



FILE NO: CH100607	COMPANY LARAMIE ENERGY	
API NO: 05077102560000	WELL PICEANCE FEDERAL 28-20E	
	FIELD VEGA	
	COUNTY MESA	
	STATE CO	
Ver. 4.05 SEC 28 T9S R93W 28-10 PAD PATTERSON 306	LOCATION: SHL: 2001' FSL 2489' FWL BHL: 363' FSL 881' FEL SEC 28 TWP 9S RGE 93W	OTHER SERVICES RPM JCGR
PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB ELEVATION 22 FT 7679 FT ABOVE P.D.	ELEVATIONS: KB 7701 FT DF GL 7679 FT

DATE		30-Oct-2015		
RUN	TRIP	1	1	
SERVICE ORDER		US100607J		
DEPTH DRILLER		8446 FT		
DEPTH LOGGER		NOT TAGGED		
BOTTOM LOGGED INTERVAL		8364 FT		
TOP LOGGED INTERVAL		0 FT		
TIME STARTED		16:00		
TIME FINISHED		18:15		
OPERATOR RIG TIME		2:15		
TYPE OF FLUID IN HOLE		WATER		
FLUID DENSITY		NA		
FLUID SALINITY		NA		
FLUID LEVEL		46 FT		
LOGGED CEMENT TOP		NA		
WELLHEAD PRESSURE		0 PSI		
MAXIMUM HOLE DEVIATION		NA		
NOMINAL LOGGING SPEED		100 F/MN		
MAX. RECORDED TEMP.		243 DEGF		
REFERENCE LOG		NONE		
REFERENCE LOG DATE		NA		
EQUIP. NO.	LOCATION	6685	GRAND JCT	
RECORDED BY		W. QUIGLEY		
WITNESSED BY		MR. ROGER FOSTER		

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
11 IN	0 FT	1604 FT
7.875 IN	1604 FT	8569 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
8.625 IN	24 LB/F	J-55	0 FT	1604 FT
4.5 IN	11.6 LB/F	I-80	0 FT	8569 FT

REMARKS

RUN 1 TRIP 1: THIS IS THE FIRST LOG ON THIS WELL

BHT = 243 degF

SJ = 6736' - 6759'

SJ = 7612' - 7634'

THANKS FOR USING BAKER HUGHES WIRELINE
RIG: PATTERSON 306

LOGGED WITH 0 PSI AT THE WELLHEAD

JUNK CATCHER/GAUGE RING HIT PBTD/OBSTRUCTION AT ~8397 FT

SUBSEQUENT RUNS BEGIN WITH THE BOTTOM OF THE TOOLS AT 8390 FT TO AVOID STICKING
PER CUSTOMER REQUEST

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	RAL	1426XA	10154957	CENTRALIZED
1	1	GR/CCL	1355XA	12670181	CENTRALIZED

MAIN PRESENTATION 0 PSI

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

Updates: 1 Patches: 8

Plotted: Sat Oct 31 07:58:10 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH100607/n012g02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 11.750 ft BOTTOM DEPTH: 8390.000 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*)	187	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	187	us	"	"
	AMP WINDOW START (fgp3*)	187	us	"	"
	AMP WINDOW START (fgp4*)	187	us	"	"
	AMP WINDOW START (fgp5*)	187	us	"	"
	AMP WINDOW START (fgp6*)	187	us	"	"
	AMP WINDOW START (fgp7*)	187	us	"	"
	AMP WINDOW START (fgp8*)	187	us	"	"
	AMP WINDOW START (fgpn*)	187	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	170	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*)	-74	us	"	"
	TOOL DELAY (str2*)	-74	us	"	"
	TOOL DELAY (str3*)	-74	us	"	"
	TOOL DELAY (str4*)	-74	us	"	"
	TOOL DELAY (str5*)	-74	us	"	"
	TOOL DELAY (str6*)	-74	us	"	"
	TOOL DELAY (str7*)	-74	us	"	"
	TOOL DELAY (str8*)	-74	us	"	"
	TOOL DELAY (strn*)	-74	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

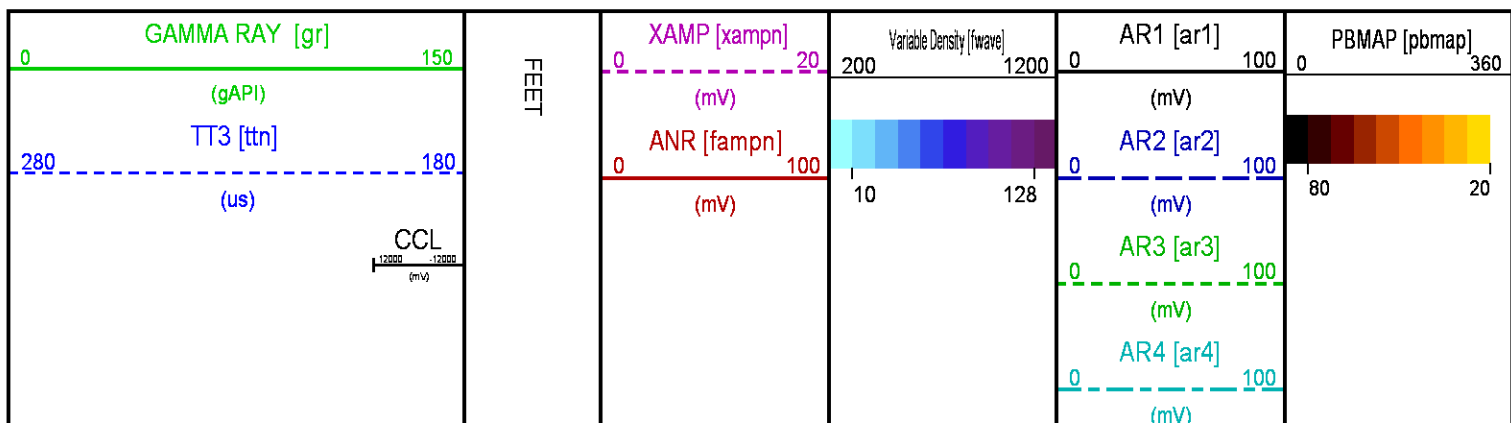
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R1
F1:AR2	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R2
F1:AR3	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R3
F1:AR4	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R4
F1:AR5	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R5
F1:AR6	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R6
F1:AR7	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R7
F1:AR8	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE T-R8
F1:CCL	Oct 30 16:46:36 2015	CASING COLLAR LOCATOR
F1:FAMPN	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Oct 30 16:46:36 2015	FAR WAVE FORM
F1:GR	Oct 30 16:46:36 2015	GAMMA RAY
F1:PBMAP	Oct 30 16:46:36 2015	PERCENT BOND CEMENT MAP
F1:TTN	Oct 30 16:46:36 2015	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Oct 30 16:46:36 2015	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

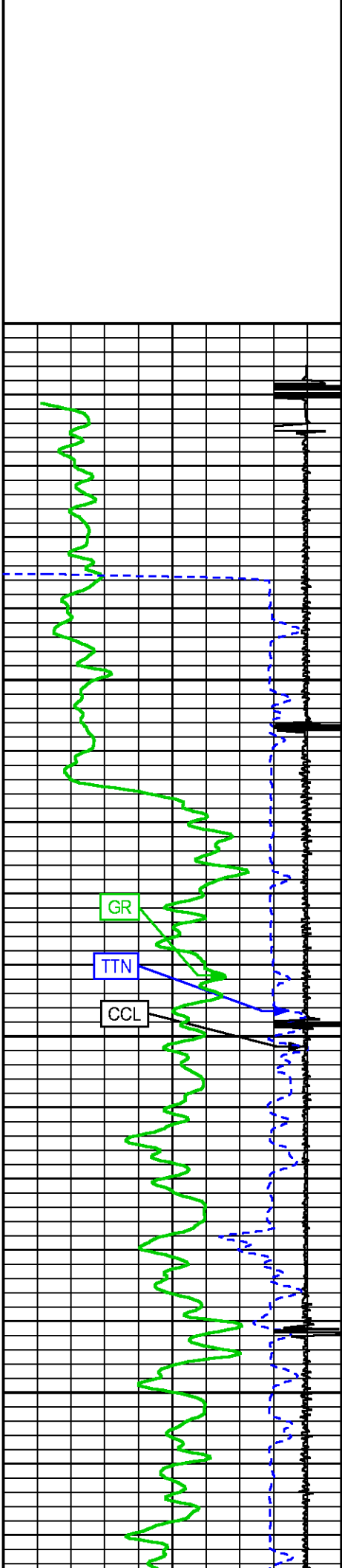
CURVE MEASURE POINT OFFSET

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		

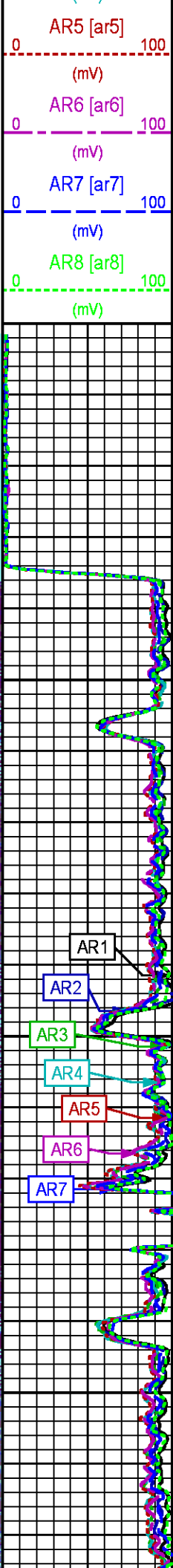
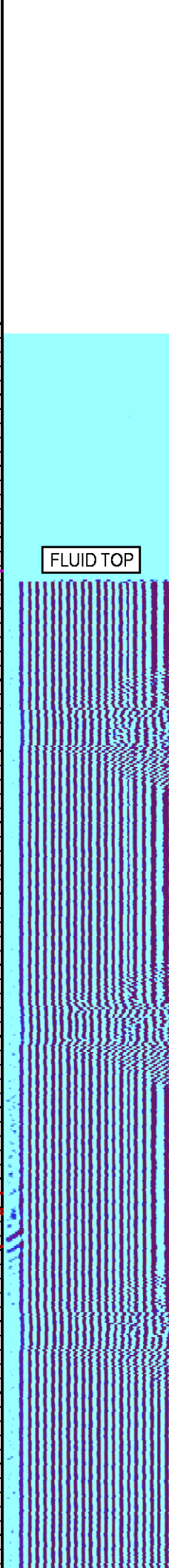
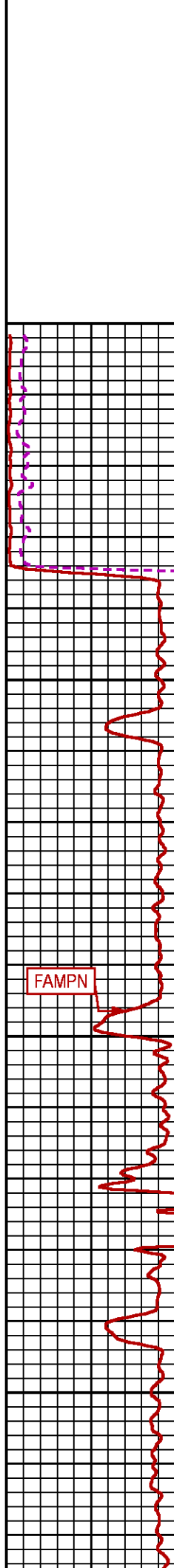
Presentation : cas6685:/dat1a/CH100607/LARAMIE_CBL.fvpdf [5"/100' Scale]
Plot Interval : 1.5 - 8388.75 Feet

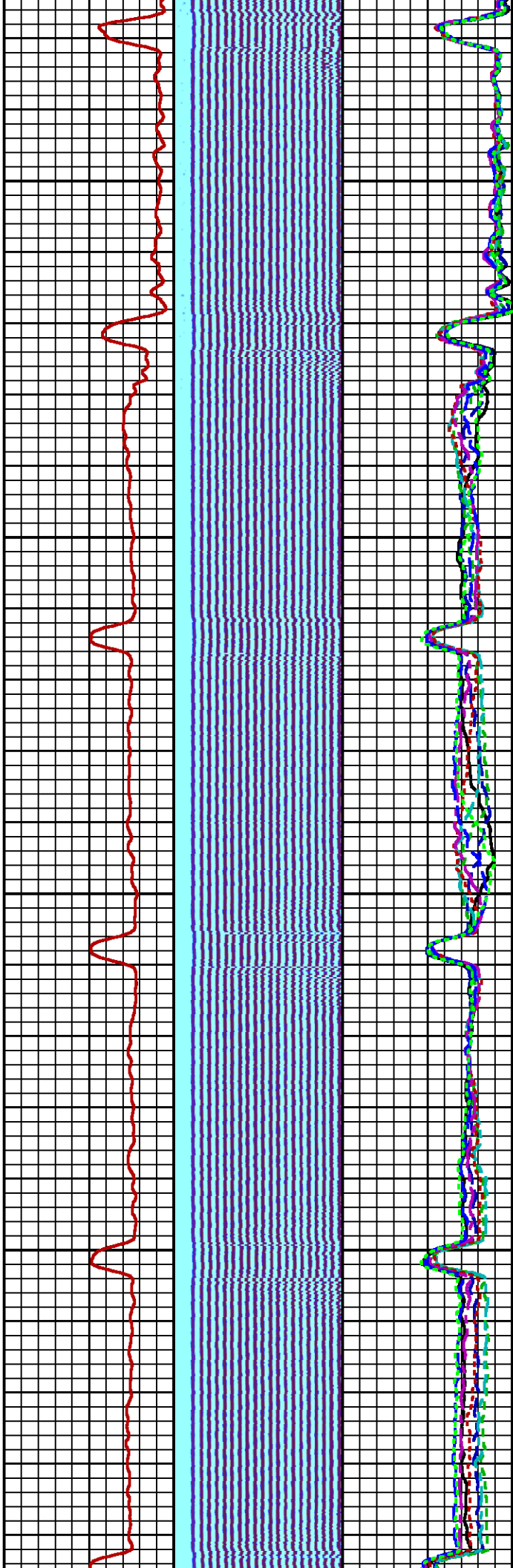
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Created On : Oct 30 16:46:36 2015
Company : LARAMIE ENERGY
Well : PICEANCE FEDERAL 28-20E
Field : VEGA
File Interval : 0.5 - 8390 Feet
OCT : n012g





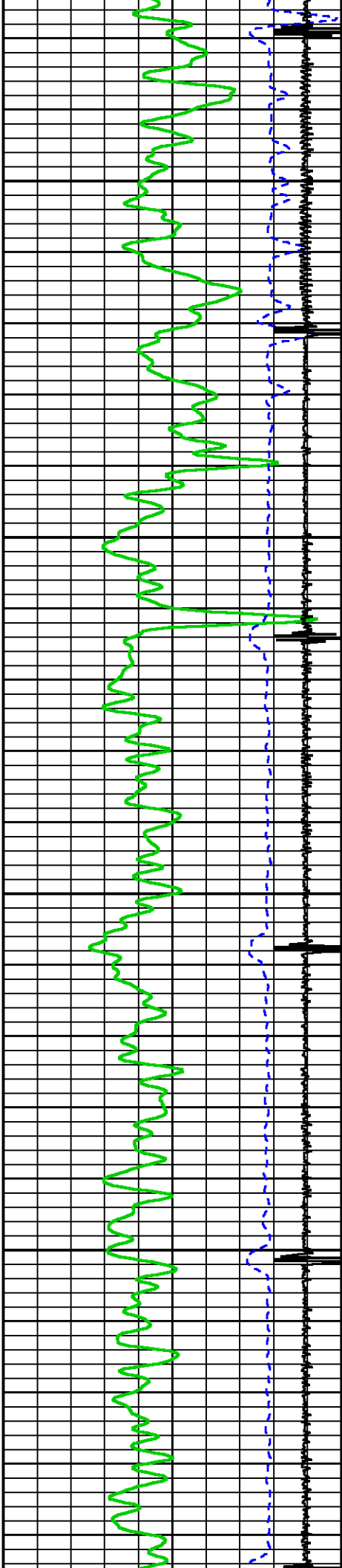
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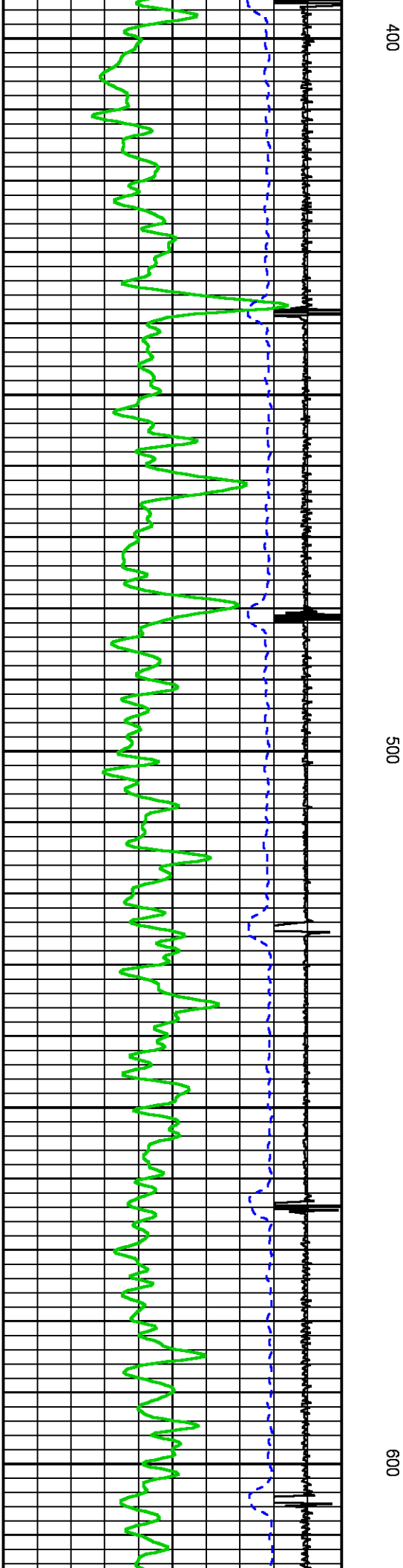
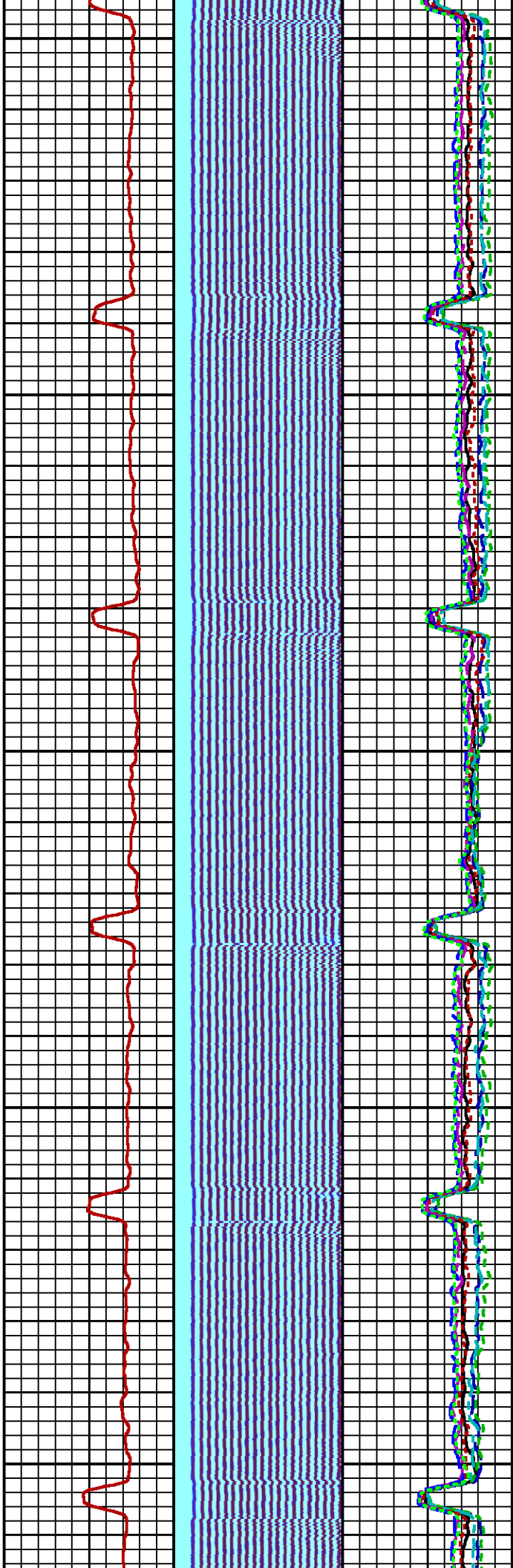


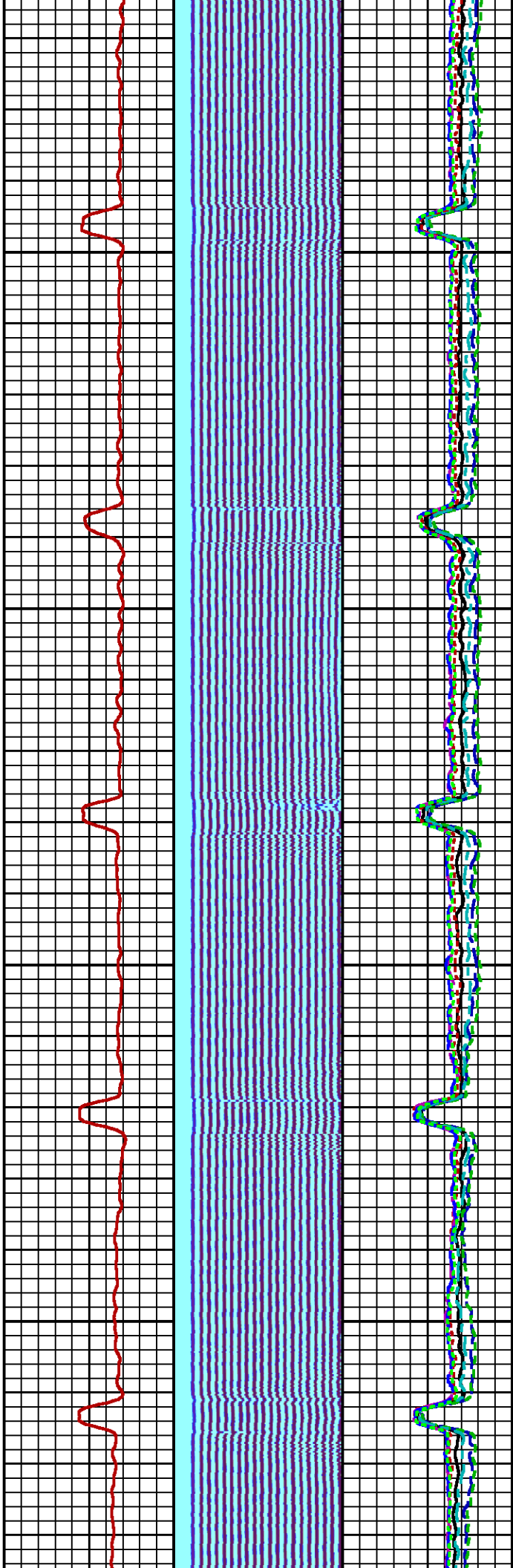


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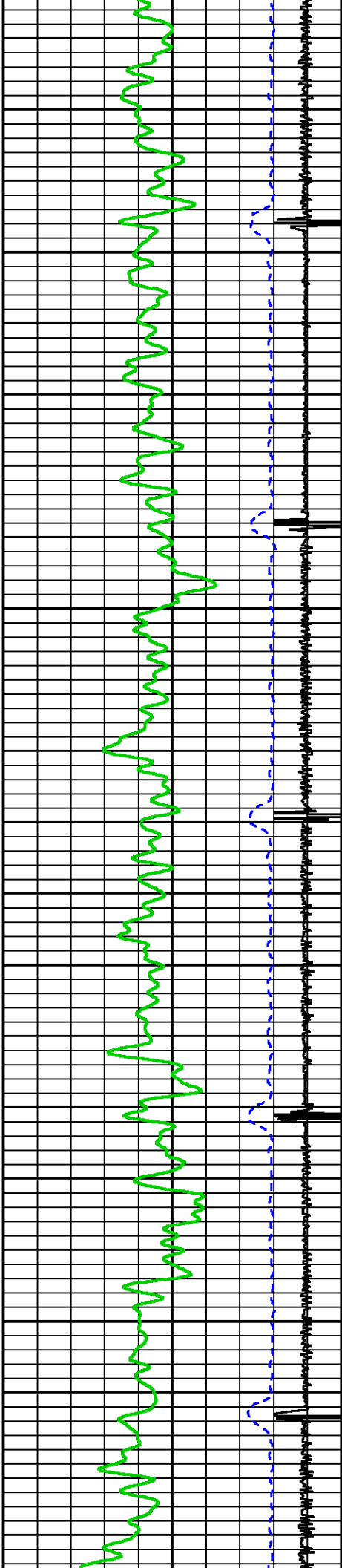


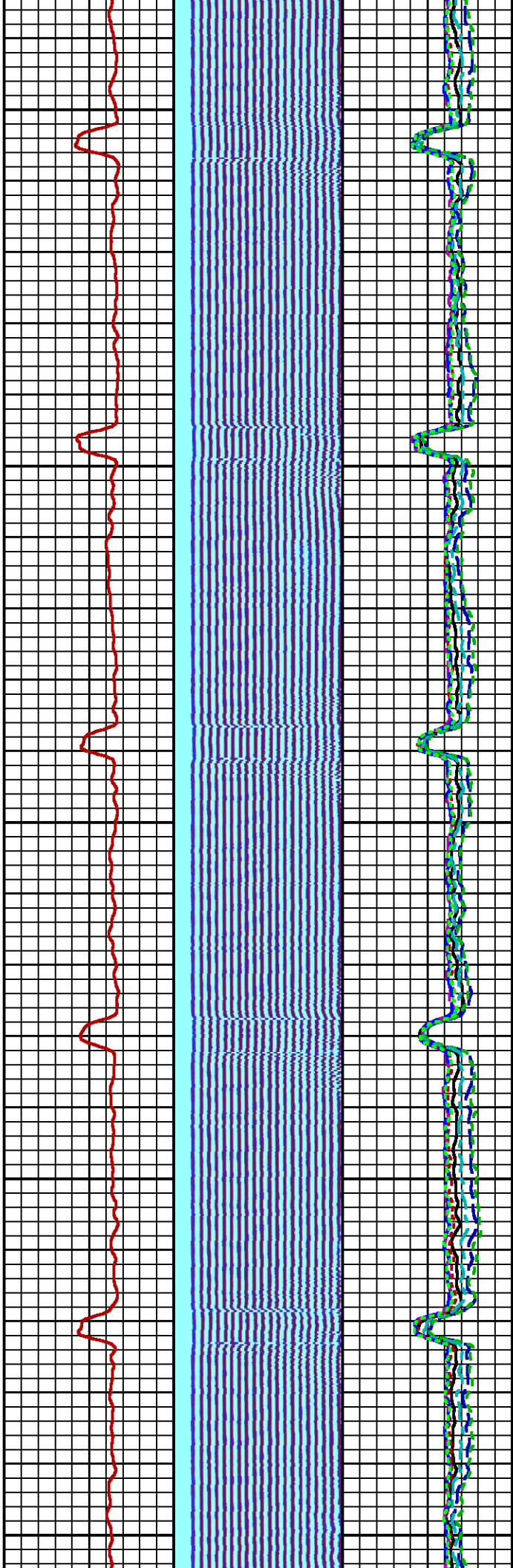




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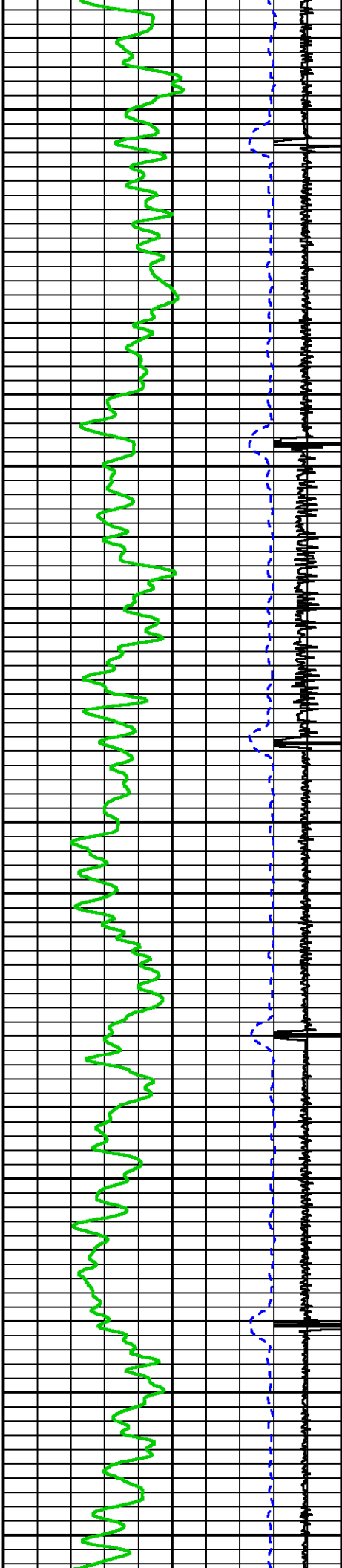
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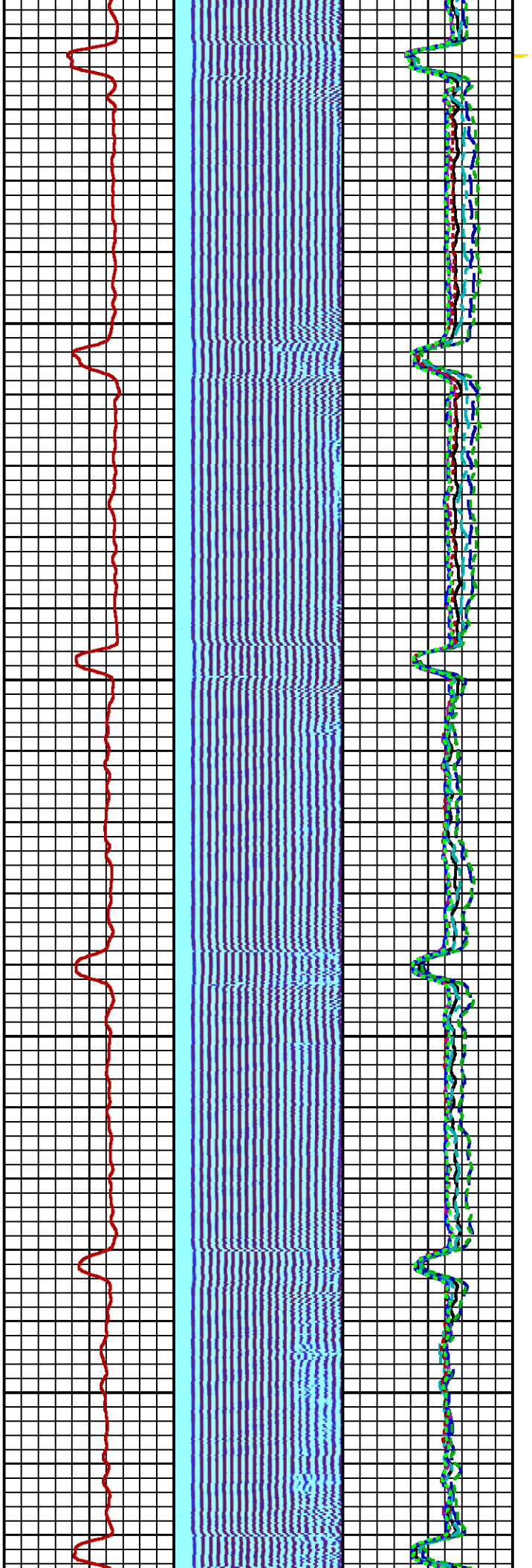




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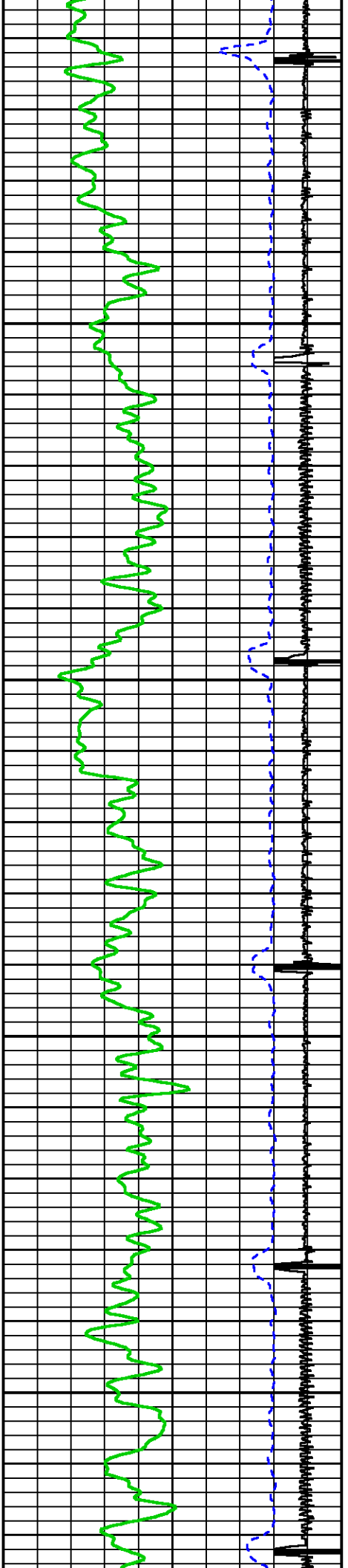
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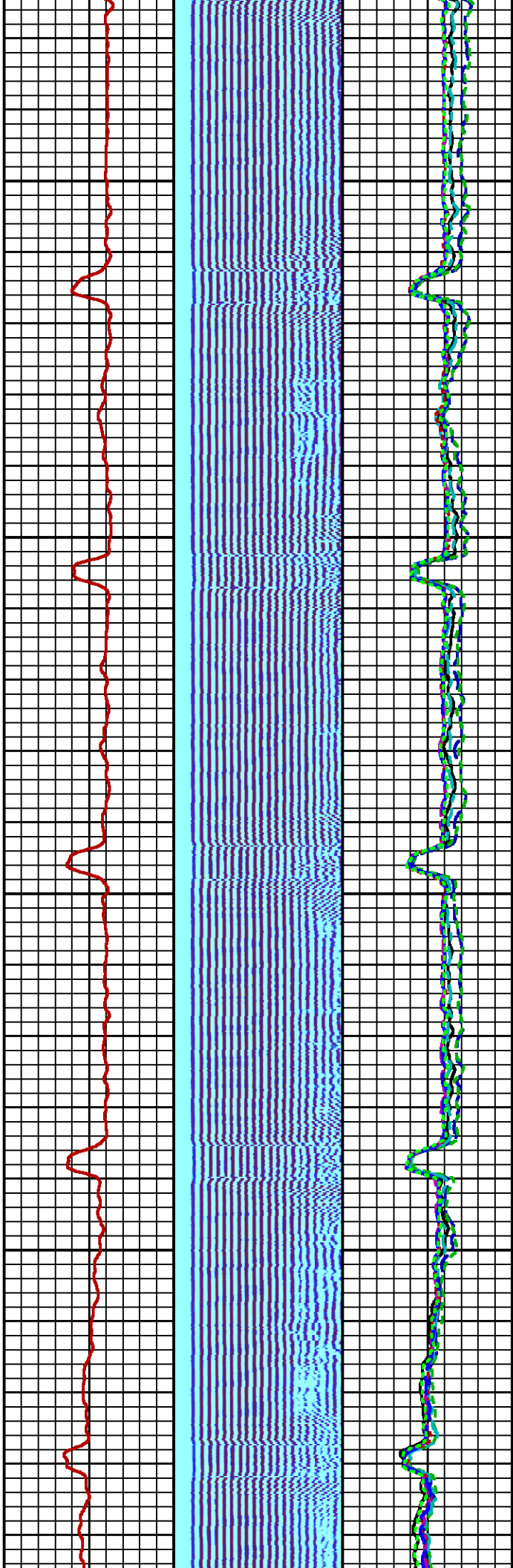




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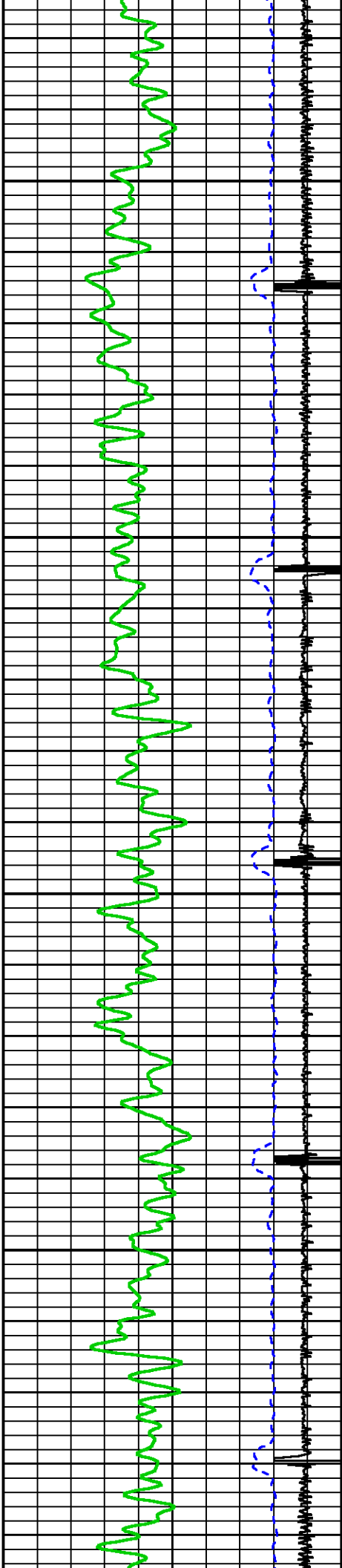
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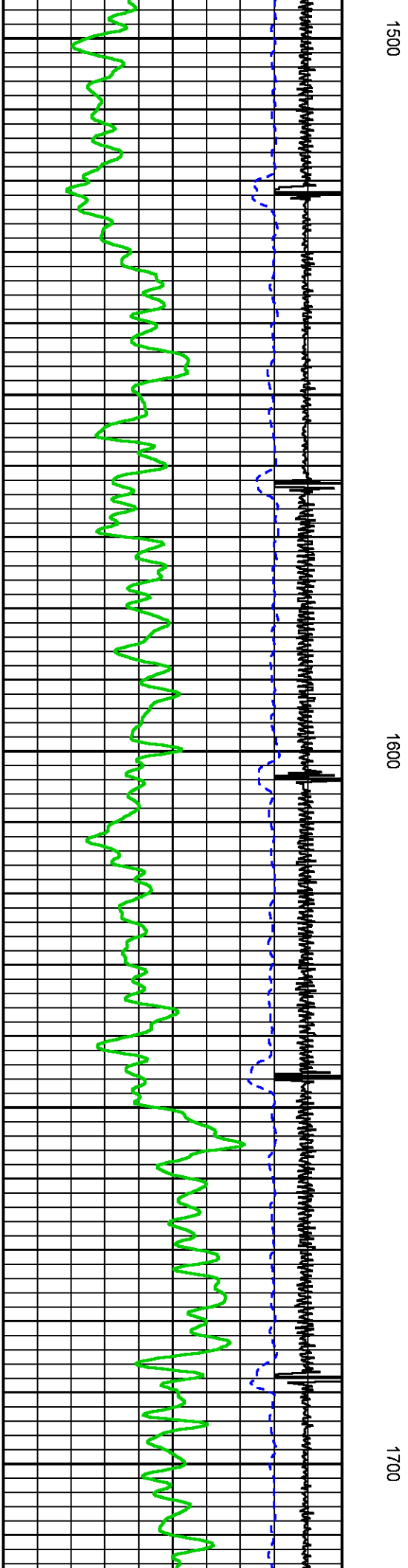
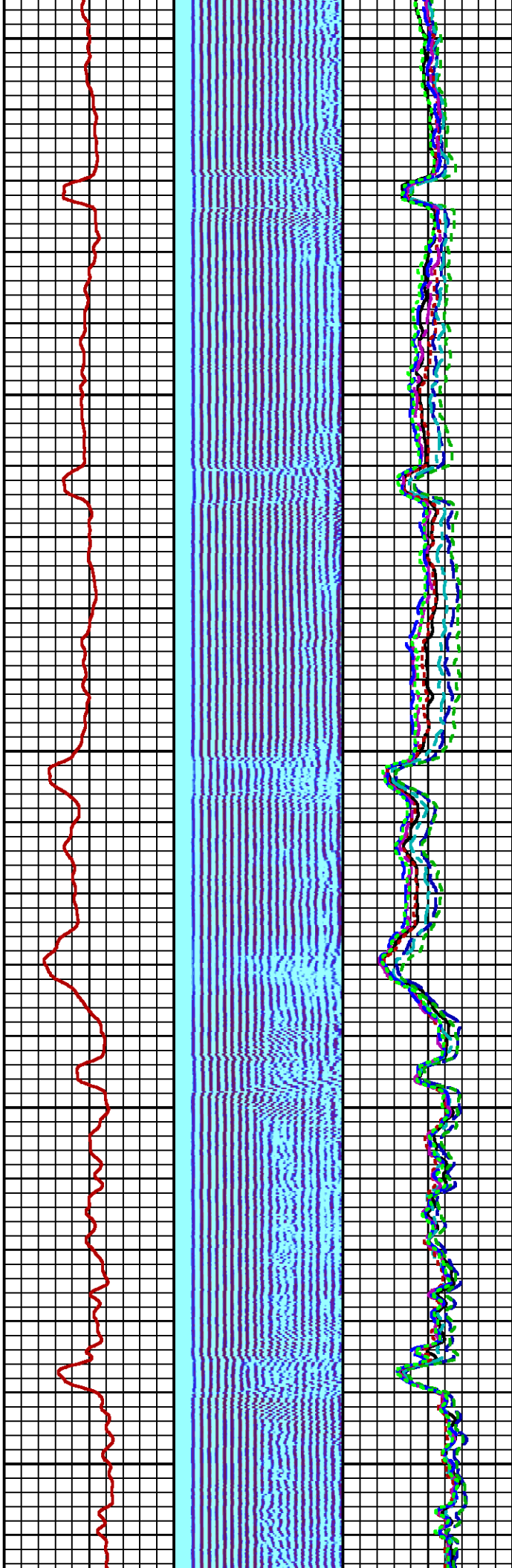
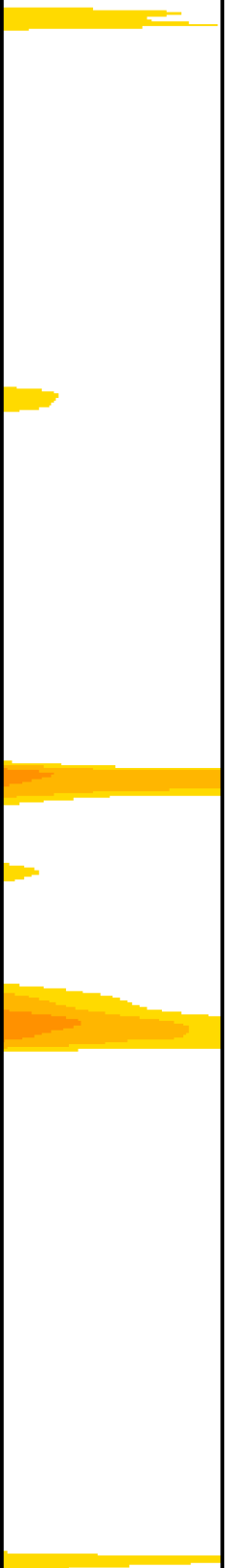


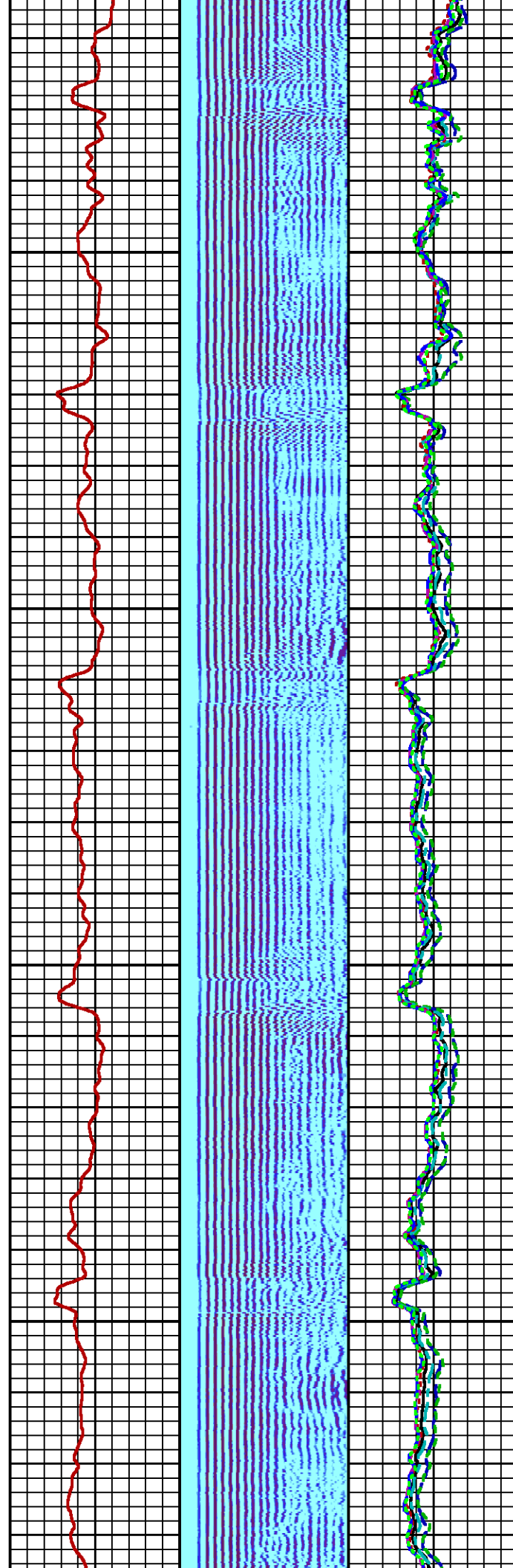
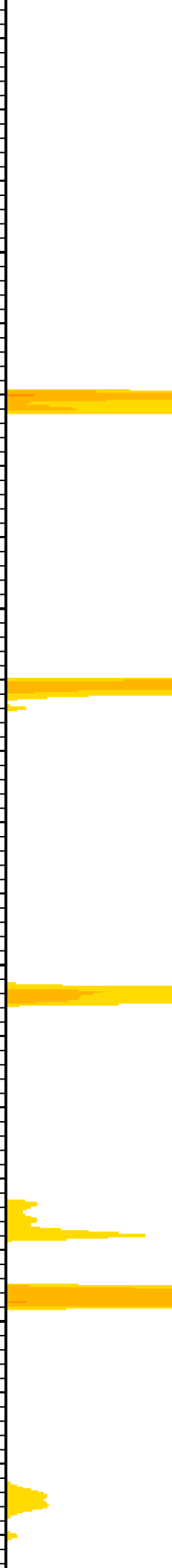


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1400

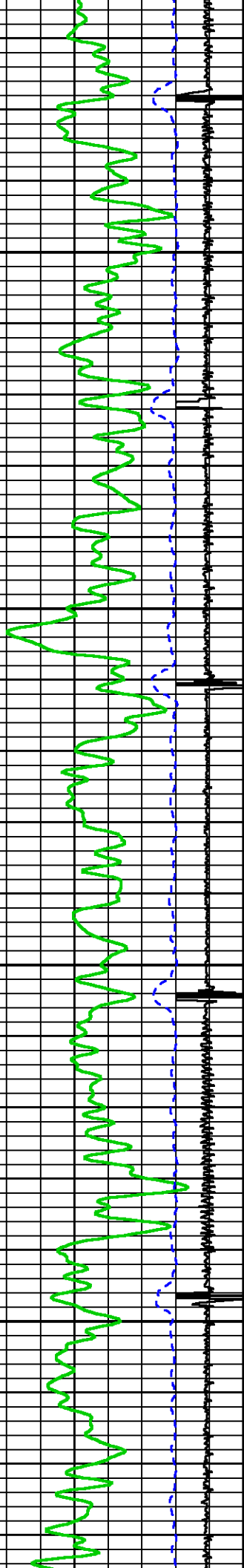


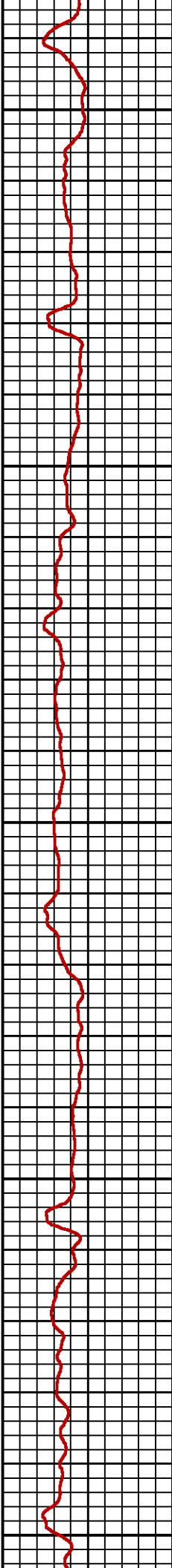
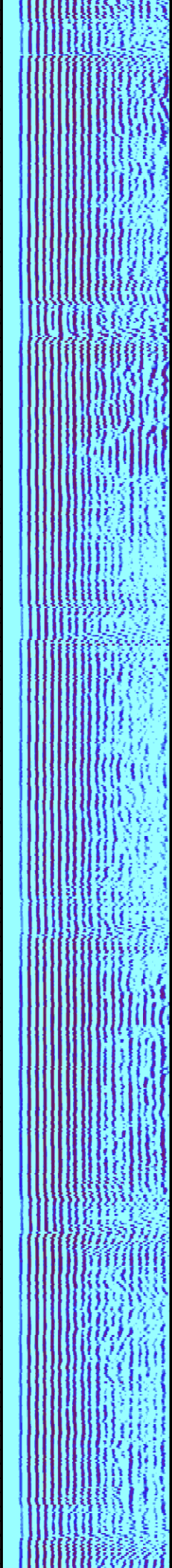
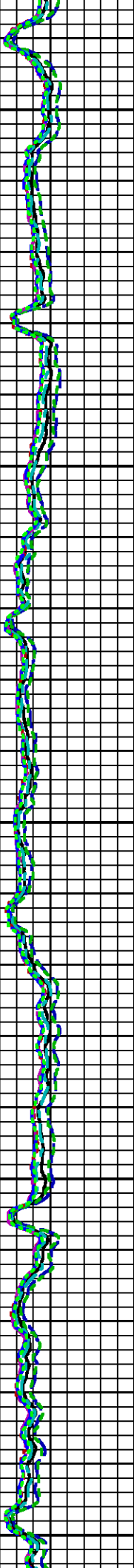
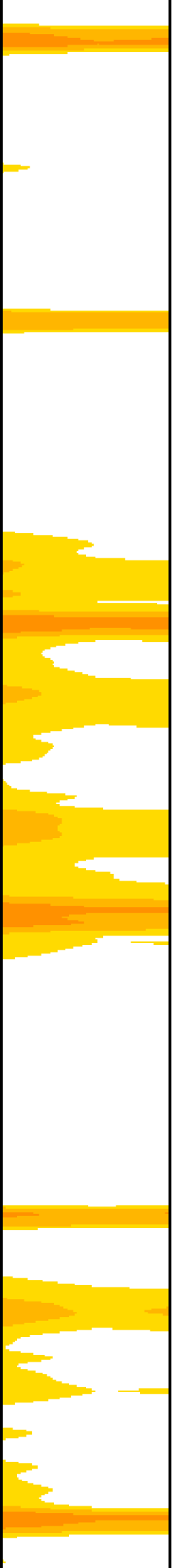




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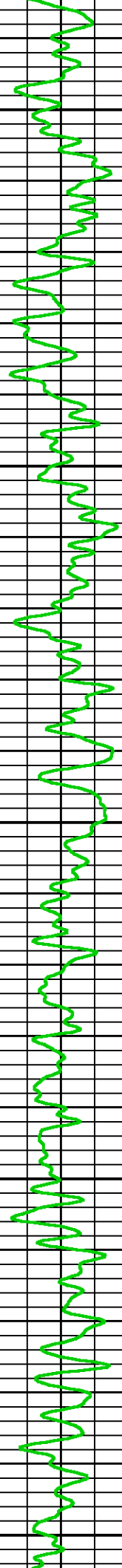
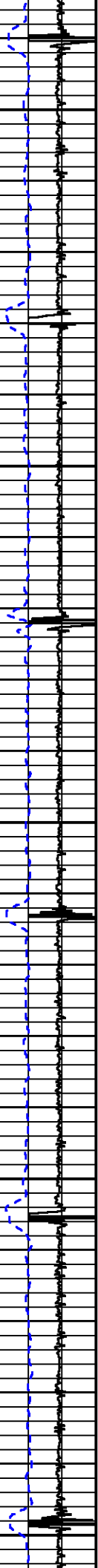
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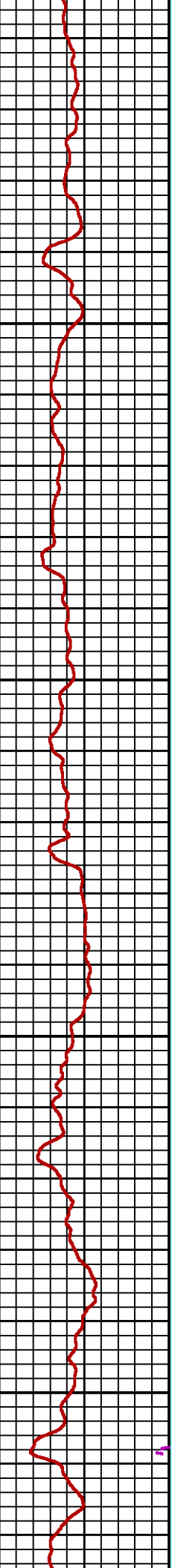
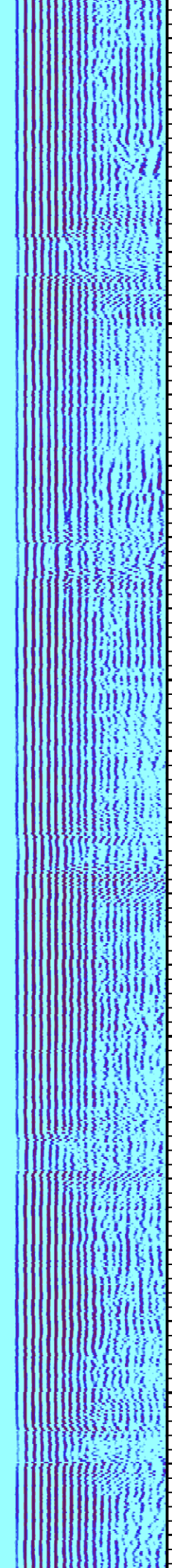
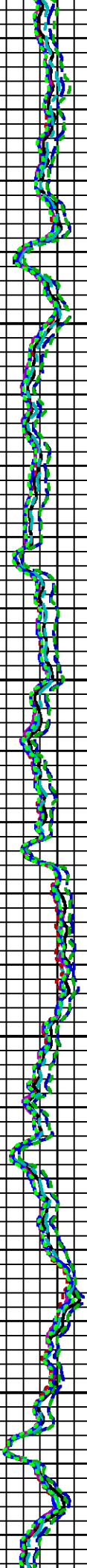
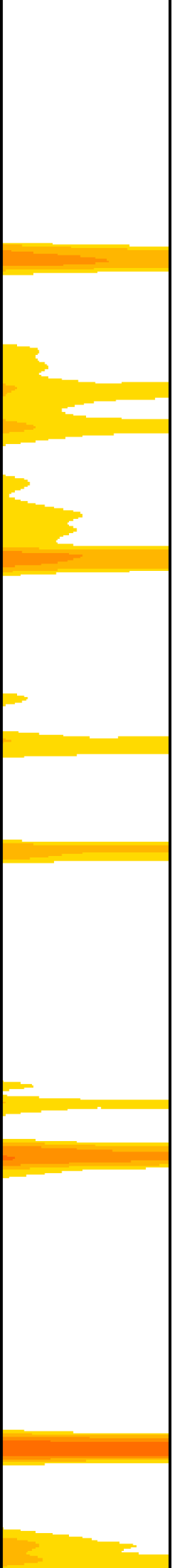




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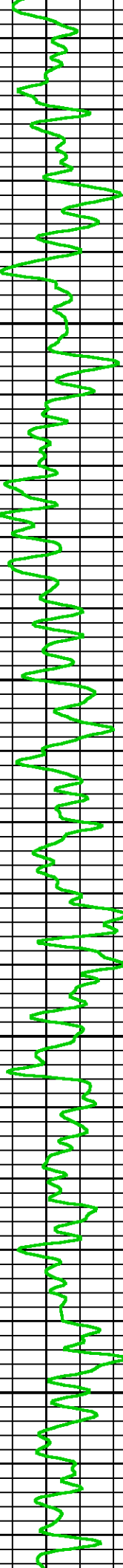
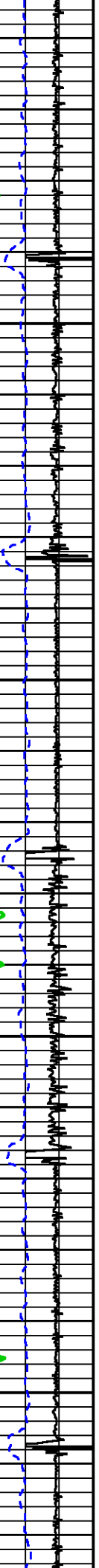
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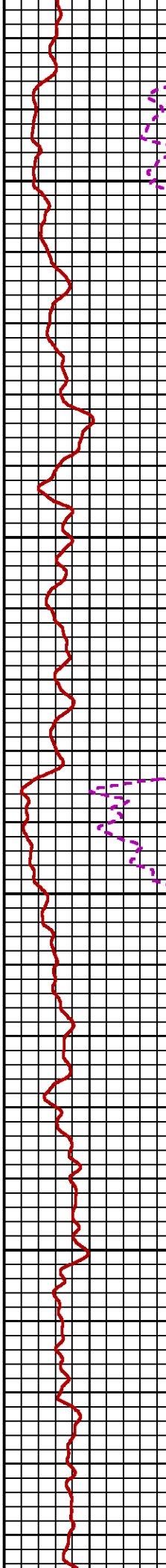
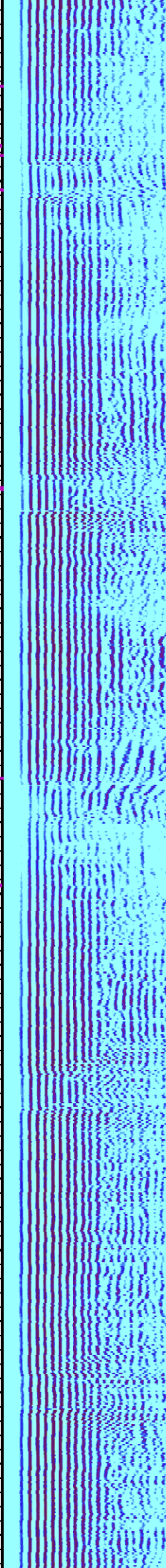
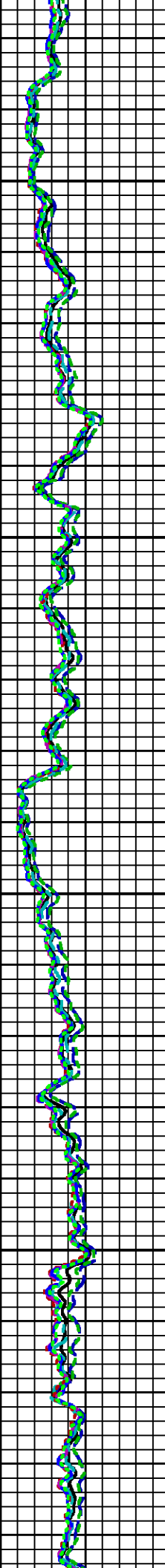




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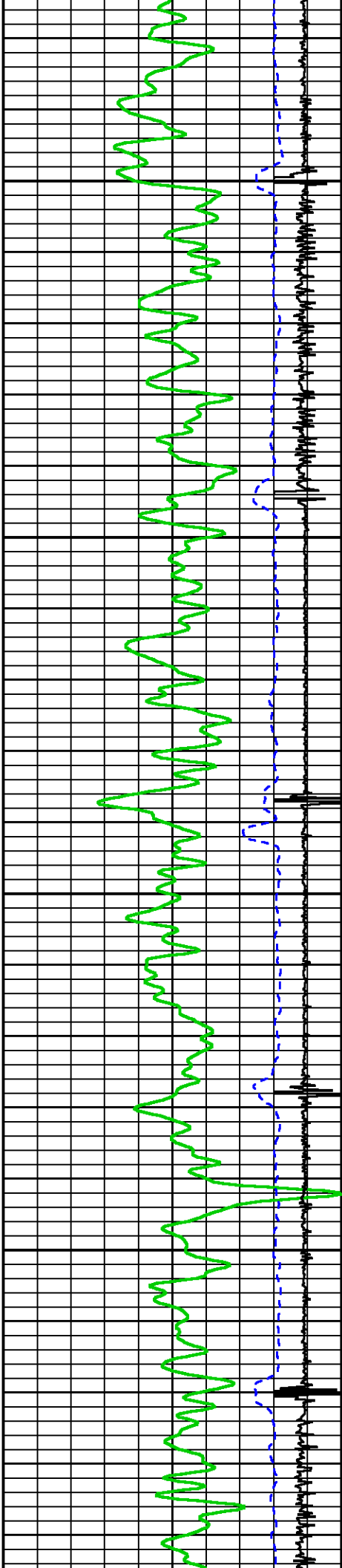
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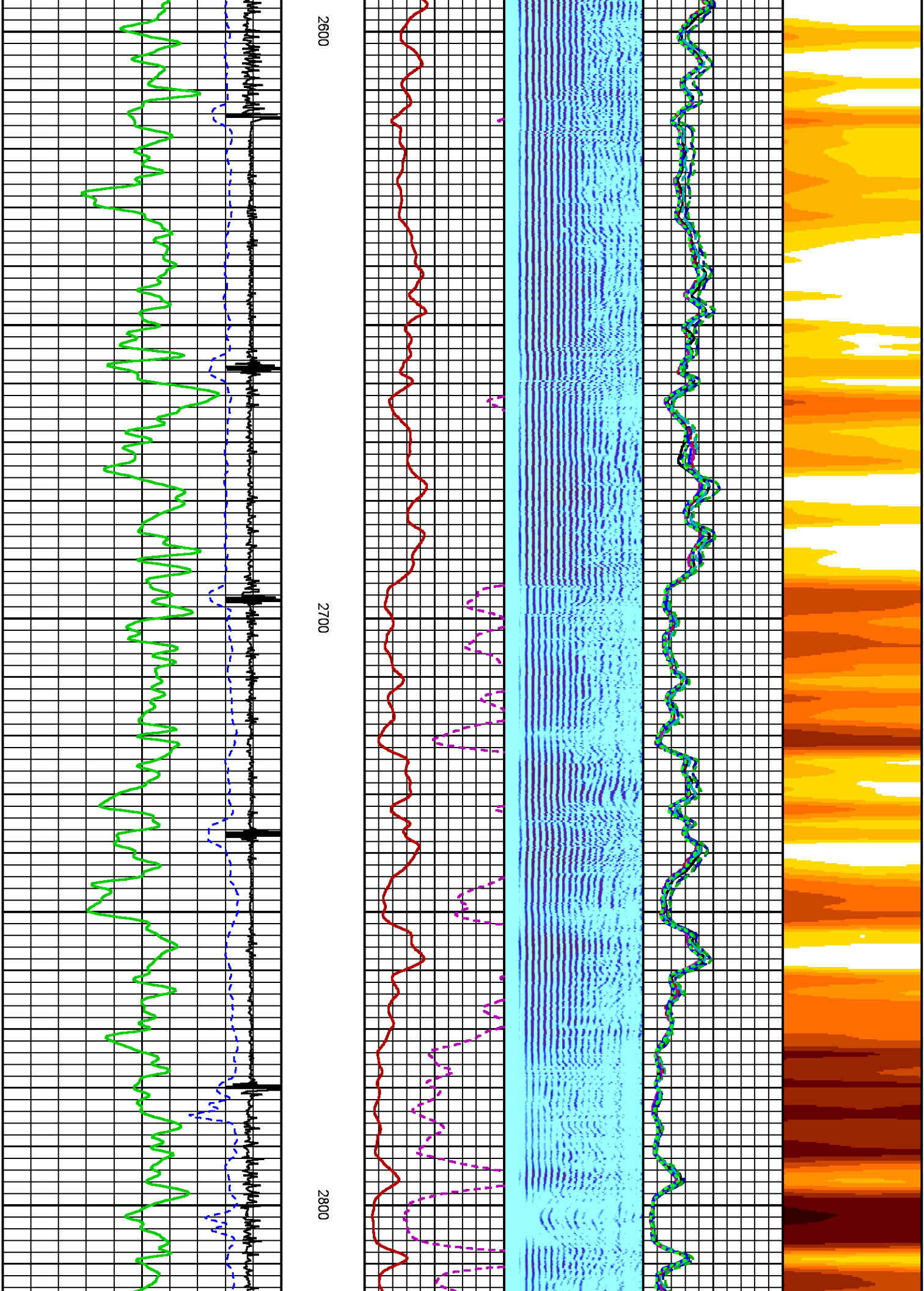


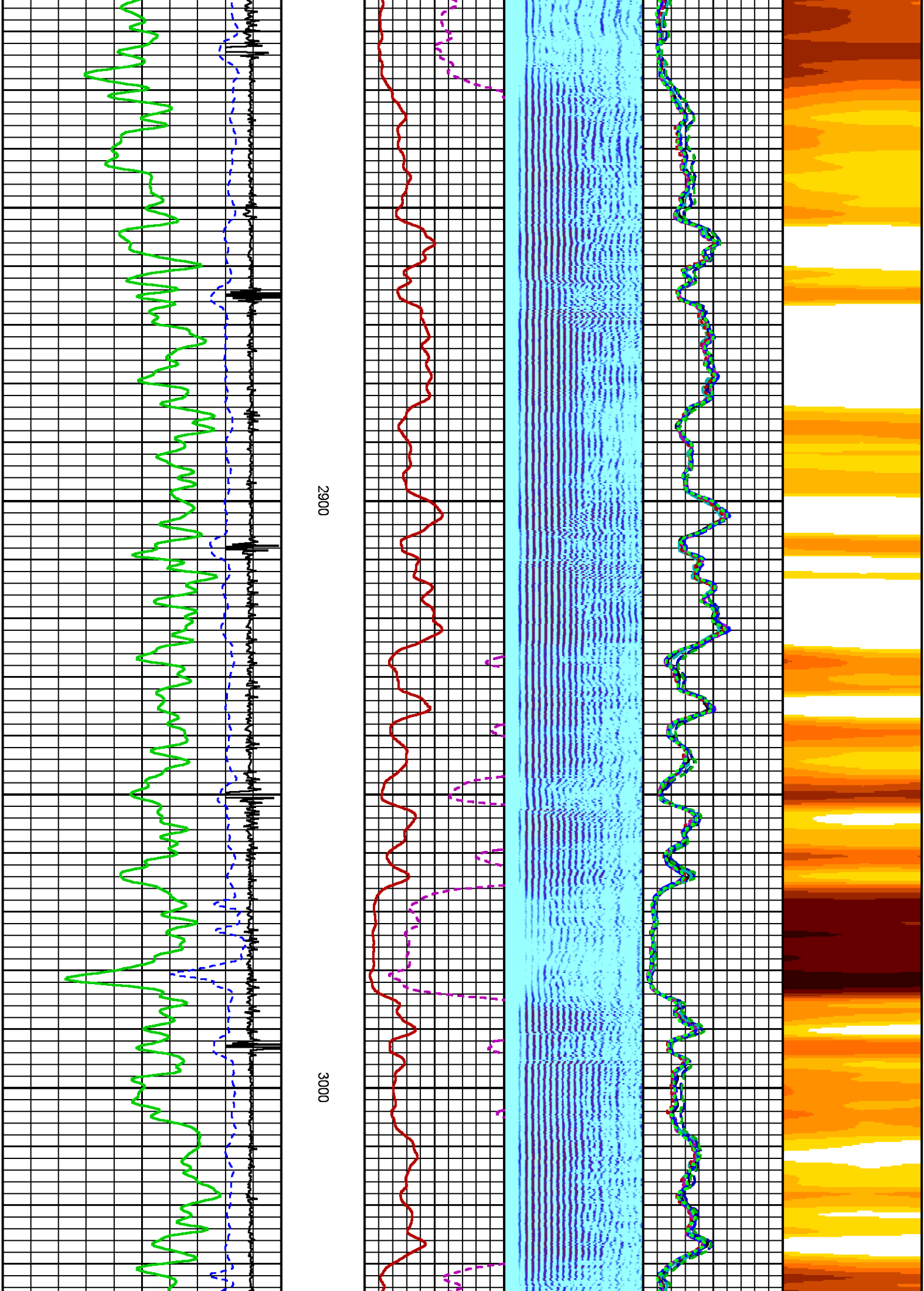


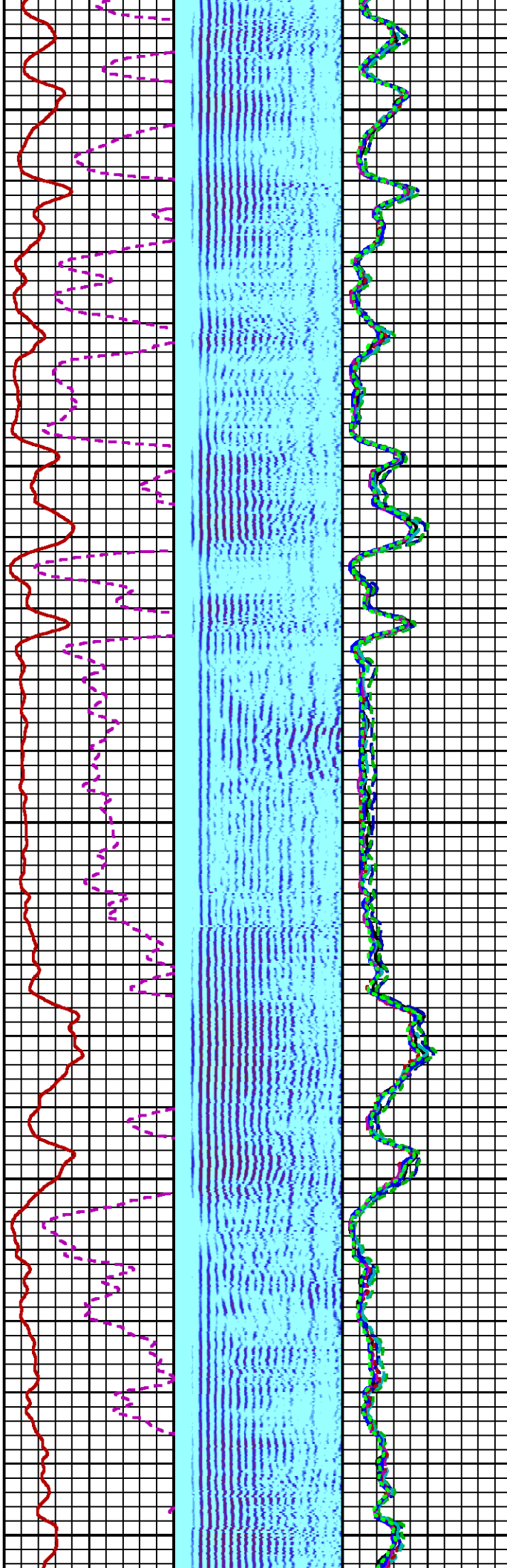
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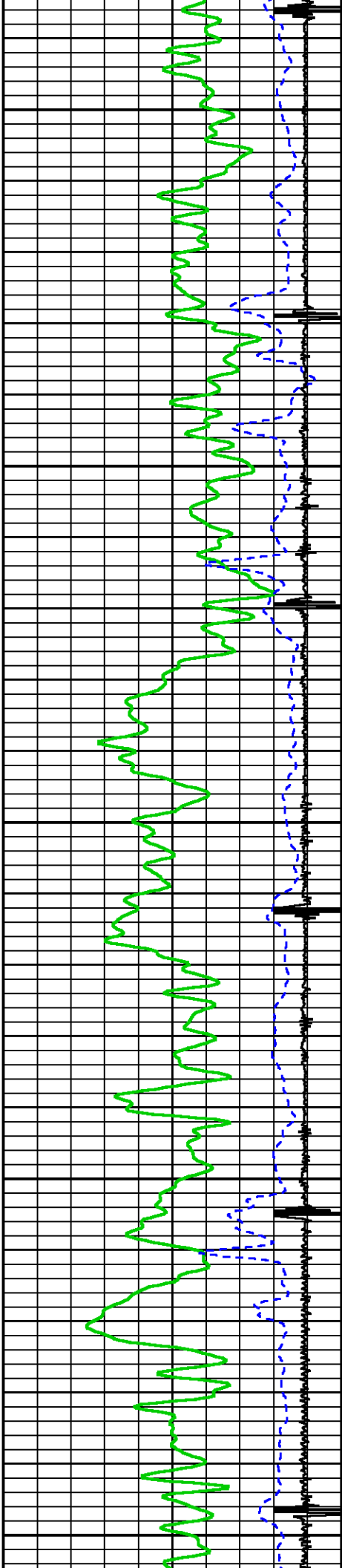


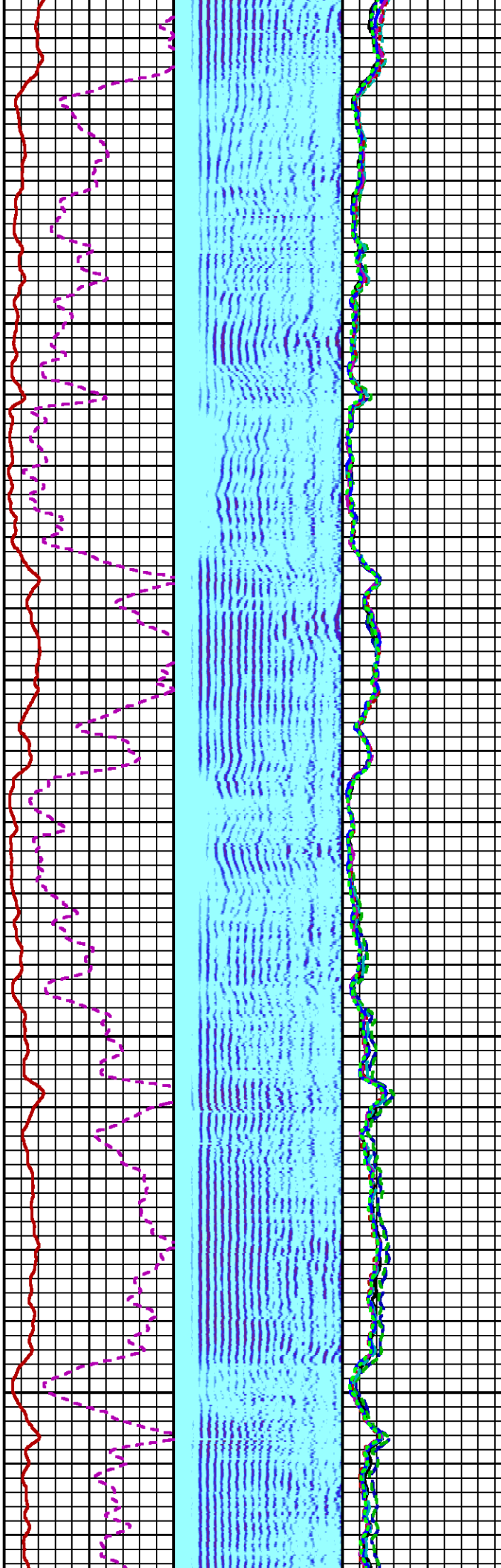




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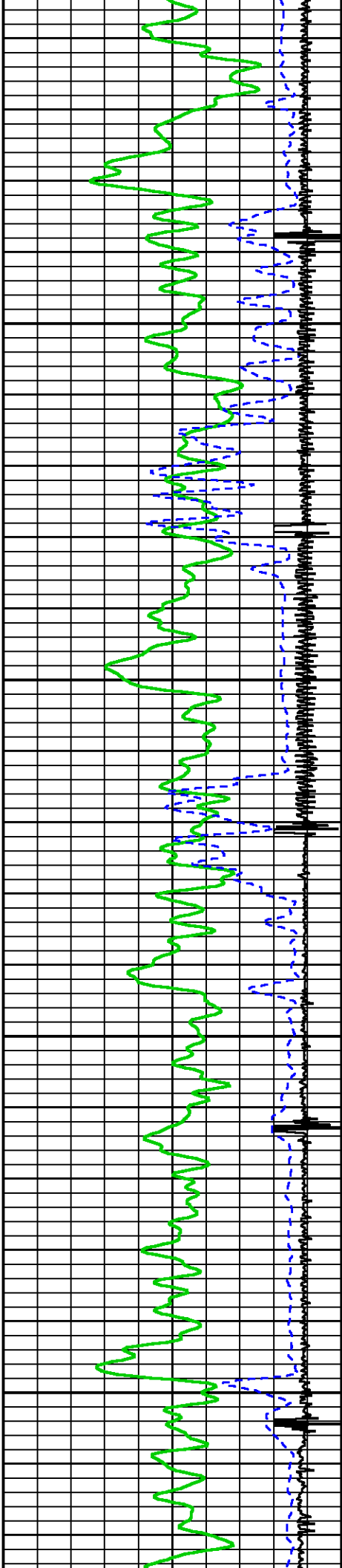
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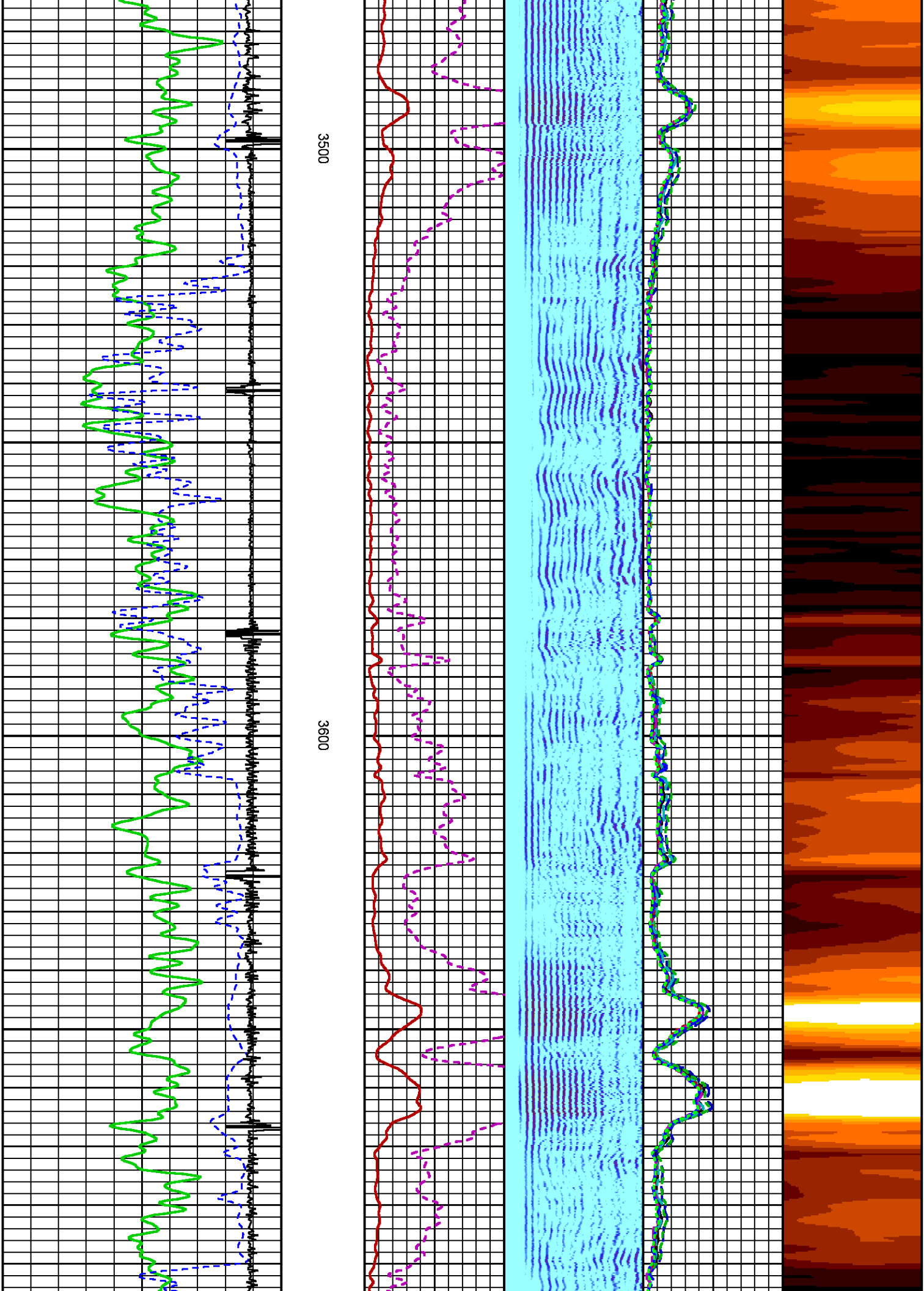


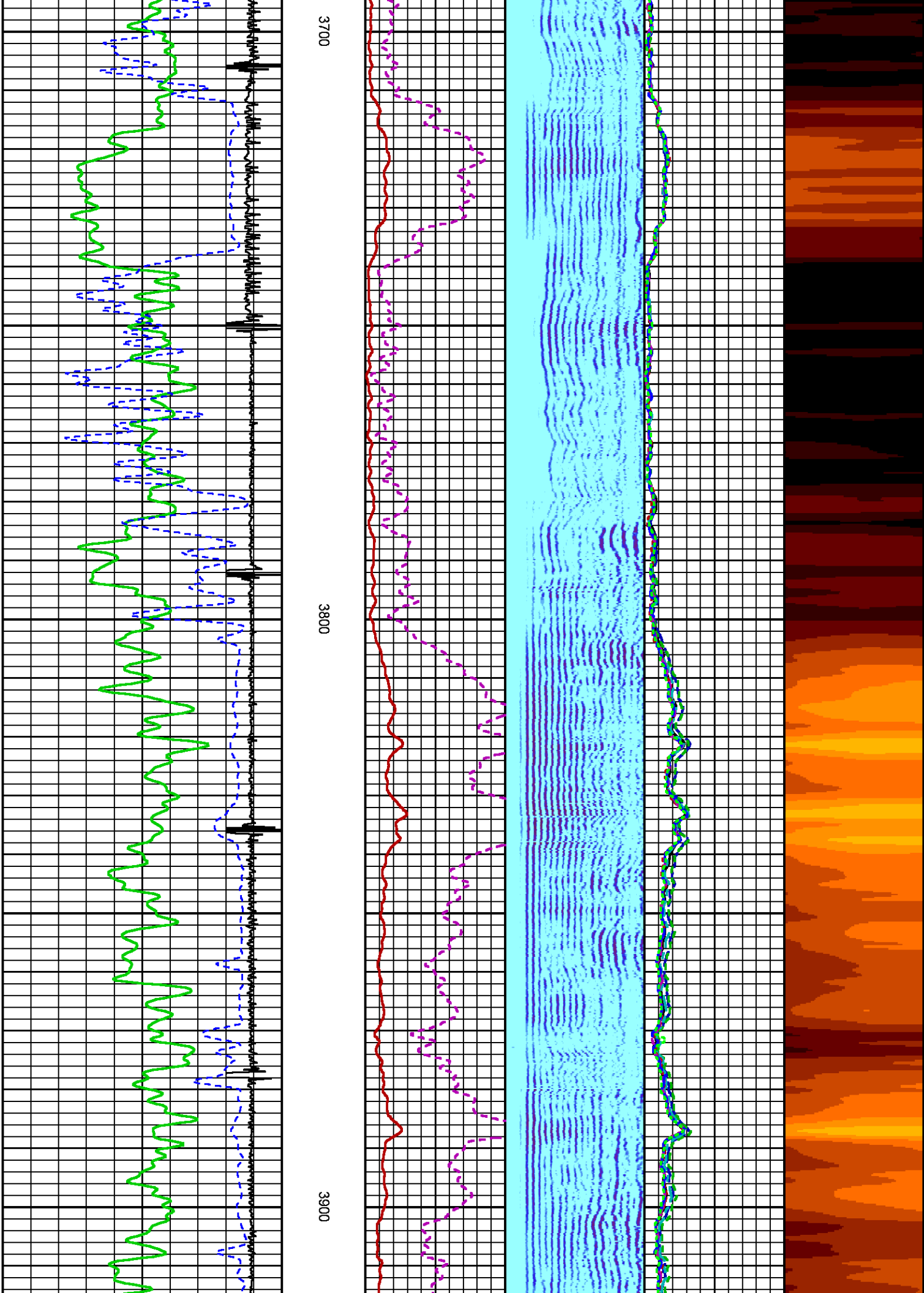


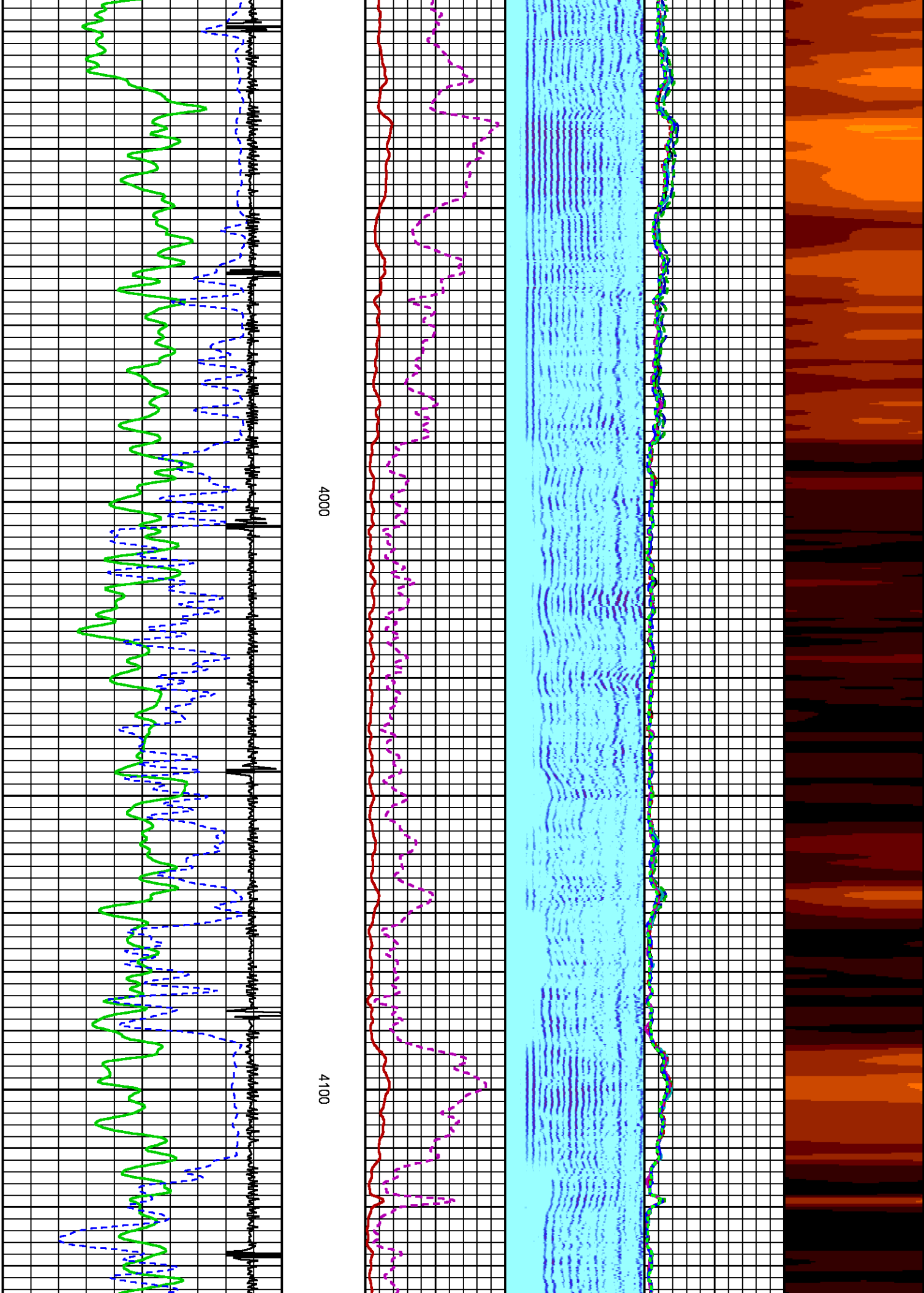
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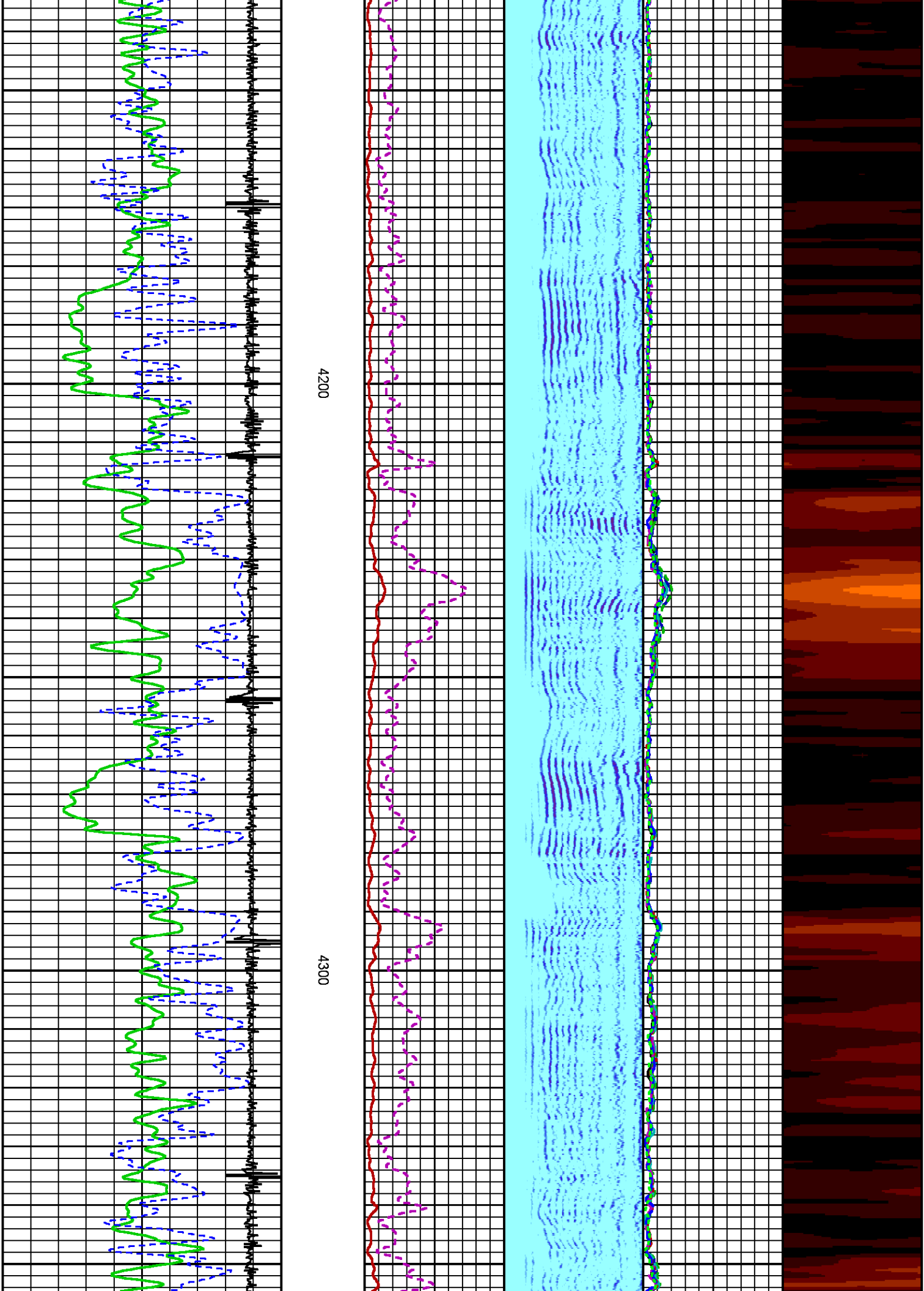
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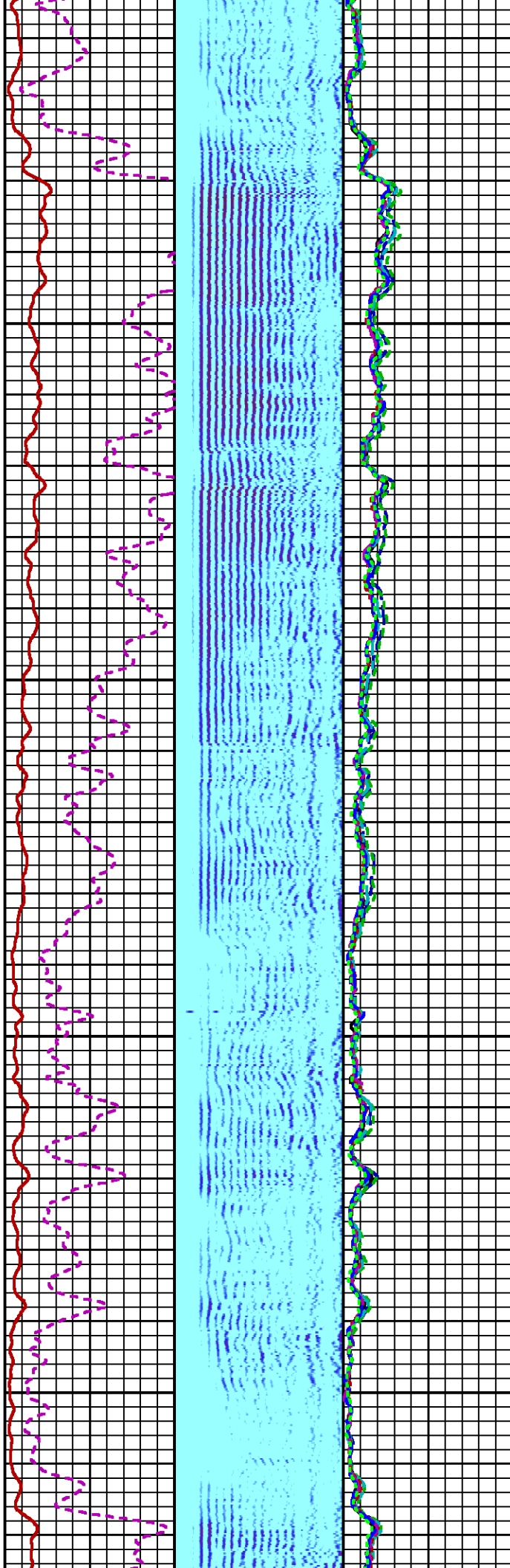
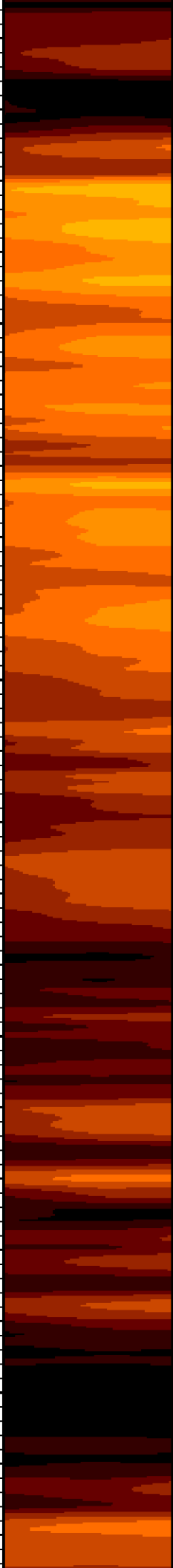






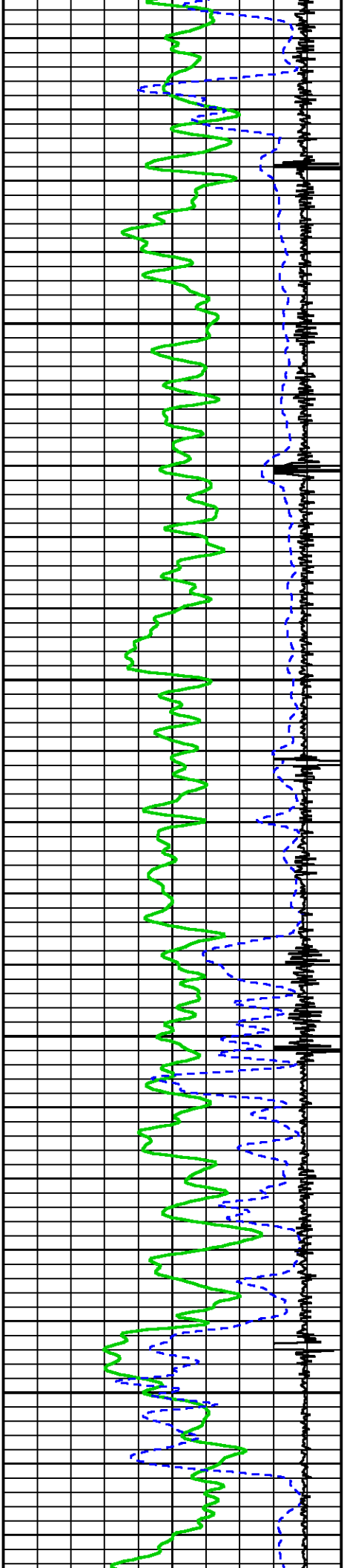


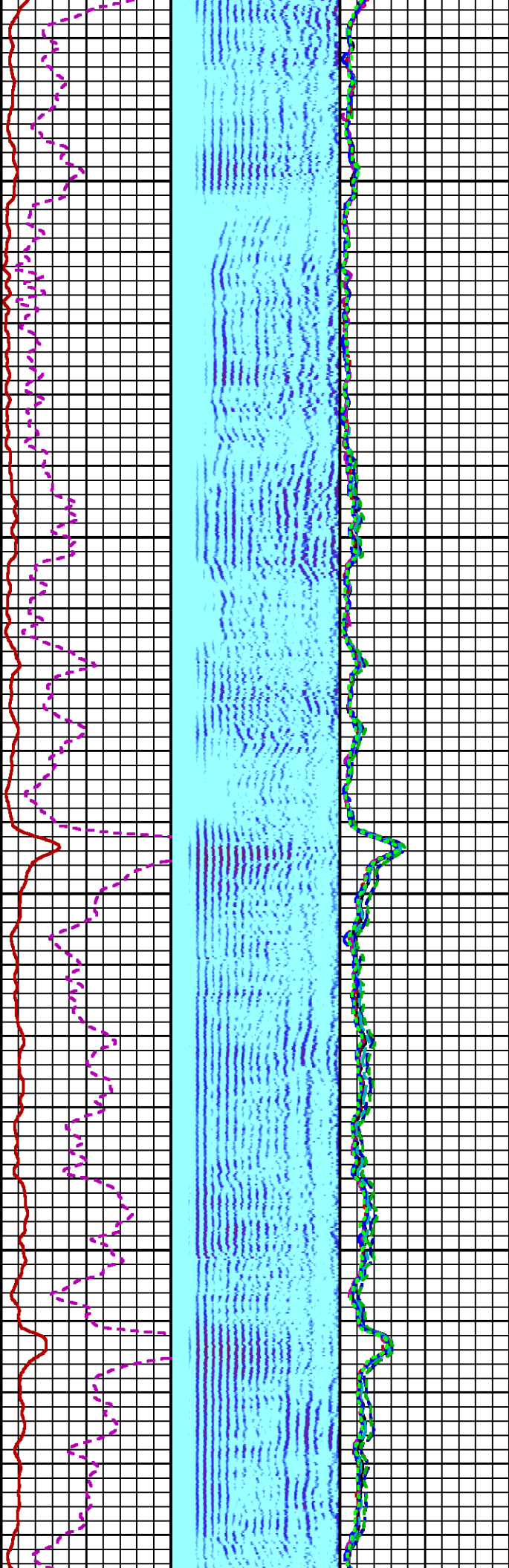
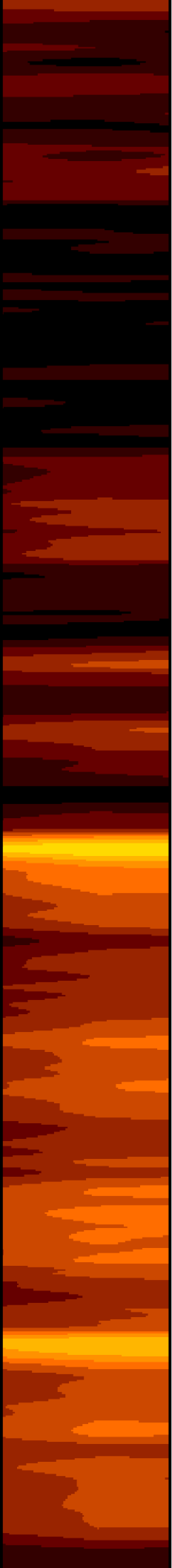




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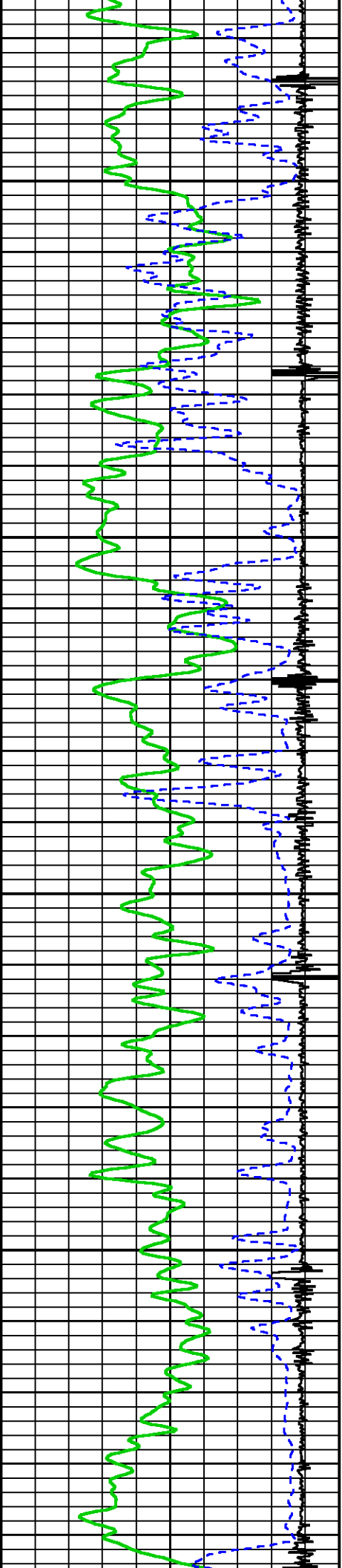
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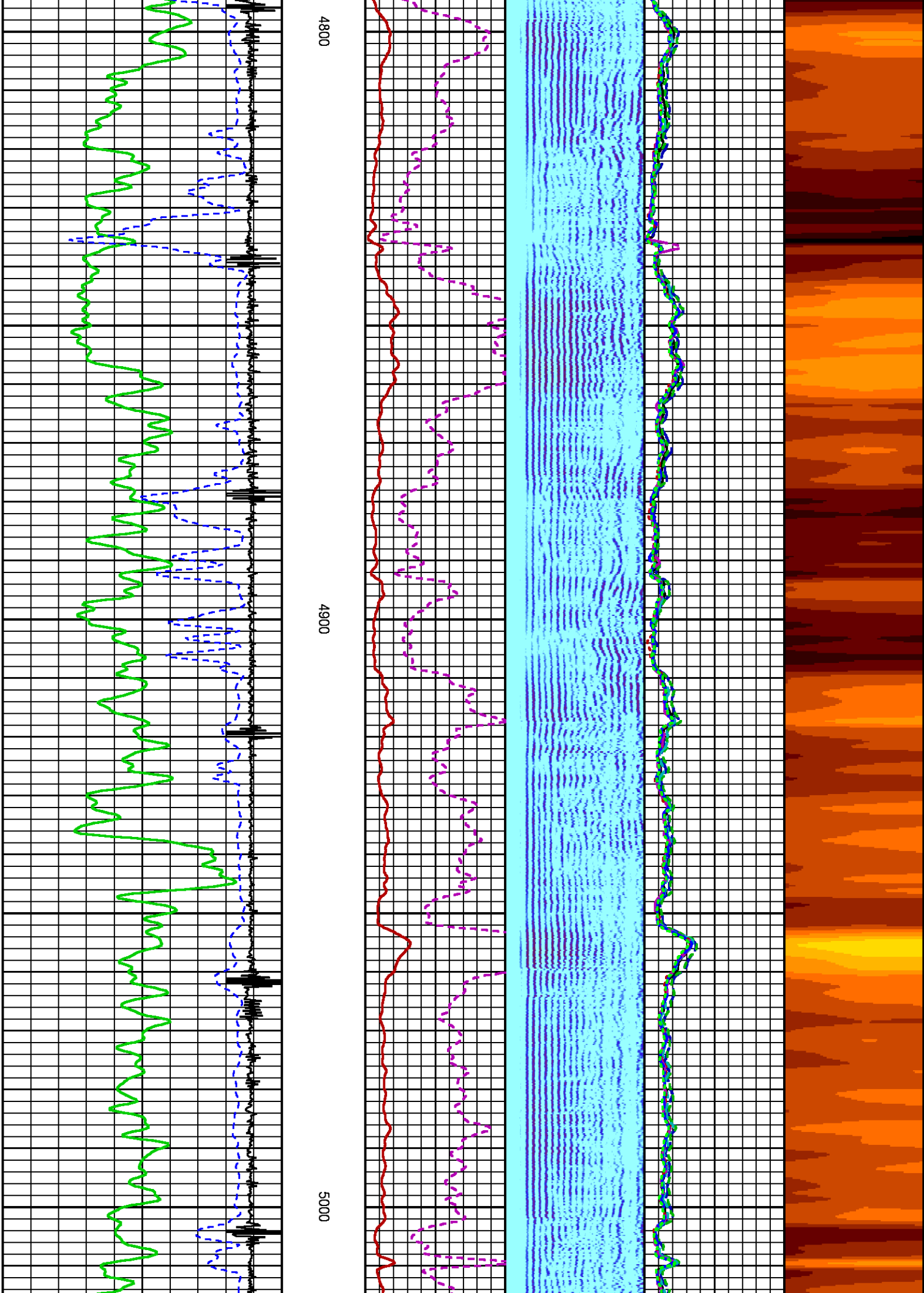


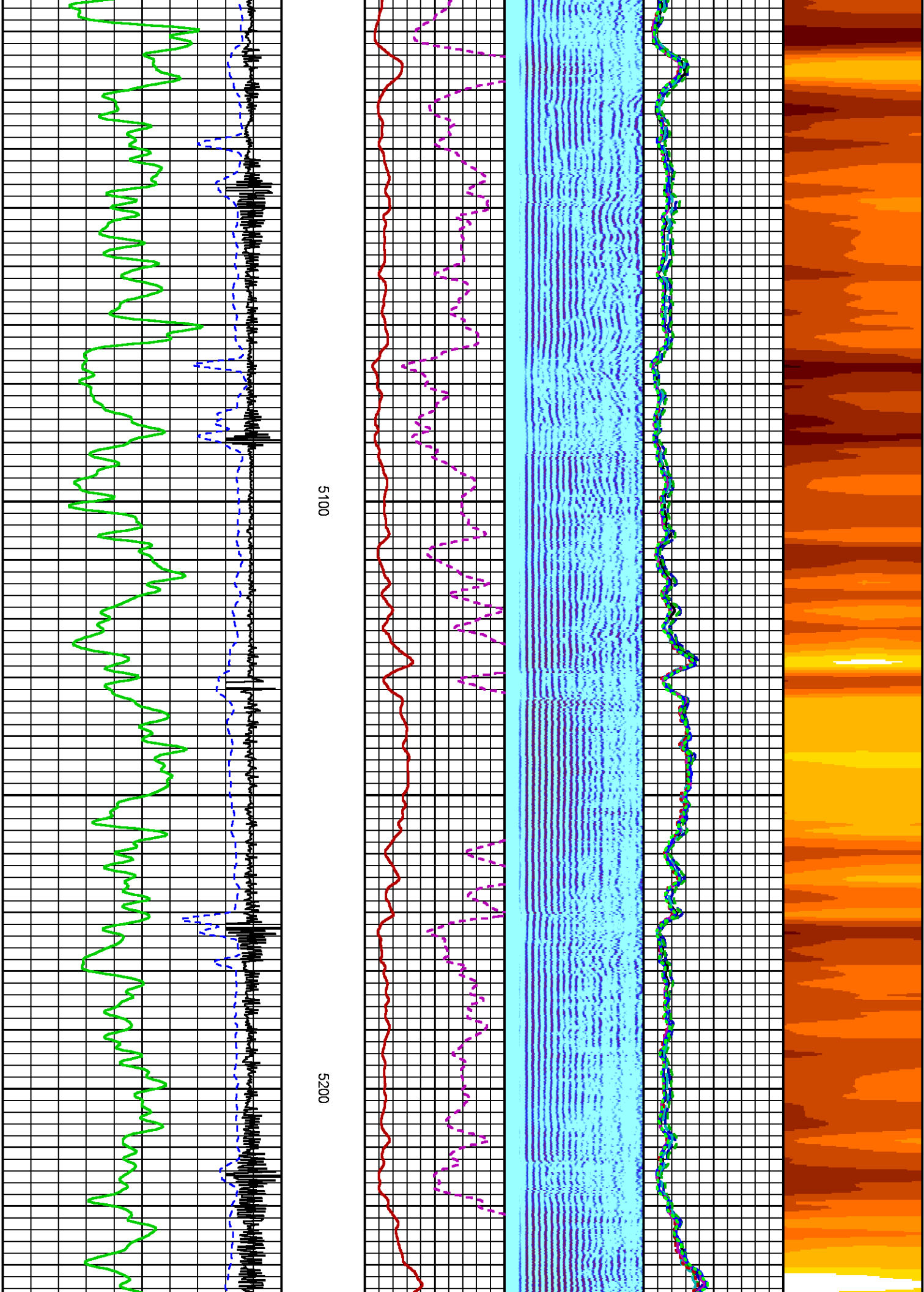


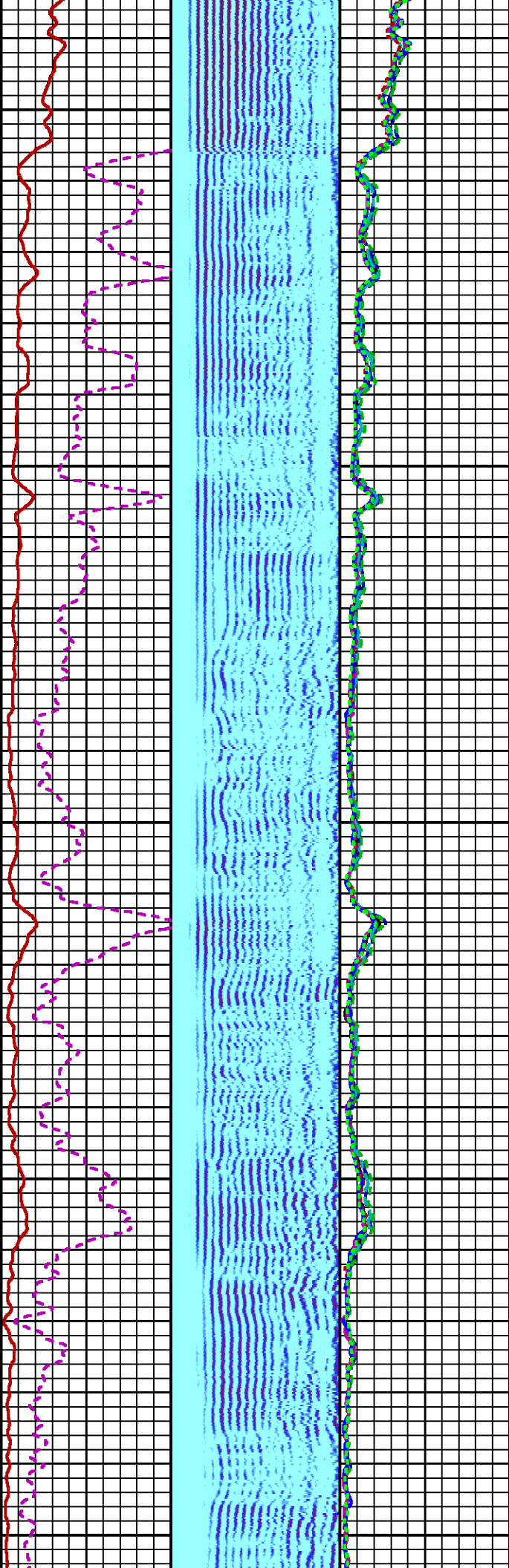
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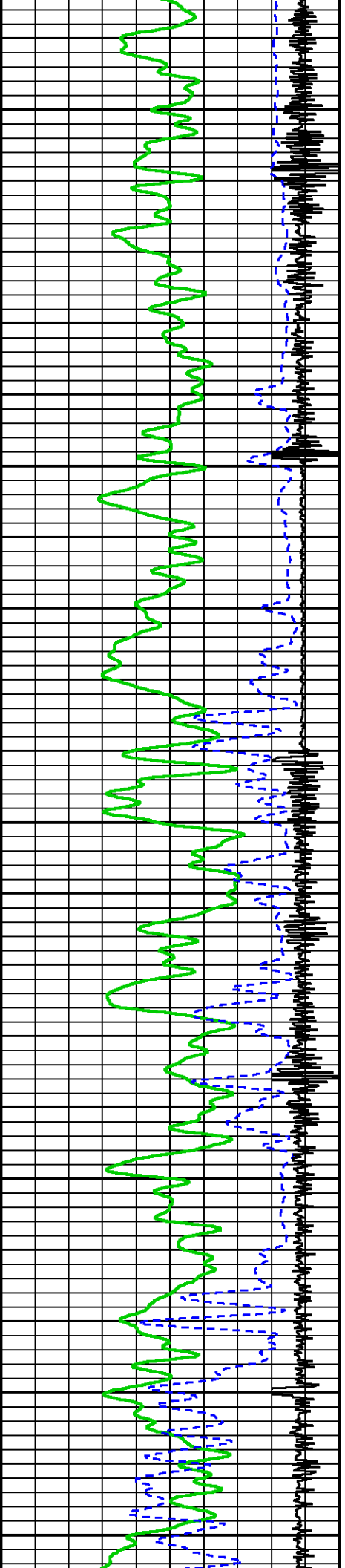


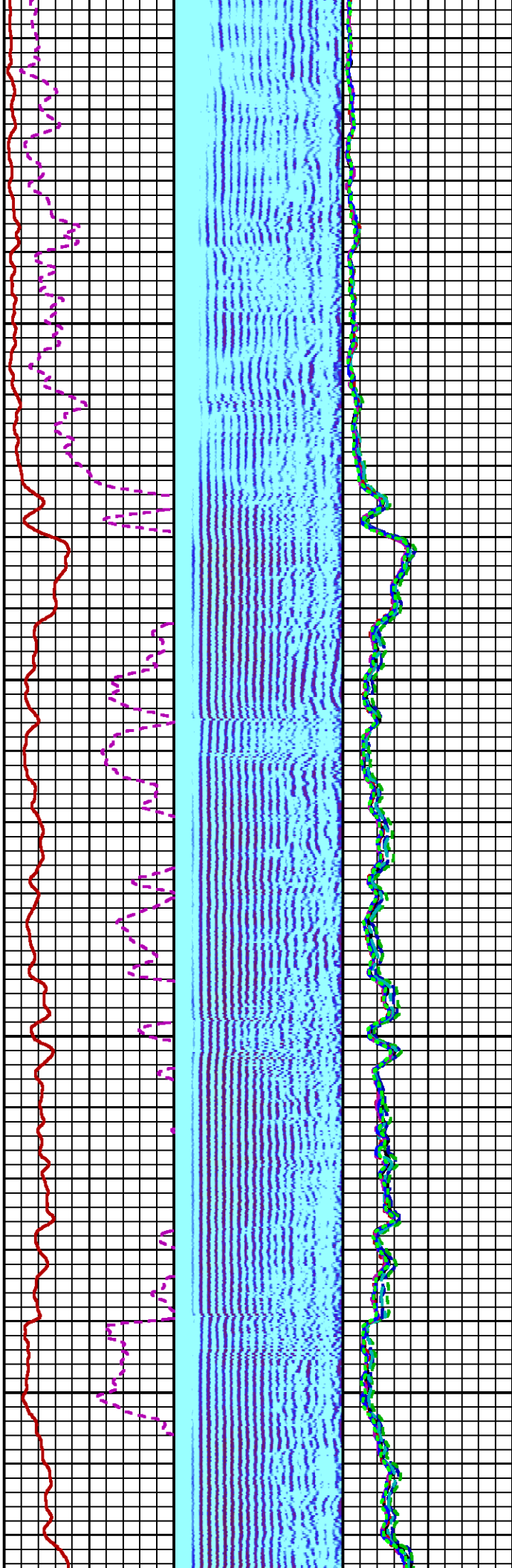
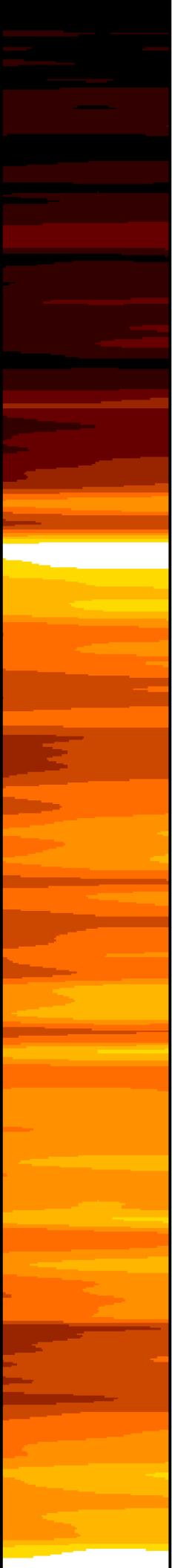




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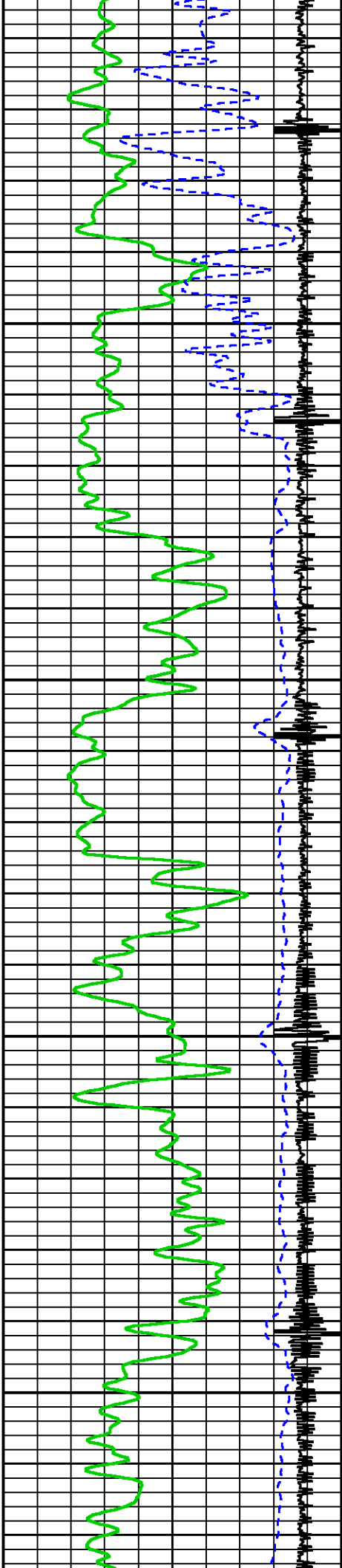
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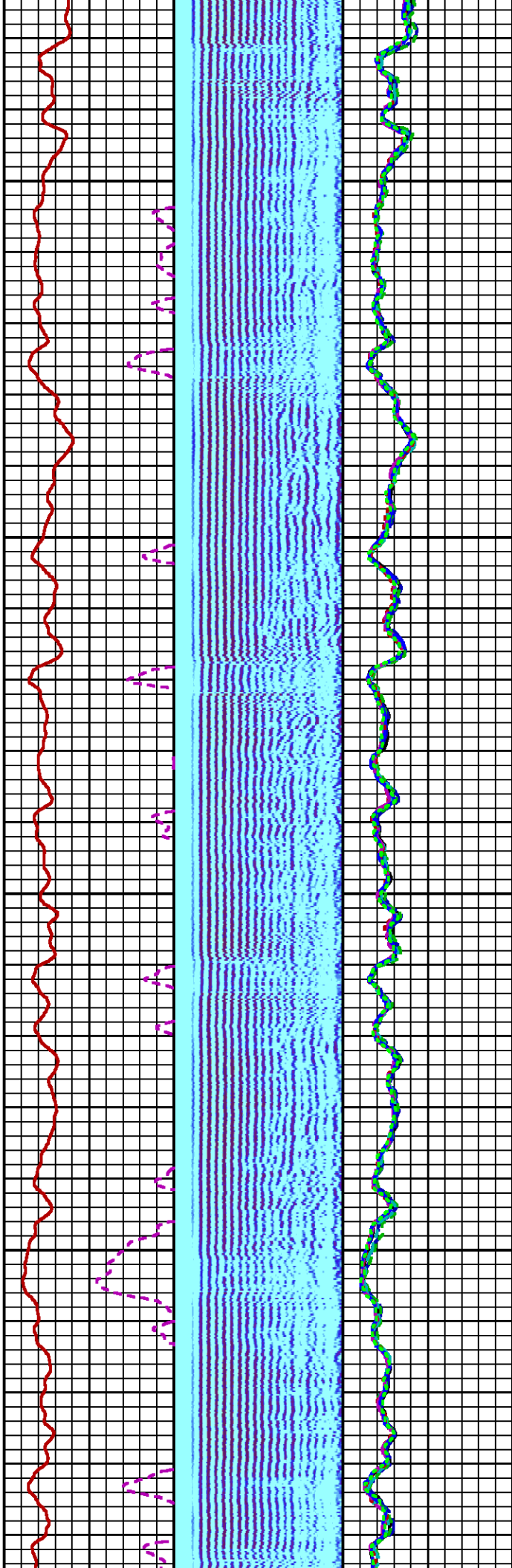




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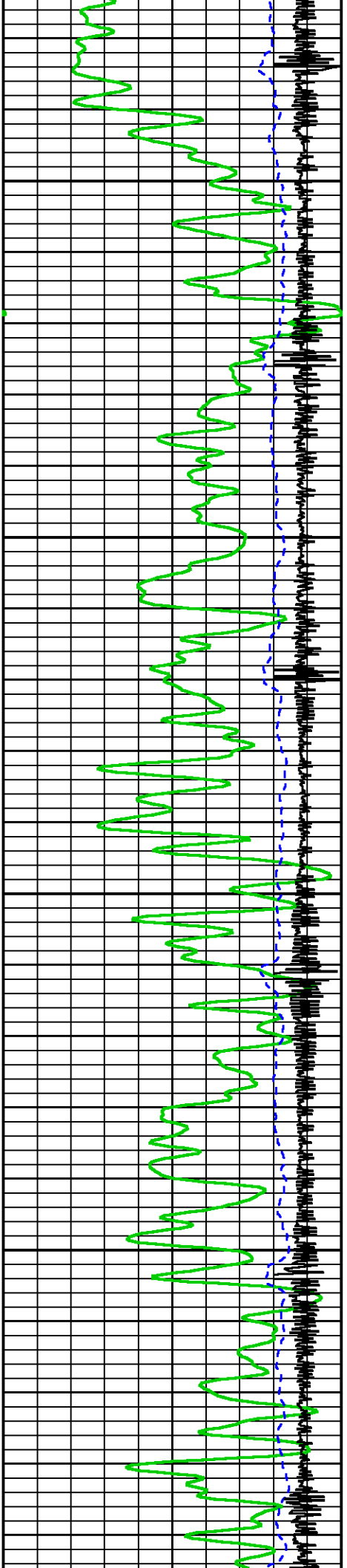
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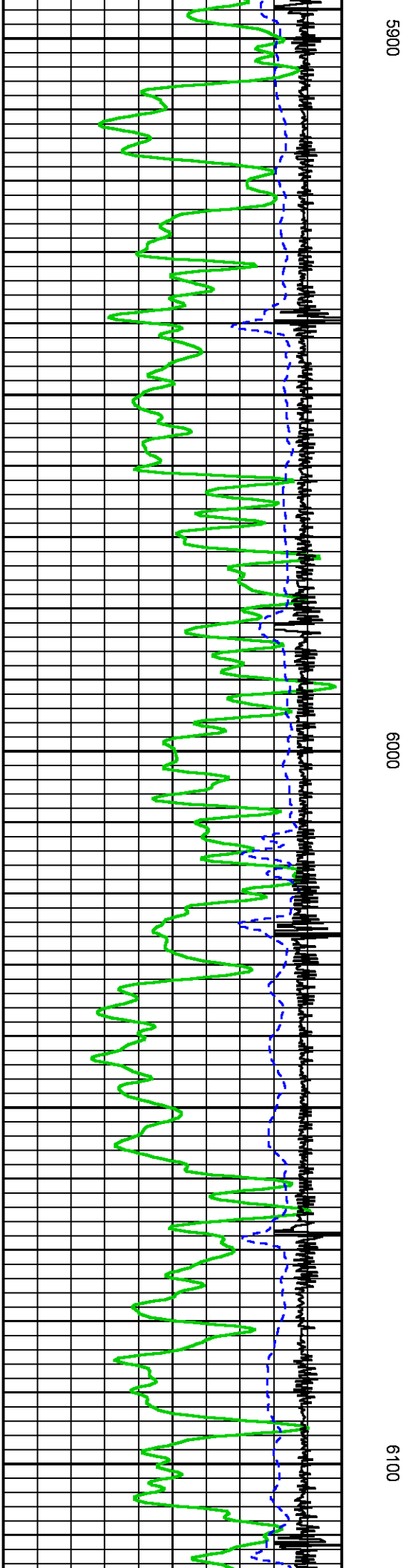
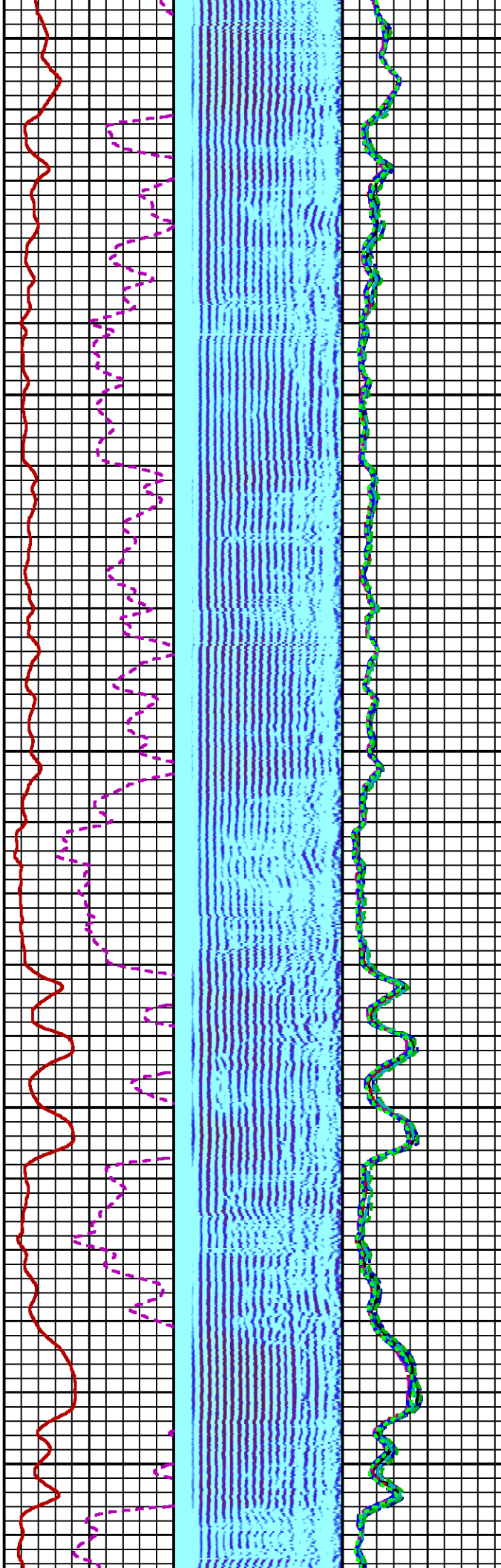


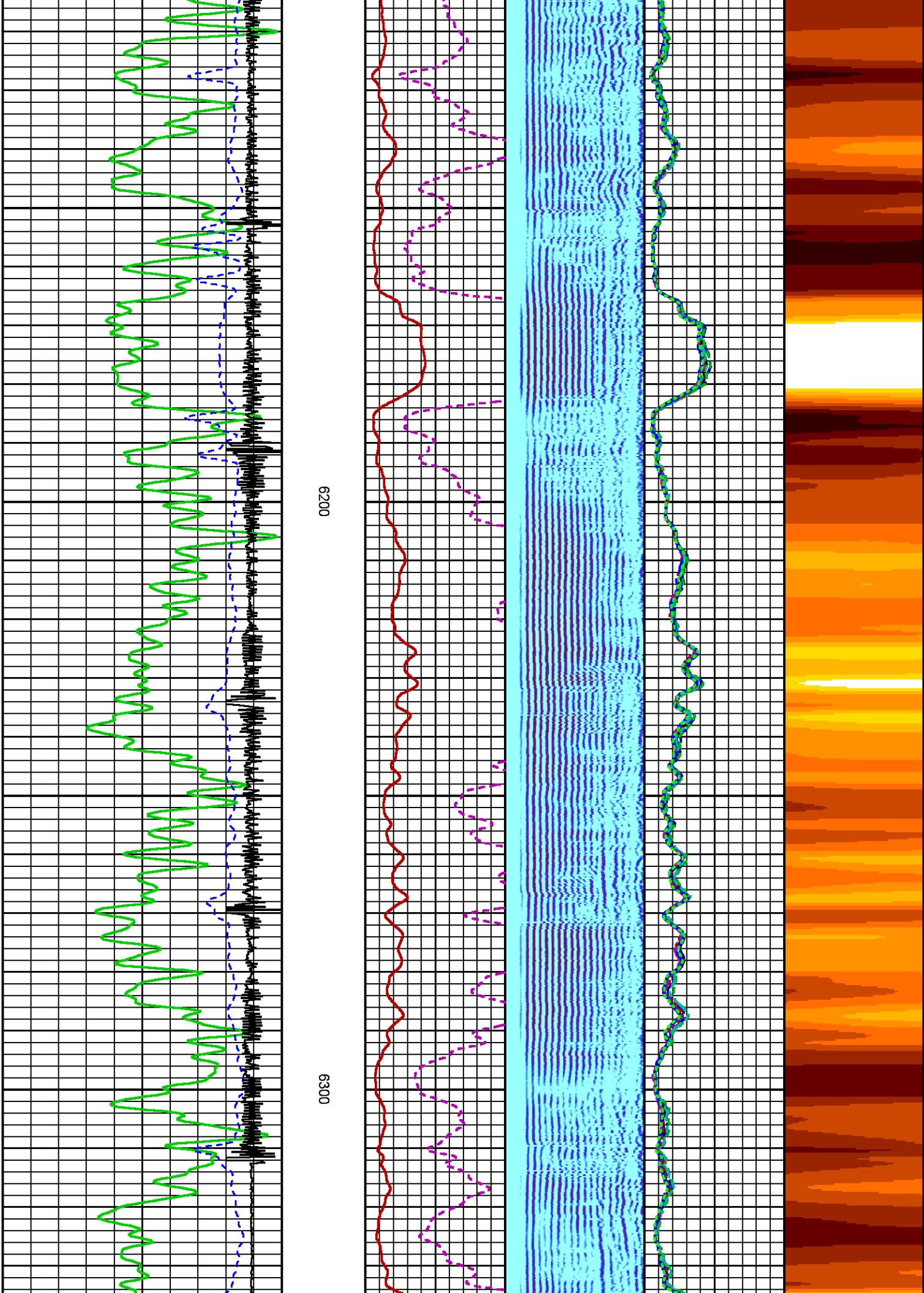


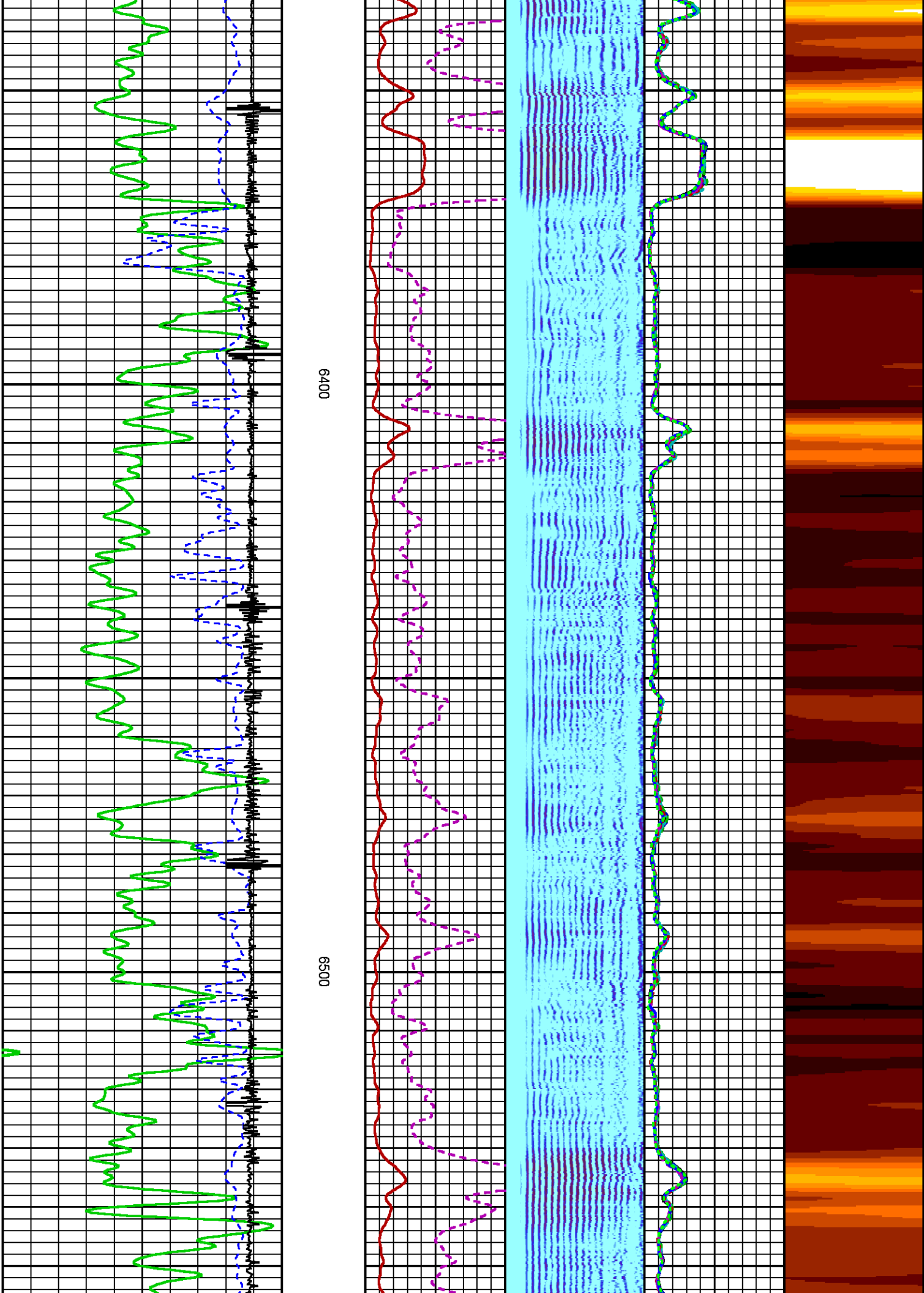
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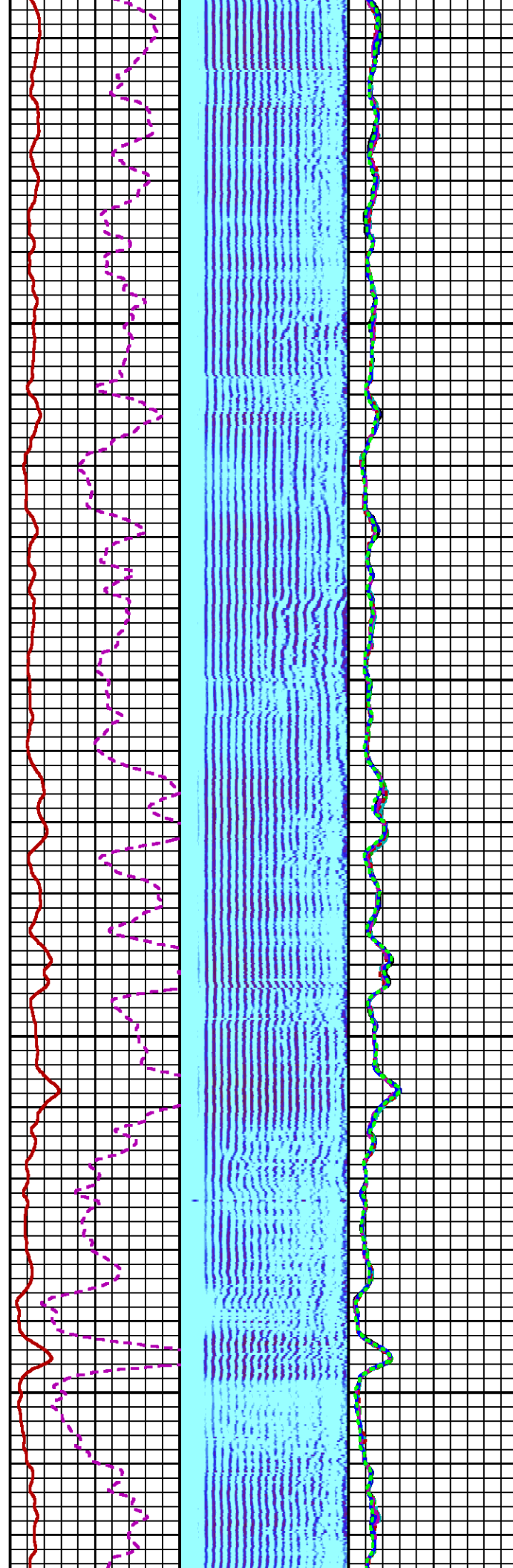
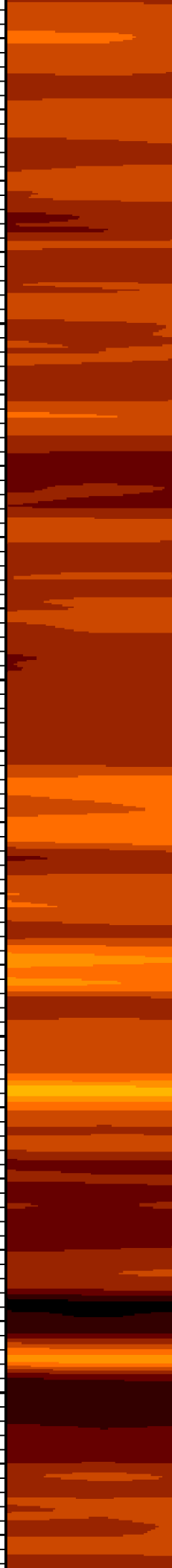
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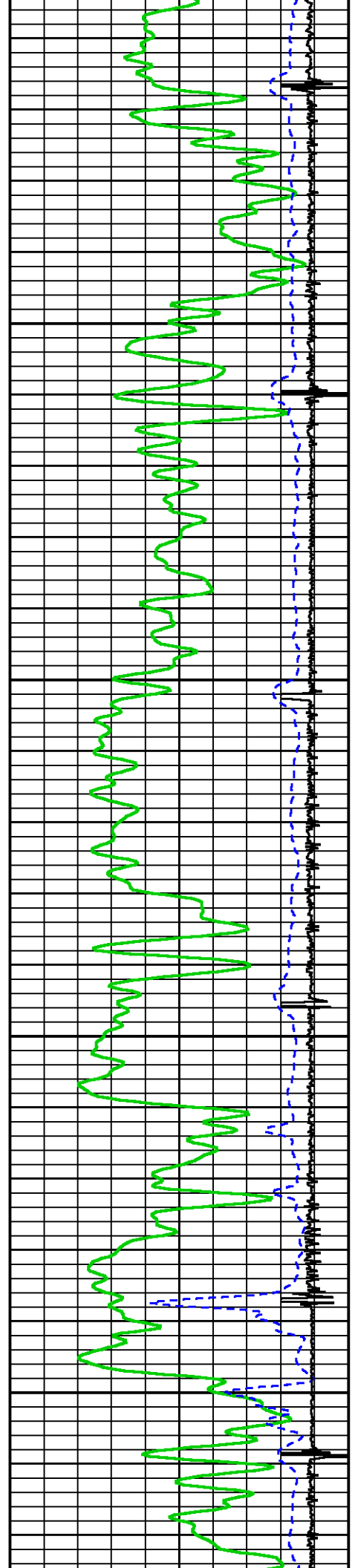


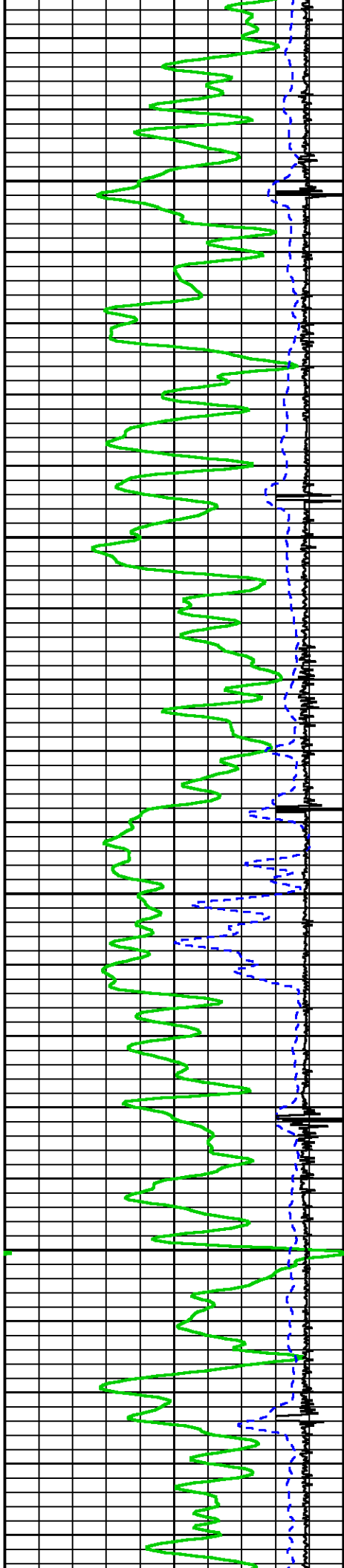


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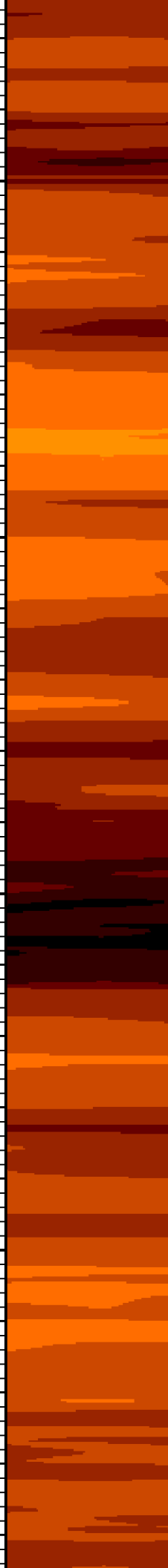
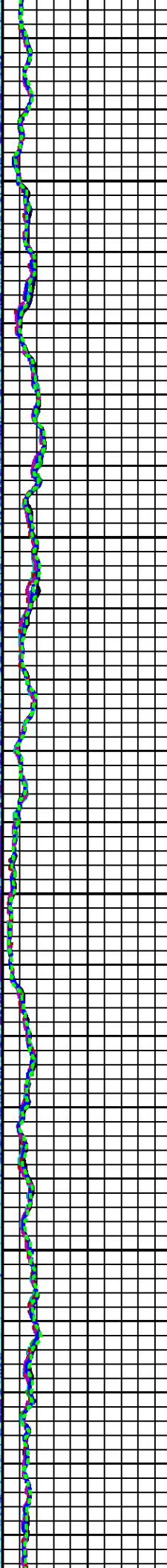
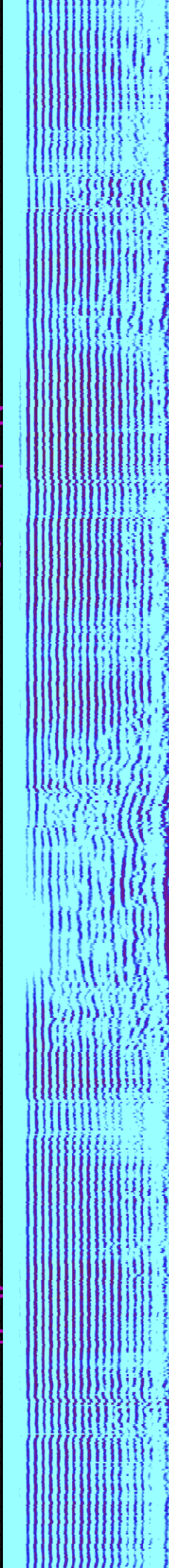
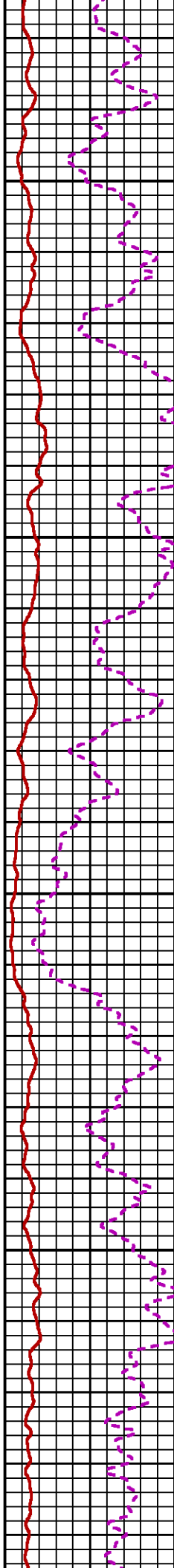
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JOINT

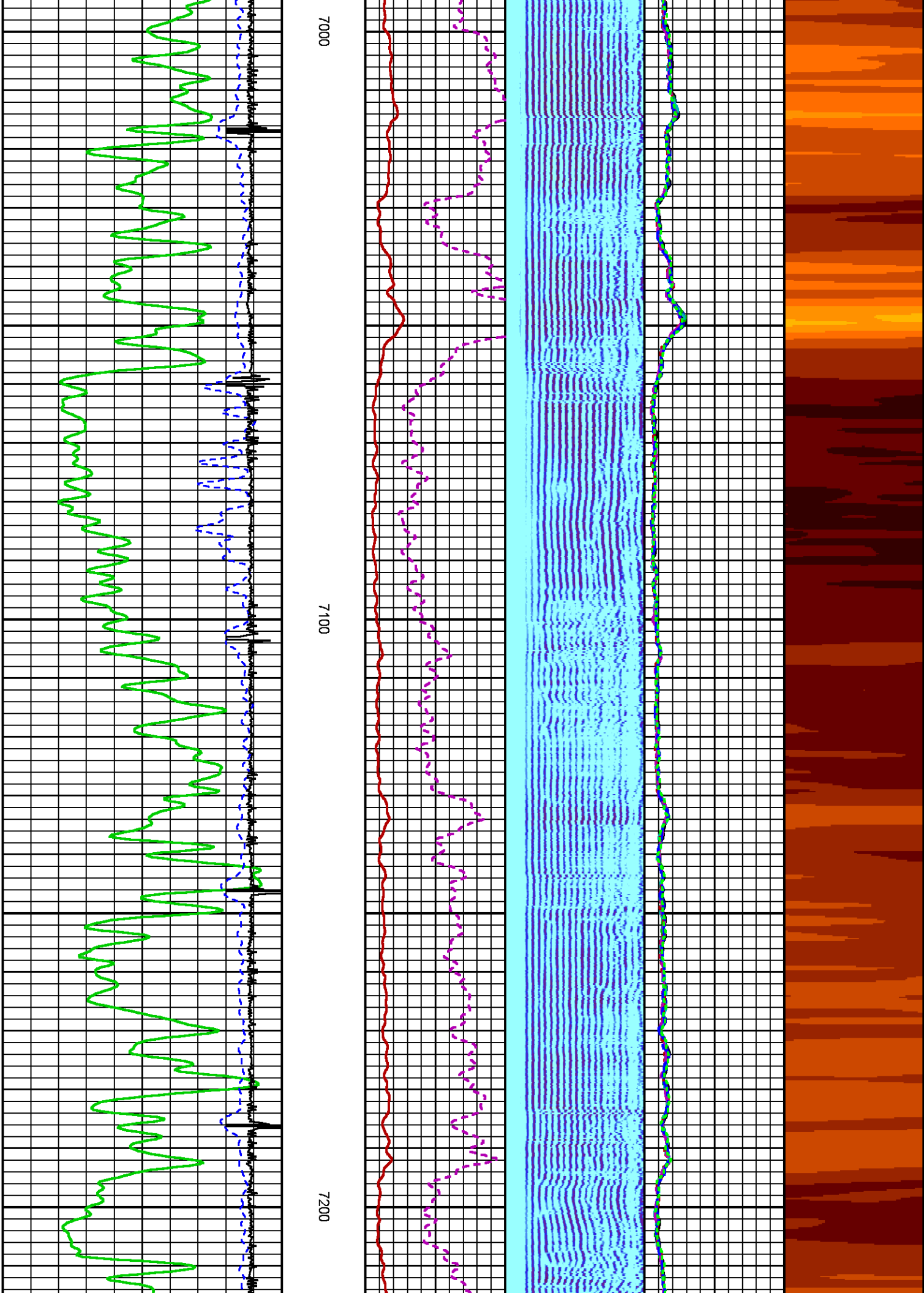


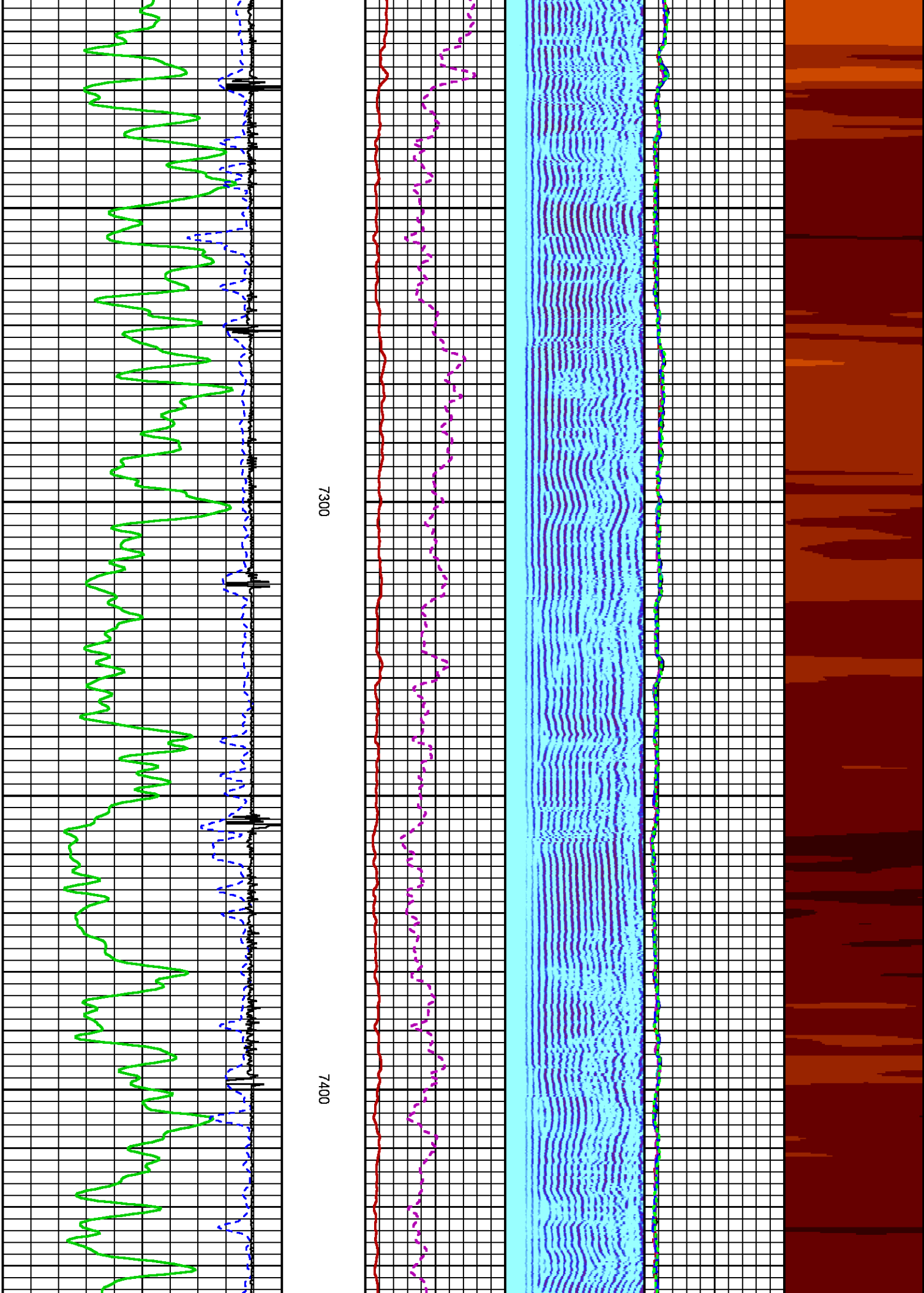


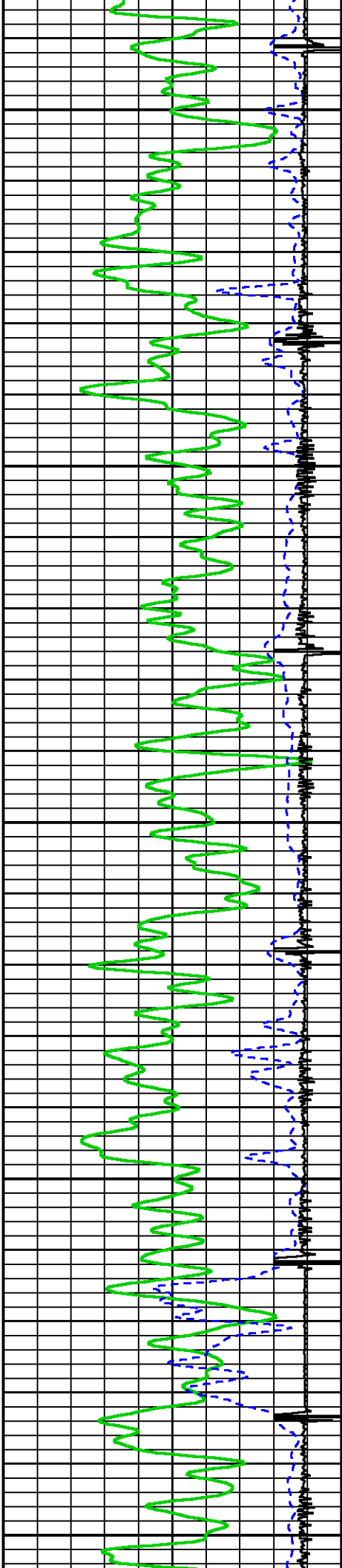
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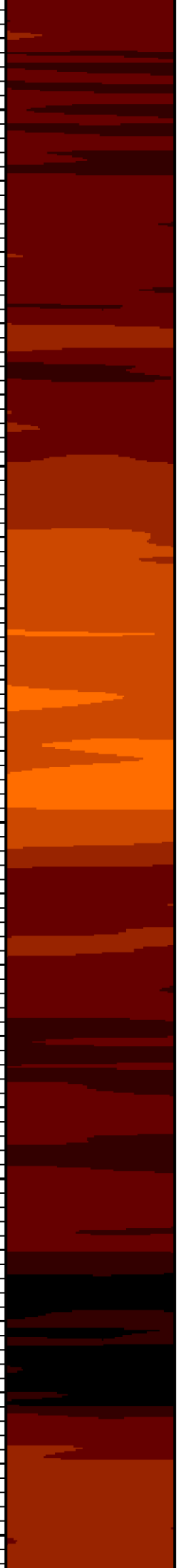
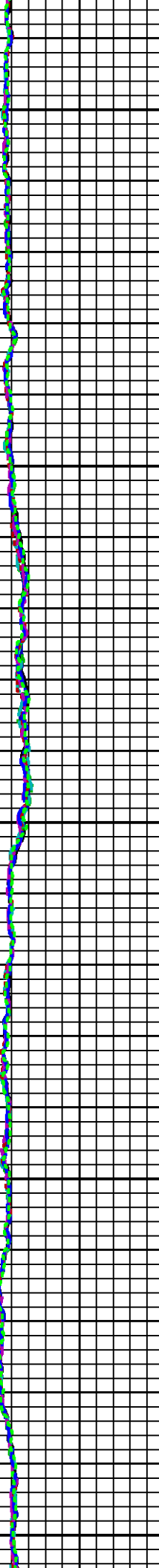
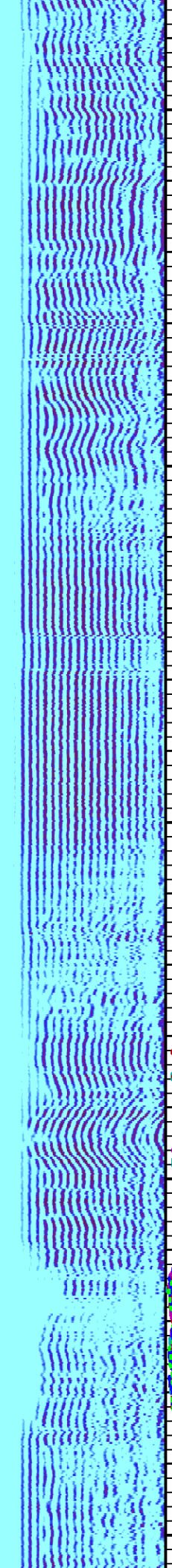
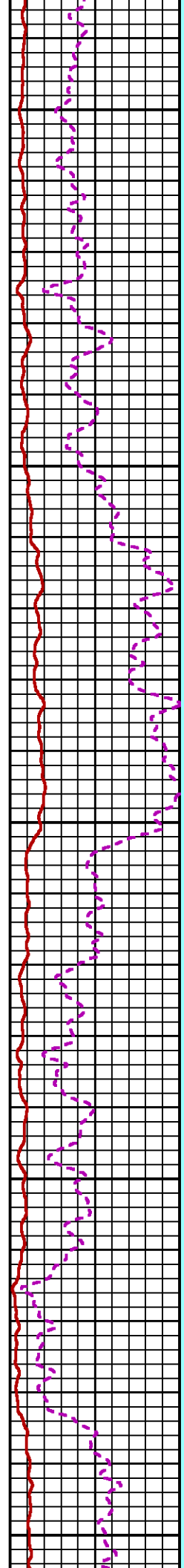


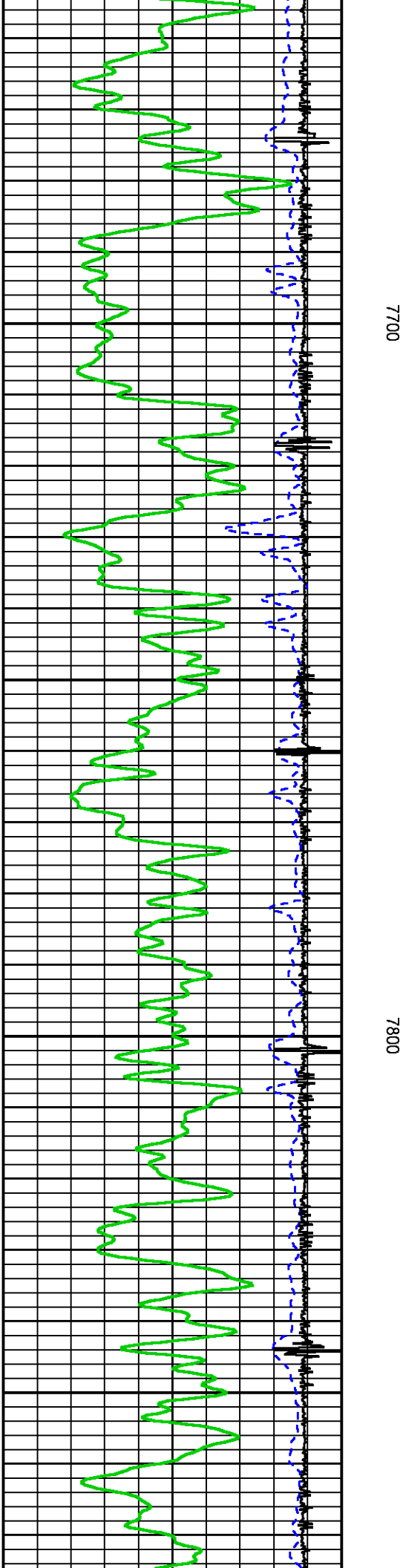
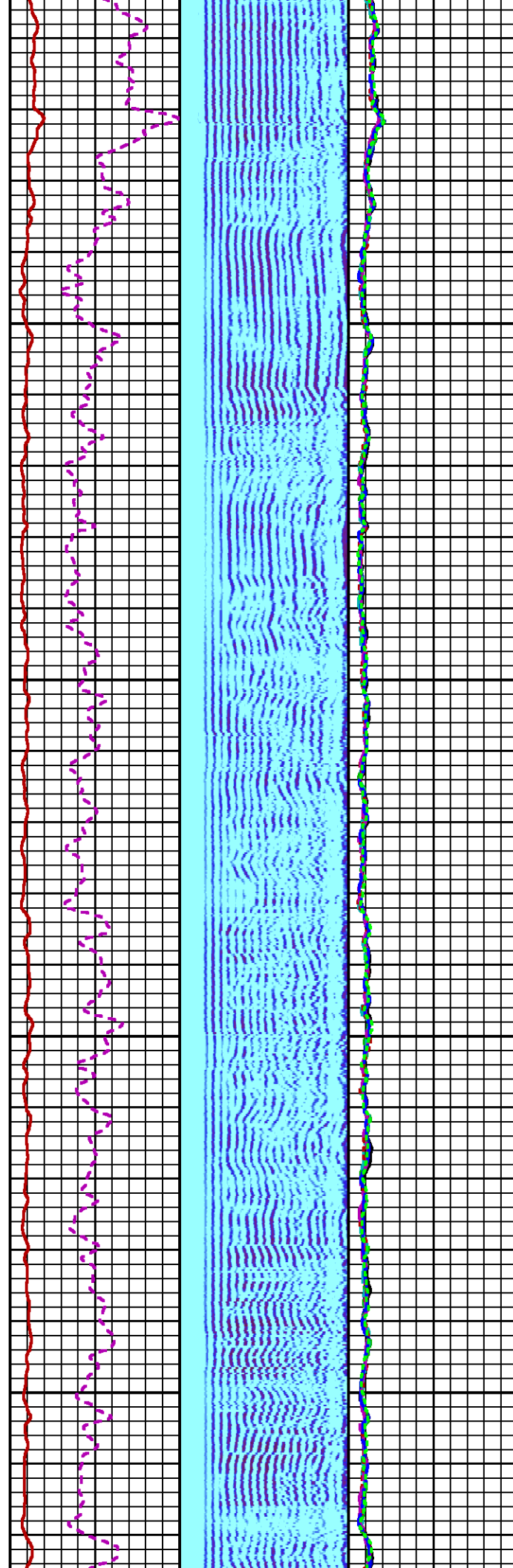
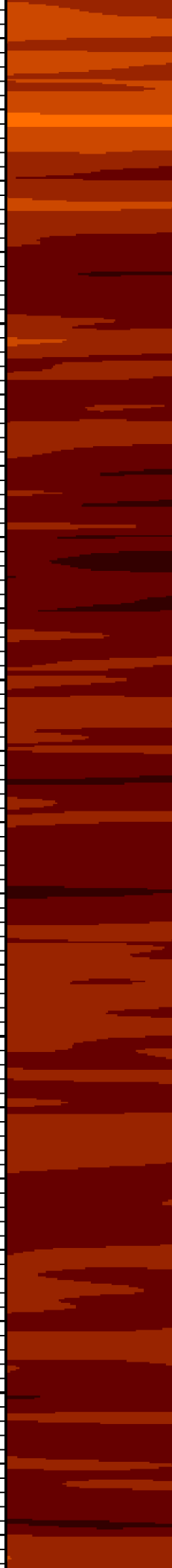


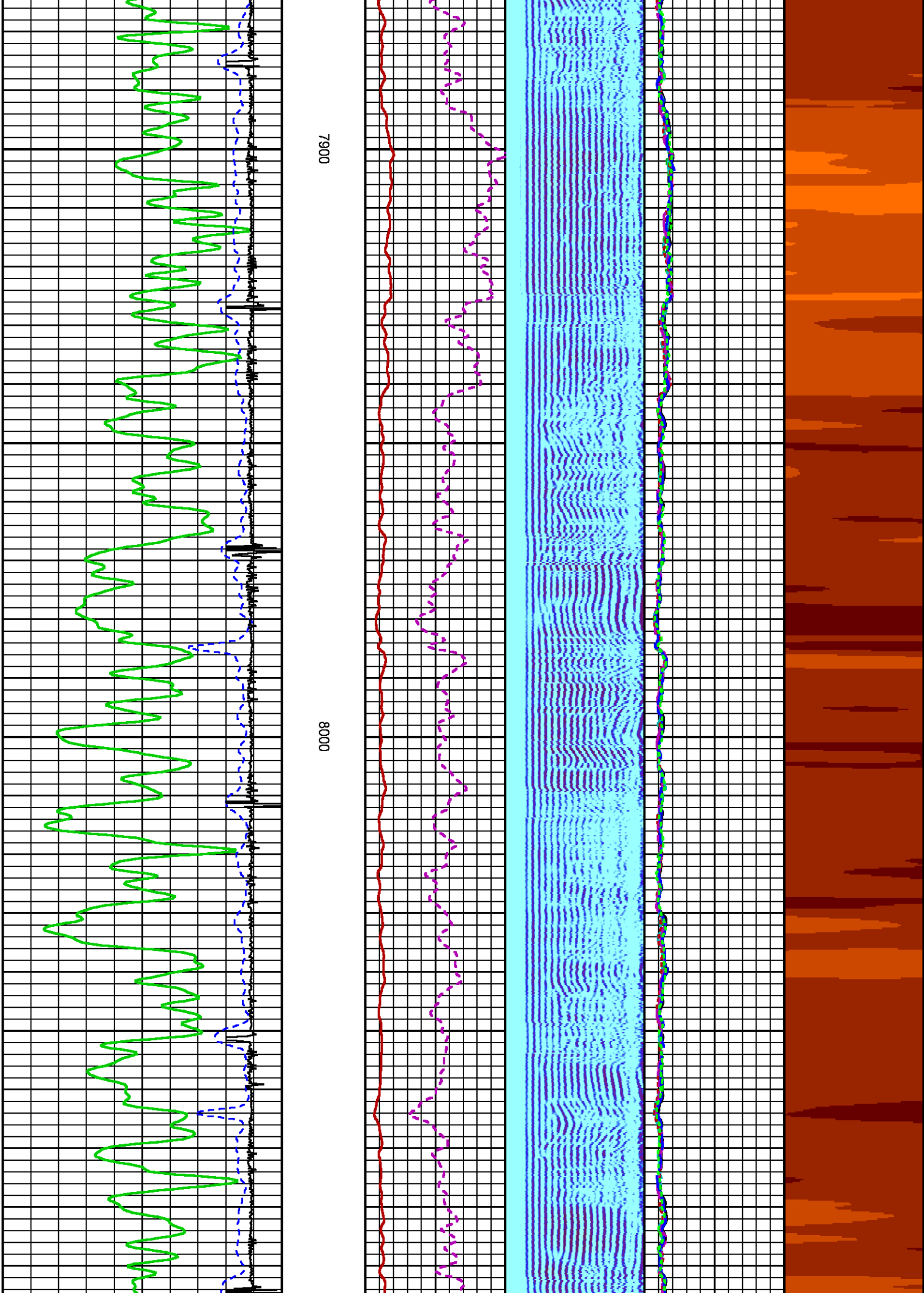
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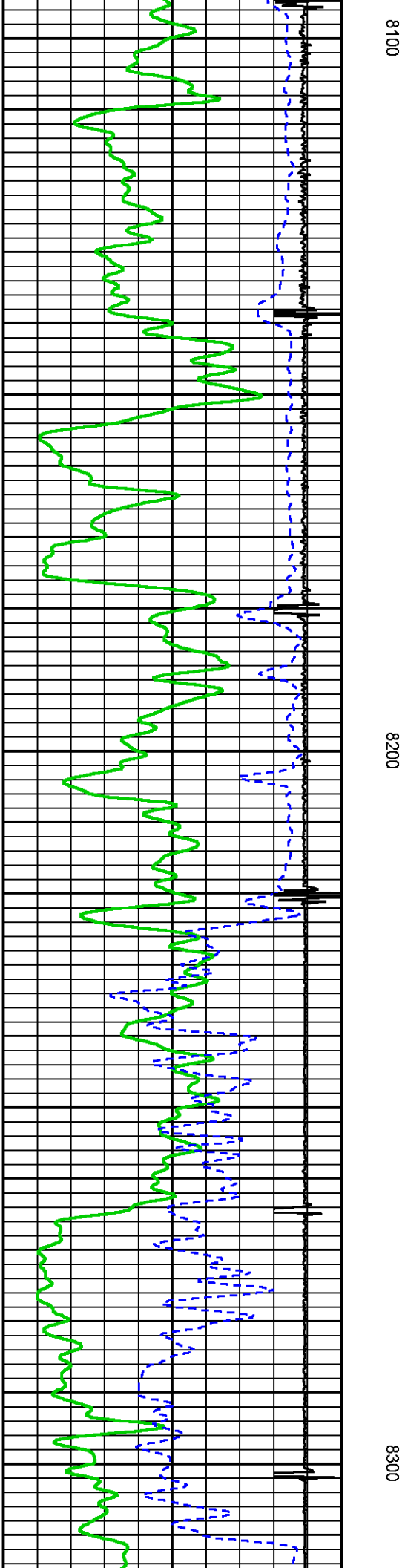
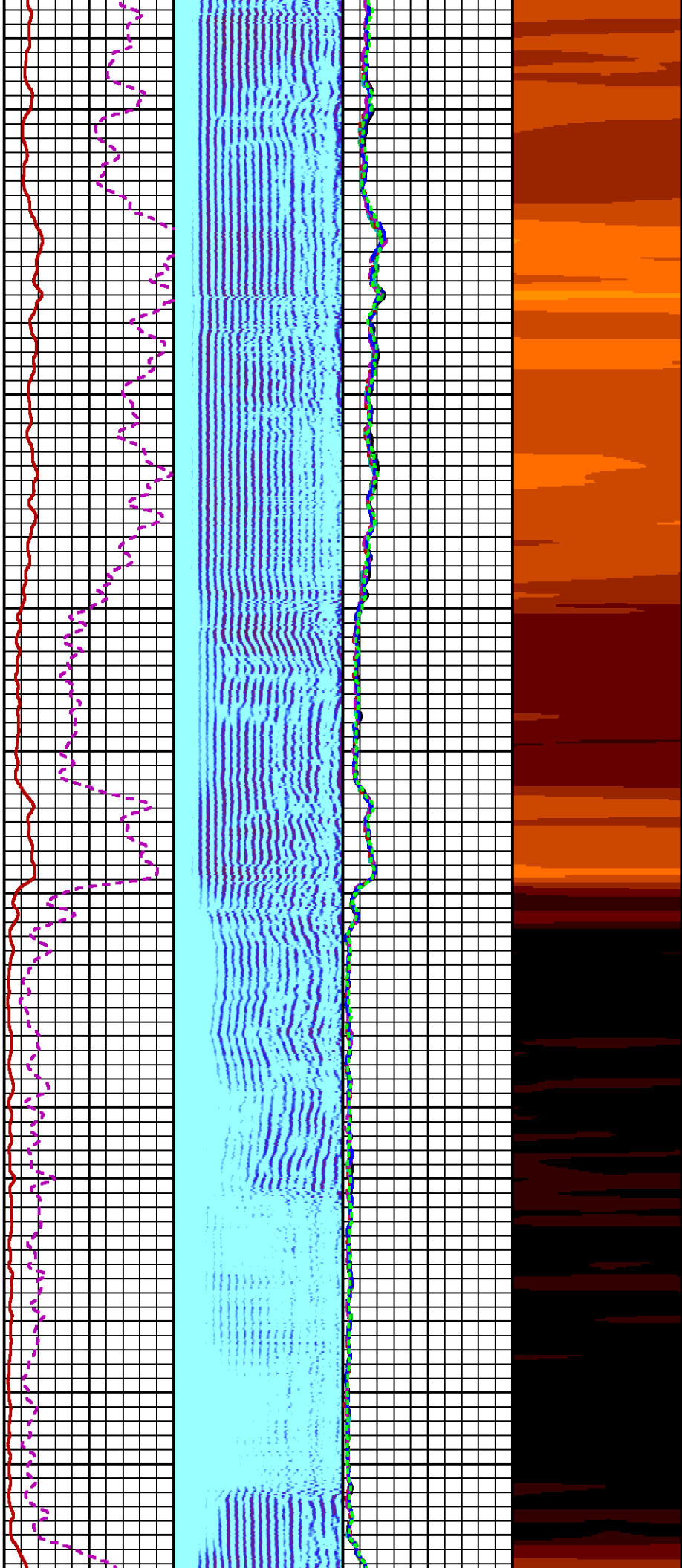
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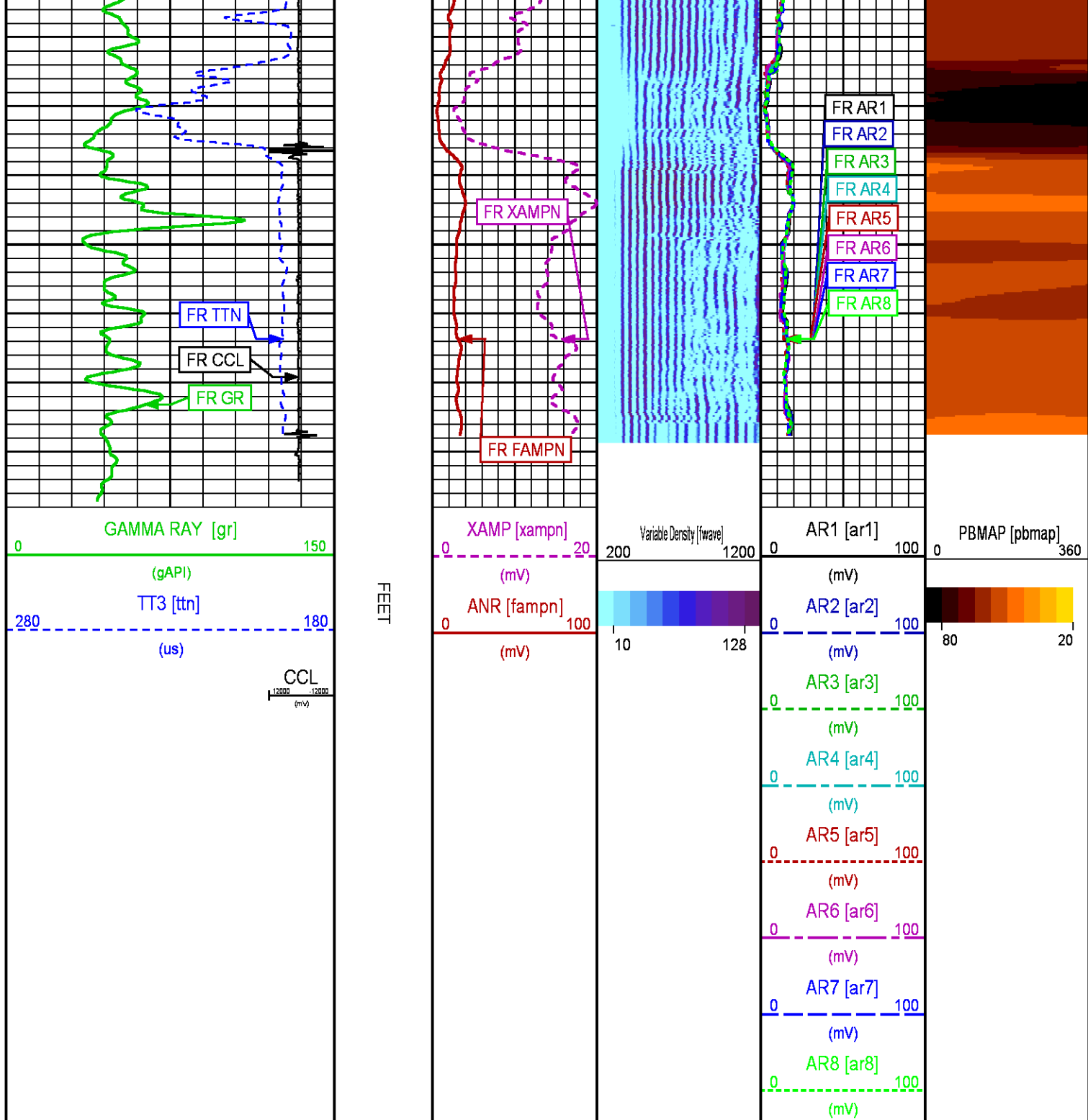
7600











