SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company NORSTAR PETROLEUM, INC.

Well WJLH KOONS #1-36

Field

County THOMAS State KANSAS

Location: API # : 15-193-20824

2371' FSL & 1005' FEL

SEC 36 TWP 10S RGE 35W

Other Services
CDL/CNL
MICRO

Elevation
K.B. 3294
D.F.
G.L. 3289

Permanent Datum GROUND LEVEL Elevation 3289
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Company NORSTAR PETROLEUM, INC.
Well WJLH KOONS #1-36
Field
County THOMAS
State KANSAS

Date	11-2-11		
Run Number	ONE		
Depth Driller	4900		
Depth Logger	4901		
Bottom Logged Interval	4899		
Top Log Interval	00		
Casing Driller	260		
Casing Logger	260		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 64		
pH / Fluid Loss	10.0 / 11.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.45 @ 71F		
Rmf @ Meas. Temp	0.34 @ 71F		
Rmc @ Meas. Temp	0.54 @ 71F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.260 @ 124F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	12:30 A.M.		
Maximum Recorded Temperature	124F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	BOB ELDER		

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Comments

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: MONUMENT, 2W TO HIGHWAY #25, 2N, TO RD. "A", 6W, 1/2N, W INTO.

MAIN SECTION

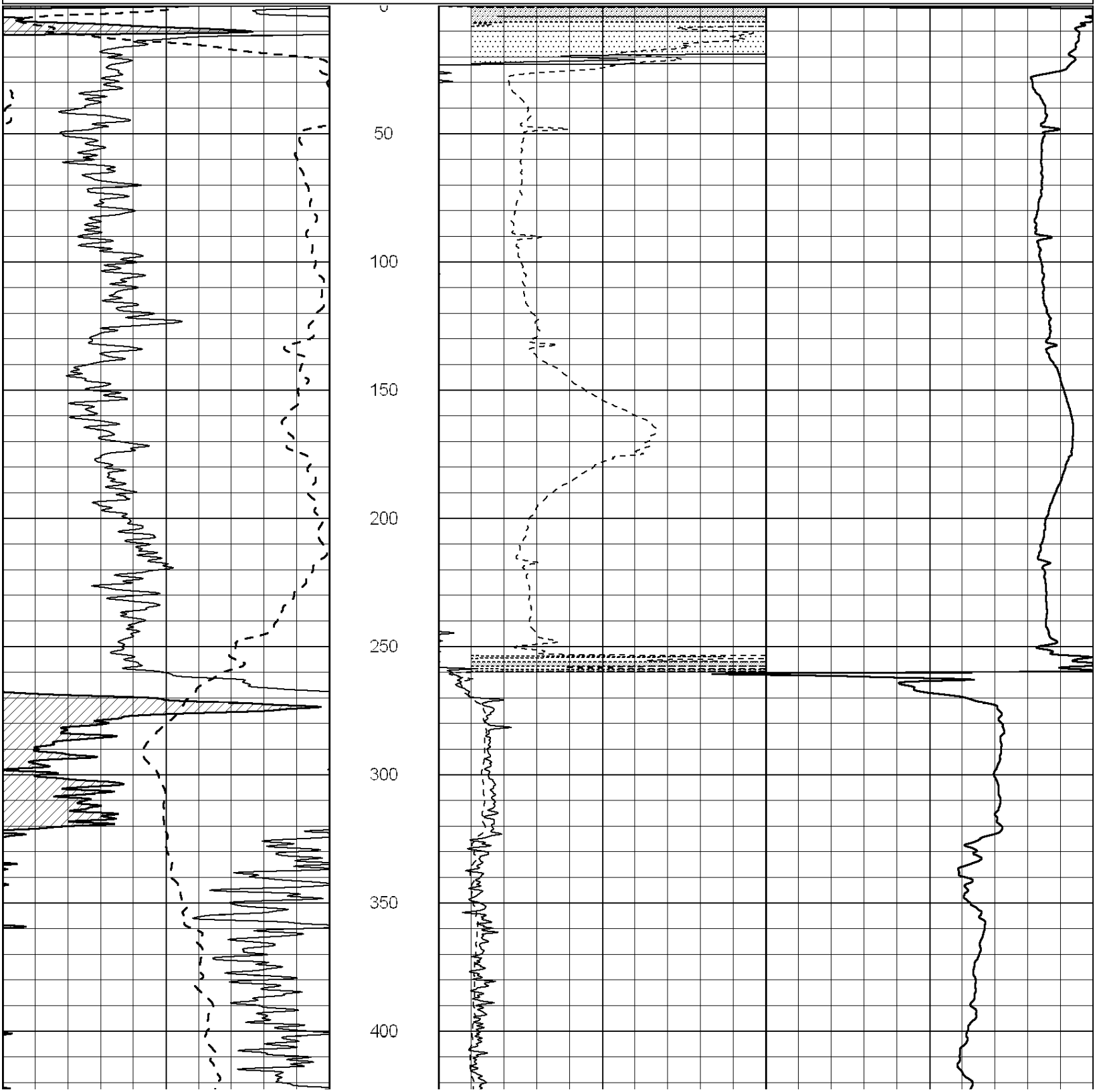
SUPERIOR
Hays,

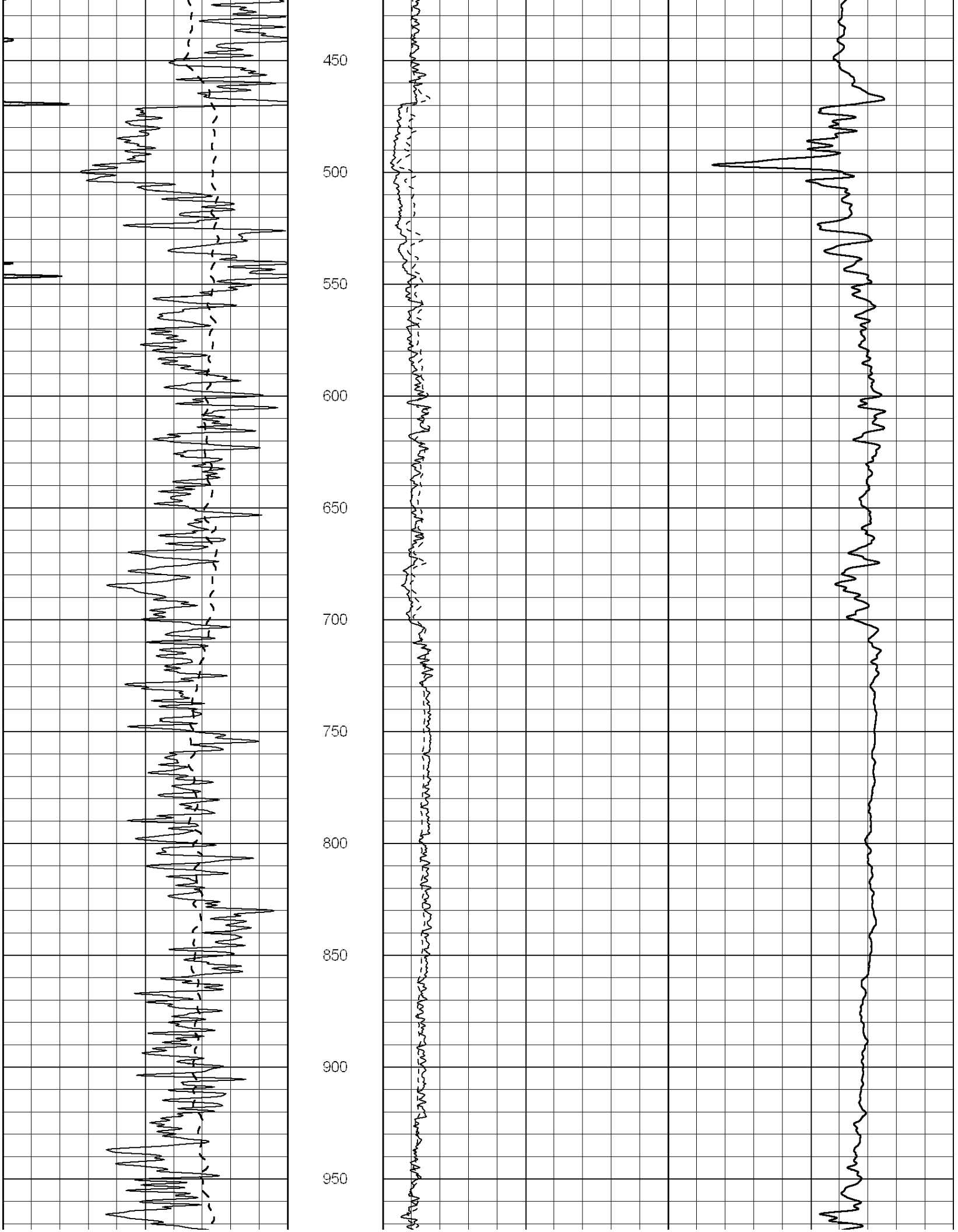
Kansas

Database File:	007776ddn.db
Dataset Pathname:	pass3.A
Presentation Format:	dil2
Dataset Creation:	Wed Nov 02 02:31:23 2011
Charted by:	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
1000	CILD (mmho/m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

