Schlumberger

Company: **SANDRIDGE ENERGY**

Well: **JELLISON A 3319 9−5H 2L**
Field: **BIRD SOUTH**
County: **COMANCHE** State: **KANSAS**

ARRAY INDUCTION
GAMMA RAY
MEMORY LOG

County: COMANCHE
Field: BIRD SOUTH
Location: 600' FSL & 1015' FNL
Well: JELLISON A 3319 9−5H 2L
Company: SANDRIDGE ENERGY

LOCATION

600' FSL & 1015' FNL

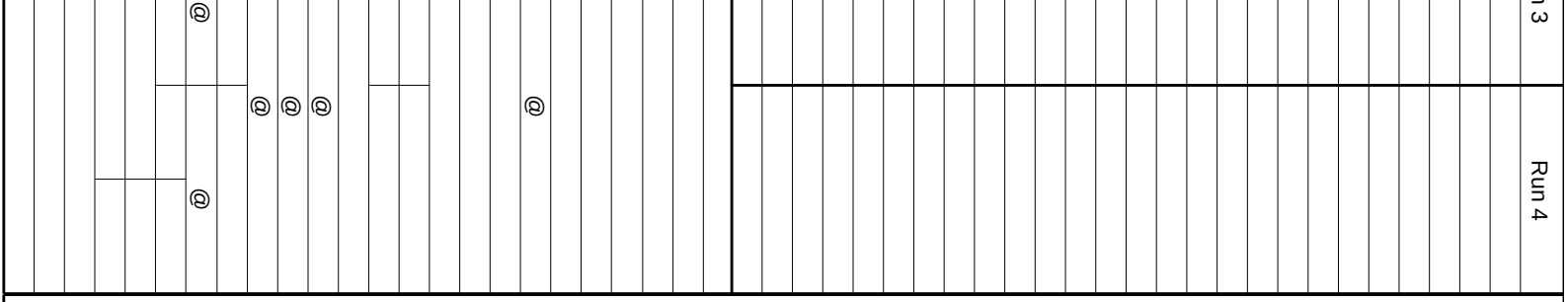
Elev.: K.B. 1906.00 ft
G.L. 1884.00 ft
D.F. 1906.00 ft

Permanent Datum: GROUND LEVEL Elev.: 1884.00 ft
Log Measured From: DRILL FLOOR 22.00 ft above Perm. Datum
Drilling Measured From: DRILL FLOOR

API Serial No.	Section	Township	Range
15033217690200	32	32S	19W

	Run 1	Run 2	Run
Logging Date	15−Sep−2014		
Run Number	1		
Depth Driller	9967 ft		
Schlumberger Depth	9949 ft		
Bottom Log Interval	9939 ft		
Top Log Interval	5200 ft		
Casing Driller Size @ Depth	7.000 in @ 5678 ft	@	@
Casing Schlumberger	5678 ft		
Bit Size	6.125 in		
Type Fluid In Hole	WBM		
MUD Density / Viscosity	8.5 lbm/gal / 27 s		
MUD Fluid Loss / PH	60 cm3 / 9		
MUD Source Of Sample	MUD SENSOR		
RM @ Measured Temperature	1.370 ohm.m @ 72 degF	@	@
RMF @ Measured Temperature	1.160 ohm.m @ 72 degF	@	@
RMC @ Measured Temperature	1.580 ohm.m @ 72 degF	@	@
Source RMF / RMC	CALCULATED / CALCULATED		
RM @ MRT / RMF @ MRT	0.838 @ 122 / 0.710 @ 122	@ / @	@ / @
Maximum Recorded Temperatures	122 degF		
Circulation Stopped Time	15−Sep−2014 22:00		
Logger On Bottom Time	15−Sep−2014 23:15		
Unit Number / Location	4 / OKC, OK		
Recorded By	B. FRANTOM		
Witnessed By	J.T. HUNTER		

	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			



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	OTHER SERVICES2
OS1: THRUBIT	OS1:
OS2: PORTAL	OS2:
OS3: BIT	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
SERVICE LEVEL 4 − HOR. MEMORY PUMPDOWN − BIT DEPTH: 9895 LOG TO: 5200	
ALL SCALES AND PRESENTATIONS PER CLIENT REQUEST	
LIMESTONE MATRIX 2.71 G/CC USED TO MEASURE POROSITIES	
TOOLSTRING RAN WITH S. DECENTRALIZER, SWIVEL, NO STANDOFFS	
CEMENT VOLUME CALCULATED USING 4.5" FUTURE CASING	
HSPM AND PASON USED TO CREATE LOG DEPTH	
LOG DEPTH CORRELATED TO MWD GAMMA RAY	
RIG: PATTERSON 56	
CREW: B. FRANTOM/J. HIRST/K. REED	

RUN 1		RUN 2	
SERVICE ORDER #:	3233	SERVICE ORDER #:	
PROGRAM VERSION:	19C2−270	PROGRAM VERSION:	
FLUID LEVEL:		FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

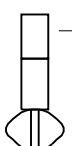
SURFACE EQUIPMENT

WITM (ThruBit)

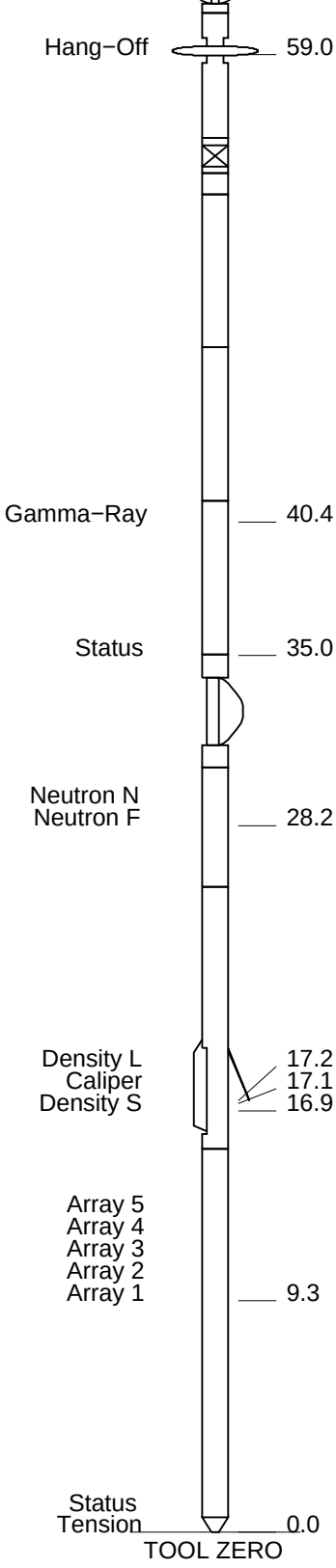
DOWNHOLE EQUIPMENT

TBT−A 68.6
THEAD
CCL
BDOT−B
THOT
TBUJ2
T10_1
TBAT1 7

CCL 65.6



TBAT2 40
TMG−A 34
TILE−A
TBN−A 32
NNLS−EWA
TBD−A 23
GGLS−FZ
TBI−A 3



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: JELLISON A 3319 9−5H 2L**

Input DLIS Files

DEFAULT	ThruBit_007PUP	FN:6	PRODUCER	16−Sep−2014 06:15	9949.0 FT	5082.0 FT

Output DLIS Files

TBT .009	FN:8	16−Sep−2014 06:30	9949.0 FT	5465.0 FT

OP System Version: 19C2−270

TBT **SRPC−5303−ThruBit**

	Relative Bearing (RB)
	0 (DEG) 940
gr wrap4 From LHT1 to GR4	
gr wrap3 From LHT1 to GR3	
gr wrap2 From LHT1 to GR2	

gr wrap1
From LHT1 to GR1

Caliper (CALI)
4 (IN) 14

Gamma Ray 4 (GR)
600 (GAPI) 750

Gamma Ray 3 (GR)
450 (GAPI) 600

Gamma Ray 2 (GR)
300 (GAPI) 450

Gamma Ray 1 (GR)
150 (GAPI) 300

Gamma Ray (GR)
0 (GAPI) 150

Bit Size (BS)
4 (IN) 14

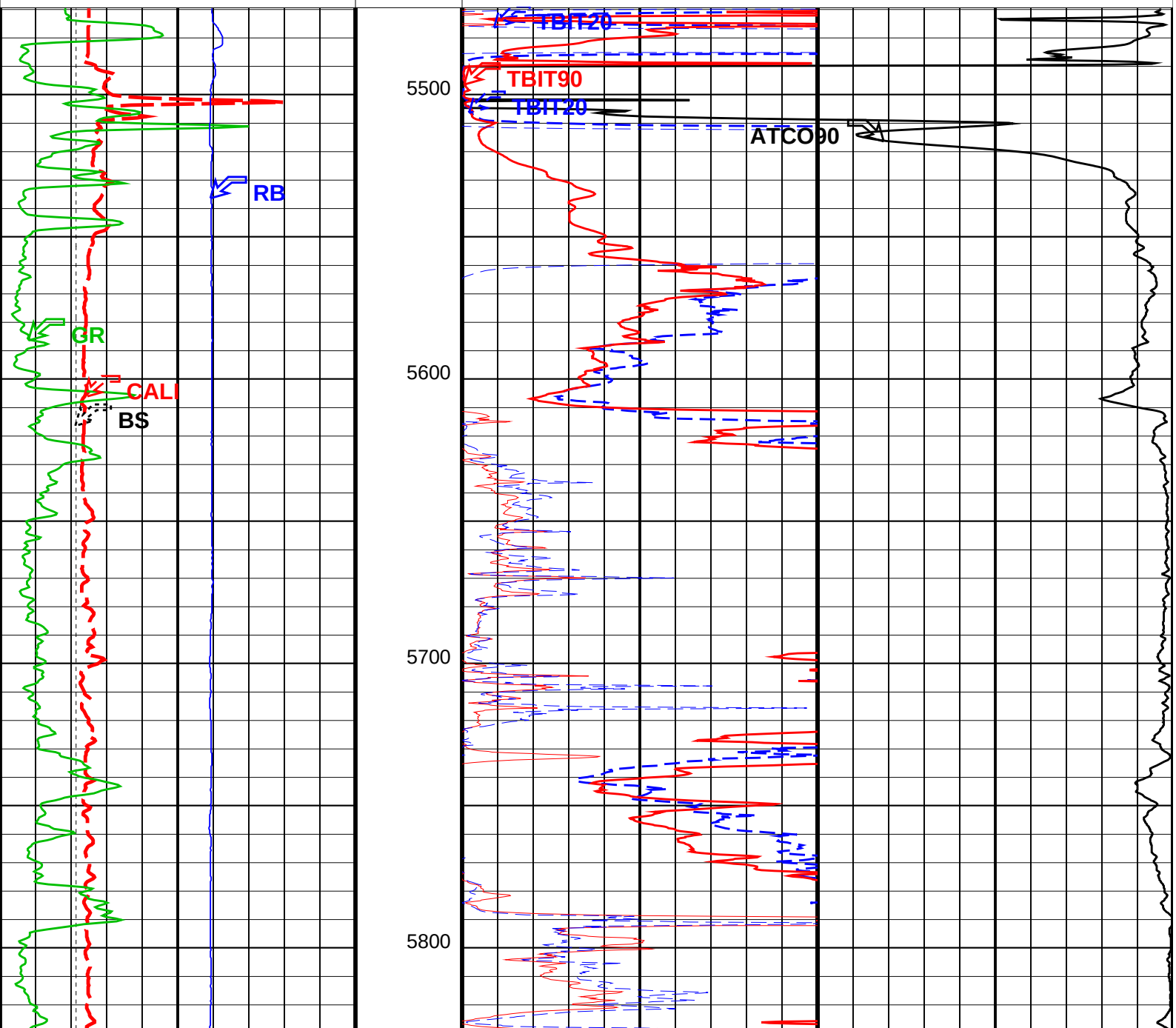
TBI 20 Inch Investigation (TBIT20)
50 (OHMM) 500

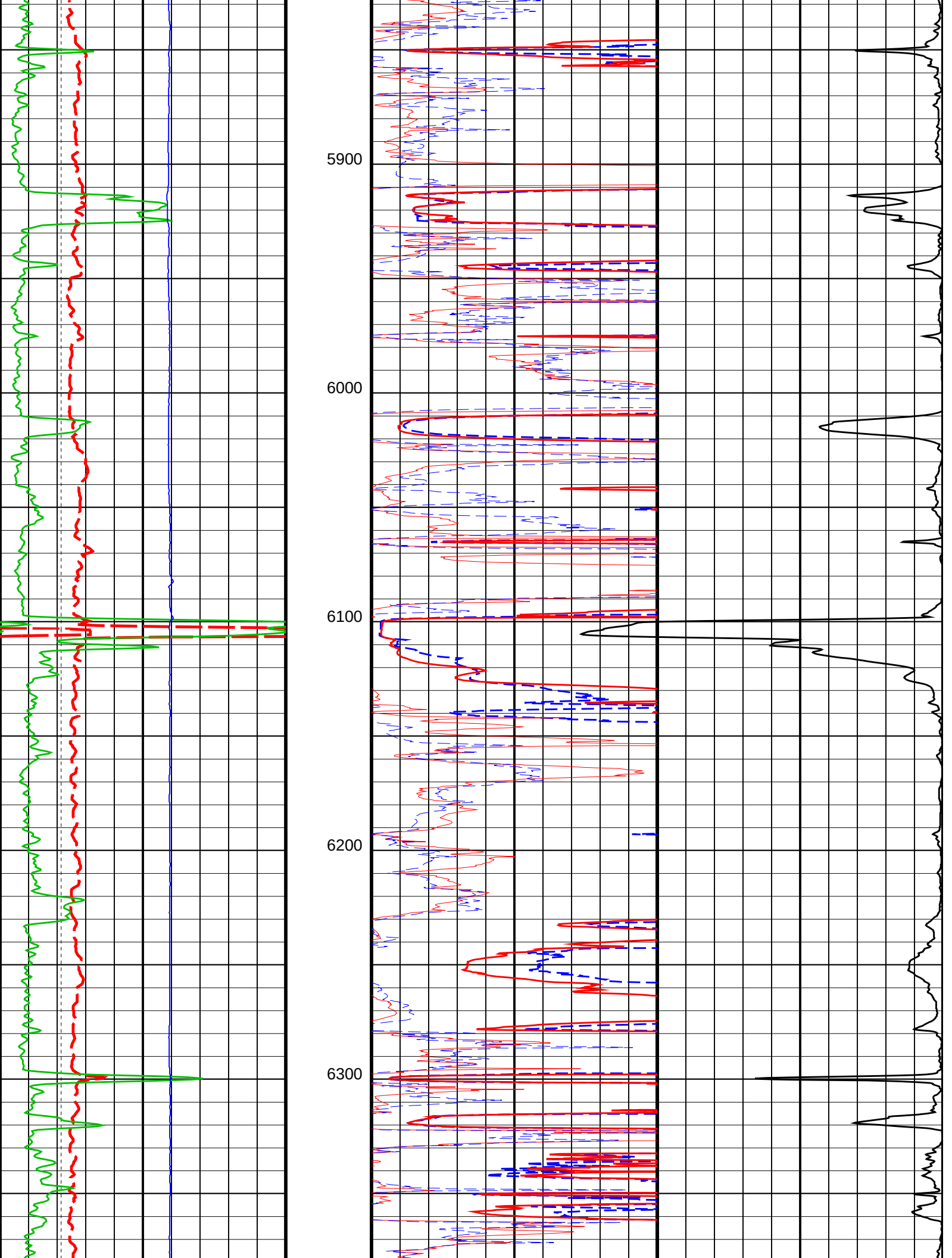
TBI 90 Inch Investigation (TBIT90)
50 (OHMM) 500

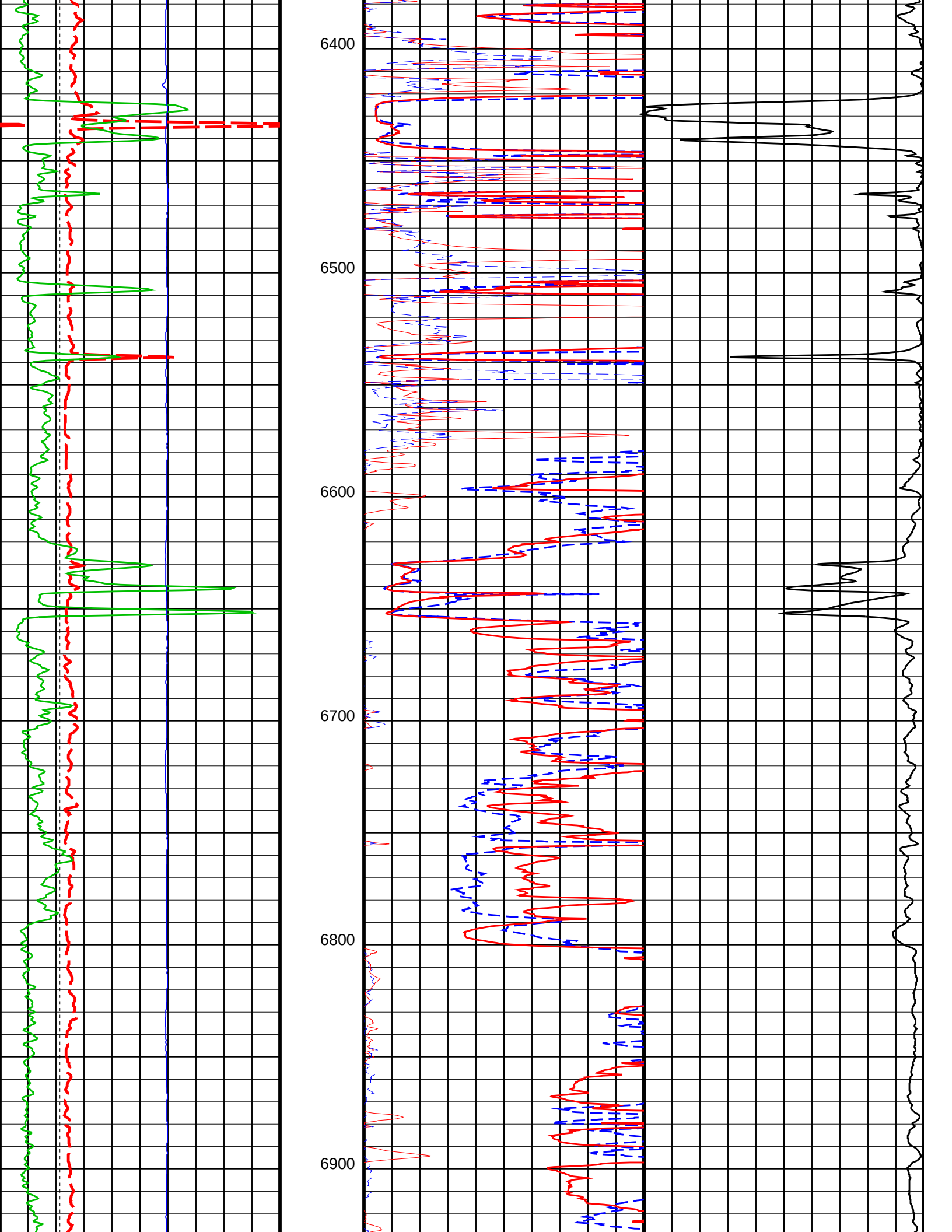
TBI 90 Inch Investigation (TBIT90)
0 (OHMM) 50

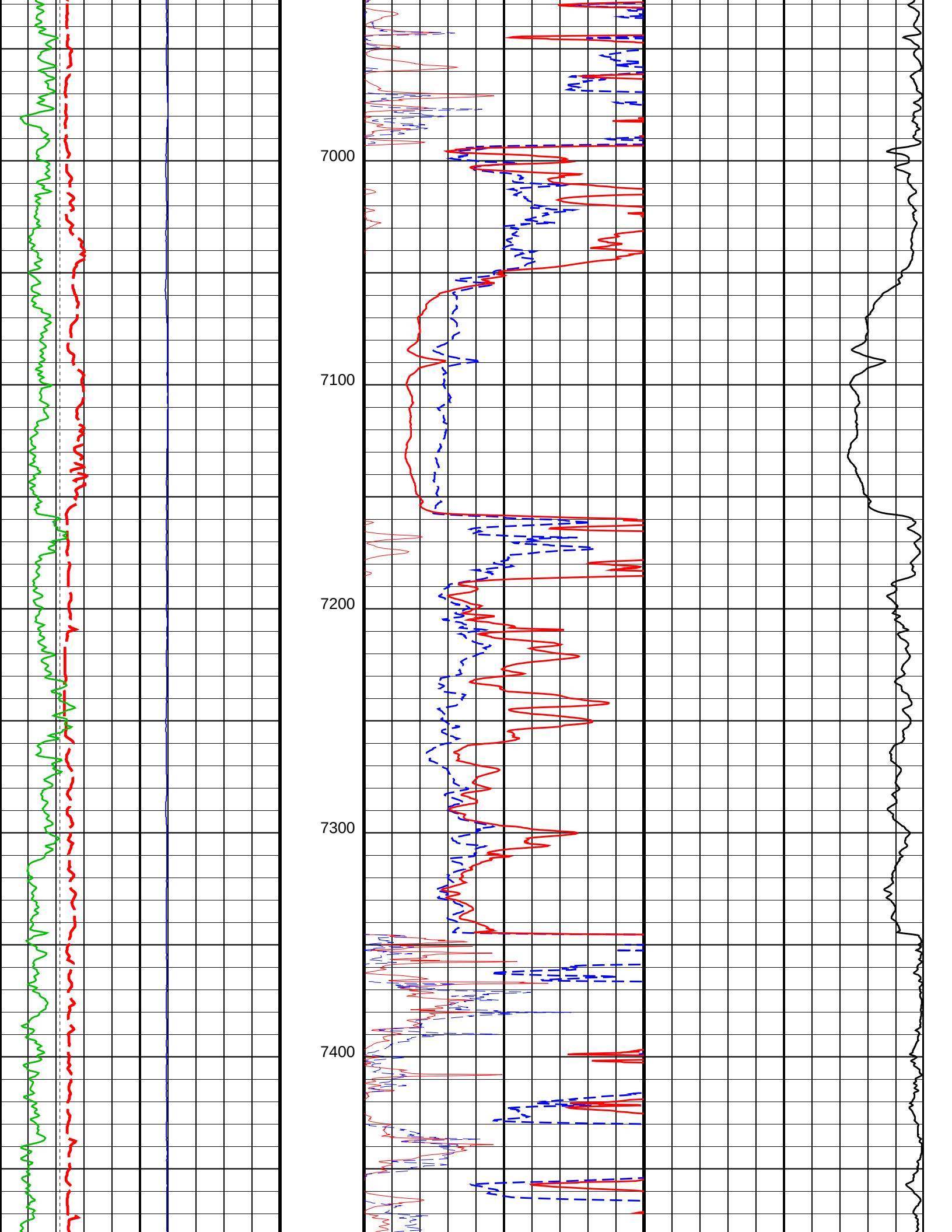
TBI 20 Inch Investigation (TBIT20)
0 (OHMM) 50

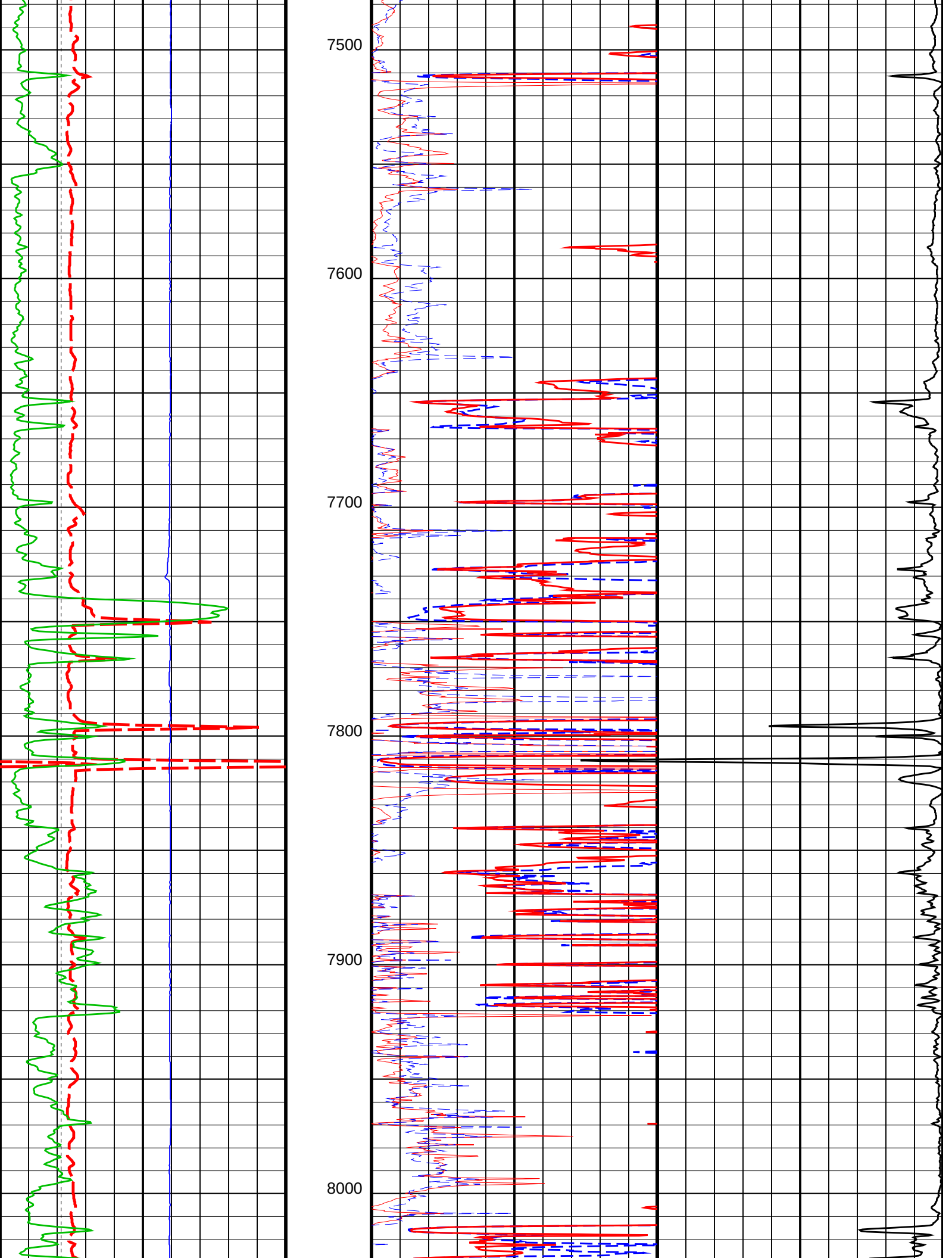
TBI 60 Inch Conductivity (ATCO90)
1000 (MM/M) 0

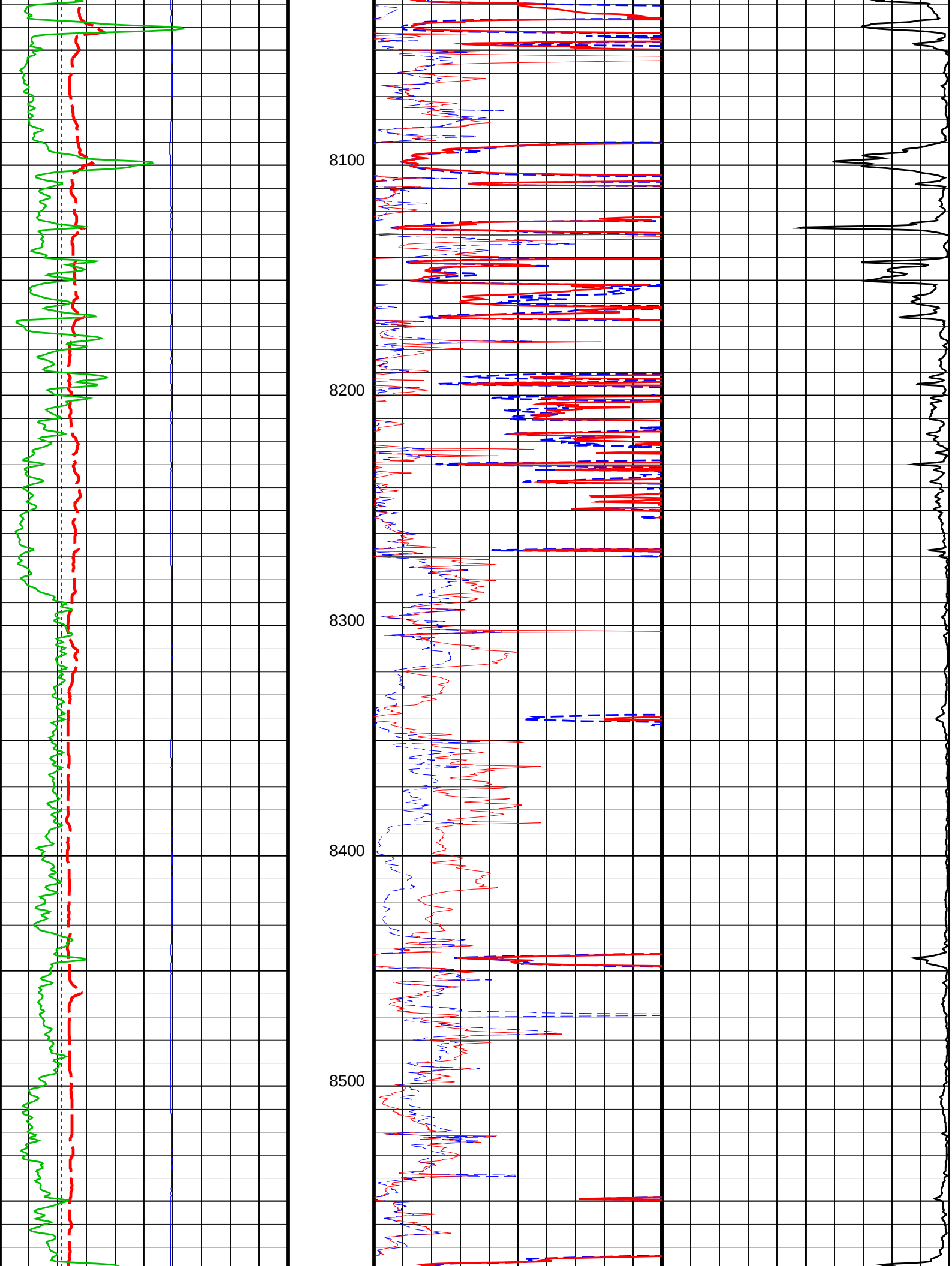


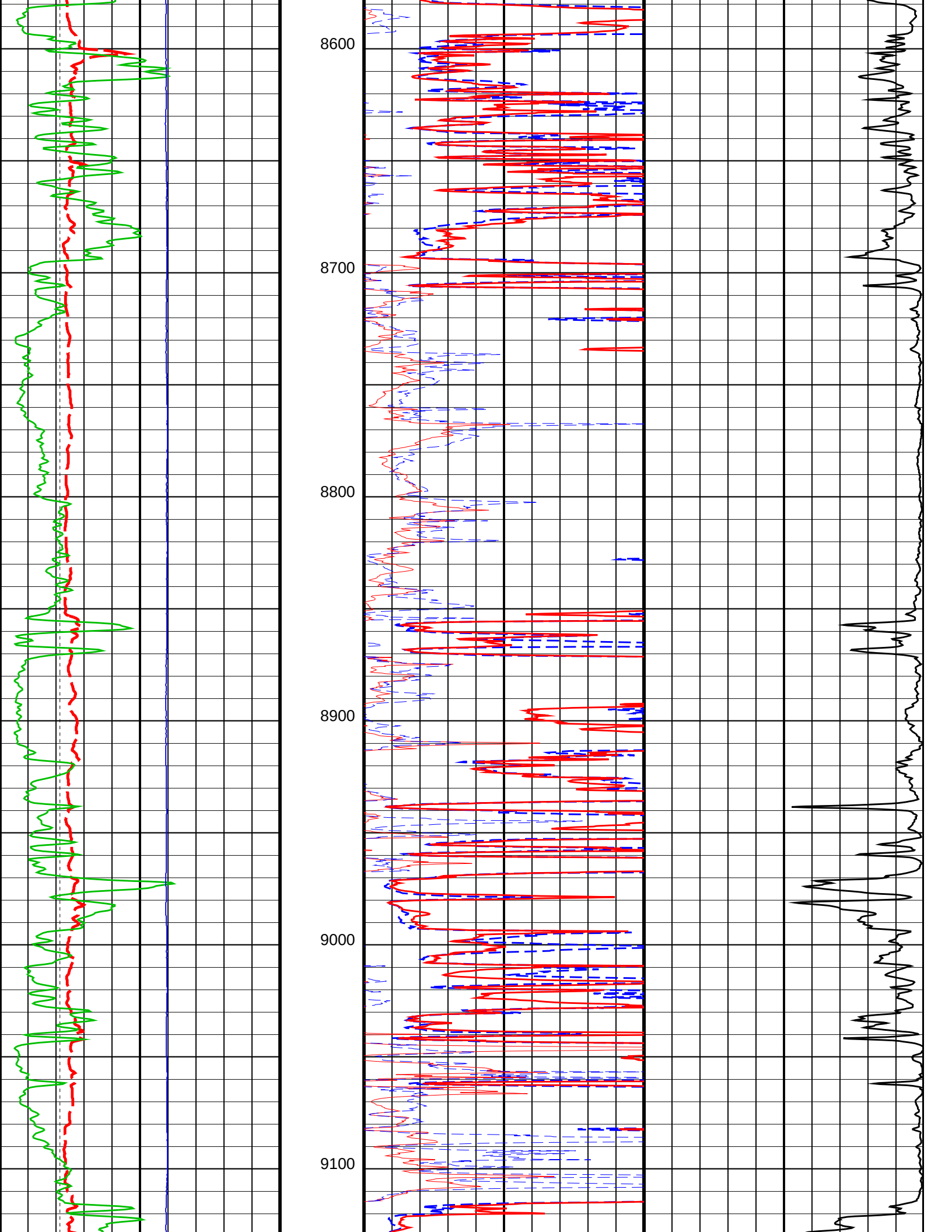

5900
6000
6100
6200
6300

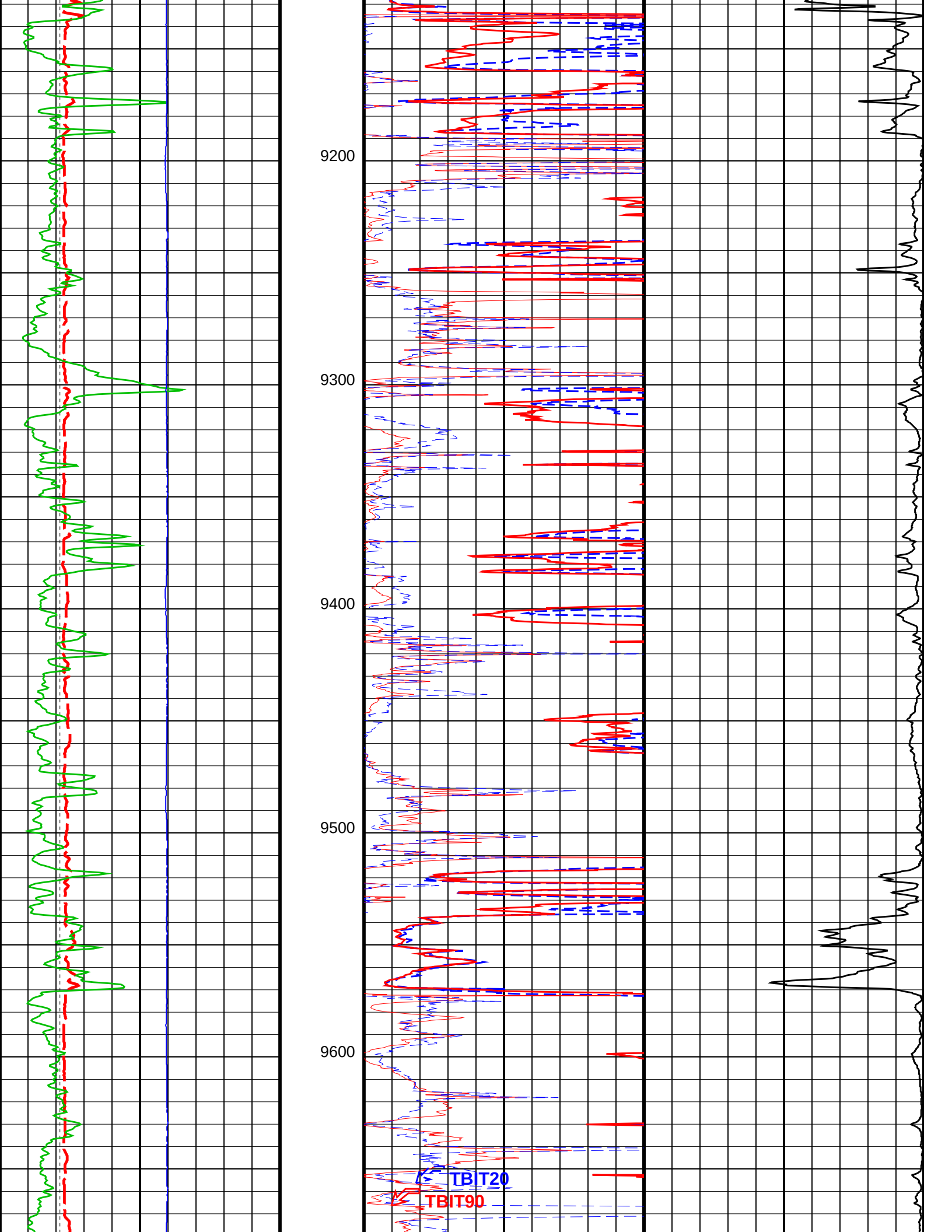

6400
6500
6600
6700
6800
6900

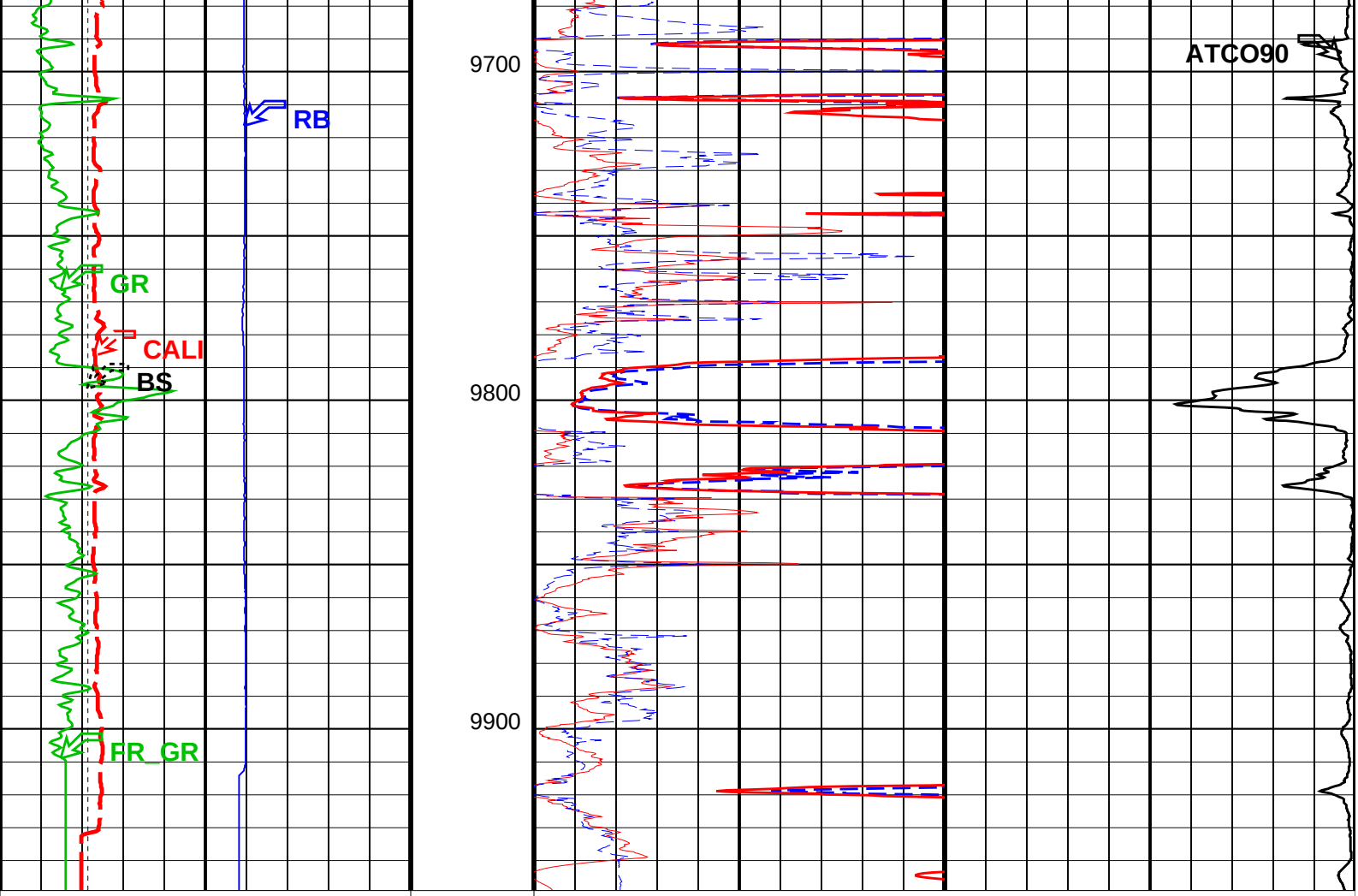

7000
7100
7200
7300
7400


7500
7600
7700
7800
7900
8000


8100
8200
8300
8400
8500


8600
8700
8800
8900
9000
9100


9200
9300
9400
9500
9600
TBIT20
TBIT90



Bit Size (BS)		
4	(IN)	14
Gamma Ray (GR)		
0	(GAPI)	150
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
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)		

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

0	(DEG)	940

Parameters

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

Format: TB_2INCH_RESISTIVITY Vertical Scale: 2" per 100' Graphics File Created: 16−Sep−2014 06:30

OP System Version: 19C2−270

TBT	SRPC−5303−ThruBit

Input DLIS Files

DEFAULT	ThruBit_007PUP	FN:6	PRODUCER	16−Sep−2014 06:15	9949.0 FT	5082.0 FT

Output DLIS Files

TBT	.009	FN:8	16−Sep−2014 06:30	

Schlumberger

MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY Well: JELLISON A 3319 9−5H 2L

Input DLIS Files

DEFAULT	ThruBit_007PUP	FN:6	PRODUCER	16−Sep−2014 06:15	9949.0 FT	5082.0 FT

Output DLIS Files

TBT	.009	FN:8	16−Sep−2014 06:30	9949.0 FT	5465.0 FT

OP System Version: 19C2−270

TBT	SRPC−5303−ThruBit

	Relative Bearing (RB)		
	0	(DEG)	940
gr wrap4 From LHT1 to GR4			
gr wrap3 From LHT1 to GR3			

gr wrap2
From LHT1 to GR2

gr wrap1
From LHT1 to GR1

Caliper (CALI)
4 (IN) 14

Gamma Ray 4 (GR)
600 (GAPI) 750

Gamma Ray 3 (GR)
450 (GAPI) 600

Gamma Ray 2 (GR)
300 (GAPI) 450

Gamma Ray 1 (GR)
150 (GAPI) 300

Gamma Ray (GR)
0 (GAPI) 150

Bit Size (BS)
4 (IN) 14

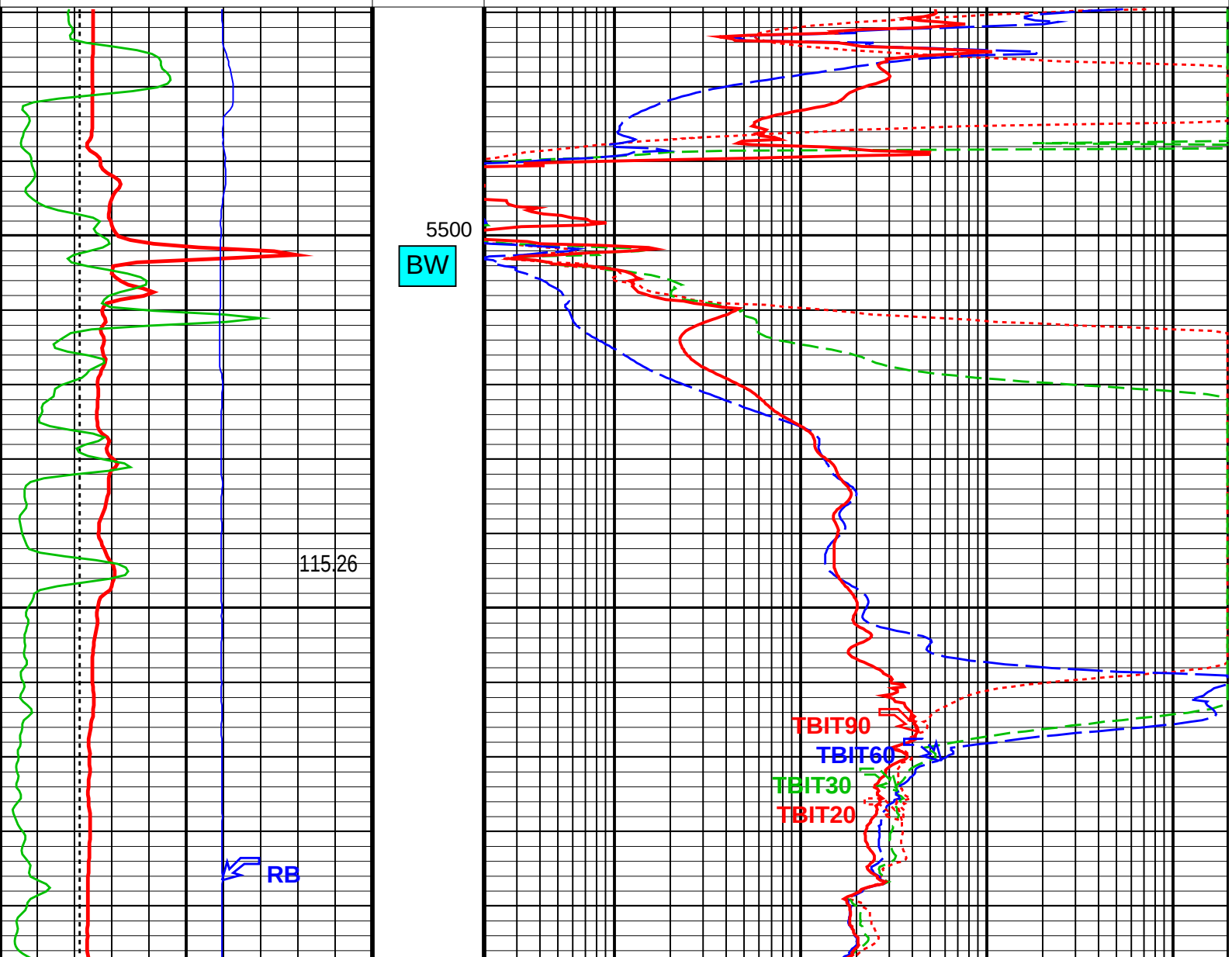
GR Temp (WTEP)
(DEGF)

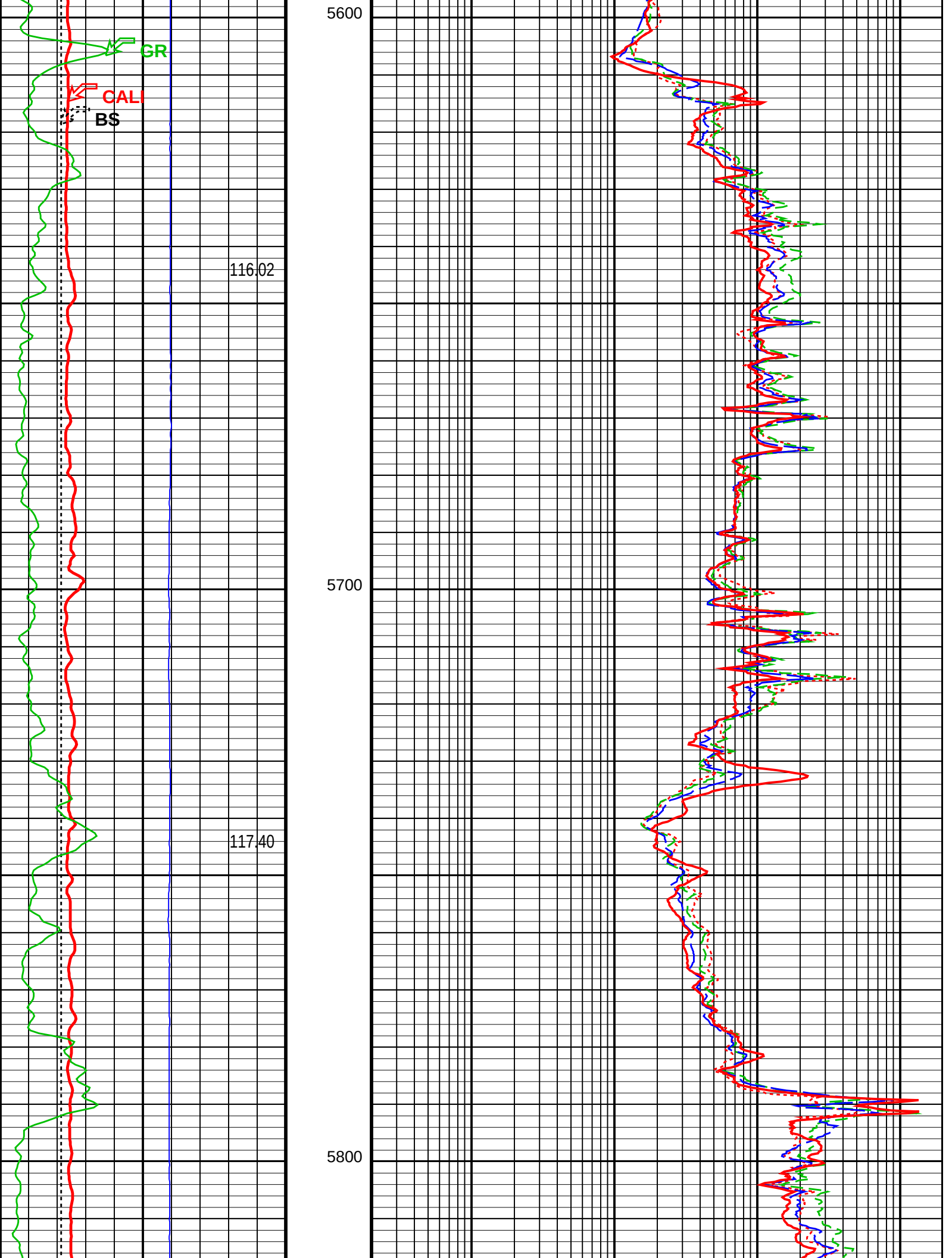
TBI 90 Inch Investigation (TBIT90)
0.2 (OHMM) 2000

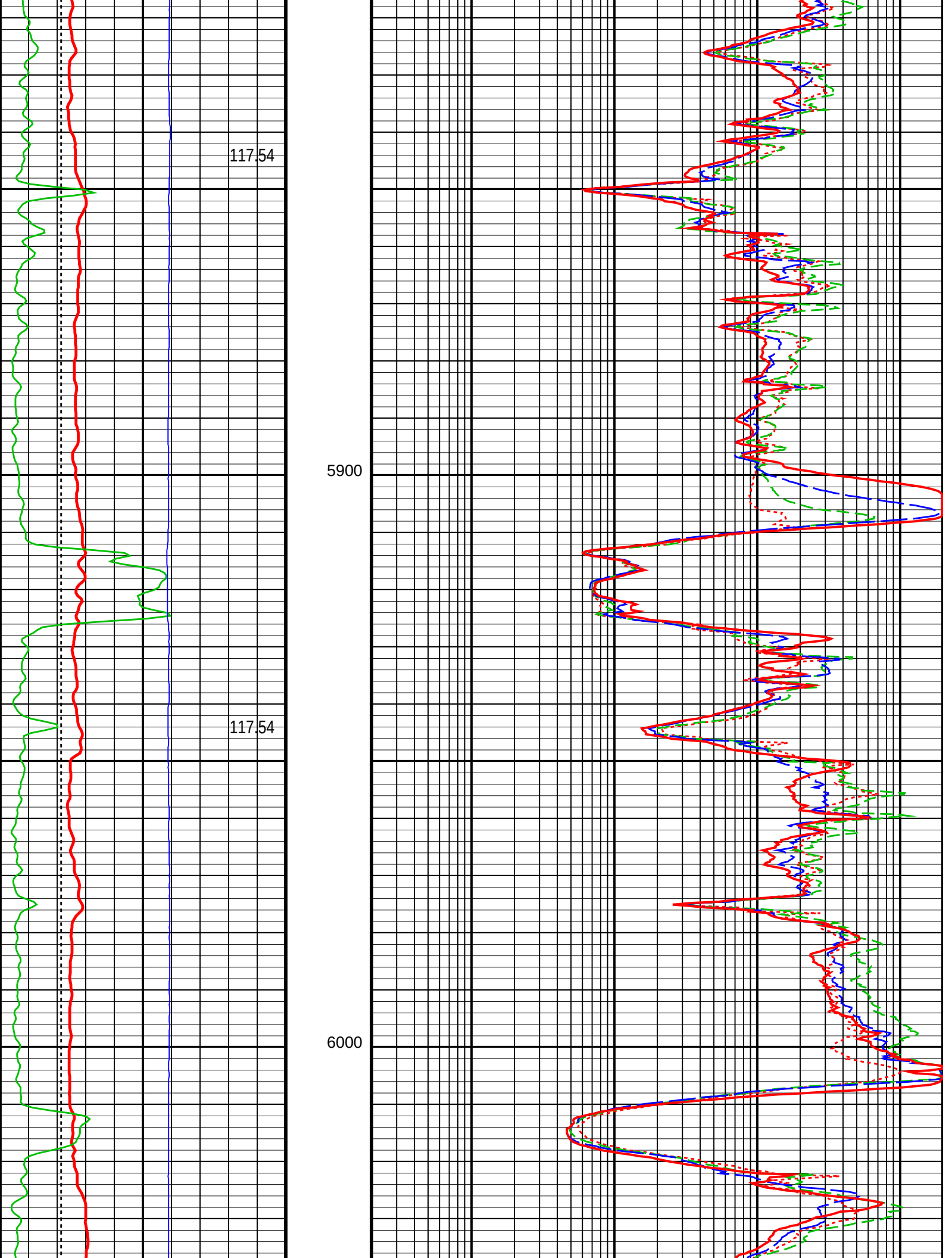
TBI 60 Inch Investigation (TBIT60)
0.2 (OHMM) 2000

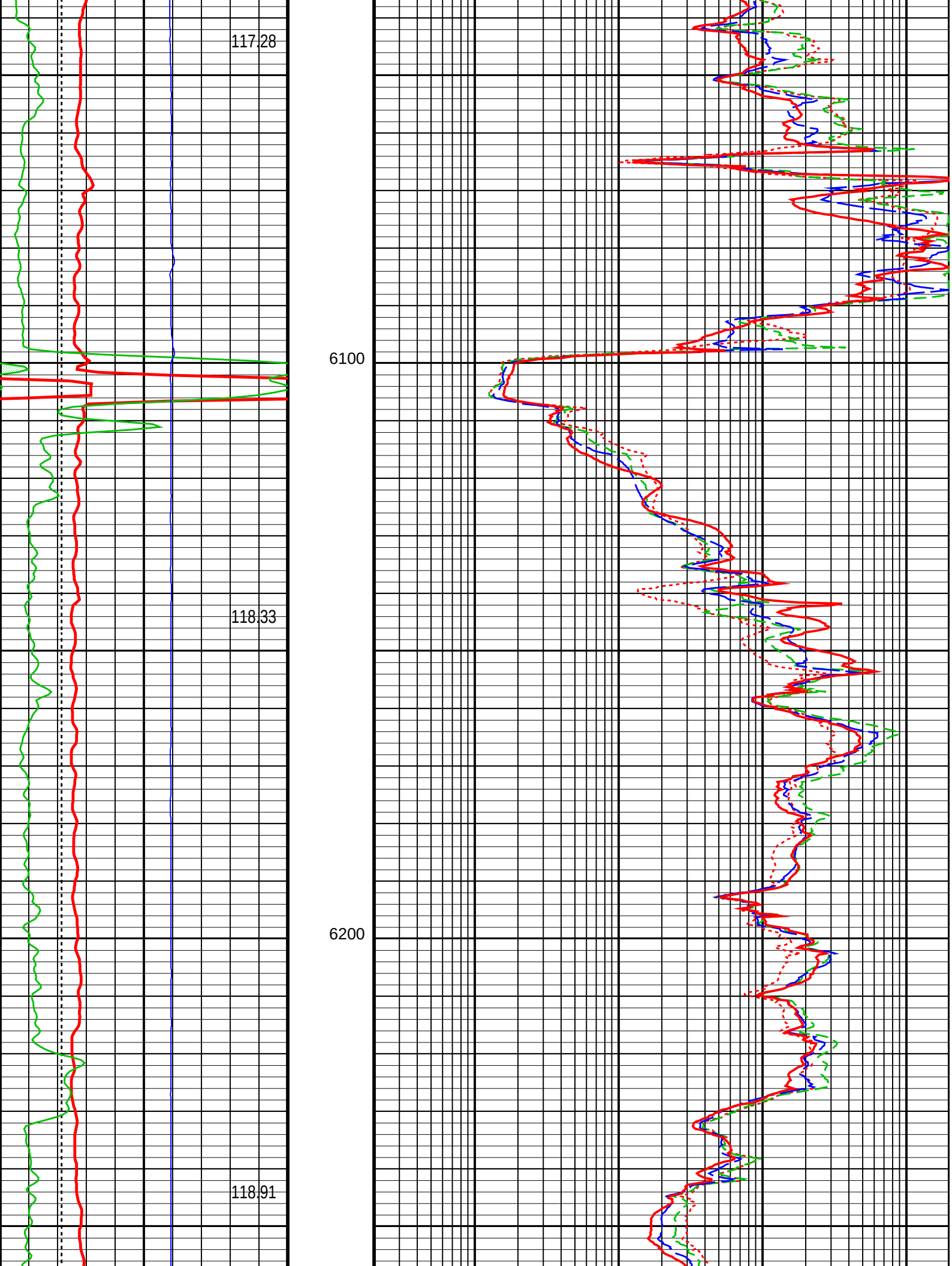
TBI 30 Inch Investigation (TBIT30)
0.2 (OHMM) 2000

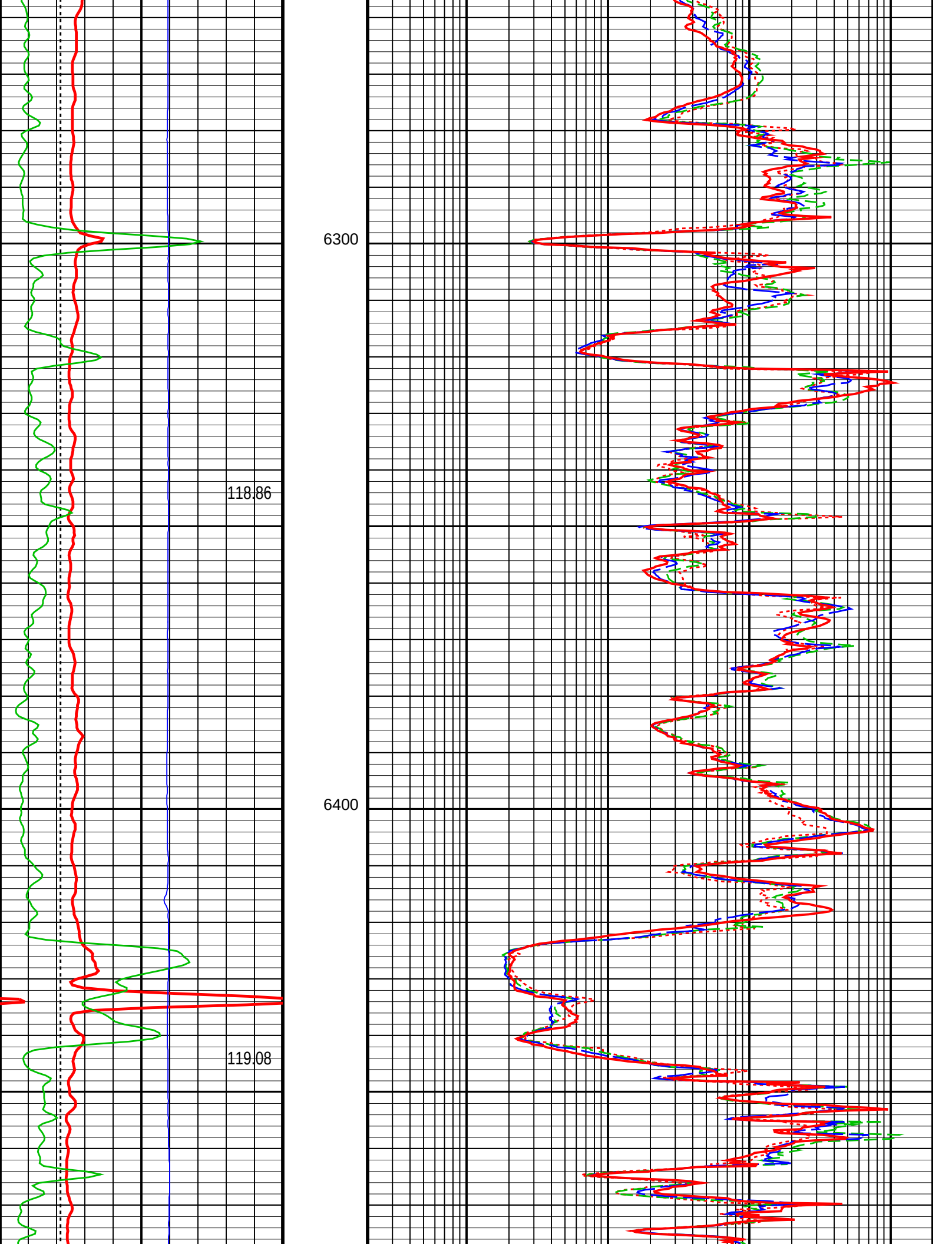
TBI 20 Inch Investigation (TBIT20)
0.2 (OHMM) 2000

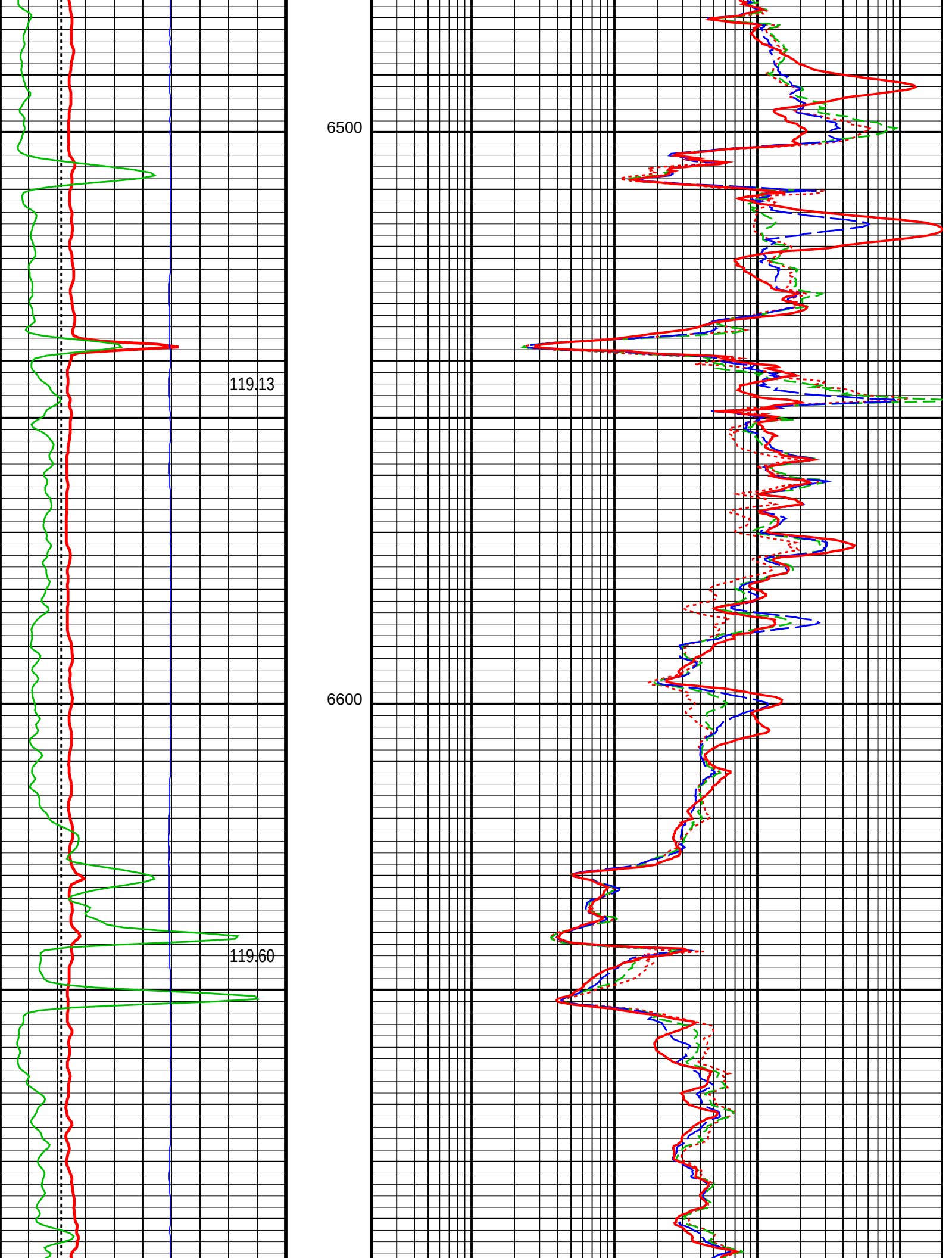


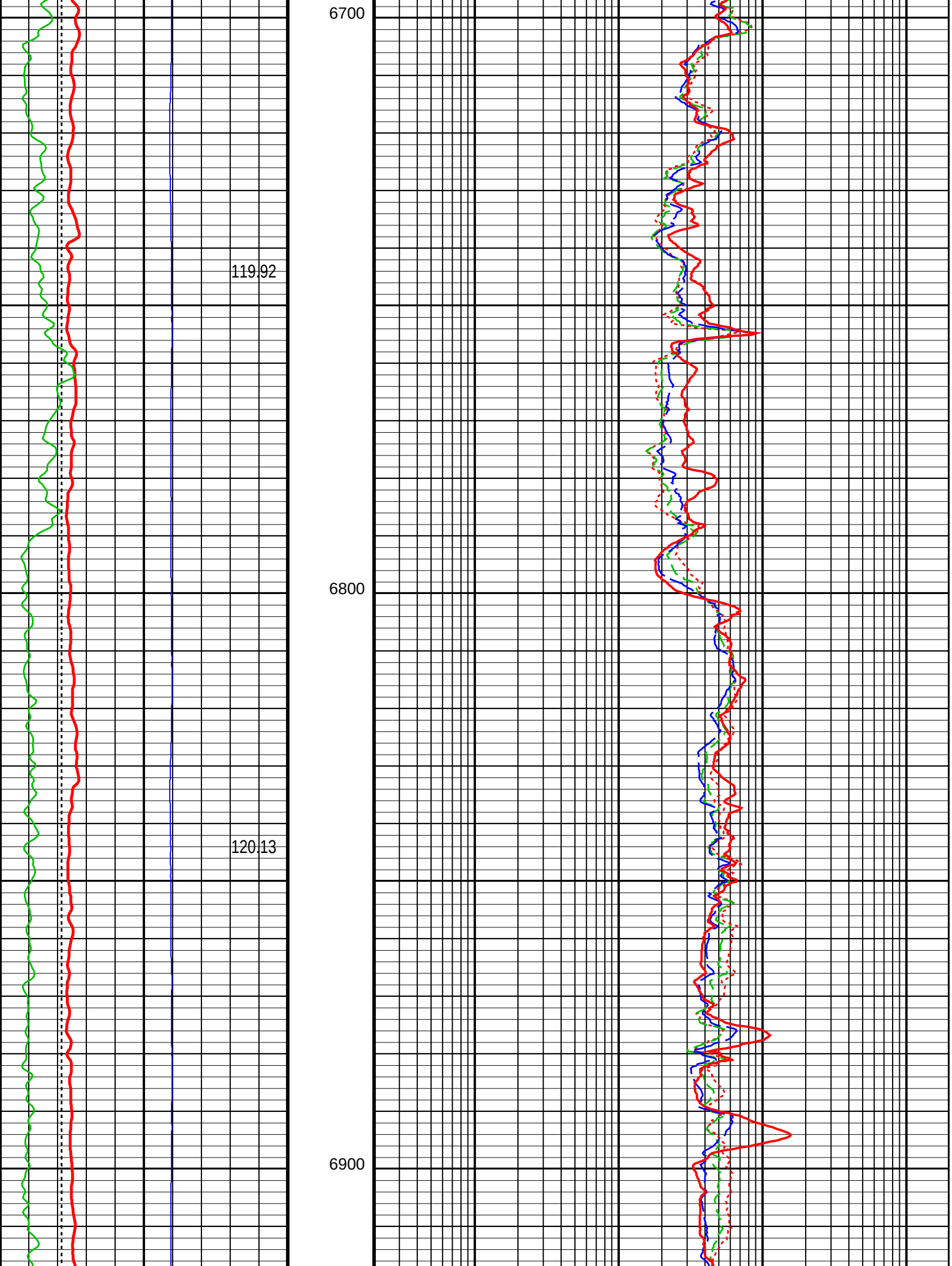

GR
CALI
BS
116.02
117.40
5600
5700
5800

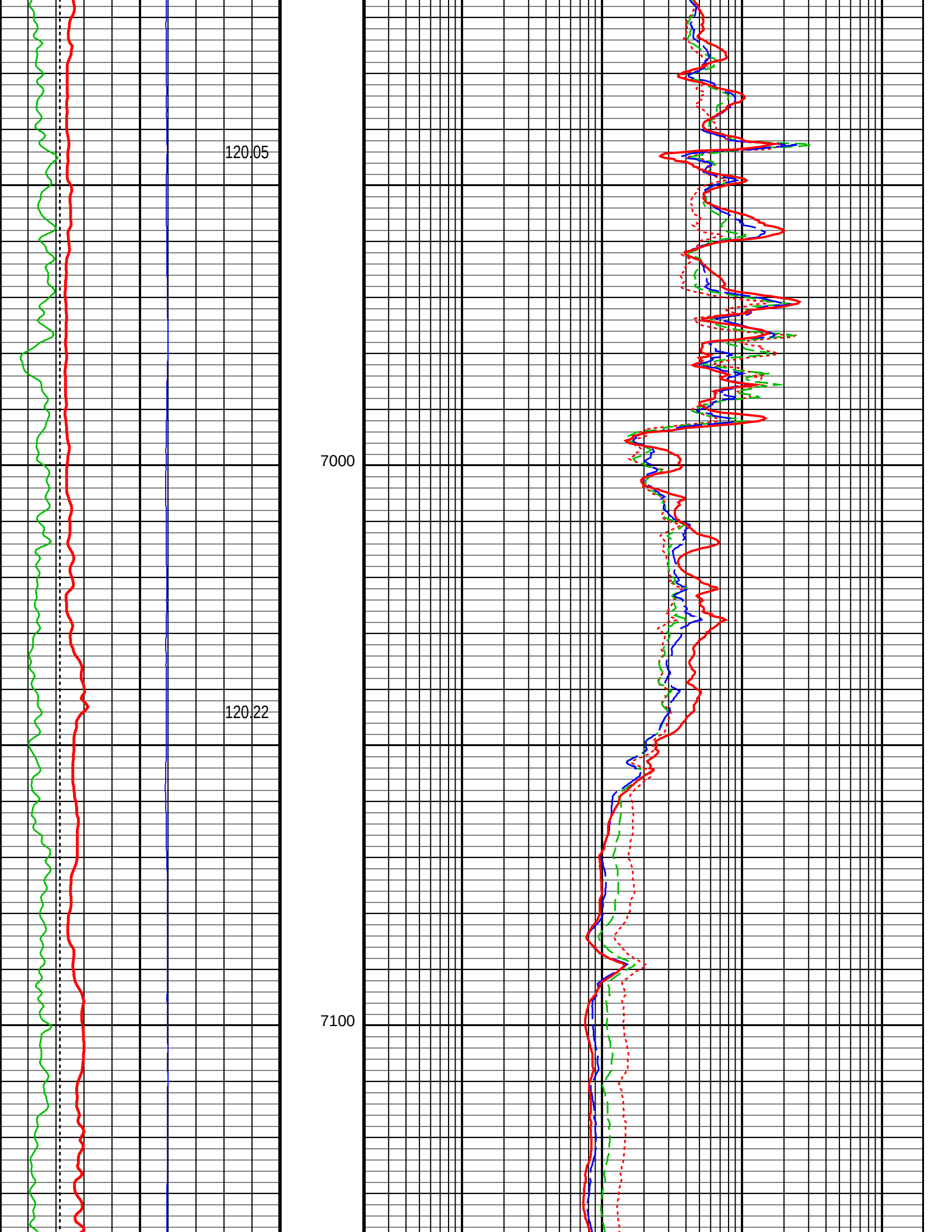

117.54
5900
117.54
6000

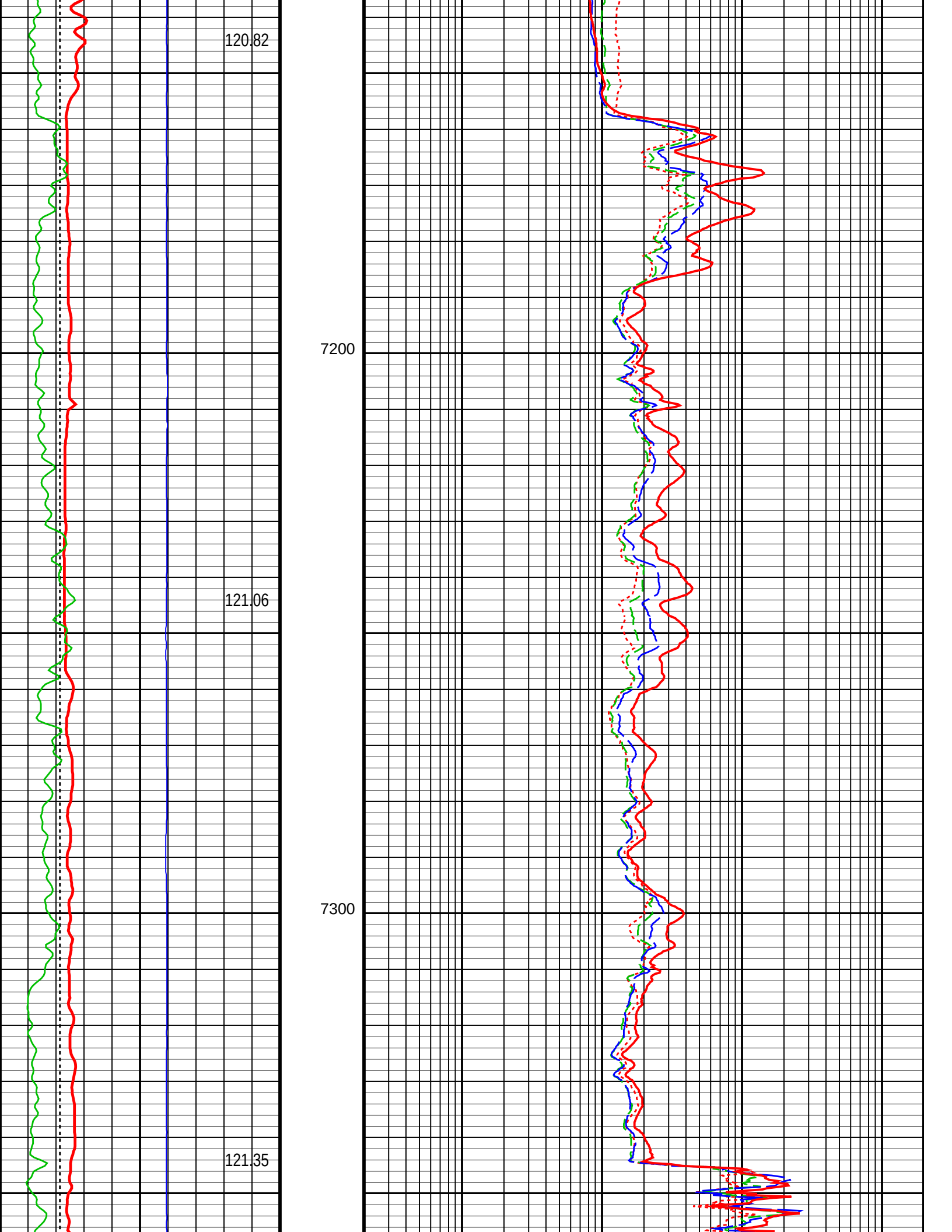

117.28
6100
118.33
6200
118.91

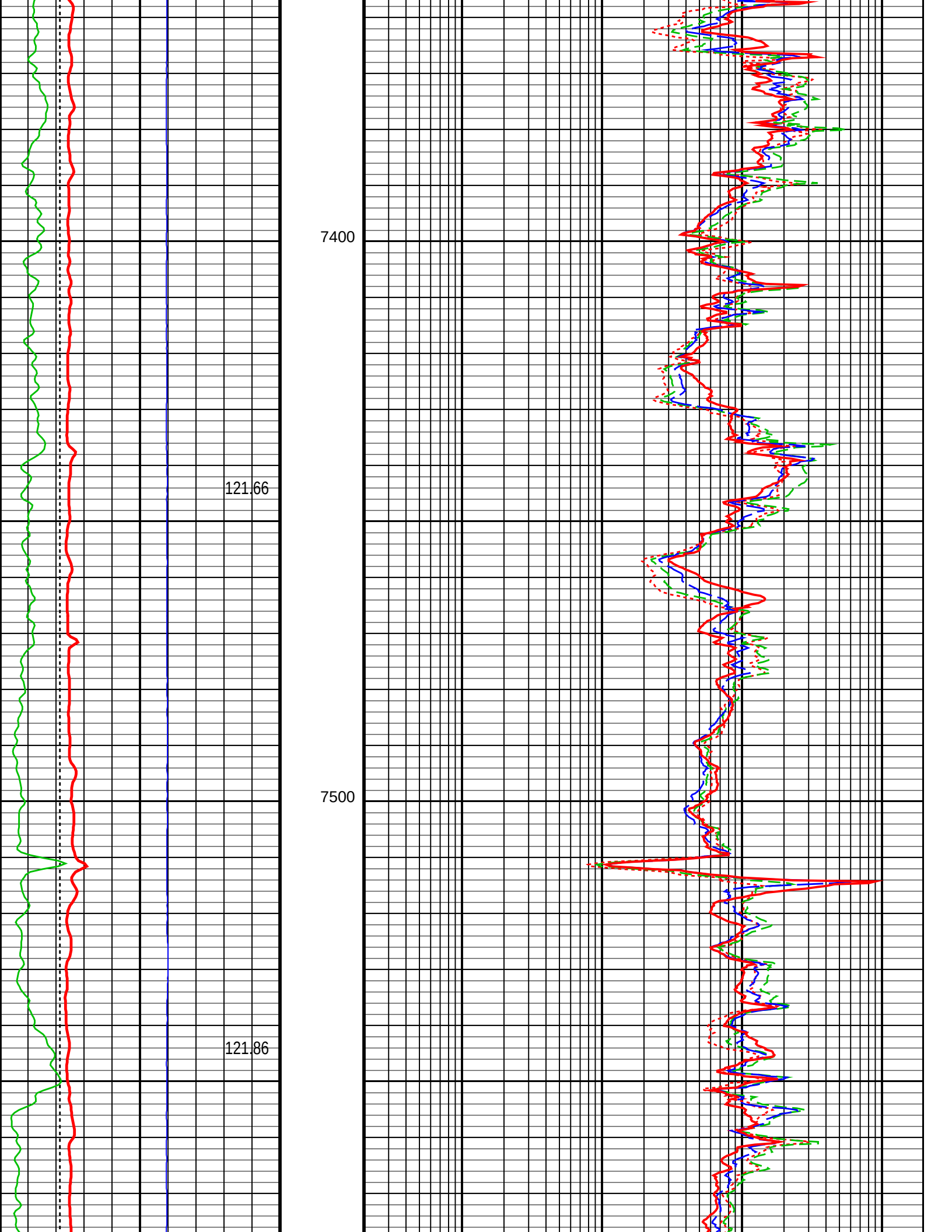

6300
118.86
6400
119.08

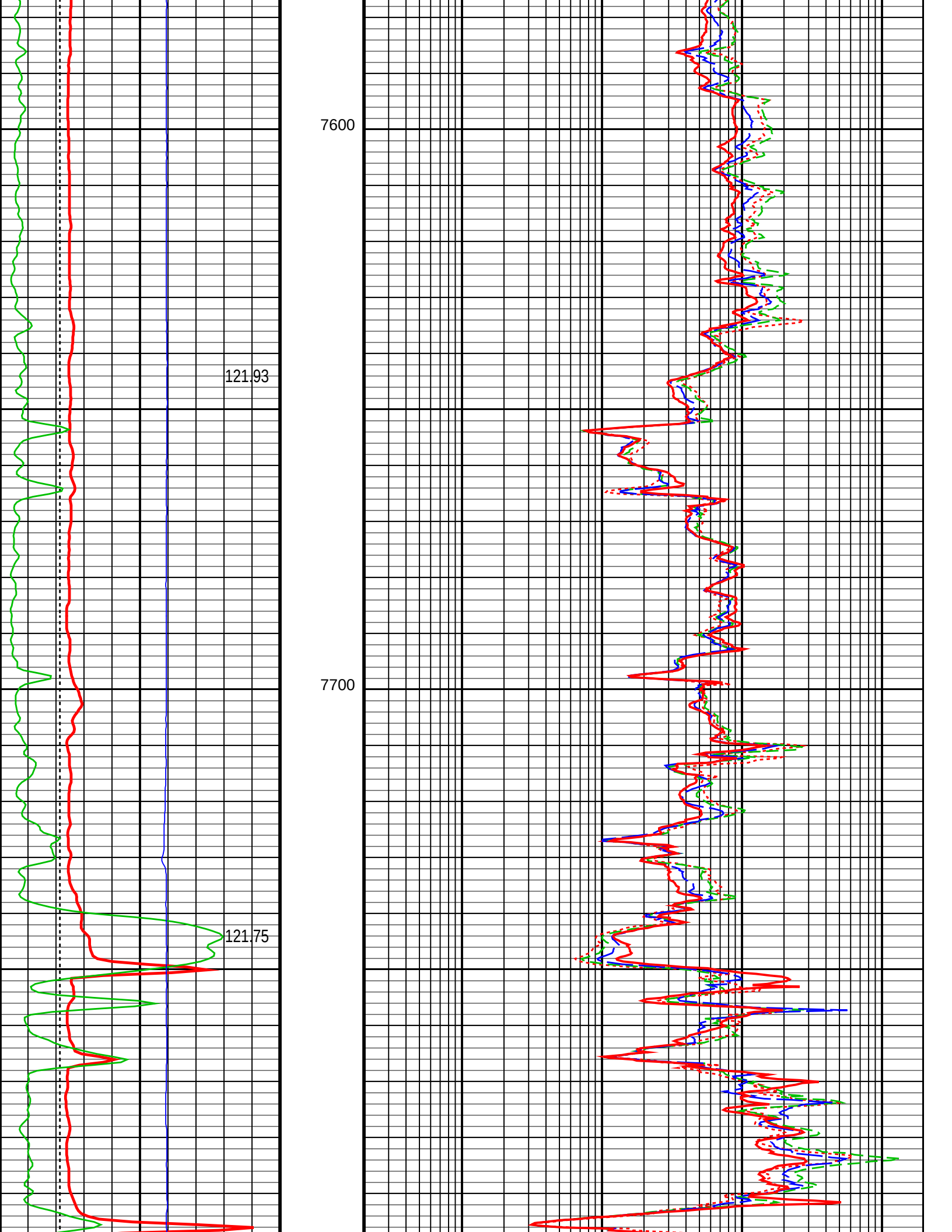

6500
119.13
6600
119.60

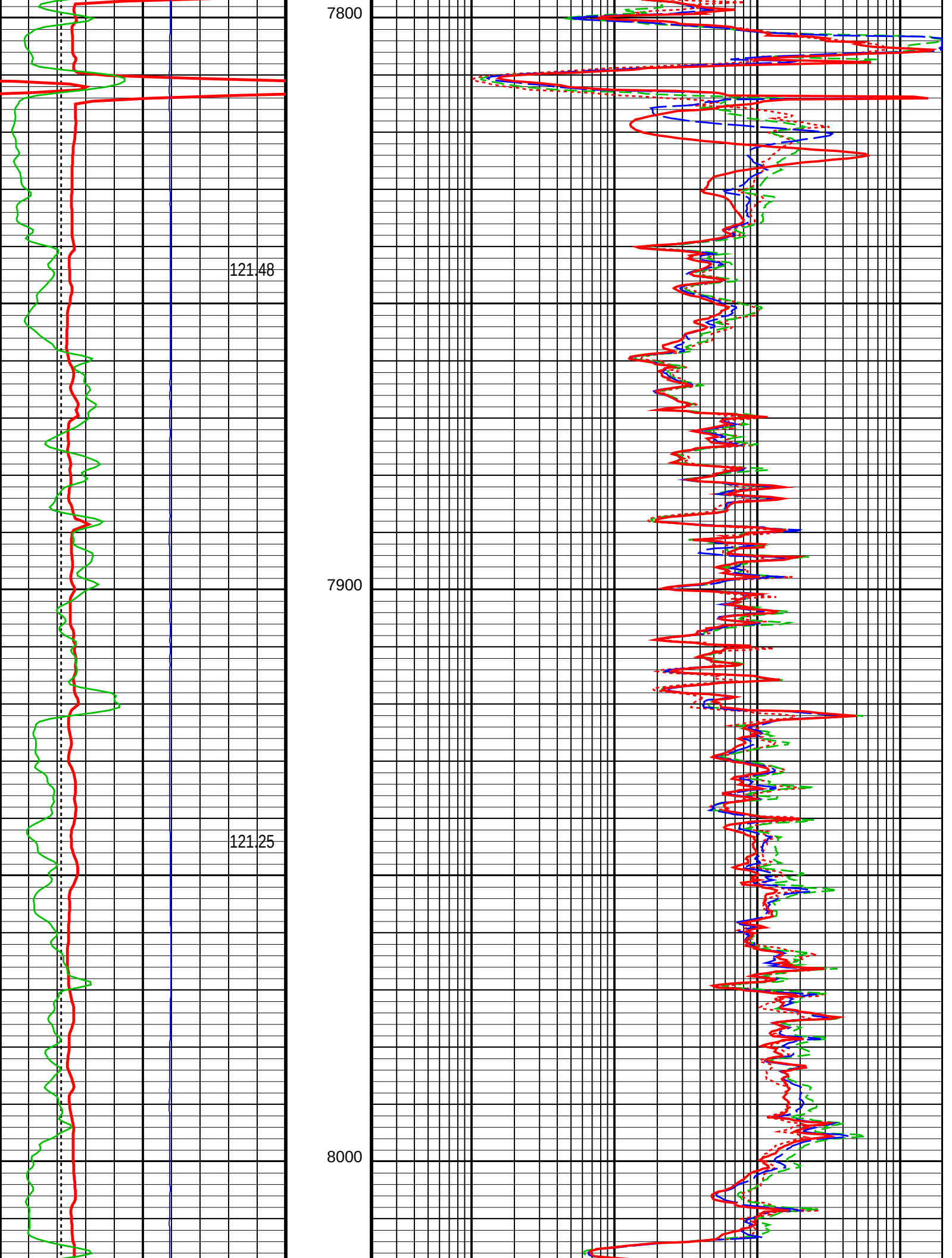

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6800
120.13
6900

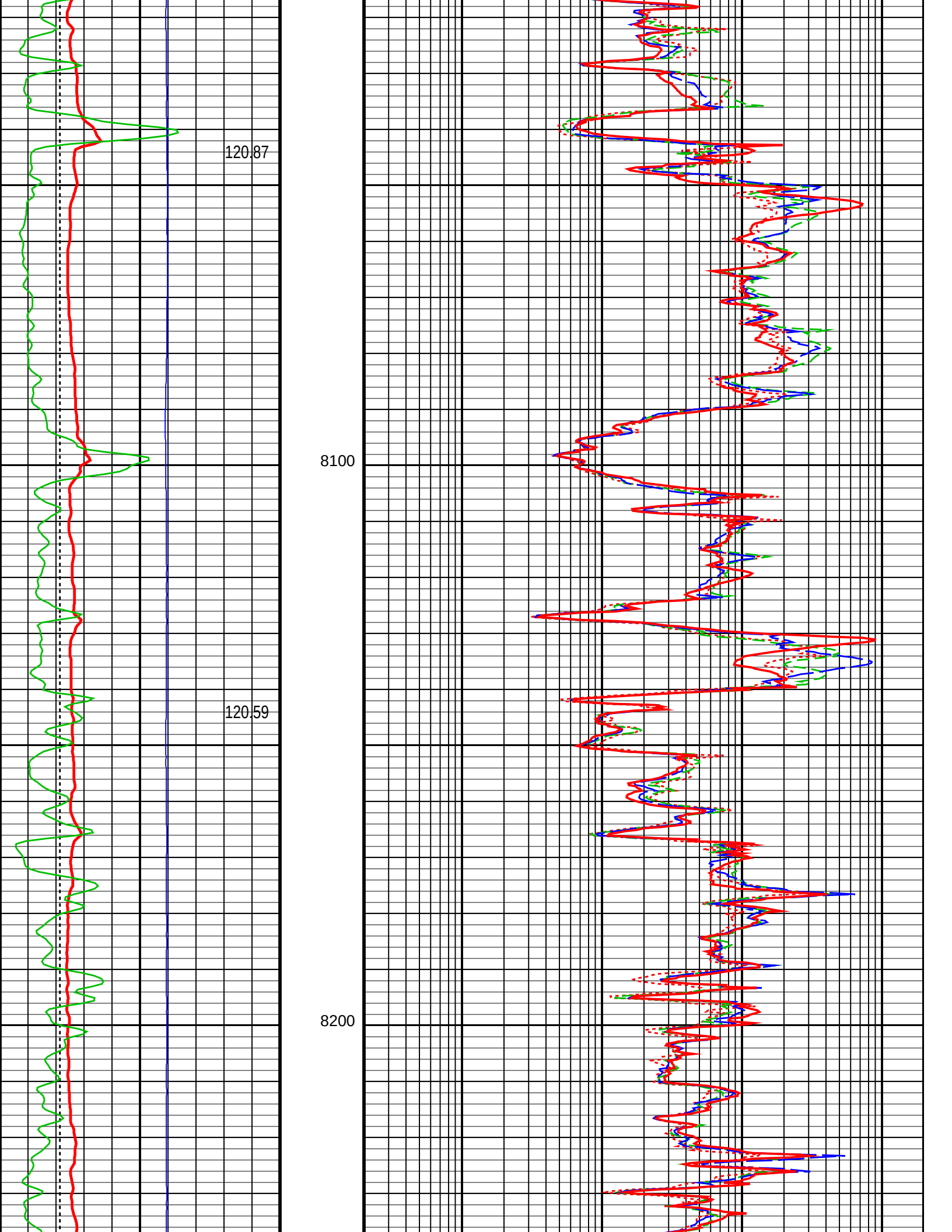

120.05
7000
120.22
7100

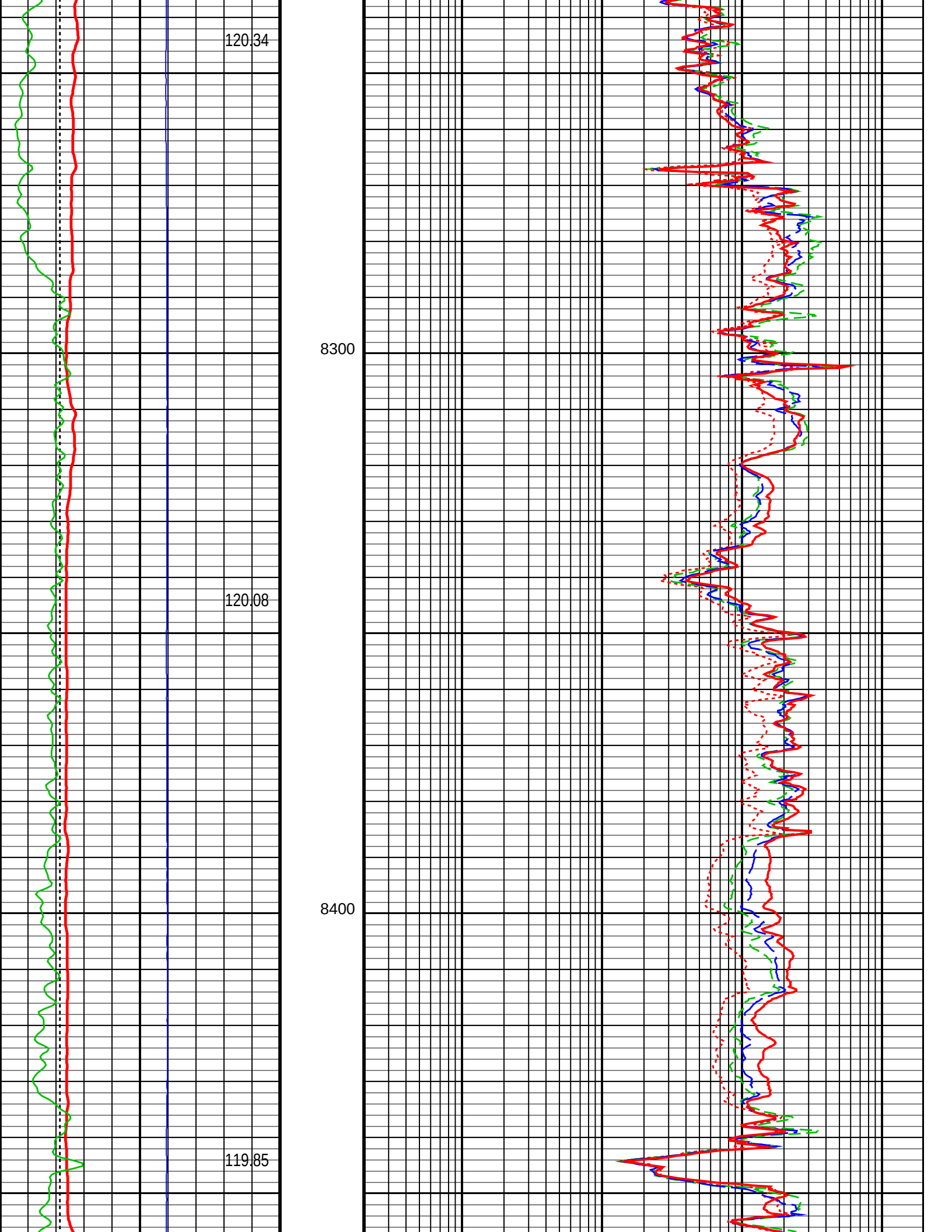

120.82
7200
121.06
7300
121.35

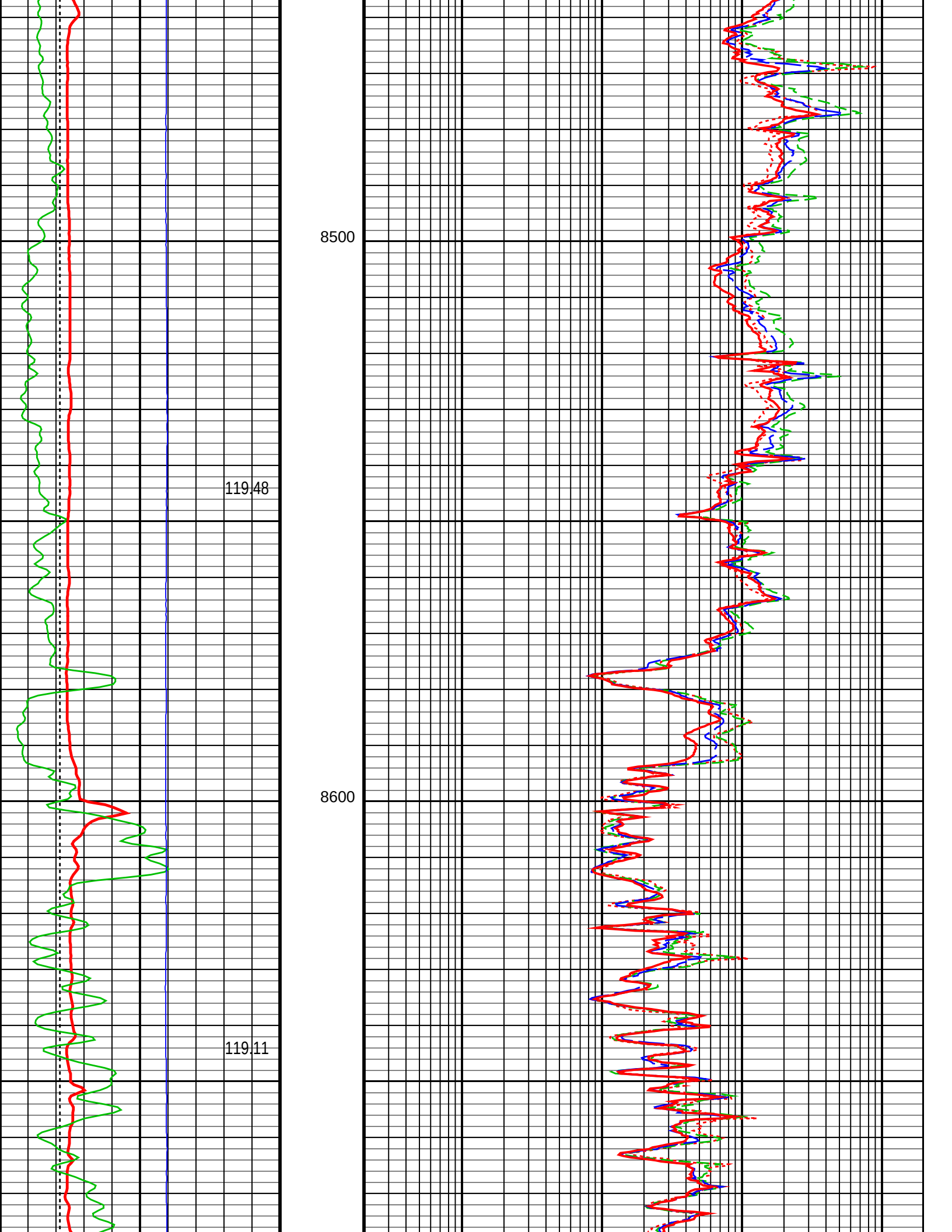

7400
121.66
7500
121.86

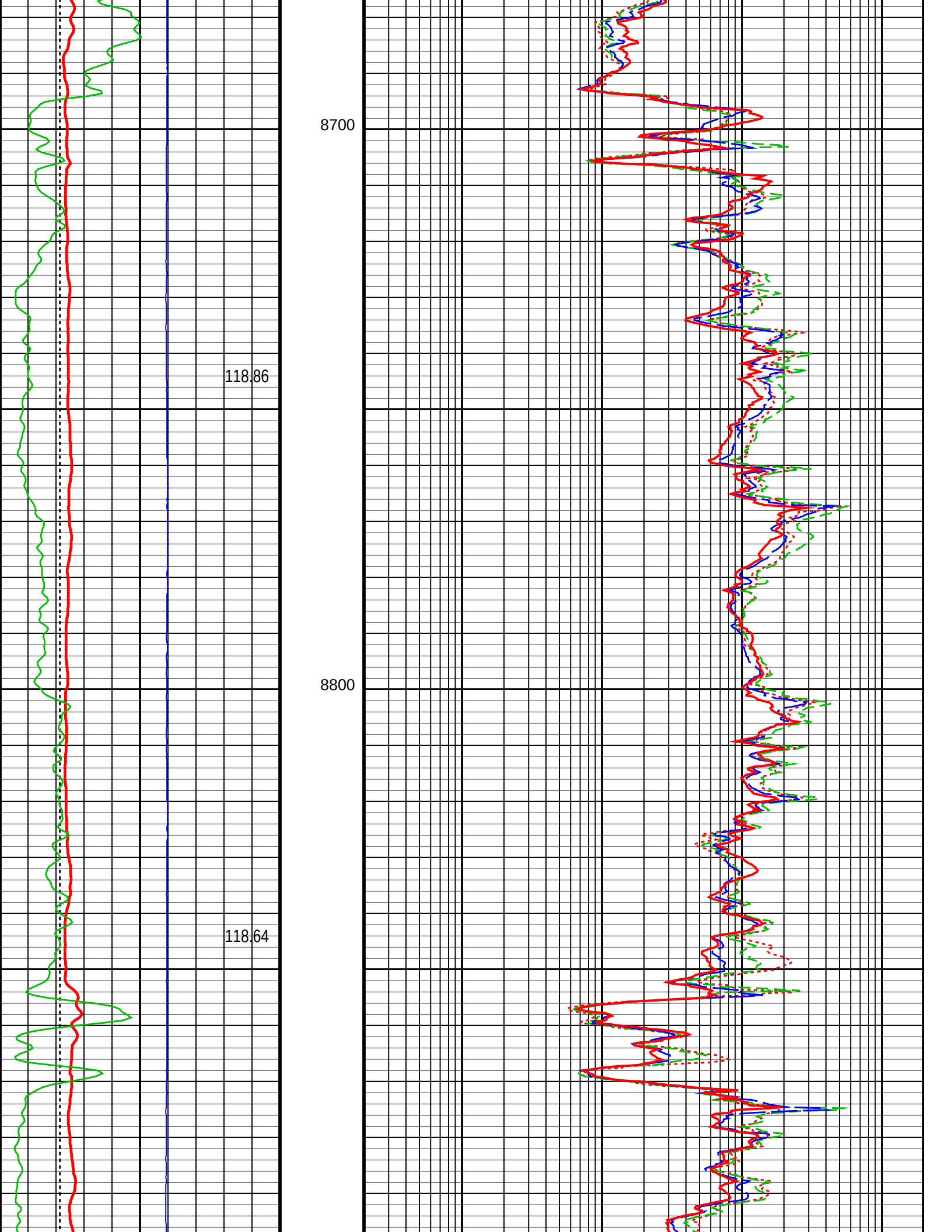

7600
121.93
7700
121.75

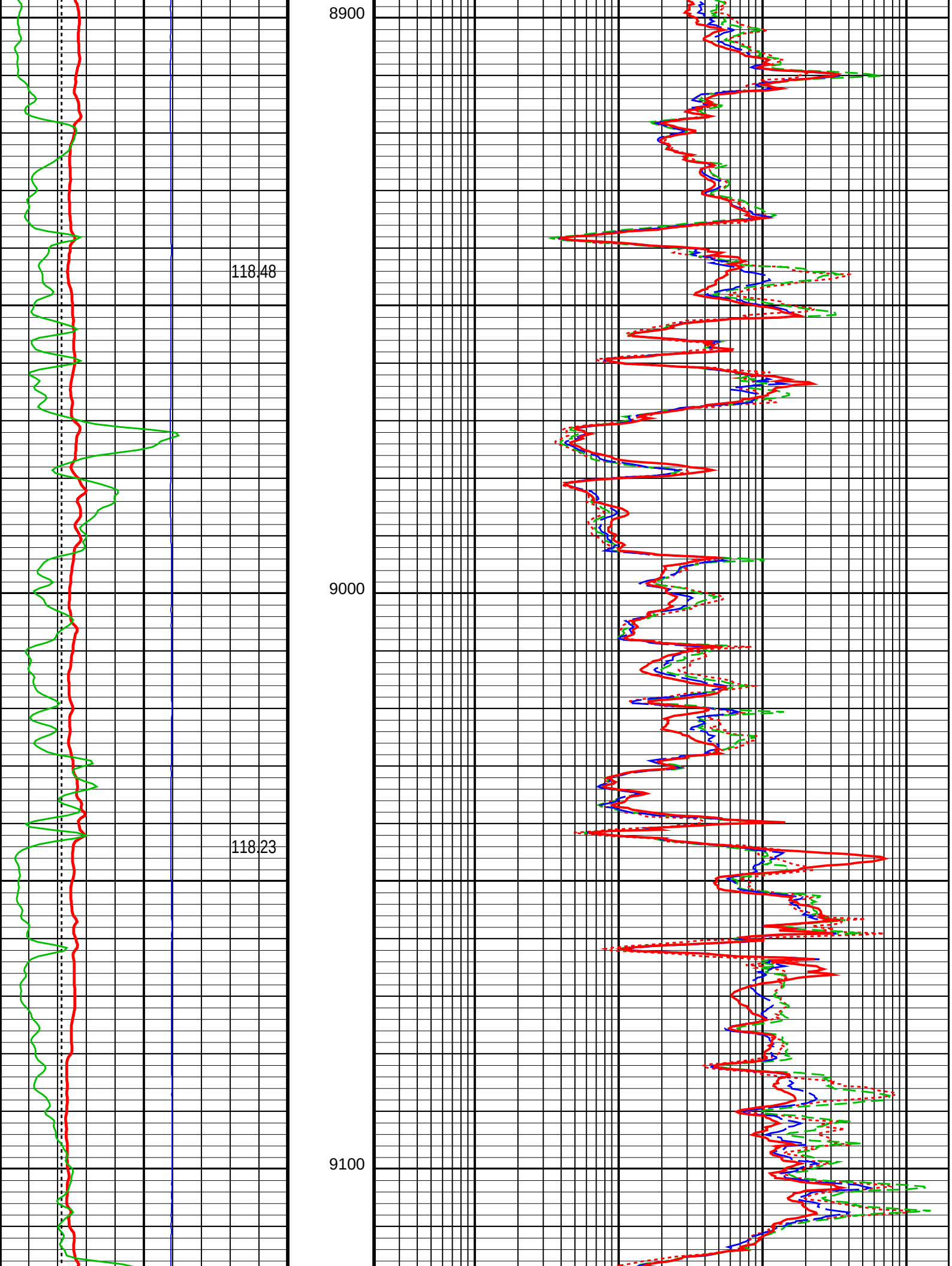

7800
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7900
121.25
8000

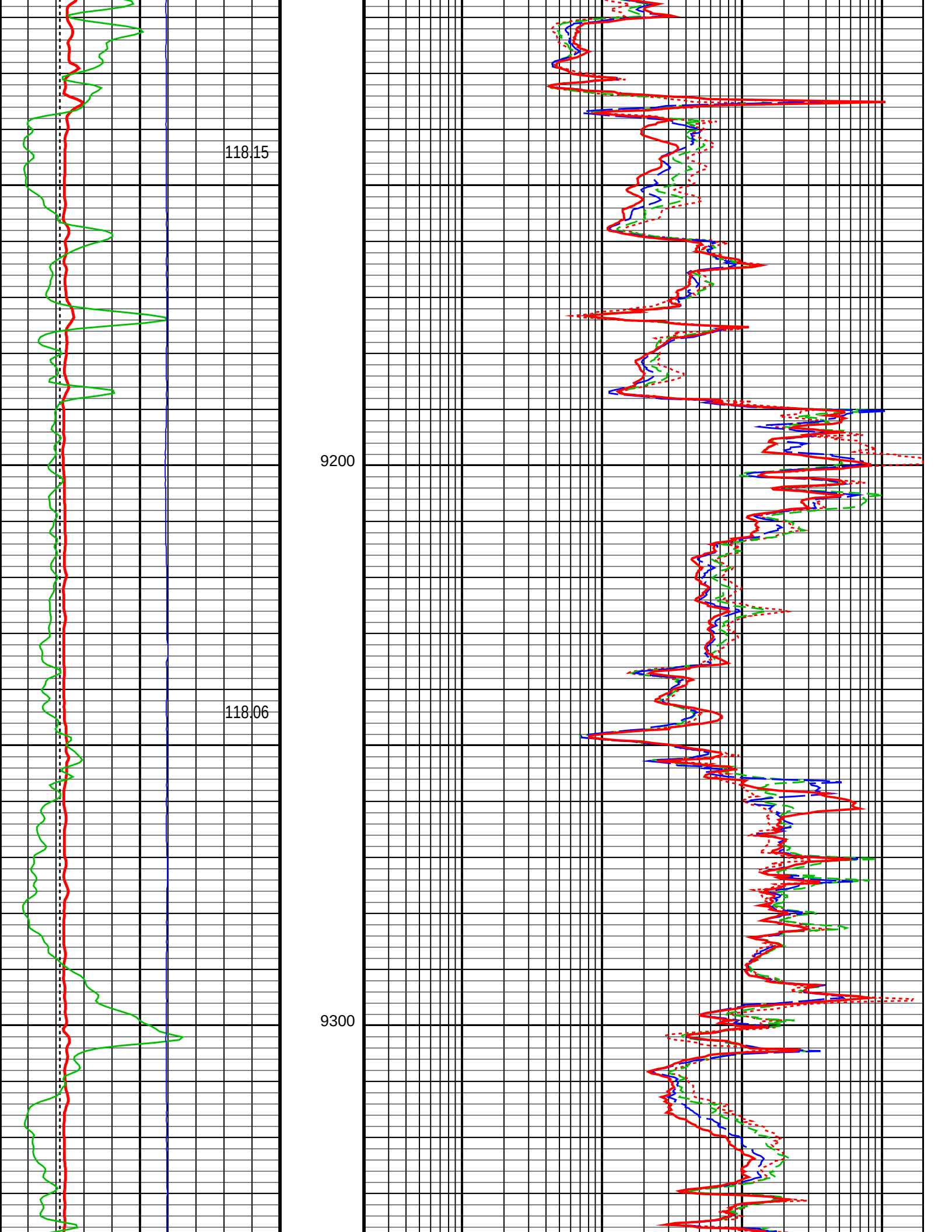

120.87
8100
120.59
8200

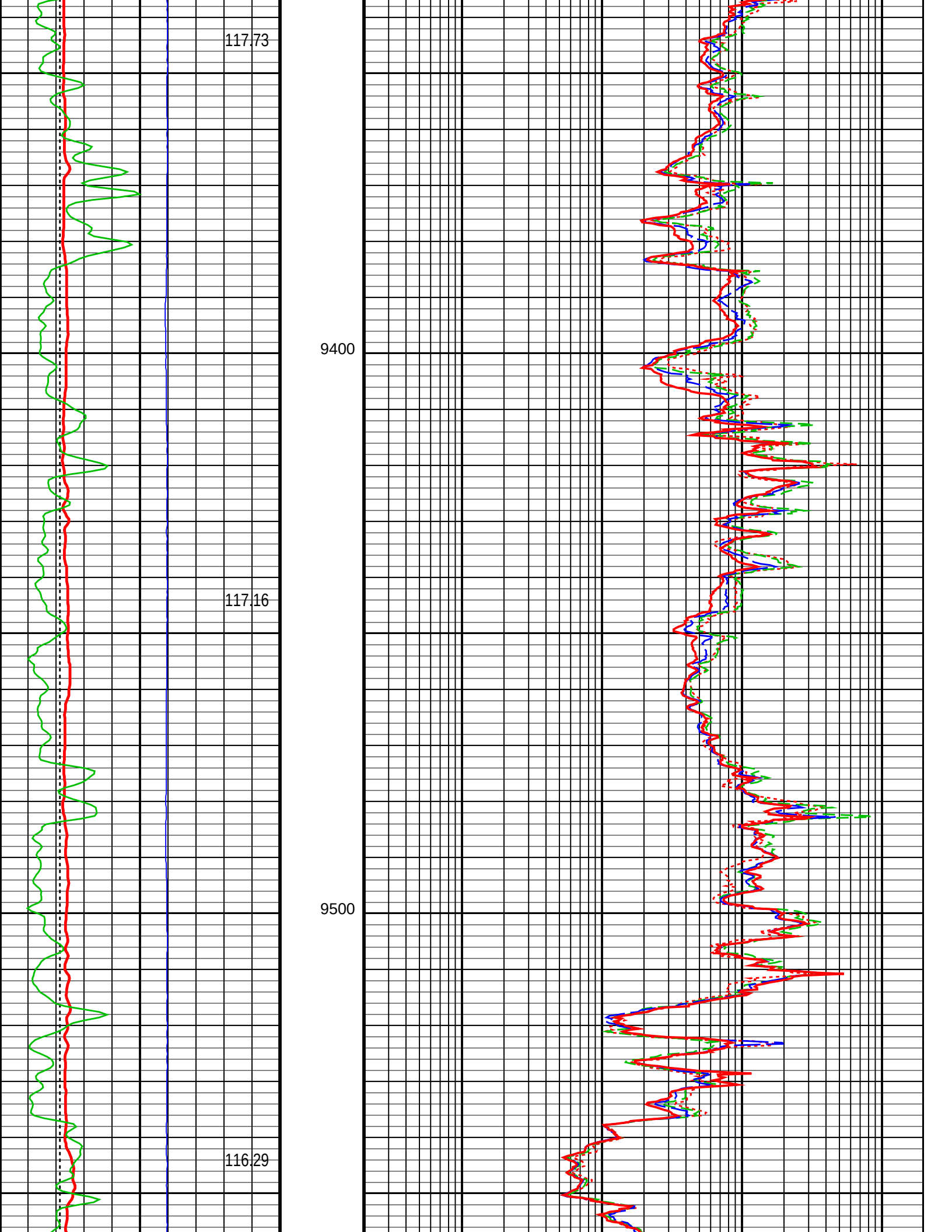

120.34
8300
120.08
8400
119.85

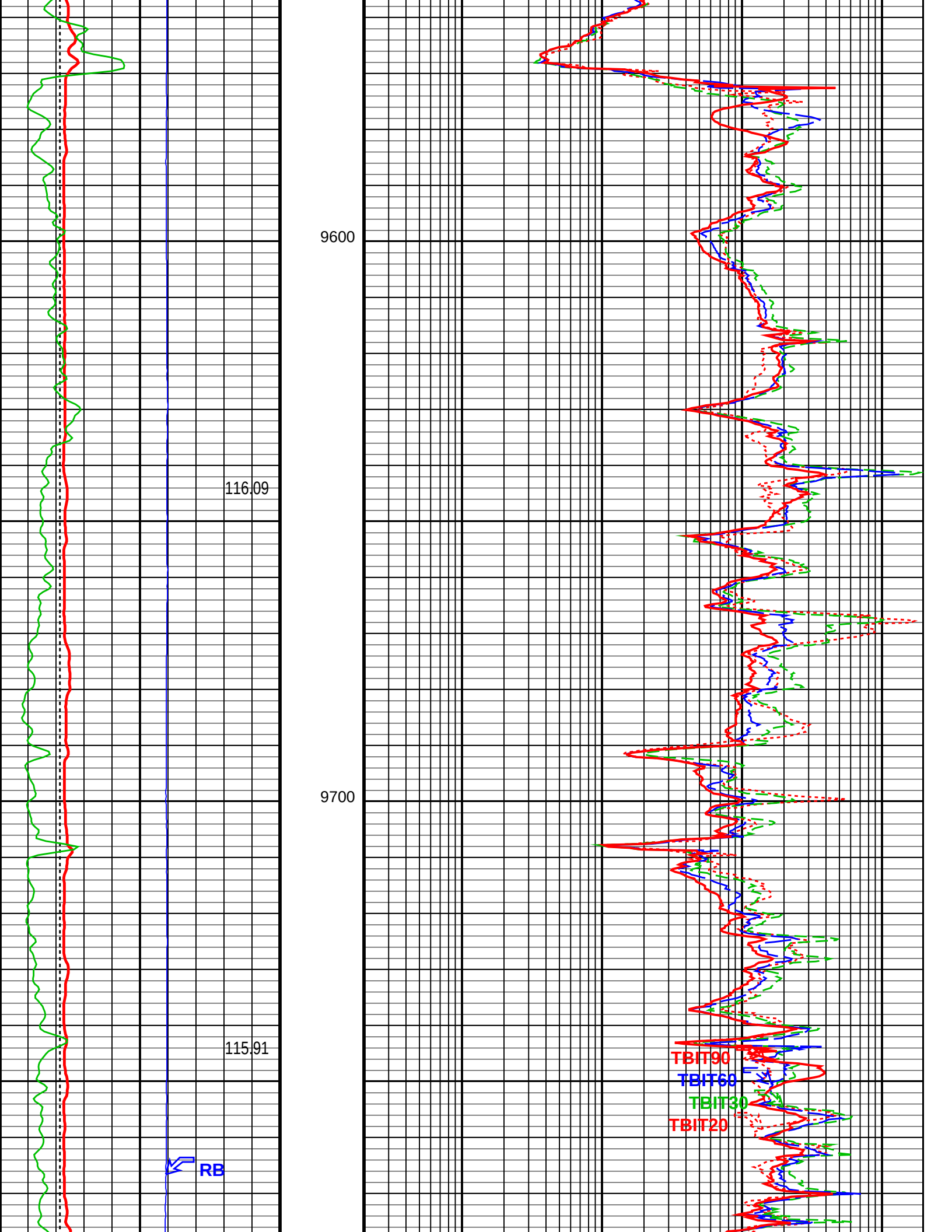

8500
119.48
8600
119.11

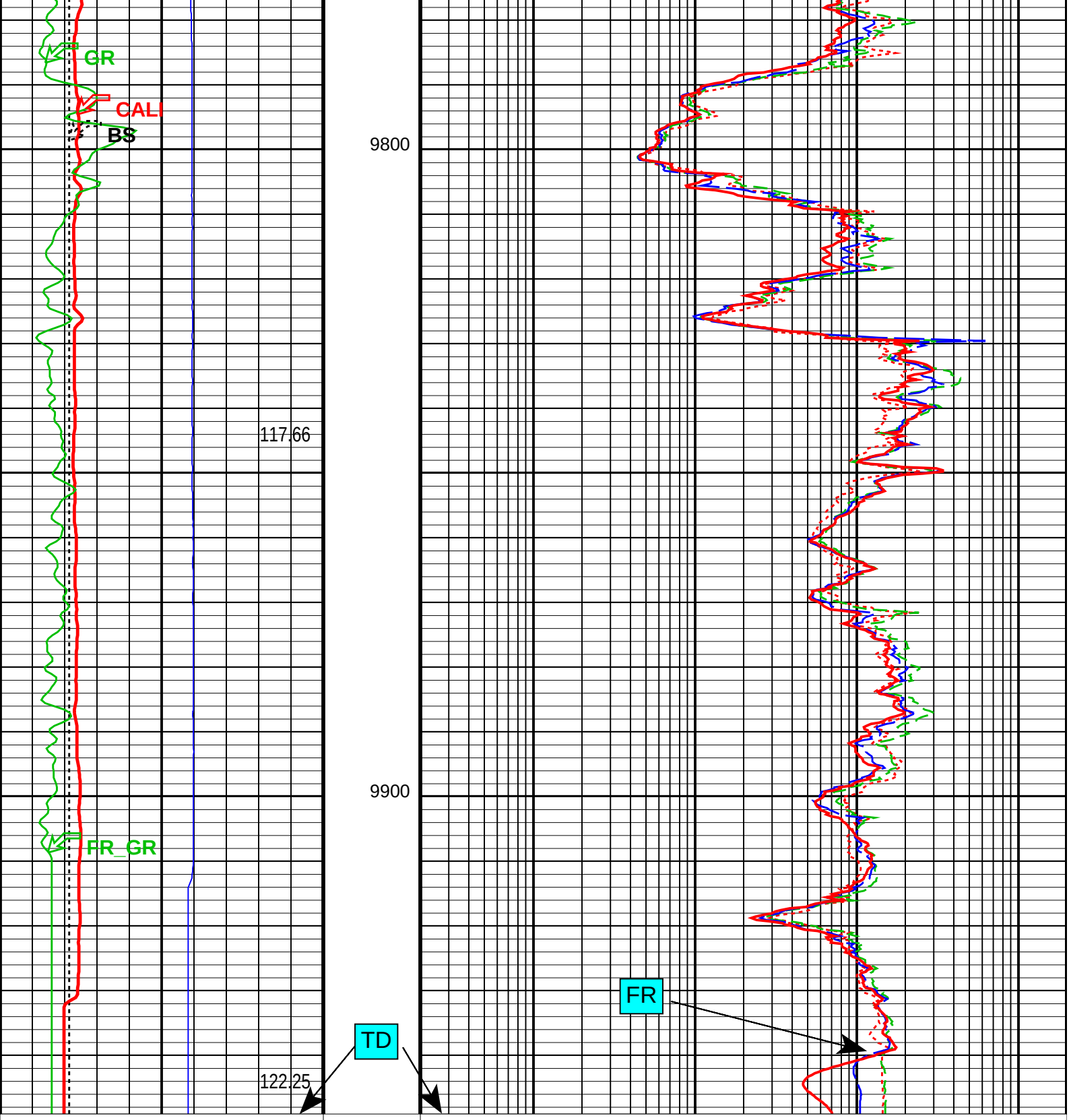

8700
118.86
8800
118.64


8900
118.48
9000
118.23
9100


118.15
9200
118.06
9300

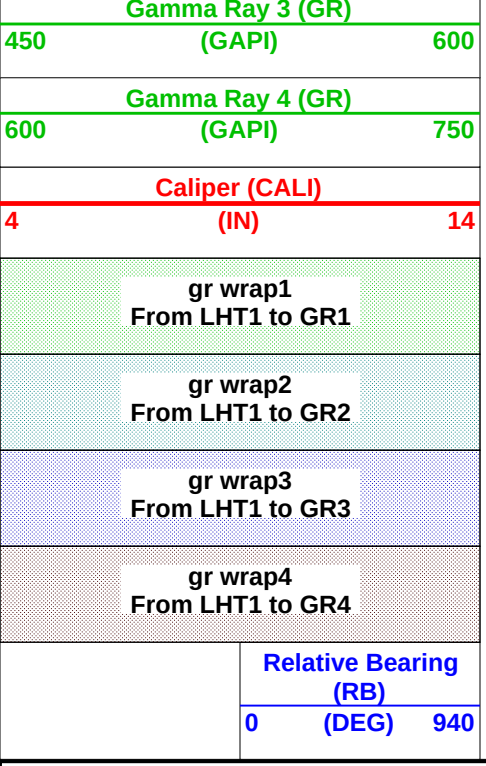

117.73
9400
117.16
9500
116.29


9600
116.09
9700
115.91
RB
TBIT90
TBIT60
TBIT30
TBIT20



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

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



Parameters

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

Format: TB_5INCH_RESISTIVITY Vertical Scale: 5" per 100' Graphics File Created: 16−Sep−2014 06:30

OP System Version: 19C2−270

TBT SRPC−5303−ThruBit

Input DLIS Files

DEFAULT	ThruBit_007PUP	FN:6	PRODUCER	16−Sep−2014 06:15	9949.0 FT	5082.0 FT

Output DLIS Files

TBT .009	FN:8	16−Sep−2014 06:30	

Schlumberger

CALIBRATIONS

MAXIS Field Log

ThruBit String / Equipment Identification

Primary Equipment:		
Induction Resistivity	TBI − A	3
Density	TBD − A	23
Gamma−Ray Logging Source	GGLS − FZ	
Thermal Neutron	TBN − A	32
Neutron Logging Source	NNLS − EWA	
Telemetry Memory GR	TMG − A	34
Battery	TBAT −	40
Battery	TBAT −	7

Auxiliary Equipment:

ThruBit String Master Calibration

TBI Master Calibration Sonde Errors

	Value	Nominal		Value	Nominal
Freq 1, A1, R	−456.524	−457.000	Freq 1, A1, X	80.1519	300.000
−556.000 (Minimum)	−387.000 (Nominal)	(Maximum)	−500.000 (Minimum)	1100.00 (Nominal)	(Maximum)
Freq 1, A2, R	−147.640	−141.000	Freq 1, A2, X	7.28902	320.000
−182.000 (Minimum)	−120.000 (Nominal)	(Maximum)	−75.0000 (Minimum)	700.000 (Nominal)	(Maximum)
Freq 1, A3, R	−29.9611	−28.0000	Freq 1, A3, X	−7.26270	50.0000
−38.0000 (Minimum)	−18.0000 (Nominal)	(Maximum)	−375.000 (Minimum)	475.000 (Nominal)	(Maximum)
Freq 1, A4, R	−18.6840	−16.0000	Freq 1, A4, X	194.696	300.000
−24.0000 (Minimum)	−8.00000 (Nominal)	(Maximum)	25.0000 (Minimum)	575.000 (Nominal)	(Maximum)
Freq 1, A5, R	−18.0029	−14.0000	Freq 1, A5, X	105.192	150.000
−21.0000 (Minimum)	−7.00000 (Nominal)	(Maximum)	25.0000 (Minimum)	300.000 (Nominal)	(Maximum)
Freq 2, A1, R	−237.532	−237.000	Freq 2, A1, X	21.7984	150.000
−313.000 (Minimum)	−186.000 (Nominal)	(Maximum)	−375.000 (Minimum)	675.000 (Nominal)	(Maximum)
Freq 2, A2, R	−95.7068	−92.0000	Freq 2, A2, X	−25.6539	160.000
−126.000 (Minimum)	−76.0000 (Nominal)	(Maximum)	−100.000 (Minimum)	425.000 (Nominal)	(Maximum)
Freq 2, A3, R	−21.6735	−21.0000	Freq 2, A3, X	−57.5084	−20.0000
−28.0000 (Minimum)	−13.0000 (Nominal)	(Maximum)	−325.000 (Minimum)	250.000 (Nominal)	(Maximum)
Freq 2, A4, R	−23.0699	−20.0000	Freq 2, A4, X	35.7392	100.000
−28.0000 (Minimum)	−10.0000 (Nominal)	(Maximum)	−75.0000 (Minimum)	275.000 (Nominal)	(Maximum)
Freq 2, A5, R	−23.9040	−20.0000	Freq 2, A5, X	−32.9961	−25.0000
−27.0000 (Minimum)	−10.0000 (Nominal)	(Maximum)	−125.000 (Minimum)	100.000 (Nominal)	(Maximum)
Freq 3, A1, R	−149.962	−149.000	Freq 3, A1, X	−58.1783	25.0000
−213.000 (Minimum)	−108.000 (Nominal)	(Maximum)	−375.000 (Minimum)	425.000 (Nominal)	(Maximum)
Freq 3, A2, R	−72.8319	−70.0000	Freq 3, A2, X	−62.6397	70.0000
−101.000 (Minimum)	−57.0000 (Nominal)	(Maximum)	−125.000 (Minimum)	250.000 (Nominal)	(Maximum)
Freq 3, A3, R	−17.3737	−17.0000	Freq 3, A3, X	−101.554	−90.0000

−23.0000 (Minimum)		−11.0000 (Maximum)		−300.000 (Minimum)		125.000 (Maximum)	
Freq 3, A4, R		Value	Nominal	Freq 3, A4, X		Value	Nominal
		−25.8531	−22.0000			−73.0456	−50.0000
−31.0000 (Minimum)		−11.0000 (Maximum)		−200.000 (Minimum)		100.000 (Maximum)	
Freq 3, A5, R		Value	Nominal	Freq 3, A5, X		Value	Nominal
		−27.9836	−22.0000			−135.634	−110.000
−32.0000 (Minimum)		−11.0000 (Maximum)		−250.000 (Minimum)		0 (Maximum)	
Freq 4, A1, R		Value	Nominal	Freq 4, A1, X		Value	Nominal
		−83.0375	−80.0000			−198.075	−190.000
−128.000 (Minimum)		−54.0000 (Maximum)		−450.000 (Minimum)		75.0000 (Maximum)	
Freq 4, A2, R		Value	Nominal	Freq 4, A2, X		Value	Nominal
		−52.6790	−50.0000			−129.313	−75.0000
−80.0000 (Minimum)		−41.0000 (Maximum)		−200.000 (Minimum)		50.0000 (Maximum)	
Freq 4, A3, R		Value	Nominal	Freq 4, A3, X		Value	Nominal
		−13.5332	−14.0000			−178.474	−190.000
−19.0000 (Minimum)		−8.00000 (Maximum)		−350.000 (Minimum)		−25.0000 (Maximum)	
Freq 4, A4, R		Value	Nominal	Freq 4, A4, X		Value	Nominal
		−30.6911	−25.0000			−239.561	−235.000
−37.0000 (Minimum)		−11.0000 (Maximum)		−400.000 (Minimum)		−75.0000 (Maximum)	
Freq 4, A5, R		Value	Nominal	Freq 4, A5, X		Value	Nominal
		−36.4876	−28.0000			−312.354	−300.000
−43.0000 (Minimum)		−12.0000 (Maximum)		−475.000 (Minimum)		−100.000 (Maximum)	

Master: 10−Sep−2014 10:09

ThruBit String Master Calibration

TBI Master Calibration COMPLEX GAINS

Freq 1, R	Value	Nominal	Freq 1, X	Value	Nominal
	0.9923	1.000		0.003750	0
	0.9949	1.000		0.003459	0
	0.9984	1.000		−0.004777	0
	0.9930	1.000		0.004003	0
	0.9994	1.000		0.002304	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
	0.9884	1.000		−0.005613	0
	0.9905	1.000		−0.005595	0
	0.9883	1.000		−0.006254	0
	0.9893	1.000		−0.004509	0
	0.9964	1.000		−0.006852	0
0.9500 (Minimum) (Nominal) 1.050 (Maximum)			−0.05000 (Minimum) (Nominal) 0.05000 (Maximum)		
Freq 3, R	Value	Nominal	Freq 3, X	Value	Nominal
	0.9926	1.000		0.004222	0
	0.9950	1.000		0.004625	0
	0.9926	1.000		0.003735	0
	0.9927	1.000		0.005805	0
	1.001	1.000		0.003798	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

	0.9893	1.000		−0.005682	0
	0.9918	1.000		−0.005082	0
	0.9915	1.000		−0.007732	0
	0.9880	1.000		−0.003652	0
	1.004	1.000		−0.007422	0
0.9300 (Minimum) 1.070 (Nominal) (Maximum)			−0.05000 (Minimum) 0.05000 (Nominal) (Maximum)		

Master: 10−Sep−2014 10:09

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
	1877.8	1949.8		2047.8	2096.7		2211.0	2285.7
1799.8 (Minimum) 2099.8 (Nominal) (Maximum)			1946.7 (Minimum) 2246.7 (Nominal) (Maximum)			2135.7 (Minimum) 2435.7 (Nominal) (Maximum)		

Master: 10−Sep−2014 13:25

ThruBit String Master Calibration

TBD Density Master Calibration. Be 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
	133.78	140.00		133.57	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
	27.51	29.00		4391.85	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
	861.03	870.00		7323.24	8000.00
750.00 (Minimum) 982.00 (Nominal) (Maximum)			6695.00 (Minimum) 9269.00 (Nominal) (Maximum)		

LS4 Aluminium CPS	Value	Nominal
	872.02	955.00
796.00 (Minimum) 1169.0 (Nominal) (Maximum)		

LS1 Al + Sleeve CPS	Value	Nominal
	778.91	725.00
650.00 (Minimum) 838.00 (Nominal) (Maximum)		

LS4 Al + Sleeve CPS	Value	Nominal
	426.36	426.50
382.00 (Minimum) 638.00 (Nominal) (Maximum)		

LS1 Magnesium CPS	Value	Nominal
	5639.93	5800.00
5158.00 (Minimum) 6486.00 (Nominal) (Maximum)		

SS Slope	Value	Nominal
	1.614	1.645
1.520 (Minimum) 1.770 (Nominal) (Maximum)		

LS Slope	Value	Nominal
	0.4192	0.4150
0.3800 (Minimum) 0.4500 (Nominal) (Maximum)		

Pef K Factor	Value	Nominal
	4.343	4.840
3.510 (Minimum) 6.170 (Nominal) (Maximum)		

Pef B Factor	Value	Nominal
	−0.5325	−0.5550
−0.7000 (Minimum) −0.4100 (Maximum)		

Master: 10−Sep−2014 13:10

ThruBit String Master Calibration

Thermal Neutron Master Calibration

TNF, Background CPS	Value	Nominal	TNN, Background CPS	Value	Nominal
	0	1.0		0.017	1.0
0 (Minimum) 2.0 (Maximum)			0 (Minimum) 2.0 (Maximum)		
TNF, Tank CPS	**Value**	**Nominal**	**TNN, Tank CPS**	**Value**	**Nominal**
	69.02	96.00		2039.8	2860.0
25.00 (Minimum) 200.0 (Maximum)			750.00 (Minimum) 5700.0 (Maximum)		
TNF, Tank + Al Sleeve CPS	**Value**	**Nominal**	**TNN, Tank + Al Sleeve CPS**	**Value**	**Nominal**
	2176.7	3040.0		22410.4	32350.0
727.00 (Minimum) 6080.0 (Maximum)			8000.00 (Minimum) 64700.0 (Maximum)		
Tank + Al Sleeve Ratio	**Value**	**Nominal**	**Tank + Al Sleeve Porosity PU**	**Value**	**Nominal**
	10.785	10.797		14.46	14.40
10.300 (Minimum) 11.300 (Maximum)			13.40 (Minimum) 15.40 (Maximum)		
Tank, Ratio	**Value**	**Nominal**	**Tank, Temperature DEGF**	**Value**	**Nominal**
	29.554	30.958		77.0	70.0
28.000 (Minimum) 34.000 (Maximum)			20.0 (Minimum) 120 (Maximum)		

Master: 22−Aug−2014 10:46

ThruBit String Master Calibration

TMG Accelerometer Calibration

Minimum Ax, m/s2	Value	Nominal	Maximum Ax, m/s2	Value	Nominal
NOT DONE	N/A	−9.810	NOT DONE	N/A	9.810
−10.81 (Minimum) −8.810 (Maximum)			8.810 (Minimum) 10.81 (Maximum)		
Minimum Ay, m/s2	**Value**	**Nominal**	**Maximum Ay, m/s2**	**Value**	**Nominal**
NOT DONE	N/A	−9.810	NOT DONE	N/A	9.810
−10.81 (Minimum) −8.810 (Maximum)			8.810 (Minimum) 10.81 (Maximum)		
Minimum Az, m/s2	**Value**	**Nominal**	**Maximum Az, m/s2**	**Value**	**Nominal**
NOT DONE	N/A	0	NOT DONE	N/A	9.810
−1.000 (Minimum) 1.000 (Maximum)			8.810 (Minimum) 10.81 (Maximum)		

RB Offset, degrees	Value	Nominal
	−17.00	0
−360.0 (Minimum) 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
	27.65	30.00		161.9	170.7
0 (Minimum) 120.0 (Maximum)			136.6 (Minimum) 204.8 (Maximum)		

Master: 5−Sep−2014 13:28

Company: **SANDRIDGE ENERGY**

Schlumberger

Well: **JELLISON A 3319 9−5H 2L**
Field: **BIRD SOUTH**
County: **COMANCHE**
State: **KANSAS**

ARRAY INDUCTION
GAMMA RAY
MEMORY LOG

Schlumberger

MAIN PASS

MAXIS Field Log

Company: SANDRIDGE ENERGY **Well: JELLISON A 3319 9−5H 2L**

Input DLIS Files

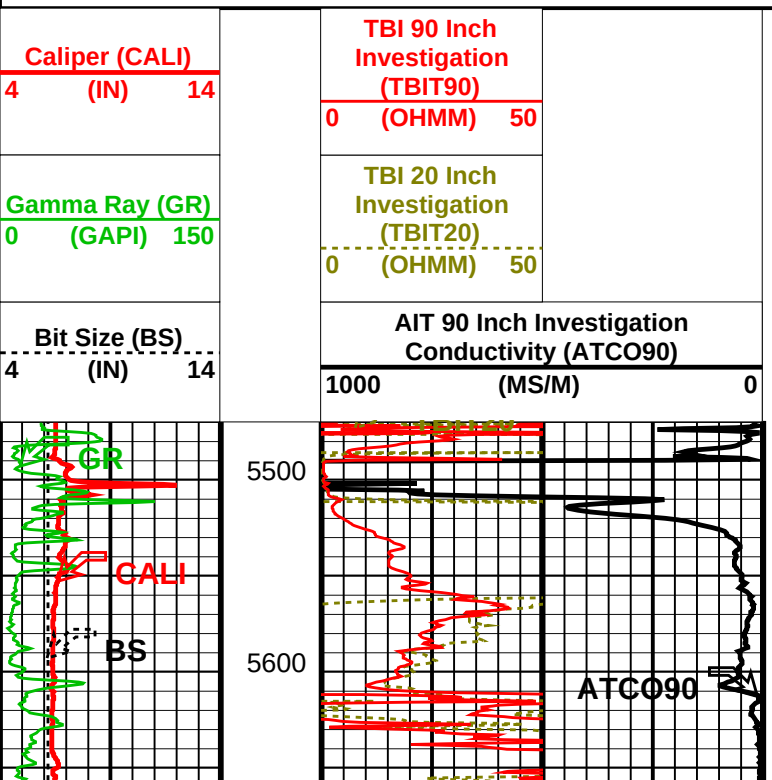
DEFAULT	ThruBit_007PUP	FN:6	PRODUCER	16−Sep−2014 06:15	9949.0 FT	5082.0 FT

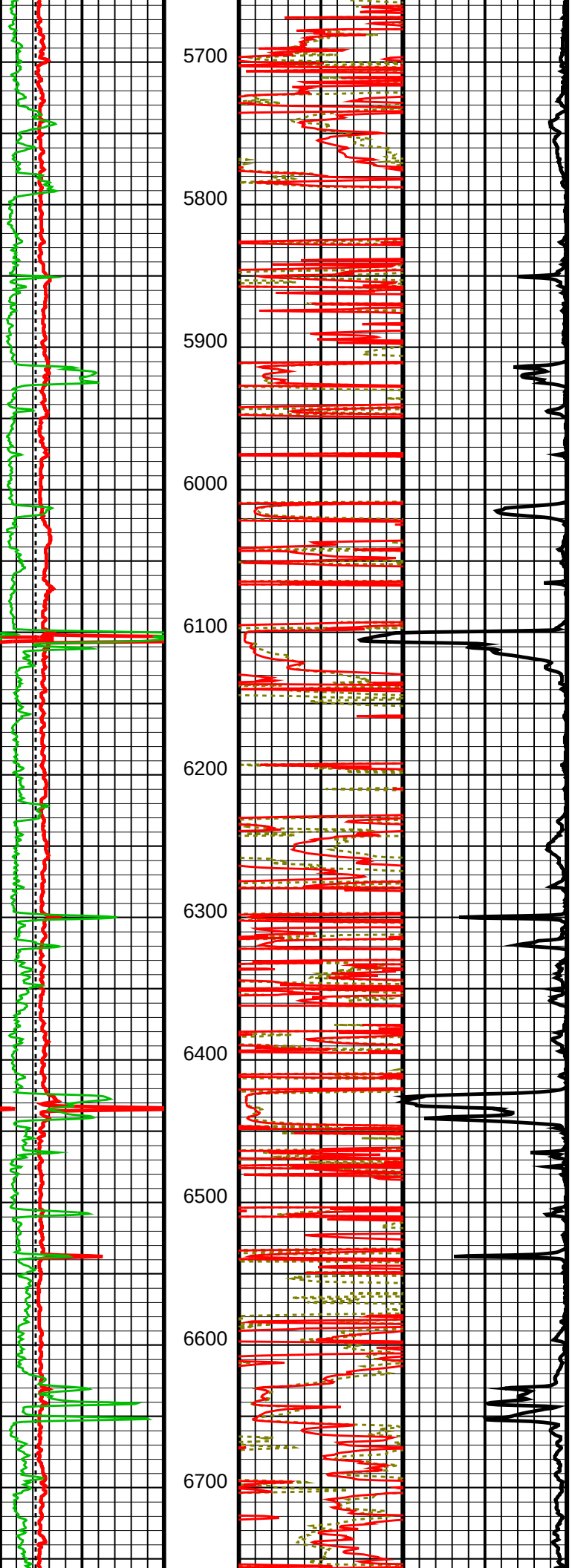
Output DLIS Files

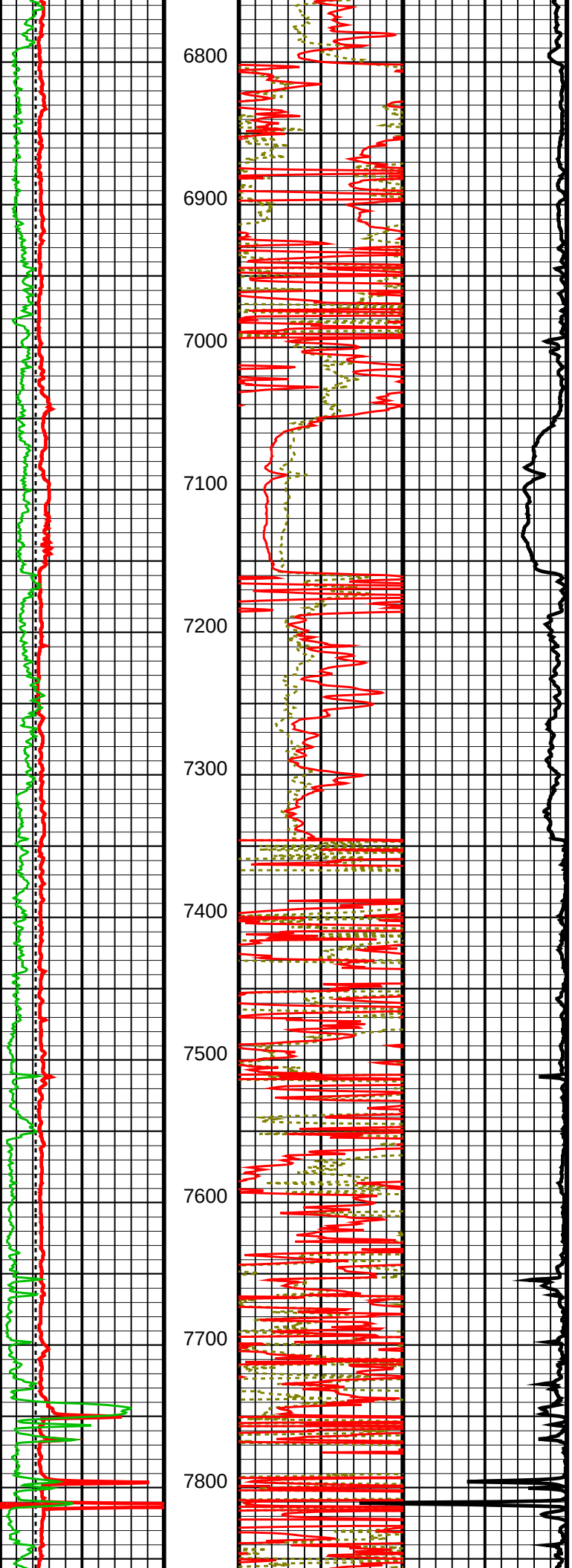
TBT .009	FN:8	16−Sep−2014 06:30	9949.0 FT	5465.0 FT

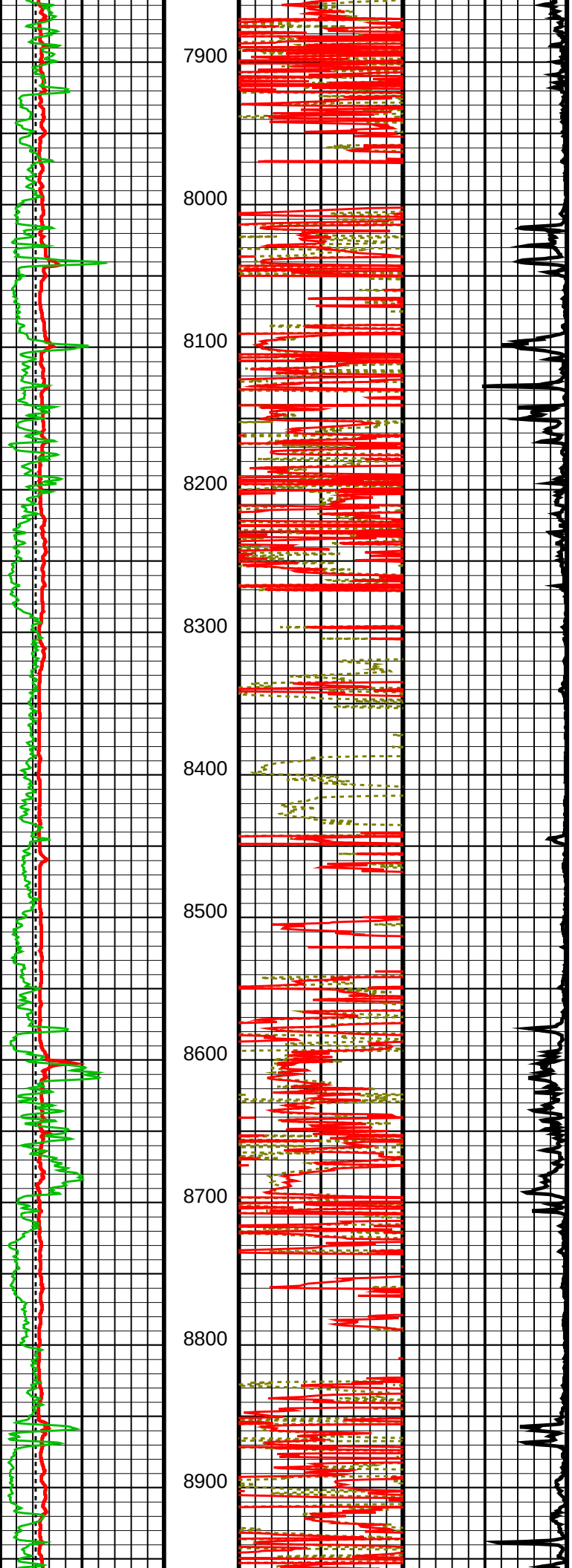
OP System Version: 19C2−270

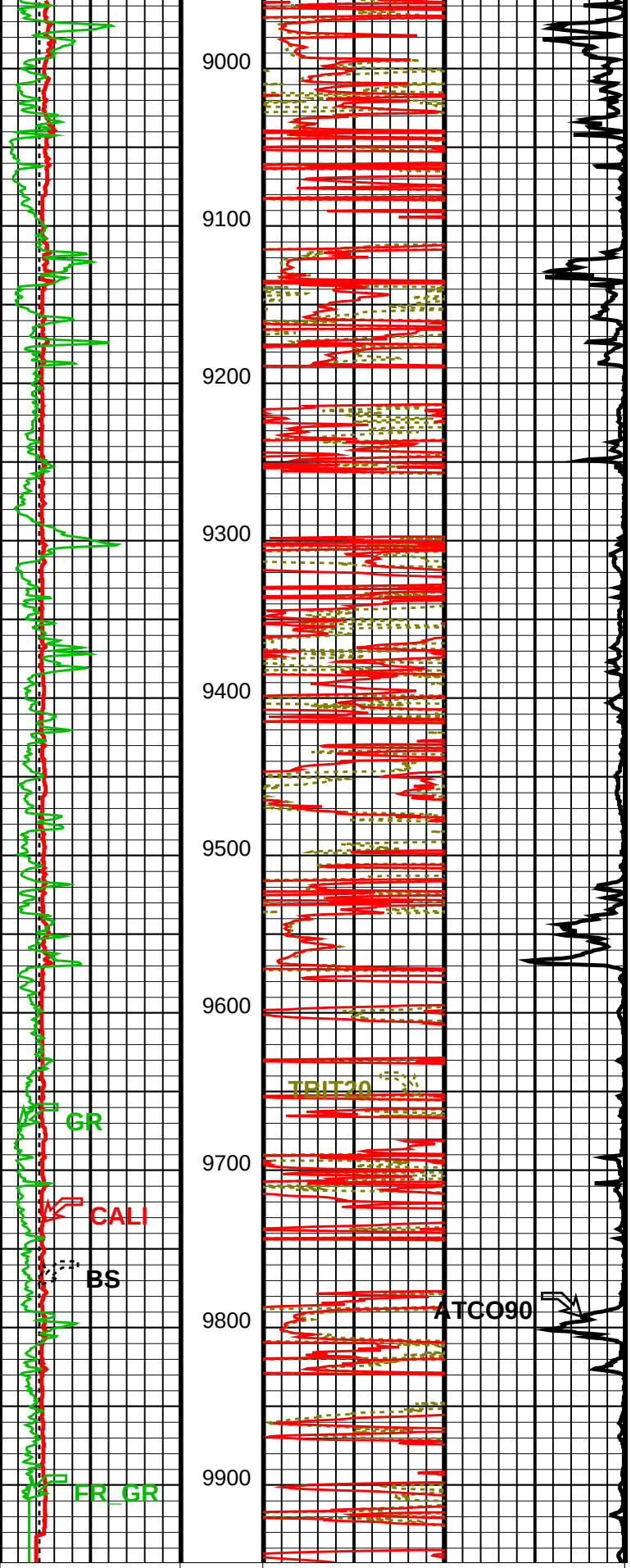
TBT **SRPC−5303−ThruBit**




5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700


6800
6900
7000
7100
7200
7300
7400
7500
7600
7700
7800


7900
8000
8100
8200
8300
8400
8500
8600
8700
8800
8900



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

0 (CALI) 150	0 (OHMM) 50	
Caliper (CALI) 4 (IN) 14	TBI 90 Inch Investigation (TBIT90) 0 (OHMM) 50	

Format: TB_1INCH_RES **Vertical Scale: 1" per 100'** **Graphics File Created: 16−Sep−2014 06:30**

OP System Version: 19C2−270

TBT	**SRPC−5303−ThruBit**

Input DLIS Files

DEFAULT	**ThruBit_007PUP**	**FN:6**	**PRODUCER**	**16−Sep−2014 06:15**	**9949.0 FT**	**5082.0 FT**

Output DLIS Files

TBT .009	**FN:8**	**16−Sep−2014 06:30**	