SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	MAI OIL OPERATIONS, INC.
Well	YOUNGER #1
Field	STEGMAN
County	RUSH
State	KANSAS

Company MAI OIL OPERATIONS, INC.
Well YOUNGER #1
Field STEGMAN
County RUSH State KANSAS
Location: API # : 15-165-21957-0000
330' FNL & 1250' FEL
W/2 - NW - NE - NE
SEC 11 TWP 16S RGE 17W

Permanent Datum	GROUND LEVEL	Elevation 1930	Other Services CDL/CNL MEL
Log Measured From	KELLY BUSHING 8' A.G.L.		Elevation K.B. 1938
Drilling Measured From	KELLY BUSHING		D.F. 1936
			G.L. 1930

Date	2/13/12		
Run Number	ONE		
Depth Driller	3600		
Depth Logger	3599		
Bottom Logged Interval	3597		
Top Log Interval	00		
Casing Driller	8 5/8"@1070'		
Casing Logger	1070		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,600 PPM	
Density / Viscosity	9.2/50		
pH / Fluid Loss	10.0/8.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.700@54F		
Rmf @ Meas. Temp	.525@54F		
Rmc @ Meas. Temp	.840@54F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.338@112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	10:30 A.M.		
Maximum Recorded Temperature	112F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KURT TALBOTT		

<<< Fold Here >>>

Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
LORETTO, KS. 1 3/4N., 1/2E. INTO @MAIL BOX, VEER NORTH BEFORE FARM HOUSE

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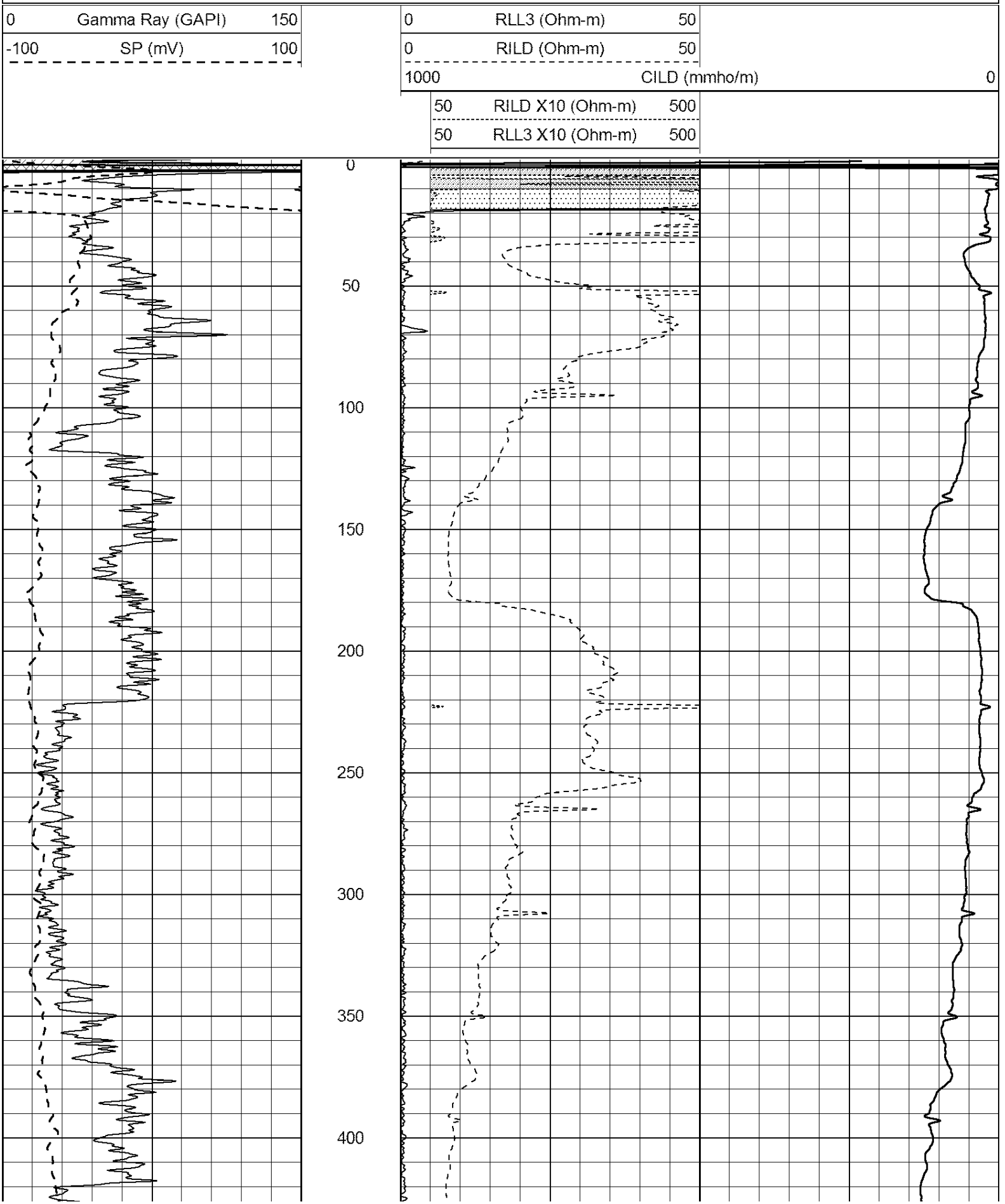
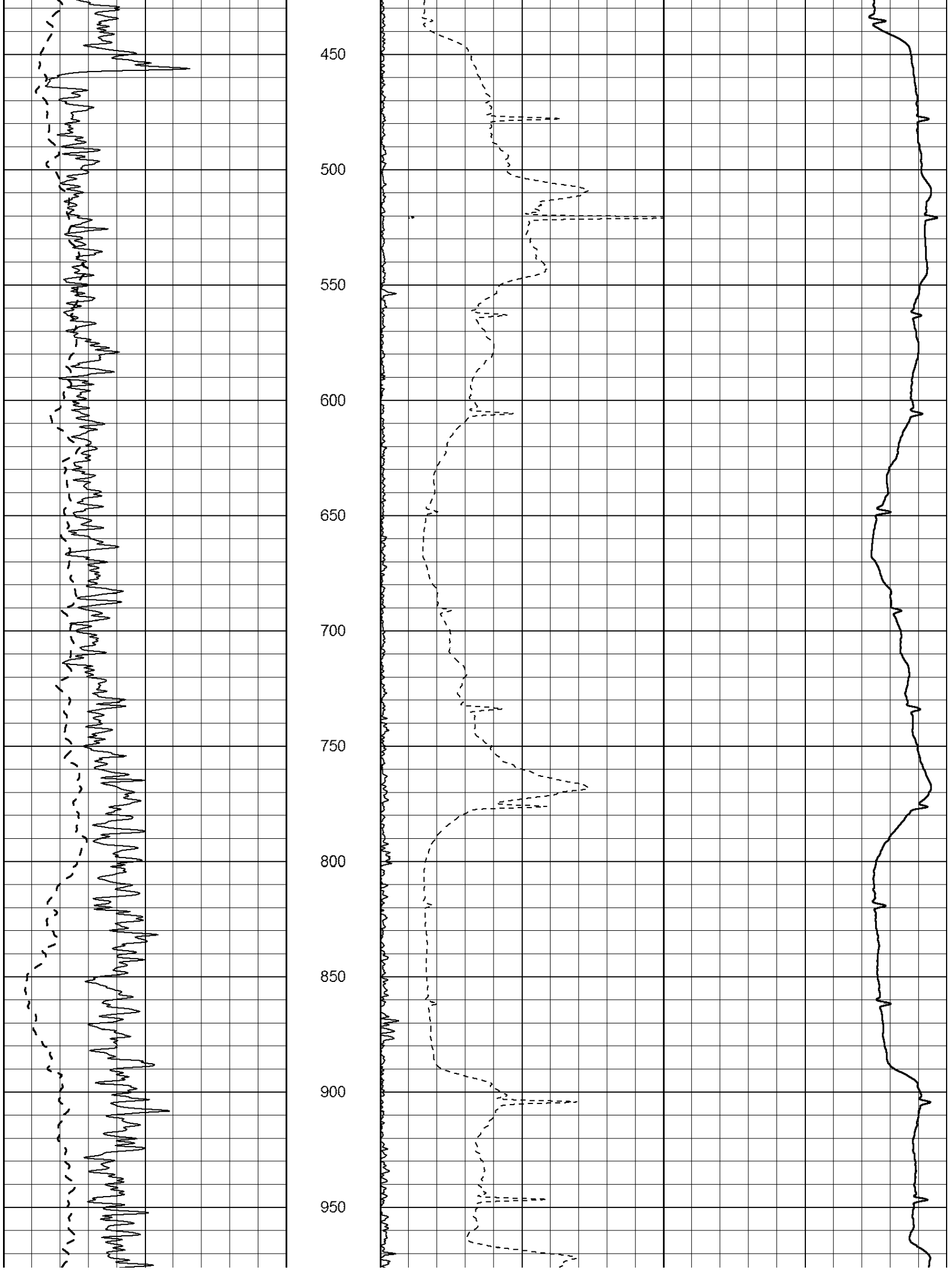
MAIN SECTION

