



DUAL INDUCTION LOG

Company	WHITE EXPLORATION INC.		
Well	SPENCER'S BLUFFS #1-21		
Field	WILDCAT		
County	BARBER	State	KANSAS
Location:	API # : 15-007-24367-0000 3590' FSL & 880' FEL		Other Services CDL/CNL/MEL SON
Permanent Datum	SEC 21 TWP 31S RGE 12W	Elevation	
Log Measured From	GROUND LEVEL	Elevation	K.B. 1646
Drilling Measured From	KELLY BUSHING 7' A.G.L. KELLY BUSHING	D.F.	1642
		G.L.	1639
Date	03/12/20		
Run Number	ONE		
Depth Driller	4680		
Depth Logger	4677		
Bottom Logged Interval	4675		
Top Log Interval	00		
Casing Driller	8 5/8" @ 348		
Casing Logger	348		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3/51		
pH / Fluid Loss	10.5/10.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.52 @ 62F		
Rmf @ Meas. Temp	.39 @ 62F		
Rmc @ Meas. Temp	.62 @ 62F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.26 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	122F		
Equipment Number	1523		
Location	HAYS, KANSAS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	ANDY WHITE		

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395

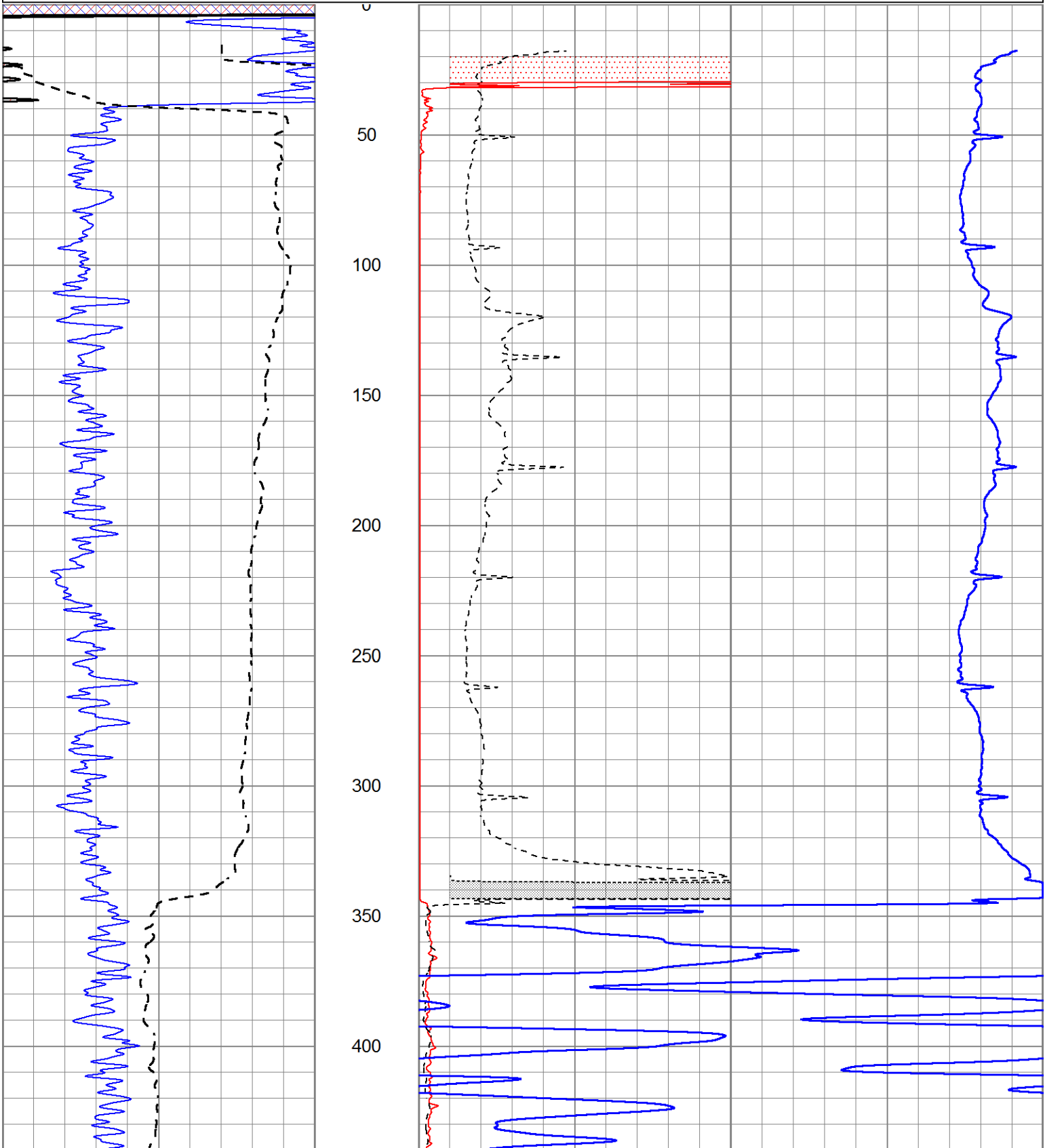
DIRECTIONS: SUN CITY RD FROM MEDICINE WEST 3 MILES TO SPRING CREEK RD.
NORTH 3.3 MILES, SE INTO.



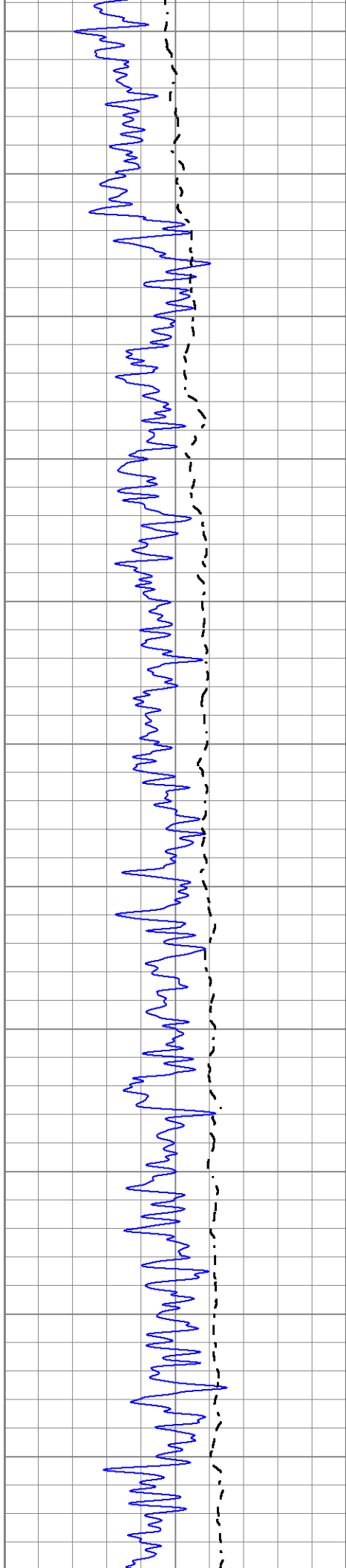
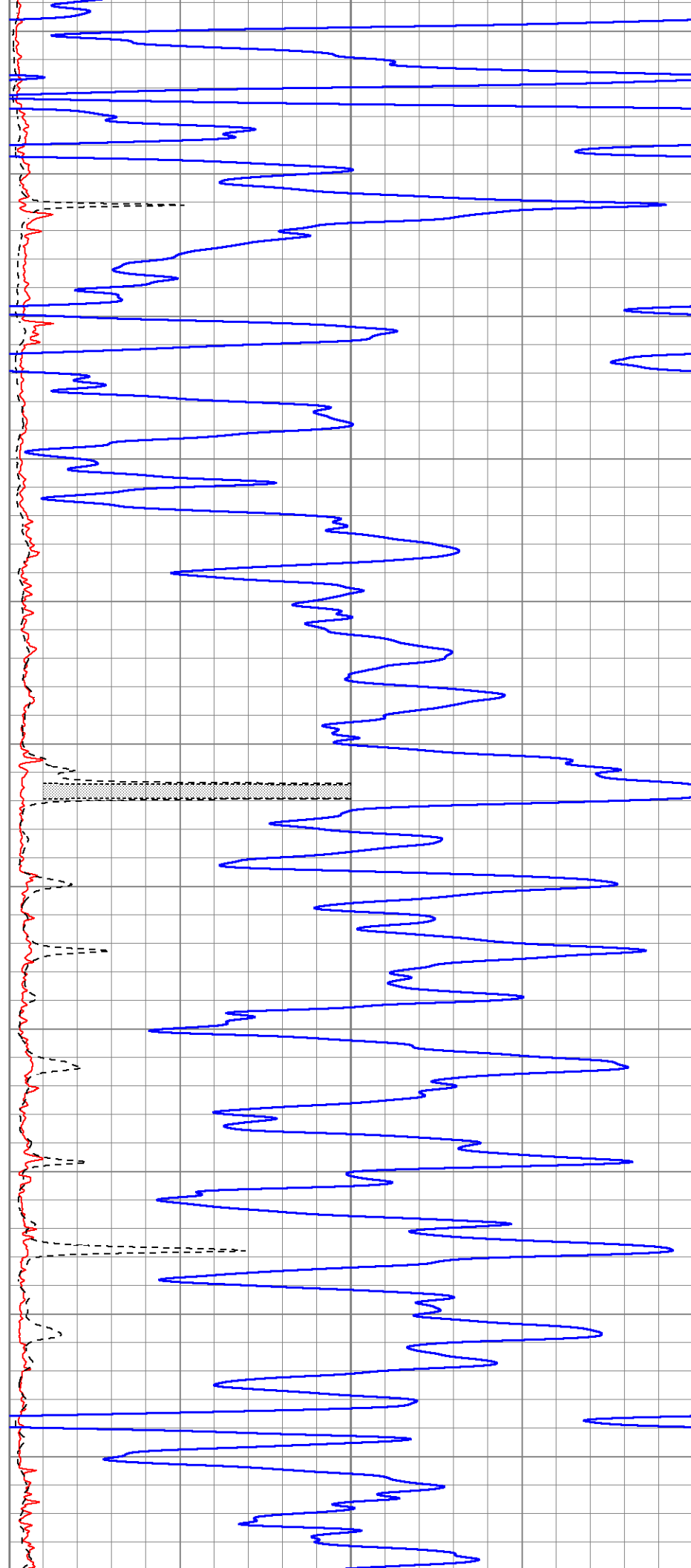
MAIN PASS

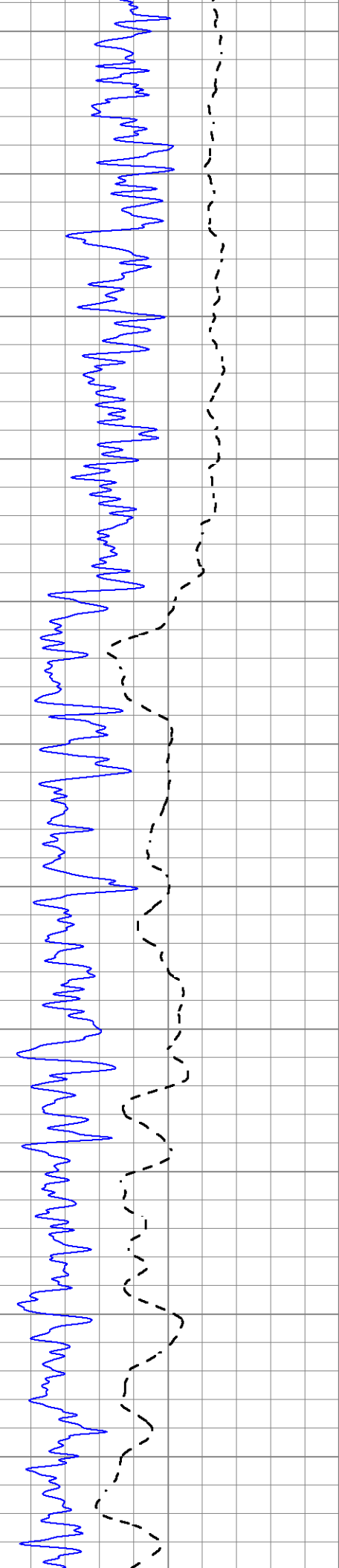
Database File	4683pe.db
Dataset Pathname	pass5.1
Presentation Format	_dil2
Dataset Creation	Thu Mar 12 11:54:56 2020
Charted by	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

