NABORS
COMPLETION & PRODUCTION SERVICES CO.

DUAL INDUCTION LOG

Company RITCHIE EXPLORATION, INC.

Well #2 POTOSI

Field THUNDER

County FORD State KANSAS

Location: API # : 15-057-20856

1662' FNL & 335' FWL

SEC 13 TWP 27S RGE 24W

Other Services: CDL/CNL

Permanent Datum GROUND LEVEL Elevation 2440

Log Measured From KELLY BUSHING 11' A.G.L.

Drilling Measured From KELLY BUSHING

Elevation: K.B. 2451, D.F., G.L. 2440

Company RITCHIE EXPLORATION, INC.
Well #2 POTOSI
Field THUNDER
County FORD
State KANSAS

Date	11-17-12		
Run Number	ONE		
Depth Driller	5100		
Depth Logger	5105		
Bottom Logged Interval	5103		
Top Log Interval	00		
Casing Driller	350		
Casing Logger	350		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 66		
pH / Fluid Loss	9.0 / 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.75 @ 64F		
Rmf @ Meas. Temp	0.56 @ 64F		
Rmc @ Meas. Temp	0.90 @ 64F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.380 @ 126F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	1:00 A.M.		
Maximum Recorded Temperature	126F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	ADAM ELDANI		

<<< Fold Here >>>

Comments

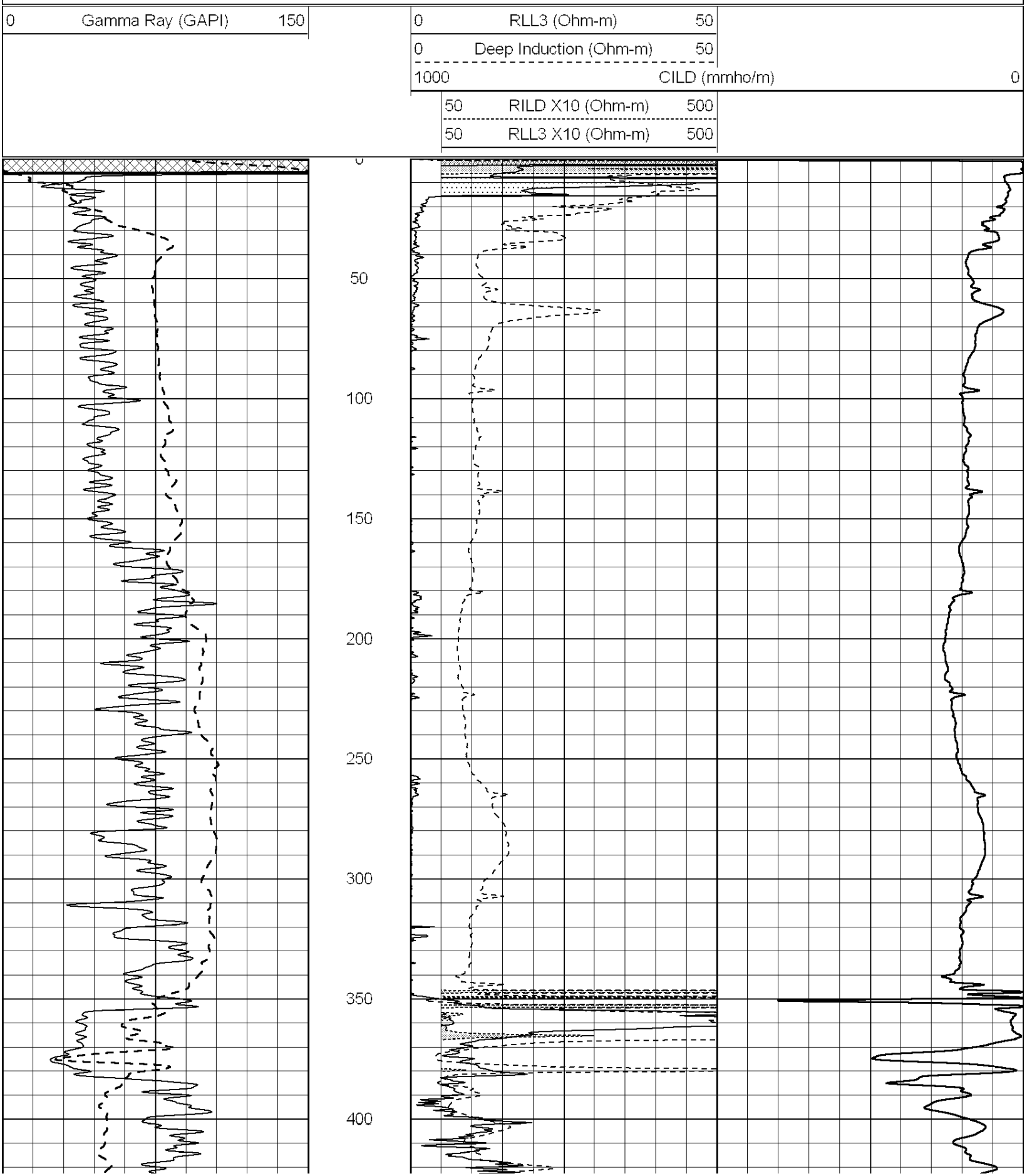
NABORS COMPLETION & PRODUCTION CO.
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: WRIGHT, S TO K-#400, 1 1.2S, E & S INTO.

