

Company: **SANDRIDGE ENERGY**

Well: **BASCOM FARMS 3408 1-4H33**

Field: **WHARTON**

County: **HARPER**

State: **KANSAS**

**ARRAY INDUCTION
GAMMA RAY
MEMORY LOG**

County: HARPER
Field: WHARTON
Location: 150' FNL & 740' FEL
Well: BASCOM FARMS 3408 1-4H33
Company: SANDRIDGE ENERGY

150' FNL & 740' FEL

Elev.: K.B. 1355.00 ft
G.L. 1337.00 ft
D.F. 1355.00 ft

Permanent Datum: _____ GROUND LEVEL
Log Measured From: D.F. _____ Elev.: 1337.00 ft
Drilling Measured From: D.F. _____ 18.00 ft above Perm. Datum

API Serial No. 15077221470100	Section 9	Township 34N	Range 8W
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Logging Date	14-Jun-2015		
Run Number	1		
Depth Driller	14670 ft		
Schlumberger Depth	14660 ft		
Bottom Log Interval	14650 ft		
Top Log Interval	5142 ft		
Casing Driller Size @ Depth	7.000 in @		5146 ft
Casing Schlumberger	5142 ft		
Bit Size	6.125 in		
Type Fluid In Hole	BRINE		
Density	8.4 lbm/gal	26 s	
Fluid Loss	99 cm3	7.3	
Source Of Sample	MUD SENSOR		
RM @ Measured Temperature	0.480 ohm.m	@	65 degF
RMF @ Measured Temperature	0.410 ohm.m	@	65 degF
RMC @ Measured Temperature	0.550 ohm.m	@	65 degF
Source RMF	CALCULATED	CALCULATED	
RM @ MRT	0.248 @	132	0.212 @
Maximum Recorded Temperatures	132 degF	@	
Circulation Stopped	Time	14-Jun-2015	3:15
Logger On Bottom	Time	14-Jun-2015	4:18
Unit Number	Location	4	OKC
Recorded By	C.PARKER		
Witnessed By	J.PARSLEY		

Logging Date	Run 1	Run 2	Run
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth			
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature			
RMF @ Measured Temperature			
RMC @ Measured Temperature			
Source RMF			
RM @ MRT			
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1
 OS1: TBI-TBD-TBN-TMG
 OS2:
 OS3:
 OS4:
 OS5:

OTHER SERVICES2
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:

REMARKS: RUN NUMBER 1
 SERVICE:HORIZONTAL PUMP DOWN MEMORY BIT DEPTH: 14584' LOGGED TO: 3000'
 ALL SCALES AND PRESENTATIONS PER CLIENT REQUEST
 LIMESTONE MATRIX 2.71 g/cc USED FOR POROSITY MEASUREMENTS
 TOOLSTRING RAN WITH SWIVEL AND SMALL DE-CENTRALIZER
 TBHV REPRESENTS TOTAL BOREHOLE VOLUME, ft3
 ABHV REPRESENTS ANNULAR HOLE VOLUME, CALCULATED FOR 4.5" CSG, ft3
 TOTCO USED TO ACQUIRE LOG DEPTH
 LOG CORRELATED TO MWD GR
 RIG:LARIAT 20
 CREW: C.PARKER R.CRESSWELL Z.HOWARD

REMARKS: RUN NUMBER 2

RUN 1		
SERVICE ORDER #:	2122149985	
PROGRAM VERSION:	19C2-270	
FLUID LEVEL:	0 ft	
LOGGED INTERVAL	START	STOP

RUN 2		
SERVICE ORDER #:		
PROGRAM VERSION:		
FLUID LEVEL:		
LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

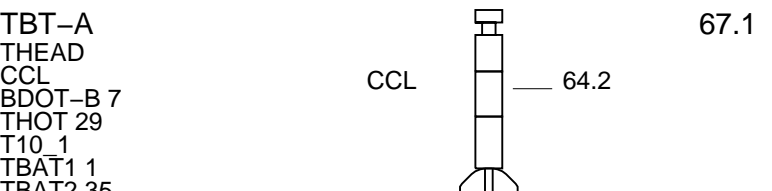
RUN 1

SURFACE EQUIPMENT

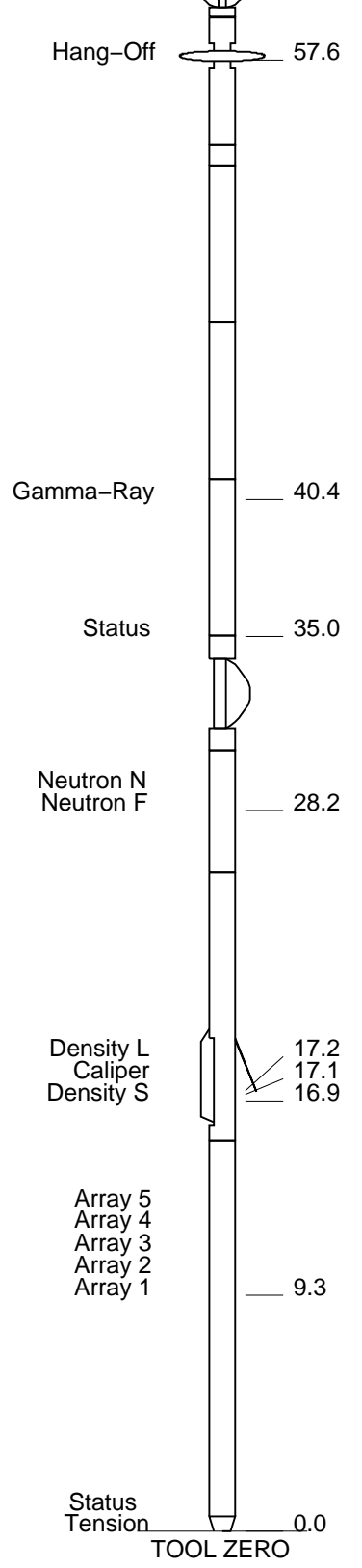
WITM (ThruBit)

RUN 2

DOWNHOLE EQUIPMENT



TMG-A 34
TILE-A
TBN-A 18
NNLS-EWA 3752
TBD-A 12
GGLS-FZ 3354
TBI-A 29



MAXIMUM STRING DIAMETER 2.13 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY

Well: BASCOM FARMS 3408 1-4H33

Input DLIS Files

ThruBit_005PUP

FN:4

14-Jun-2015 14:42 14649.0 FT

2900.5 FT

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

**Relative Bearing
(RB)**
0 (DEG) 940

gr wrap4
From LHT1 to GR4

gr wrap3
From LHT1 to GR3

gr wrap2
From LHT1 to GR2

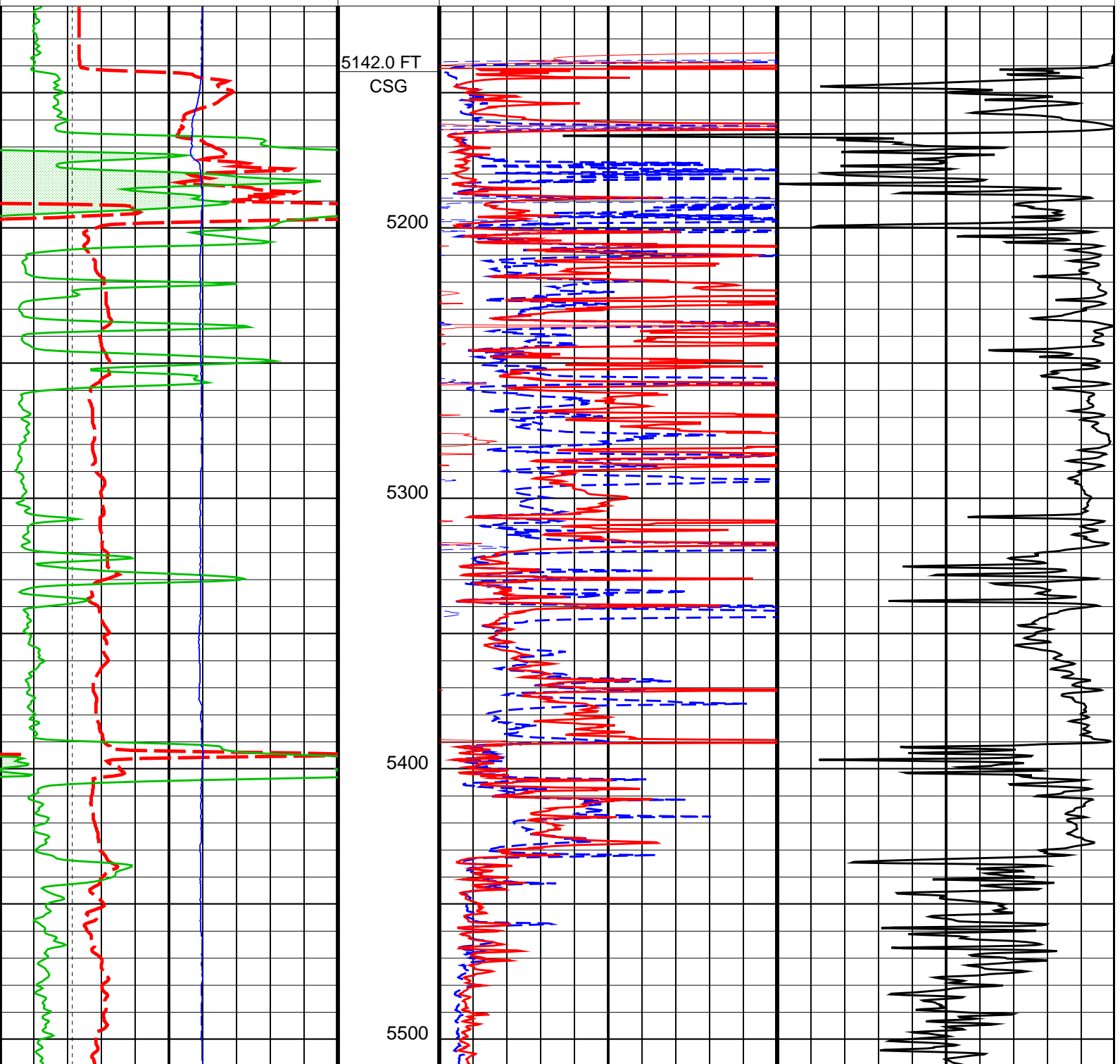
gr wrap1
From LHT1 to GR1

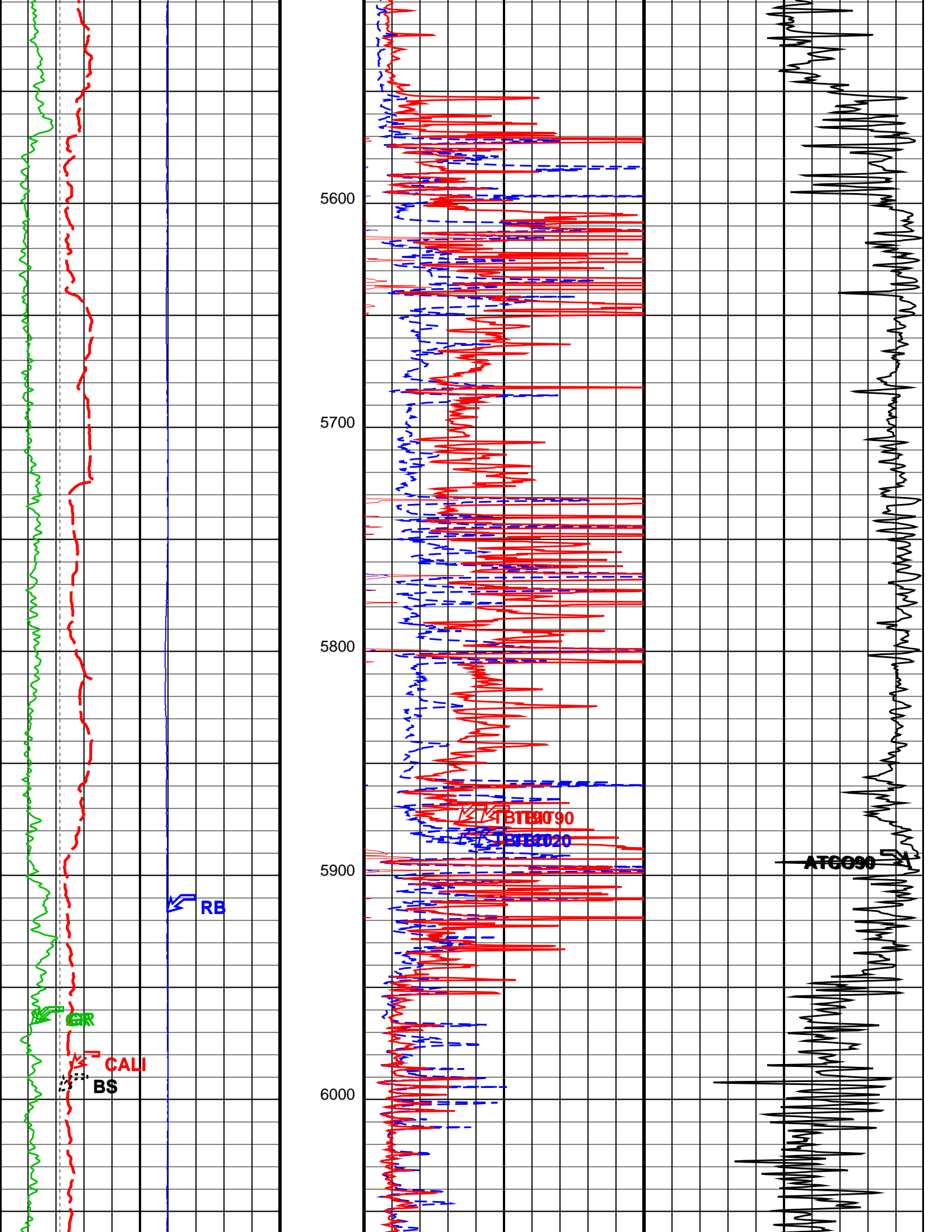
Caliper (CAL)

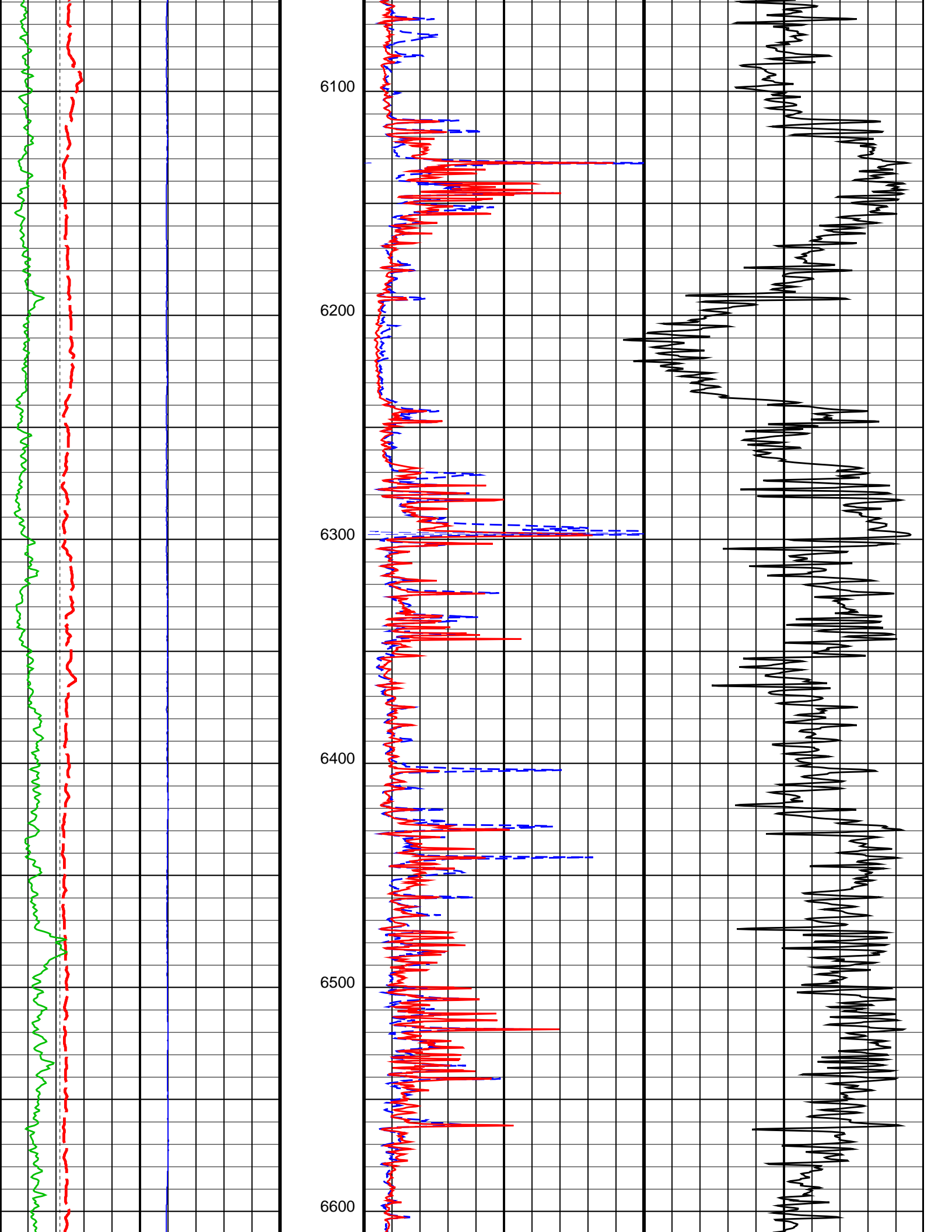
Caliper (CALI)		
4	(IN)	14
Gamma Ray 4 (GR)		
600	(GAPI)	750
Gamma Ray 3 (GR)		
450	(GAPI)	600
Gamma Ray 2 (GR)		
300	(GAPI)	450
Gamma Ray 1 (GR)		
150	(GAPI)	300
Gamma Ray (GR)		
0	(GAPI)	150
Bit Size (BS)		
4	(IN)	14

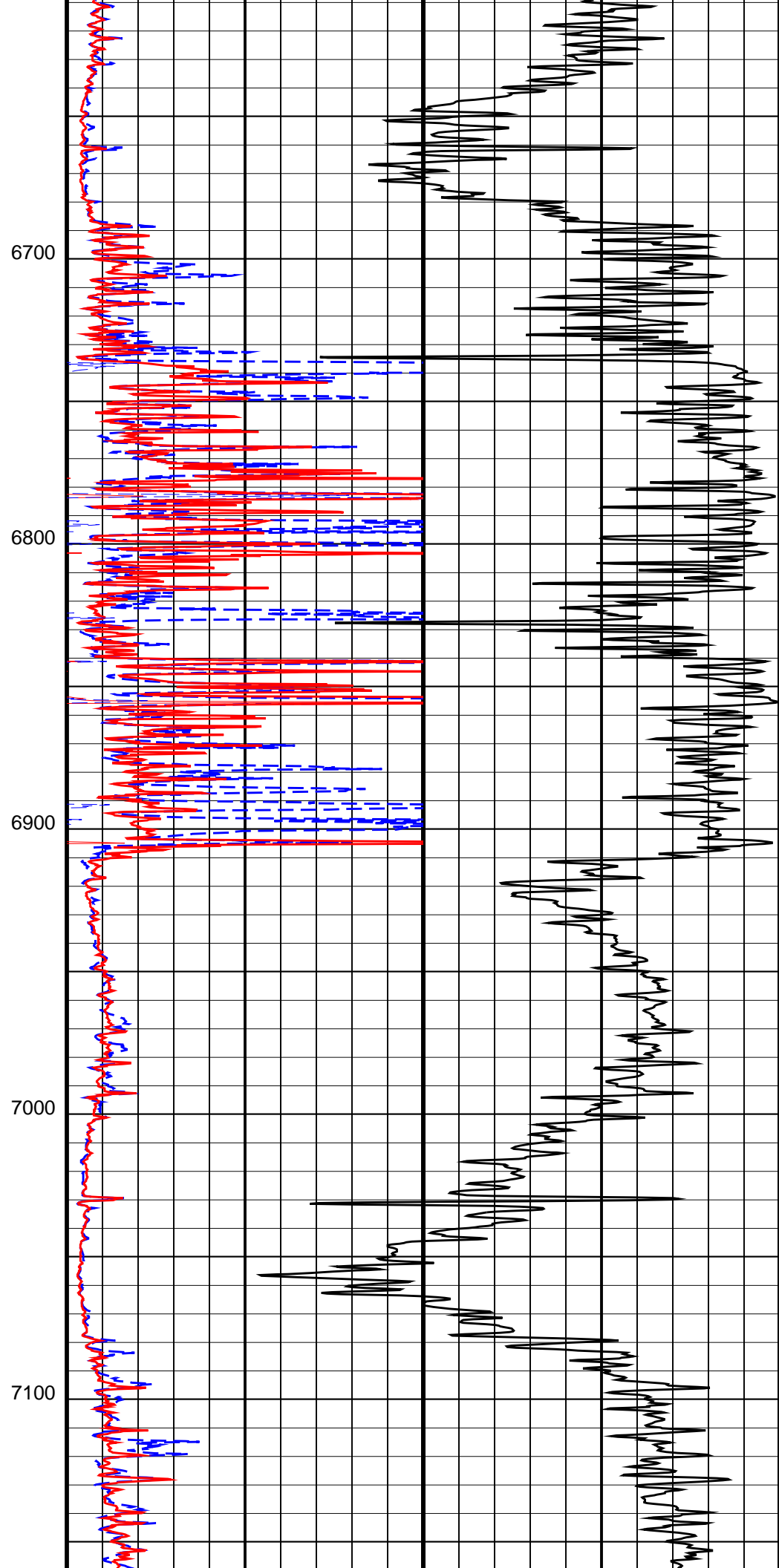
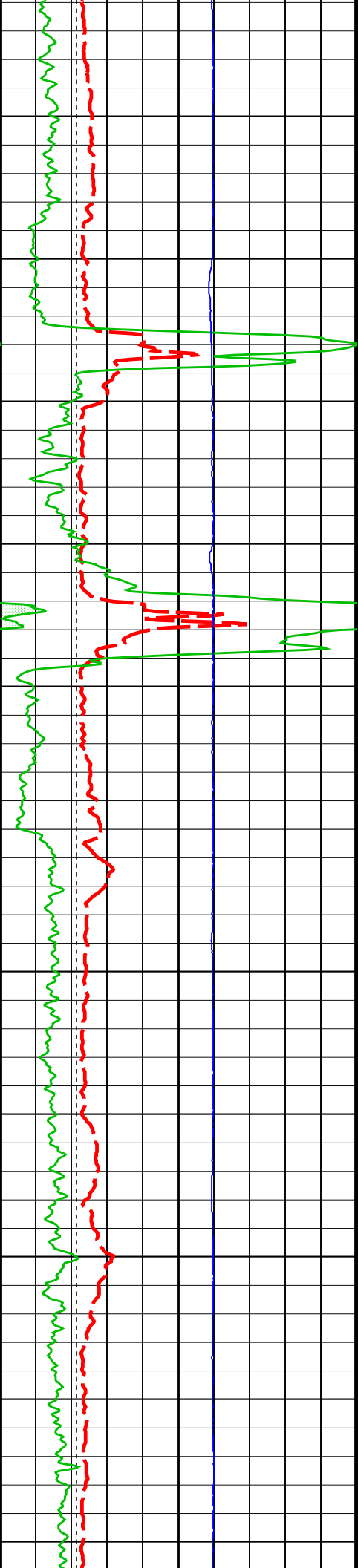
TBI 20 Inch Investigation (TBIT20)		
50	(OHMM)	500
TBI 90 Inch Investigation (TBIT90)		
50	(OHMM)	500
TBI 90 Inch Investigation (TBIT90)		
0	(OHMM)	50
TBI 20 Inch Investigation (TBIT20)		
0	(OHMM)	50

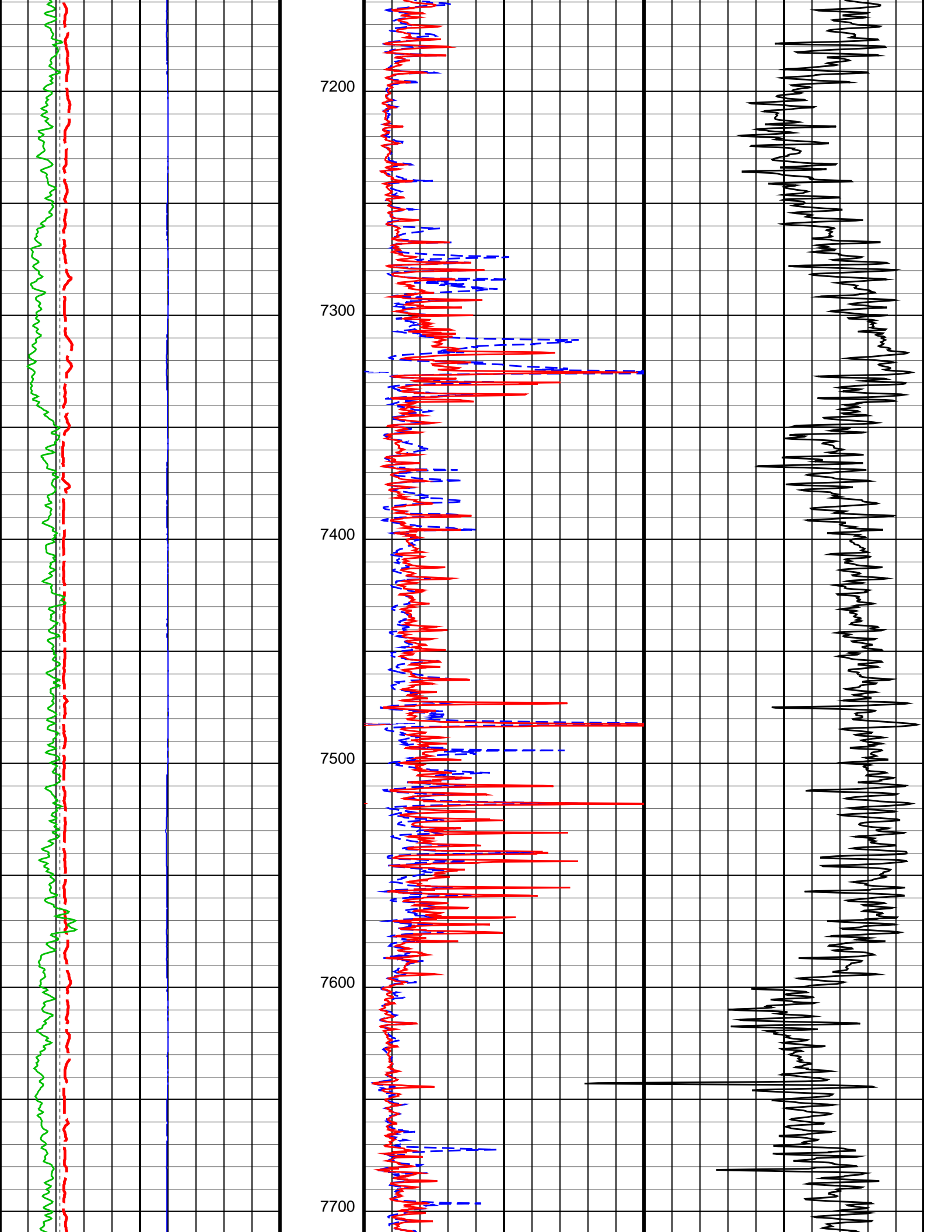
TBI 60 Inch Conductivity (ATCO90)		
1000	(MM/M)	0

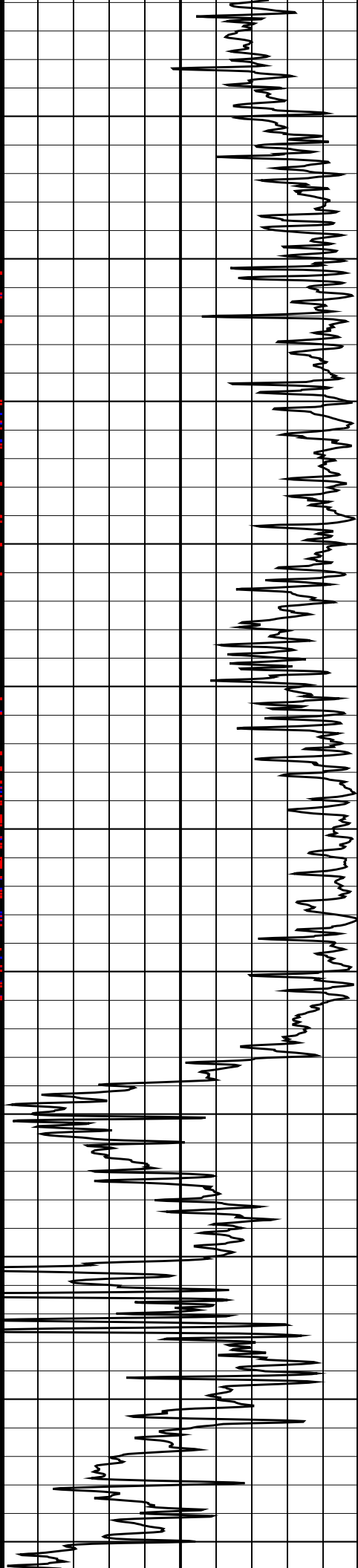
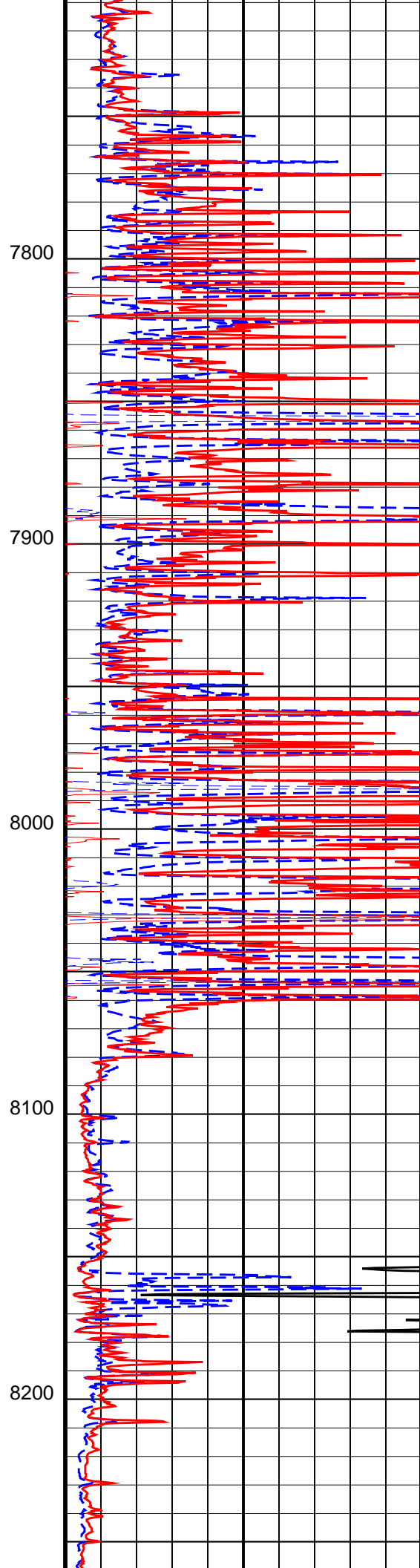
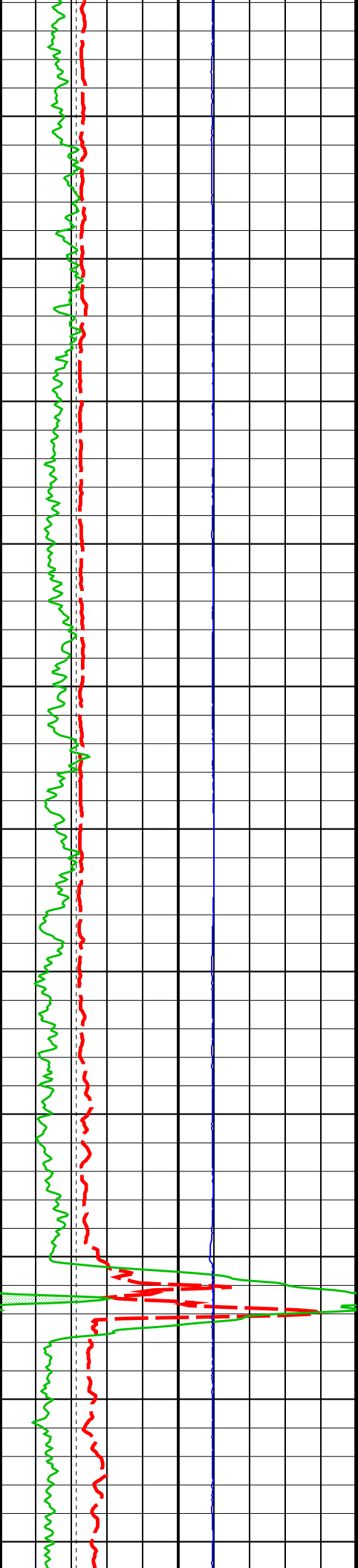


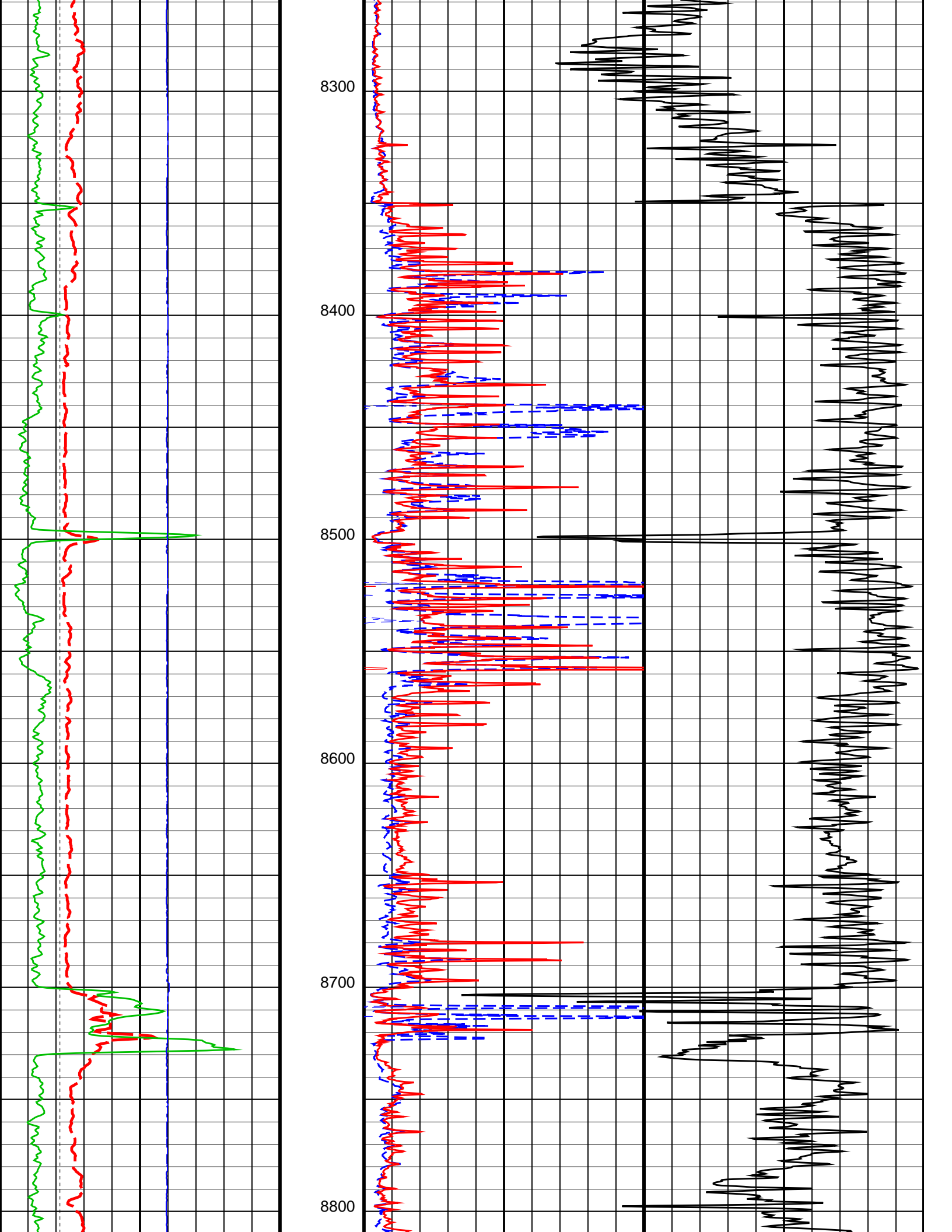


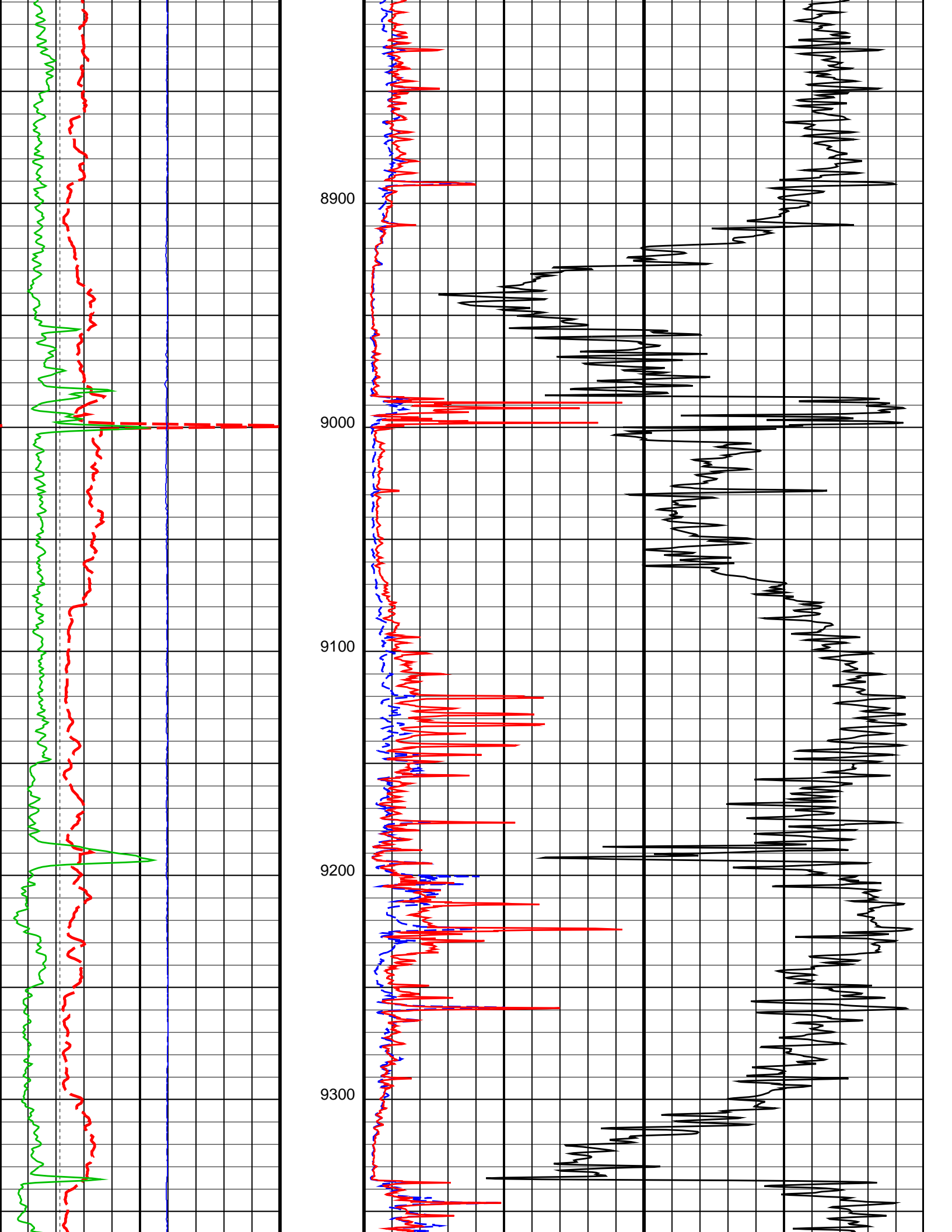


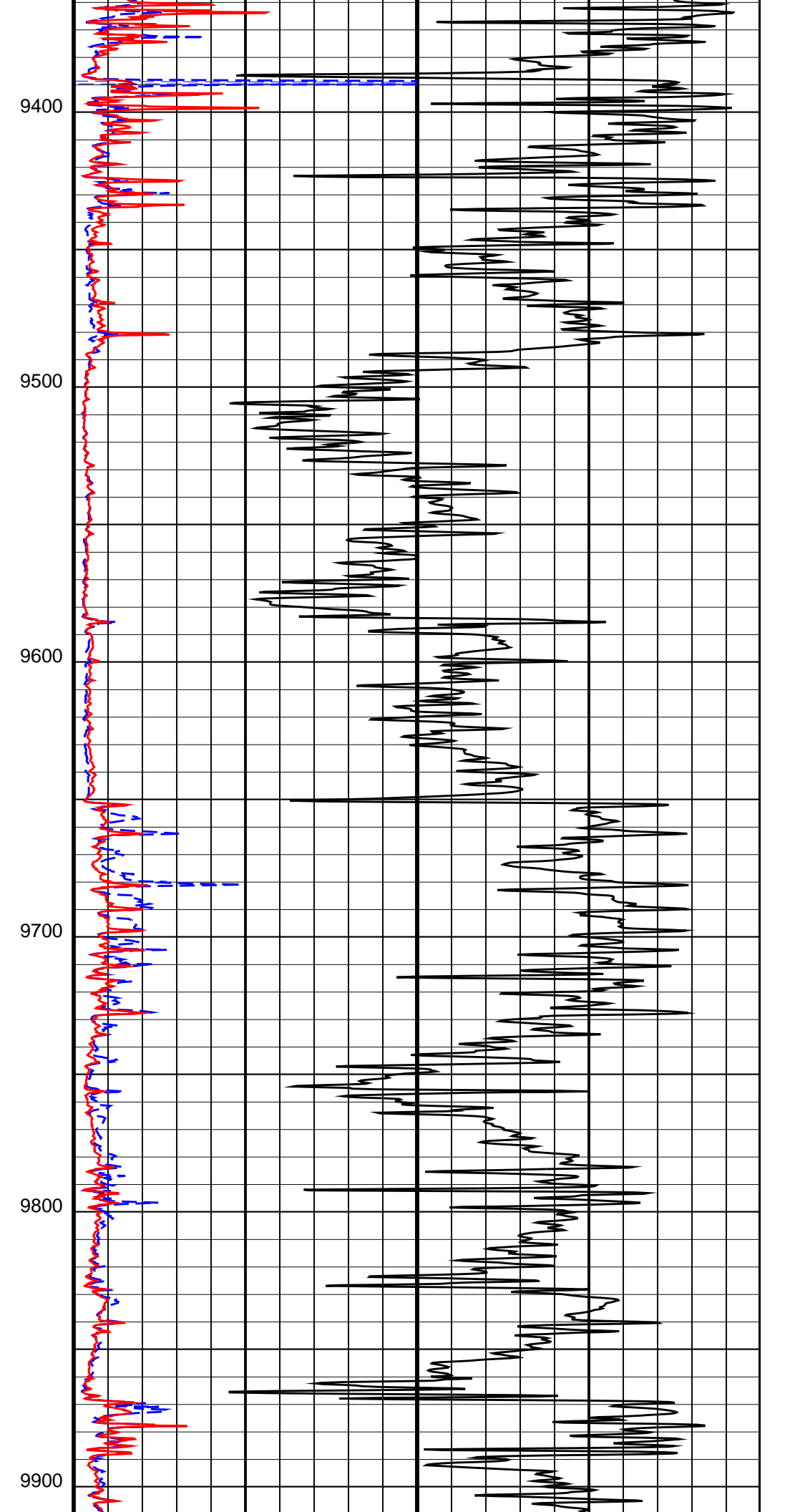
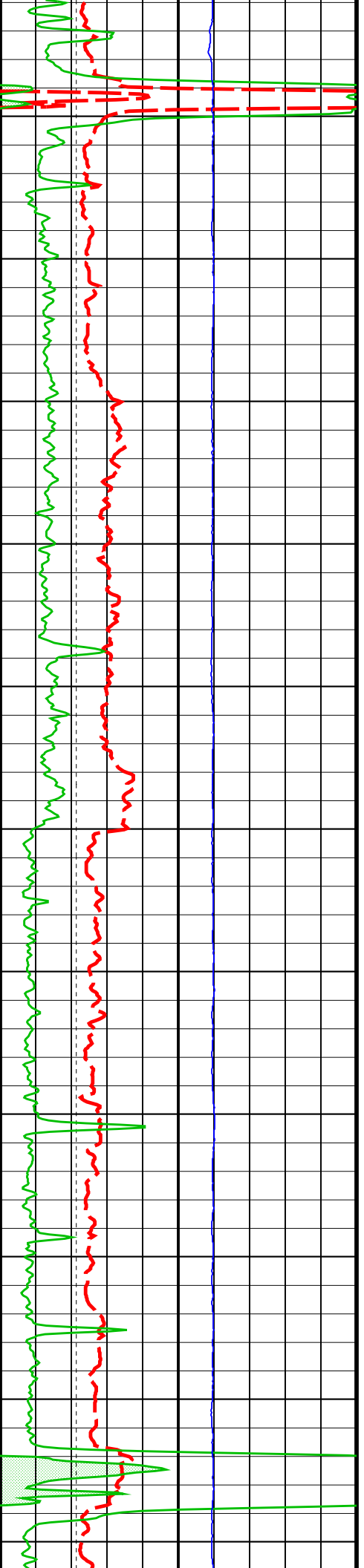


