



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company WOOLSEY OPERATING CO. LLC.
Well TUCKER GU "A" #4
Field SPICER
County BARBER
State KANSAS

Company WOOLSEY OPERATING COMPANY, LLC.
Well TUCKER GU "A" #4
Field SPICER
County BARBER
State KANSAS

Location:

1650' FSL & 660' FWL

API # : 15-007-23941-0000

SEC 28 TWP 33S RGE 10W

DIL

Permanent Datum GROUND LEVEL Elevation 1434
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1444
D.F. 1442
G.L. 1434

Date

9/19/12

Run Number

ONE

Depth Driller

5052

Depth Logger

5050

Bottom Logged Interval

5026

Top Log Interval

1700

Casing Driller

8 5/8"@215'

Casing Logger

215

Bit Size

7 7/8"

Type Fluid in Hole

CHEMICAL MUD

CHLORIDES 4,500 PPM

Density / Viscosity

9.1/54

pH / Fluid Loss

9.5/10.8

Source of Sample

FLOWLINE

Rm @ Meas. Temp

.900@78F

Rmt @ Meas. Temp

.675@78F

Rmc @ Meas. Temp

1.08@78F

Source of Rmt / Rmc

MEASUREMENT

Rm @ BHT

.557@126F

Time Circulation Stopped

3 HOURS

Time Logger on Bottom

10:30 A.M.

Maximum Recorded Temperature

126F

Equipment Number

4010

Location

HAYS, KANSAS

Recorded By

JEFF LUEBBERS

Witnessed By

SCOTT ALBERG

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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
SHARON, KS., 7 S. ON "TRI CITY " BLKTOP TO "KOCHIA RD.", 1W., 1/2N., E. INTO