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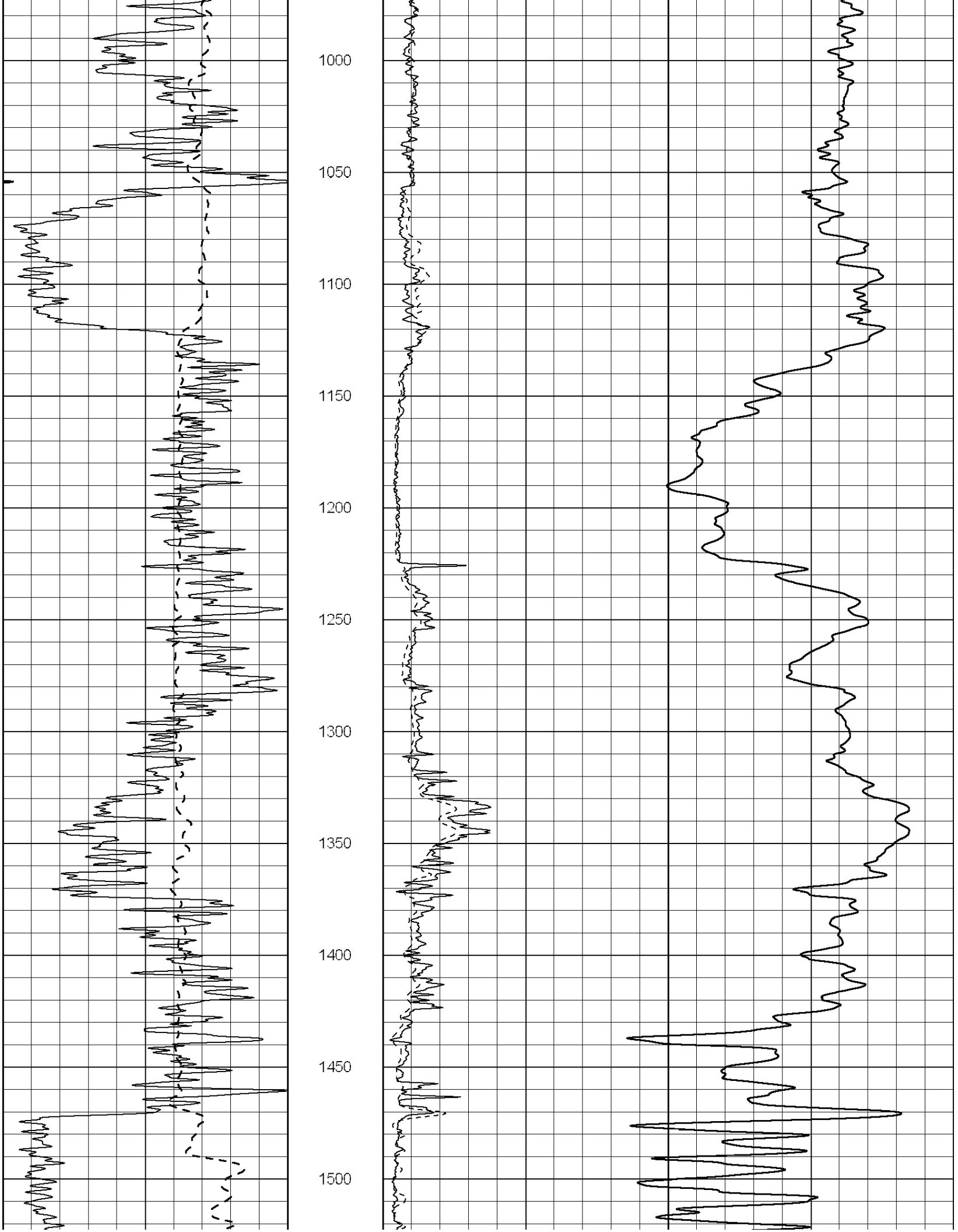
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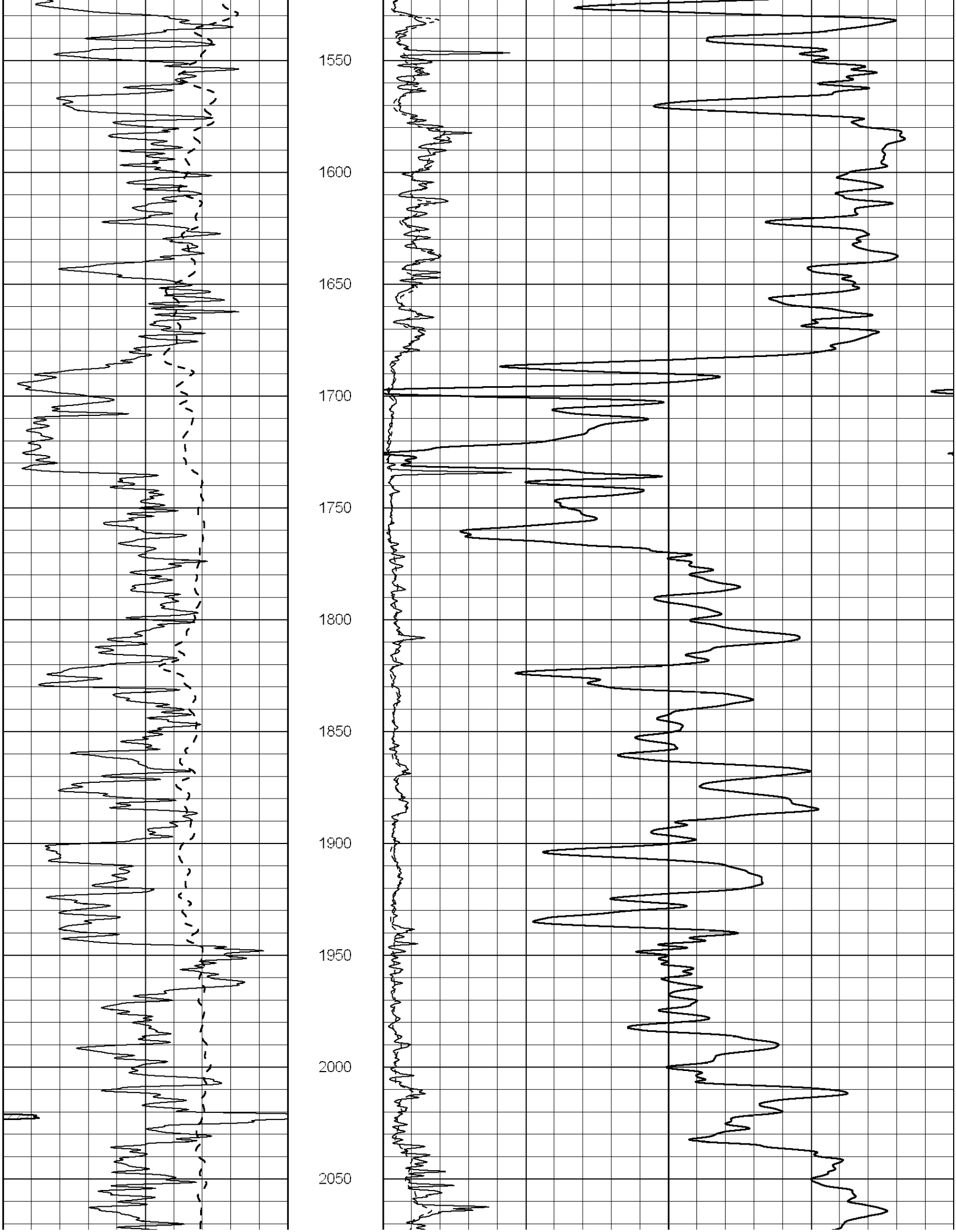
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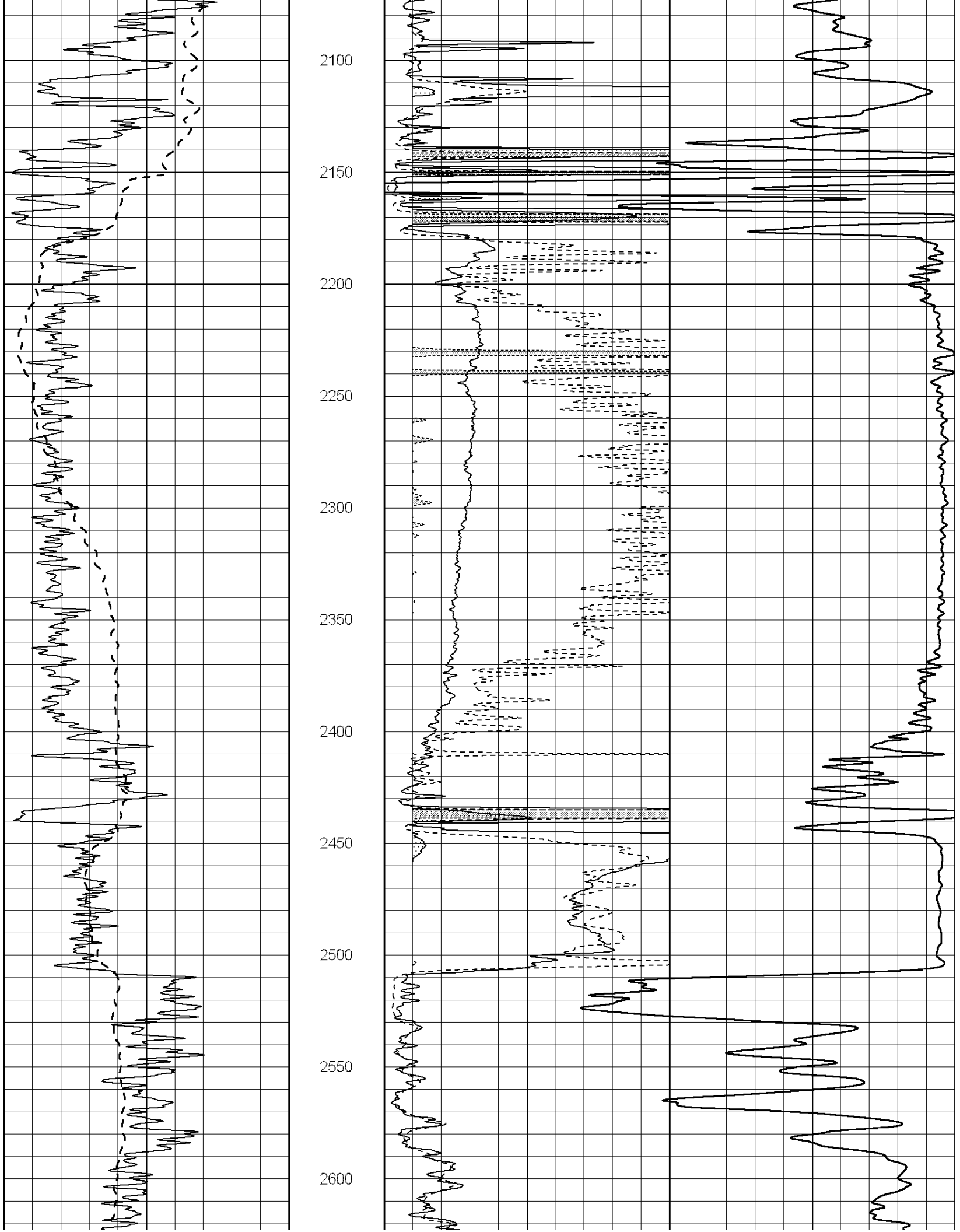
