DUAL INDUCTION LOG

Company ABERCROMBIE ENERGY, LLC.
Well GARY #1-33
Field
County LANE State KANSAS

Location: API # : 15-101-22647-0000
2290' FNL & 200' FWL
SEC 33 TWP 17S RGE 27W

Other Services
CDL/CNL
PE

Elevation
K.B. 2705
D.F. 2703
G.L. 2700

Permanent Datum GROUND LEVEL Elevation 2700
Log Measured From KELLY BUSHING 5' A.G.L
Drilling Measured From KELLY BUSHING

Date	3/12/21		
Run Number	ONE		
Depth Driller	4656		
Depth Logger	4658		
Bottom Logged Interval	4656		
Top Log Interval	00		
Casing Driller	8 5/8" @ 357		
Casing Logger	357		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3000 PPM	
Density / Viscosity	9.3/51		
pH / Fluid Loss	11.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.95 @ 60F		
Rmf @ Meas. Temp	.71 @ 60F		
Rmc @ Meas. Temp	1.14 @ 60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.46 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	122F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	DAVE GOLDAK		

Company ABERCROMBIE ENERGY, LLC.
Well GARY #1-33
Field
County LANE
State KANSAS

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Comments

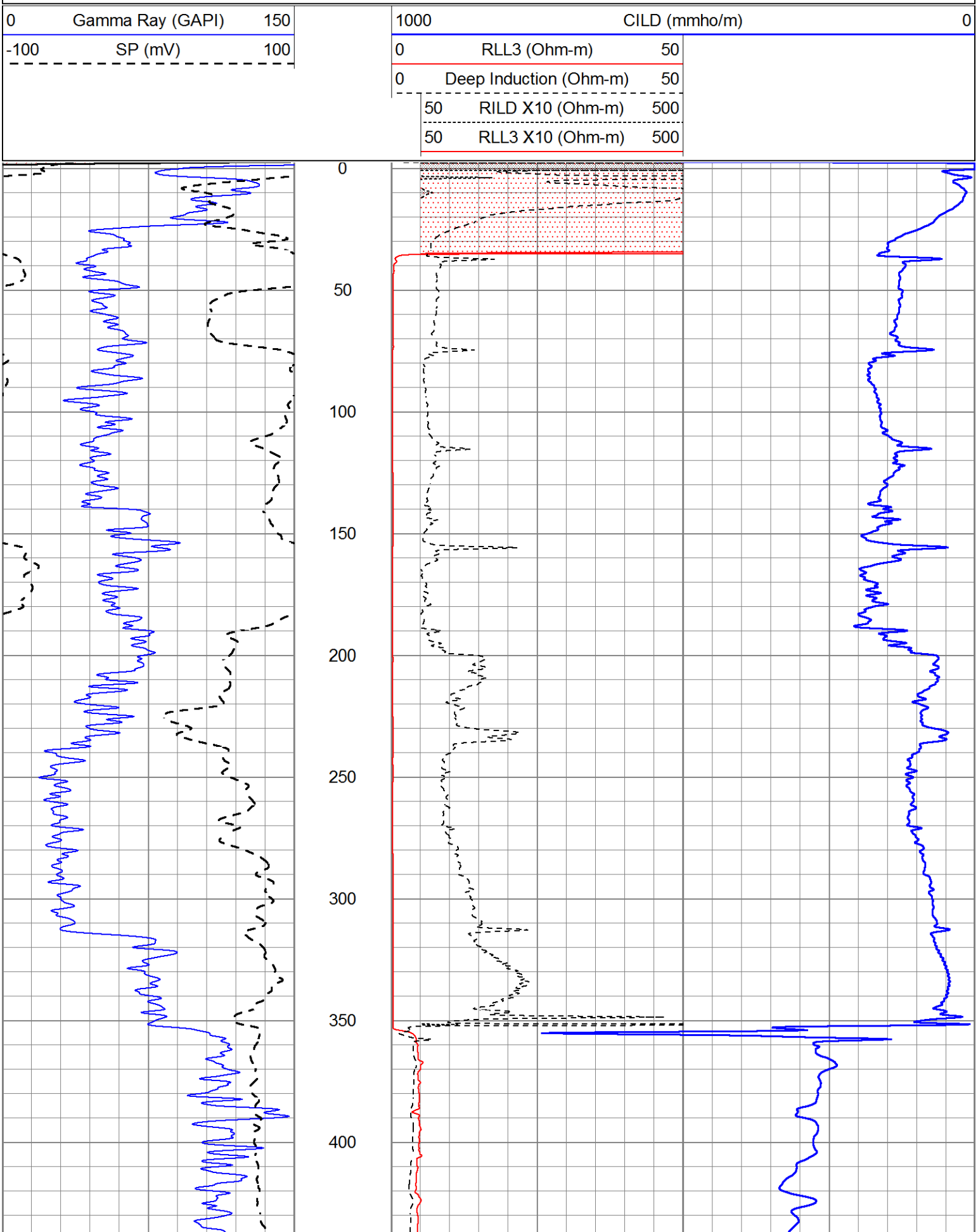
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

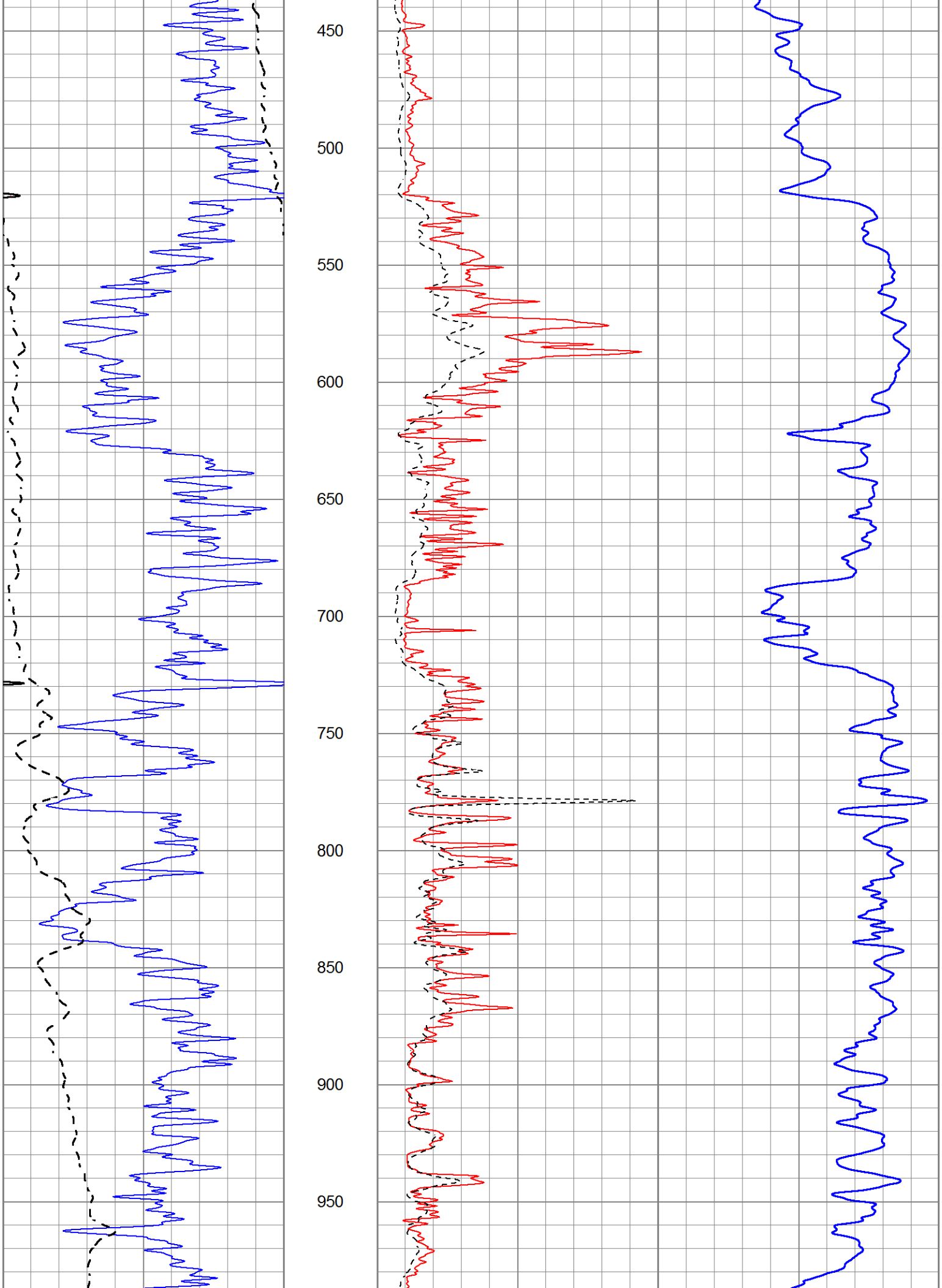
DIRECTIONS

NESS CITY, KS. - WEST TO TURKEY RED RD. - 3 1/2 NORTH TO CURVE WEST
1 WEST - NORTH & EAST INTO

MAIN SECTION

Database File	5211pe.db
Dataset Pathname	pass3.3
Presentation Format	_dil2
Dataset Creation	Fri Mar 12 23:03:34 2021
Charted by	Depth in Feet scaled 1:600

