



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company RAYMOND OIL COMPANY, INC.
Well HINEMAN #1
Field WILDCAT
County LANE
State KANSAS

Company RAYMOND OIL COMPANY, INC.
Well HINEMAN #1
Field WILDCAT
County LANE State KANSAS

Location: 1260' FNL & 2120' FWL
API #: 15-101-22467-0000
SEC 9 TWP 19S RGE 27W
Permanent Datum GROUND LEVEL Elevation 2713
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services CDL/CNL MEL
Elevation K.B. 2724
D.F. 2722
G.L. 2713

Date	10/29/13
Run Number	ONE
Depth Driller	4779
Depth Logger	4780
Bottom Logged Interval	4778
Top Log Interval	0
Casing Driller	8 5/8" @ 266'
Casing Logger	265'
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3 / 60
pH / Fluid Loss	10.5 / 5.6
Source of Sample	FLOWLINE
Rin @ Meas. Temp	1.50 @ 74F
Rmf @ Meas. Temp	1.13 @ 74F
Rmc @ Meas. Temp	1.80 @ 74F
Source of Rmf / Rmc	MEASURED
Rin @ BHT	0.90 @ 123F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	123F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JEFF GRONEMEG
Witnessed By	KIM SHOEMAKER

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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 NABORS COMPLETION & PRODUCTION SVCS. (785) 628-6395

DIRECTIONS:
NESS/LANE COUNTY LINE ON HWY 96 - WEST TO TURKEY RED RD
4 MILES SOUTH - 1/2 MILE WEST - SOUTH INTO

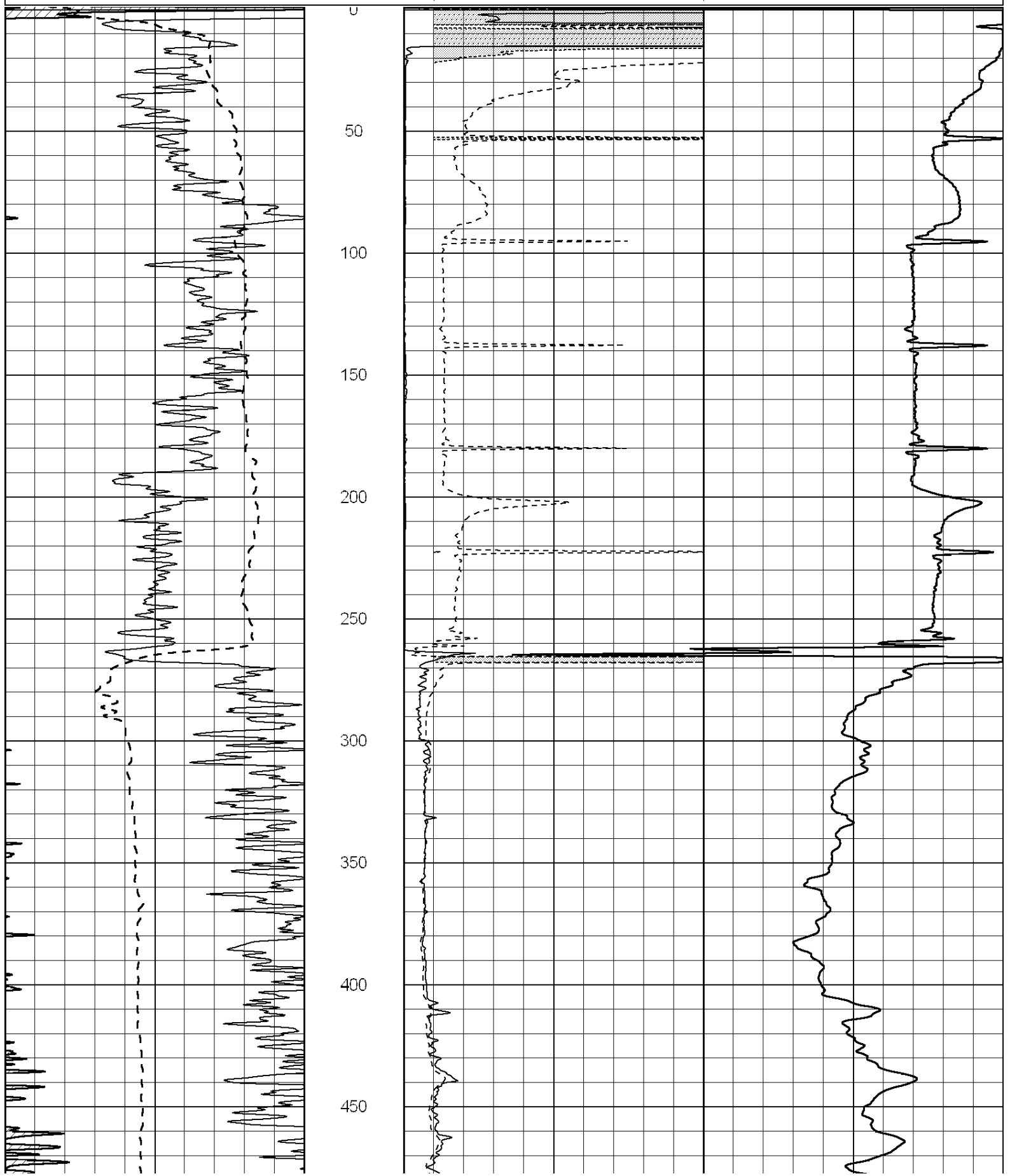
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Dataset Pathname: pass3.3
Presentation Format: _dil2
Dataset Creation: Tue Oct 29 12:49:12 2013 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

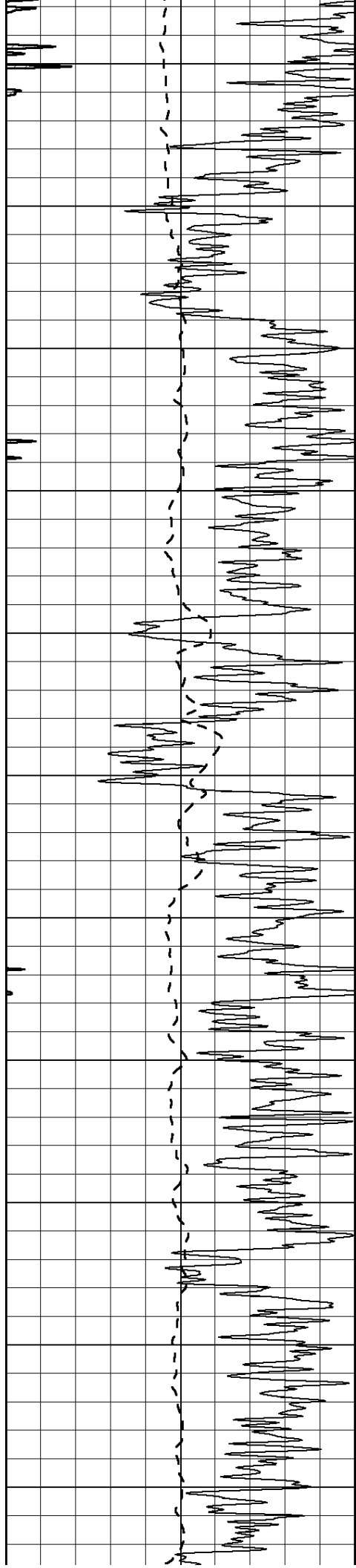
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-100	SP (mV)	100

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

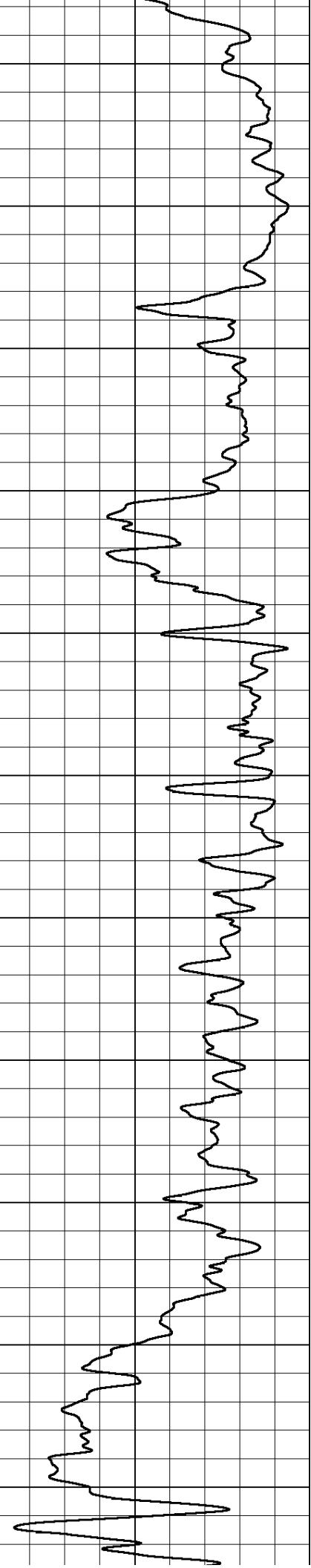
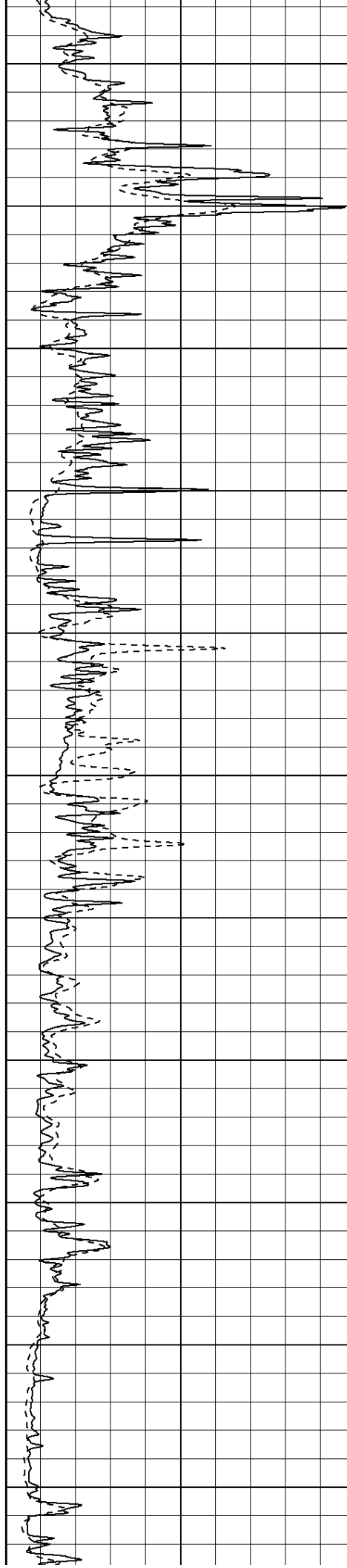
1000	CILD (mmho/m)	0
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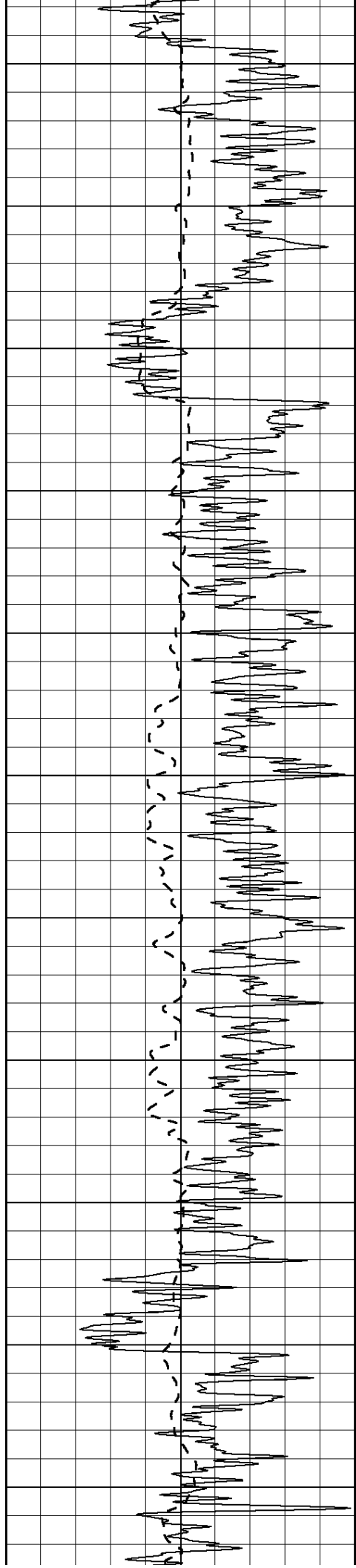
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50	RLL3 X10 (Ohm-m)	500



