



Company: SANDRIDGE ENERGY

Well: GEORGE 3406 2-4H

Field: STORHVILLE

County: HARPER

State: KANSAS

SPECTRAL DENSITY
DUAL SPACED NEUTRON
MEMORY LOG

290' FSL & 850' FWL

Elev.: K.B. 1269.00 ft

G.L. 1251.00 ft

D.F. 1269.00 ft

Permanent Datum: _____

Elev.: 1251.00 ft

Log Measured From: K.B. _____

18.00 ft above Perm. Datum

Drilling Measured From: K.B. _____

County: HARPER
Field: STORHVILLE
Location: 290' FSL & 850' FWL
Well: GEORGE 3406 2-4H
Company: SANDRIDGE ENERGY

LOCATION		Section		Township		Range	
290' FSL & 850' FWL		4		34S		6W	
API Serial No. 15-077-220430100							

Logging Date 18-May-2014

Run Number 1

Depth Driller 9140 ft

Schlumberger Depth 9126 ft

Bottom Log Interval 9108 ft

Top Log Interval 3000 ft

Casing Driller Size @ Depth 7.000 in @ 5581 ft

Casing Schlumberger 5584 ft

Bit Size 6.125 in

Type Fluid In Hole WBM

Density 8.4 lbm/gal

Fluid Loss 5.2 cm3

PH 10

Source Of Sample MUD SENSOR

RM @ Measured Temperature 0.870 ohm.m @ 65 degF

RMF @ Measured Temperature 0.660 ohm.m @ 65 degF

RMC @ Measured Temperature 1.090 ohm.m @ 65 degF

Source RMF RMC CALCULATED CALCULATED

RM @ MRT RMF @ MRT 0.437 @ 136 0.332 @ 136

Maximum Recorded Temperatures 136 degF

Circulation Stopped Time 18-May-2014 20:30

Logger On Bottom Time 18-May-2014 21:45

Unit Number 5 OKC

Recorded By S.JARSKI

Witnessed By A.MILLER

Run 1

Run 2

Run

Logging Date

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

PH

Source Of Sample

RM @ Measured Temperature

RMF @ Measured Temperature

RMC @ Measured Temperature

Source RMF RMC

RM @ MRT RMF @ MRT

Maximum Recorded Temperatures

Circulation Stopped Time

Logger On Bottom Time

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-TMC
 OS2:
 OS3:
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1
 SERVICE:HORIZONTAL PUMP DOWN MEMORY BIT DEPTH: 9065' 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 COLUME, CALCULATED FOR 4.5" CSG, ft3
 HSPM USED TO ACQUIRE LOG DEPTH
 LOG CORRELATED TO MWD GR
 RIG: LARIAT 40
 CREW: S.JARSKI R.CRESSWELL I.HERNDEZ R.WILSON

REMARKS: RUN NUMBER 2
 LOGGED TO: 3000'

RUN 1		
SERVICE ORDER #:	2861	
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

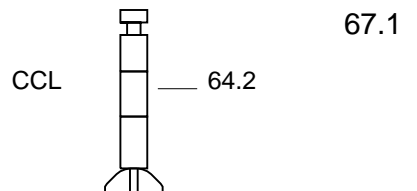
SURFACE EQUIPMENT

WITM (ThruBit)

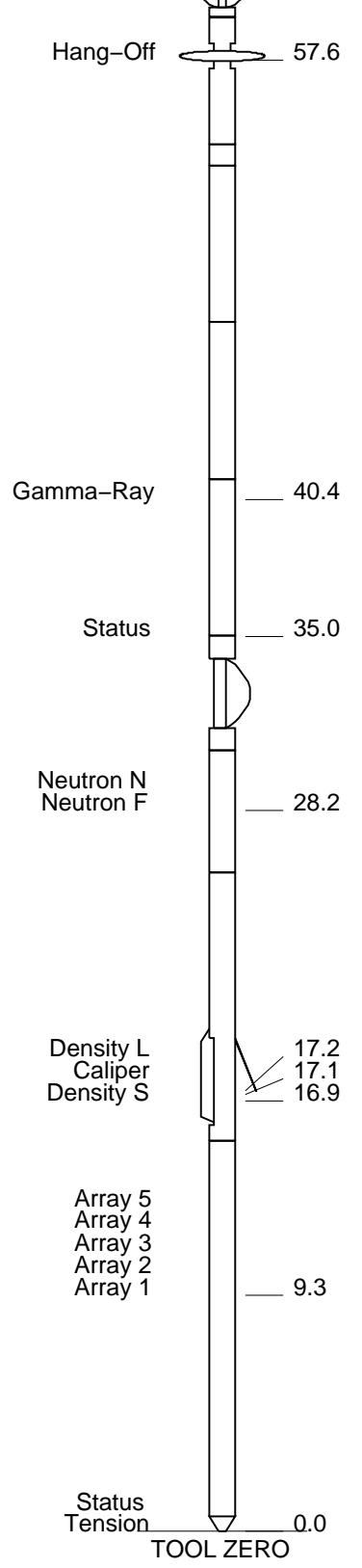
RUN 2

DOWNHOLE EQUIPMENT

TBT-A
 THEAD
 CCL
 BDOT-B 14
 THOT 29
 T10 1
 TBAT1 13
 TBAT2 35



TMG-A 27
TILE-A
TBN-A 27
NNLS-EWA 4484
TBD-A 43
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: GEORGE 3406 2-4H

Input DLIS Files

DEFAULT ThruBit_011PUP FN:10 PRODUCER 19-May-2014 05:37 9125.2 FT 2910.2 FT

Output DLIS Files

DEFAULT ThruBit_014PUP FN:13 PRODUCER 19-May-2014 05:54

OP System Version: 19C2-270

TBT-A SRPC-5298-ThruBit_b

PIP SUMMARY

Time Mark Every 60 S

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 (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)

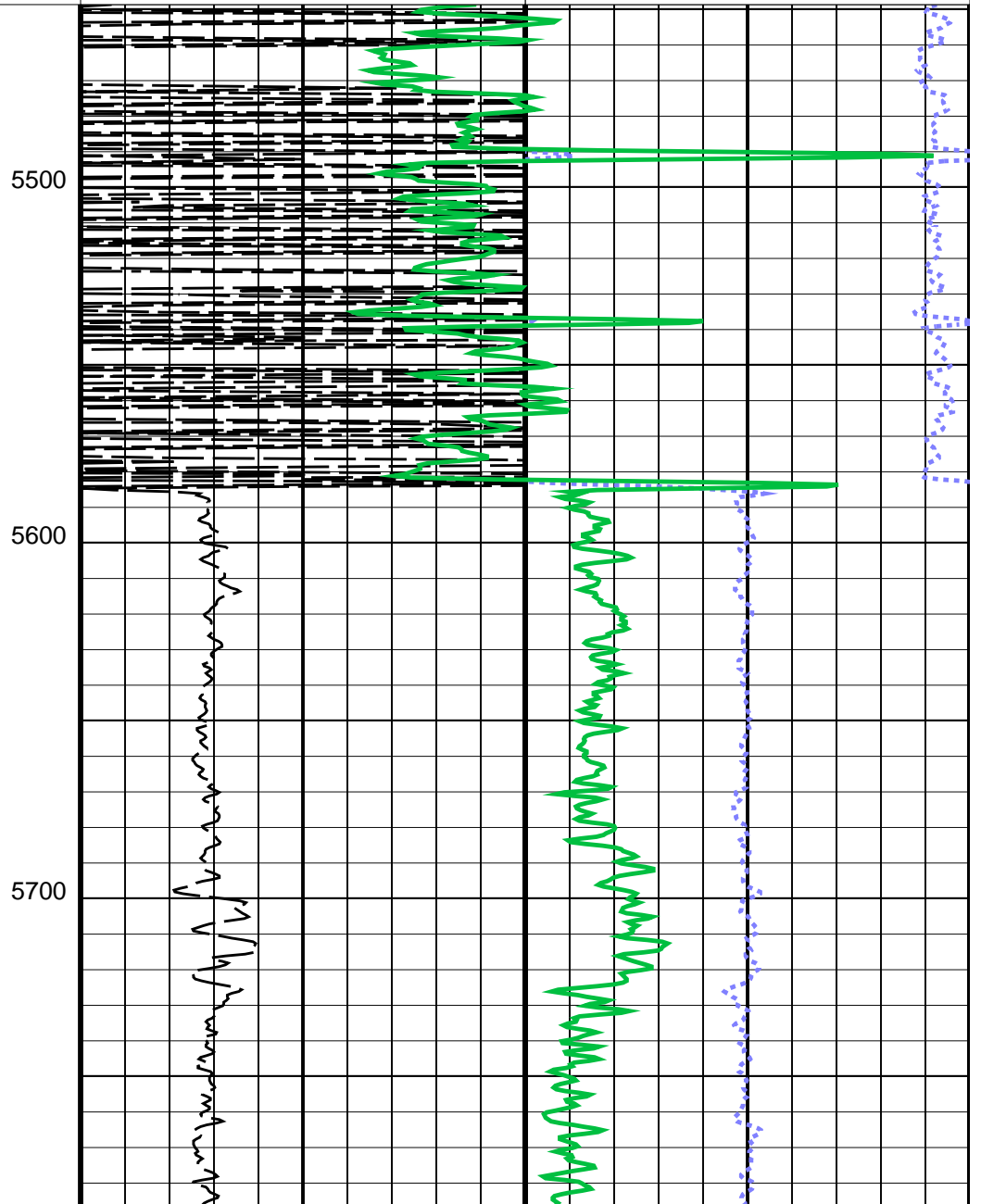
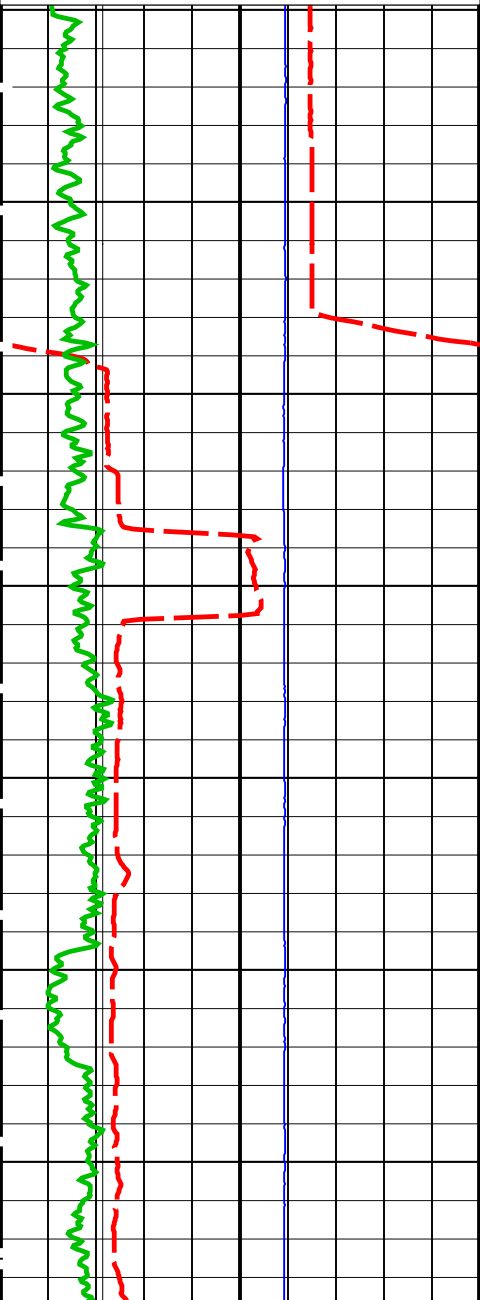
2 (G/C3) 3

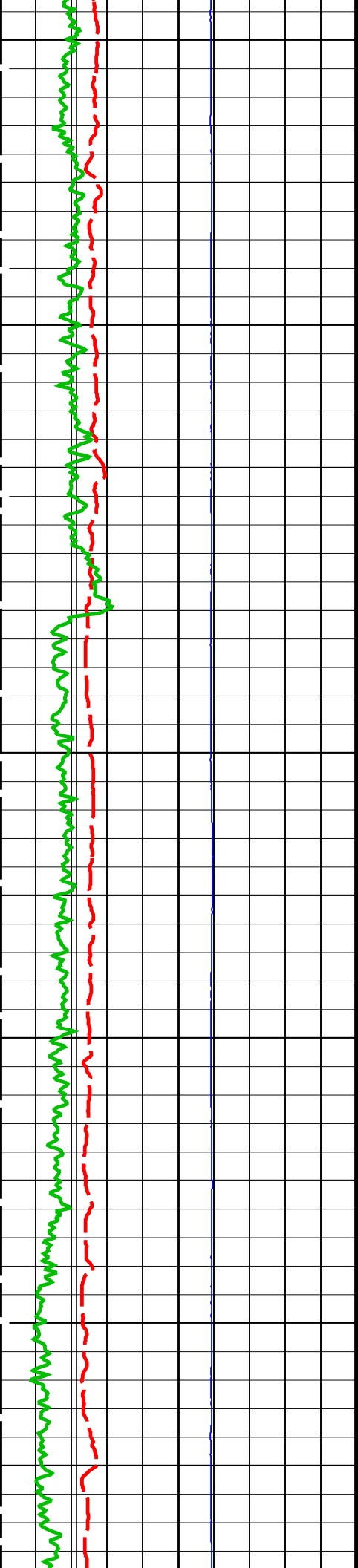
PEF (PEF)

0 (----) 10

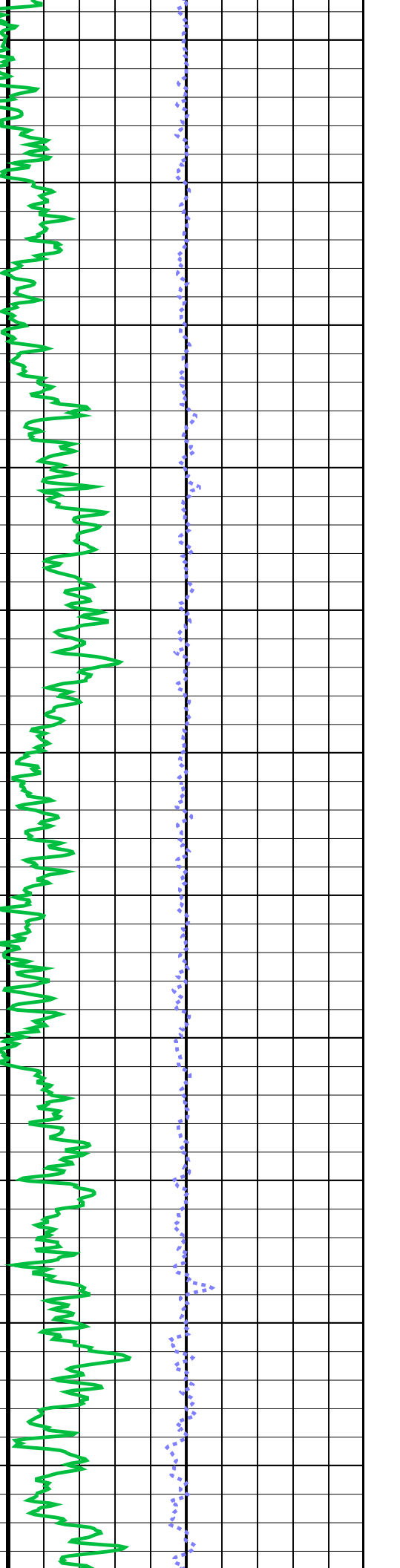
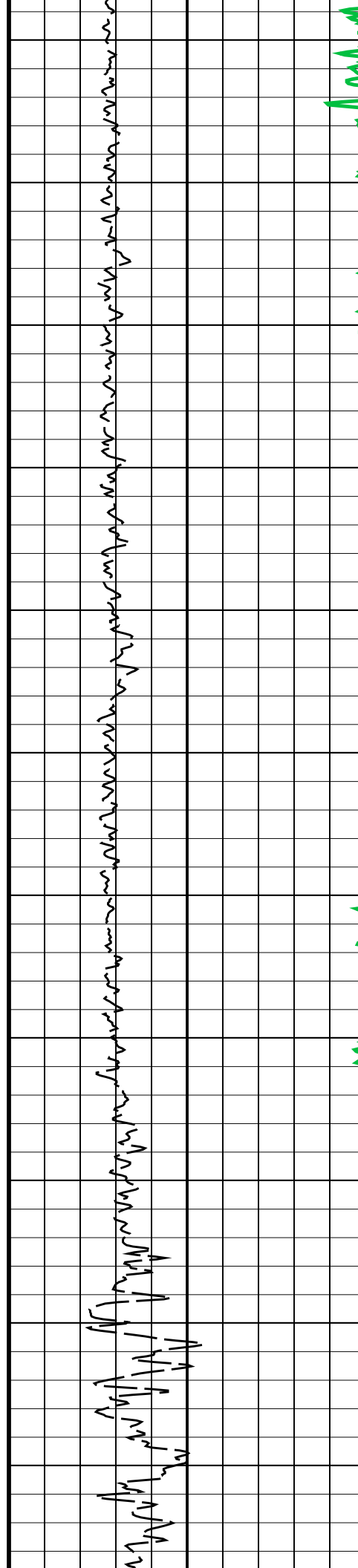
DRHO (DRHO)