Database File: 408412ddn.db
Dataset Pathname: pass3.4
Presentation Format: dil2
Dataset Creation: Mon Feb 13 11:46:42 2012
Charted by: Depth in Feet scaled 1:600

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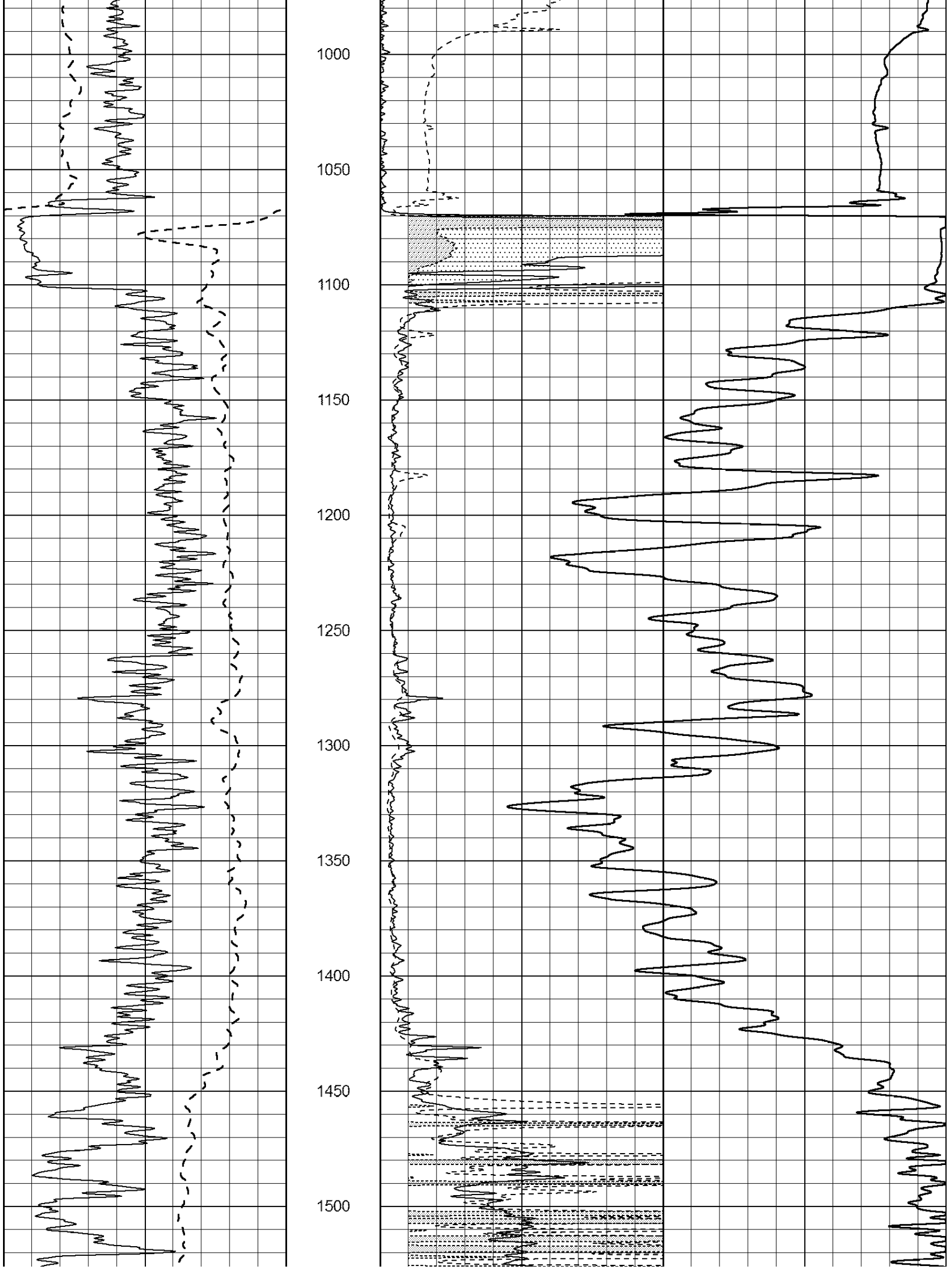
500
550
600
650
700
750
800
850
900
950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1100
