DUAL INDUCTION LOG

Company WOOLSEY OPERATING COMPANY, LLC
Well HUXMAN #1
Field WINSINGER
County McPHERSON
State KANSAS

Company WOOLSEY OPERATING COMPANY, LLC.
Well HUXMAN #1
Field WINSINGER
County McPHERSON State KANSAS

Location: API # : 15-113-21395-0000
1550' FSL & 1750' FEL
E2 W2 SE
SEC 19 TWP 21S RGE 1W

Other Services
CDL/CNL/PE

Permanent Datum GROUND LEVEL Elevation 1487
Log Measured From KELLY BUSHING 13' A.G.L
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1500
D.F. 1498
G.L. 1487

Date	9/20/19		
Run Number	ONE		
Depth Driller	3450		
Depth Logger	3450		
Bottom Logged Interval	3448		
Top Log Interval	00		
Casing Driller	8 5/8" @ 265'		
Casing Logger	265'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES PPM	
Density / Viscosity	9.4/54		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.30 @ 89F		
Rmf @ Meas. Temp	0.97 @ 89F		
Rmc @ Meas. Temp	1.56 @ 89F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.04 @ 111F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	111F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	BILL KLAVER		

<<< Fold Here >>>

Comments

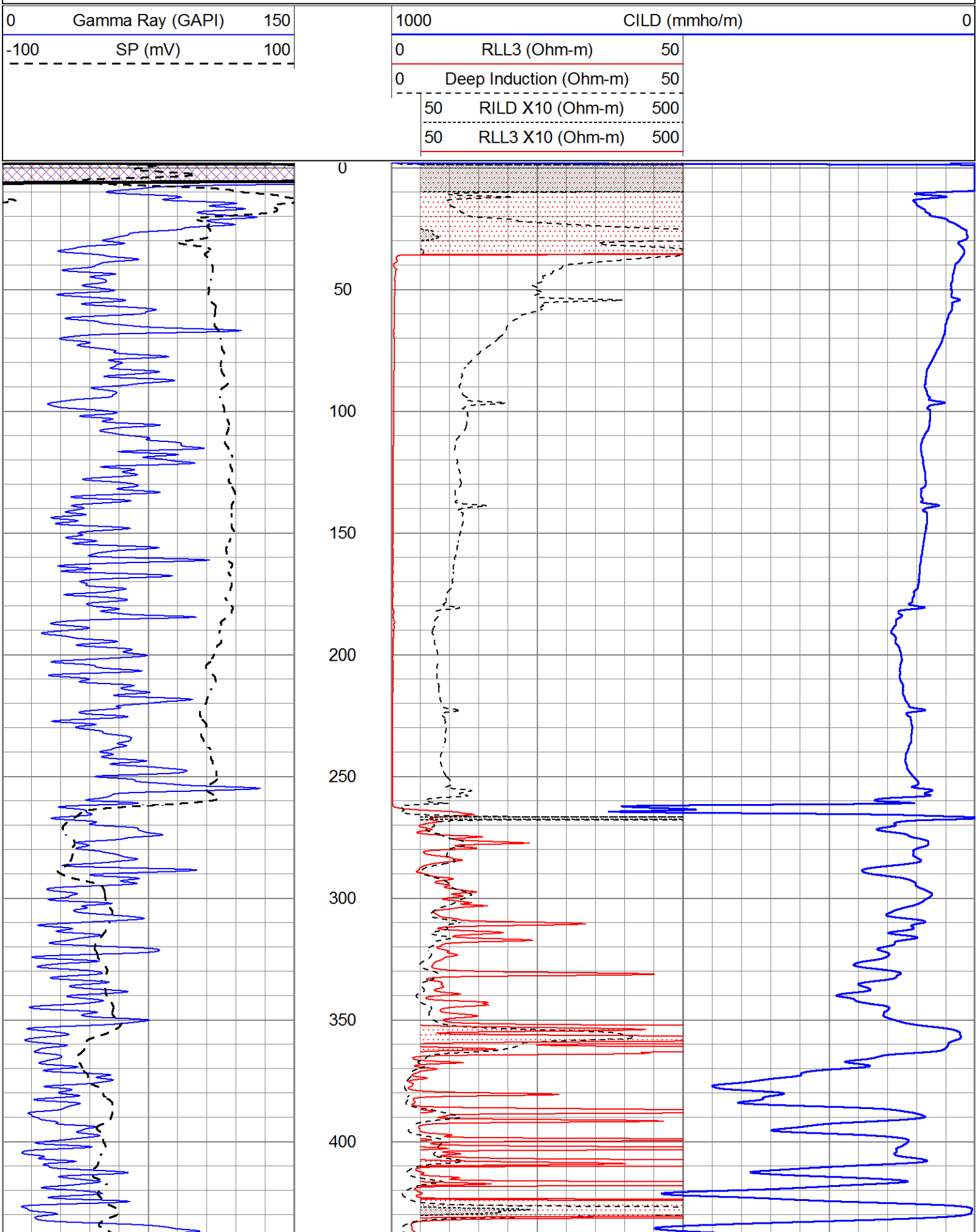
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

