



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company		RITCHIE EXPLORATION, INC.	
Well		#1 CHAPIN-GAY	
Field		WILDCAT	
County		KIT CARSON	
State		COLORADO	
Company		RITCHIE EXPLORATION, INC.	
Well		#1 CHAPIN-GAY	
Field		WILDCAT	
County		KIT CARSON	
State		COLORADO	
Location:		API # : 05-063-06345-0000 2028' FSL & 2537' FEL	
Permanent Datum		GROUND LEVEL	
Log Measured From		KELLY BUSHING 11' A.G.L.	
Drilling Measured From		KELLY BUSHING	
SEC 23 TWP 10S RGE 46W		Elevation K.B. 4490 D.F. 4488 G.L. 4479	
Date	8/17/12		
Run Number	ONE		
Depth Driller	5860		
Depth Logger	5850		
Bottom Logged Interval	5848		
Top Log Interval	00		
Casing Driller	8 5/8" @ 392		
Casing Logger	385		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 300 PPM	
Density / Viscosity	9.1/60		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	1.5 @ 83F		
Rmf @ Meas. Temp	1.12 @ 83F		
Rmc @ Meas. Temp	1.80 @ 83F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	.94 @ 132F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	132F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	DAVE WILLIAMS		

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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
BURLINGTON, CO. - I-70 & HWY 385 - 12 S. TO RD. G - 13 W. TO RD. 35
2 1/2 N. - 1/2 E. - N. INTO



SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 009583ddn.db
Dataset Pathname: pass3.2
Presentation Format: _dil2
Dataset Creation: Sat Aug 18 01:02:20 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

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

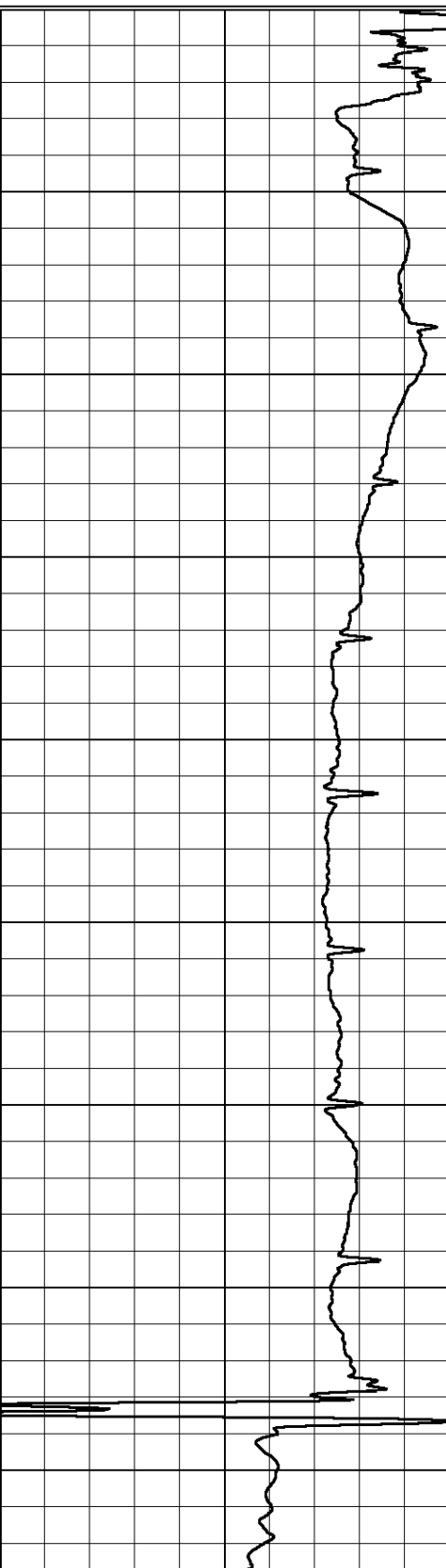
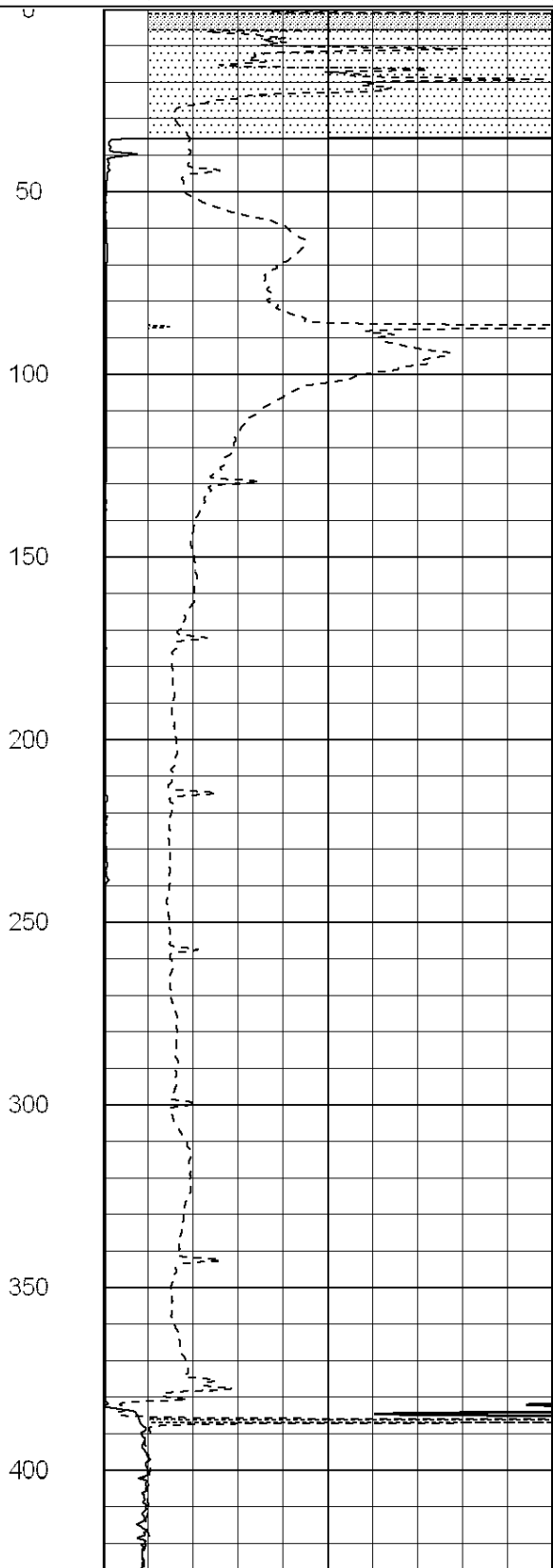
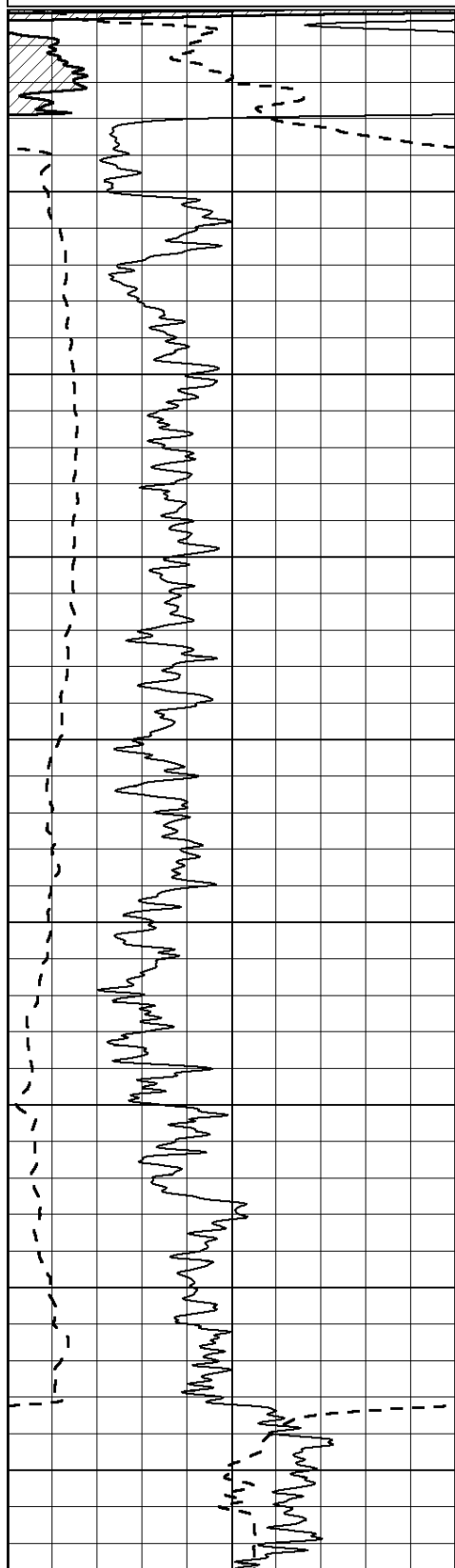
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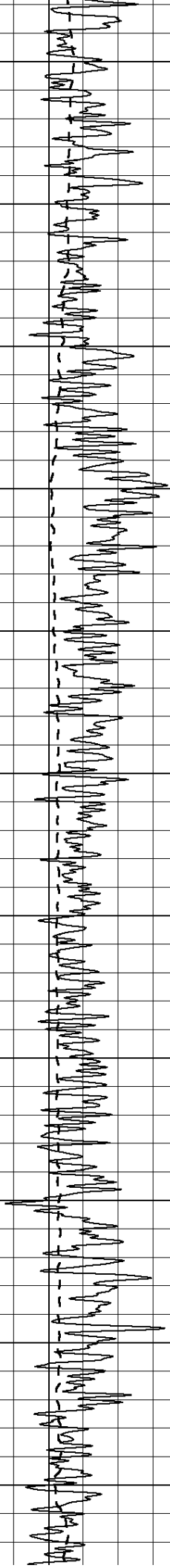
0 Deep Induction (Ohm-m) 50

