



Weatherford

**COMPENSATED NEUTRON
PHOTO DENSITY
LOG**

COMPANY	UNIT PETROLEUM COMPANY		
WELL	JAMES #1-2		
FIELD	WILDCAT		
PROVINCE/COUNTY	LINCOLN		
COUNTRY/STATE	USA / COLORADO		
LOCATION	1980' FNL & 1980' FWL SE-NW		
SEC 2	TWP 15S	RGE 55W	Other Services
Latitude	38.772690		
Longitude	-103.527090		
API Number	05-073-06713		
Permanent Datum GL, Elevation 5123 feet			
Log Measured From KB			
Drilling Measured From KB			
Date	07-DEC-2015		Elevations: KB 5138.00 DF 5136.00 GL 5123.00
Run Number	ONE		
Service Order	7055-137049030		
Depth Driller	7635.00	feet	
Depth Logger	7629.00	feet	
First Reading	---		
Last Reading	---		
Casing Driller	490.00	feet	
Casing Logger	488.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	---		
Density / Viscosity	9.40 lb/USg	55.00 sec/qt	
PH / Fluid Loss	8.60	5.20 ml/30Min	
Sample Source	MUD TANK		
Rm @ Measured Temp	1.92 @ 56.0	ohm-m	
Rmf @ Measured Temp	1.536 @ 56.0	ohm-m	
Rmc @ Measured Temp	2.304 @ 56.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	---		
Time Since Circulation	4 HOURS		
Max Recorded Temp	---		
Equipment / Base	14343	OKC	
Recorded By	JUSTIN HICKS		
Witnessed By	RICH BACON		

BOREHOLE RECORD			Last Edited: 12-DEC-2015 04:56
Bit Size inches	Depth From feet	Depth To feet	
12.250	0.00	490.00	
7.875	490.00	7635.00	

CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	490.00	32.00

REMARKS
TOOLS RAN: RUN 1: CBH, MTA, SHA, MCG, MDN, MPD, MFE, MAI. RUN 2: CBH, MTA, SHA, MCG, MBN, MDM, MRD, MTD.
HARDWARE USED: MAI: TWO 0.5 INCH STANDOFFS. MFE: ONE 0.5 INCH STANDOFF. MDN: DUAL NEUTRON BOWSPRING. MPD: 8 INCH PROFILE PLATE. MDM: ONE CENTRALIZER. MRD: FOUR 0.5 INCH STANDOFFS. MTD: THREE 0.5 INCH STANDOFFS AND ONE CENTRALIZER.
2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY. ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.
TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = XXXX CU FT

STRAIGHT HOLE VOLUMETRY FROM TD TO SURFACE CASING = XXXX CU.FT.
ANNULAR HOLE VOLUME WITH 5.5 INCH PRODUCTION CASING FROM TD TO SURFACE CASING = XXXX CU.FT.

FIELD TICKET NUMBER: 7055-137049030

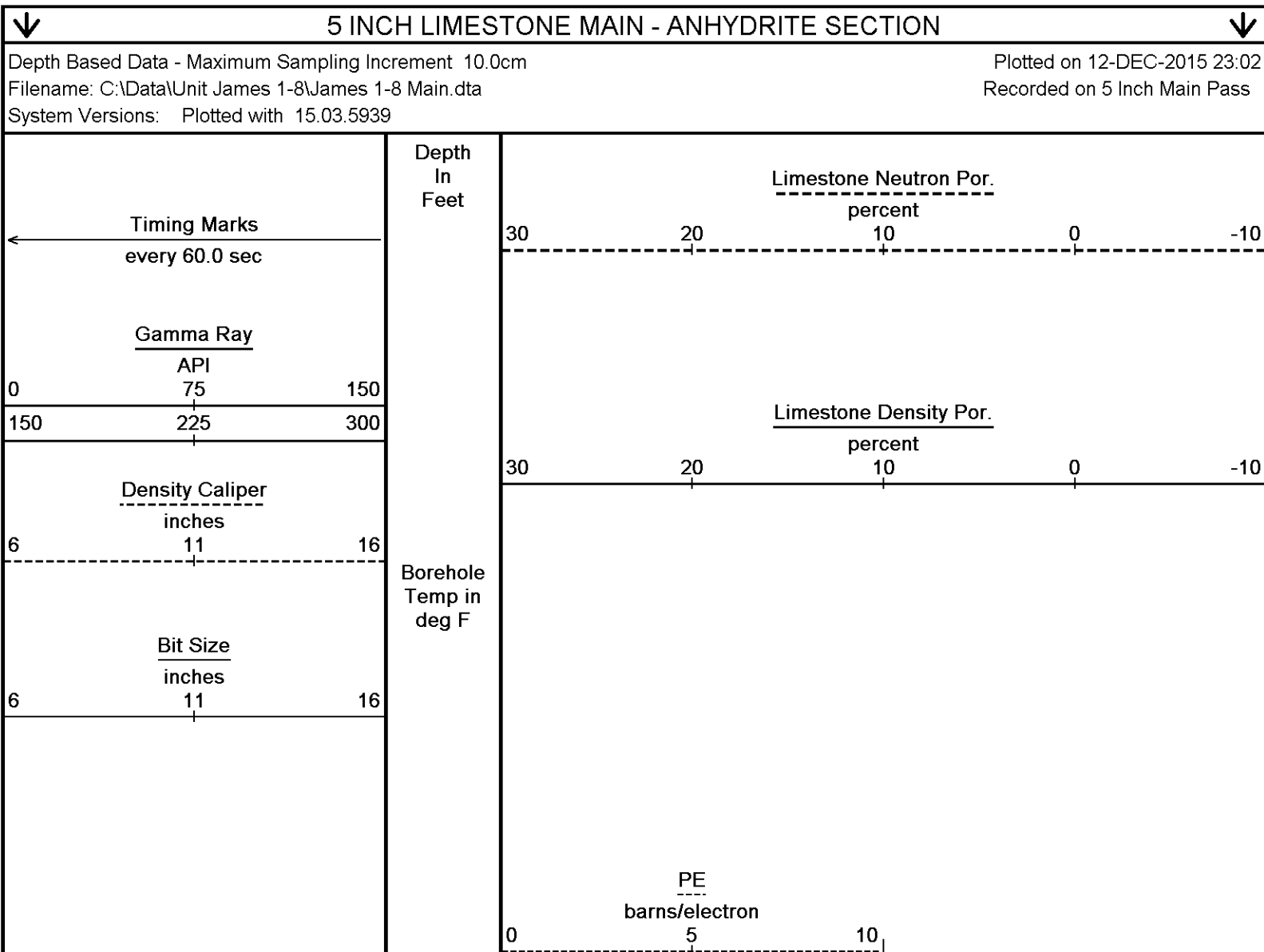
RIG: EXTREME DRILLING, RIG #11

OPERATOR(S): R. BRADSHAW, C. COUSINS

MUD PROPERTIES:
CHLORIDES: 1400 MG/L
LCM: 11%

HOLE WASHOUTS AND RUGOSITY WILL AFFECT LOG QUALITY AND REPEATABILITY.

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.



DST Uphole Tension
pounds
5000 0

Replay
Scale
1:240

420

← BIT

GRGC

NPRL

450

Casing
Type

34

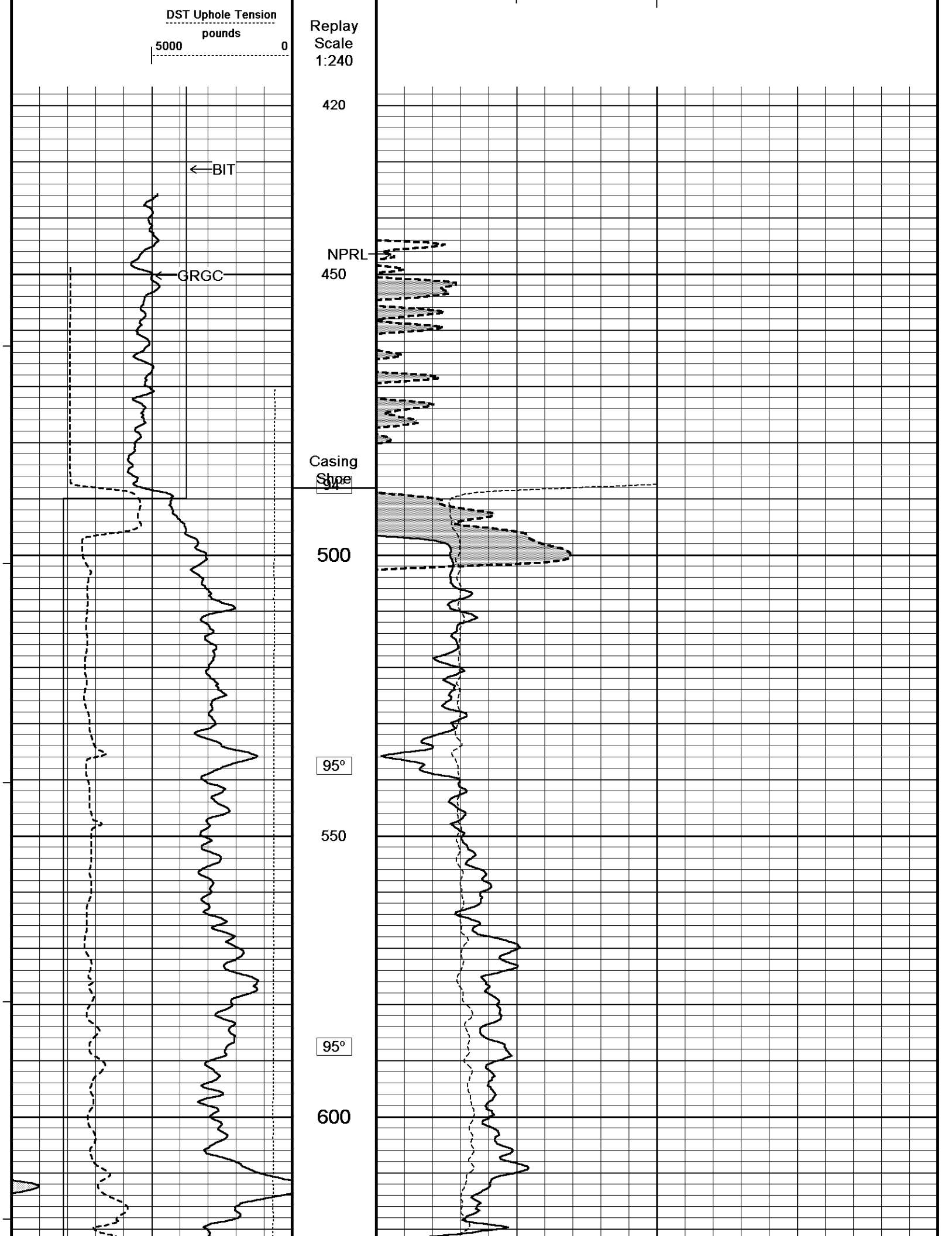
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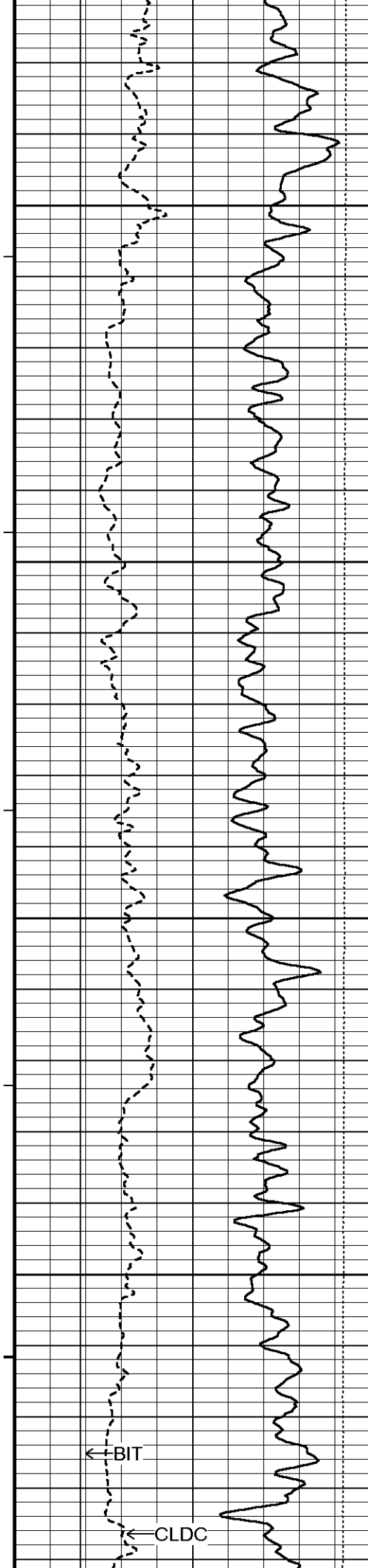
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550

95°

600





96°

650

97°

700

98°

750

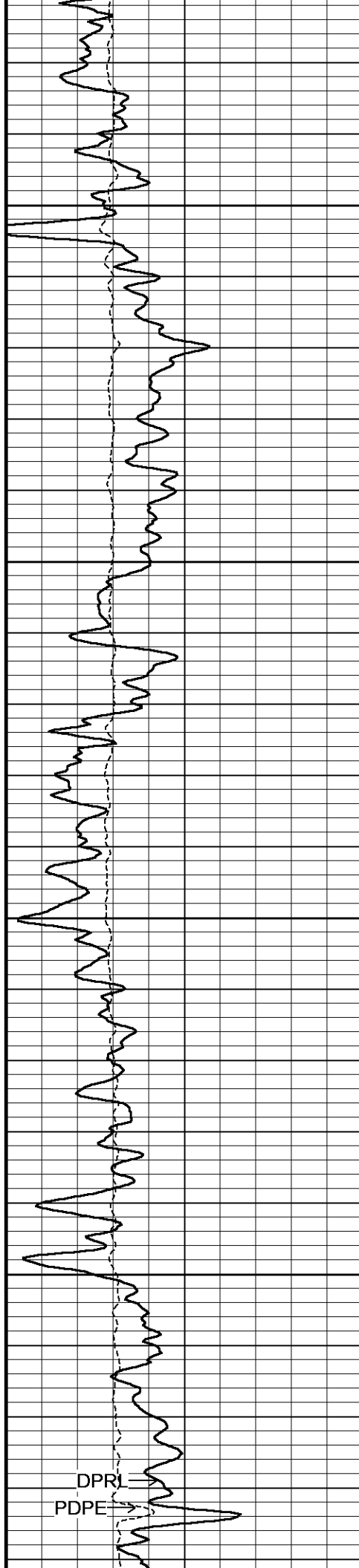
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800

98°

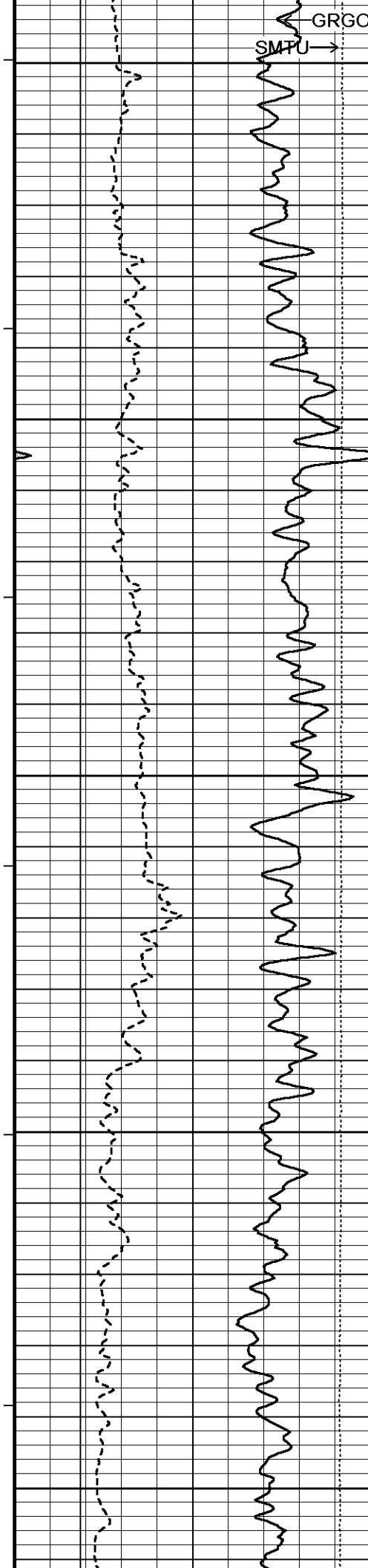
← BIT

← CLDC



DPRI

PDPE →



850

99°

900

100°

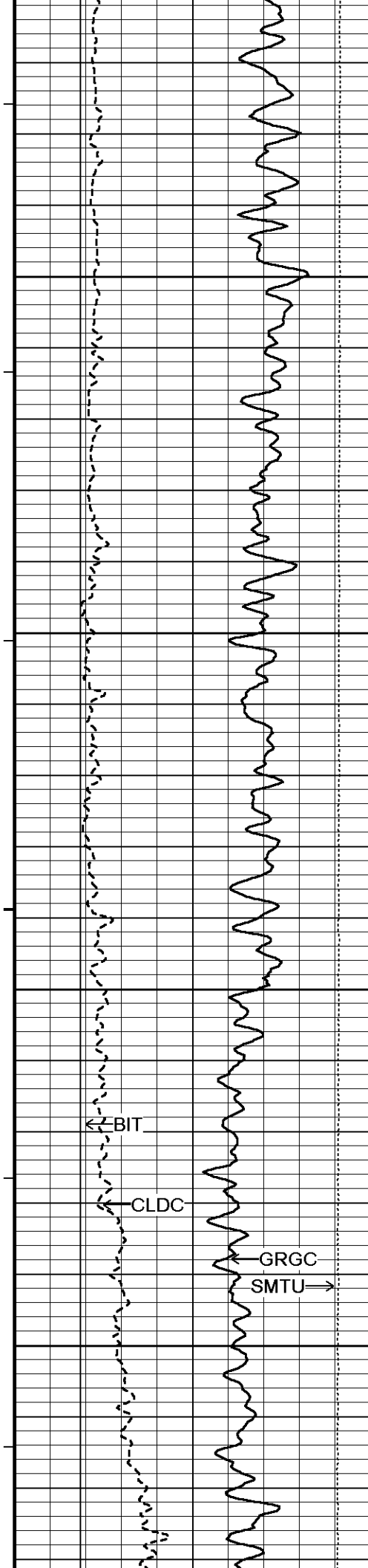
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101°

1000

101°

1050



102°

1100

102°

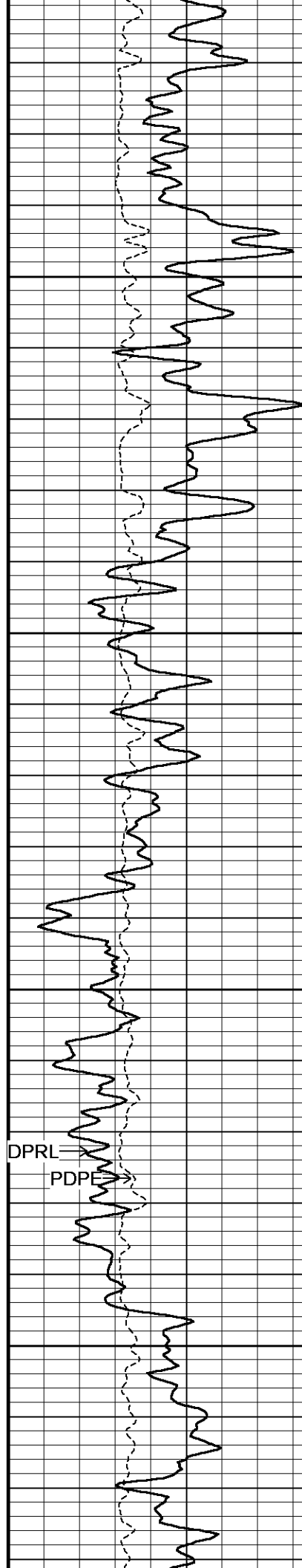
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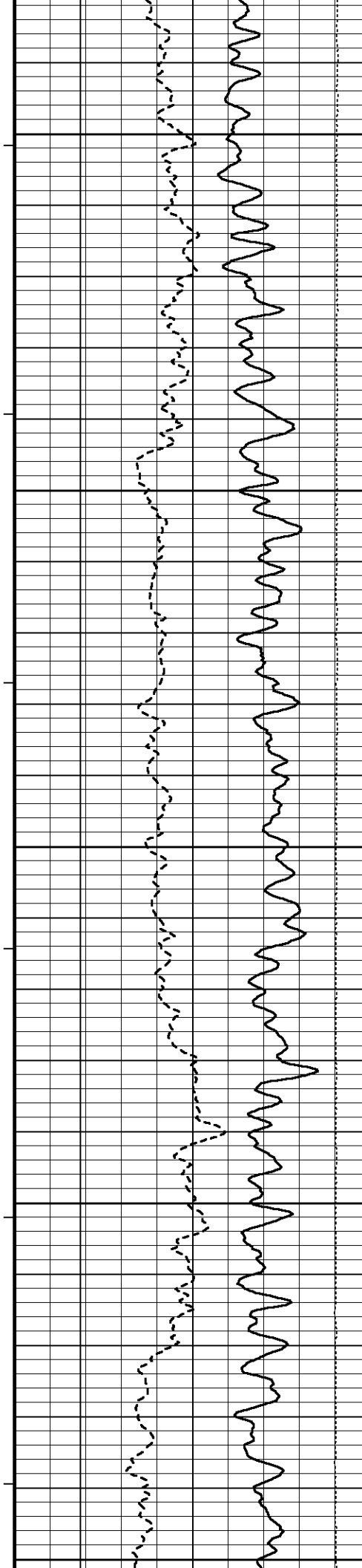
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1200