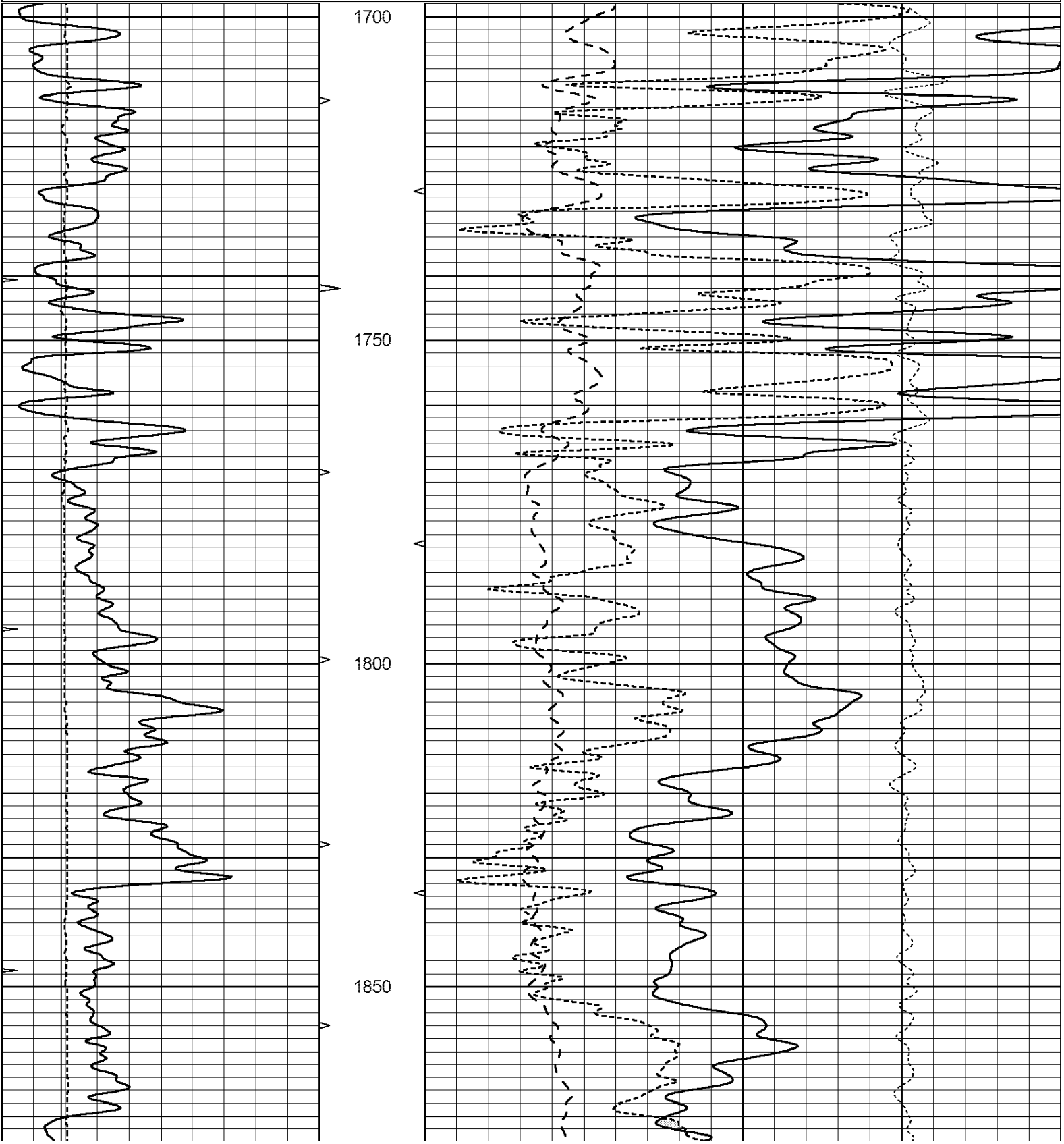


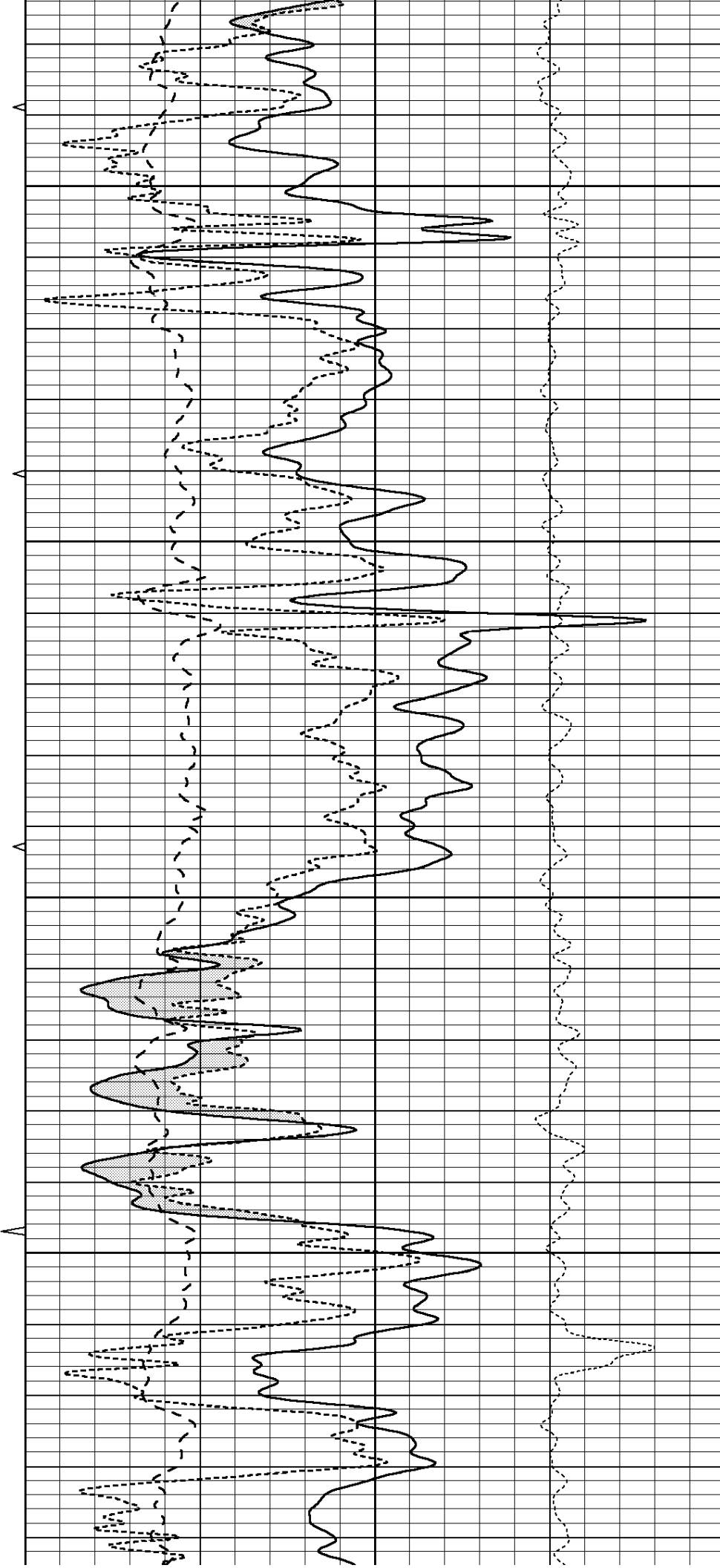
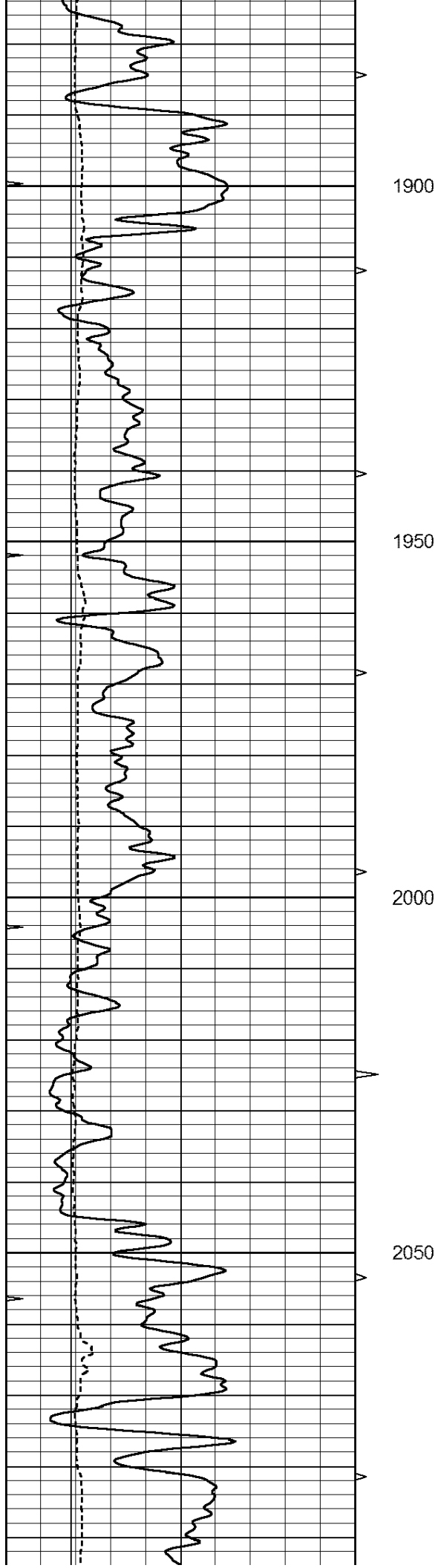
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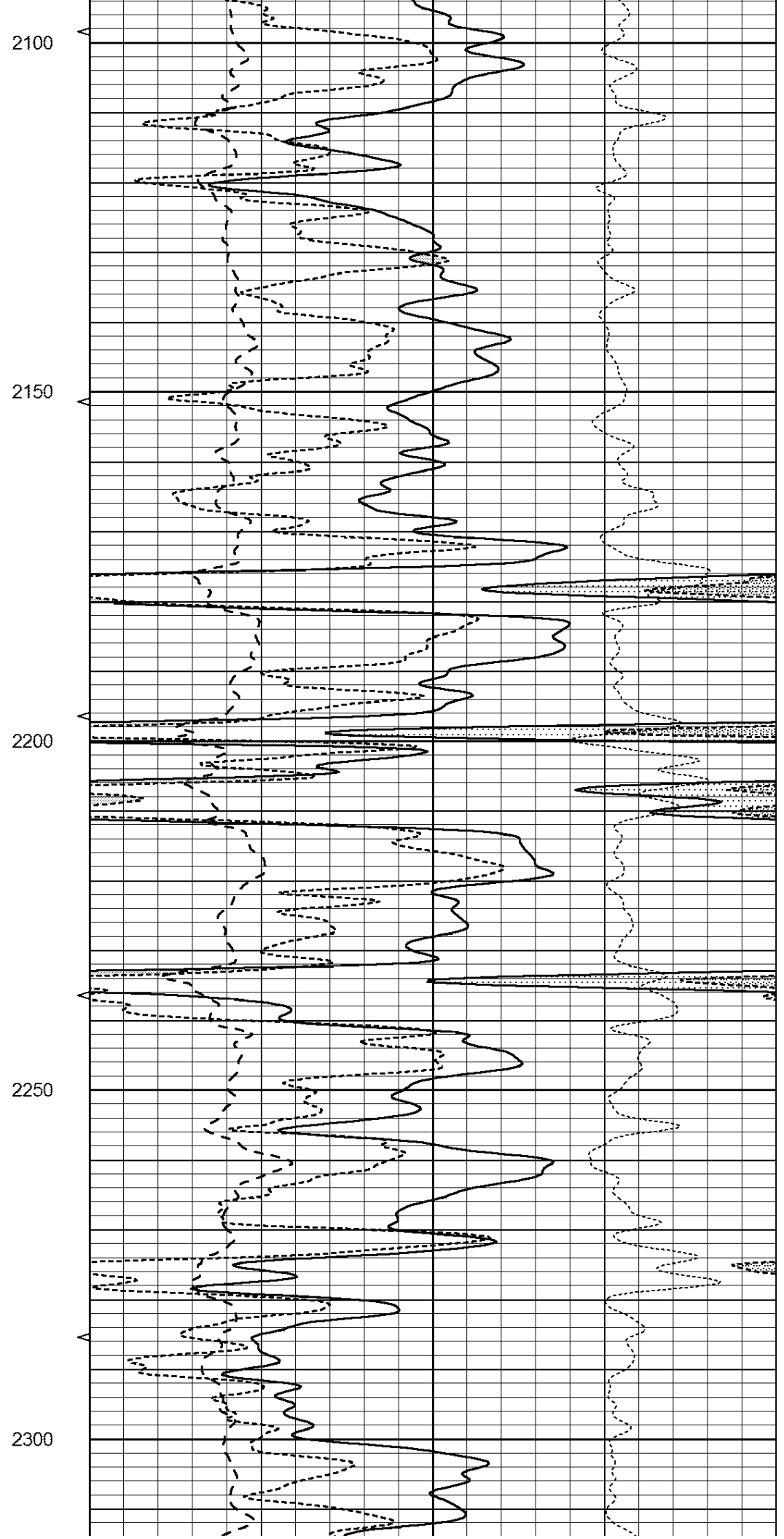
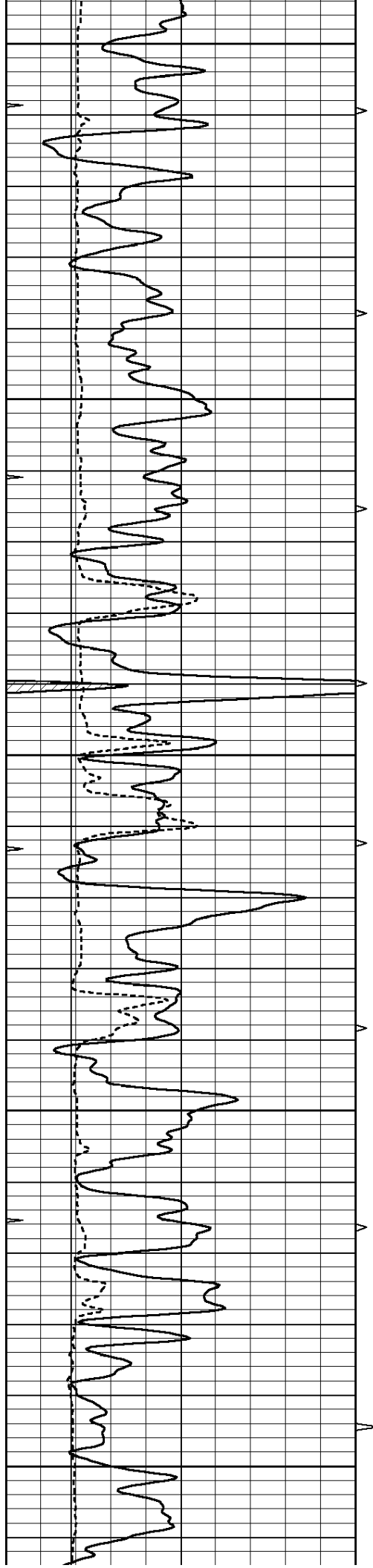
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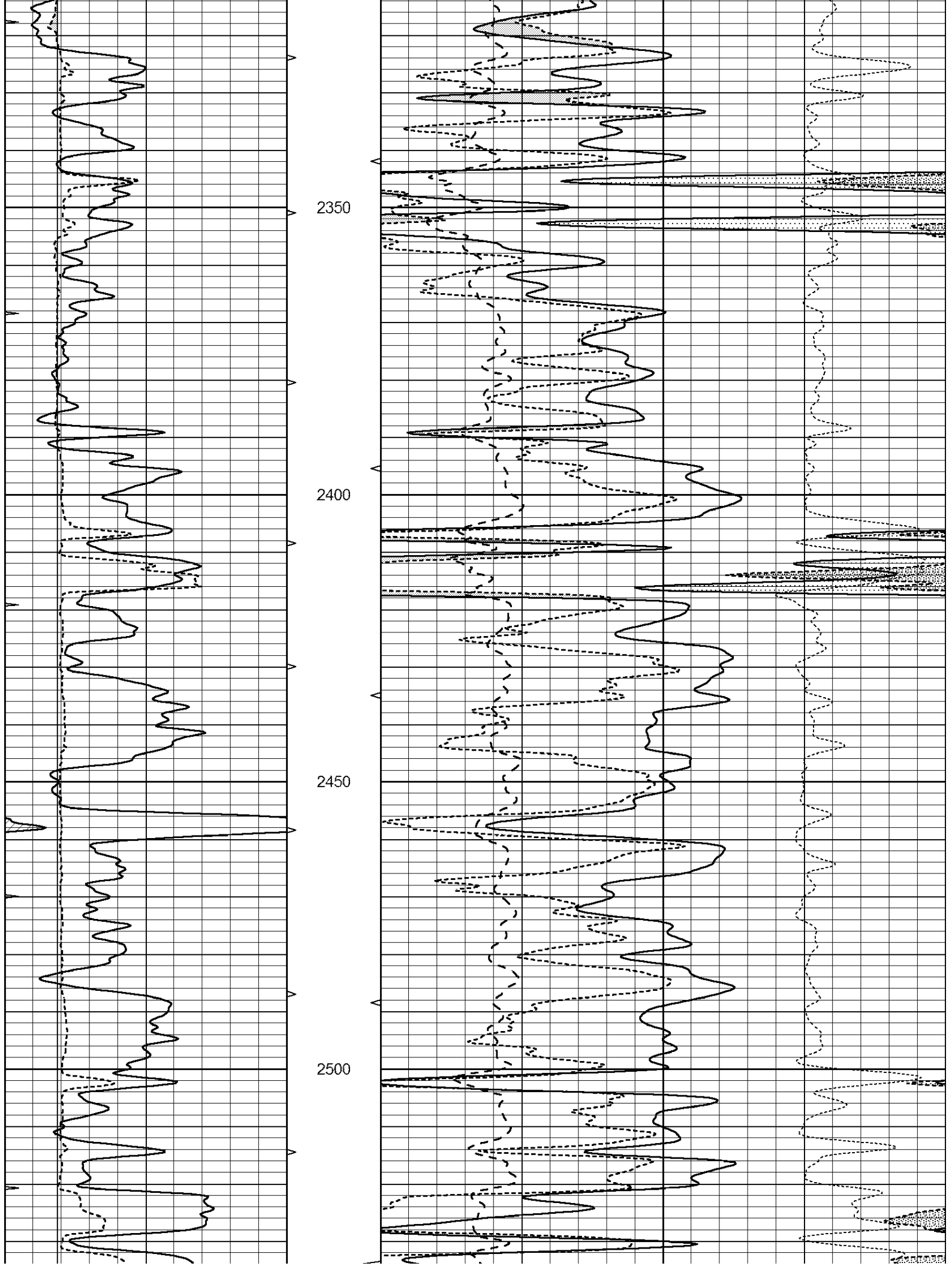
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Presentation Format: ldt_neu
Dataset Creation: Wed Sep 19 12:05:55 2012
Charted by: Depth in Feet scaled 1:240

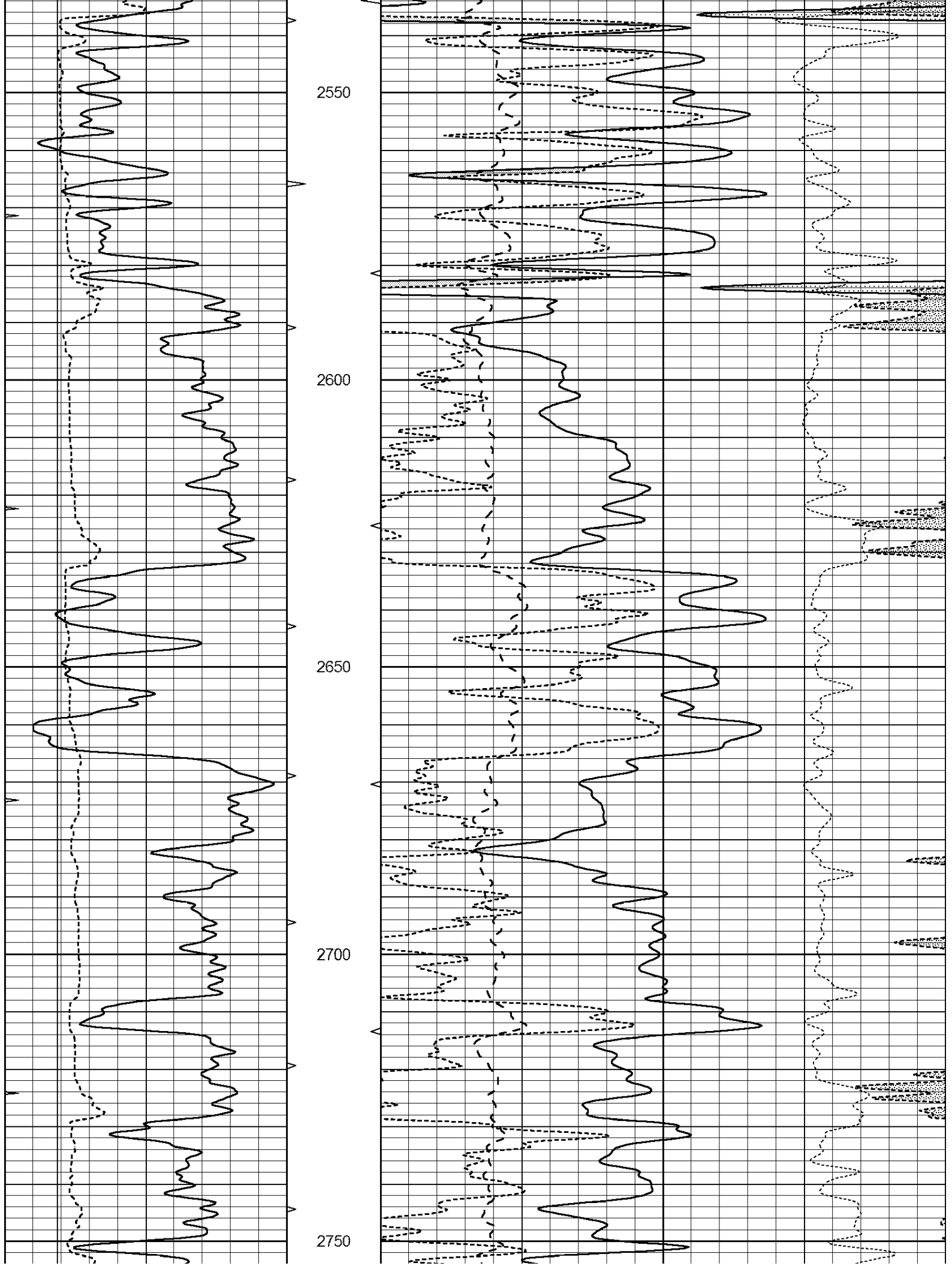
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6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3)	10		

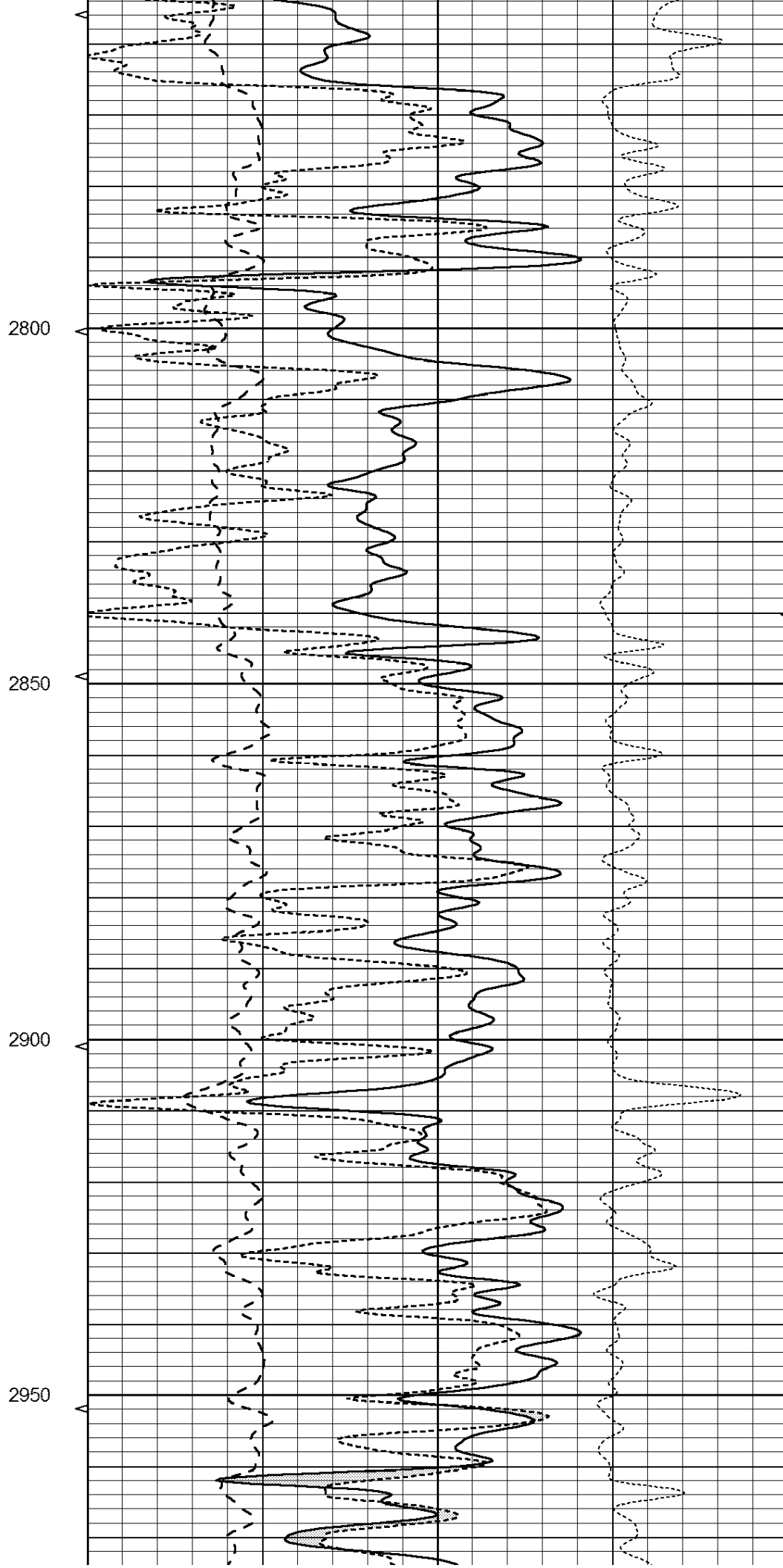
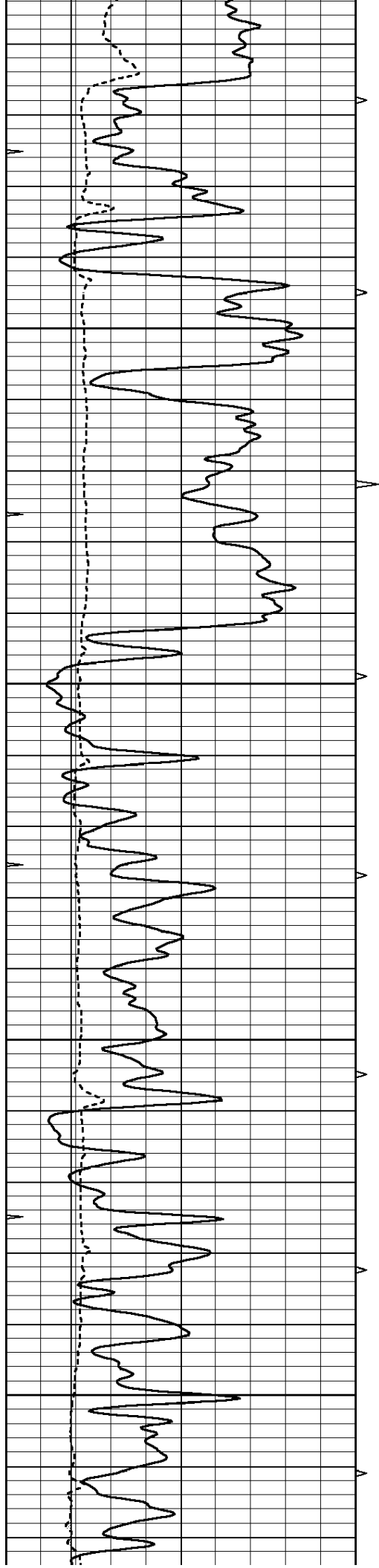