1000 CILD (mmho/m) 0

50 RILD X10 (Ohm-m) 500

50 RLL3 X10 (Ohm-m) 500





450

500

550

600

650

700

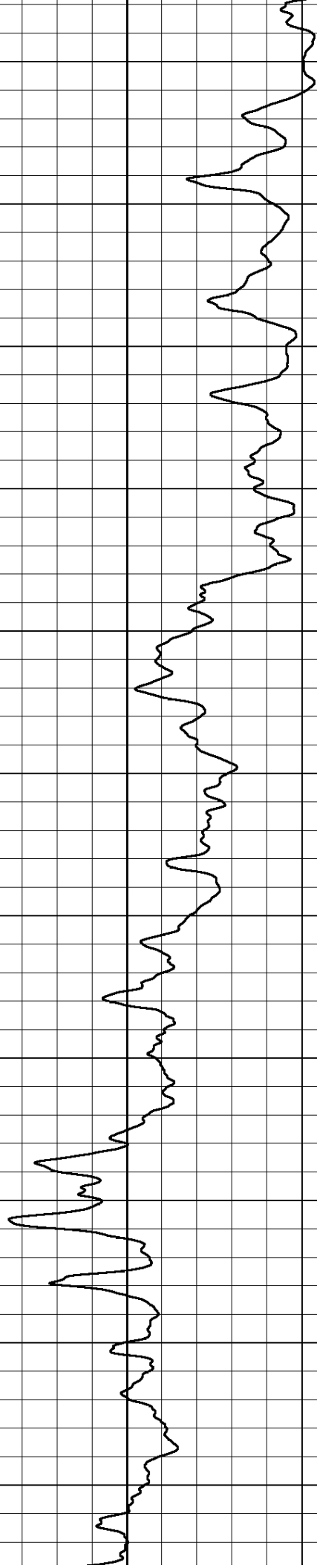
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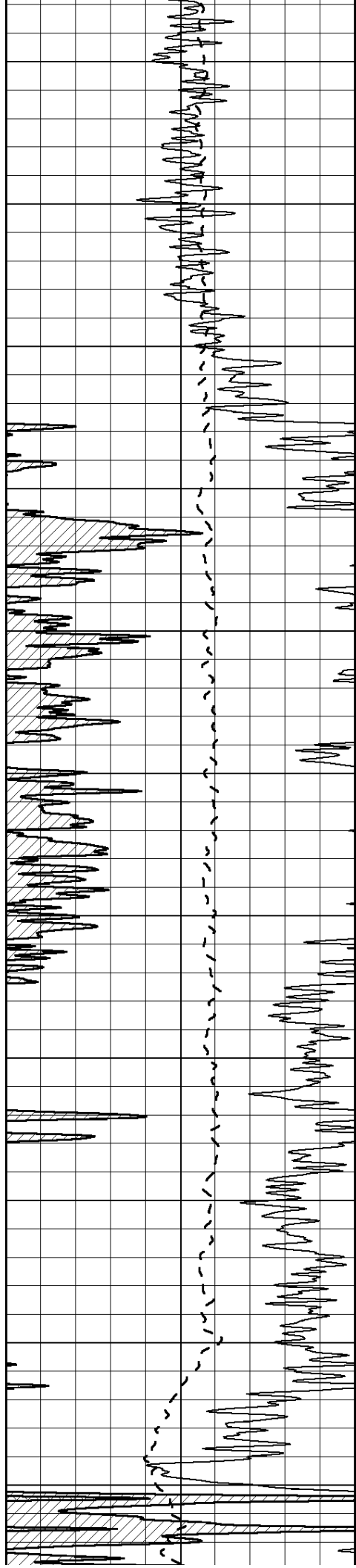
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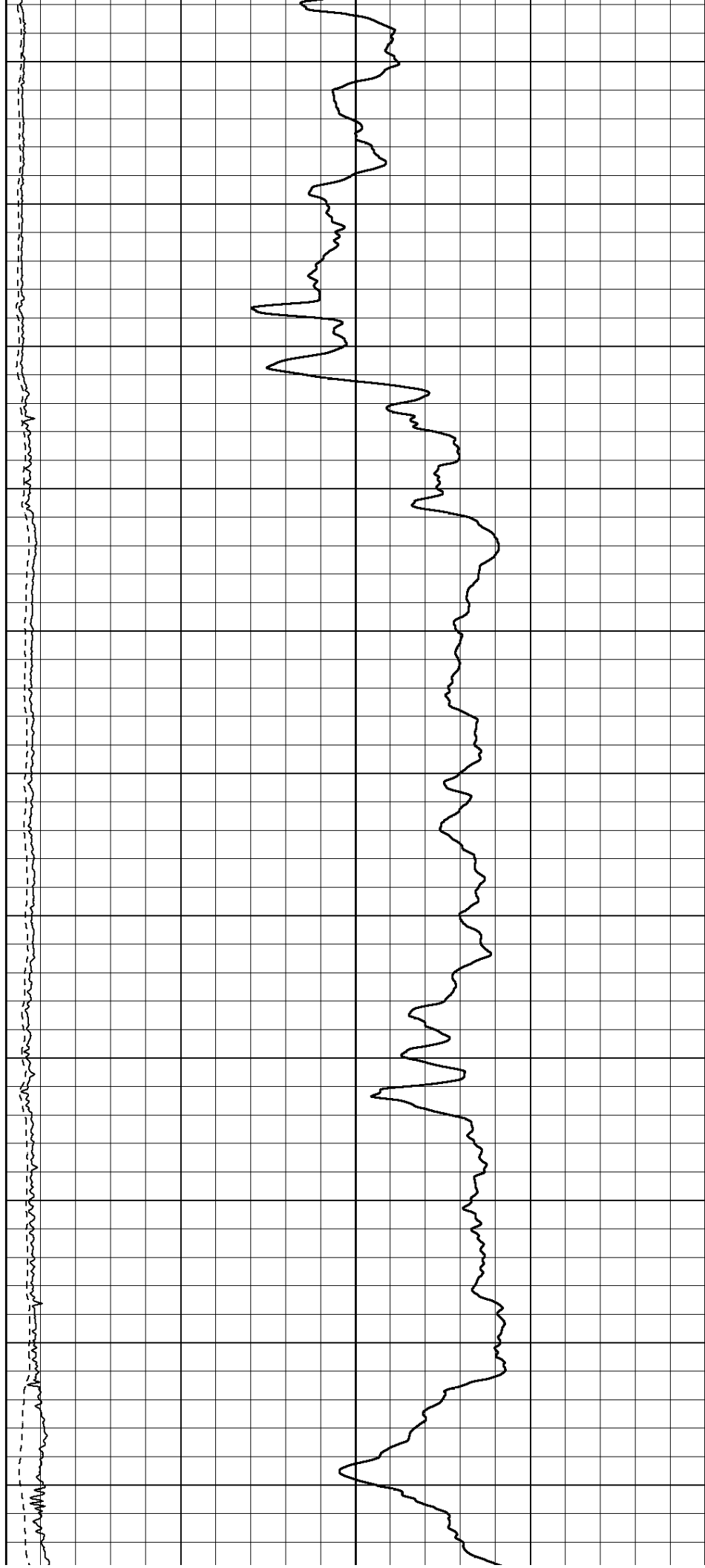
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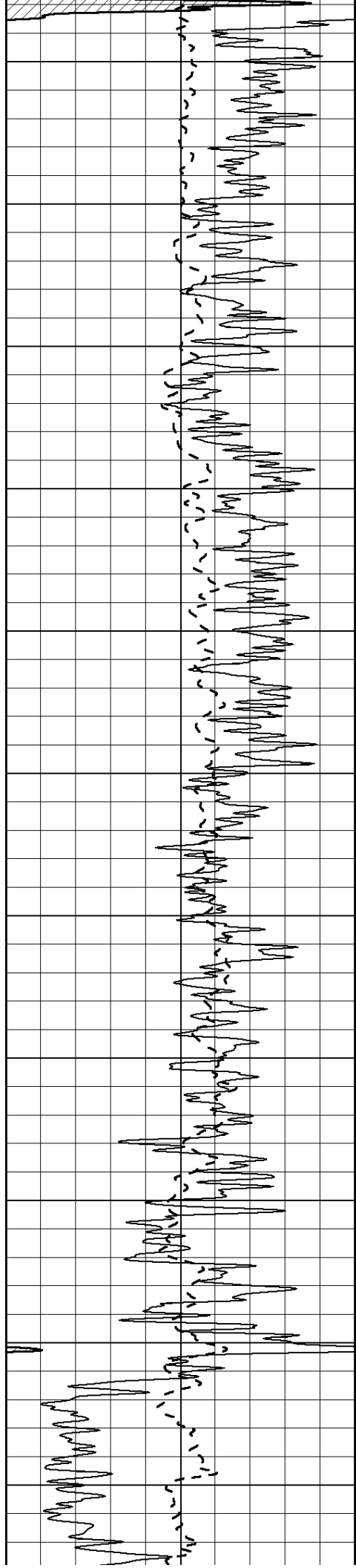
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1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500





1550

1600

1650

1700

1750

1800

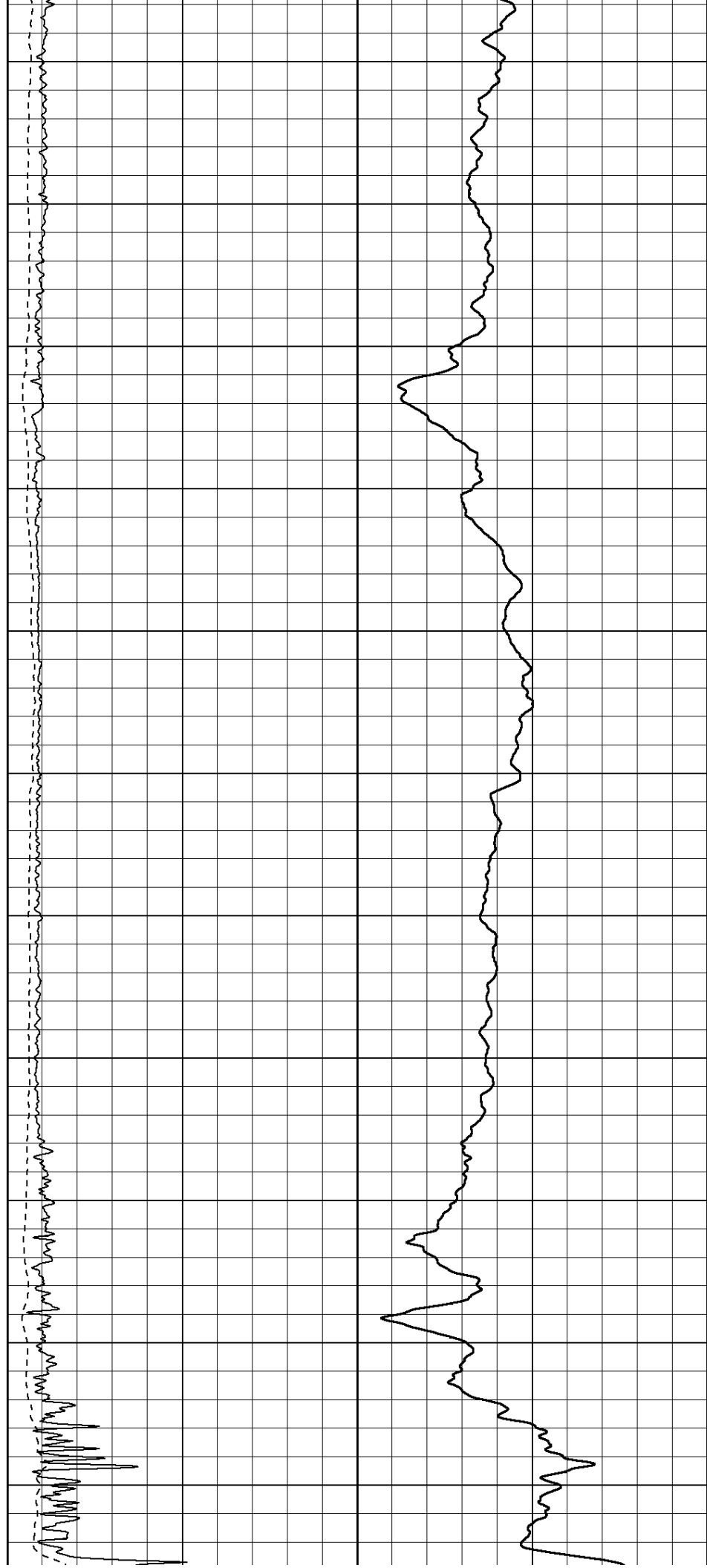
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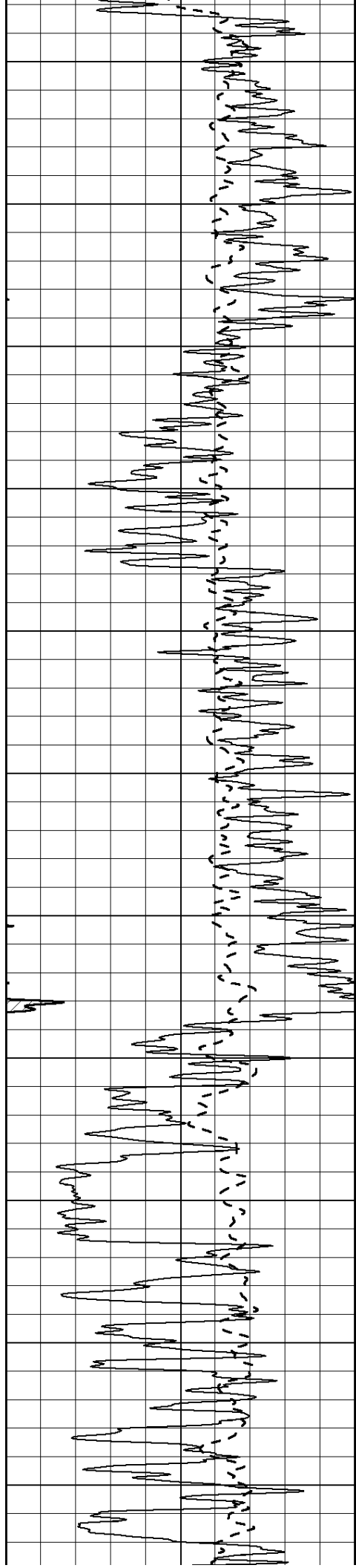
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2050





2100

2150

2200

2250

2300

2350

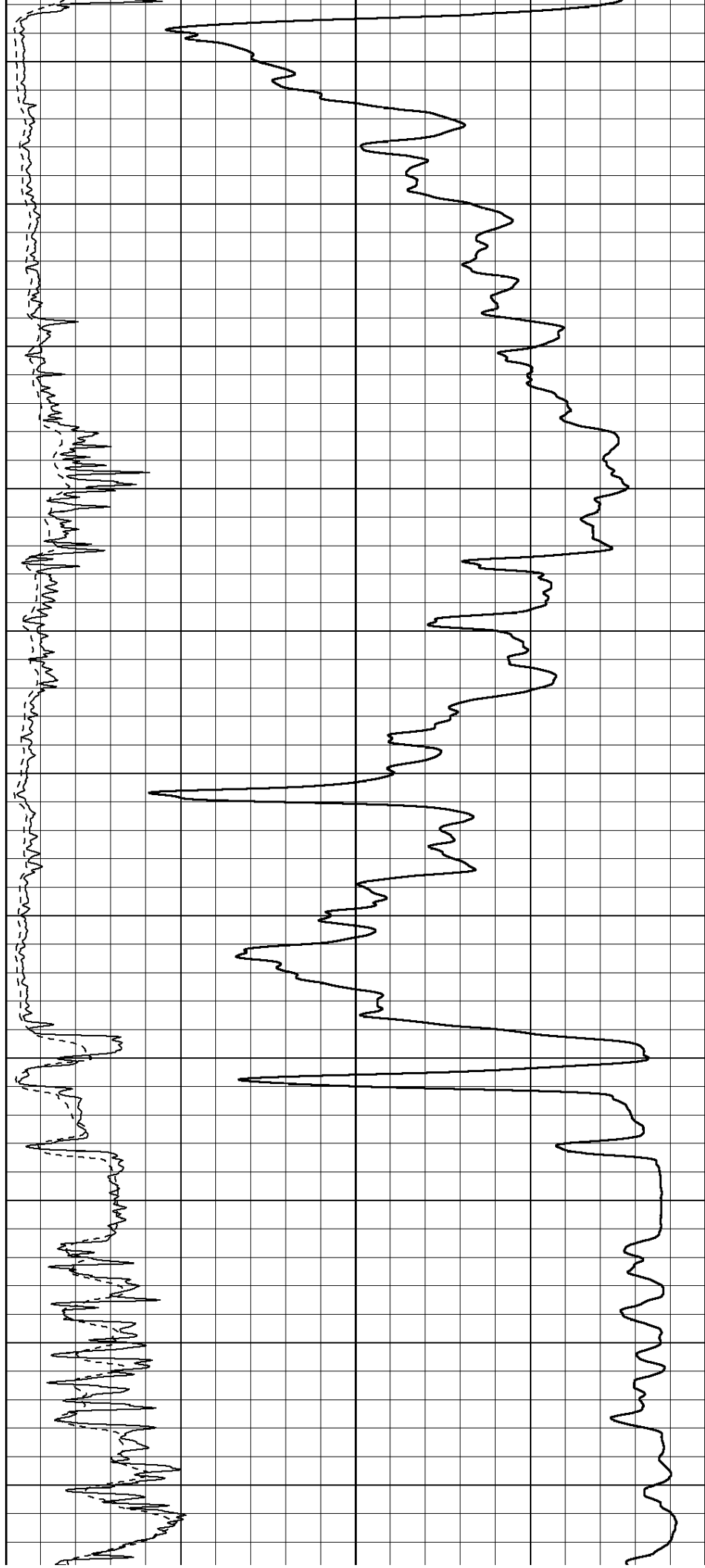
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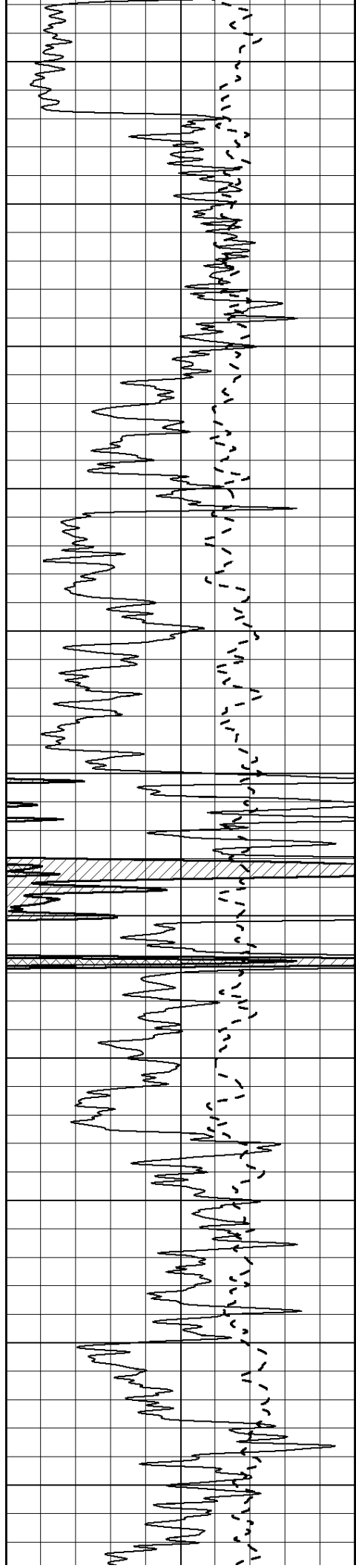
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2500

