



SUPERIOR
Hays,
Kansas

DUAL
INDUCTION
LOG

Company	RITCHIE EXPLORATION, INC.		
Well	#2 HESS 29 "A"		
Field	GOVE		
County	KANSAS		
State	KANSAS		
Company	RITCHIE EXPLORATION, INC.		
Well	#2 HESS 29 "A"		
Field	GOVE		
County	KANSAS		
State	KANSAS		
Location:	API # : 15-063-21819		Other Services
SEC 29 TWP 13S RGE 31W		CDL/CNL	
Permanent Datum	GROUND LEVEL	Elevation	2857
Log Measured From	KELLY BUSHING 5' A.G.L.	K.B. 2862	
Drilling Measured From	KELLY BUSHING	D.F.	
		G.L. 2857	
Date	12-8-09		
Run Number	ONE		
Depth Driller	4635		
Depth Logger	4635		
Bottom Logged Interval	4633		
Top Log Interval	00		
Casing Driller	219		
Casing Logger	219		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 48		
pH / Fluid Loss	10.0 / 7.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.20 @ 58F		
Rinf @ Meas. Temp	0.90 @ 58F		
Rmc @ Meas. Temp	1.44 @ 58F		
Source of Rinf / Rmc	MEASURED		
Rim @ BHT	.580 @ 121F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	8:45 P.M.		
Maximum Recorded Temperature	121F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	JEFF CHRISTIAN		

<<< Fold Here >>>

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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: OAKLEY, S TO THE GOVE RD., 3E, 4S, 1E TO EAST OF THE TANK BATTERIES, S INTO.



SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 004320ddn.db
Dataset Pathname: pass3.1A
Presentation Format: dil2
Dataset Creation: Tue Dec 08 22:41:49 2009
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

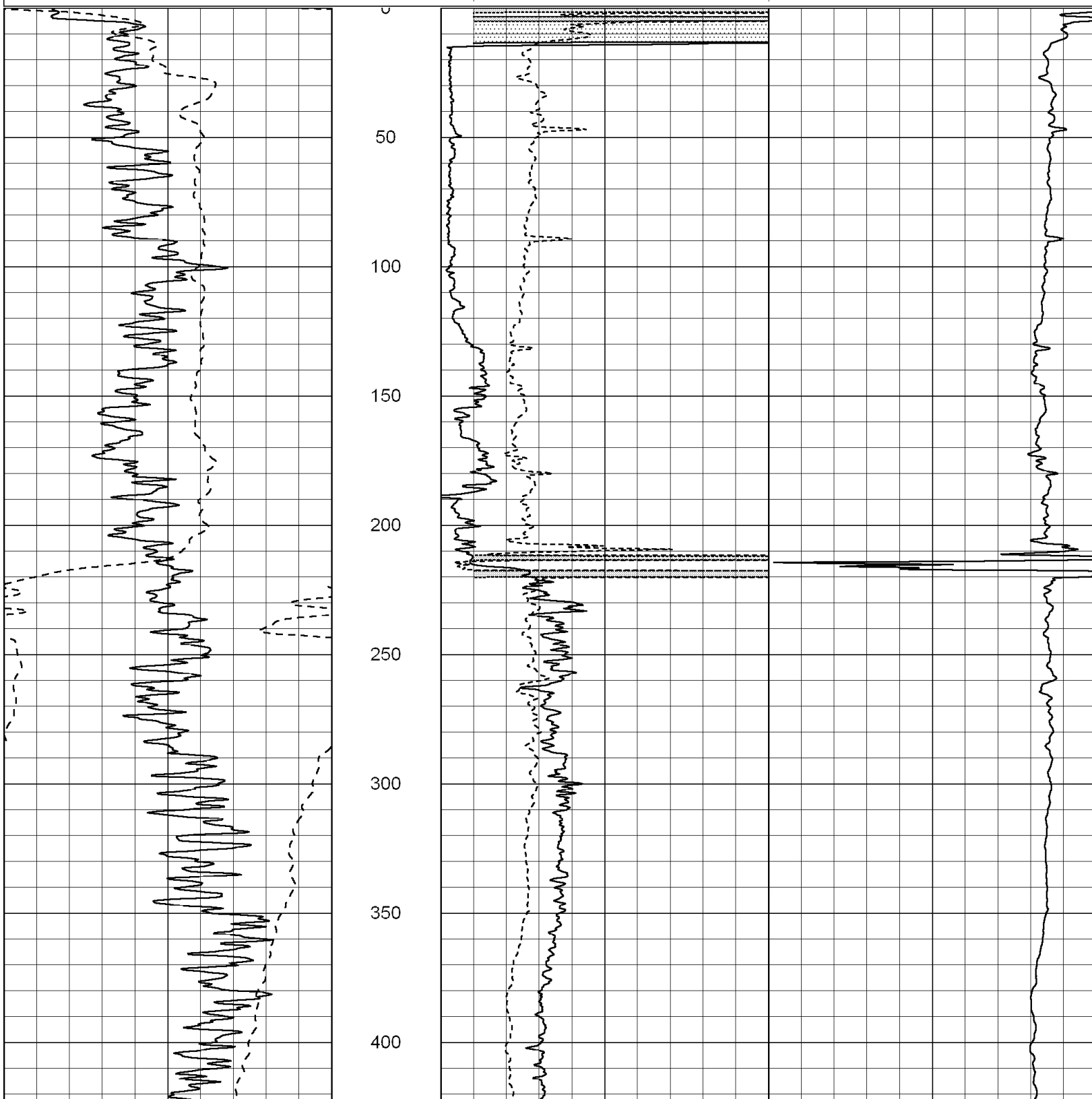
0	RLL3 (Ohm-m)	50
---	--------------	----

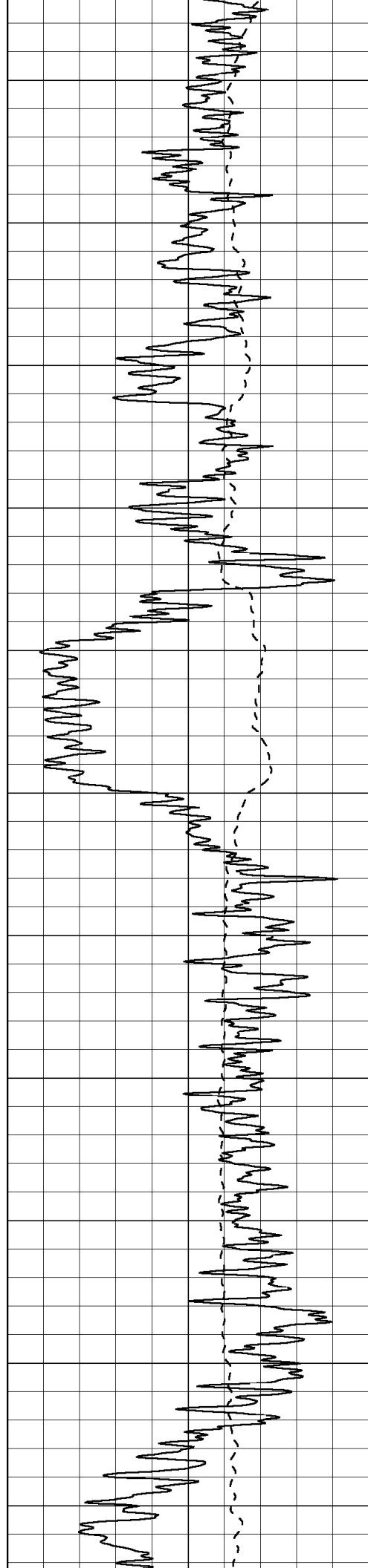
0	Deep Induction (Ohm-m)	50
---	------------------------	----

1000	CILD (mmho-m)	0
------	---------------	---

50	RILD X10 (Ohm-m)	500
----	------------------	-----

50	RLL3 X10 (Ohm-m)	500
----	------------------	-----





450

500

550

600

650

700

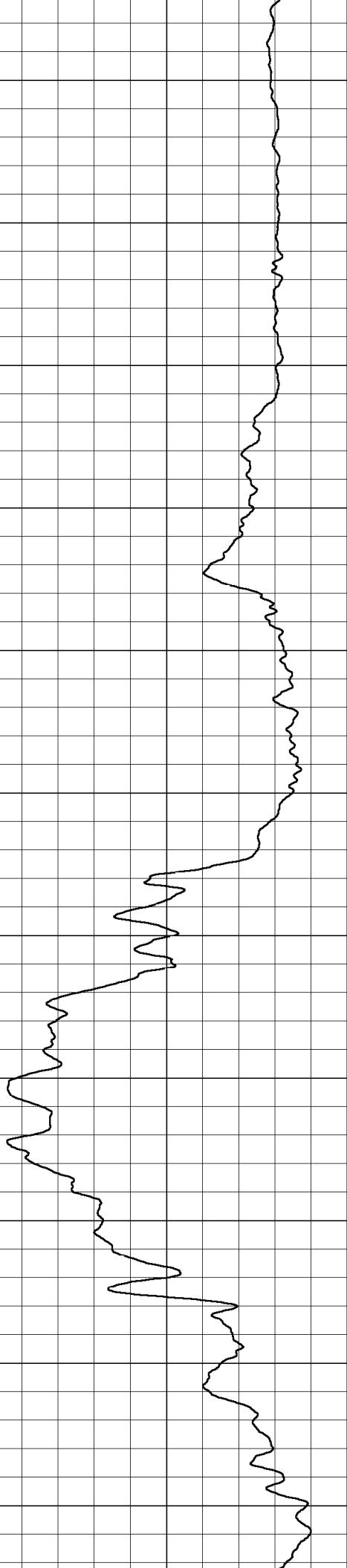
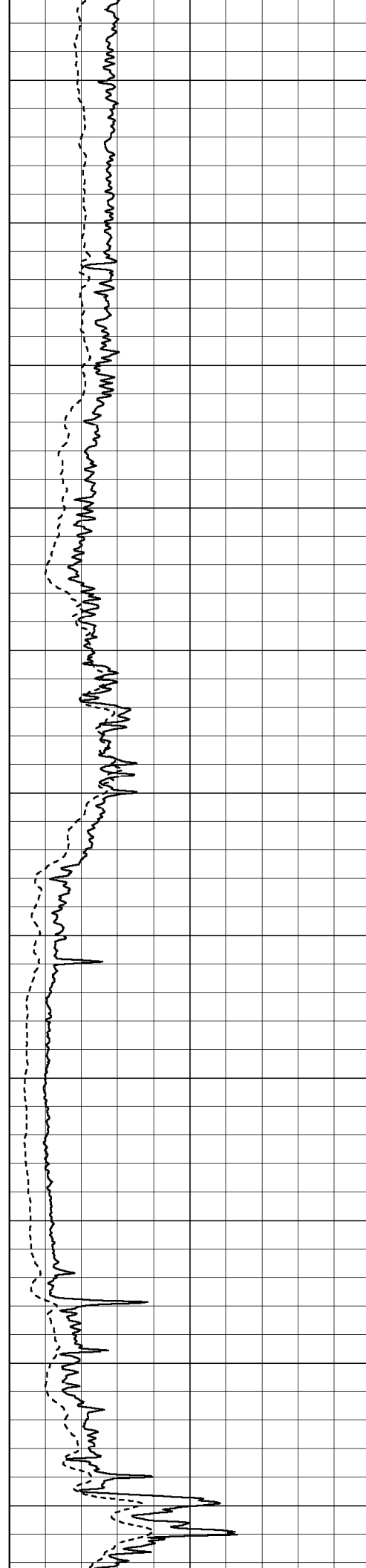
750