104°

1250





104°

1300

105°

1350

105°

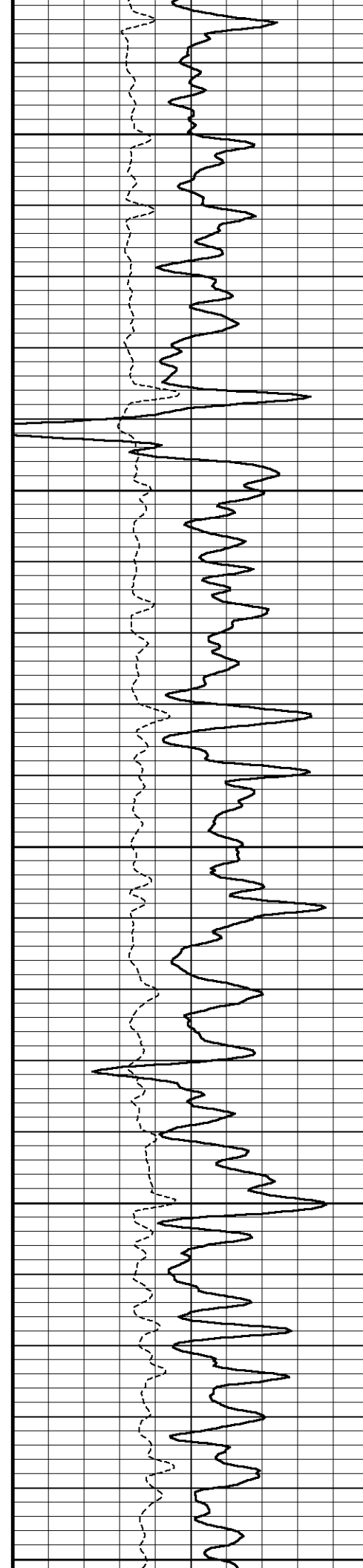
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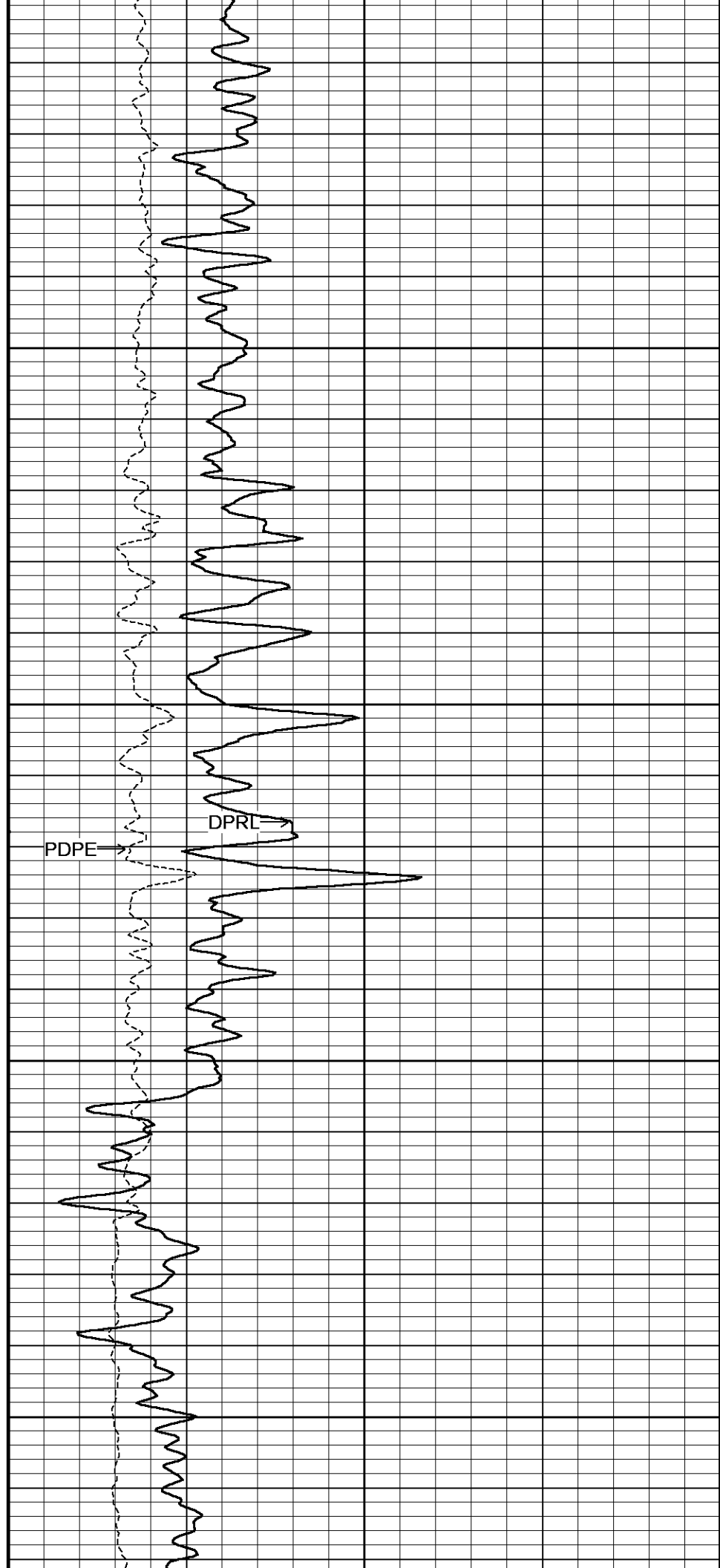
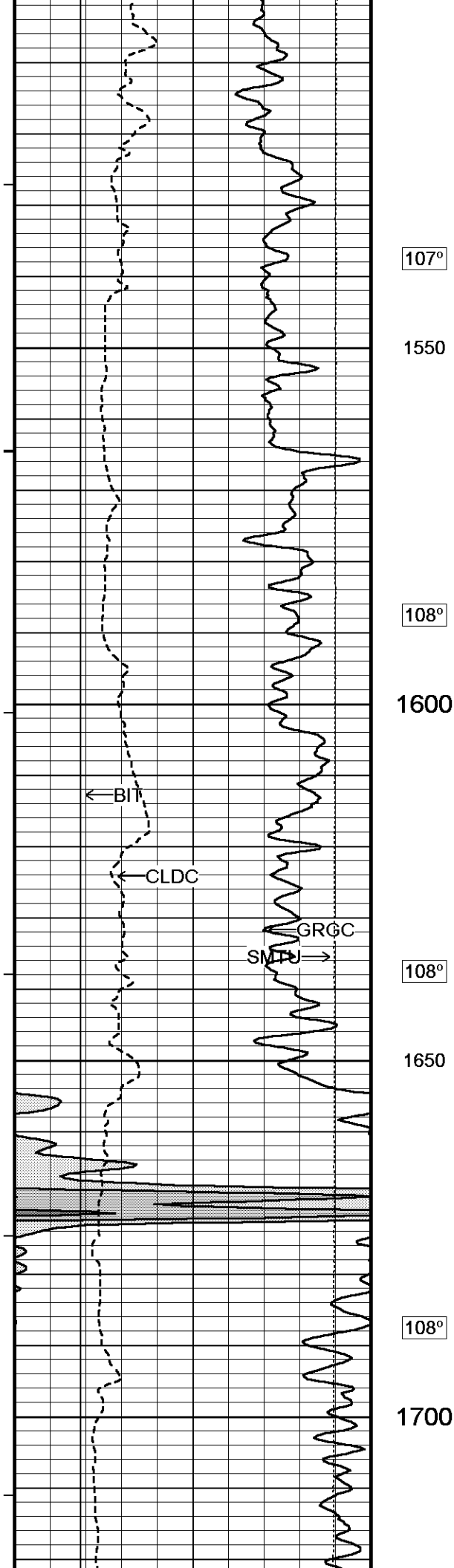
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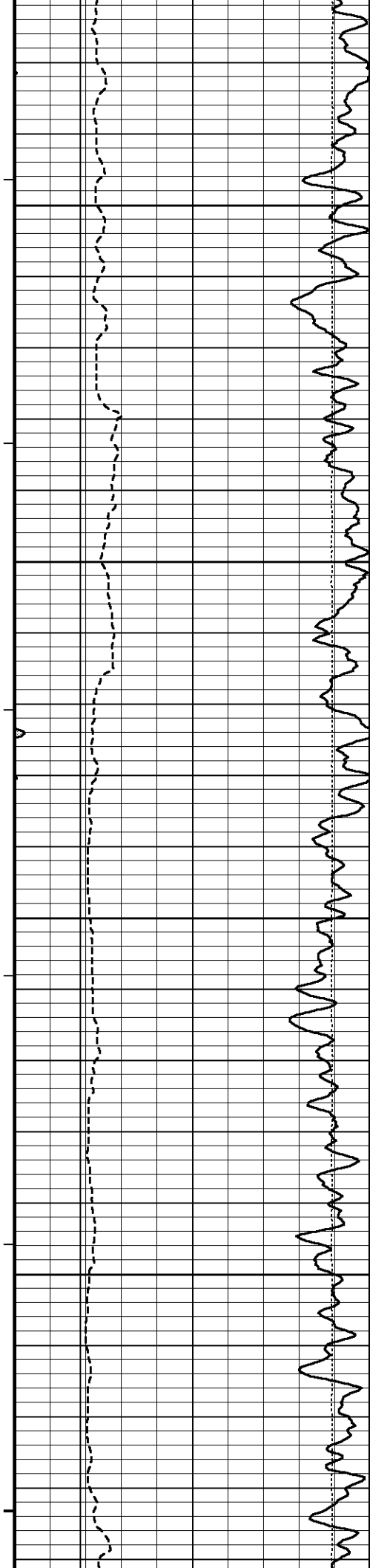
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107°

1500







109°

1750

109°

1800

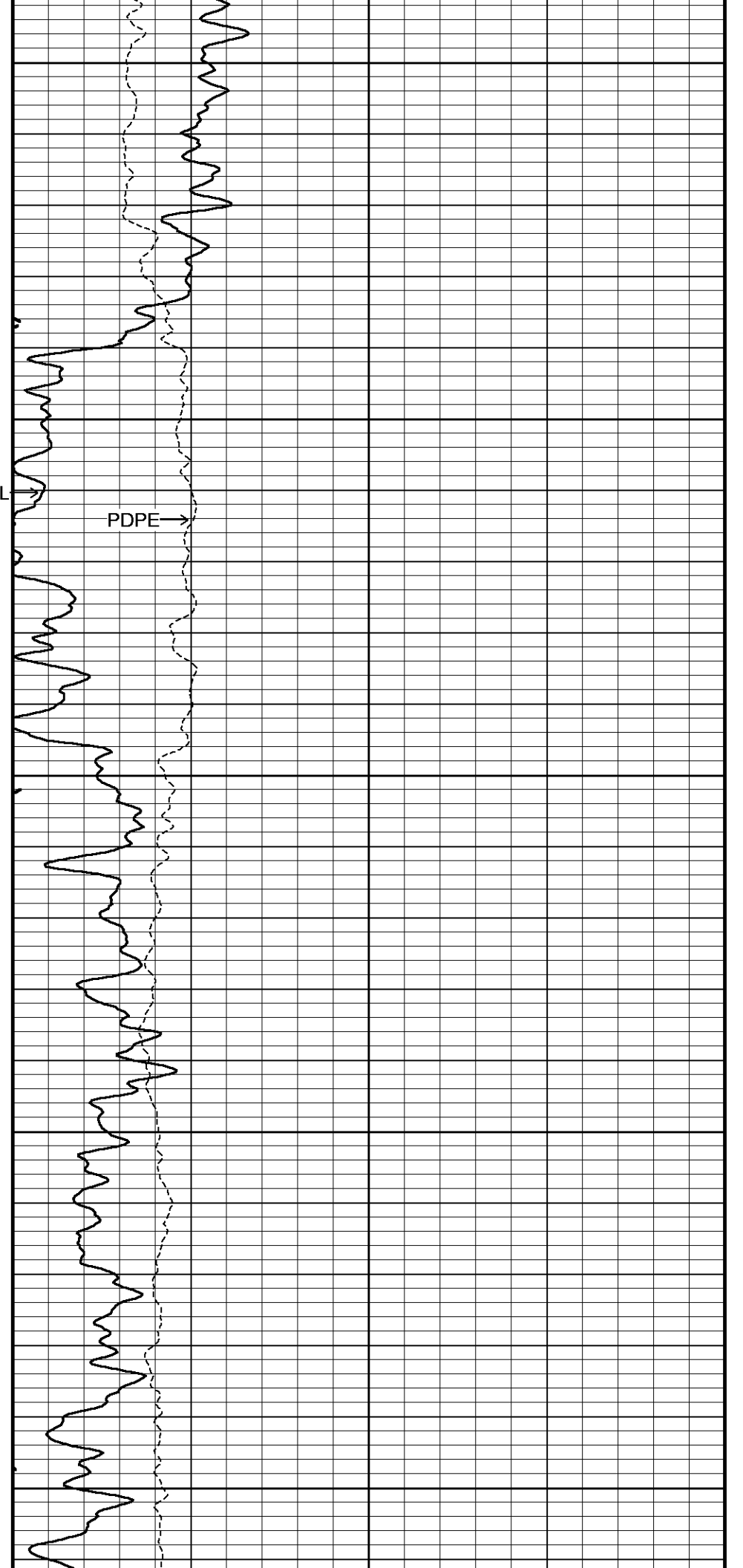
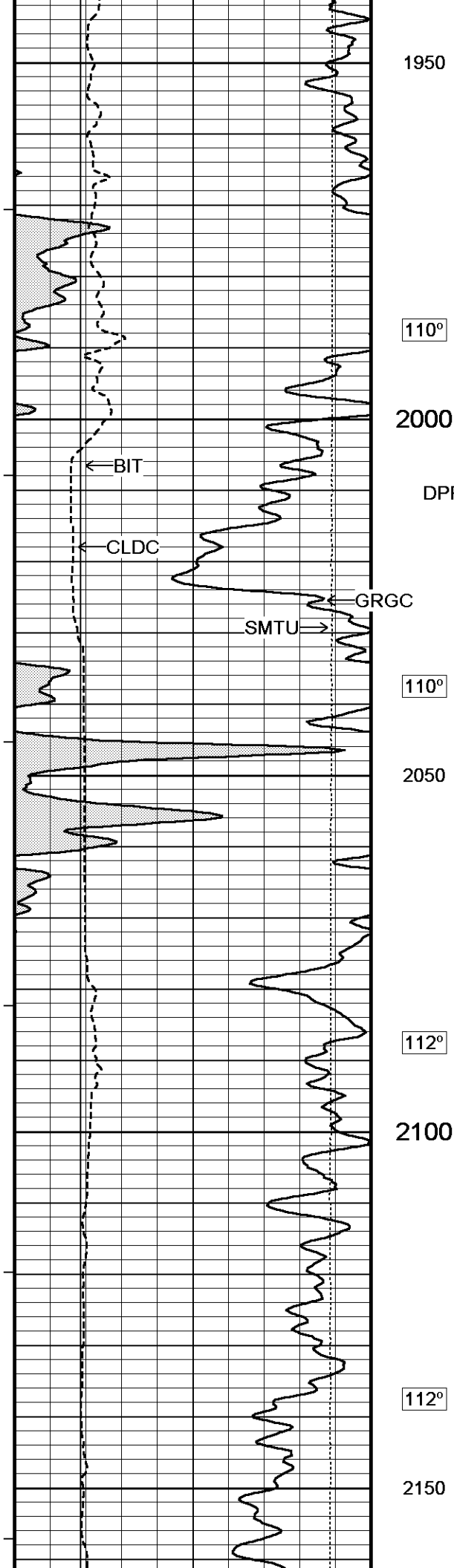
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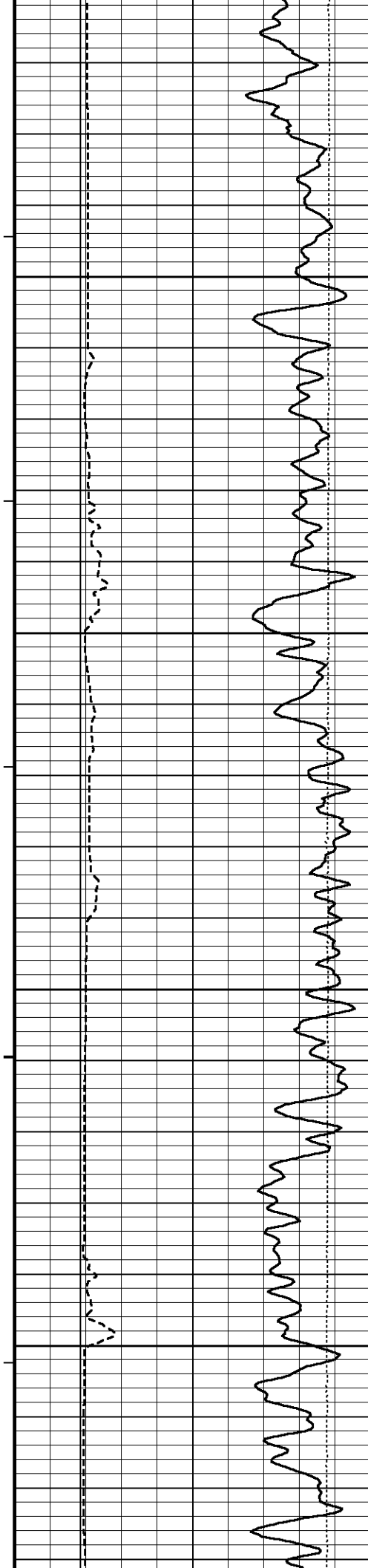
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110°

1900

110°





113°

2200

113°

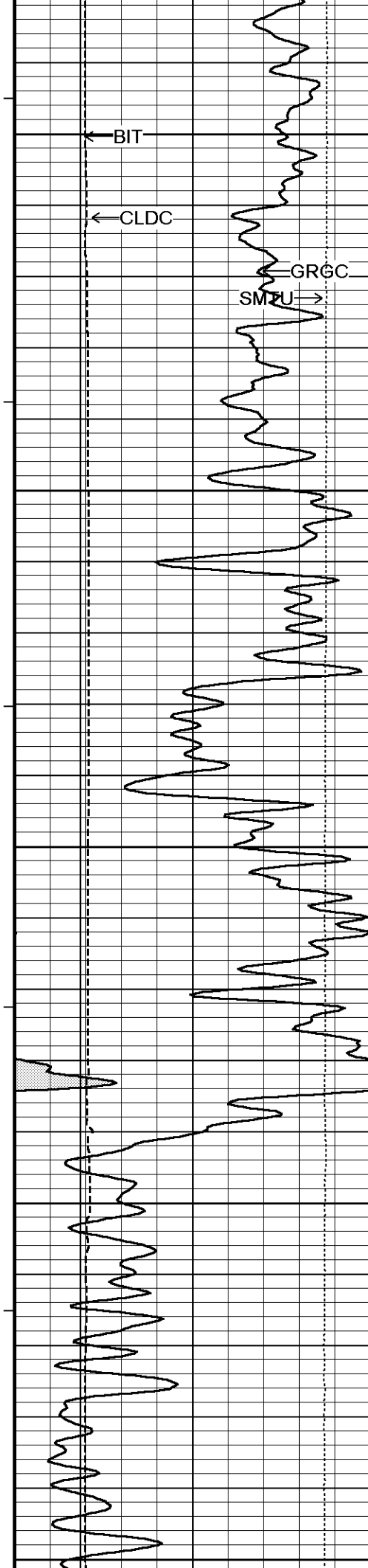
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114°

