



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company TETON NORTH AMERICA, LLC.
Well ALLPHIN #7
Field COOPER
County GRAHAM
State KANSAS

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Well ALLPHIN #7
Field COOPER
County GRAHAM State KANSAS

Location: API # : 15-065-23446-0000

1393' FSL & 1848' FWL

SEC 33 TWP 9S RGE 21W

Permanent Datum GROUND LEVEL Elevation 2317
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING

Other Services
CDL/CNL
MEL/SONIC
Elevation
K.B. 2325
D.F. 2323
G.L. 2317

Date 6/27/08

Run Number ONE

Depth Driller 3977

Depth Logger 3976

Bottom Logged Interval 3974

Top Log Interval 00

Casing Driller 8 5/8"@221'

Casing Logger 221

Bit Size 7 7/8

Type Fluid in Hole CHEMICAL MUD CHLORIDES 2,000 PPM

Density / Viscosity 9.4/68

pH / Fluid Loss 10.0/8.8

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.20@90F

Rmf @ Meas. Temp .900@90F

Rmc @ Meas. Temp 1.44@90F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .931@116F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom

Maximum Recorded Temperature 116F

Equipment Number 0836

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By KEITH REAVIS

BRIAN KARLIN

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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 HAYS, KANSAS (785)628-6395
DIRECTIONS
PALCO, KS. 2S. ON BLKTOP TO RD. "Y", 5 1/2 W., N. INTO BEFORE TANK BATTERY



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MAIN SECTION

Database File: 002062ddn.db
Dataset Pathname: pass3.5
Presentation Format: dil2
Dataset Creation: Fri Jun 27 13:54:41 2008 by Calc Open-Cased 060407
Charted by: Depth in Feet scaled 1:600

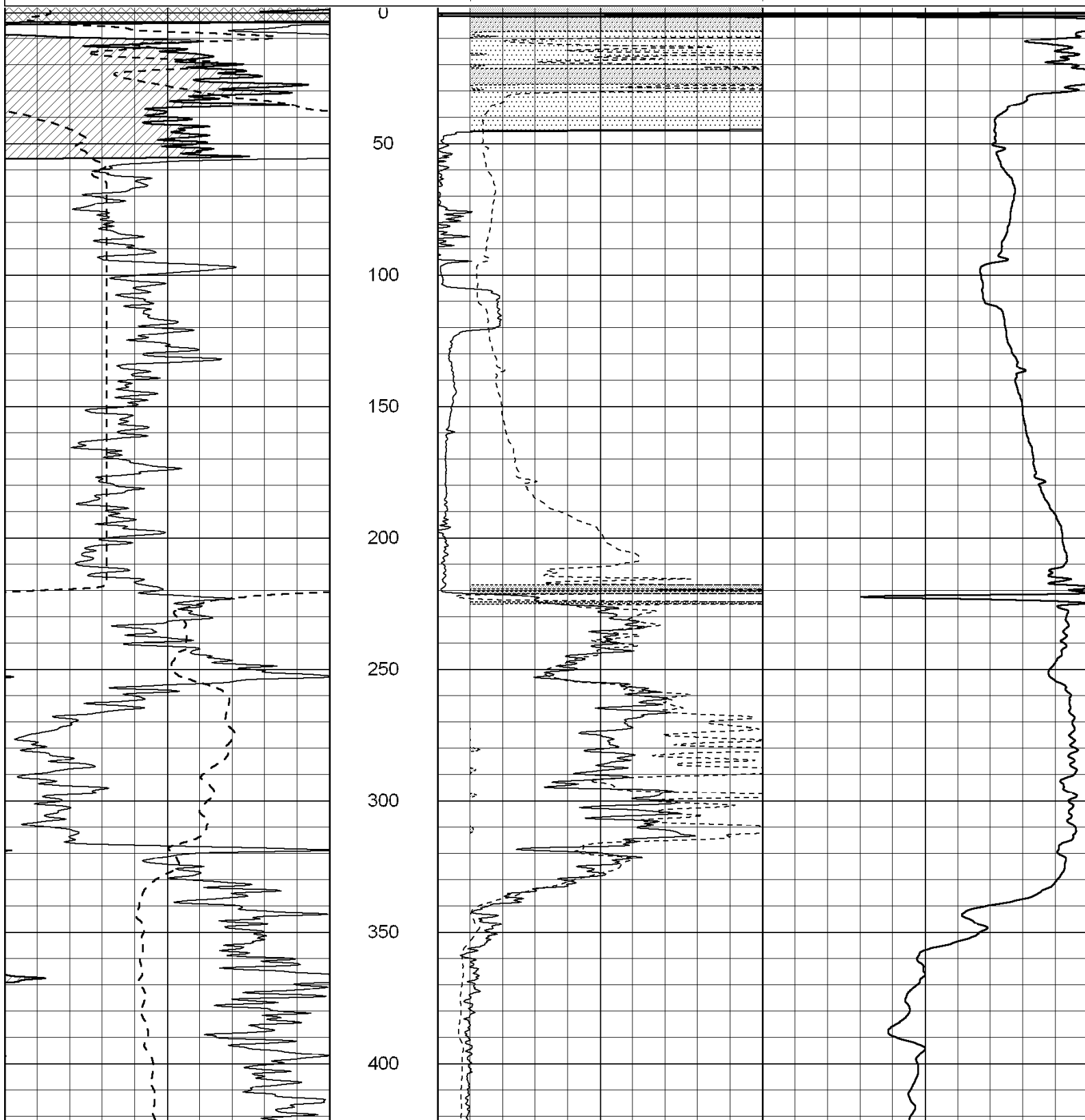
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-100	SP (mV)	100

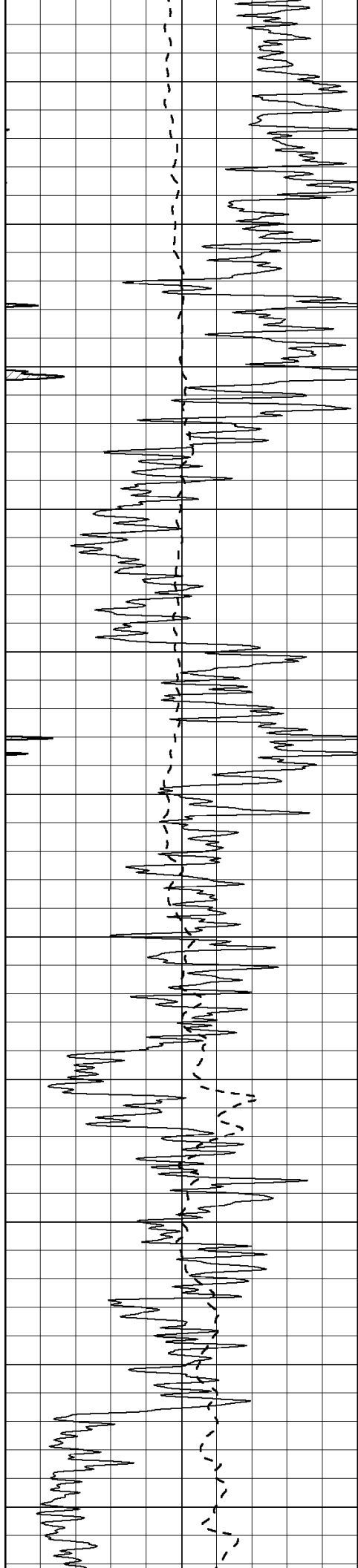
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

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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450

