Schlumberger

Company: **SANDRIDGE ENERGY**

Well: **ALICE 3306 1−12H**
Field: **STOHRVILLE**
County: **HARPER** State: **KANSAS**

County: HARPER
Field: STOHRVILLE
Location: 250' FSL & 1500' FWL
Well: ALICE 3306 1−12H
Company: SANDRIDGE ENERGY

SPECTRAL DENSITY DUAL SPACED NEUTRON MEMORY LOG

LOCATION

250' FSL & 1500' FWL

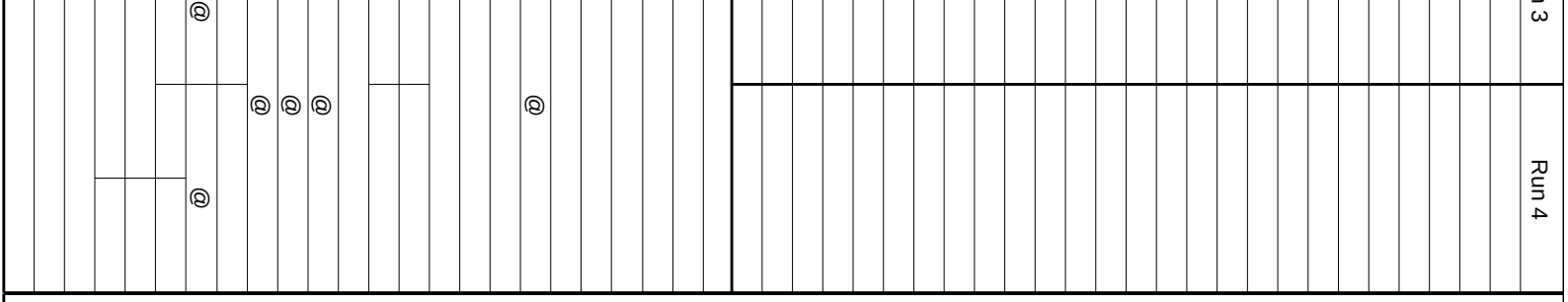
Elev.: K.B. 1354.00 ft
G.L. 1332.00 ft
D.F. 1354.00 ft

Permanent Datum: GROUND LEVEL Elev.: 1332.00 ft
Log Measured From: K.B. 22.00 ft above Perm. Datum
Drilling Measured From: K.B.

API Serial No.	Section	Township	Range
15−077−22081−0100	12	33S	6W

			Run 1	Run 2	Run 3
Logging Date		20−Aug−2014			
Run Number		1			
Depth Driller		9152 ft			
Schlumberger Depth		9120 ft			
Bottom Log Interval		9101 ft			
Top Log Interval		2500 ft			
Casing Driller Size @ Depth		7.000 in @ 5451 ft	@	@	
Casing Schlumberger		5448 ft			
Bit Size		6.125 in			
Type Fluid In Hole		WBM			
MUD Density	Viscosity	8.4 lbm/gal	28 s		
MUD Fluid Loss	PH	60 cm3	9		
MUD Source Of Sample		MUD SENSOR			
RM @ Measured Temperature		1.390 ohm.m @ 65 degF	@	@	
RMF @ Measured Temperature		1.040 ohm.m @ 65 degF	@	@	
RMC @ Measured Temperature		1.740 ohm.m @ 65 degF	@	@	
Source RMF	RMC	CALCULATED	CALCULATED		
RM @ MRT	RMF @ MRT	0.709 @ 134	0.530 @ 134	@	@
Maximum Recorded Temperatures		134 degF			
Circulation Stopped	Time	20−Aug−2014	10:30		
Logger On Bottom	Time	20−Aug−2014	11:30		
Unit Number	Location	5	OKC		
Recorded By		S.JARSKI			
Witnessed By		J.BIAS			

			Run 1	Run 2	Run 3
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					
MUD Density	Viscosity				
MUD Fluid Loss	PH				
MUD 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	Location				
Recorded By					
Witnessed By					



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OTHER SERVICES1	OTHER SERVICES2
OS1: TBI−TBD−TBN−TMC	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
SERVICE:HORIZONTAL PUMP DOWN MEMORY BIT DEPTH: 9060' 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−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: LATSHAW 27	
CREW: S.JARSKI R.WILSON I.HERNDEZ	

RUN 1		RUN 2	
SERVICE ORDER #:	3145	SERVICE ORDER #:	
PROGRAM VERSION:	19C2−270	PROGRAM VERSION:	
FLUID LEVEL:	0 ft	FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

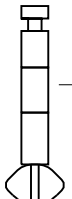
SURFACE EQUIPMENT

WITM (ThruBit)