2300

115°

2350



116°

2400

117°

2450

117°

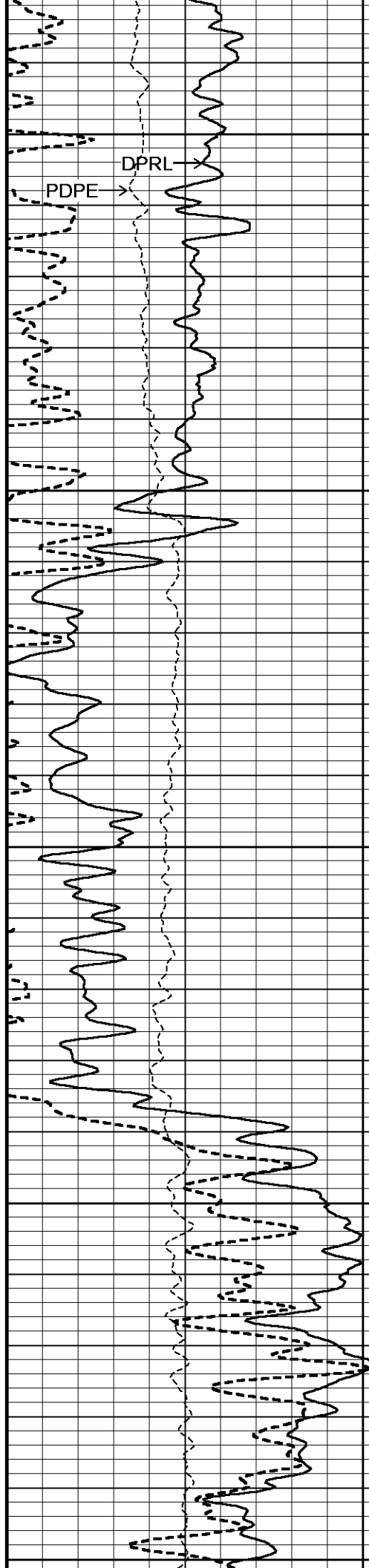
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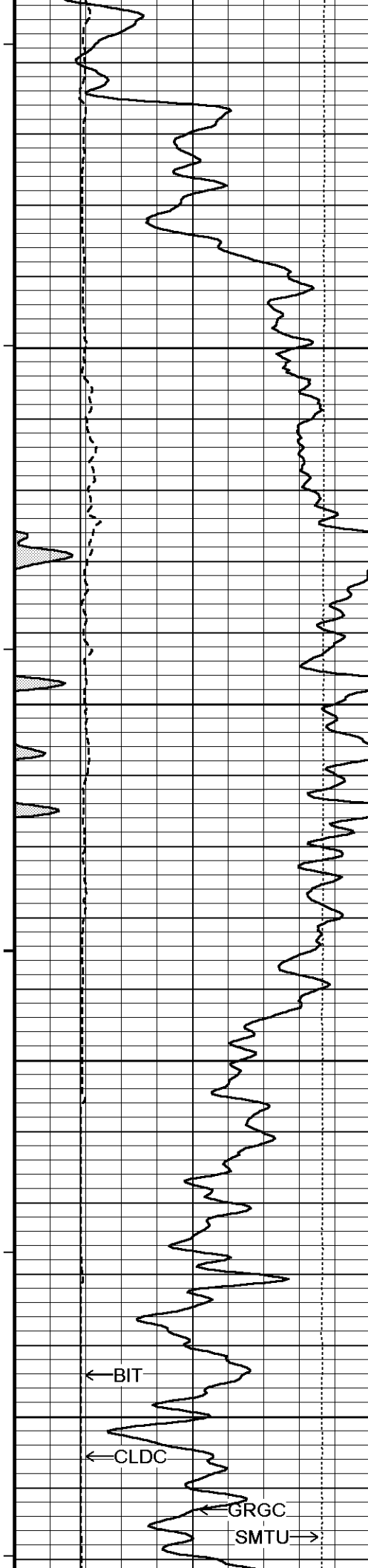
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2550

119°

2600





119°

2650

120°

2700

121°

2750

121°

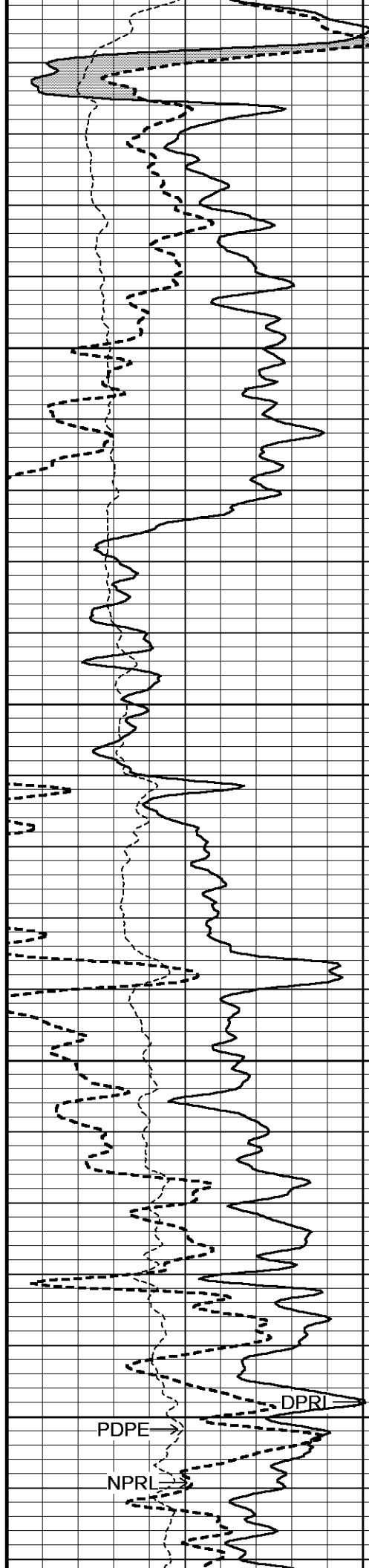
2800

← BIT

← CLDC

← GRGC

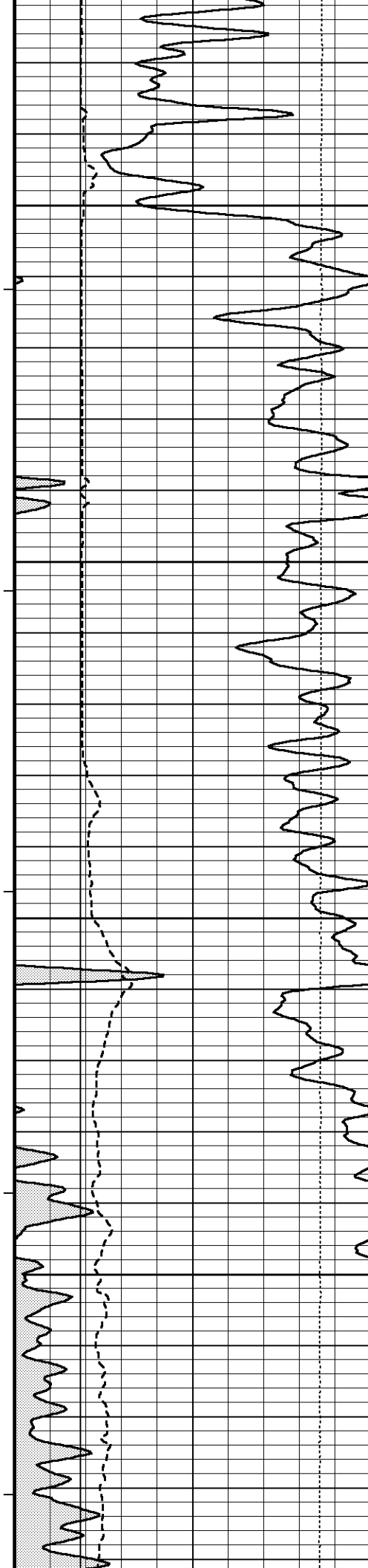
SMTU →



PDPE →

NPRI →

DPRI →



122°

2850

123°

2900

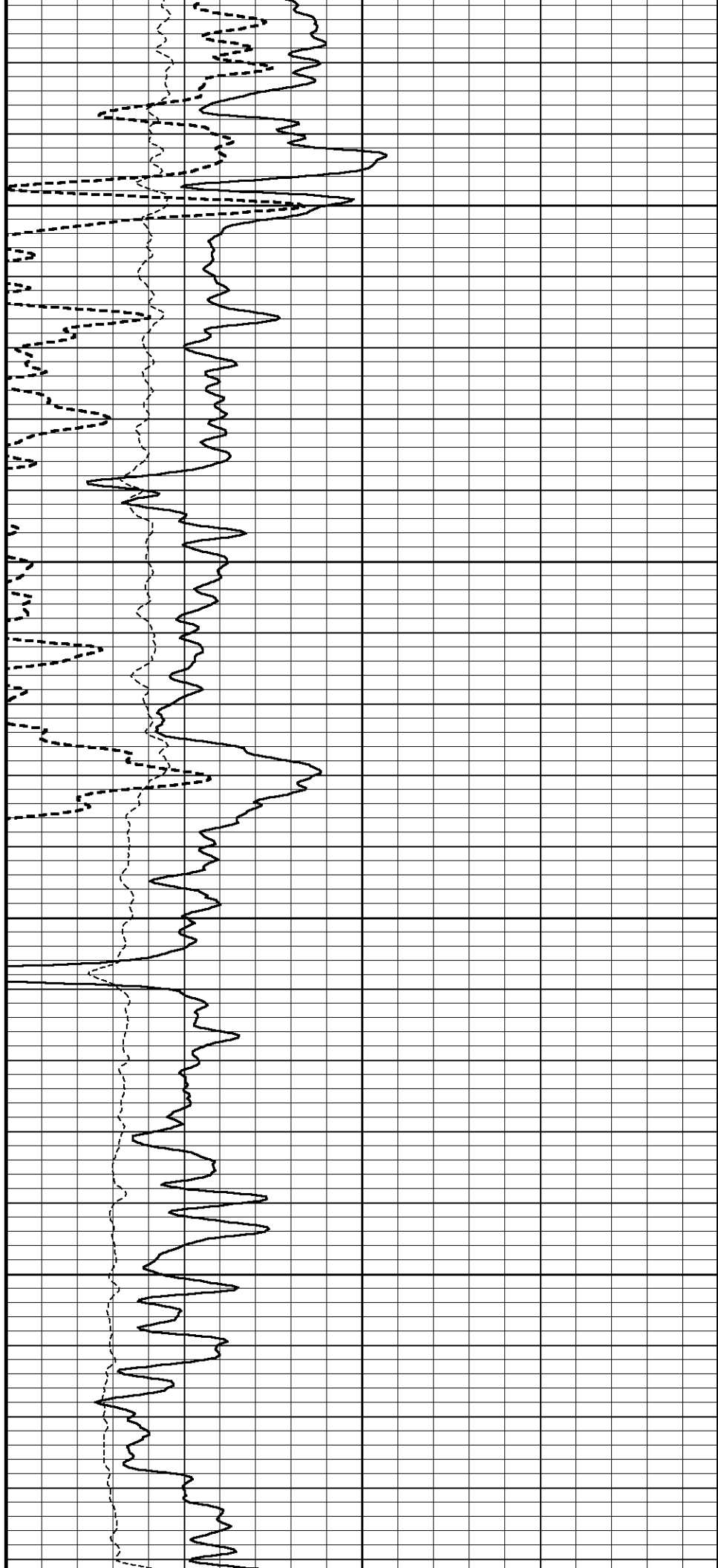
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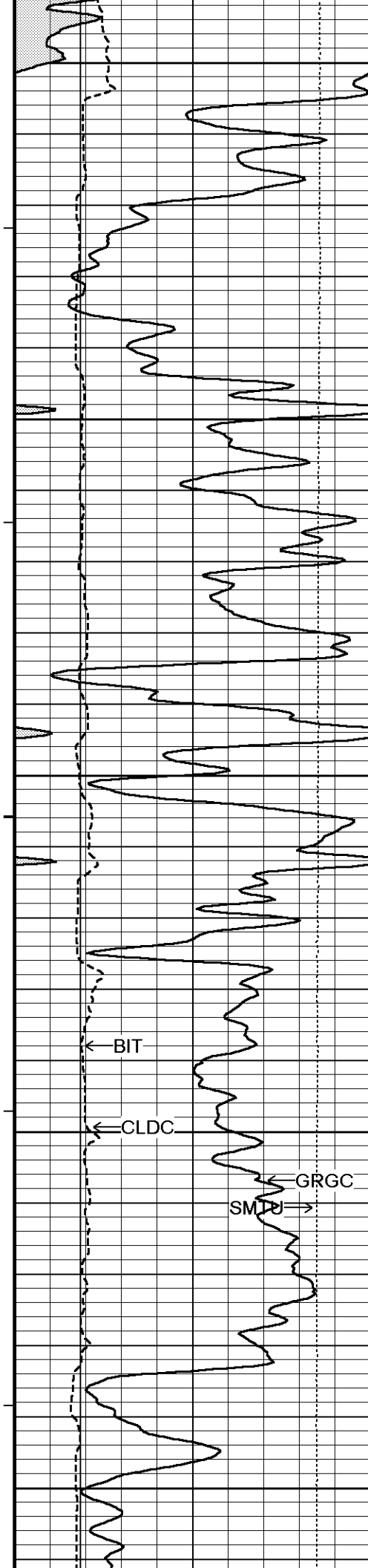
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124°

3000

124°





3050

125°

3100

125°

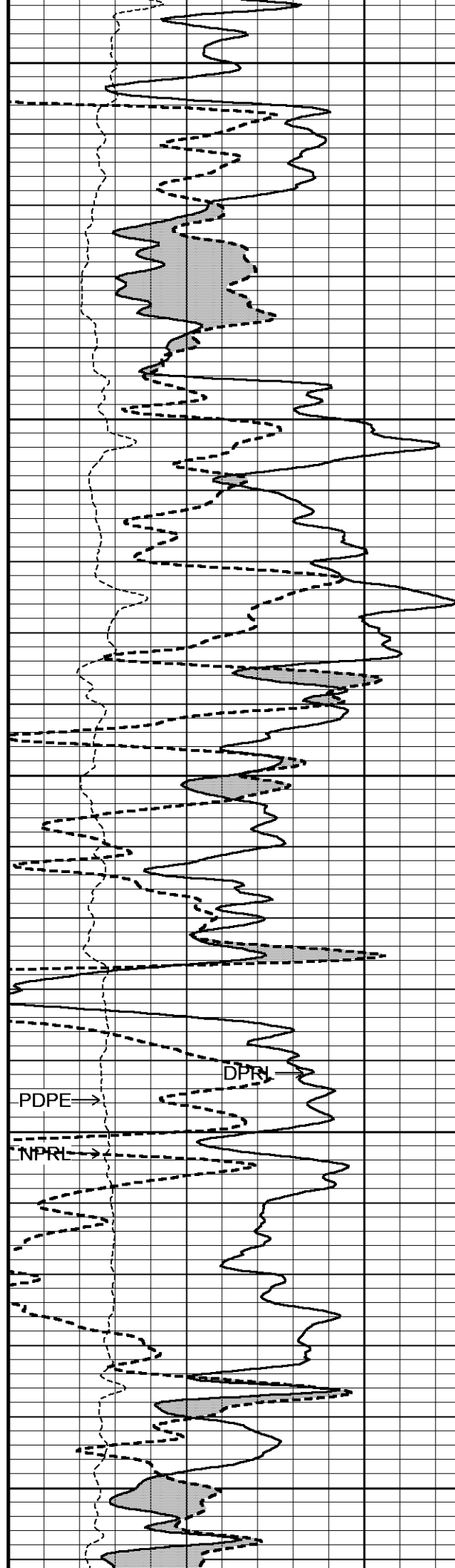
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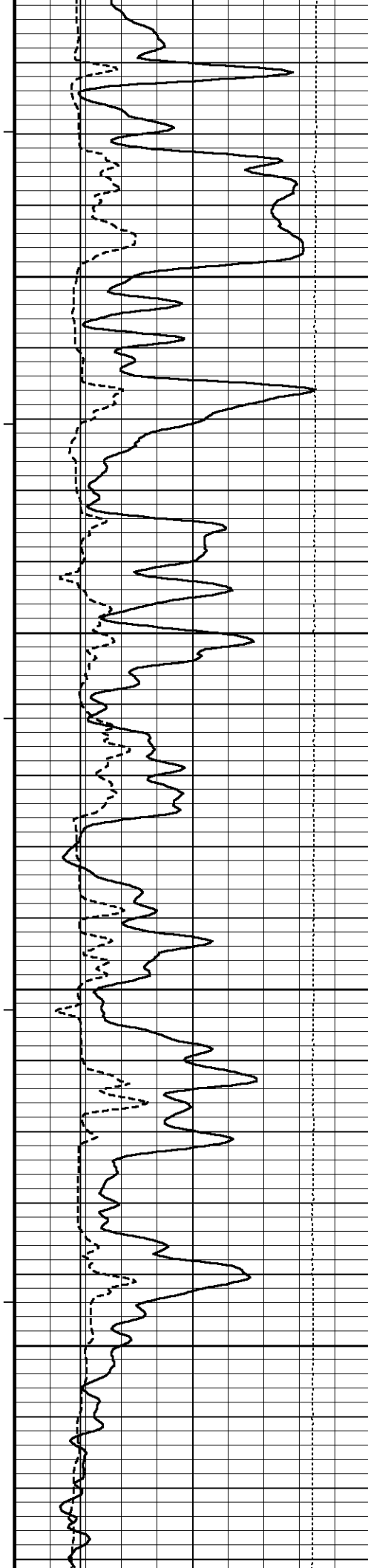
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3200

