



**SUPERIOR**  
Hays,  
Kansas

**DUAL  
INDUCTION  
LOG**

Company MAI OIL OPERATIONS  
Well BOXBERGER #1  
Field WILDCAT  
County BARTON  
State KANSAS

Company MAI OIL OPERATIONS  
Well BOXBERGER #1  
Field WILDCAT  
County BARTON State KANSAS

Location: API # : 15-009-25696-0000  
800' FNL & 705' FEL  
NE - SW - NE - NE  
SEC 13 TWP 16S RGE 15W  
Permanent Datum GROUND LEVEL Elevation 1934  
Log Measured From KELLY BUSHING & A.G.L.  
Drilling Measured From KELLY BUSHING  
Elevation  
K.B. 1942  
D.F. 1940  
G.L. 1934

Date	6/17/12
Run Number	ONE
Depth Driller	3490
Depth Logger	3490
Bottom Logged Interval	3488
Top Log Interval	00
Casing Driller	8 5/8" @ 434
Casing Logger	432
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/51
pH / Fluid Loss	10.0/10.2
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.50 @ 92F
Rmf @ Meas. Temp	.37 @ 92F
Rmc @ Meas. Temp	.60 @ 92F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.41 @ 112F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	112F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JASON CAPPELLUCCI
Witnessed By	KURT TALBOTT

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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

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395  
DIRECTIONS  
GALATIA, KS. - 2 N. - 2 E. - S. INTO



**SUPERIOR**  
Hays,  
Kansas

**MAIN SECTION**

Database File: 009224ddn.db  
 Dataset Pathname: pass3.2  
 Presentation Format: \_dil2  
 Dataset Creation: Sun Jun 17 19:42:17 2012 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:600