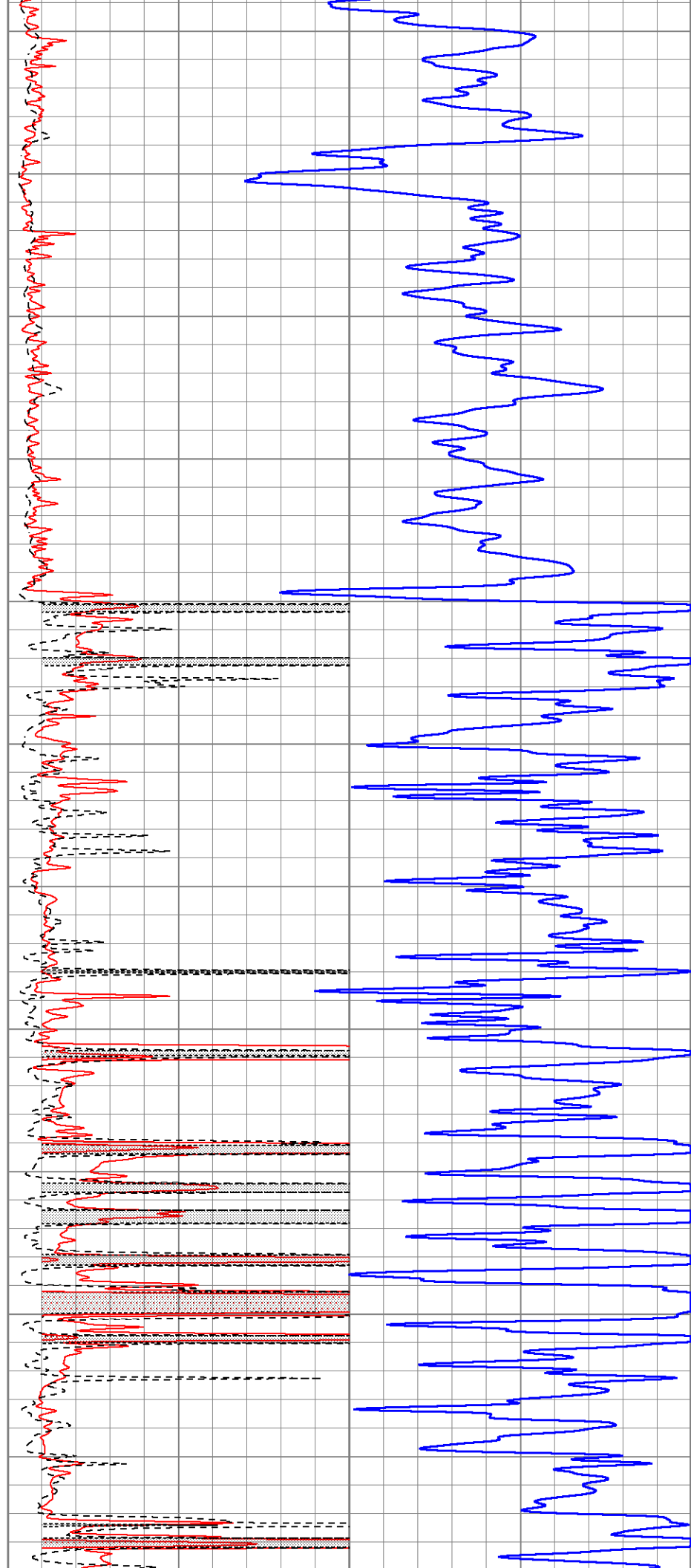


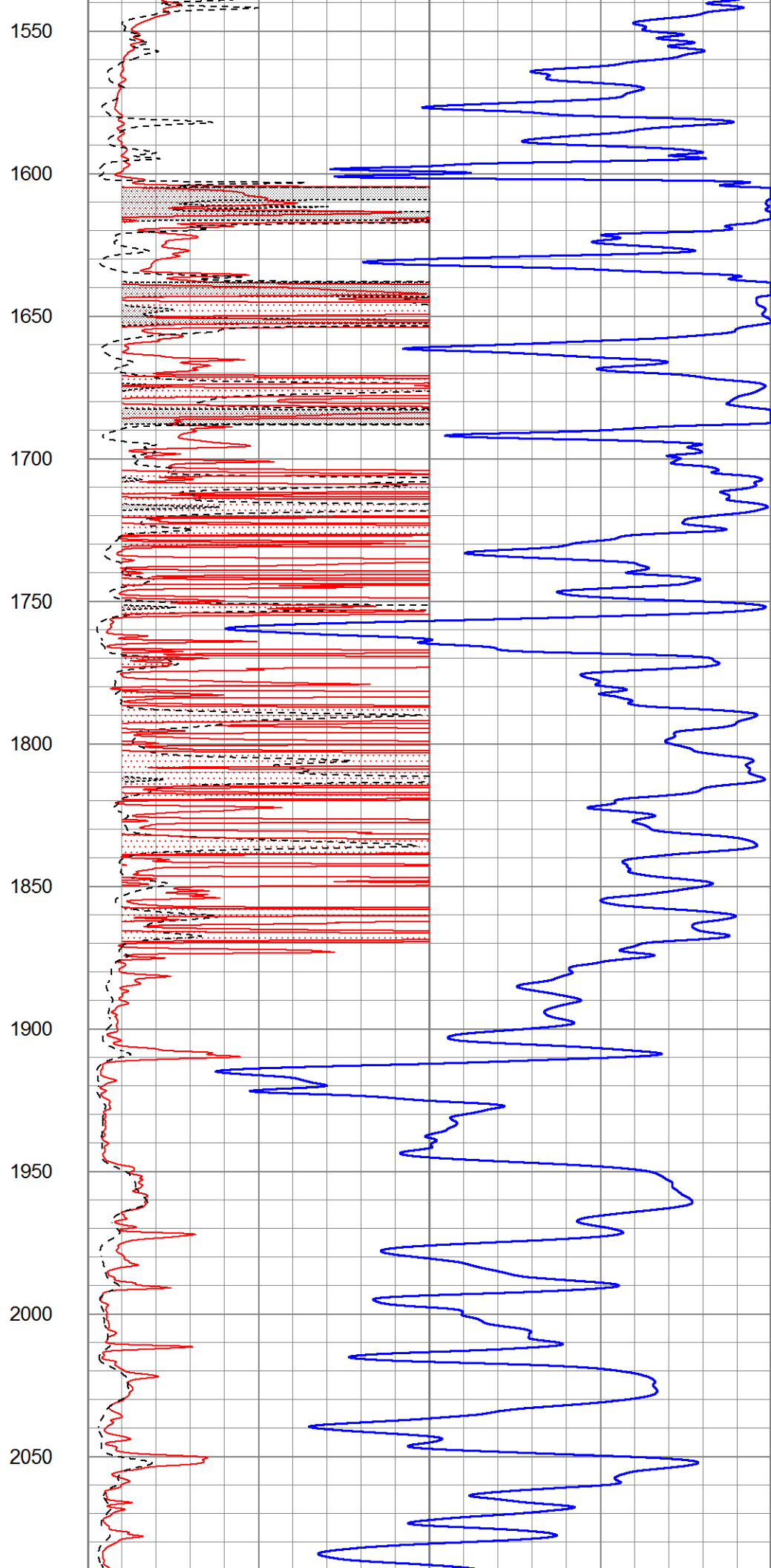
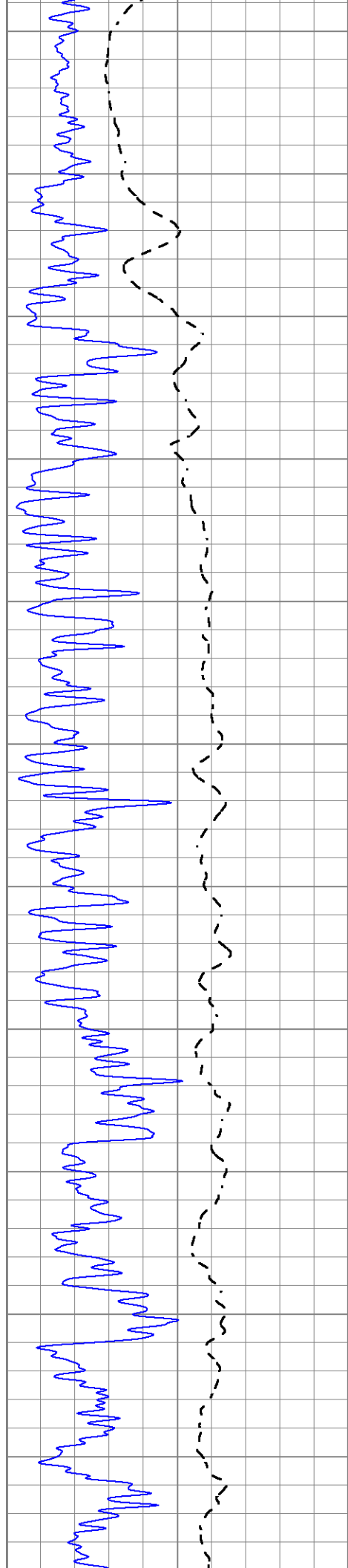
450
500
550
600
650
700
750
800
850
900
950

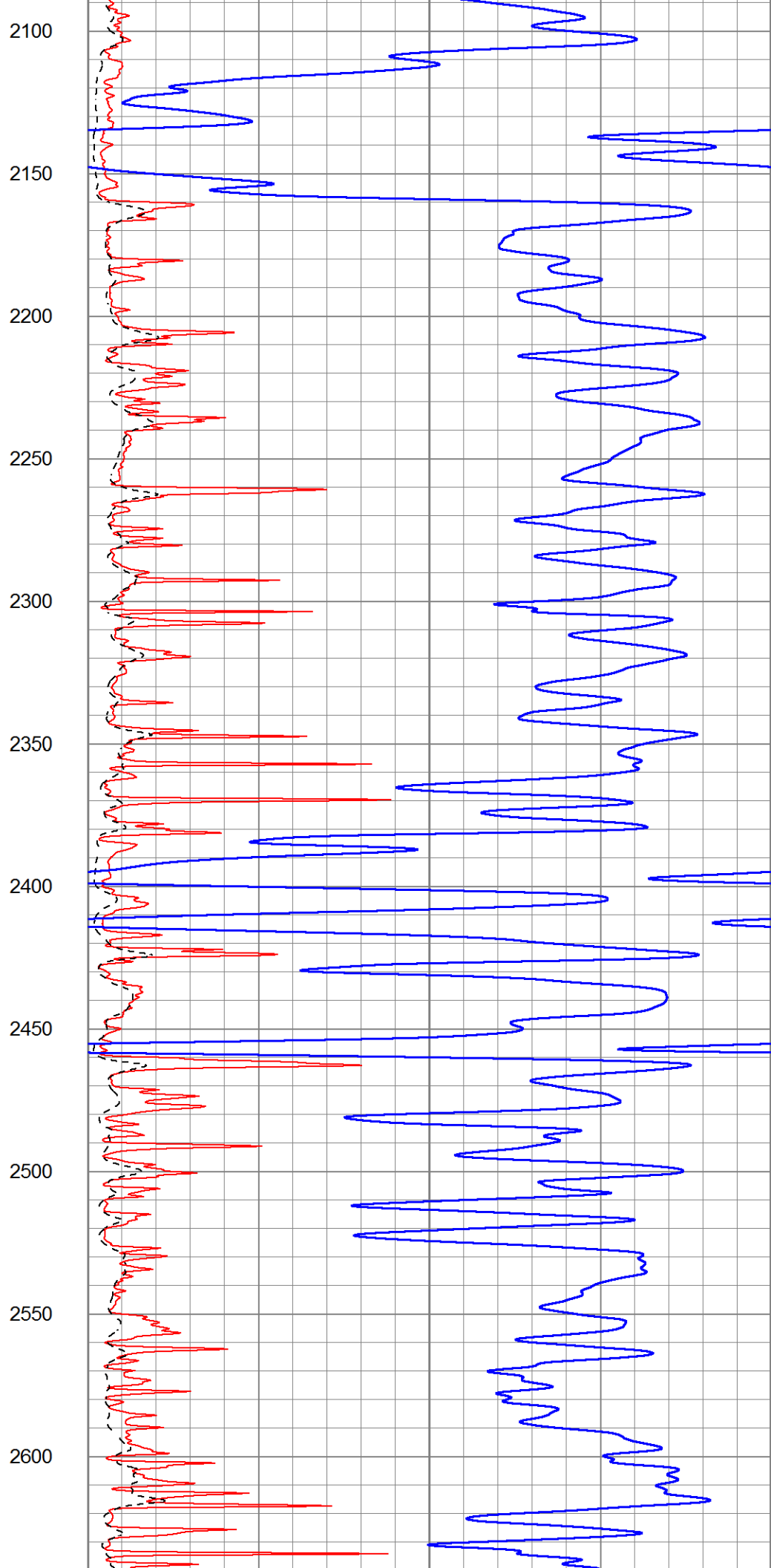
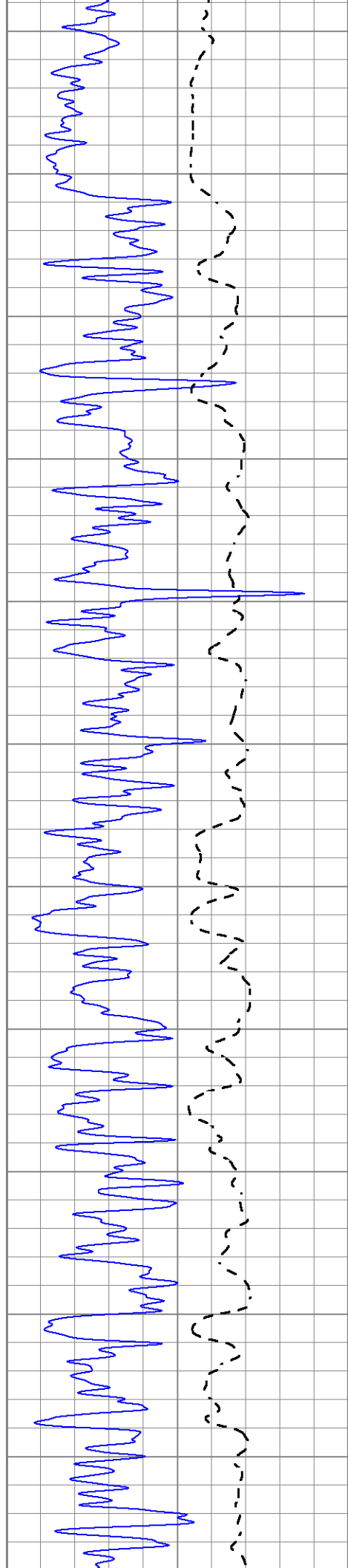