126°

3250





127°

3300

128°

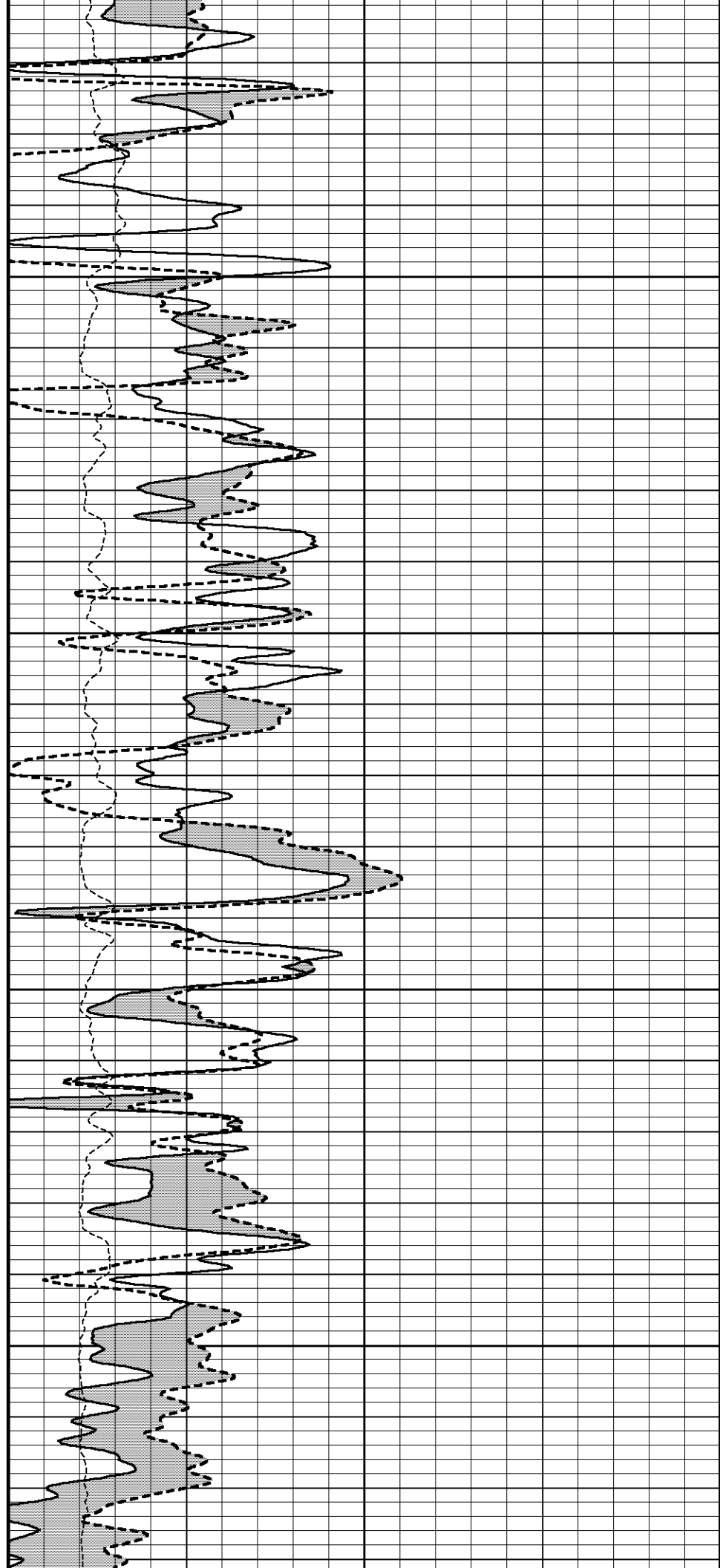
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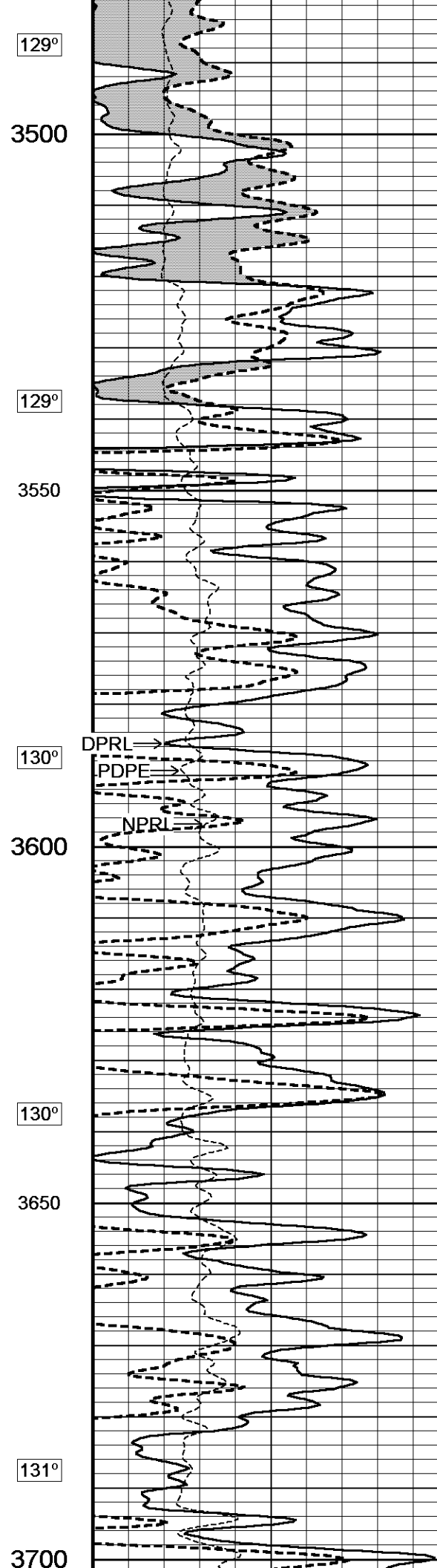
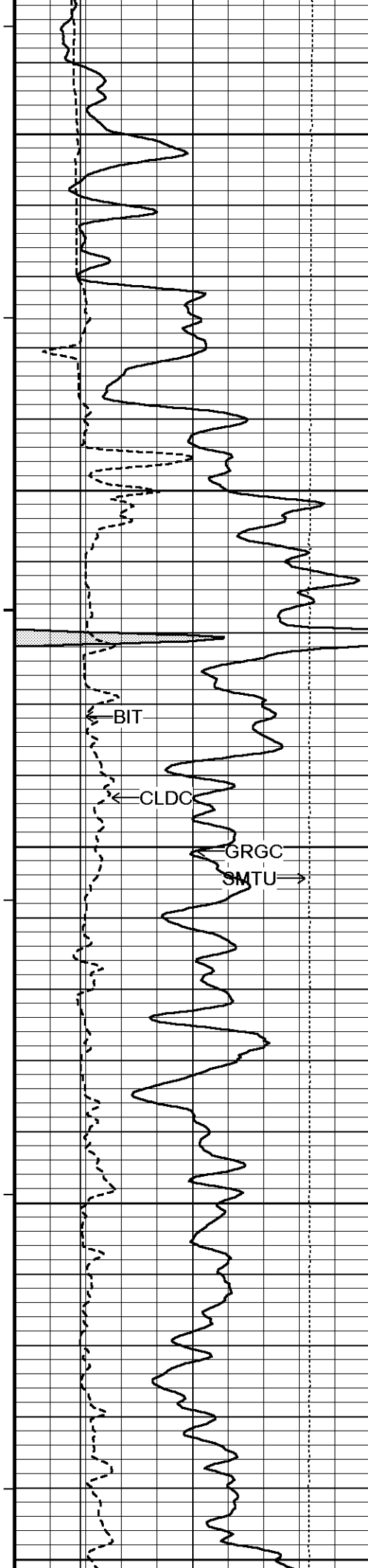
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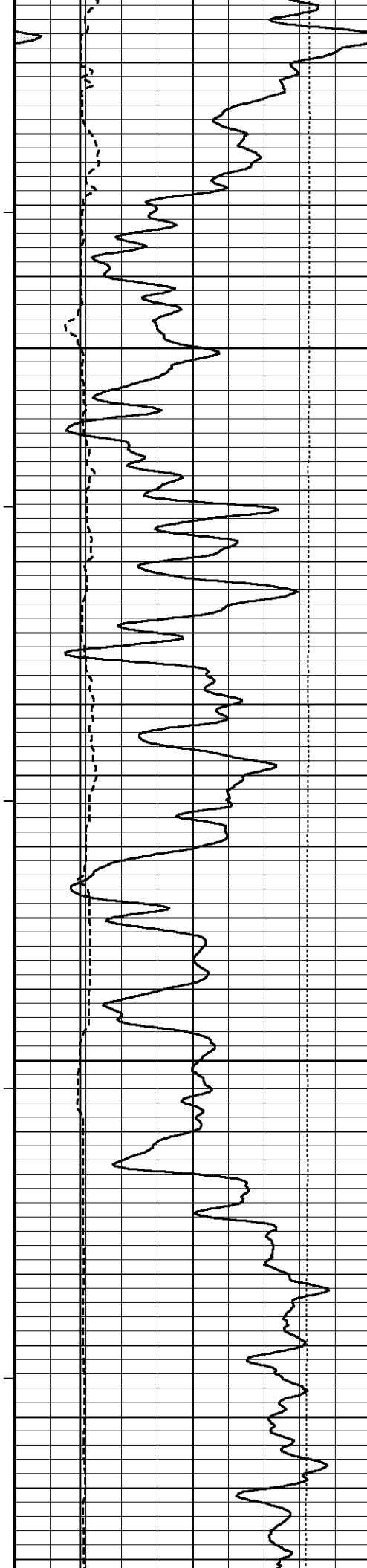
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129°

3450







132°

3750

133°

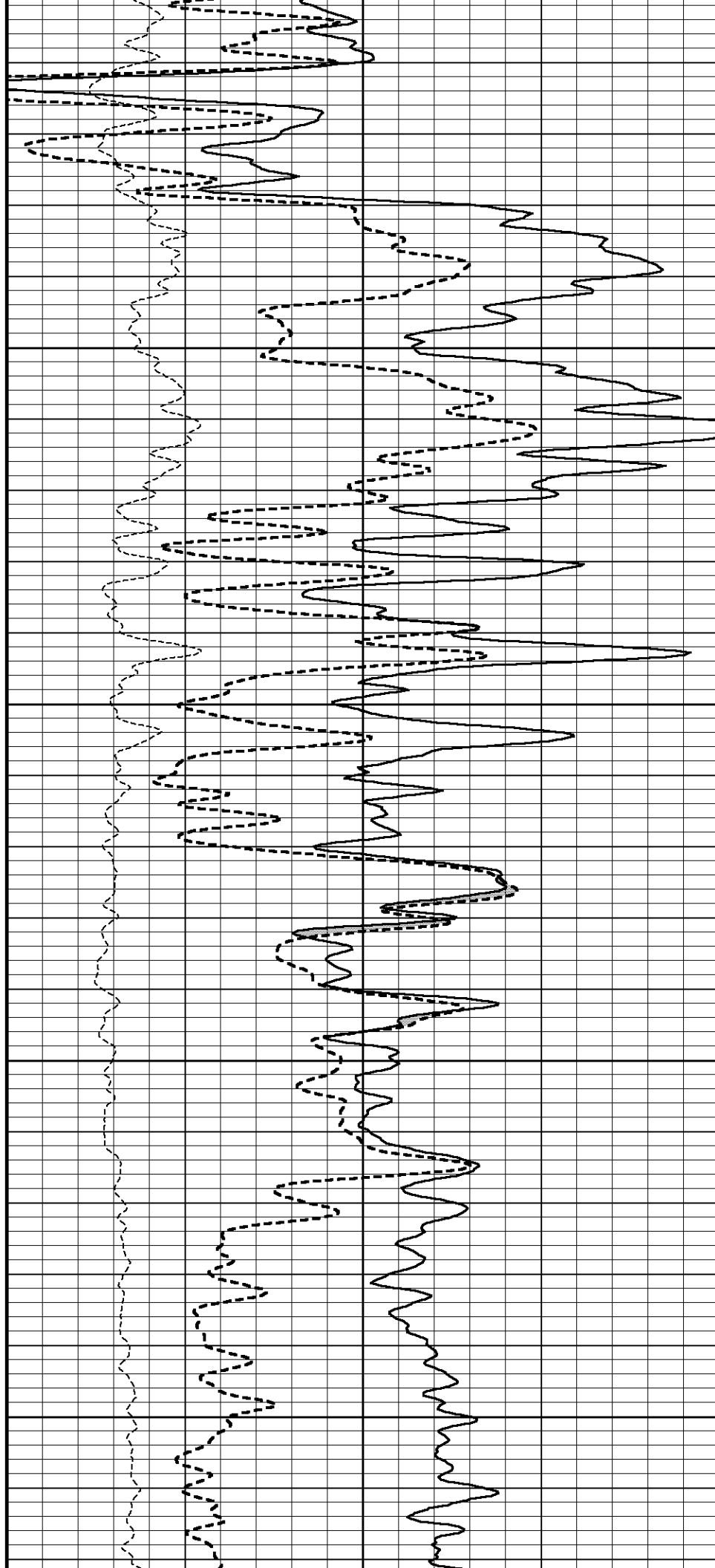
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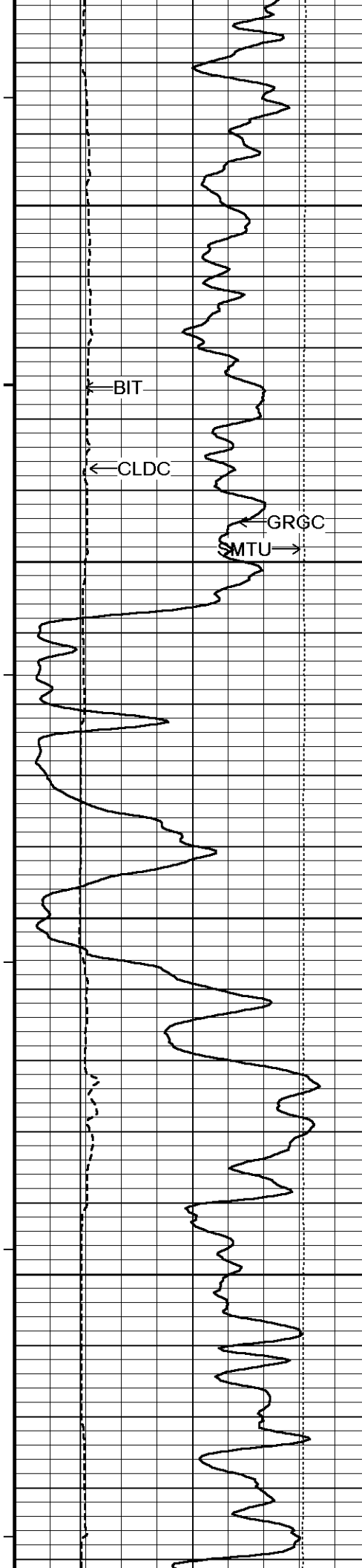
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3850

133°

3900





134°

3950

135°

4000

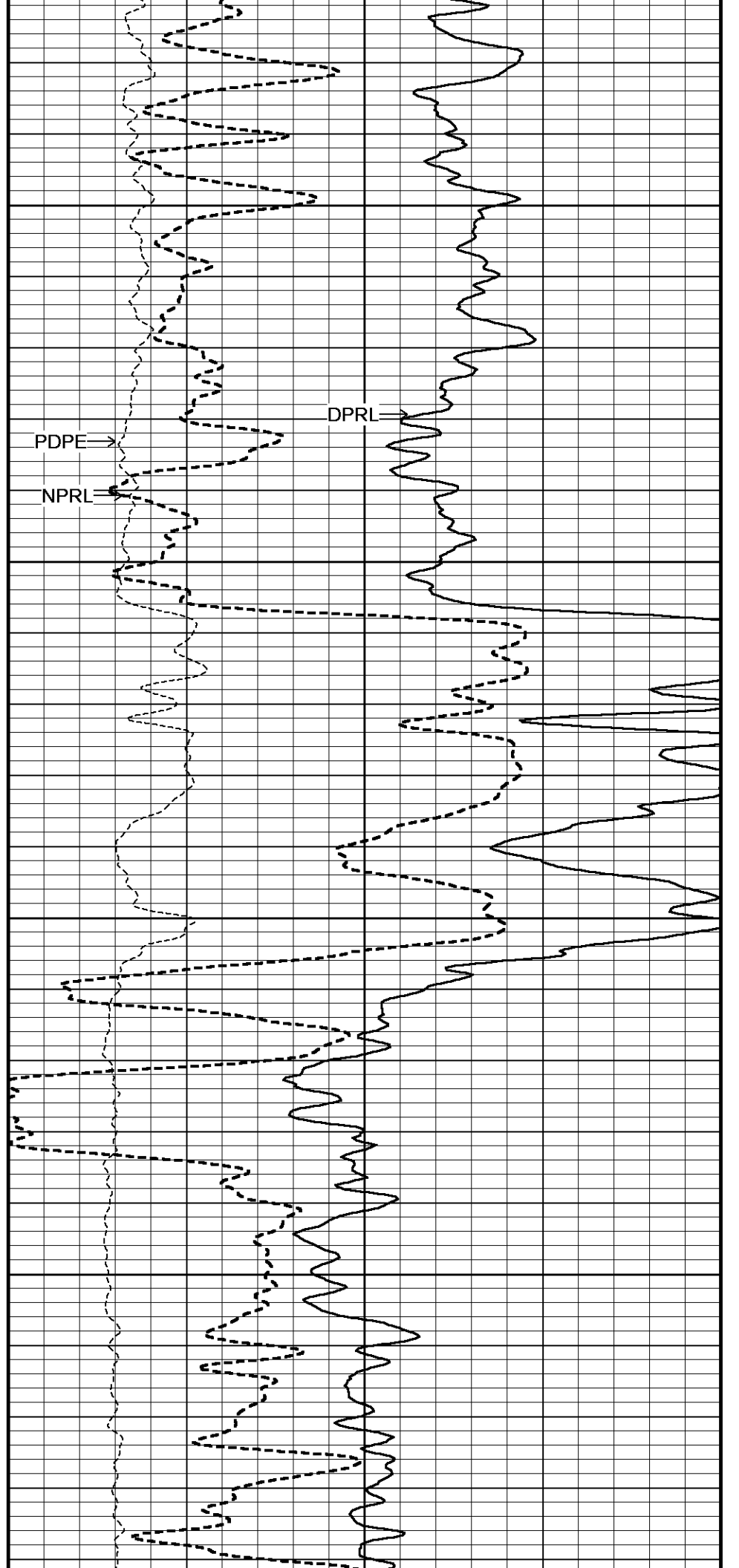
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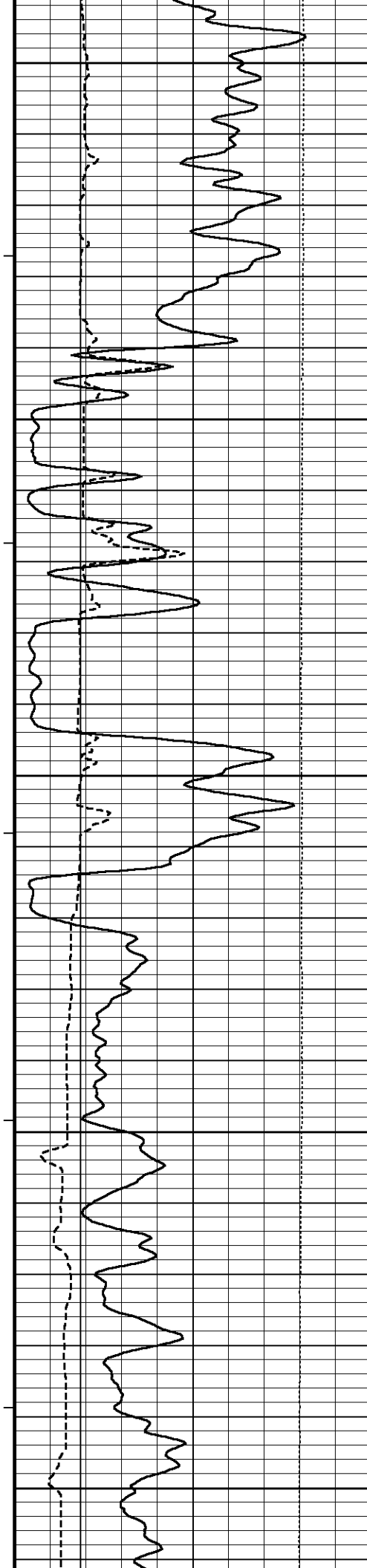
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135°