2550

2600





2650

2700

2750

2800

2850

2900

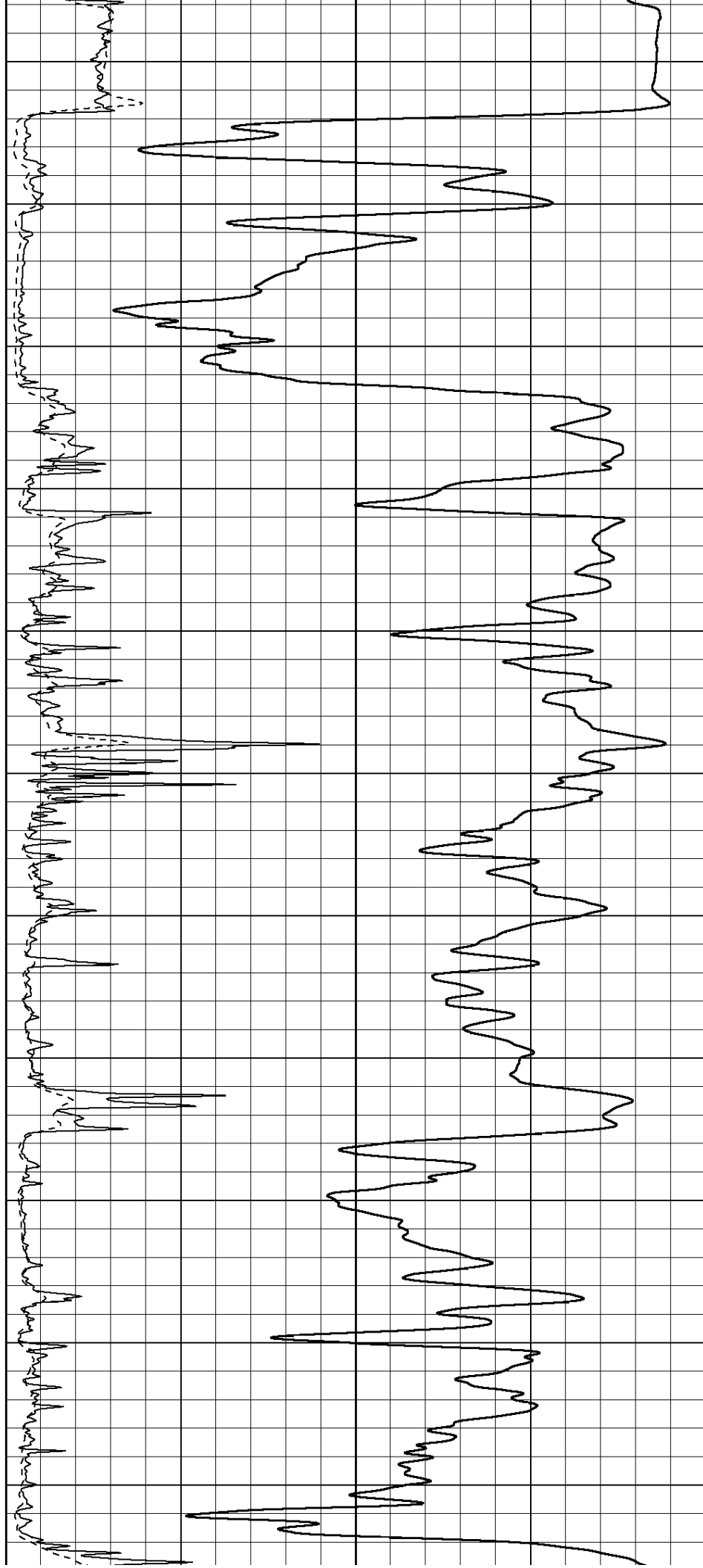
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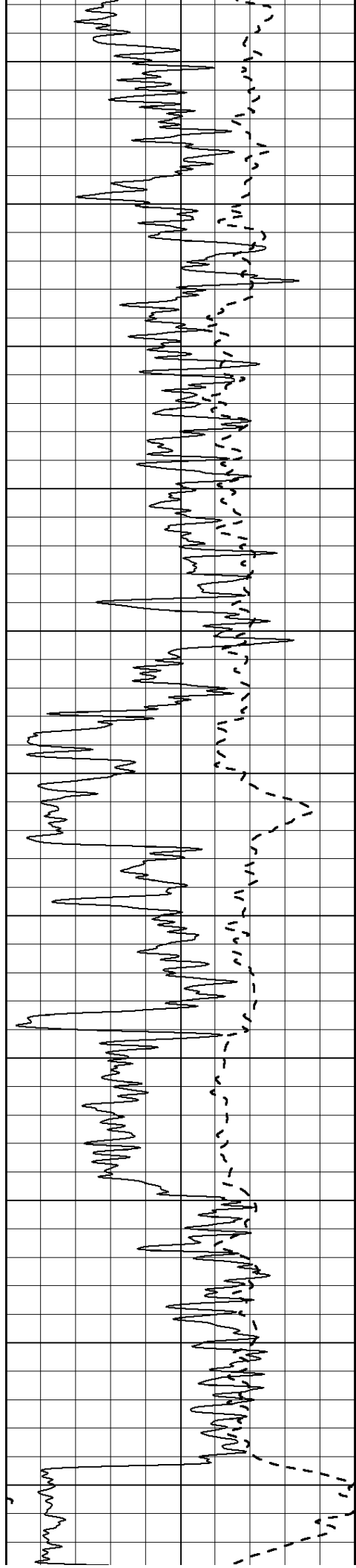
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3050

3100

3150





3200

3250

3300

3350

3400

3450

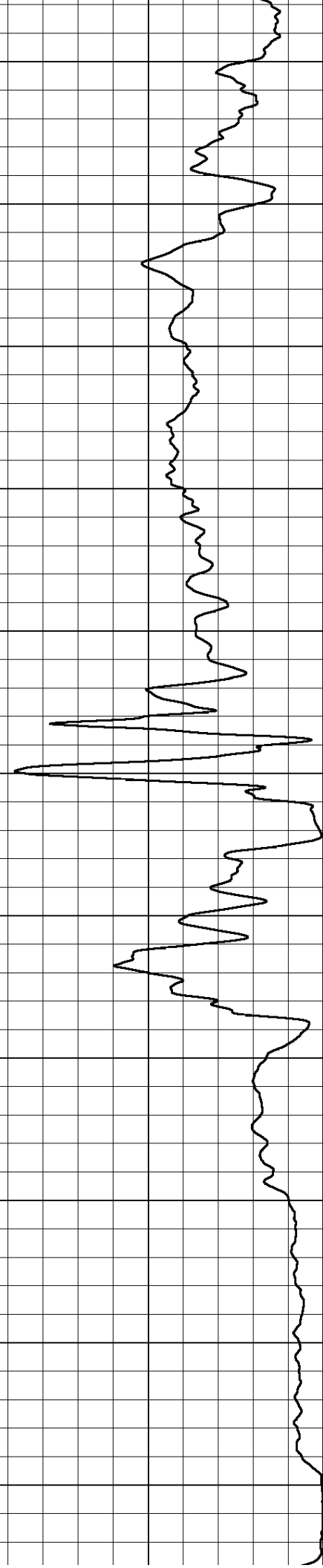
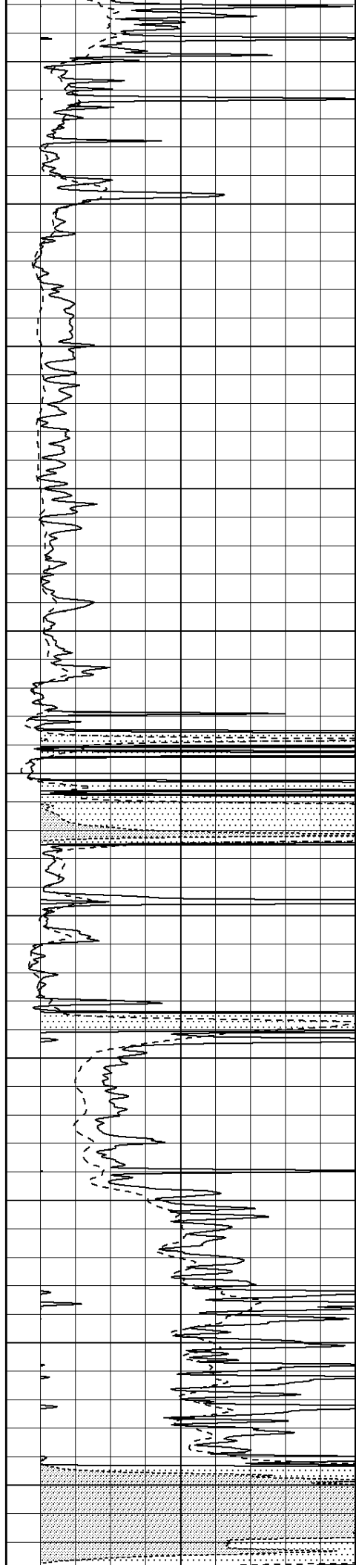
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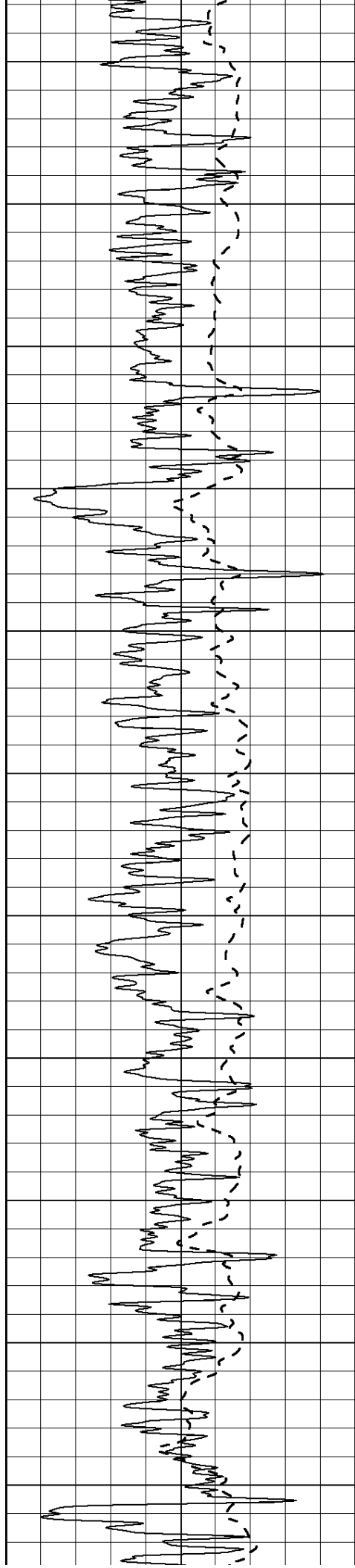
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3700





