



FILE NO: CH101518	COMPANY WELL FIELD COUNTY	LARAMIE ENERGY PICEANCE FEDERAL 28-13E VEGA MESA STATE CO
API NO: 05077102490000		

Ver. 4.01 28 9S 93W 28-10 PAD PATTERSON 306	LOCATION: SHL: 2042' FSL & 2489' FWL BHL: 2113' FSL & 877' FEL SEC 28 TWP 9S RGE 93W	OTHER SERVICES RPM
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL ELEVATION 7682 FT KB 22 FT ABOVE P.D. KB	ELEVATIONS: KB 7704 FT DF GL 7682 FT
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DATE		22-JAN-2016			
RUN	TRIP	1	1		
SERVICE ORDER	US101518				
DEPTH DRILLER	8306 FT				
DEPTH LOGGER	8302 FT				
BOTTOM LOGGED INTERVAL	8292 FT				
TOP LOGGED INTERVAL	22 FT				
TIME STARTED	8:00				
TIME FINISHED	10:30				
OPERATOR RIG TIME	2.5 HOURS				
TYPE OF FLUID IN HOLE	WATER				
FLUID DENSITY	NA				
FLUID SALINITY	NA				
FLUID LEVEL	49 FT				
LOGGED CEMENT TOP	NA				
WELLHEAD PRESSURE	0 PSI				
MAXIMUM HOLE DEVIATION	NA				
NOMINAL LOGGING SPEED	100 F/MIN				
MAX. RECORDED TEMP.	236 DEGF				
REFERENCE LOG	NA				
REFERENCE LOG DATE	NA				
EQUIP. NO.	LOCATION	HL-6670	GRAND JCT.		
RECORDED BY	P. EDWARDS				
WITNESSED BY	JOHN GRUBICH				

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		22 FT	8393 FT

REMARKS

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

LOGGED WITH 0 PSI AT WELLHEAD.

BHT = 236 DEGF

SJ = 6624' - 6645'
SJ = 7482' - 7504'

THANK YOU FOR CHOOSING BAKER HUGHES ... THE BEST CHOICE!

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION

1	1	CBL	1426XA	10124106	CENTRALIZED
1	1	GR/CCL	1355XA	11871506	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: 6

Plotted: Fri Jan 22 10:20:06 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH101518/n012g02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 10.000 ft BOTTOM DEPTH: 8296.629 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	"	"
TRAVEL TIME WINDOW (NEAR)	AMP WINDOW LENGTH	25	us	"	"
	TT WINDOW START (ttn*)	174	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*)	-73	us	"	"
	TOOL DELAY (str2*)	-73	us	"	"
	TOOL DELAY (str3*)	-73	us	"	"
	TOOL DELAY (str4*)	-73	us	"	"
	TOOL DELAY (str5*)	-73	us	"	"
	TOOL DELAY (str6*)	-73	us	"	"
	TOOL DELAY (str7*)	-73	us	"	"
	TOOL DELAY (str8*)	-73	us	"	"
	TOOL DELAY (strn*)	-73	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	"	"

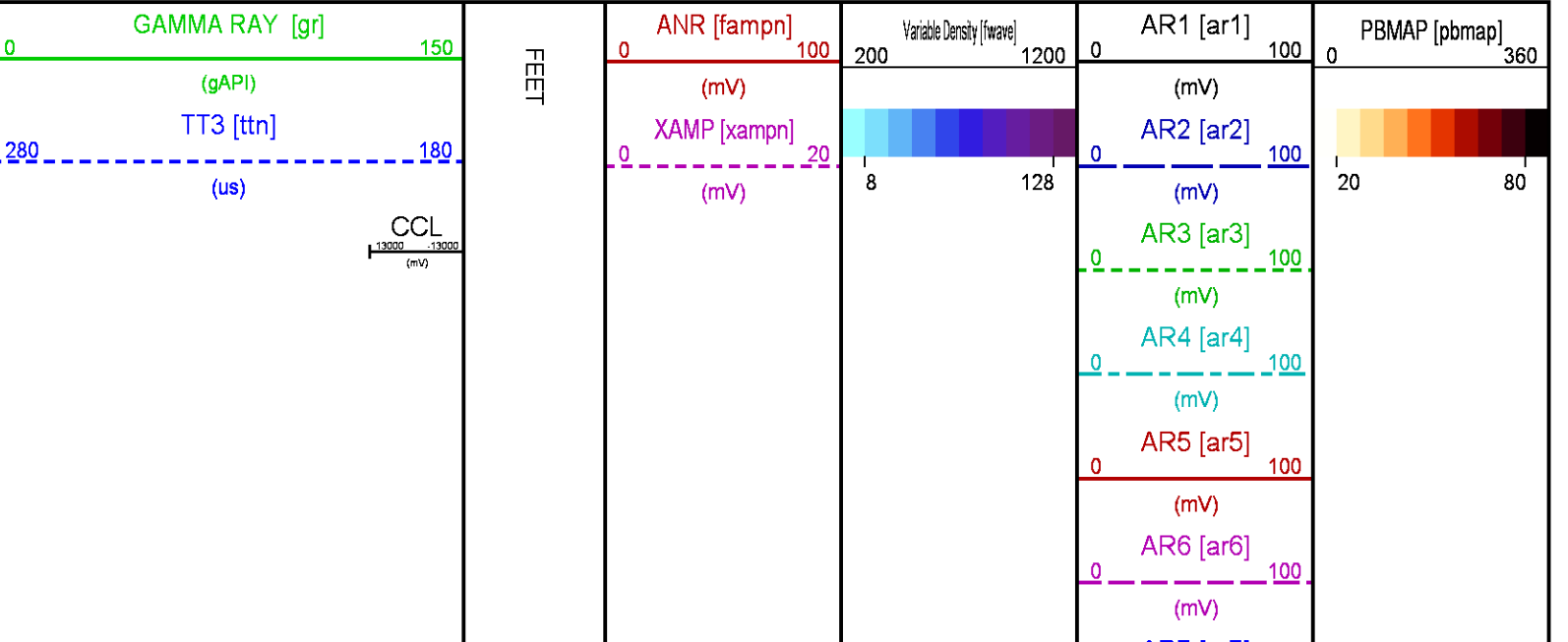
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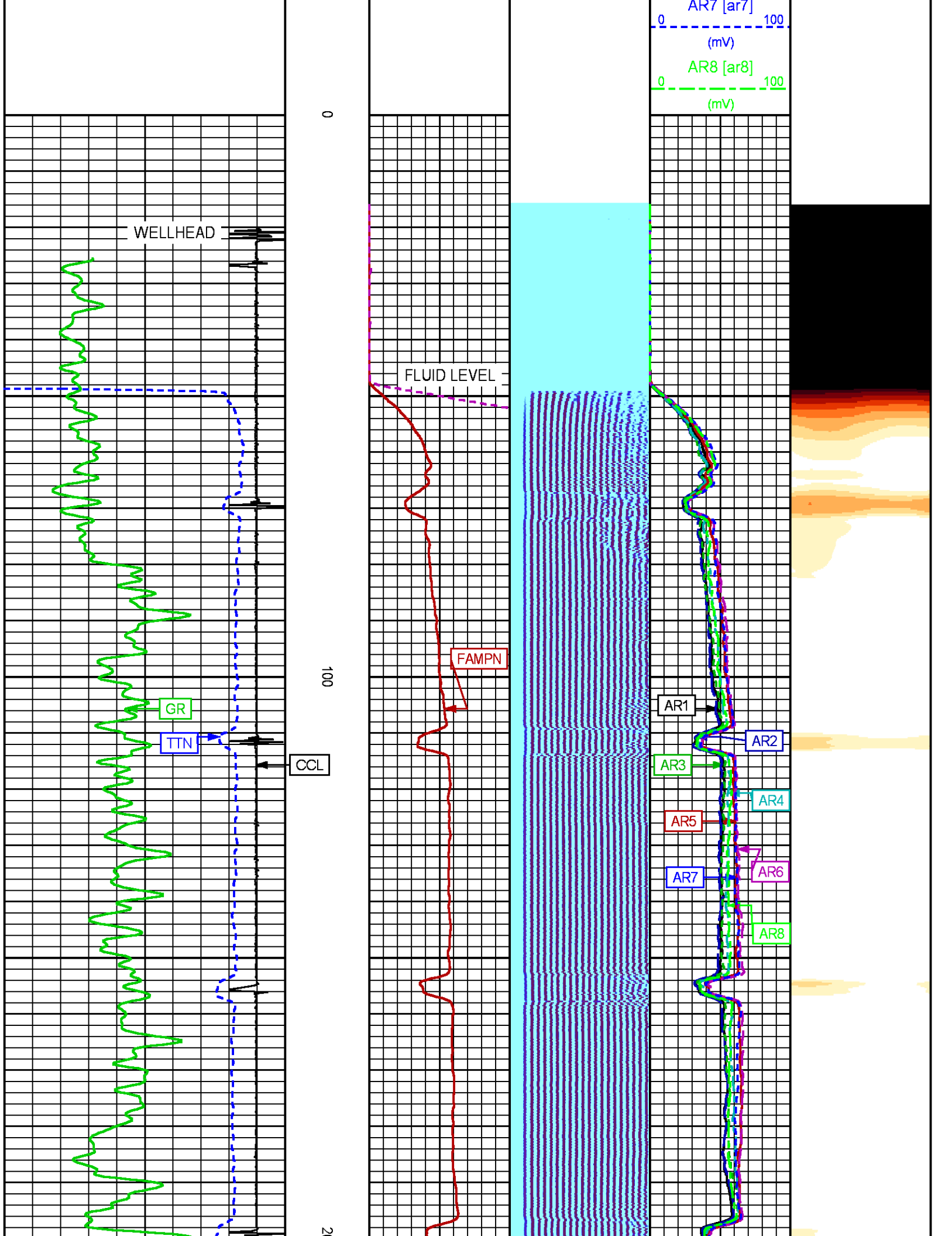
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R1
F1:AR2	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R2
F1:AR3	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R3
F1:AR4	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R4
F1:AR5	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R5
F1:AR6	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R6
F1:AR7	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R7
F1:AR8	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE T-R8
F1:CCL	Jan 22 08:32:38 2016	CASING COLLAR LOCATOR
F1:FAMPN	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Jan 22 08:32:38 2016	FAR WAVE FORM
F1:GR	Jan 22 08:32:38 2016	GAMMA RAY
F1:PBMAP	Jan 22 08:32:38 2016	PERCENT BOND CEMENT MAP
F1:TTN	Jan 22 08:32:38 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Jan 22 08:32:38 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

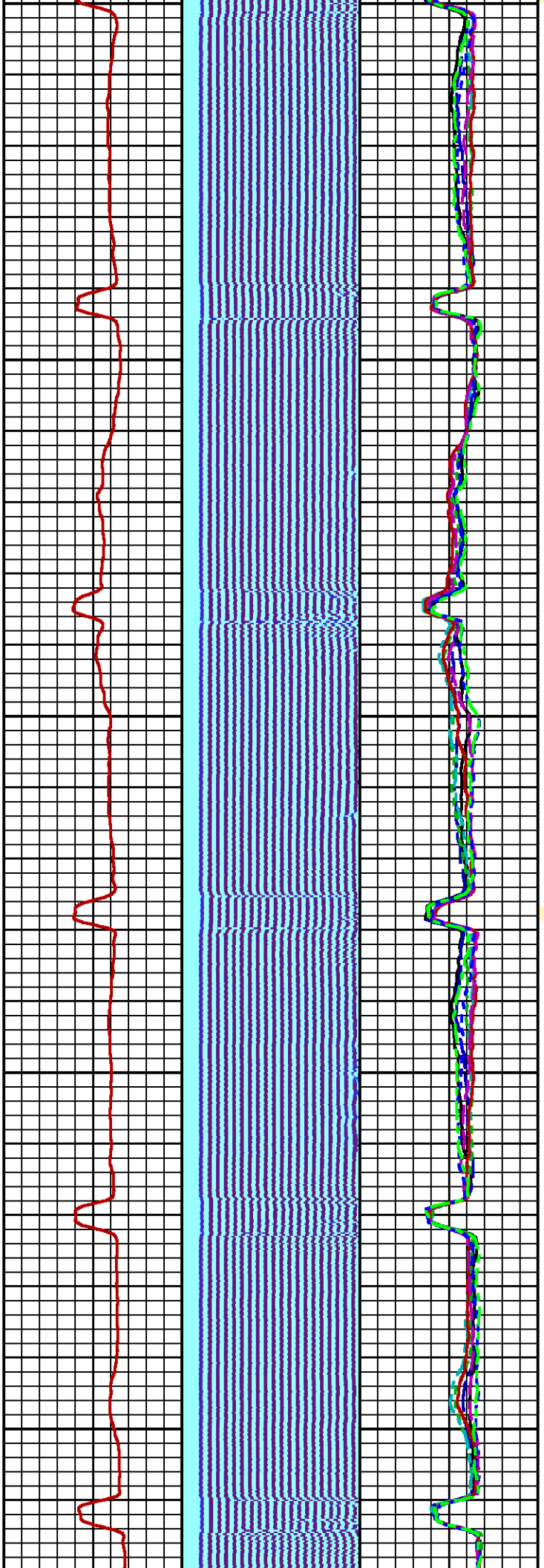
CURVE MEASURE POINT OFFSET

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	: HL6670:/dat1a/CH101518/13E_CBL_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 0 - 8307 Feet
Data File 1	: F1 : HL6670:/dat1a/CH101518/n012g02MAIN13E.xtf
Created On	: Jan 22 08:32:38 2016
Company	: LARAMIE ENERGY
Well	: PICEANCE_FEDERAL_29_13E
Field	: VEGA
File Interval	: 14.75 - 8310 Feet
OCT	: n012g



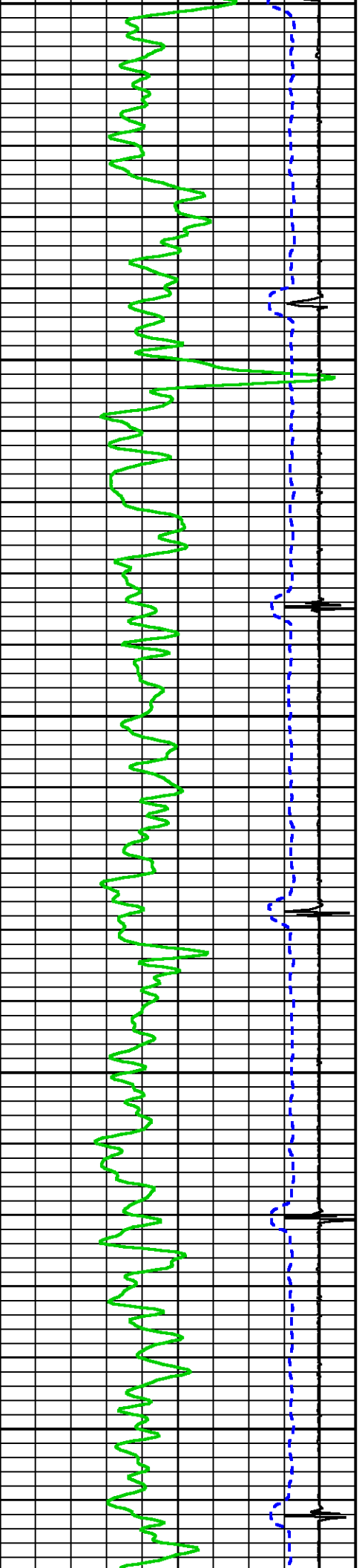


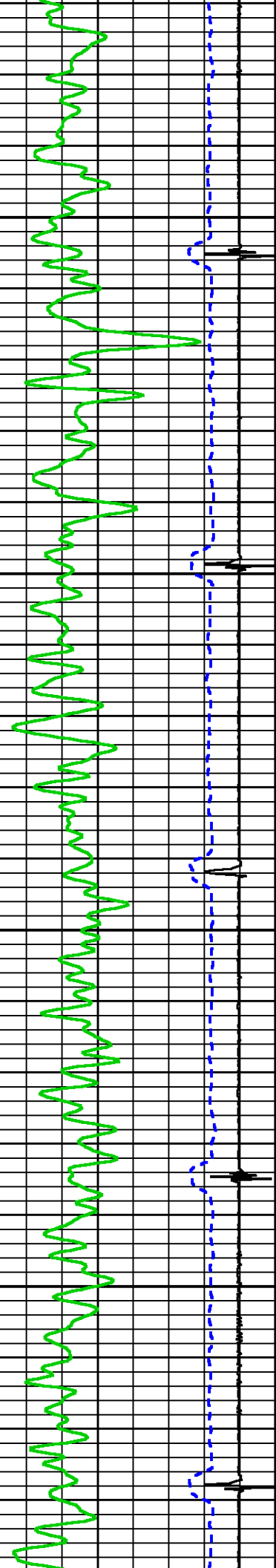


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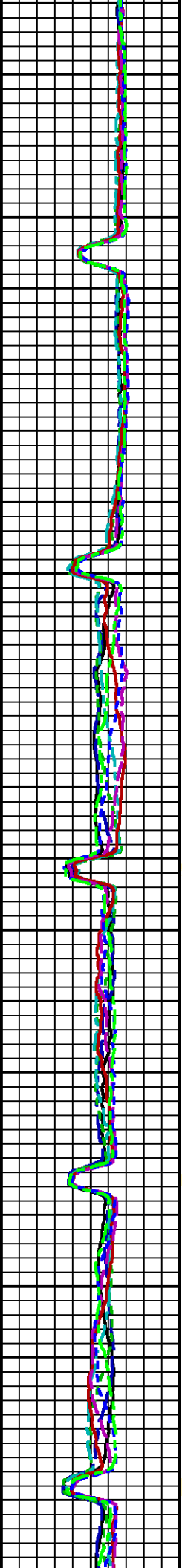
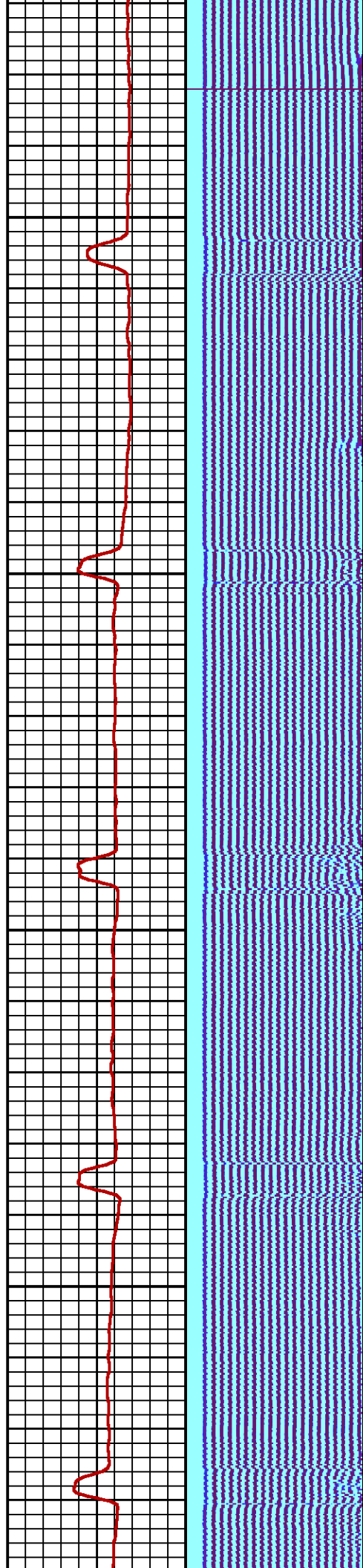
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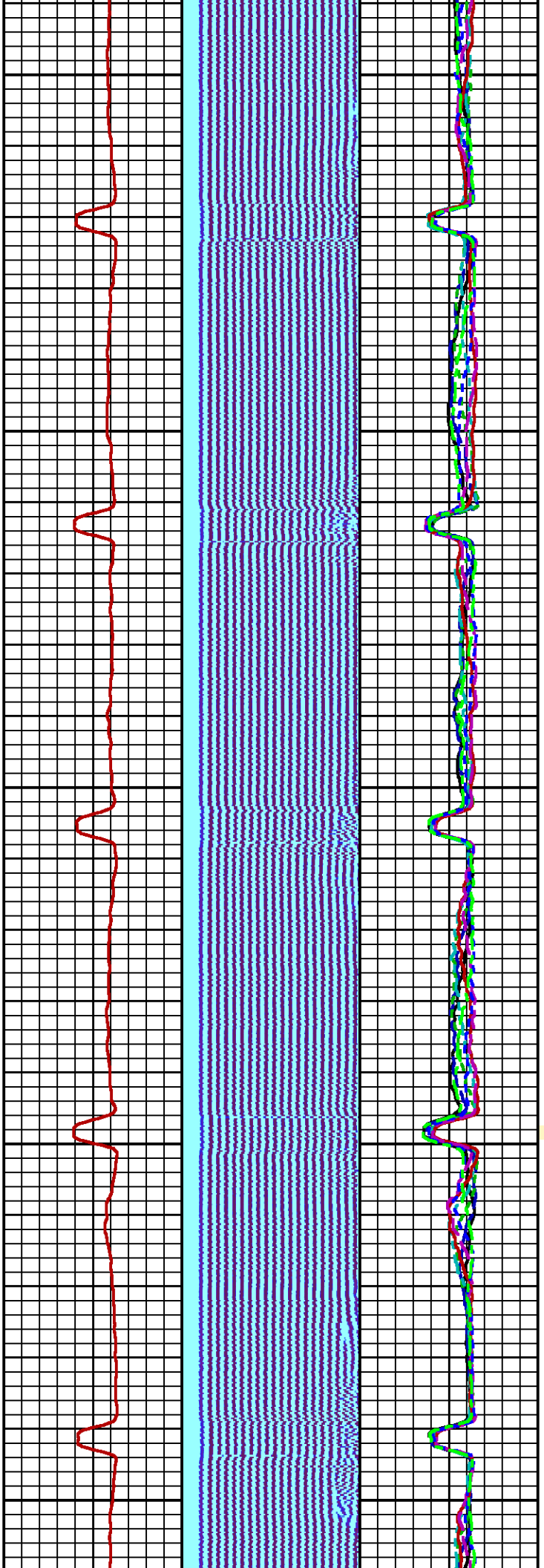