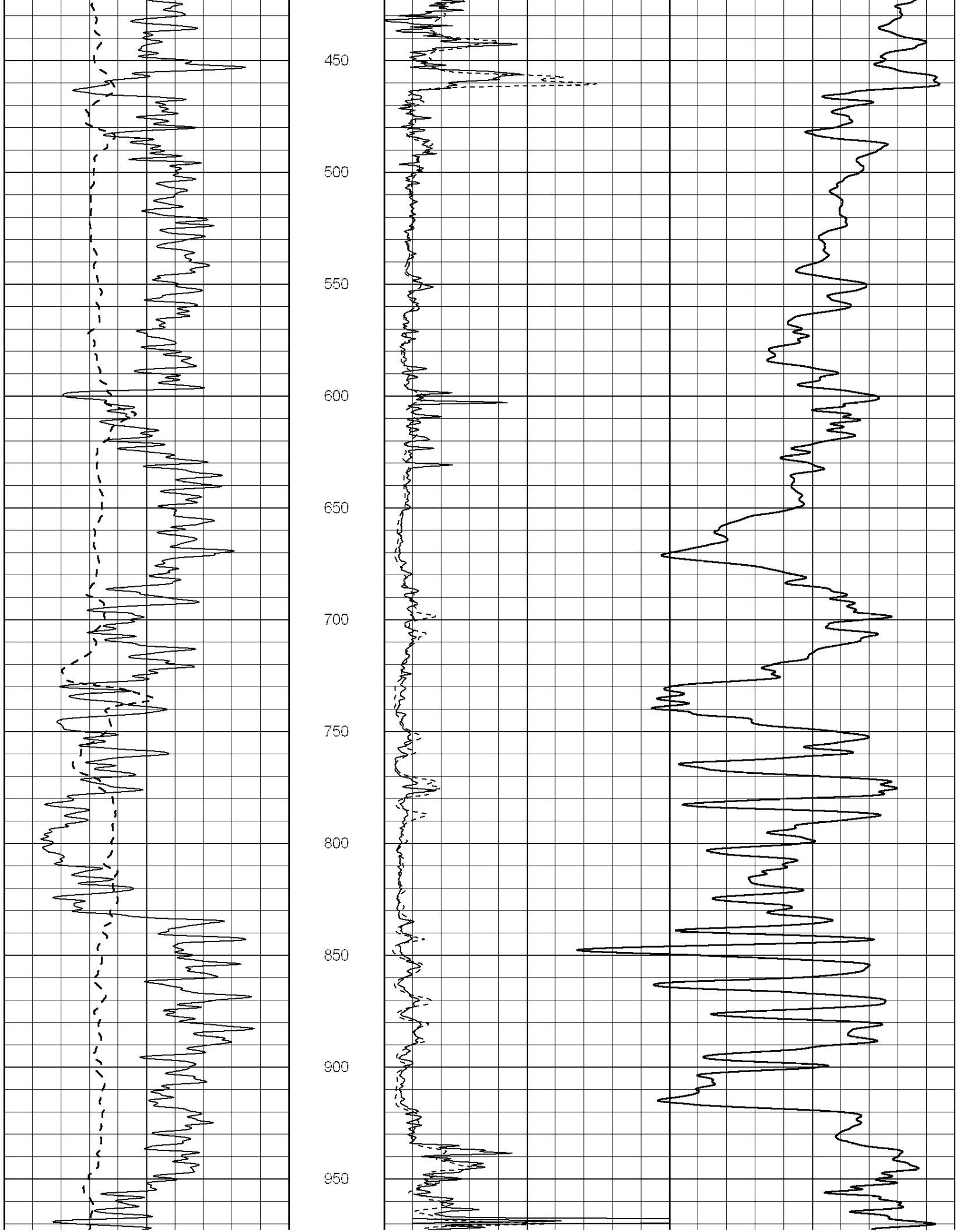
MAIN SECTION

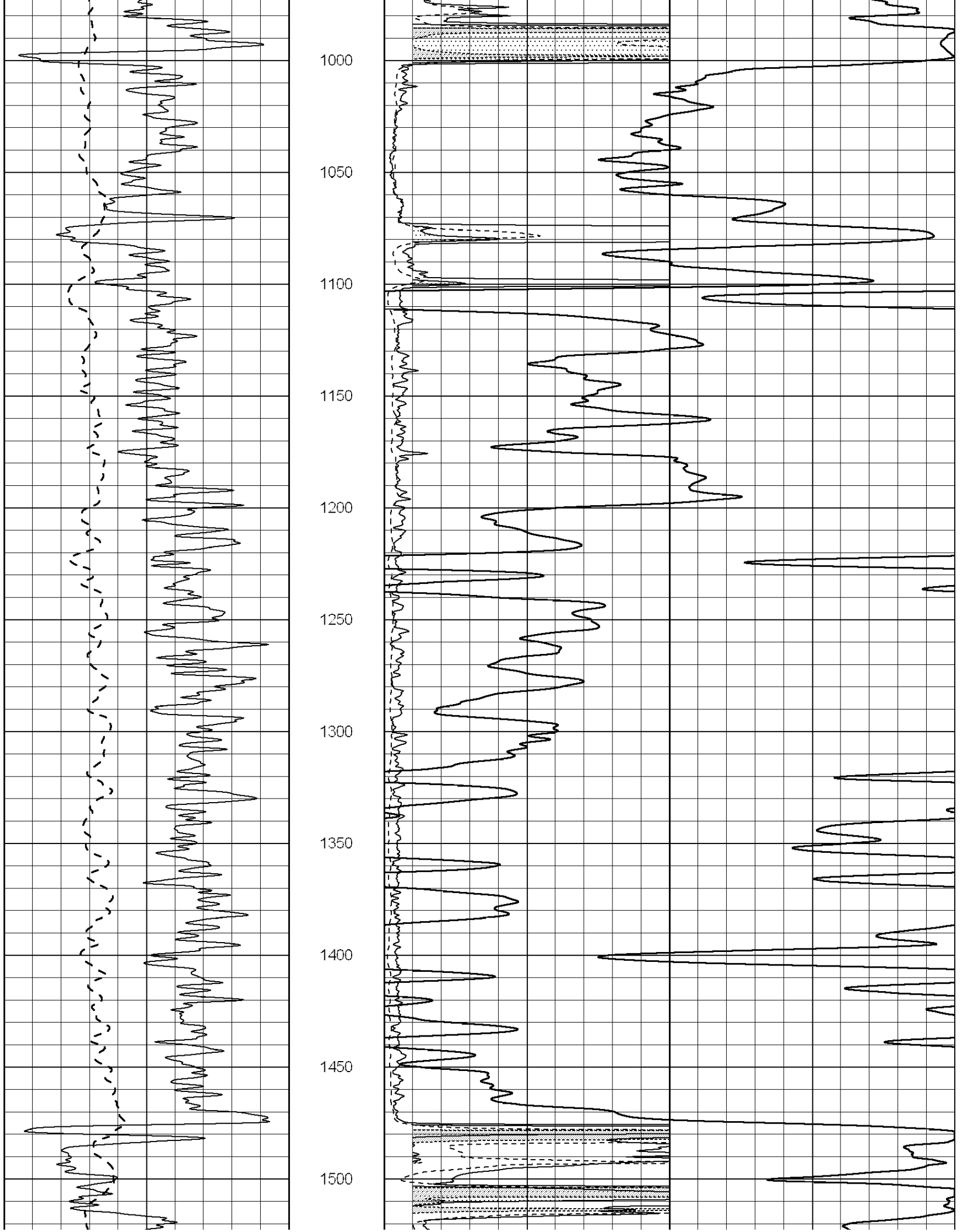
NABORS COMPLETION & PRODUCTION

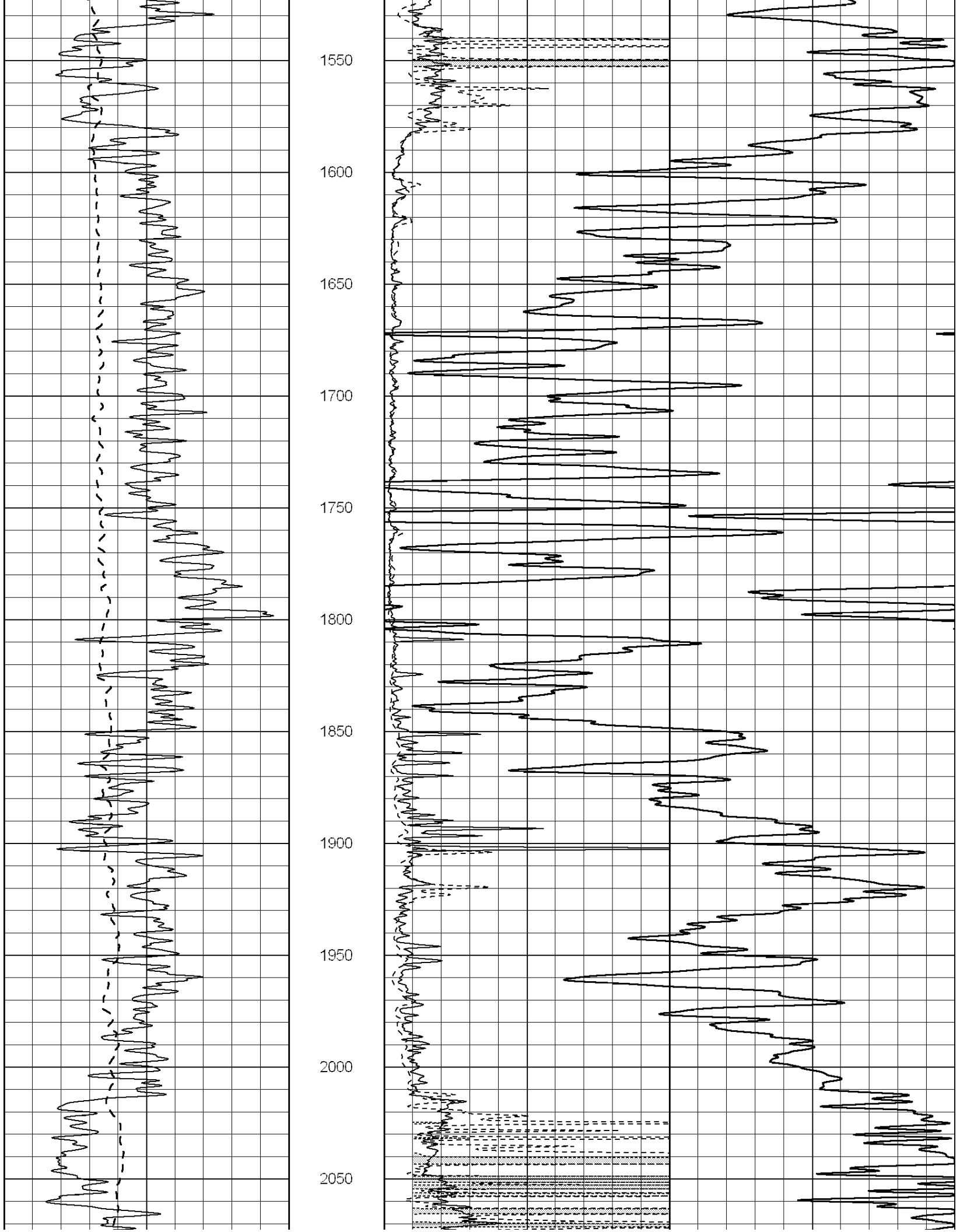
SERVICES CO.

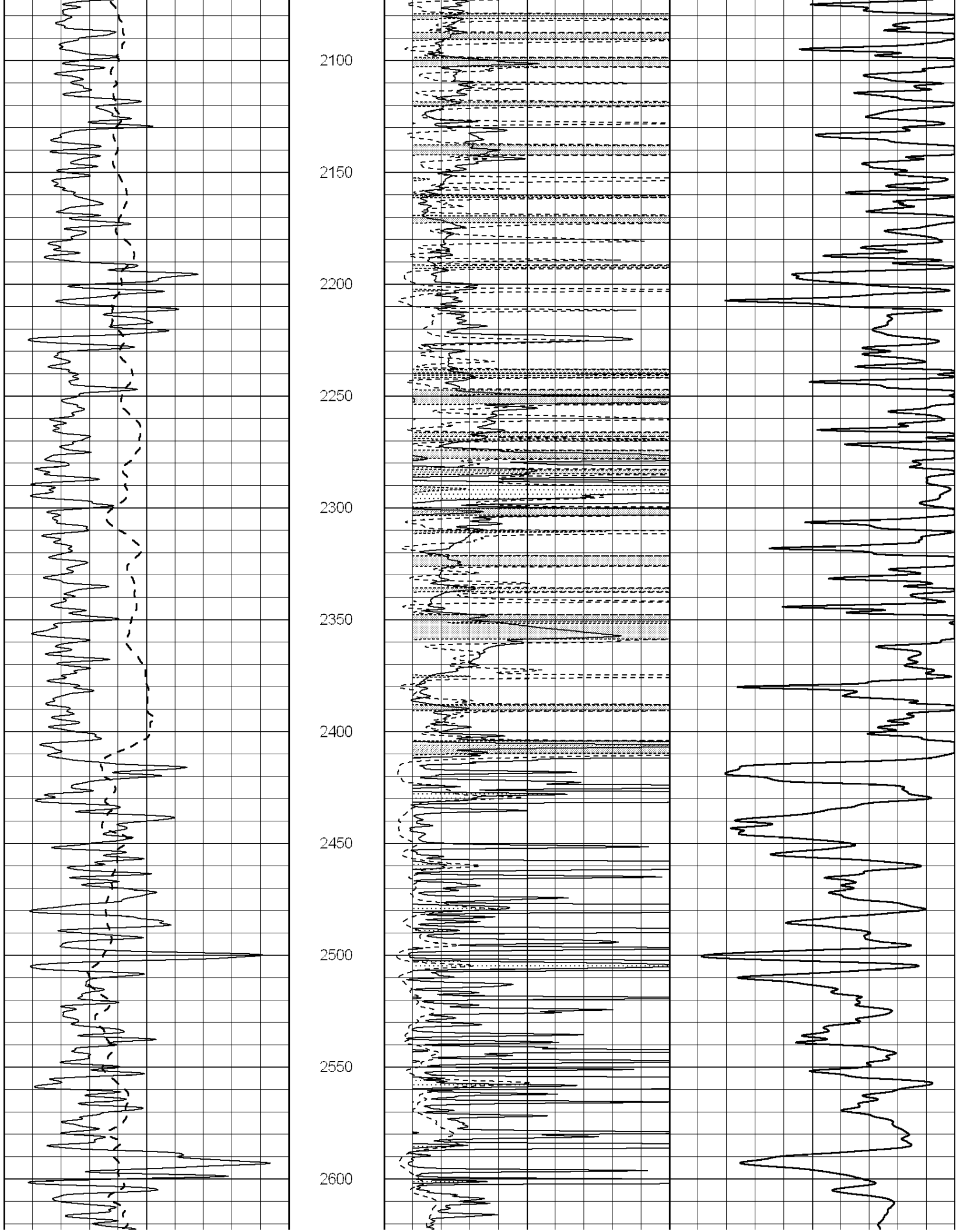
Database File: 009950ddn.db
Dataset Pathname: pass3.1A
Presentation Format: dil2
Dataset Creation: Sun Nov 18 03:06:22 2012
Charted by: Depth in Feet scaled 1:600