3750

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3900

3950

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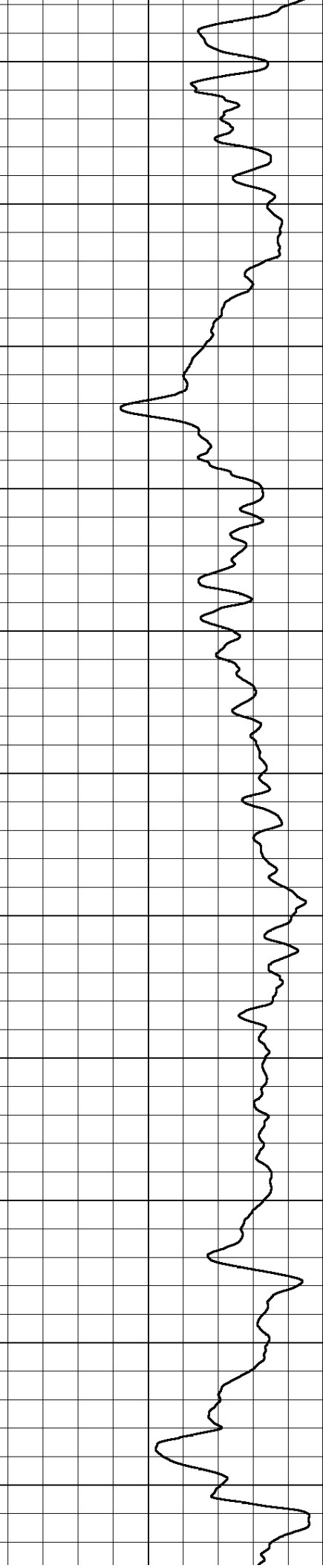
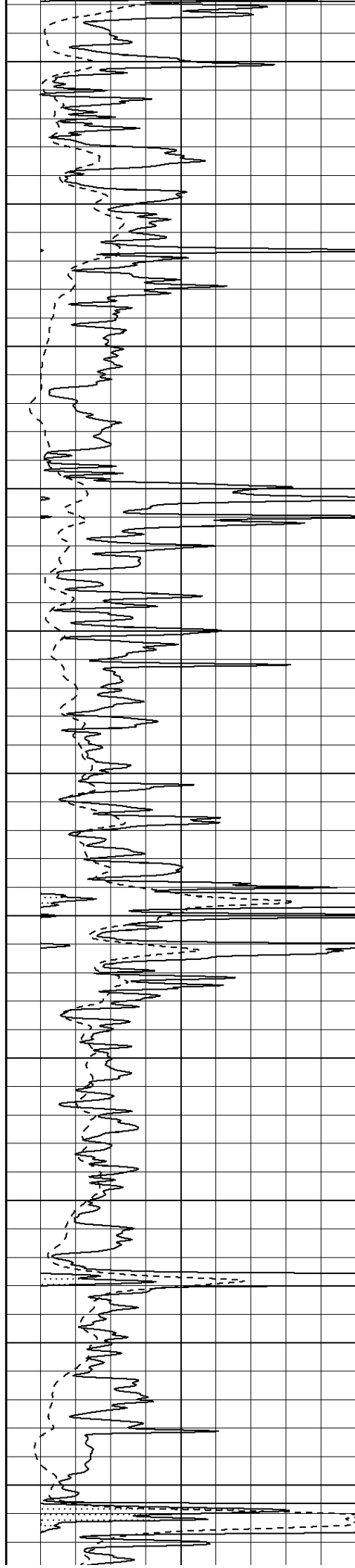
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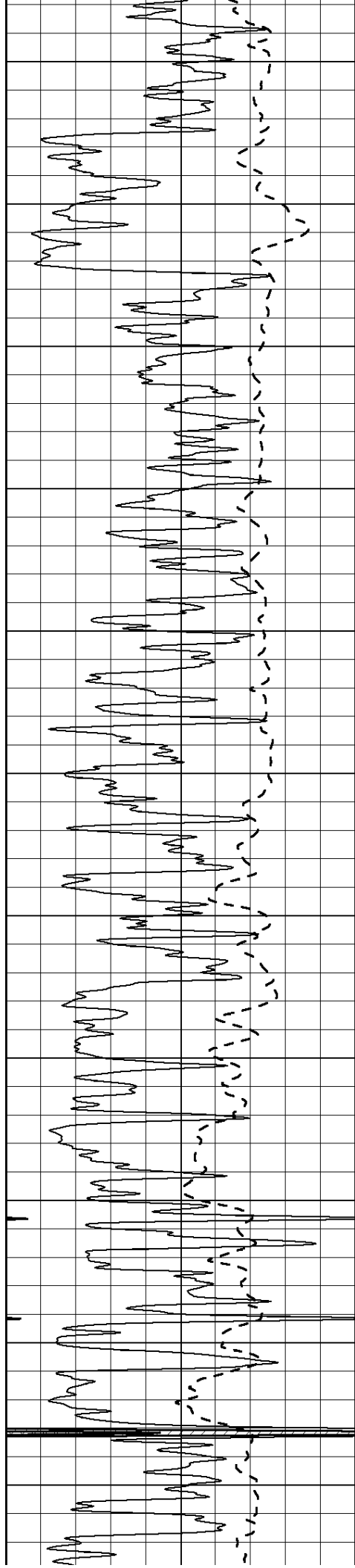
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4150

4200

4250





4300

4350

4400

4450

4500

4550

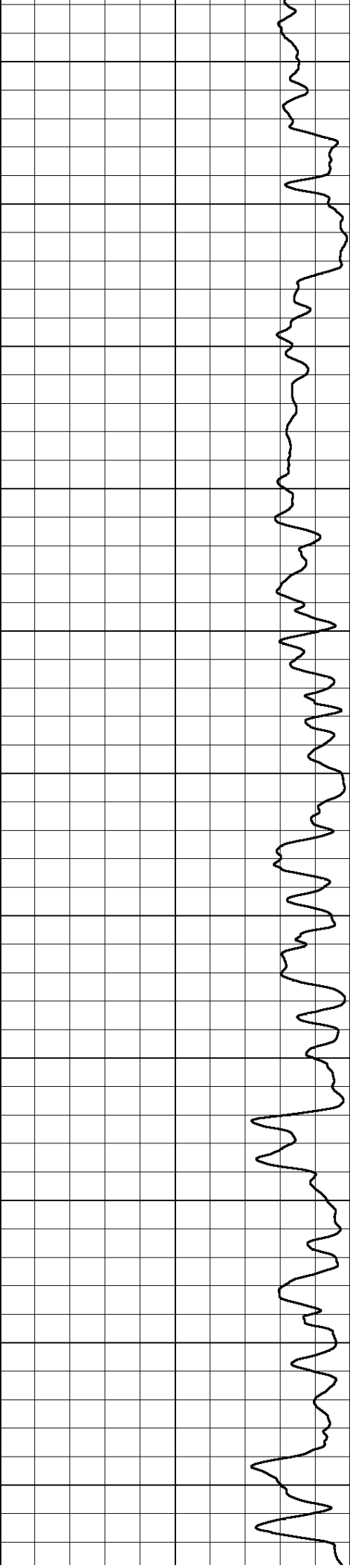
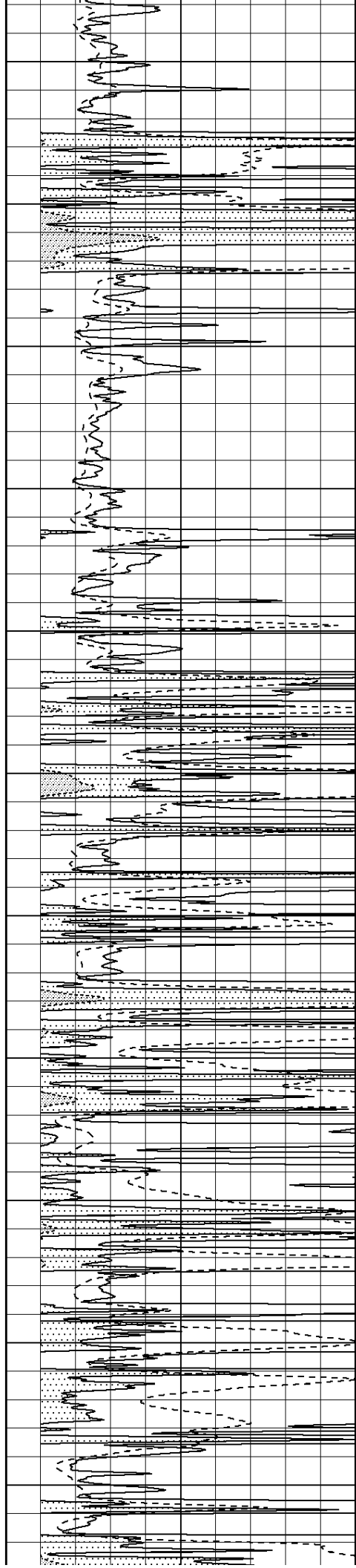
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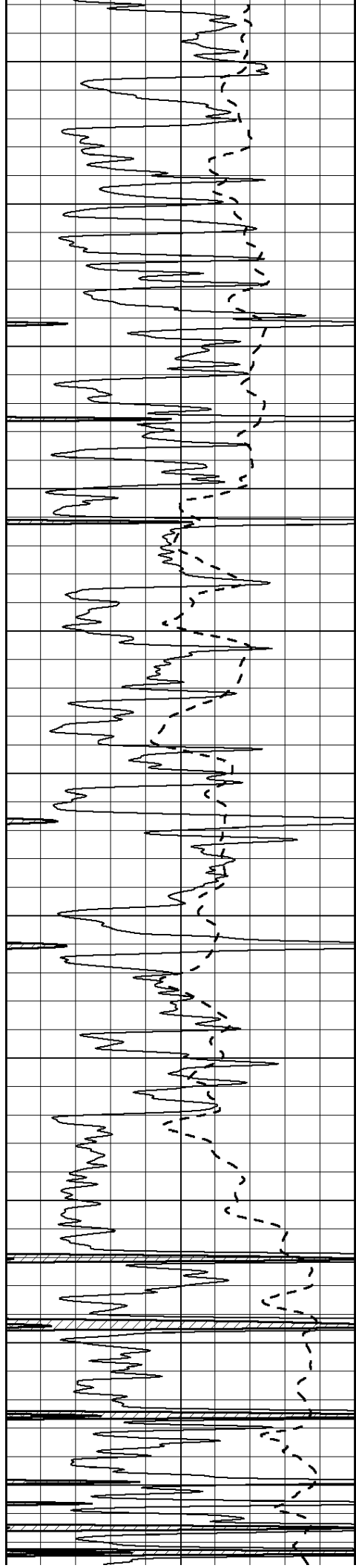
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4700