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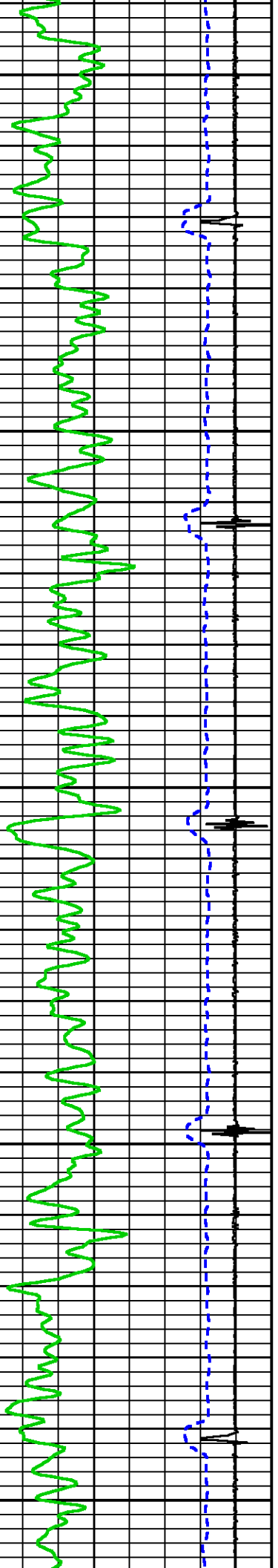
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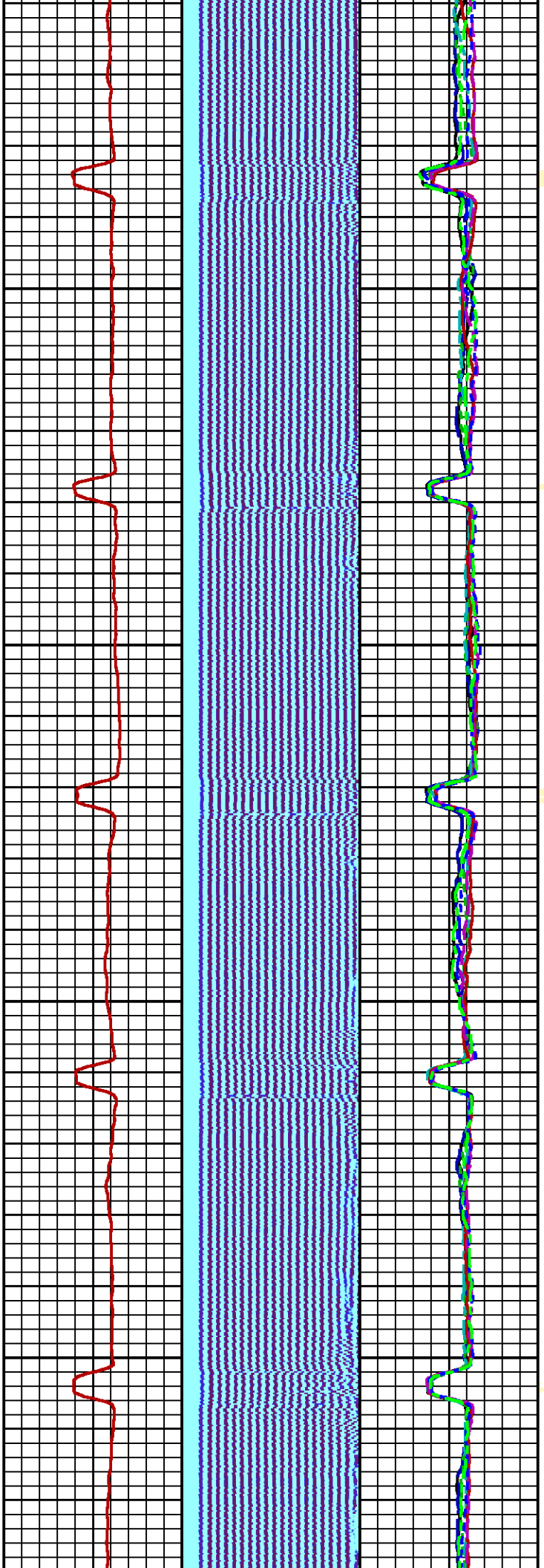




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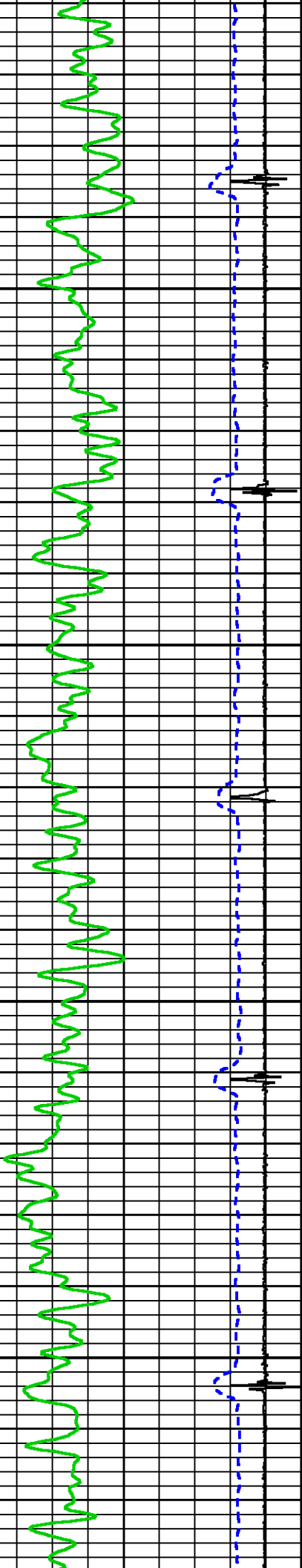
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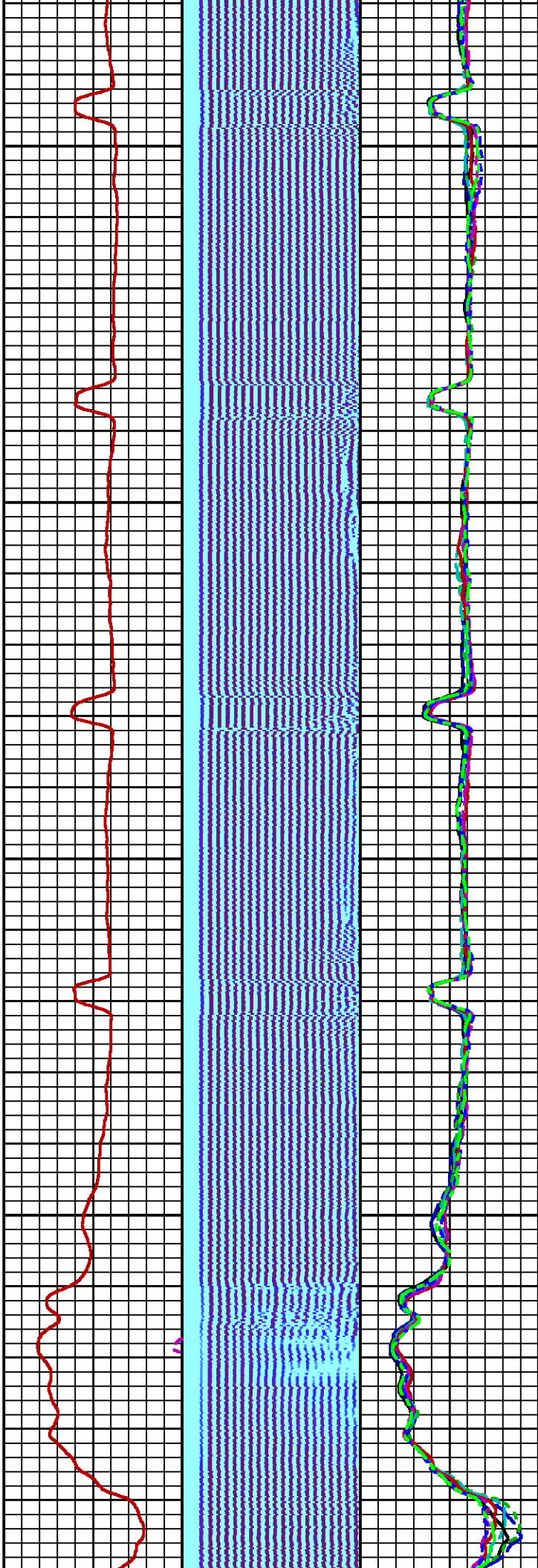
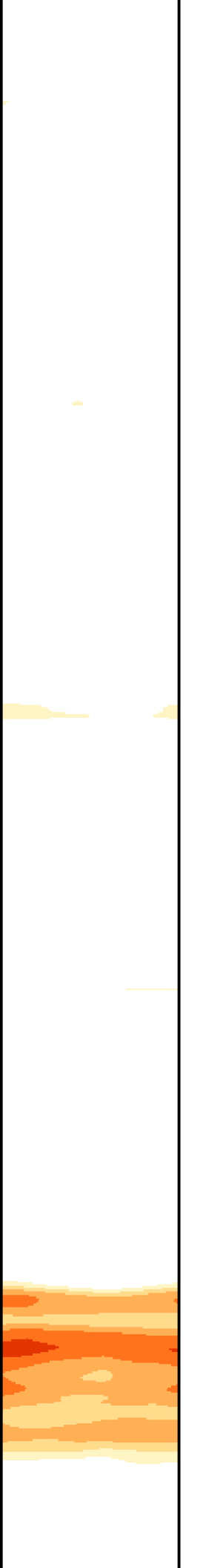




900

1000

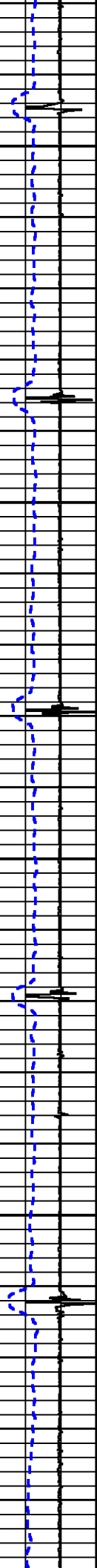


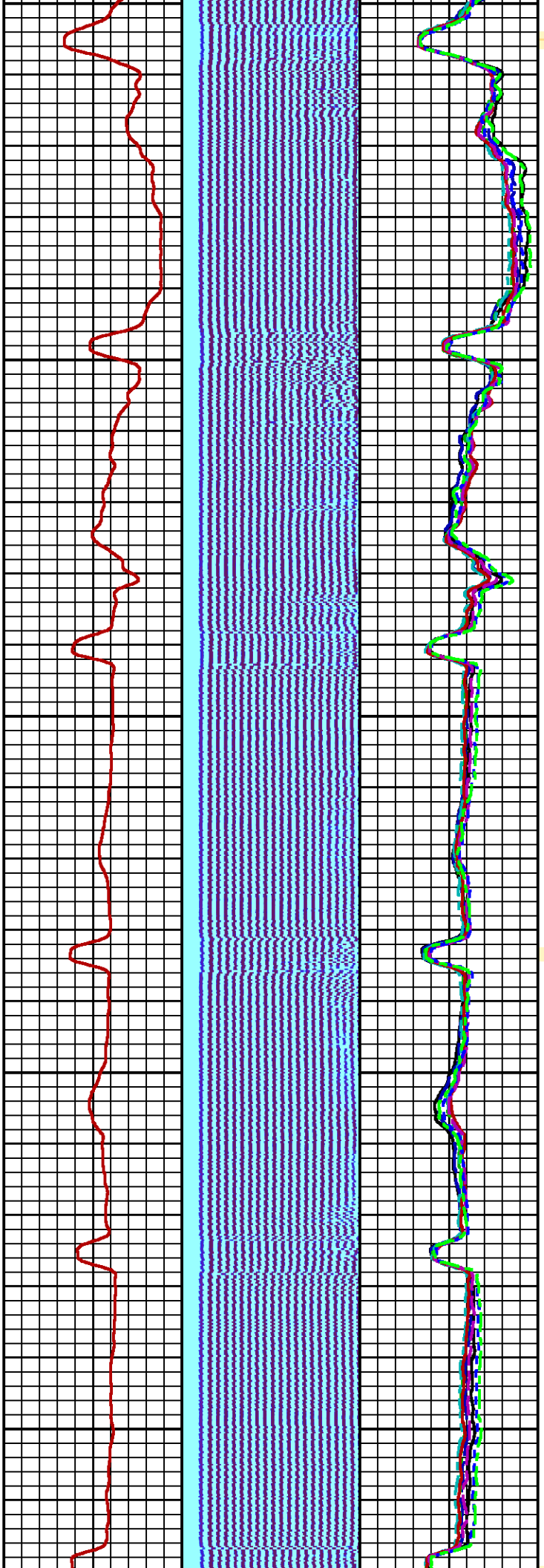


1100

1200

13

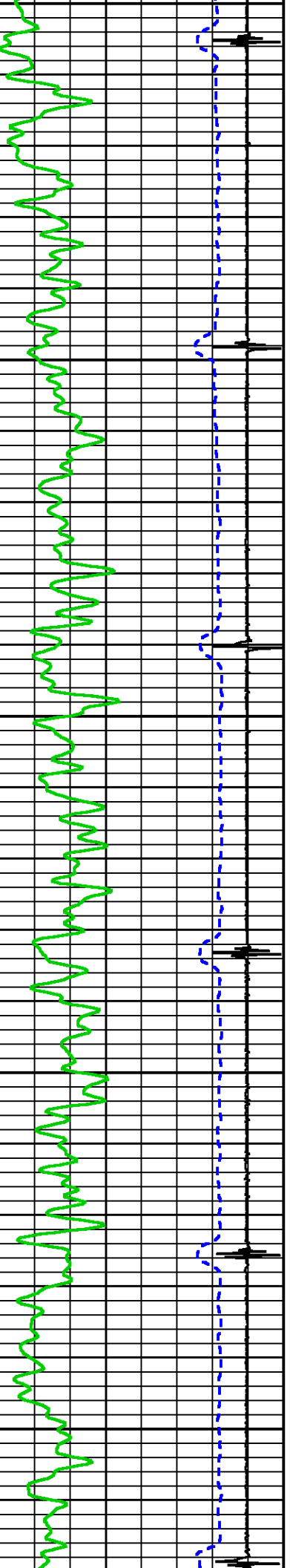


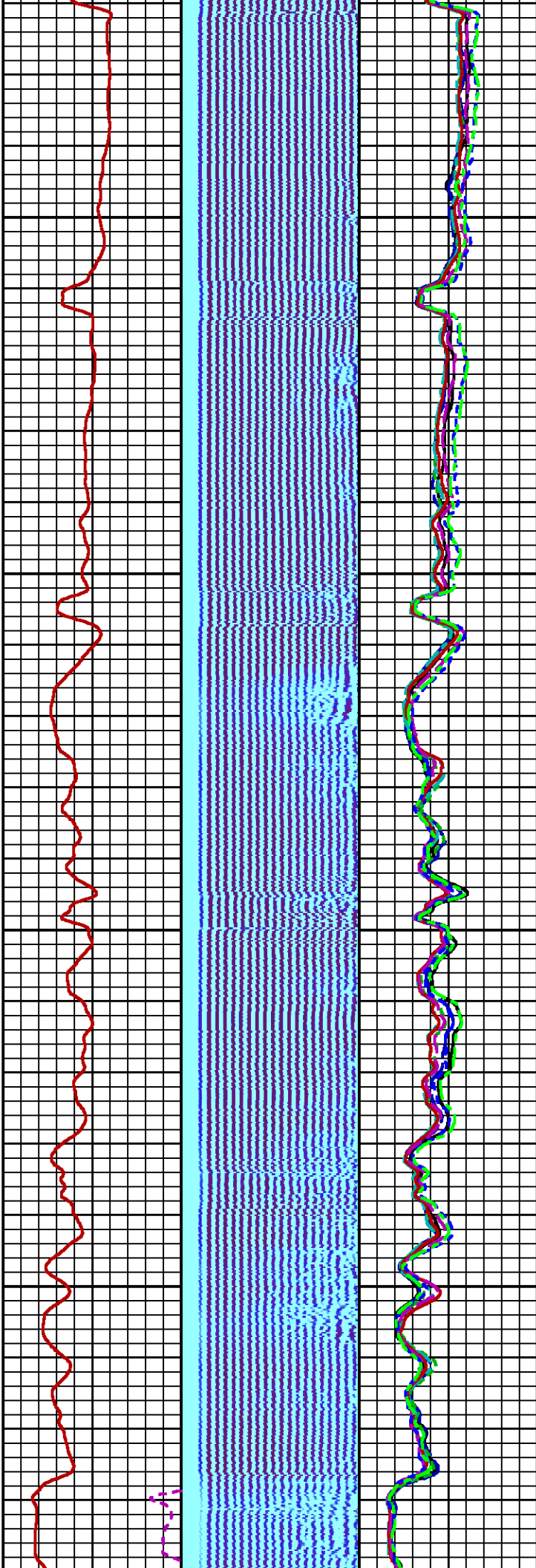
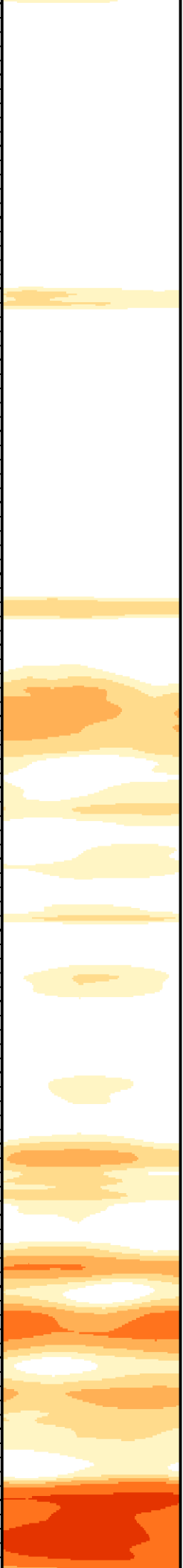