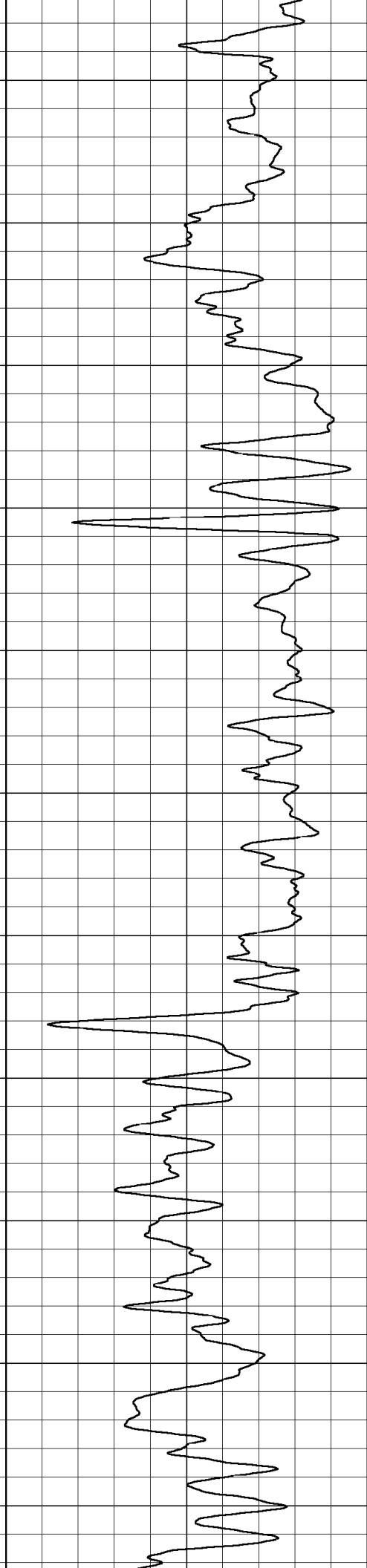
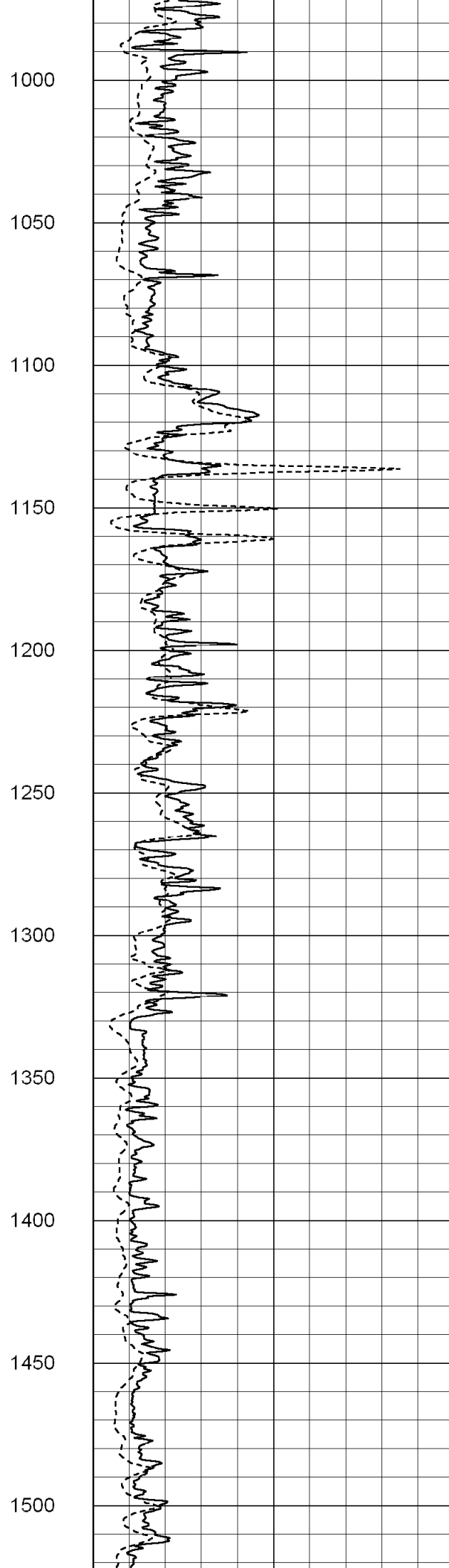
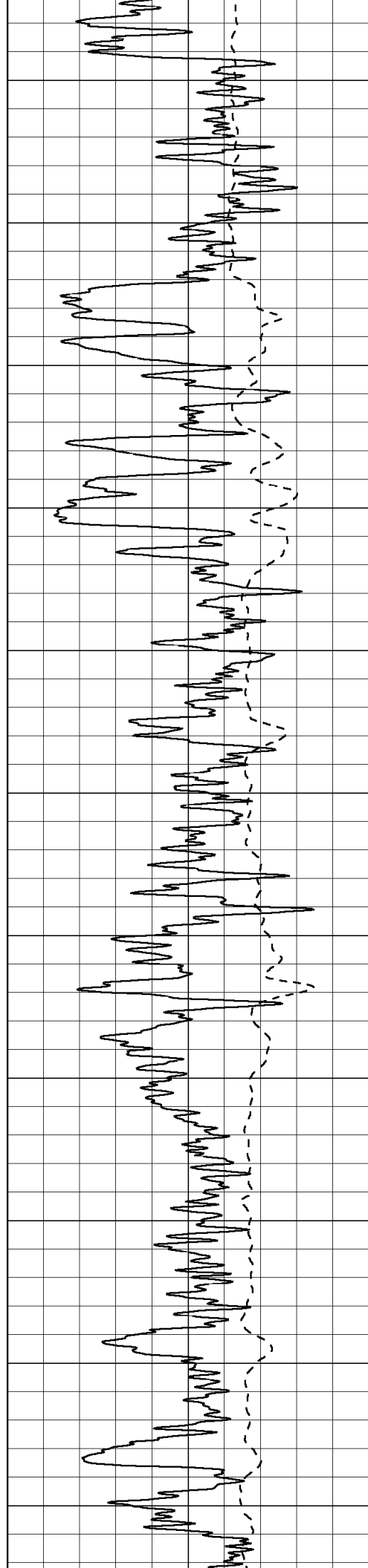
800

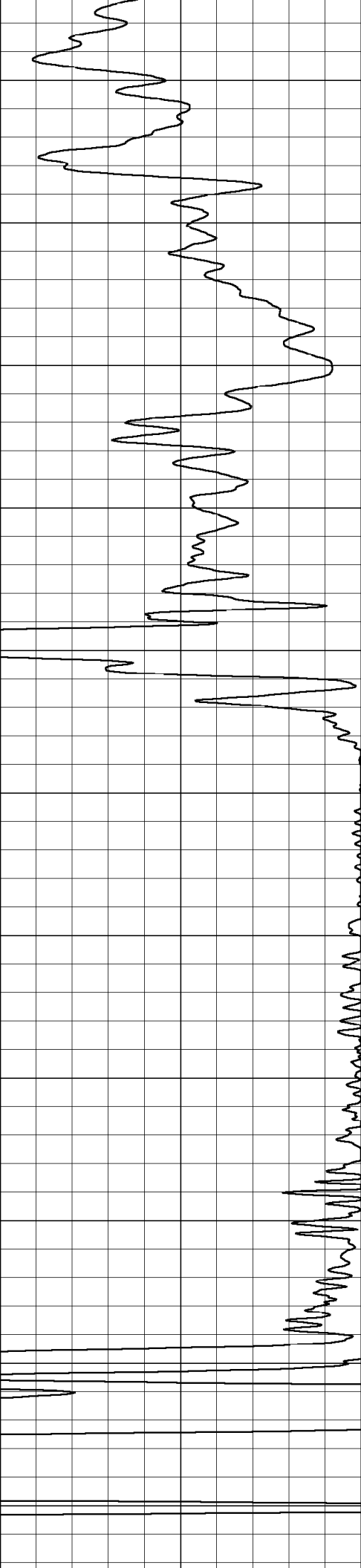
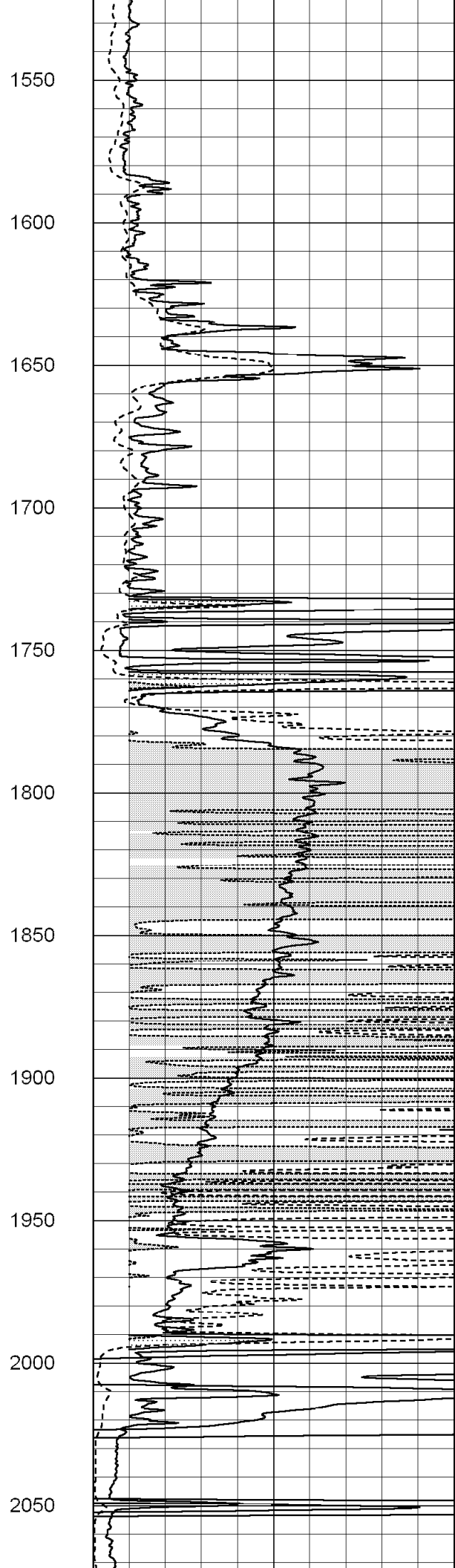
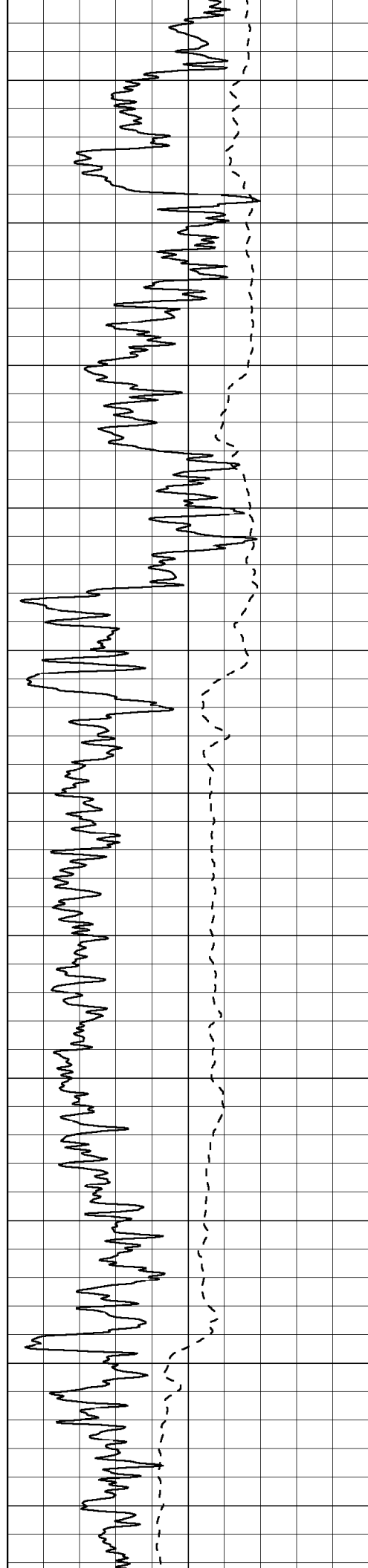
850