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

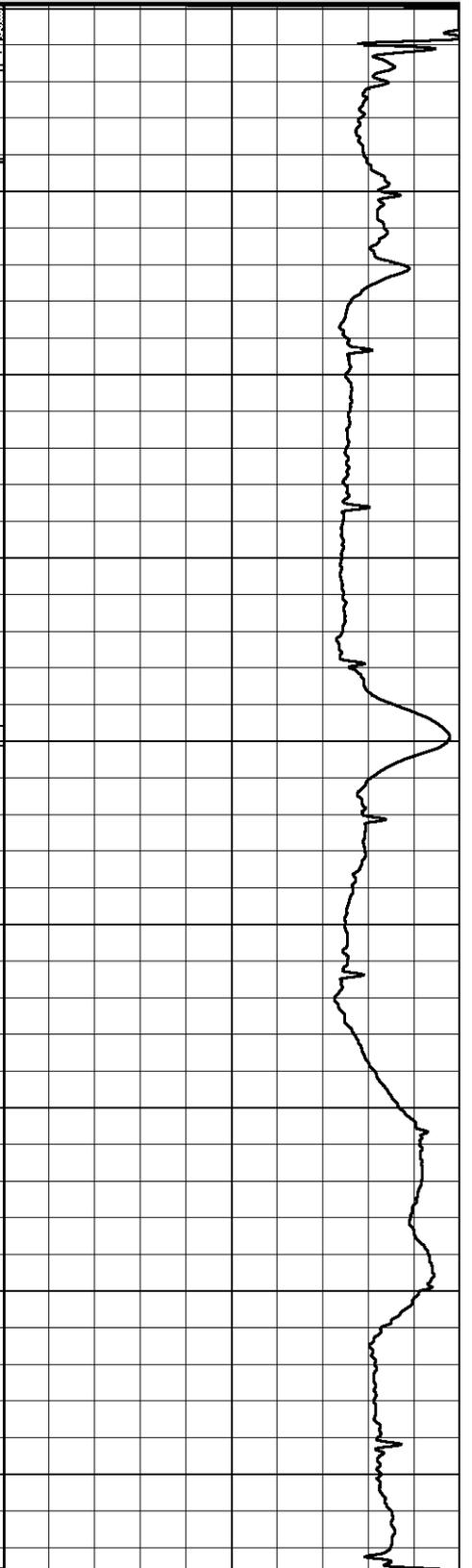
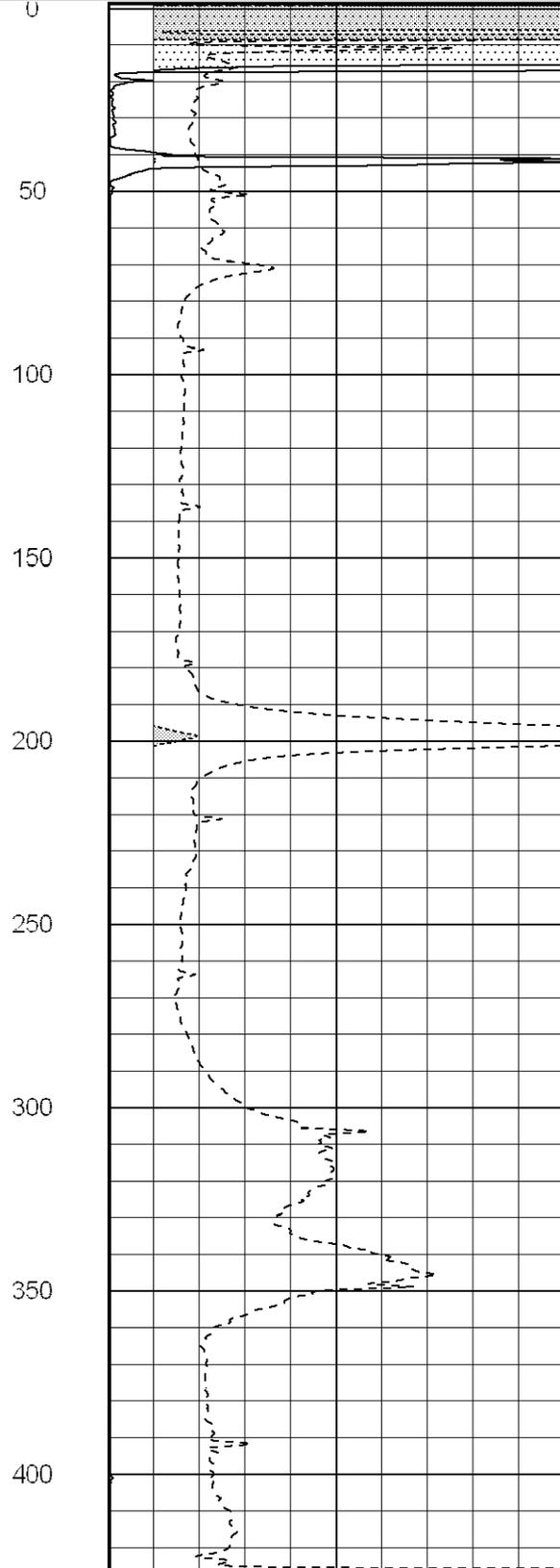
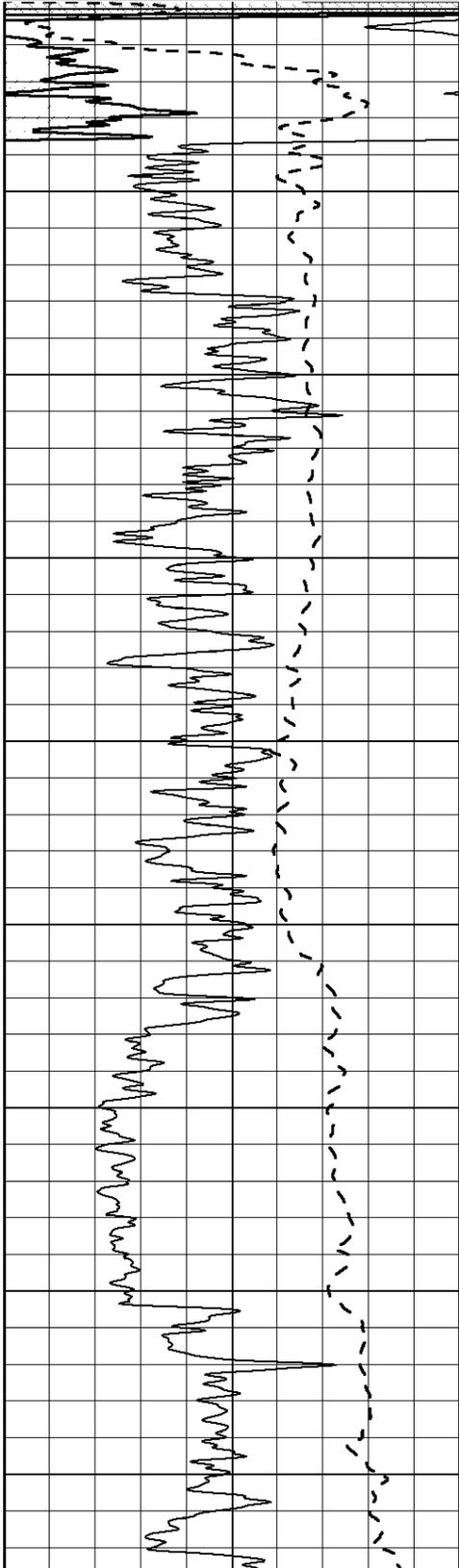
0	RLL3 (Ohm-m)	50
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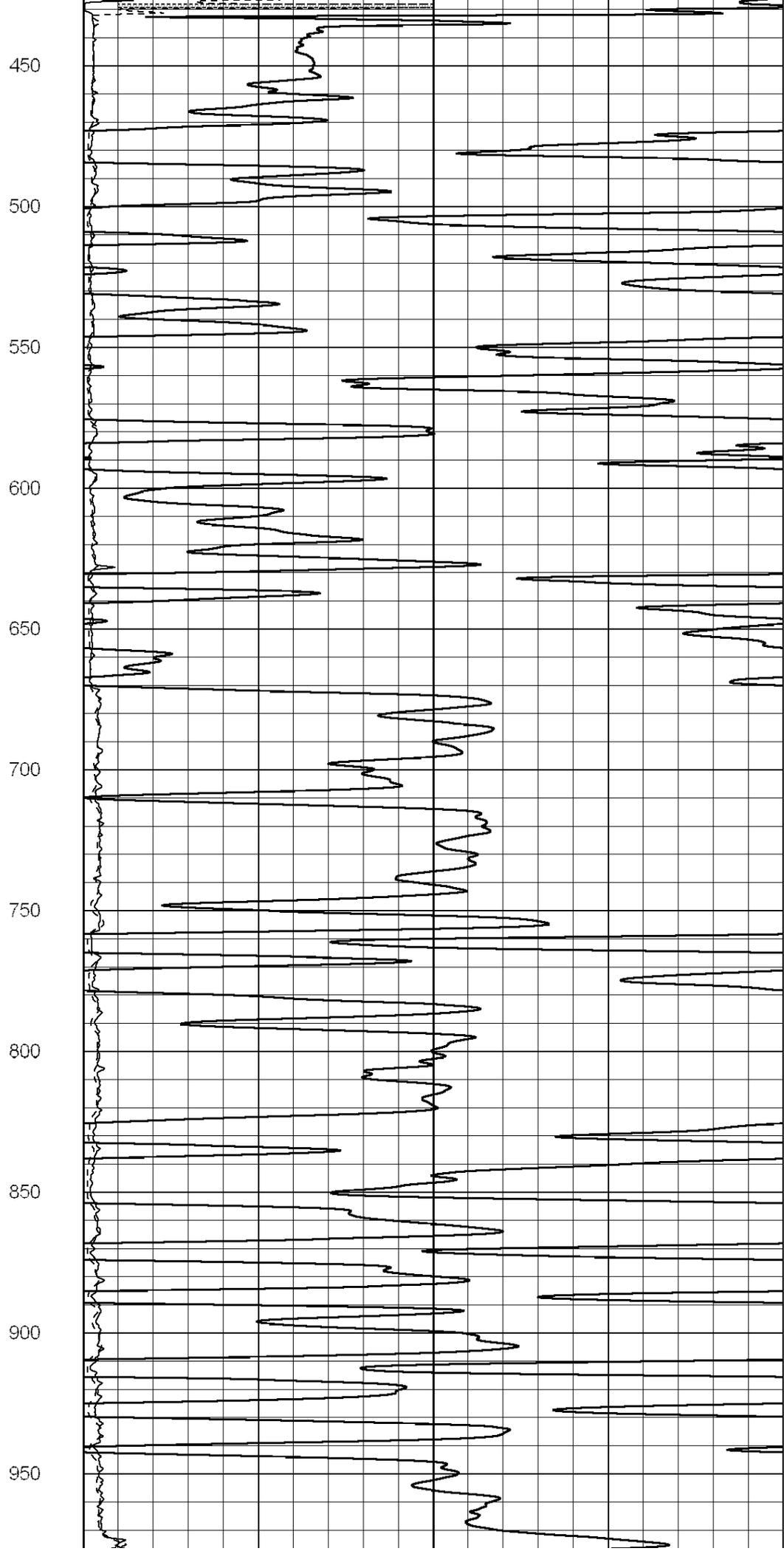
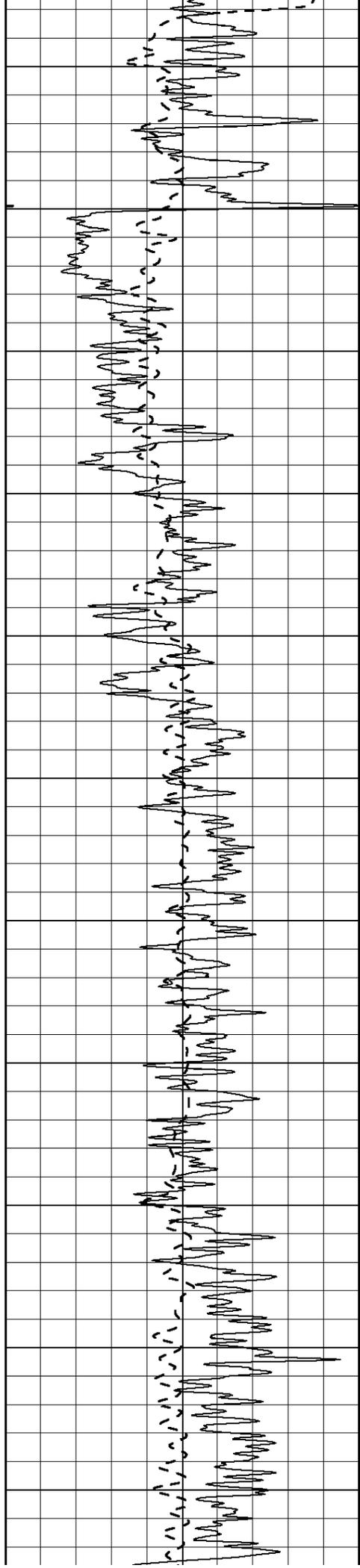
0	Deep Induction (Ohm-m)	50
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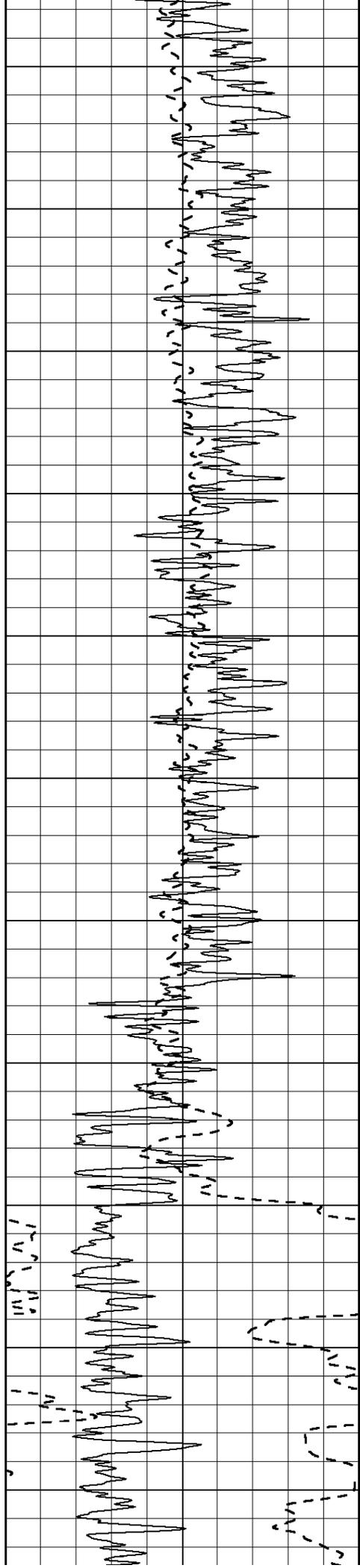
1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
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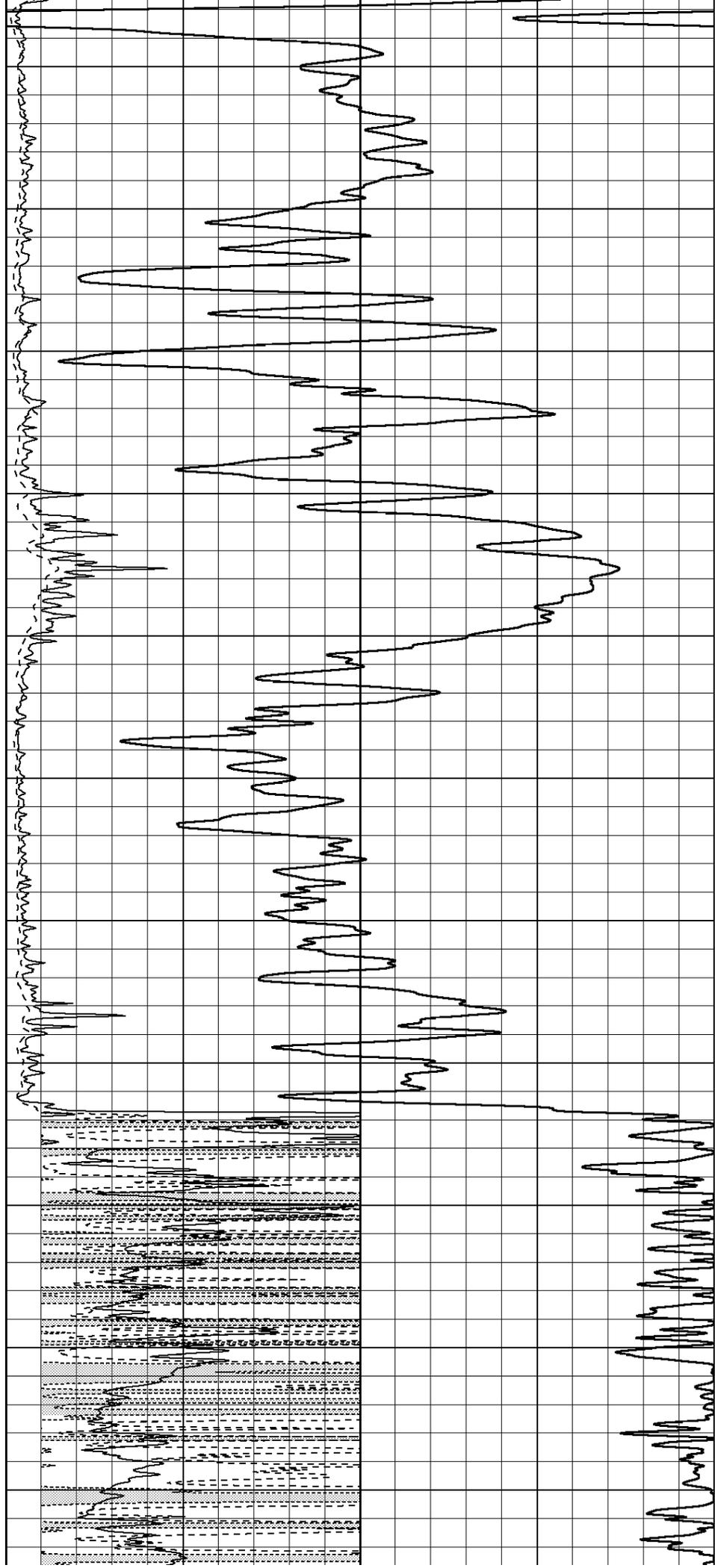
50	RLL3 X10 (Ohm-m)	500
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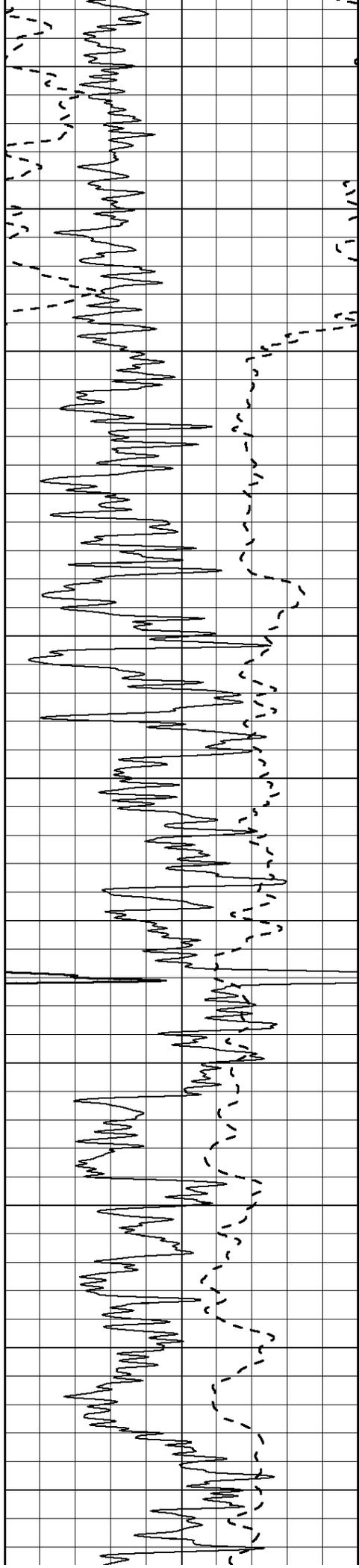