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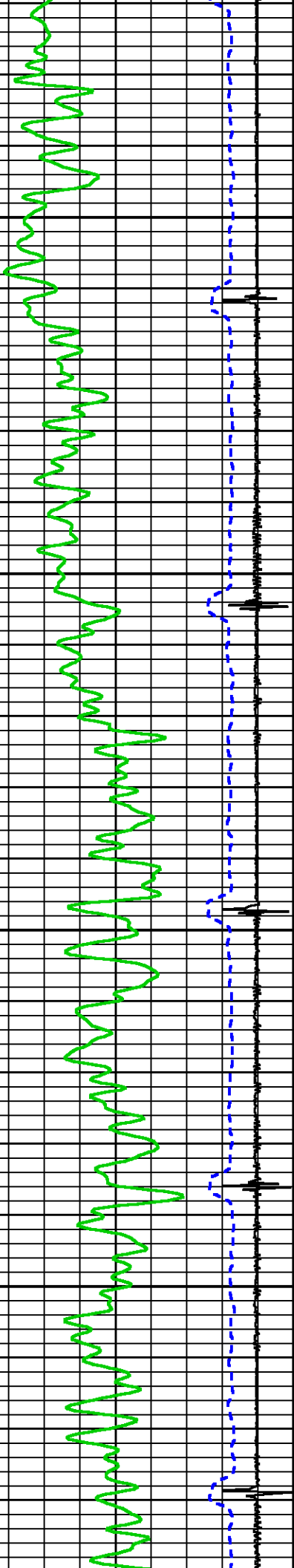
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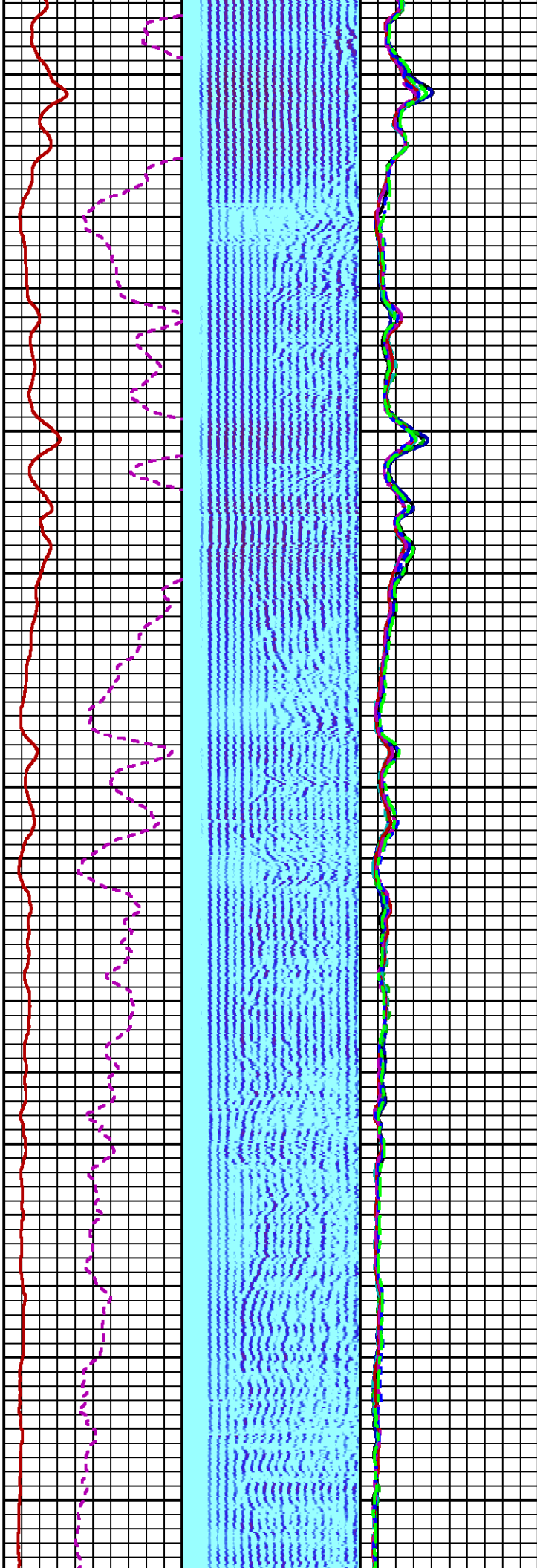
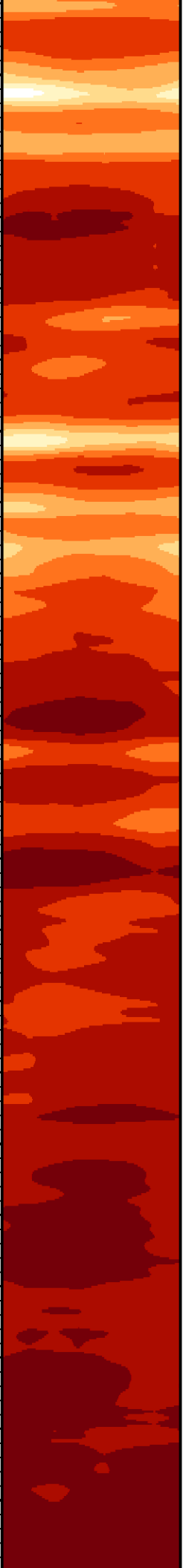




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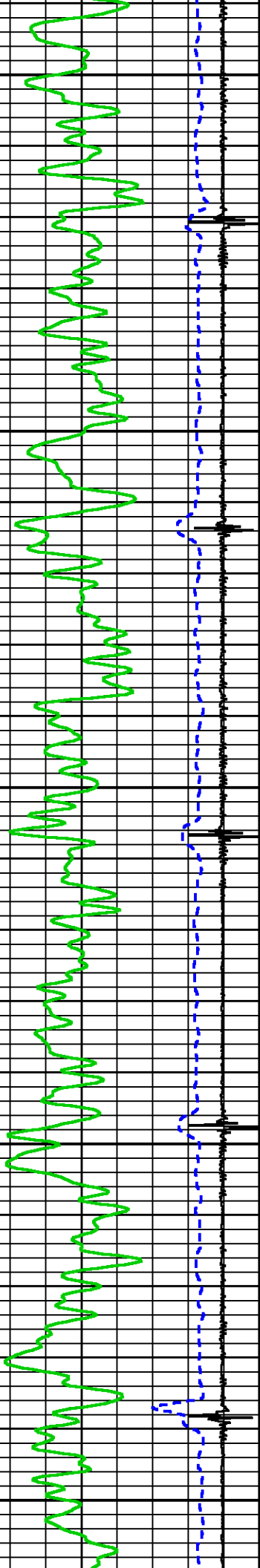
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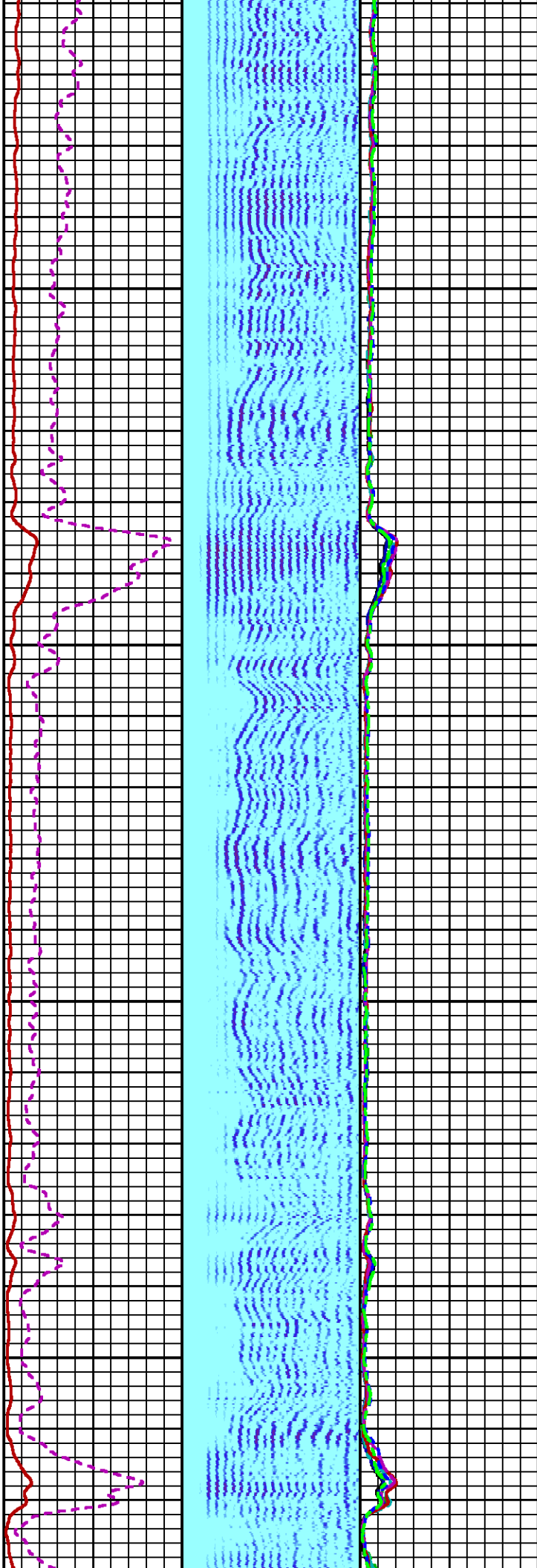




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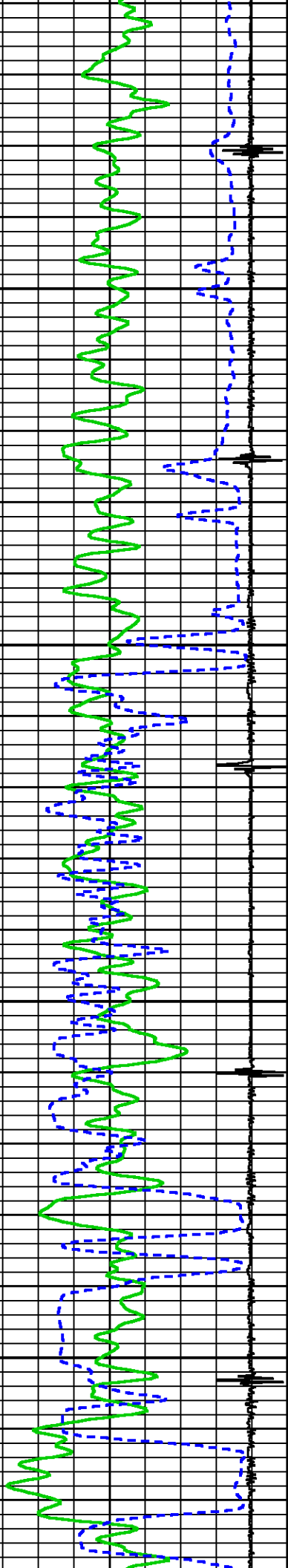
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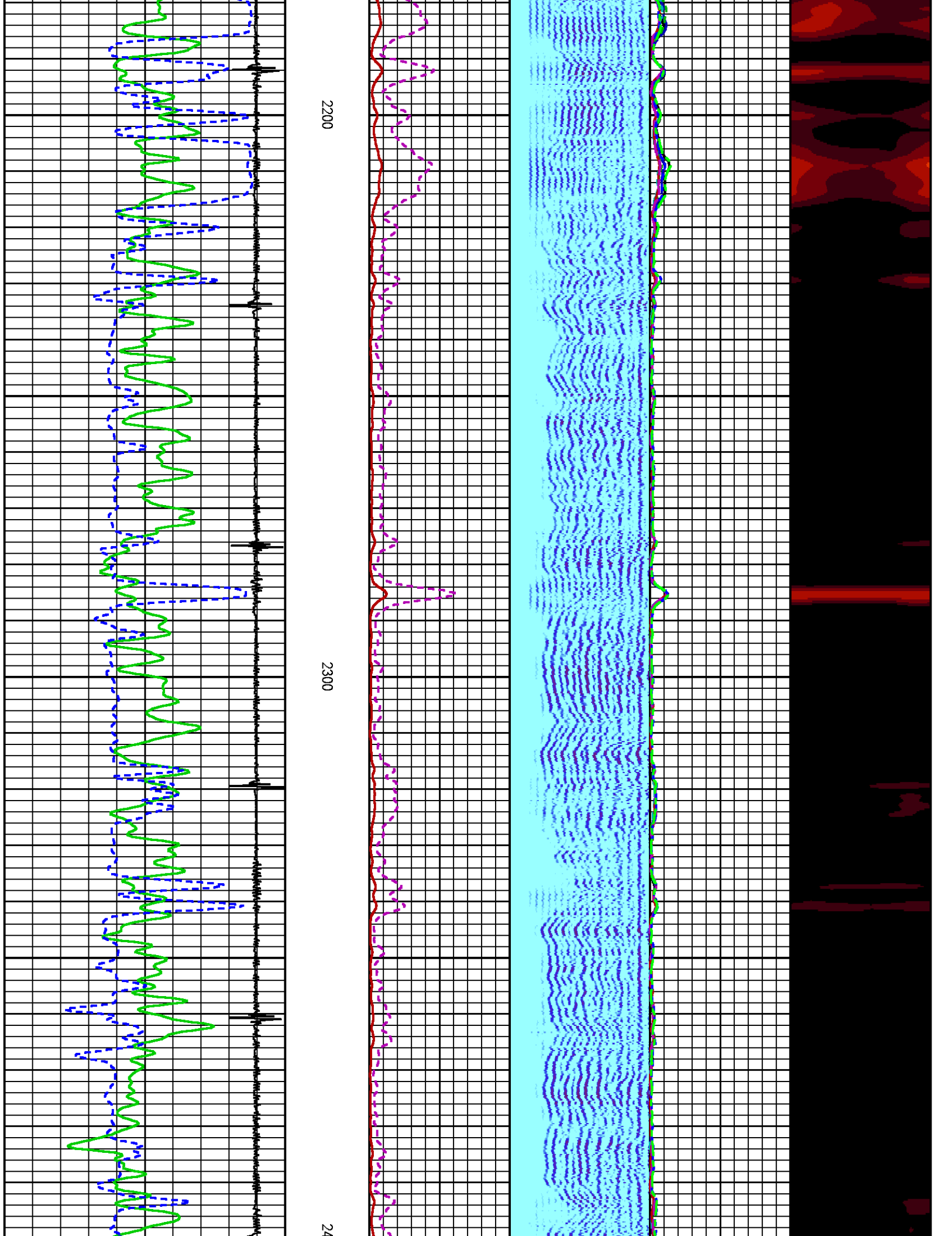


