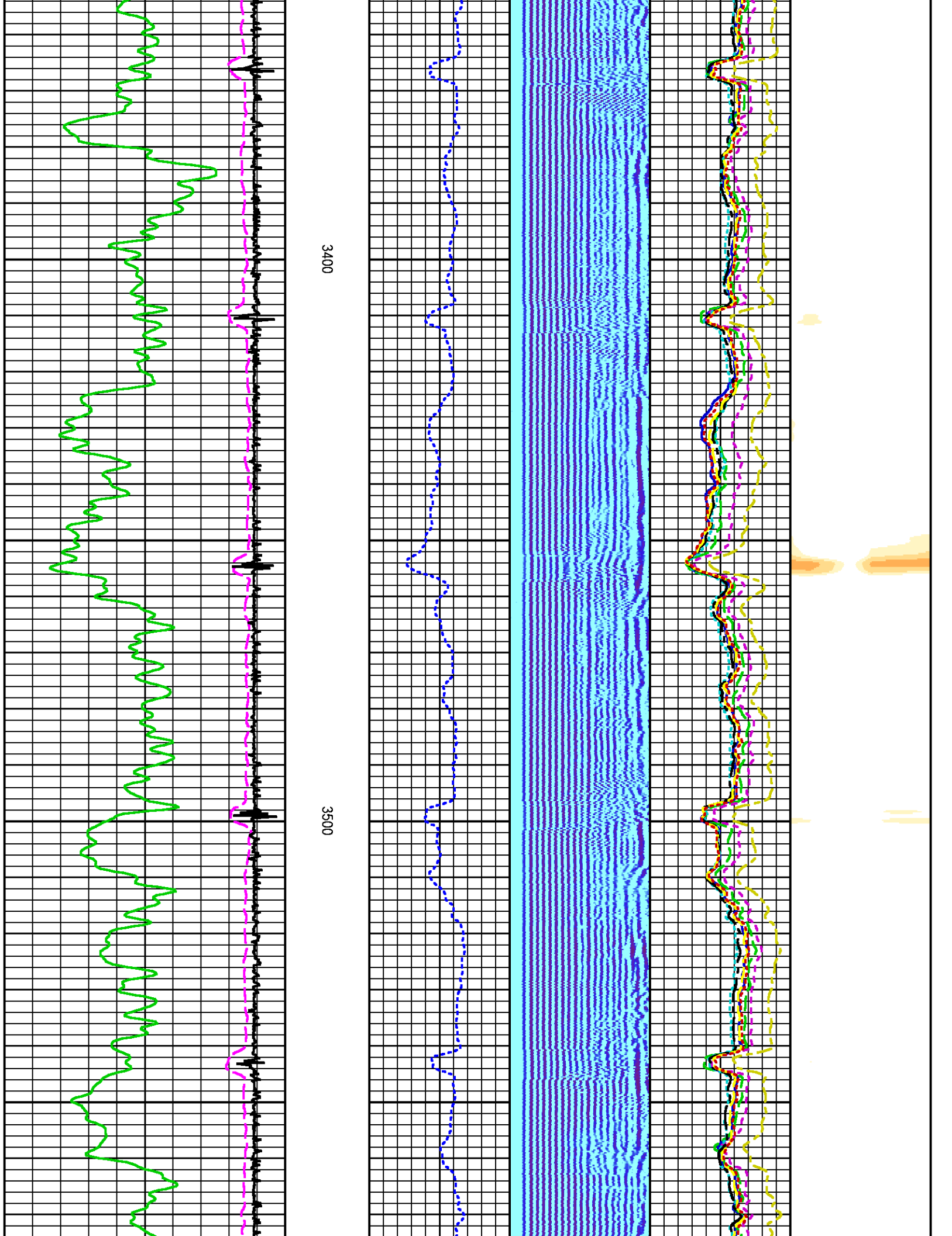


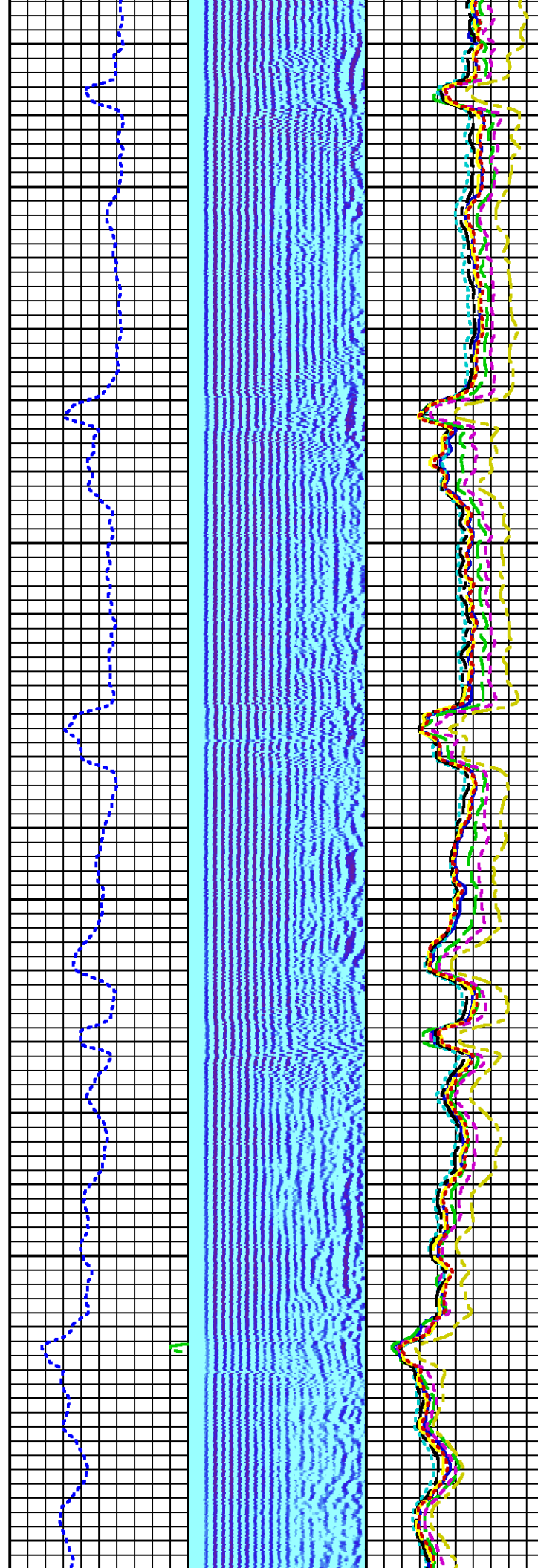
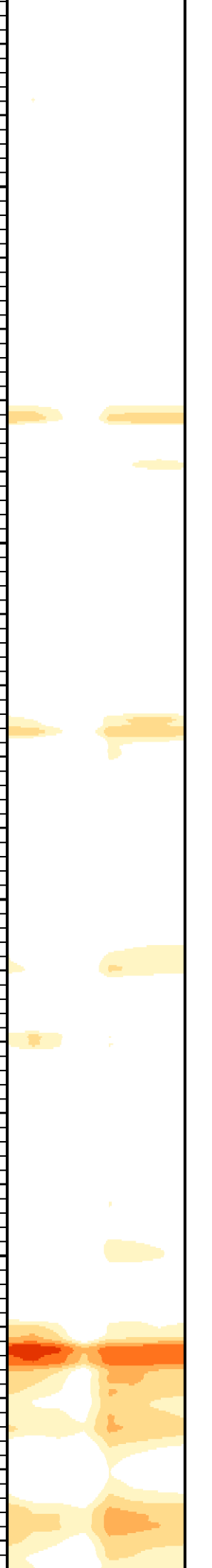


