



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	BUFFALO RESOURCES, LLC.		
Well	MOG #1-27		
Field	WILDCAT		
County	RUSSELL	State	KANSAS
Location:	API # : 15-167-23568-0000		Other Services CDL/CNL MEL
SEC 27 TWP 15S RGE 11W			
Permanent Datum	GROUND LEVEL	Elevation	1795
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		
Date	4/15/09		
Run Number	CNE		
Depth Driller	3320		
Depth Logger	3322		
Bottom Logged Interval	3320		
Top Log Interval	00		
Casing Driller	8 5/8"@421'		
Casing Logger	420		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,100 PPM	
Density / Viscosity	9.0/65		
pH / Fluid Loss	8.8/11.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.800@72F		
Rmf @ Meas. Temp	.600@72F		
Rmc @ Meas. Temp	.960@72F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.524@110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	6:00 P.M.		
Maximum Recorded Temperature	110F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	CURTIS COVEY	DARON PATTERSON	

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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
WILSON, KS. 7S. ON BLKTOP TO STICKNEY RD. (K AVE.) 2W., 1S., 3/4W., N. INTO



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MAIN SECTION

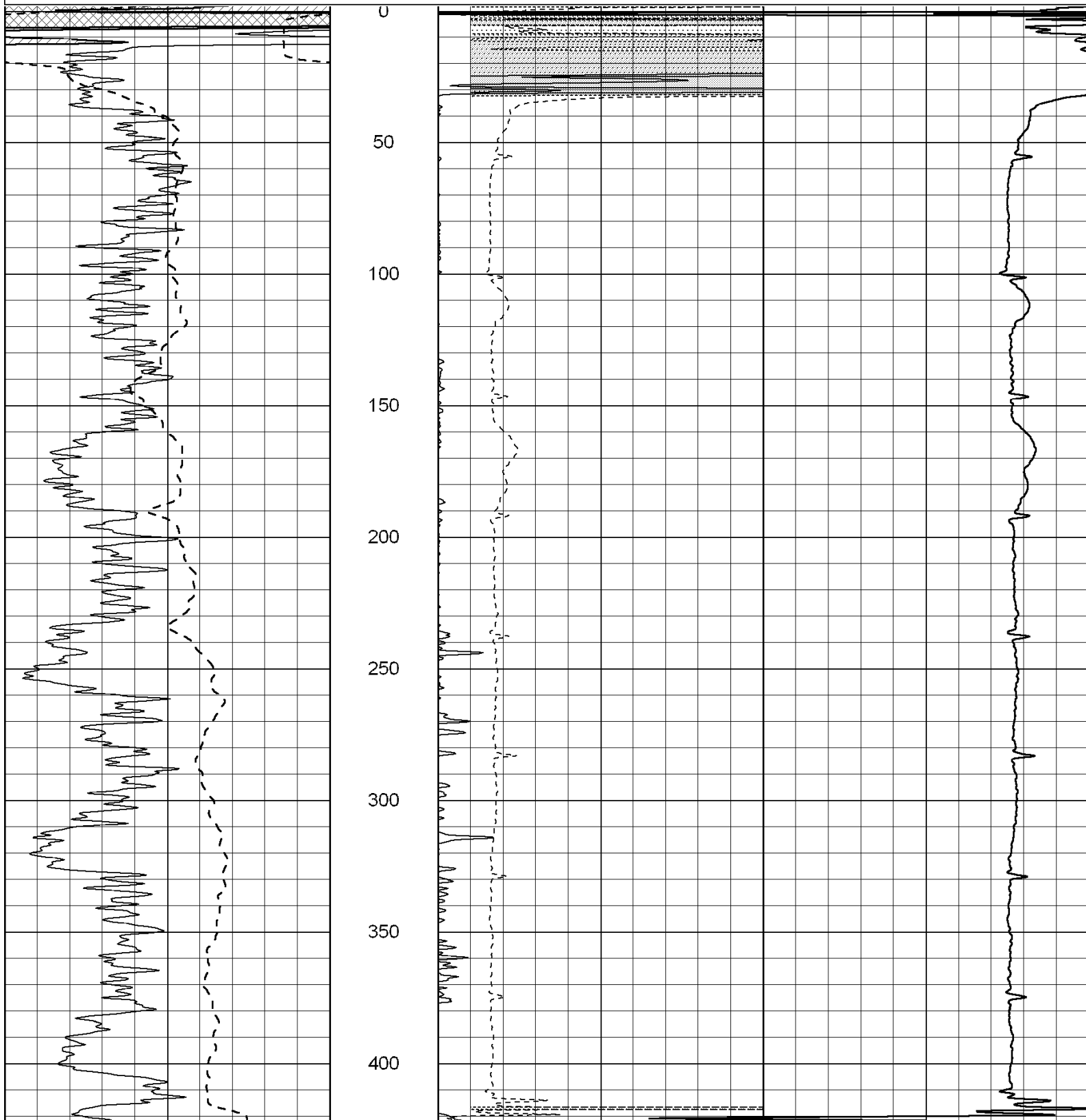
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 Dataset Pathname: pass3.2
 Presentation Format: dil2
 Dataset Creation: Wed Apr 15 19:28:10 2009 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:600

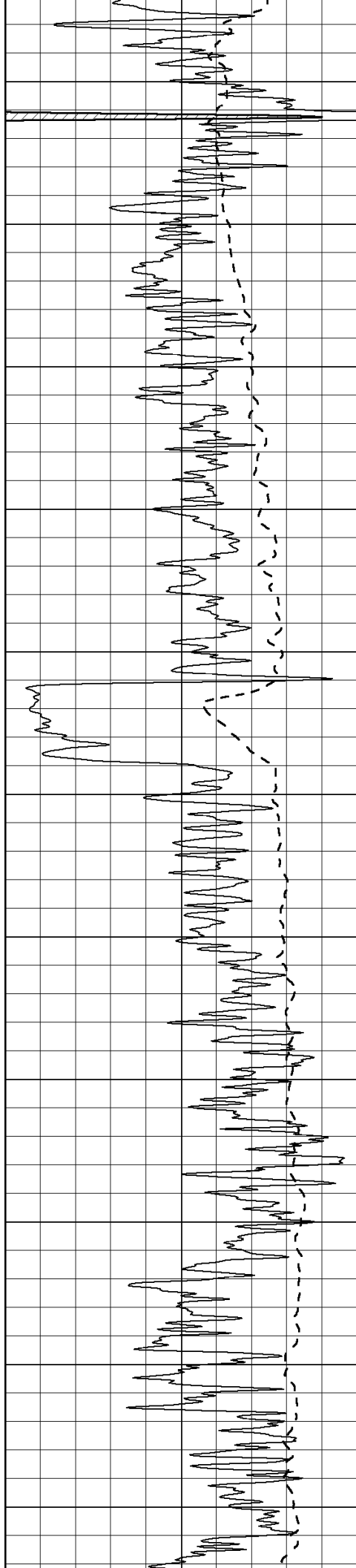
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	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

