

DUAL INDUCTION LOG

Company NEC OPERATING - KANSAS, LLC.

Well AMELIA #1

Field GAGELMAN

County TREGO State KANSAS

Location: API # : 15-195-23146-0000
330' FSL & 330' FWL
SW - SW - SW

SEC 14 TWP 11S RGE 22W

Permanent Datum GROUND LEVEL Elevation 2279

Log Measured From KELLY BUSHING 5' A.G.L.

Drilling Measured From KELLY BUSHING

Other Services
CDL/CNL/PE
MEL

Elevation
K.B. 2284
D.F. 2282
G.L. 2279

Date 8/9/22

Run Number ONE

Depth Driller 4100

Depth Logger 4097

Bottom Logged Interval 4095

Top Log Interval 00

Casing Driller 8 5/8" @ 224'

Casing Logger 224

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.1/52

pH / Fluid Loss 10.0/6.0

Source of Sample FLOWLINE

Rm @ Meas. Temp .750 @ 96F

Rmf @ Meas. Temp .563 @ 96F

Rmc @ Meas. Temp .900 @ 96F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .615 @ 117F

Time Circulation Stopped 2.5 HOURS

Time Logger on Bottom 6:00 P.M.

Maximum Recorded Temperature 117F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By PAT DEENIHAN

<<< 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.

15-195-23146-0000

Comments

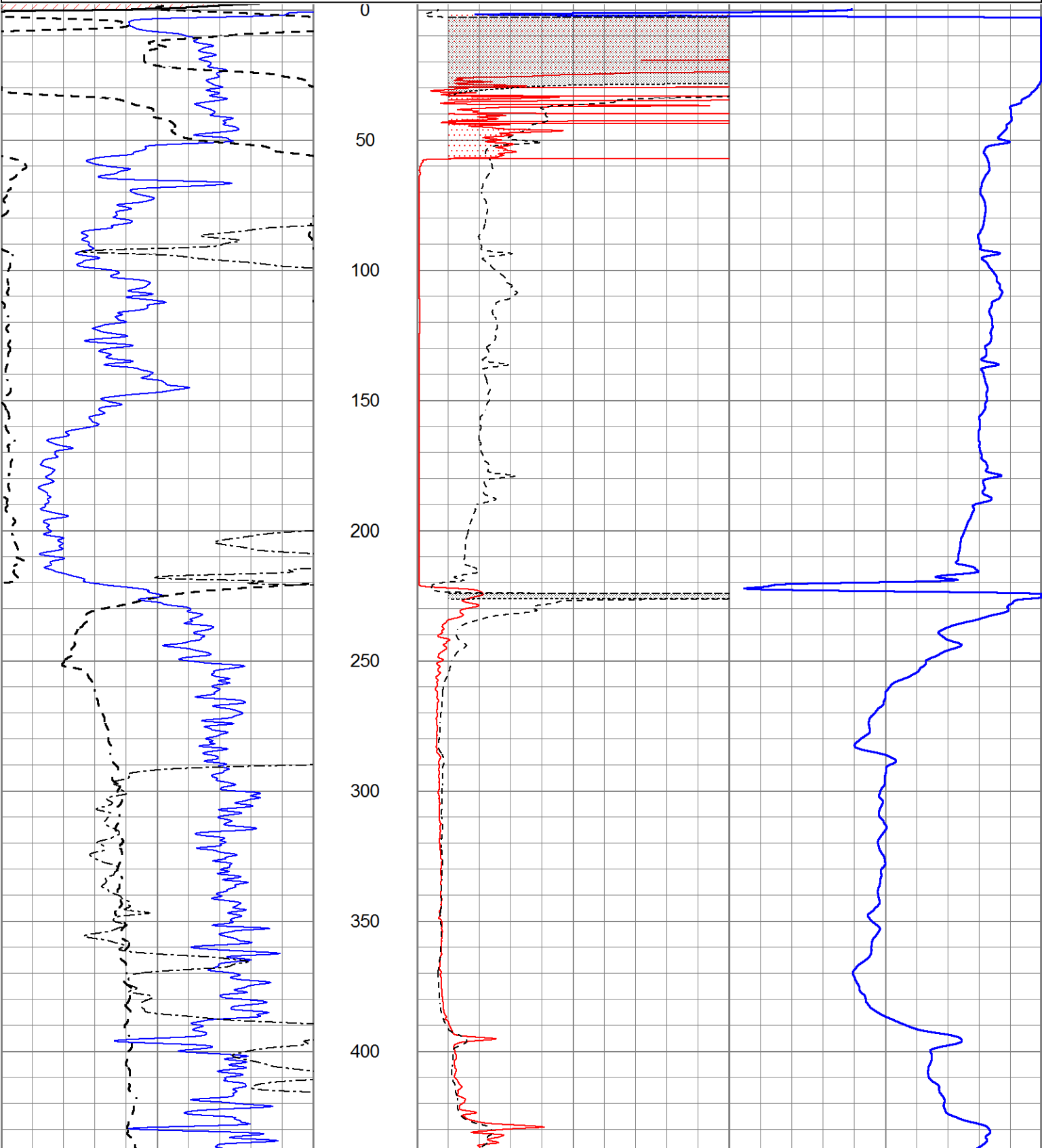
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
OGALLAH, KS. & I-70 EXIT, 7 1/2 N., E. INTO



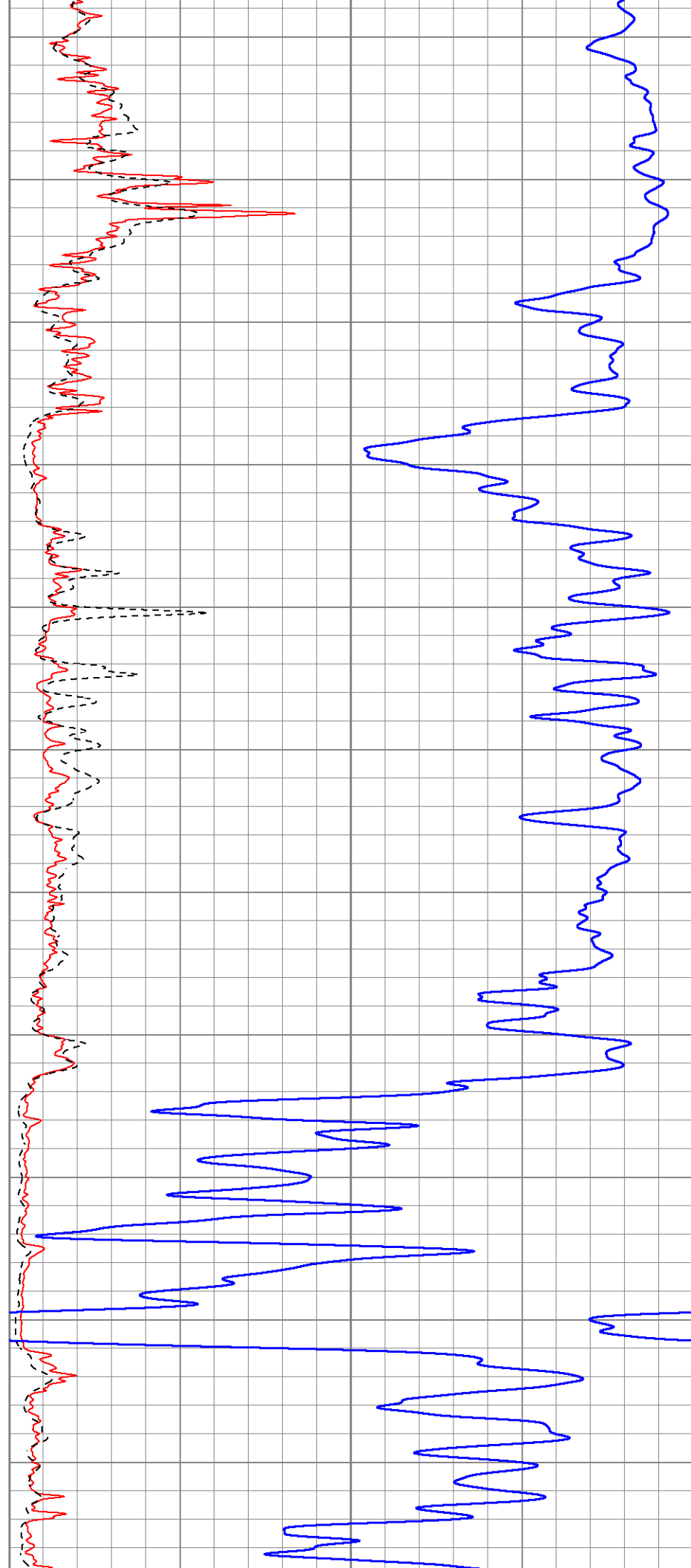
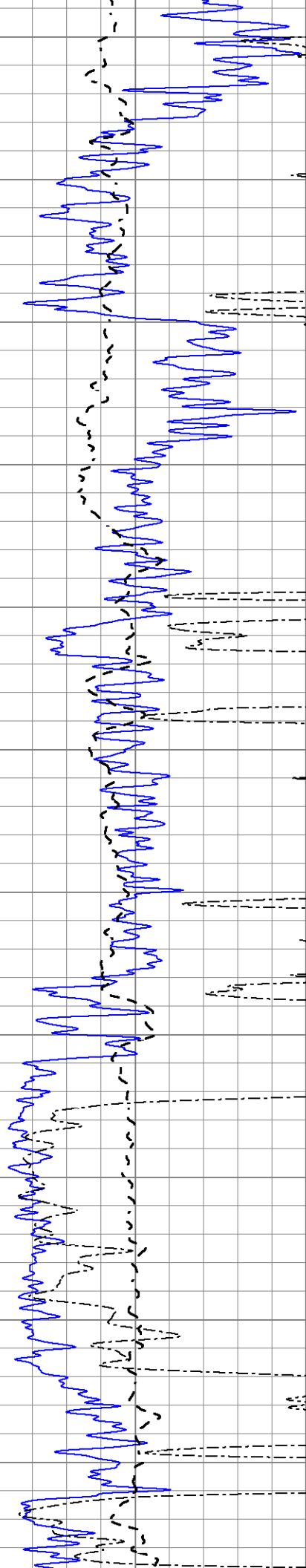
MAIN SECTION

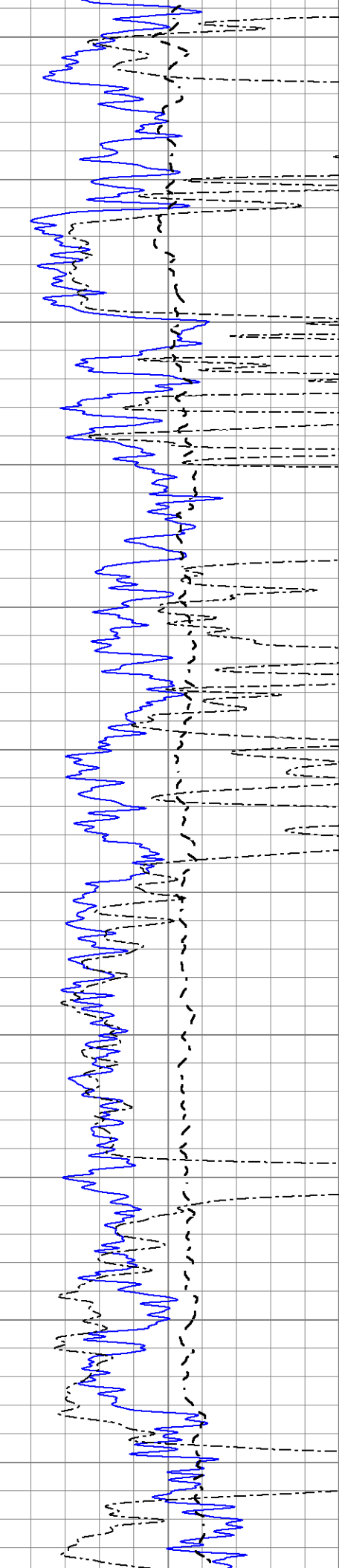
Database File	6901pe.db
Dataset Pathname	pass6.1M
Presentation Format	_dil2
Dataset Creation	Tue Aug 09 19:59:26 2022
Charted by	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
0	RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

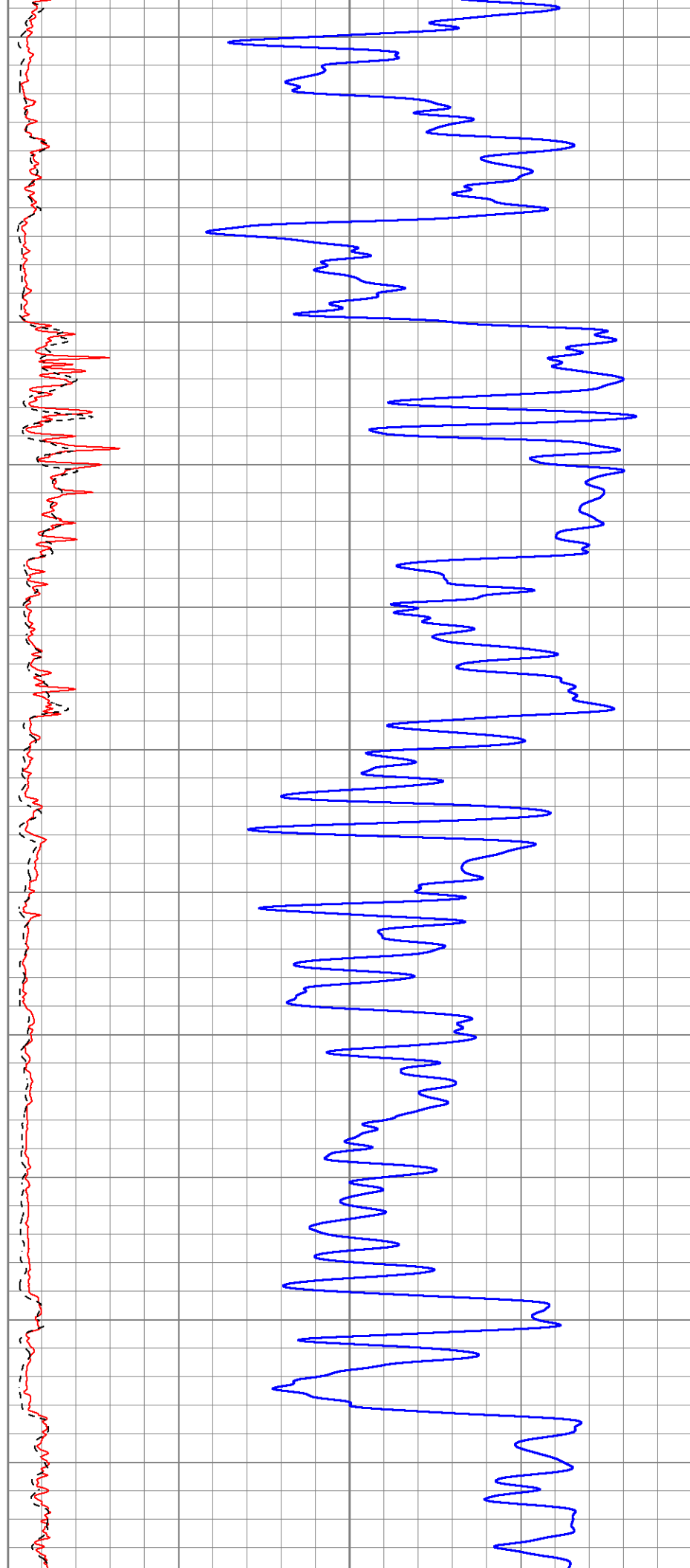


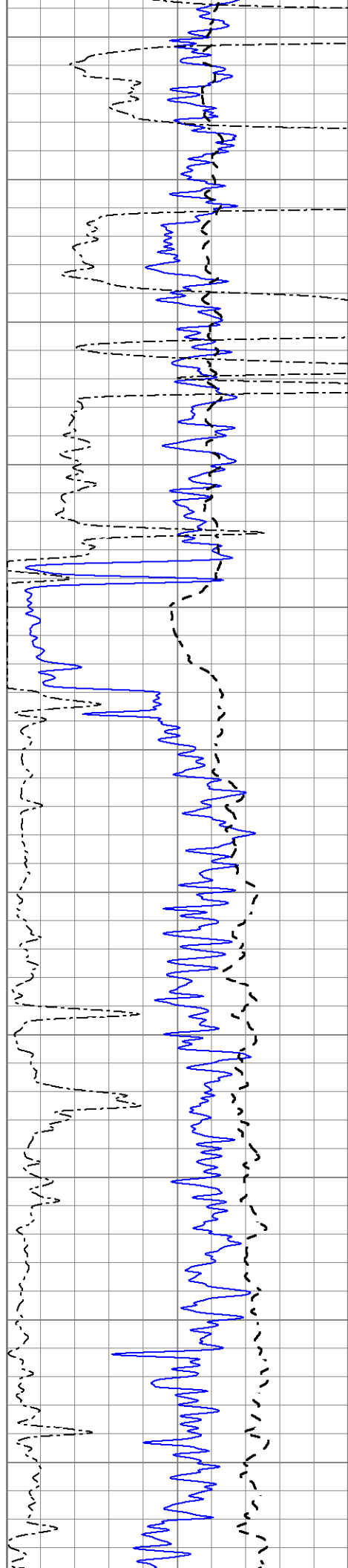
450
500
550
600
650
700
750
800
850
900
950





1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500





1550

1600

1650

1700

1750

1800

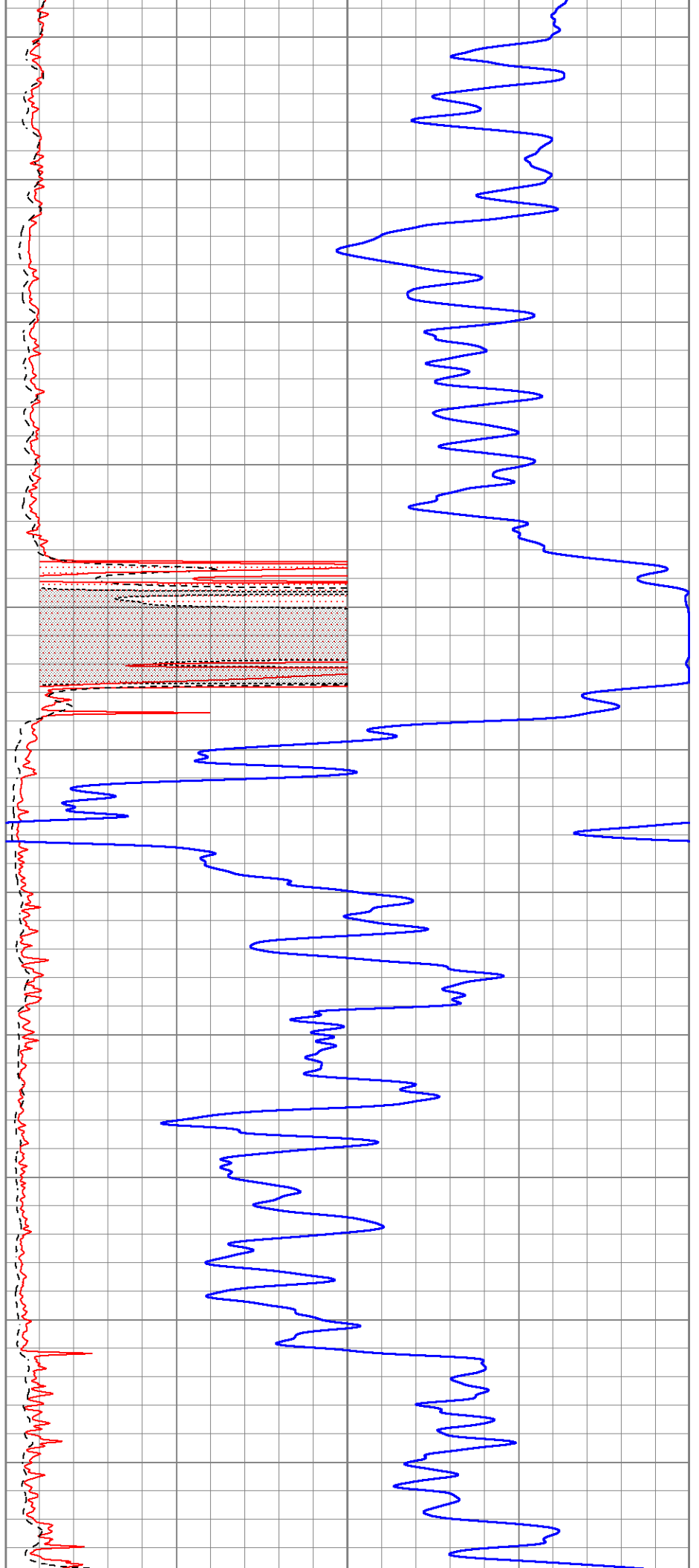
1850

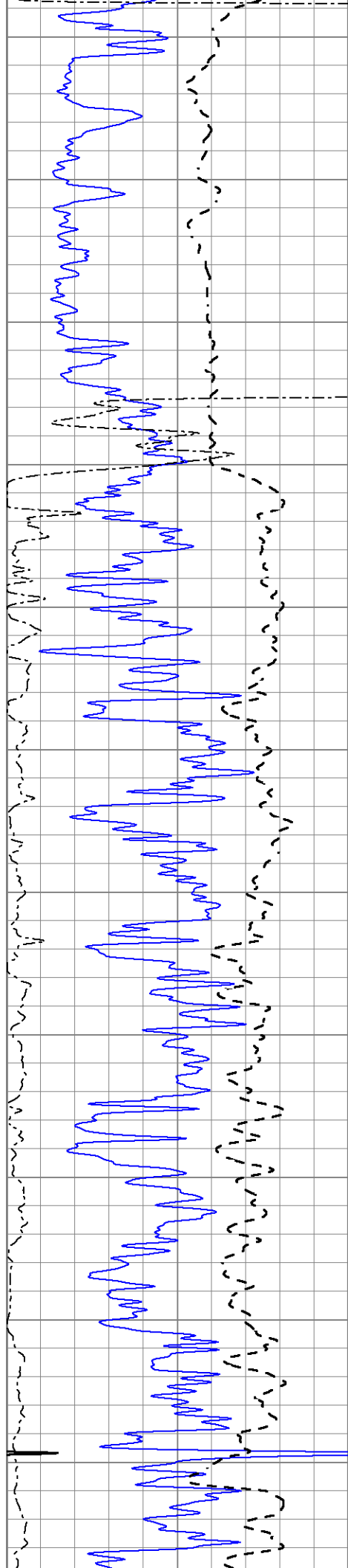
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

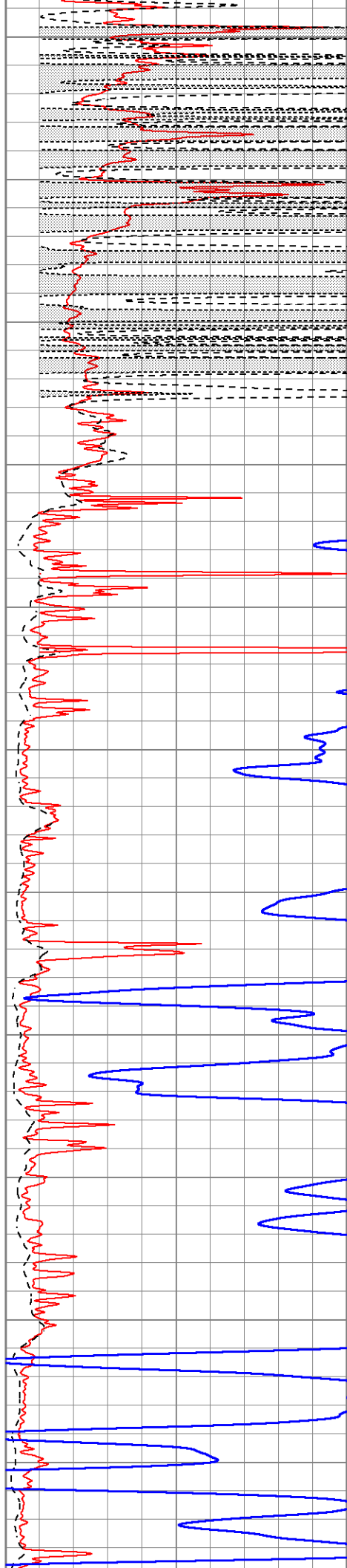
2400

2450

2500

2550

2600



2650

2700

2750

2800

2850

2900

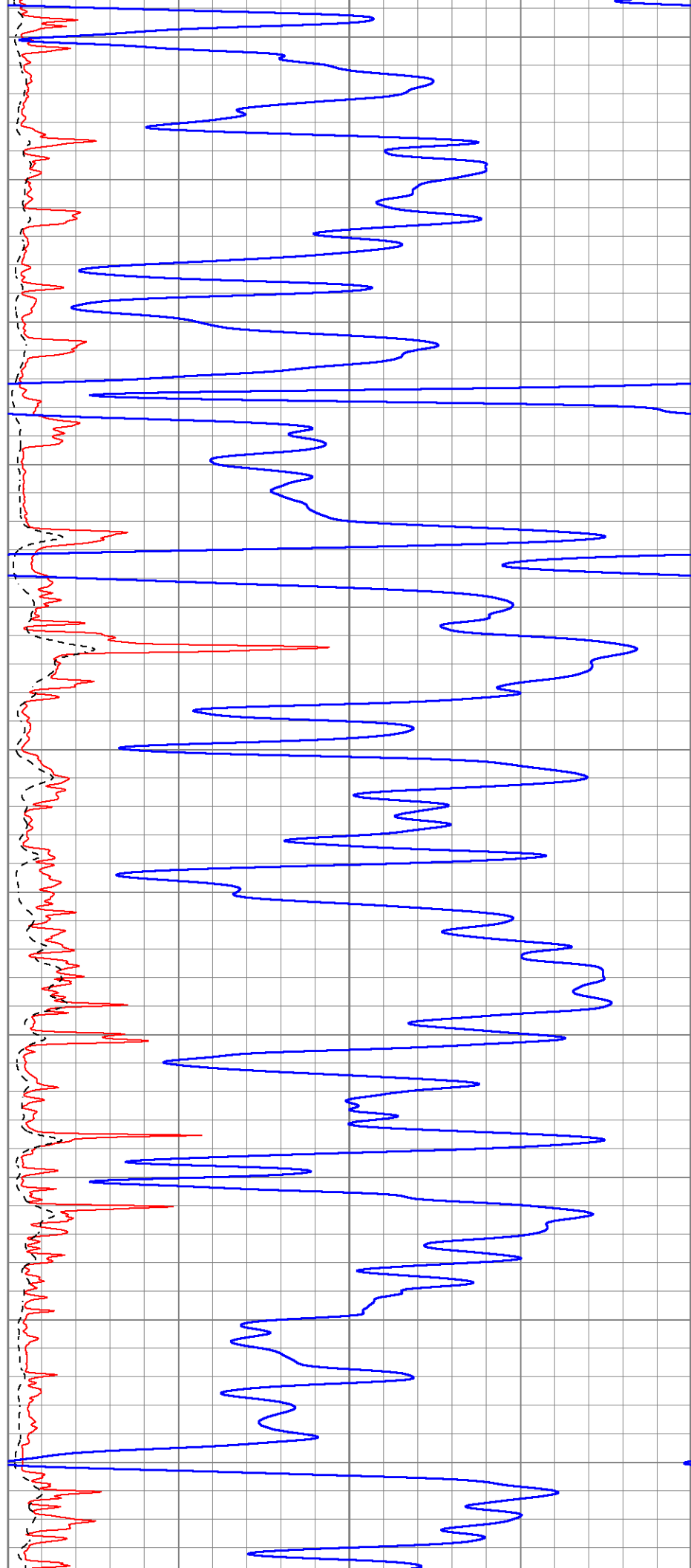
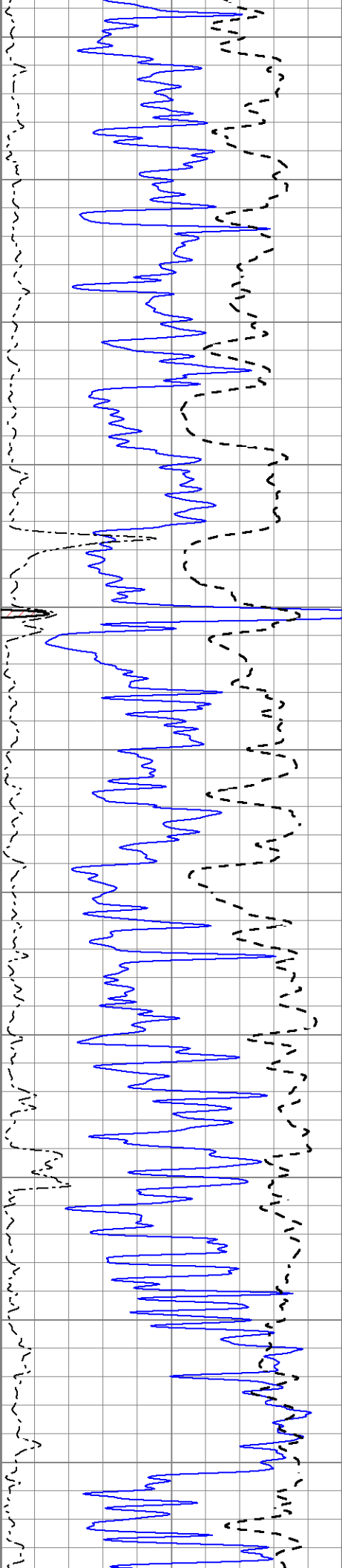
2950