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1200
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1300
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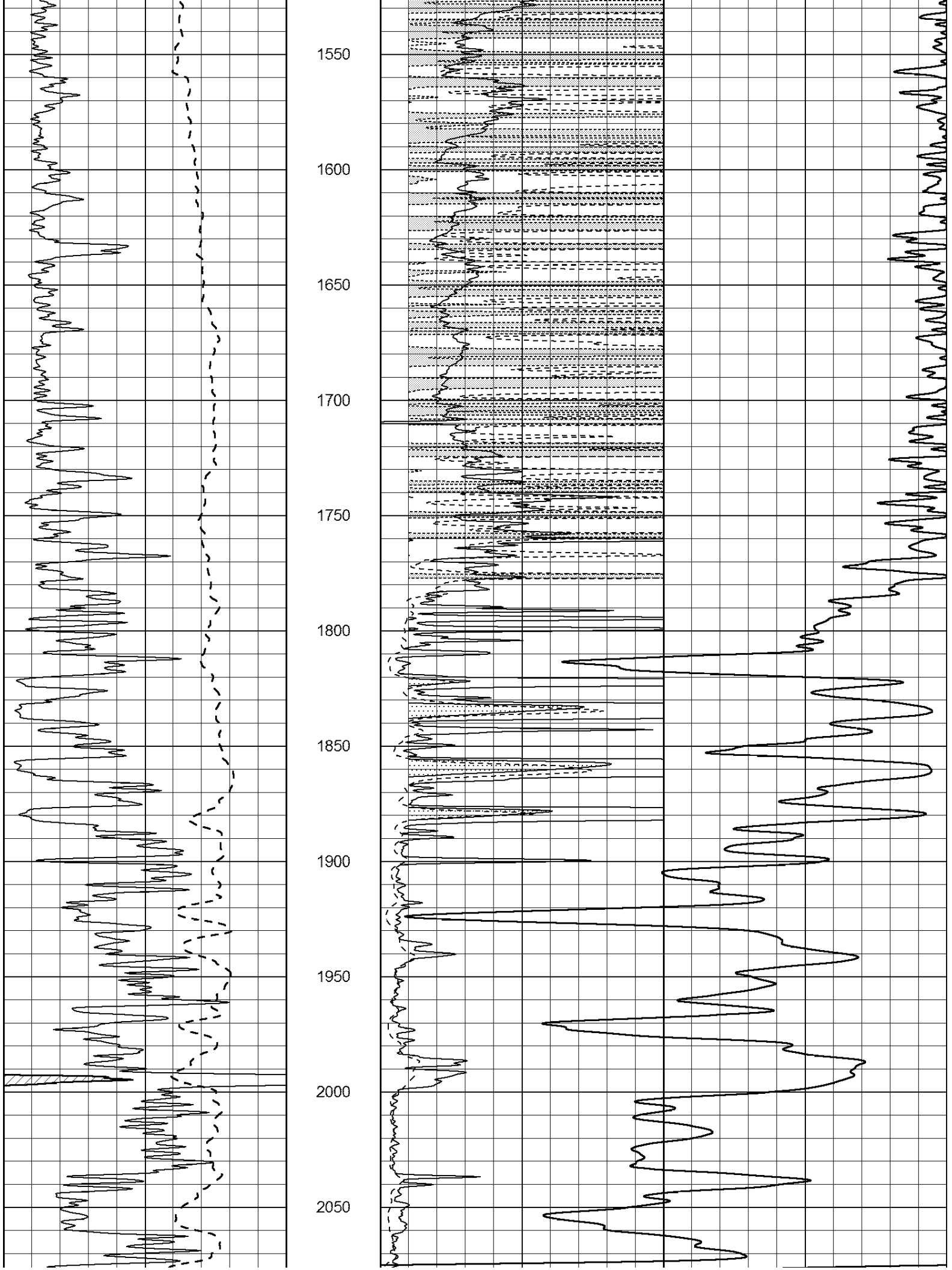
1400
1450
1500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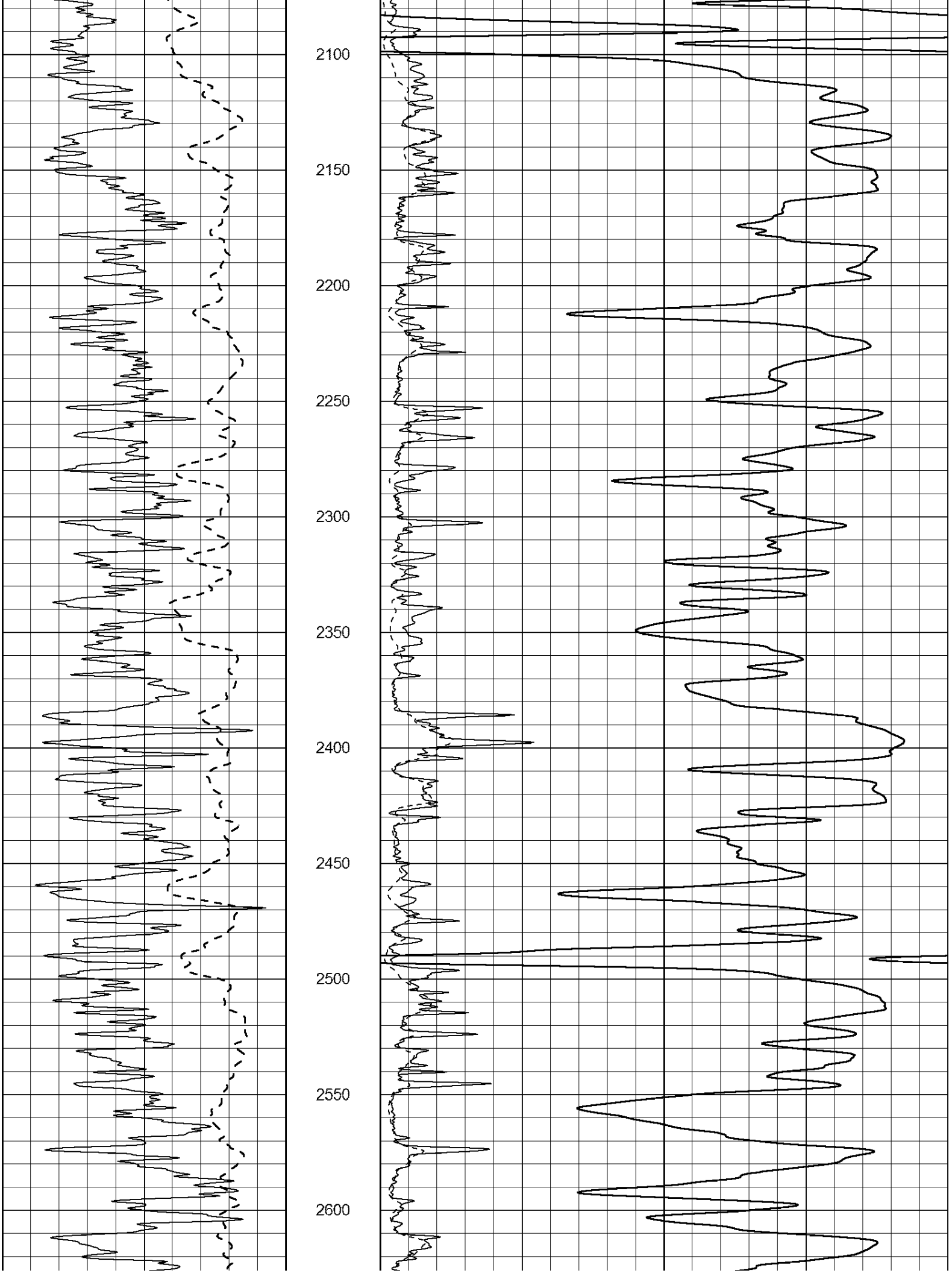