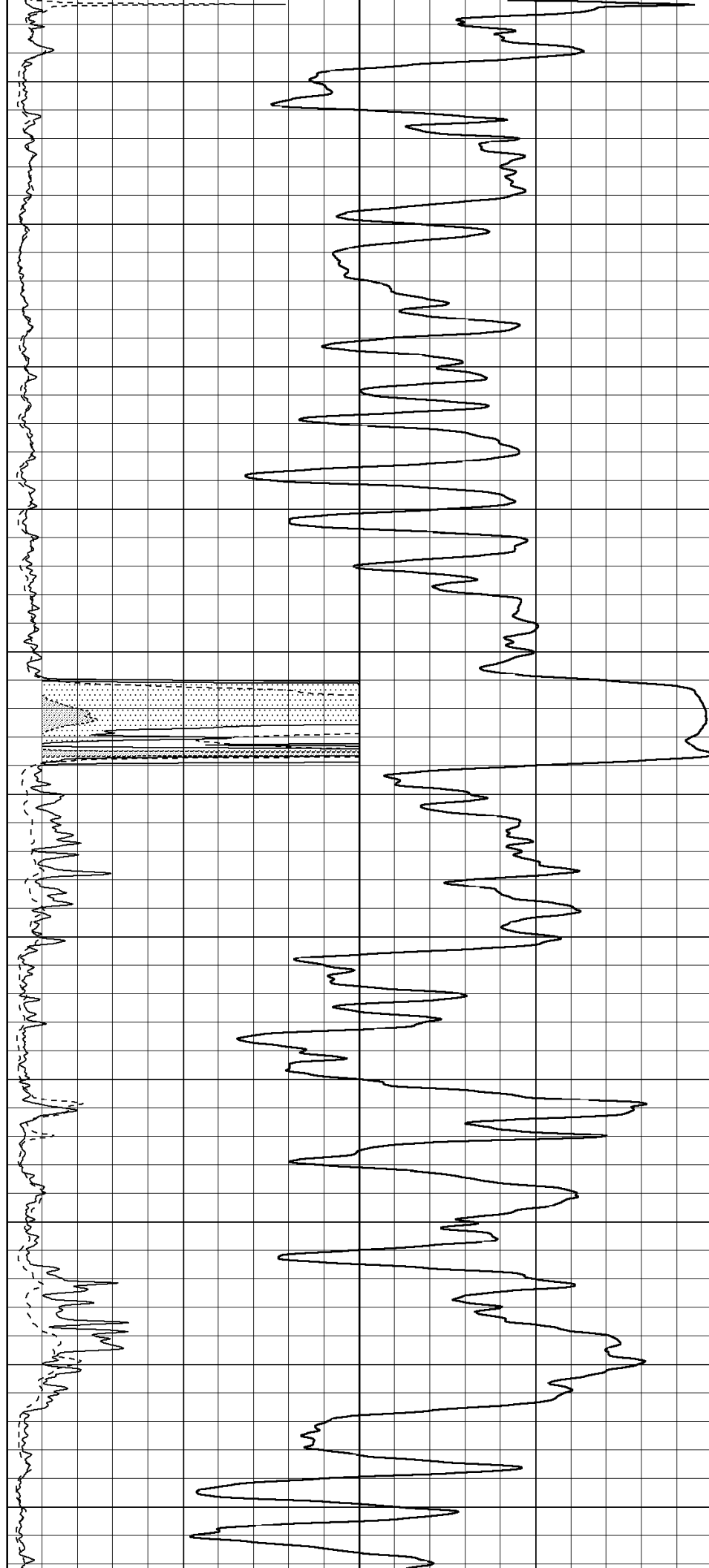
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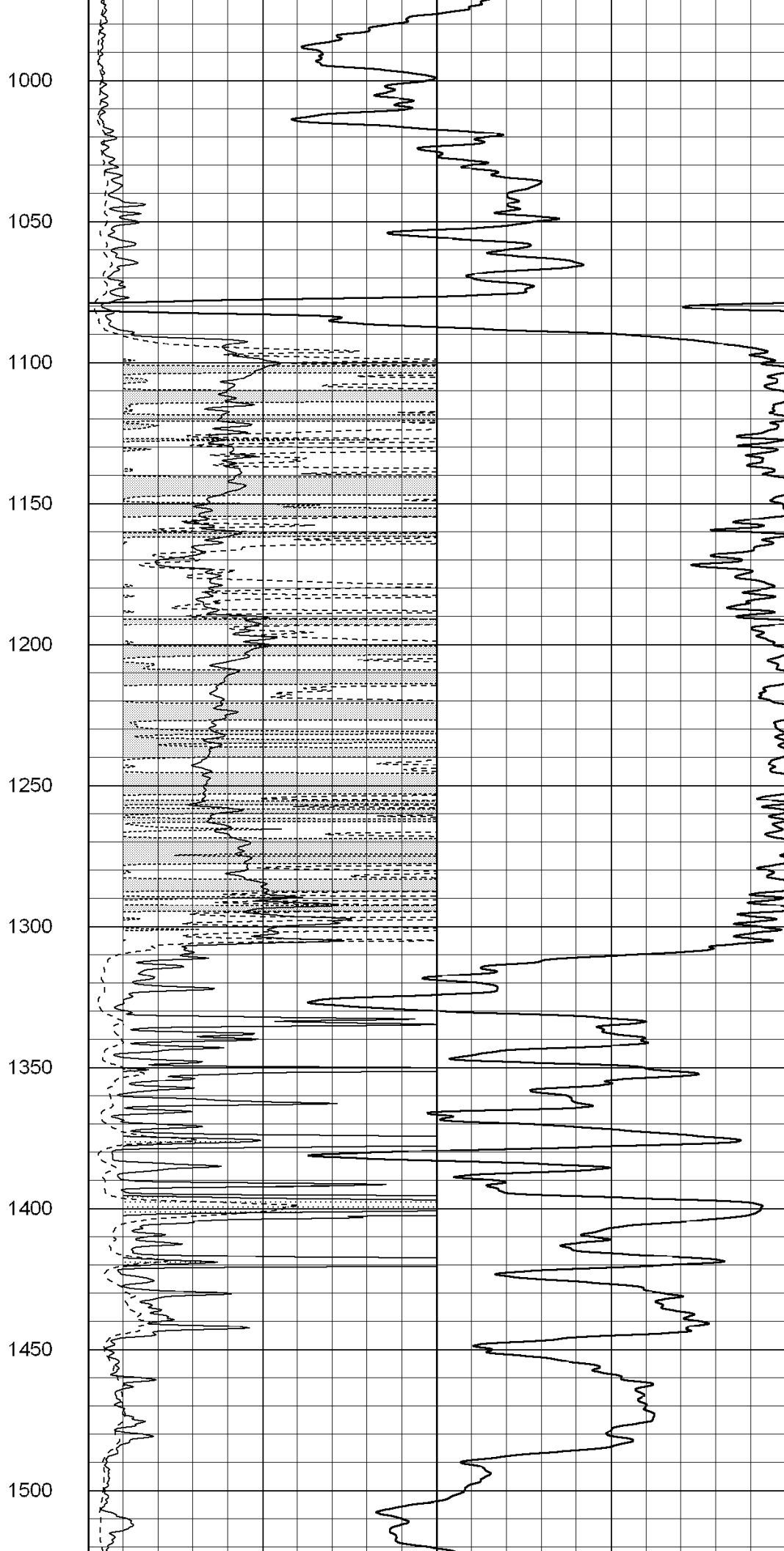
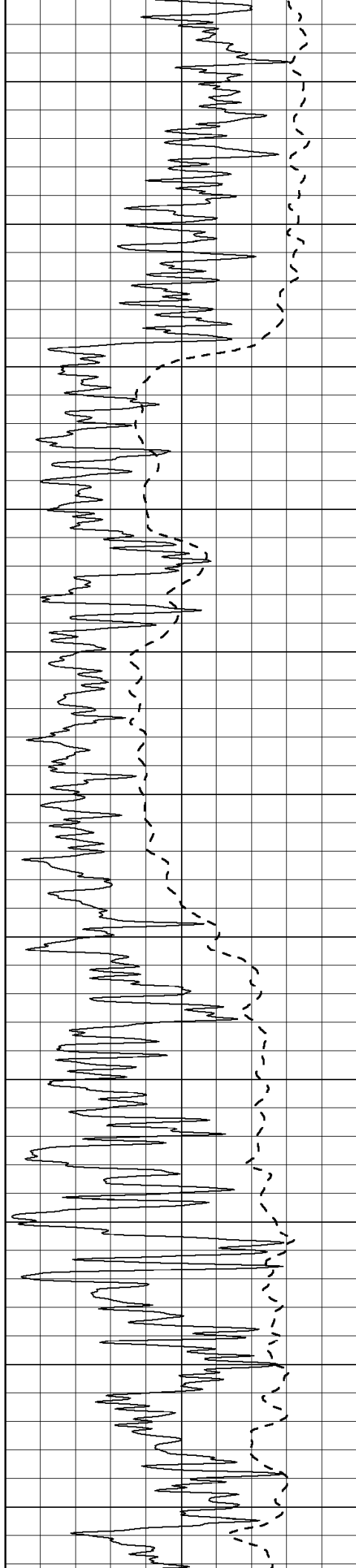
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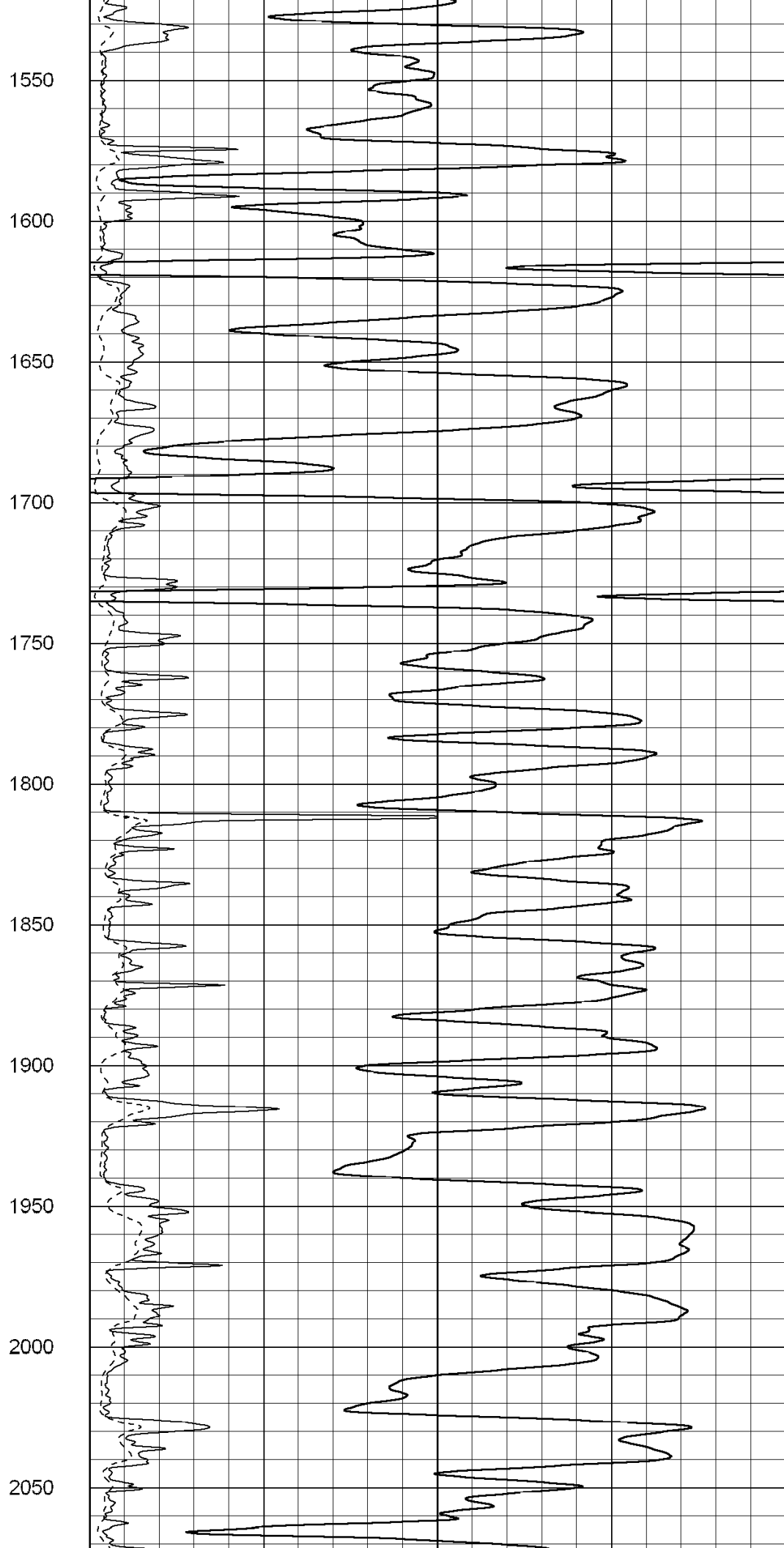
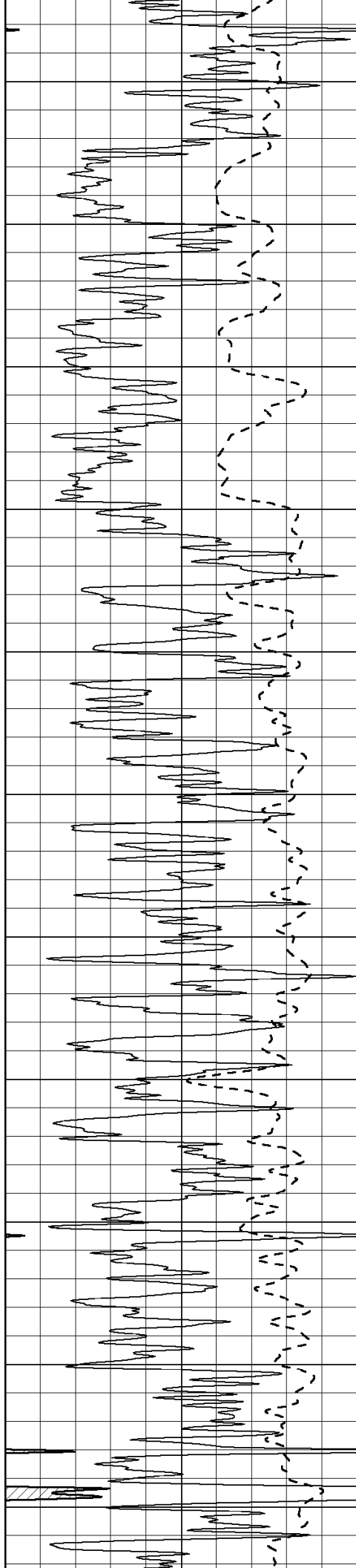
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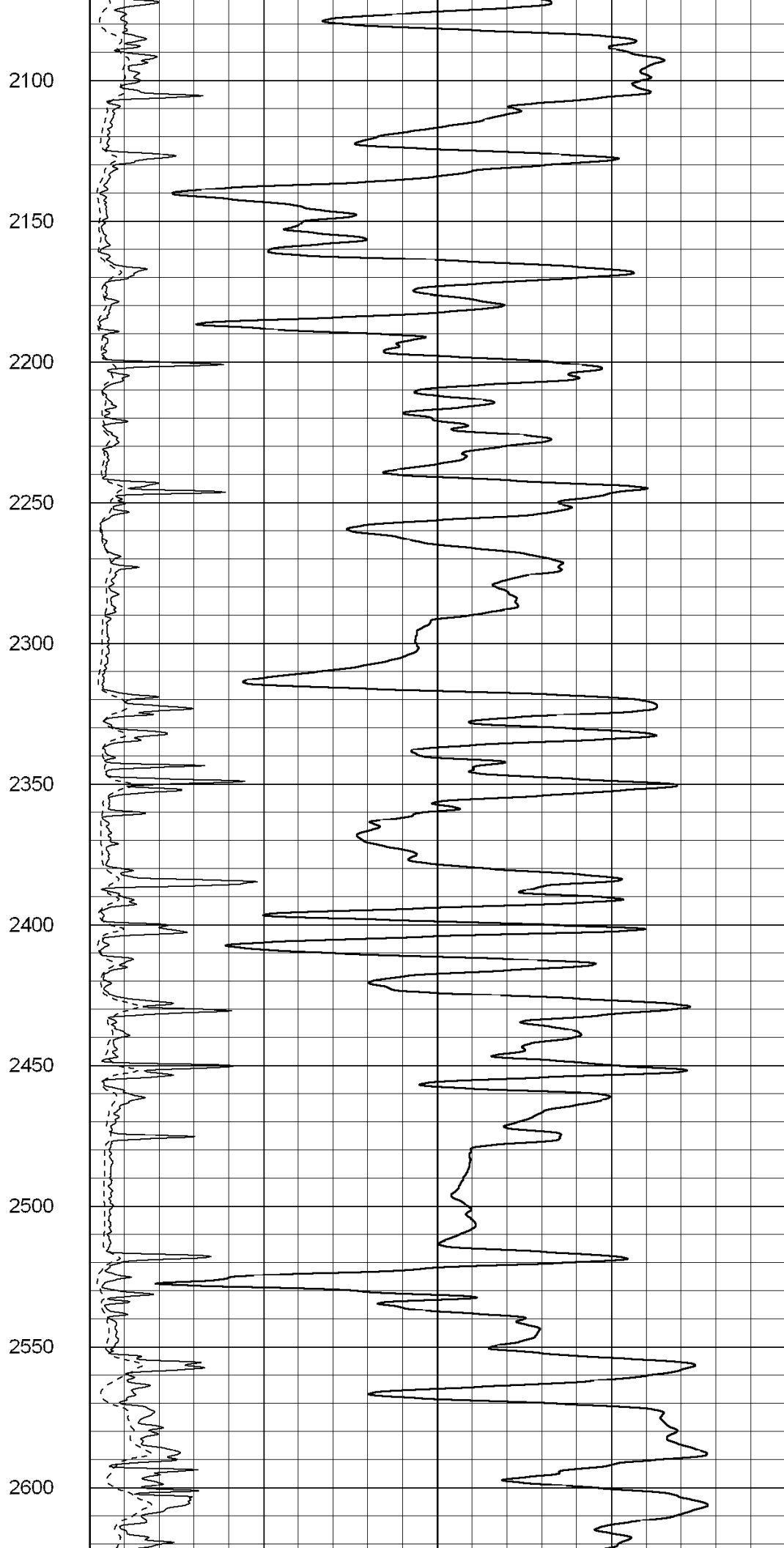
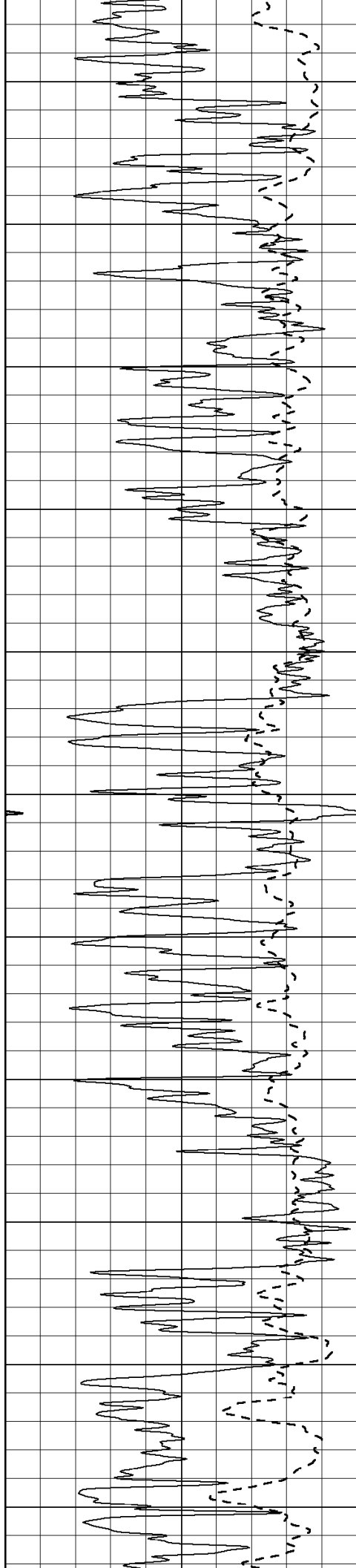
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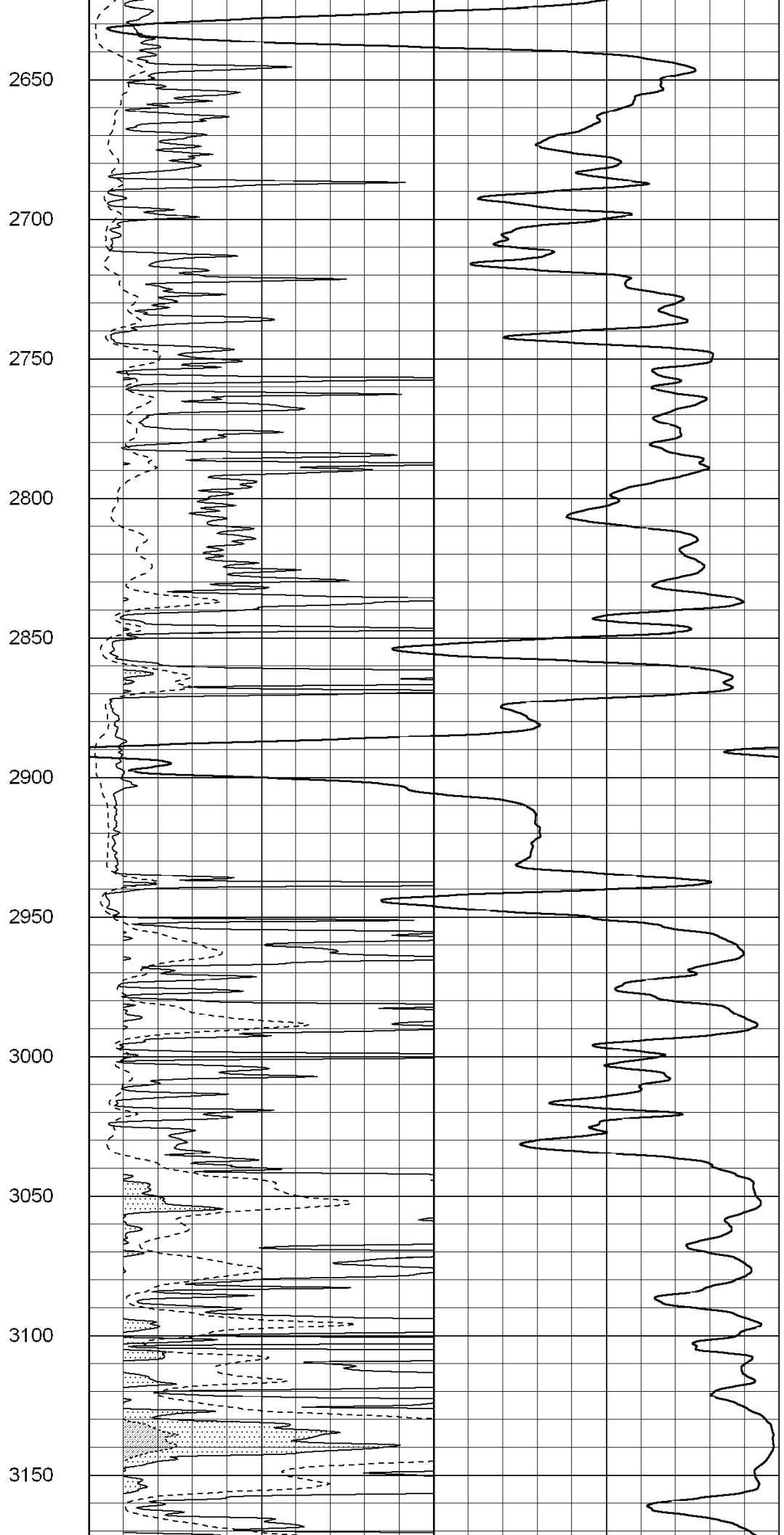
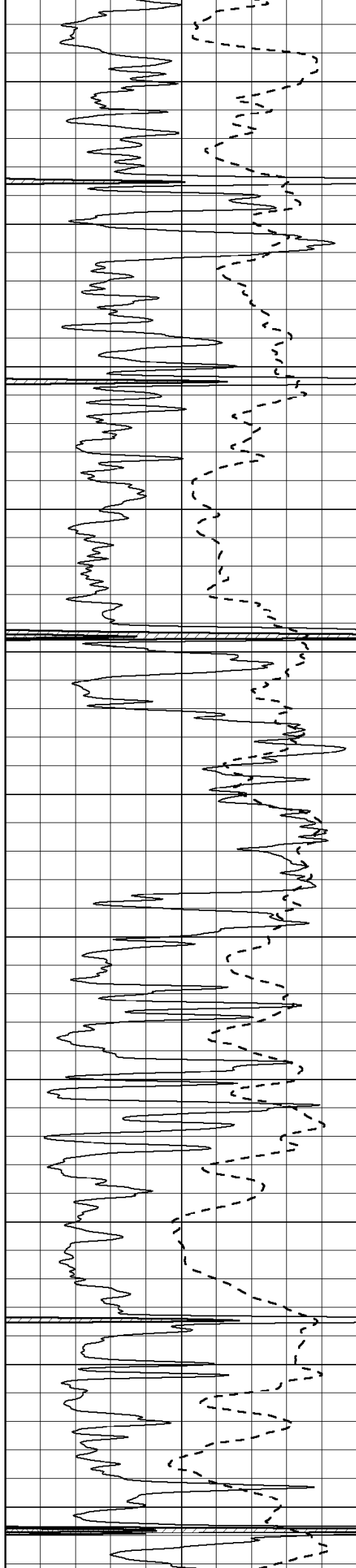
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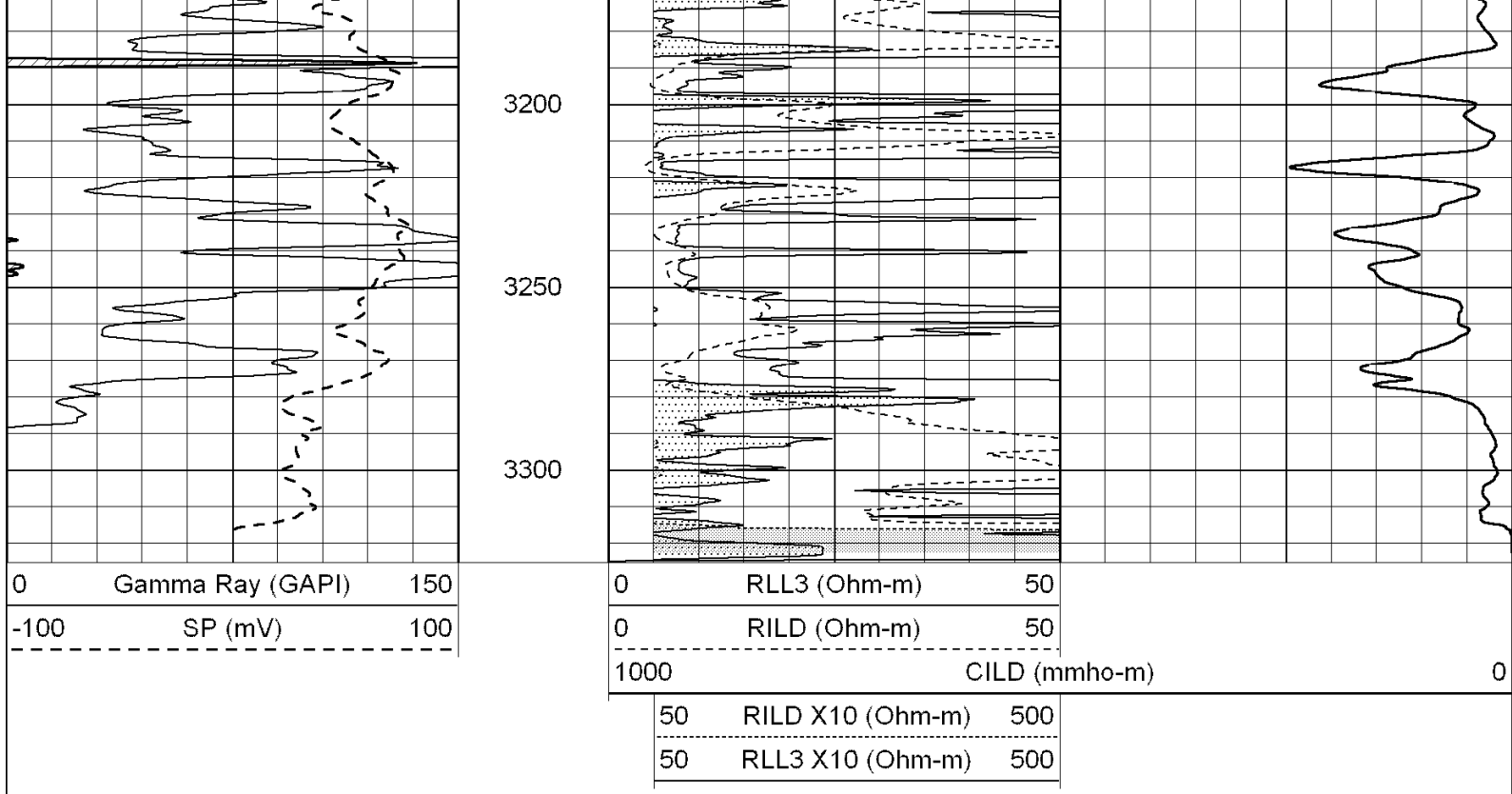










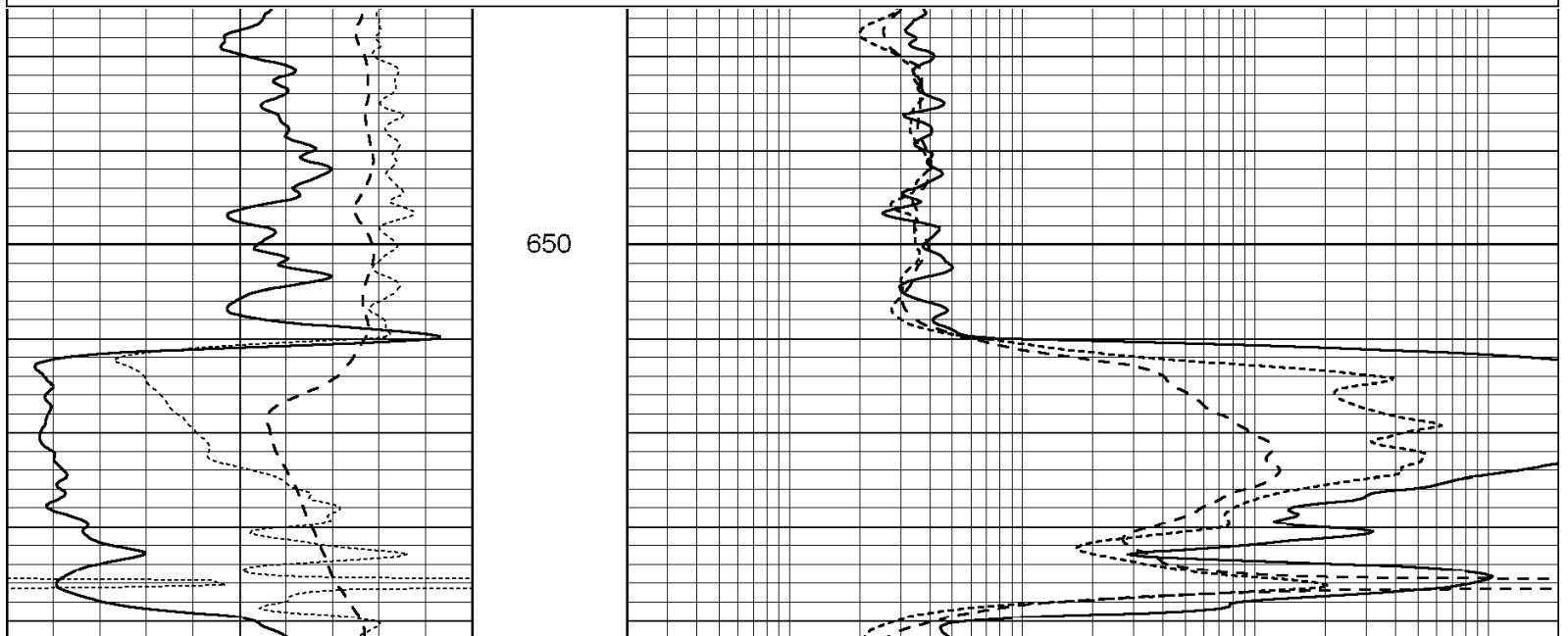


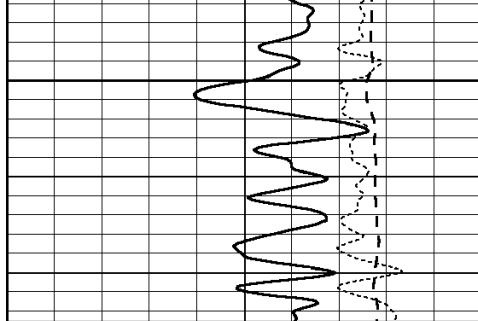
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ANHYDRITE

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 Dataset Pathname: pass3.3
 Presentation Format: dil
 Dataset Creation: Wed Apr 15 19:28:52 2009 by Calc Open-Cased 060407
 Charted by: Depth in Feet scaled 1:240

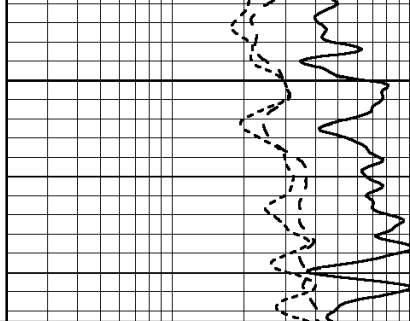
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000





700

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



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



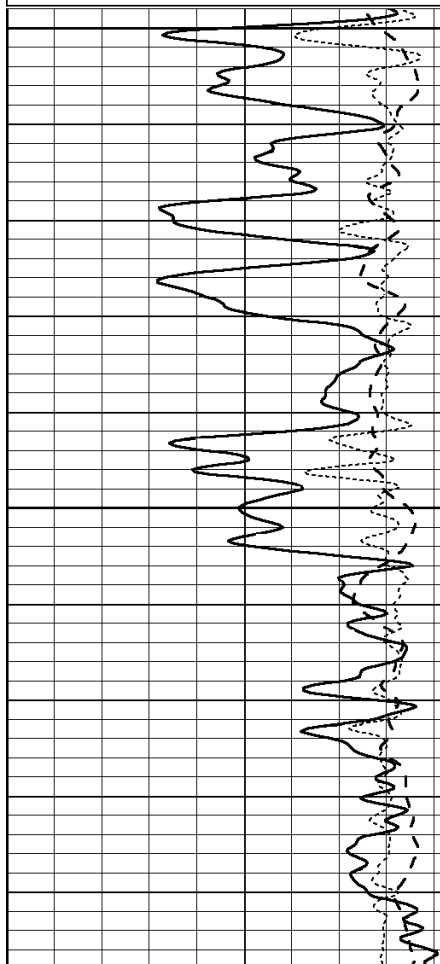
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MAIN SECTION

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 Presentation Format: dil
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 Charted by: Depth in Feet scaled 1:240

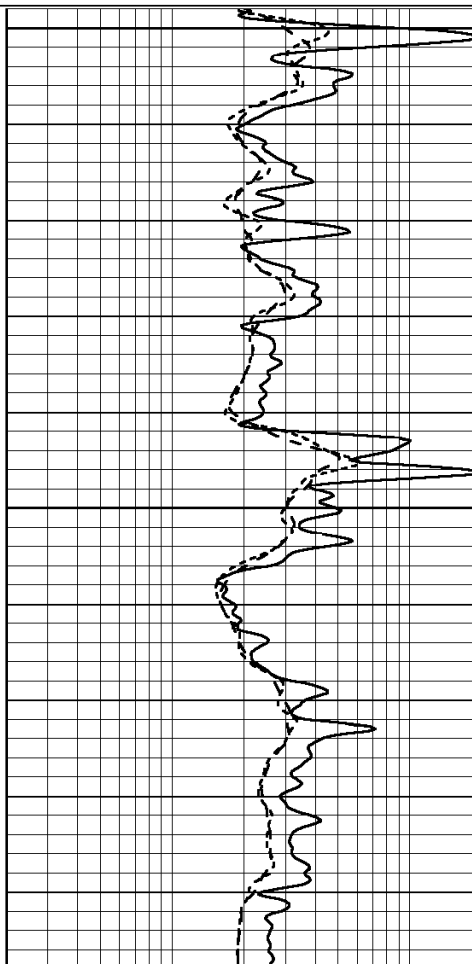
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-100	SP (mV)	100
-250	Rxo/Rt	50

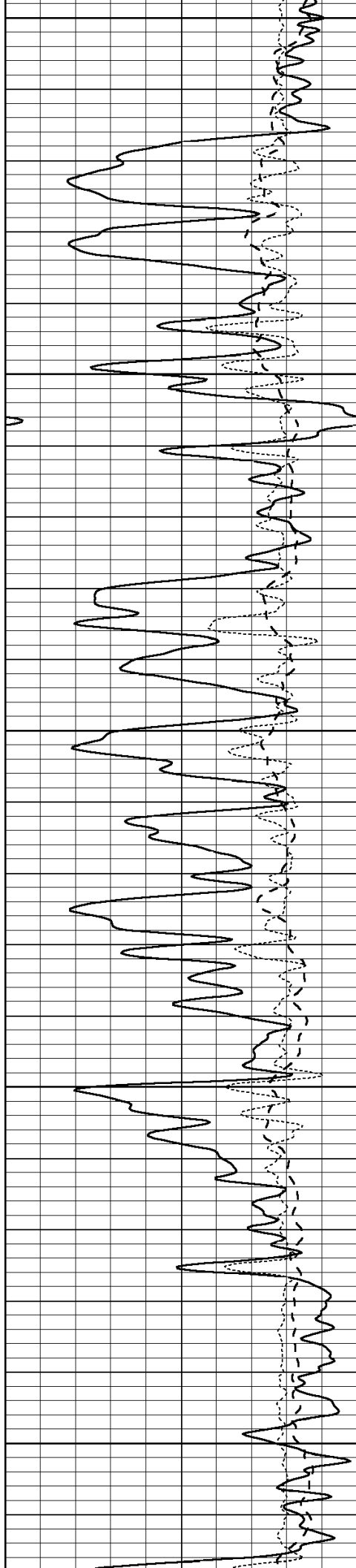
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



2200

2250





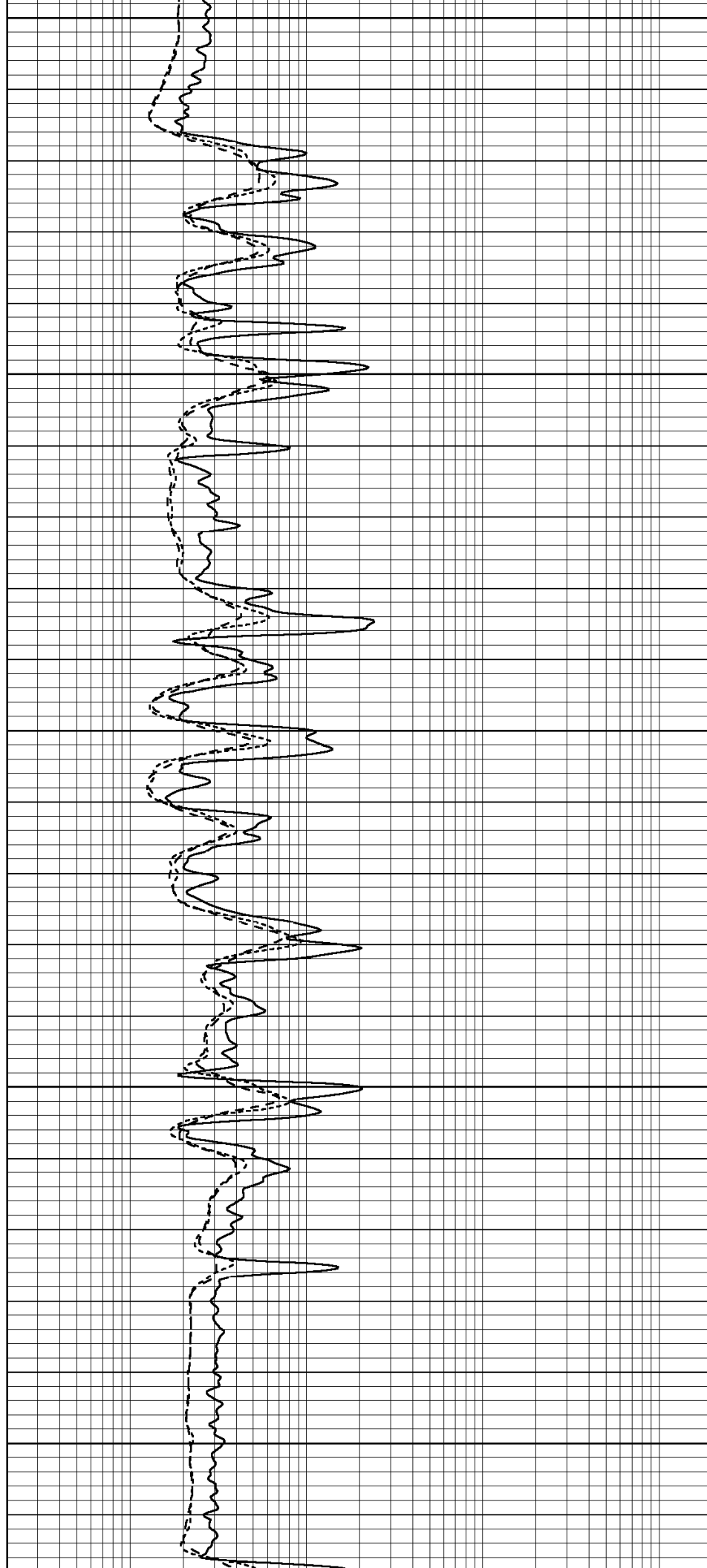
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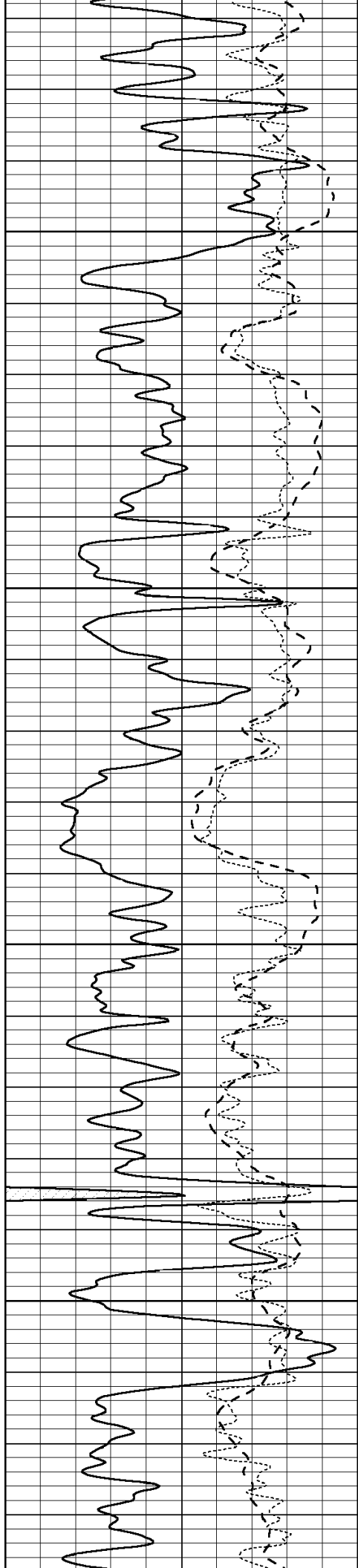
2350