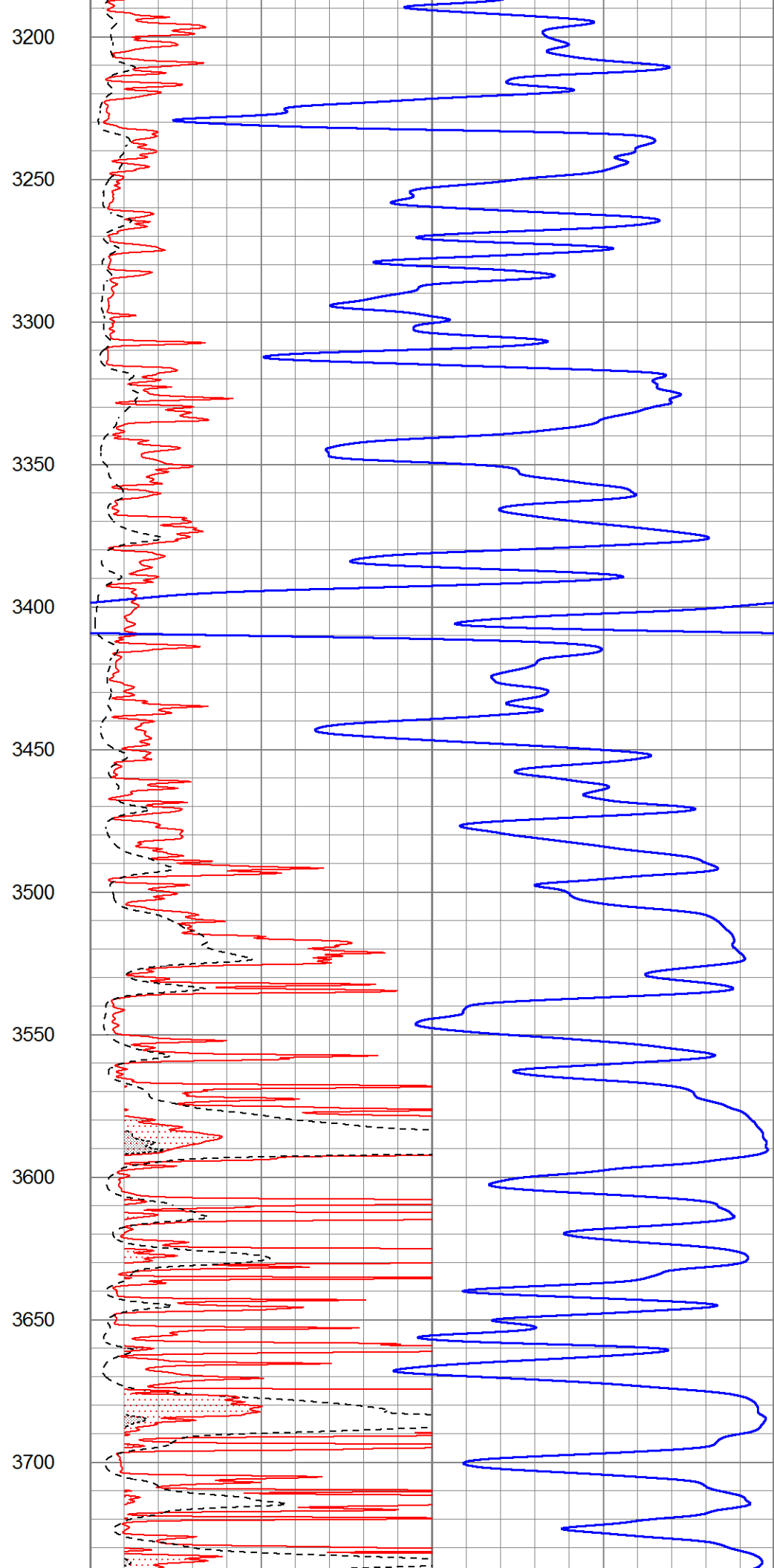
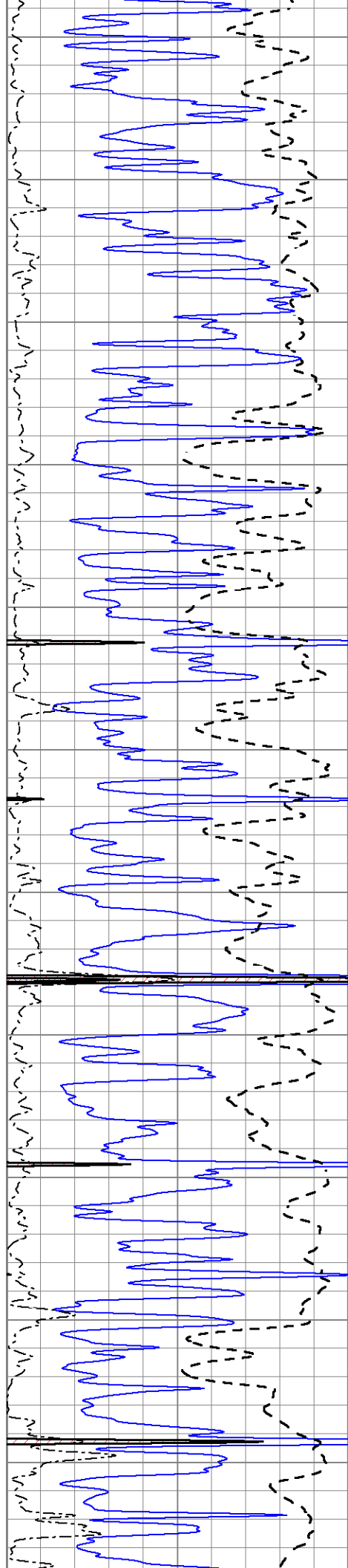
3000

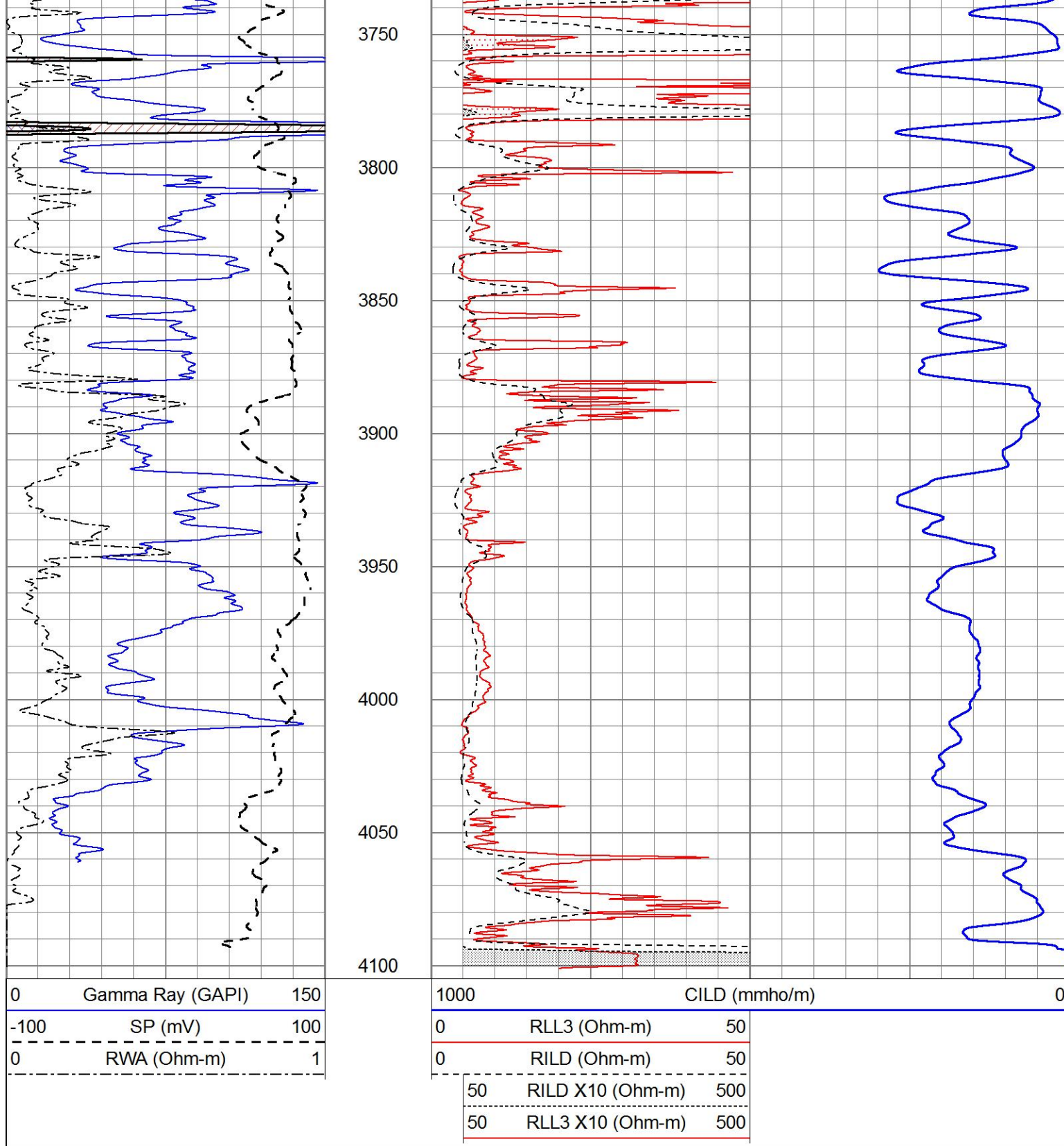
3050

3100

3150



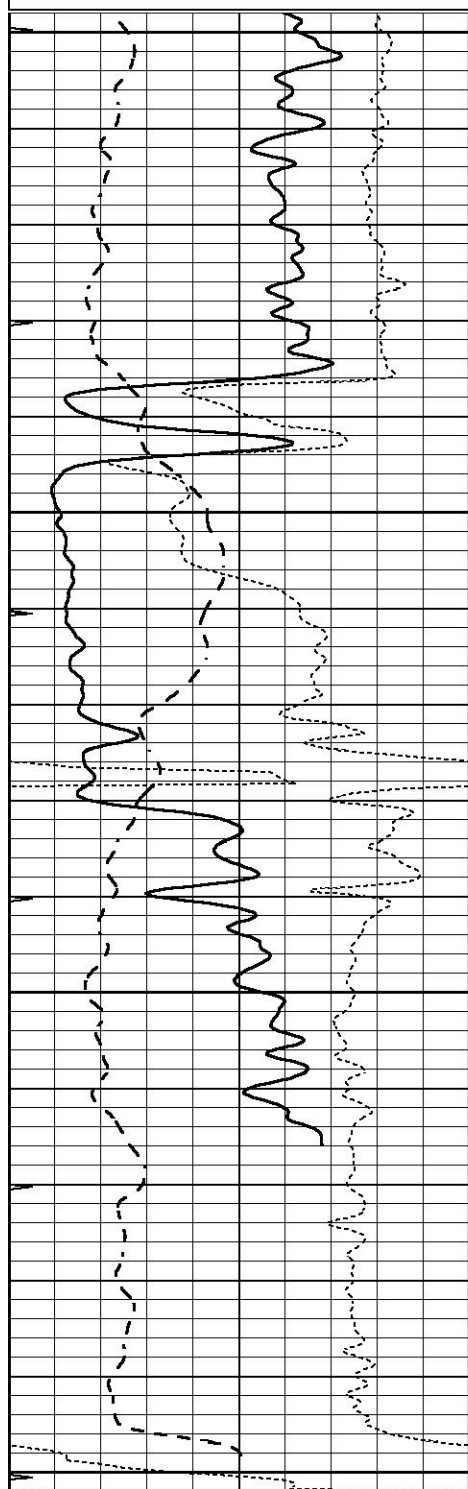




ANHYDRITE REPEAT

Database File 6901pe.db
 Dataset Pathname pass3.2A
 Presentation Format _dil
 Dataset Creation Tue Aug 09 18:23:06 2022
 Charted by Depth in Feet scaled 1:240

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



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

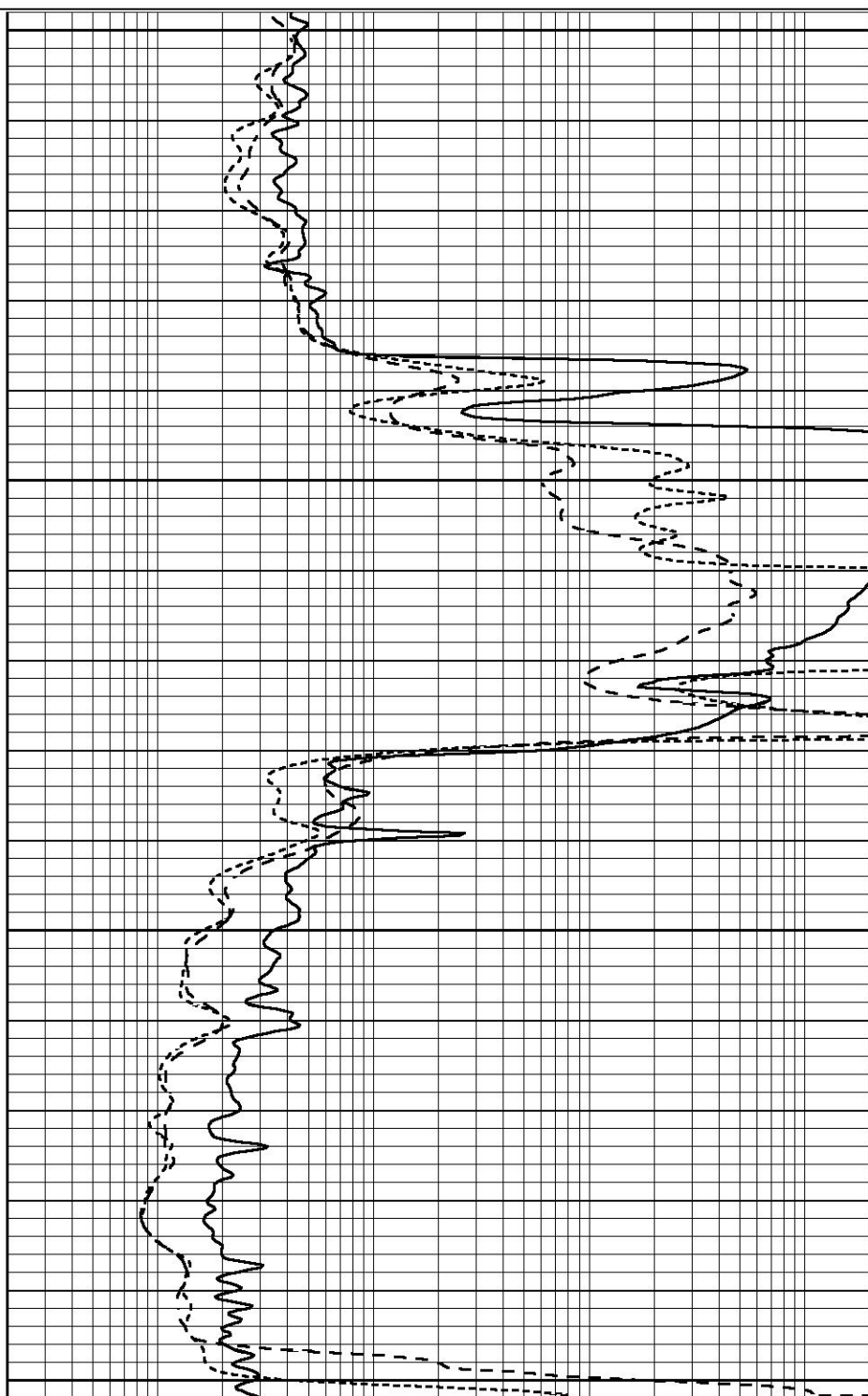
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

1700

1750

1800

1850



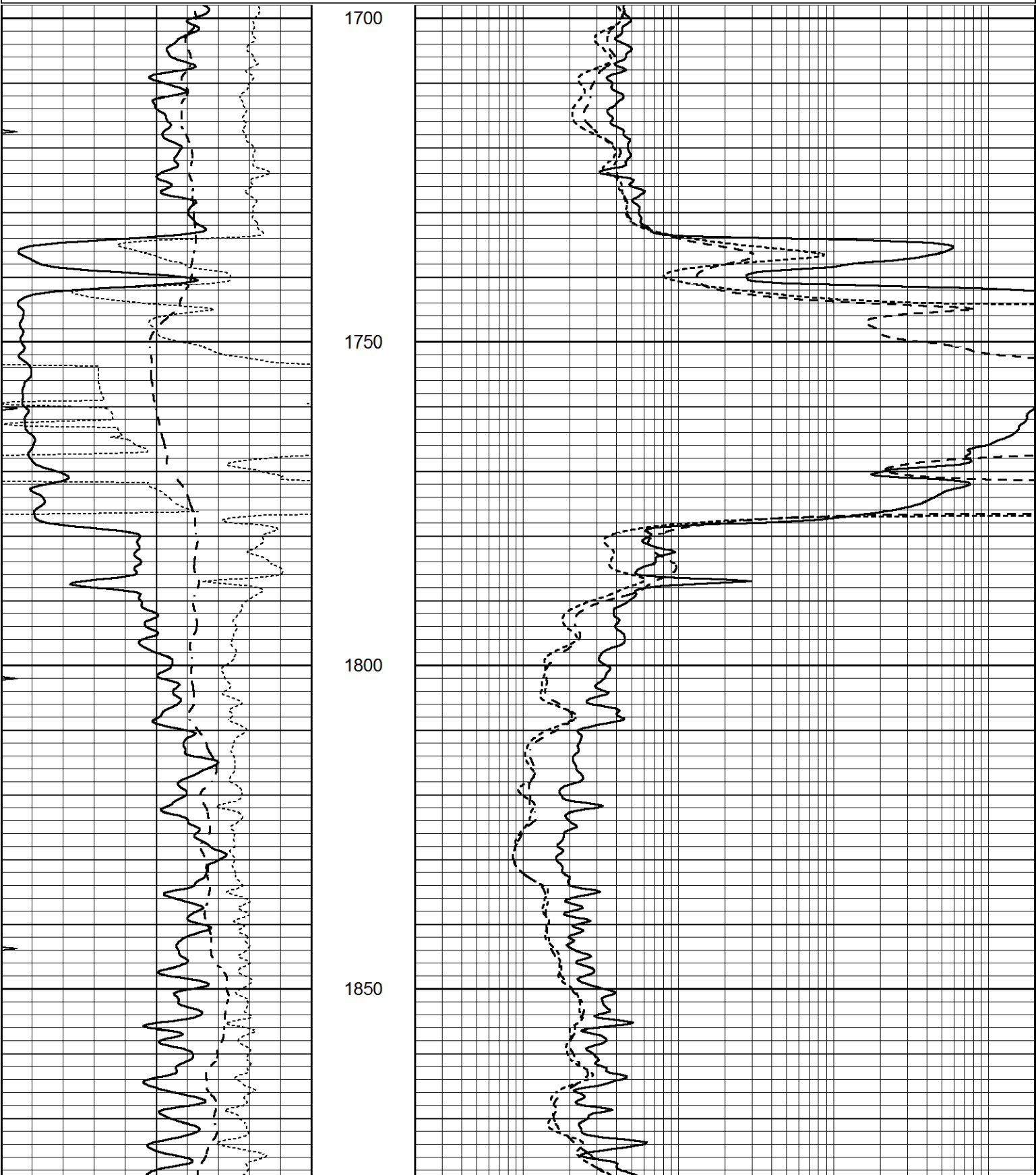
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

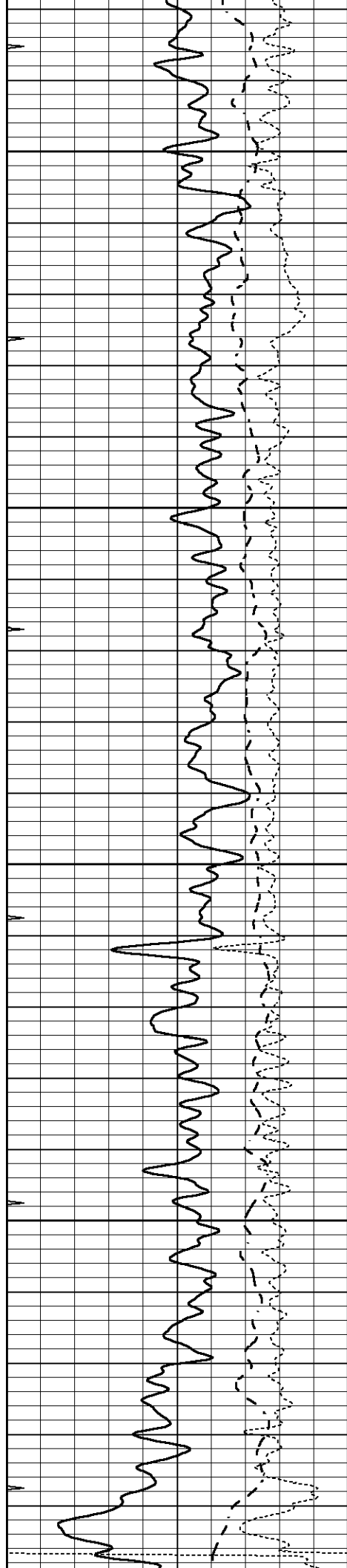


MAIN SECTION

Database File	6901pe.db
Dataset Pathname	pass6.1M
Presentation Format	_dil
Dataset Creation	Tue Aug 09 19:59:26 2022
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
0	MINMK	20			



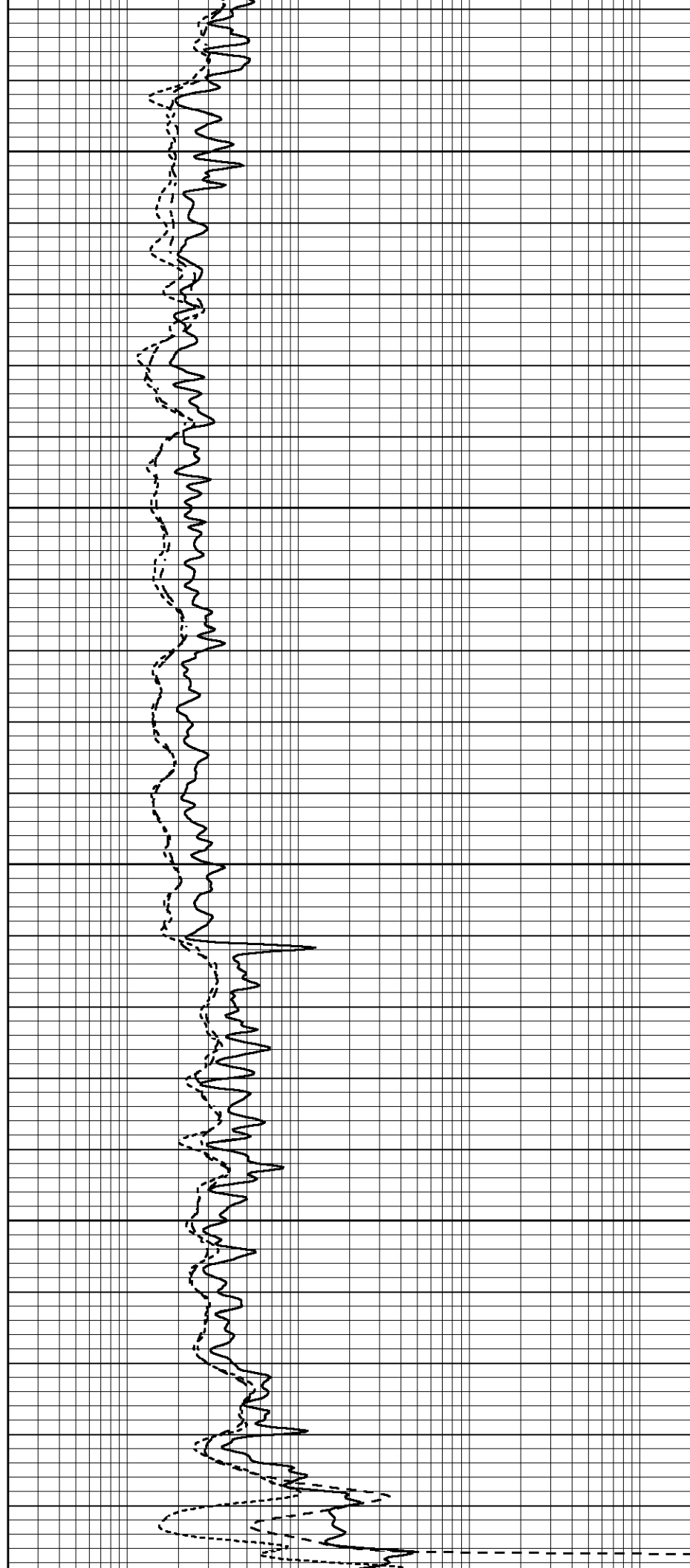


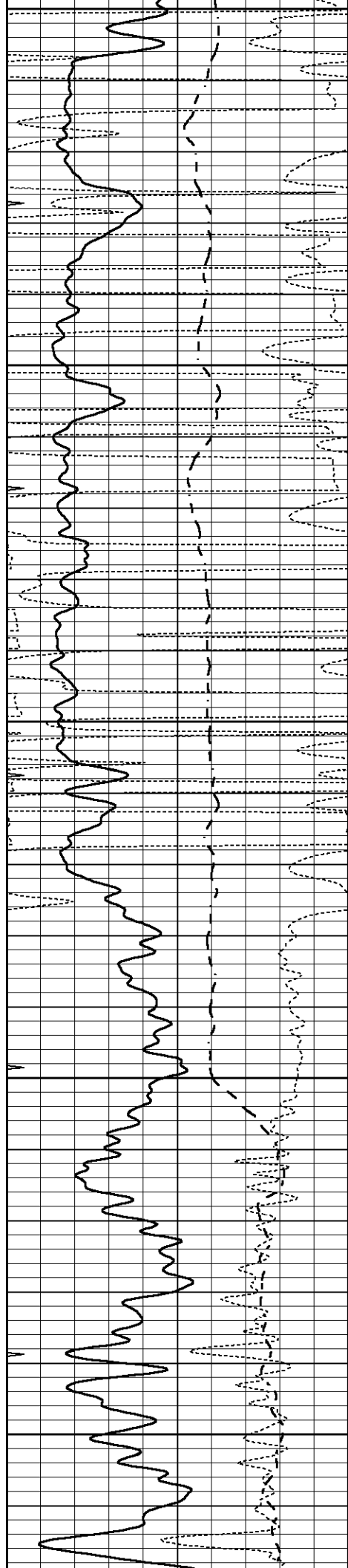
1900

1950

2000

2050





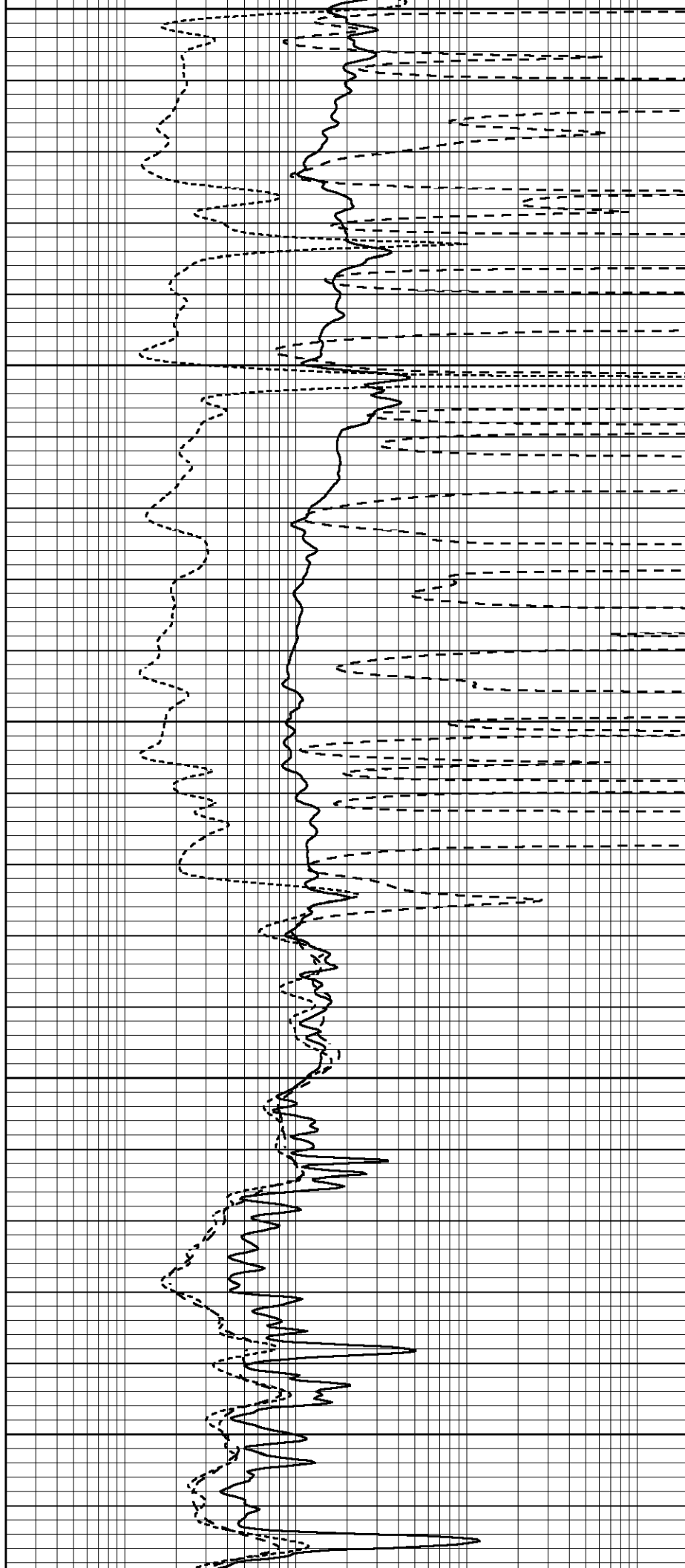
2100

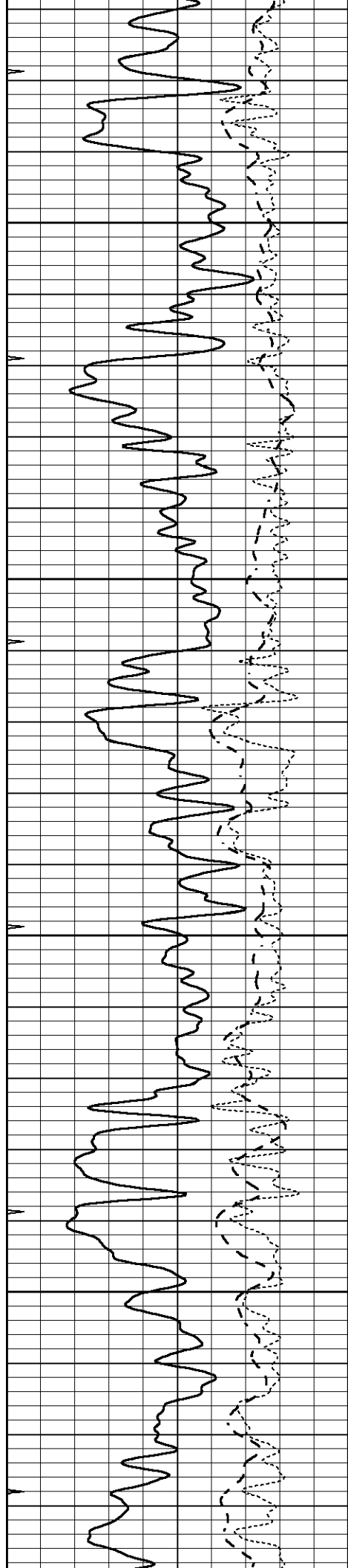
2150

2200

2250

2300



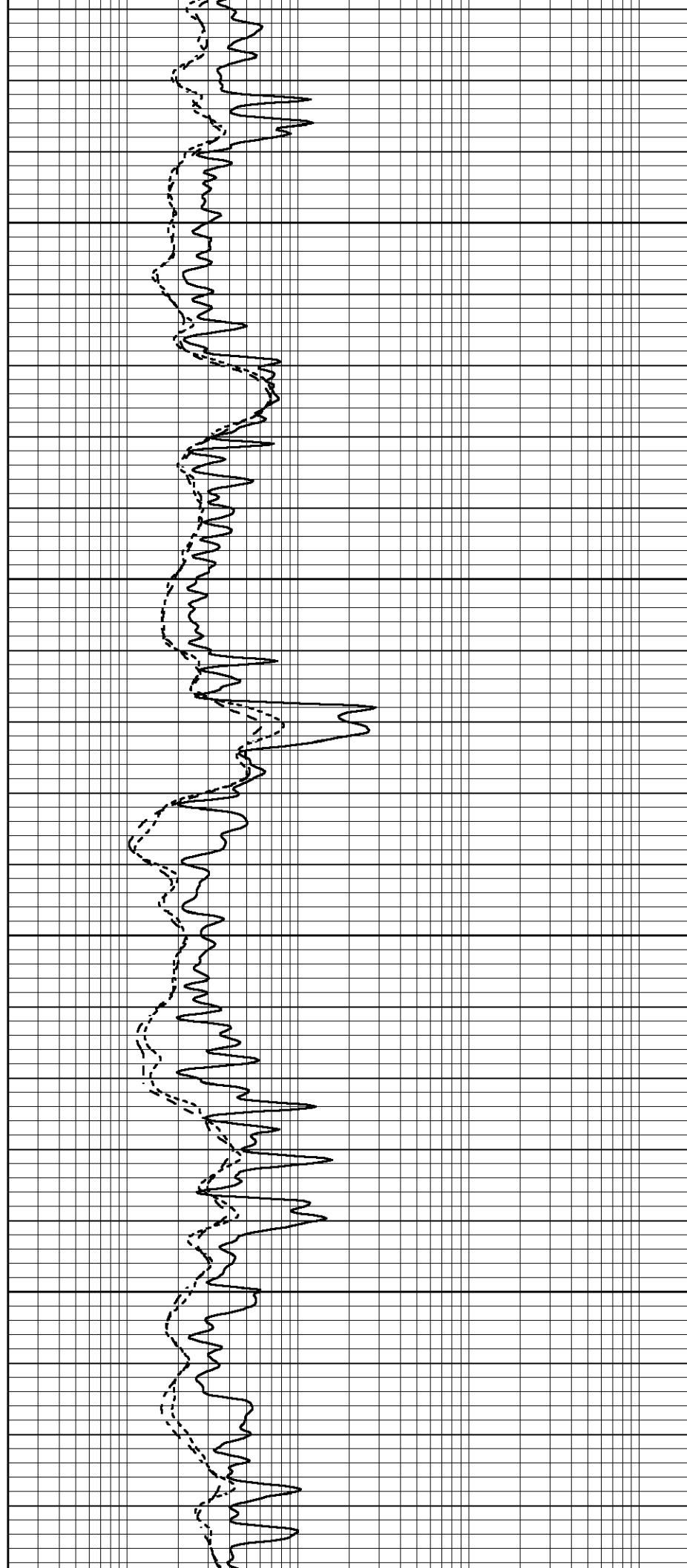


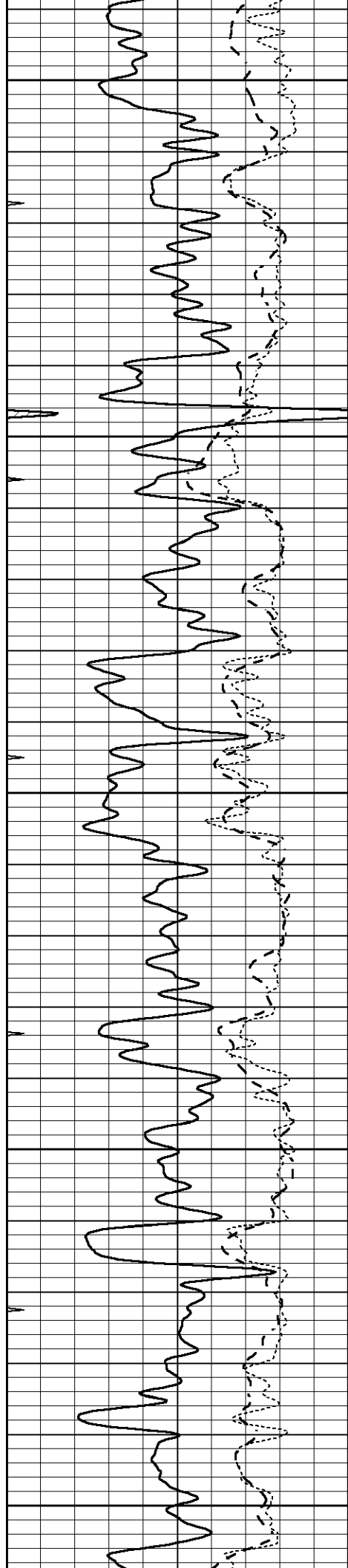
2350

2400

2450

2500





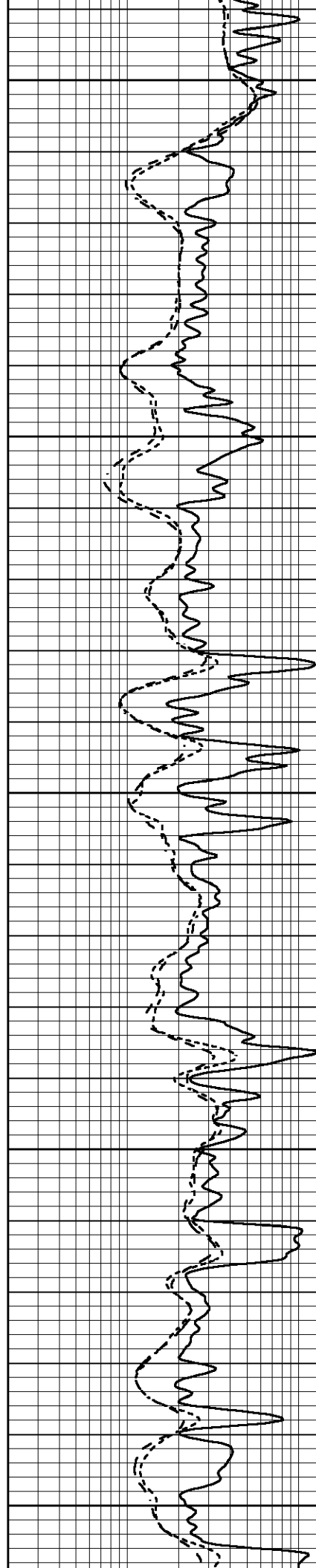
2550

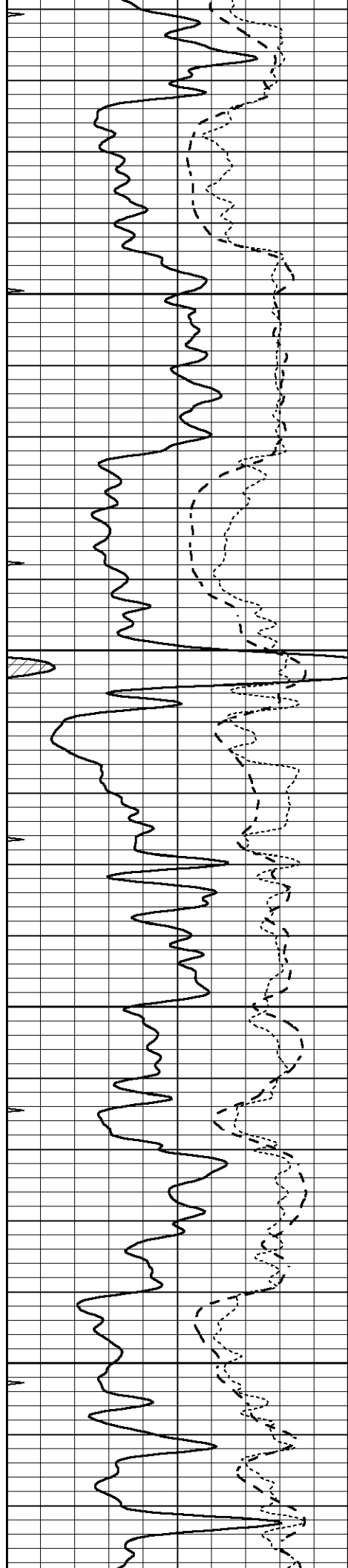
2600

2650

2700

2750



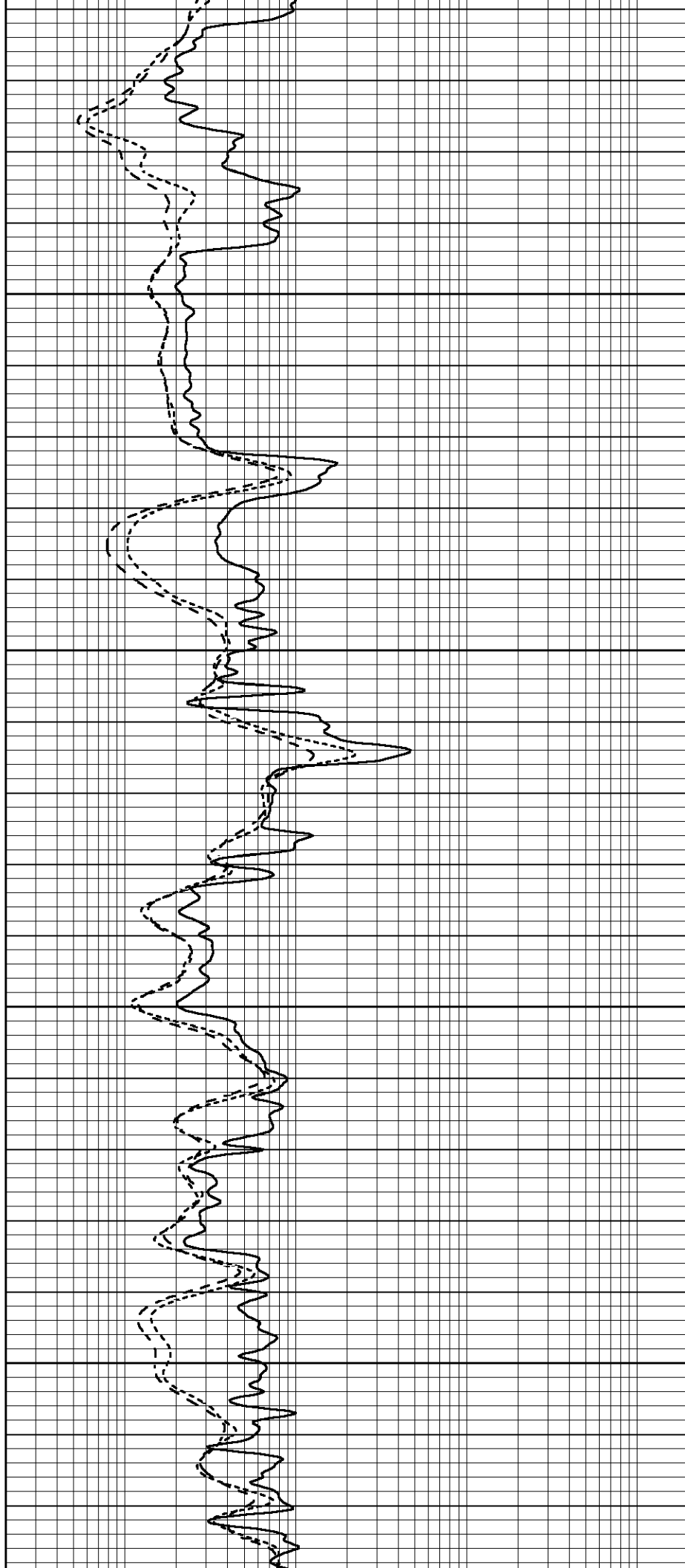


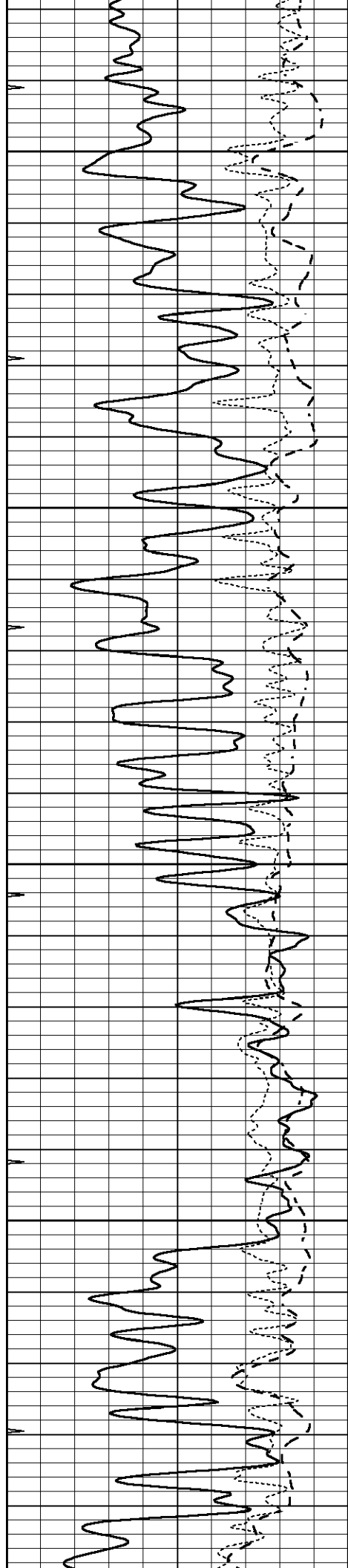
2800

2850

2900

2950



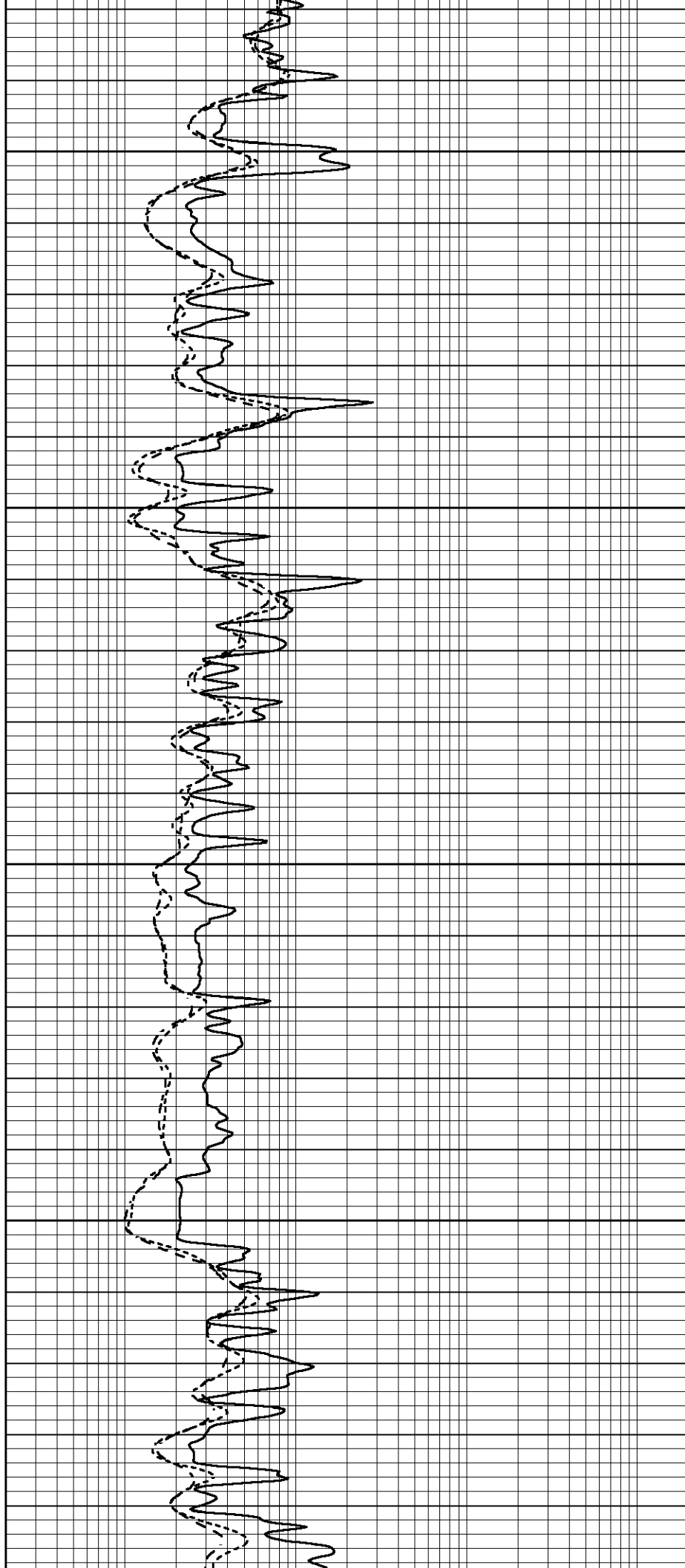


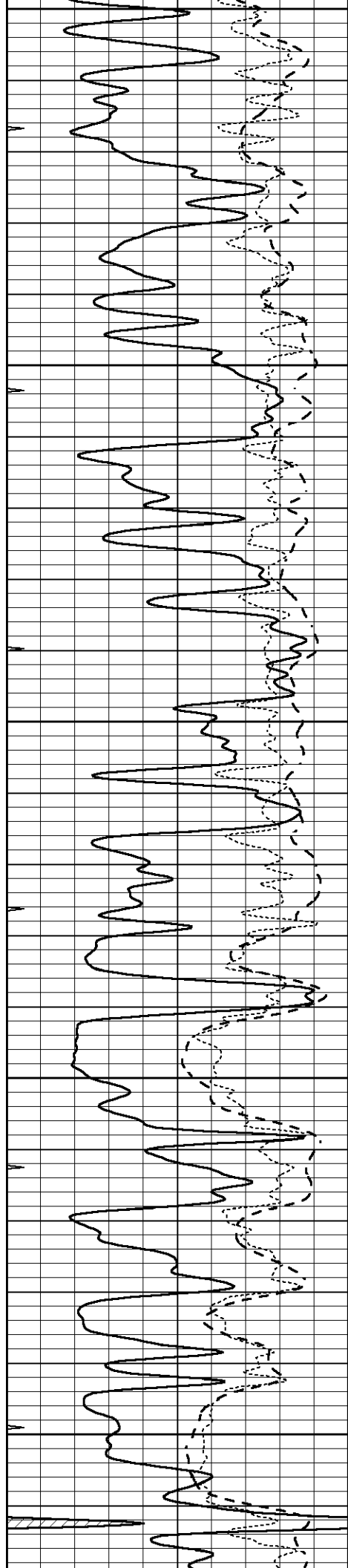
3000

3050

3100

3150





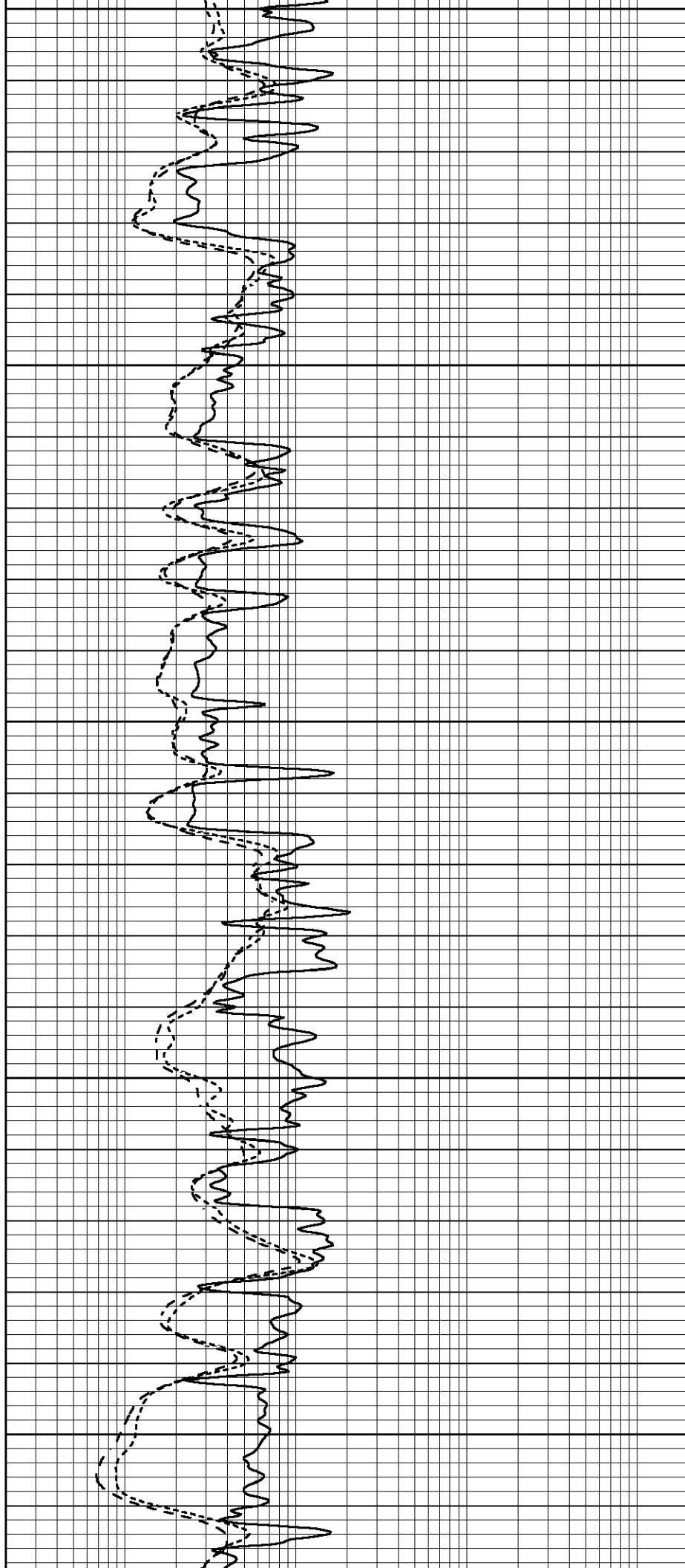
3200

3250

3300

3350

3400



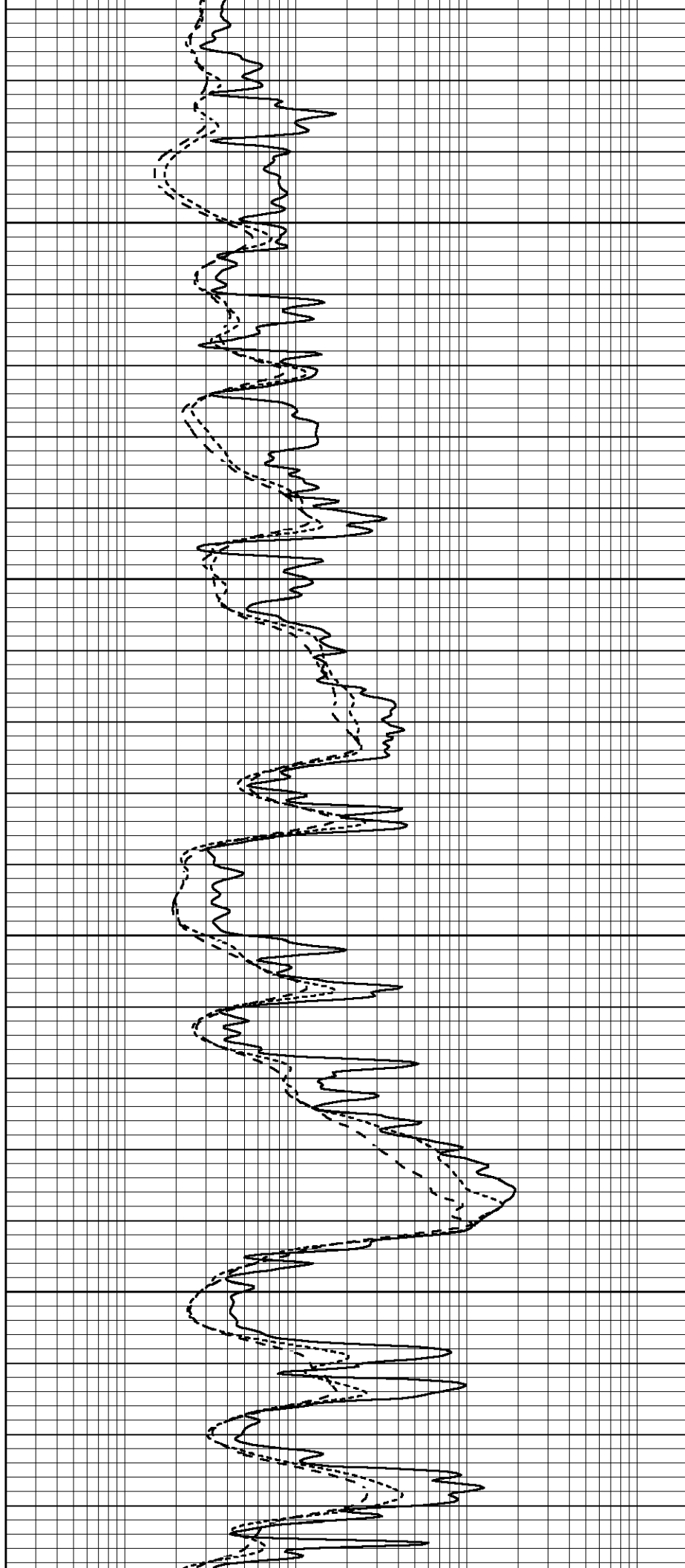


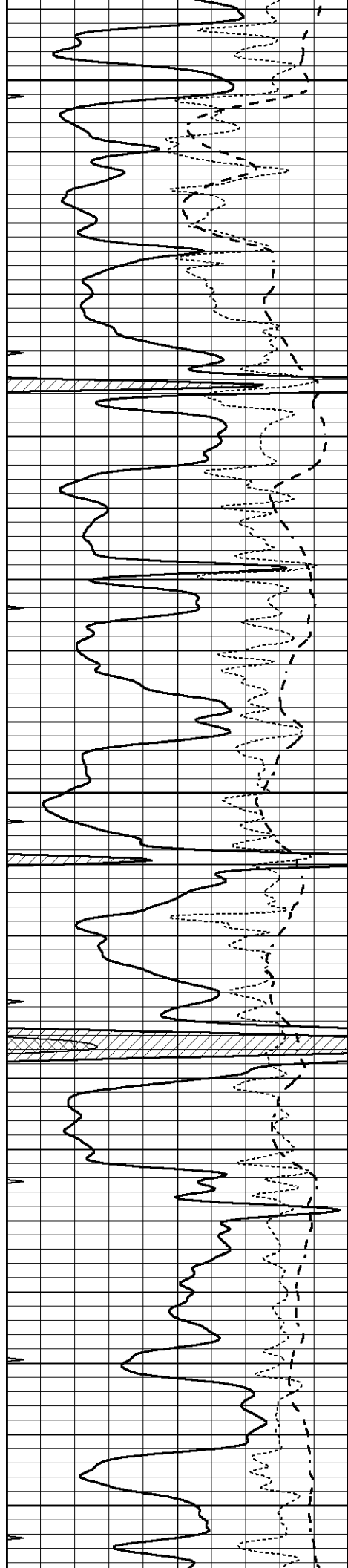
3450

3500

3550

3600





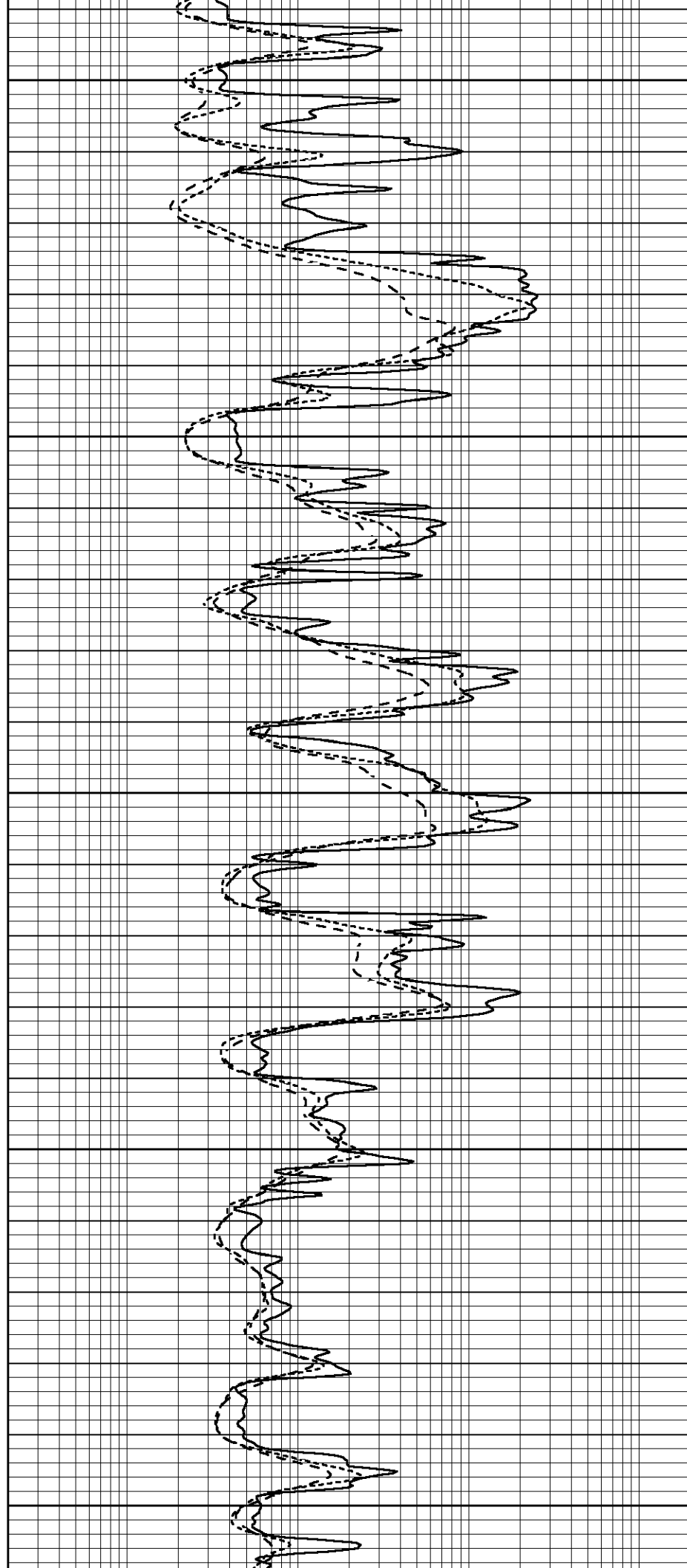
3650

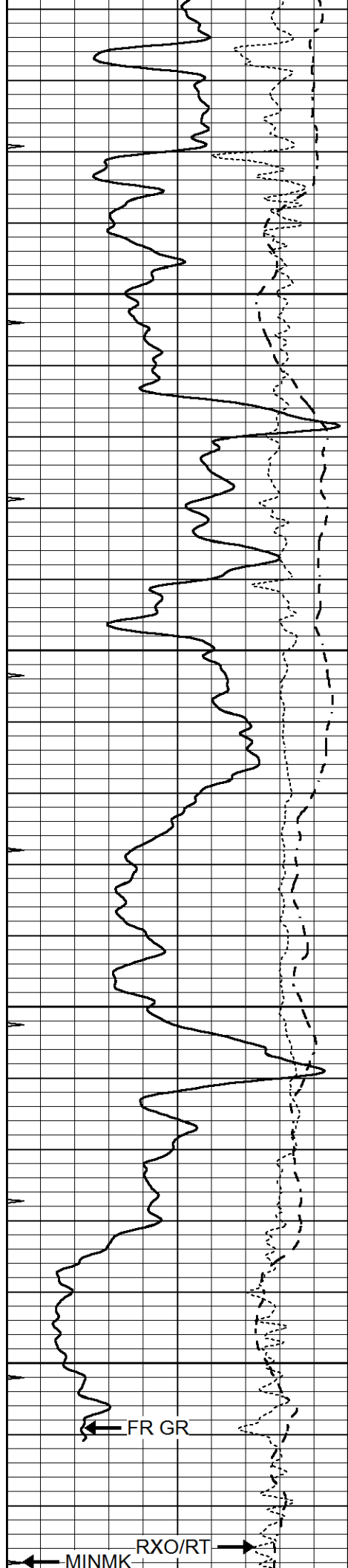
3700

3750

3800

3850



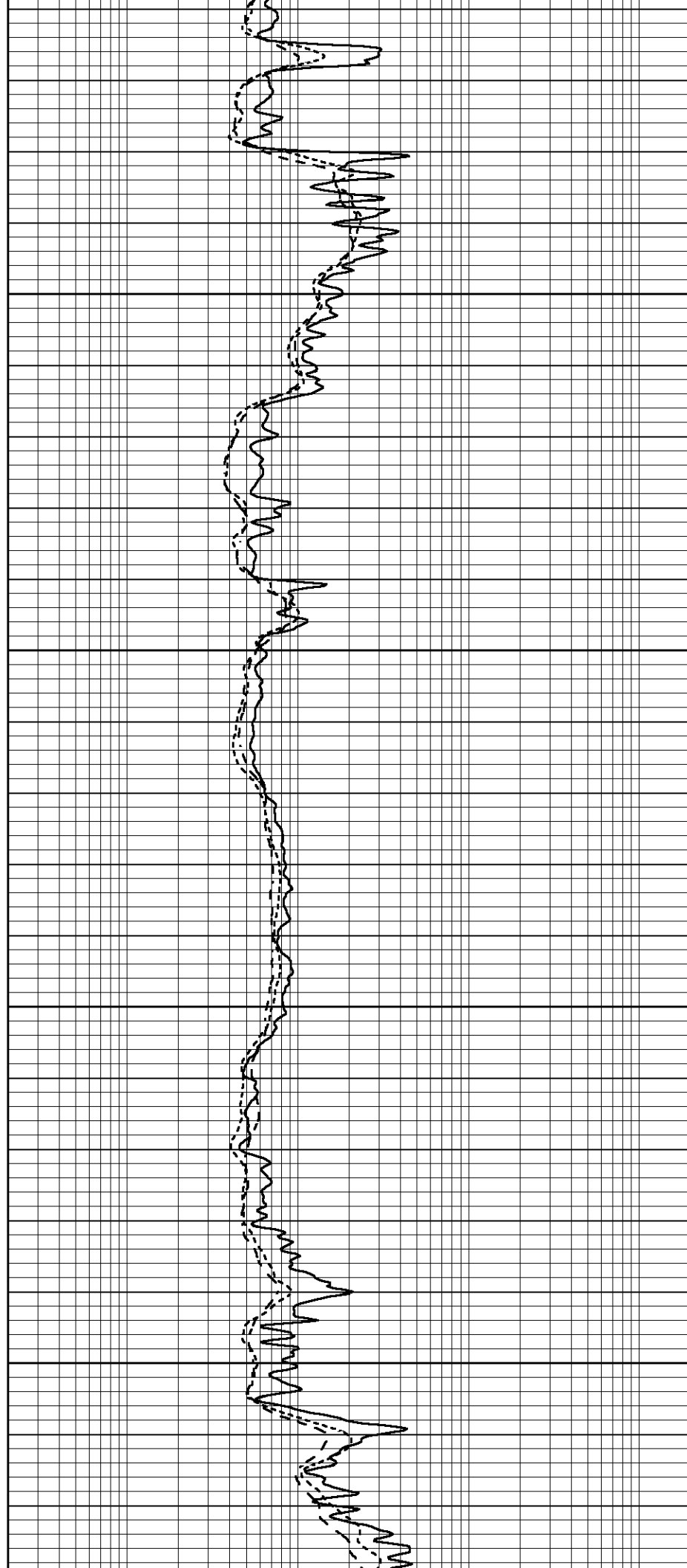


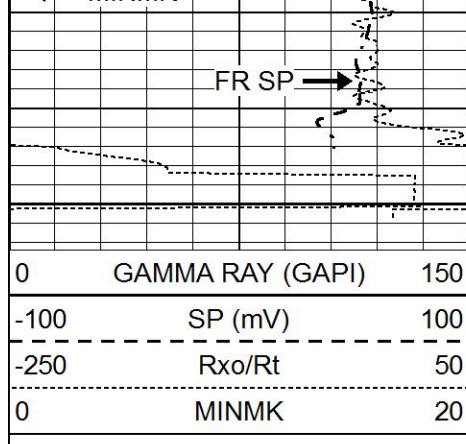
3900

3950

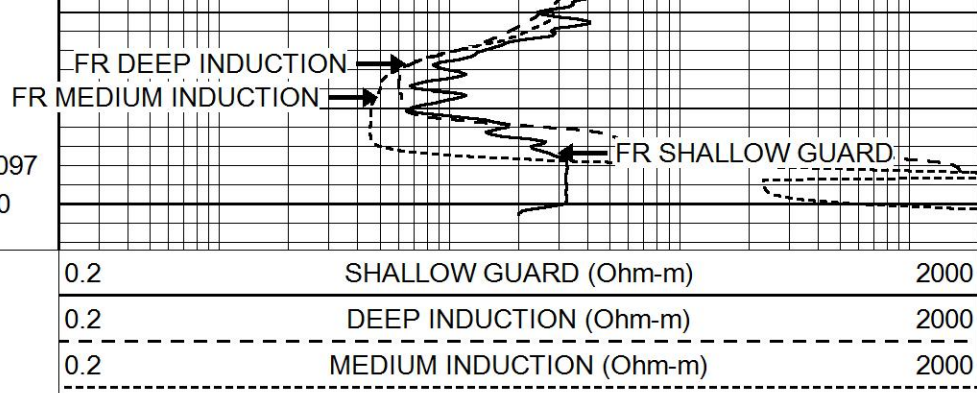
4000

4050



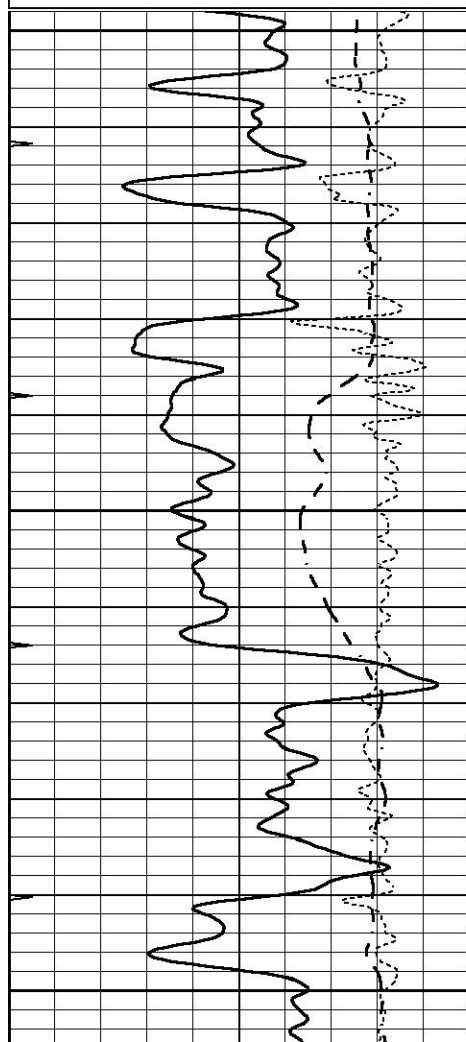
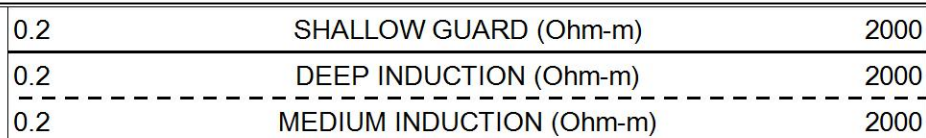
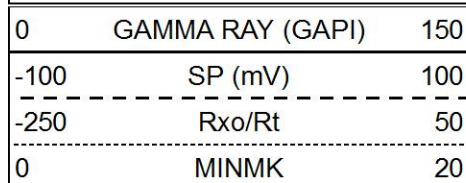


LTD 4097
4100



REPEAT SECTION

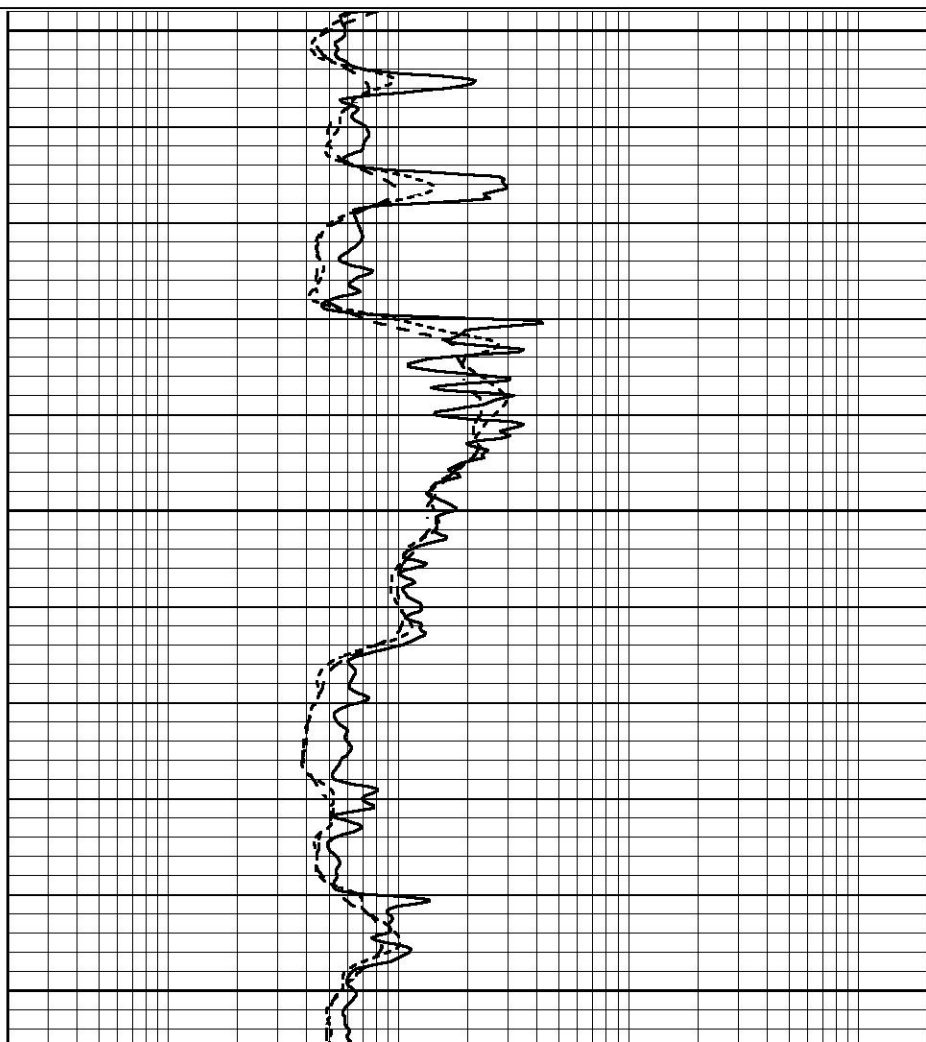
Database File 6901pe.db
Dataset Pathname pass5.1R
Presentation Format _dil
Dataset Creation Tue Aug 09 18:47:40 2022
Charted by Depth in Feet scaled 1:240

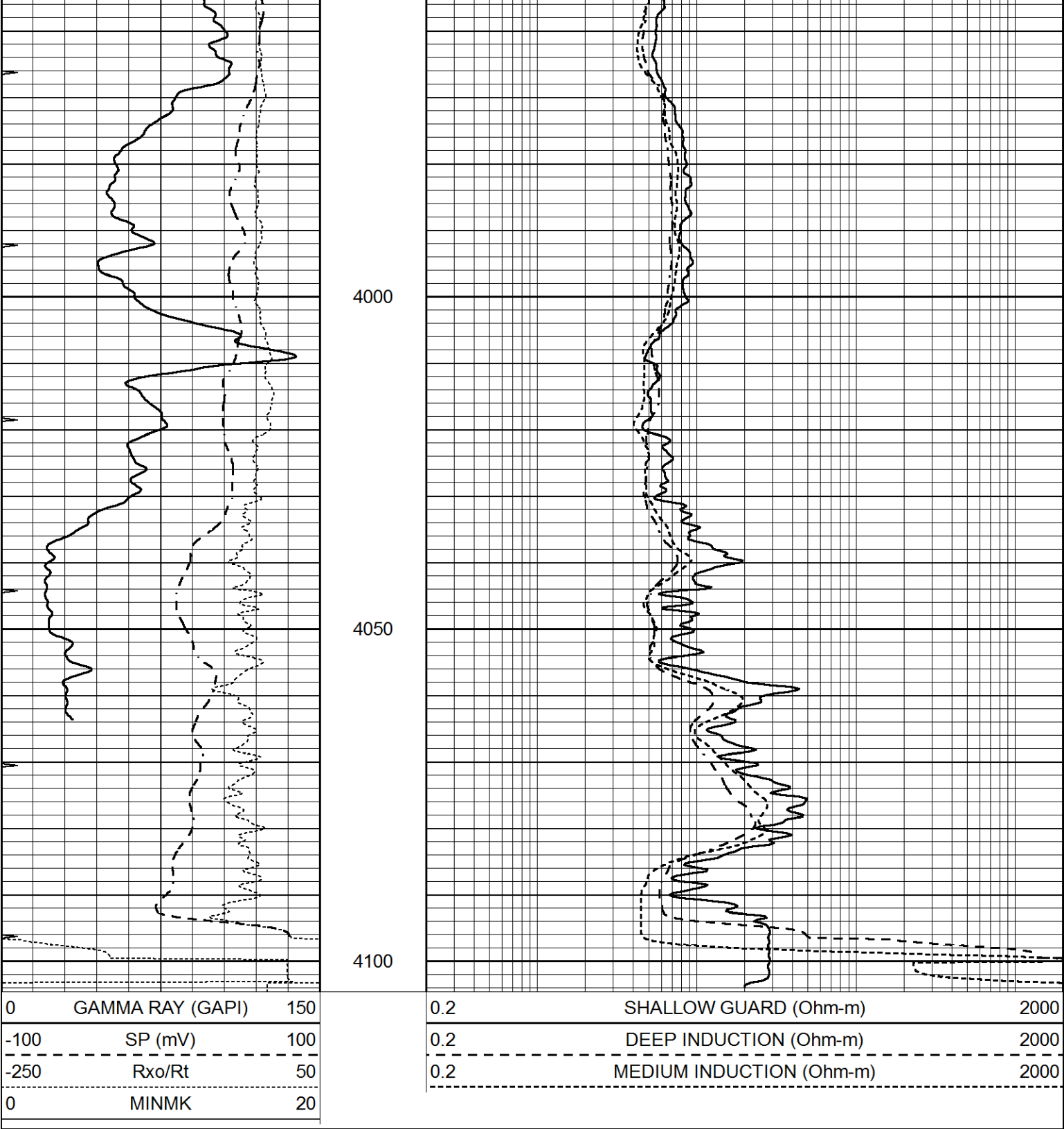


3850

3900

3950





Calibration Report	
Database File	6901pe.db
Dataset Pathname	pass6.1M
Dataset Creation	Tue Aug 09 19:59:26 2022
Dual Induction Calibration Report	
Serial-Model:	PROBE8-DILG
Surface Cal Performed:	Tue Aug 09 19:18:29 2022
Downhole Cal Performed:	Mon Jul 28 11:08:27 2008