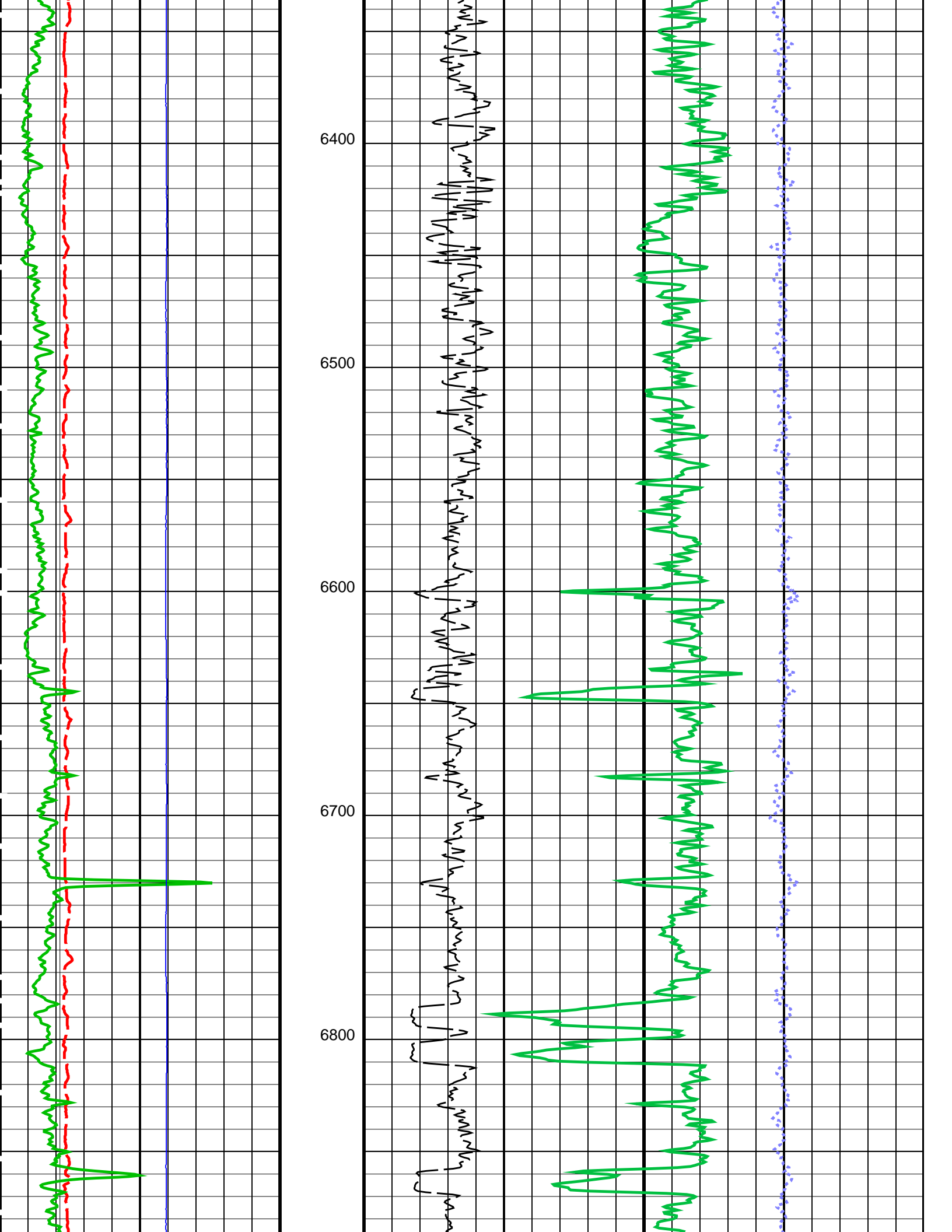
-0.5 (G/C3) 0.5

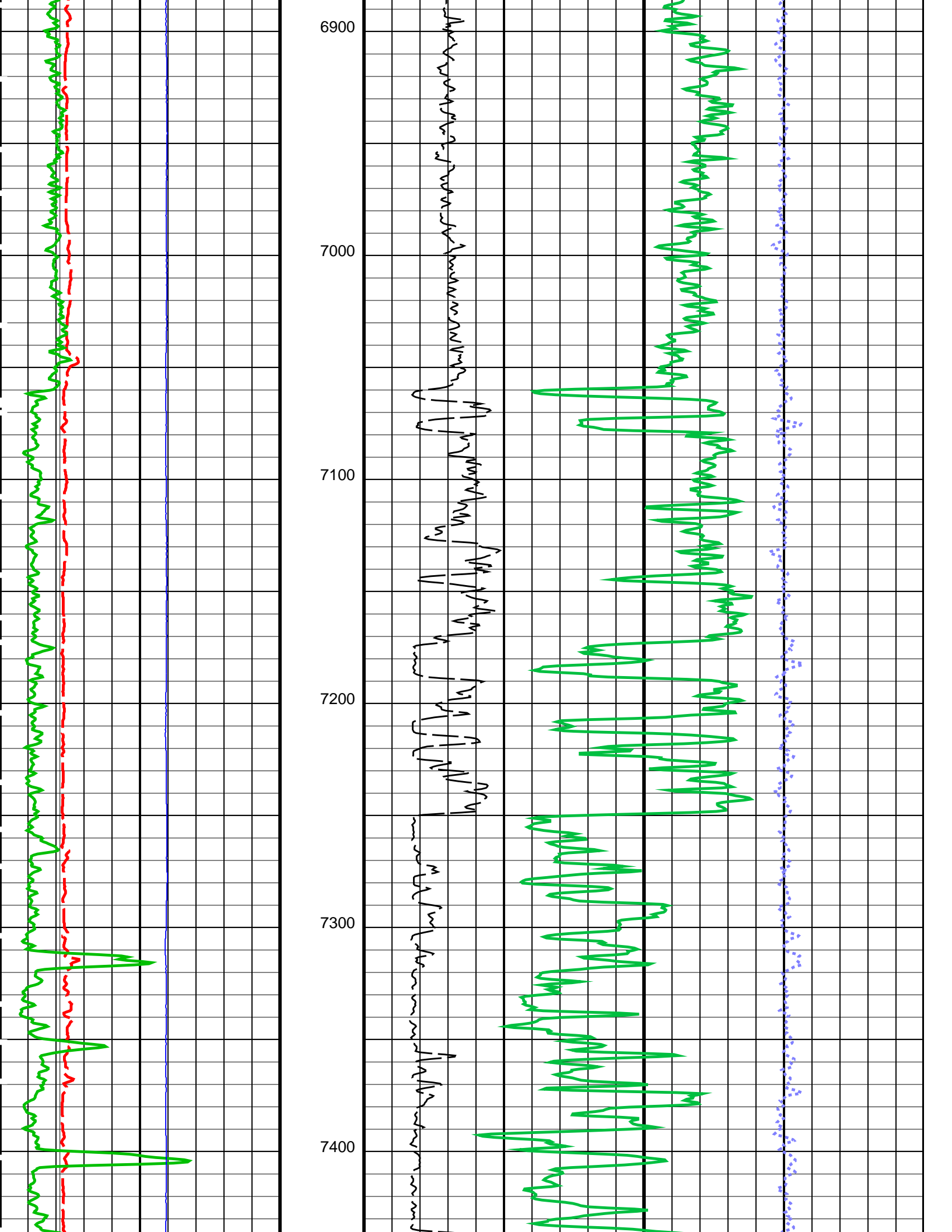


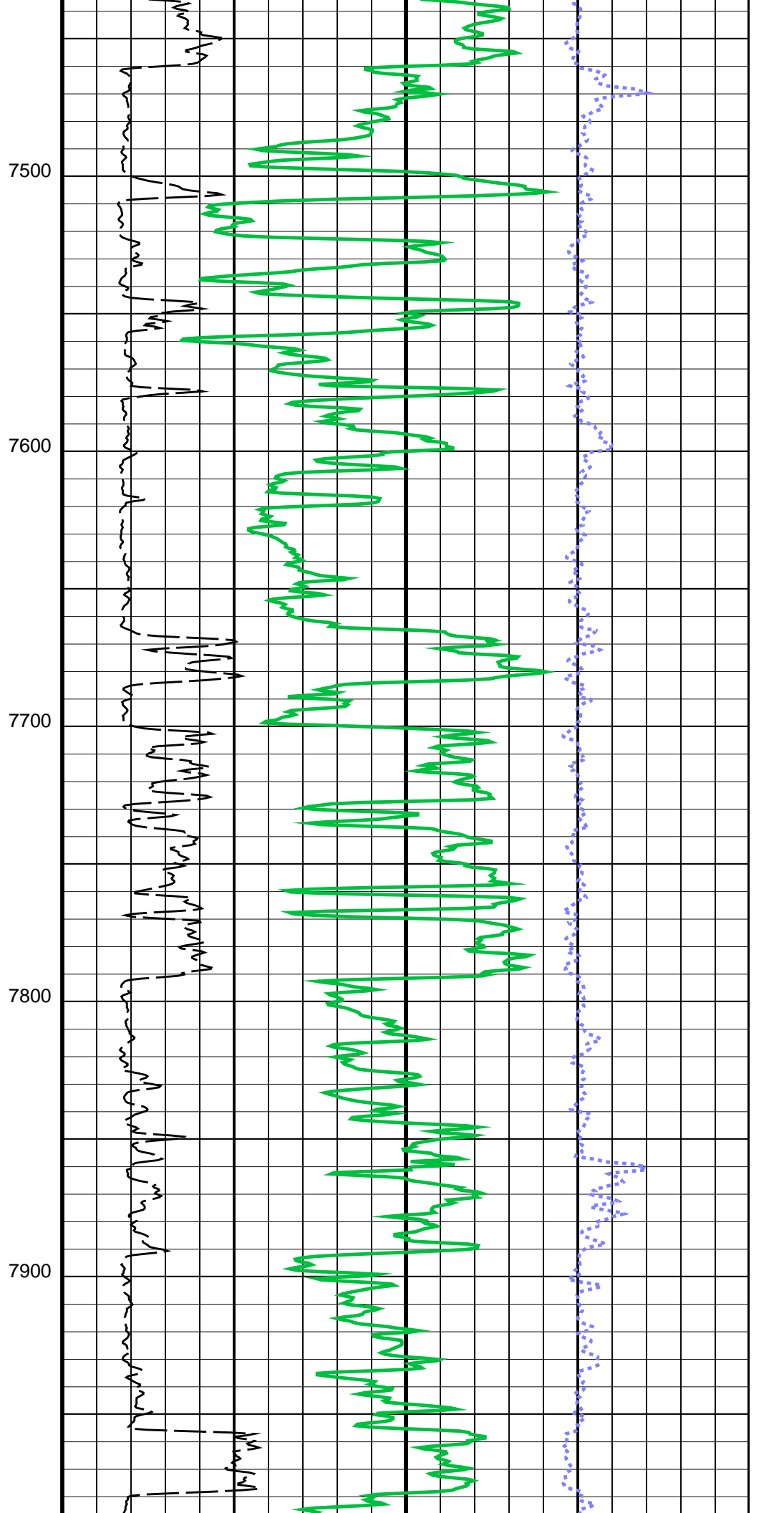
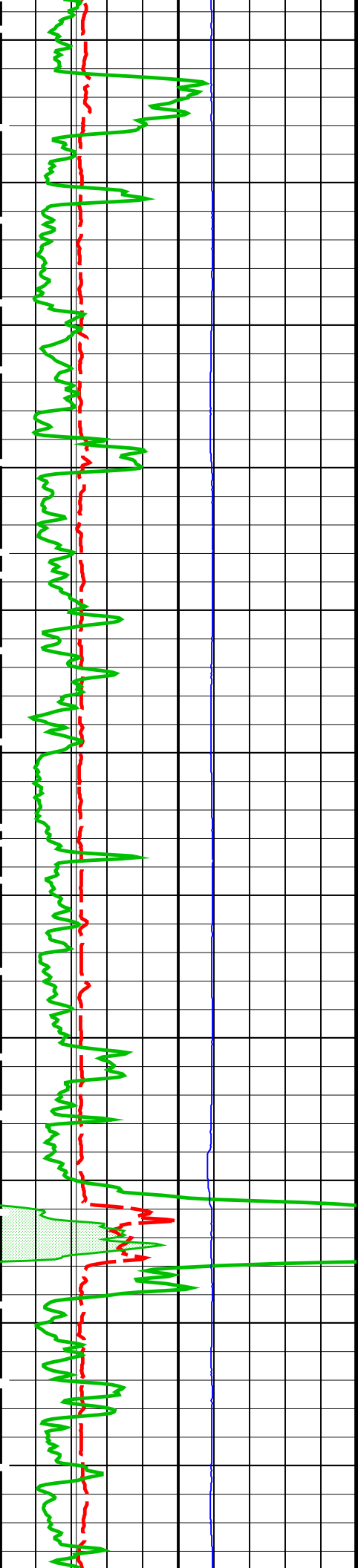


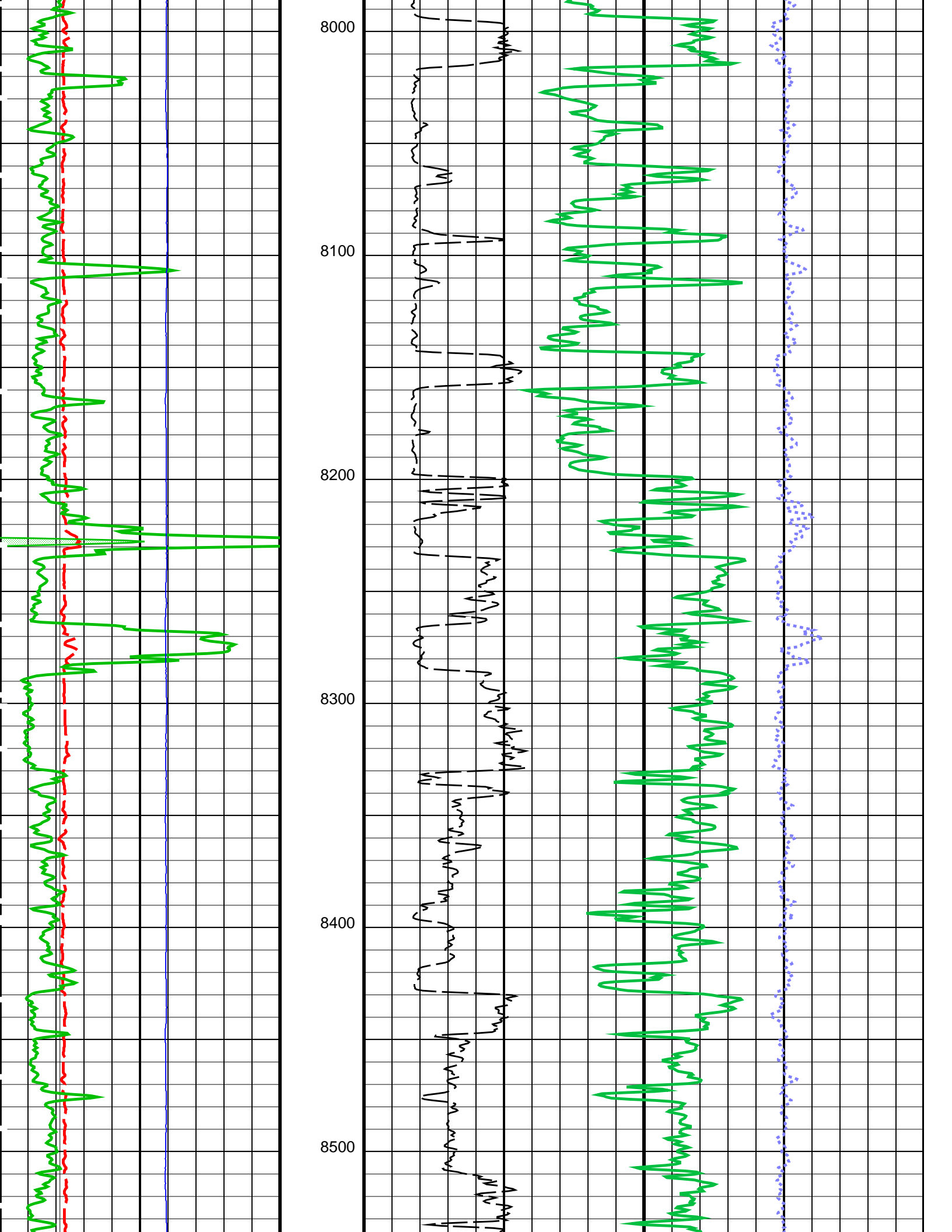
5800
5900
6000
6100
6200
6300

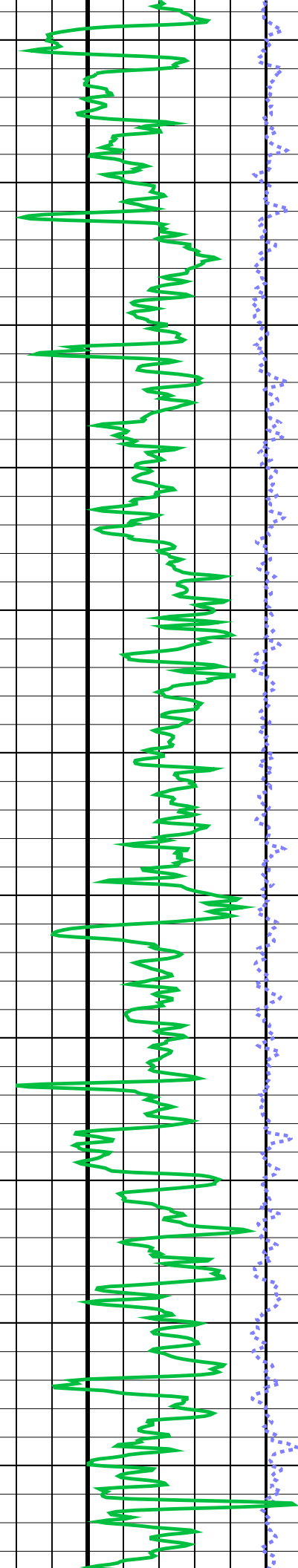
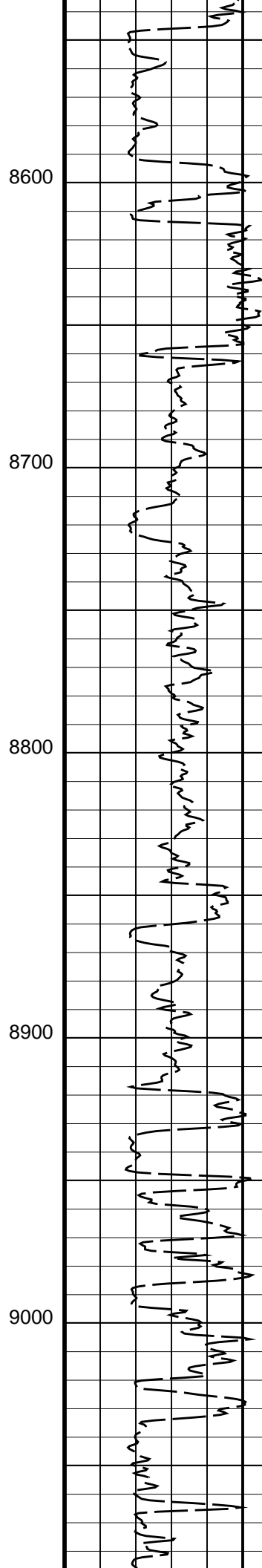
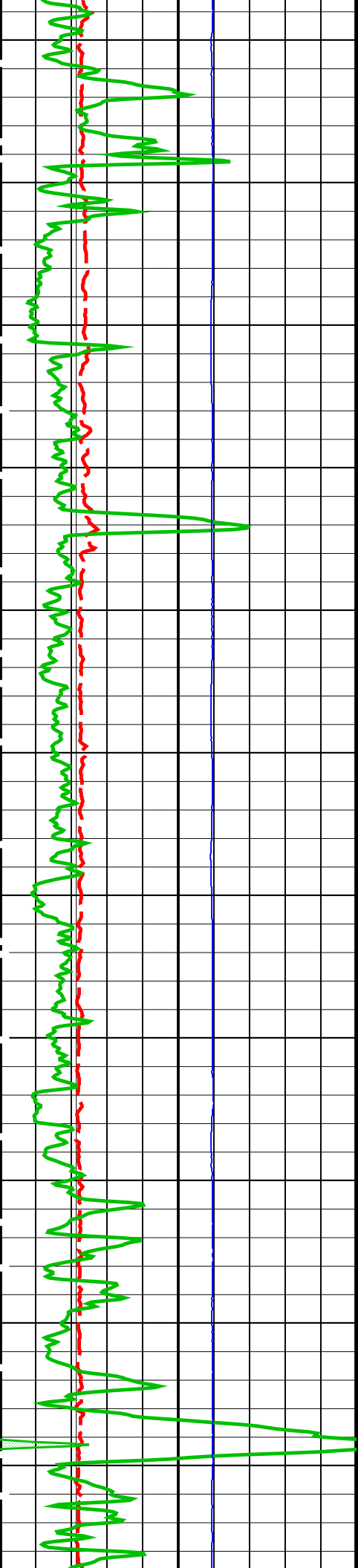












8600

8700

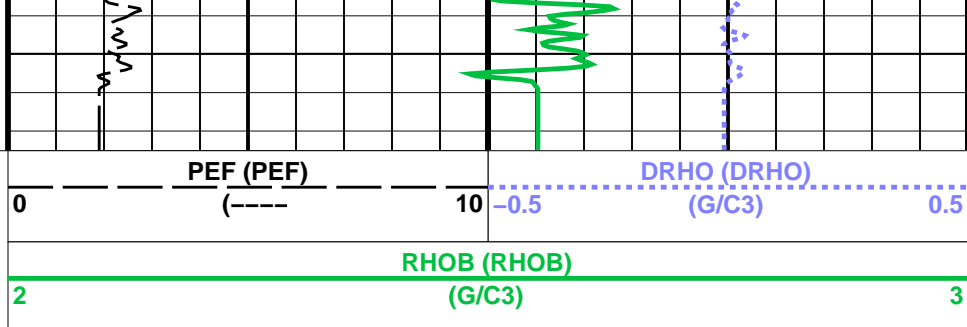
8800

8900

9000

Bit Size (BS)		
4	(IN)	14
Gamma Ray 1 (GR)		
150	(GAPI)	300
Gamma Ray 2 (GR)		
300	(GAPI)	450
Gamma Ray 3 (GR)		
450	(GAPI)	600
Gamma Ray 4 (GR)		
600	(GAPI)	750
Caliper (CALI)		
4	(IN)	14
Gamma Ray (GR)		
0	(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		
Relative Bearing (RB)		
0	(DEG)	940

9100



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

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
TBT-A: ThruBit String		
DHC	Density Hole Correction	
RB_OFFSET	Additional RB offset (degrees)	CALIPER 0 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 %
WMUD	Mud Weight	8.4 LB/G
System and Miscellaneous		
BS	Bit Size	6.125 IN
DO	Depth Offset for Playback	0.0 FT
PP	Playback Processing	NORMAL

Format: TB_2INCH_NUCLEAR Vertical Scale: 2" per 100' Graphics File Created: 19-May-2014 05:54

OP System Version: 19C2-270

TBT-A SRPC-5298-ThruBit_b

Input DLIS Files

DEFAULT	ThruBit_011PUP	FN:10	PRODUCER	19-May-2014 05:37	9125.2 FT	2910.2 FT
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Output DLIS Files

DEFAULT

ThruBit_014PUP

FN:13

PRODUCER

19-May-2014 05:54



MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY

Well: GEORGE 3406 2-4H

Input DLIS Files

DEFAULT ThruBit_011PUP FN:10 PRODUCER 19-May-2014 05:37 9125.2 FT 2910.2 FT

Output DLIS Files

DEFAULT ThruBit_014PUP FN:13 PRODUCER 19-May-2014 05:54 9125.0 FT 2969.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 782.53 F3

Cement Volume = 391.40 F3 (assuming 4.50 IN casing O.D.)