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050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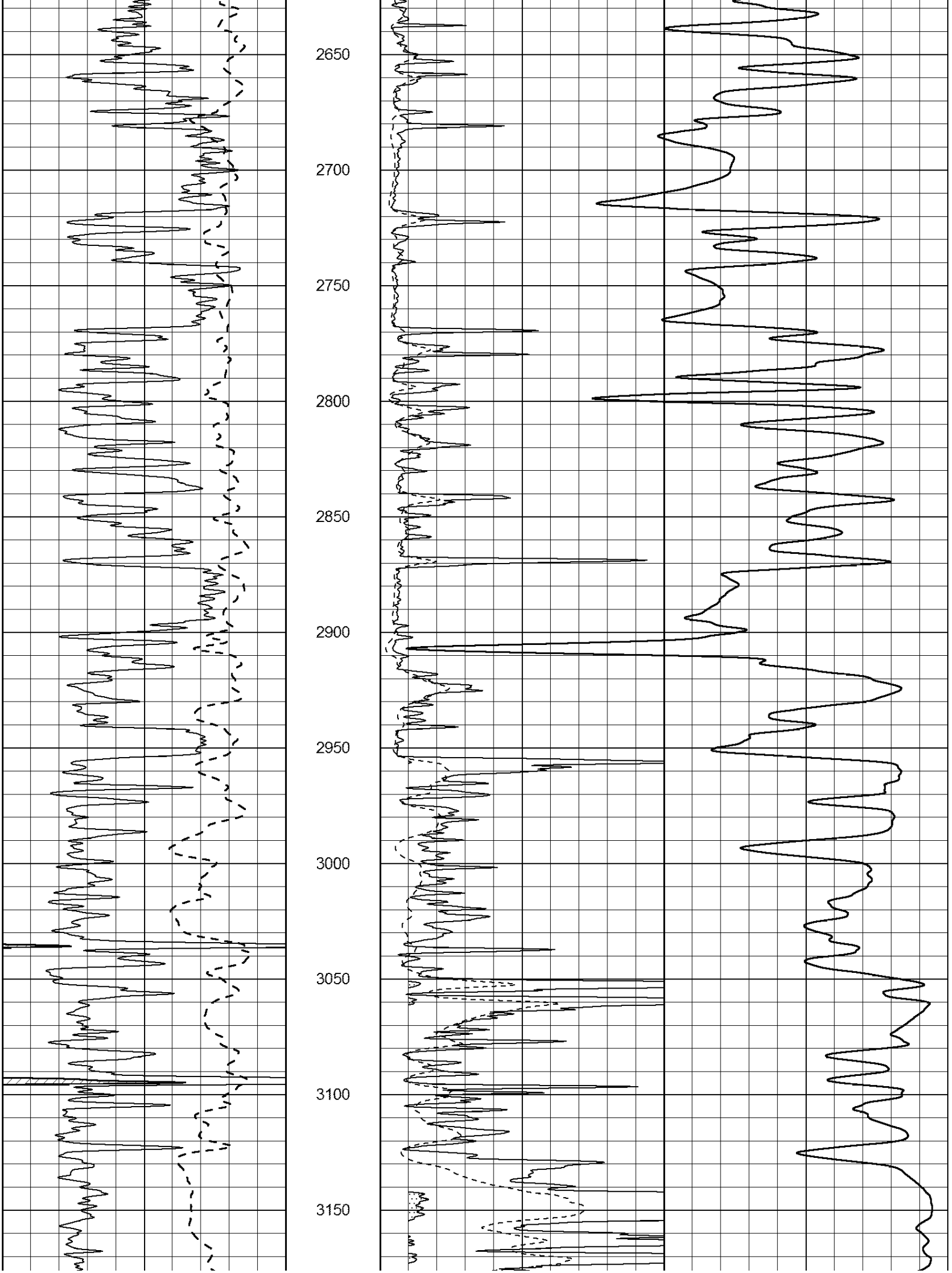
2200
2250
2300
2350
2400
2450
2500
2550
2600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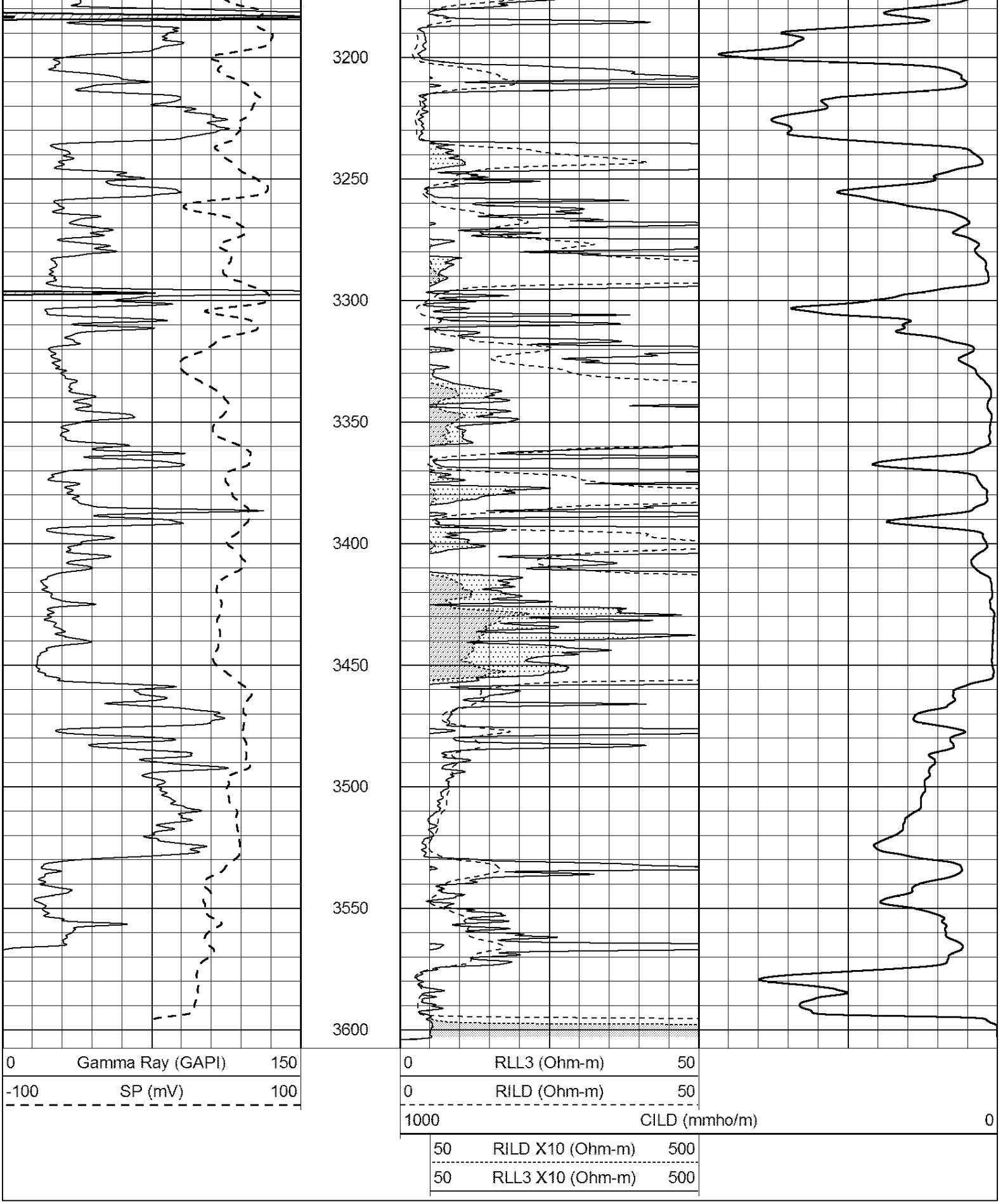
2800
2850
2900
2950
3000
3050
3100
3150