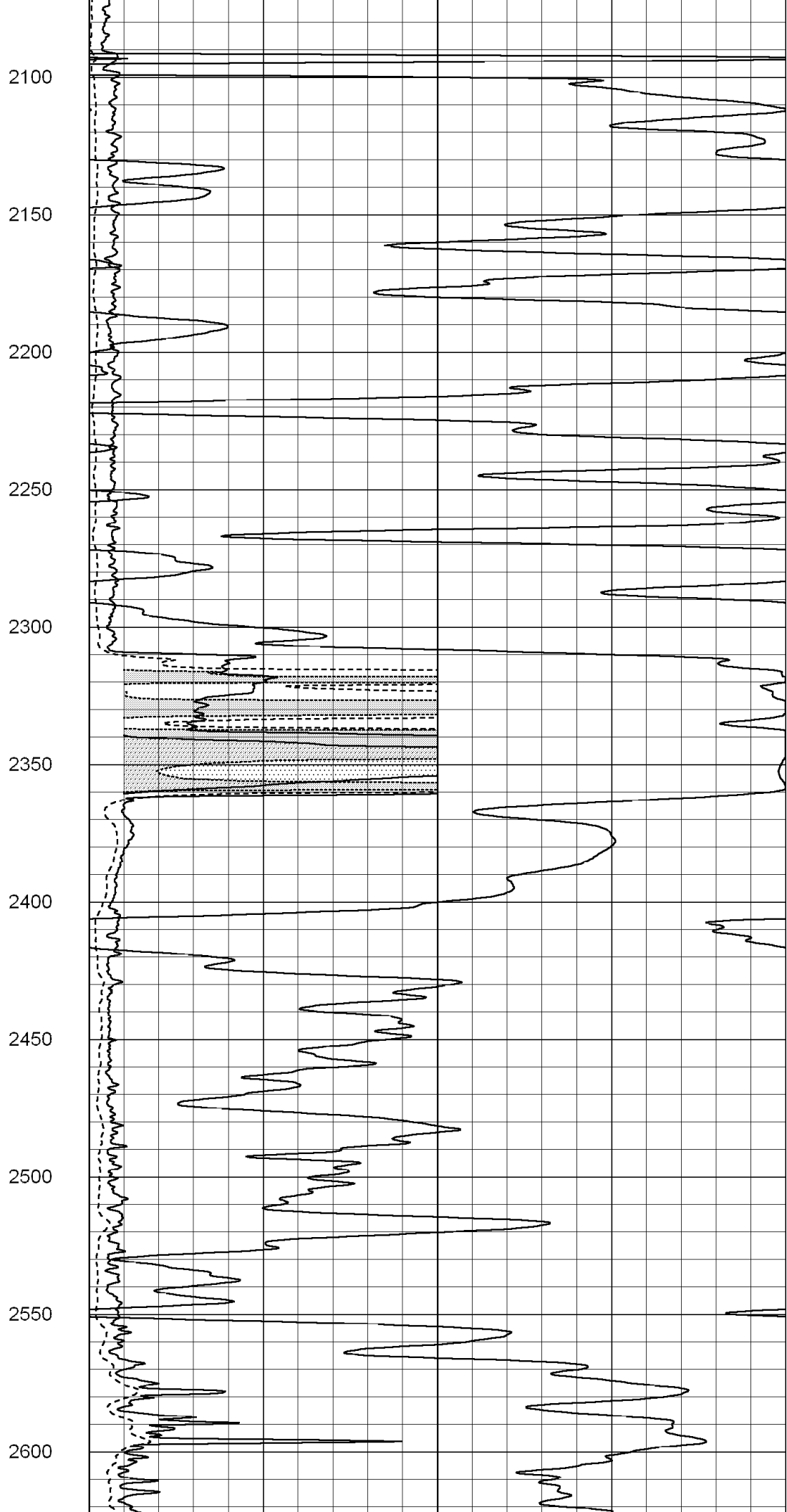
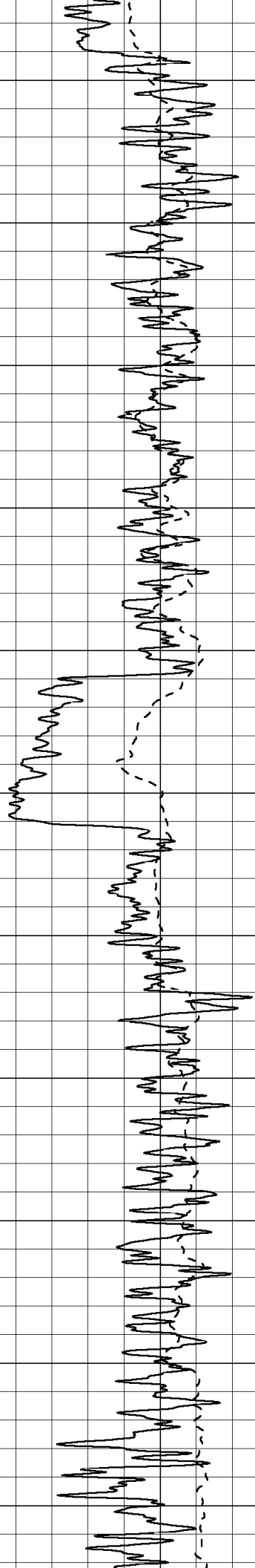
900

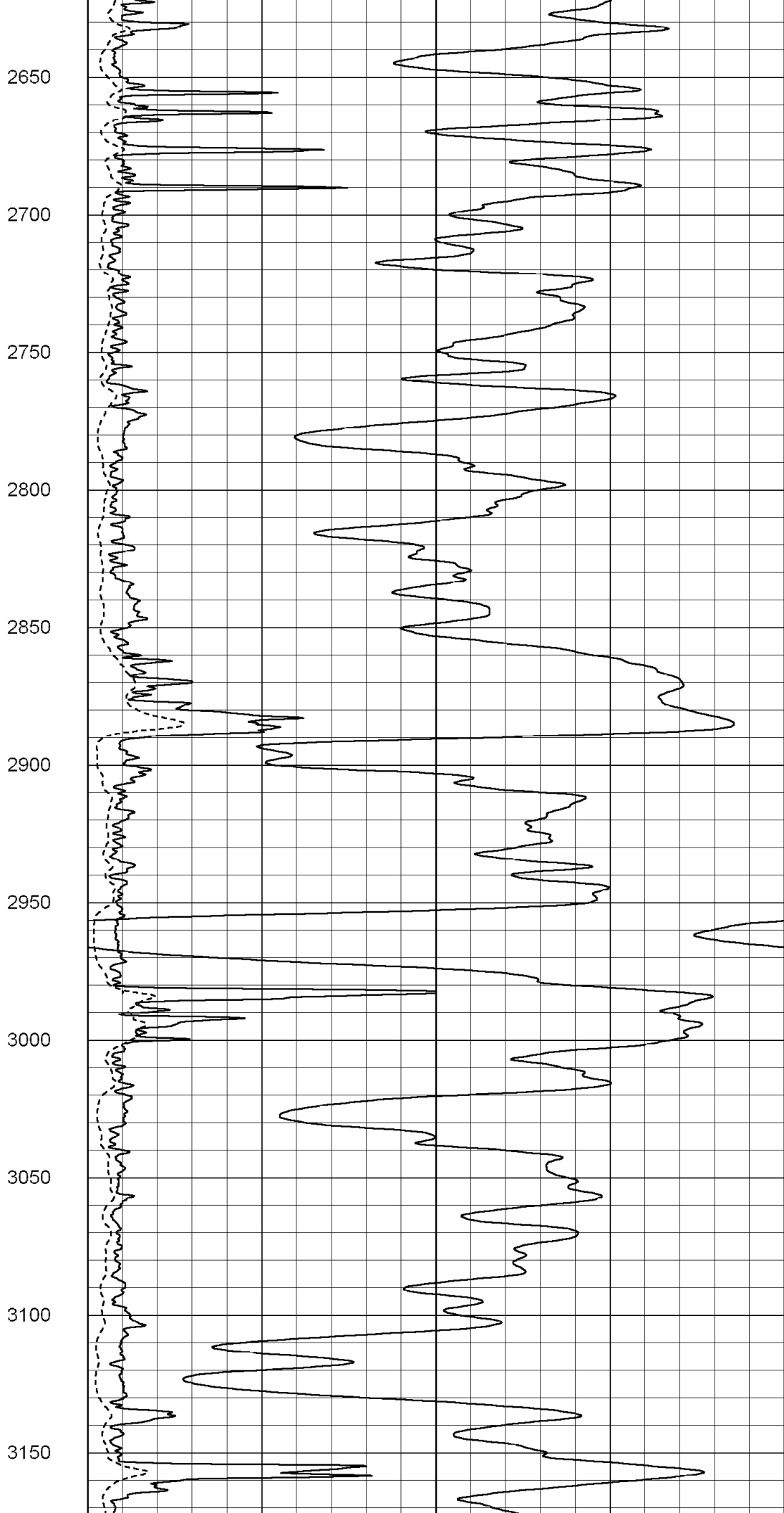
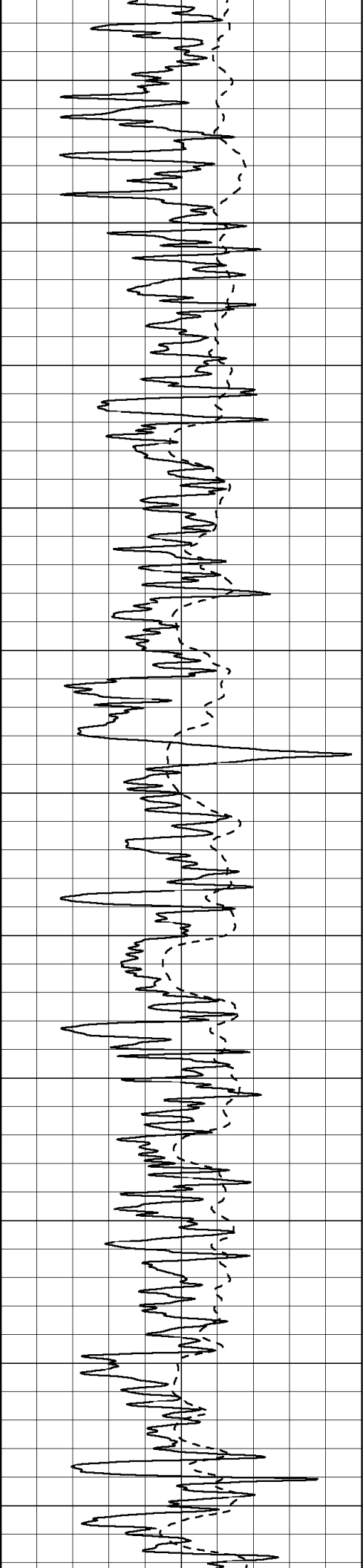
950