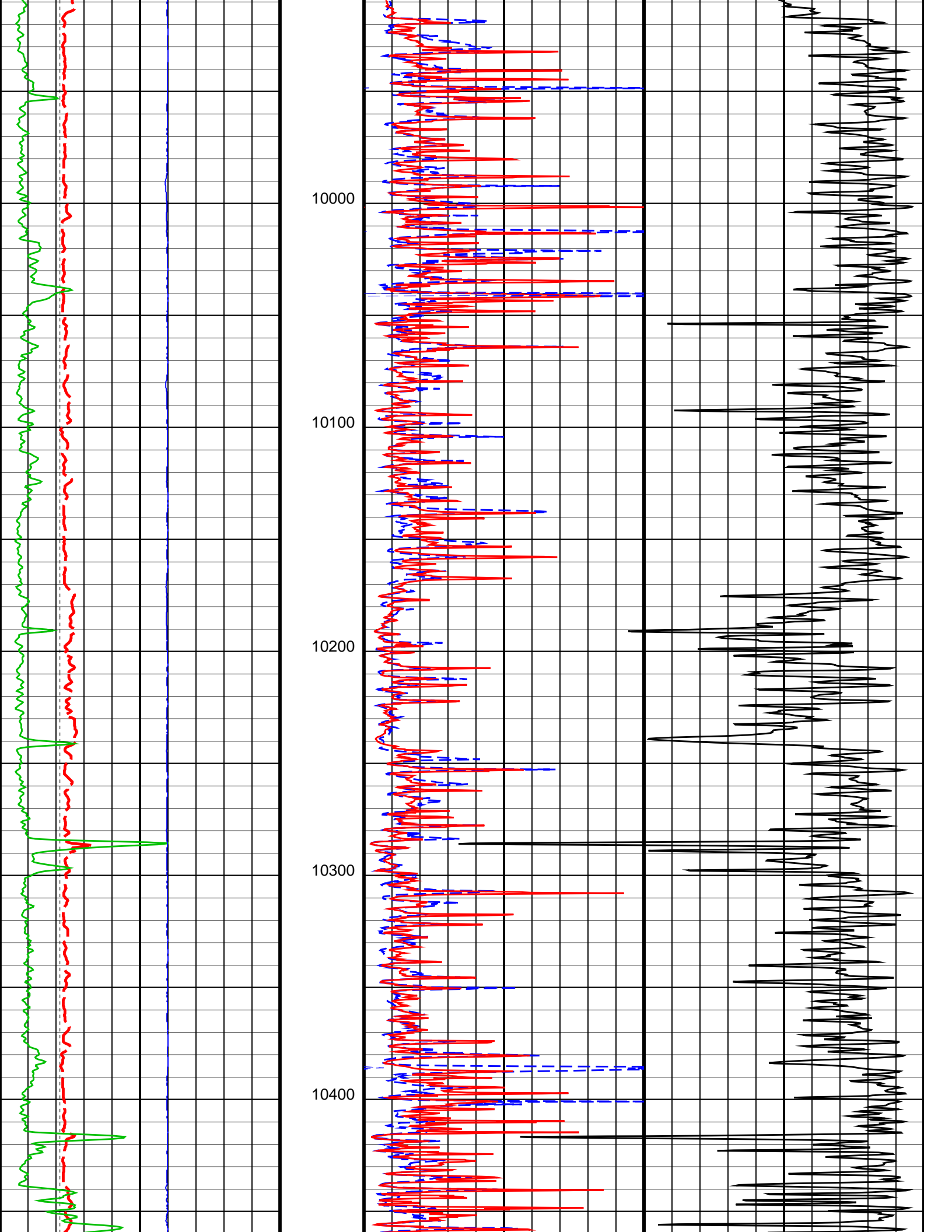


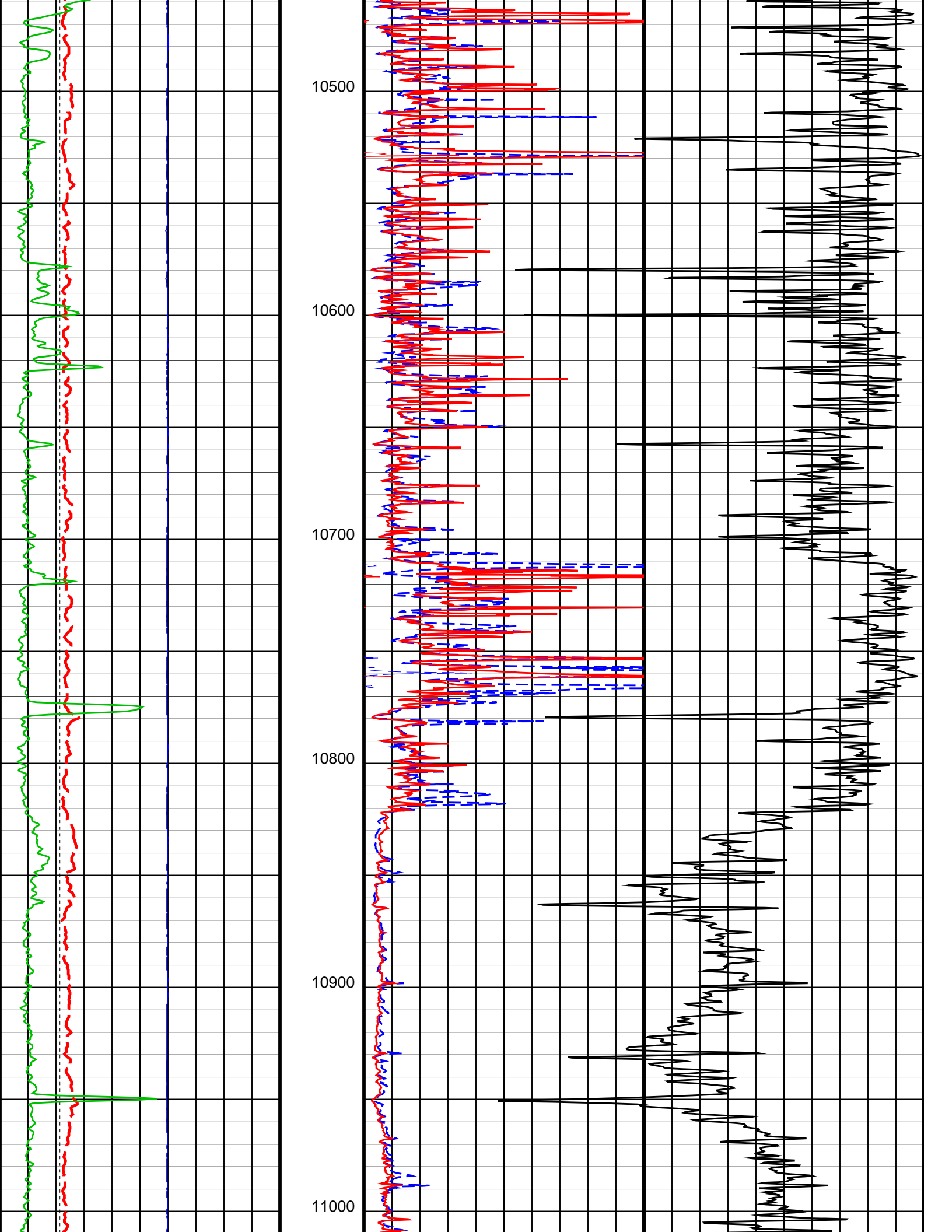


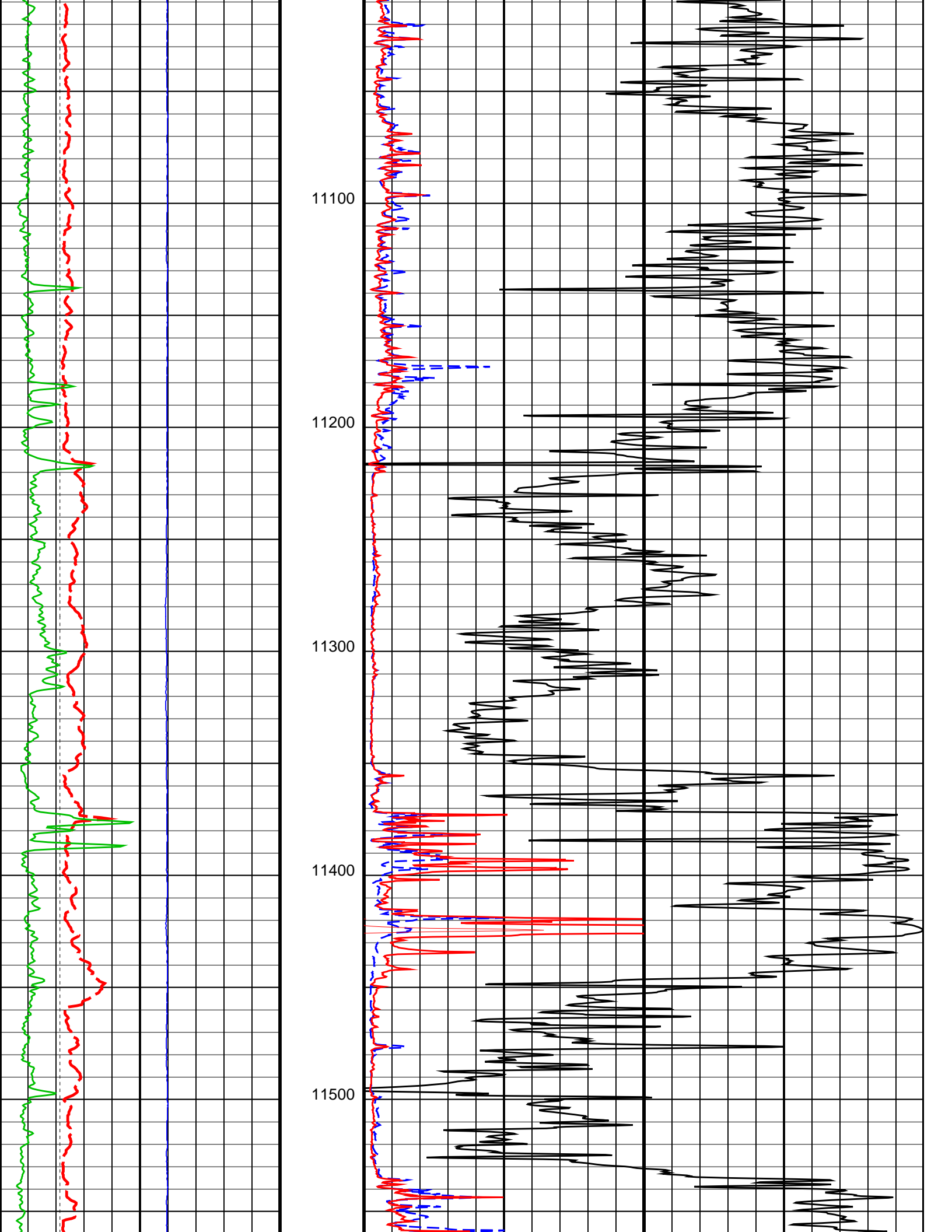


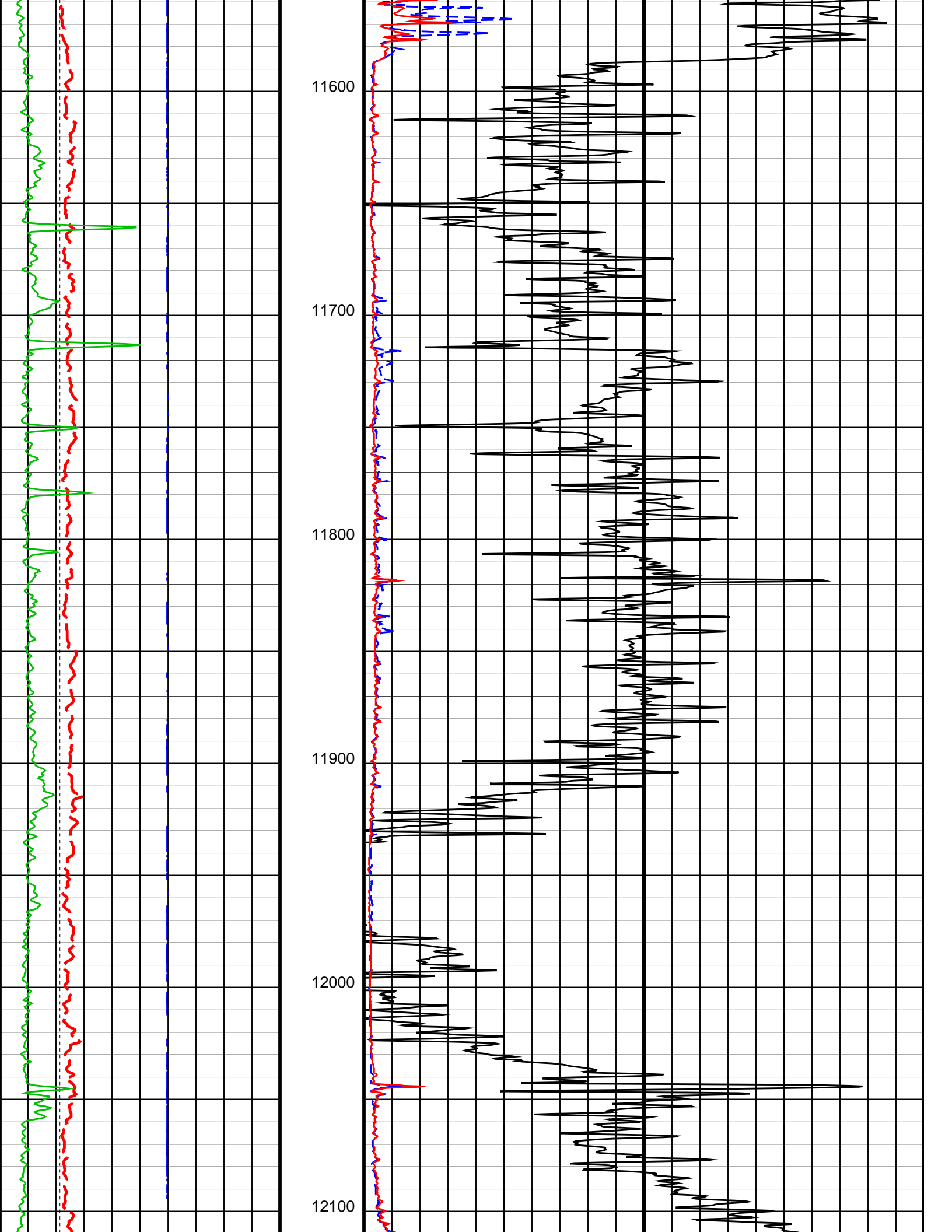


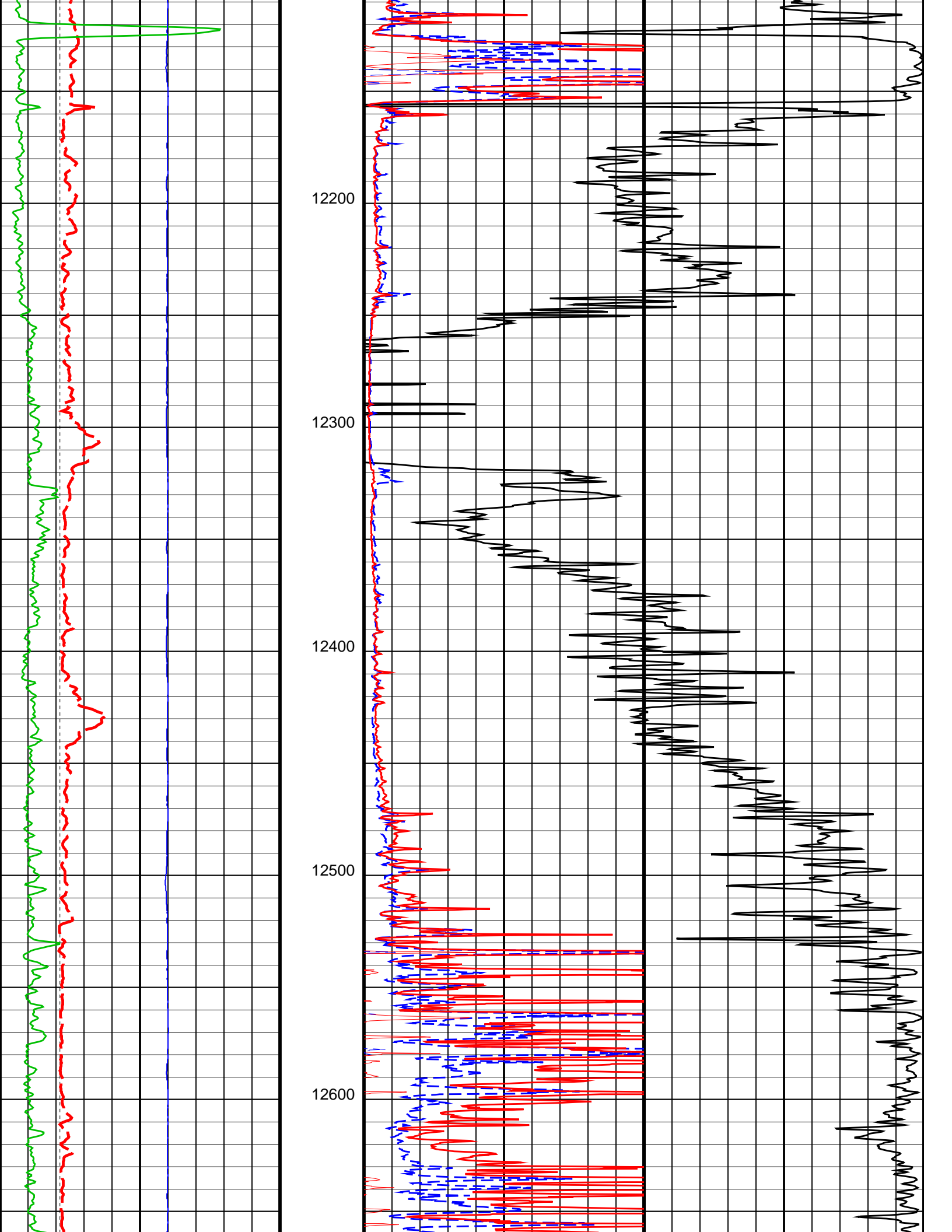


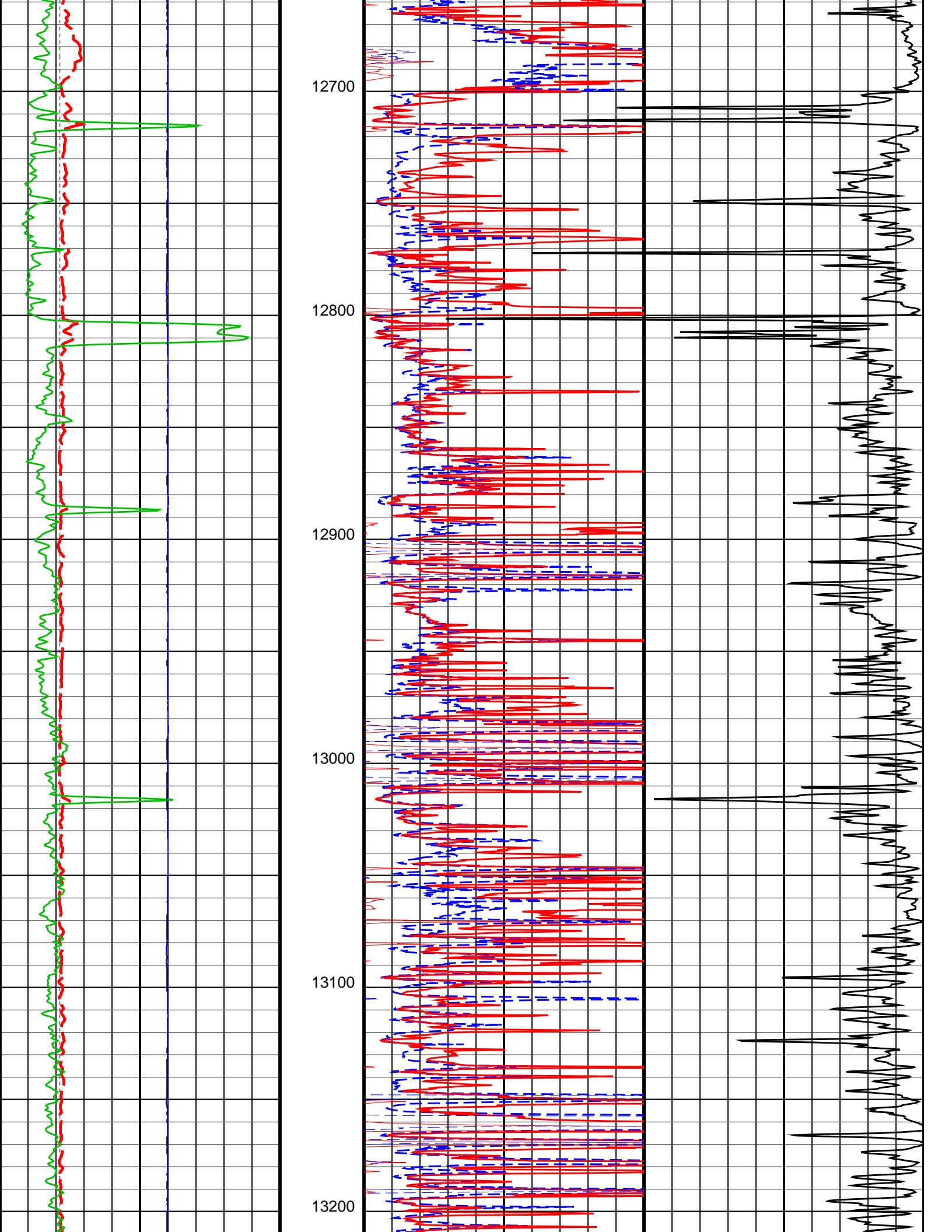


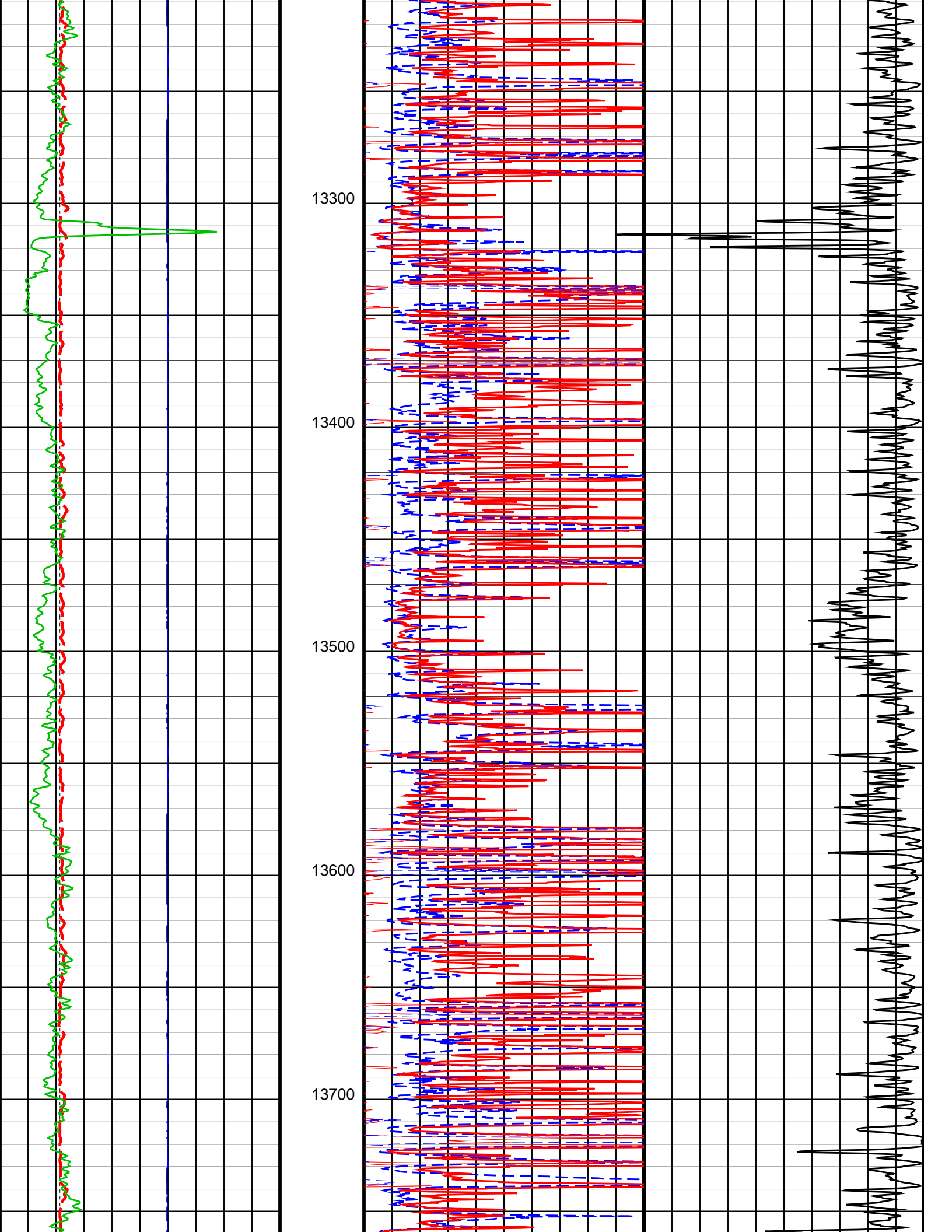


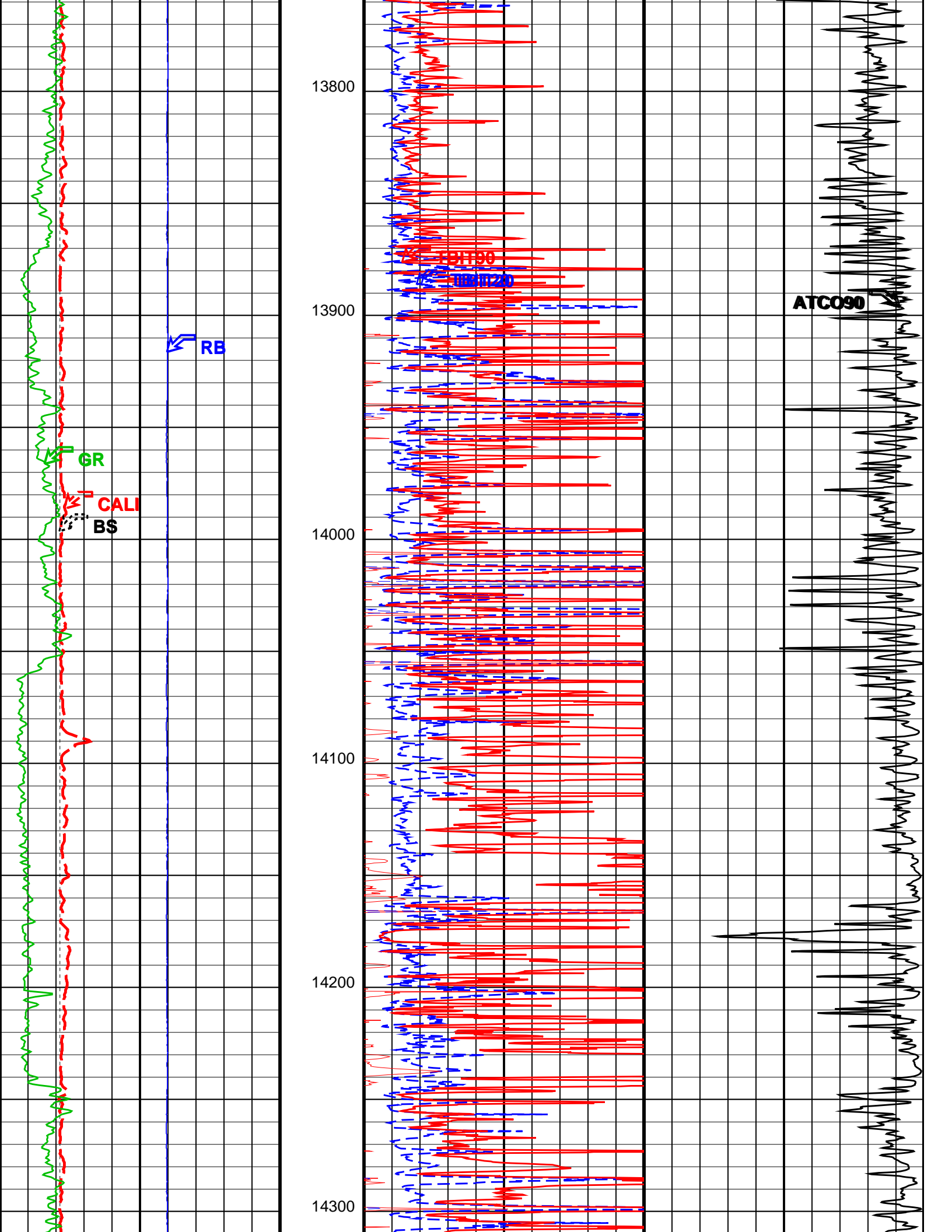


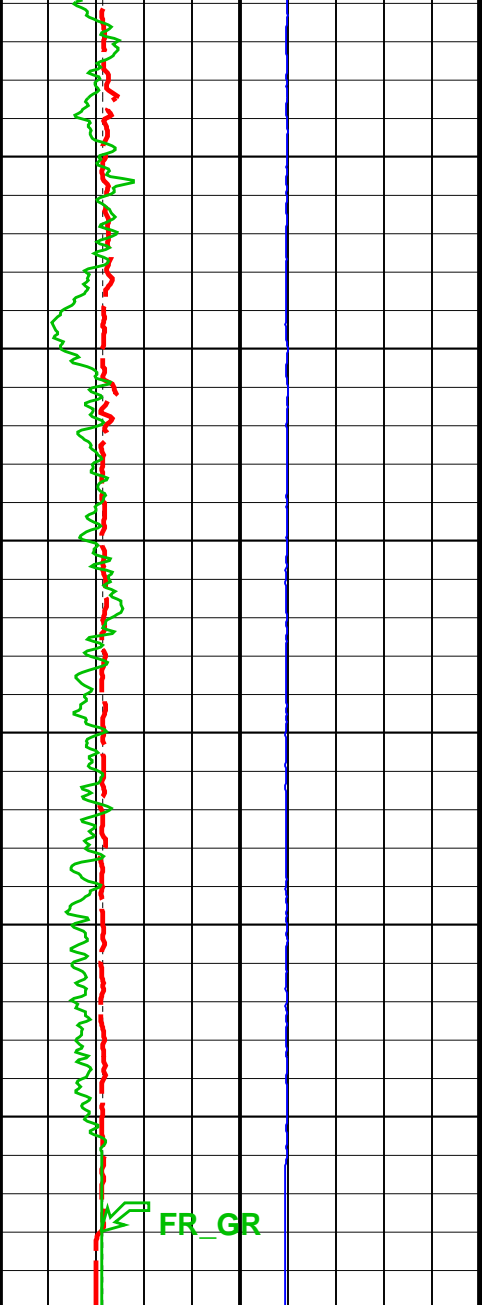




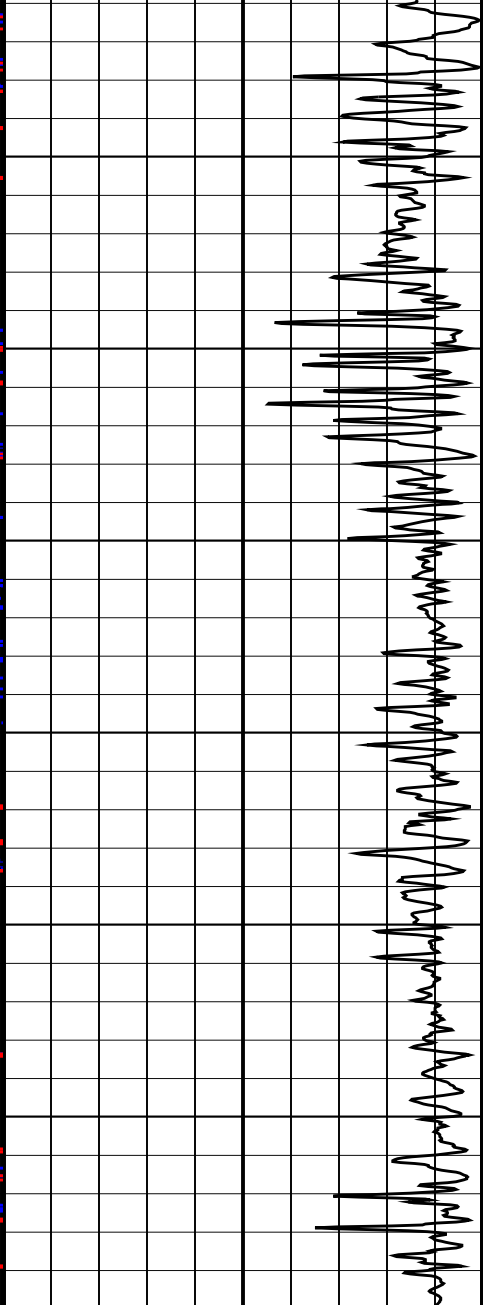
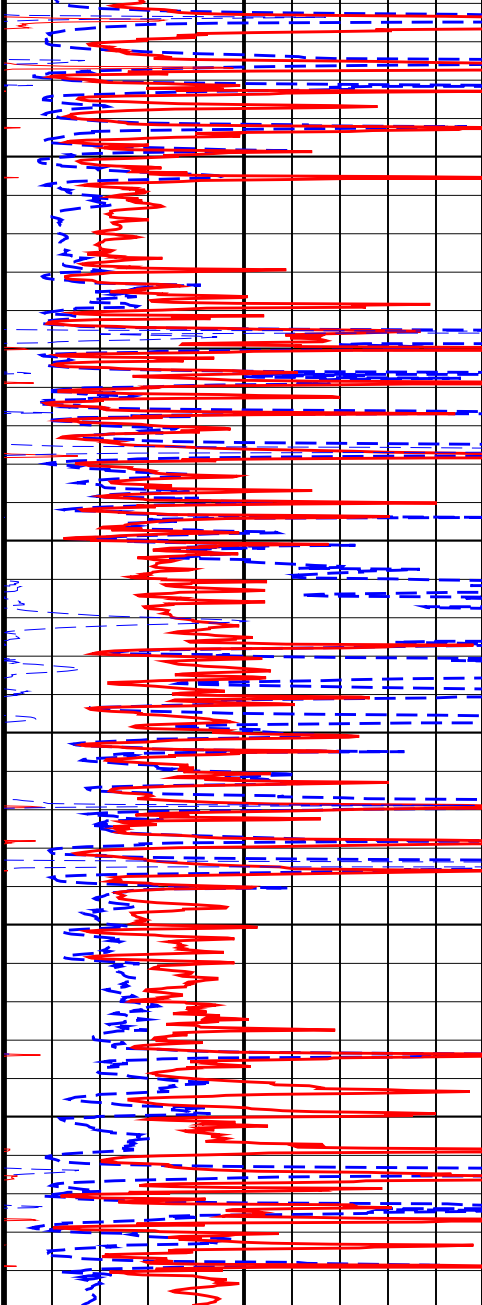








14400
14500
14600



Bit Size (BS)
(IN) 4 14

0	Gamma Ray (GR) (GAPI)	150
150	Gamma Ray 1 (GR) (GAPI)	300
300	Gamma Ray 2 (GR) (GAPI)	450
450	Gamma Ray 3 (GR) (GAPI)	600
600	Gamma Ray 4 (GR) (GAPI)	750

Caliper (CALI)
(IN) 4 14

gr wrap1
From LHT1 to GR1

gr wrap2
From LHT1 to GR2

TBI 60 Inch Conductivity (ATCO90)
(MM/M) 1000 0

0	TBI 20 Inch Investigation (TBIT20) (OHMM)	50
0	TBI 90 Inch Investigation (TBIT90) (OHMM)	50
50	TBI 90 Inch Investigation (TBIT90) (OHMM)	500
50	TBI 20 Inch Investigation (TBIT20) (OHMM)	500

gr wrap3
From LHT1 to GR3

gr wrap4
From LHT1 to GR4

Relative Bearing
(RB)
0 (DEG) 940

Parameters

DLIS Name	Description	Value
TBT-A: ThruBit String		
MT	Mud Type (for TBN and TBI correction)	WBM
RB_OFFSET	Additional RB offset (degrees)	0.000 deg
TBI_ALGO	TBI Algorithm Selection	AIT
TBI_BHC_OP	Borehole Correction Option (for TBI)	CALIPER
TBI_CALTYP	TBI Mastercal Type	THRUBIT
TBI_REPL_ARRAY_DEST	TBI: Replace This Array	NONE
TBI_REPL_ARRAY_SOURCE	TBI: With This Array	NONE
TBI_TC_OP	Induction Temperature Correction Option	LOWER
System and Miscellaneous		
BS	Bit Size	6.125 in

Format: TB_2INCH_RESISTIVITY Vertical Scale: 2" per 100' Graphics File Created: 14-Jun-2015 14:48

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

Input DLIS Files

ThruBit_005PUP FN:4 14-Jun-2015 14:42 14649.0 FT 2900.5 FT



MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY

Well: BASCOM FARMS 3408 1-4H33

Input DLIS Files

ThruBit_005PUP FN:4 14-Jun-2015 14:42 14649.0 FT 2900.5 FT

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

Relative Bearing
(RB)
0 (DEG) 940

gr wrap4
From LHT1 to GR4

gr wrap3
From LHT1 to GR3

gr wrap2
From LHT1 to GR2

gr wrap1
From LHT1 to GR1

Caliper (CALI)

4 (IN) 14

Gamma Ray 4 (GR)

600 (GAPI) 750

Gamma Ray 3 (GR)

450 (GAPI) 600

Gamma Ray 2 (GR)

300 (GAPI) 450

Gamma Ray 1 (GR)

150 (GAPI) 300

Gamma Ray (GR)

0 (GAPI) 150

Bit Size (BS)

4 (IN) 14

GR Temp (WTEP)
(DEGF)

TBI 90 Inch Investigation (TBIT90)

0.2 (OHMM) 2000

TBI 60 Inch Investigation (TBIT60)

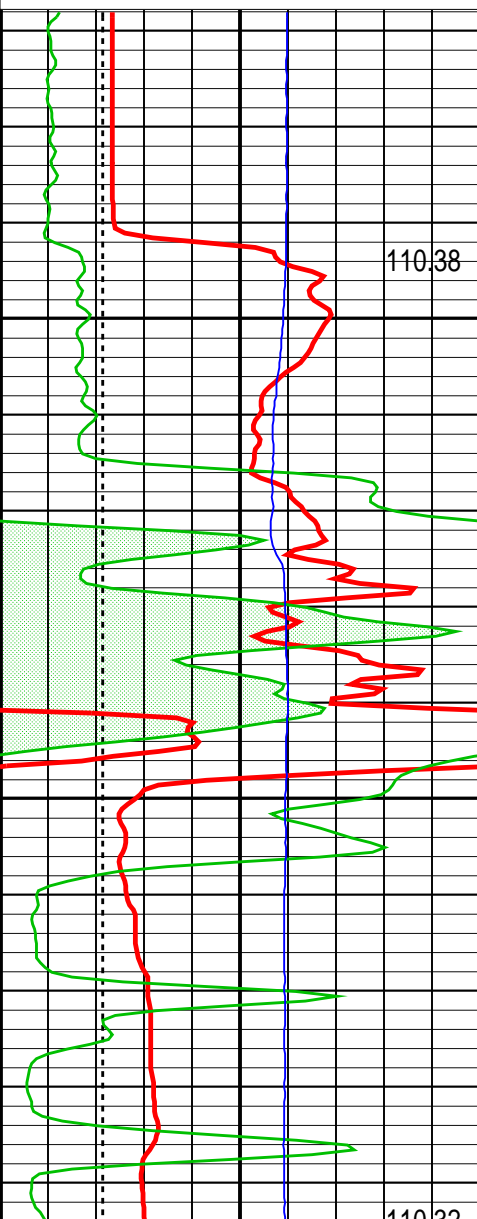
0.2 (OHMM) 2000

TBI 30 Inch Investigation (TBIT30)

0.2 (OHMM) 2000

TBI 20 Inch Investigation (TBIT20)

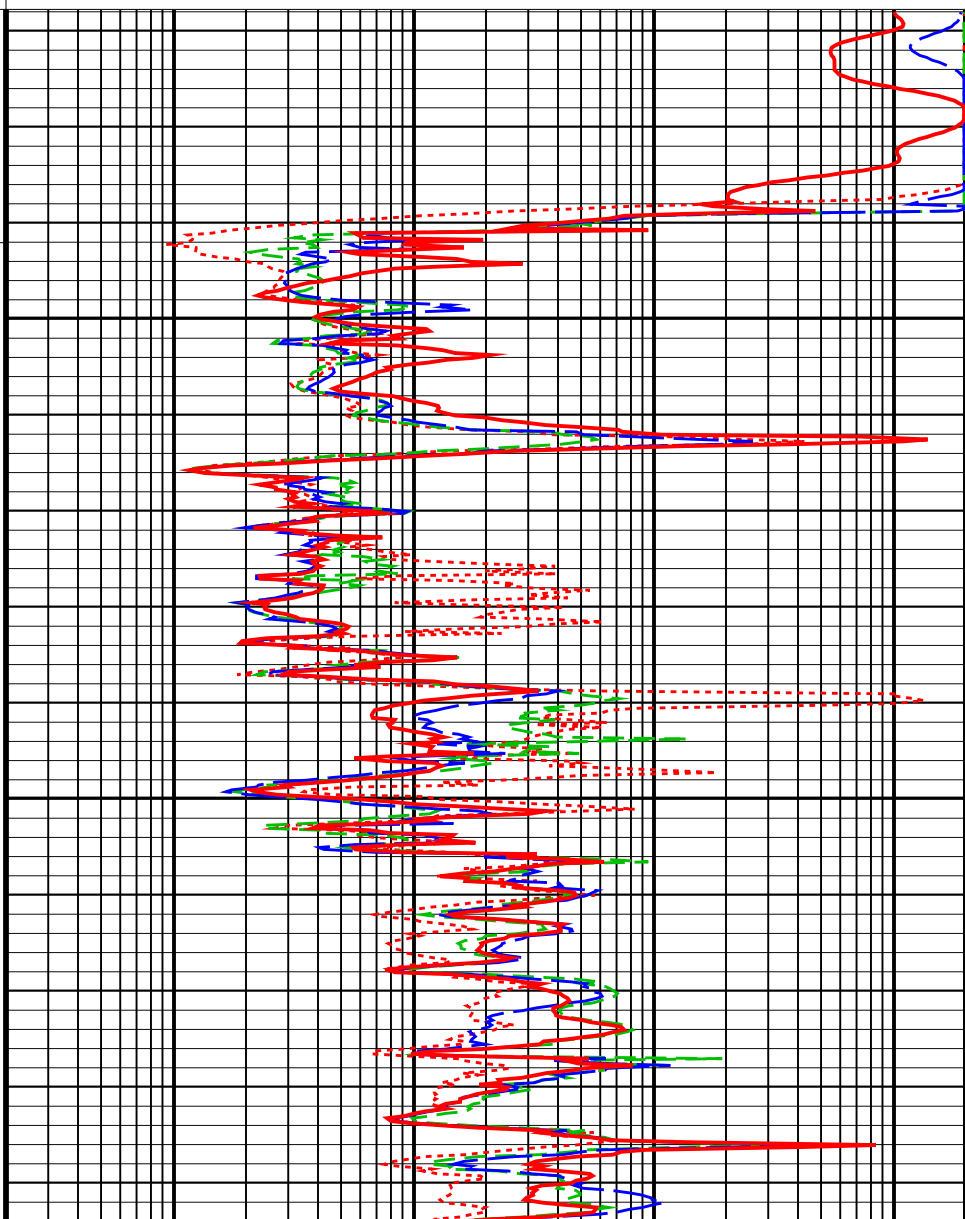
0.2 (OHMM) 2000

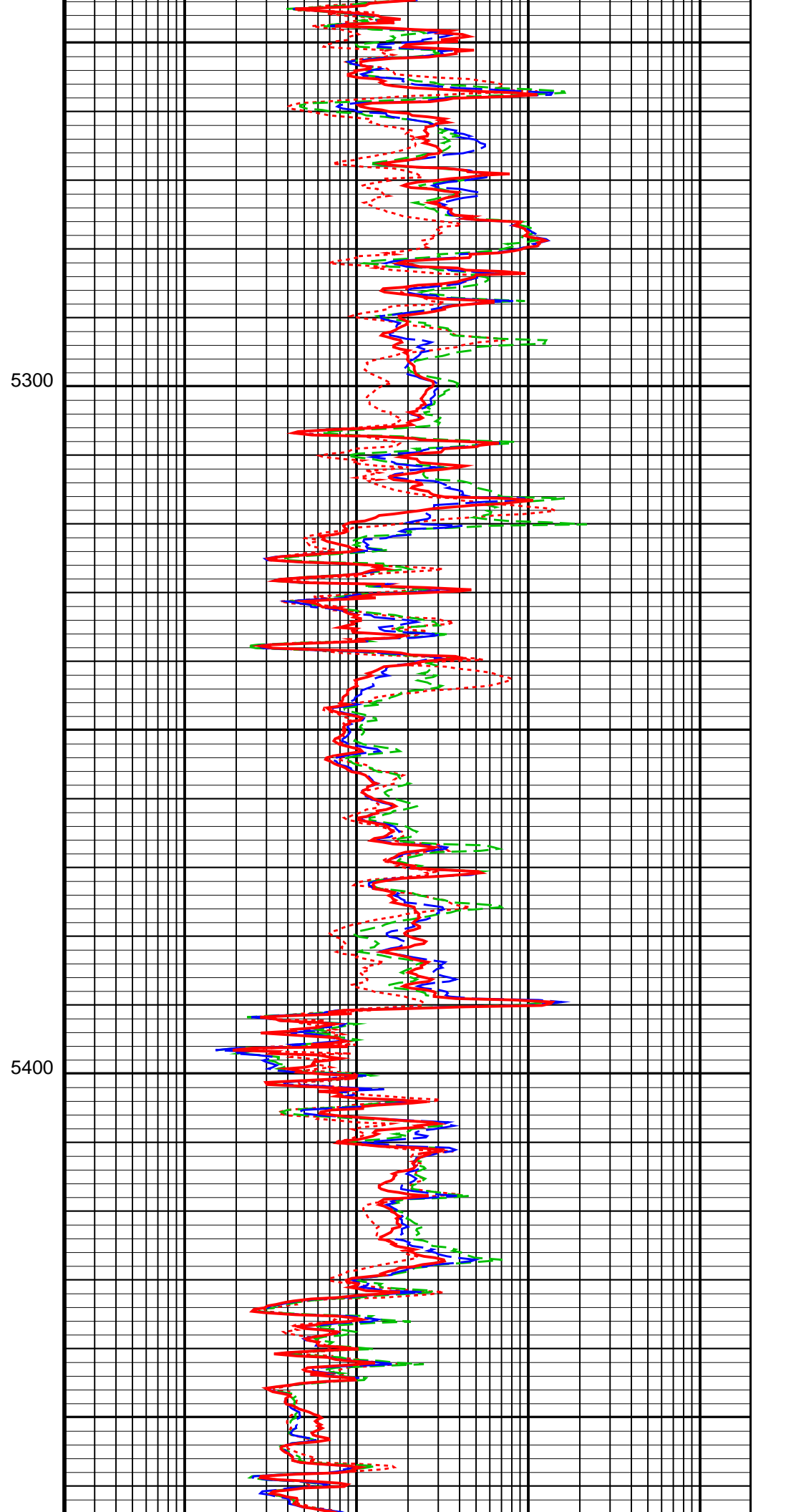
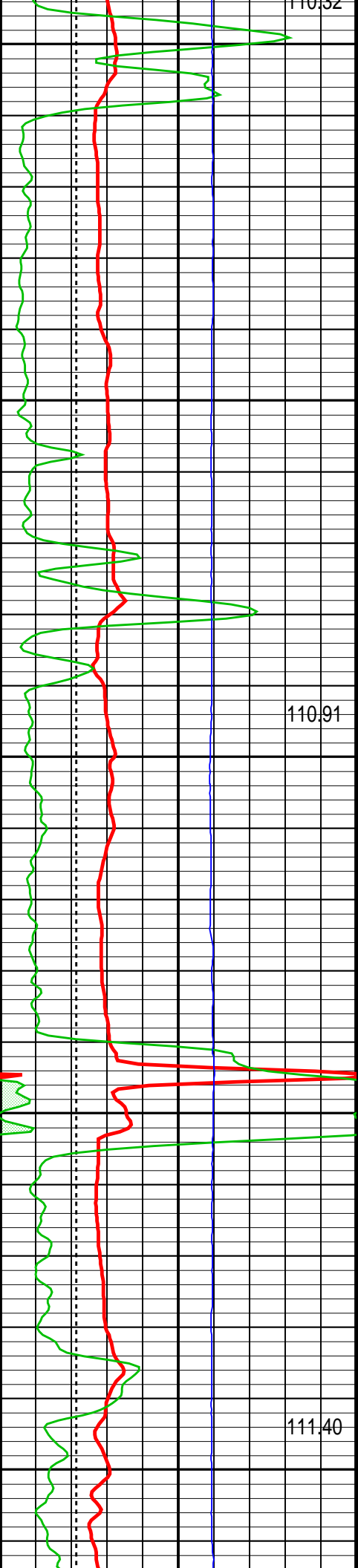


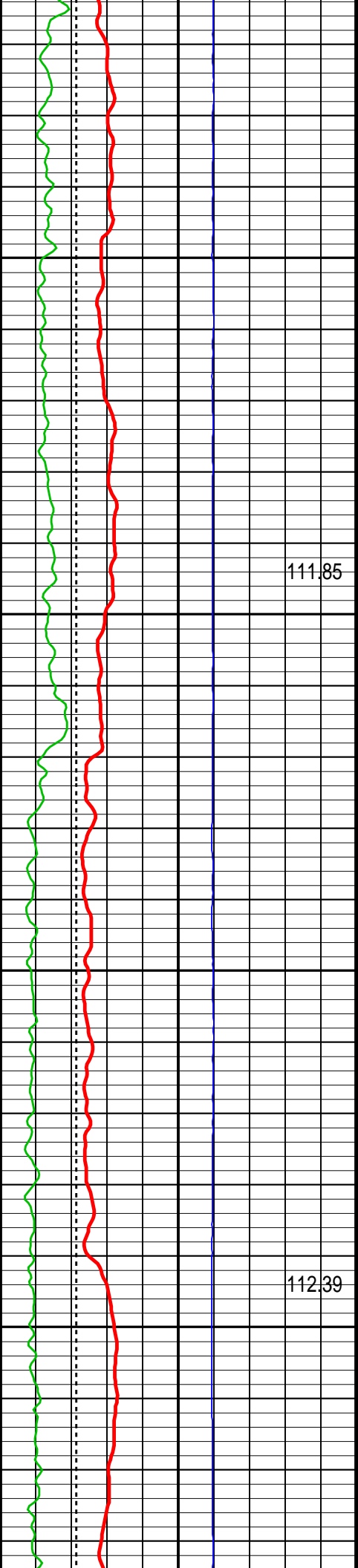
5142.0 FT
CSG

5200

11022





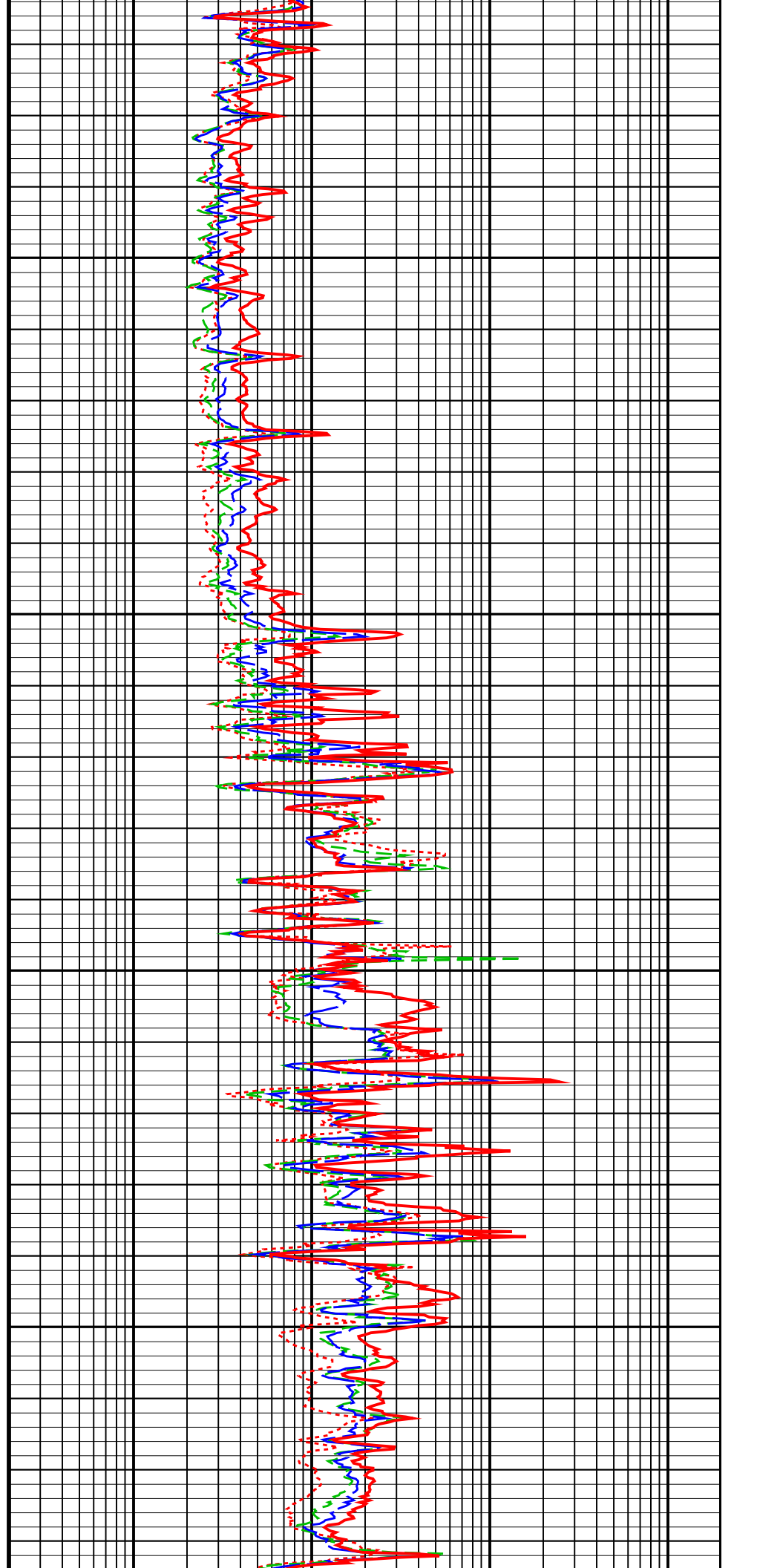


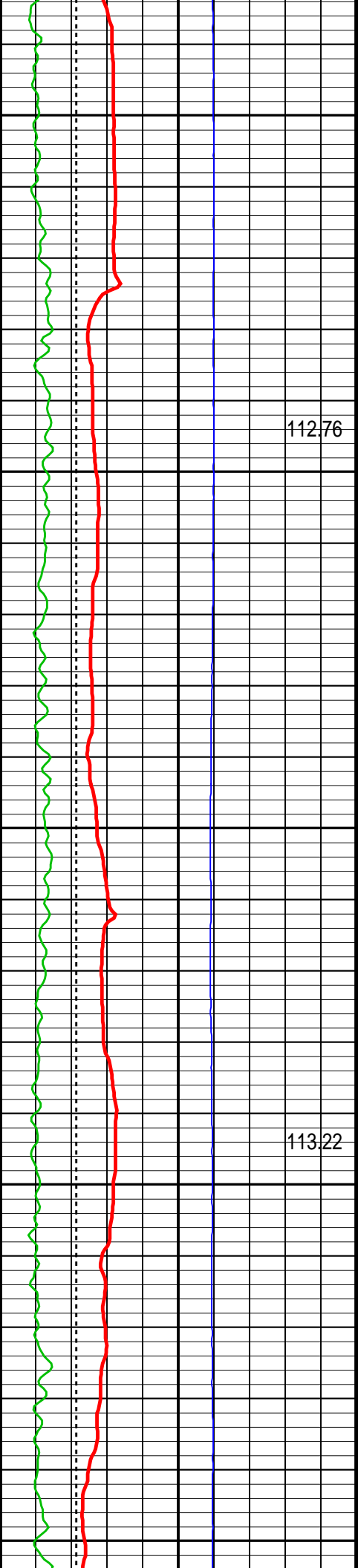
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111.85

5600

112.39





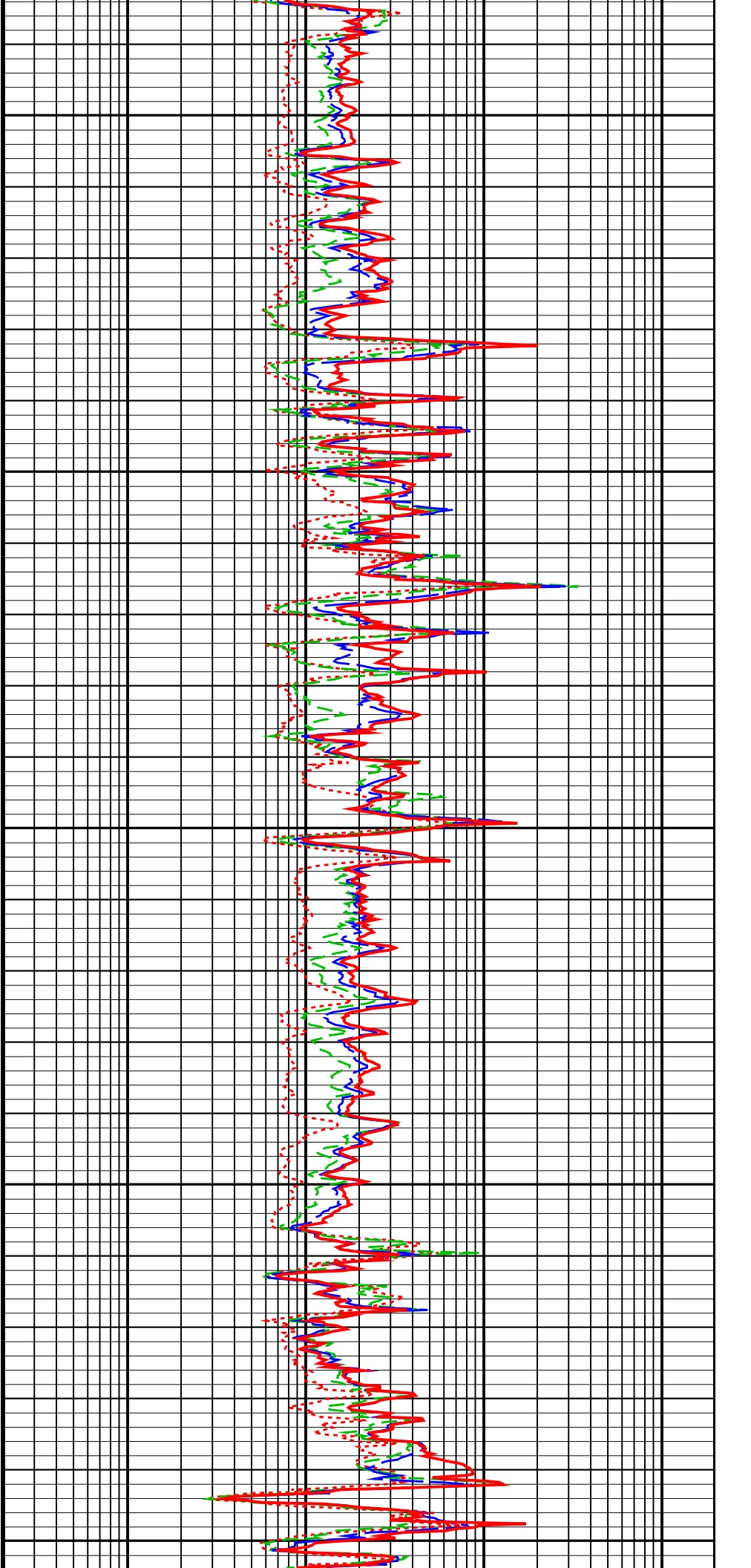
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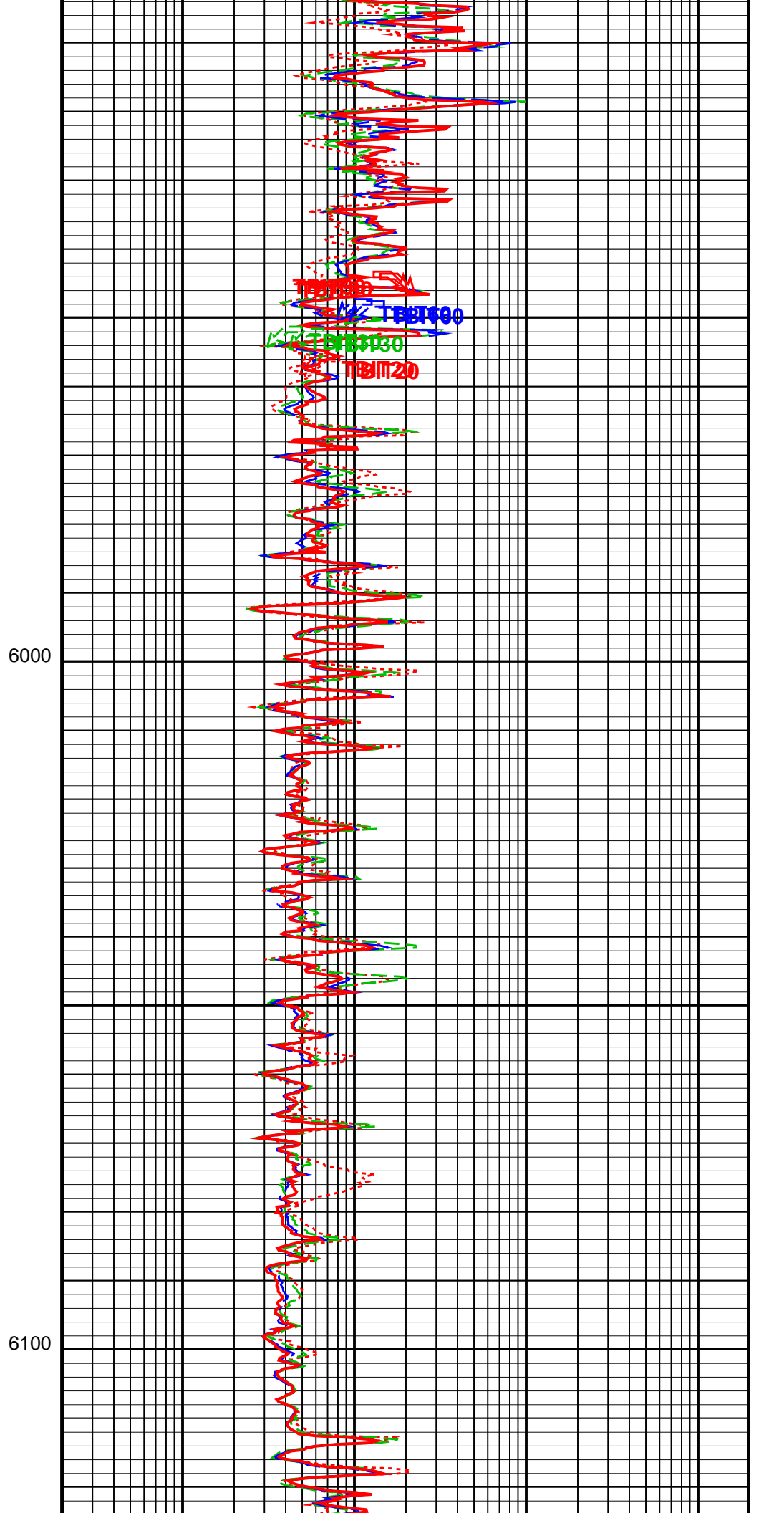
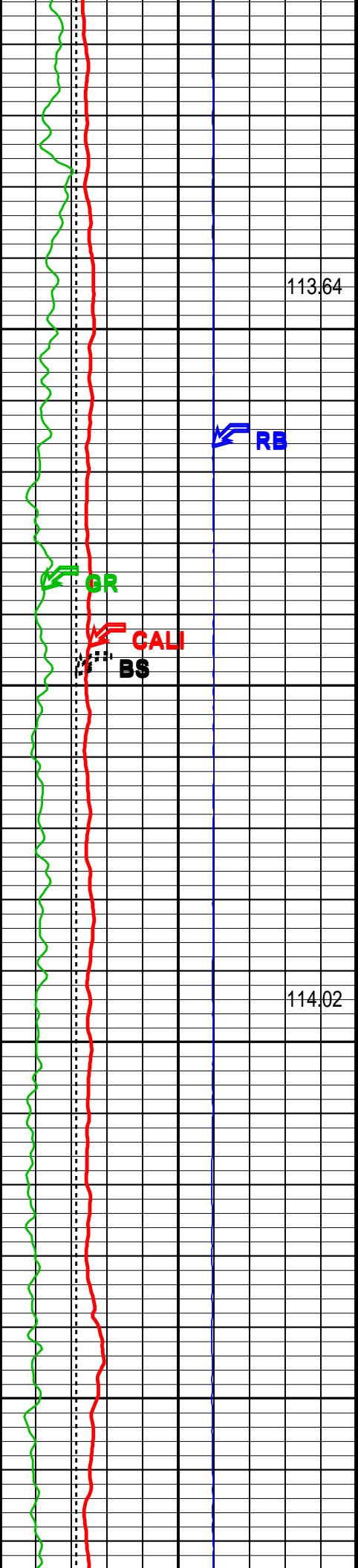
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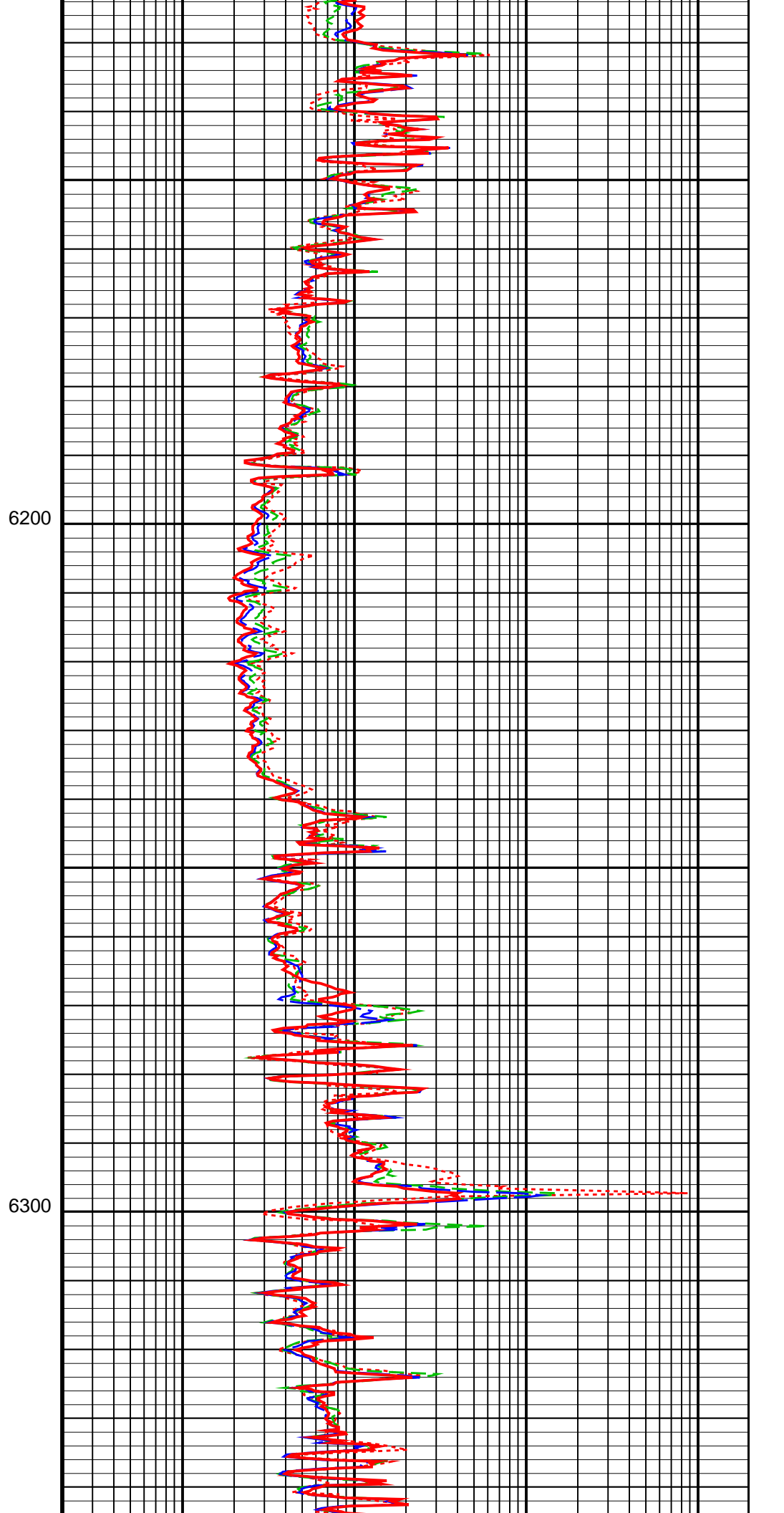
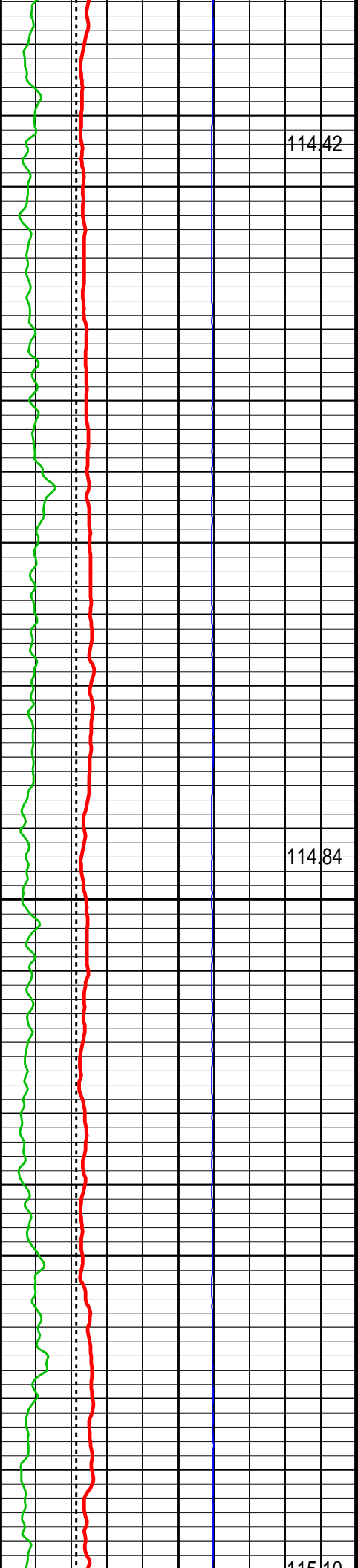
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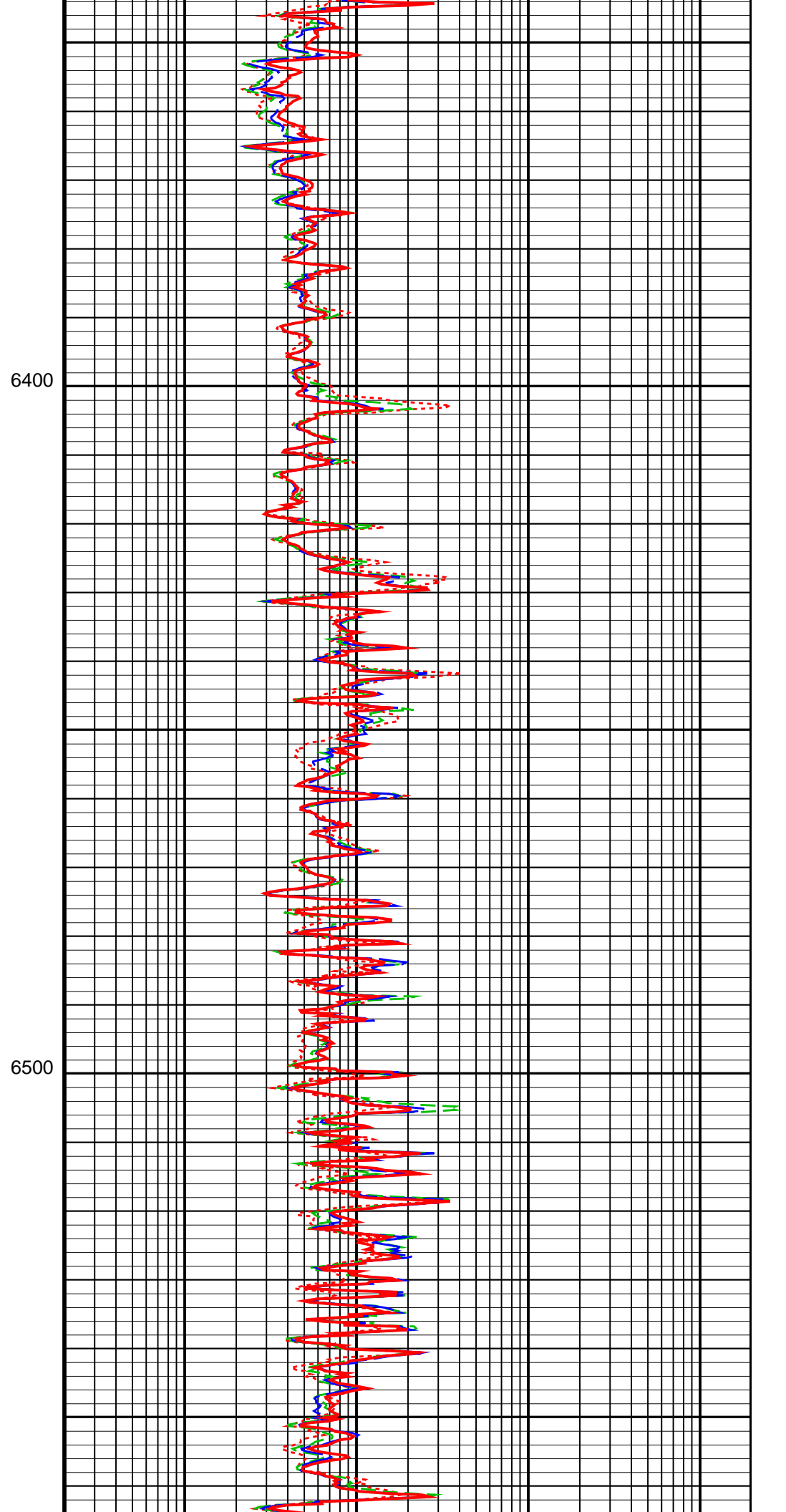
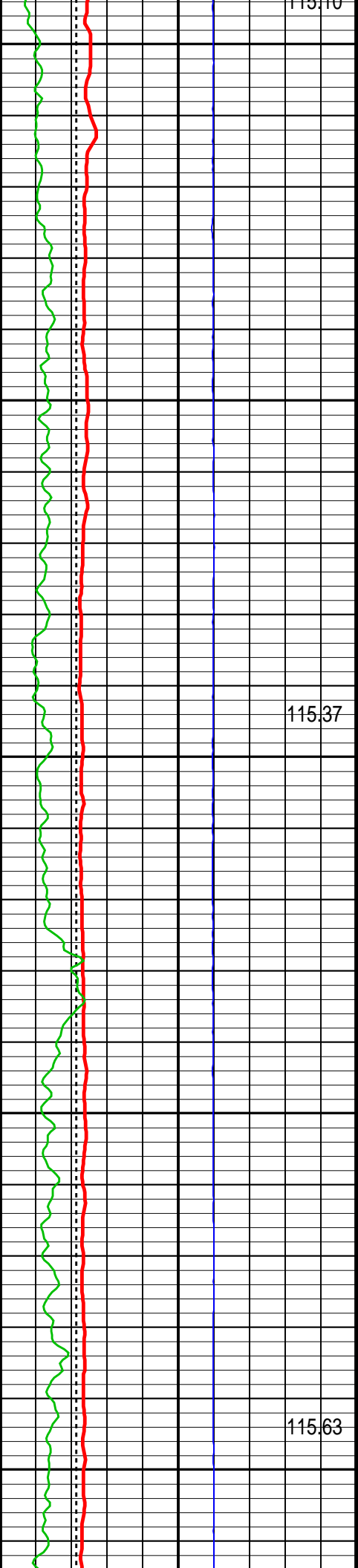
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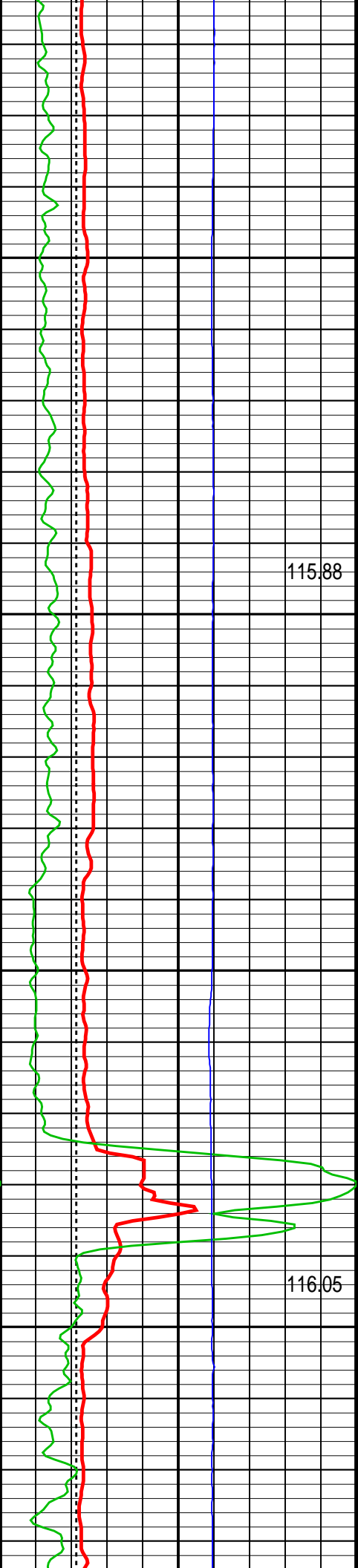
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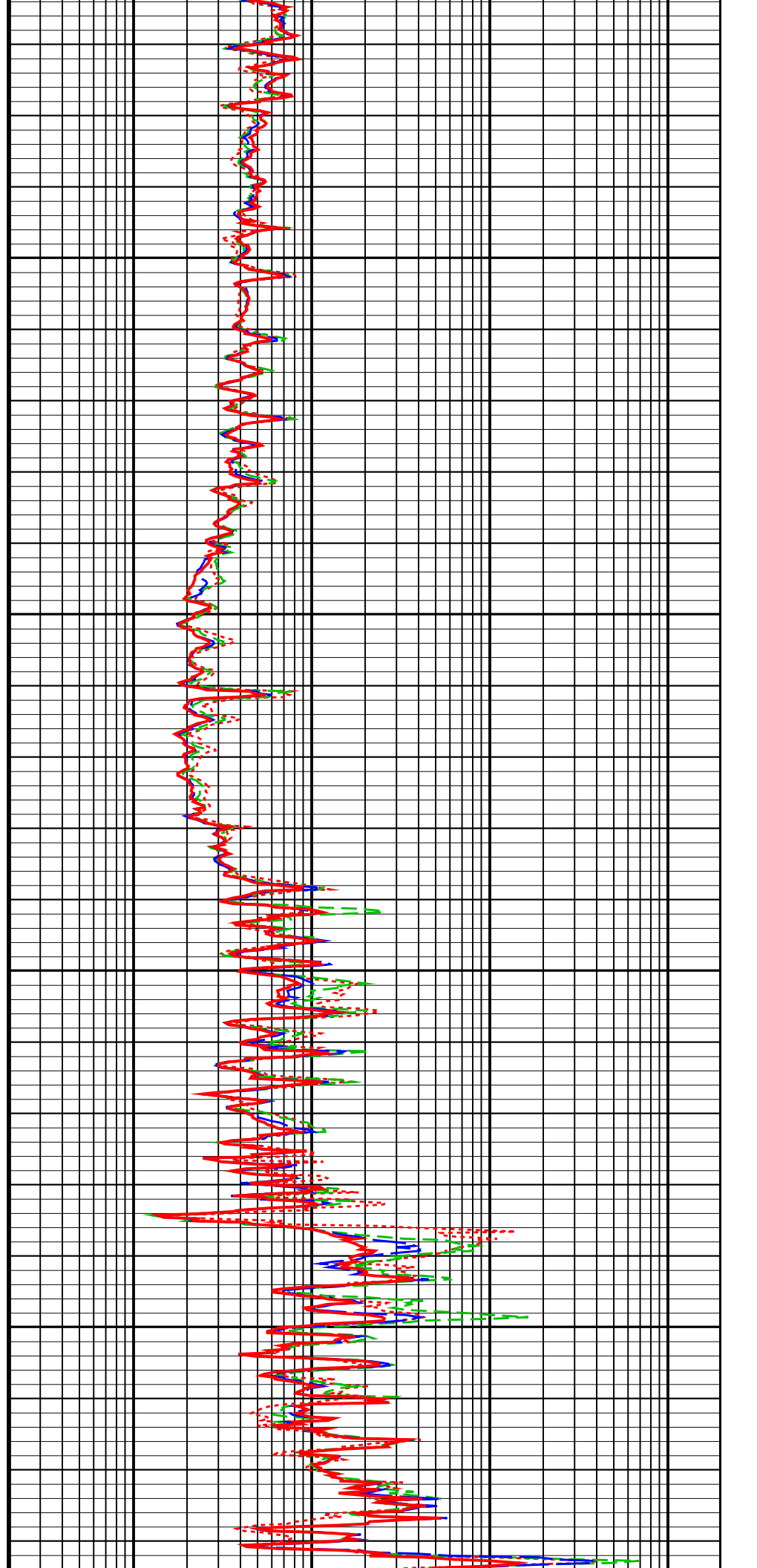


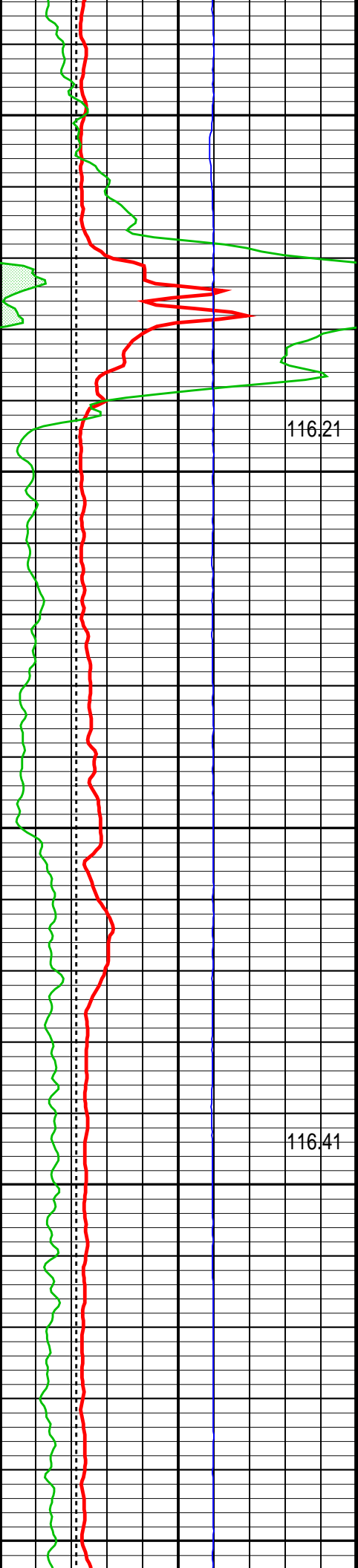
6600

115.88

6700

116.05





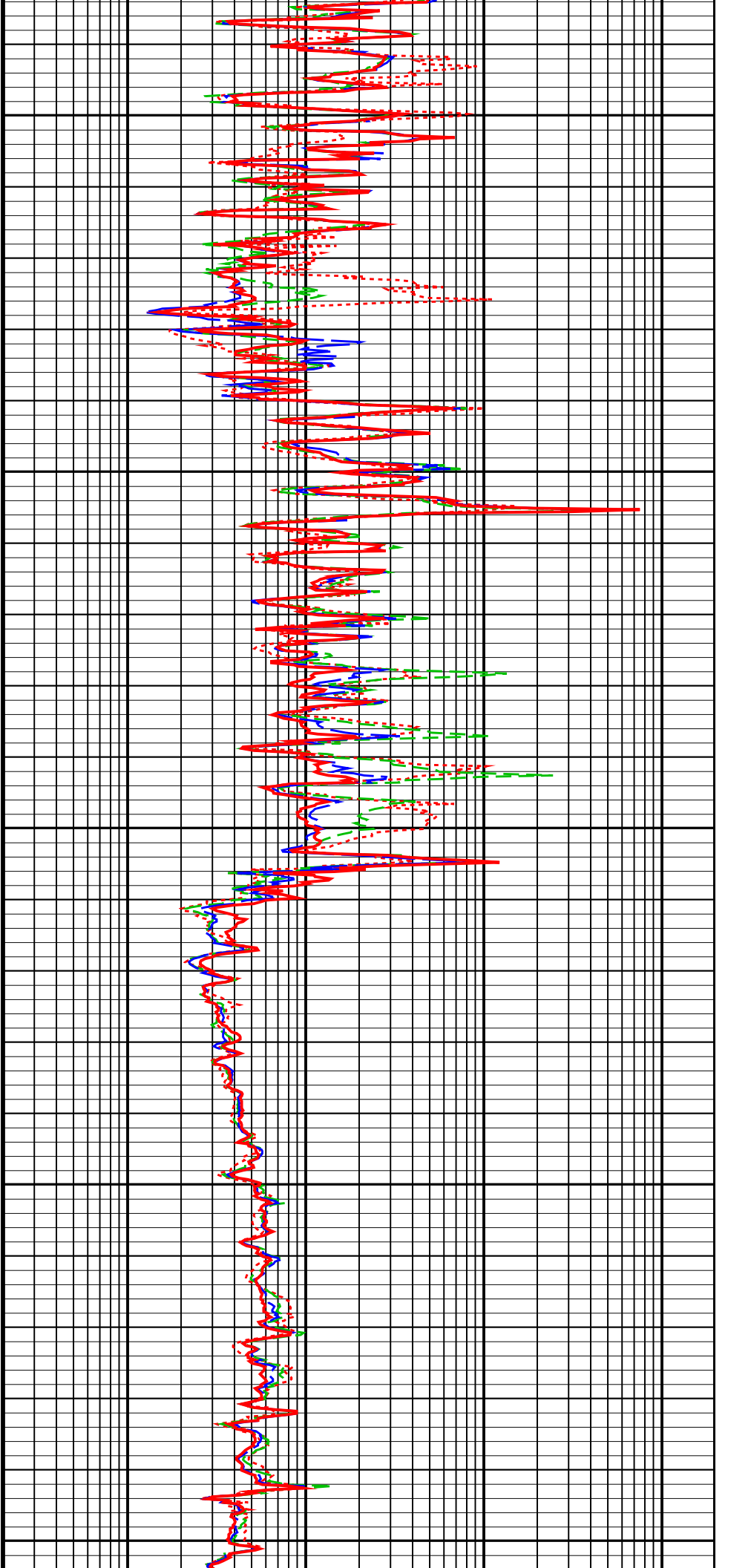
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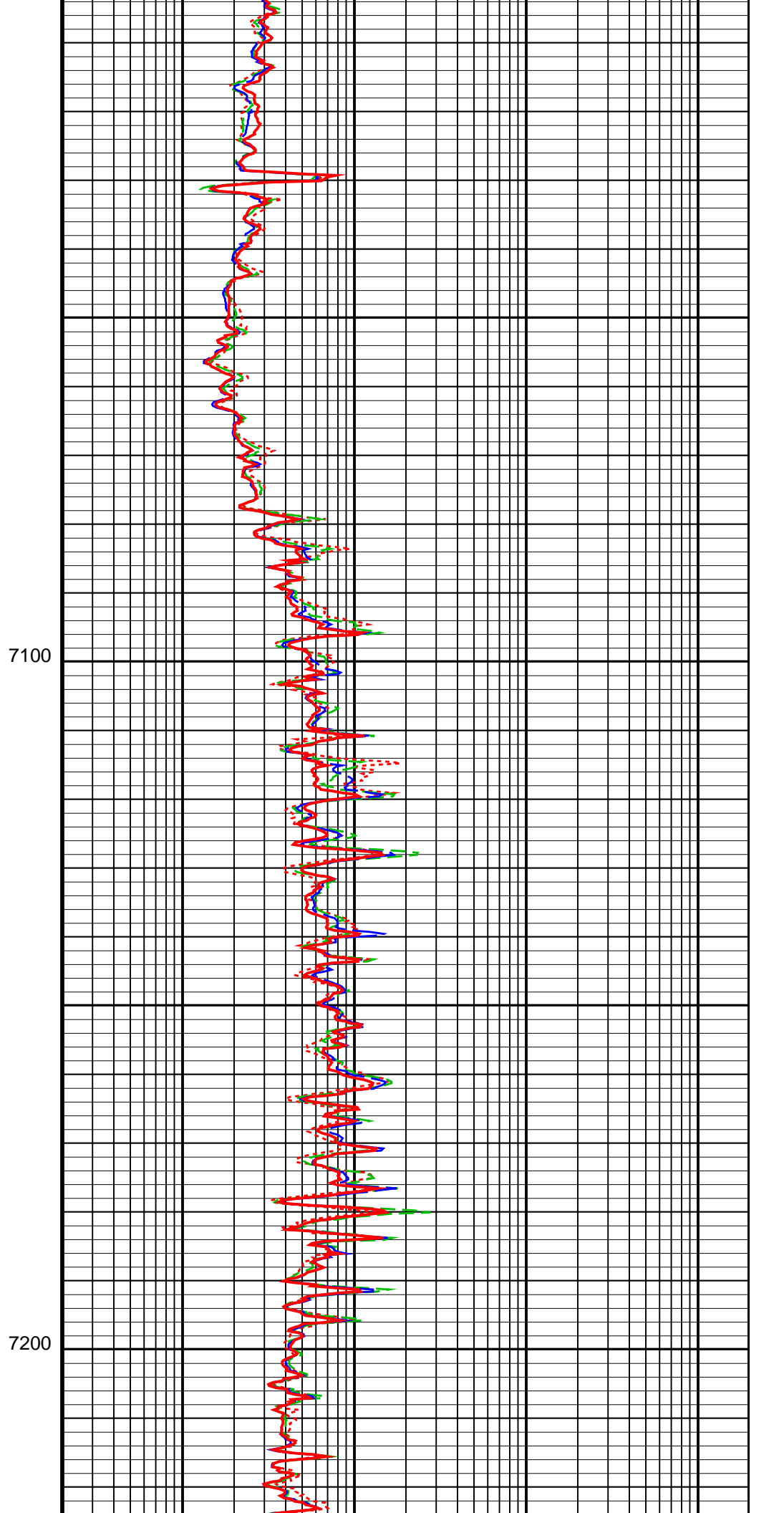
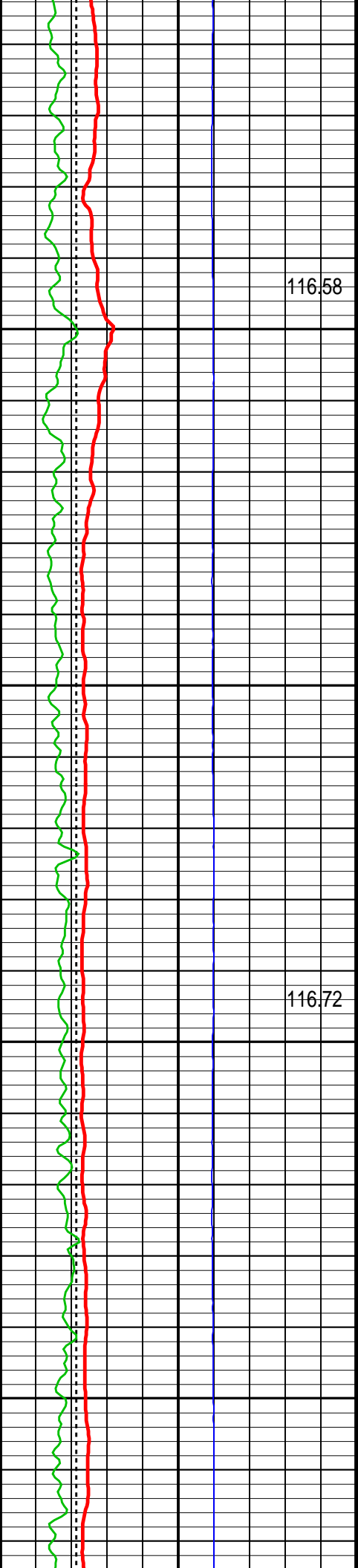
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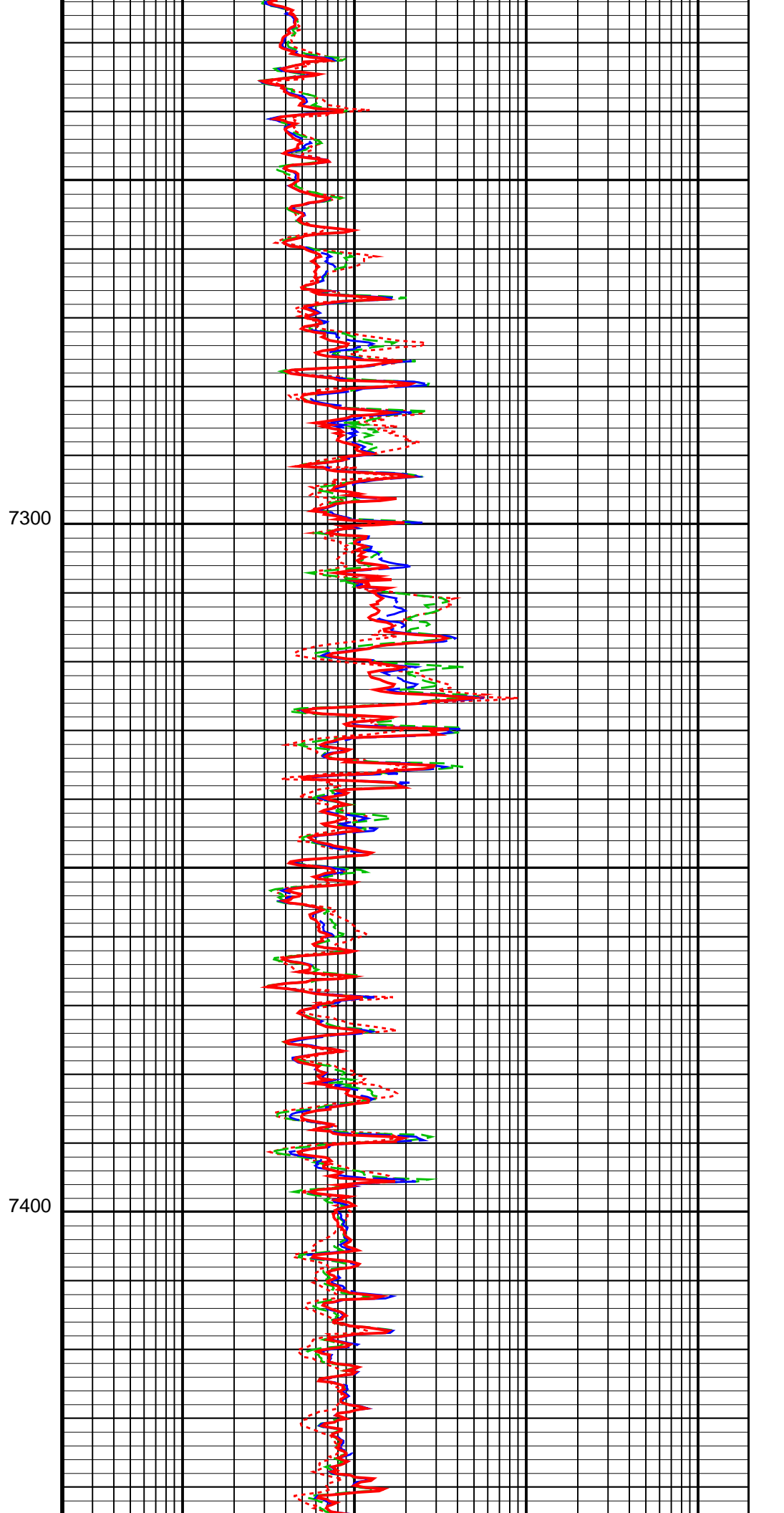
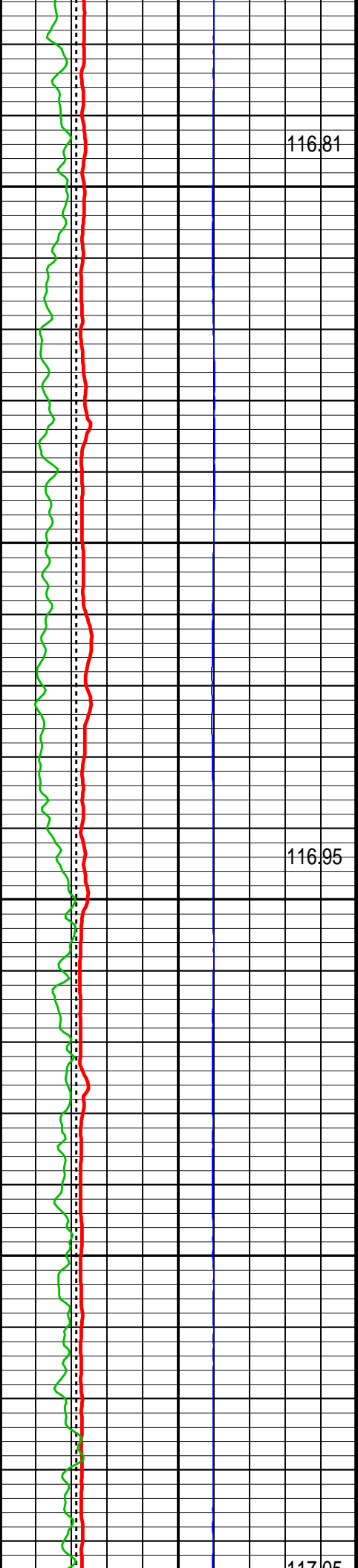
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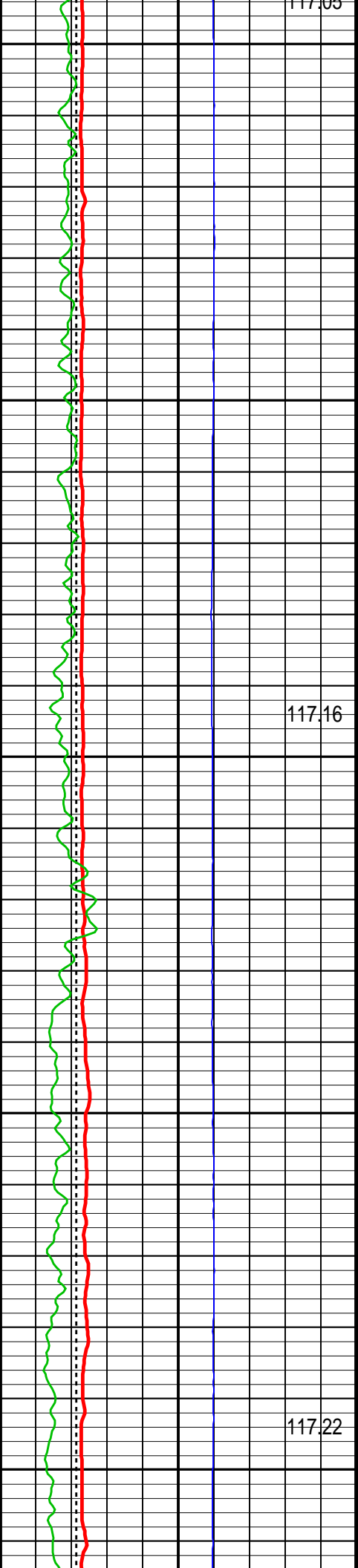
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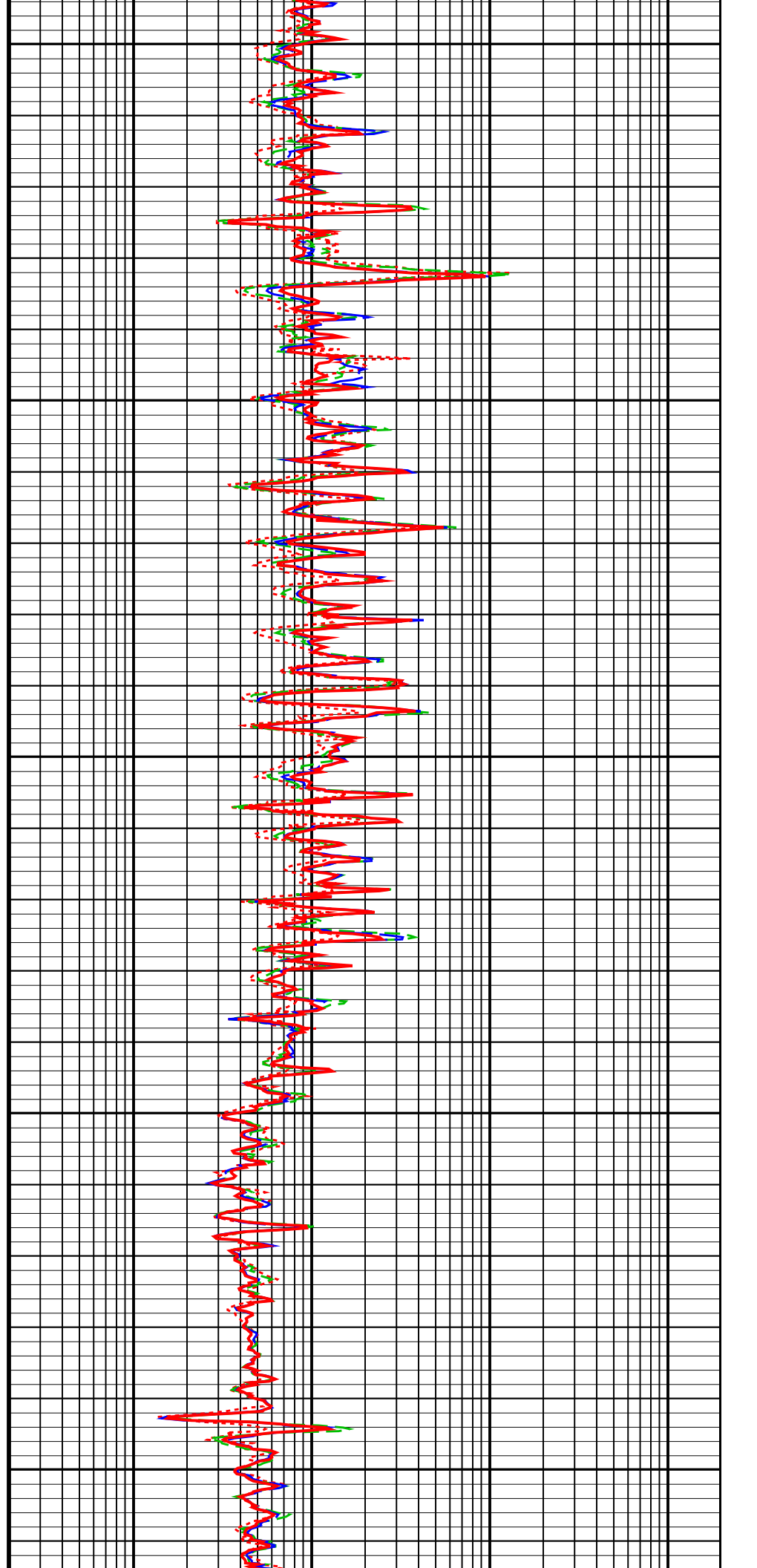


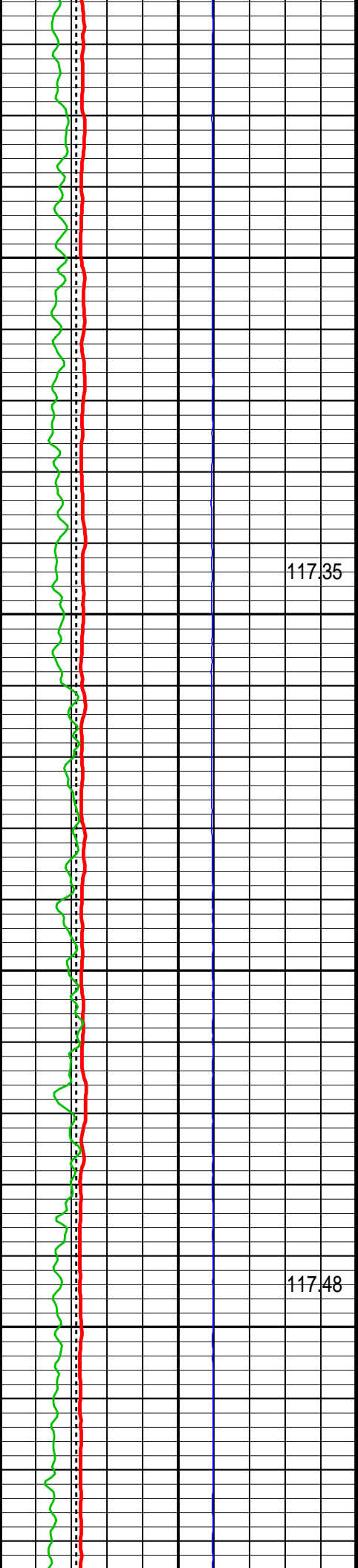




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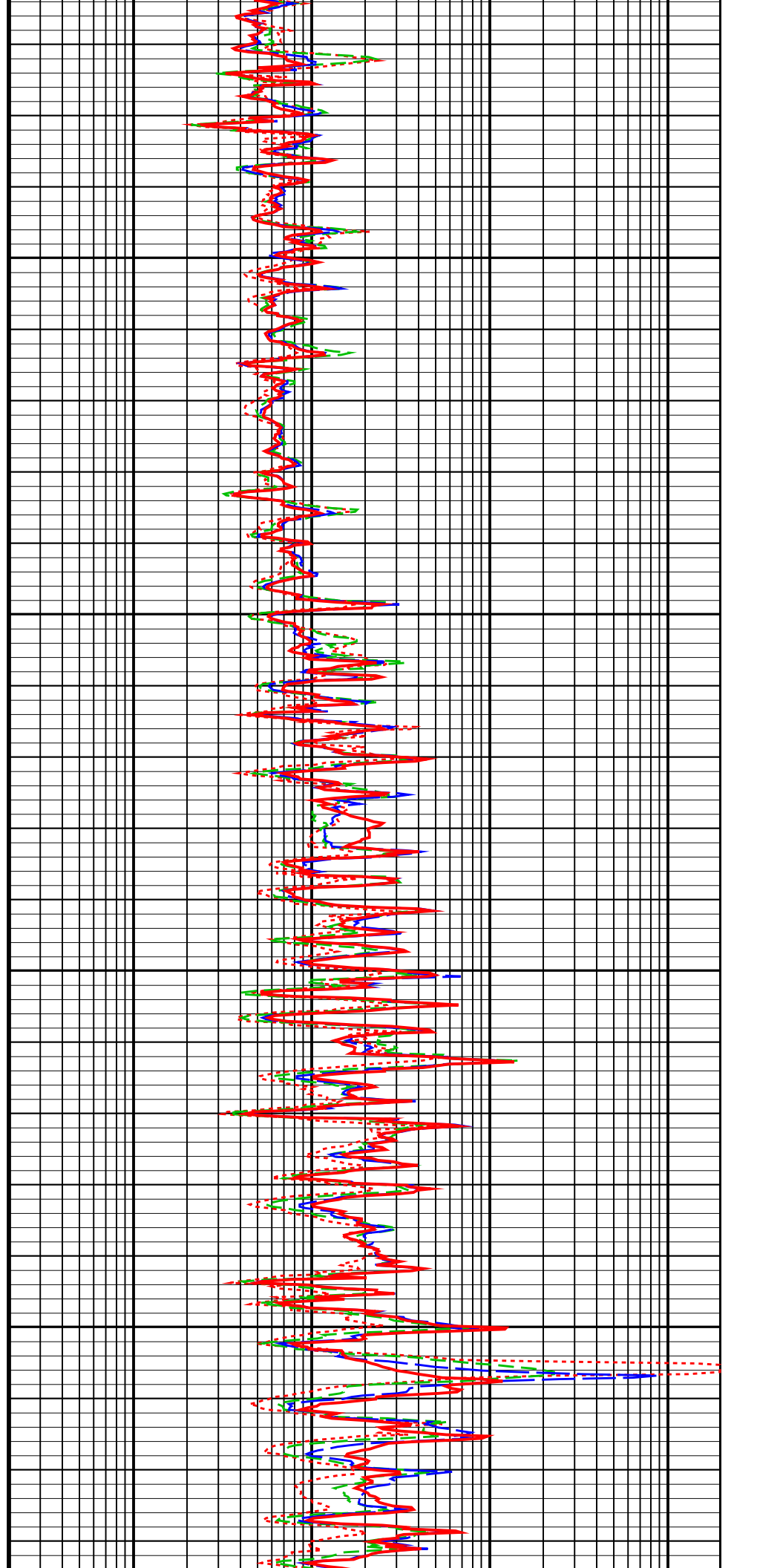
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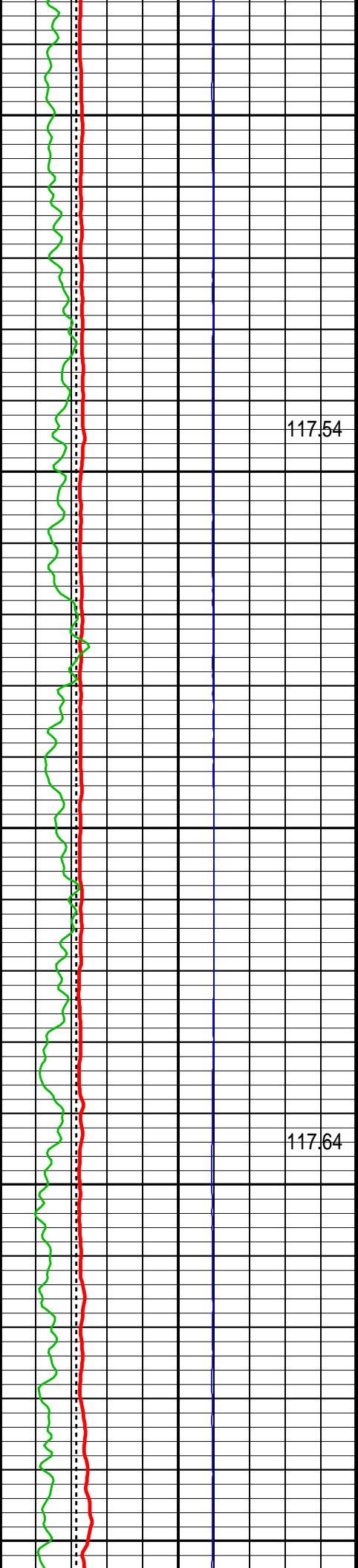




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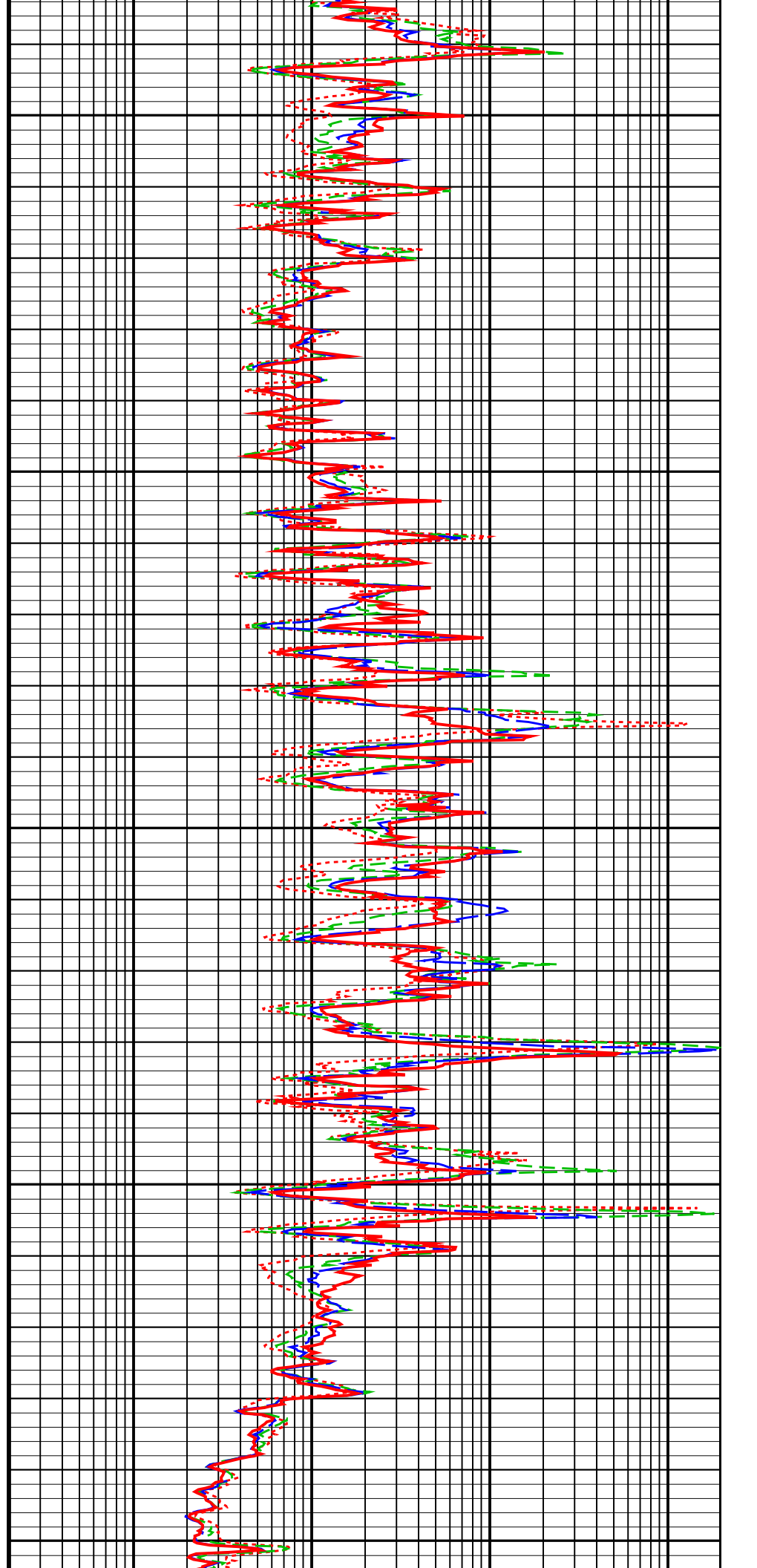


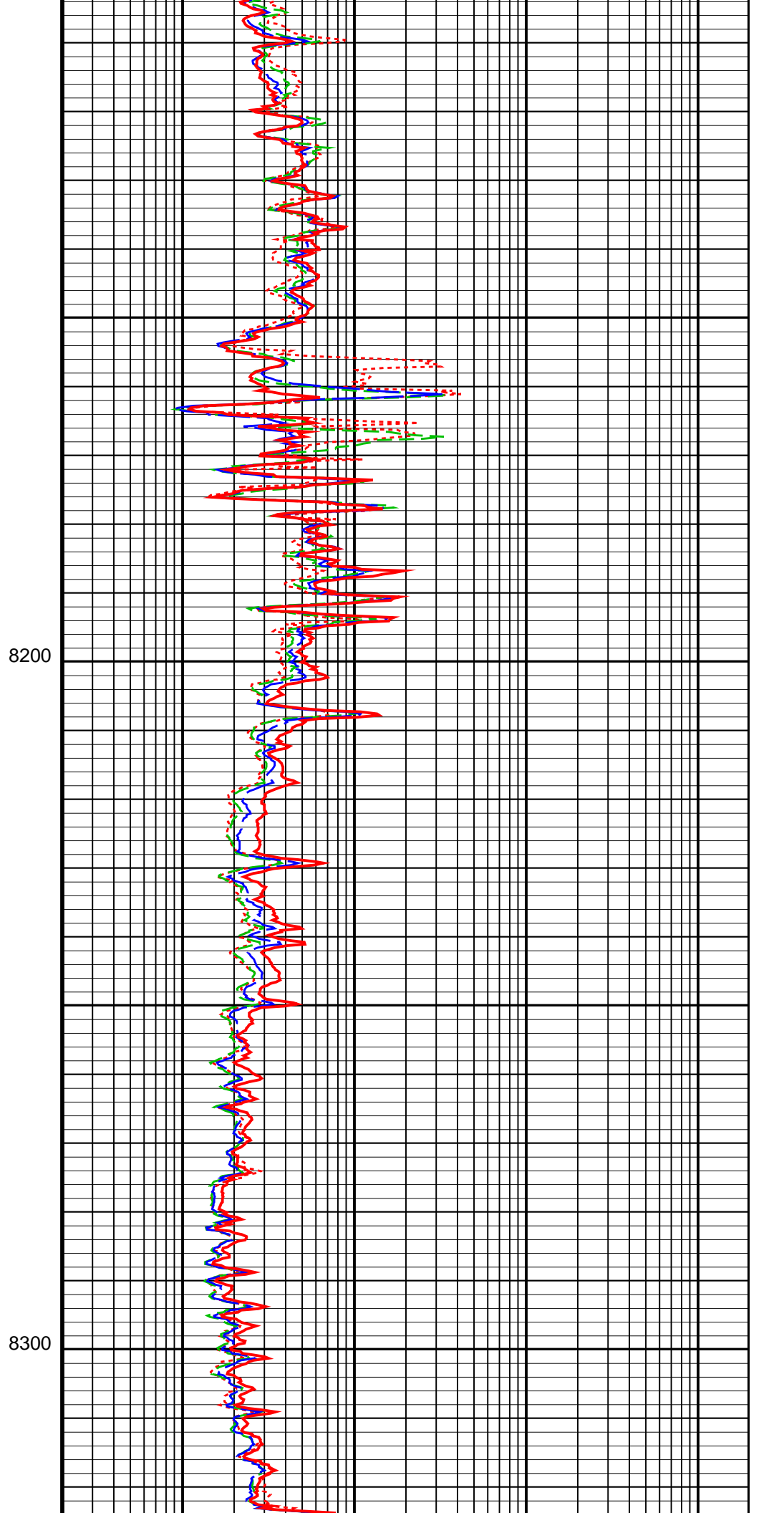
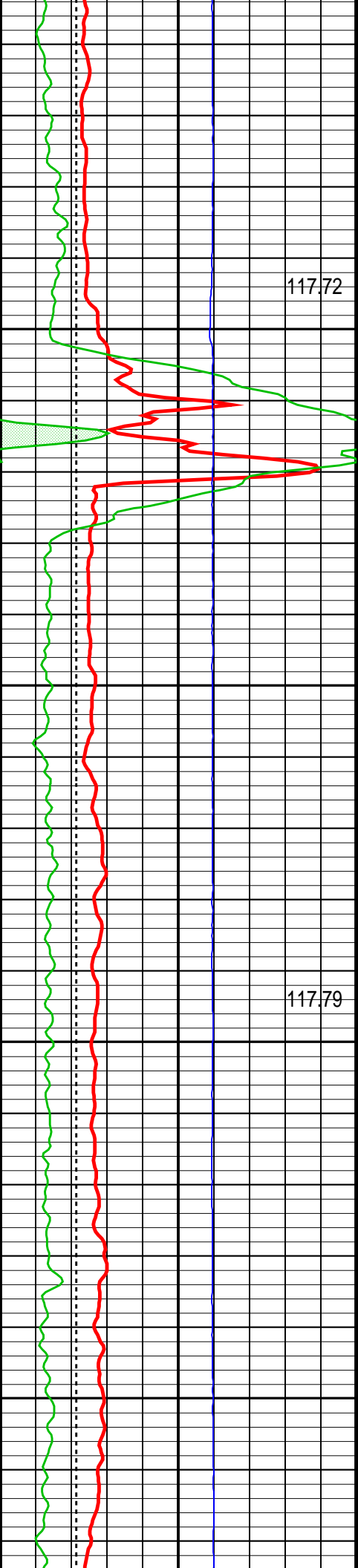


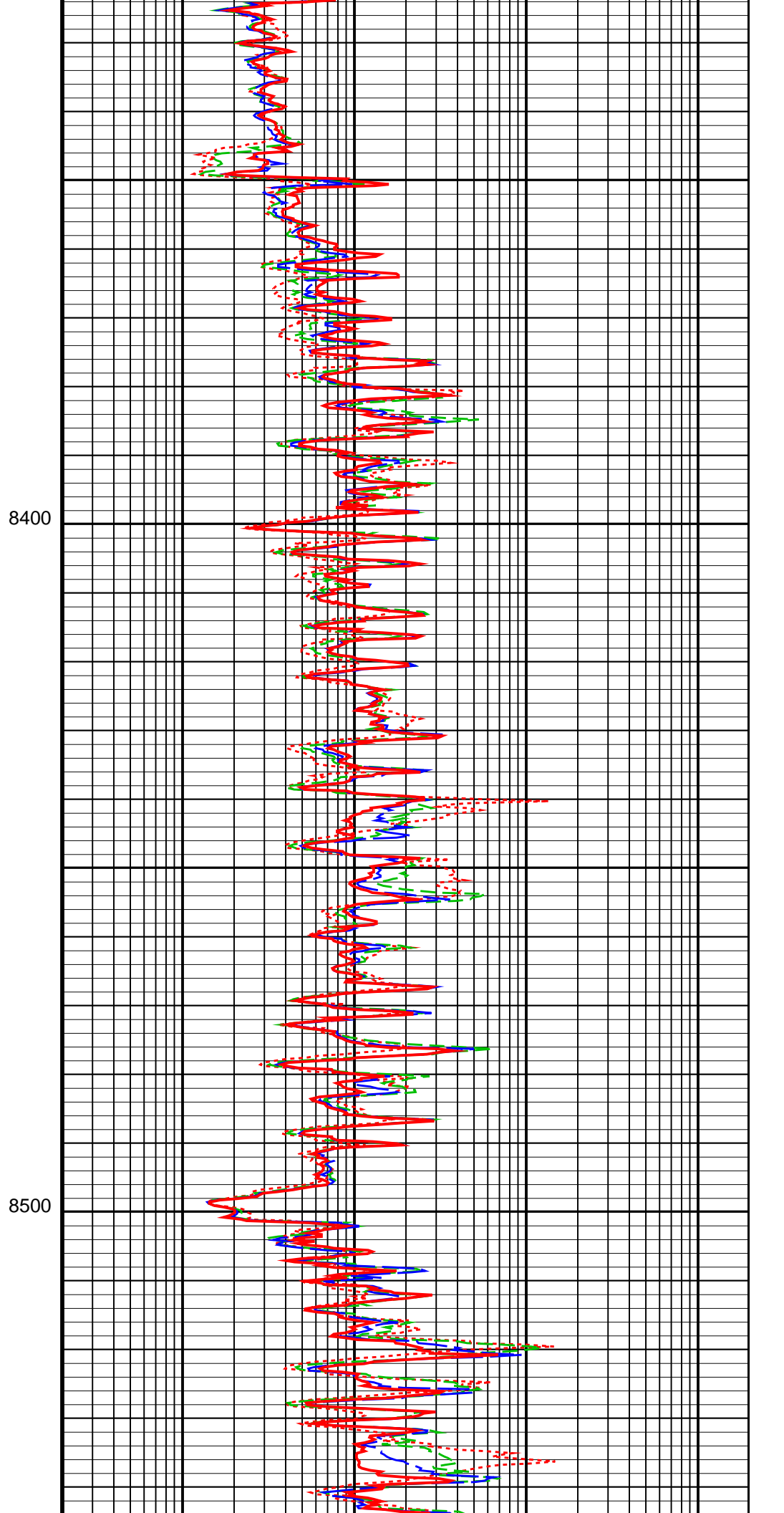
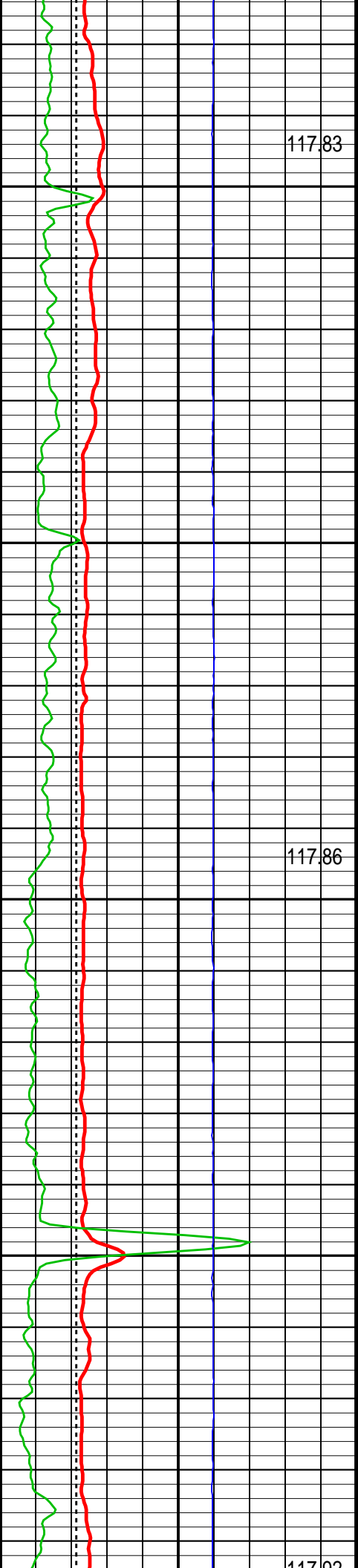
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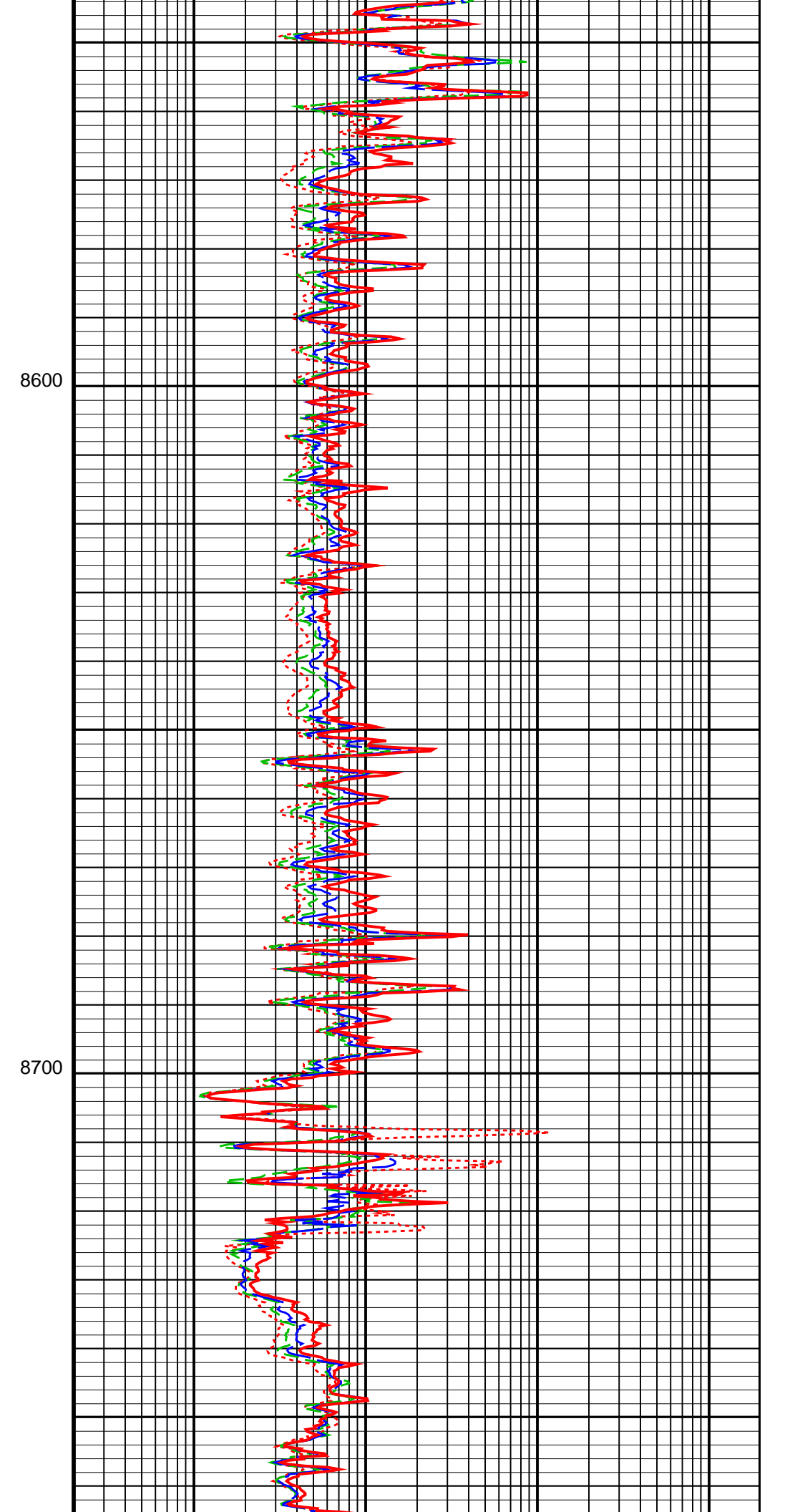
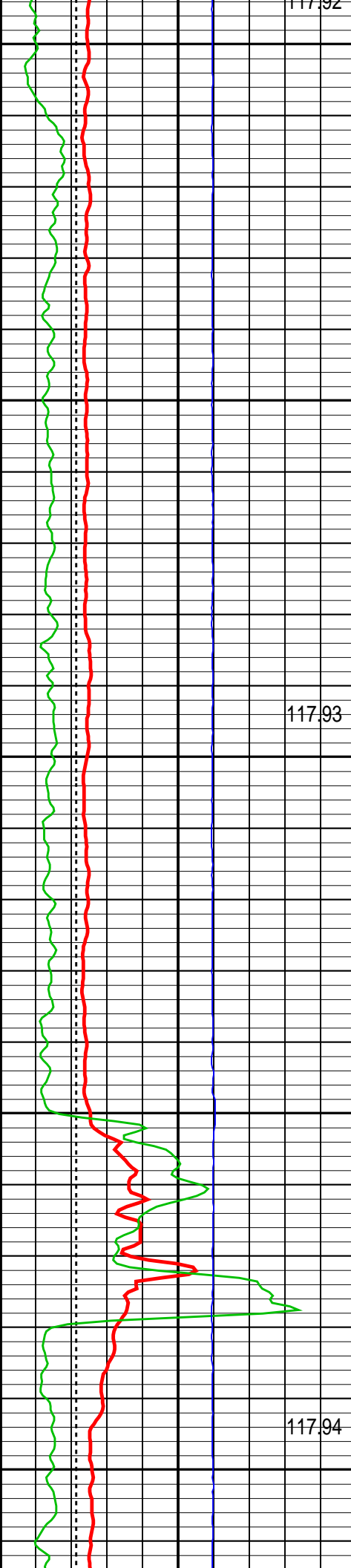
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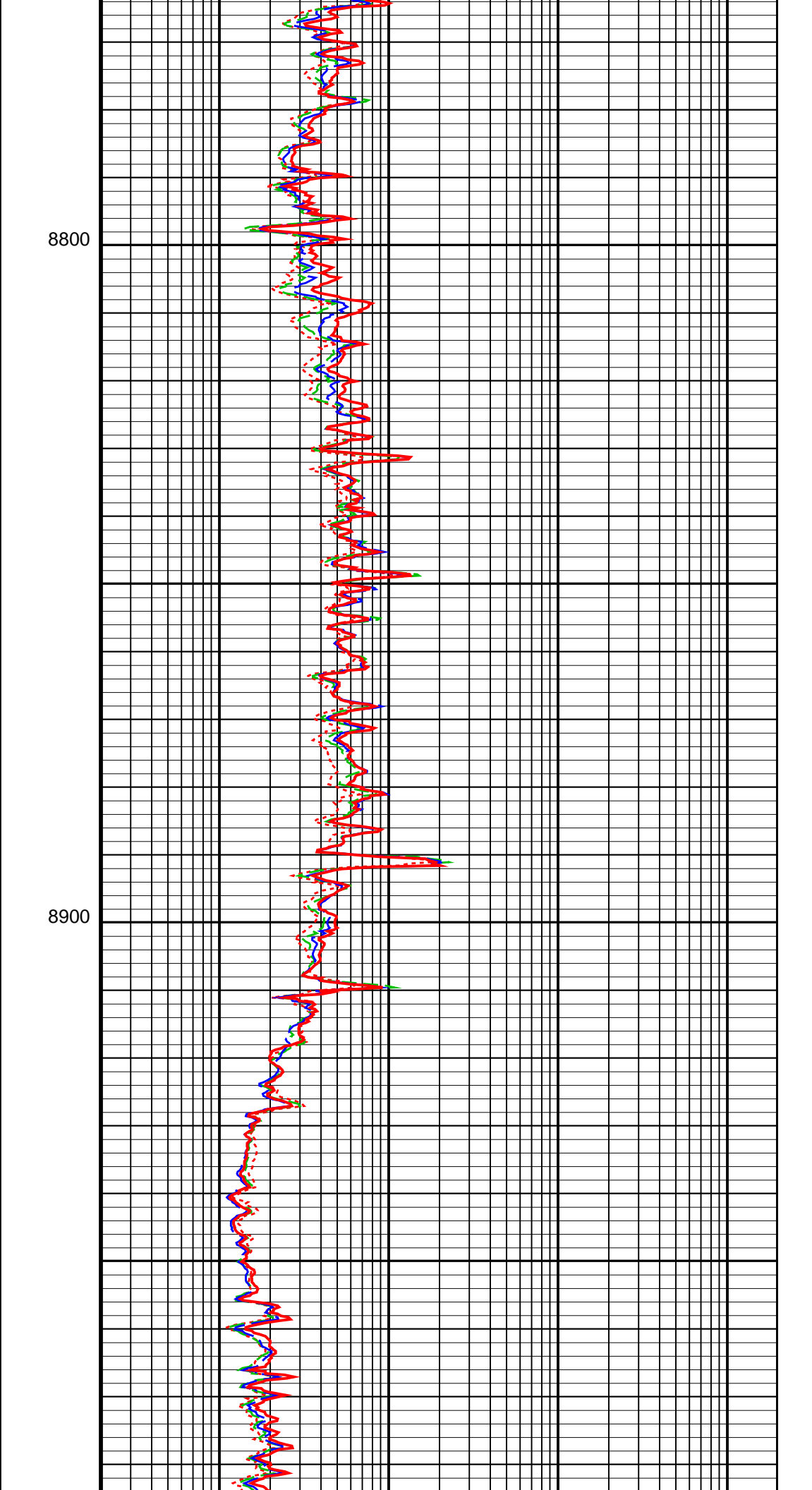
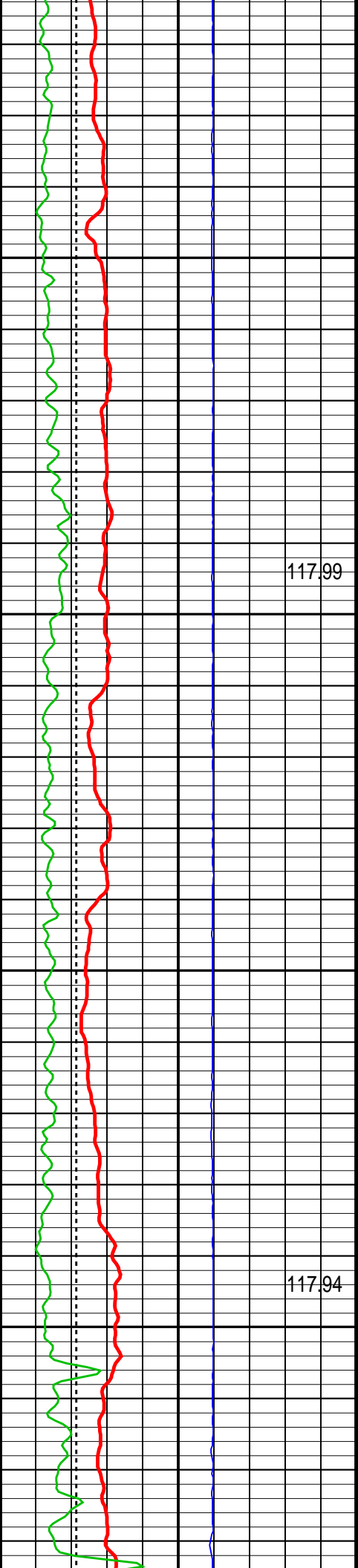
8100

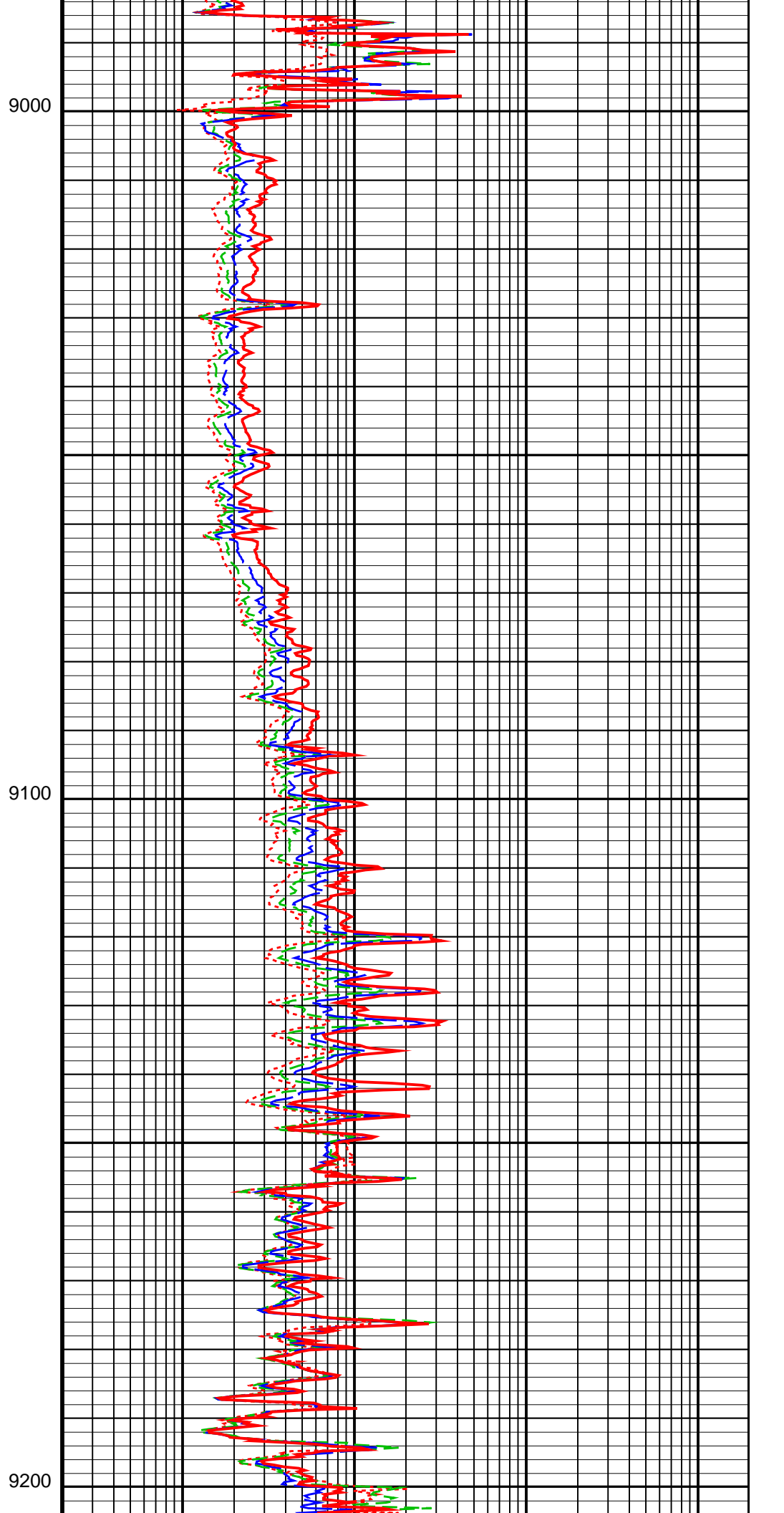
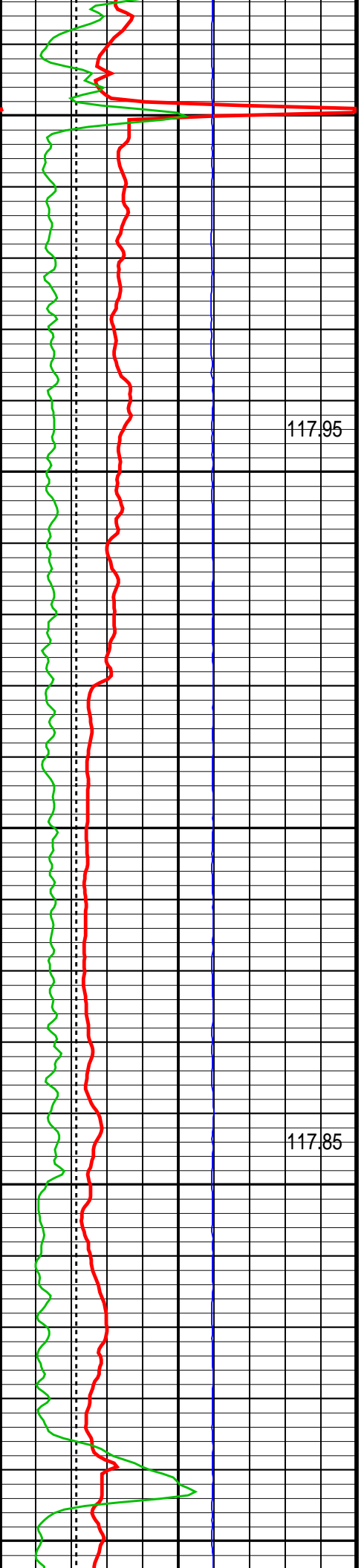


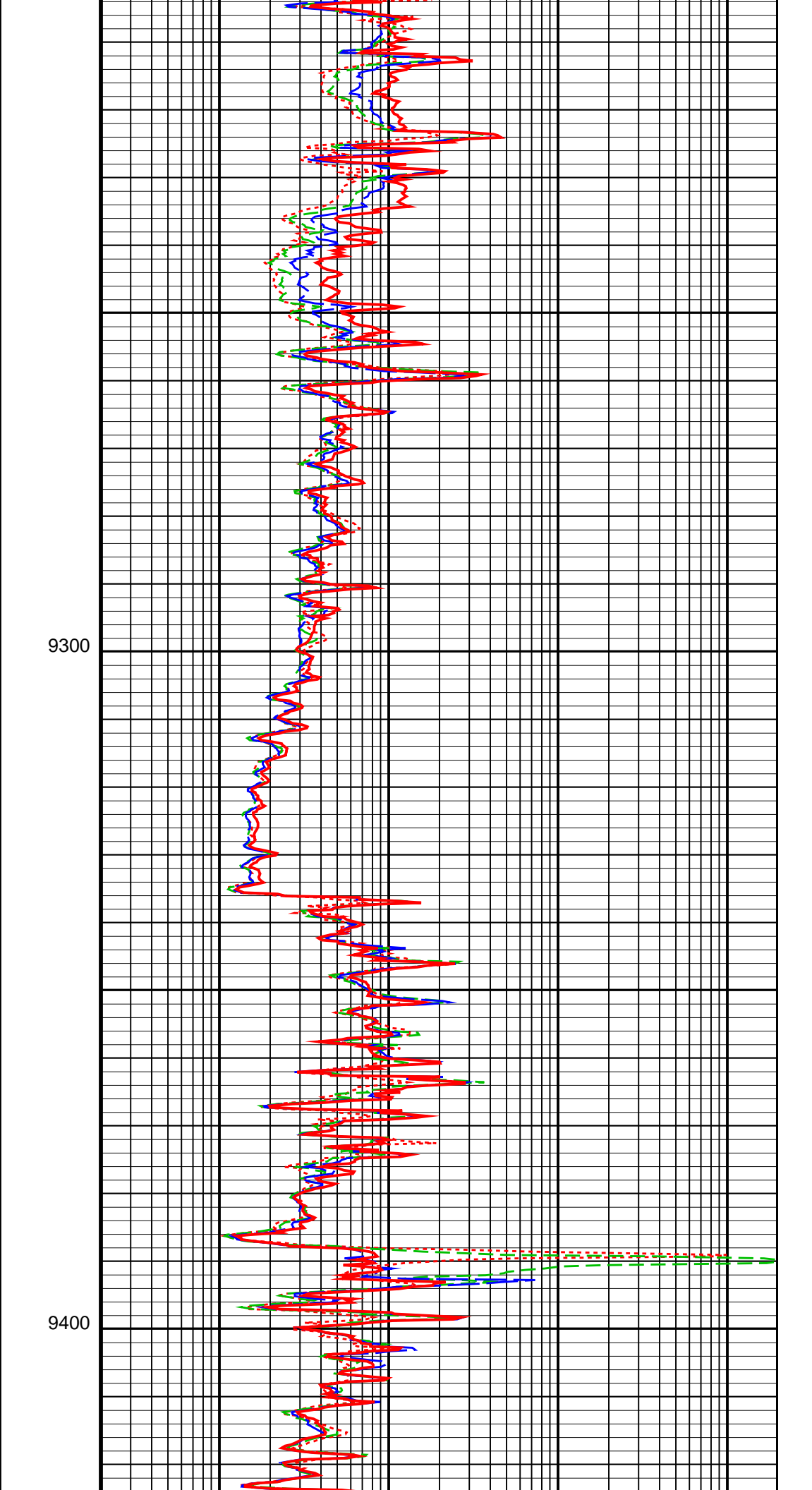
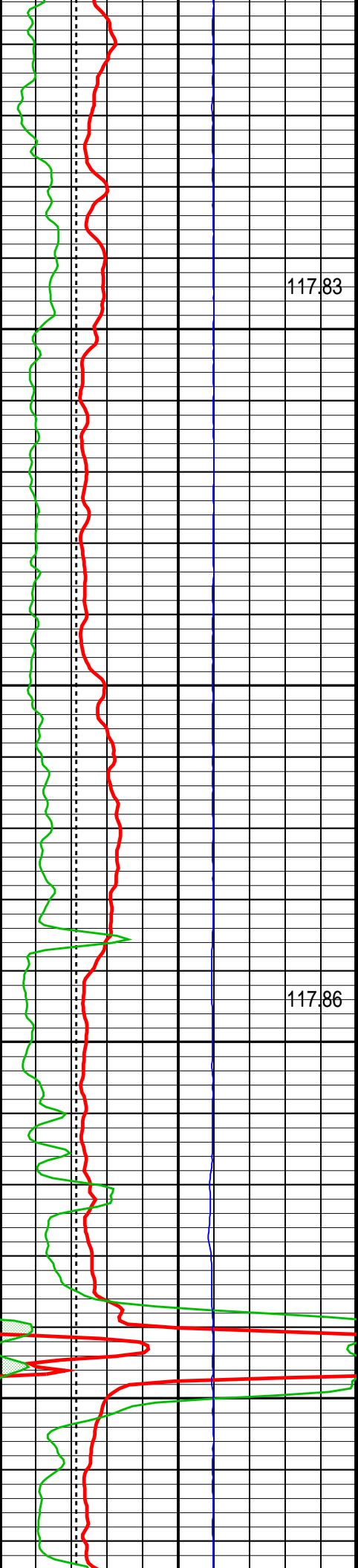


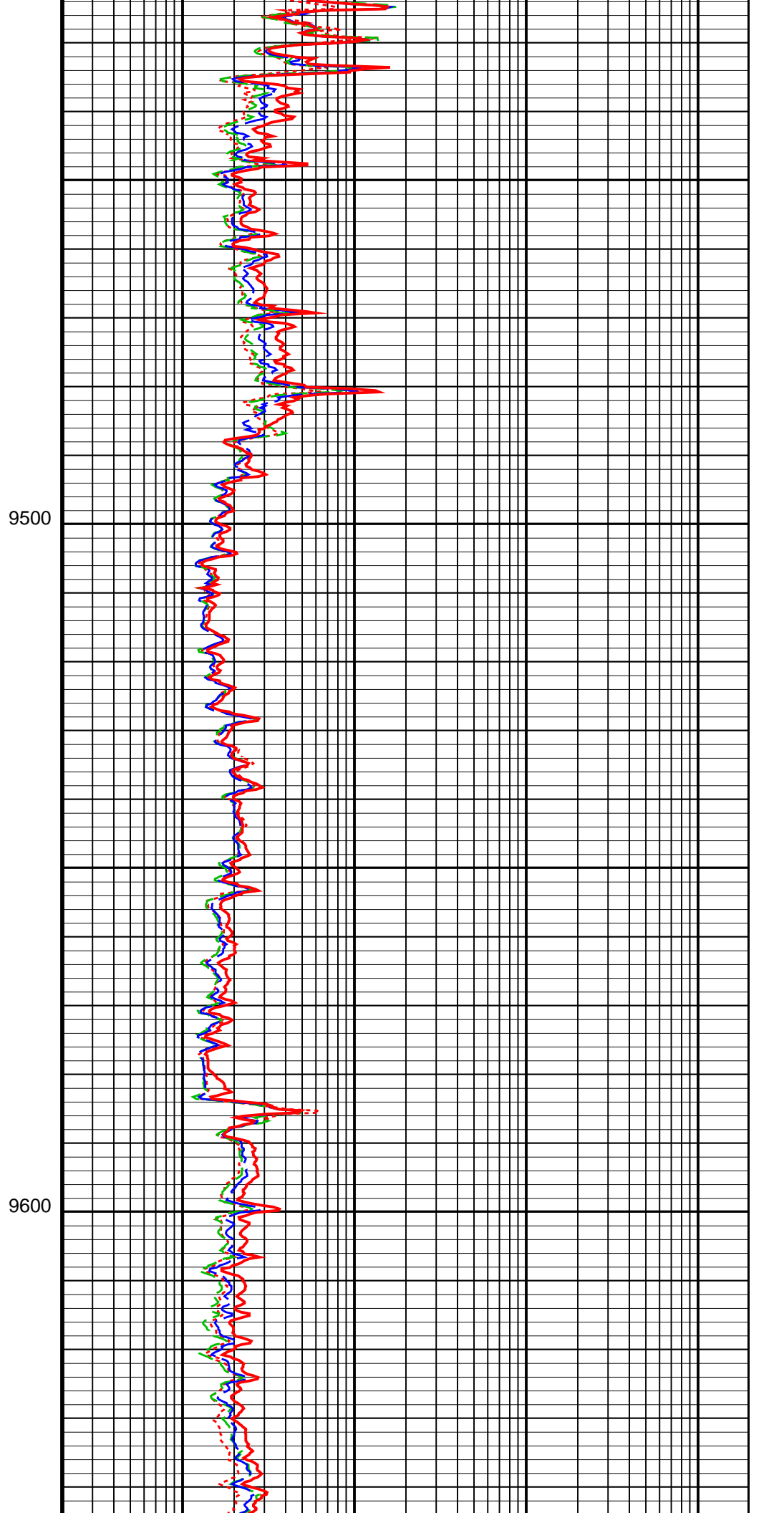
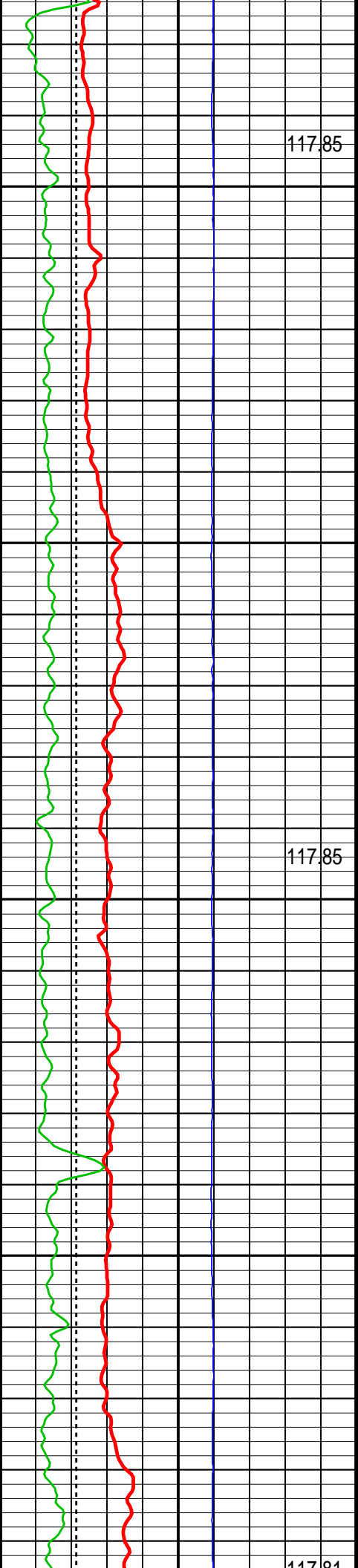


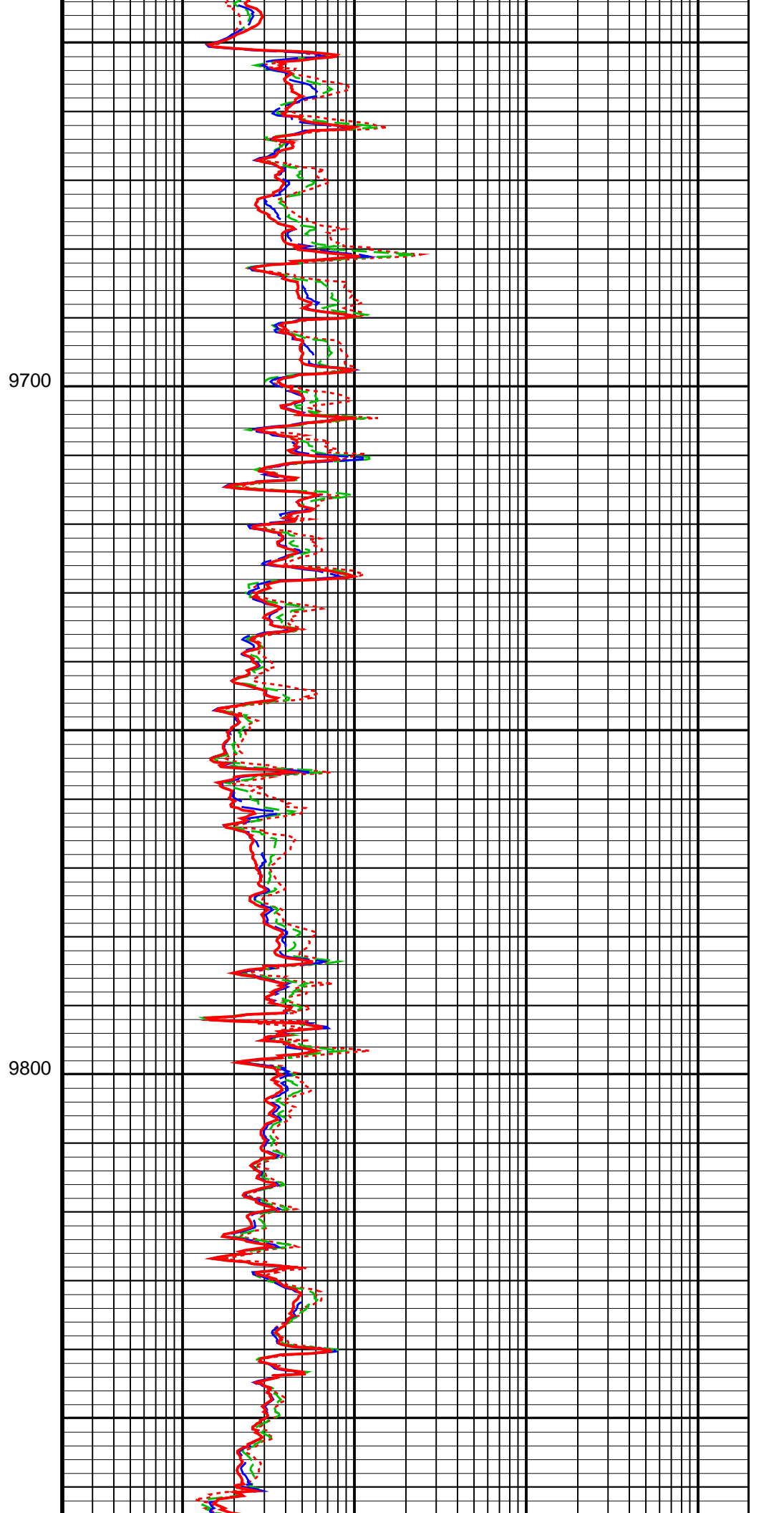
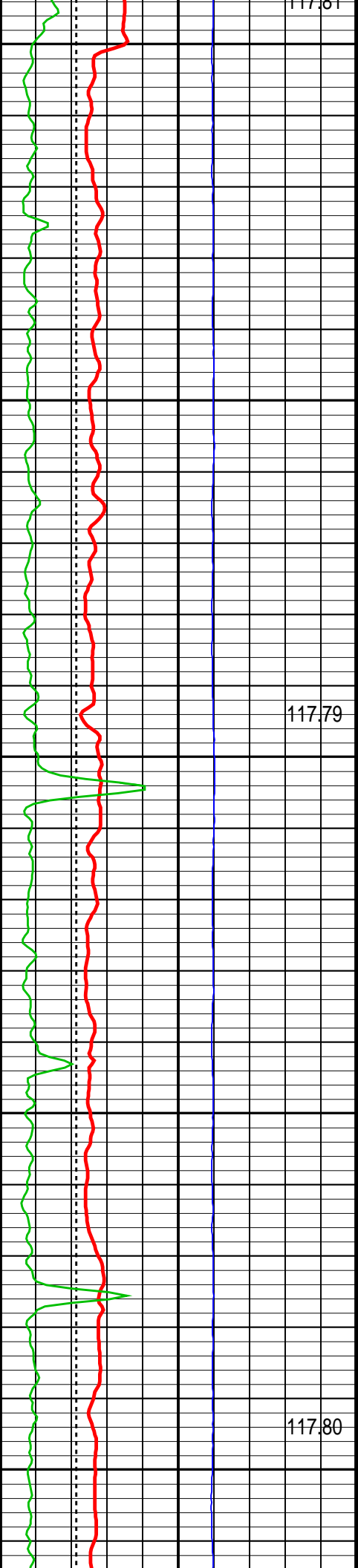


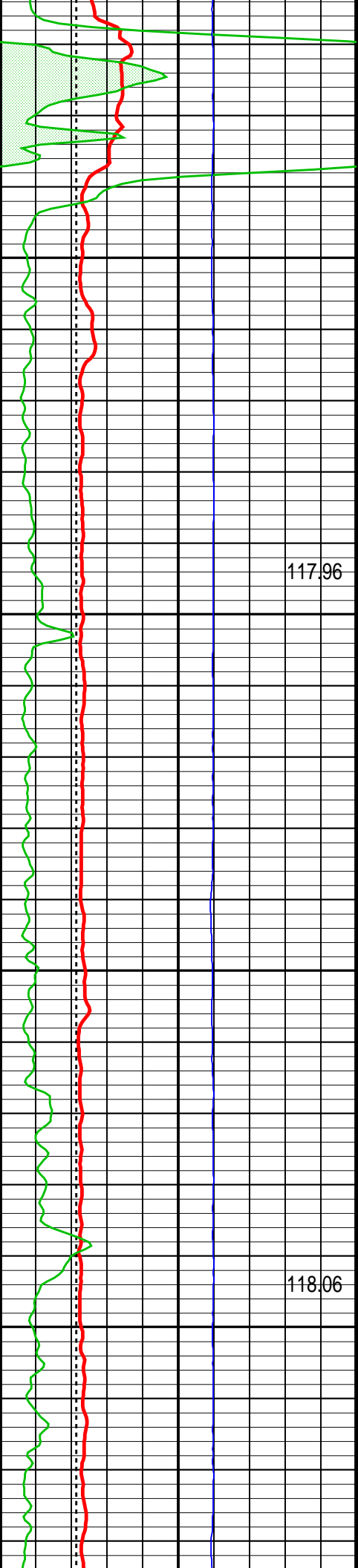










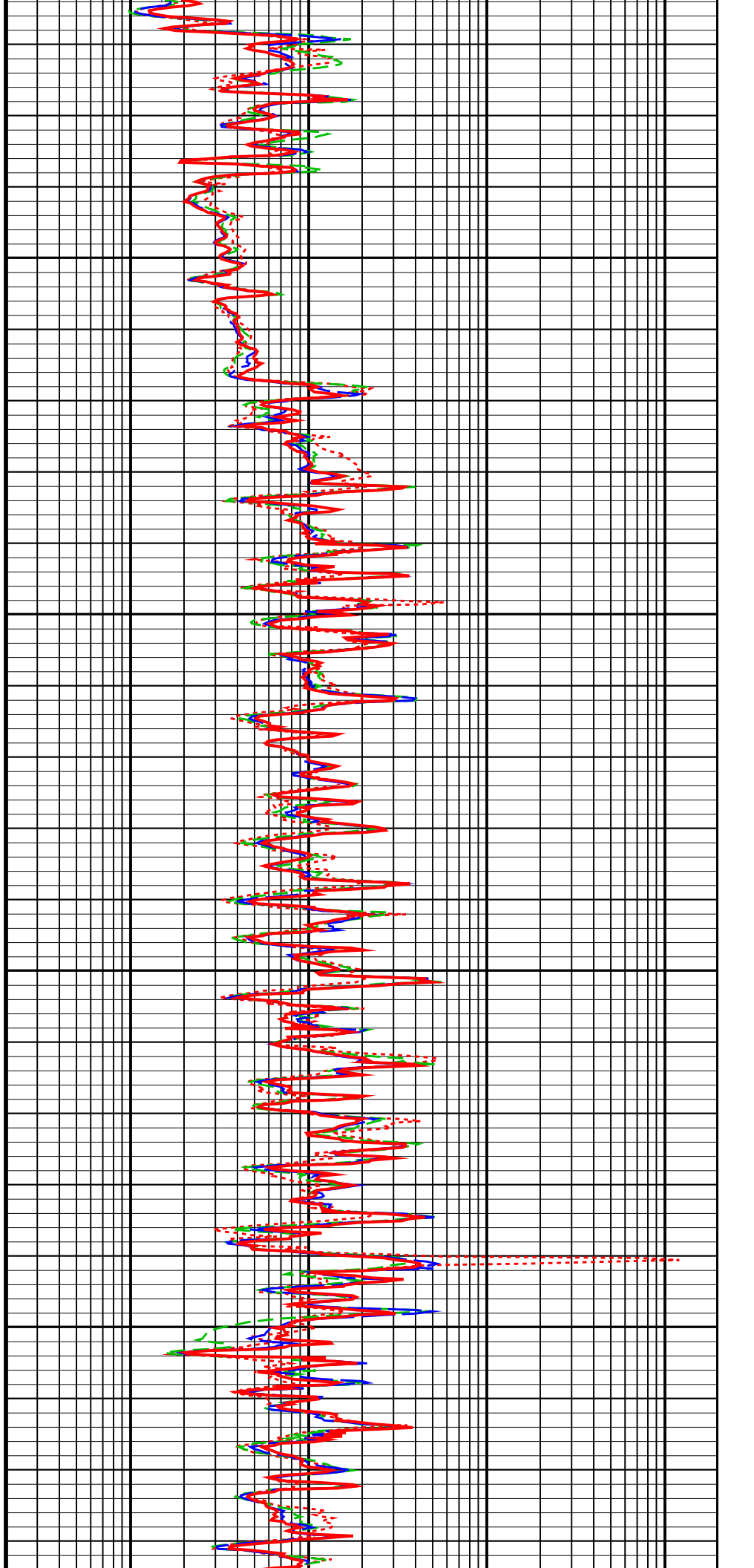


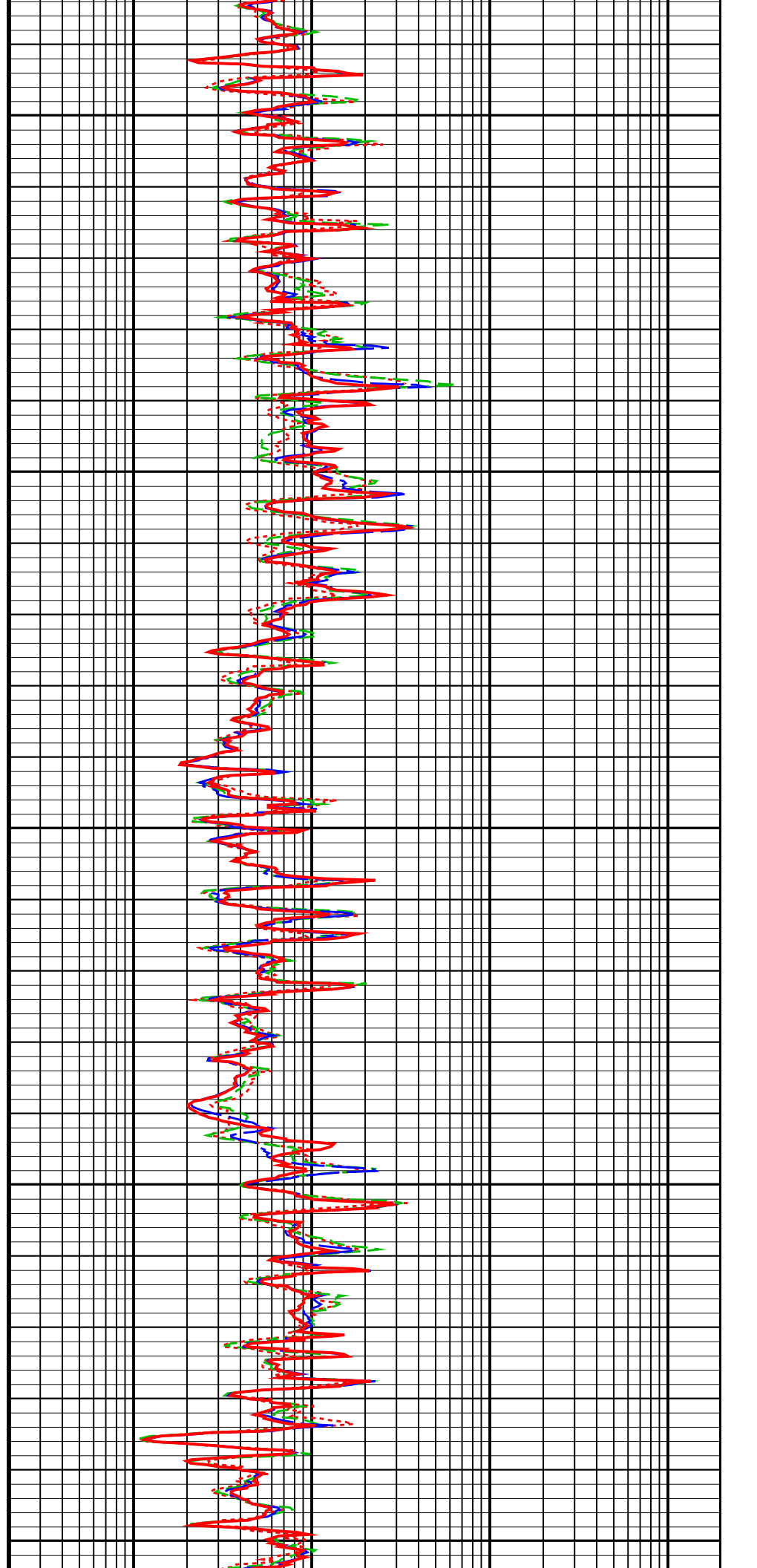
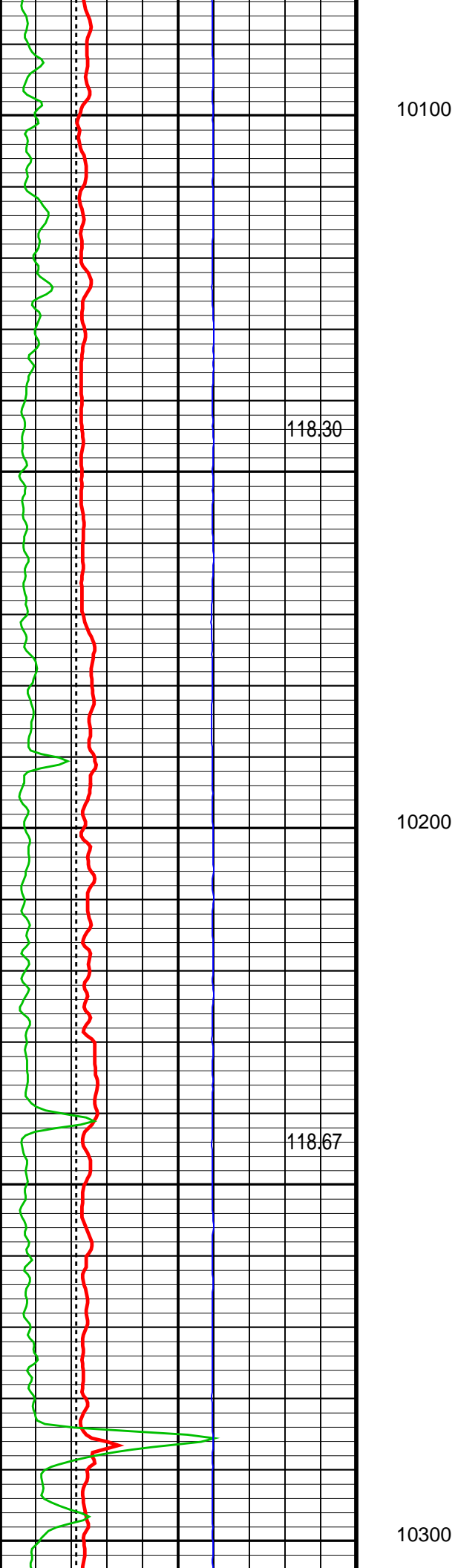
9900

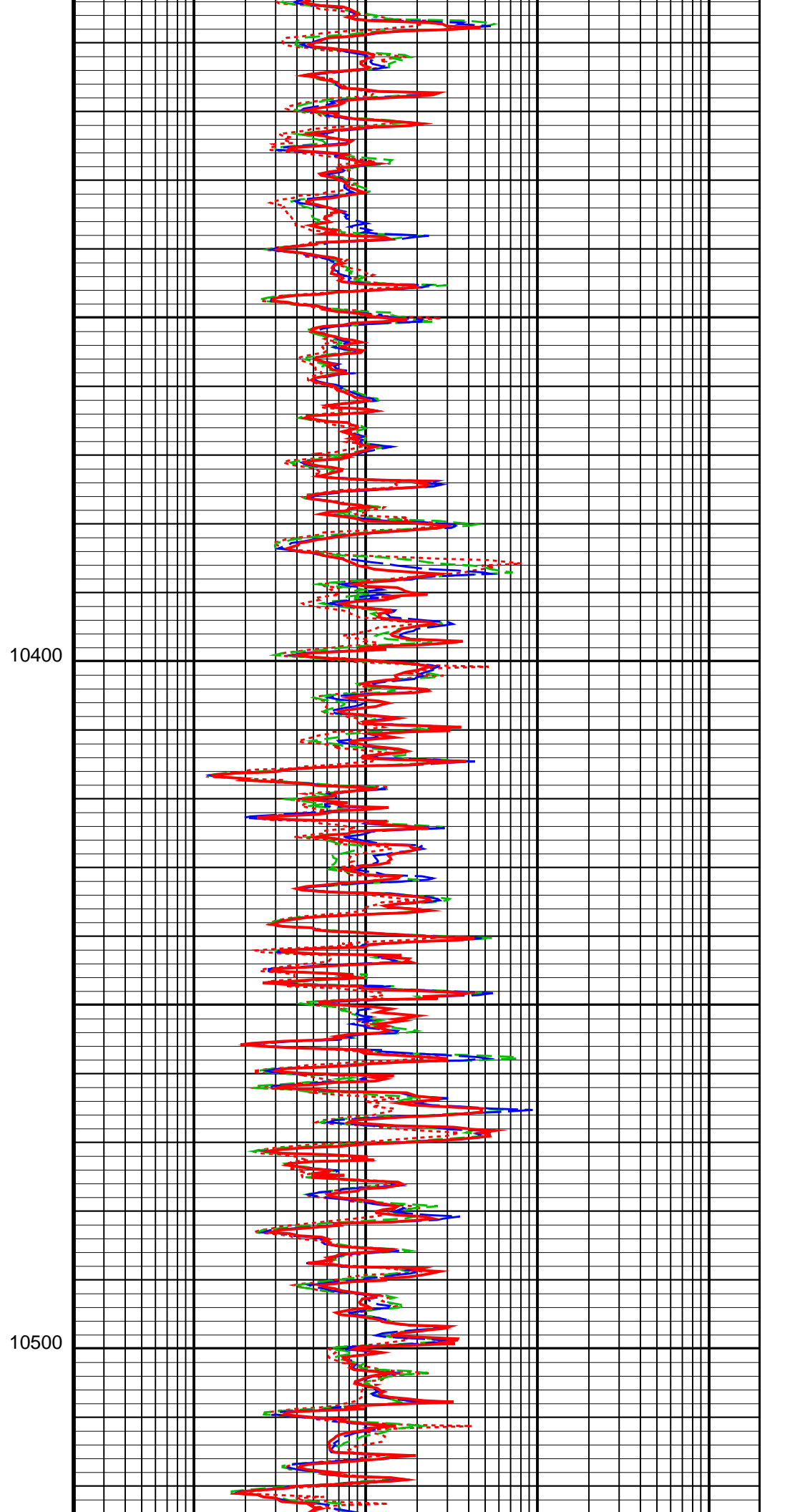
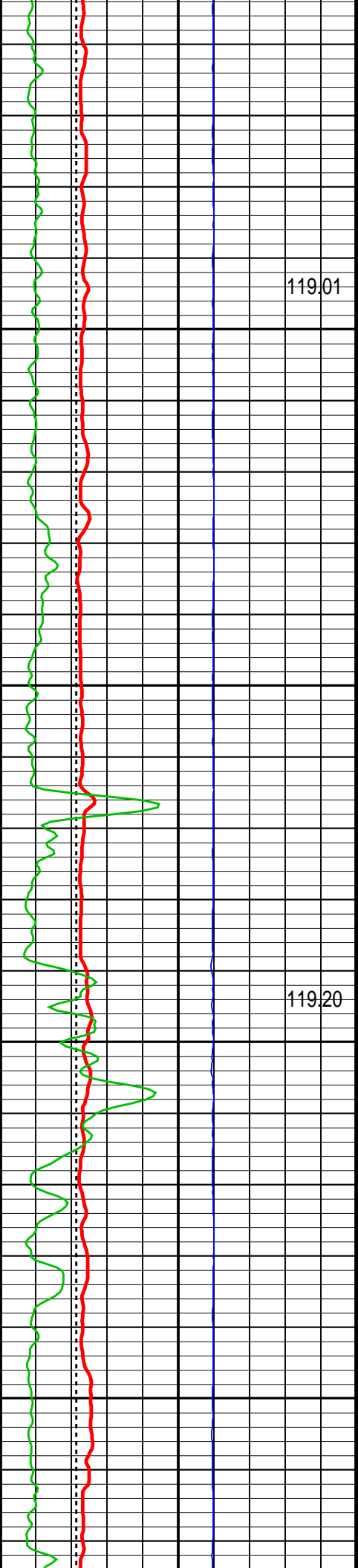
117.96

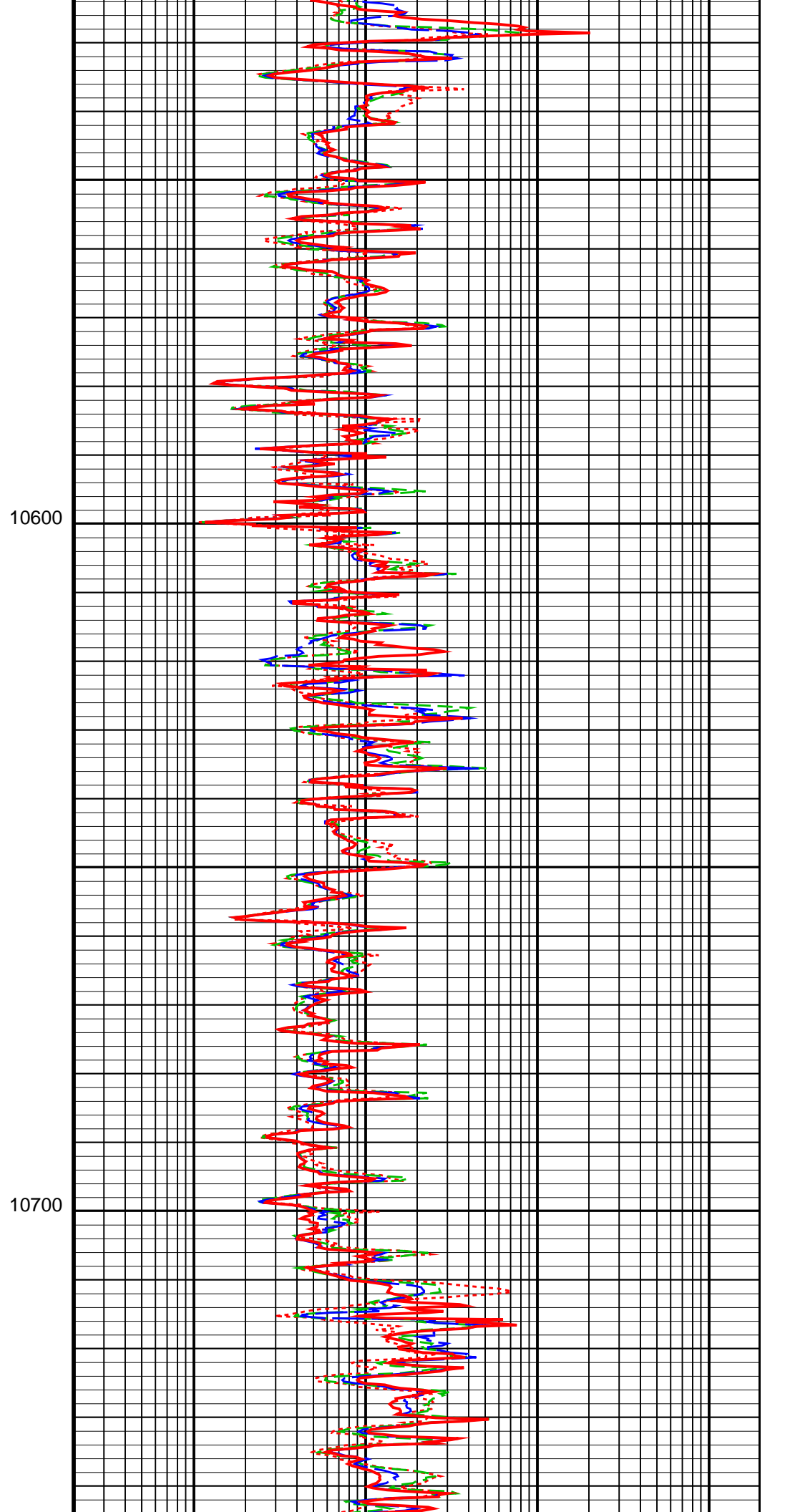
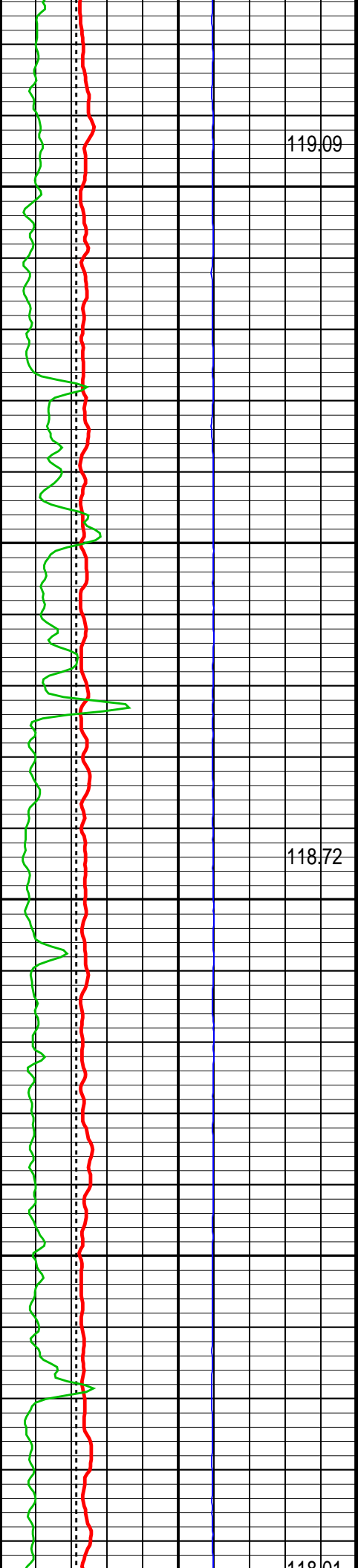
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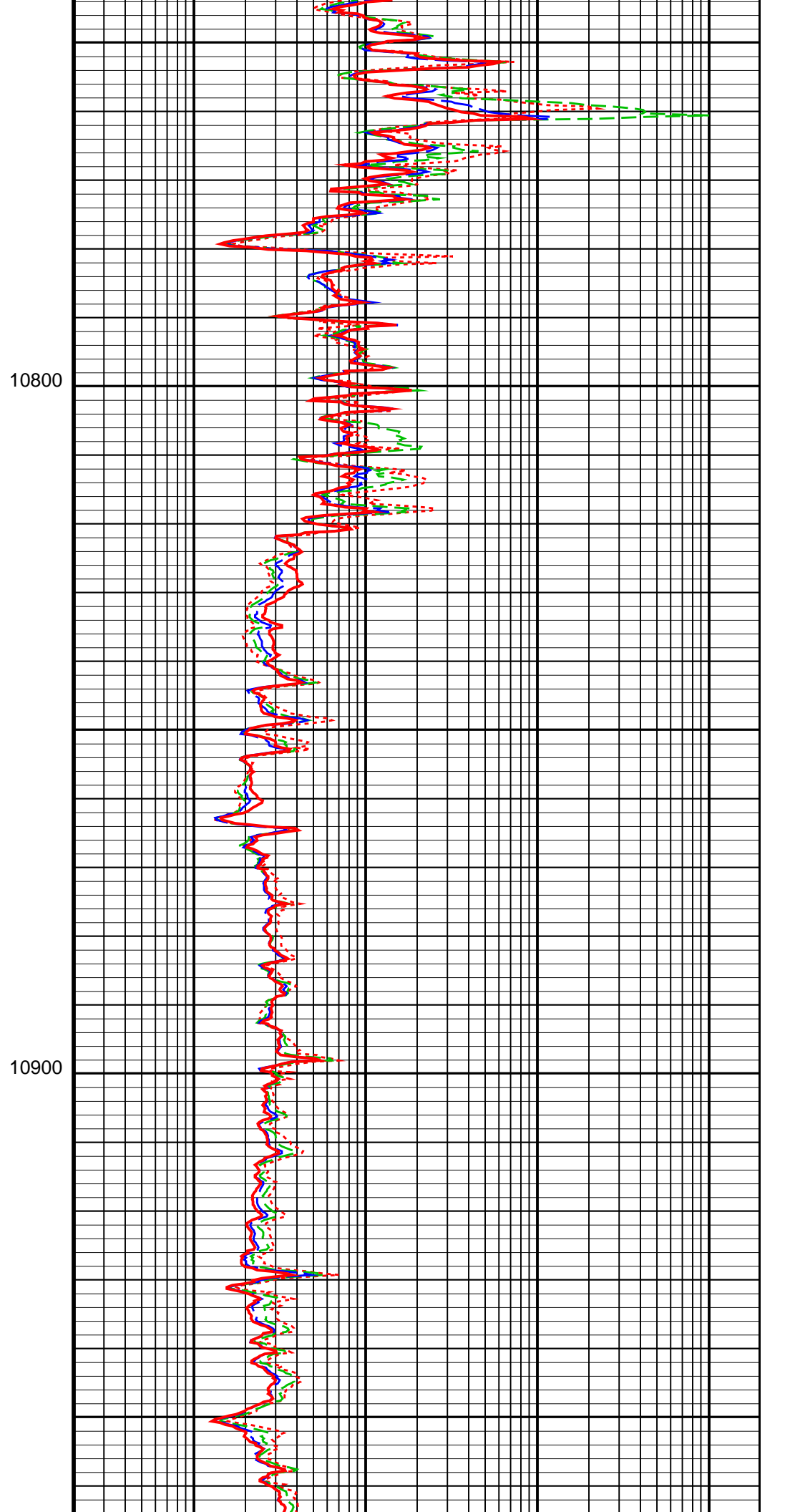
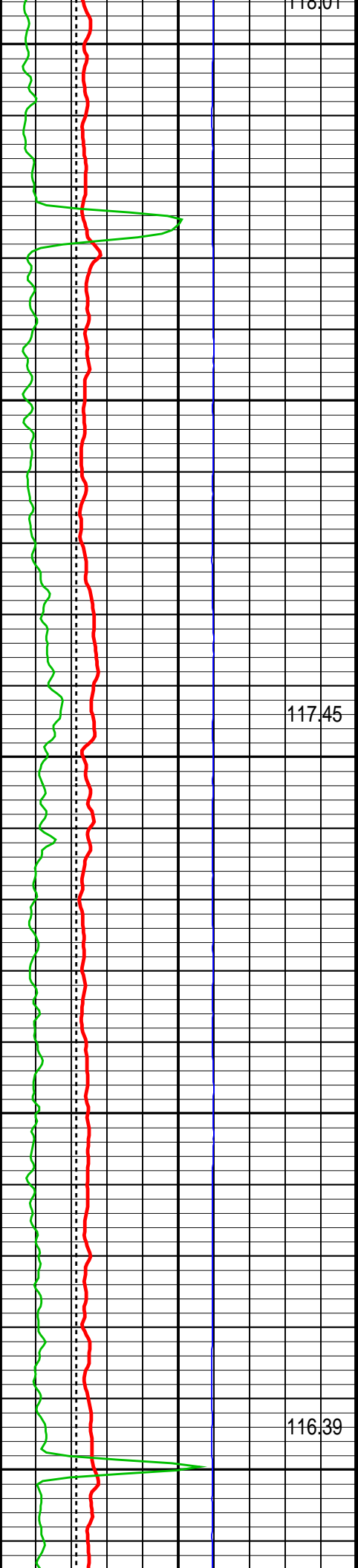
118.06

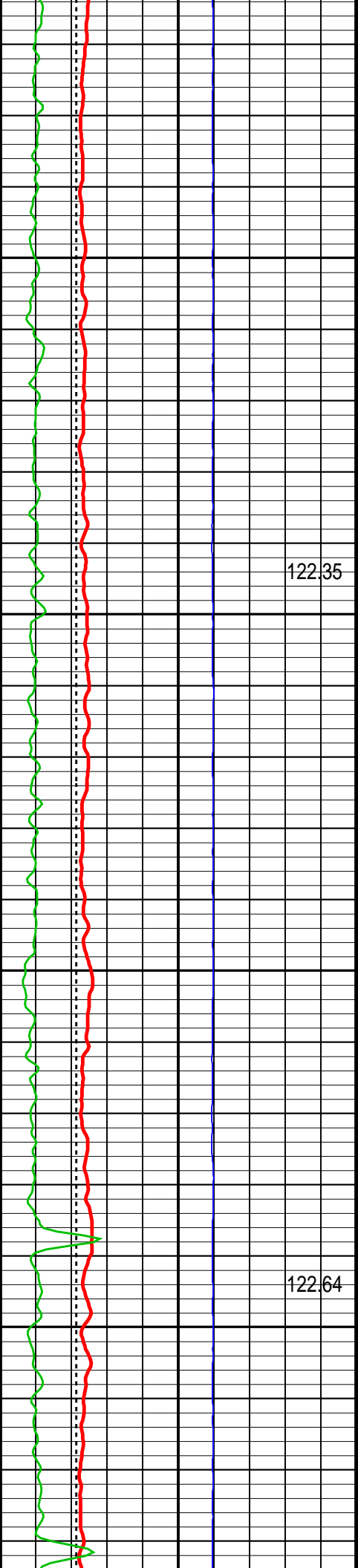










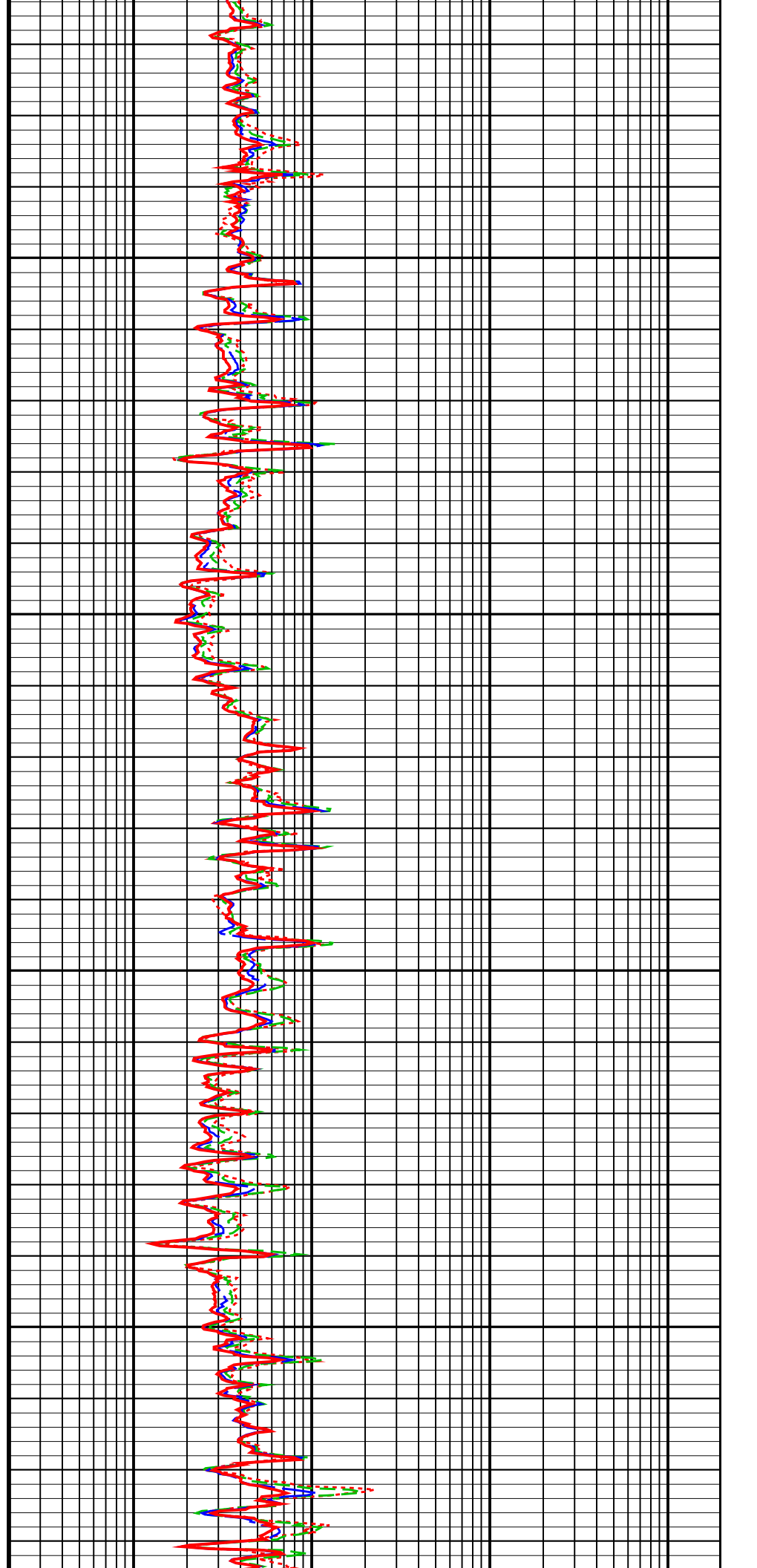


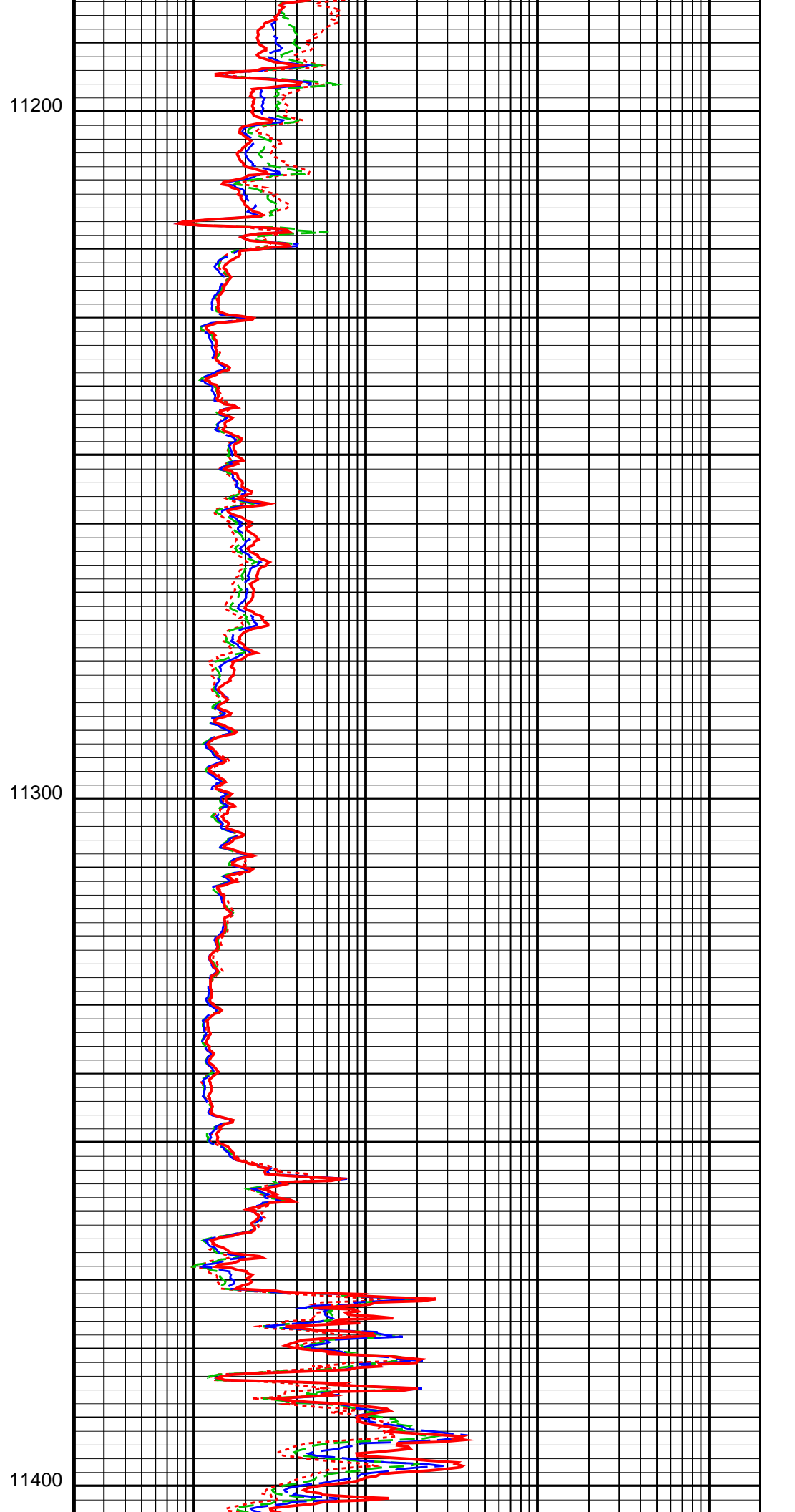
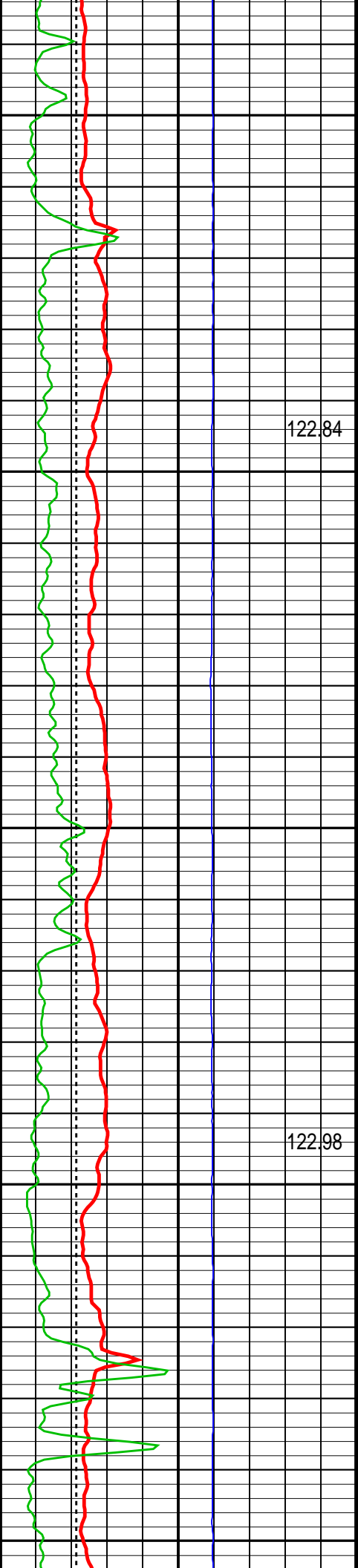
122.35

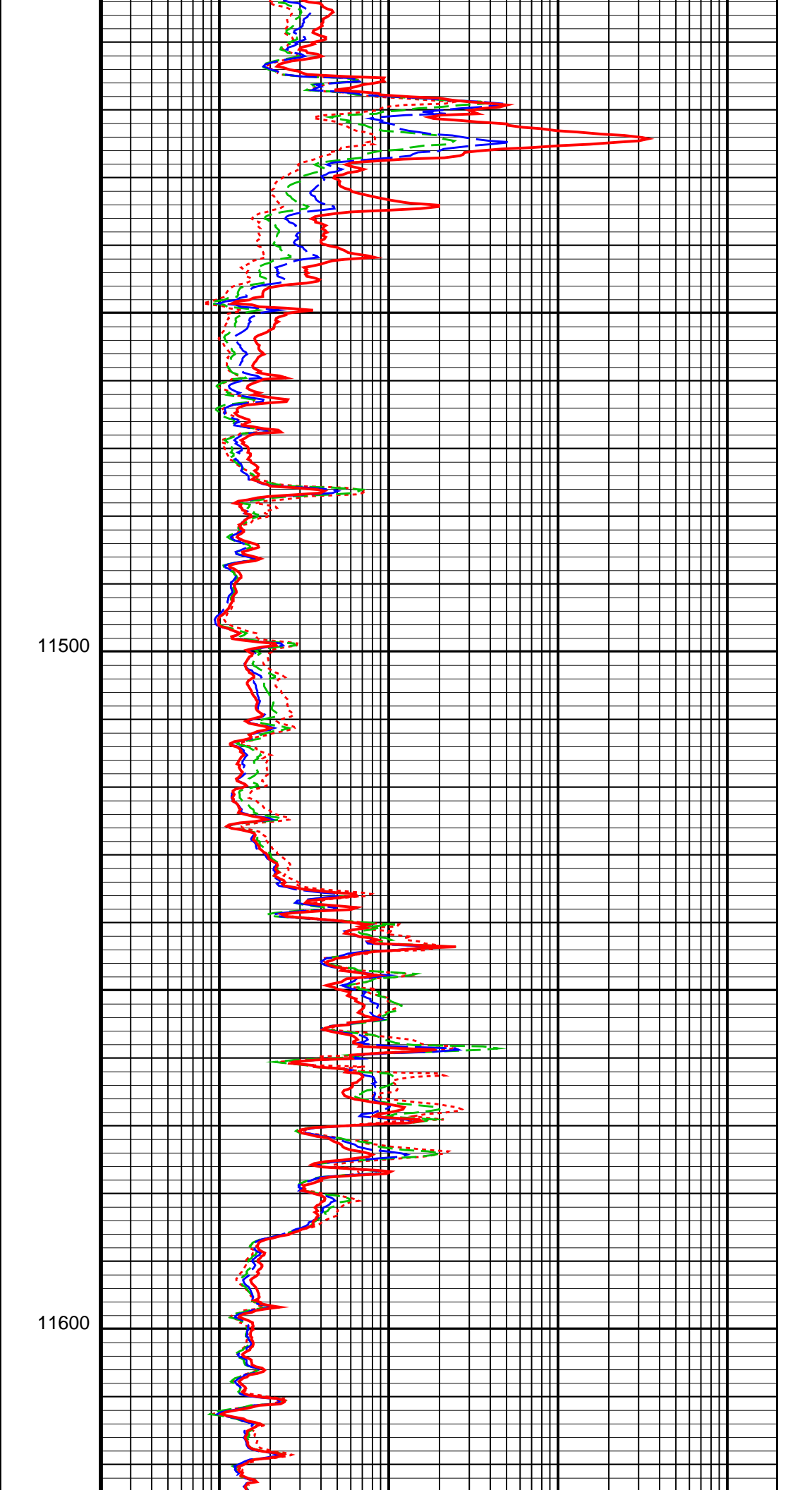
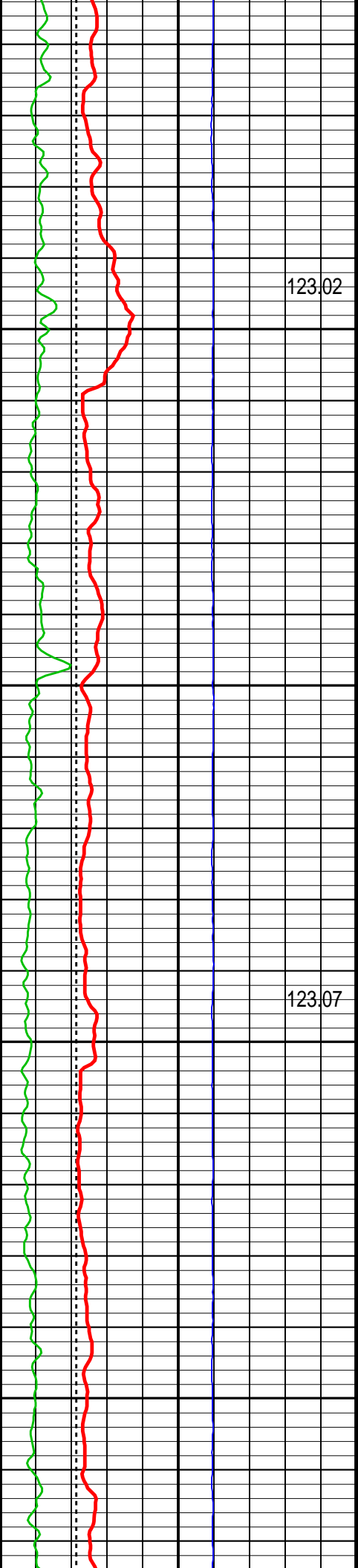
122.64

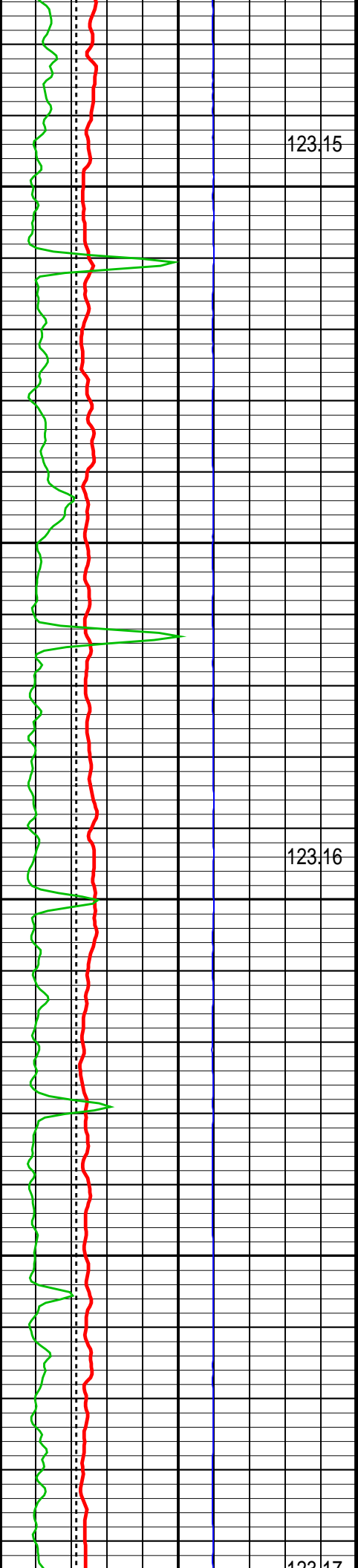
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11100









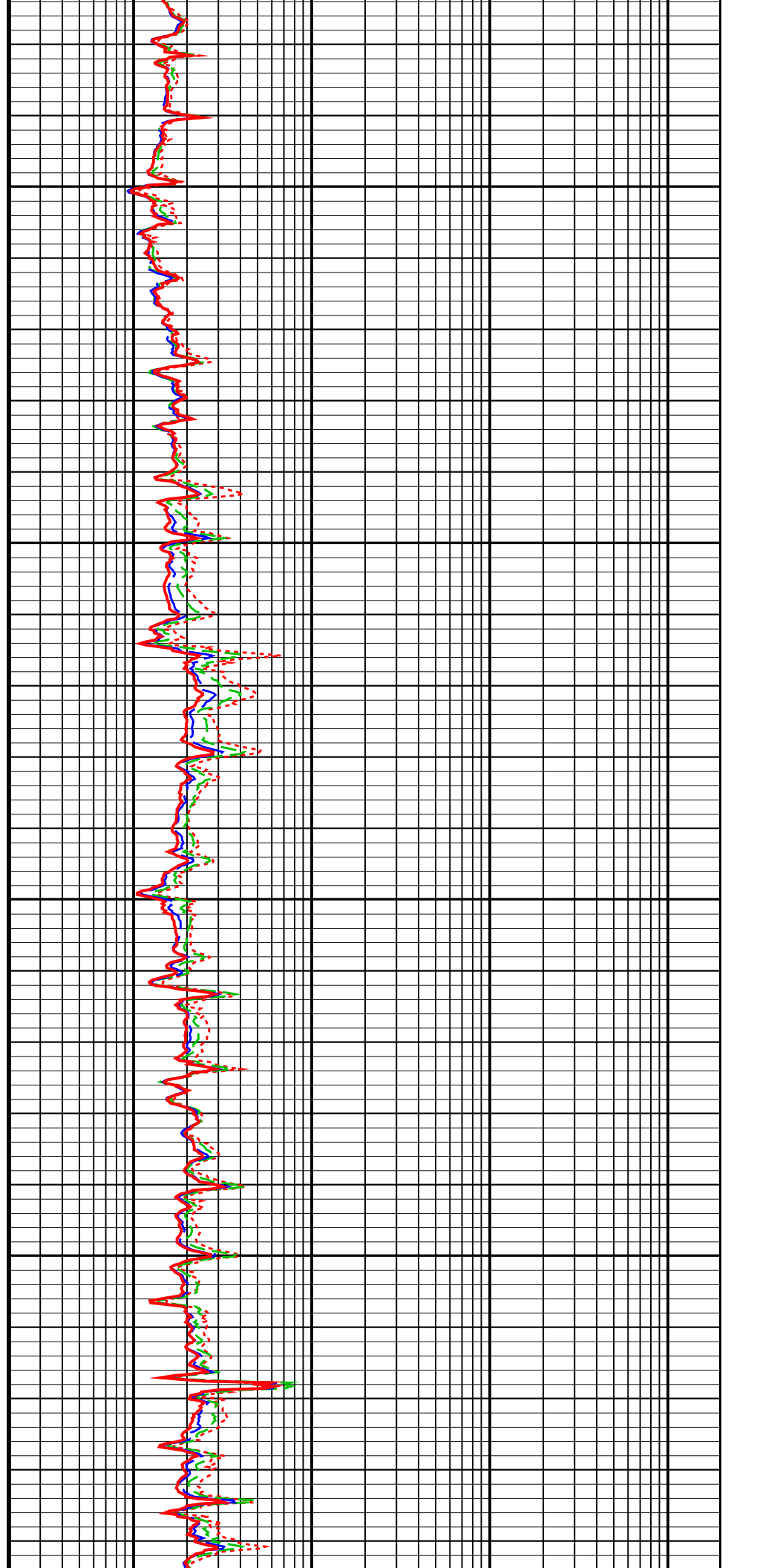
123.15

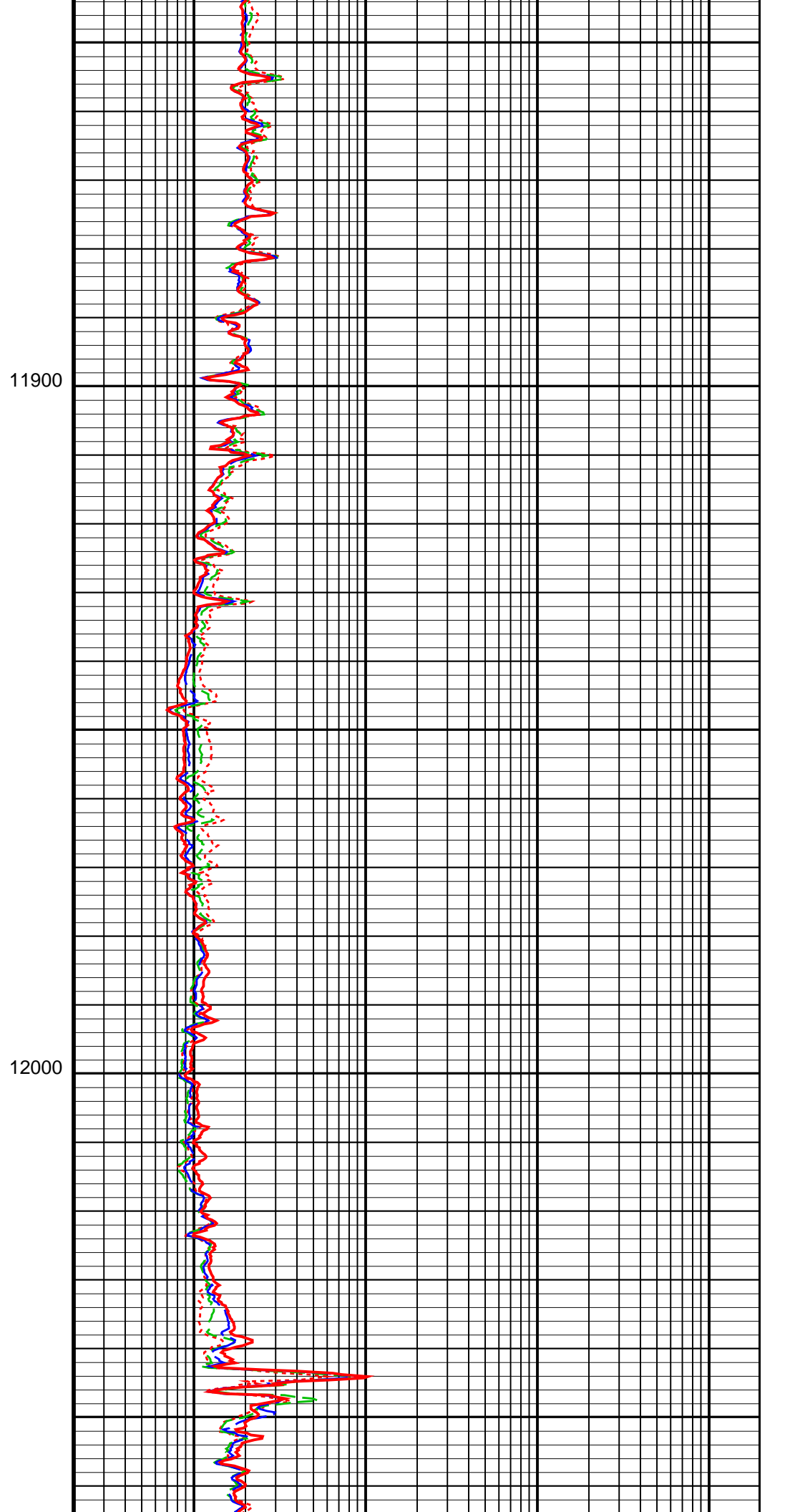
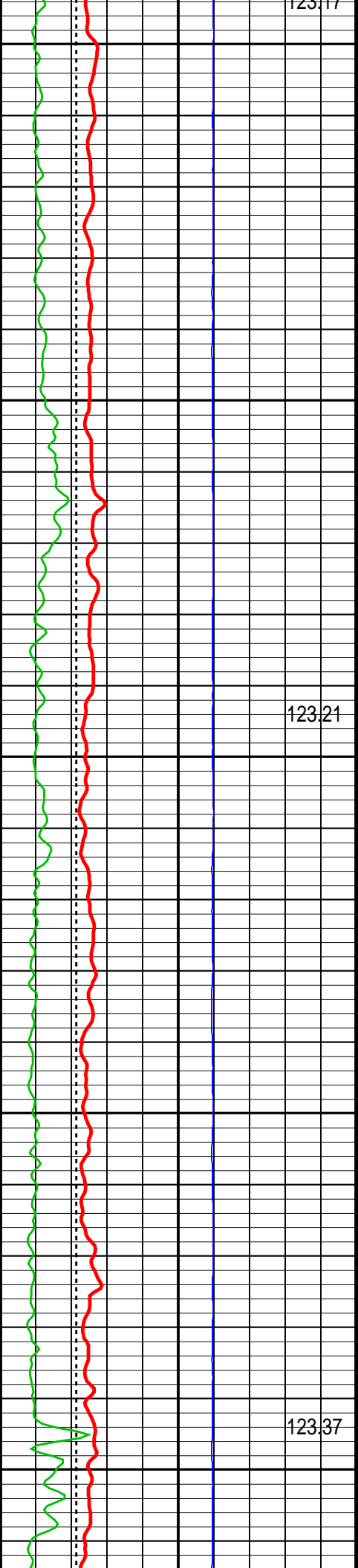
123.16

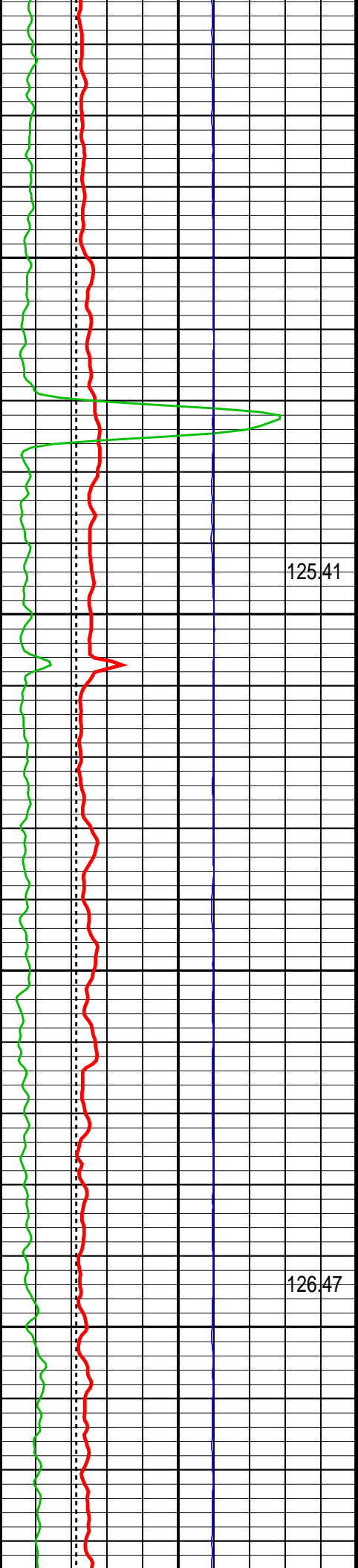
123.17

11700

11800

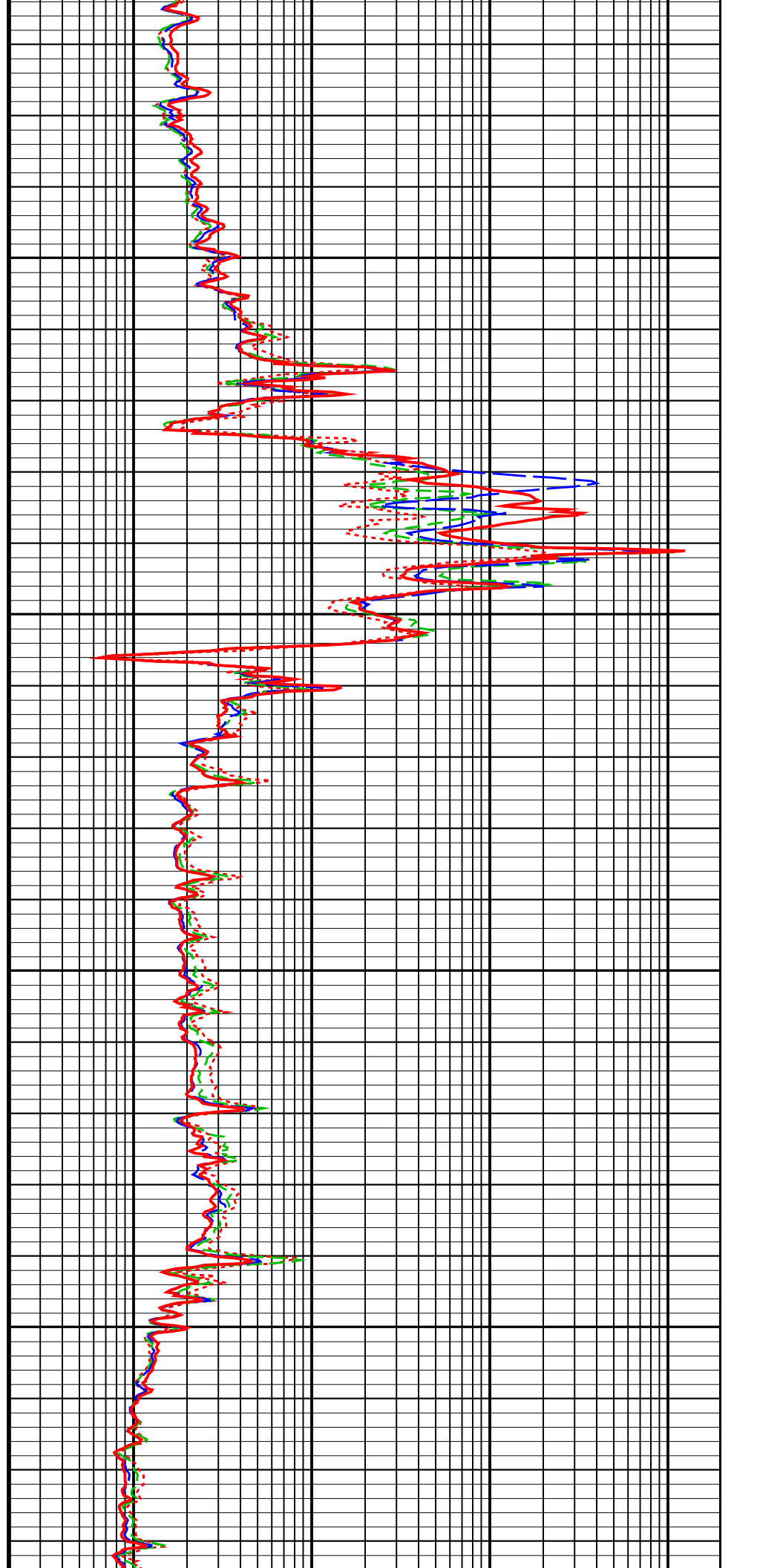






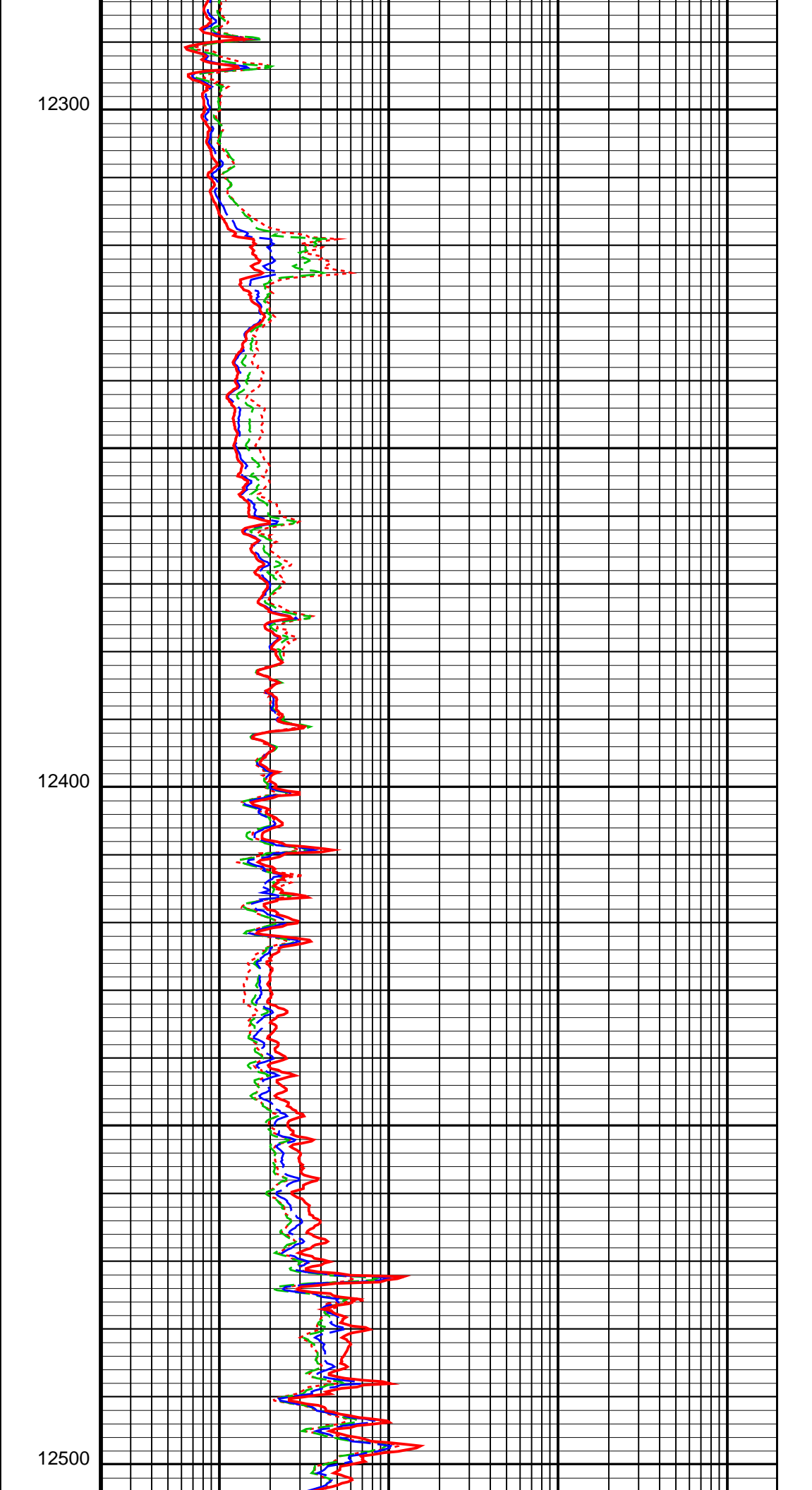
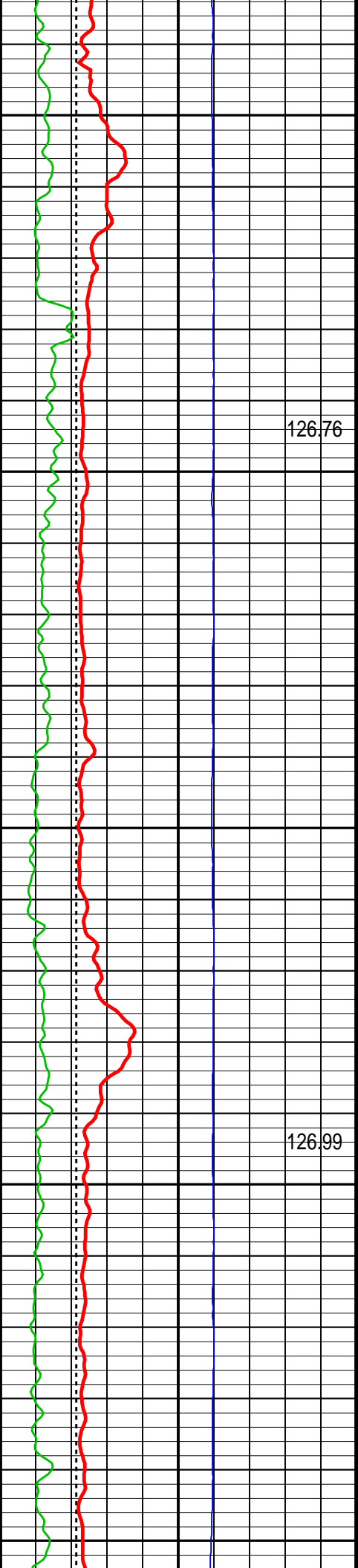
12100

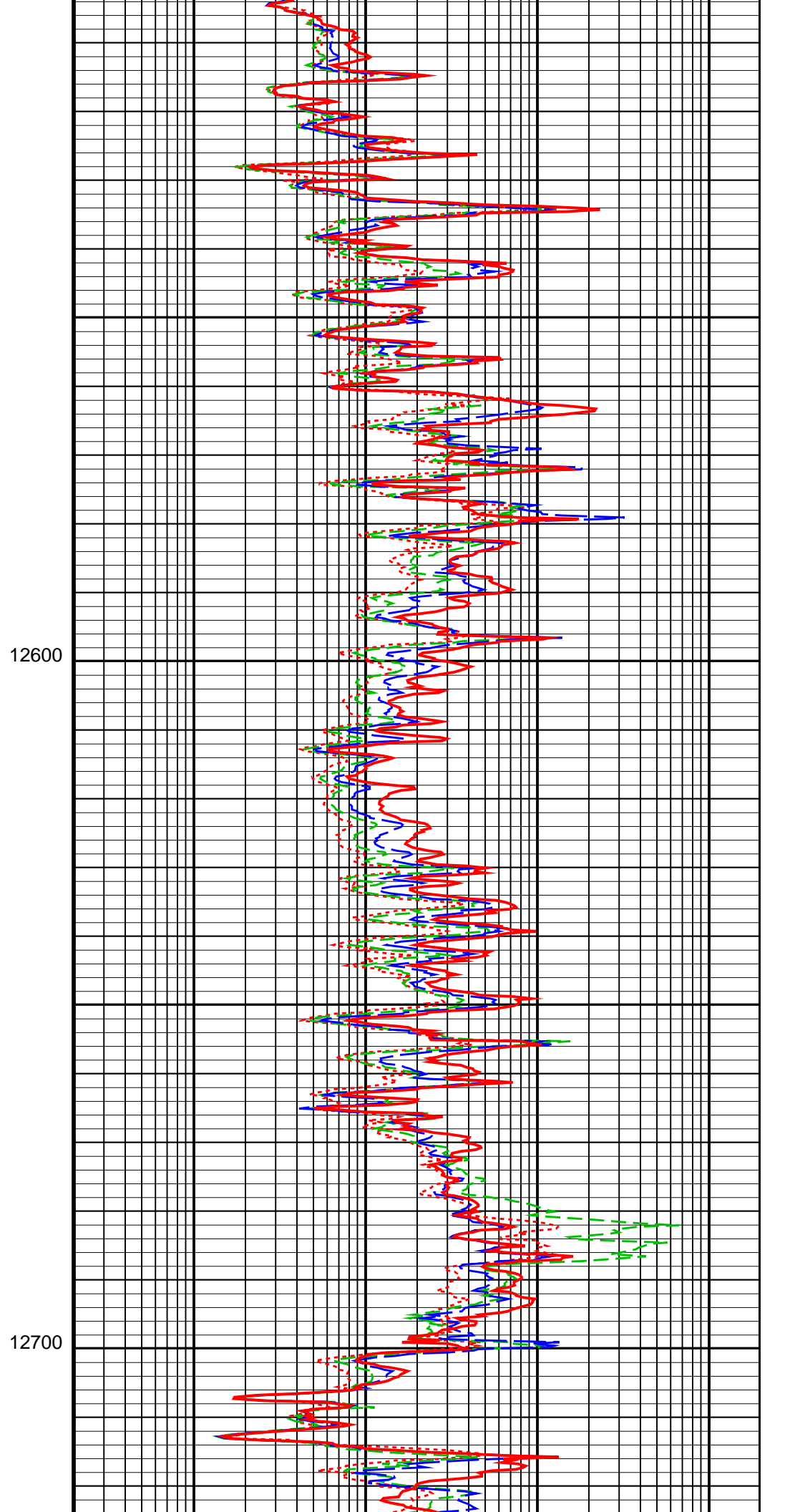
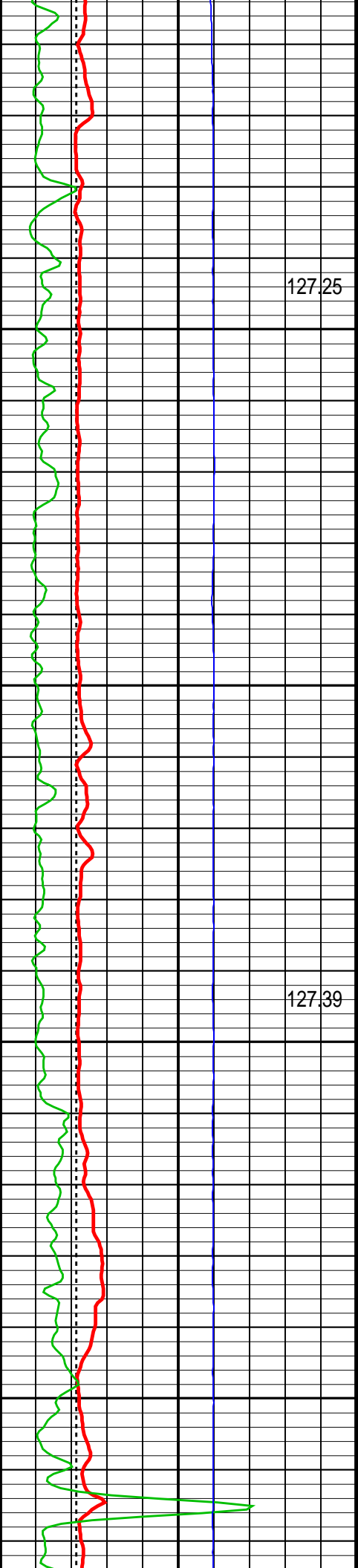
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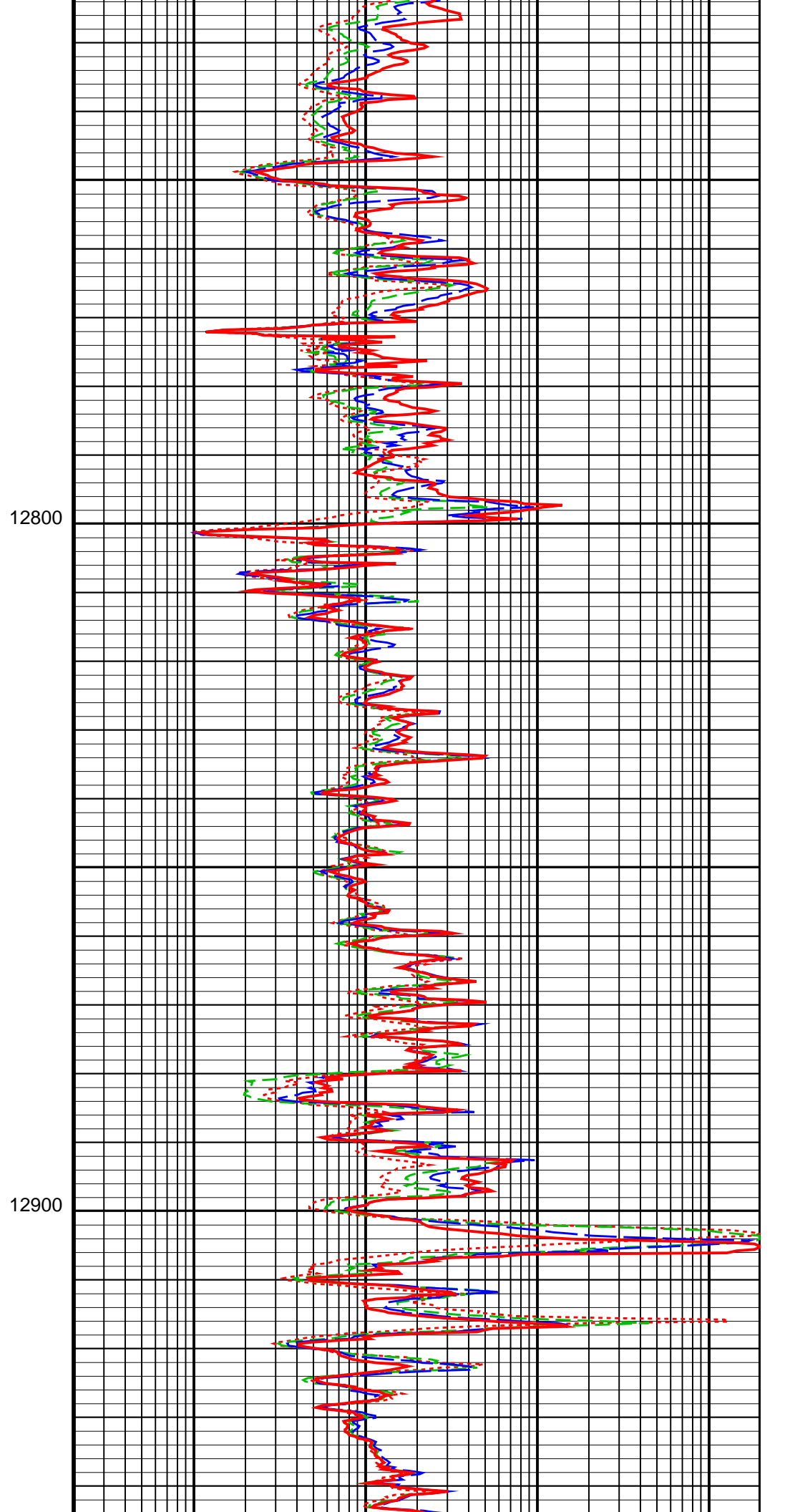
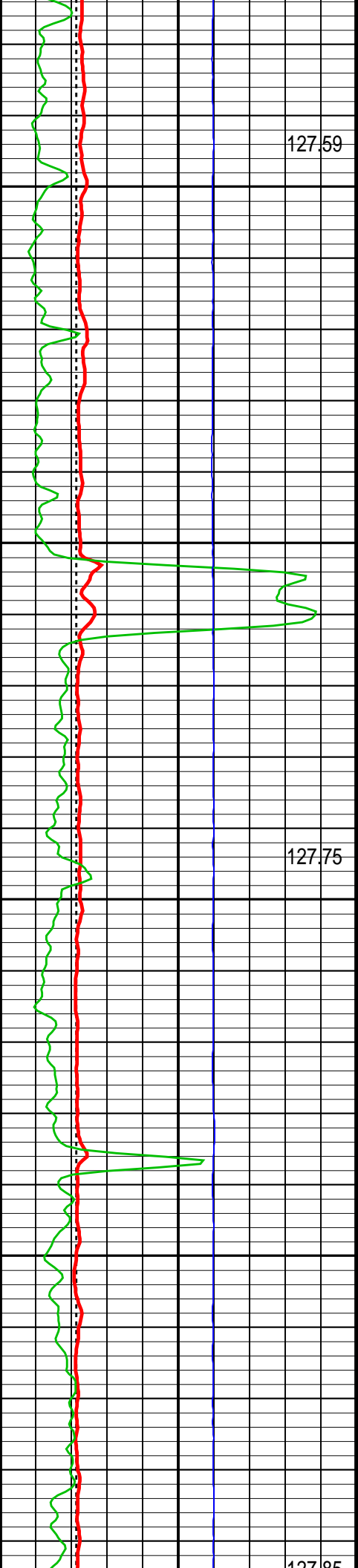


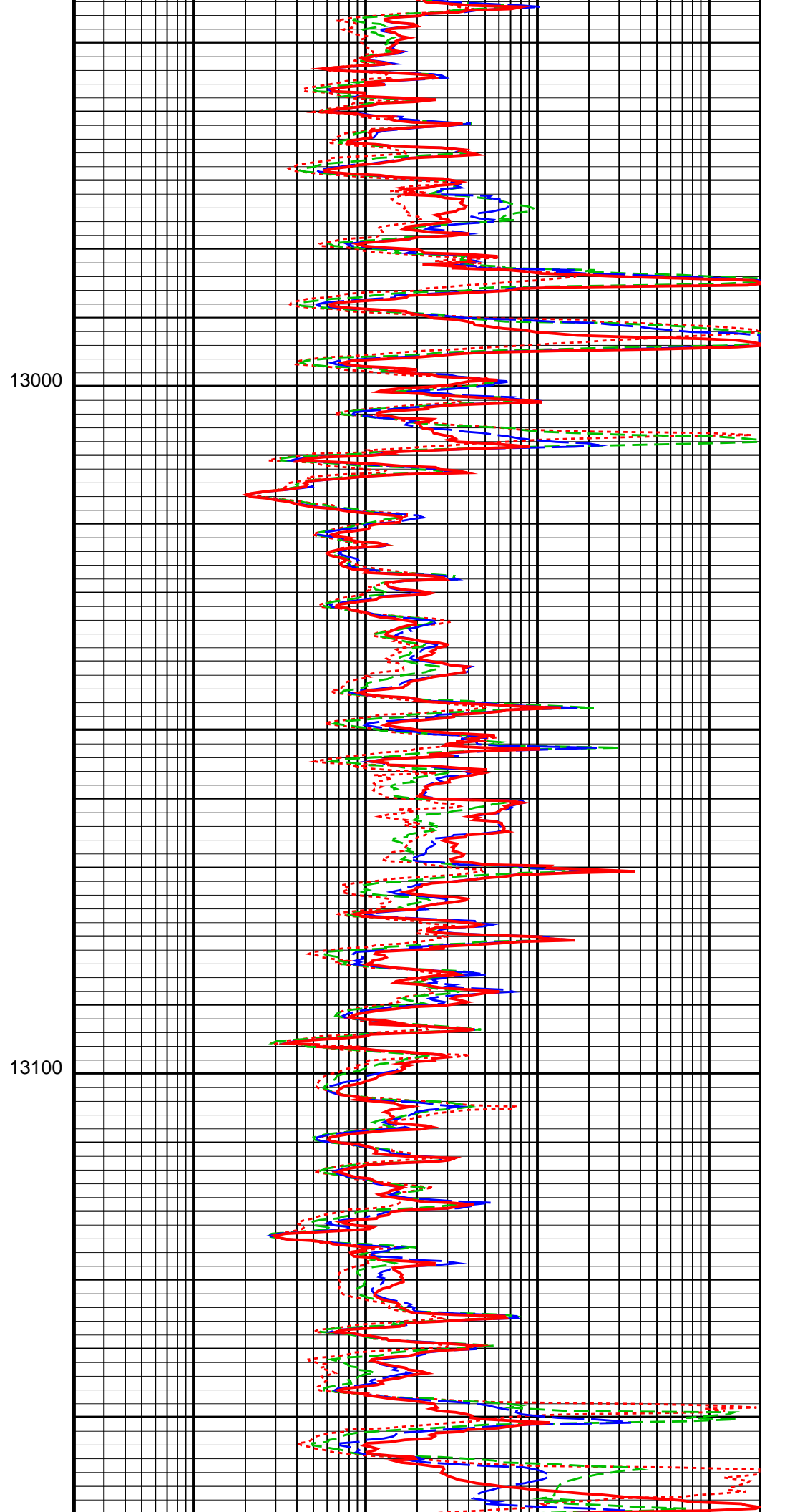
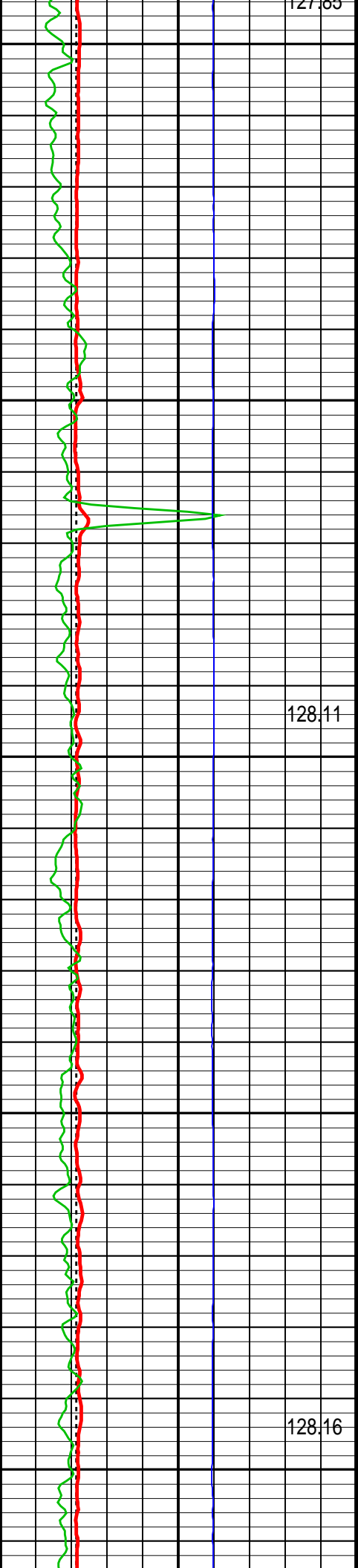
125.41

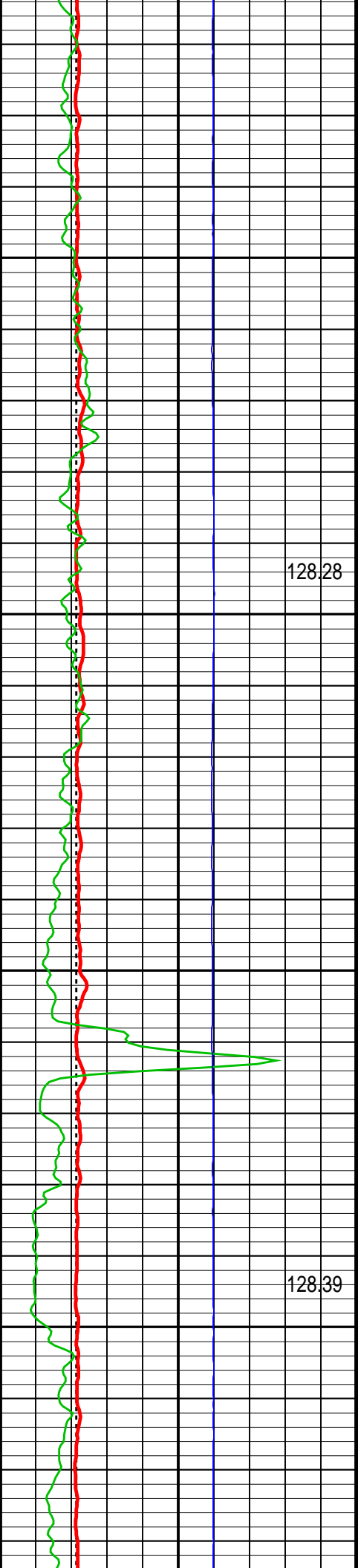
126.47









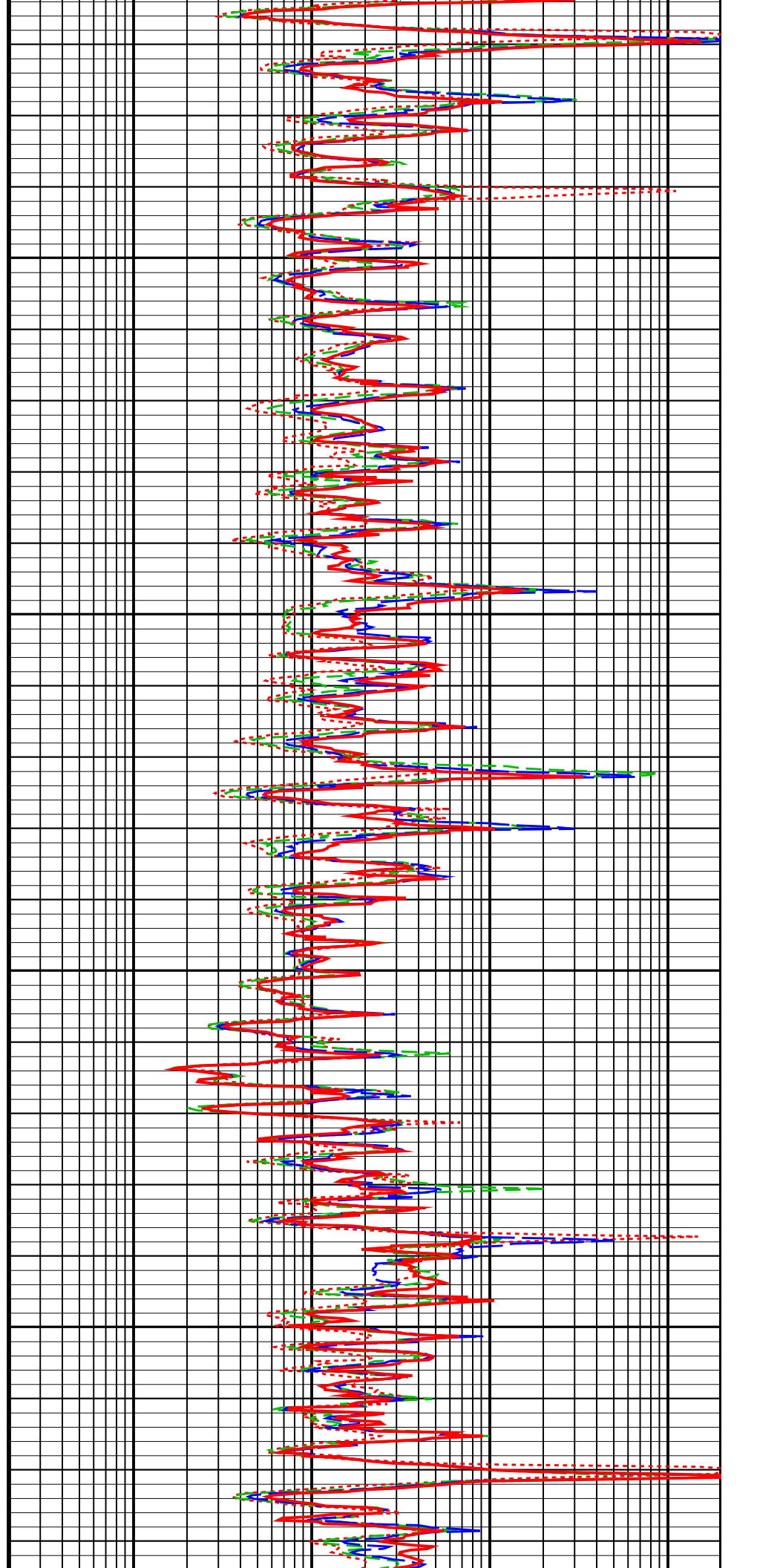


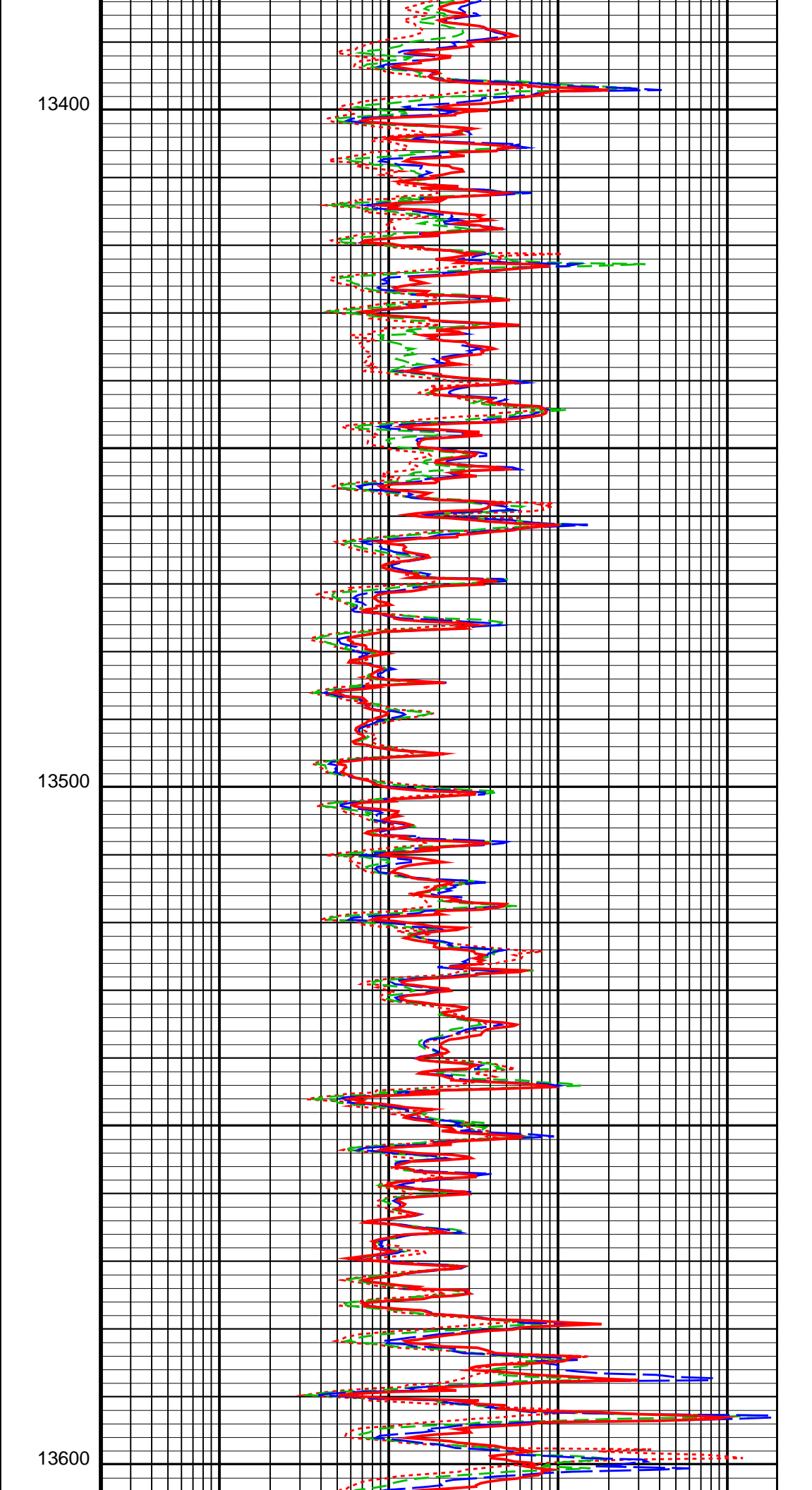
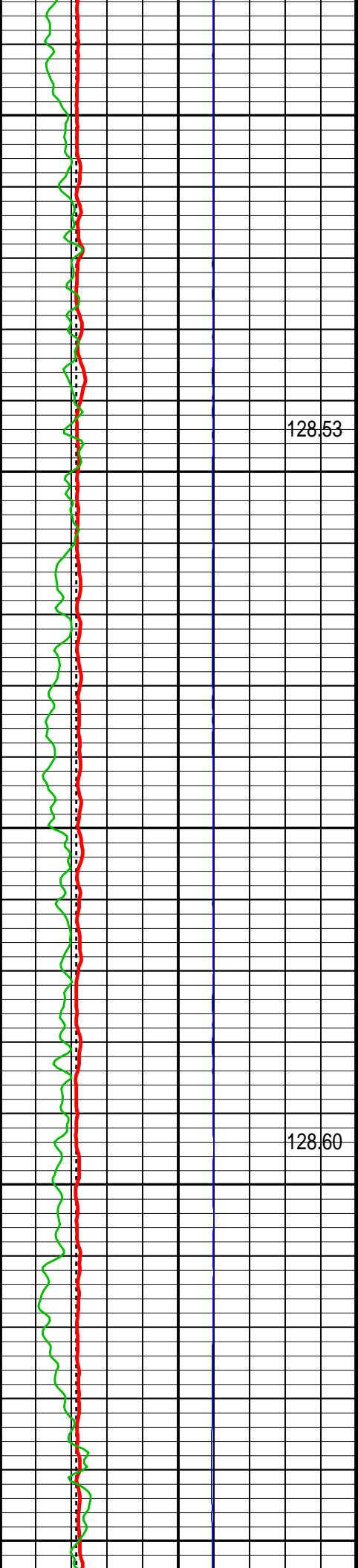
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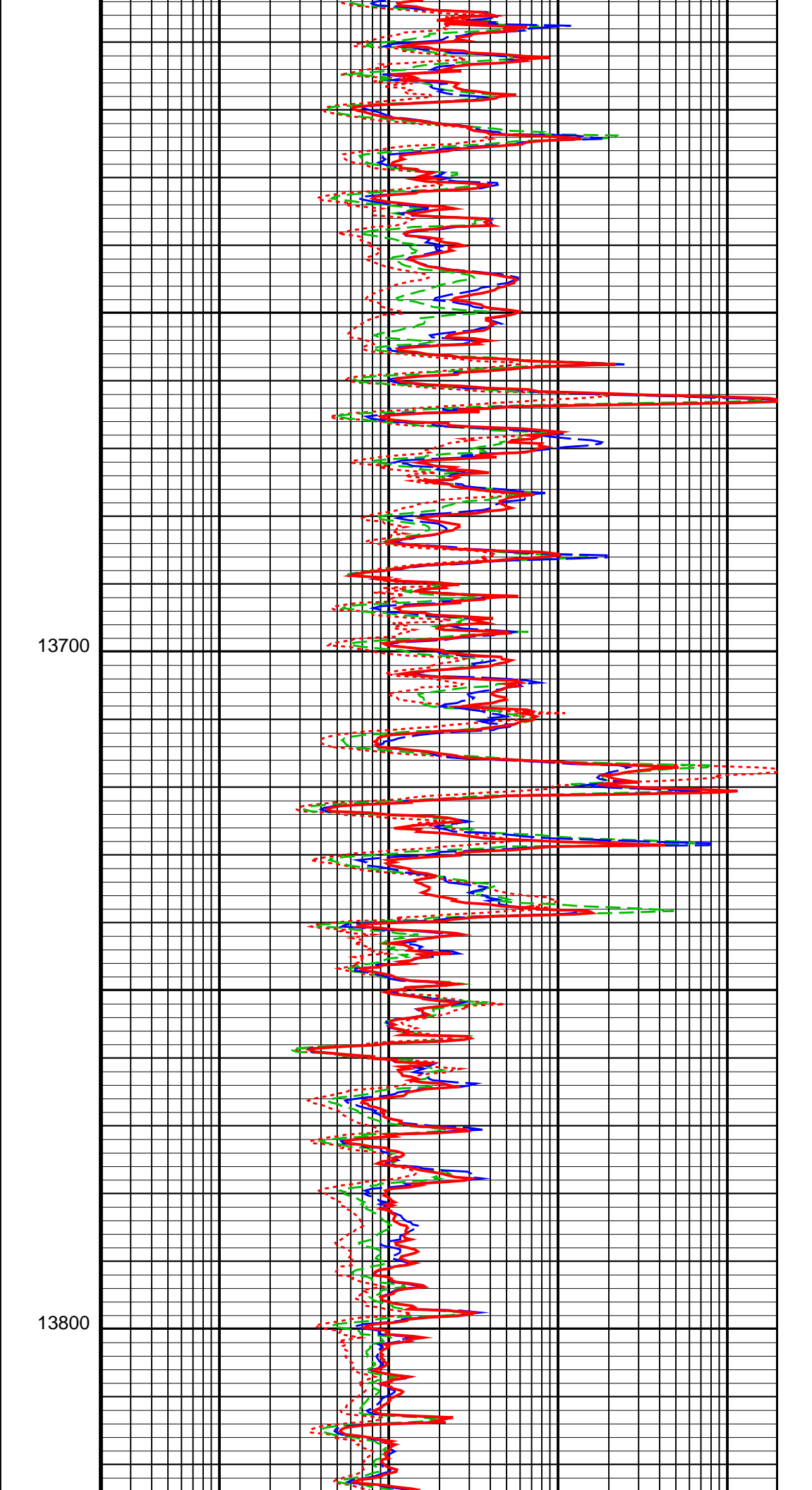
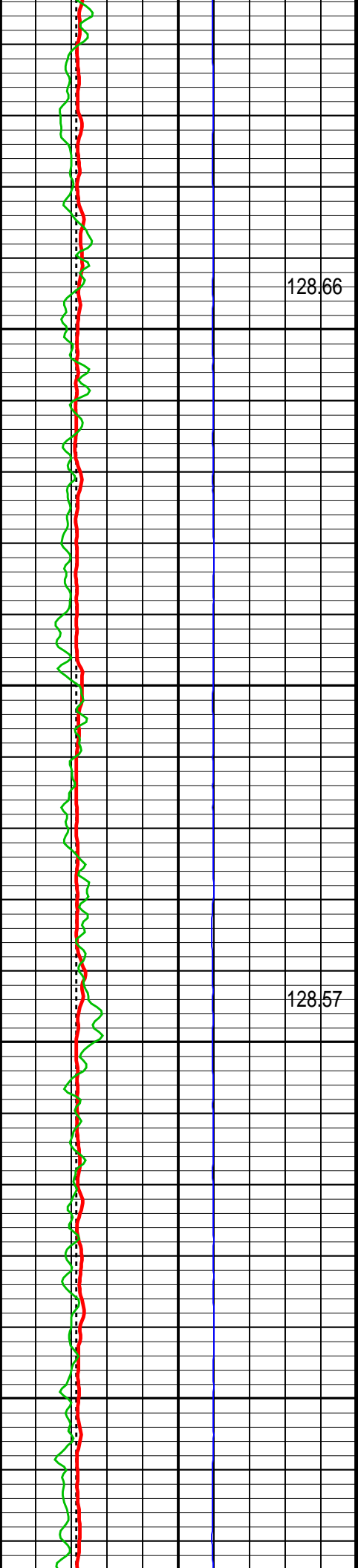
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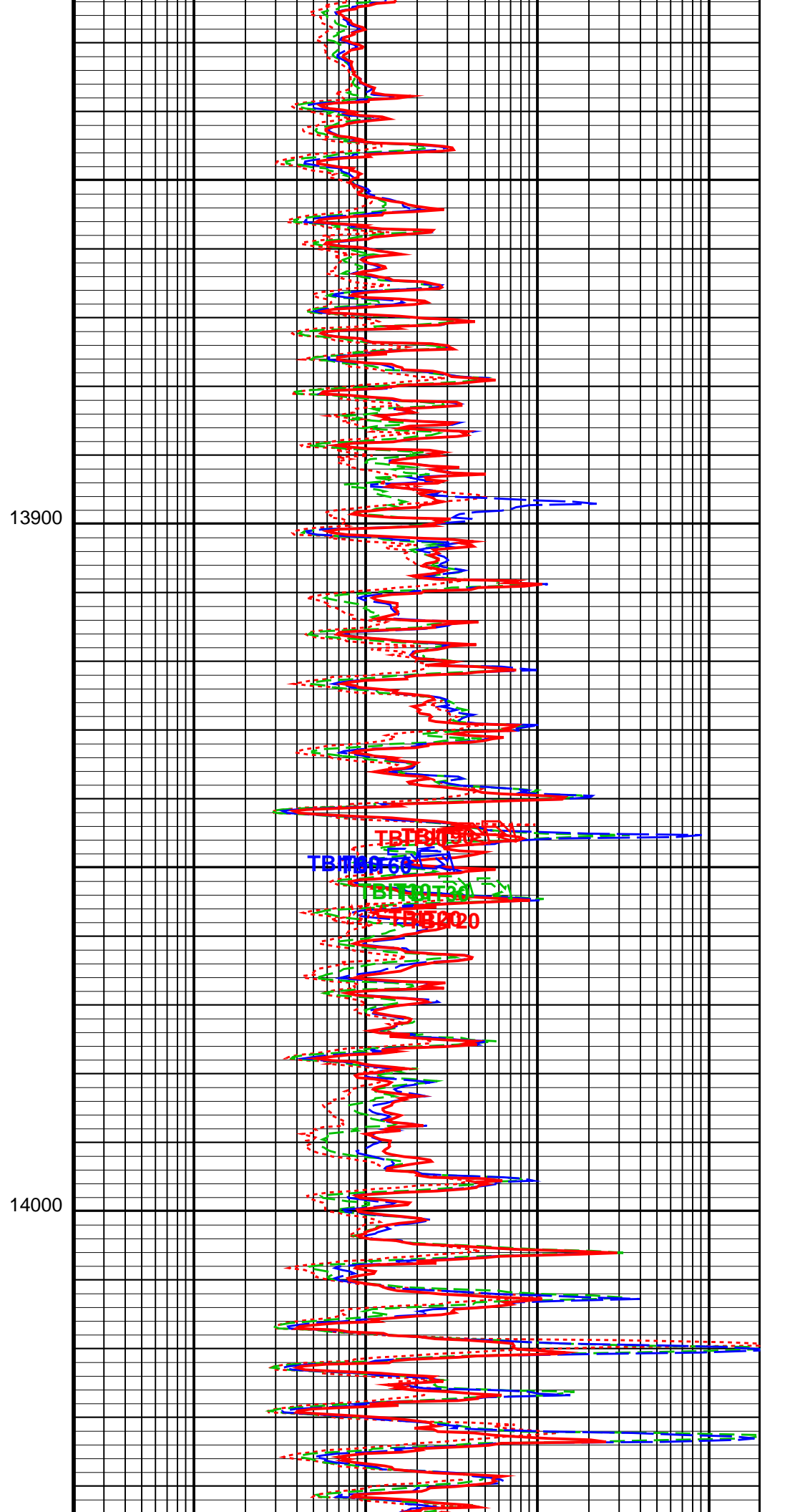
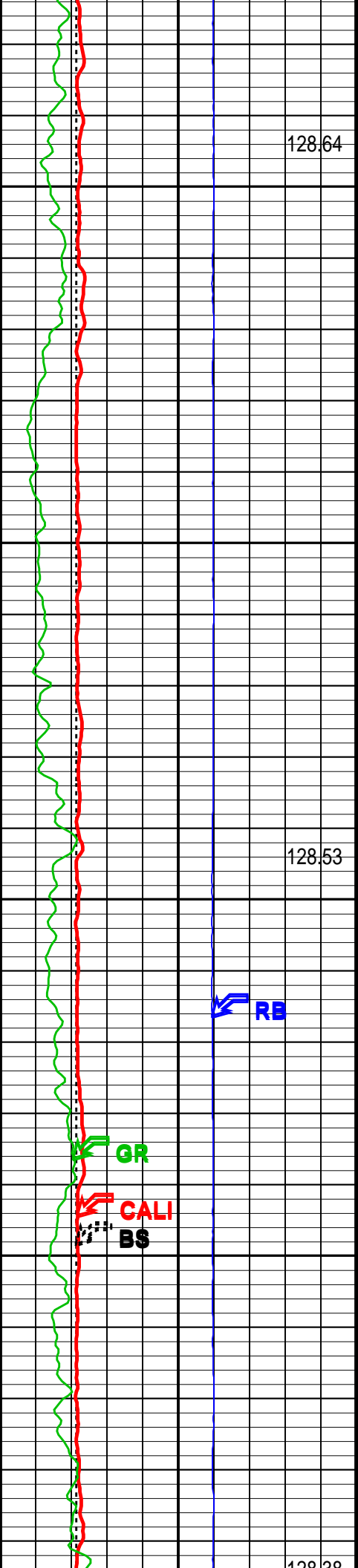
128.28

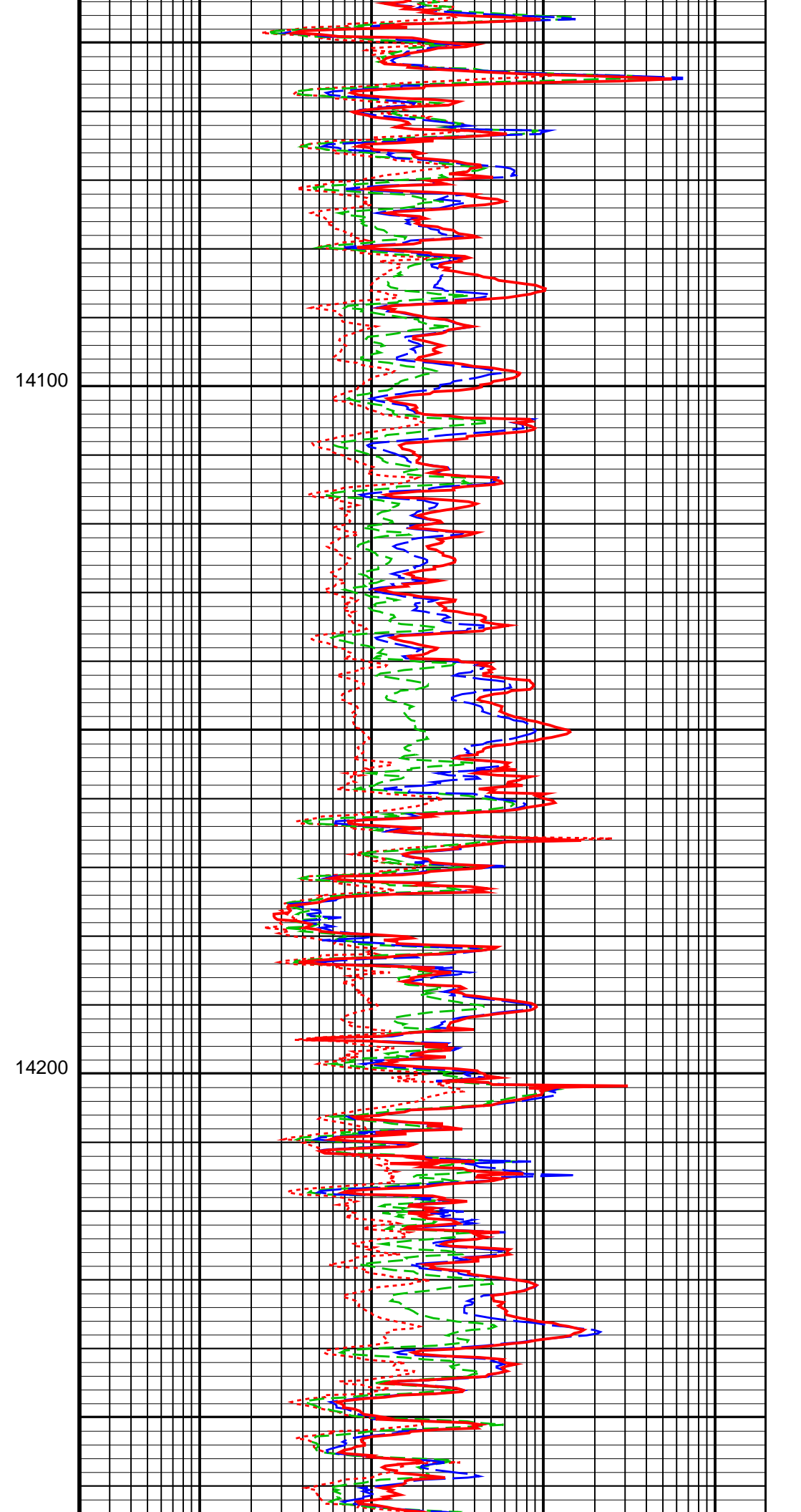
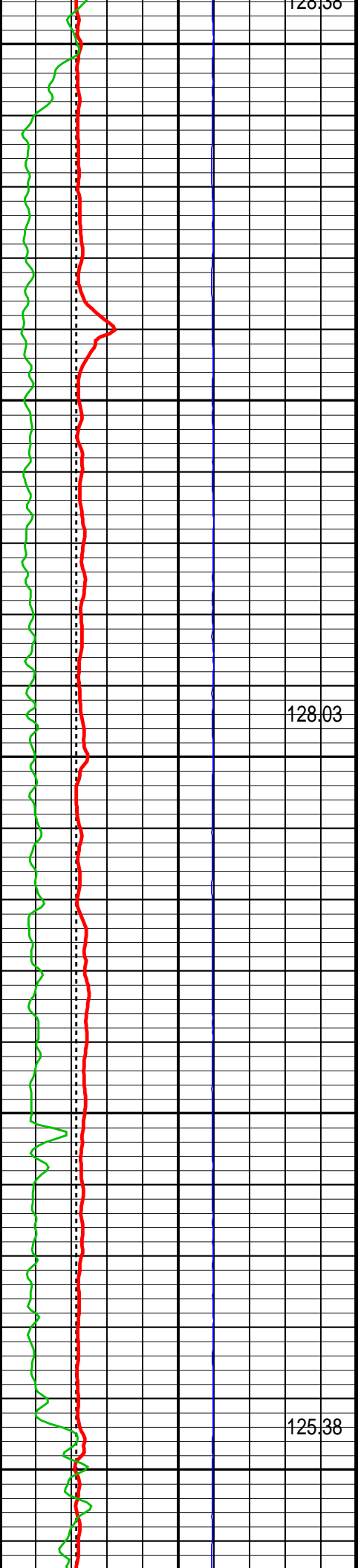
128.39

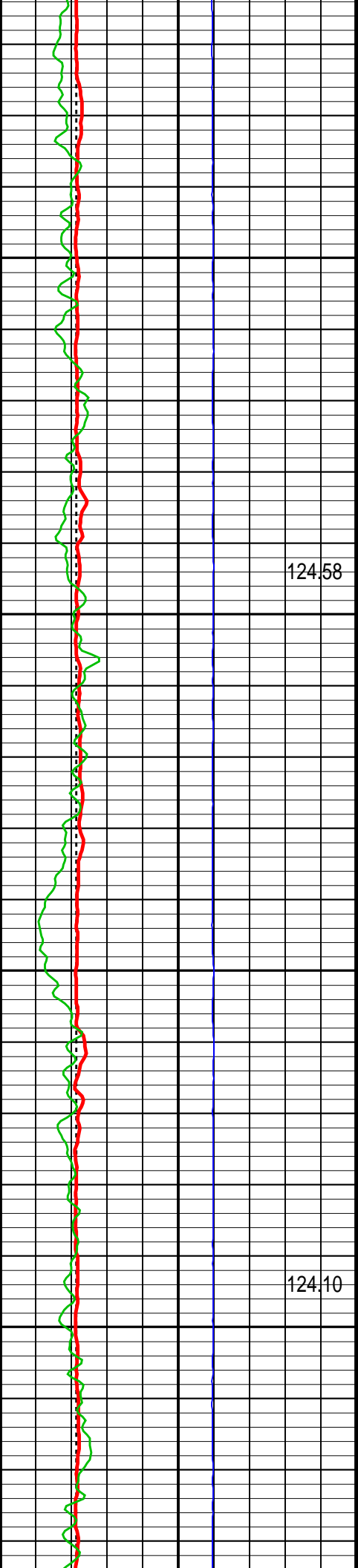










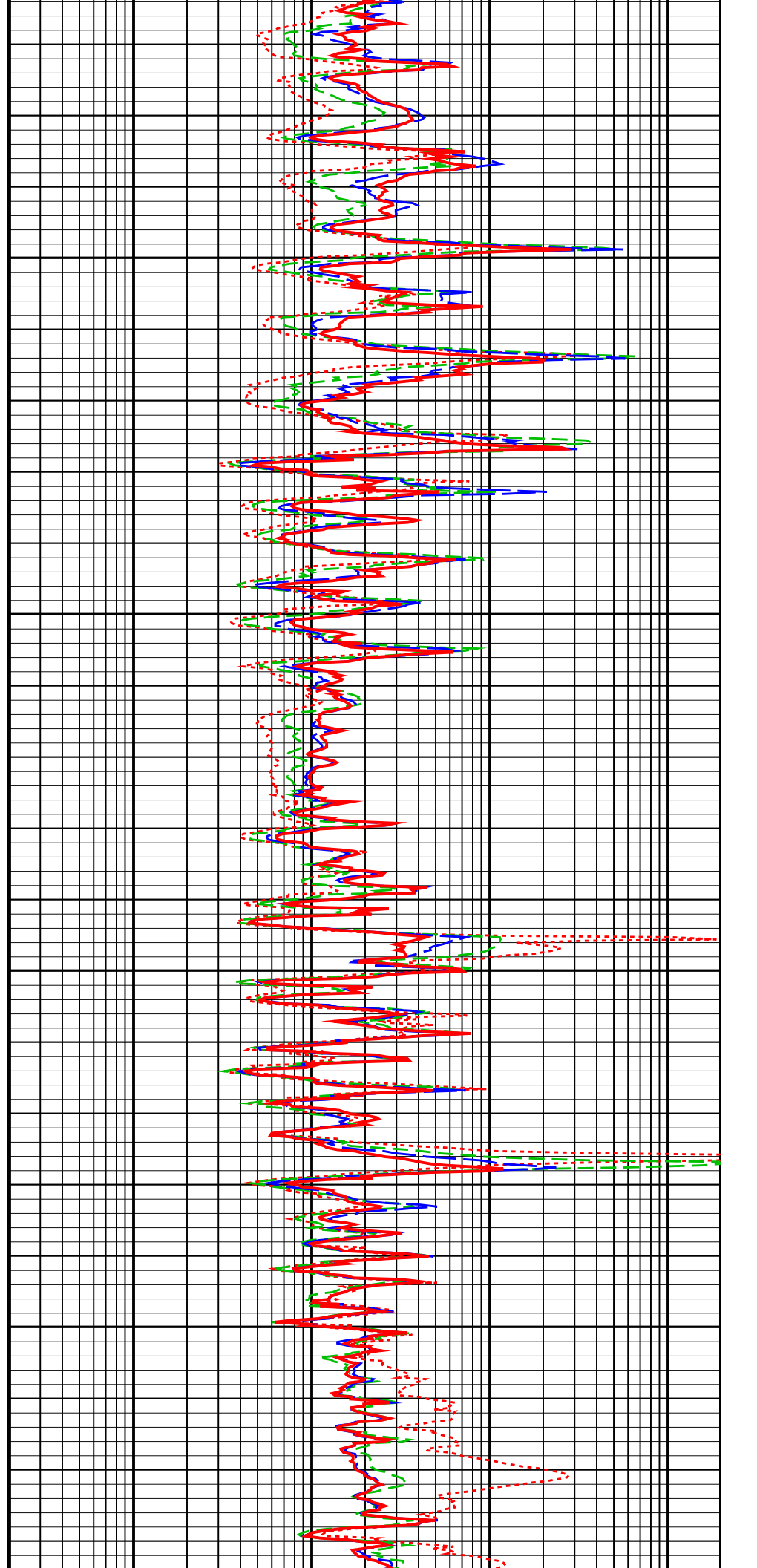


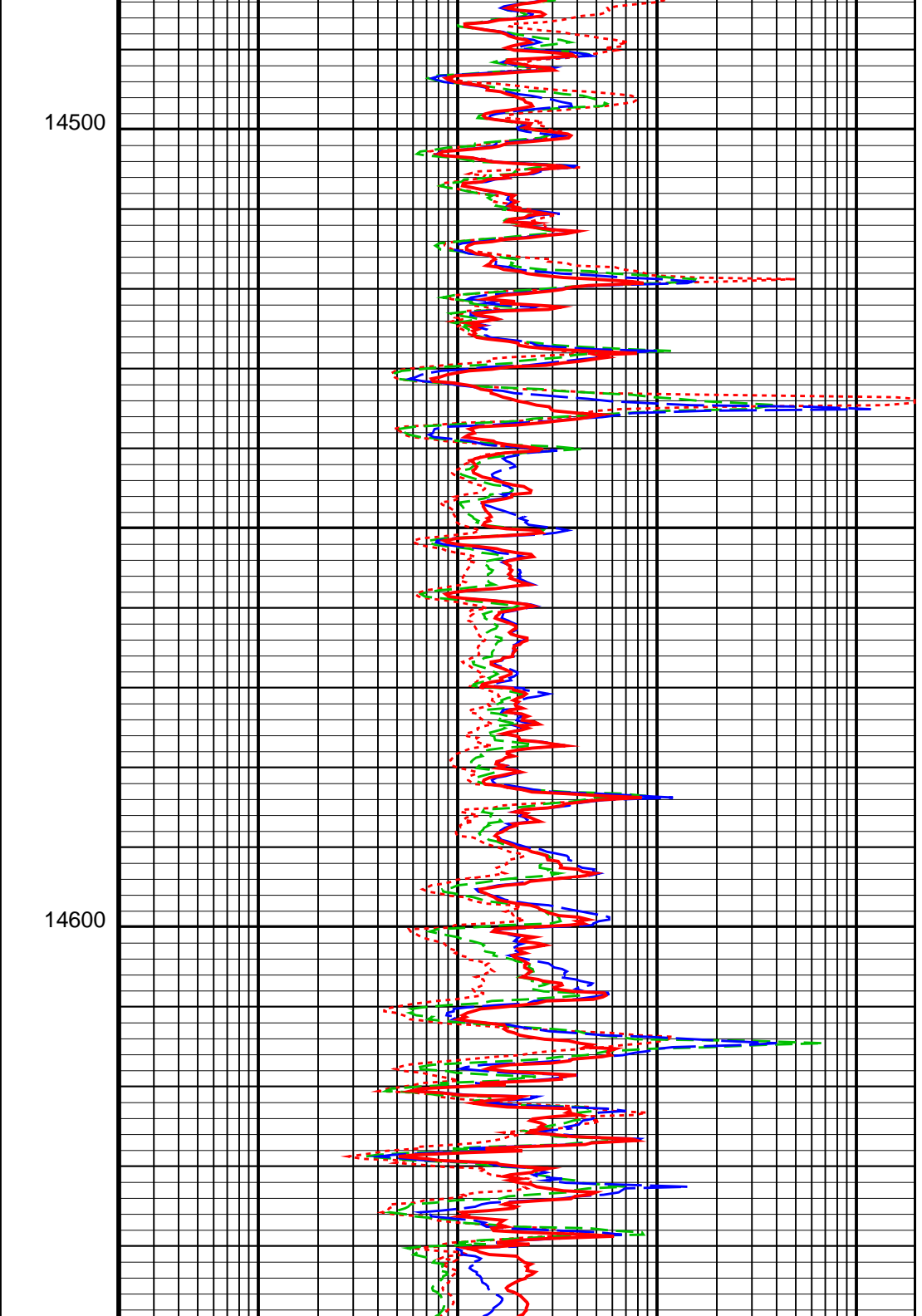
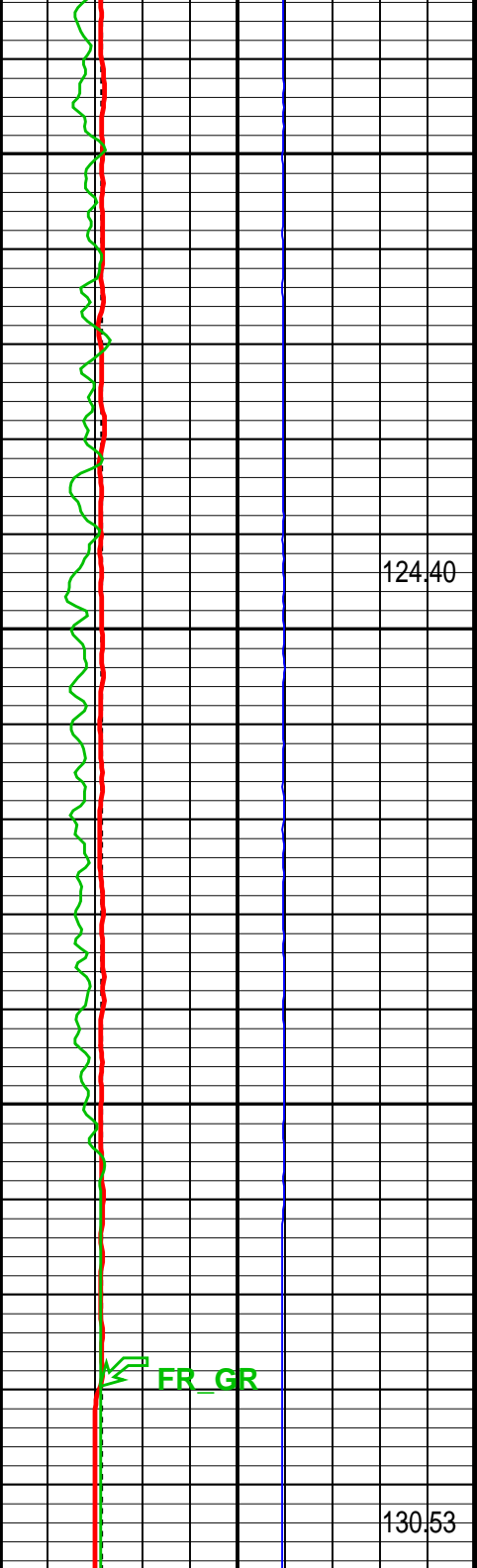
14300

124.58

14400

124.10





GR Temp (WTEP) (DEGF)		
Bit Size (BS) (IN)		
4		14
Gamma Ray (GR) (GAPI)		
0		150
Gamma Ray 1 (GR) (GAPI)		
150		300
Gamma Ray 2 (GR) (GAPI)		
300		450
Gamma Ray 3 (GR) (GAPI)		
450		600

0.2	TBI 20 Inch Investigation (TBIT20) (OHMM)	2000
0.2	TBI 30 Inch Investigation (TBIT30) (OHMM)	2000
0.2	TBI 60 Inch Investigation (TBIT60) (OHMM)	2000
0.2	TBI 90 Inch Investigation (TBIT90) (OHMM)	2000

Gamma Ray 4 (GR)		
600	(GAPI)	750
Caliper (CALI)		
4	(IN)	14
gr wrap1 From LHT1 to GR1		
gr wrap2 From LHT1 to GR2		
gr wrap3 From LHT1 to GR3		
gr wrap4 From LHT1 to GR4		
		Relative Bearing
		(RB)
0	(DEG)	940

Parameters

DLIS Name	Description	Value
TBT-A: ThruBit String		
MT	Mud Type (for TBN and TBI correction)	WBM
RB_OFFSET	Additional RB offset (degrees)	0.000 deg
TBI_ALGO	TBI Algorithm Selection	AIT
TBI_BHC_OP	Borehole Correction Option (for TBI)	CALIPER
TBI_CALTYP	TBI Mastercal Type	THRUBIT
TBI_REPL_ARRAY_DEST	TBI: Replace This Array	NONE
TBI_REPL_ARRAY_SOURCE	TBI: With This Array	NONE
TBI_TC_OP	Induction Temperature Correction Option	LOWER
System and Miscellaneous		
BS	Bit Size	6.125 in

Format: TB_5INCH_RESISTIVITY Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2015 14:48

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

Input DLIS Files

ThruBit_005PUP	FN:4	14-Jun-2015 14:42	14649.0 FT	2900.5 FT
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CALIBRATIONS

MAXIS Field Log

ThruBit String / Equipment Identification


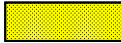


























Primary Equipment:

Induction Resistivity	TBI - A	29
Density	TBD - A	12
Gamma-Ray Logging Source	GGLS - FZ	3354
Thermal Neutron	TBN - A	18
Neutron Logging Source	NNLS - EWA	2752

Neutron Logging Source
 Telemetry Memory GR
 Battery
 Battery

NNLS - EWA 3732
 TMG - A 34
 TBAT - 35
 TBAT - 1

Auxiliary Equipment:

ThruBit String Master Calibration					
TBI Master Calibration Sonde Errors					
Freq 1, A1, R	Value	Nominal	Freq 1, A1, X	Value	Nominal
	-467.536	-457.000		-173.924	300.000
-556.000 (Minimum)	-387.000 (Maximum)		-500.000 (Minimum)	1100.00 (Maximum)	
(Nominal)			(Nominal)		
Freq 1, A2, R	Value	Nominal	Freq 1, A2, X	Value	Nominal
	-153.226	-141.000		-21.1478	320.000
-182.000 (Minimum)	-120.000 (Maximum)		-75.0000 (Minimum)	700.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 1, A3, R	Value	Nominal	Freq 1, A3, X	Value	Nominal
	-31.1454	-28.0000		-116.738	50.0000
-38.0000 (Minimum)	-18.0000 (Maximum)		-375.000 (Minimum)	475.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 1, A4, R	Value	Nominal	Freq 1, A4, X	Value	Nominal
	-17.1333	-16.0000		251.903	300.000
-24.0000 (Minimum)	-8.00000 (Maximum)		25.0000 (Minimum)	575.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 1, A5, R	Value	Nominal	Freq 1, A5, X	Value	Nominal
	-15.8284	-14.0000		104.546	150.000
-21.0000 (Minimum)	-7.00000 (Maximum)		25.0000 (Minimum)	300.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 2, A1, R	Value	Nominal	Freq 2, A1, X	Value	Nominal
	-242.971	-237.000		-146.889	150.000
-313.000 (Minimum)	-186.000 (Maximum)		-375.000 (Minimum)	675.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 2, A2, R	Value	Nominal	Freq 2, A2, X	Value	Nominal
	-100.450	-92.0000		-42.8731	160.000
-126.000 (Minimum)	-76.0000 (Maximum)		-100.000 (Minimum)	425.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 2, A3, R	Value	Nominal	Freq 2, A3, X	Value	Nominal
	-22.6550	-21.0000		-127.306	-20.0000
-28.0000 (Minimum)	-13.0000 (Maximum)		-325.000 (Minimum)	250.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 2, A4, R	Value	Nominal	Freq 2, A4, X	Value	Nominal
	-20.2612	-20.0000		78.3481	100.000
-28.0000 (Minimum)	-10.0000 (Maximum)		-75.0000 (Minimum)	275.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 2, A5, R	Value	Nominal	Freq 2, A5, X	Value	Nominal
	-20.9269	-20.0000		-31.1602	-25.0000
-27.0000 (Minimum)	-10.0000 (Maximum)		-125.000 (Minimum)	100.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 3, A1, R	Value	Nominal	Freq 3, A1, X	Value	Nominal
	-153.010	-149.000		-183.457	25.0000
-213.000 (Minimum)	-108.000 (Maximum)		-375.000 (Minimum)	425.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 3, A2, R	Value	Nominal	Freq 3, A2, X	Value	Nominal
	-76.5351	-70.0000		-73.9865	70.0000
-101.000 (Minimum)	-57.0000 (Maximum)		-125.000 (Minimum)	250.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 3, A3, R	Value	Nominal	Freq 3, A3, X	Value	Nominal
	-18.4625	-17.0000		-150.956	-90.0000
-23.0000 (Minimum)	-11.0000 (Maximum)		-300.000 (Minimum)	125.000 (Maximum)	
(Nominal)			(Nominal)		
Freq 3, A4, R	Value	Nominal	Freq 3, A4, X	Value	Nominal
	-22.0296	-22.0000		-36.4678	-50.0000
-31.0000 (Minimum)	-11.0000 (Maximum)		-200.000 (Minimum)	100.000 (Maximum)	
(Nominal)			(Nominal)		

Freq 3, A5, R		Value	Nominal	Freq 3, A5, X		Value	Nominal
		-23.6833	-22.0000			-132.227	-110.000
-32.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)		-250.000 (Minimum)	(Nominal)	0 (Maximum)	
Freq 4, A1, R		Value	Nominal	Freq 4, A1, X		Value	Nominal
		-83.8694	-80.0000			-281.507	-190.000
-128.000 (Minimum)	(Nominal)	-54.0000 (Maximum)		-450.000 (Minimum)	(Nominal)	75.0000 (Maximum)	
Freq 4, A2, R		Value	Nominal	Freq 4, A2, X		Value	Nominal
		-55.2497	-50.0000			-135.036	-75.0000
-80.0000 (Minimum)	(Nominal)	-41.0000 (Maximum)		-200.000 (Minimum)	(Nominal)	50.0000 (Maximum)	
Freq 4, A3, R		Value	Nominal	Freq 4, A3, X		Value	Nominal
		-14.7150	-14.0000			-204.979	-190.000
-19.0000 (Minimum)	(Nominal)	-8.00000 (Maximum)		-350.000 (Minimum)	(Nominal)	-25.0000 (Maximum)	
Freq 4, A4, R		Value	Nominal	Freq 4, A4, X		Value	Nominal
		-25.4036	-25.0000			-206.577	-235.000
-37.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)		-400.000 (Minimum)	(Nominal)	-75.0000 (Maximum)	
Freq 4, A5, R		Value	Nominal	Freq 4, A5, X		Value	Nominal
		-29.7870	-28.0000			-305.092	-300.000
-43.0000 (Minimum)	(Nominal)	-12.0000 (Maximum)		-475.000 (Minimum)	(Nominal)	-100.000 (Maximum)	

Master: 29-May-2015 12:01

ThruBit String Master Calibration							
TBI Master Calibration COMPLEX GAINS							
Freq 1, R		Value	Nominal	Freq 1, X		Value	Nominal
		0.9941	1.000			-0.001461	0
		0.9907	1.000			-0.0005546	0
		0.9972	1.000			-0.006284	0
		0.9913	1.000			0.003712	0
		1.024	1.000			-9.477E-00	0
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)		-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)	
Freq 2, R		Value	Nominal	Freq 2, X		Value	Nominal
		0.9899	1.000			-0.01016	0
		0.9856	1.000			-0.008586	0
		0.9862	1.000			-0.007472	0
		0.9865	1.000			-0.005079	0
		1.020	1.000			-0.009475	0
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)		-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)	
Freq 3, R		Value	Nominal	Freq 3, X		Value	Nominal
		0.9953	1.000			-0.001410	0
		0.9913	1.000			0.0001592	0
		0.9915	1.000			0.0007384	0
		0.9897	1.000			0.003222	0
		1.028	1.000			-0.0005339	0
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)		-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)	
Freq 4, R		Value	Nominal	Freq 4, X		Value	Nominal
		0.9975	1.000			-0.01198	0
		0.9929	1.000			-0.01053	0
		0.9953	1.000			-0.01246	0
		0.9890	1.000			-0.007667	0

0.9300 (Minimum)	(Nominal)	1.070 (Maximum)	1.040	1.000	-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)	-0.01536	0
Master: 29-May-2015 12:01									

ThruBit String Master Calibration								
TBD Caliper Master Calibration								
Caliper 12in Ring IN	Value	Nominal	Caliper 9in Ring IN	Value	Nominal	Caliper 6in Ring IN	Value	Nominal
	1890.7	1949.8		2052.2	2096.7		2219.4	2285.7
1799.8 (Minimum)	2099.8 (Maximum)		1946.7 (Minimum)	2246.7 (Maximum)		2135.7 (Minimum)	2435.7 (Maximum)	
Master: 24-Mar-2015 13:40								

ThruBit String Master Calibration						
TBD Density Master Calibration. Ti Window, ThruBit blocks						
LS1 Background CPS	Value	Nominal	SS1 Background CPS	Value	Nominal	
	127.93	143.00		133.39	143.00	
100.00 (Minimum)	(Nominal)	186.00 (Maximum)		100.00 (Minimum)	(Nominal)	186.00 (Maximum)
LS2 Background CPS	Value	Nominal	SS2 Background CPS	Value	Nominal	
	32.5474	37.0000		37.3910	38.0000	
26.0000 (Minimum)	(Nominal)	48.0000 (Maximum)		27.0000 (Minimum)	(Nominal)	50.0000 (Maximum)
LS3 Background CPS	Value	Nominal	SS3 Background CPS	Value	Nominal	
	19.4957	22.0000		21.8004	23.0000	
15.0000 (Minimum)	(Nominal)	29.0000 (Maximum)		16.0000 (Minimum)	(Nominal)	30.0000 (Maximum)
LS4 Background CPS	Value	Nominal	SS4 Background CPS	Value	Nominal	
	26.35	30.00		30.7954	31.0000	
20.00 (Minimum)	(Nominal)	40.00 (Maximum)		22.0000 (Minimum)	(Nominal)	40.0000 (Maximum)
LS1 Aluminium CPS	Value	Nominal	SS1 Aluminium CPS	Value	Nominal	
	1207.0	1210.0		6851.73	7850.00	
850.00 (Minimum)	(Nominal)	1570.0 (Maximum)		5500.00 (Minimum)	(Nominal)	10200.0 (Maximum)
LS2 Aluminium CPS	Value	Nominal	SS2 Aluminium CPS	Value	Nominal	
	1107.19	1110.00		3550.46	4000.00	
780.00 (Minimum)	(Nominal)	1440.00 (Maximum)		2800.00 (Minimum)	(Nominal)	5200.00 (Maximum)
LS3 Aluminium CPS	Value	Nominal	SS3 Aluminium CPS	Value	Nominal	
	979.141	1010.00		2965.76	3350.00	
710.00 (Minimum)	(Nominal)	1300.00 (Maximum)		2350.00 (Minimum)	(Nominal)	4360.00 (Maximum)
LS4 Aluminium CPS	Value	Nominal	SS4 Aluminium CPS	Value	Nominal	
	695.69	760.00		2946.2859	3230.0000	
530.00 (Minimum)	(Nominal)	990.00 (Maximum)		2260.0000 (Minimum)	(Nominal)	4200.0000 (Maximum)
LS1 Al + Sleeve CPS	Value	Nominal	SS1 Al + Sleeve CPS	Value	Nominal	
	992.22	970.00		5602.64	6160.00	
680.00 (Minimum)	(Nominal)	1260.0 (Maximum)		4300.00 (Minimum)	(Nominal)	8000.00 (Maximum)
LS2 Al + Sleeve CPS	Value	Nominal	SS2 Al + Sleeve CPS	Value	Nominal	
	841.974	830.000		2789.54	3050.00	
580.00 (Minimum)	(Nominal)	1080.00 (Maximum)		2130.00 (Minimum)	(Nominal)	4000.00 (Maximum)
LS3 Al + Sleeve CPS	Value	Nominal	SS3 Al + Sleeve CPS	Value	Nominal	
	623.984	650.000		1995.32	2190.00	
460.00 (Minimum)	(Nominal)	850.000 (Maximum)		1533.00 (Minimum)	(Nominal)	2850.00 (Maximum)
LS4 Al + Sleeve CPS	Value	Nominal	SS4 Al + Sleeve CPS	Value	Nominal	
	383.52	420.00		1631.44	1700.00	
300.00 (Minimum)	(Nominal)	550.00 (Maximum)		1190.00 (Minimum)	(Nominal)	2200.00 (Maximum)
LS1 Magnesium CPS	Value	Nominal	SS1 Magnesium CPS	Value	Nominal	

5670.00 (Minimum)	(Nominal)	10530.0 (Maximum)	8004.02	8100.00	8920.00 (Minimum)	(Nominal)	16560.0 (Maximum)	11074.8	12740.0
LS2 Magnesium CPS			Value	Nominal	SS2 Magnesium CPS			Value	Nominal
			7584.31	7650.00				5908.42	6670.00
5360.00 (Minimum)	(Nominal)	9950.00 (Maximum)			4670.00 (Minimum)	(Nominal)	8670.00 (Maximum)		
LS3 Magnesium CPS			Value	Nominal	SS3 Magnesium CPS			Value	Nominal
			6571.56	6800.00				4799.28	5400.00
4760.00 (Minimum)	(Nominal)	8840.00 (Maximum)			3780.00 (Minimum)	(Nominal)	7020.00 (Maximum)		
LS4 Magnesium CPS			Value	Nominal	SS4 Magnesium CPS			Value	Nominal
			4499.06	4850.00				4791.39	5240.00
3400.00 (Minimum)	(Nominal)	6300.00 (Maximum)			3670.00 (Minimum)	(Nominal)	6810.00 (Maximum)		
Master: 20-May-2015 13:16									

ThruBit String Master Calibration									
Thermal Neutron Master Calibration									
TNF, Background CPS			Value	Nominal	TNN, Background CPS			Value	Nominal
			0	1.0				0.017	1.0
0 (Minimum)	(Nominal)	2.0 (Maximum)			0 (Minimum)	(Nominal)	2.0 (Maximum)		
TNF, Tank CPS			Value	Nominal	TNN, Tank CPS			Value	Nominal
			54.48	96.00				1626.4	2860.0
25.00 (Minimum)	(Nominal)	200.0 (Maximum)			750.00 (Minimum)	(Nominal)	5700.0 (Maximum)		
TNF, Tank + AI Sleeve CPS			Value	Nominal	TNN, Tank + AI Sleeve CPS			Value	Nominal
			1710.2	3040.0				17691.4	32350.0
727.00 (Minimum)	(Nominal)	6080.0 (Maximum)			8000.00 (Minimum)	(Nominal)	64700.0 (Maximum)		
Tank + AI Sleeve Ratio			Value	Nominal	Tank + AI Sleeve Porosity PU			Value	Nominal
			10.727	10.797				14.46	14.40
10.300 (Minimum)	(Nominal)	11.300 (Maximum)			13.40 (Minimum)	(Nominal)	15.40 (Maximum)		
Tank, Ratio			Value	Nominal	Tank, Temperature DEGF			Value	Nominal
			29.853	30.958				73.5	70.0
28.000 (Minimum)	(Nominal)	34.000 (Maximum)			20.0 (Minimum)	(Nominal)	120 (Maximum)		
Master: 19-May-2015 11:21									

ThruBit String Master Calibration									
TMG Accelerometer Calibration									
Minimum Ax, m/s2			Value	Nominal	Maximum Ax, m/s2			Value	Nominal
			N/A	-9.810				N/A	9.810
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)			8.810 (Minimum)	(Nominal)	10.81 (Maximum)		
Minimum Ay, m/s2			Value	Nominal	Maximum Ay, m/s2			Value	Nominal
			N/A	-9.810				N/A	9.810
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)			8.810 (Minimum)	(Nominal)	10.81 (Maximum)		
Minimum Az, m/s2			Value	Nominal	Maximum Az, m/s2			Value	Nominal
			N/A	0				N/A	9.810
-1.000 (Minimum)	(Nominal)	1.000 (Maximum)			8.810 (Minimum)	(Nominal)	10.81 (Maximum)		
RB Offset, degrees			Value	Nominal					
			-17.00	0					
-360.0 (Minimum)	(Nominal)	360.0 (Maximum)							
Master: Calibration not done									

ThruBit String Master Calibration									
TMG Gamma-Ray Calibration									
GR Background GAPI			Value	Nominal	GR Jig-Background GAPI			Value	Nominal
			28.42	30.00				139.2	143.3

0 (Minimum)	(Nominal)	120.0 (Maximum)	114.6 (Minimum)	(Nominal)	172.0 (Maximum)
Master: 20-Apr-2015 15:25					

Company: **SANDRIDGE ENERGY**



Well: **BASCOM FARMS 3408 1-4H33**
 Field: **WHARTON**
 County: **HARPER**
 State: **KANSAS**

ARRAY INDUCTION
 GAMMA RAY
 MEMORY LOG

Company: SANDRIDGE ENERGY Well: BASCOM FARMS 3408 1-4H33

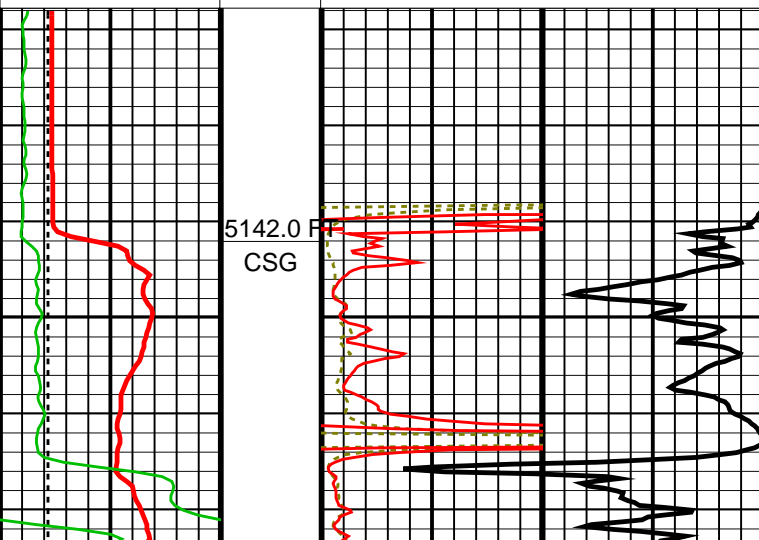
Input DLIS Files

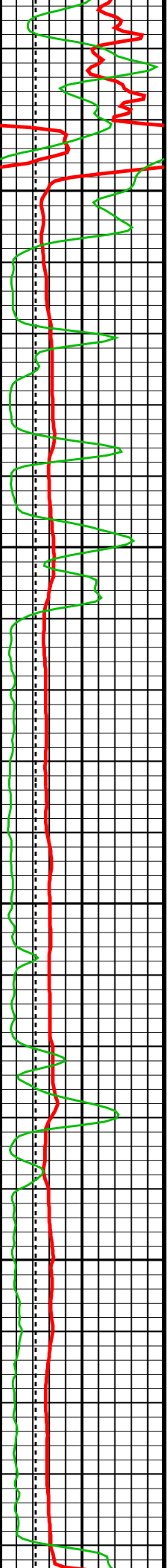
ThruBit_005PUP FN:4 14-Jun-2015 14:42 14649.0 FT 2900.5 FT

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

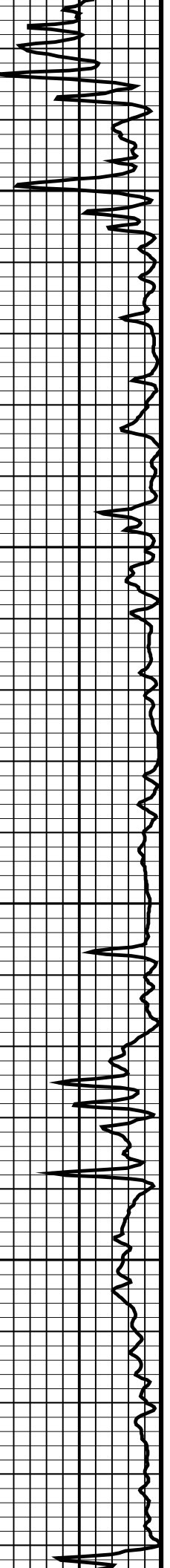
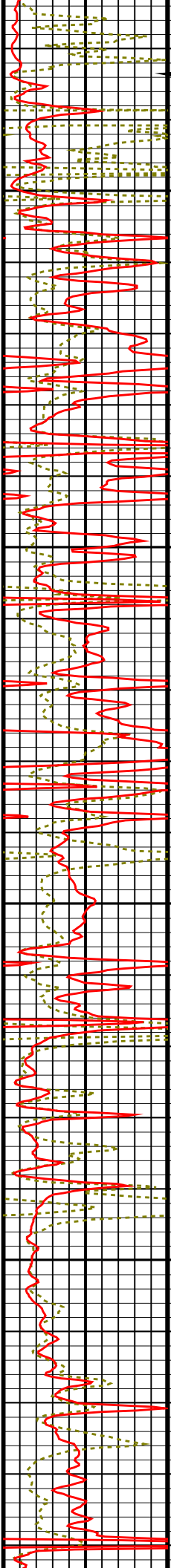
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Gamma Ray (GR) 0 (GAPI) 150	TBI 20 Inch Investigation (TBIT20) 0 (OHMM) 50
Bit Size (BS) 4 (IN) 14	AIT 90 Inch Investigation Conductivity (ATCO90) 1000 (MS/M) 0

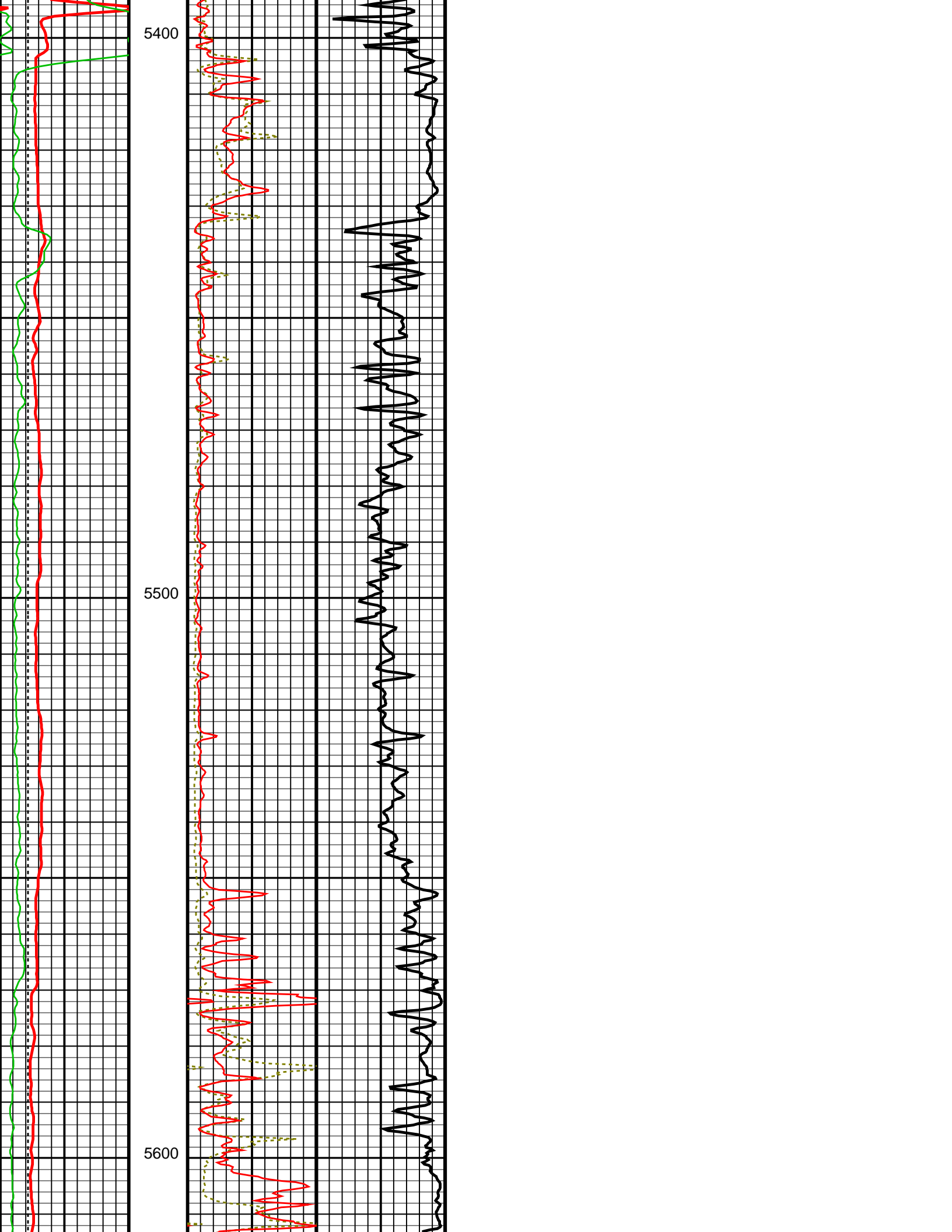


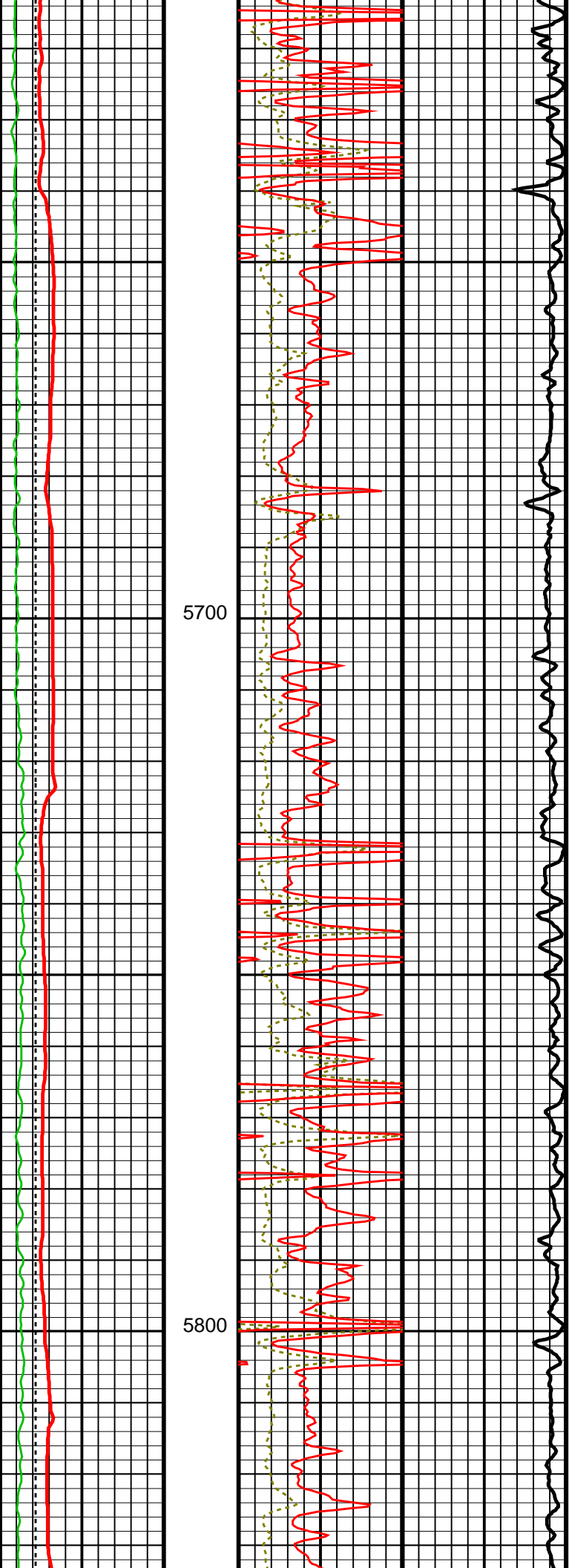


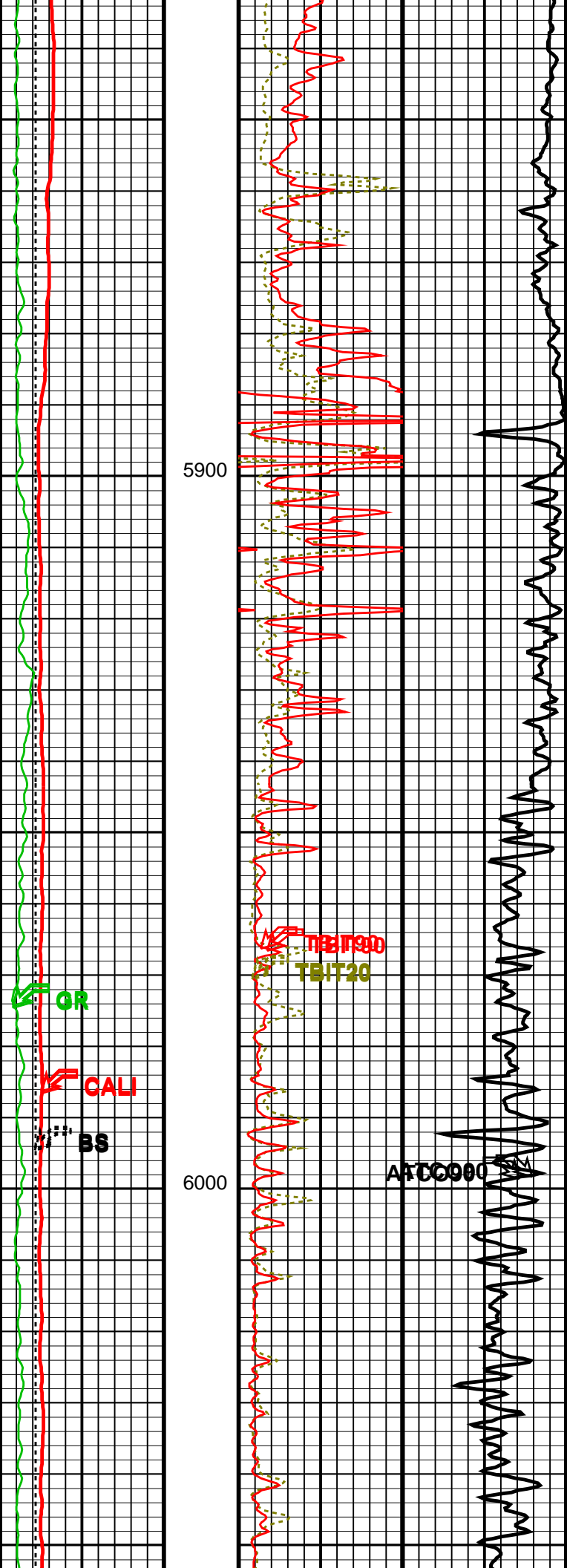
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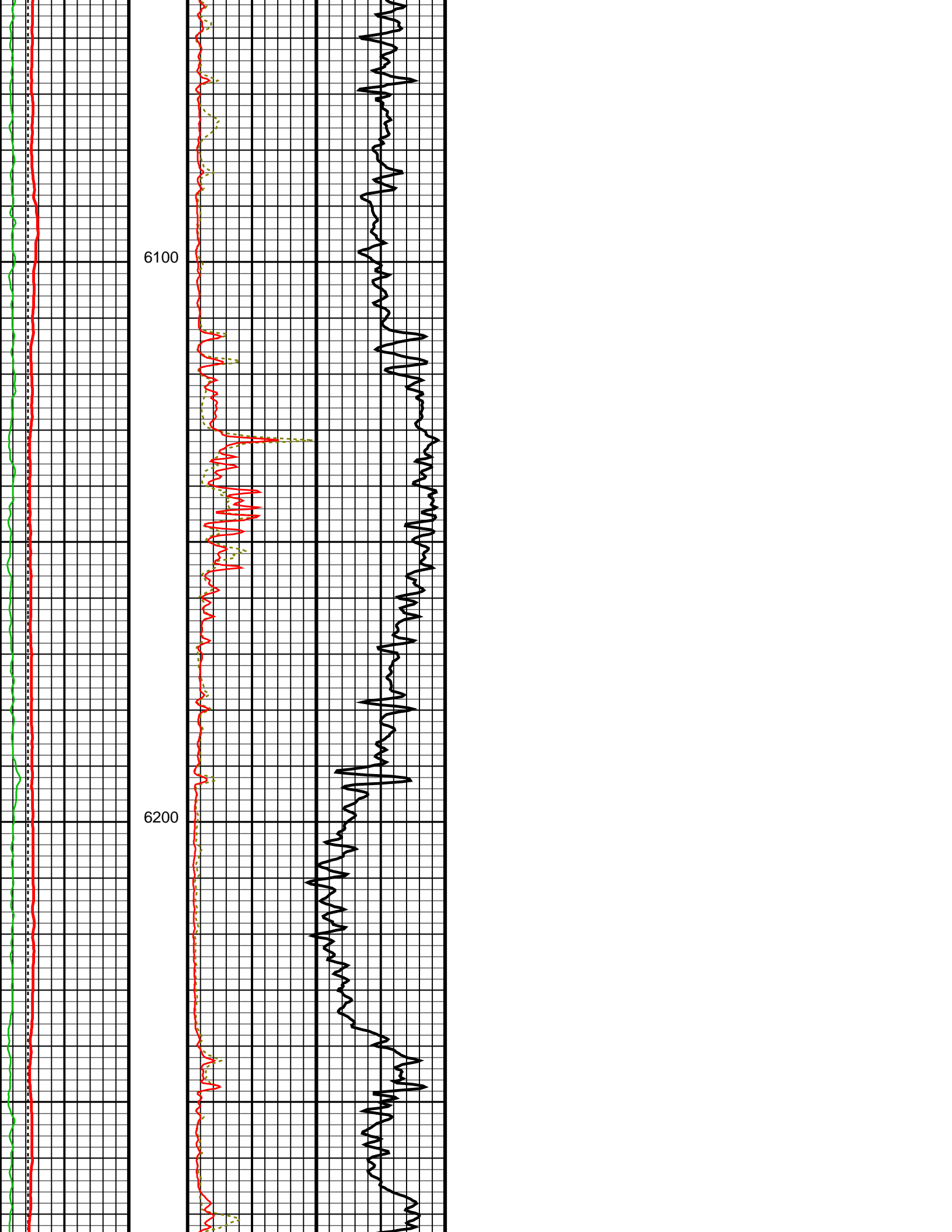
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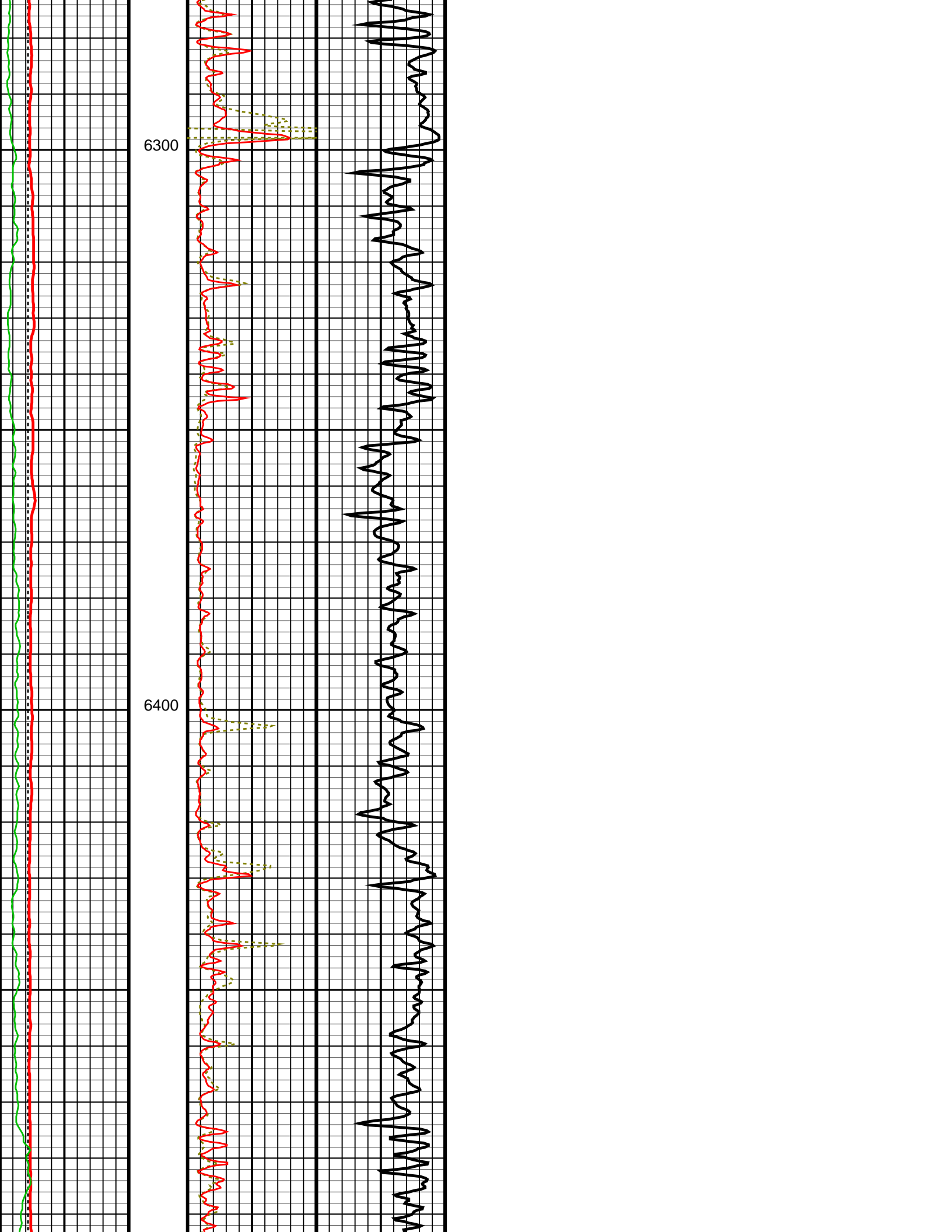


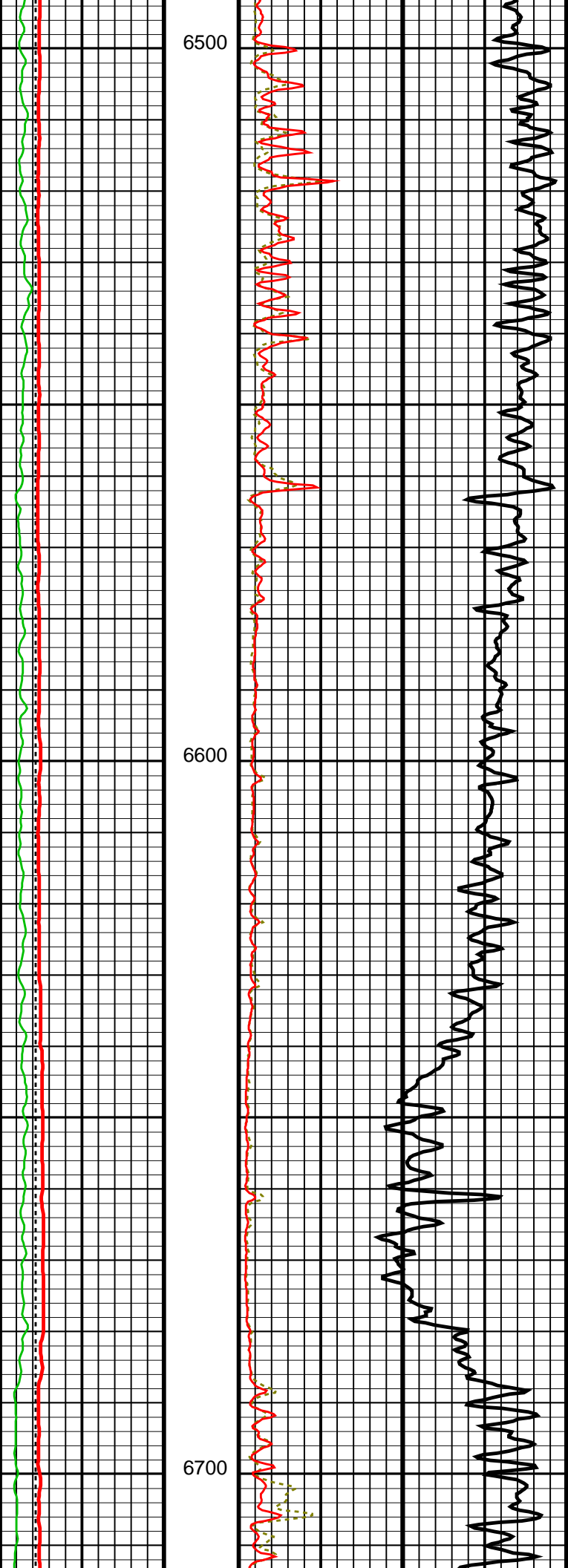


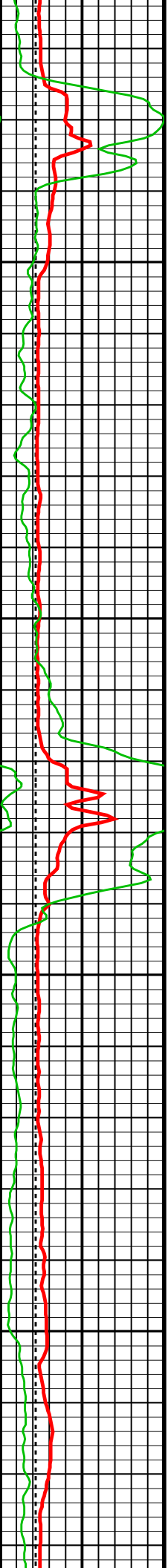






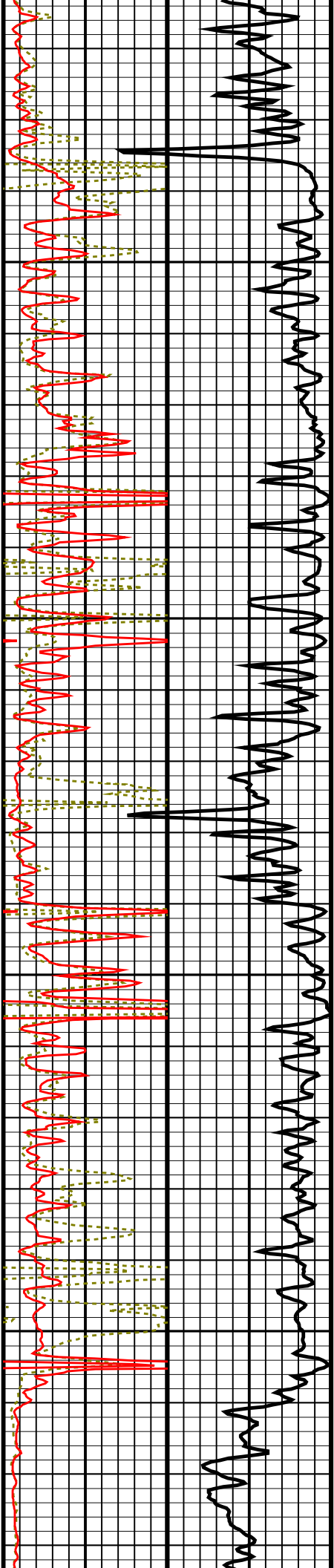


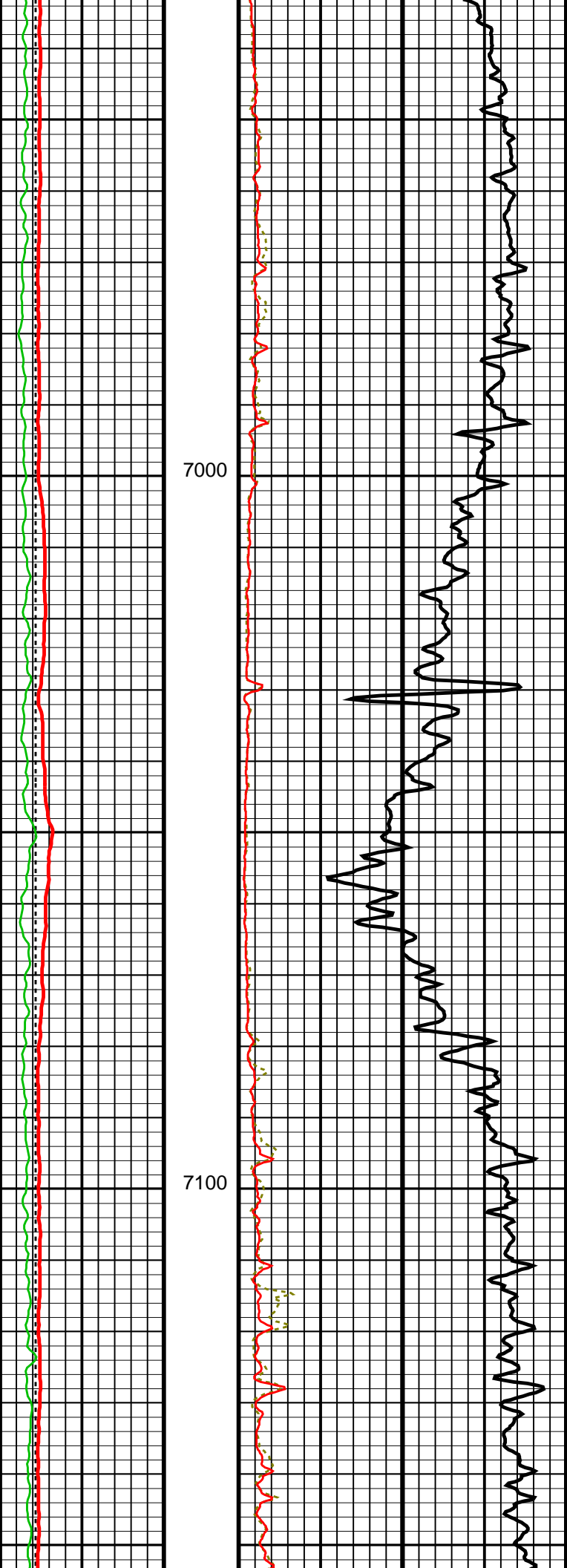


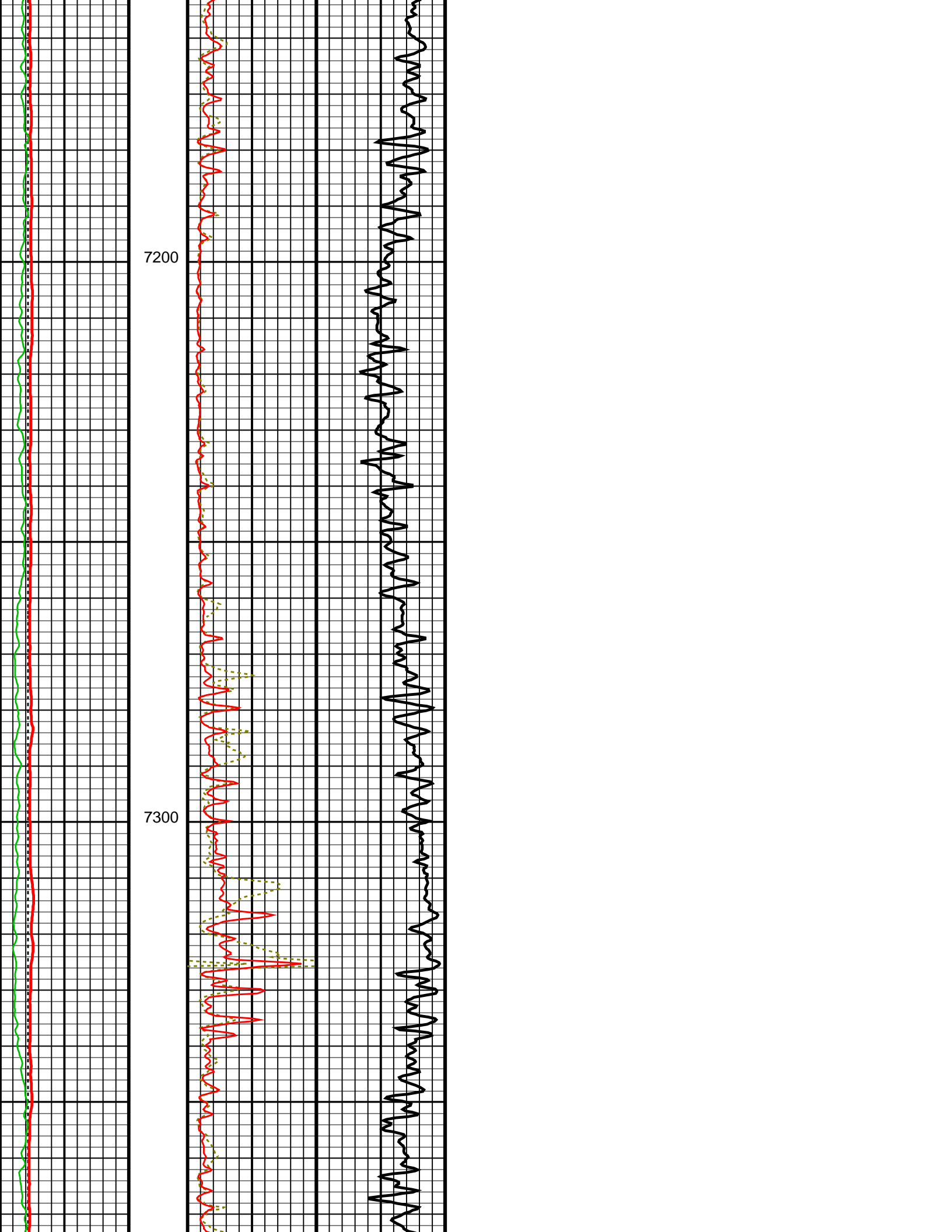


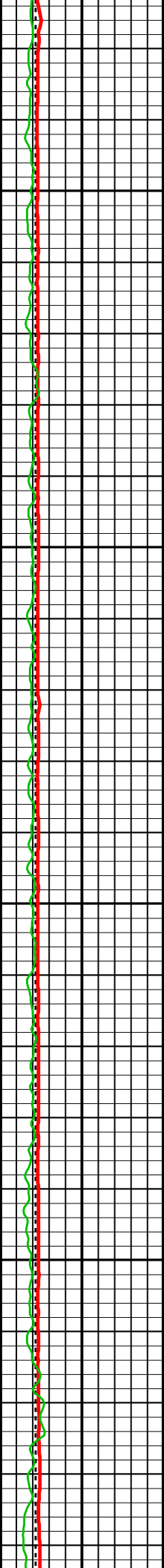
6800

6900



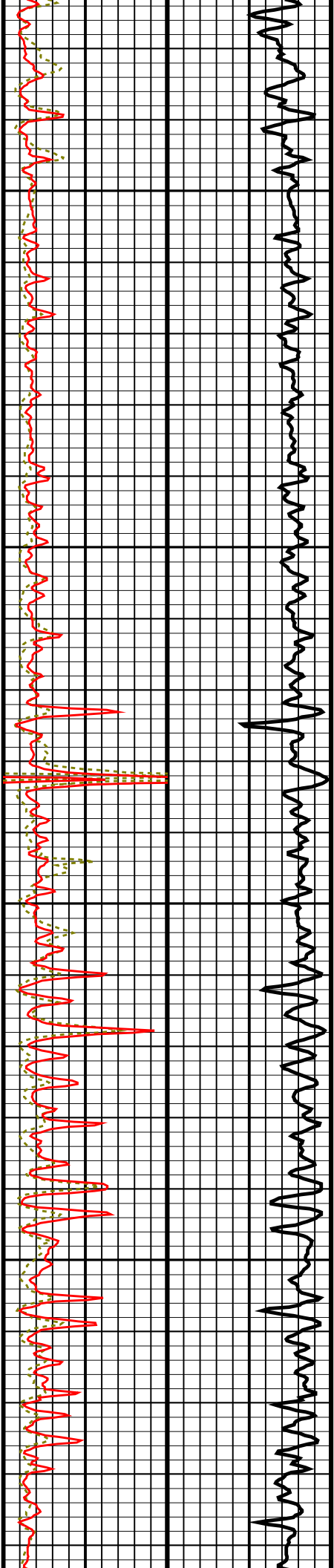


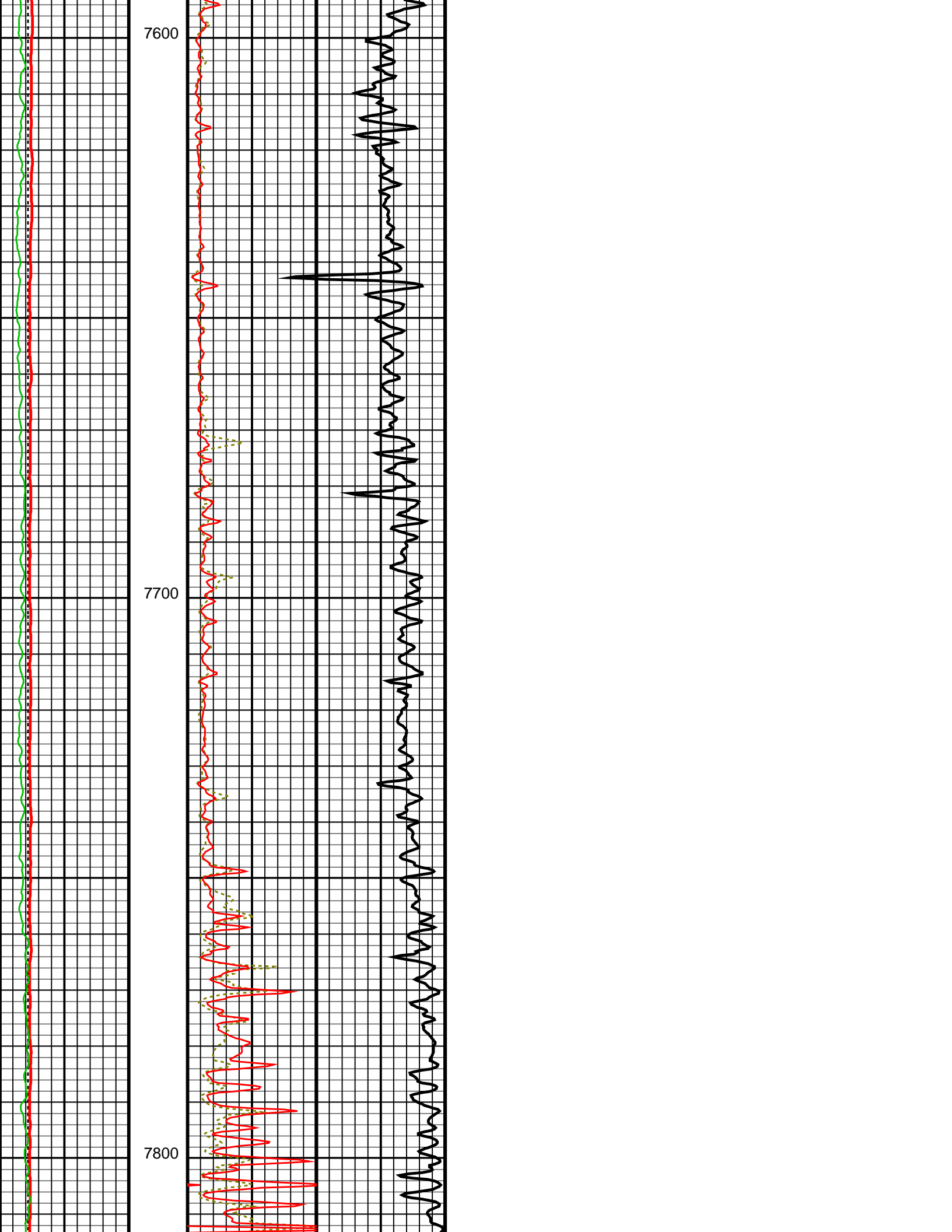


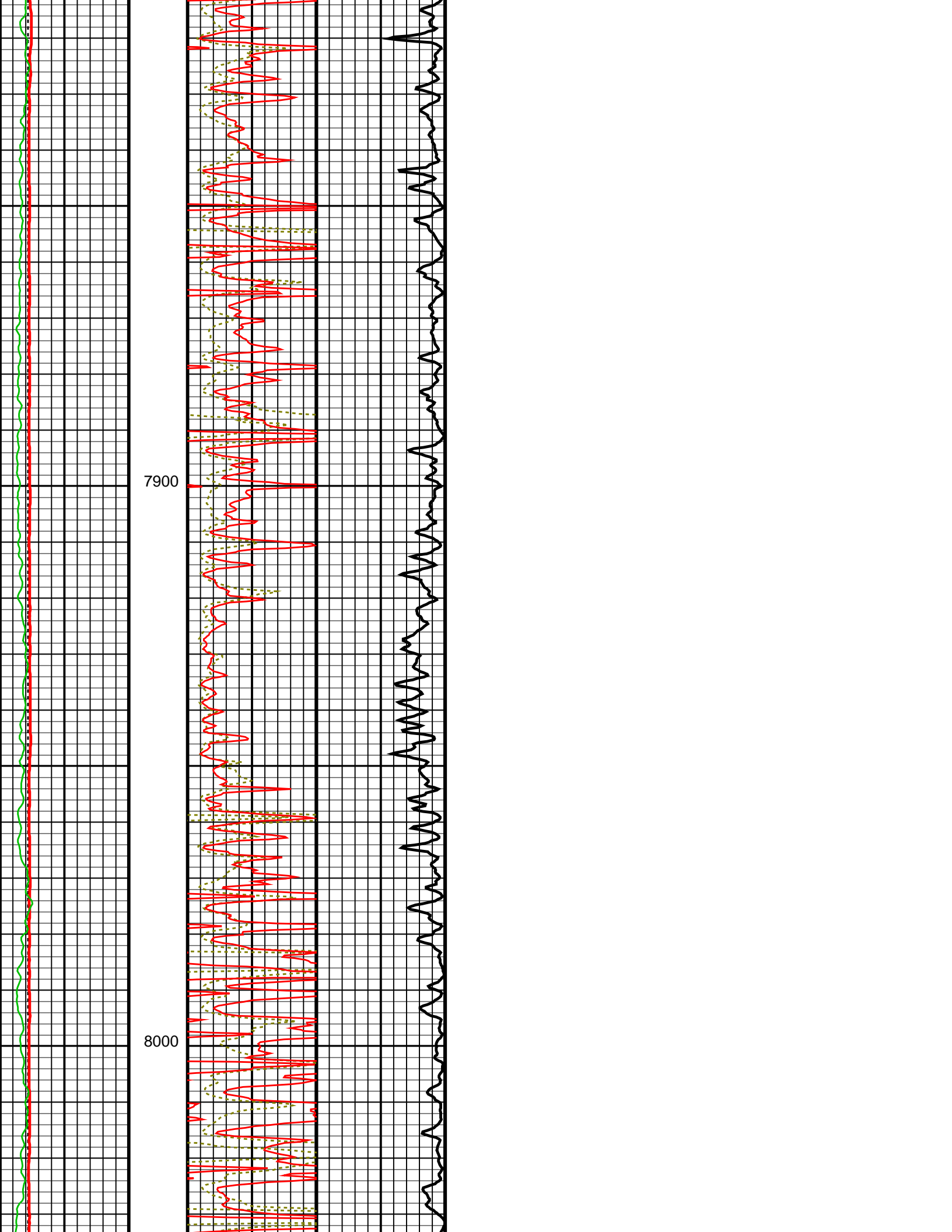


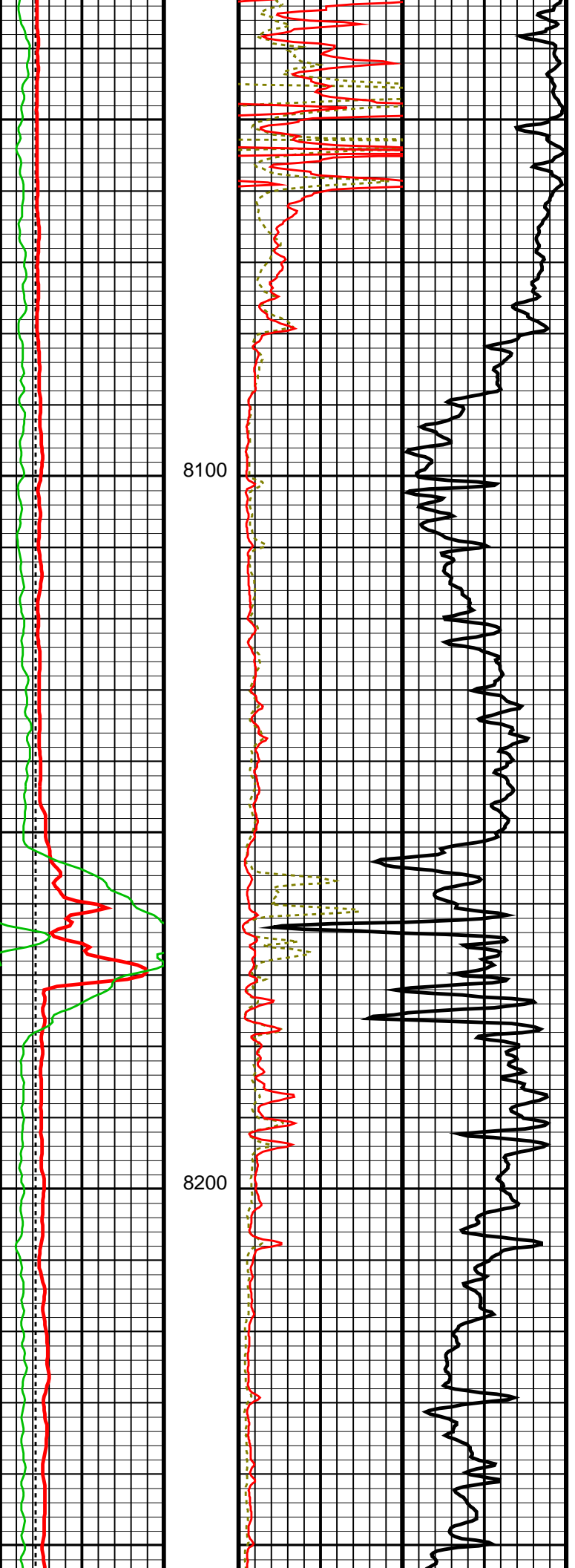
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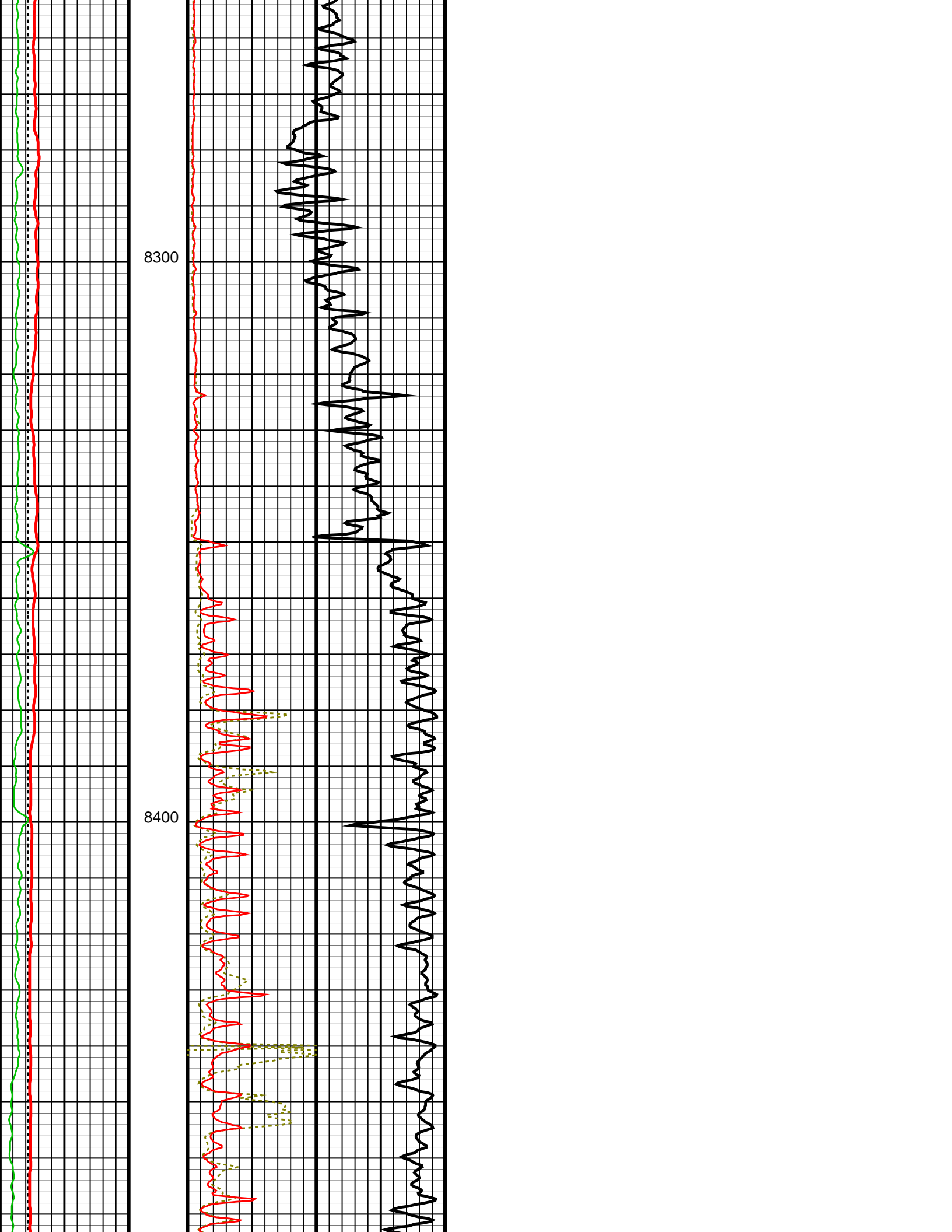
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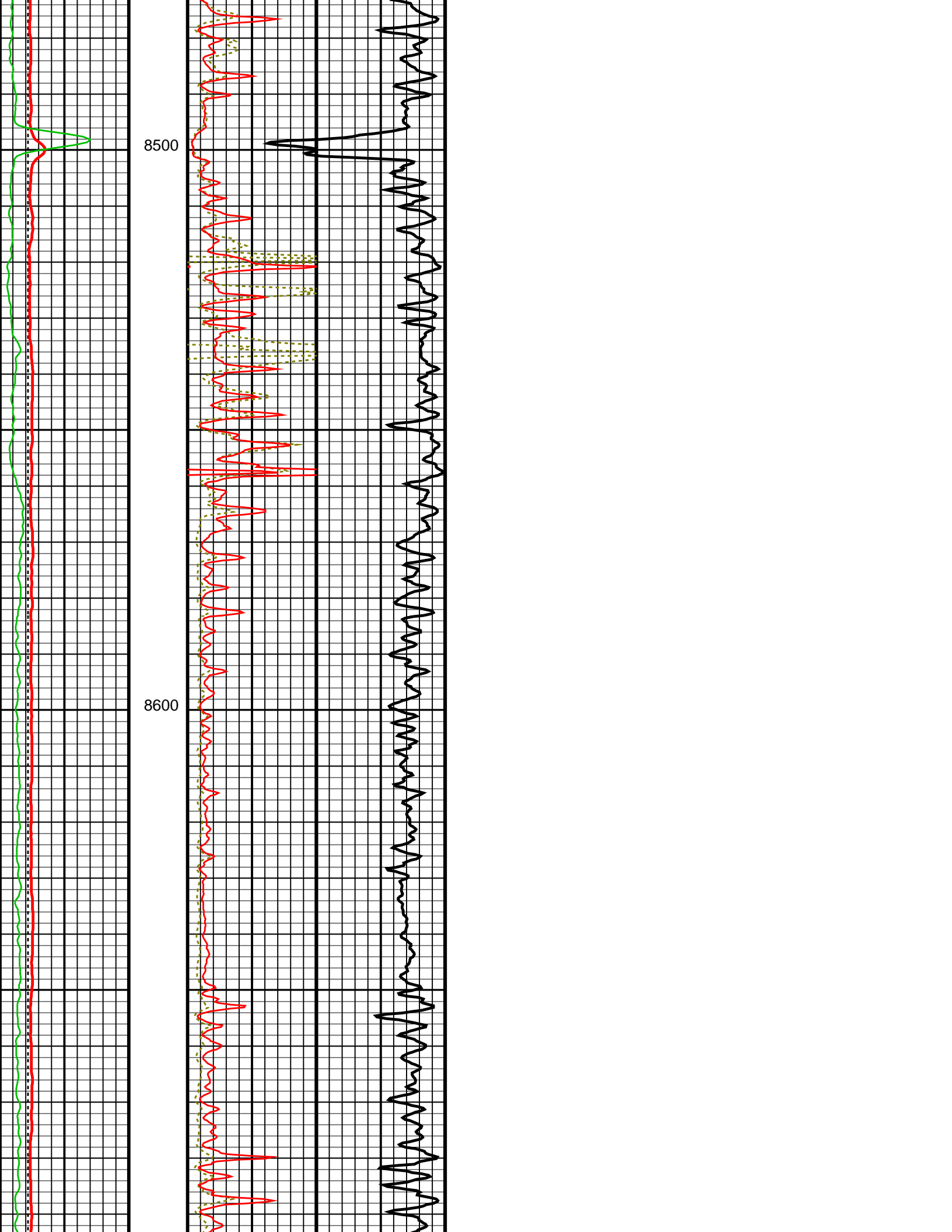


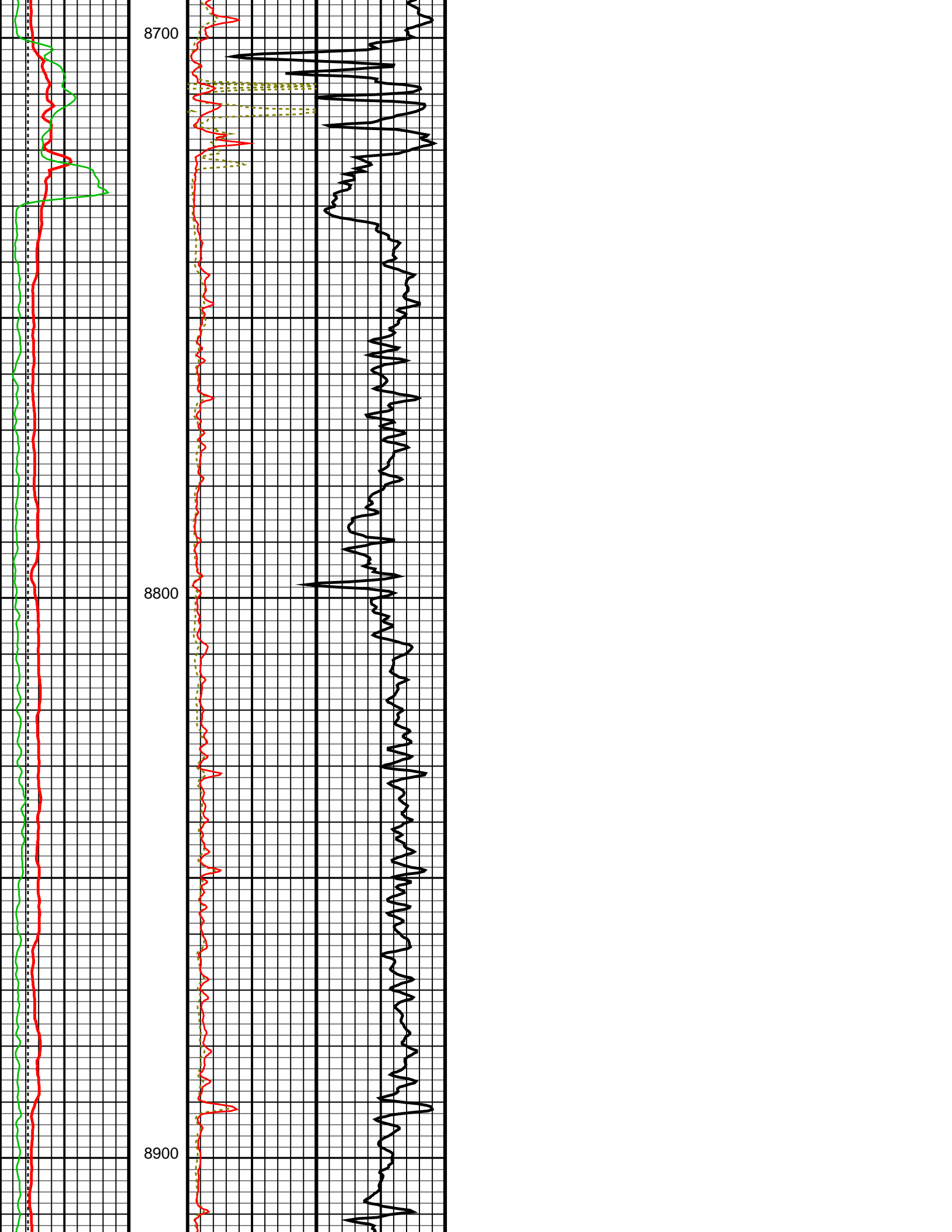


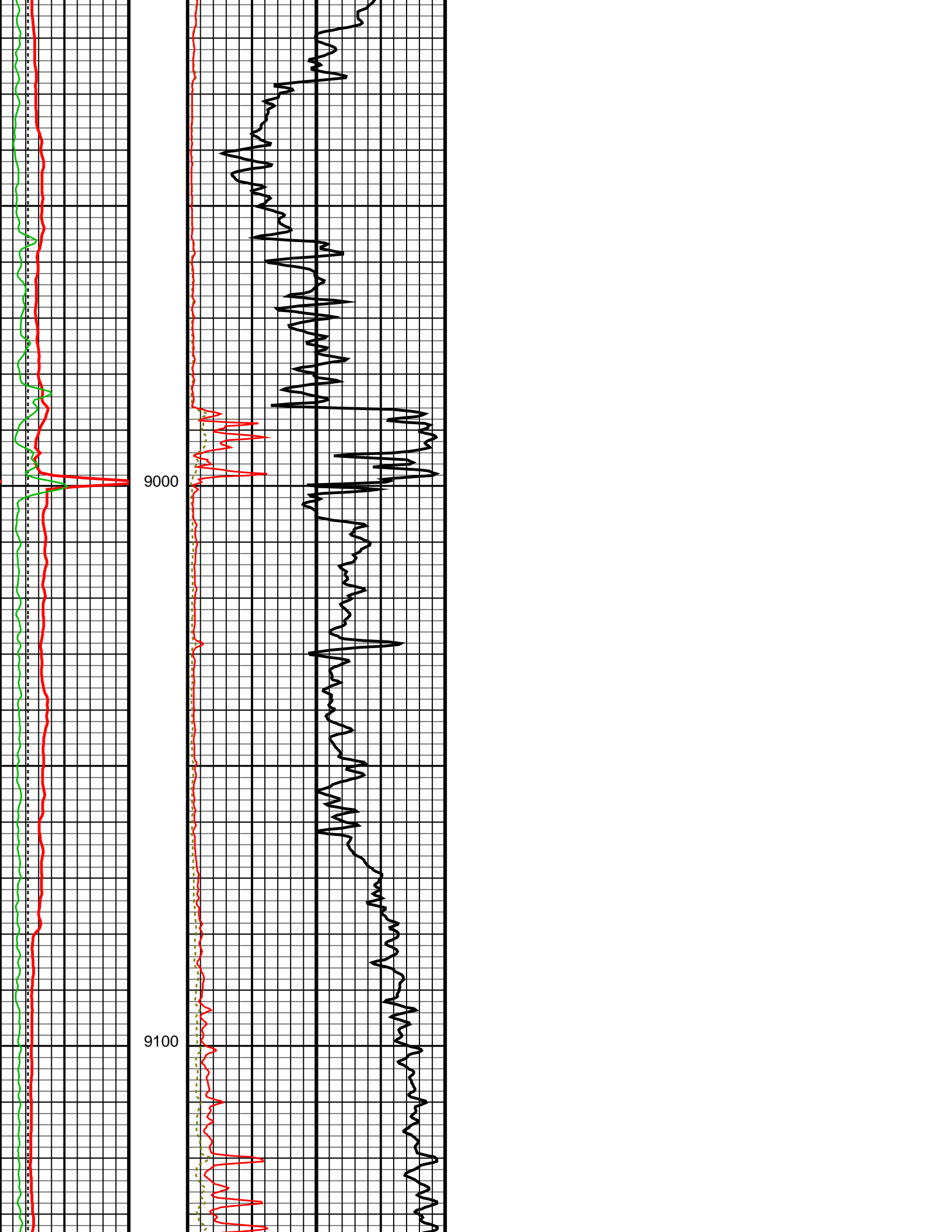


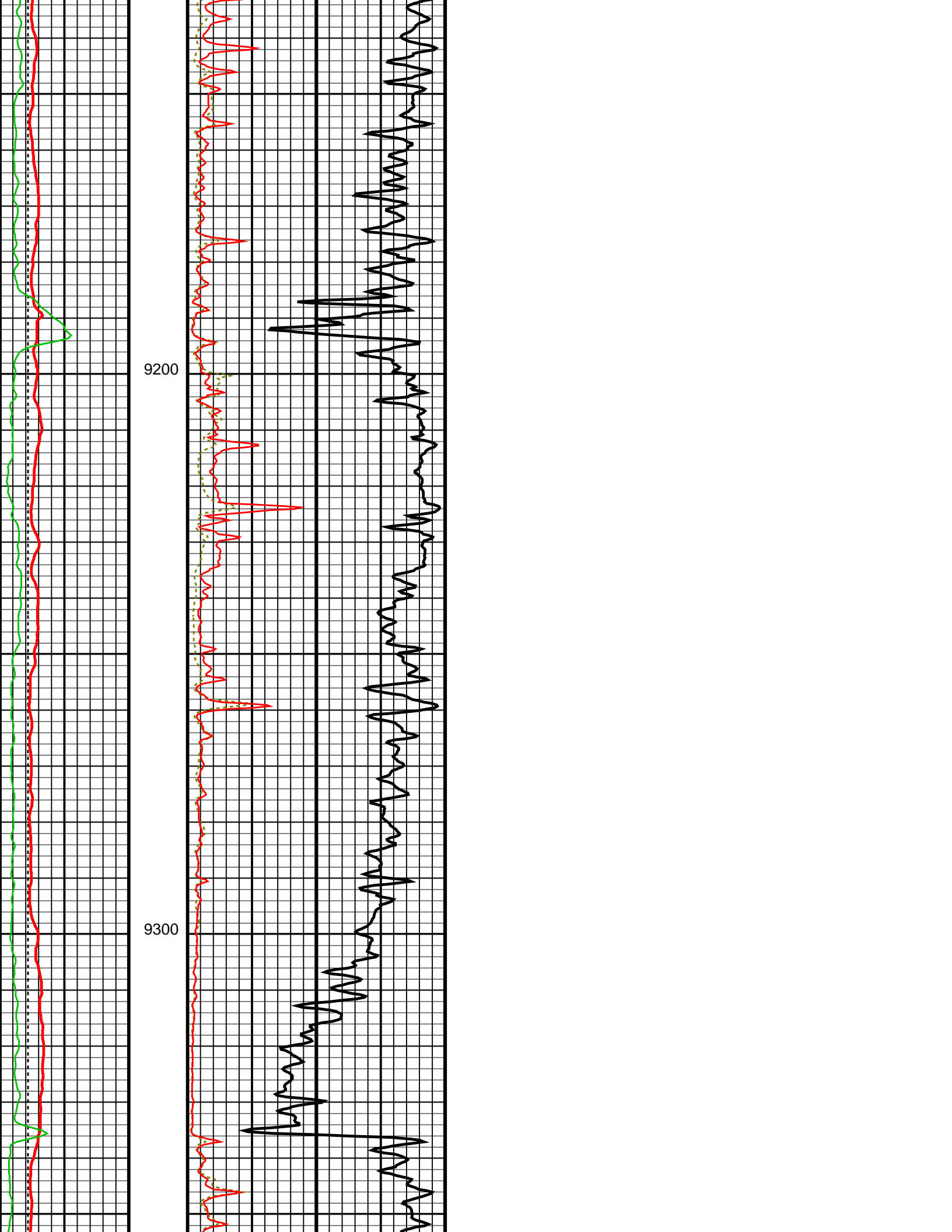


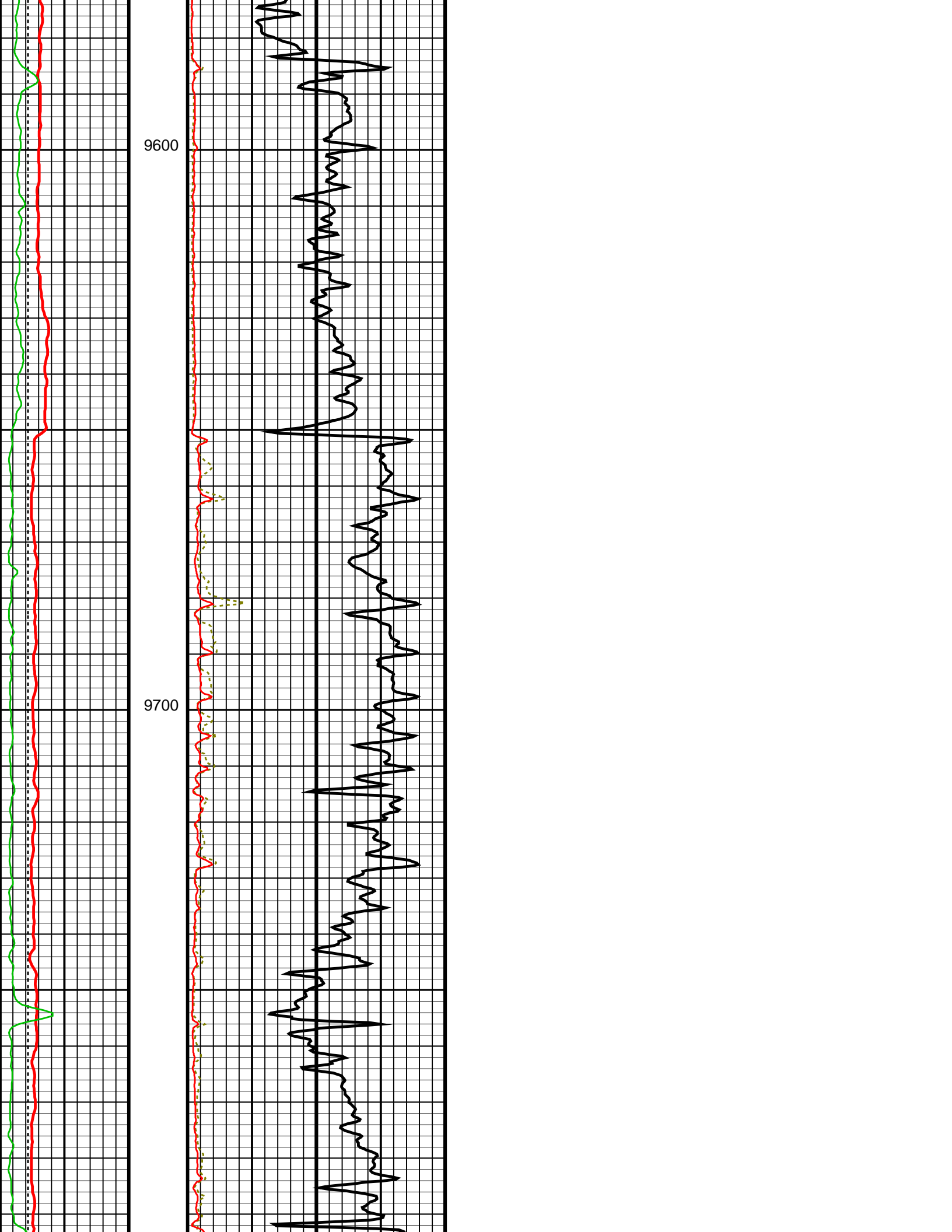


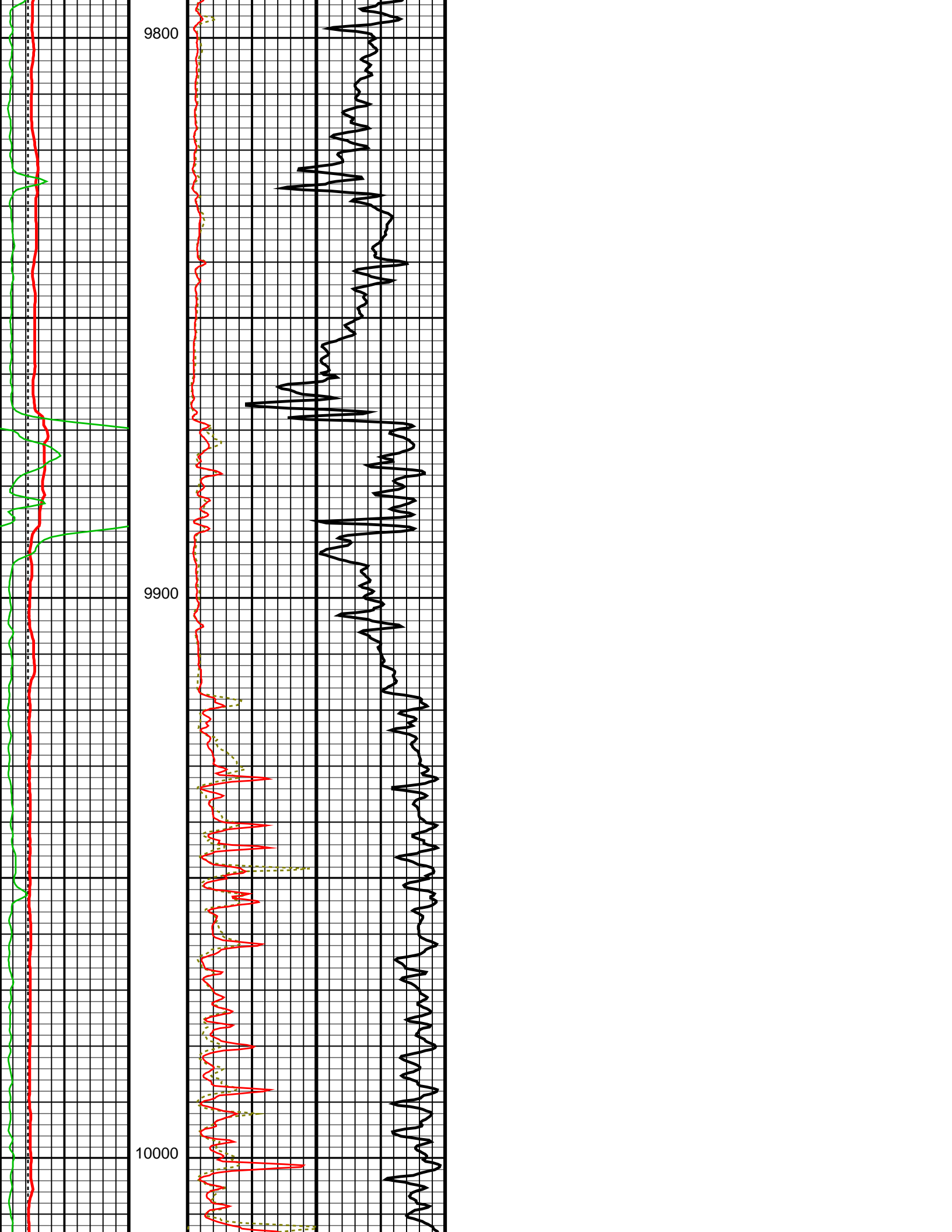


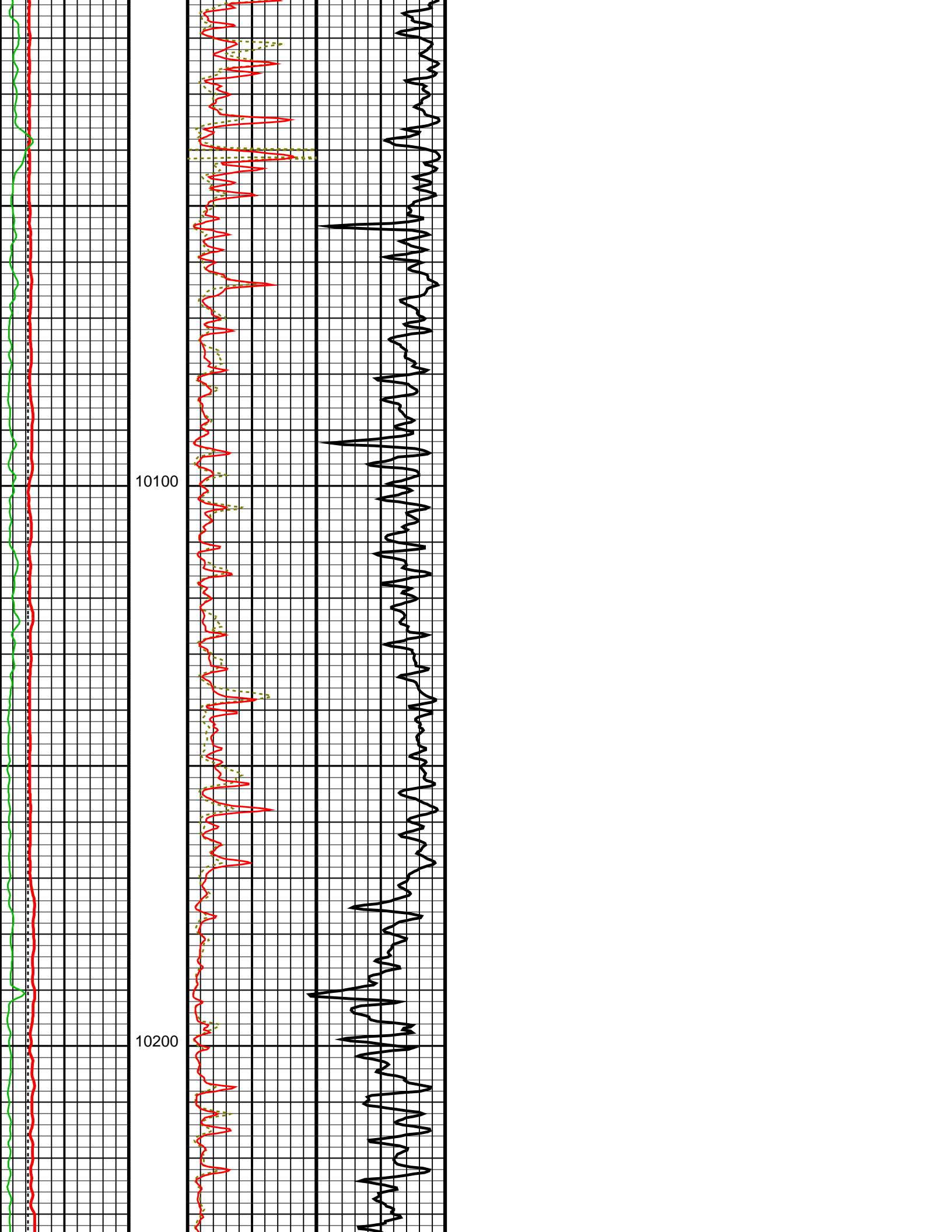


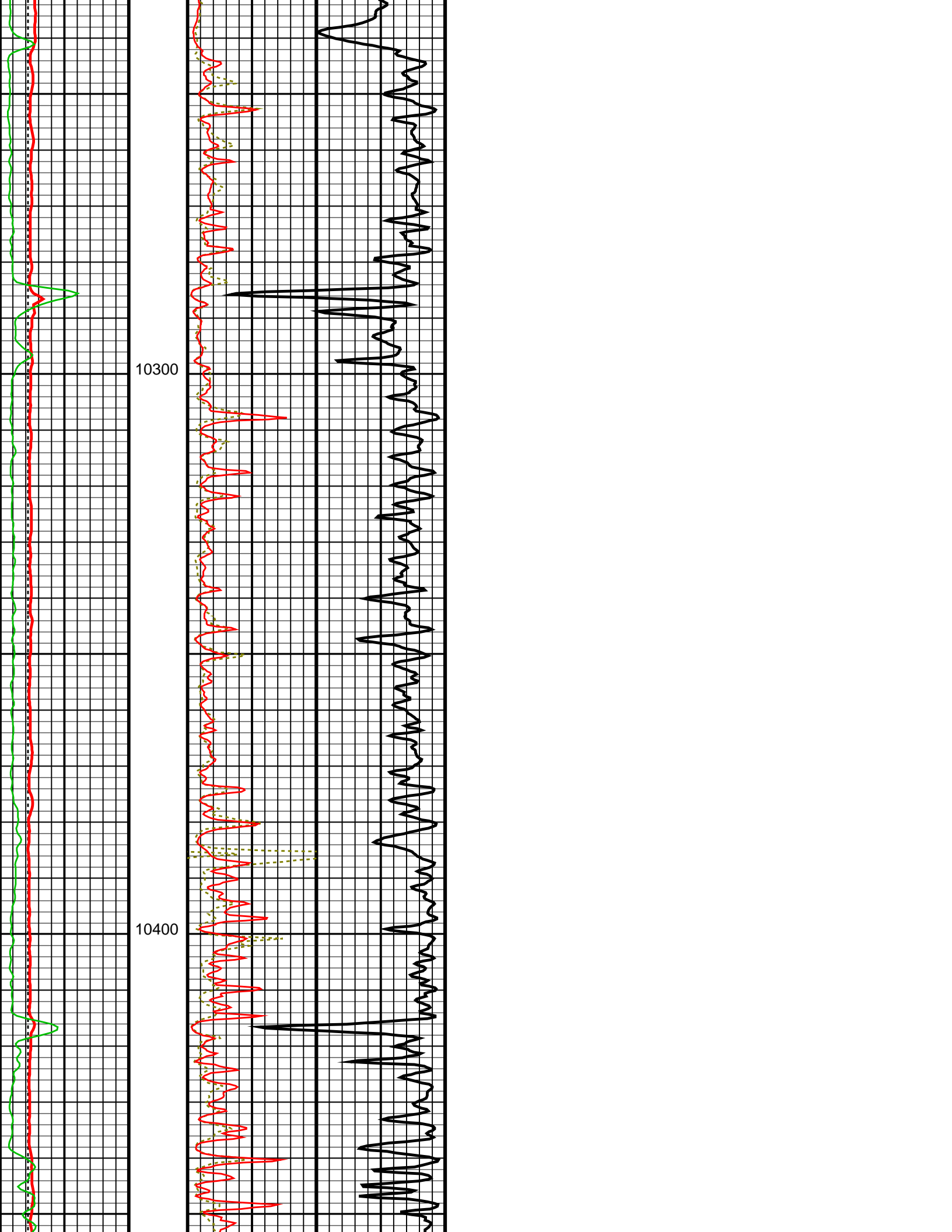


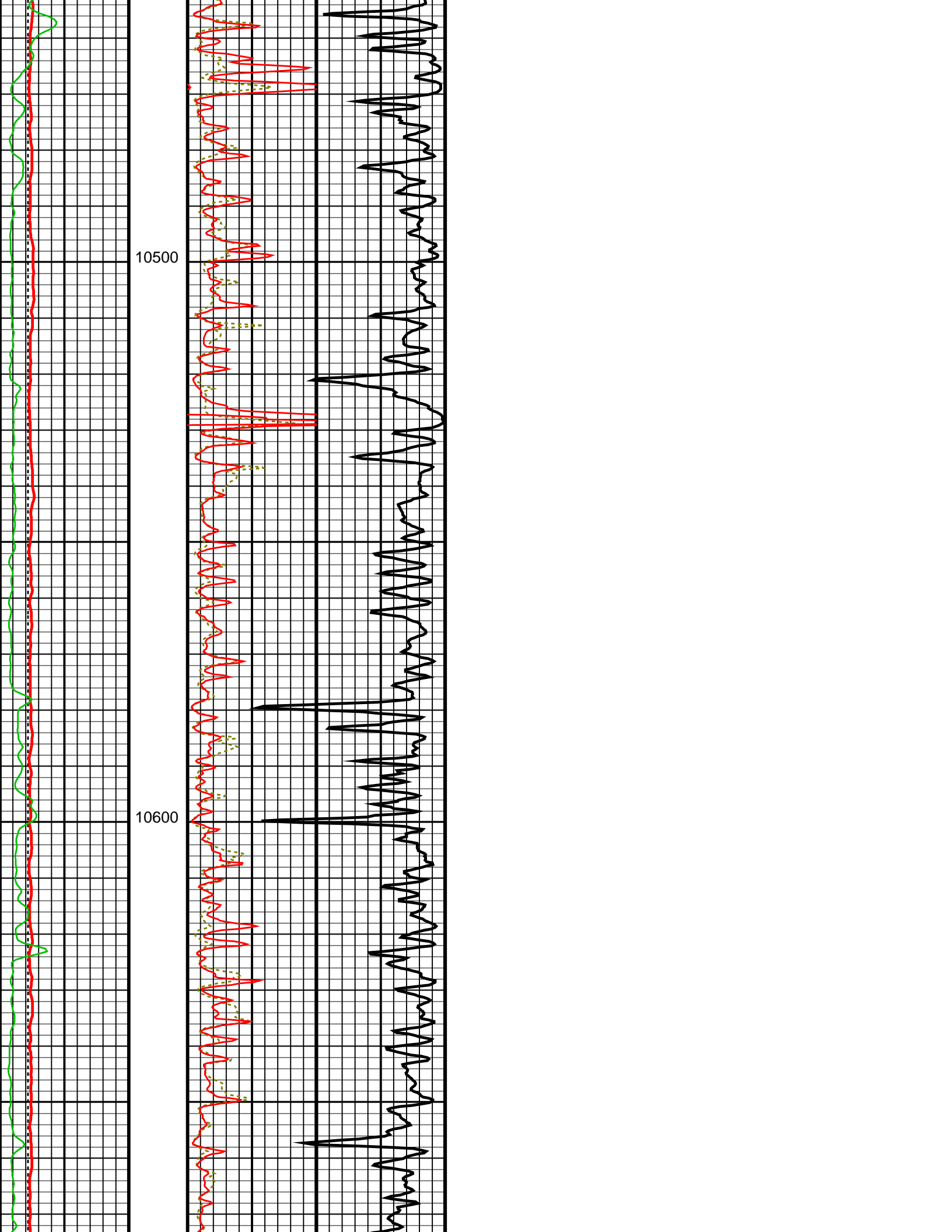


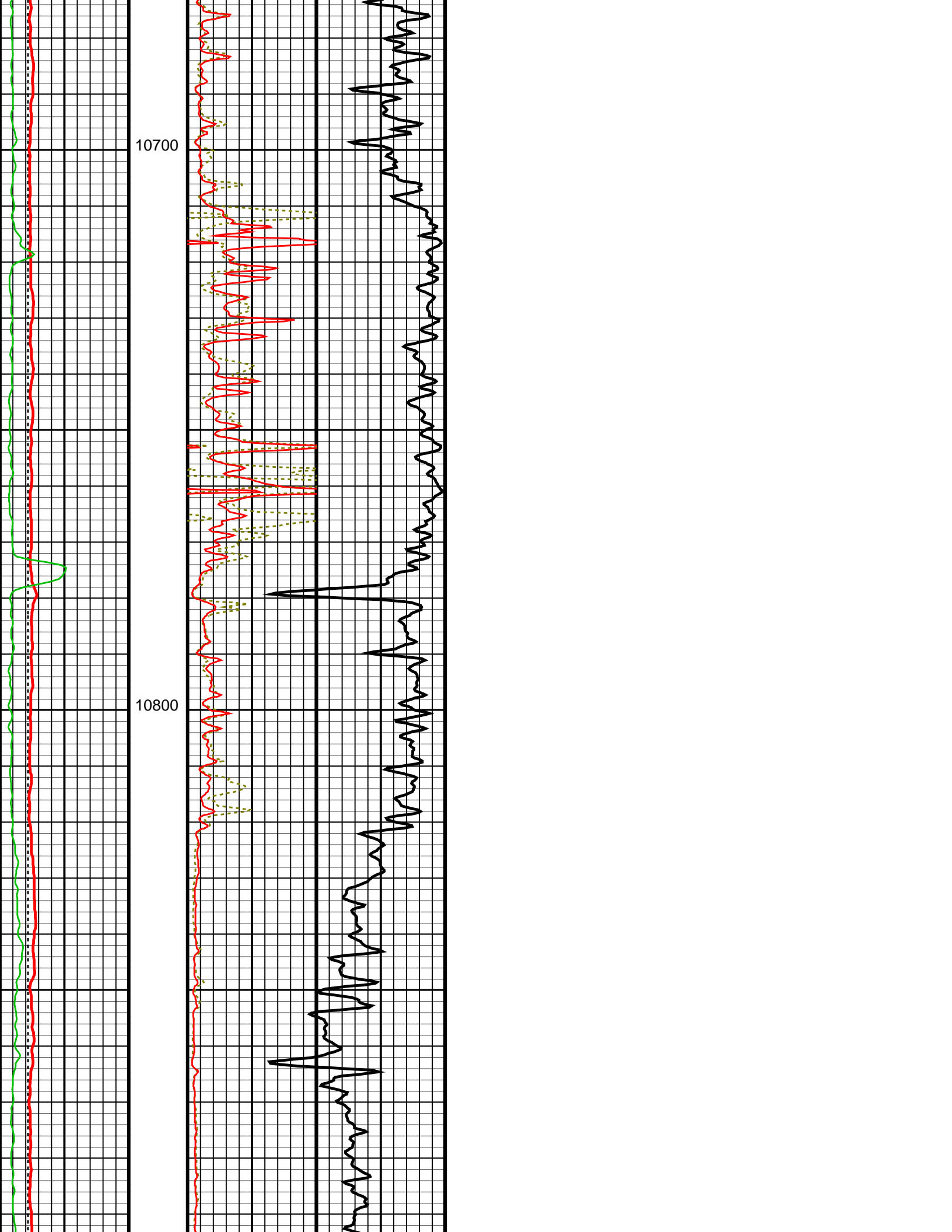


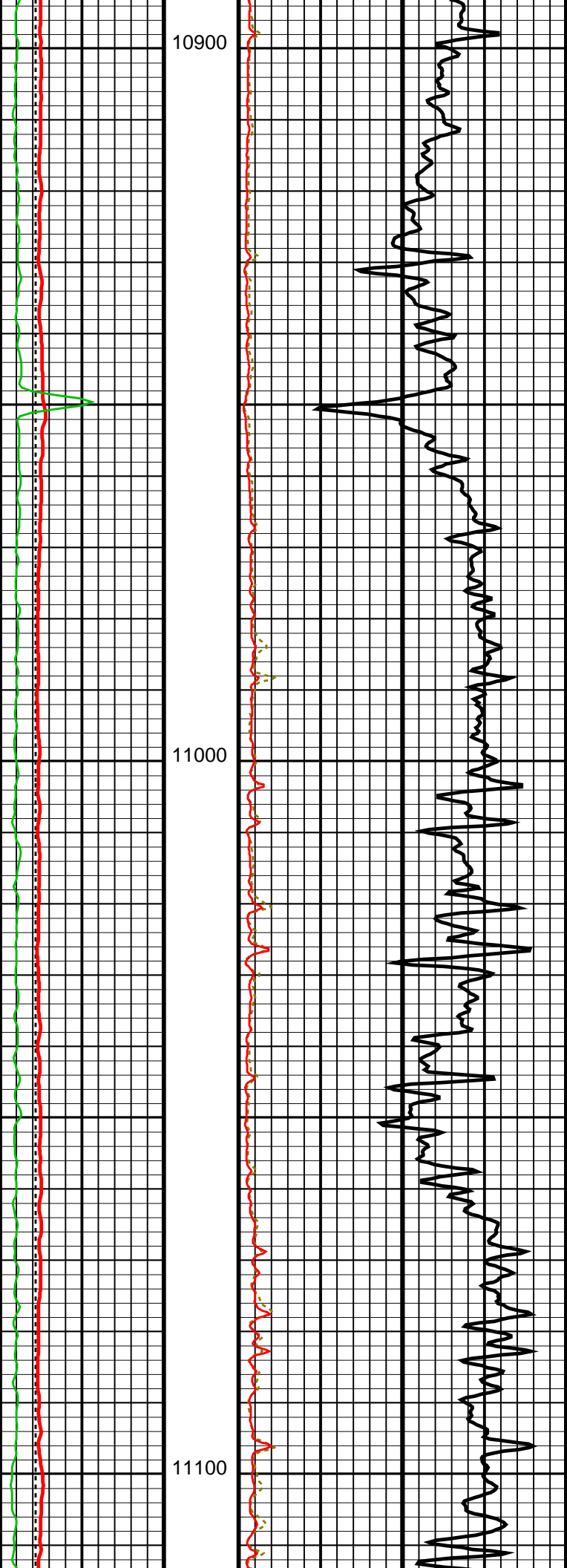


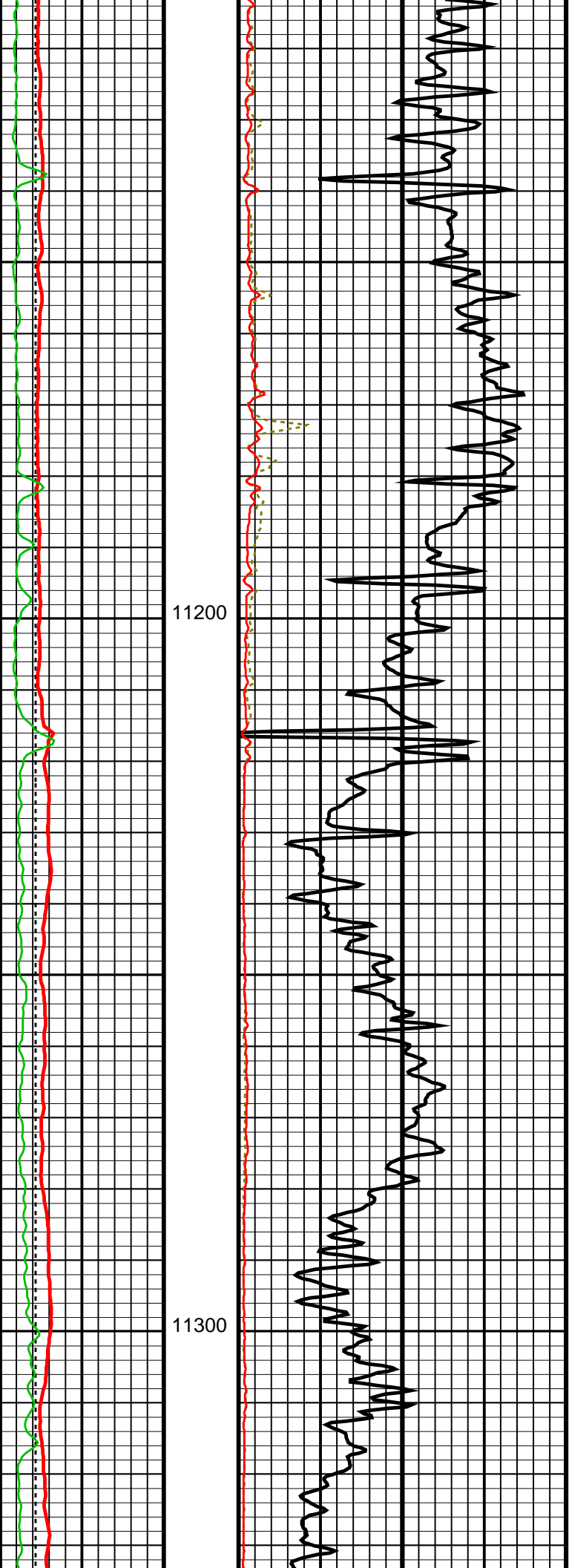


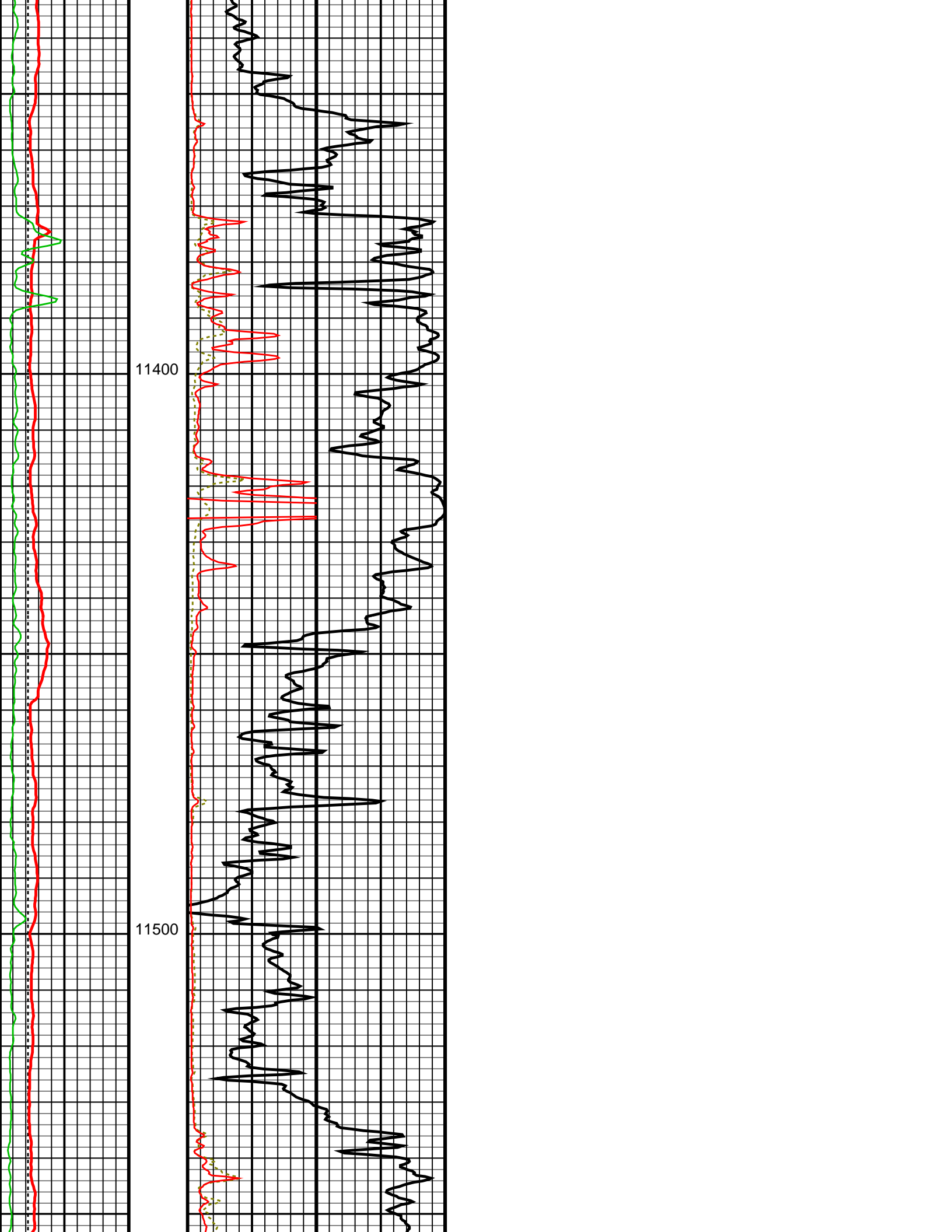


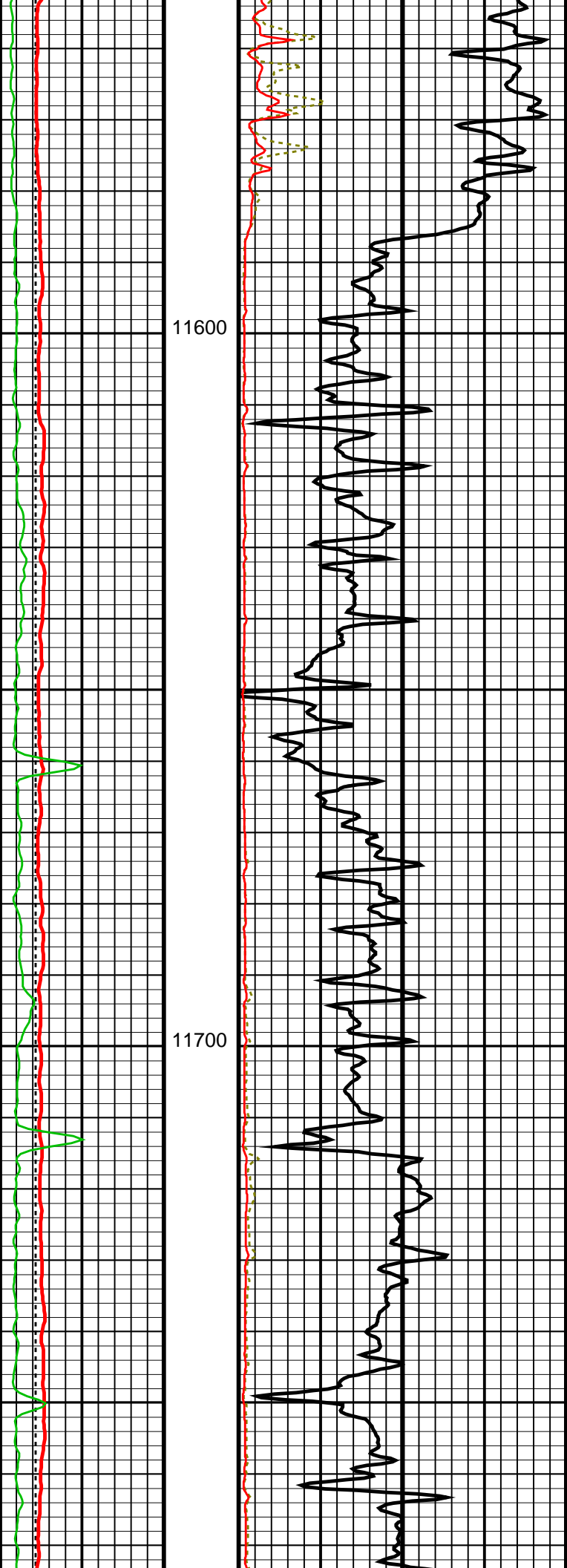


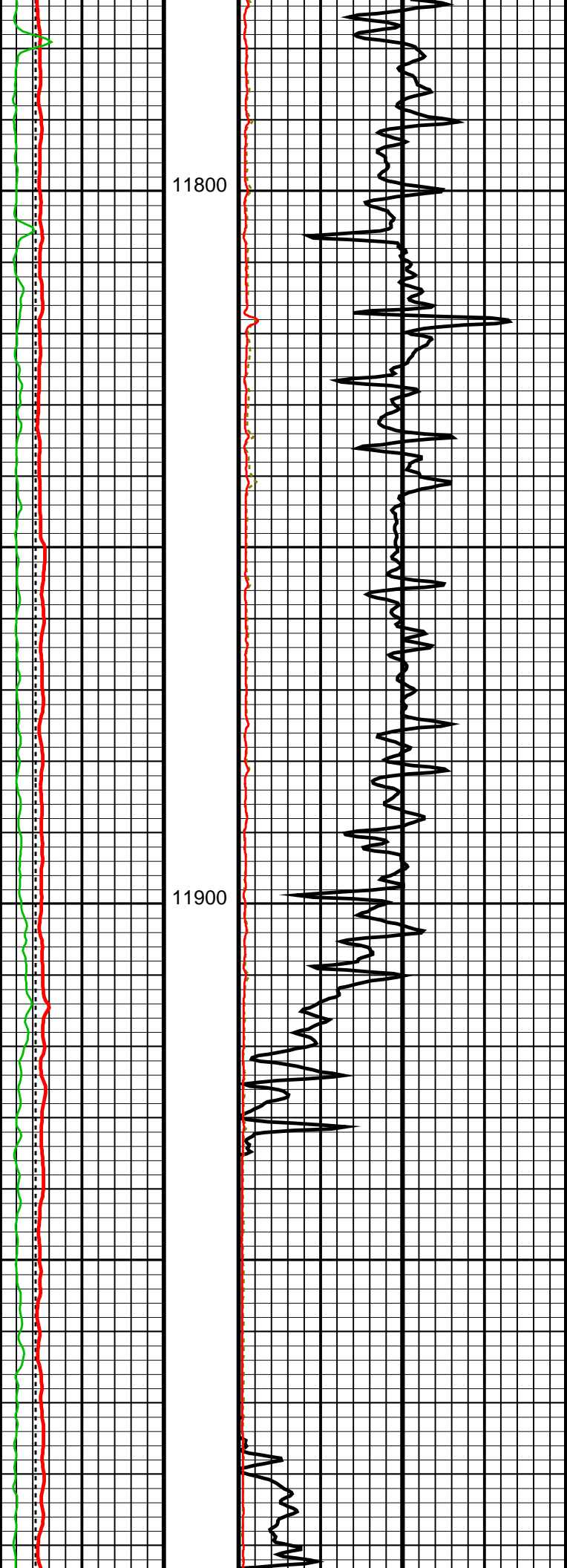




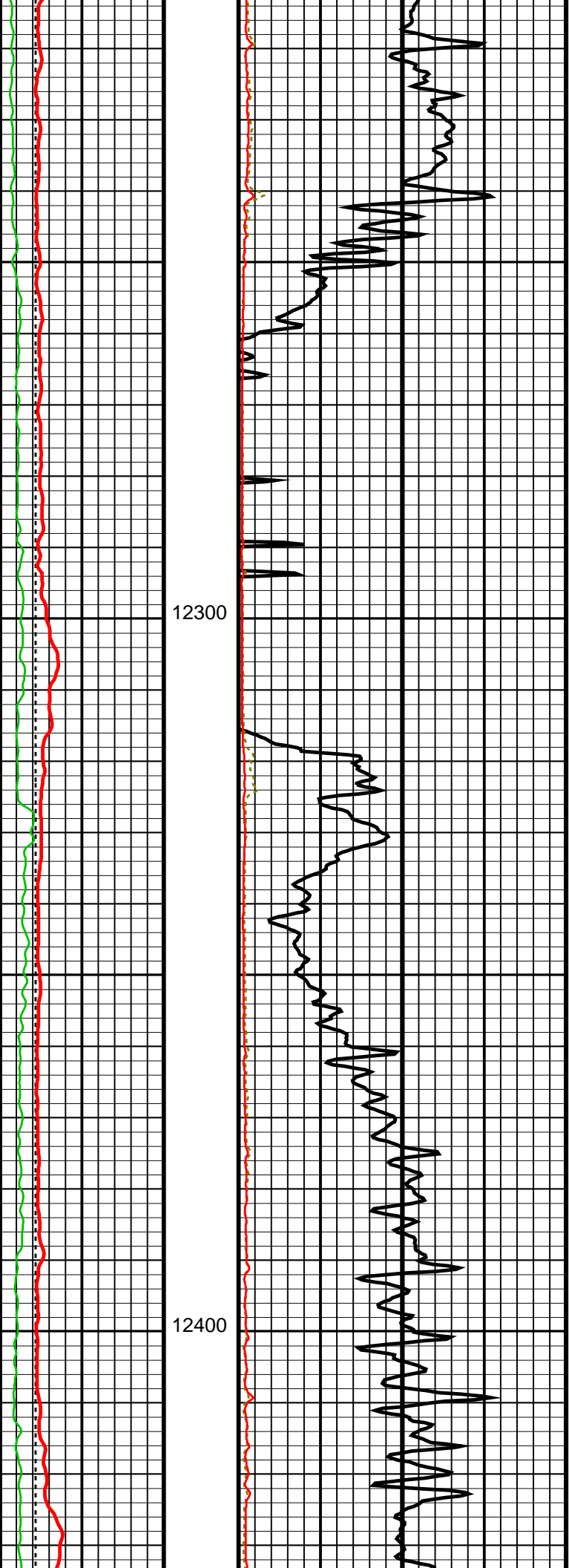


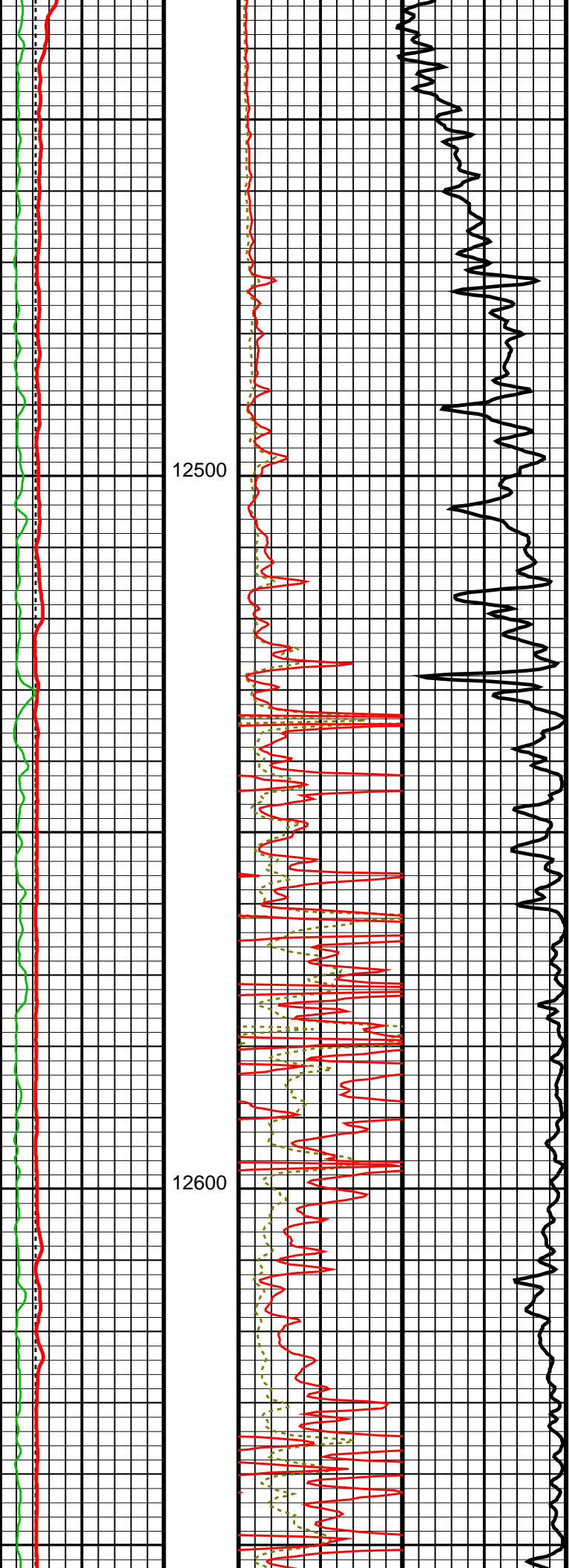


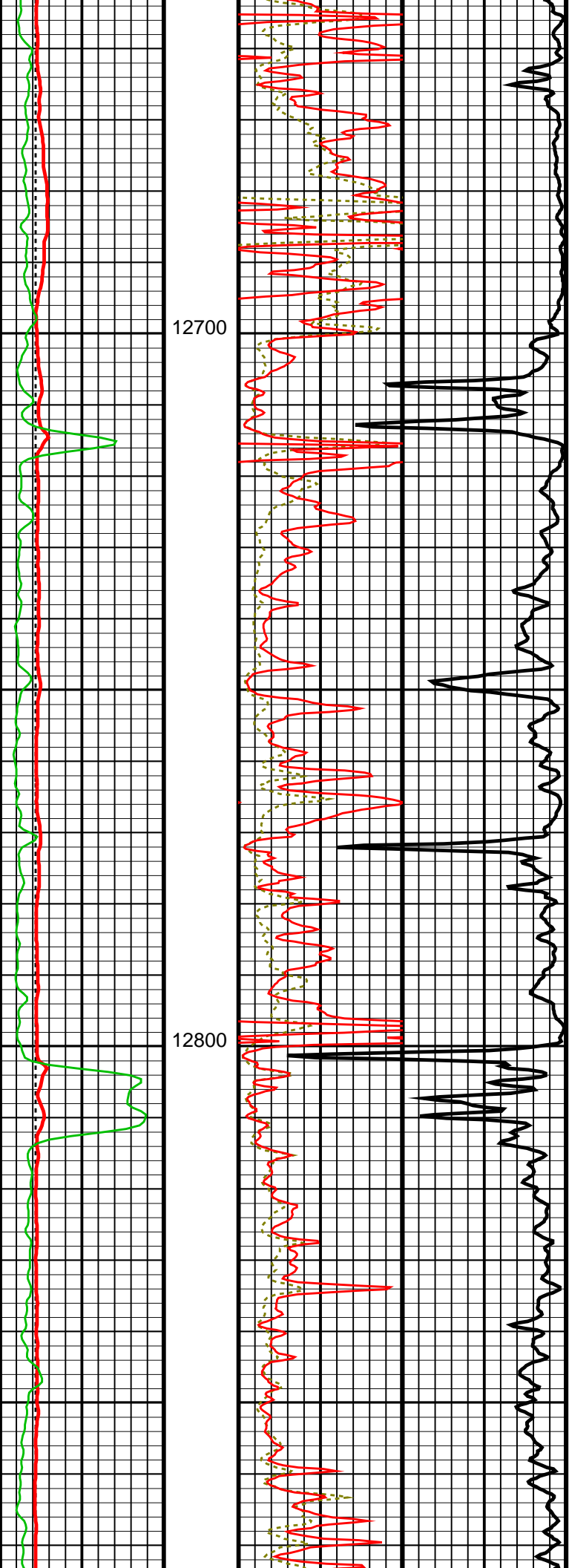


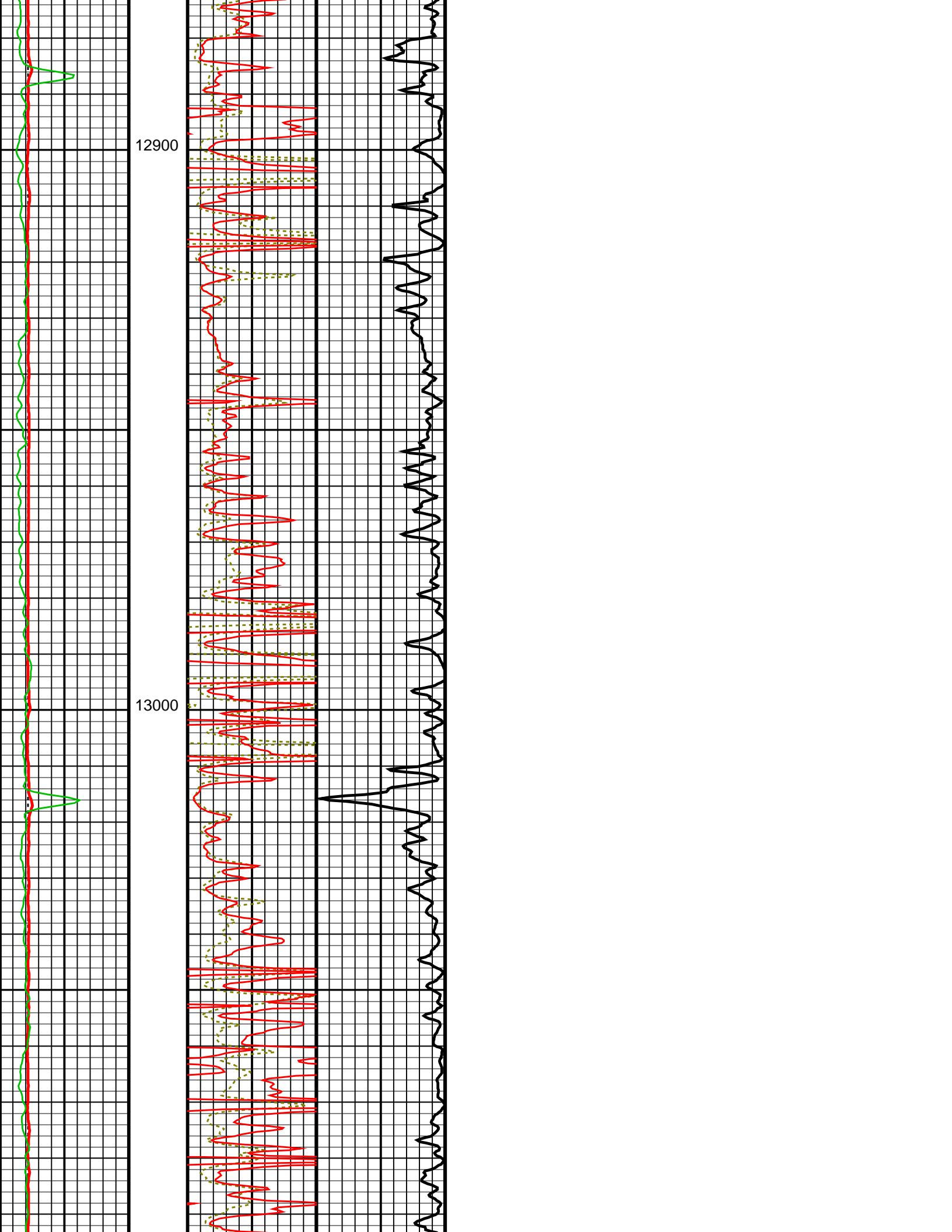


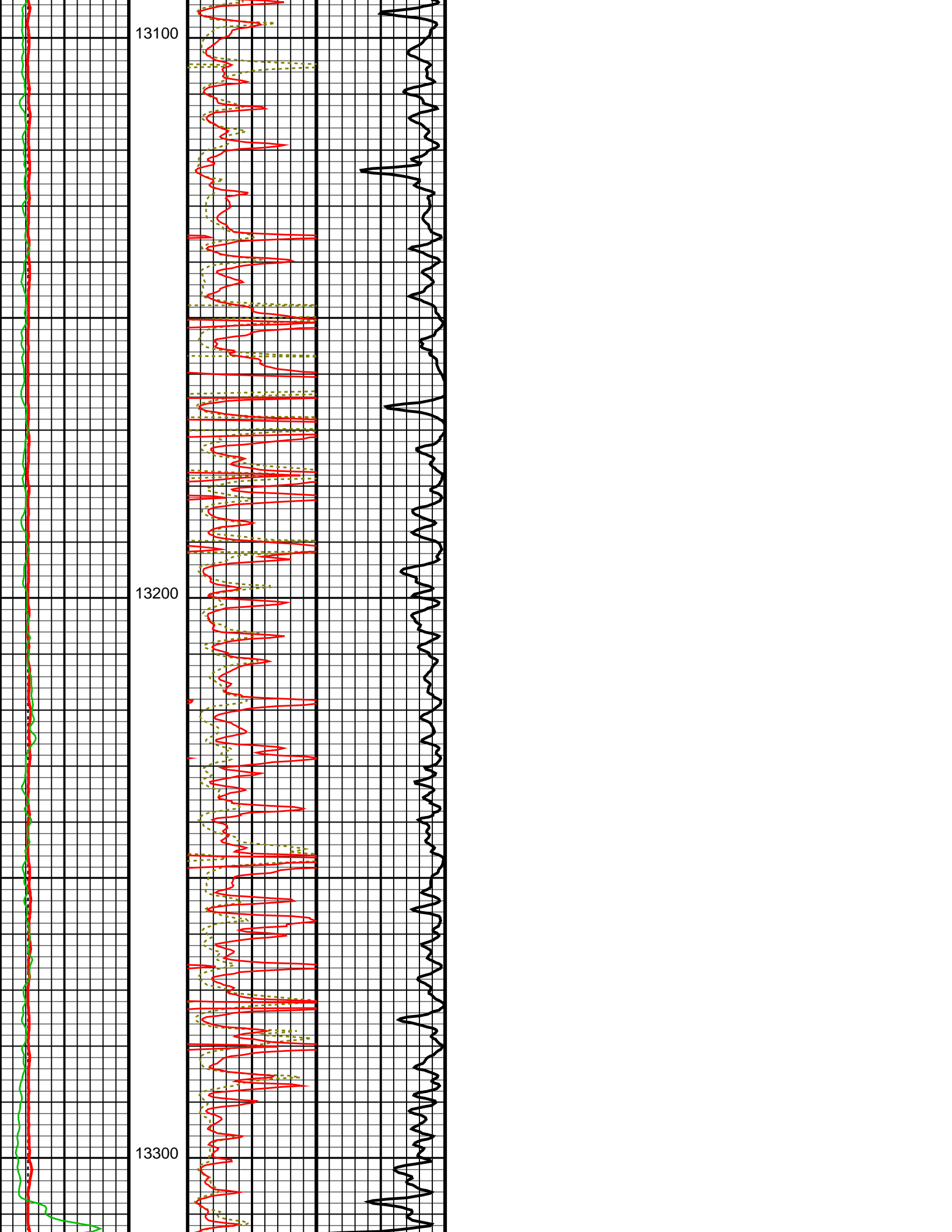


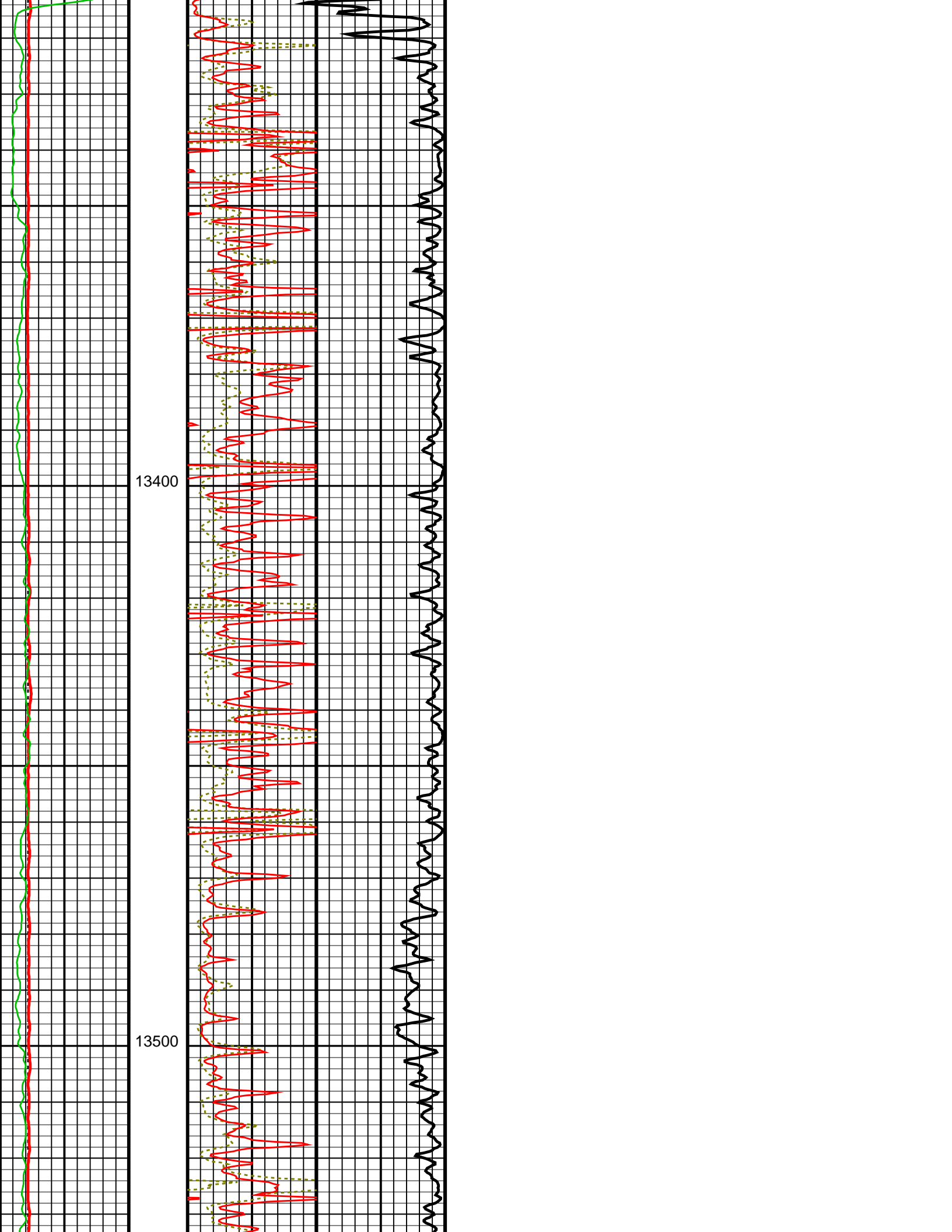


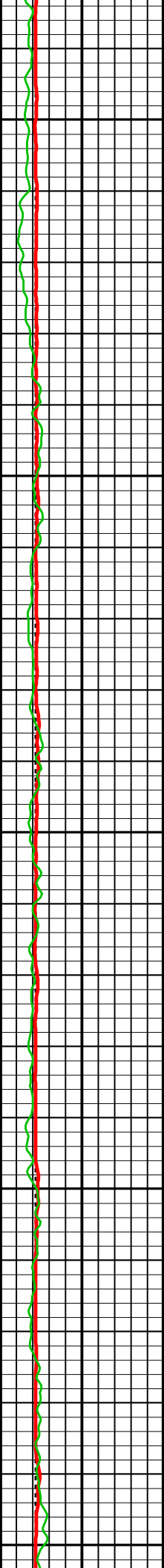






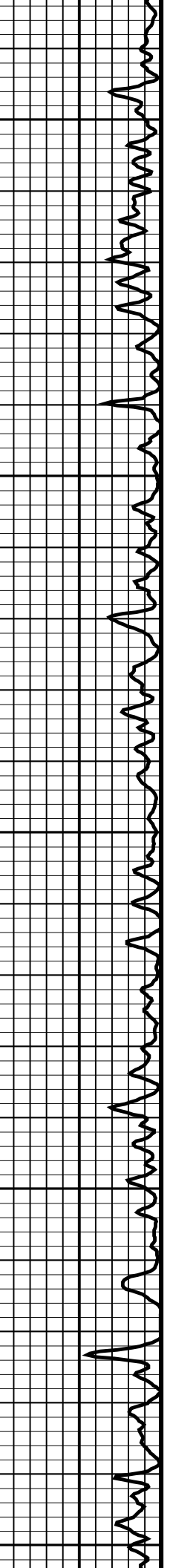
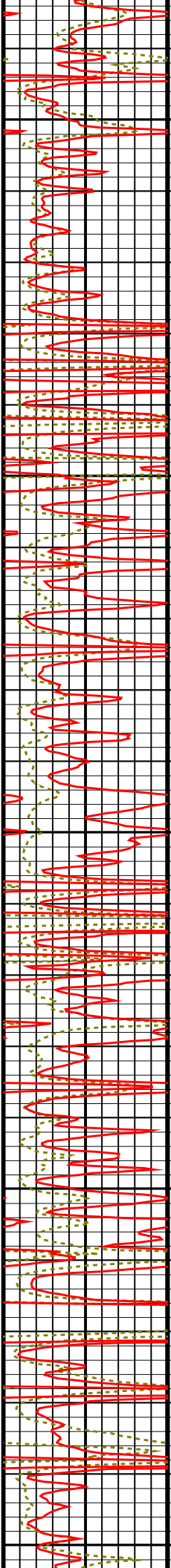


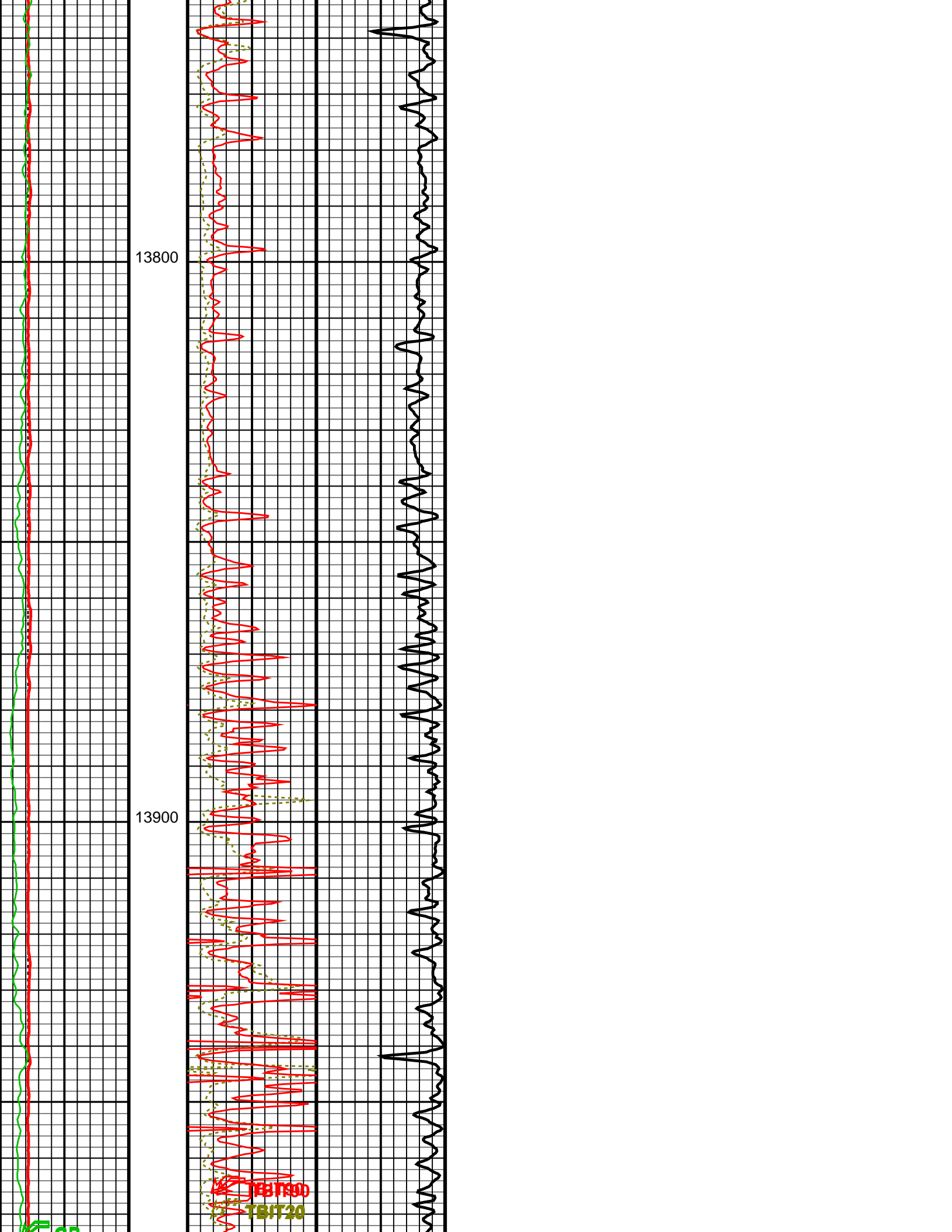


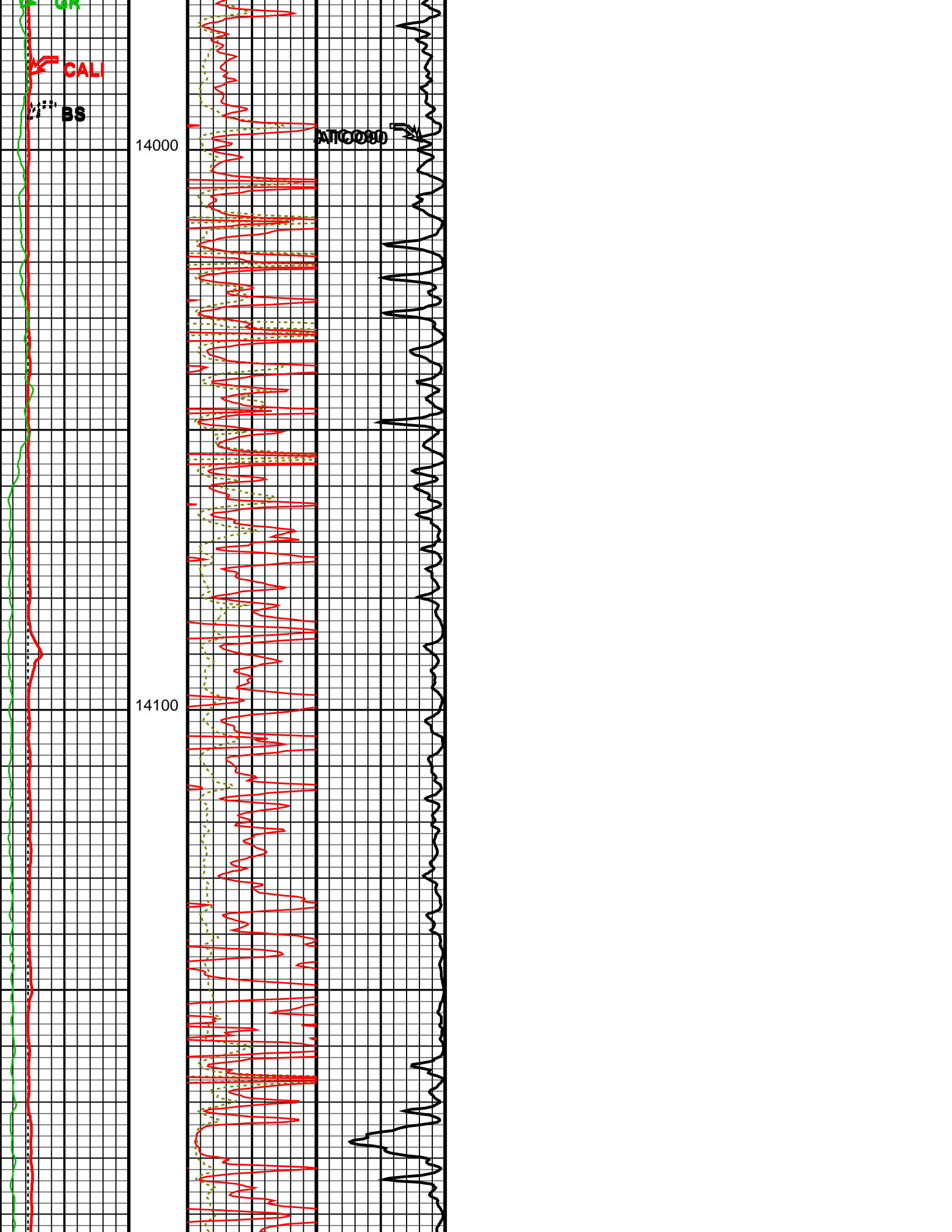


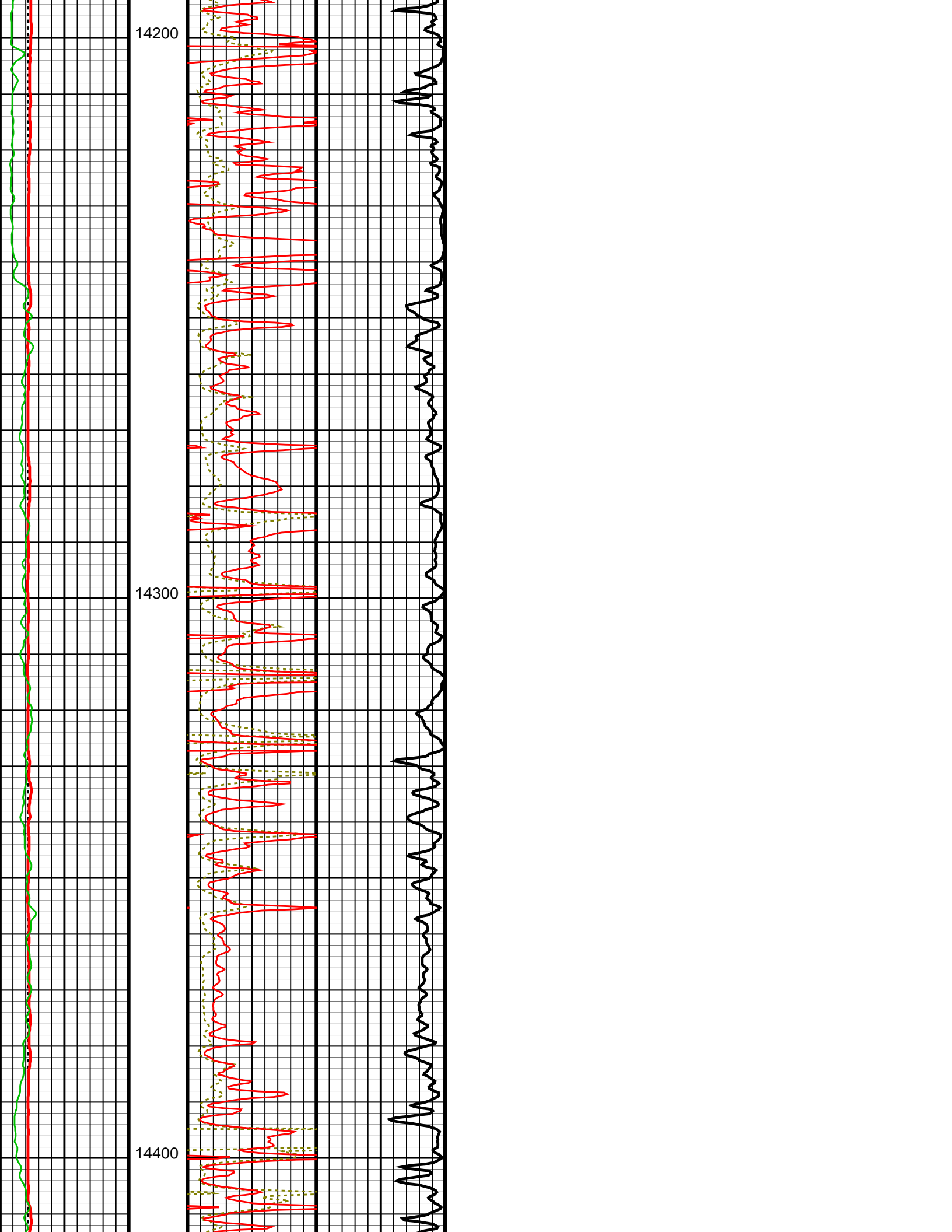
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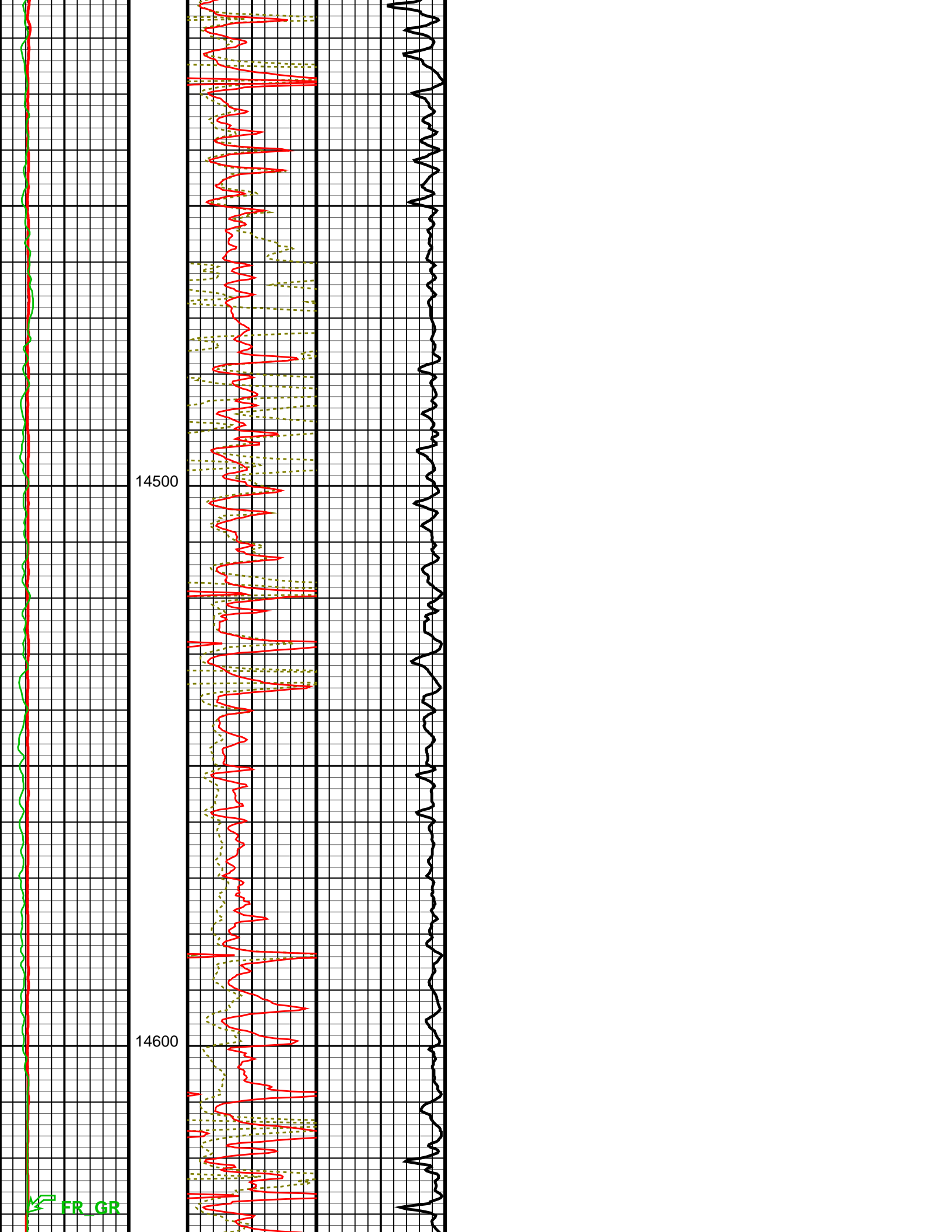
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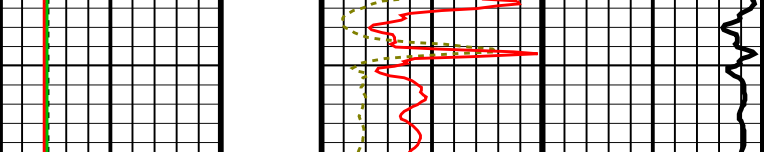












Bit Size (BS)
 4 (IN) 14

**AIT 90 Inch Investigation
 Conductivity (ATCO90)**
 1000 (MS/M) 0

Gamma Ray (GR)
 0 (GAPI) 150

**TBI 20 Inch
 Investigation
 (TBIT20)**
 0 (OHMM) 50

Caliper (CALI)
 4 (IN) 14

**TBI 90 Inch
 Investigation
 (TBIT90)**
 0 (OHMM) 50

Format: TB_1INCH_RES Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2015 14:48

OP System Version: 19C2-270

TBT SRPC-5307-ThruBit

Input DLIS Files

ThruBit_005PUP FN:4 14-Jun-2015 14:42 14649.0 FT 2900.5 FT