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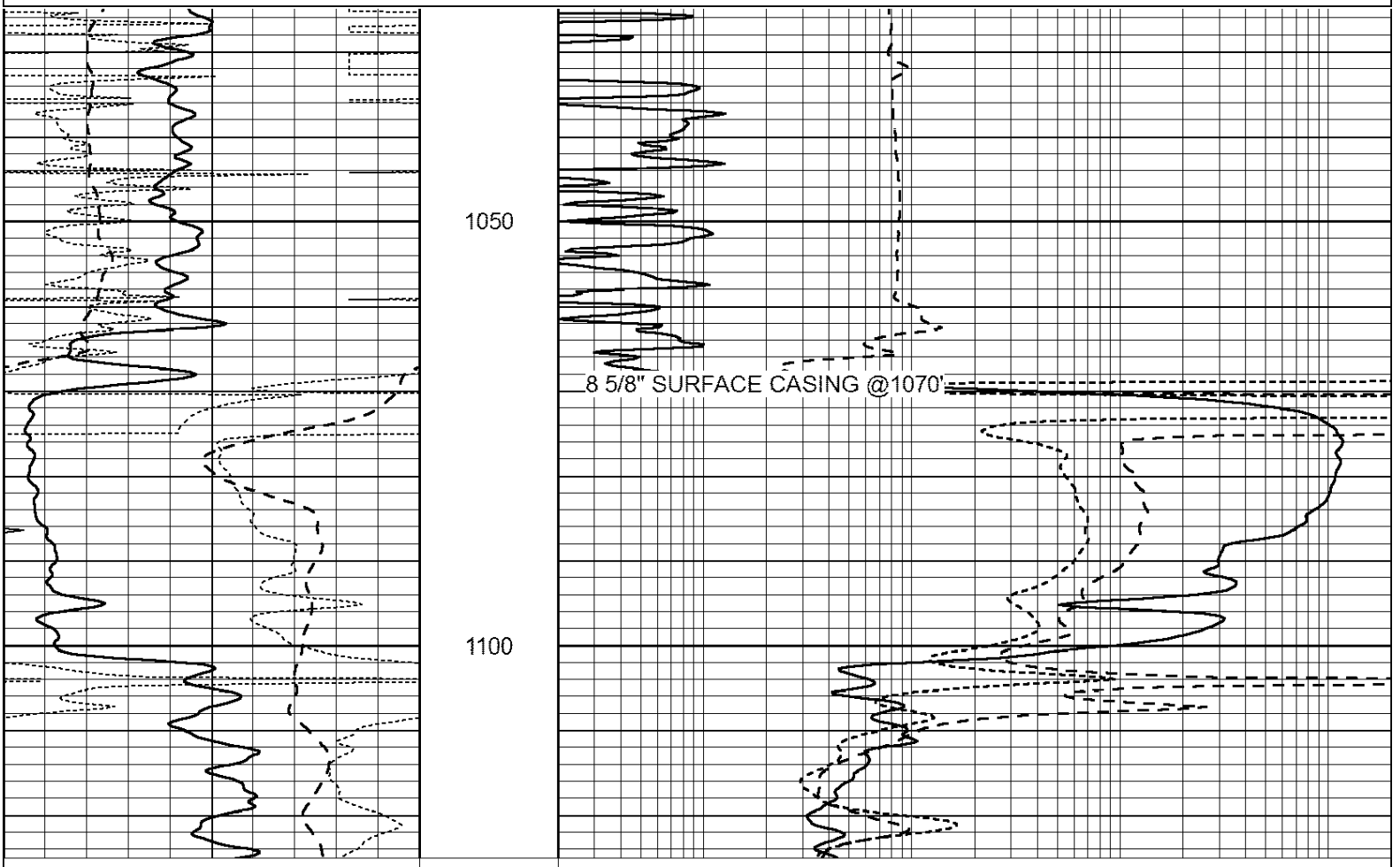
ANHYDRITE