2400

2450

2500



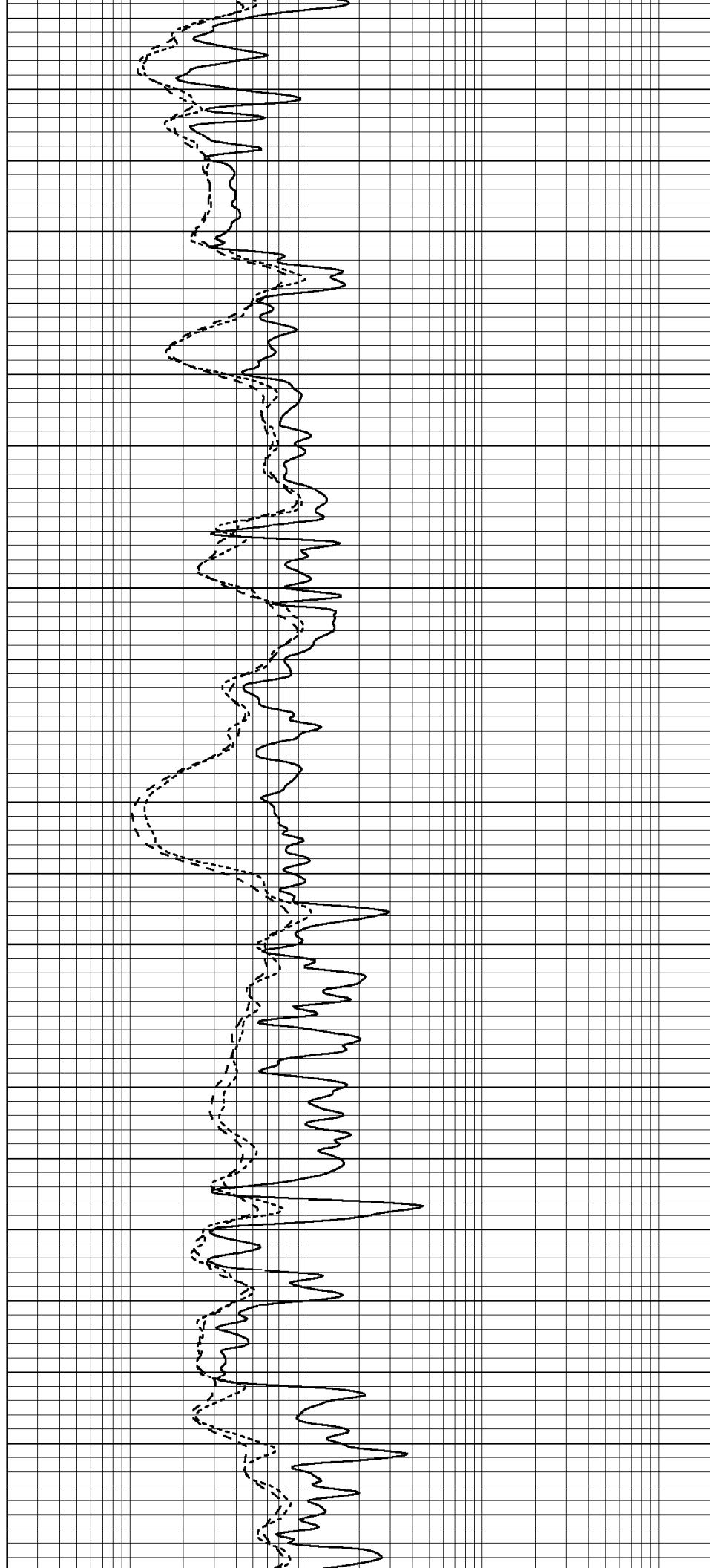


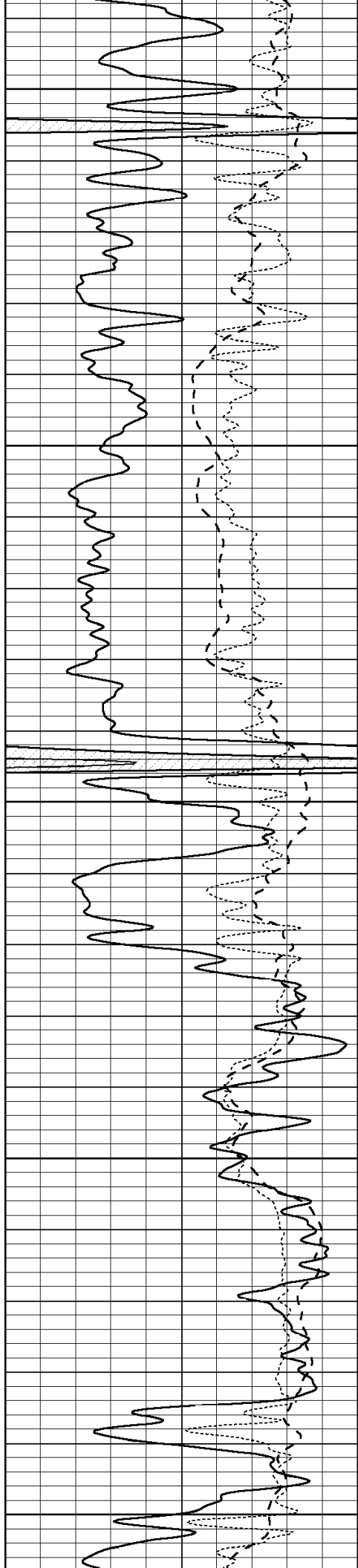
2550

2600

2650

2700





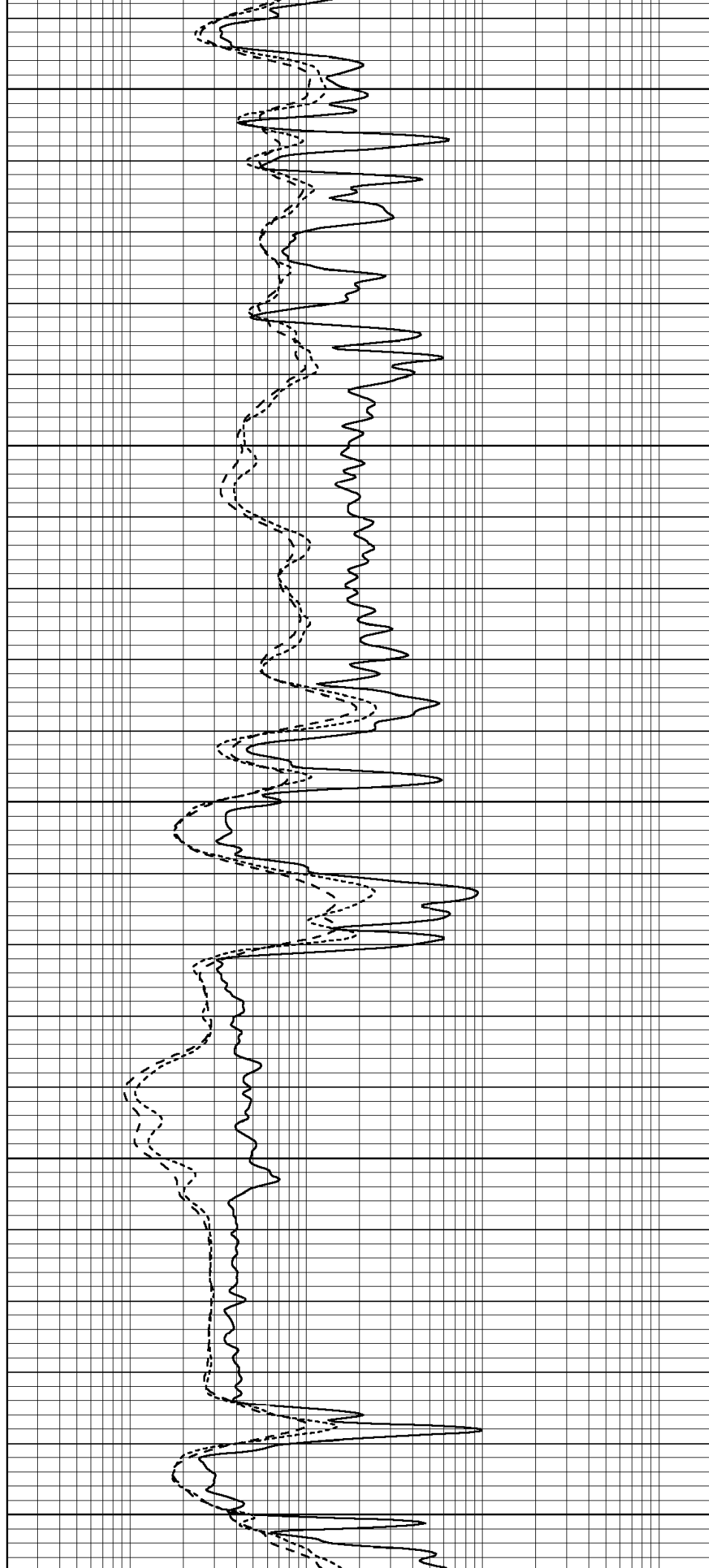
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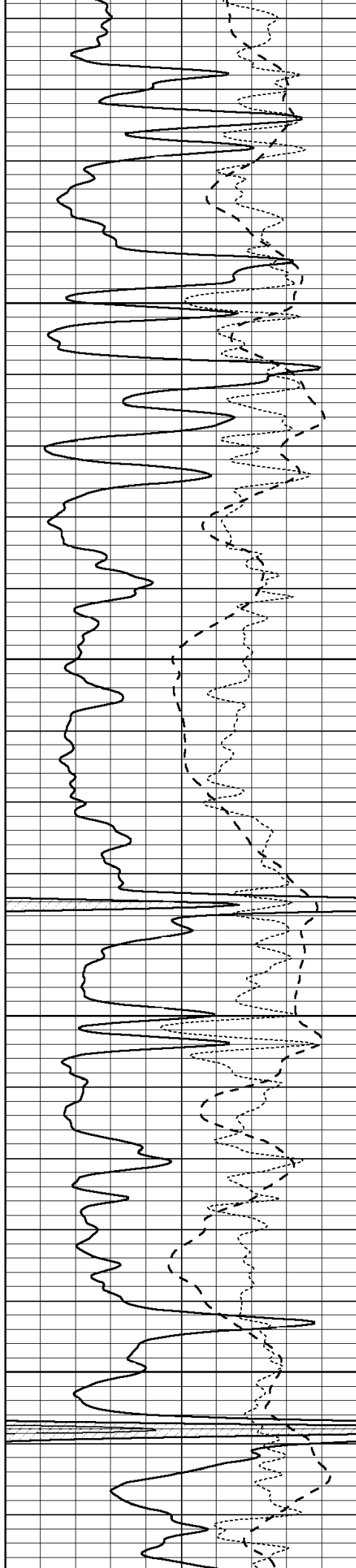
2800

2850

2900

2950



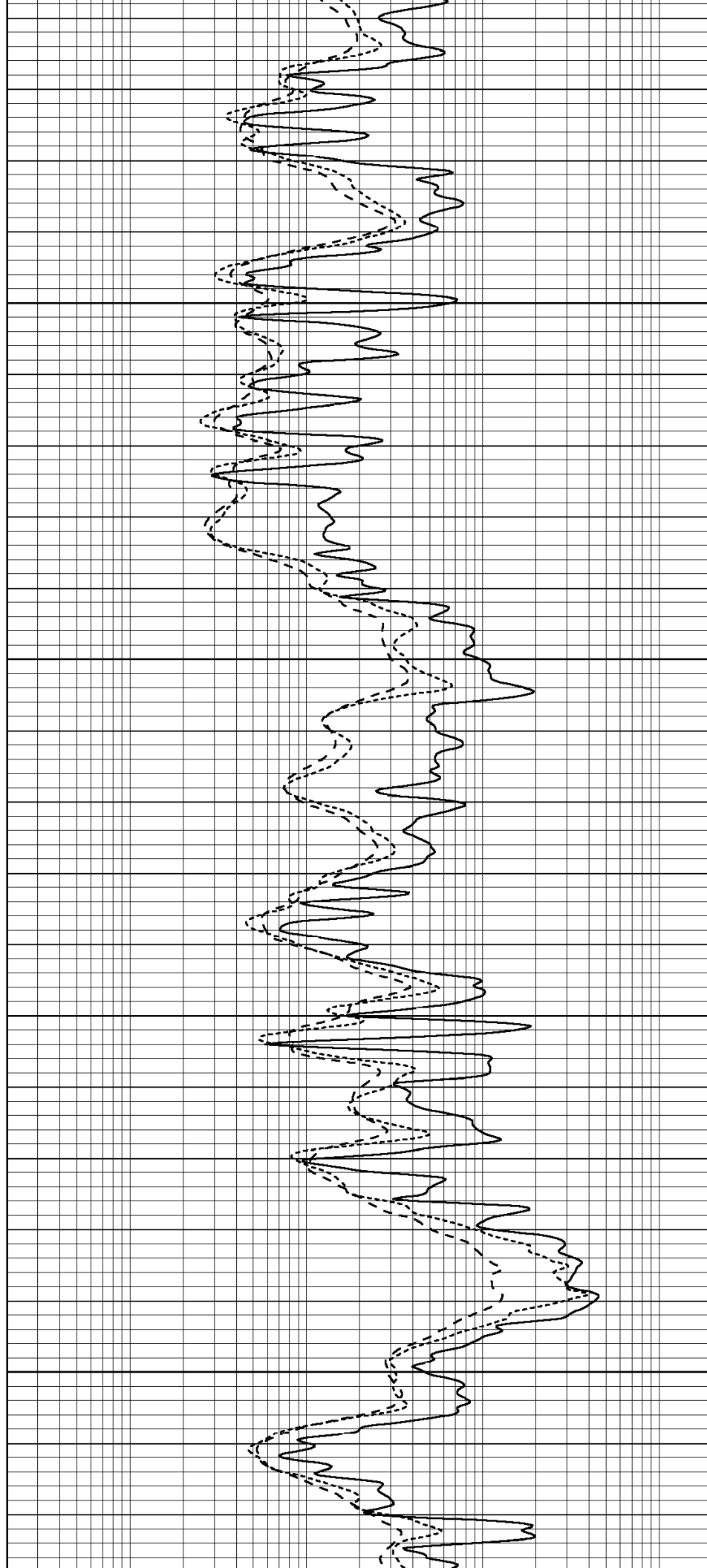


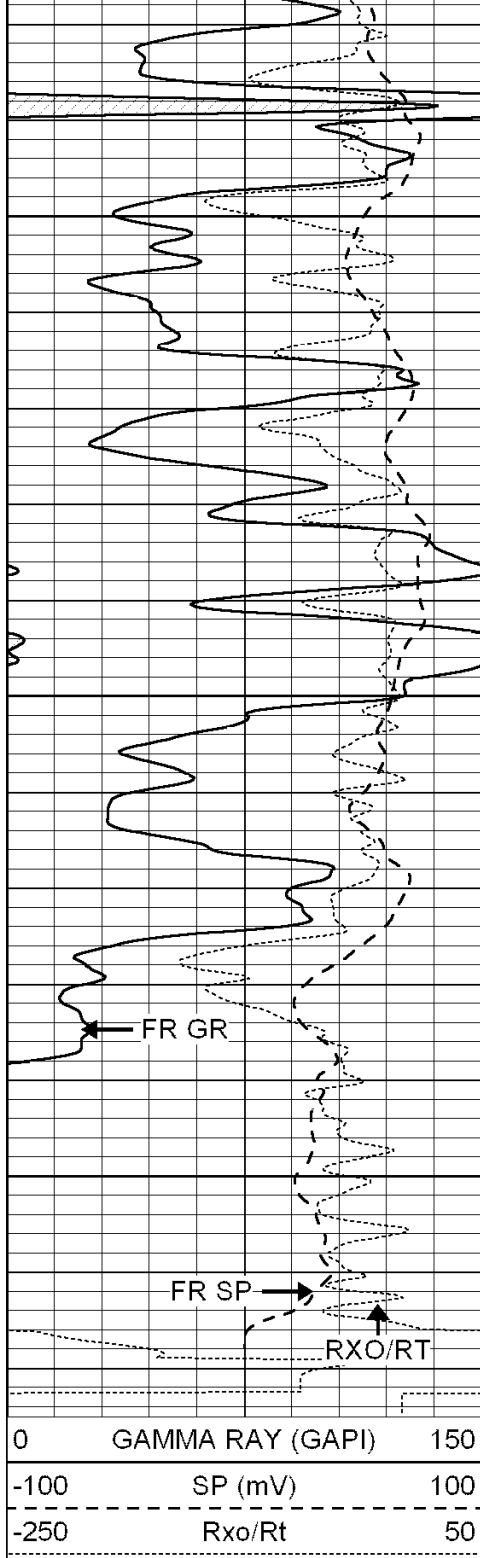
3000

3050

3100

3150



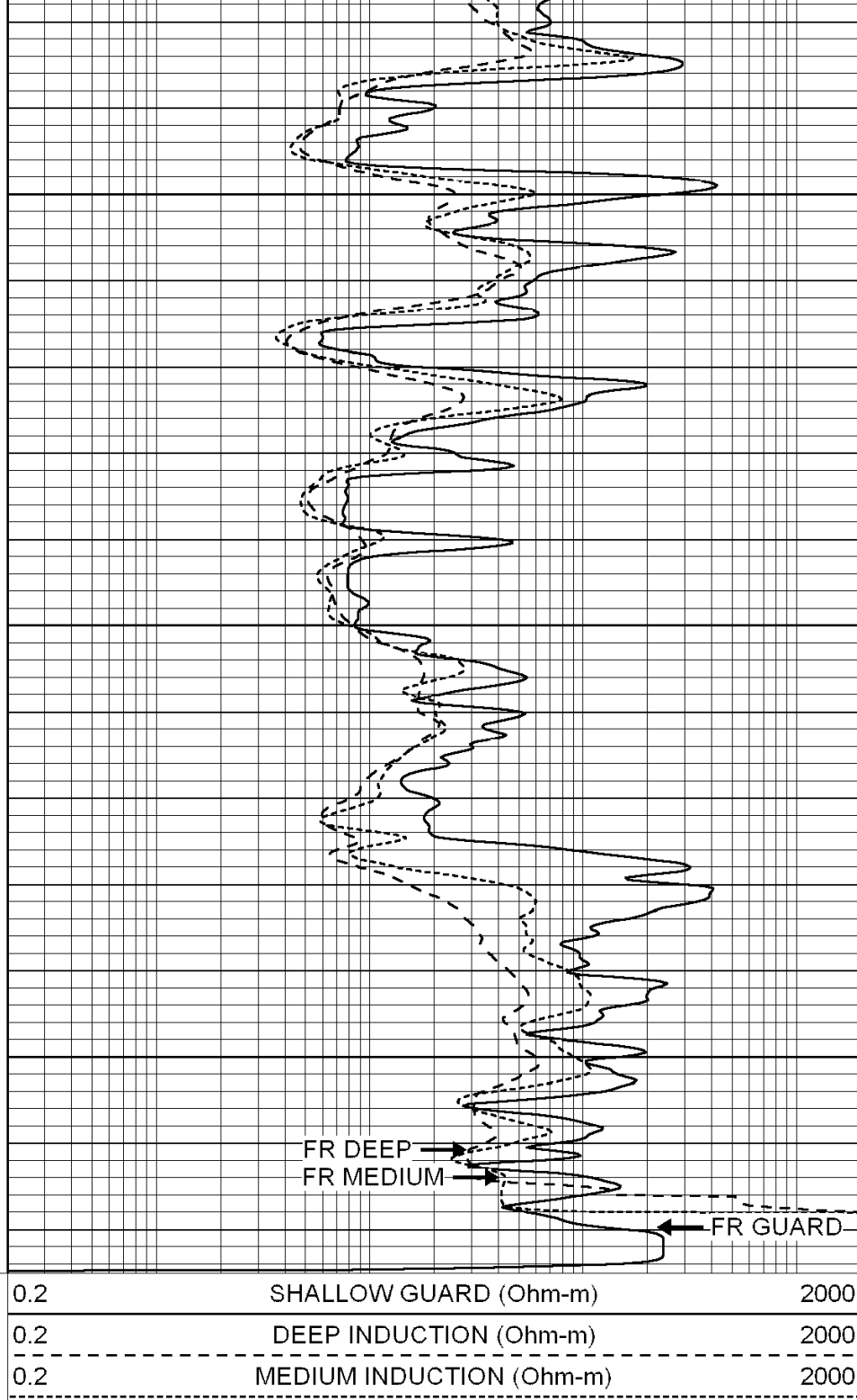


3200

3250

3300

LTD 3322



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REPEAT SECTION

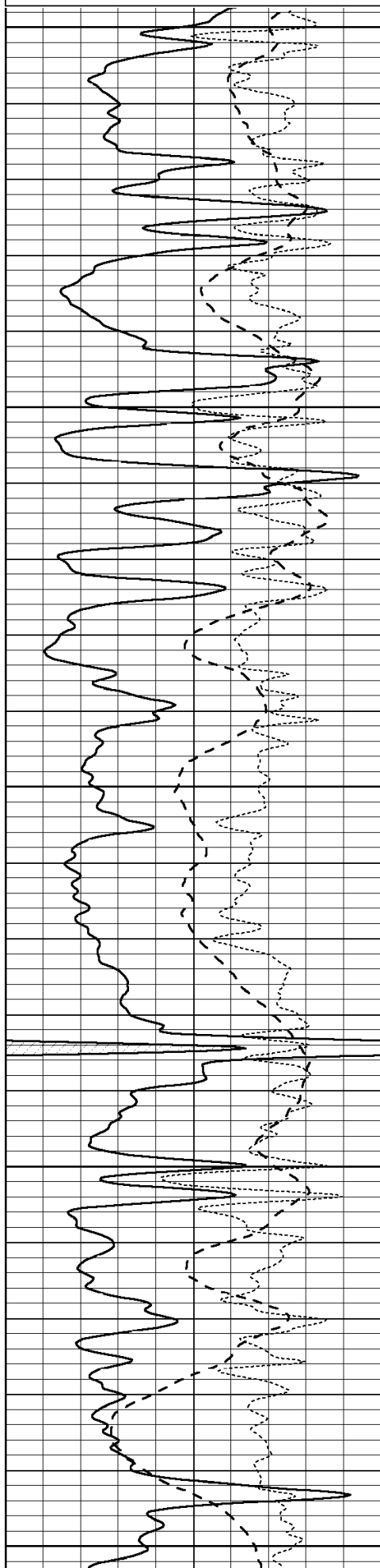
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 Charted by: Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150

0.2 SHALLOW GUARD (Ohm-m) 2000

-100 SP (mV) 100
-250 Rxo/Rt 50

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



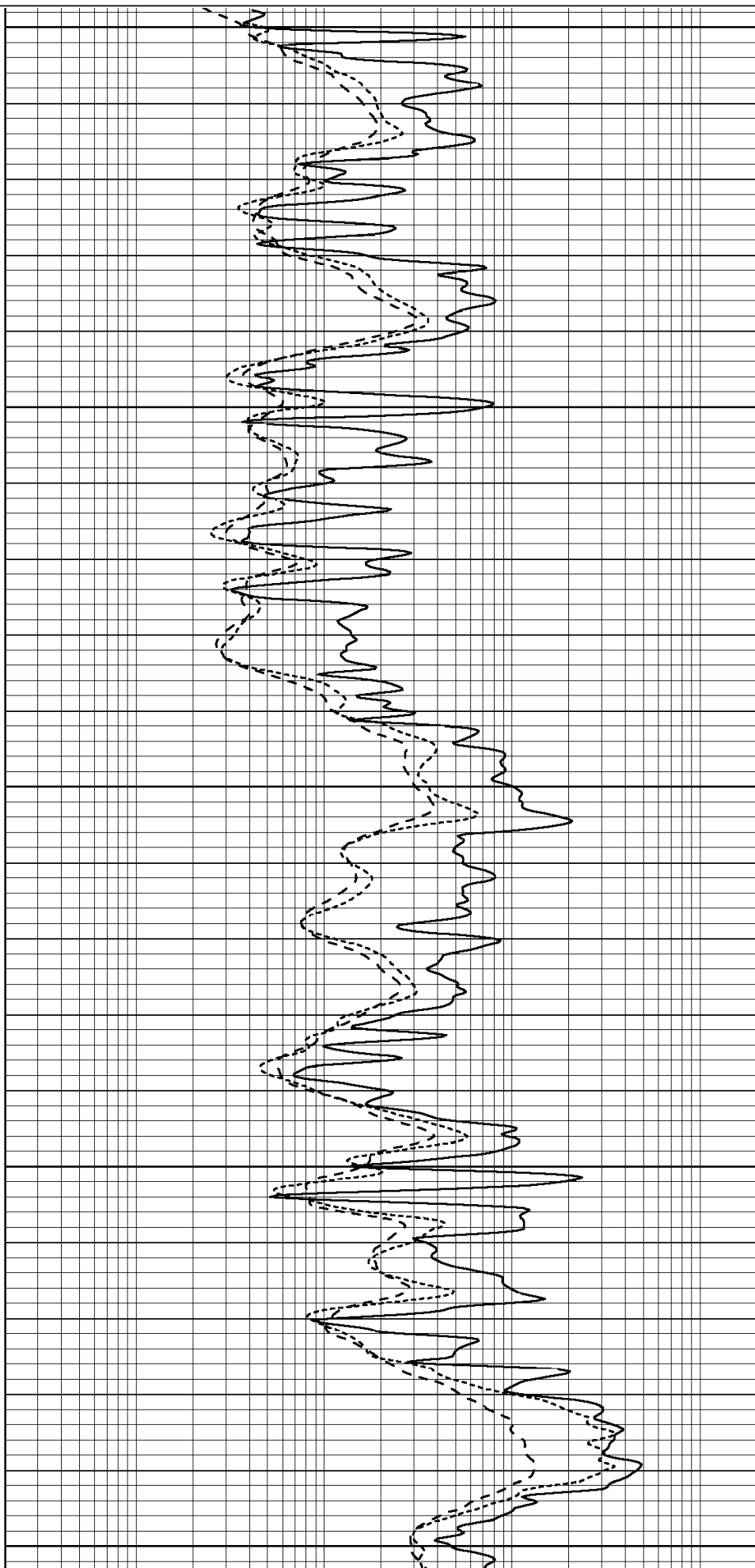
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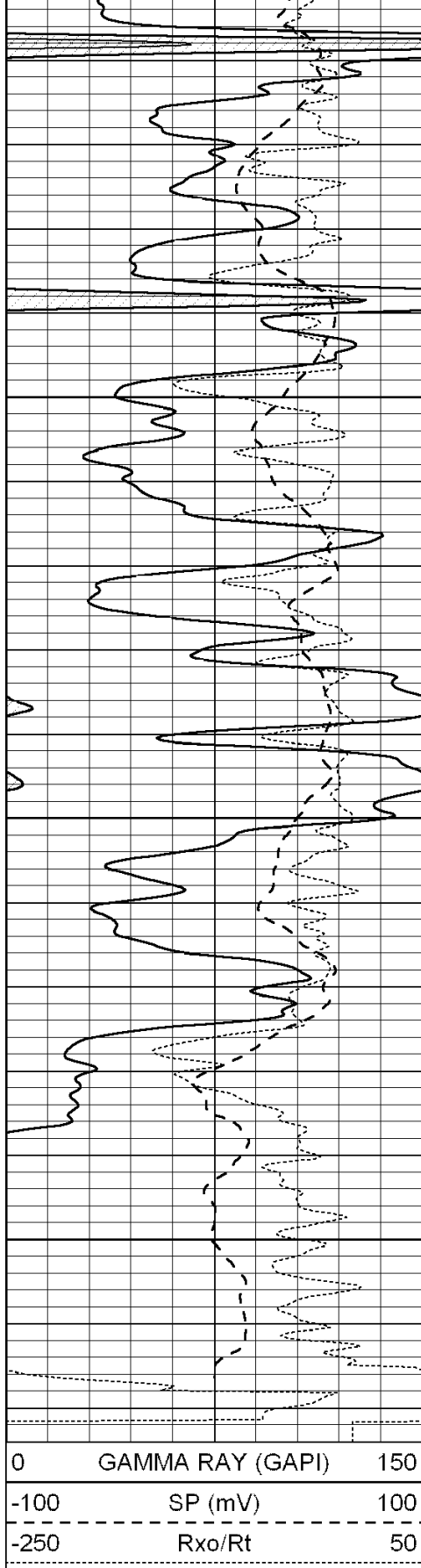
3000

3050

3100

3150

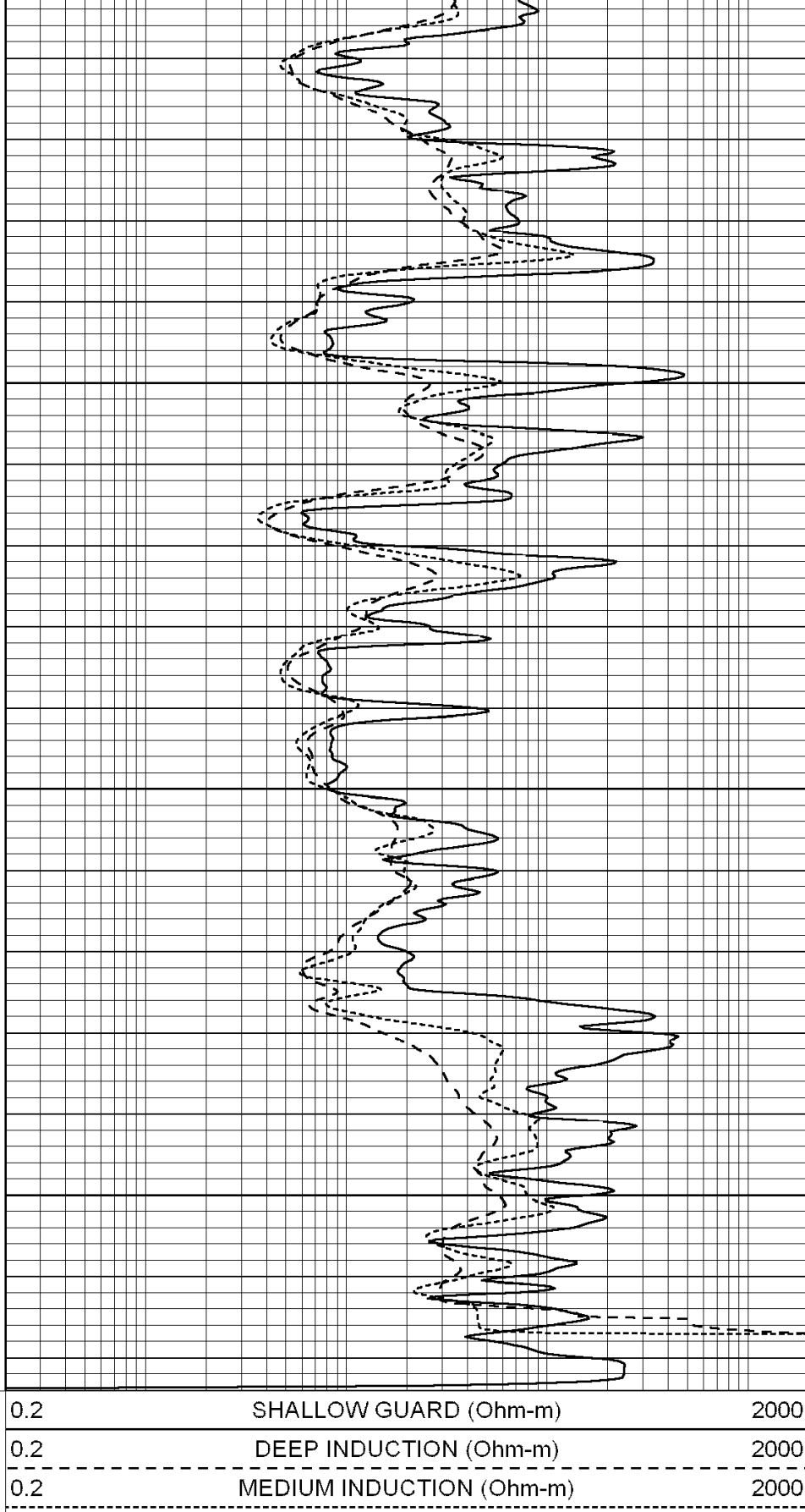




3200

3250

3300



Calibration Report

Database File: 003258ddn.db
Dataset Pathname: pass3.2
Dataset Creation: Wed Apr 15 19:28:10 2009 by Calc Open-Cased 060407

Dual Induction Calibration Report

Serial-Model:
Performed:

DIL2-GEAR
Wed Apr 15 17:17:07 2009

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.667	V	0.000	400.000	mmho-m	650.000	5.000
Medium	-0.003	0.739	V	0.000	462.500	mmho-m	750.000	-16.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.658	V	0.000	400.000	mmho-m	609.010	-0.700
Medium	0.015	0.761	V	0.000	462.500	mmho-m	620.392	-9.326

Litho Density Calibration Report
Serial: 003N Model: PRB
Performed Wed Feb 18 13:47:54 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2040.8	12807.7	4363.1	13737.9	cps
Window 2	1833.5	9910.0	3570.0	10363.1	cps
Window 3	1572.8	6142.6	2530.0	6298.3	cps
Window 4	471.2	473.7	466.8	470.3	cps
Long Space	0.0	8076.4	1736.5	8529.6	cps
Short Space	2.2	3464.4	2249.4	3602.7	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 44.3	Rib Slope	: 0.976	Density/Spine Ratio	: 0.551
Spine Angle	: 74.3	Spine Slope	: 3.559	Spine Intercept	: -20.0

Caliper

	Readings	Reference
Low Ref	2.1	6.3
High Ref	4.4	14.0
Gain:	3.3	Offset: -0.5

Compensated Neutron Calibration Report

Serial Number: NEU_3I
Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	997.00	cps	1000.00	cps	1.0000
Long Space	986.00	cps	1000.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR3
Tool Model: OPEN
Performed: Wed Apr 15 18:50:35 2009

Calibrator Value: 200.0 GAPI

Background Reading: 3.0 cps
Calibrator Reading: 186.0 cps

Sensitivity: 0.4500 GAPI/cps