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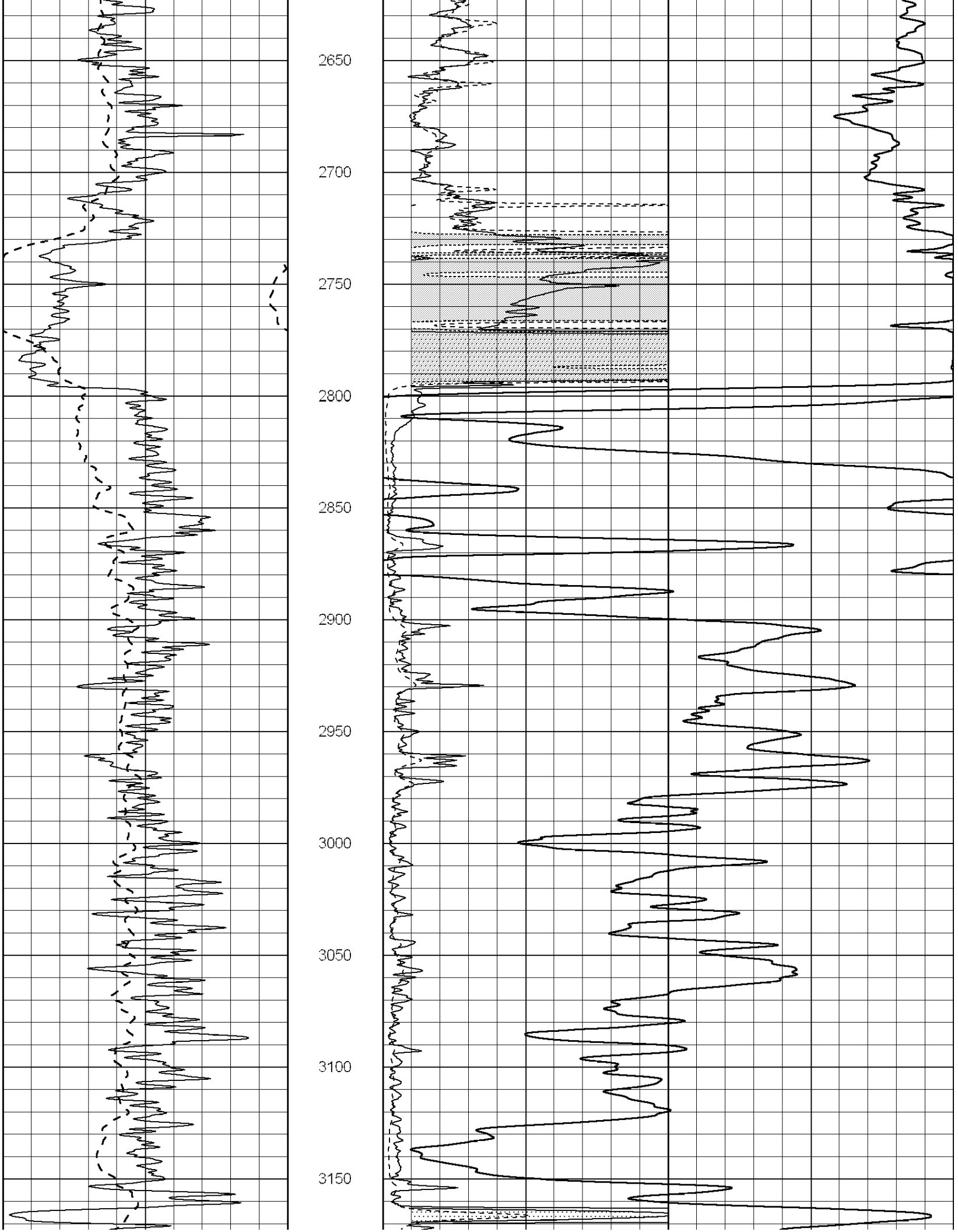
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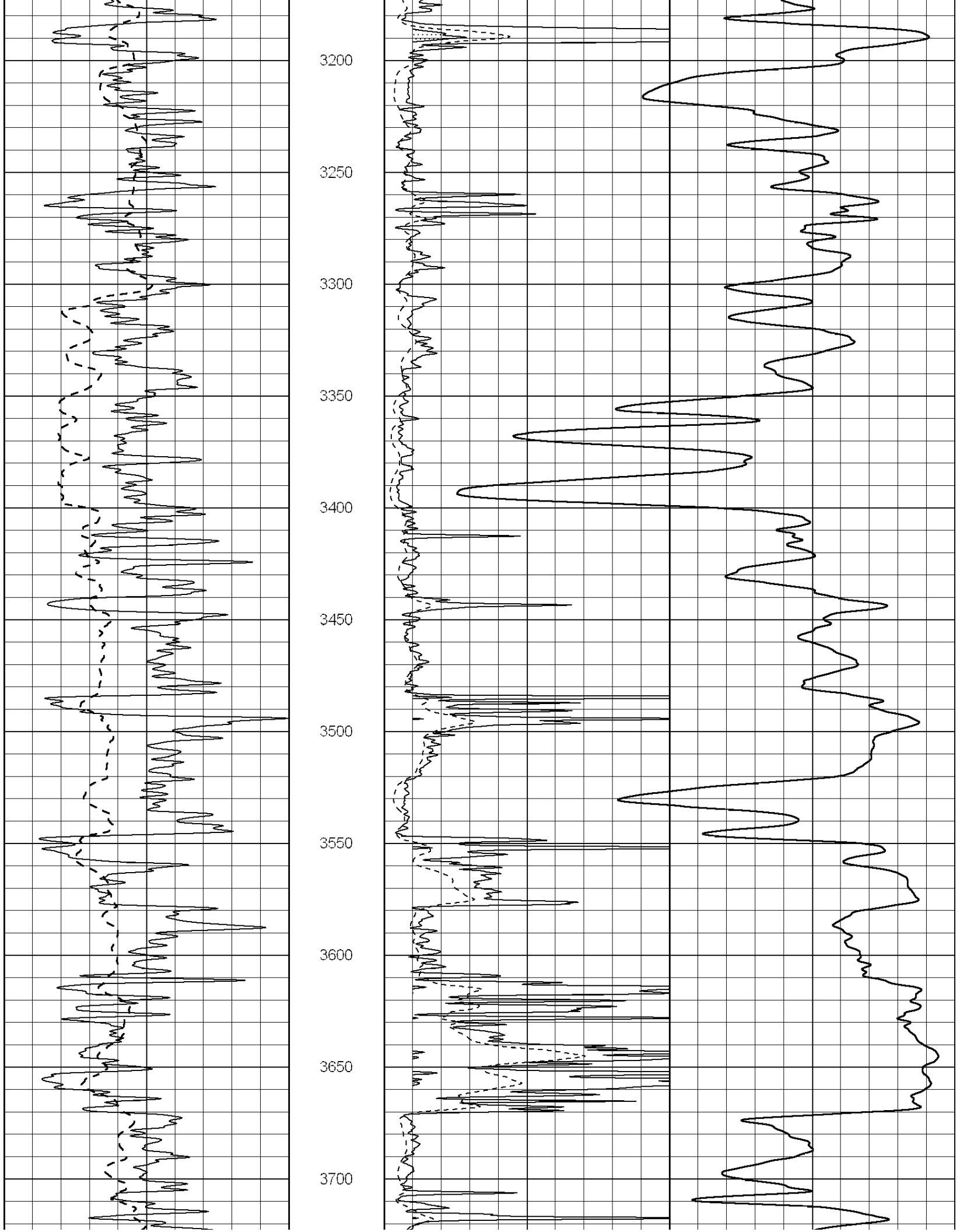
