NABORS COMPLETION & PRODUCTION SERVICES CO.

DUAL INDCUTION LOG

Company	KANTOR OIL CO., LLC
Well	BOTT K-2
Field	BURRTON
County	HARVEY
State	KANSAS

Company	KANTOR OIL CO., LLC
Well	BOTT K-2
Field	BURRTON
County	HARVEY
State	KANSAS
Location:	API # : 15-079-20709-00-00 610' FSL & 2640' FEL N2 - S2 - S2 - S2 SEC 7 TWP 23S RGE 3W
Permanent Datum	GROUND LEVEL Elevation 1469
Log Measured From	KELLY BUSHING 8' A.G.L.
Drilling Measured From	KELLY BUSHING

Other Services: CDL/CNL

Elevation: K.B. 1477, D.F. 1475, G.L. 1469

Date	11/19/14		
Run Number	ONE		
Depth Driller	3901		
Depth Logger	3894		
Bottom Logged Interval	3892		
Top Log Interval	00		
Casing Driller	13 3/8" @ 308'		
Casing Logger	304'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1,500 PPM	
Density / Viscosity	9.1/42		
pH / Fluid Loss	11.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.50 @ 62F		
Rmf @ Meas. Temp	1.13 @ 62F		
Rmc @ Meas. Temp	1.80 @ 62F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.81 @ 115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	115F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	TERRY MCLEOD		

<<< Fold Here >>>

Comments

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

DIRECTIONS:

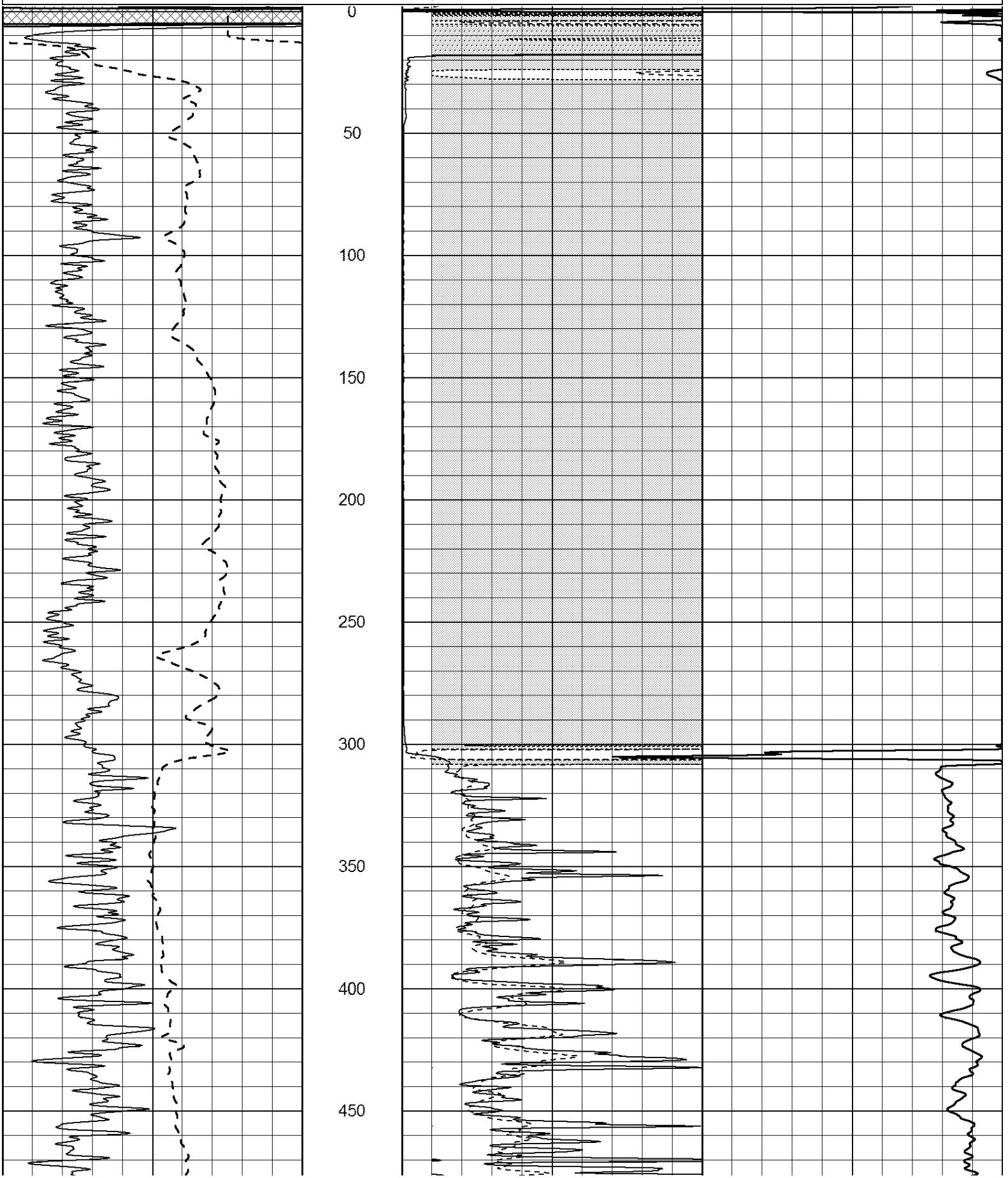
BURRTON, KS. - NORTH 2 MILES TO NW 12TH ST. WEST 1 1/4 MILE - NORTH INTO

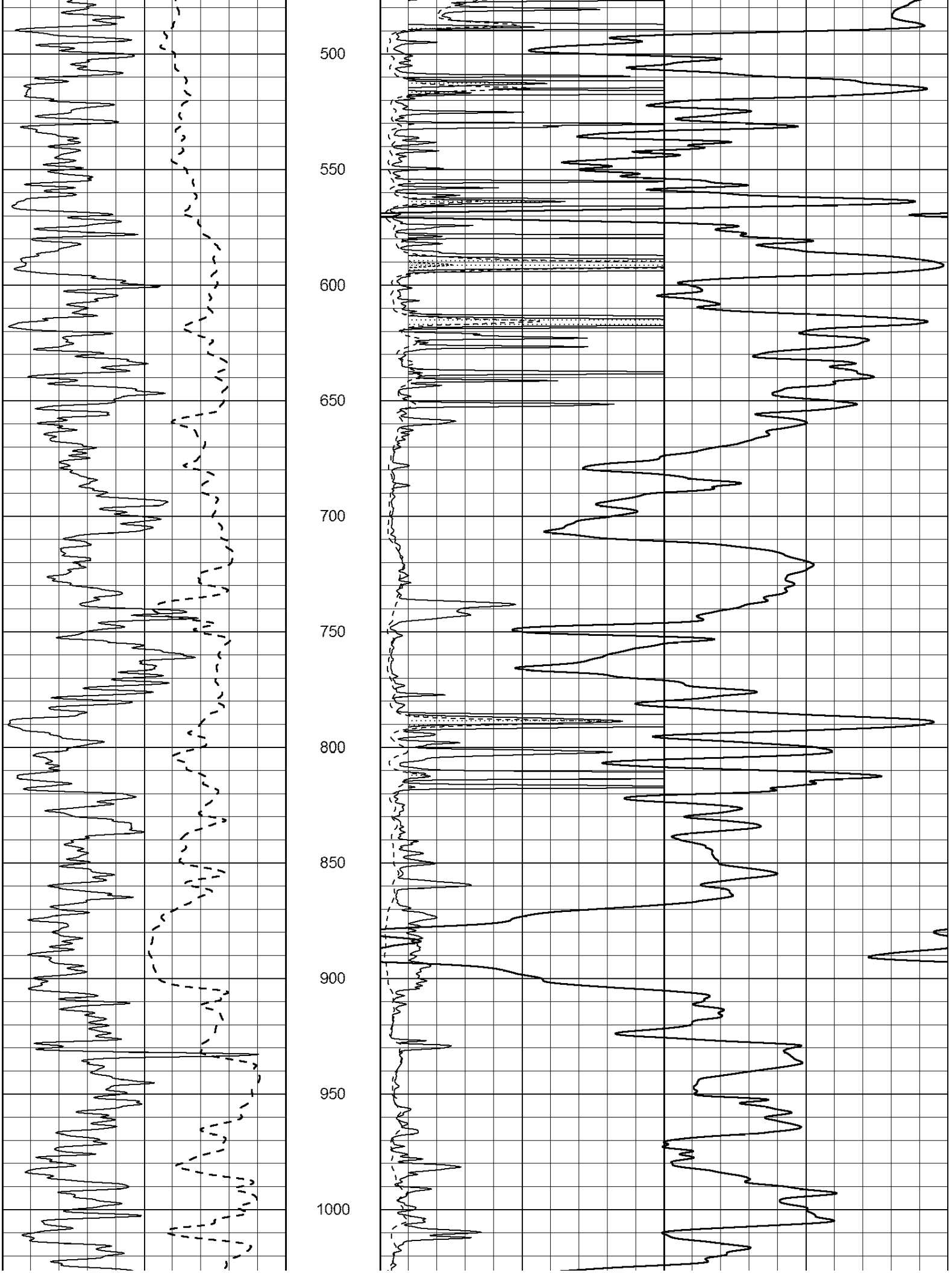
Database File:	26407ddn.db
Dataset Pathname:	pass3.2
Presentation Format:	_dil2
Dataset Creation:	Wed Nov 19 10:00:39 2014 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:600

