

DUAL INDUCTION LOG

Company	RAYMOND OIL COMPANY, INC.		
Well	ELMORE A #3 OWWO		
Field	McCRACKEN NORTHEAST		
County	RUSH	State	KANSAS
Location:	AP1 # : 15-165-20187-00-00		Other Services CDL/CNL
3330 FSL & 660' FEL			
SEC 17 TWP 17S RGE 20W			
Permanent Datum	GROUND LEVEL	Elevation	2123'
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		
Elevation			KB. 2131 D.F. 2129 G.L. 2123
Date	07/18/17		
Run Number	ONE		
Depth Driller	4250		
Depth Logger	4256		
Bottom Logged Interval	4254		
Top Log Interval	00		
Casing Driller	@ 1365		
Casing Logger	1368		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 74000 PPM	
Density / Viscosity	9.2/42		
pH / Fluid Loss	8.0/NC		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.40@92		
Rmt @ Meas. Temp	.30@92		
Rmc @ Meas. Temp	.48@92		
Source of Rmt / Rmc	MEASURED		
Rm @ BHT	.31@118		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	///		
Maximum Recorded Temperature	118F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	ROBERT TURNER		

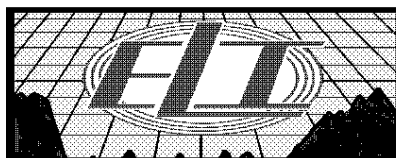
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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 ELI WIRELINE, HAYS, KS. (785) 628-6395

DIRECTIONS
McCRACKEN KS, SOUTH 1 MILE,
2 EAST, NORTH INTO.



MAIN PASS

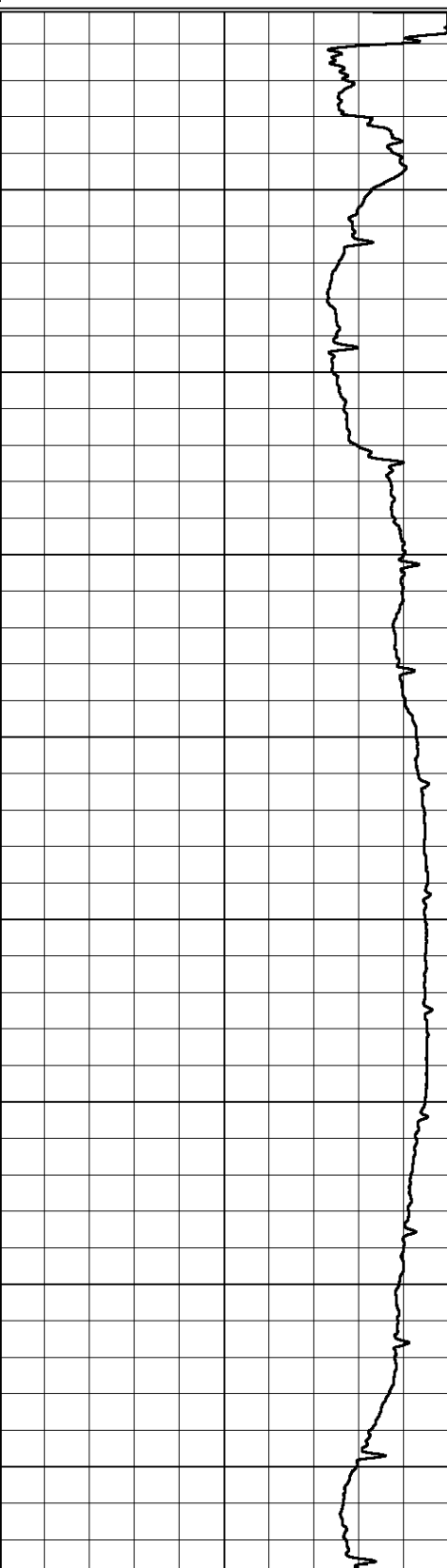
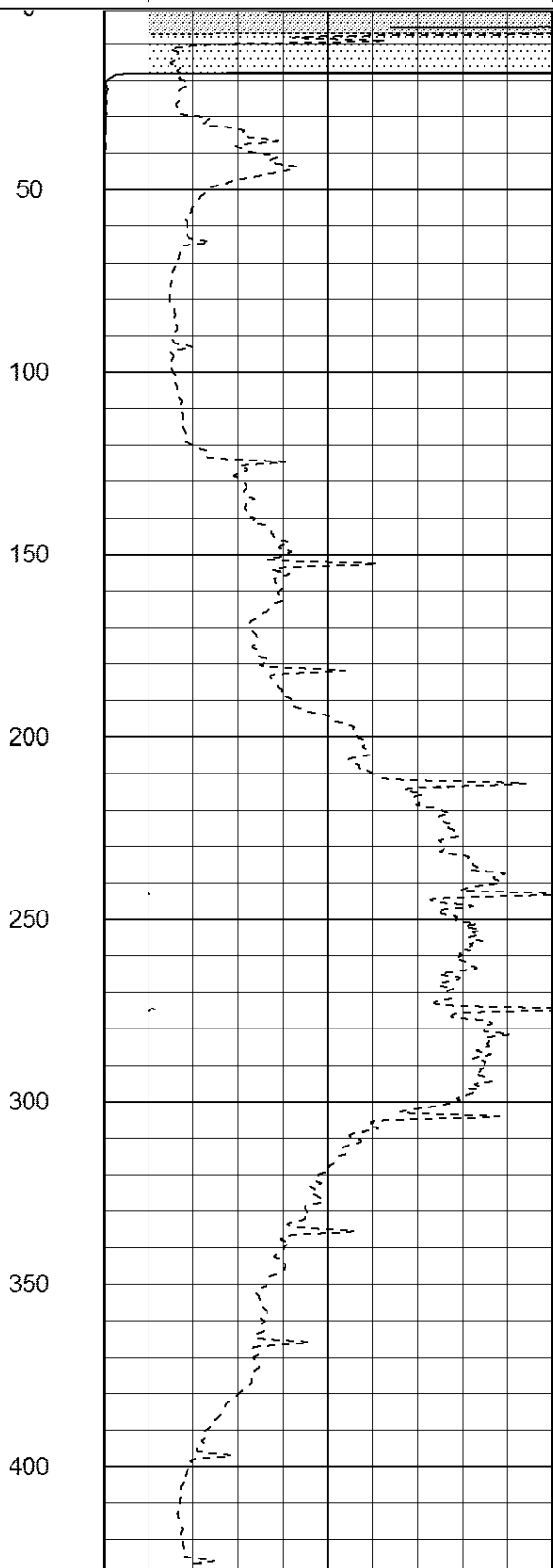
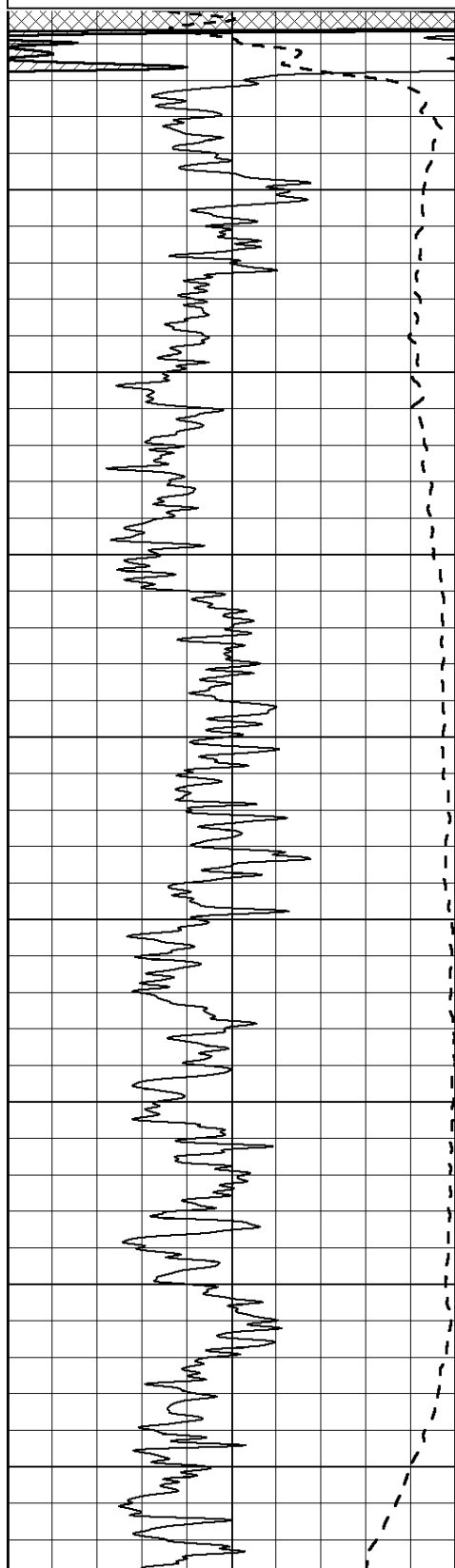
Database File: 1806ddn.db
 Dataset Pathname: pass3DIL.1
 Presentation Format: _dil2
 Dataset Creation: Wed Jul 19 01:41:20 2017
 Charted by: Depth in Feet scaled 1:600

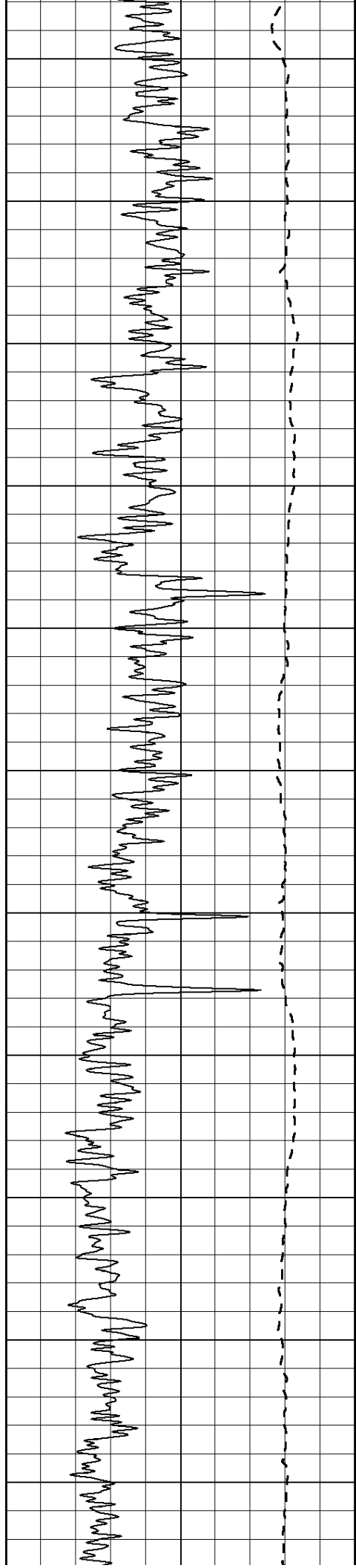
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

