



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company L.D. DRILLING, INC.
Well 1-2 ANDRESS "B"
Field WILDCAT
County STAFFORD State KANSAS

Company L.D. DRILLING, INC.
Well 1-2 ANDRESS "B"
Field WILDCAT
County STAFFORD
State KANSAS

Location: API #: 15-185-23787-00-00
SW - SE - NE
2310' FSL & 990' FEL
SEC 2 TWP 21S RGE 13W
Permanent Datum GROUND LEVEL Elevation 1860
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CNL/CDL
MEL
Elevation
K.B. 1865
D.F. 1863
G.L. 1860

Date	02/07/2013
Run Number	ONE
Depth Driller	3630
Depth Logger	3635
Bottom Logged Interval	3633
Top Log Interval	00
Casing Driller	384
Casing Logger	386
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.5 / 56
pH / Fluid Loss	8.5 / 8.8
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.65 @ 76F
Rmf @ Meas. Temp	.52 @ 76F
Rmc @ Meas. Temp	.78 @ 76F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.43 @ 113F
Time Circulation Stopped	1.5 HOURS
Time Logger on Bottom	7:30 A.M
Maximum Recorded Temperature	113F
Equipment Number	860
Location	HAYS, KS.
Recorded By	MIKE GARRISON
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

NABORS COMPLETION & PRODUCTION SERVICES

785-628-6395

THANK YOU FOR YOUR BUSINESS

DIRECTIONS: GREAT BEND, KS-SOUTH TO BARTON/STAFFORD COUNTY LINE, 2 1/2 EAST, 1/2 SOUTH, WEST INTO

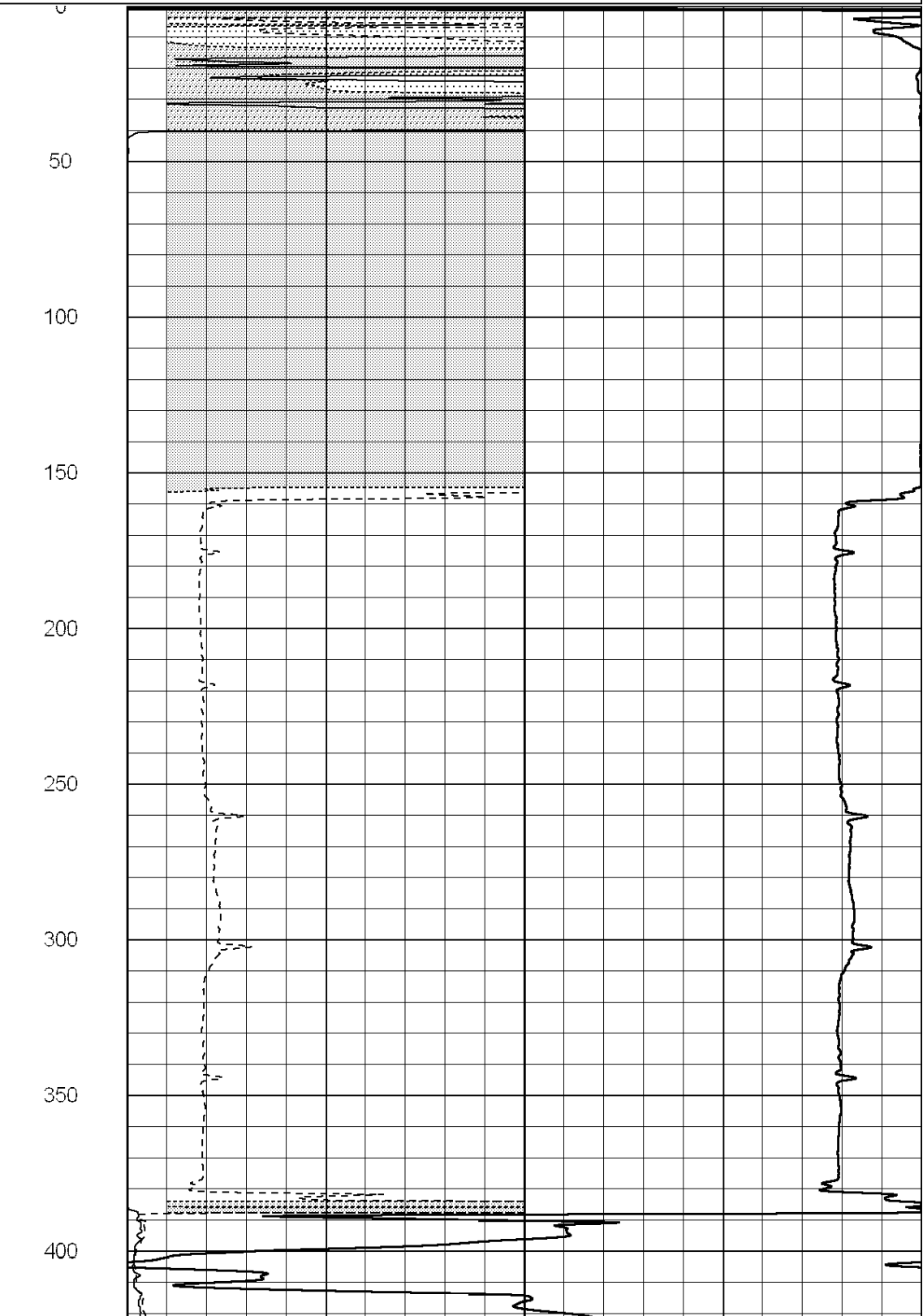
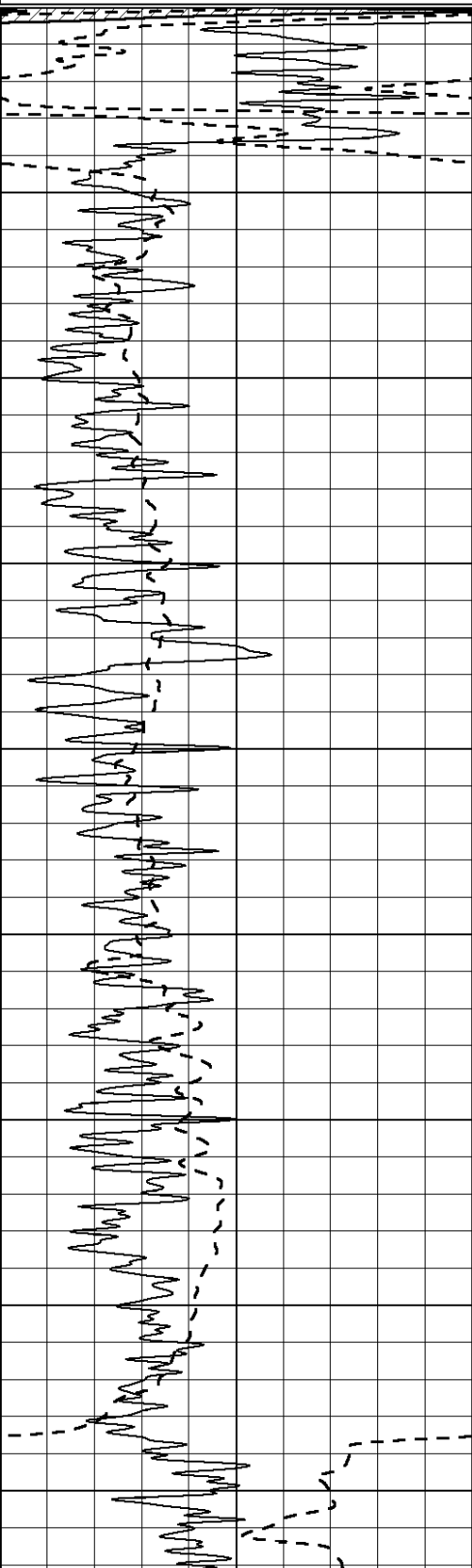


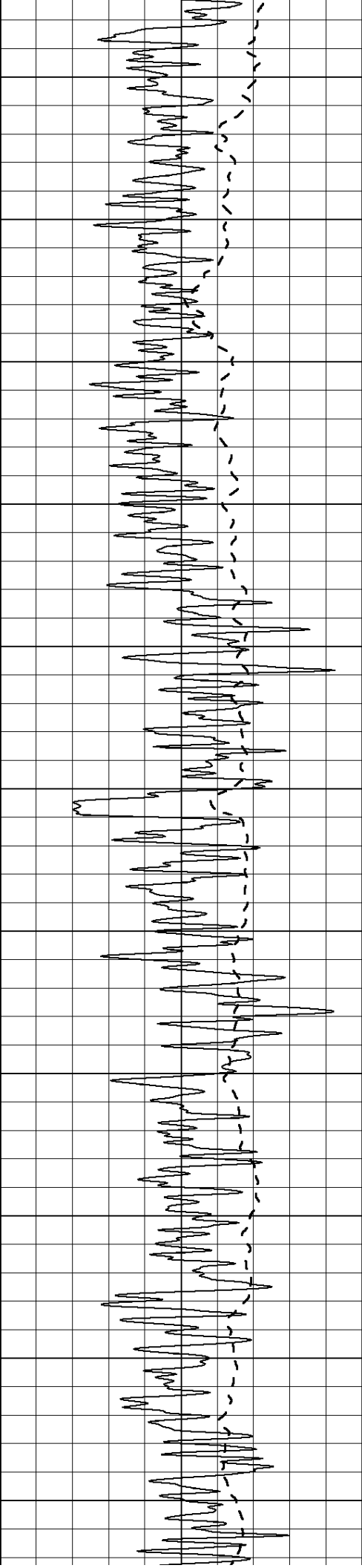
**COMPLETION
& PRODUCTION**

MAIN SECTION

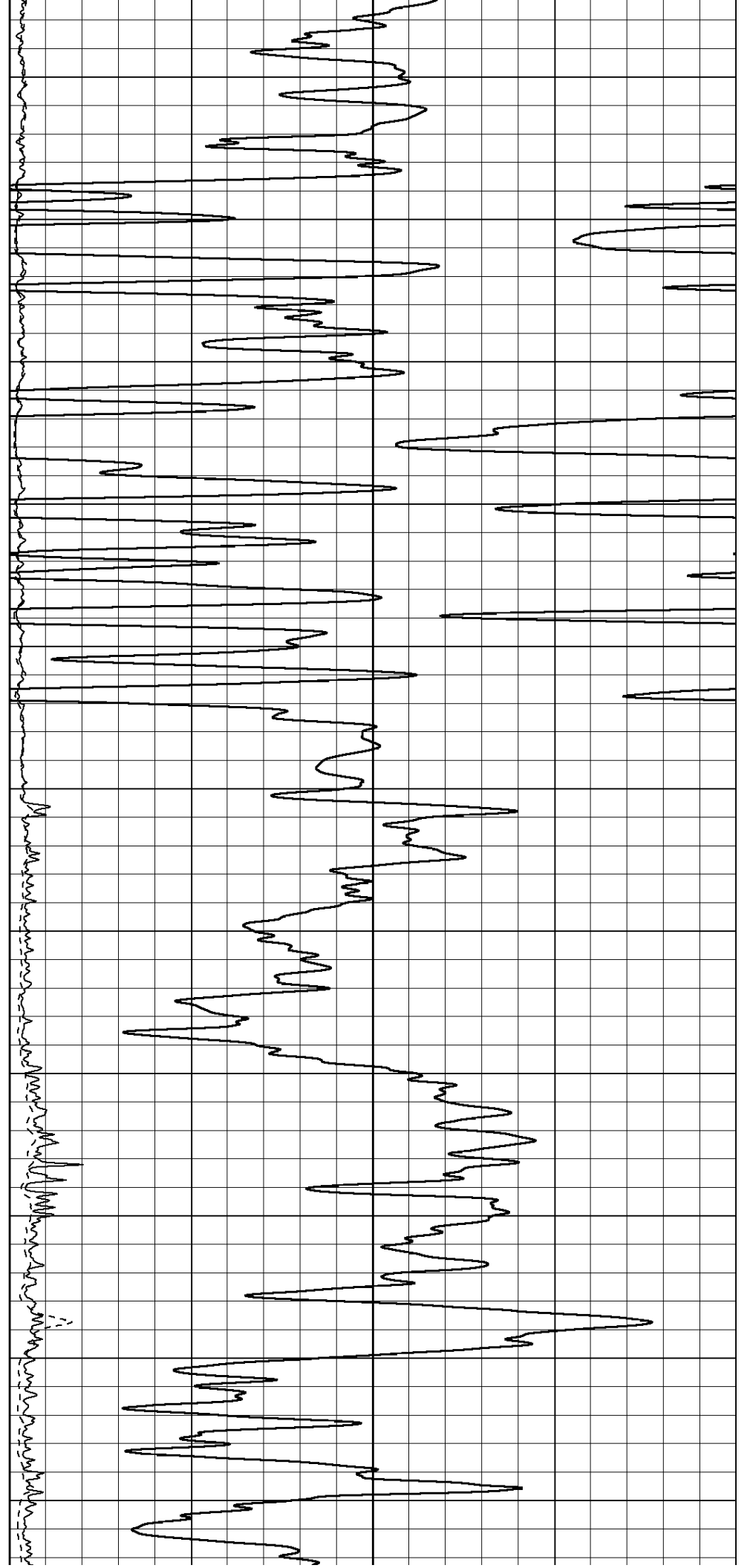
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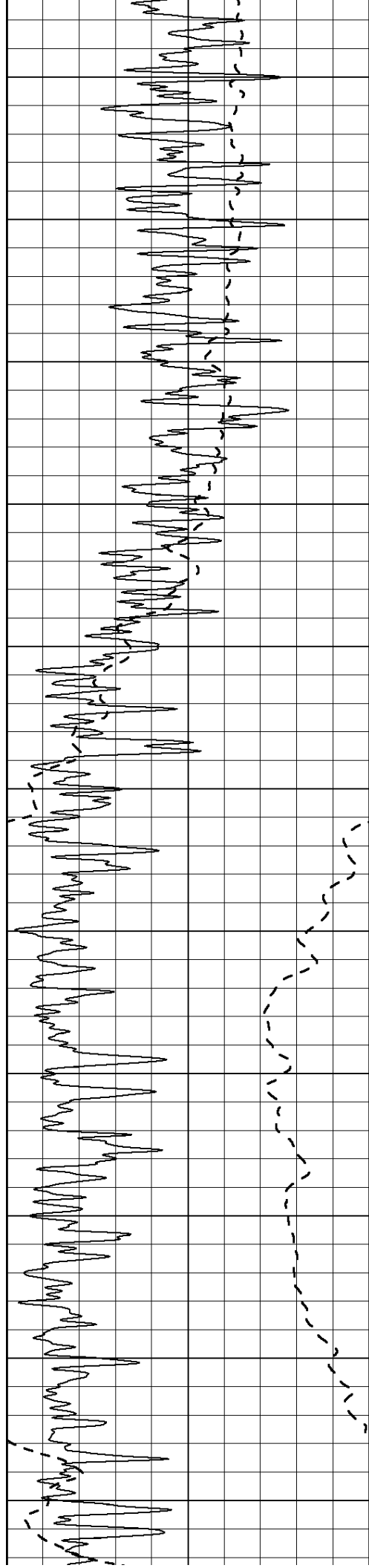
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			50	RLL3 X10 (Ohm-m)	500



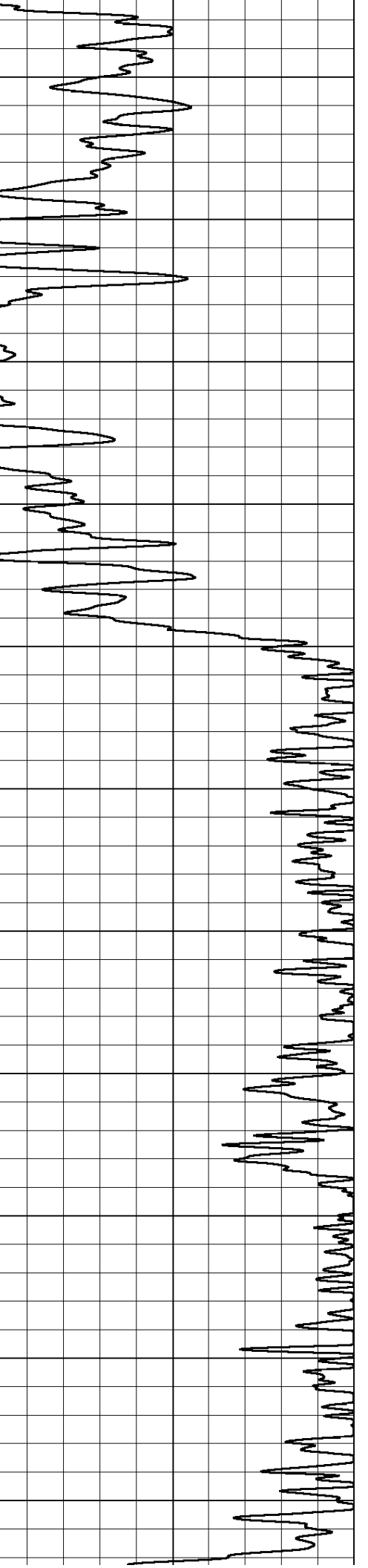
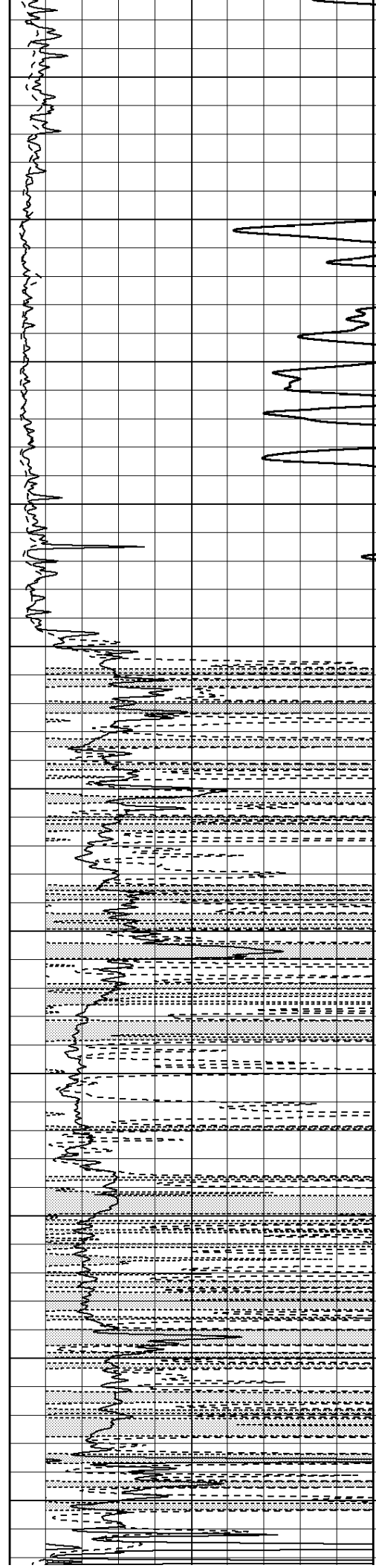


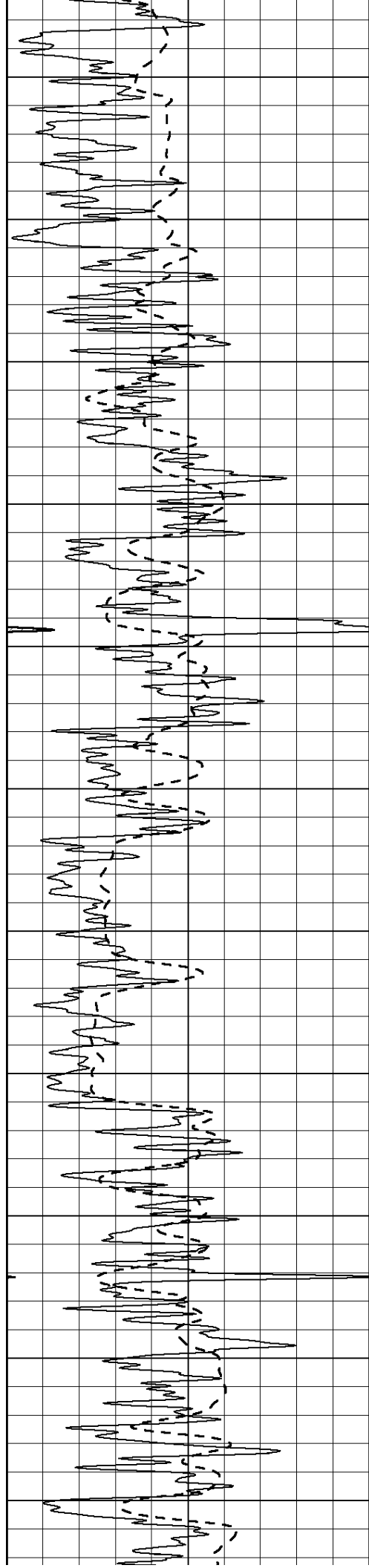
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1500





1550

1600

1650

1700

1750

1800

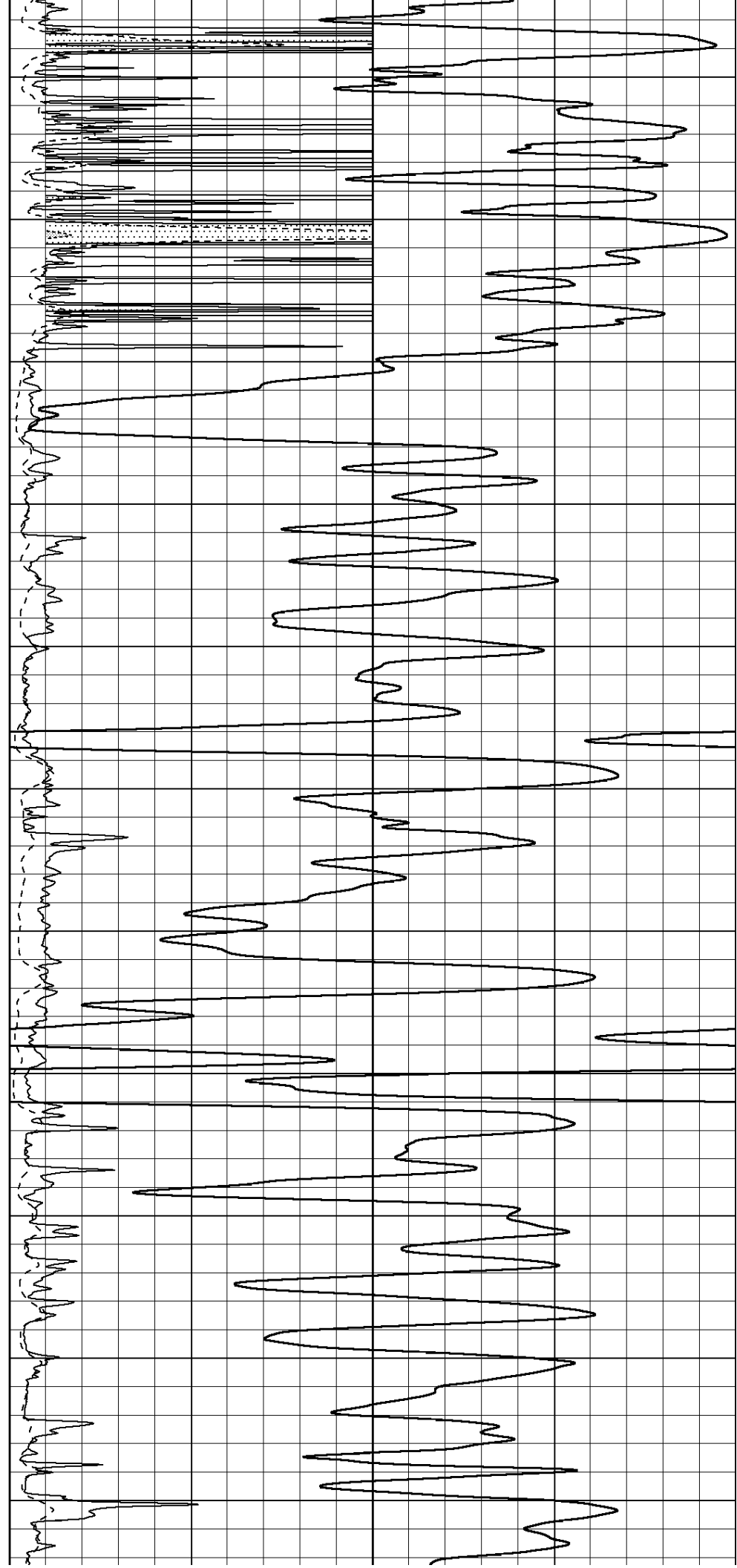
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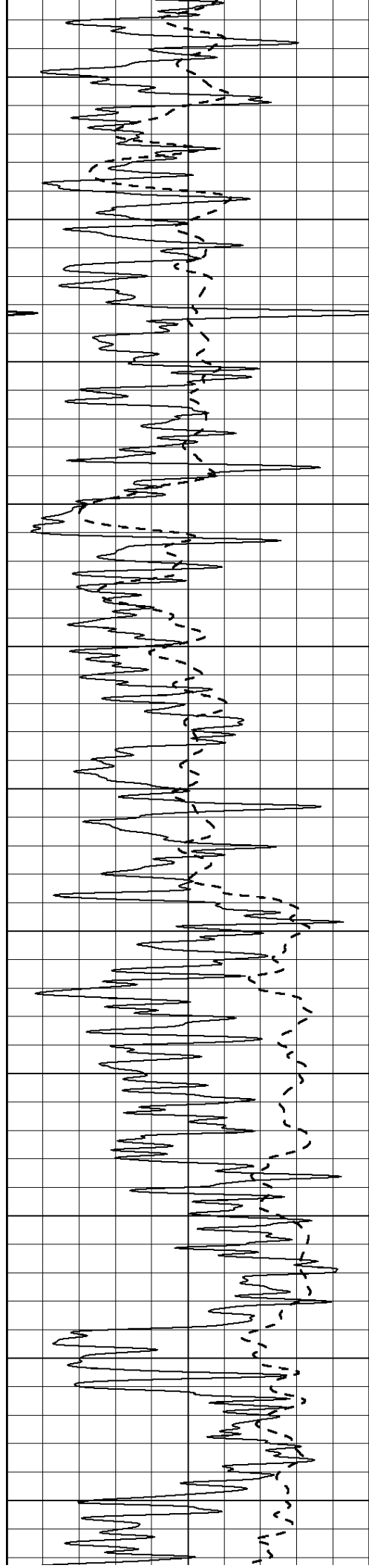
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2050





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2250

2300

2350

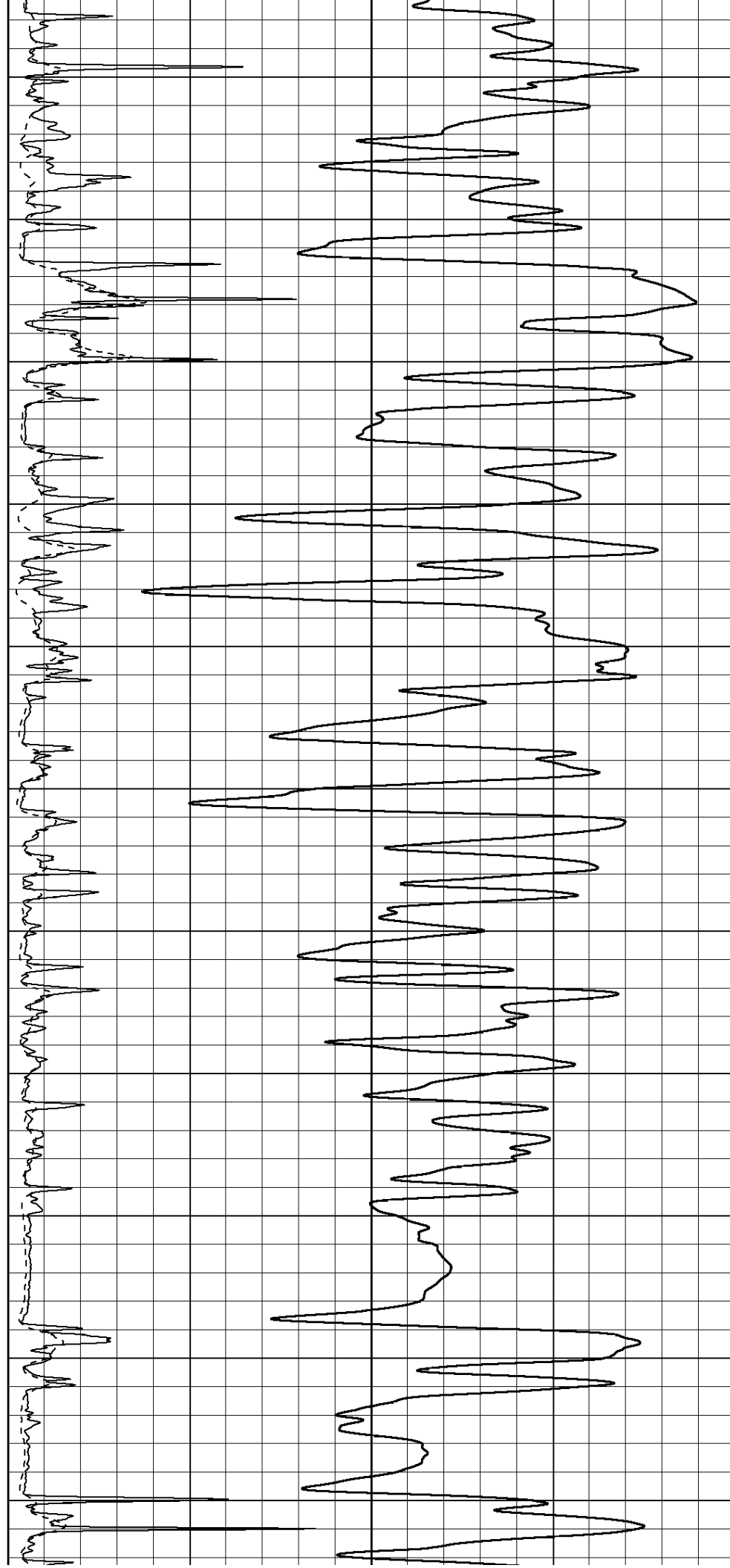
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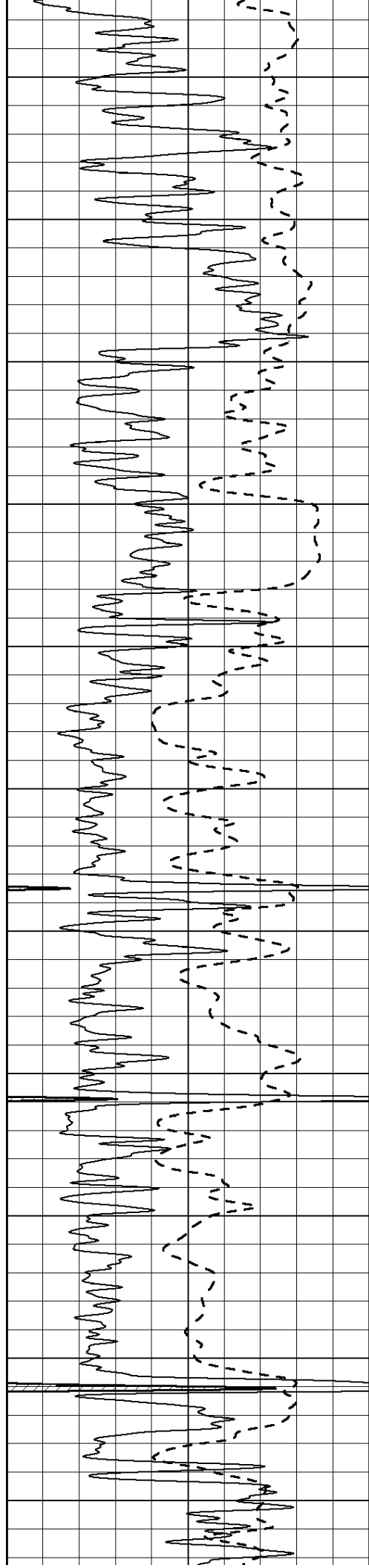
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2550

2600





2650

2700

2750

2800

2850

2900

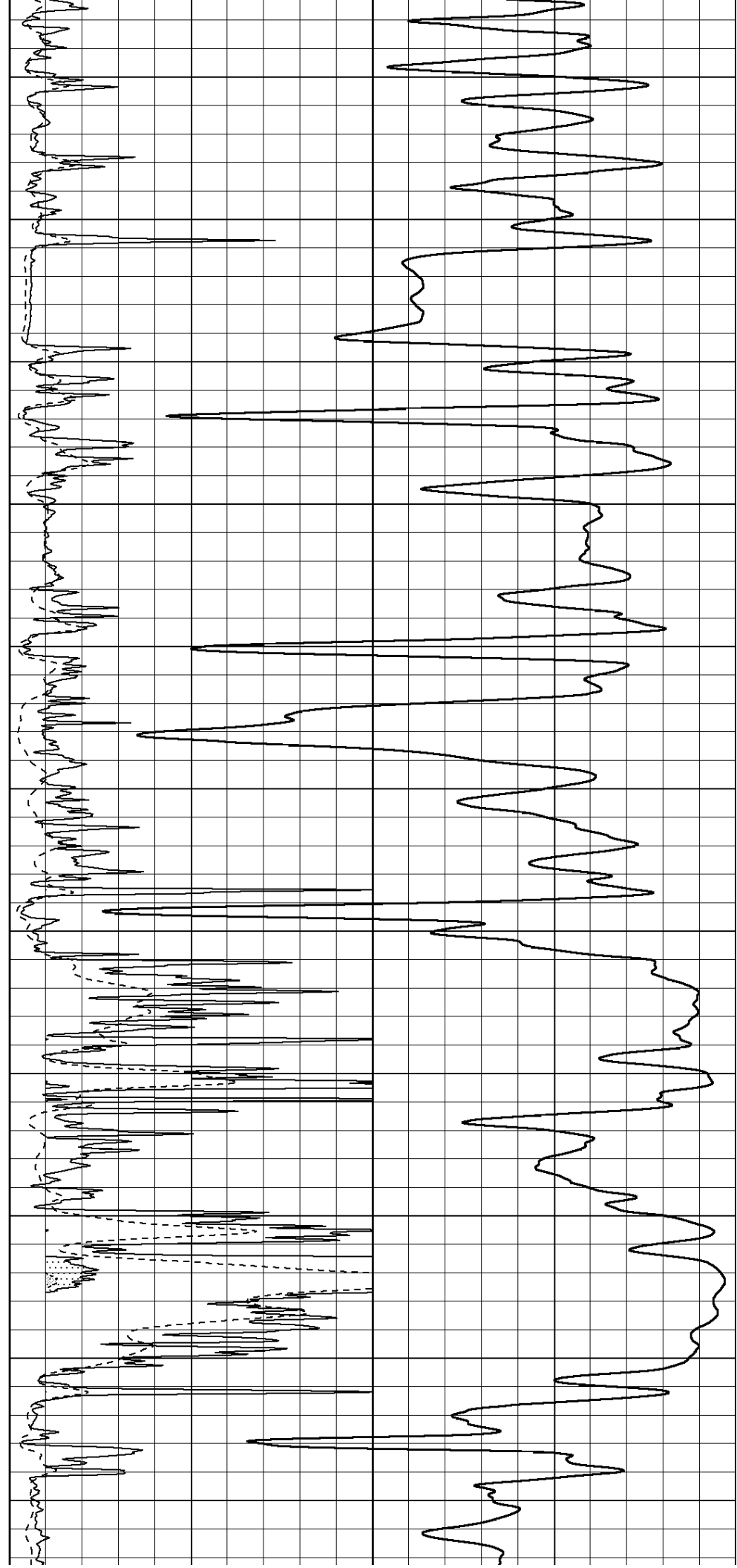
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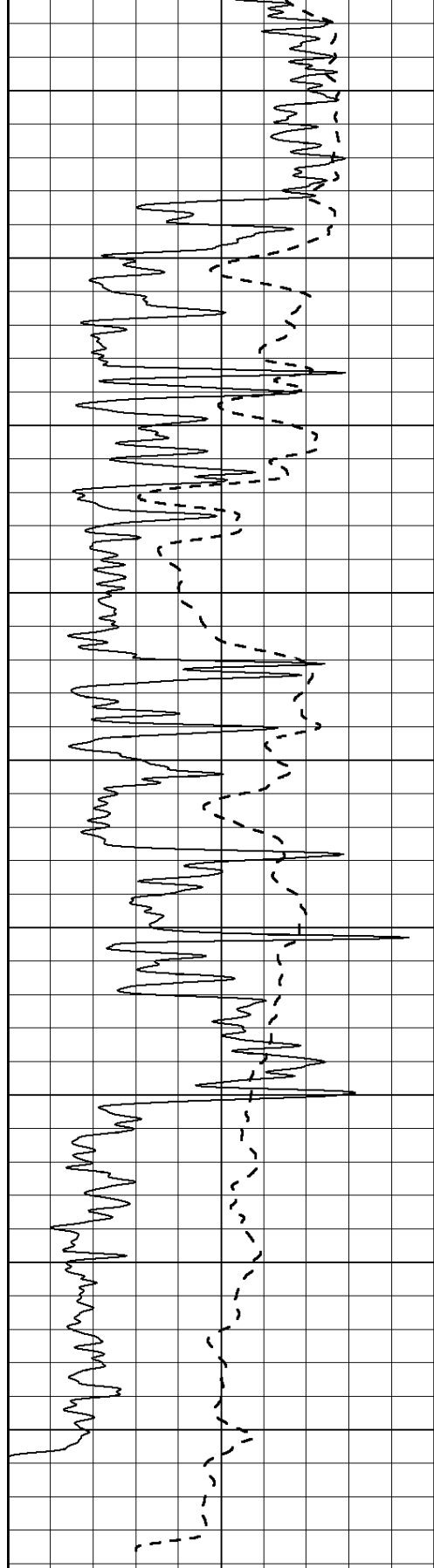
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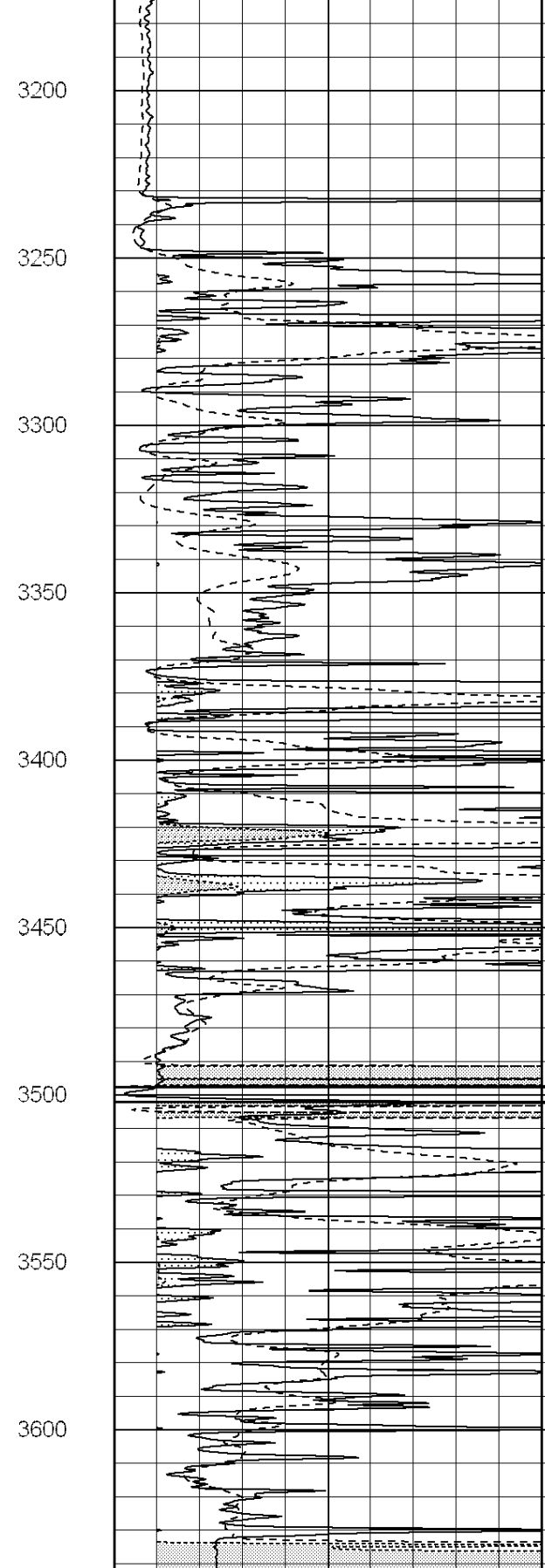
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3150





0 150

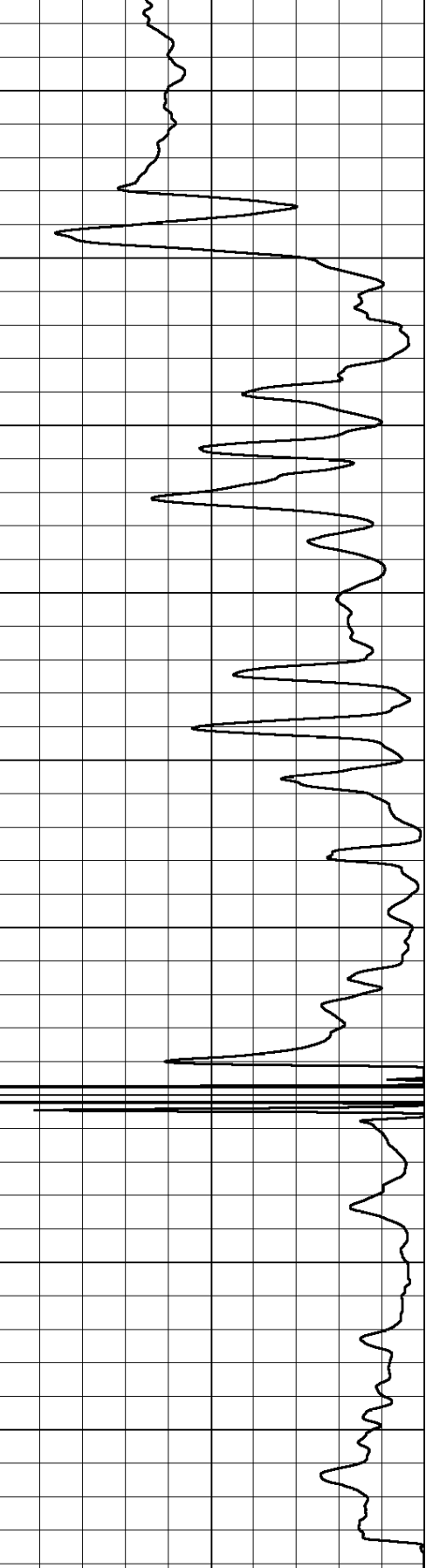


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0 50

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500 500



1000 0

500 500

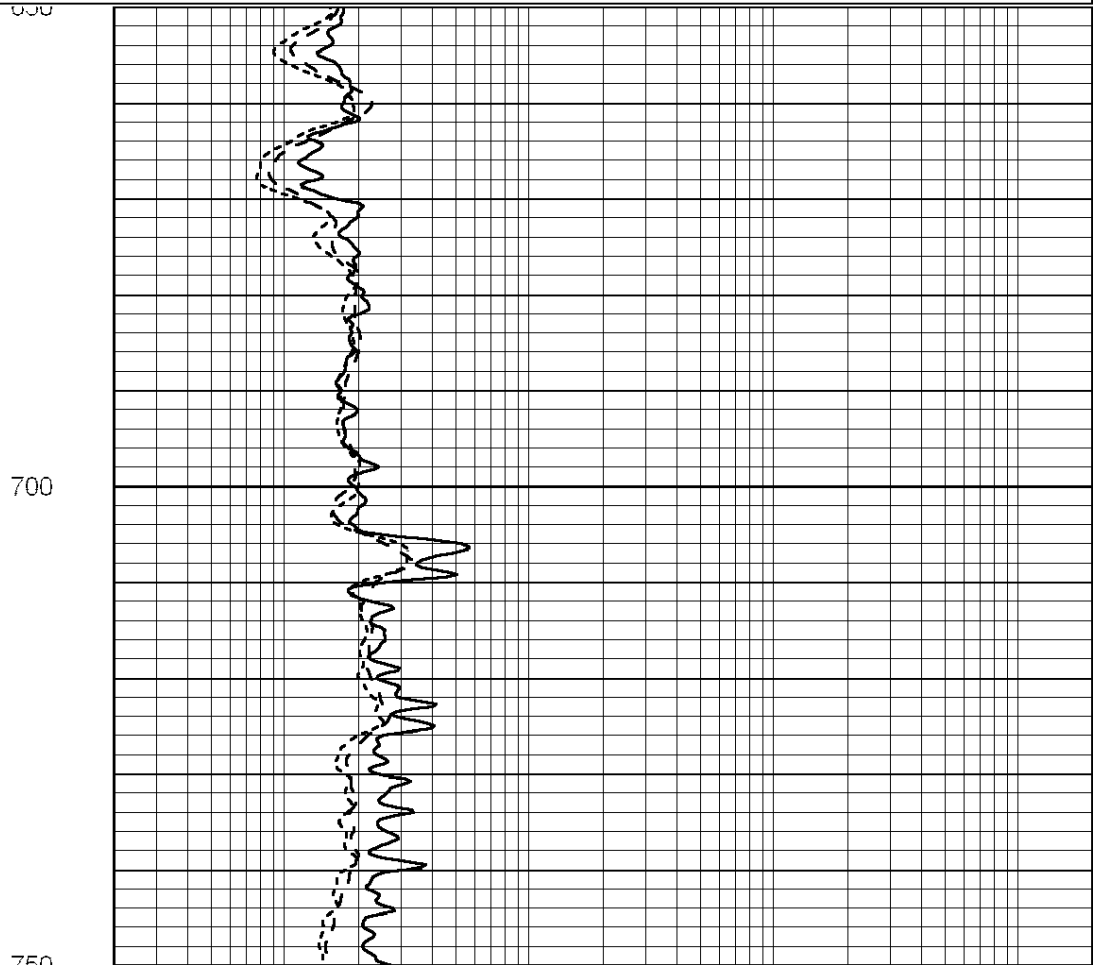
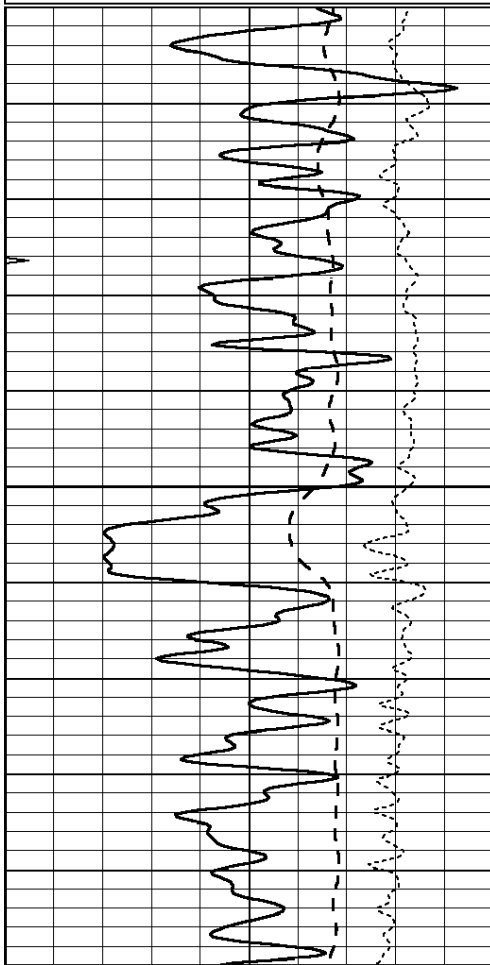
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MAIN SECTION

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 Presentation Format: dil
 Dataset Creation: Thu Feb 07 09:14:16 2013 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	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	RxoRt	50
0	MINMK	20

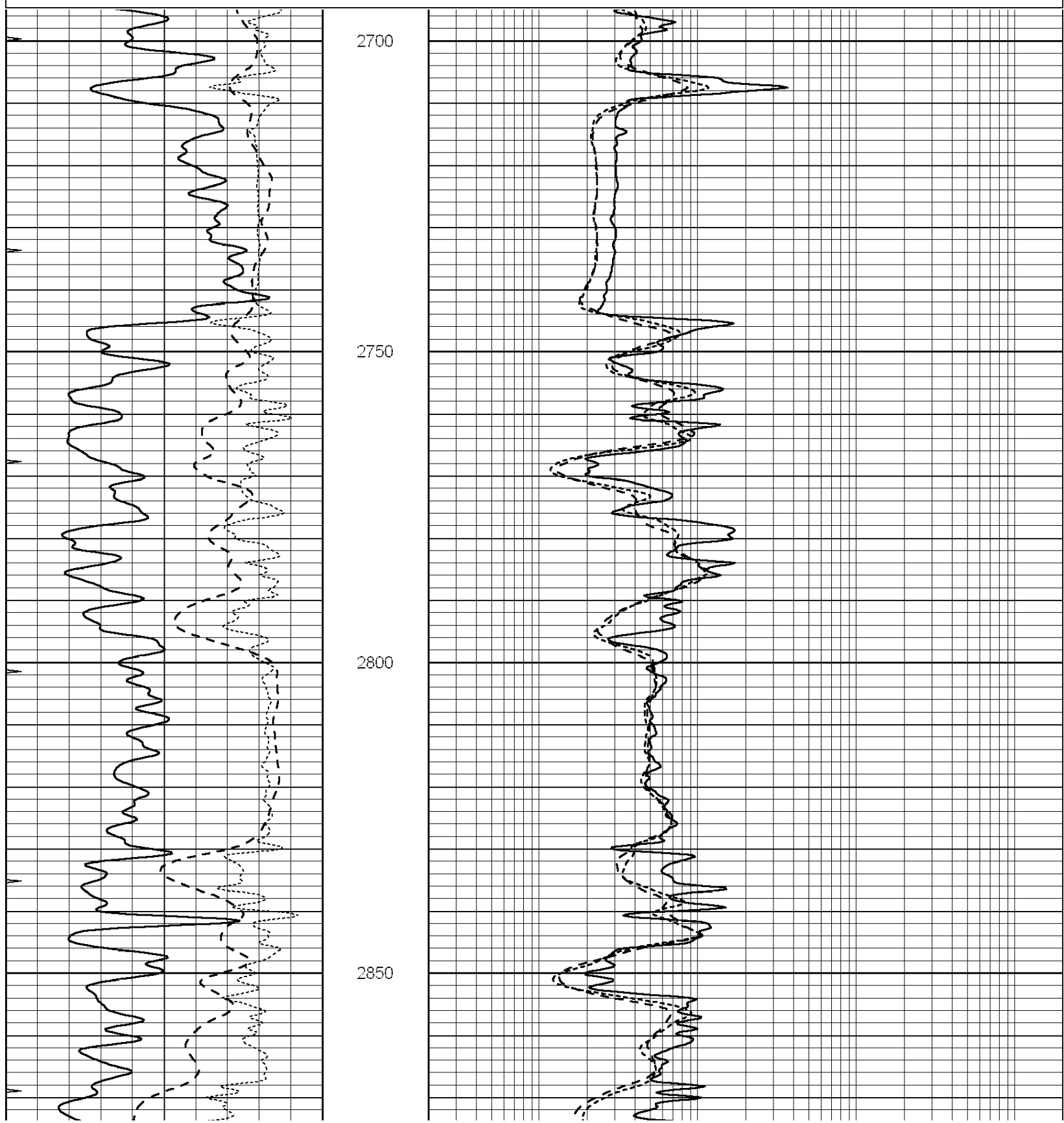
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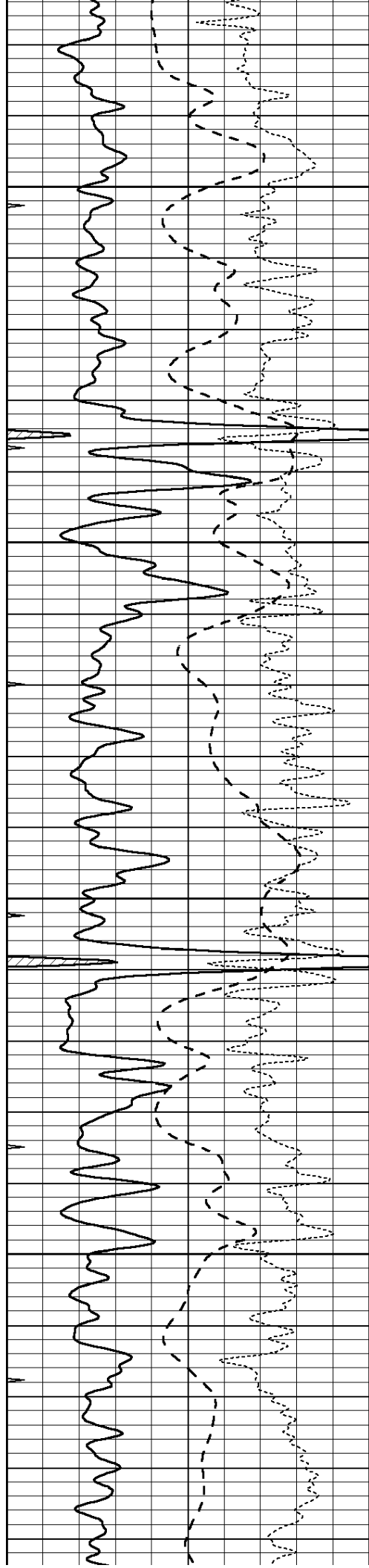
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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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



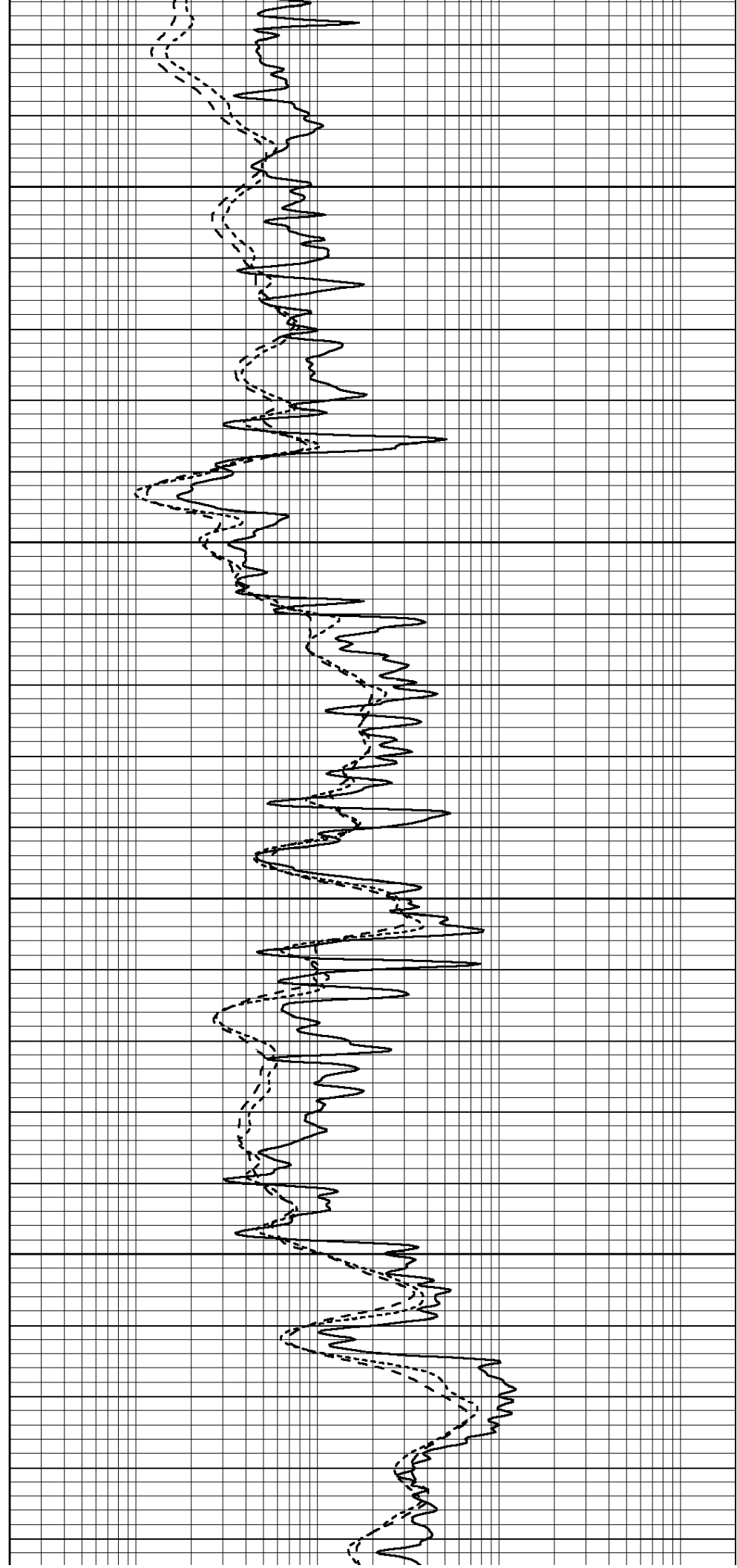


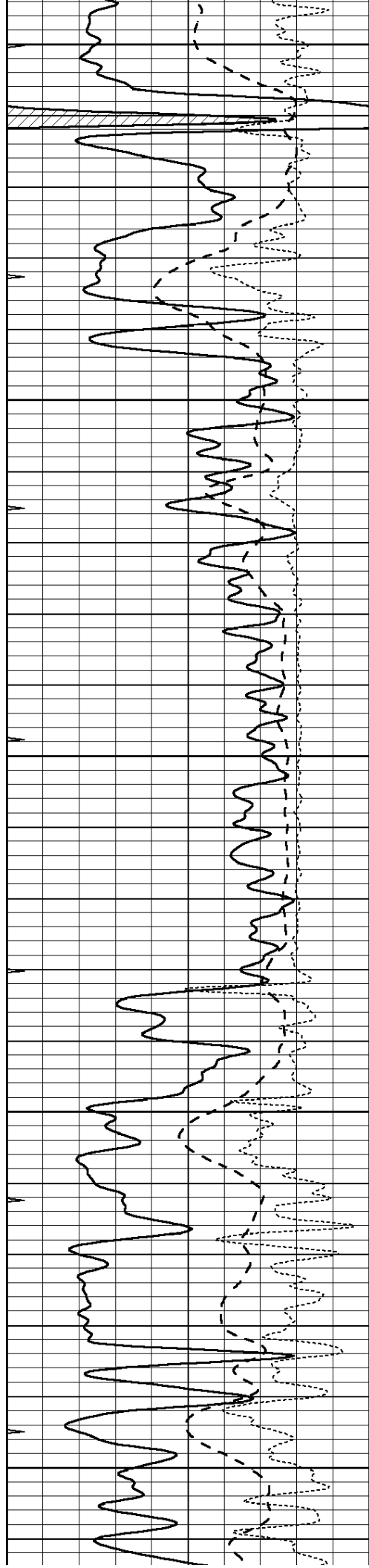
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3000

3050





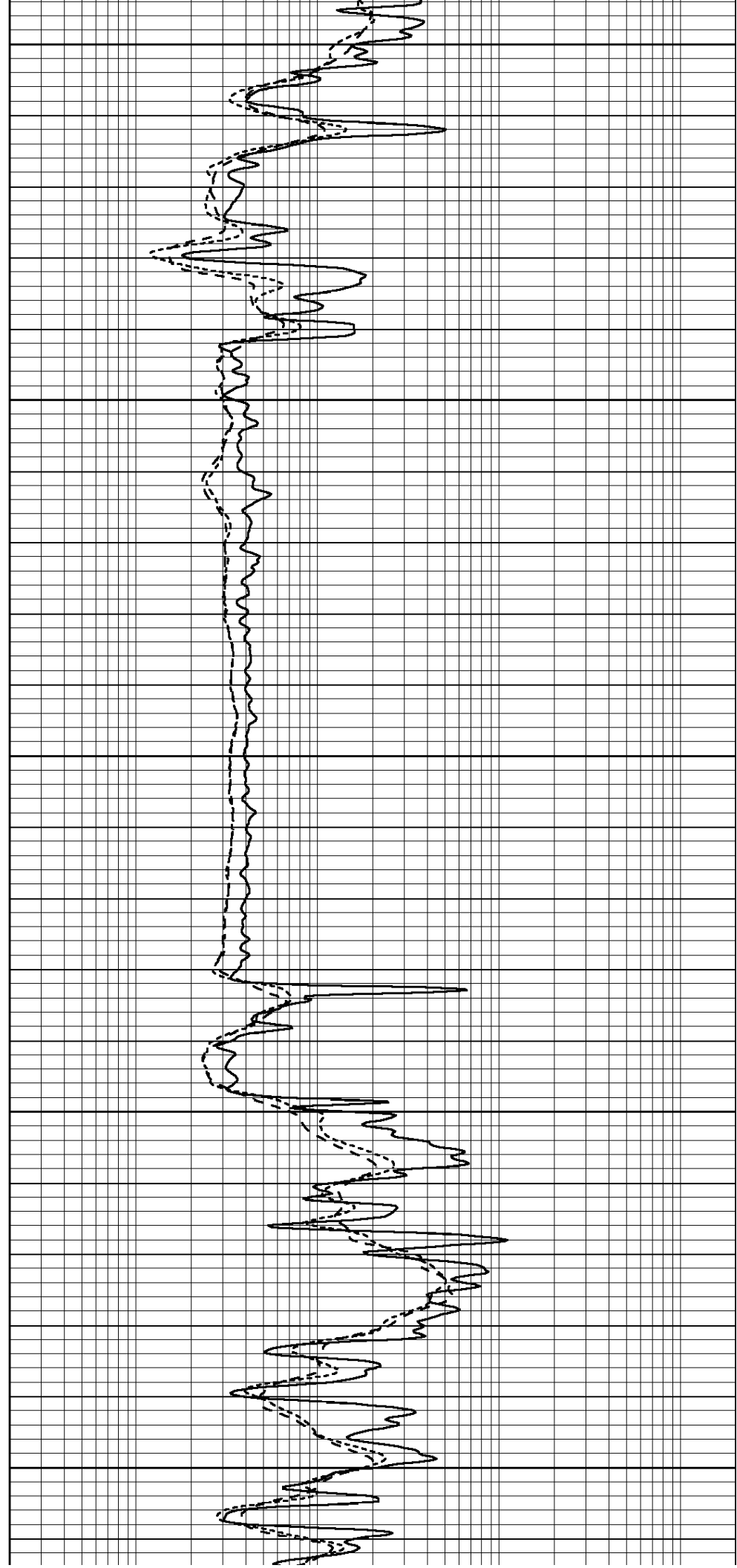
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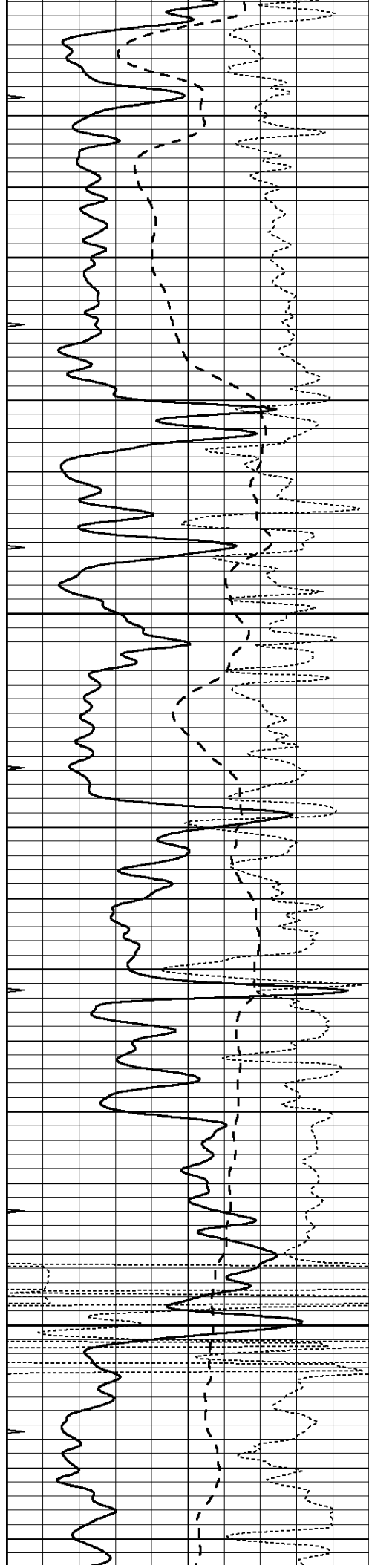
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3300



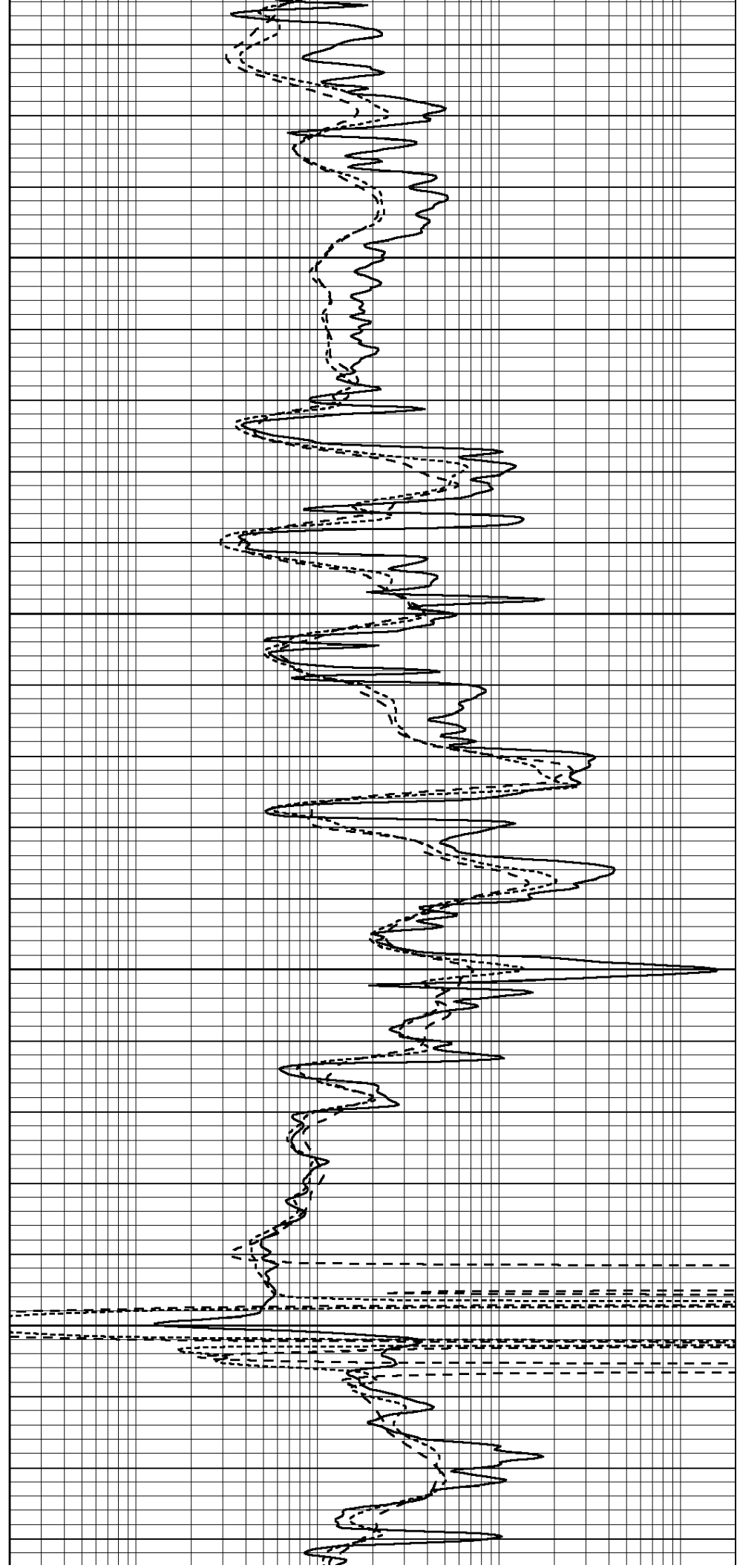


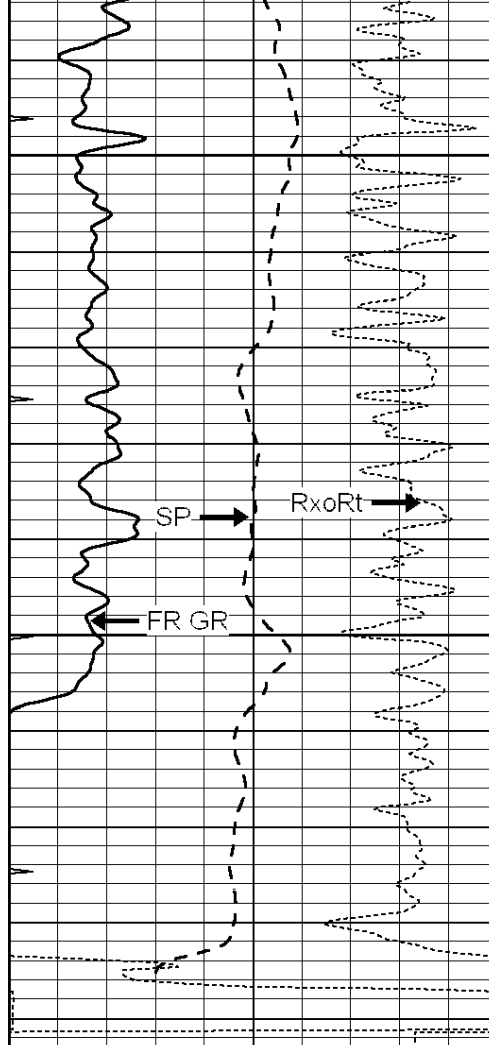
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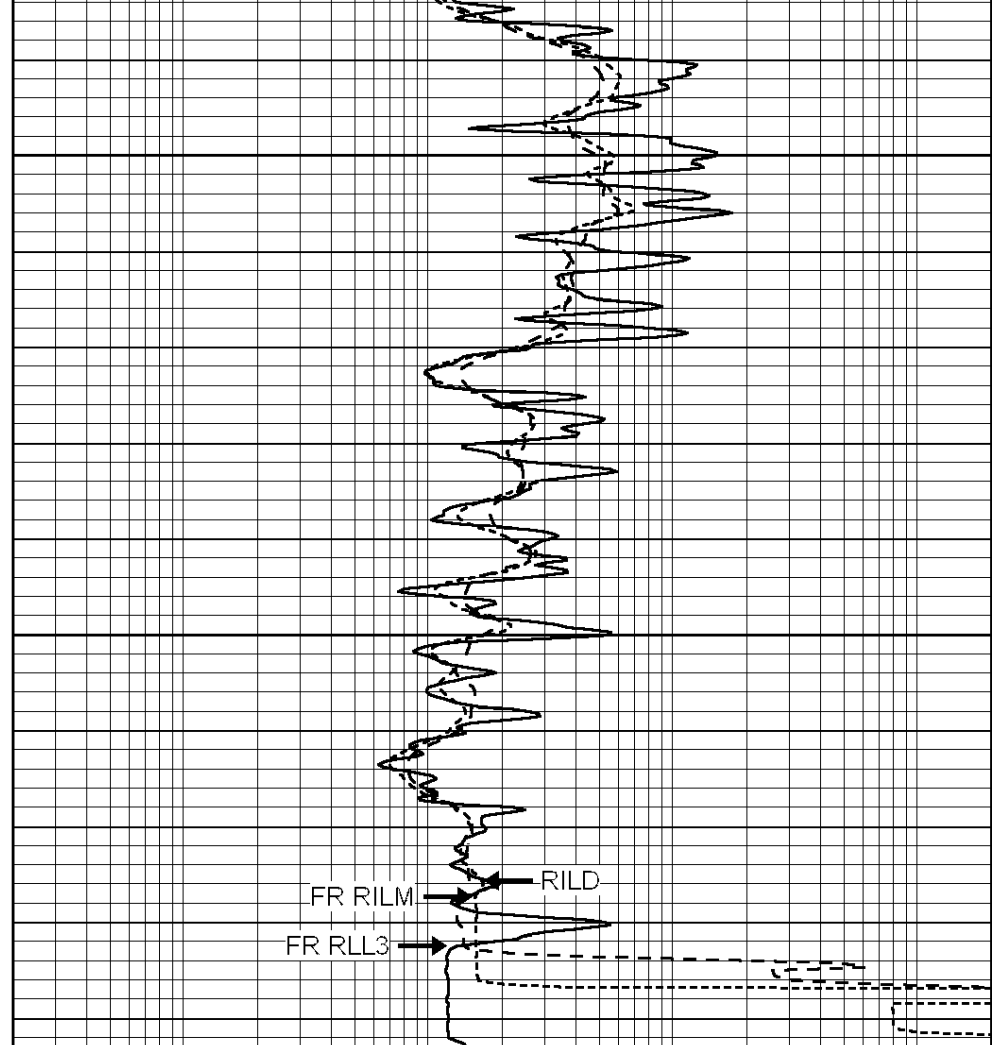
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3550
3600
LTD 3635

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



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

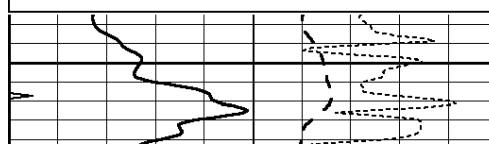


REPEAT SECTION

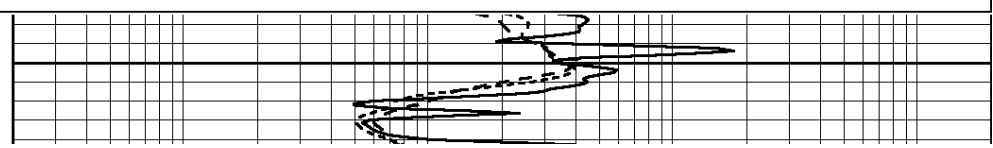
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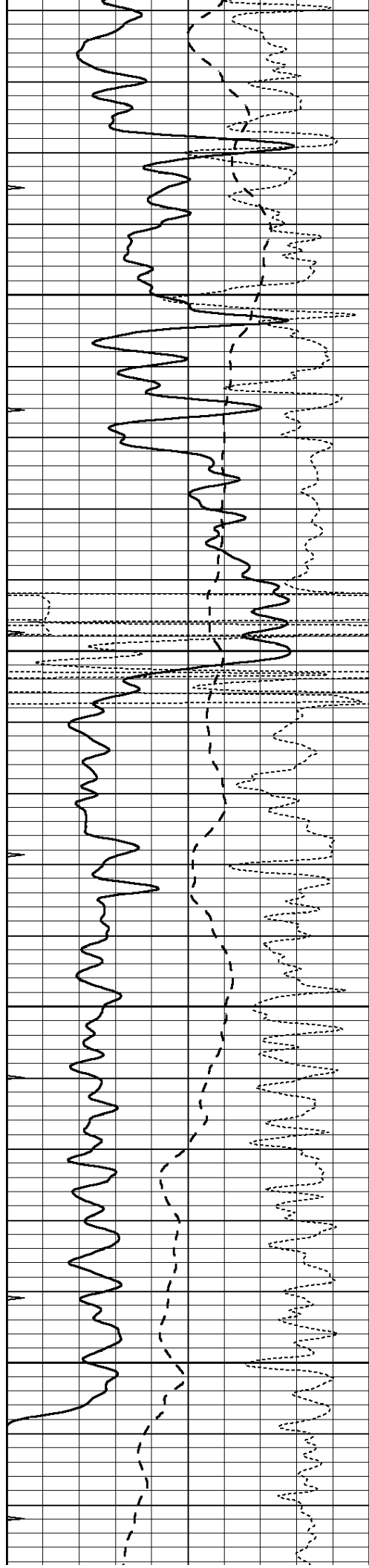
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-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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



3400



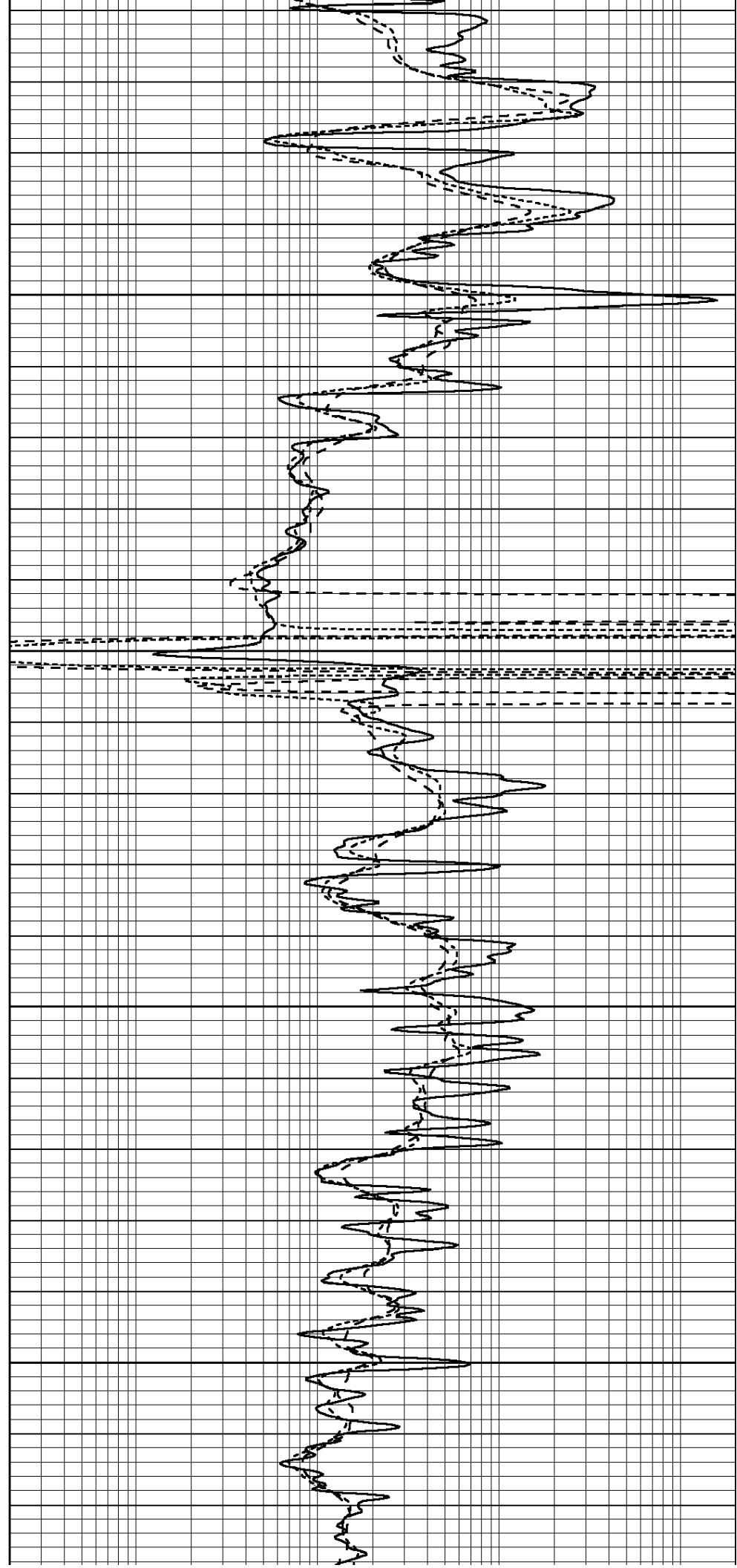


3450

3500

3550

3600



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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

Calibration Report

Database File: 010667dildn.db
 Dataset Pathname: pass5.1
 Dataset Creation: Thu Feb 07 09:14:16 2013 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE7-DILG
 Surface Cal Performed: Sat Feb 02 01:31:14 2013
 Downhole Cal Performed: Sat Jan 19 19:51:38 2013
 After Survey Verification Performed: Sat Jan 19 19:51:38 2013

Surface Calibration

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.793	0.790	V	0.000	400.000	mmho/m	630.000	0.000
Medium	0.992	1.002	V	0.000	464.000	mmho/m	700.000	-49.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.041	0.642	V	0.000	400.000	mmho/m	664.874	-27.011
Medium	0.035	0.802	V	0.000	464.000	mmho/m	604.936	-21.367

Downhole Calibration

	Readings				References		Results	
	Zero	Cal			Zero	Cal	m'	b'
Deep	135384.000	27094.500	mmho/m	135400.000	27082.400	mmho/m	1.000	-19.259
Medium	-47330.100	-9381.740	mmho/m	-47327.100	-9389.280	mmho/m	1.000	-10.154
LL3		7.322	V		1400.000	Ohm-m		
		0.038	V		20.000	Ohm-m		
		-7.273	V		4000.000	mmho-m		

After Survey Verification

	Readings				Targets		Results	
	Zero	Cal			Zero	Cal	m'	b'
Deep	0.000	0.000	mmho/m	135384.000	27094.500	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-47330.100	-9381.740	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1400.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		4000.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: GEAR2-GEARHART
 Source / Verifier: 147 / 147
 Master Calibration Performed: Fri Jan 04 10:28:05 2013

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	923.76	475.45	cps
Aluminum	2.580	g/cc	205.31	331.69	cps
Spine Angle = 76.54			Density/Spine Ratio = 0.563		
	Size		Reading		
Small Ring	8.40	in	5.48	V	
Large Ring	14.00	in	7.58	V	

Compensated Neutron Calibration Report

Serial Number: NEU_4I
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: GR5
Tool Model: OPEN
Performed: Sat Feb 02 04:28:00 2013

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 2.4000 GAPI/cps