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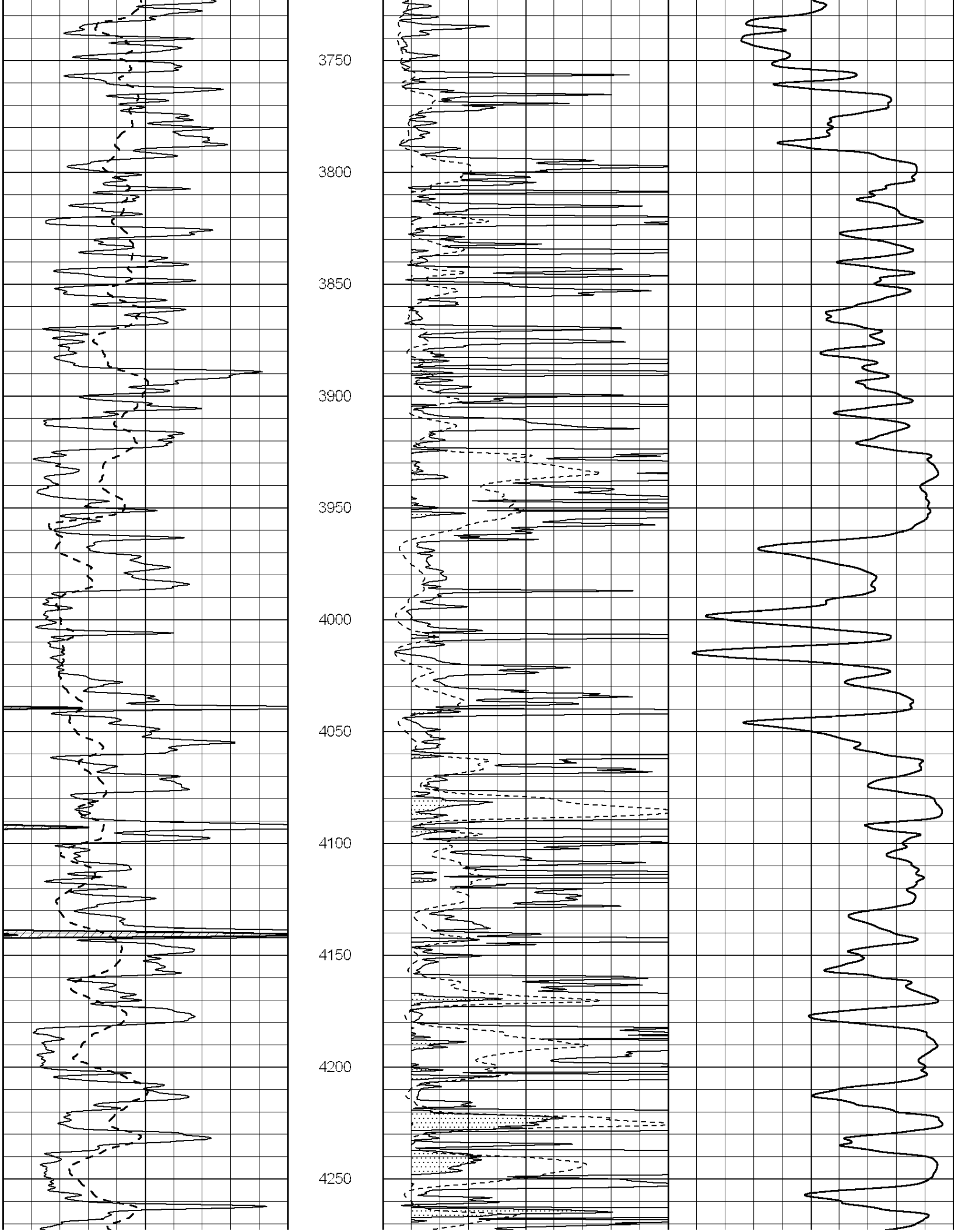
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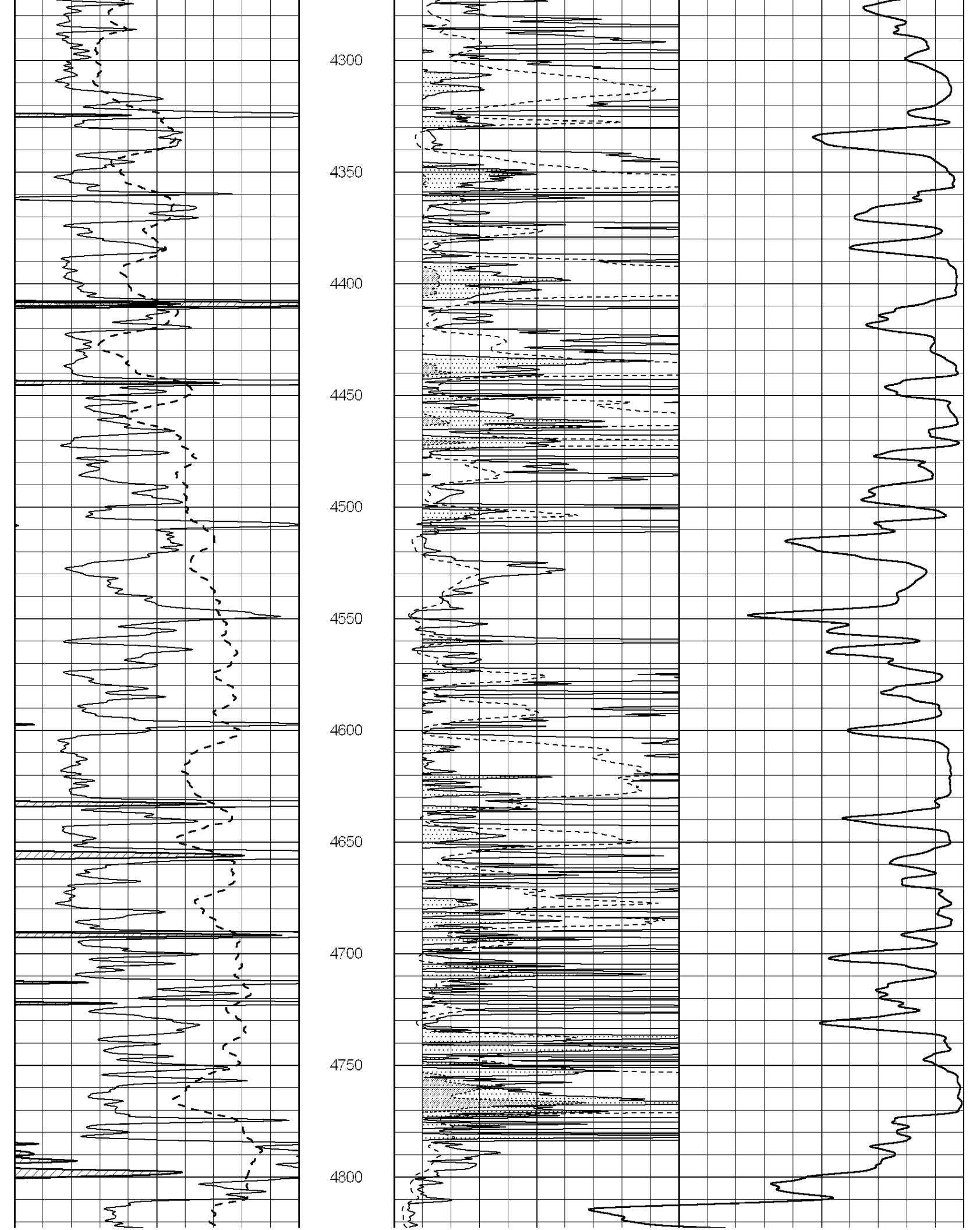
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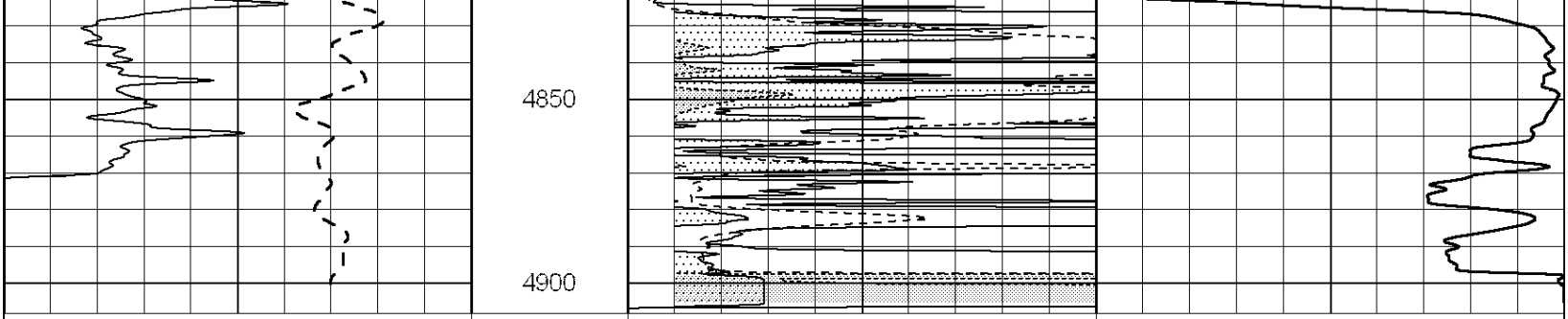

