

Company: SANDRIDGE ENERGY

Well: SARAH 3306 3-28H

Field: STOHRVILLE

County: HARPER

State: KANSAS

SPECTRAL DENSITY DUAL SPACED NEUTRON MEMORY LOG

350' FSL & 1230' FWL

Elev.: K.B. 1324.00 ft

G.L. 1302.00 ft

D.F. 1324.00 ft

Permanent Datum: _____ GROUND LEVEL _____

Elev.: 1302.00 ft _____

Log Measured From: _____ D.F. _____

22.00 ft above Perm. Datum

Drilling Measured From: _____ D.F. _____

County: HARPER
Field: STOHRVILLE
Location: 350' FSL & 1230' FWL
Well: SARAH 3306 3-28H
Company: SANDRIDGE ENERGY

API Serial No. 15077220660100	Section 28	Township 33S	Range 6W
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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			

Logging Date	30-Jul-2014		
Run Number	1		
Depth Driller	9175 ft		
Schlumberger Depth	9146 ft		
Bottom Log Interval	9125 ft		
Top Log Interval	2500 ft		
Casing Driller Size @ Depth	7.000 in @ 5325 ft		
Casing Schlumberger	5325 ft		
Bit Size	6.125 in		
Type Fluid In Hole	WBM		
Density	8.4 lbm/gal	28 s	
Fluid Loss	60 cm3	9	
Source Of Sample	MUD SENSOR		
RM @ Measured Temperature	3.300 ohm.m @ 65 degF		
RMF @ Measured Temperature	2.800 ohm.m @ 65 degF		
RMC @ Measured Temperature	5.310 ohm.m @ 65 degF		
Source RMF	CALCULATED	CALCULATED	
RM @ MRT	1.592 @ 142	1.351 @ 142	
Maximum Recorded Temperatures	142 degF		
Circulation Stopped	29-Jul-2014	21:10	
Logger On Bottom	29-Jul-2014	22:18	
Unit Number	5	OKC	
Recorded By	C.PARKER		
Witnessed By	R.TICHENOR		

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-TMC
 OS2:
 OS3:
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1
 SERVICE:HORIZONTAL PUMP DOWN MEMORY BIT DEPTH: 9086' LOGGED TO: 2500'
 ALL SCALES AND PRESENTATIONS PER CLIENT REQUEST
 LIMESTONE MATRIX 2.71 g/cc USED FOR POROSITY MEASUREMENTS
 TOOLSTRING RAN WITH SWIVEL AND SMALL DE-CENTRALIZE
 TBHV REPRESENTS TOTAL BOREHOLE VOLUME, ft3
 ABHV REPRESENTS ANNULAR HOLE COLUME, CALCULATED FOR 4.5" CSG, ft3
 HSPM USED TO ACQUIRE LOG DEPTH: CORRELATED TO MWD GR
 LOSS OF DATA AT 5250' DUE TO BATTERY SWITCH NOT EFFECTIVE
 RIG:LATSHAW 27
 CREW: C.PARKER R.CRESSWELL I.HERNANDEZ

REMARKS: RUN NUMBER 2
 LOGGED TO: 2500'

RUN 1		
SERVICE ORDER #:	3078	
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

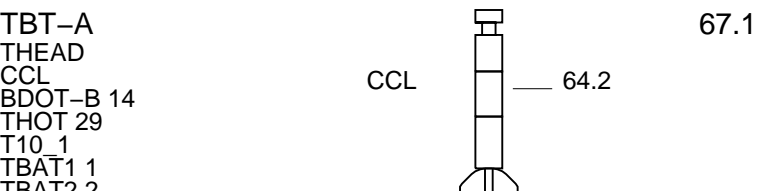
RUN 1

SURFACE EQUIPMENT

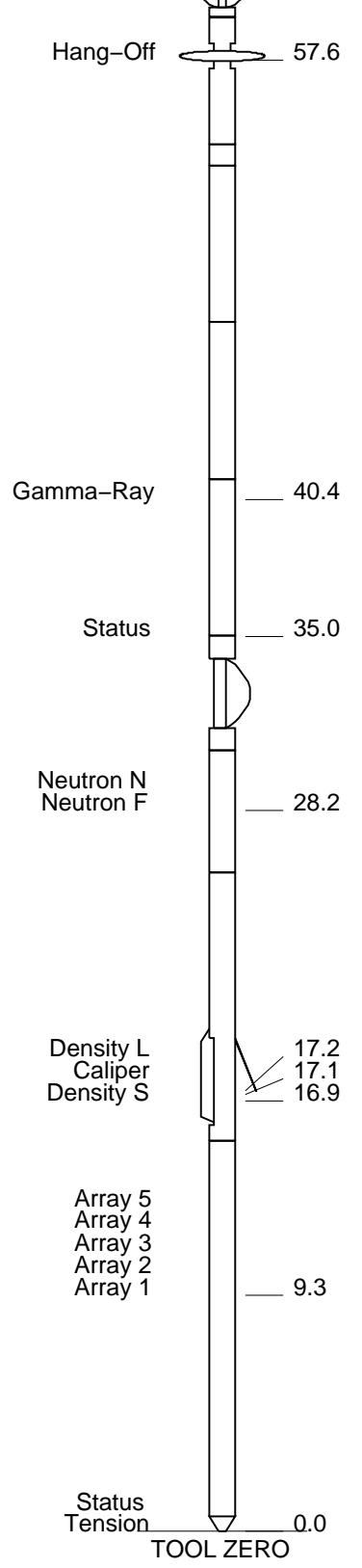
WITM (ThruBit)

RUN 2

DOWNHOLE EQUIPMENT



TMG-A 27
TILE-A
TBN-A 18
NNLS-EWA 4484
TBD-A 46
GGLS-FZ 3216
TBI-A 48



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: SARAH 3306 3-28H

Input DLIS Files

DEFAULT SPLICE_botto019ass FN:1 PRODUCER 30-Jul-2014 05:05 9142.8 FT 2393.1 FT

OP System Version: 19C2-270

TBT SRPC-5298-ThruBit_b

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

gr wrap4
From LHT1 to GR4

gr wrap3
From LHT1 to GR3

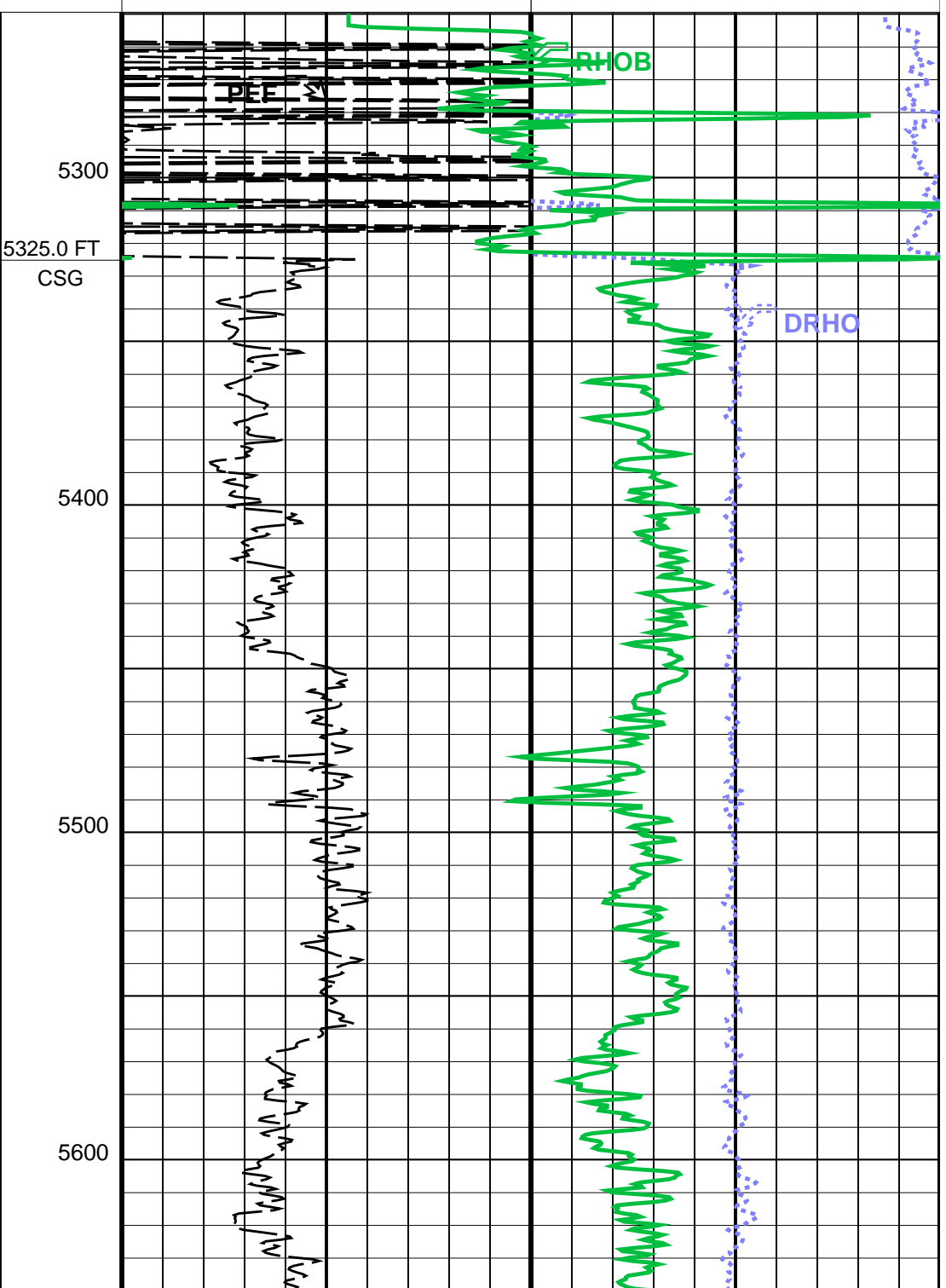
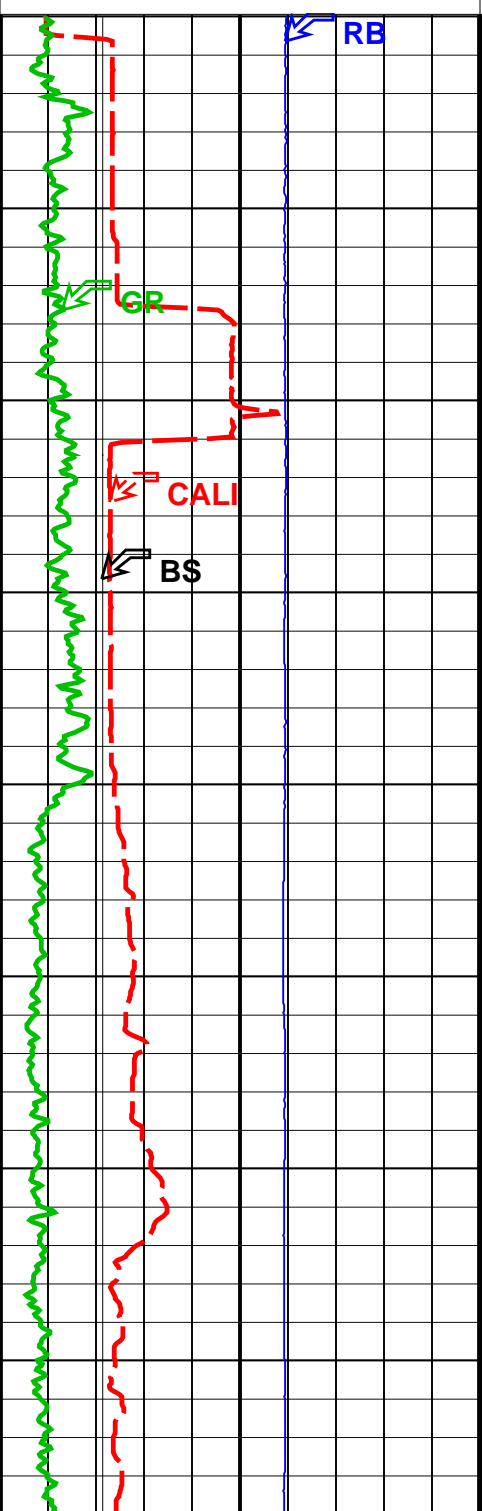
gr wrap2
From LHT1 to GR2

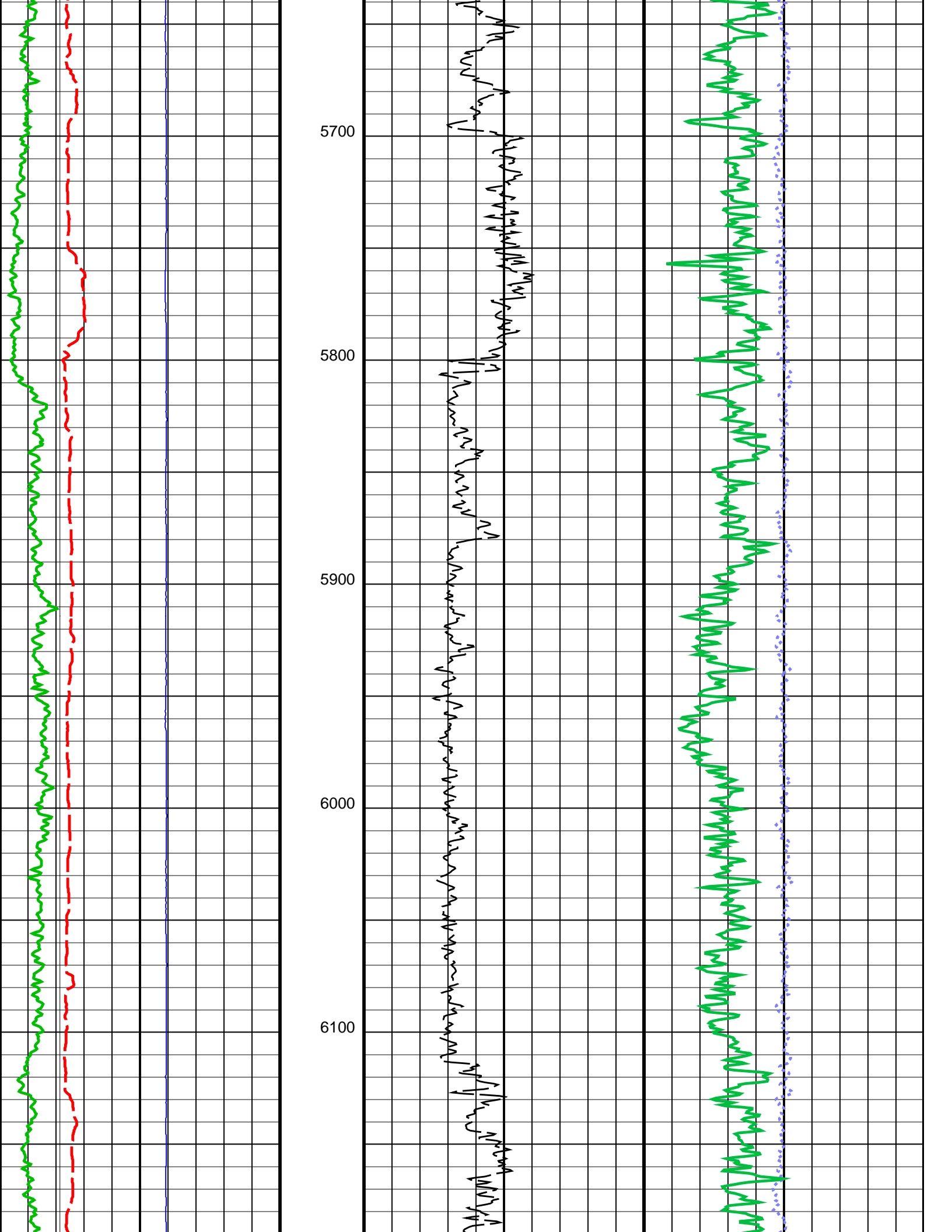
gr wrap1
From LHT1 to GR1

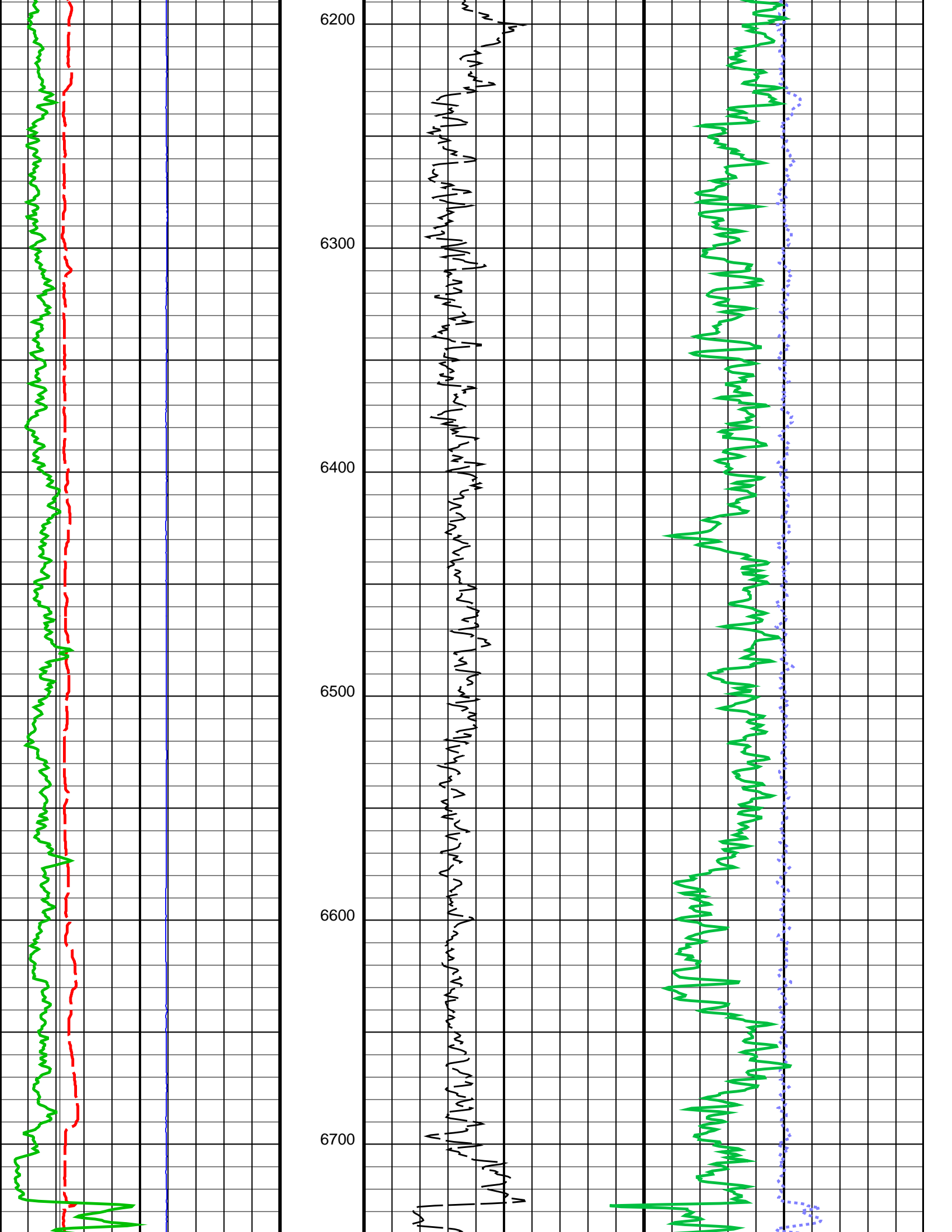
Gamma Ray (GR)

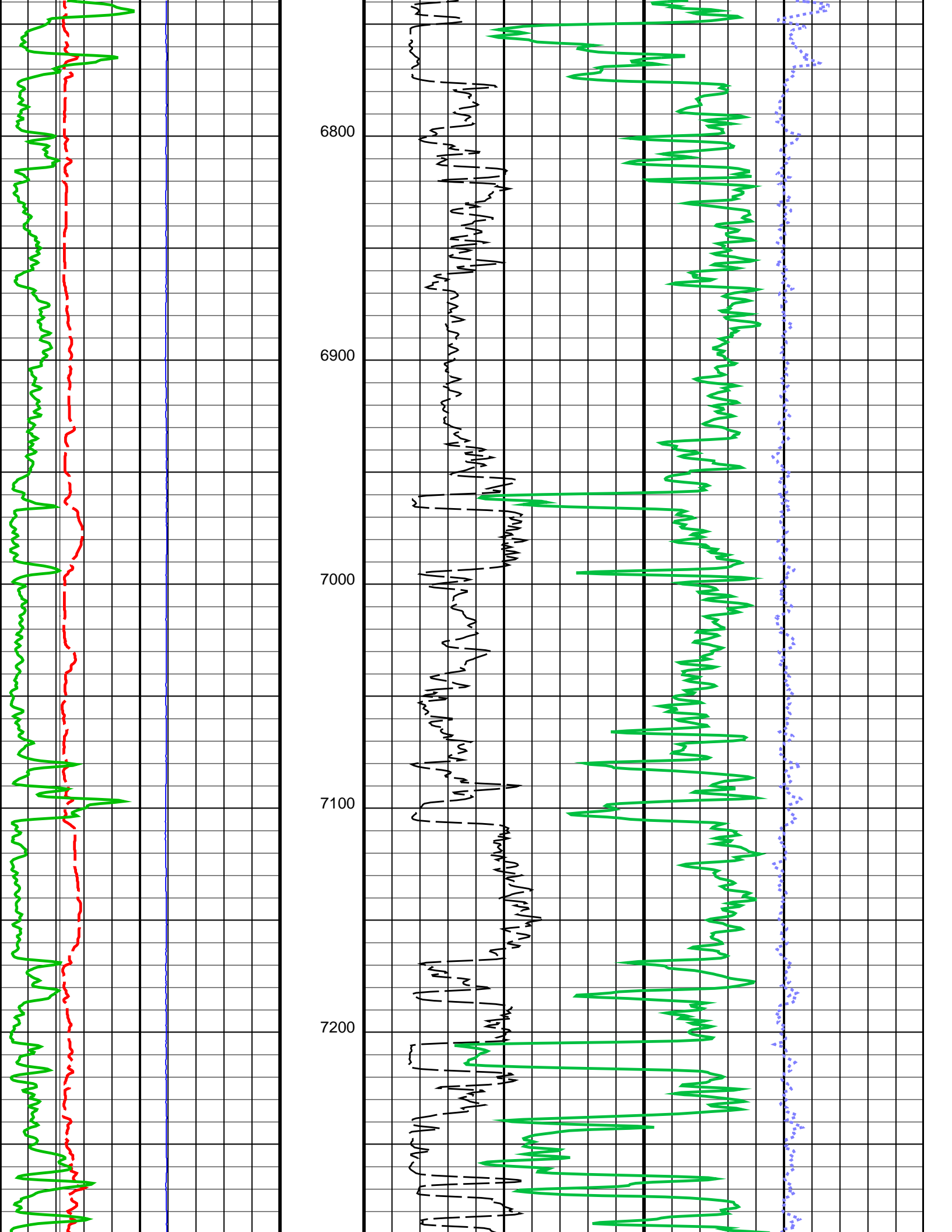
Gamma Ray (GR)		
0	(GAPI)	150
Caliper (CALI)		
4	(IN)	14
Gamma Ray 4 (GR)		
600	(GAPI)	750
Gamma Ray 3 (GR)		
450	(GAPI)	600
Gamma Ray 2 (GR)		
300	(GAPI)	450
Gamma Ray 1 (GR)		
150	(GAPI)	300
Bit Size (BS)		
4	(IN)	14

