NABORS COMPLETION & PRODUCTION SERVICES CO.

DUAL INDUCTION LOG

Company	I.A. OPERATING, INC.
Well	PEAVEY D #6-1
Field	ANDERSON
County	ELLIS
State	KANSAS

Company I.A. OPERATING, INC.
Well PEAVEY D #6-1
Field ANDERSON
County ELLIS State KANSAS
Location: API # : 15-051-26540-00-00
520' FNL & 1130' FWL
SE - NE - NW - NW
SEC 6 TWP 11S RGE 18W

Permanent Datum GROUND LEVEL Elevation 1951
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING

Other Services
CDL/CNL
MEL/SON

Elevation
K.B. 1959
D.F. 1957
G.L. 1951

Date	6/10/13		
Run Number	ONE		
Depth Driller	3580		
Depth Logger	3579		
Bottom Logged Interval	3577		
Top Log Interval	0		
Casing Driller	8 5/8" @ 263		
Casing Logger	263		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 8,000 PPM	
Density / Viscosity	9.1/50		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.45 @ 89F		
Rmf @ Meas. Temp	0.34 @ 89F		
Rmc @ Meas. Temp	0.54 @ 89F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.36 @ 112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	MARC DOWNING		

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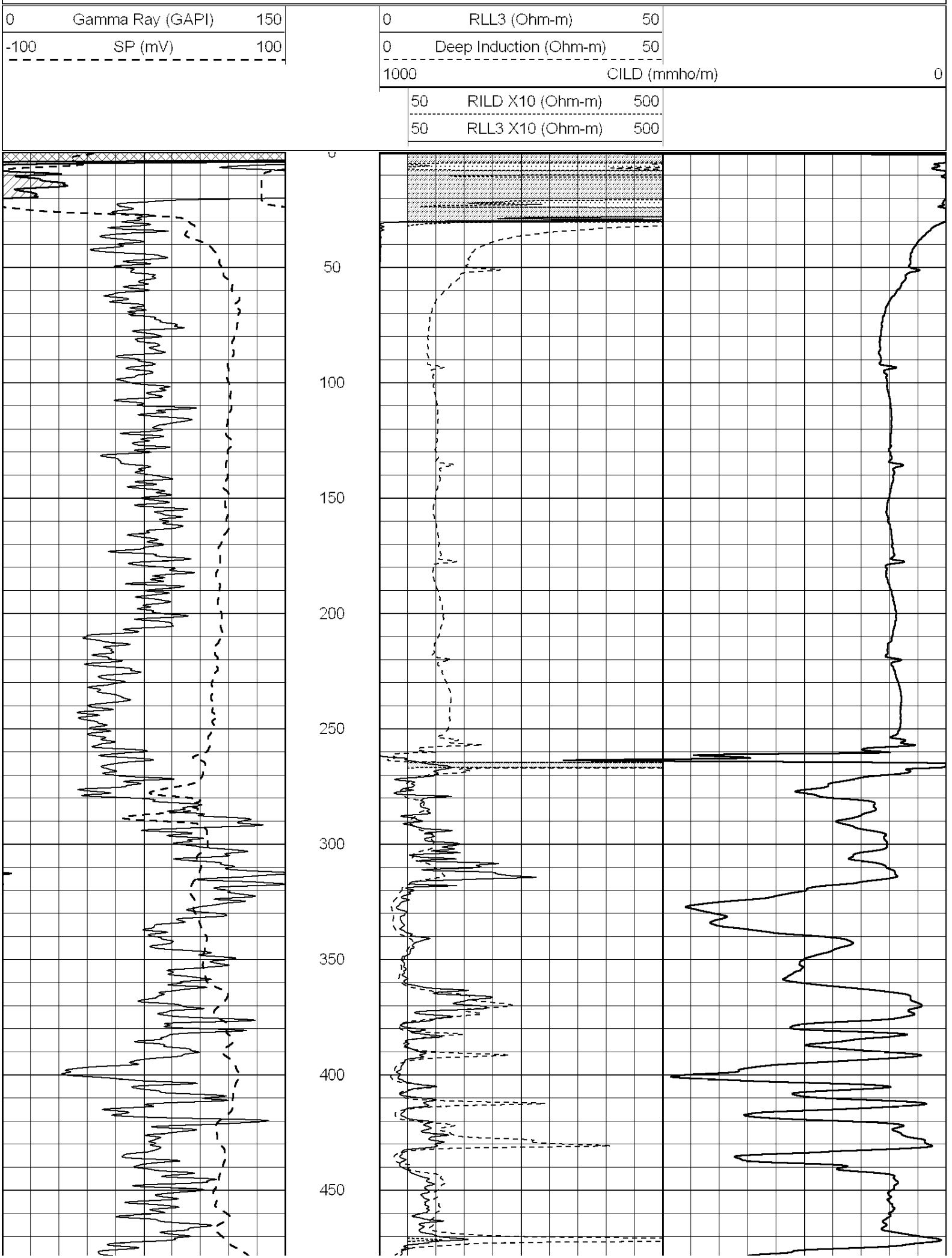
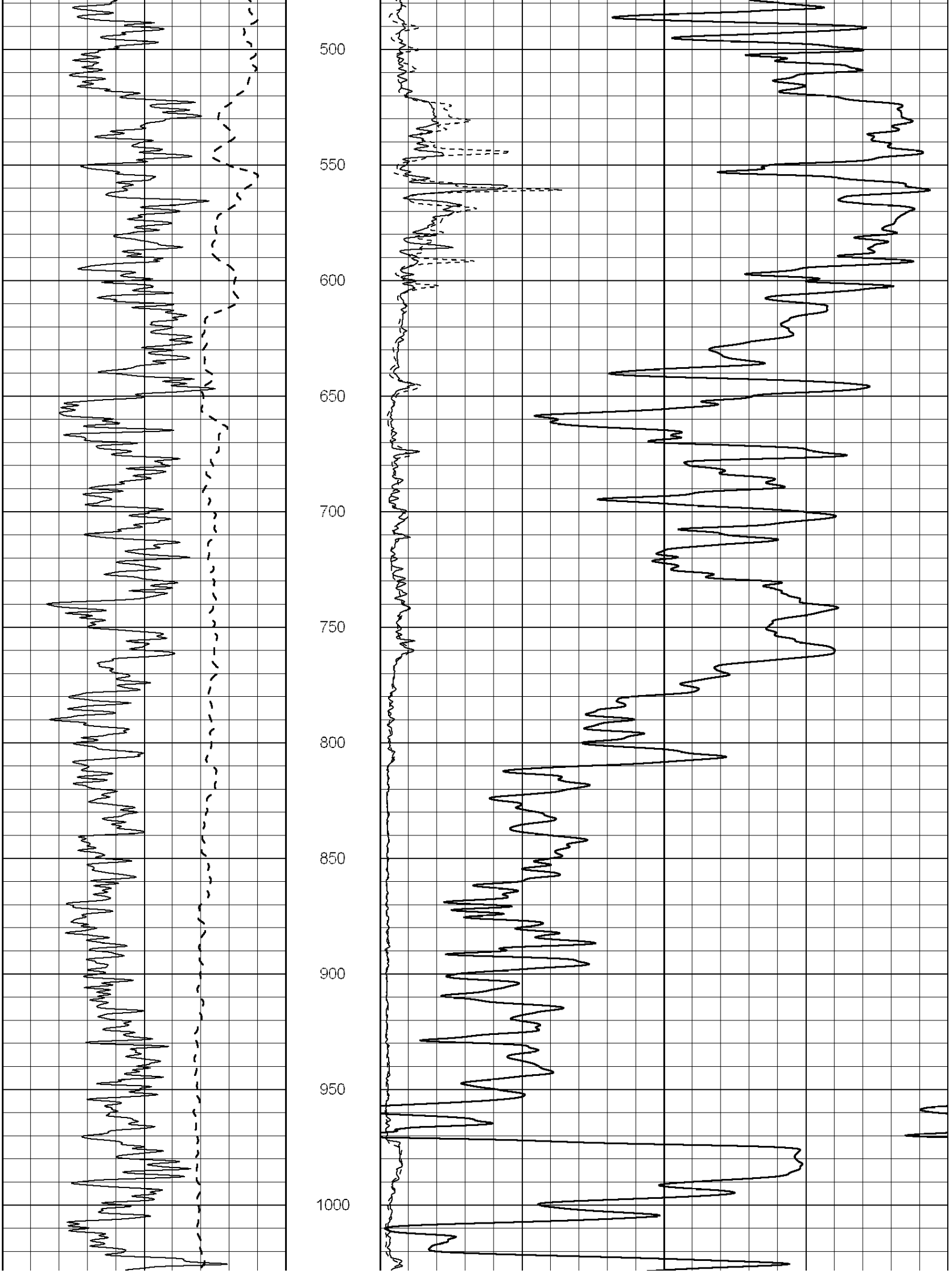
Comments

THANK YOU FOR USING NABORS COMPLETION & PRODUCTION SVCS. (785) 628-6395

DIRECTIONS:
HAYS, KS - NORTH TO SALINE RIVER RD - 1 1/2 MILES WEST TO RD 240
2.8 MILES NORTH AND WEST - WEST 3/4 MILE INTO AT PB RANCH SIGN

Database File:	061013ddn.db
Dataset Pathname:	pass3.3
Presentation Format:	_dil2
Dataset Creation:	Mon Jun 10 05:21:07 2013 by Calc Open-Cased 090629
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
0
50
100
150
200
250
300
350
400
450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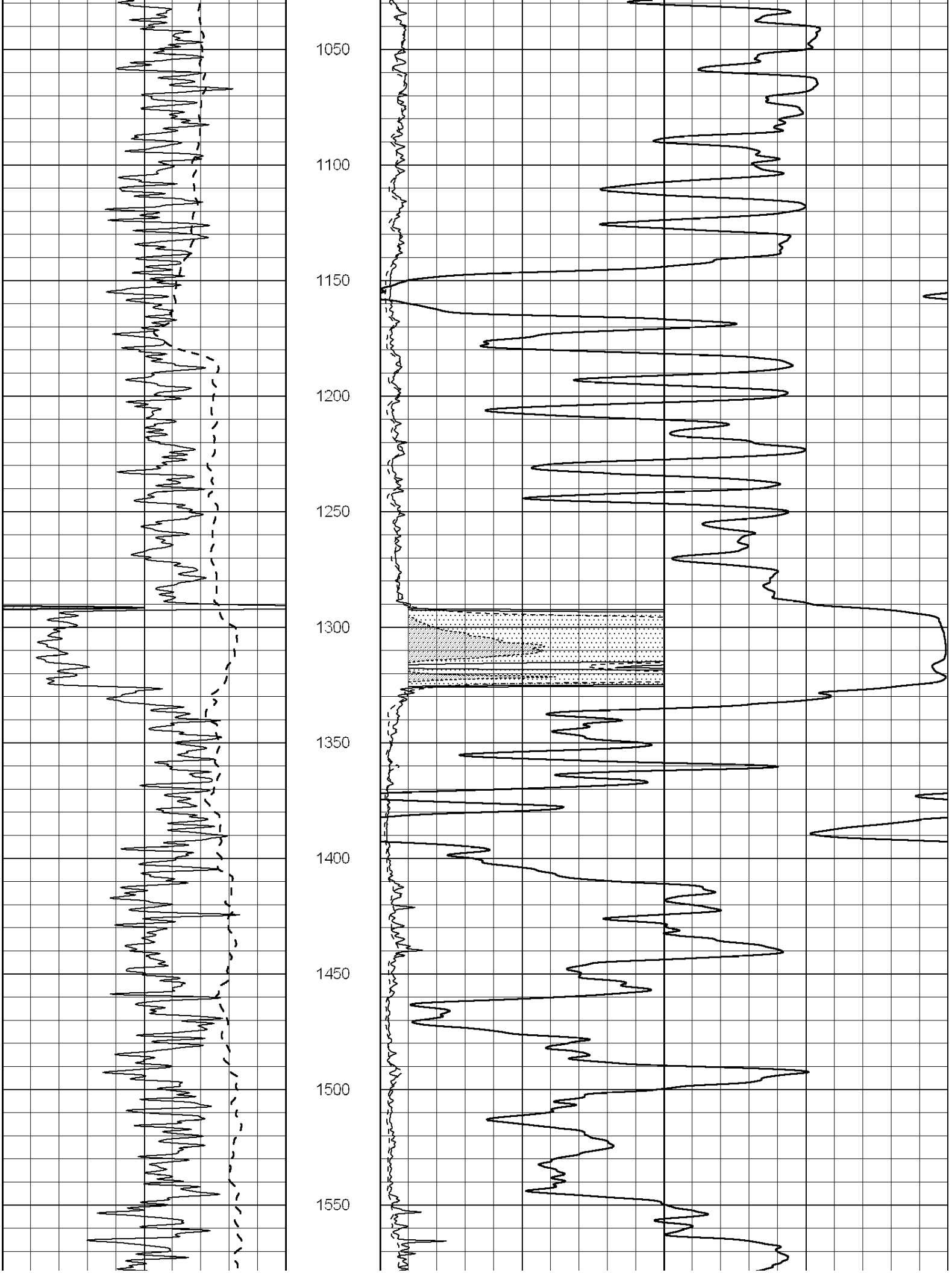
550
600
650
700
750
800
850
900
950
1000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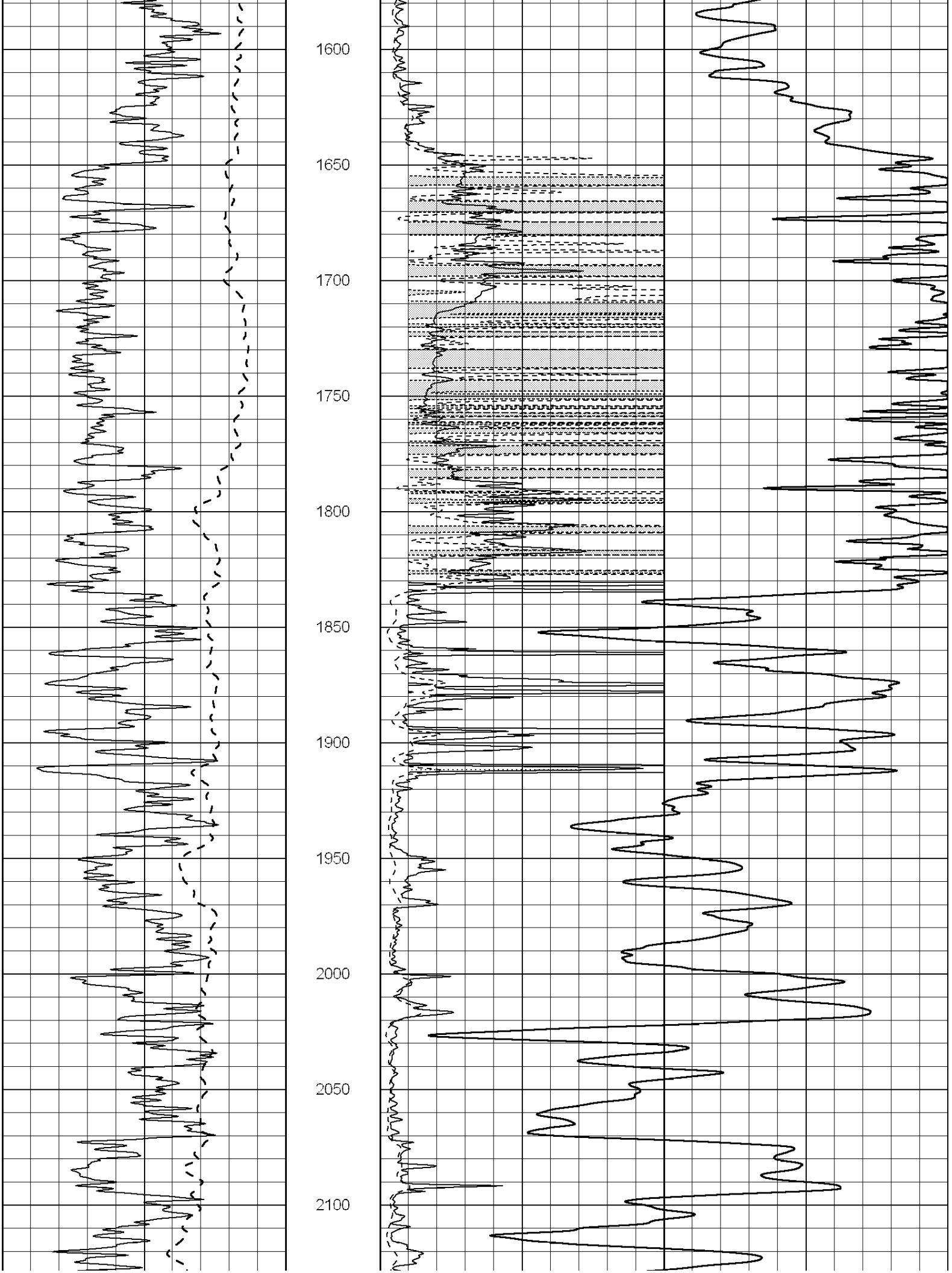
1150
1200
1250
1300
1350
1400
1450
1500
1550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1700
1750
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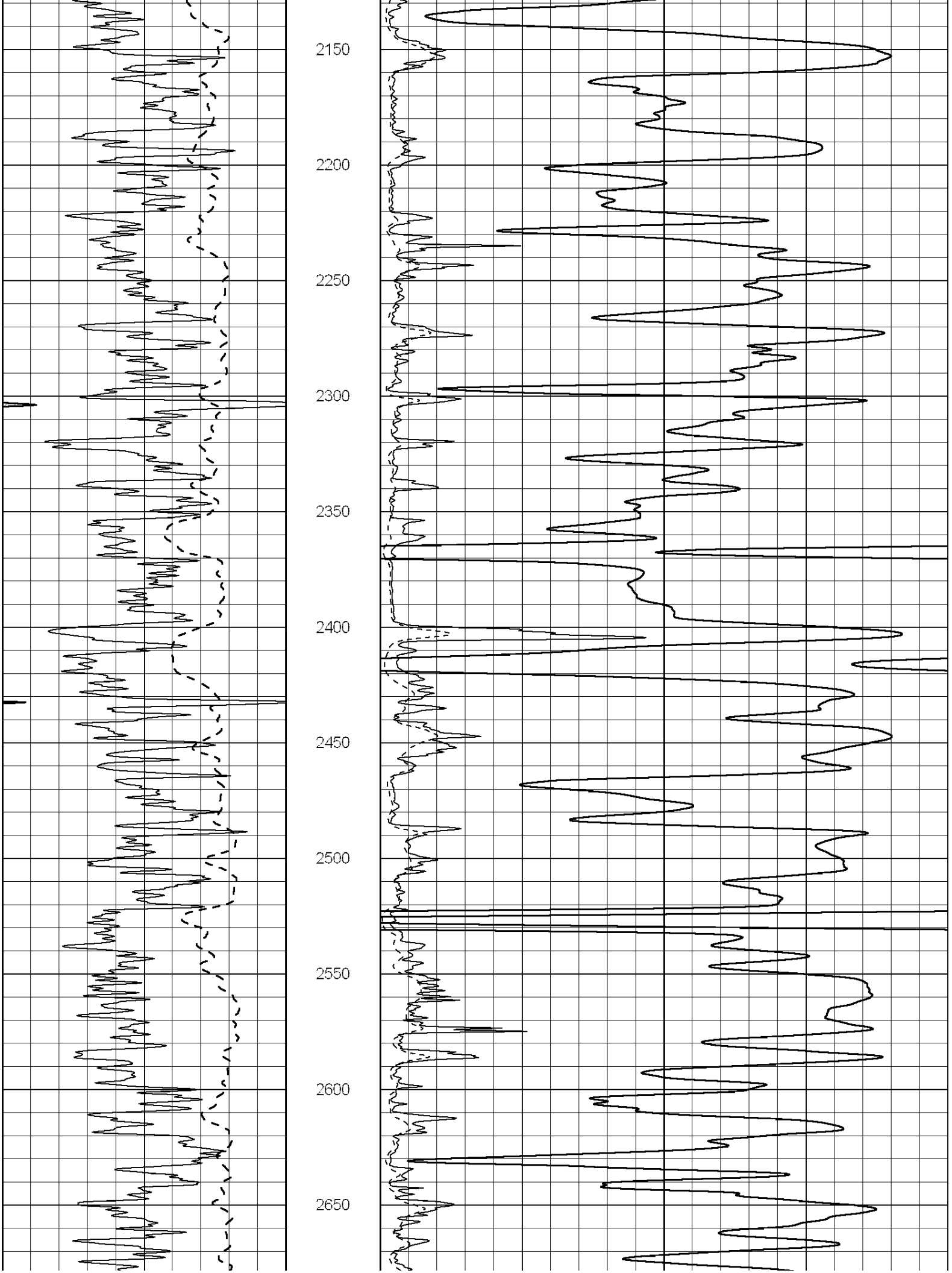
1850
1900
1950
2000
2050
2100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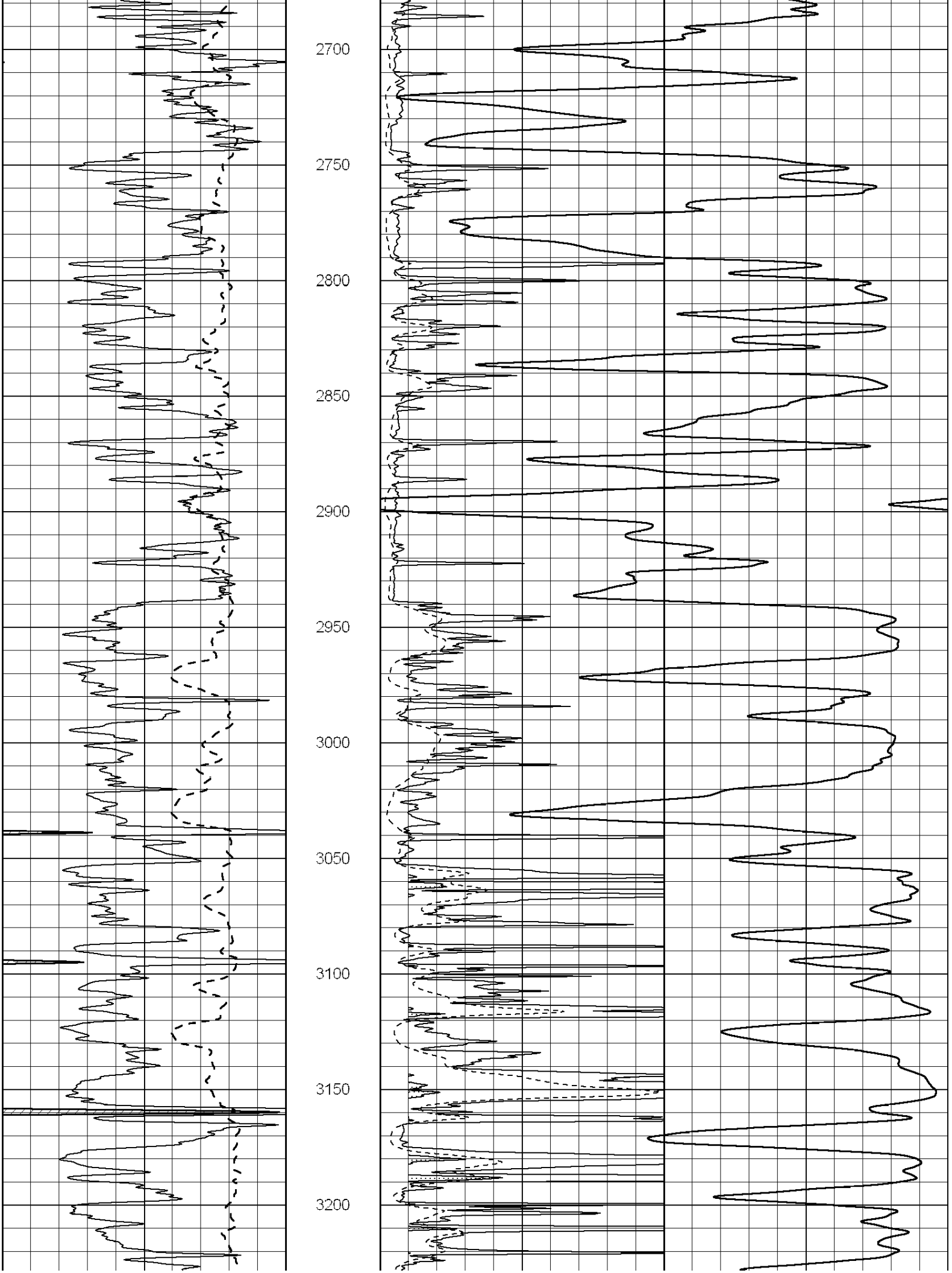
2250
2300
2350
2400
2450
2500
2550
2600
2650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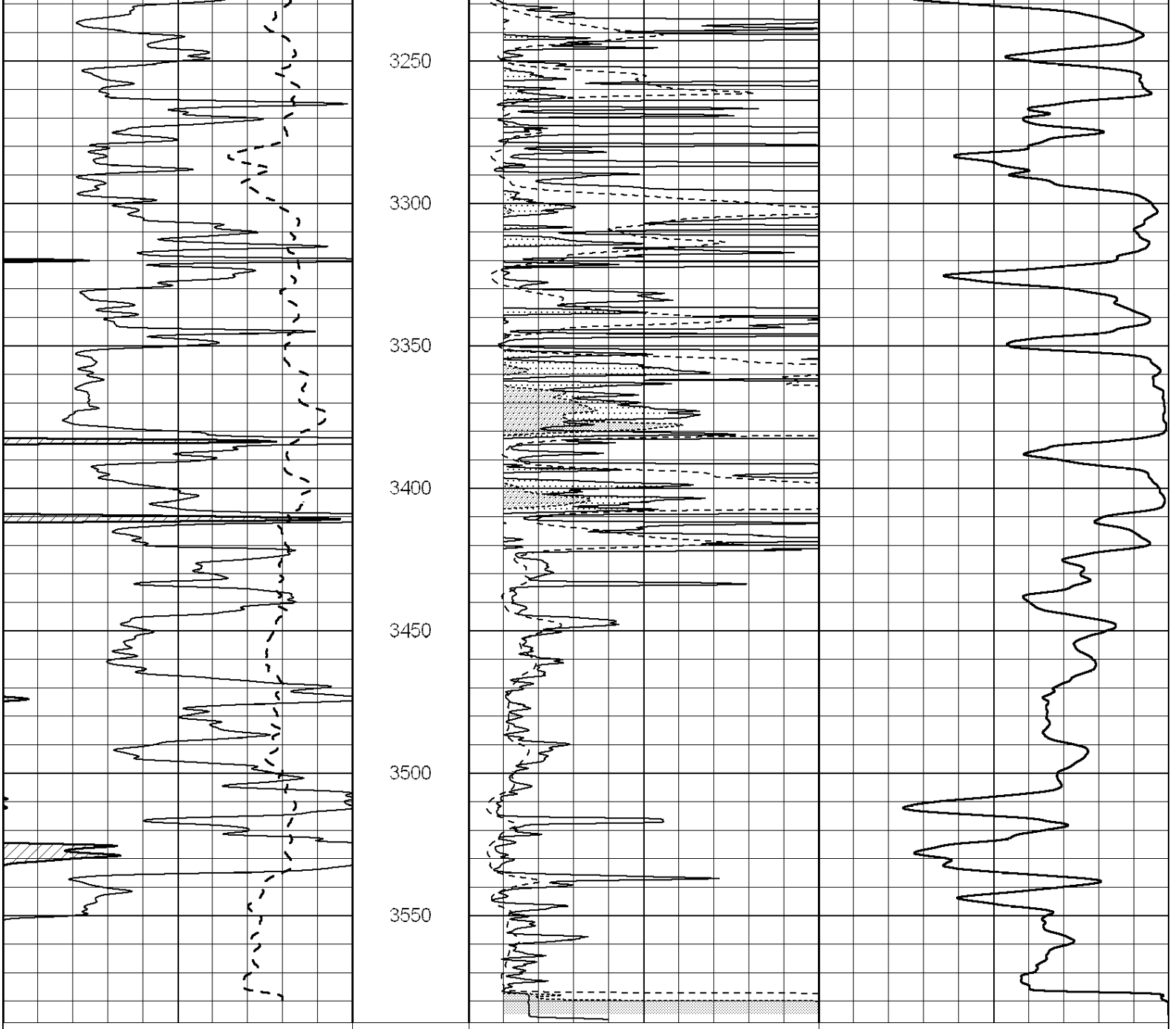
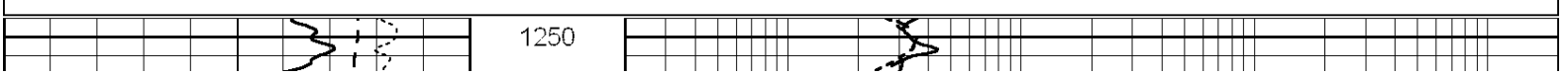
2800
2850
2900
2950
3000
3050
3100
3150
3200

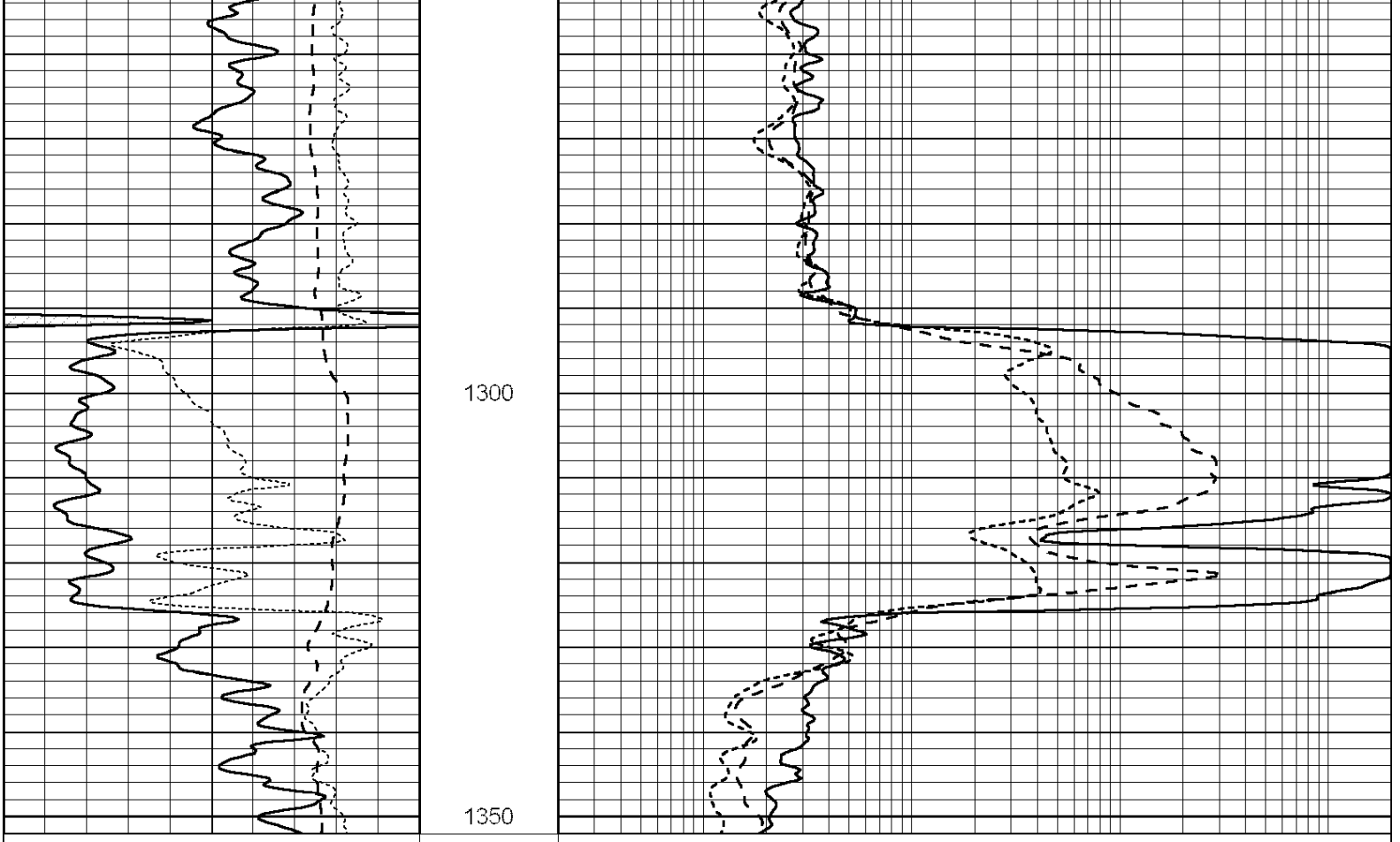


Database File: 061013ddn.db
Dataset Pathname: pass3.3
Presentation Format: _dil
Dataset Creation: Mon Jun 10 05:21:07 2013 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

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

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





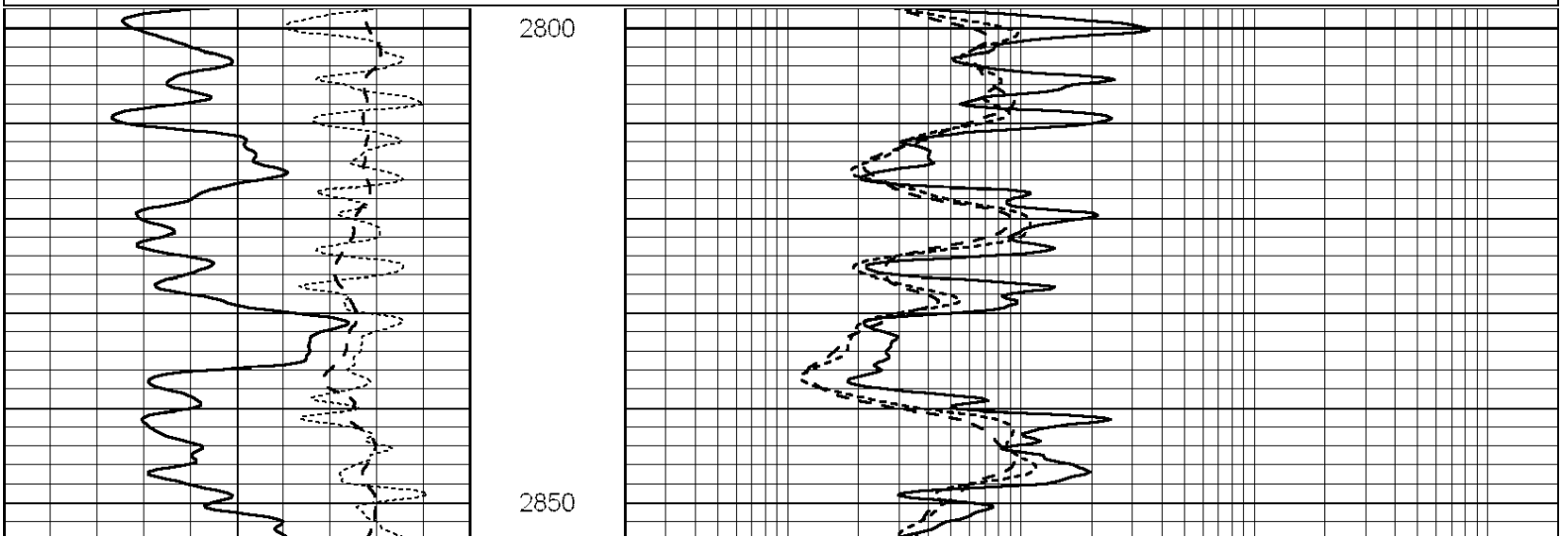
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

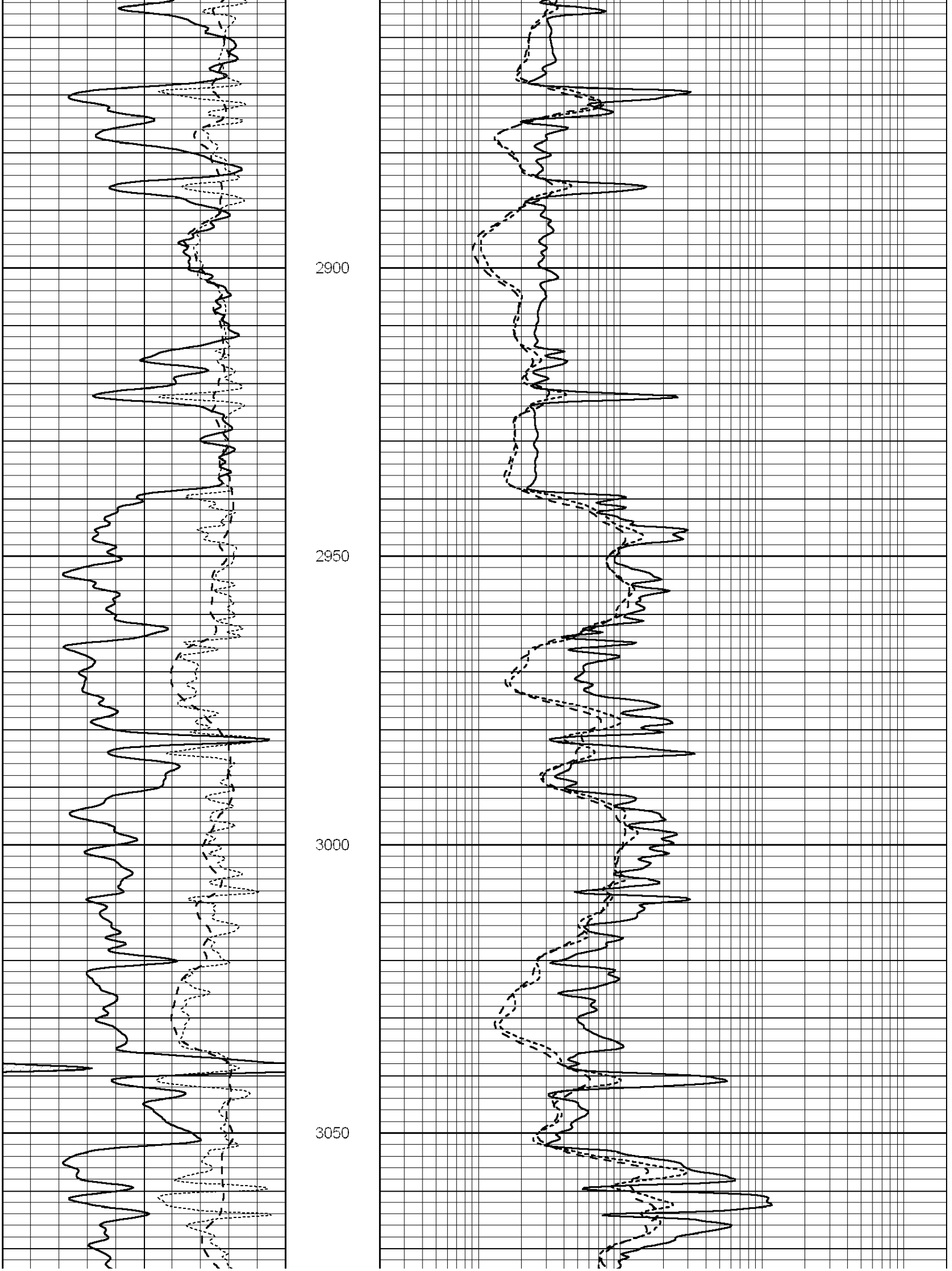
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

Database File:	061013ddn.db
Dataset Pathname:	pass3.2
Presentation Format:	_dil
Dataset Creation:	Mon Jun 10 03:55:58 2013 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

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

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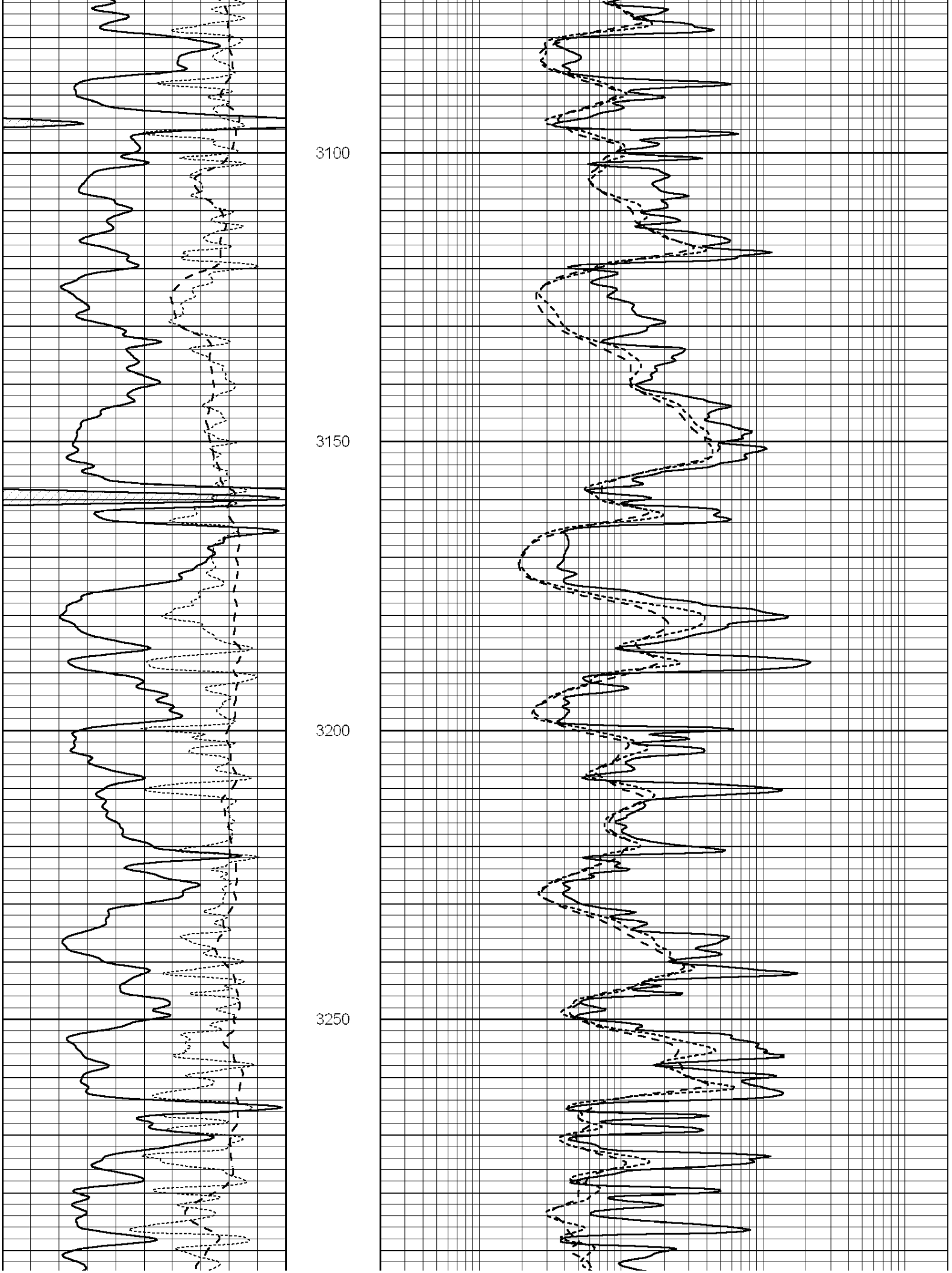
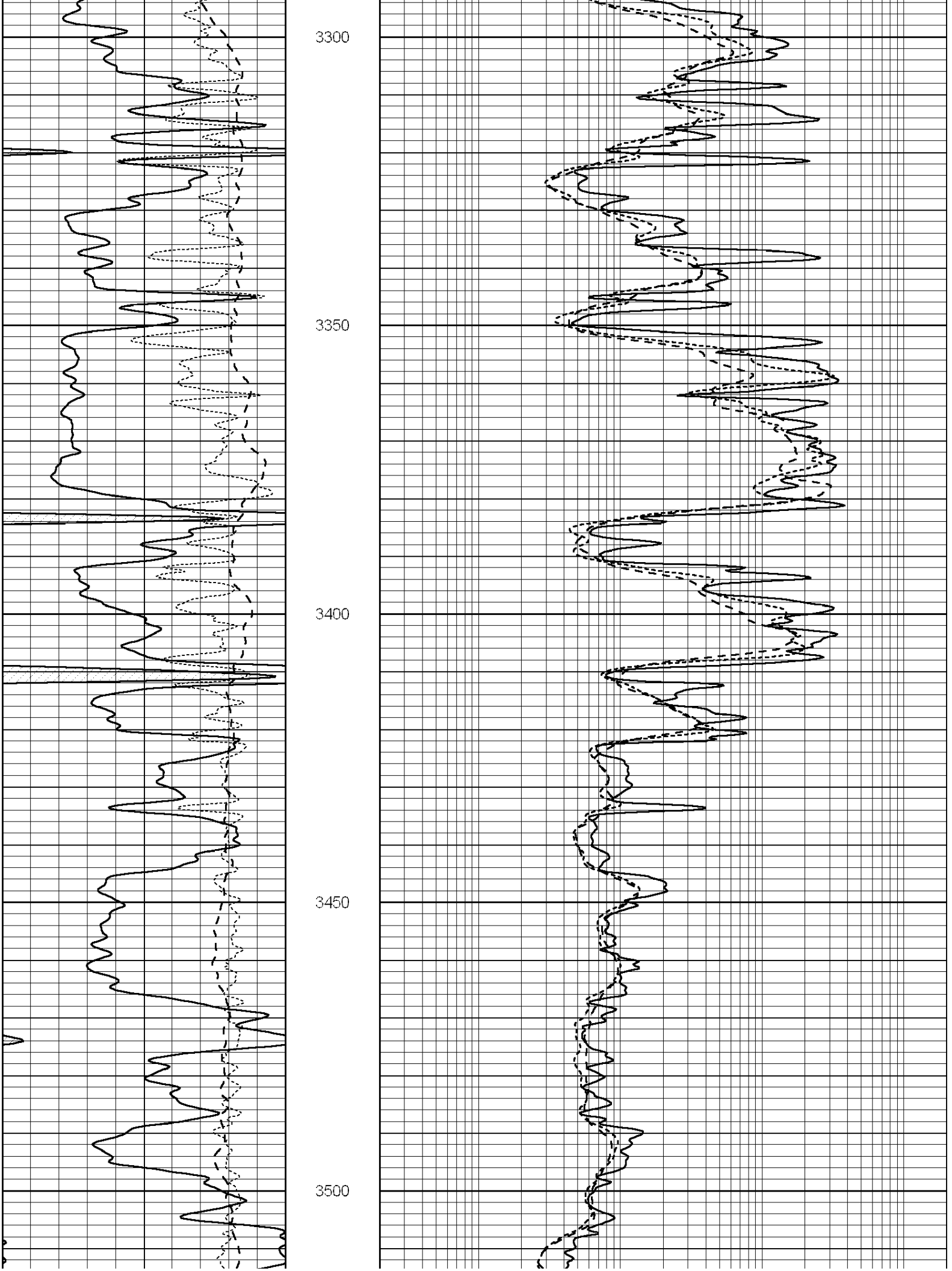
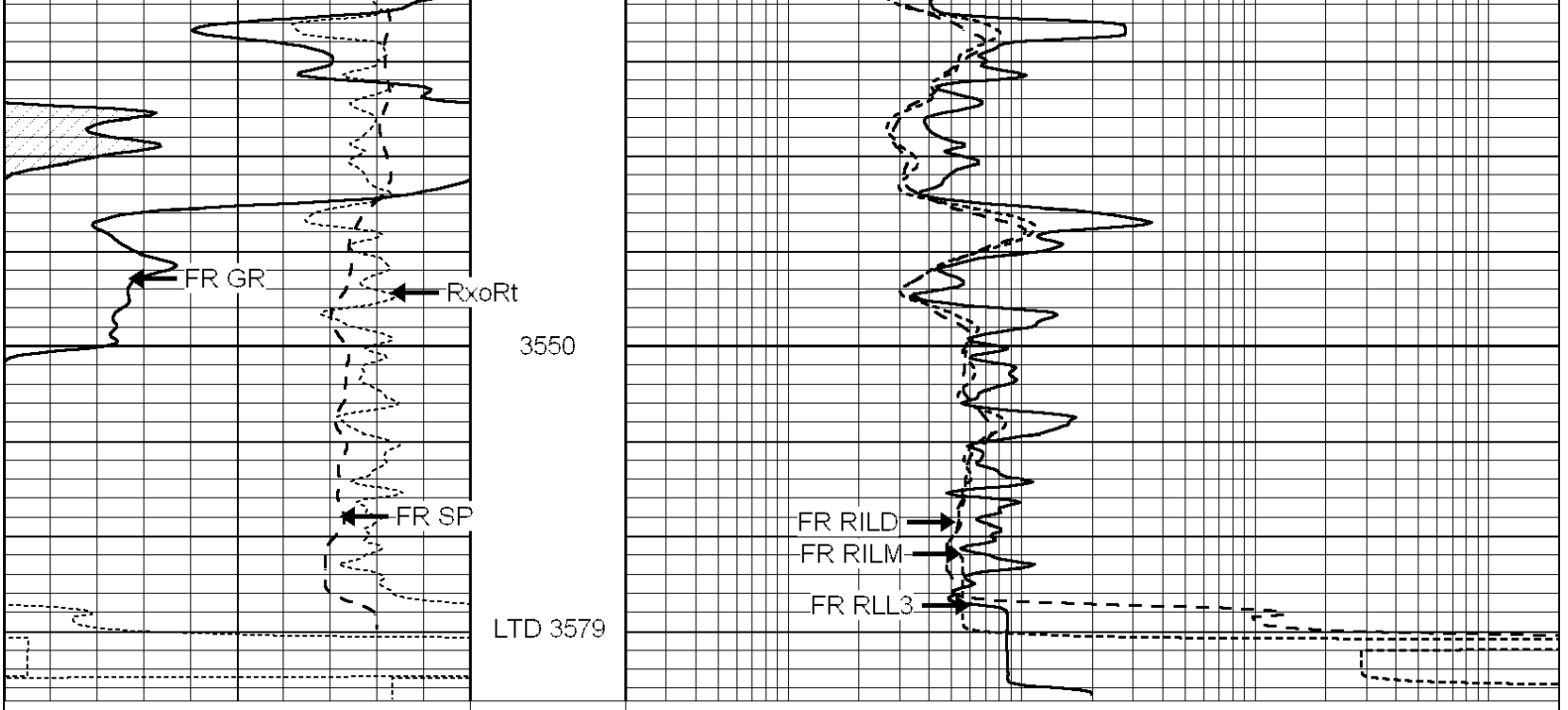
2950
3000
3050


3100
3150
3200
3250


3300
3350
3400
3450
3500



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

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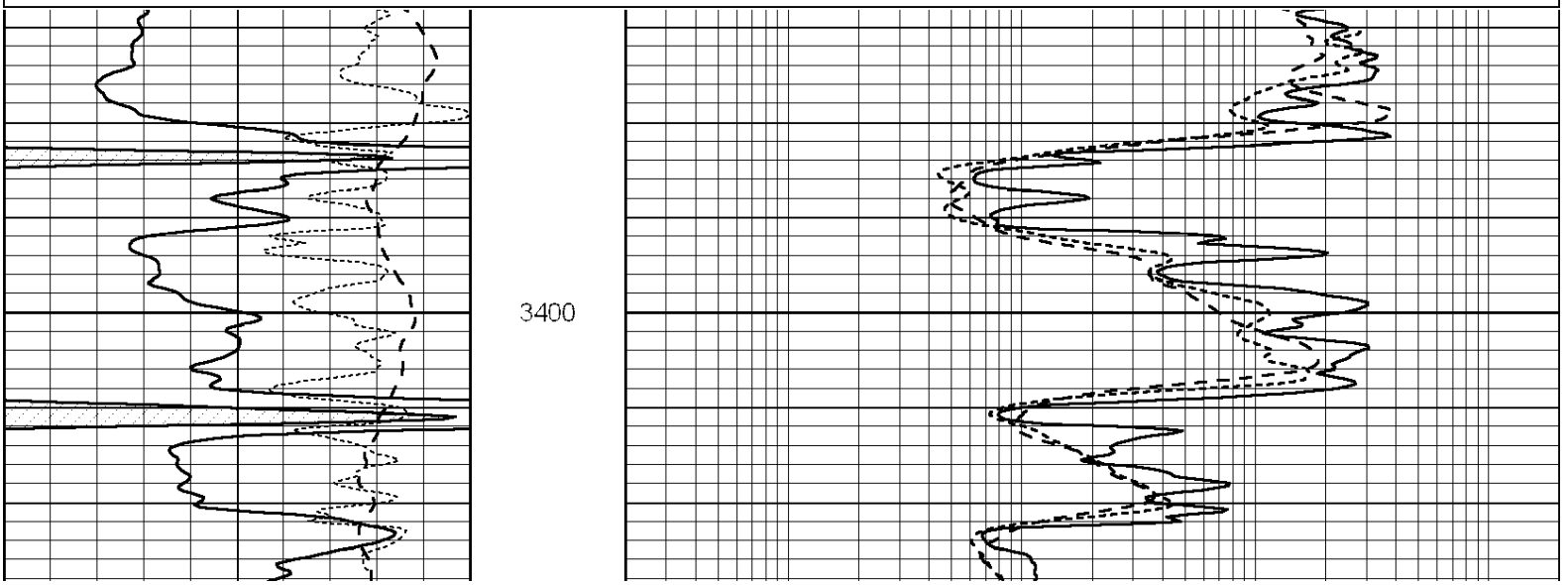
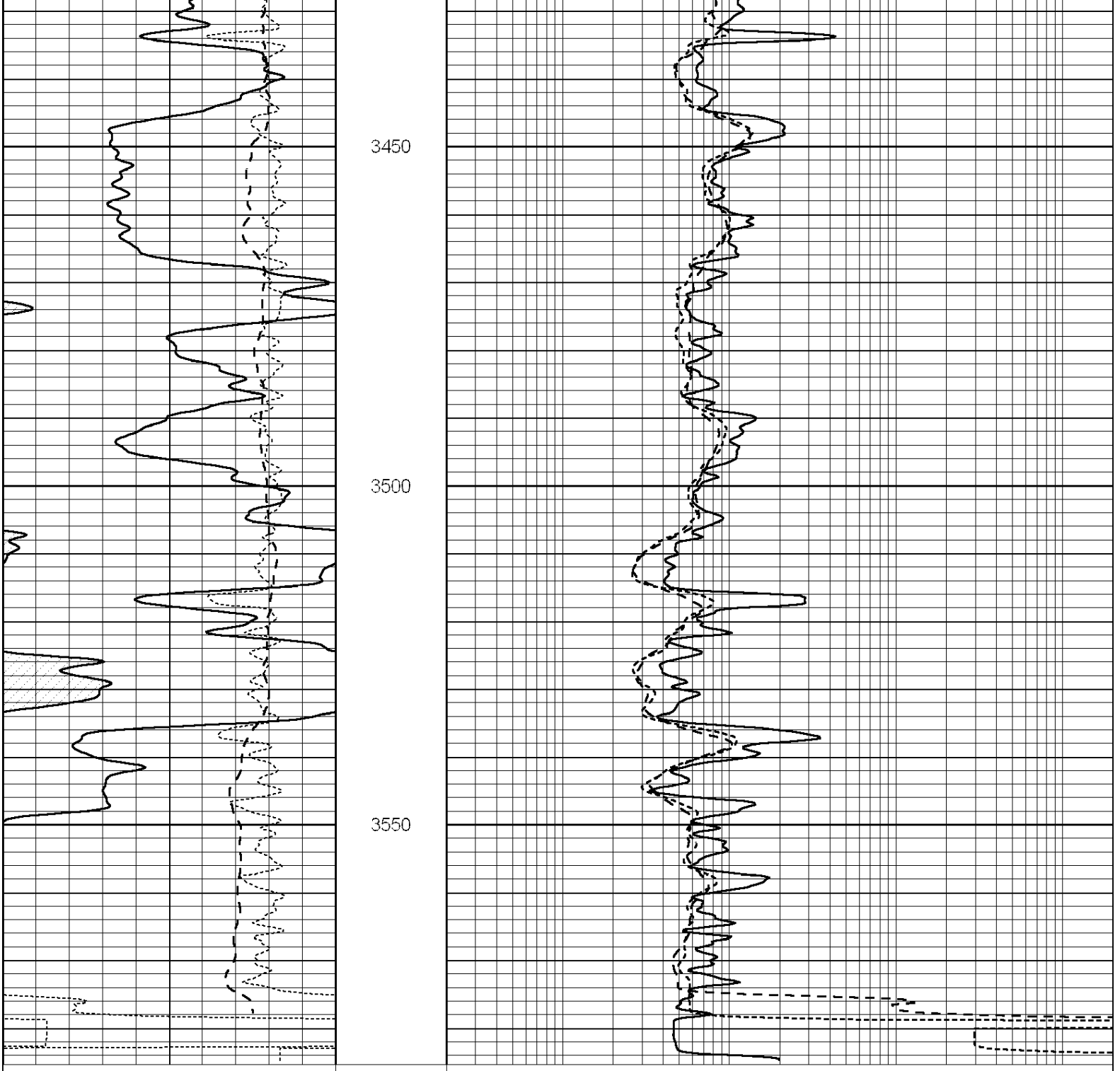
REPEAT SECTION

Database File: 061013ddn.db
Dataset Pathname: pass2.4
Presentation Format: _dil
Dataset Creation: Mon Jun 10 04:10:32 2013 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

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





Calibration Report

Database File:	061013ddn.db
Dataset Pathname:	pass3.3
Dataset Creation:	Mon Jun 10 05:21:07 2013 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE8-DILG
Surface Cal Performed:	Fri Aug 01 06:33:19 2008
Downhole Cal Performed:	Mon Jul 28 11:08:27 2008
After Survey Verification Performed:	Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings Air	Readings Loop		References Air	References Loop		Results m	Results b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
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 Zero	Readings Cal		References Zero	References Cal		Results m'	Results 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 Zero	Readings Cal		Targets Zero	Targets Cal		Results m'	Results 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: Mon Mar 19 19:07:19 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1015.91	497.51	cps
Aluminum	2.600	g/cc	227.67	350.20	cps

Spine Angle = 76.79 Density/Spine Ratio = 0.579

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

Compensated Neutron Calibration Report

Serial Number: 6I
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:	#8	
Tool Model:	OPEN	
Performed:	Mon Jun 13 16:56:43 2011	
Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	175.0	cps
Sensitivity:	0.8371	GAPI/cps