Computed from 9125.0 FT to 5584.0 FT using data channel(s) CALI

OP System Version: 19C2-270

TBT-A SRPC-5298-ThruBit_b

PIP SUMMARY

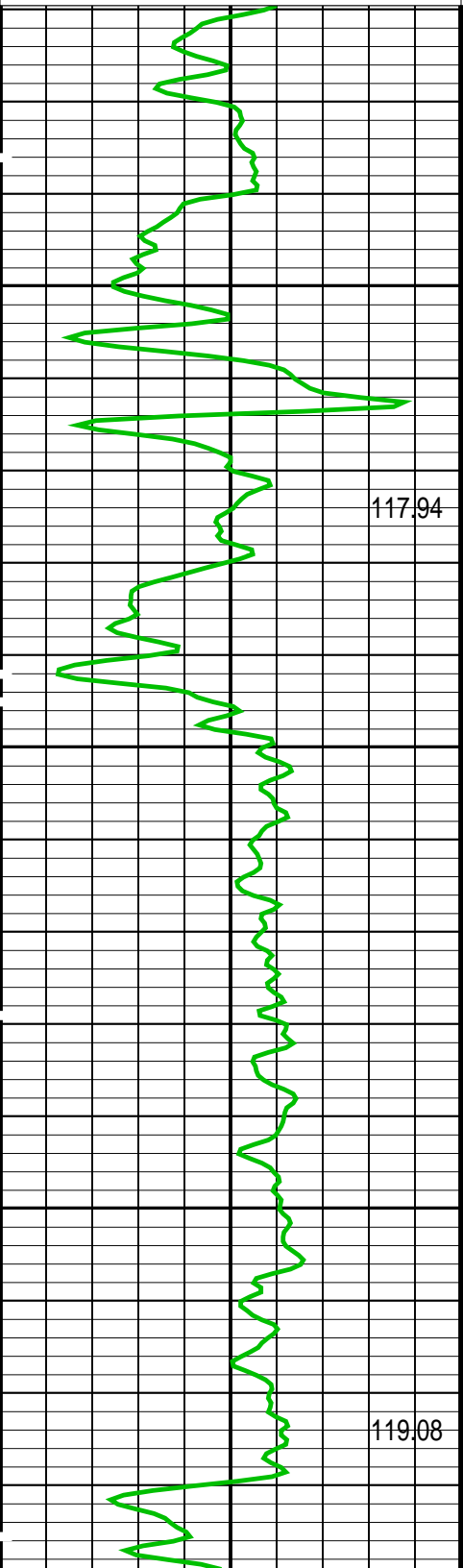
- └ Integrated Cement Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Hole Volume Minor Pip Every 10 F3

Time Mark Every 60 S

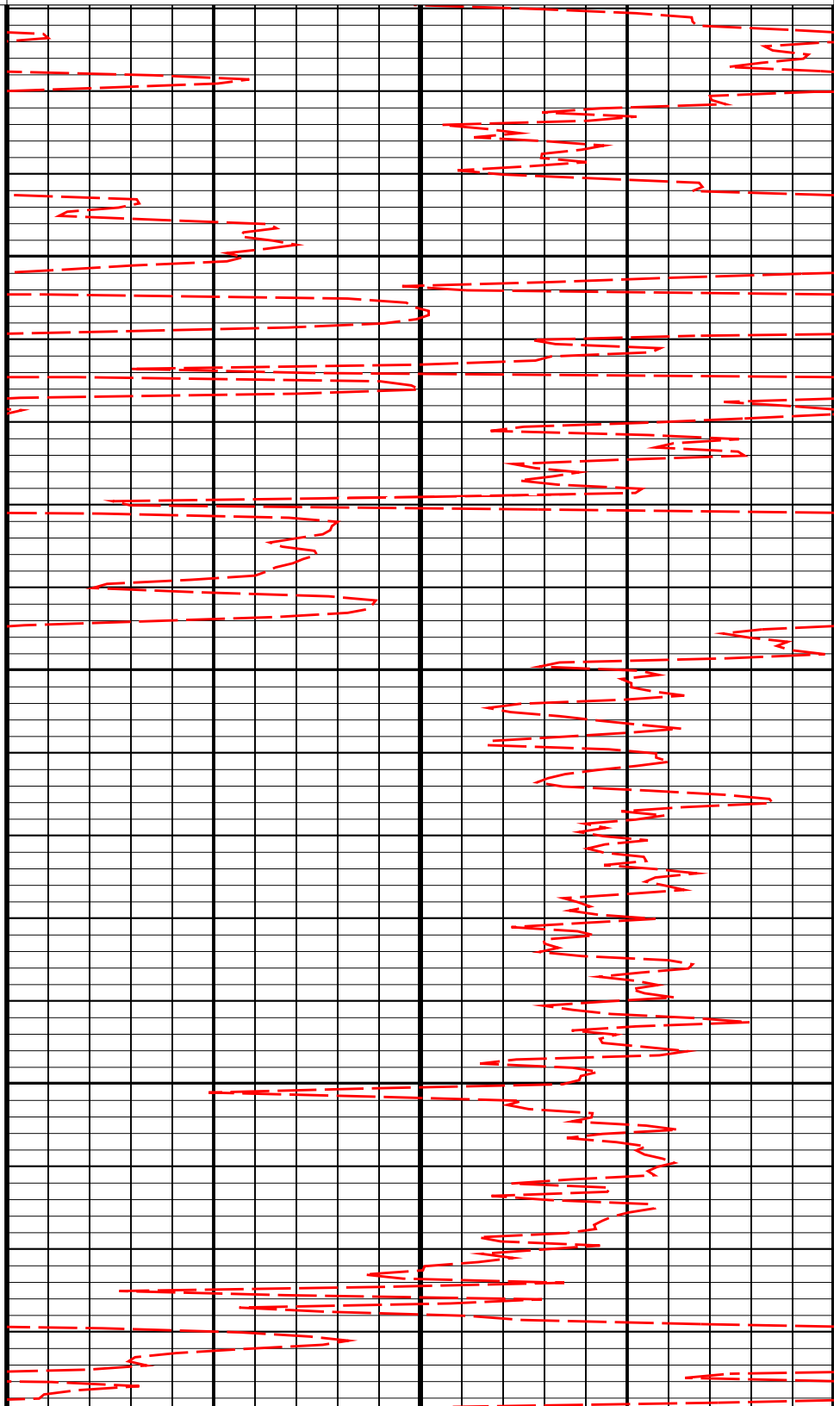
		Relative Bearing (RB)		
		0 (DEG)	940	
gr wrap4 From LHT1 to GR4				
gr wrap3 From LHT1 to GR3				
gr wrap2 From LHT1 to GR2				
gr wrap1 From LHT1 to GR1				
Gamma Ray (GR)				
0	(GAPI)			150
Caliper (CALI)				
4	(IN)			14
Gamma Ray 4 (GR)				
600	(GAPI)			750

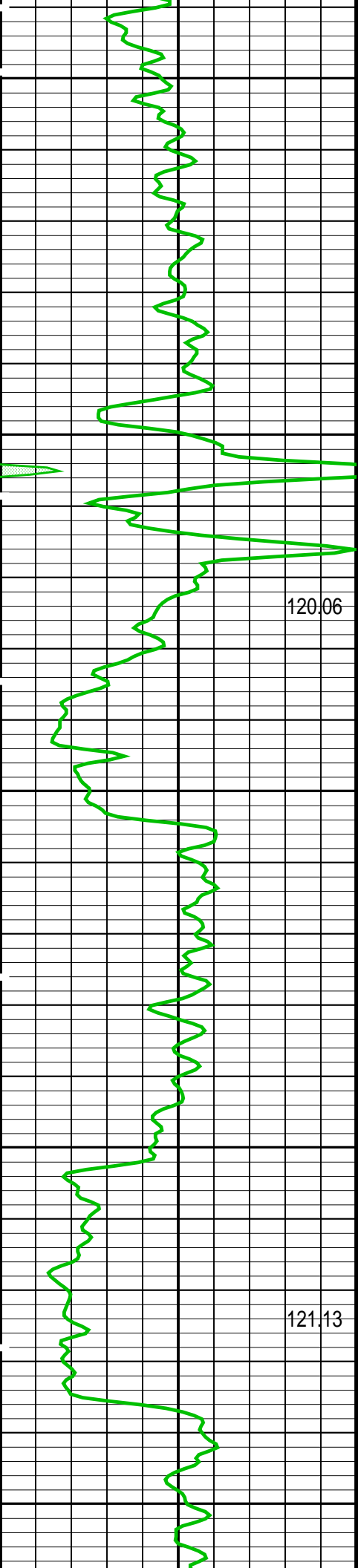
750	Gamma Ray 3 (GR) (GAPI)	600
450	Gamma Ray 2 (GR) (GAPI)	450
300	Gamma Ray 1 (GR) (GAPI)	300
4	Bit Size (BS) (IN)	14

GR Temp (WTEP)
(DEGF)