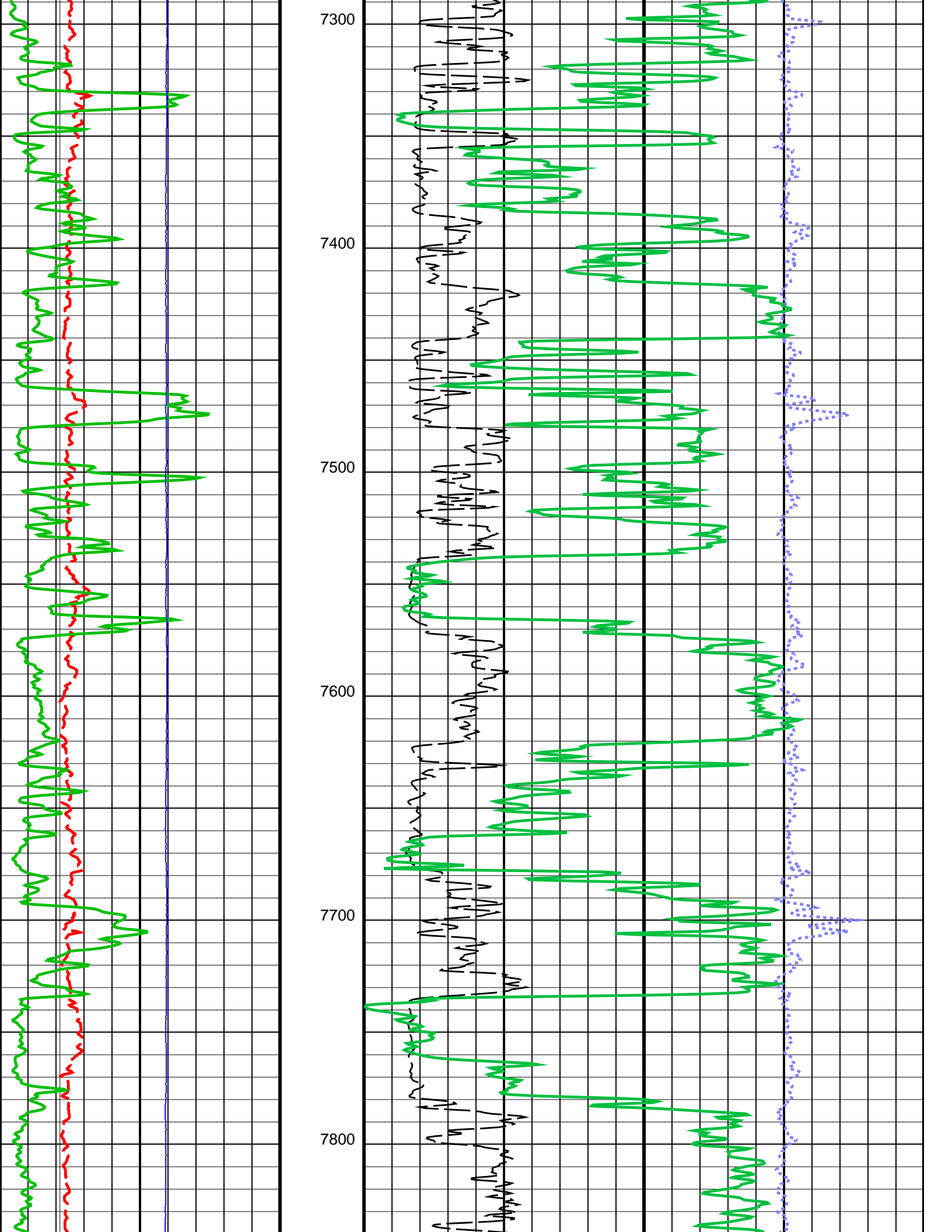
RHOB (RHOB)					
2	(G/C3)	3			
PEF (PEF)		DRHO (DRHO)			
0	(----	10	-0.5	(G/C3)	0.5

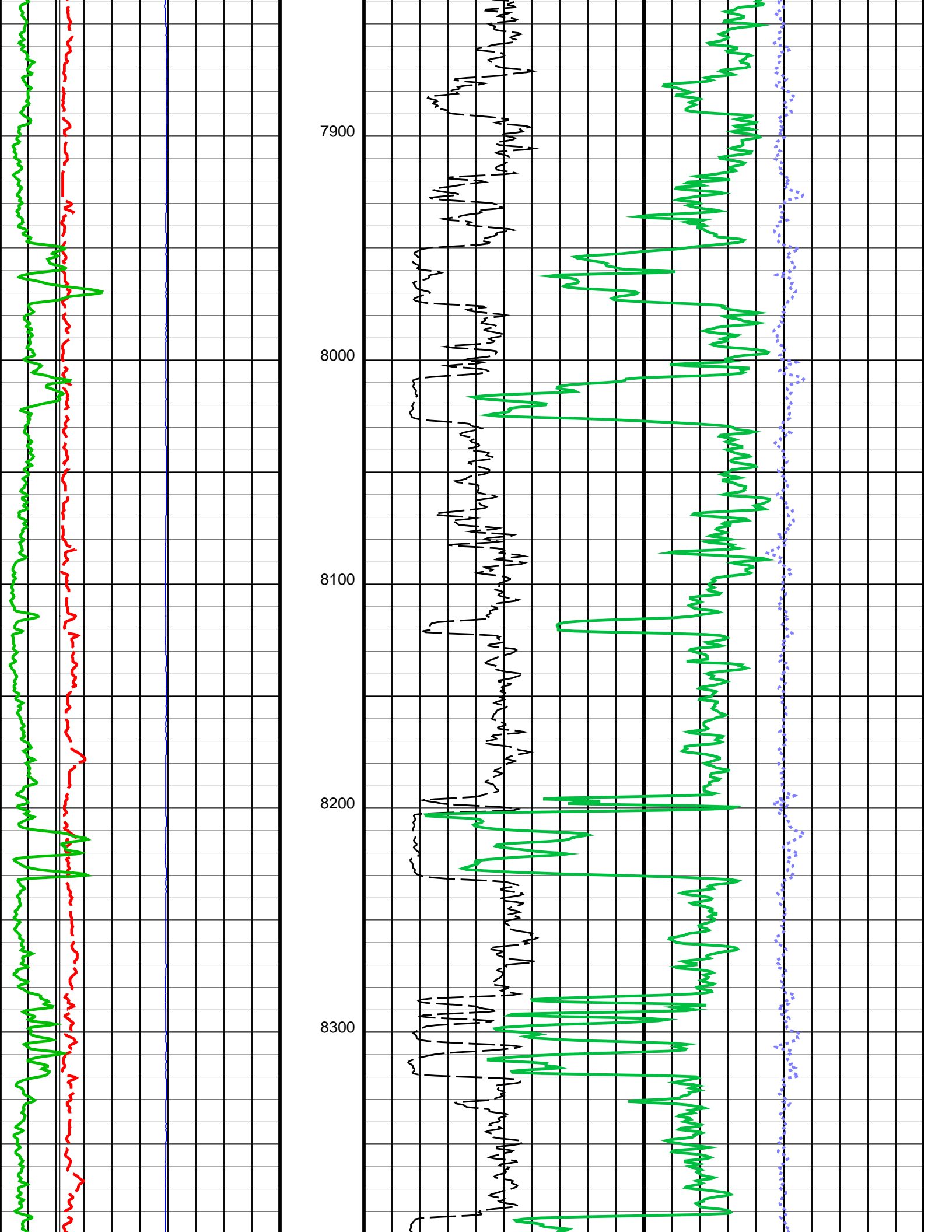


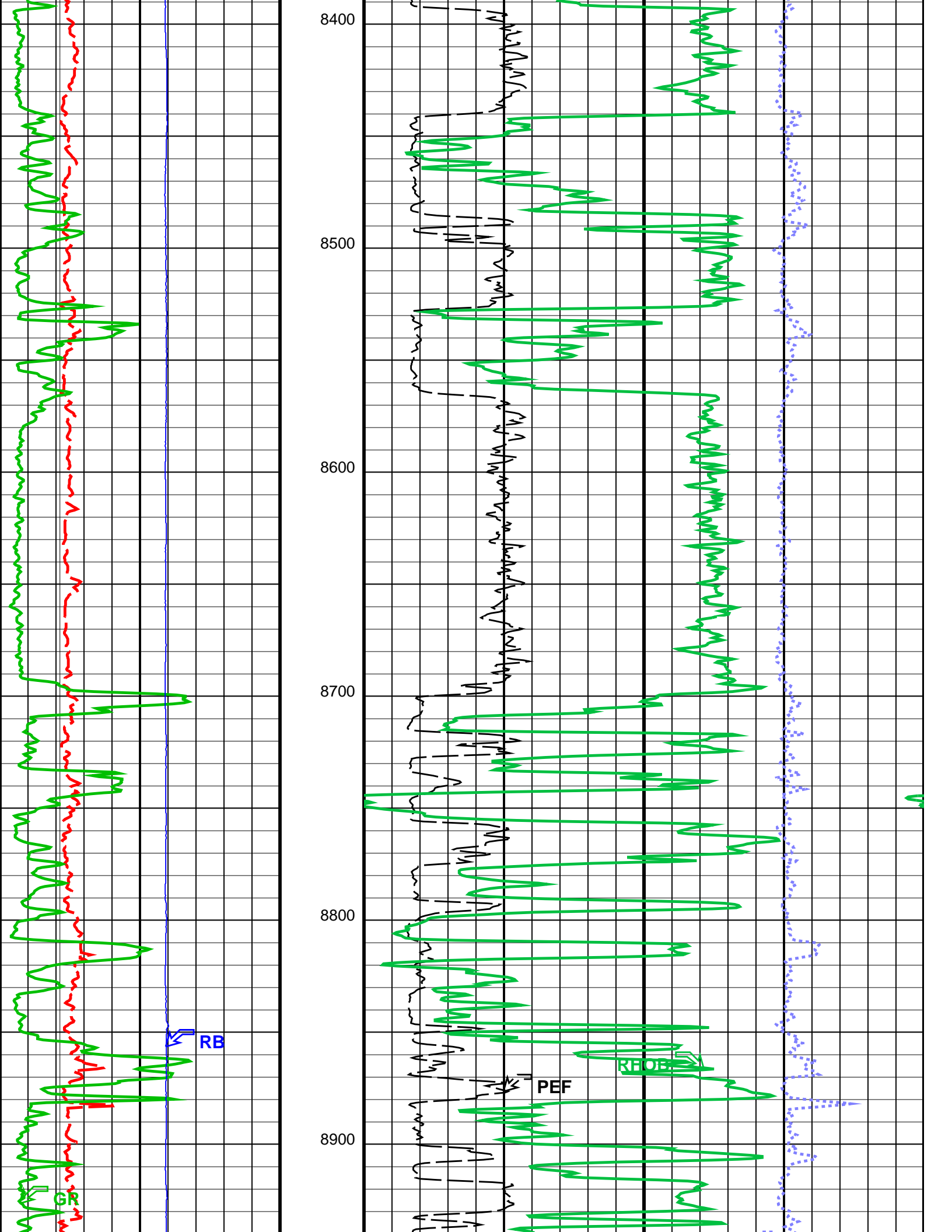


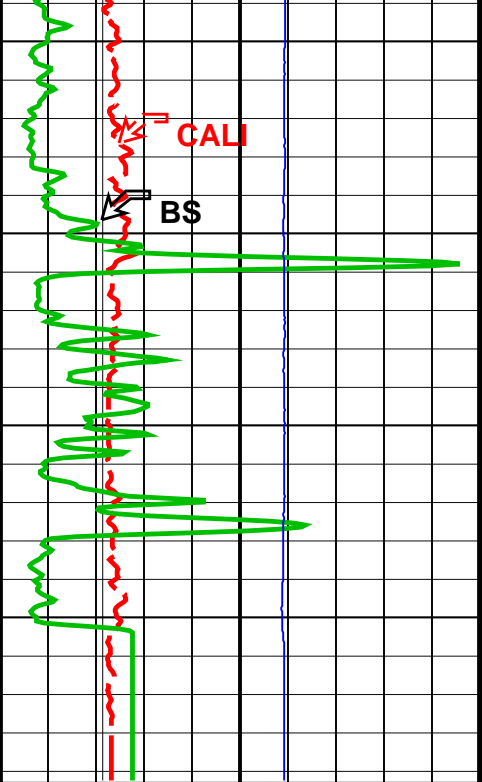




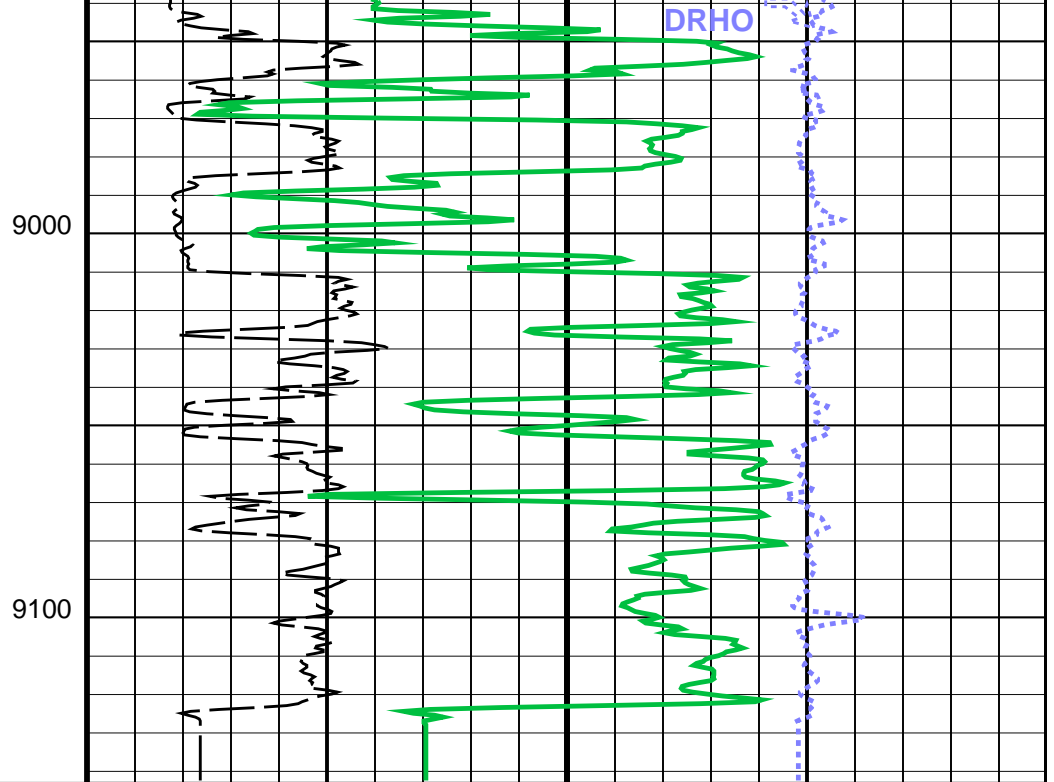








Bit Size (BS)		14
(IN)		
Gamma Ray 1 (GR)		300
(GAPI)		
150		
Gamma Ray 2 (GR)		450
(GAPI)		
300		
Gamma Ray 3 (GR)		600
(GAPI)		
450		
Gamma Ray 4 (GR)		750
(GAPI)		
600		
Caliper (CALI)		14
(IN)		
4		
Gamma Ray (GR)		150
(GAPI)		
0		
gr wrap1 From LHT1 to GR1		
gr wrap2 From LHT1 to GR2		
gr wrap3 From LHT1 to GR3		
gr wrap4 From LHT1 to GR4		
Relative Bearing (RB)		940
(DEG)		
0		



PEF (PEF)		10

0		
DRHO (DRHO)		0.5
(G/C3)		
-0.5		
RHOB (RHOB)		3
(G/C3)		
2		

Parameters

DLIS Name	Description	Value
TBT-A: ThruBit String		
DHC	Density Hole Correction	CALIPER

RB_OFFSET	Additional RB offset (degrees)	0.000	deg
TBD_CAL_BLOCK	TBD Calibration Block Type	THRUBIT	
TBD_SPIKE_REJECT	TBD Spike Detection Option	DETECT	
TBD_SPIKE_THRESHOLD	TBD Attenuation Change Threshold for Spike Detection	5.000	%
WMUD	Mud Weight	8.400	lbm/gal
System and Miscellaneous			
BS	Bit Size	6.125	in

Format: TB_2INCH_NUCLEAR Vertical Scale: 2" per 100' Graphics File Created: 30-Jul-2014 05:06

OP System Version: 19C2-270

TBT SRPC-5298-ThruBit_b

Input DLIS Files

DEFAULT SPLICE_botto019ass FN:1 PRODUCER 30-Jul-2014 05:05 9142.8 FT 2393.1 FT



MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY Well: SARAH 3306 3-28H

Input DLIS Files

DEFAULT SPLICE_botto019ass FN:1 PRODUCER 30-Jul-2014 05:05 9142.8 FT 2393.1 FT

OP System Version: 19C2-270

TBT SRPC-5298-ThruBit_b

PIP SUMMARY

- └ Integrated Cement Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Hole Volume Minor Pip Every 10 F3

	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

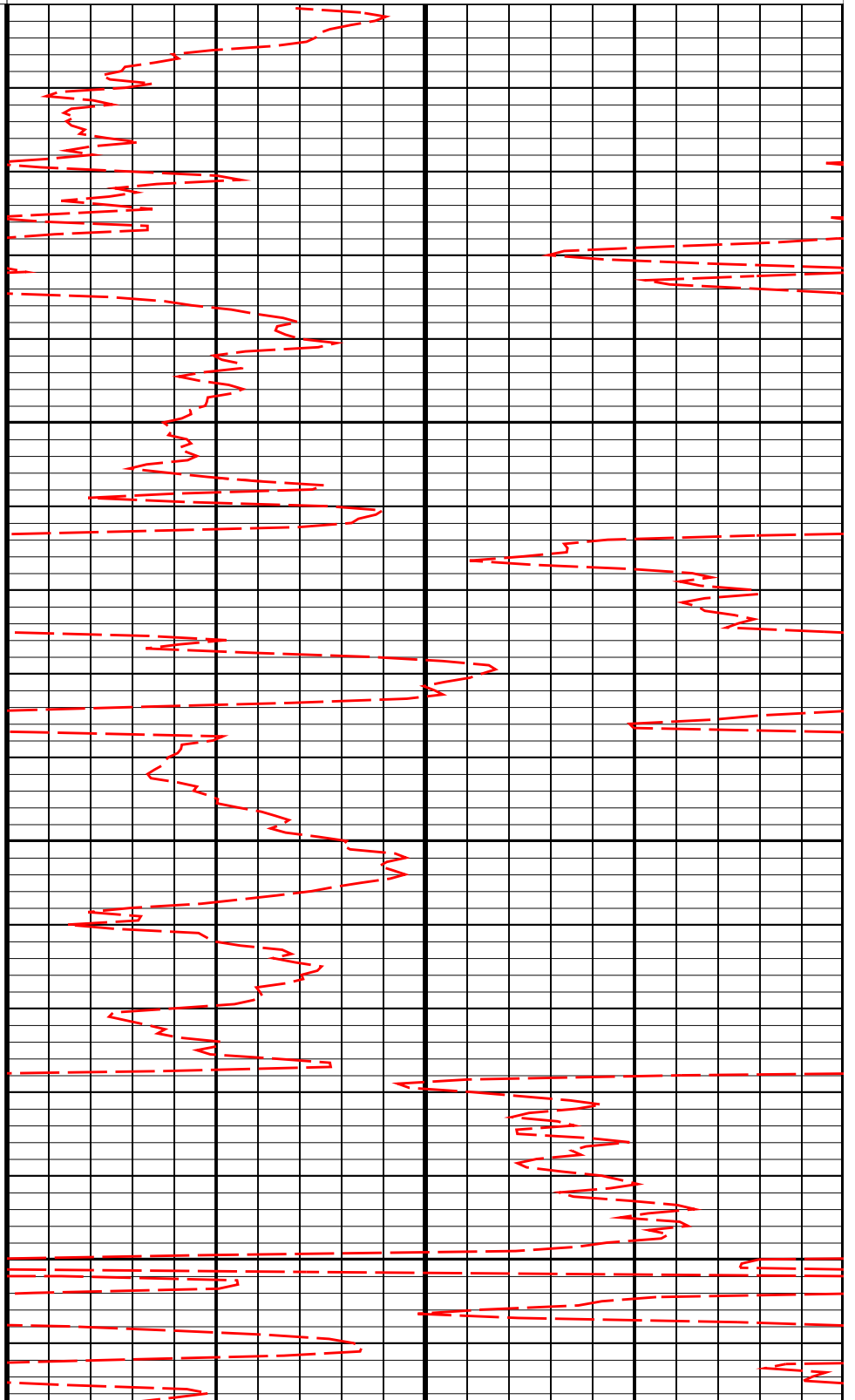
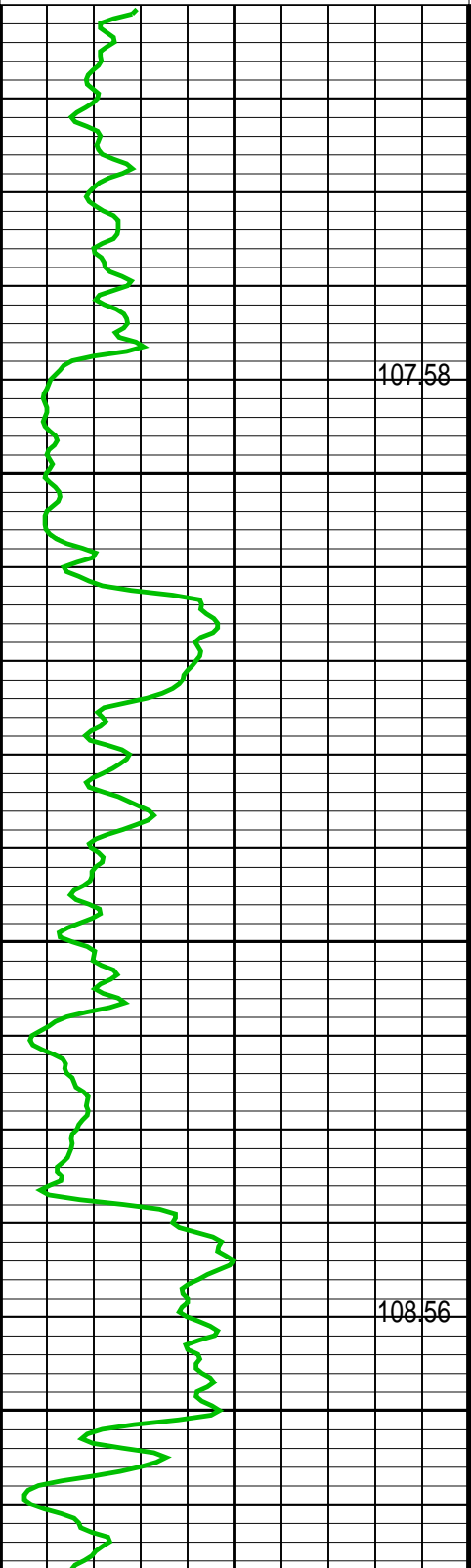
Gamma Ray (GR)		
0	(GAPI)	150

Caliper (CALI)		
4	(IN)	14

Gamma Ray 4 (GR)