1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350  
1400  
1450  
1500





1550

1600

1650

1700

1750

1800

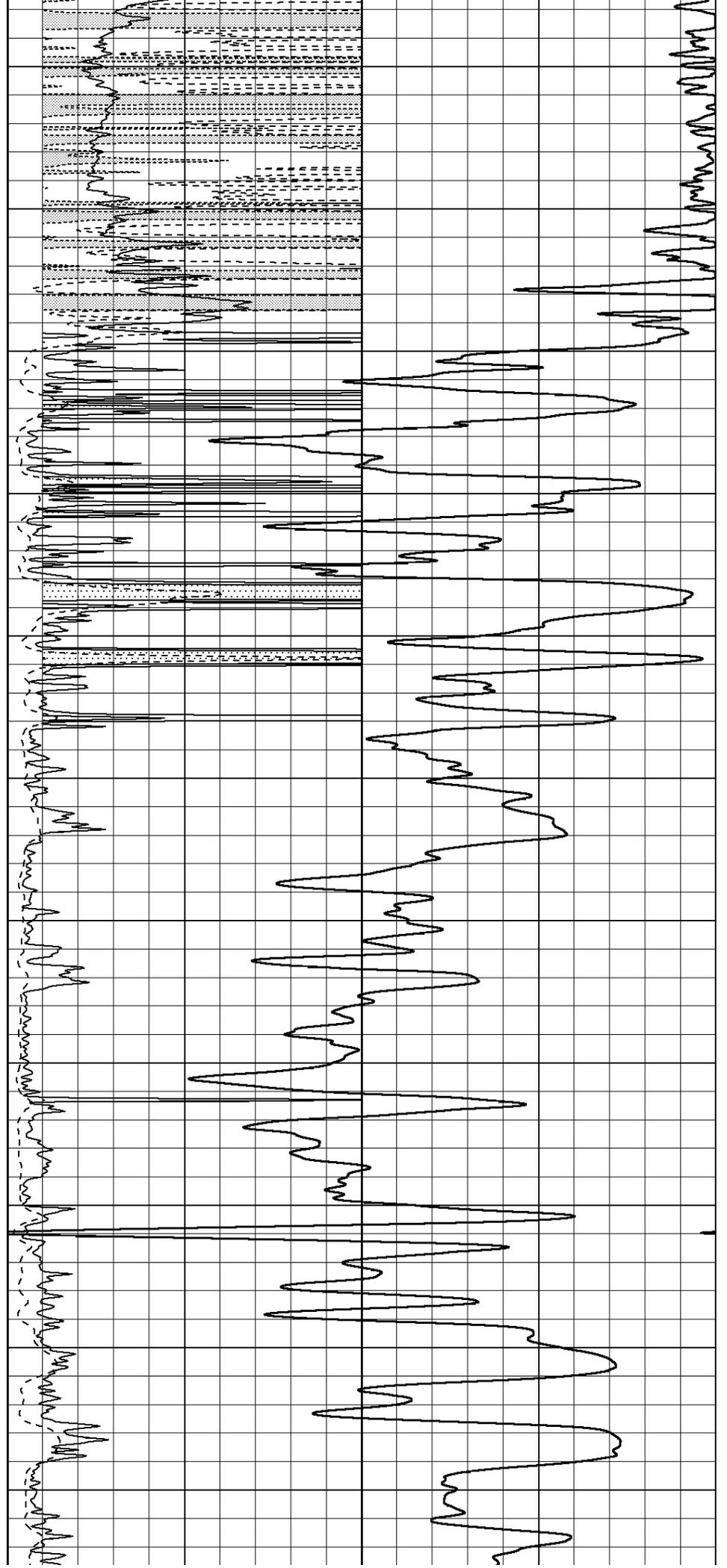
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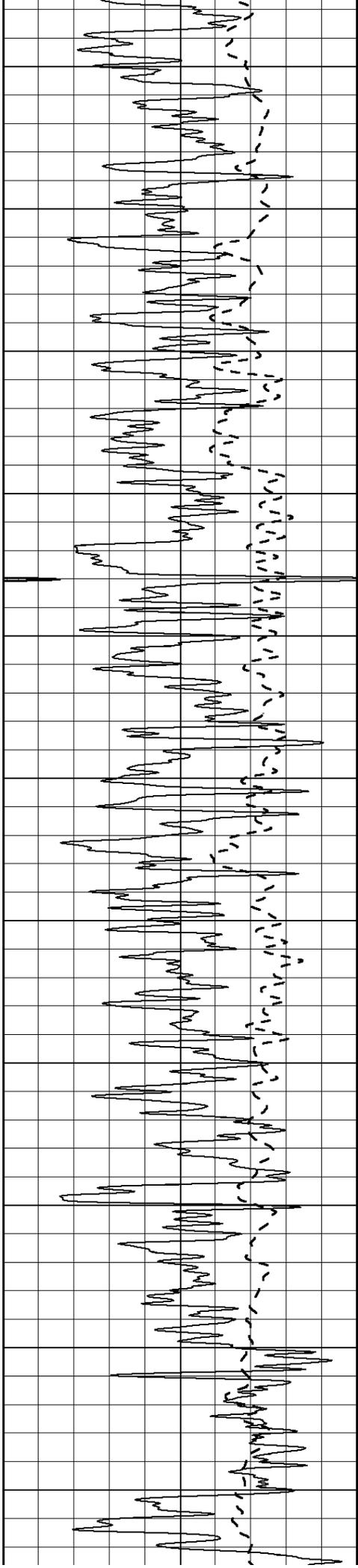
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

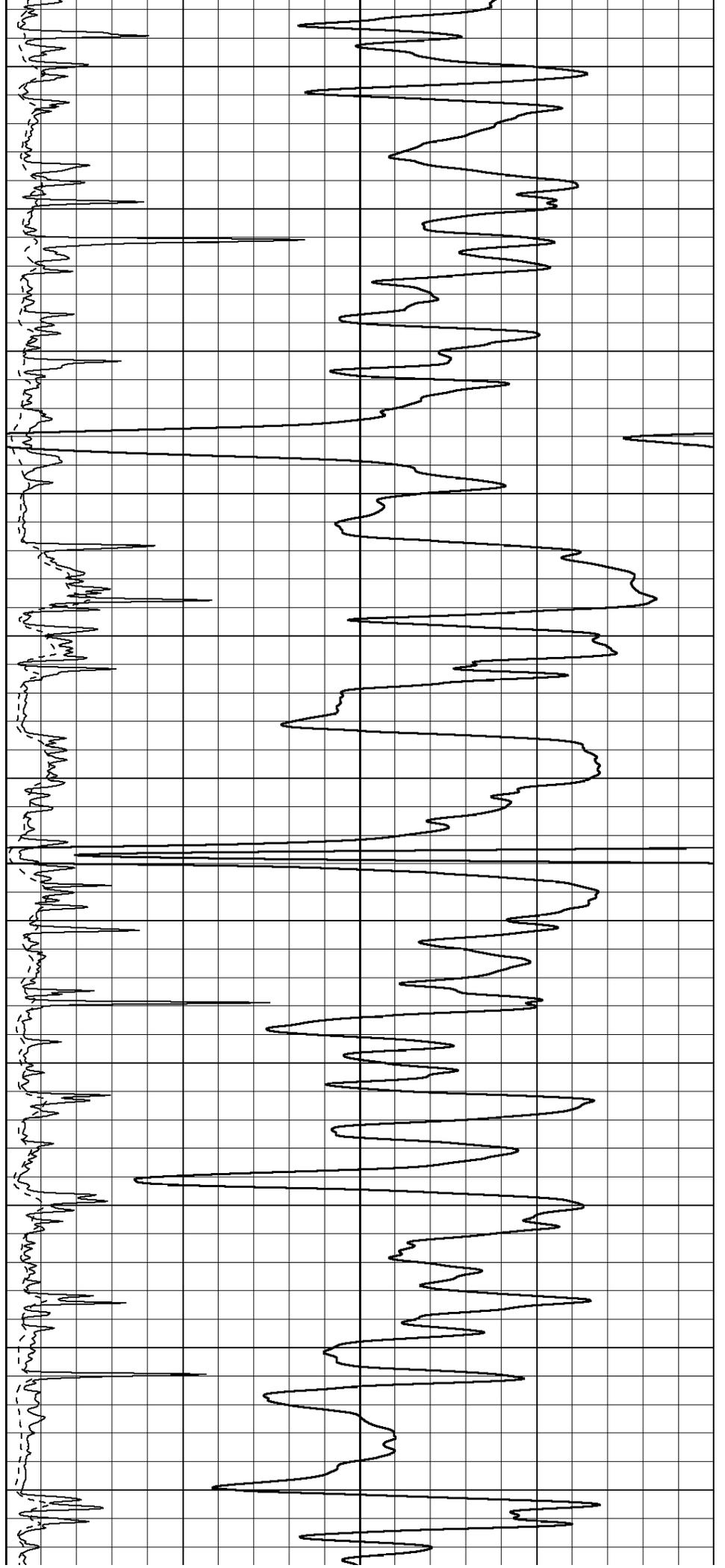
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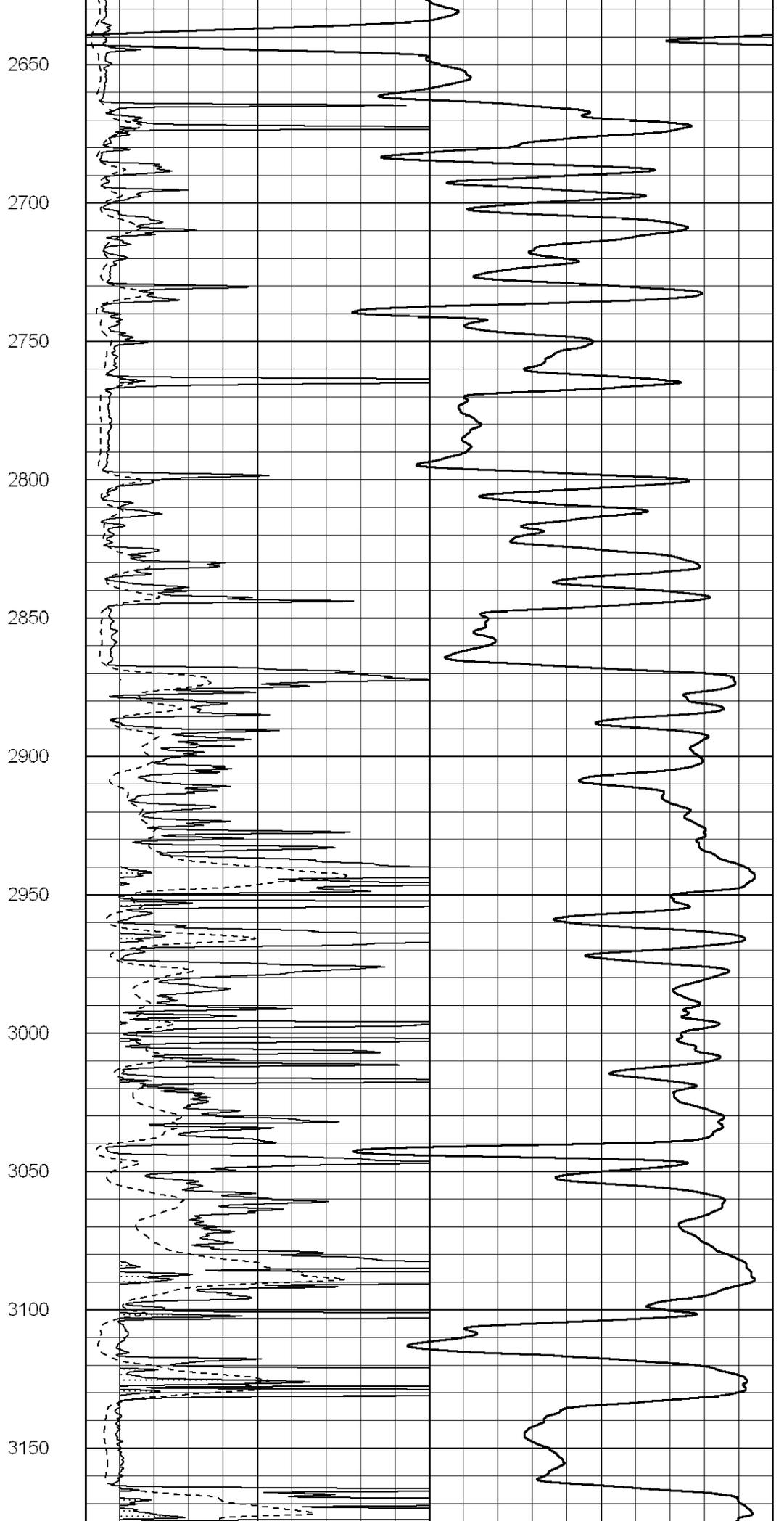
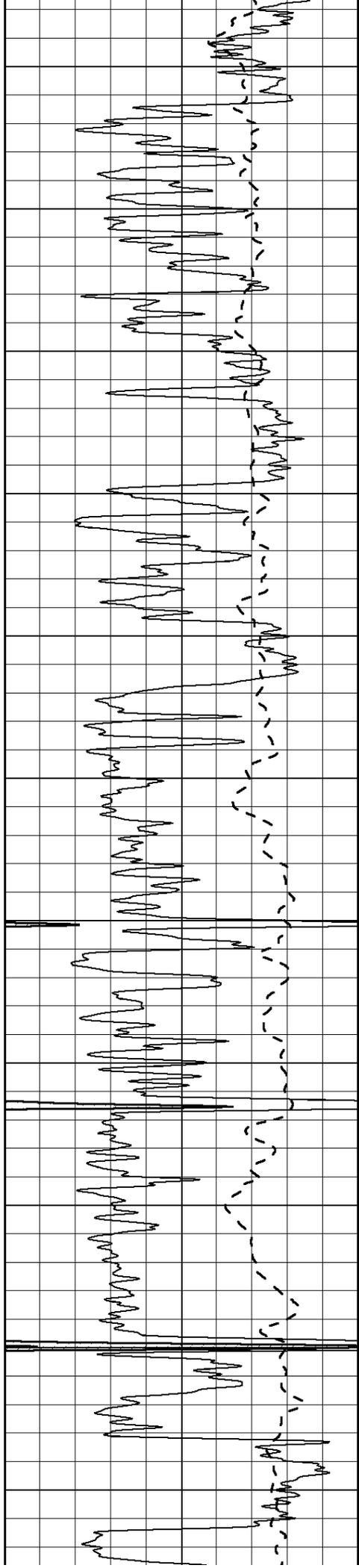
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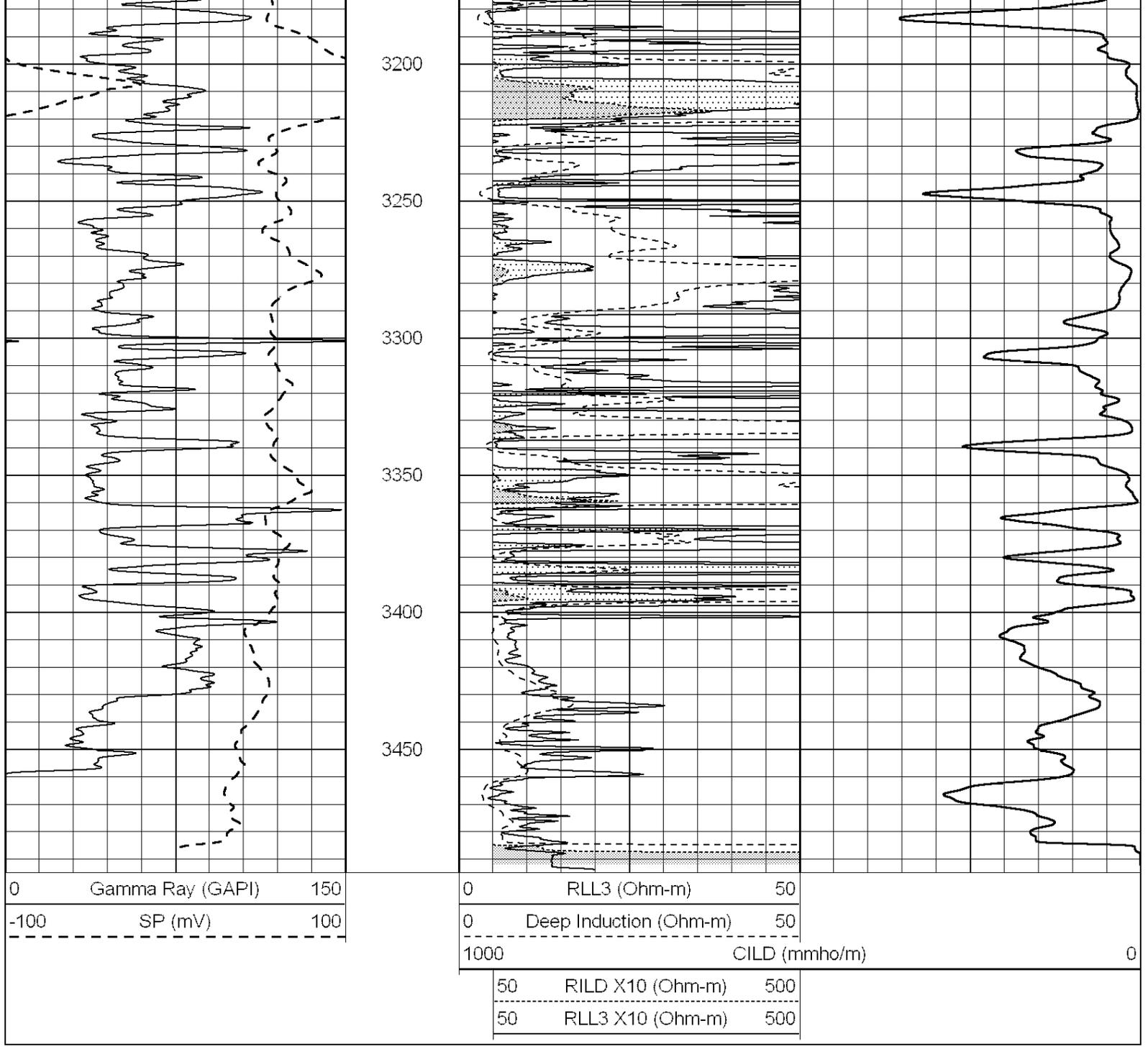
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2550

2600









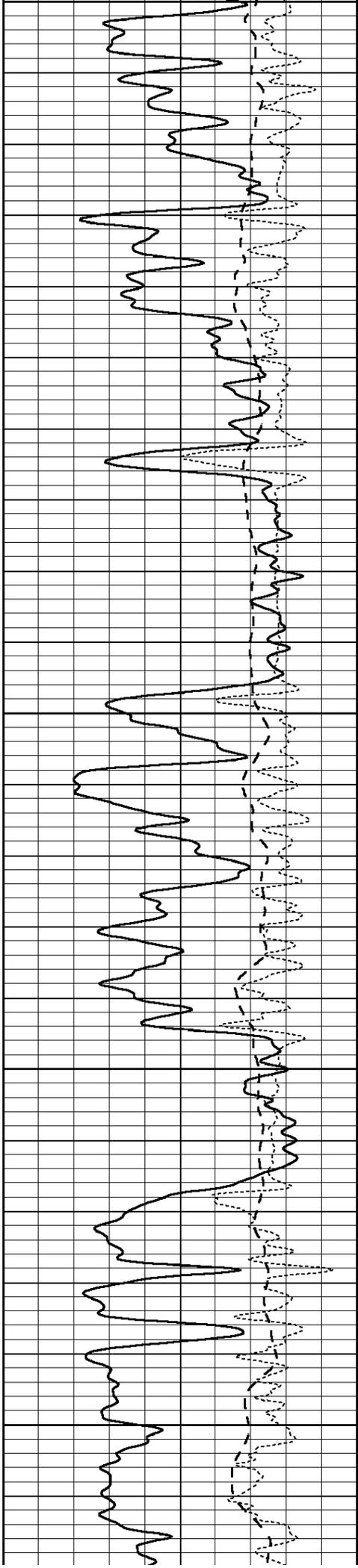
**SUPERIOR**  
WELL SERVICES

**Hays,  
Kansas**

# MAIN SECTION

Database File: 009224ddn.db  
 Dataset Pathname: pass3.1  
 Presentation Format: \_dil  
 Dataset Creation: Sun Jun 17 18:59:42 2012 by Calc Open-Cased 090629  
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



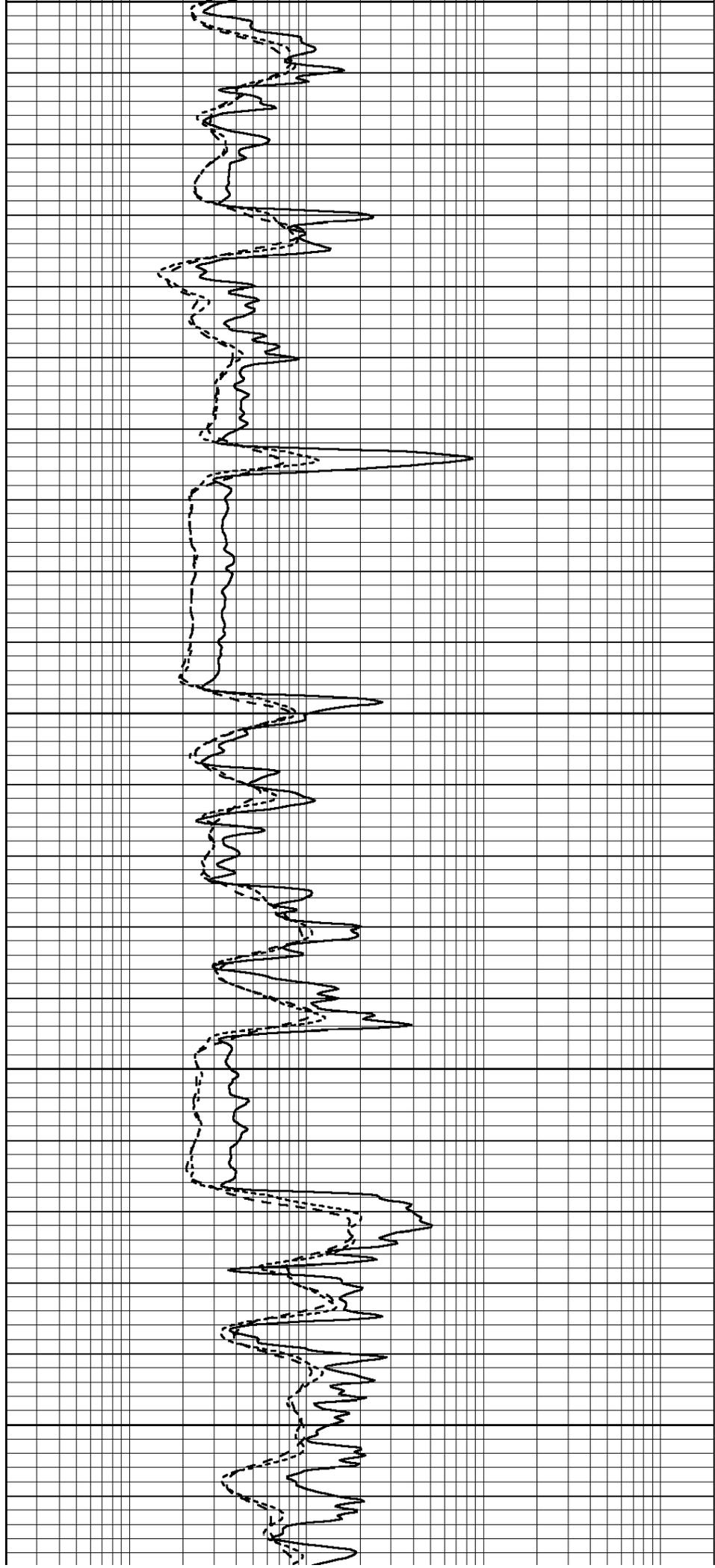
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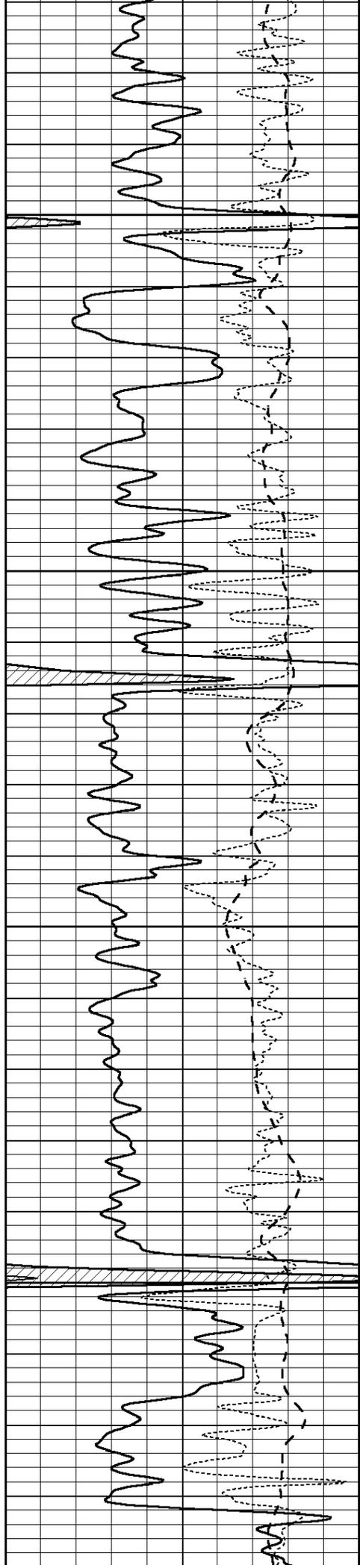
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2800

2850

2900



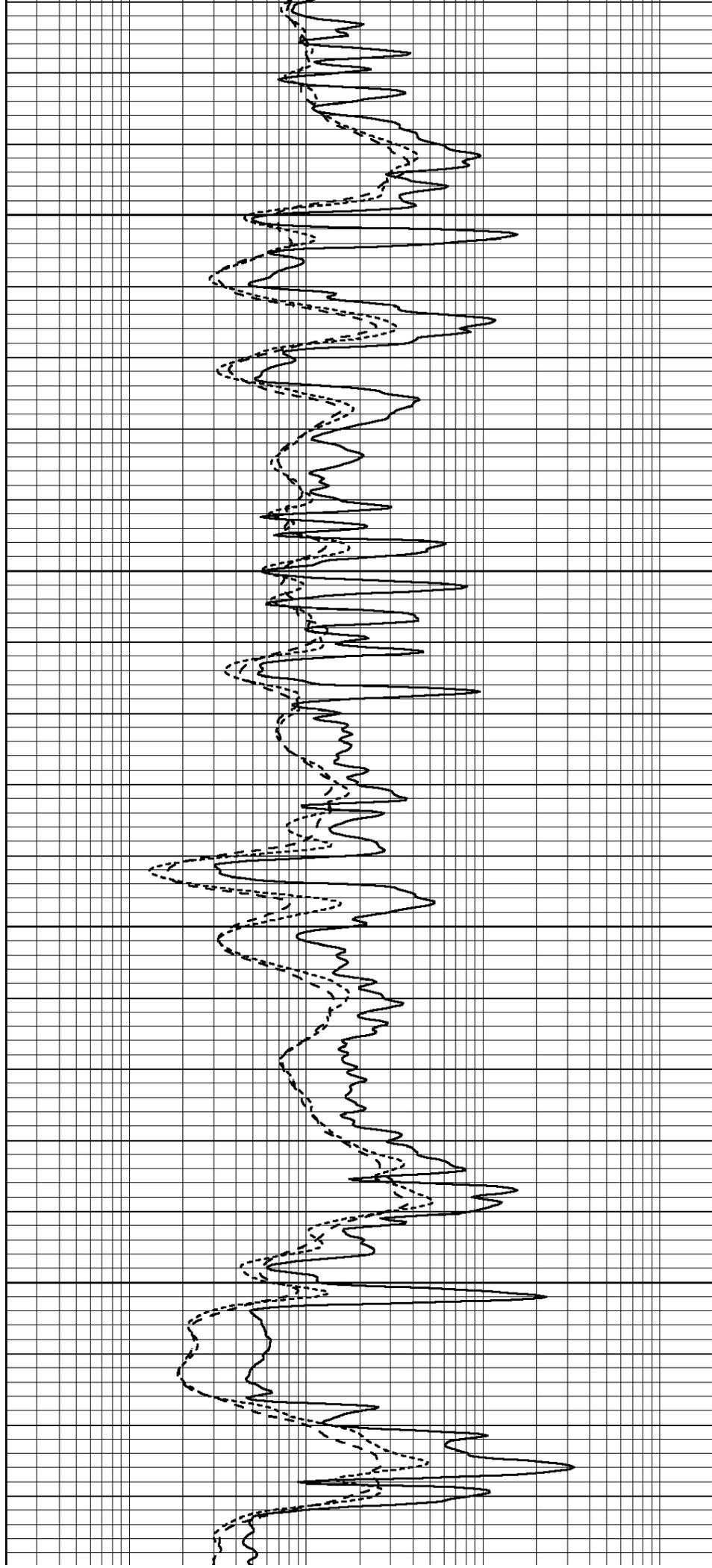


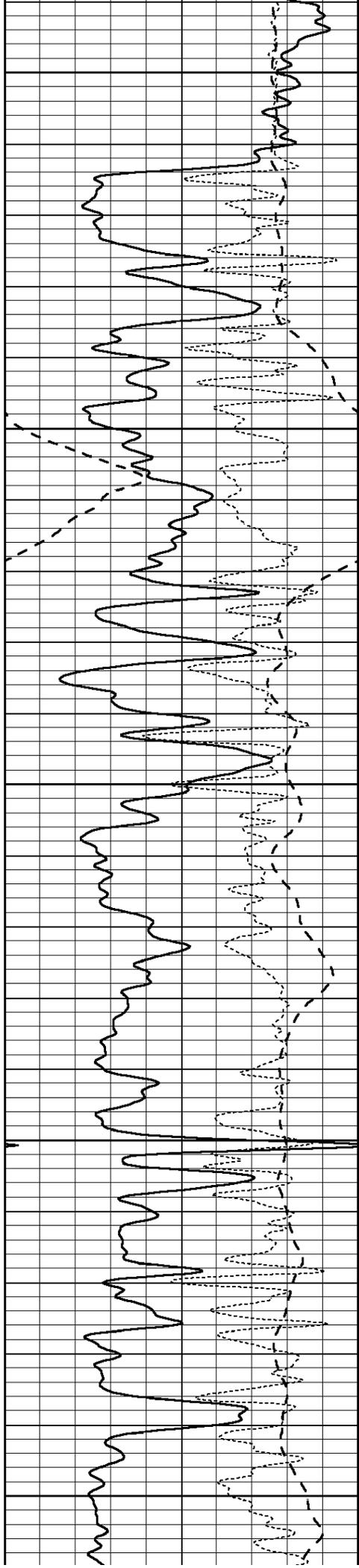
2950

3000

3050

3100





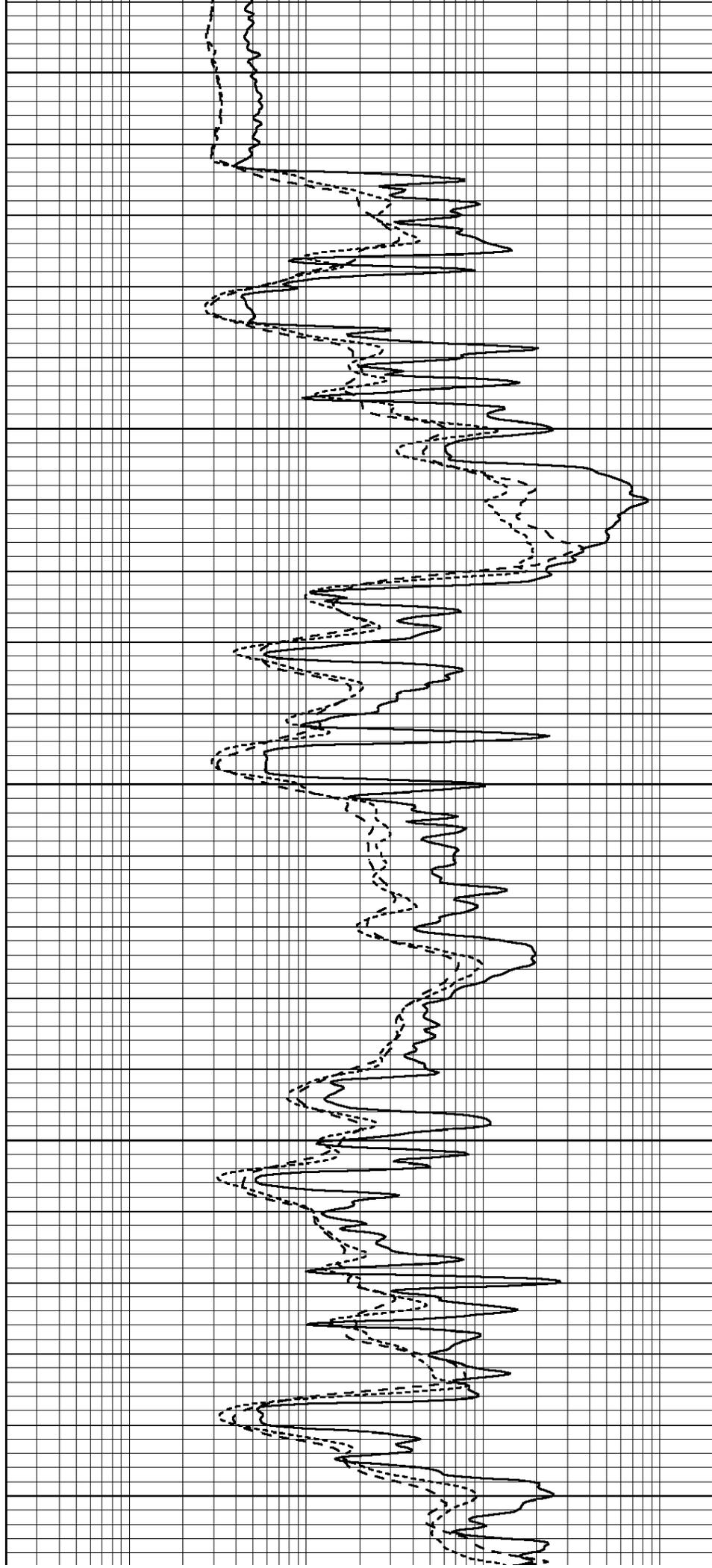
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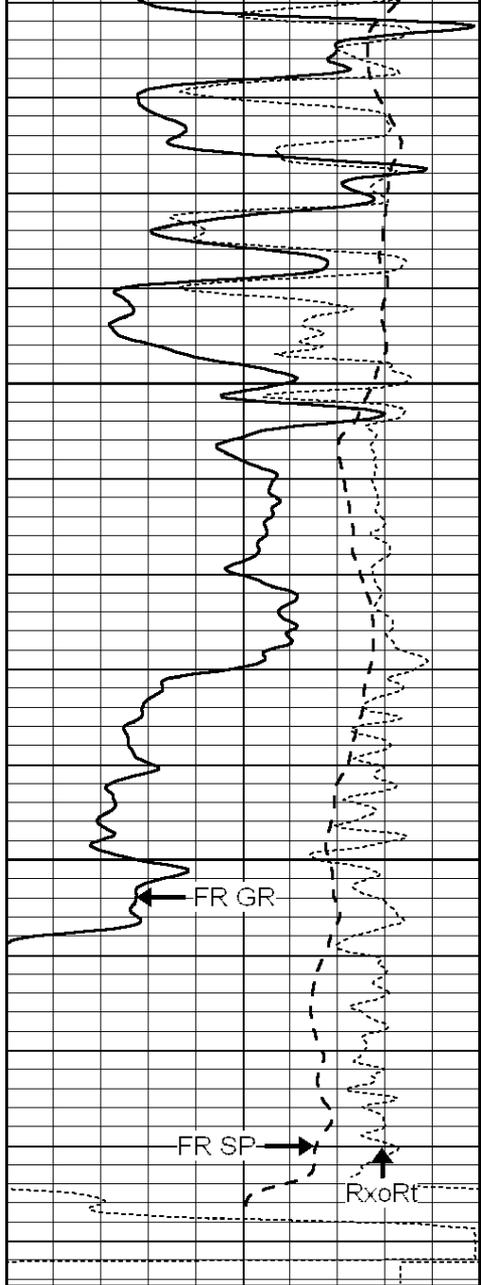
3200

3250

3300

3350



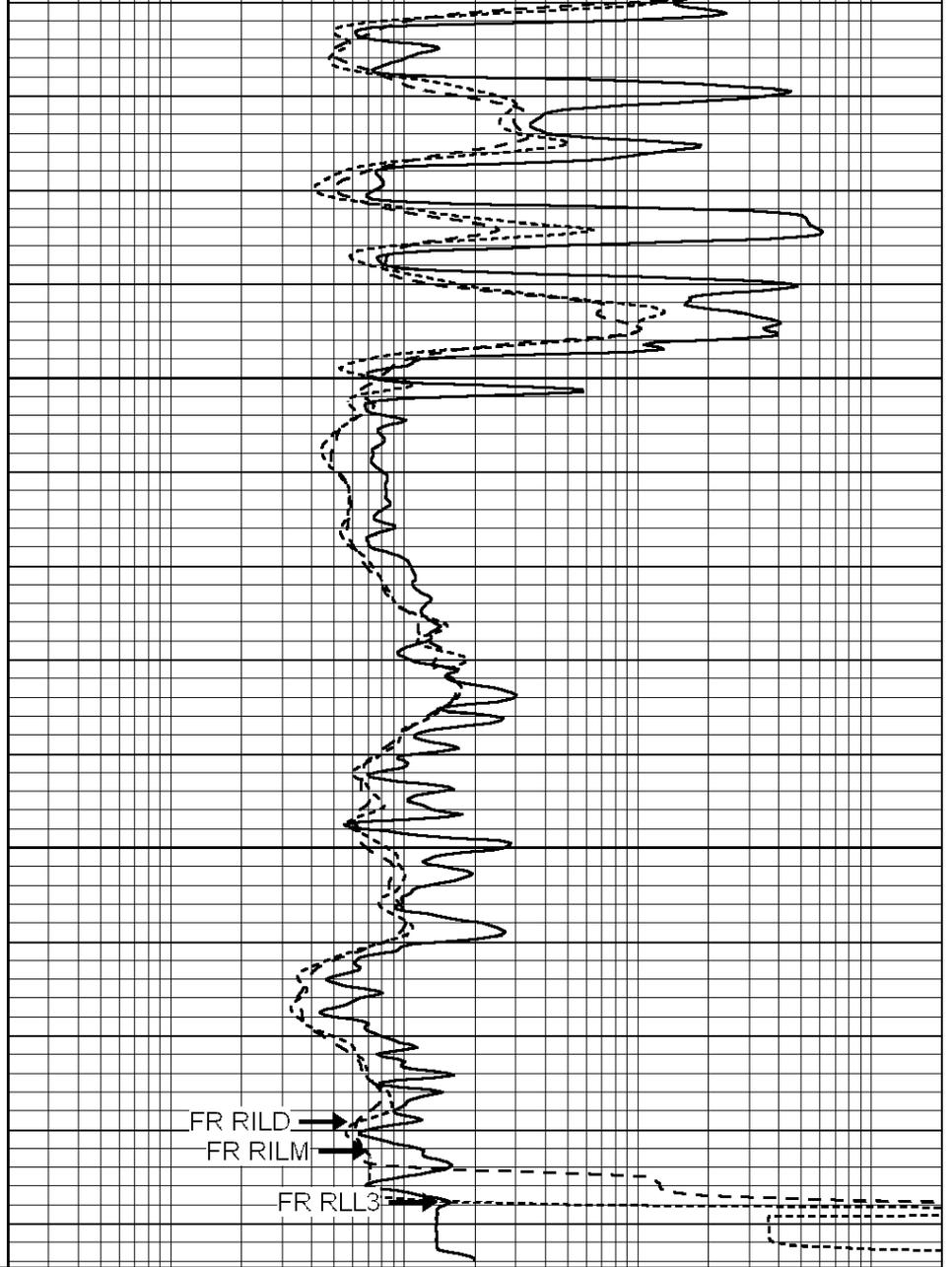


3400

3450

LTD 3490

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



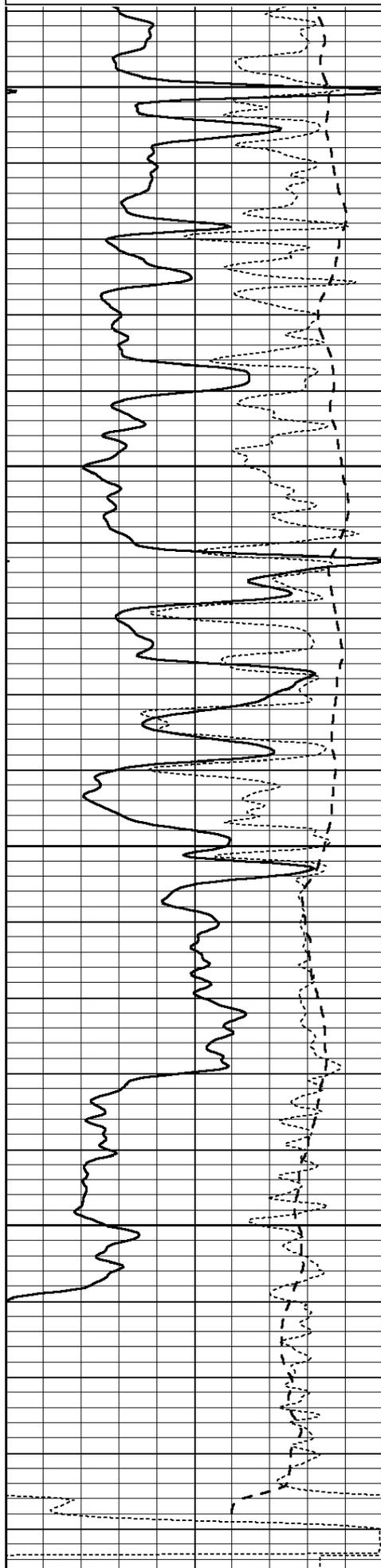
SUPERIOR  
Hays,  
Kansas

# REPEAT SECTION

Database File: 009224ddn.db  
 Dataset Pathname: pass2.1  
 Presentation Format: \_dil  
 Dataset Creation: Sun Jun 17 19:00:46 2012 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



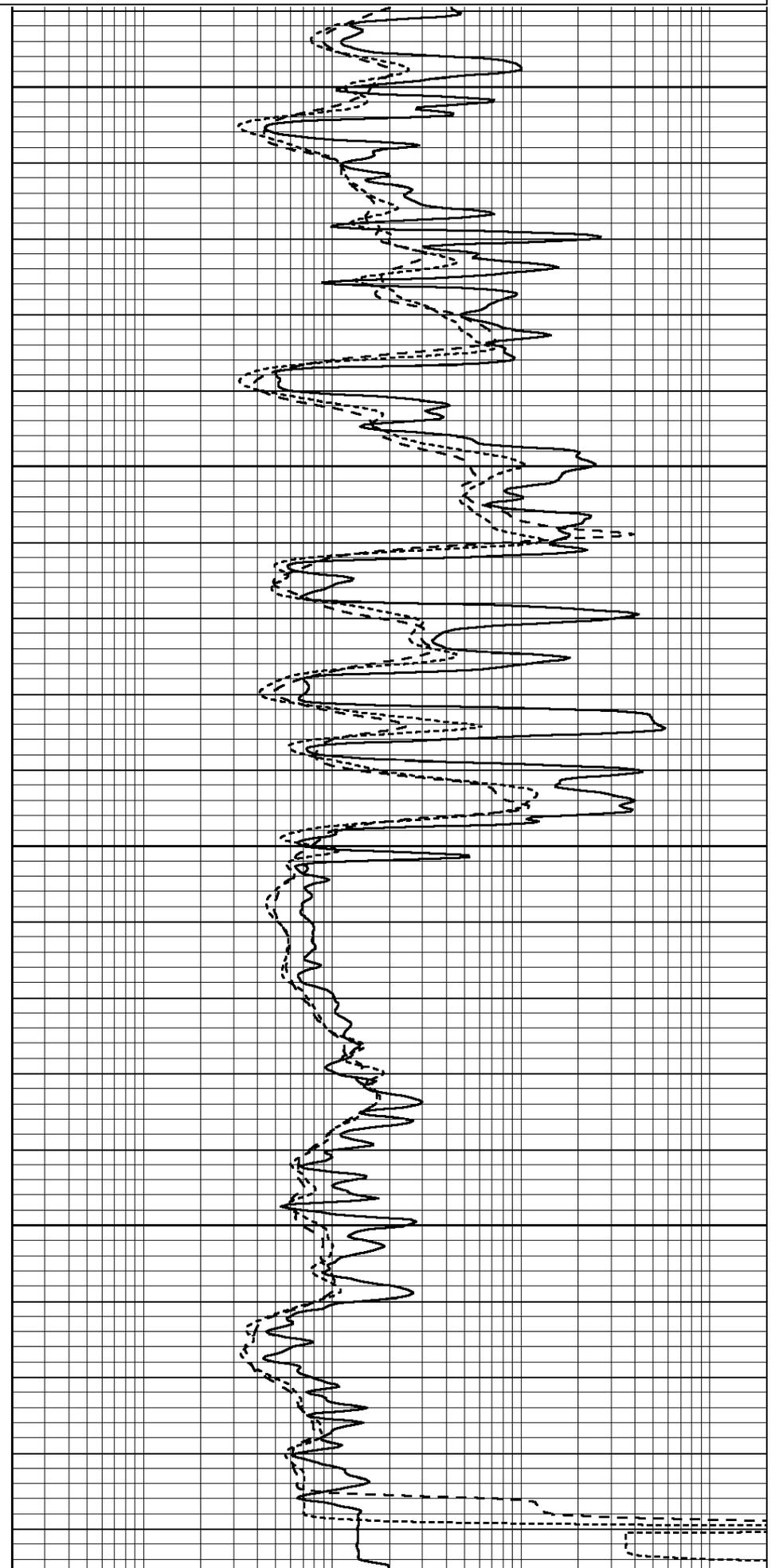
3300

3350

3400

3450

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: 009224ddn.db  
 Dataset Pathname: pass2.1  
 Dataset Creation: Sun Jun 17 19:00:46 2012 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			References			Results	
	Air	Loop		Air	Loop		m	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			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: 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	2.570	g/cc	227.67	350.20	cps
Spine Angle = 76.79			Density/Spine Ratio = 0.560		
	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