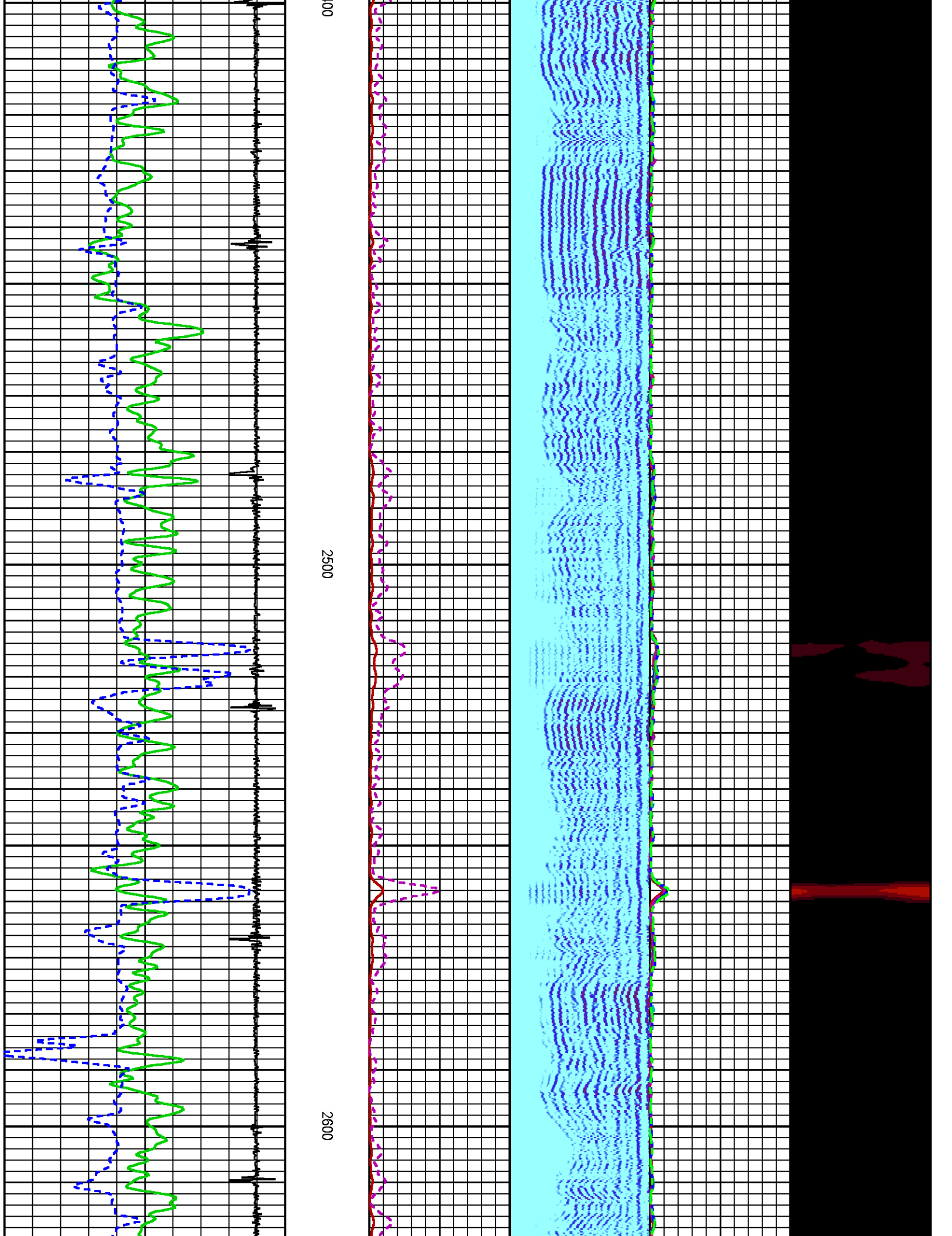


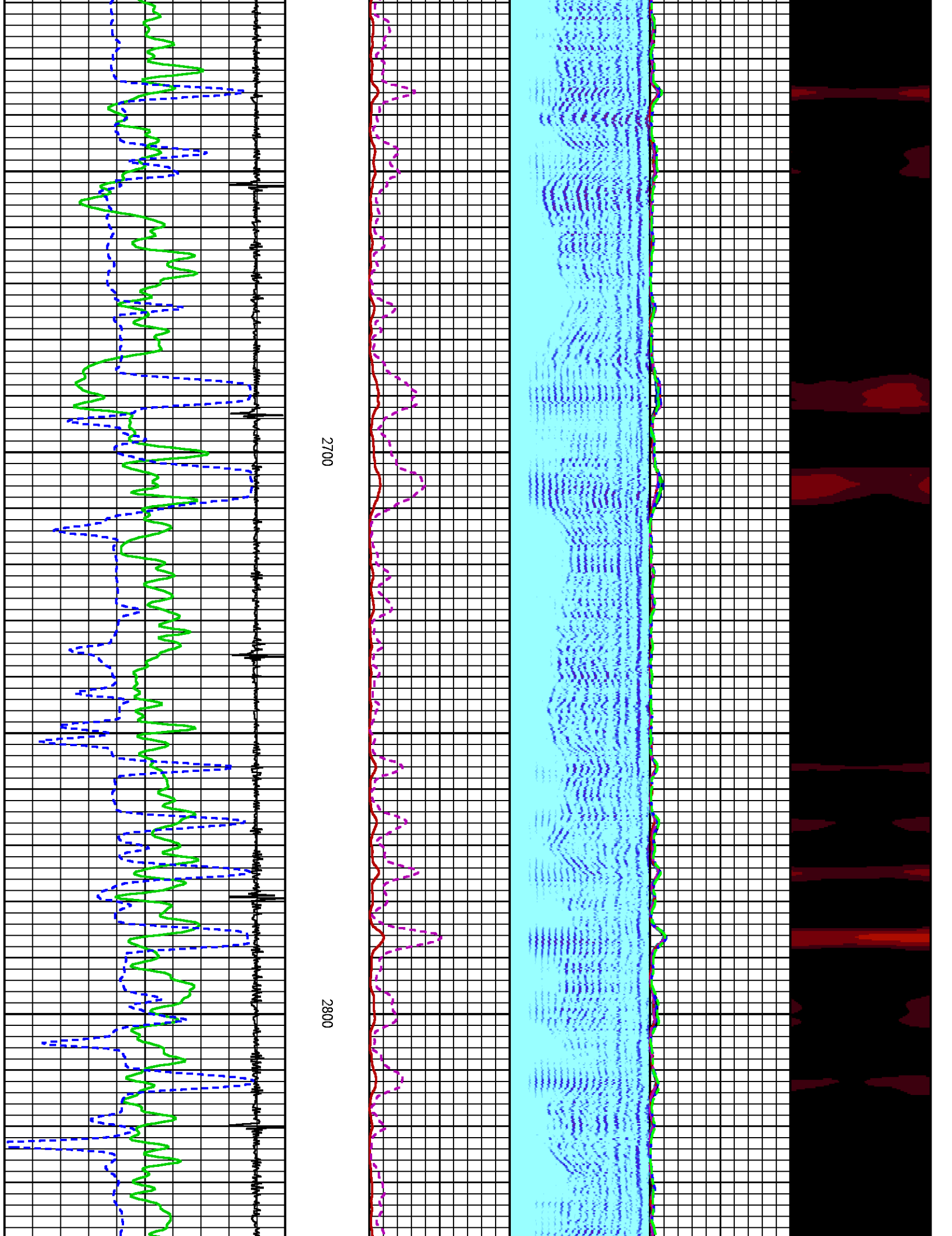
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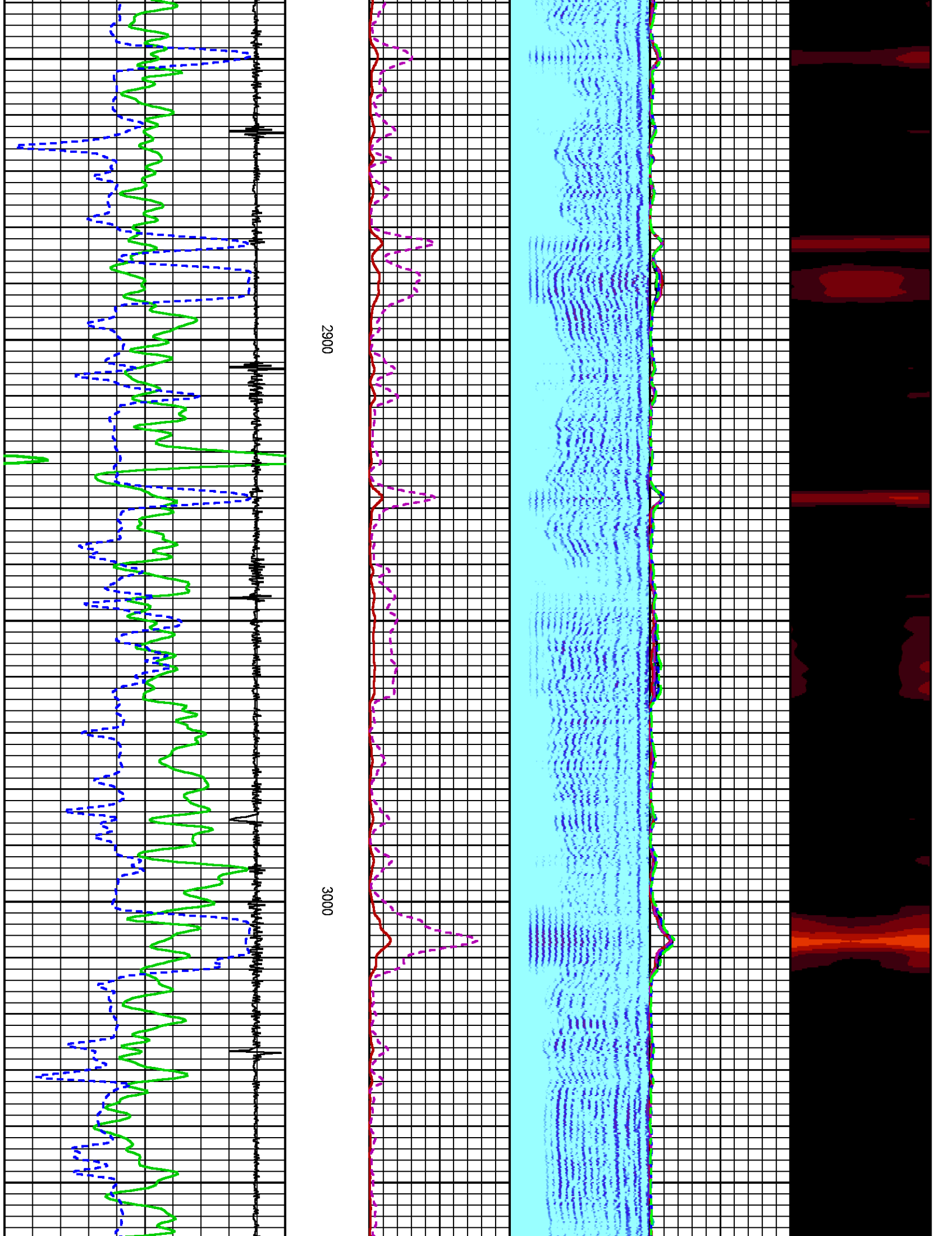
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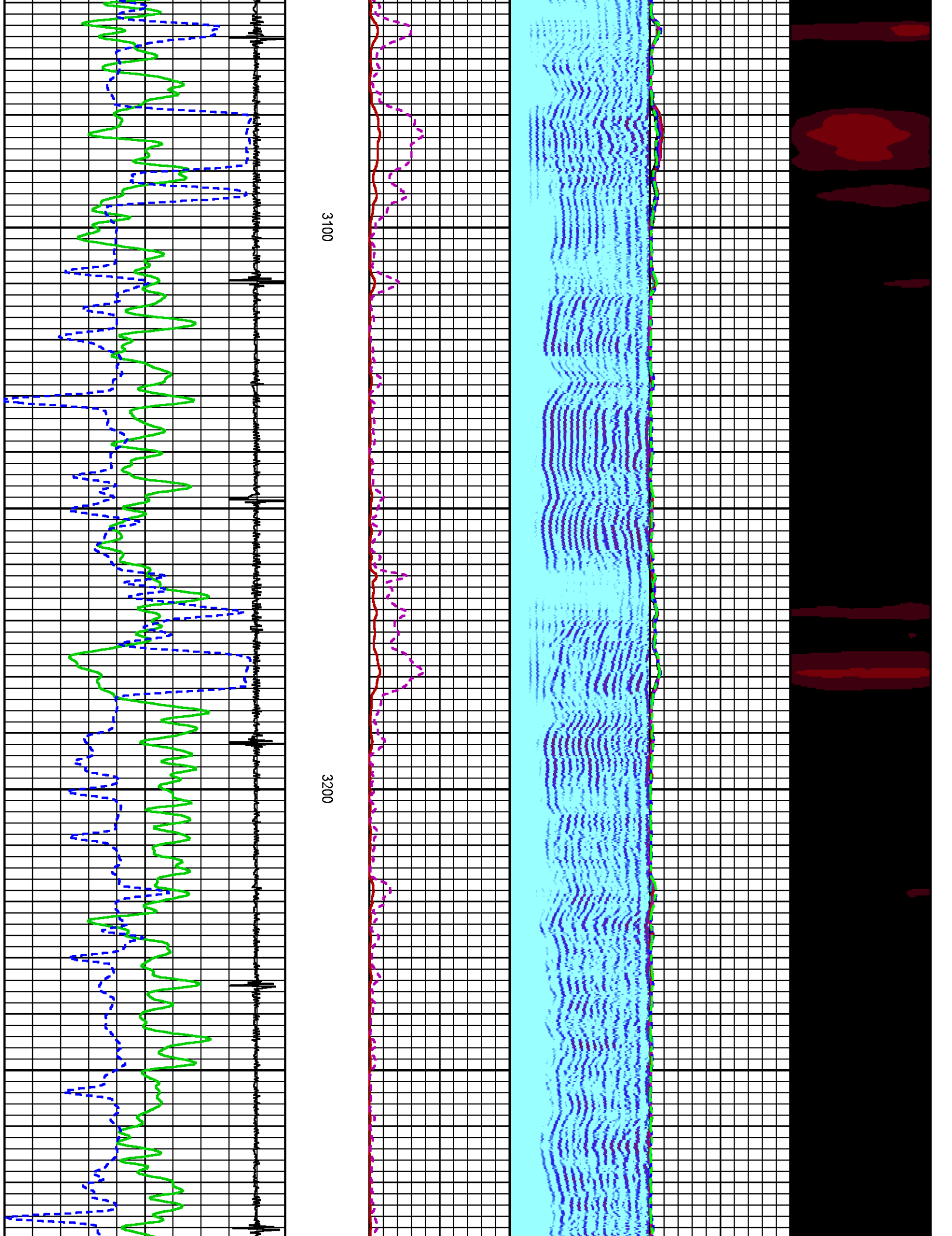


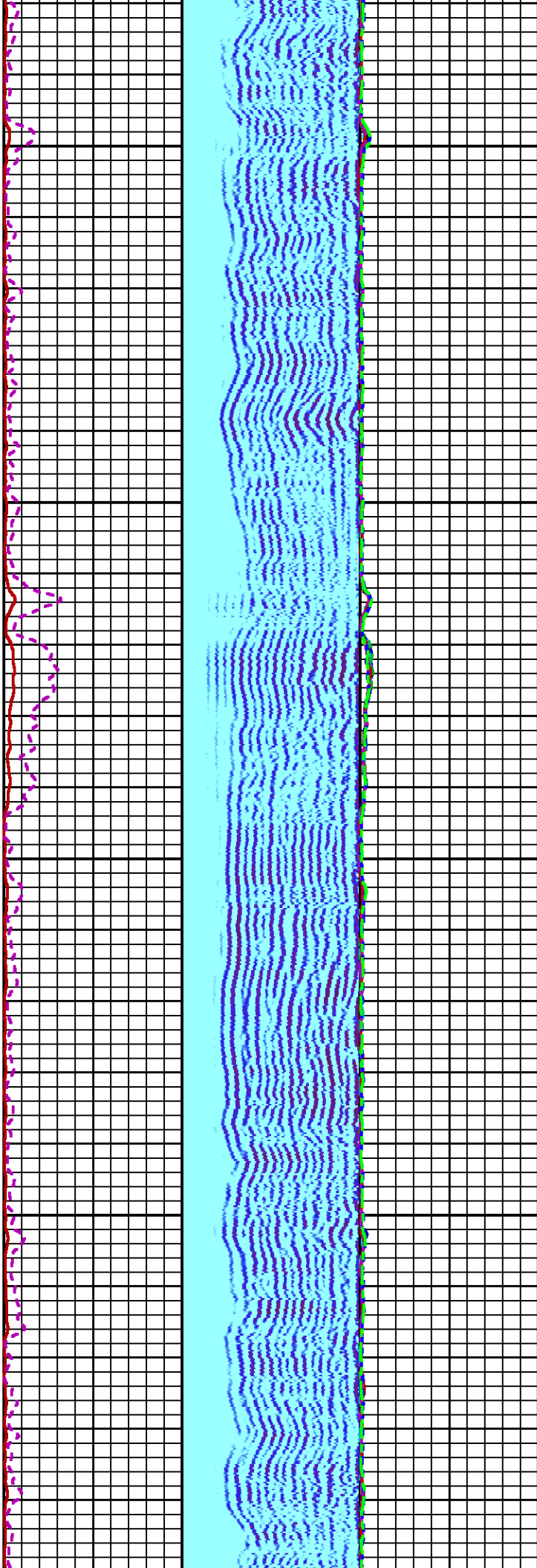








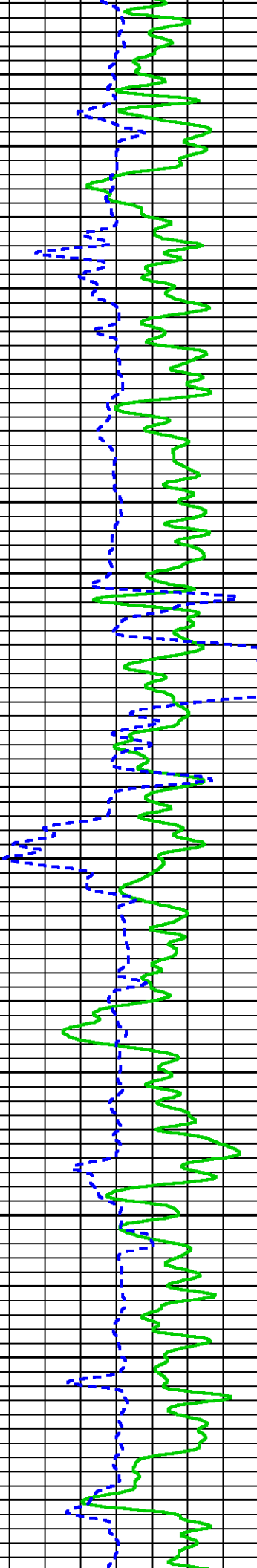
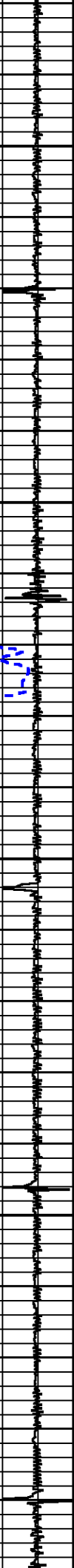