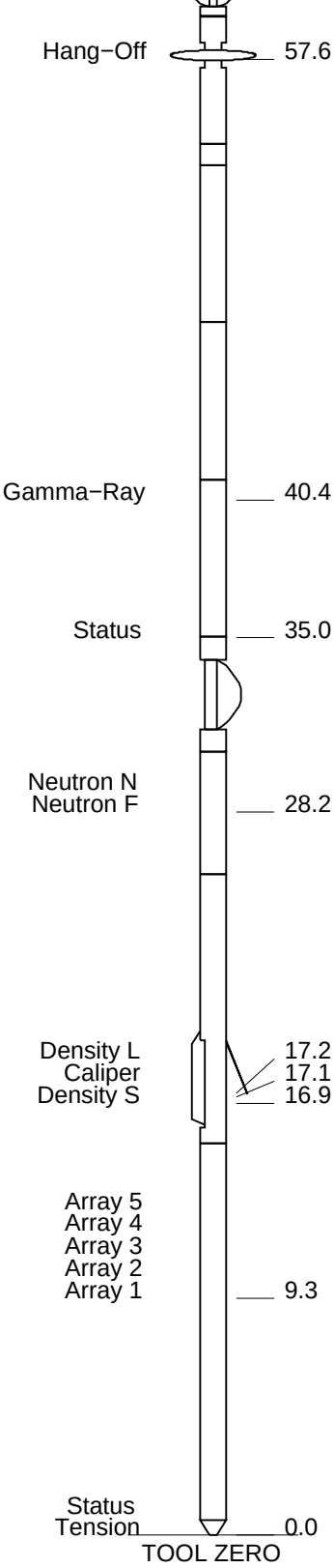
DOWNHOLE EQUIPMENT

TBT−A 67.1
THEAD
CCL
BDOT−B 14
THOT 29
T10_1
TBAT1 13
TBAT2 35

CCL 64.2



TMG−A 24
TILE−A
TBN−A 18
NNLS−EWA 4484
TBD−A 28
GGLS−FZ 3216
TBI−A 19



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: ALICE 3306 1−12H**

Input DLIS Files

DEFAULT	ThruBit_008PUP	FN:7	PRODUCER	20−Aug−2014 18:59	9116.8 FT	2395.8 FT

Output DLIS Files

DEFAULT	ThruBit_009PUP	FN:8	PRODUCER	20−Aug−2014 19:07

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

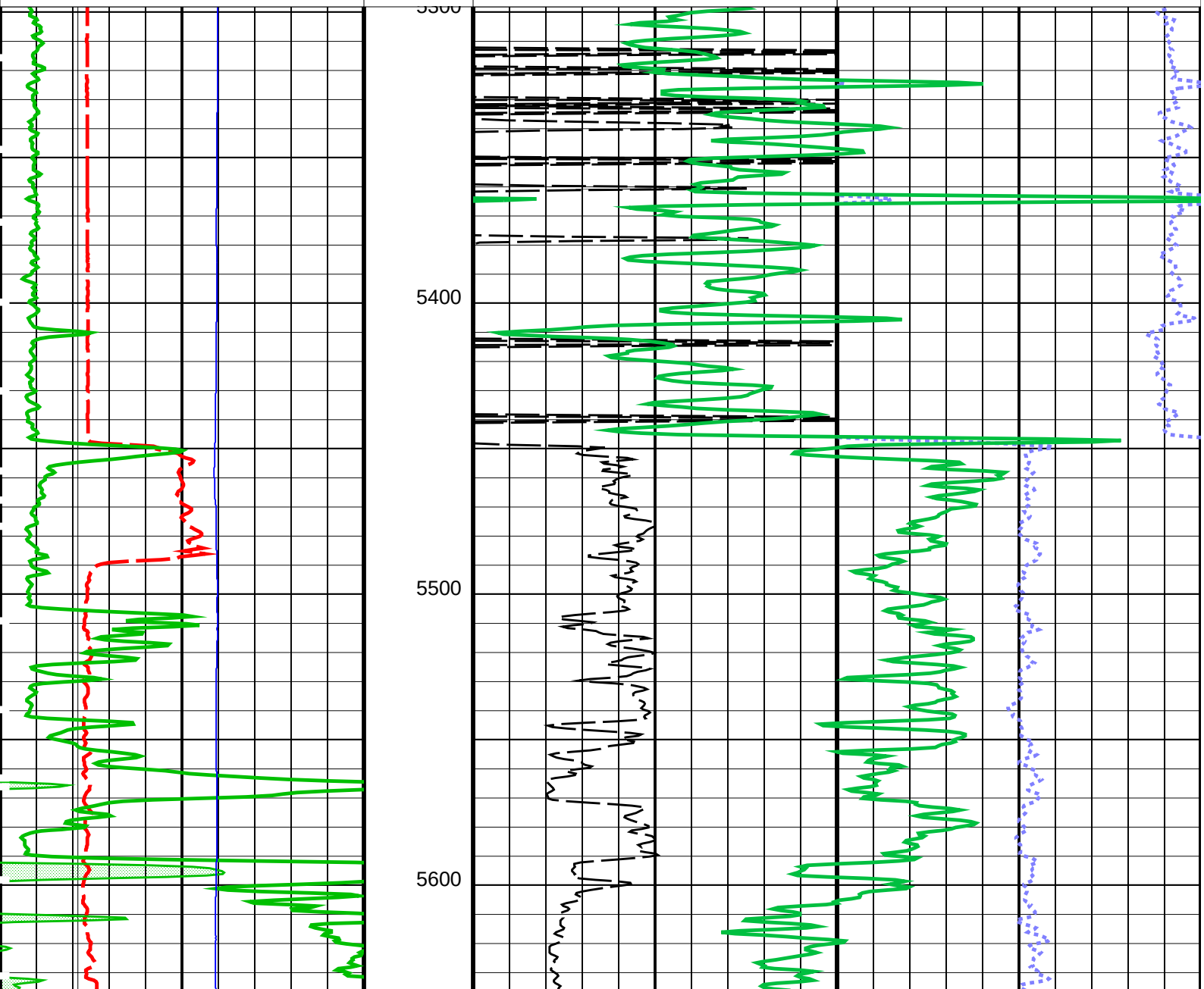
PEF (PEF)
0 (---- 10

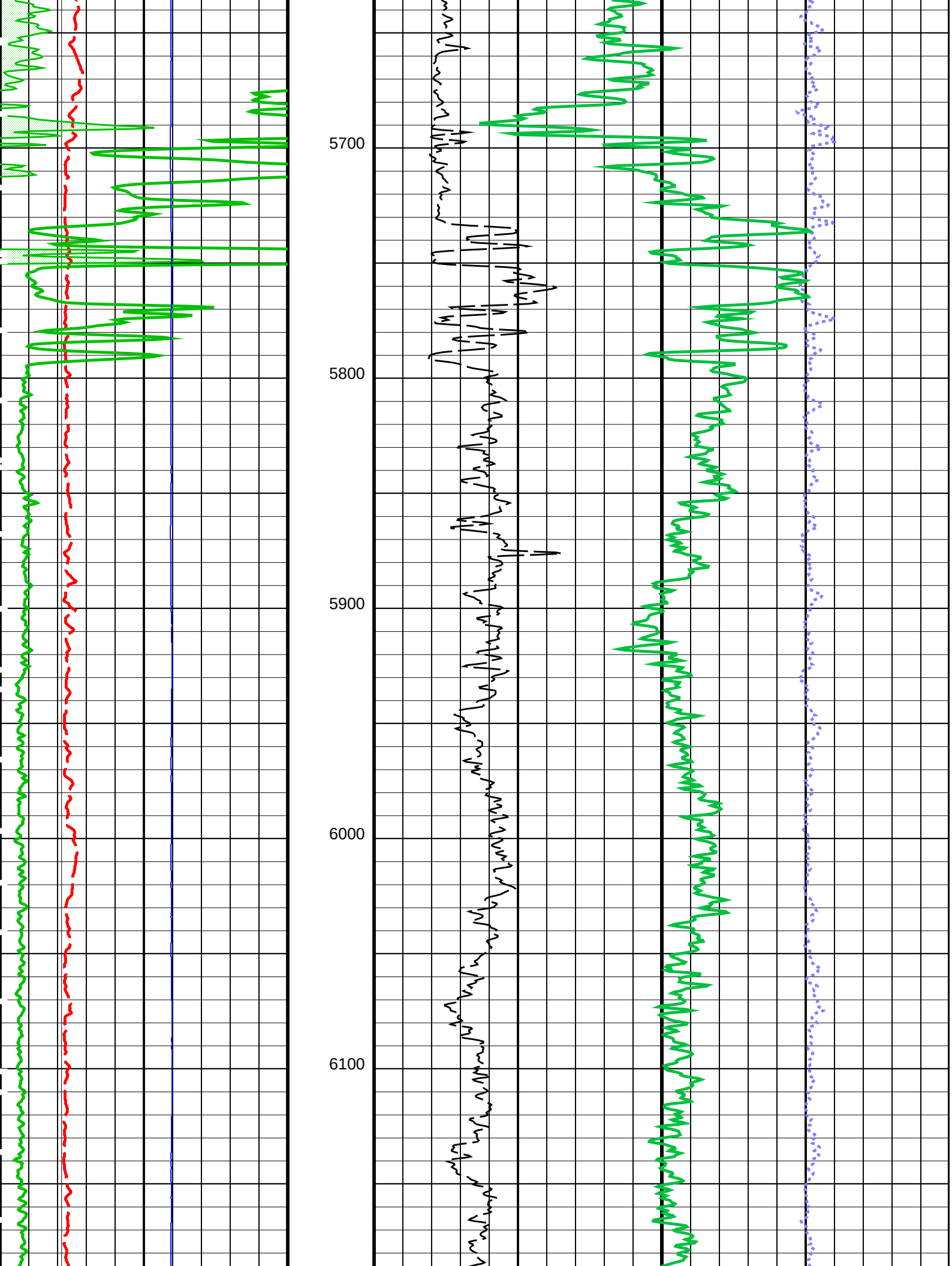
DRHO (DRHO)
-0.5 (G/C3) 0.5

5400

5500

5600

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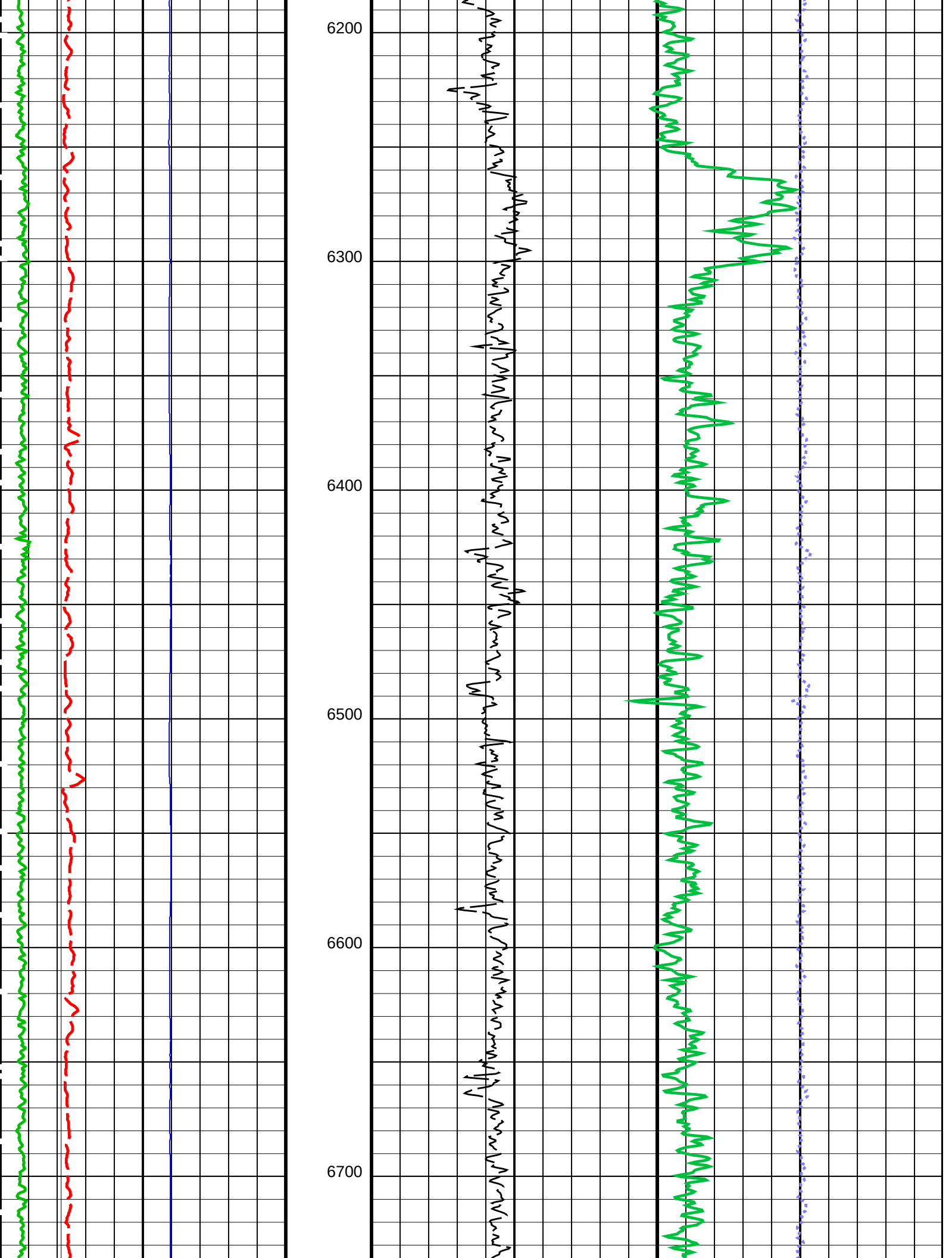
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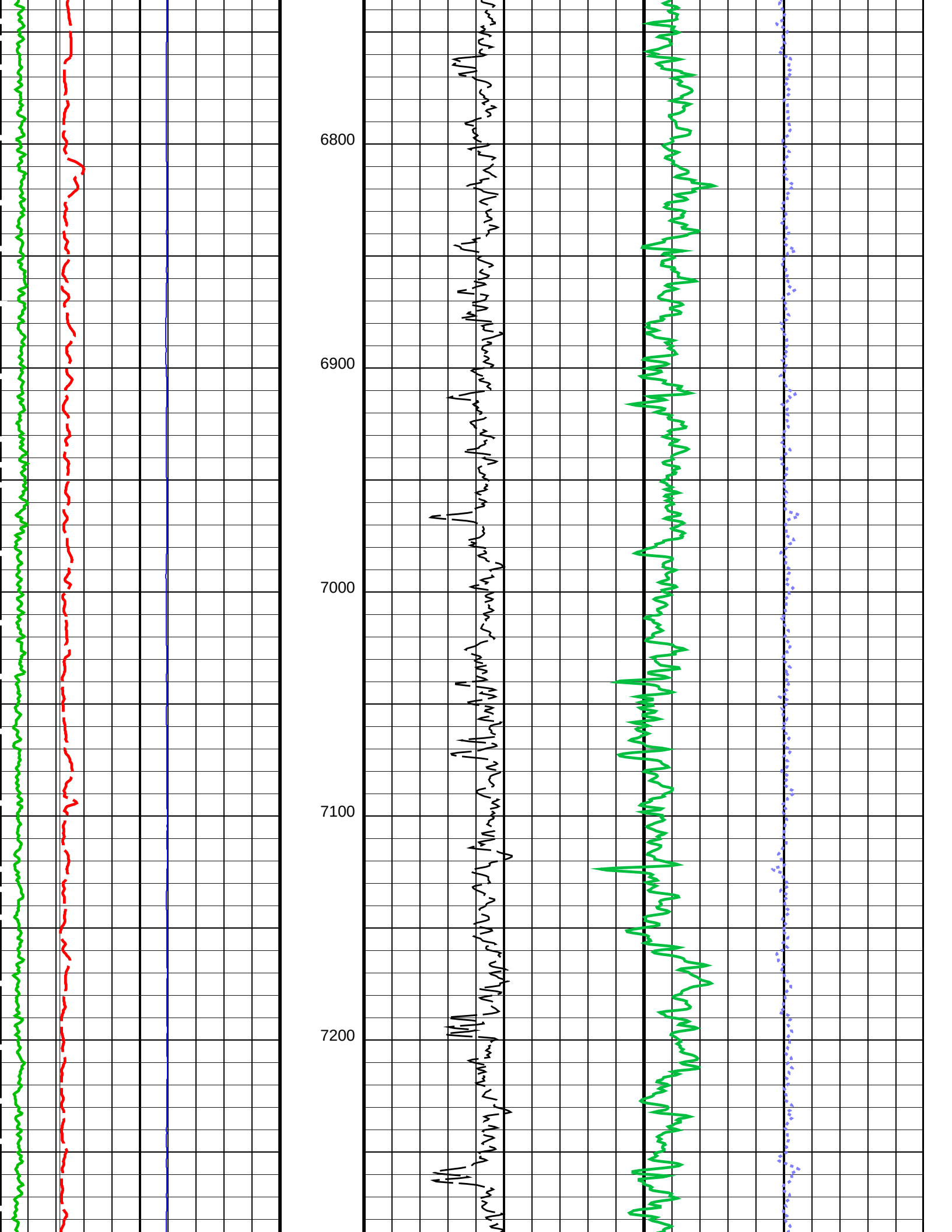
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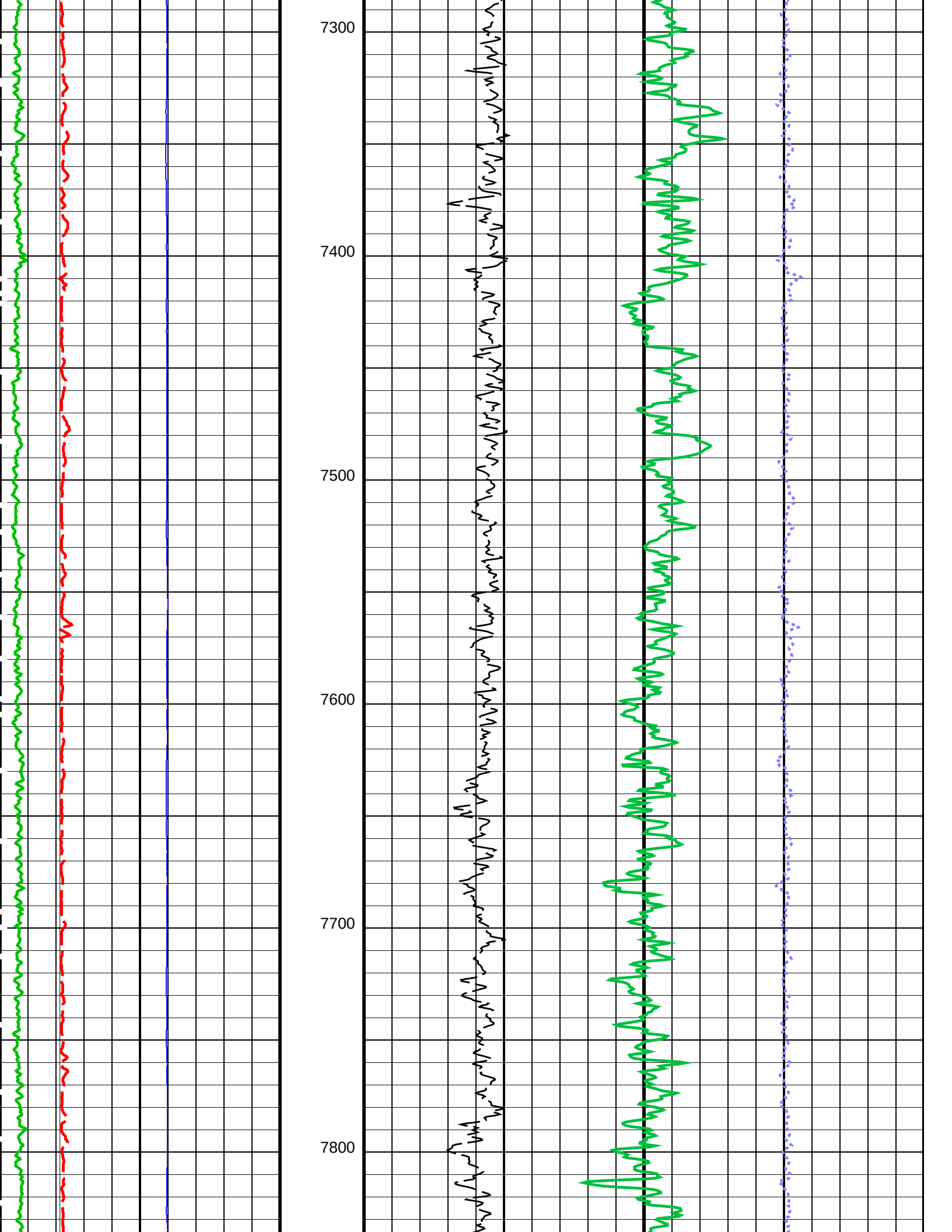
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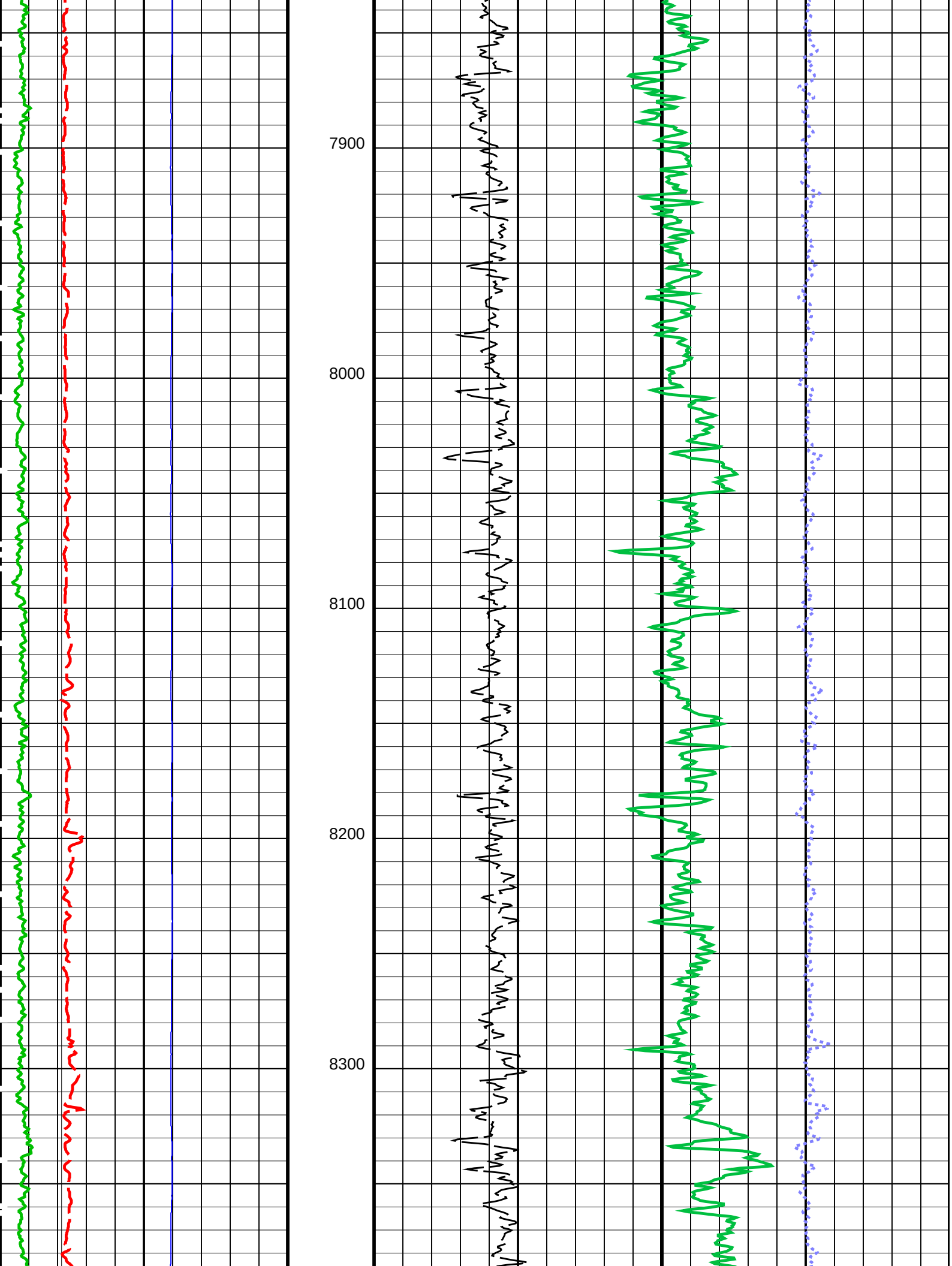
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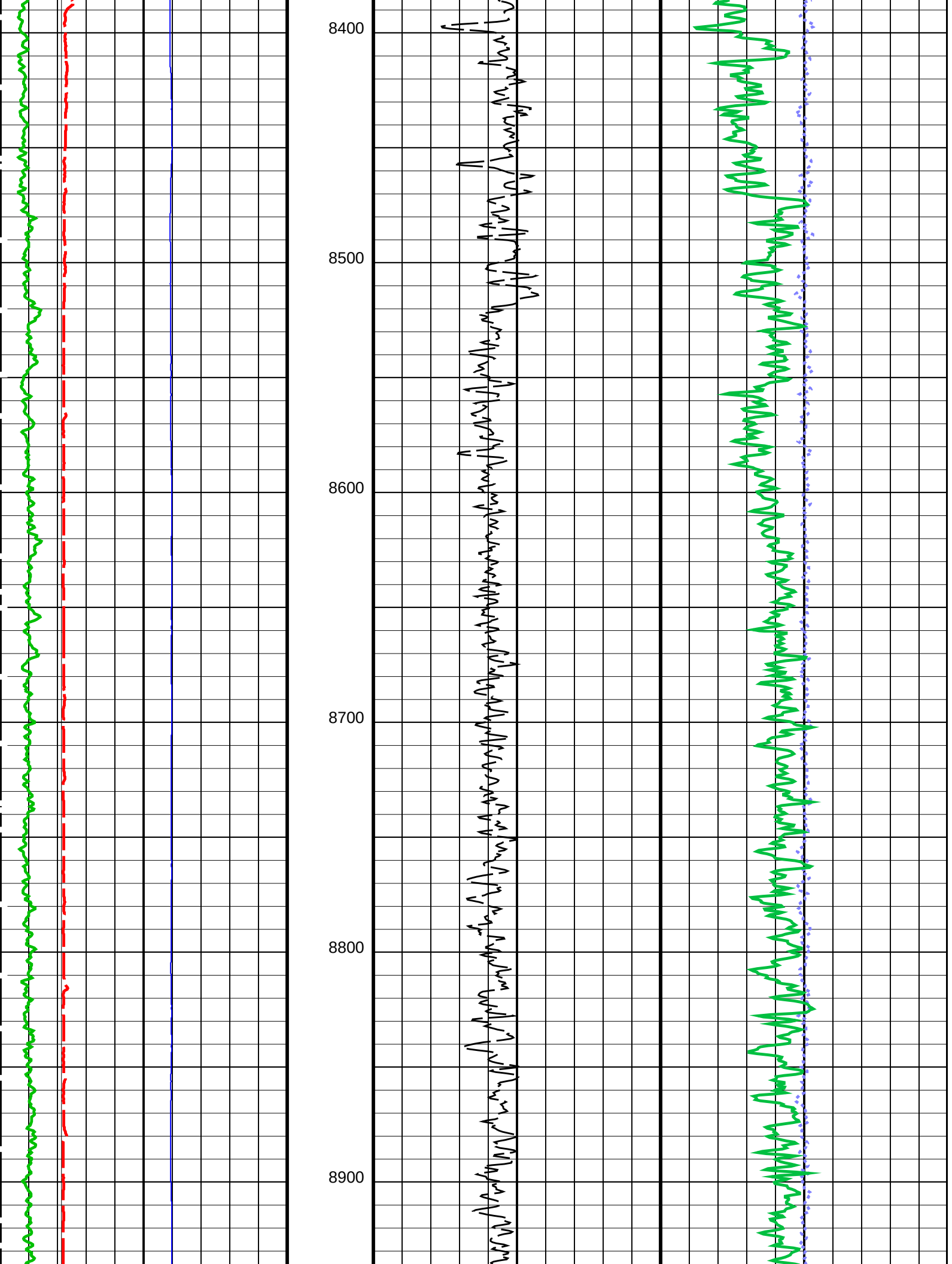
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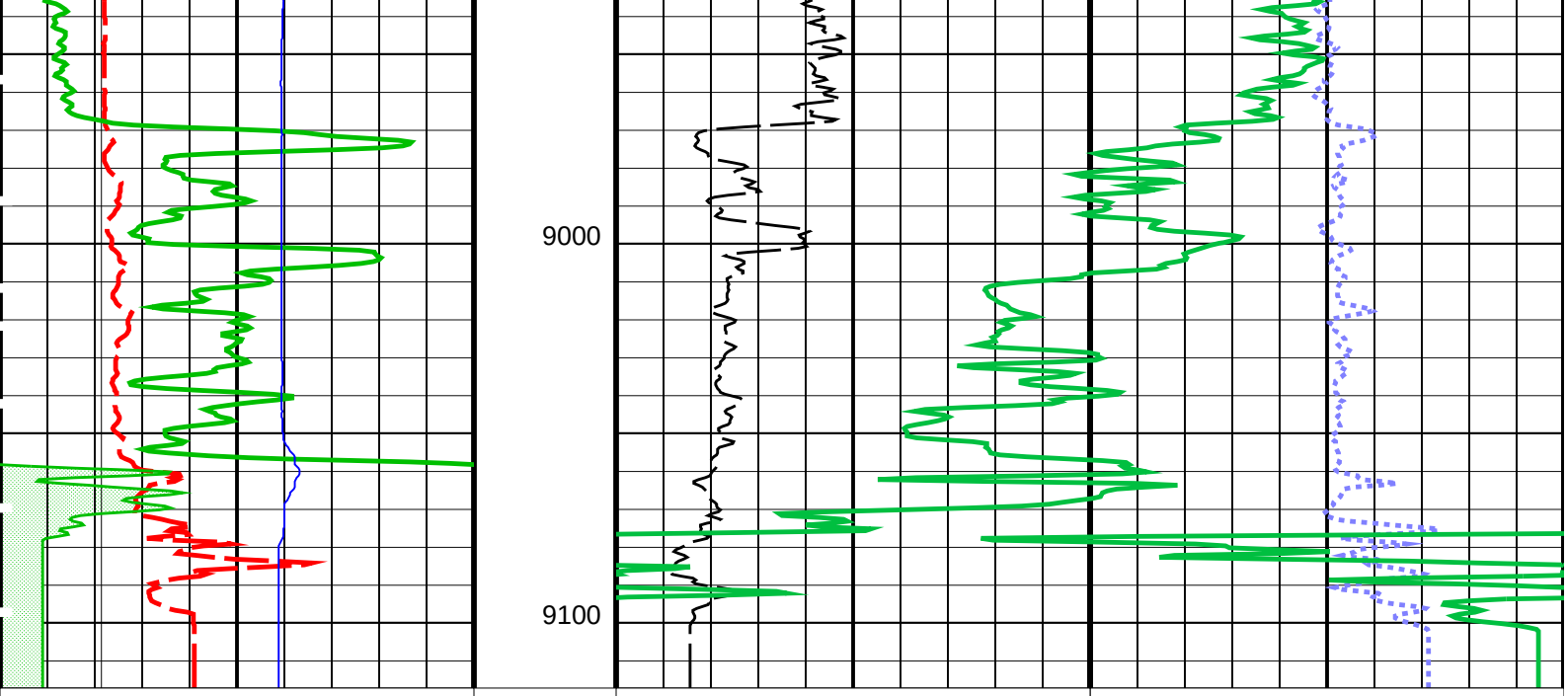


Bit Size (BS)		
4	(IN)	14

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

PEF (PEF)		
0	(-----	10

DRHO (DRHO)		
−0.5	(G/C3)	0.5

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	CALIPER
RB_OFFSET	Additional RB offset (degrees)	0 DEG

RB_OFFSET	Additional RB offset (degrees)	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: 20−Aug−2014 19:07

OP System Version: 19C2−270

TBT−A SRPC−5298−ThruBit_b

Input DLIS Files

DEFAULT	ThruBit_008PUP	FN:7	PRODUCER	20−Aug−2014 18:59	9116.8 FT	2395.8 FT

Output DLIS Files

DEFAULT	ThruBit_009PUP	FN:8	PRODUCER	20−Aug−2014 19:07		

Schlumberger

MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY Well: ALICE 3306 1−12H

Input DLIS Files

DEFAULT	ThruBit_008PUP	FN:7	PRODUCER	20−Aug−2014 18:59	9116.8 FT	2395.8 FT

Output DLIS Files

DEFAULT	ThruBit_009PUP	FN:8	PRODUCER	20−Aug−2014 19:07	9117.0 FT	2470.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 812.50 F3

Cement Volume = 407.24 F3 (assuming 4.50 IN casing O.D.)

Computed from 9117.0 FT to 5448.0 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

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

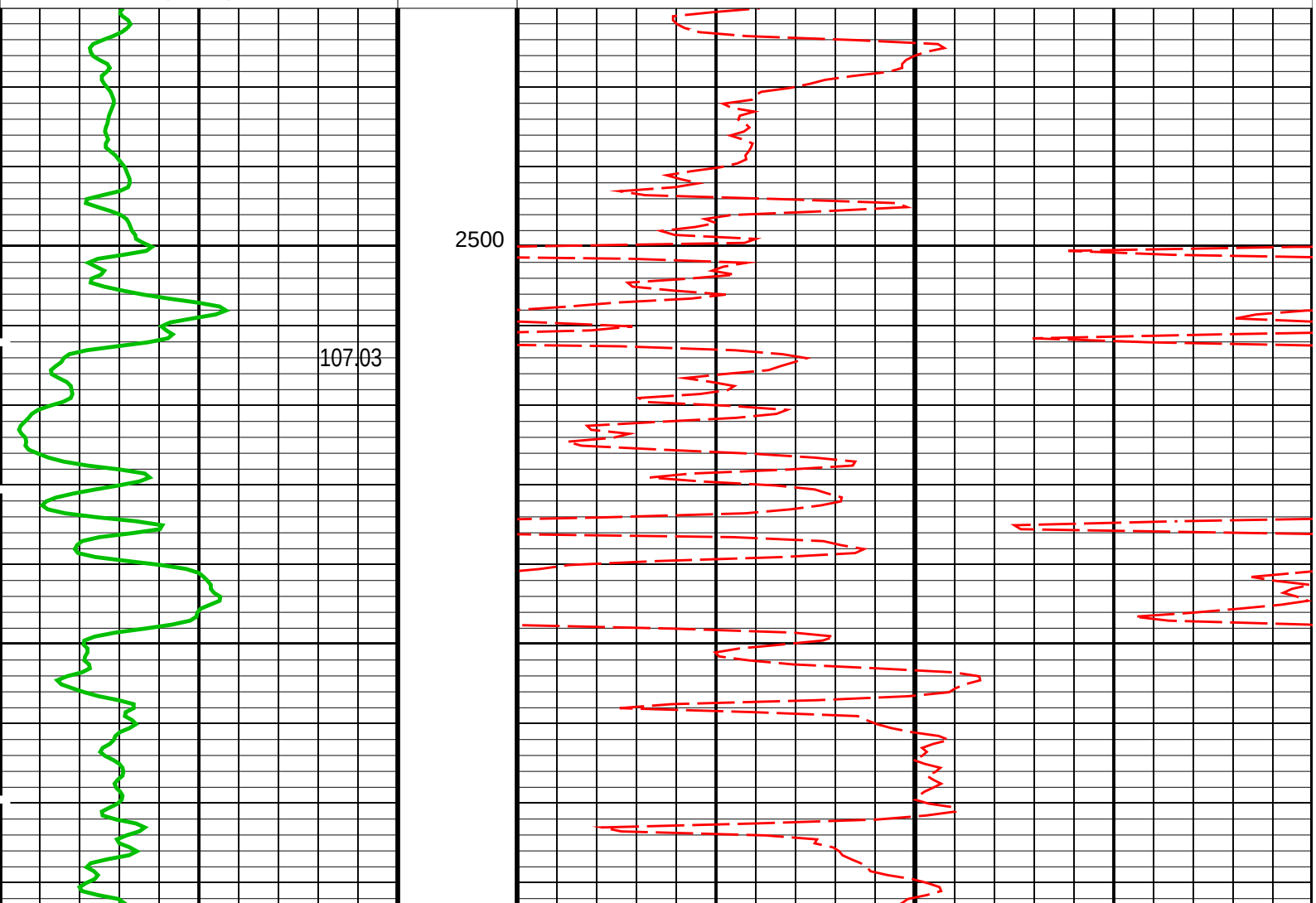
GR Temp (WTEP)
(DEGF)