Charted by: Depth in Feet scaled 1:600

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

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

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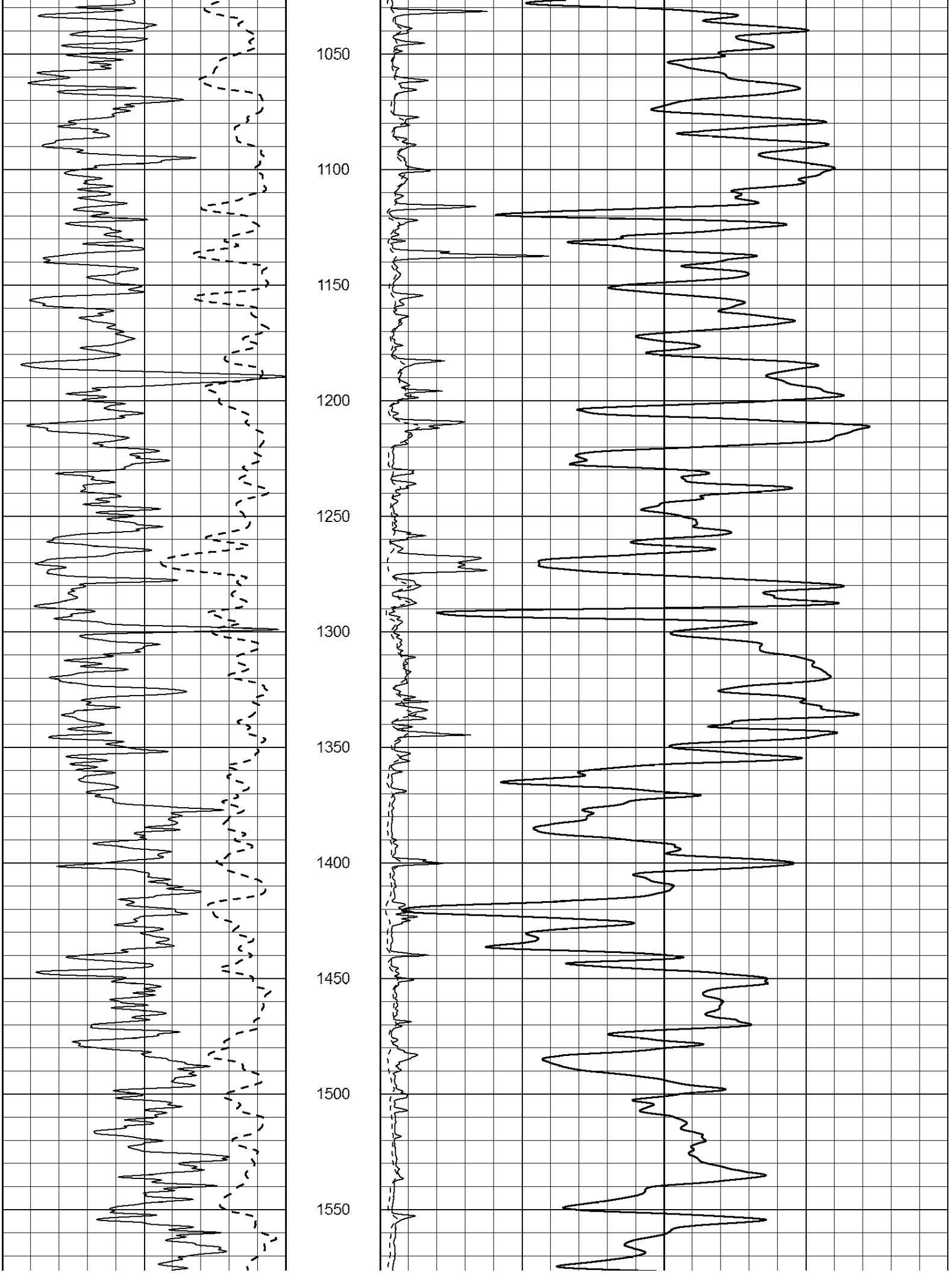
1000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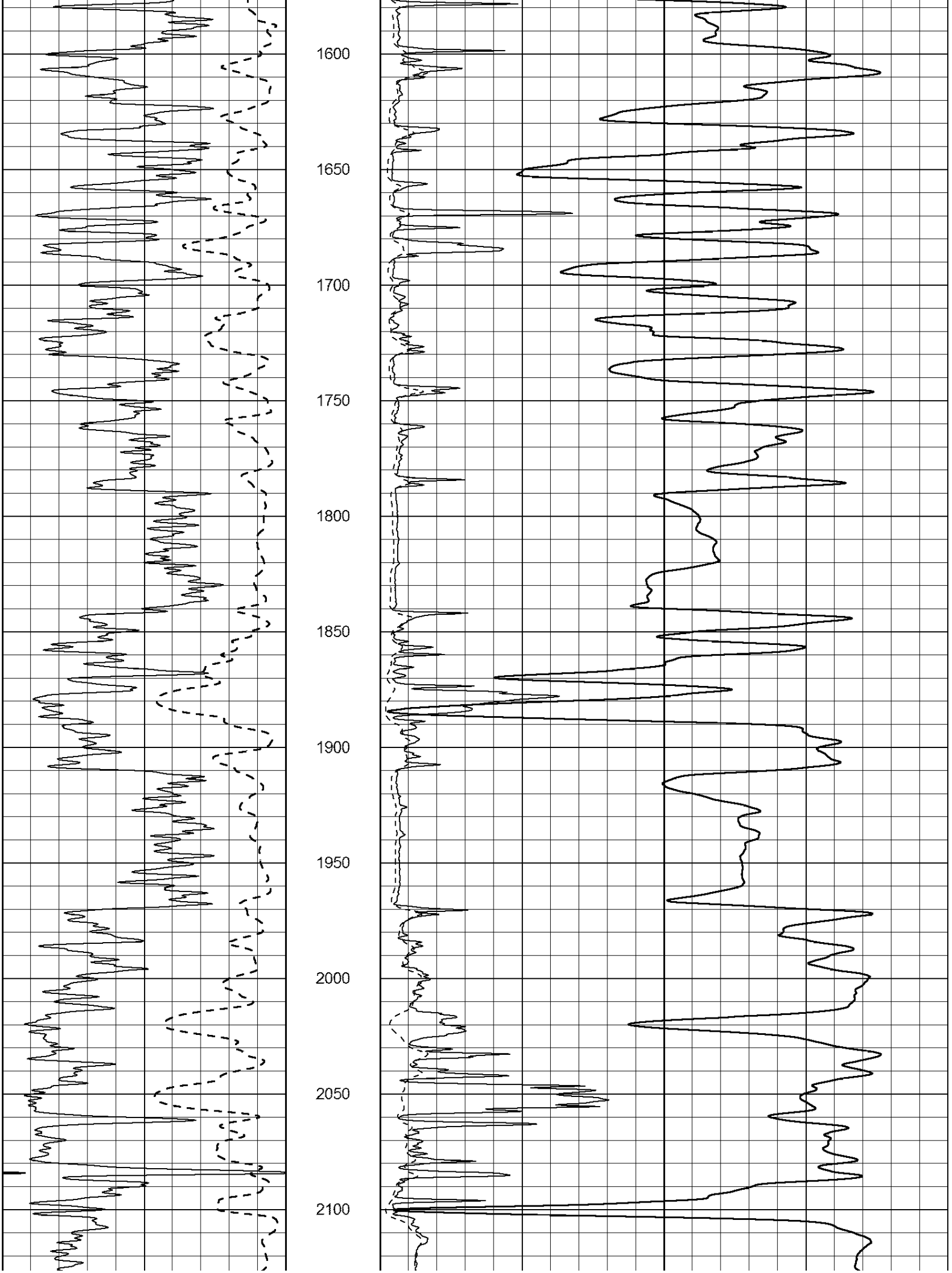
1500
1550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1750
1800
1850
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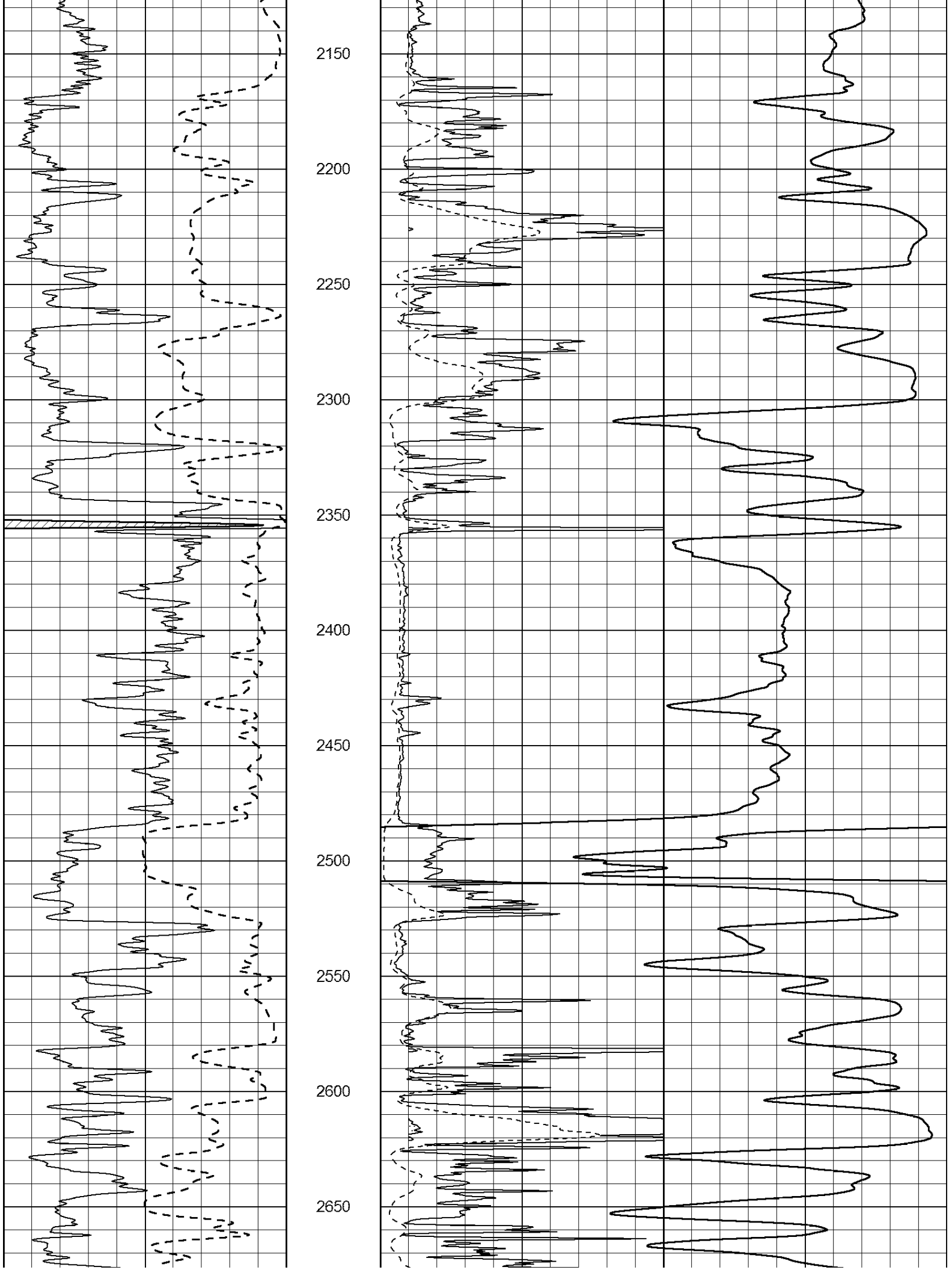
2000
2050
2100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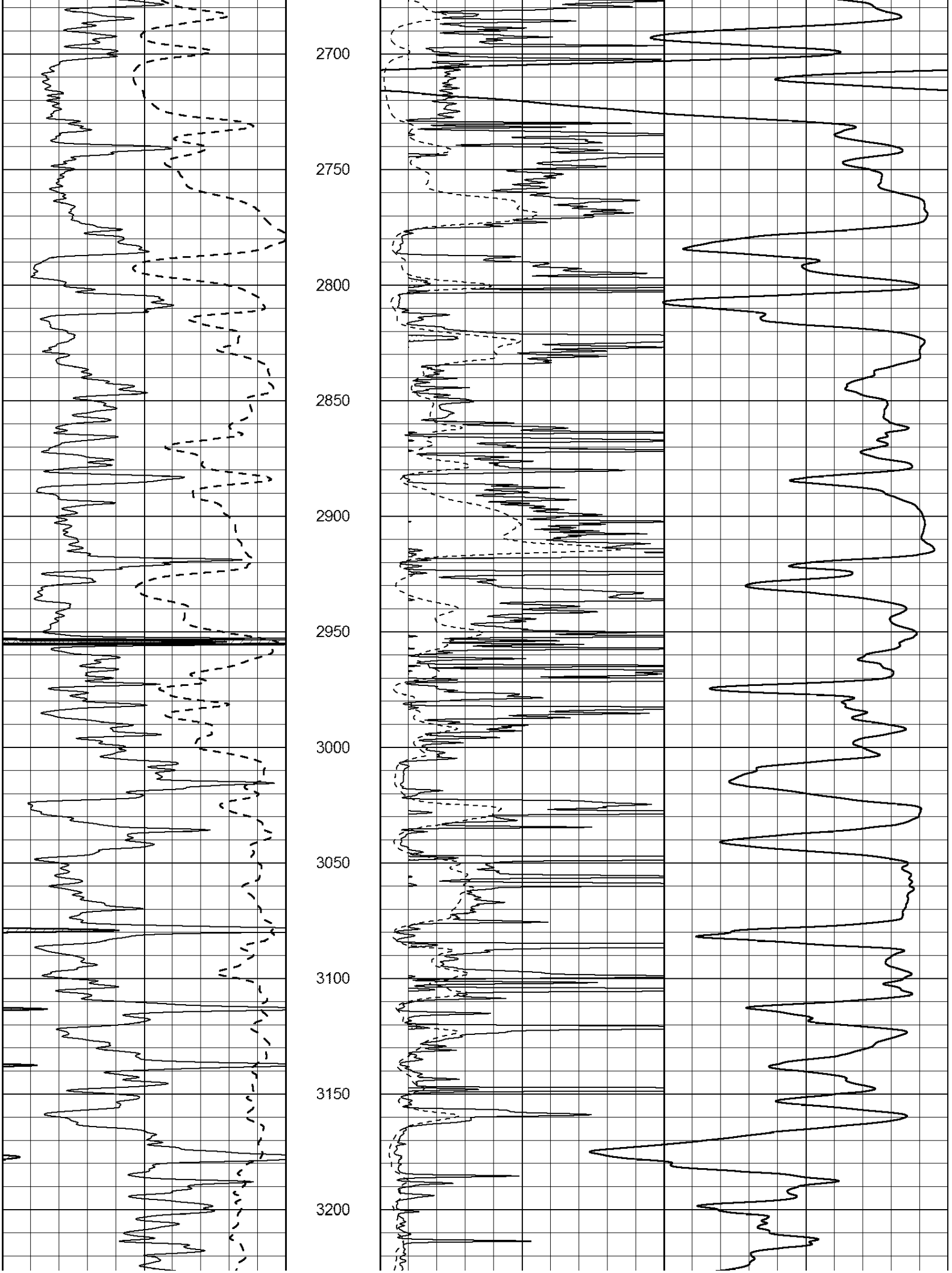
2300
2350
2400
2450
2500
2550
2600
2650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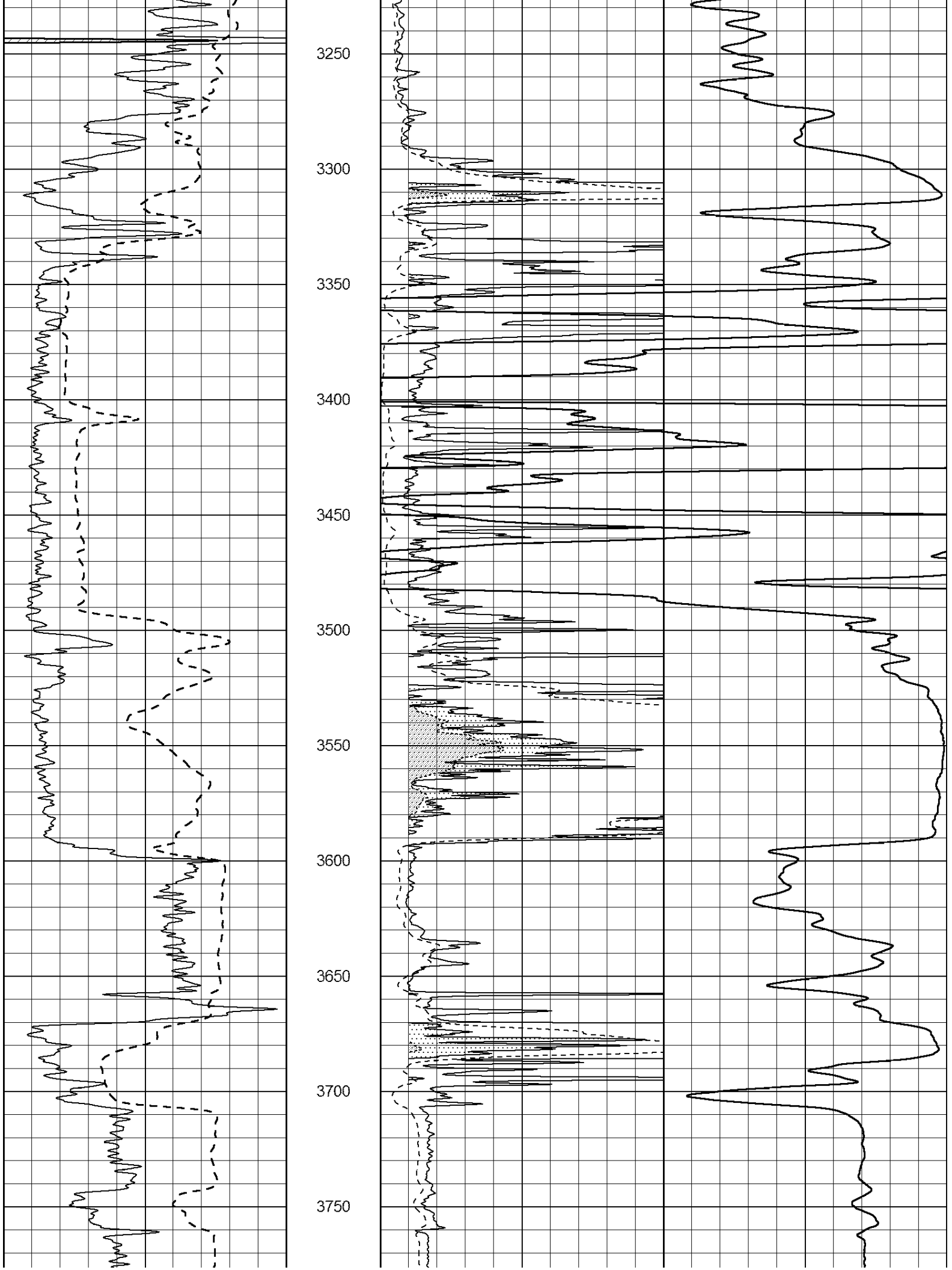
2900
2950
3000
3050
3100
3150
3200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3400
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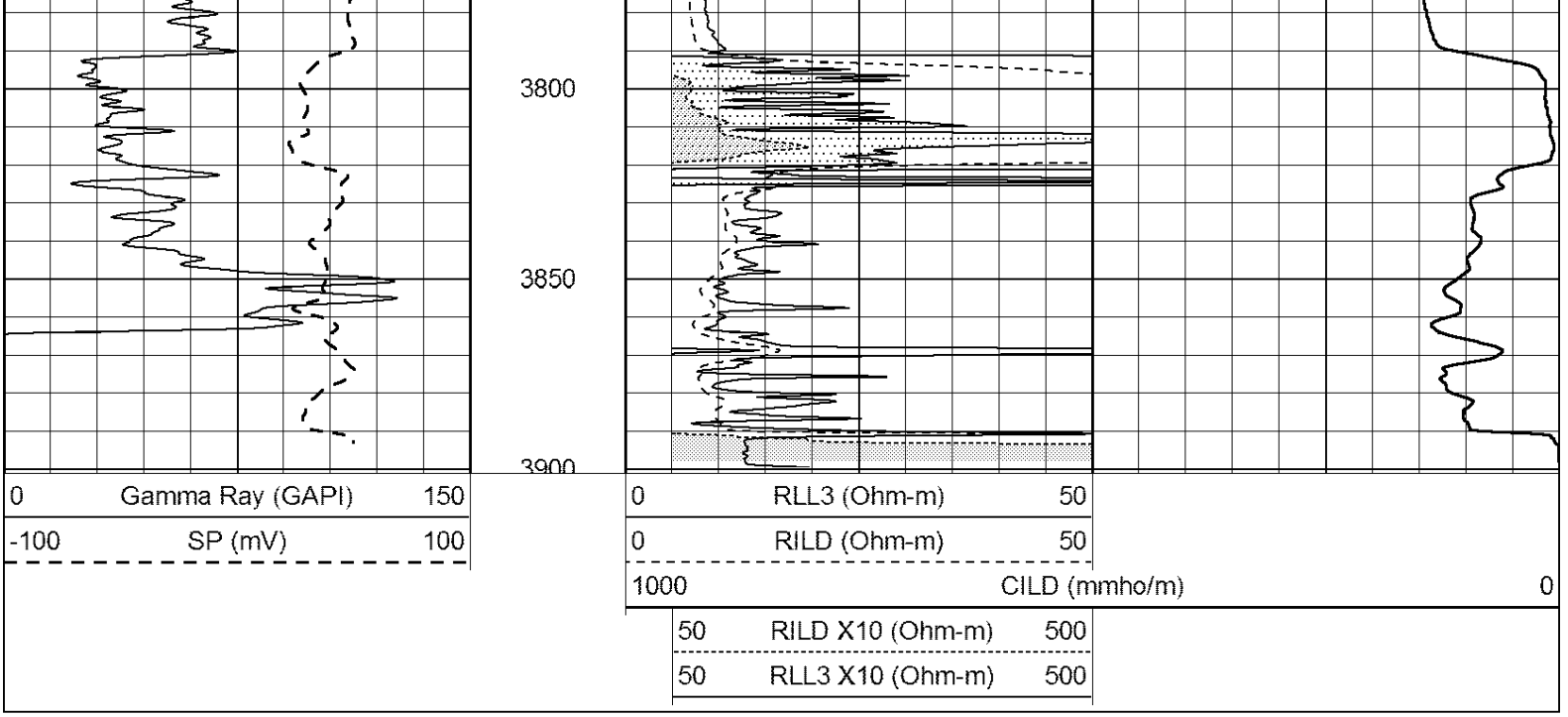
3550
3600
3650
3700
3750



Database File: 26407ddn.db
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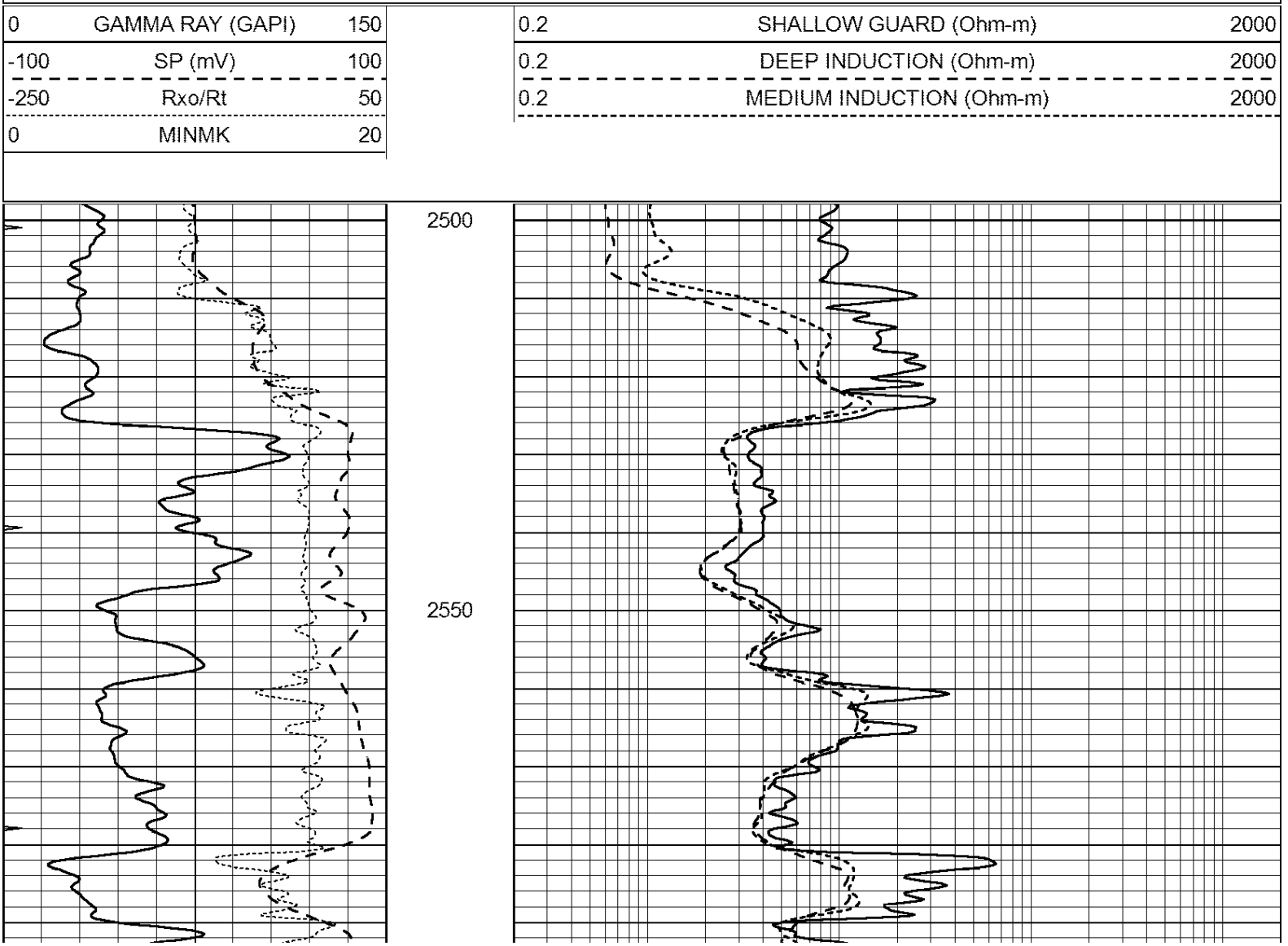
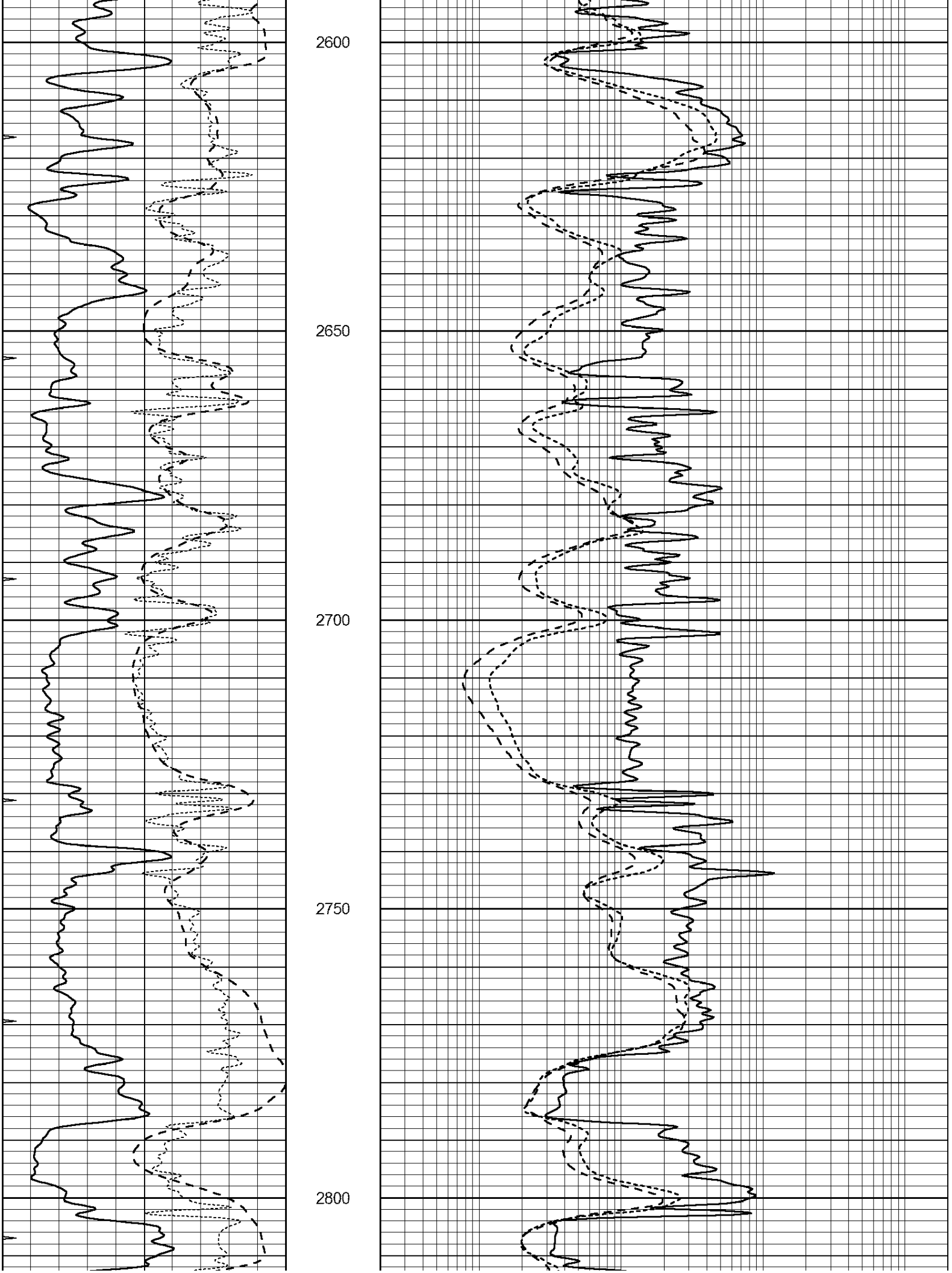
Presentation Format: _dil
Dataset Creation: Wed Nov 19 09:29:45 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

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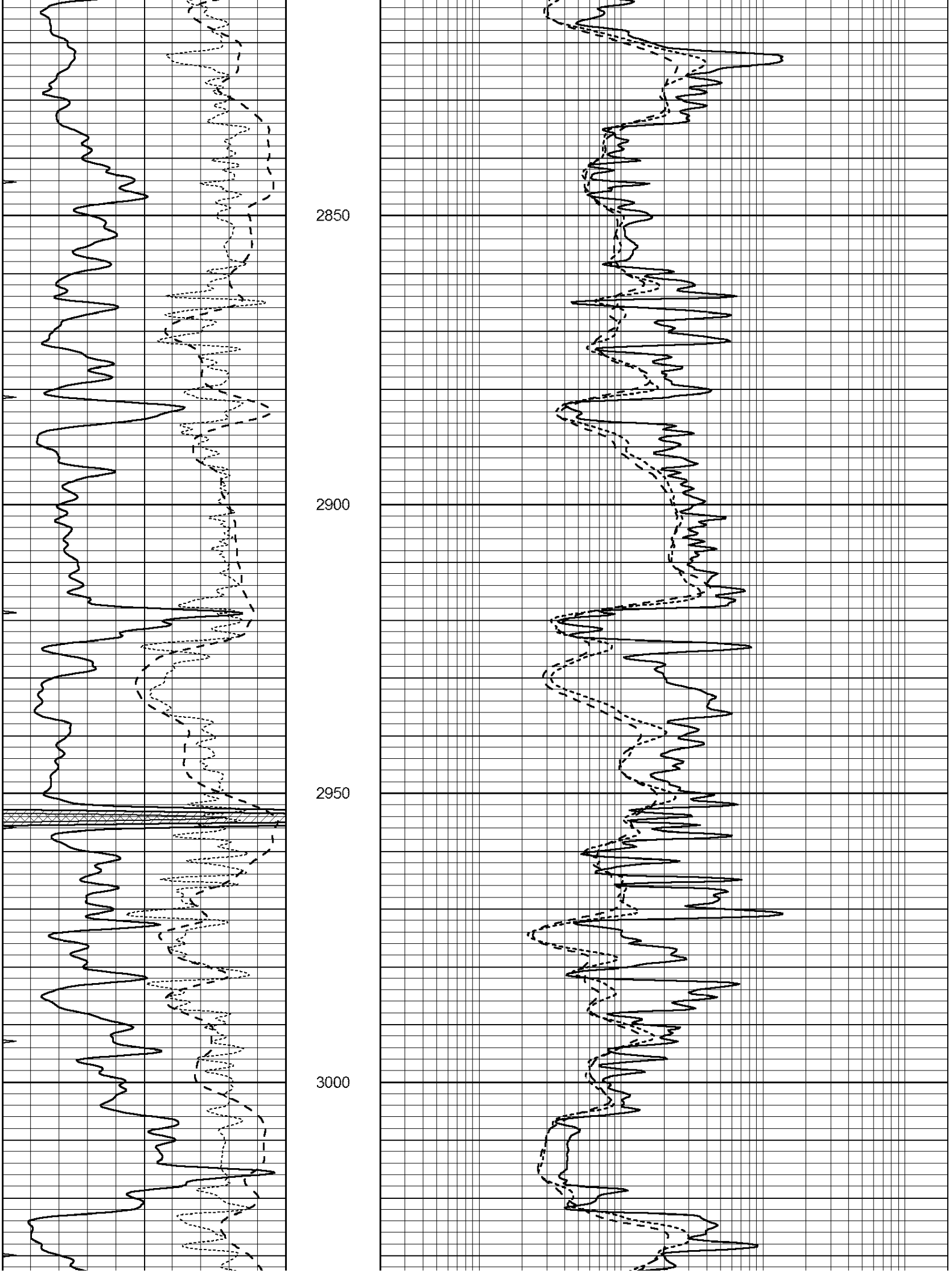
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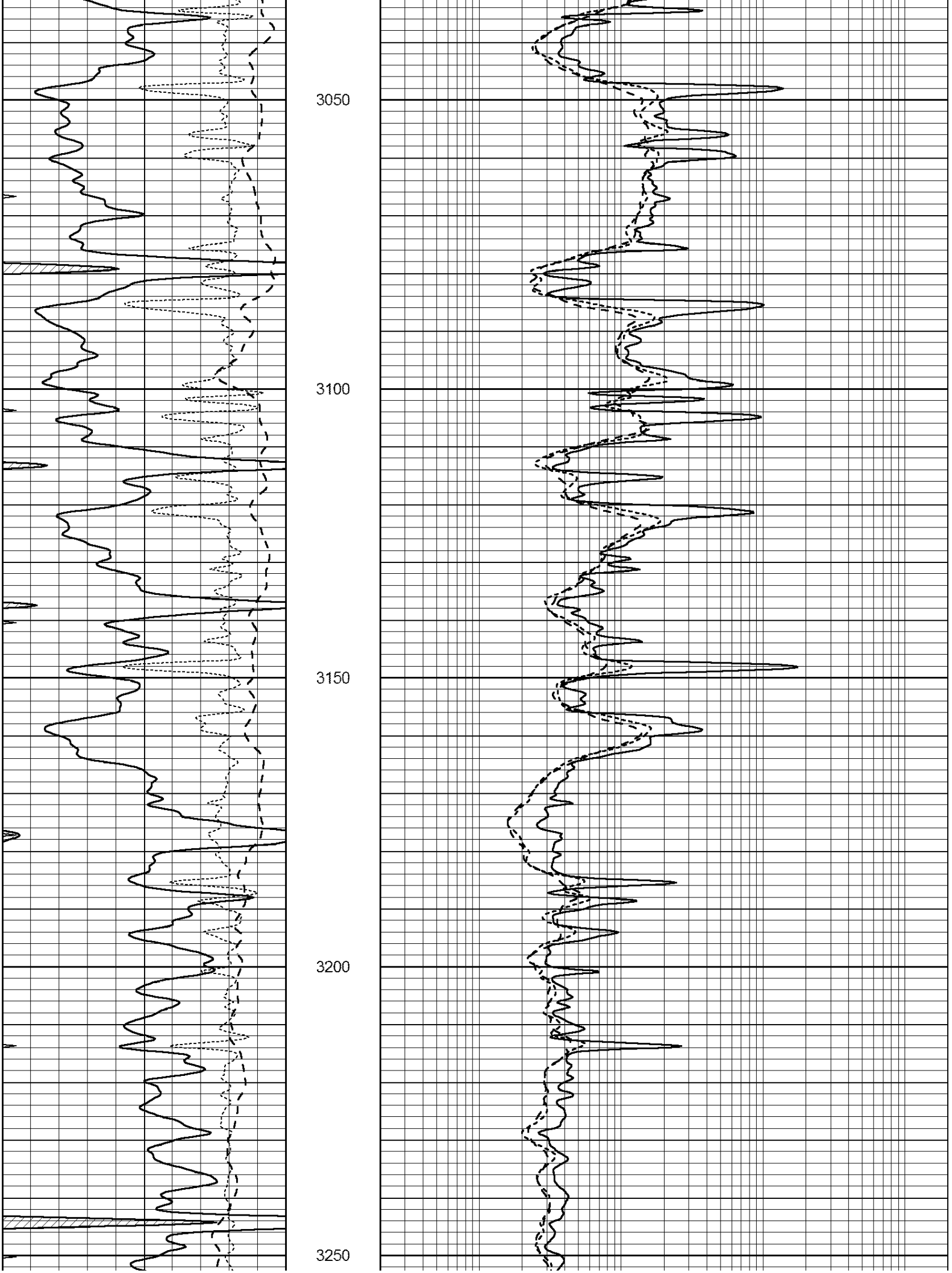
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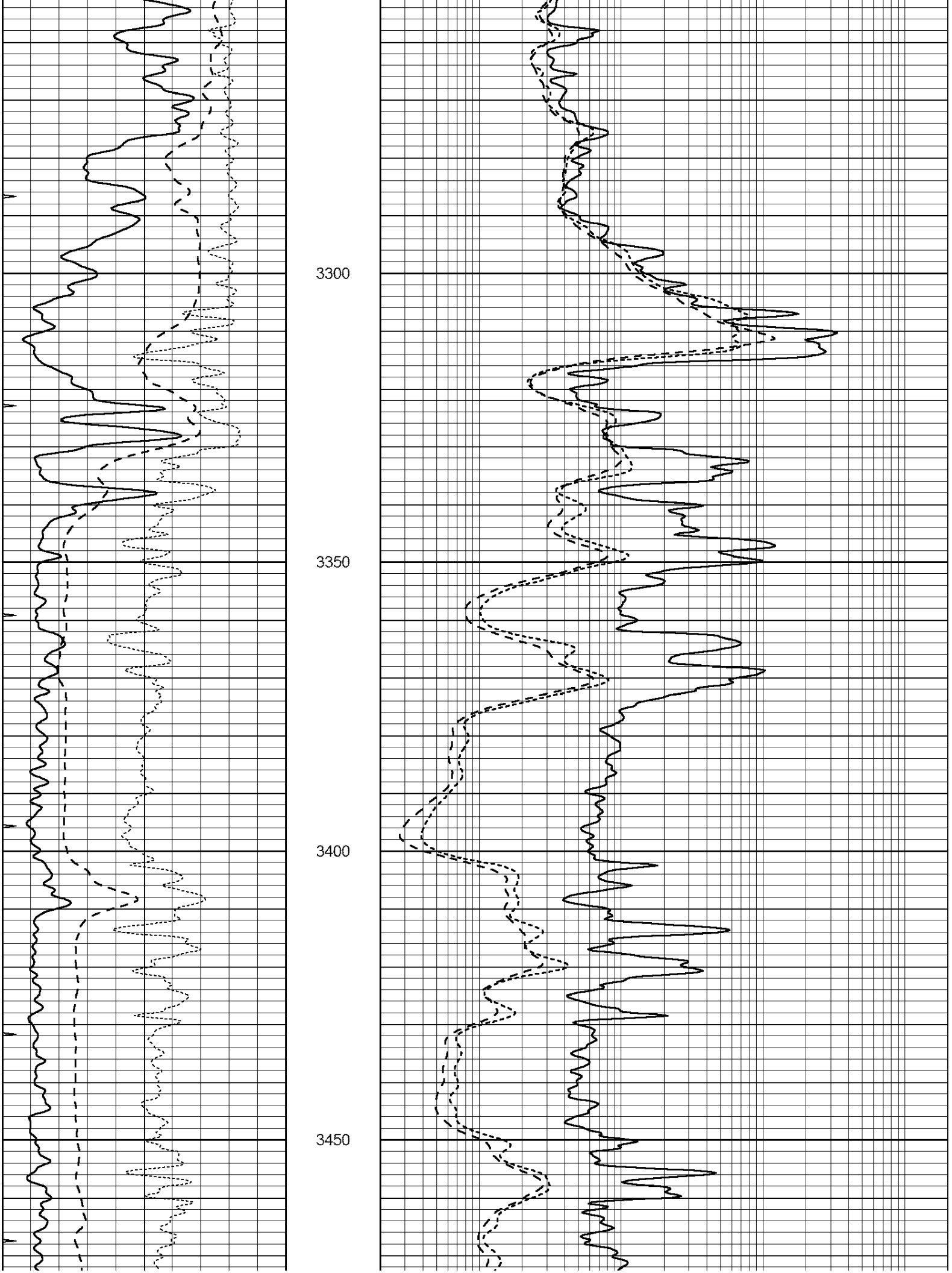
3150
3200
3250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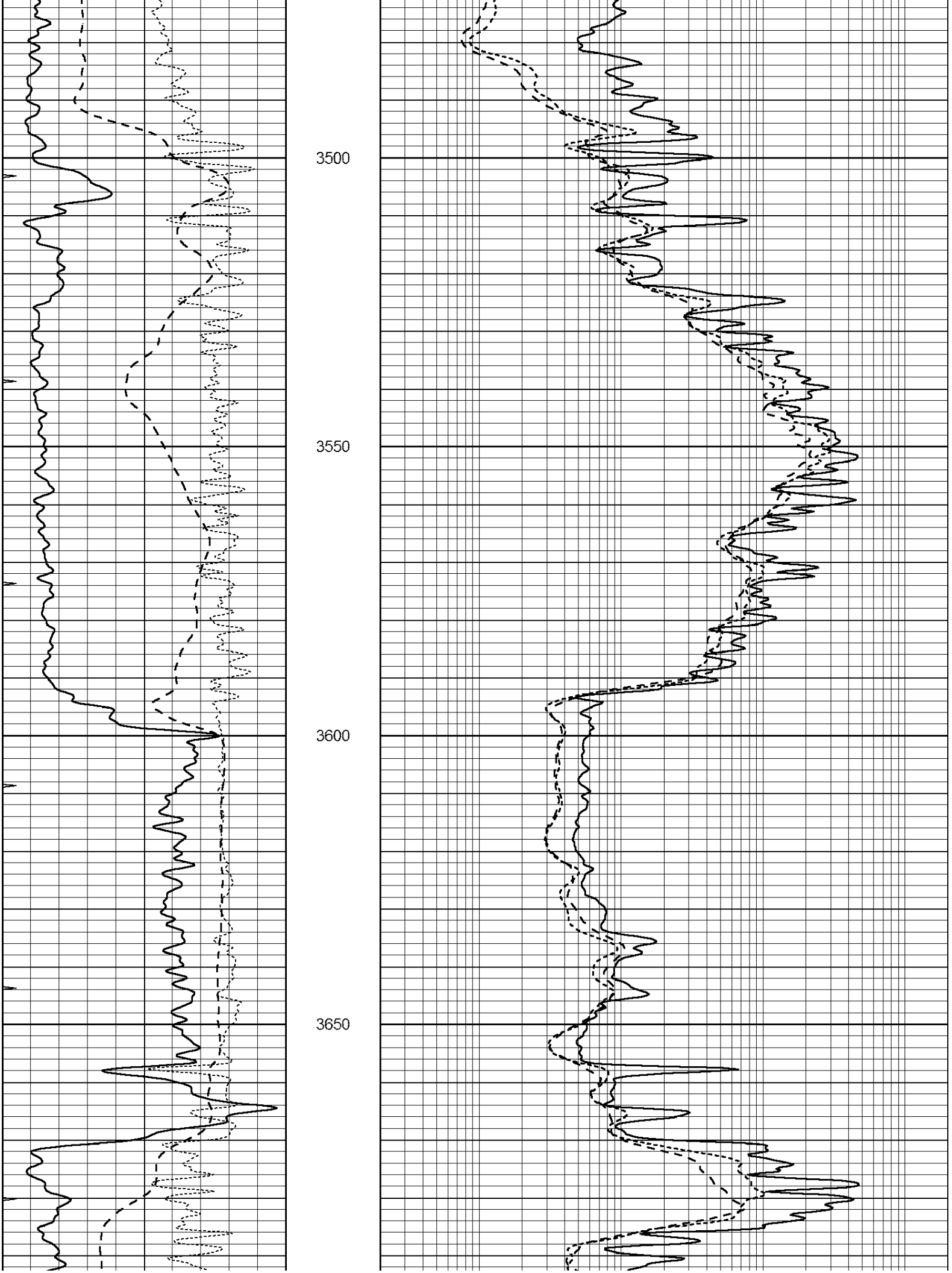
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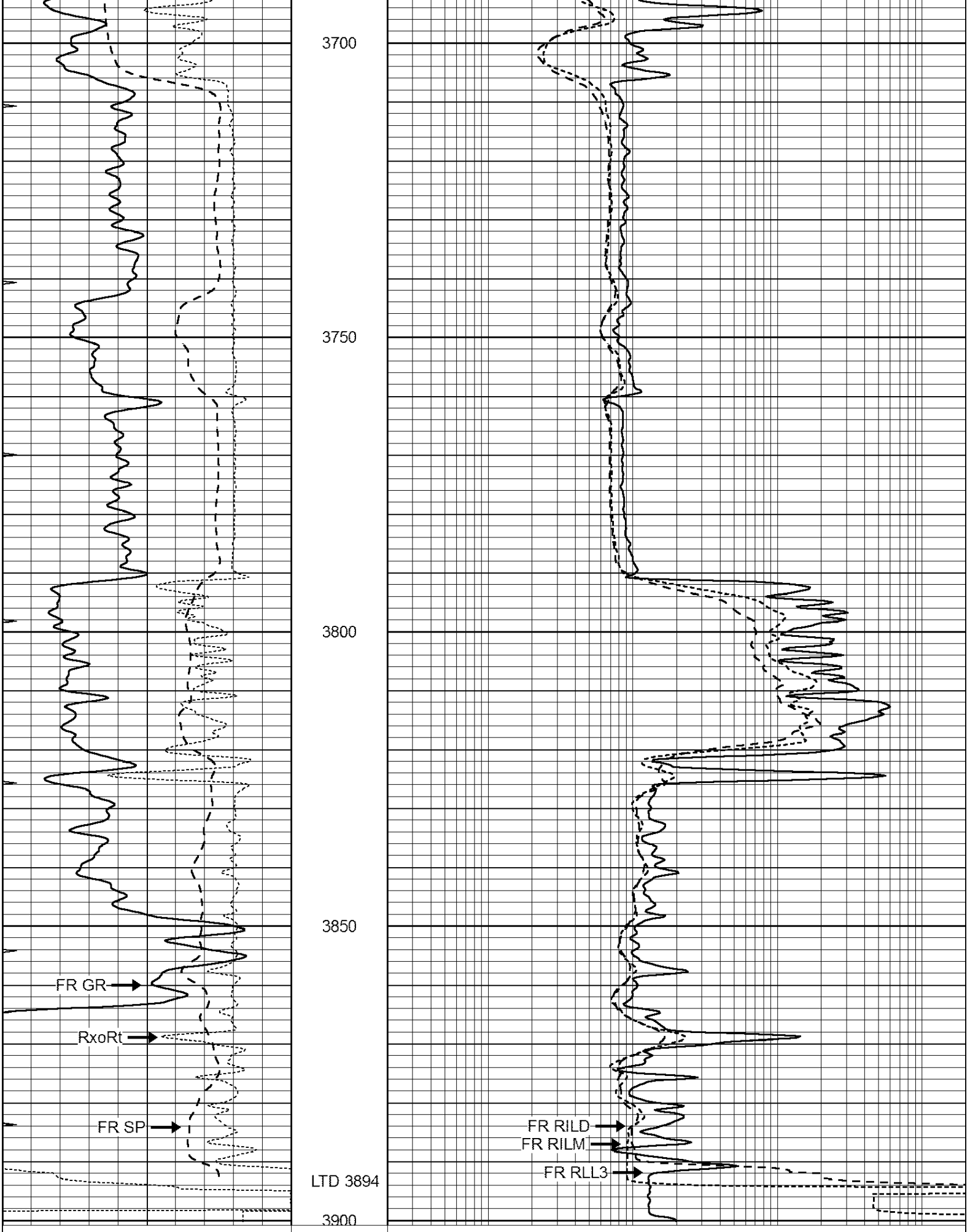
3700
3750
3800
3850
FR GR
RxoRt
FR SP
LTD 3894
3900
FR RILD
FR RILM
FR RLL3
0
GAMMA RAY (GAPI)
150
-100
SP (mV)
100
0.2
SHALLOW GUARD (Ohm-m)
2000
0.2
DEEP INDUCTION (Ohm-m)
2000

-250	Rxo/Rt	50
0	MINMK	20

0.2	MEDIUM INDUCTION (Ohm-m)	2000

NABORS
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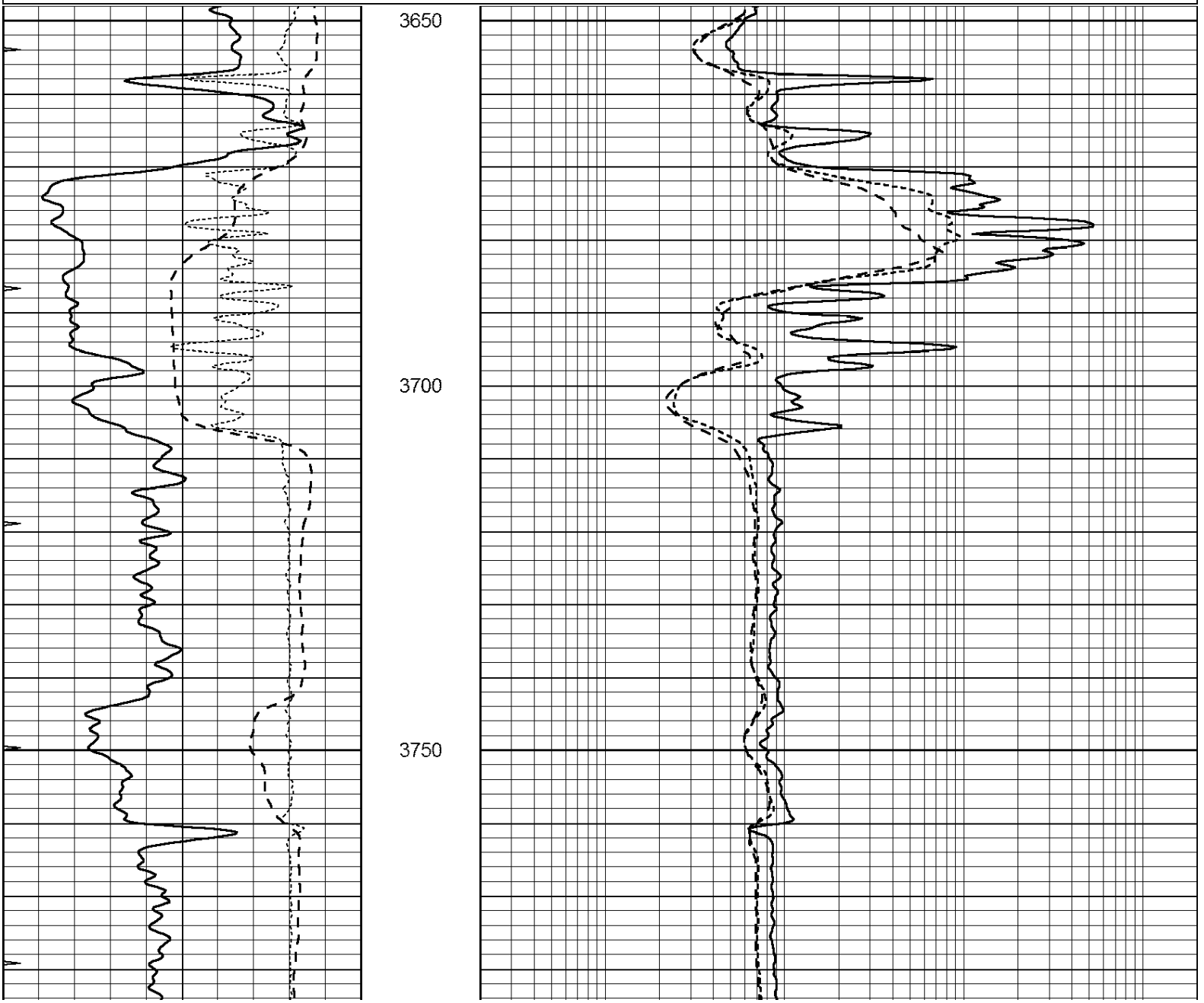
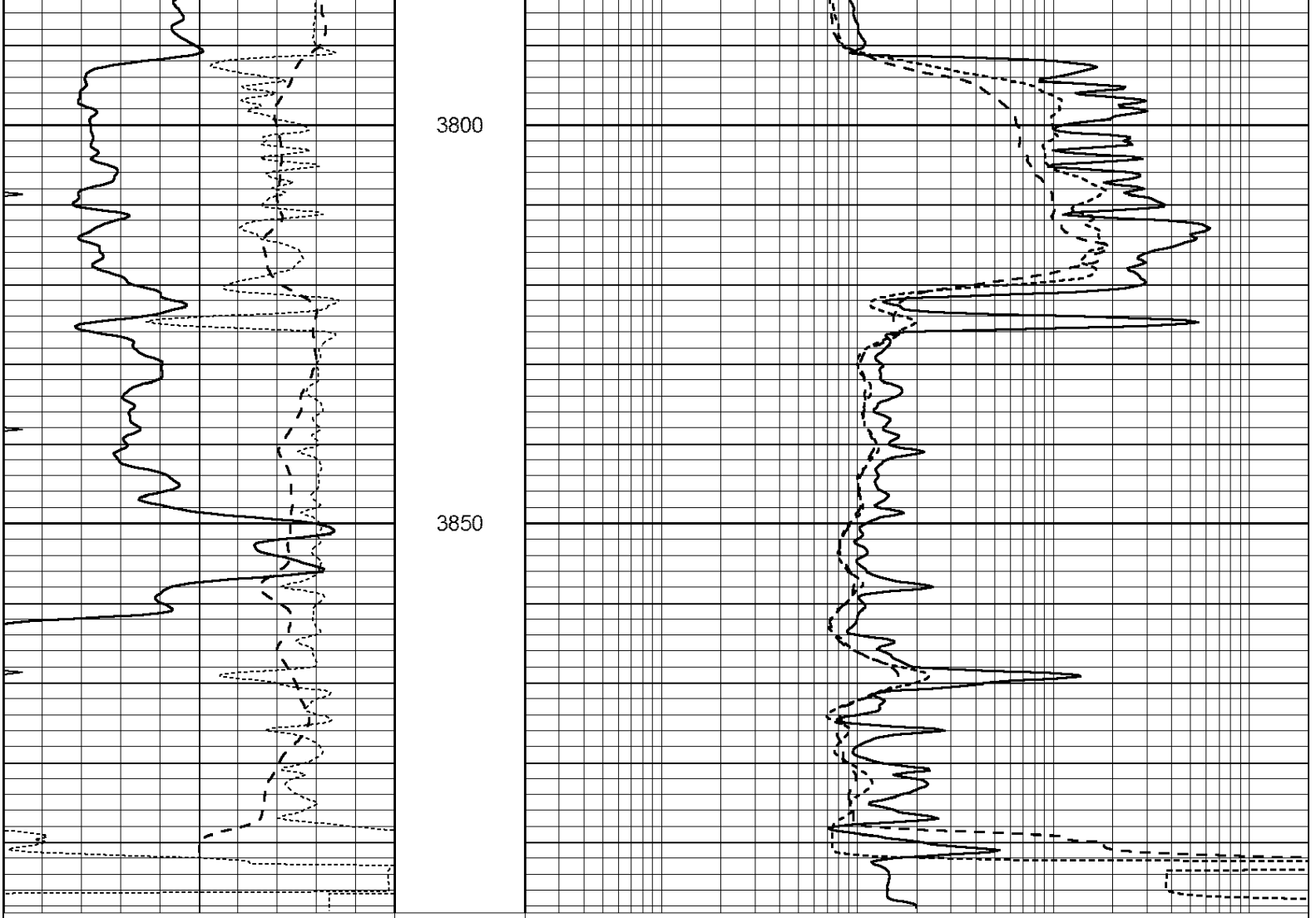
REPEAT SECTION

Database File: 26407ddn.db
Dataset Pathname: pass2.3
Presentation Format: _dil
Dataset Creation: Wed Nov 19 08:44:54 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

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





Calibration Report

Database File: 26407ddn.db
Dataset Pathname: pass3.2
Dataset Creation: Wed Nov 19 10:00:39 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE8-DILG
Surface Cal Performed:	Sun Aug 17 08:09:53 2014
Downhole Cal Performed:	Mon Jul 28 11:08:27 2008
After Survey Verification Performed:	Mon Jul 28 11:08:27 2008

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	-2.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-16.000
Internal:	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	625.992	-9.739

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		

Compensated Density Calibration Report

Serial-Model: GEAR4-GEARHART
Source / Verifier: 143 / 143
Master Calibration Performed: Wed Sep 18 03:03:09 2013
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1075.98	532.39	cps
Aluminum	2.560	g/cc	286.51	422.88	cps

Spine Angle = 80.13 Density/Spine Ratio = 0.633

	Size		Reading	
Small Ring	8.00	in	3.21	V
Large Ring	14.00	in	5.46	V

Before Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

After Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

Compensated Neutron Calibration Report

Serial Number: 6l
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

PRE-SURVEY VERIFICATION

	Detector	Readings		Measured		Target	
1)	Short Space		cps				
	Long Space		cps		pu		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		pu
2)	Short Space		cps				
	Long Space		cps		pu		pu
3)	Short Space		cps				
	Long Space		cps		pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6	
Tool Model:	OPEN	
Performed:	Sun Aug 17 15:23:09 2014	
Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps
Sensitivity:	0.7000	GAPI/cps