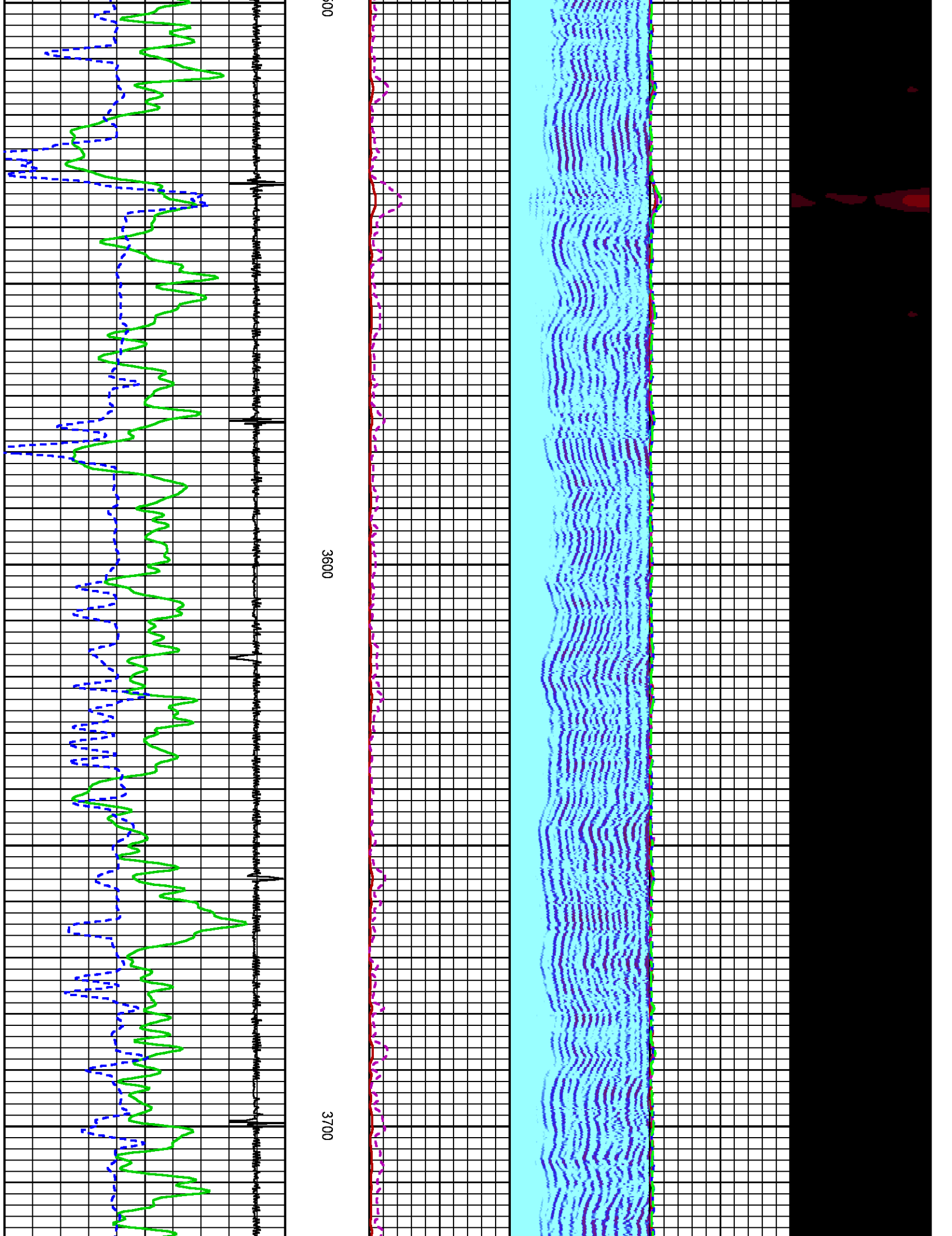


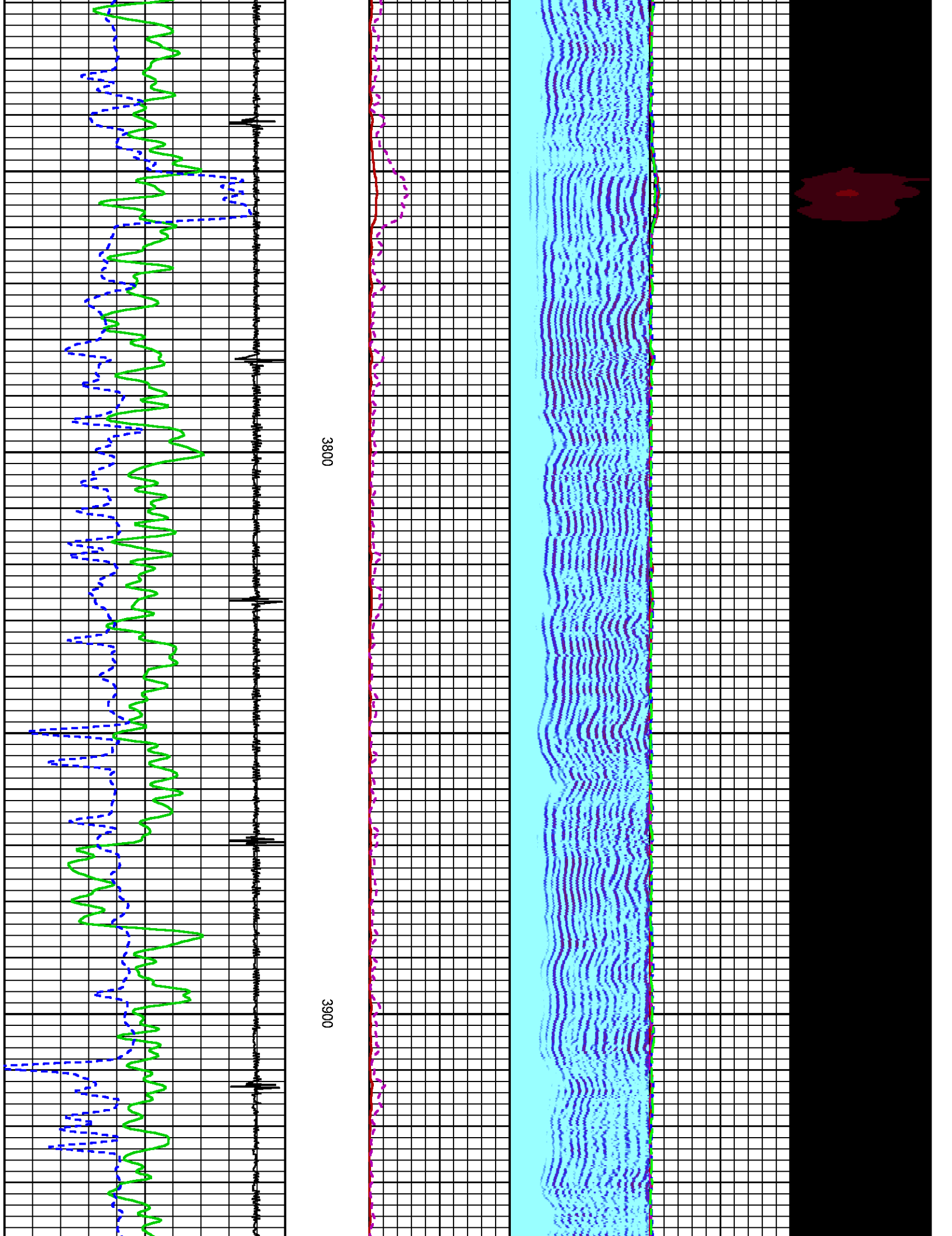
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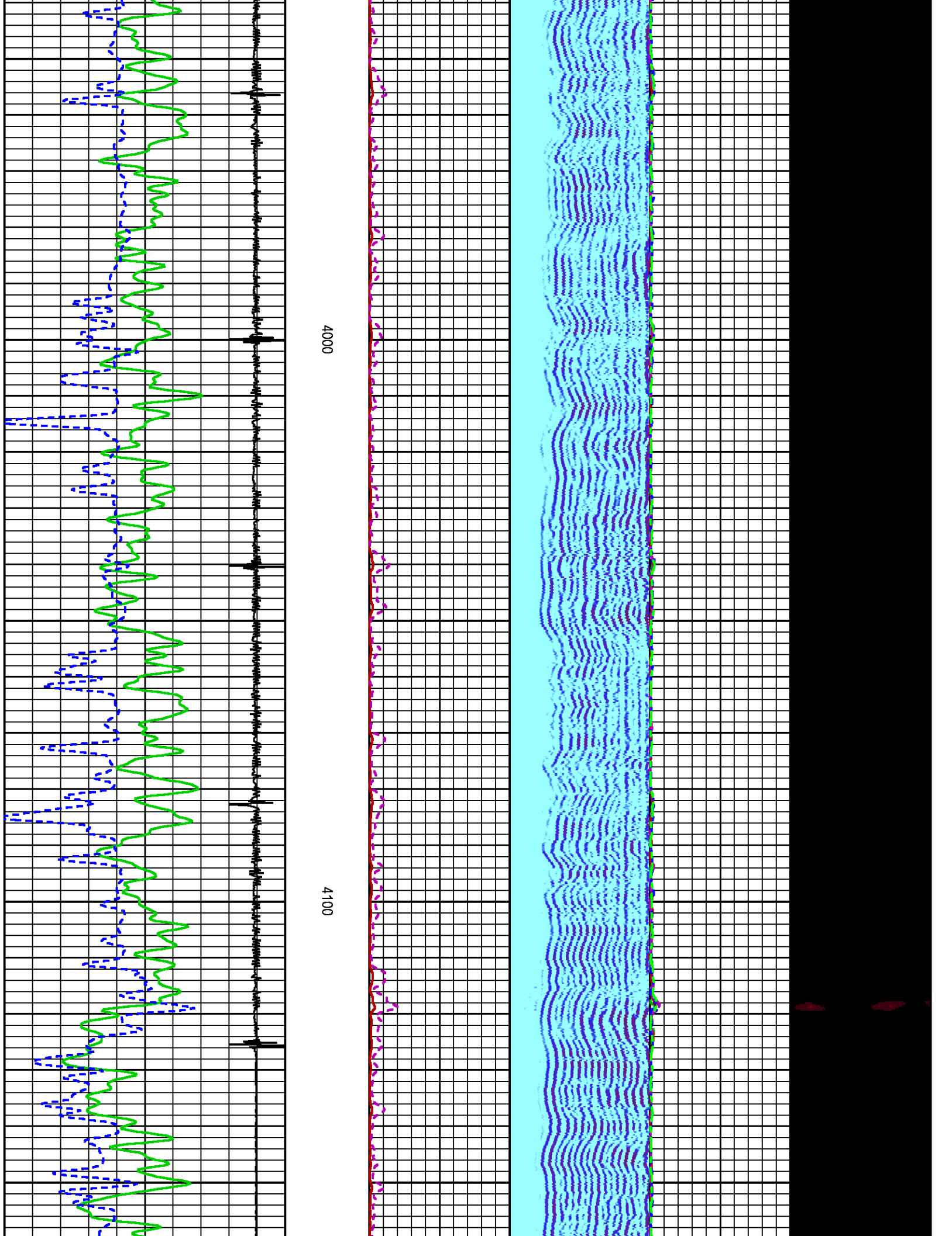
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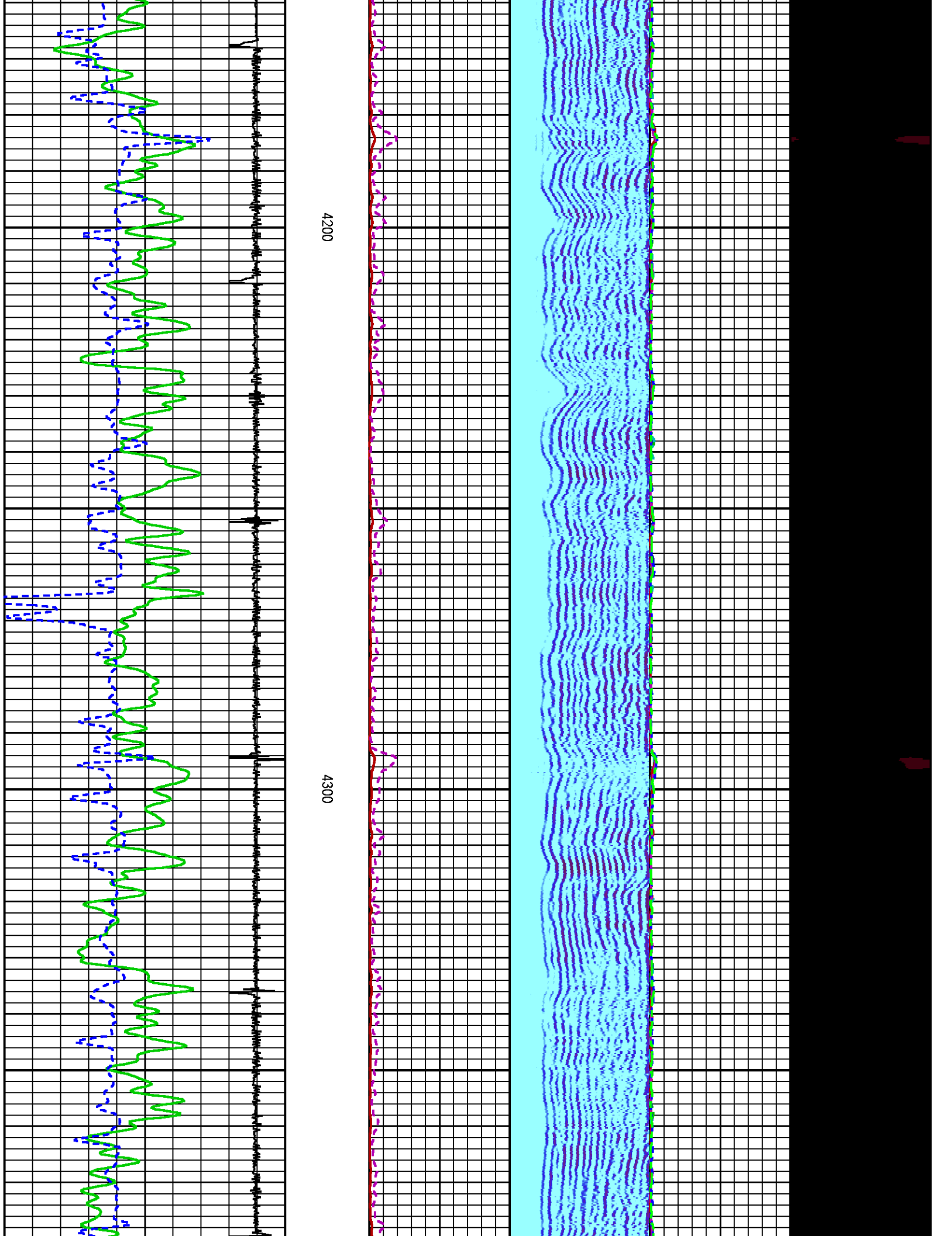
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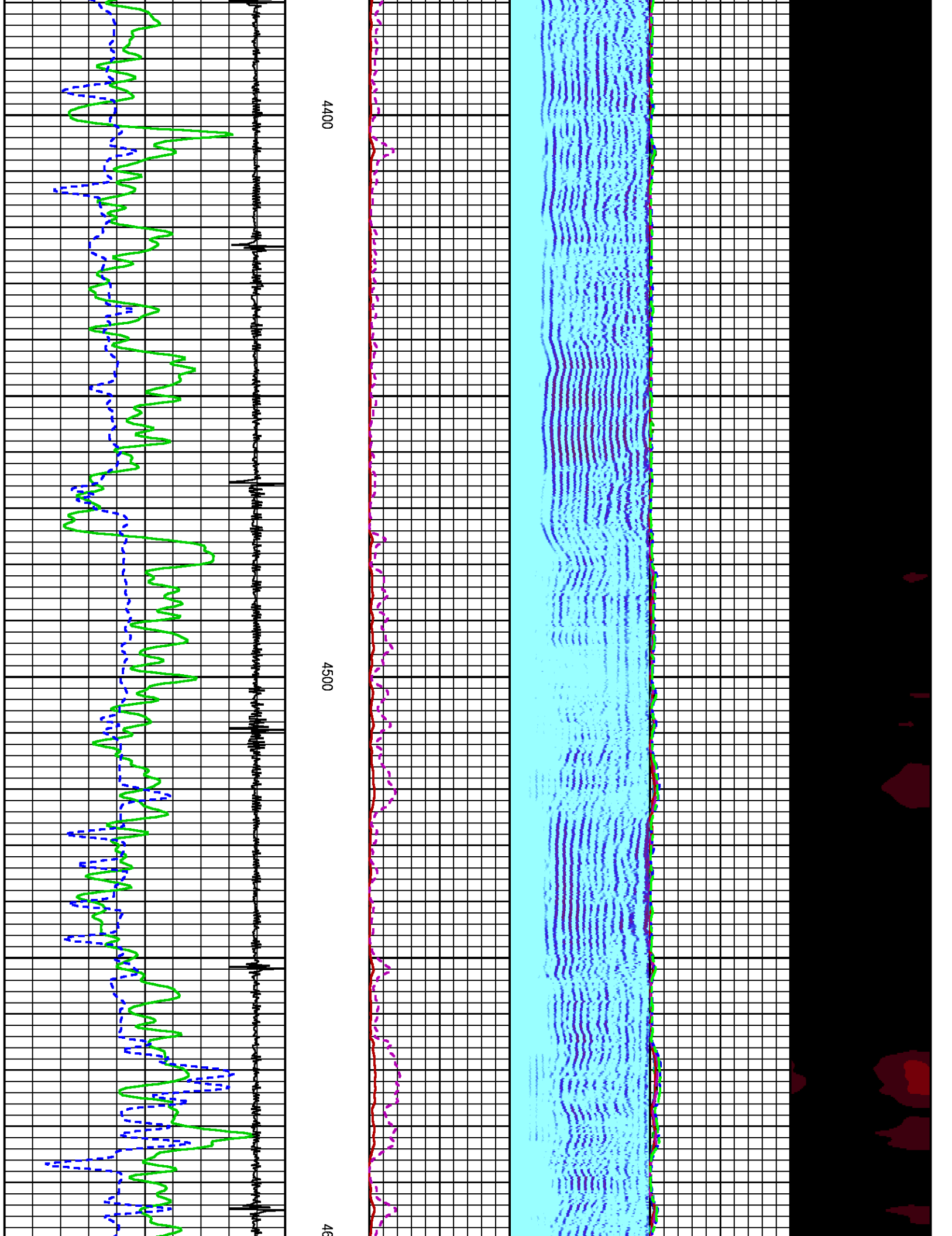