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3300

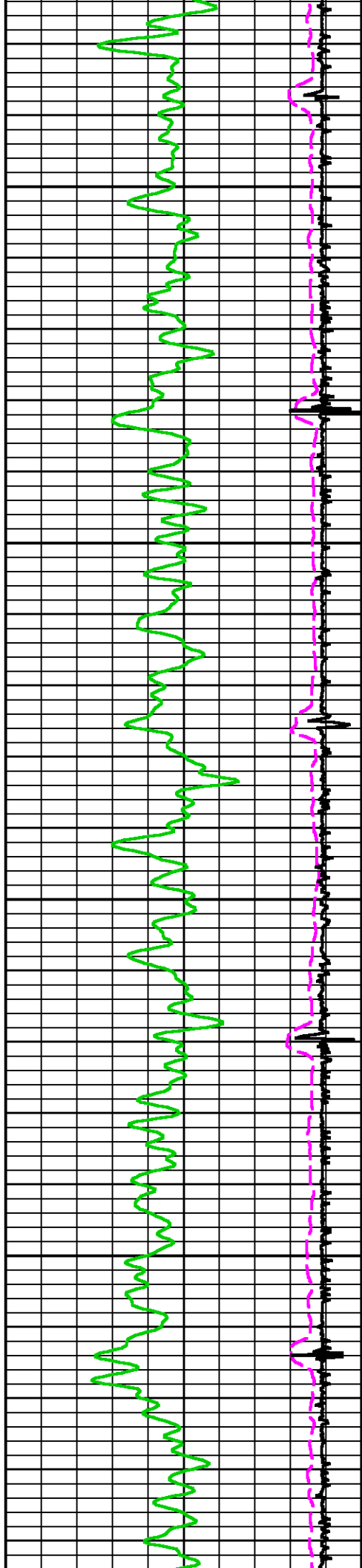


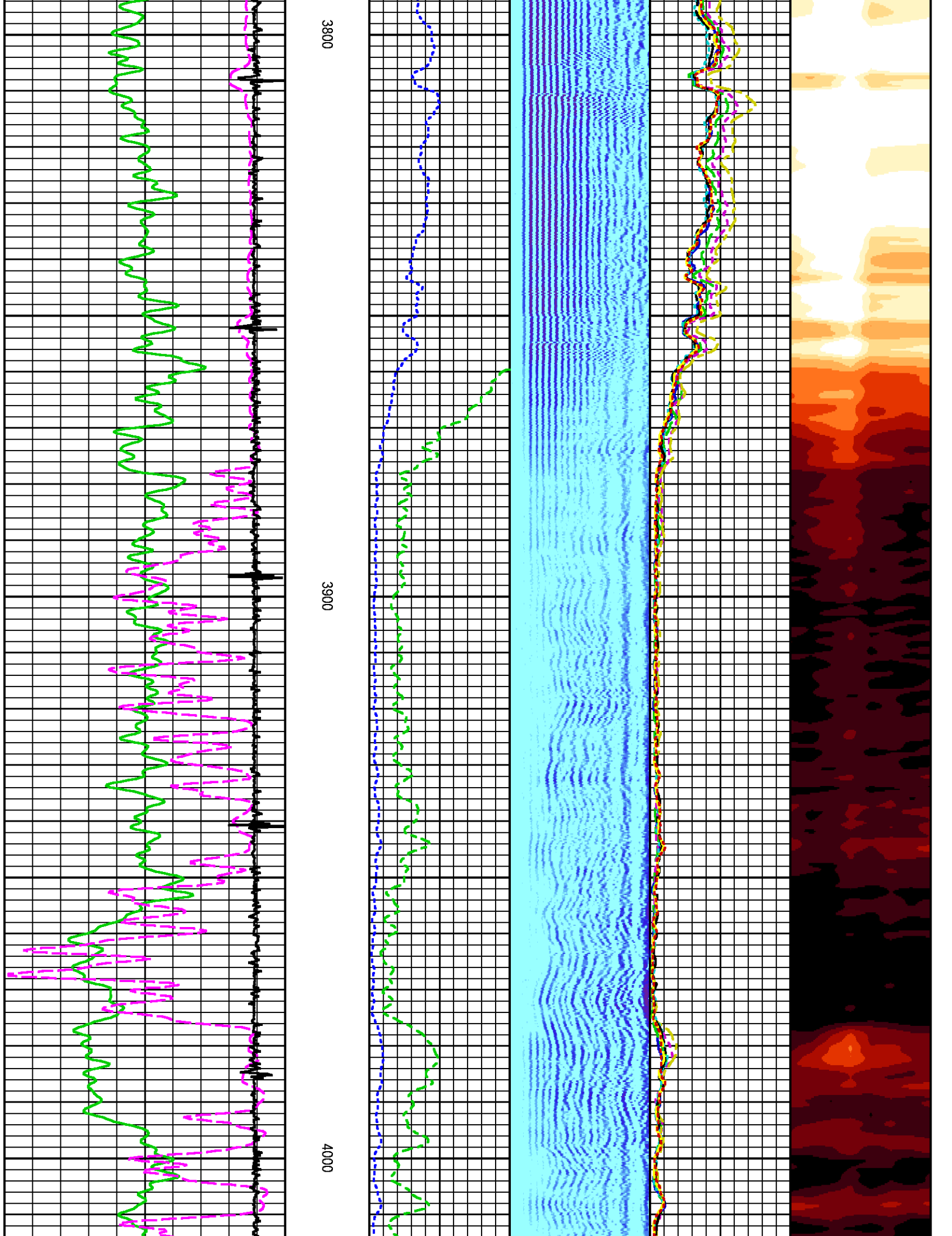


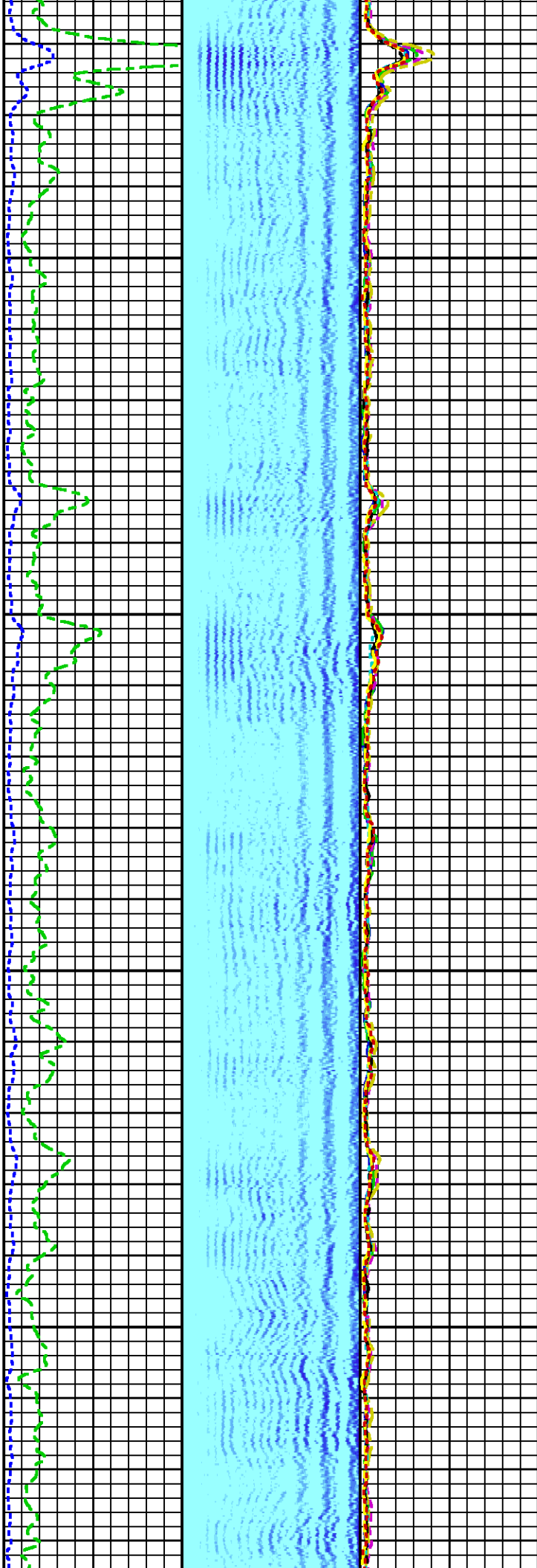


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3700

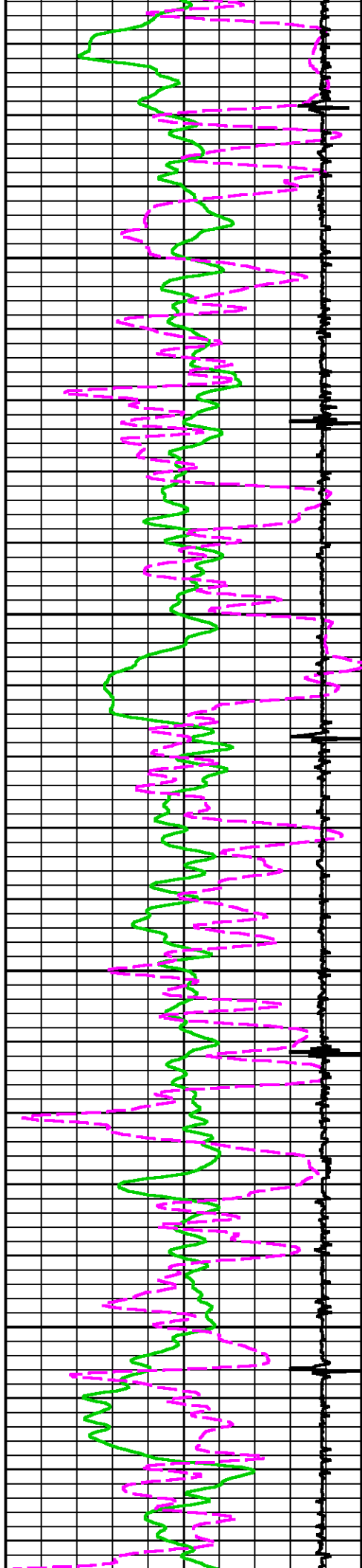


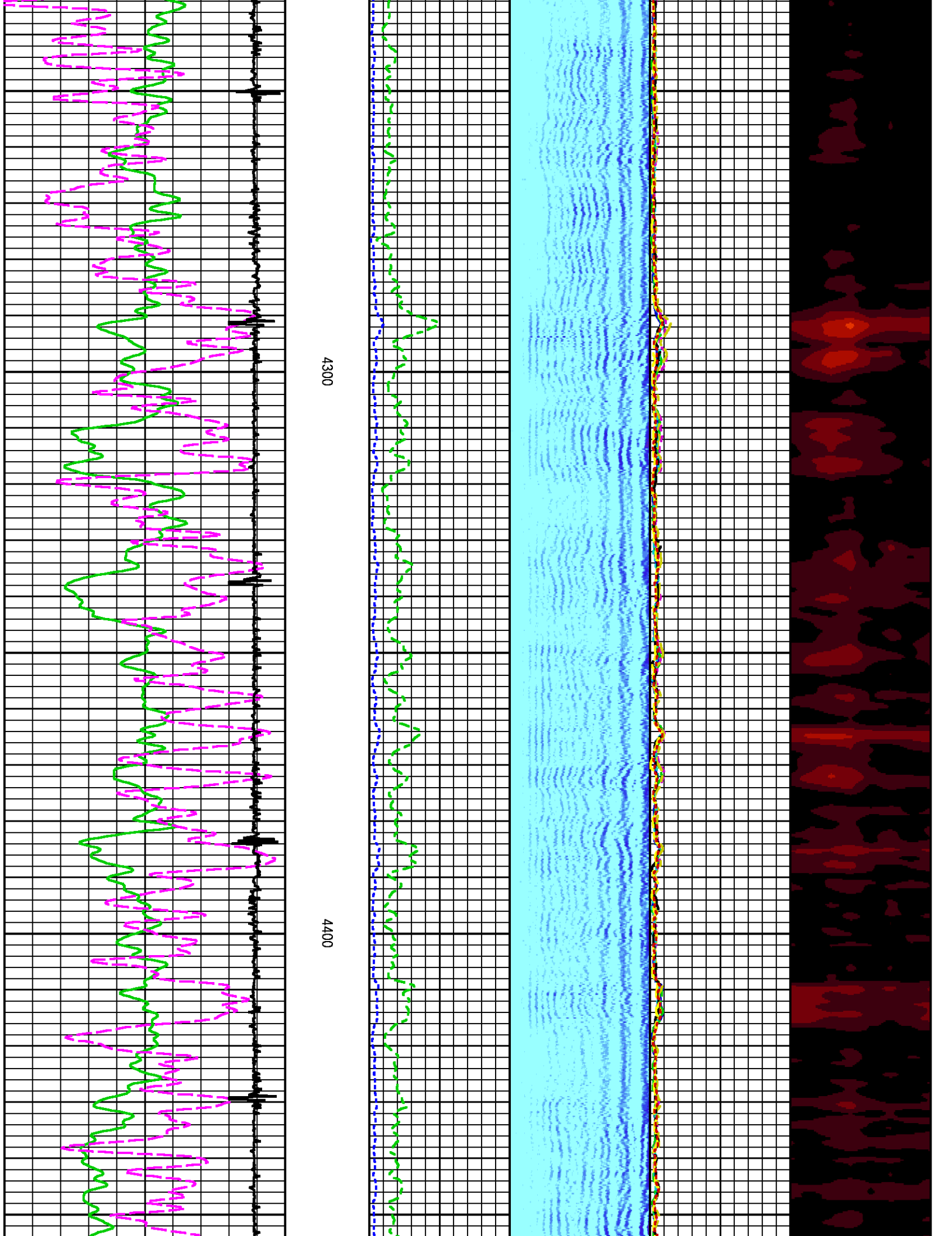


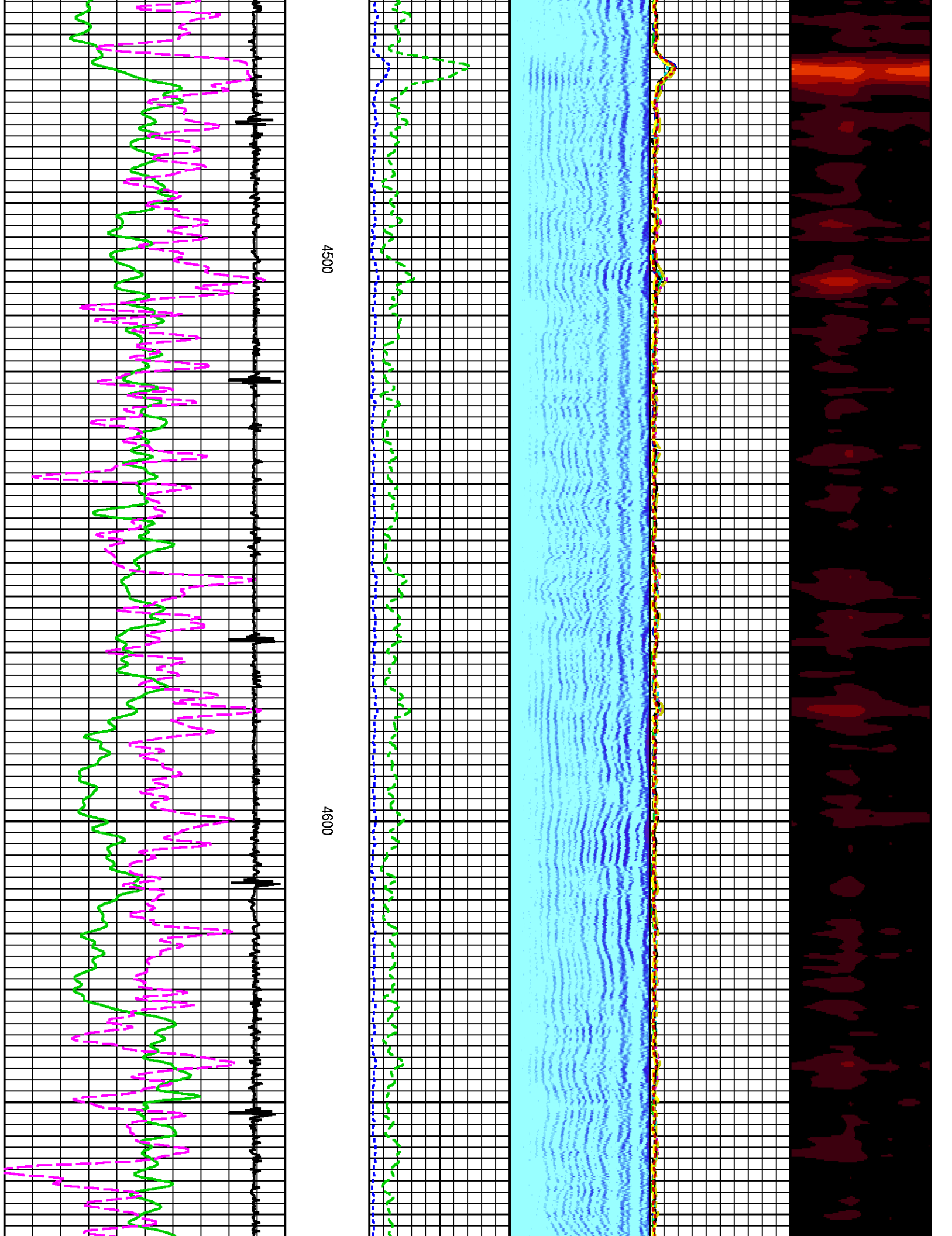


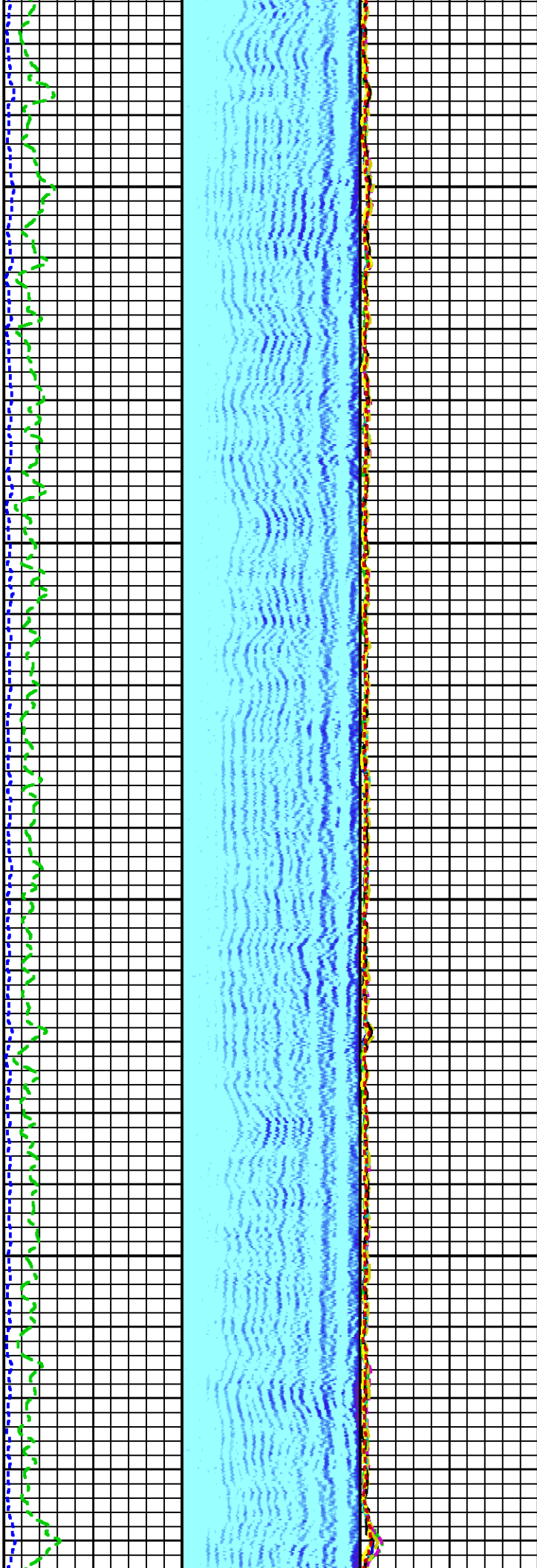
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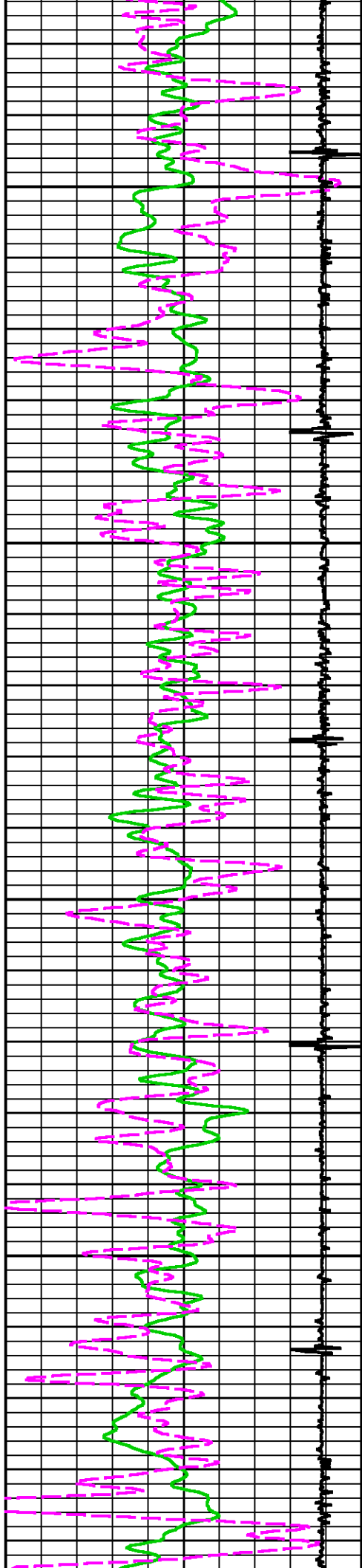