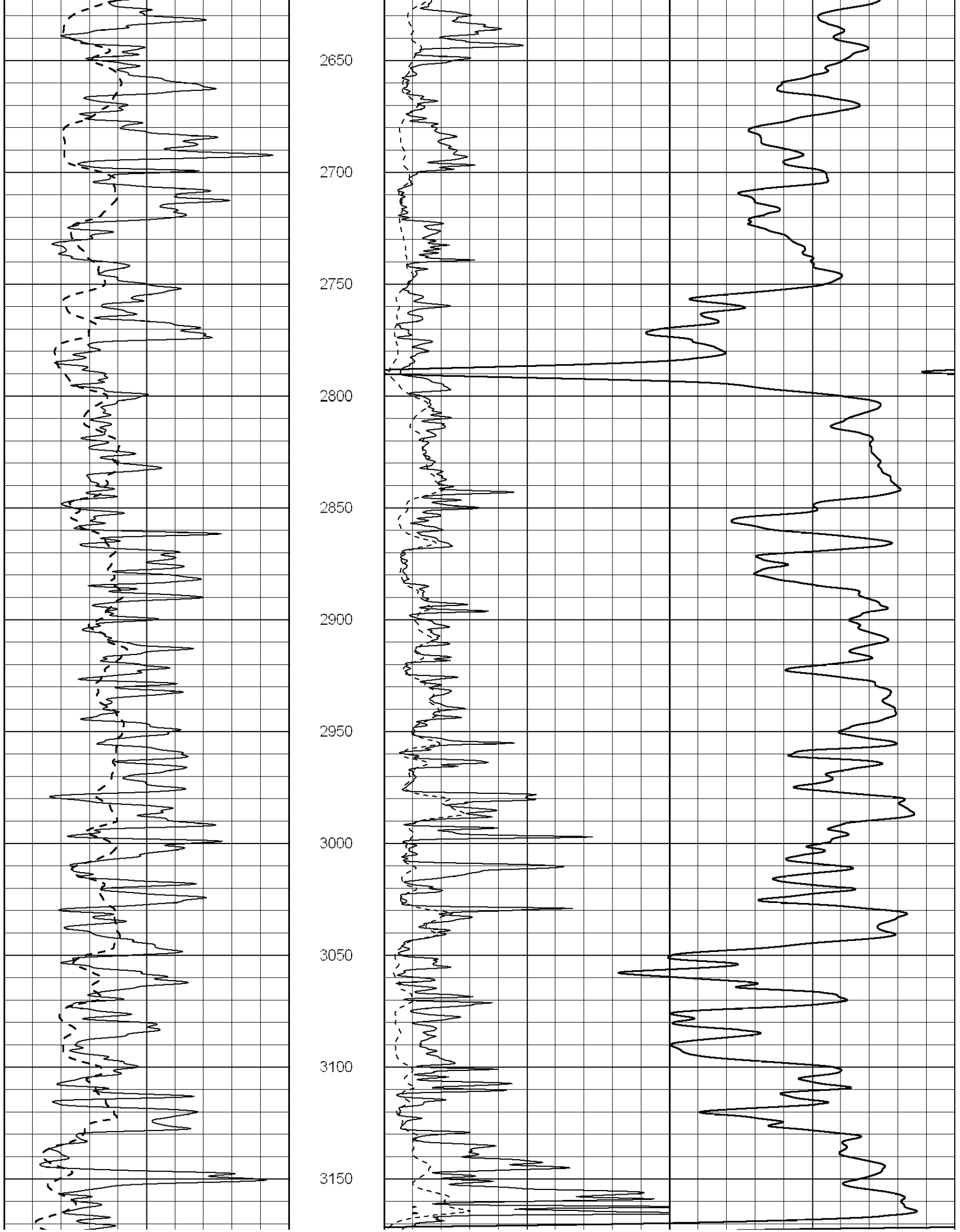


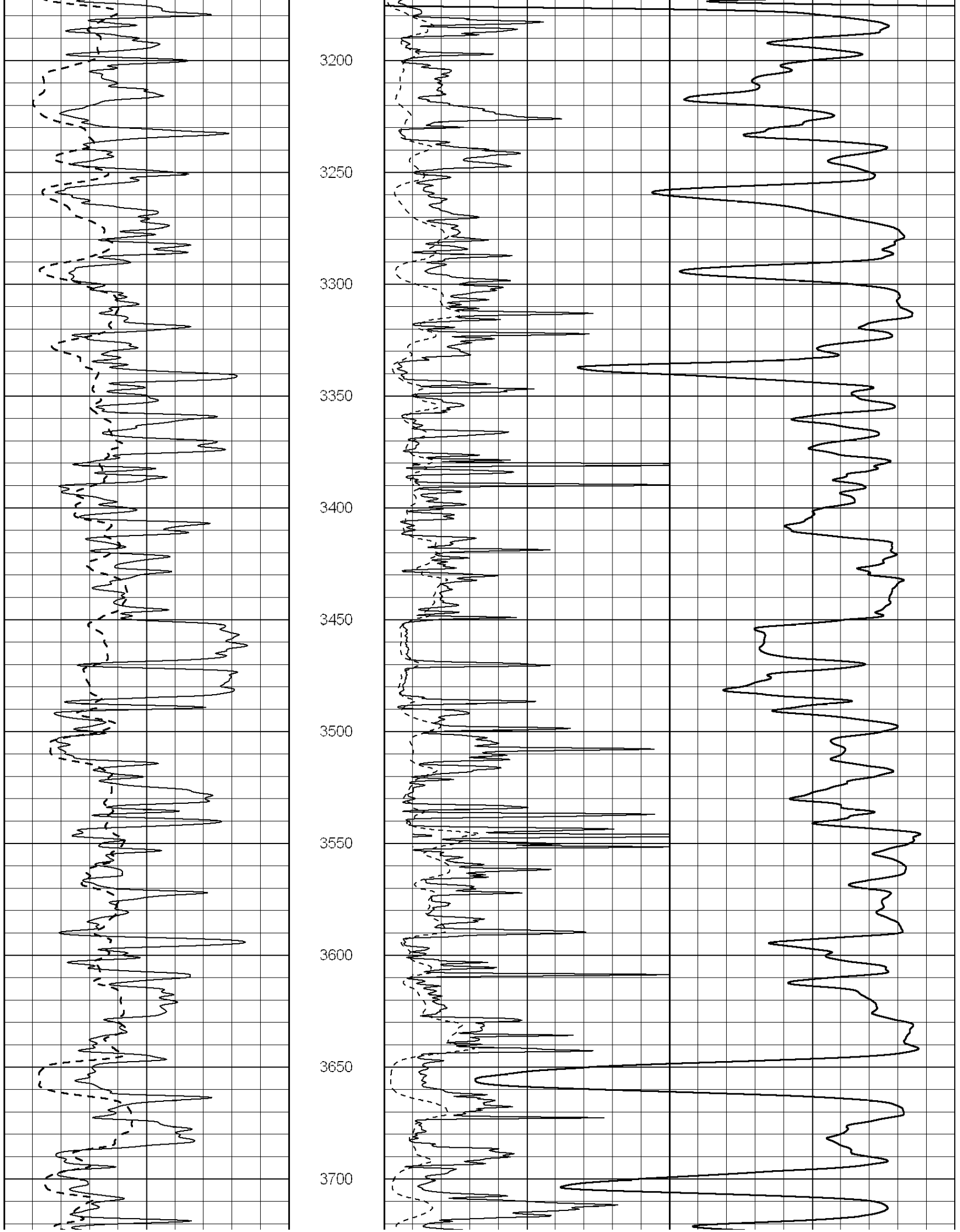

450
500
550
600
650
700
750
800
850
900
950

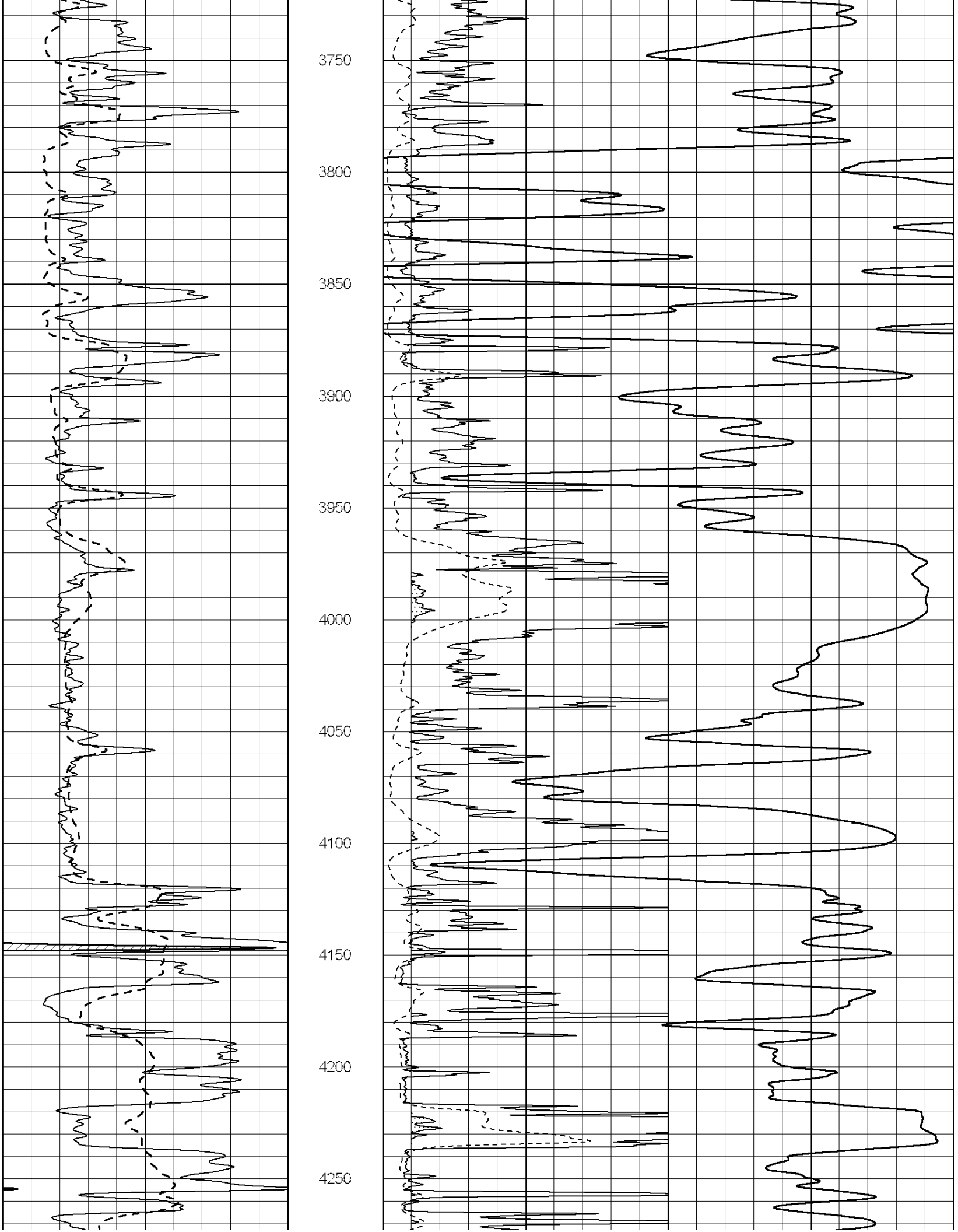

1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

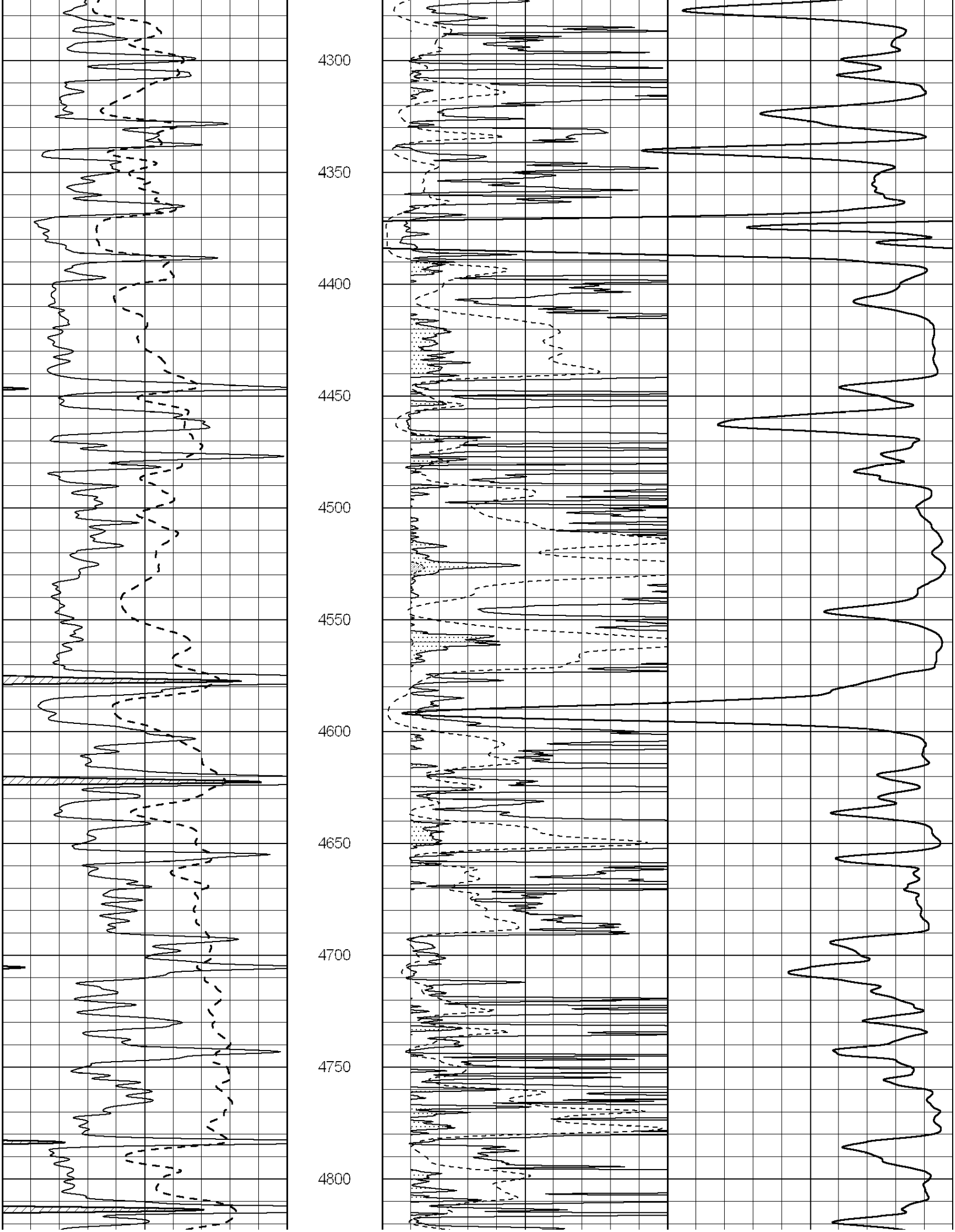

1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050

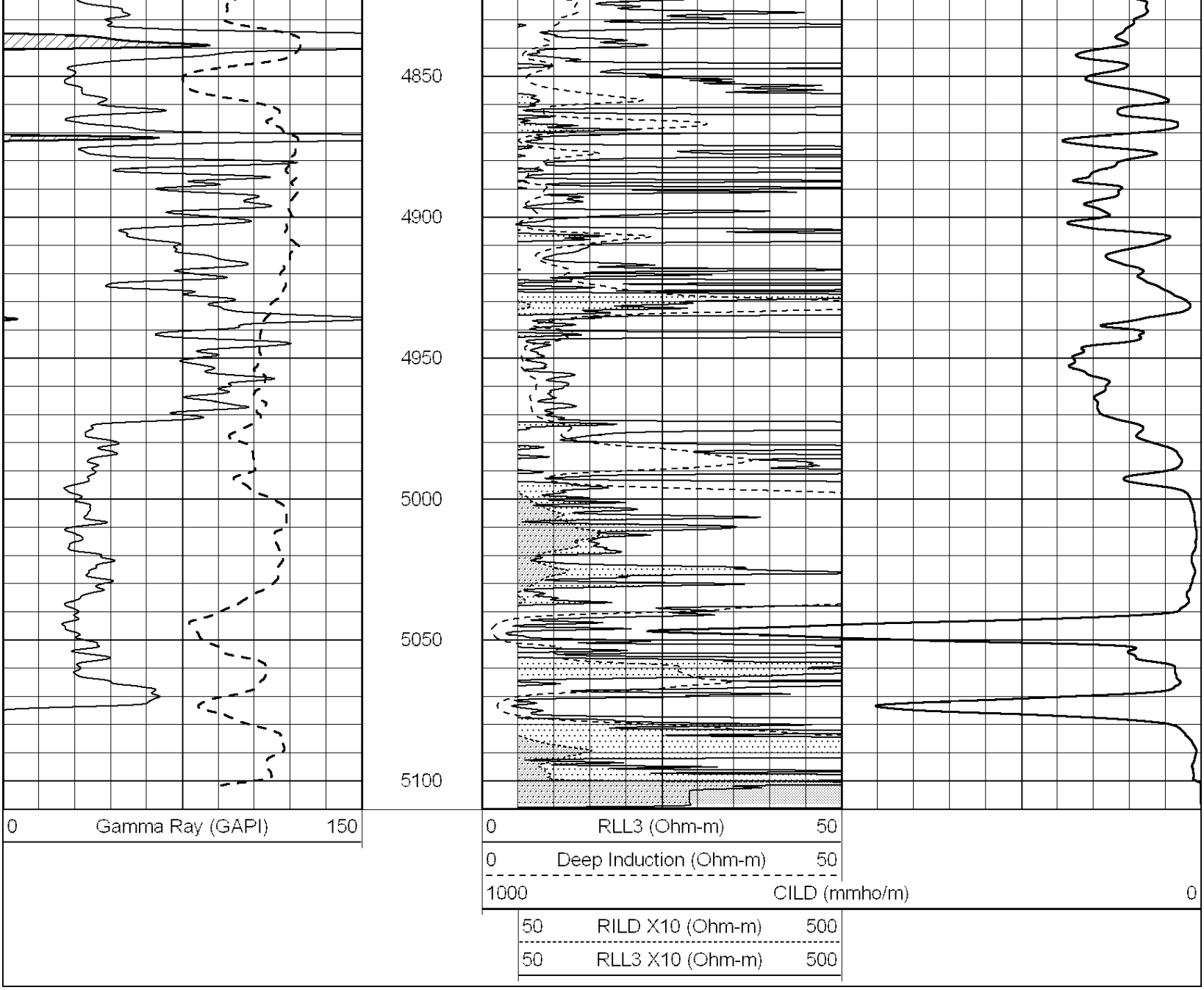

2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600


2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150


3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700


3750
3800
3850
3900
3950
4000
4050
4100
4150
4200
4250


4300
4350
4400
4450
4500
4550
4600
4650
4700
4750
4800



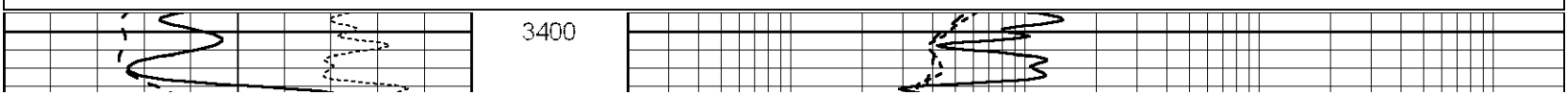
NABORS
COMPLETION & PRODUCTION SERVICES CO.

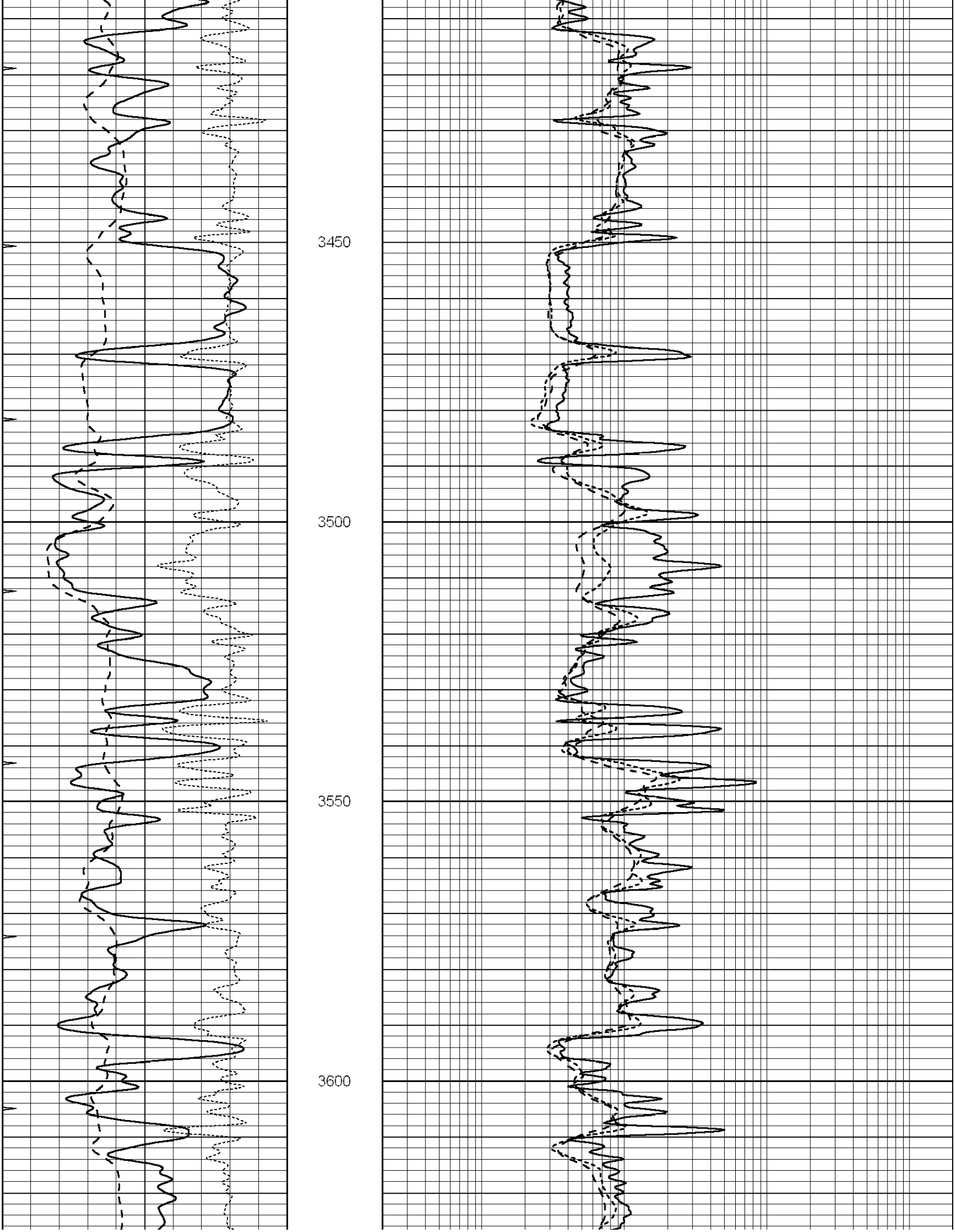
MAIN SECTION

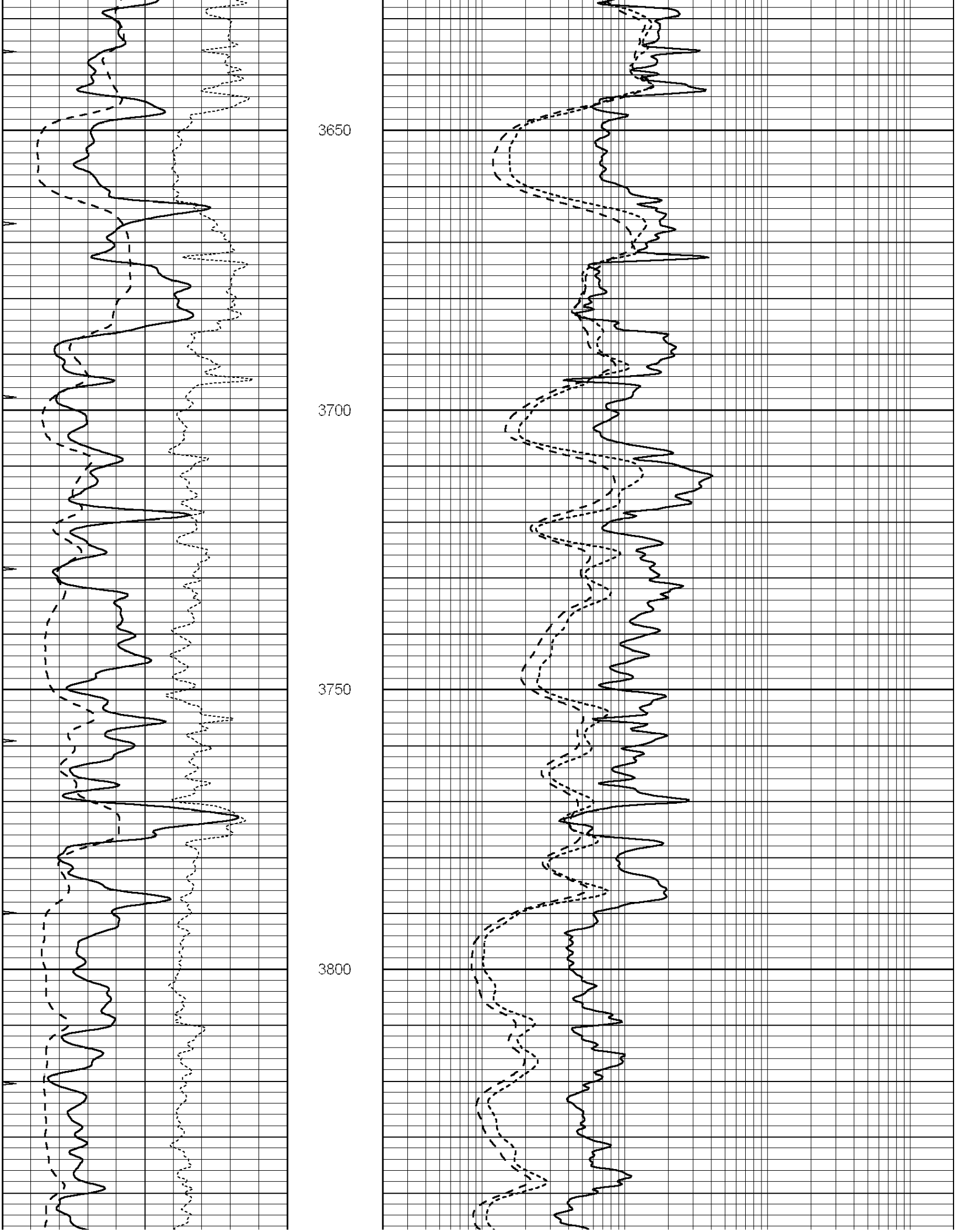
Database File:	009950ddn.db
Dataset Pathname:	pass3.1A
Presentation Format:	dil
Dataset Creation:	Sun Nov 18 03:06:22 2012
Charted by:	Depth in Feet scaled 1:240

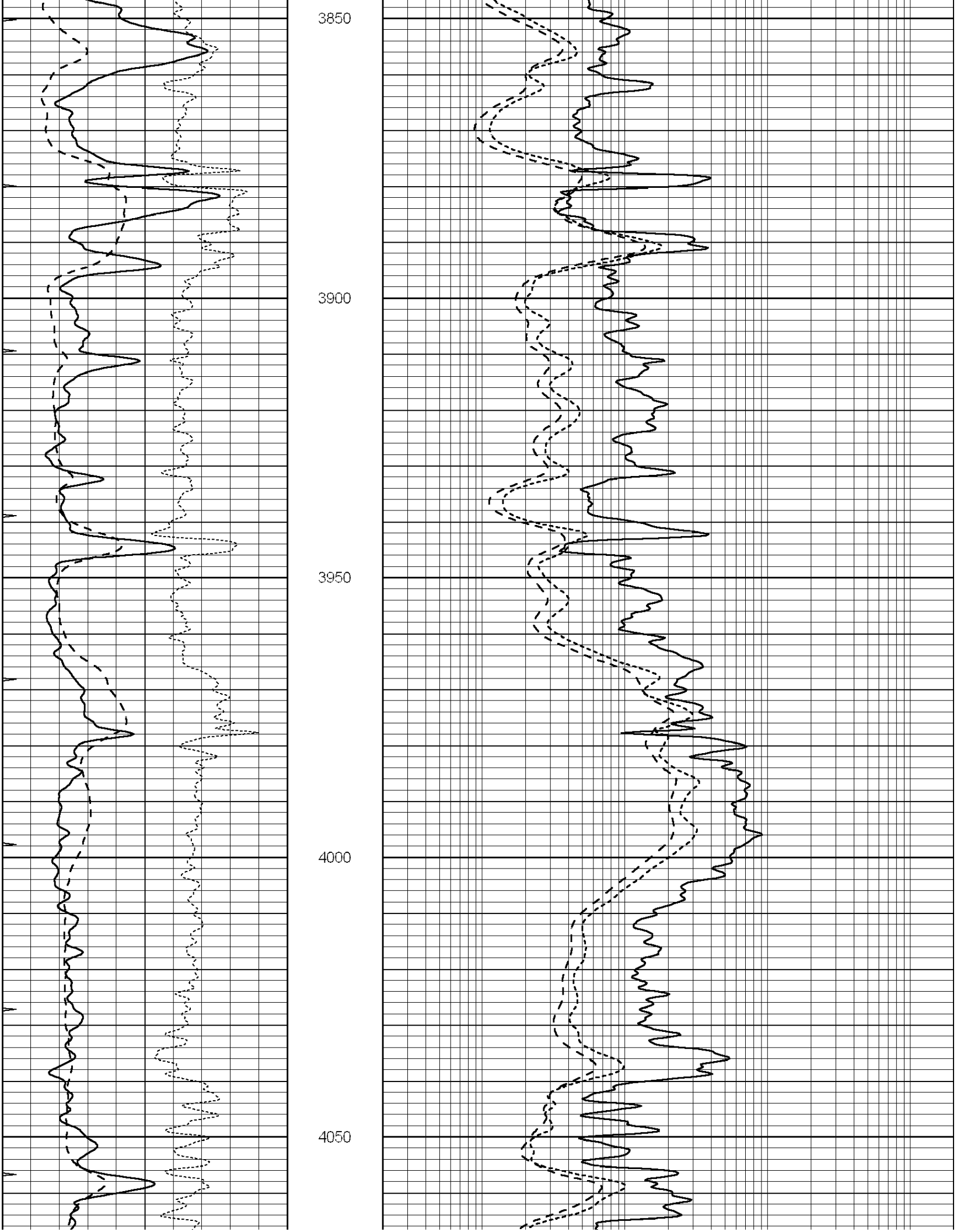
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

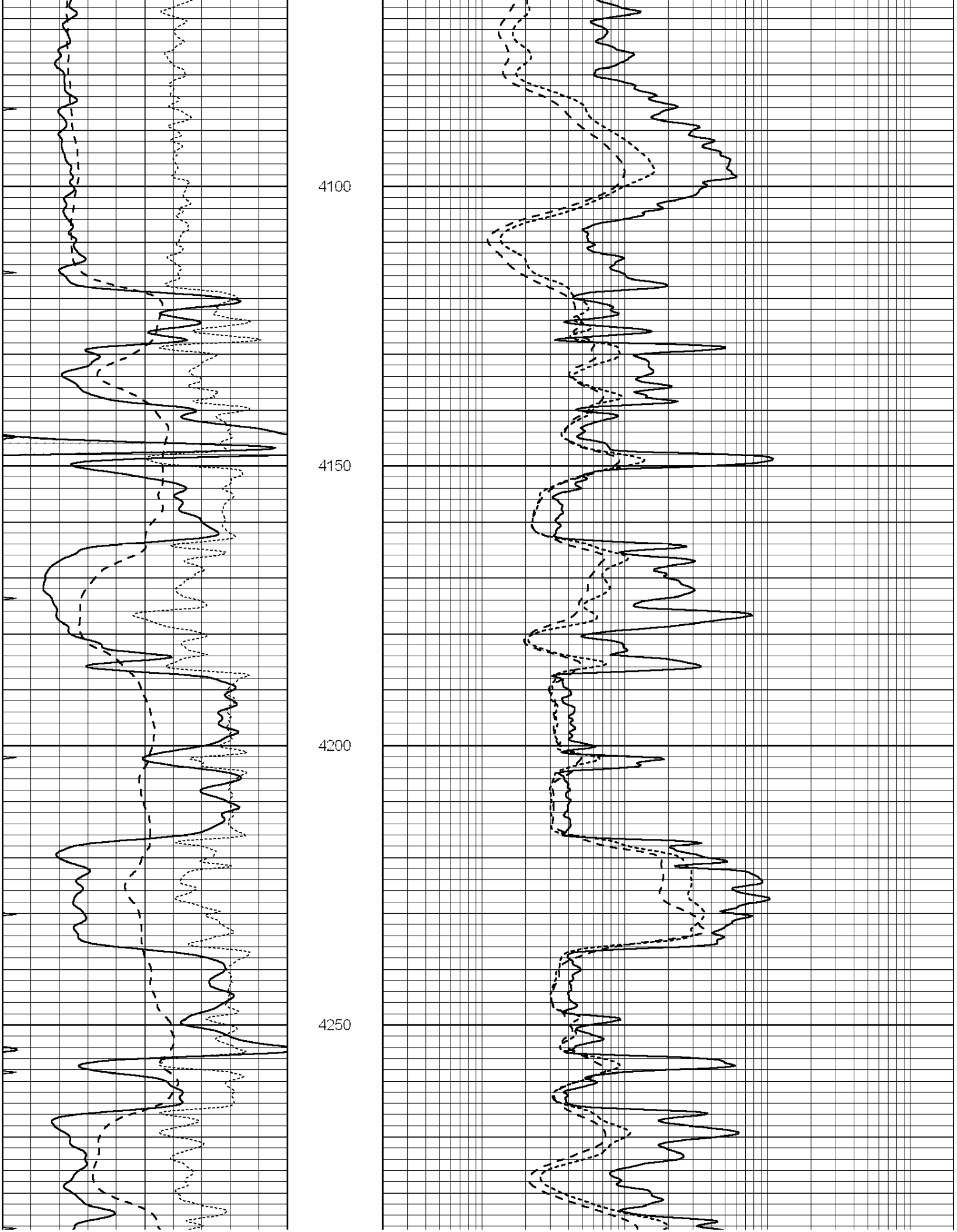
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

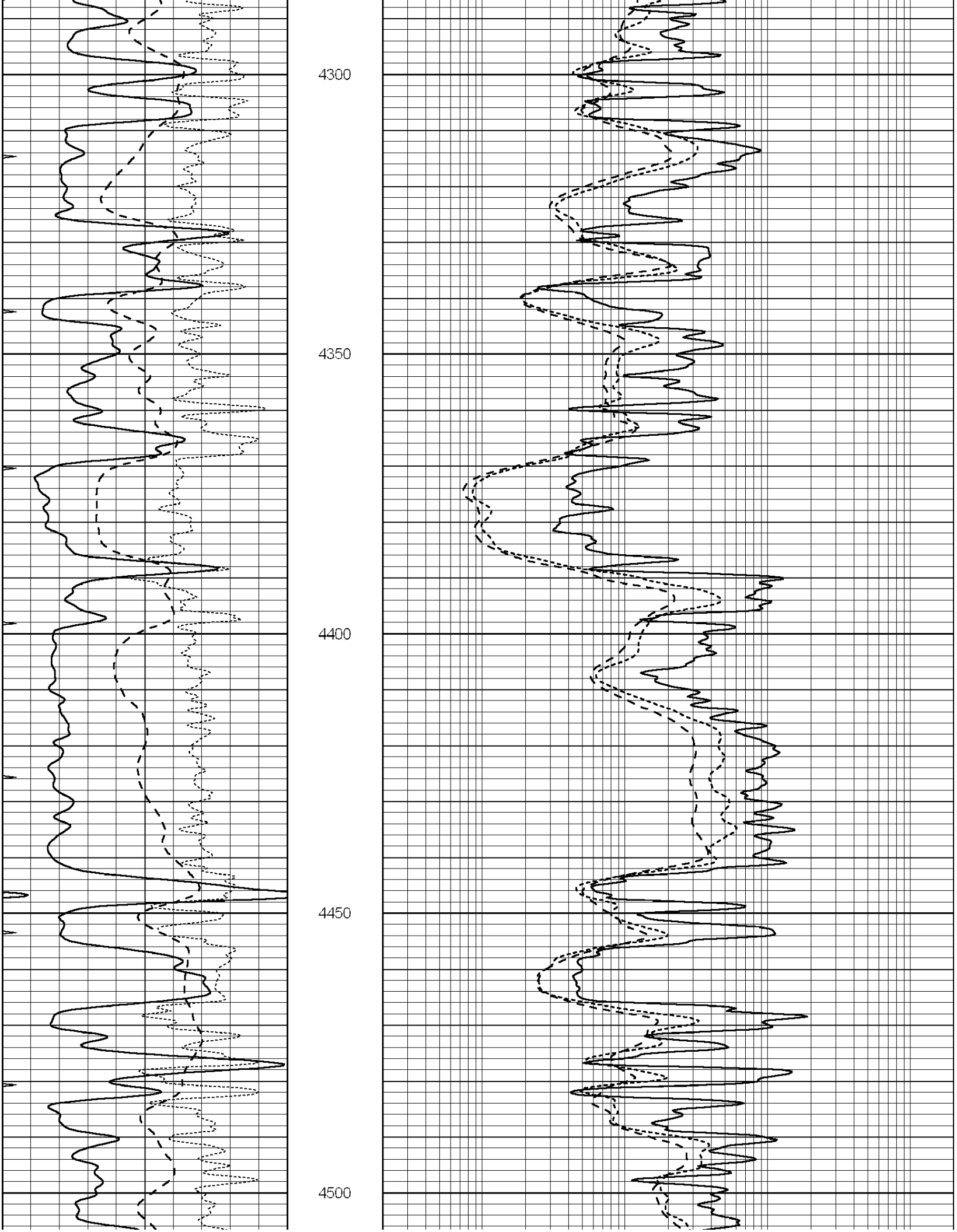


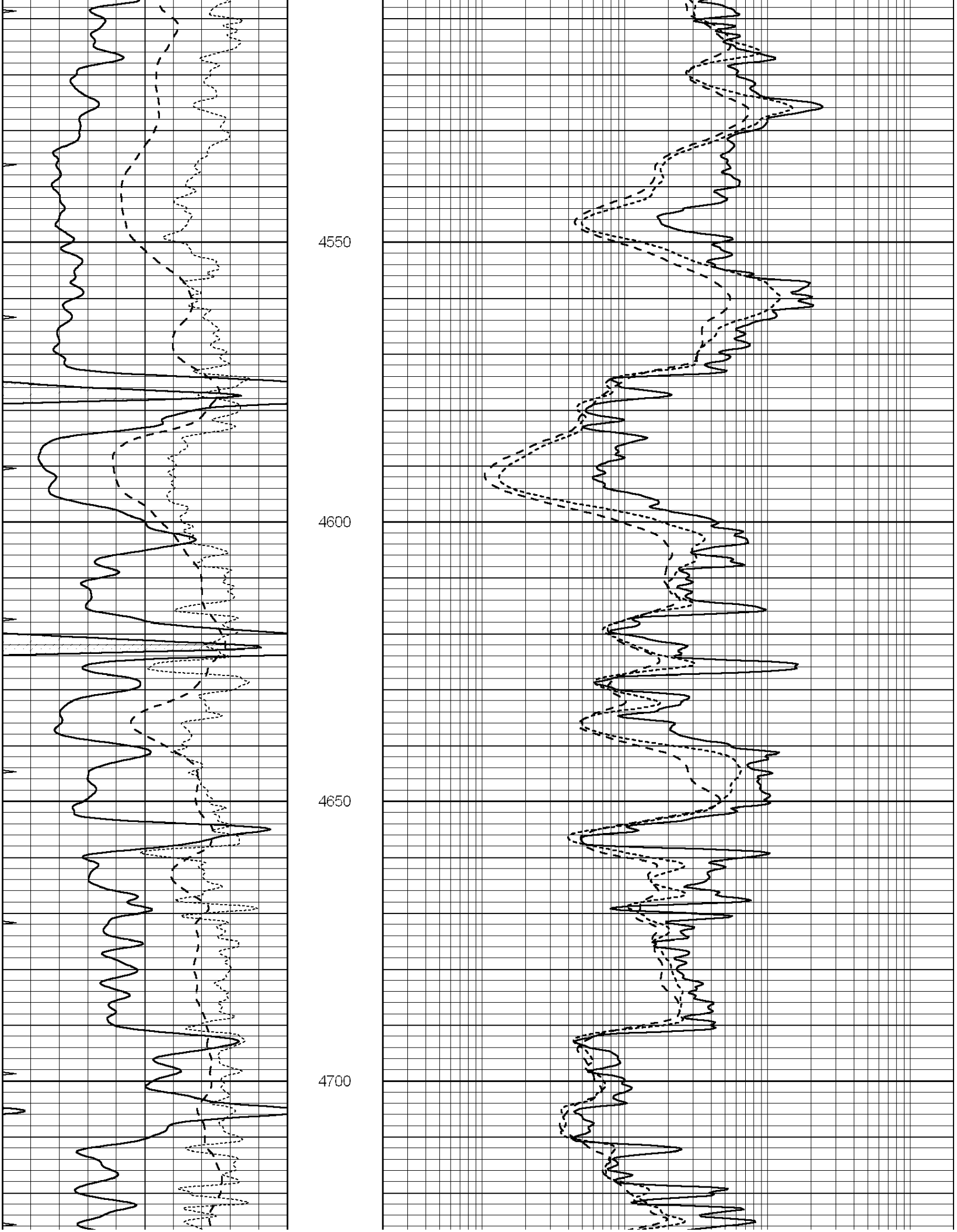

3450
3500
3550
3600

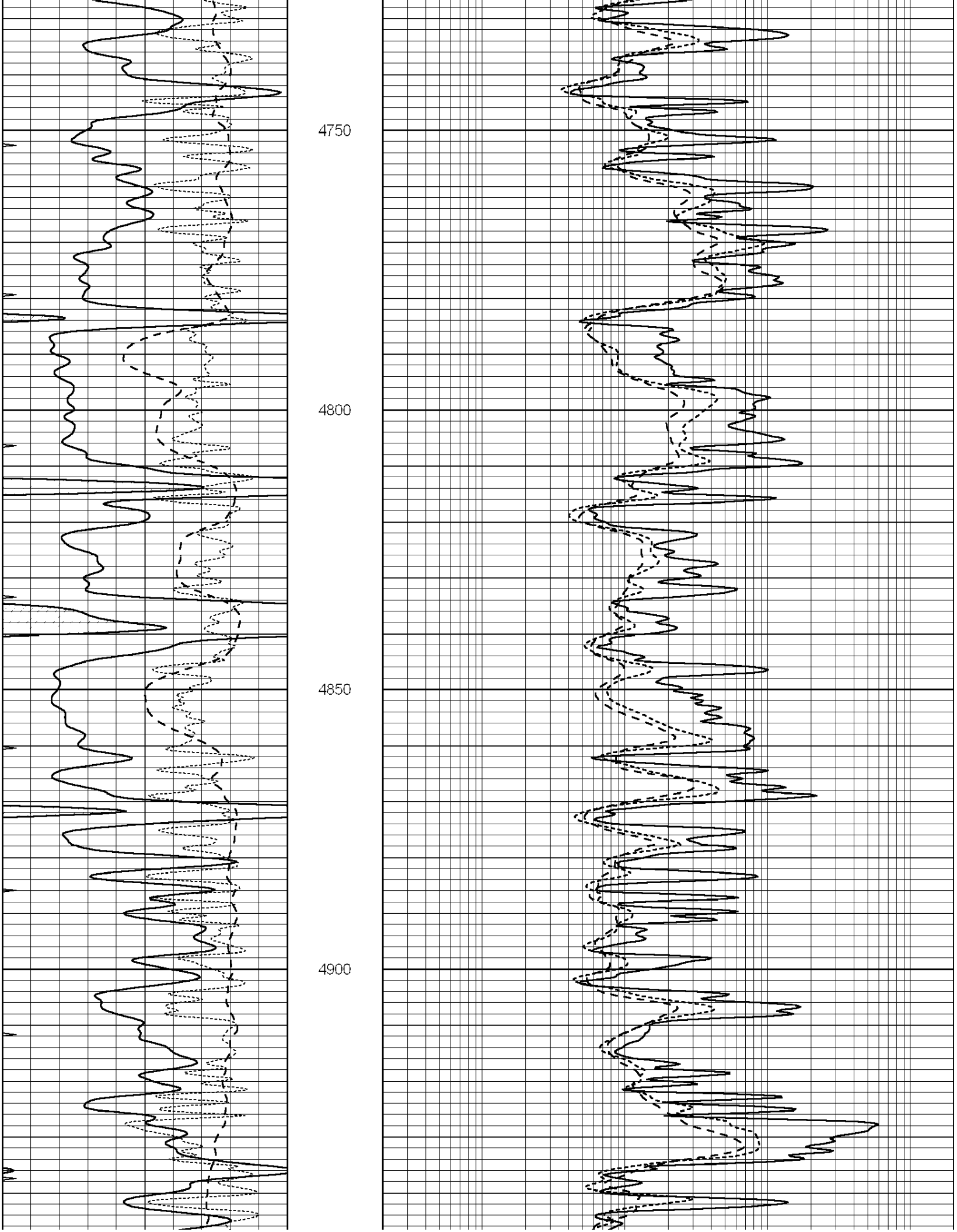

3650
3700
3750
3800

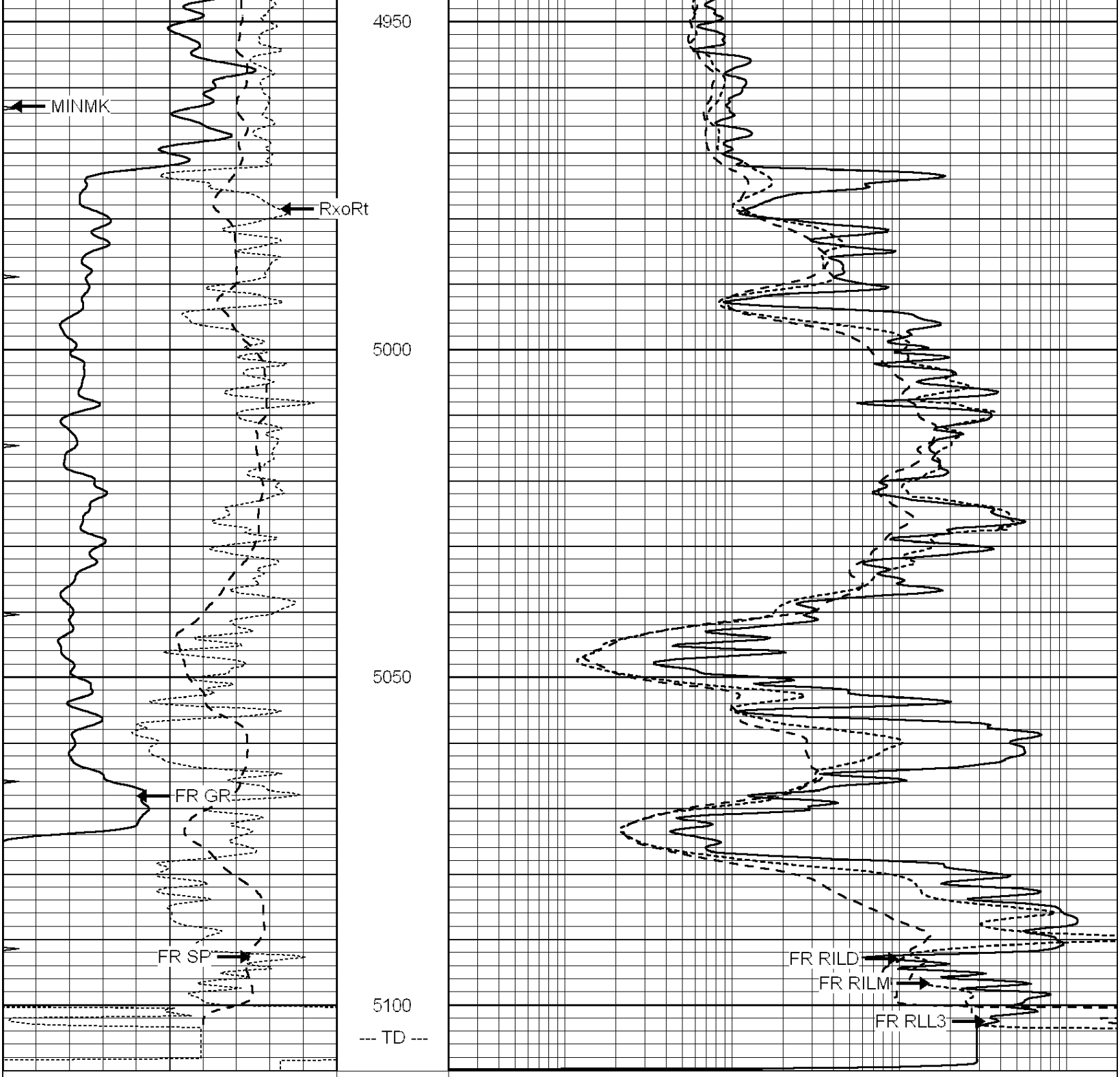

3850
3900
3950
4000
4050


4100
4150
4200
4250


4300
4350
4400
4450
4500


4550
4600
4650
4700


4750
4800
4850
4900



NABORS
COMPLETION & PRODUCTION SERVICES CO.

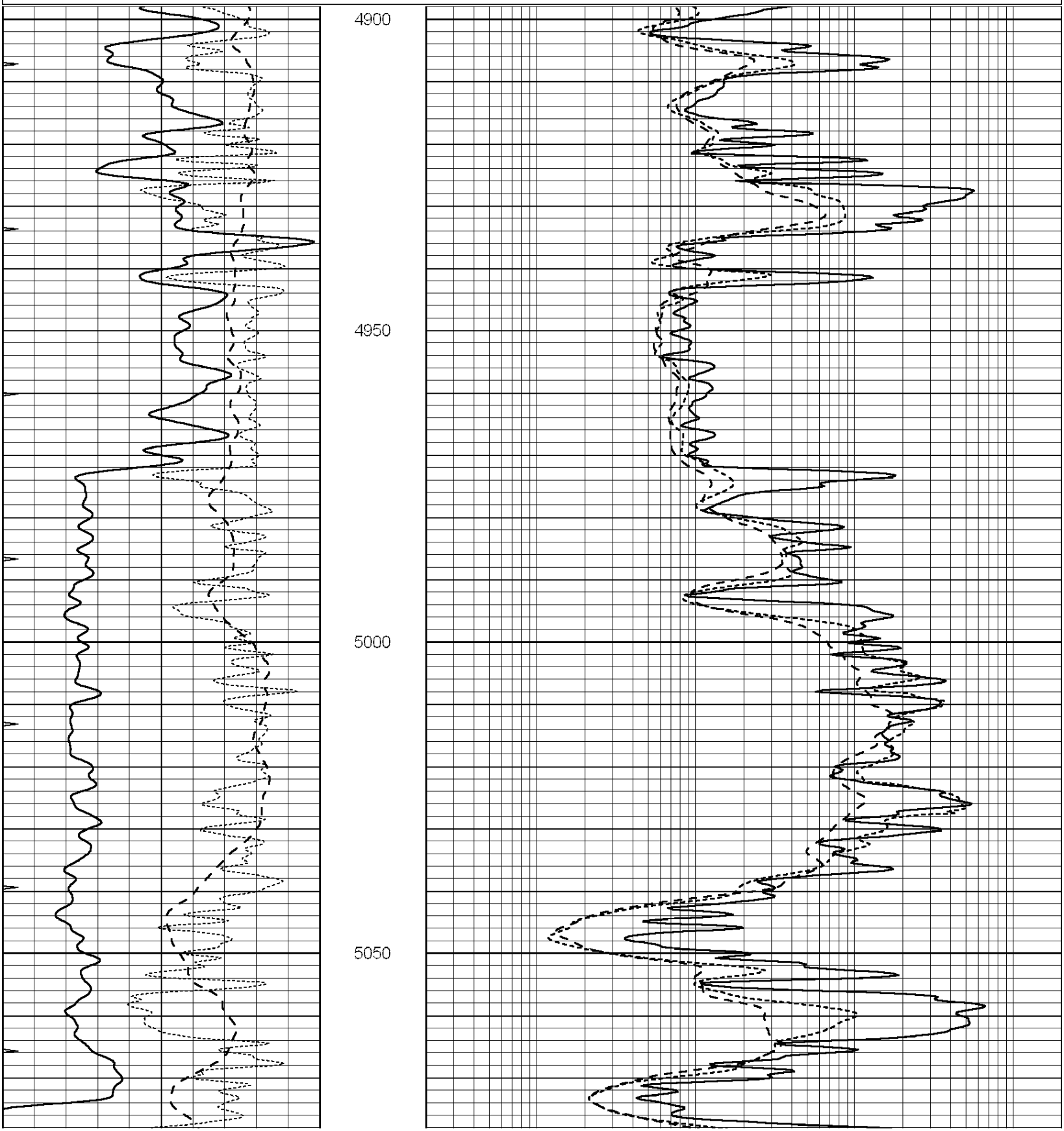
REPEAT SECTION

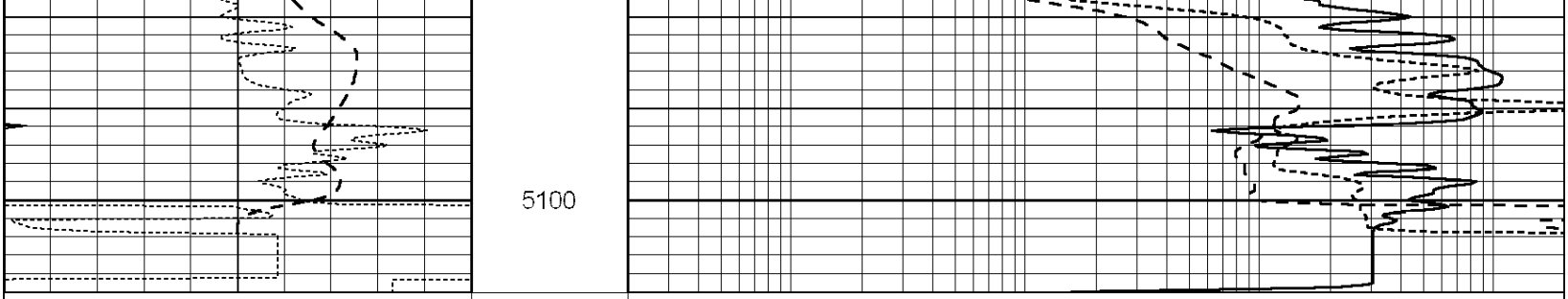
Database File: 009950ddn.db

Dataset Pathname:	pass2.1A
Presentation Format:	dil
Dataset Creation:	Sun Nov 18 03:08:18 2012
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





Calibration Report

Database File: 009950ddn.db
Dataset Pathname: pass3.1A
Dataset Creation: Sun Nov 18 03:06:22 2012

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Sun Nov 18 01:24:45 2012

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	470.000	-10.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	490.000	-7.500
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: Sun Nov 18 01:24:34 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1205.67	613.10	cps
Aluminum	2.590	g/cc	277.64	430.46	cps

Spine Angle = 76.46

Density/Spine Ratio = 0.583

	Size		Reading	
Small Ring	8.75	in	4.69	V
Large Ring	14.00	in	6.52	V

Compensated Neutron Calibration Report

Serial Number: NUE_2I
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:	Sun Nov 18 01:33:42 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7500	GAPI/cps