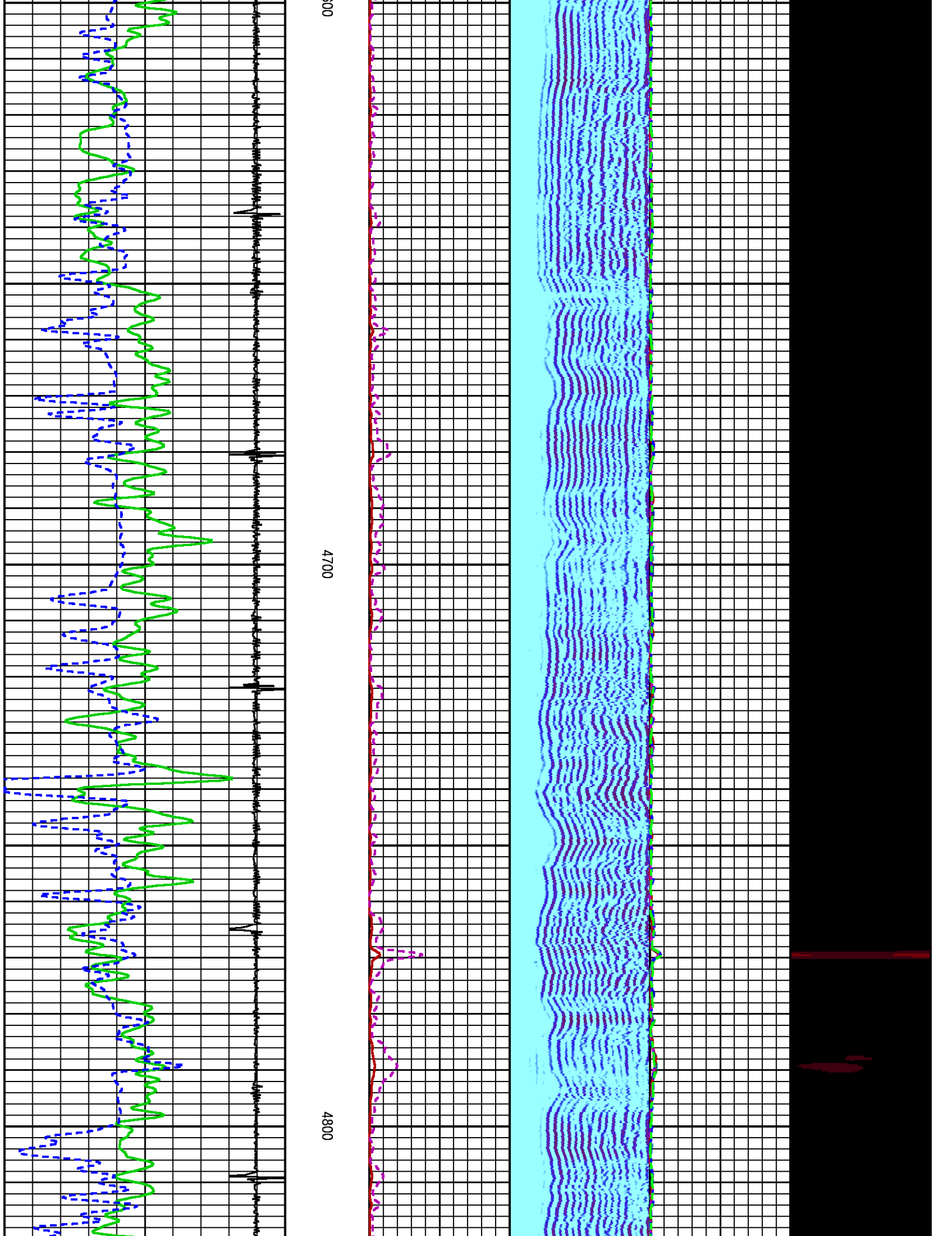


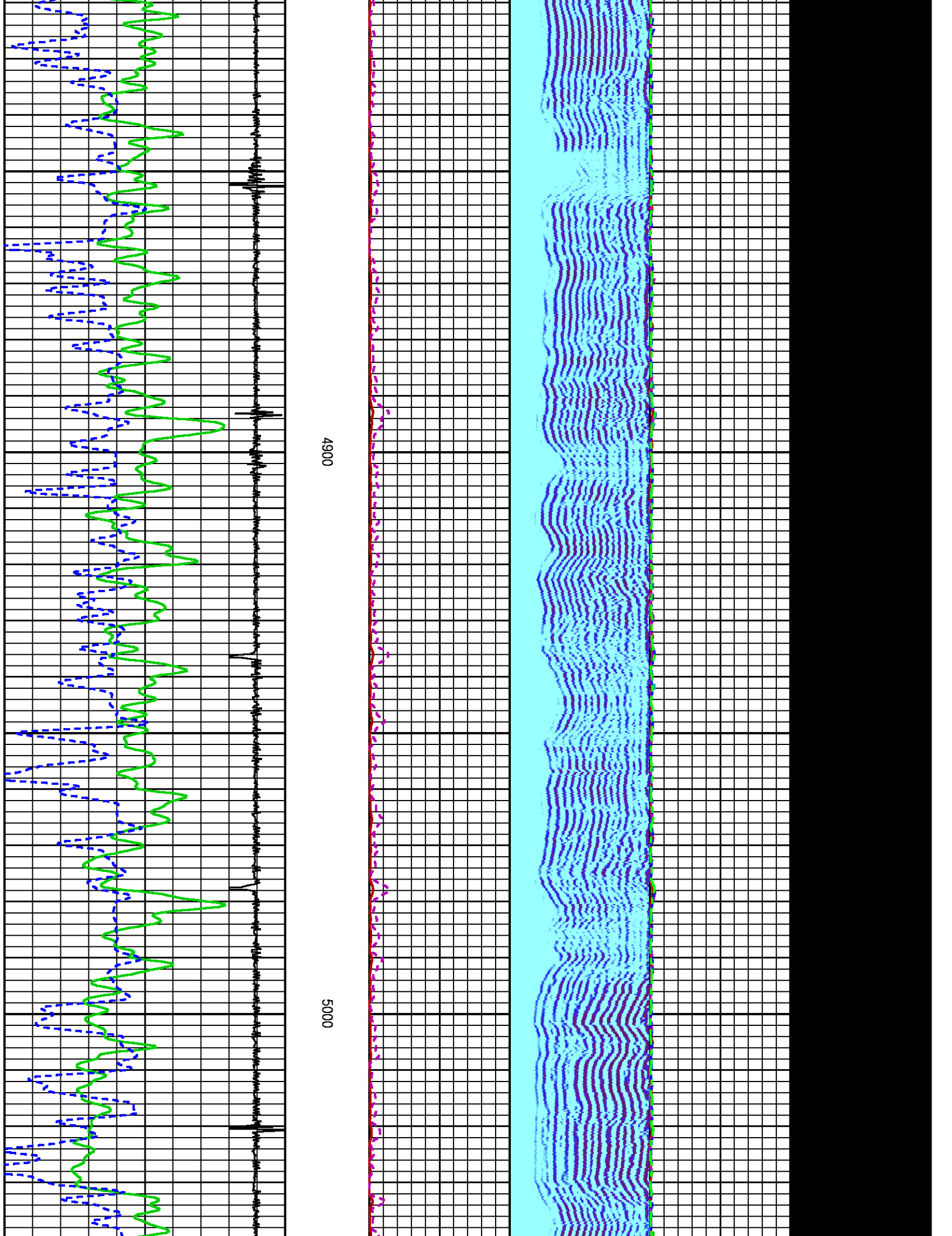


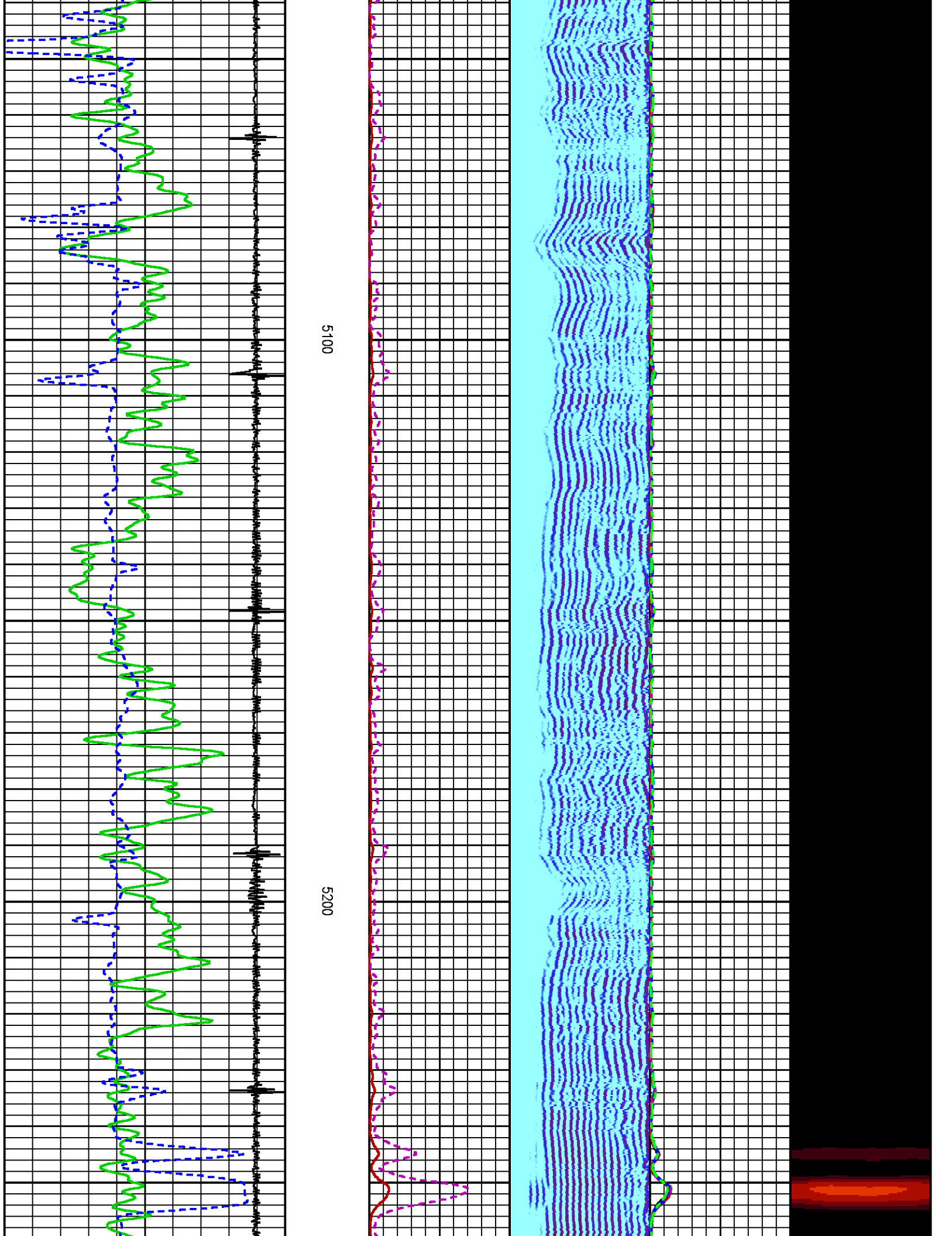


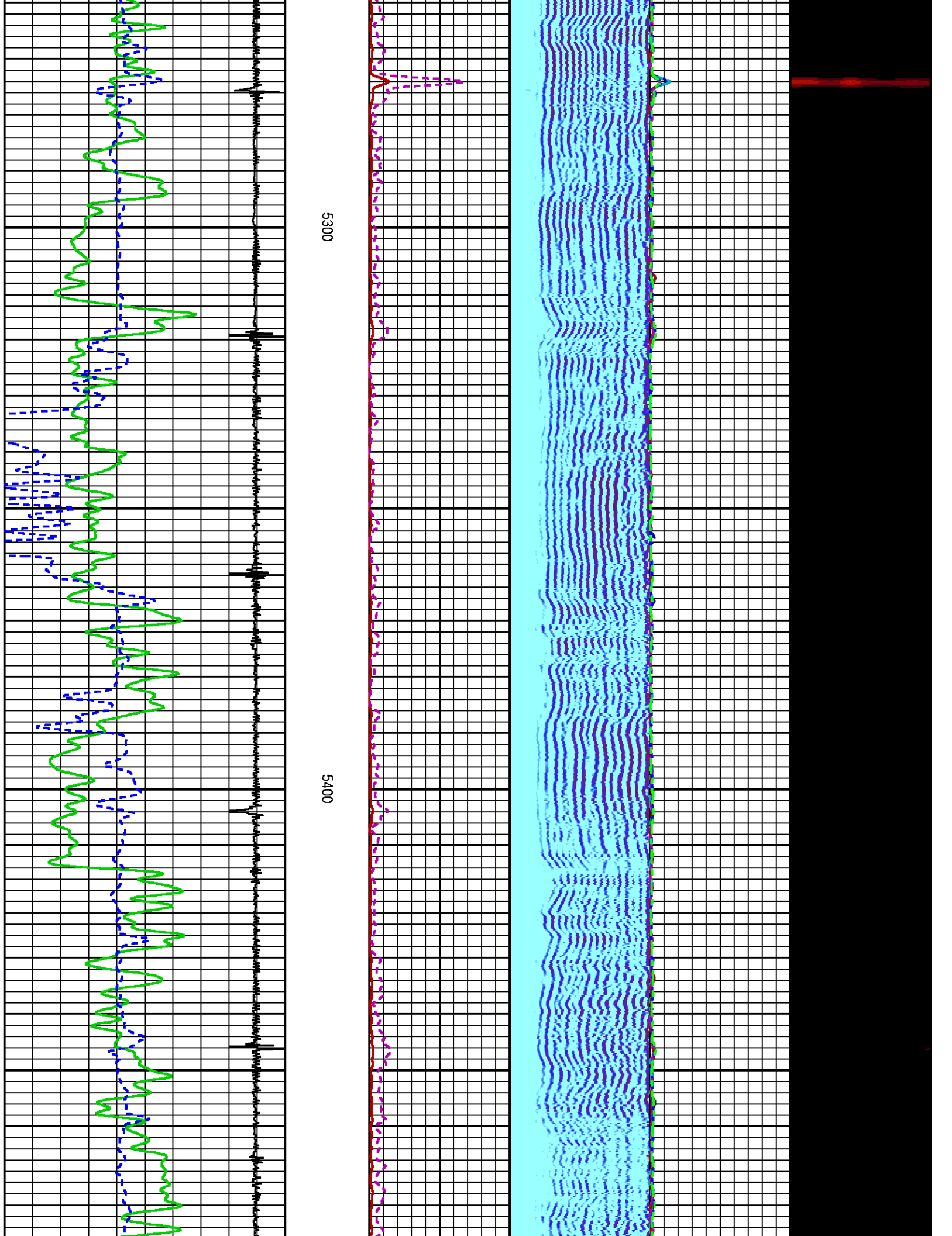


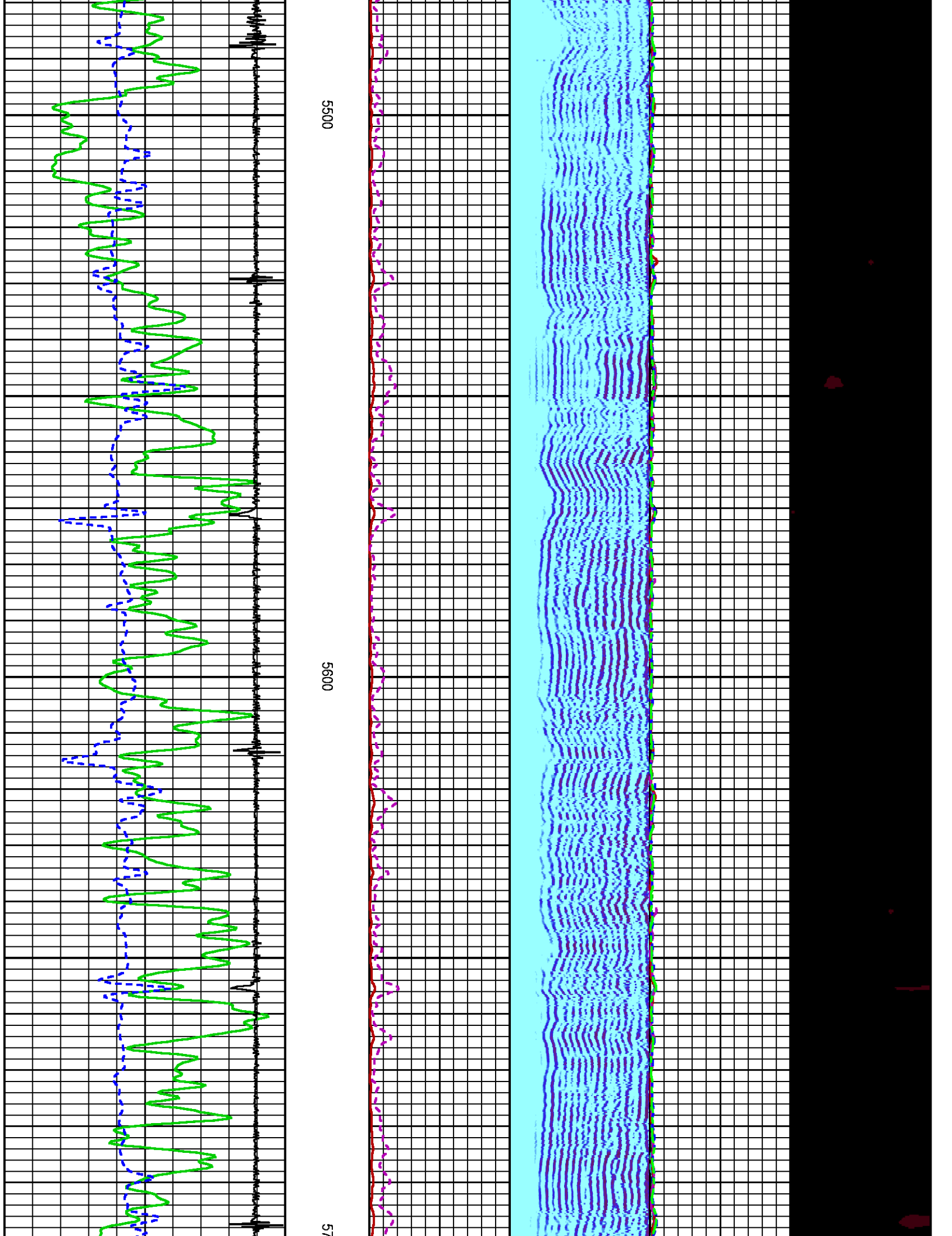


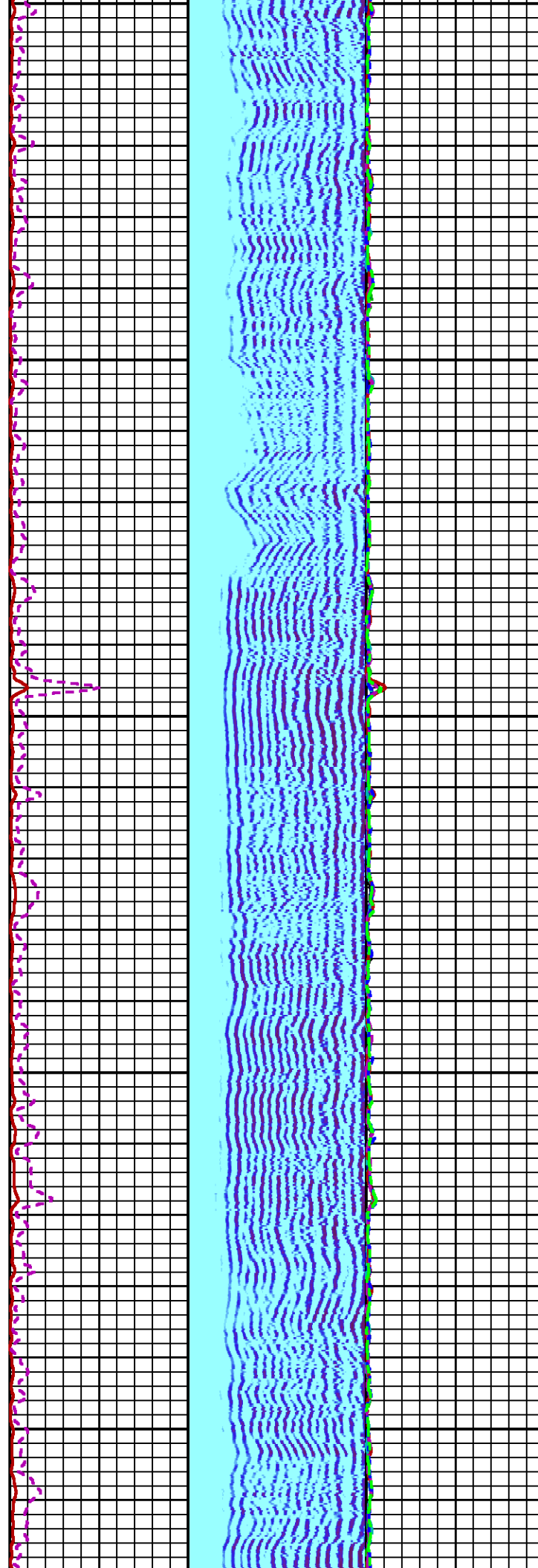
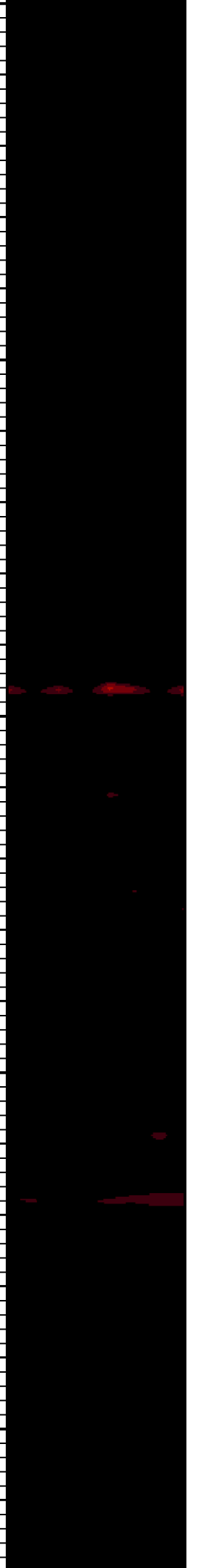








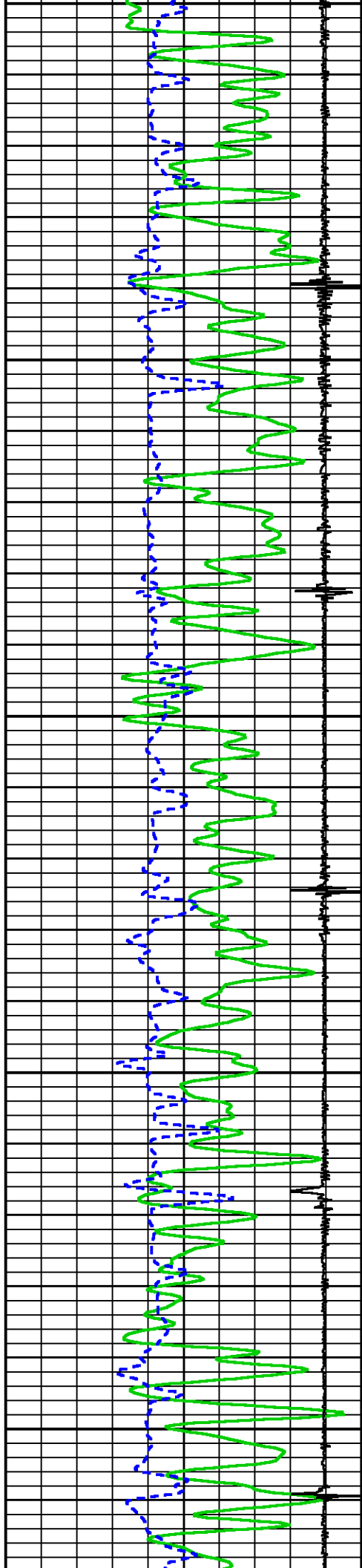


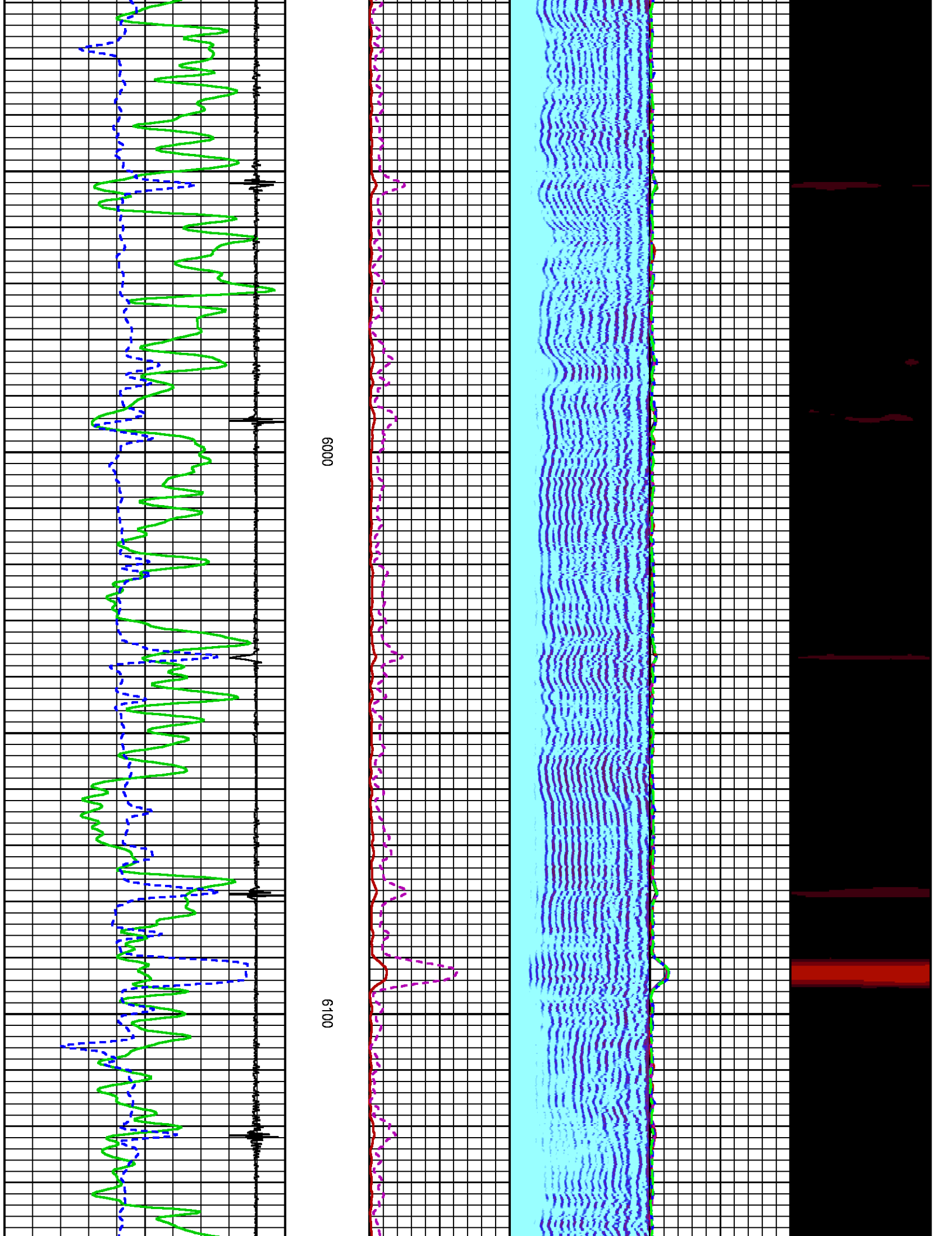


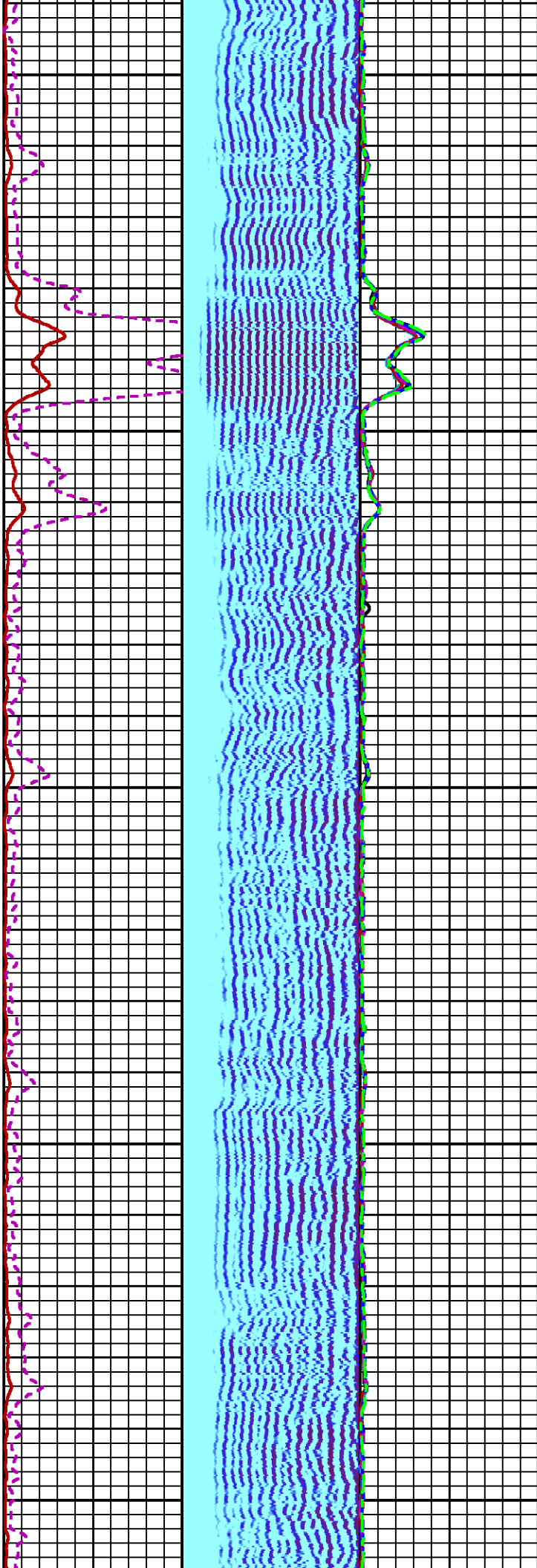
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5800