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

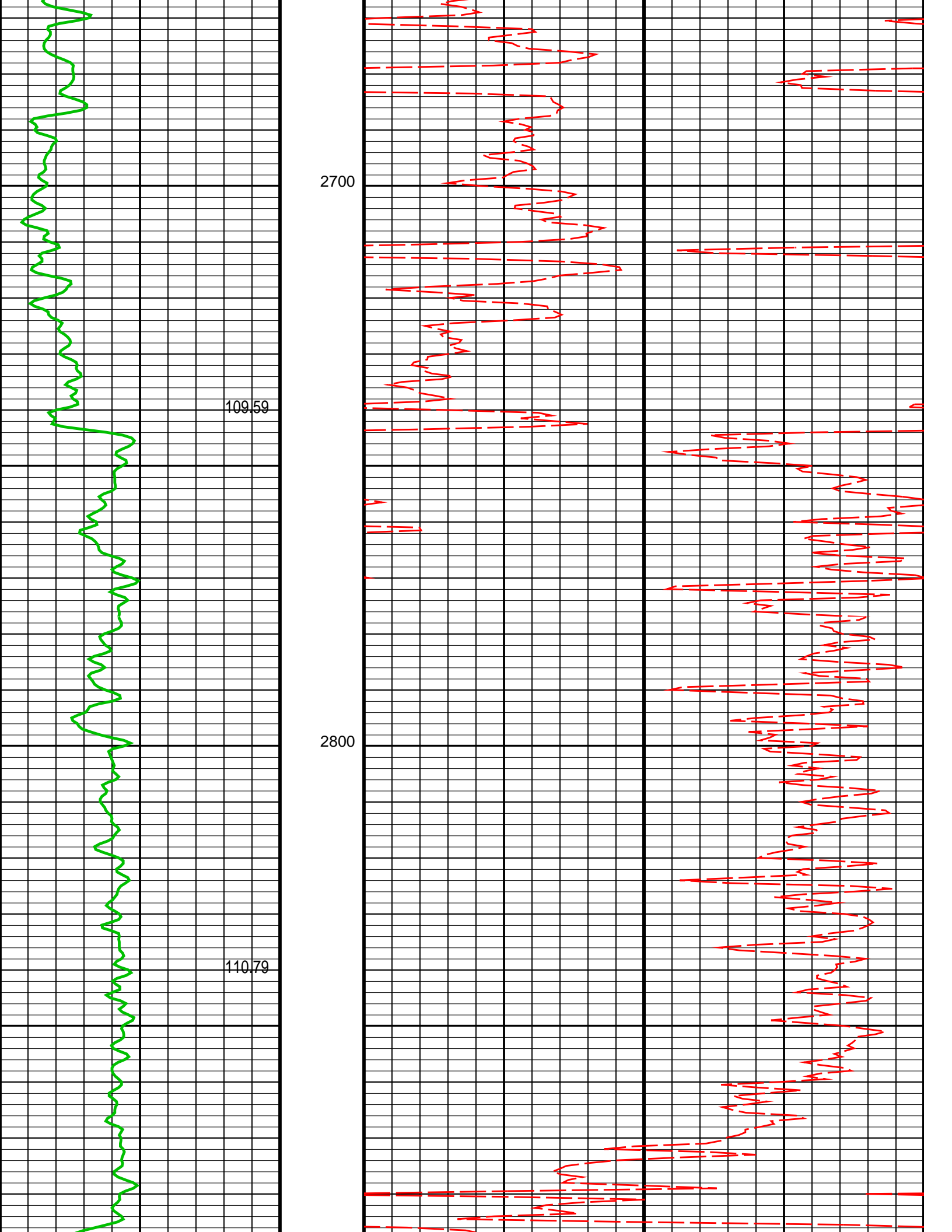
30	TNPH (TNPH) (%)	-10
0	PEF (PEF) (---	10
-0.5	DRHO (DRHO) (G/C3)	0.5
30	DPHI (DPHI) (PU)	-10

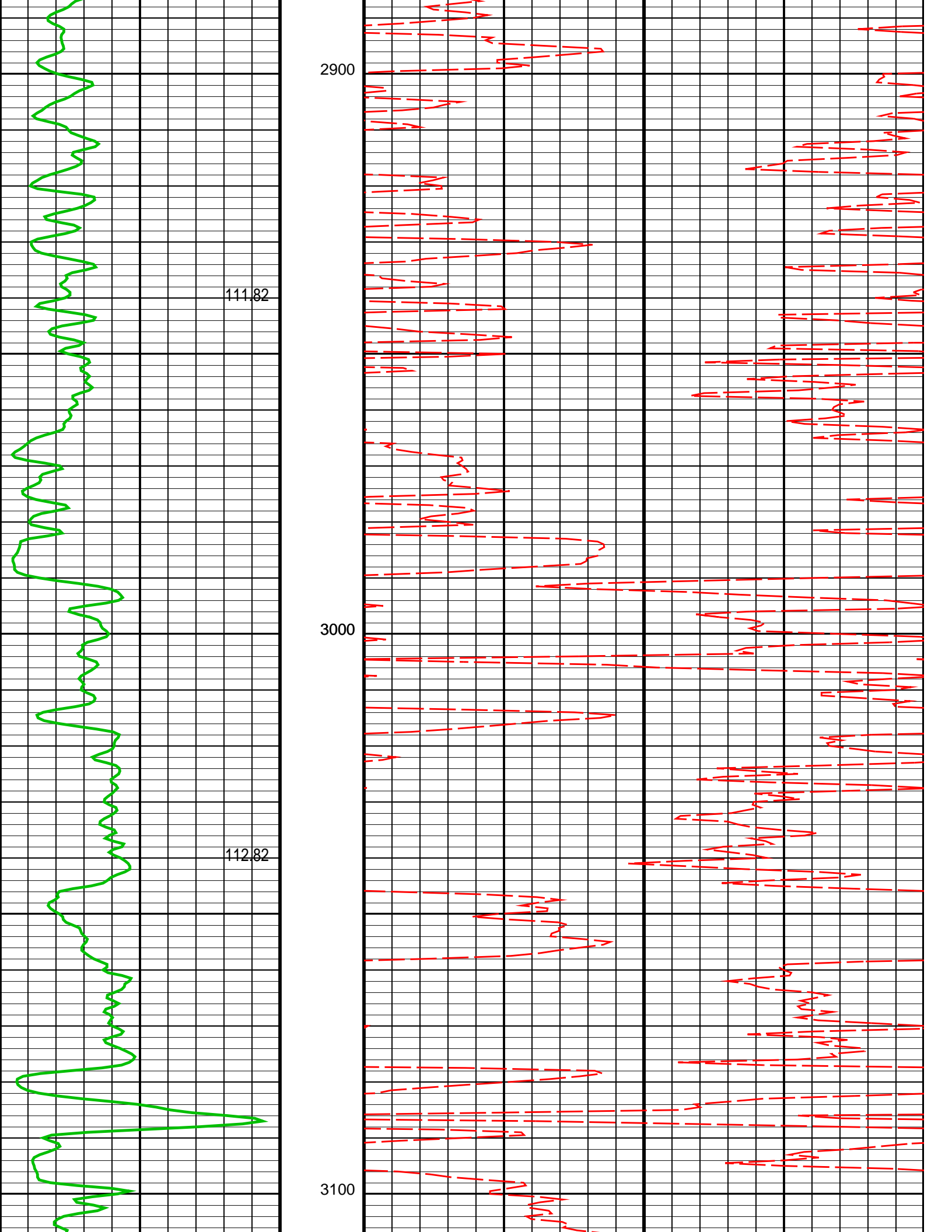


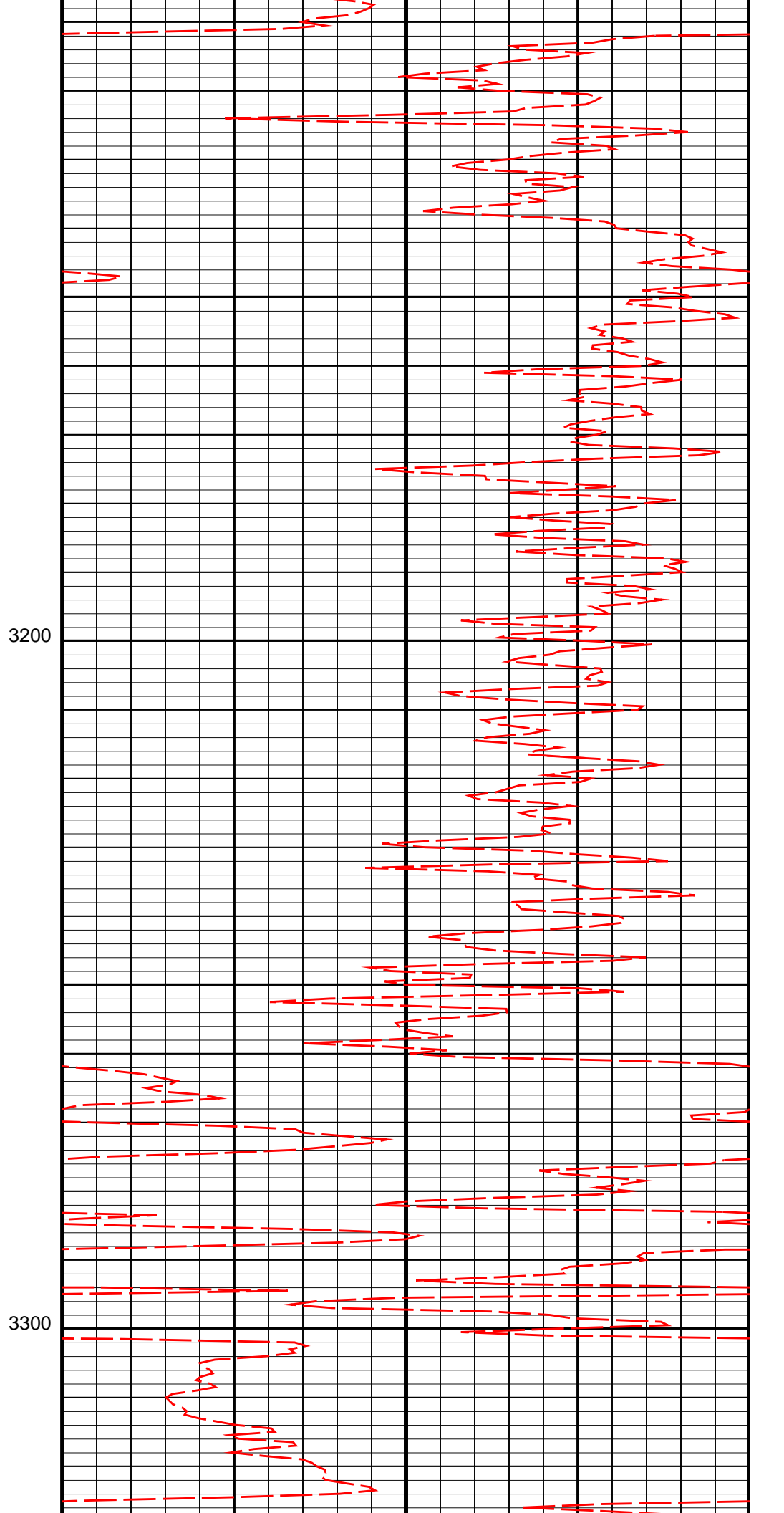
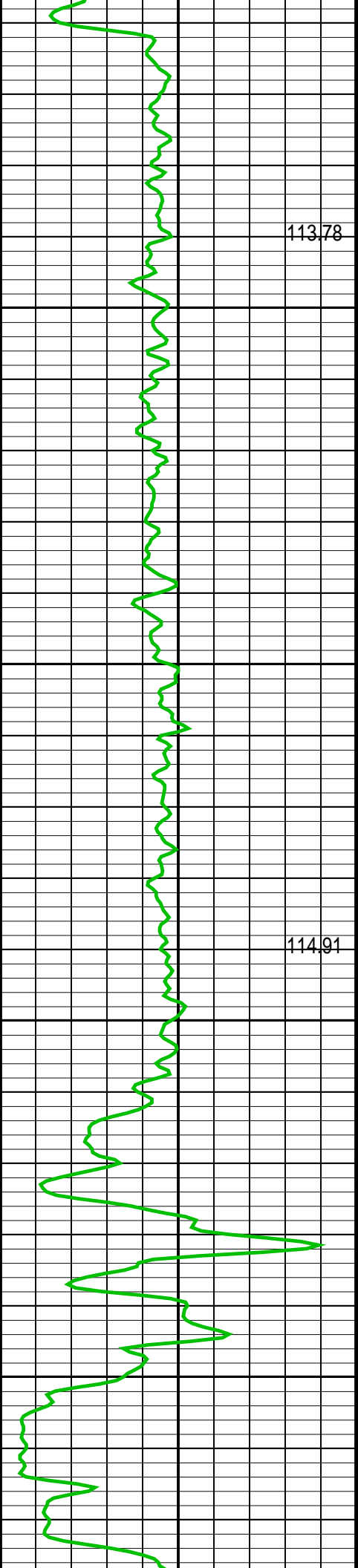
107.58

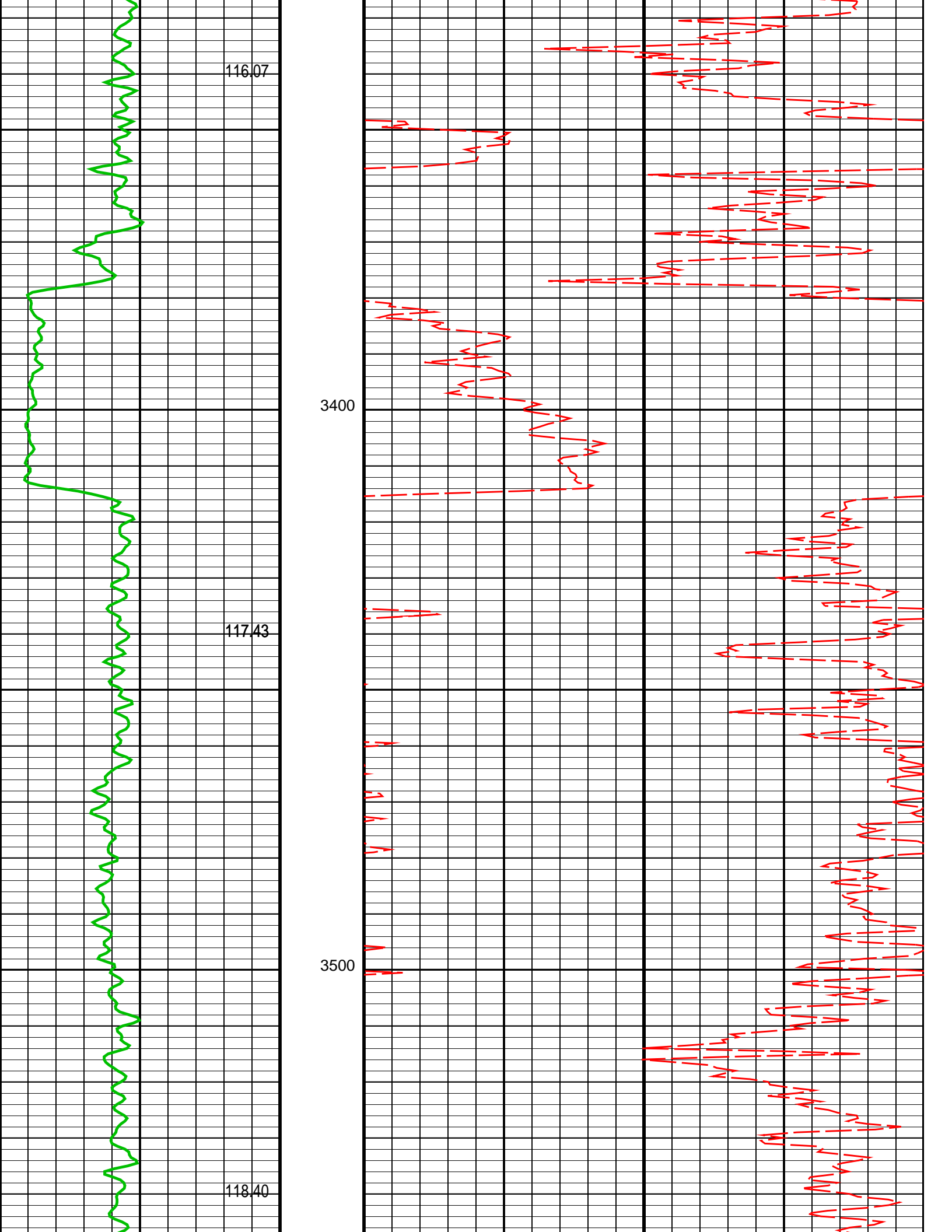
2600

108.56









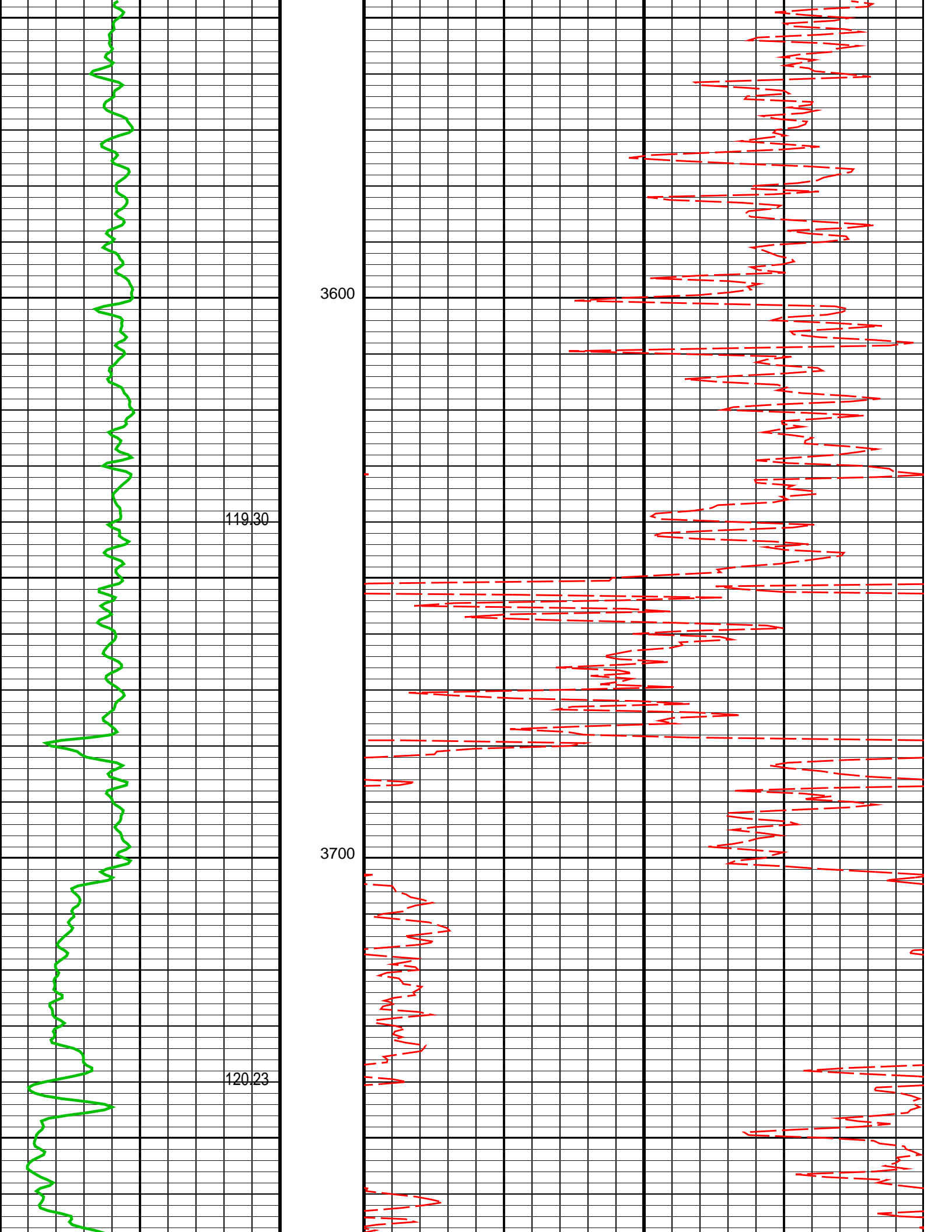
116.07

3400

117.43

3500

118.40

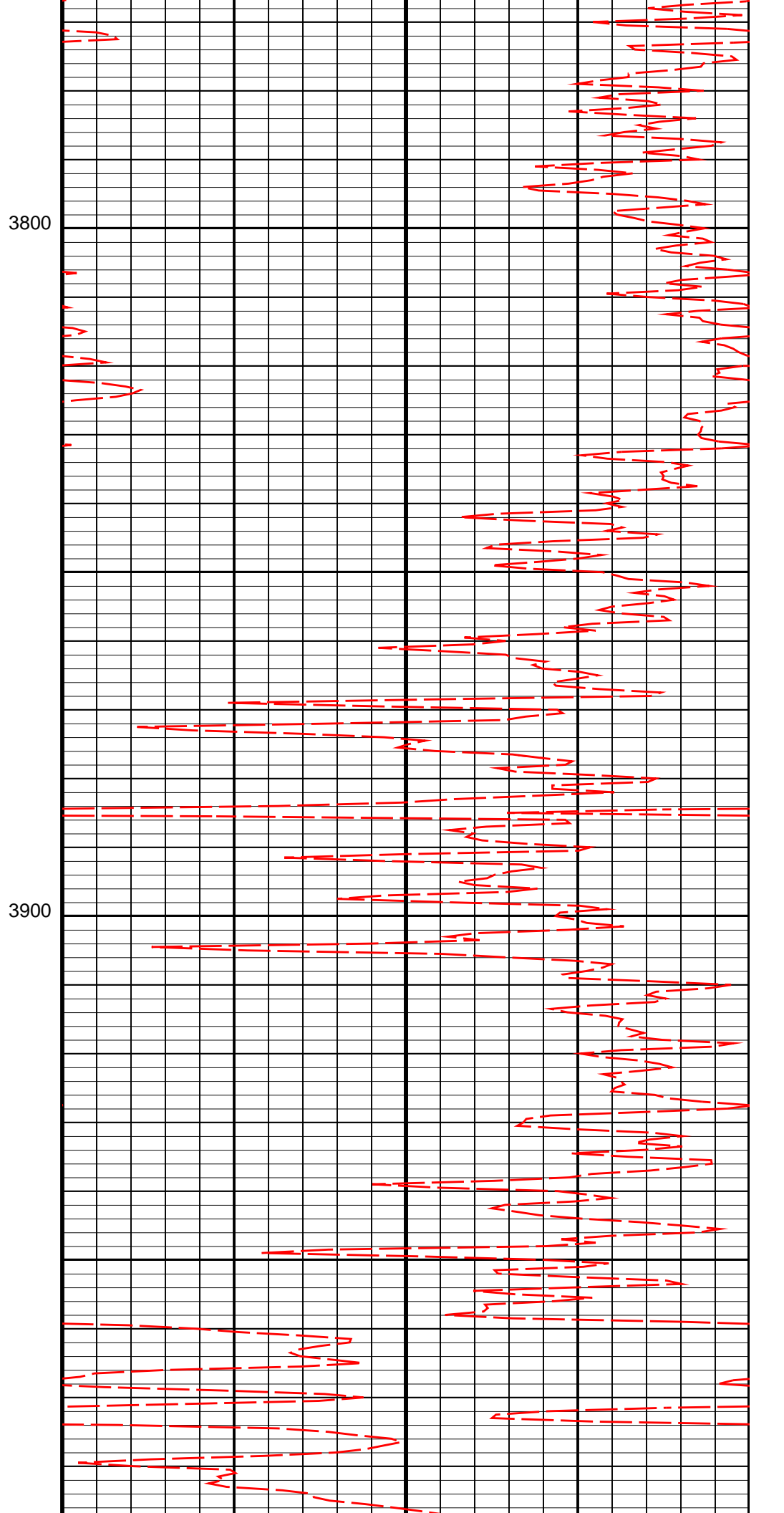
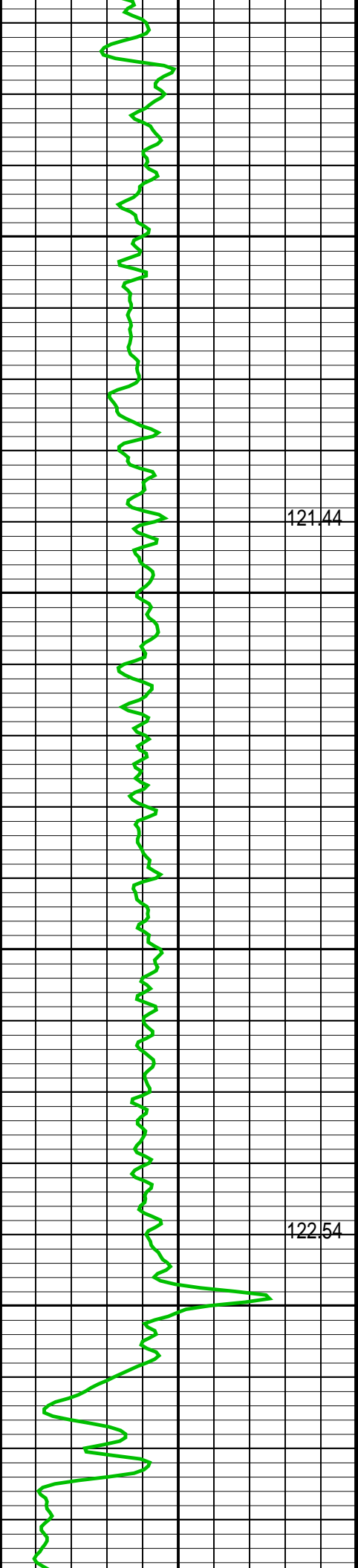