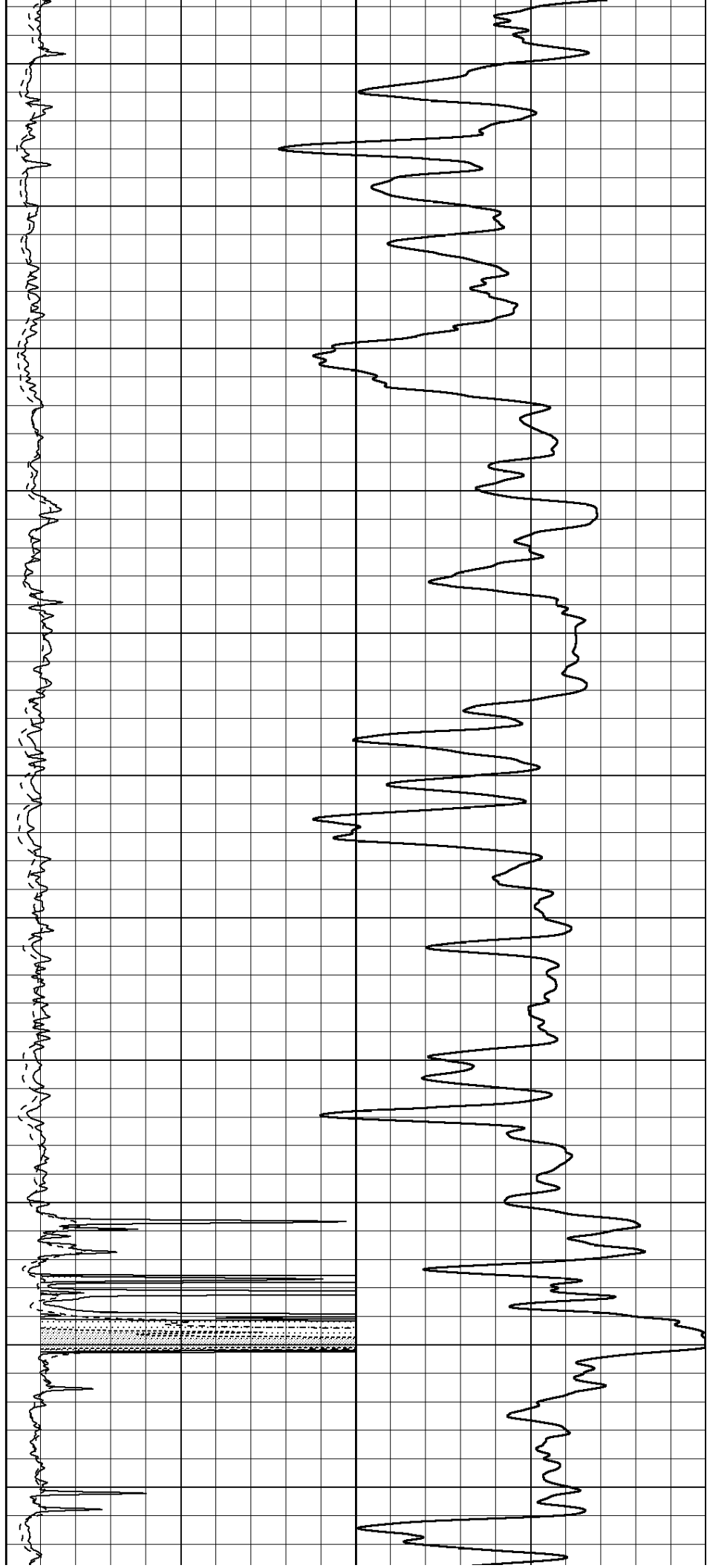


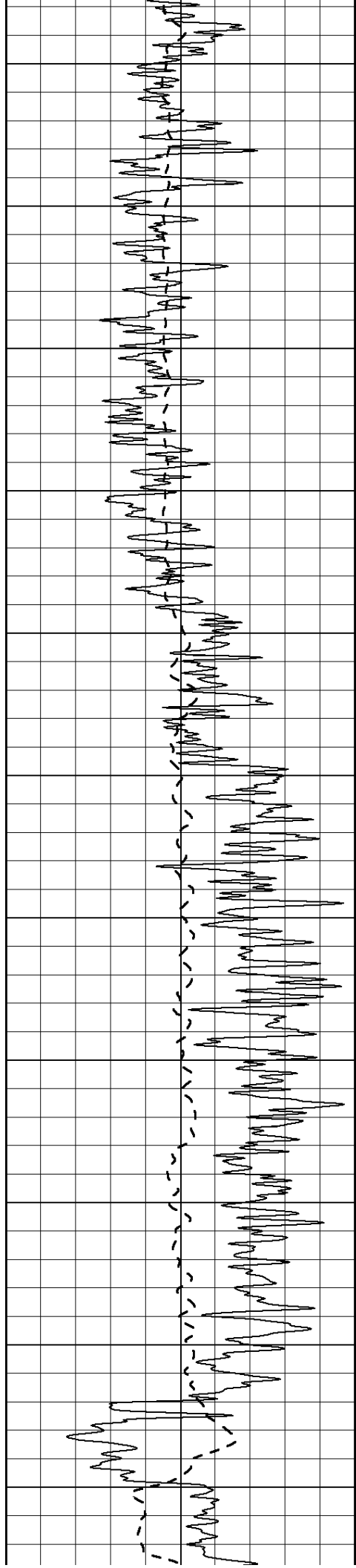
500
550
600
650
700
750
800
850
900
950
1000



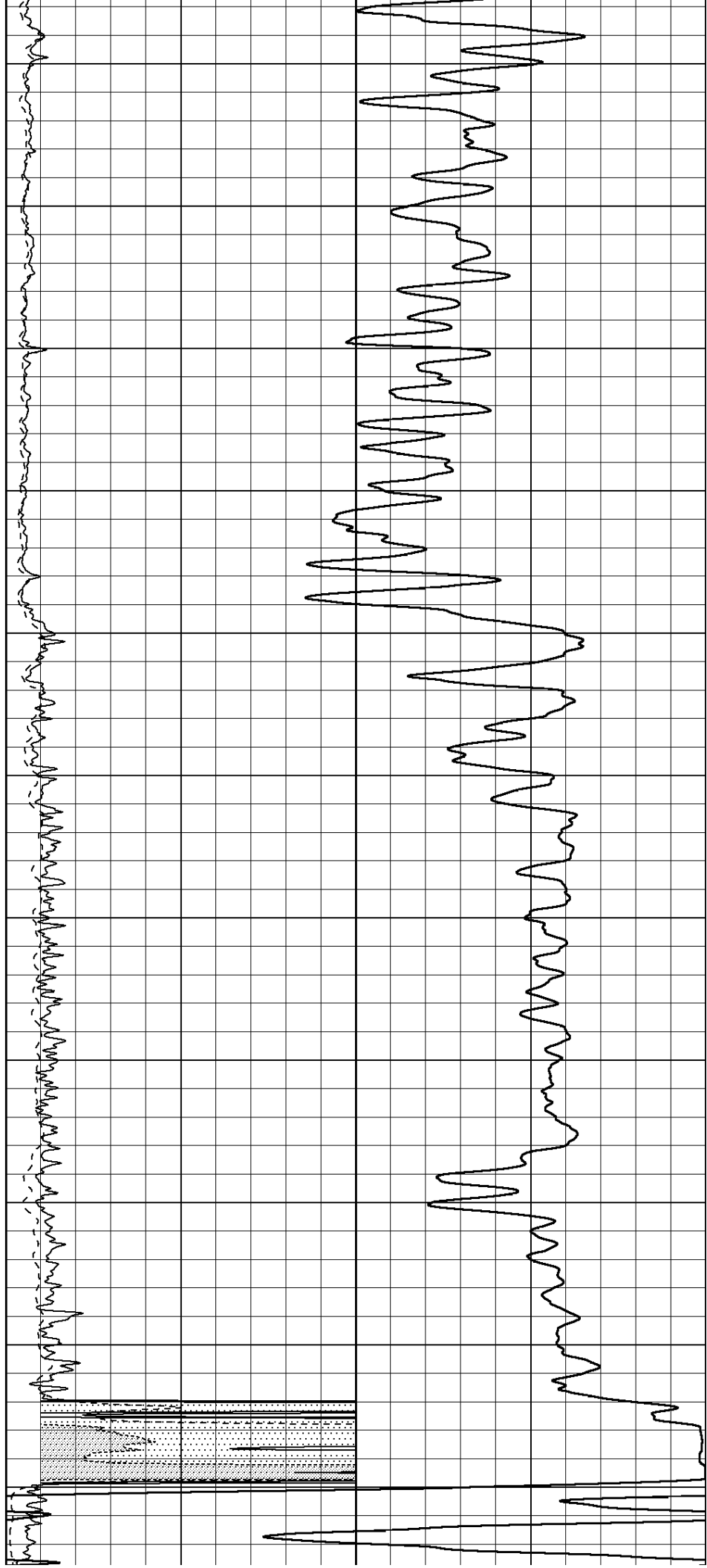


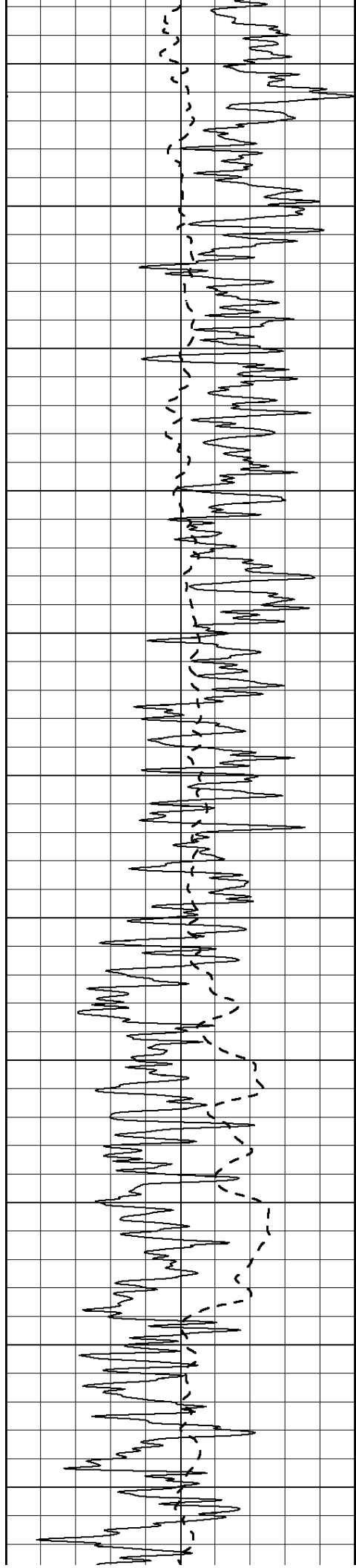
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1350
1400
1450
1500
1550