5900

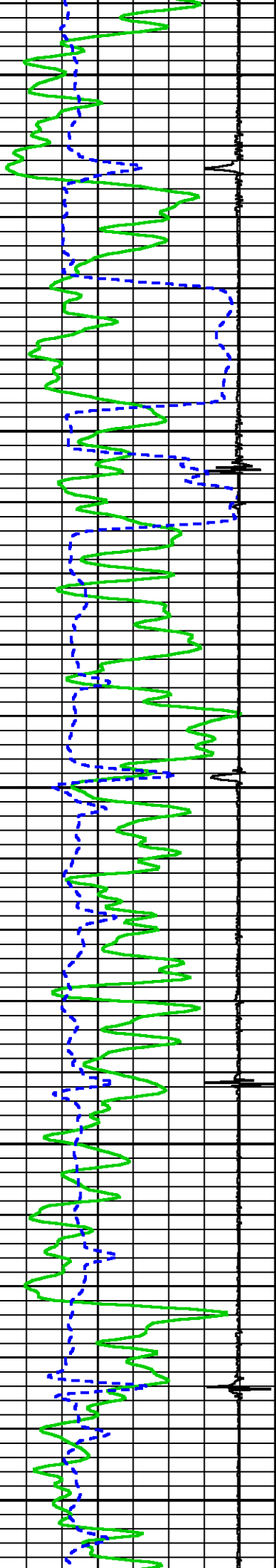


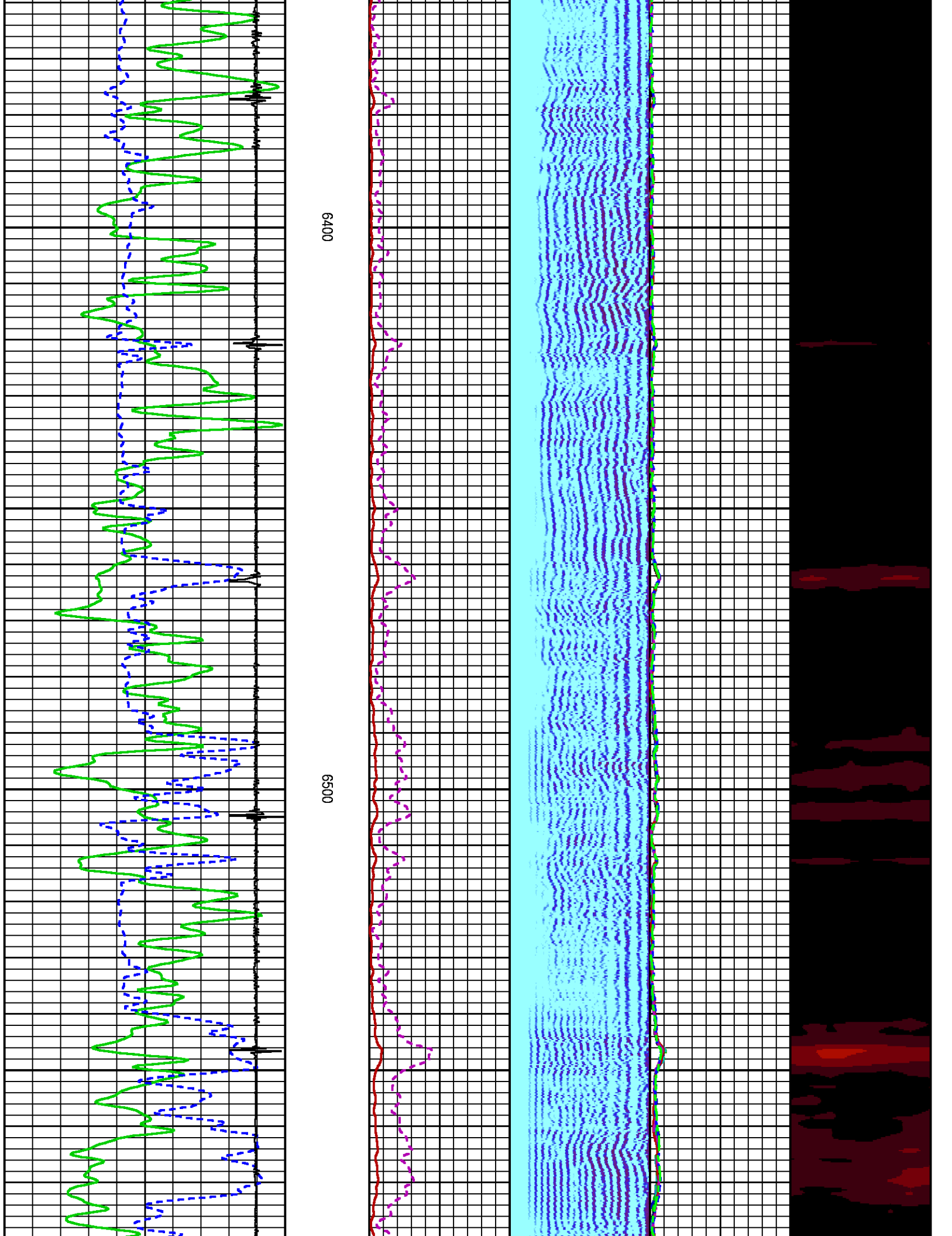


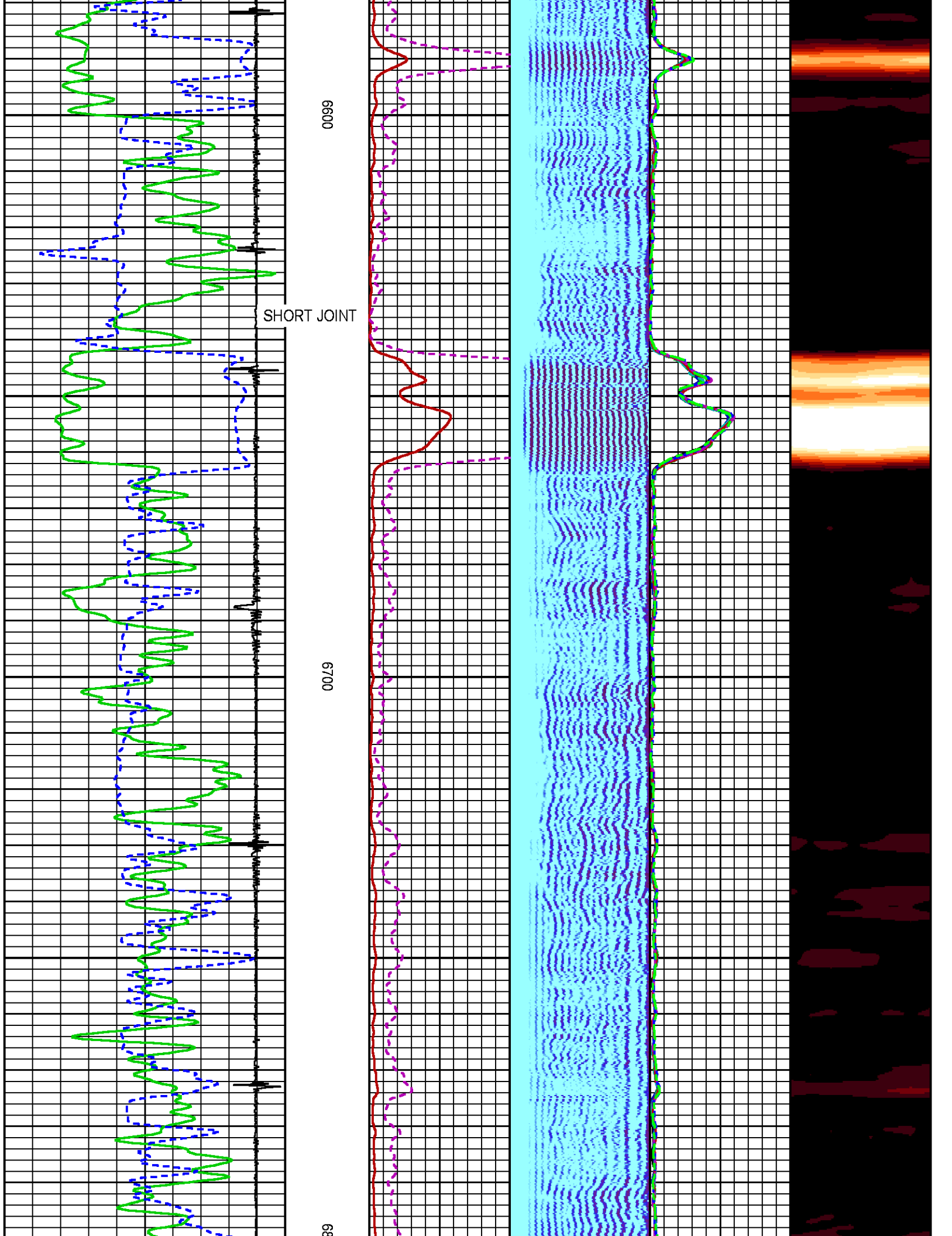


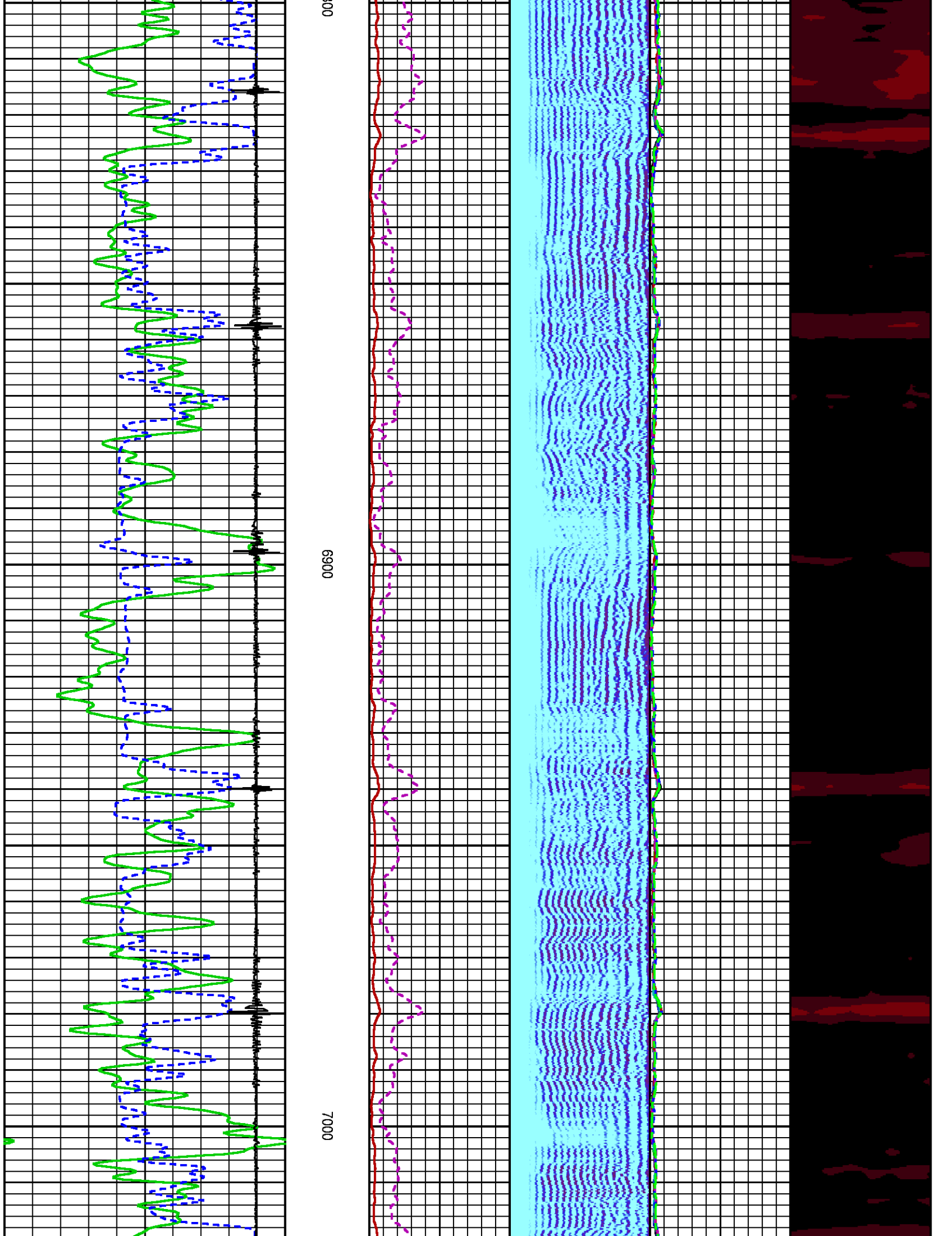
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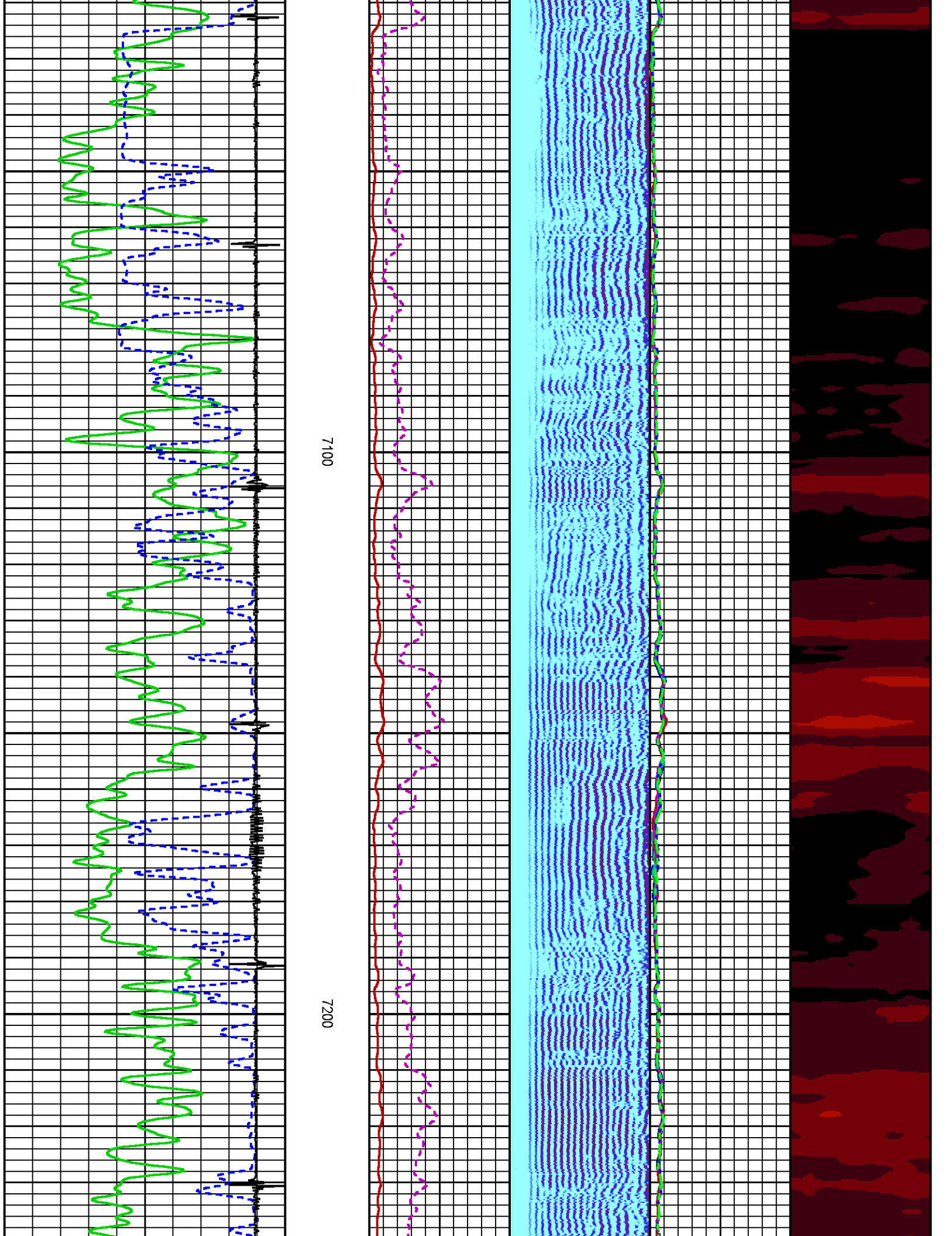
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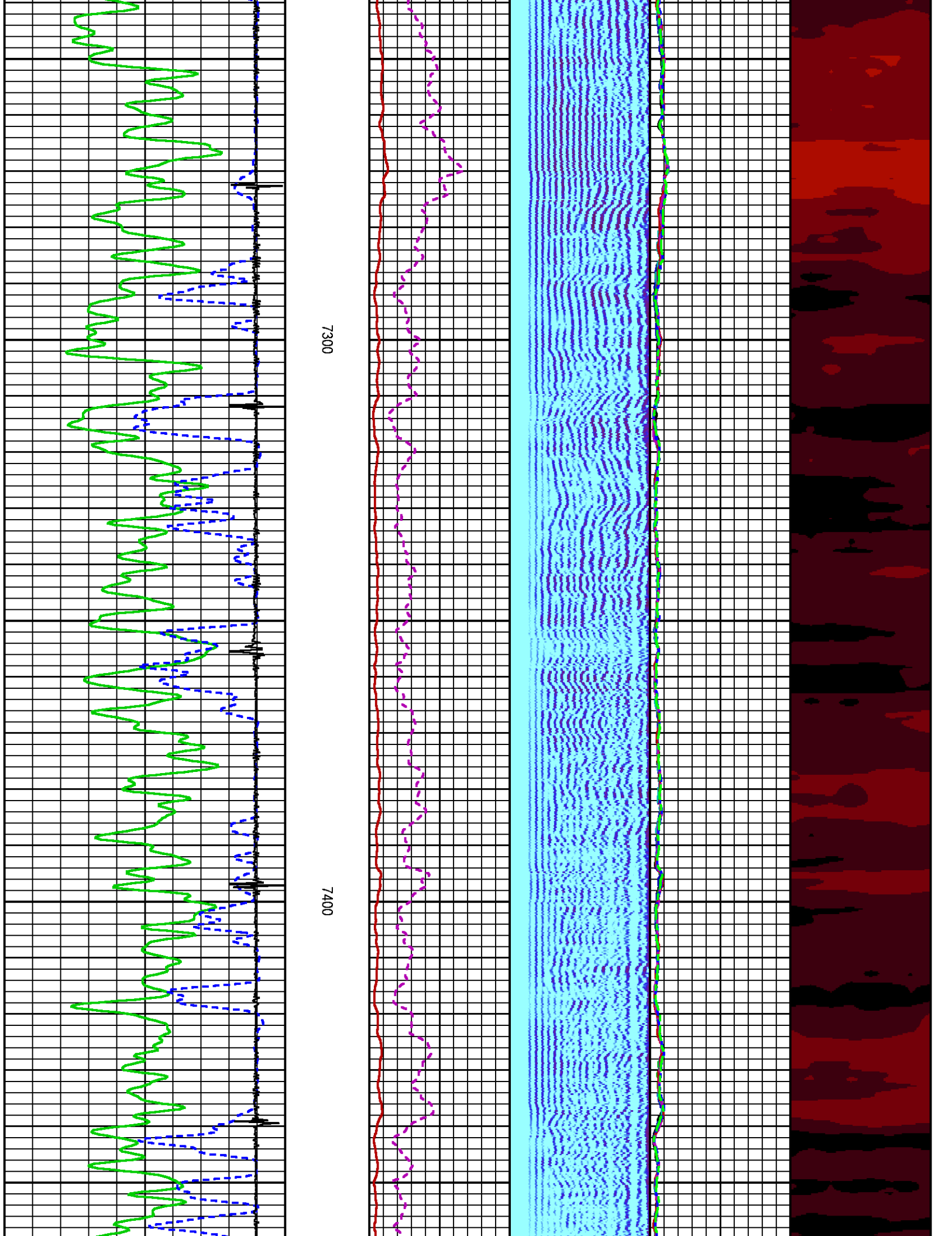