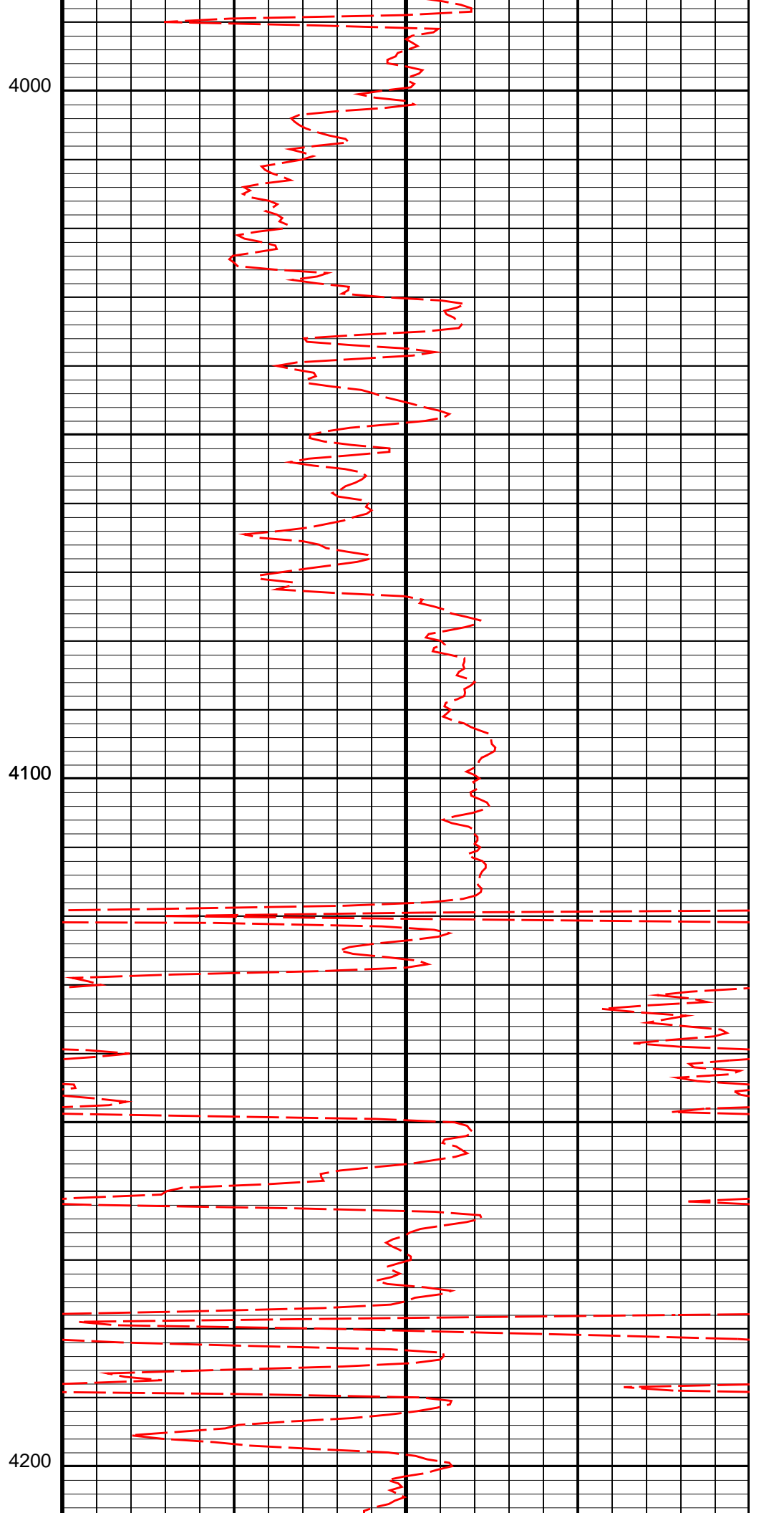
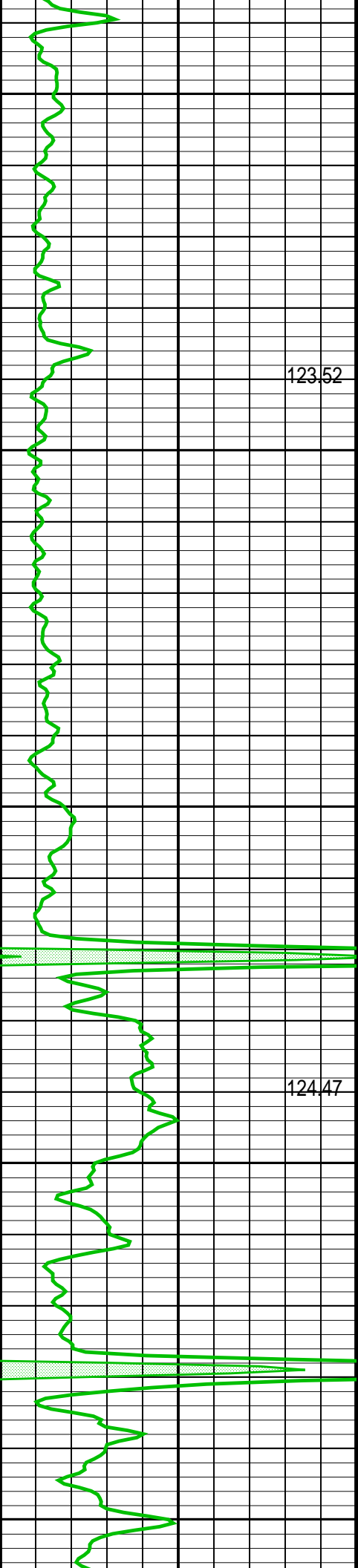
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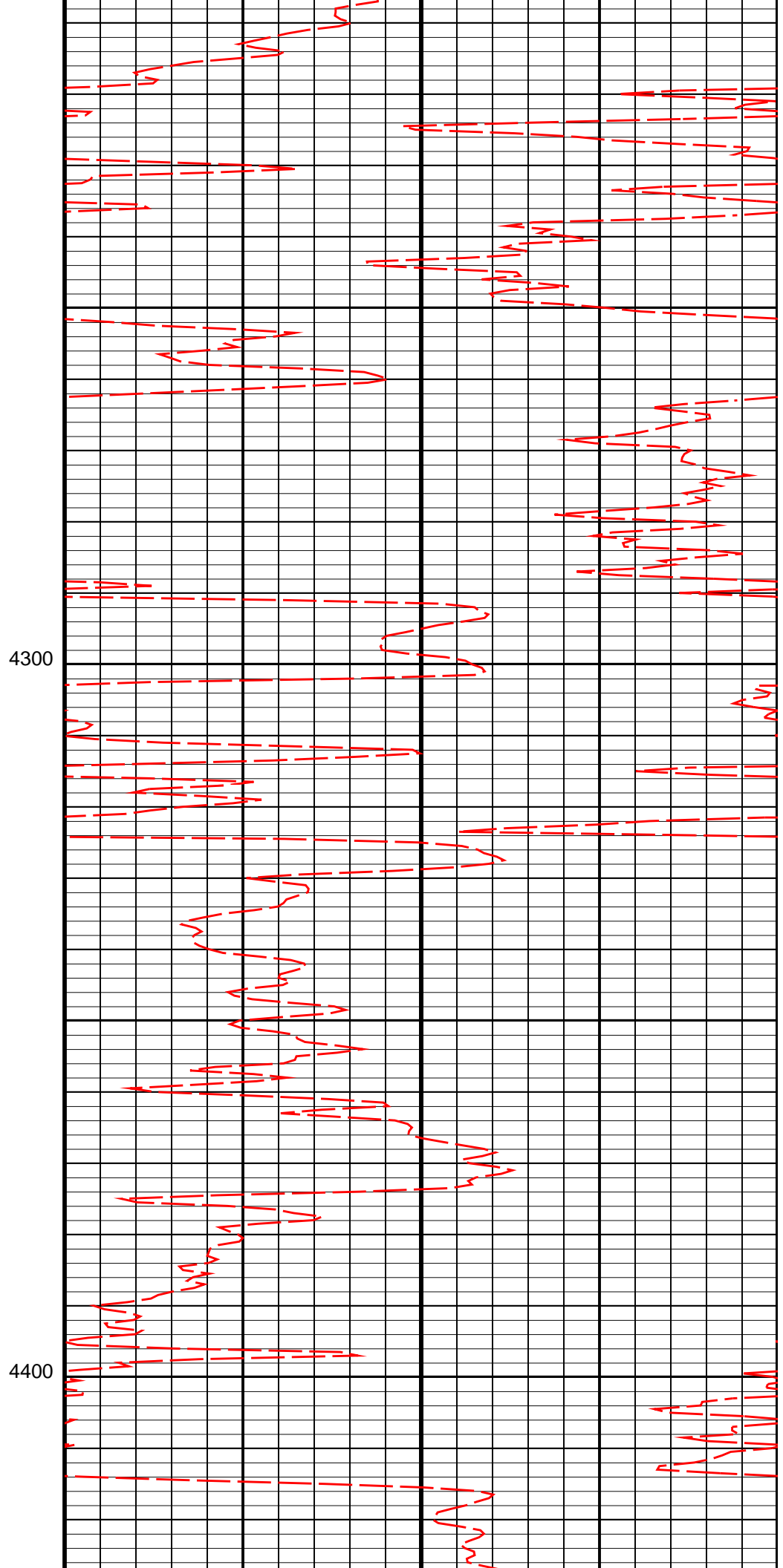
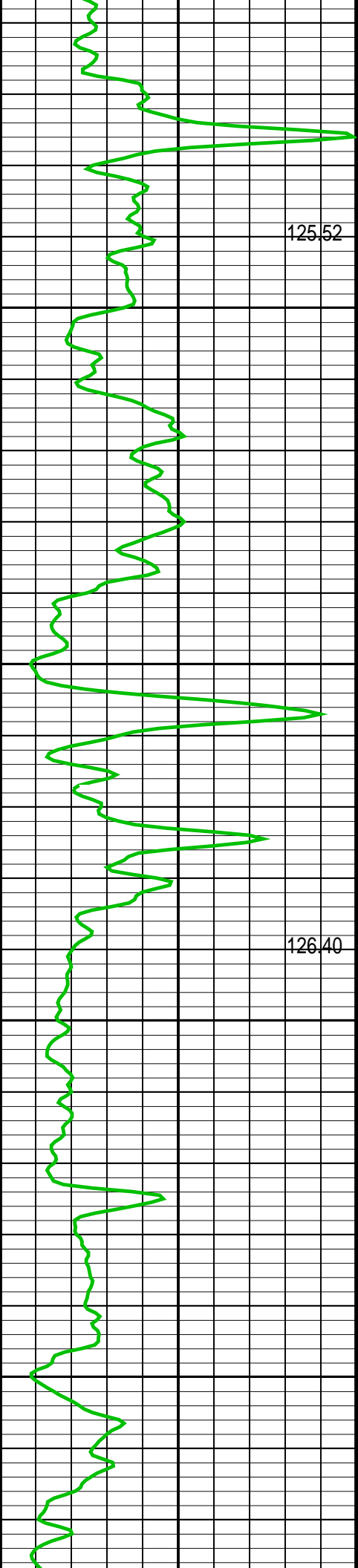
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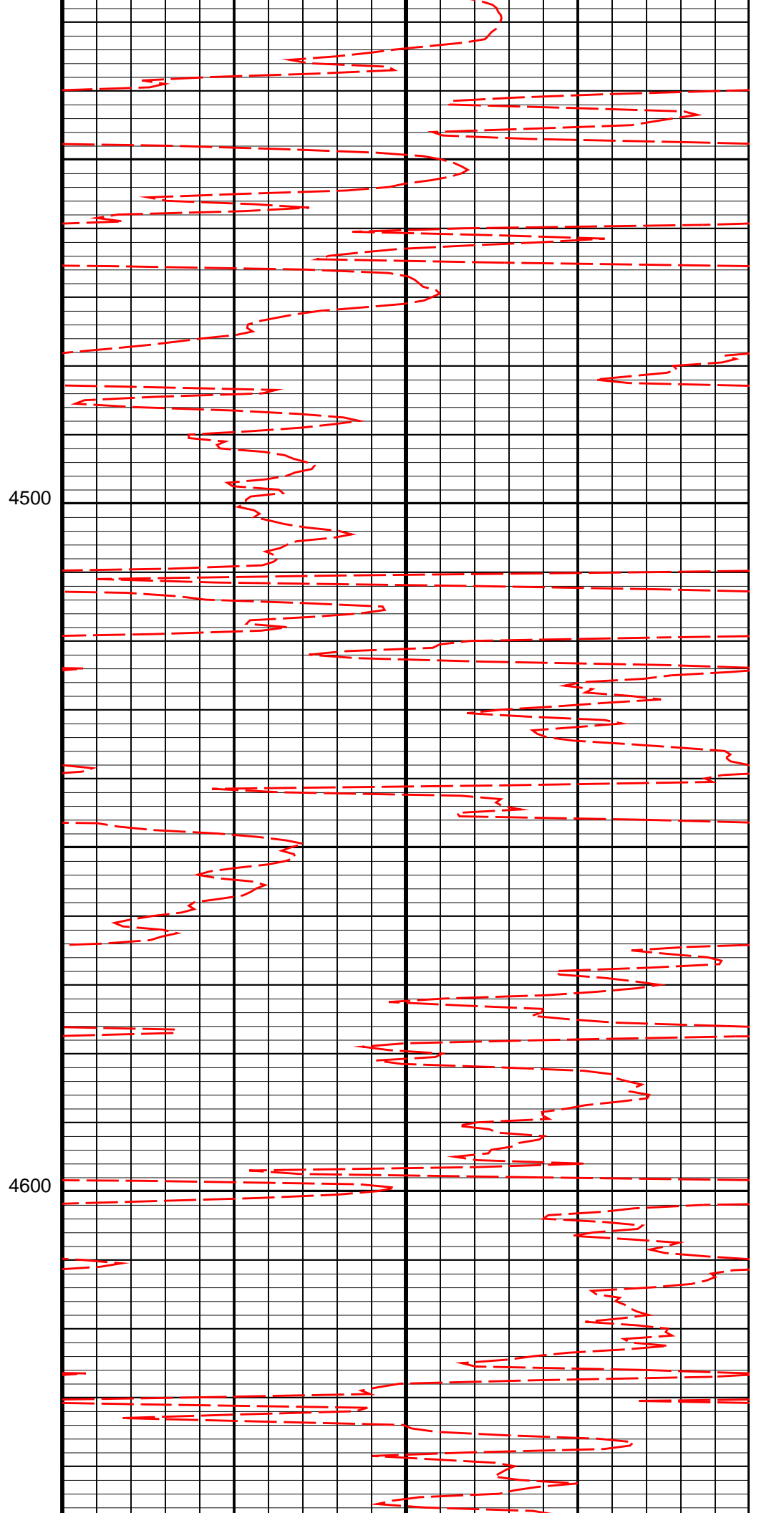
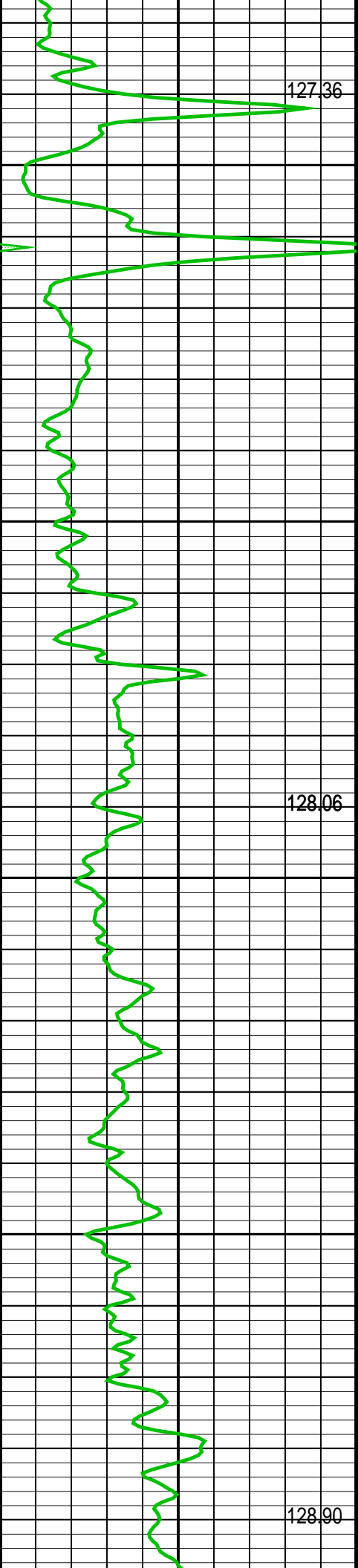
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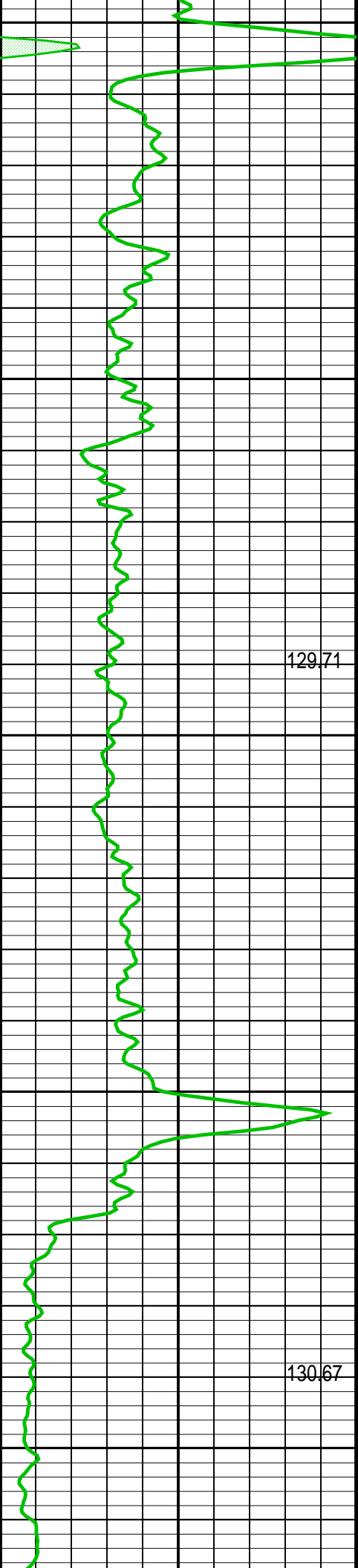
120.23









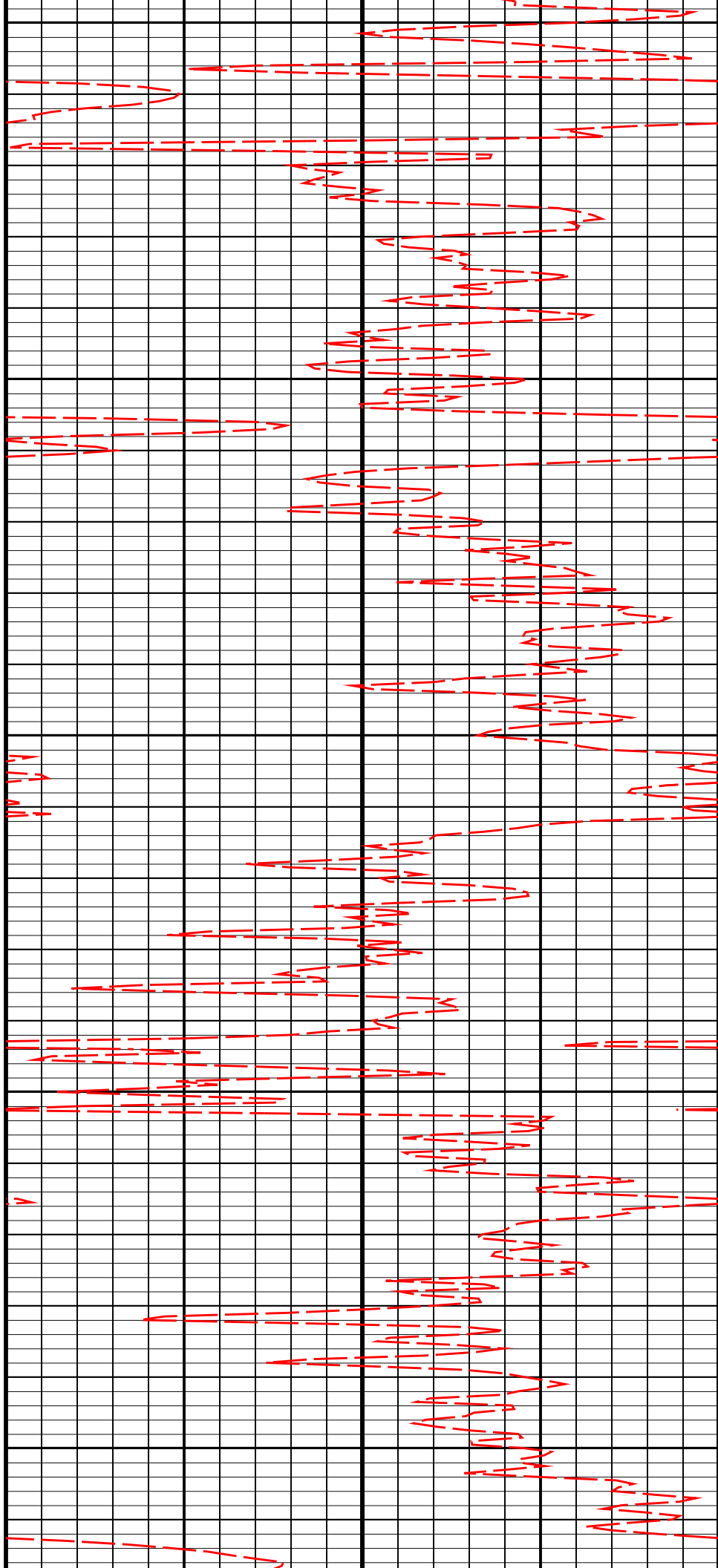


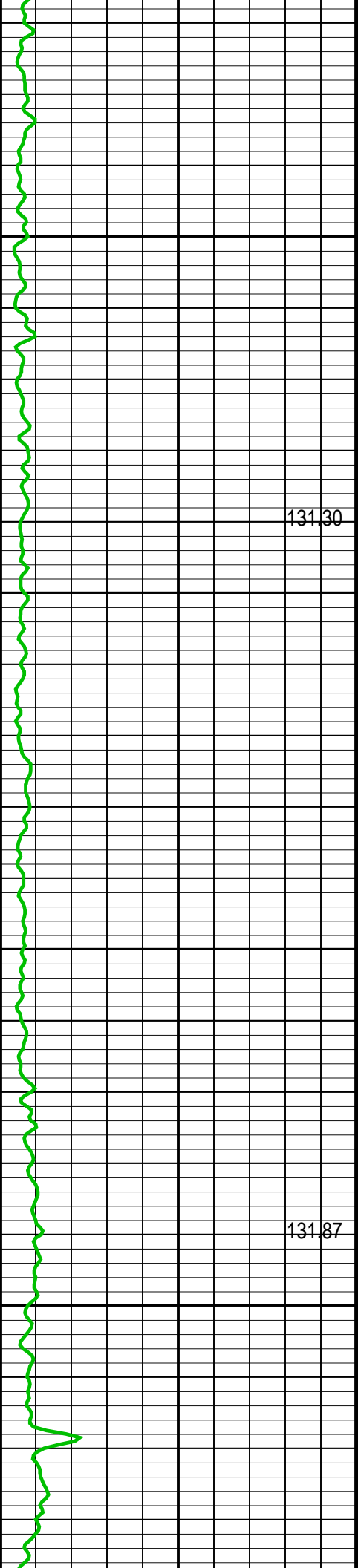
4700

4800

129.71

130.67



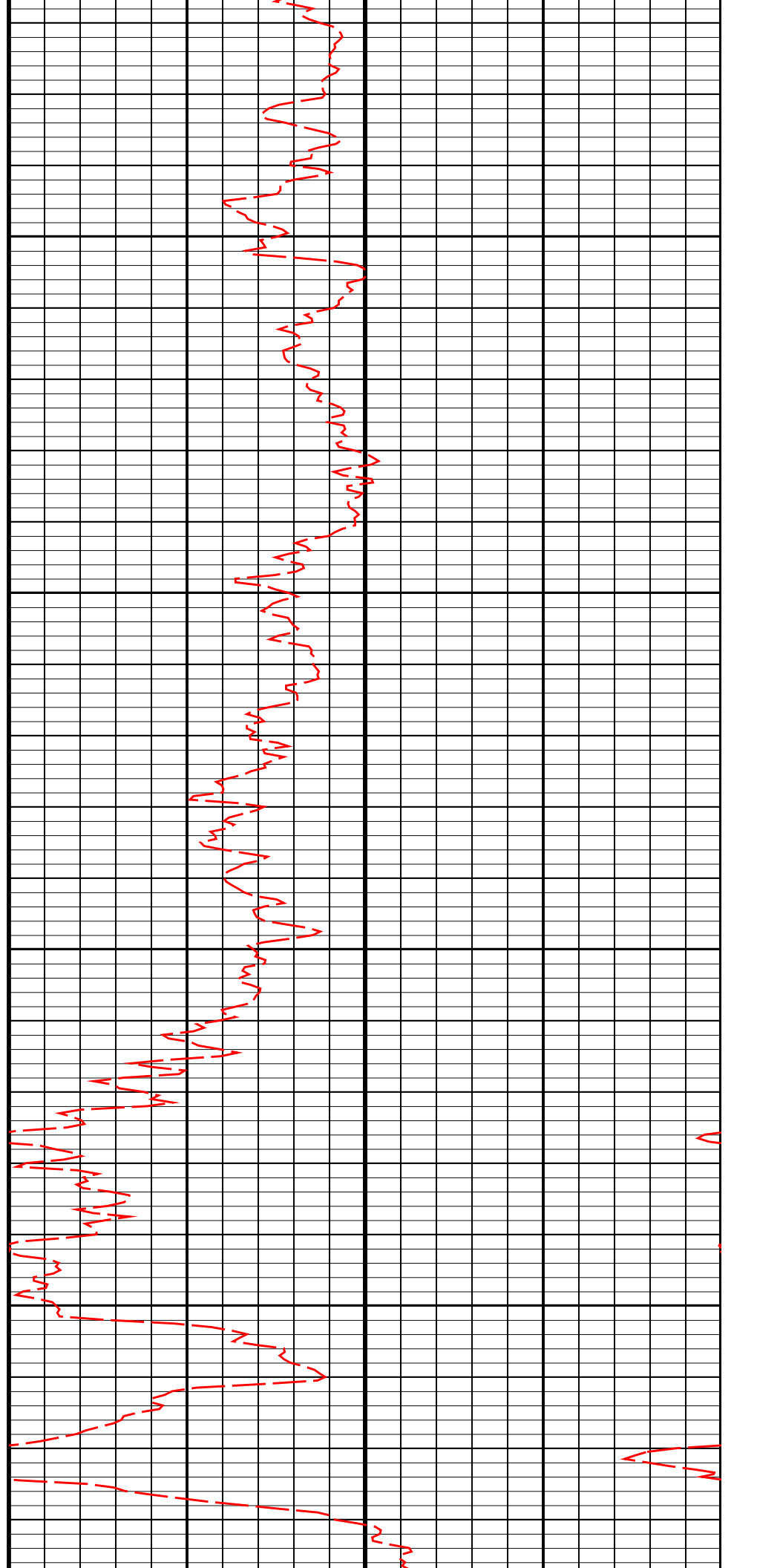


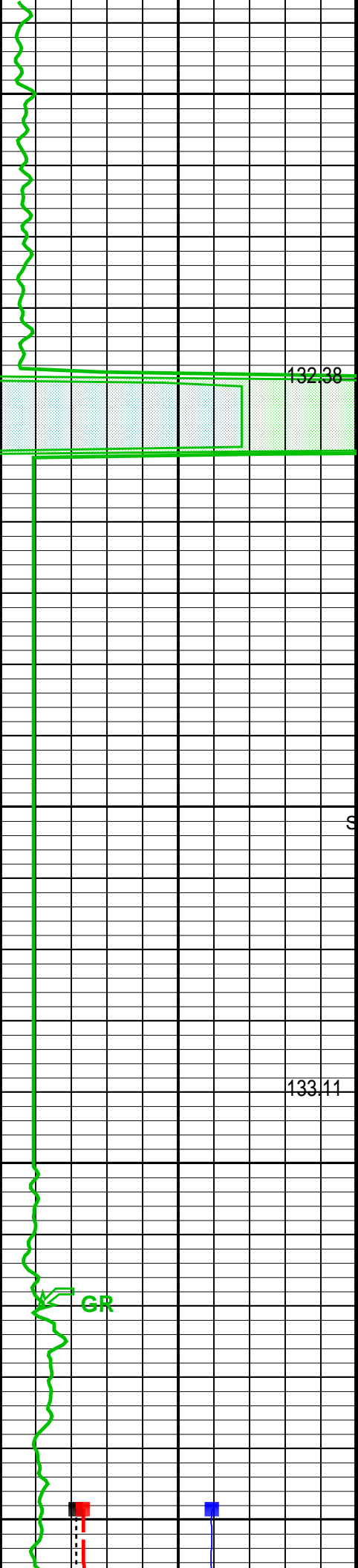
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131.87

4900

5000





5100

132.38

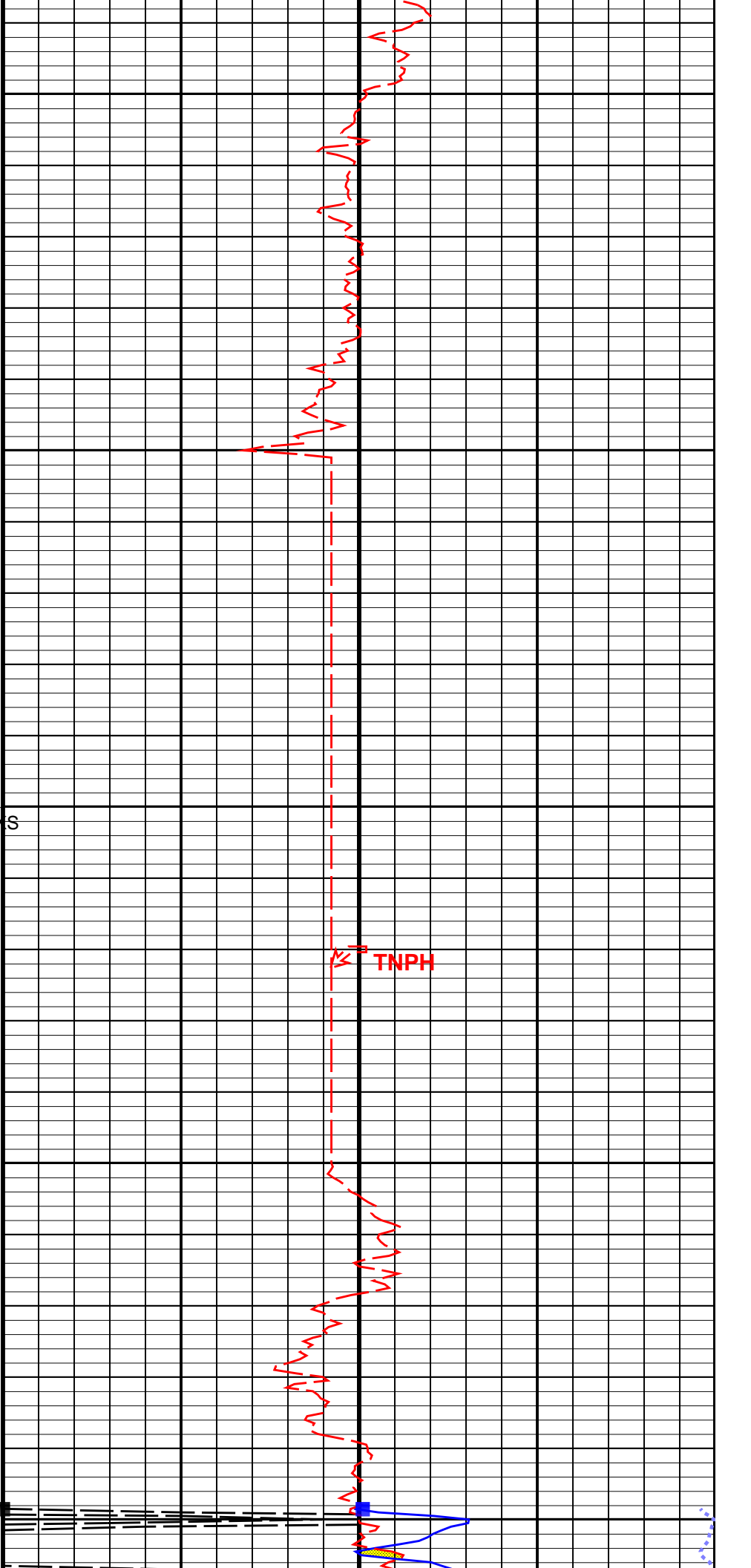
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SEE REMARKS

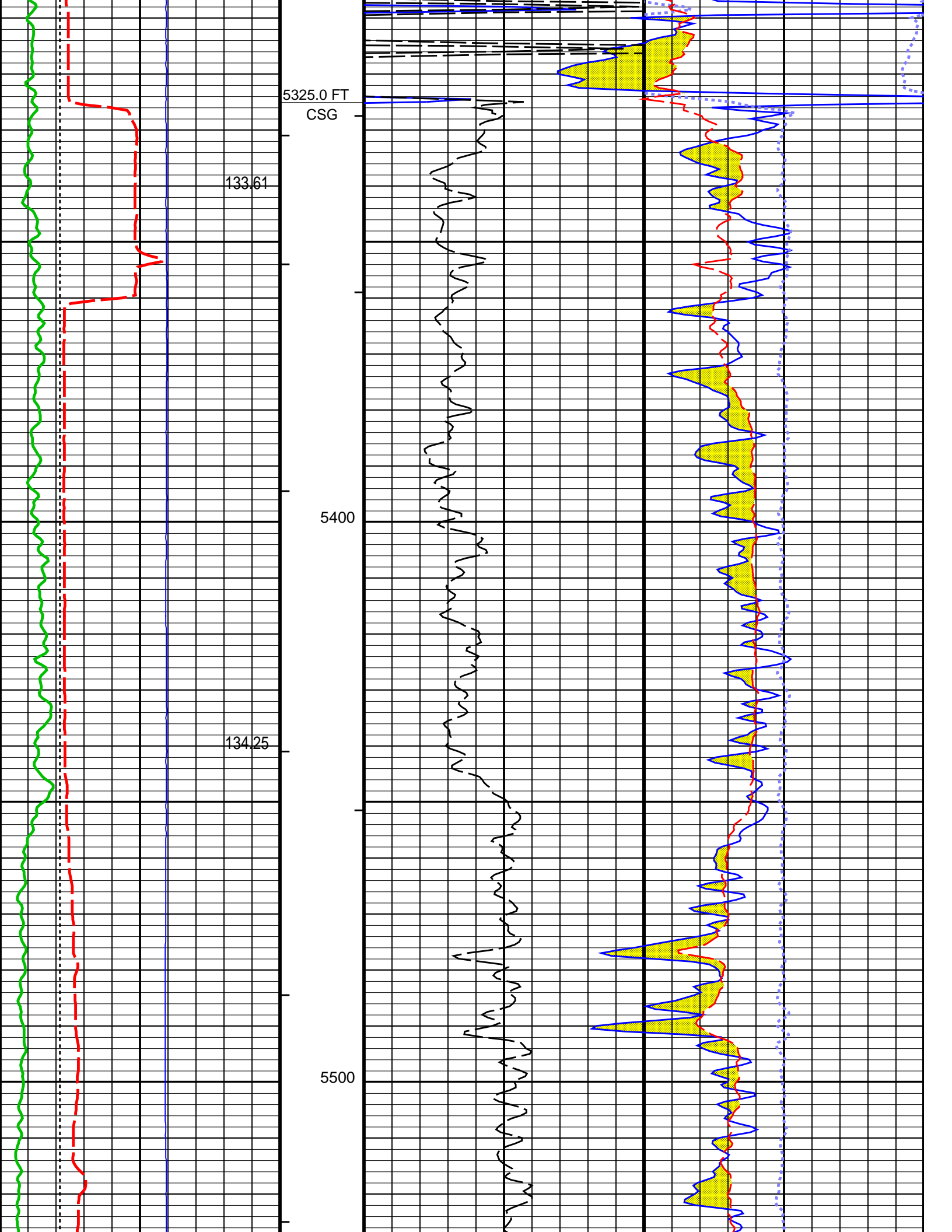
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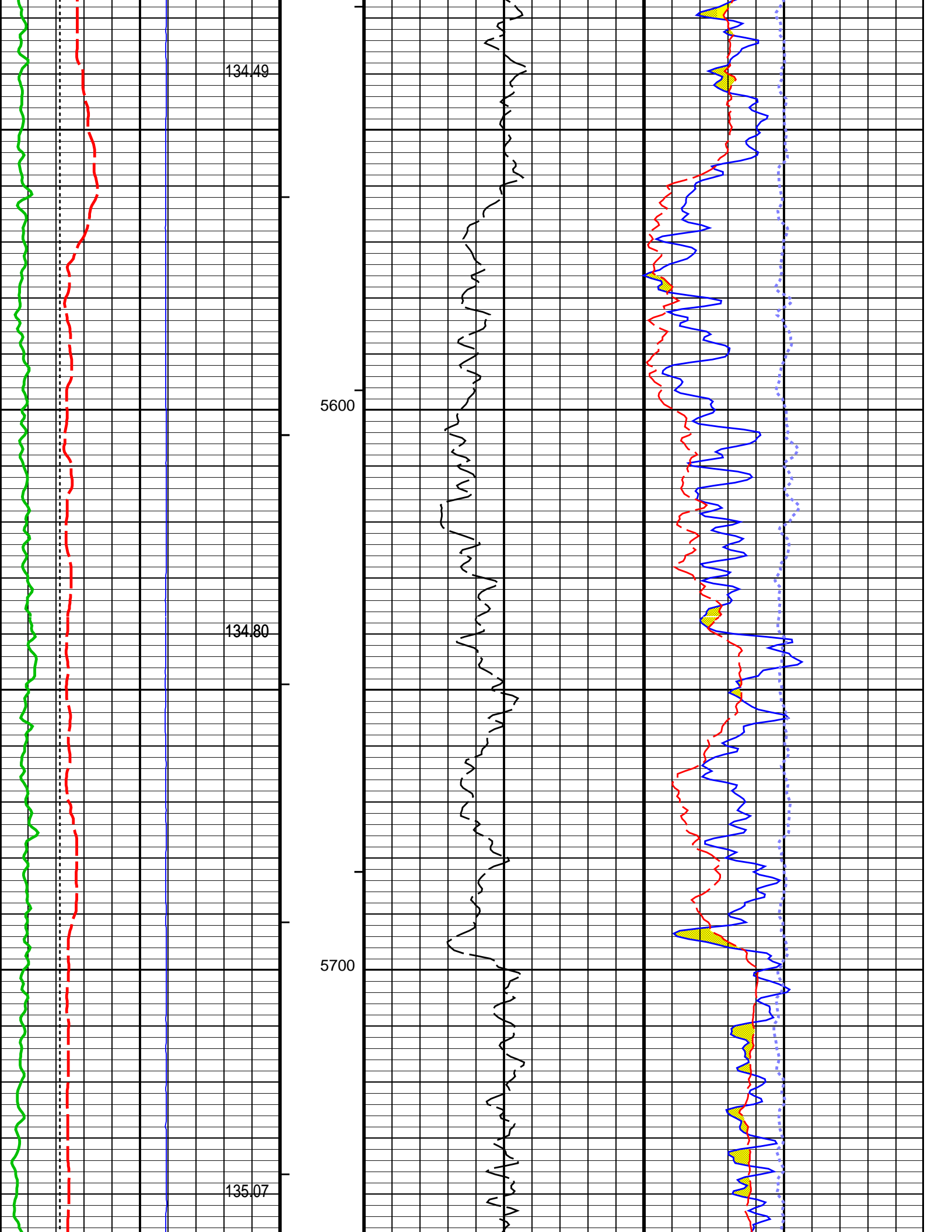
GR

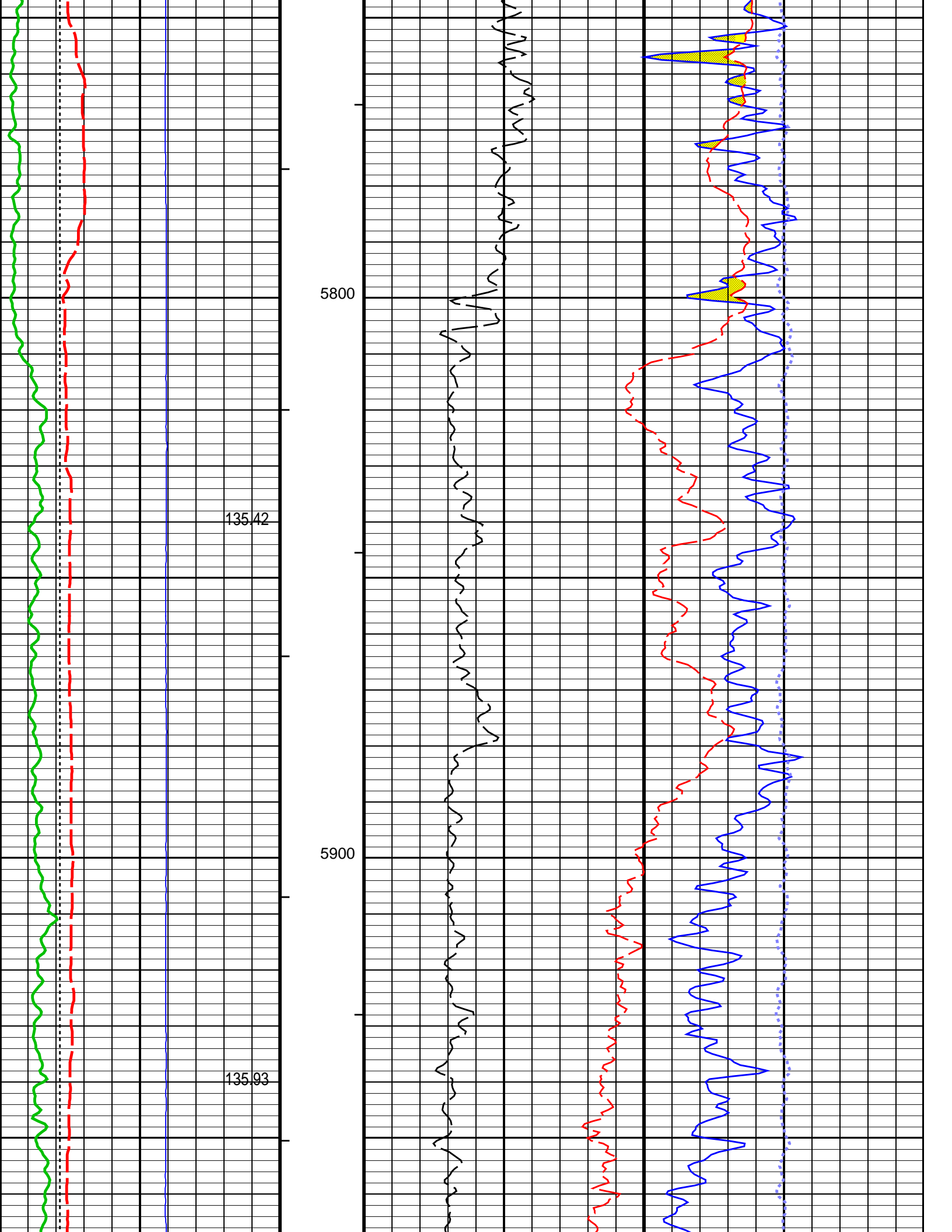
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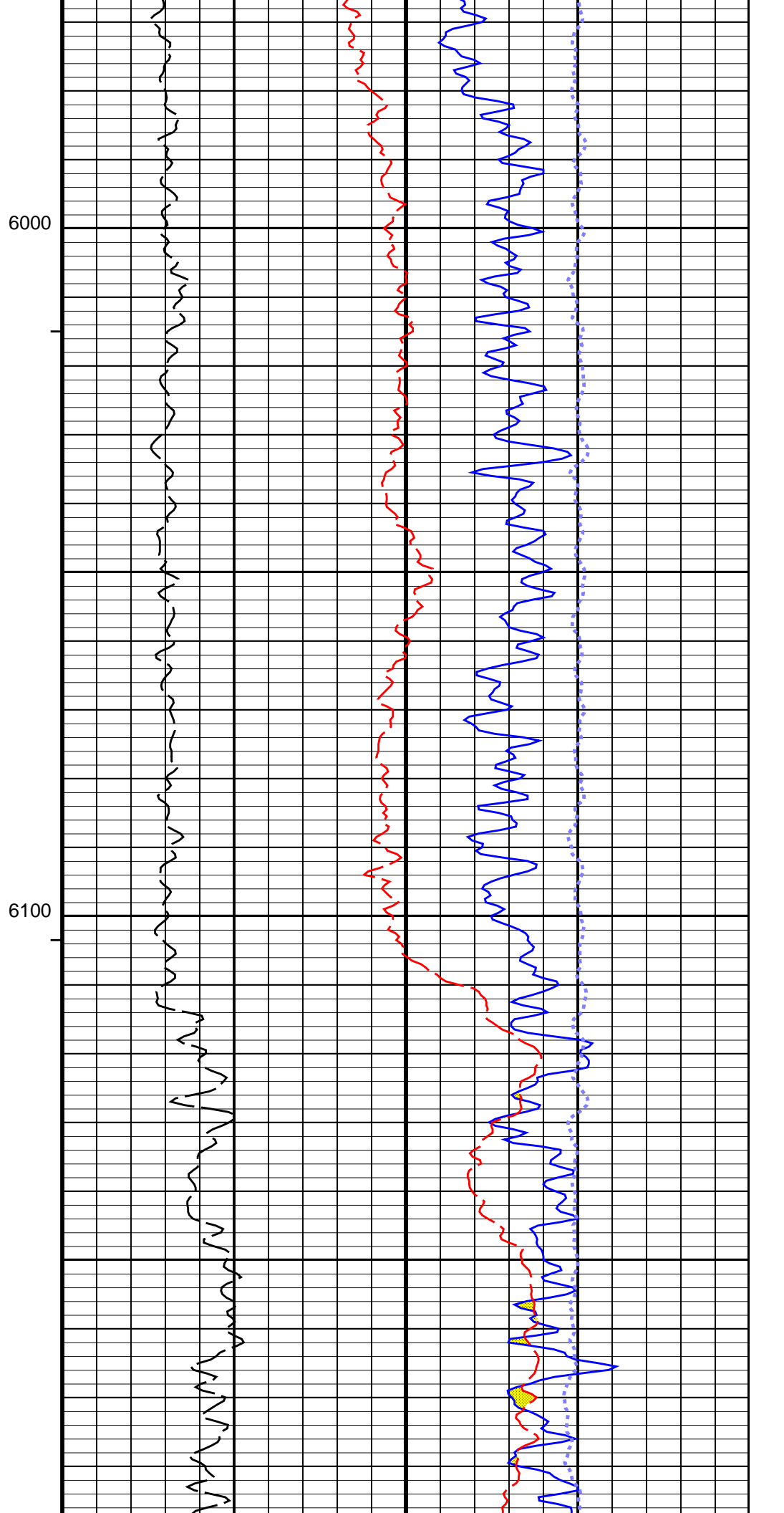
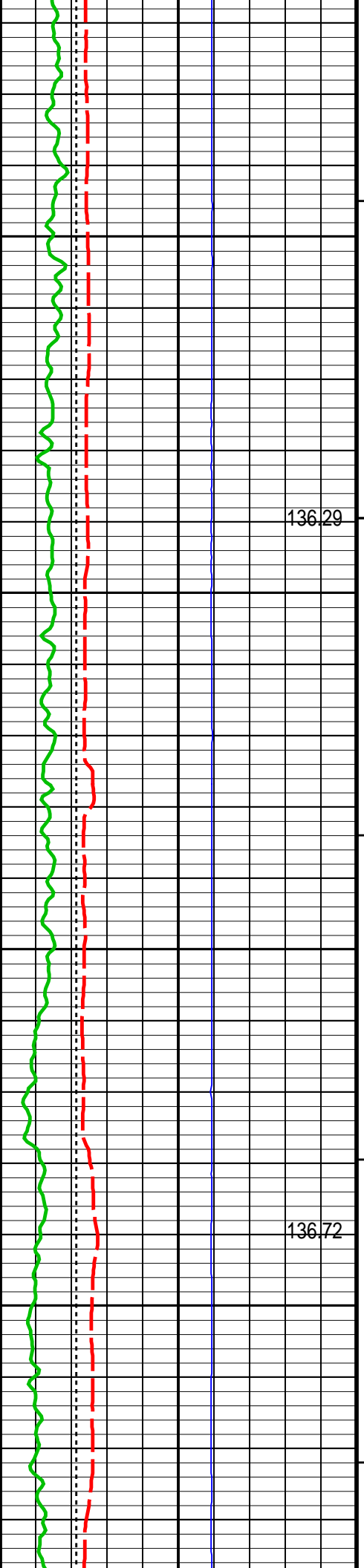
TNPH

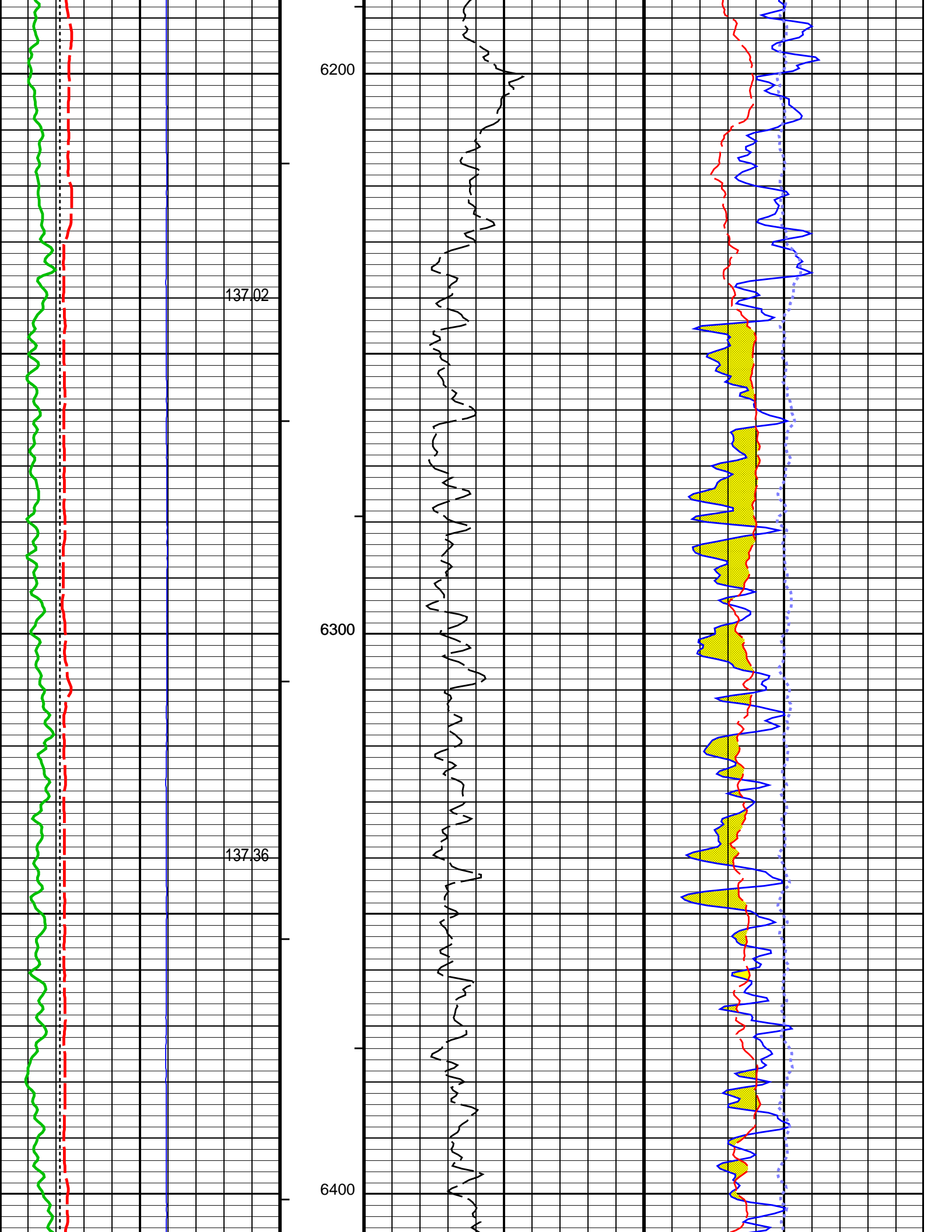


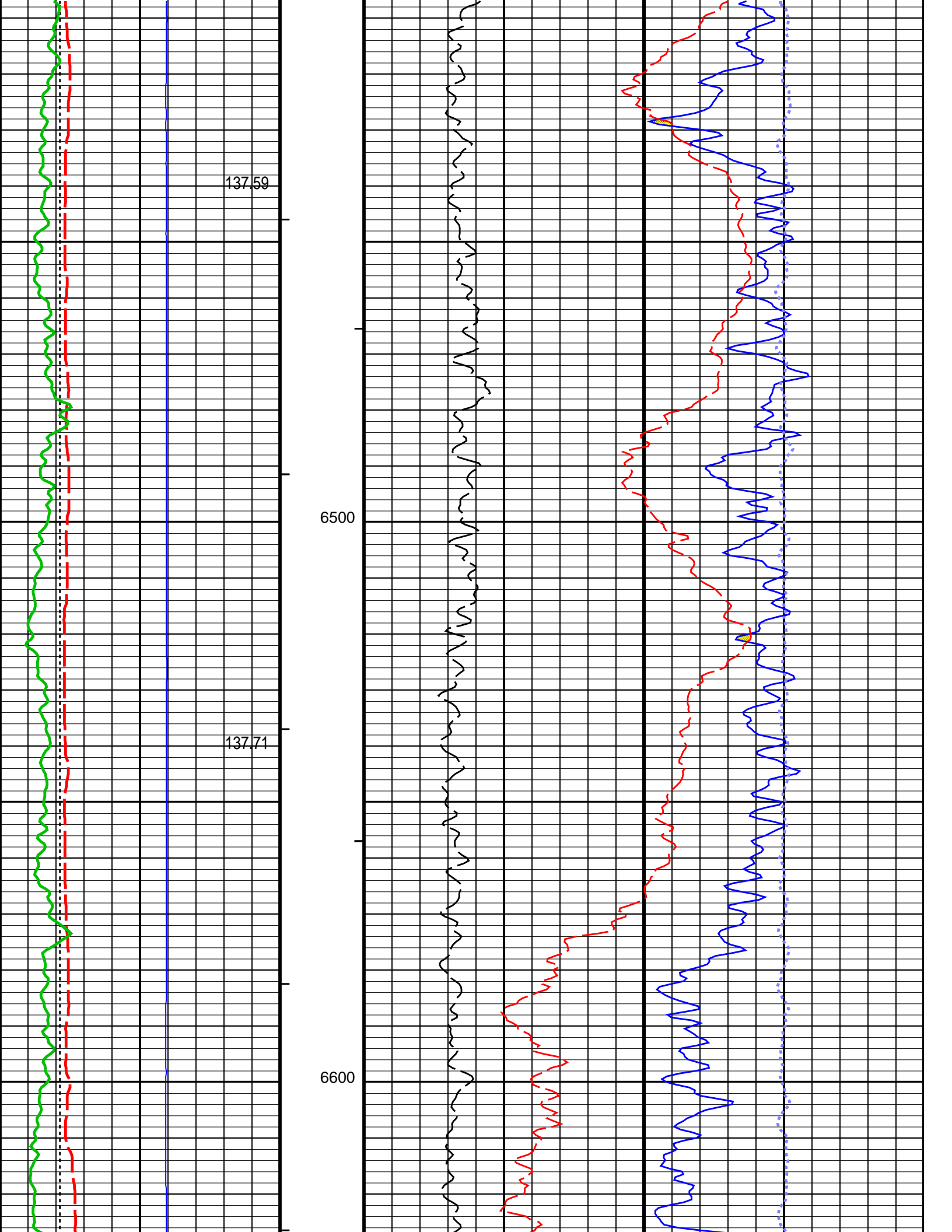


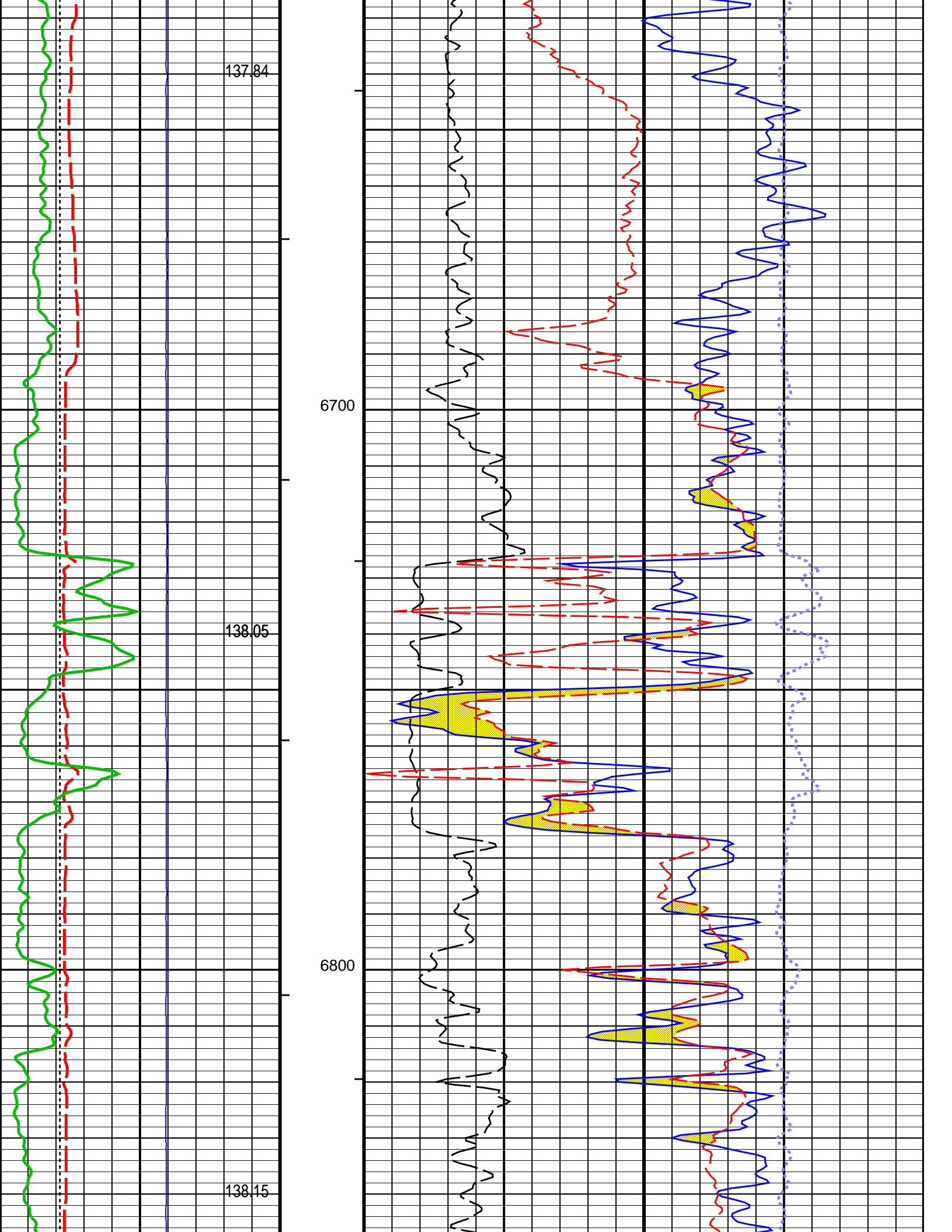


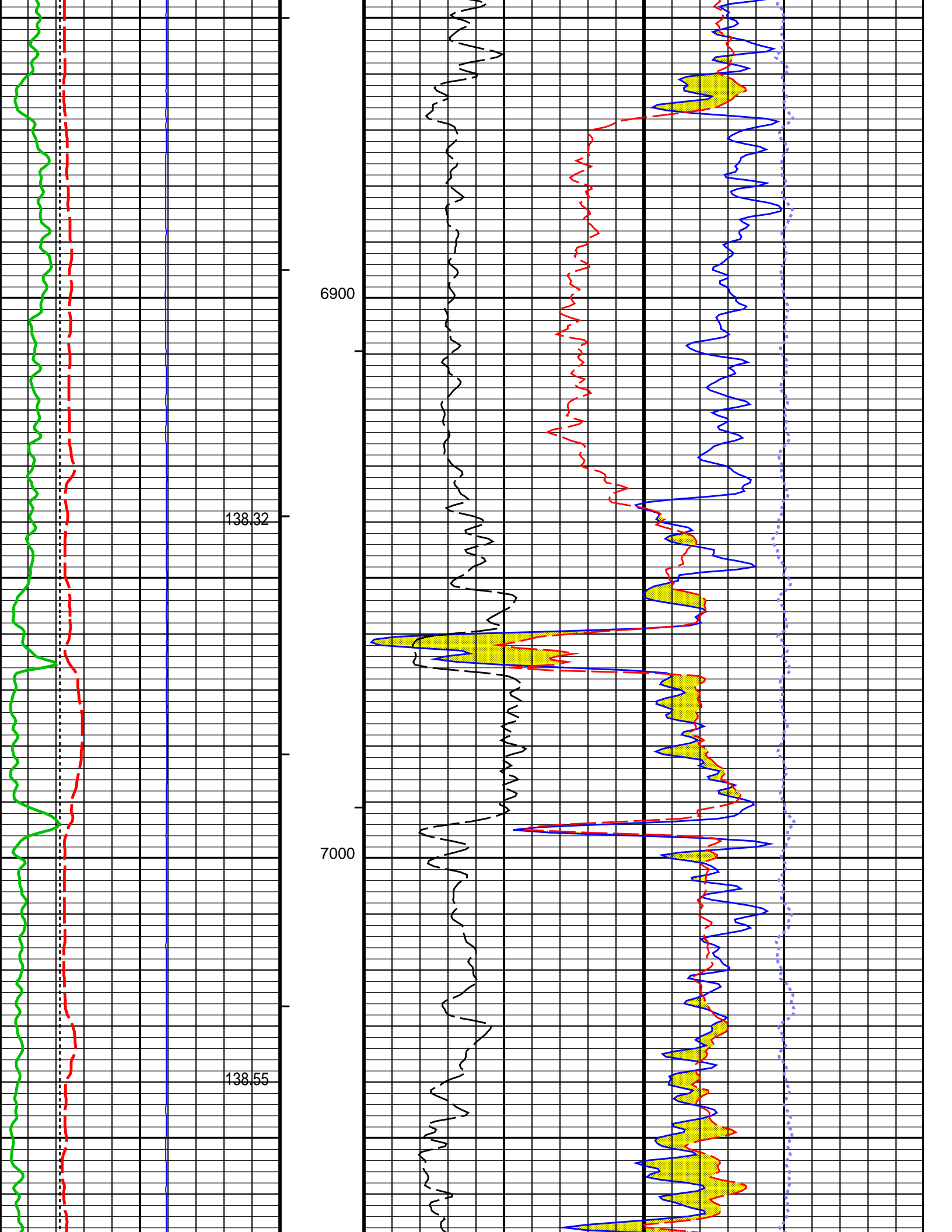


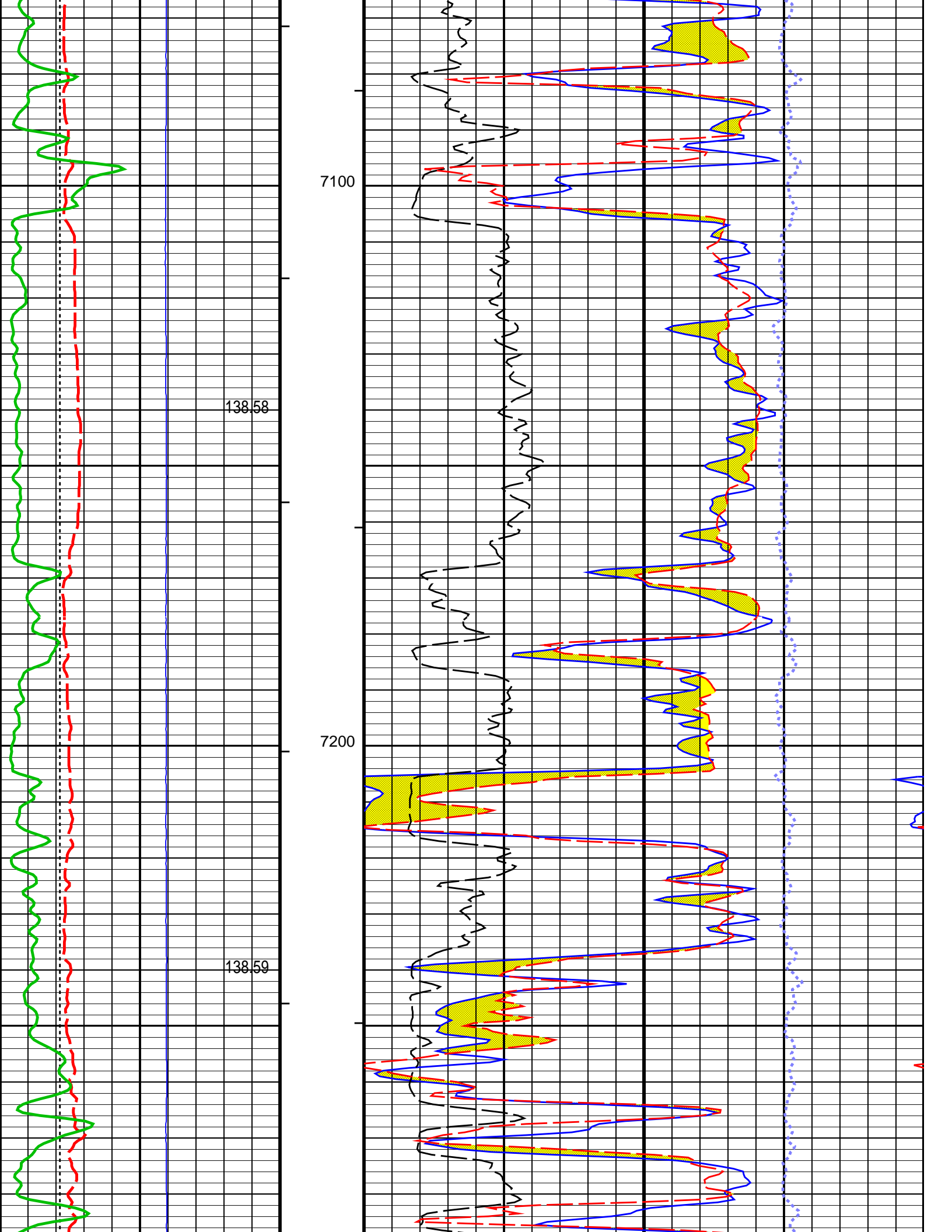


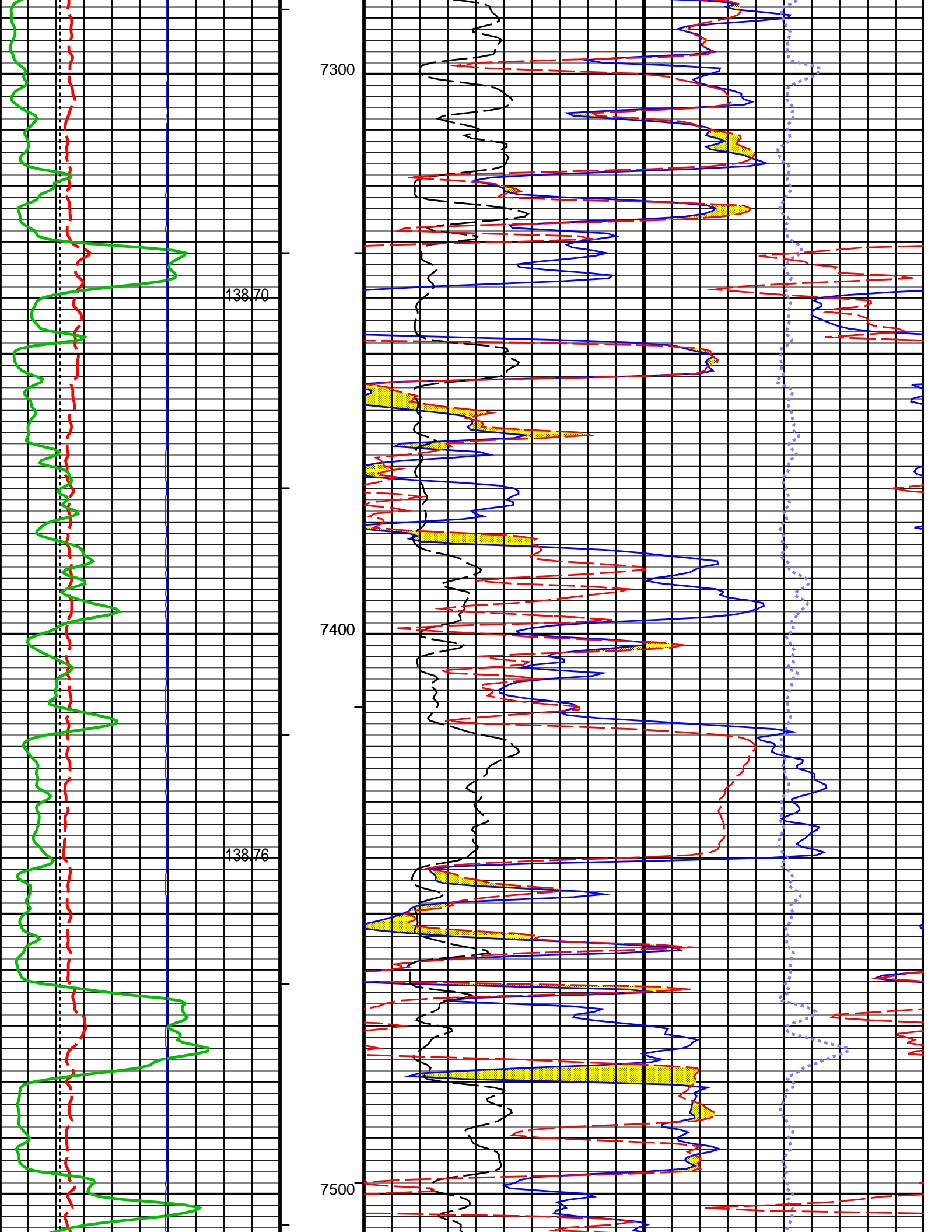


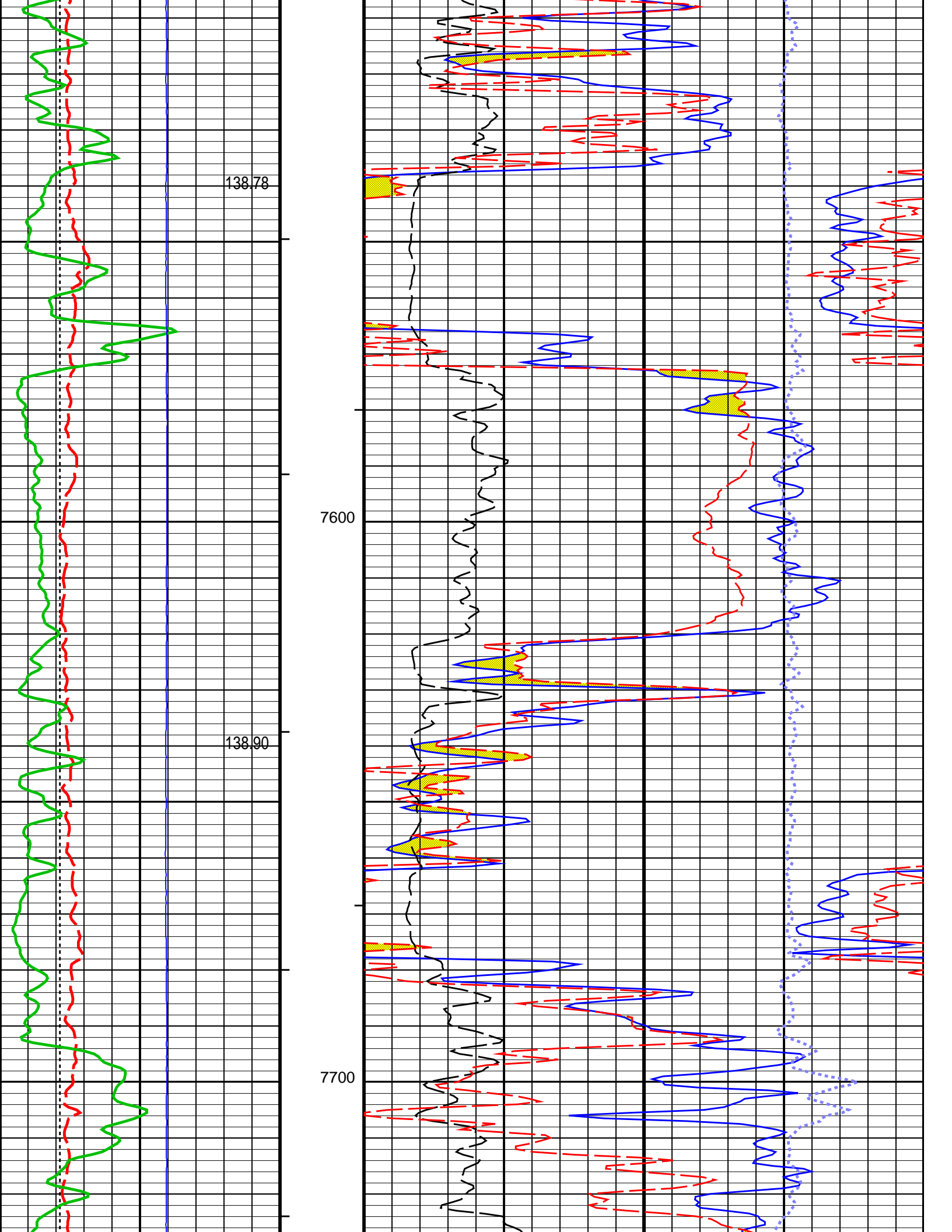


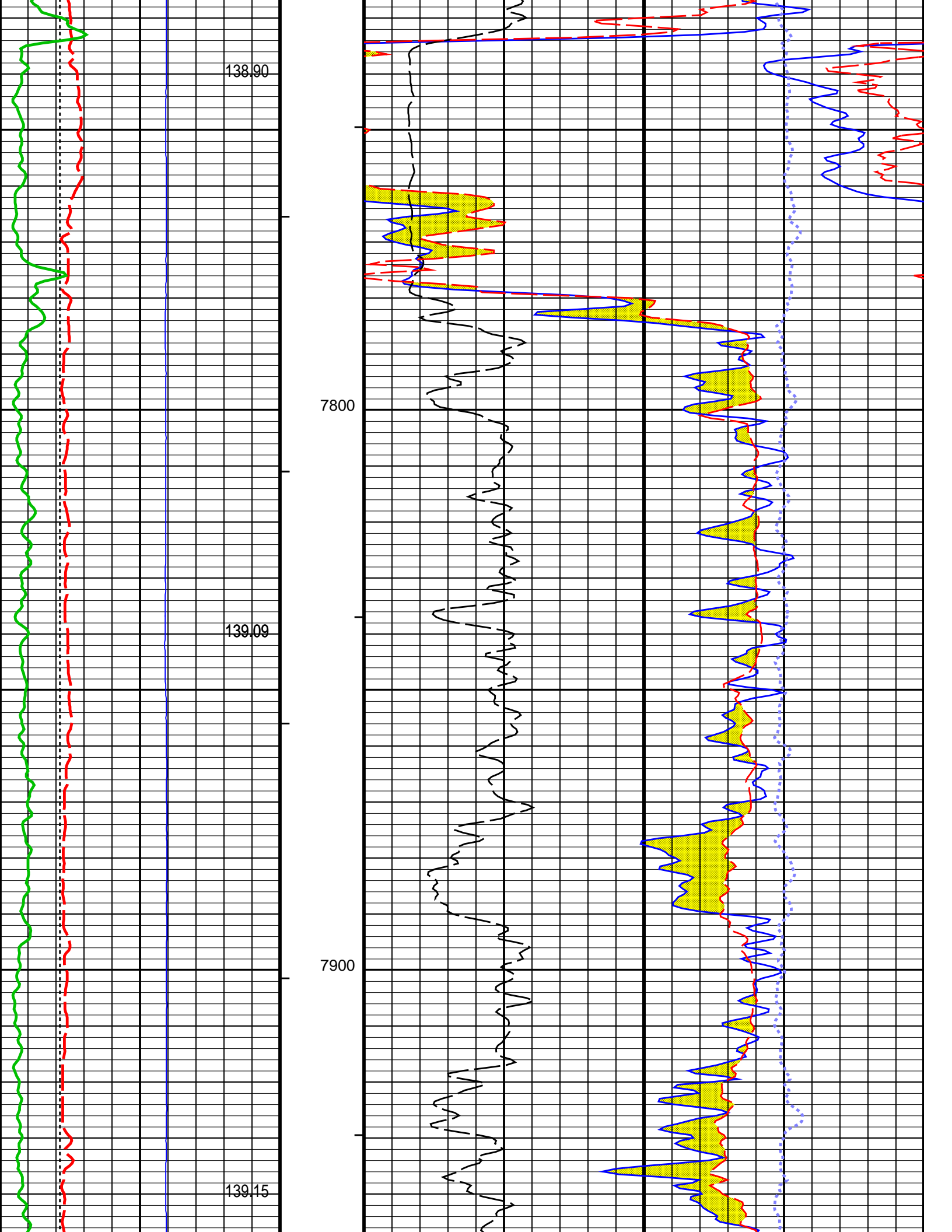


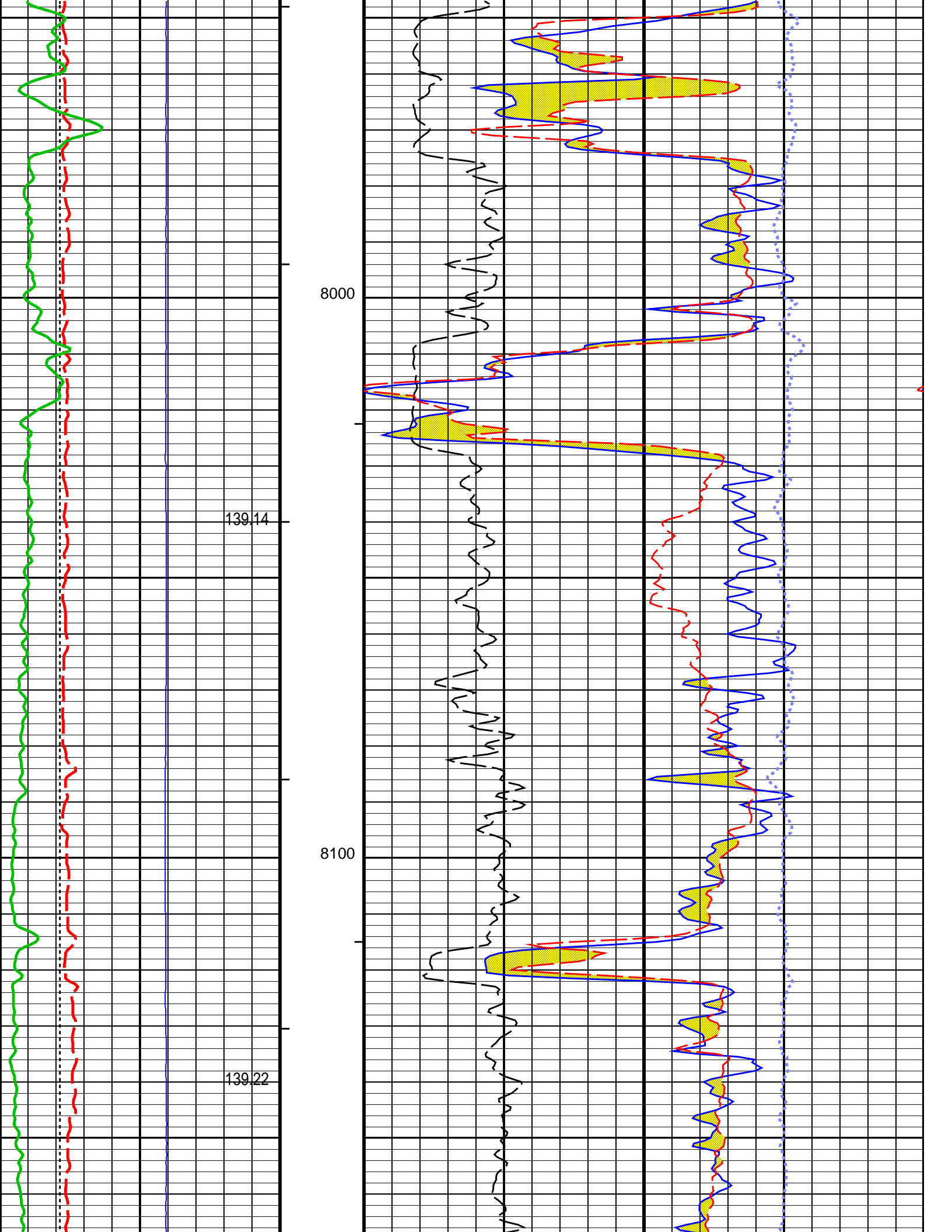


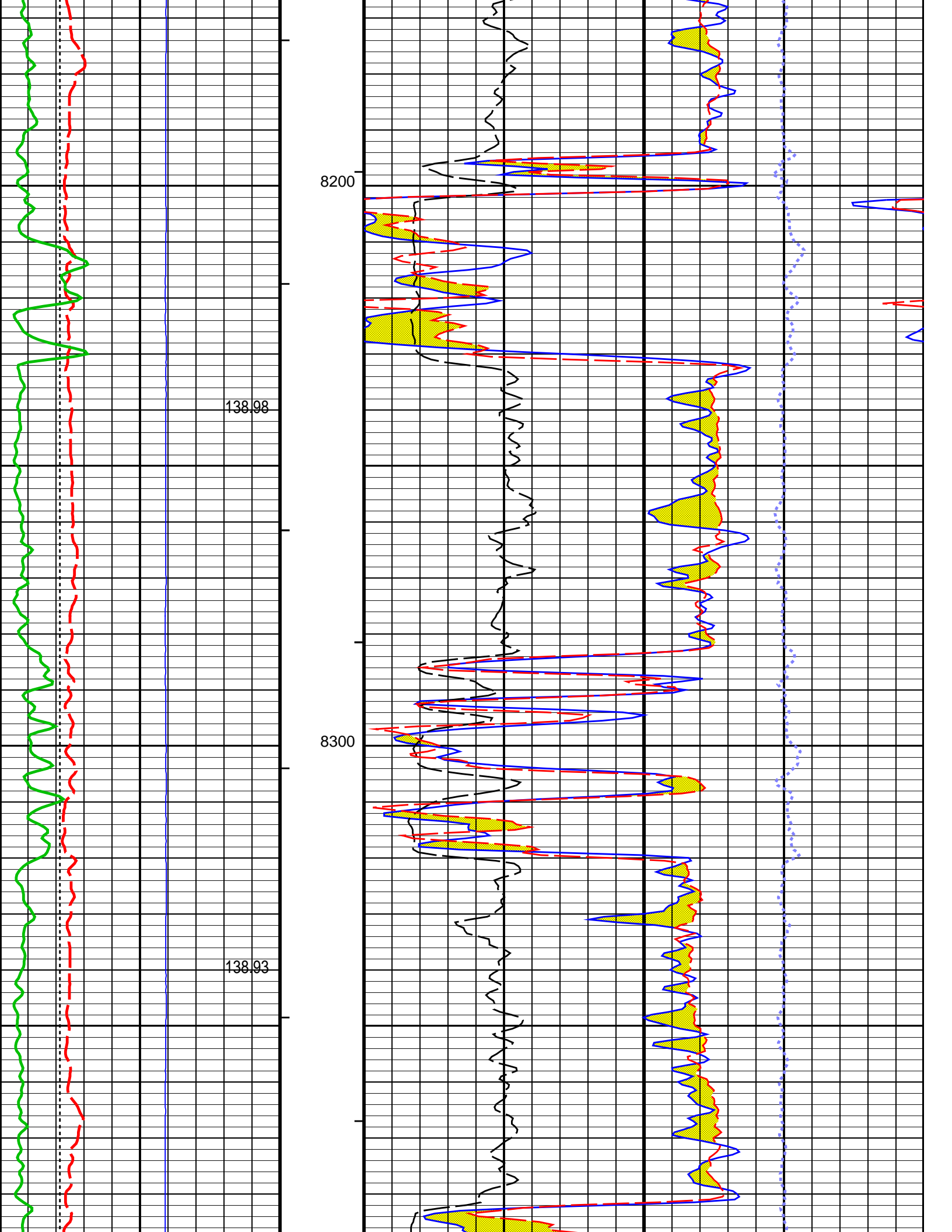


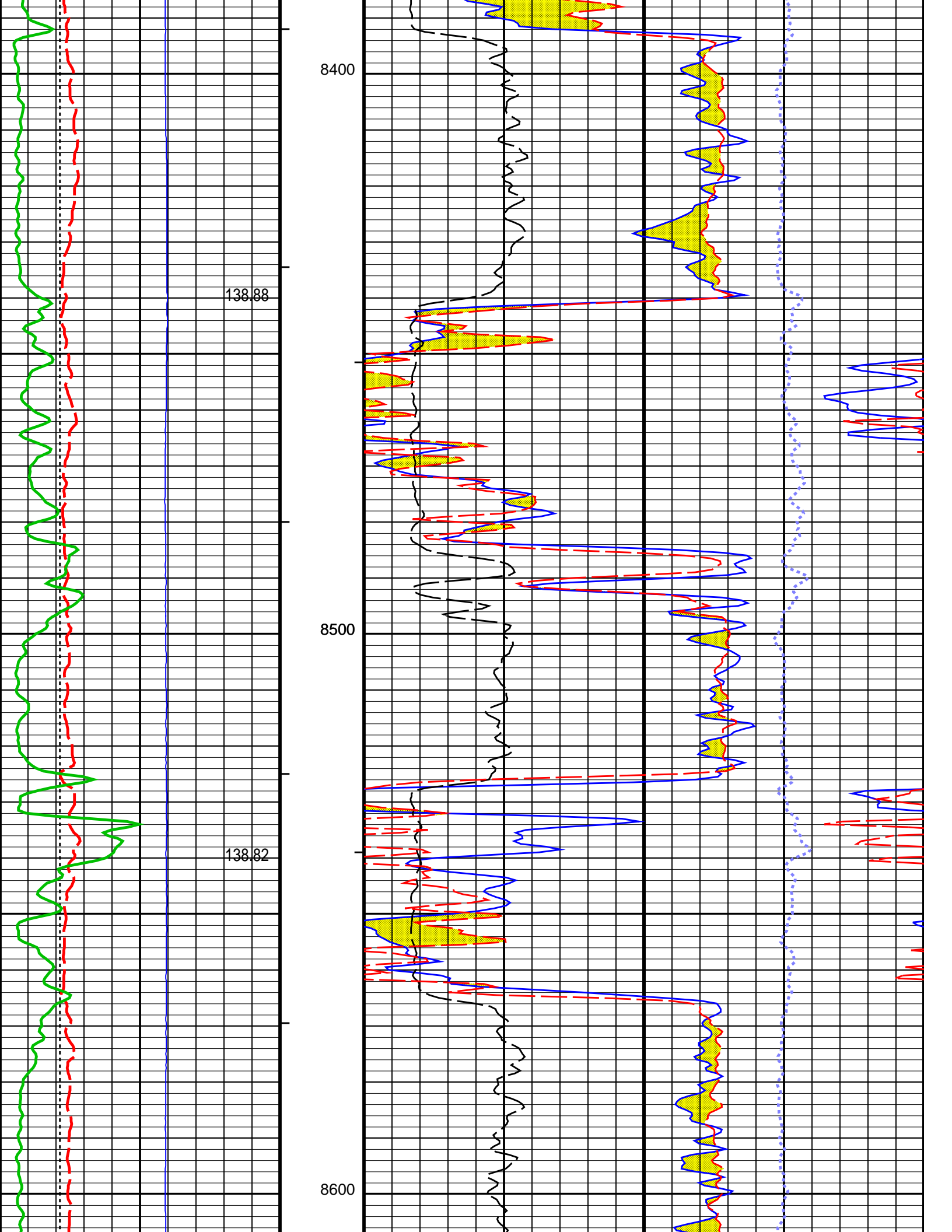


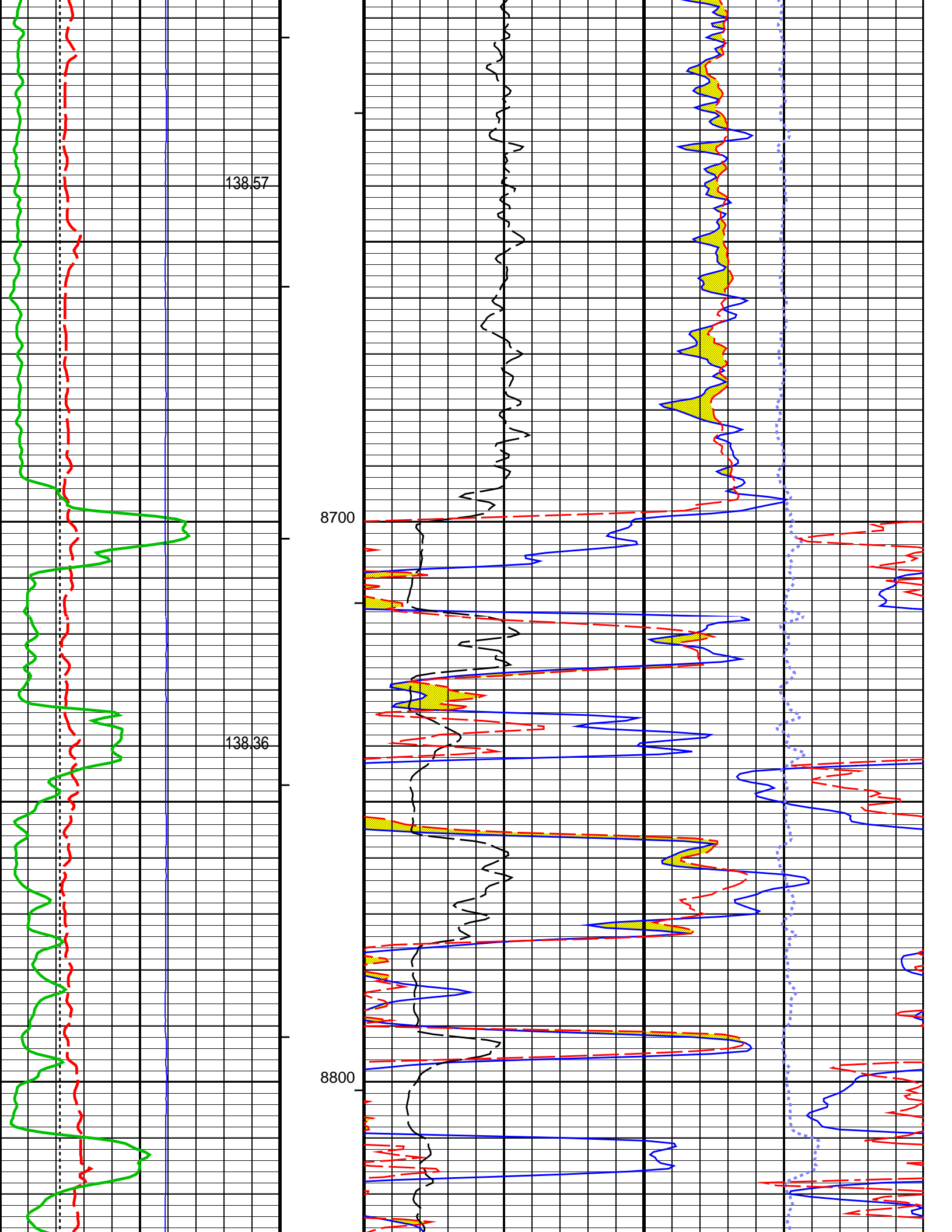


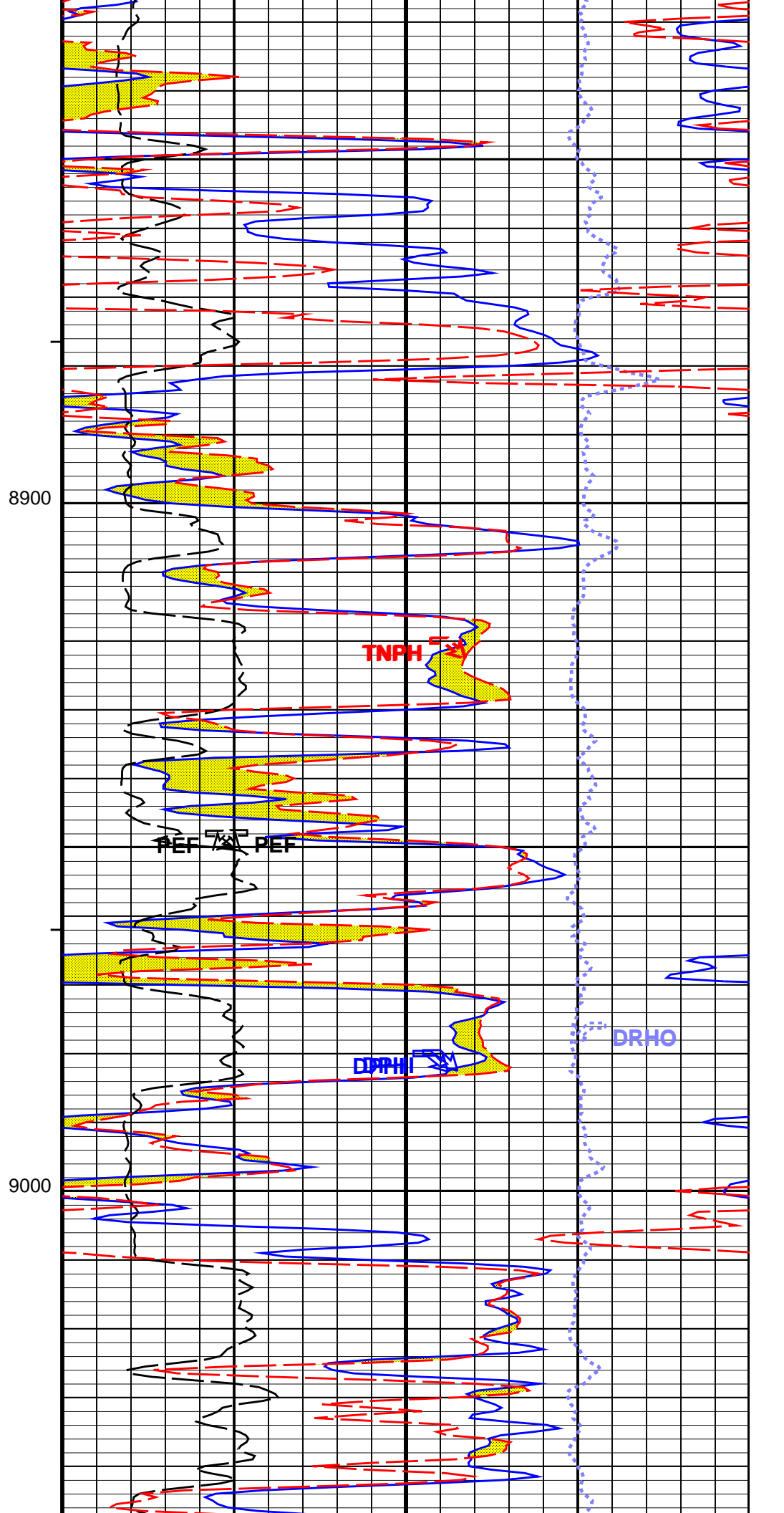
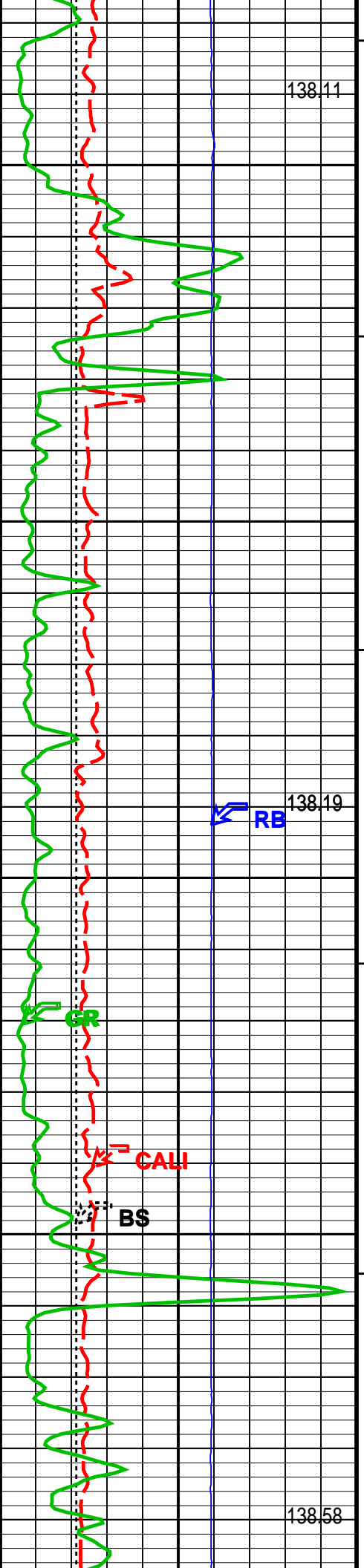


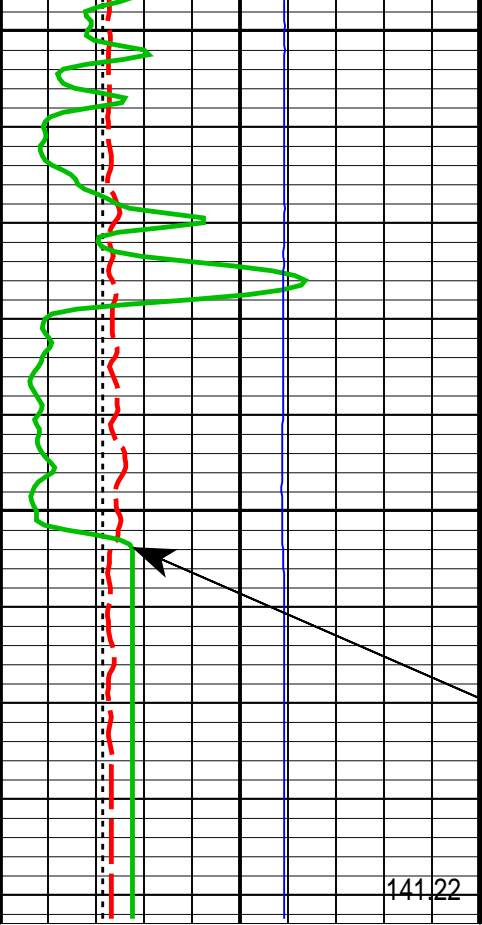








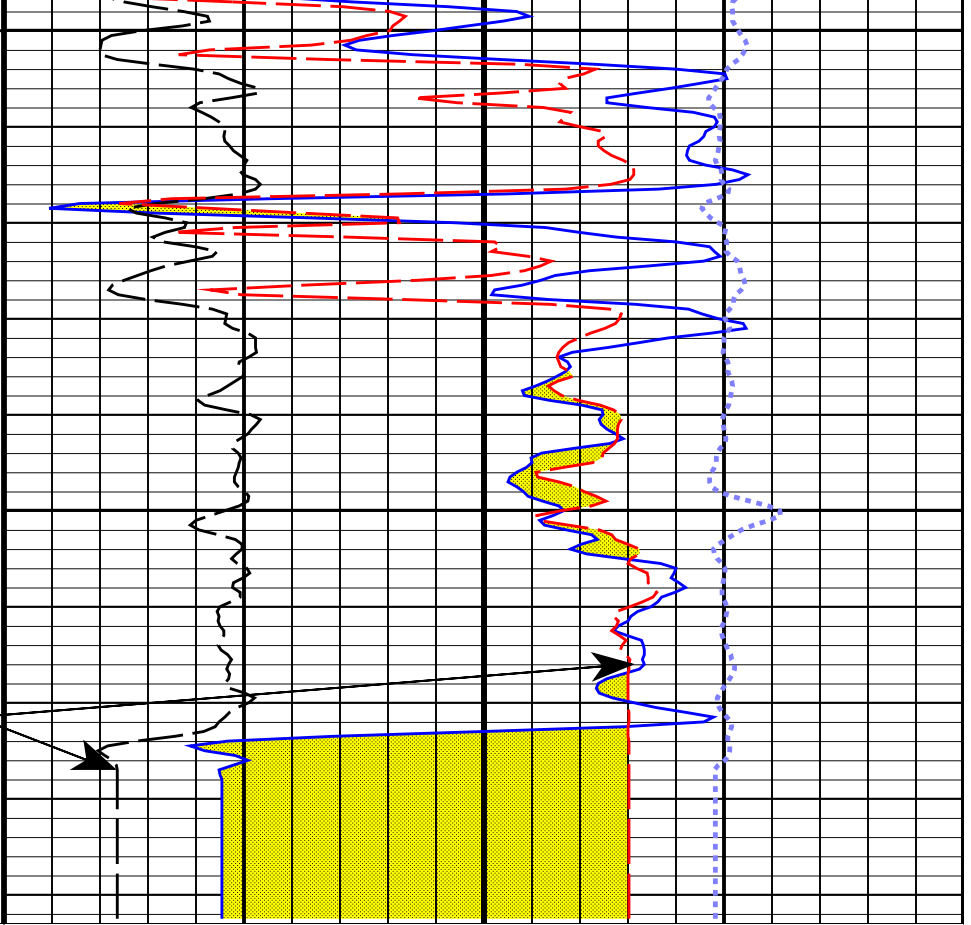




141.22

FR

9100



GR Temp (WTEP) (DEGF)		
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4	Bit Size (BS) (IN)	14
---	-----------------------	----

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
-----	----------------------------	-----

4	Caliper (CALI) (IN)	14
---	------------------------	----

0	Gamma Ray (GR) (GAPI)	150
---	--------------------------	-----

gr wrap1
From LHT1 to GR1

gr wrap2
From LHT1 to GR2

gr wrap3
From LHT1 to GR3

gr wrap4
From LHT1 to GR4

30	DPHI (DPHI) (PU)	-10
----	---------------------	-----

0	PEF (PEF) (----	10	-0.5	DRHO (DRHO) (G/C3)	0.5
---	--------------------	----	------	-----------------------	-----

30	TNPH (TNPH) (%)	-10
----	--------------------	-----

Relative Bearing (RB)		
0	(DEG)	940

PIP SUMMARY

- Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Minor Pip Every 10 F3
- Integrated Hole Volume Major Pip Every 100 F3
- Integrated Hole Volume Minor Pip Every 10 F3

Parameters

DLIS Name	Description	Value	
TBT-A: ThruBit String			
BHS	Borehole Status	OPEN	
CSAL	Cement Salinity	0.000	ppm
CSID	Casing Size I.D.	6.500	in
DHC	Density Hole Correction	CALIPER	
FD	Fluid Density	1.000	g/cm3
FSAL	Formation Salinity	0.000	ppm
FSCO	Formation Salinity Correction Enabled? (for TBN)	NO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
MDEN	Matrix Density	2.710	g/cm3
MT	Mud Type (for TBN and TBI correction)	WBM	
MWCO	Mud-Weight Correction Enabled? (for TBN)	NO	
RB_OFFSET	Additional RB offset (degrees)	0.000	deg
SOCO	Stand-Off Correction Enabled? (for TBN)	NO	
SOFF	TBN Standoff	0.000	in
TBD_CAL_BLOCK	TBD Calibration Block Type	THRUBIT	
TBD_SPIKE_REJECT	TBD Spike Detection Option	DETECT	
TBD_SPIKE_THRESHOLD	TBD Attenuation Change Threshold for Spike Detection	5.000	%
TBN_BHC_OP	Borehole Correction Option (for TBN)	CALIPER	
TBN_CAL_TANK	TBN Calibration Tank Type	THRUBIT	
TBN_PRES_OP	Pressure Correction Enabled? (for TBN)	NO	
TBN_TEMP_OP	Temperature Correction Enabled? (for TBN)	NO	
TBN_WPRE	Well Pressure (for TBN)	14.696	psi
WMUD	Mud Weight	8.400	lbm/gal
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
System and Miscellaneous			
BS	Bit Size	6.125	in
BSAL	Borehole Salinity	800.0	ppm

Format: TB_5INCH_NUCLEAR Vertical Scale: 5" per 100' Graphics File Created: 30-Jul-2014 05:07

OP System Version: 19C2-270

TBT SRPC-5298-ThruBit_b

Input DLIS Files

DEFAULT SPLICE_botto019ass FN:1 PRODUCER 30-Jul-2014 05:05 9142.8 FT 2393.1 FT



CALIBRATIONS

MAXIS Field Log

ThruBit String / Equipment Identification

Primary Equipment:		
Induction Resistivity	TBI - A	48
Density	TBD - A	46
Gamma-Ray Logging Source	GGLS - FZ	3216
Thermal Neutron	TBN - A	18
Neutron Logging Source	NNLS - EWA	4484

Auxiliary Equipment:

ThruBit String Master Calibration						
TBI Master Calibration Sonde Errors						
Freq 1, A1, R	Value	Nominal	Freq 1, A1, X	Value	Nominal	
	-477.754	-457.000		-47.2811	300.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 1, A2, R	Value	Nominal	Freq 1, A2, X	Value	Nominal	