4750

4800





4850

4900

4950

5000

5050

5100

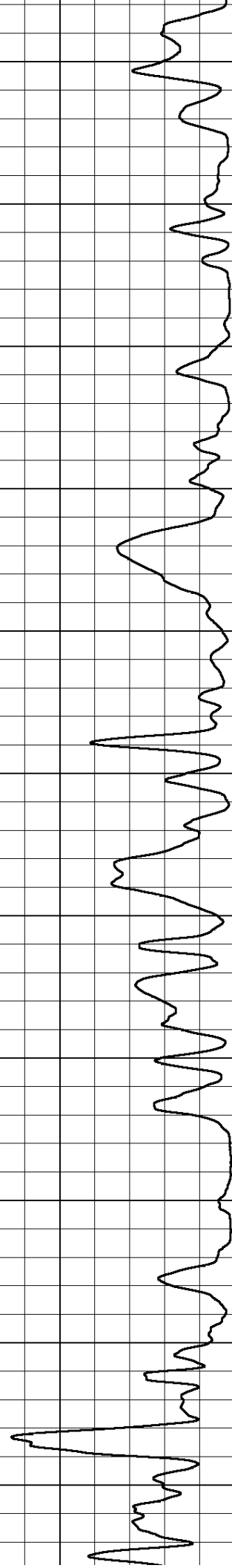
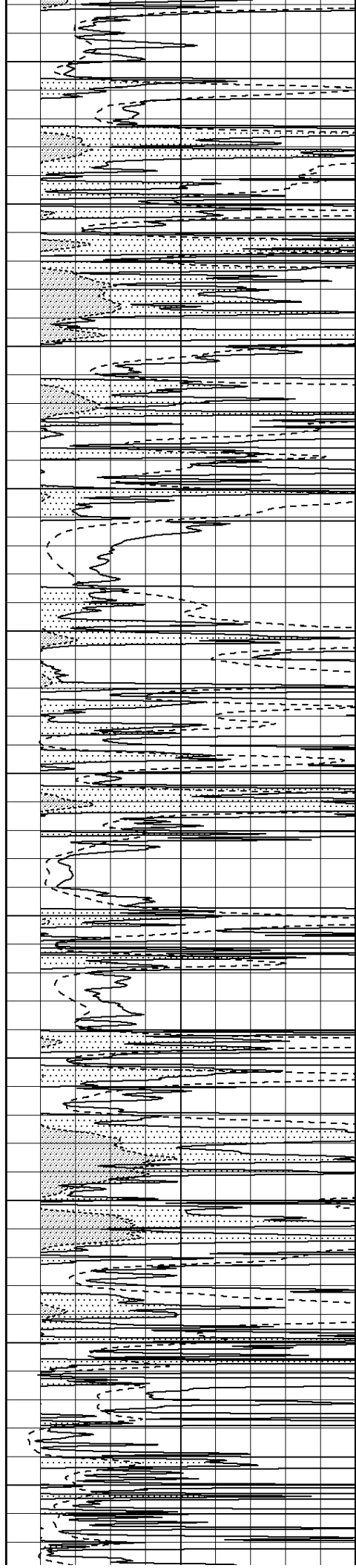
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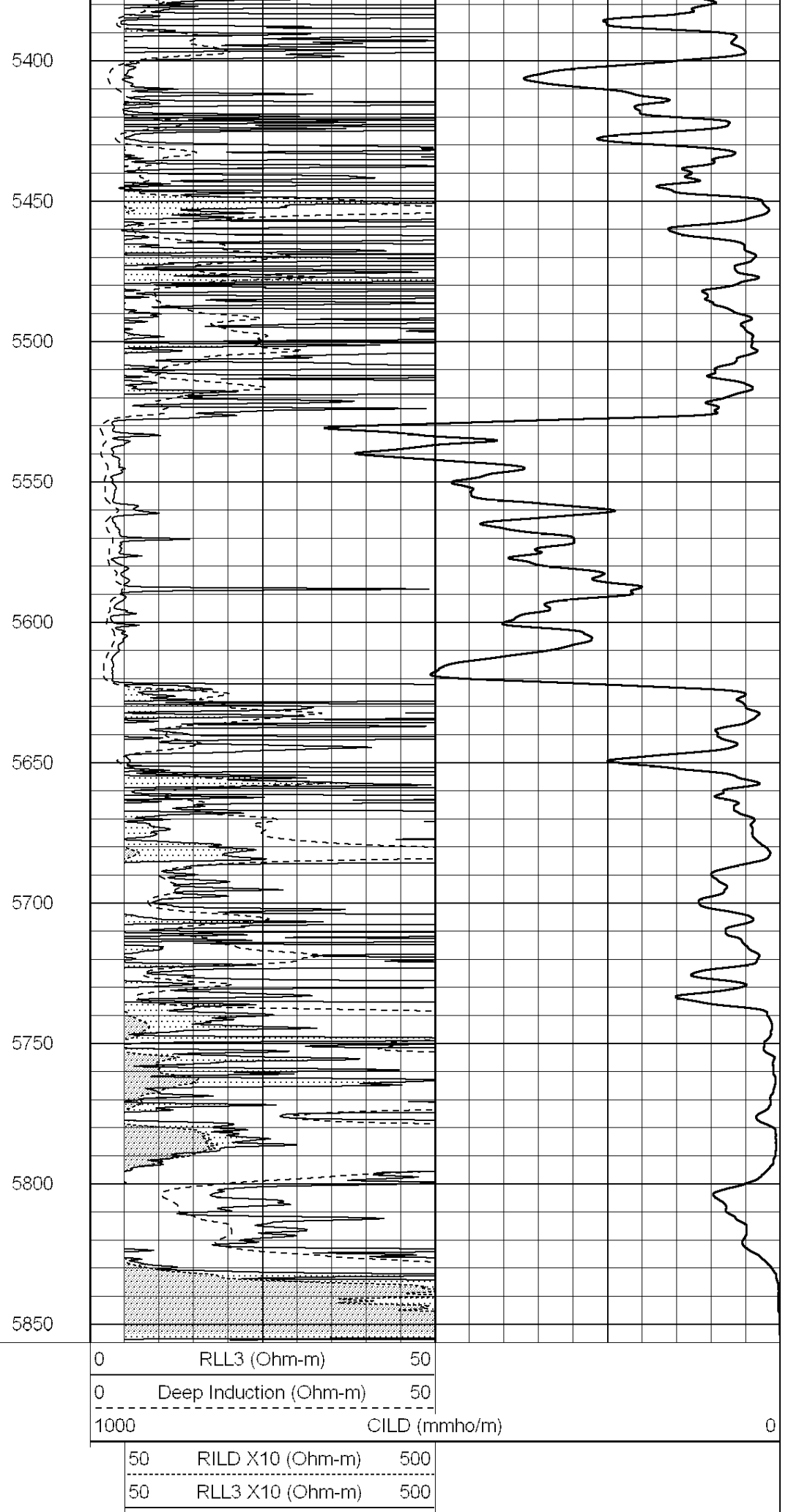
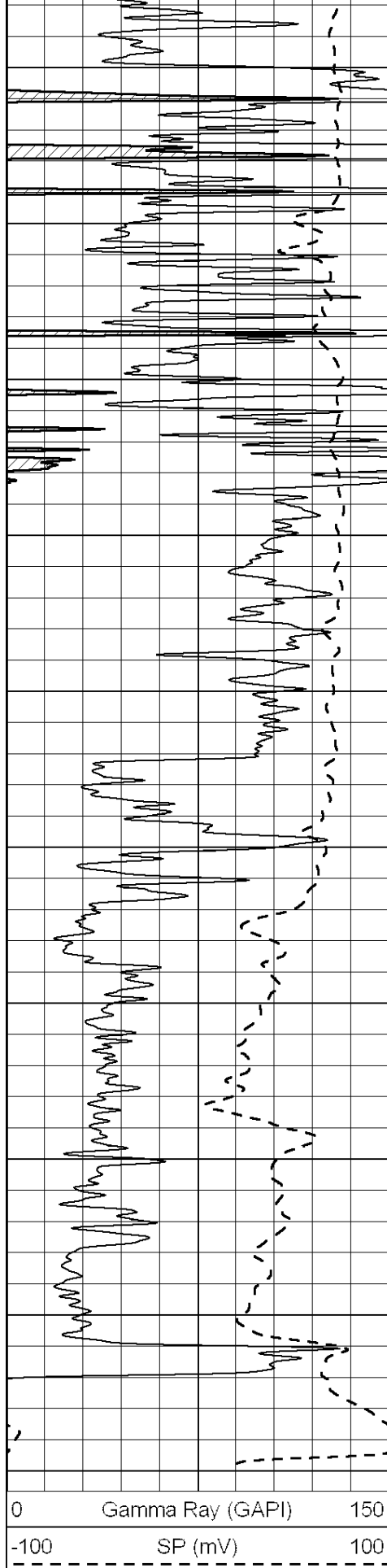
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5250

5300

5350







SUPERIOR

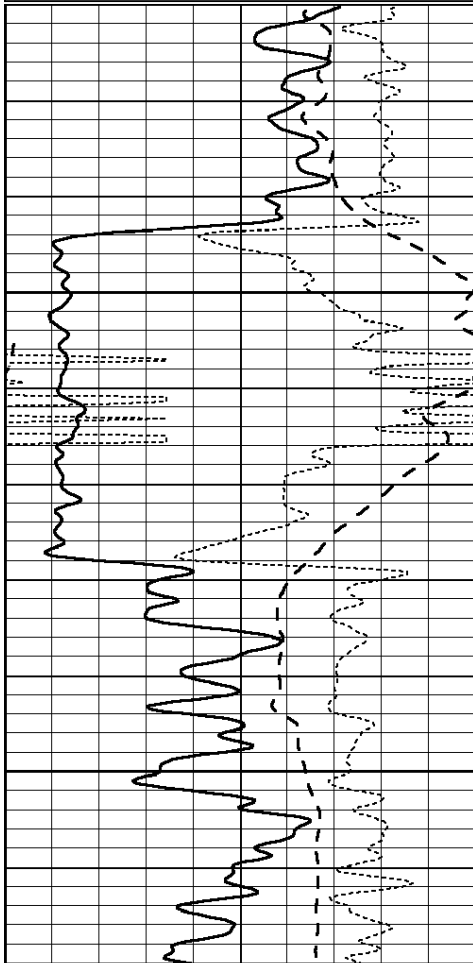
Hays,
Kansas

ANHYDRITE

Database File: 009583ddn.db
Dataset Pathname: pass3.3
Presentation Format: _dil
Dataset Creation: Sat Aug 18 00:11:07 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

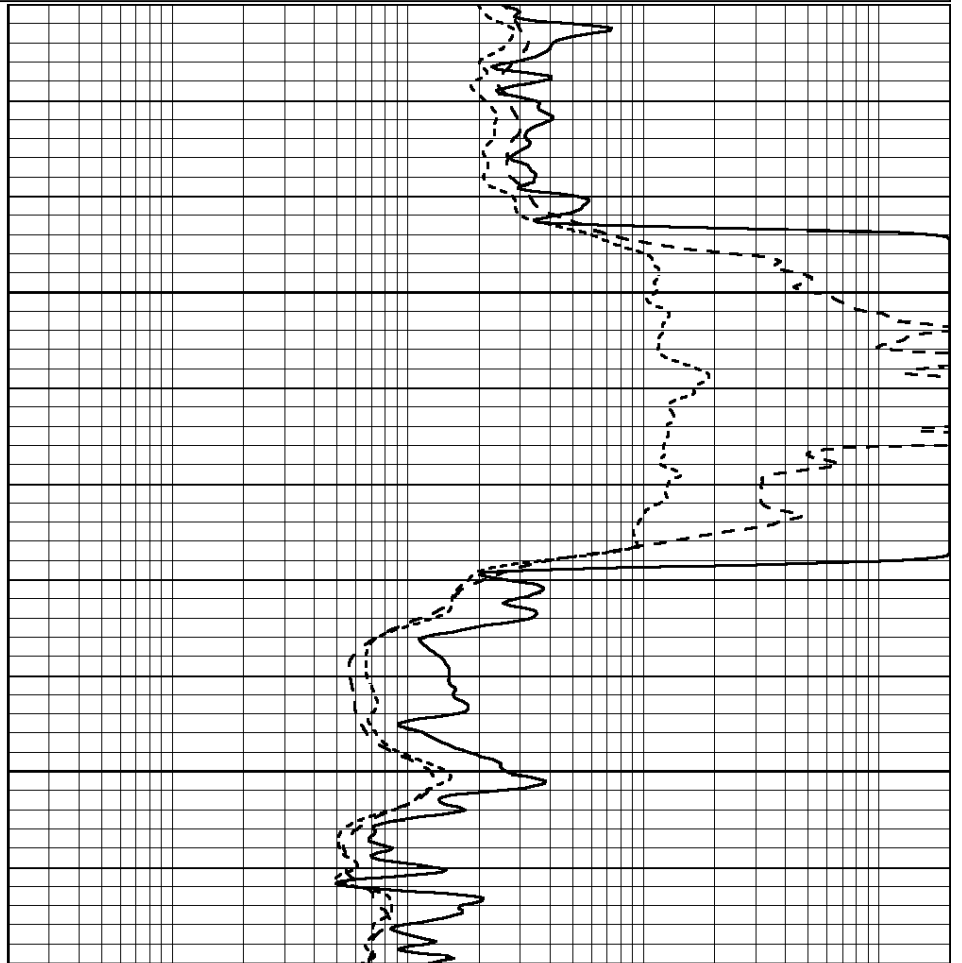
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



3700

3750



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

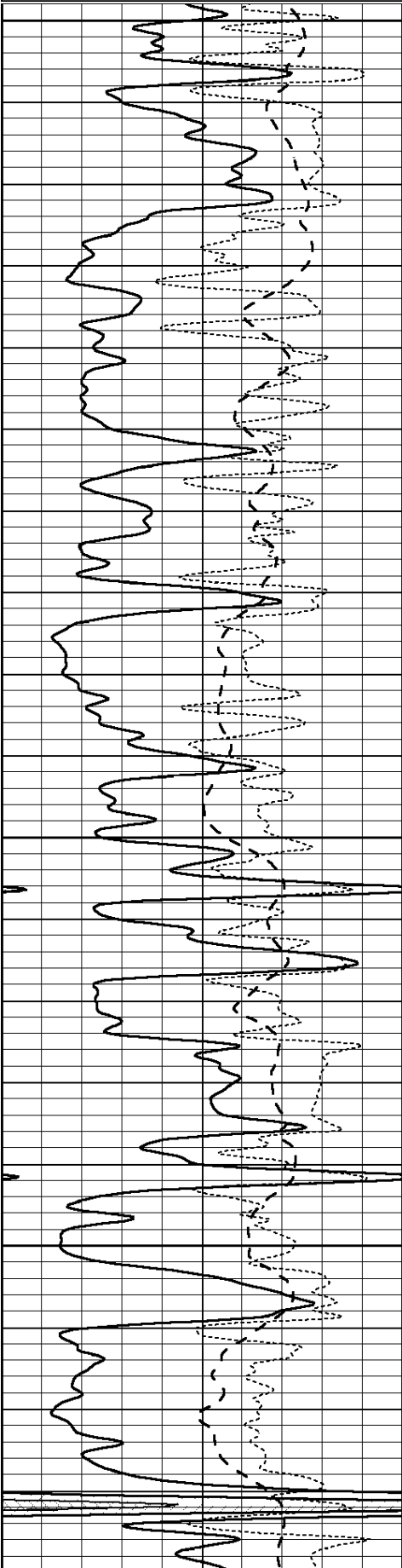
Hays,
Kansas

MAIN SECTION

Database File: 009583ddn.db
Dataset Pathname: pass3.1
Presentation Format: _dil

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

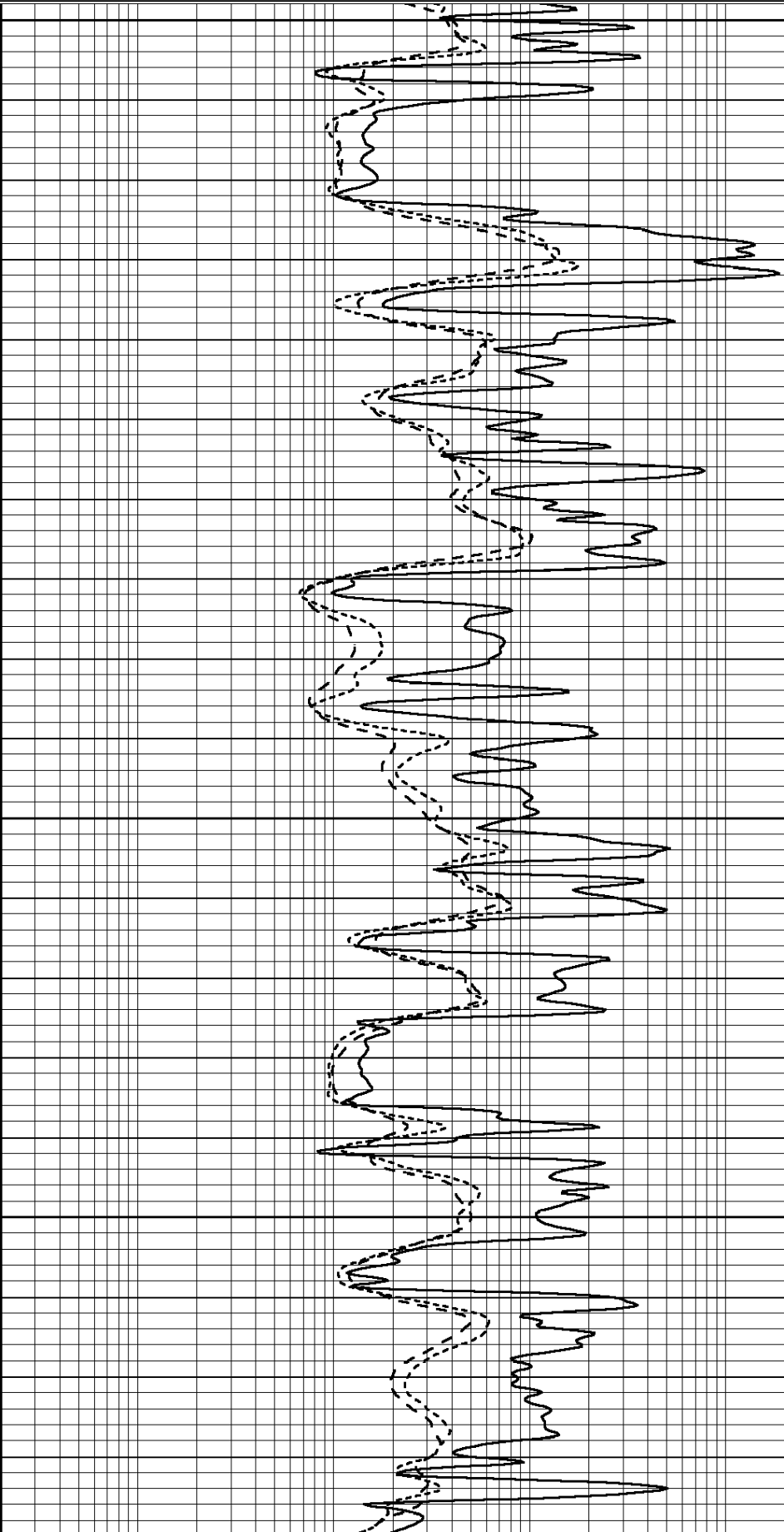


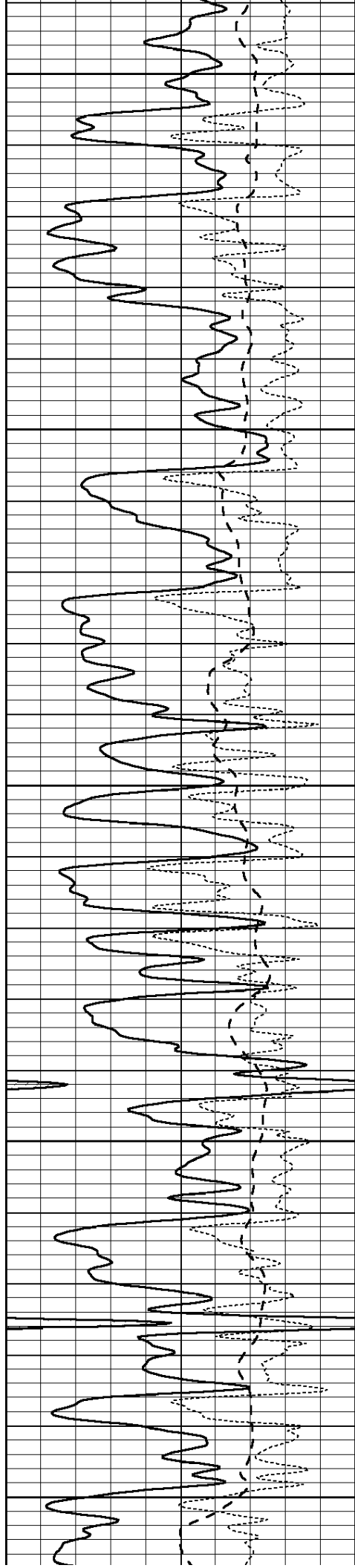
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4650

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4750





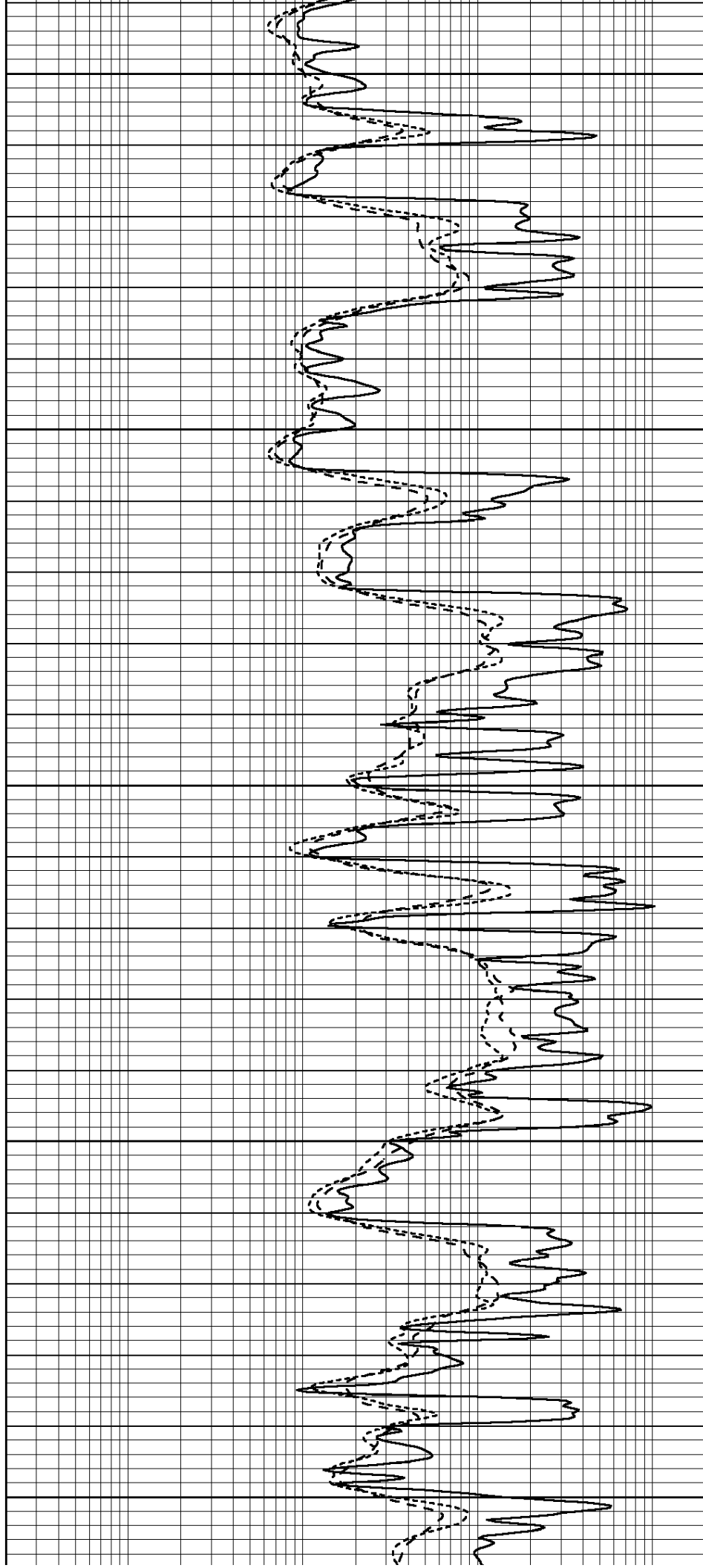
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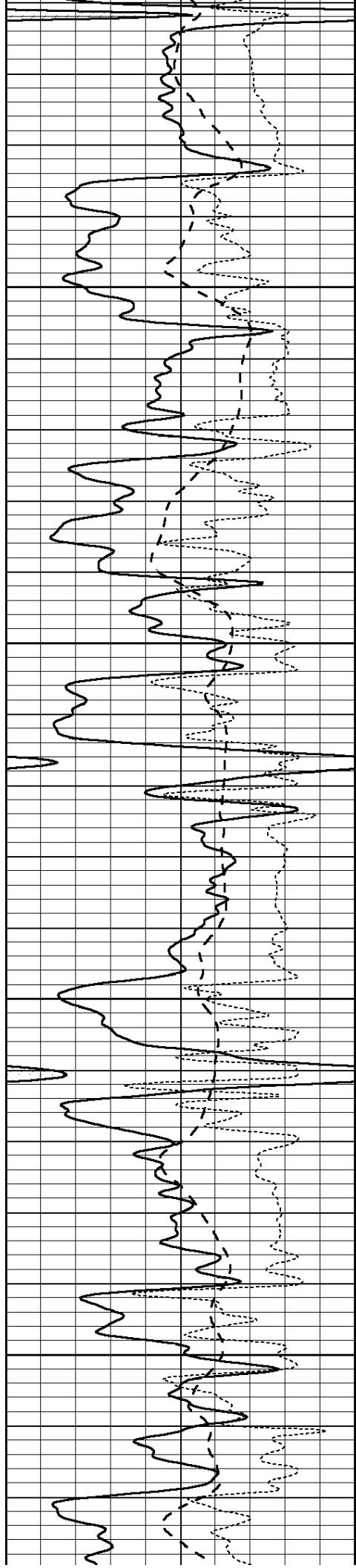
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4900

4950

5000



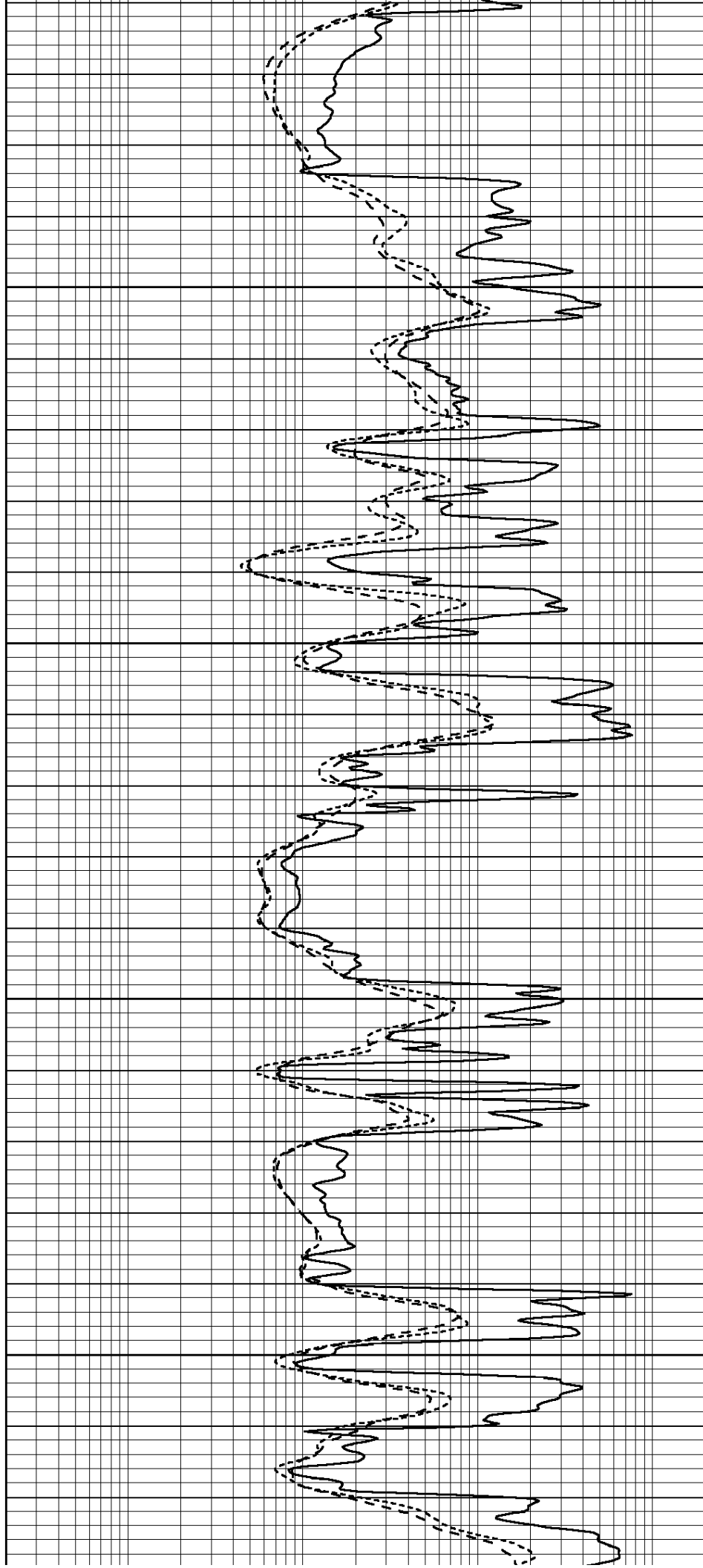


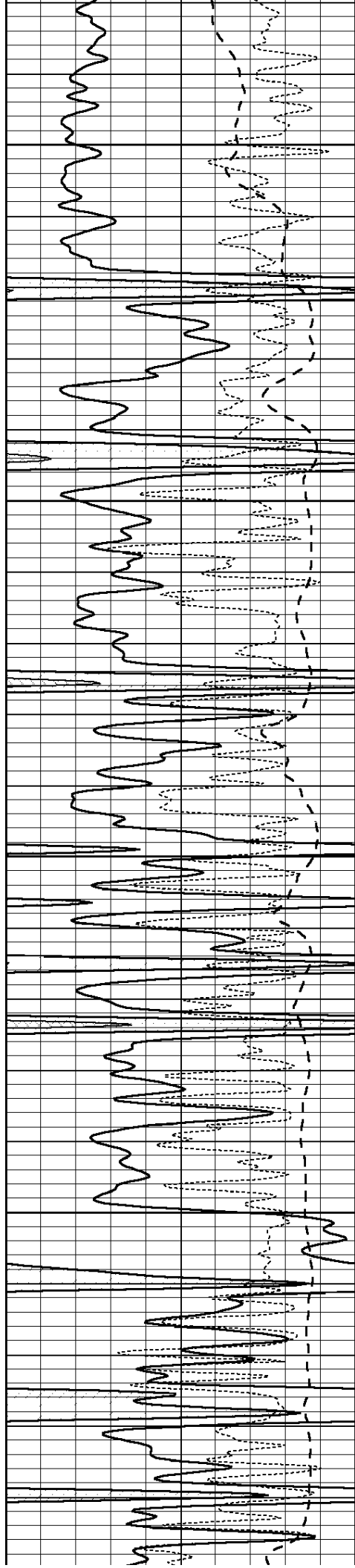
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5200





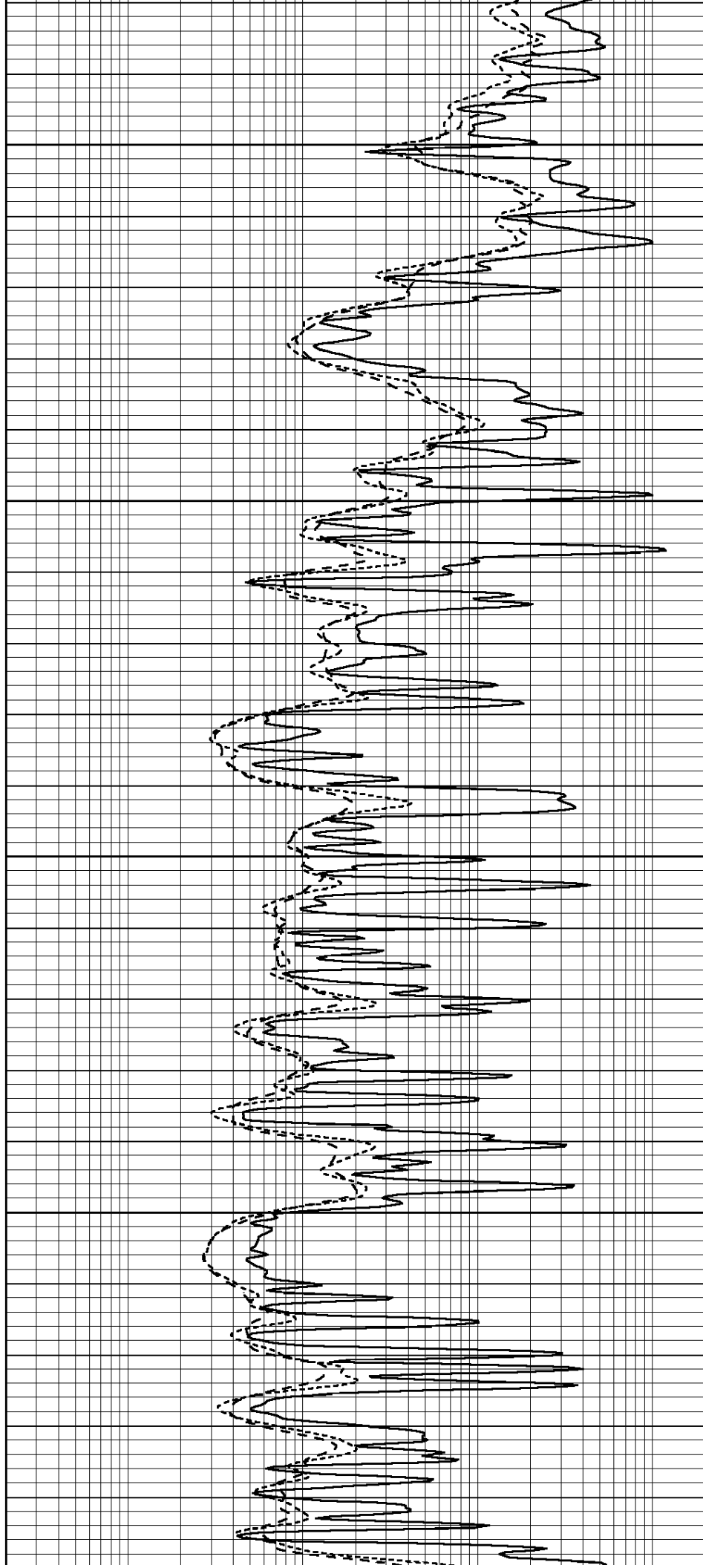
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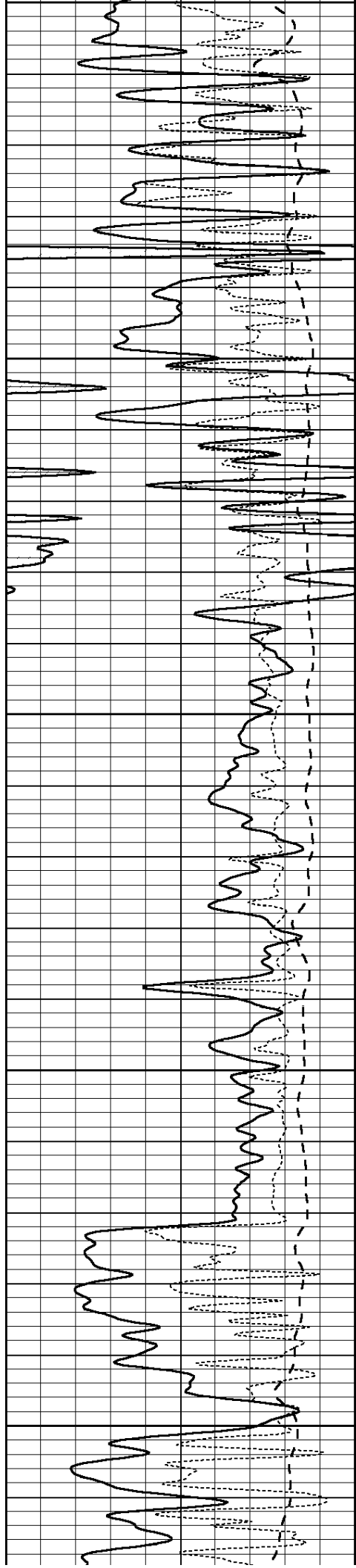
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5350

5400

5450





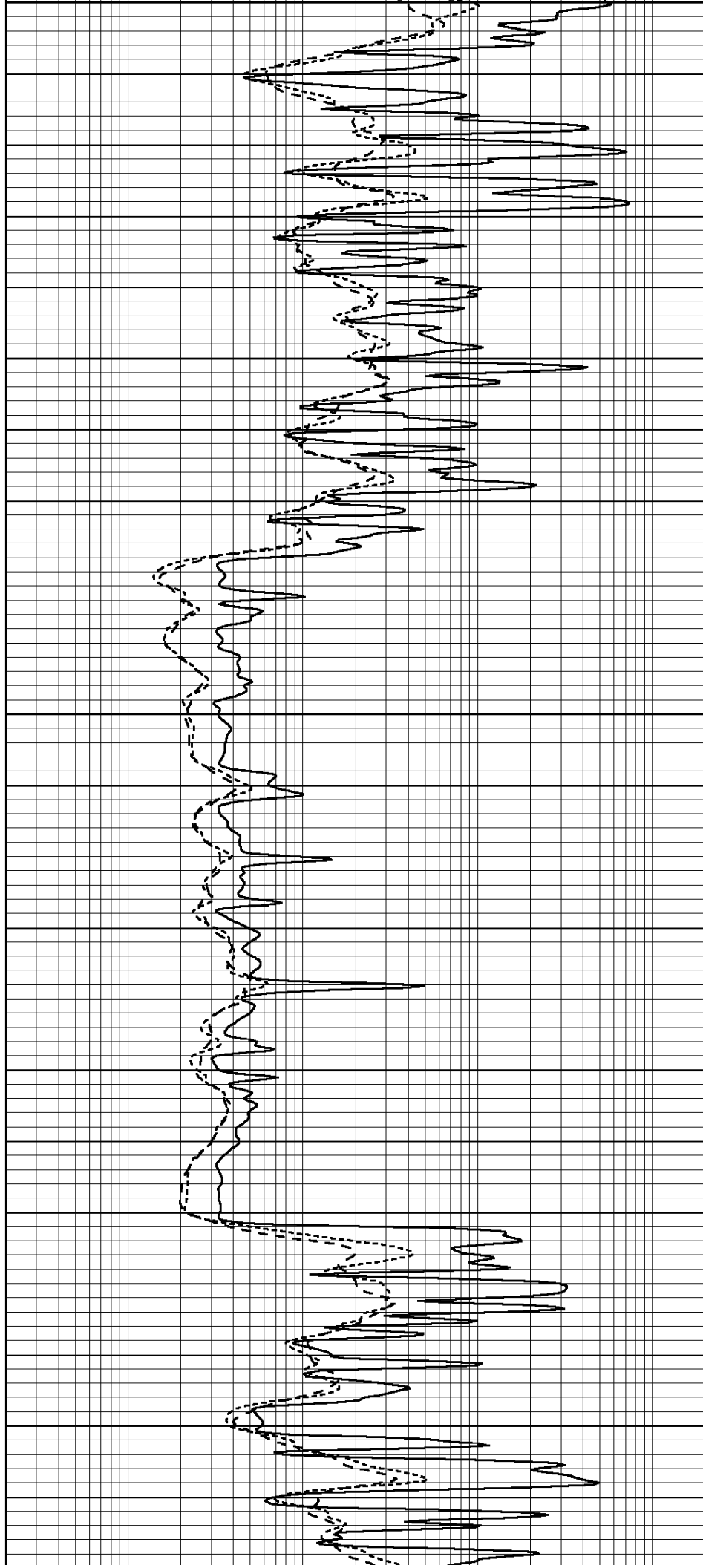
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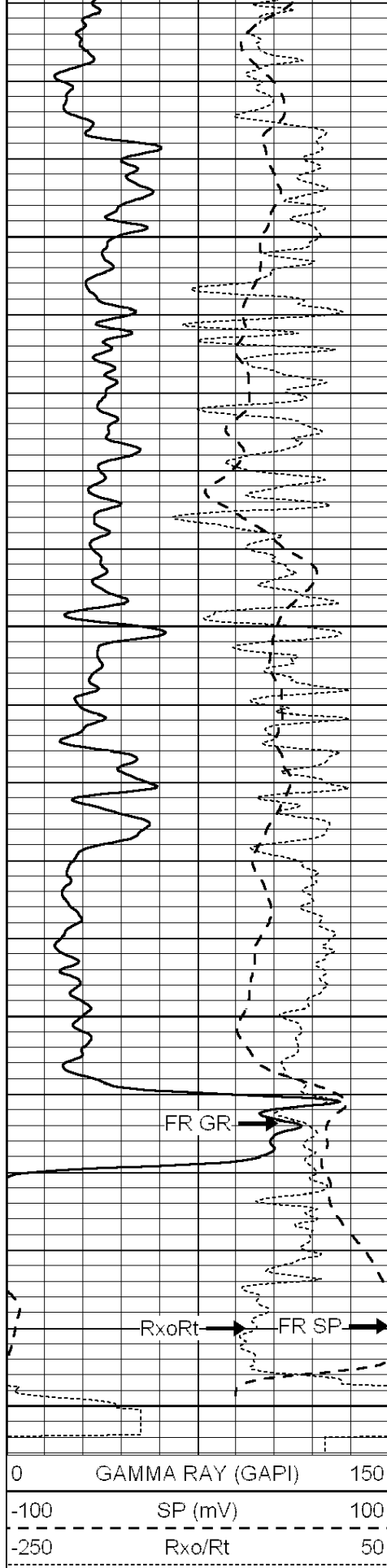
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5600

5650



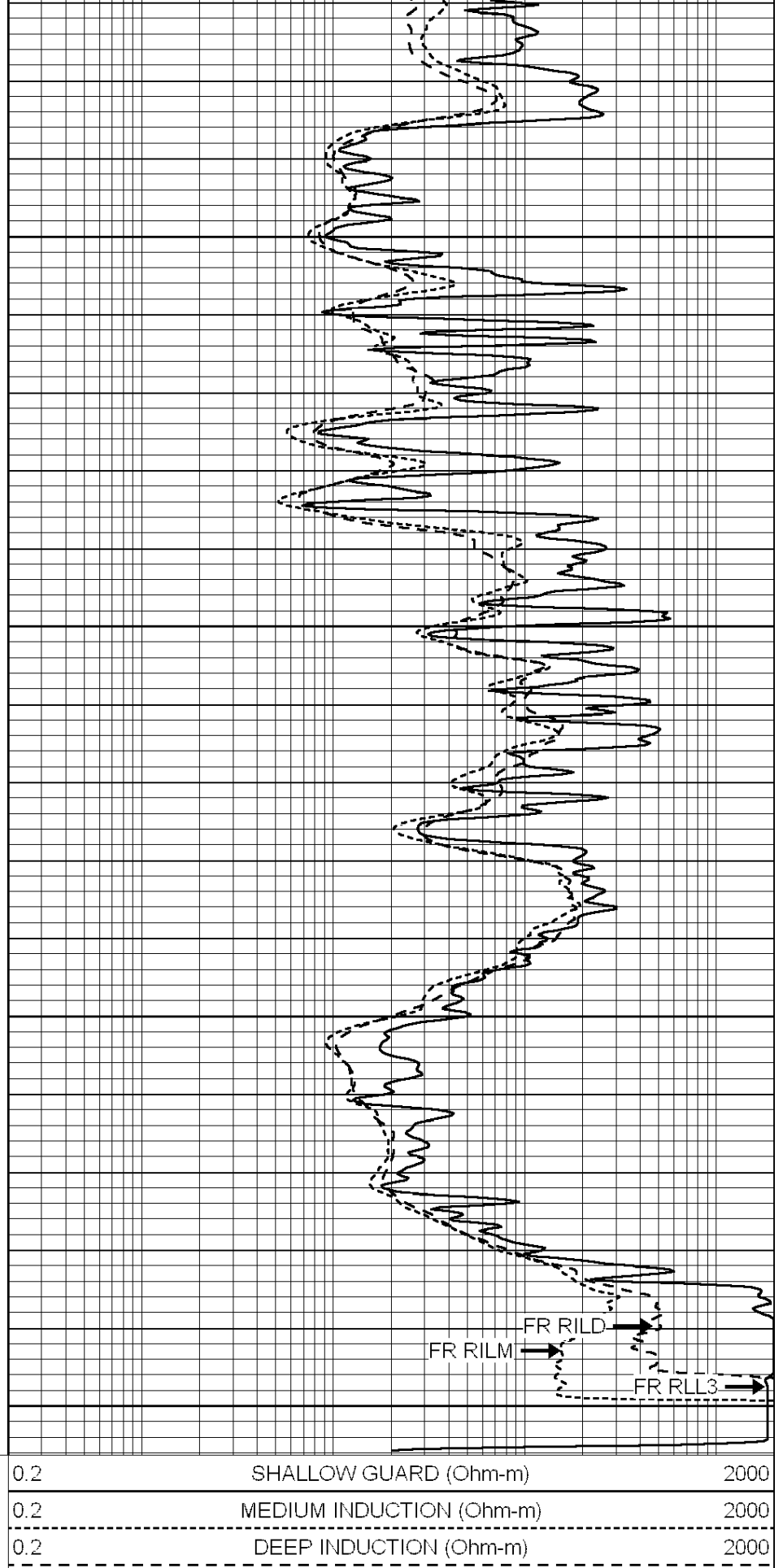


5700

5750

5800

LTD 5850



SUPERIOR

REPEAT SECTION



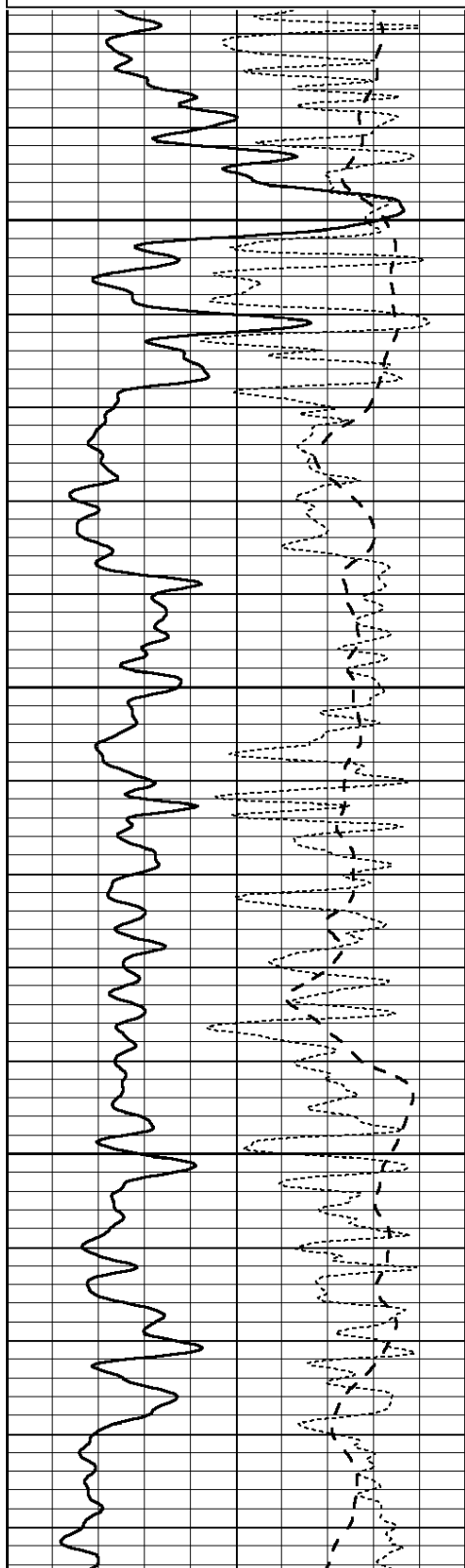
Hays,
Kansas

REPEAT SECTION

Database File: 009583ddn.db
Dataset Pathname: pass2.1
Presentation Format: dil
Dataset Creation: Fri Aug 17 23:58:25 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

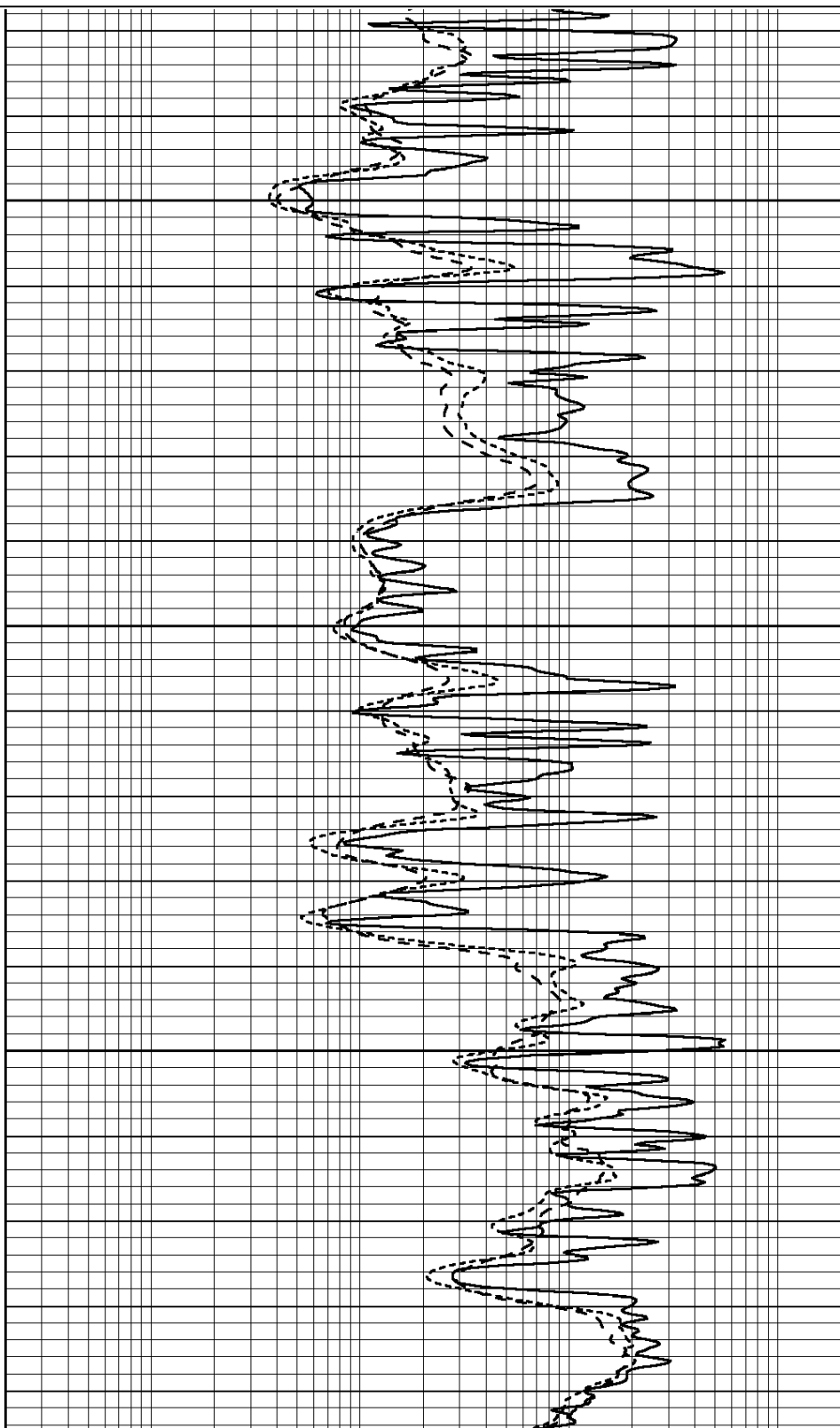
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

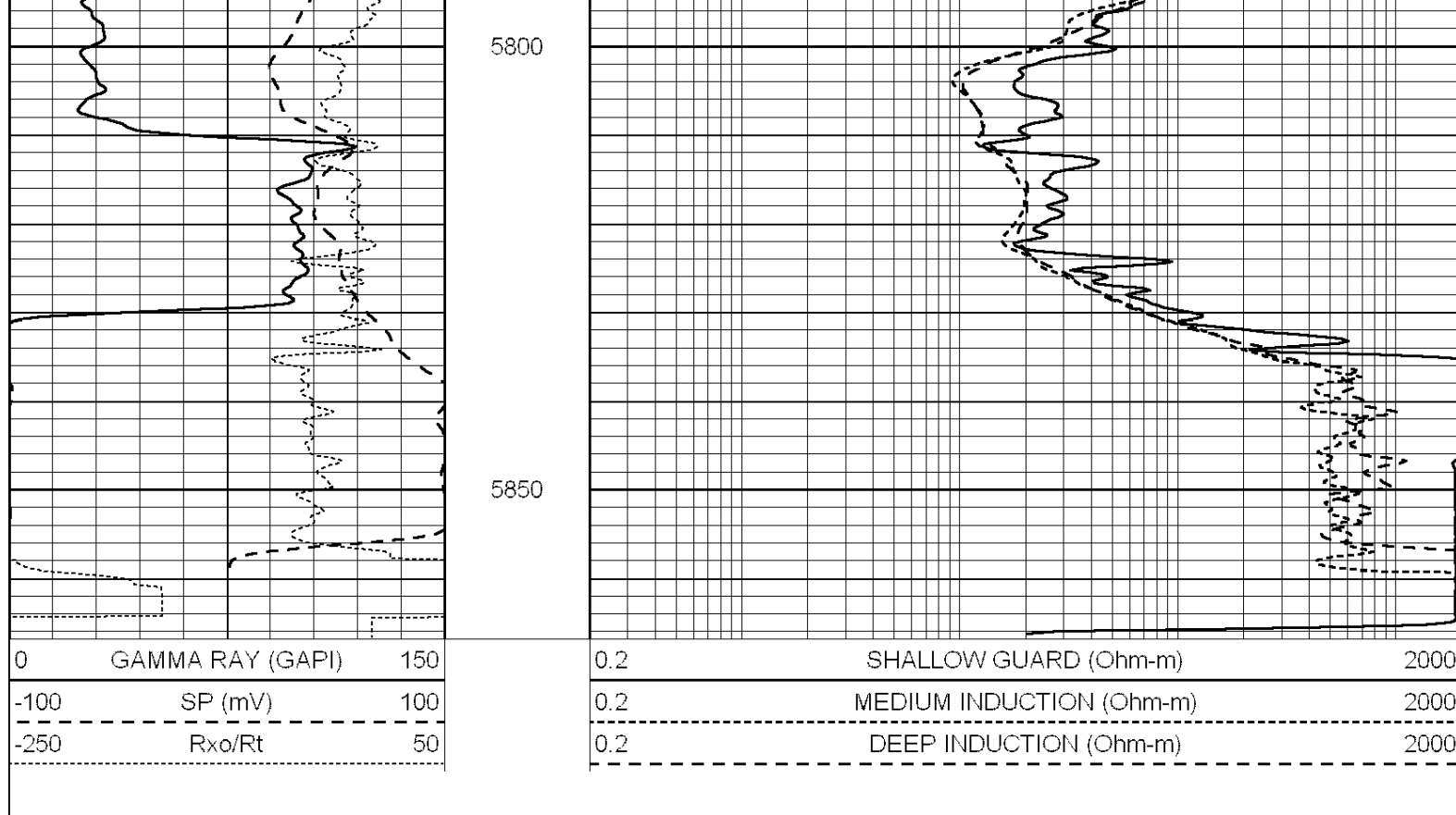


5650

5700

5750





Calibration Report

Database File: 009583ddn.db
 Dataset Pathname: pass3.3
 Dataset Creation: Sat Aug 18 00:11:07 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
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	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	2.600	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