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



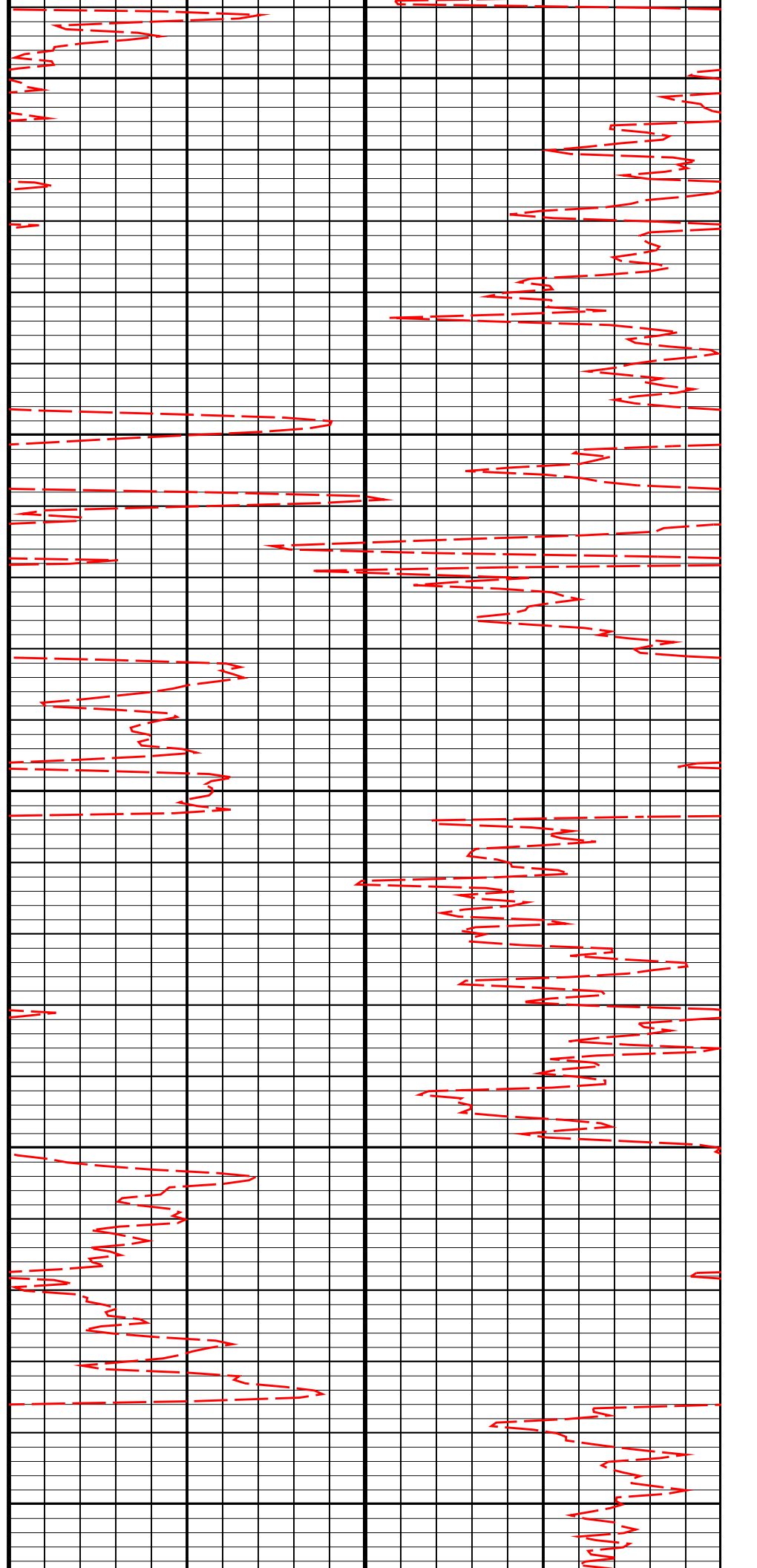


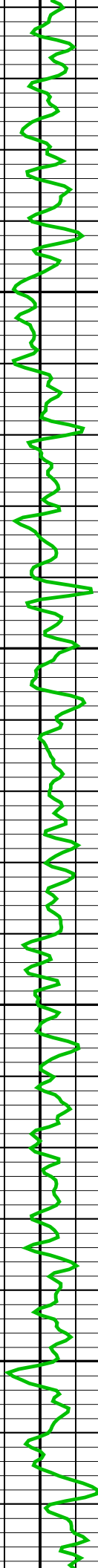
120,06

121,13

3200

3300



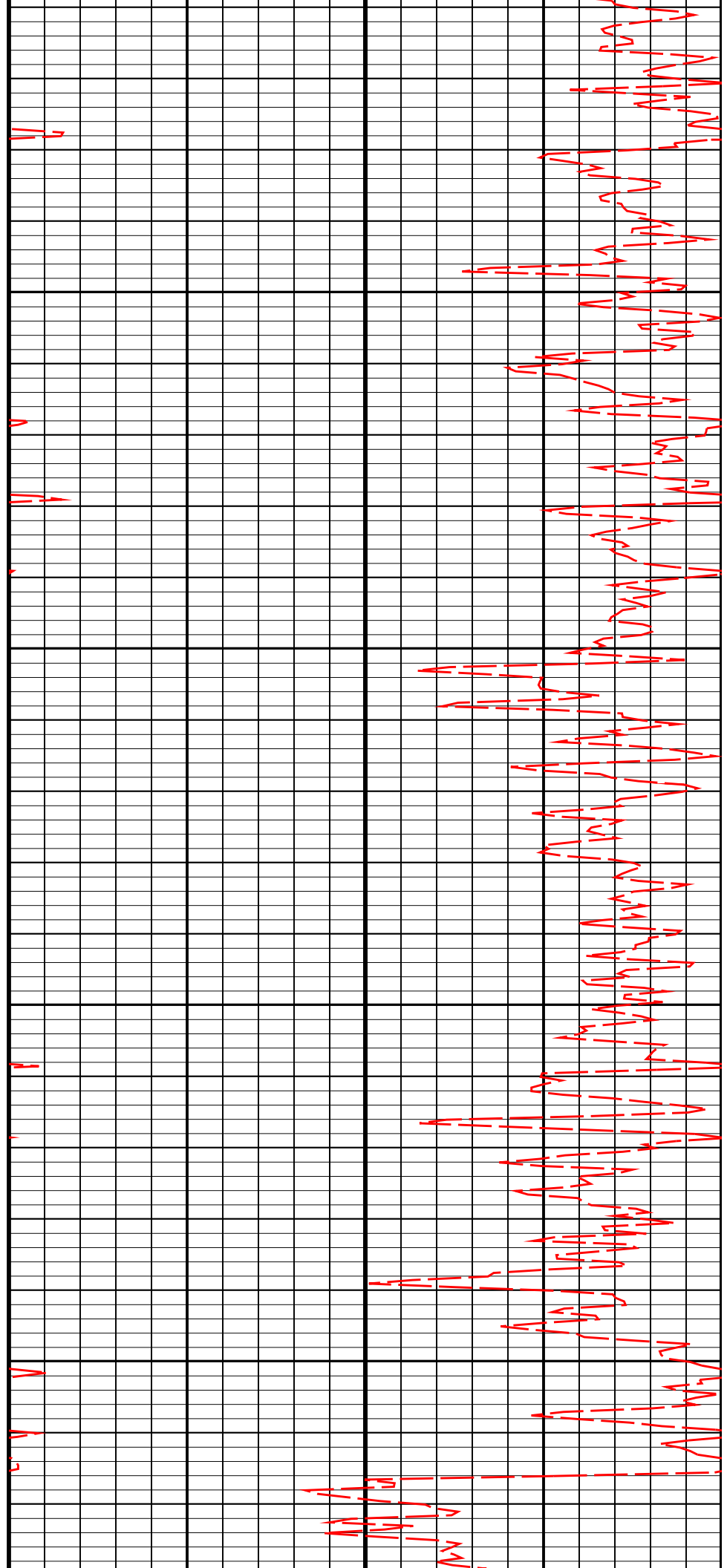


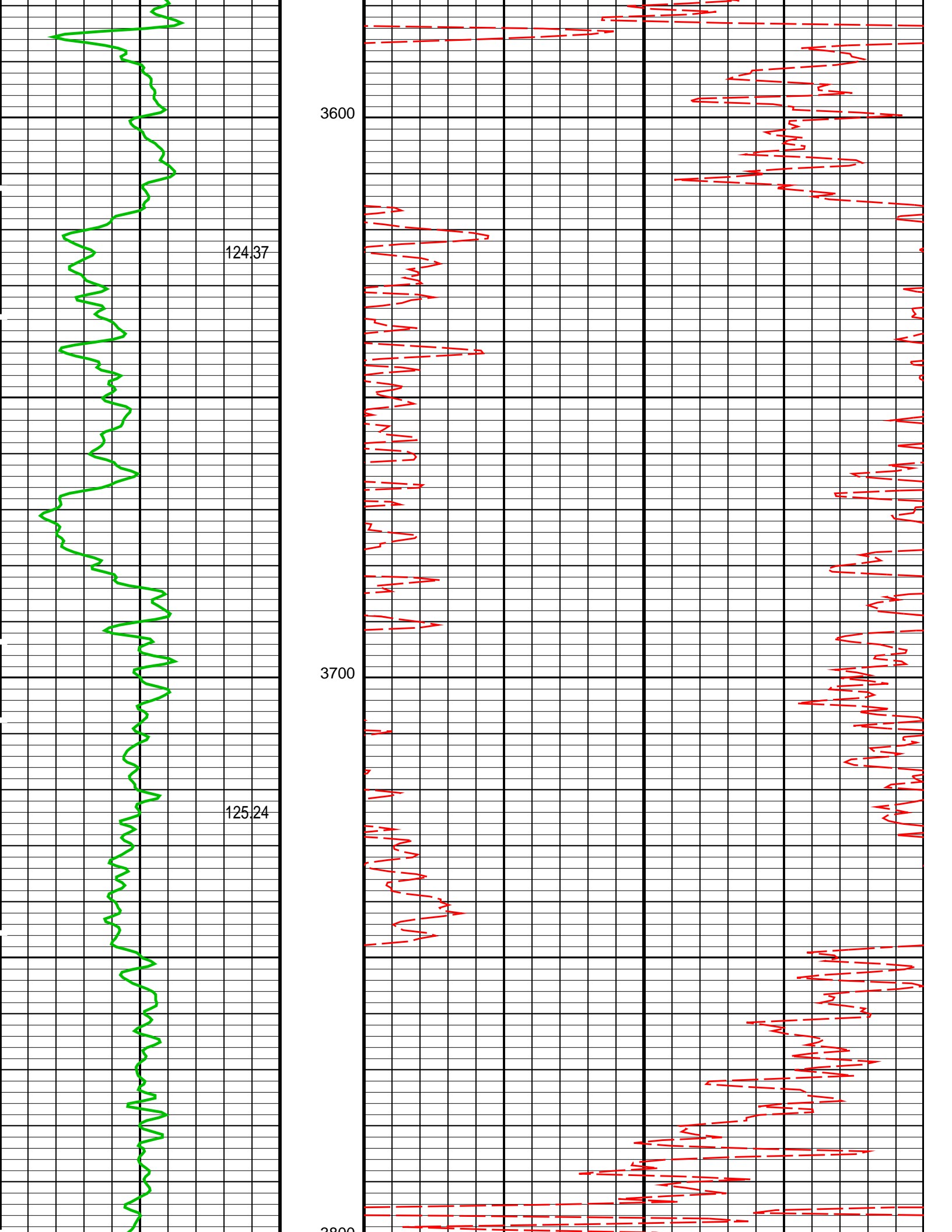
122.25

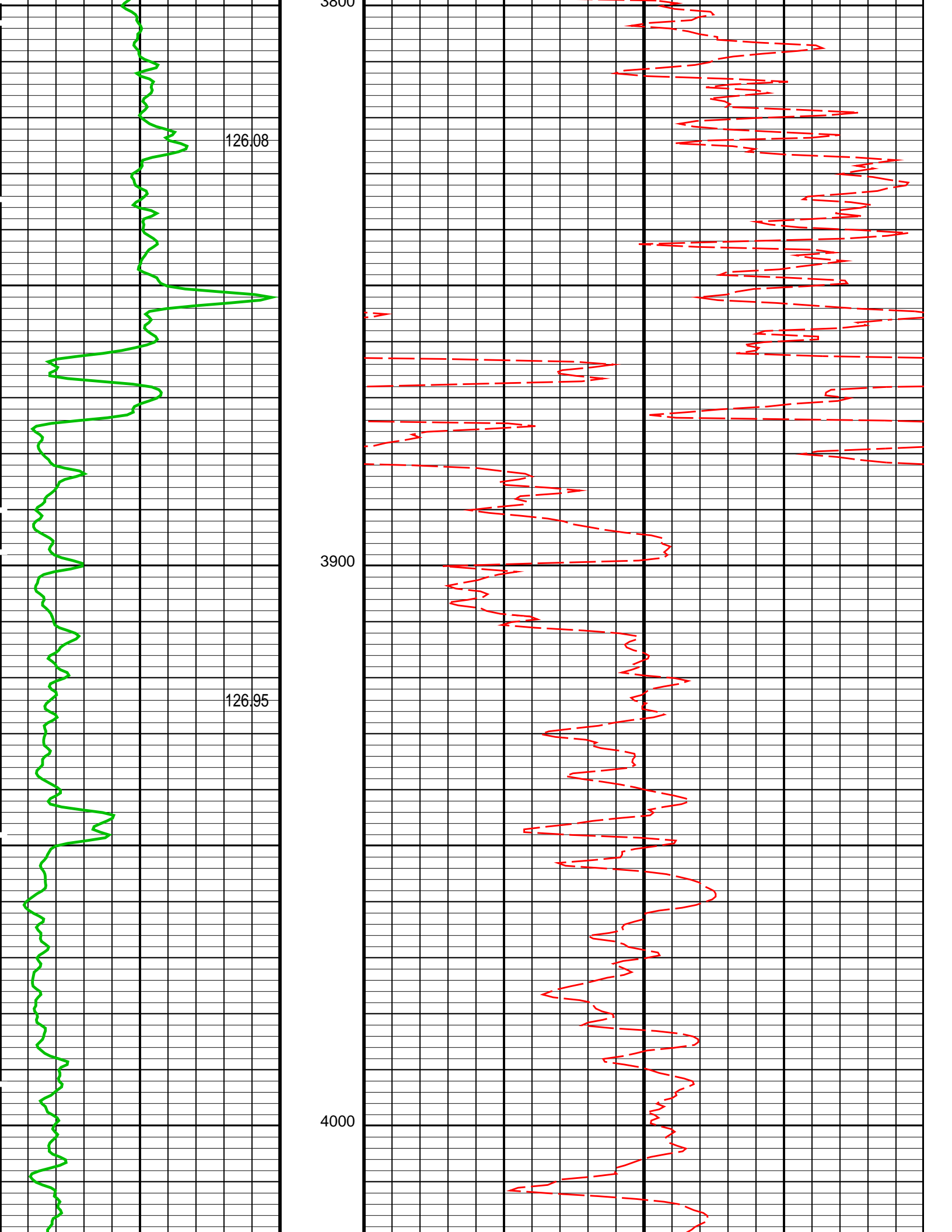
123.26

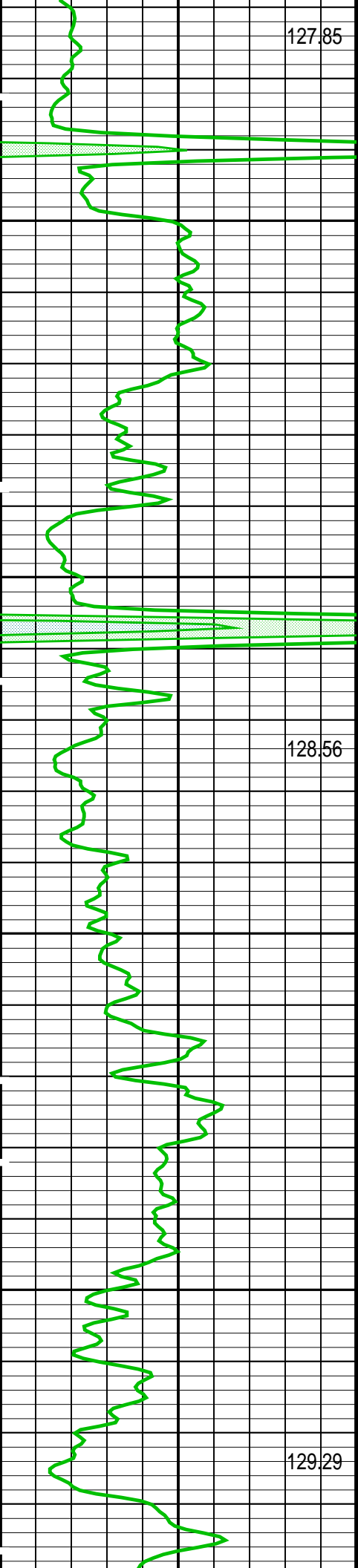
3400

3500









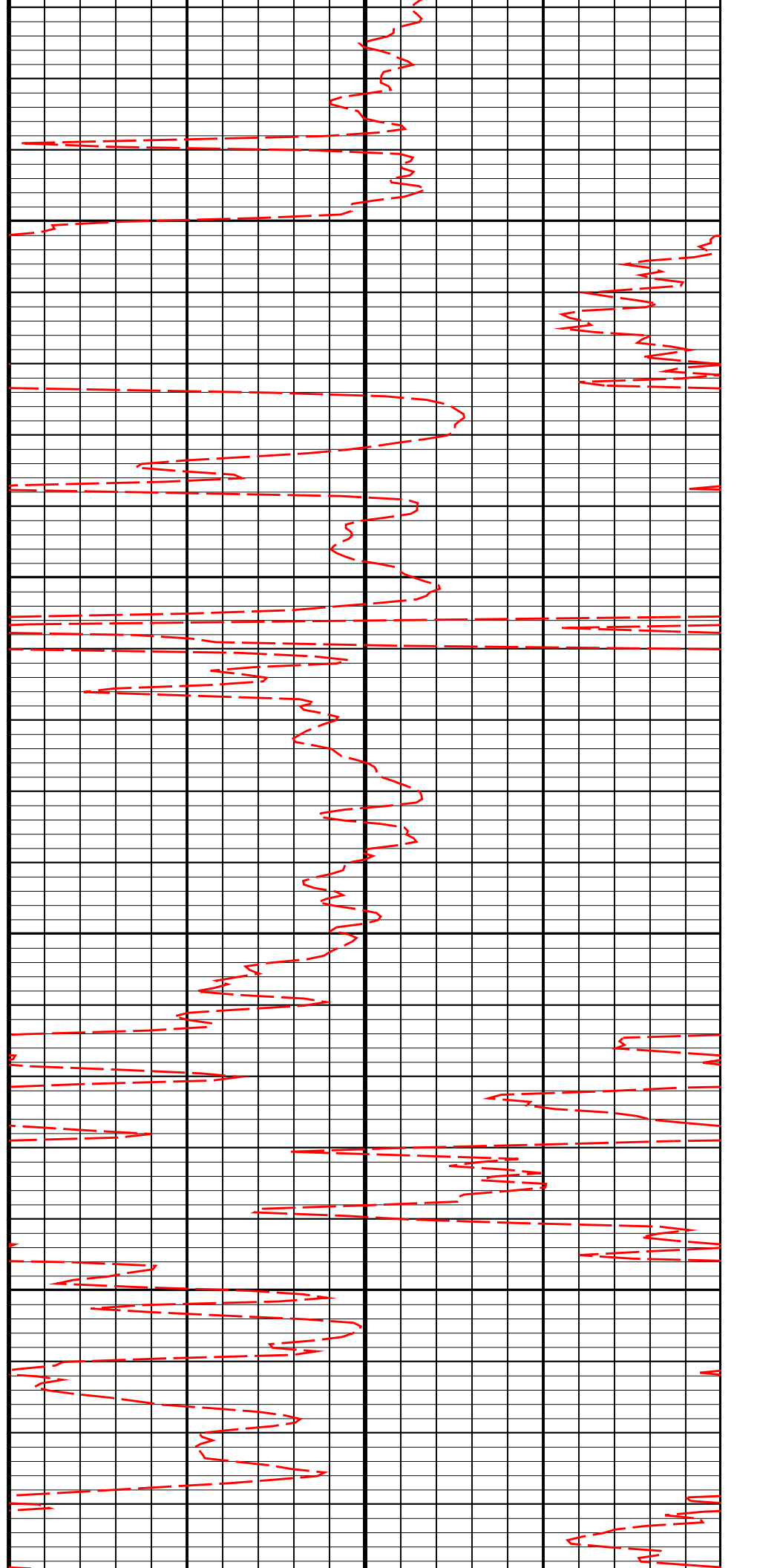
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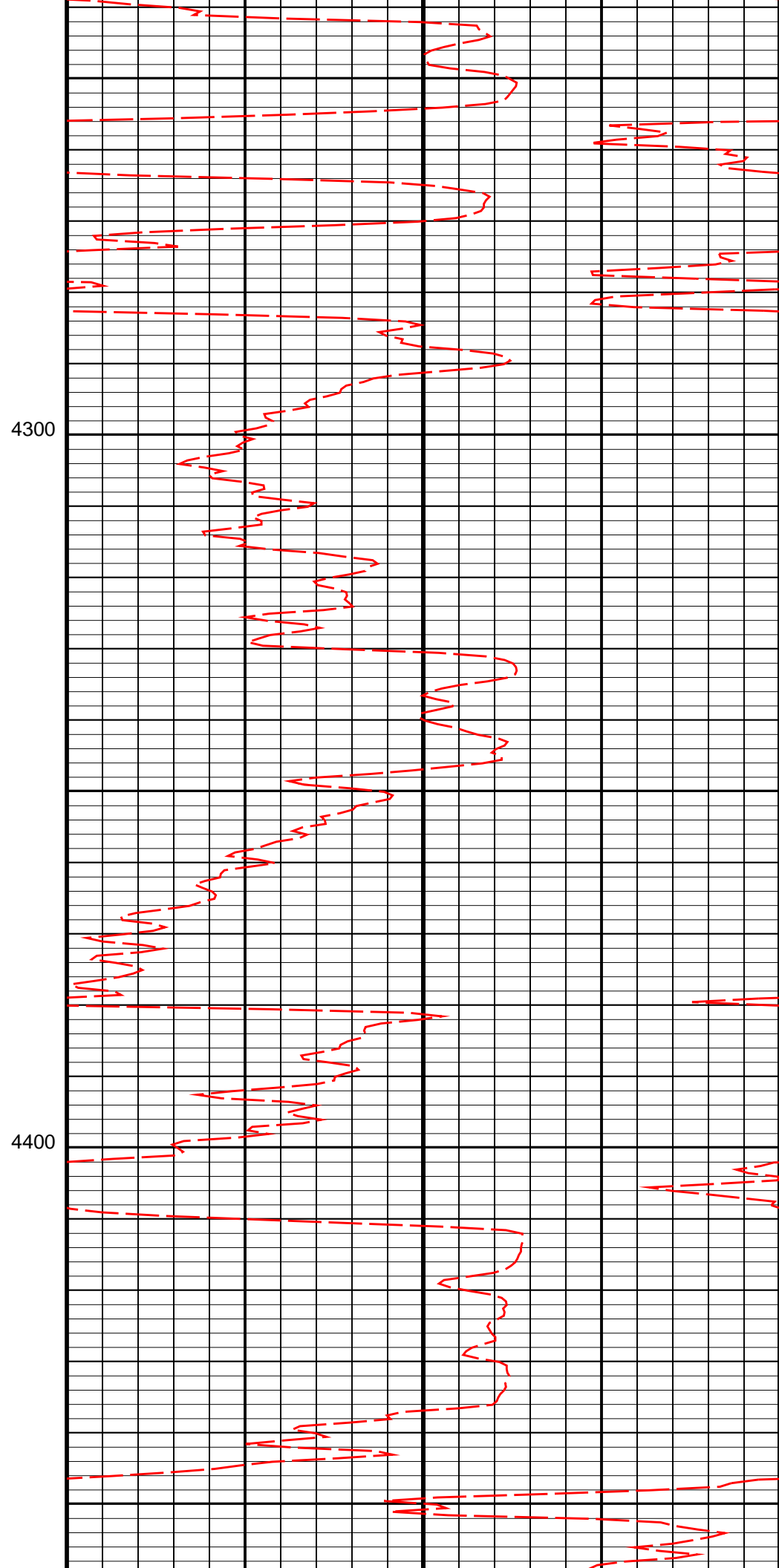
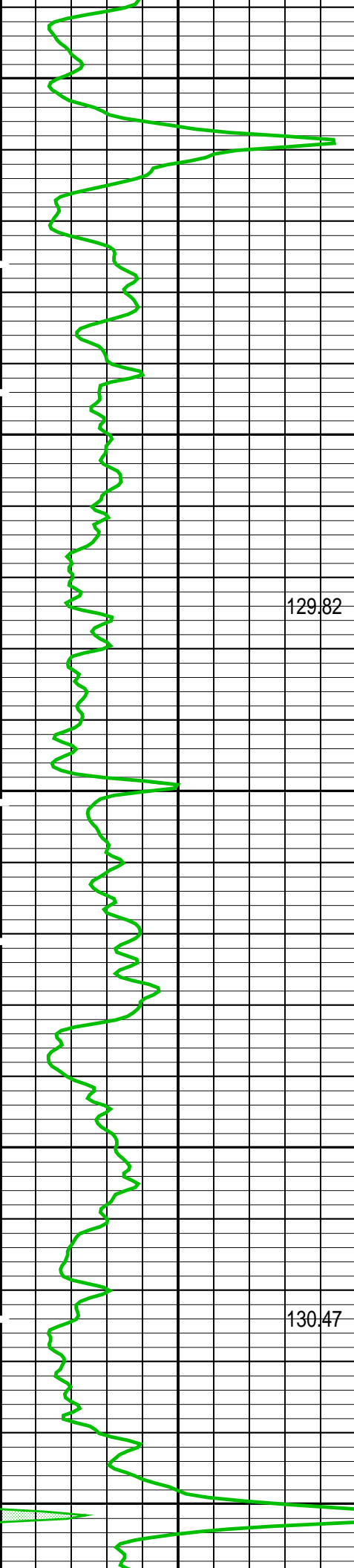
4100

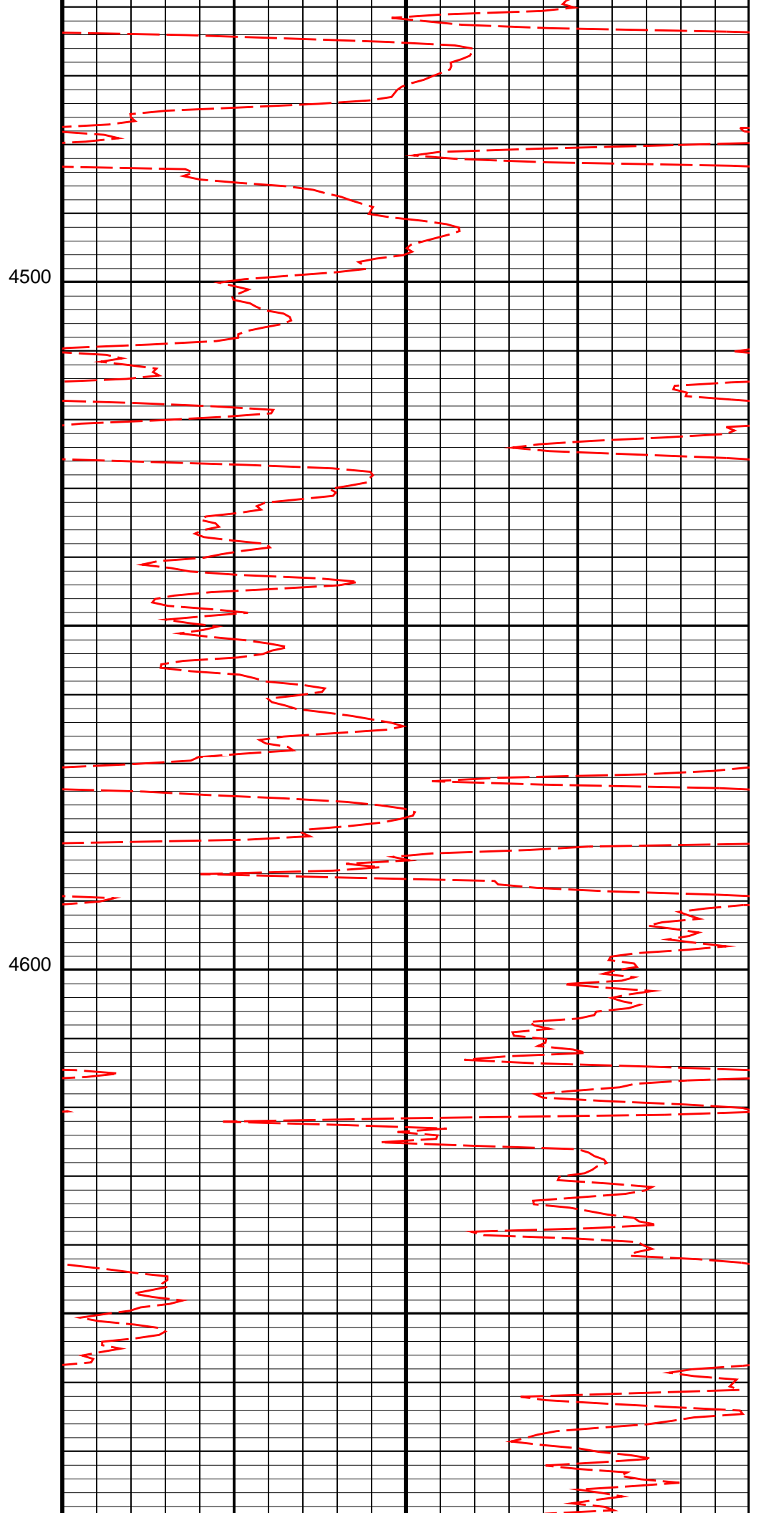
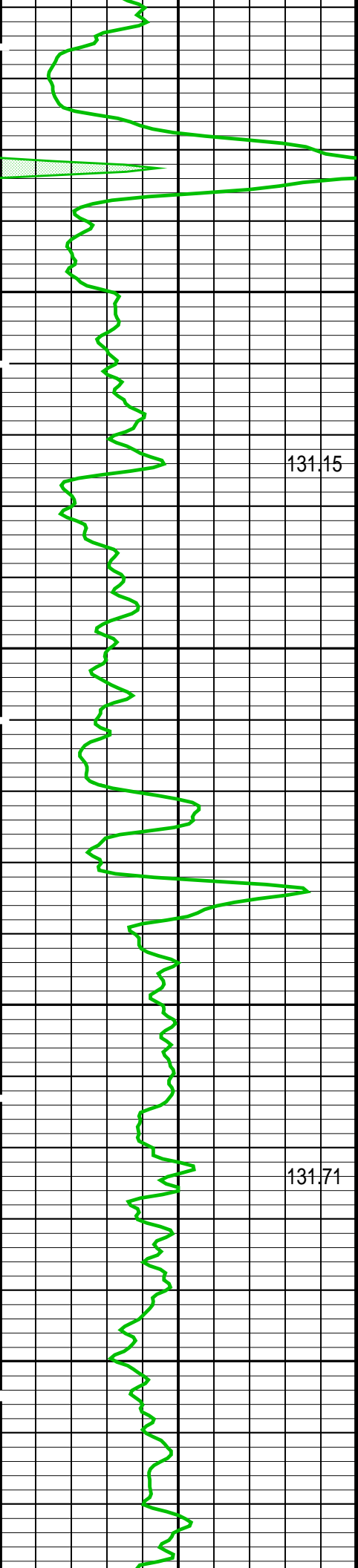
128.56

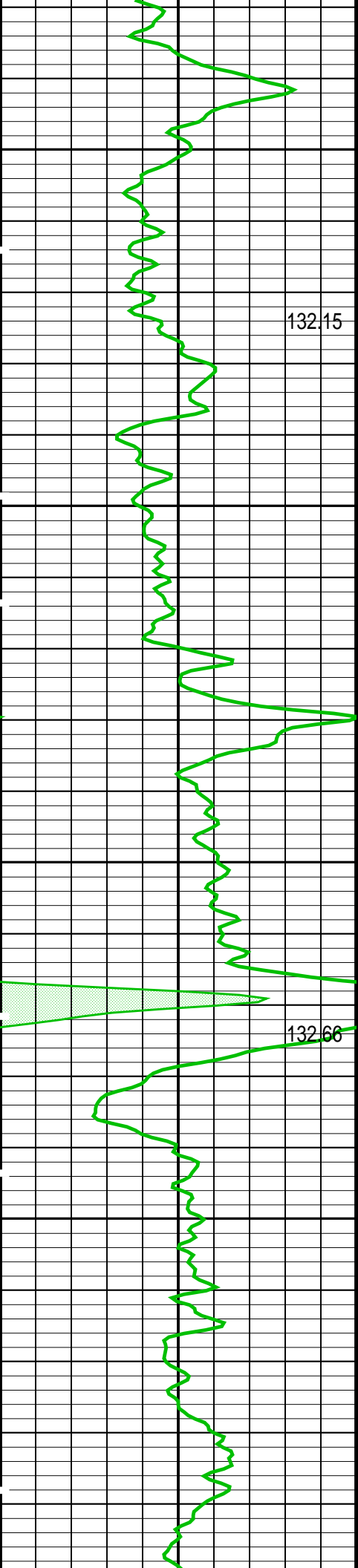
4200

129.29









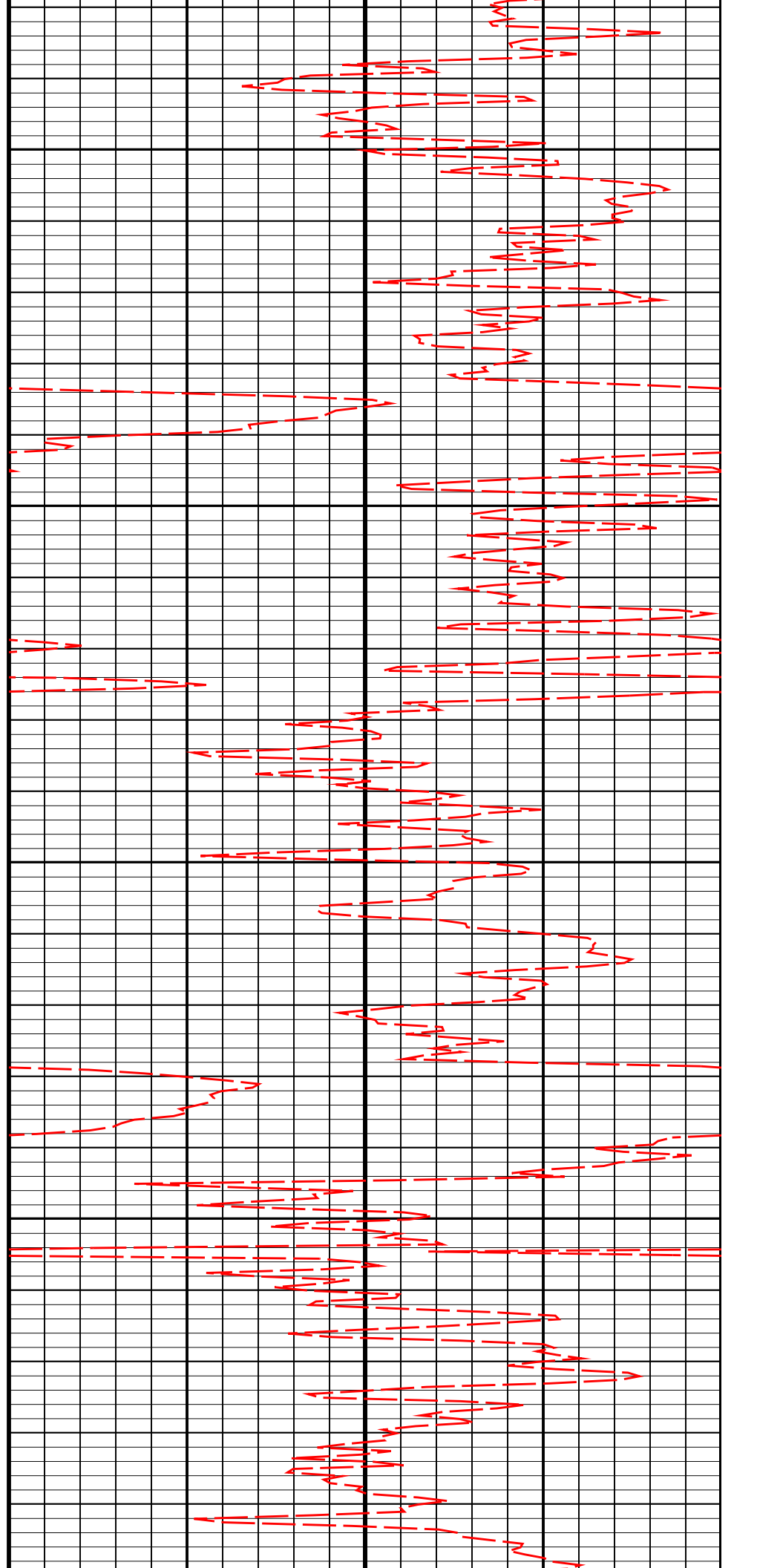
4700

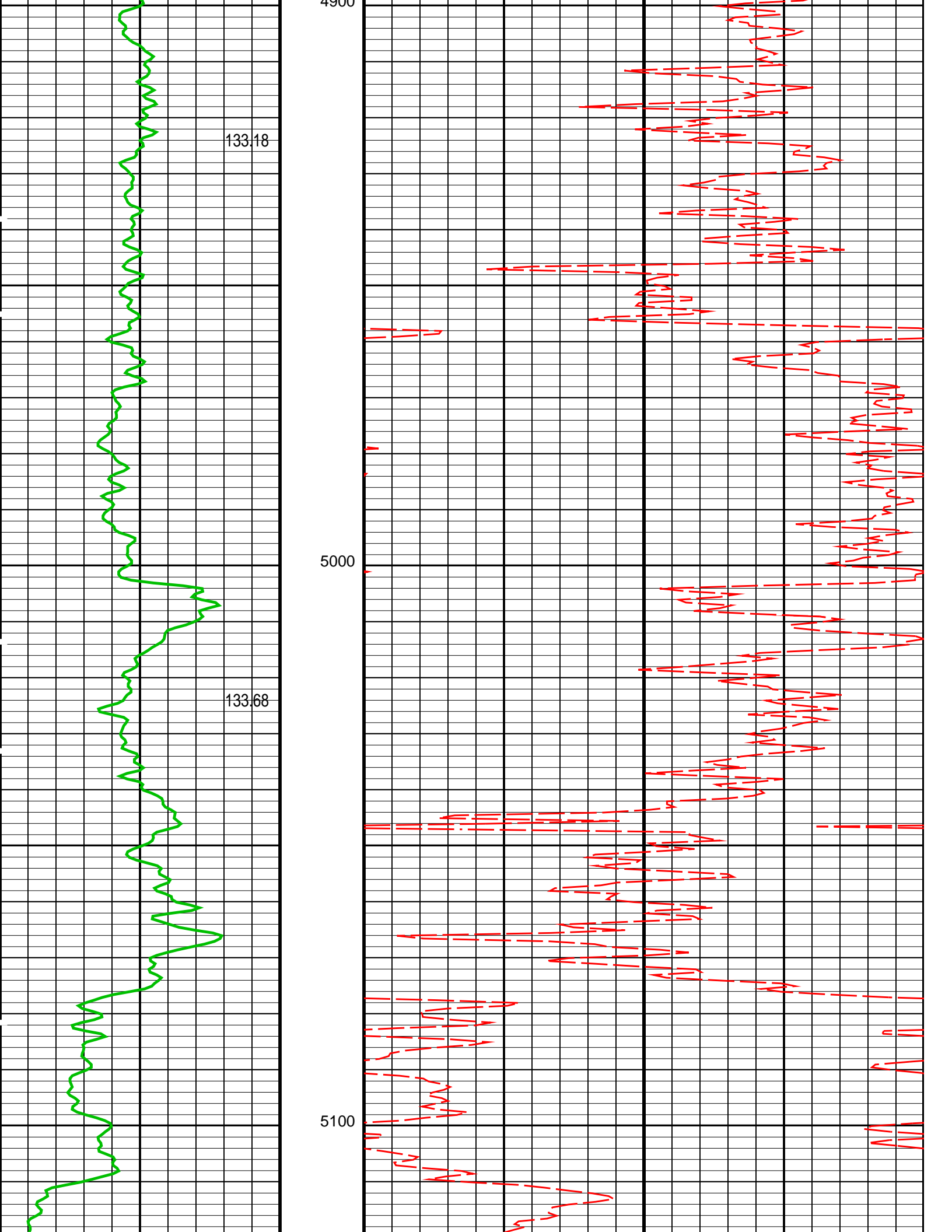
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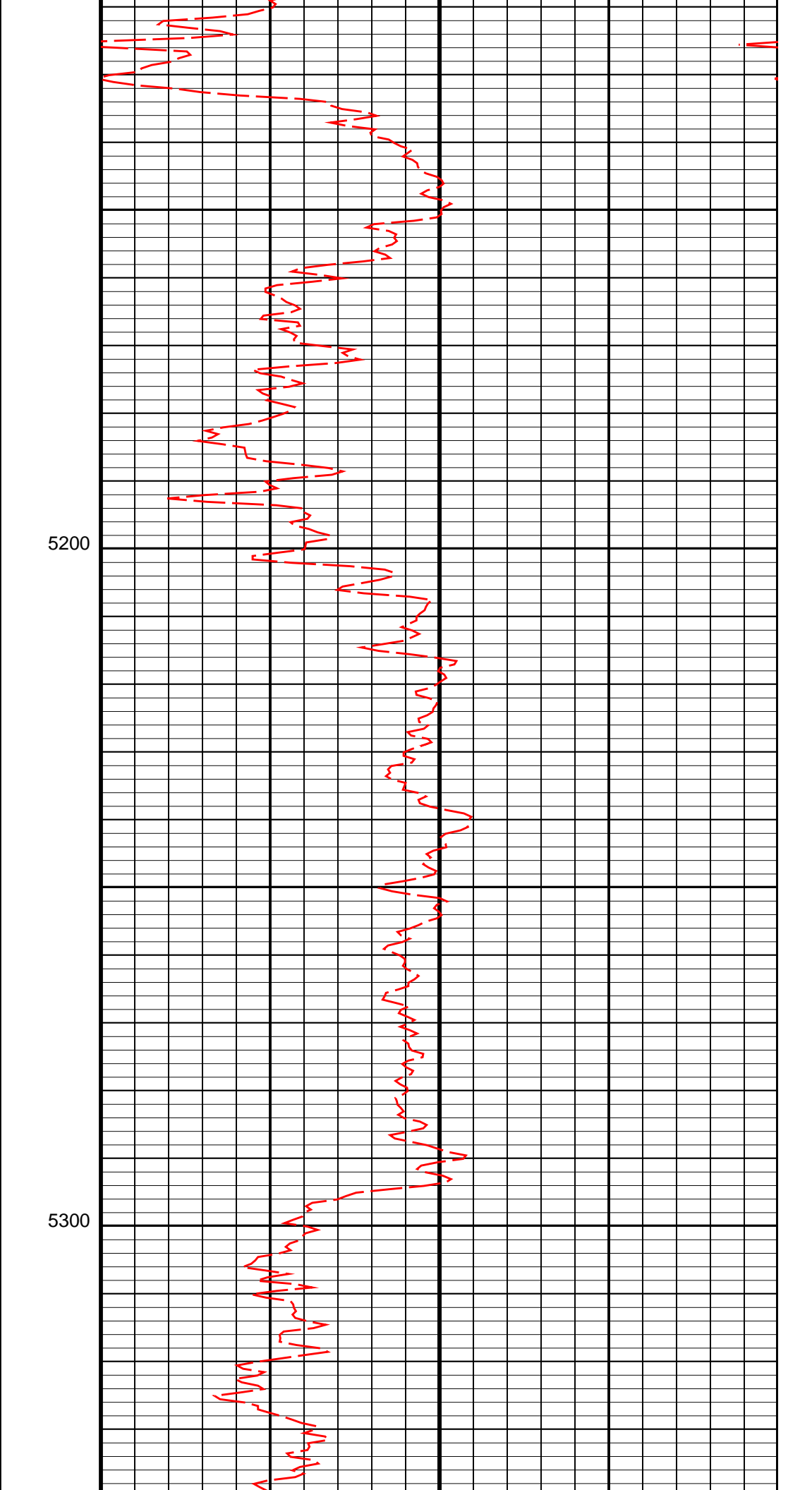
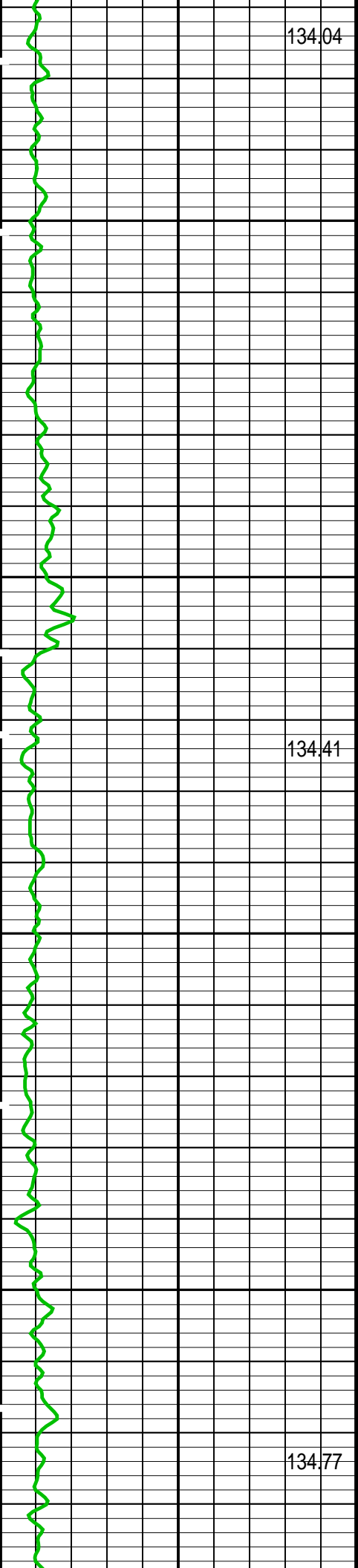
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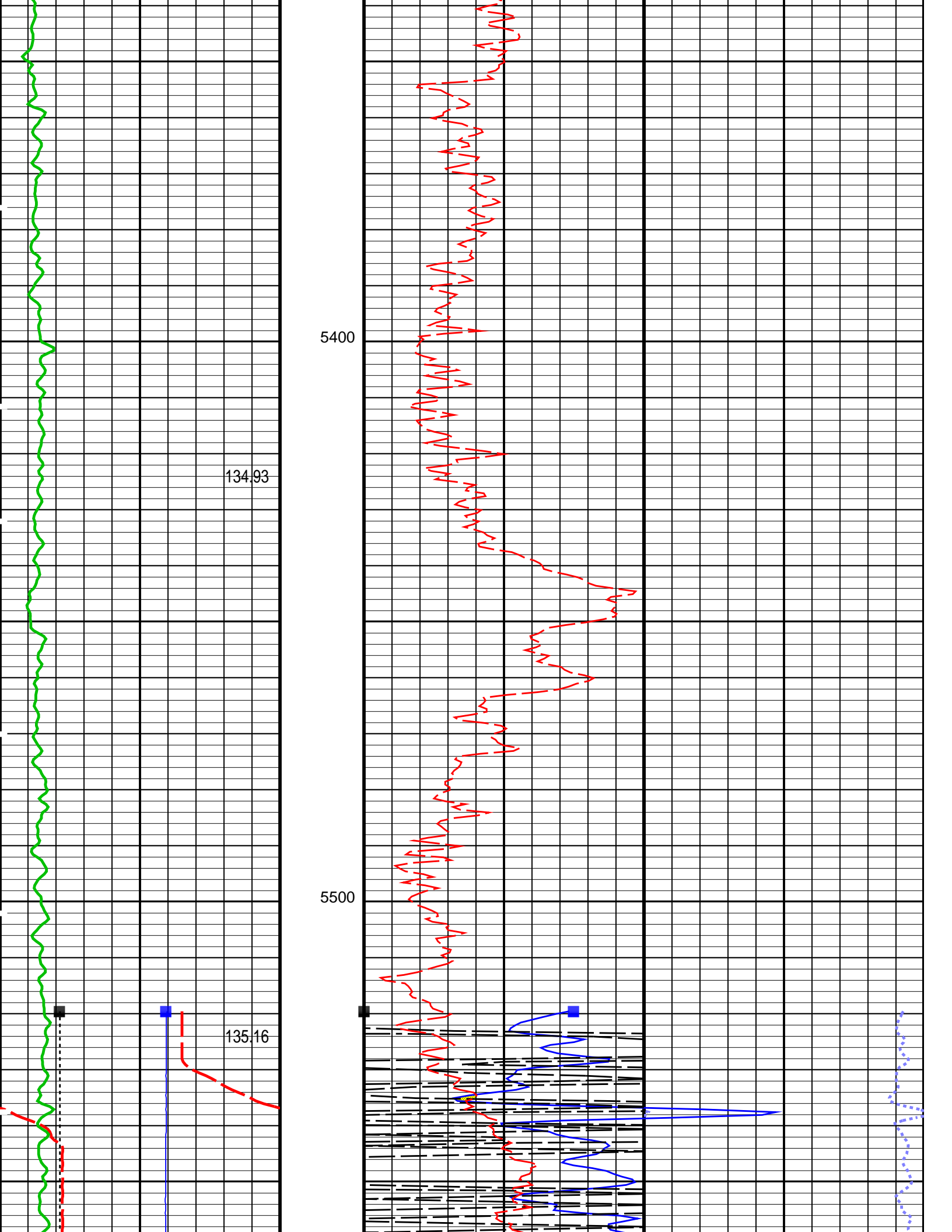
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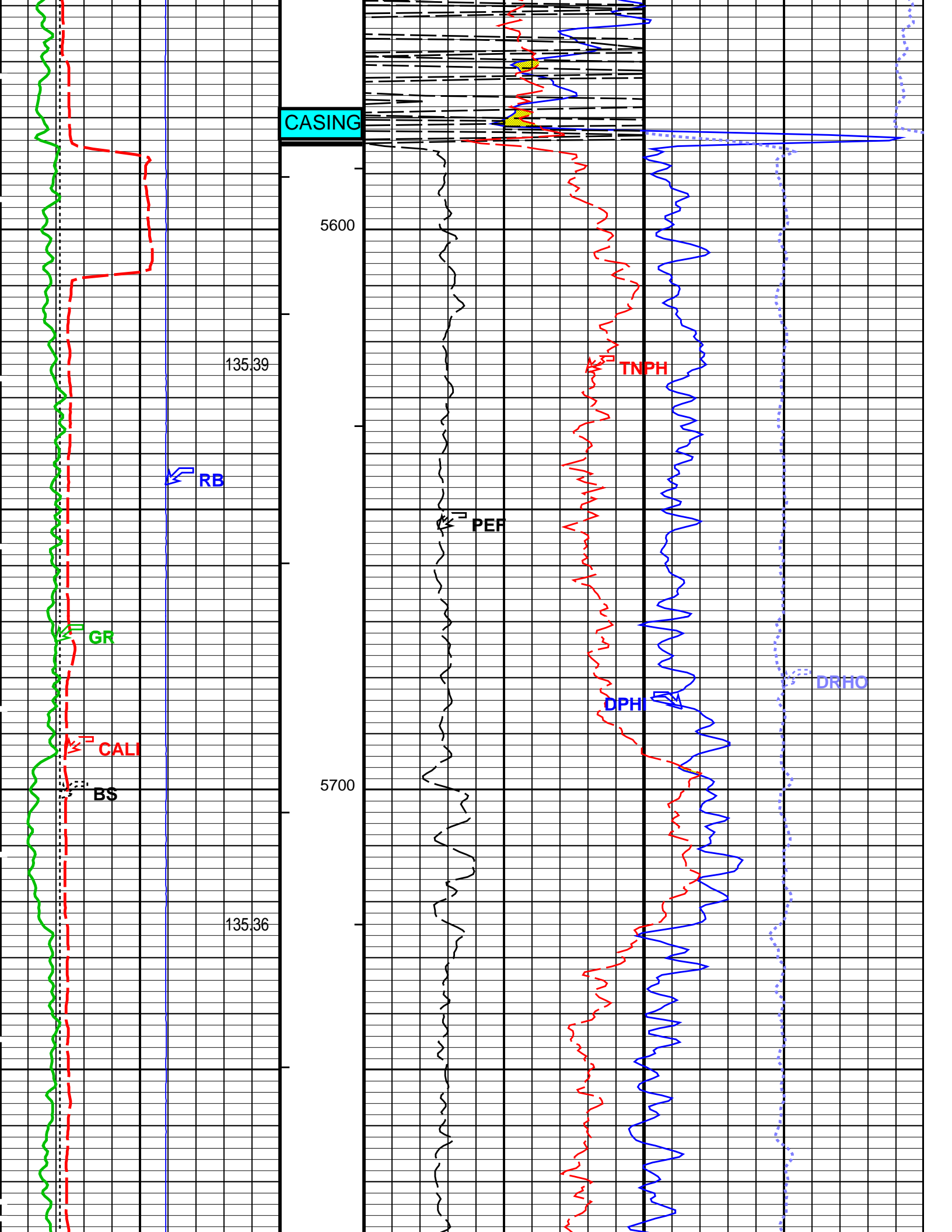
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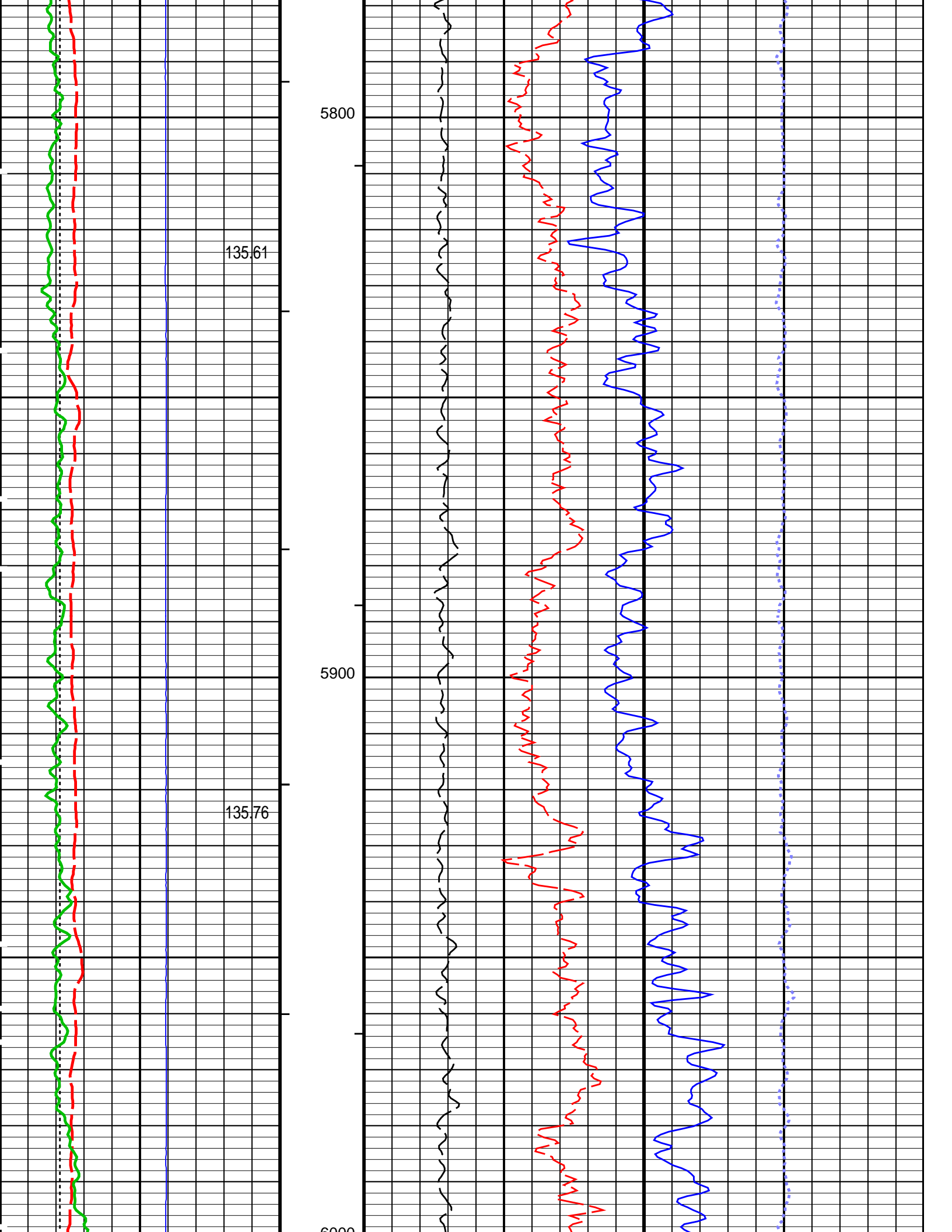