Database File: 408412ddn.db
Dataset Pathname: pass3.5
Presentation Format: _dil
Dataset Creation: Mon Feb 13 11:46:59 2012
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



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

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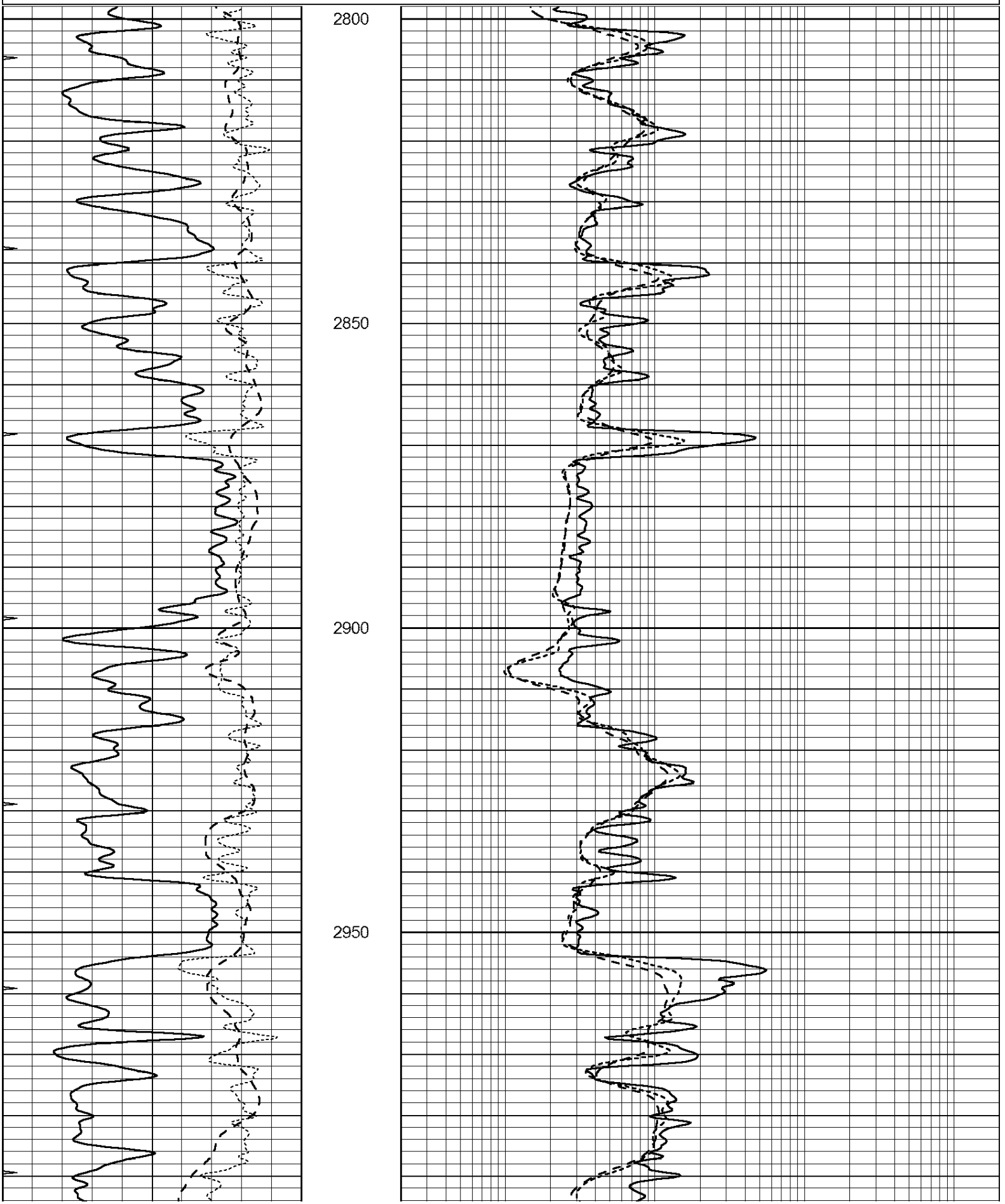
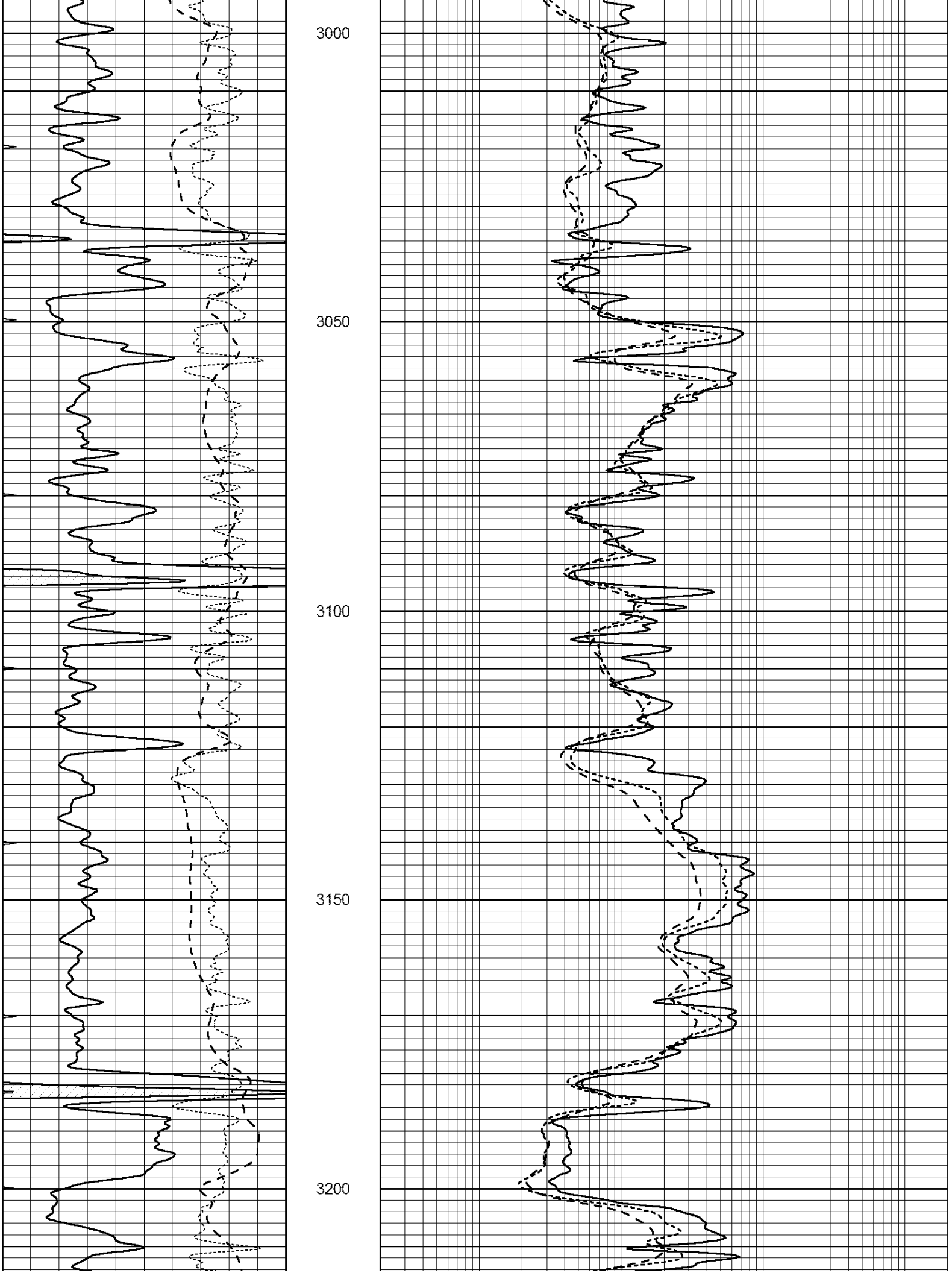
MAIN SECTION

Database File: 408412ddn.db
Dataset Pathname: pass3.4
Presentation Format: dil
Dataset Creation: Mon Feb 13 11:46:42 2012
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

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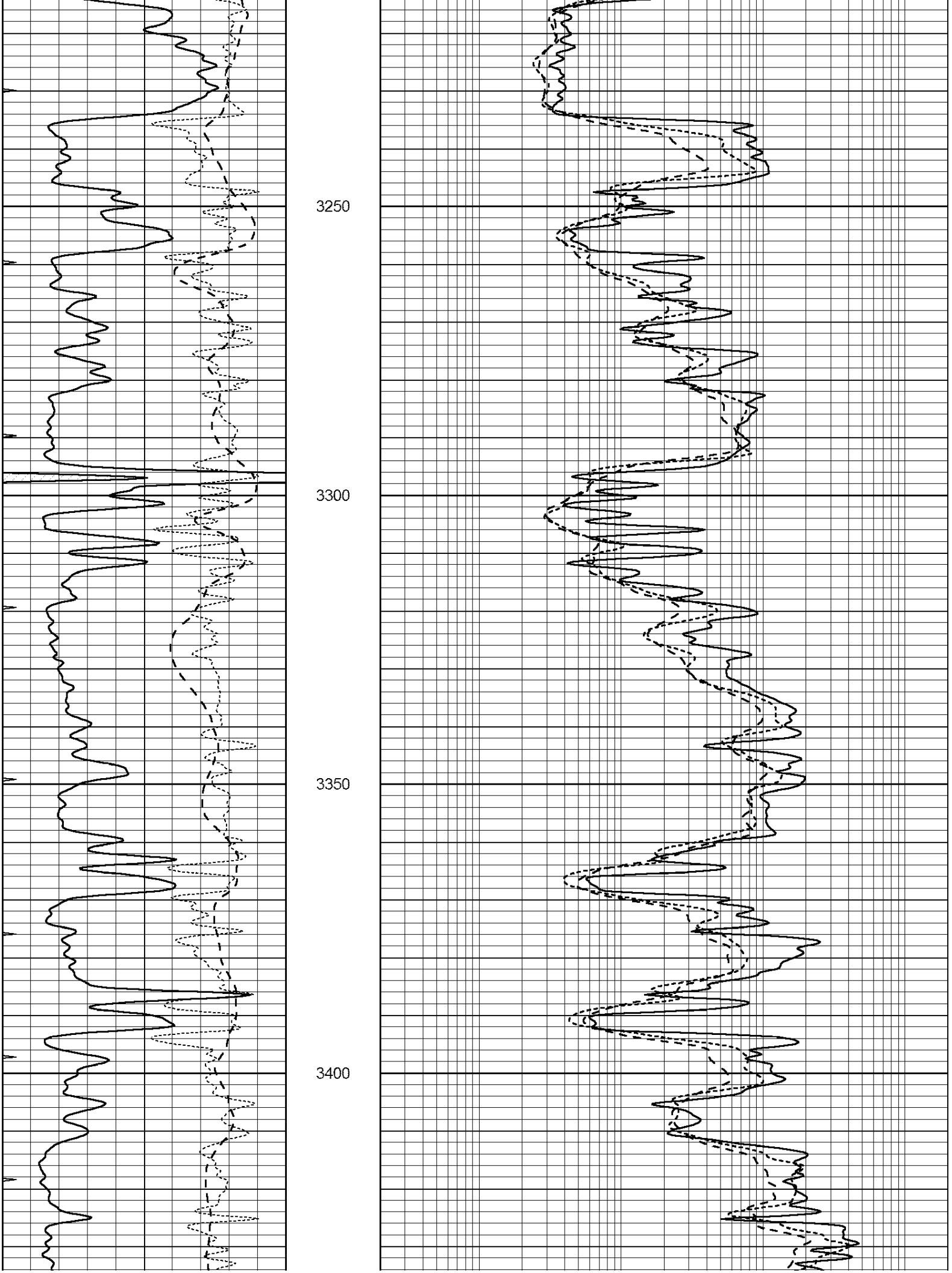
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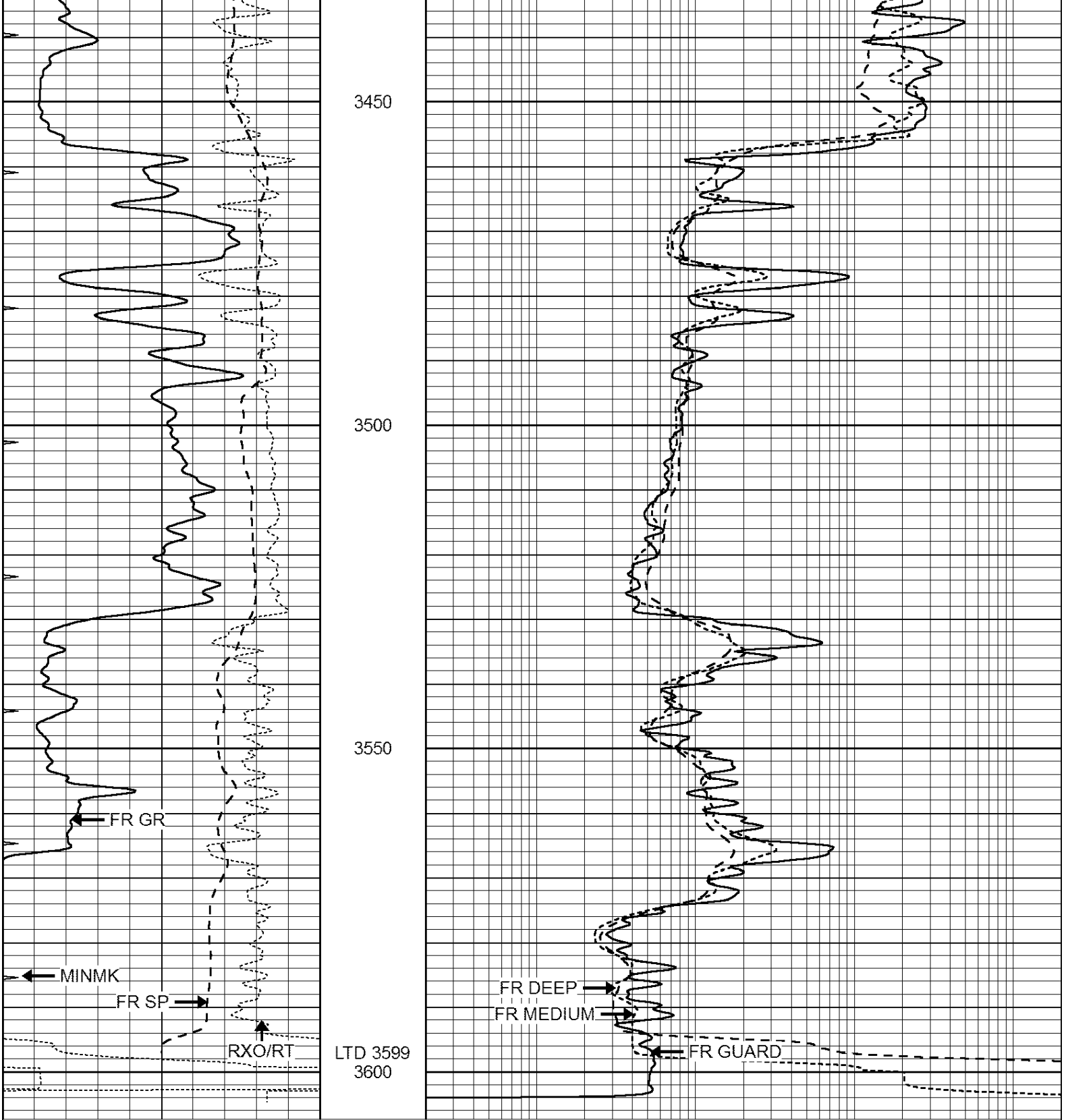
3300
3350
3400