4100

136°





4150

136°

4200

137°

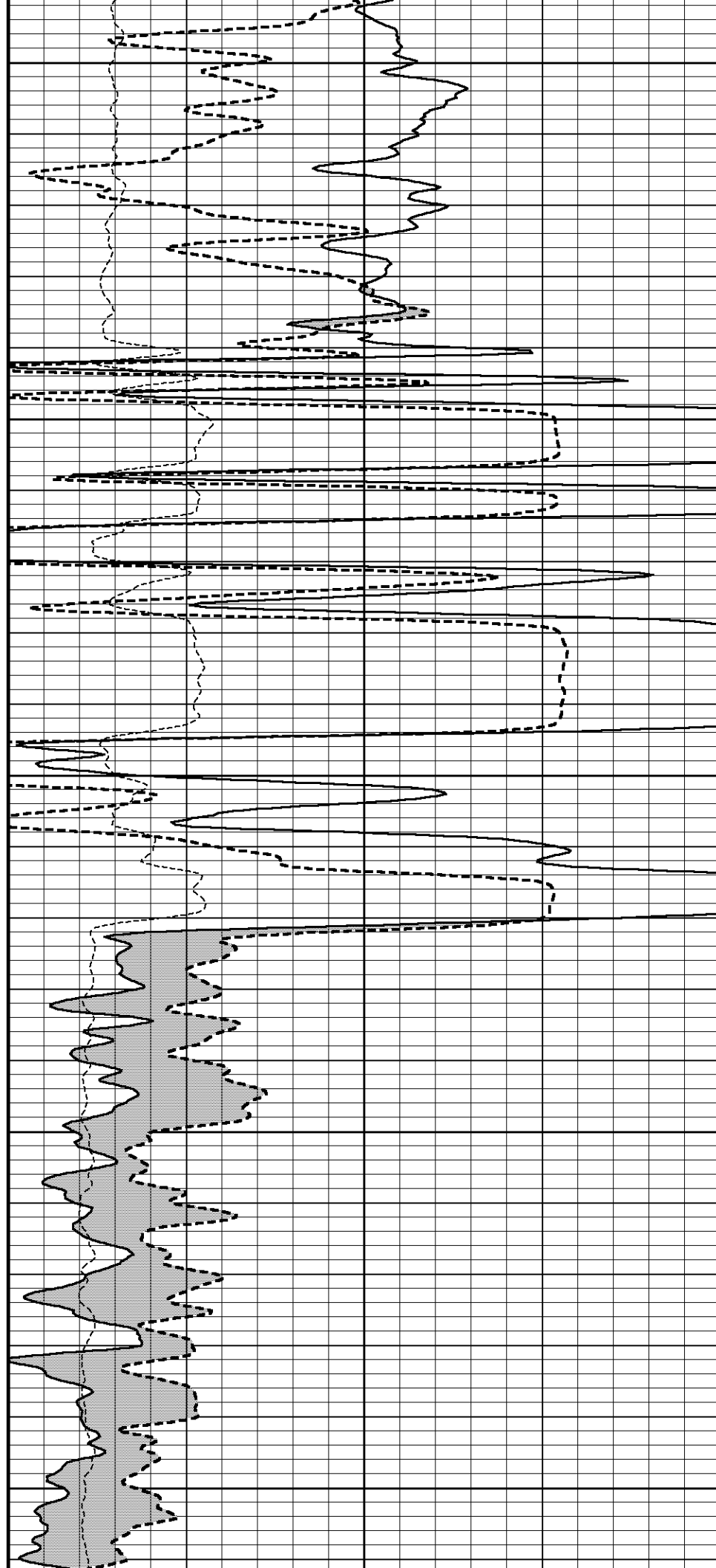
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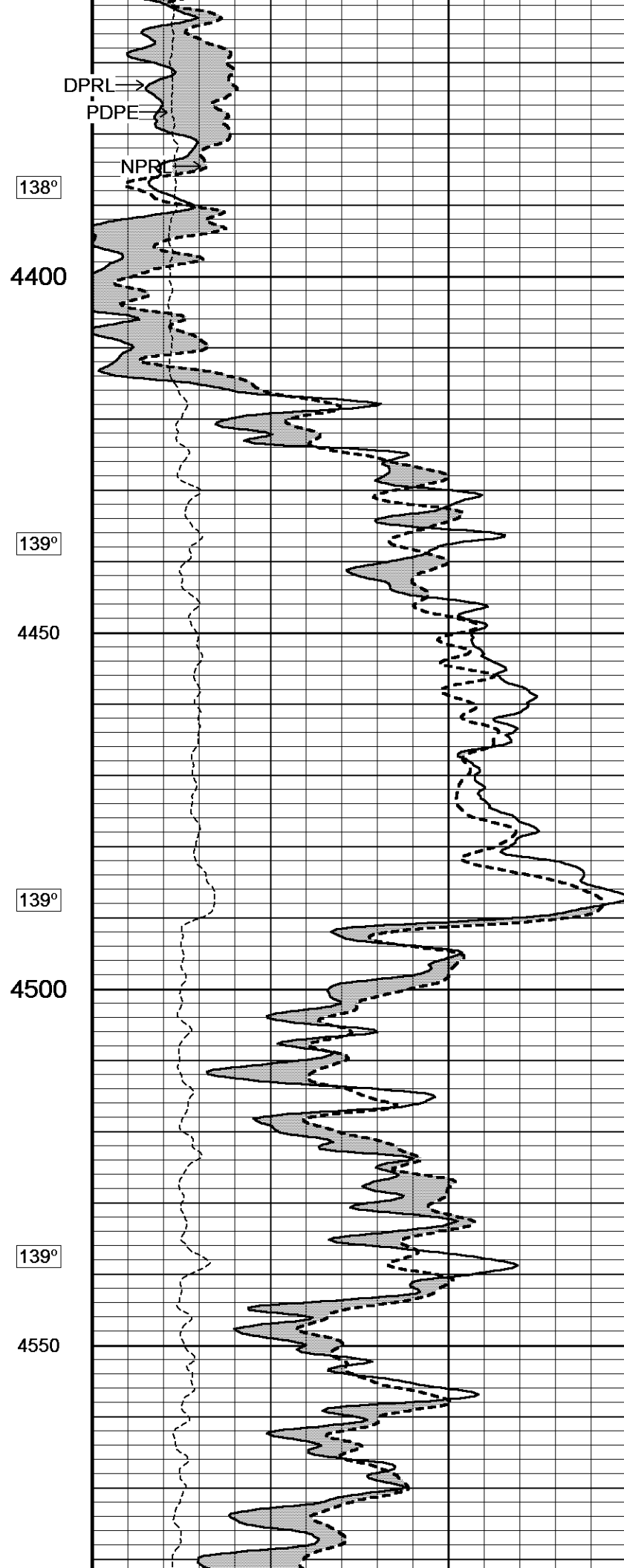
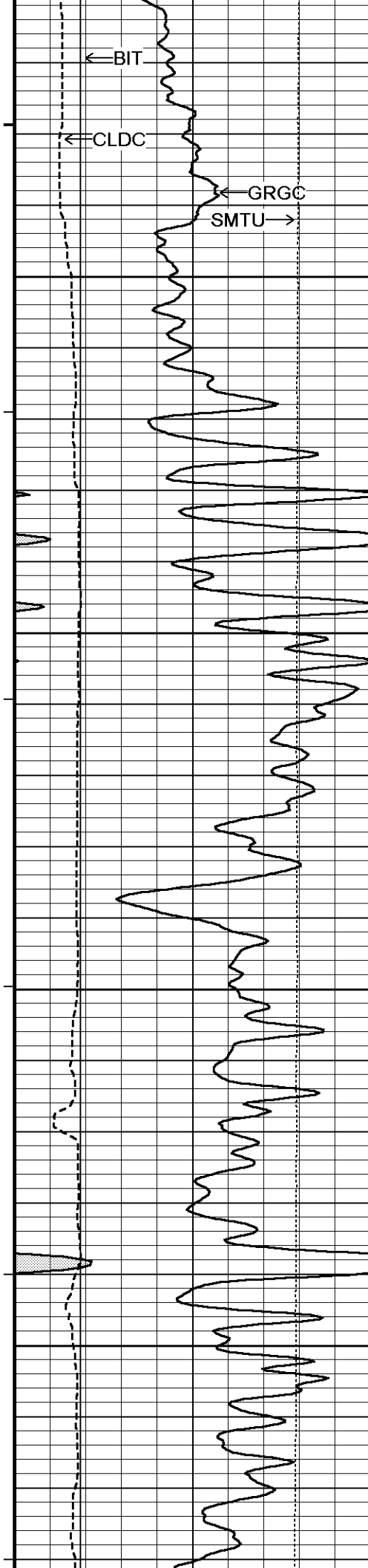
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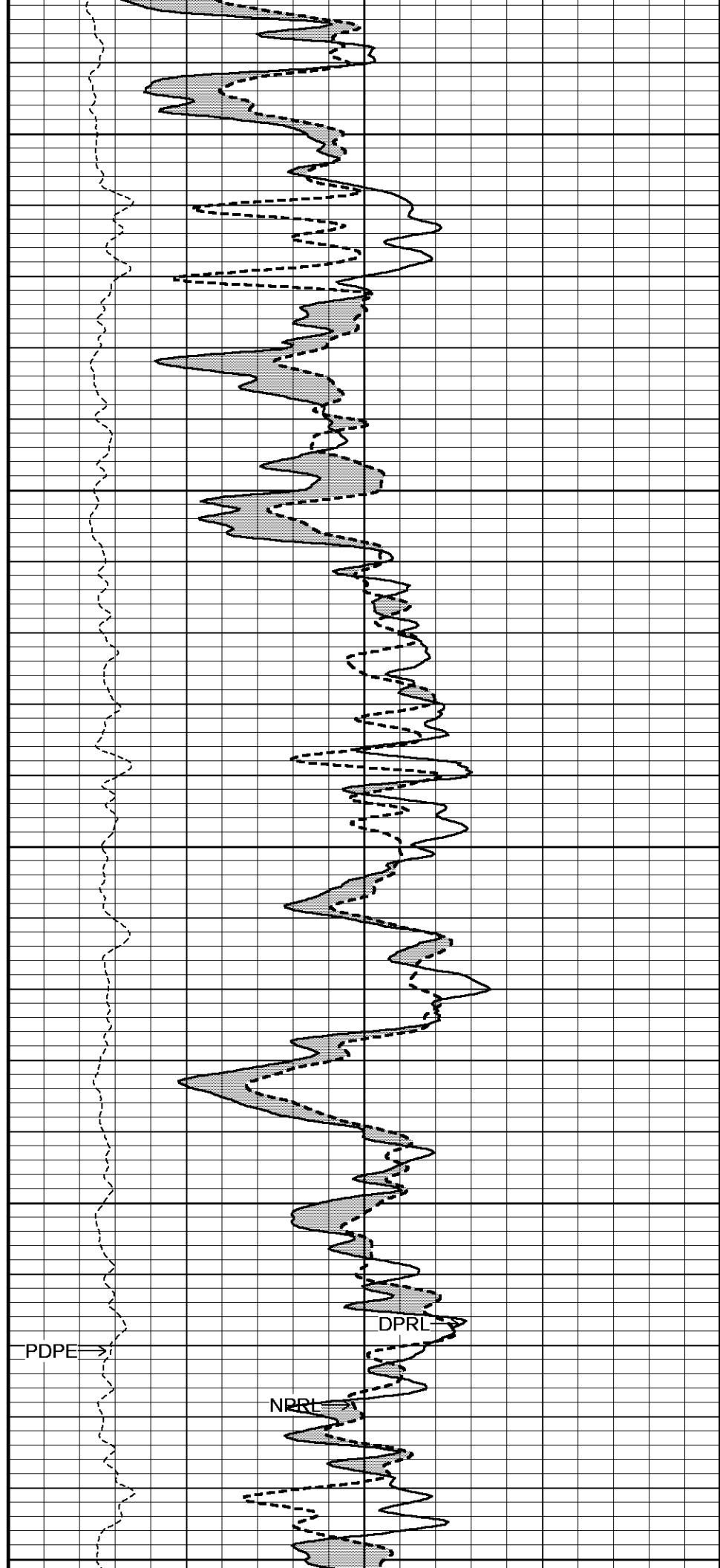
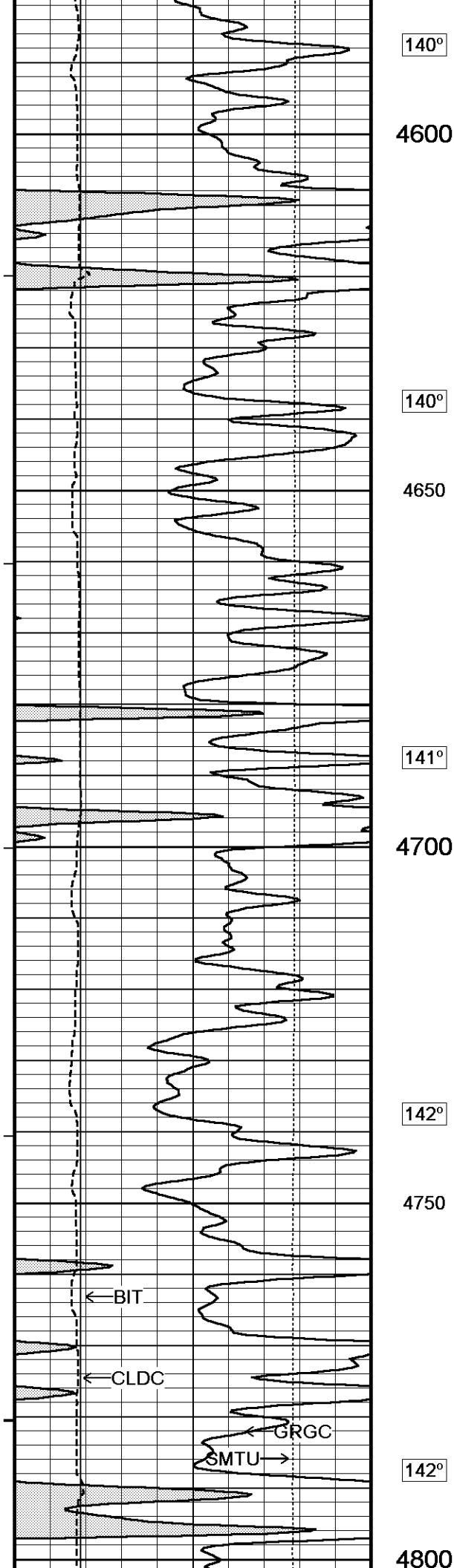
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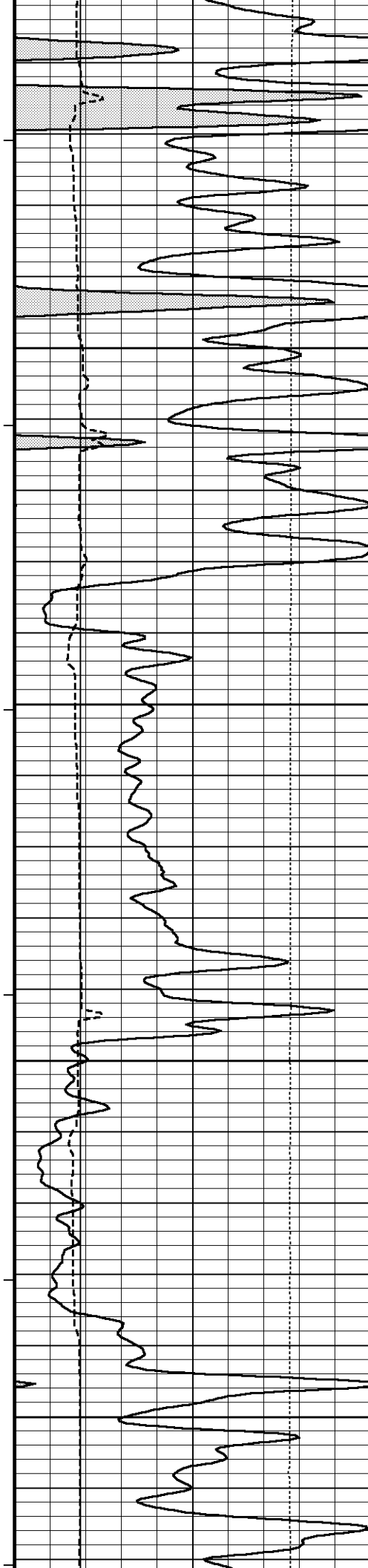
138°