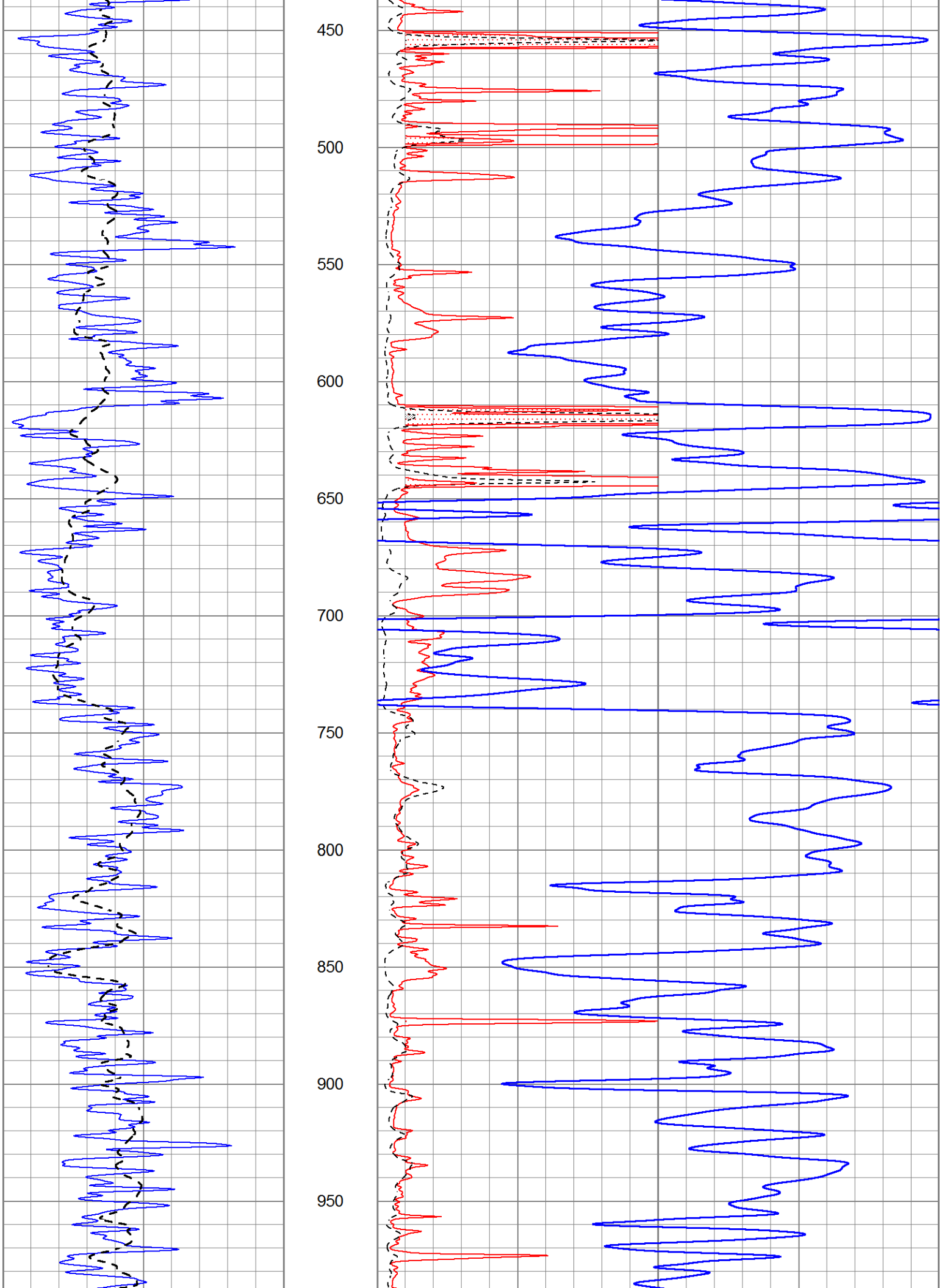
DIRECTIONS

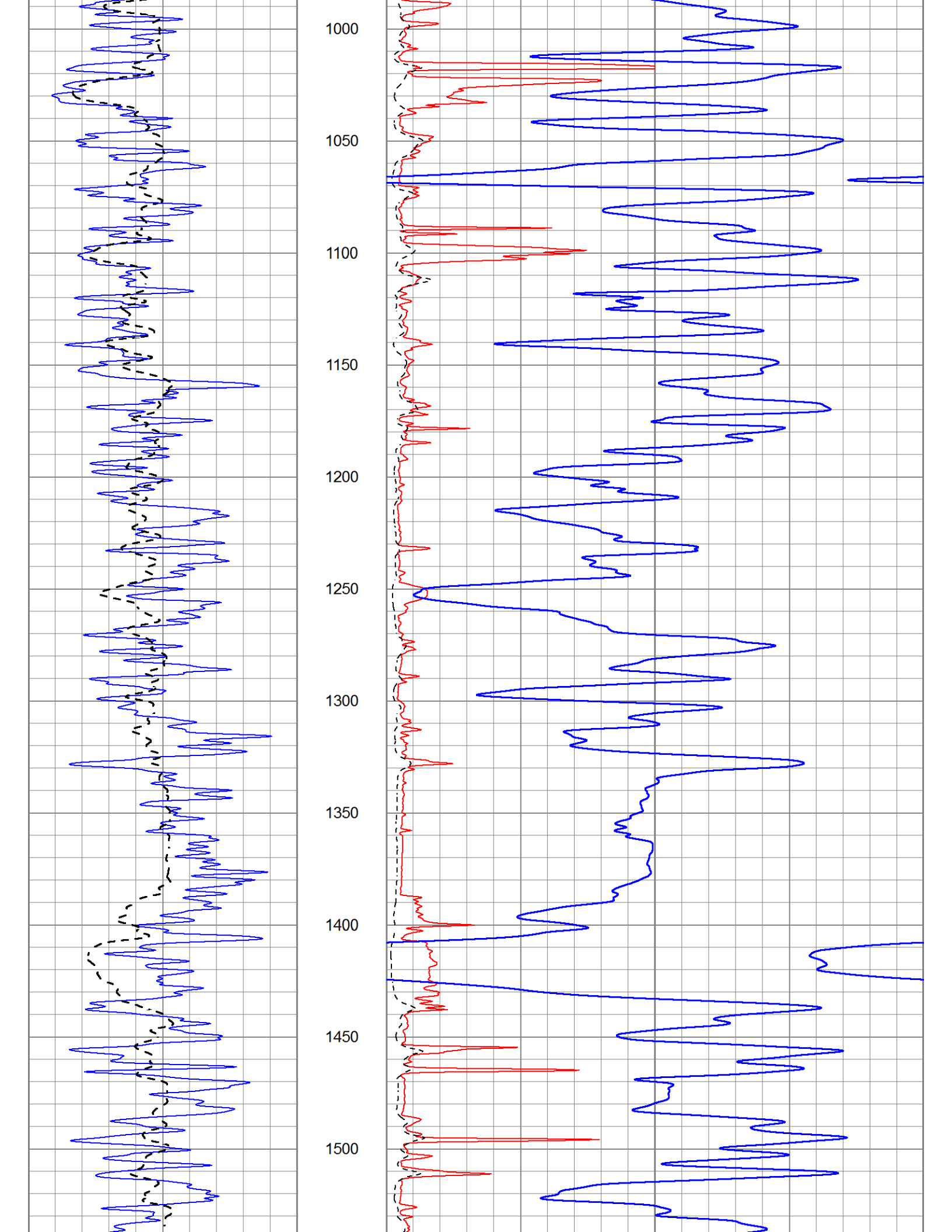
MOUNDRIDGE, KS. - I 35 & EXIT 46 (ARROWHEAD RD.)
3/4 EAST - NORTH INTO

MAIN SECTION

Database File	3994pe8.db
Dataset Pathname	pass3.2
Presentation Format	_dil2
Dataset Creation	Fri Sep 20 17:48:26 2019
Charted by	Depth in Feet scaled 1:600




450
500
550
600
650
700
750
800
850
900
950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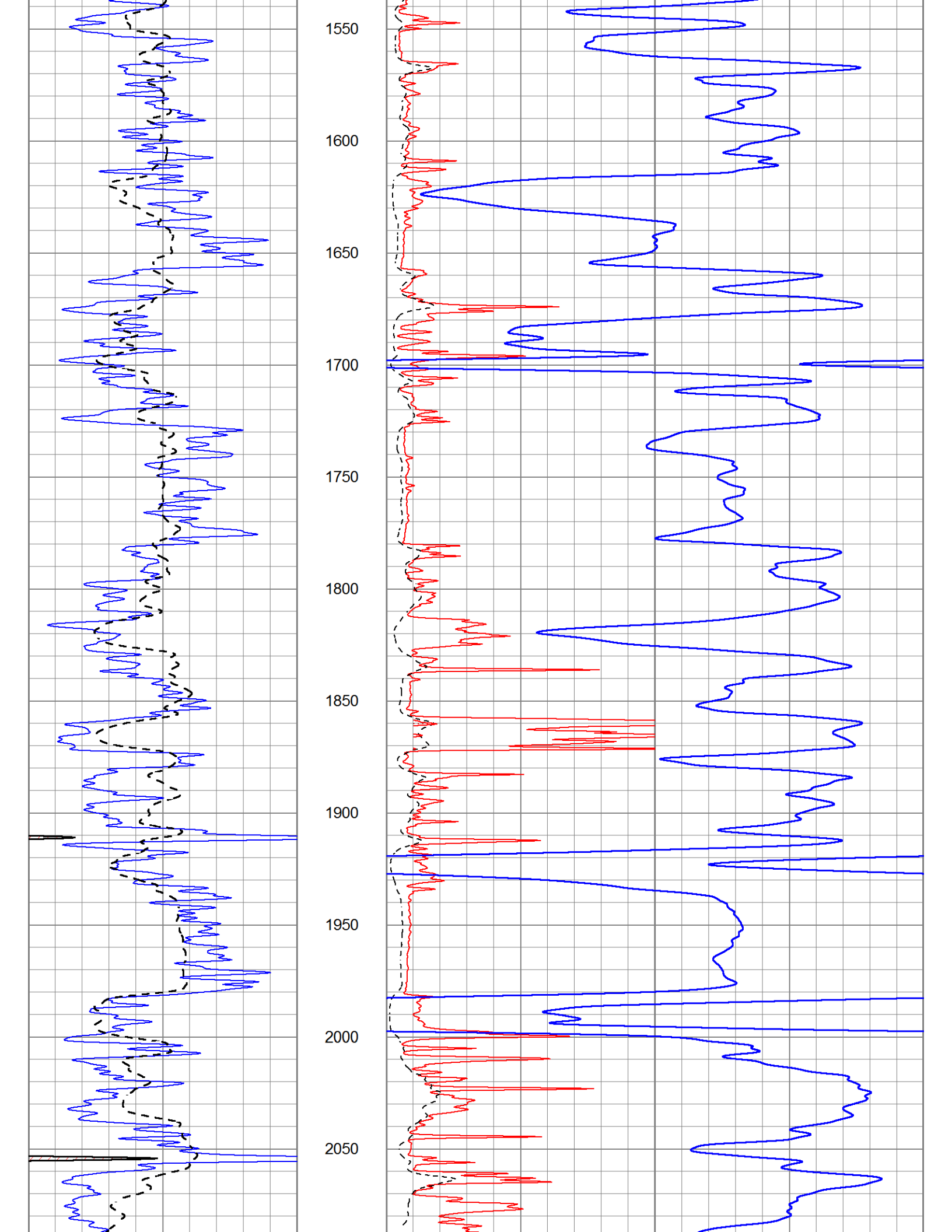
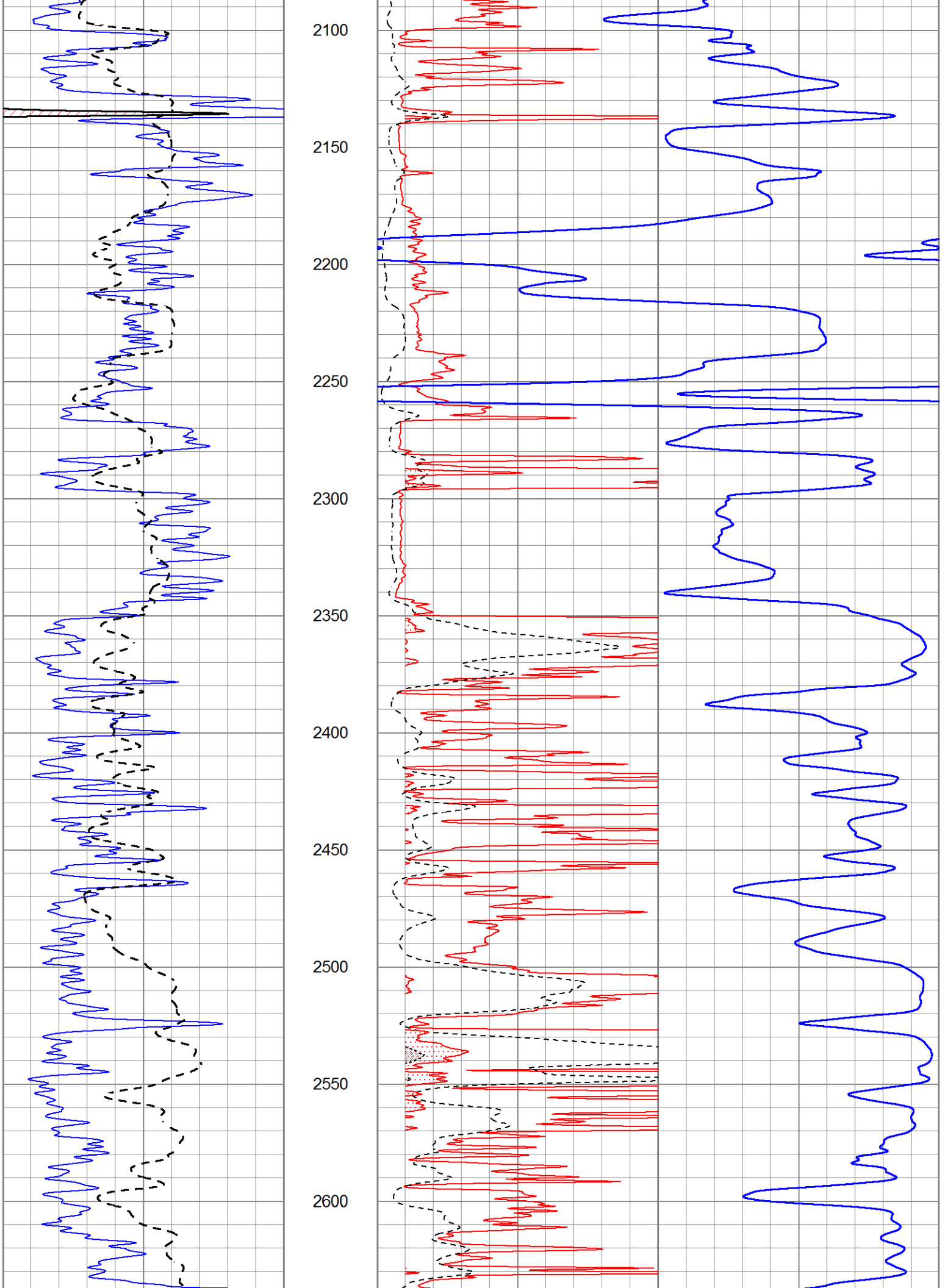
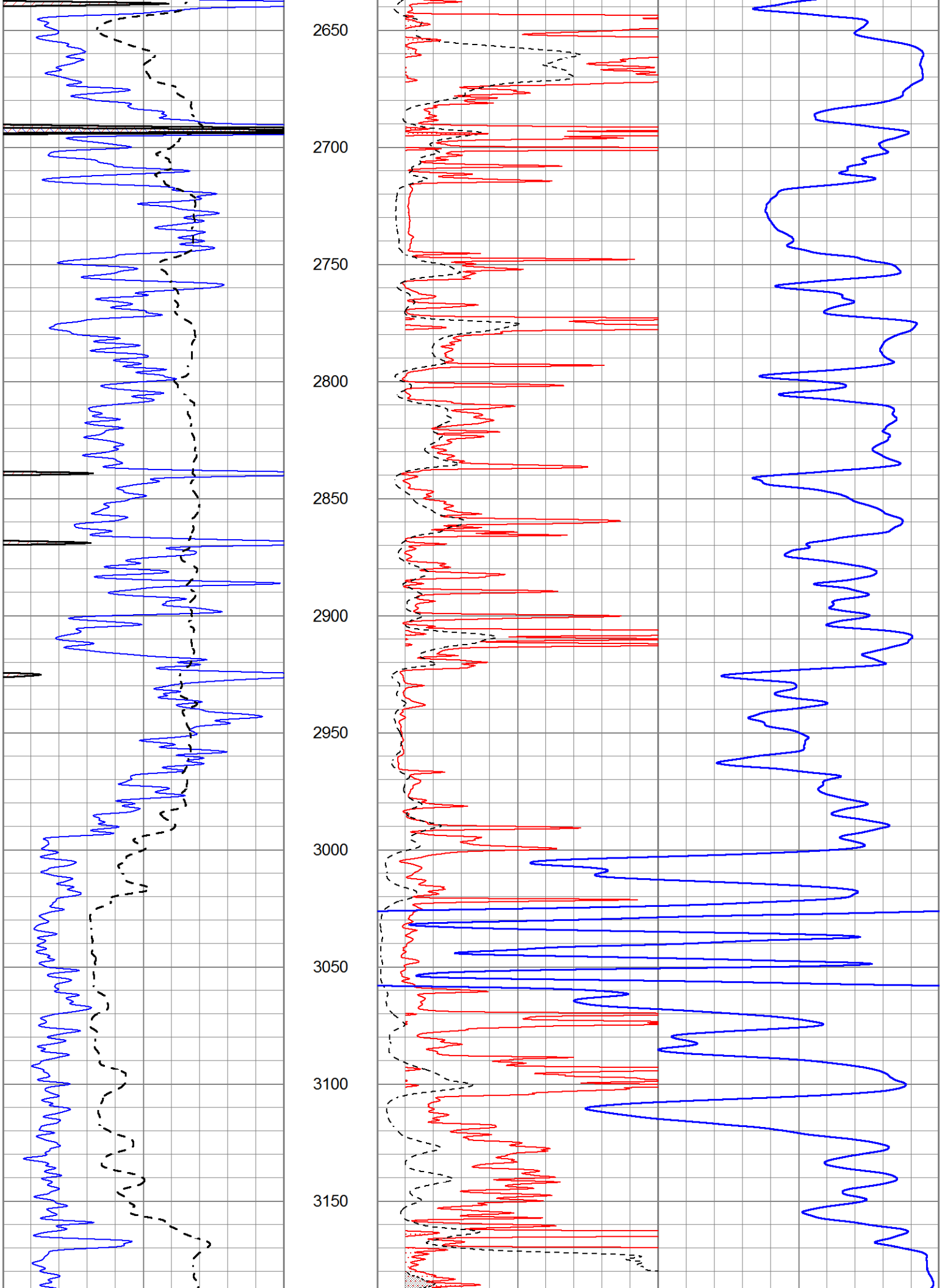
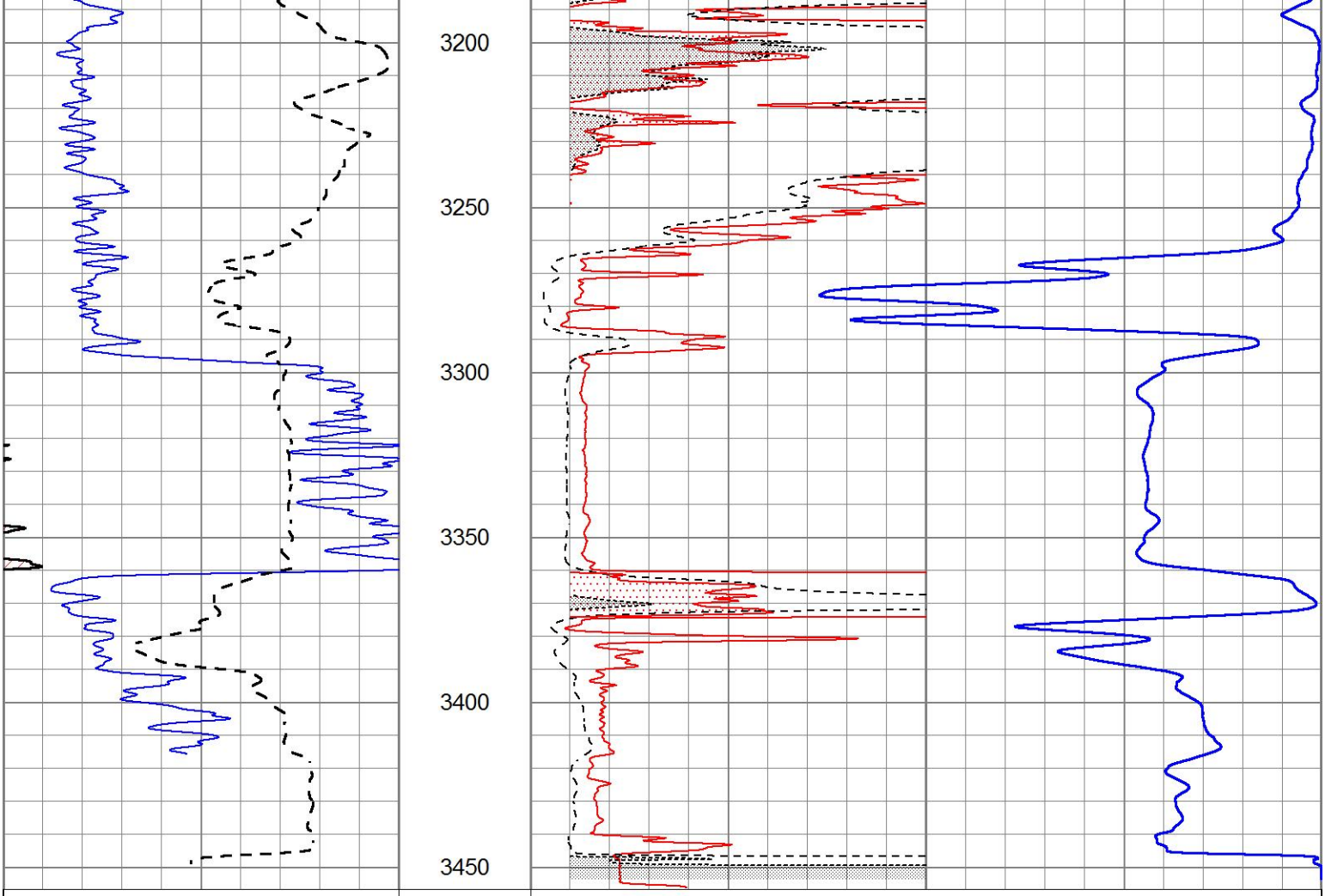
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500


1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600


2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150

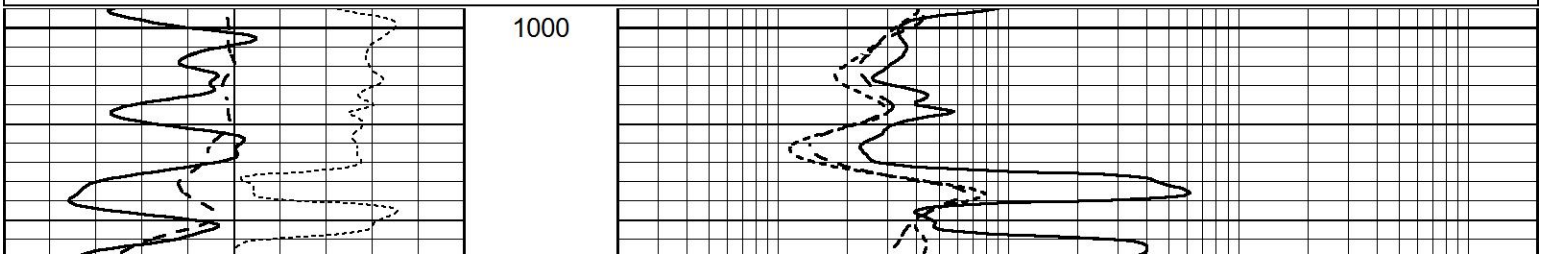


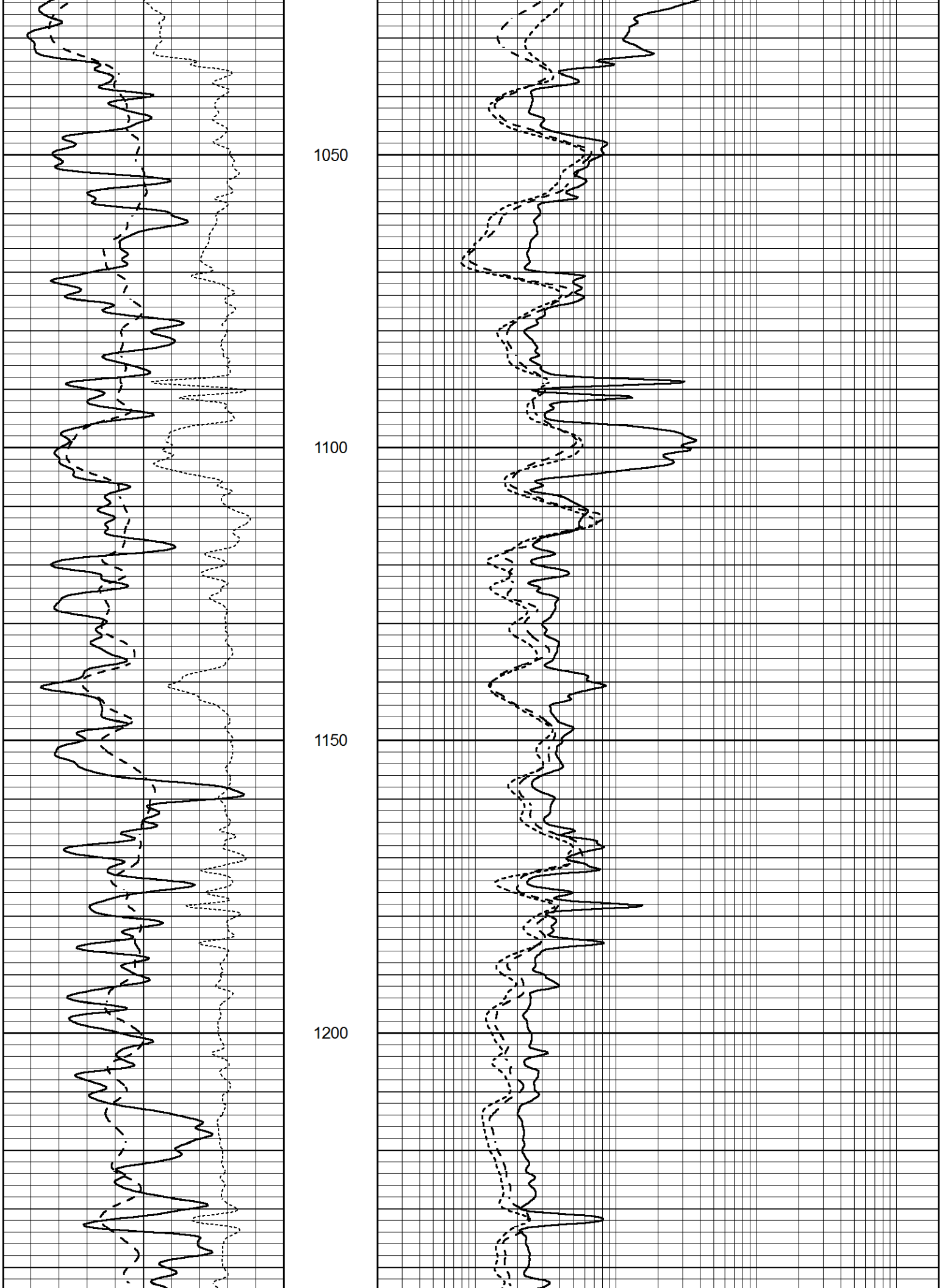
MAIN SECTION

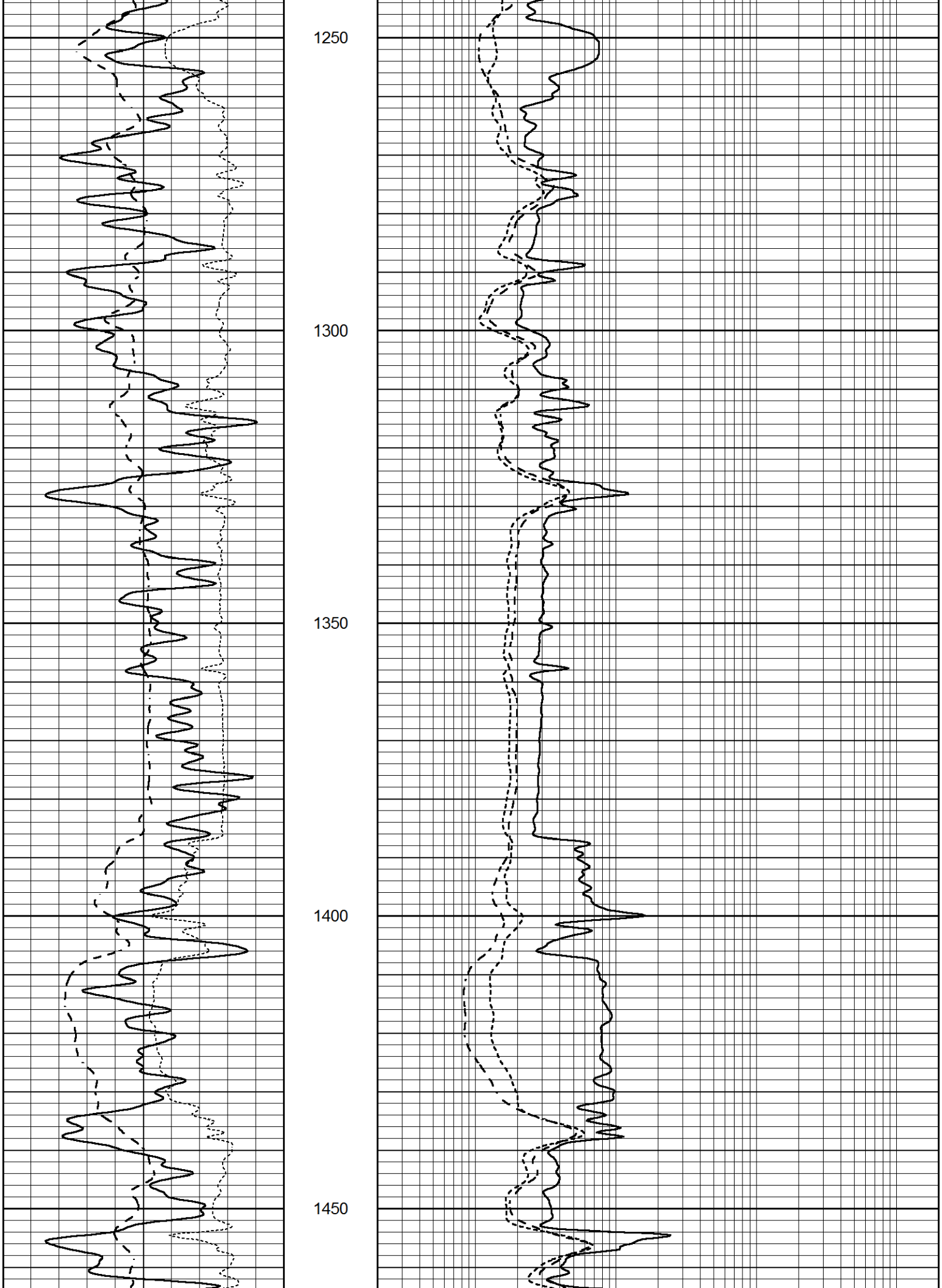
Database File	3994pe8.db
Dataset Pathname	pass3.1
Presentation Format	_dil
Dataset Creation	Fri Sep 20 17:34:09 2019
Charted by	Depth in Feet scaled 1:240

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

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




1050
1100
1150
1200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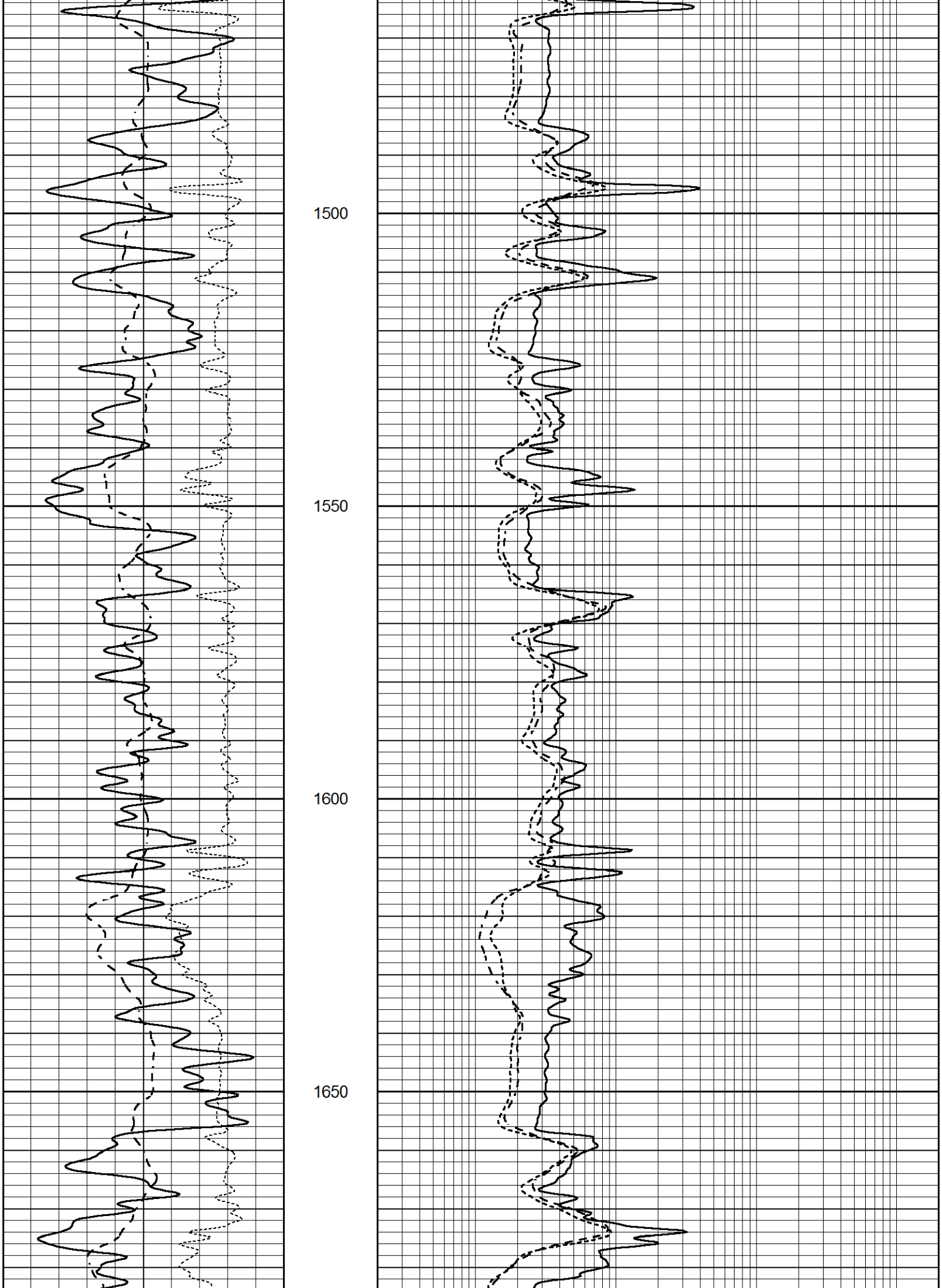
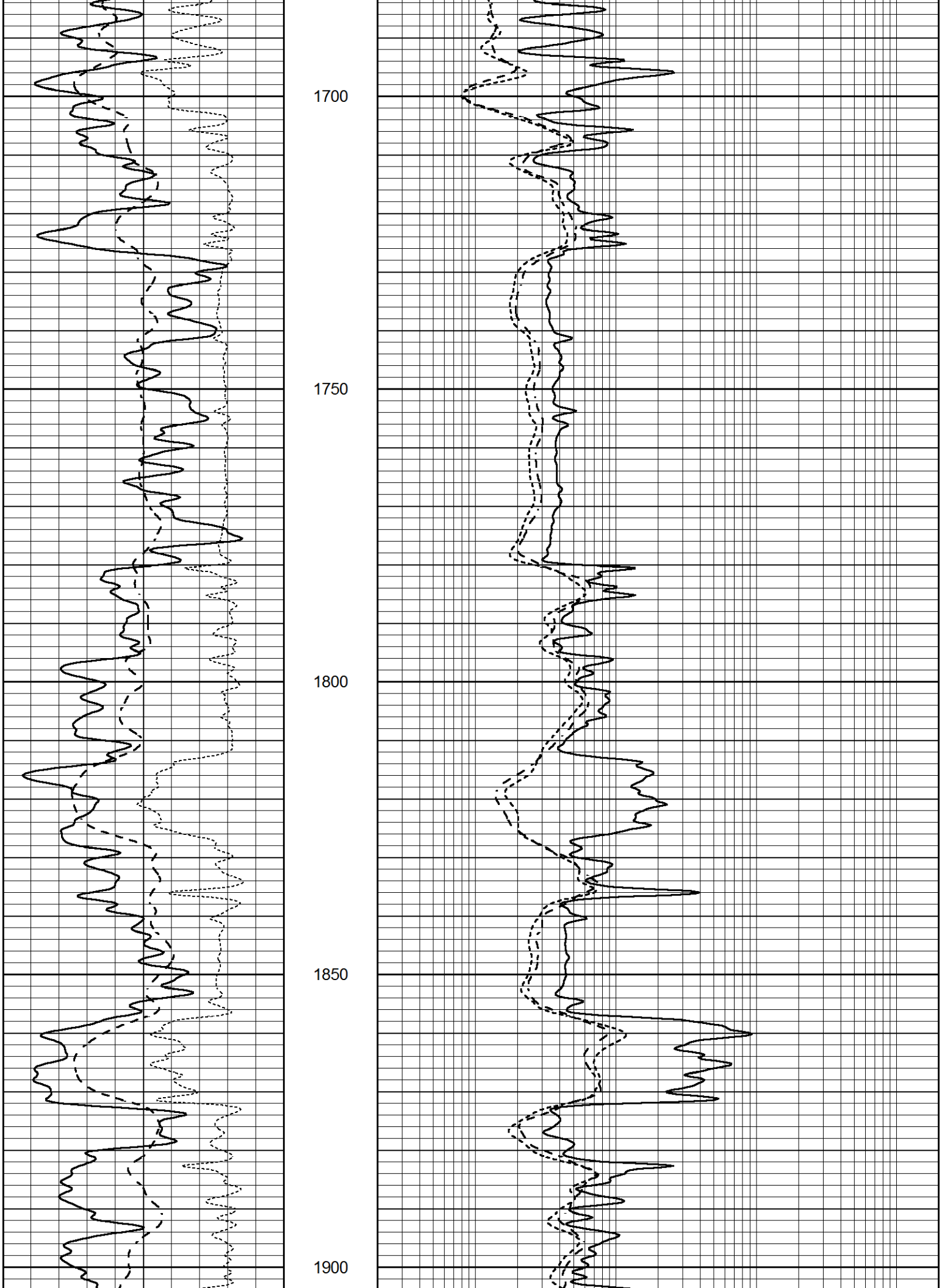
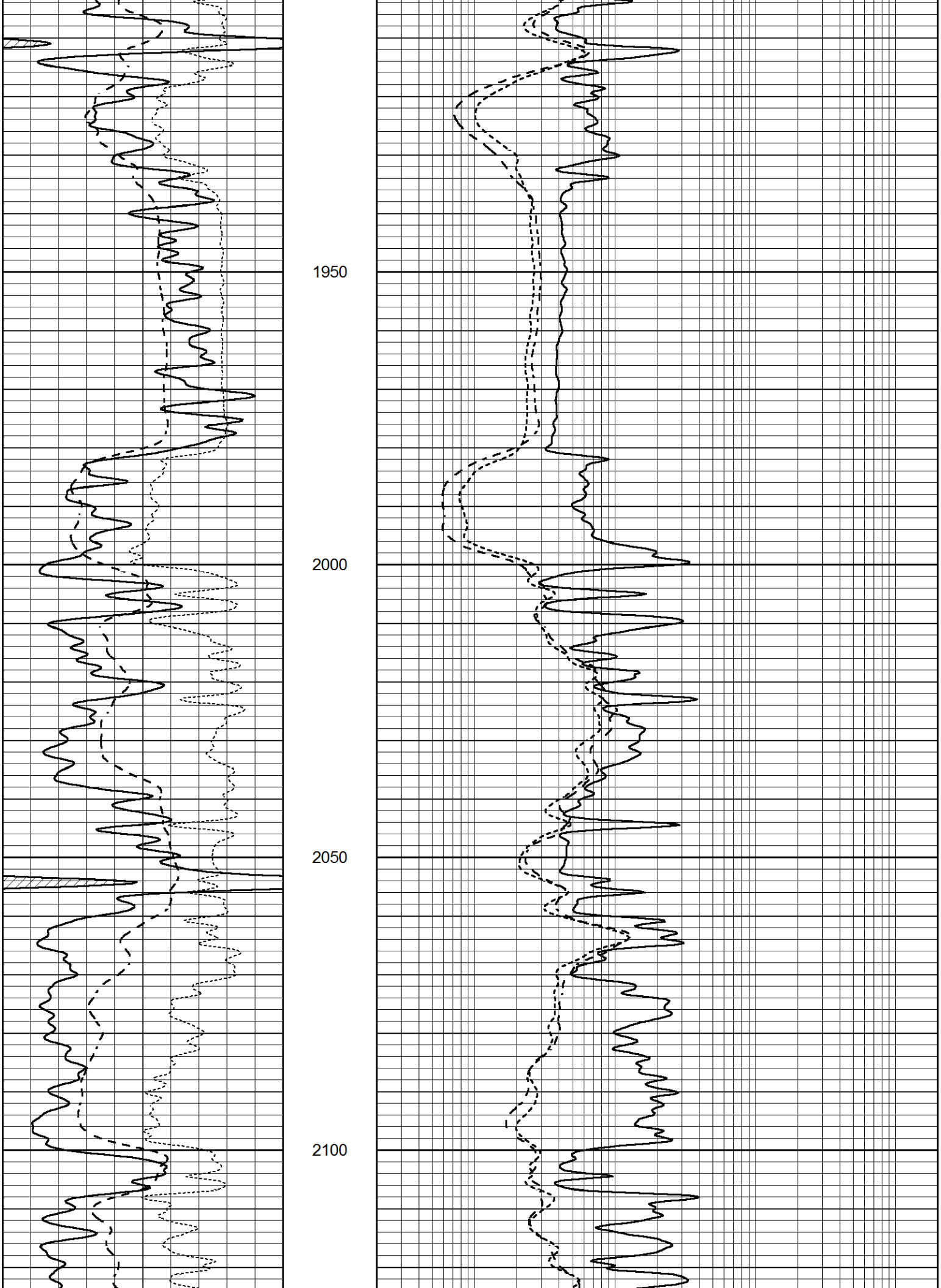
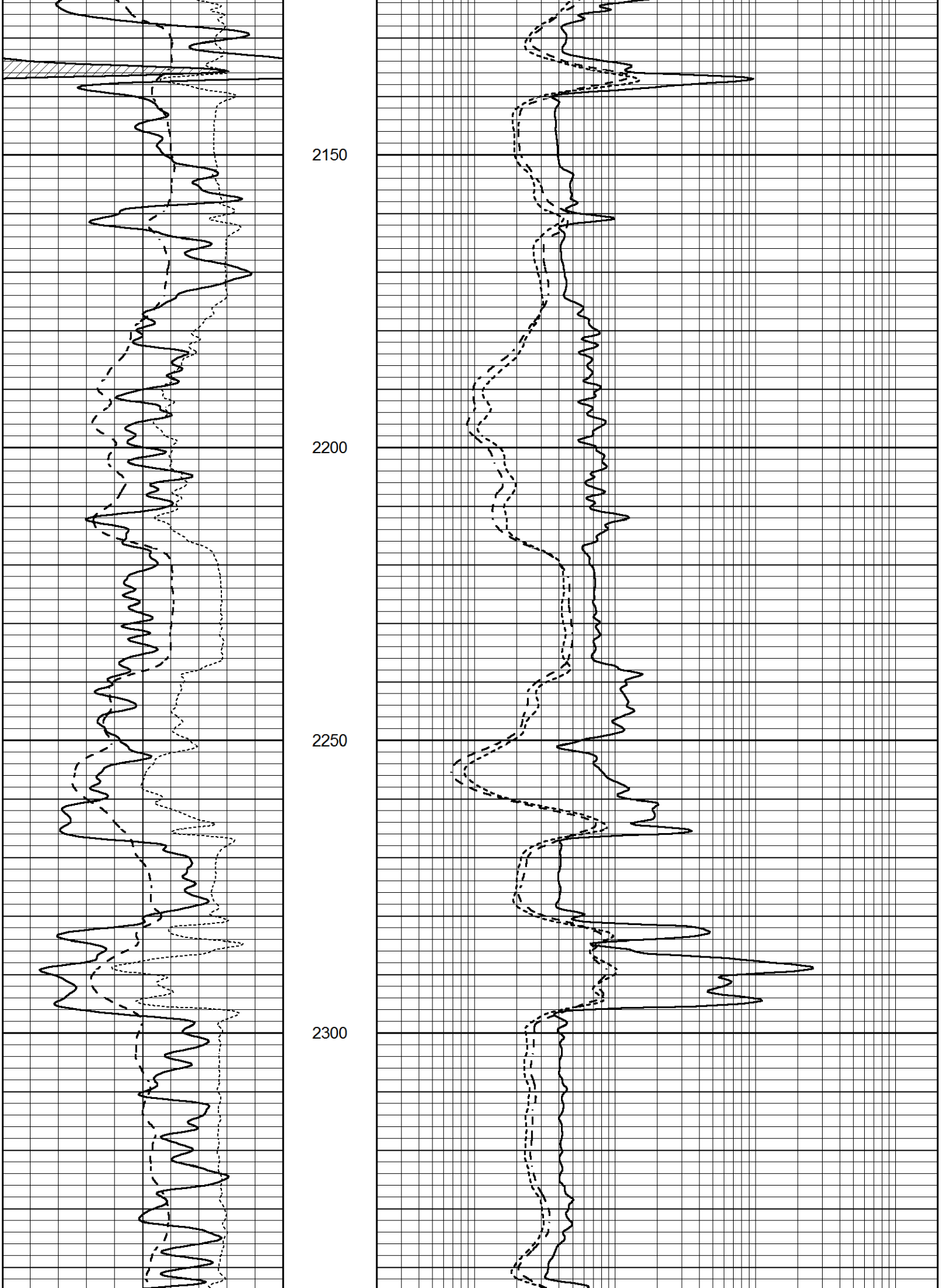
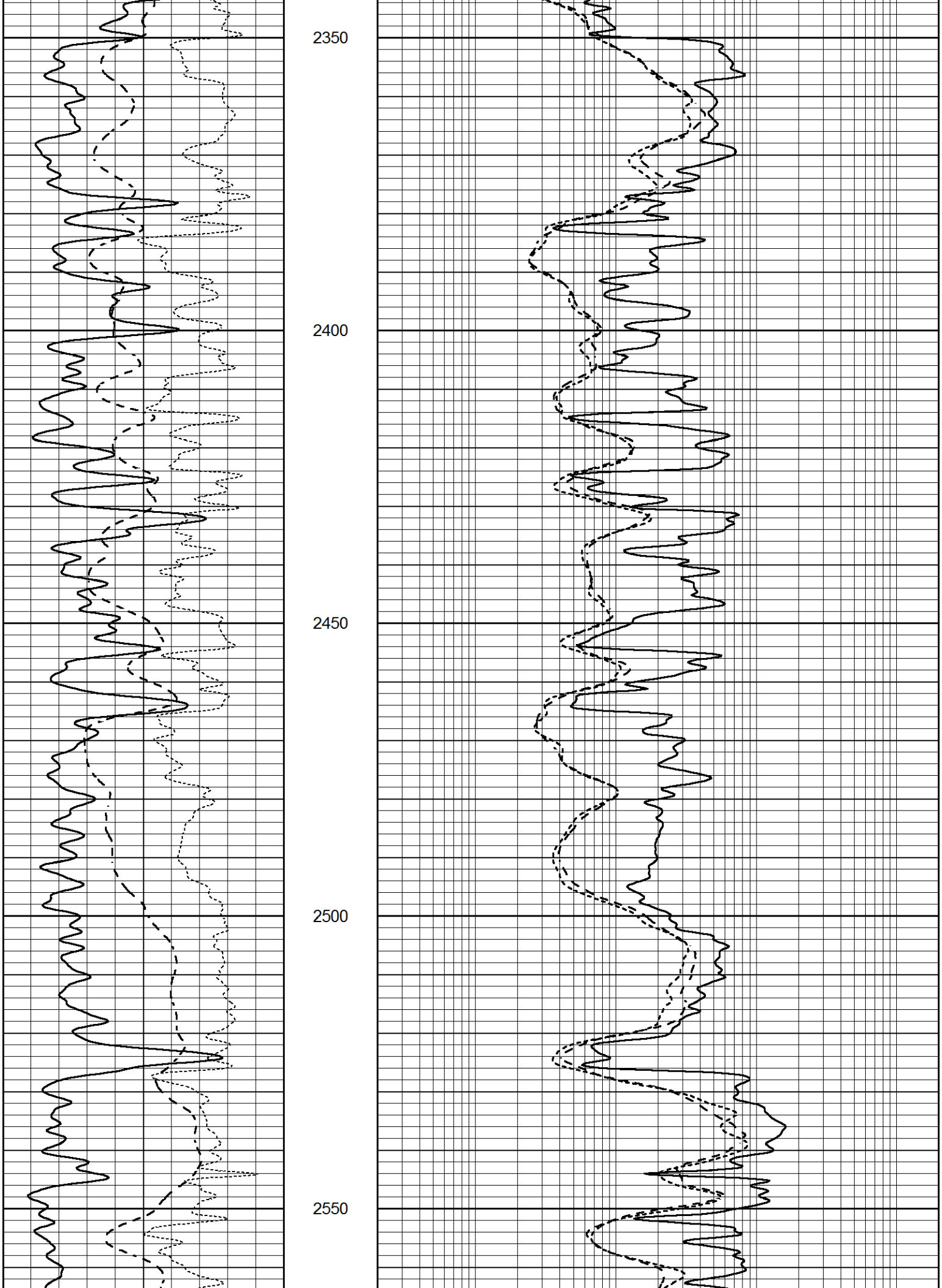
1300
1350
1400
1450


1500
1550
1600
1650


1700
1750
1800
1850
1900


1950
2000
2050
2100


2150
2200
2250
2300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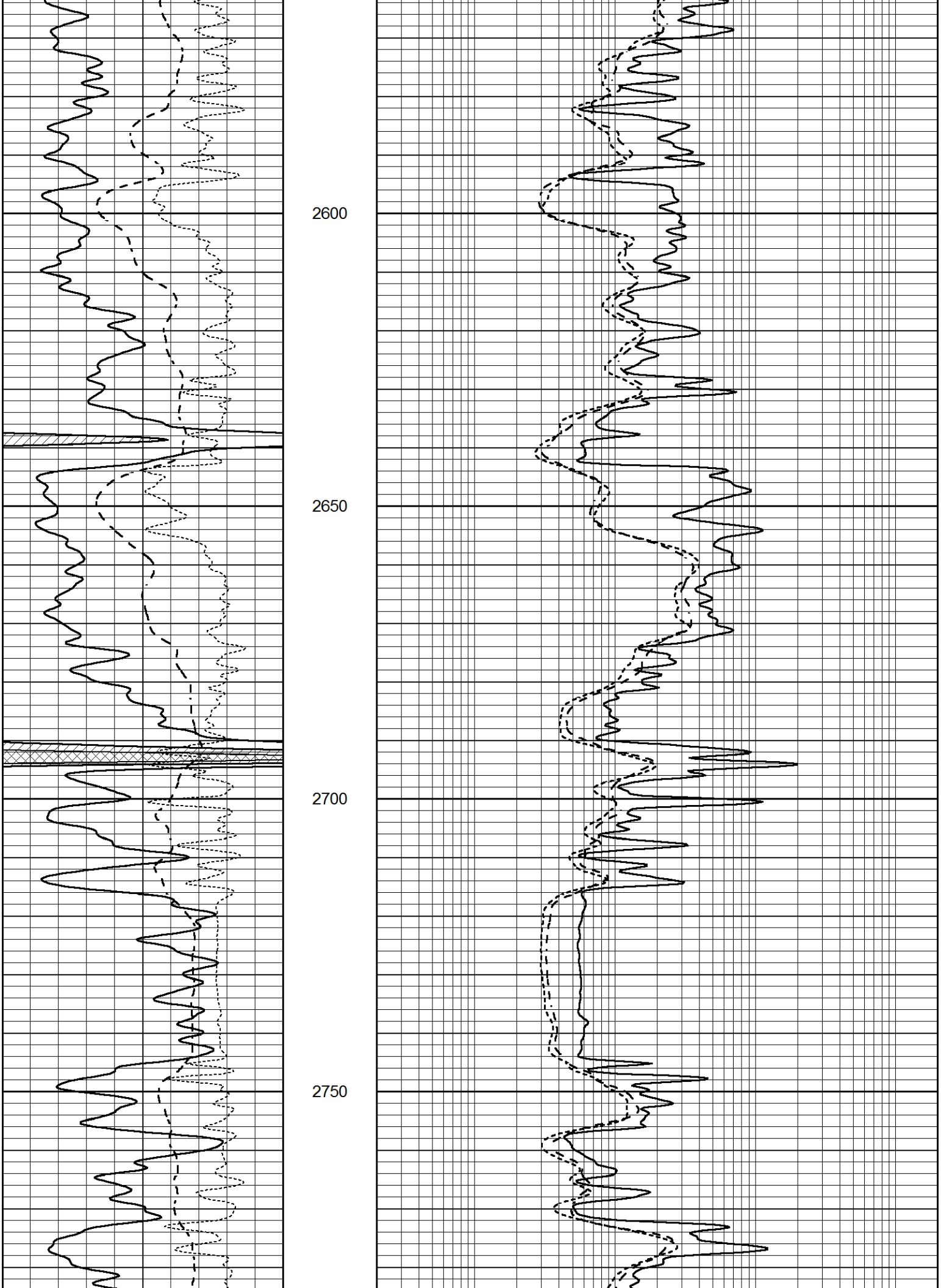
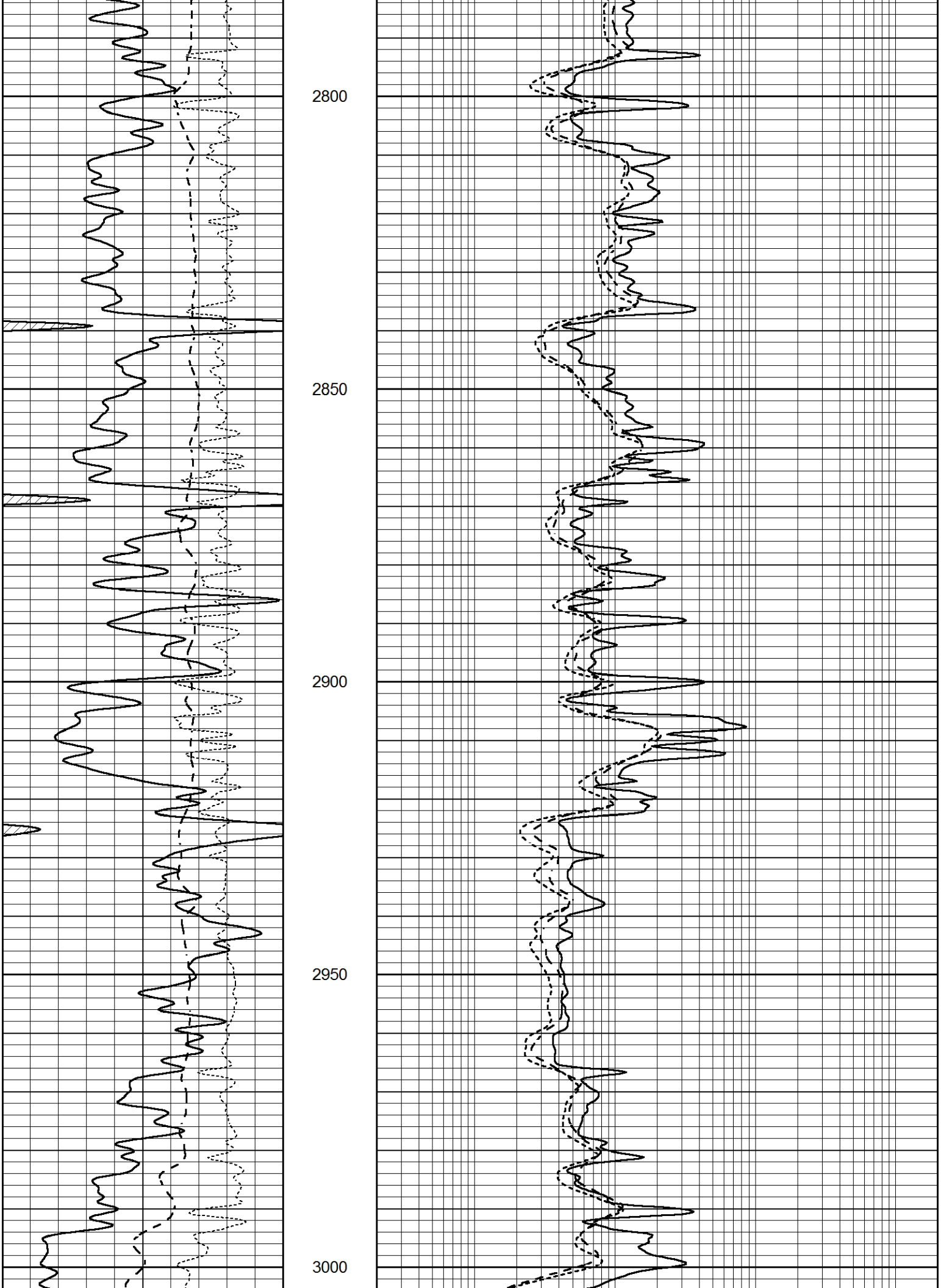
2400
2450
2500
2550


2600
2650
2700
2750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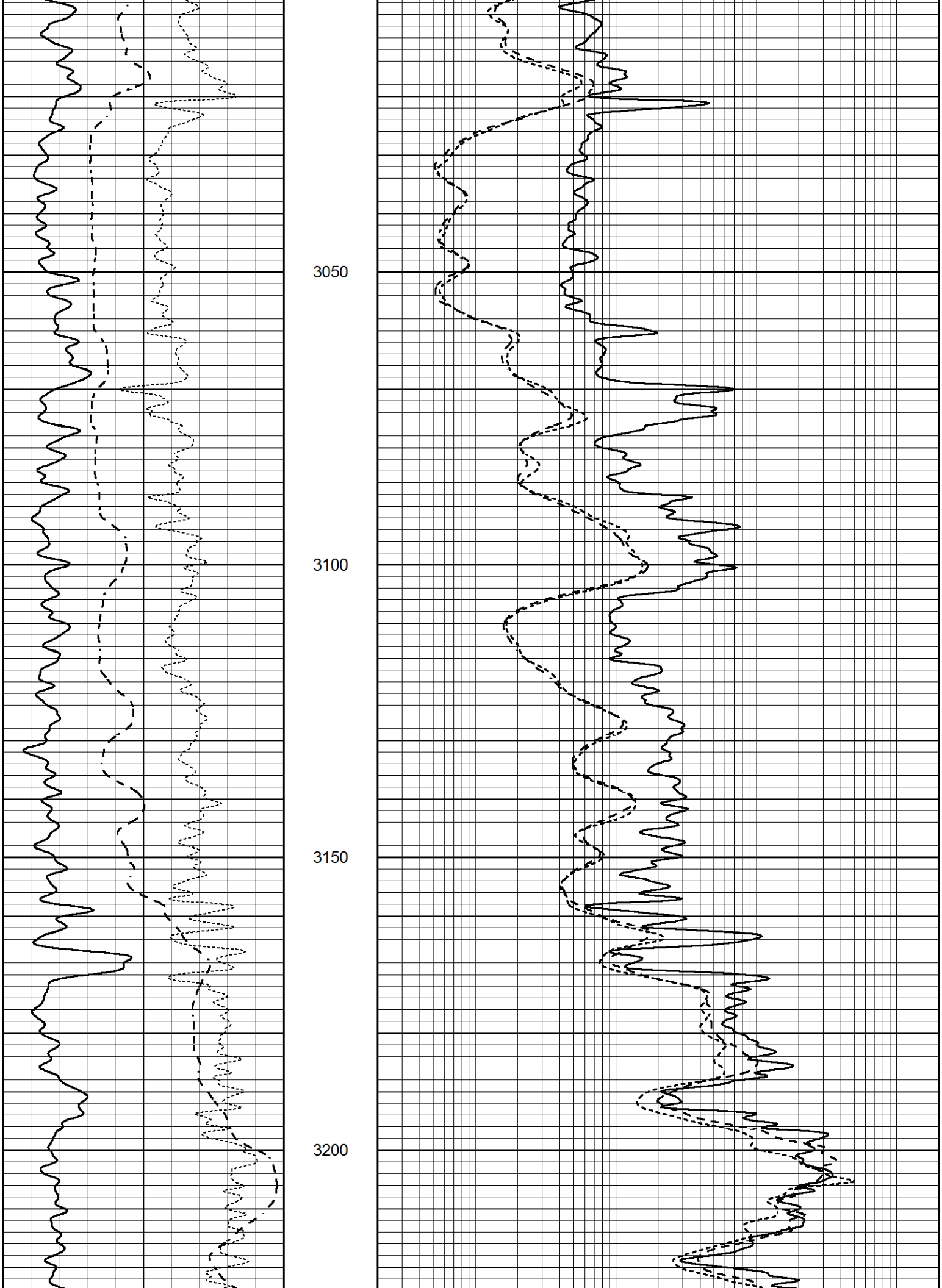
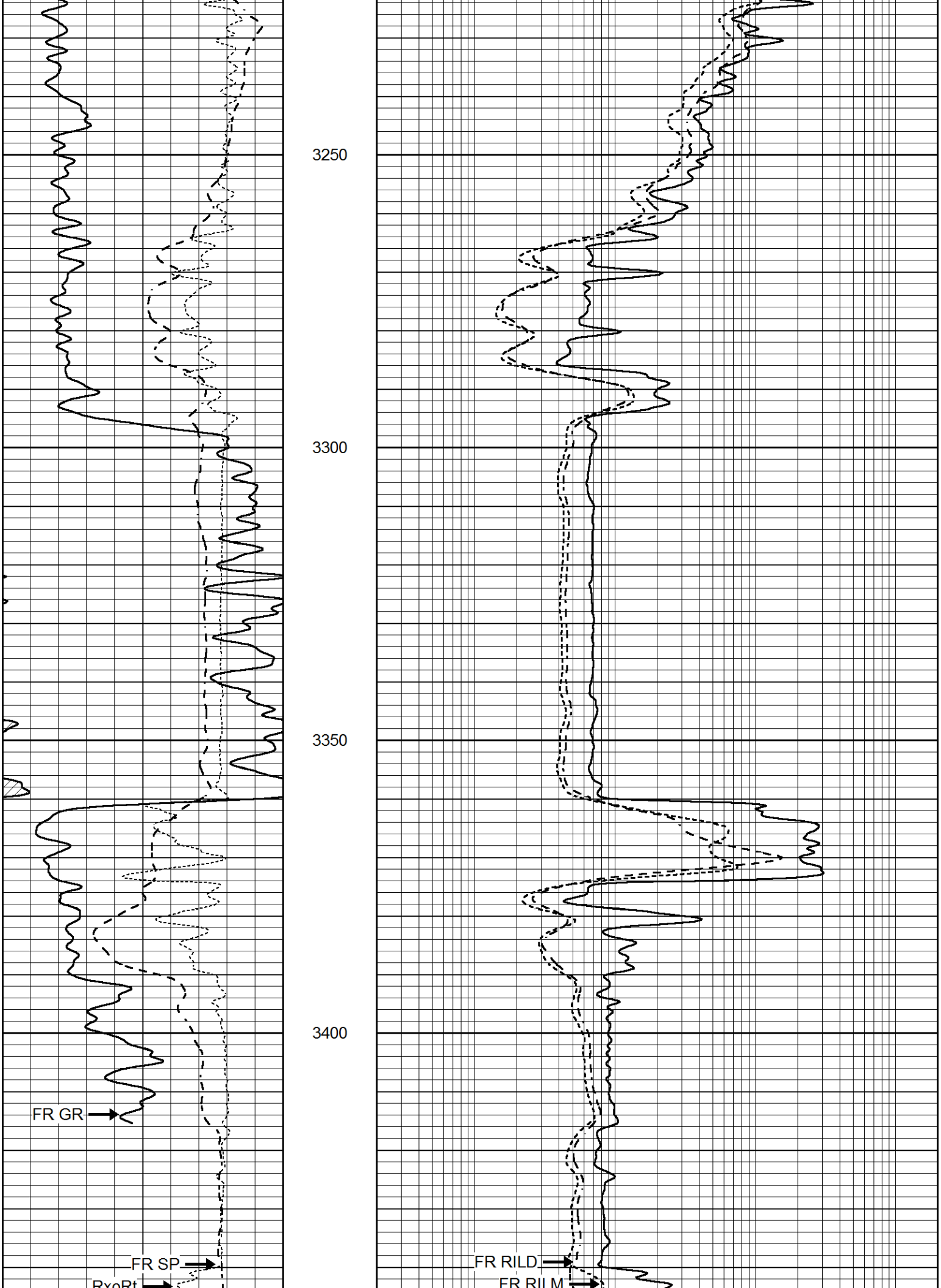
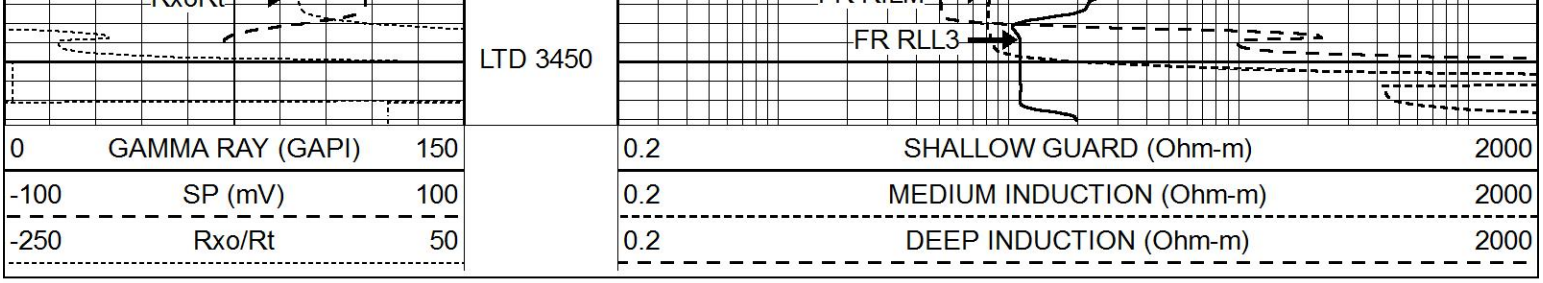
2850
2900
2950
3000

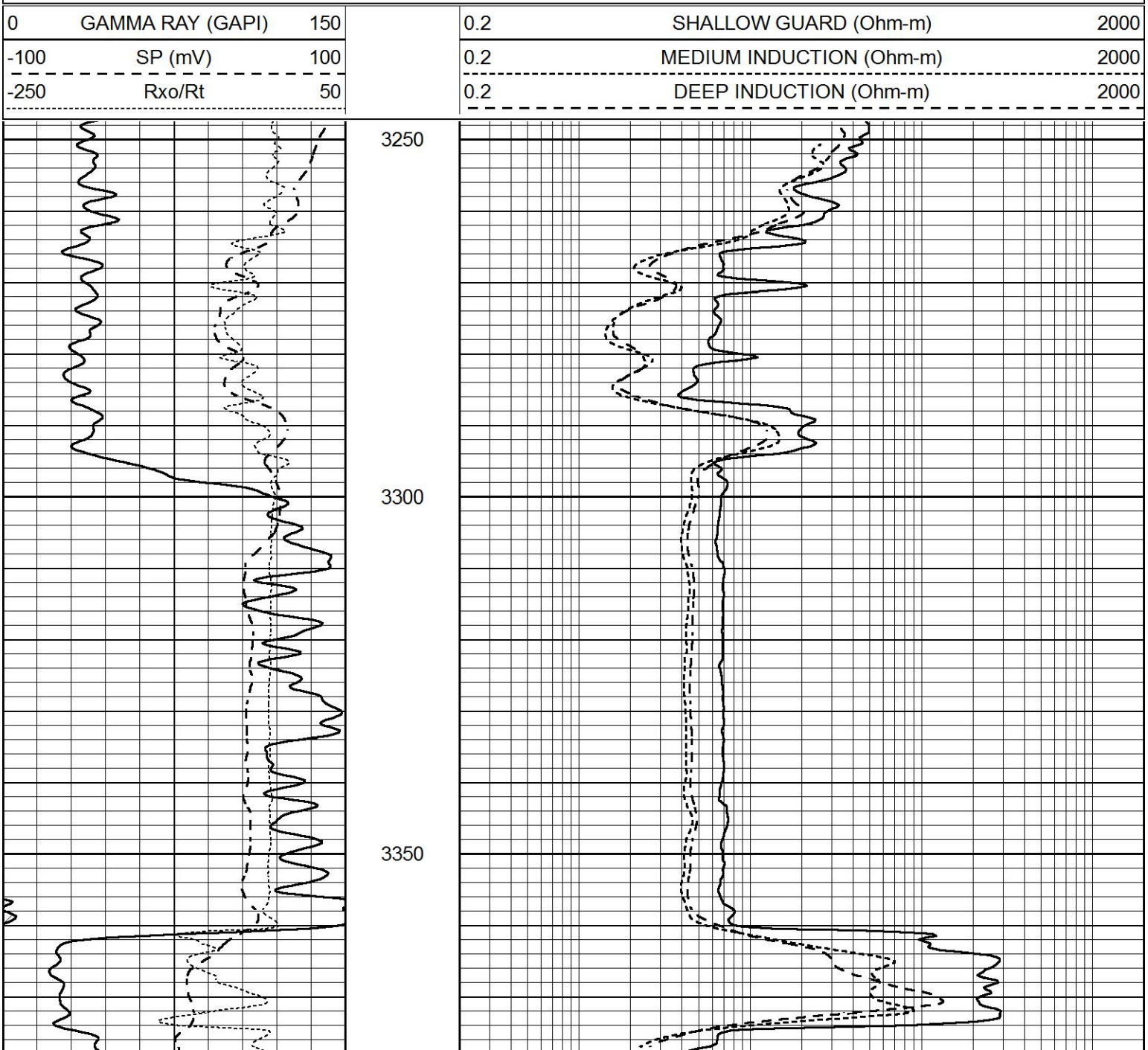

3050
3100
3150
3200

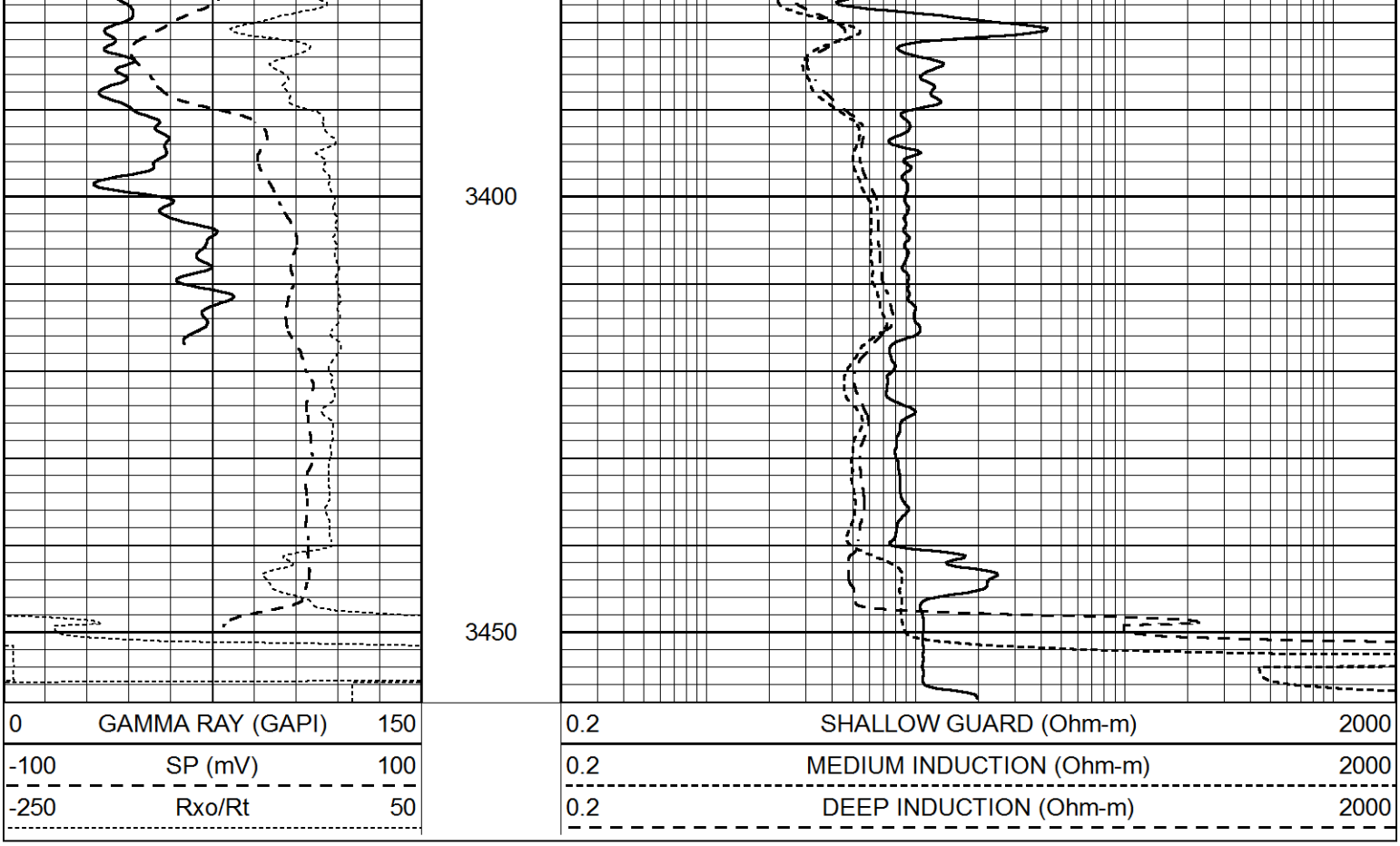

3250
3300
3350
3400
FR GR
FR SP
RxoRt
FR RILD
FR RILM



REPEAT SECTION

Database File	3994pe8.db
Dataset Pathname	pass2.1
Presentation Format	_dil
Dataset Creation	Fri Sep 20 17:06:24 2019
Charted by	Depth in Feet scaled 1:240





Calibration Report

Database File	3994pe8.db
Dataset Pathname	pass2.1
Dataset Creation	Fri Sep 20 17:06:24 2019

Dual Induction Calibration Report

Serial-Model:	FW1410-55-Probe
Surface Cal Performed:	Tue Feb 19 11:44:18 2019
Downhole Cal Performed:	Tue Feb 19 11:44:24 2019
After Survey Verification Performed:	Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 7
Tool Model: Probe1
Performed: Tue Feb 19 11:45:10 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.4300 GAPI/cps