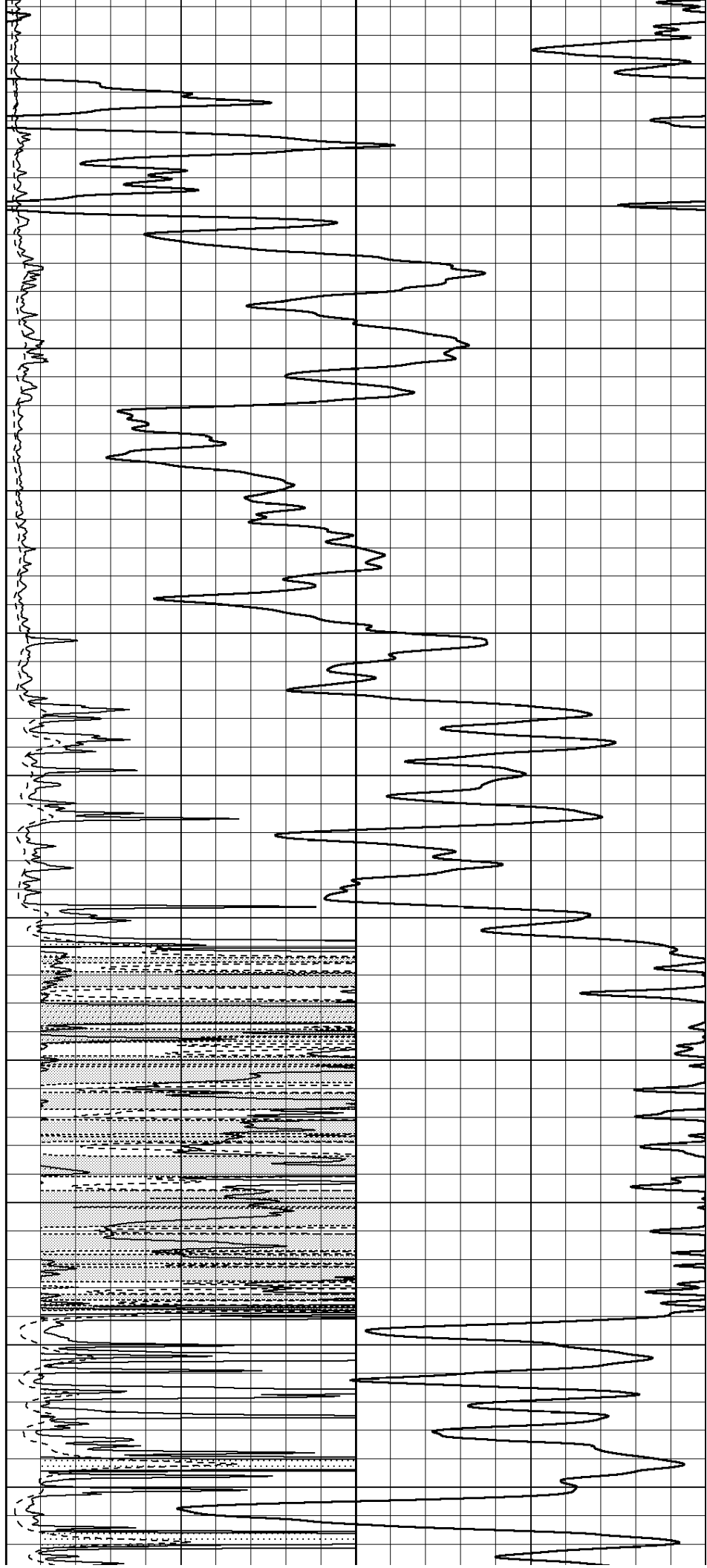


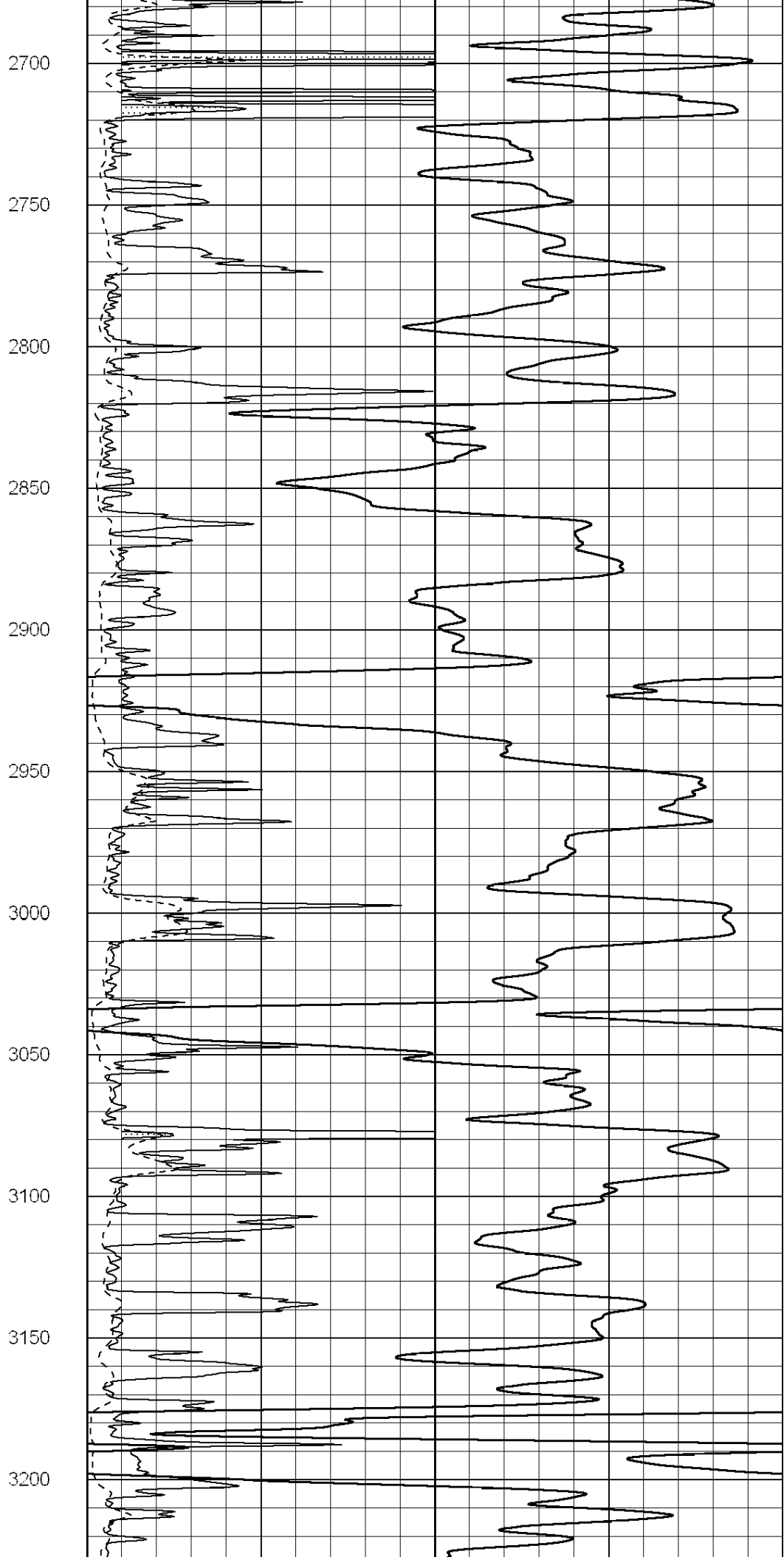
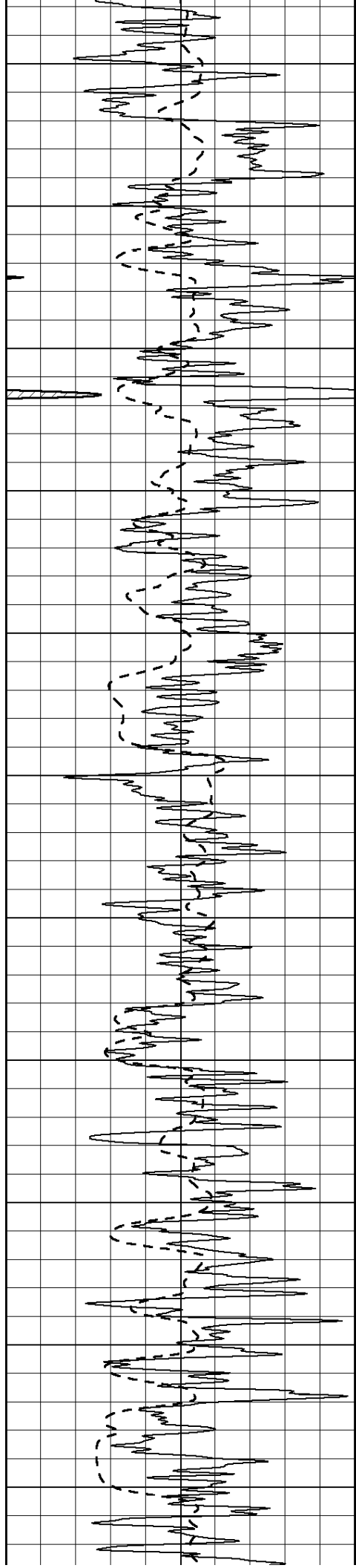
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1950
2000
2050
2100