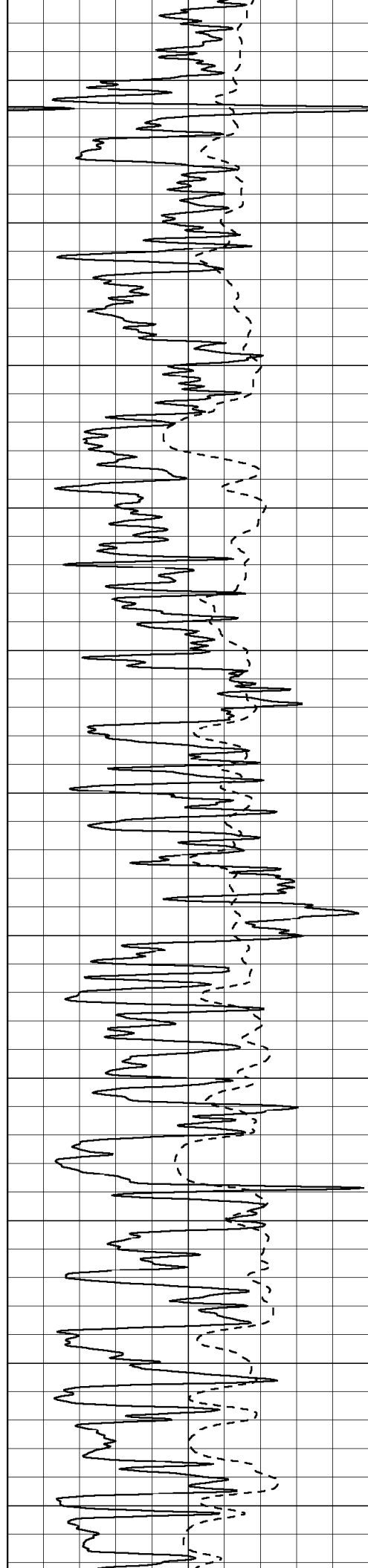












3200

3250

3300

3350

3400

3450

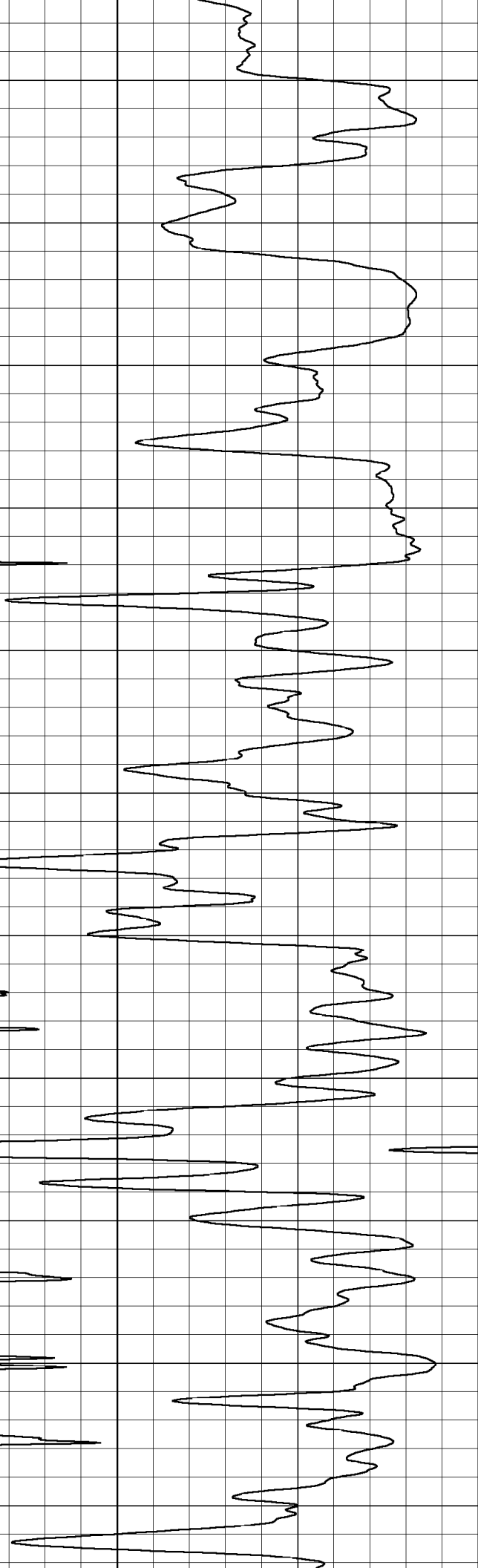
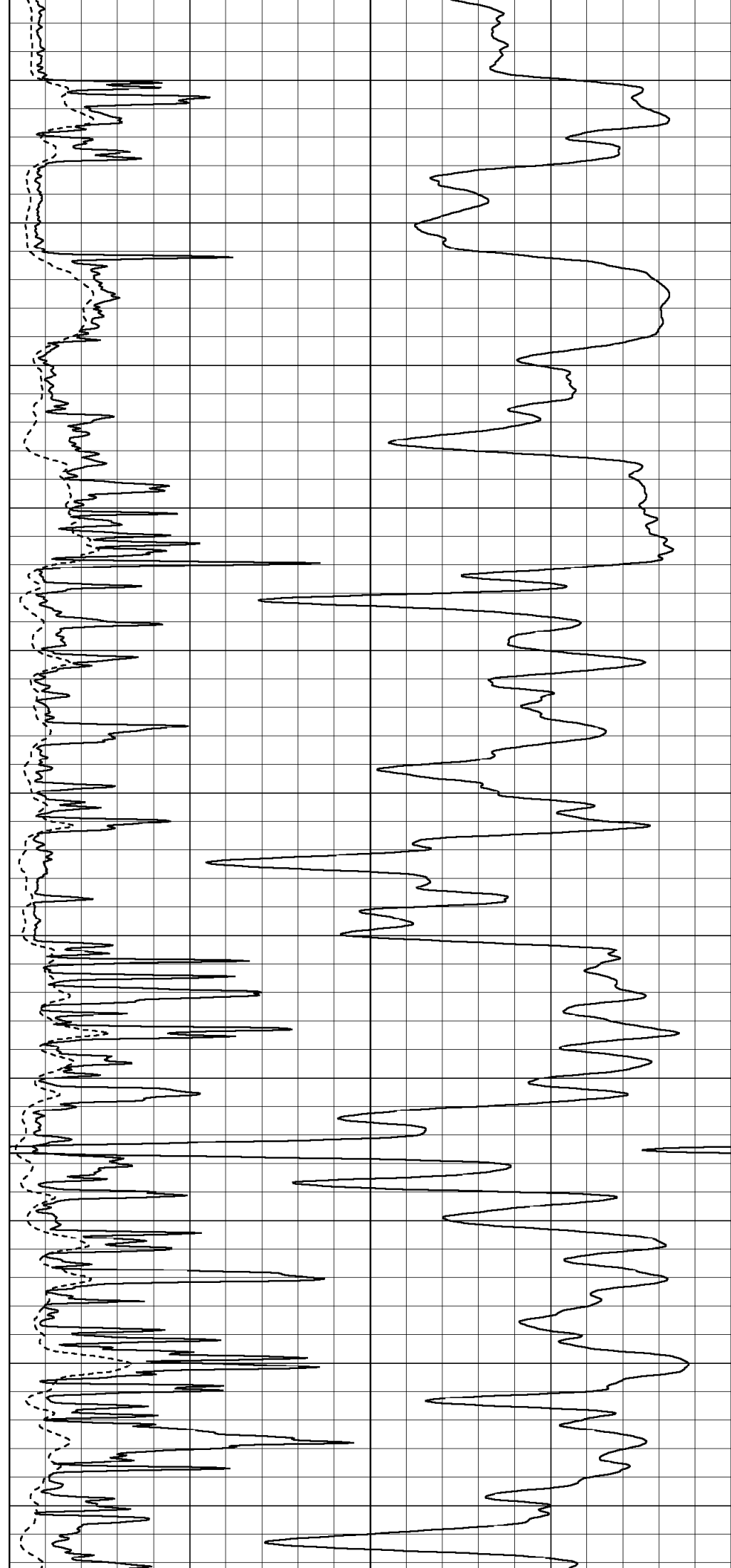
3500

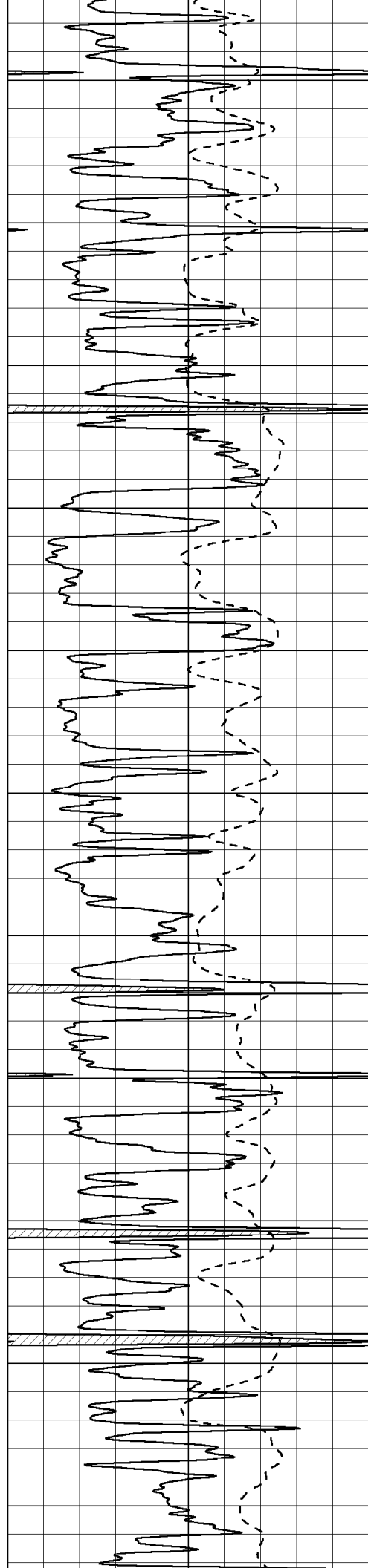
3550

3600

3650

3700





3750

3800

3850

3900

3950

4000

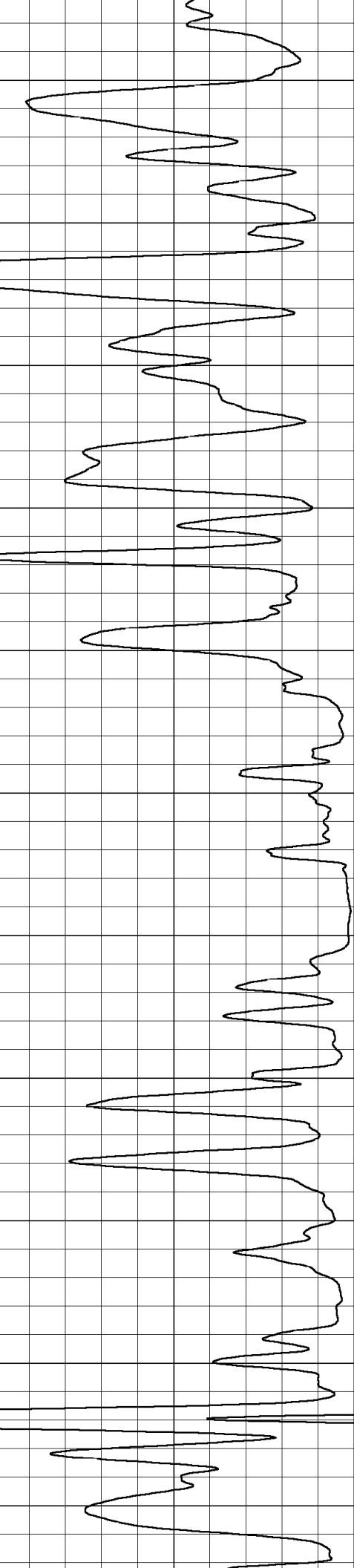
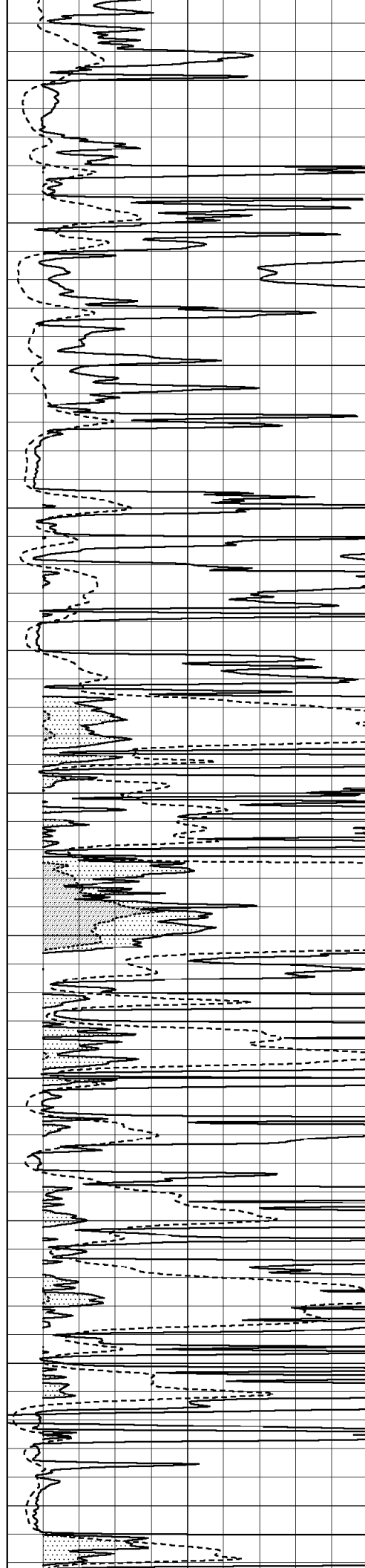
4050

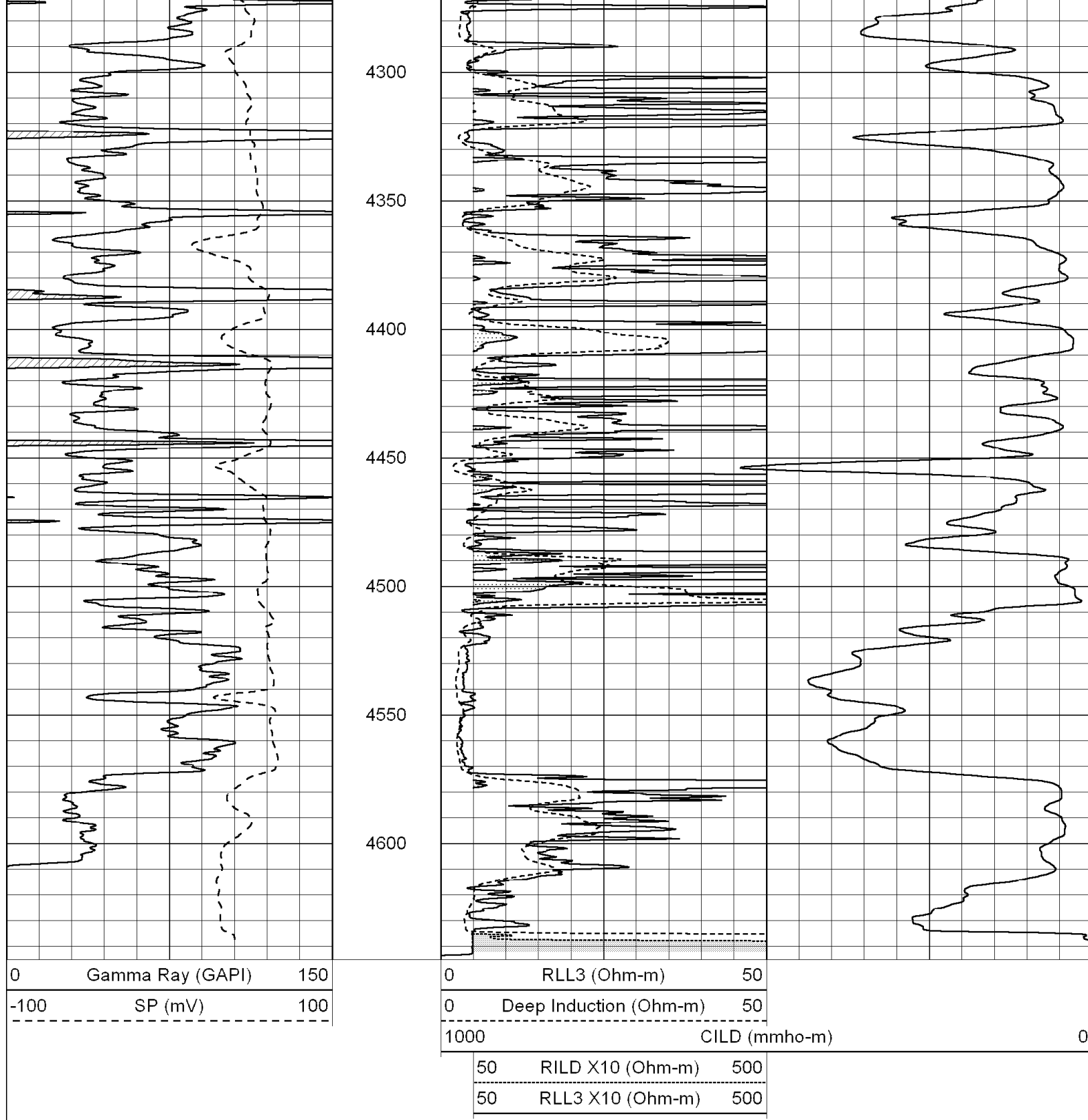
4100

4150

4200

4250



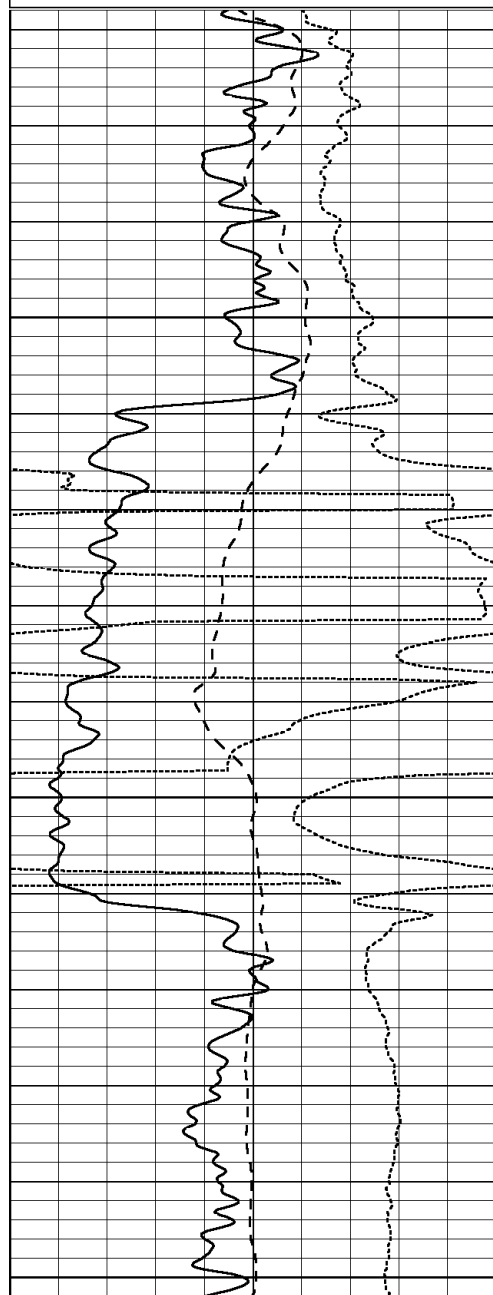


SUPERIOR
Hays,
Kansas

MAIN SECTION

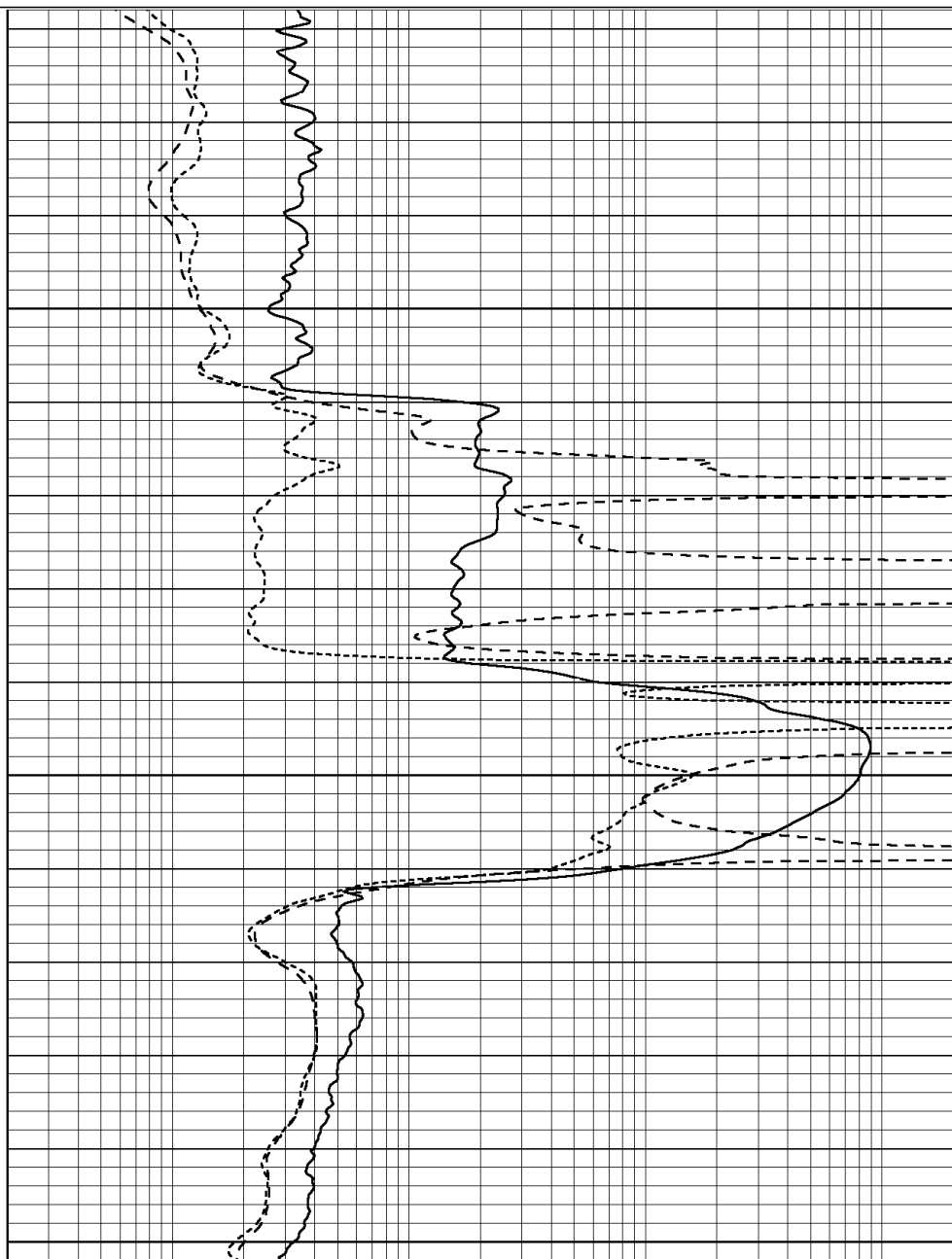
Database File: 004320ddn.db
Dataset Pathname: pass3.1A
Presentation Format: dil
Dataset Creation: Tue Dec 08 22:41:49 2009
Charted by: Depth in Feet scaled 1:240

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



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

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



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



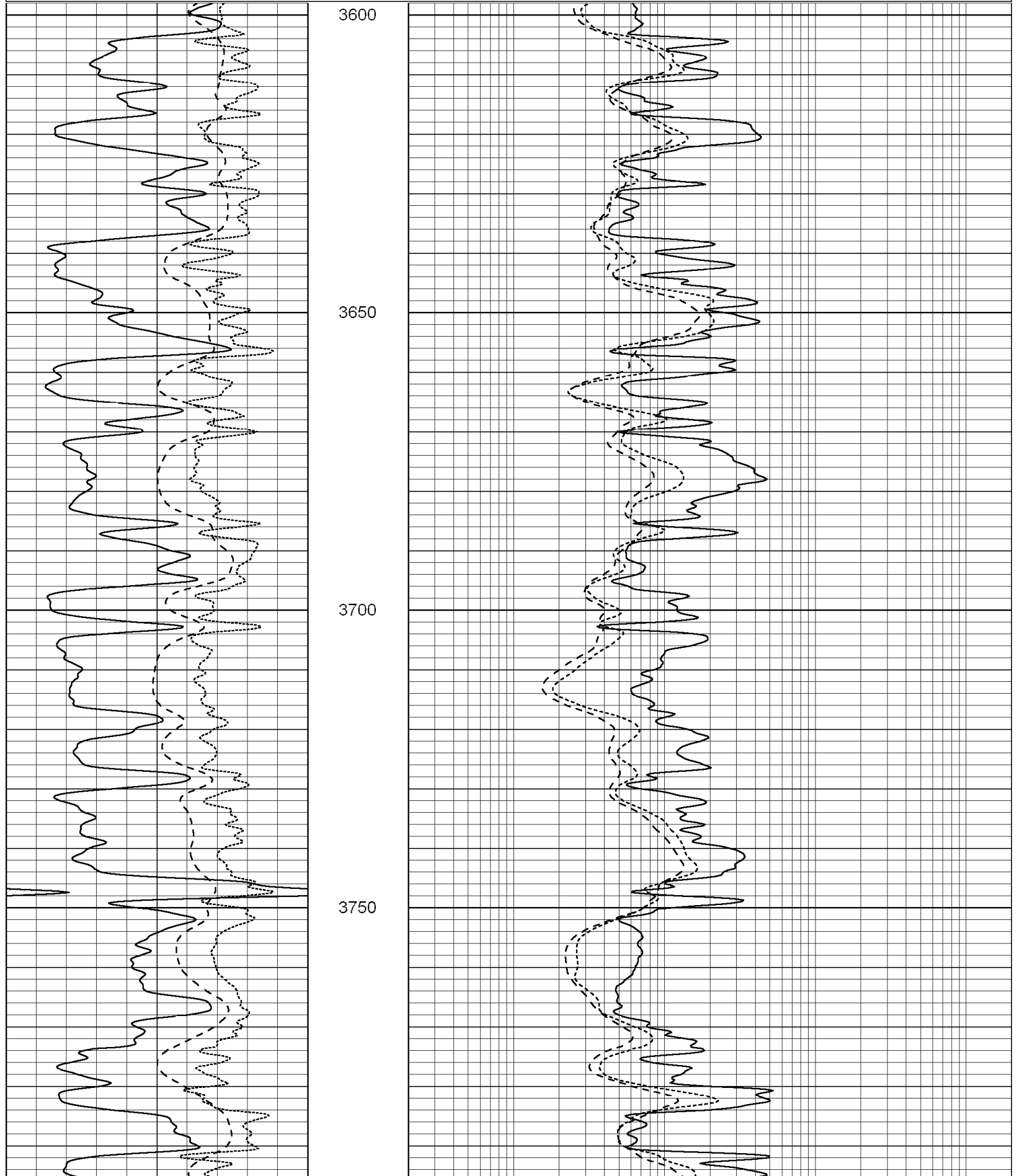
SUPERIOR
Hays,
Kansas

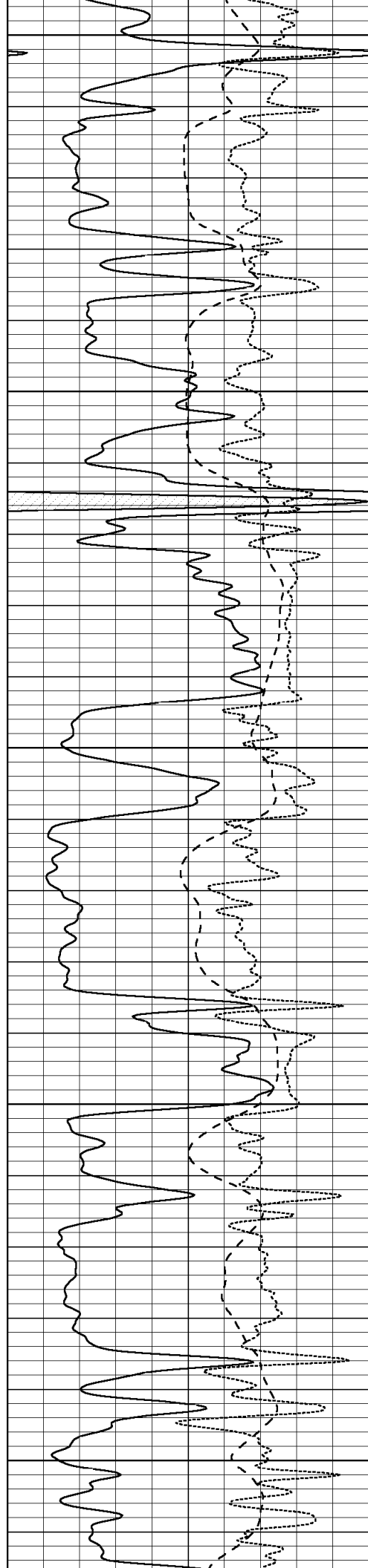
MAIN SECTION

Database File: 004320ddn.db
Dataset Pathname: pass3.1A
Presentation Format: dil
Dataset Creation: Tue Dec 08 22:41:49 2009
Charted by: Depth in Feet scaled 1:240

