SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company I.A. OPERATING, INC.

Well ROGER #10-4

Field WILDCAT

County ELLIS State KANSAS

Location: API # : 15-051-25836-0000

900' FSL & 330' FEL
NE - SE - SE

SEC 10 TWP 11S RGE 16W

Other Services
CDL/CNL
MEL

Permanent Datum GROUND LEVEL Elevation 1899
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1904
D.F. 1902
G.L. 1899

Company I.A. OPERATING, INC.
Well ROGER #10-4
Field WILDCAT
County ELLIS
State KANSAS

Date	10/23/08		
Run Number	TWO		
Depth Driller	3625		
Depth Logger	3624		
Bottom Logged Interval	3622		
Top Log Interval	00		
Casing Driller	8 5/8"@220'		
Casing Logger	219		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,200 PPM	
Density / Viscosity	9.0/65		
pH / Fluid Loss	10.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.00@74F		
Rmf @ Meas. Temp	.750@74F		
Rmc @ Meas. Temp	1.20@74F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.655@113F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	10:45 P.M.		
Maximum Recorded Temperature	113F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	RANDY KILIAN		

<<< Fold Here >>>

Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785)628-6395
DIRECTIONS
BLUE HILL SCHOOL, 6N. TO CURVE, 1E., 1/2N., W. INTO