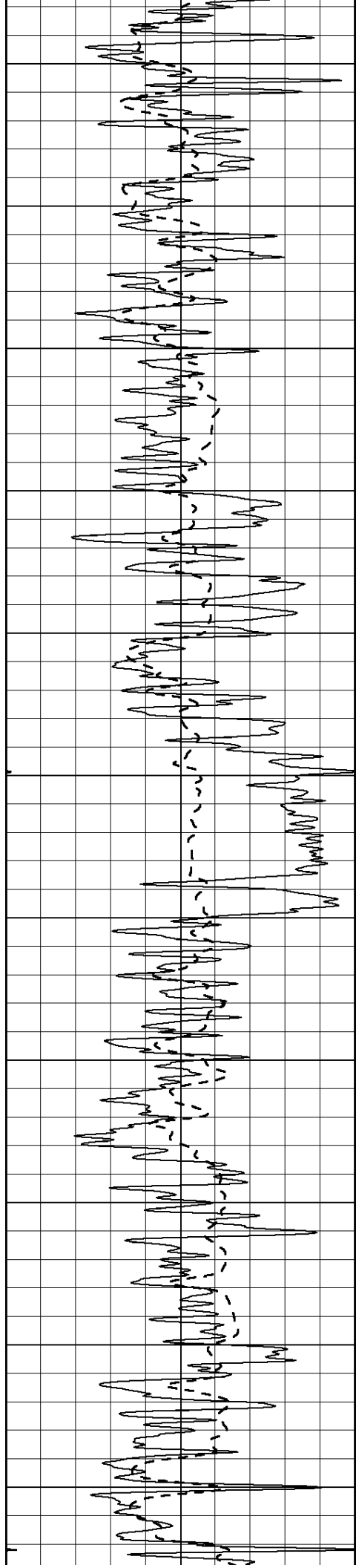




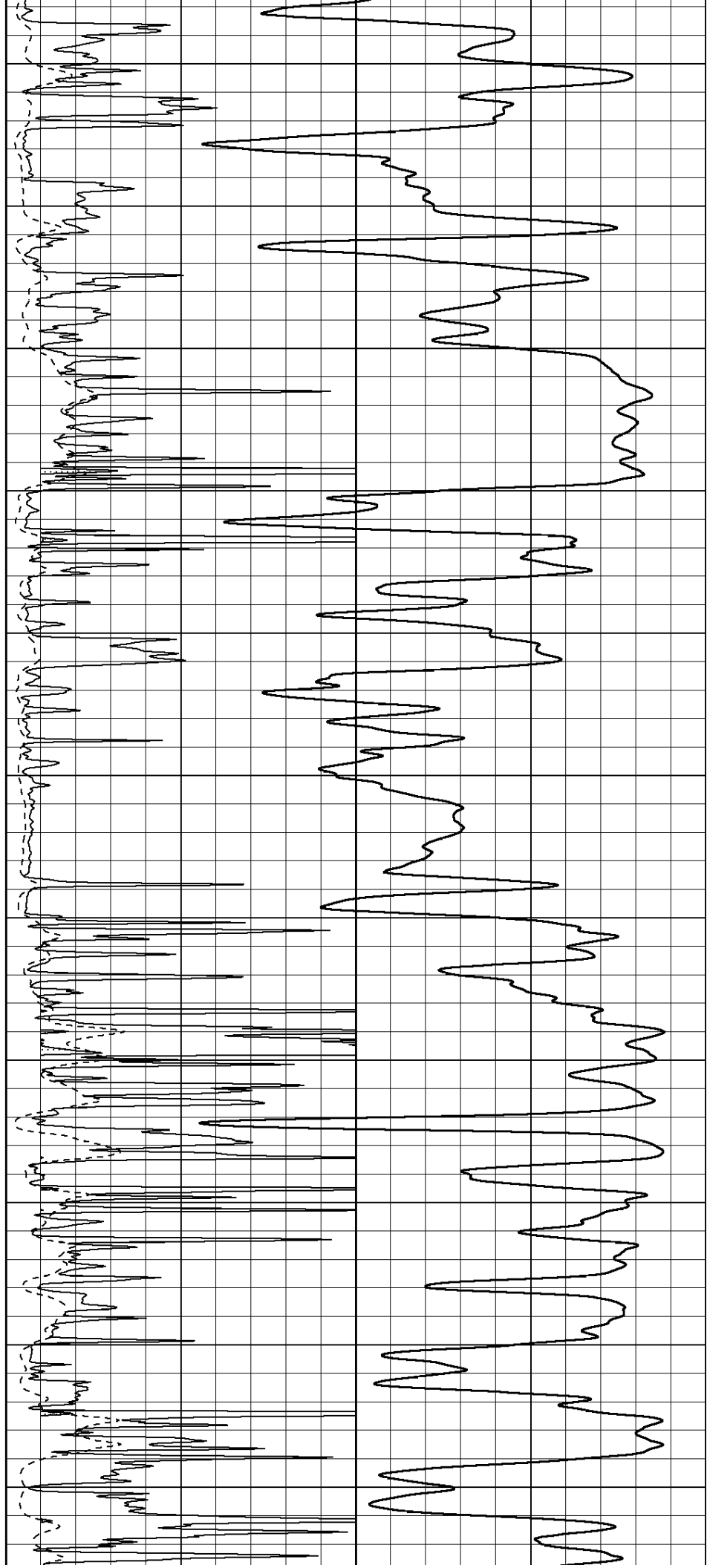
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2300
2350
2400
2450
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2550
2600
2650

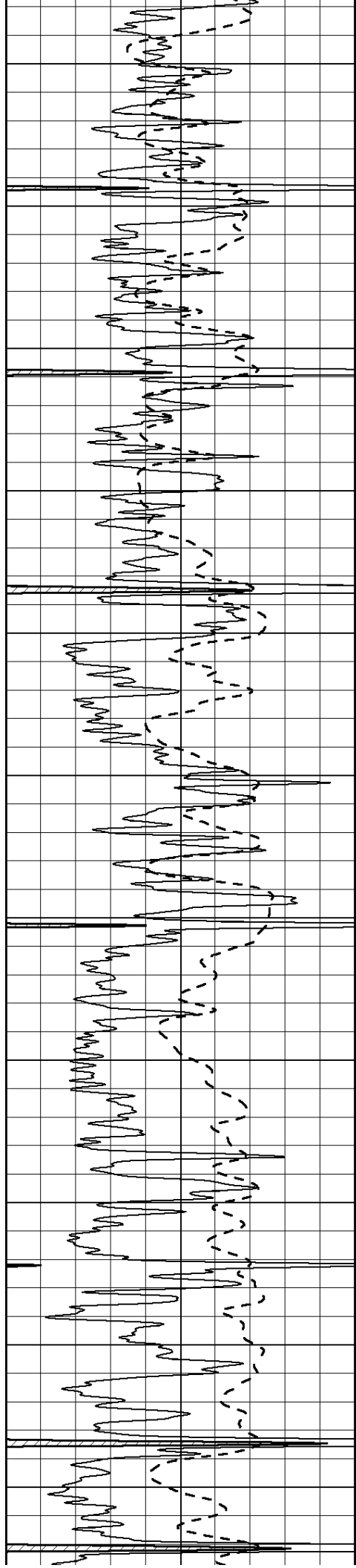




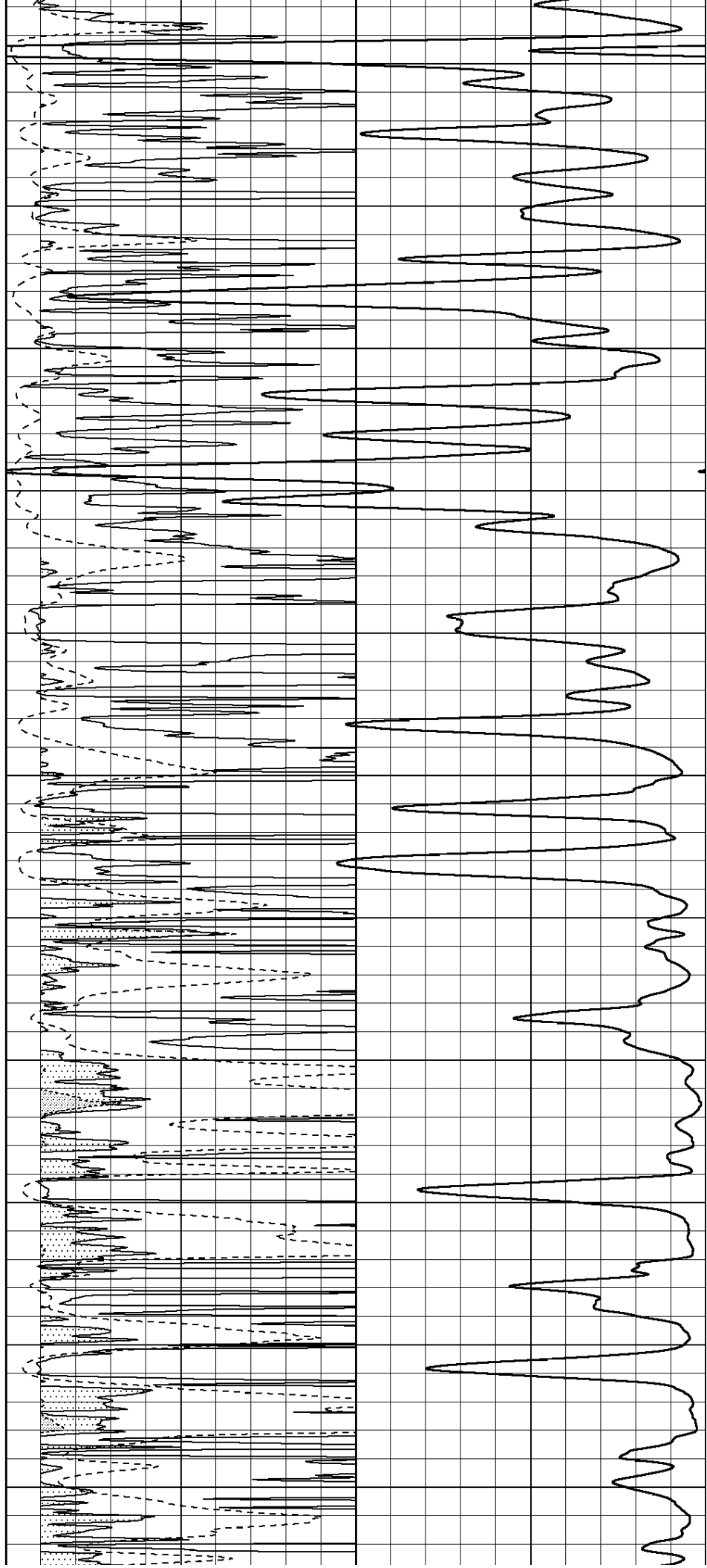


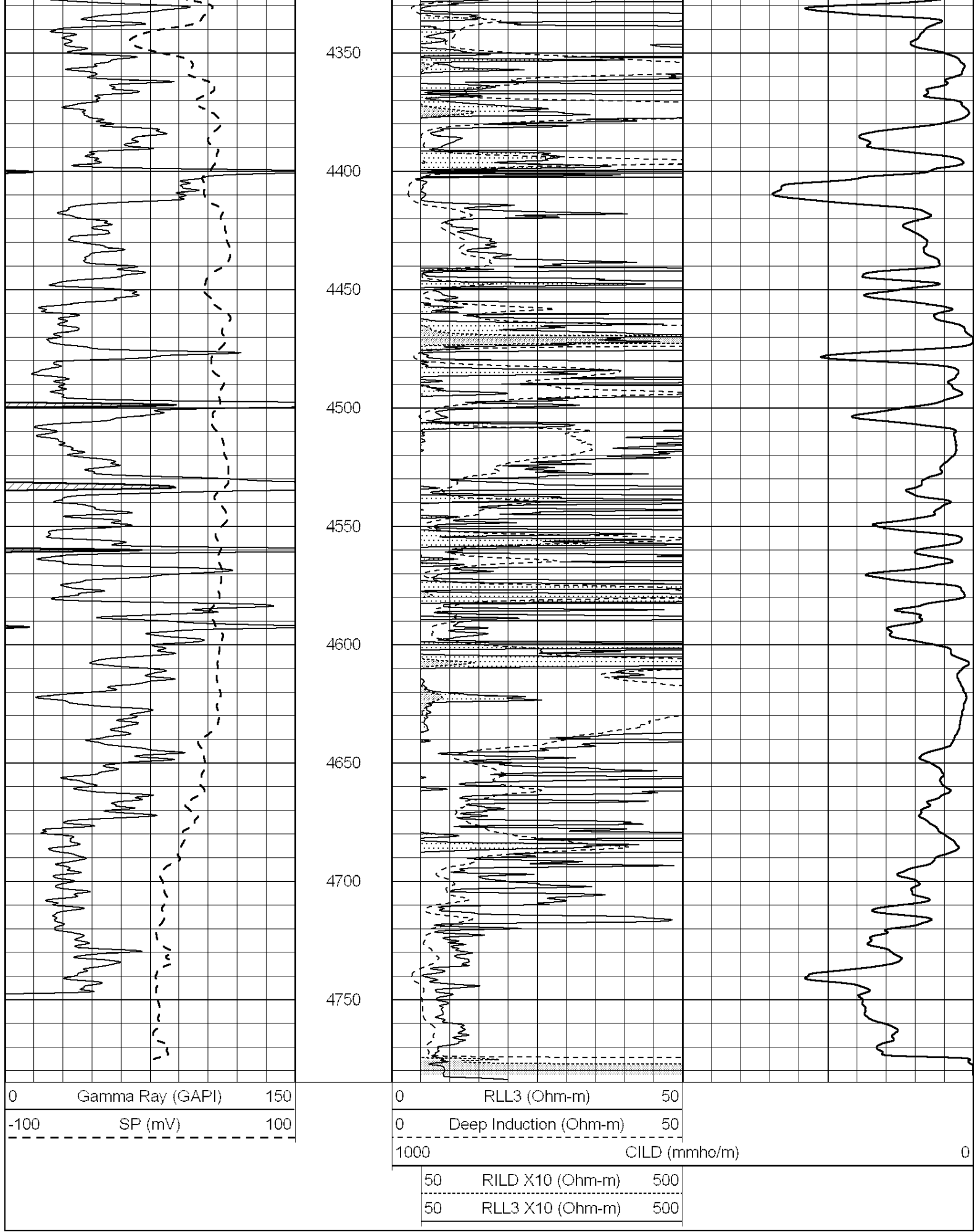
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3350
3400
3450
3500
3550
3600
3650
3700
3750





3800
3850
3900
3950
4000
4050
4100
4150
4200
4250
4300

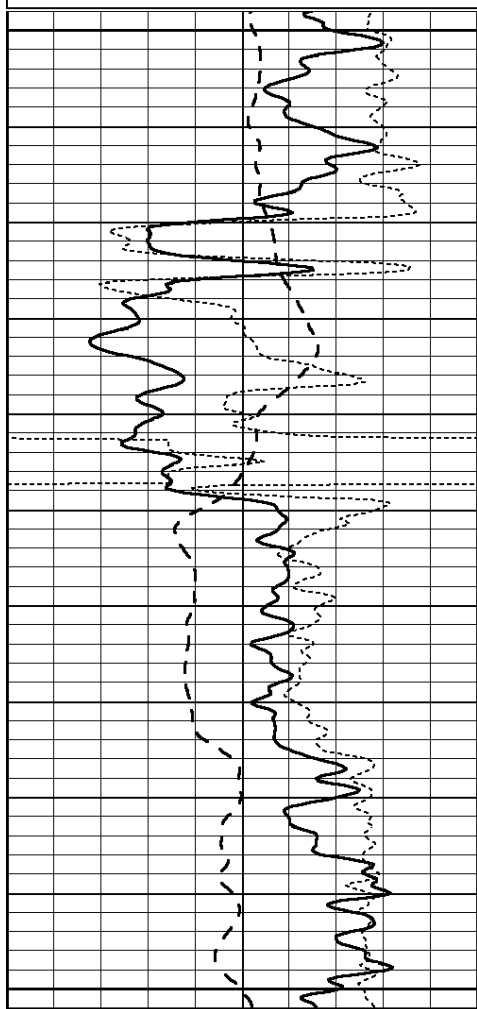




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 Charted by: Depth in Feet scaled 1:240

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

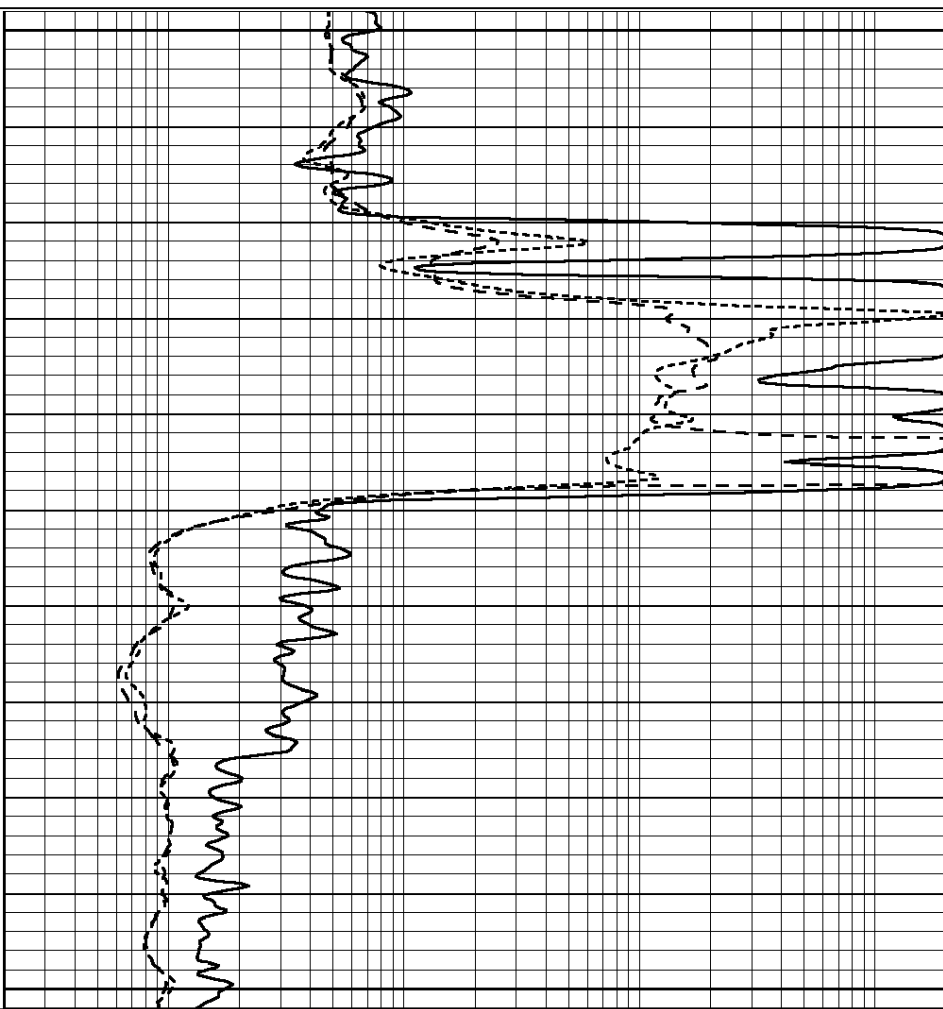
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



2050

2100

2150



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

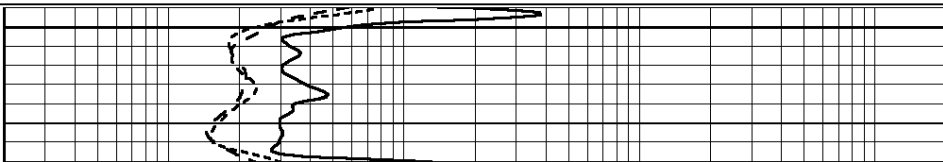
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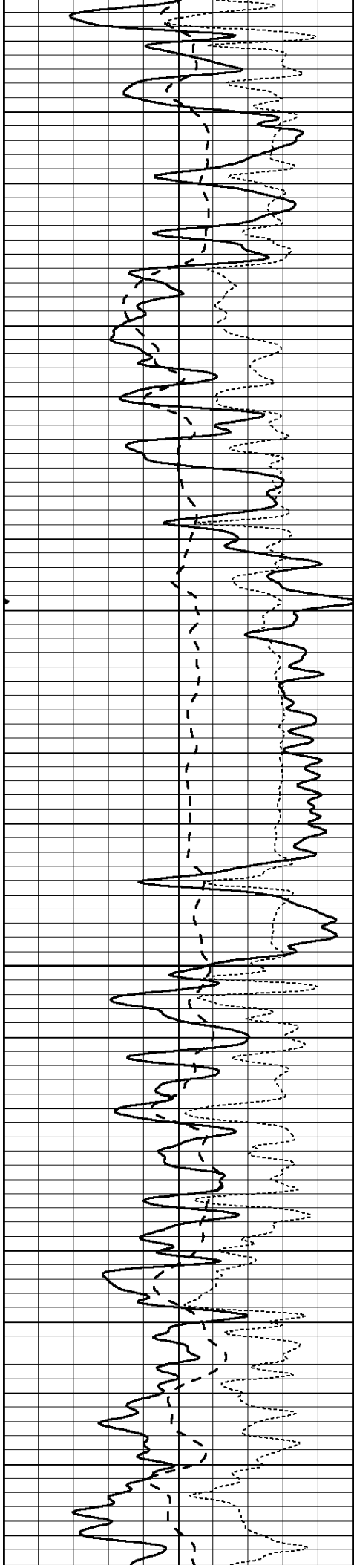
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



3400



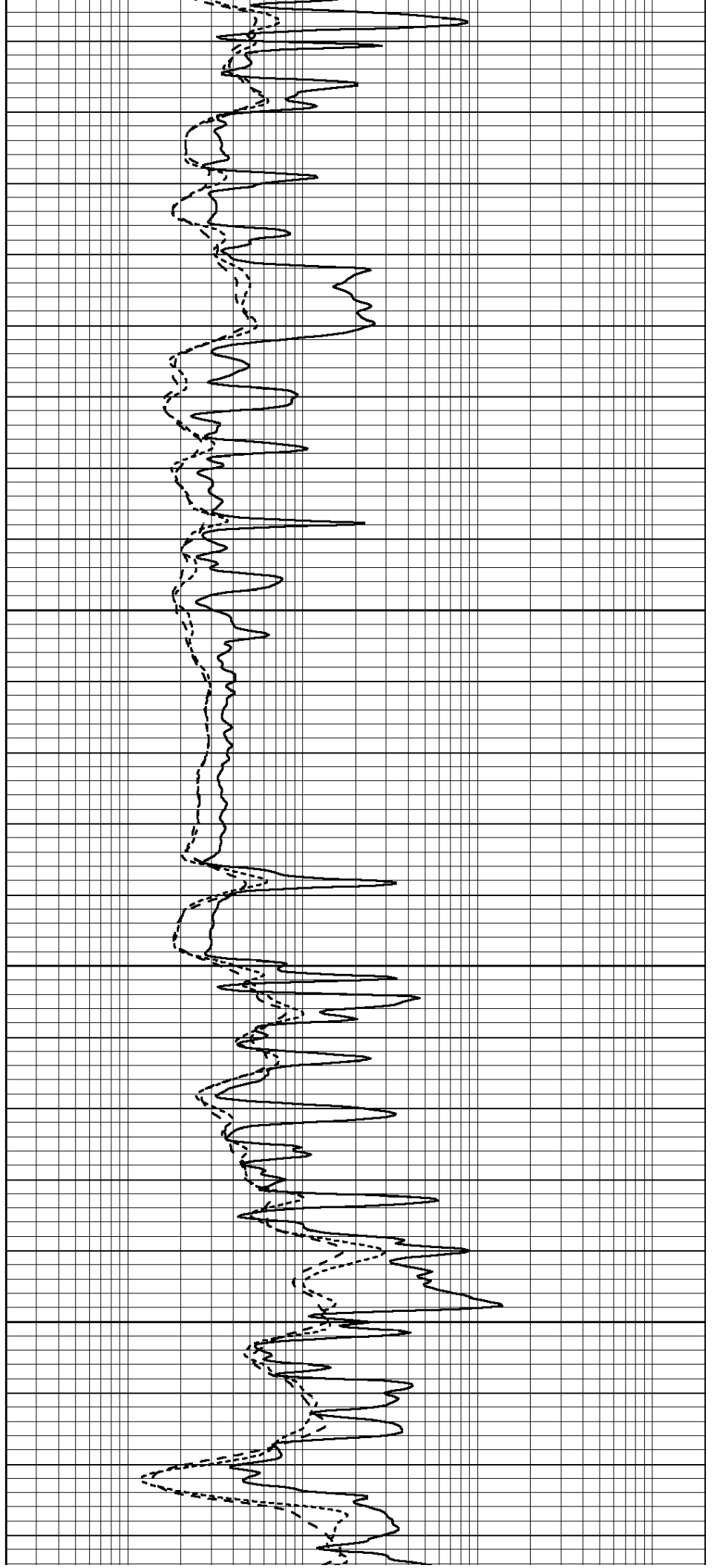


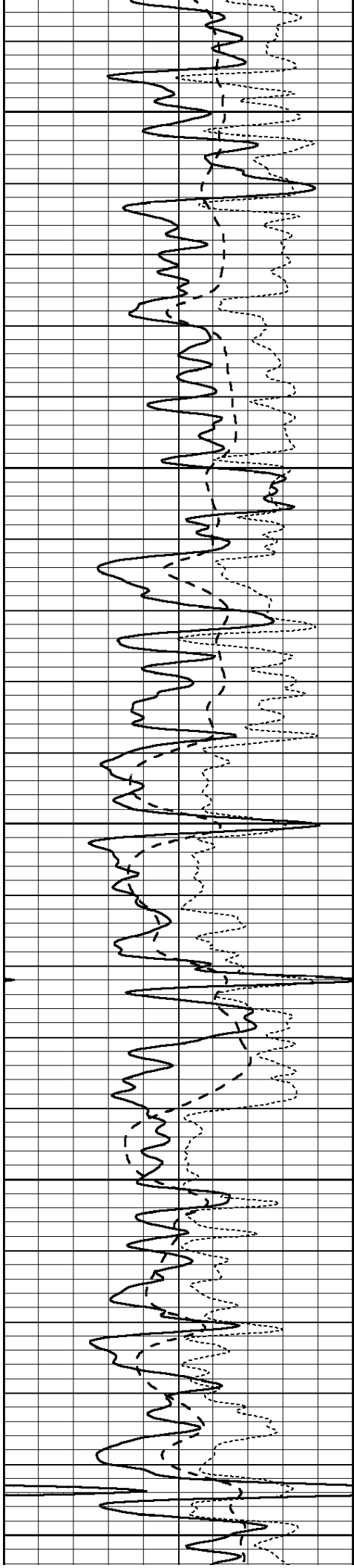
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3500

3550

3600





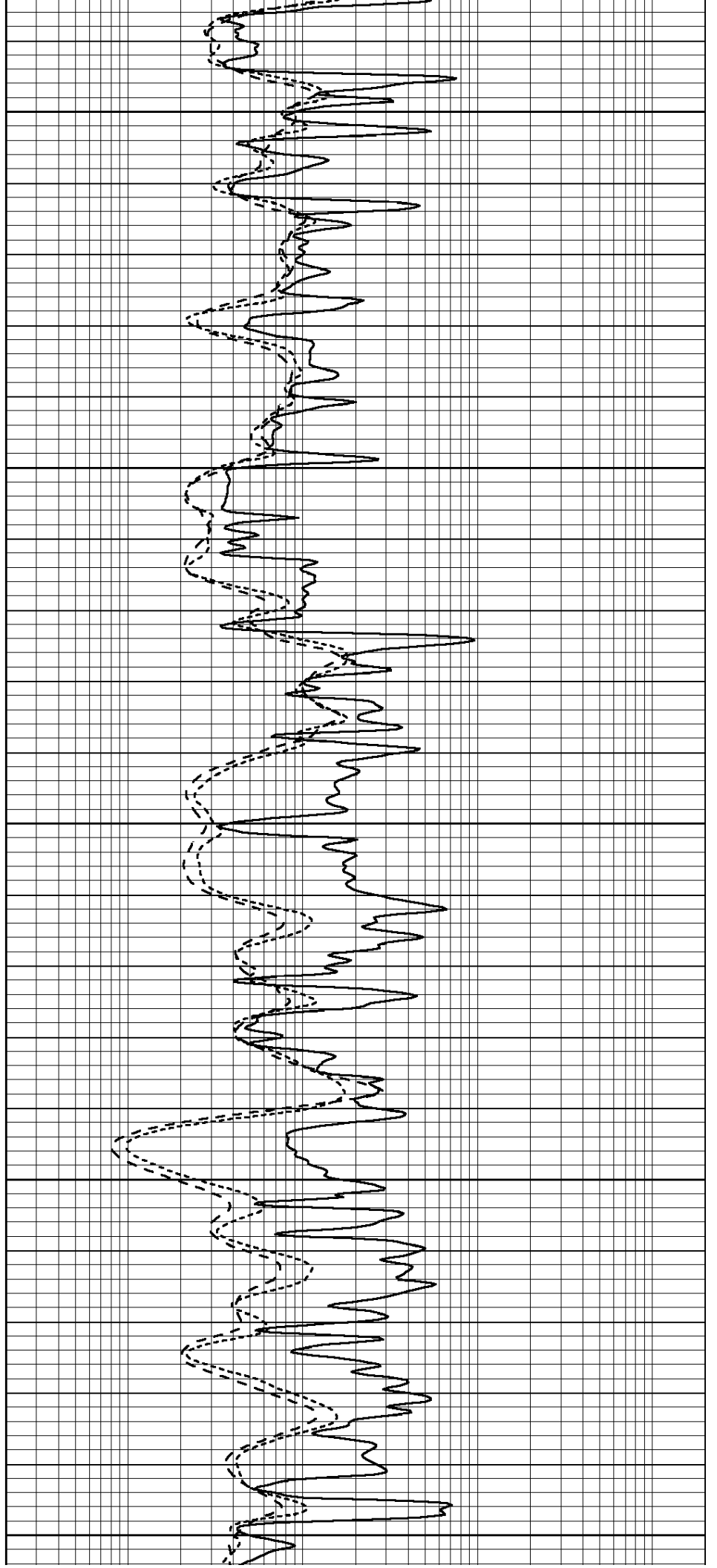
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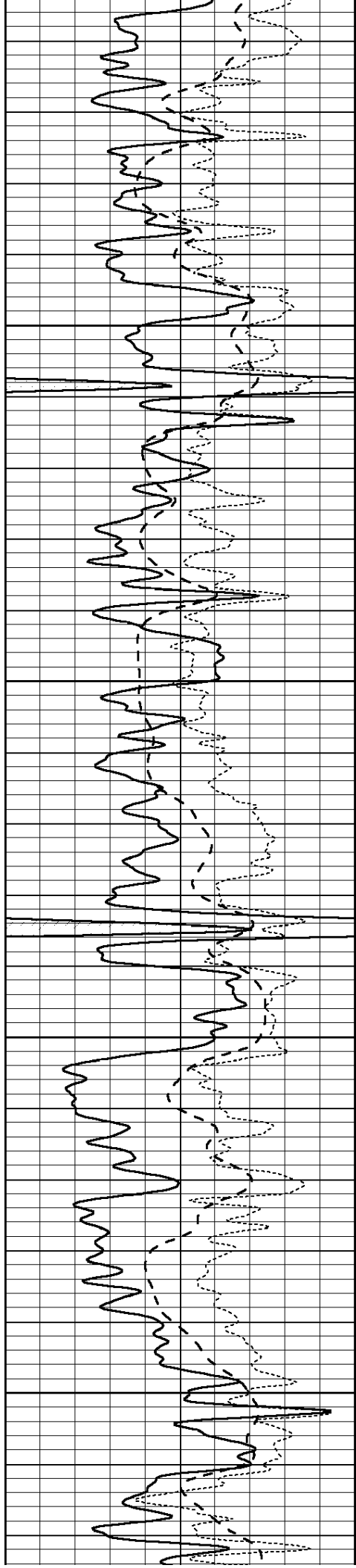
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3750

3800

3850



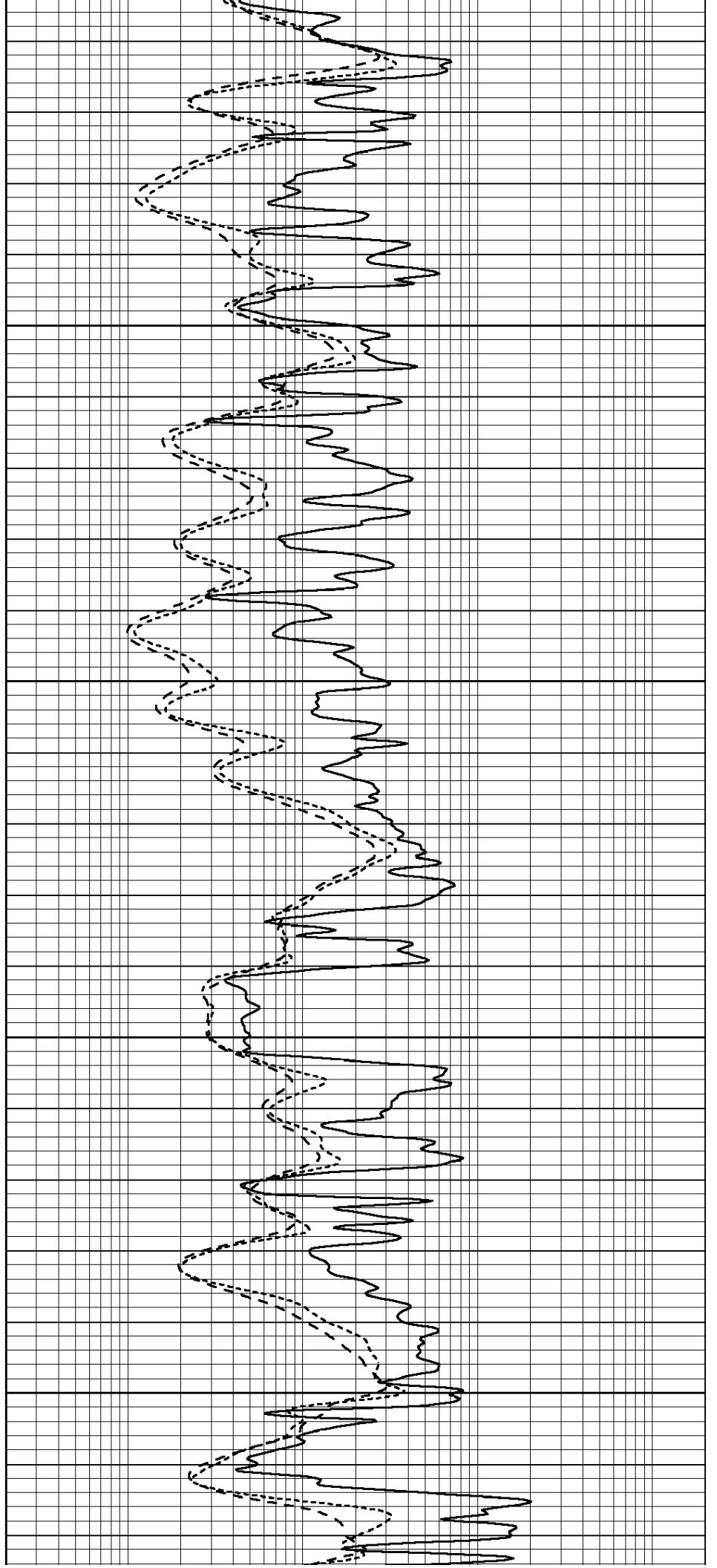


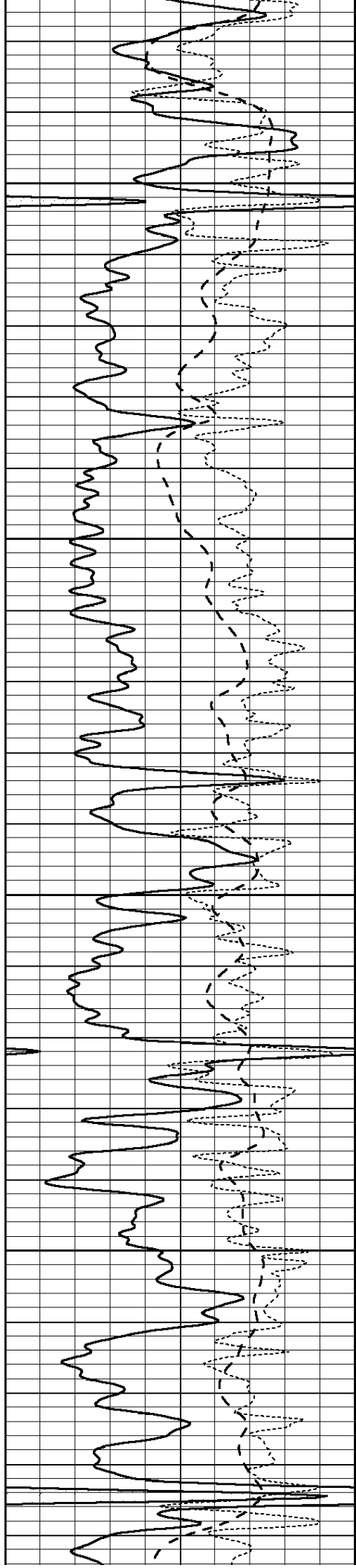
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3950

4000

4050



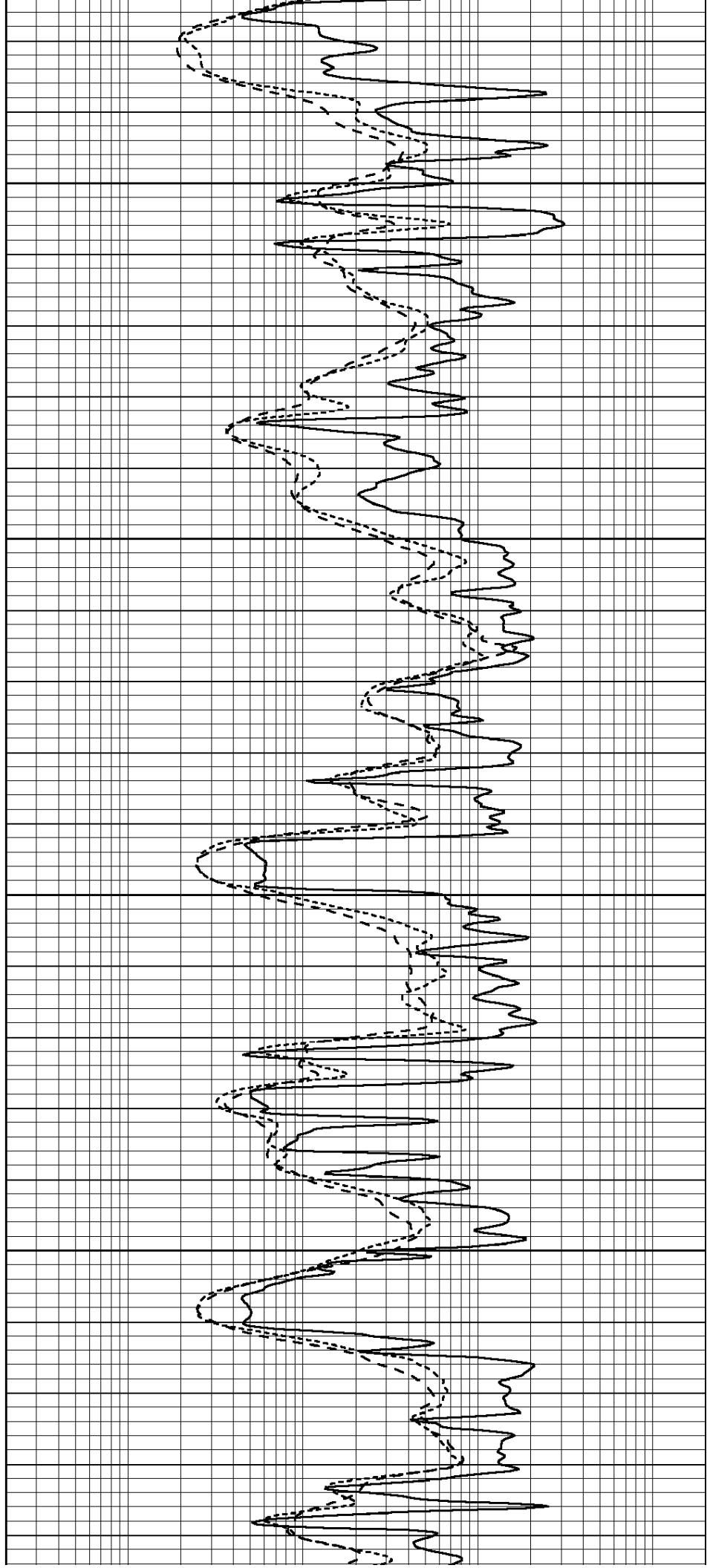


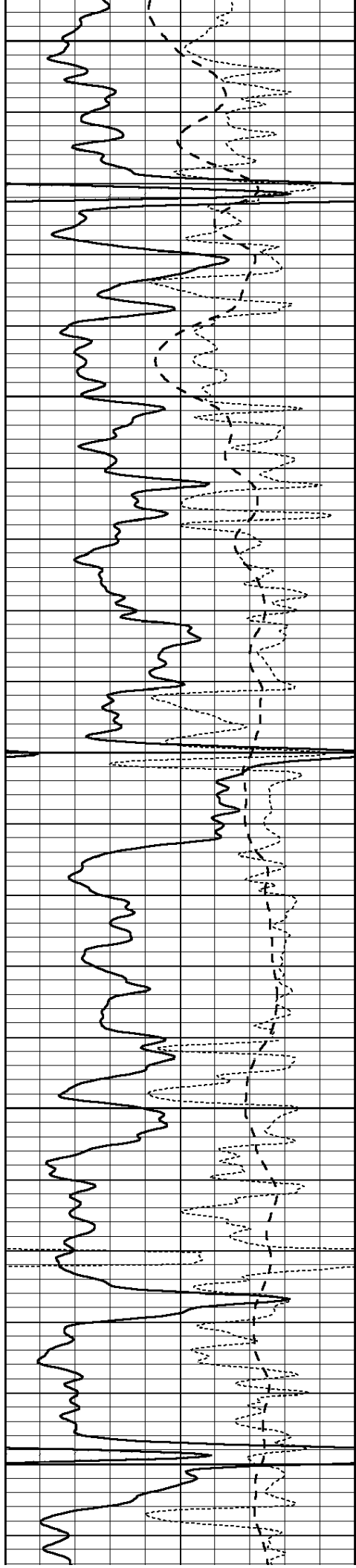
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4150

4200

4250





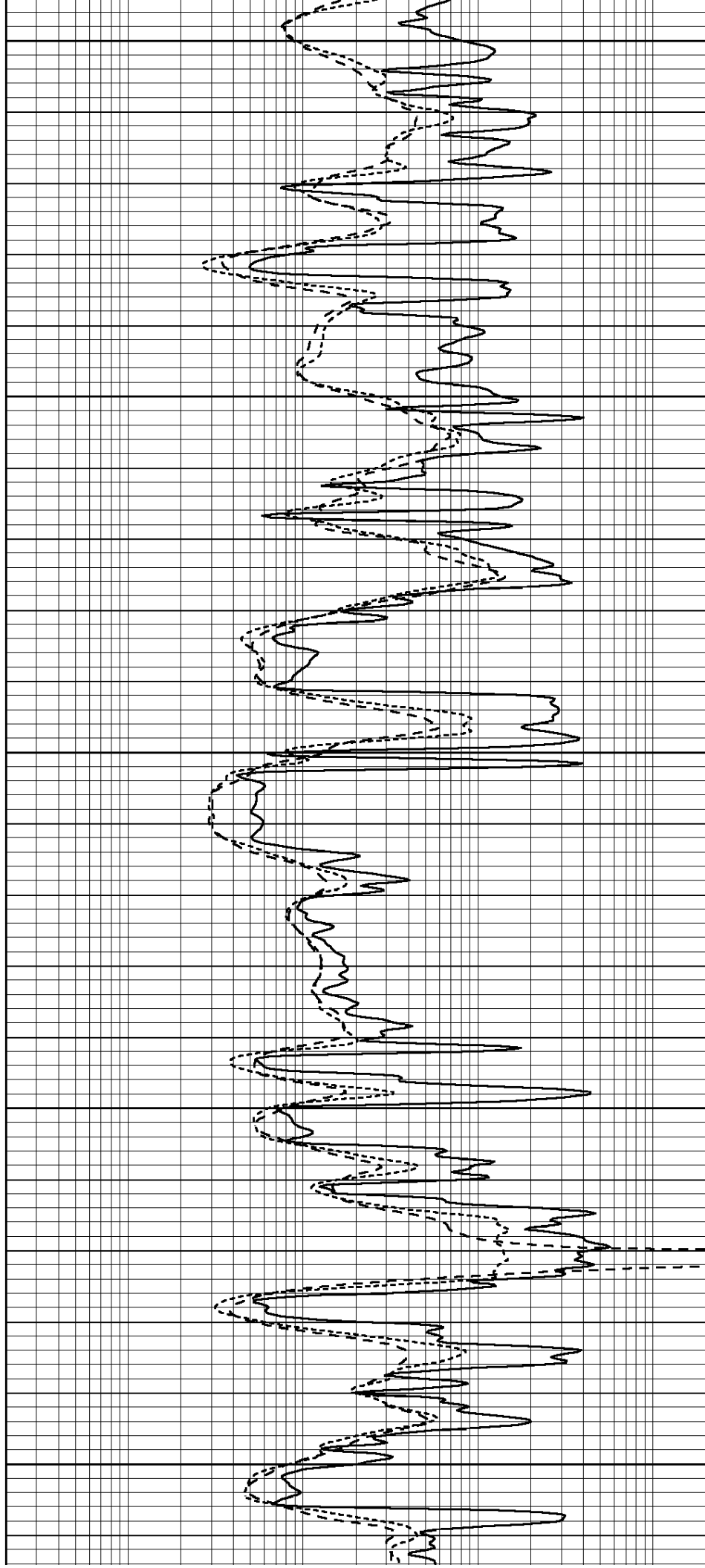
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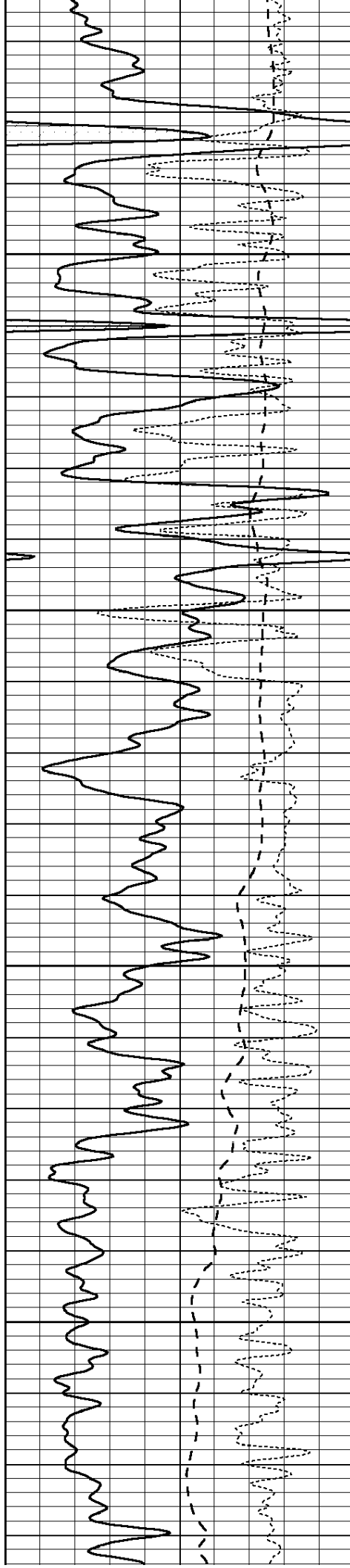
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4400

4450

4500



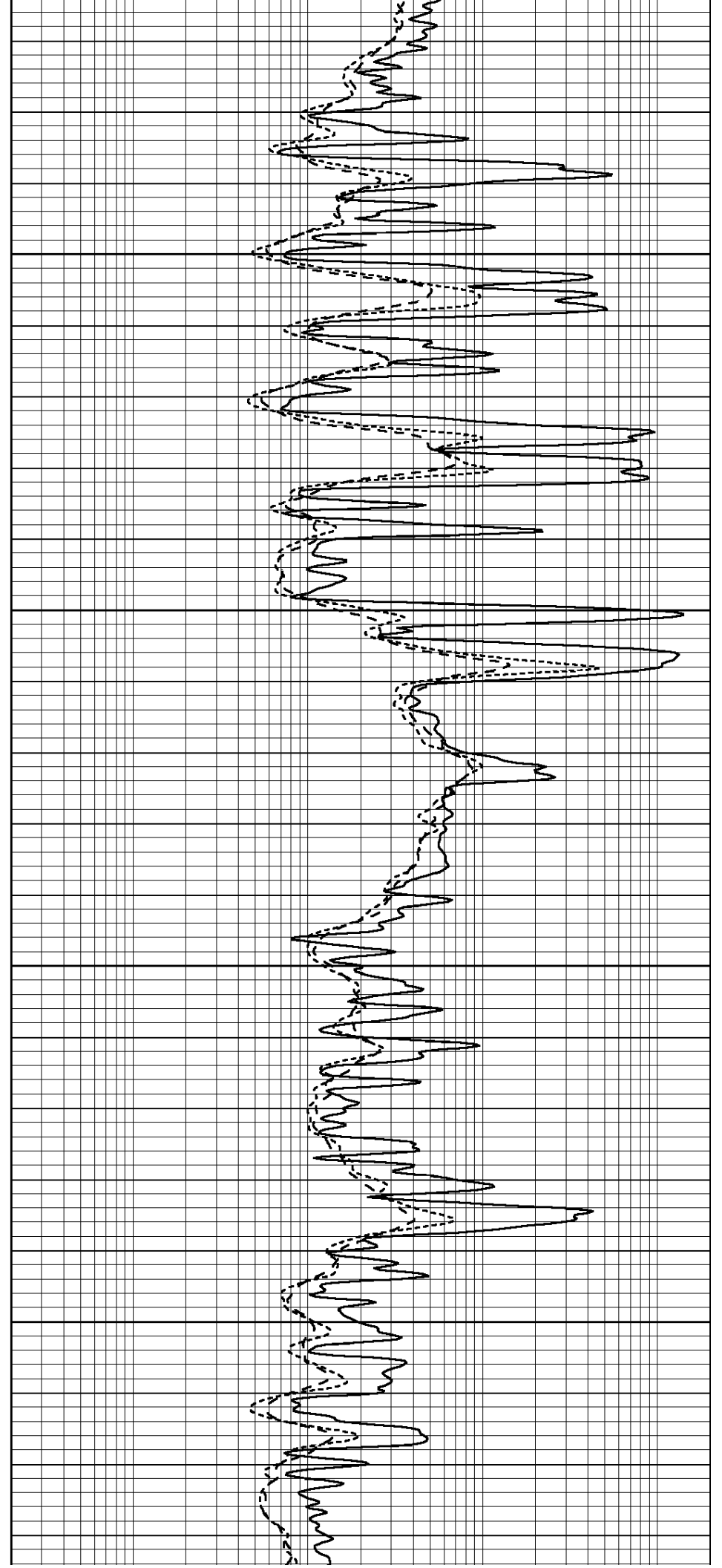


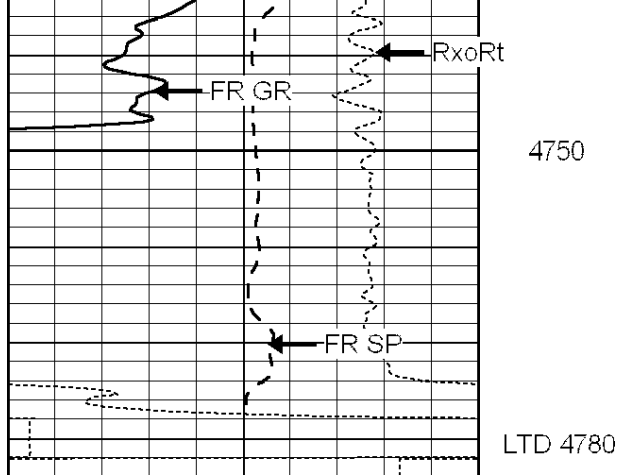
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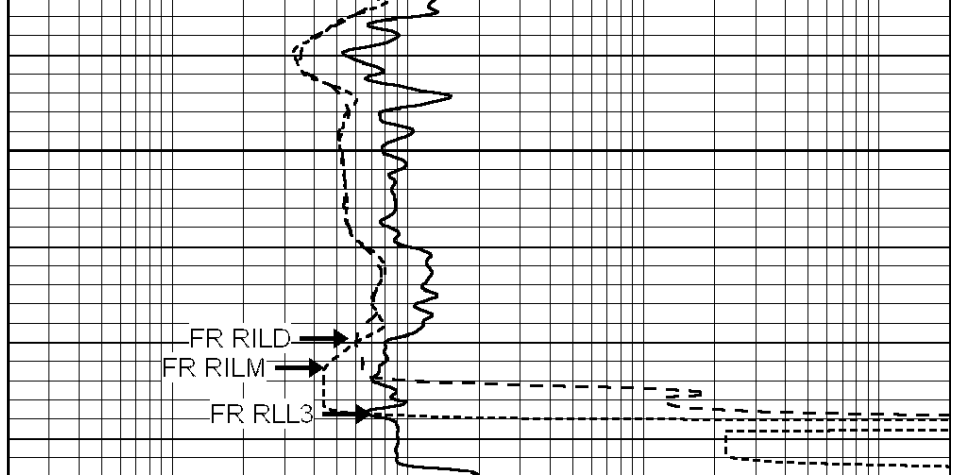
4650

4700





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

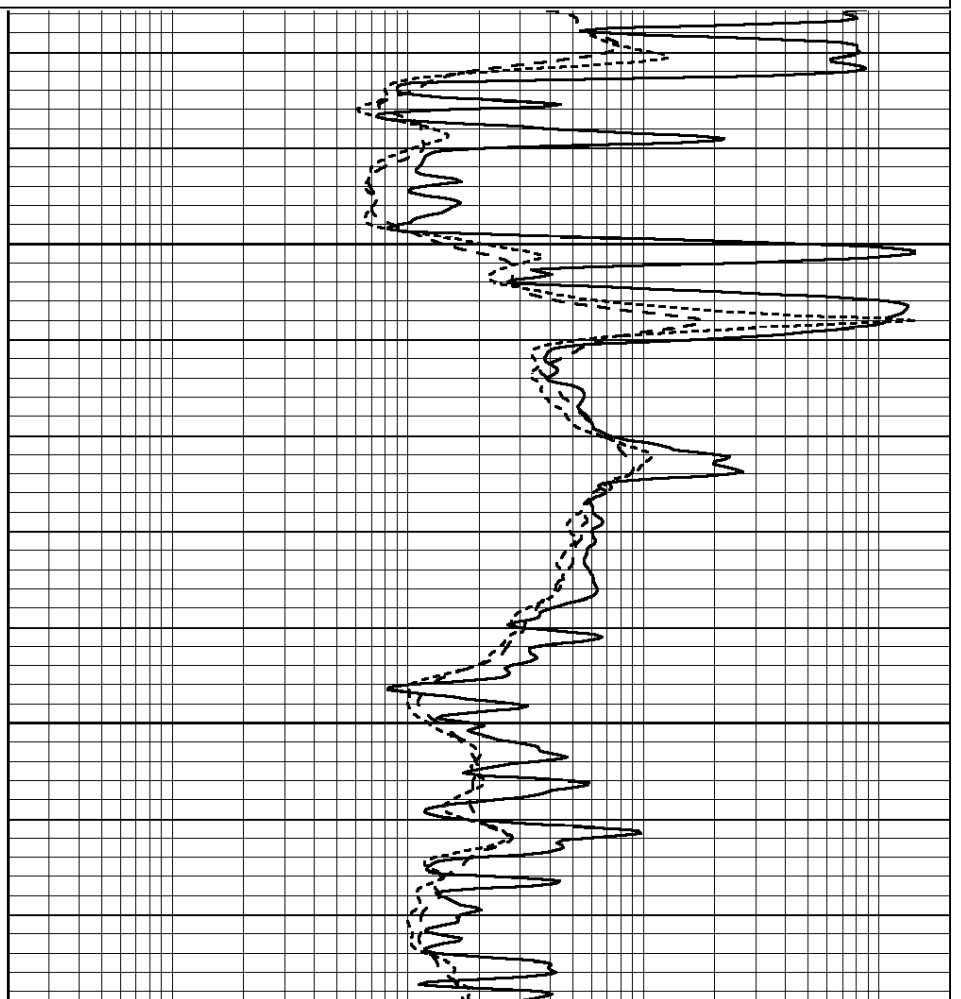
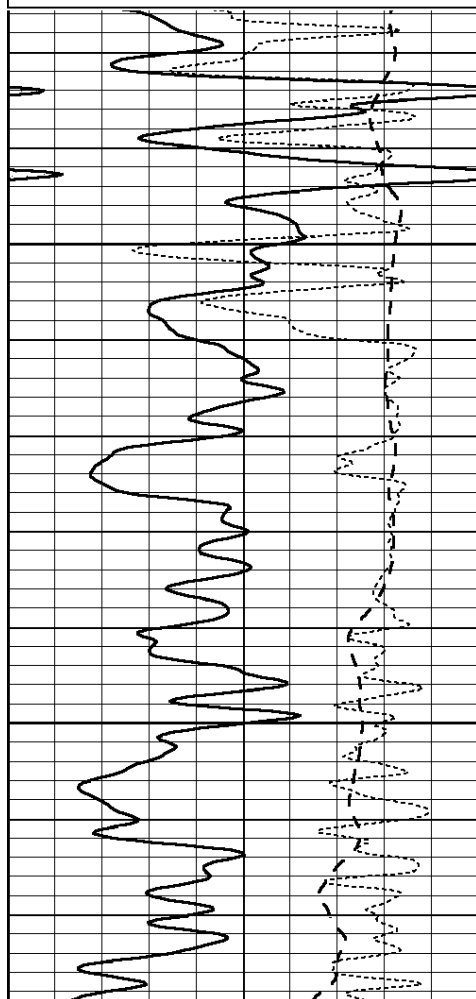


0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

Database File: 012079ddn.db
 Dataset Pathname: pass2.2
 Presentation Format: _dil
 Dataset Creation: Tue Oct 29 10:58:29 2013 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



	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	2.600	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