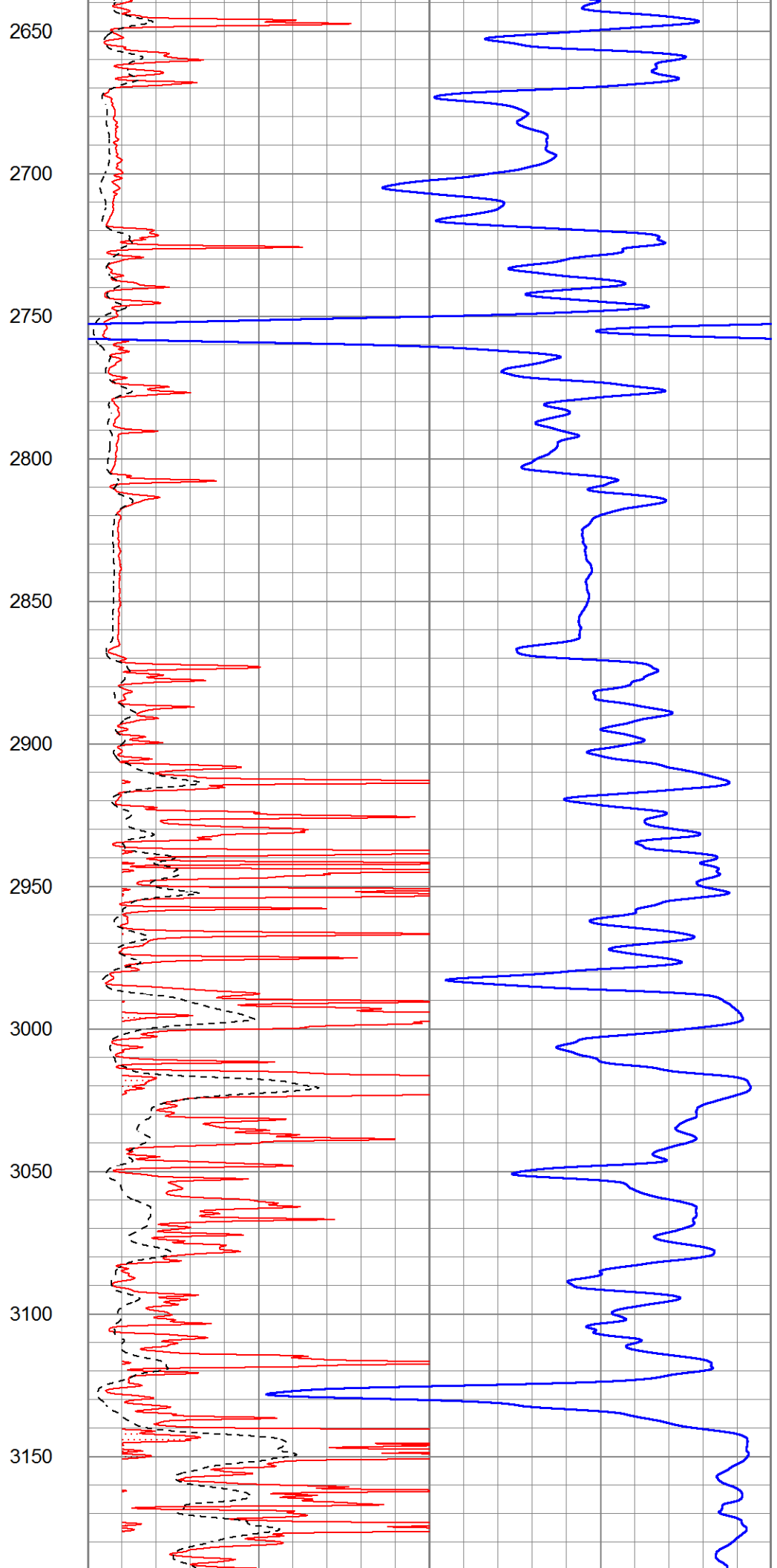
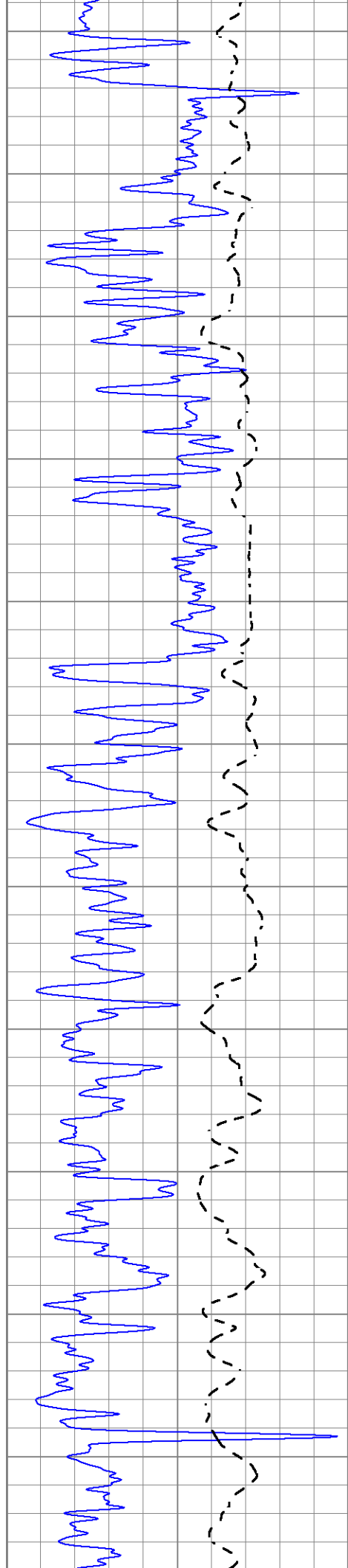


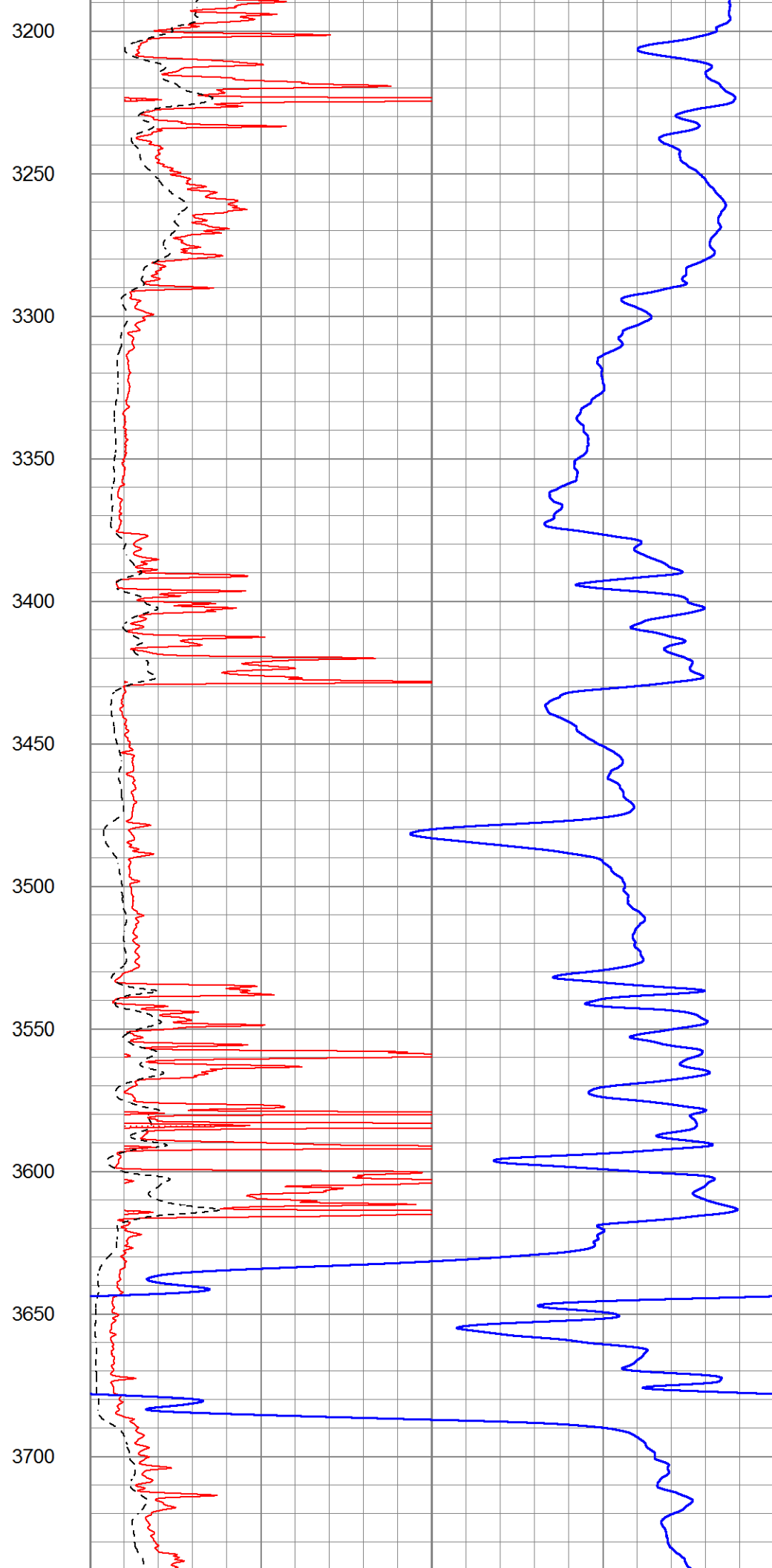
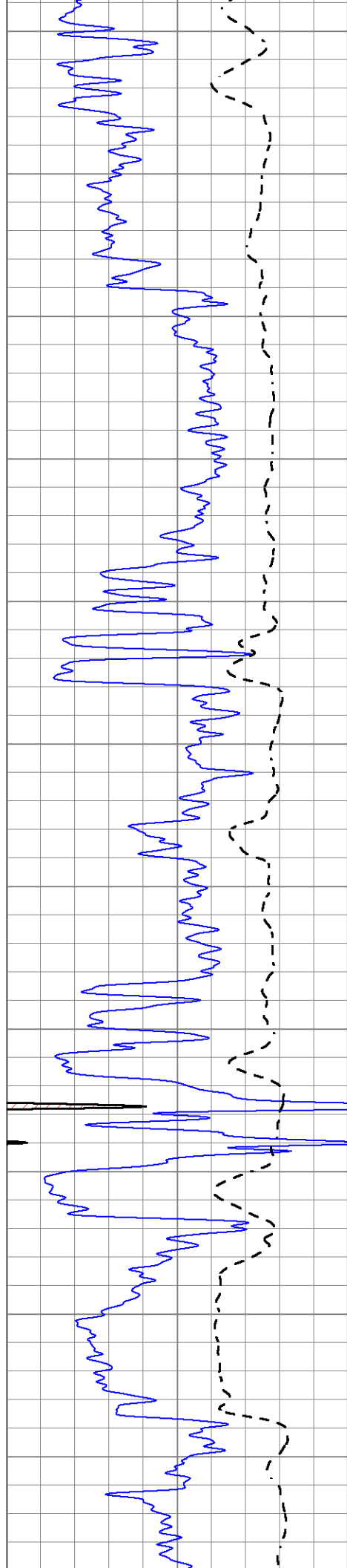
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

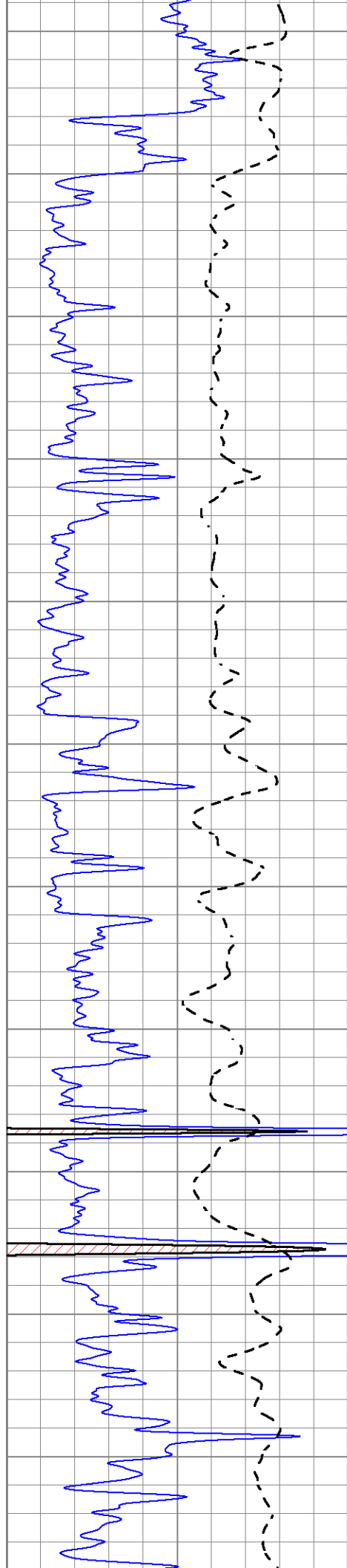




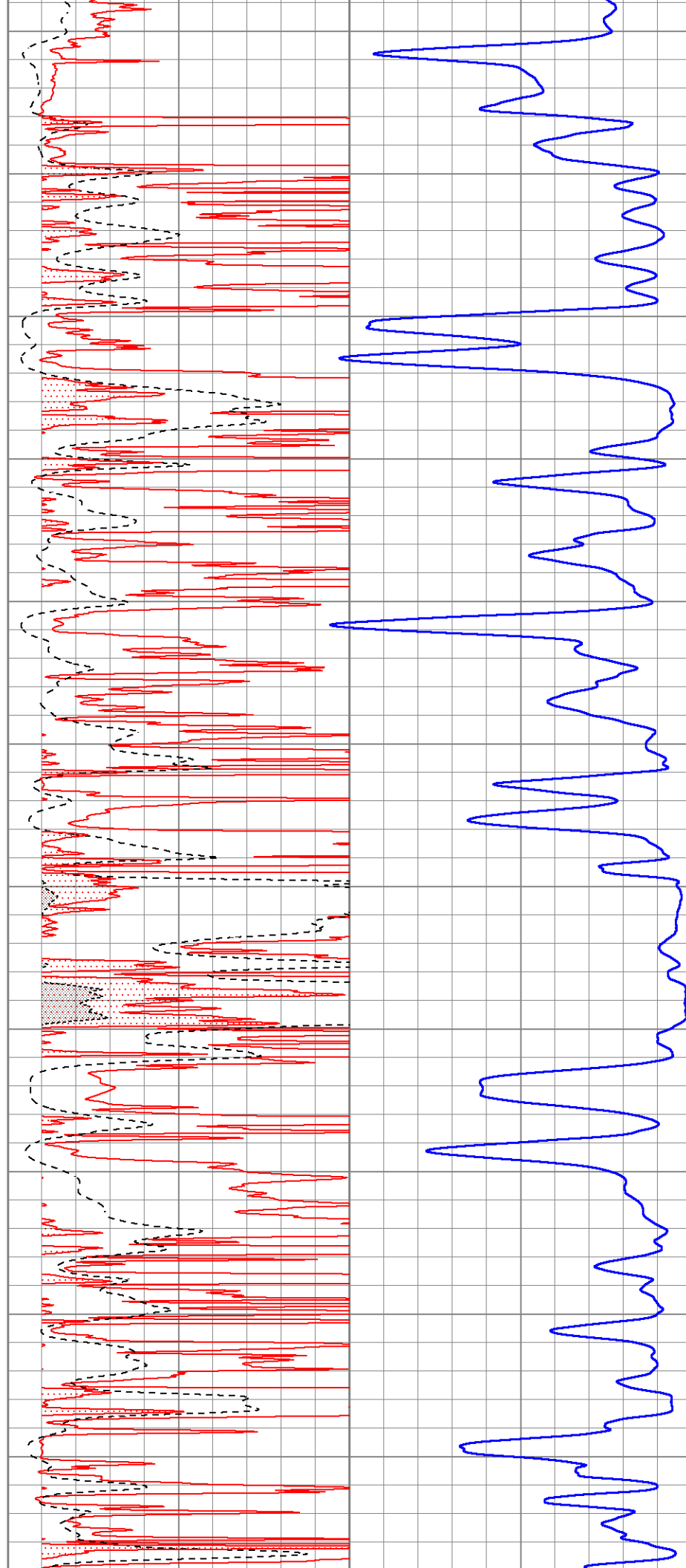


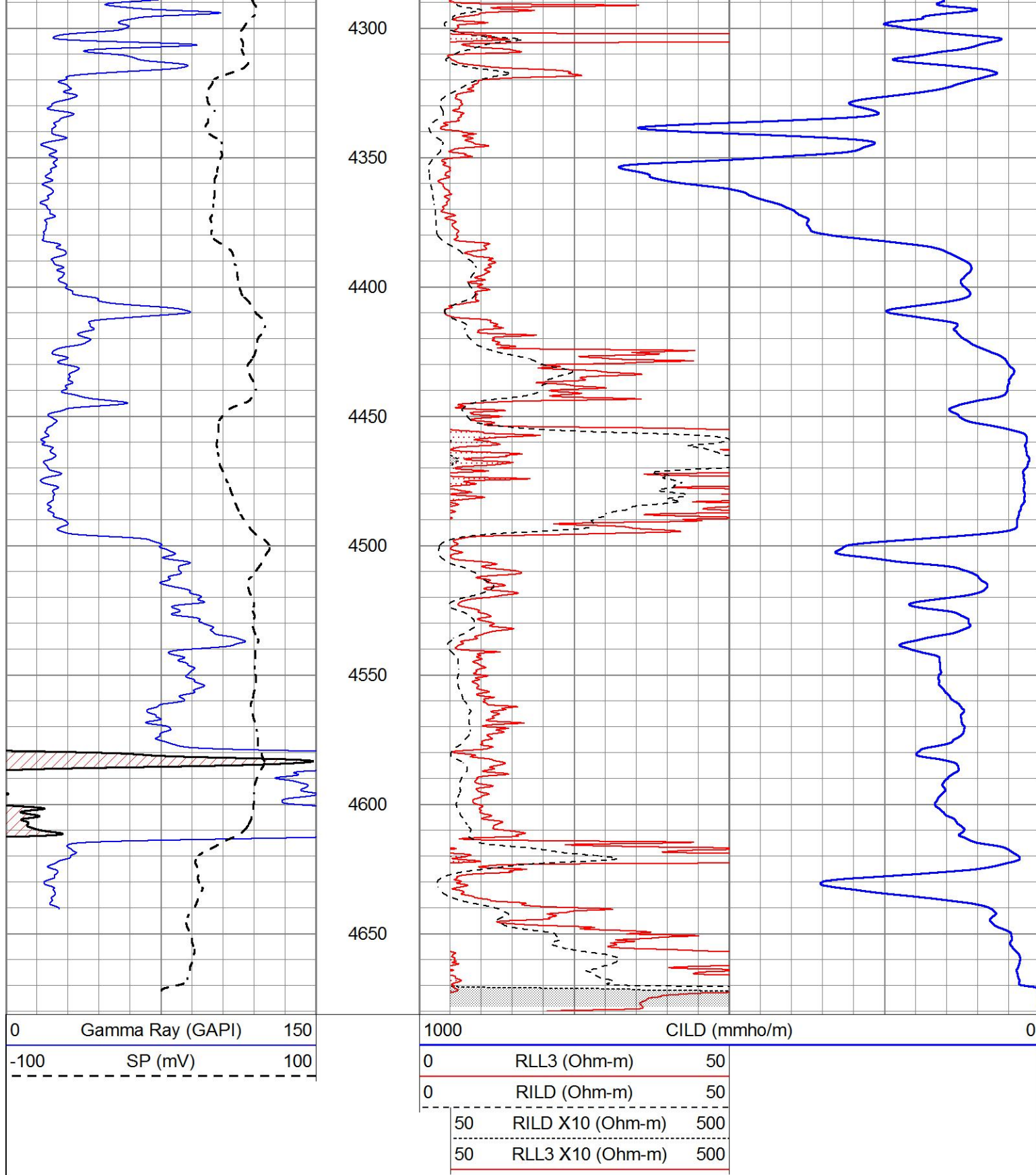






3750
3800
3850
3900
3950
4000
4050
4100
4150
4200
4250



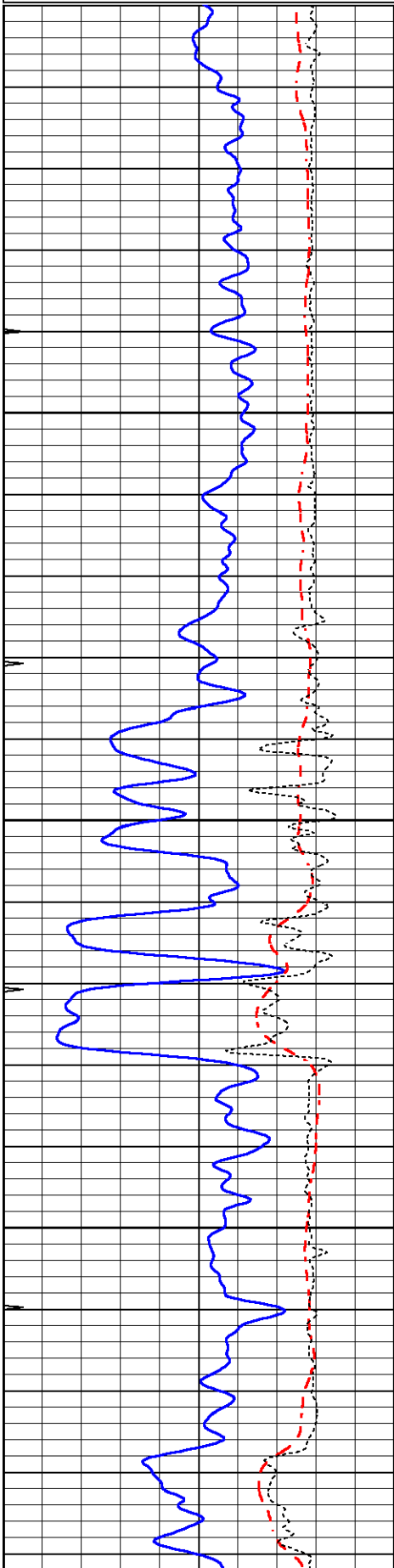


MAIN PASS

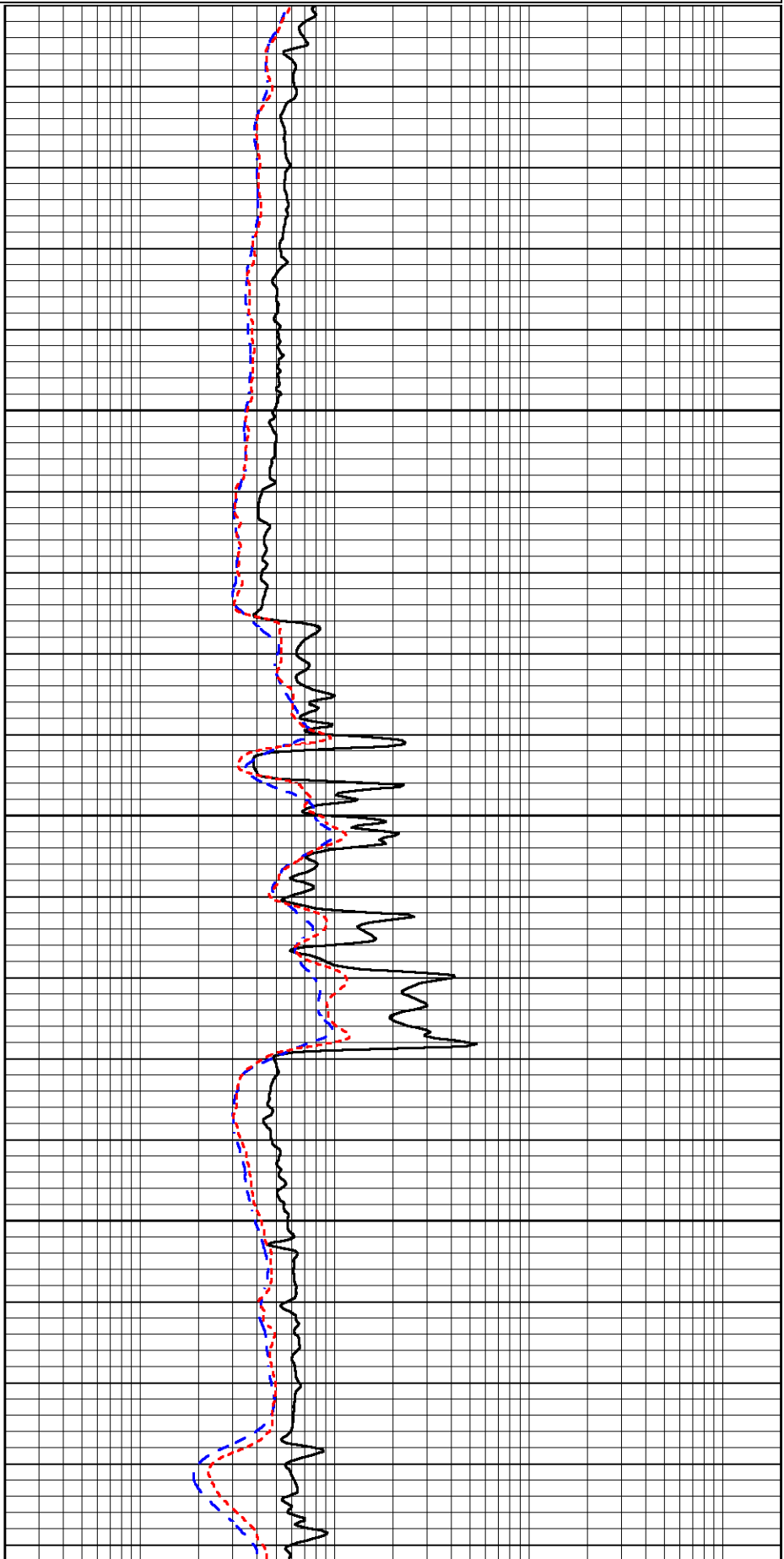
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 Presentation Format _dil
 Dataset Creation Thu Mar 12 11:54:56 2020

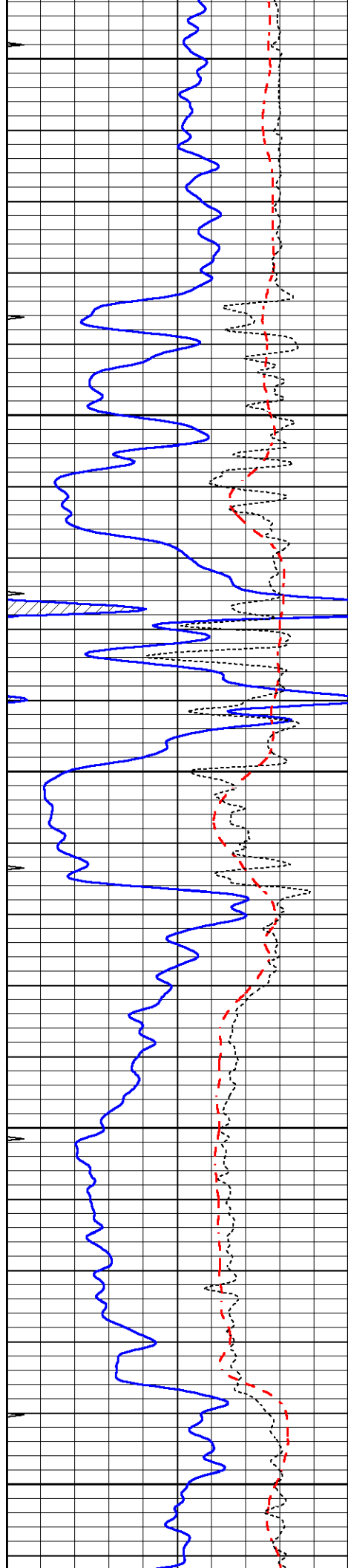
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3300
3350
3400
3450





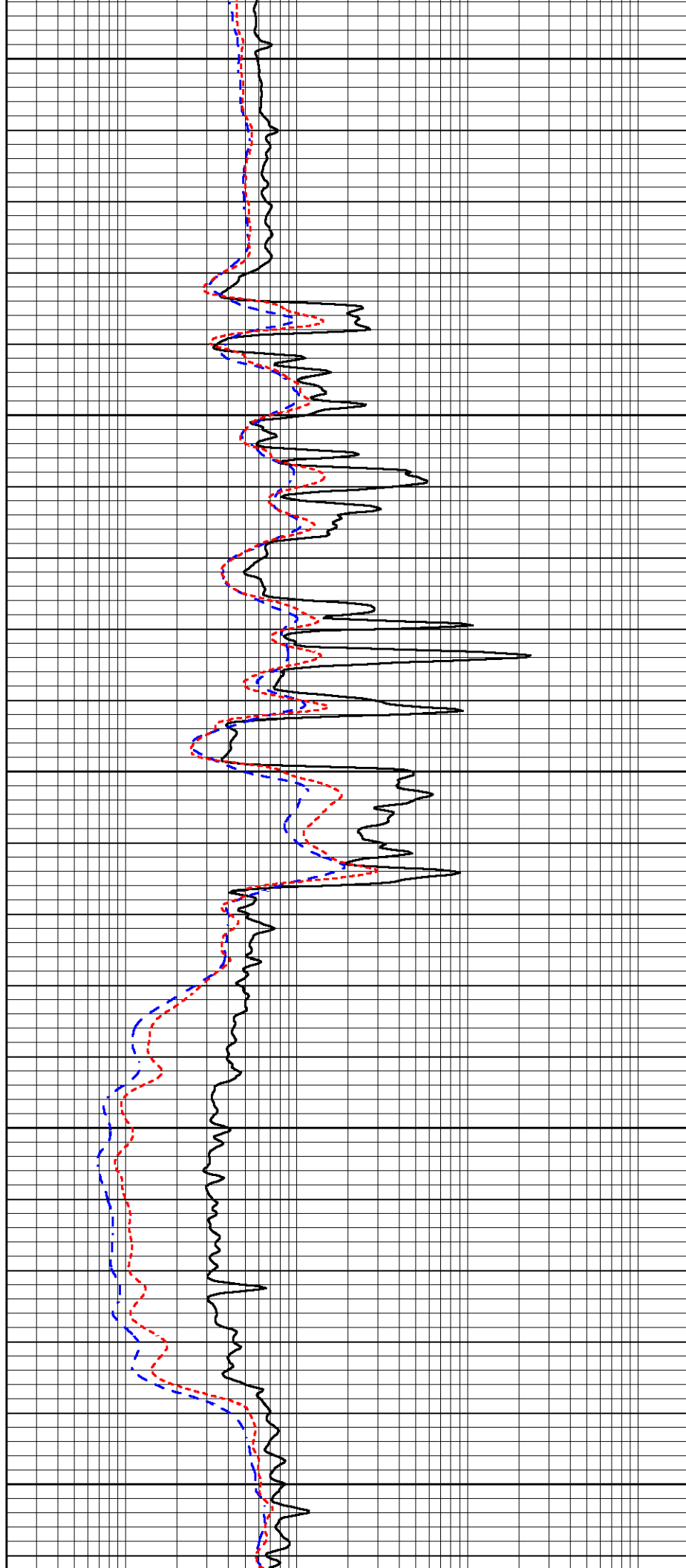
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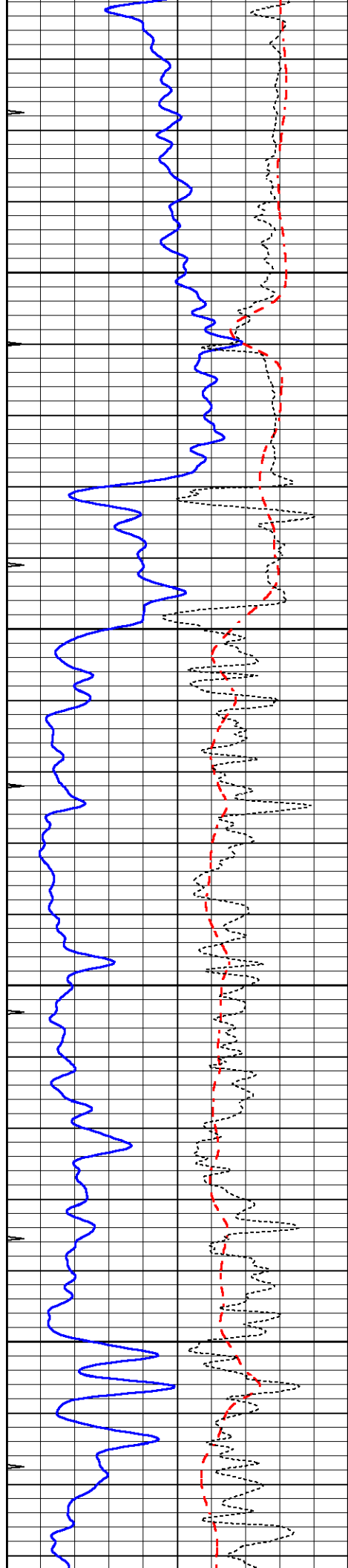
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3600

3650

3700



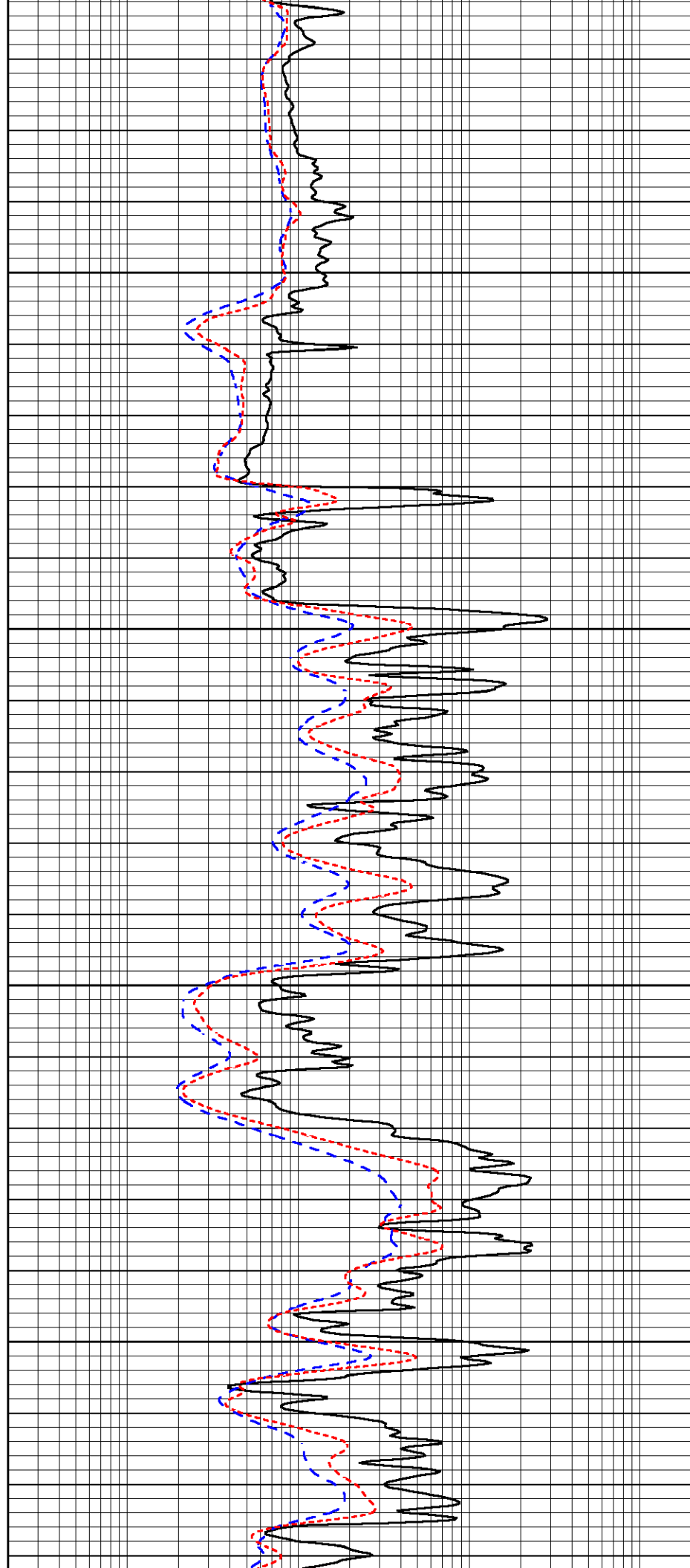


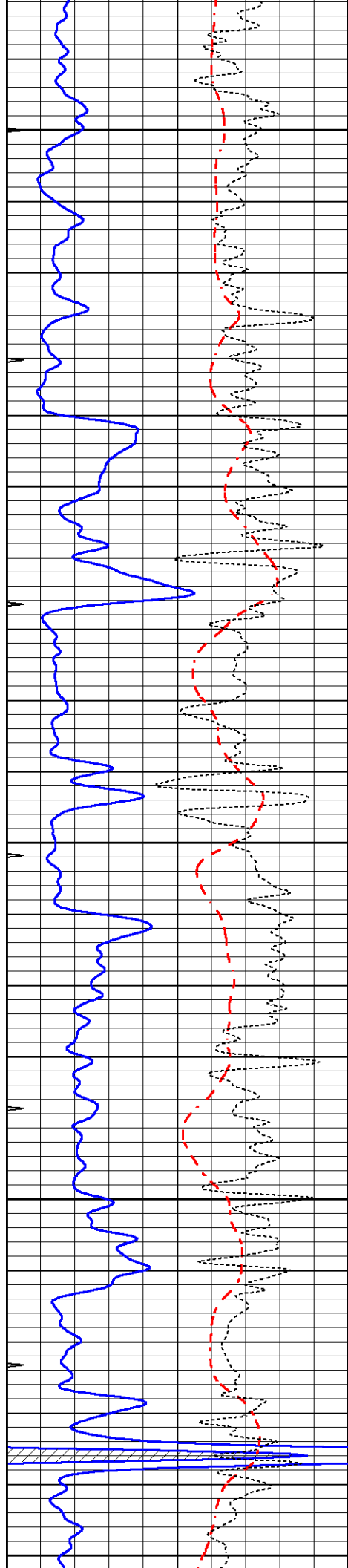
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3800

3850

3900





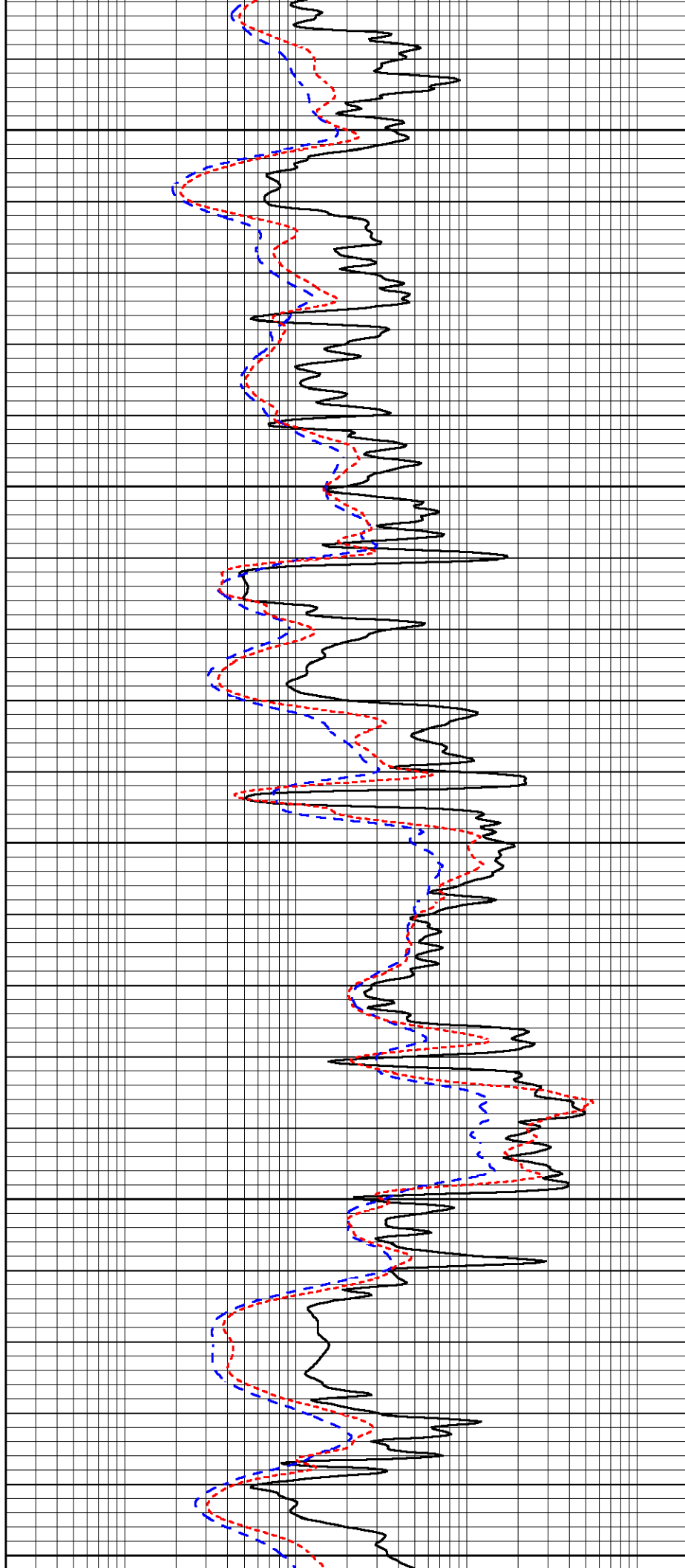
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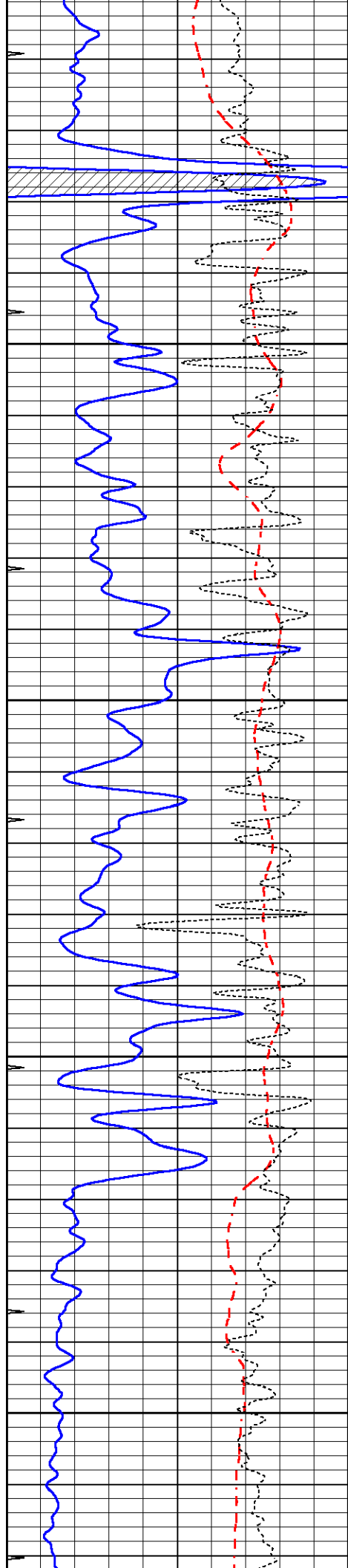
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4050

4100

4150



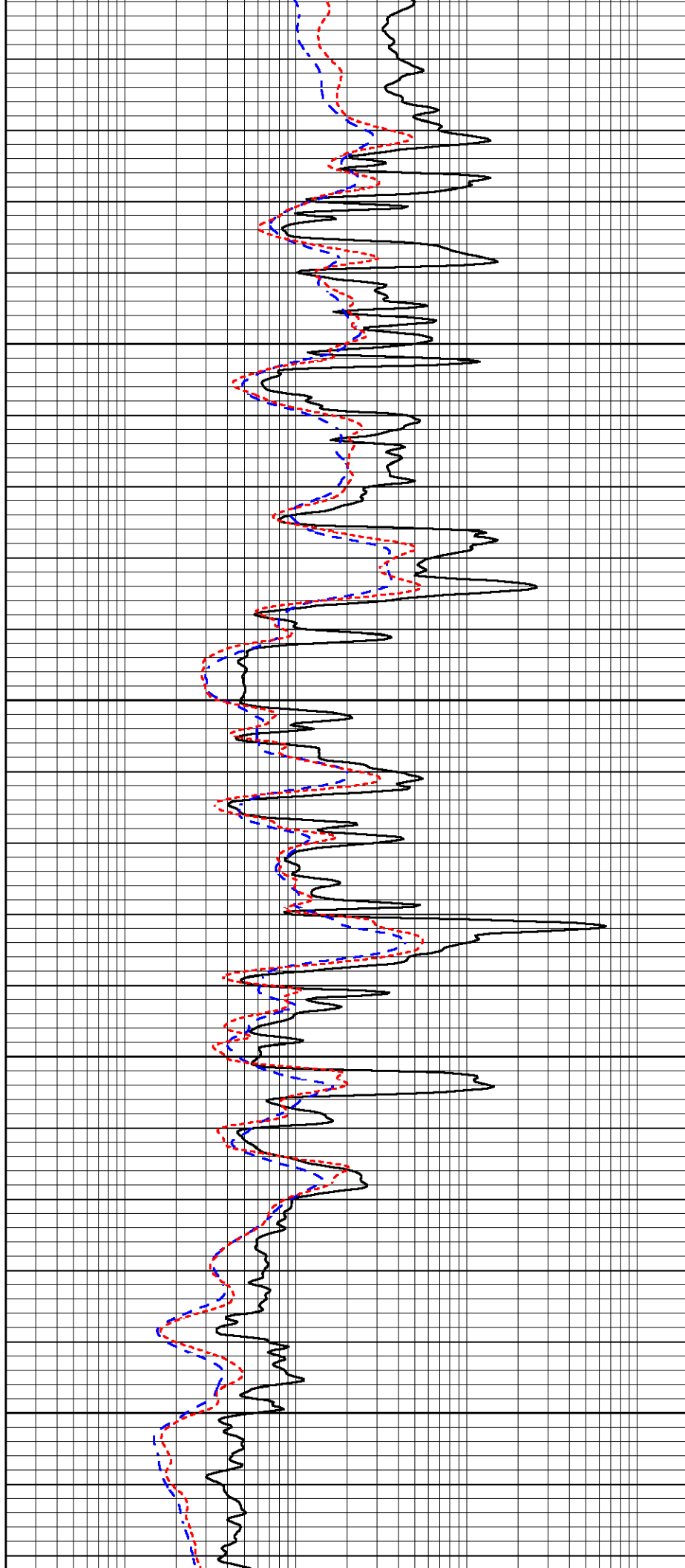


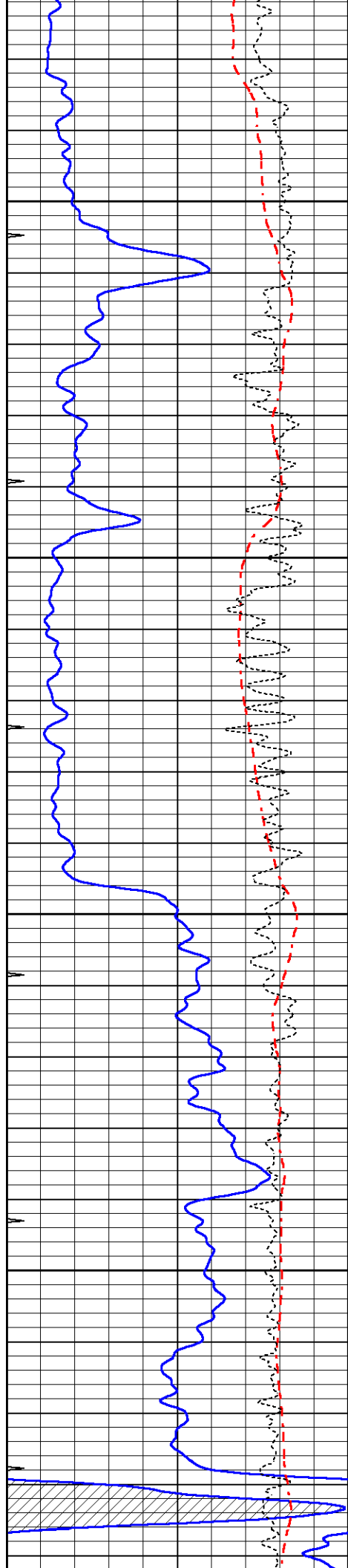
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4250

4300

4350



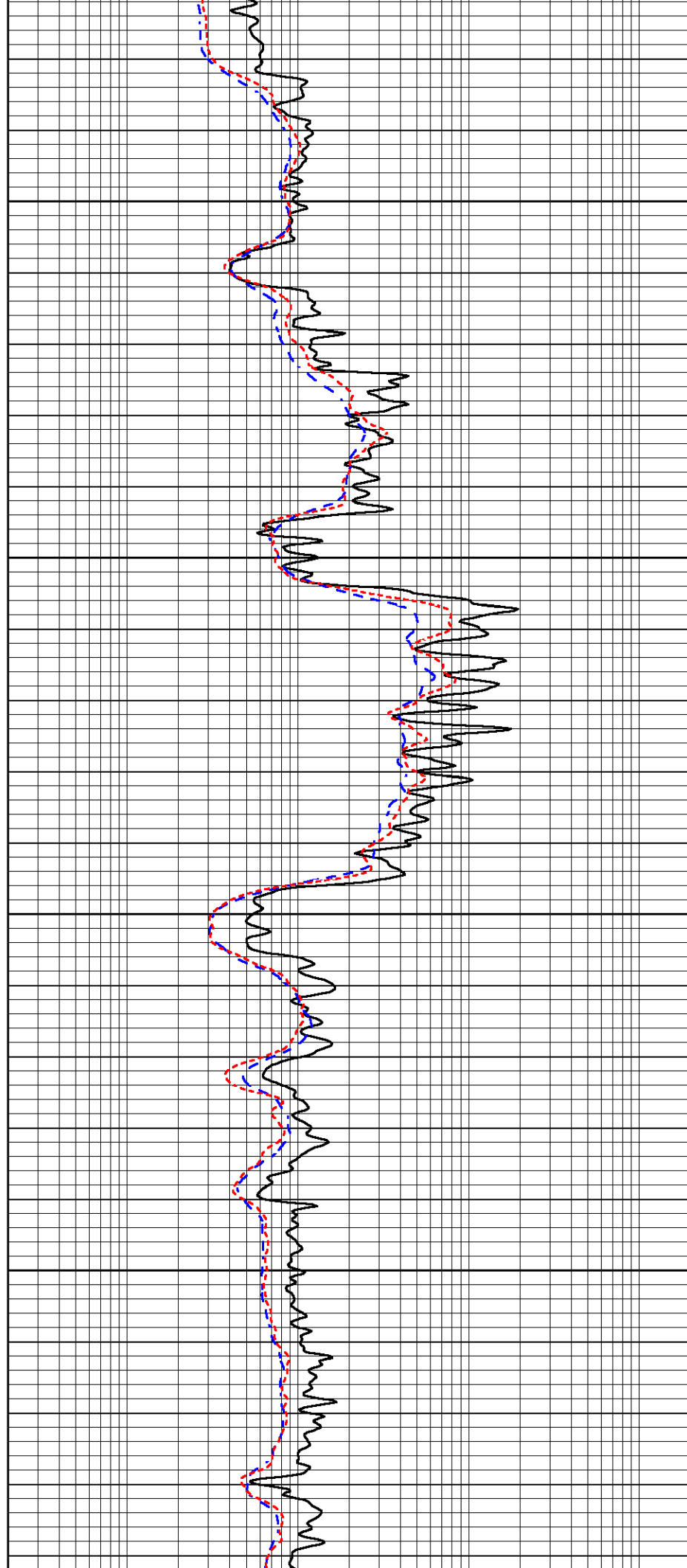


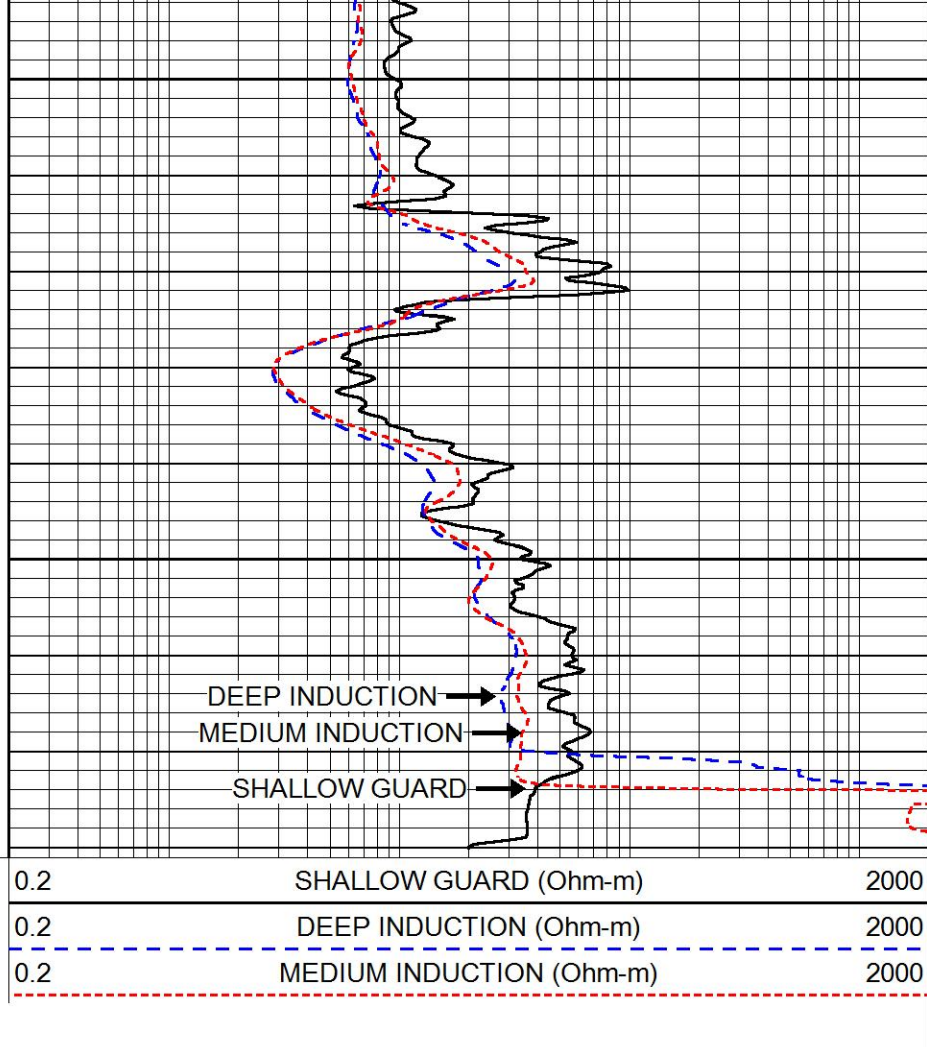
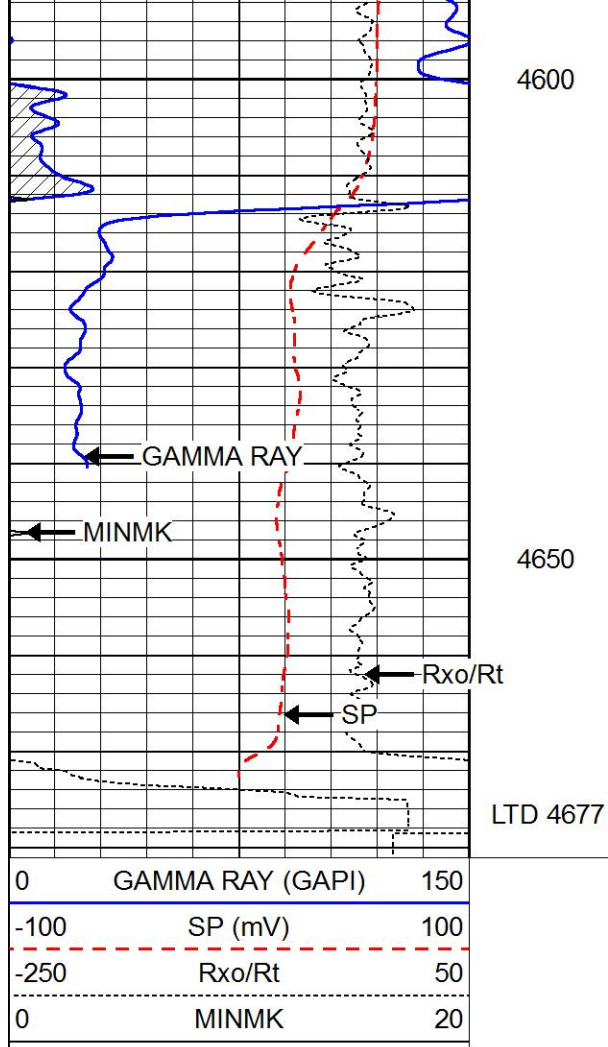
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4450

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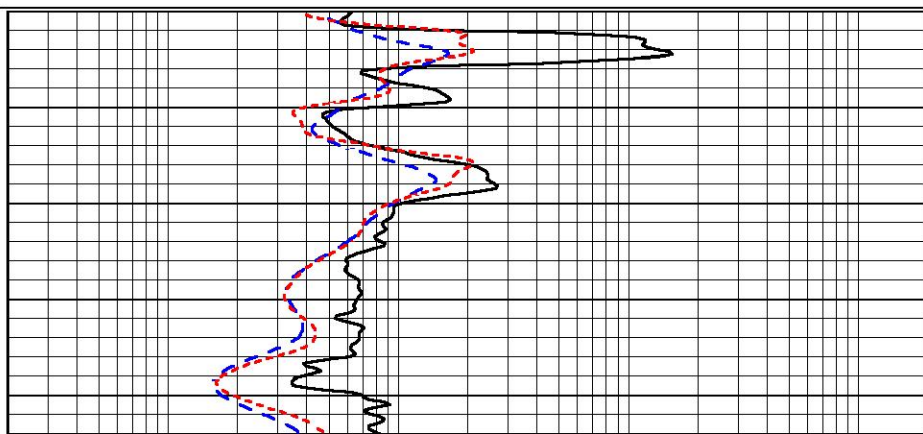
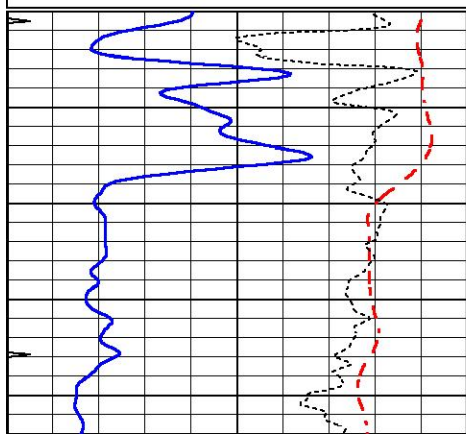
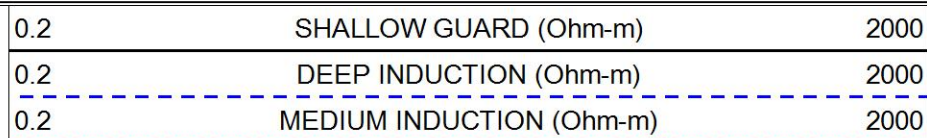
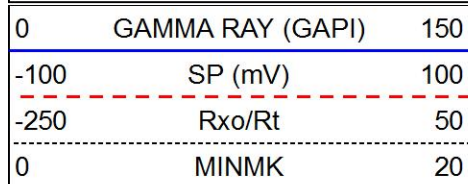
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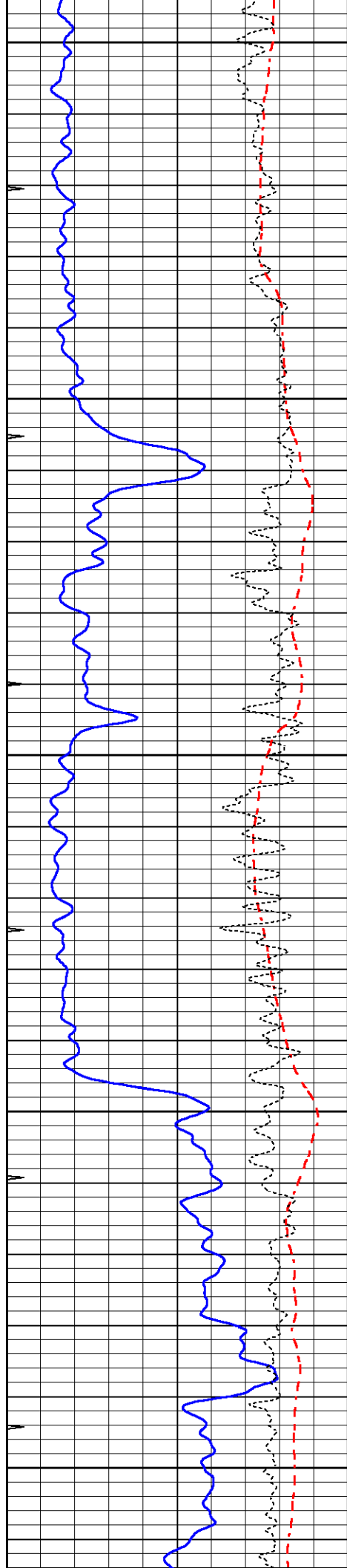




REPEAT SECTION

Database File 4683pe.db
 Dataset Pathname pass4.1
 Presentation Format _dil
 Dataset Creation Thu Mar 12 10:09:26 2020
 Charted by Depth in Feet scaled 1:240





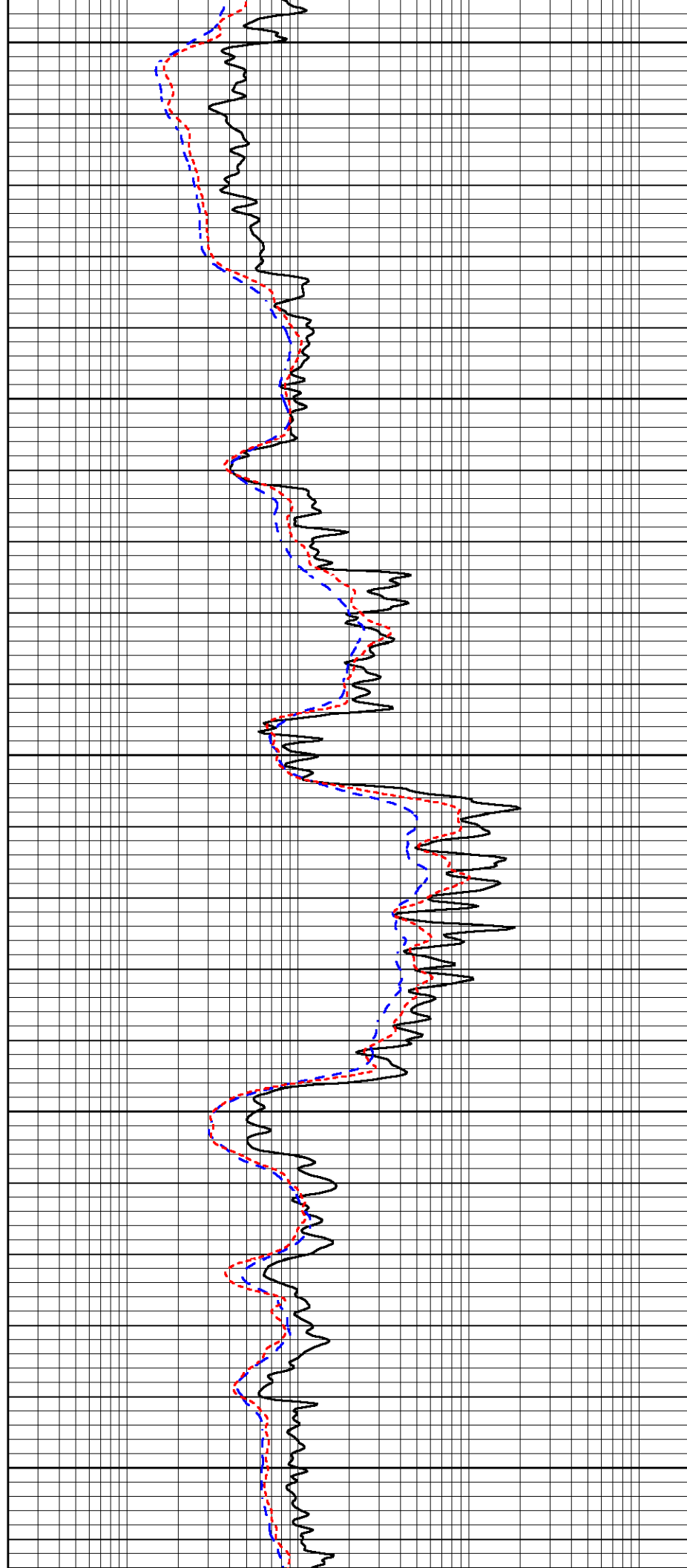
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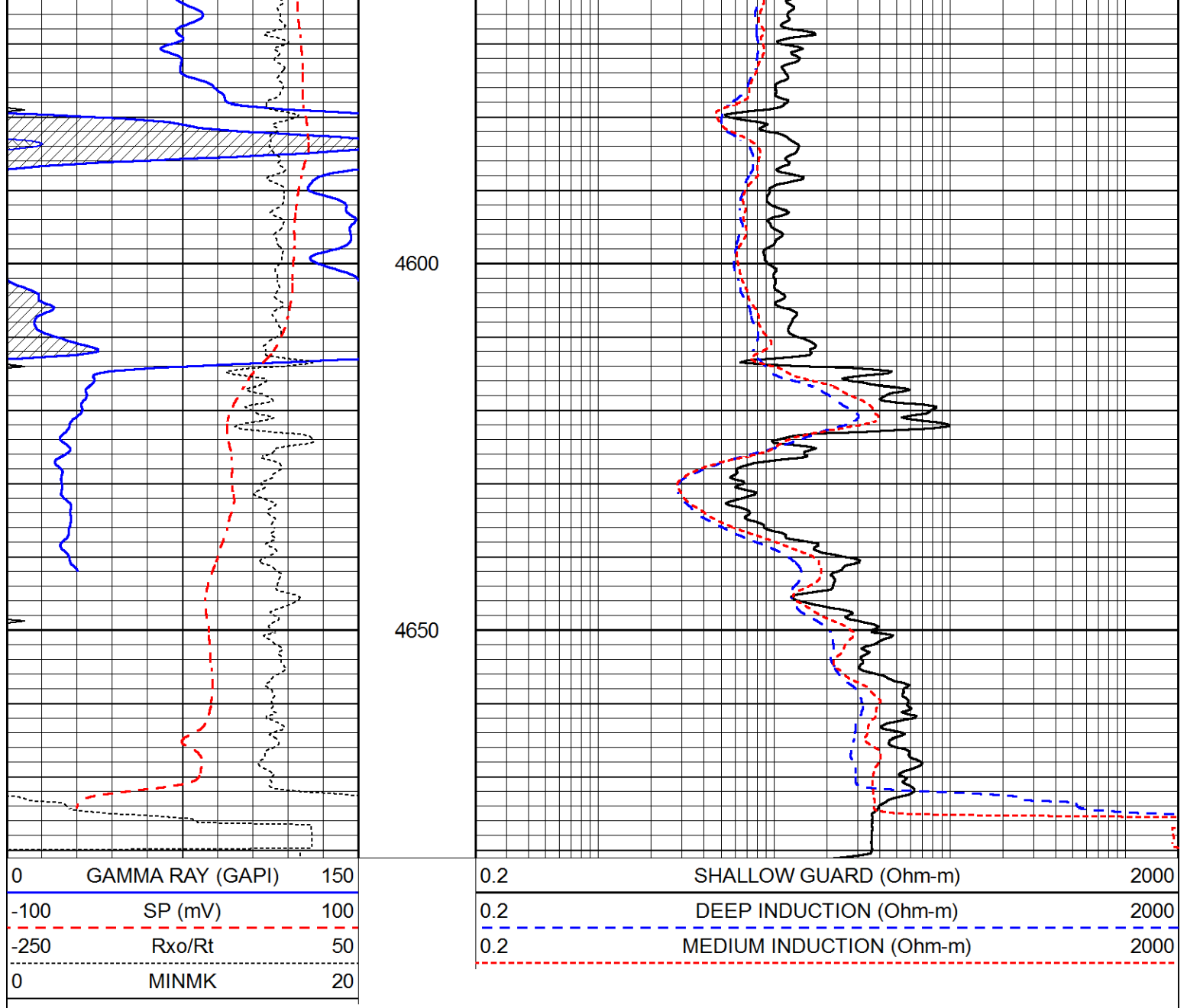
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4450

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Calibration Report

Database File 4683pe.db
Dataset Pathname pass4.1
Dataset Creation Thu Mar 12 10:09:26 2020

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
Surface Cal Performed: Mon Sep 10 14:28:35 2018
Downhole Cal Performed: Mon Sep 10 14:28:38 2018
After Survey Verification Performed: Mon Sep 10 14:28:40 2018

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
Internal:	Zero			Cal			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.000	0.720

Downhole Calibration								
Readings			References			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		
After Survey Verification								
Readings			Targets			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		
Litho Density Calibration Report Serial: 002N Model: PRB								
Master Calibration			Performed Tue Mar 10 15:08:00 2020					
	Background	Magnesium		Aluminum		Aluminum+Fe		
Window 1	780.1	6981.9		2088.6		1871.2		cps
Window 2	718.6	5898.2		1813.8		1664.1		cps
Window 3	580.0	2989.5		1088.0		1039.1		cps
Window 4	172.8	175.7		175.3		173.5		cps
Long Space	0.0	5179.6		1095.2		945.5		cps
Short Space	1.1	1228.6		821.2		690.4		cps
Rho		1.7100		2.5900		0.0000		g/cc
Pe		2.0000		2.7500		5.7900		
Rib Angle	: 45.5	Rib Slope	: 1.016	Density/Spine Ratio			: 0.548	
Spine Angle	: 75.5	Spine Slope	: 3.857	Spine Intercept			: -18.9	
Before Survey Verification			Performed Wed Dec 31 18:00:00 1969					
Window 1	0.0	0.0		0.0		0.0		cps
Window 2	0.0	0.0		0.0		0.0		cps
Window 3	0.0	0.0		0.0		0.0		cps
Window 4	0.0	0.0		0.0		0.0		cps
Long Space	0.0	0.0		0.0		0.0		cps
Short Space	0.0	0.0		0.0		0.0		cps
Measured Rho		0.0000		0.0000		0.0000		g/cc
Measured Correction		0.0000		0.0000		0.0000		g/cc
Measured Pe				0.0000		0.0000		
After Survey Verification			Performed Wed Dec 31 18:00:00 1969					
Window 1	0.0	0.0		0.0		0.0		cps
Window 2	0.0	0.0		0.0		0.0		cps
Window 3	0.0	0.0		0.0		0.0		cps
Window 4	0.0	0.0		0.0		0.0		cps
Long Space	0.0	0.0		0.0		0.0		cps
Short Space	0.0	0.0		0.0		0.0		cps

Measured Rho	0.0000	0.0000	0.0000	g/cc
Measured Correction	0.0000	0.0000	0.0000	g/cc
Measured Pe		0.0000	0.0000	
Compensated Neutron Calibration Report				
Serial Number:		6I		
Tool Model:		G		
CALIBRATION				
Detector		Readings		Target
Short Space		1.00	cps	1.00 cps
Long Space		1.00	cps	1.00 cps
				Normalization
				1.0000
				1.0000
PRE-SURVEY VERIFICATION				
Detector		Readings		Measured
				Target
1)	Short Space	cps		
	Long Space	cps		pu
2)	Short Space	cps		
	Long Space	cps		pu
3)	Short Space	cps		
	Long Space	cps		pu
POST-SURVEY VERIFICATION				
Detector		Readings		Measured
				Target
1)	Short Space	cps		
	Long Space	cps		pu
2)	Short Space	cps		
	Long Space	cps		pu
3)	Short Space	cps		
	Long Space	cps		pu
Gamma Ray Calibration Report				
Serial Number:		GR6		
Tool Model:		OPEN		
Performed:		Wed Jul 03 12:57:34 2019		
Calibrator Value:		150.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		276.0	cps	
Sensitivity:		0.5700	GAPI/cps	