MAIN SECTION

SUPERIOR
Hays,
Kansas

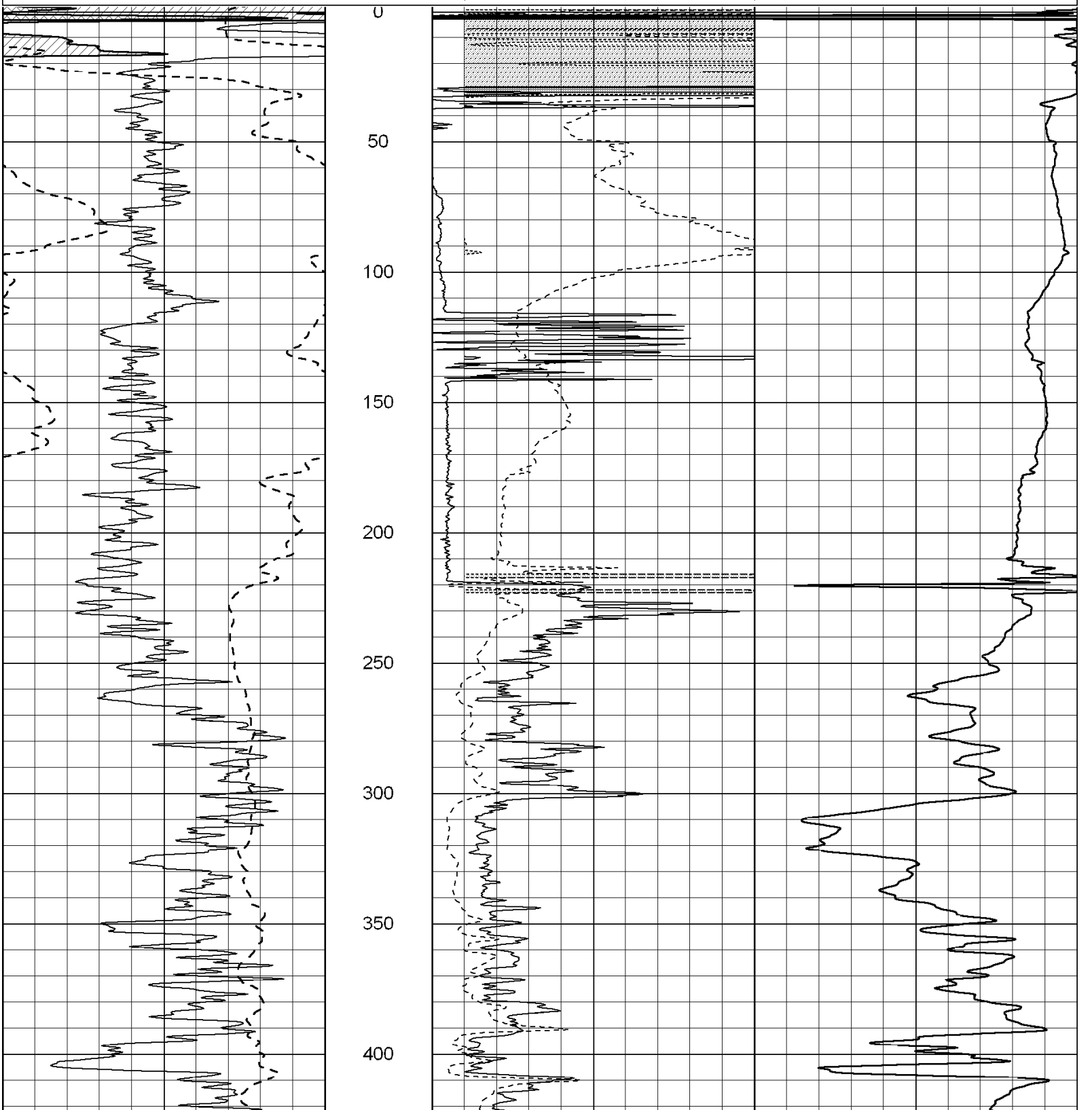
SUPERIOR WELL SERVICES

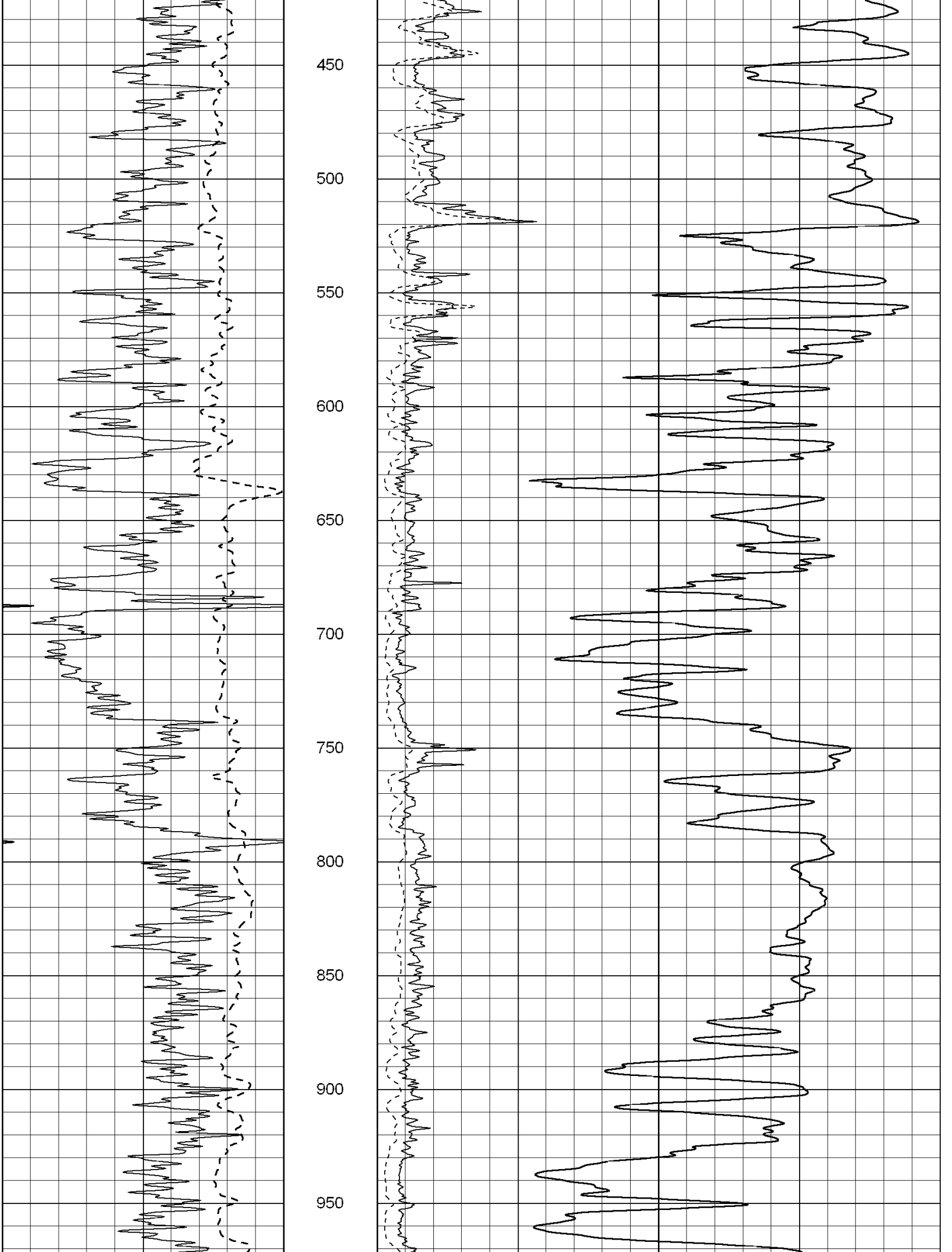
Kansas

Database File: 002499ddn.db
Dataset Pathname: pass8.4
Presentation Format: dil2
Dataset Creation: Fri Oct 24 01:41:07 2008 by Calc Open-Cased 060407
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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650
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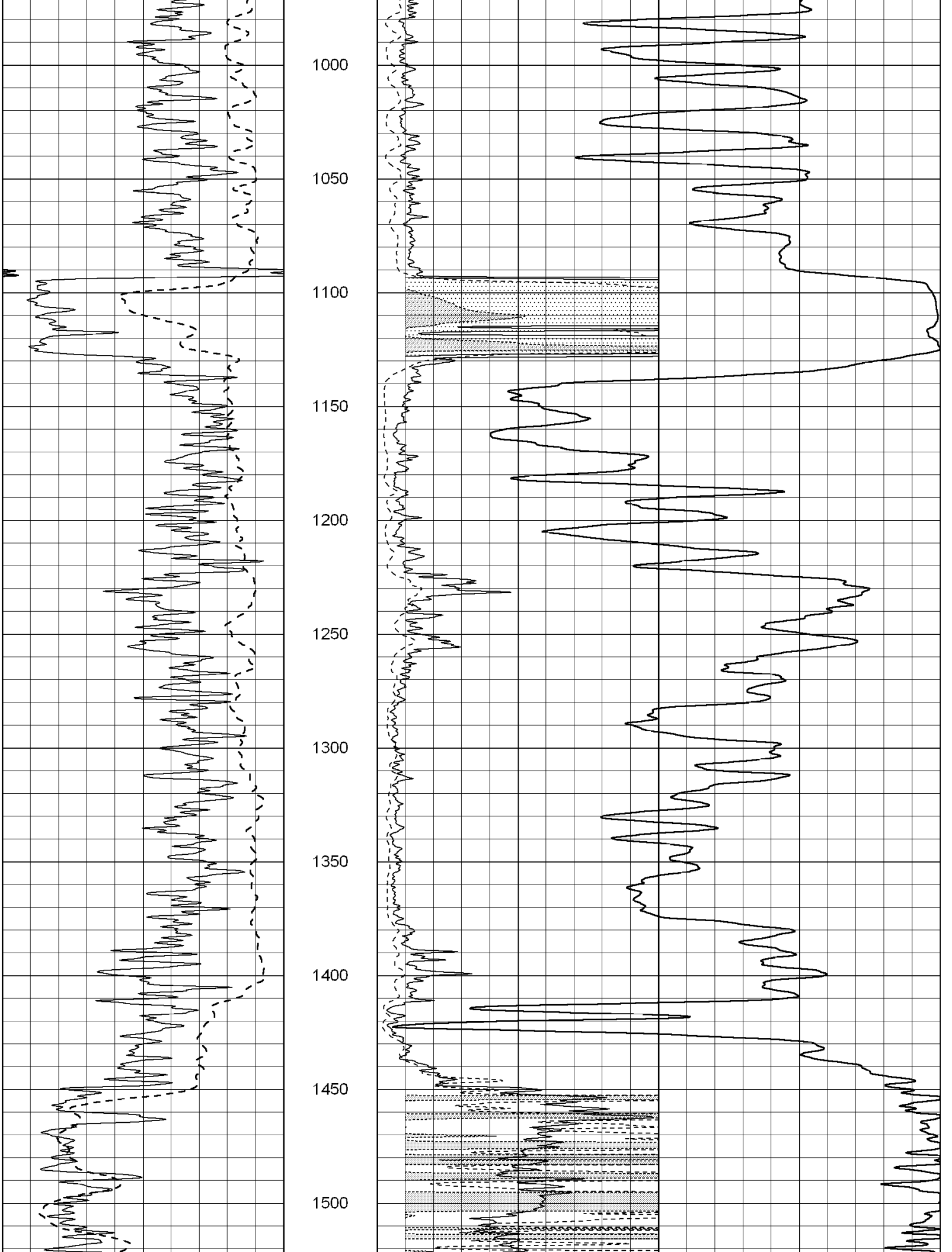
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1200
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1400
1450
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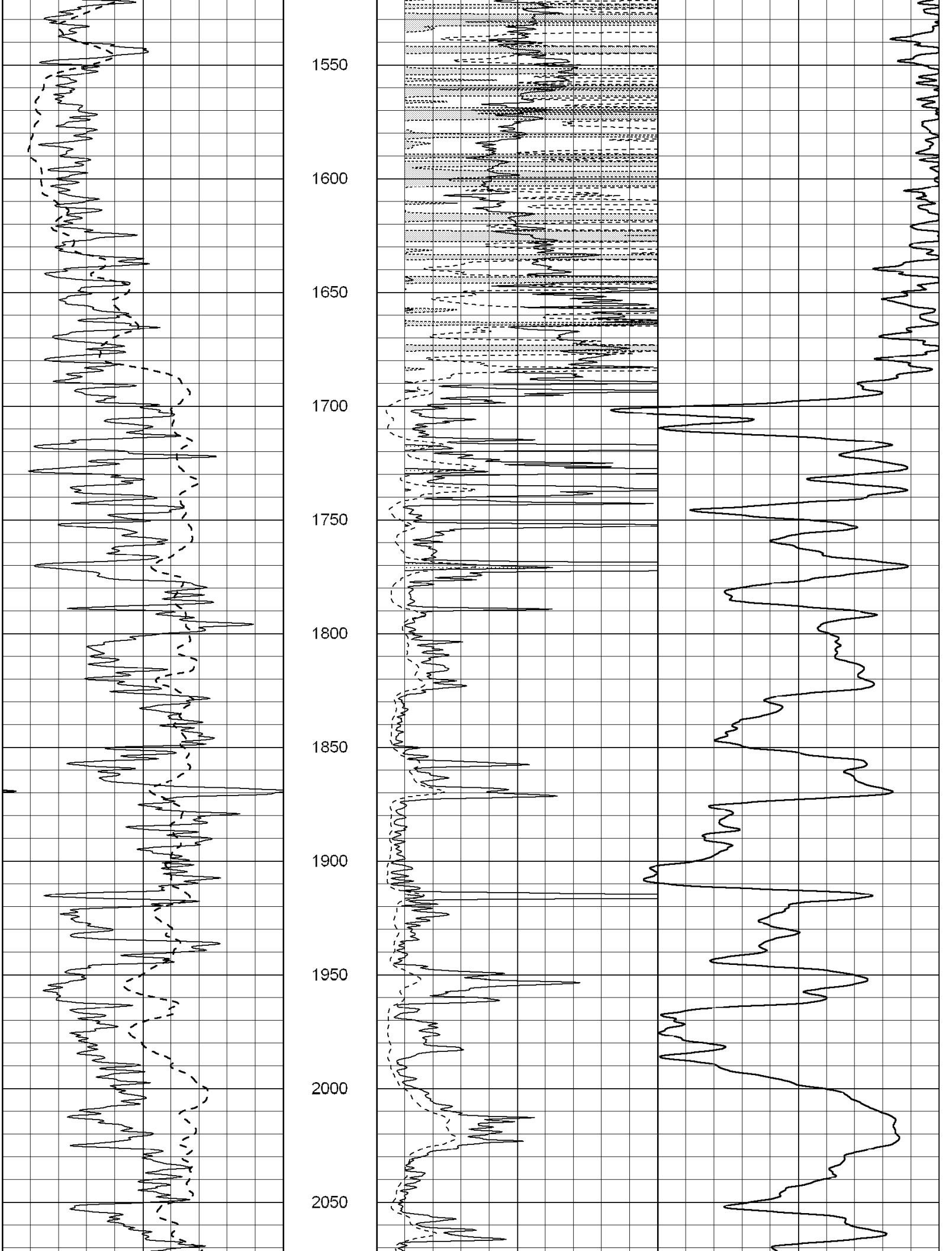
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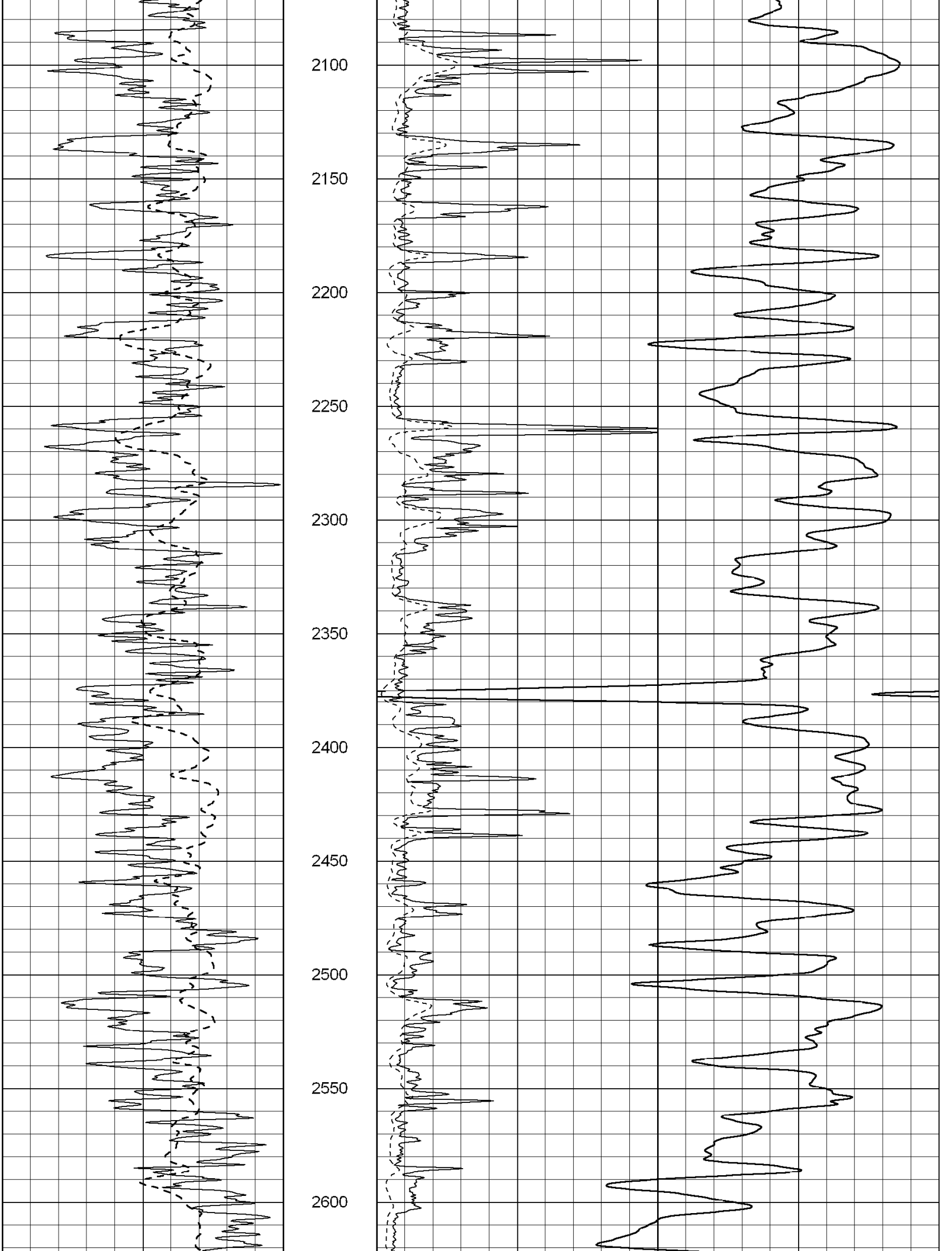
1850
1900
1950
2000
2050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2300
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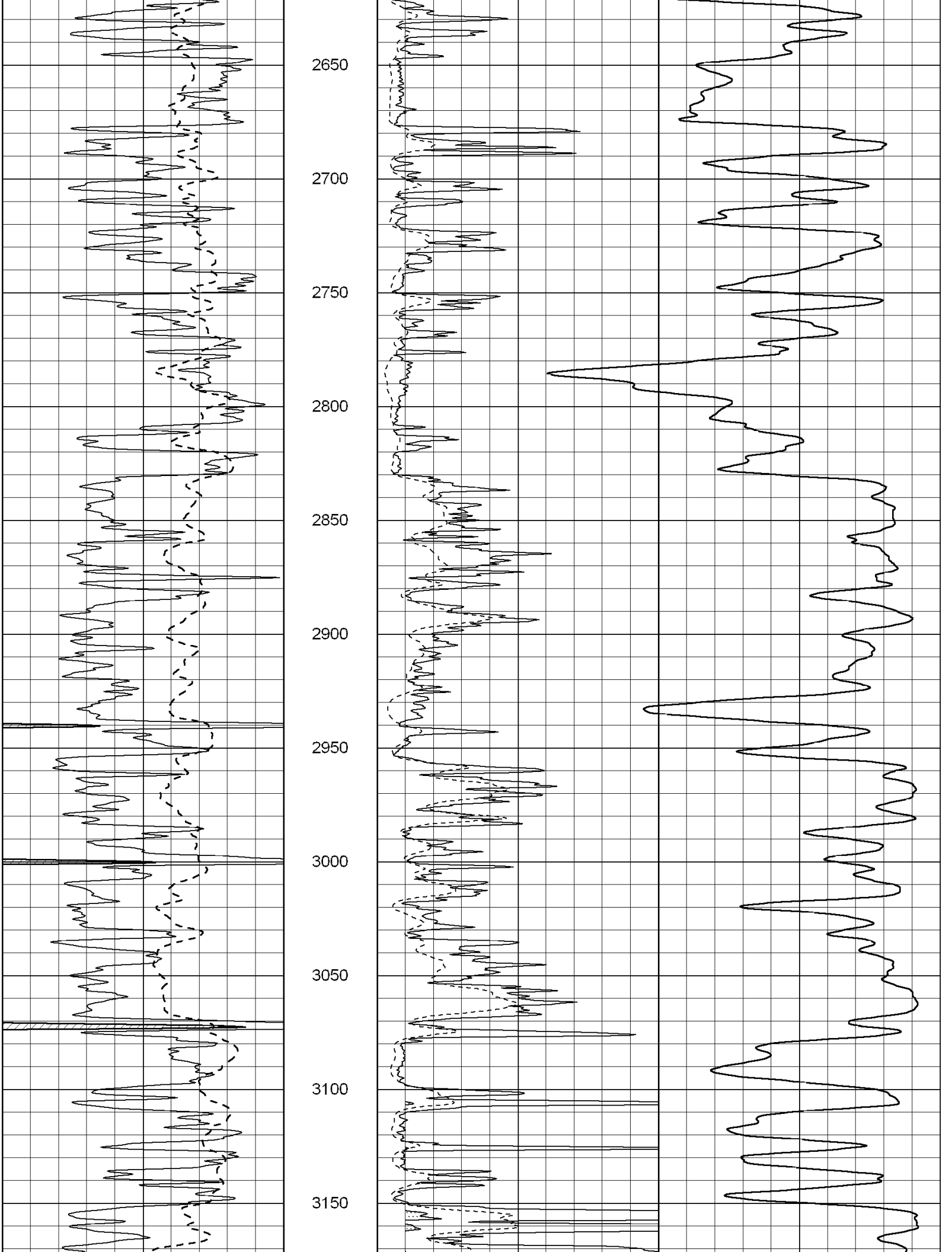
2400
2450
2500
2550
2600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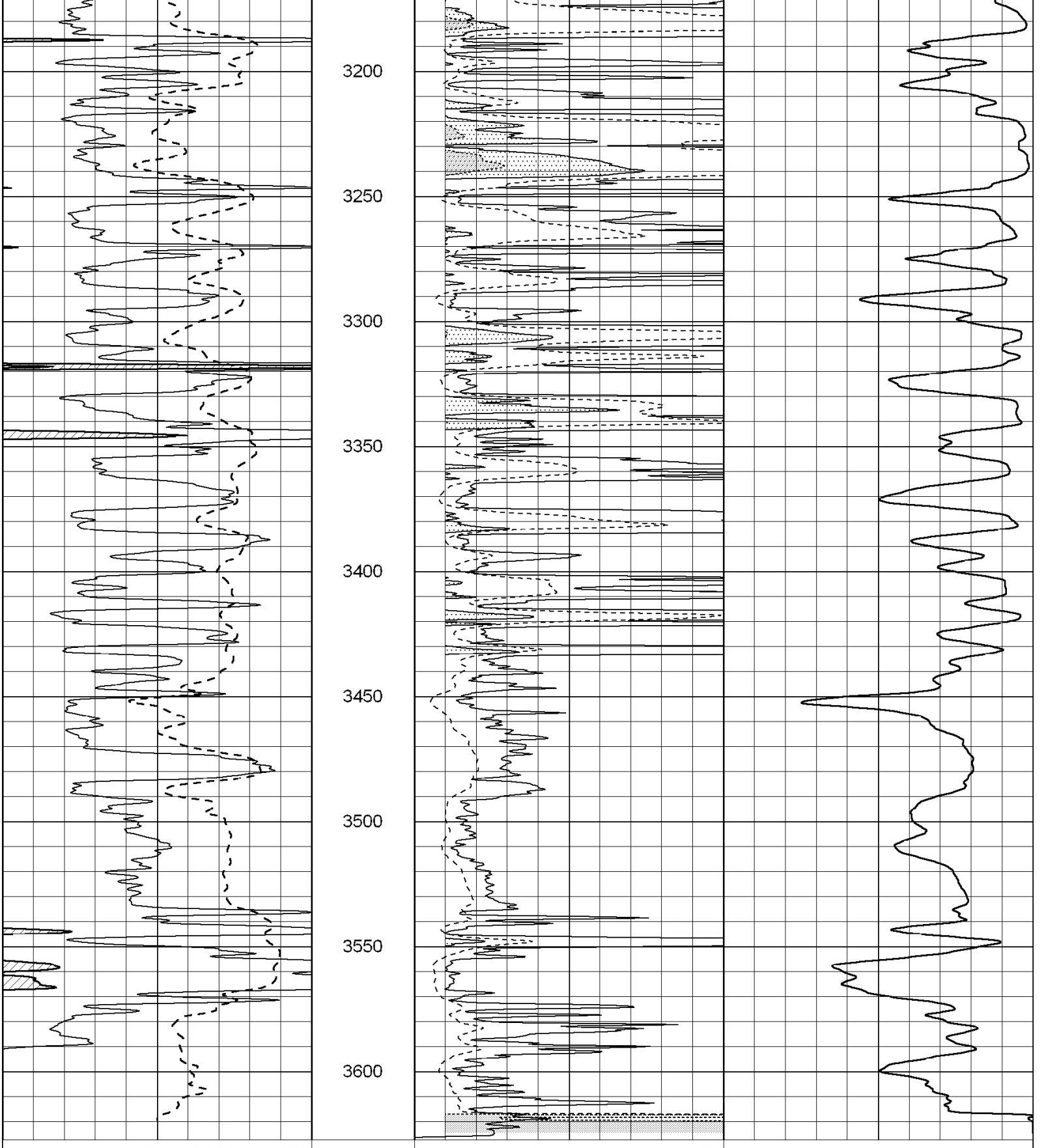
2800
2850
2900
2950
3000
3050
3100
3150


3200
3250
3300
3350
3400
3450
3500
3550
3600
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

SUPERIOR

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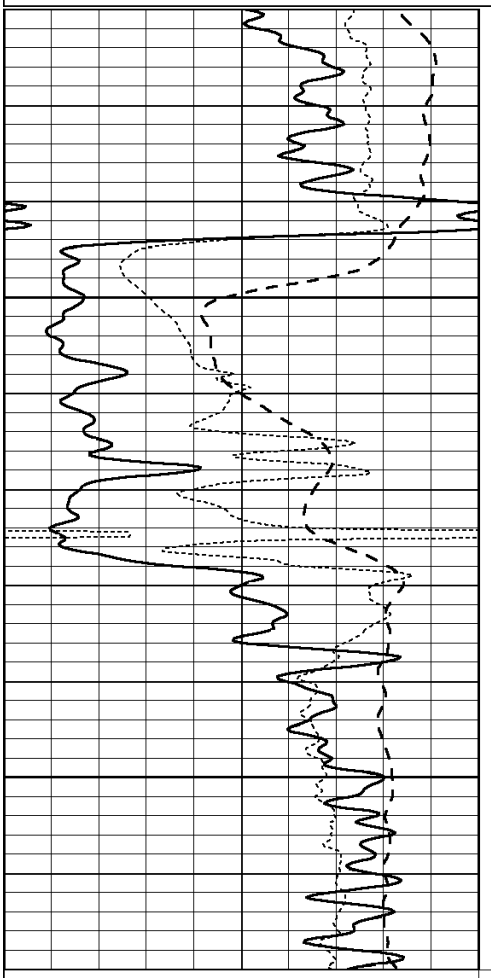
Hays, Kansas

ANHYDRITE

Database File: 002499ddn.db
Dataset Pathname: pass8.5
Presentation Format: dil
Dataset Creation: Fri Oct 24 01:41:23 2008 by Calc Open-Cased 060407
Charted by: Depth in Feet scaled 1:240

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

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



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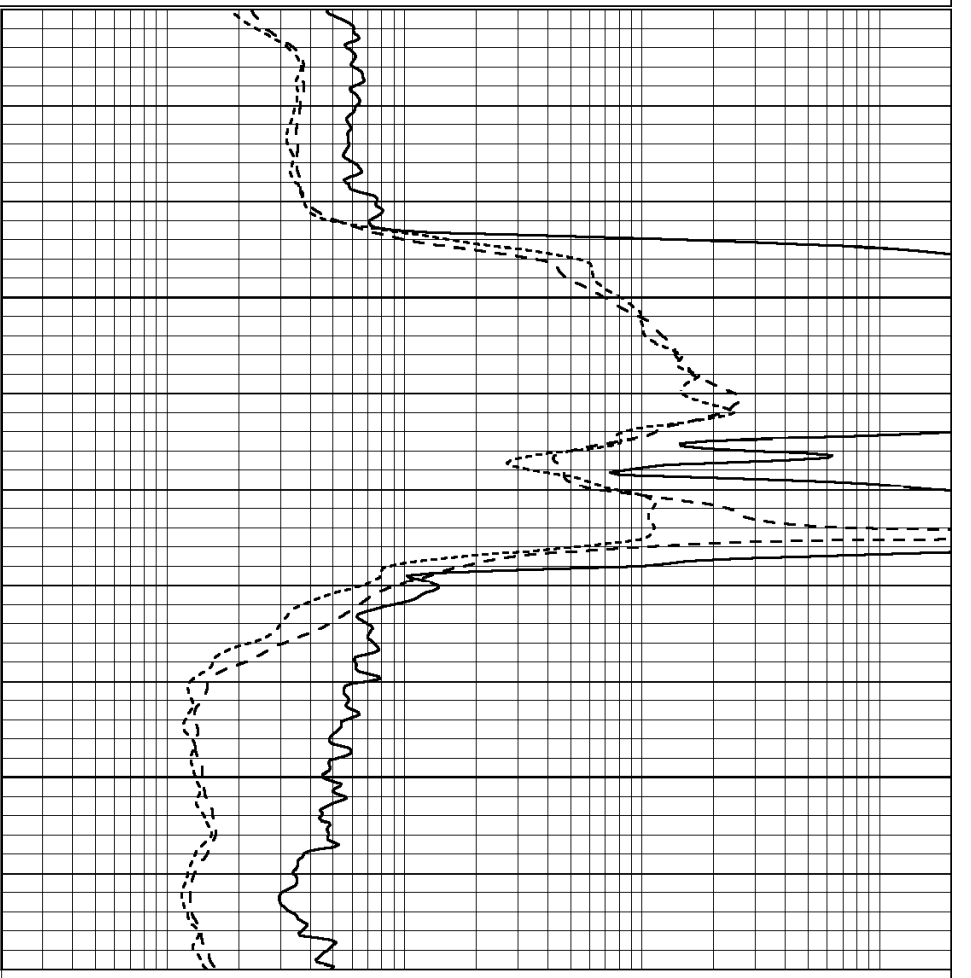
1150



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

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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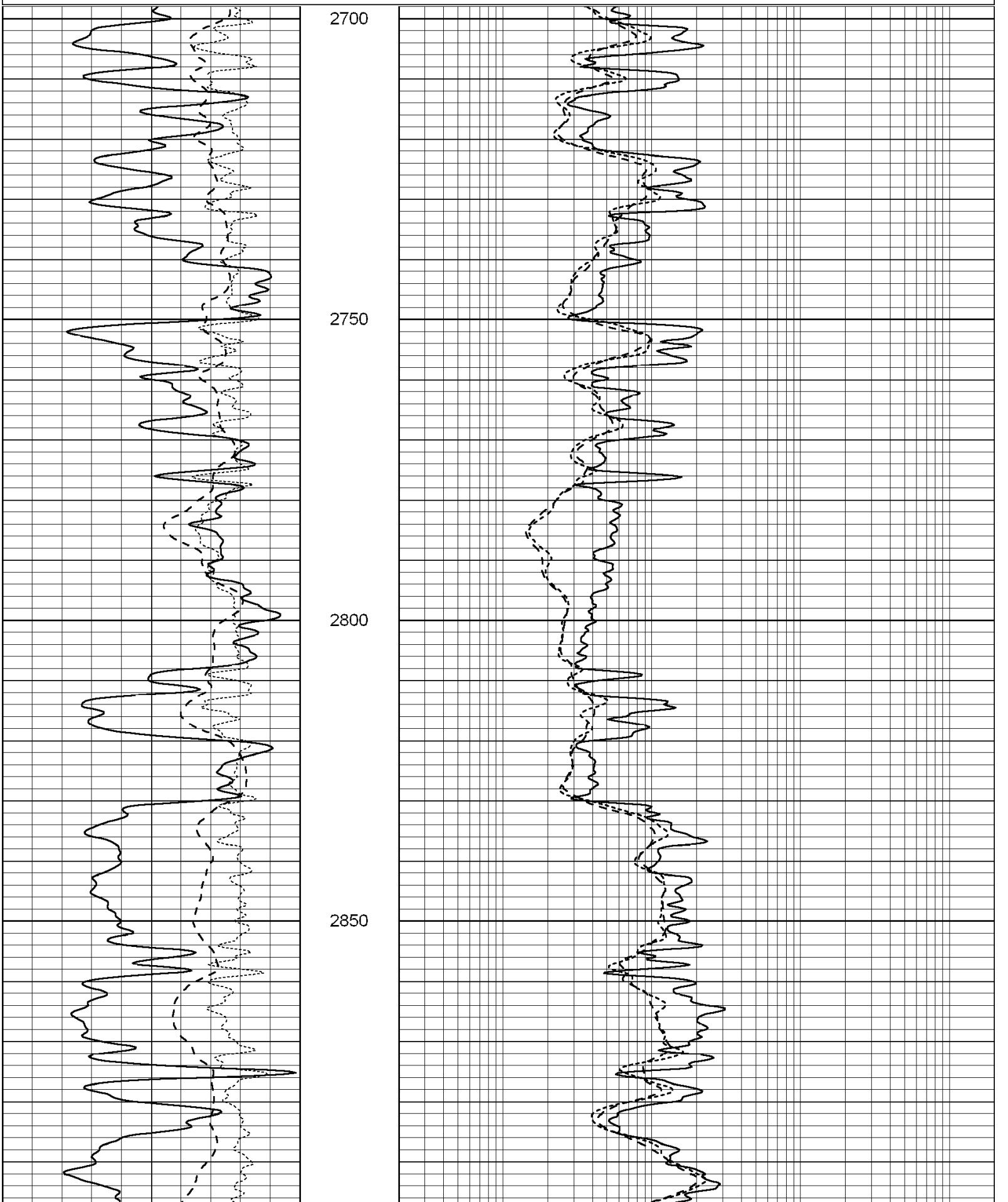
Hays, Kansas

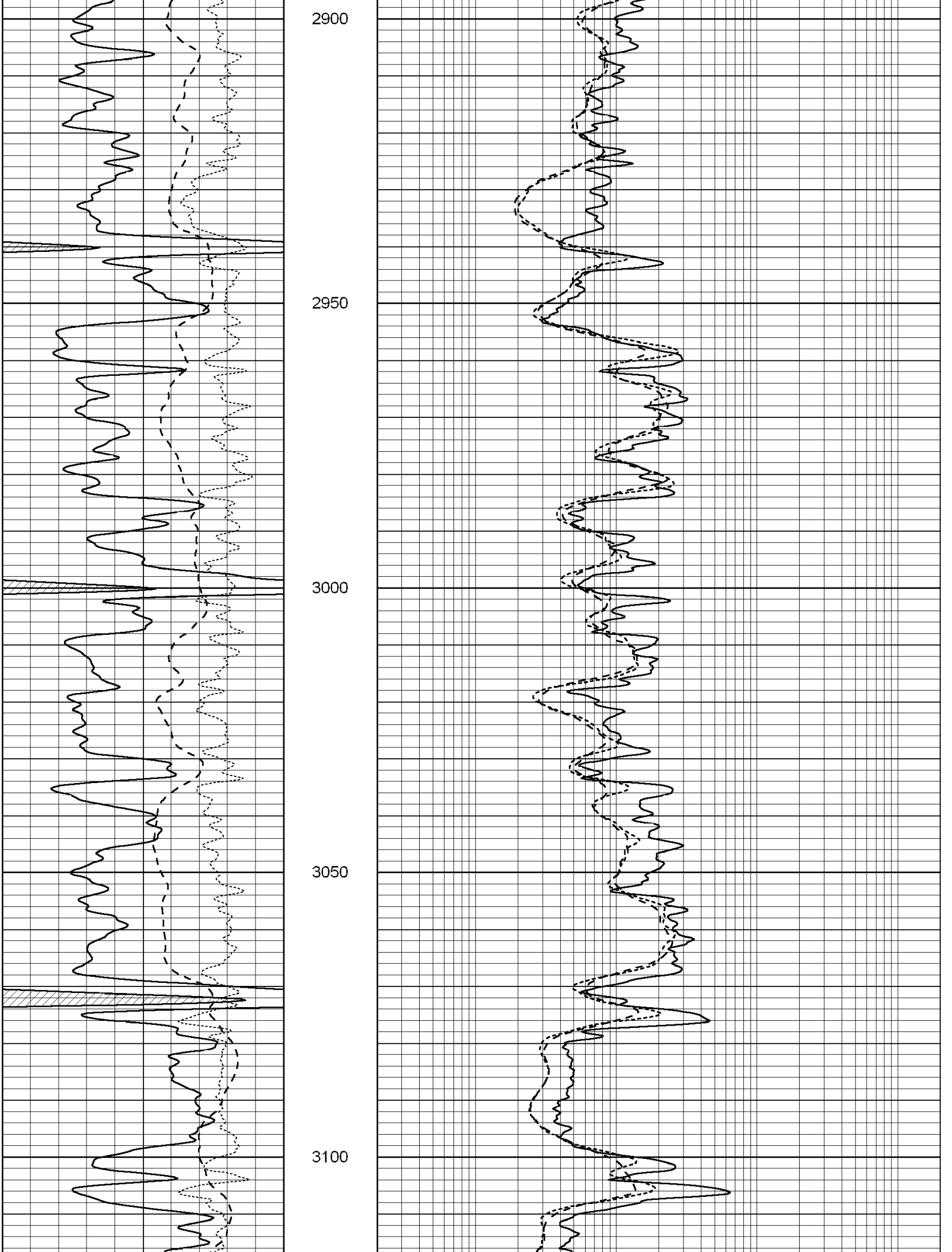
MAIN SECTION

Database File: 002499ddn.db
Dataset Pathname: pass8.4
Presentation Format: dil
Dataset Creation: Fri Oct 24 01:41:07 2008 by Calc Open-Cased 060407
Charted by: Depth in Feet scaled 1:240

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

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

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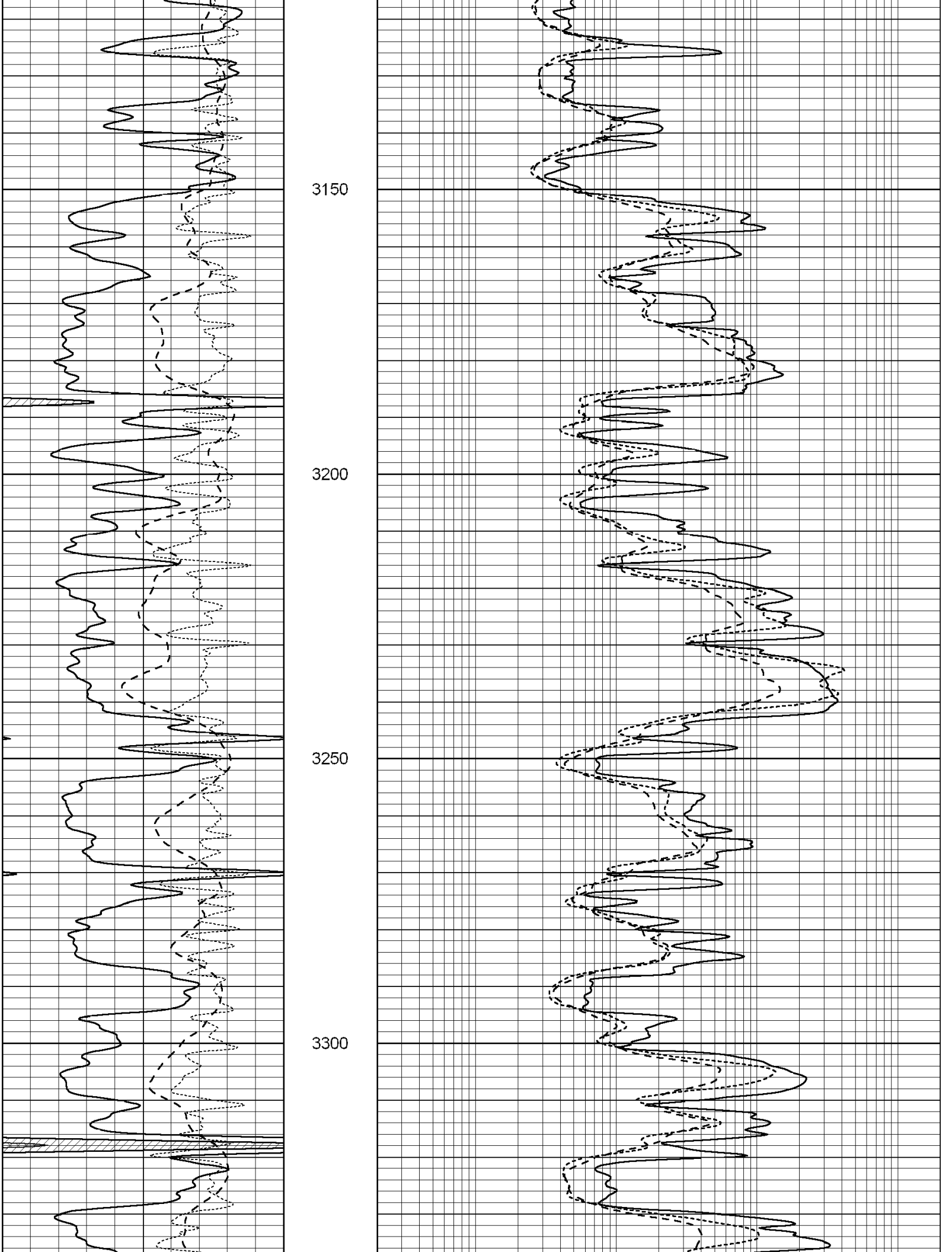
2950
3000
3050
3100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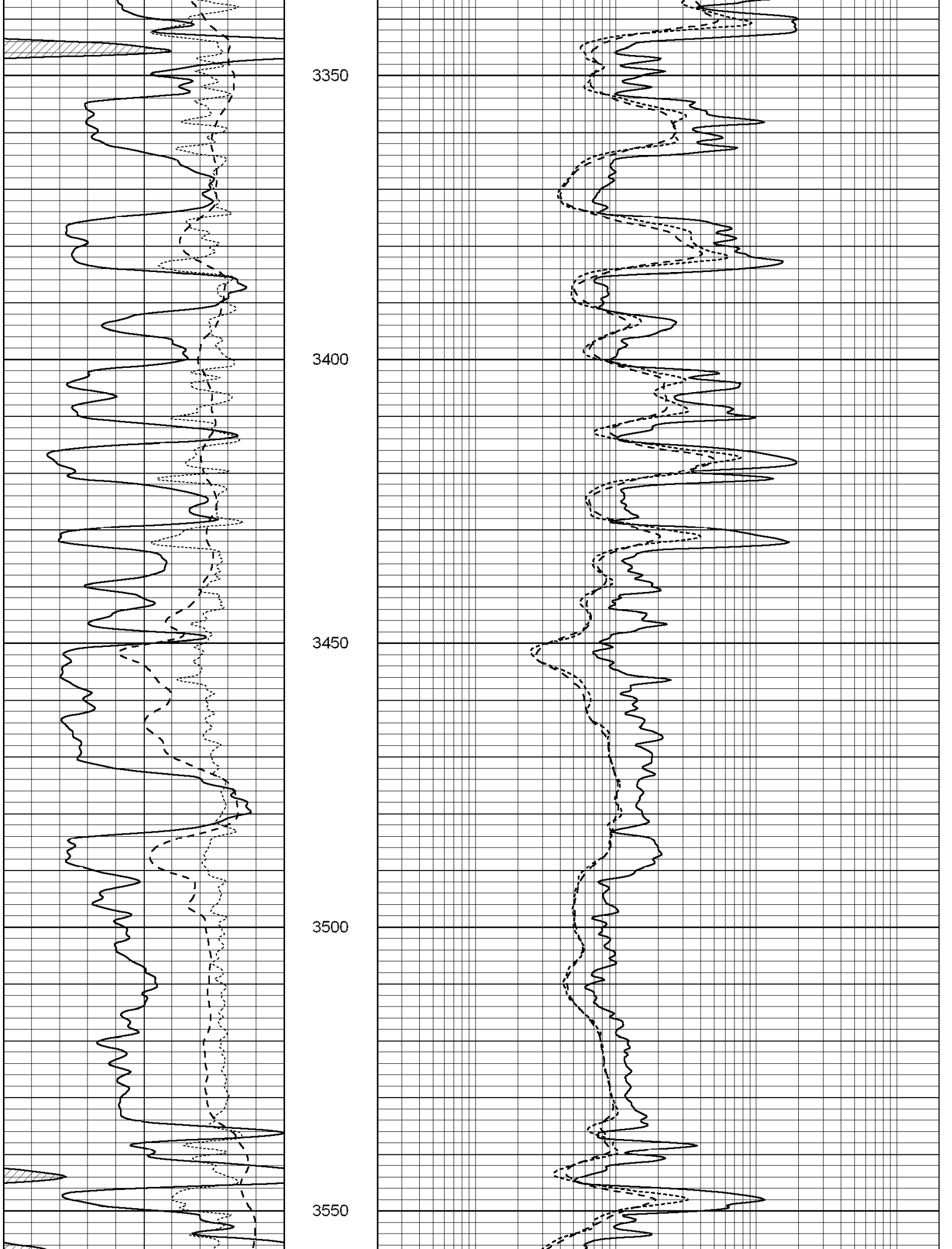
3200
3250
3300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3400
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3500
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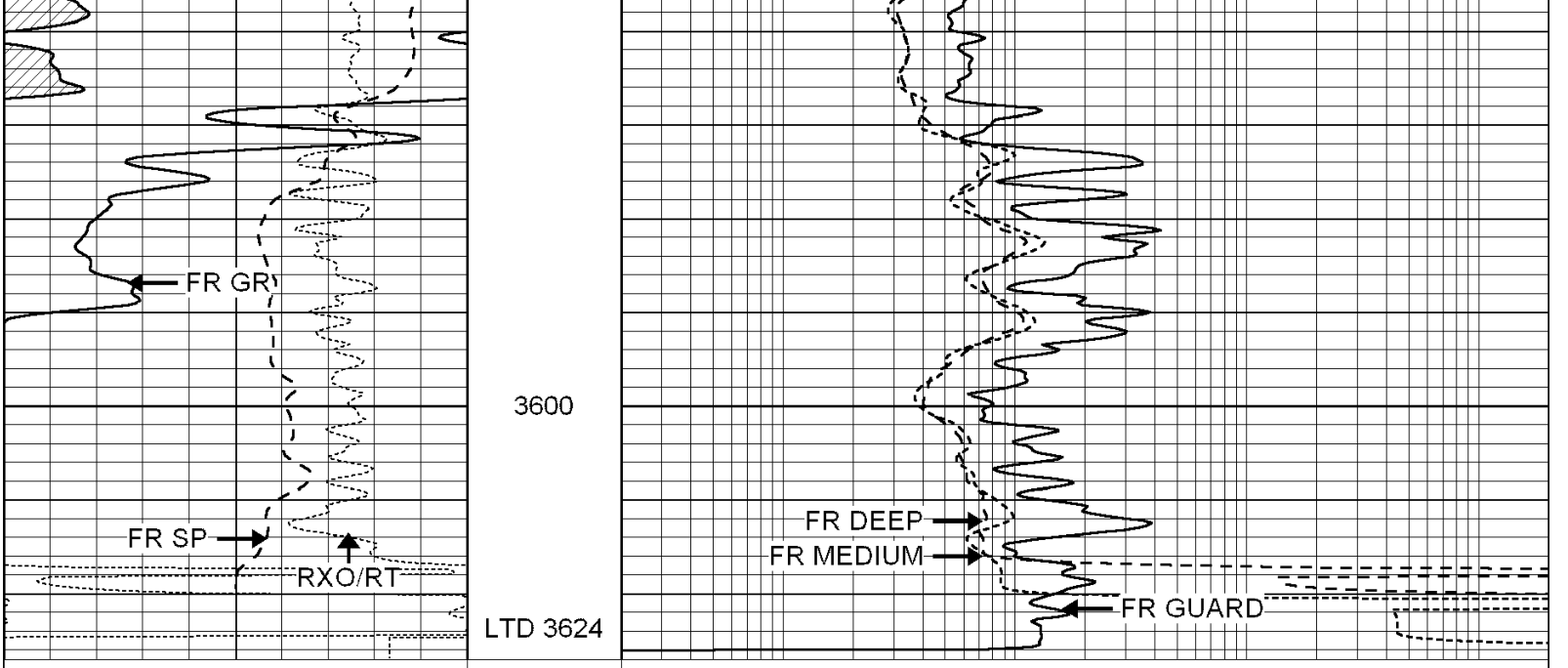

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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

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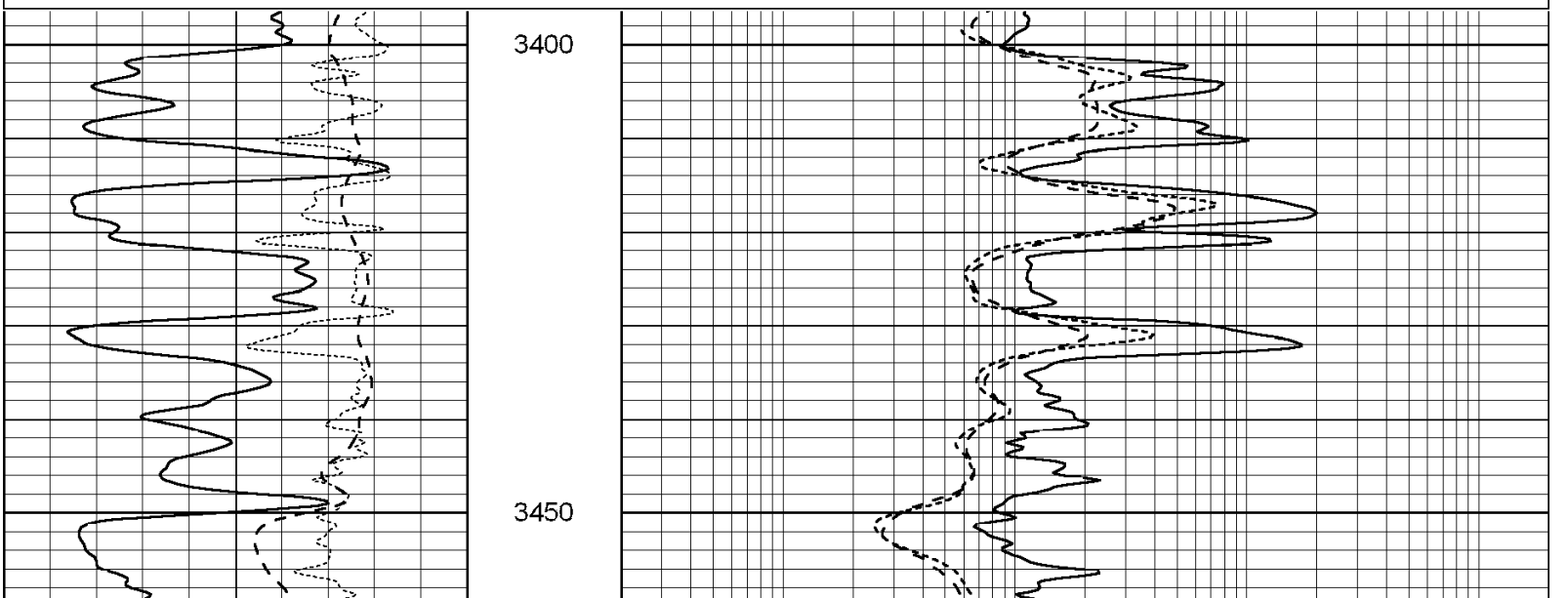
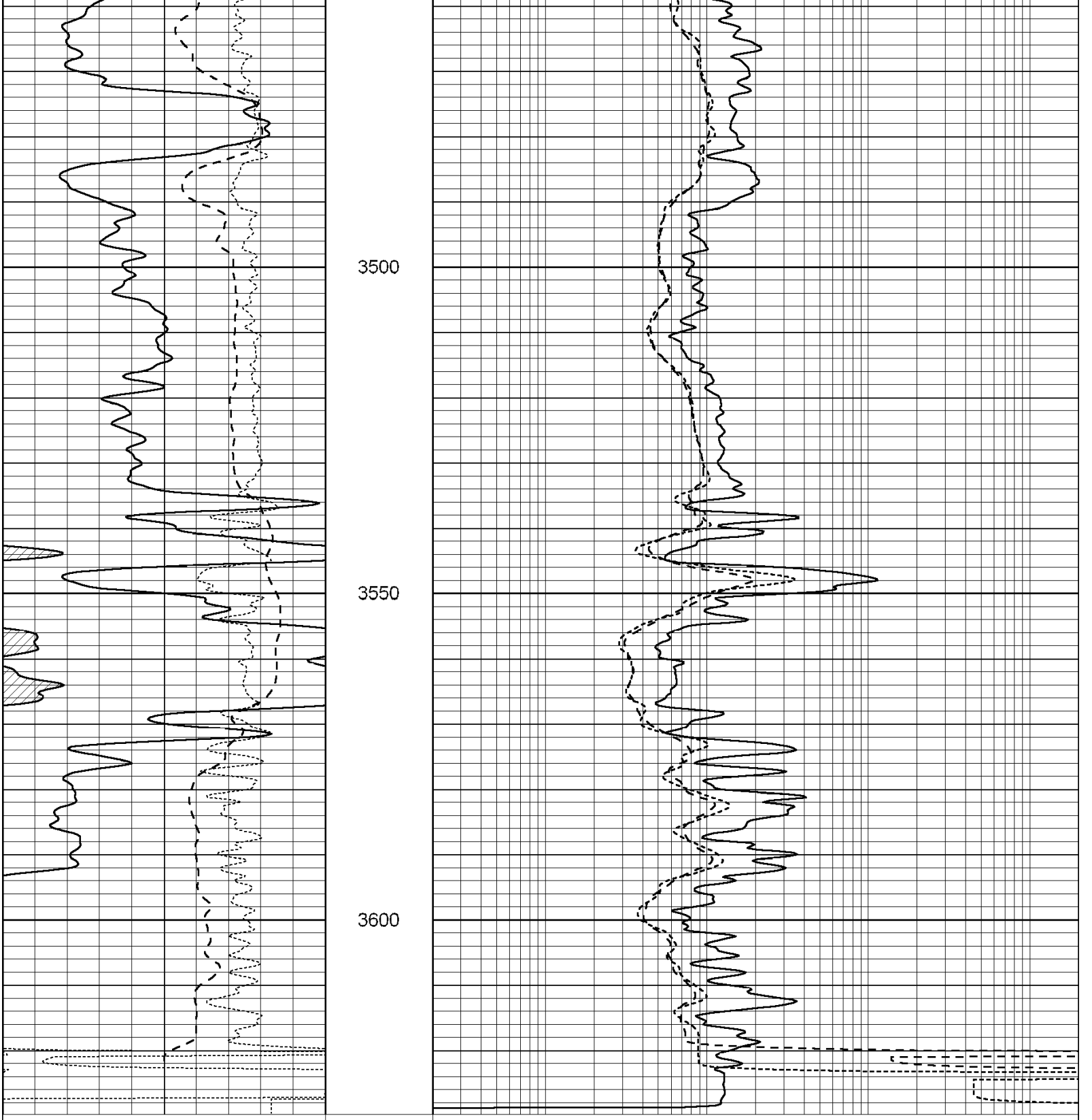
REPEAT SECTION

Database File:	002499ddn.db
Dataset Pathname:	pass7.3
Presentation Format:	dil
Dataset Creation:	Fri Oct 24 00:51:21 2008 by Calc Open-Cased 060407
Charted by:	Depth in Feet scaled 1:240

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

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	Rxo/Rt	50

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

Calibration Report

Database File: 002499ddn.db
Dataset Pathname: pass8.4
Dataset Creation: Fri Oct 24 01:41:07 2008 by Calc Open-Cased 060407

Dual Induction Calibration Report

Serial-Model: DIL1-GEAR
Performed: Thu Oct 23 21:53:49 2008

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.014	0.656	V	0.000	400.000	mmho-m	525.000	-6.000
Medium	-0.001	0.753	V	0.000	464.000	mmho-m	575.000	-7.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.015	0.658	V	0.000	500.000	mmho-m	778.152	-11.717
Medium	0.014	0.750	V	0.000	500.000	mmho-m	680.048	-9.713

Litho Density Calibration Report

Serial: 003 Model: PRB
Performed Sun May 27 14:00:47 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2129.3	13425.5	4493.9	14622.8	cps
Window 2	1911.5	10435.8	3706.5	11076.3	cps
Window 3	1670.1	6774.1	2736.9	7064.4	cps
Window 4	493.6	496.3	490.8	497.3	cps
Long Space	0.0	8524.3	1795.1	9164.8	cps
Short Space	2.1	3478.4	2258.5	3656.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.5	Rib Slope	: 0.983	Density/Spine Ratio	: 0.544
Spine Angle	: 74.5	Spine Slope	: 3.607	Spine Intercept	: -20.4

Caliper

	Readings	Reference
Low Ref	2.2	6.5
High Ref	4.5	15.5

Gain: 3.8 Offset: -1.7

Compensated Neutron Calibration Report

Serial Number: NEU_3I
Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	997.00	cps	1000.00	cps	1.0000
Long Space	986.00	cps	1000.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR3
Tool Model: OPEN
Performed: Fri Oct 24 00:39:51 2008

Calibrator Value: 200.0 GAPI

Background Reading: 3.0 cps
Calibrator Reading: 186.0 cps

Sensitivity: 0.8000 GAPI/cps