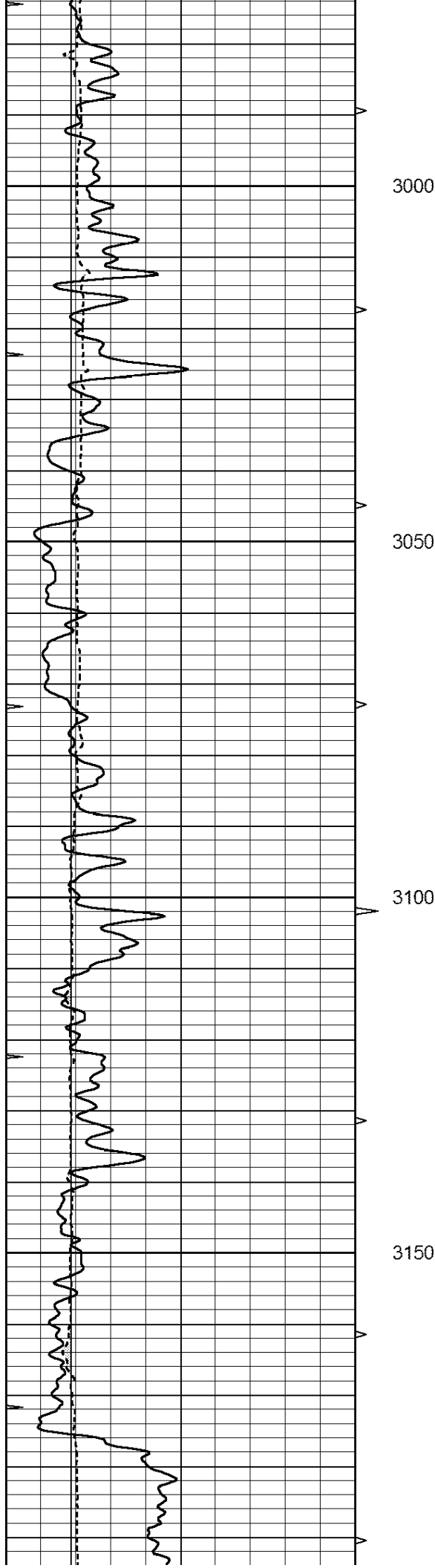










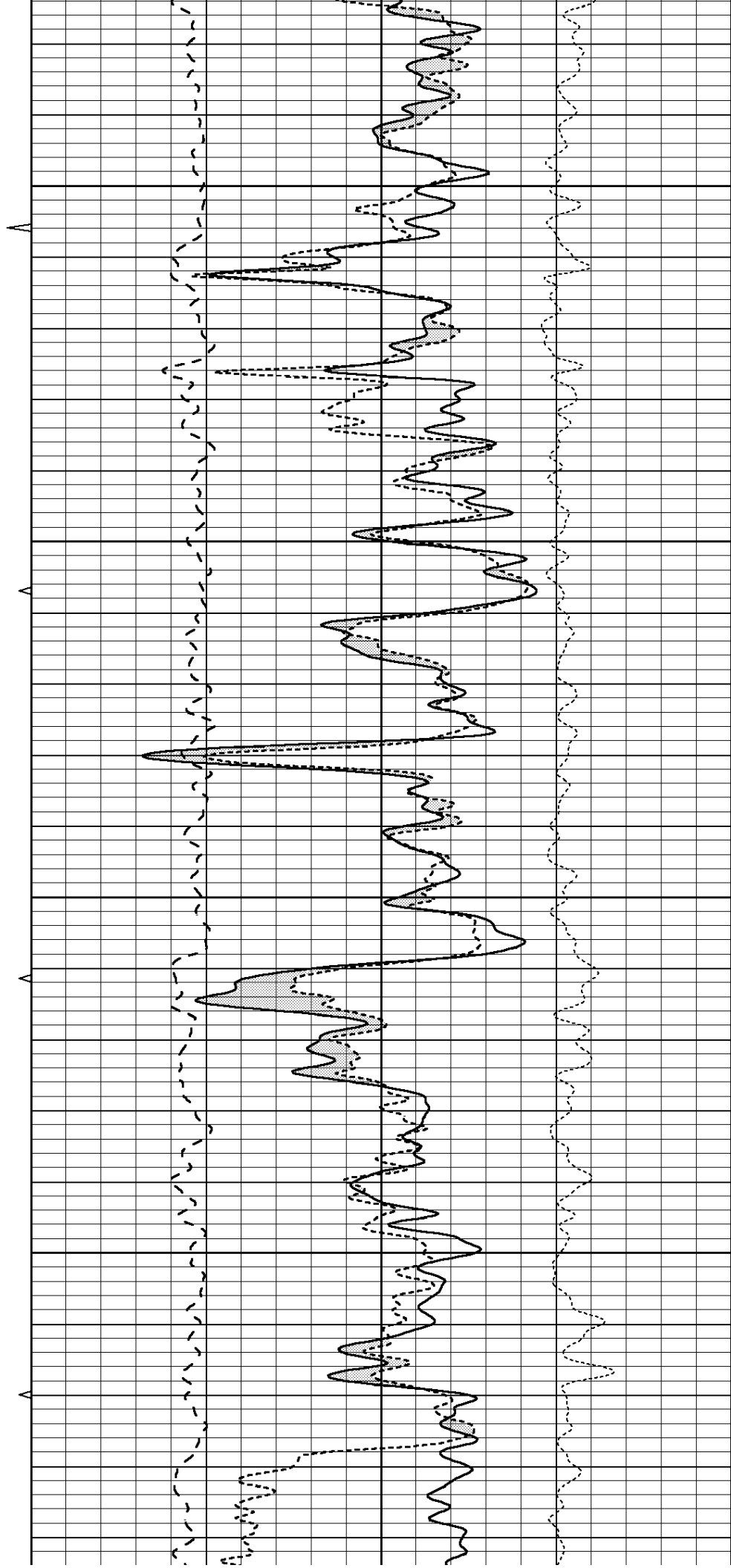


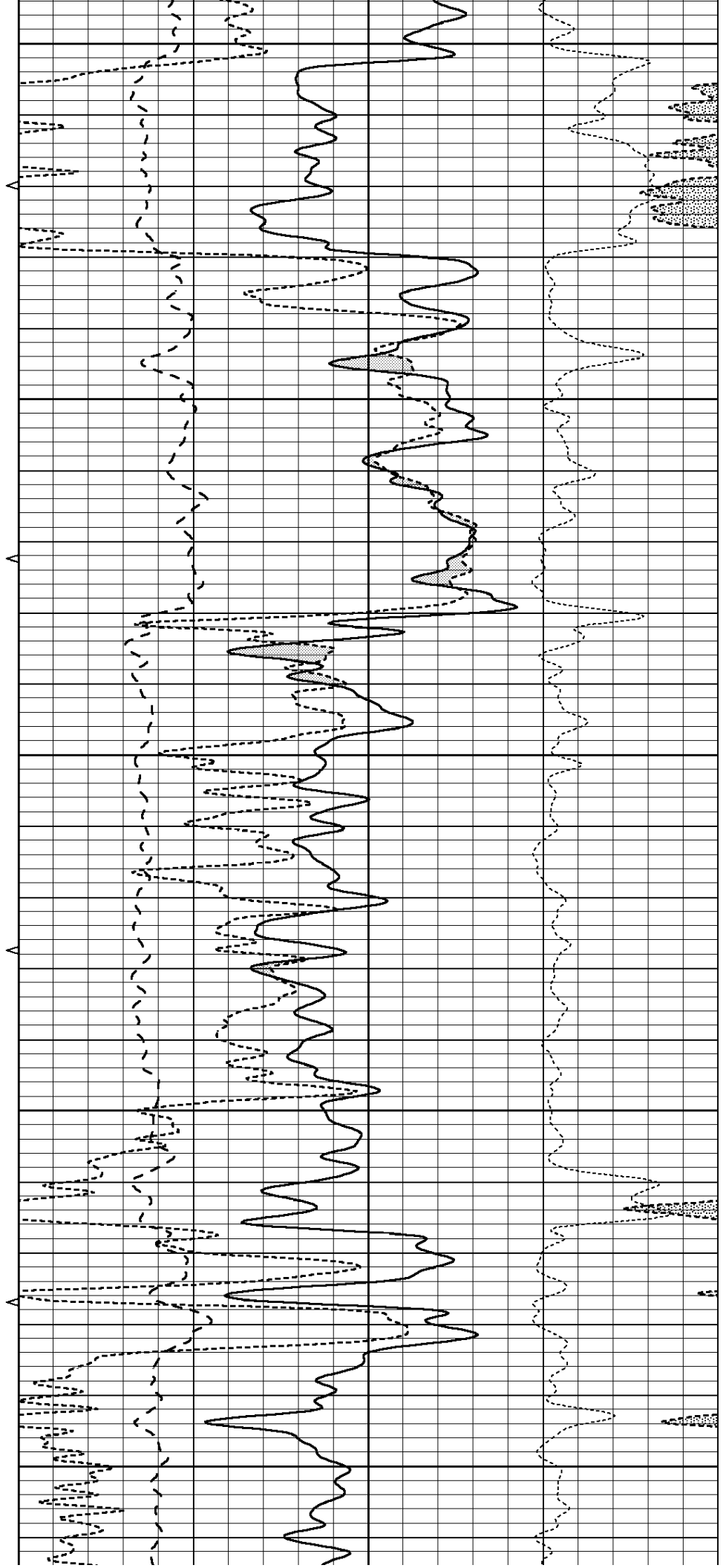
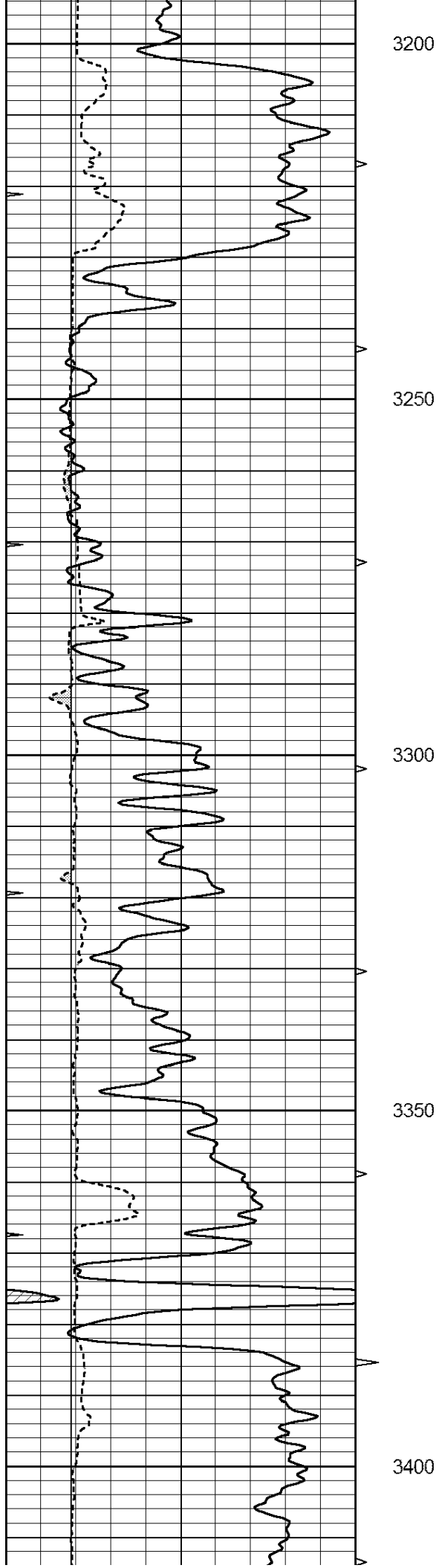
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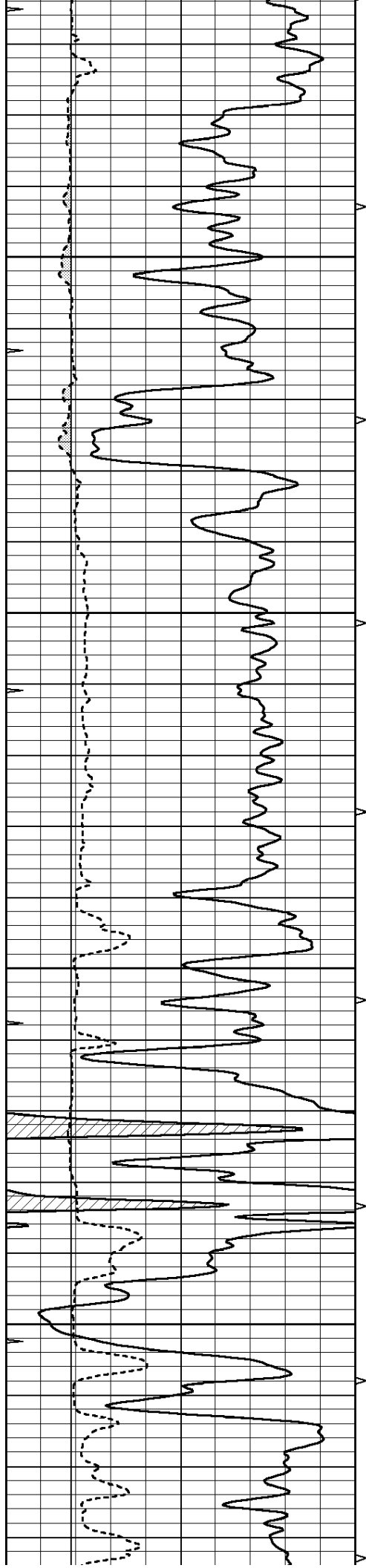
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3100

3150





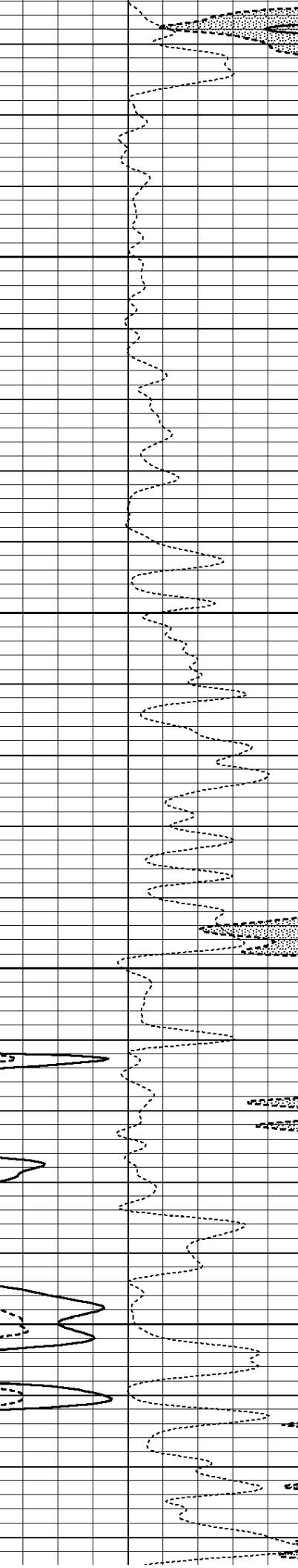
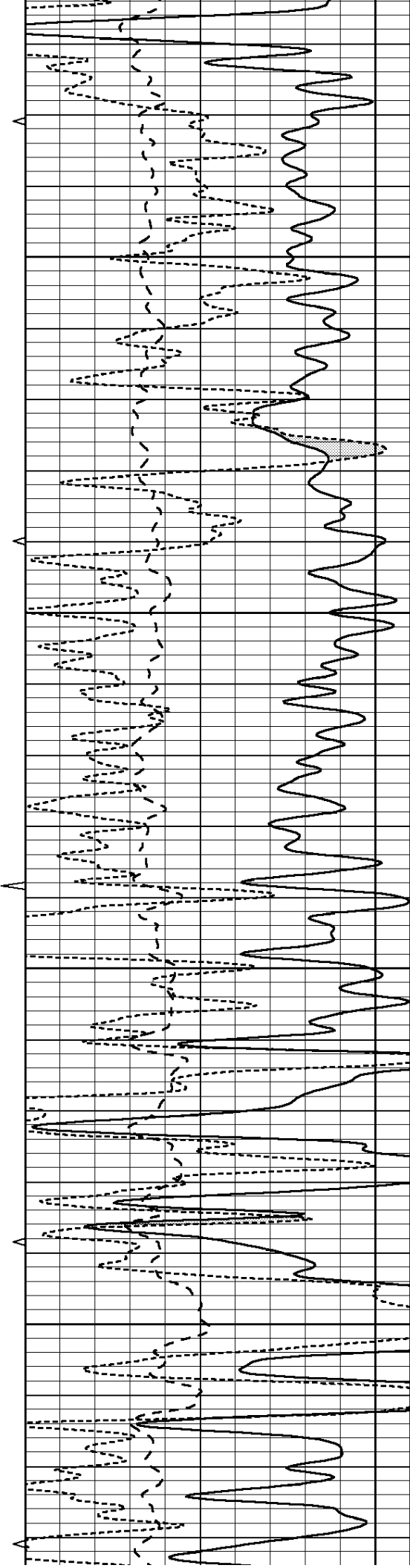


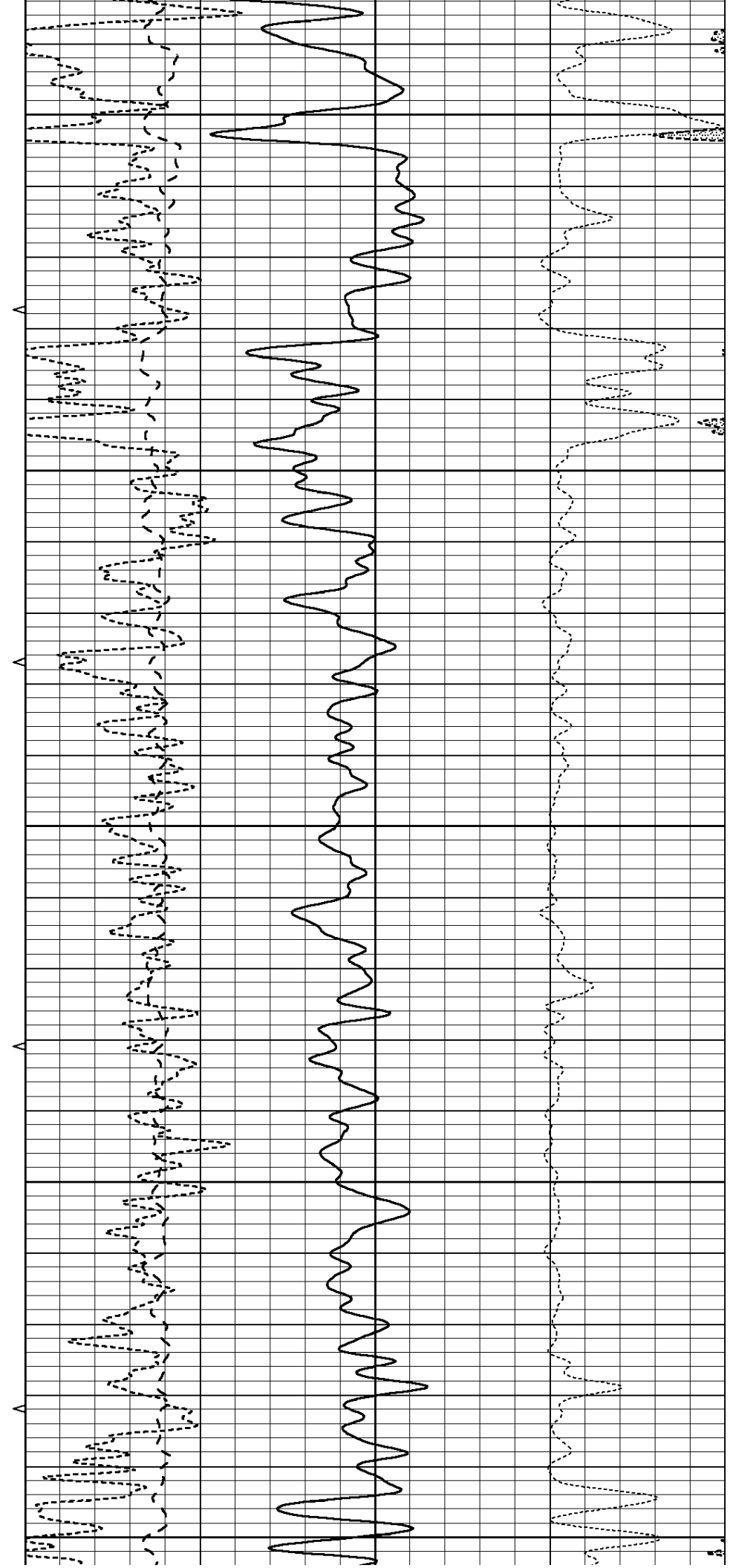
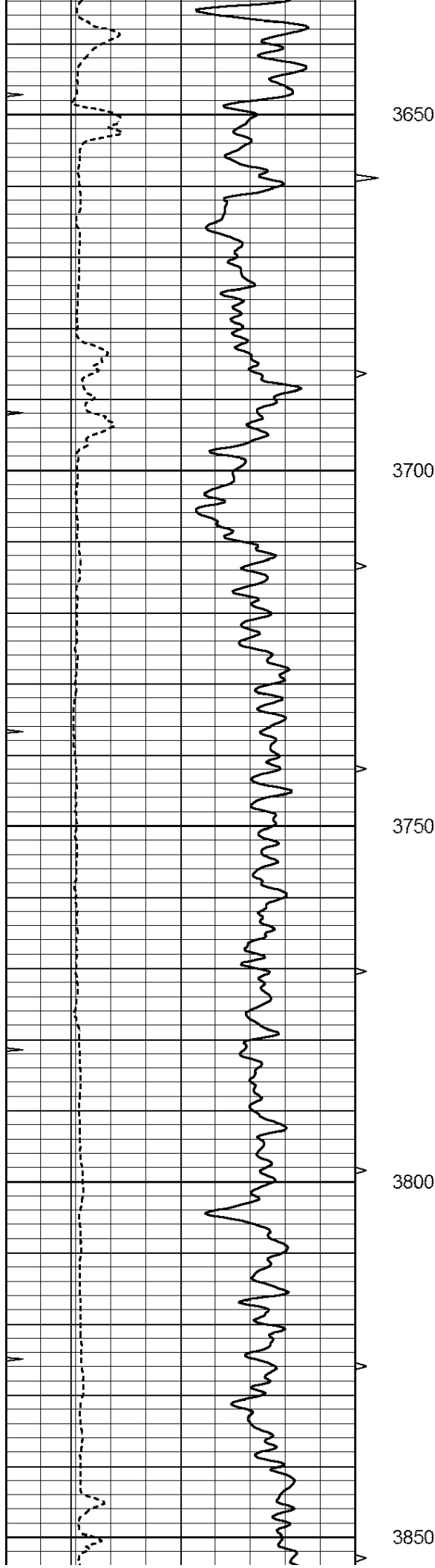
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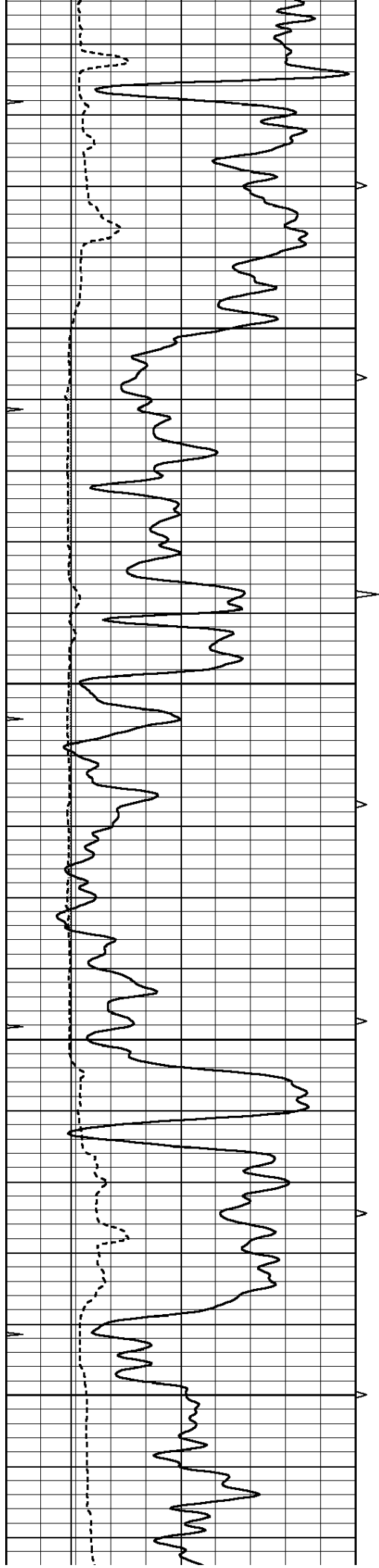
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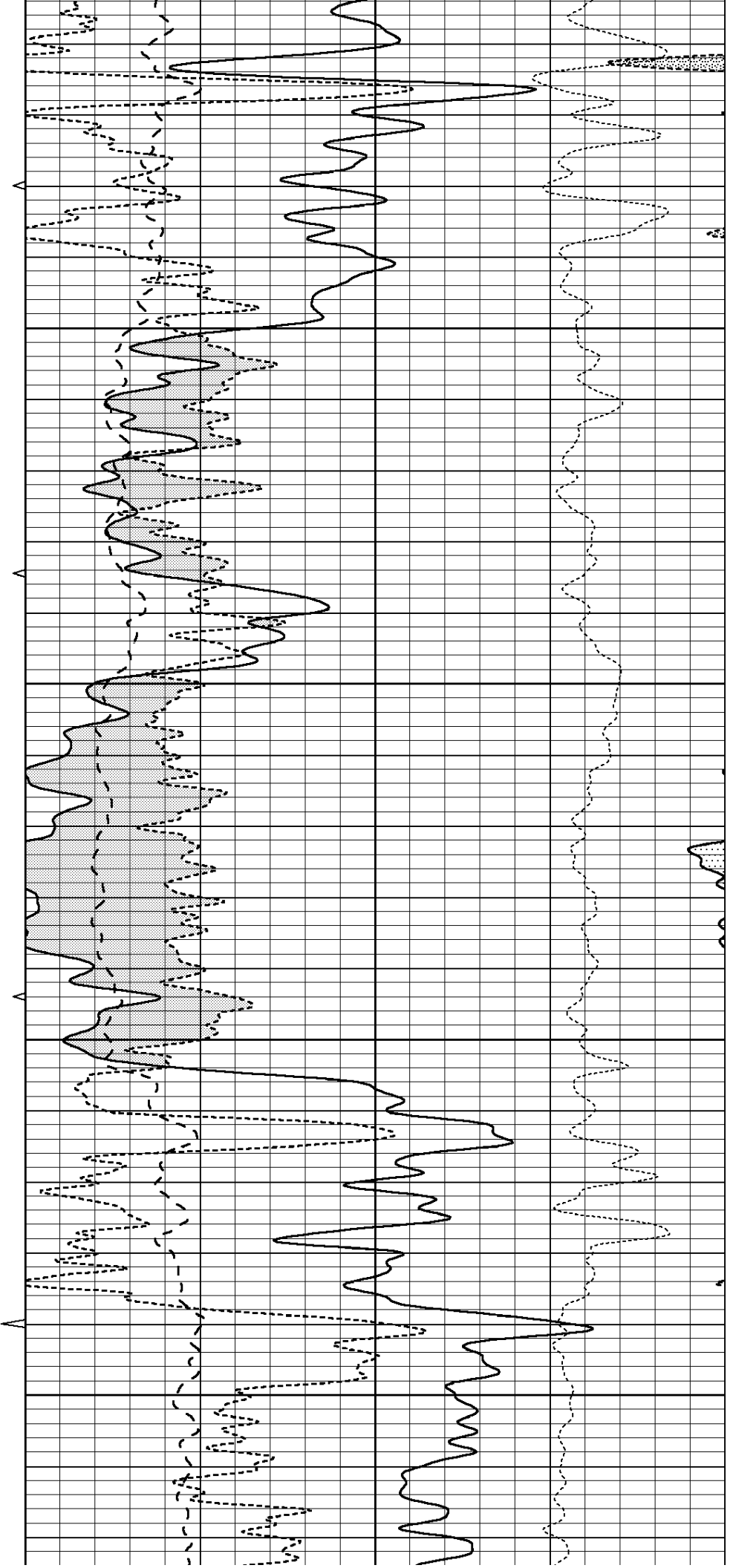


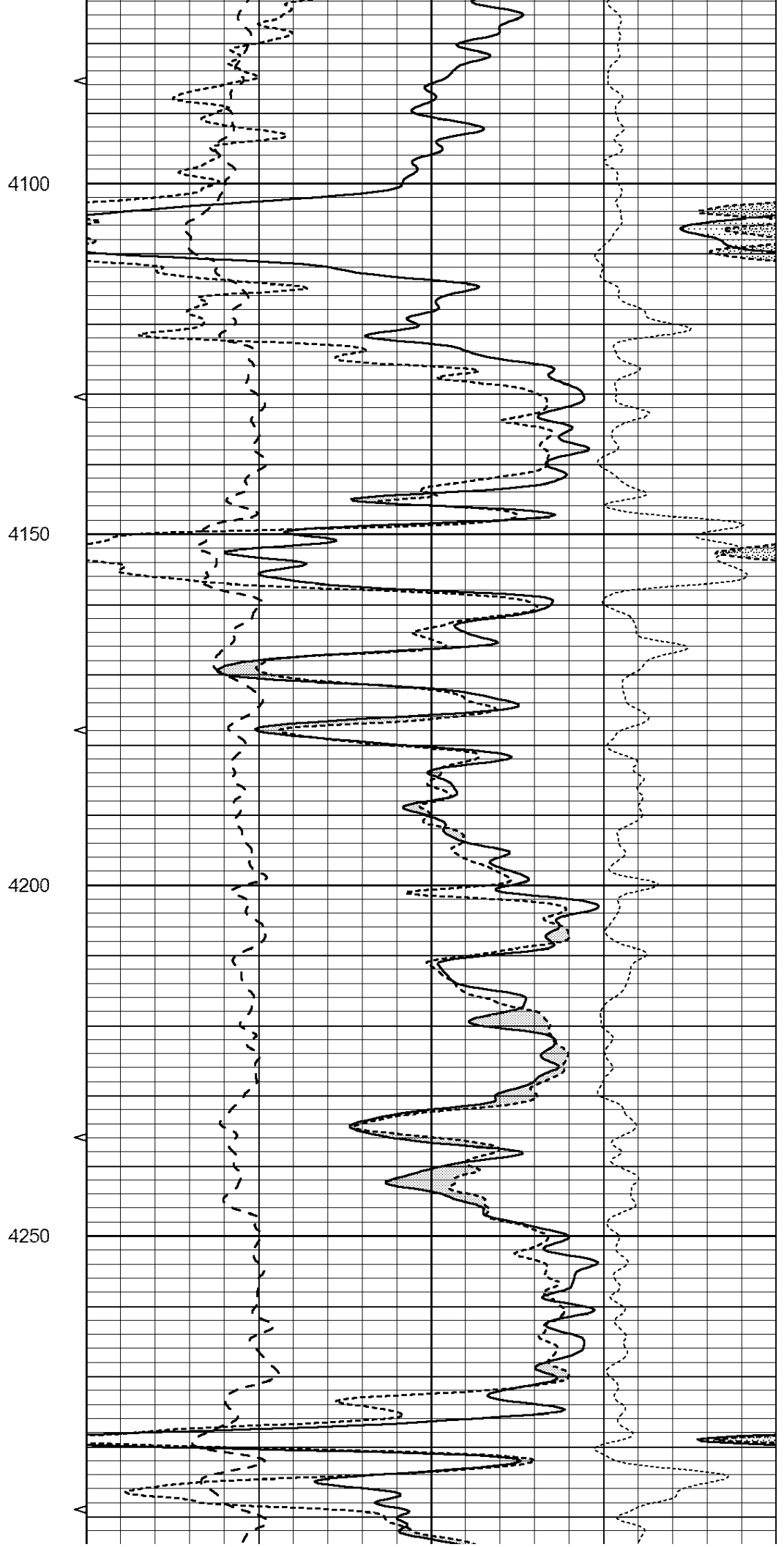
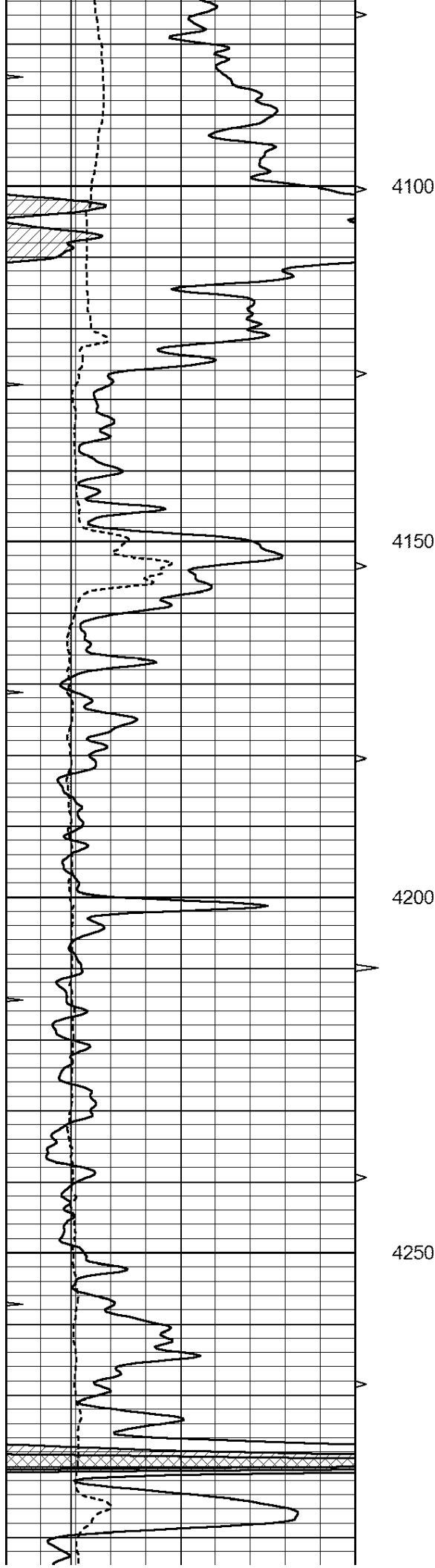
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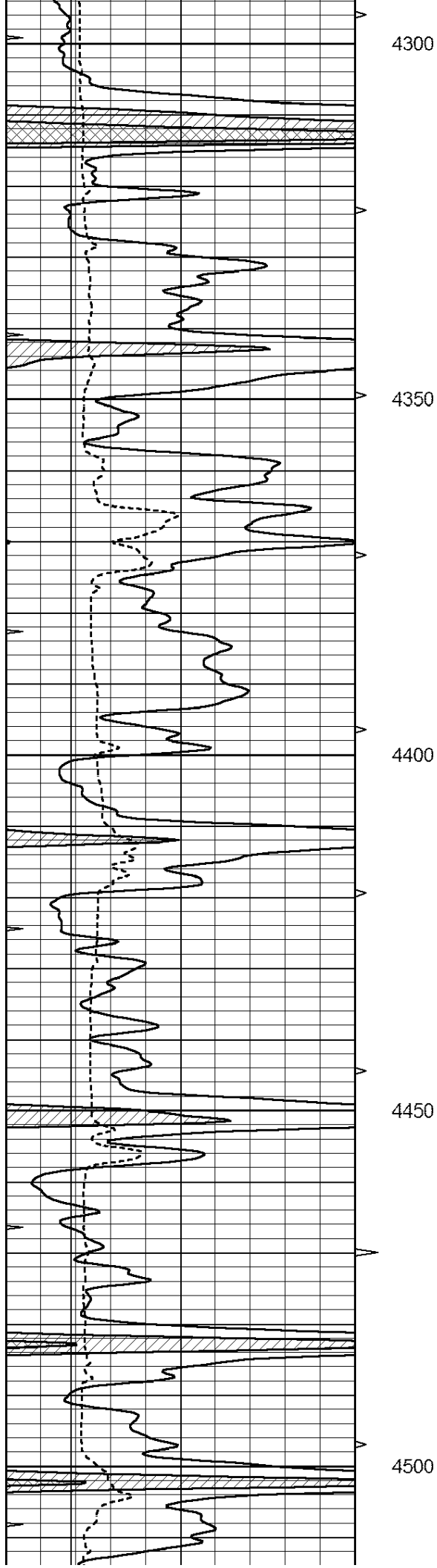
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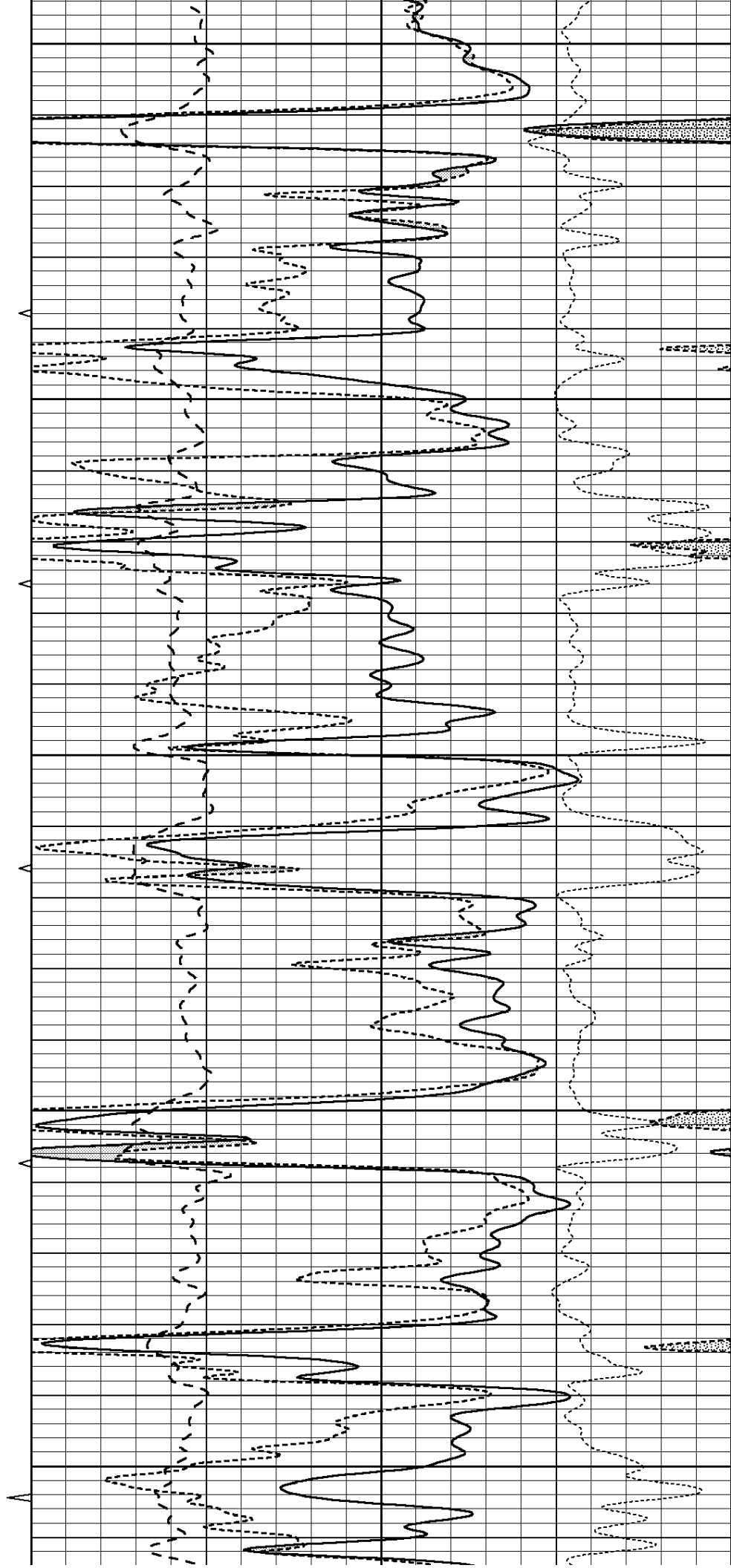
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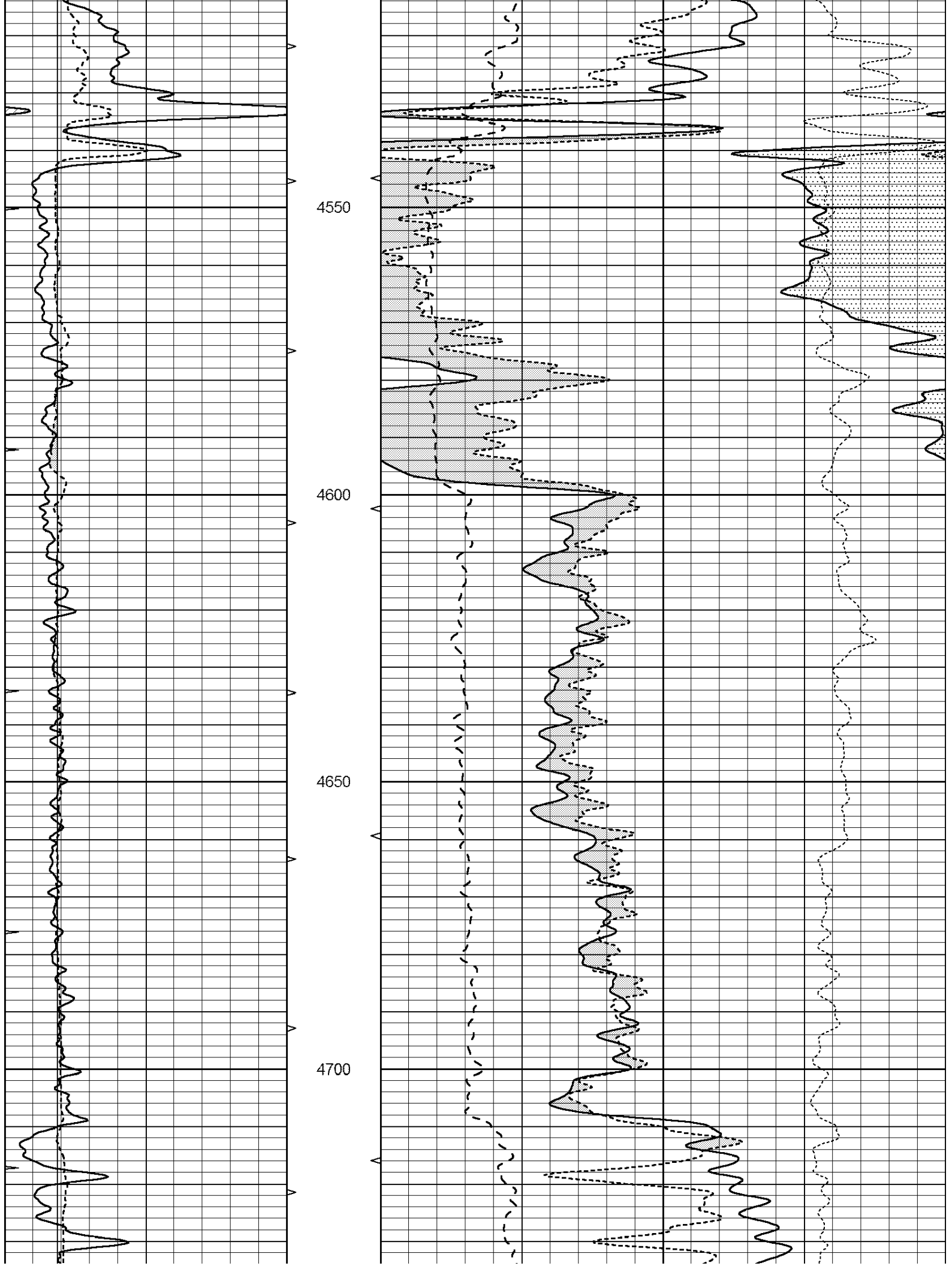
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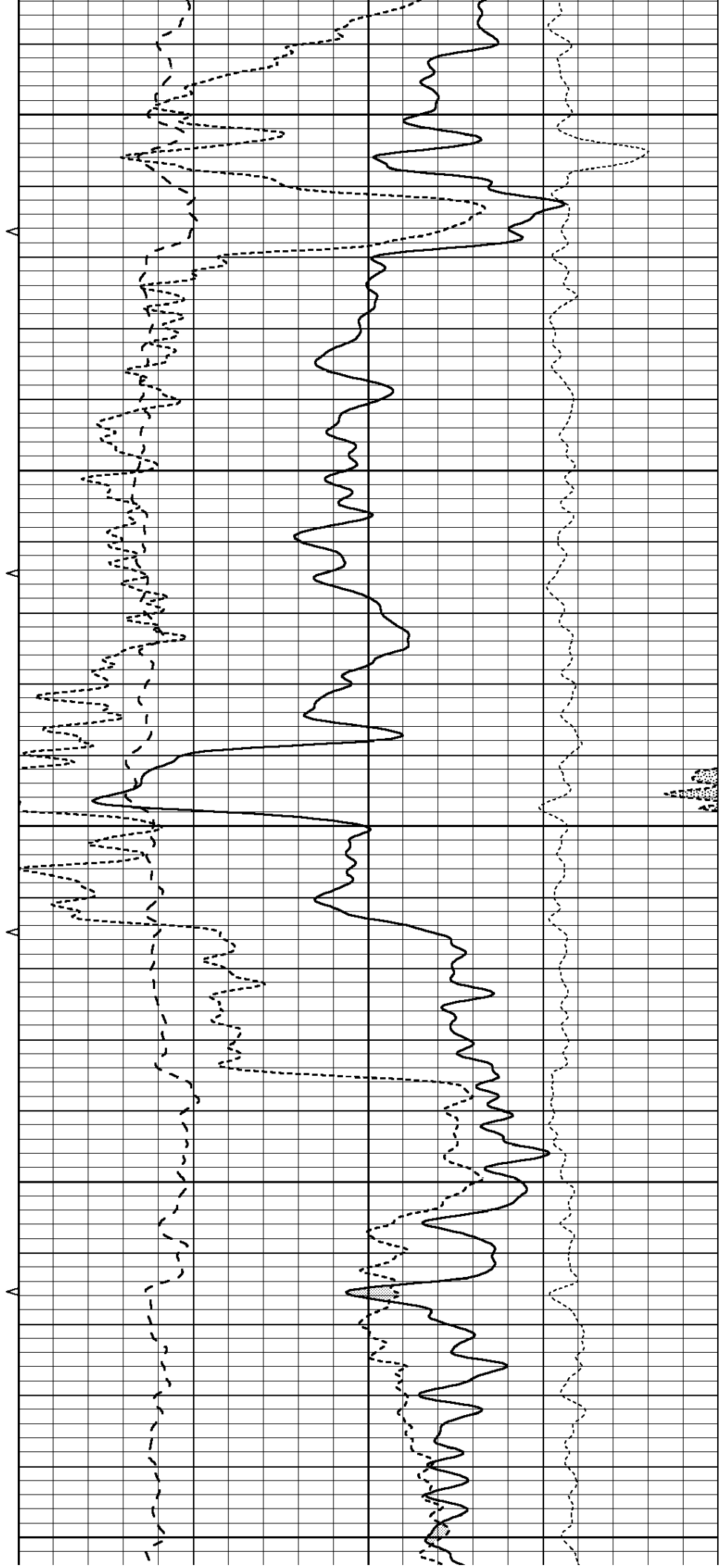
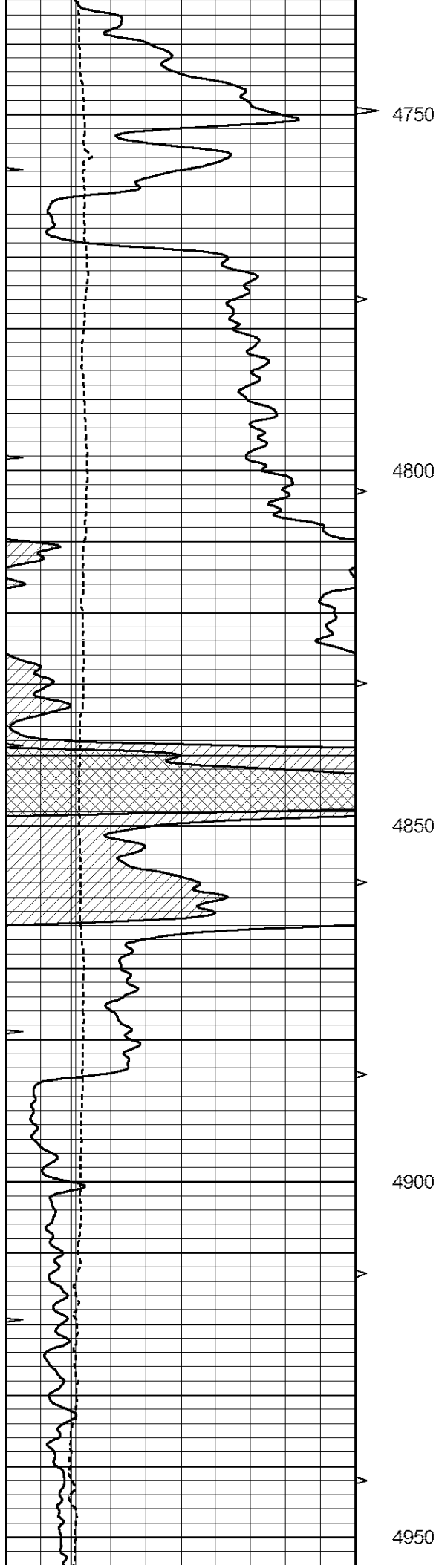
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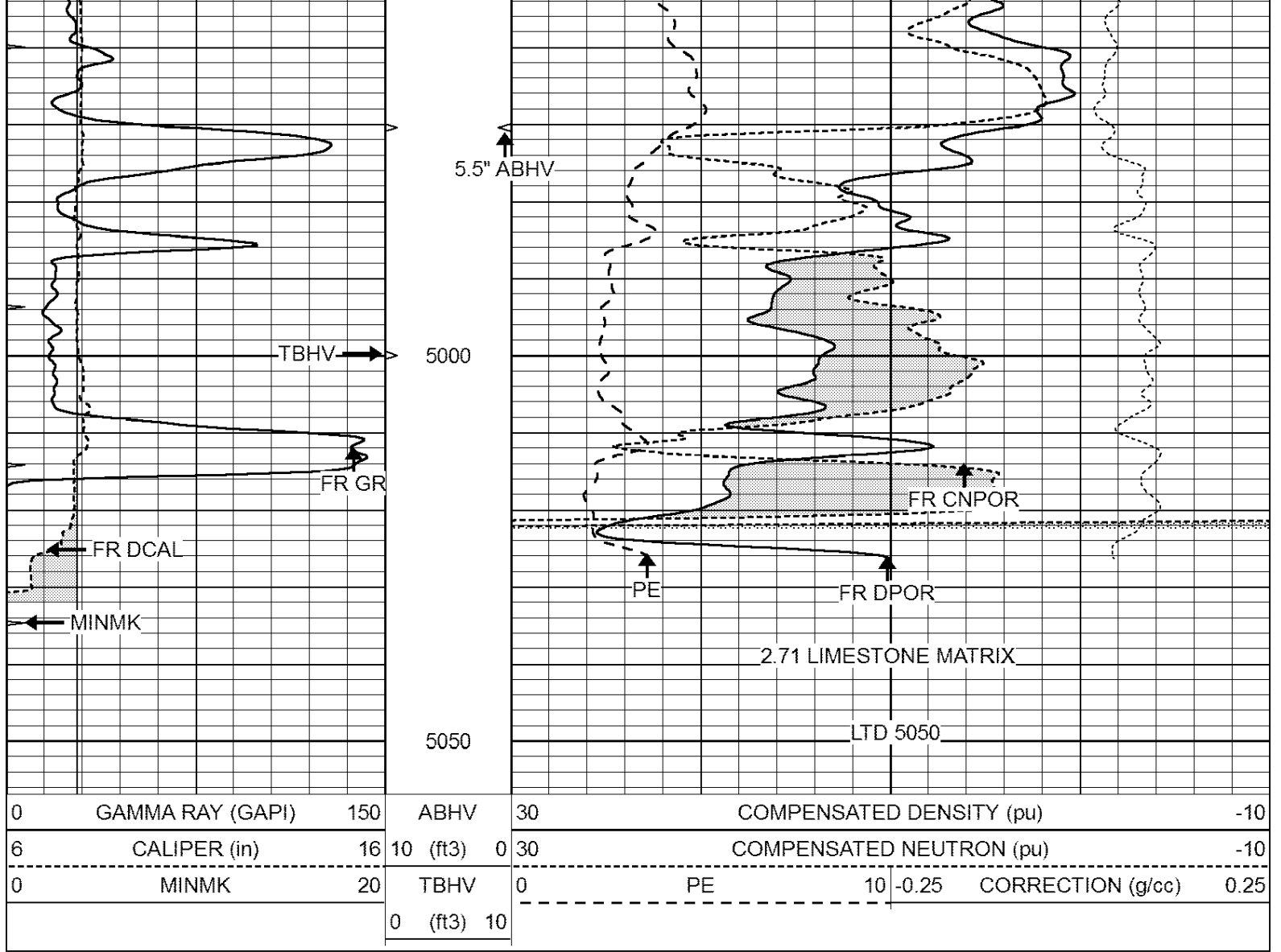
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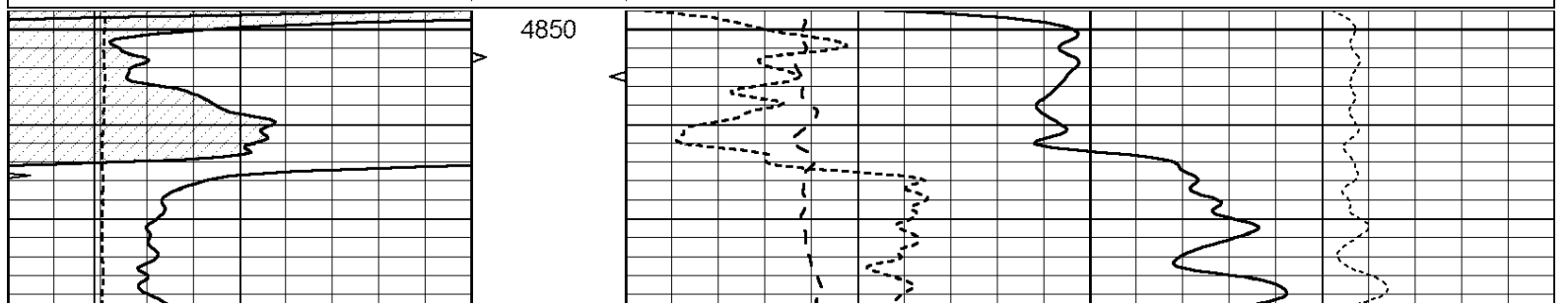


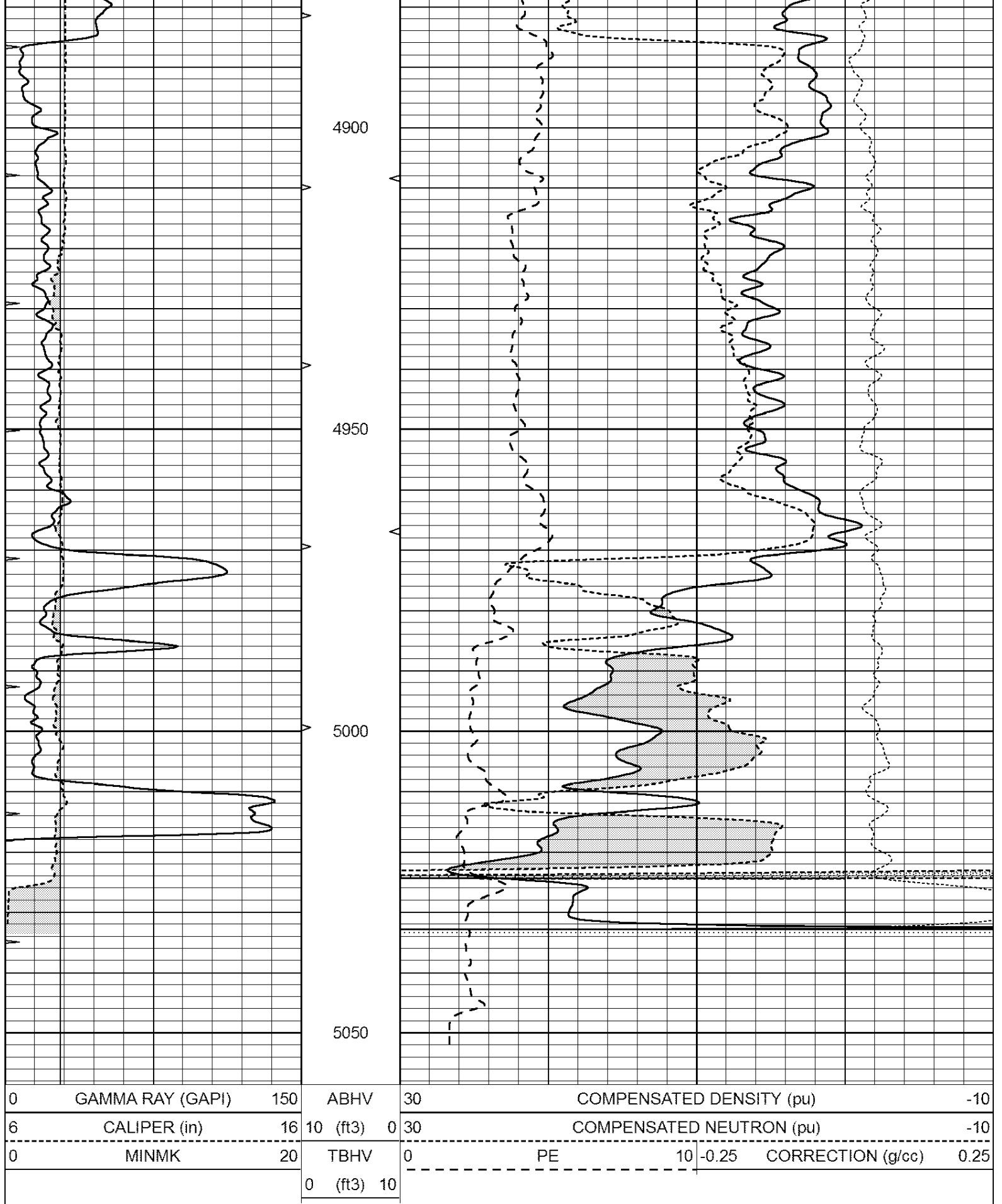
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 409677pe.db
 Dataset Pathname: pass2.4
 Presentation Format: _ldt_neu
 Dataset Creation: Wed Sep 19 10:39:22 2012
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					





Calibration Report

Database File: 409677pe.db
 Dataset Pathname: pass3.4
 Dataset Creation: Wed Sep 19 09:48:49 2012 by Calc Open-Cased 110302

Dual Induction Calibration Report								
Serial-Model: Performed:			DIL3-GEAR Wed Sep 19 06:32:38 2012					
Readings			References				Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	12.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-6.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

Litho Density Calibration Report					
Serial: 006		Model: PRB		Performed Sun Aug 15 09:48:41 2010	
Litho Density Calibration					
	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps
Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1

Caliper		
Low Ref	Readings 3.5	Reference 7.0
High Ref	5.5	15.0
	Gain: 4.2	Offset: -7.6

Compensated Neutron Calibration Report				
Serial Number:		070808		
Tool Model:		Probe		
PRE-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	
POST-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	

Gamma Ray Calibration Report	
Serial Number:	070559
Tool Model:	OPEN_GR
Performed:	Mon Sep 17 04:54:29 2012

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps