



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company BACH OIL PRODUCTION
Well DAWNDY #1
Field WOODRUFF
County PHILLIPS State KANSAS

Company BACH OIL PRODUCTION
Well DAWNDY #1
Field WOODRUFF
County PHILLIPS
State KANSAS

Location: API #: 15-147-20739
2854' FSL & 449' FEL
SEC 14 TWP 1S RGE 19W
Permanent Datum GROUND LEVEL Elevation 2068
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING 5' A.G.L.
Other Services
CDL/CNL
Elevation
K.B. 2073
D.F.
G.L. 2068

Date	5-17-14
Run Number	ONE
Depth Driller	3540
Depth Logger	3540
Bottom Logged Interval	3538
Top Log Interval	00
Casing Driller	218
Casing Logger	218
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1 / 62
pH / Fluid Loss	11.0 / 5.6
Source of Sample	FLOWLINE
Rim @ Meas. Temp	1.90 @ 82F
Rmf @ Meas. Temp	1.43 @ 82F
Rmc @ Meas. Temp	2.28 @ 82F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	1.42 @ 110F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	2:00 P.M.
Maximum Recorded Temperature	110F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	BOB PETERSON

<<< 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

NABORS COMPLETION & PRODUCTION SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: PHILLIPSBURG, N TO #383, 3W, 1 1/2S, W INTO.

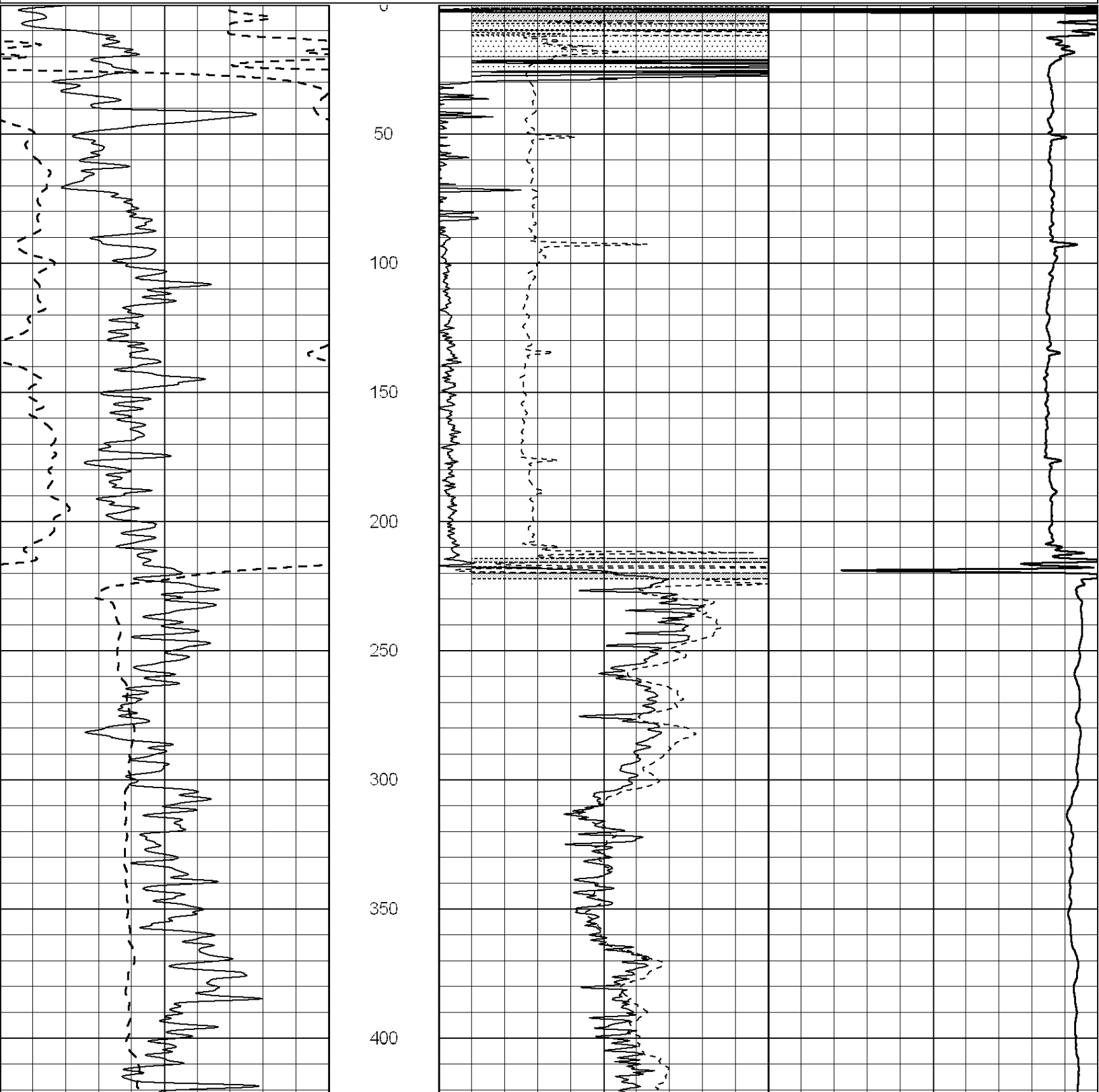


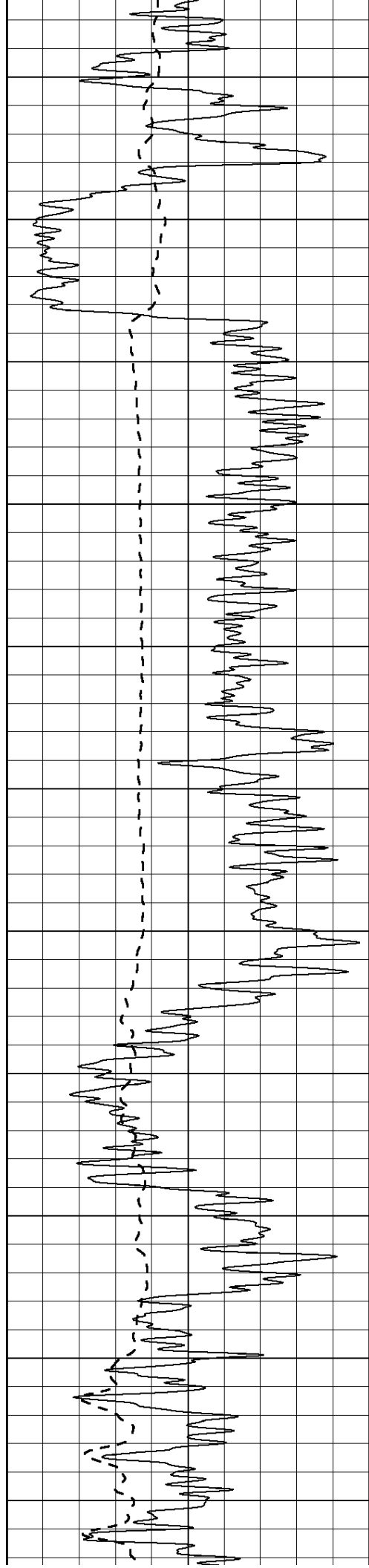
**COMPLETION
& PRODUCTION**

MAIN SECTION

Database File: 24435ddn.db
 Dataset Pathname: pass6.1
 Presentation Format: _dil2
 Dataset Creation: Sat May 17 17:12:49 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	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

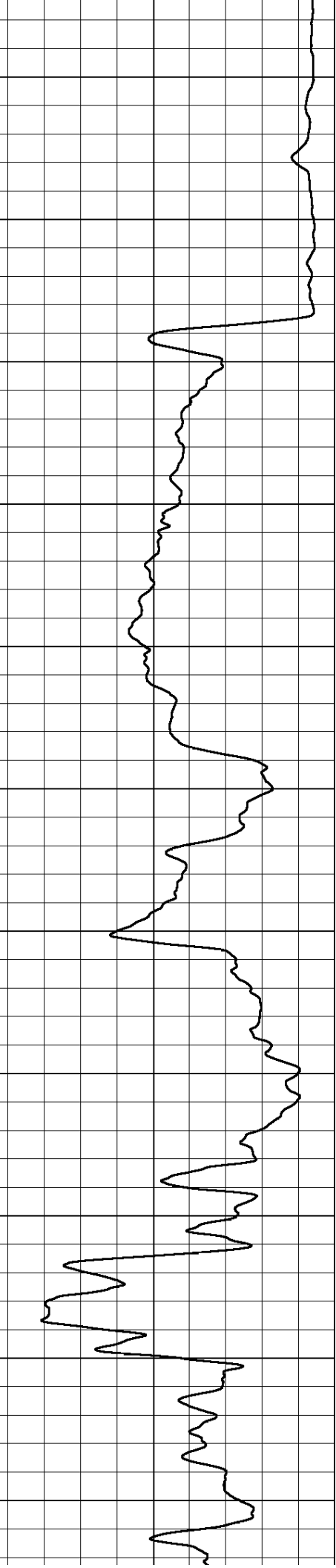
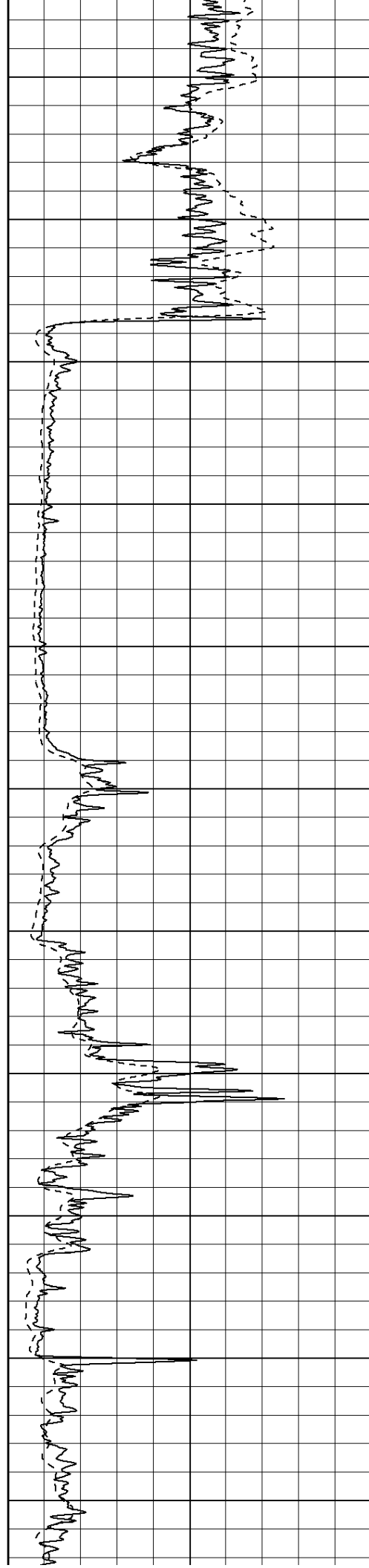
750

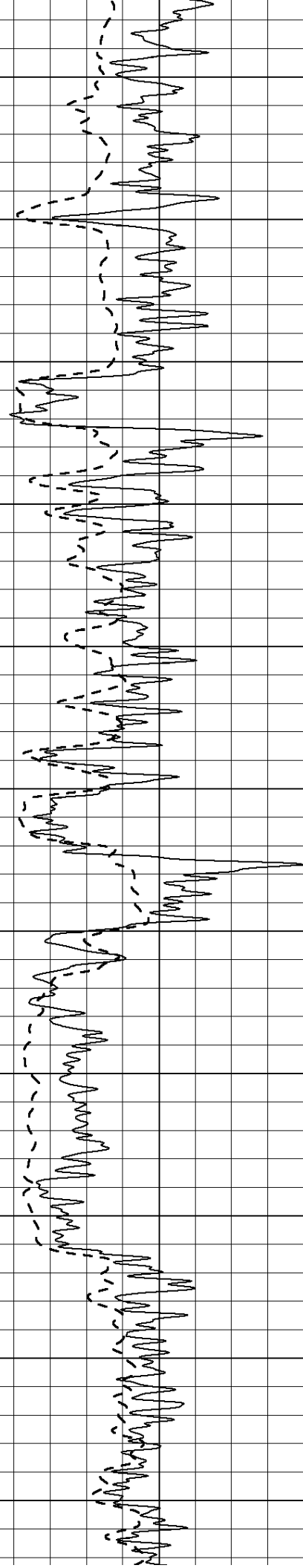
800

850

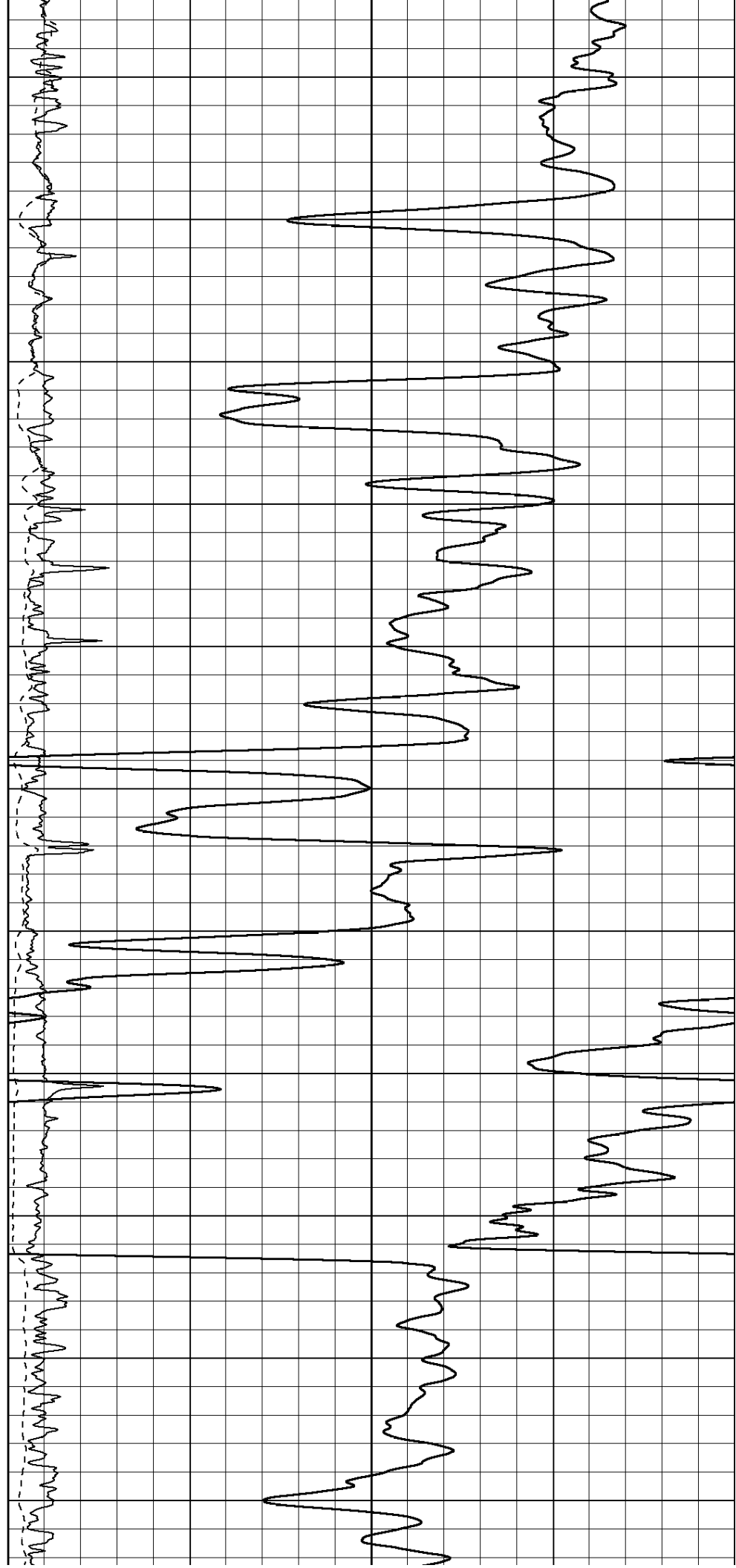
900

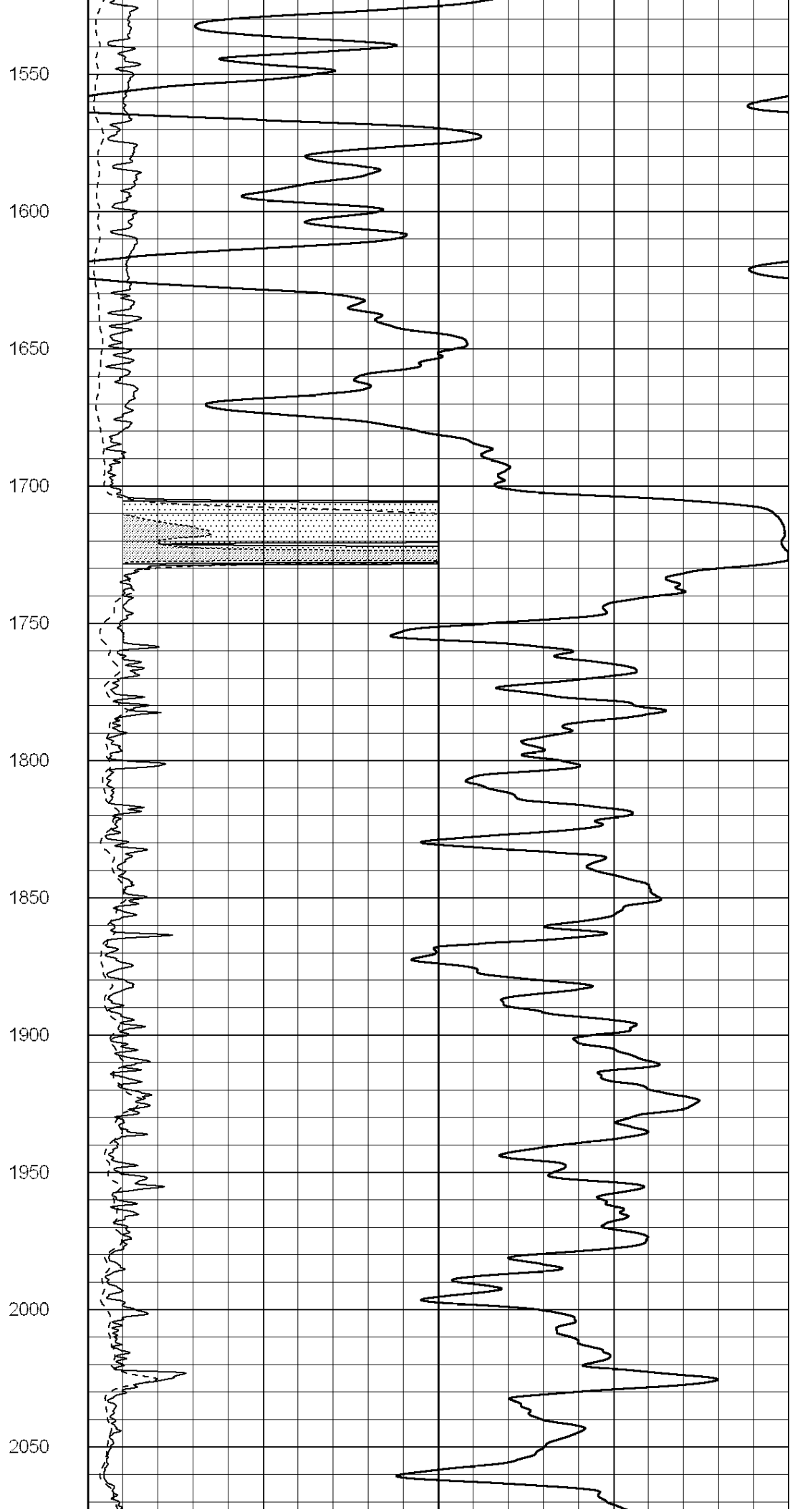
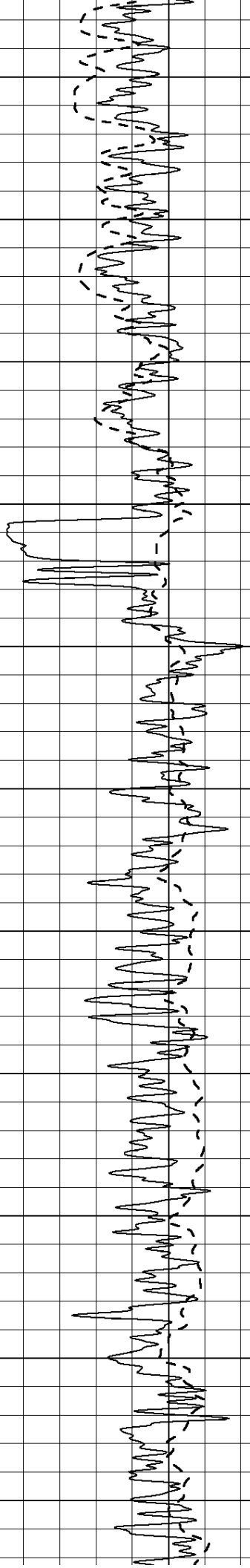
950

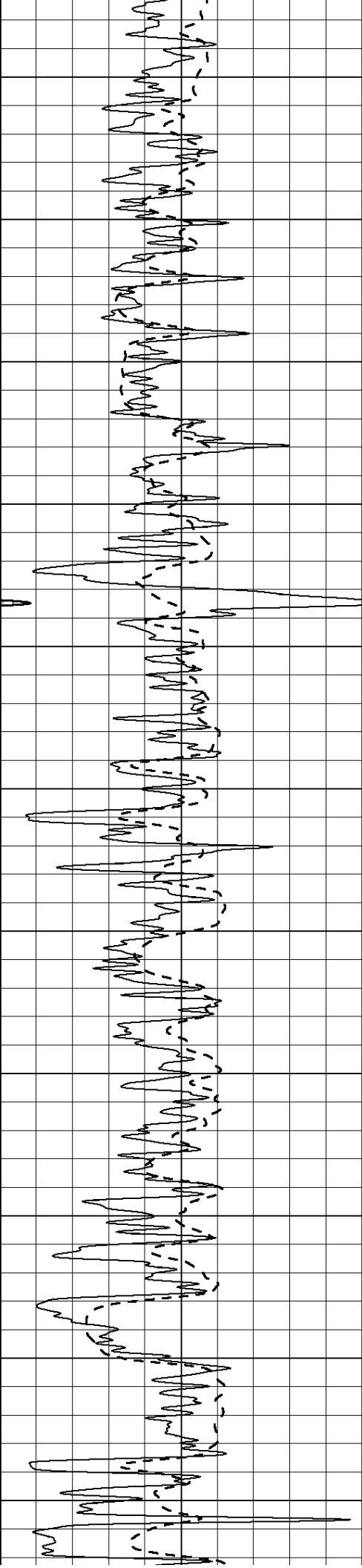




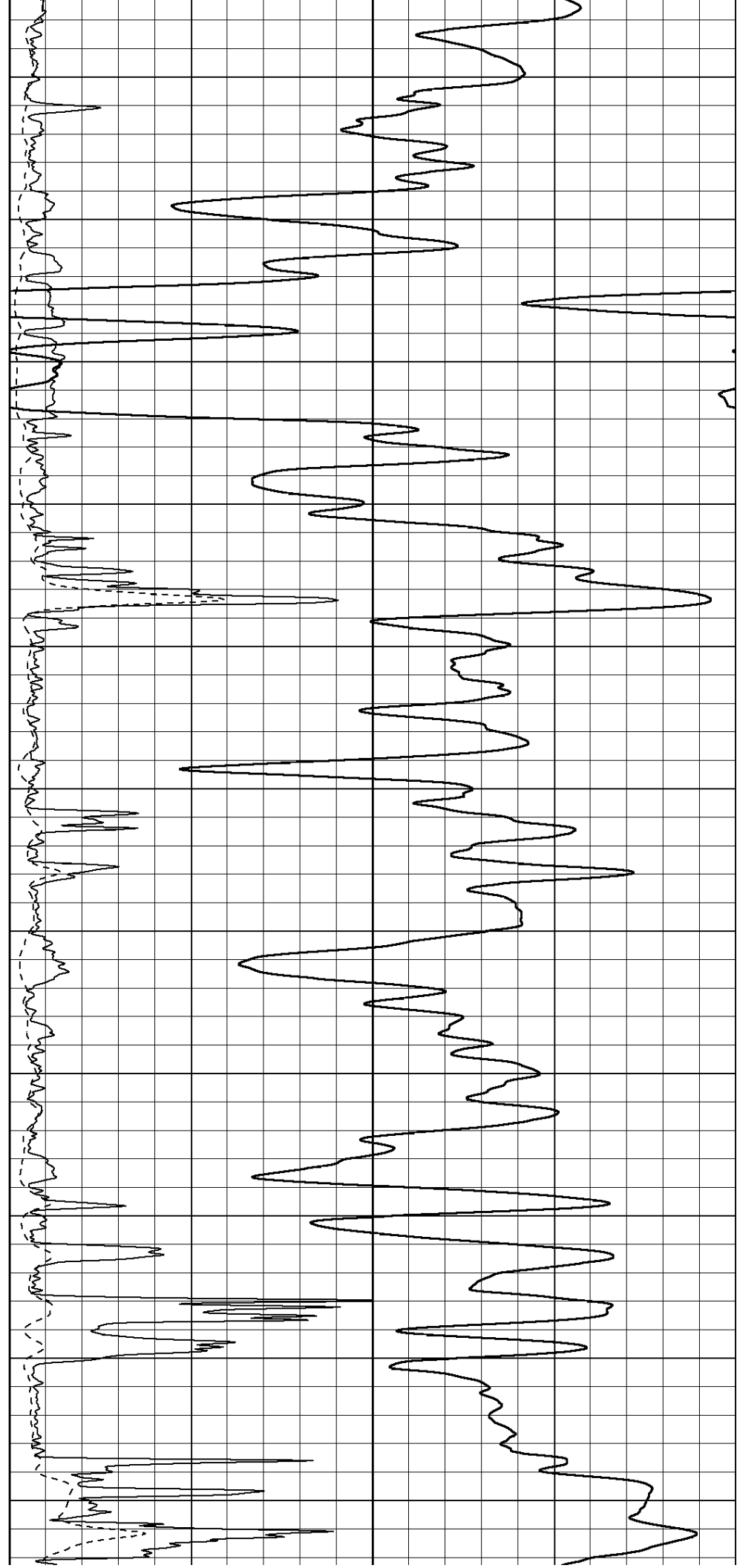
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

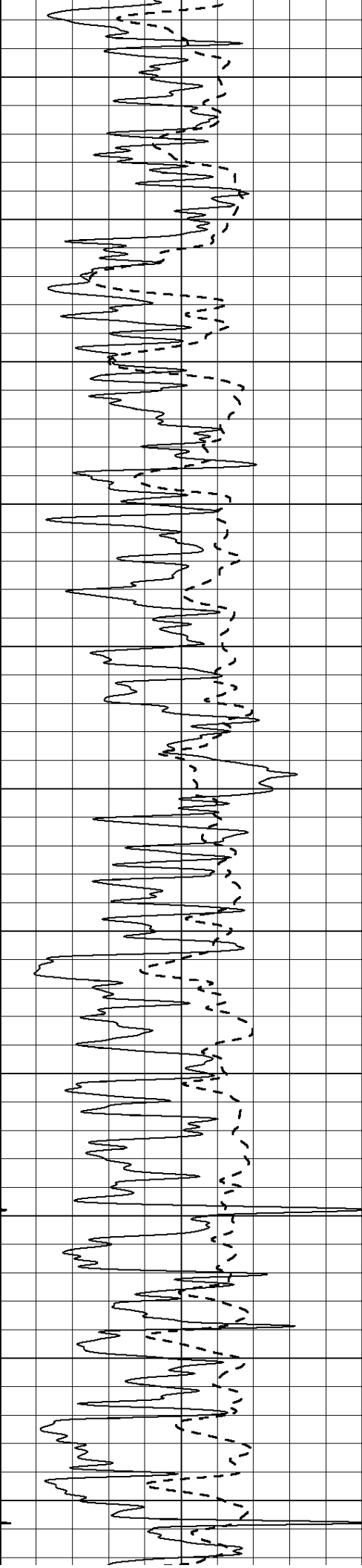






2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600





2650

2700

2750

2800

2850

2900

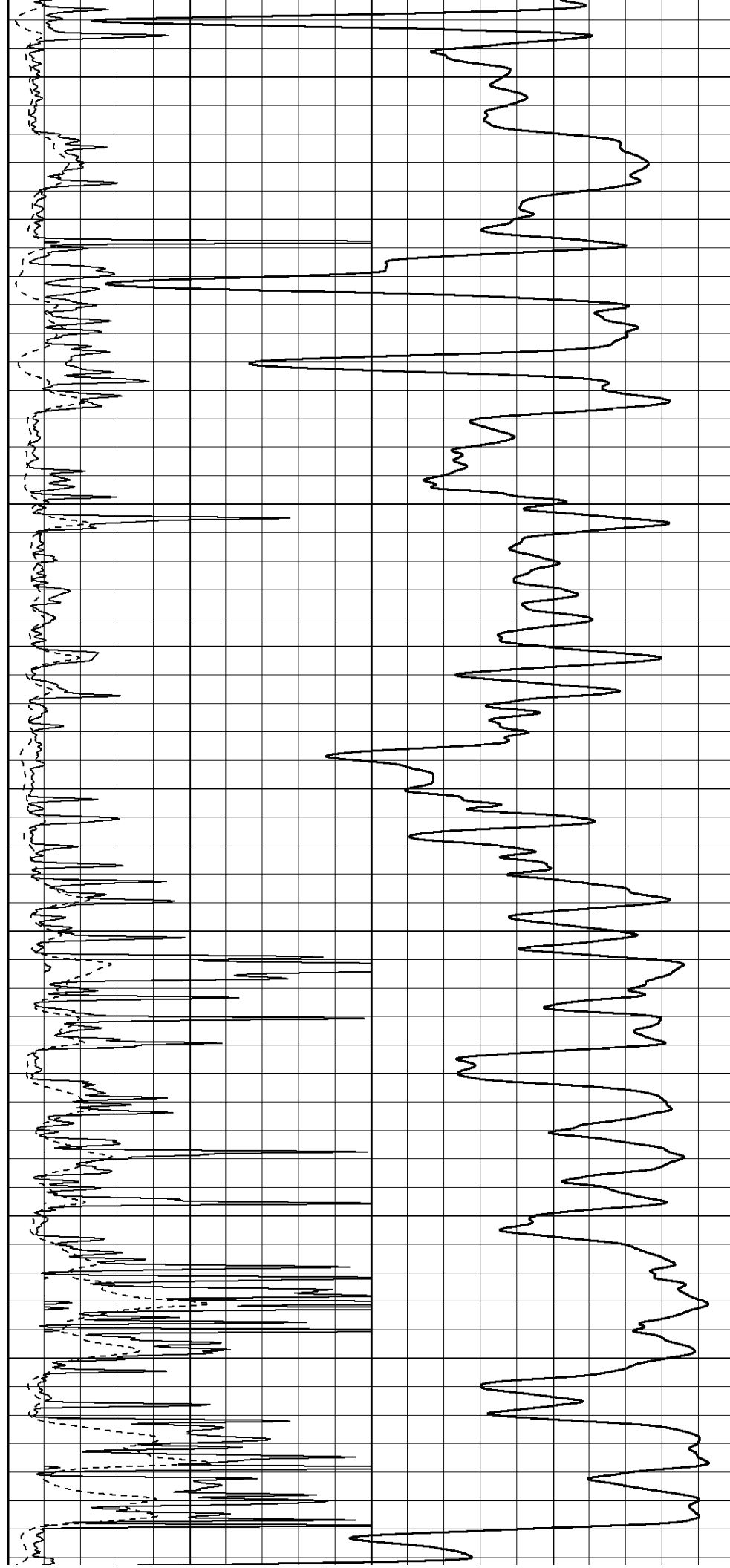
2950

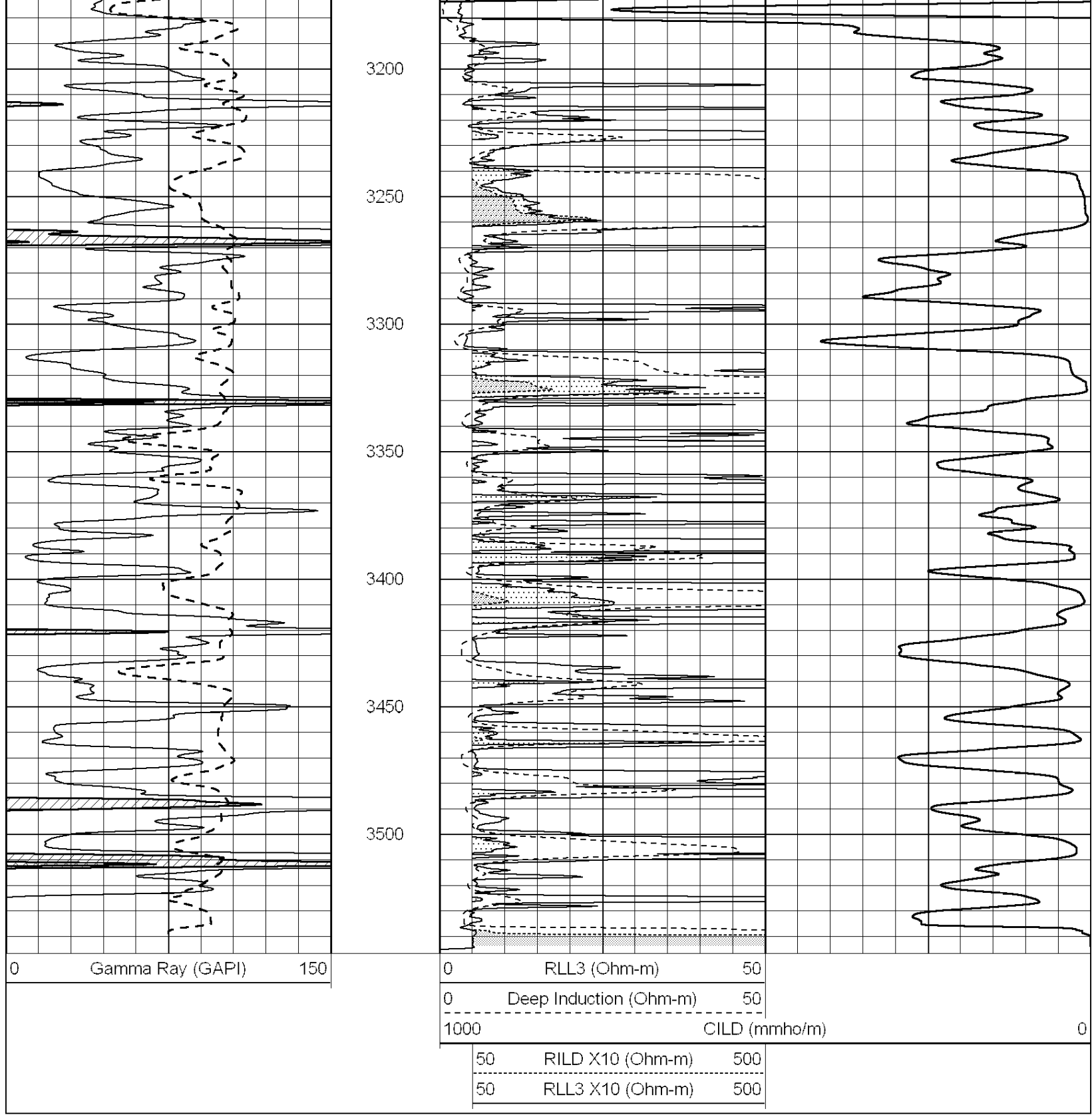
3000

3050

3100

3150



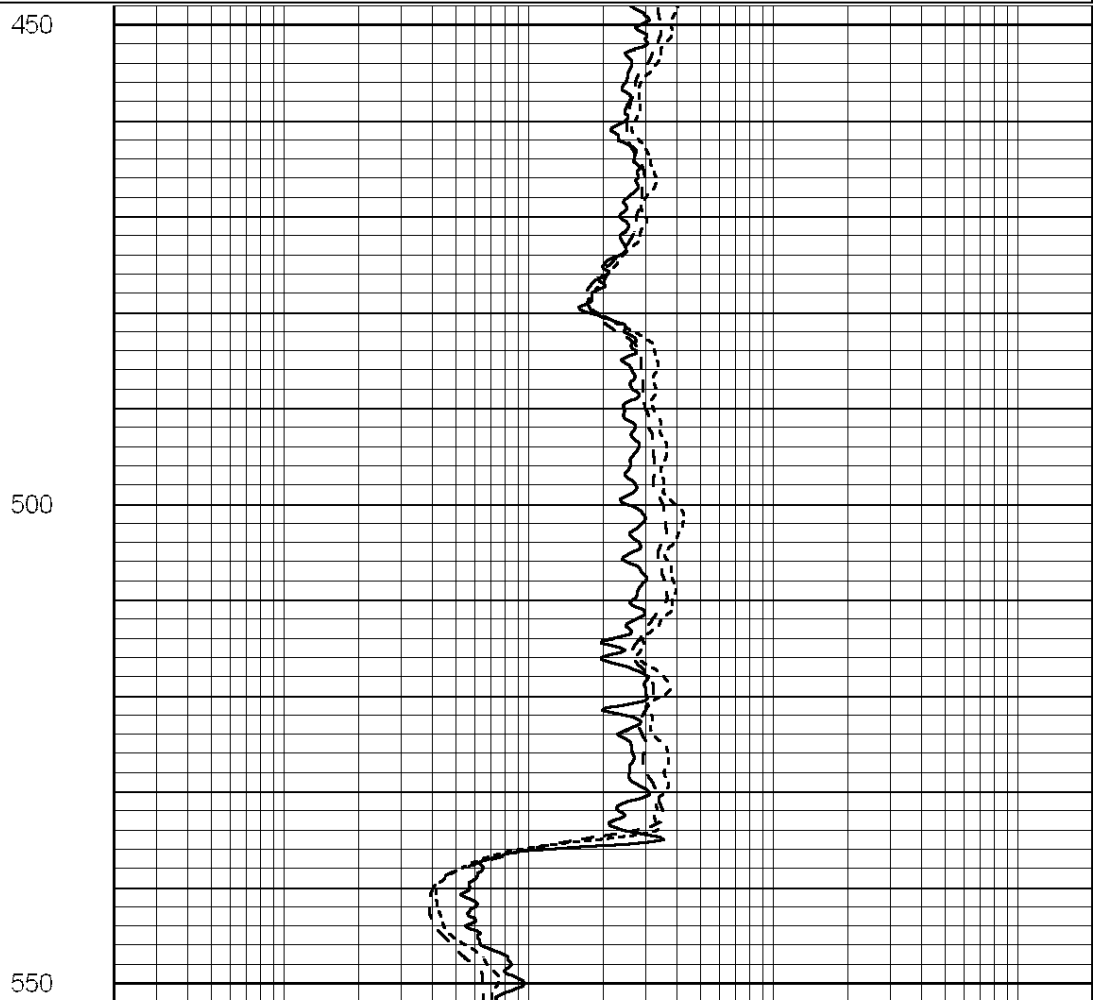
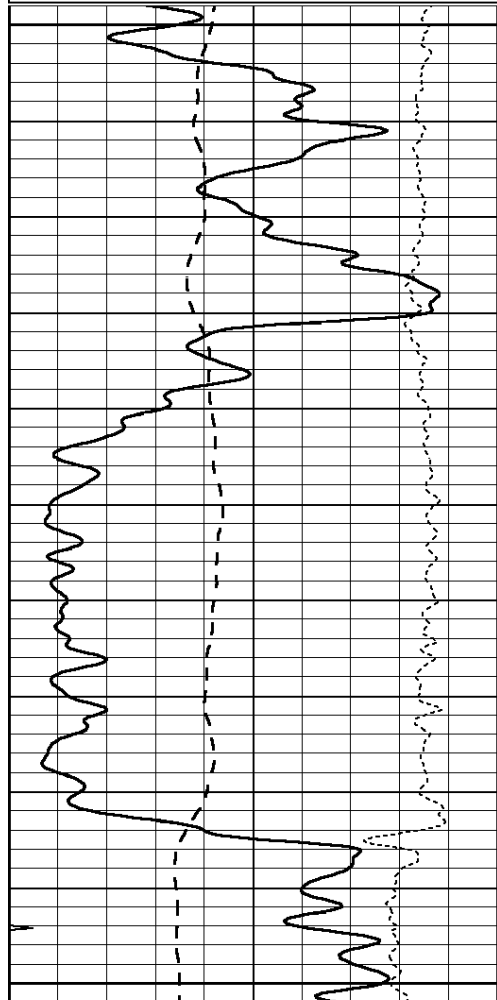


MAIN SECTION

Database File: 24435ddn.db
 Dataset Pathname: pass6.1
 Presentation Format: _dil
 Dataset Creation: Sat May 17 17:12:49 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

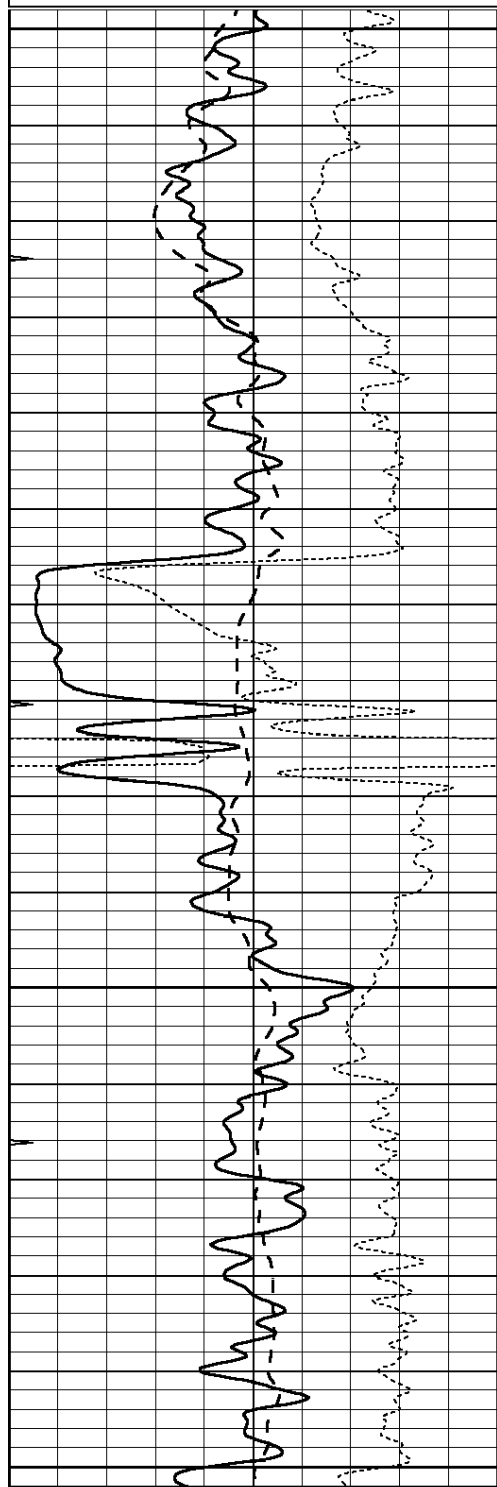


MAIN SECTION

Database File: 24435ddn.db
 Dataset Pathname: pass6.1
 Presentation Format: _dil
 Dataset Creation: Sat May 17 17:12:49 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

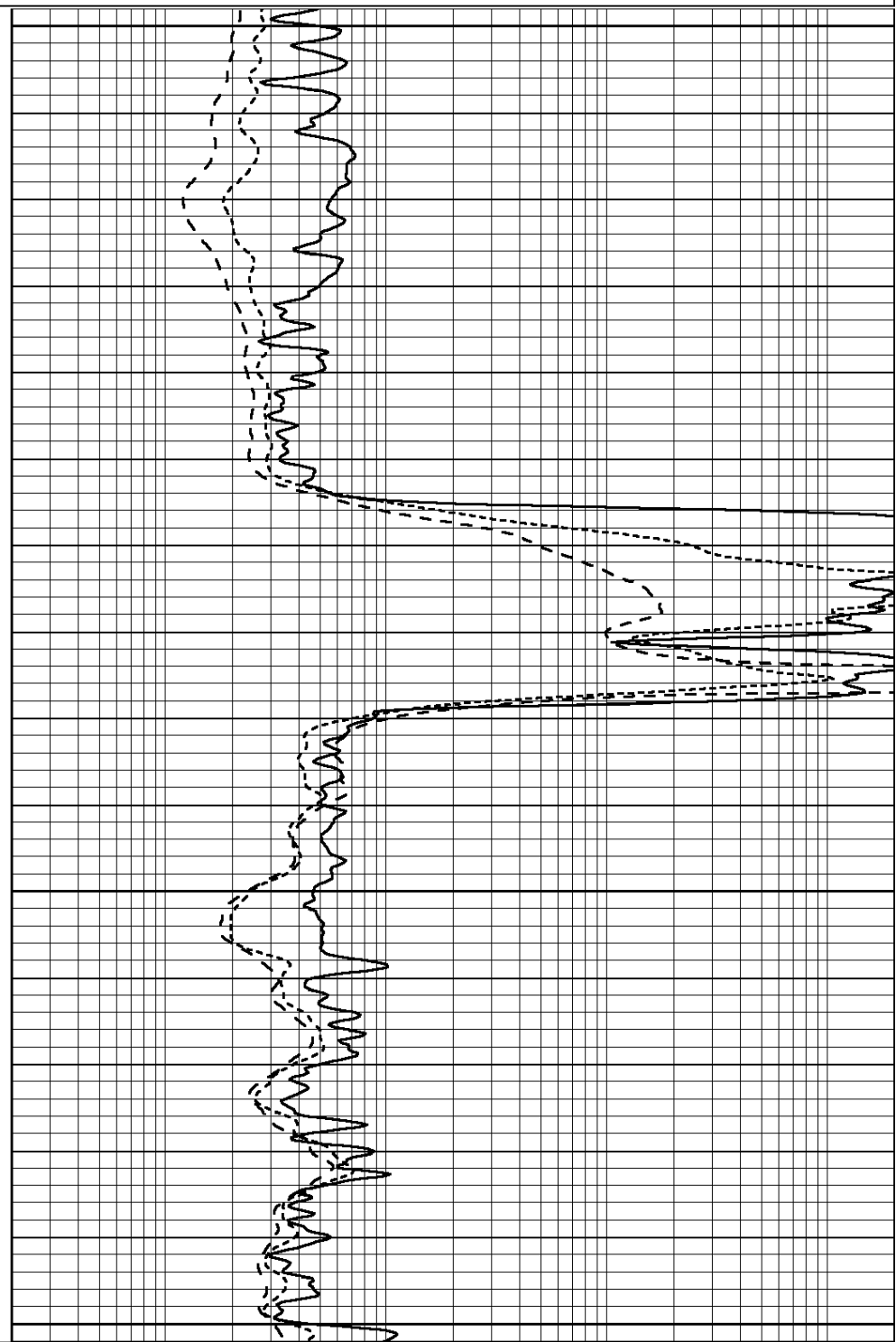
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



1650
1700
1750
1800

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



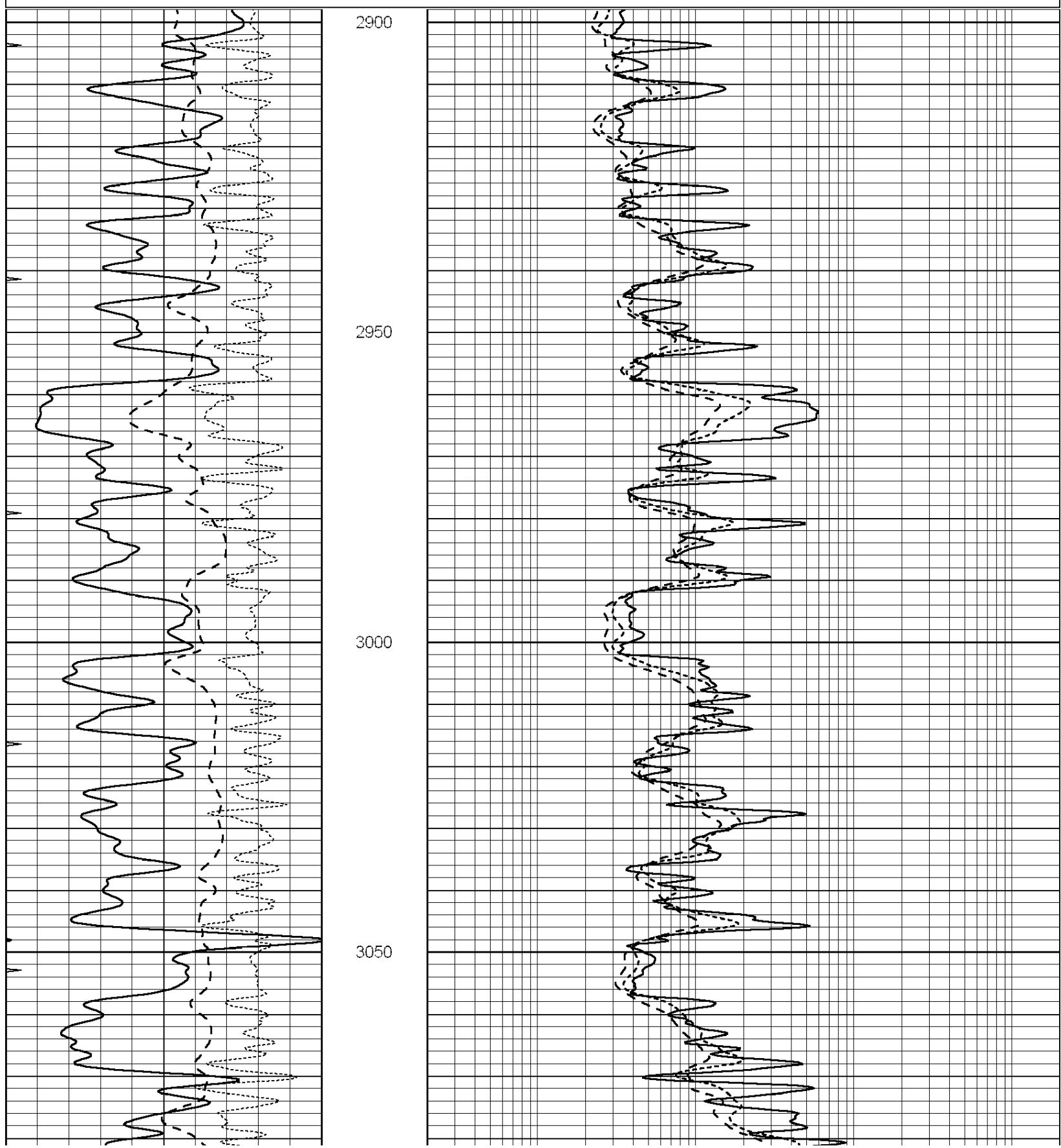
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

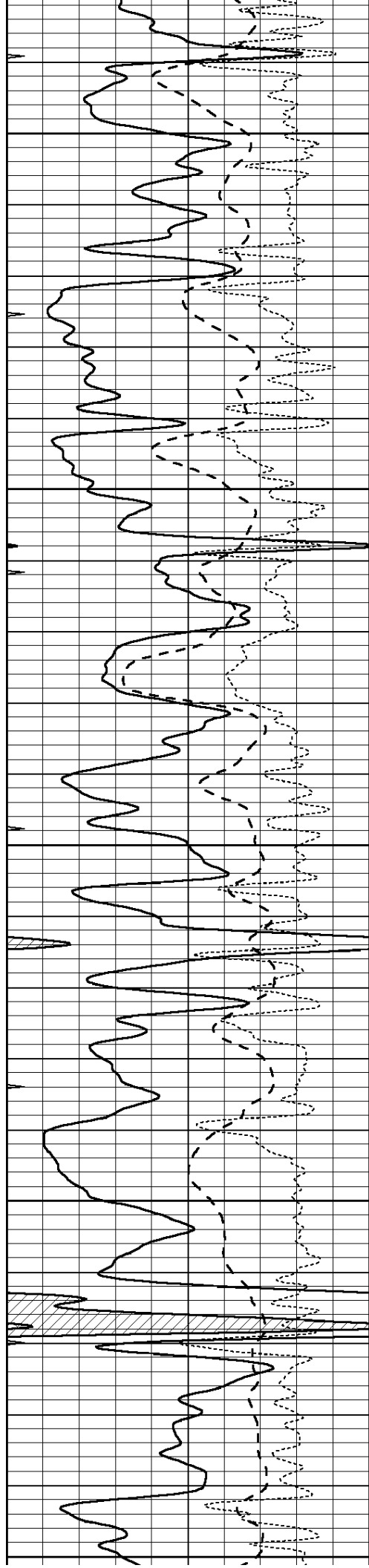


MAIN SECTION

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





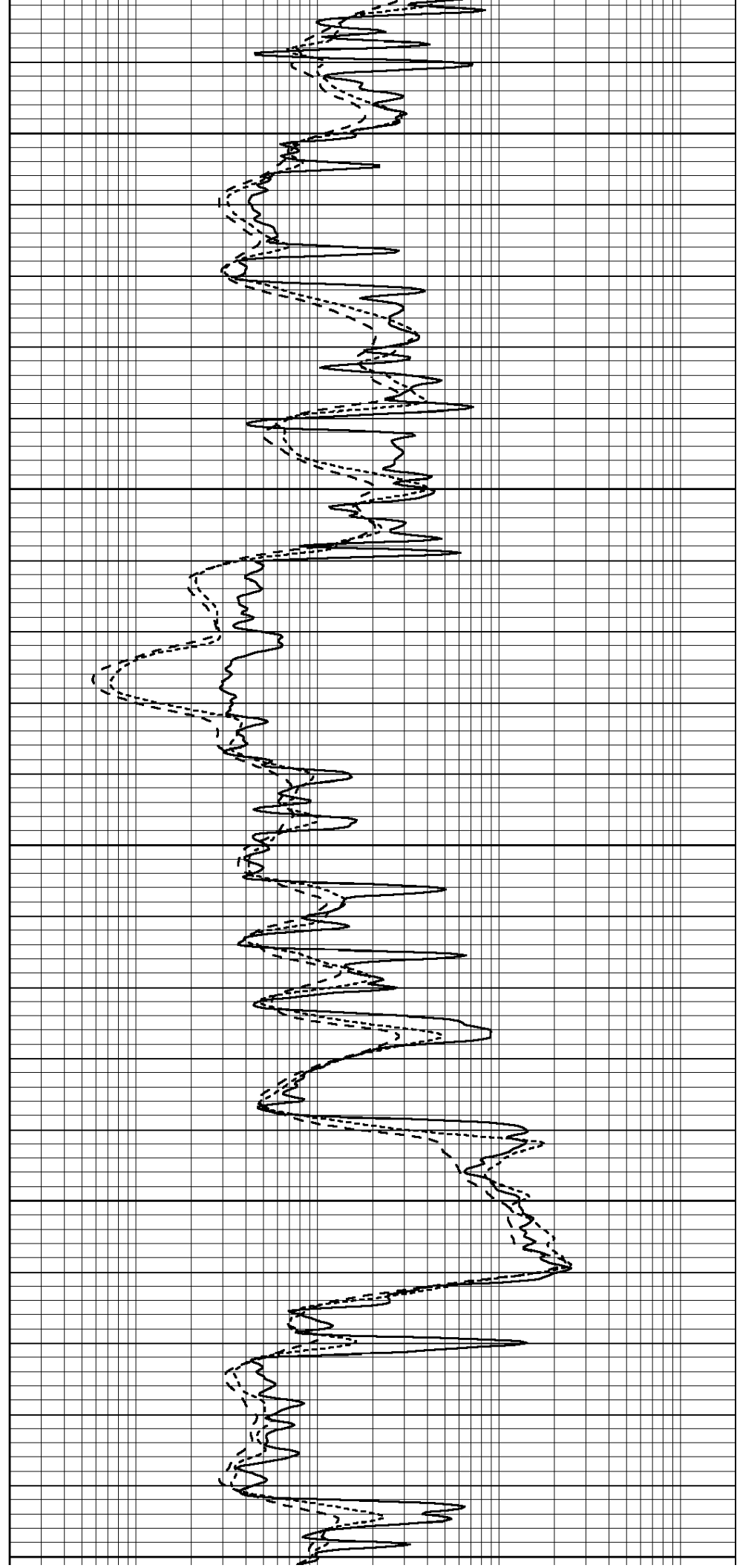
3100

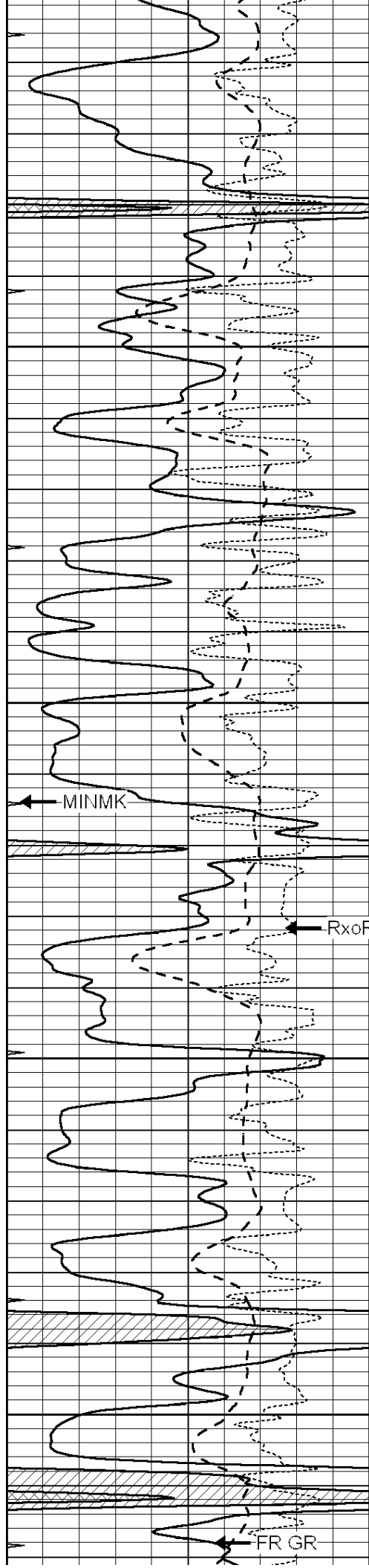
3150

3200

3250

3300



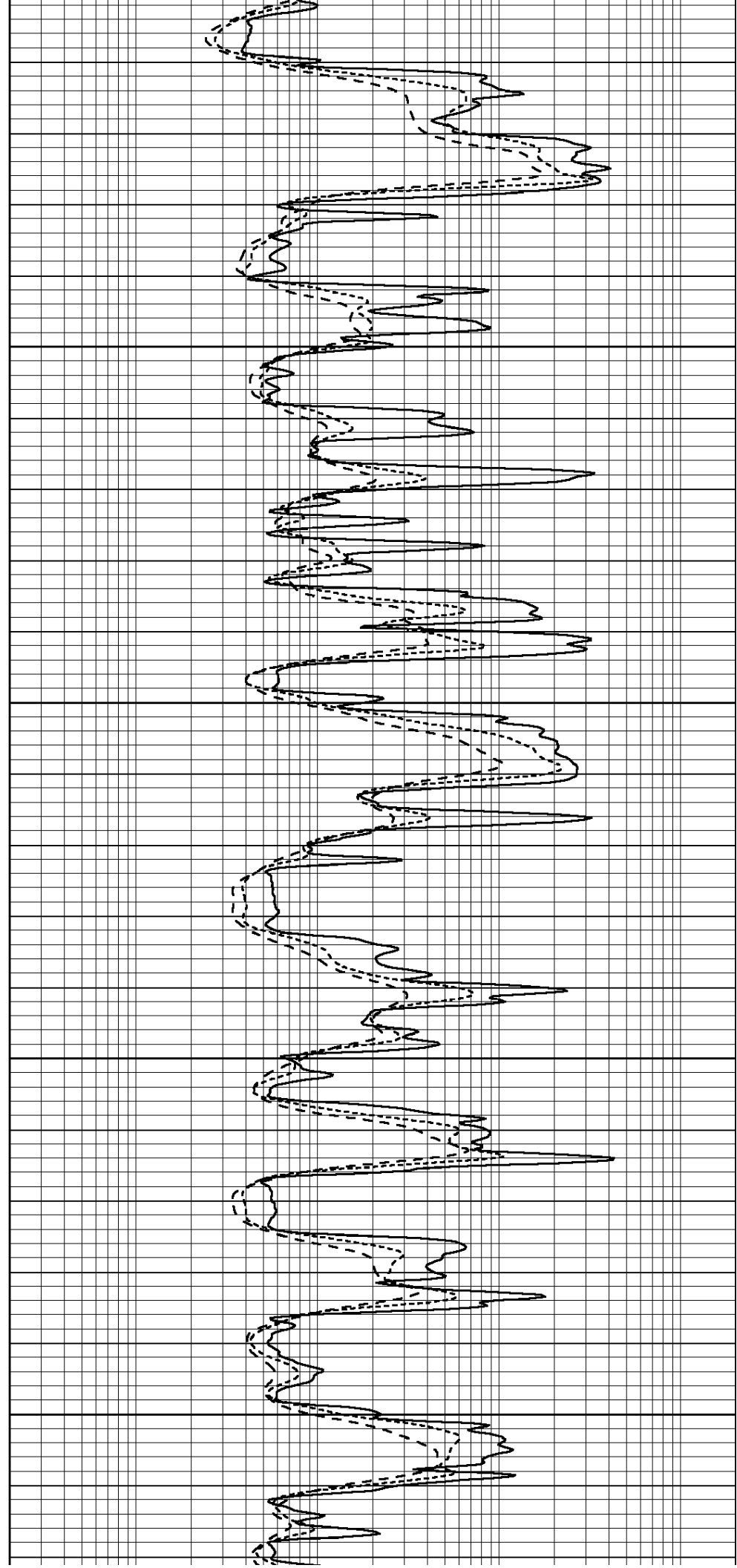


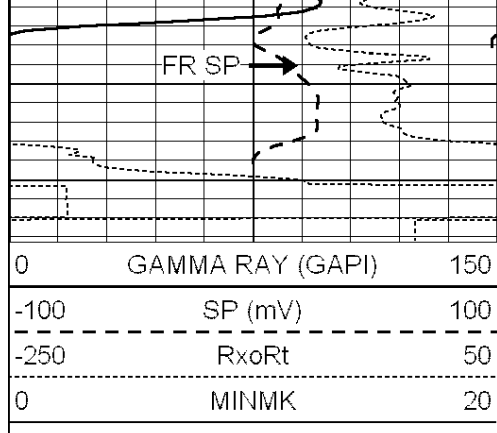
3350

3400

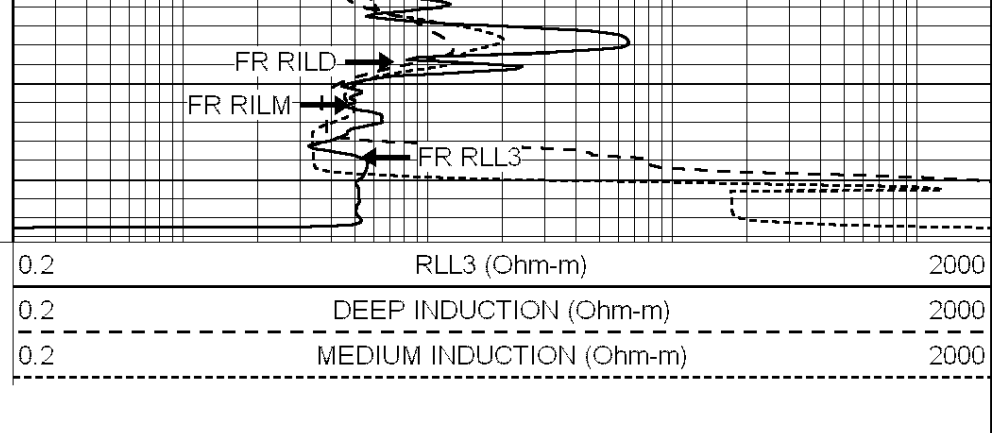
3450

3500



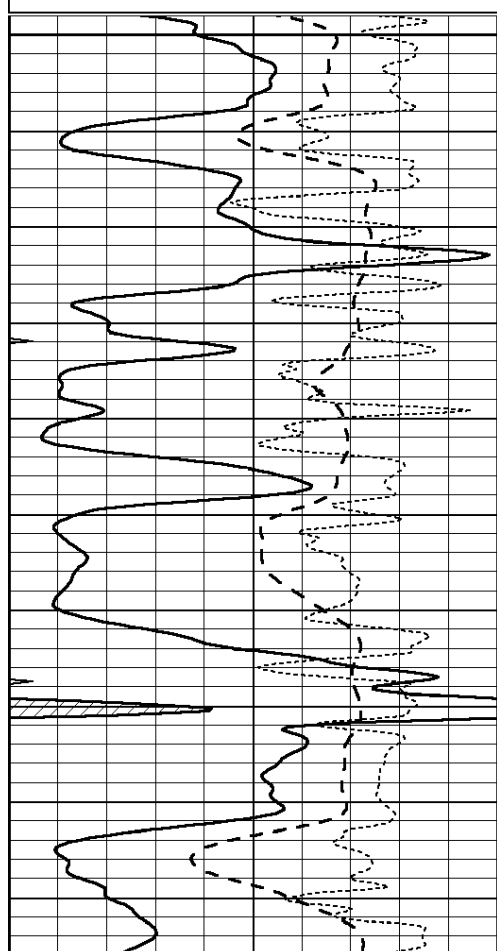
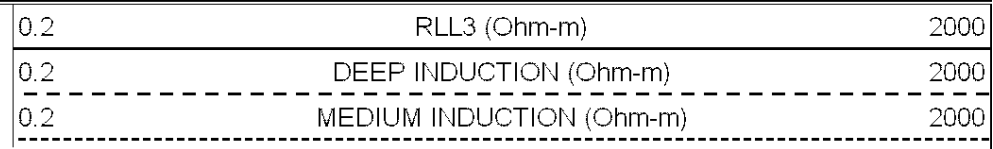
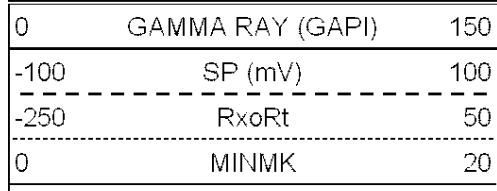


--- TD ---



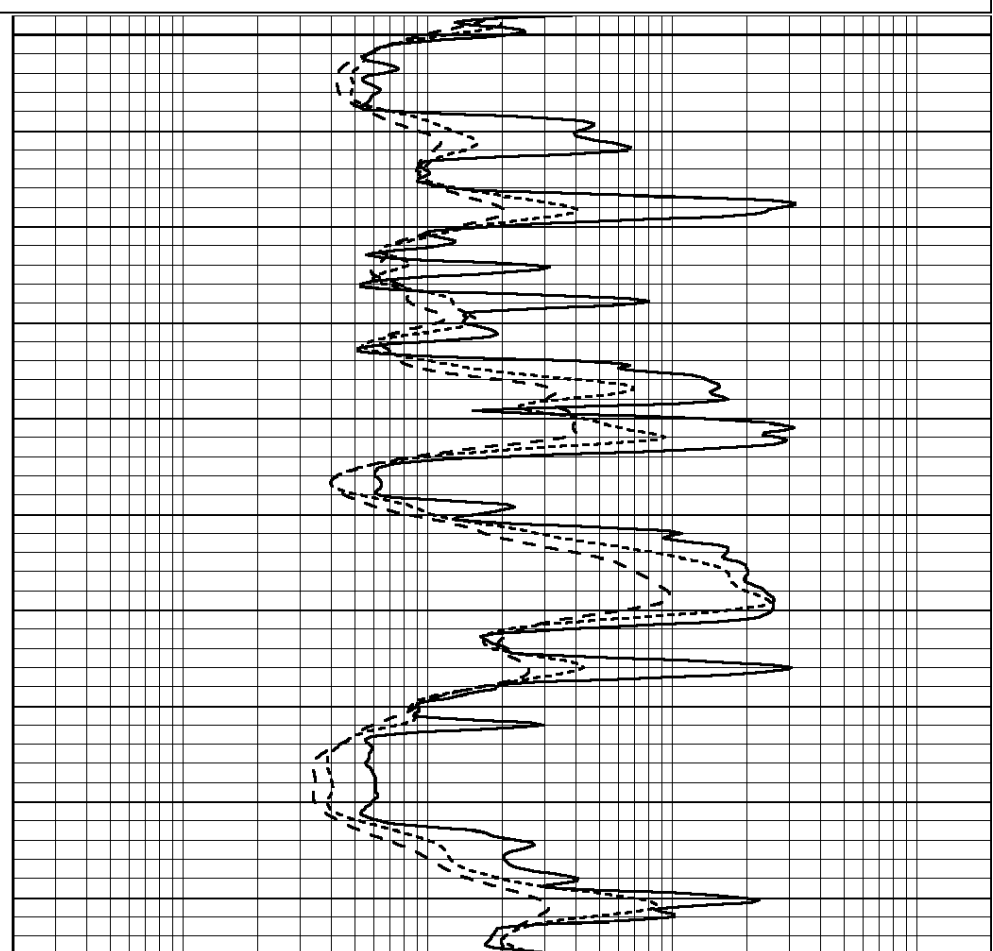
REPEAT SECTION

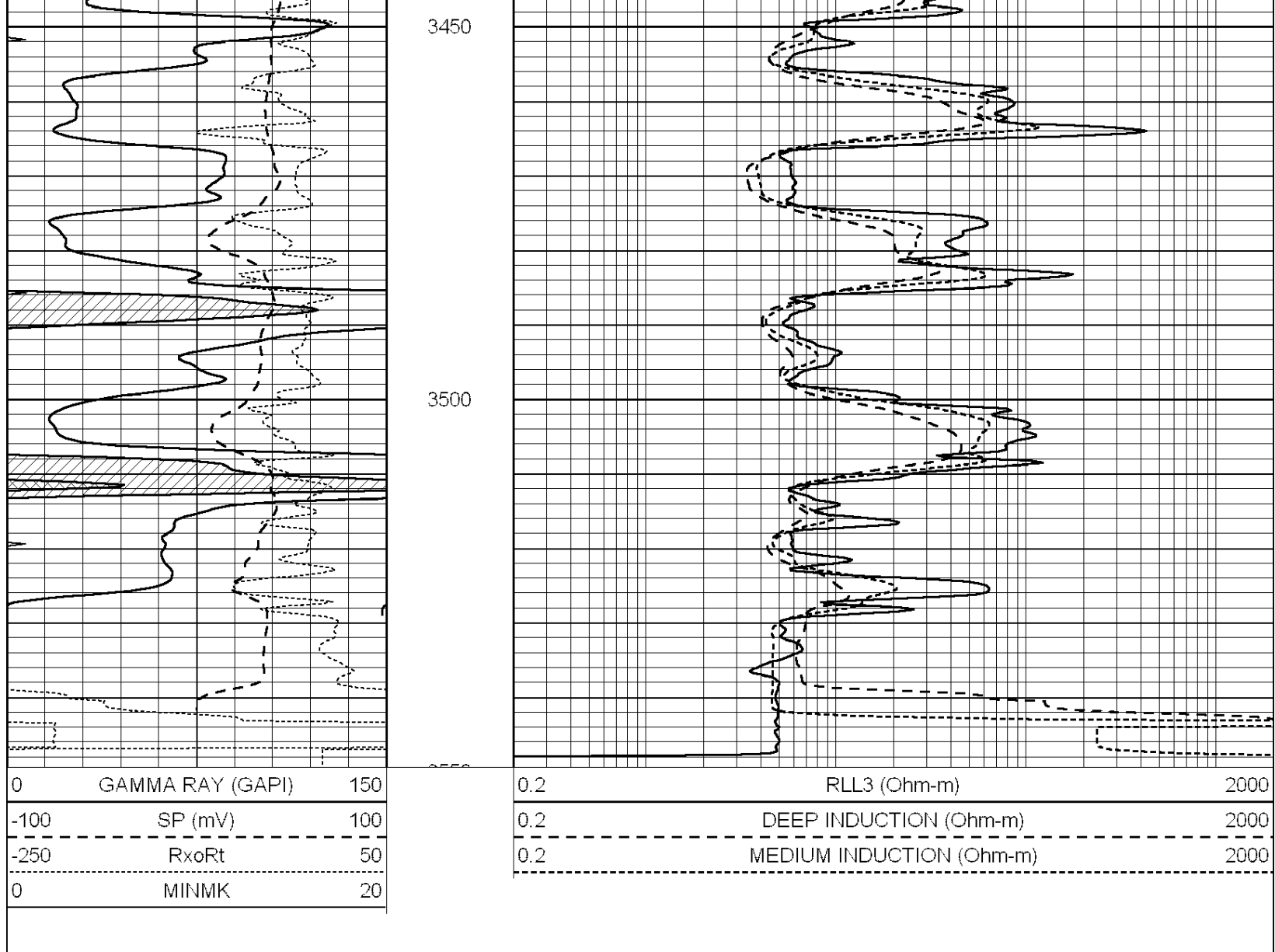
Database File: 24435ddn.db
 Dataset Pathname: pass5.1
 Presentation Format: _dil
 Dataset Creation: Sat May 17 16:16:24 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240



3350

3400





Calibration Report

Database File: 24435ddn.db
 Dataset Pathname: pass6.1
 Dataset Creation: Sat May 17 17:12:49 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Sat May 17 16:06:41 2014

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	550.000	8.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	540.000	-5.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	560.000	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	540.000	-4.000

Gamma Ray Calibration Report

Serial Number: GR5
 Tool Model: OPEN
 Performed: Sat May 17 16:07:43 2014

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8000	GAPI/cps