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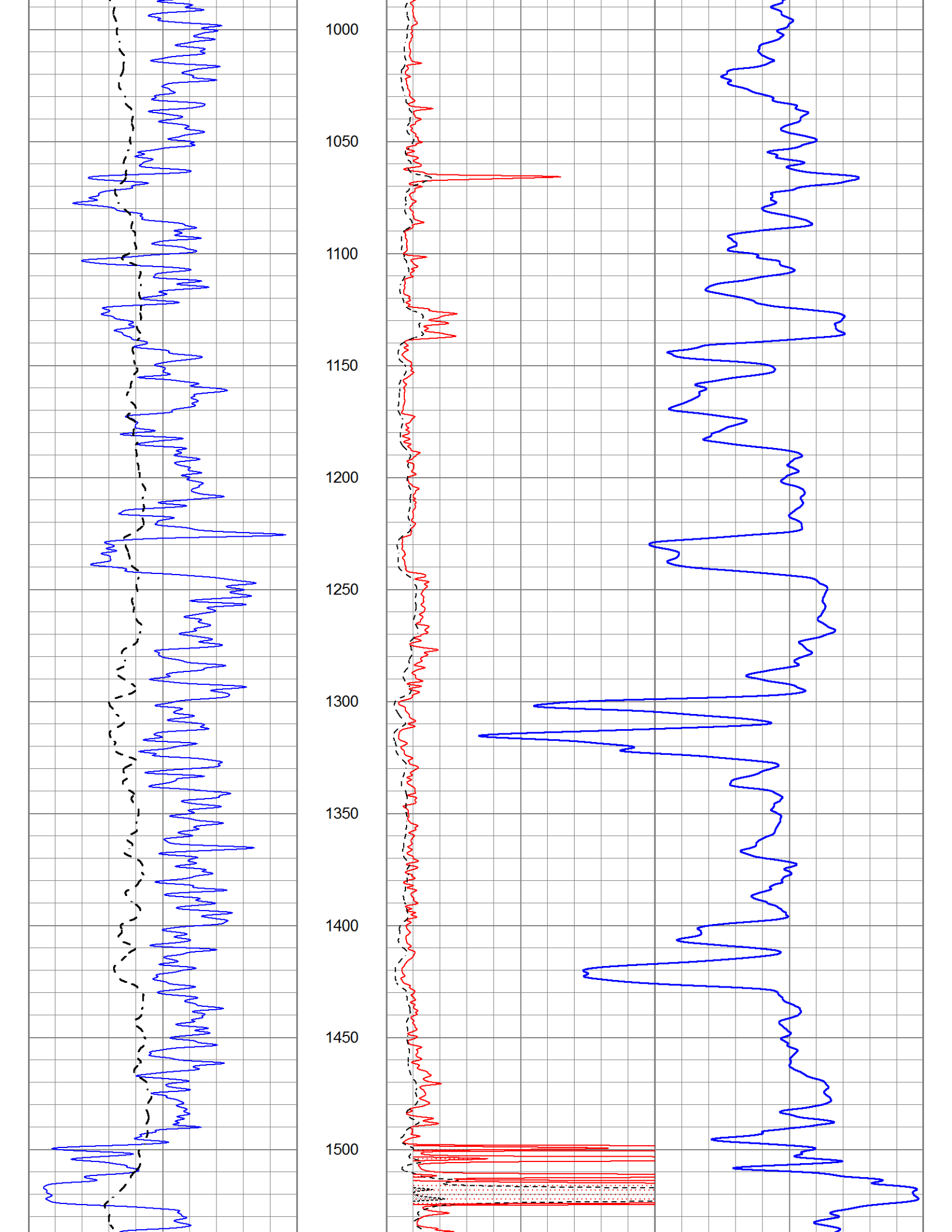
950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1300
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1450
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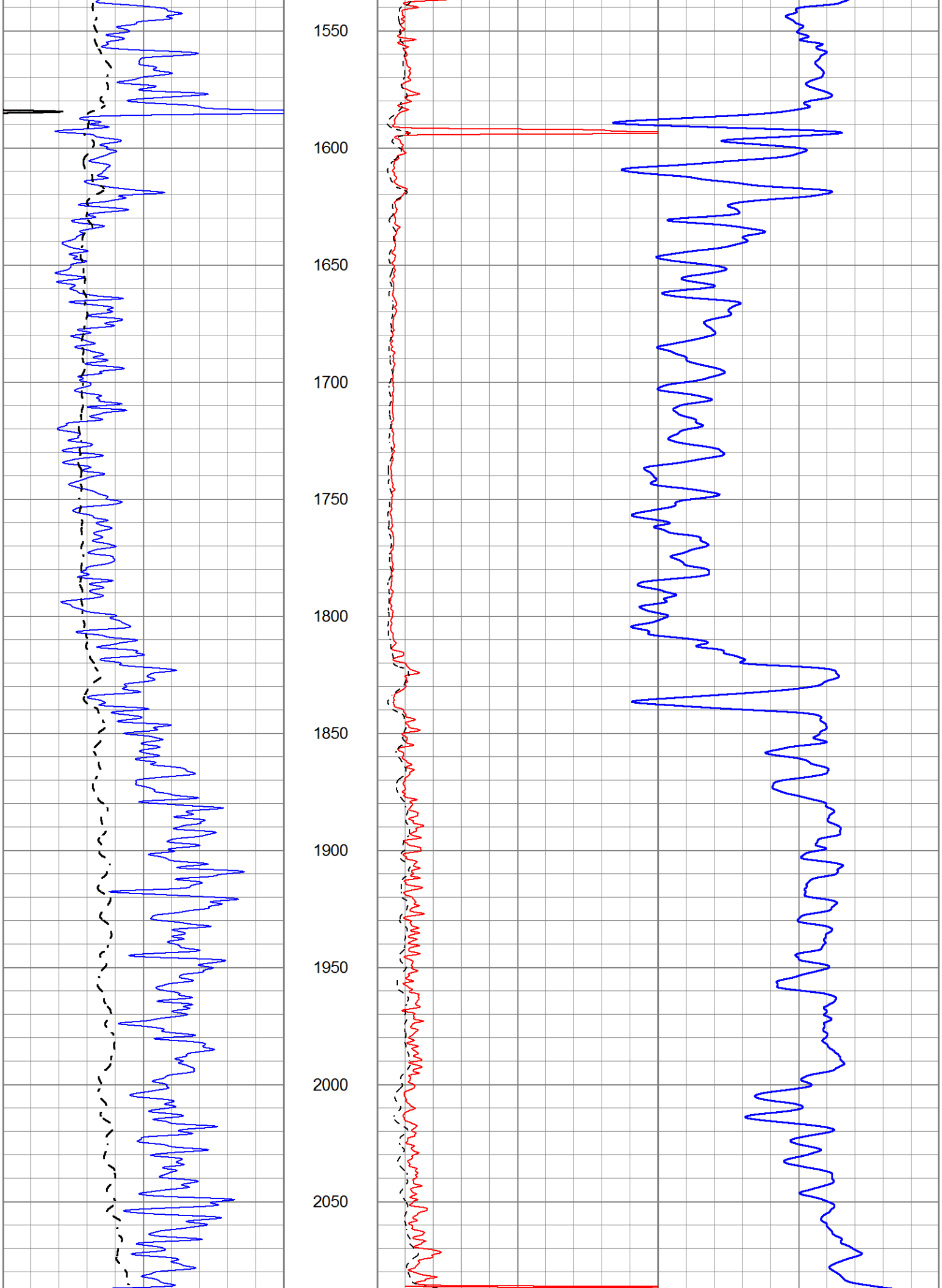
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1700
1750
