Schlumberger

Company: **SANDRIDGE ENERGY**

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

ARRAY INDUCTION
GAMMA RAY
MEMORY LOG

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

LOCATION

250' FSL & 1500' FWL

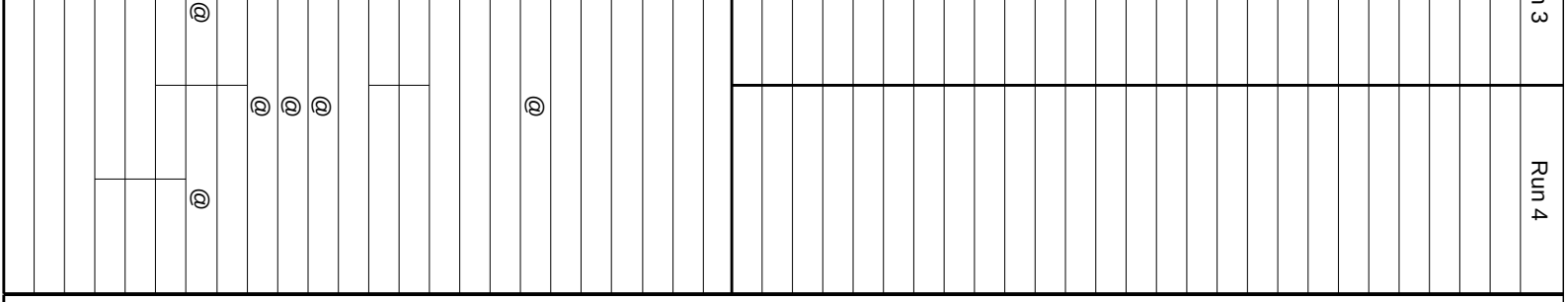
Elev.: K.B. 1354.00 ft
G.L. 1332.00 ft
D.F. 1354.00 ft

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
15−077−22081−010(	12	33S	6W

	Run 1	Run 2	Run
Logging Date	20−Aug−2014		
Run Number	1		
Depth Driller	9152 ft		
Schlumberger Depth	9120 ft		
Bottom Log Interval	9110 ft		
Top Log Interval	5448 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
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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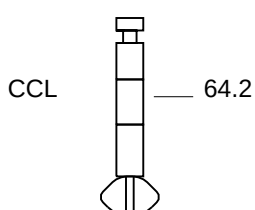
OTHER SERVICES1	OTHER SERVICES2
OS1: TBI−TBD−TBN−TMG	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
SERVICE:HORIZONTAL PUMP DOWN MEMORY BIT DEPTH: 9060' LOGGED TO: 2500'	
ALL SCALES AND PRESENTATIONS PER CLIENT REQUEST	
LIMESTONE MATRIX 2.71 g/cc USED FOR POROSITY 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	

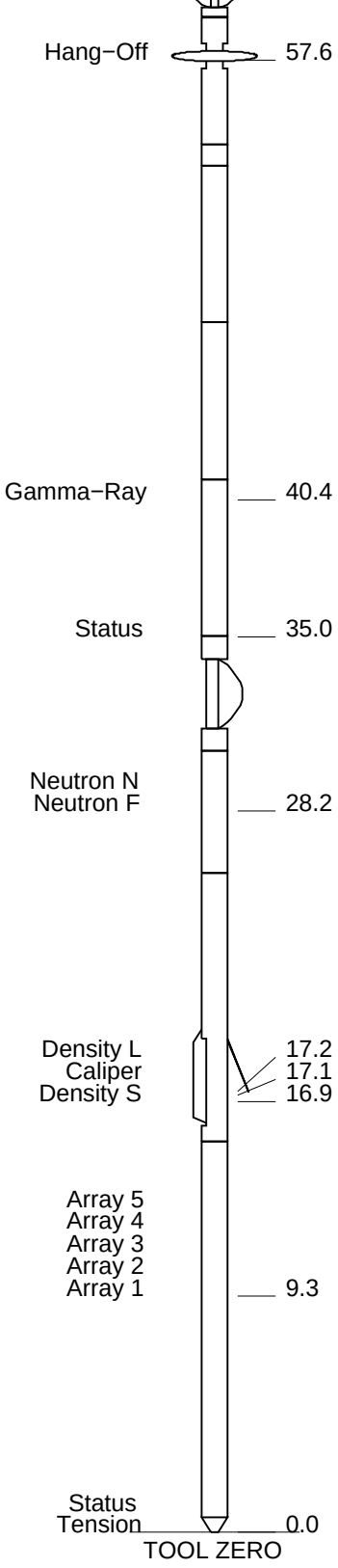
RUN 1			RUN 2		
SERVICE ORDER #:		3145	SERVICE ORDER #:		
PROGRAM VERSION:		19C2−270	PROGRAM VERSION:		
FLUID LEVEL:		0 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

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	



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

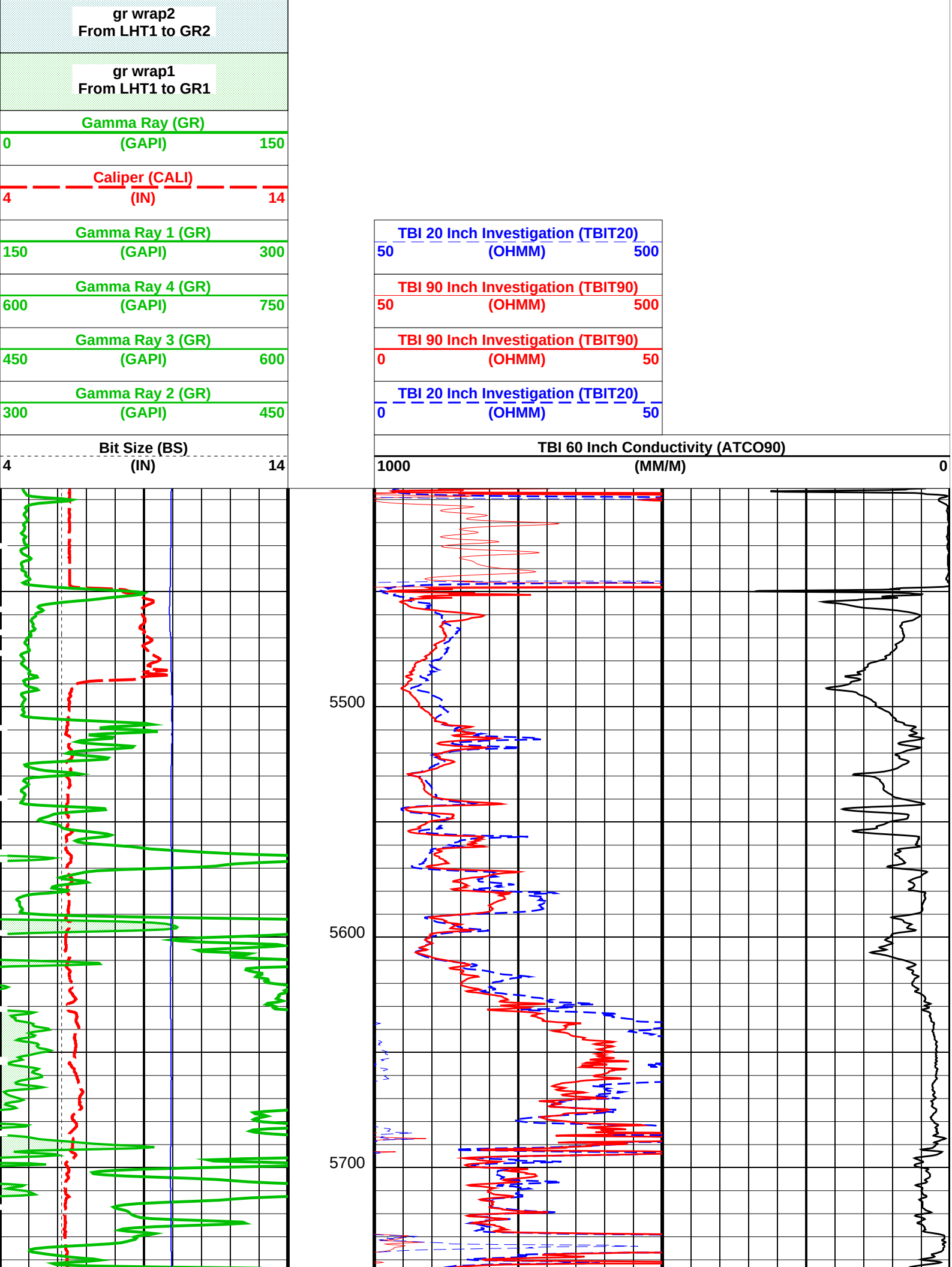
OP System Version: 19C2−270

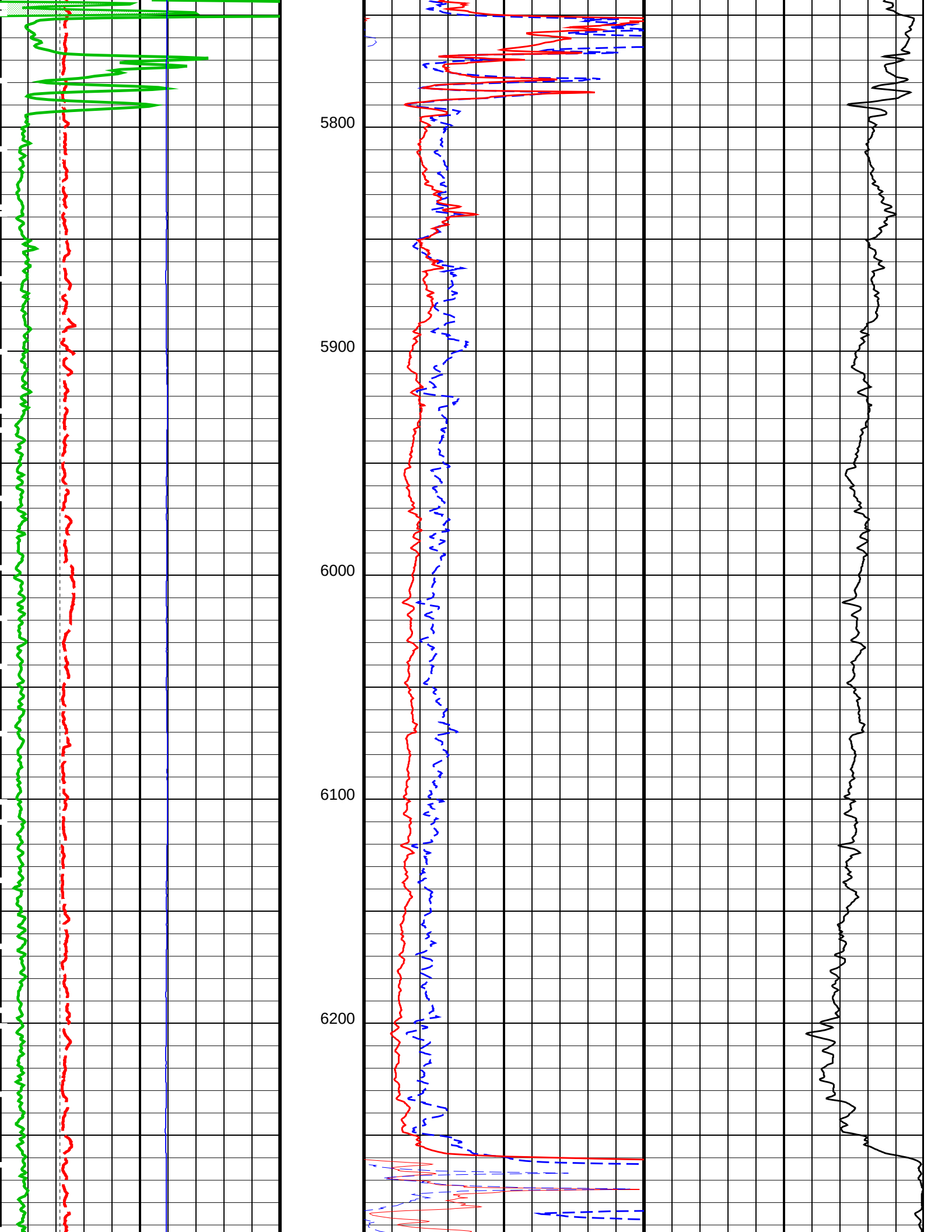
TBT−A	SRPC−5298−ThruBit_b

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 1 (GR)
150
(GAPI)
300
Gamma Ray 4 (GR)
600
(GAPI)
750
Gamma Ray 3 (GR)
450
(GAPI)
600
Gamma Ray 2 (GR)
300
(GAPI)
450
Bit Size (BS)
4
(IN)
14
TBI 20 Inch Investigation (TBIT20)
50
(OHMM)
500
TBI 90 Inch Investigation (TBIT90)
50
(OHMM)
500
TBI 90 Inch Investigation (TBIT90)
0
(OHMM)
50
TBI 20 Inch Investigation (TBIT20)
0
(OHMM)
50
TBI 60 Inch Conductivity (ATCO90)
1000
(MM/M)
0
5500
5600
5700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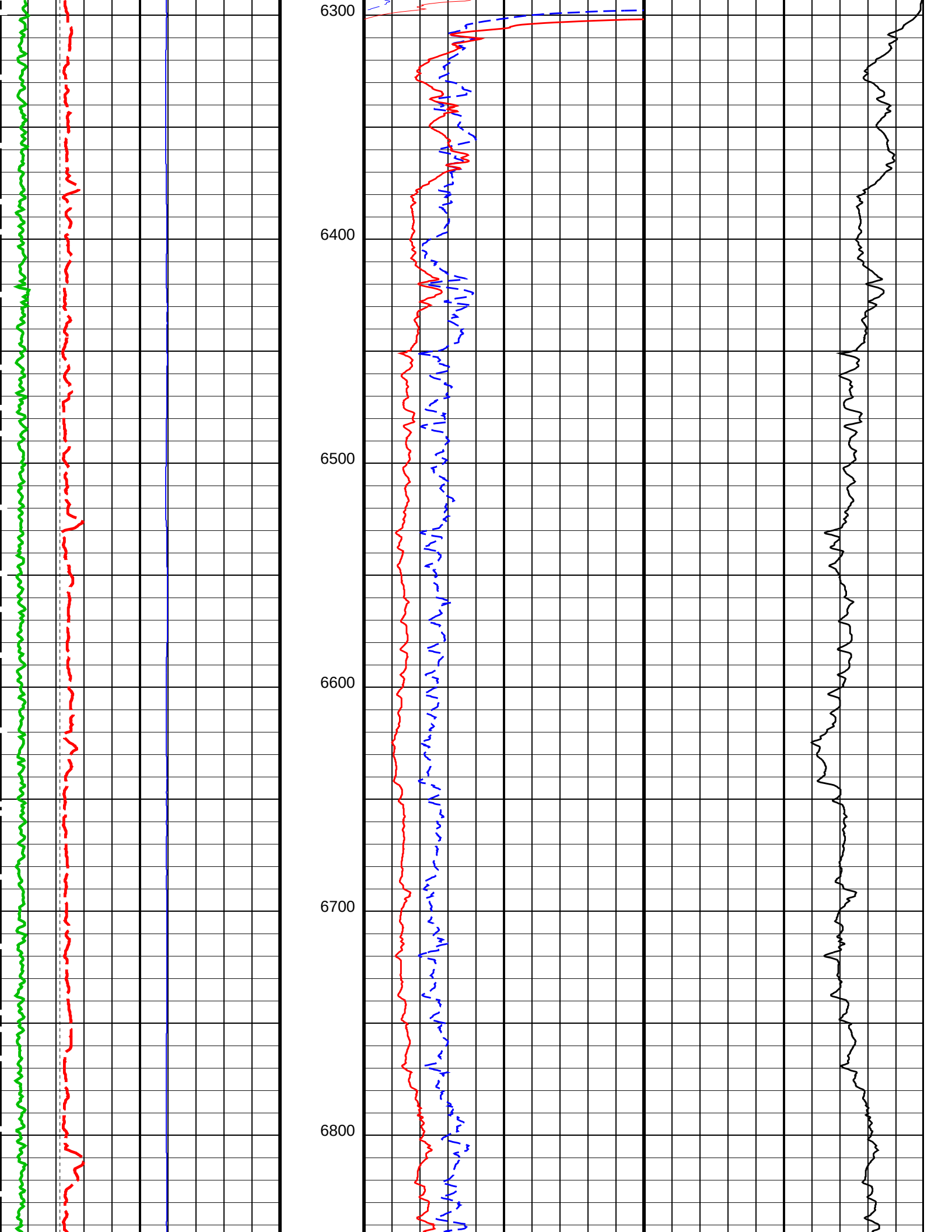
5900
6000
6100
6200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6600
6700
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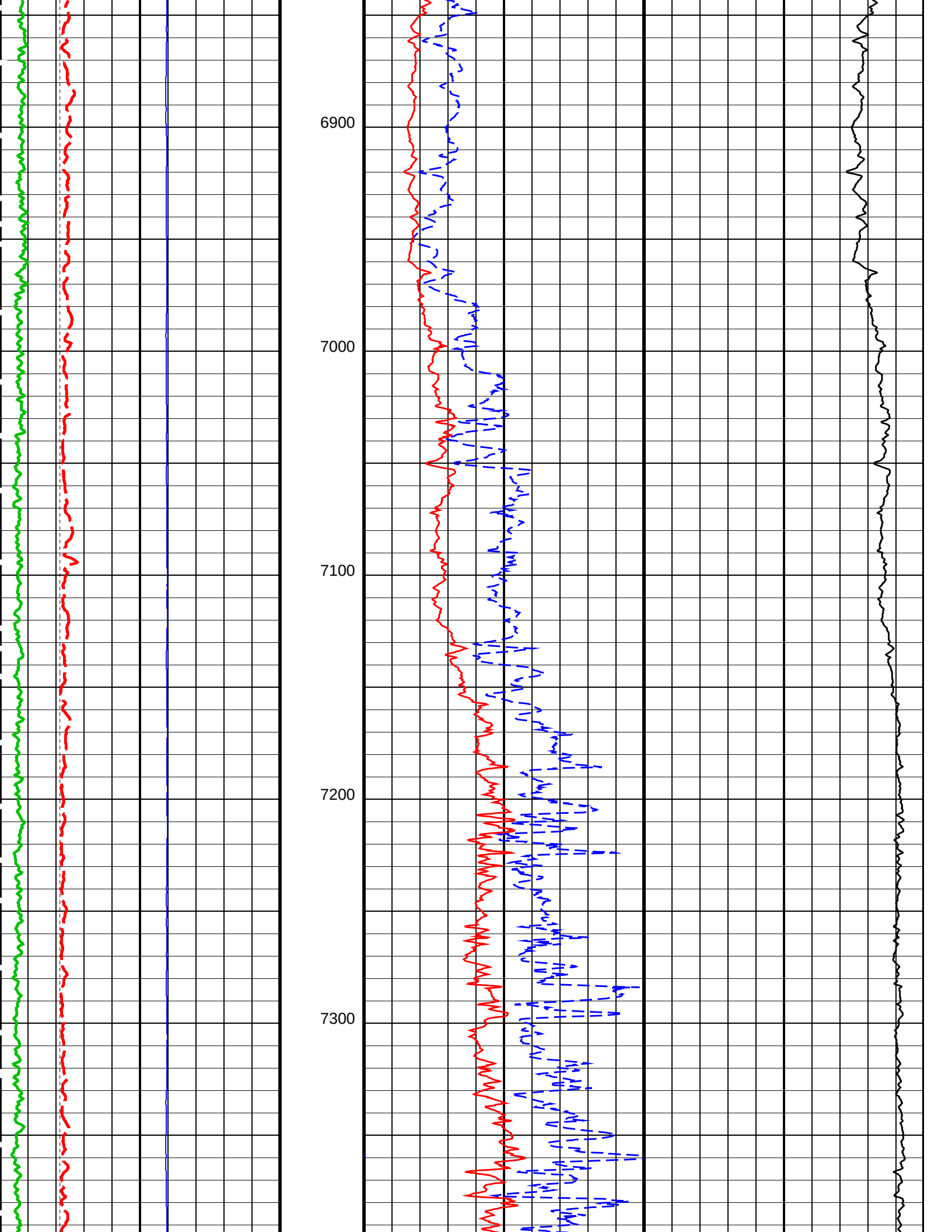
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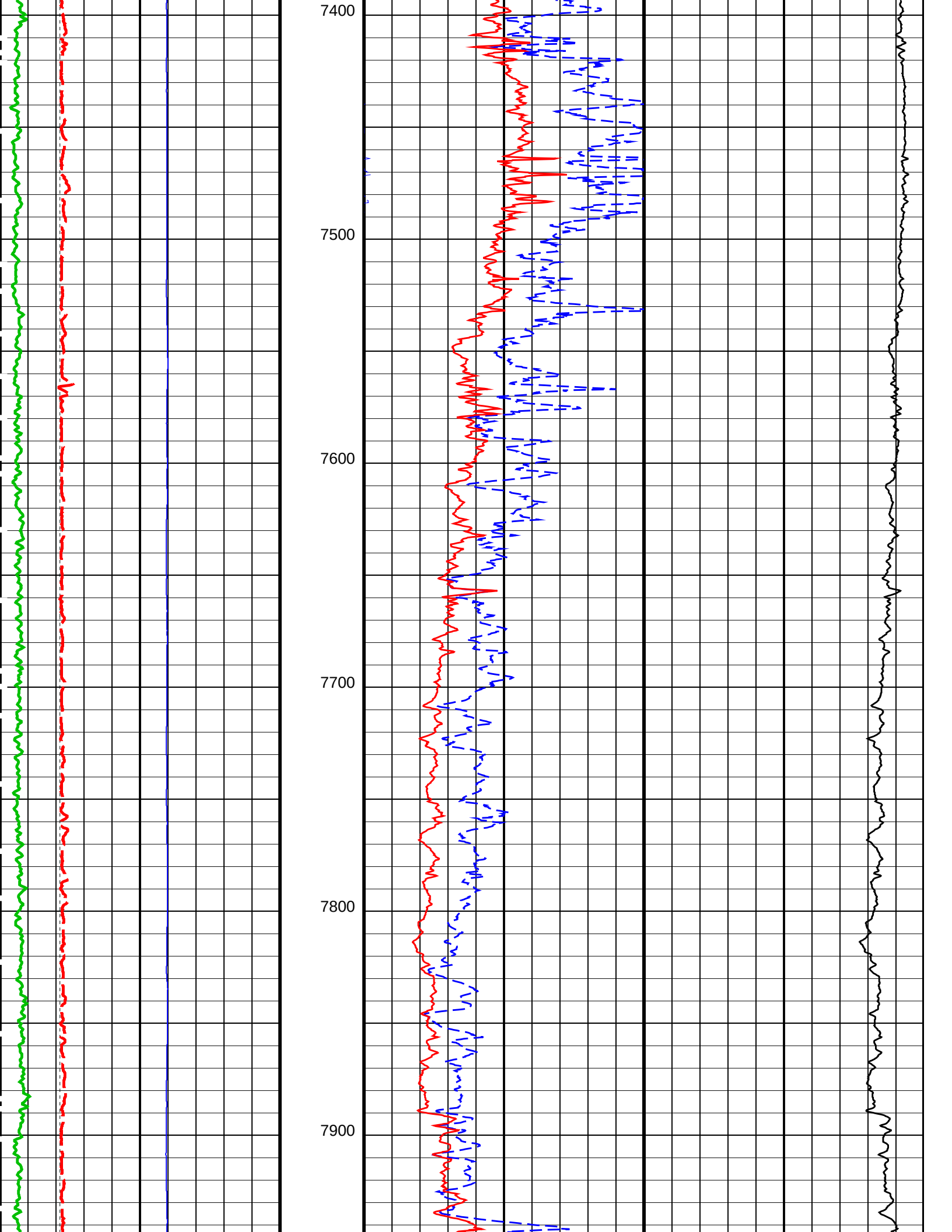
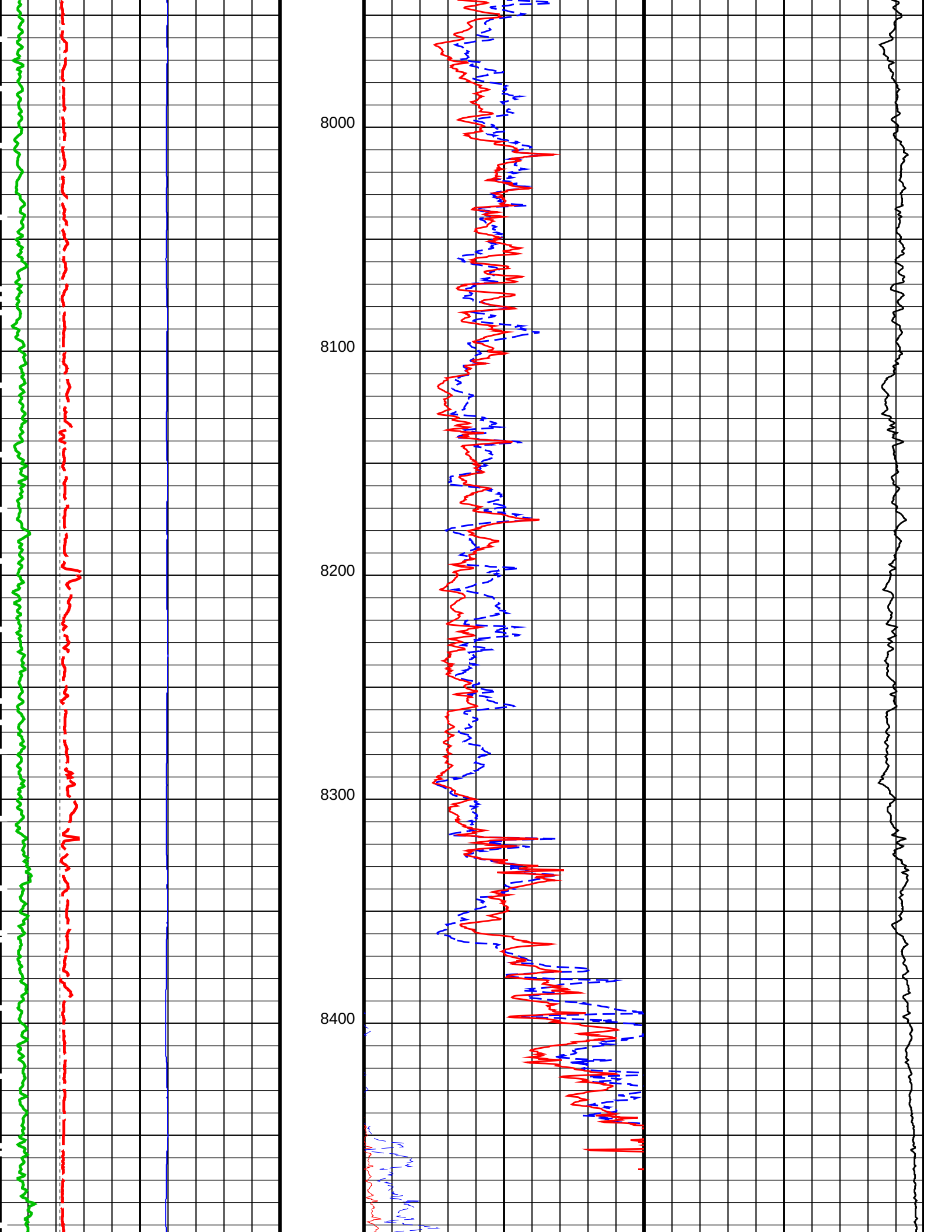
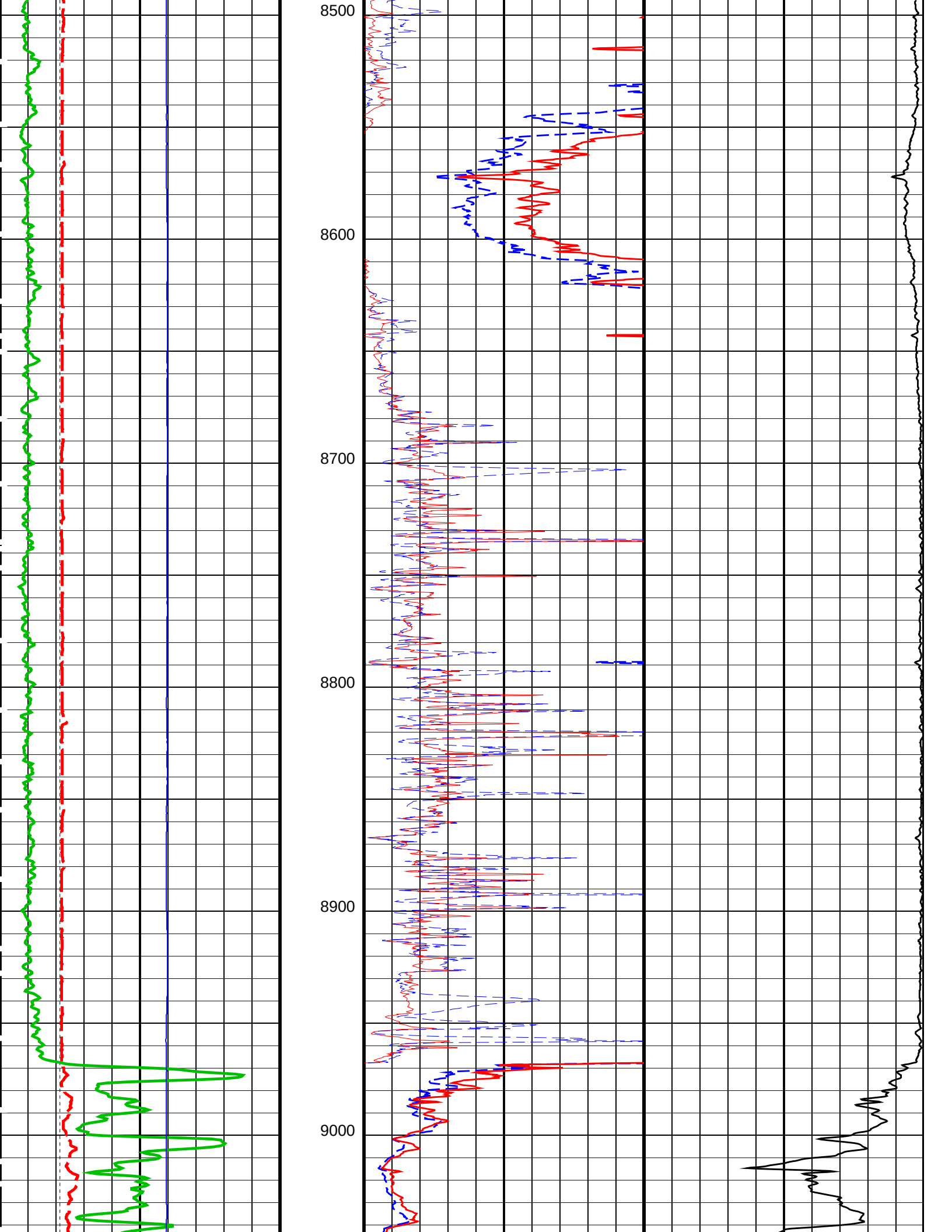
7000
7100
7200
7300


7400
7500
7600
7700
7800
7900


8000
8100
8200
8300
8400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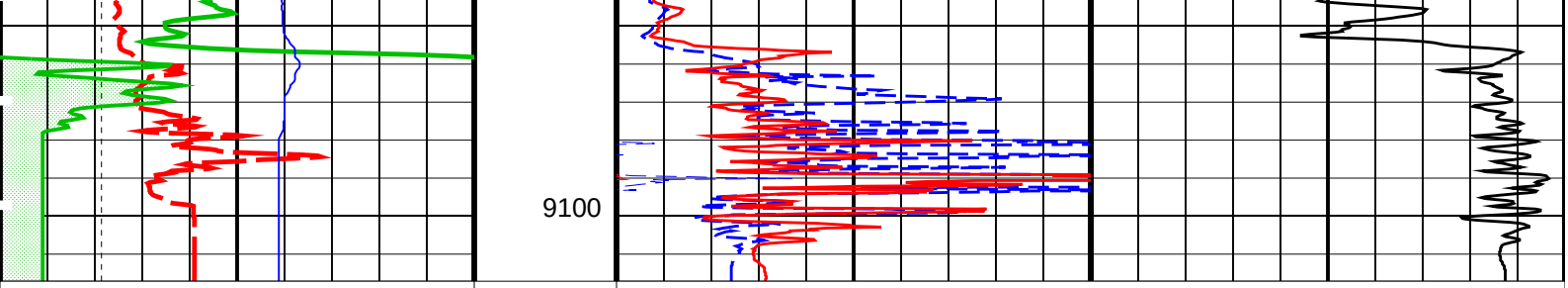
8600
8700
8800
8900
9000



Bit Size (BS)
4 (IN) 14

Gamma Ray 2 (GR)
300 (GAPI) 450

Gamma Ray 3 (GR)
450 (GAPI) 600

Gamma Ray 4 (GR)
600 (GAPI) 750

Gamma Ray 1 (GR)
150 (GAPI) 300

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

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

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

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

TBI 90 Inch Investigation (TBIT90)
50 (OHMM) 500

TBI 20 Inch Investigation (TBIT20)
50 (OHMM) 500

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	TBT−A: ThruBit String		
MT	Mud Type (for TBN and TBI correction)	WBM	
RB_OFFSET	Additional RB offset (degrees)	0	DEG
TBI_ALGO	TBI Algorithm Selection	AIT	
TBI_BHC_OP	Borehole Correction Option (for TBI)	Caliper	
TBI_CALTYP	TBI Mastercal Type	ThruBit	
TBI_REPL_ARRAY_DEST	TBI: Replace This Array	None	
TBI_REPL_ARRAY_SOURCE	TBI: With This Array	None	
TBI_TC_OP	Induction Temperature Correction Option	Lower	
	System and Miscellaneous		
BS	Bit Size	6.125	IN
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	NORMAL	

Format: TB_2INCH_RESISTIVITY 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

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)		

TBL 90 Inch Investigation (TBIT90)

Gamma Ray 2 (GR)
300 (GAPI) 450

Gamma Ray 1 (GR)
150 (GAPI) 300

Bit Size (BS)
4 (IN) 14

GR Temp (WTEP)
(DEGF)

TBI 90 Inch Investigation (TBIT90)
0.2 (OHMM) 2000

TBI 60 Inch Investigation (TBIT60)
0.2 (OHMM) 2000

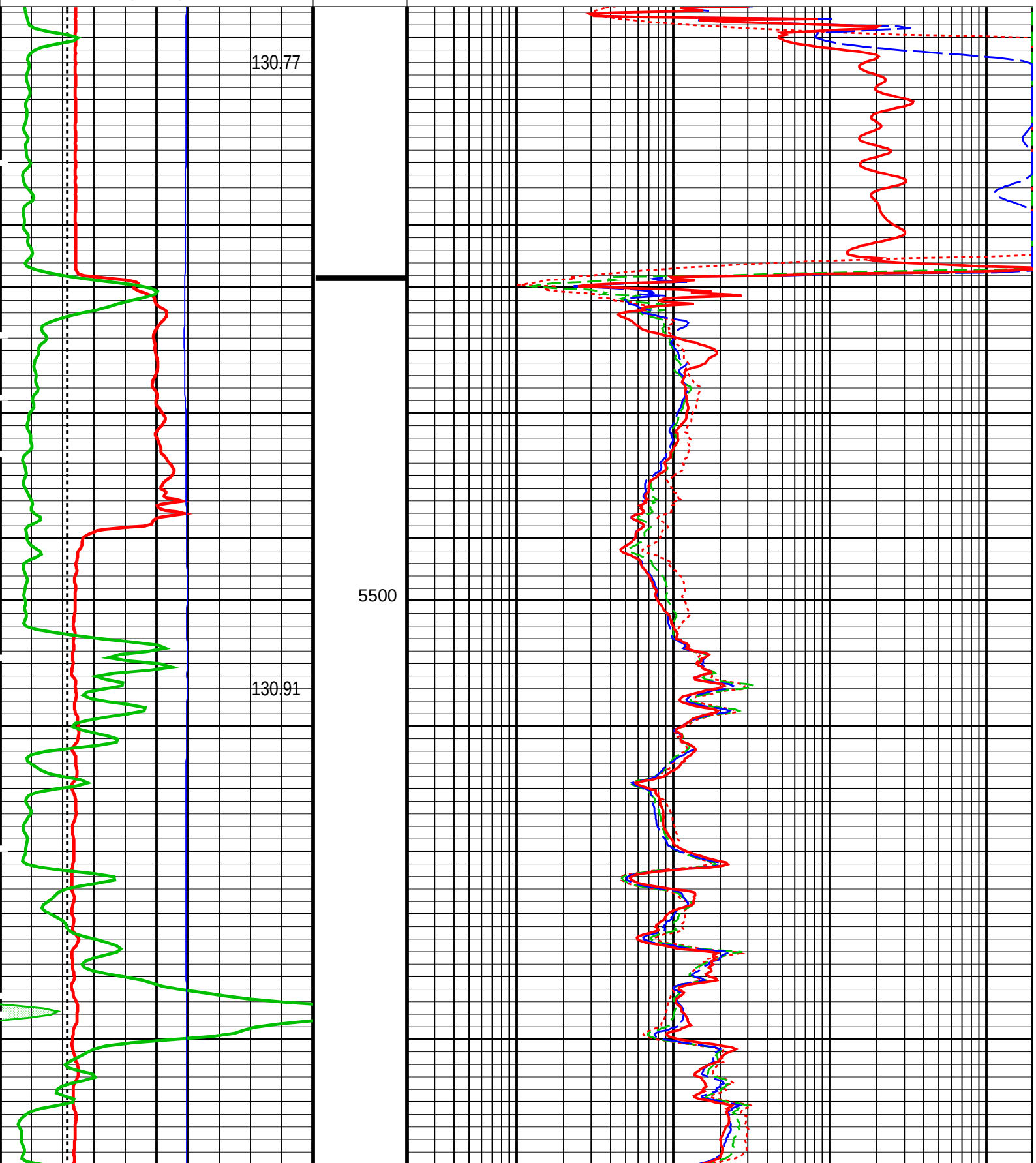
TBI 30 Inch Investigation (TBIT30)
0.2 (OHMM) 2000

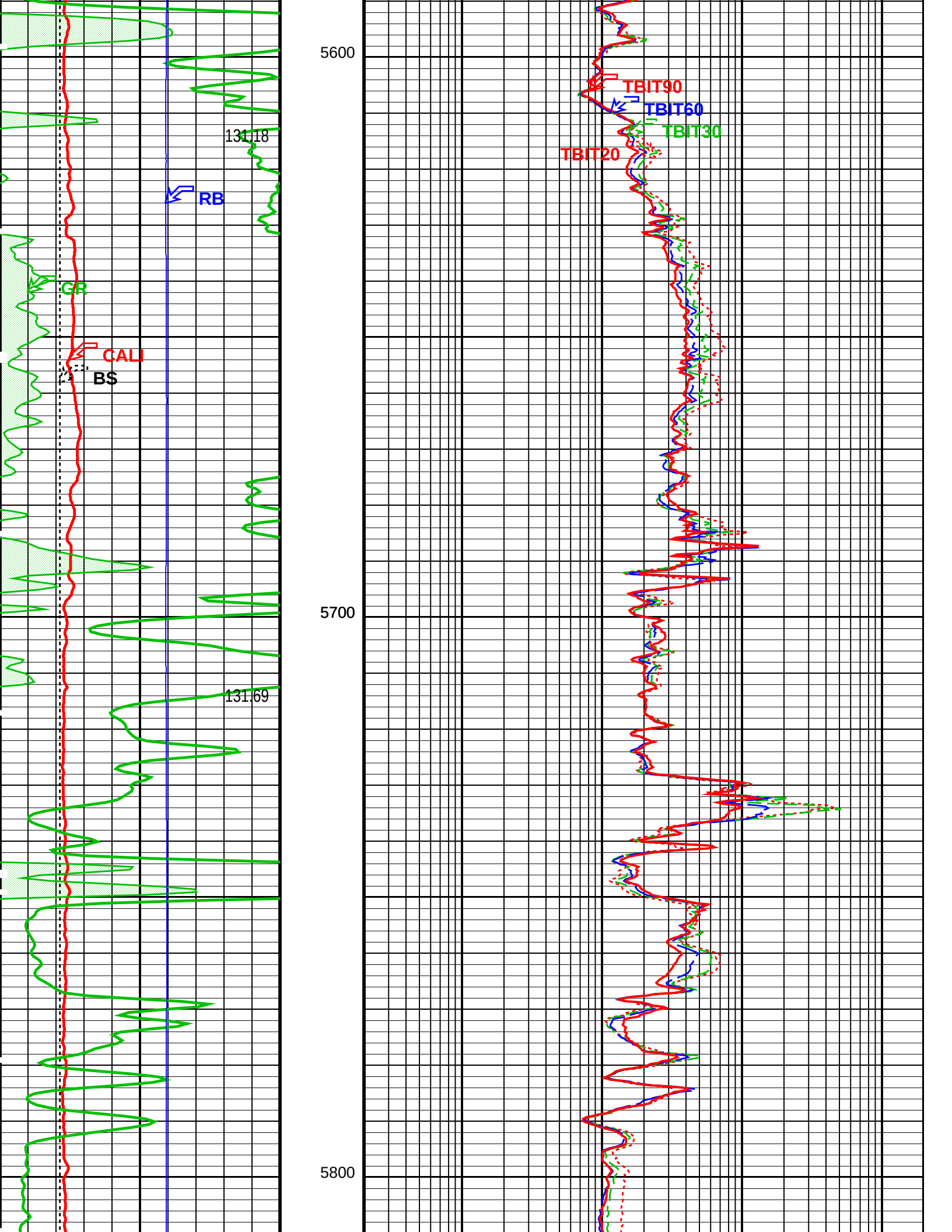
TBI 20 Inch Investigation (TBIT20)
0.2 (OHMM) 2000

130.77

5500

130.91

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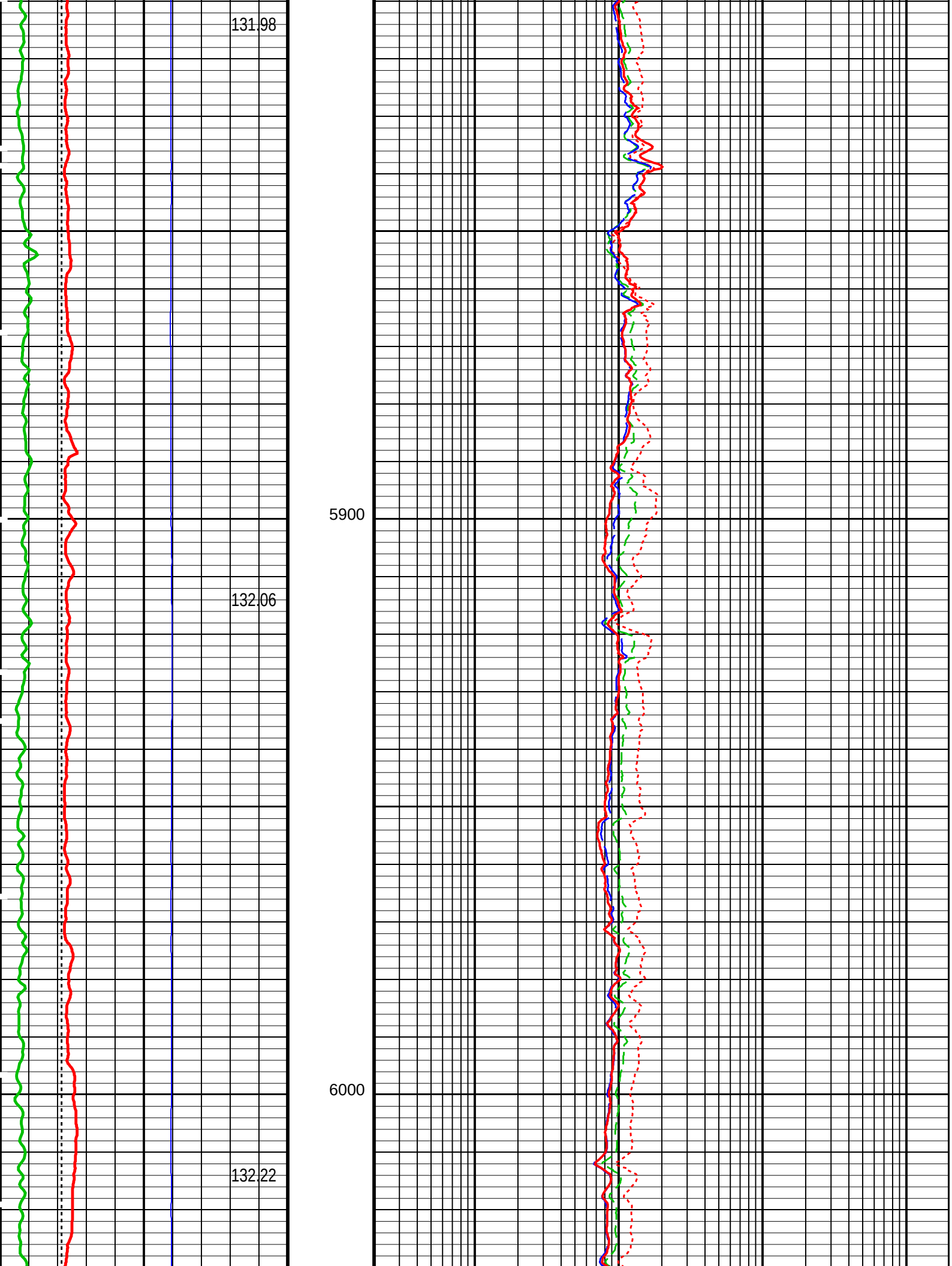
5700
5800
131.18
131.69
RB
GR
CALI
BS
TBIT90
TBIT60
TBIT30
TBIT20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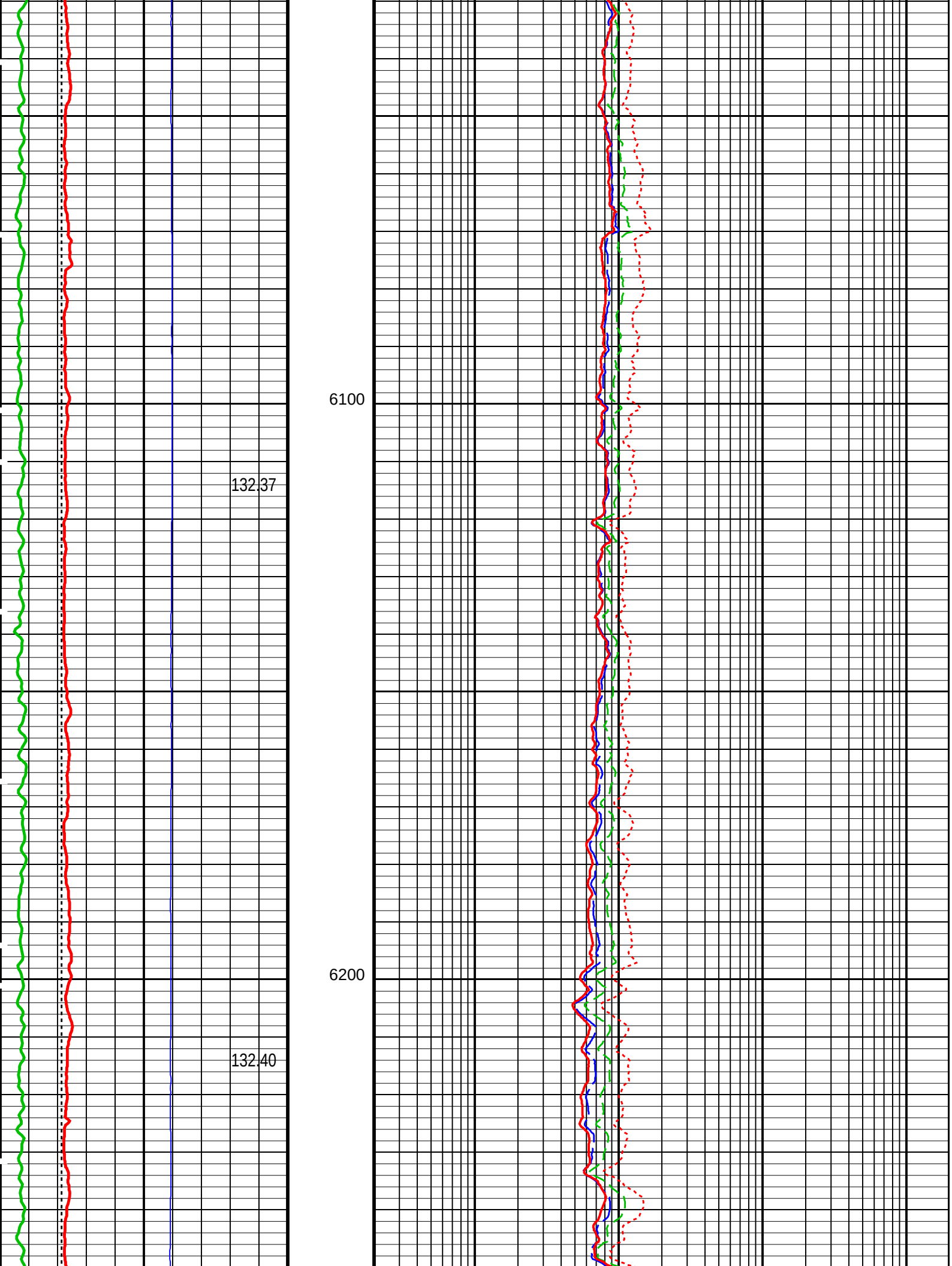
6000
132.22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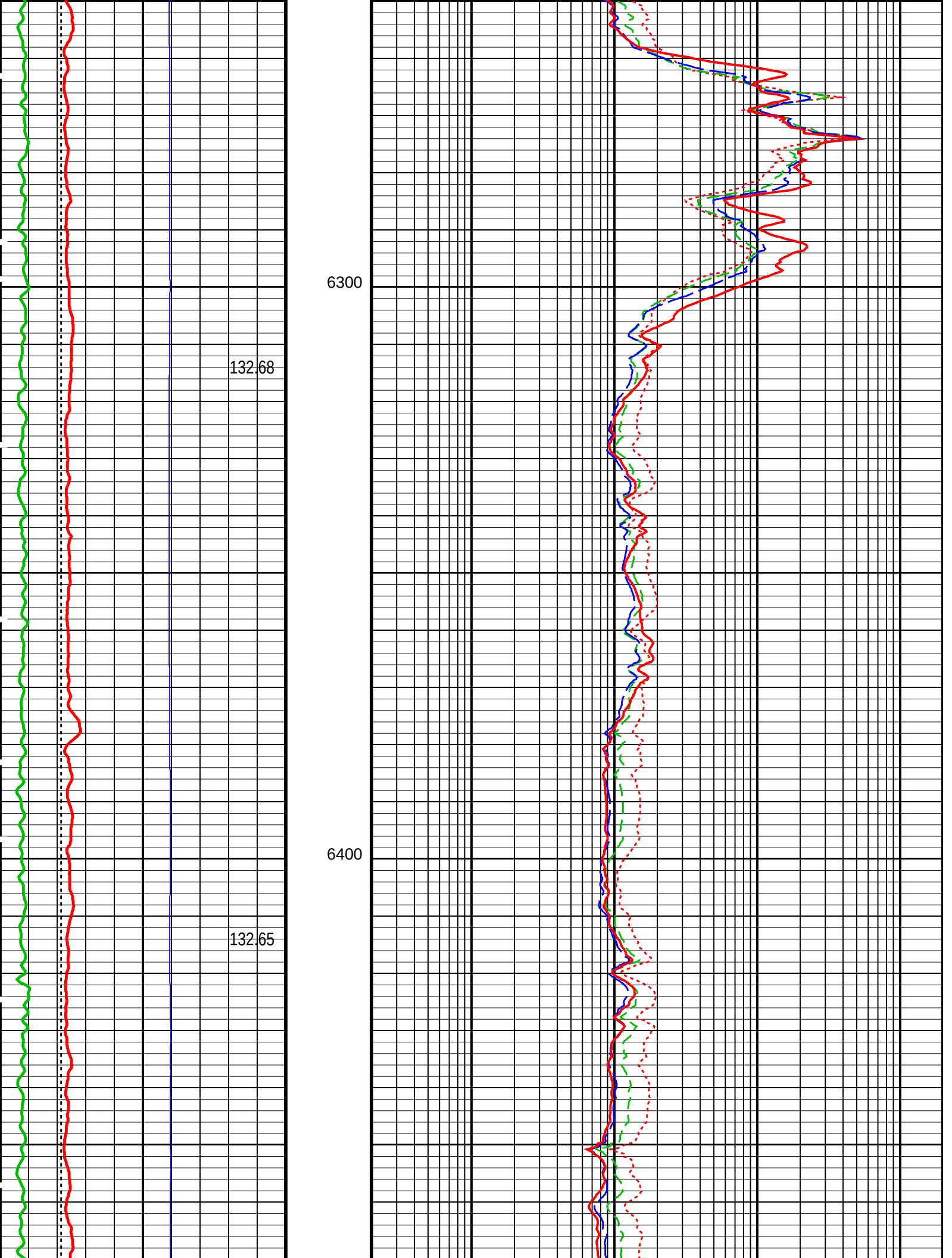
132.40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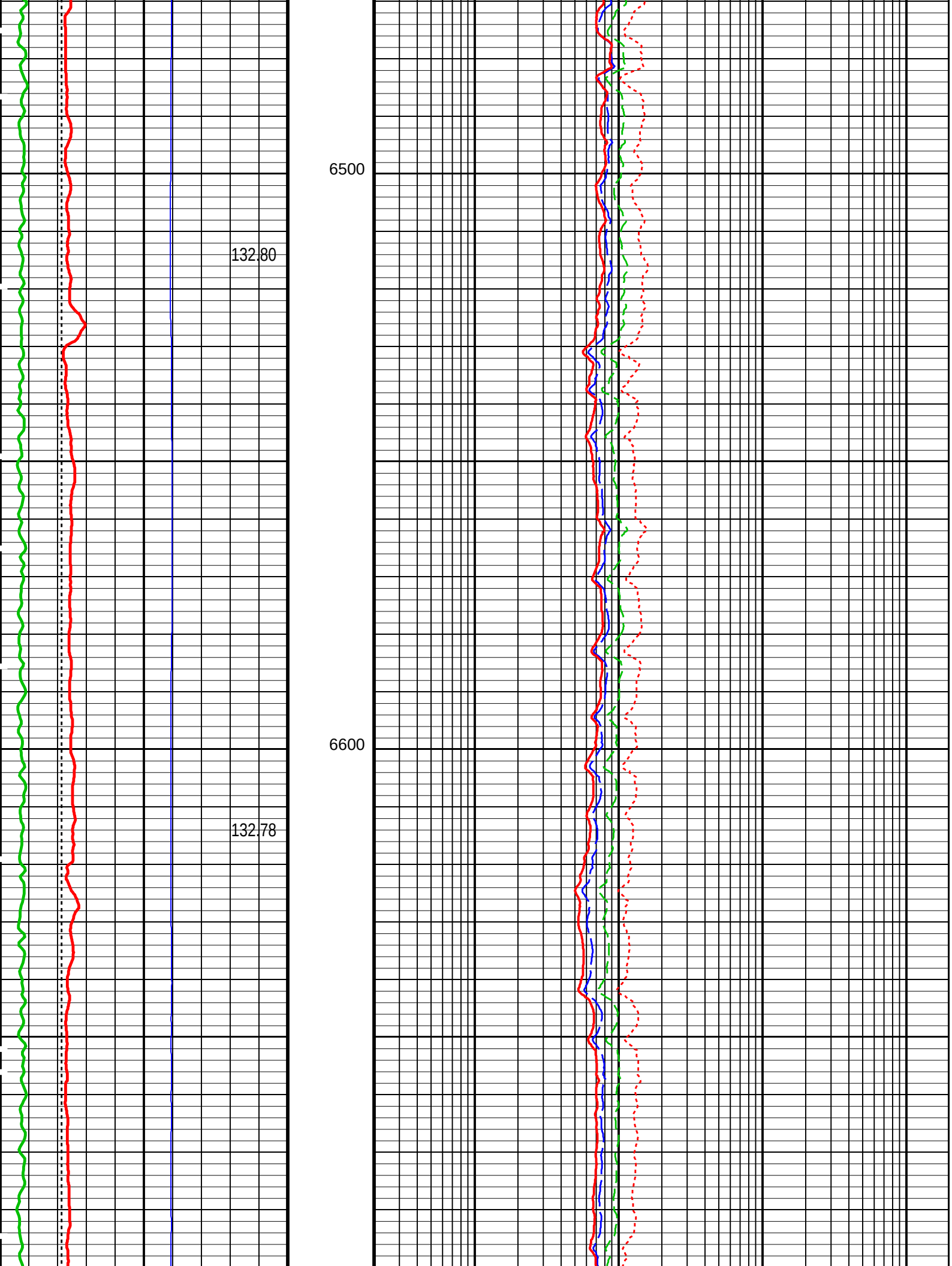
132.65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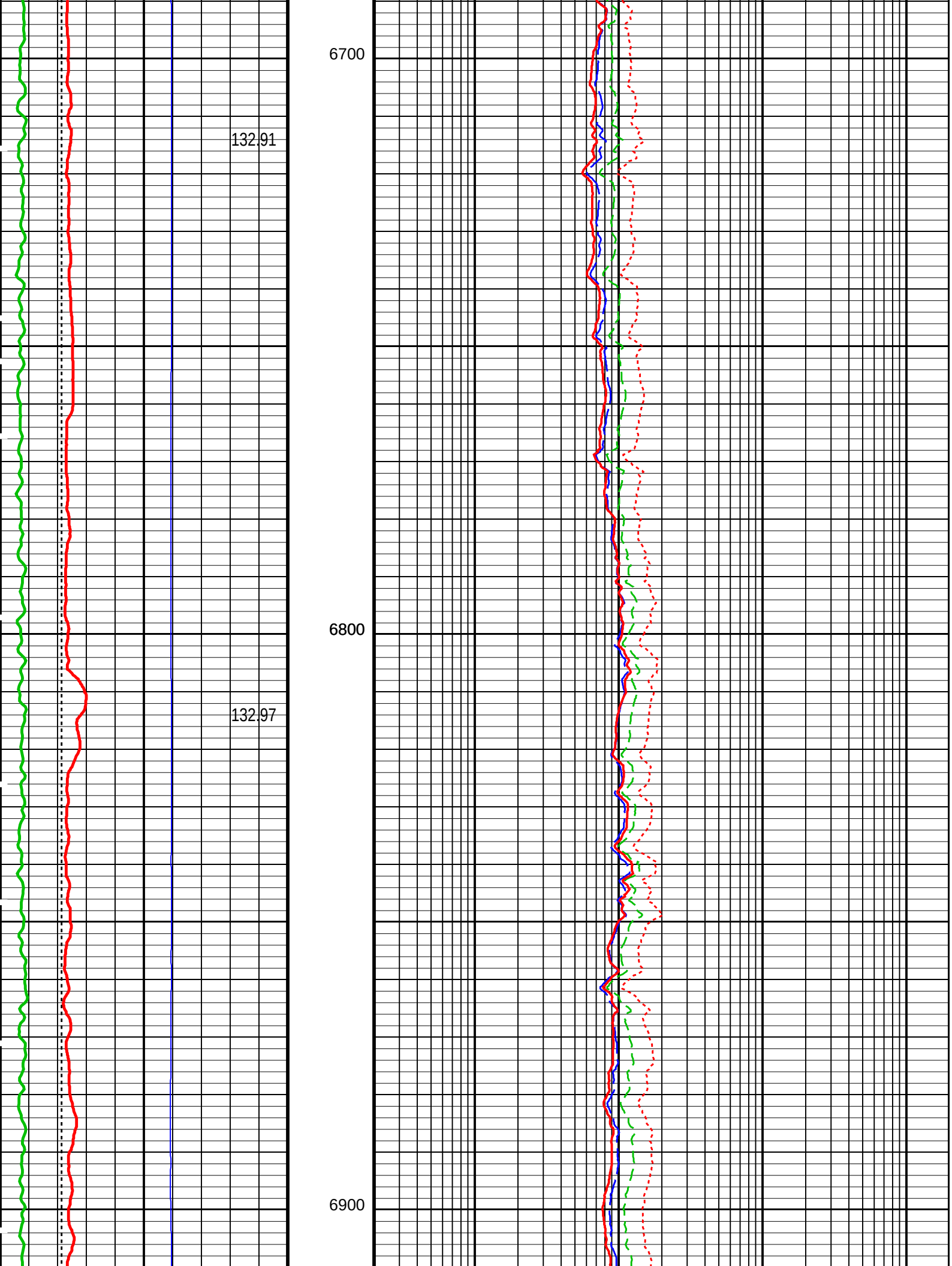
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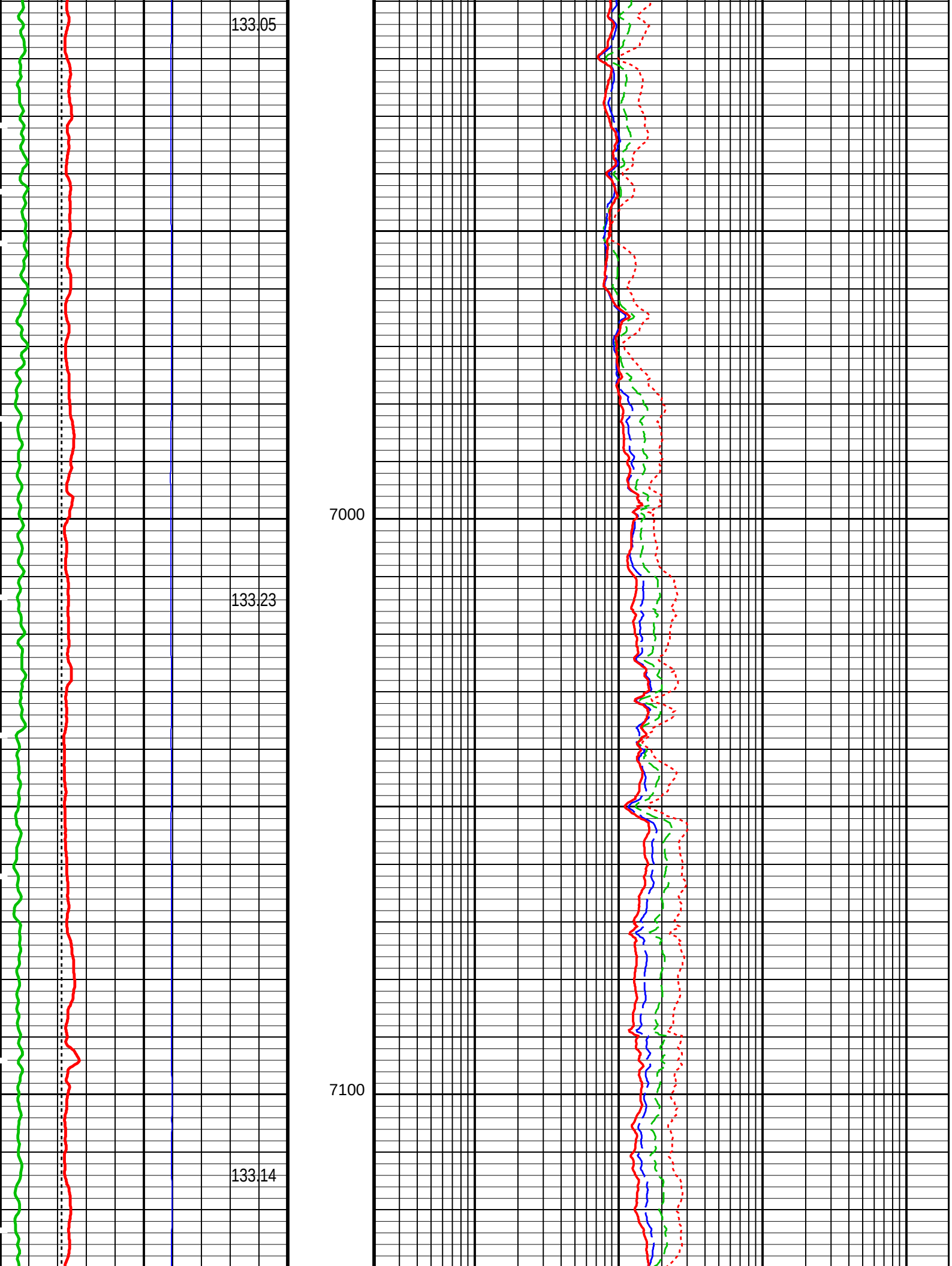
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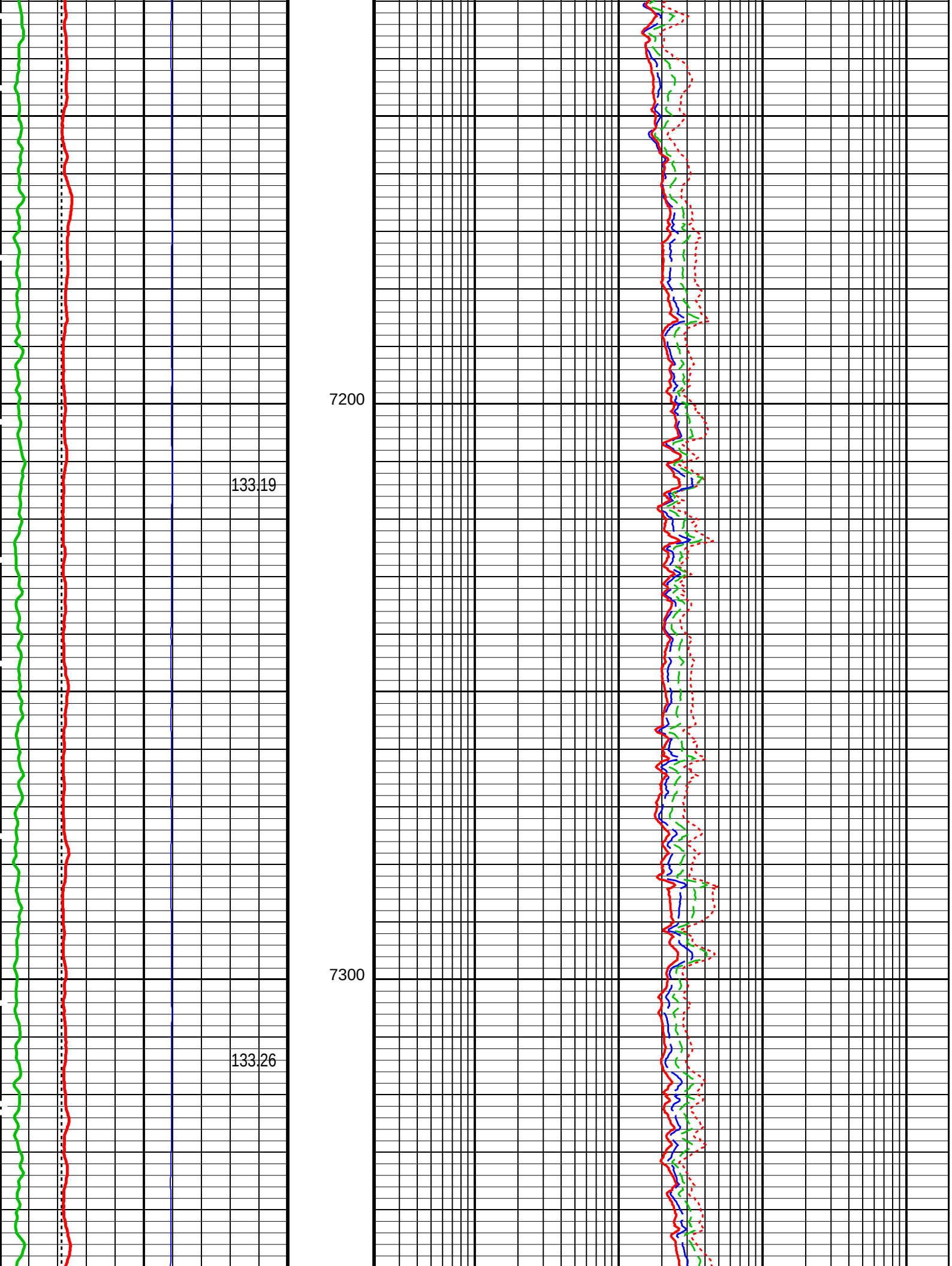
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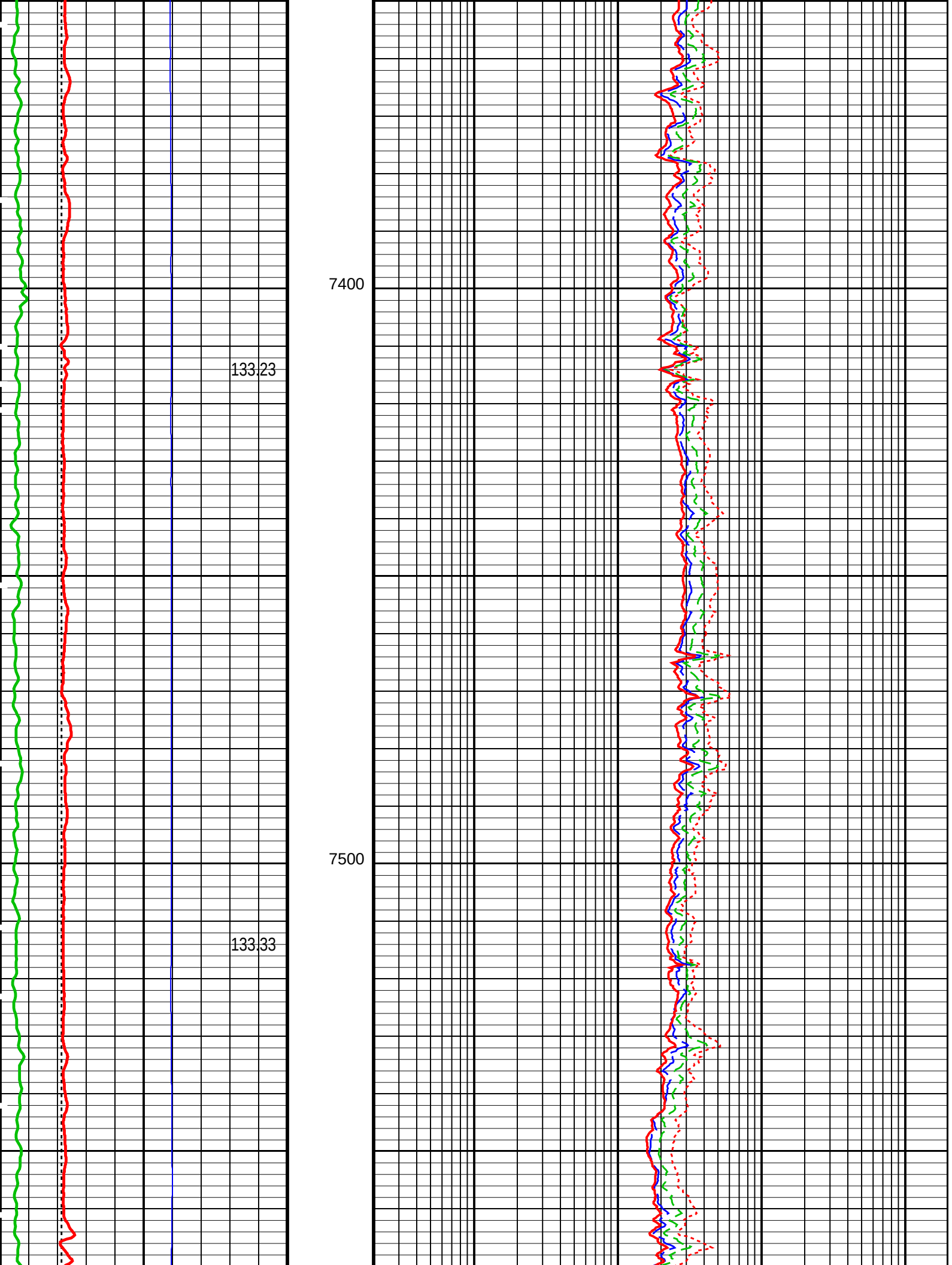
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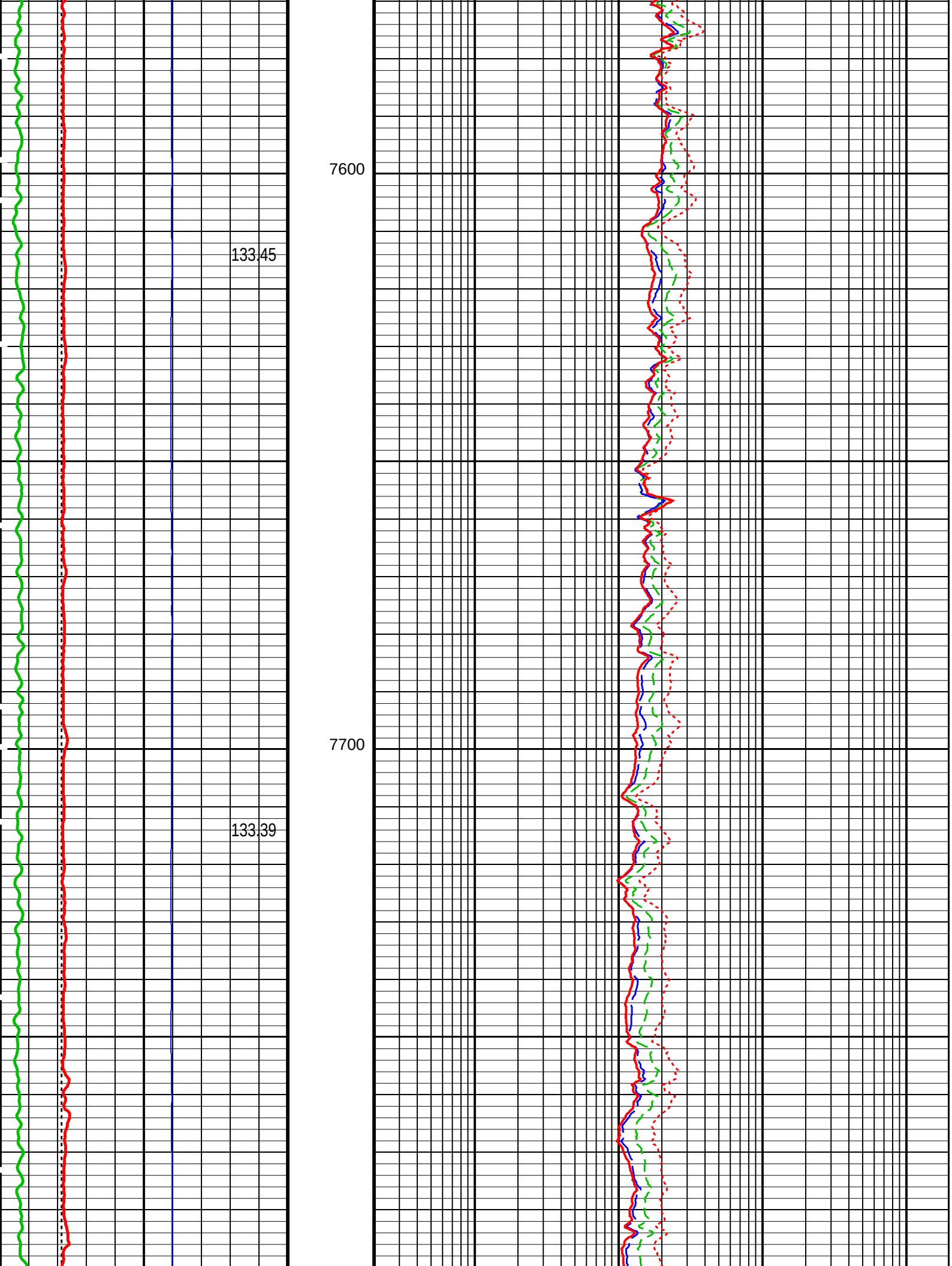
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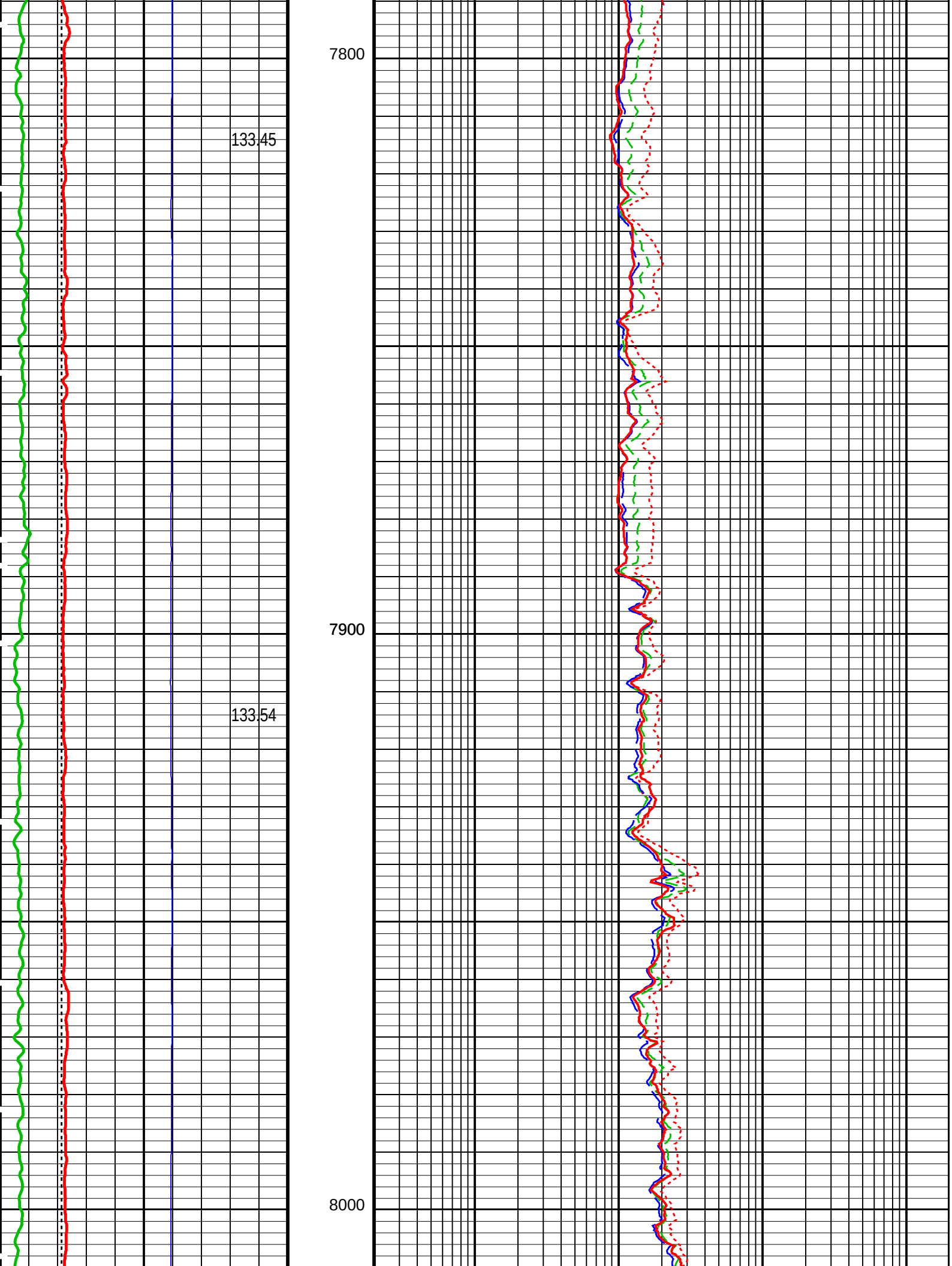
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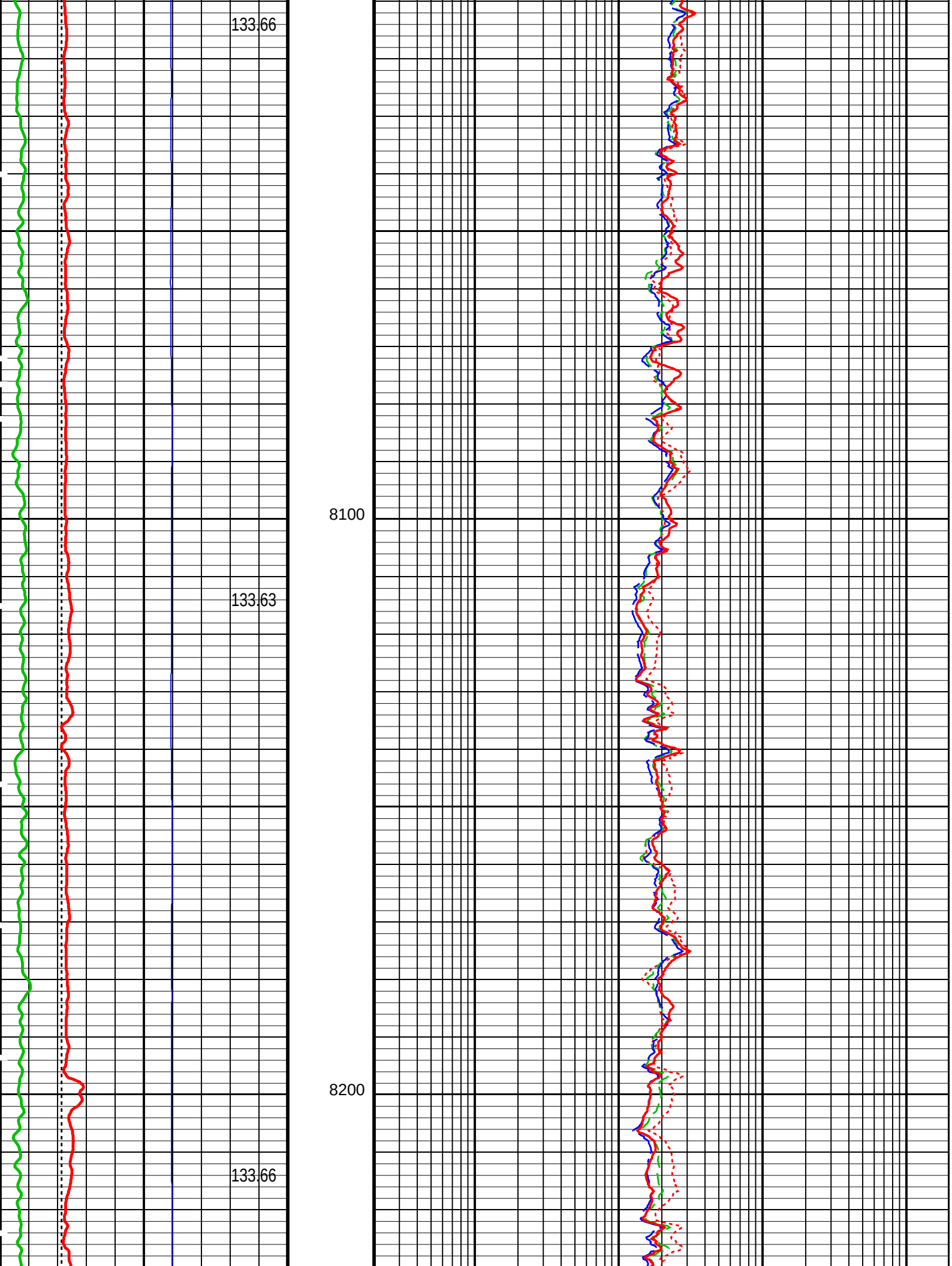
7900
133.54
8000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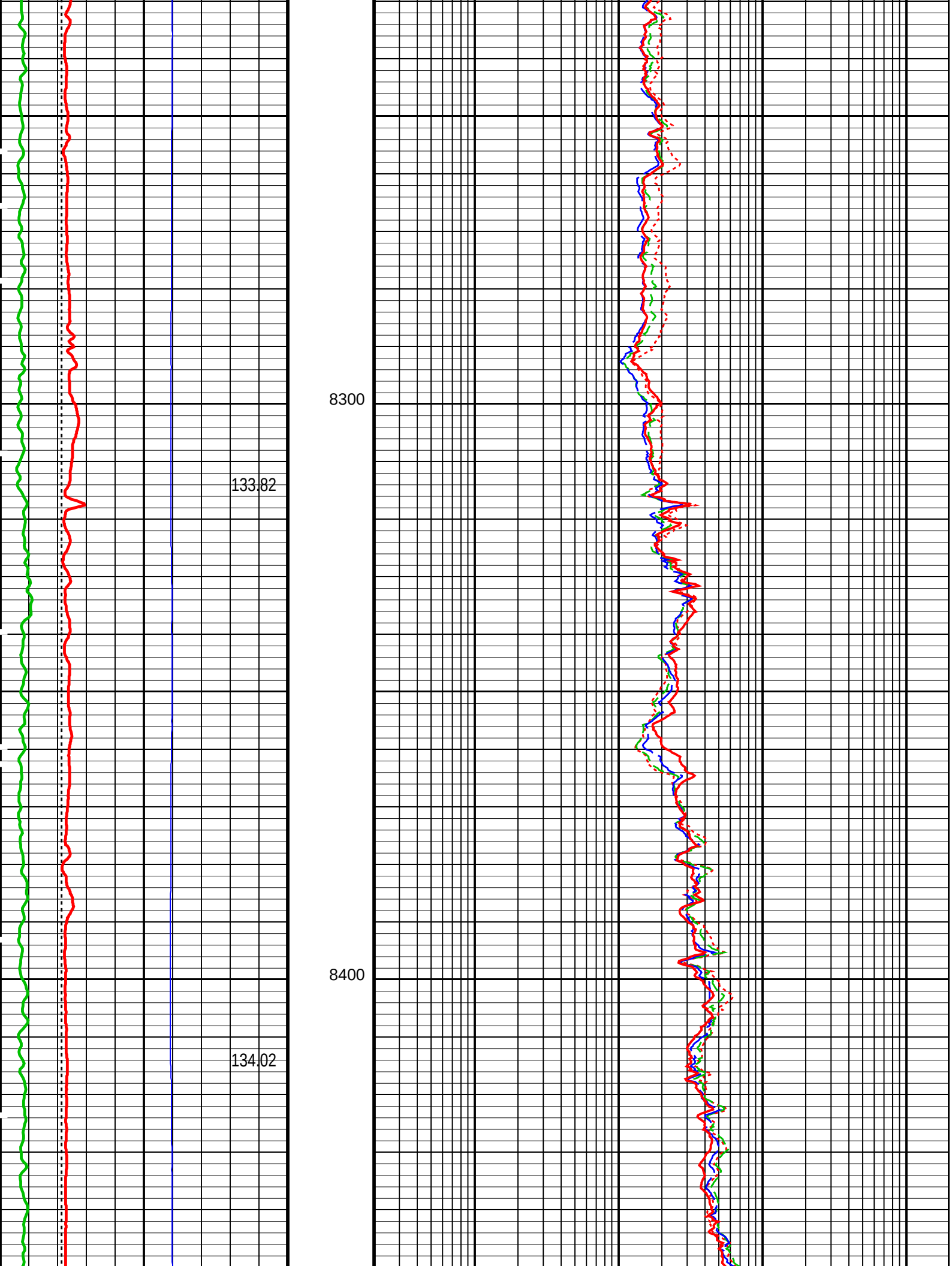
133.66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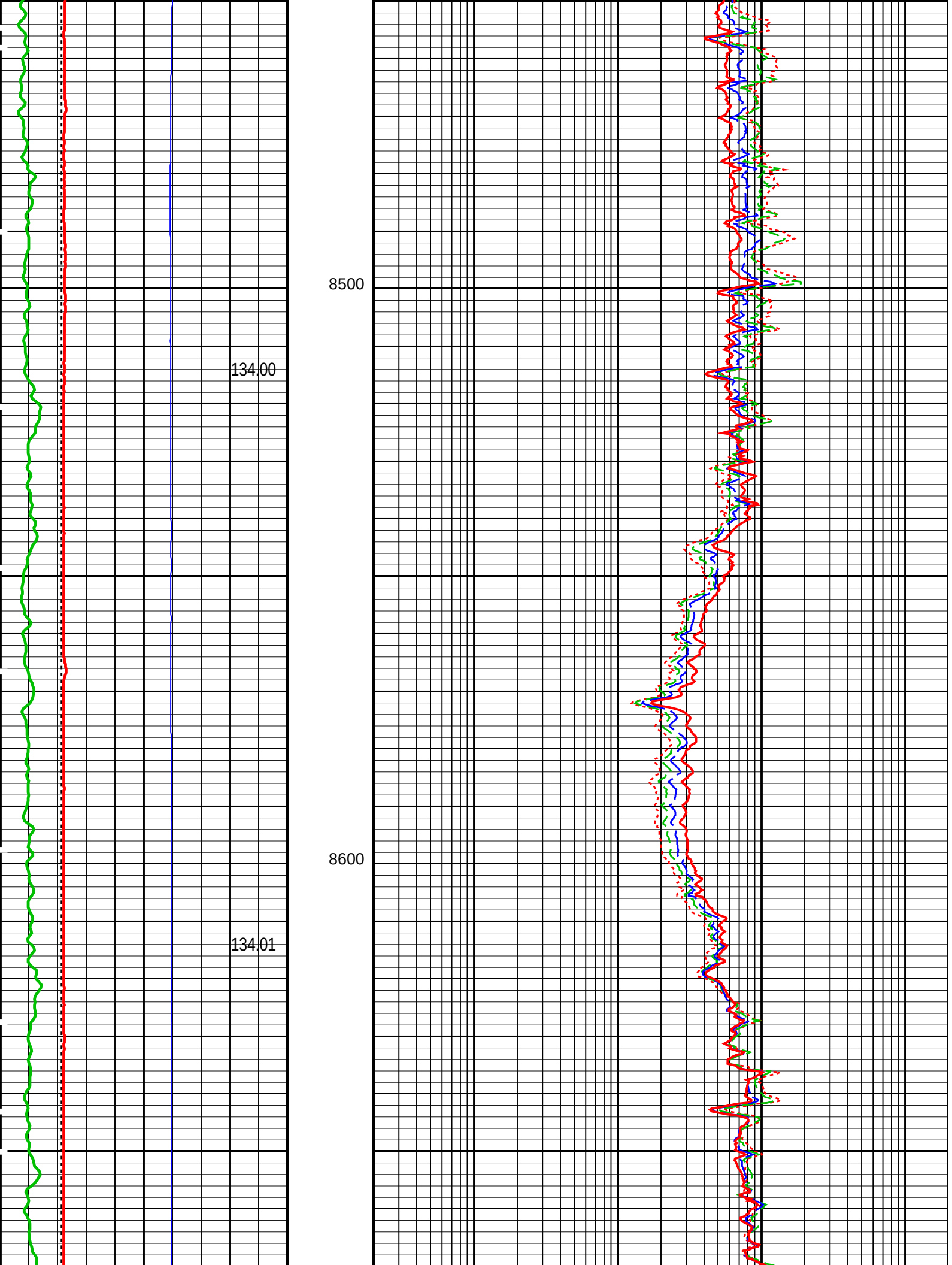
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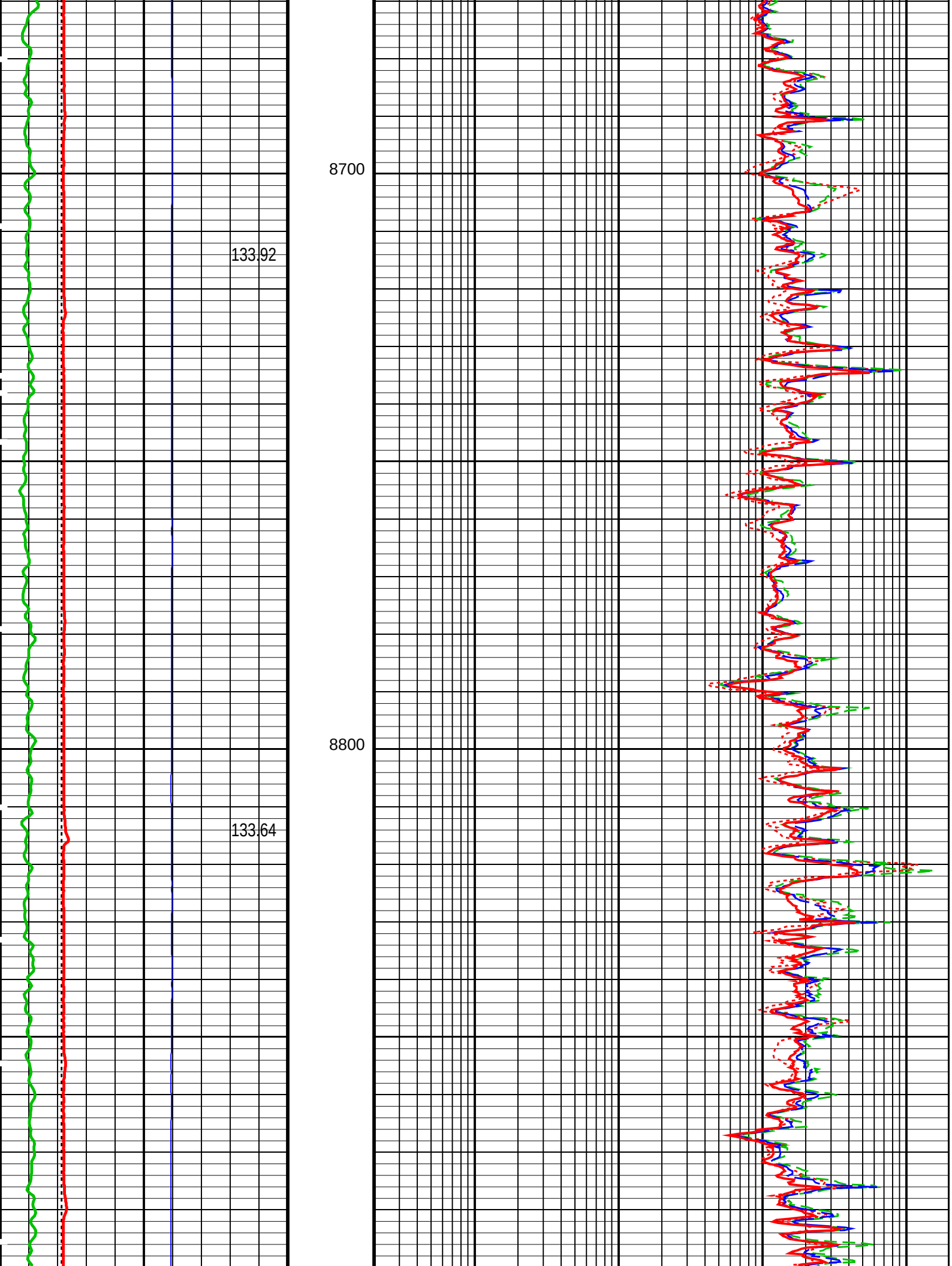
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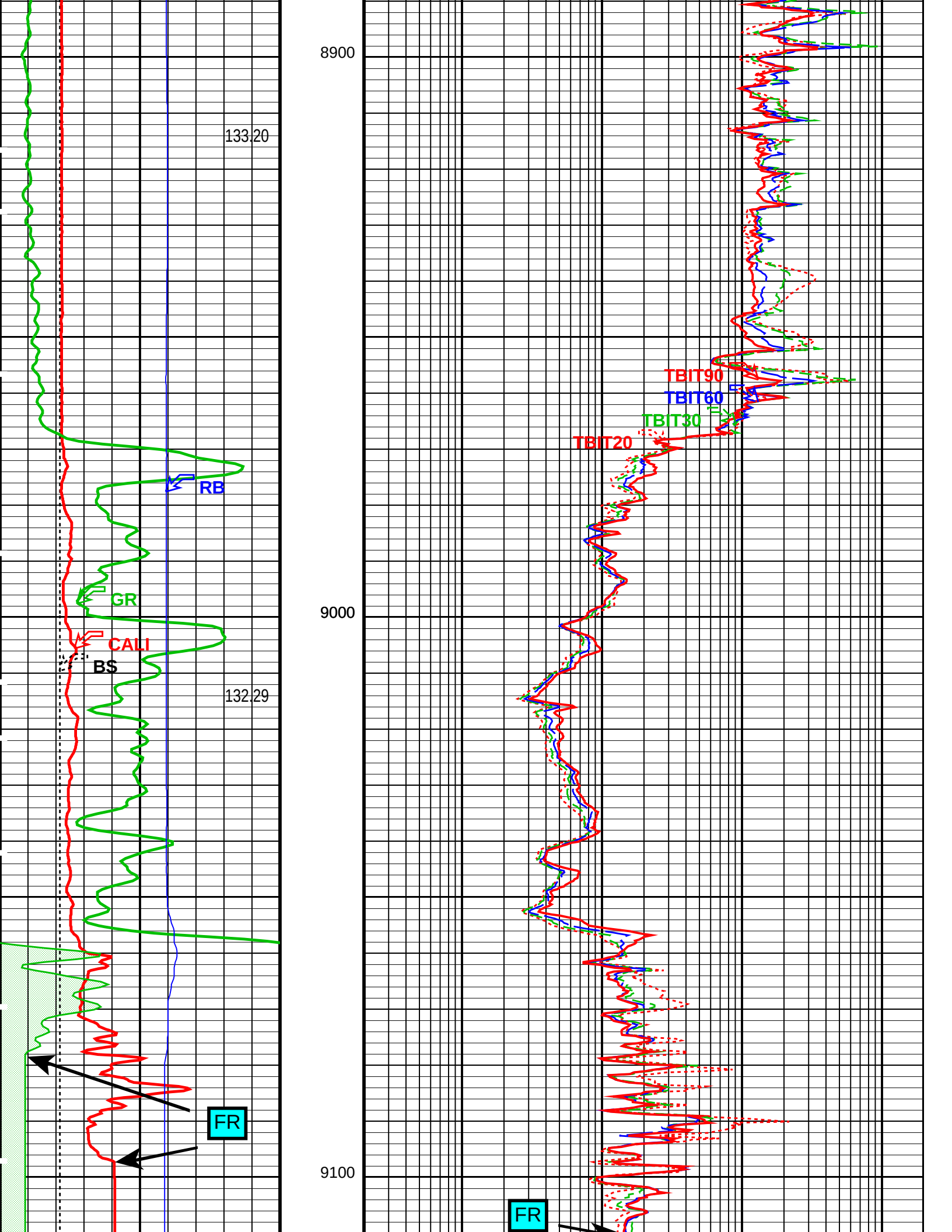
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9000
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133.20
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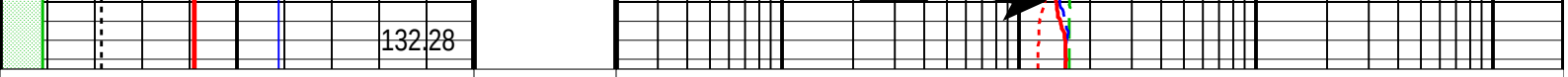
RB
GR
CALI
B$
FR
FR
TBIT90
TBIT60
TBIT30
TBIT20



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

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

TBI 20 Inch Investigation (TBIT20)
0.2 (OHMM) 2000

TBI 30 Inch Investigation (TBIT30)
0.2 (OHMM) 2000

TBI 60 Inch Investigation (TBIT60)
0.2 (OHMM) 2000

TBI 90 Inch Investigation (TBIT90)
0.2 (OHMM) 2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
TBT−A: ThruBit String			
MT	Mud Type (for TBN and TBI correction)	WBM	
RB_OFFSET	Additional RB offset (degrees)	0	DEG
TBI_ALGO	TBI Algorithm Selection	AIT	
TBI_BHC_OP	Borehole Correction Option (for TBI)	Caliper	
TBI_CALTYP	TBI Mastercal Type	ThruBit	
TBI_REPL_ARRAY_DEST	TBI: Replace This Array	None	
TBI_REPL_ARRAY_SOURCE	TBI: With This Array	None	
TBI_TC_OP	Induction Temperature Correction Option	Lower	
System and Miscellaneous			
BS	Bit Size	6.125	IN
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	NORMAL	

Format: TB_5INCH_RESISTIVITY 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

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

Freq 1, A1, R	Value	Nominal	Freq 1, A1, X	Value	Nominal
	−499.874	−457.000		−151.260	300.000
−536.000 (Minimum) −387.000 (Nominal) −18.0000 (Maximum)			−500.000 (Minimum) 1100.00 (Nominal) 2100.00 (Maximum)		
Freq 1, A2, R	Value	Nominal	Freq 1, A2, X	Value	Nominal
	−151.260	−141.000		24.3585	320.000
−162.000 (Minimum) −120.000 (Nominal) −78.0000 (Maximum)			−75.0000 (Minimum) 700.000 (Nominal) 1475.00 (Maximum)		
Freq 1, A3, R	Value	Nominal	Freq 1, A3, X	Value	Nominal
	−29.8282	−28.0000		−47.9286	50.0000
−38.0000 (Minimum) −18.0000 (Nominal) 2.00000 (Maximum)			−375.000 (Minimum) 475.000 (Nominal) 1325.00 (Maximum)		
Freq 1, A4, R	Value	Nominal	Freq 1, A4, X	Value	Nominal
	−17.1550	−16.0000		216.881	300.000
−24.0000 (Minimum) −8.00000 (Nominal) 8.00000 (Maximum)			25.0000 (Minimum) 575.000 (Nominal) 1125.00 (Maximum)		
Freq 1, A5, R	Value	Nominal	Freq 1, A5, X	Value	Nominal
	−14.0290	−14.0000		114.659	150.000
−21.0000 (Minimum) −7.00000 (Nominal) 7.00000 (Maximum)			25.0000 (Minimum) 275.000 (Nominal) 525.000 (Maximum)		
Freq 2, A1, R	Value	Nominal	Freq 2, A1, X	Value	Nominal
	−264.636	−237.000		−127.909	150.000
−293.000 (Minimum) −186.000 (Nominal) −79.0000 (Maximum)			−375.000 (Minimum) 675.000 (Nominal) 1725.00 (Maximum)		
Freq 2, A2, R	Value	Nominal	Freq 2, A2, X	Value	Nominal
	−97.8553	−92.0000		−13.7816	160.000
−106.000 (Minimum) −76.0000 (Nominal) −46.0000 (Maximum)			−100.000 (Minimum) 425.000 (Nominal) 950.000 (Maximum)		
Freq 2, A3, R	Value	Nominal	Freq 2, A3, X	Value	Nominal
	−21.3559	−21.0000		−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) 1.050 (Nominal) (Maximum)			−0.05000 (Minimum) 0.05000 (Nominal) (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) 1.050 (Nominal) (Maximum)			−0.05000 (Minimum) 0.05000 (Nominal) (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) 1.070 (Nominal) (Maximum)			−0.05000 (Minimum) 0.05000 (Nominal) (Maximum)		

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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) 2099.8 (Nominal) (Maximum)			1946.7 (Minimum) 2246.7 (Nominal) (Maximum)			2135.7 (Minimum) 2435.7 (Nominal) (Maximum)		

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

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

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

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

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

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

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

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

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

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

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

Pef B Factor	Value	Nominal
	−0.6909	−0.5550
−0.7000 (Minimum) −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) 2.0 (Maximum)		

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

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

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

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

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

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

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

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

Tank, Temperature DEGF	Value	Nominal
	77.0	70.0
20.0 (Minimum) 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) −8.810 (Maximum)		

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

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

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

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

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

RB Offset, degrees	Value	Nominal
−360.0 (Minimum) (Nominal) 360.0 (Maximum)	−17.00	0

Master: Calibration not done

ThruBit String Master Calibration

TMG Gamma−Ray Calibration

GR Background GAPI	Value	Nominal	GR Jig−Background GAPI	Value	Nominal
0 (Minimum) (Nominal) 120.0 (Maximum)	25.34	30.00	133.4 (Minimum) (Nominal) 200.0 (Maximum)	161.5	166.7

Master: 5−Aug−2014 14:42

Company: **SANDRIDGE ENERGY**

Schlumberger

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

ARRAY INDUCTION
GAMMA RAY
MEMORY 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**

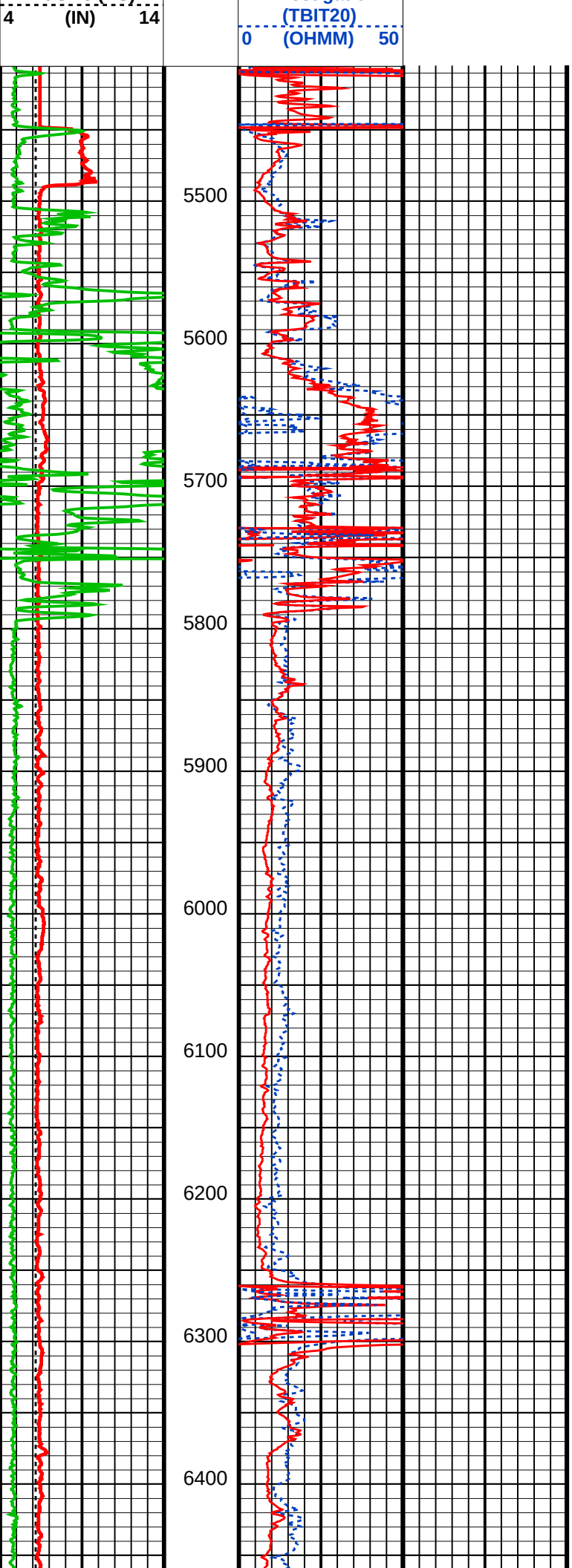
Output DLIS Files

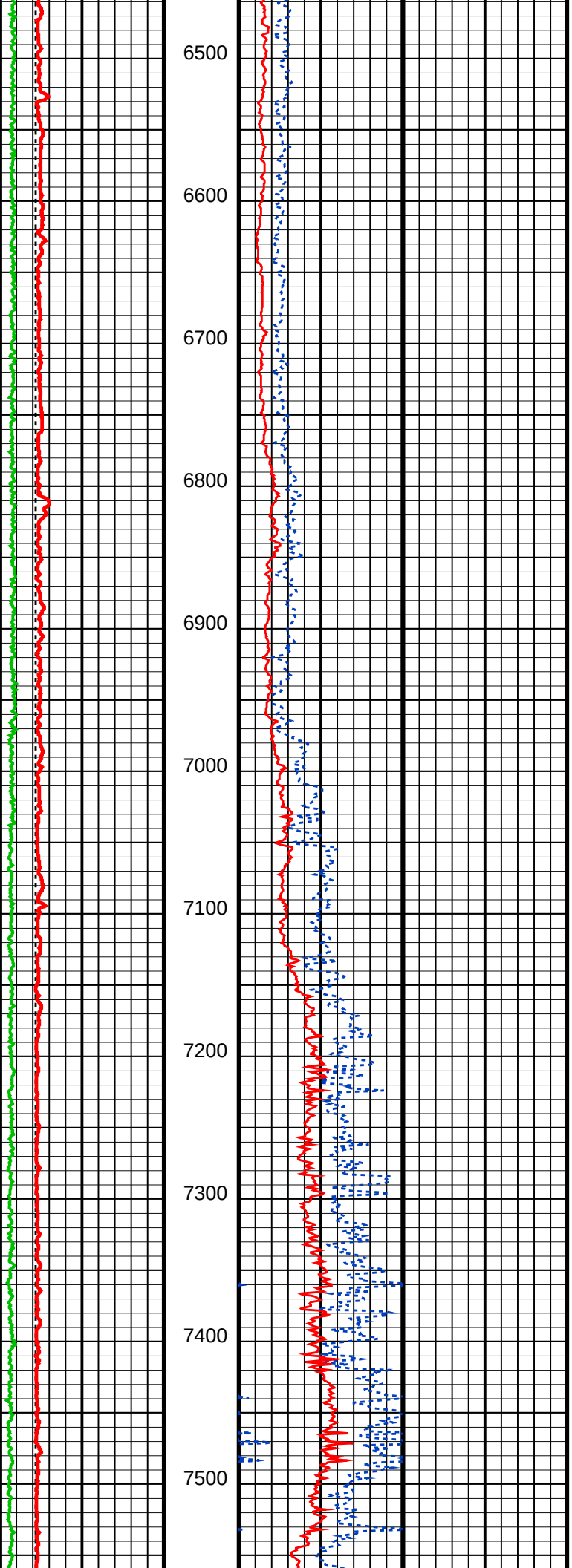
DEFAULT **ThruBit_009PUP** **FN:8** **PRODUCER** **20−Aug−2014 19:07**

OP System Version: 19C2−270

TBT−A **SRPC−5298−ThruBit_b**

	TBI 20 Inch Investigation (TBIT20) 50 (OHMM) 500
Caliper (CALI) 4 (IN) 14	TBI 90 Inch Investigation (TBIT90) 50 (OHMM) 500
Gamma Ray (GR) 0 (GAPI) 150	TBI 90 Inch Investigation (TBIT90) 0 (OHMM) 50
Bit Size (BS)	TBI 20 Inch Investigation


4 (IN) 14
(TBIT20)
0 (OHMM) 50
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400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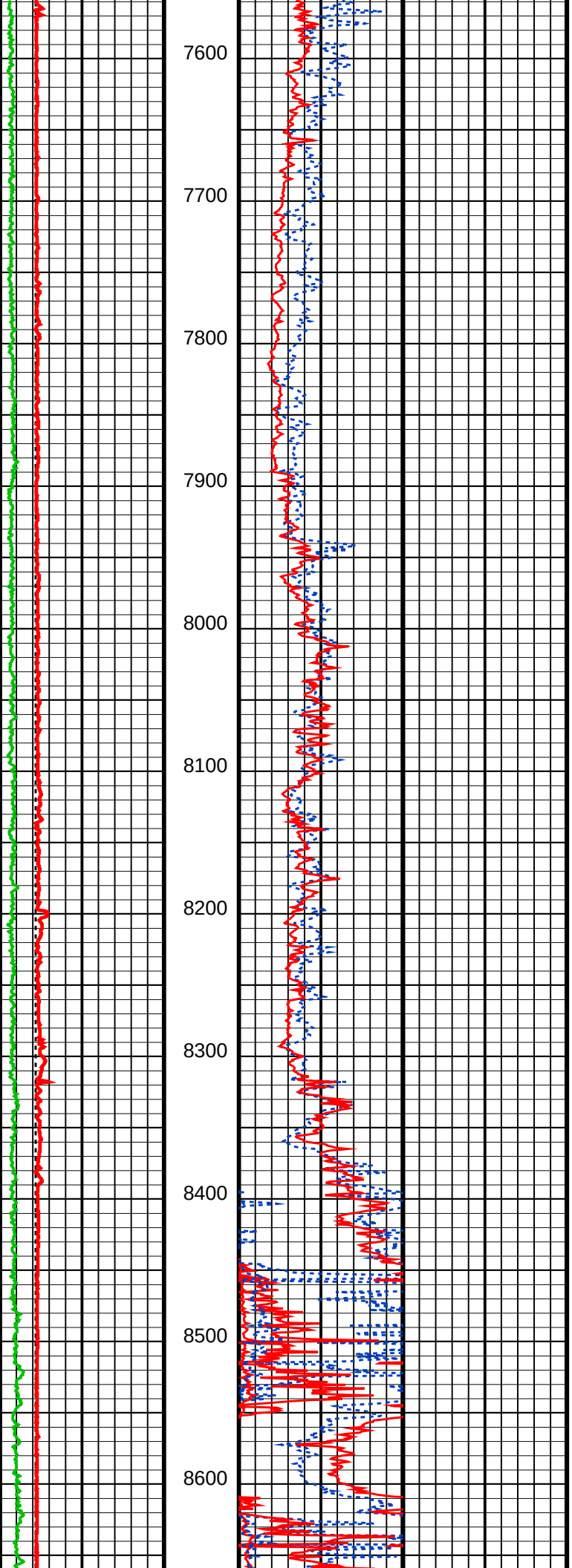
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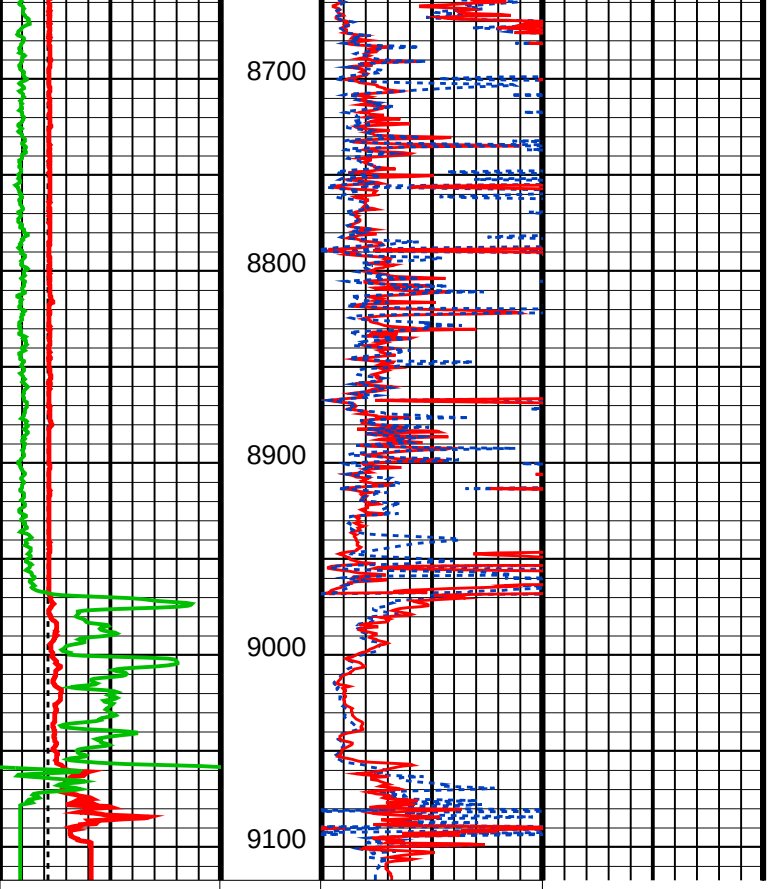

Bit Size (BS) 4 (IN) 14		TBI 20 Inch Investigation (TBIT20) 0 (OHMM) 50
Gamma Ray (GR) 0 (GAPI) 150		TBI 90 Inch Investigation (TBIT90) 0 (OHMM) 50
Caliper (CALI) 4 (IN) 14		TBI 90 Inch Investigation (TBIT90) 50 (OHMM) 500
		TBI 20 Inch Investigation (TBIT20) 50 (OHMM) 500

Parameters

DLIS Name	Description	Value	
TBT−A: ThruBit String			
MT	Mud Type (for TBN and TBI correction)	WBM	
TBI_ALGO	TBI Algorithm Selection	AIT	
TBI_BHC_OP	Borehole Correction Option (for TBI)	Caliper	
TBI_CALTYP	TBI Mastercal Type	ThruBit	
TBI_REPL_ARRAY_DEST	TBI: Replace This Array	None	
TBI_REPL_ARRAY_SOURCE	TBI: With This Array	None	
TBI_TC_OP	Induction Temperature Correction Option	Lower	
System and Miscellaneous			
BS	Bit Size	6.125	IN
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	NORMAL	

Format: TB_1INCH_RES Vertical Scale: 1" 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