After Survey Verification Performed:	Mon Jul 28 11:08:27 2008

Surface Calibration	Readings	Reference	Results
---------------------	----------	-----------	---------

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	640.000	10.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	630.000	-4.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
Readings				References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification								
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		

Litho Density Calibration Report								
Serial: 004				Model: PRB				

Master Calibration				Performed Tue Aug 02 11:29:35 2022				
	Background	Magnesium		Aluminum	Aluminum+Fe			
Window 1	1154.2	10019.5		3137.9	2795.6		cps	
Window 2	1054.4	8597.6		2733.4	2469.5		cps	
Window 3	902.3	5241.4		1832.1	1719.3		cps	
Window 4	251.9	261.1		255.8	252.9		cps	
Long Space	0.0	7543.2		1679.0	1415.0		cps	
Short Space	4.4	2049.3		1321.7	1116.8		cps	
Rho		1.7100		2.5900	0.0000		g/cc	
Pe		2.0000		2.7500	5.7900			
Rib Angle	: 43.7	Rib Slope	: 0.957	Density/Spine Ratio		: 0.562		
Spine Angle	: 73.7	Spine Slope	: 3.426	Spine Intercept		: -17.2		

Before Survey Verification				Performed Wed Dec 31 18:00:00 1969				
Window 1	0.0	0.0		0.0	0.0		cps	
Window 2	0.0	0.0		0.0	0.0		cps	
Window 3	0.0	0.0		0.0	0.0		cps	
Window 4	0.0	0.0		0.0	0.0		cps	
Long Space	0.0	0.0		0.0	0.0		cps	
Short Space	0.0	0.0		0.0	0.0		cps	
Measured Rho		0.0000		0.0000	0.0000		g/cc	
Measured Correction		0.0000		0.0000	0.0000		g/cc	
Measured Pe				0.0000	0.0000			

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number: 070808PMC
Tool Model: NABORS

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: 070558
Tool Model: OPEN_GR
Performed: Mon Aug 08 22:47:24 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.3000 GAPI/cps