SUPERIOR WELL SERVICES

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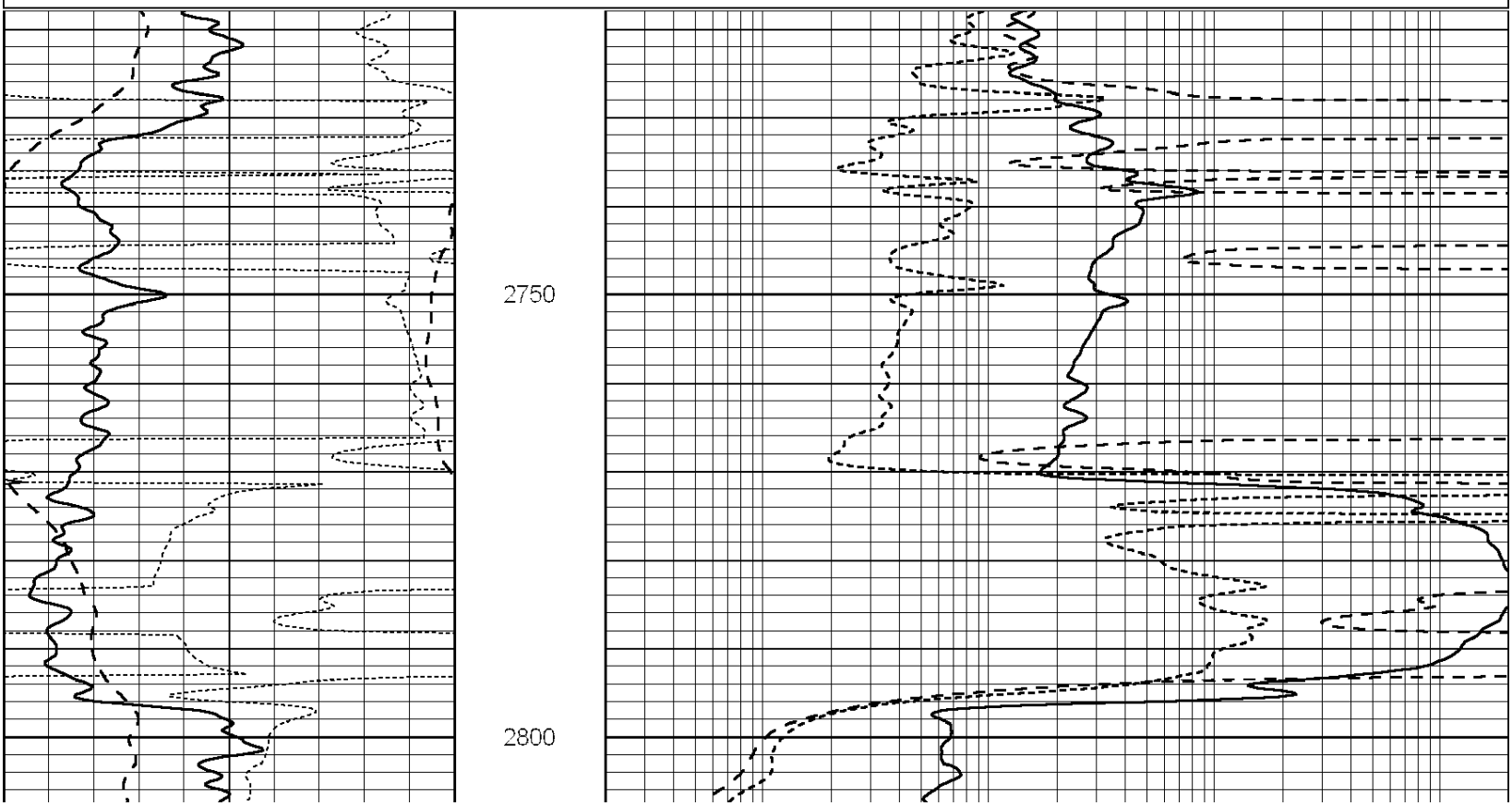
Hays,
Kansas

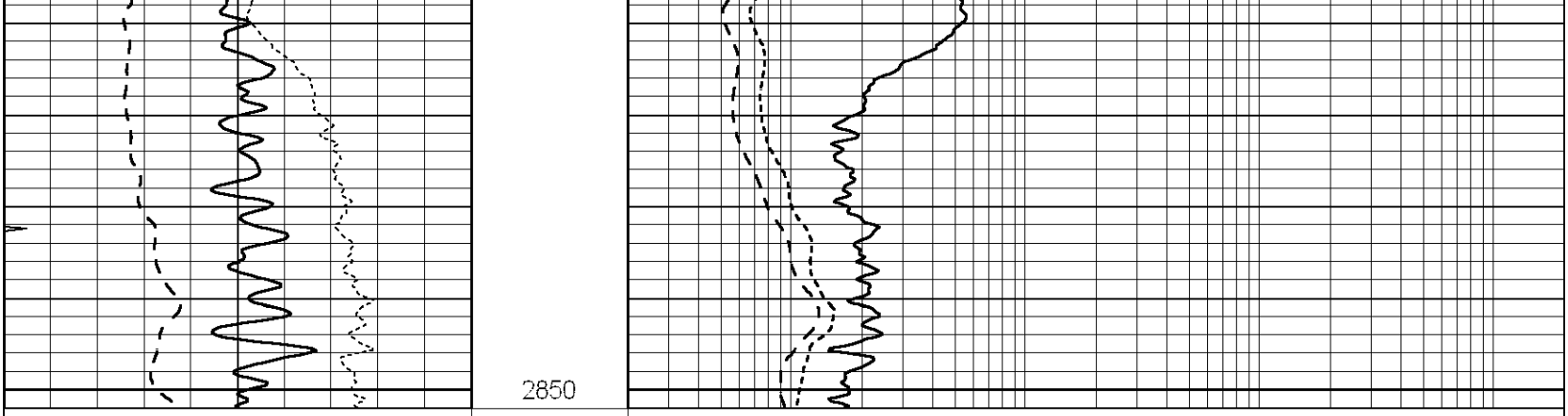
MAIN SECTION

Database File:	007776ddn.db
Dataset Pathname:	pass3.A
Presentation Format:	dil
Dataset Creation:	Wed Nov 02 02:31:23 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

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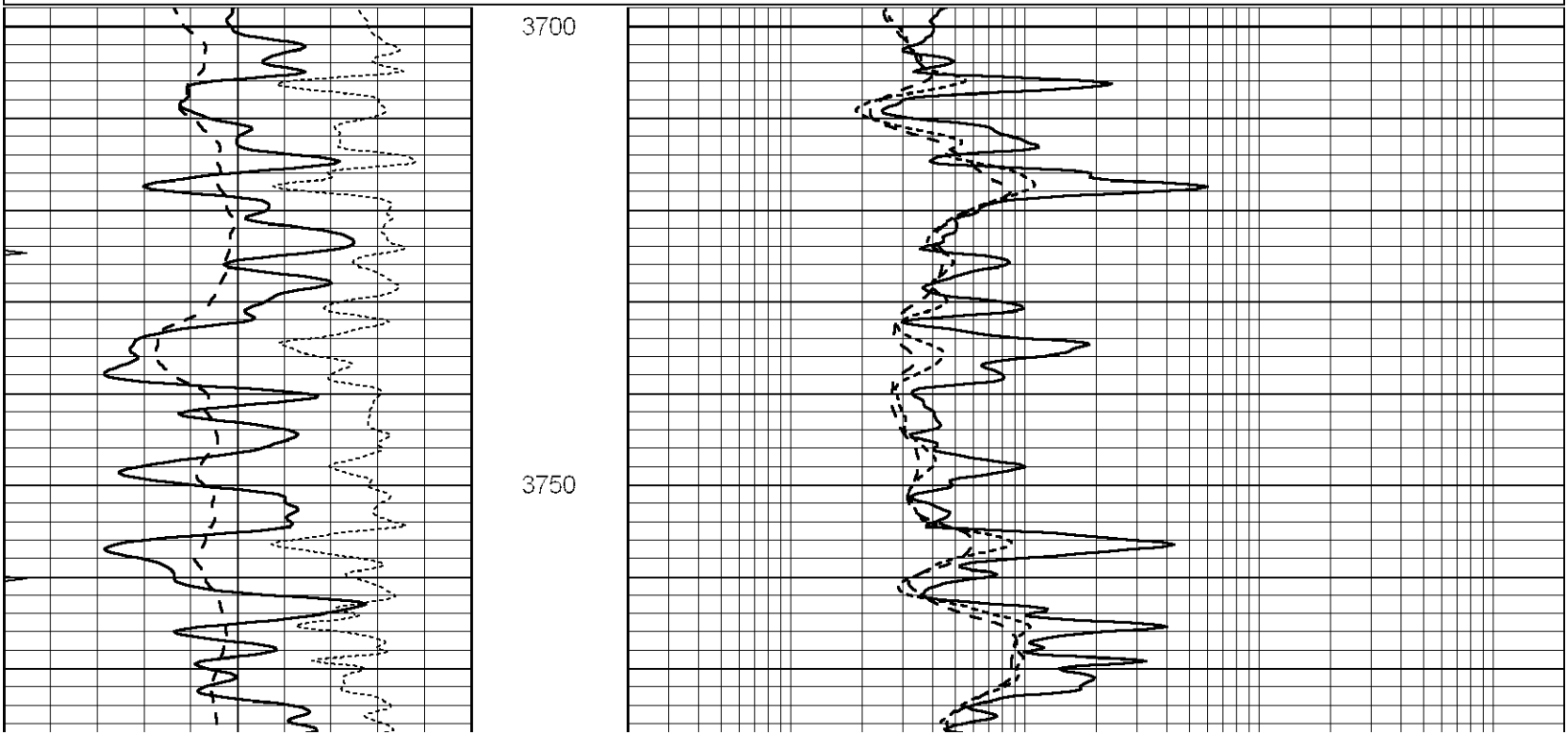
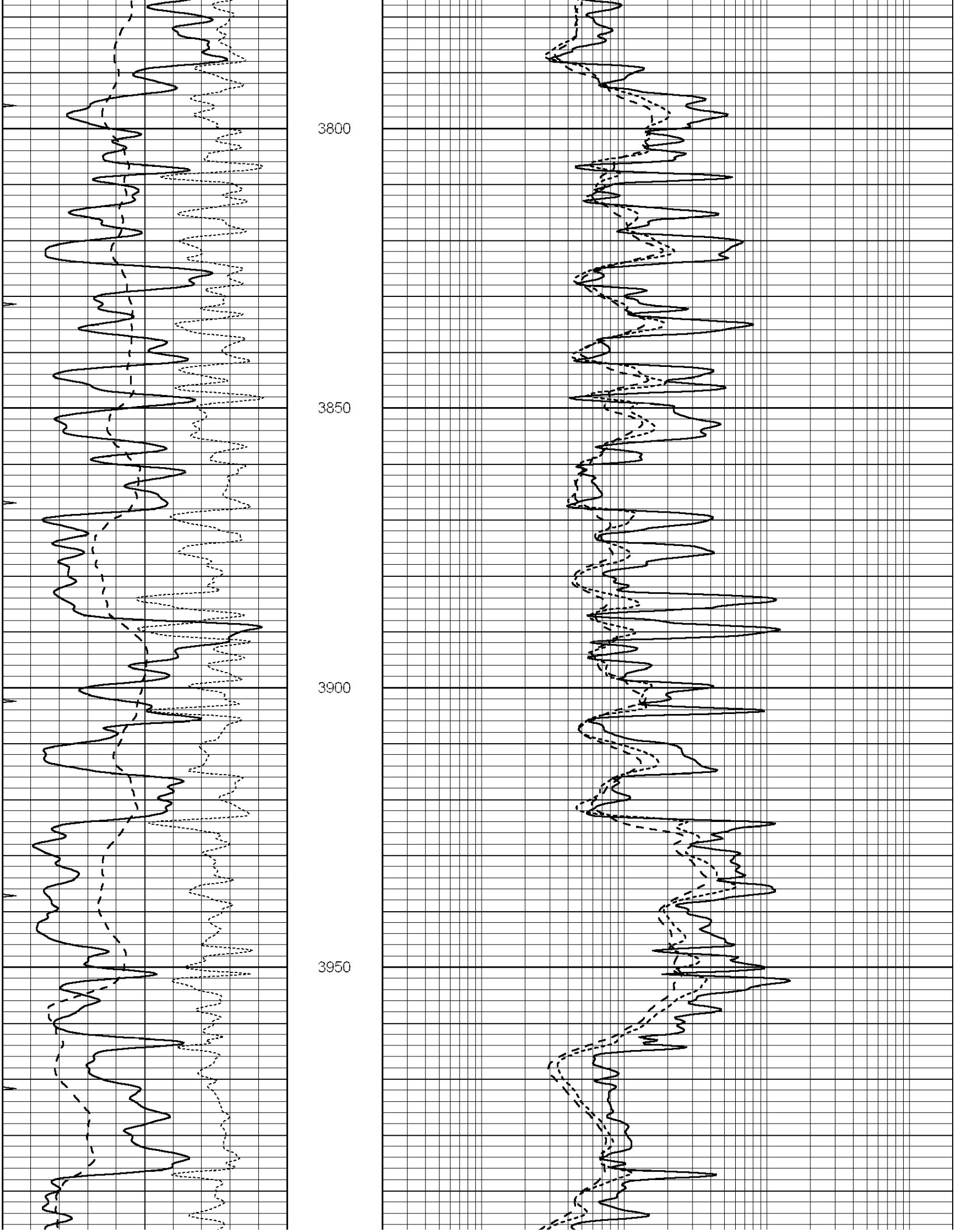
MAIN SECTION