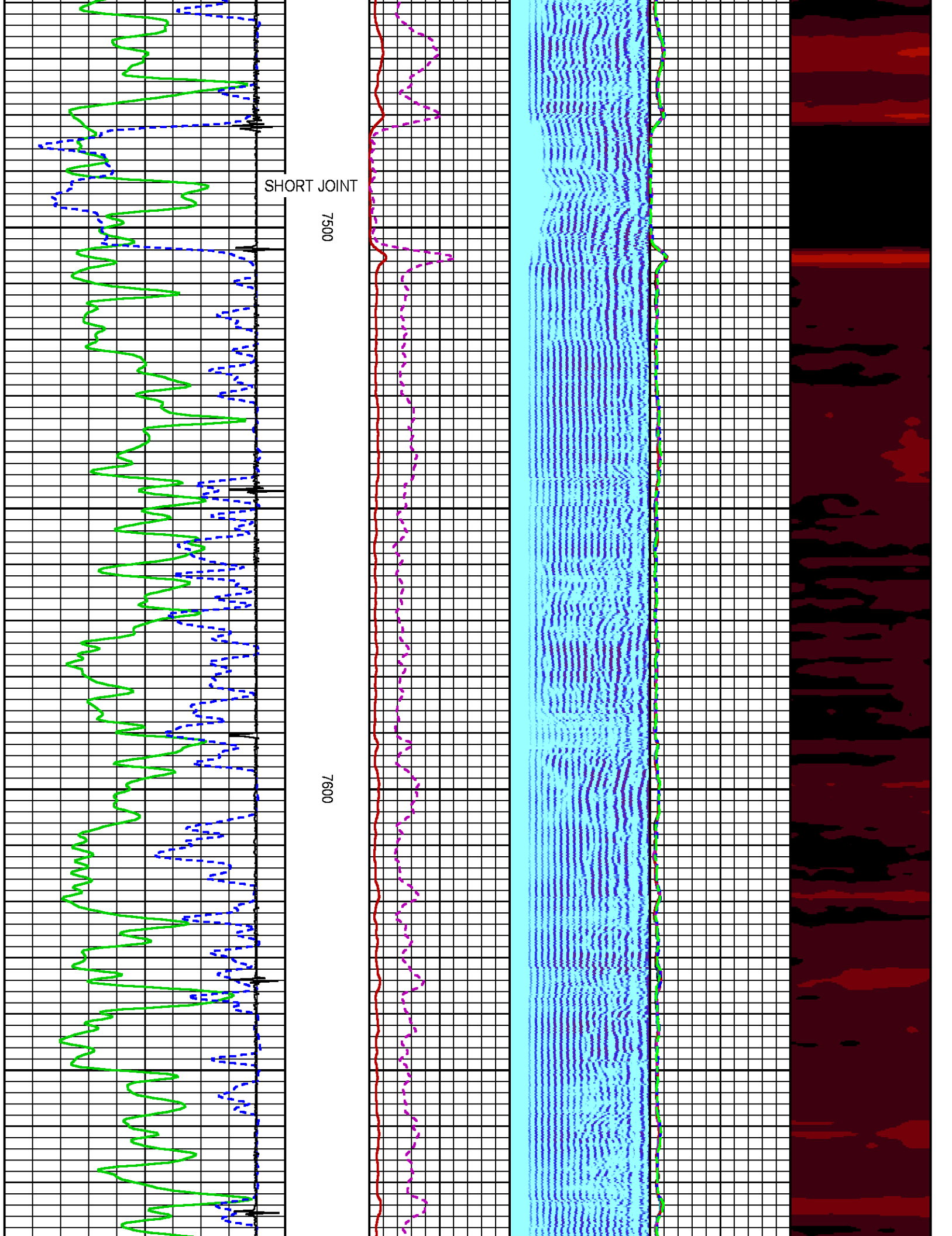


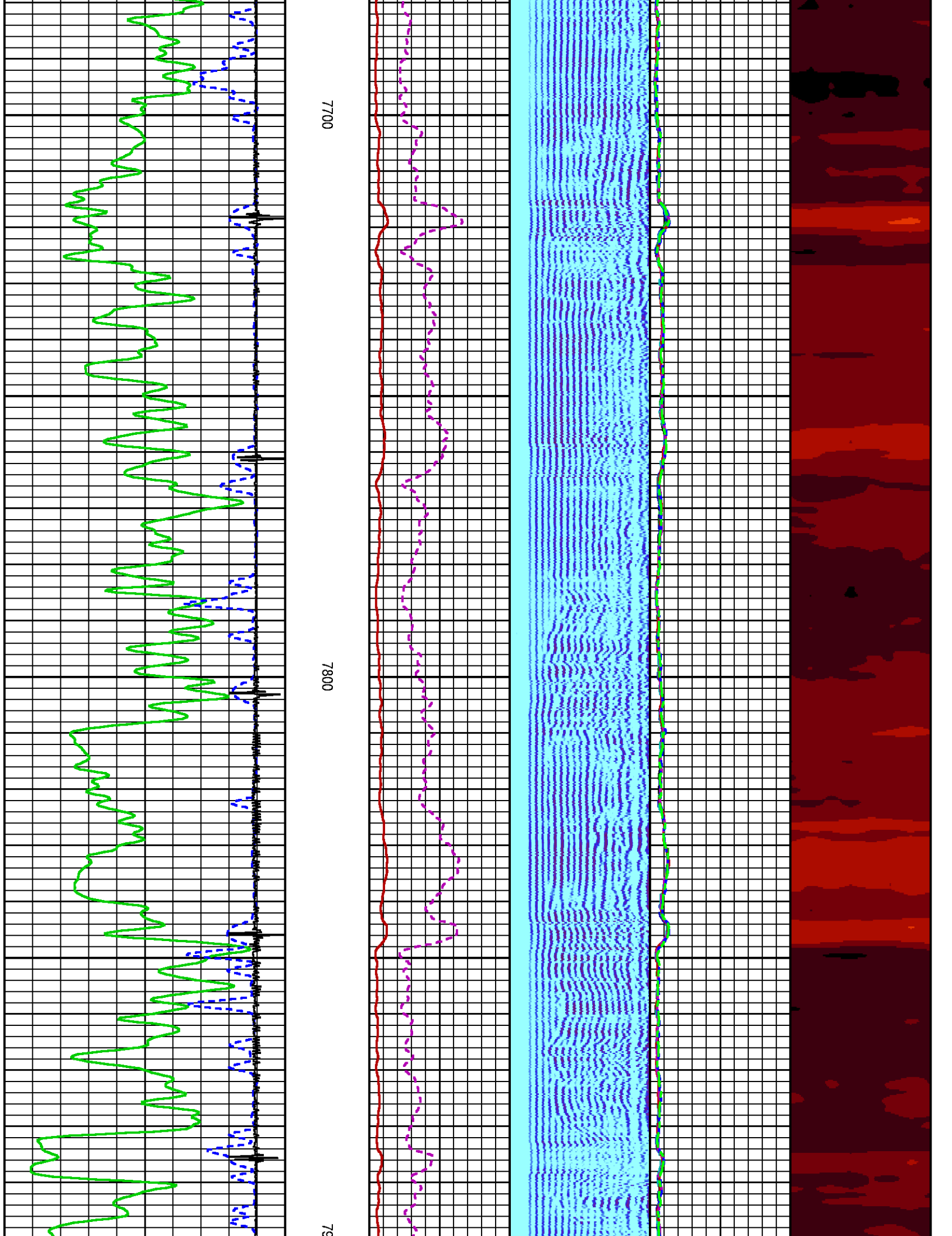


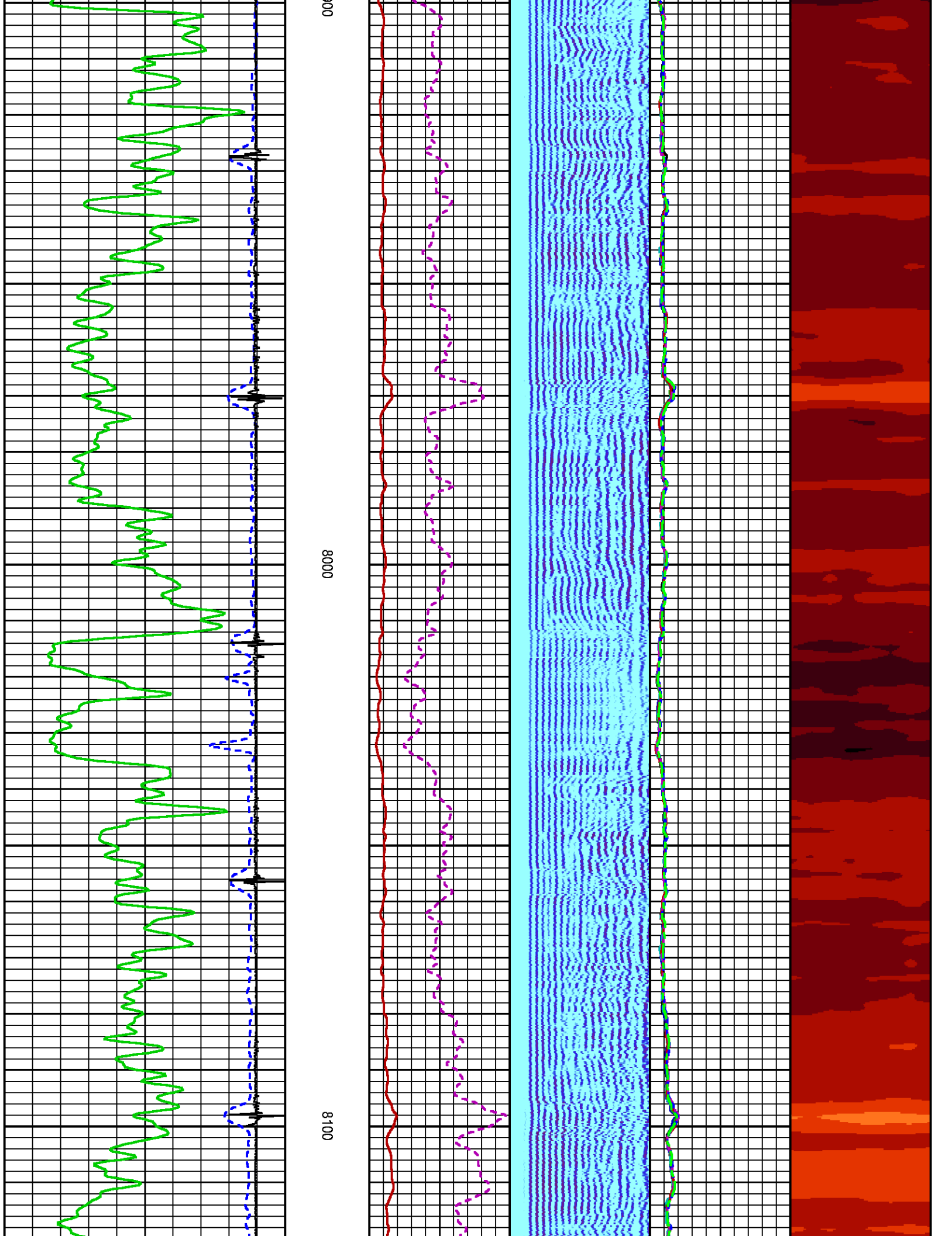


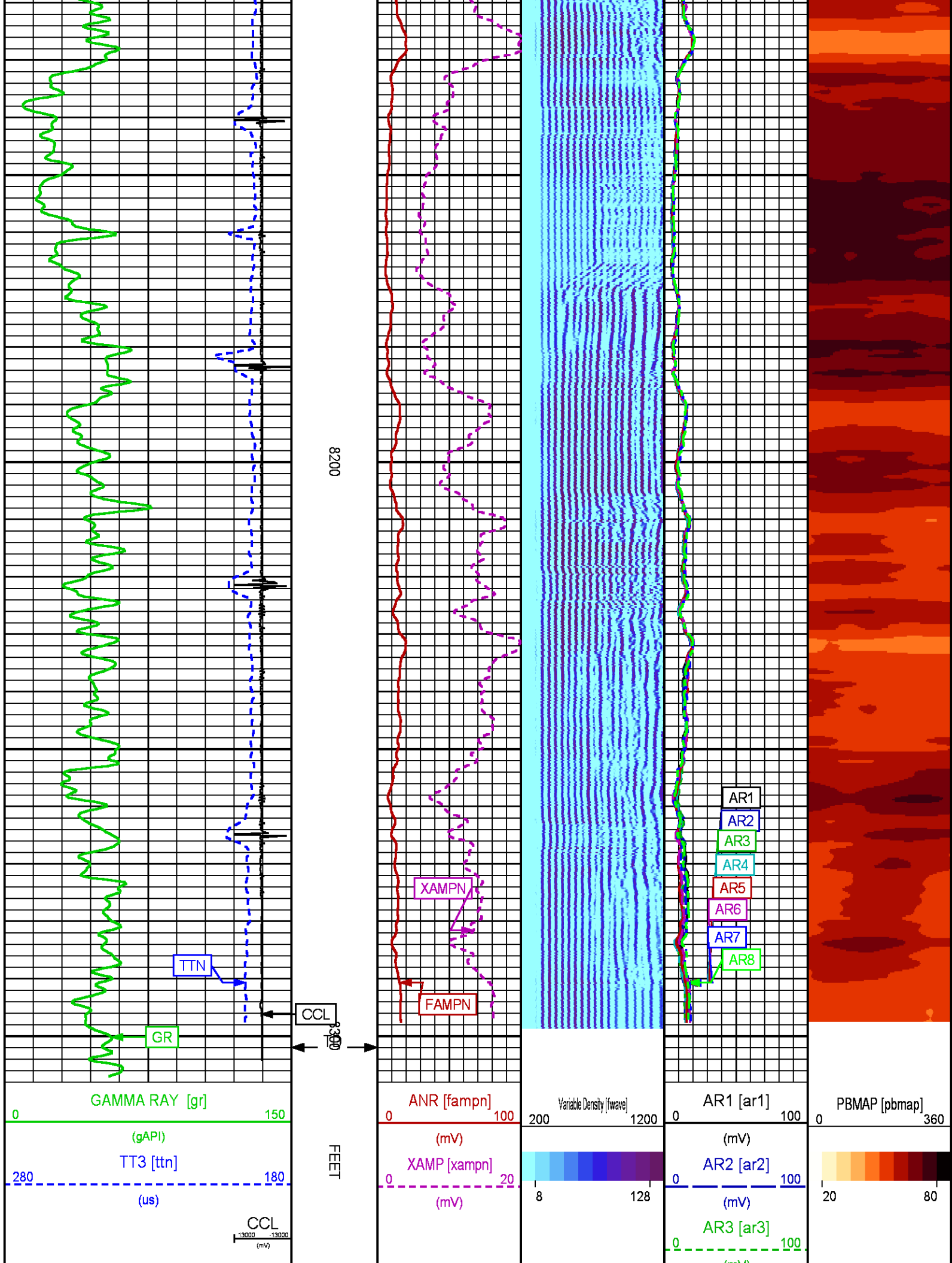


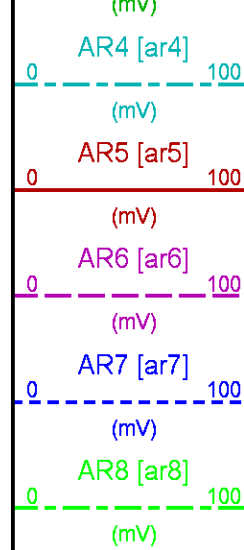












REPEAT PRESENTATION 0 PSI

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

Updates: 1 Patches: 6

Plotted: Fri Jan 22 08:34:26 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH101518/n012g01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 8018.000 ft BOTTOM DEPTH: 8312.250 ft

SYMMETRIC FILTER

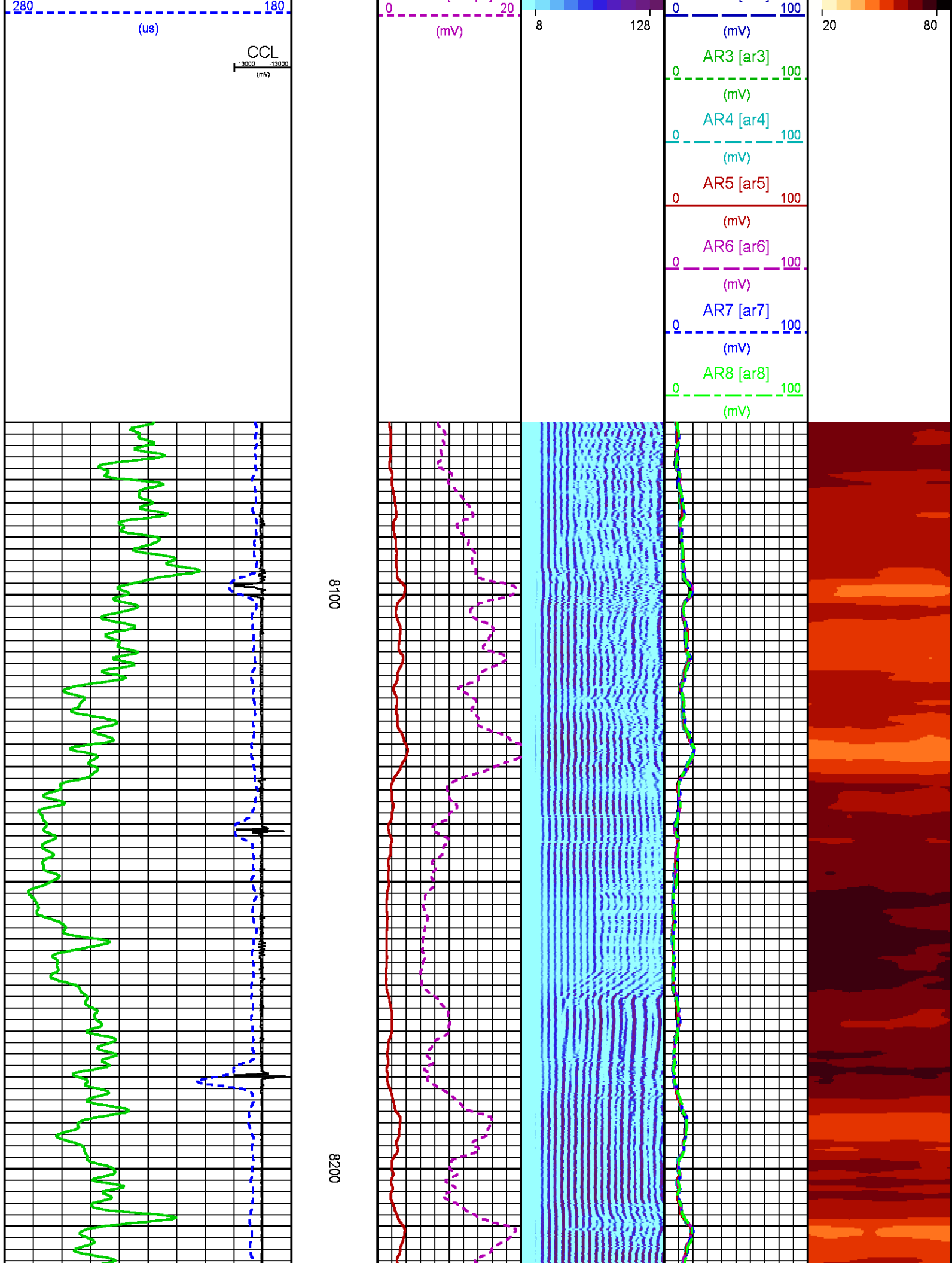
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
TRAVEL TIME	FILTER ()	medium (1)		"	"

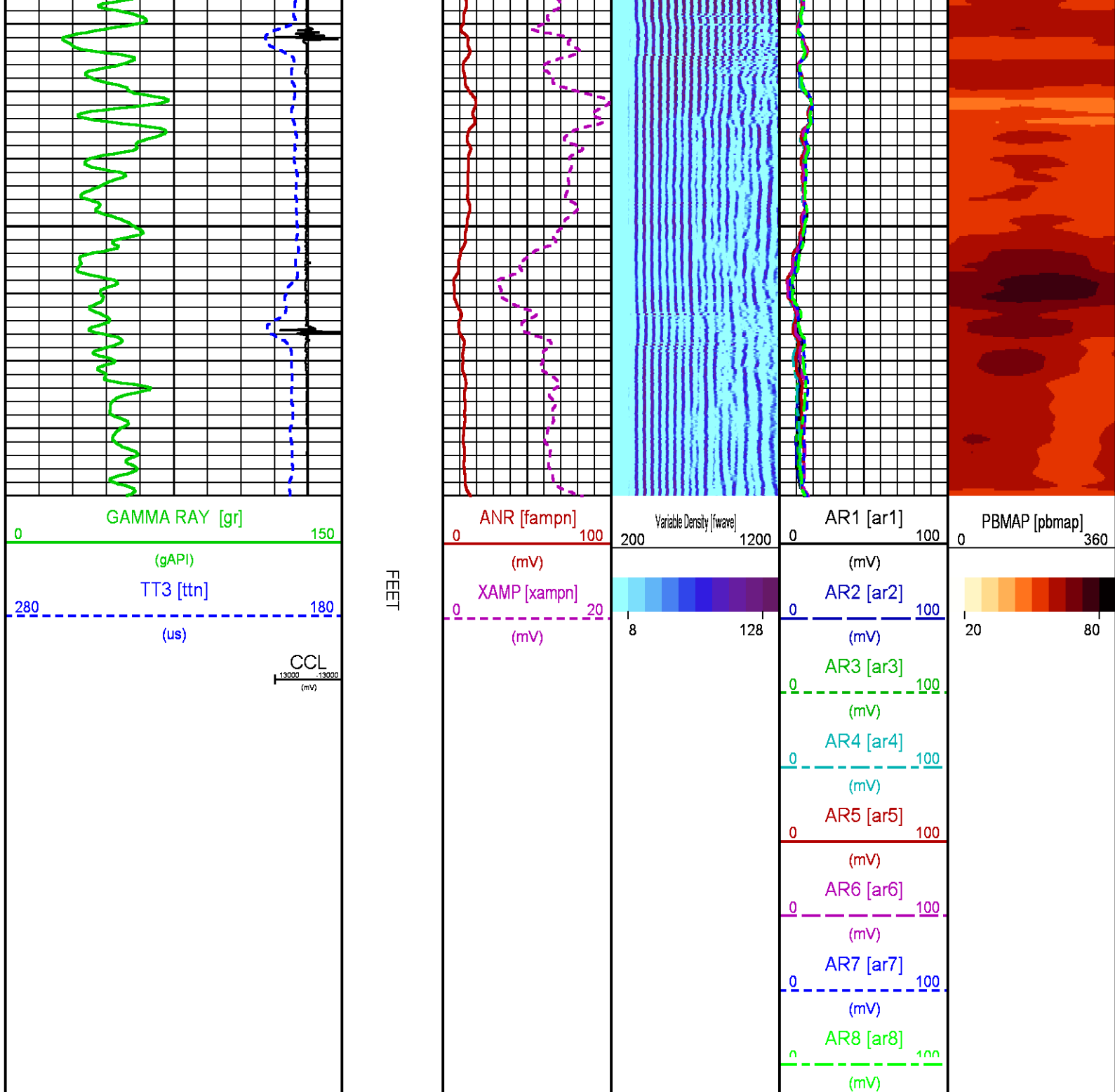
RAL CCL PROCESSING

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	"	"
TRAVEL TIME WINDOW (NEAR)	AMP WINDOW LENGTH	25	us	"	"
	TT WINDOW START (ttn*)	174	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*)	-73	us	"	"
	TOOL DELAY (str2*)	73	us	"	"





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH101518/n012g.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10124106

DATE/TIME PERFORMED: Thu Jan 21 07:52:18 2016

UNIT #: 3880TA HL6670

NEAR
(mV)

RADIAL
(mV)

FAR
(mV)

TARGETS (mV) (mV) (mV)

100.00

100.00

150.00

	NEAR	R1	R2	R3	R4	R5	R6	R7	R8	FAR	CAL
ZERO (mV)	-0.37	-0.69	-0.36	-0.29	-0.69	-0.42	-0.40	-0.49	-0.44	-0.84	-0.40
AMP FLUID (mV)	96	96	96	96	97	96	96	97	97	134	95
TT (us)	217	217	217	216	216	216	216	216	218	324	217
M FACTOR	1.04	1.03	1.04	1.04	1.03	1.03	1.03	1.03	1.03	1.11	1.05

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10124106 DATE/TIME PERFORMED: Fri Jan 22 07:57:22 2016 DAYS SINCE CAL: 1

UNIT #: 3880TA HL6670 CABLE #: 6670SM SMALL1

	NEAR (mV)	R1 (mV)	R2 (mV)	R3 (mV)	R4 (mV)	R5 (mV)	R6 (mV)	R7 (mV)	R8 (mV)	FAR (mV)	CAL (mV)
ZERO	0.15	0.03	-0.00	0.00	0.00	-0.02	-0.04	-0.02	-0.01	-0.15	-0.01
AMP AIR	-0.79	-0.86	-0.83	-0.73	-0.89	-0.62	-0.71	-0.56	-0.62	-0.33	99.41

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
1.05	0.00	1.01

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 11871506 DATE/TIME PERFORMED: Thu Jan 14 08:45:06 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	34.13	202.49	168.4	0.891	30.41	180.41	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 11871506 DATE/TIME PERFORMED: Thu Jan 14 08:46:09 2016

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

	BACKGROUND (cts)	CALBRTR ON (cts)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	34.18	205.20	0.891	30.45	182.83	152.38
						140.00 160.00

TEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 11871506 DATE/TIME PERFORMED: Sun Nov 15 14:02:37 2015

UNIT #: 3880TA HL6670

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Temp	0.000000E+00	1.000000E-01	0.000000E+00	0.000000E+00

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH101518/CBL-tdg

A3 CABLEHEAD

Diameter : 1.37"

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

TOTAL LENGTH: 18.85'
TOTAL WEIGHT: 227 lbs
MAX DIAMETER: 0'4.00"

18.85'

NEAR RCVR 11.17'

FAR RCVR 10.21'

CCL 5.79'

GR 1.67'

TEMP 0.17'



COMPANY
WELL
FIELD

LARAMIE ENERGY
PICEANCE FEDERAL 28-13E
VEGA

FILE NO:
CH101518
API NO:



COUNTY <u>MESA</u> STATE <u>CO</u>		APPROX: <u>05077102490000</u>
LOCATION: SHL: 2042' FSL & 2489' FWL BHL: 2113' FSL & 877' FEL	ELEVATIONS: KB 7704 FT DF GL 7682 FT	28 9S 93W 28-10 PAD PATTERSON 306
	SEC <u>28</u> TWP <u>9S</u> RGE <u>93W</u>	DATE <u>22-JAN-2016</u>