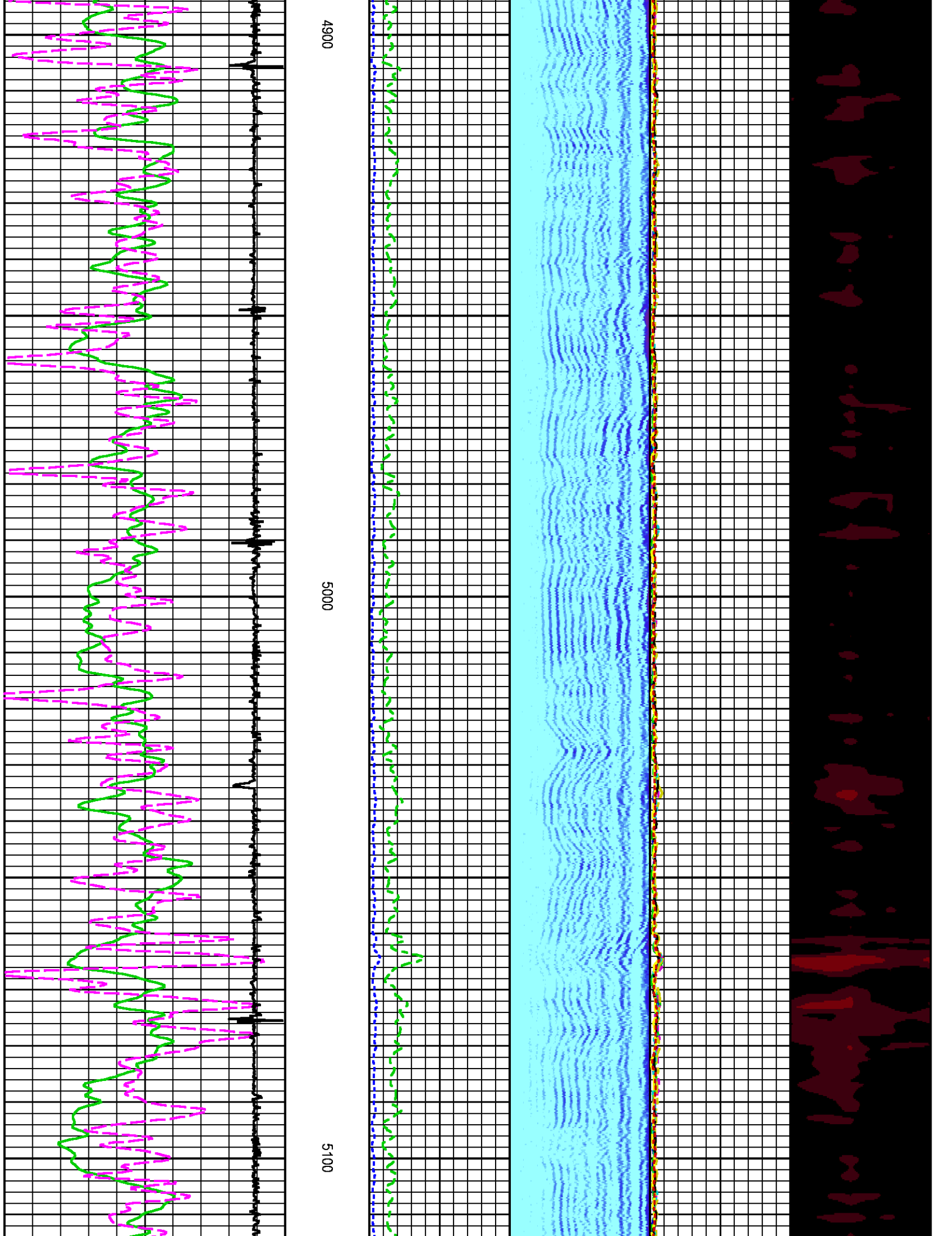


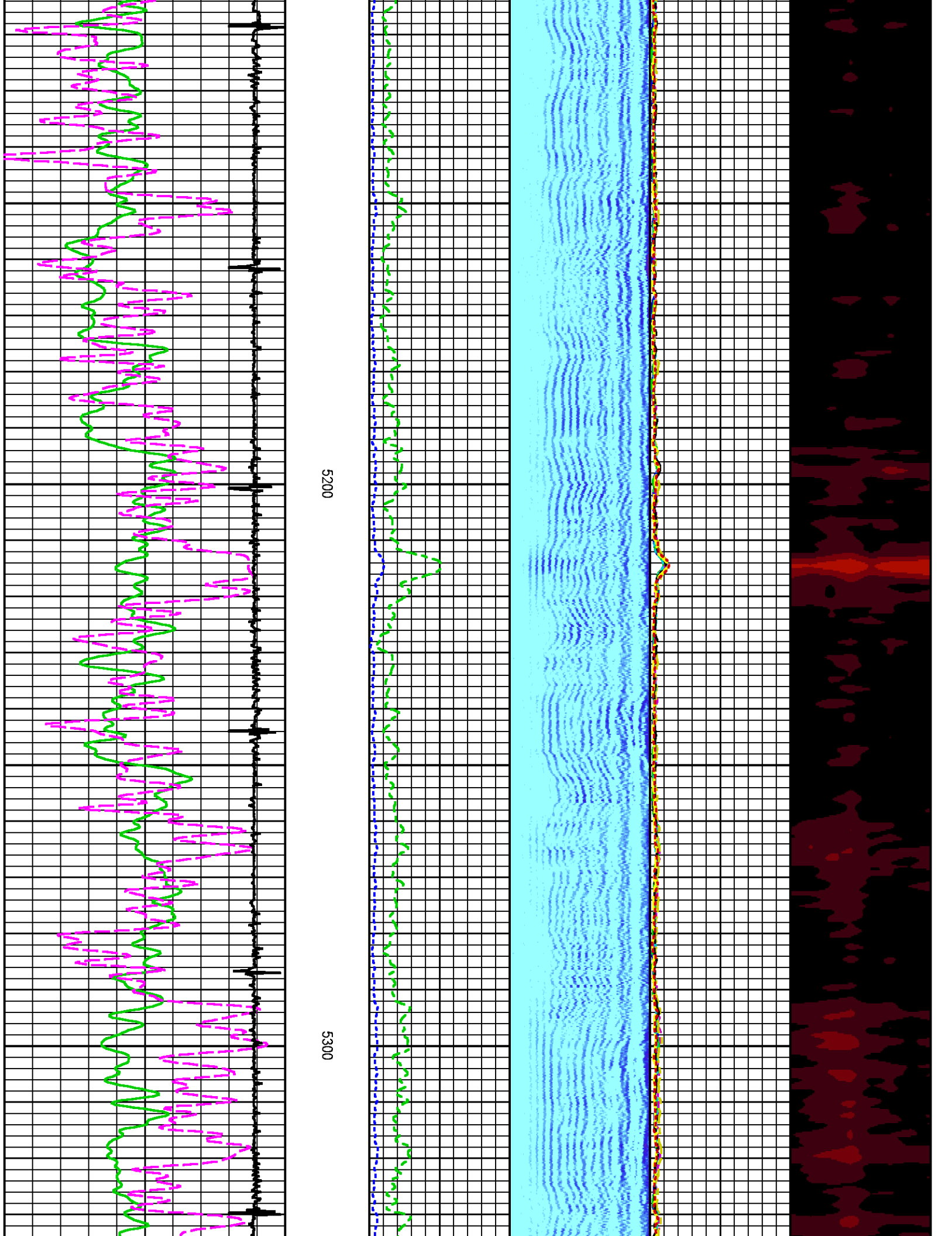


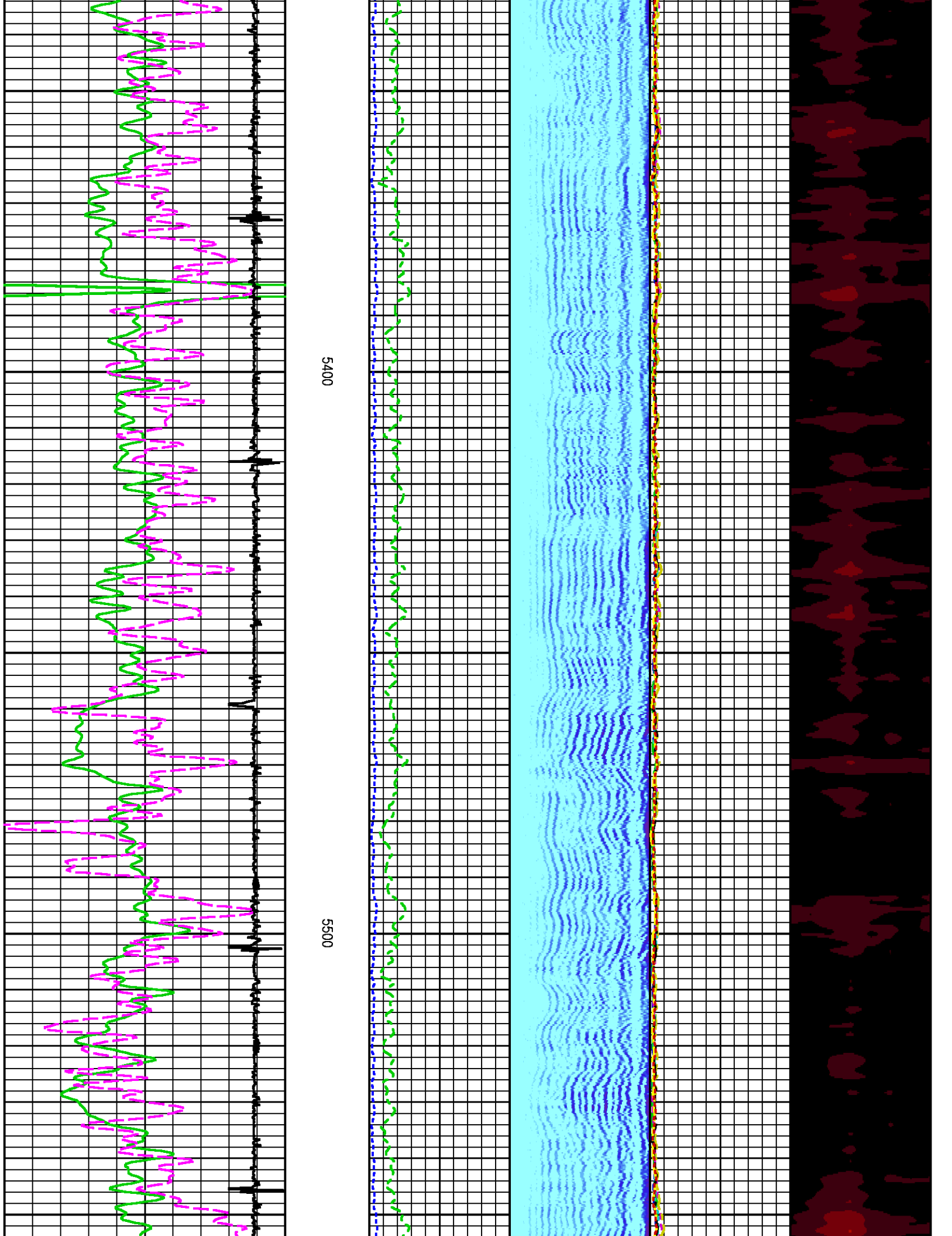
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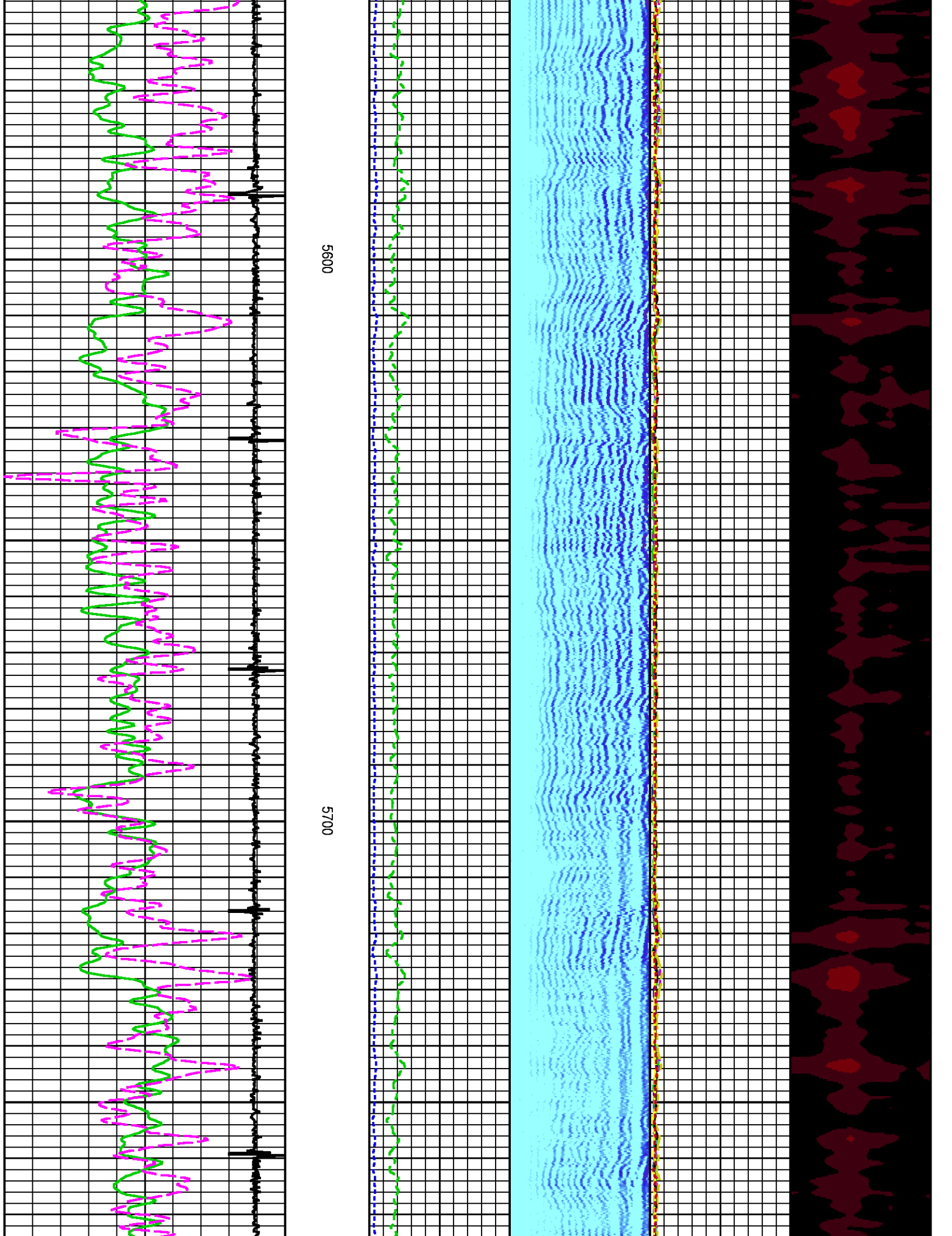
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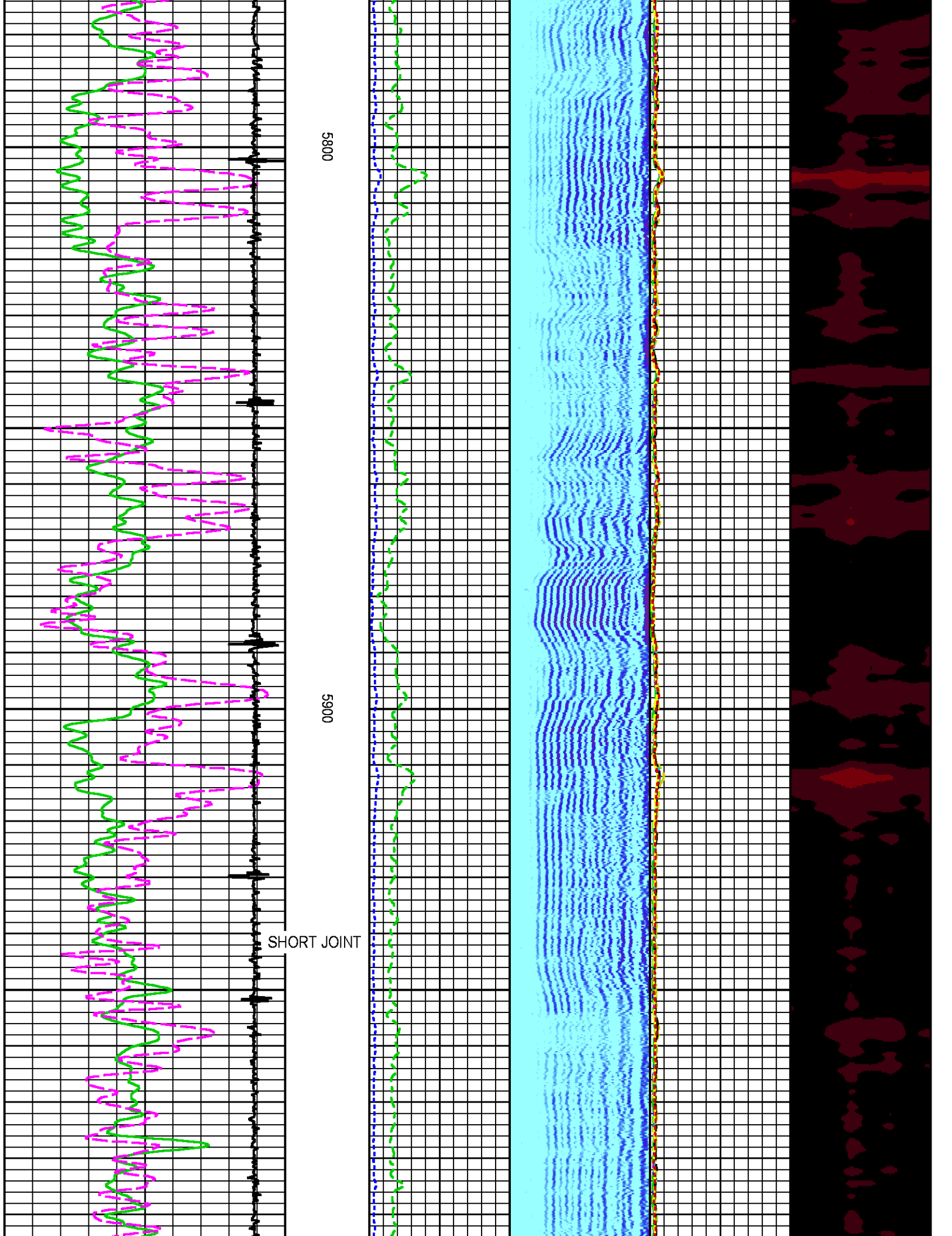


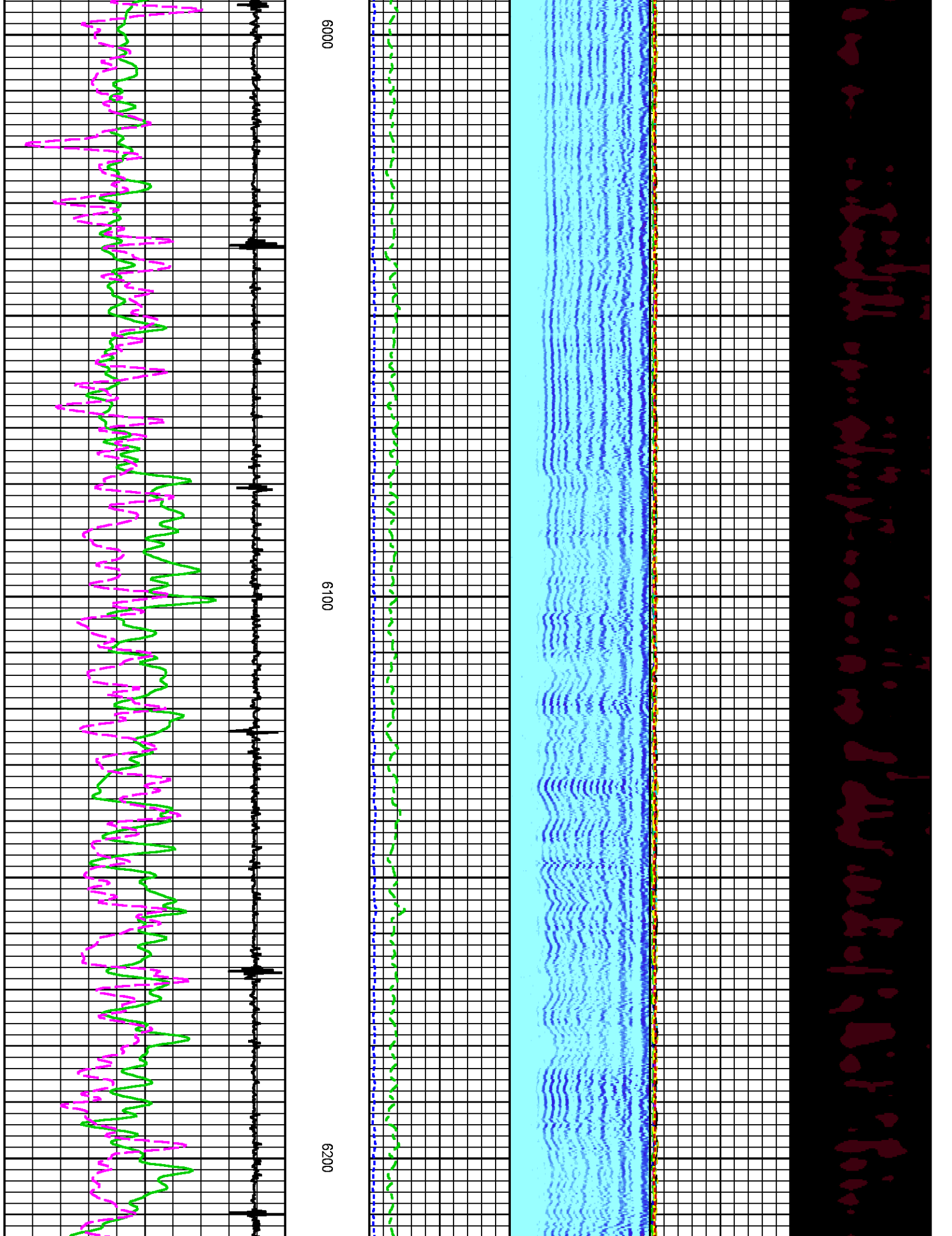


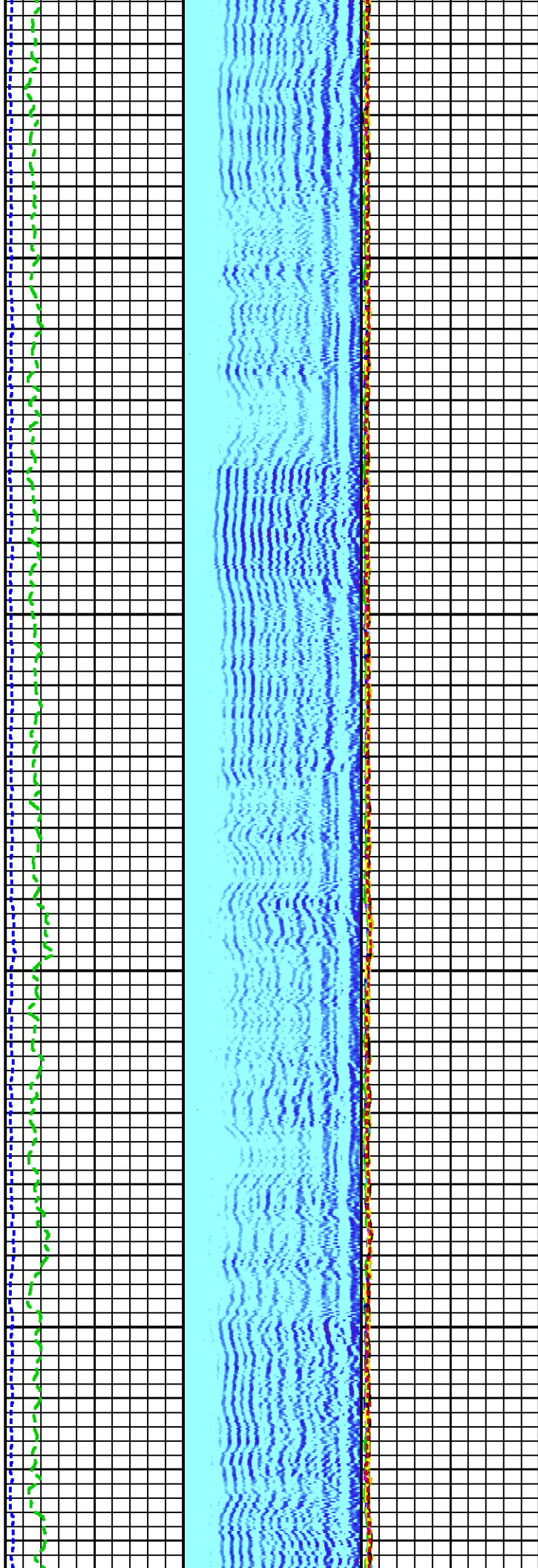
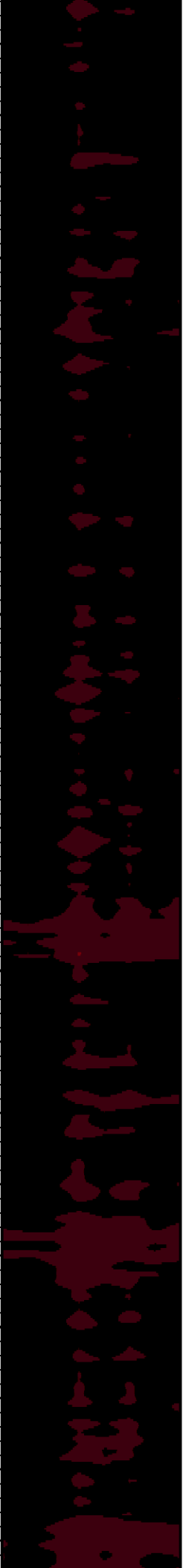






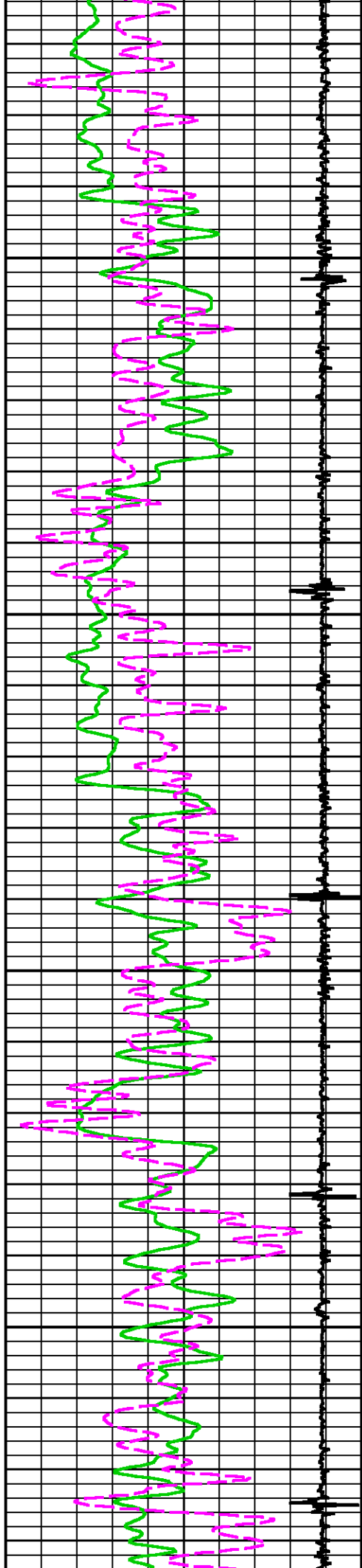


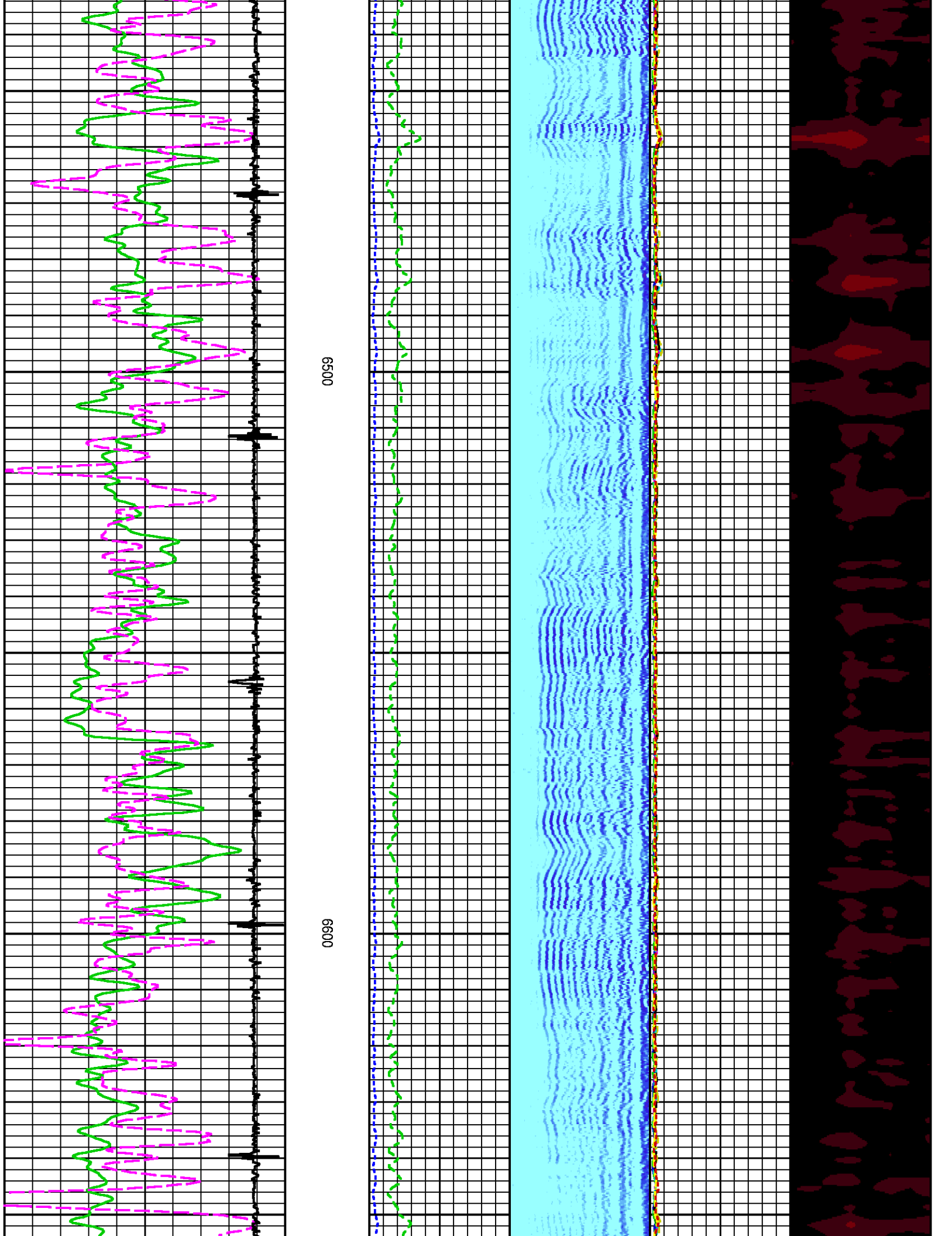


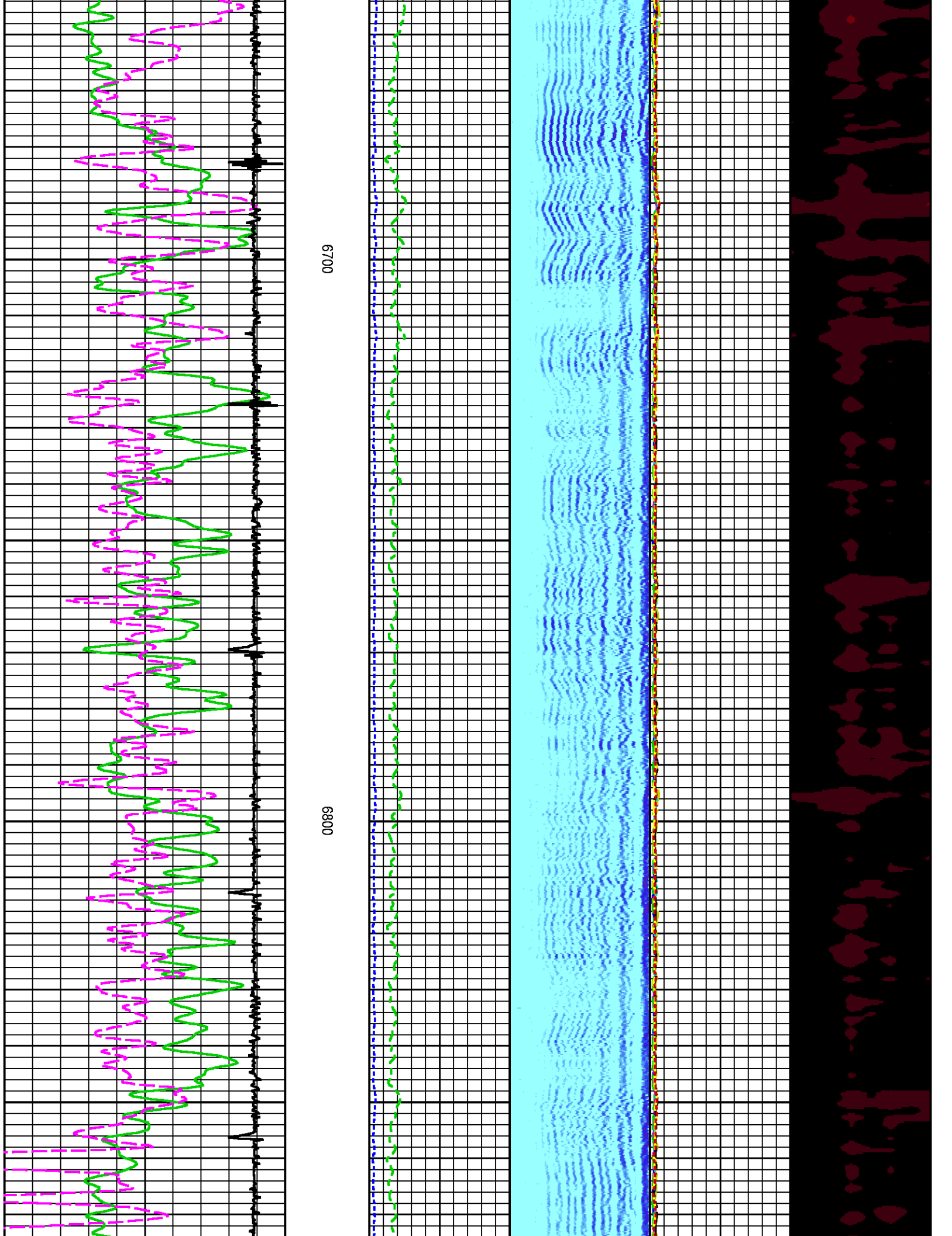


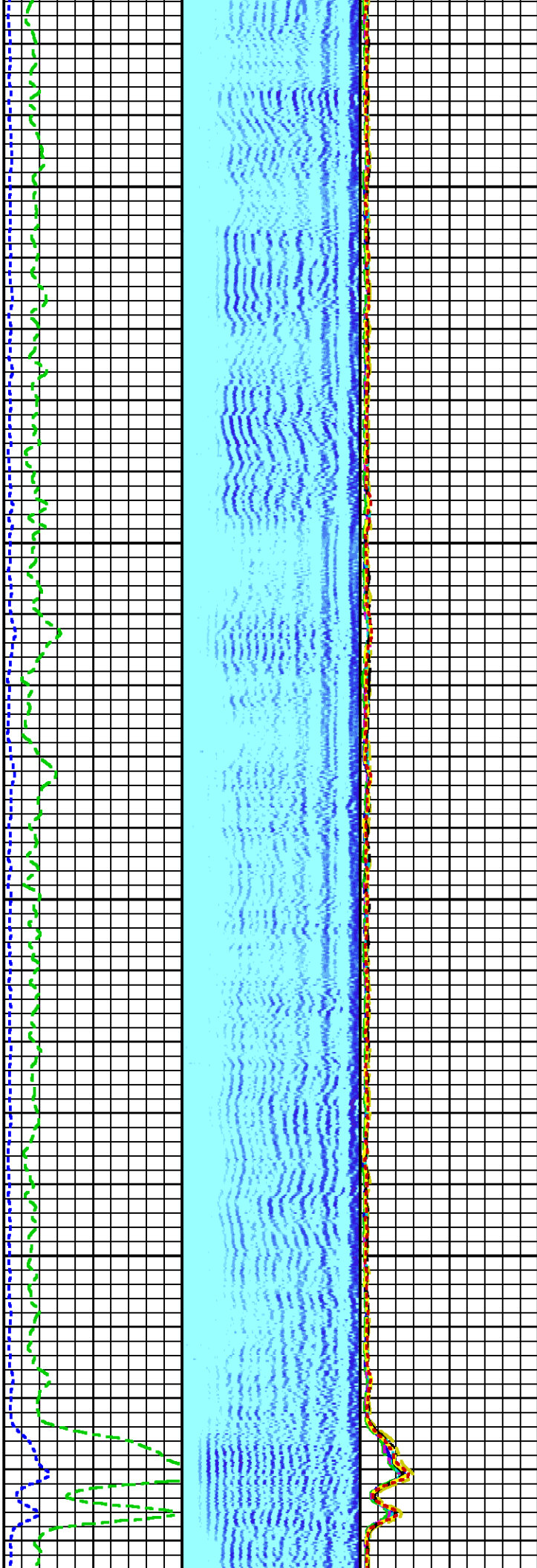
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6400



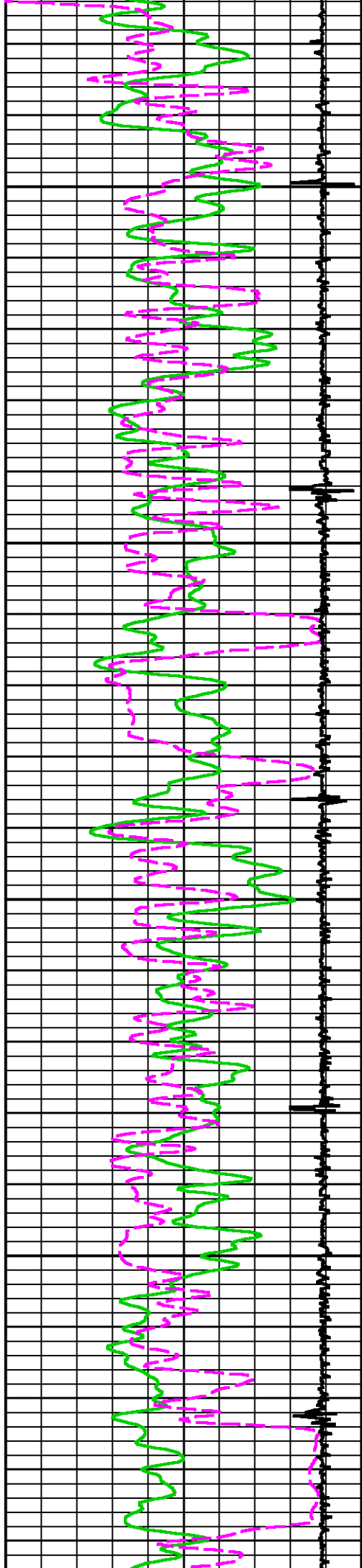


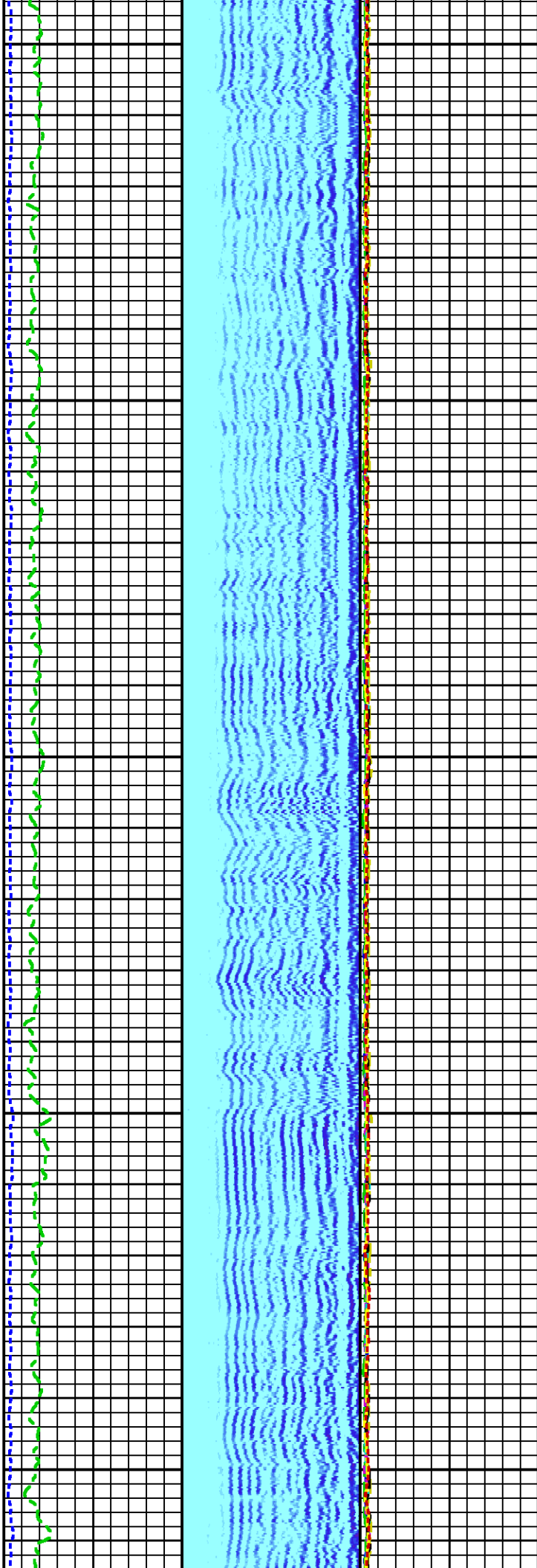




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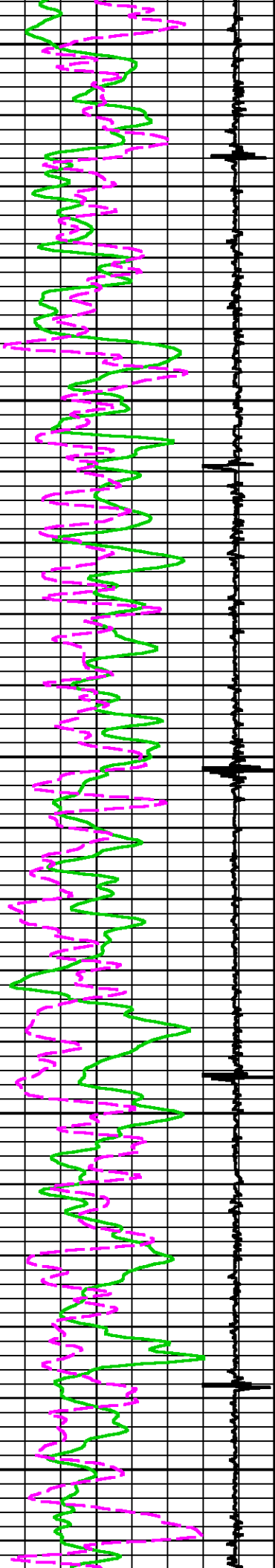


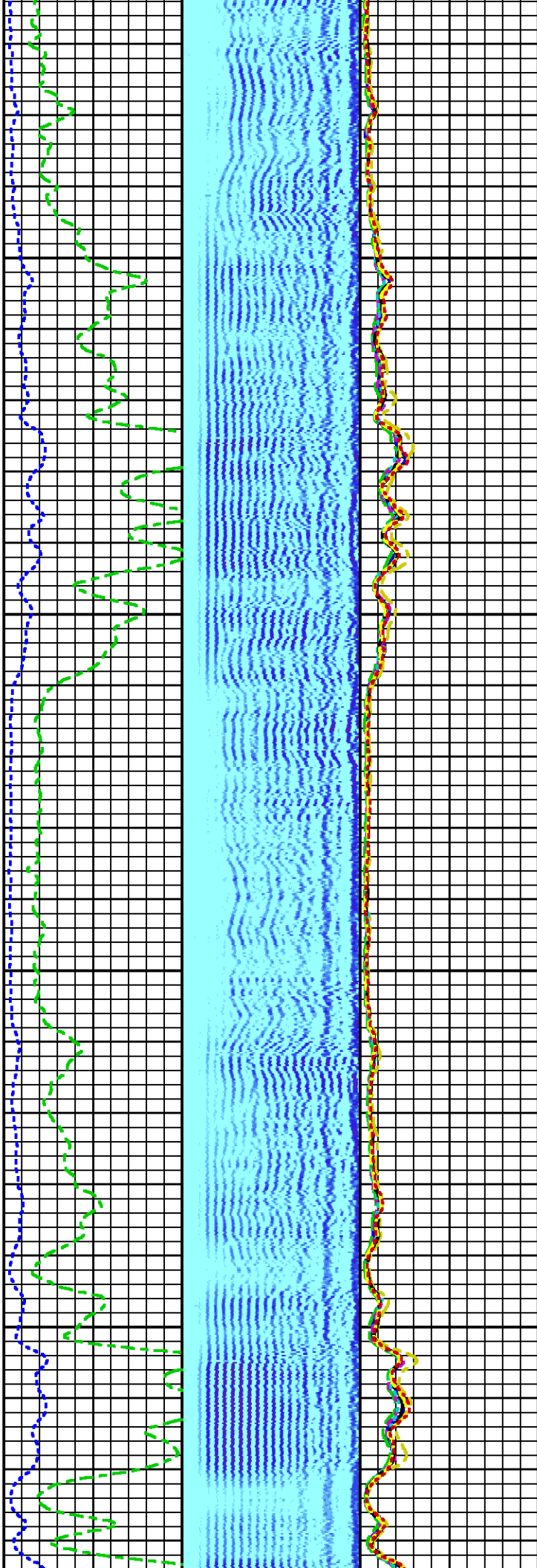
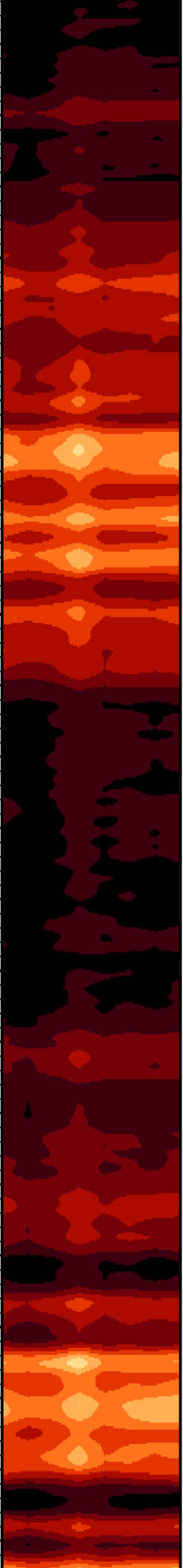