500

550

600

650

700

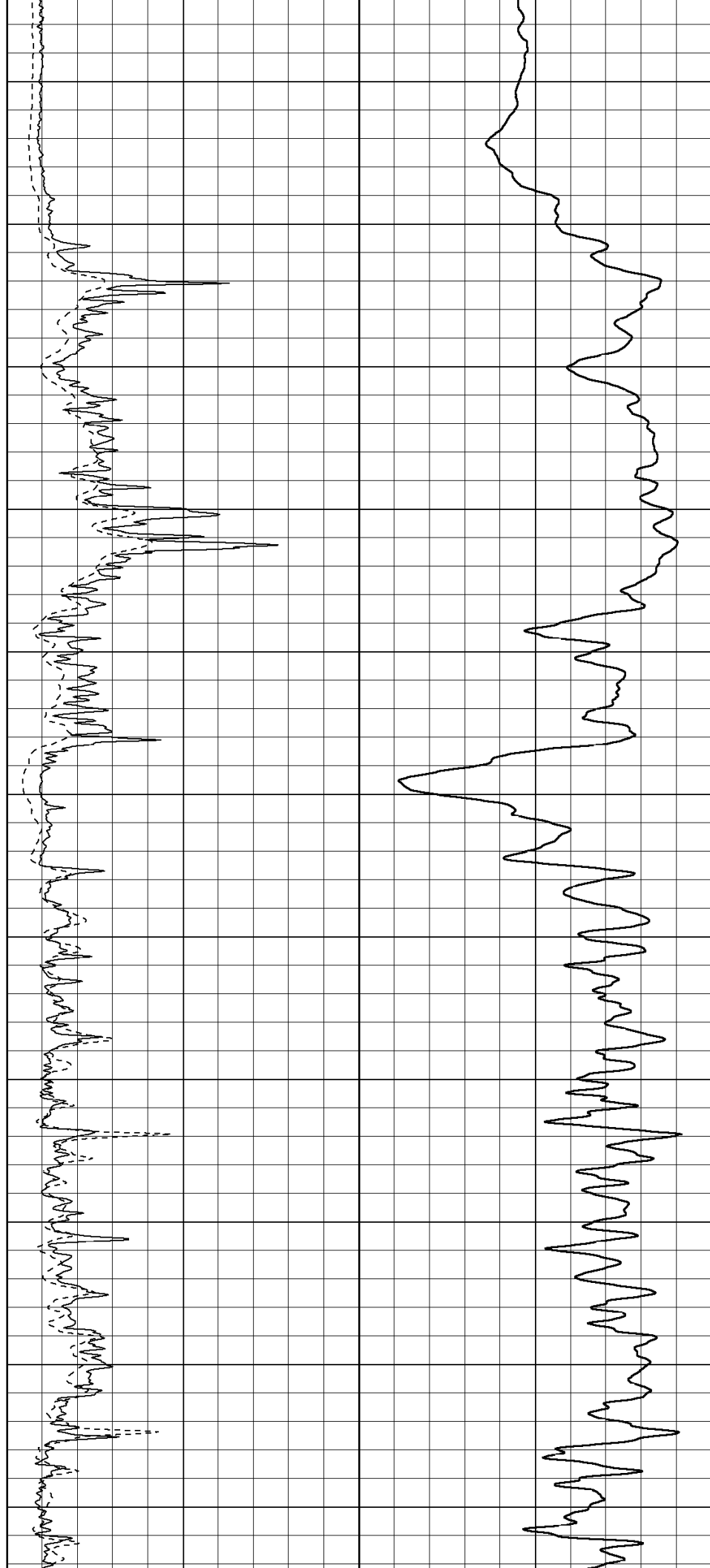
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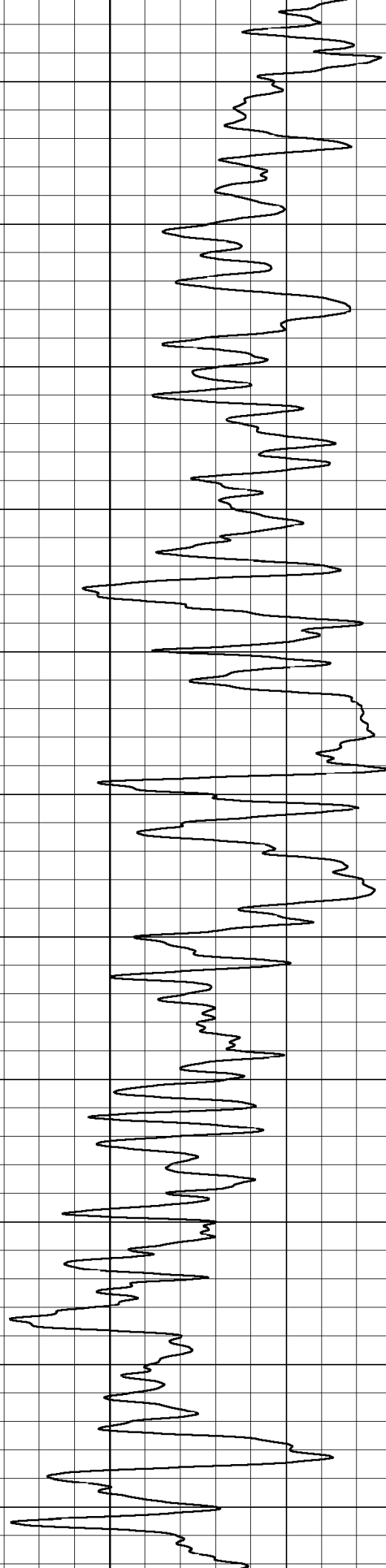
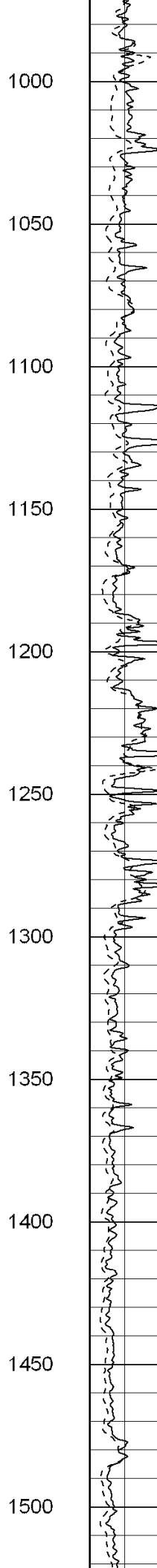
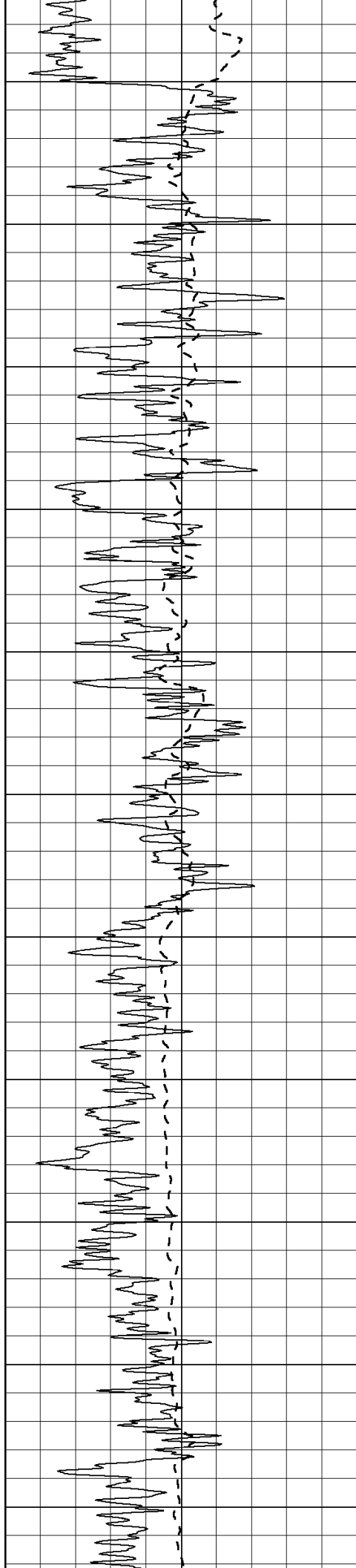
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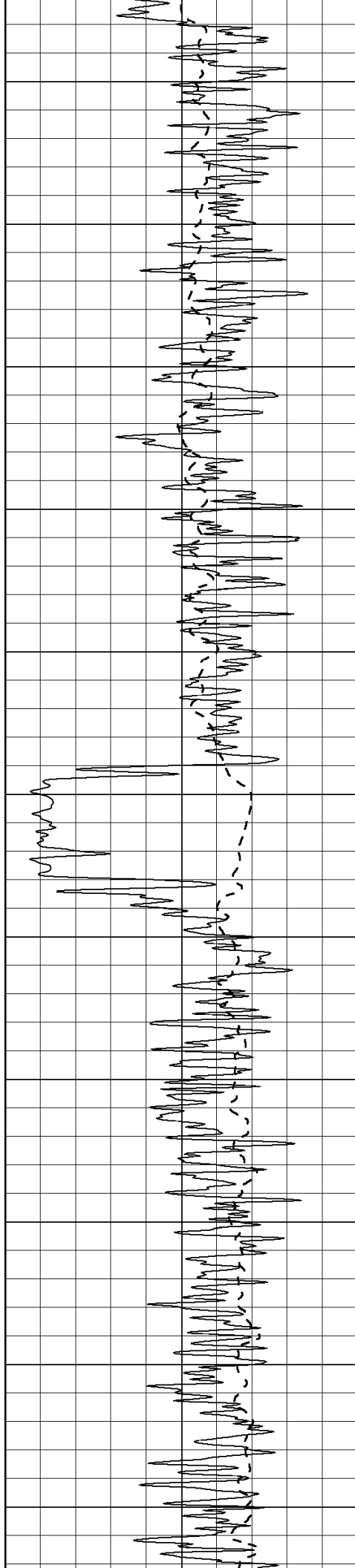
850

900

950







1550

1600

1650

1700

1750

1800

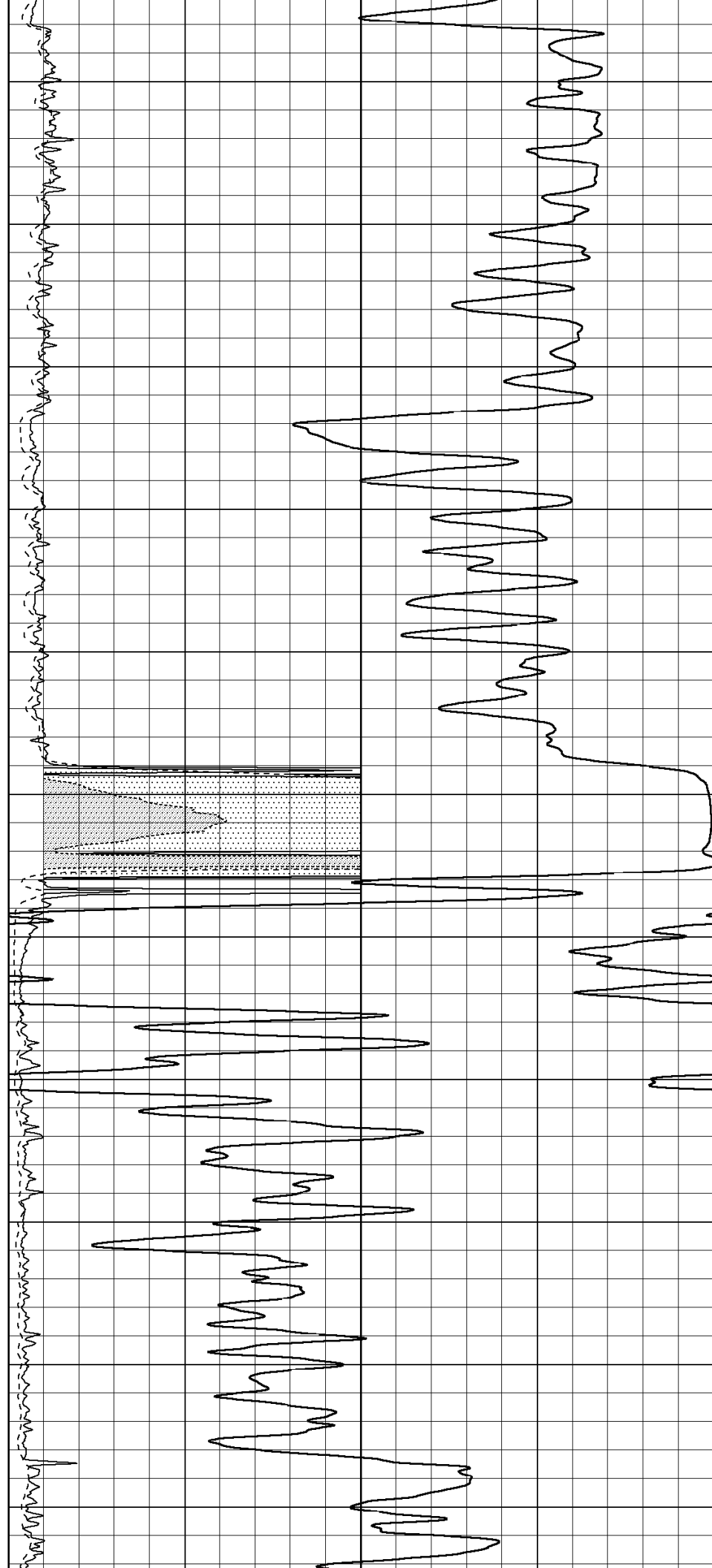
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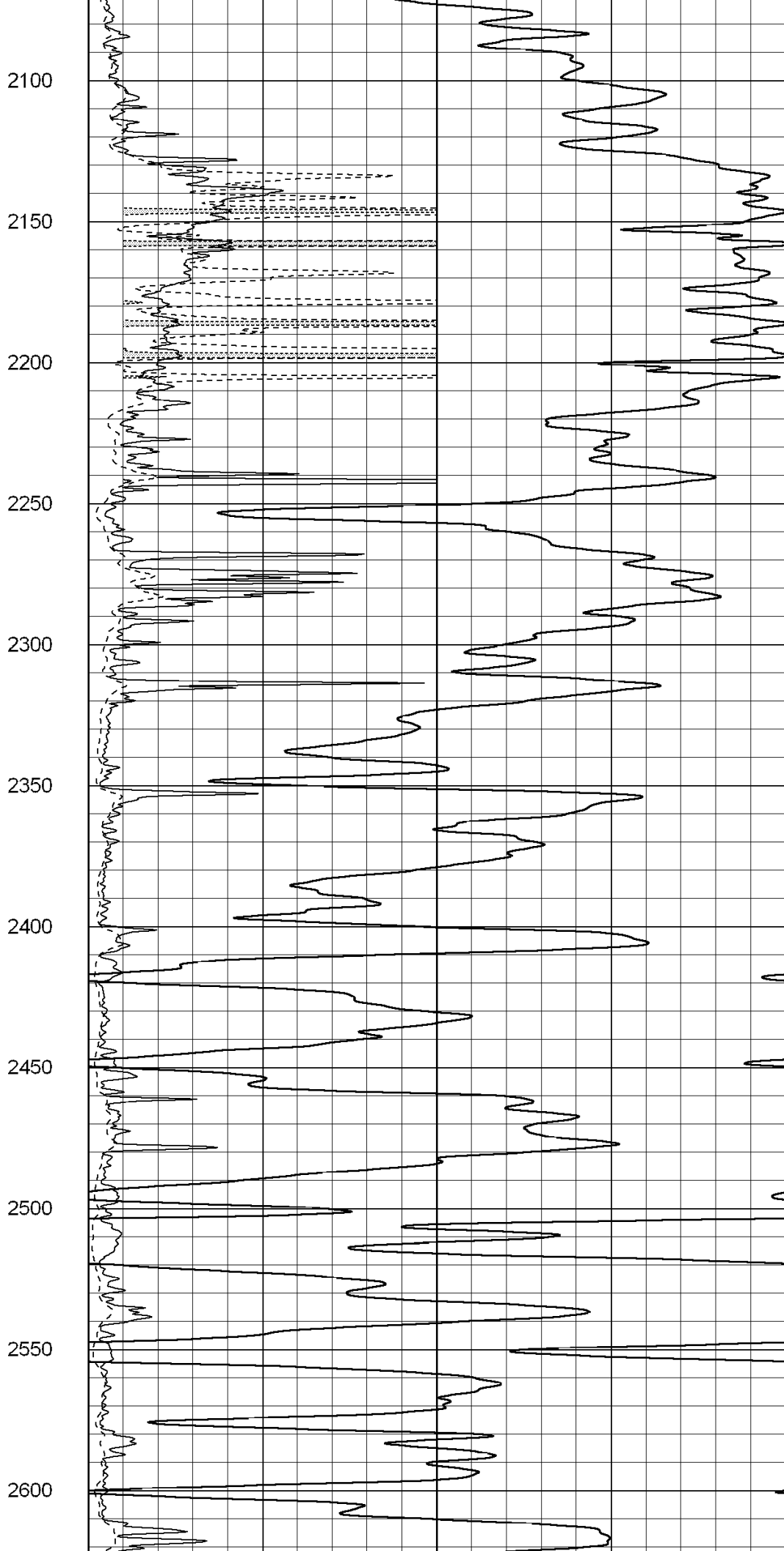
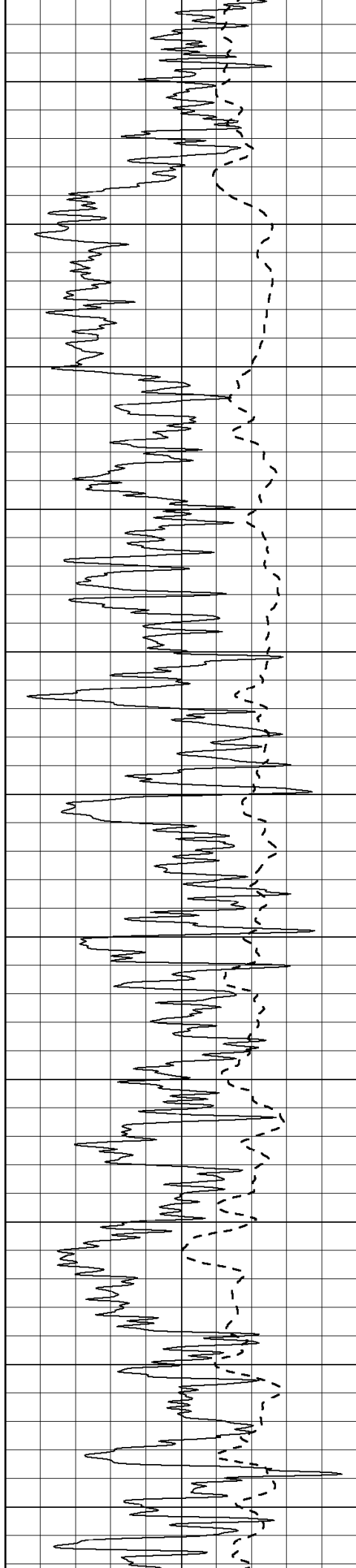
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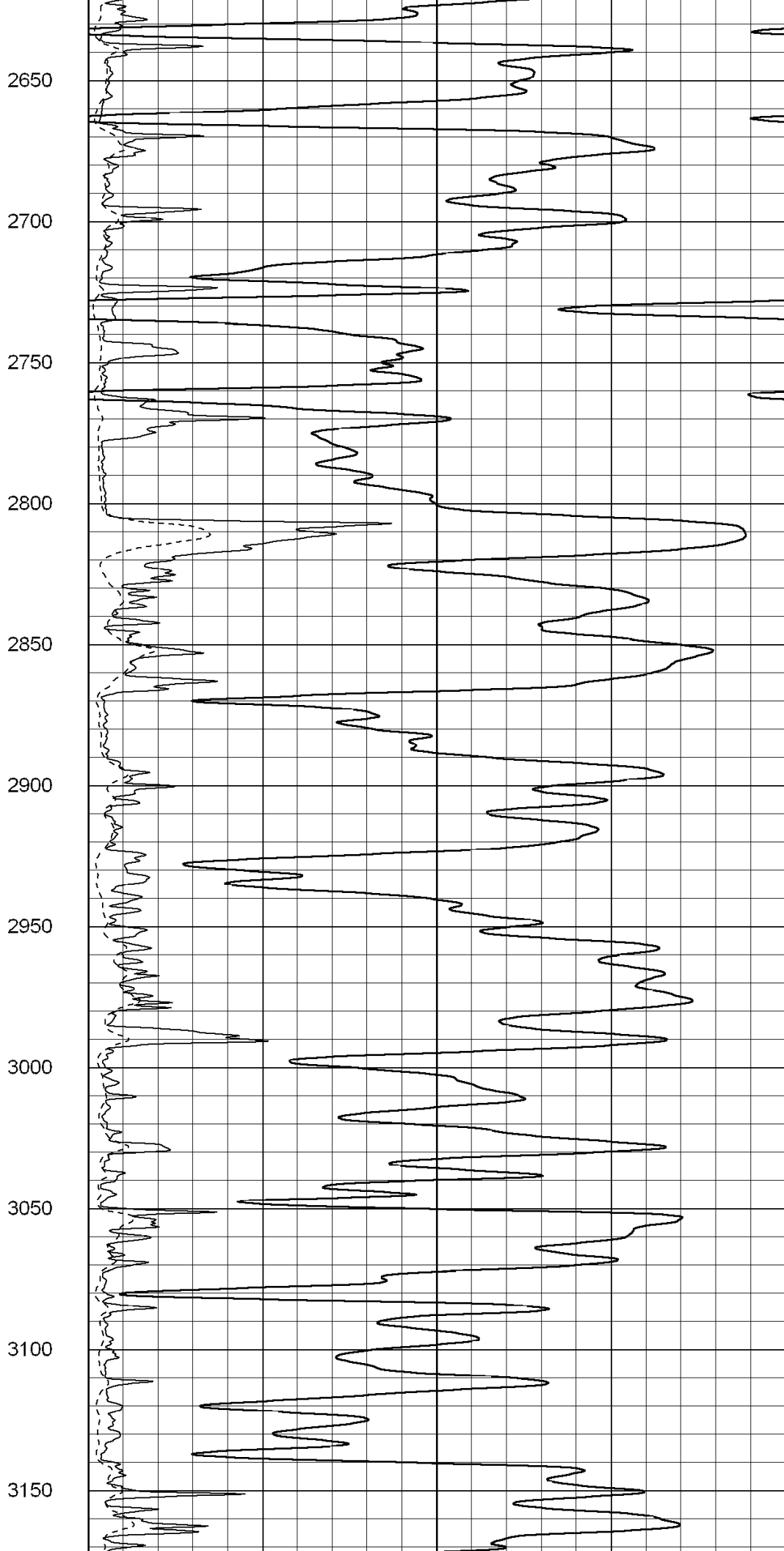
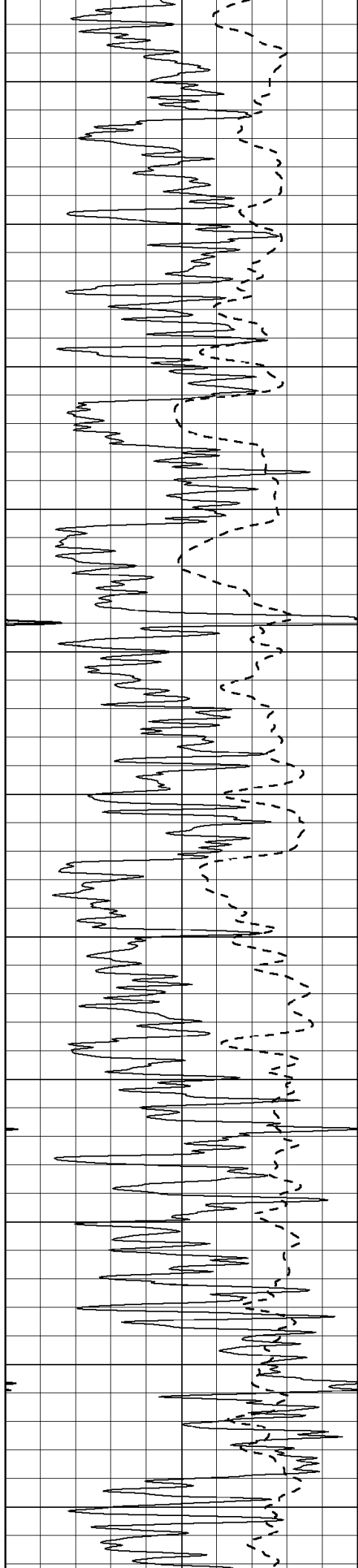
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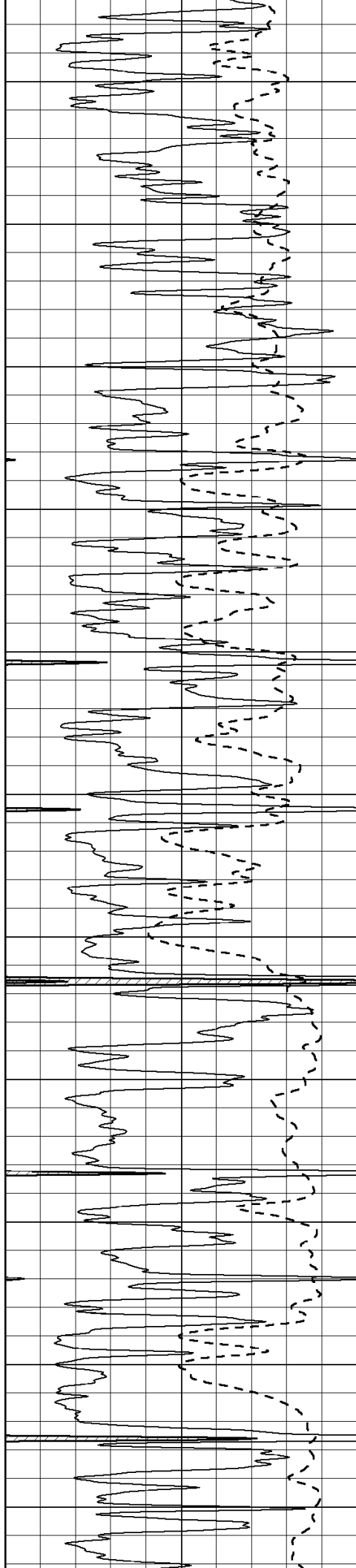
2000

2050









3200

3250

3300

3350

3400

3450

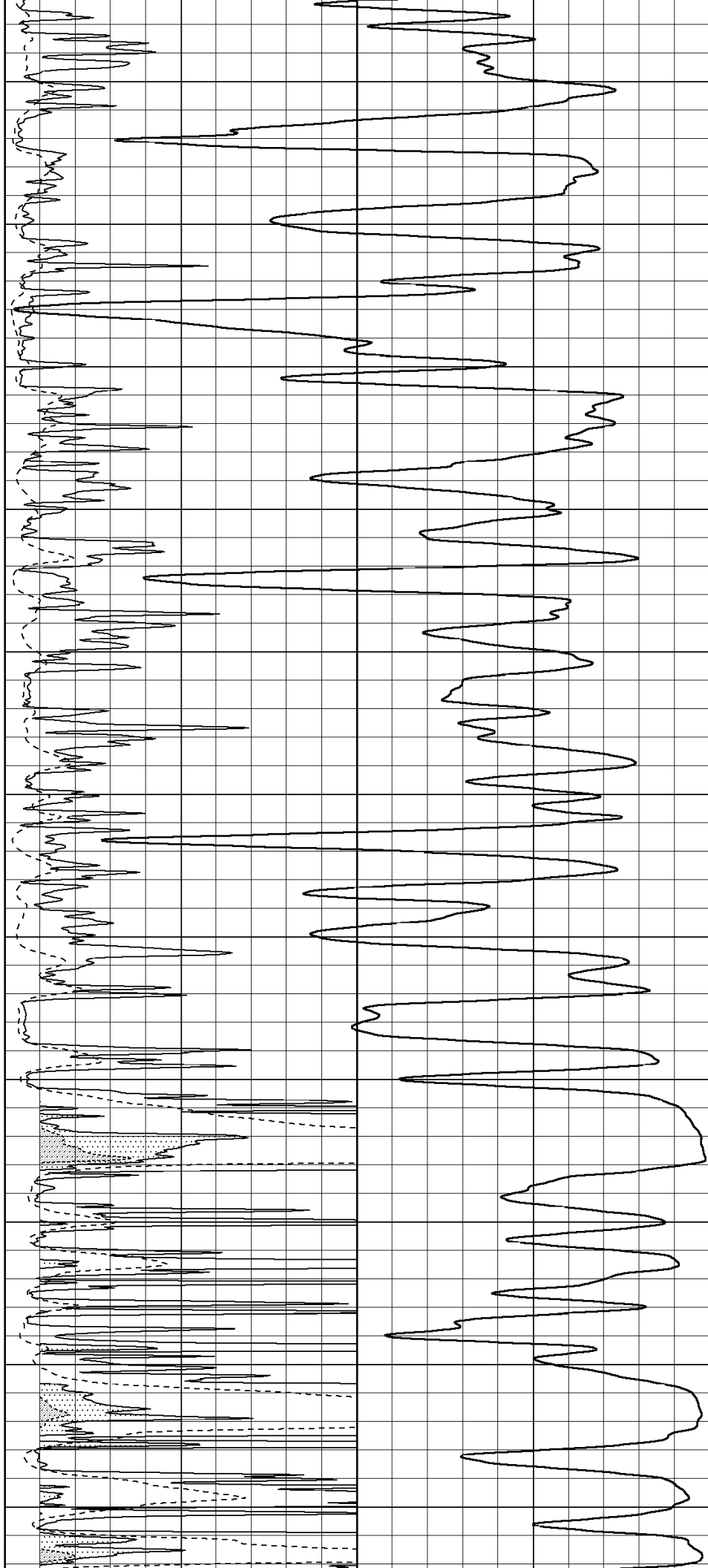
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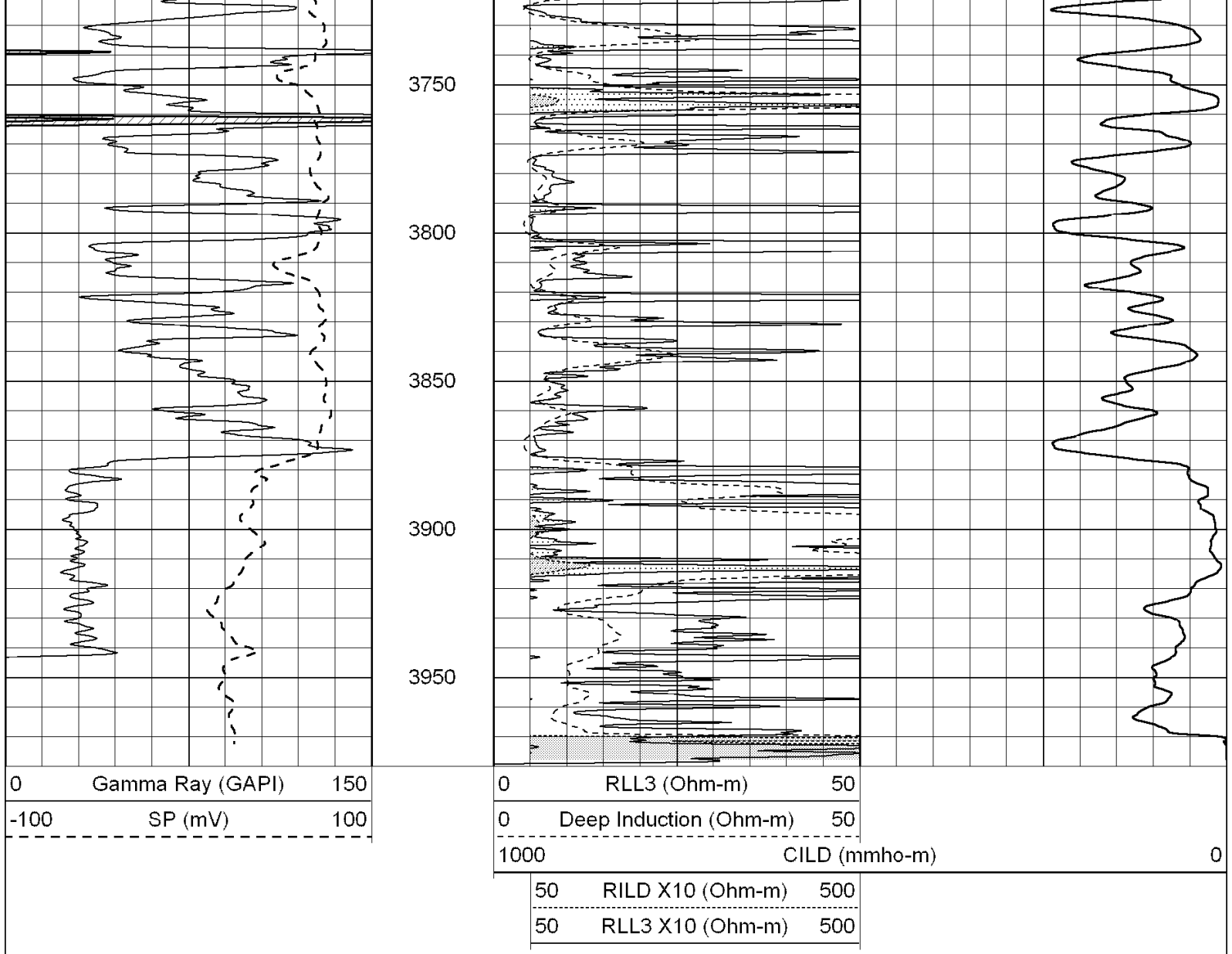
3550

3600

3650

3700





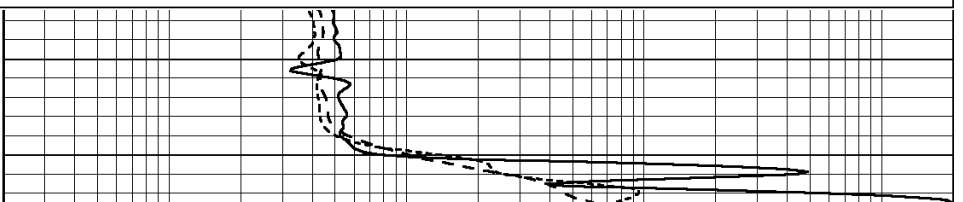
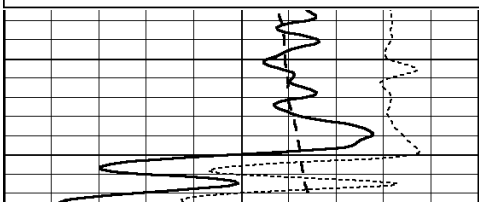
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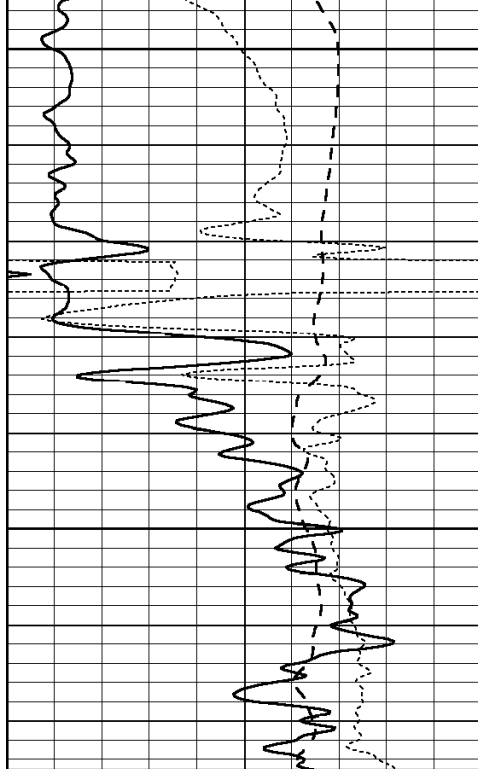
ANHYDRITE

Database File: 002062ddn.db
Dataset Pathname: pass3.6
Presentation Format: dil
Dataset Creation: Fri Jun 27 13:58:01 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	MINMK	20

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

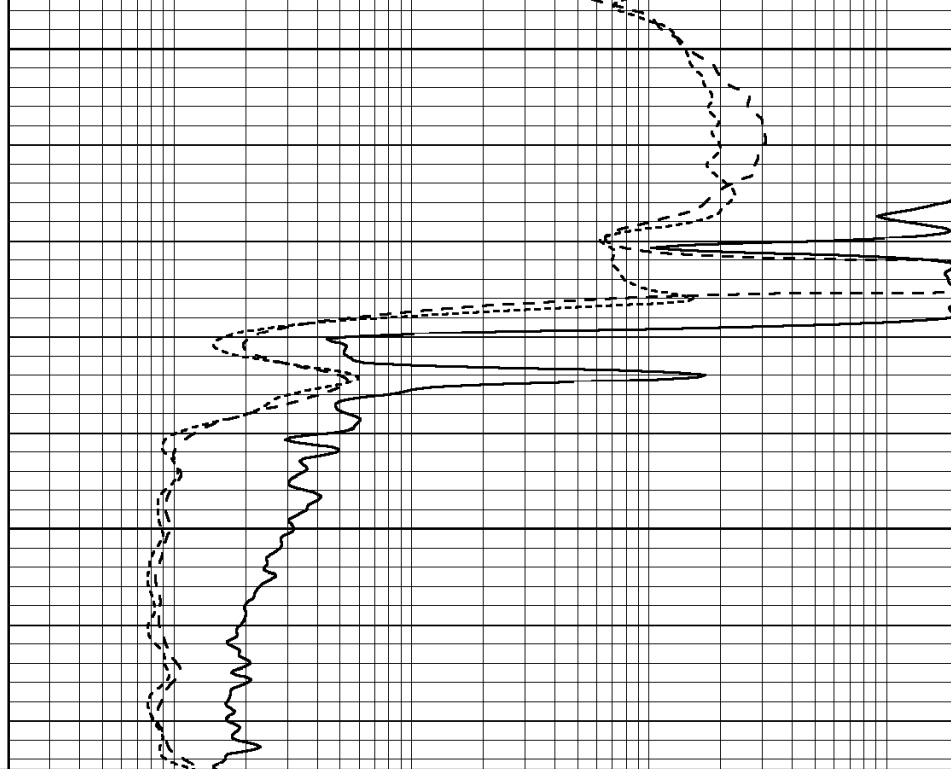




0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

1800

1850



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



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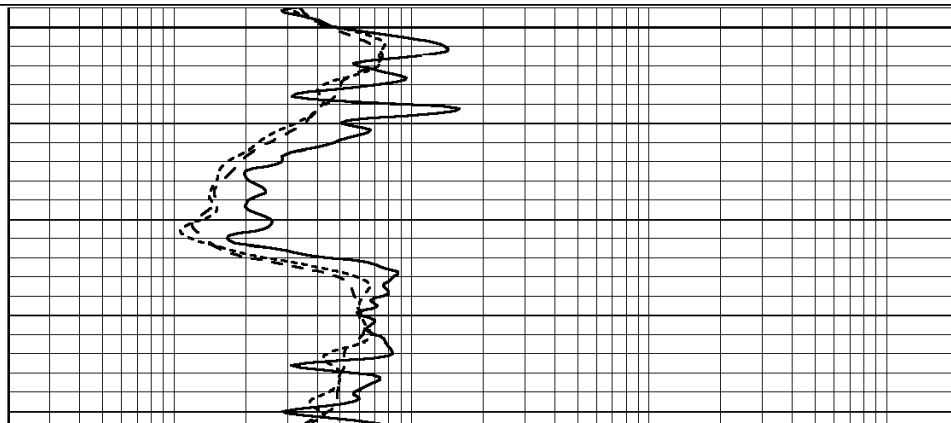
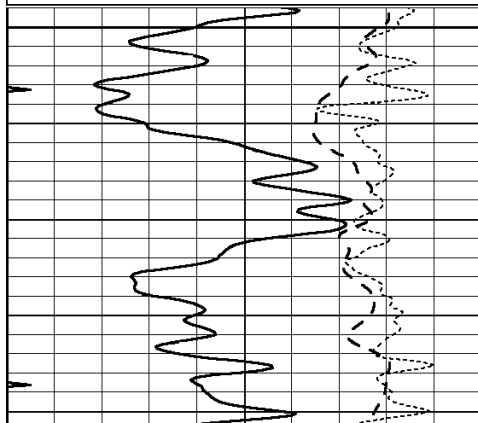
MAIN SECTION

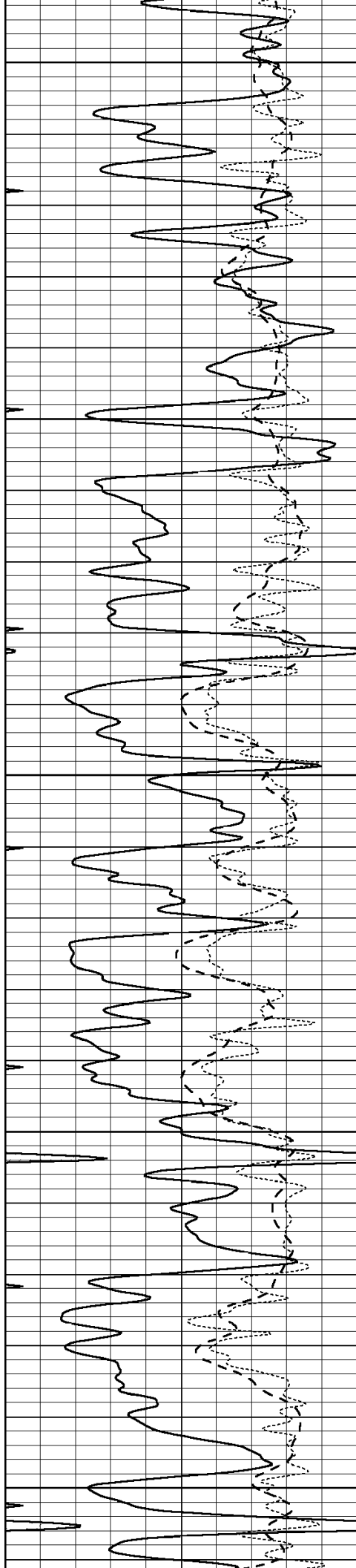
Database File: 002062ddn.db
 Dataset Pathname: pass3.5
 Presentation Format: dil
 Dataset Creation: Fri Jun 27 13:54:41 2008 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

3200





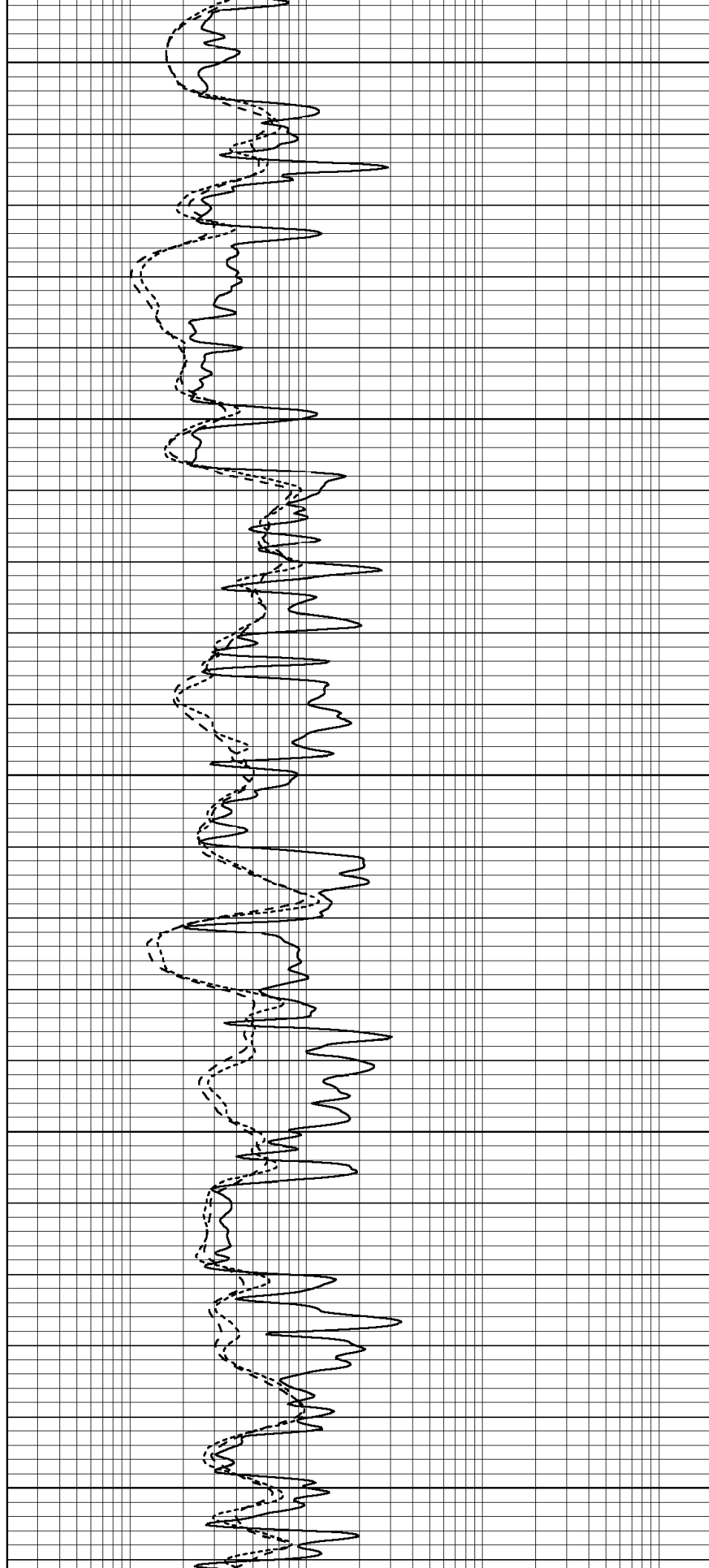
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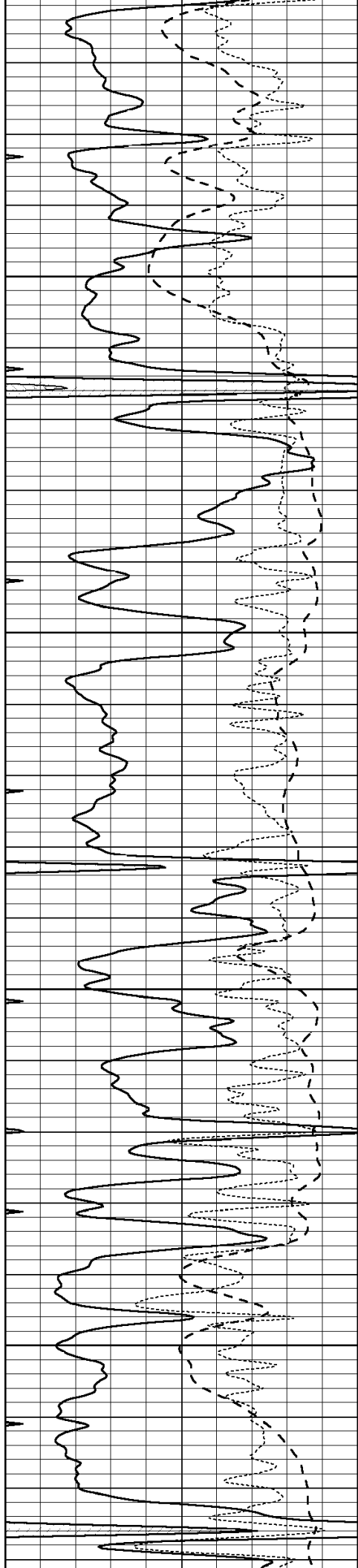
3300

3350

3400

3450



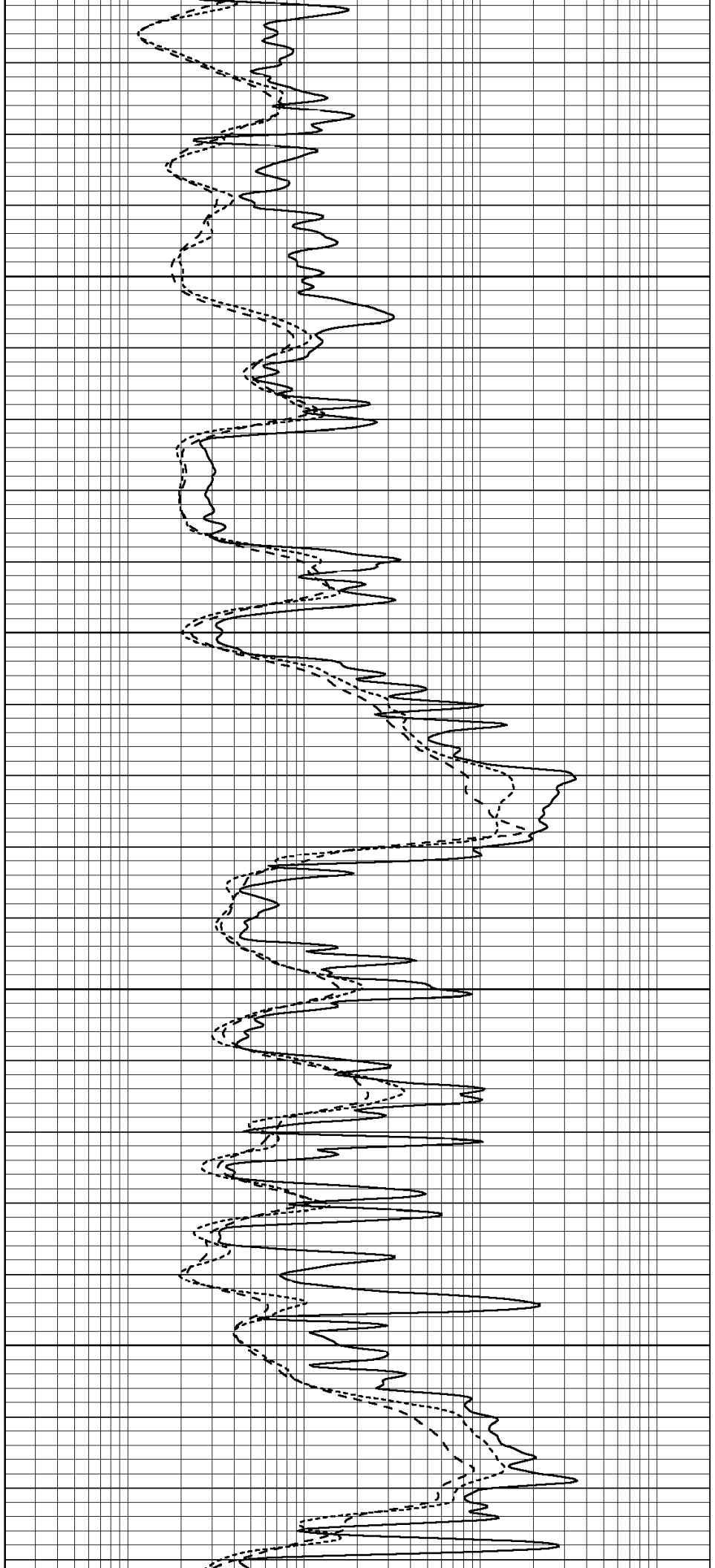


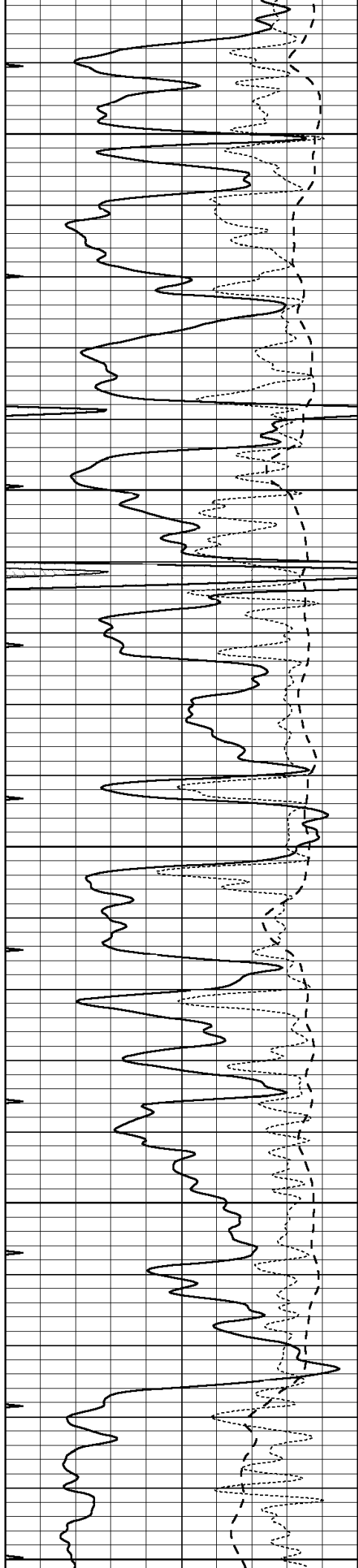
3500

3550

3600

3650





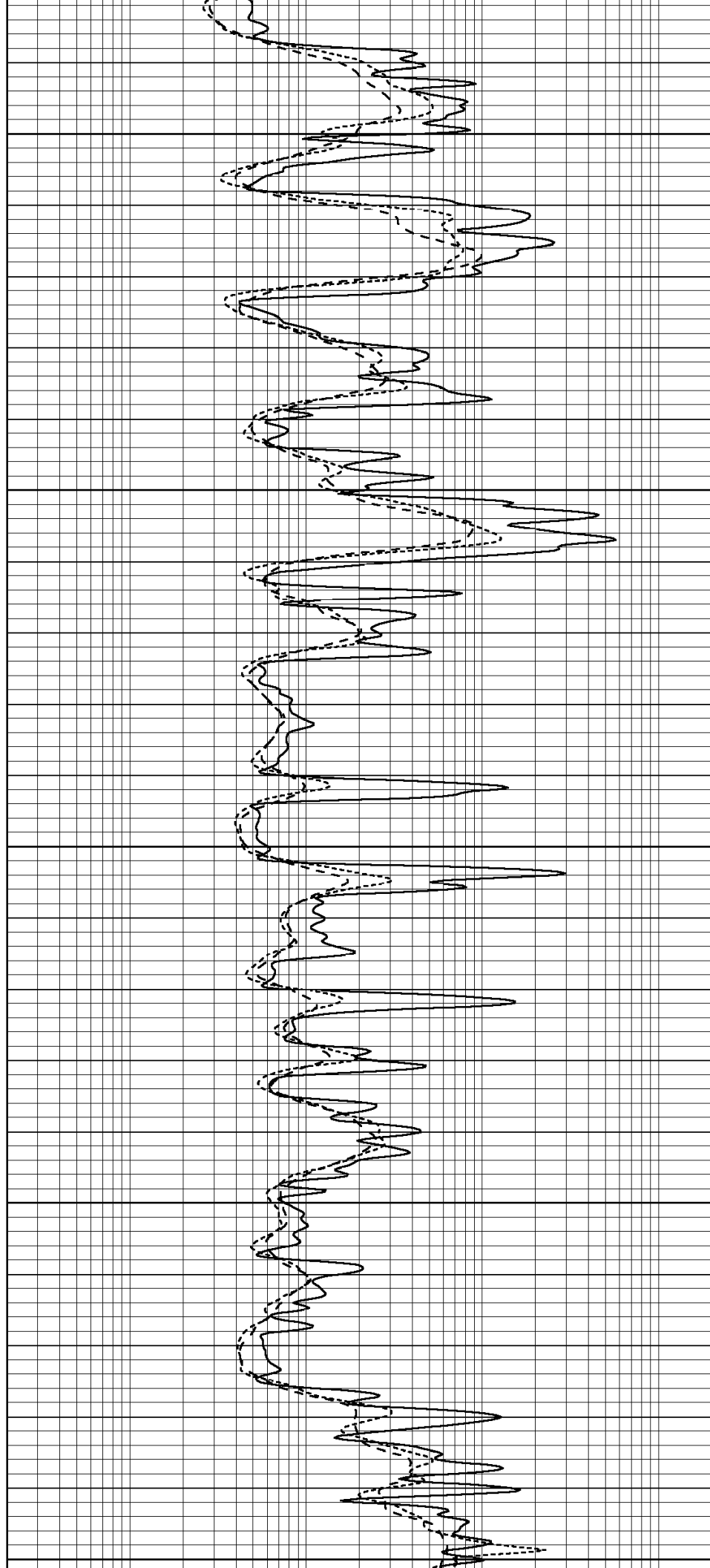
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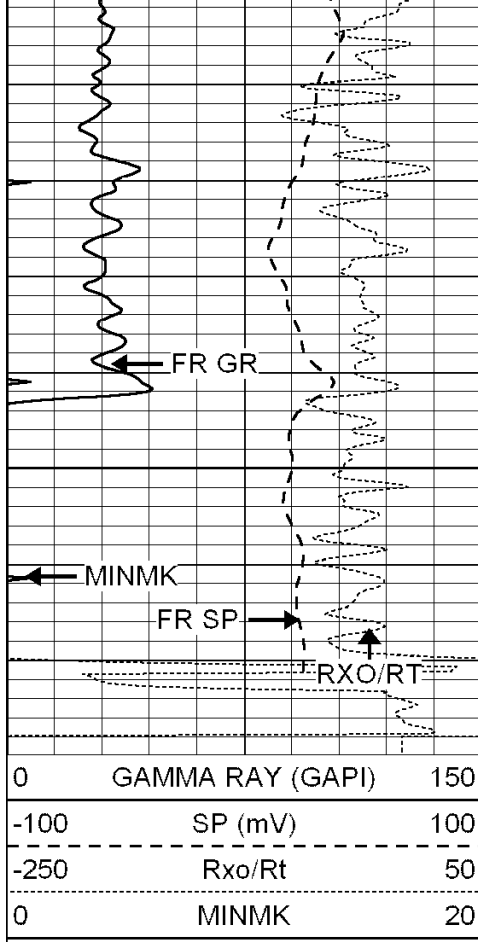
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3800

3850

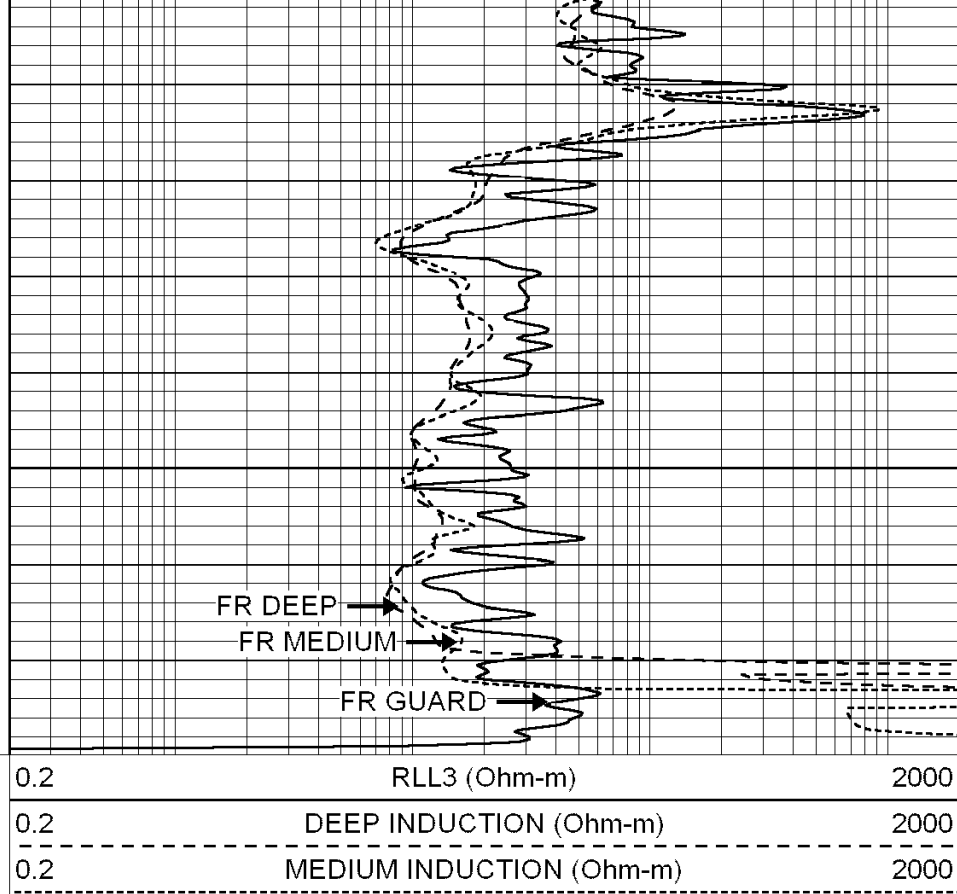
3900





3950

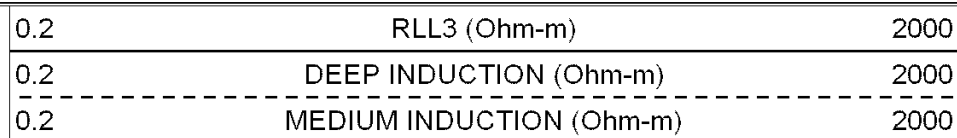
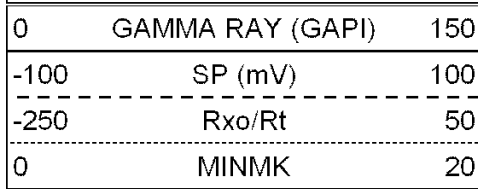
LTD 3976



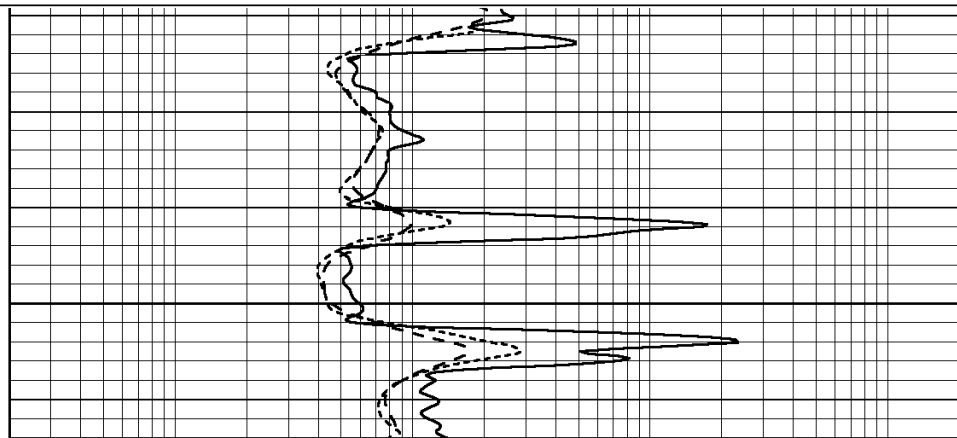
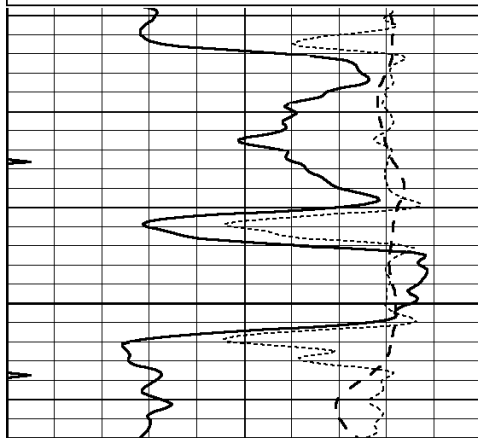
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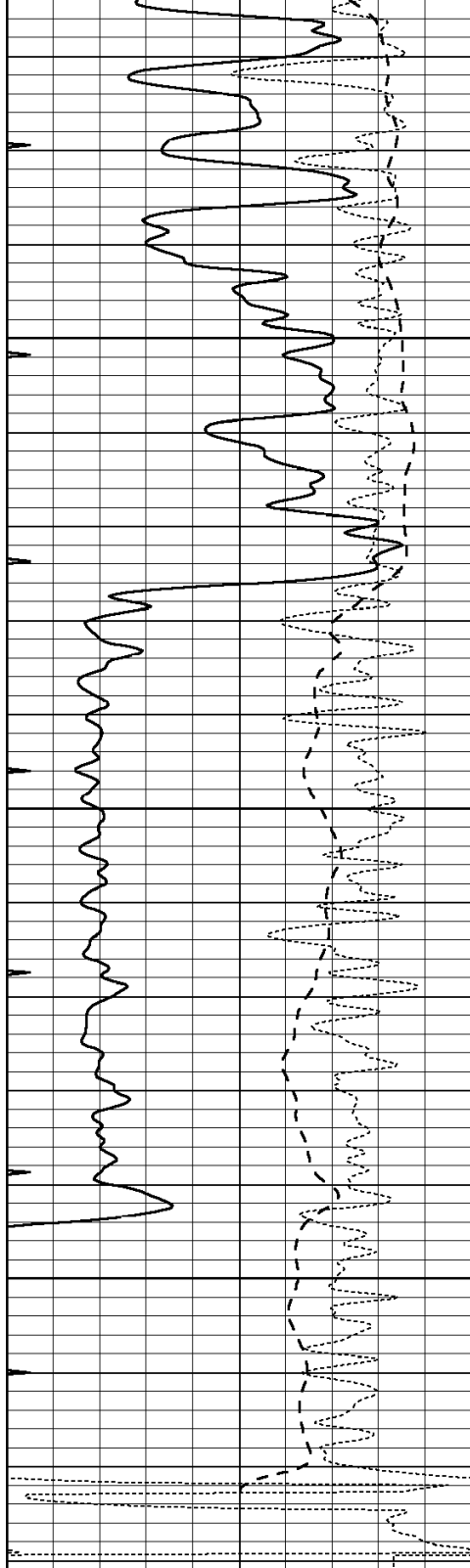
REPEAT SECTION

Database File: 002062ddn.db
 Dataset Pathname: pass2.6
 Presentation Format: dil
 Dataset Creation: Fri Jun 27 13:26:10 2008 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:240



3800



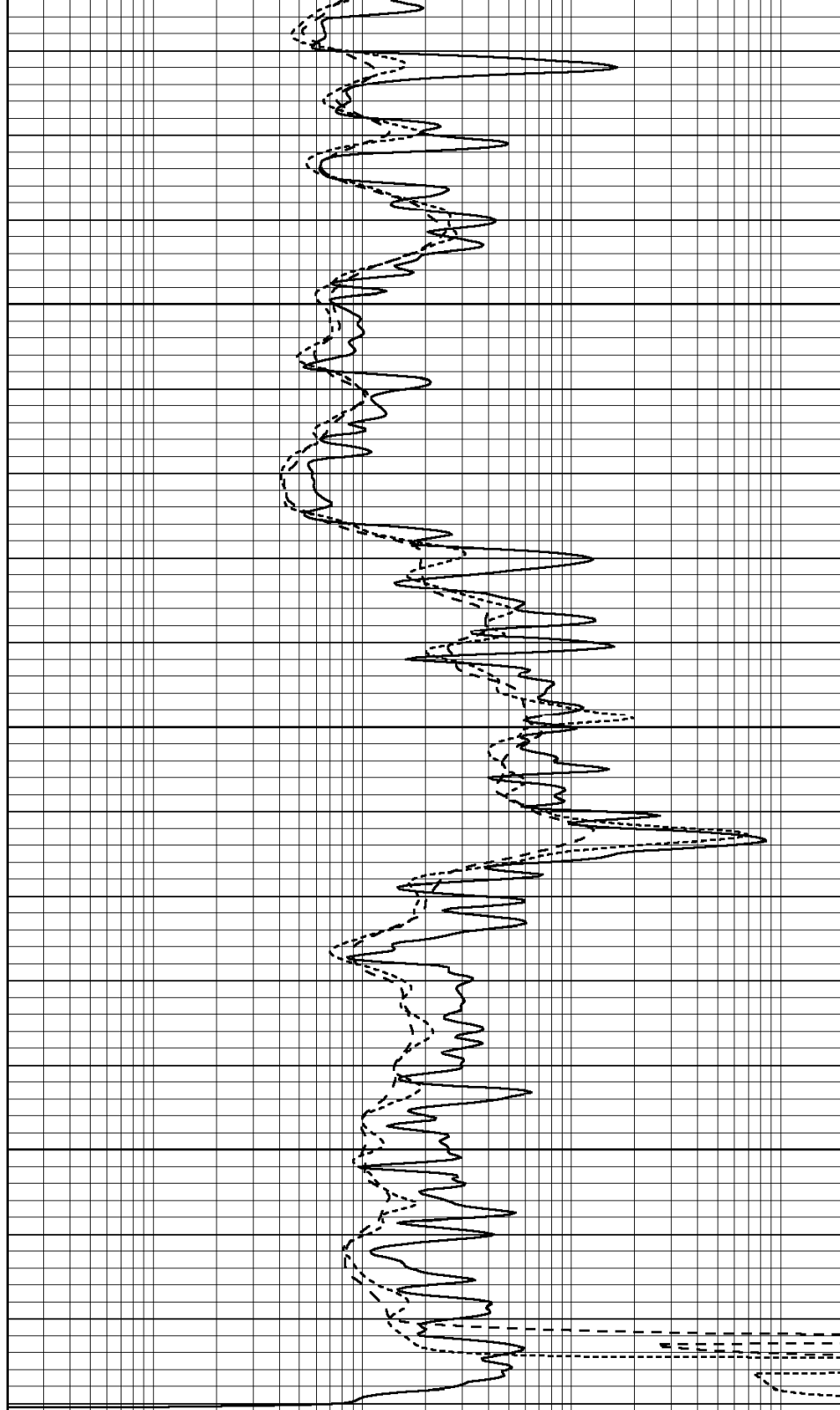


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

3850

3900

3950



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

Calibration Report

Database File: 002062ddn.db
 Dataset Pathname: pass3.5
 Dataset Creation: Fri Jun 27 13:54:41 2008 by Calc Open-Cased 060407

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.644	V	0.000	400.000	mmho-m	640.000	-5.000
Medium	0.020	0.738	V	0.000	462.500	mmho-m	720.000	-24.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	1.000	V	0.000	1.000	mmho-m	1.000	0.000
Medium	0.000	1.000	V	0.000	1.000	mmho-m	1.000	0.000

Litho Density Calibration Report
Serial: 004 Model: PRB
Performed Sun May 27 14:22:12 2007

Litho Density Calibration					
	Background	Magnesium	Aluminum	Sandstone	
Window 1	1637.8	12277.9	3987.9	13175.0	cps
Window 2	1491.6	10303.7	3430.3	10765.5	cps
Window 3	1139.1	4797.1	1913.1	4884.2	cps
Window 4	357.0	362.0	360.1	361.1	cps
Long Space	0.0	8812.1	1938.7	9273.9	cps
Short Space	1.4	1599.6	1036.7	1659.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 44.0	Rib Slope	: 0.966	Density/Spine Ratio	: 0.559
Spine Angle	: 74.0	Spine Slope	: 3.491	Spine Intercept	: -16.7

Caliper	Readings	Reference
Low Ref	2.2	6.0
High Ref	4.4	15.0
	Gain: 4.2	Offset: -3.3

Compensated Neutron Calibration Report

Serial Number:	NEU_4I
Tool Model:	G

CALIBRATION						
Detector		Readings		Target		Normalization
Short Space		996.00	cps	1000.00	cps	1.0000
Long Space		977.00	cps	1000.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number:	GR4	
Tool Model:	OPEN	
Performed:	Fri Jun 27 12:48:47 2008	
Calibrator Value:	200.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	189.0	cps
Sensitivity:	1.0000	GAPI/cps