REPEAT PRESENTATION 0 PSI

FILE: /dat1a/CH100607/n012g01.prm

LOGGING MODE: DEPTH DIRECTION: UP

TOP DEPTH: 8067.750 ft BOTTOM DEPTH: 8385.750 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*)	187	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	187	us	"	"
	AMP WINDOW START (fgp3*)	187	us	"	"
	AMP WINDOW START (fgp4*)	187	us	"	"
	AMP WINDOW START (fgp5*)	187	us	"	"
	AMP WINDOW START (fgp6*)	187	us	"	"
	AMP WINDOW START (fgp7*)	187	us	"	"
	AMP WINDOW START (fgp8*)	187	us	"	"
	AMP WINDOW START (fgpn*)	187	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	170	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*)	-74	us	"	"
	TOOL DELAY (str2*)	-74	us	"	"
	TOOL DELAY (str3*)	-74	us	"	"
	TOOL DELAY (str4*)	-74	us	"	"
	TOOL DELAY (str5*)	-74	us	"	"
	TOOL DELAY (str6*)	-74	us	"	"
	TOOL DELAY (str7*)	-74	us	"	"
	TOOL DELAY (str8*)	-74	us	"	"
	TOOL DELAY (strn*)	-74	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	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R1
F1:AR2	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R2
F1:AR3	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R3
F1:AR4	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R4
F1:AR5	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R5

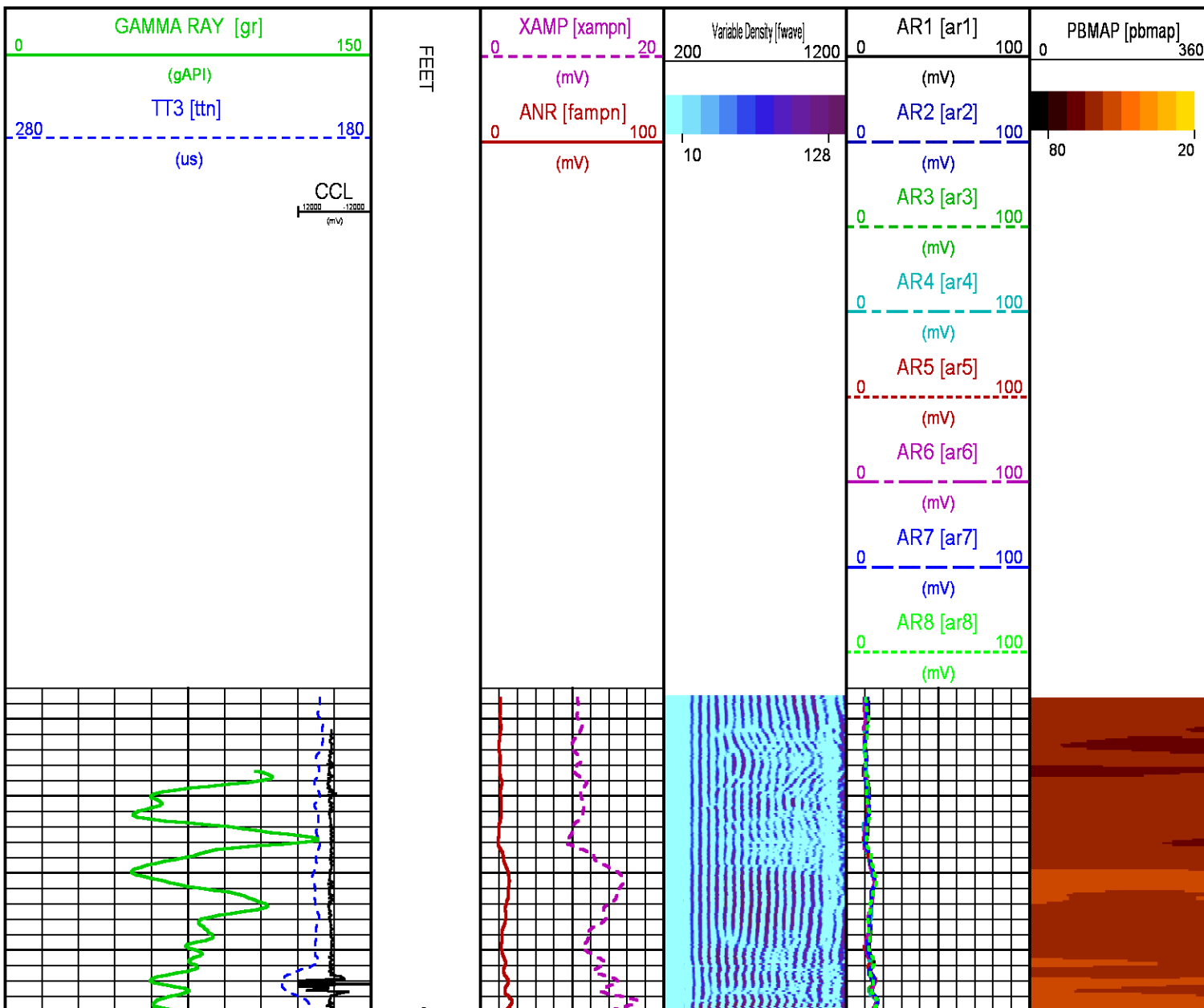
F1:AR6	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R6
F1:AR7	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R7
F1:AR8	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE T-R8
F1:CCL	Oct 30 16:38:09 2015	CASING COLLAR LOCATOR
F1:FAMPN	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Oct 30 16:38:09 2015	FAR WAVE FORM
F1:GR	Oct 30 16:38:09 2015	GAMMA RAY
F1:PBMAP	Oct 30 16:38:09 2015	PERCENT BOND CEMENT MAP
F1:TTN	Oct 30 16:38:09 2015	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Oct 30 16:38:09 2015	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

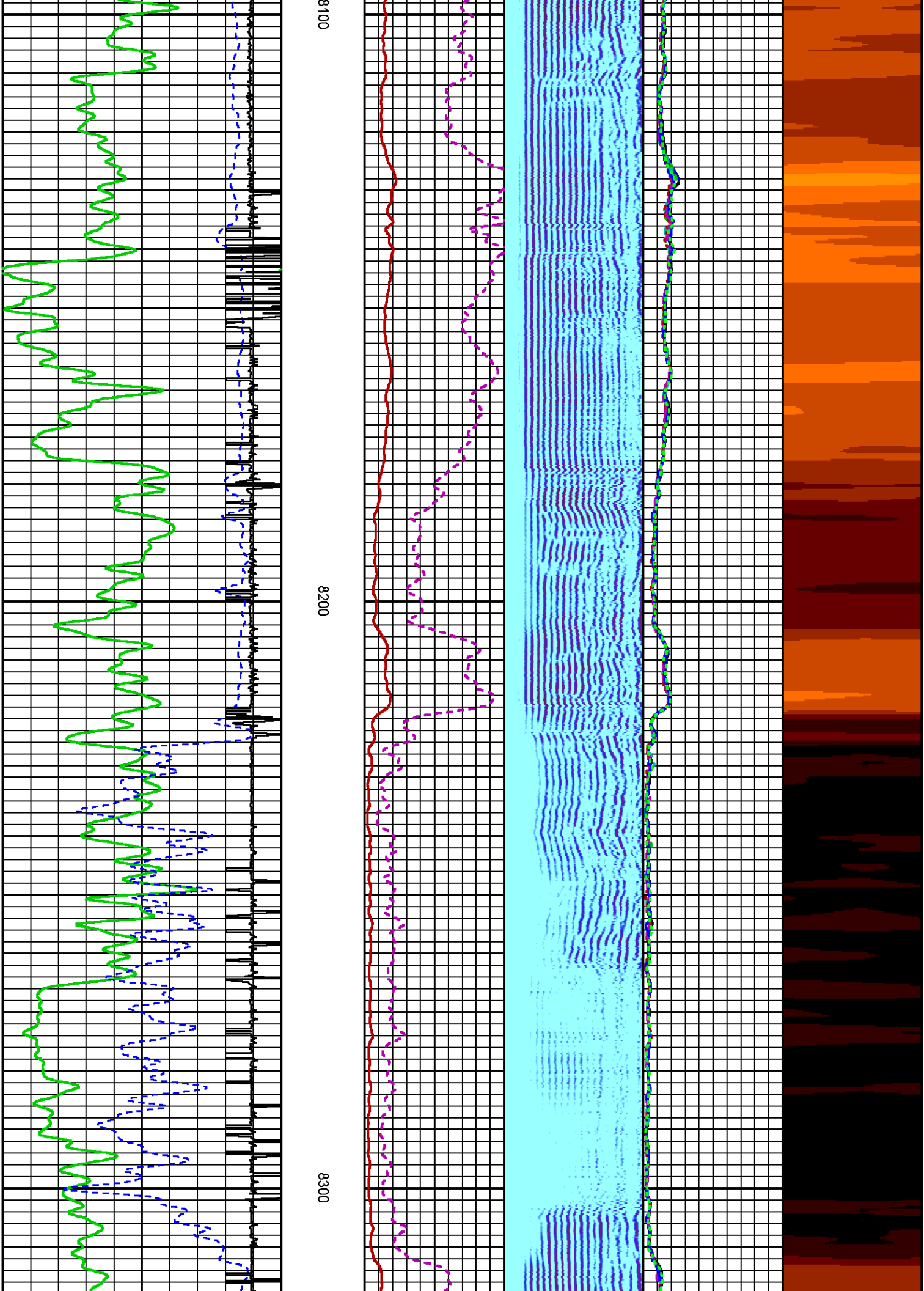
CURVE MEASURE POINT OFFSET

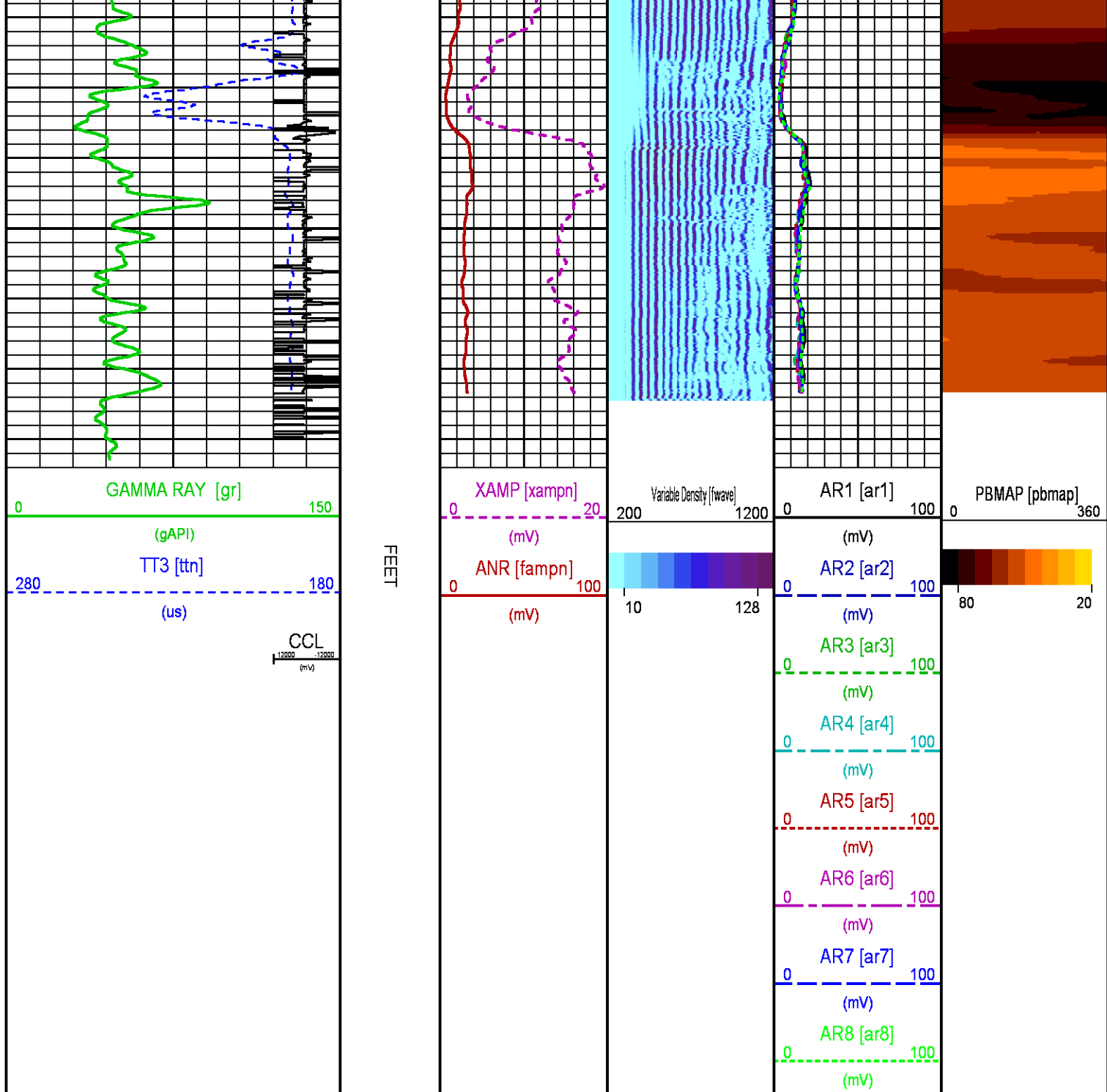
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	11.25	AR5	11.25	CCL	5.75	XAMPN	11.25
AR2	11.25	AR6	11.25	FAMPN	11.25		
AR3	11.25	AR7	11.25	GR	1.75		
AR4	11.25	AR8	11.25	TTN	11.25		

Presentation : cas6685:/dat1a/CH100607/LARAMIE_CBLREPEAT.fvpdf [5"/100' Scale]
 Plot Interval : 8057 - 8384.5 Feet

Data File 1 : F1 : cas6685:/dat1a/CH100607/n012g01_REPEAT.xtf
 Created On : Oct 30 16:38:09 2015
 Company : LARAMIE ENERGY
 Well : PICEANCE FEDERAL 28-20E
 Field : VEGA
 File Interval : 8056 - 8385.75 Feet
 OCT : n012g







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH100607/n012g.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10154957

DATE/TIME PERFORMED: Fri Oct 30 16:00:58 2015

UNIT #: 3885TC 6685

	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)	-0.10	-0.33	-0.29	-0.25	-0.15	-0.29	-0.77	-0.46	-0.10	2.20	-0.01
AMP FLUID (mV)	106	105	104	104	104	106	106	106	105	143	103
TT (us)	217	217	216	216	215	215	216	216	217	325	217
M FACTOR	0.95	0.95	0.96	0.96	0.96	0.94	0.94	0.94	0.95	1.07	0.97

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10154957 DATE/TIME PERFORMED: Fri Oct 30 16:02:20 2015 DAYS SINCE CAL: 0

UNIT #: 3885TC 6685 CABLE #: 6685SM 6685SM

	NEAR (mV)	R1 (mV)	R2 (mV)	R3 (mV)	R4 (mV)	R5 (mV)	R6 (mV)	R7 (mV)	R8 (mV)	FAR (mV)	CAL (mV)
ZERO	-0.47	-0.86	-0.78	-0.55	-0.68	-0.43	-0.46	-0.61	-0.46	0.33	-0.02
AMP AIR	1.61	1.90	1.93	1.17	1.86	1.57	1.66	1.60	1.55	1.07	100.02

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
0.97	0.00	1.00

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 12670181 DATE/TIME PERFORMED: Wed Oct 21 13:23:22 2015

UNIT #: 3885TC 6685 CALB JIG #: 4702NK BA-905

	BACKGROUND (cts)	CALBRTR ON (cts)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	81.51	297.38	215.9	0.695	56.64	206.64	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 12670181 DATE/TIME PERFORMED: Wed Oct 21 13:24:55 2015

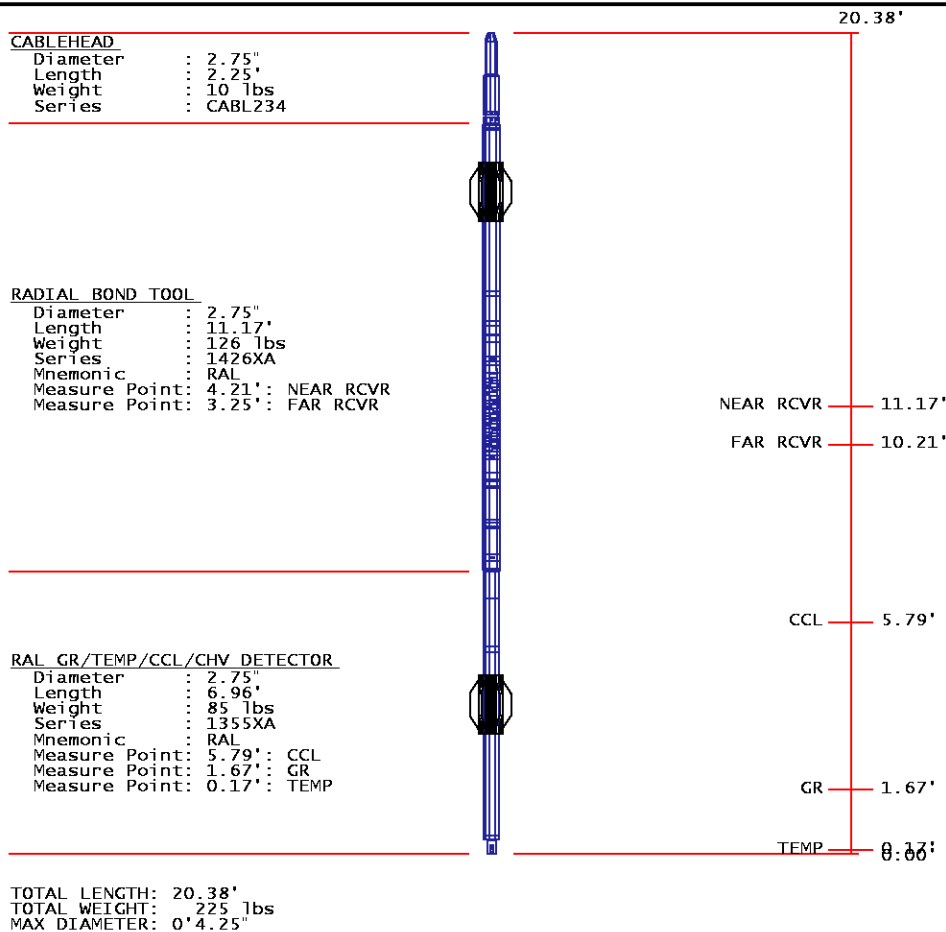
UNIT #: 3885TC 6685

VERI JIG #: 4702NK BA-905

	BACKGROUND CALBRTR ON		MULT	BACKGROUND CALBRTR ON		DIFF.
	(cts)	(cts)		(gAPI)	(gAPI)	(gAPI)
GR	81.82	299.20	0.695	56.86	207.91	151.05
						140.00 160.00

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH100606/n012g~tdg



COMPANY
WELL
FIELD
COUNTY

LARAMIE ENERGY
PICEANCE FEDERAL 28-20E
VEGA
MESA STATE CO

FILE NO:

CH100607

API NO:

05077102560000

LOCATION:

SHL: 2001' FSL 2489' FWL
BHL: 363' FSL 881' FEL

ELEVATIONS:

KB 7701 FT
DF
GL 7679 FT

SEC 28 T9S R93W
28-10 PAD
PATTERSON 306

SEC 28 TWP 9S RGE 93W

DATE 30-Oct-2015