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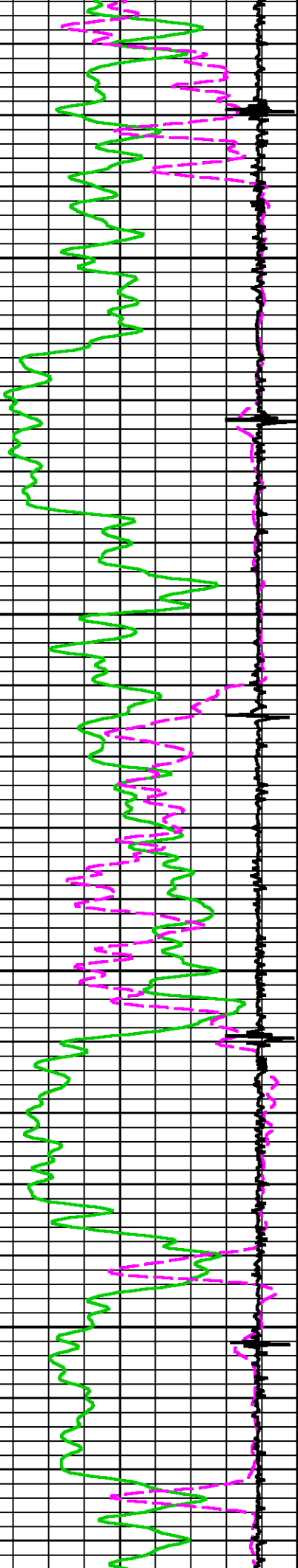
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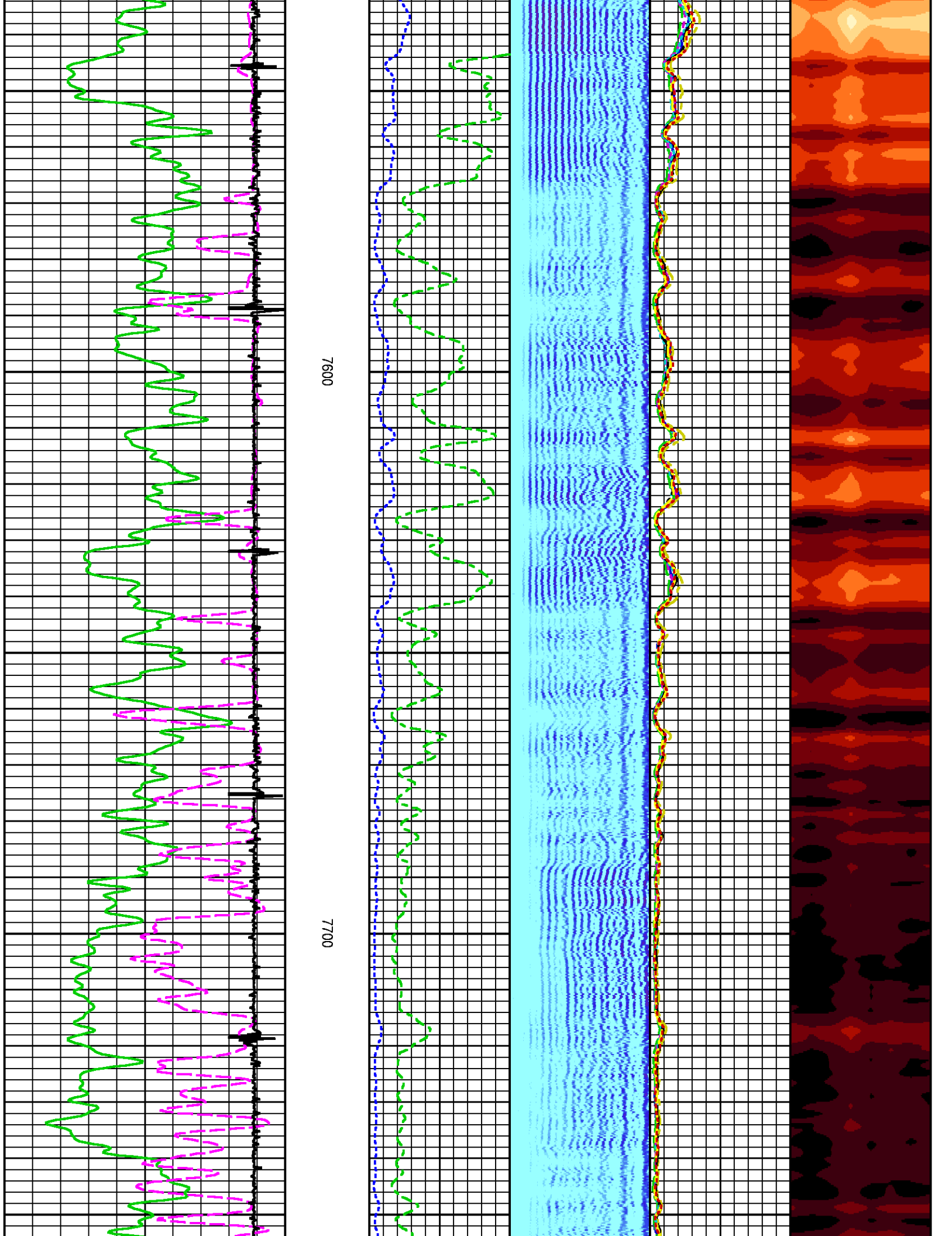