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

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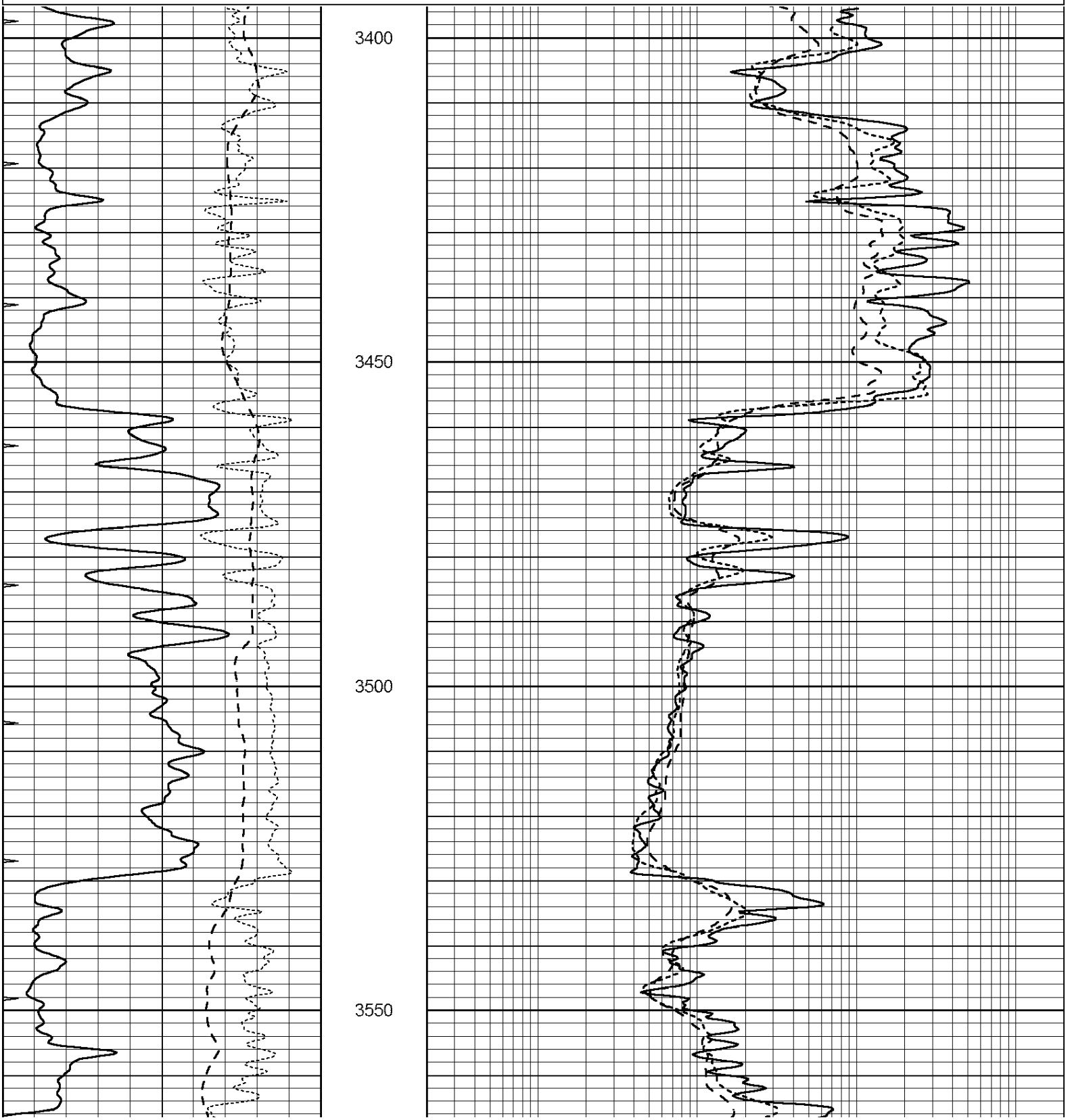
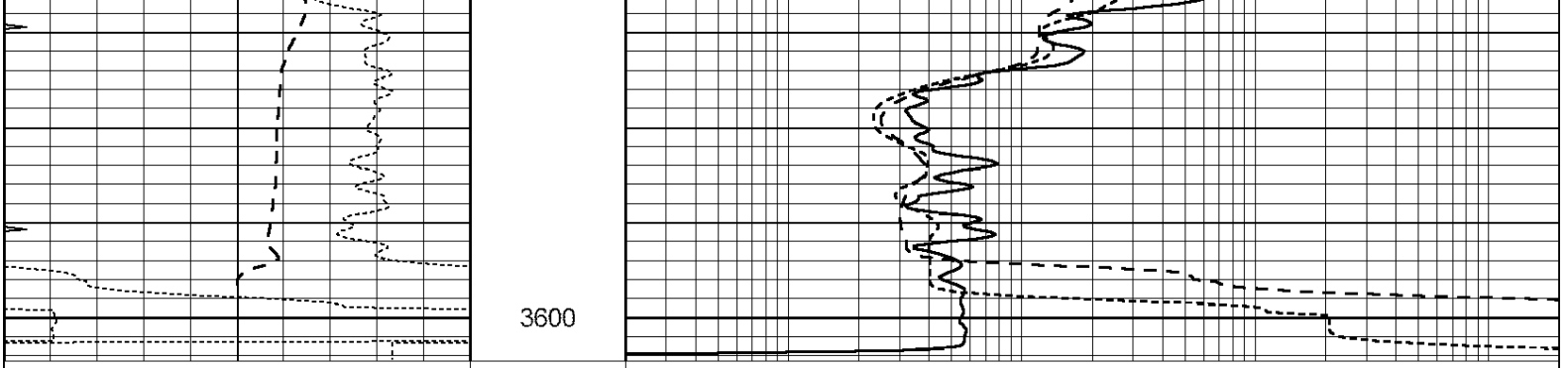
REPEAT SECTION

Database File:	408412ddn.db
Dataset Pathname:	pass2.4
Presentation Format:	dil
Dataset Creation:	Mon Feb 13 11:04:54 2012 by Calc Open-Cased 110302
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





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: 408412ddn.db
Dataset Pathname: pass3.4
Dataset Creation: Mon Feb 13 11:46:42 2012

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
Performed: Mon Feb 13 10:45:29 2012

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	2.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	4.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report

Serial: 003N Model: PRB
Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper

	Readings	Reference
Low Ref	2.0	7.2
High Ref	4.0	15.0

Gain: 3.8 Offset: -0.3

Compensated Neutron Calibration Report

Serial Number: 070808
Tool Model: Probe

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: 070559
Tool Model: OPEN_GR
Performed: Fri Feb 10 19:55:42 2012

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps