SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	LIBERTY OPERATIONS, INC.
Well	GANOUNG #1
Field	WILDCAT
County	ROOKS
State	KANSAS

Company LIBERTY OPERATIONS, INC.

Well GANOUNG #1

Field WILDCAT

County ROOKS State KANSAS

Location: API #: 15-163-23979-0000

1760' FNL & 925' FWL
SW - NE - SW - NW

SEC 28 TWP 10S RGE 17W

Other Services
CDL/CNL/PE
SON/MEL

Permanent Datum	GROUND LEVEL	Elevation	2104
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		

Elevation
K.B. 2112
D.F. 2110
G.L. 2104

Date	9-30-11		
Run Number	ONE		
Depth Driller	3800		
Depth Logger	3797		
Bottom Logged Interval	3795		
Top Log Interval	0		
Casing Driller	226		
Casing Logger	222		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.2 / 55	CHLORIDES 7000 PPM	
pH / Fluid Loss	9.0 / 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.55 @ 79F		
Rmf @ Meas. Temp	0.41 @ 79F		
Rmc @ Meas. Temp	0.66 @ 79F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.38 @ 114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	114F		
Equipment Number	0860		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	TONY RICHARDSON		

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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

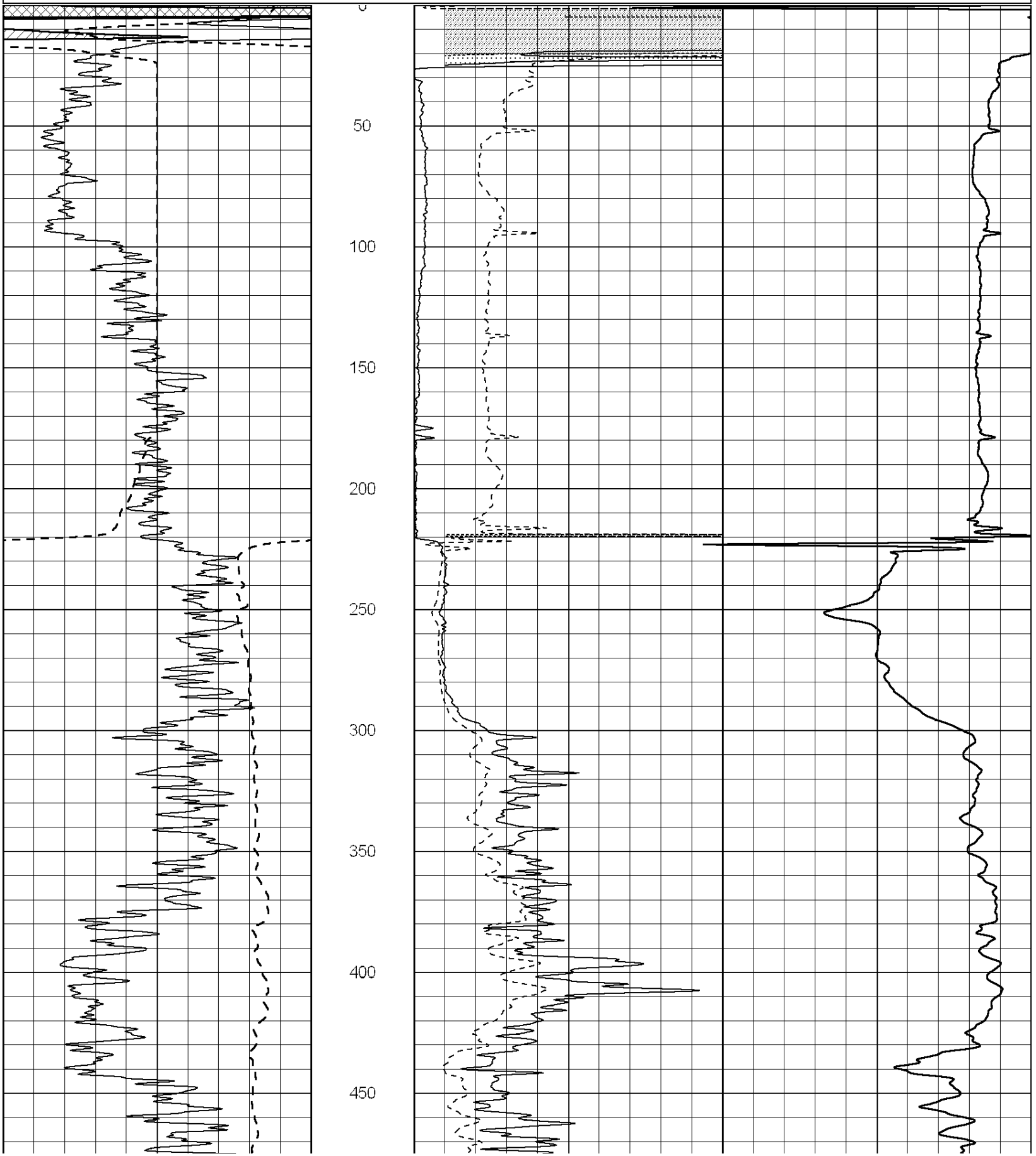
SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: PLAINVILLE, KS - SOUTH TO RD BB - 4 MILES EAST TO RD 21
1 1/2 MILES SOUTH - SOUTH & EAST INTO

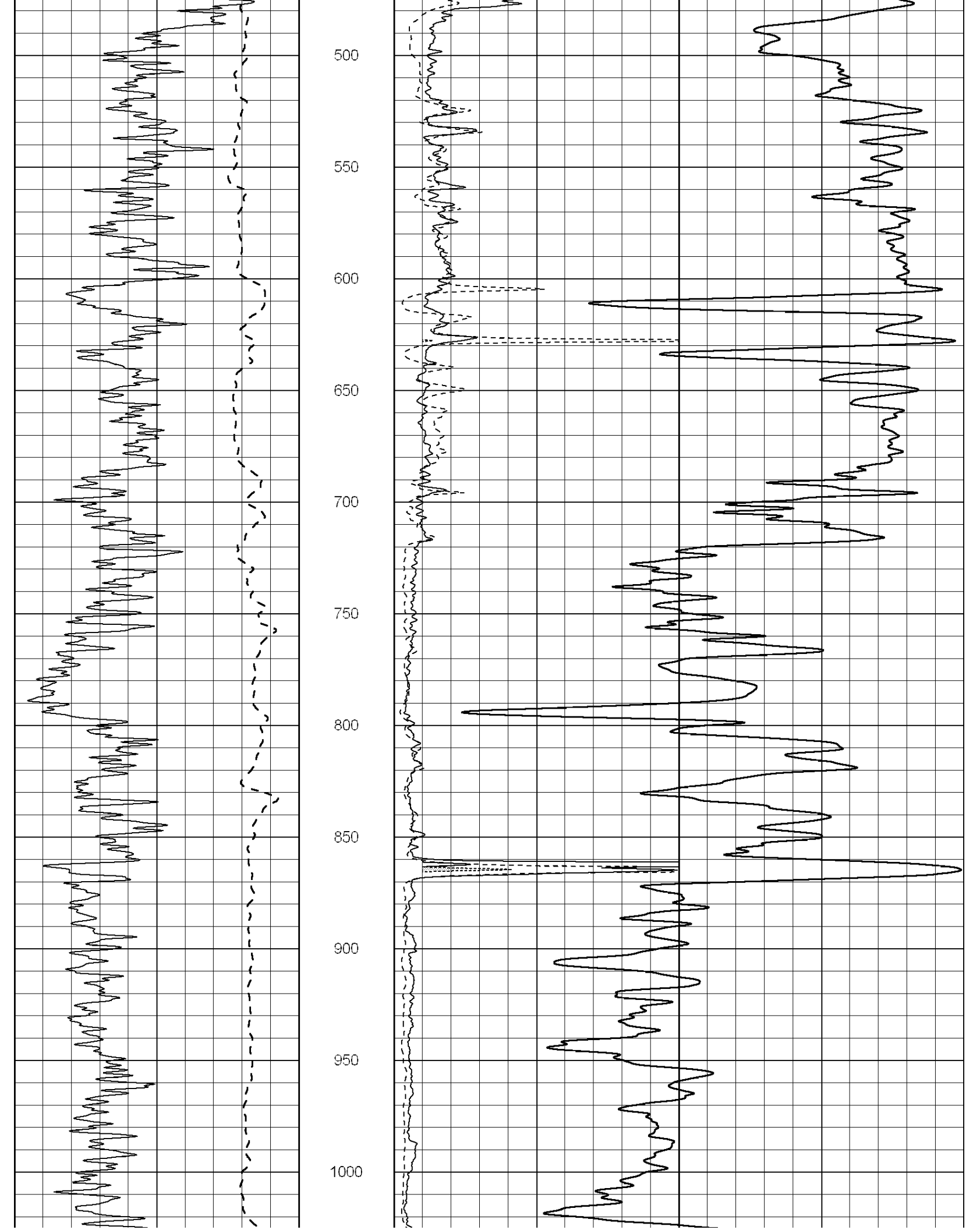
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Presentation Format:	dil2
Dataset Creation:	Fri Sep 30 11:45:32 2011 by Calc Open-Cased 090629

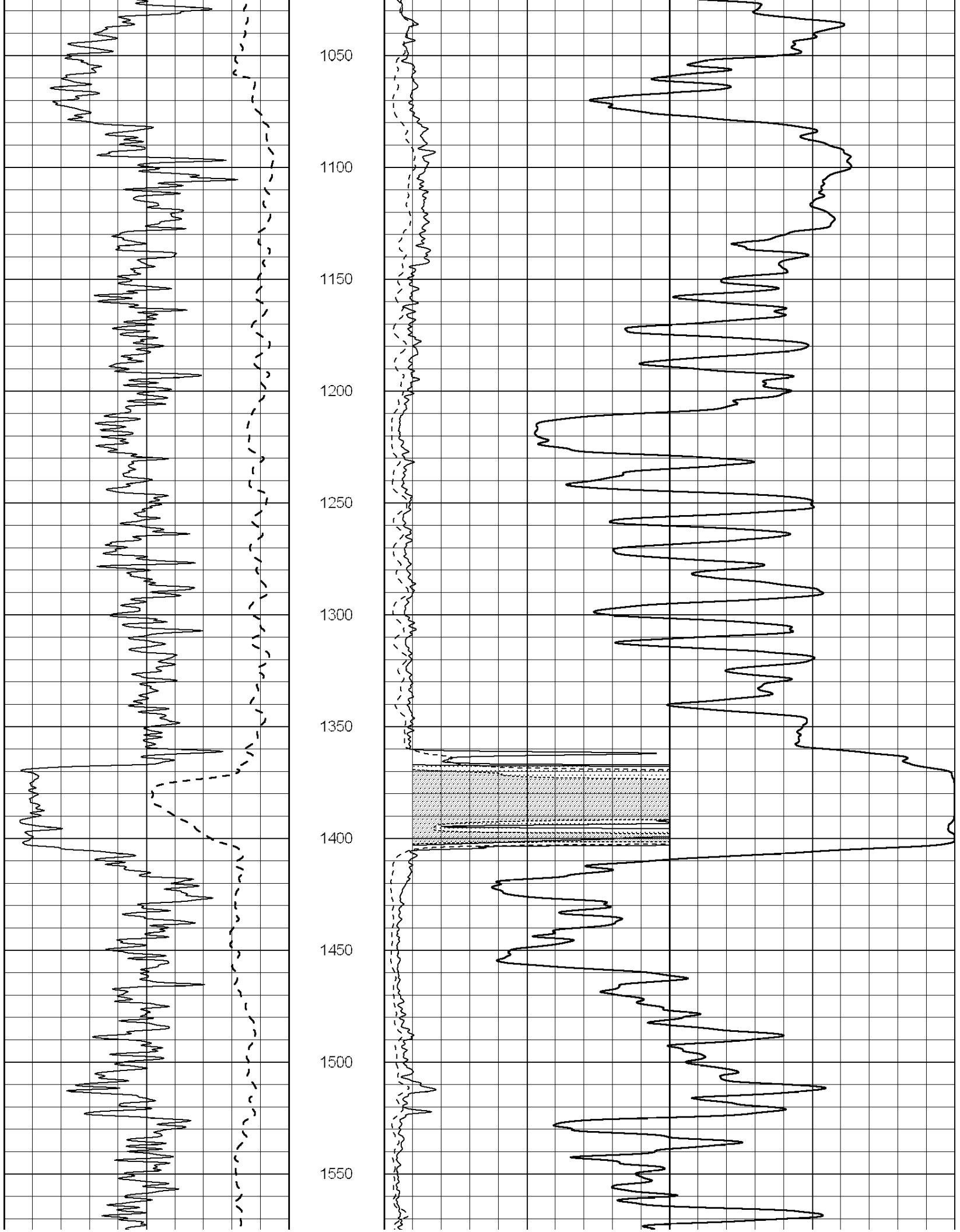
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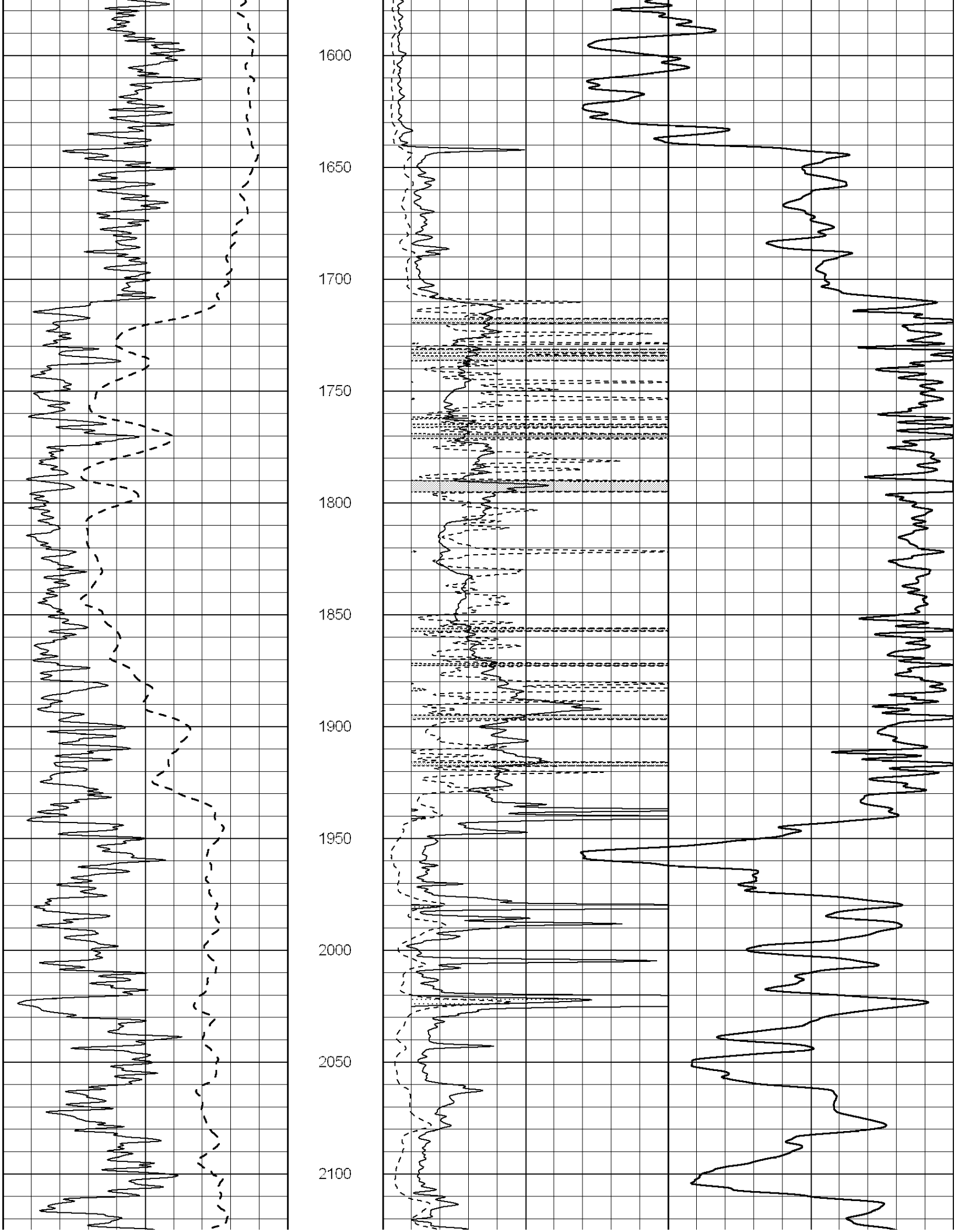
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

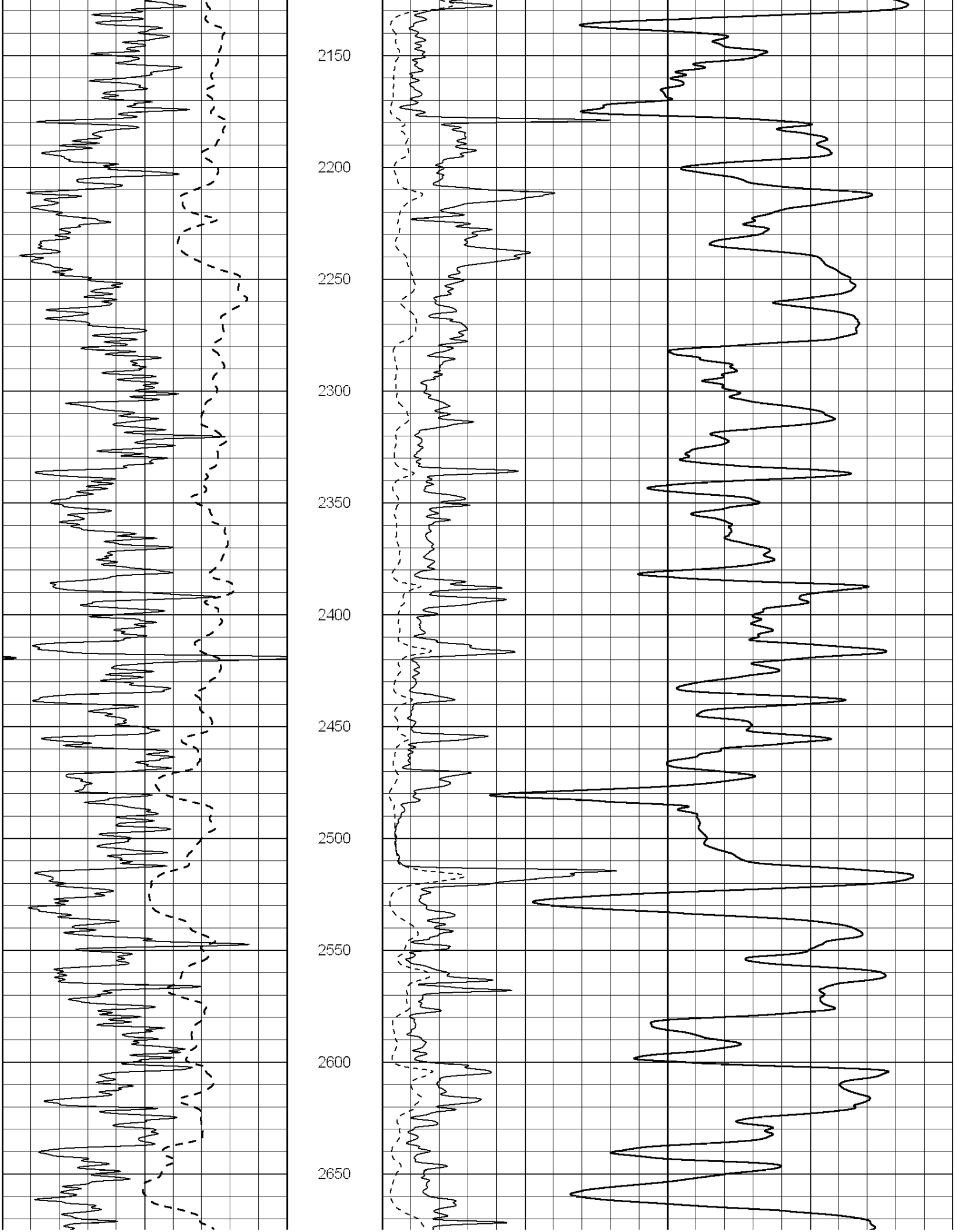
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
1000	CILD (mmho/m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

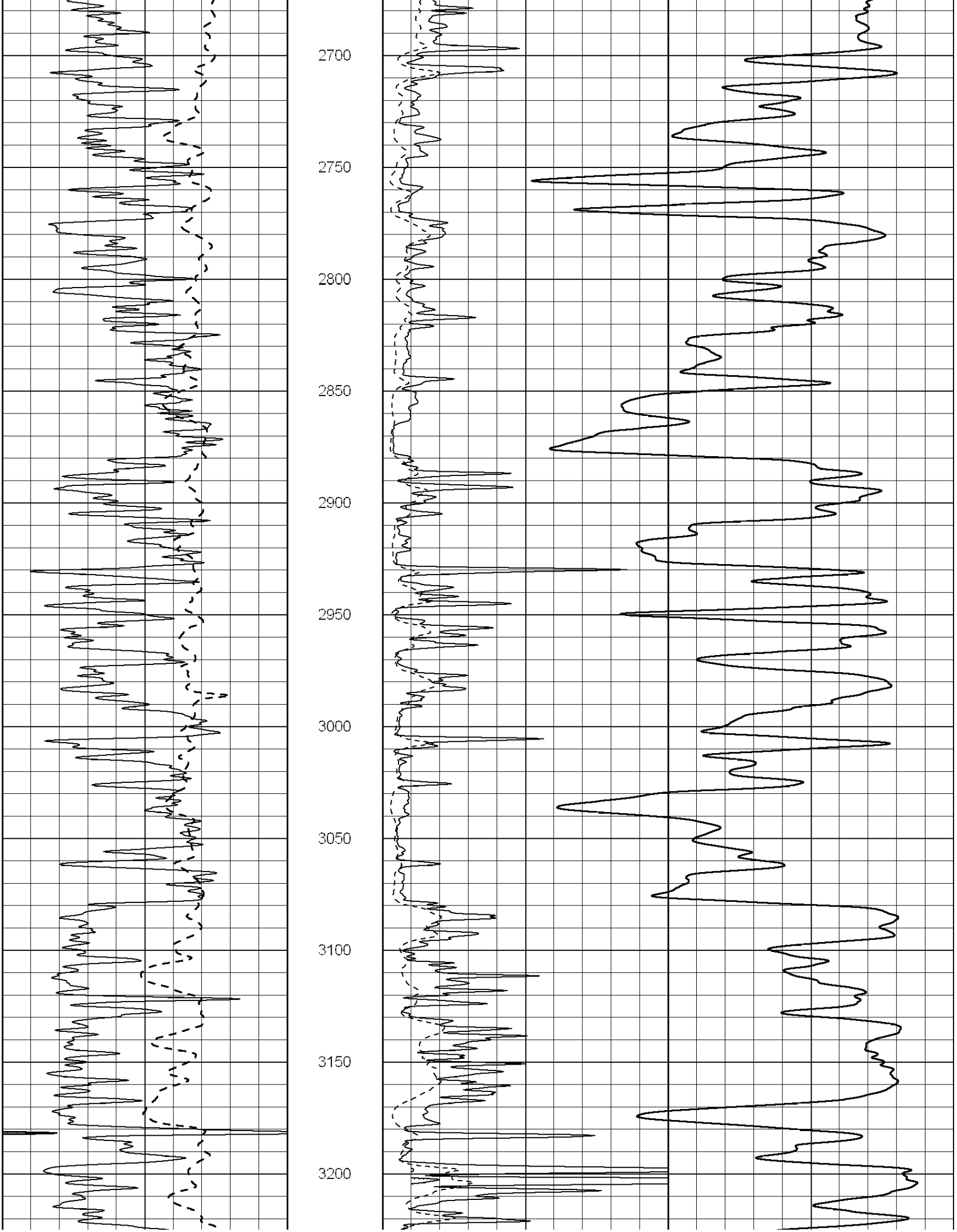


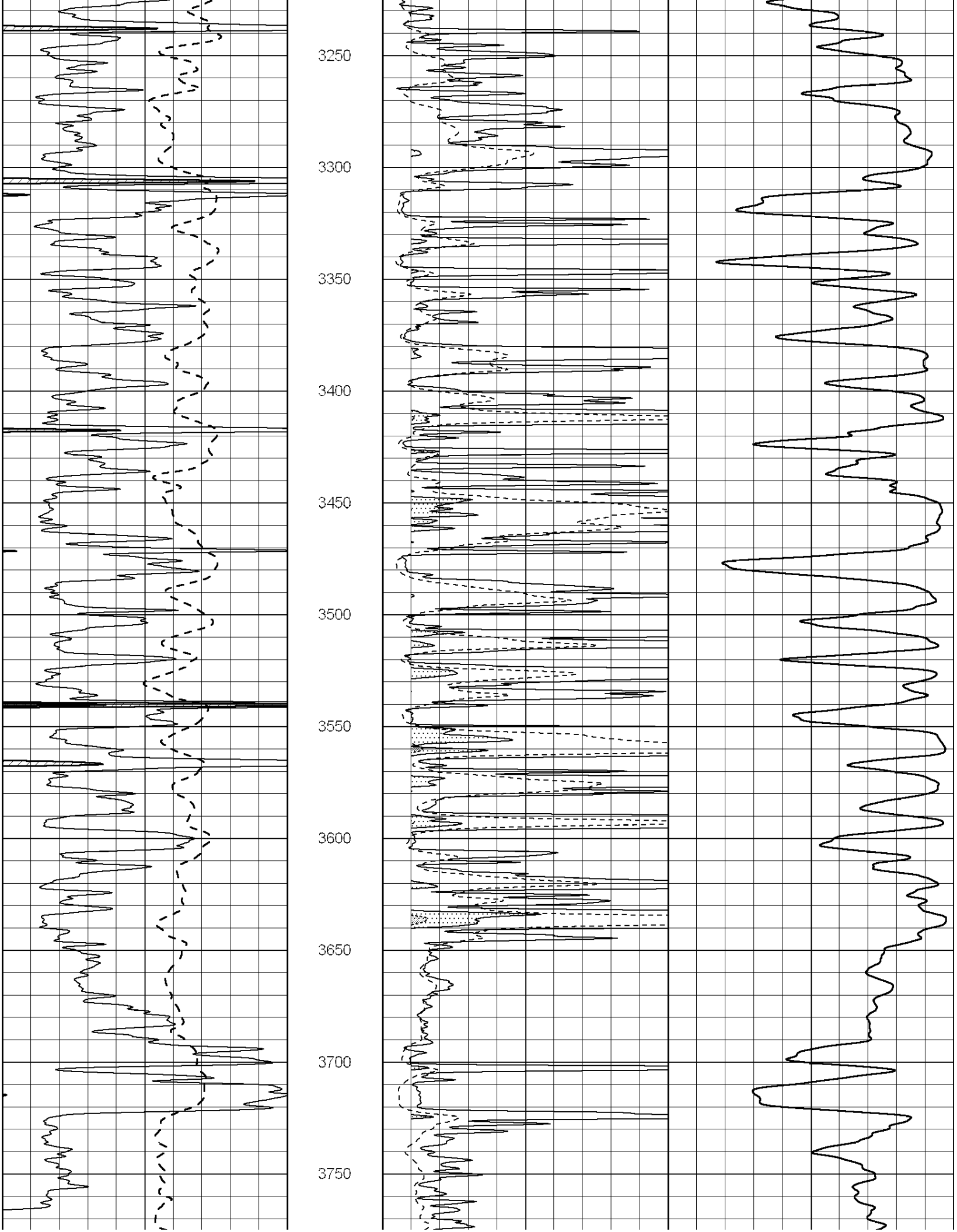

500
550
600
650
700
750
800
850
900
950
1000

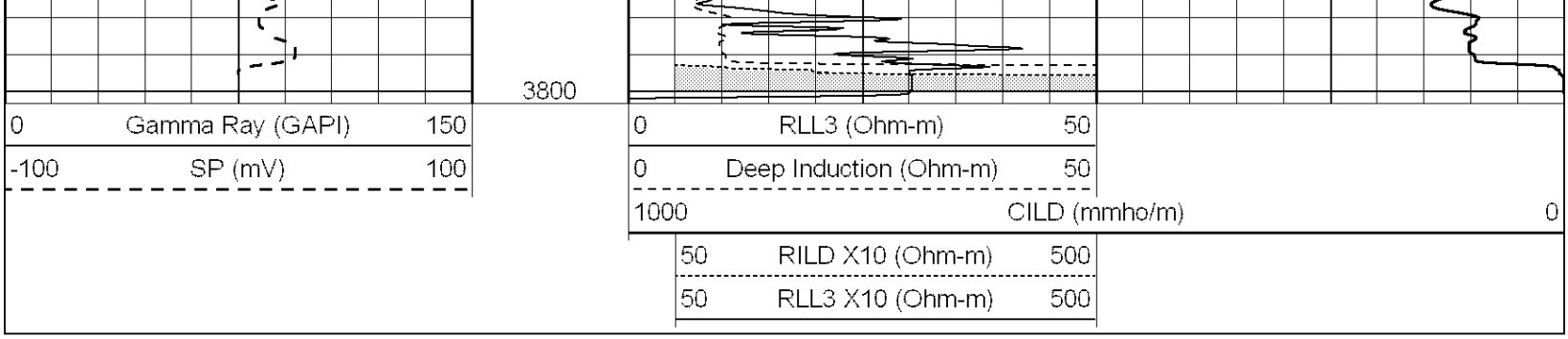

1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550


1600
1650
1700
1750
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1850
1900
1950
2000
2050
2100

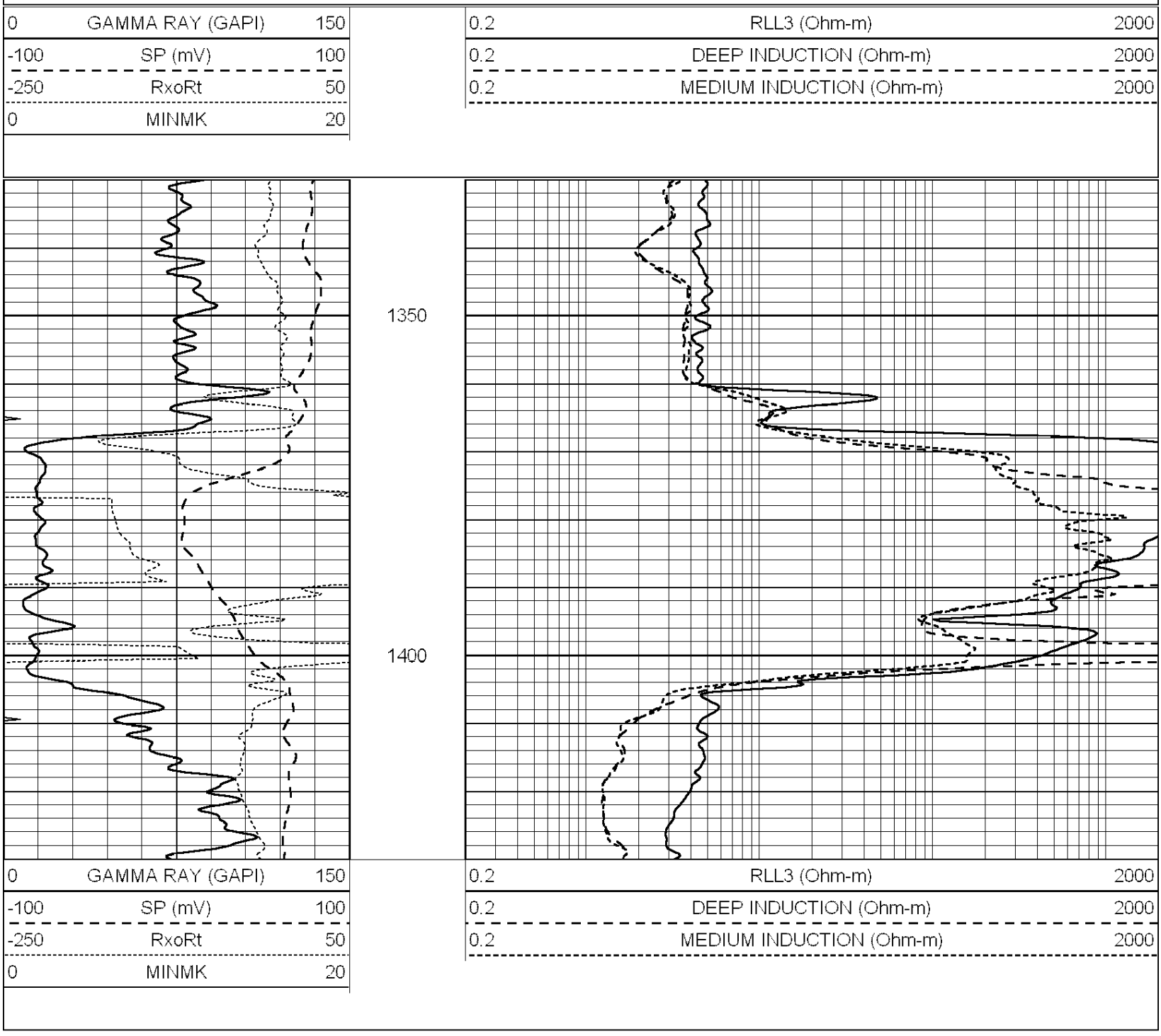

2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650


2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200


3250
3300
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3600
3650
3700
3750



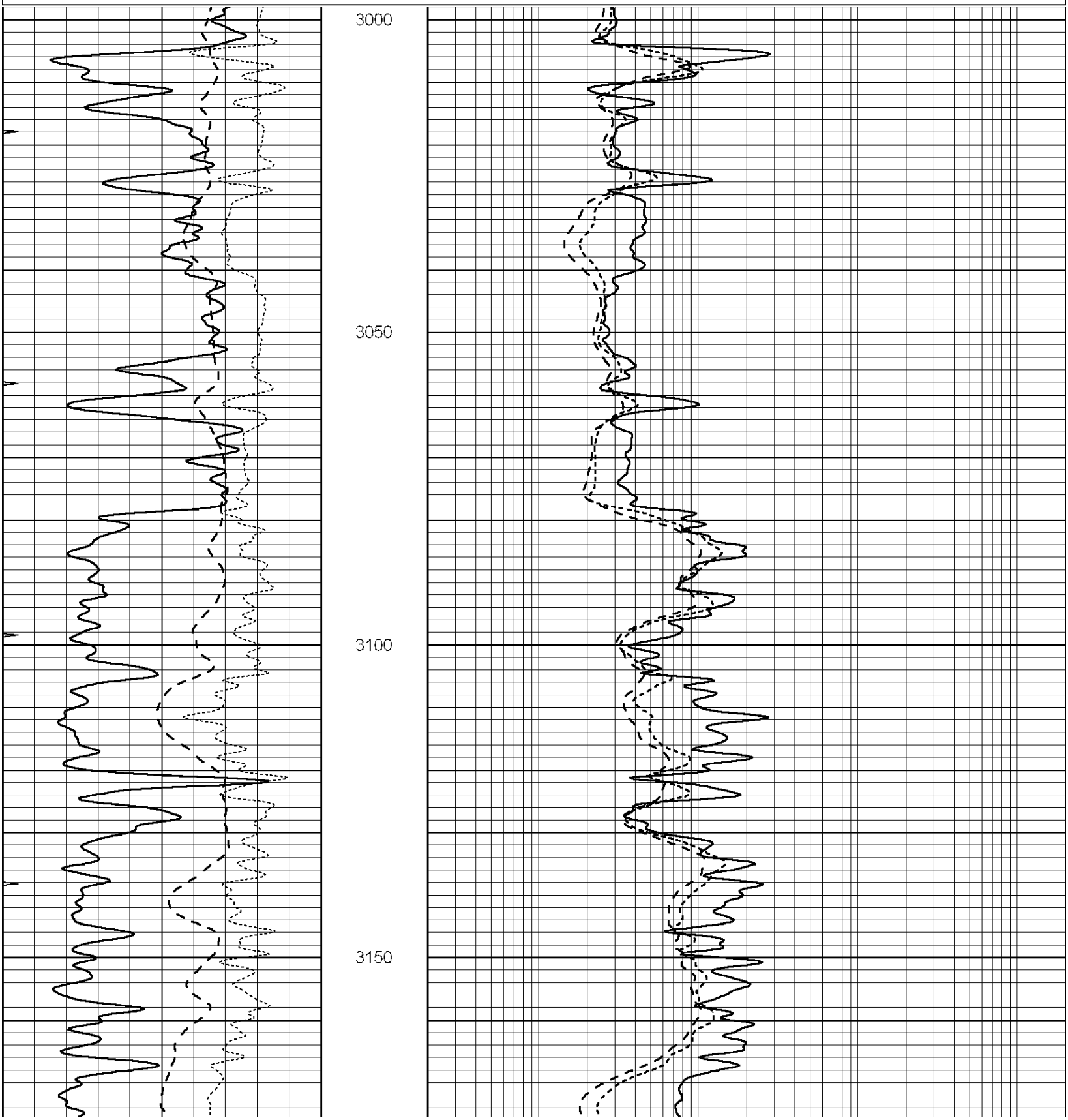
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Presentation Format: dil
Dataset Creation: Fri Sep 30 11:45:32 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

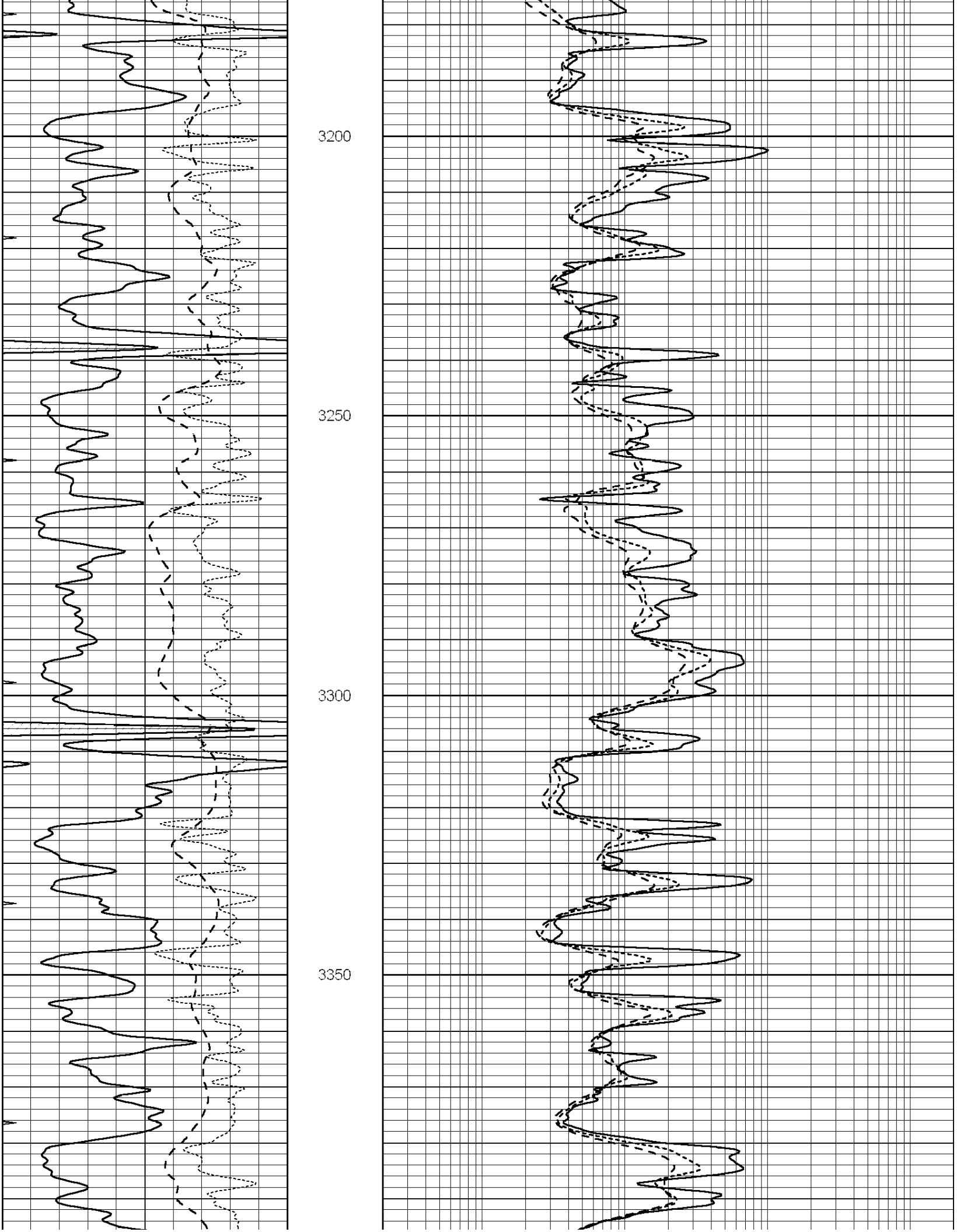


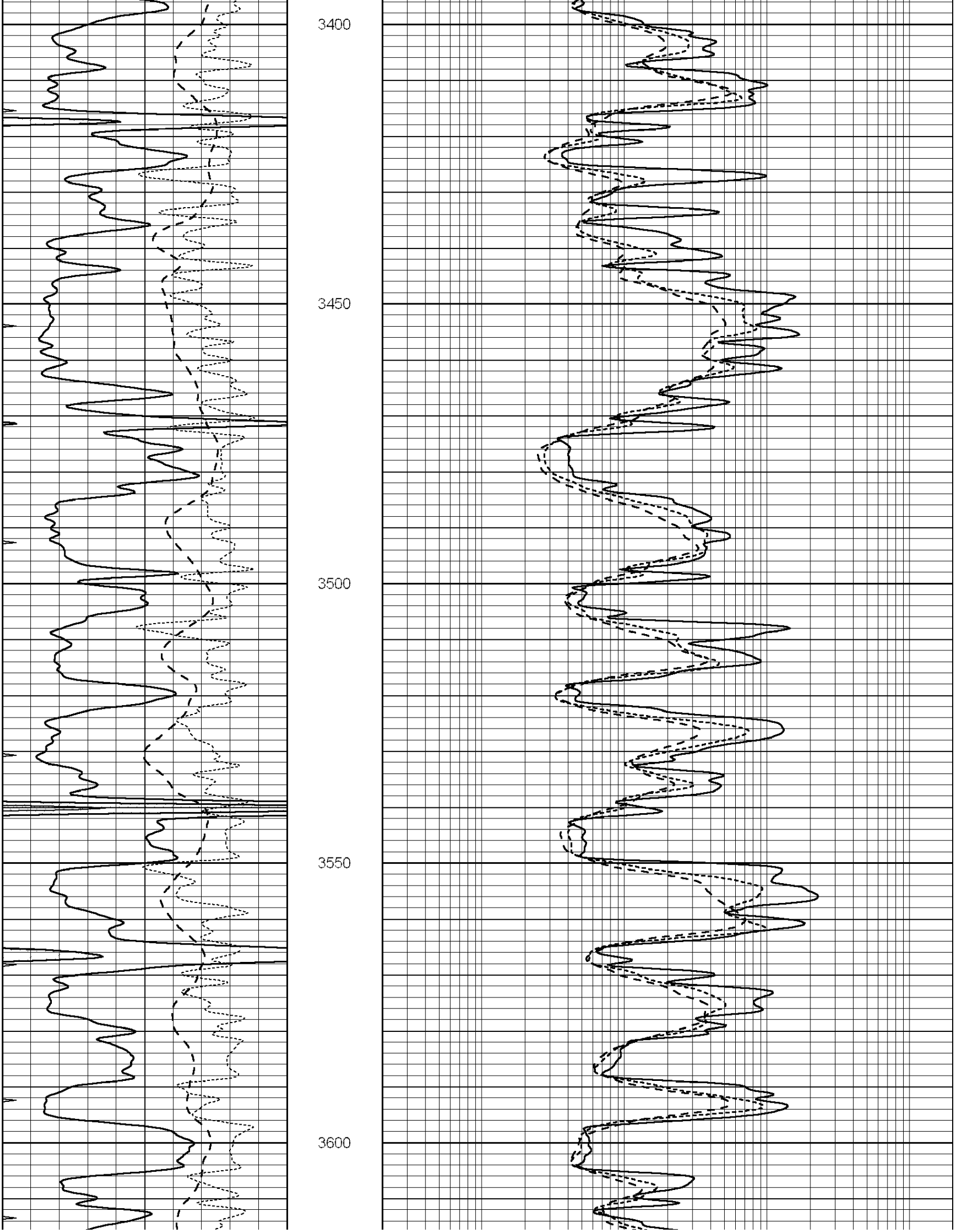
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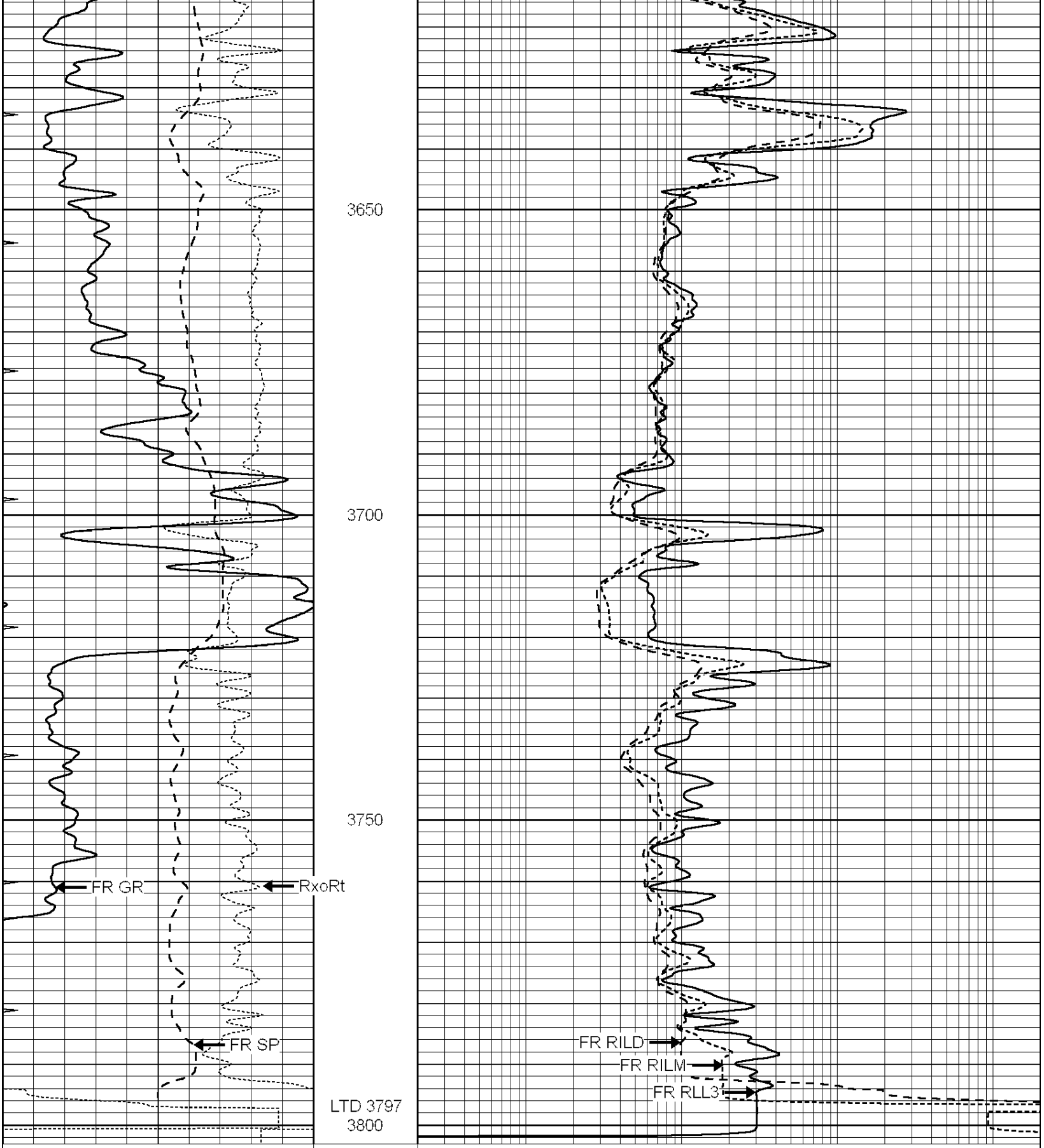
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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




3200
3250
3300
3350


3400
3450
3500
3550
3600


3650
3700
3750
FR GR
RxoRt
FR SP
FR RILD
FR RILM
FR RLL3
LTD 3797
3800
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 WELL SERVICES

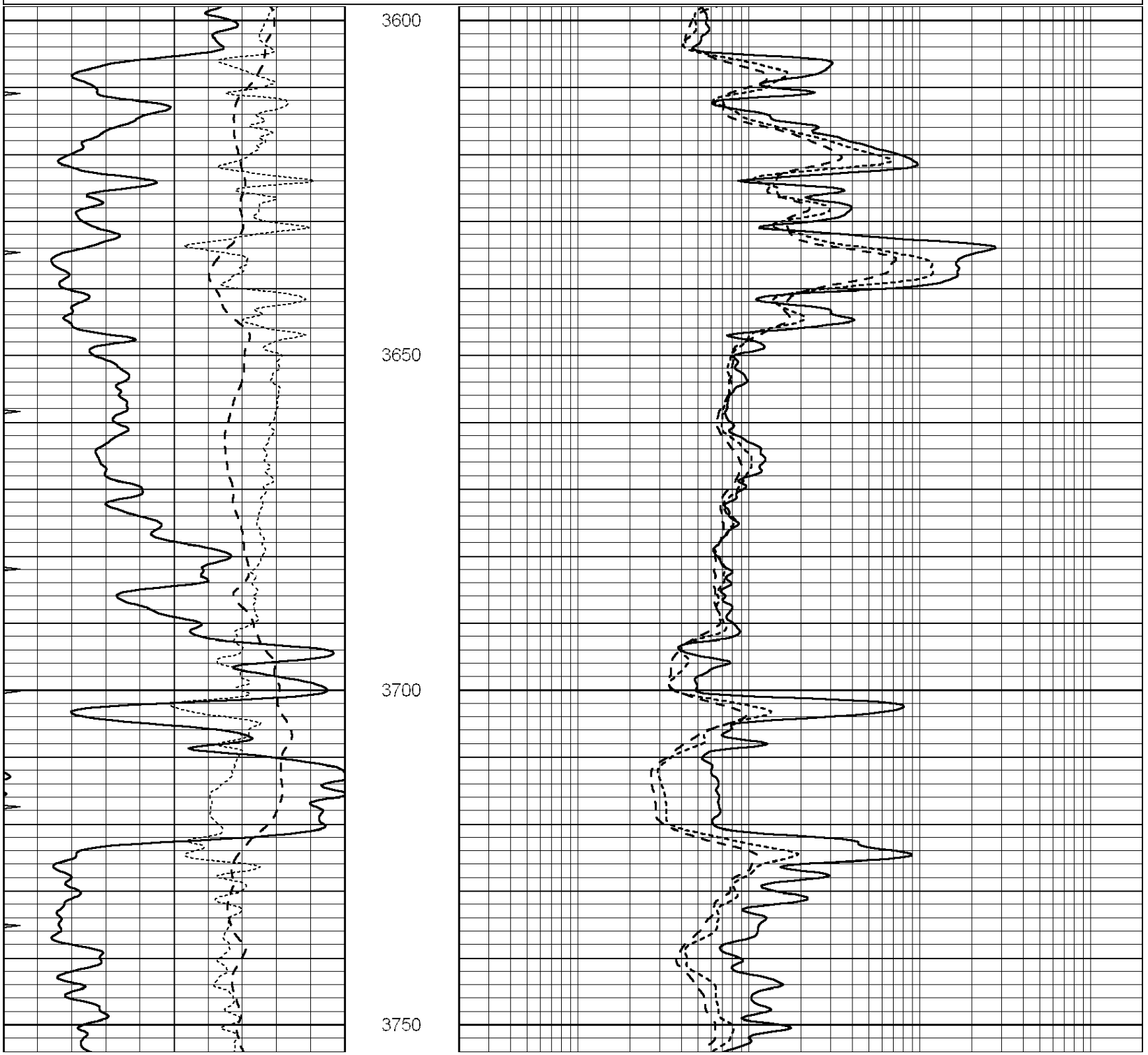
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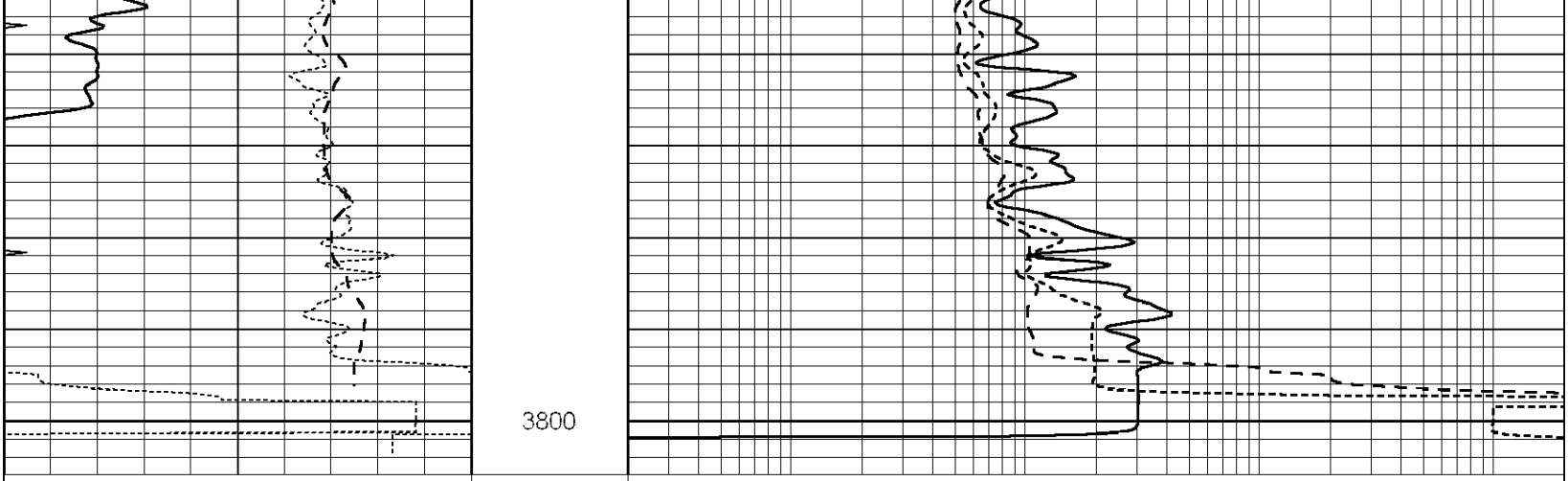
REPEAT SECTION

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Presentation Format:	dil
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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