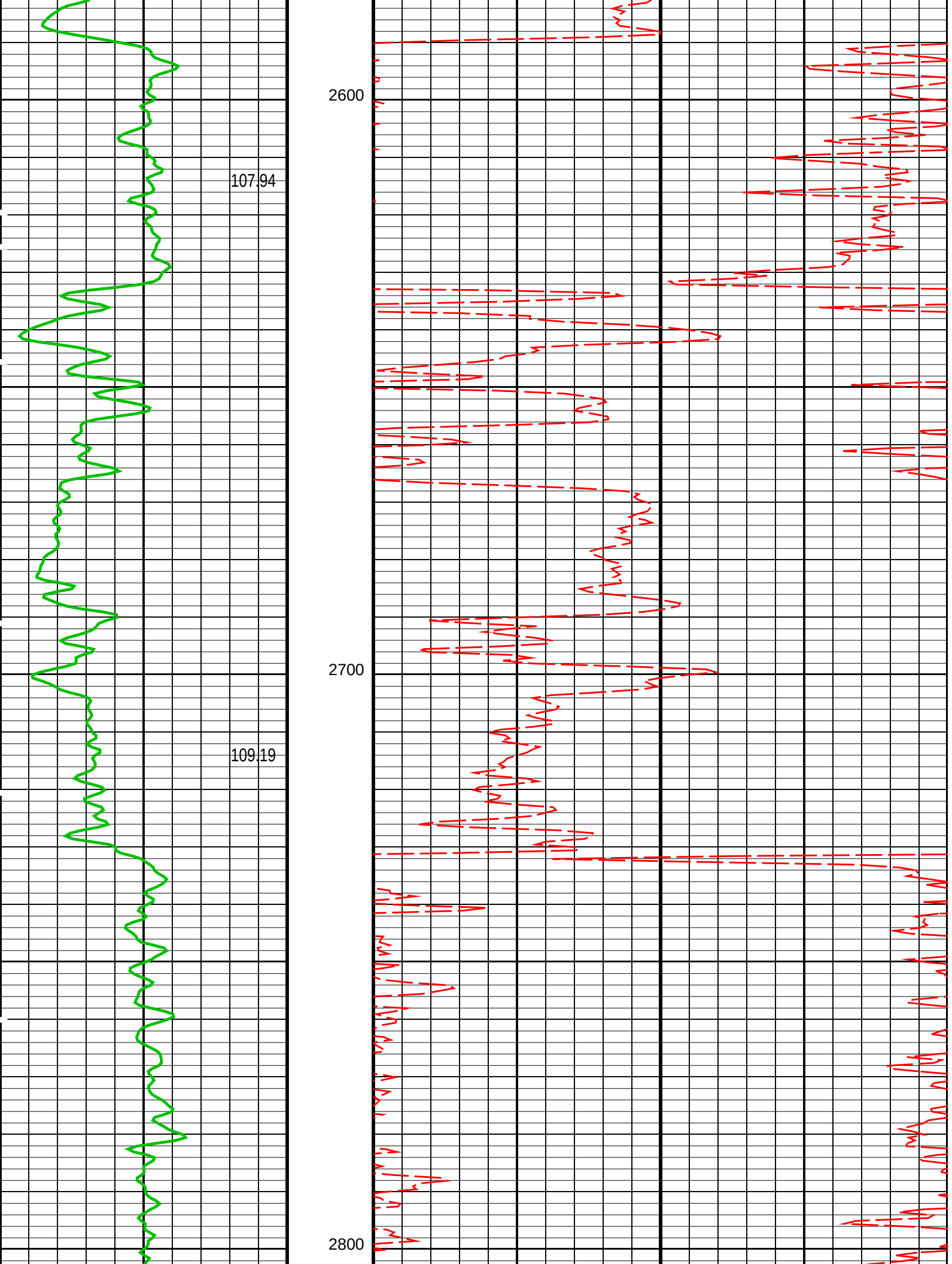
TNPH (TNPH)
30 (%) −10

PEF (PEF)
0 (−−−− 10

DRHO (DRHO)
−0.5 (G/C3) 0.5

DPHI (DPHI)
30 (PU) −10

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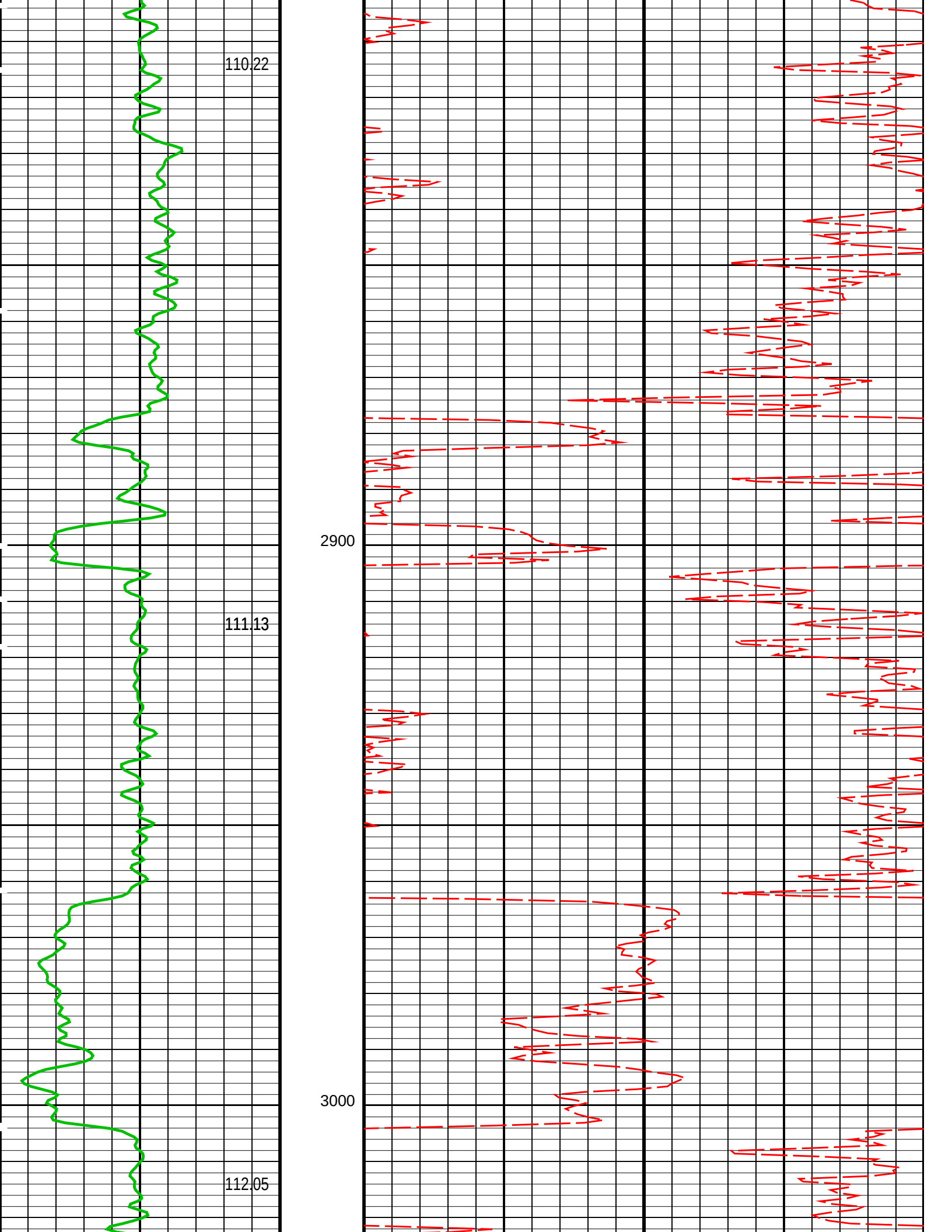
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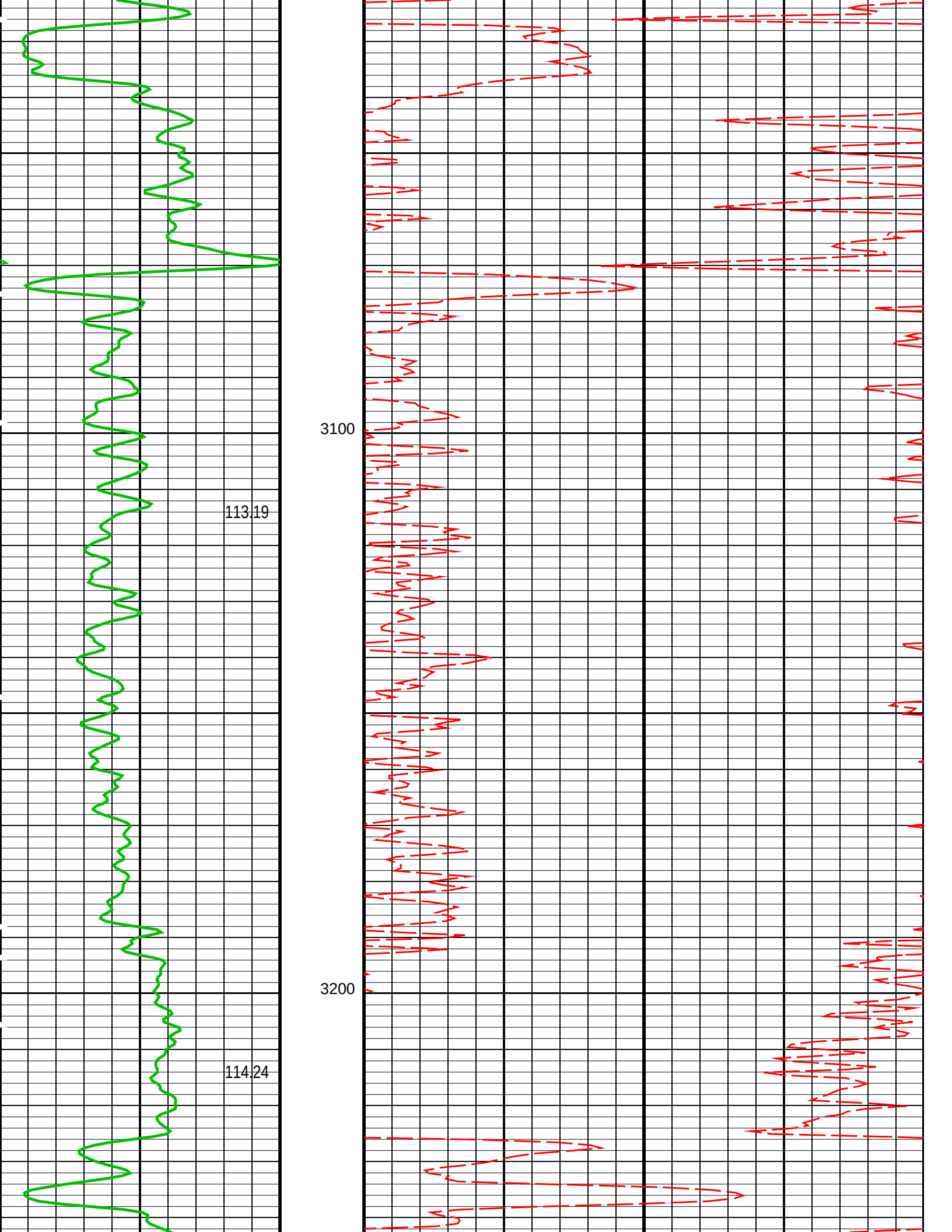
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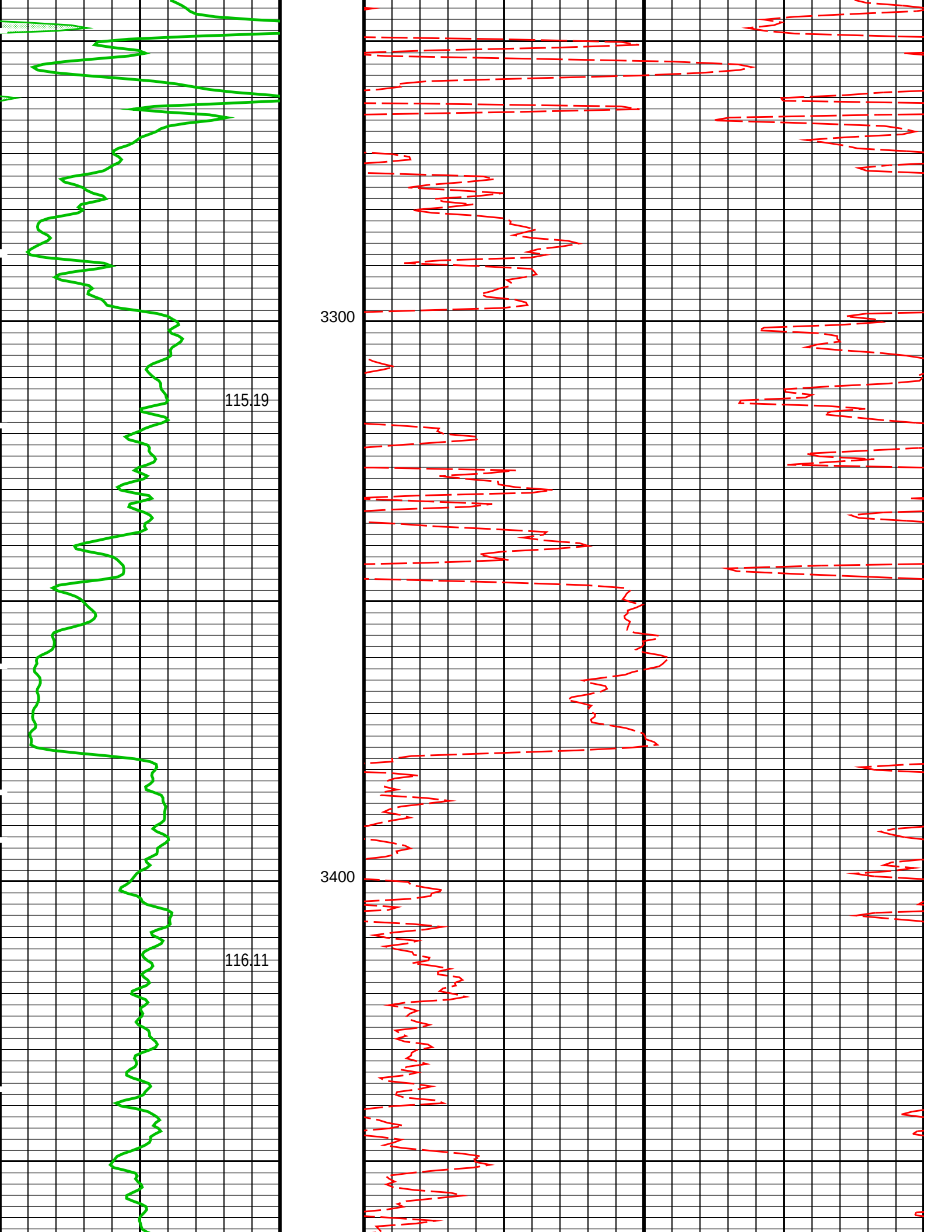
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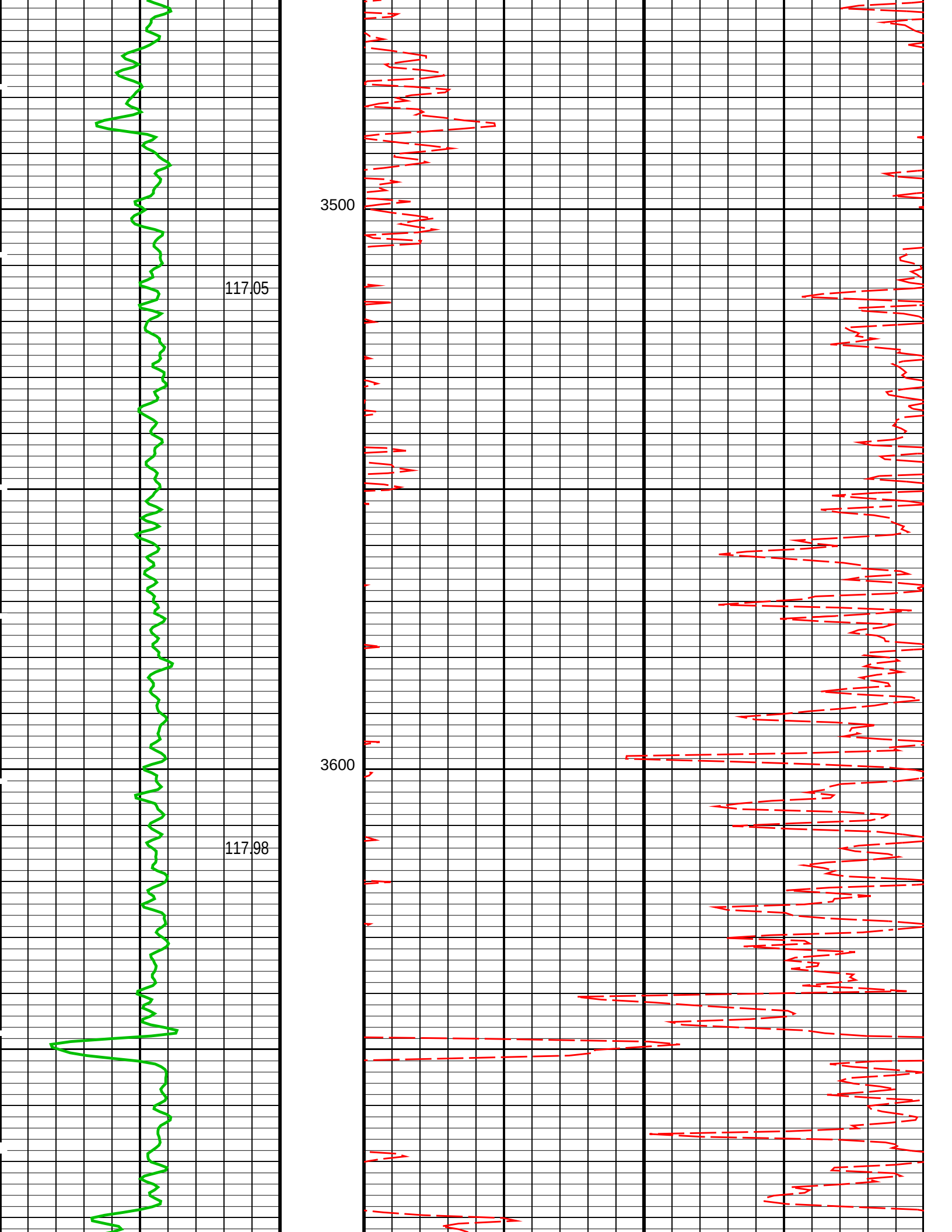
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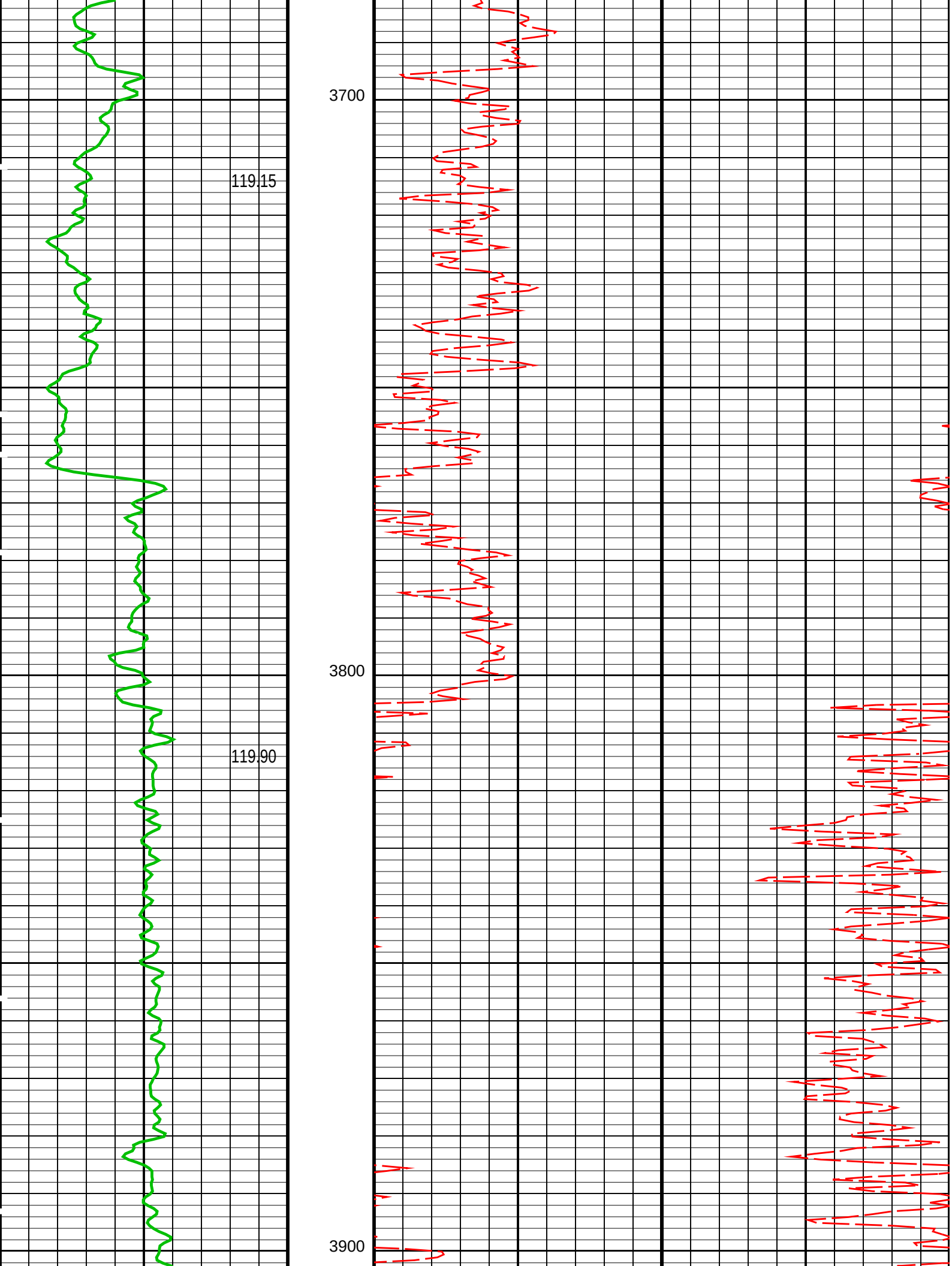
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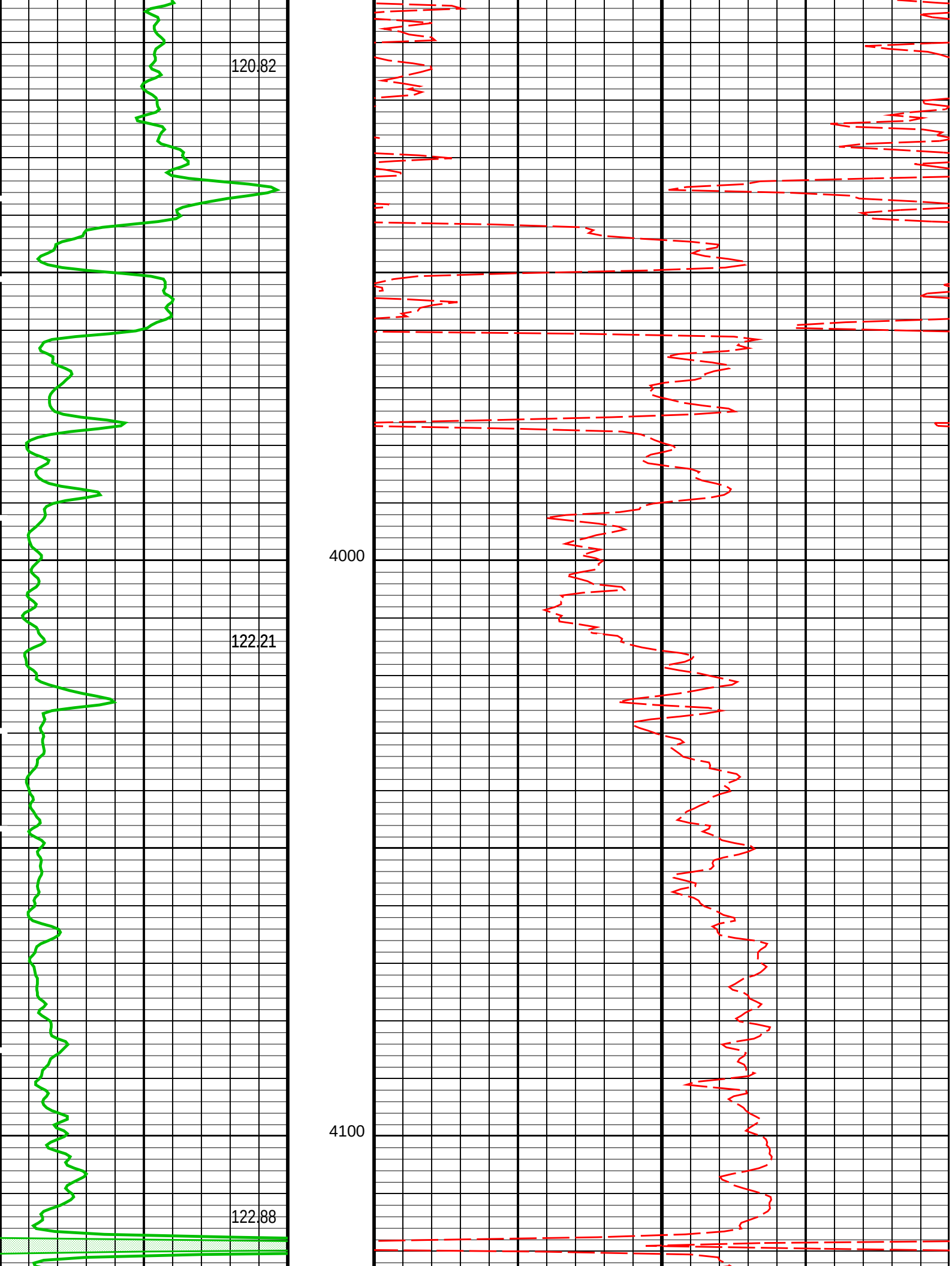
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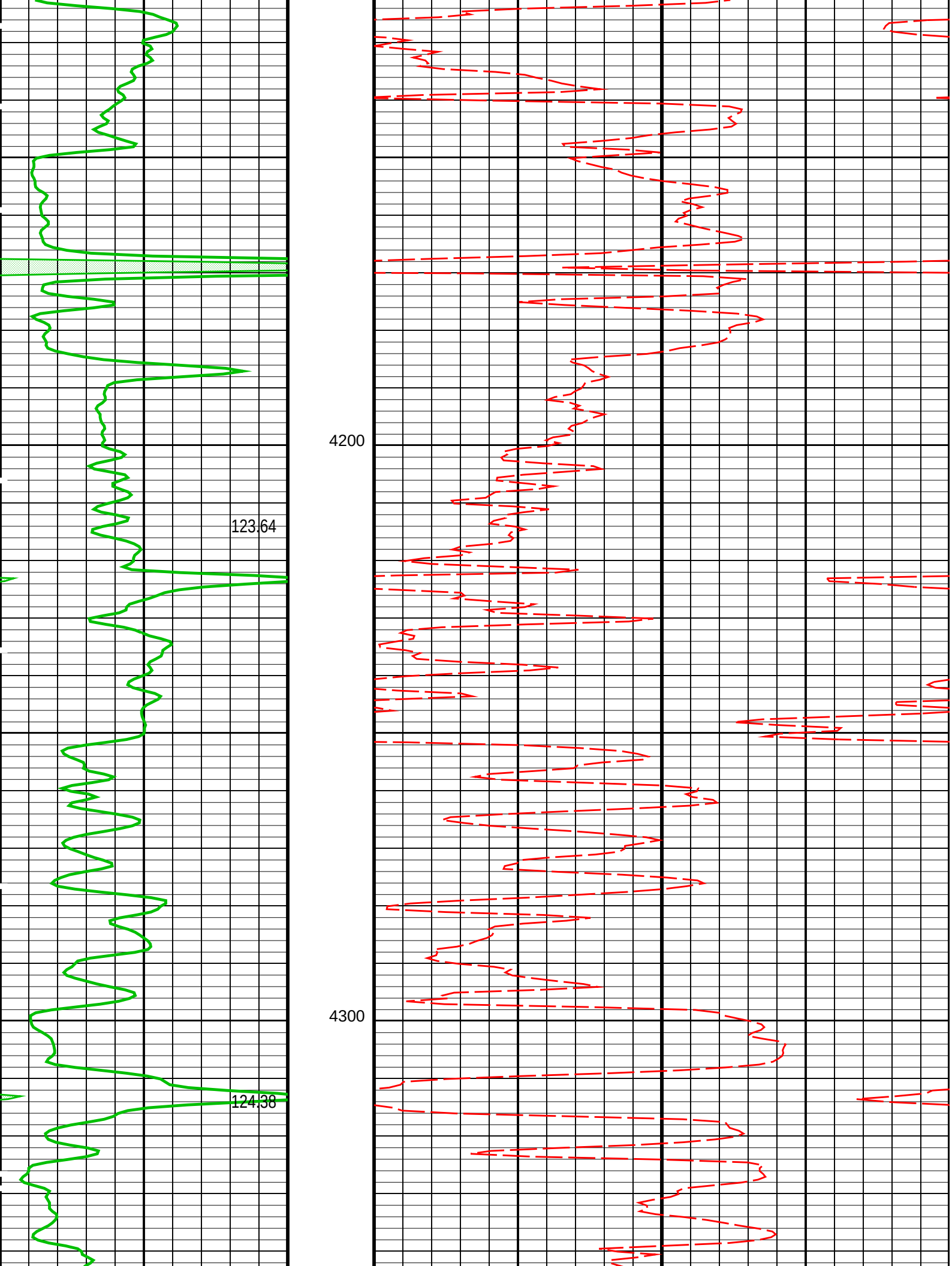
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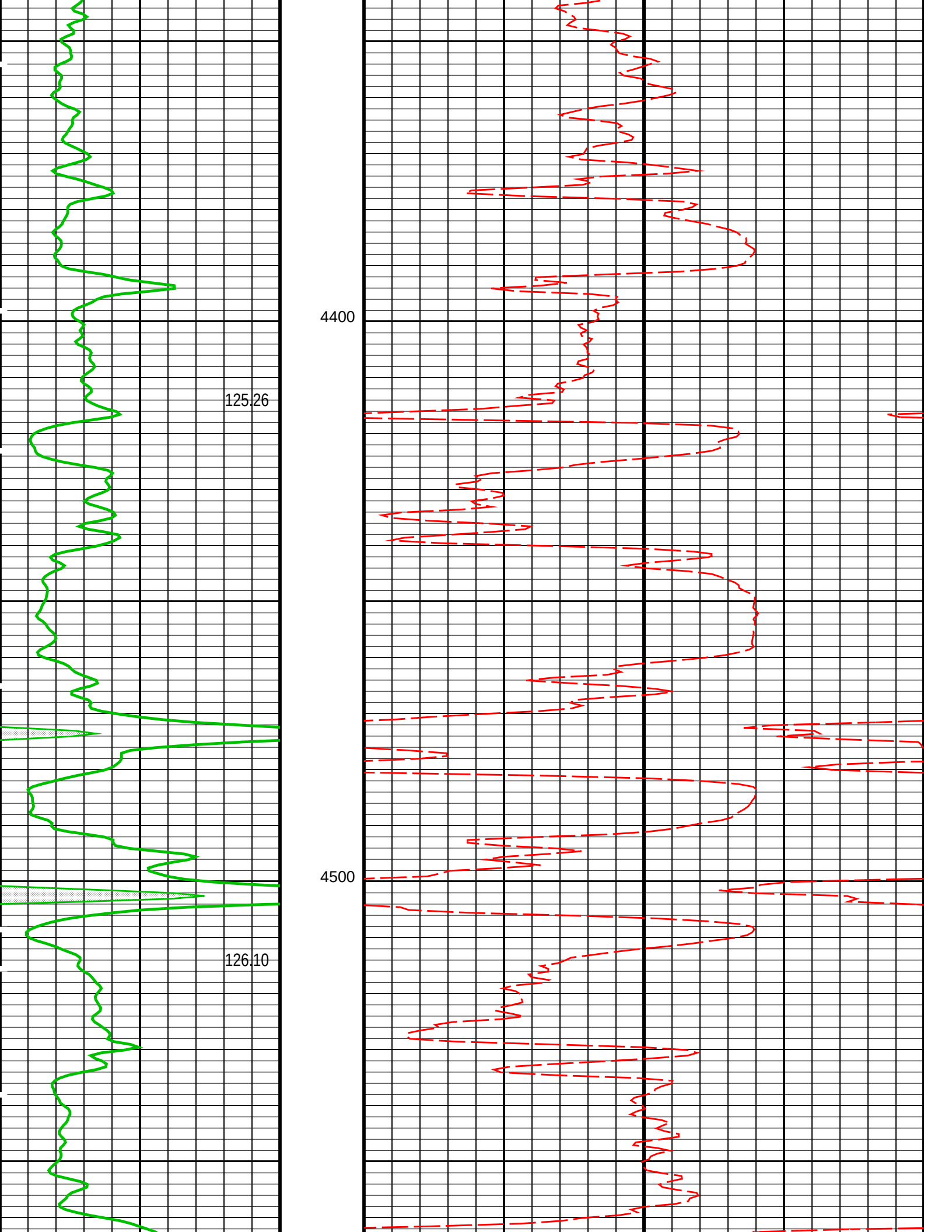
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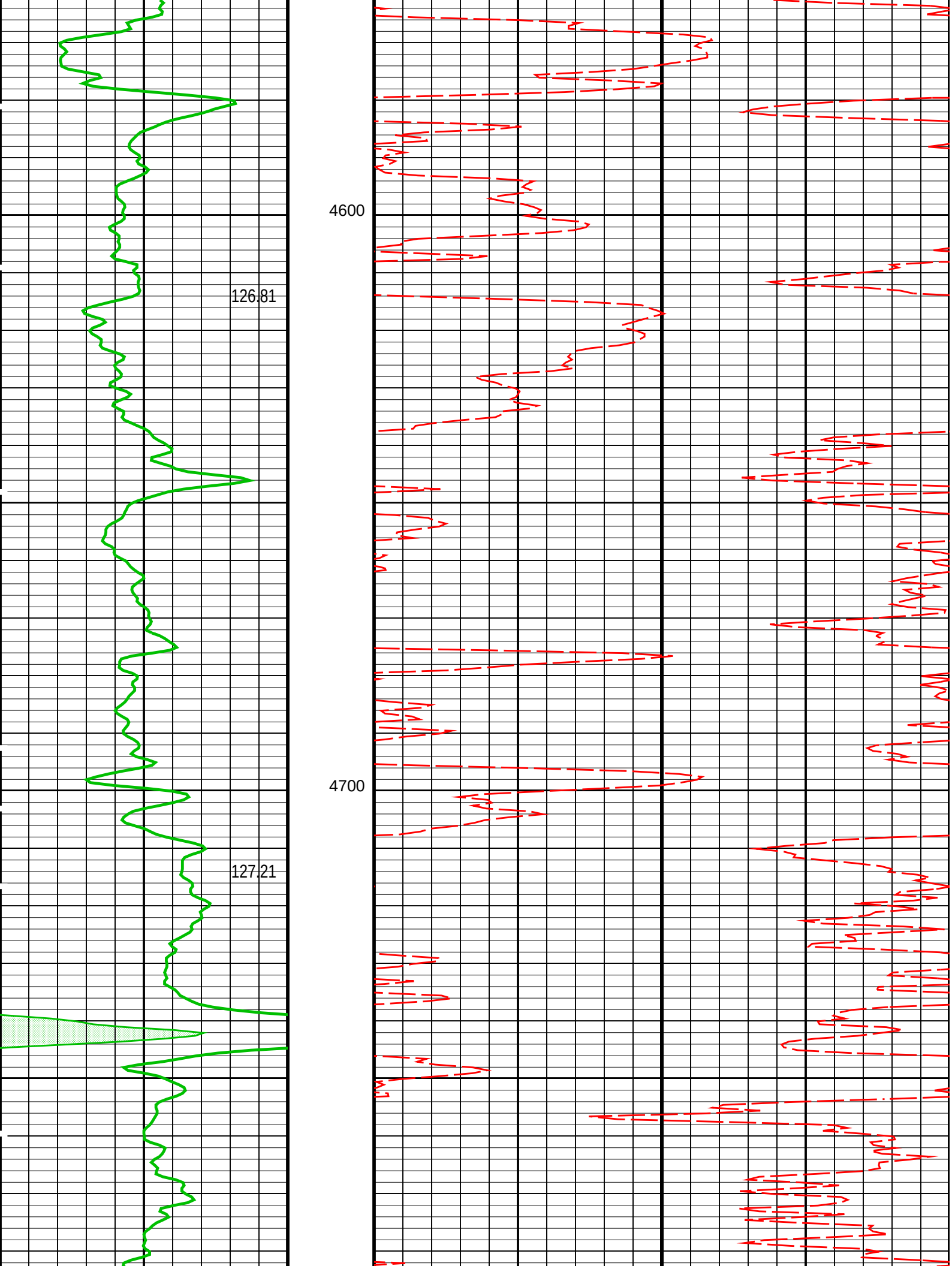
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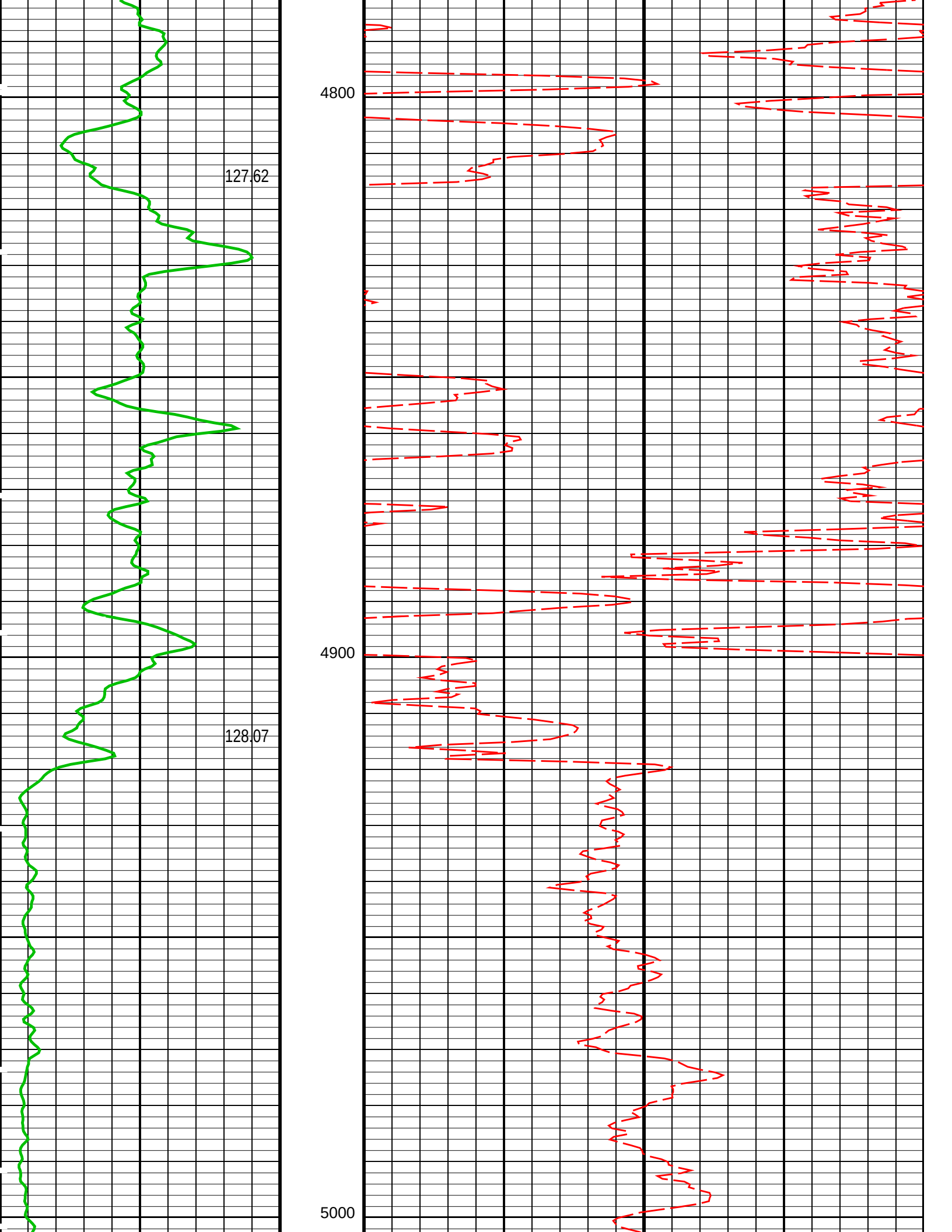
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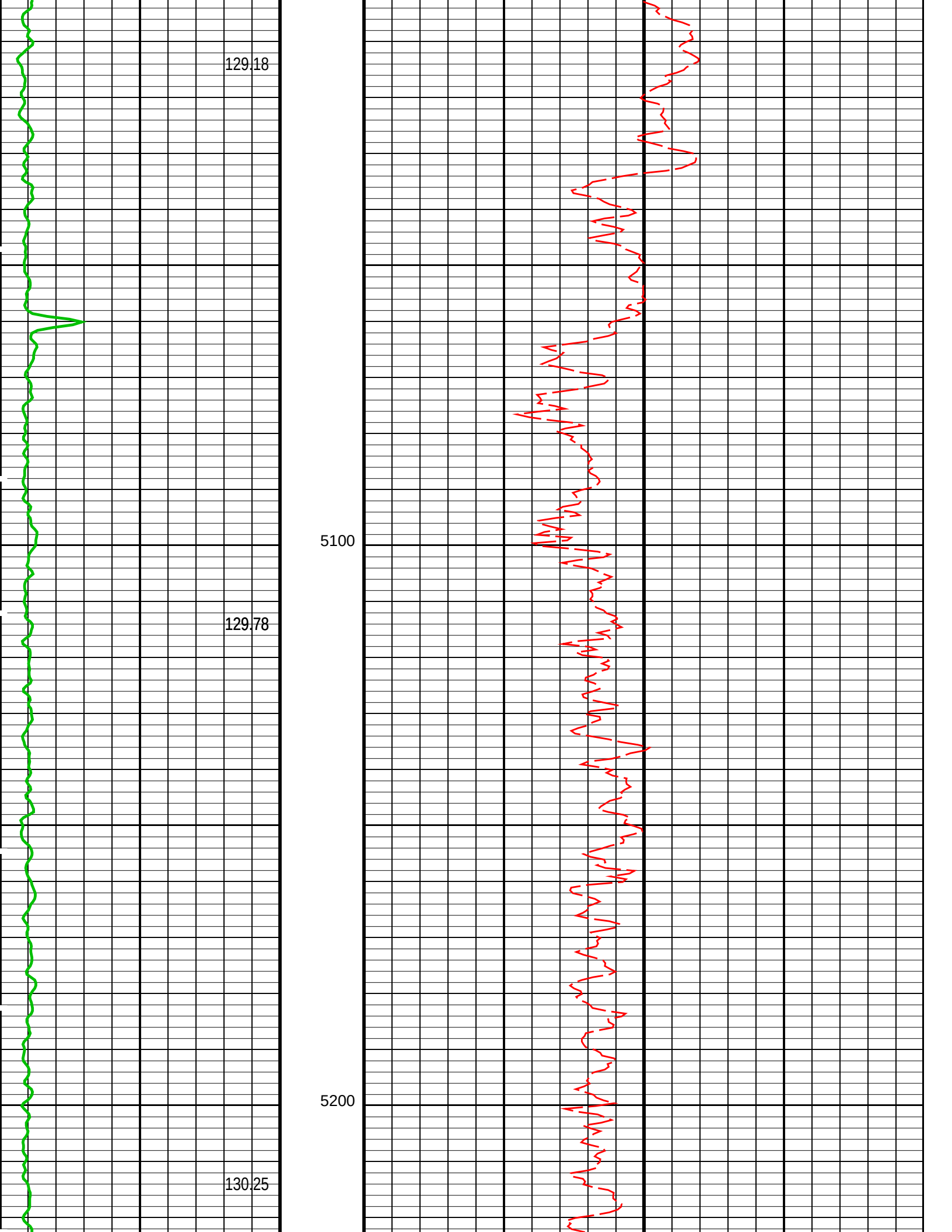
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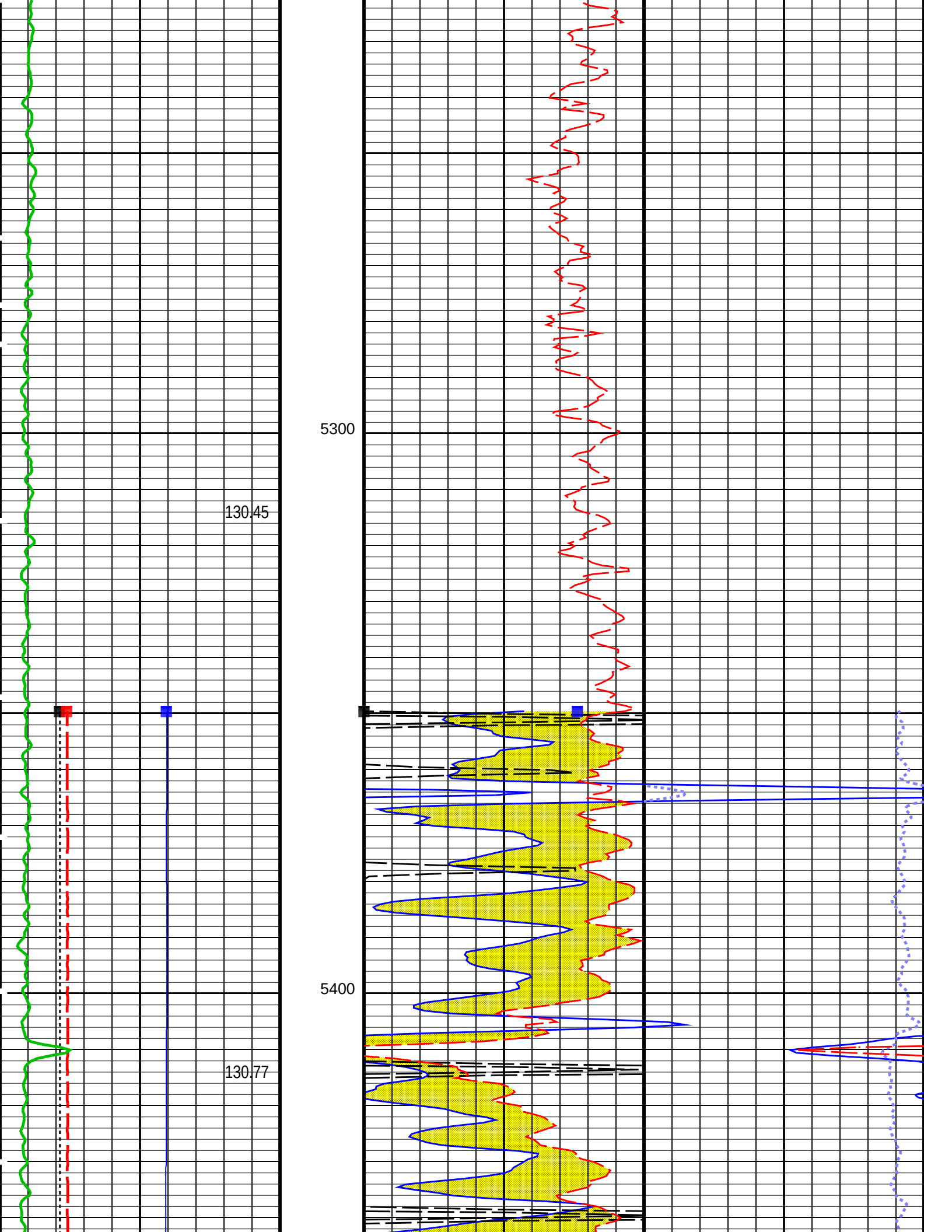
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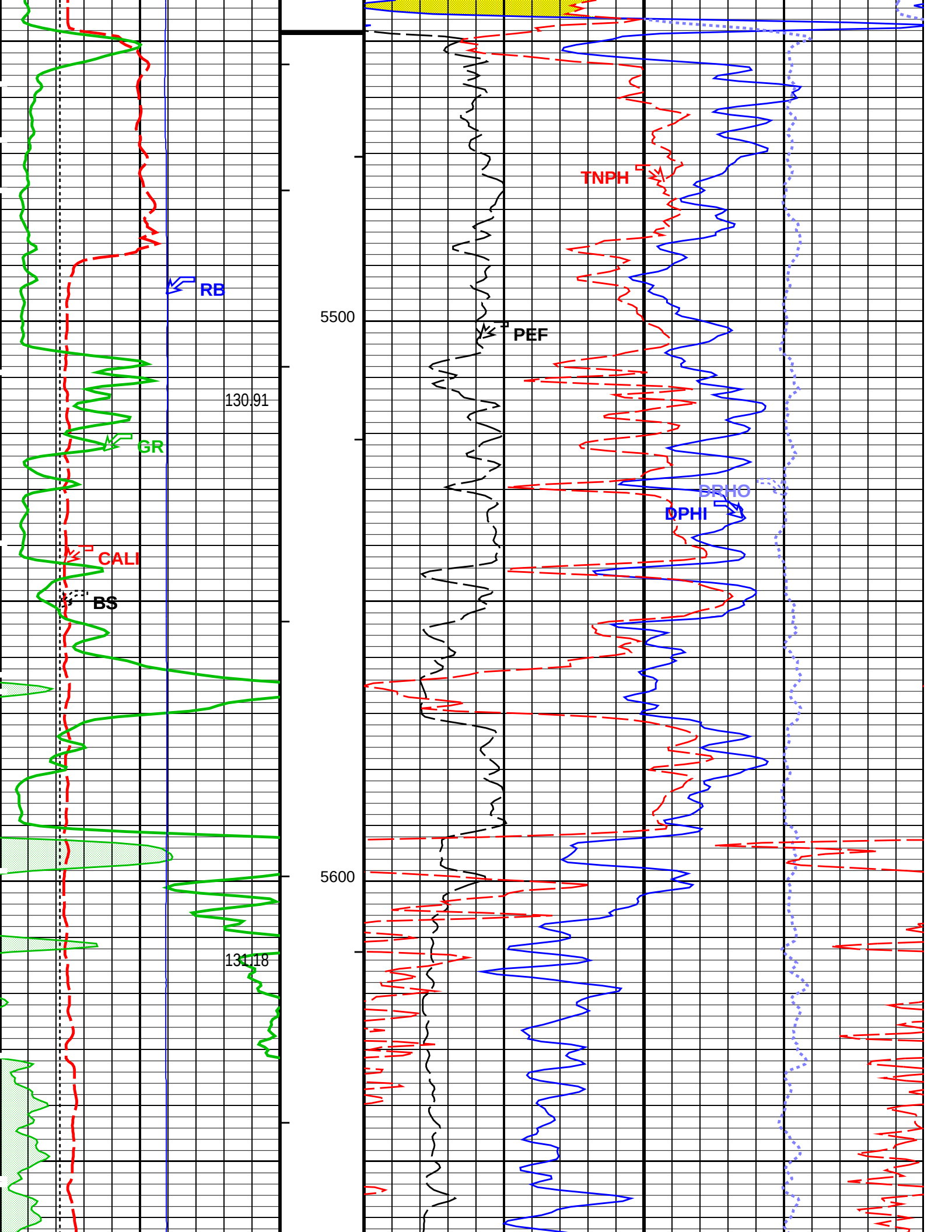
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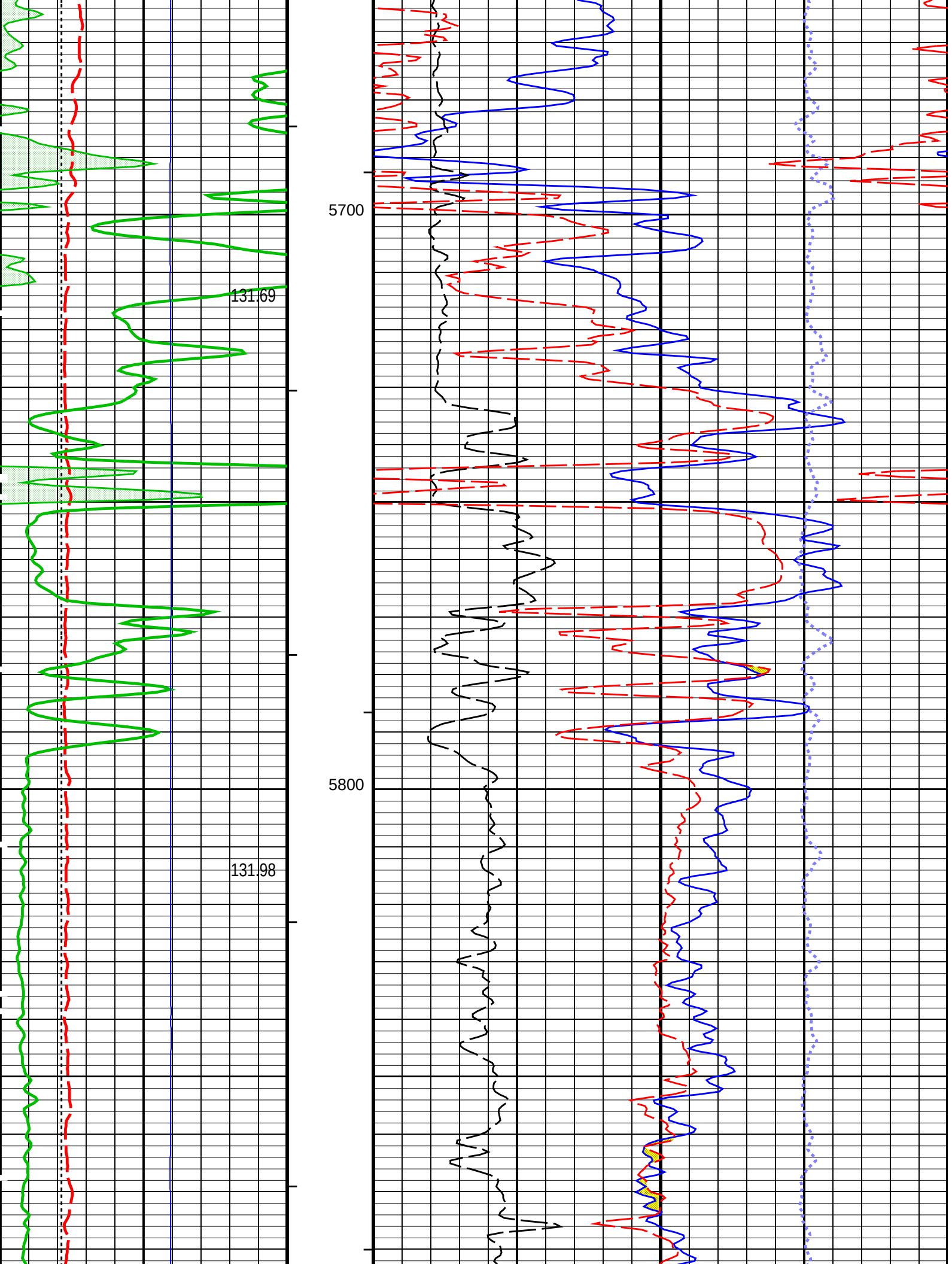
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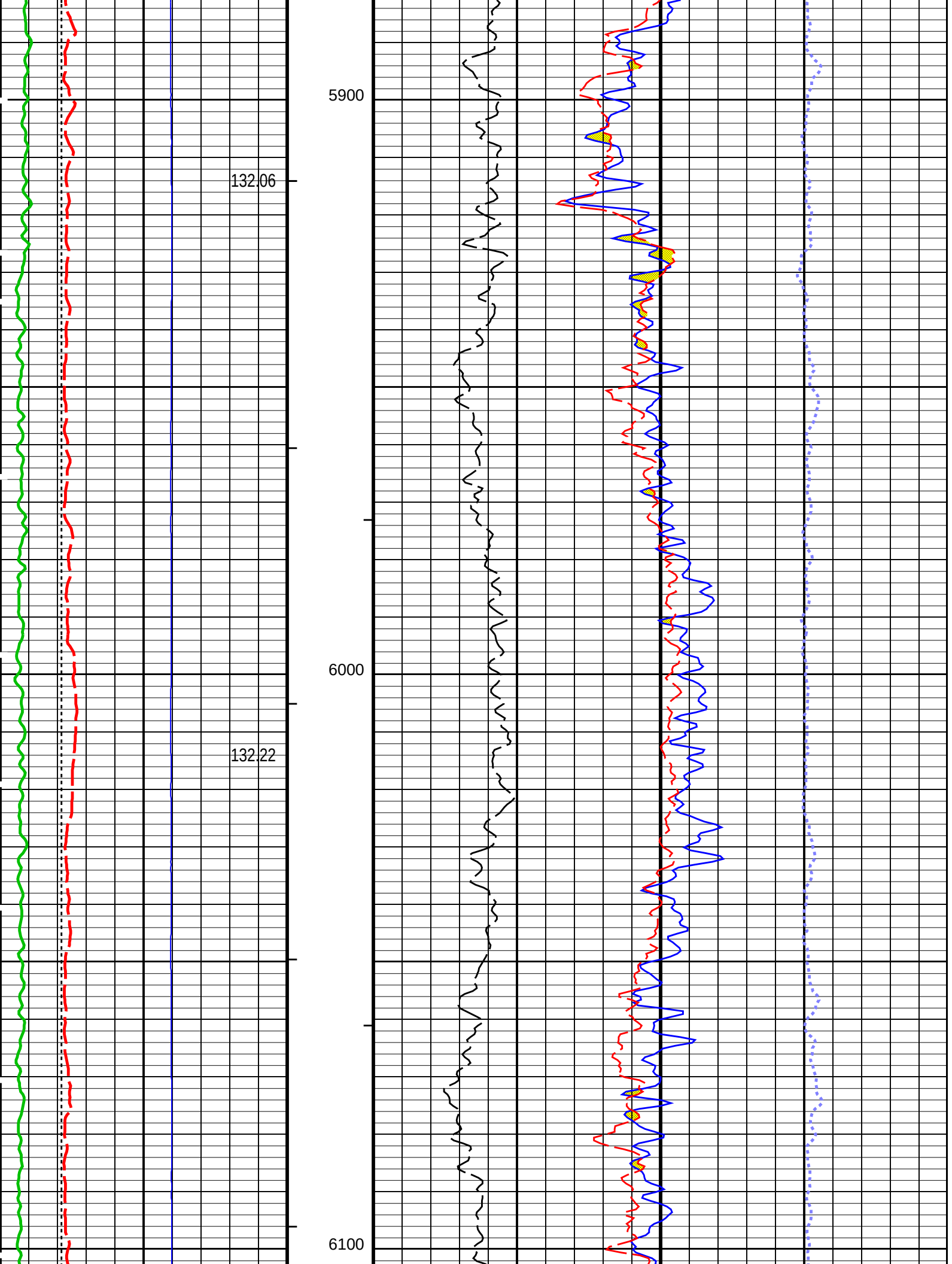
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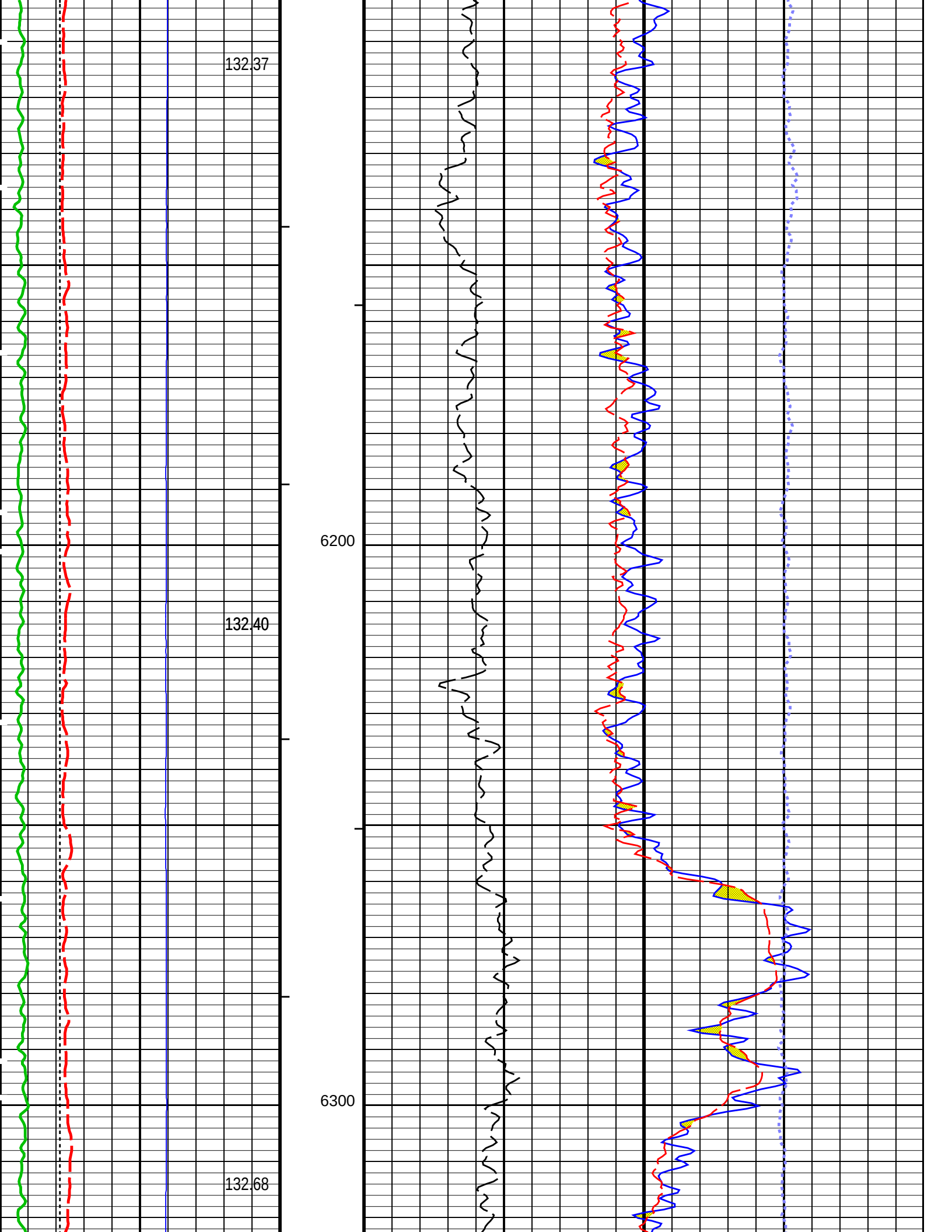
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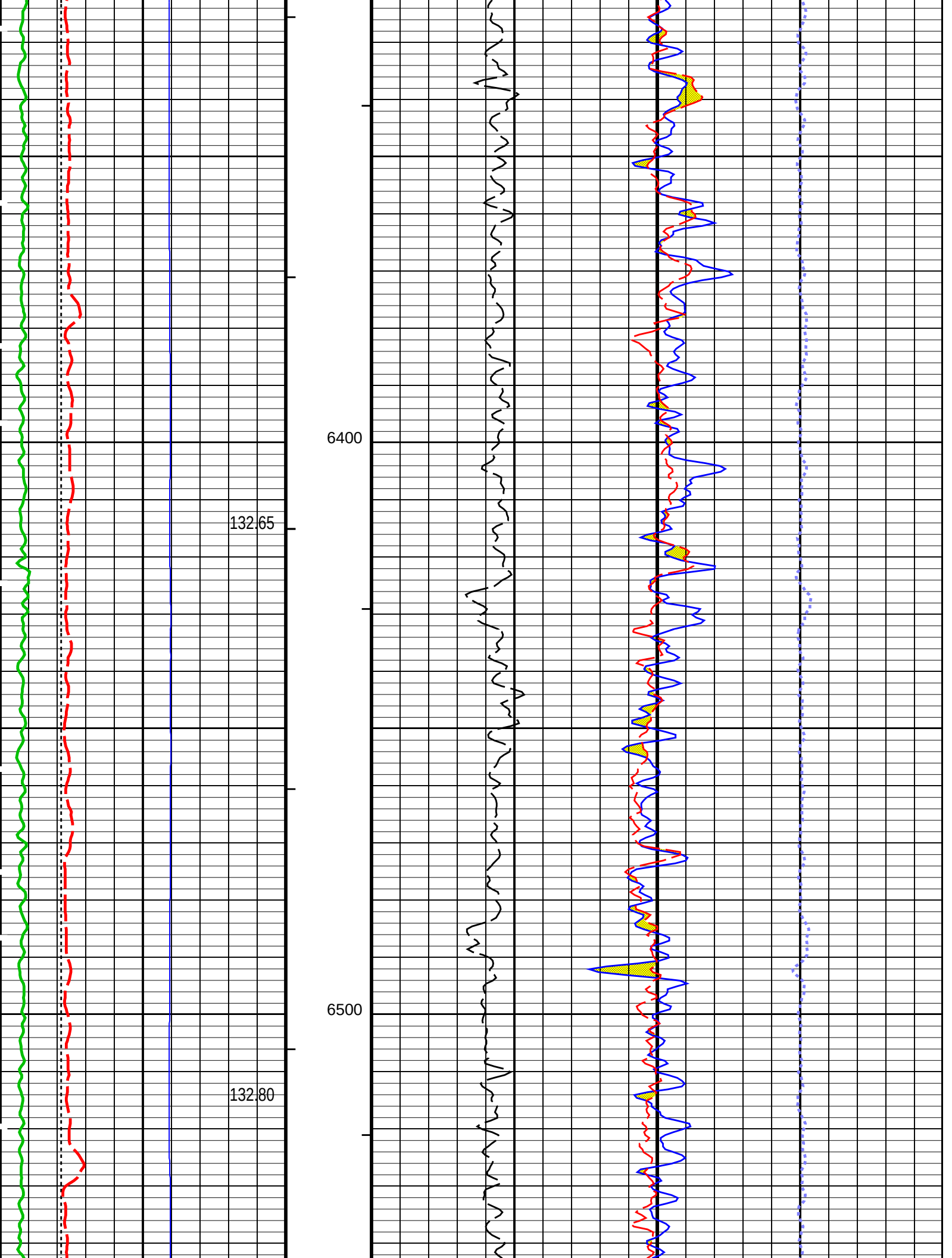
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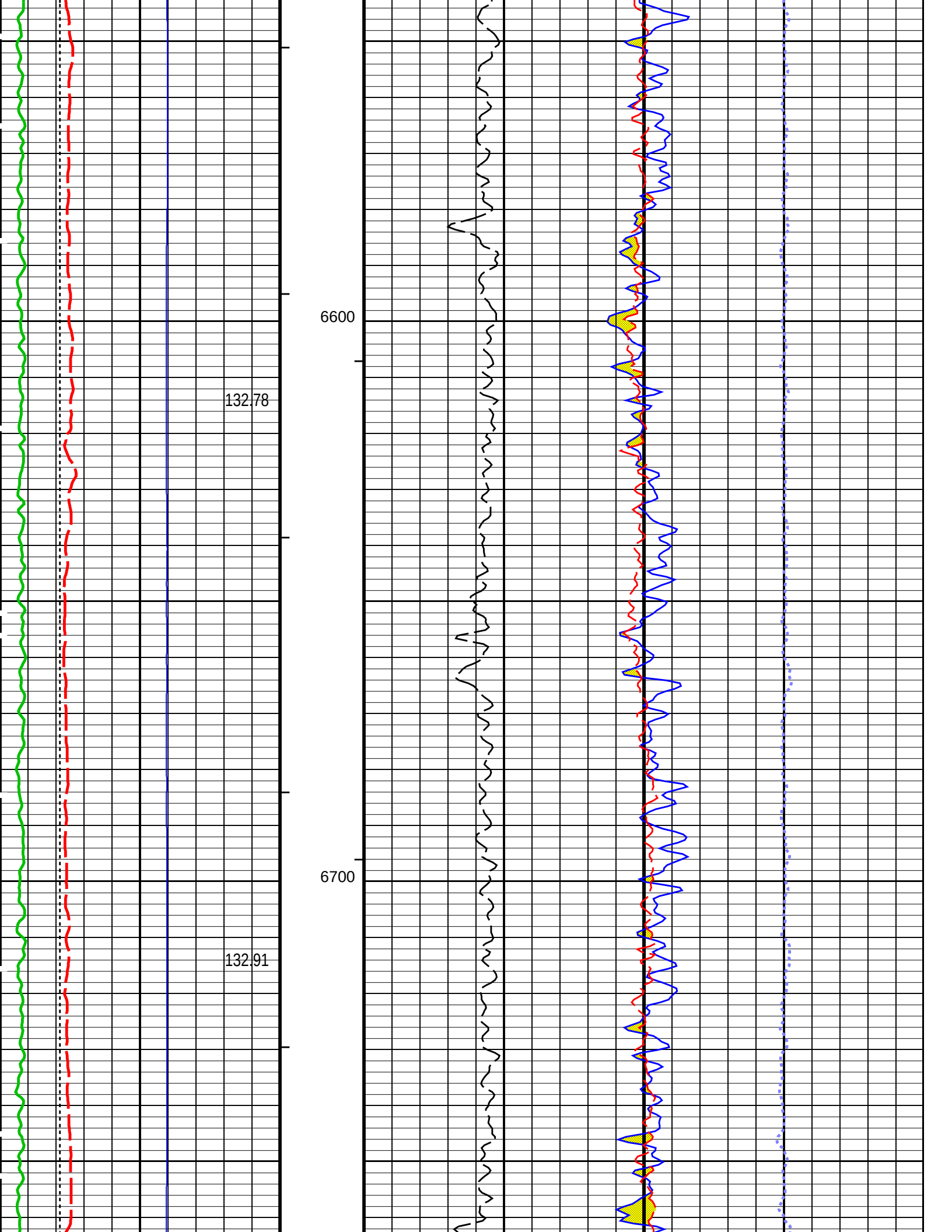
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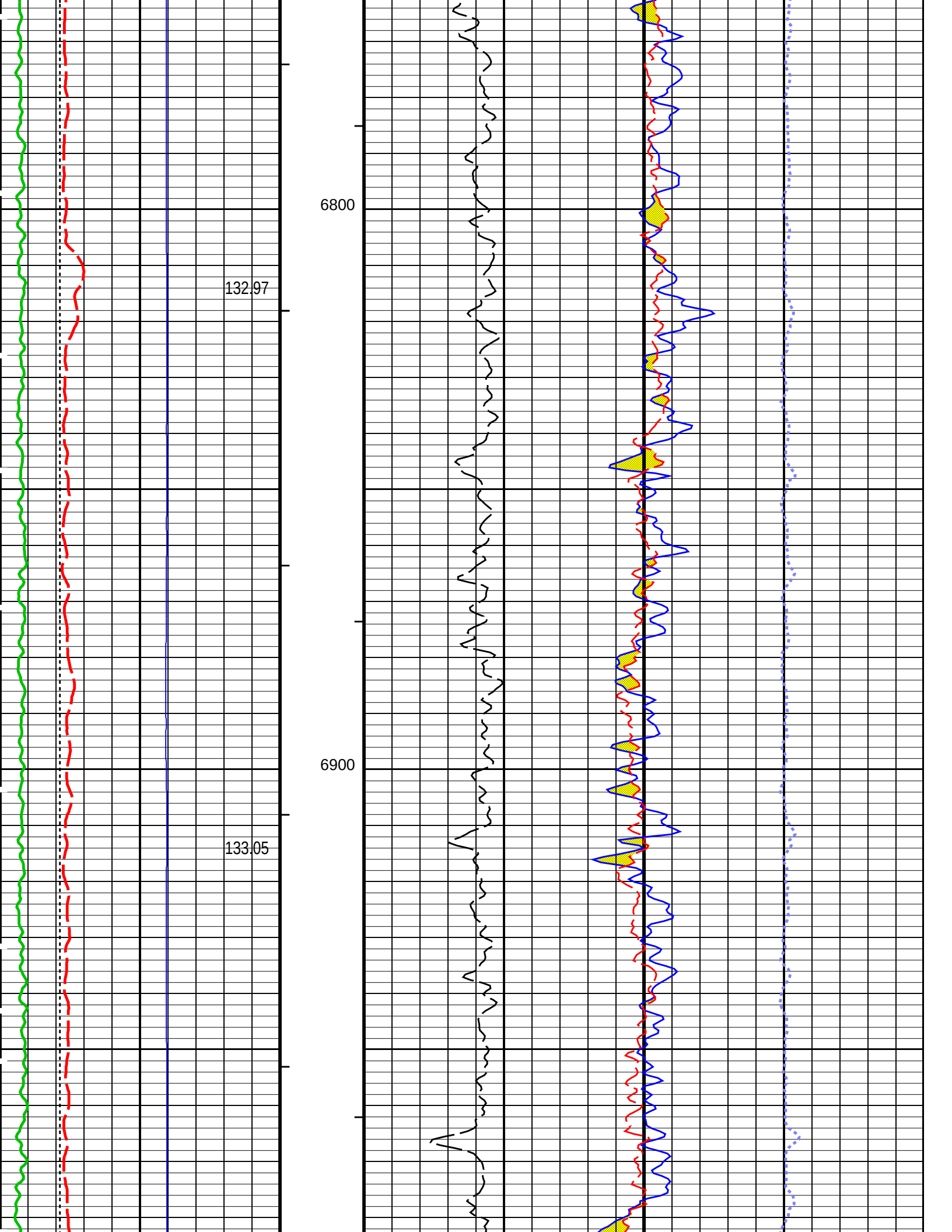
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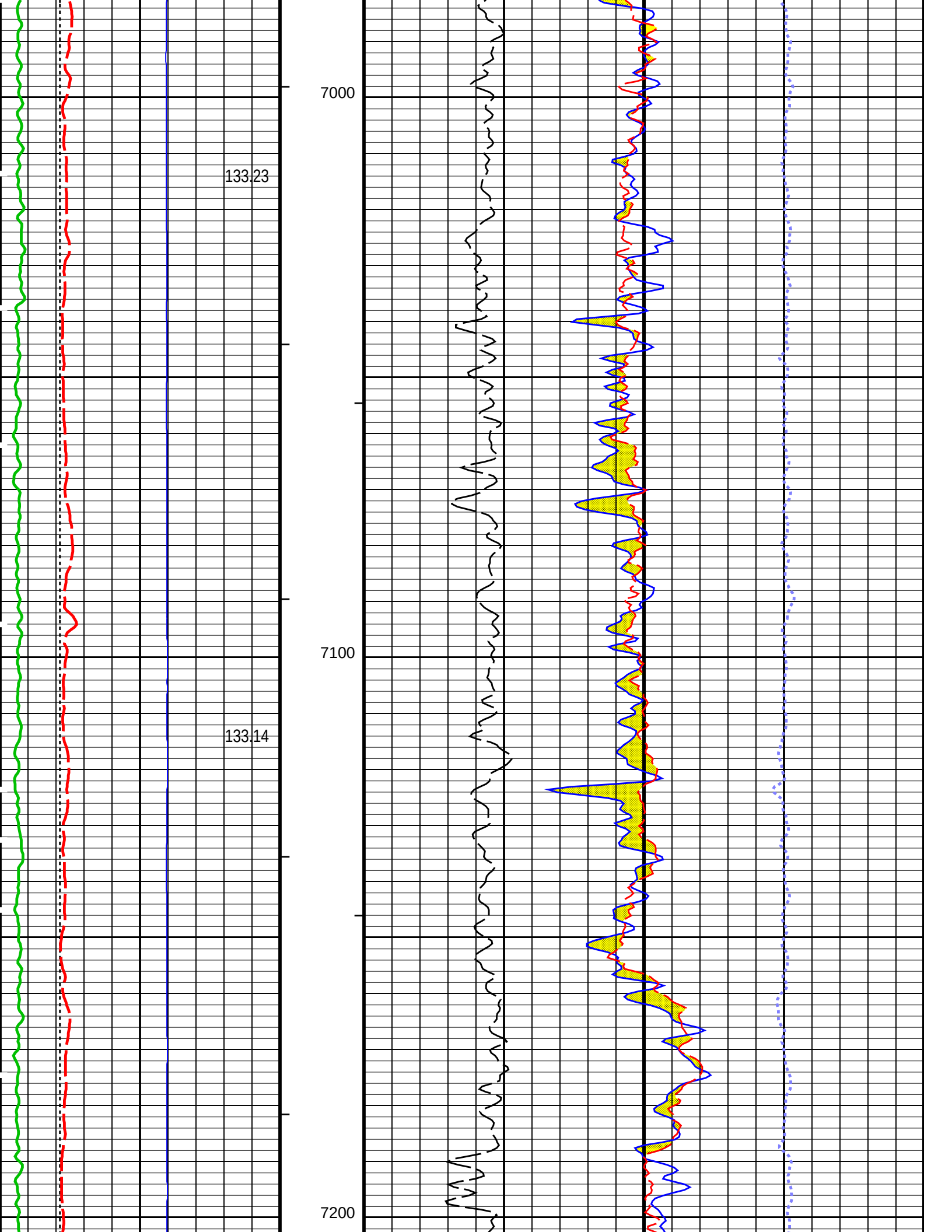
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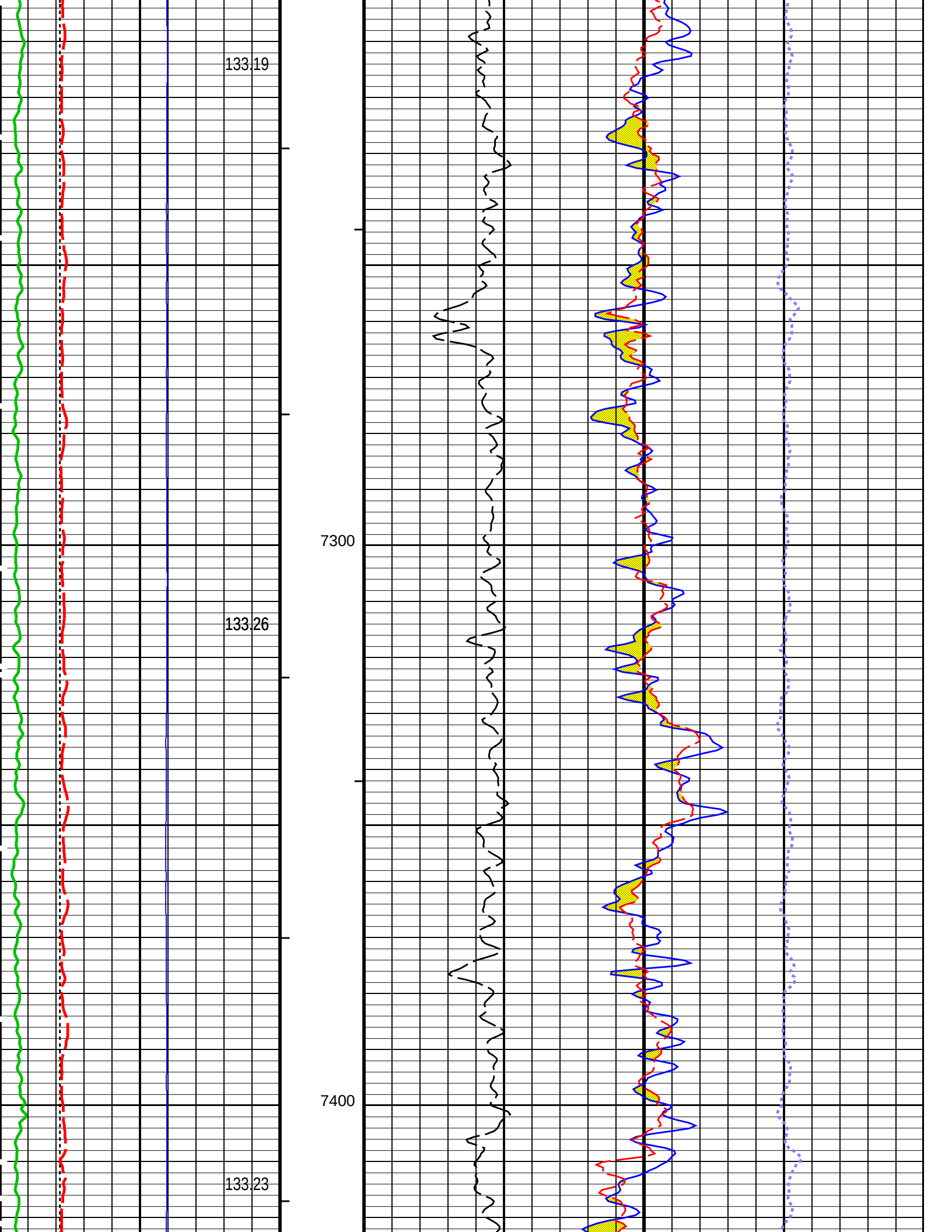
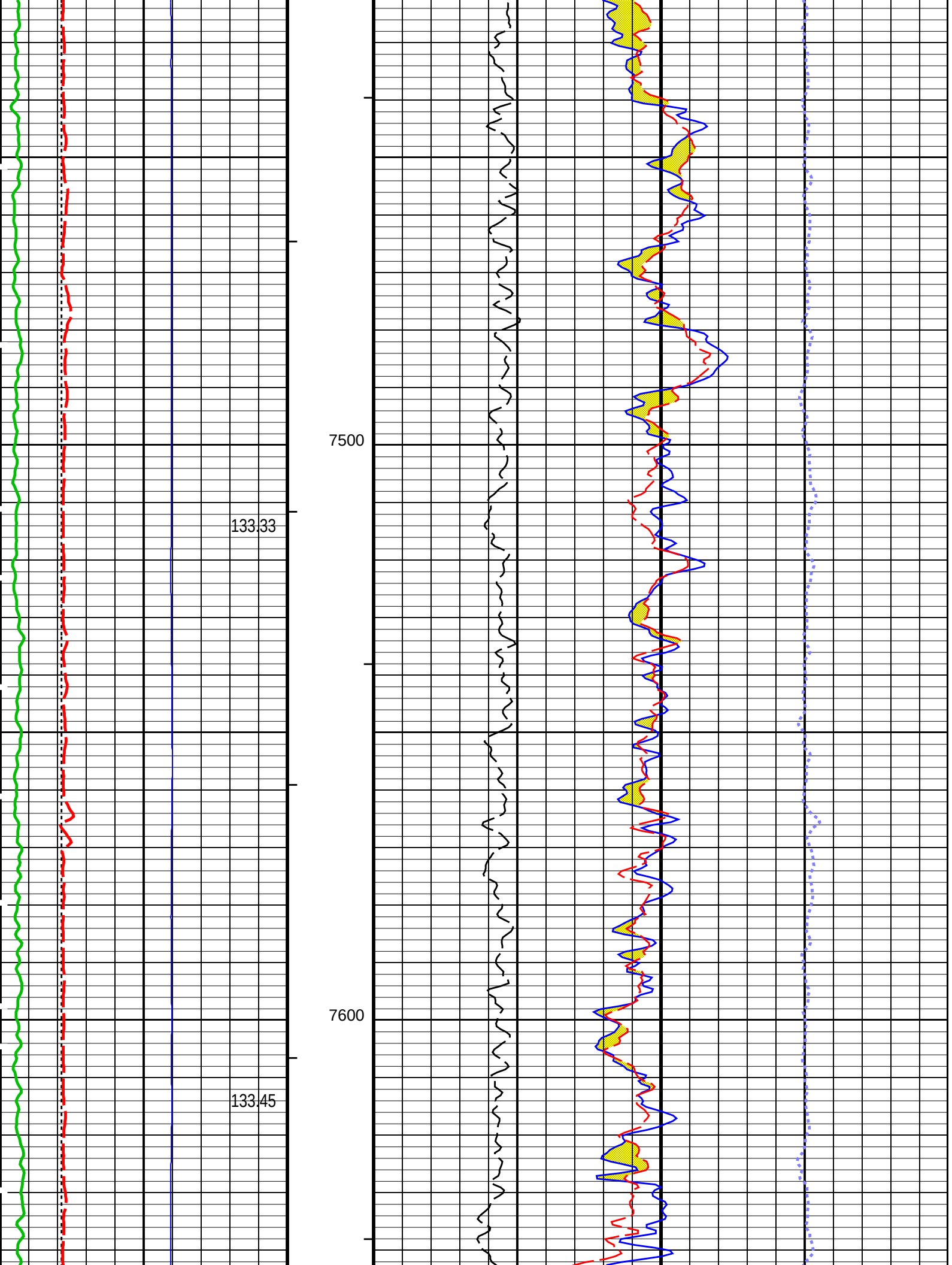
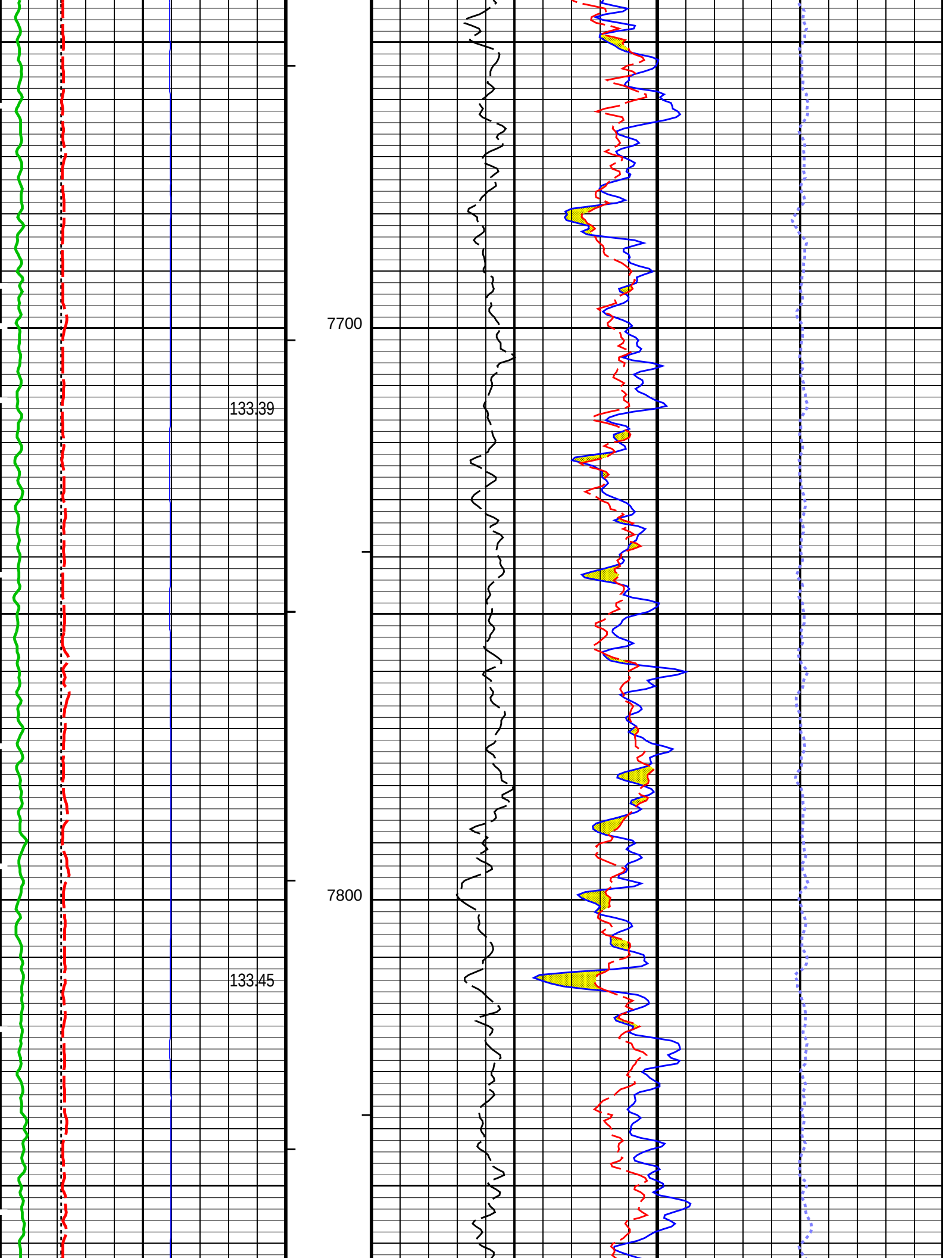
133.14
7200


133.19
7300
133.26
7400
133.23


7500
133.33
7600
133.45


7700
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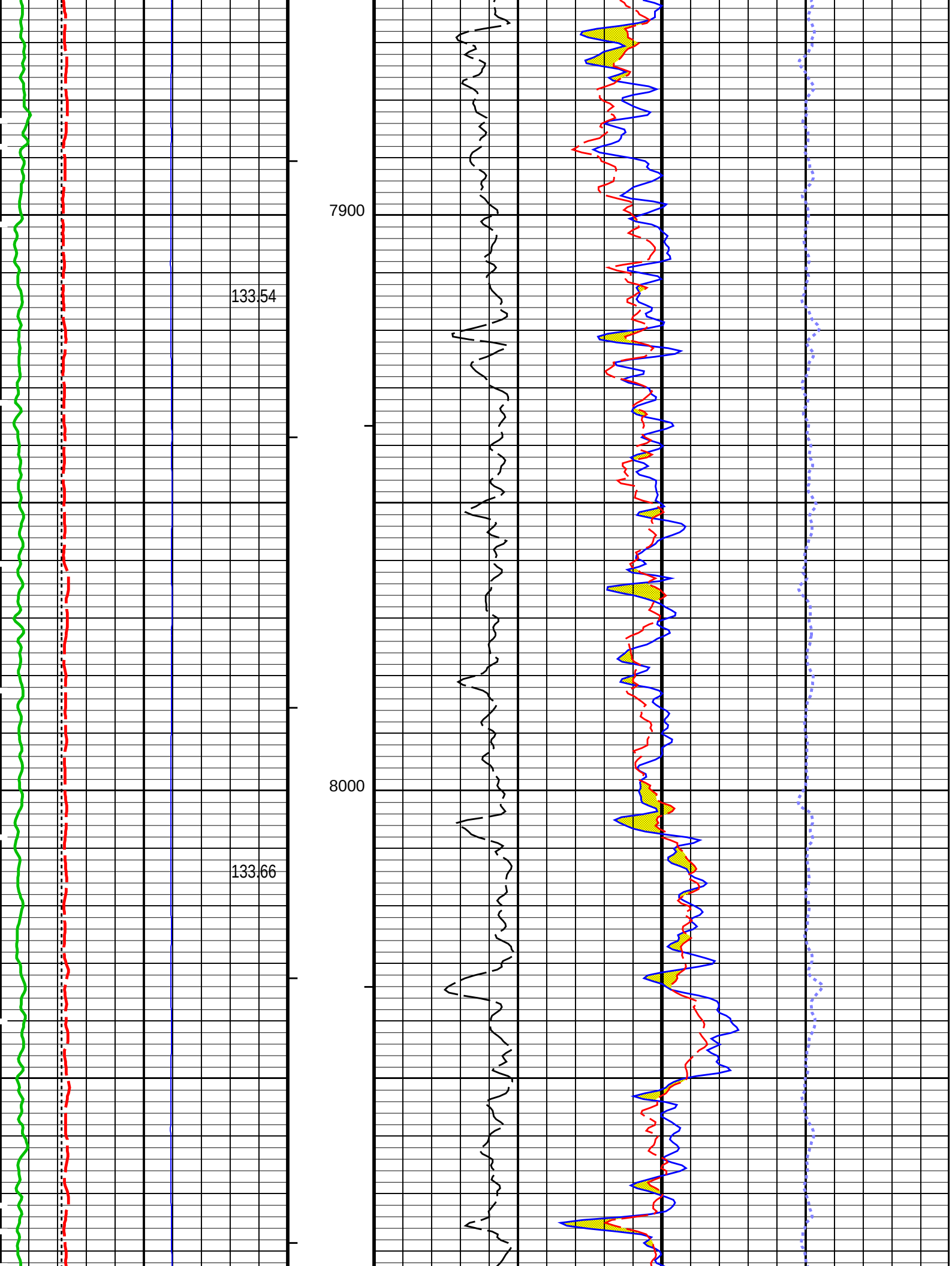
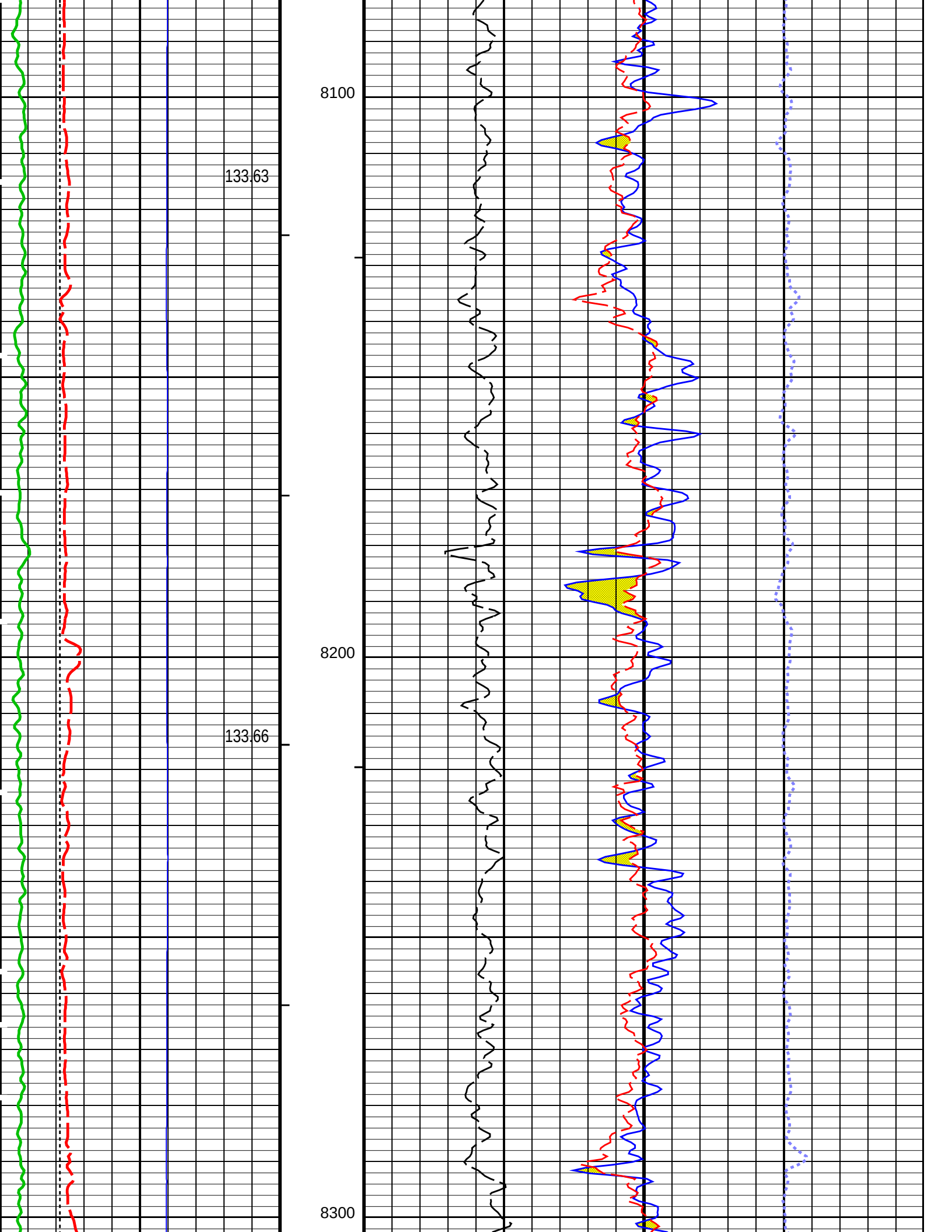
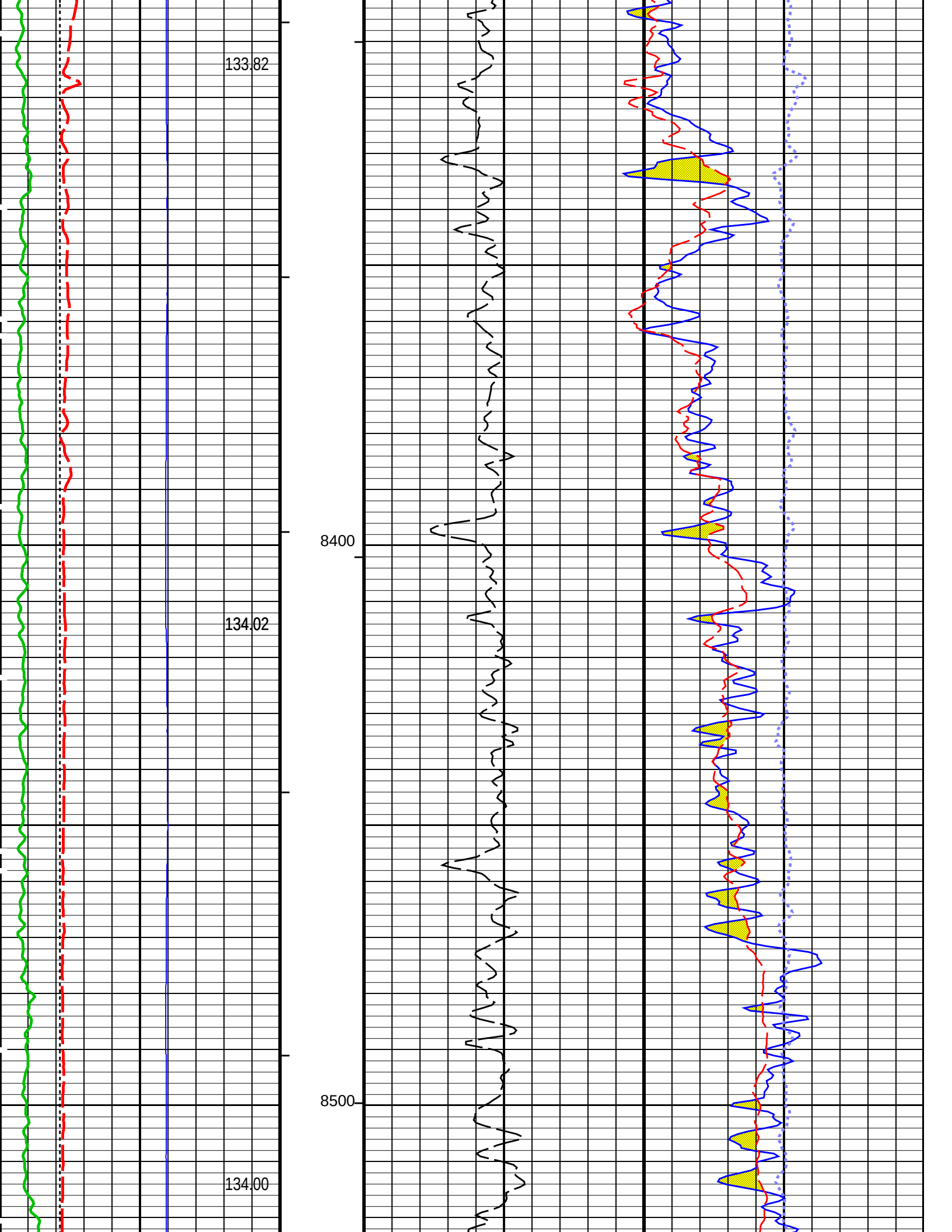
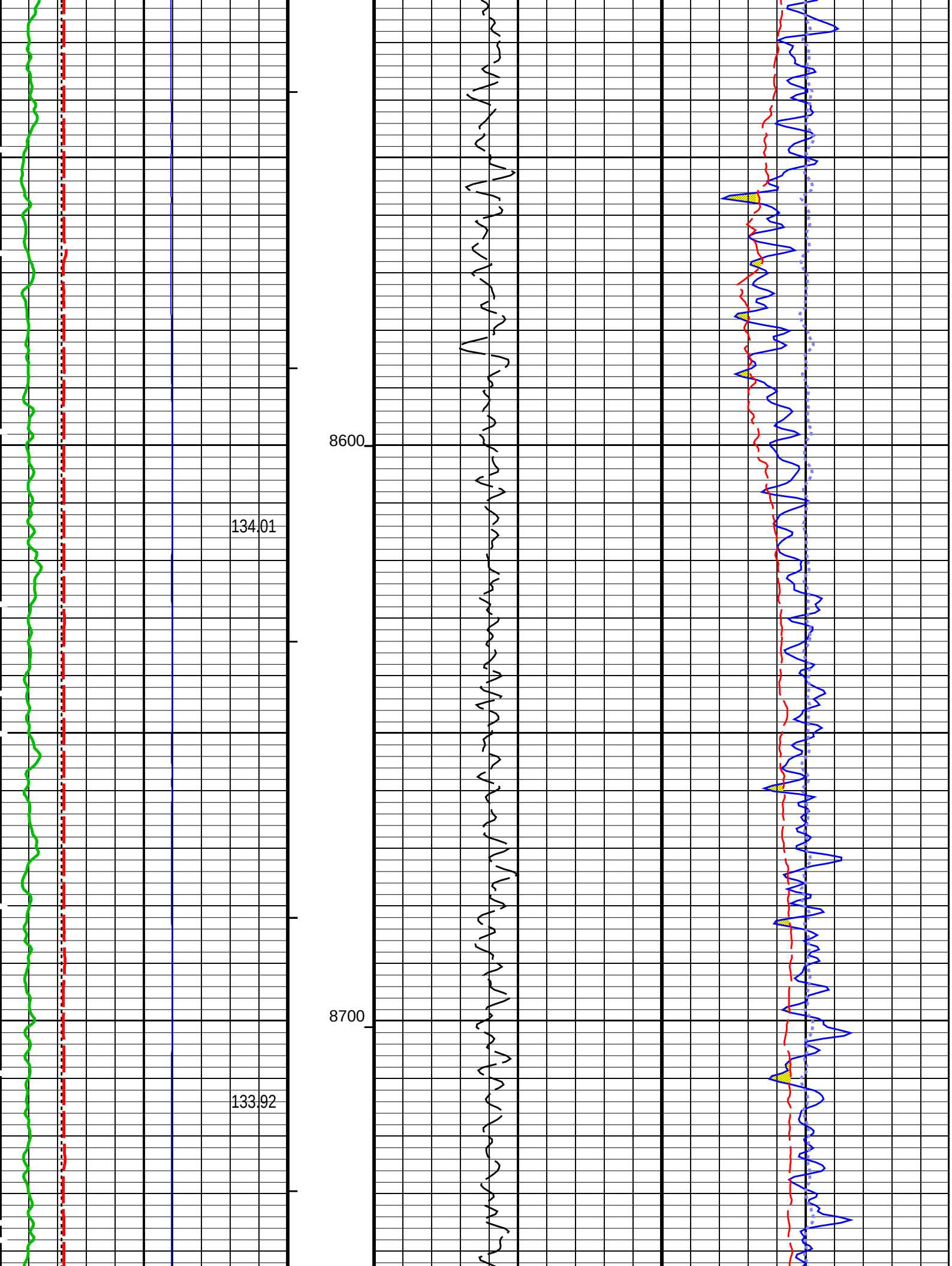
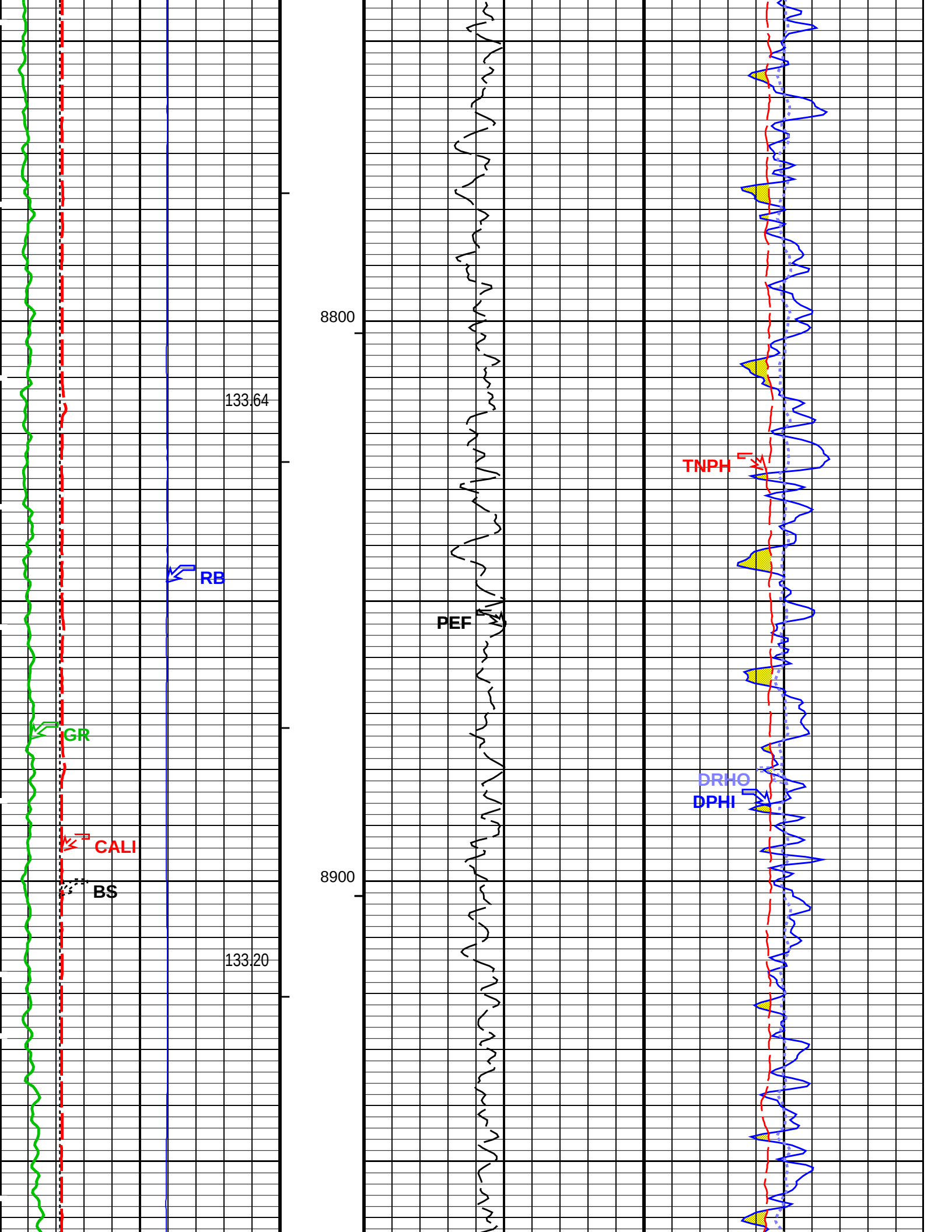
7800
133.45

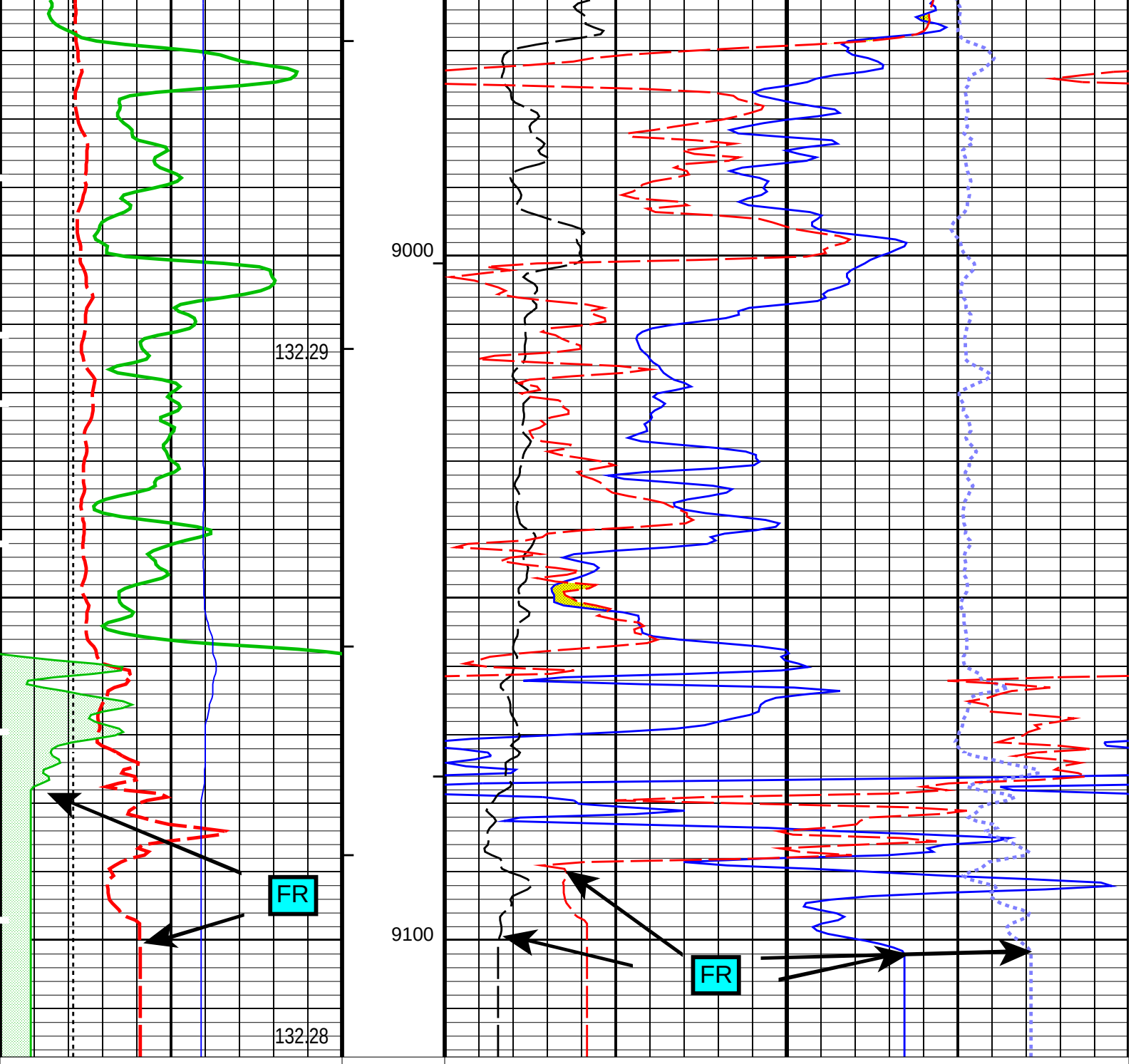

7900
133.54
8000
133.66


8100
133.63
8200
133.66
8300


133.82
8400
134.02
8500
134.00

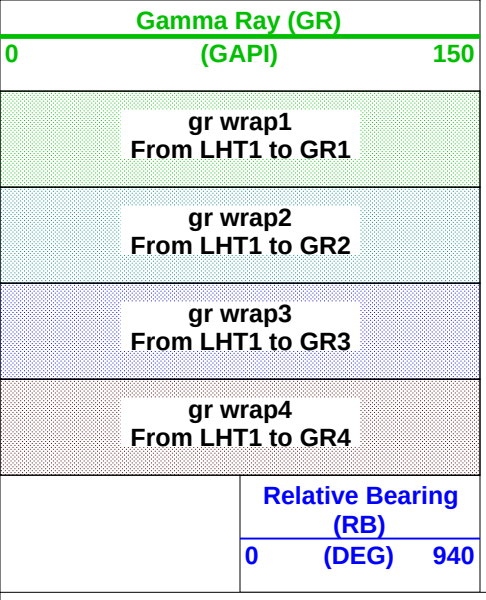

8600
134.01
8700
133.92


8800
8900
133.64
133.20
RB
GR
CALI
BS
PEF
TNPH
DRHO
DPHI



GR Temp (WTEP) (DEGF)		
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

DPHI (DPHI)		
30	(PU)	−10
PEF (PEF)		DRHO (DRHO)
0	(−−−−	10 −0.5 (G/C3) 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	
FD	Fluid Density	1	G/C3
FSAL	Formation Salinity	0	PPM
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	1600.00	PPM
CSIZ	Current Casing Size	7.000	IN
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	NORMAL	
TD	Total Depth	9120	FT

Format: TB_5INCH_NUCLEAR Vertical Scale: 5" per 100’ Graphics File Created: 20−Aug−2014 19:07

OP System Version: 19C2−270

TBT−A SRPC−5298−ThruBit_b

Input DLIS Files

DEFAULT ThruBit_008PUP FN:7 PRODUCER 20−Aug−2014 18:59 9116.8 FT 2395.8 FT

DEFAULT ThruBit_008PUP FN:7 PRODUCER 20−Aug−2014 18:59 9116.8 FT 2395.8 FT

Output DLIS Files

DEFAULT ThruBit_009PUP FN:8 PRODUCER 20−Aug−2014 19:07

Schlumberger

CALIBRATIONS

MAXIS Field Log

ThruBit String / Equipment Identification

Primary Equipment:		
Induction Resistivity	TBI − A	19
Density	TBD − A	28
Gamma−Ray Logging Source	GGLS − FZ	3216
Thermal Neutron	TBN − A	18
Neutron Logging Source	NNLS − EWA	4484
Telemetry Memory GR	TMG − A	24
Battery	TBAT −	35
Battery	TBAT −	13
Auxiliary Equipment:		

ThruBit String Master Calibration

TBI Master Calibration Sonde Errors

	Value	Nominal		Value	Nominal
Freq 1, A1, R	−499.874	−457.000	Freq 1, A1, X	−151.260	300.000
−536.000 (Minimum)	−387.000 (Nominal)	−387.000 (Maximum)	−500.000 (Minimum)	1100.00 (Nominal)	1100.00 (Maximum)
Freq 1, A2, R	−151.260	−141.000	Freq 1, A2, X	24.3585	320.000
−162.000 (Minimum)	−120.000 (Nominal)	−120.000 (Maximum)	−75.0000 (Minimum)	700.000 (Nominal)	700.000 (Maximum)
Freq 1, A3, R	−29.8282	−28.0000	Freq 1, A3, X	−47.9286	50.0000
−38.0000 (Minimum)	−18.0000 (Nominal)	−18.0000 (Maximum)	−375.000 (Minimum)	475.000 (Nominal)	475.000 (Maximum)
Freq 1, A4, R	−17.1550	−16.0000	Freq 1, A4, X	216.881	300.000
−24.0000 (Minimum)	−8.00000 (Nominal)	−8.00000 (Maximum)	25.0000 (Minimum)	575.000 (Nominal)	575.000 (Maximum)
Freq 1, A5, R	−14.0290	−14.0000	Freq 1, A5, X	114.659	150.000
−21.0000 (Minimum)	−7.00000 (Nominal)	−7.00000 (Maximum)	25.0000 (Minimum)	275.000 (Nominal)	275.000 (Maximum)
Freq 2, A1, R	−264.636	−237.000	Freq 2, A1, X	−127.909	150.000
−293.000 (Minimum)	−186.000 (Nominal)	−186.000 (Maximum)	−375.000 (Minimum)	675.000 (Nominal)	675.000 (Maximum)
Freq 2, A2, R	−97.8553	−92.0000	Freq 2, A2, X	−13.7816	160.000
−106.000 (Minimum)	−76.0000 (Nominal)	−76.0000 (Maximum)	−100.000 (Minimum)	425.000 (Nominal)	425.000 (Maximum)
Freq 2, A3, R	−21.3559	−21.0000	Freq 2, A3, X	−85.1529	−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
		−19.8978	−20.0000			57.8505	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
		−18.6716	−20.0000			−15.6937	−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
		−169.259	−149.000			−164.423	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
		−74.2036	−70.0000			−52.9796	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
		−17.0602	−17.0000			−122.601	−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
		−21.0882	−22.0000			−48.8888	−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
		−20.8238	−22.0000			−110.720	−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
		−93.5347	−80.0000			−264.462	−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		Value	Nominal
		−53.9868	−50.0000			−121.315	−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
		−13.3450	−14.0000			−192.310	−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
		−23.5496	−25.0000			−208.555	−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
		−25.6168	−28.0000			−270.104	−300.000
−43.0000 (Minimum)	(Nominal)	−12.0000 (Maximum)		−475.000 (Minimum)	(Nominal)	−125.000 (Maximum)	

Master: 5−Aug−2014 12:21

ThruBit String Master Calibration

TBI Master Calibration COMPLEX GAINS

Freq 1, R	Value	Nominal	Freq 1, X	Value	Nominal
	1.002	1.000		−0.004372	0
	0.9957	1.000		−0.0004628	0
	0.9985	1.000		−0.006971	0
	0.9903	1.000		0.002896	0
	0.9981	1.000		0.0008423	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

	0.9966	1.000		−0.01184	0
	0.9898	1.000		−0.008324	0
	0.9870	1.000		−0.007725	0
	0.9856	1.000		−0.005659	0
	0.9958	1.000		−0.007887	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
	1.003	1.000		−0.009471	0
	0.9967	1.000		−0.006480	0
	0.9937	1.000		−0.006248	0
	0.9905	1.000		−0.004172	0
	1.004	1.000		−0.005861	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
	0.9966	1.000		−0.01982	0
	0.9894	1.000		−0.01756	0
	0.9884	1.000		−0.01941	0
	0.9832	1.000		−0.01532	0
	1.008	1.000		−0.01929	0
0.9300 (Minimum) (Nominal) 1.070 (Maximum)			−0.05000 (Minimum) (Nominal) 0.05000 (Maximum)		

Master: 5−Aug−2014 12:21

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
	1894.8	1949.8		2051.0	2096.7		2205.1	2285.7
1799.8 (Minimum) (Nominal) 2099.8 (Maximum)			1946.7 (Minimum) (Nominal) 2246.7 (Maximum)			2135.7 (Minimum) (Nominal) 2435.7 (Maximum)		

Master: 14−Aug−2014 13:37

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) (Nominal) 2.657 (Maximum)			1.702 (Minimum) (Nominal) 1.802 (Maximum)		

LS1 Background CPS	Value	Nominal	SS1 Background CPS	Value	Nominal
	136.17	140.00		122.61	140.00
100.00 (Minimum) (Nominal) 187.00 (Maximum)			100.00 (Minimum) (Nominal) 185.00 (Maximum)		

LS4 Background CPS	Value	Nominal	SS1 Aluminium CPS	Value	Nominal
	29.51	29.00		4863.33	4850.00
20.00 (Minimum) (Nominal) 38.00 (Maximum)			4076.00 (Minimum) (Nominal) 5613.00 (Maximum)		

LS1 Aluminium CPS	Value	Nominal	SS1 Magnesium CPS	Value	Nominal
	837.90	870.00		8165.26	8000.00
750.00 (Minimum) (Nominal) 982.00 (Maximum)			6695.00 (Minimum) (Nominal) 9269.00 (Maximum)		

LS4 Aluminium CPS	Value	Nominal
	1044.5	955.00
796.00 (Minimum) (Nominal) 1169.0 (Maximum)		

LS1 Al + Sleeve CPS	Value	Nominal
	764.13	725.00
650.00 (Minimum) (Nominal) 838.00 (Maximum)		

LS4 Al + Sleeve CPS	Value	Nominal
	518.82	426.50
382.00 (Minimum) (Nominal) 638.00 (Maximum)		

LS1 Magnesium CPS	Value	Nominal
	5512.36	5800.00
5158.00 (Minimum) (Nominal) 6486.00 (Maximum)		

SS Slope	Value	Nominal
	1.599	1.645
1.520 (Minimum) (Nominal) 1.770 (Maximum)		

LS Slope	Value	Nominal
	0.4168	0.4150
0.3800 (Minimum) (Nominal) 0.4500 (Maximum)		

Pef K Factor	Value	Nominal
	5.314	4.840
3.510 (Minimum) (Nominal) 6.170 (Maximum)		

Pef B Factor	Value	Nominal
	−0.6909	−0.5550
−0.7000 (Minimum) (Nominal) −0.4100 (Maximum)		

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ThruBit String Master Calibration

Thermal Neutron Master Calibration

TNF, Background CPS	Value	Nominal
	0.15	1.0
0 (Minimum) (Nominal) 2.0 (Maximum)		

TNN, Background CPS	Value	Nominal
	0.10	1.0
0 (Minimum) (Nominal) 2.0 (Maximum)		

TNF, Tank CPS	Value	Nominal
	85.42	96.00
25.00 (Minimum) (Nominal) 200.0 (Maximum)		

TNN, Tank CPS	Value	Nominal
	2557.8	2860.0
750.00 (Minimum) (Nominal) 5700.0 (Maximum)		

TNF, Tank + Al Sleeve CPS	Value	Nominal
	2821.5	3040.0
727.00 (Minimum) (Nominal) 6080.0 (Maximum)		

TNN, Tank + Al Sleeve CPS	Value	Nominal
	29602.7	32350.0
8000.00 (Minimum) (Nominal) 64700.0 (Maximum)		

Tank + Al Sleeve Ratio	Value	Nominal
	10.847	10.797
10.300 (Minimum) (Nominal) 11.300 (Maximum)		

Tank + Al Sleeve Porosity PU	Value	Nominal
	14.46	14.40
13.40 (Minimum) (Nominal) 15.40 (Maximum)		

Tank, Ratio	Value	Nominal
	29.945	30.958
28.000 (Minimum) (Nominal) 34.000 (Maximum)		

Tank, Temperature DEGF	Value	Nominal
	77.0	70.0
20.0 (Minimum) (Nominal) 120 (Maximum)		

Master: 31−Jul−2014 14:17

ThruBit String Master Calibration

TMG Accelerometer Calibration

Minimum Ax, m/s2	Value	Nominal
NOT DONE	N/A	−9.810
−10.81 (Minimum) (Nominal) −8.810 (Maximum)		

Maximum Ax, m/s2	Value	Nominal
NOT DONE	N/A	9.810
8.810 (Minimum) (Nominal) 10.81 (Maximum)		

Minimum Ay, m/s2	Value	Nominal
NOT DONE	N/A	−9.810
−10.81 (Minimum) (Nominal) −8.810 (Maximum)		

Maximum Ay, m/s2	Value	Nominal
NOT DONE	N/A	9.810
8.810 (Minimum) (Nominal) 10.81 (Maximum)		

Minimum Az, m/s2	Value	Nominal
NOT DONE	N/A	0
−1.000 (Minimum) (Nominal) 1.000 (Maximum)		

Maximum Az, m/s2	Value	Nominal
NOT DONE	N/A	9.810
8.810 (Minimum) (Nominal) 10.81 (Maximum)		

RB Offset, degrees	Value	Nominal

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
	25.34	30.00		161.5	166.7
0 (Minimum) (Nominal) 120.0 (Maximum)			133.4 (Minimum) (Nominal) 200.0 (Maximum)		

Master: 5−Aug−2014 14:42

Company: **SANDRIDGE ENERGY**

Schlumberger

Well: **ALICE 3306 1−12H**
Field: **STOHRVILLE**
County: **HARPER**
State: **KANSAS**

SPECTRAL DENSITY
DUAL SPACED NEUTRON
MEMORY LOG