Database File:	007776ddn.db
Dataset Pathname:	pass3.A
Presentation Format:	dil
Dataset Creation:	Wed Nov 02 02:31:23 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

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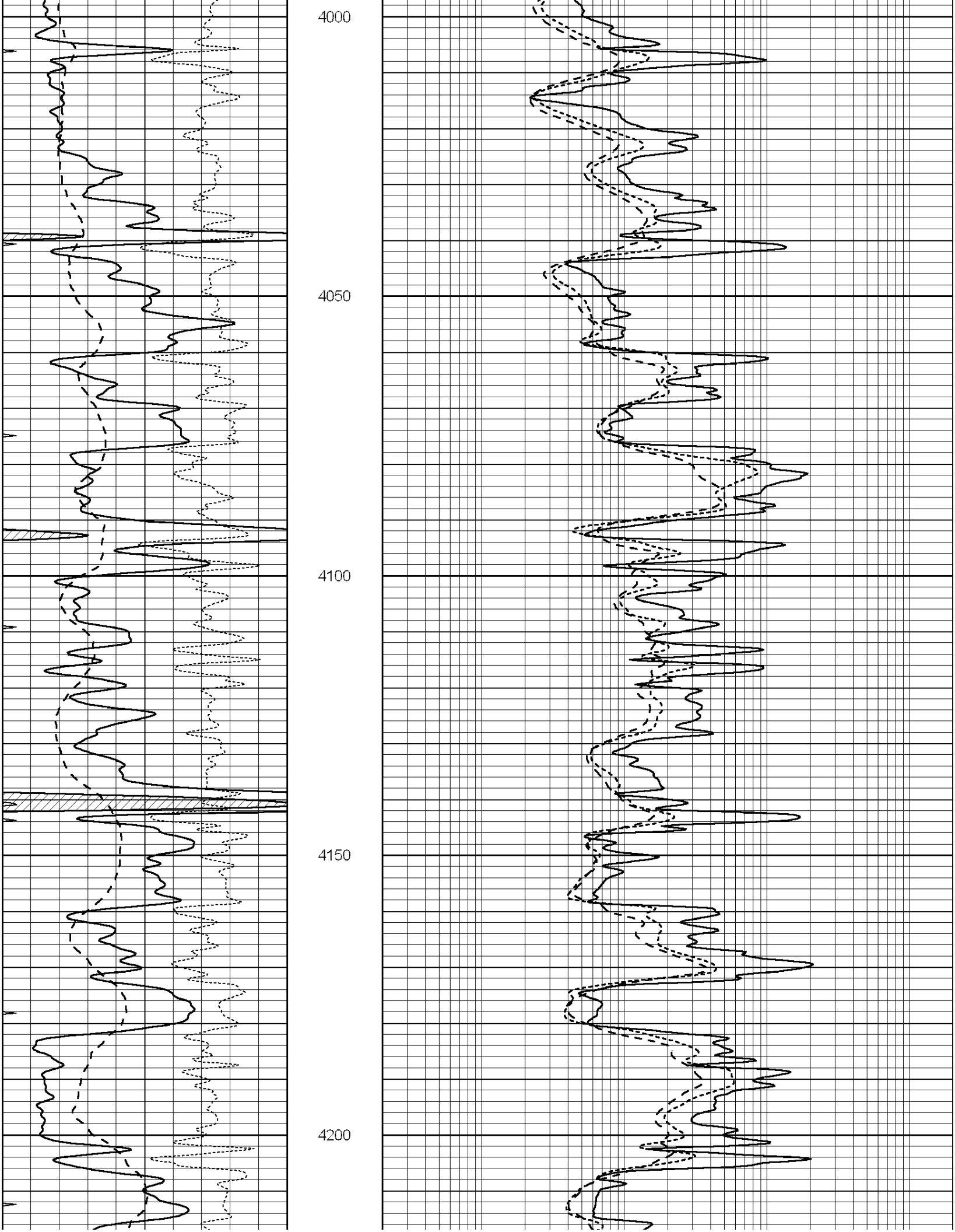
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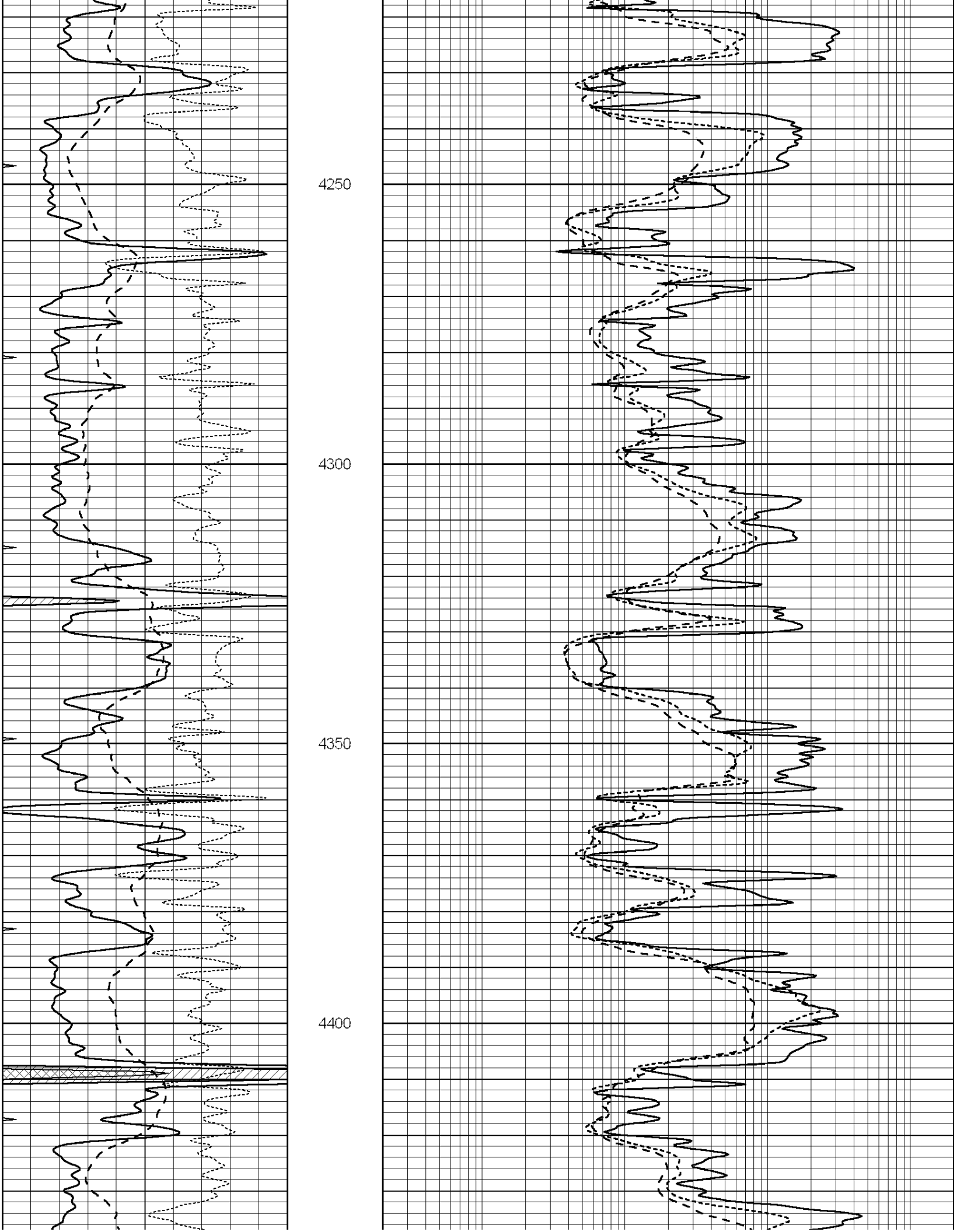
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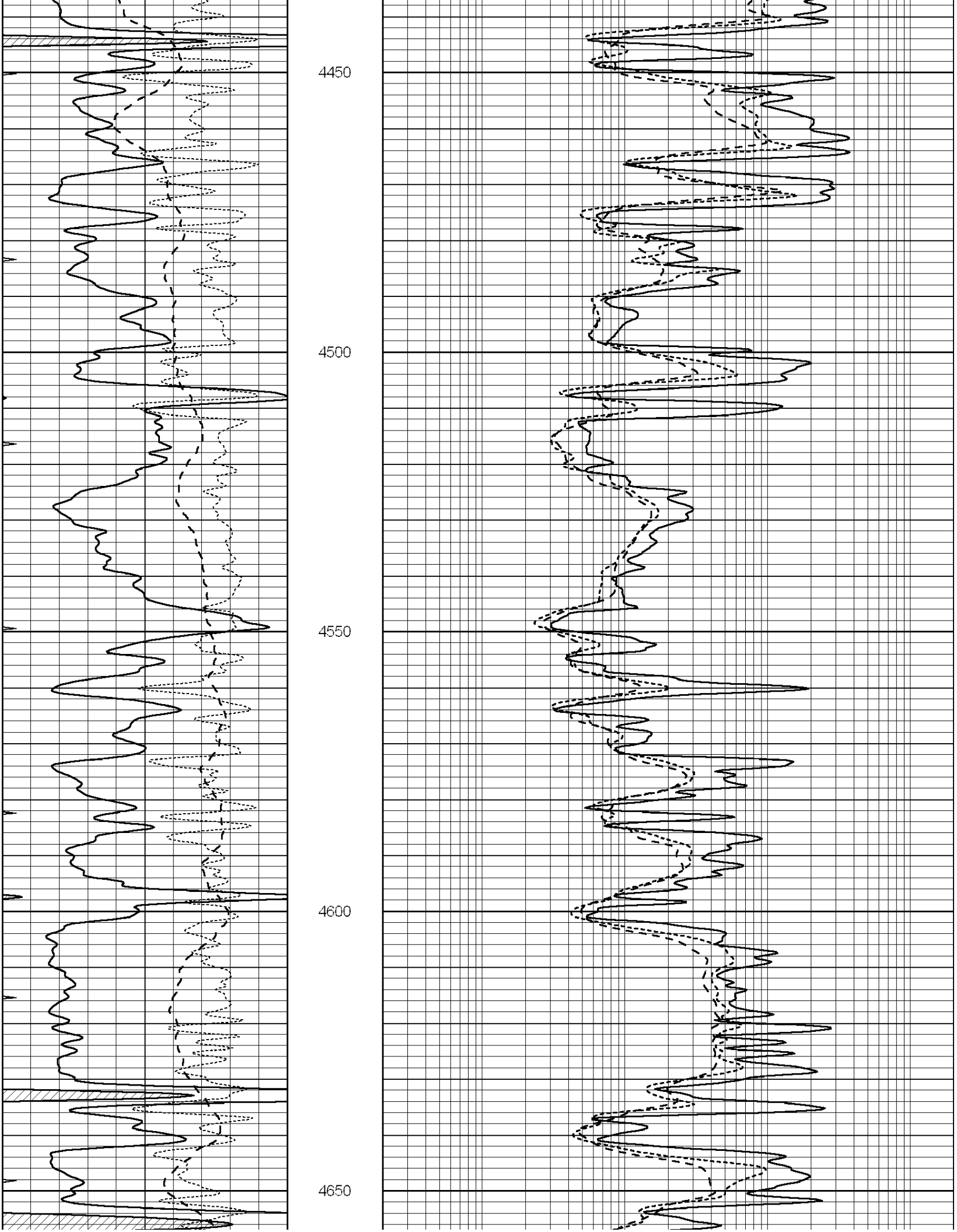
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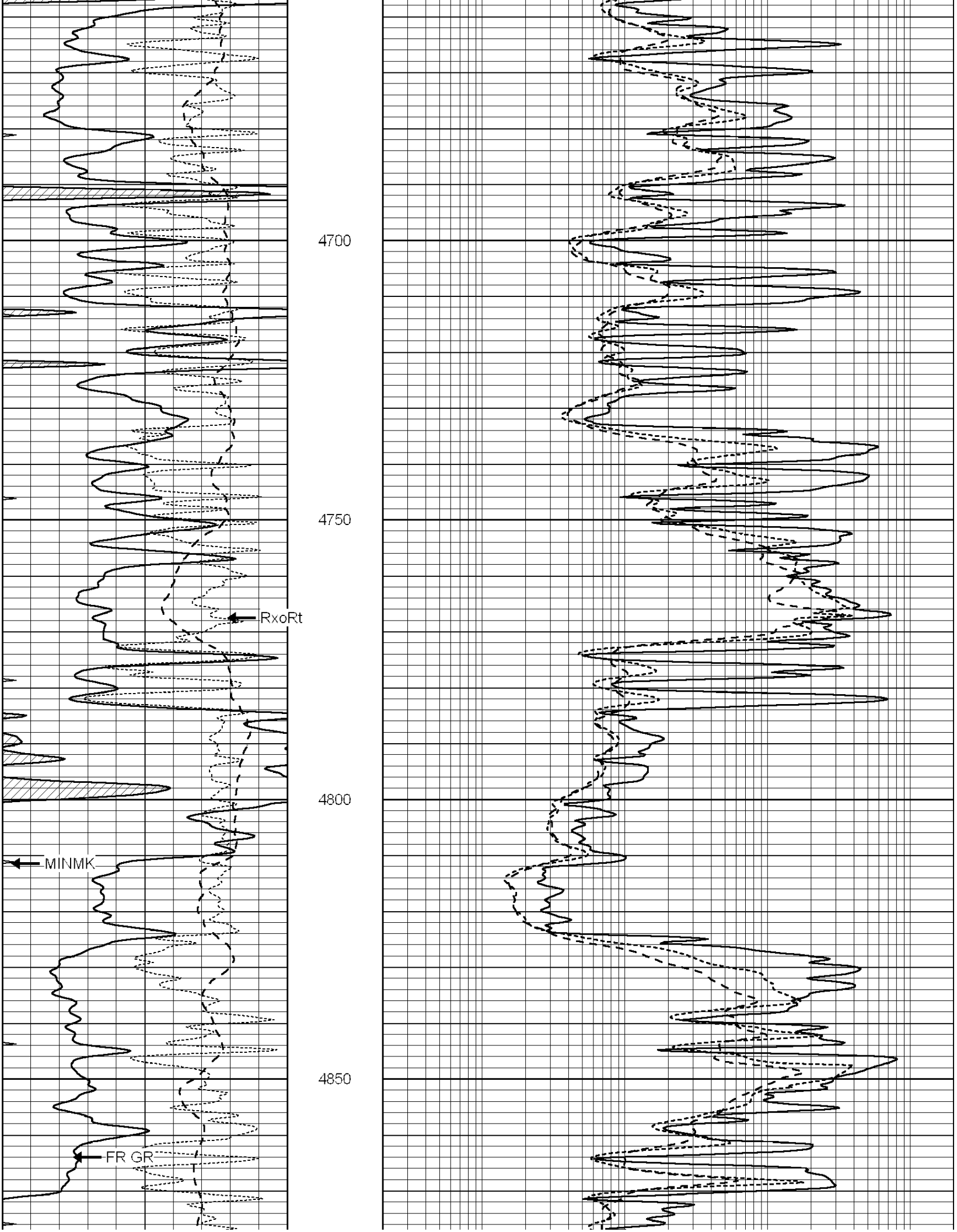
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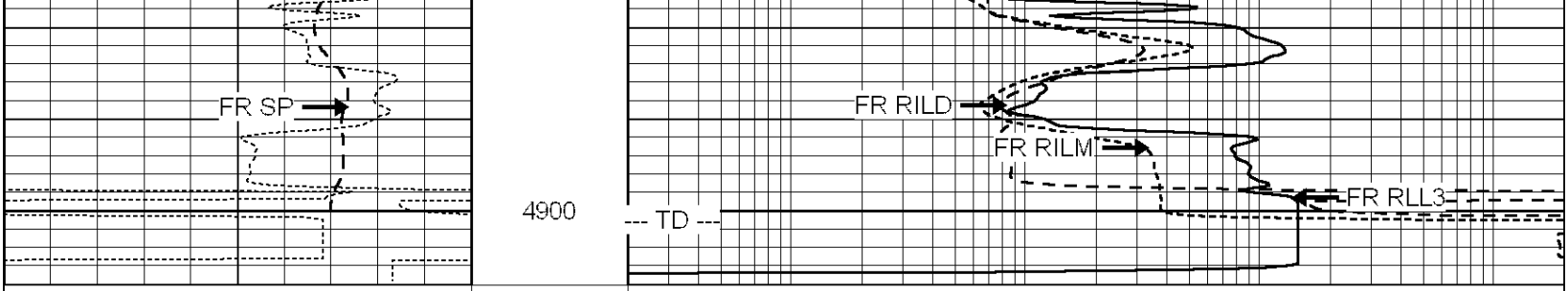