	-148.548	-141.000		11.9862	320.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 1, A3, R	Value	Nominal	Freq 1, A3, X	Value	Nominal	
	-29.5006	-28.0000		-43.8062	50.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 1, A4, R	Value	Nominal	Freq 1, A4, X	Value	Nominal	
	-17.1795	-16.0000		223.227	300.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 1, A5, R	Value	Nominal	Freq 1, A5, X	Value	Nominal	
	-14.9890	-14.0000		108.223	150.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 2, A1, R	Value	Nominal	Freq 2, A1, X	Value	Nominal	
	-248.729	-237.000		-63.9629	150.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 2, A2, R	Value	Nominal	Freq 2, A2, X	Value	Nominal	
	-96.3757	-92.0000		-20.3241	160.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 2, A3, R	Value	Nominal	Freq 2, A3, X	Value	Nominal	
	-21.3083	-21.0000		-81.3063	-20.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 2, A4, R	Value	Nominal	Freq 2, A4, X	Value	Nominal	
	-20.1695	-20.0000		55.8334	100.000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 2, A5, R	Value	Nominal	Freq 2, A5, X	Value	Nominal	
	-19.7655	-20.0000		-29.5598	-25.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 3, A1, R	Value	Nominal	Freq 3, A1, X	Value	Nominal	
	-158.303	-149.000		-118.392	25.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 3, A2, R	Value	Nominal	Freq 3, A2, X	Value	Nominal	
	-73.4697	-70.0000		-56.5094	70.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 3, A3, R	Value	Nominal	Freq 3, A3, X	Value	Nominal	
	-17.3847	-17.0000		-119.295	-90.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 3, A4, R	Value	Nominal	Freq 3, A4, X	Value	Nominal	
	-21.8296	-22.0000		-57.6300	-50.0000	
(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	
Freq 3 A5 R	Value	Nominal	Freq 3 A5 X	Value	Nominal	

	-22.3674	-22.0000		-132.582	-110.000
-32.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)	-250.000 (Minimum)	(Nominal)	-25.0000 (Maximum)
Freq 4, A1, R	Value	Nominal	Freq 4, A1, X	Value	Nominal
	-86.9244	-80.0000		-238.503	-190.000
-108.0000 (Minimum)	(Nominal)	-54.0000 (Maximum)	-450.000 (Minimum)	(Nominal)	75.0000 (Maximum)
Freq 4, A2, R	Value	Nominal	Freq 4, A2, X	Value	Nominal
	-52.6892	-50.0000		-121.709	-75.0000
-60.0000 (Minimum)	(Nominal)	-41.0000 (Maximum)	-200.000 (Minimum)	(Nominal)	50.0000 (Maximum)
Freq 4, A3, R	Value	Nominal	Freq 4, A3, X	Value	Nominal
	-13.6973	-14.0000		-188.964	-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
	-25.1397	-25.0000		-228.660	-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
	-28.4649	-28.0000		-309.437	-300.000
-43.0000 (Minimum)	(Nominal)	-12.0000 (Maximum)	-475.000 (Minimum)	(Nominal)	-125.000 (Maximum)

Master: 5-Jun-2014 10:00

ThruBit String Master Calibration					
TBI Master Calibration COMPLEX GAINS					
Freq 1, R	Value	Nominal	Freq 1, X	Value	Nominal
	0.9896	1.000		-0.001894	0
	0.9874	1.000		0.001263	0
	0.9915	1.000		-0.006632	0
	0.9919	1.000		0.001961	0
	0.9955	1.000		0.001397	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
	0.9848	1.000		-0.007803	0
	0.9821	1.000		-0.005261	0
	0.9806	1.000		-0.005601	0
	0.9876	1.000		-0.005181	0
	0.9917	1.000		-0.003985	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
	0.9847	1.000		-0.003502	0
	0.9825	1.000		-0.001610	0
	0.9807	1.000		-0.001887	0
	0.9865	1.000		-0.001574	0
	0.9930	1.000		-0.0004105	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
	0.9877	1.000		-0.008021	0
	0.9851	1.000		-0.006480	0
	0.9854	1.000		-0.008695	0
	0.9901	1.000		-0.007741	0
	0.9901	1.000		-0.007741	0

0.9300 (Minimum)	1.003 (Nominal)	1.070 (Maximum)	-0.05000 (Minimum)	0.05000 (Nominal)	-0.007561 (Maximum)	0
Master: 5-Jun-2014 10:00						

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
	1867.9	1949.8		2021.9	2096.7		2184.2	2285.7
1799.8 (Minimum)	2099.8 (Maximum)		1946.7 (Minimum)	2246.7 (Maximum)		2135.7 (Minimum)	2435.7 (Maximum)	
Master: 2-Jul-2014 11:19								

ThruBit String Master Calibration						
TBD Density Master Calibration. PEEK Window, ThruBit blocks						
Aluminium Density G/C3	Value	Nominal	Magnesium Density G/C3	Value	Nominal	
	2.607	2.607		1.752	1.752	
2.557 (Minimum)	2.657 (Maximum)		1.702 (Minimum)	1.802 (Maximum)		
LS1 Background CPS	Value	Nominal	SS1 Background CPS	Value	Nominal	
	136.88	140.00		132.25	140.00	
100.00 (Minimum)	187.00 (Maximum)		100.00 (Minimum)	185.00 (Maximum)		
LS4 Background CPS	Value	Nominal	SS1 Aluminium CPS	Value	Nominal	
	27.42	29.00		4557.49	4850.00	
20.00 (Minimum)	38.00 (Maximum)		4076.00 (Minimum)	5613.00 (Maximum)		
LS1 Aluminium CPS	Value	Nominal	SS1 Magnesium CPS	Value	Nominal	
	841.77	870.00		7581.66	8000.00	
750.00 (Minimum)	982.00 (Maximum)		6695.00 (Minimum)	9269.00 (Maximum)		
LS4 Aluminium CPS	Value	Nominal				
	974.50	955.00				
796.00 (Minimum)	1169.0 (Maximum)					
LS1 Al + Sleeve CPS	Value	Nominal				
	772.57	725.00				
650.00 (Minimum)	838.00 (Maximum)					
LS4 Al + Sleeve CPS	Value	Nominal				
	497.05	426.50				
382.00 (Minimum)	638.00 (Maximum)					
LS1 Magnesium CPS	Value	Nominal				
	5535.38	5800.00				
5158.00 (Minimum)	6486.00 (Maximum)					
SS Slope	Value	Nominal				
	1.623	1.645				
1.520 (Minimum)	1.770 (Maximum)					
LS Slope	Value	Nominal				
	0.4169	0.4150				
0.3800 (Minimum)	0.4500 (Maximum)					
Pef K Factor	Value	Nominal				
	4.818	4.840				
3.510 (Minimum)	6.170 (Maximum)					
Pef B Factor	Value	Nominal				
	-0.6897	-0.5550				
-0.7000 (Minimum)	-0.4100 (Maximum)					
Master: 2-Jul-2014 11:11						

ThruBit String Master Calibration					
TNF, Background CPS		Value	Nominal	TNN, Background CPS	
		0.15	1.0		
0 (Minimum)	(Nominal)	2.0 (Maximum)		0 (Minimum)	2.0 (Maximum)
TNF, Tank CPS		Value	Nominal	TNN, Tank CPS	
		89.66	96.00		
25.00 (Minimum)	(Nominal)	200.0 (Maximum)		750.00 (Minimum)	5700.0 (Maximum)
TNF, Tank + Al Sleeve CPS		Value	Nominal	TNN, Tank + Al Sleeve CPS	
		2941.7	3040.0		
727.00 (Minimum)	(Nominal)	6080.0 (Maximum)		8000.00 (Minimum)	64700.0 (Maximum)
Tank + Al Sleeve Ratio		Value	Nominal	Tank + Al Sleeve Porosity PU	
		10.779	10.797		
10.300 (Minimum)	(Nominal)	11.300 (Maximum)		13.40 (Minimum)	15.40 (Maximum)
Tank, Ratio		Value	Nominal	Tank, Temperature DEGF	
		29.987	30.958		
28.000 (Minimum)	(Nominal)	34.000 (Maximum)		20.0 (Minimum)	120 (Maximum)
Master: 1-Jul-2014 11:09					

ThruBit String Master Calibration					
TMG Accelerometer Calibration					
Minimum Ax, m/s2		Value	Nominal	Maximum Ax, m/s2	
		N/A	-9.810		
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)		8.810 (Minimum)	10.81 (Maximum)
Minimum Ay, m/s2		Value	Nominal	Maximum Ay, m/s2	
		N/A	-9.810		
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)		8.810 (Minimum)	10.81 (Maximum)
Minimum Az, m/s2		Value	Nominal	Maximum Az, m/s2	
		N/A	0		
-1.000 (Minimum)	(Nominal)	1.000 (Maximum)		8.810 (Minimum)	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	
		28.95	30.00		
0 (Minimum)	(Nominal)	120.0 (Maximum)		136.6 (Minimum)	205.0 (Maximum)
Master: Calibration out of date 15-Oct-2013 12:57					

Company: **SANDRIDGE ENERGY**

Schlumberger

Well: **SARAH 3306 3-28H**

Field: **STONERVILLE**

Field: **STOHRVILLE**

County: **HARPER**

State: **KANSAS**

SPECTRAL DENSITY
DUAL SPACED NEUTRON
MEMORY LOG