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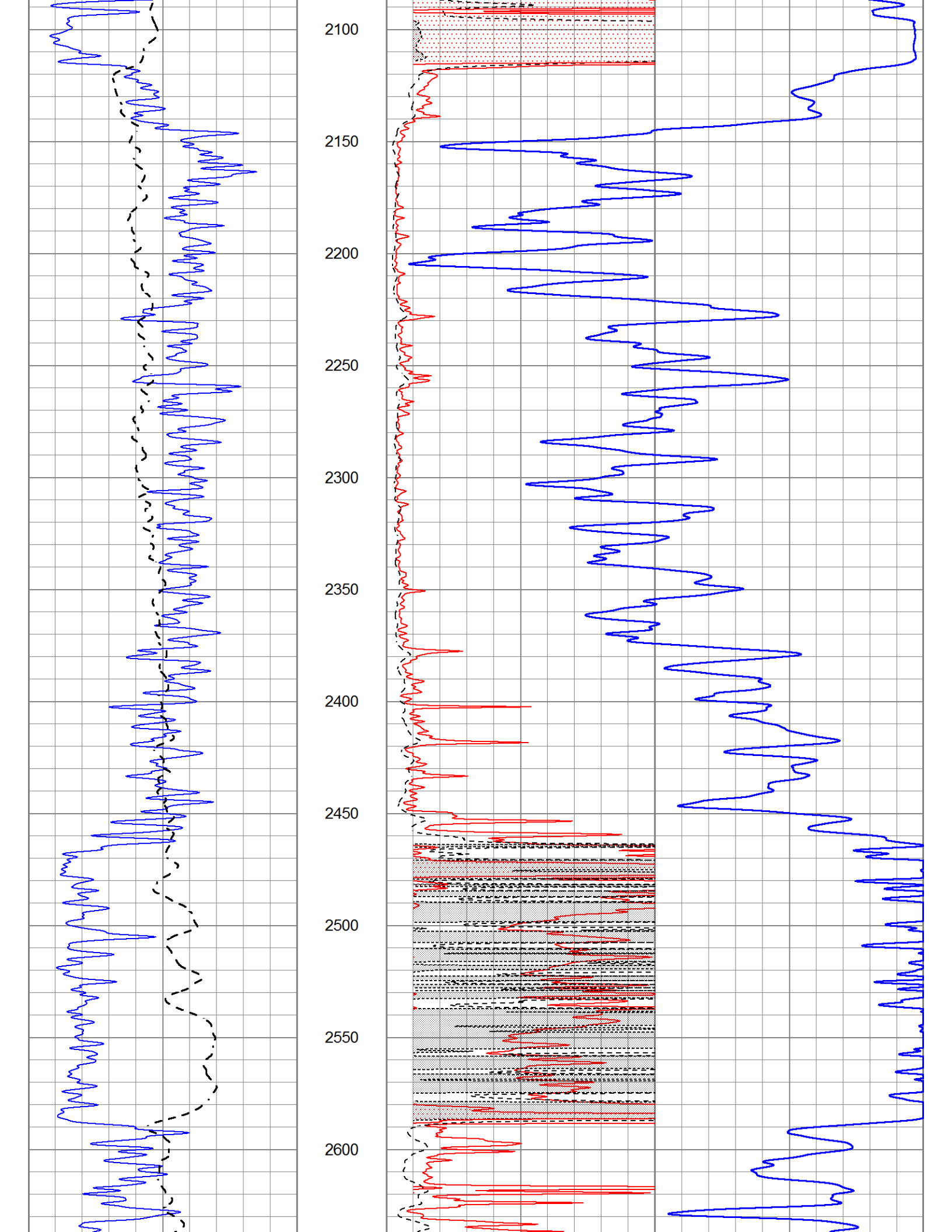
1850
1900
1950
2000
2050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2300
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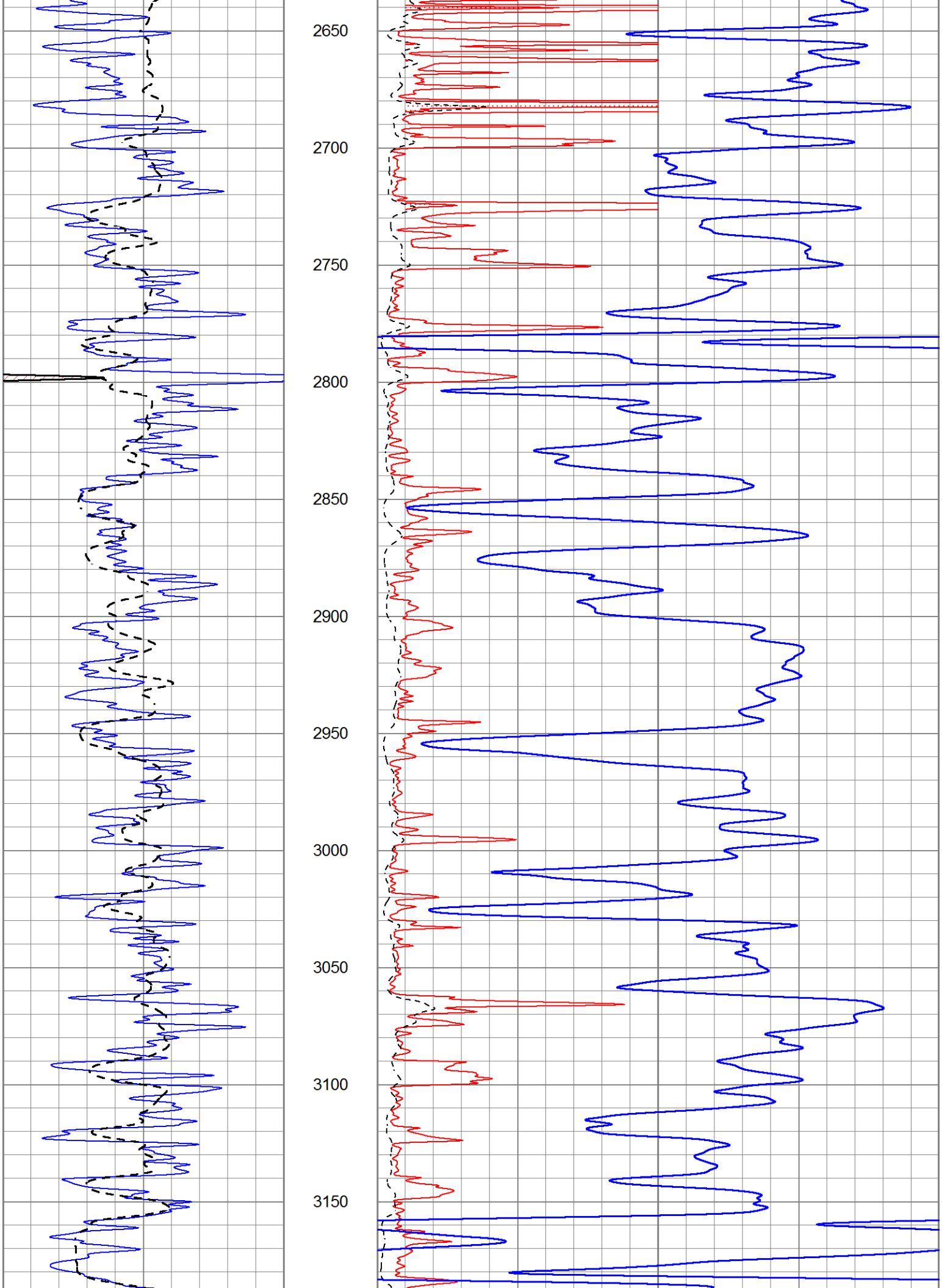
2400
2450
2500
2550
2600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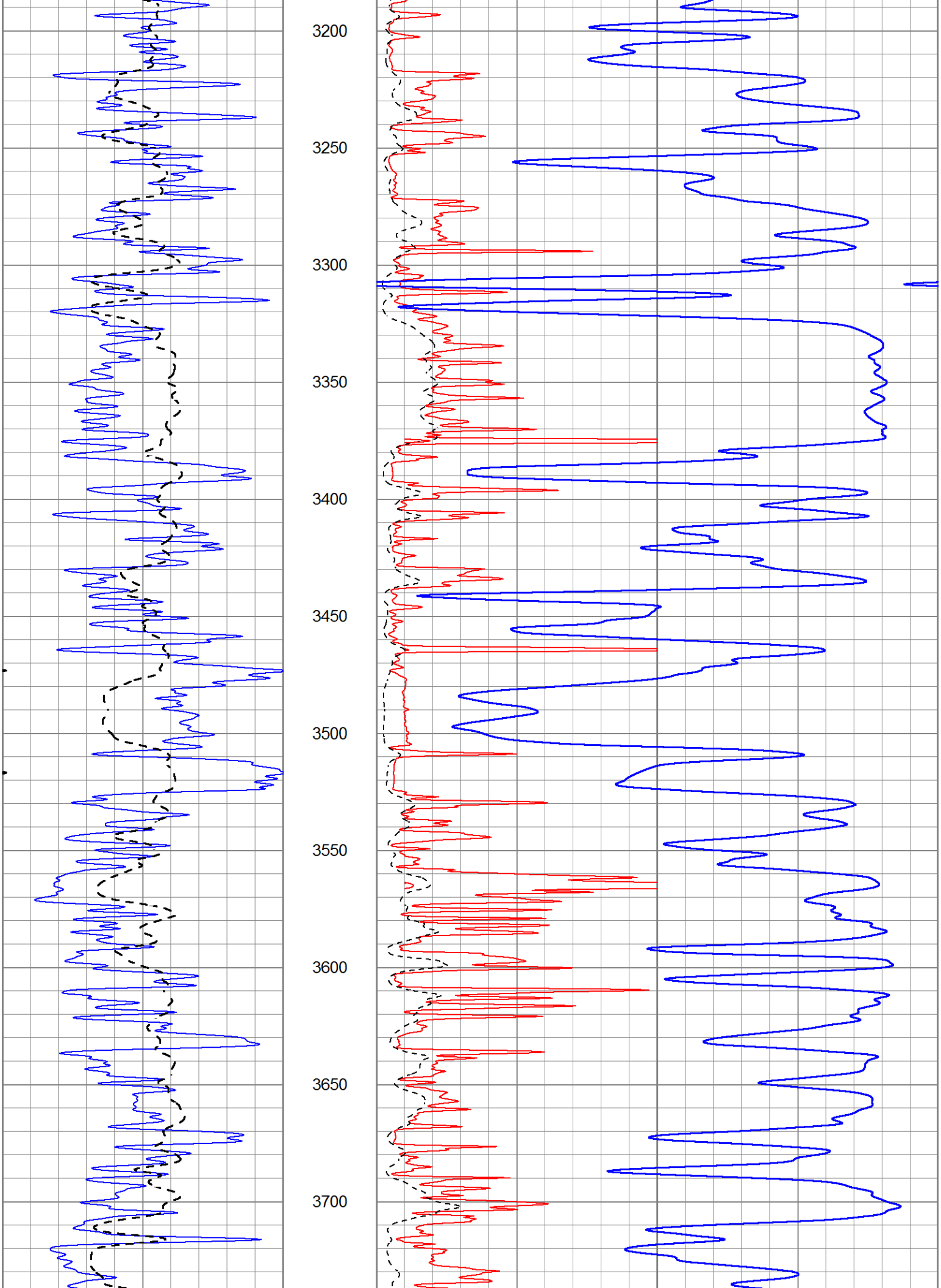
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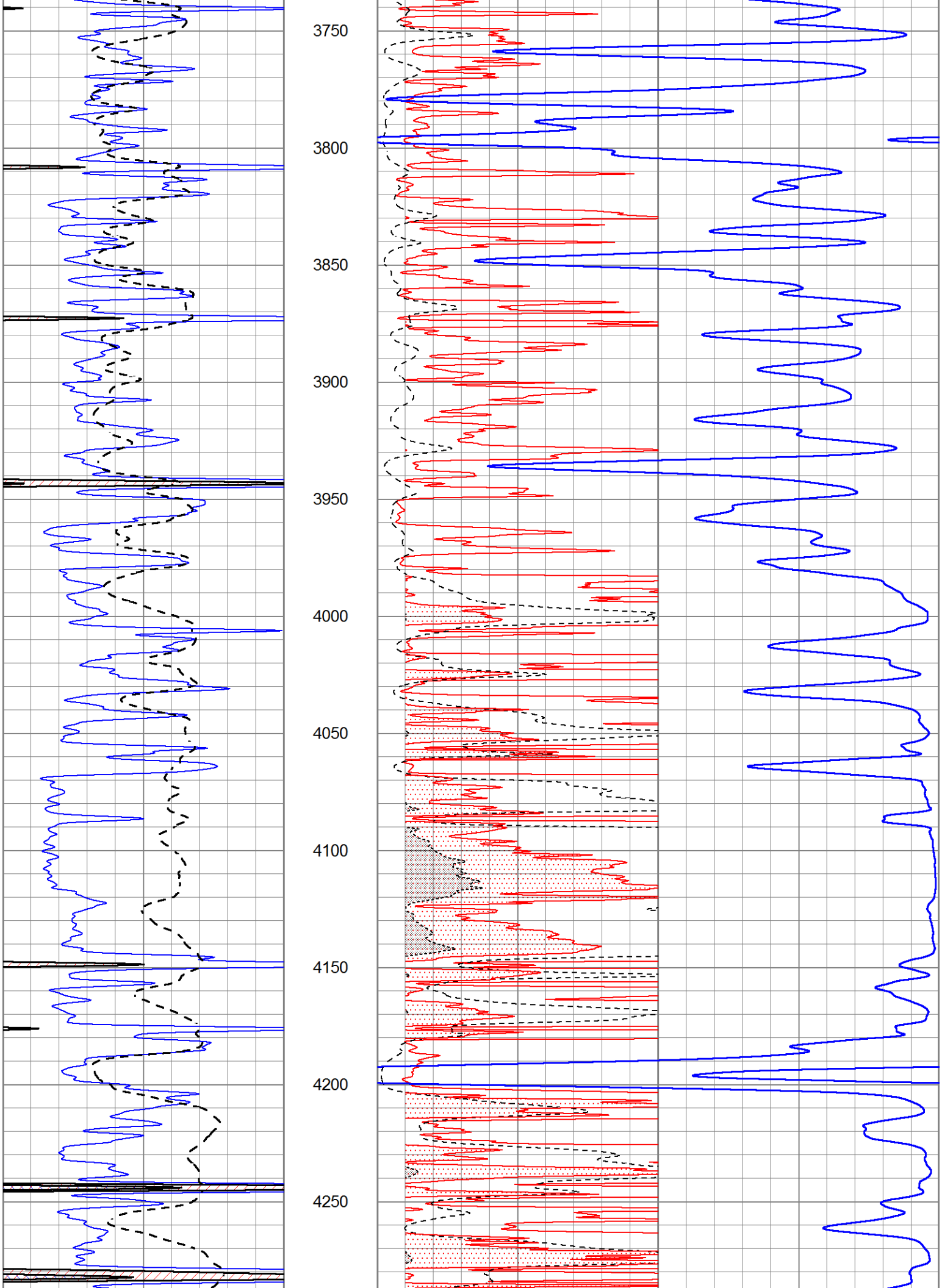
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4000
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4200
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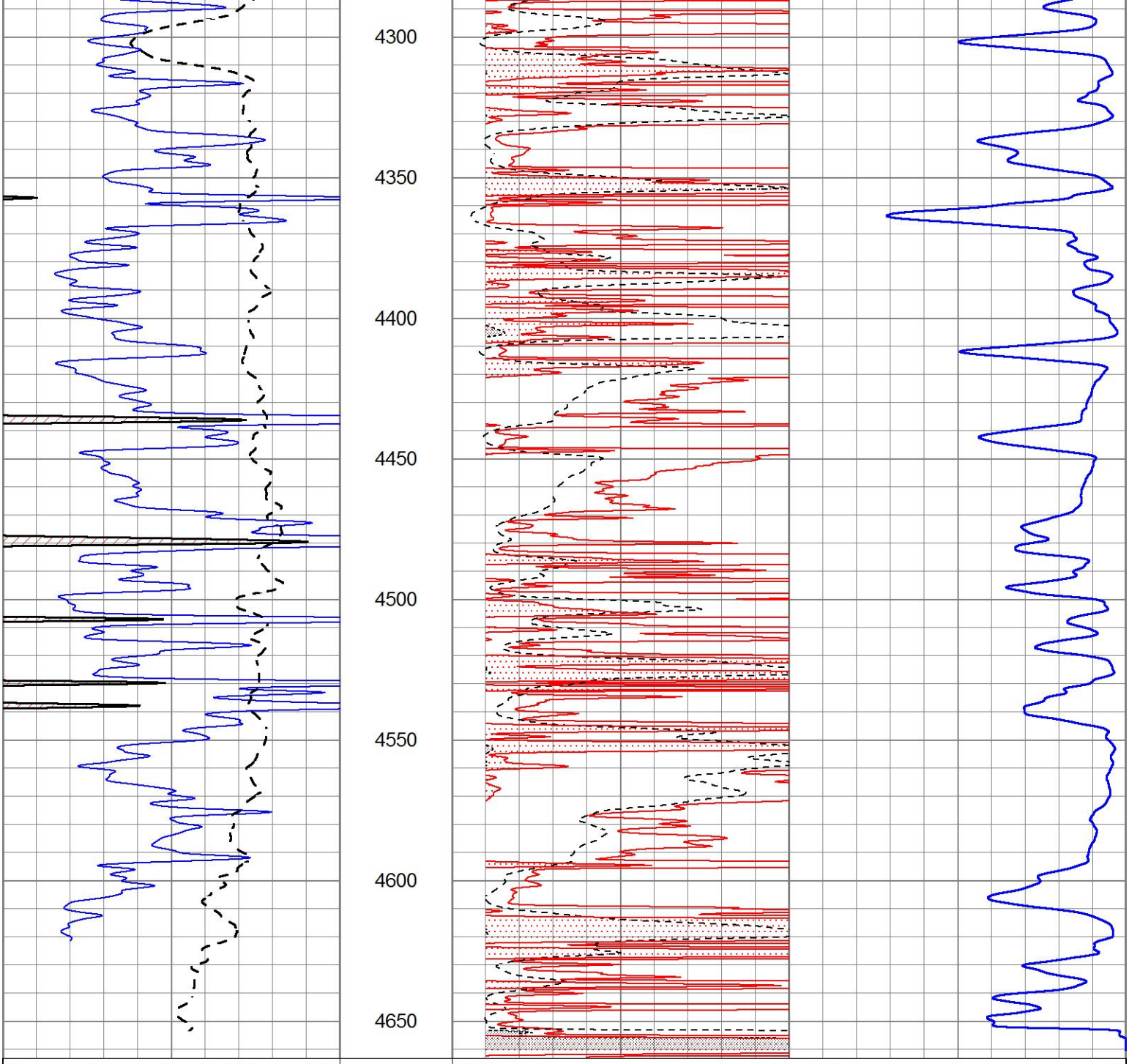
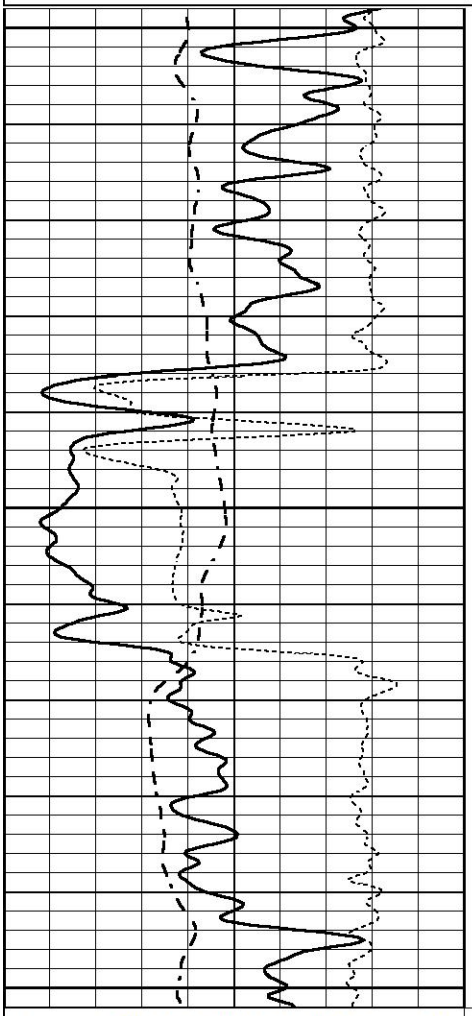


ANHYDRITE

Database File	5211pe.db
Dataset Pathname	pass3.2
Presentation Format	_dil
Dataset Creation	Fri Mar 12 22:35:04 2021
Charted by	Depth in Feet scaled 1:240

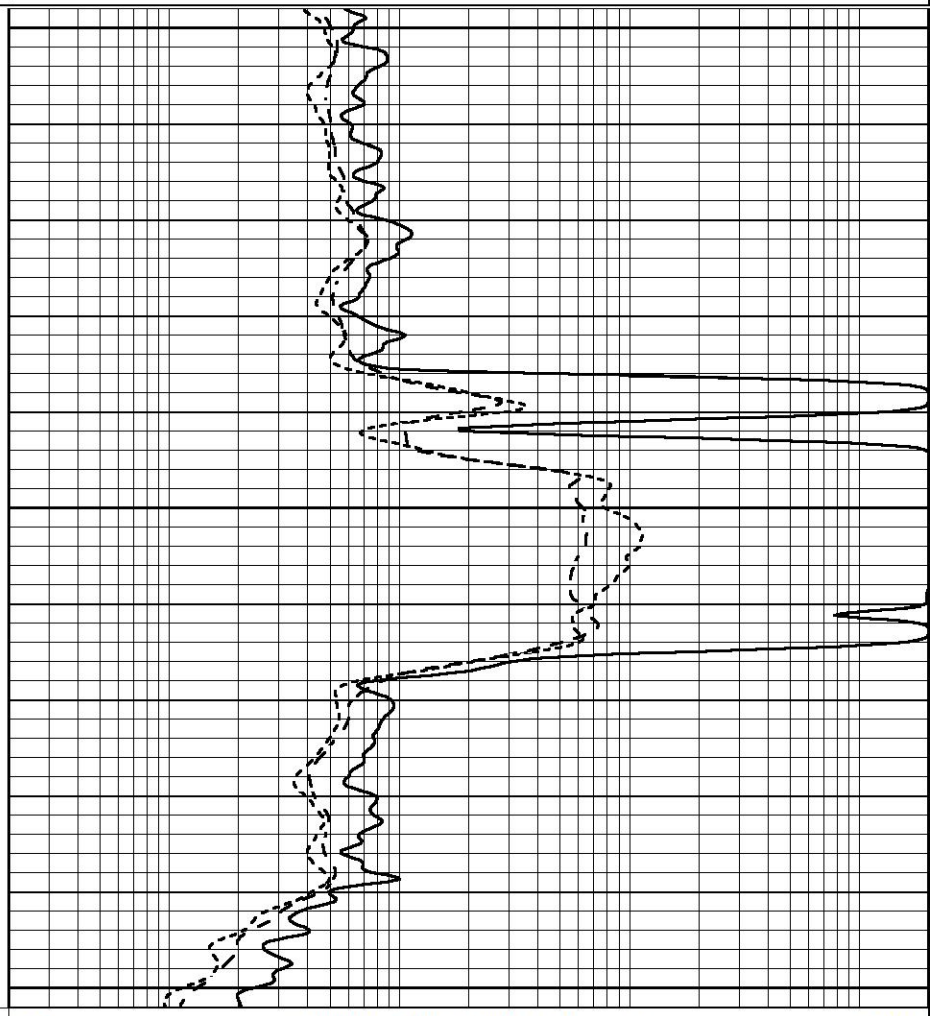
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



2050

2100

2150



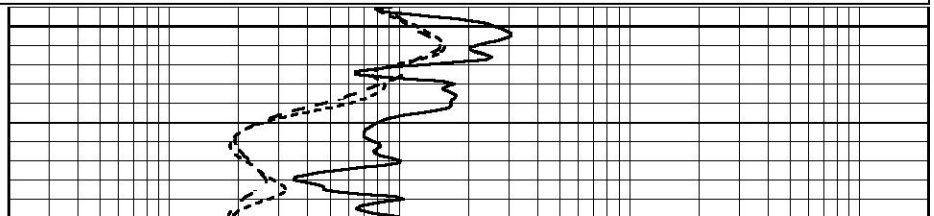
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

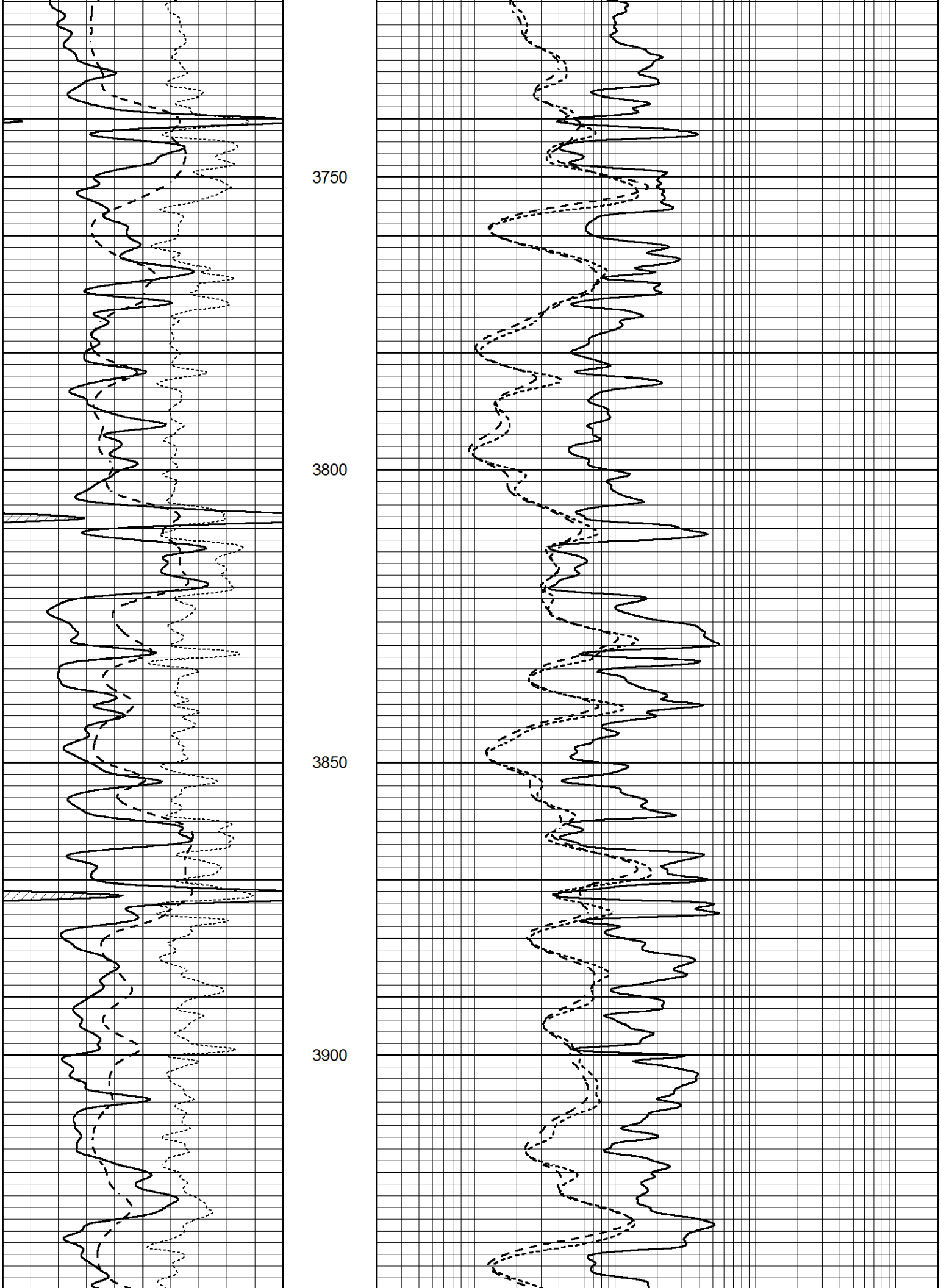
MAIN SECTION

Database File	5211pe.db
Dataset Pathname	pass3.1
Presentation Format	_dil
Dataset Creation	Fri Mar 12 22:19:43 2021
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

3700

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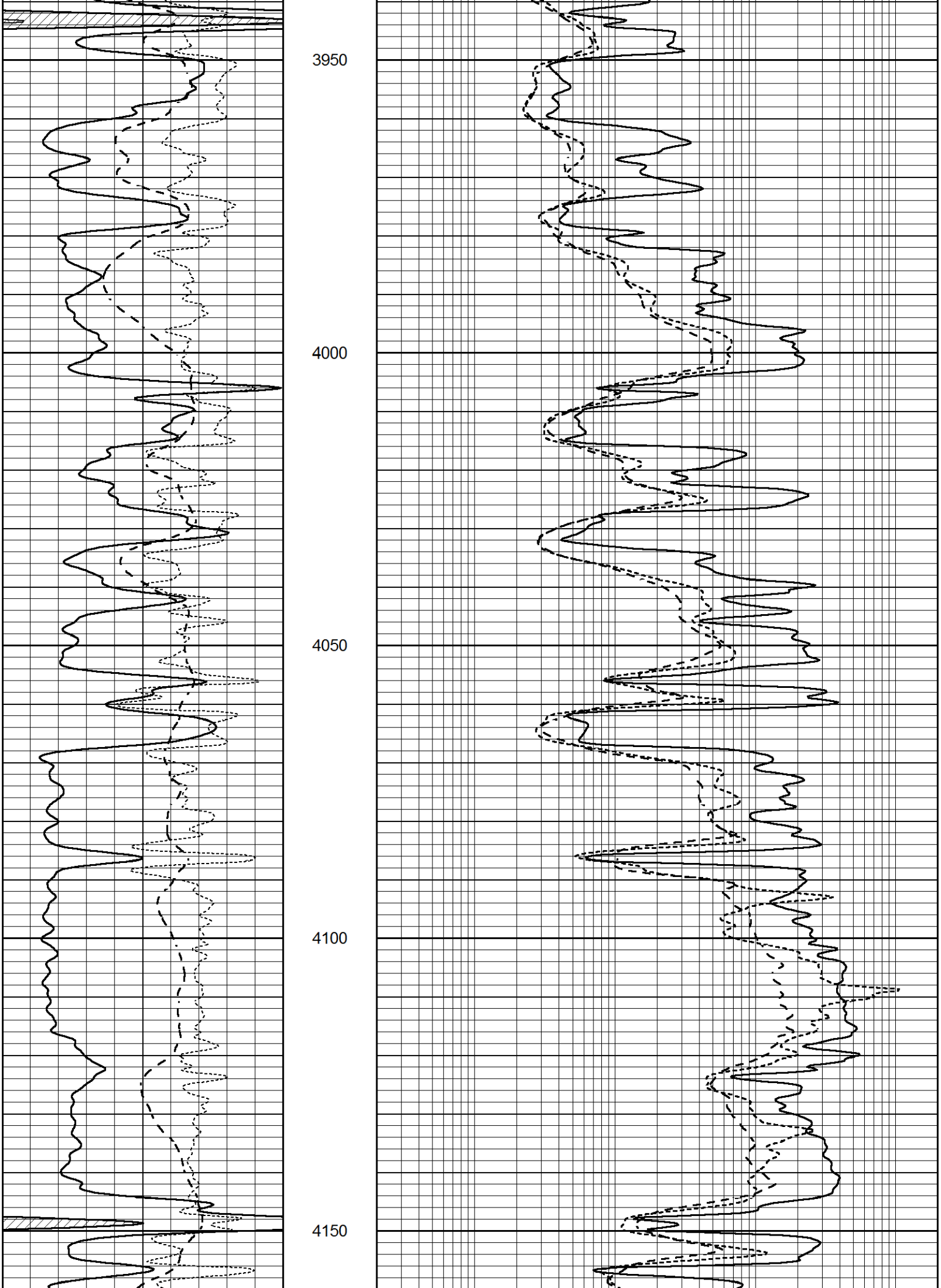
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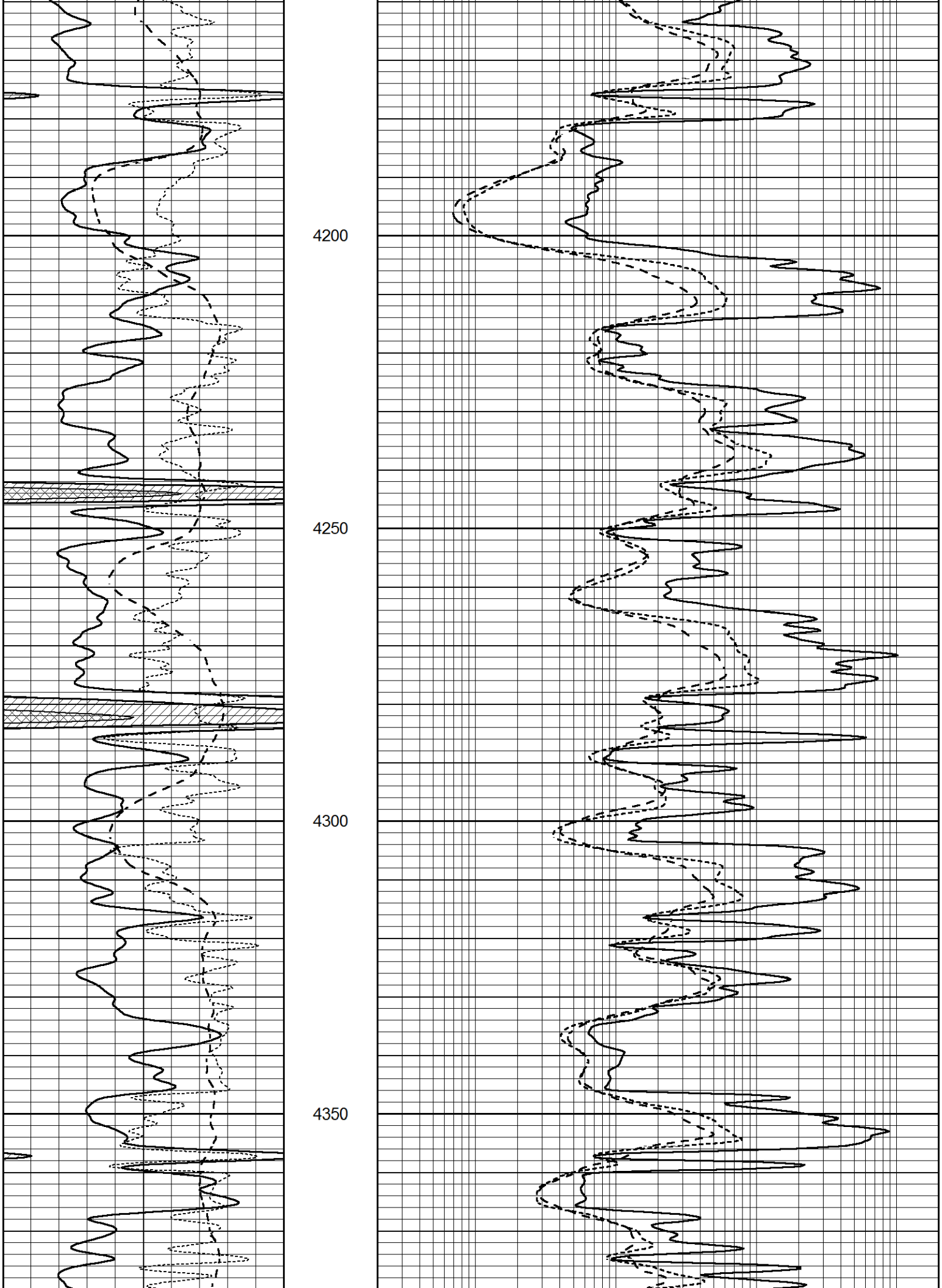
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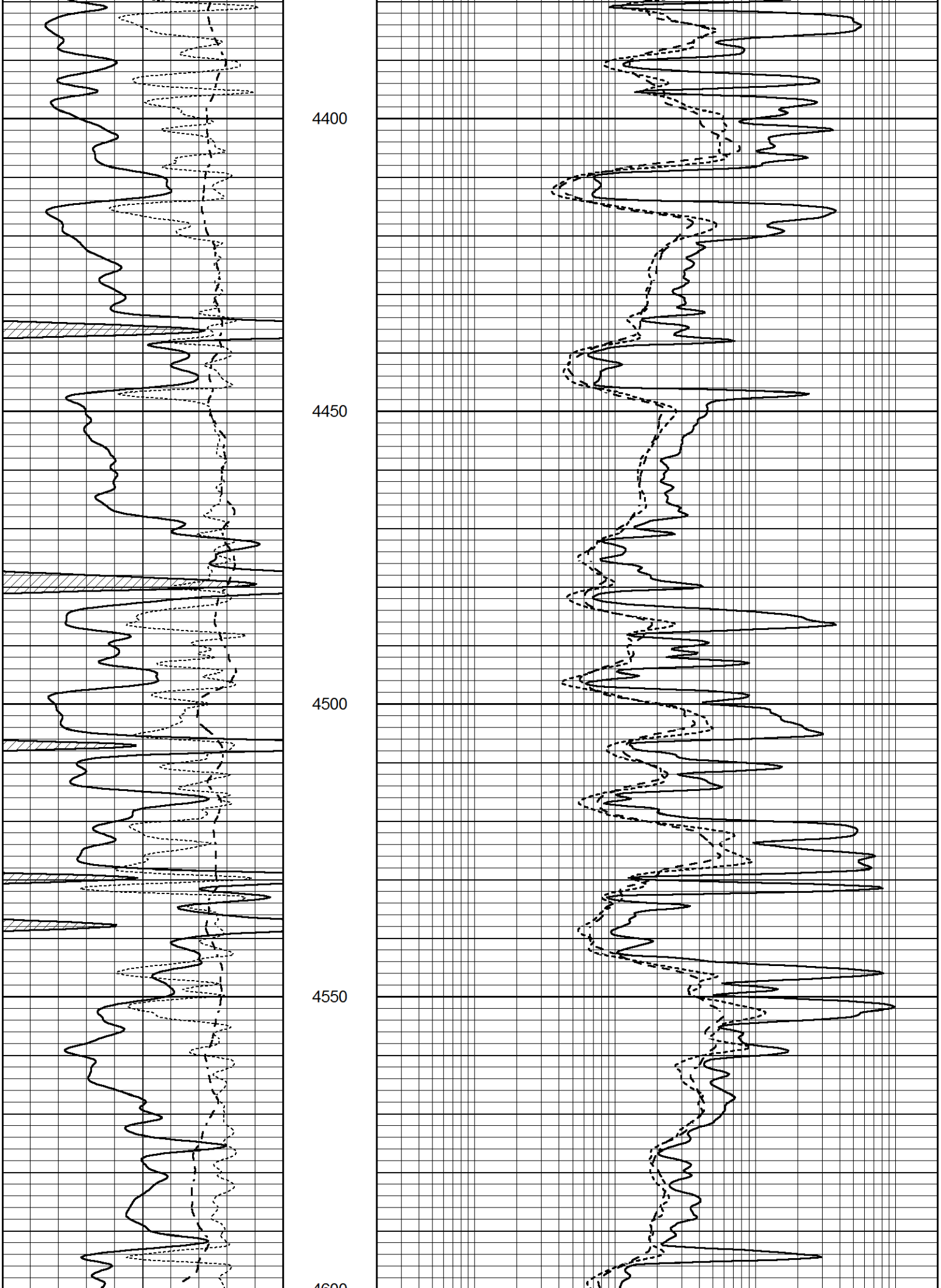
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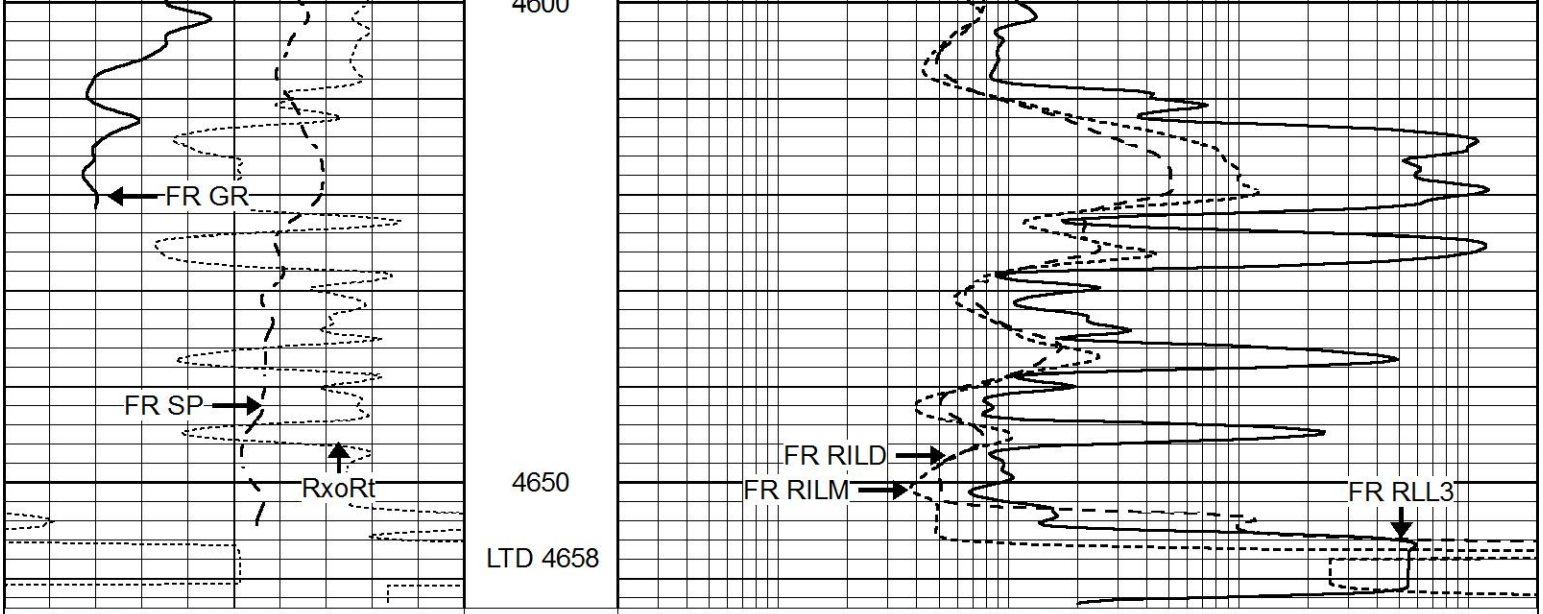


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

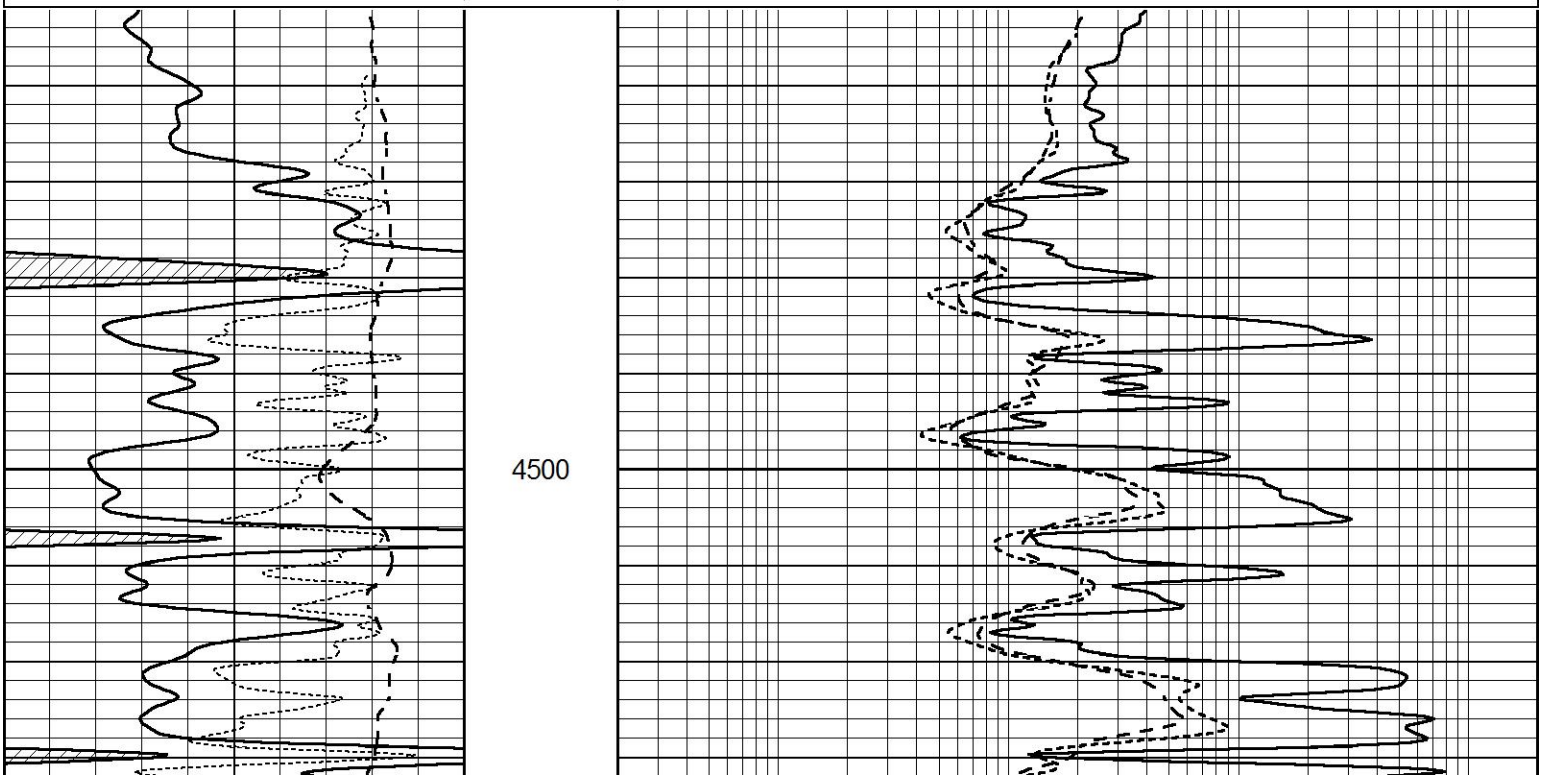
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

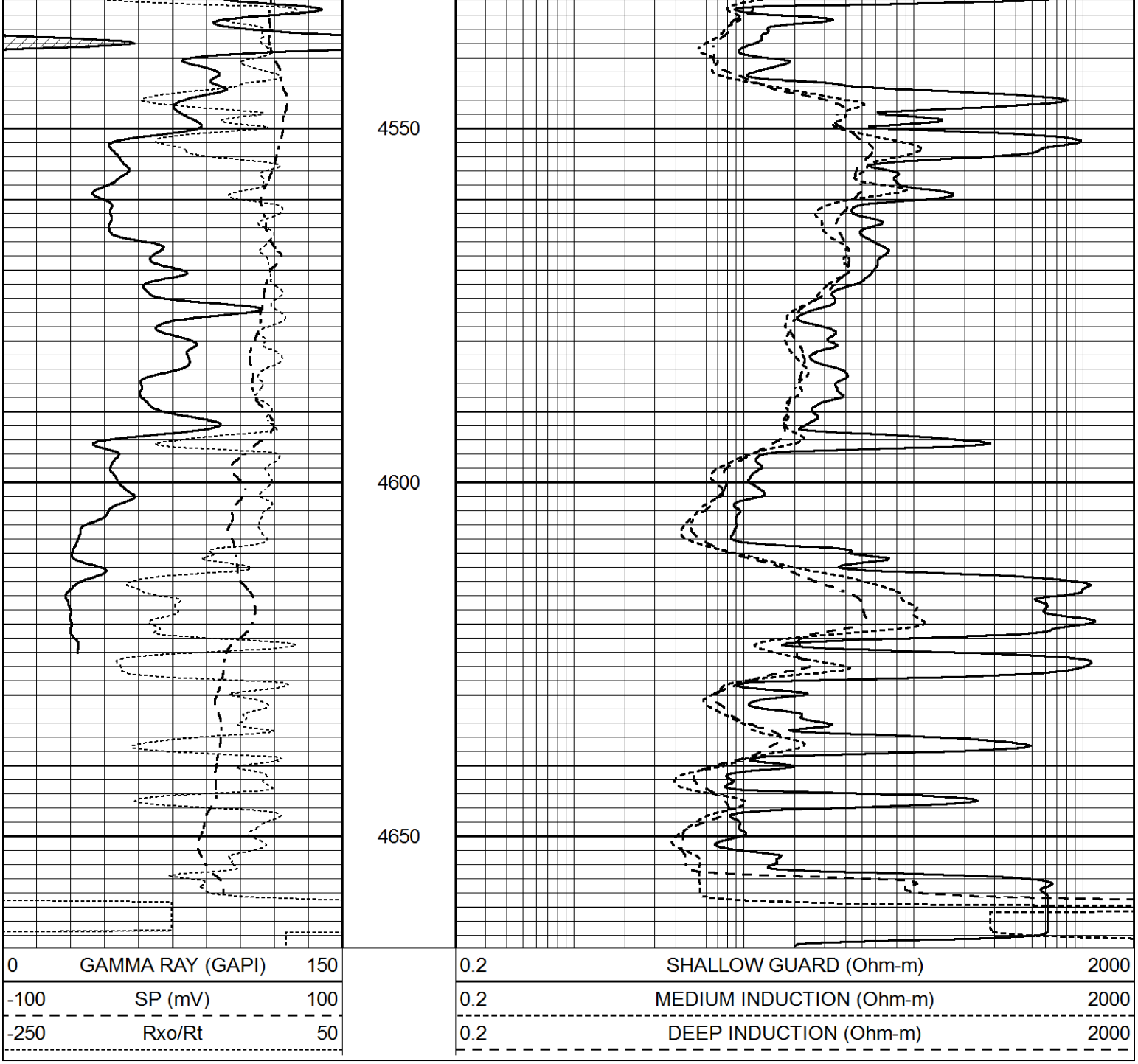
REPEAT SECTION

Database File	5211pe.db
Dataset Pathname	pass2.1
Presentation Format	_dil
Dataset Creation	Fri Mar 12 22:16:16 2021
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





Calibration Report

Database File	5211pe.db
Dataset Pathname	pass3.1
Dataset Creation	Fri Mar 12 22:19:43 2021

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		

Litho Density Calibration Report

Serial: 140703
Model: V4_10P
Source Number: 74GBq-19

Master Calibration — Performed: Wed Dec 02 12:04:44 2020

	Background	Aluminum	Magnesium	
Window 1	595.38	5386.50	23898.92	cps
Window 2	52.78	1248.21	5993.75	cps
Window 4	251.36	1200.30	5155.55	cps
Window 5	545.15	9066.30	17240.12	cps
Window 6	43.35	1491.73	2929.24	cps
Window 8	258.76	2917.82	5450.26	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha:	: -1.8726	SS Alpha:	: -0.7656	LS CPE:	: 1.0742
LS Beta:	: 127345.0723	SS Beta:	: 20293.3834	SS CPE:	: 1.5427

Before Survey Backround Counts Verification — Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

After Survey Background Counts Verification — Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps

Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration — Performed: Wed Dec 02 12:04:44 2020

Results	Readings	References (in)			
Low	High	Low	High	Gain	Offset
8003.0	11159.9	8.0	14.0	0.0	-7.2

Before Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

After Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

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 Jan 19 17:50:08 2021

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5300 GAPI/cps