4350









142°

4850

143°

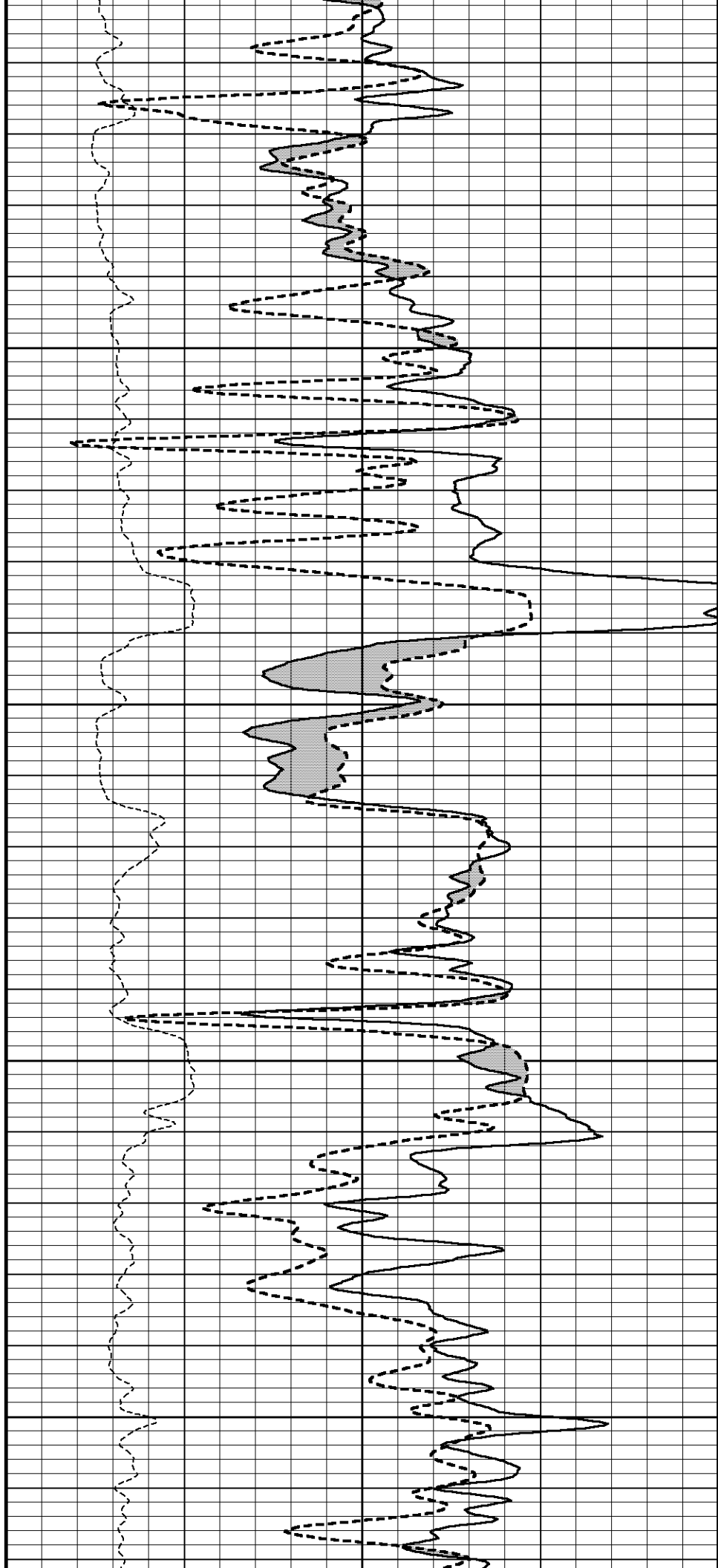
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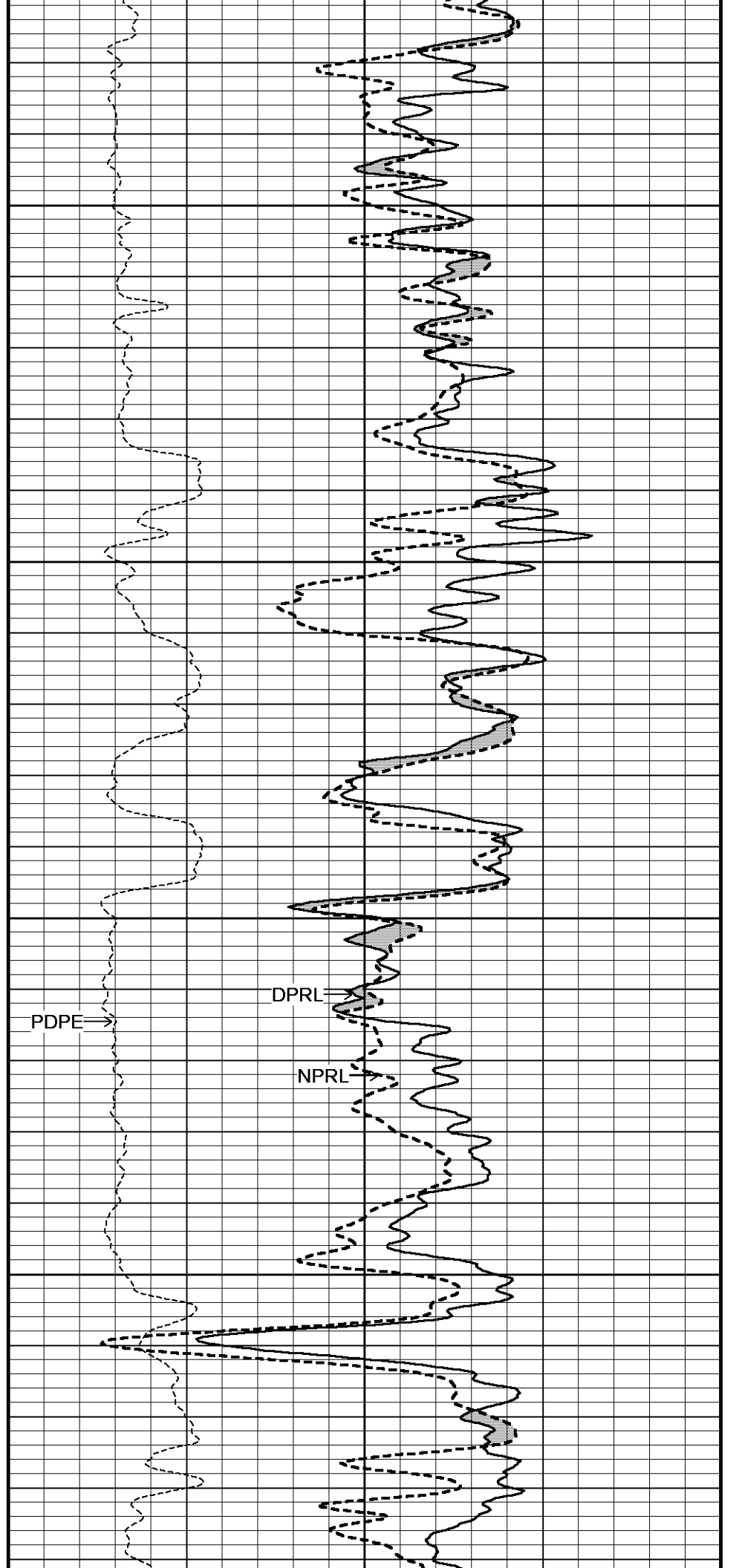
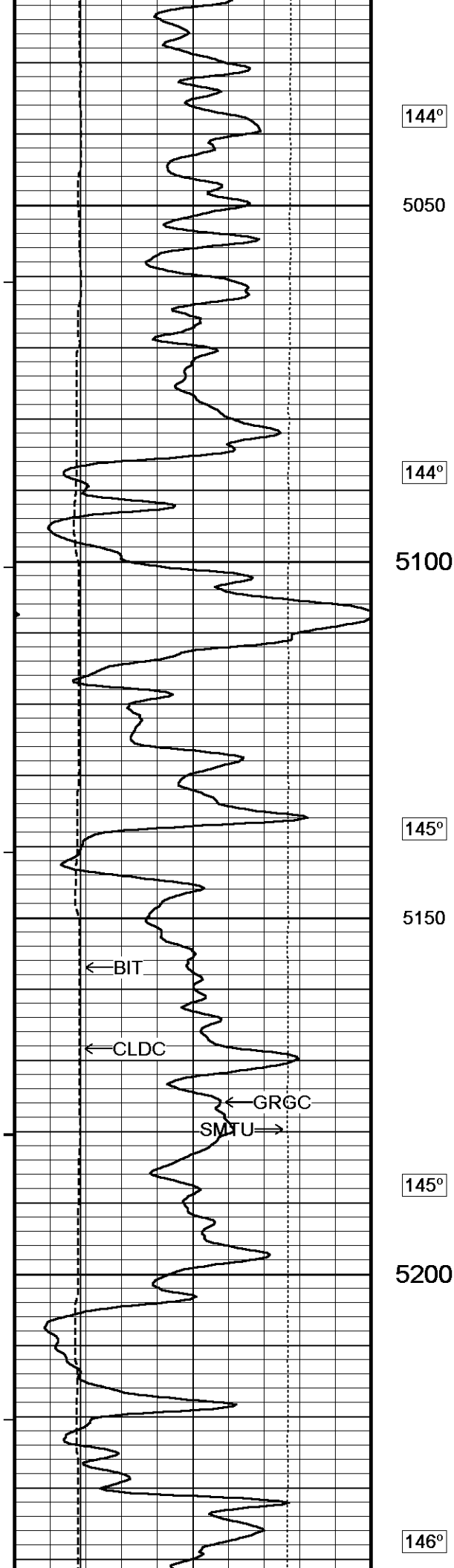
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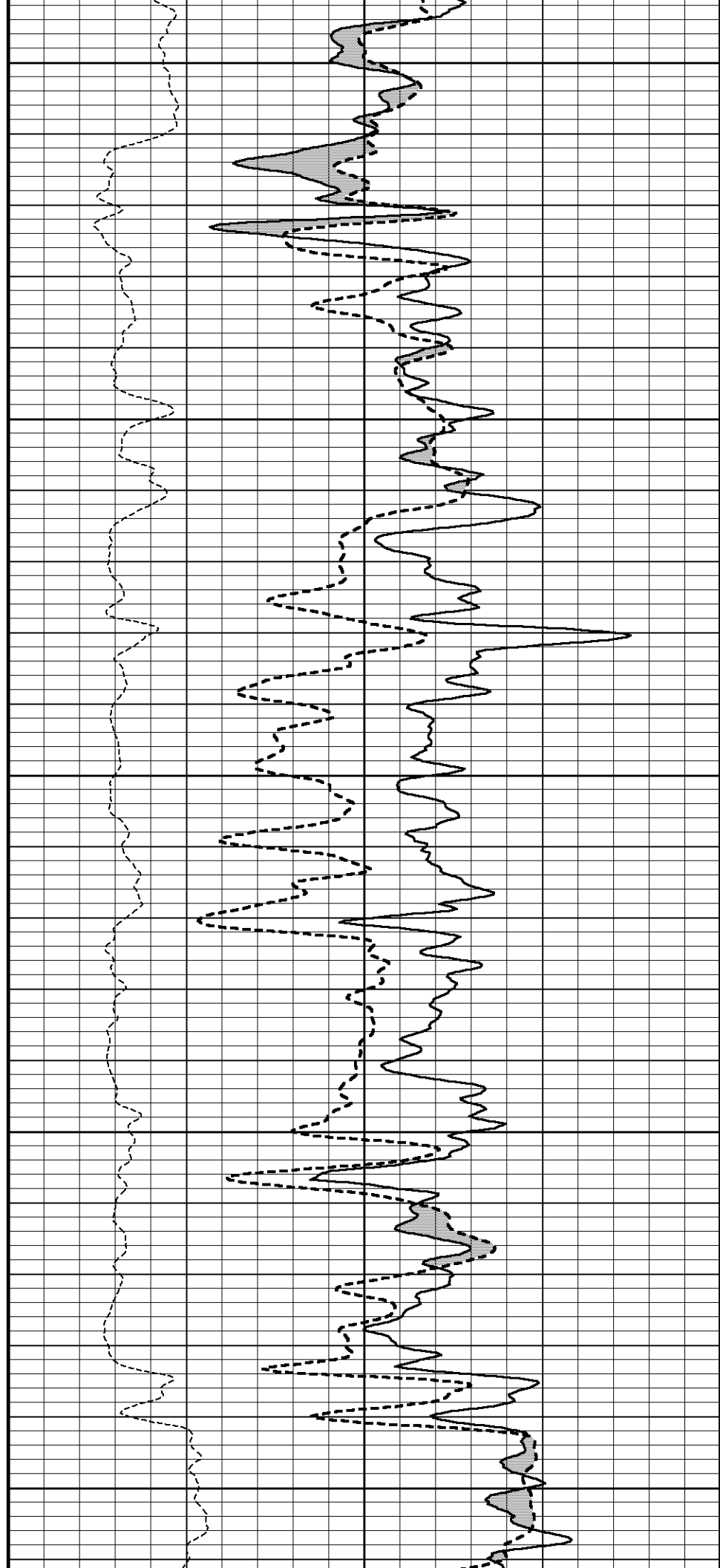
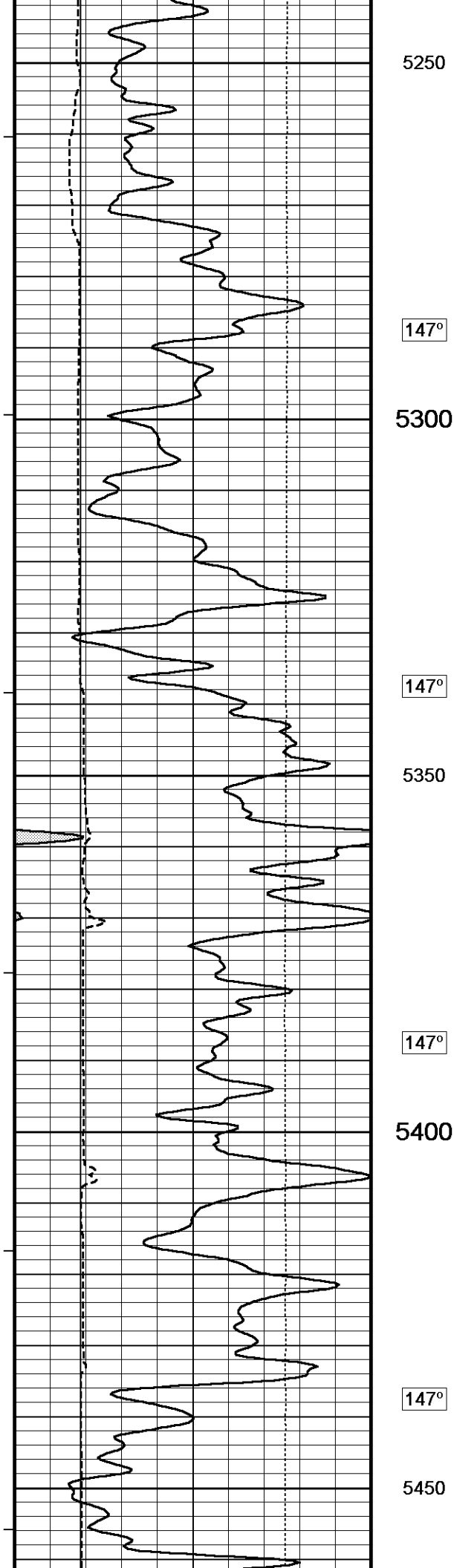
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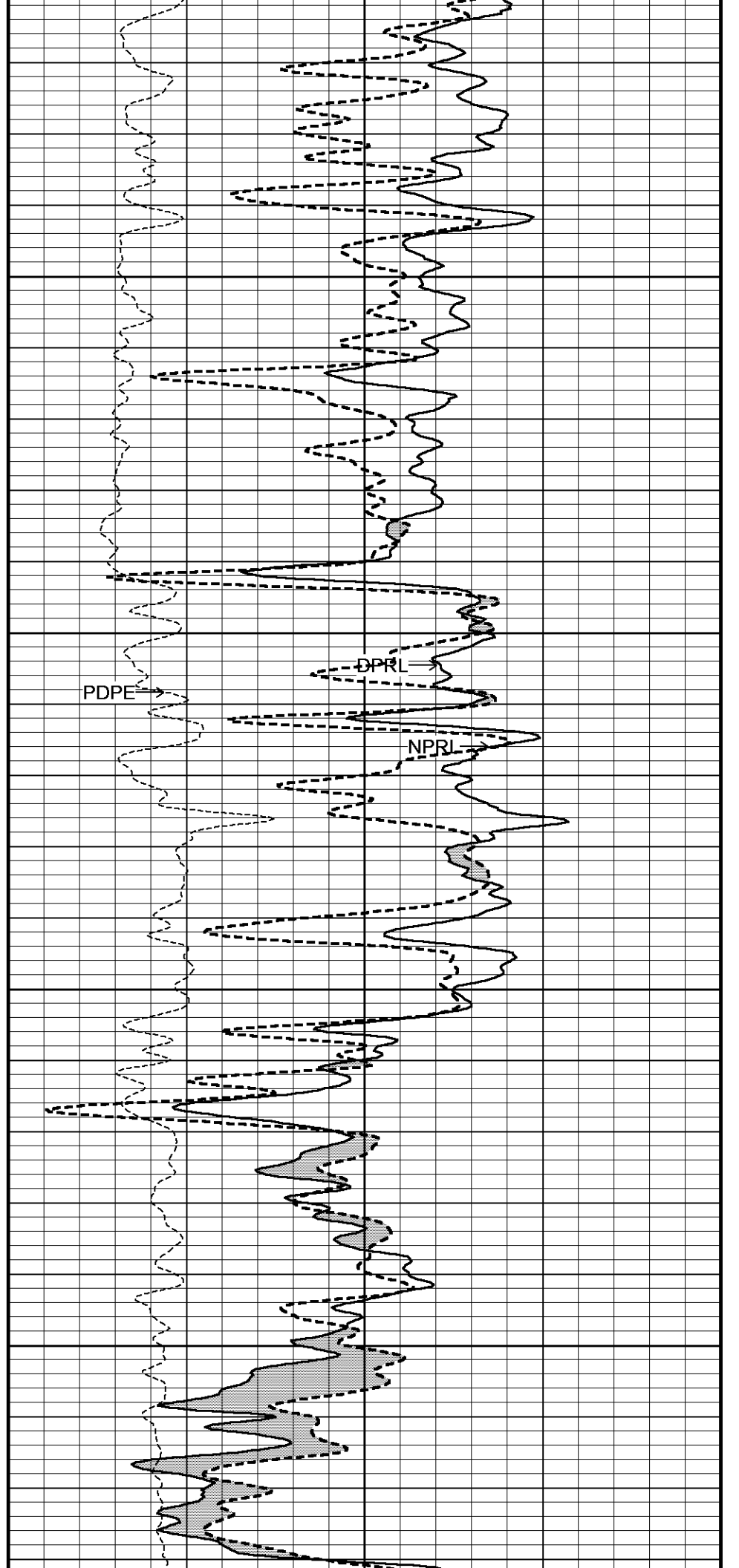
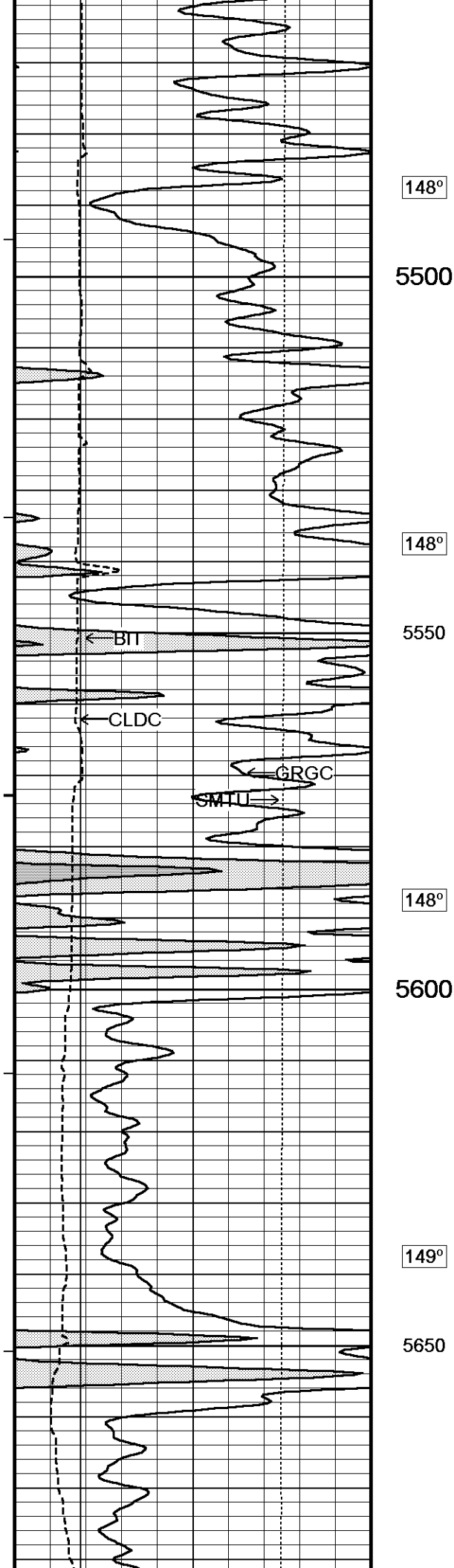
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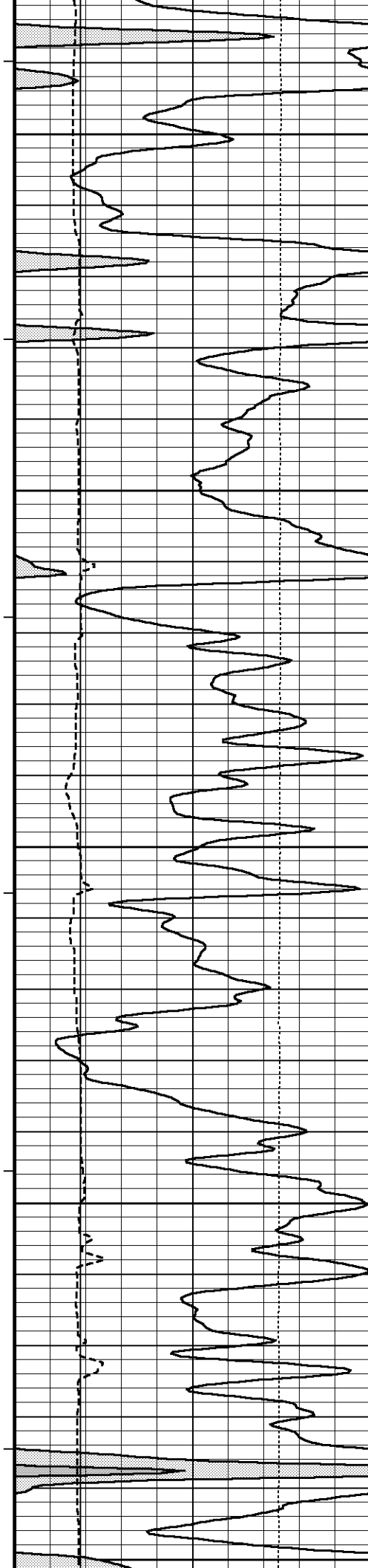
5000











150°

5700

150°

5750

151°

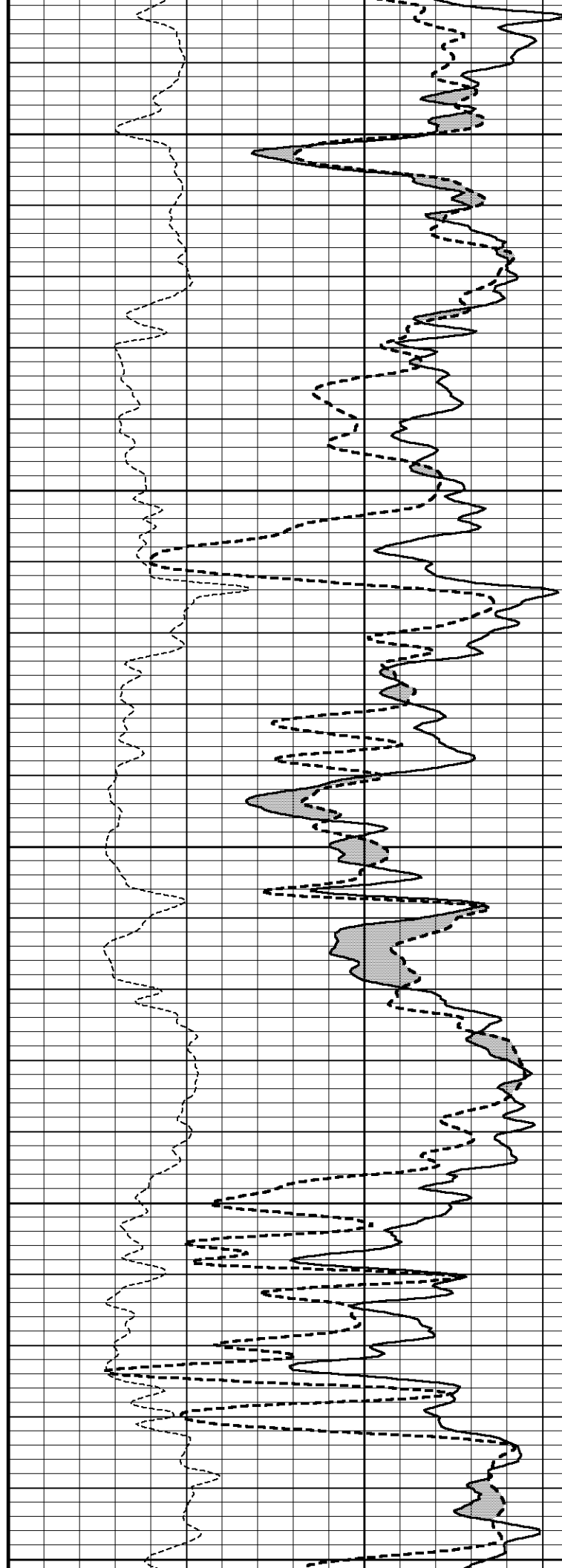
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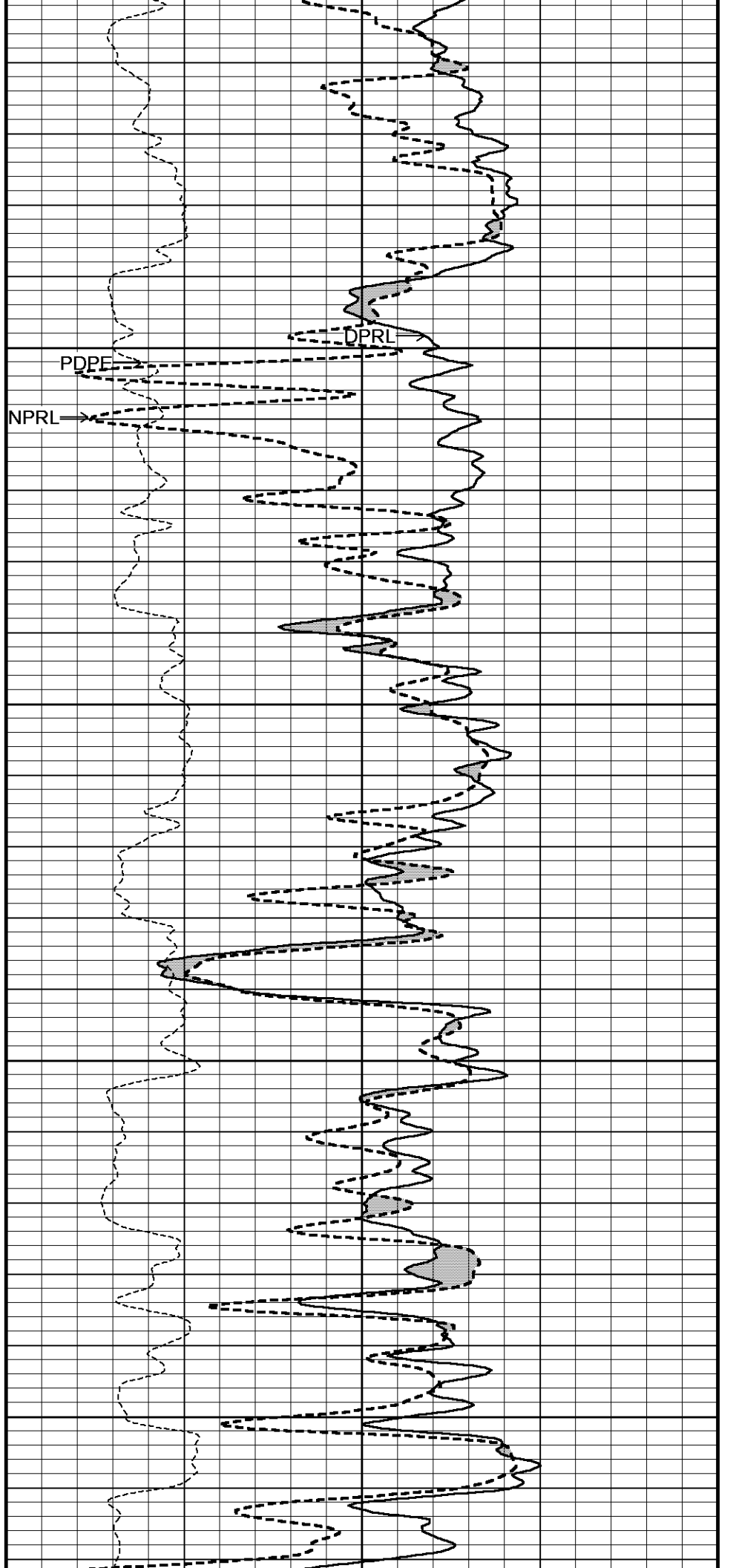
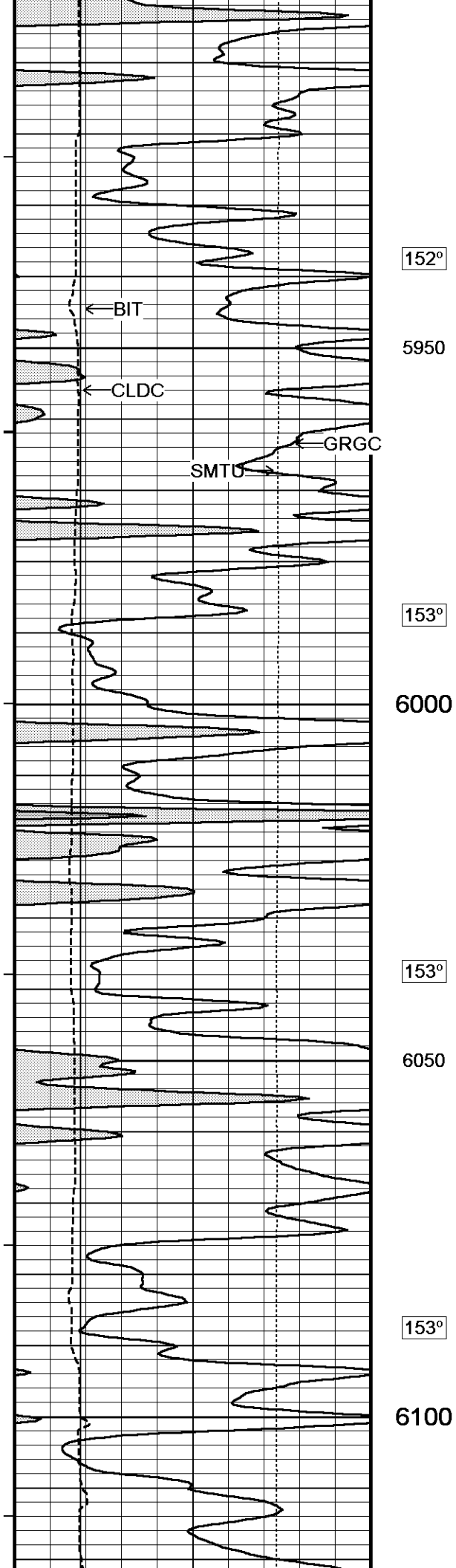
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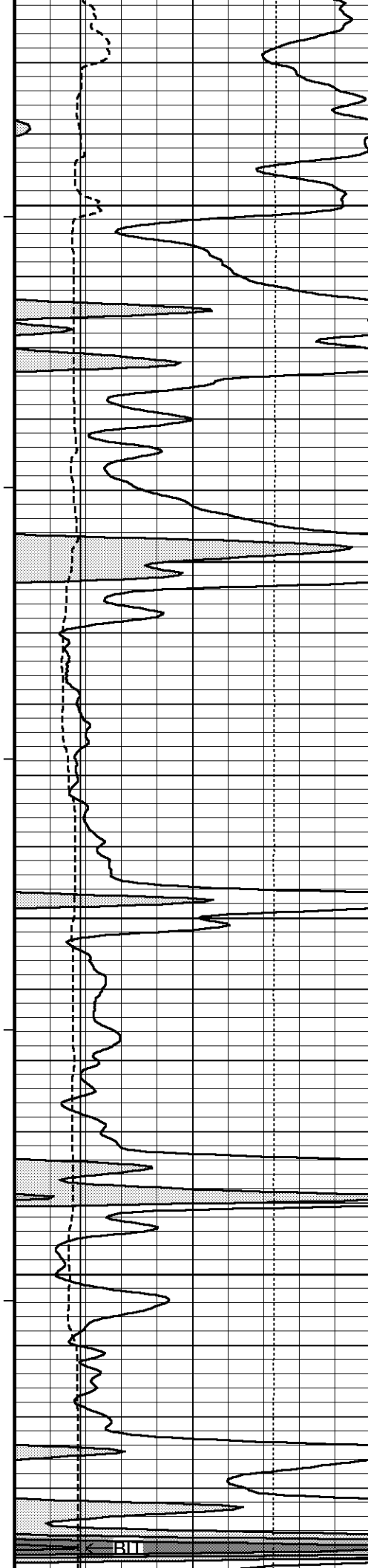
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152°

5900







154°

6150

155°

6200

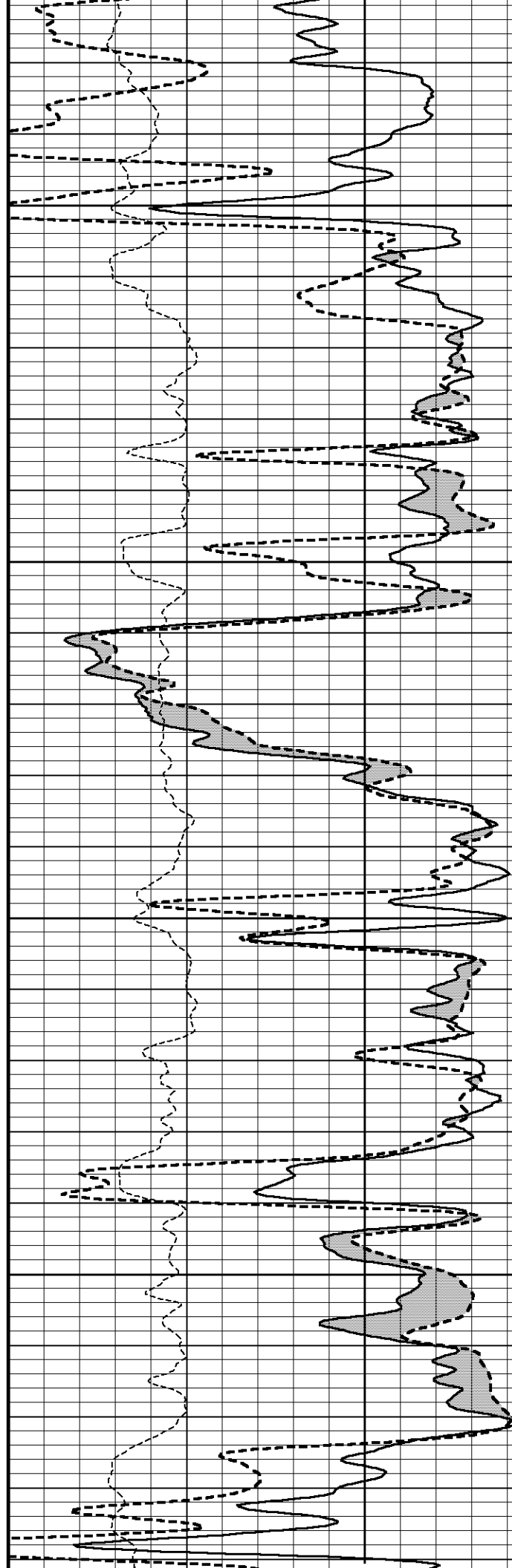
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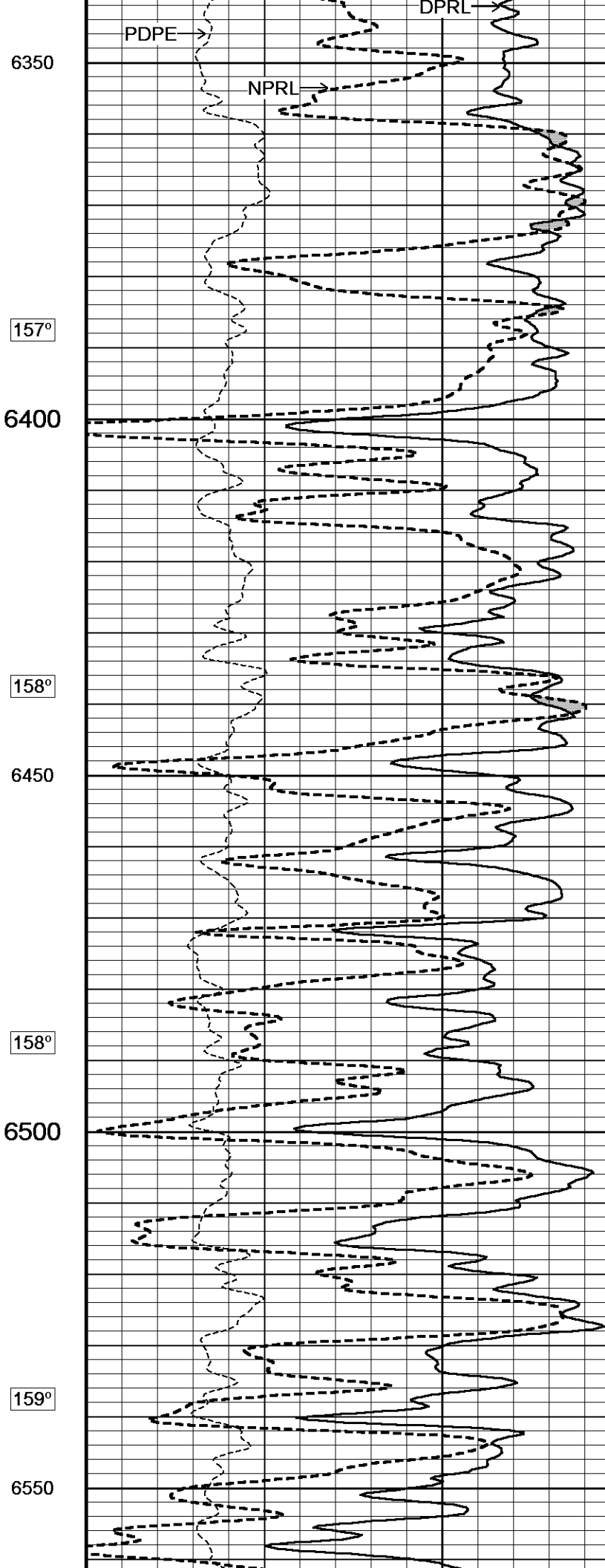
6250

156°

6300

157°





6350

157°

6400

158°

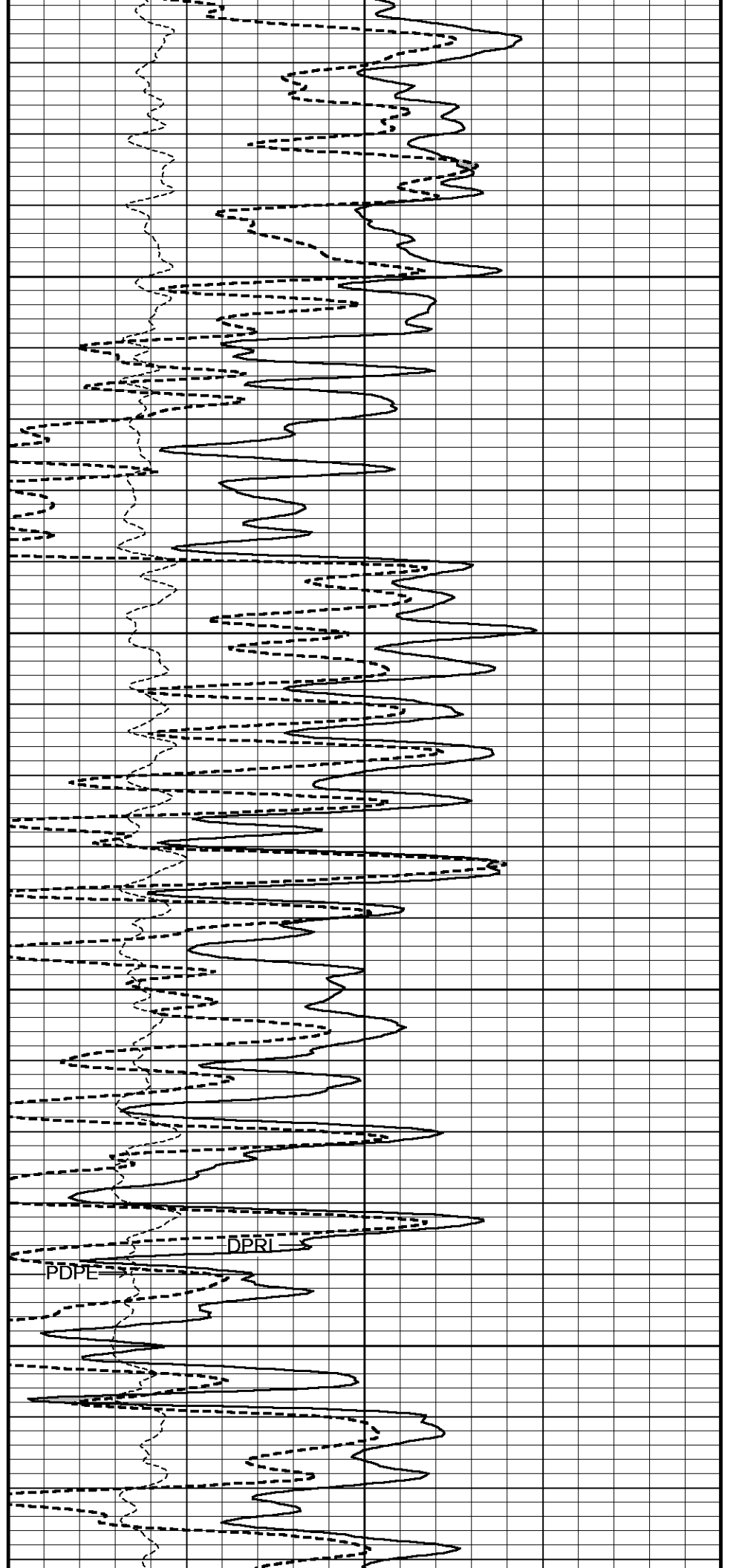
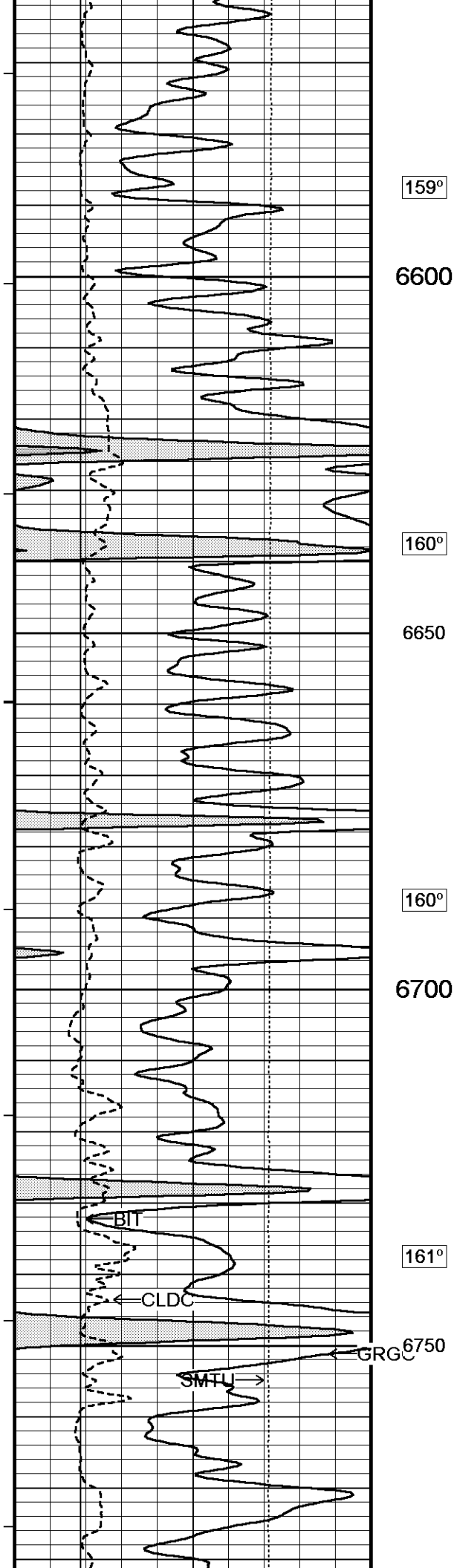
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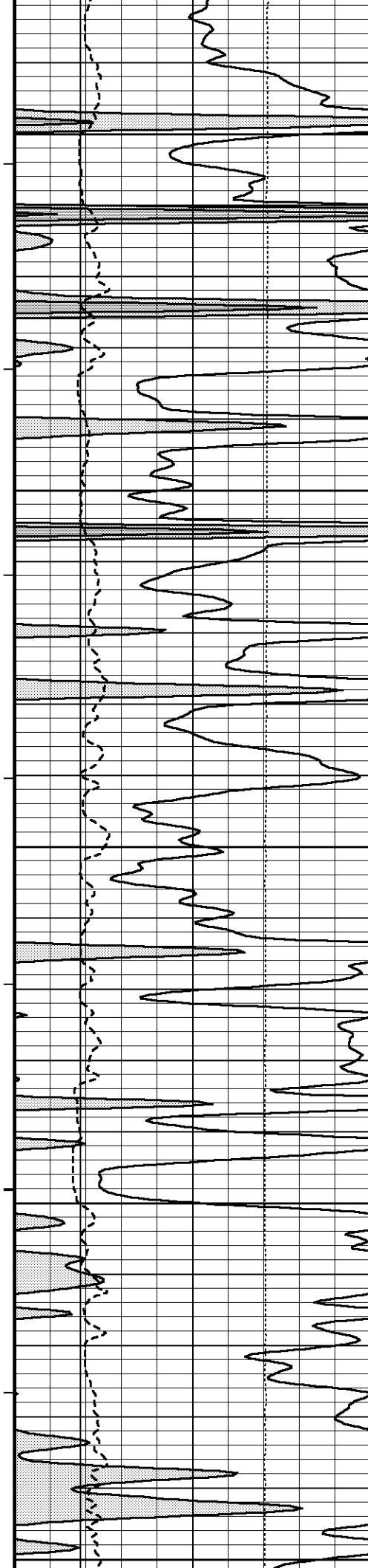
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6500