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

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





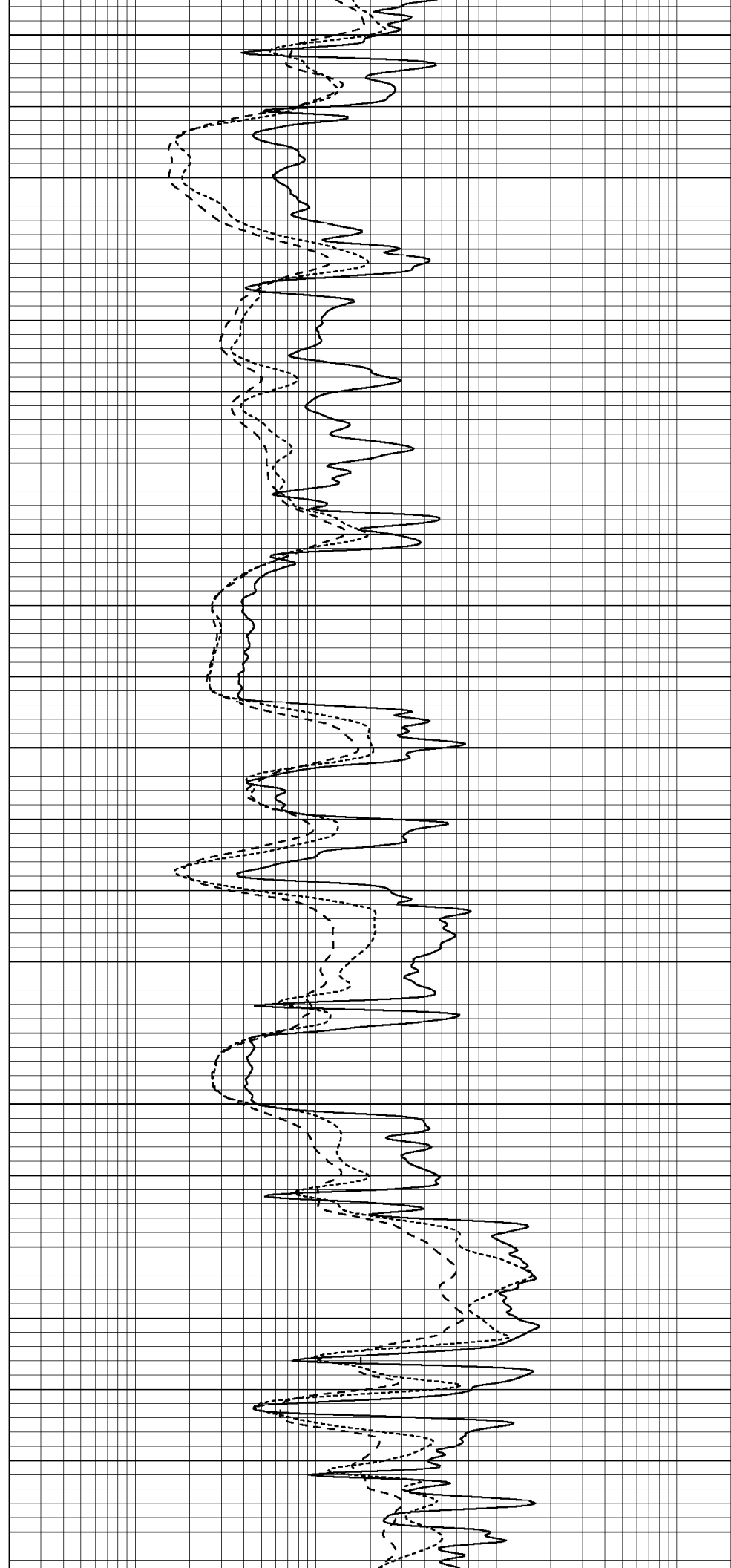
3800

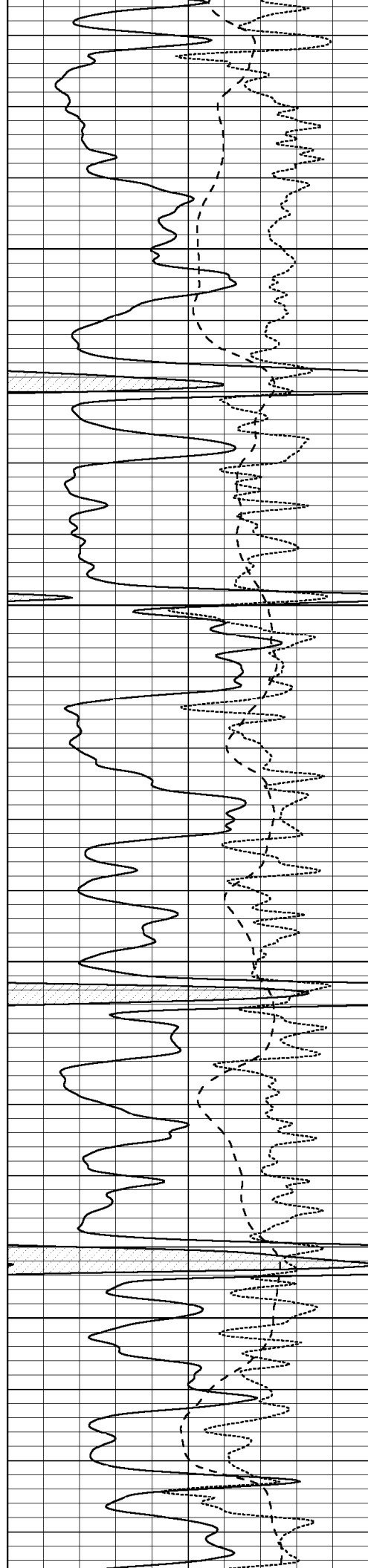
3850

3900

3950

4000



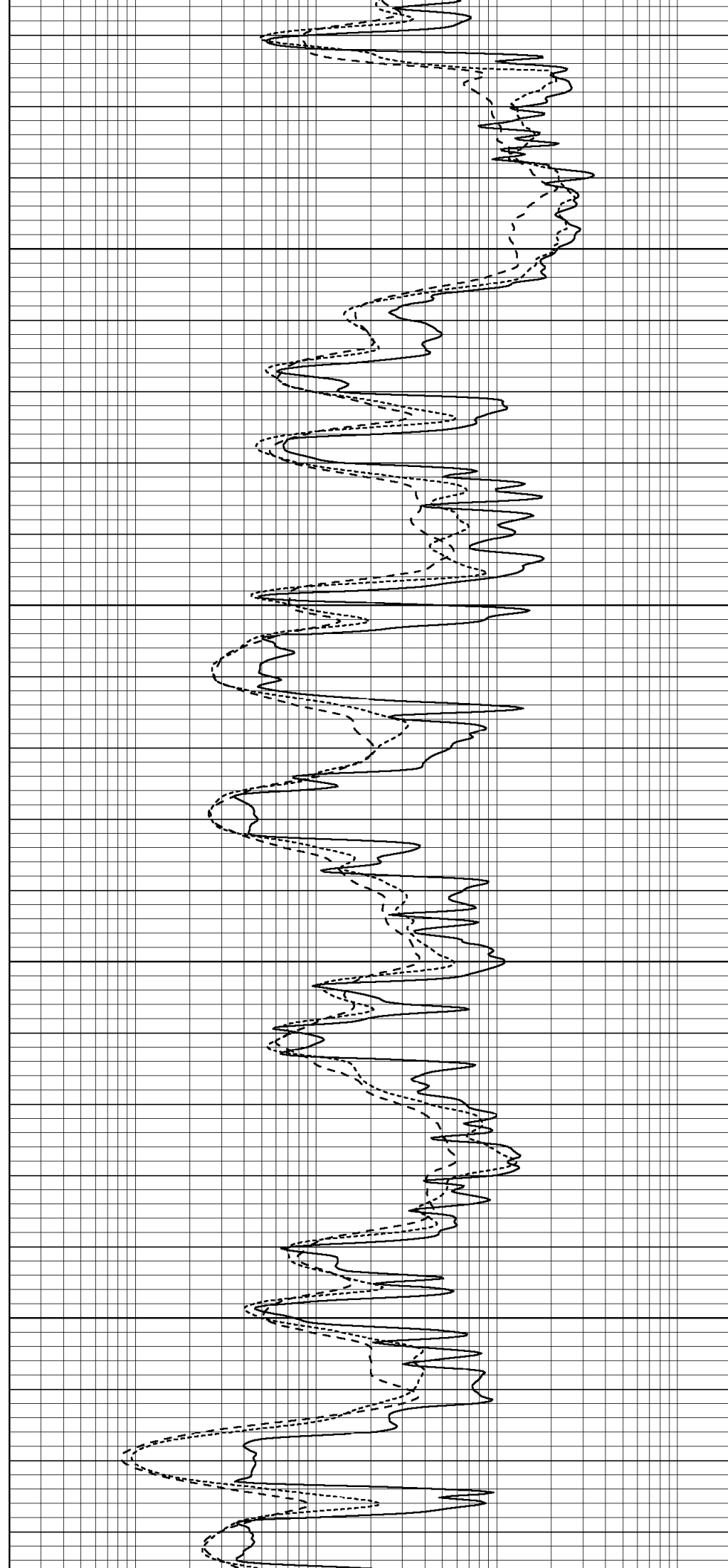


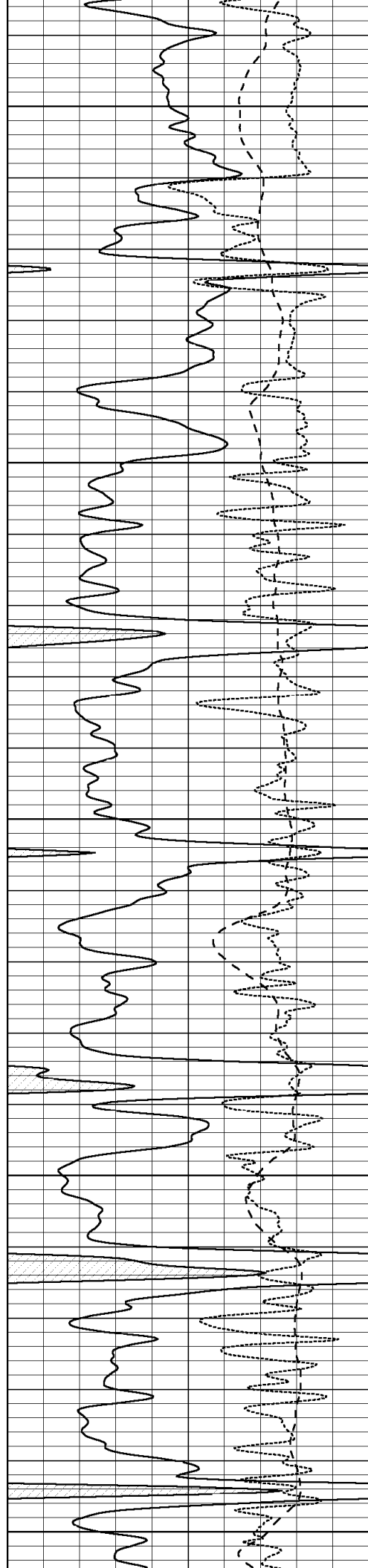
4050

4100

4150

4200





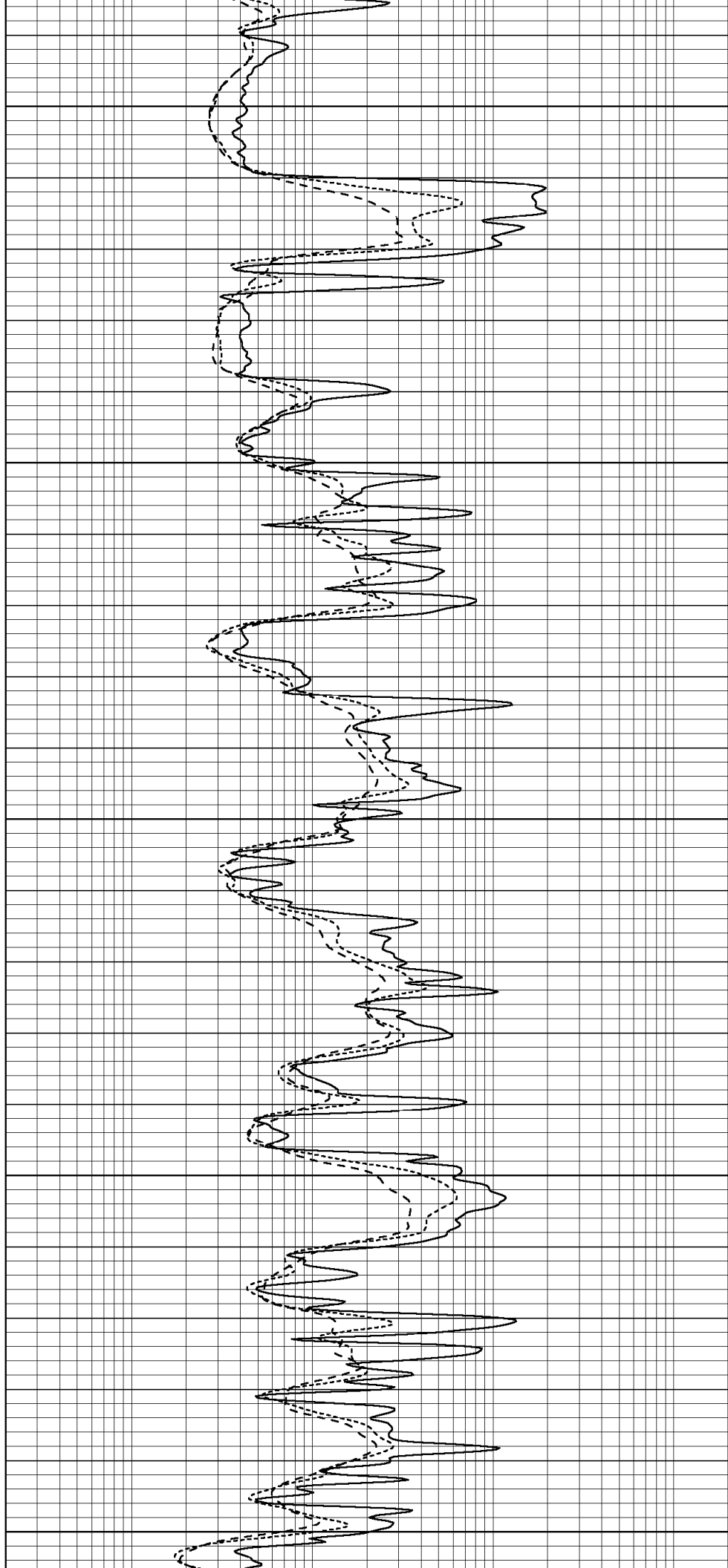
4250

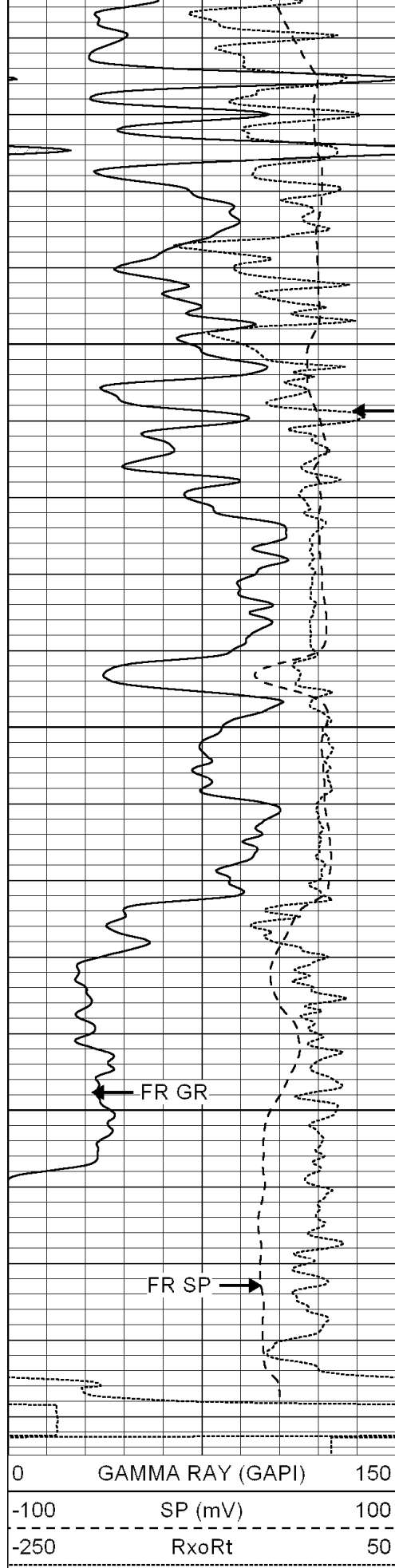
4300

4350

4400

4450





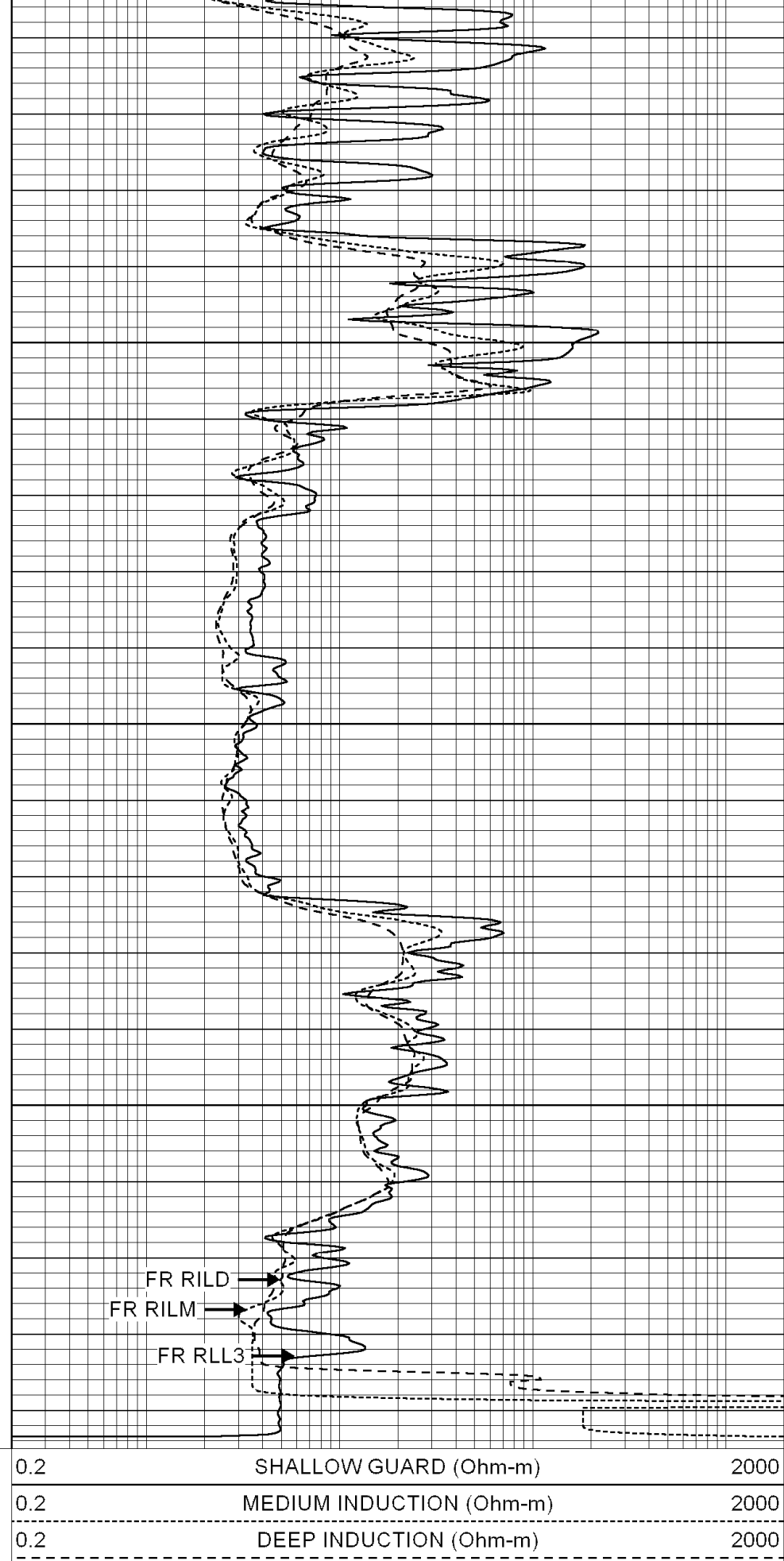
4500

RxoRt

4550

4600

--- TD ---





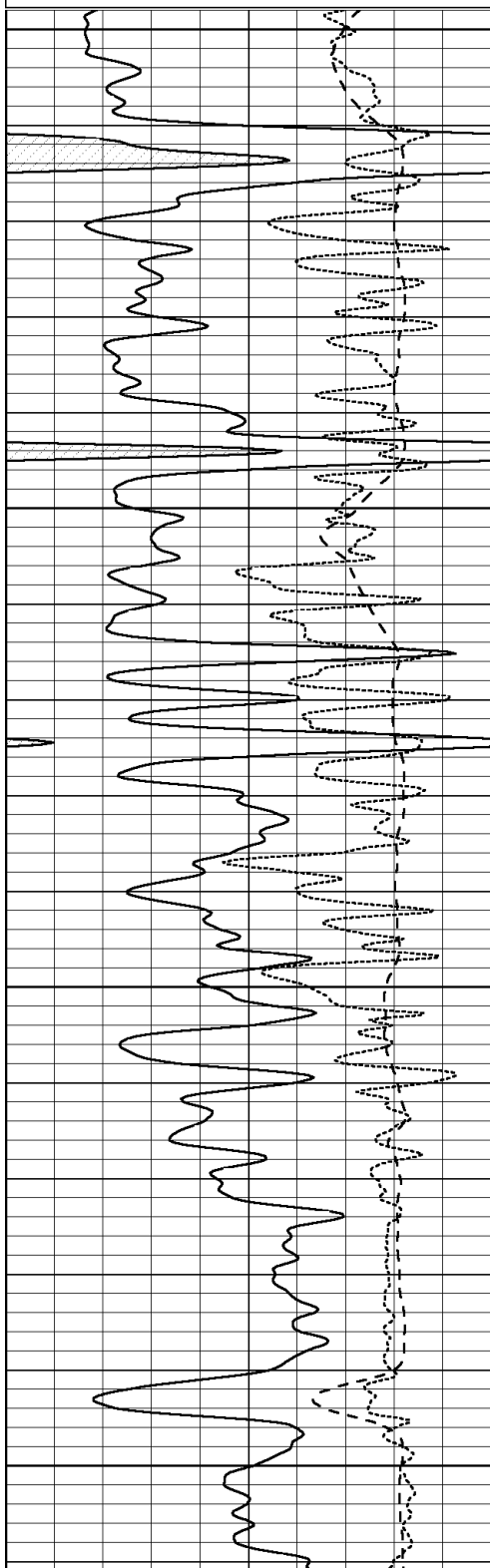
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 004320ddn.db
Dataset Pathname: pass2.1A
Presentation Format: dil
Dataset Creation: Tue Dec 08 21:51:58 2009 by Calc Open-Cased 051020
Charted by: Depth in Feet scaled 1:240

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

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

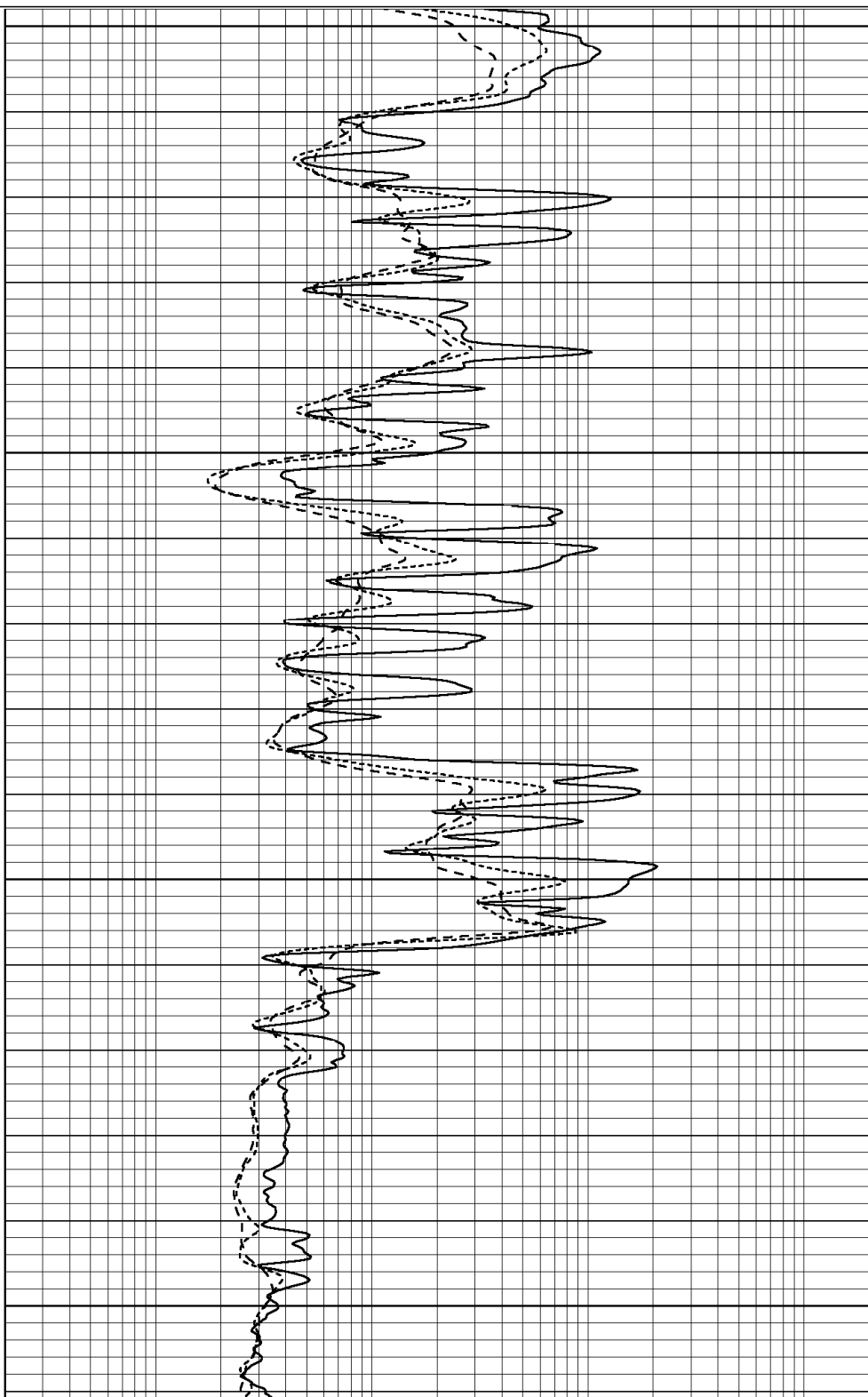


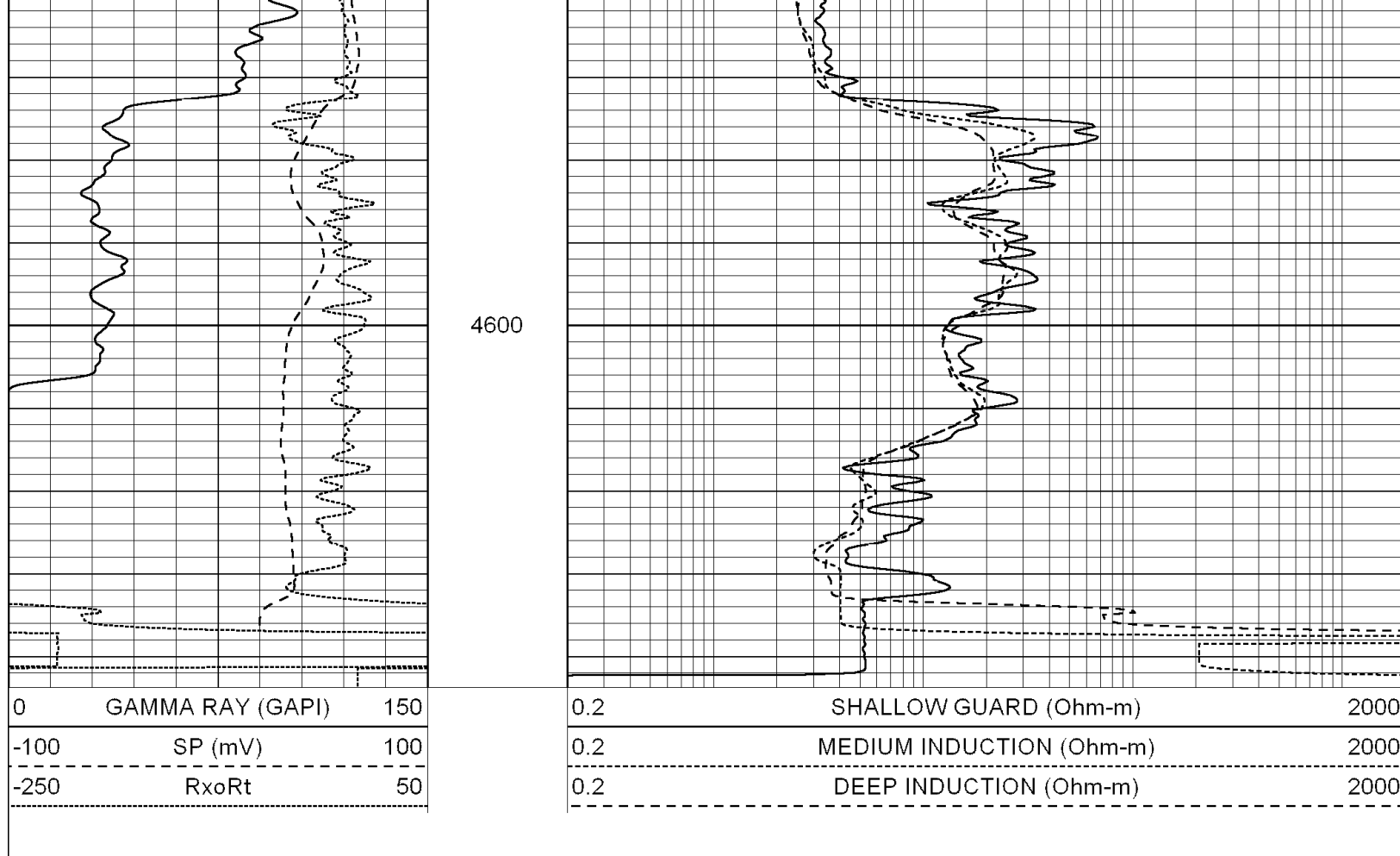
4400

4450

4500

4550





Calibration Report

Database File: 004320ddn.db
 Dataset Pathname: pass3
 Dataset Creation: Tue Dec 08 21:01:00 2009 by Log Open-Cased 051020

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Tue Dec 08 21:50:13 2009

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho-m	560.000	-4.000
Medium	-0.005	0.737	V	0.000	462.500	mmho-m	540.000	-10.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho-m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho-m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
 Source / Verifier: 147 / 147
 Master Calibration Performed: Tue Dec 08 21:23:37 2009

Master Calibration

	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		1006.91	528.07	cps
Aluminum	2.610	g/cc		233.49	355.80	cps

Spine Angle = 74.88

Density/Spine Ratio = 0.594

	Size		Reading	
Small Ring	8.00	in	3.68	V
Large Ring	14.00	in	6.06	V

Compensated Neutron Calibration Report

Serial Number: NEU_11
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: Mon Dec 07 17:19:06 2009

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5800 GAPI/cps