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





450

500

550

600

650

700

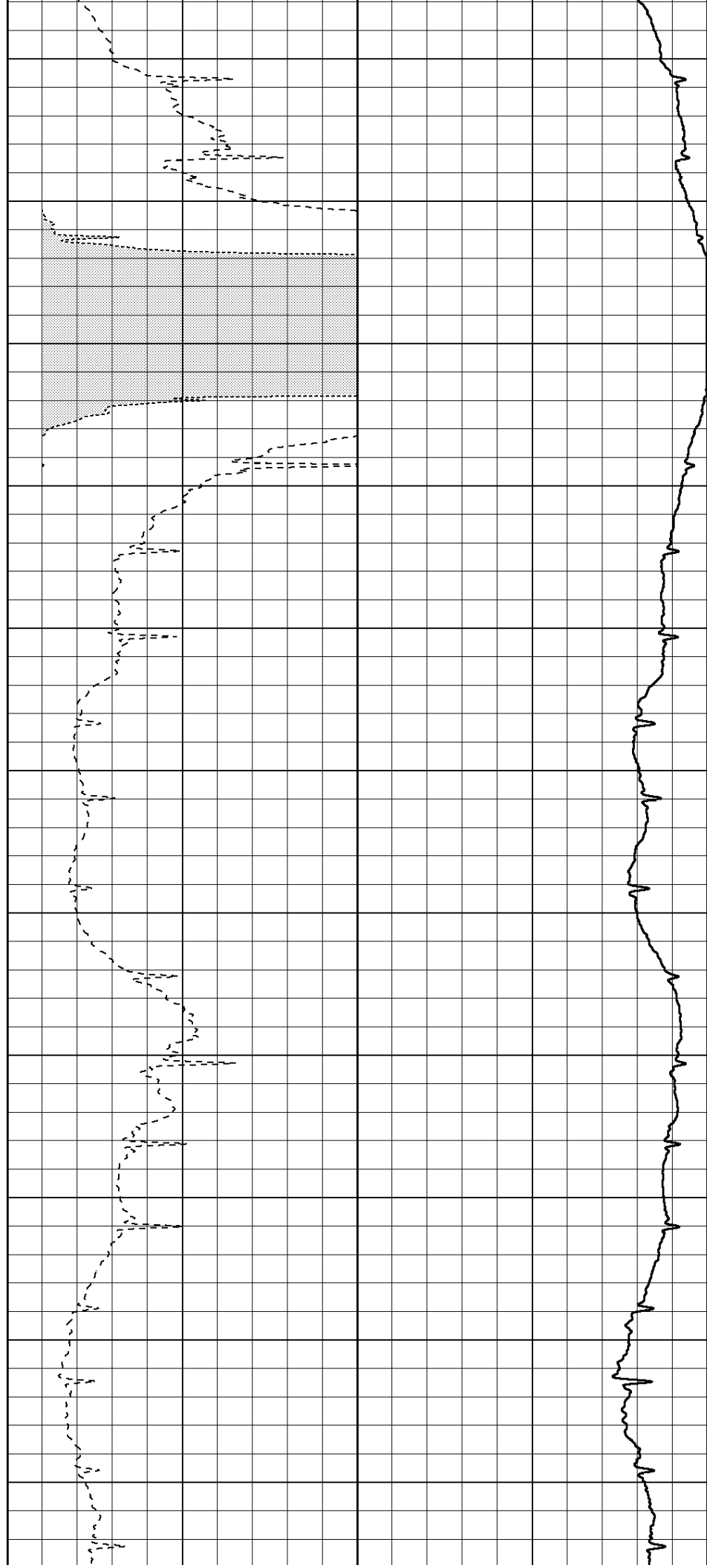
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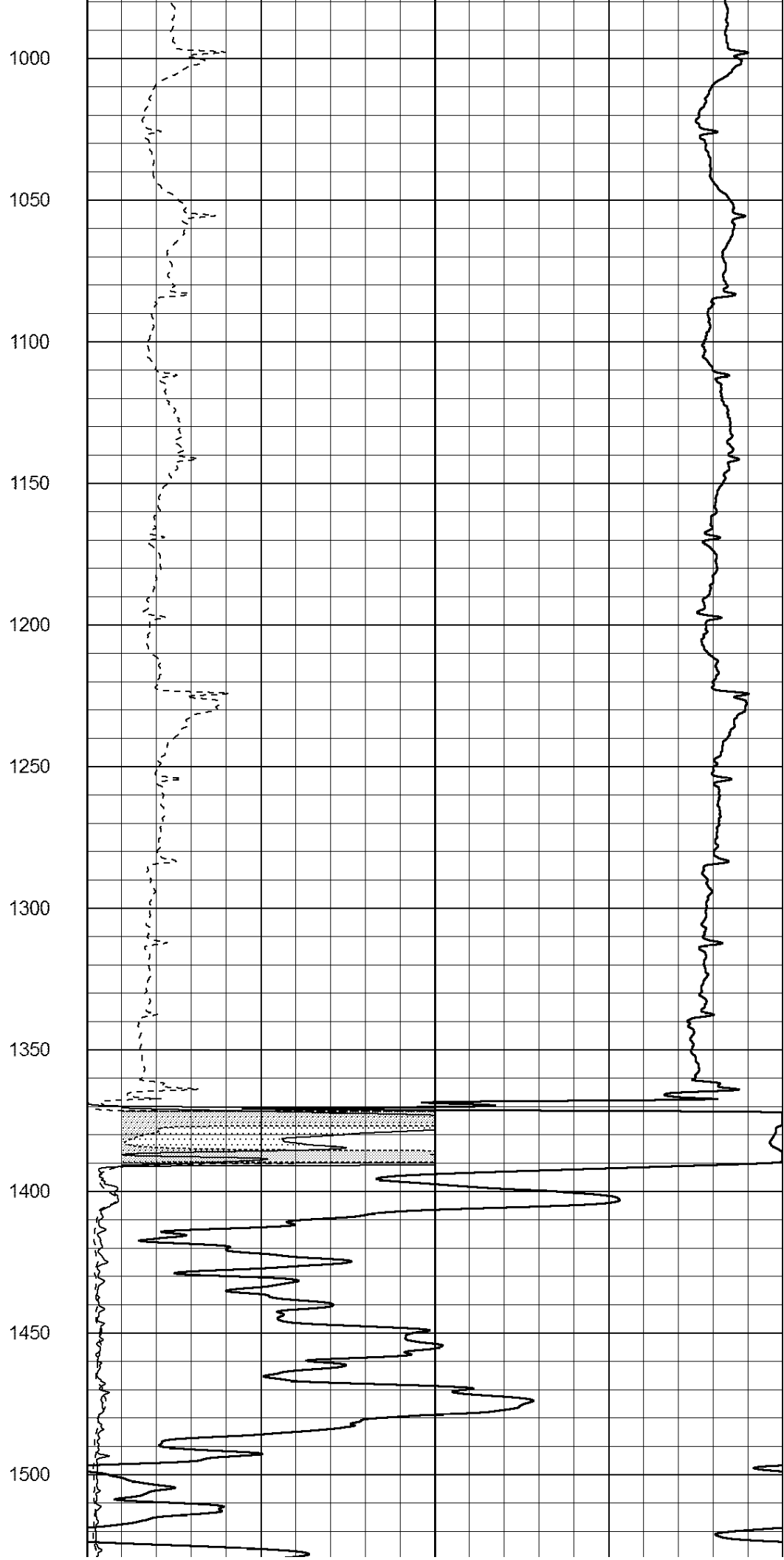
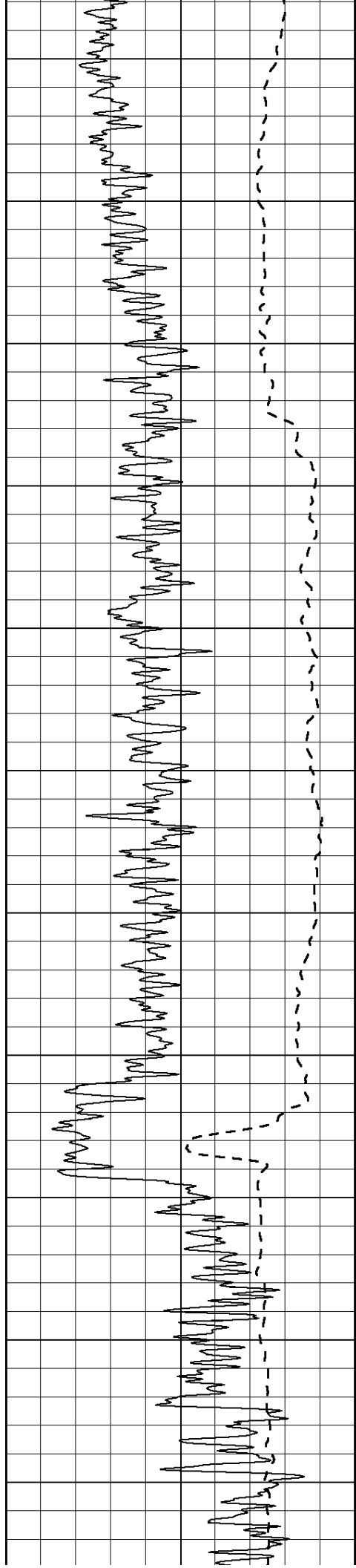
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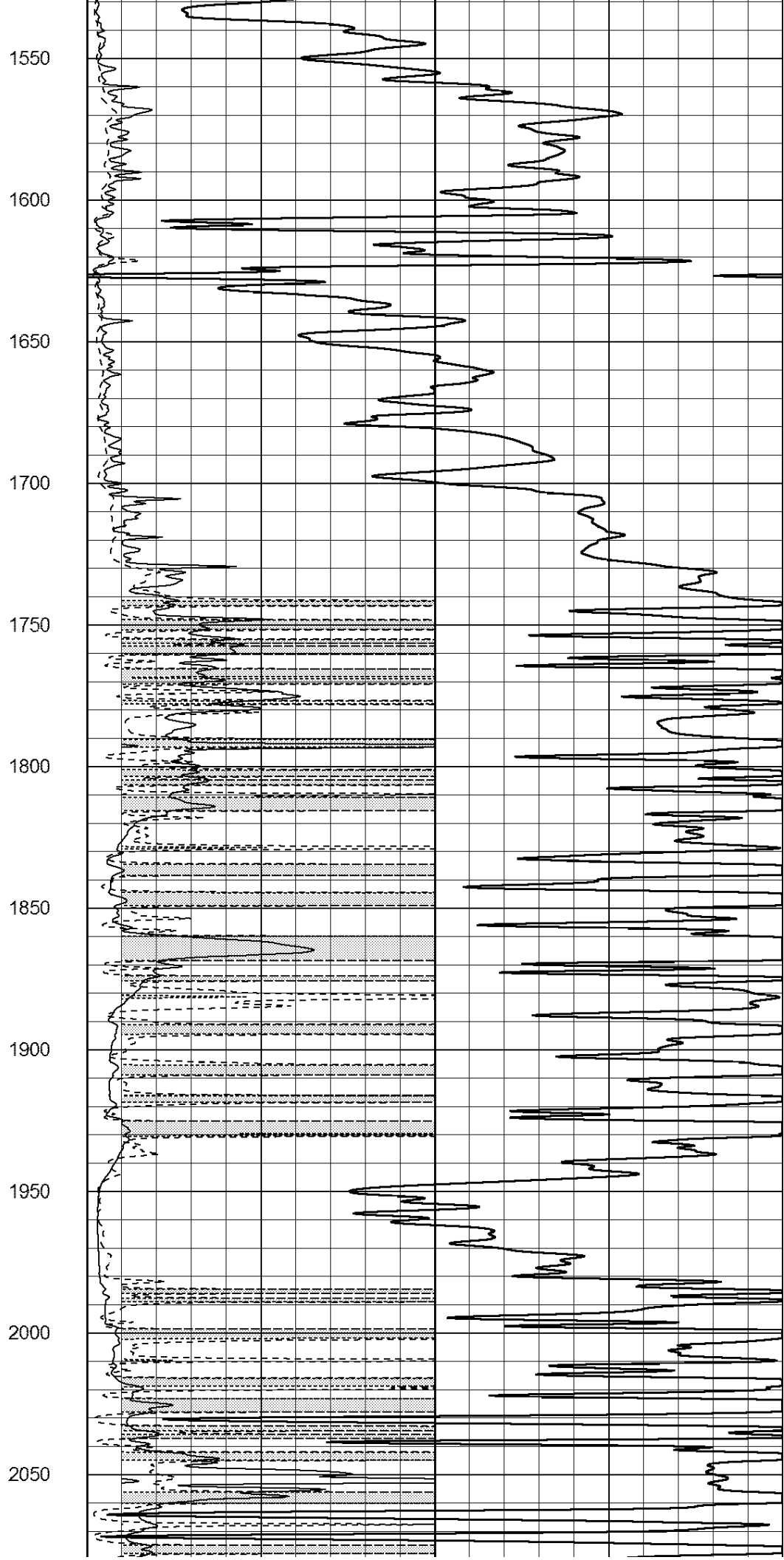
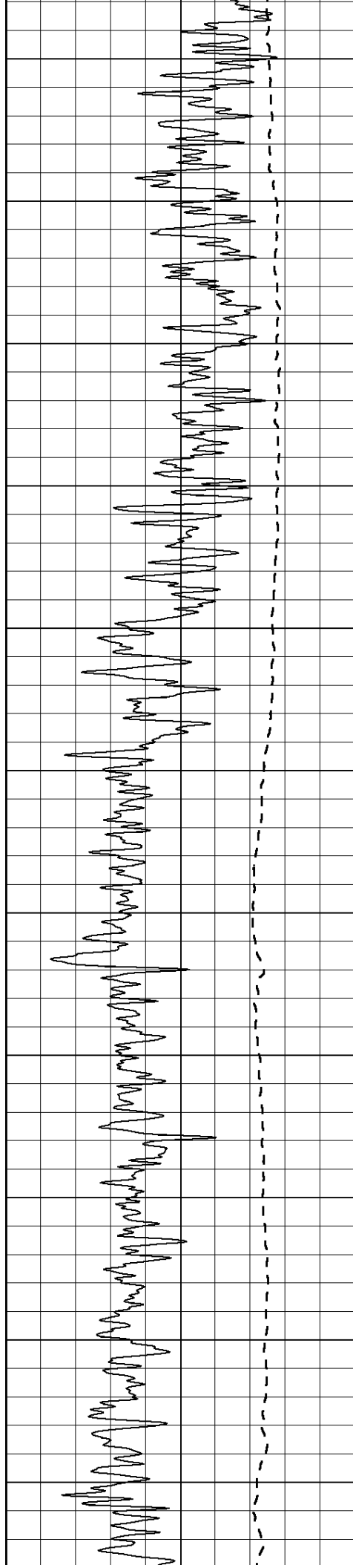
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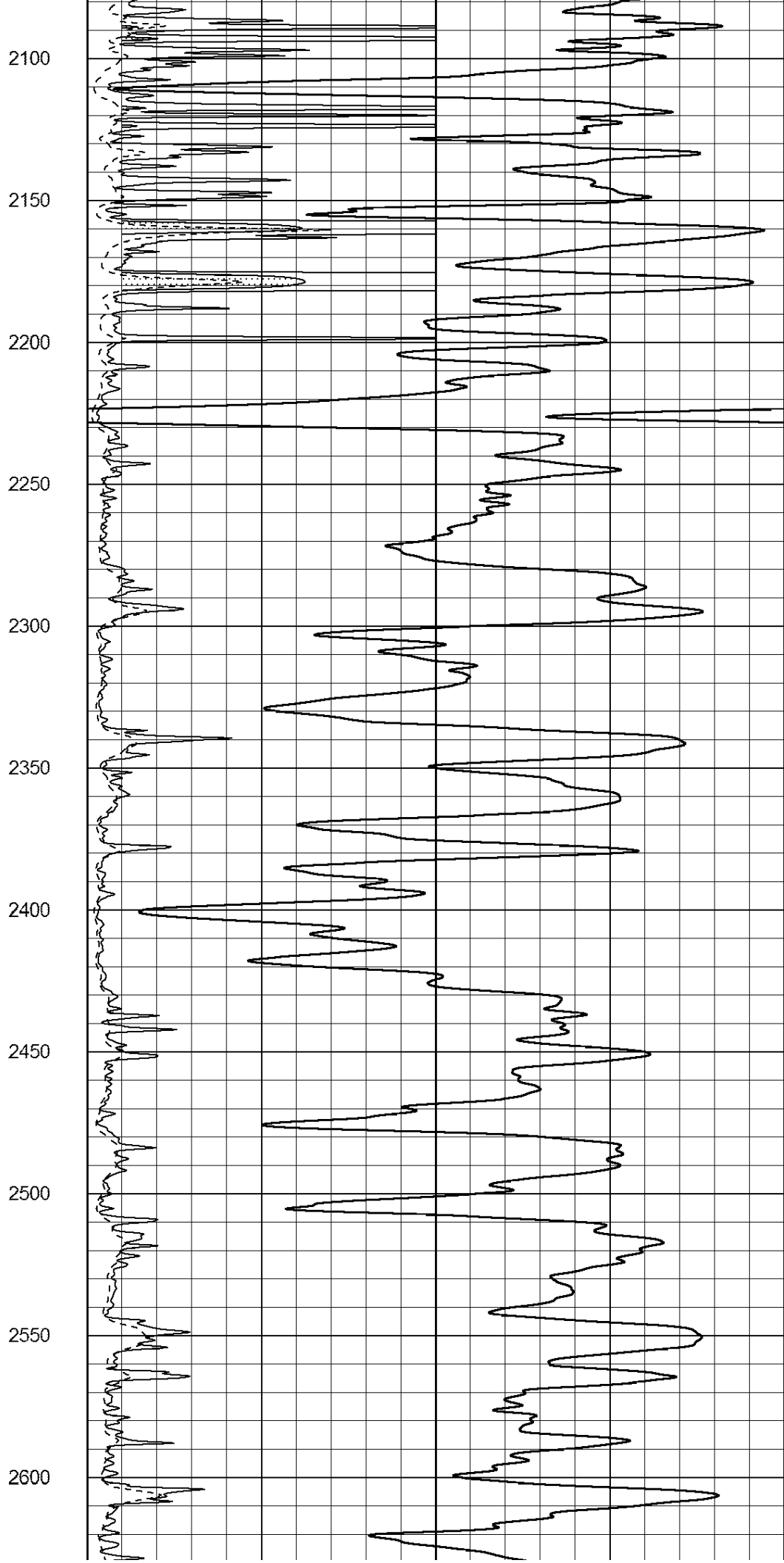
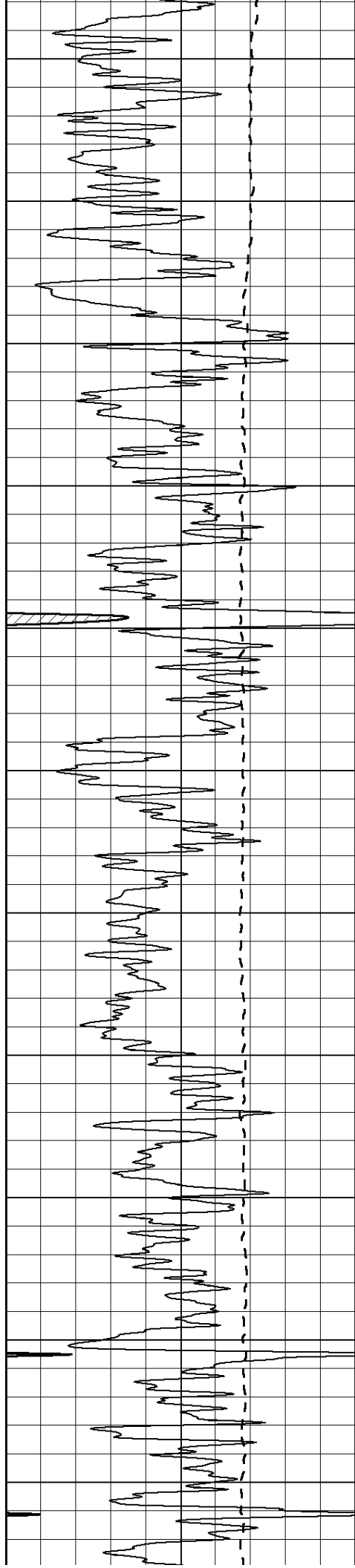
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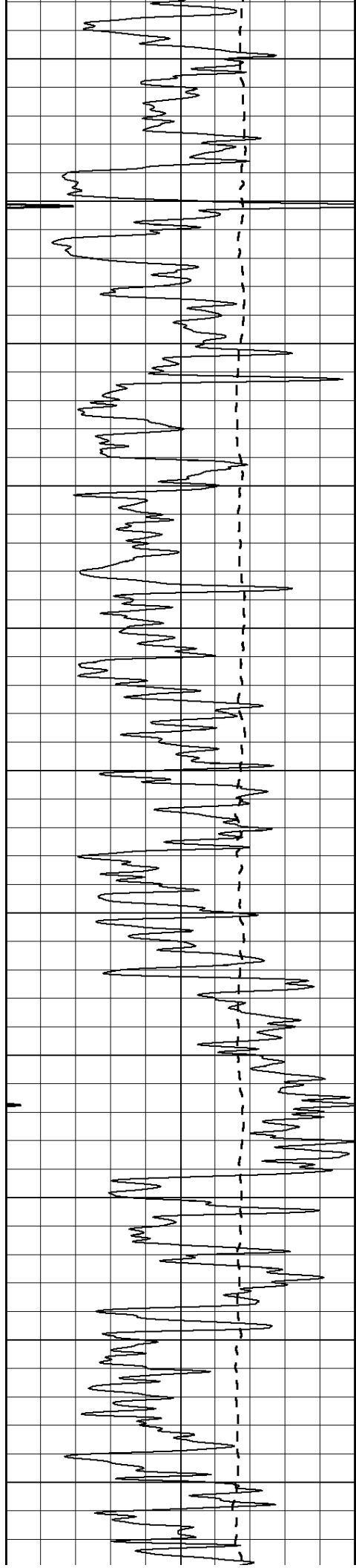
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2650

2700

2750

2800

2850

2900

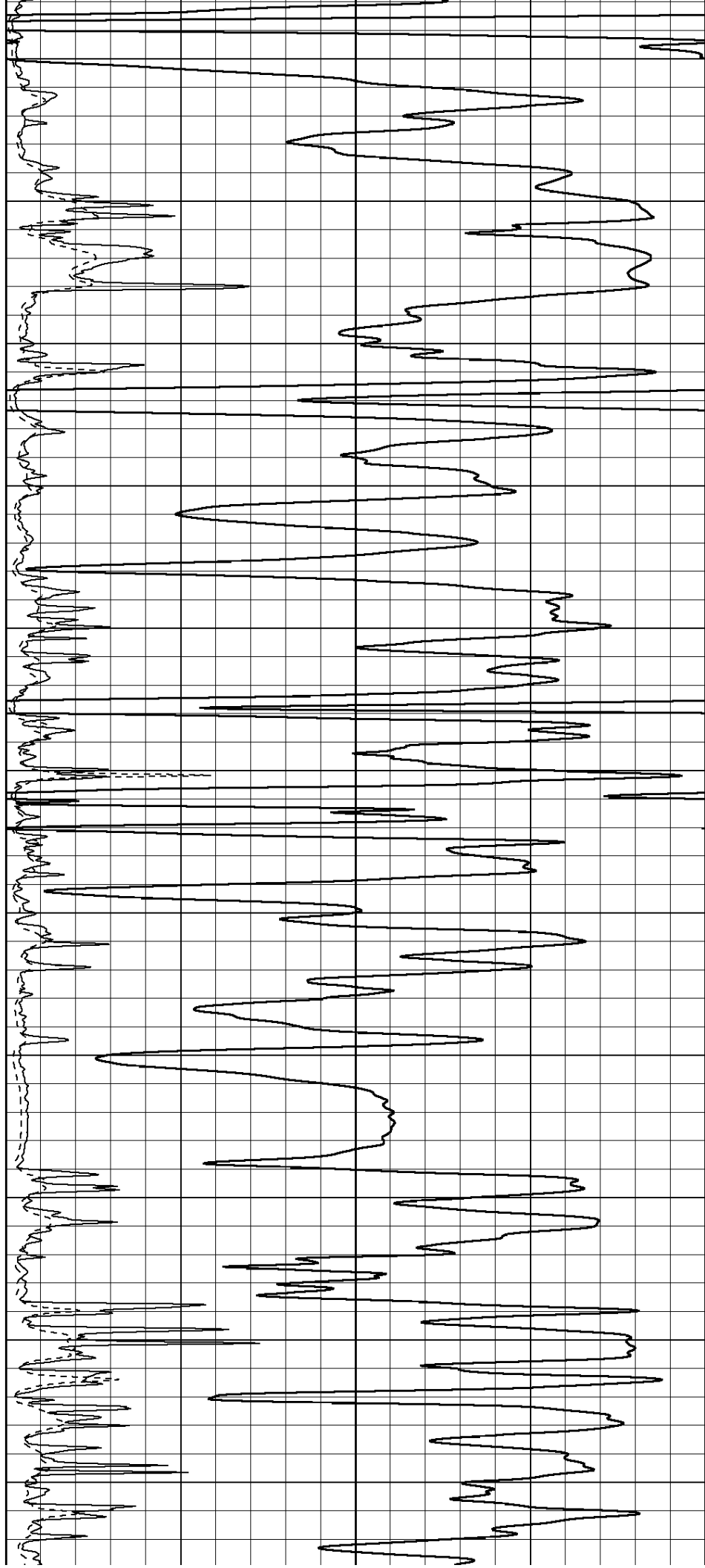
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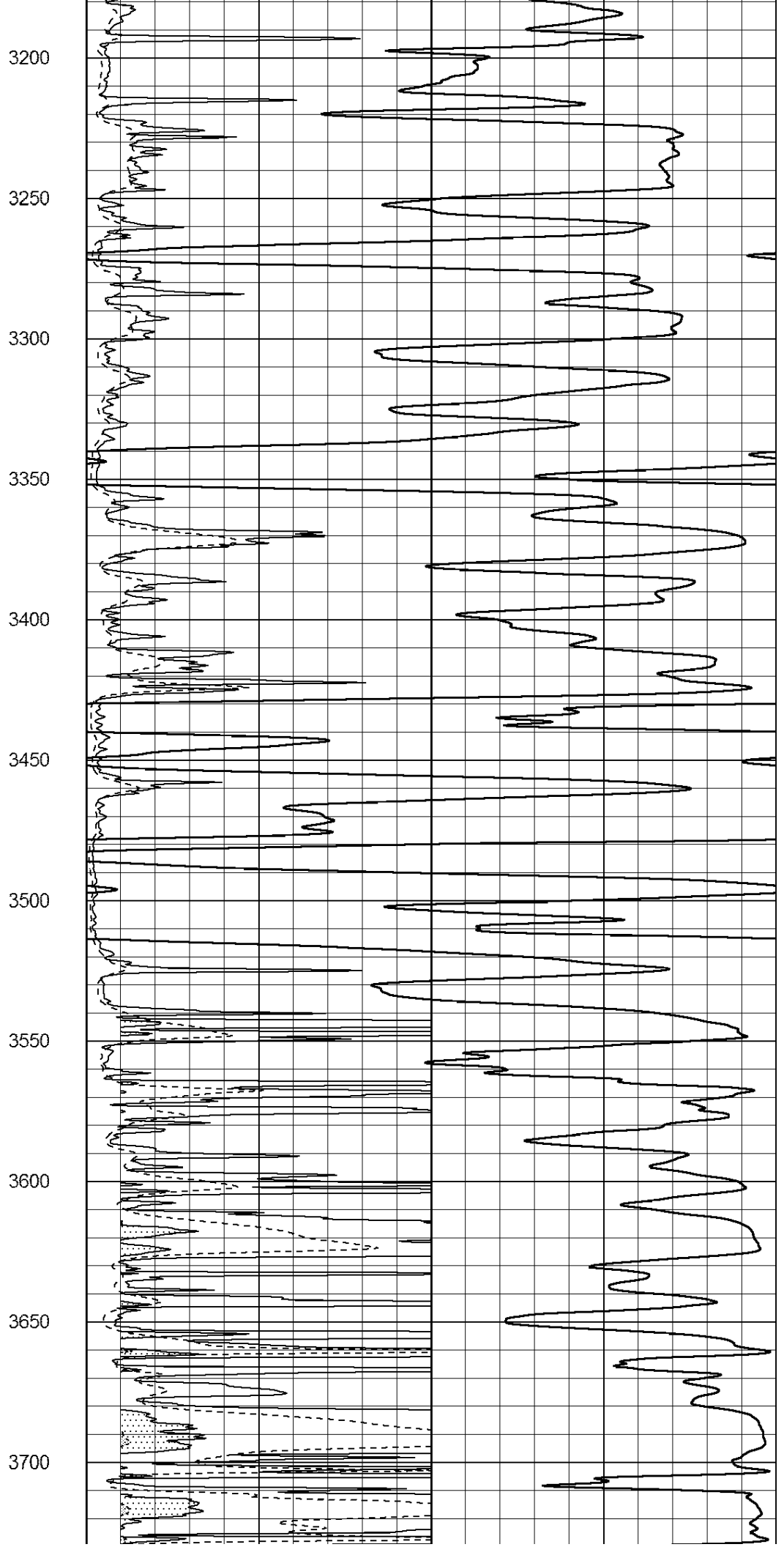
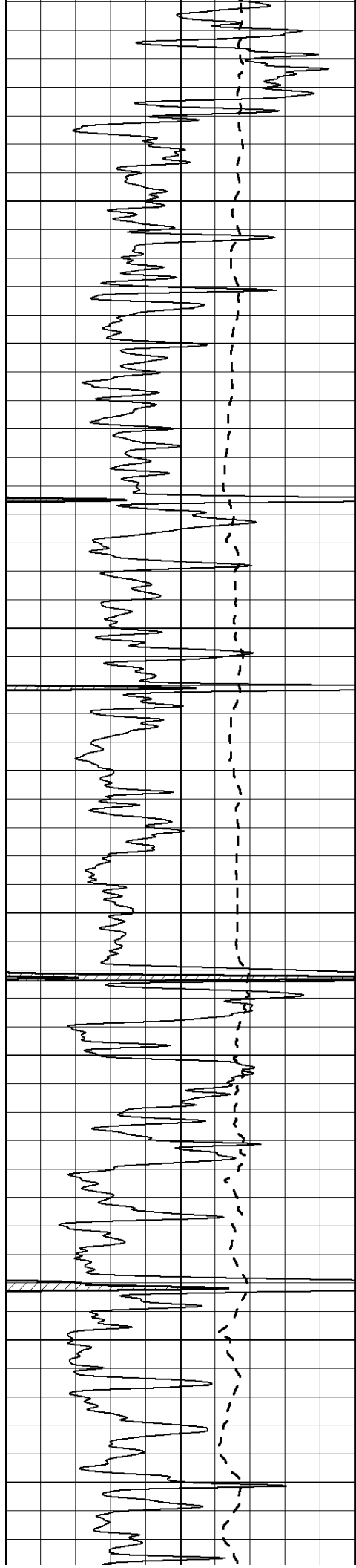
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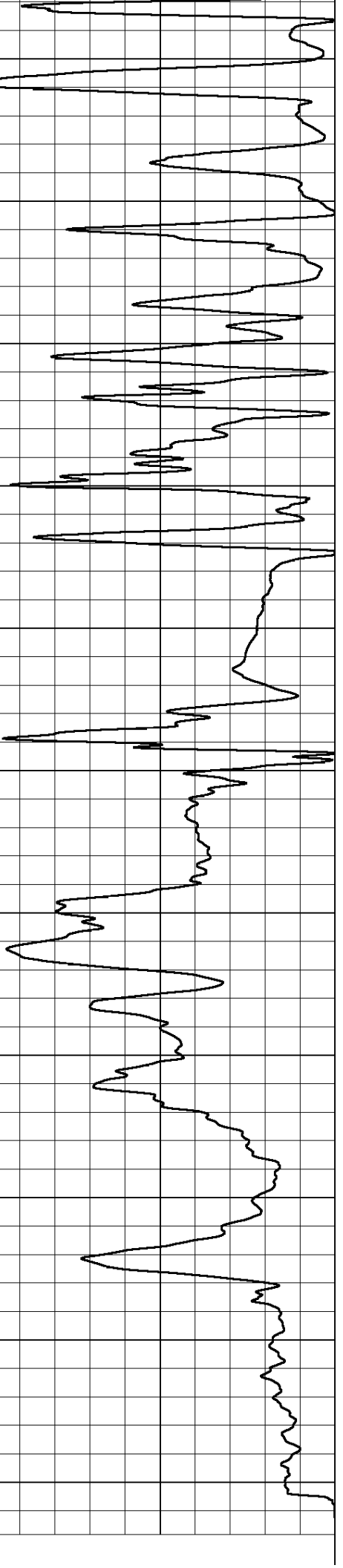
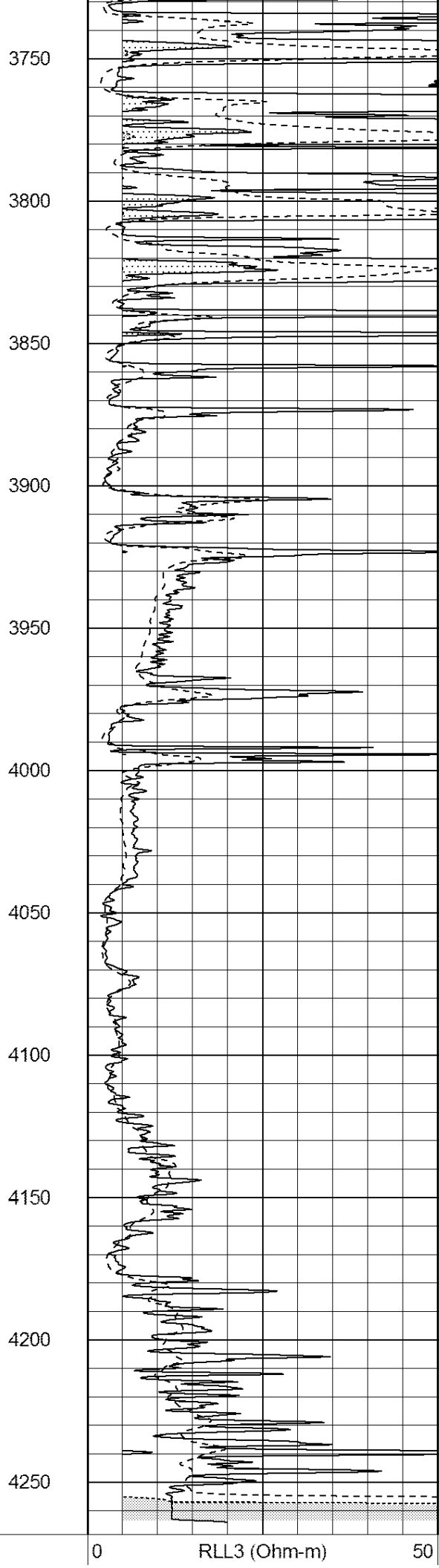
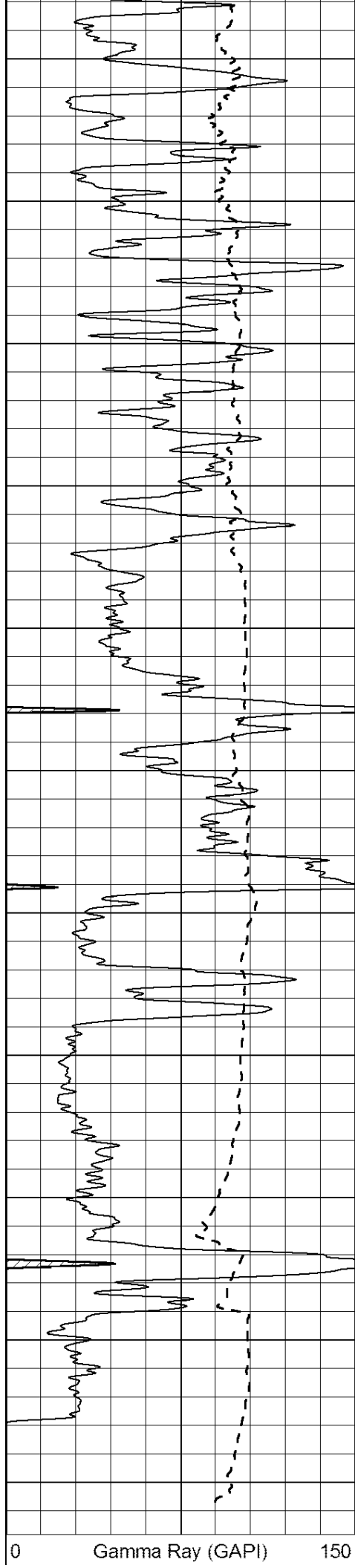
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3100

3150







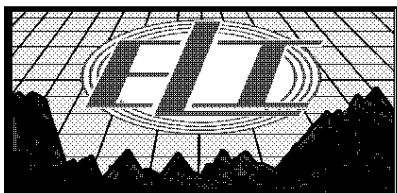
-100	SP (mV)	100
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0	RILD (Ohm-m)	50
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1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
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50	RLL3 X10 (Ohm-m)	500
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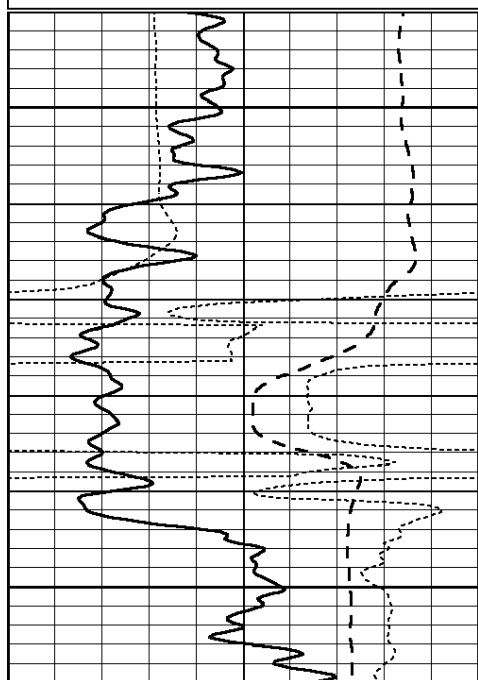


MAIN PASS

Database File: 1806ddn.db
Dataset Pathname: pass3DIL.1
Presentation Format: _dil
Dataset Creation: Wed Jul 19 01:41:20 2017
Charted by: Depth in Feet scaled 1:240

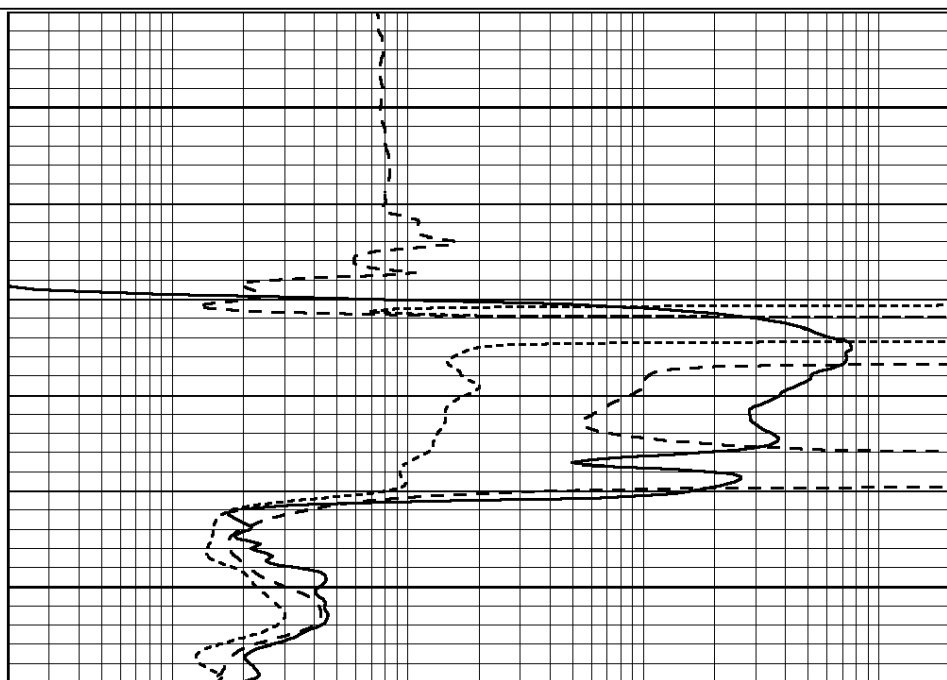
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



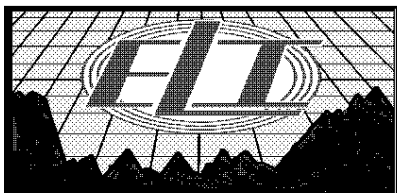
1350

1400



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

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

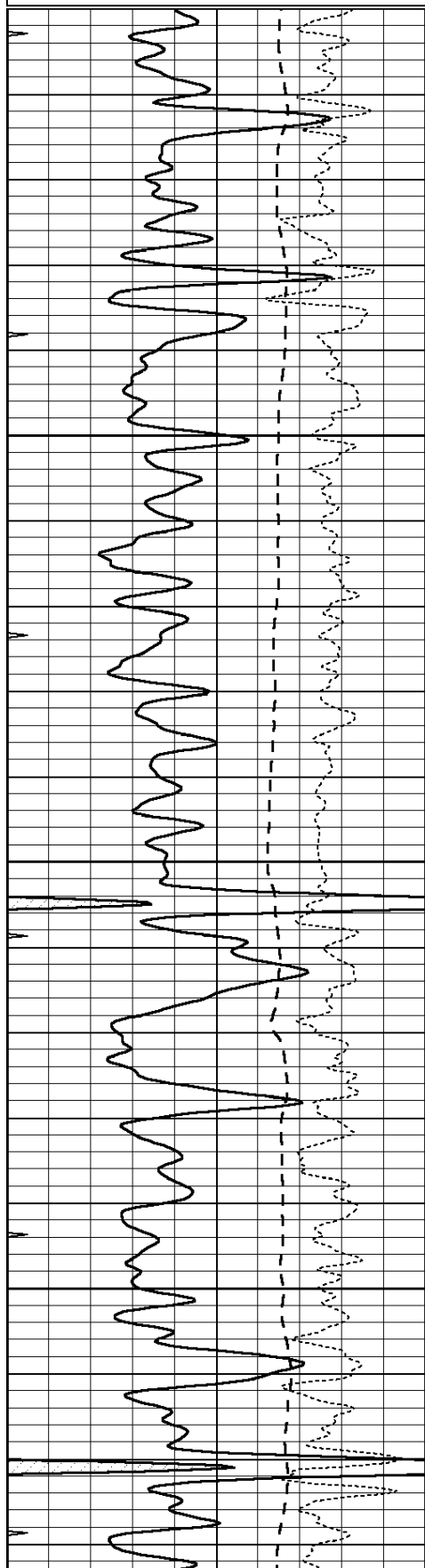


MAIN PASS

Database File: 1806ddn.db
Dataset Pathname: pass3DIL.1

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

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

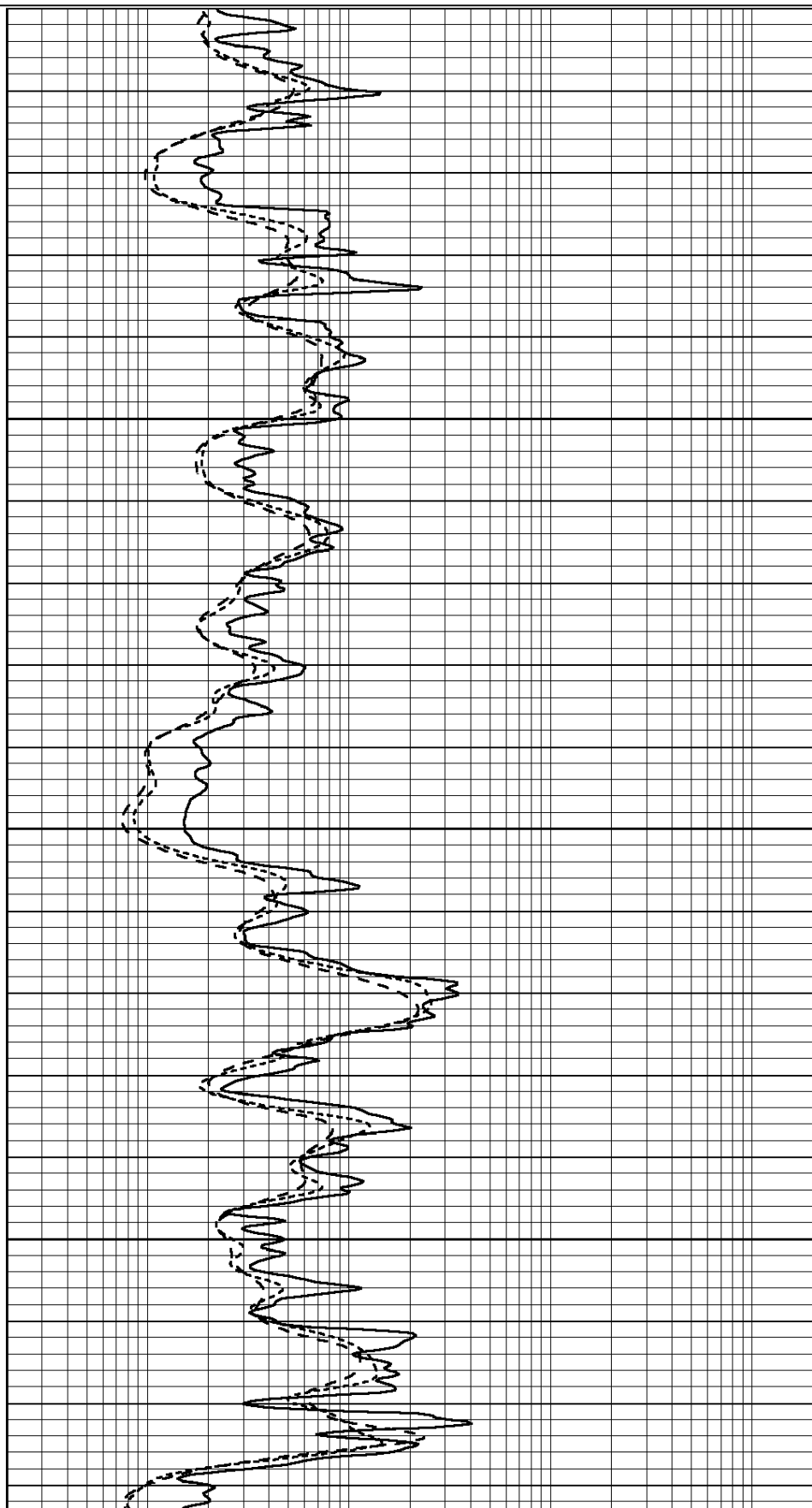


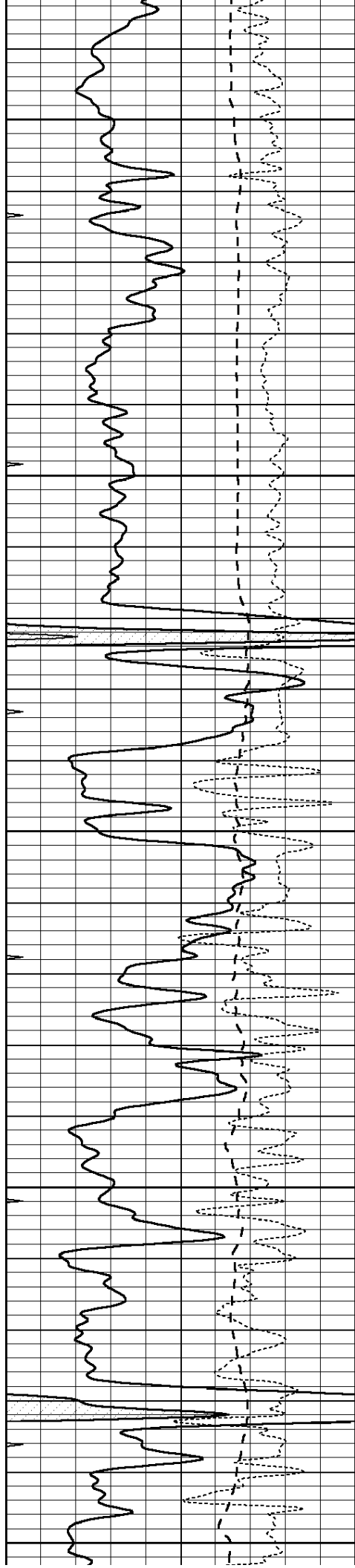
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3300

3350

3400





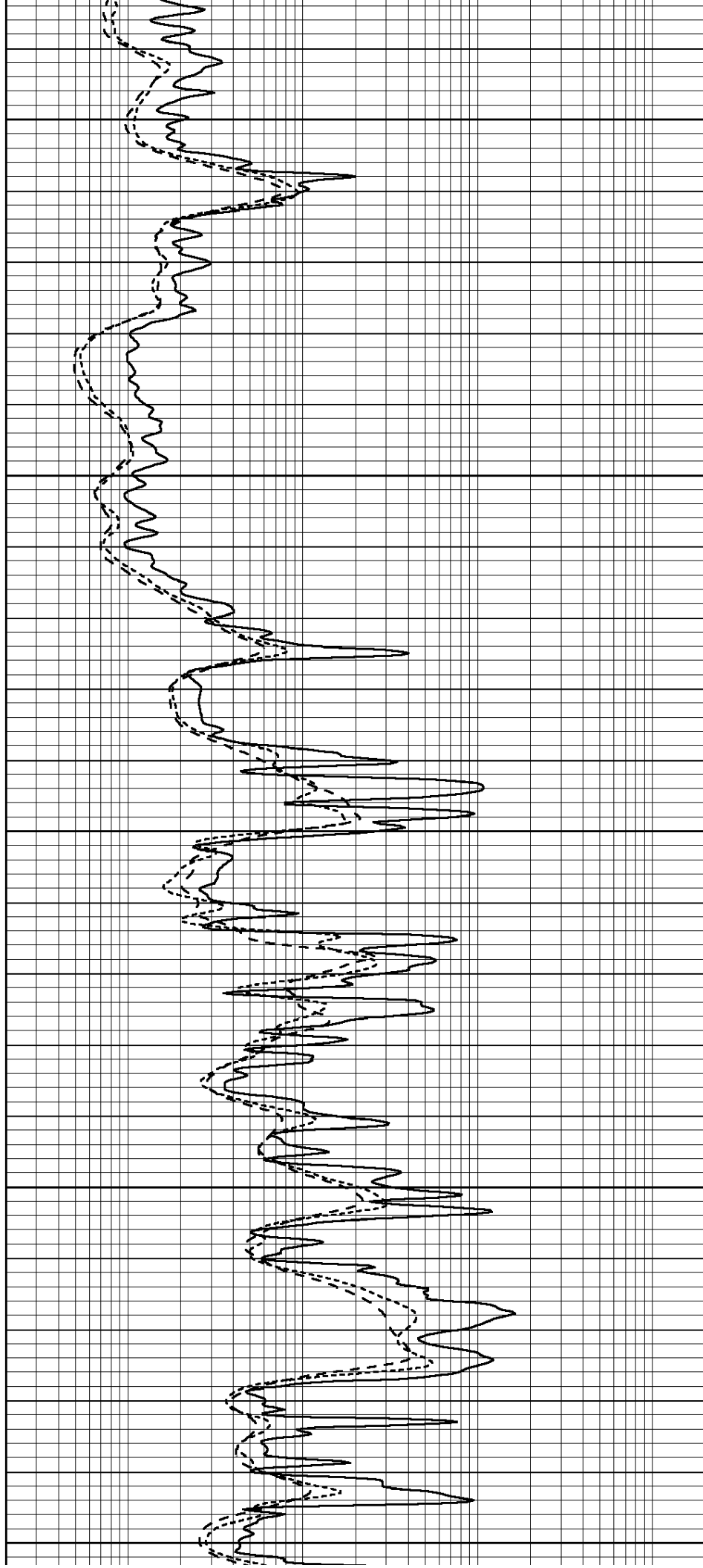
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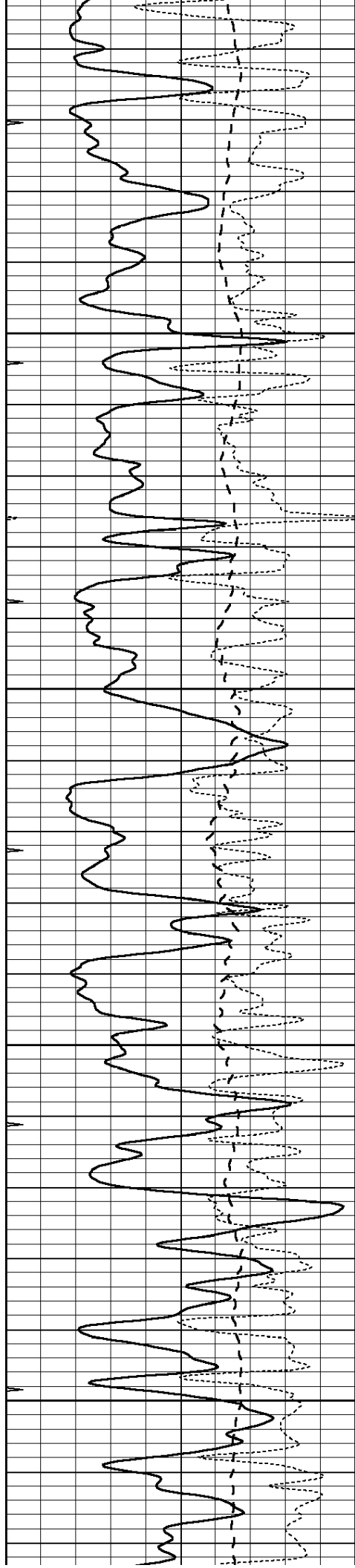
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3550

3600

3650



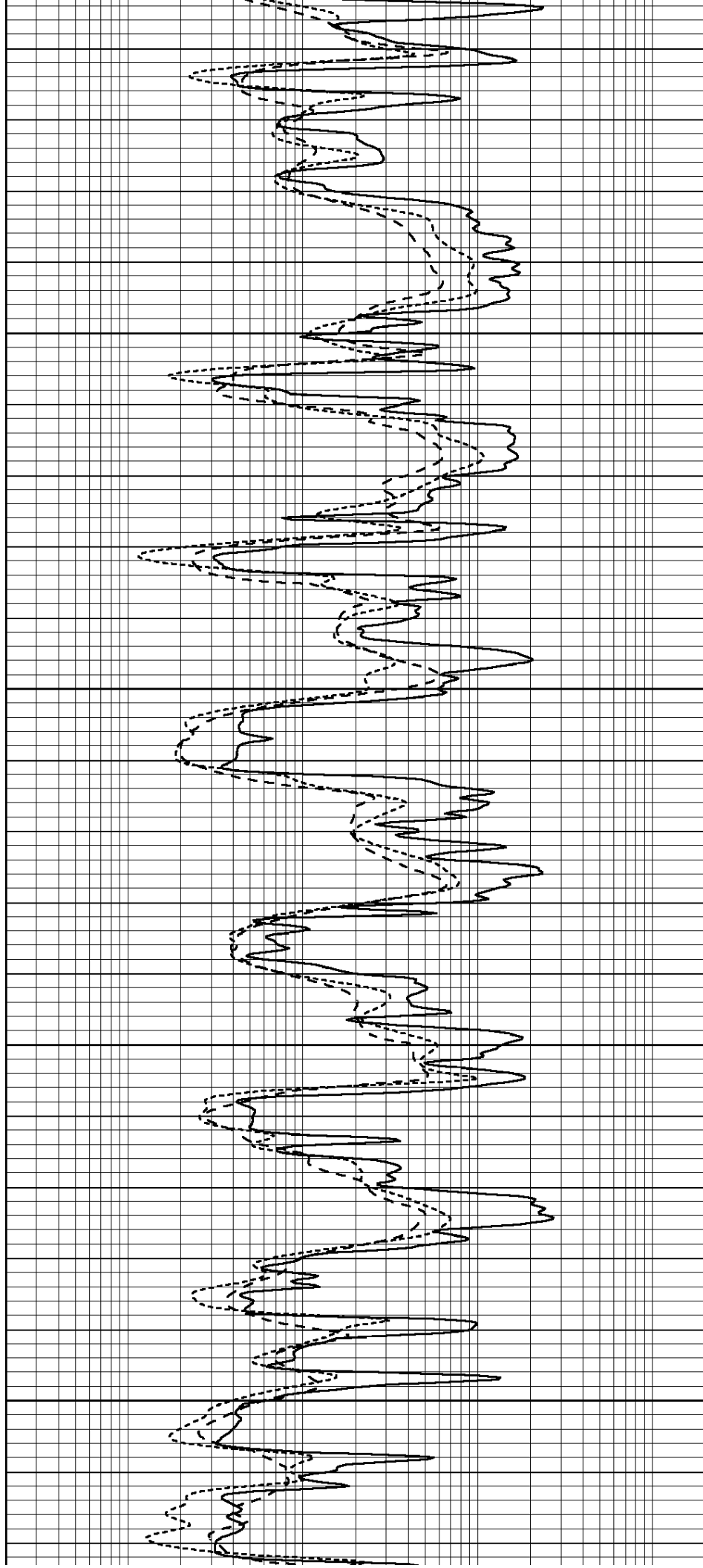


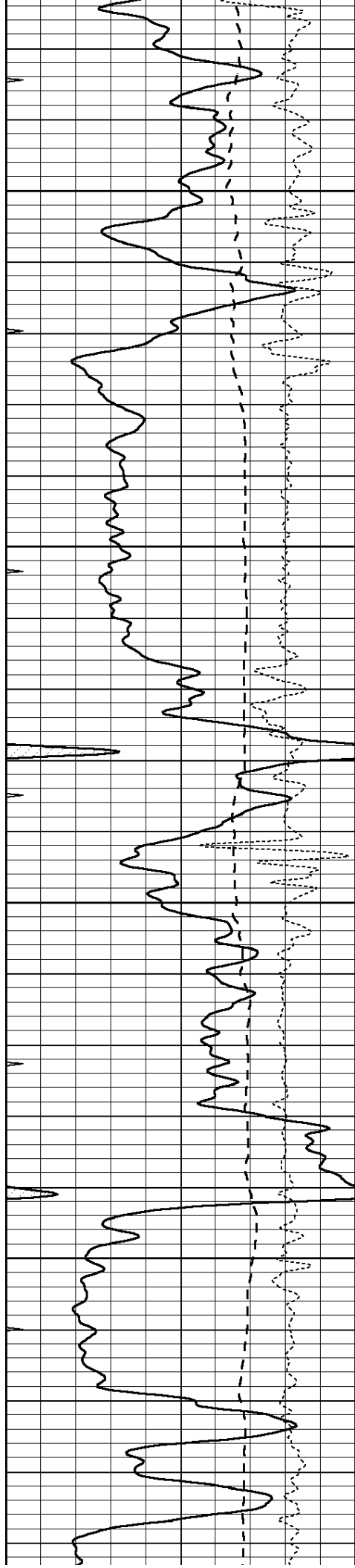
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3750

3800

3850



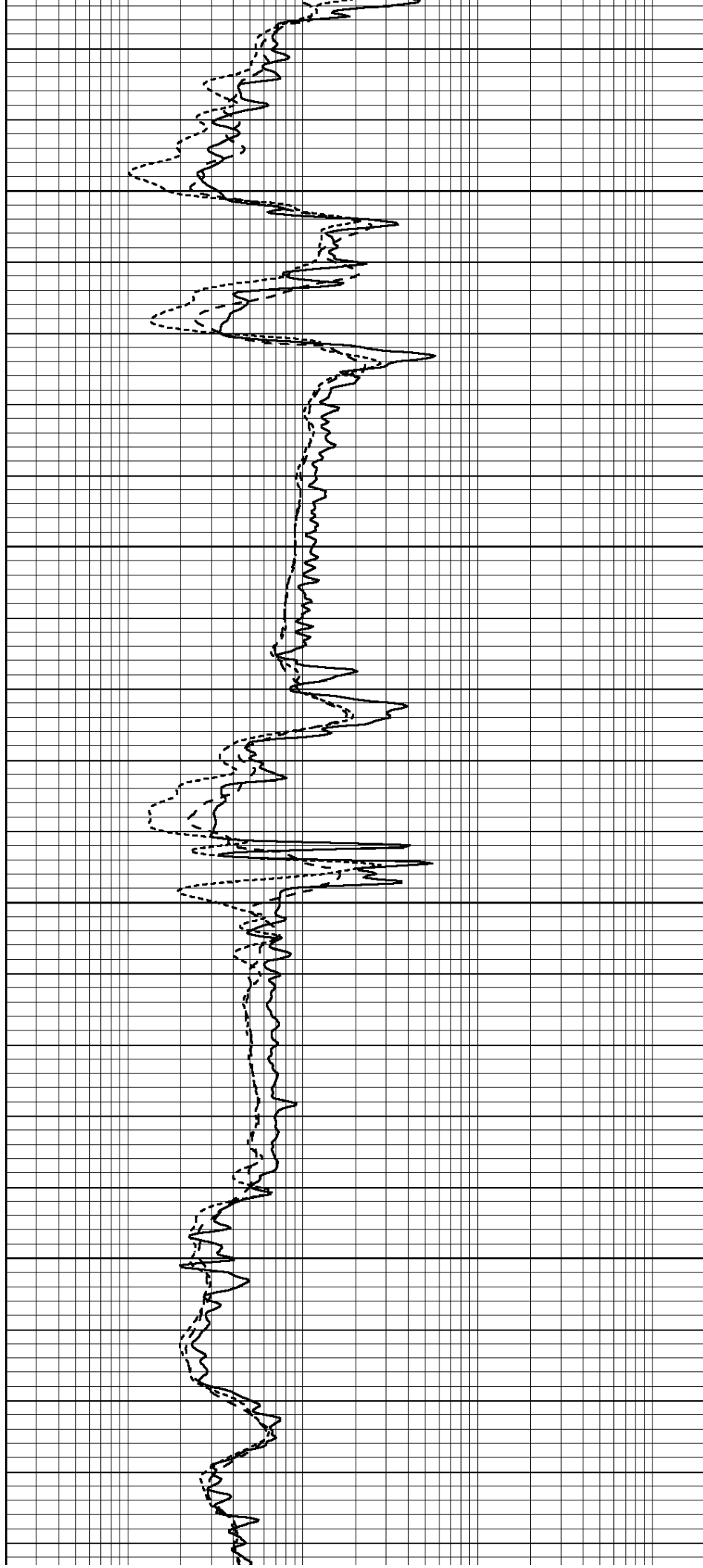


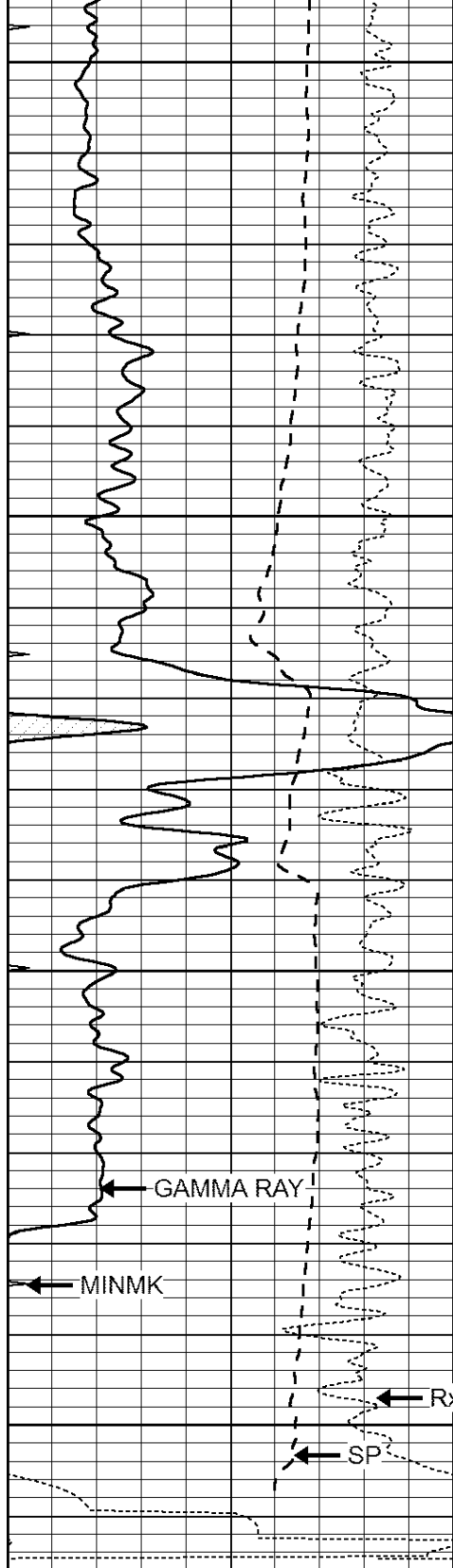
3900

3950

4000

4050





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

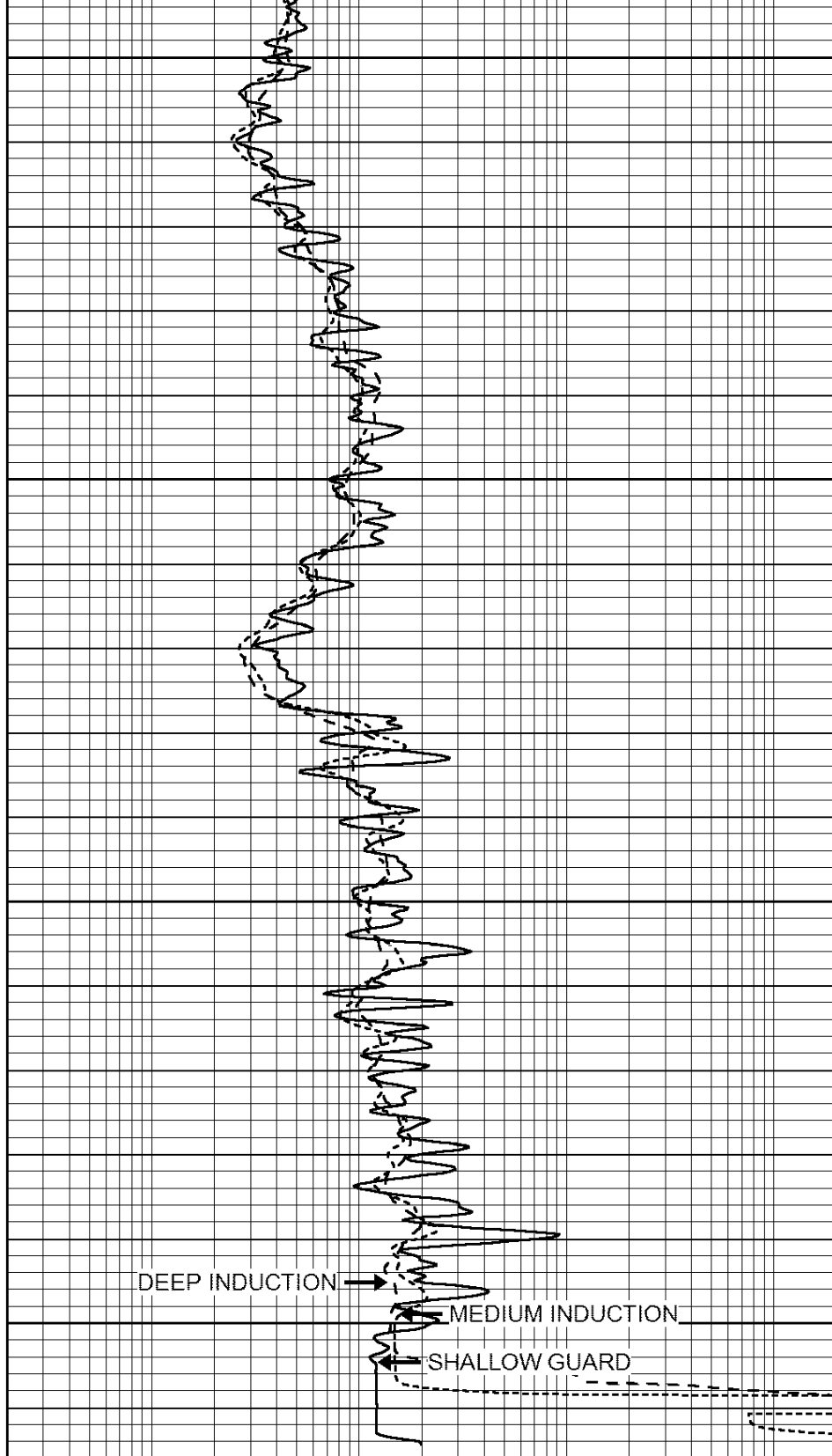
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4150

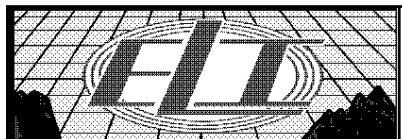
4200

4250

LTD 4256



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

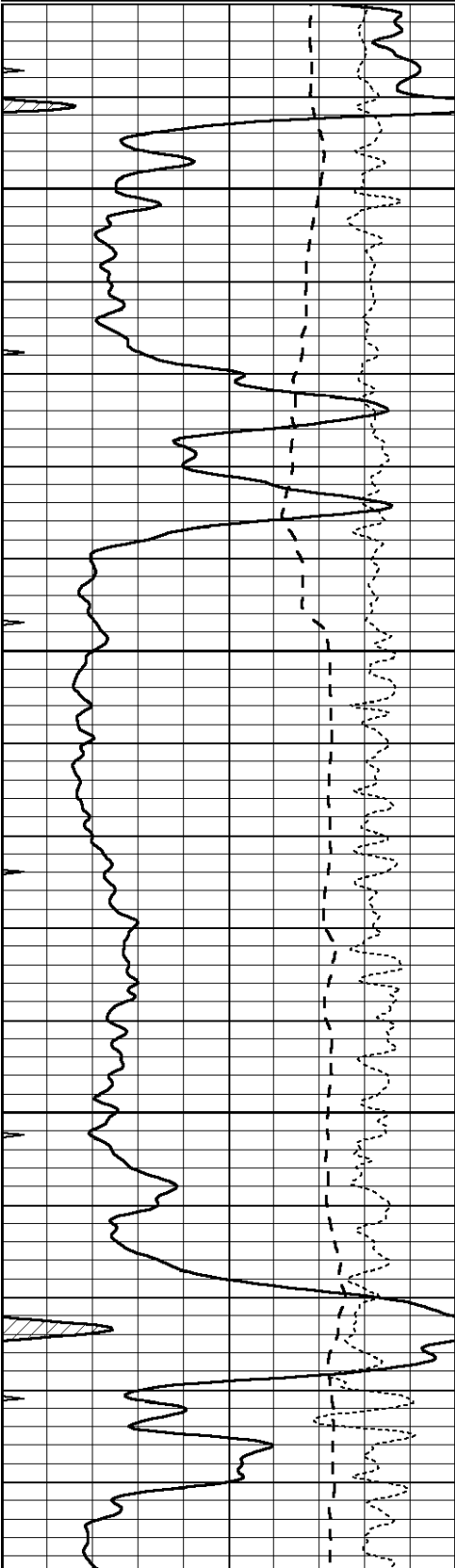


REPEAT SECTION

Database File: 1806ddn.db
Dataset Pathname: pass2.1
Presentation Format: _dil
Dataset Creation: Wed Jul 19 01:00:43 2017
Charted by: Depth in Feet scaled 1:240

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

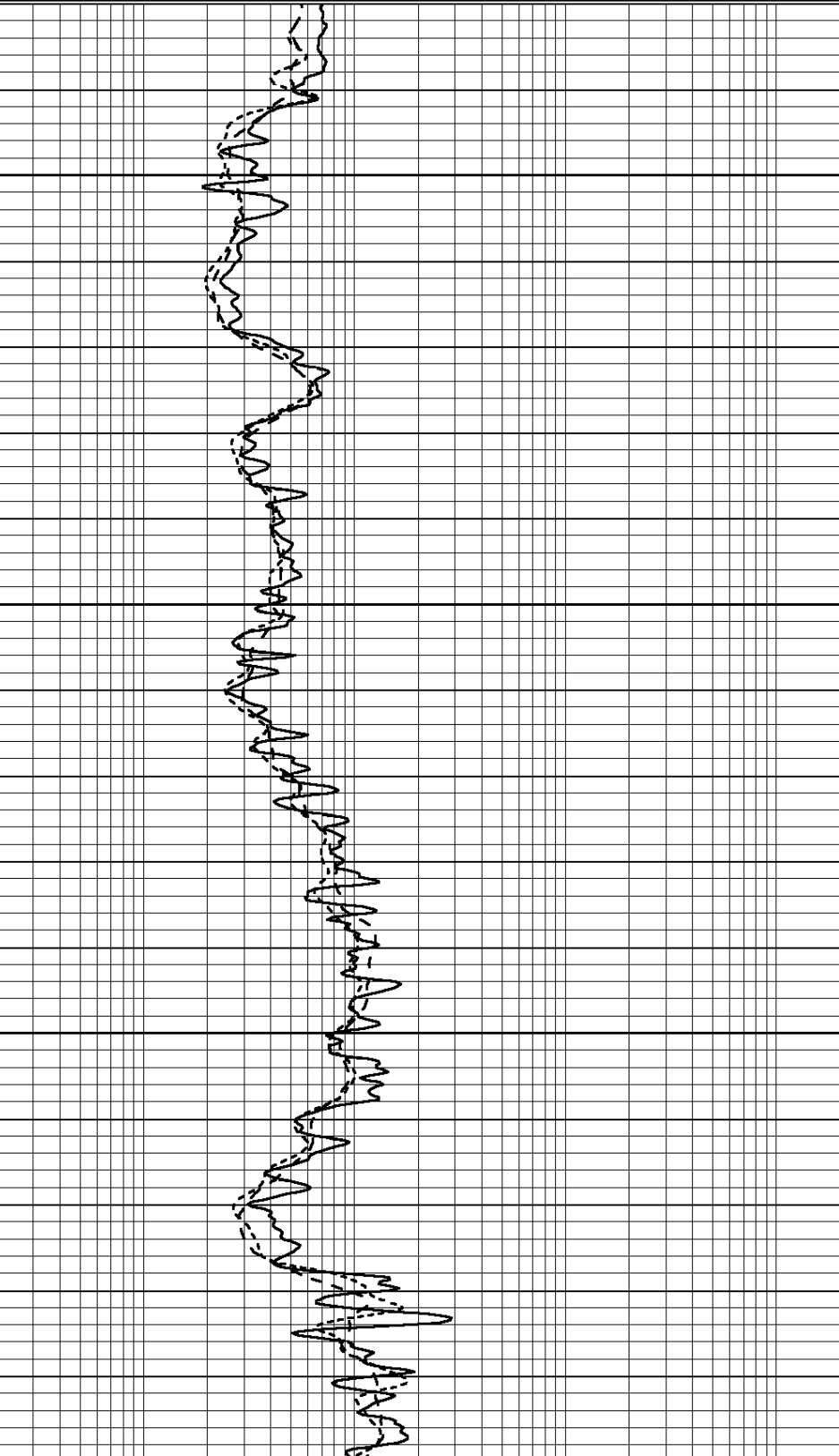
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



4050

4100

4150



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:	GEAR5-GEARHART
Source / Verifier:	/
Master Calibration Performed:	Tue Mar 21 18:56:14 2017
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration					
	Density			Far Detector	Near Detector
Magnesium	1.710	g/cc		798.83	465.02 cps
Aluminum	2.570	g/cc		178.16	318.19 cps
	Spine Angle = 75.81			Density/Spine Ratio = 0.556	
	Size			Reading	
Small Ring	7.15	in		1.47	V
Large Ring	14.00	in		3.01	V

Before Survey Verification					
	Target			Measured	
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc

After Survey Verification					
	Target			Measured	
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc

Compensated Neutron Calibration Report

Serial Number:	6l
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

PRE-SURVEY VERIFICATION					
	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	

3)	Short Space Long Space	cps cps	pu	
POST-SURVEY VERIFICATION				
	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
	Serial Number:	GR6		
	Tool Model:	OPEN		
	Performed:	Tue Mar 21 18:56:51 2017		
	Calibrator Value:	150.0	GAPI	
	Background Reading:	0.0	cps	
	Calibrator Reading:	276.0	cps	
	Sensitivity:	0.5800	GAPI/cps	