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

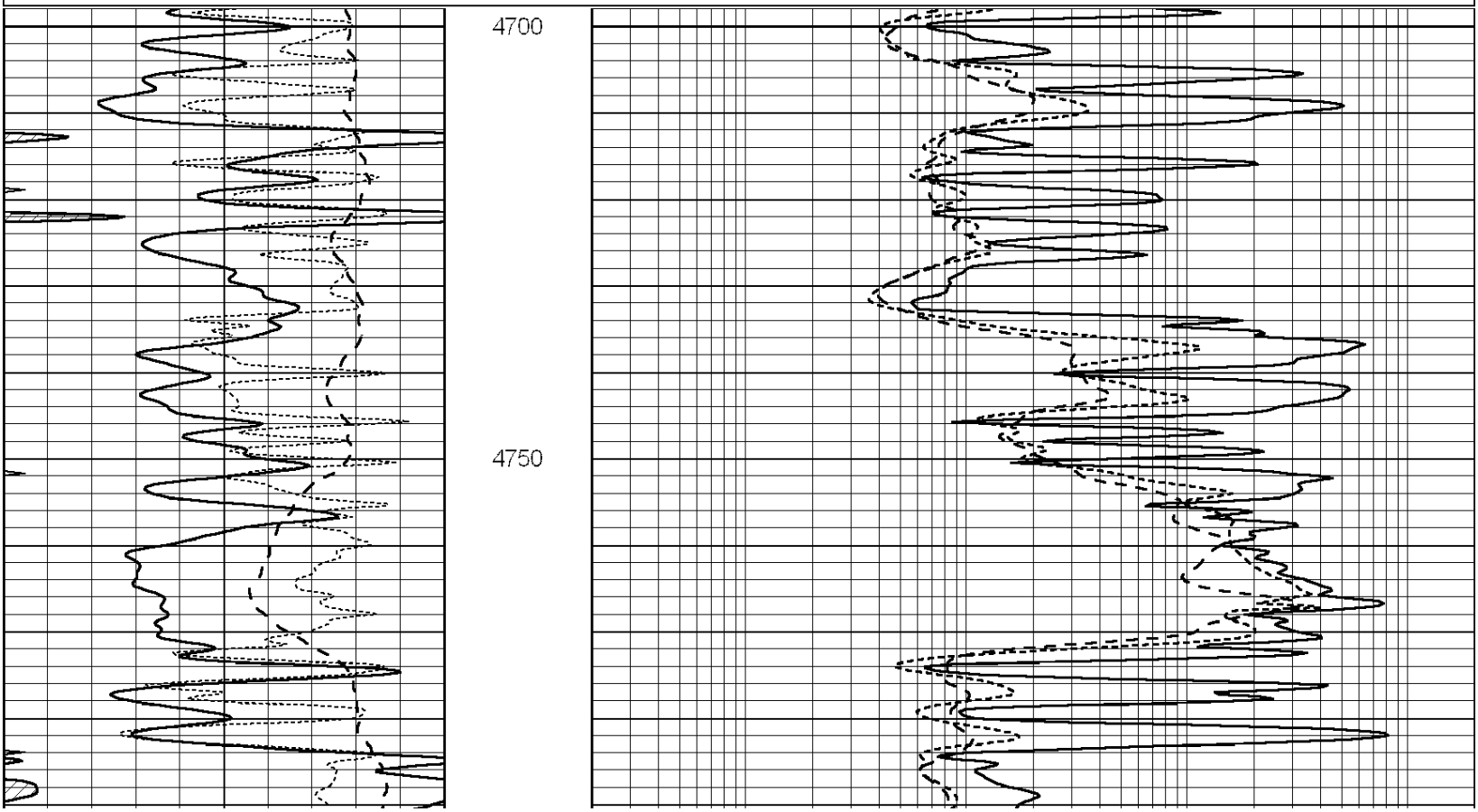
SUPERIOR
Hays,
Kansas

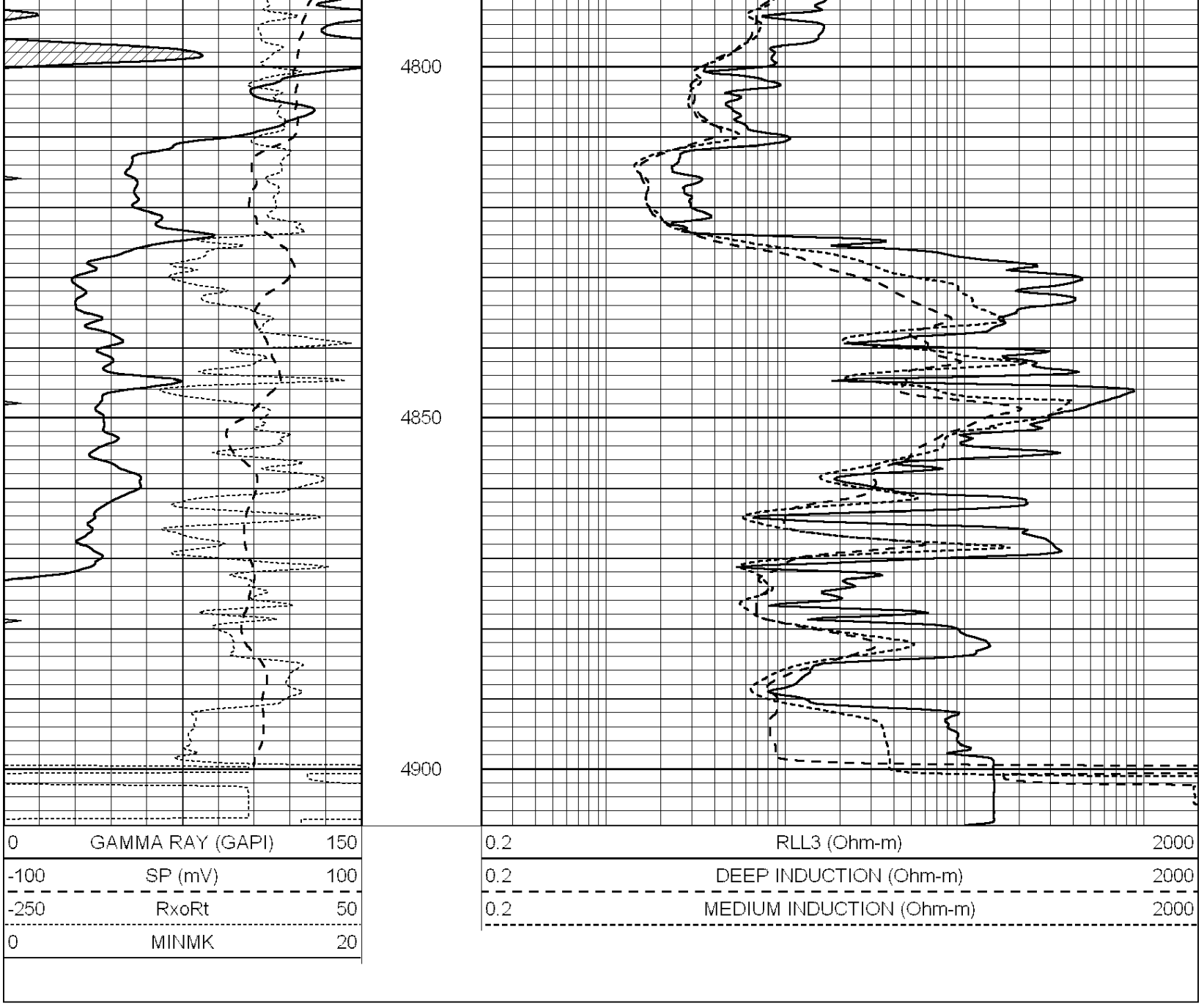
REPEAT SECTION

Database File:	007776ddn.db
Dataset Pathname:	pass2.A
Presentation Format:	dil
Dataset Creation:	Wed Nov 02 02:37:13 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





Calibration Report

Database File: 007776ddn.db
Dataset Pathname: pass3.1A
Dataset Creation: Wed Nov 02 02:29:04 2011

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Wed Nov 02 00:39:53 2011

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	530.000	-18.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-13.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model:	GEAR1-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Tue Nov 01 22:42:35 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.590	g/cc	282.16	435.01	cps

Spine Angle = 76.03 Density/Spine Ratio = 0.576

	Size		Reading	
Small Ring	8.80	in	3.15	V
Large Ring	14.00	in	4.72	V

Compensated Neutron Calibration Report

Serial Number:	NUE_2I
Tool Model:	G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.0000
Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number:	GR5	
Tool Model:	OPEN	
Performed:	Wed Nov 02 00:54:00 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6500	GAPI/cps