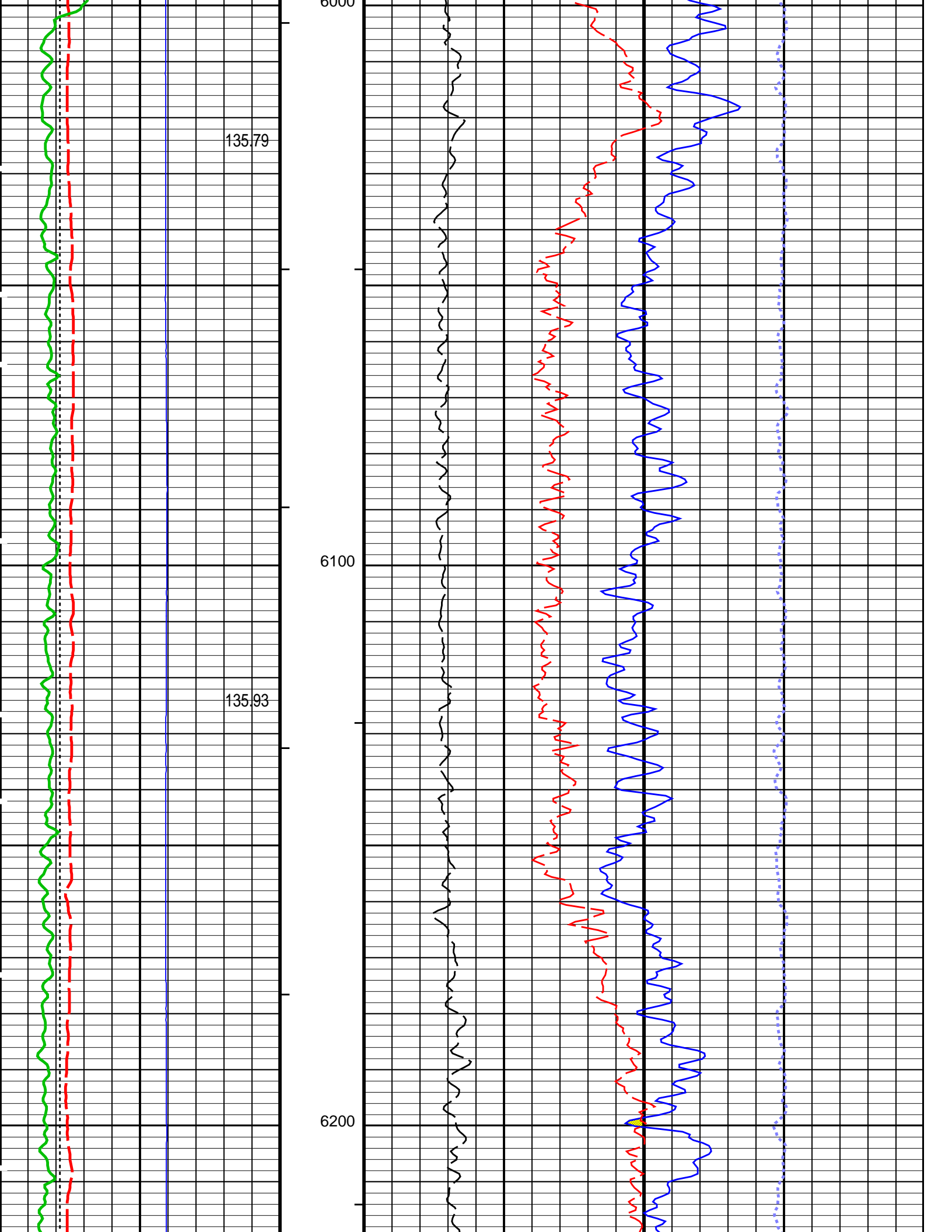


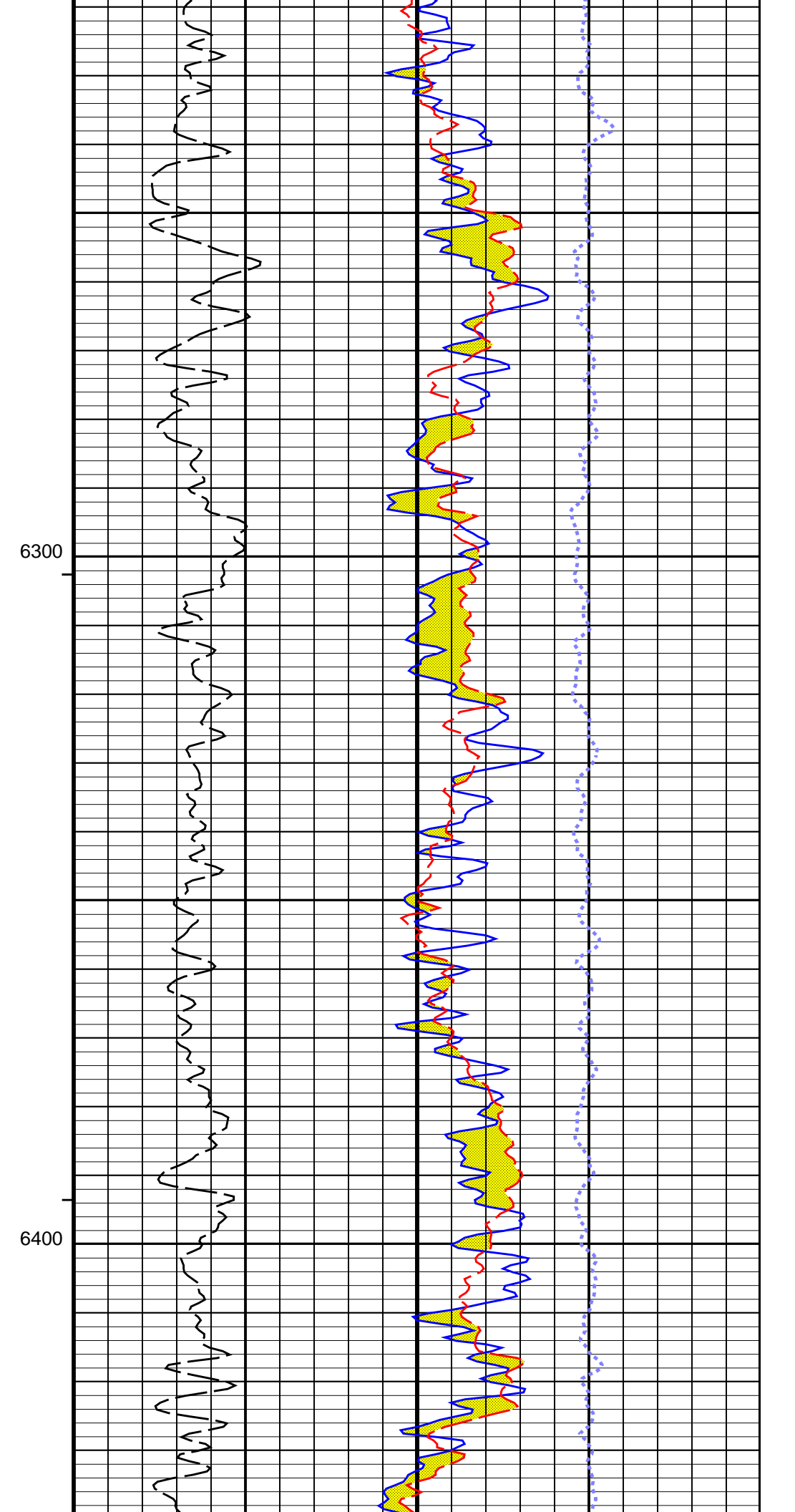
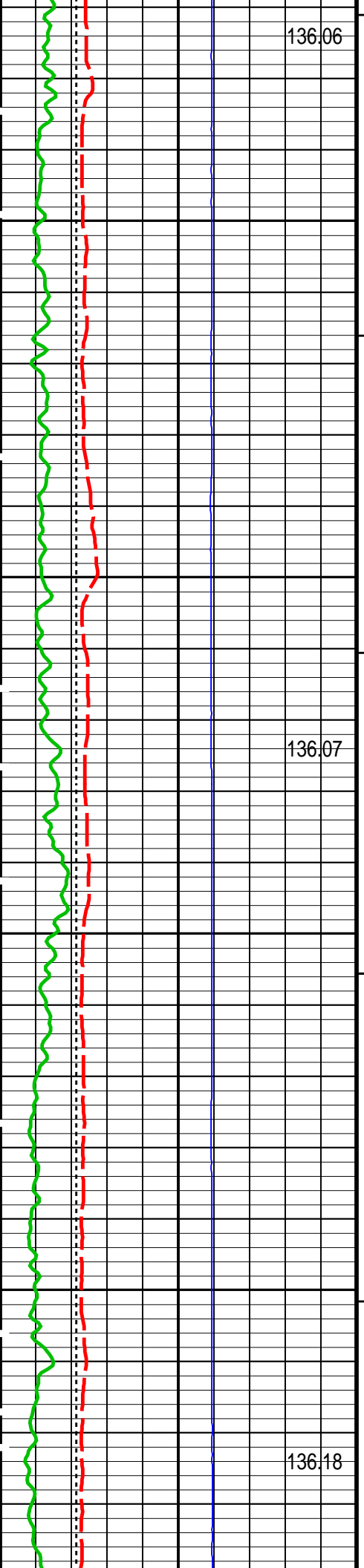


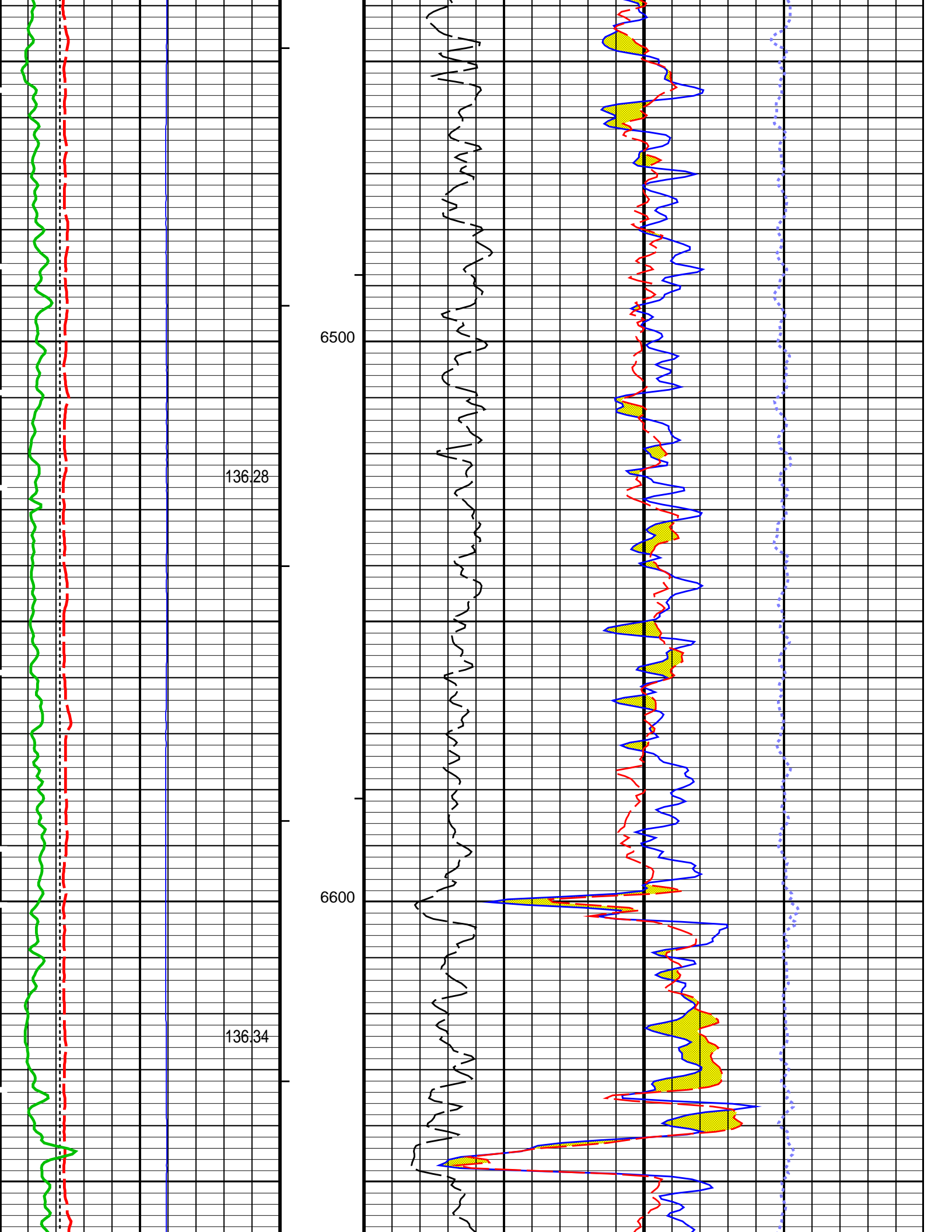


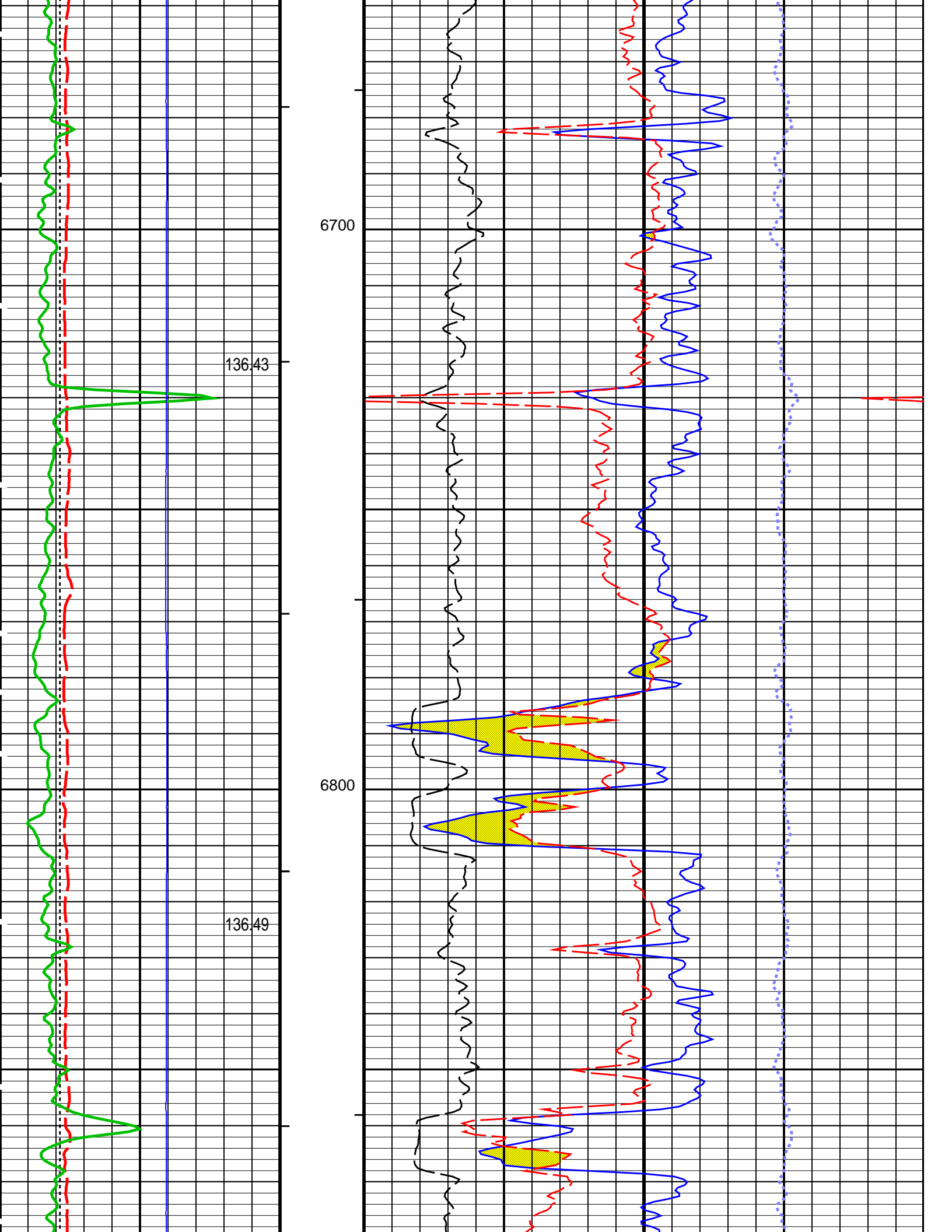


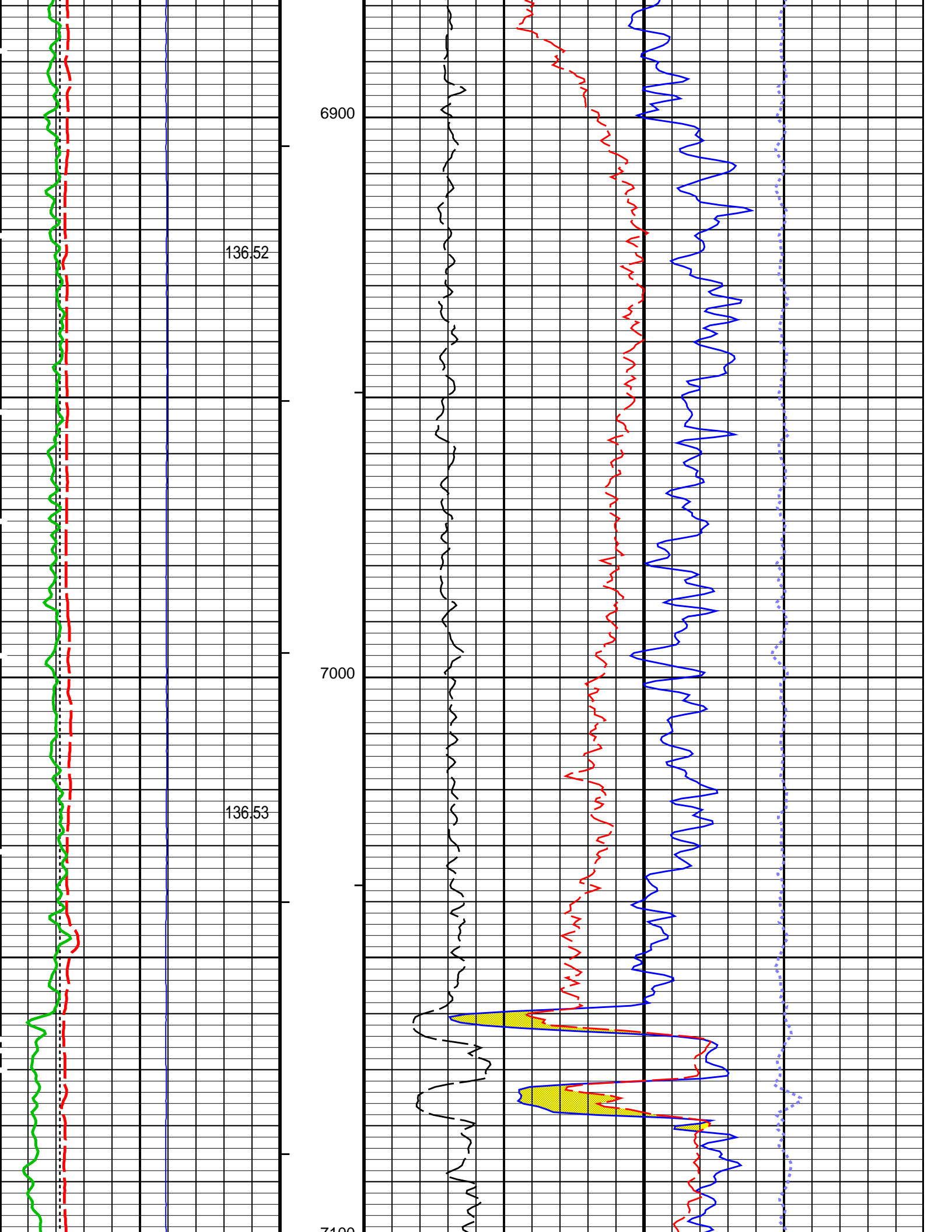


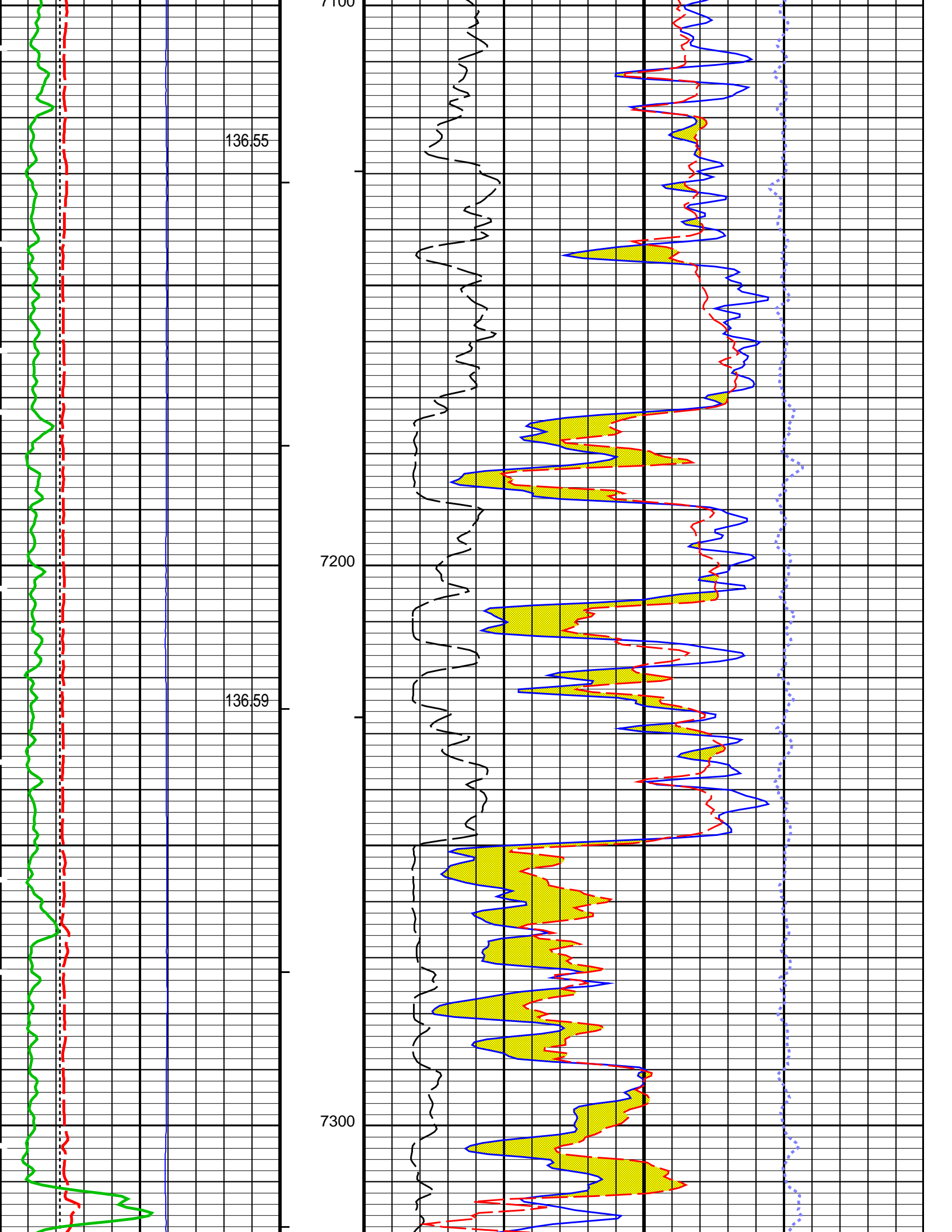


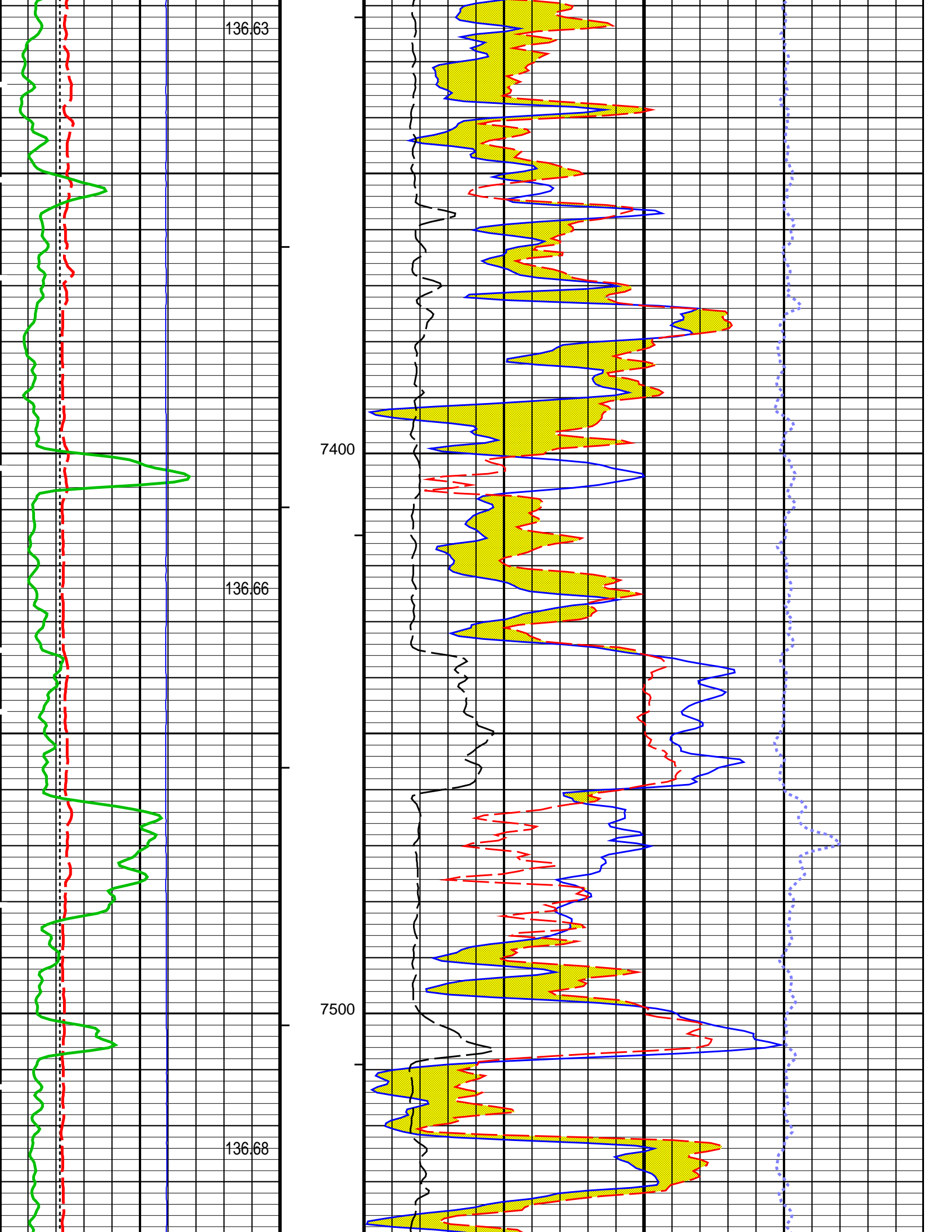


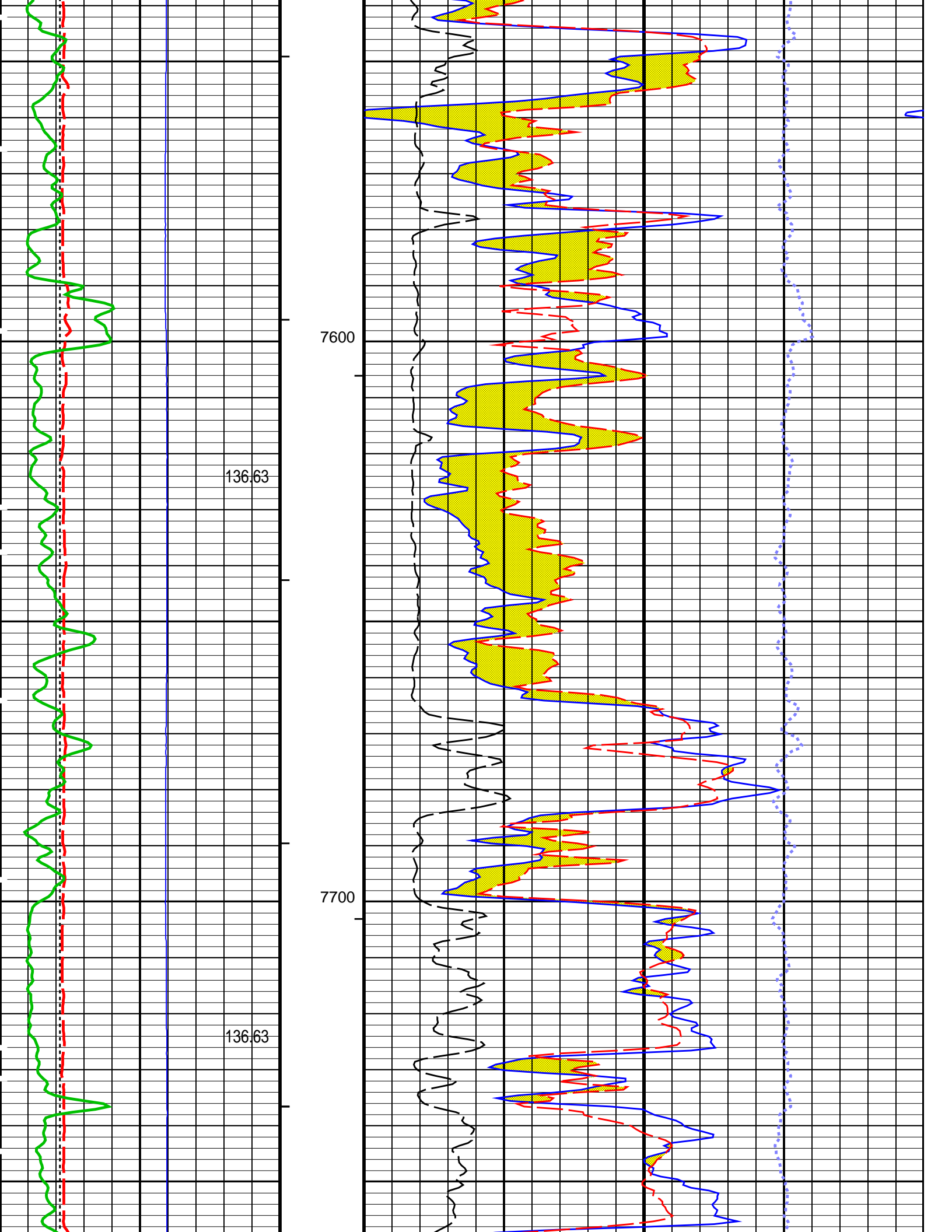


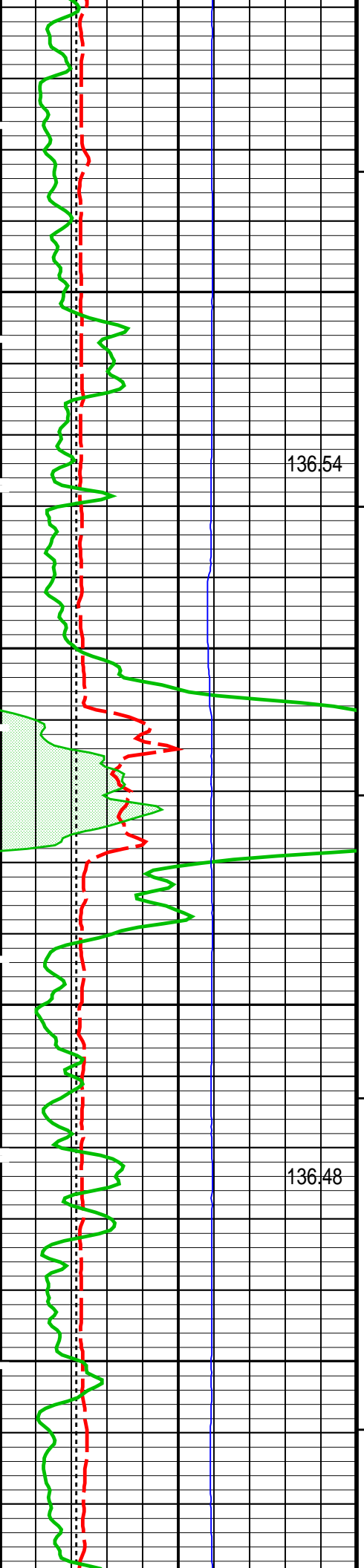










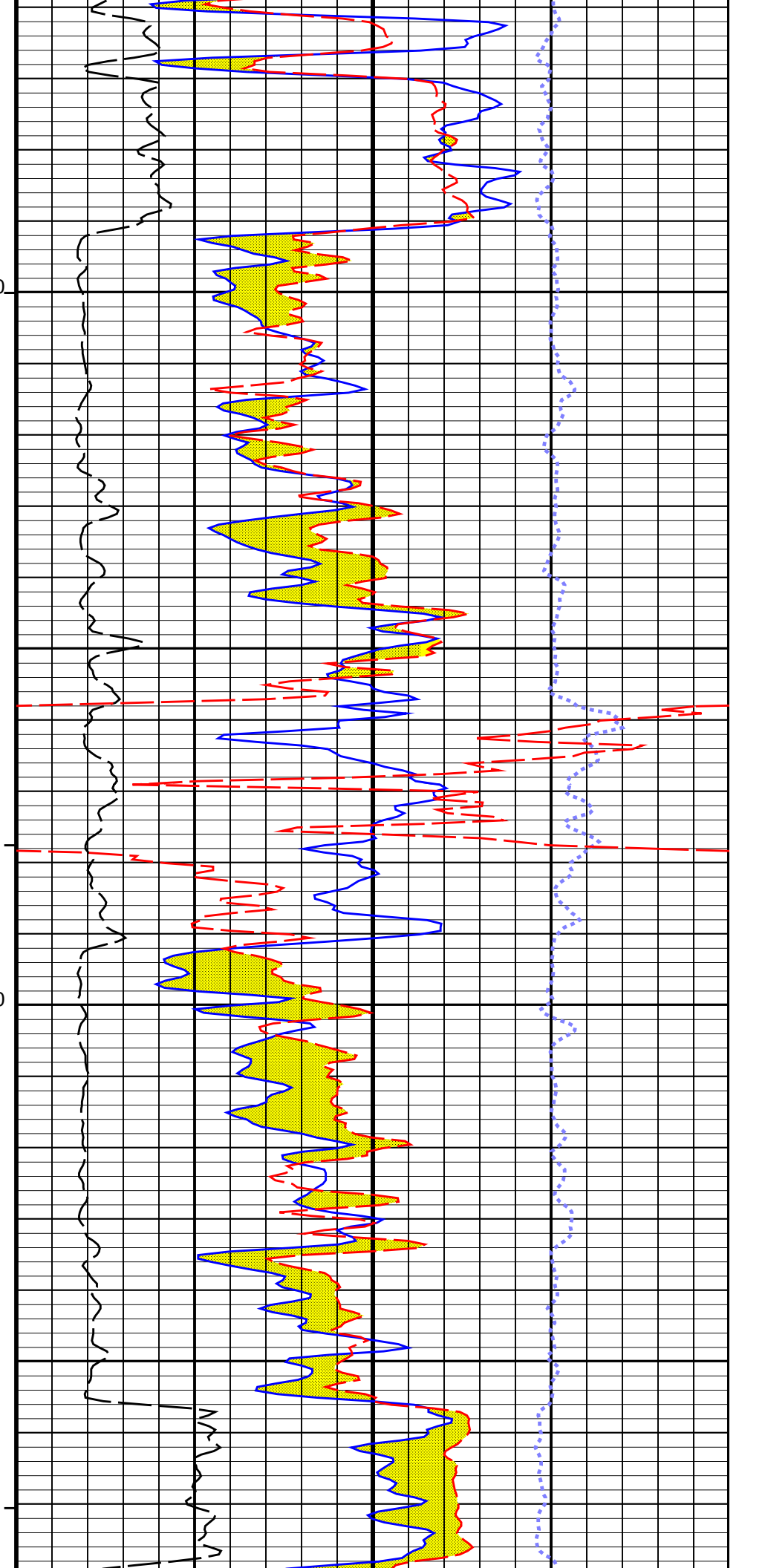


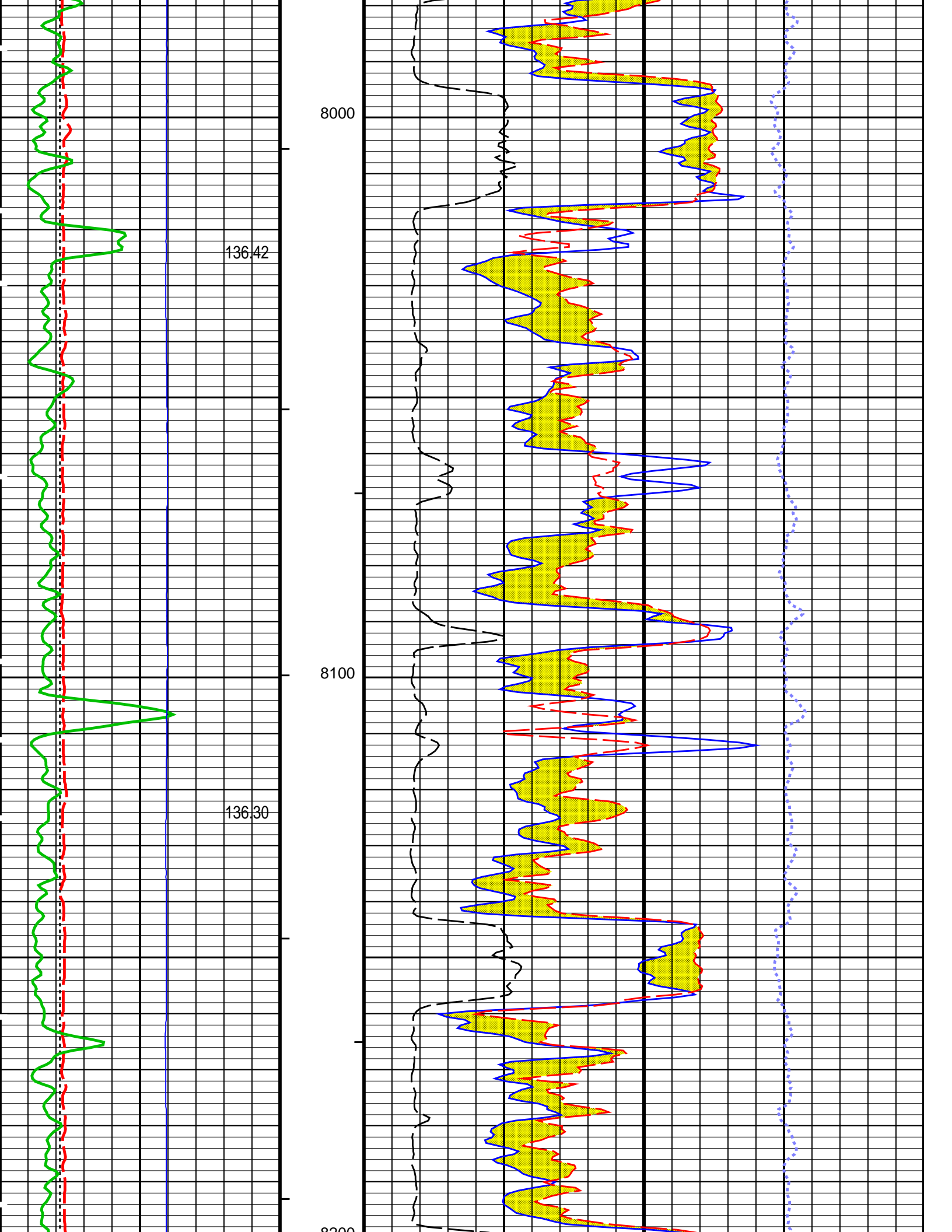
136,54

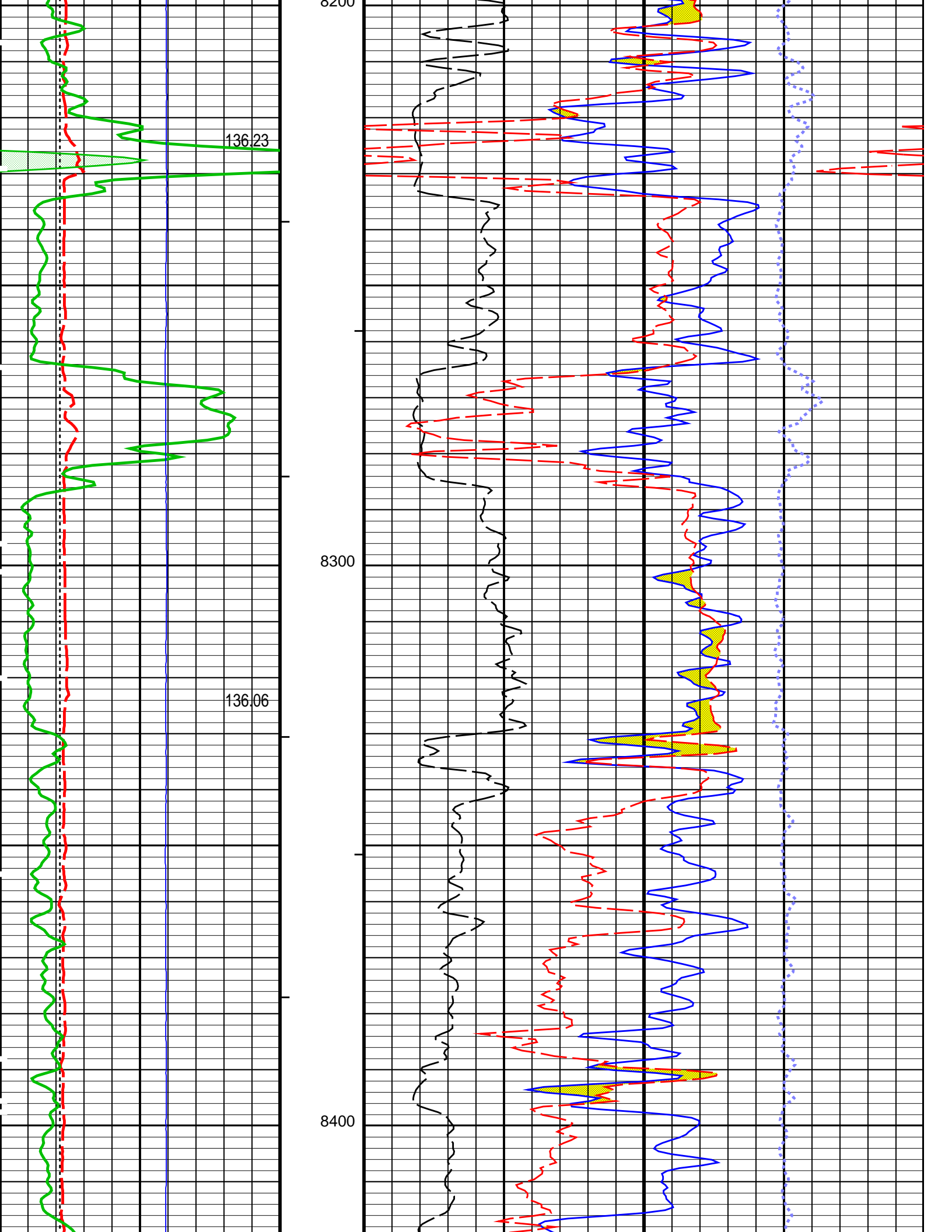
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7800

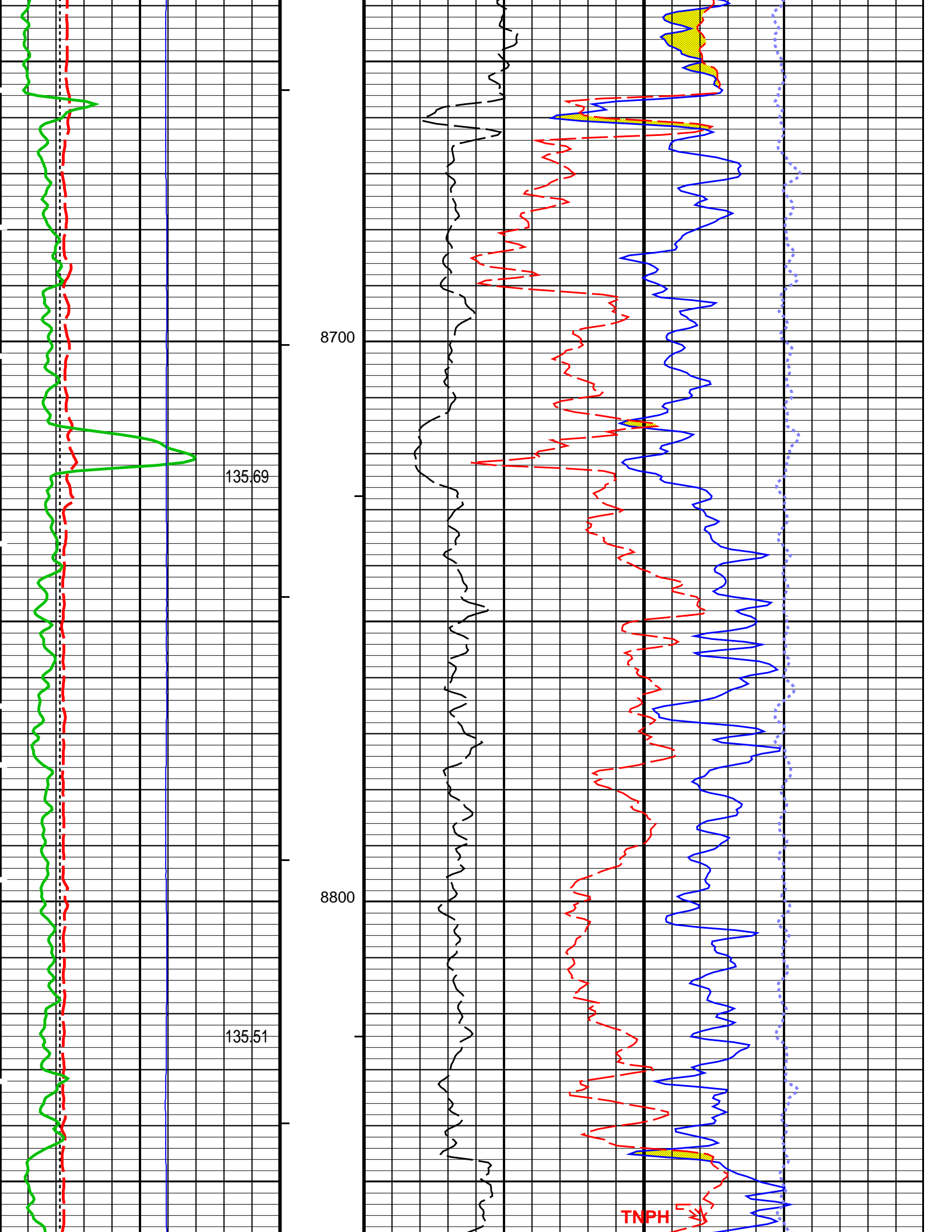
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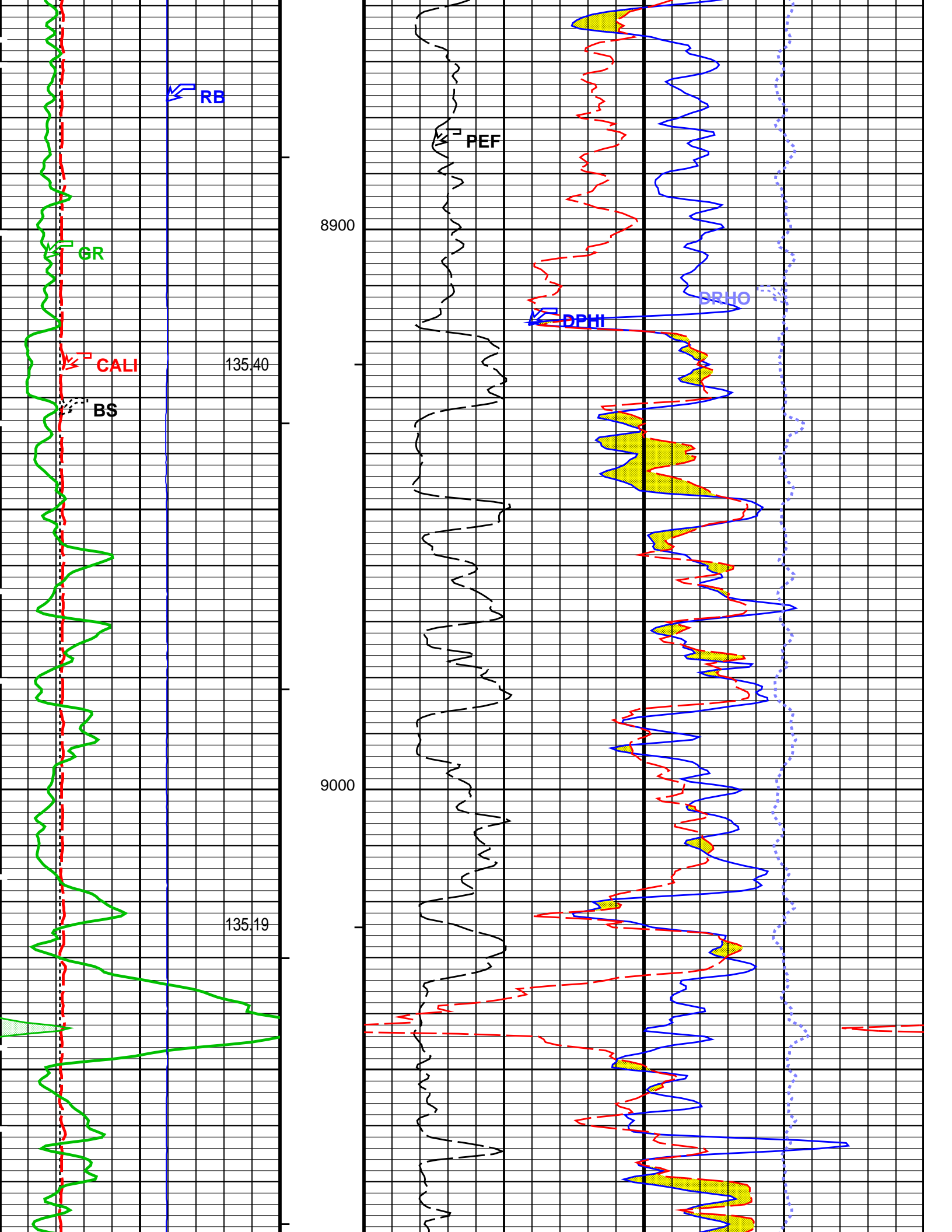


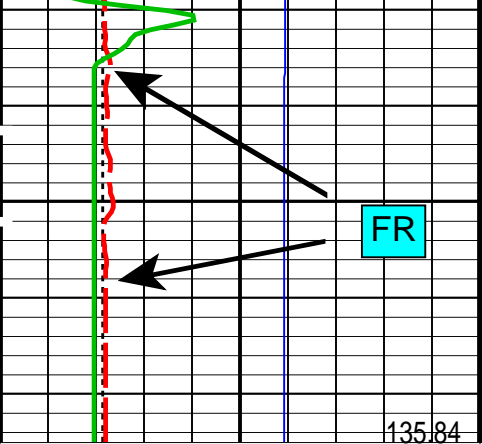




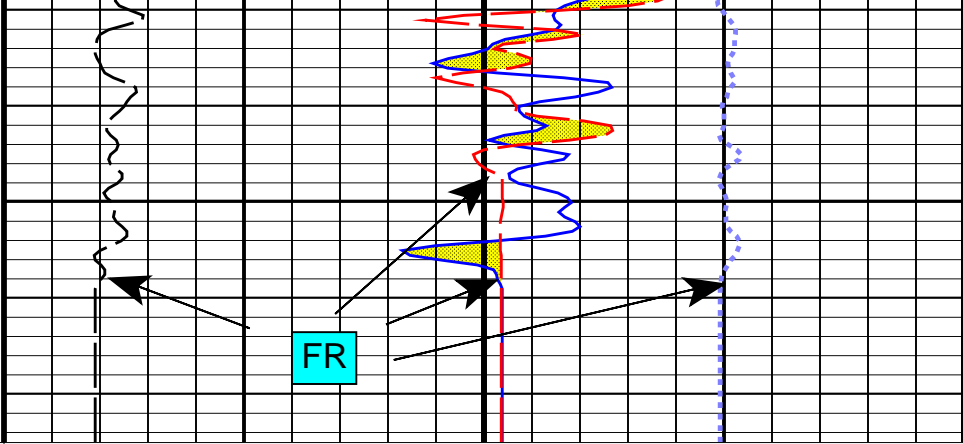








9100



GR Temp (WTEP) (DEGF)		
Bit Size (BS) (IN) 4 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
Caliper (CALI) (IN) 4 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		
Relative Bearing (RB)		940
0		(DEG)

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

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

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
TBT-A: ThruBit String		
BHS	Borehole Status	OPEN
CSAL	Cement Salinity	0 PPM
CSID	Casing Size I.D.	6.5 IN
DHC	Density Hole Correction	CALIPER

DIC	Density Hole Correction	CALIB ER	1	G/C3
FD	Fluid Density		0	PPM
FSAL	Formation Salinity		No	
FSCO	Formation Salinity Correction Enabled? (for TBN)		No	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE		
MDEN	Matrix Density		2.71	G/C3
MT	Mud Type (for TBN and TBI correction)	WBM		
MWCO	Mud-Weight Correction Enabled? (for TBN)		No	
RB_OFFSET	Additional RB offset (degrees)		0	DEG
SOCO	Stand-Off Correction Enabled? (for TBN)		No	
SOFF	TBN Standoff		0	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	%
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)		0	PSIG
WMUD	Mud Weight		8.4	LB/G
	HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN		
FCD	Future Casing (Outer) Diameter		4.5	IN
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC		
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE		
	System and Miscellaneous			
BS	Bit Size		6.125	IN
BSAL	Borehole Salinity		9000.00	PPM
CSIZ	Current Casing Size		7.000	IN
DO	Depth Offset for Playback		0.0	FT
PP	Playback Processing	NORMAL		
TD	Total Depth		9126	FT

Format: TB_5INCH_NUCLEAR Vertical Scale: 5" per 100' Graphics File Created: 19-May-2014 05:54

OP System Version: 19C2-270

TBT-A SRPC-5298-ThruBit_b

Input DLIS Files

DEFAULT	ThruBit_011PUP	FN:10	PRODUCER	19-May-2014 05:37	9125.2 FT	2910.2 FT
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Output DLIS Files

DEFAULT	ThruBit_014PUP	FN:13	PRODUCER	19-May-2014 05:54		
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CALIBRATIONS

MAXIS Field Log

ThruBit String / Equipment Identification

Primary Equipment:		
Induction Resistivity	TBI - A	16
Density	TBD - A	24
Gamma-Ray Logging Source	GGLS - FZ	3216
Thermal Neutron	TBN - A	6
Neutron Logging Source	NNLS - EWA	4484
Telemetry Memory GR	TMG - A	27
Battery	TBAT -	35
Battery	TBAT -	13
Auxiliary Equipment:		

ThruBit String Master Calibration

TBI Master Calibration Sonde Errors

Freq 1, A1, R		Value	Nominal	Freq 1, A1, X		Value	Nominal
		-475.662	-457.000			-20.0744	300.000
-536.000 (Minimum)	(Nominal)	-387.000 (Maximum)		-500.000 (Minimum)	(Nominal)	1100.00 (Maximum)	
Freq 1, A2, R		Value	Nominal	Freq 1, A2, X		Value	Nominal
		-148.883	-141.000			17.2923	320.000
-162.000 (Minimum)	(Nominal)	-120.000 (Maximum)		-75.0000 (Minimum)	(Nominal)	700.000 (Maximum)	
Freq 1, A3, R		Value	Nominal	Freq 1, A3, X		Value	Nominal
		-30.2273	-28.0000			-45.4175	50.0000
-38.0000 (Minimum)	(Nominal)	-18.0000 (Maximum)		-375.000 (Minimum)	(Nominal)	475.000 (Maximum)	
Freq 1, A4, R		Value	Nominal	Freq 1, A4, X		Value	Nominal
		-16.8583	-16.0000			224.452	300.000
-24.0000 (Minimum)	(Nominal)	-8.00000 (Maximum)		25.0000 (Minimum)	(Nominal)	575.000 (Maximum)	
Freq 1, A5, R		Value	Nominal	Freq 1, A5, X		Value	Nominal
		-14.8593	-14.0000			109.636	150.000
-21.0000 (Minimum)	(Nominal)	-7.00000 (Maximum)		25.0000 (Minimum)	(Nominal)	275.000 (Maximum)	
Freq 2, A1, R		Value	Nominal	Freq 2, A1, X		Value	Nominal
		-246.838	-237.000			-47.1666	150.000
-293.000 (Minimum)	(Nominal)	-186.000 (Maximum)		-375.000 (Minimum)	(Nominal)	675.000 (Maximum)	
Freq 2, A2, R		Value	Nominal	Freq 2, A2, X		Value	Nominal
		-96.6990	-92.0000			-16.8976	160.000
-106.000 (Minimum)	(Nominal)	-76.0000 (Maximum)		-100.000 (Minimum)	(Nominal)	425.000 (Maximum)	
Freq 2, A3, R		Value	Nominal	Freq 2, A3, X		Value	Nominal
		-21.8469	-21.0000			-82.2379	-20.0000
-28.0000 (Minimum)	(Nominal)	-13.0000 (Maximum)		-325.000 (Minimum)	(Nominal)	250.000 (Maximum)	
Freq 2, A4, R		Value	Nominal	Freq 2, A4, X		Value	Nominal
		-19.8901	-20.0000			57.4657	100.000
-28.0000 (Minimum)	(Nominal)	-10.0000 (Maximum)		-75.0000 (Minimum)	(Nominal)	275.000 (Maximum)	
Freq 2, A5, R		Value	Nominal	Freq 2, A5, X		Value	Nominal
		-19.6387	-20.0000			-27.9072	-25.0000
-27.0000 (Minimum)	(Nominal)	-10.0000 (Maximum)		-125.000 (Minimum)	(Nominal)	75.0000 (Maximum)	
Freq 3, A1, R		Value	Nominal	Freq 3, A1, X		Value	Nominal
		-156.728	-149.000			-106.926	25.0000
-193.000 (Minimum)	(Nominal)	-108.000 (Maximum)		-375.000 (Minimum)	(Nominal)	425.000 (Maximum)	
Freq 3, A2, R		Value	Nominal	Freq 3, A2, X		Value	Nominal
		-73.8182	-70.0000			-53.9371	70.0000
-81.0000 (Minimum)	(Nominal)	-57.0000 (Maximum)		-125.000 (Minimum)	(Nominal)	250.000 (Maximum)	
Freq 3, A3, R		Value	Nominal	Freq 3, A3, X		Value	Nominal
		-17.9160	-17.0000			-119.884	-90.0000
-23.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)		-300.000 (Minimum)	(Nominal)	125.000 (Maximum)	
Freq 3, A4, R		Value	Nominal	Freq 3, A4, X		Value	Nominal
		-21.5775	-22.0000			-55.4654	-50.0000
-31.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)		-200.000 (Minimum)	(Nominal)	100.000 (Maximum)	
Freq 3, A5, R		Value	Nominal	Freq 3, A5, X		Value	Nominal
		-22.3506	-22.0000			-130.465	-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
		-86.0029	-80.0000			-232.020	-190.000

-108.000 (Minimum)	(Nominal)	-54.0000 (Maximum)		-450.000 (Minimum)	(Nominal)	75.0000 (Maximum)	
Freq 4, A2, R			Value	Nominal	Freq 4, A2, X		
			-53.0604	-50.0000			
-60.0000 (Minimum)	(Nominal)	-41.0000 (Maximum)		-200.000 (Minimum)	(Nominal)	50.0000 (Maximum)	
Freq 4, A3, R			Value	Nominal	Freq 4, A3, X		
			-14.2016	-14.0000			
-19.0000 (Minimum)	(Nominal)	-8.00000 (Maximum)		-350.000 (Minimum)	(Nominal)	-25.0000 (Maximum)	
Freq 4, A4, R			Value	Nominal	Freq 4, A4, X		
			-24.7660	-25.0000			
-37.0000 (Minimum)	(Nominal)	-11.0000 (Maximum)		-400.000 (Minimum)	(Nominal)	-75.0000 (Maximum)	
Freq 4, A5, R			Value	Nominal	Freq 4, A5, X		
			-28.0152	-28.0000			
-43.0000 (Minimum)	(Nominal)	-12.0000 (Maximum)		-475.000 (Minimum)	(Nominal)	-125.000 (Maximum)	
Master: 11-Mar-2014 11:48							

ThruBit String Master Calibration							
TBI Master Calibration COMPLEX GAINS							
Freq 1, R			Value	Nominal	Freq 1, X		
			0.9931	1.000			
			0.9901	1.000			
			0.9938	1.000			
			0.9947	1.000			
			0.9990	1.000			
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)			-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)
Freq 2, R			Value	Nominal	Freq 2, X		
			0.9886	1.000			
			0.9847	1.000			
			0.9828	1.000			
			0.9903	1.000			
			0.9954	1.000			
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)			-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)
Freq 3, R			Value	Nominal	Freq 3, X		
			0.9894	1.000			
			0.9858	1.000			
			0.9836	1.000			
			0.9902	1.000			
			0.9972	1.000			
0.9500 (Minimum)	(Nominal)	1.050 (Maximum)			-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)
Freq 4, R			Value	Nominal	Freq 4, X		
			0.9918	1.000			
			0.9876	1.000			
			0.9875	1.000			
			0.9922	1.000			
			1.006	1.000			
0.9300 (Minimum)	(Nominal)	1.070 (Maximum)			-0.05000 (Minimum)	(Nominal)	0.05000 (Maximum)
Master: 11-Mar-2014 11:48							

TBD Caliper Master Calibration

Caliper 12in Ring IN		Value	Nominal	Caliper 9in Ring IN		Value	Nominal	Caliper 6in Ring IN		Value	Nominal
		1918.4	1949.8			2046.2	2096.7			2176.2	2285.7
1799.8 (Minimum)	2099.8 (Maximum)			1946.7 (Minimum)	2246.7 (Maximum)			2135.7 (Minimum)	2435.7 (Maximum)		

Master: 9-May-2014 11:01

ThruBit String Master Calibration					
TBD Density Master Calibration. PEEK Window, ThruBit blocks					
Aluminium Density G/C3		Value	Nominal	Magnesium Density G/C3	
		2.607	2.607		
2.557 (Minimum)	2.657 (Maximum)			1.702 (Minimum)	1.802 (Maximum)
LS1 Background CPS		Value	Nominal	SS1 Background CPS	
		144.74	140.00		
100.00 (Minimum)	187.00 (Maximum)			100.00 (Minimum)	185.00 (Maximum)
LS4 Background CPS		Value	Nominal	SS1 Aluminium CPS	
		29.27	29.00		
20.00 (Minimum)	38.00 (Maximum)			4076.00 (Minimum)	5613.00 (Maximum)
LS1 Aluminium CPS		Value	Nominal	SS1 Magnesium CPS	
		915.65	870.00		
750.00 (Minimum)	982.00 (Maximum)			6695.00 (Minimum)	9269.00 (Maximum)
LS4 Aluminium CPS		Value	Nominal		
		969.92	955.00		
796.00 (Minimum)	1169.0 (Maximum)				
LS1 Al + Sleeve CPS		Value	Nominal		
		821.92	725.00		
650.00 (Minimum)	838.00 (Maximum)				
LS4 Al + Sleeve CPS		Value	Nominal		
		460.44	426.50		
382.00 (Minimum)	638.00 (Maximum)				
LS1 Magnesium CPS		Value	Nominal		
		5880.64	5800.00		
5158.00 (Minimum)	6486.00 (Maximum)				
SS Slope		Value	Nominal		
		1.678	1.645		
1.520 (Minimum)	1.770 (Maximum)				
LS Slope		Value	Nominal		
		0.4228	0.4150		
0.3800 (Minimum)	0.4500 (Maximum)				
Pef K Factor		Value	Nominal		
		4.696	4.840		
3.510 (Minimum)	6.170 (Maximum)				
Pef B Factor		Value	Nominal		
		-0.5209	-0.5550		
-0.7000 (Minimum)	-0.4100 (Maximum)				

Master: 9-May-2014 10:53

ThruBit String Master Calibration					
Thermal Neutron Master Calibration					
TNF, Background CPS		Value	Nominal	TNN, Background CPS	
		0.15	1.0		
0 (Minimum)	2.0 (Maximum)			0 (Minimum)	2.0 (Maximum)

TNF, Tank CPS		Value	Nominal	TNN, Tank CPS		Value	Nominal
		93.21	96.00			2714.7	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
		3064.3	3040.0			31464.2	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
		10.915	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
		29.124	30.958			77.8	70.0
28.000 (Minimum)	(Nominal)	34.000 (Maximum)		20.0 (Minimum)	(Nominal)	120 (Maximum)	

Master: 7-May-2014 9:47

ThruBit String Master Calibration					
TMG Accelerometer Calibration					
Minimum Ax, m/s ²		Value	Nominal	Maximum Ax, m/s ²	
		N/A	-9.810		
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)		8.810 (Minimum)	10.81 (Maximum)
Minimum Ay, m/s ²		Value	Nominal	Maximum Ay, m/s ²	
		N/A	-9.810		
-10.81 (Minimum)	(Nominal)	-8.810 (Maximum)		8.810 (Minimum)	10.81 (Maximum)
Minimum Az, m/s ²		Value	Nominal	Maximum Az, m/s ²	
		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	
		N/A	30.00		
0 (Minimum)	(Nominal)	120.0 (Maximum)		121.6 (Minimum)	182.4 (Maximum)

Master: Calibration not done

Company: **SANDRIDGE ENERGY**

Schlumberger

Well: **GEORGE 3406 2-4H**

Field: **STOHRVILLE**

County: **HARPER**

State: **KANSAS**

SPECTRAL DENSITY

DUAL SPACED NEUTRON
MEMORY LOG