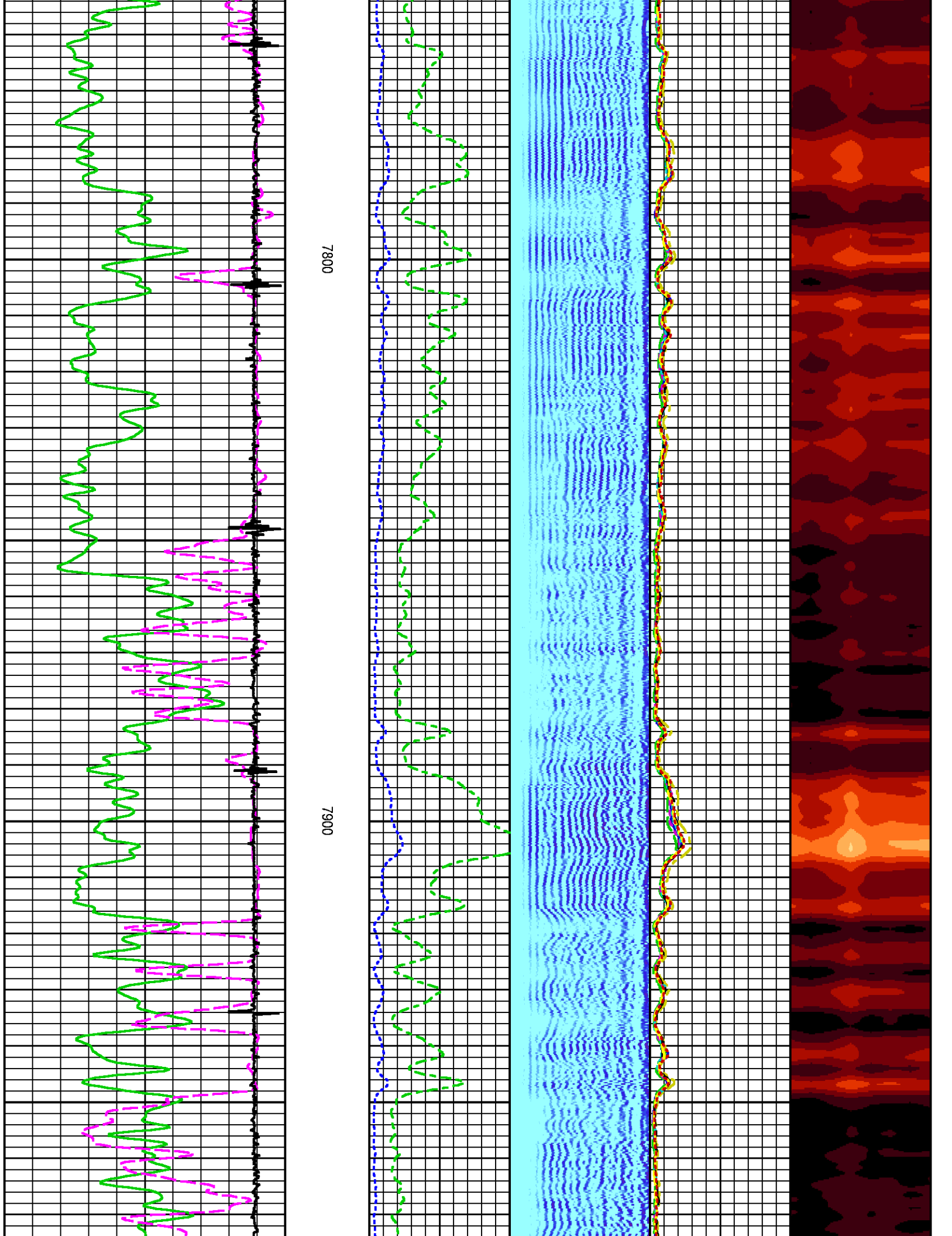


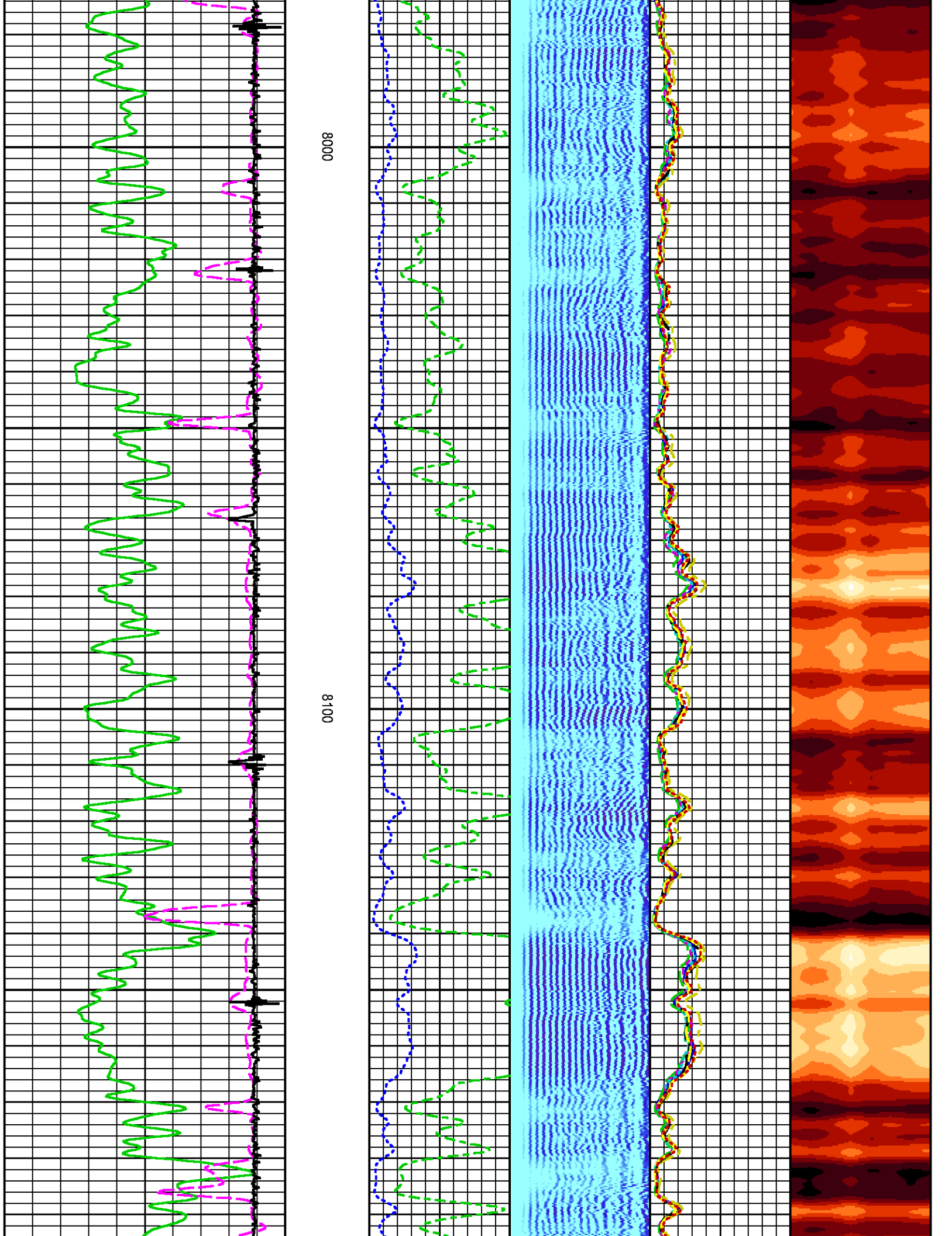
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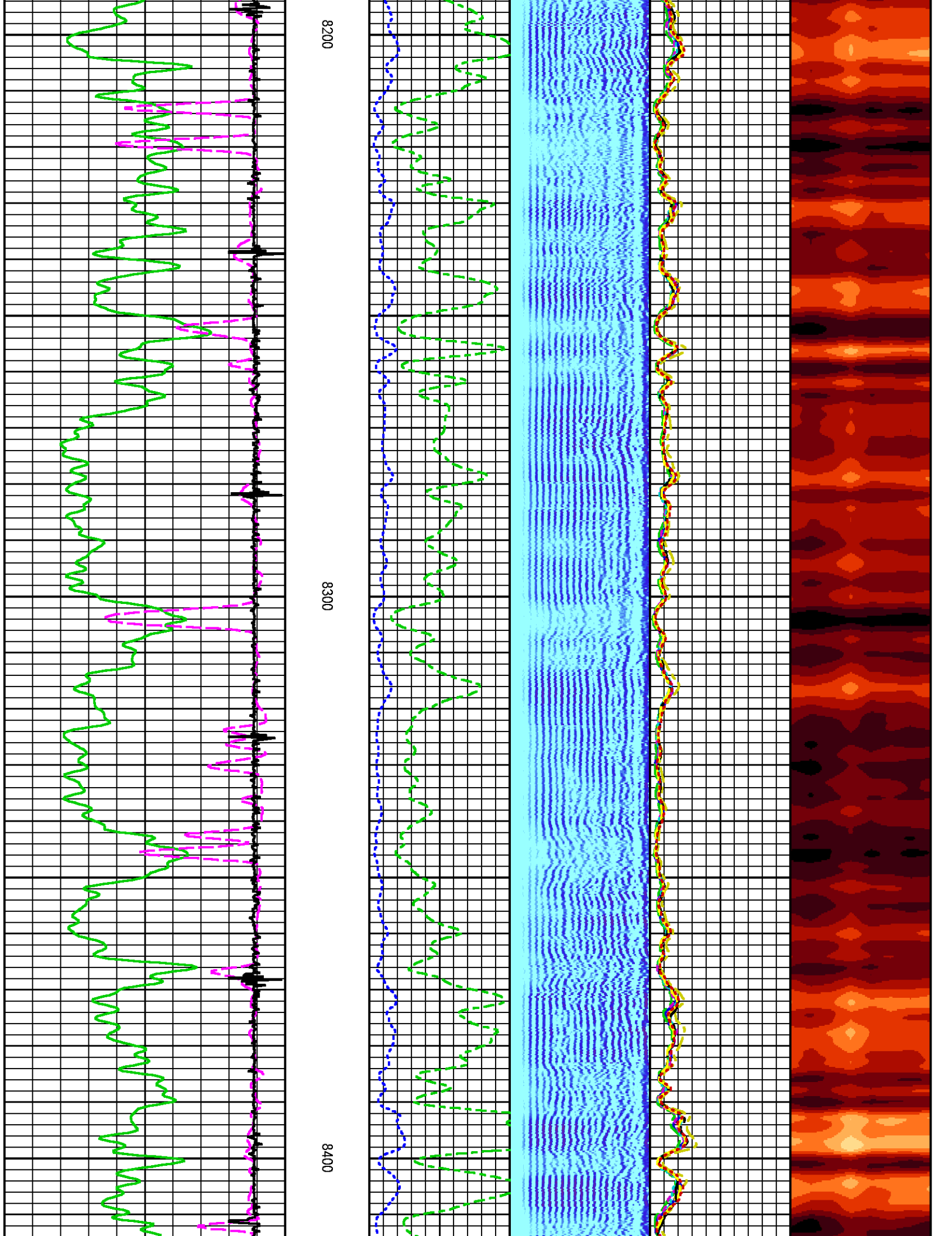
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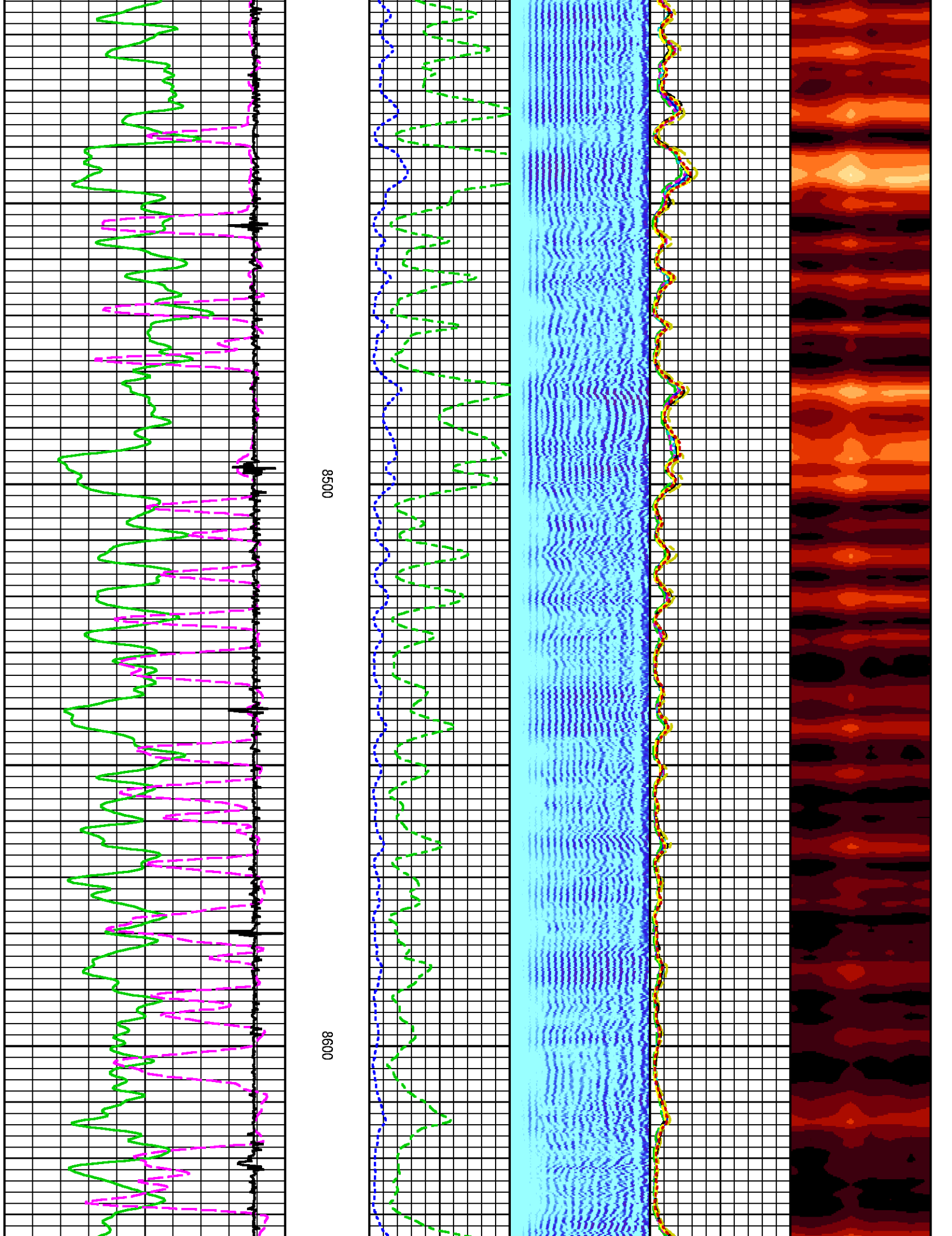


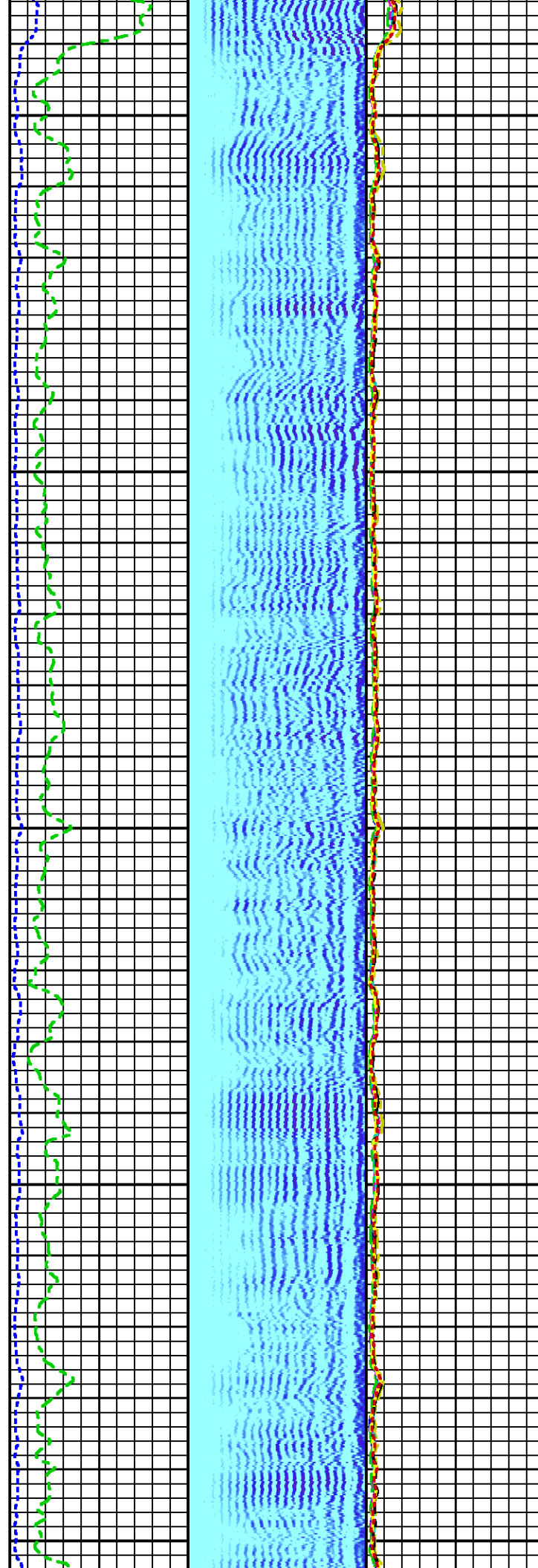
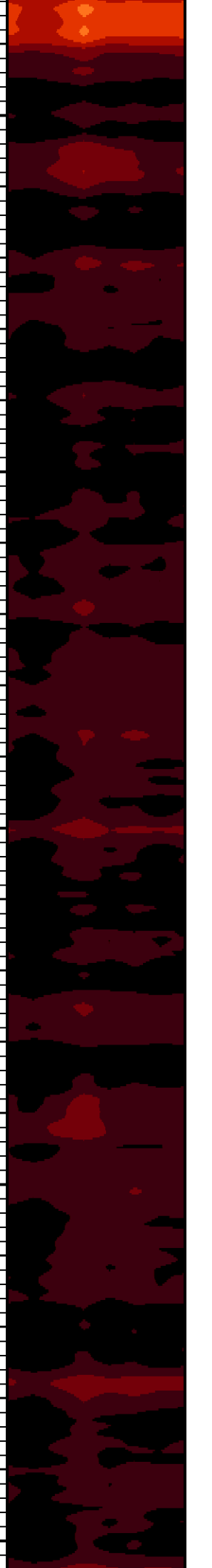






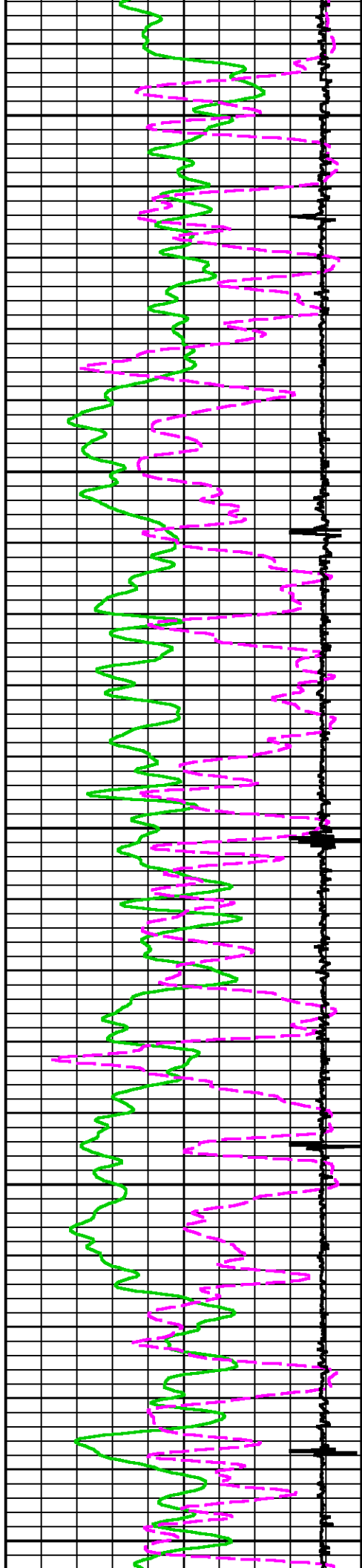


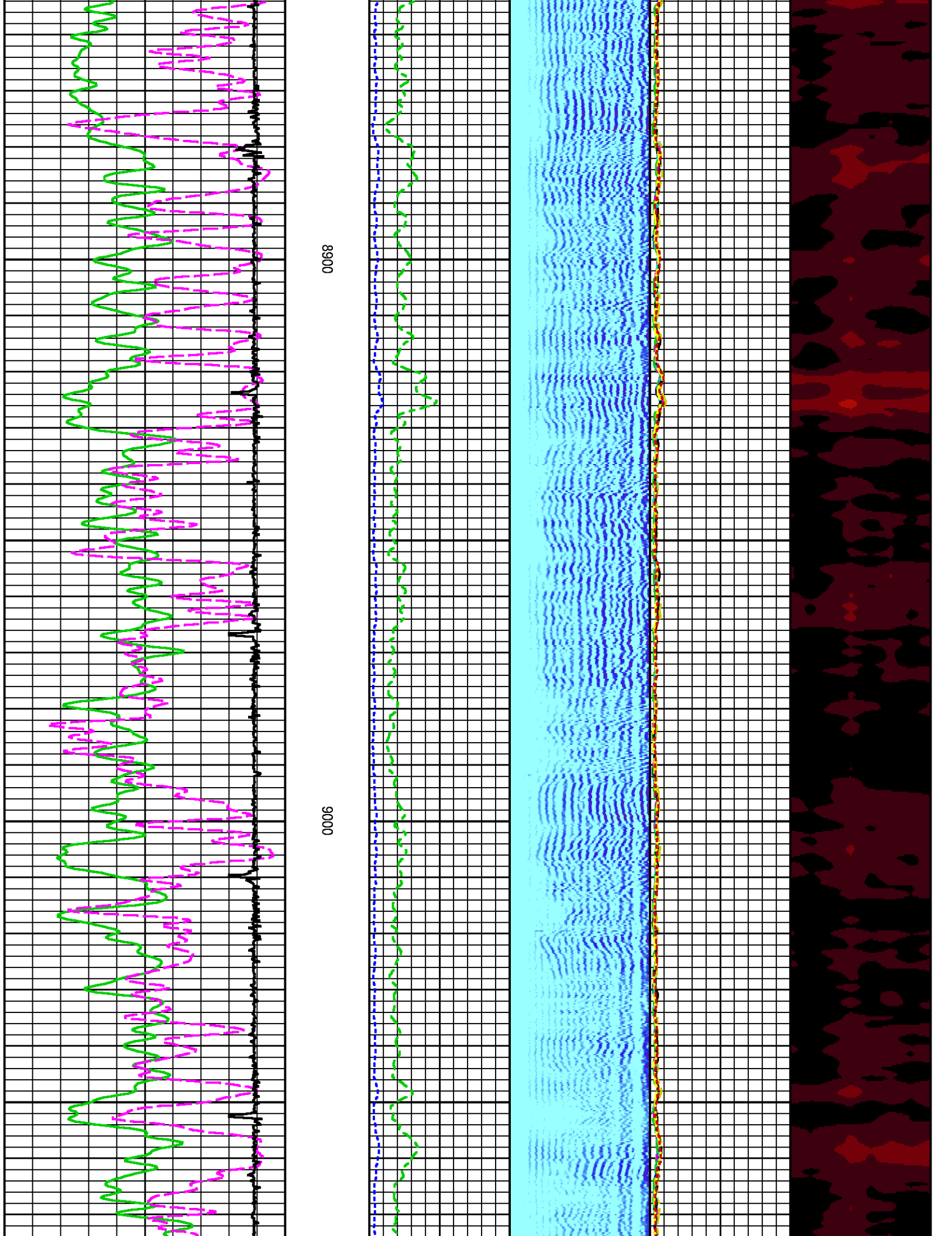


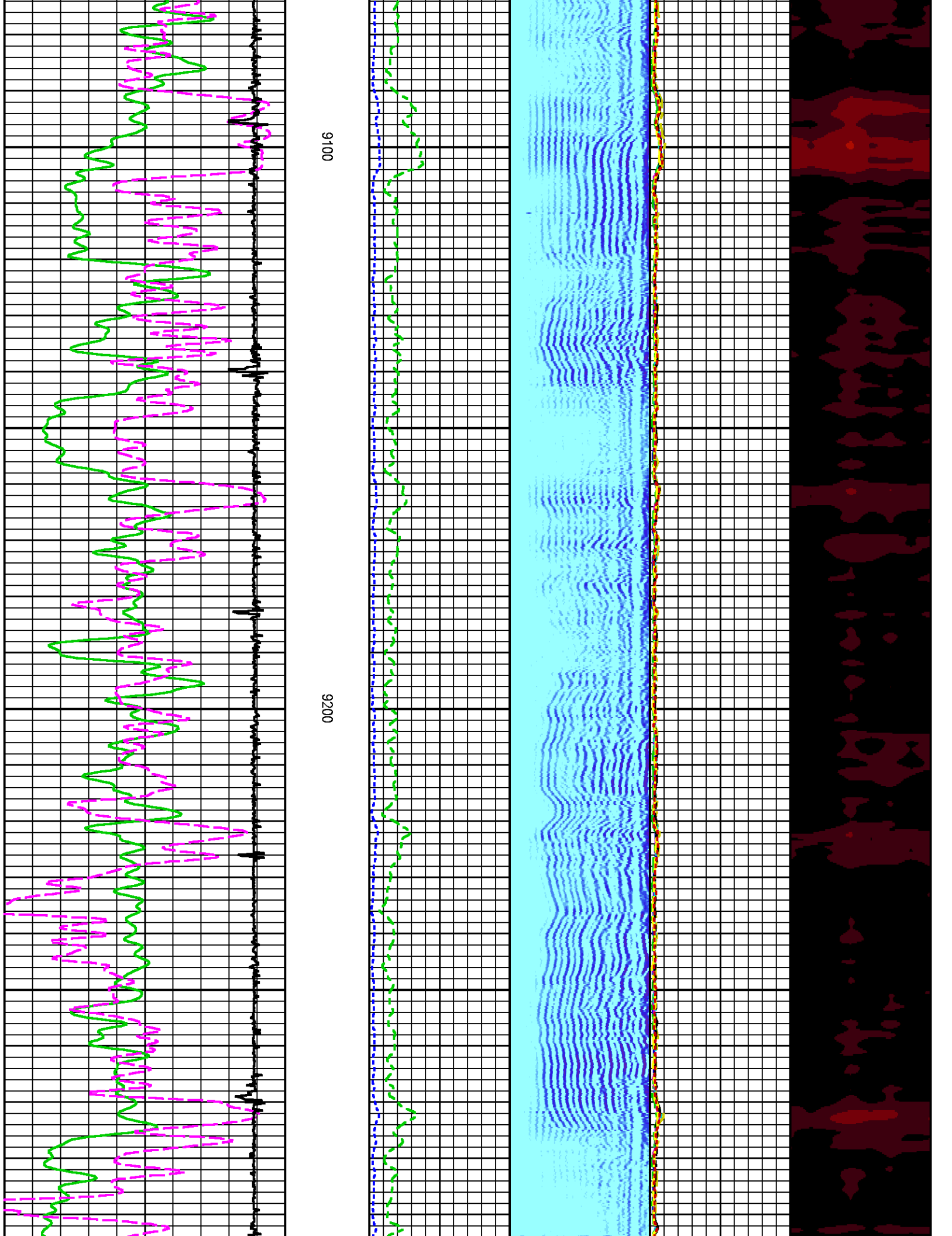


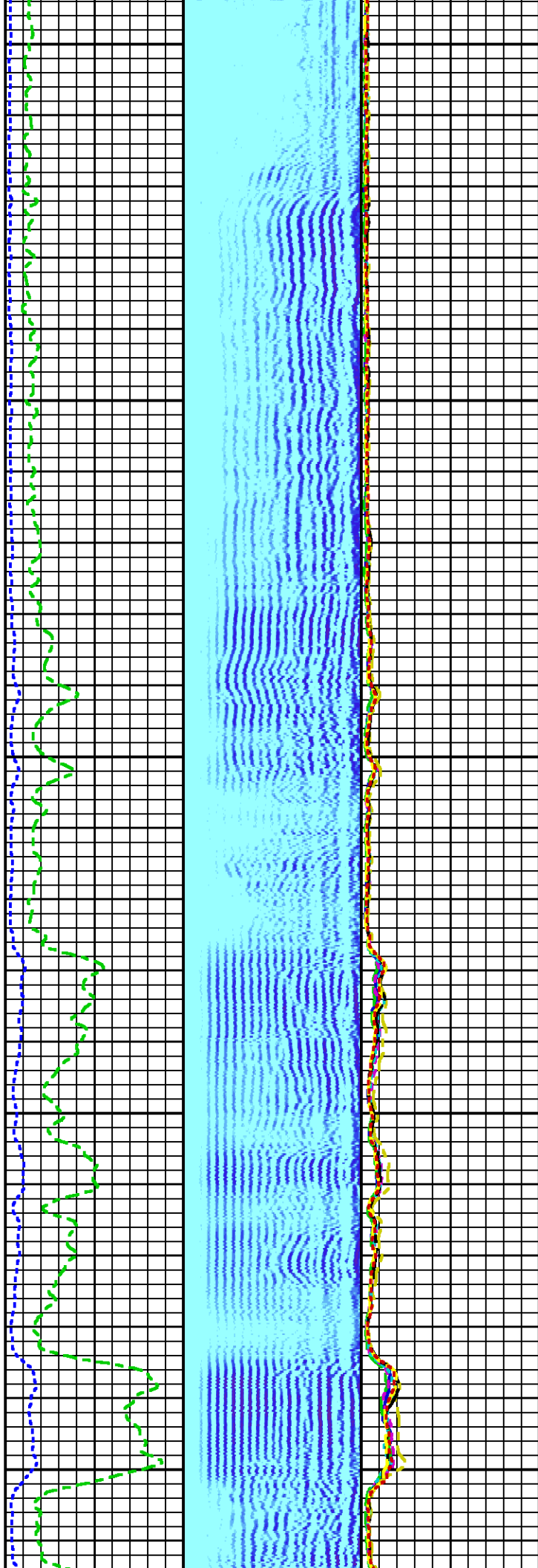
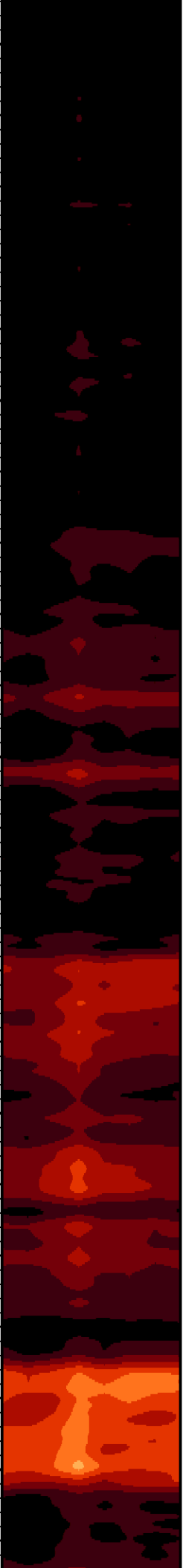
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8800





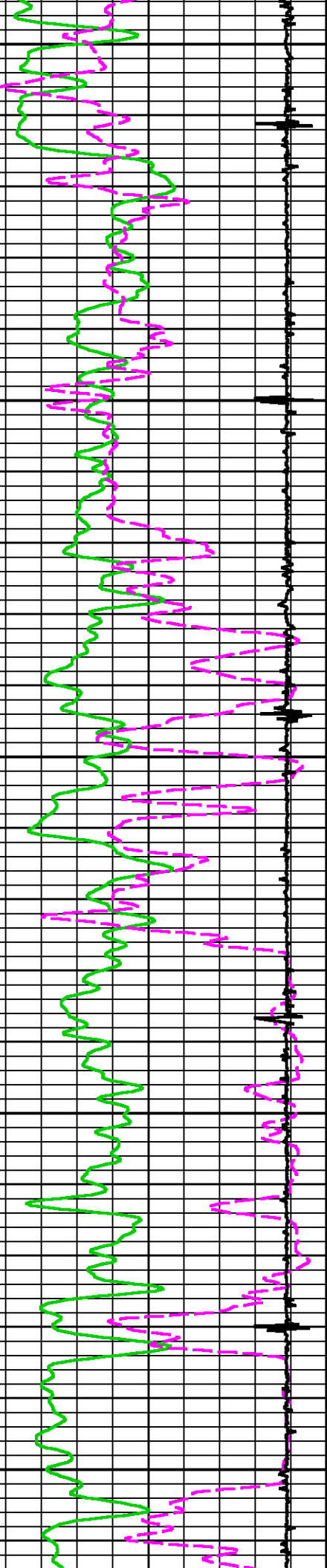


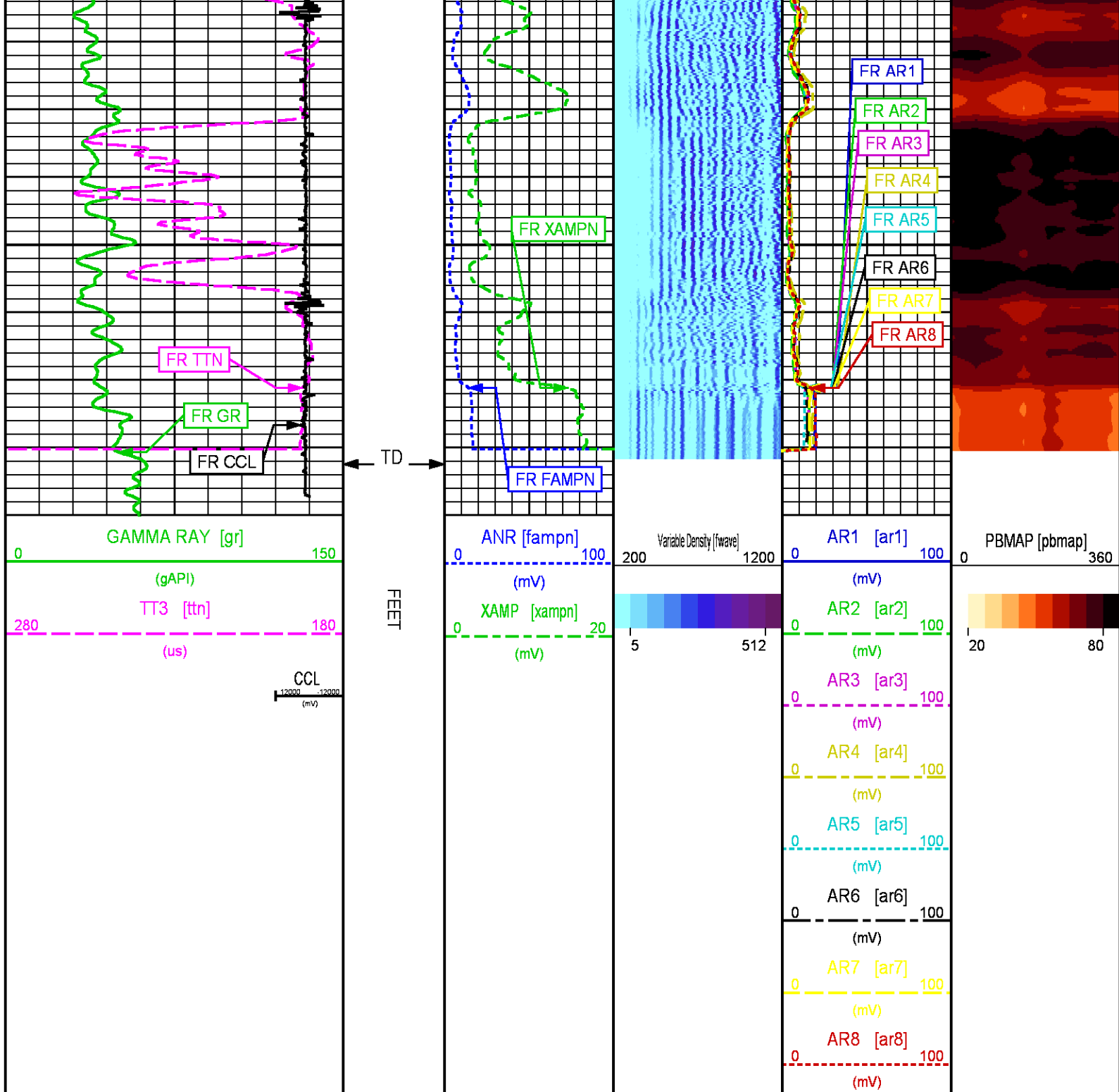


9300

9400

9500





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/TEP_YOUBERG_RU_412-7/m012g.lp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Wed Sep 28 07:54:22 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)	-0.05	0.05	-0.01	-0.07	-0.00	-0.08	-0.01	-0.02	-0.02	0.05	-0.00
AMP FLUID (mV)	88	88	88	88	85	86	87	90	89	115	87
TT (us)	216	215	215	217	215	216	214	214	216	323	215
M FACTOR	1.13	1.13	1.13	1.14	1.17	1.16	1.15	1.11	1.12	1.30	1.15

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10417452 DATE/TIME PERFORMED: Wed Sep 28 08:05:10 2016 DAYS SINCE CAL: 0

UNIT #: 3880TA HL6670 CABLE #: 6670SM SMALL6670

	NEAR (mV)	R1 (mV)	R2 (mV)	R3 (mV)	R4 (mV)	R5 (mV)	R6 (mV)	R7 (mV)	R8 (mV)	FAR (mV)	CAL (mV)
ZERO	-0.01	-0.01	0.03	0.04	-0.02	0.02	-0.04	-0.01	-0.01	0.06	-0.01
AMP AIR	2.08	1.50	0.98	1.94	2.47	2.42	2.57	1.62	2.09	2.48	100.09

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
1.15	0.00	1.00

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 12670181 DATE/TIME PERFORMED: Sat Sep 24 07:36:43 2016

UNIT #: 3880TA HL6670 CALB JIG #: 4702NK WA-612

	BACKGROUND (cts)	CALBRTR ON (cts)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	80.31	325.69	245.4	0.611	49.09	199.09	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 12670181 DATE/TIME PERFORMED: Sat Sep 24 07:38:10 2016

UNIT #: 3880TA HL6670 VERI JIG #: 4702NK WA-612

	BACKGROUND (cts)	CALBRTR ON (cts)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	81.58	316.36	0.611	49.87	193.39	143.52
						140.00 160.00

INSTRUMENT CONFIGURATION

Source File: /dat1a/TEP_YOUBERG_RU_412-7/m012g~tdg

20.38'

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


NEAR RCVR 11.17'
FAR RCVR 10.21'

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

CCL 5.79'
GR 1.67'
TEMP 0.17'

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

	COMPANY	TEP ROCKY MOUNTAIN LLC		FILE NO:	
	WELL	YUBERG RU 412-7		API NO:	
	FIELD	RULISON			
	COUNTY	GARFIELD	STATE	COLORADO	0504523230000
LOCATION:		ELEVATIONS:			
SHL: 2007' FNL & 1894' FWL BHL: 2077' FNL & 521' FWL		KB 7363 FT DF GL 7339 FT			
SEC	7	TWP	7S	RGE	93W
DATE			28-SEP-2016		