159°

6550





162°

6800

163°

6850

165°

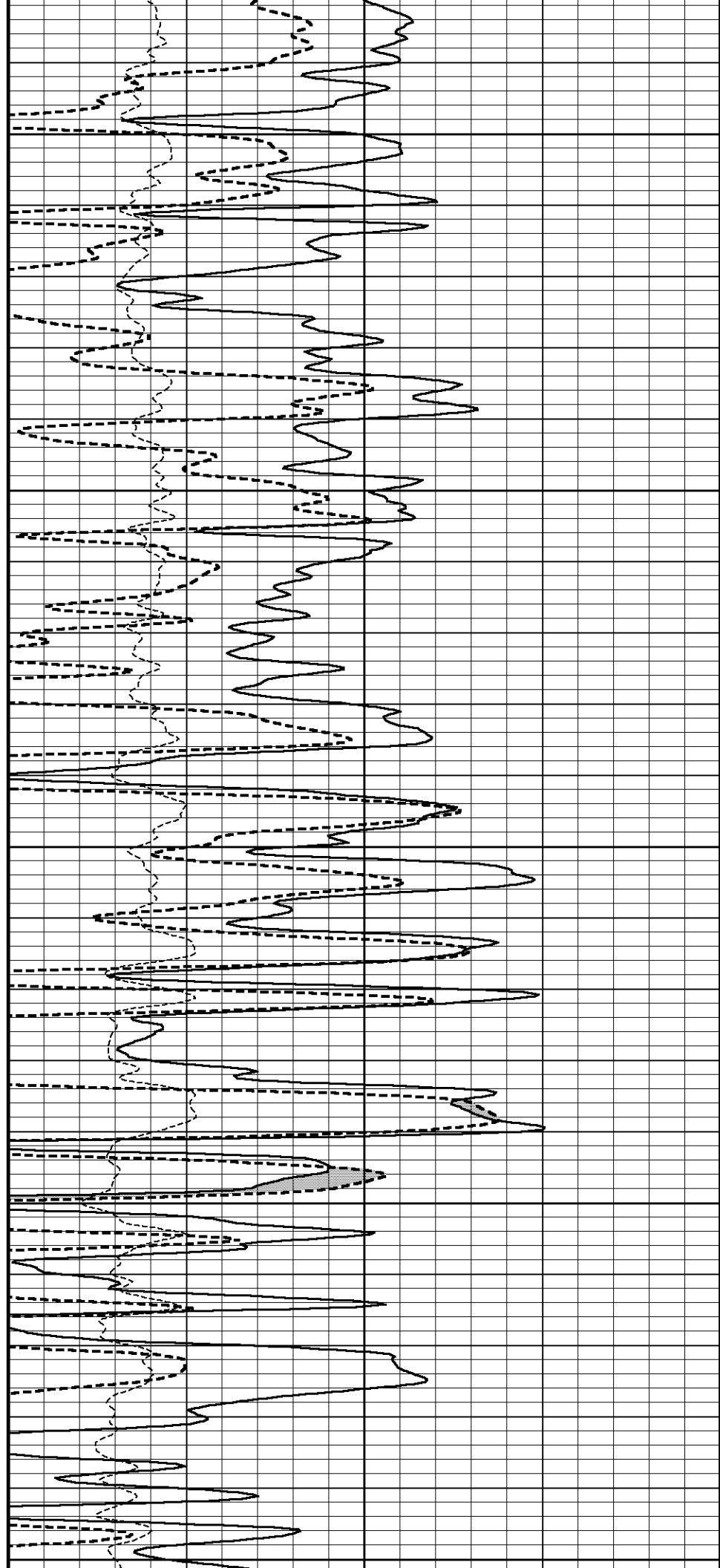
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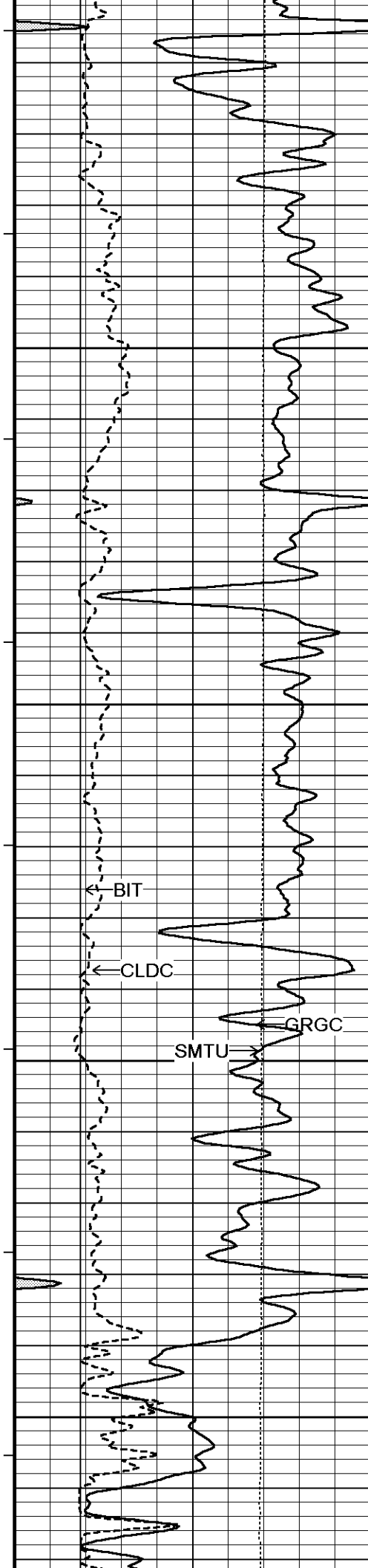
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6950

166°

7000





166°

7050

167°

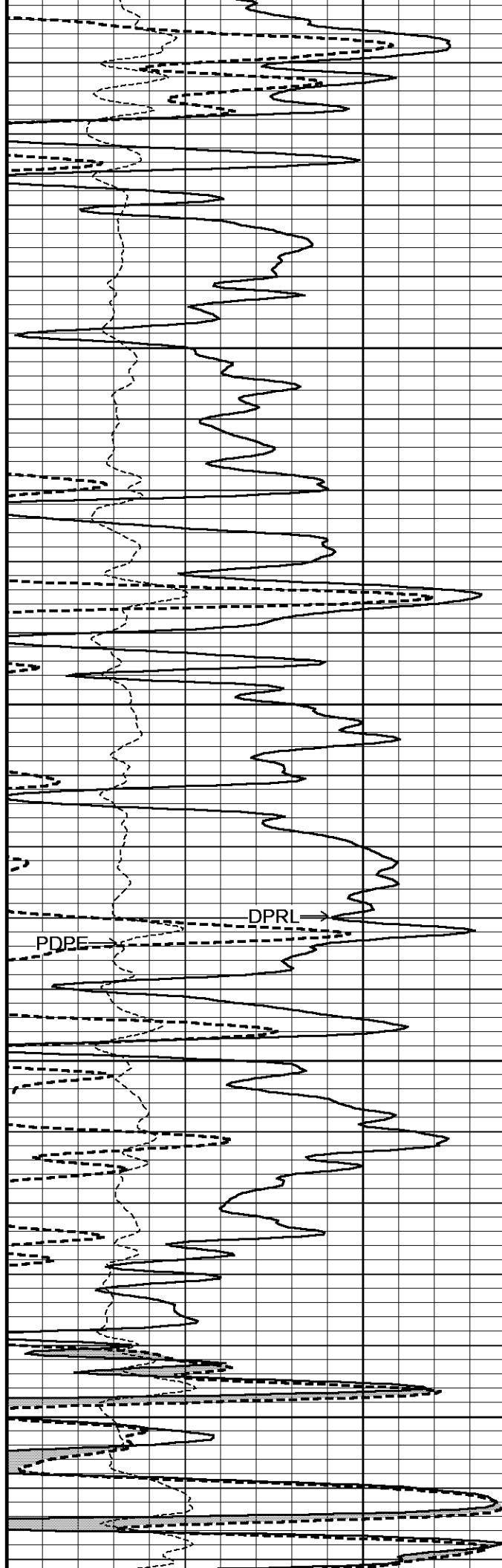
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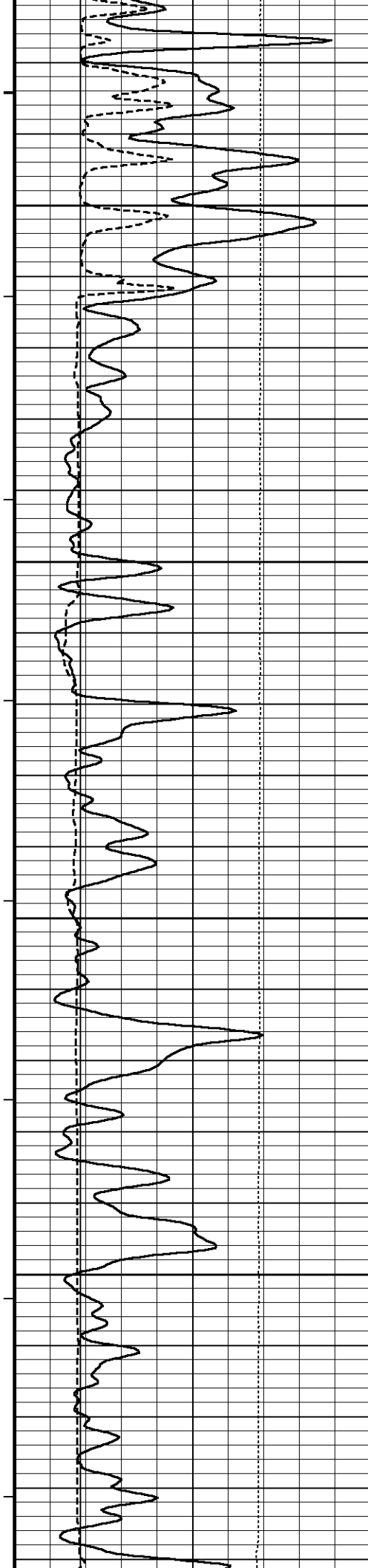
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7150

170°

7200





173°

7250

174°

7300

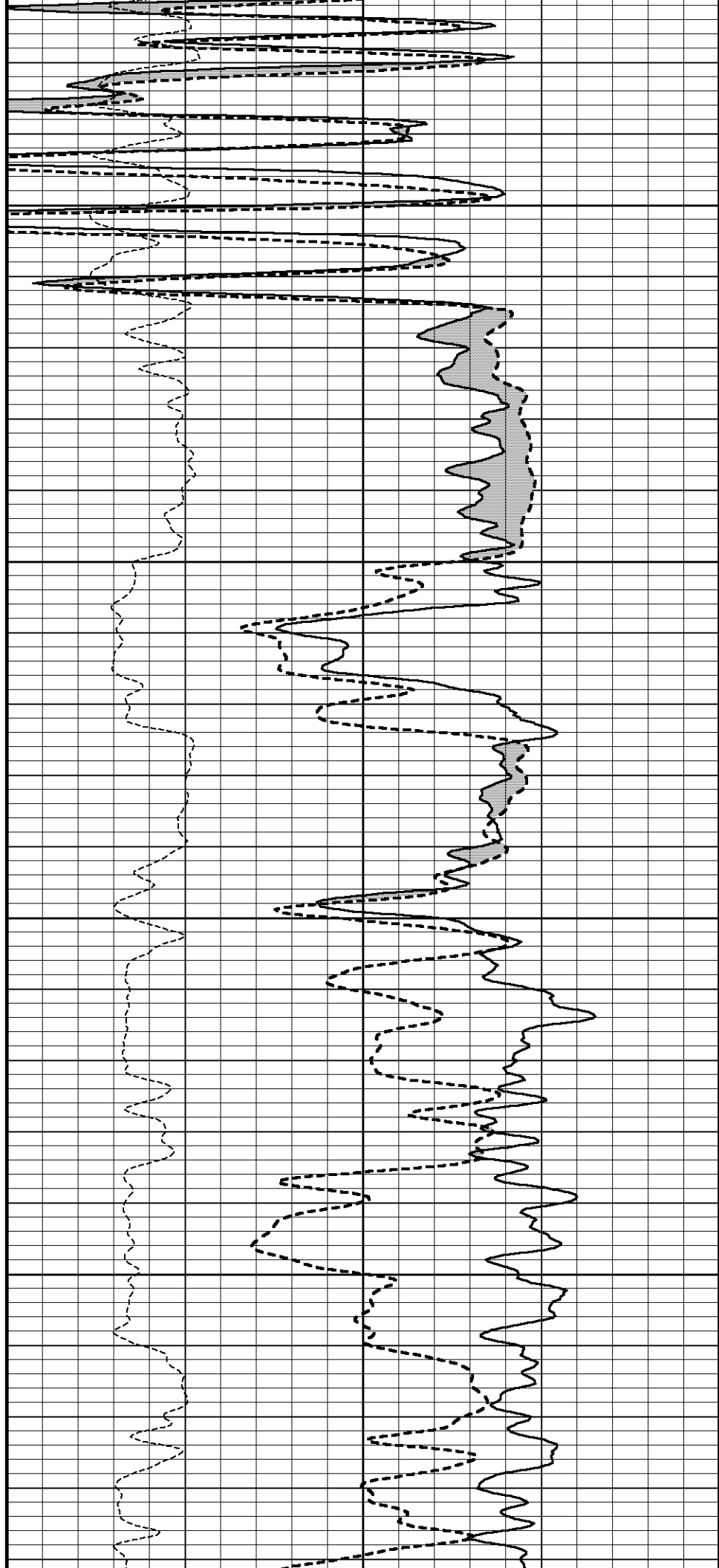
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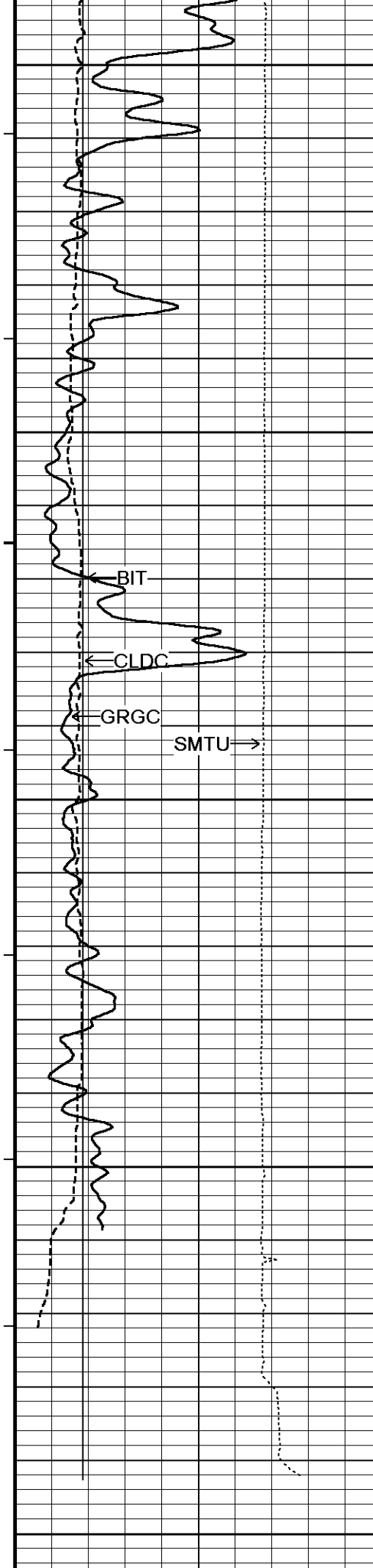
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176°

7400

177°





7450

179°

7500

181°

7550

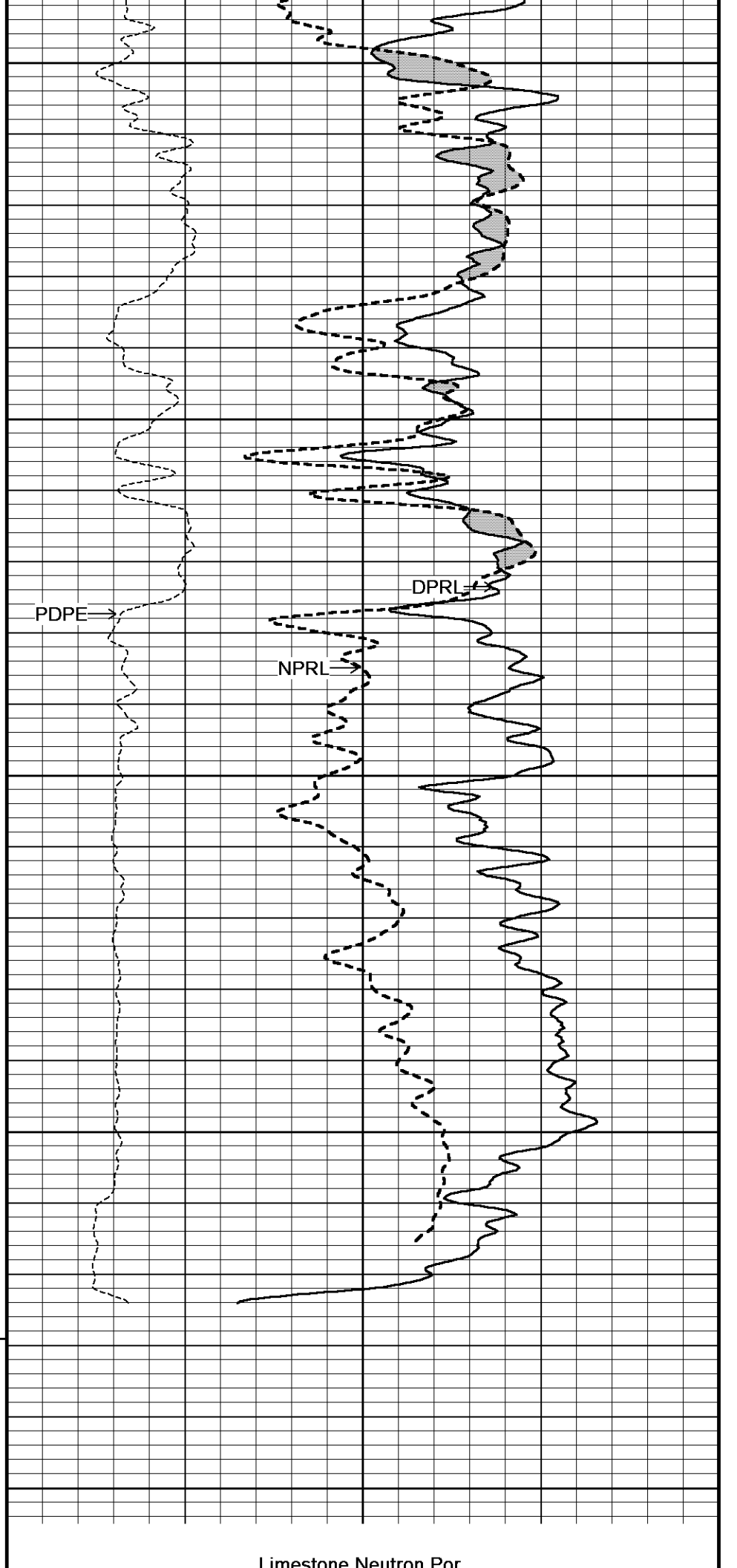
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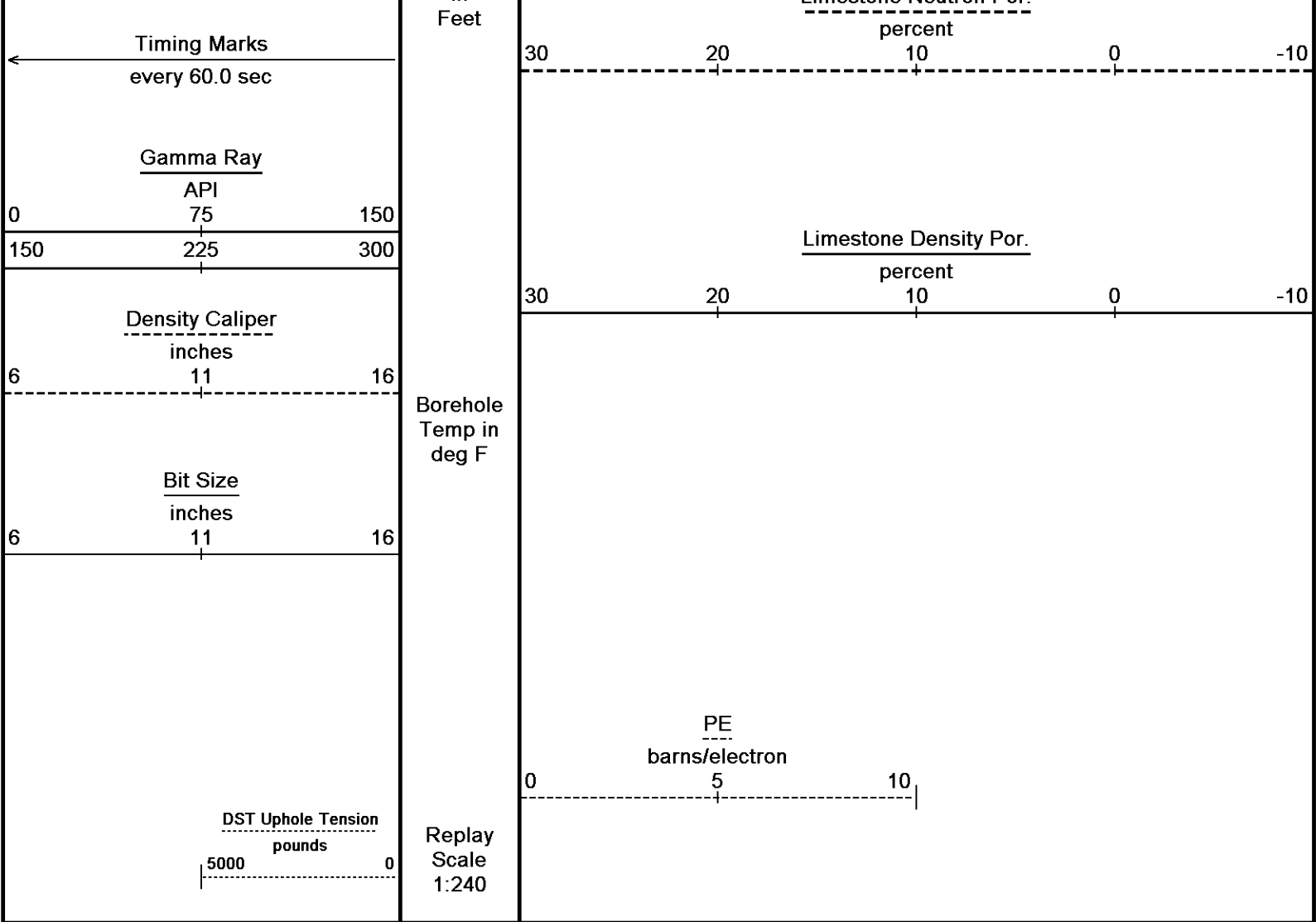
7600

TD

7650

Depth
In



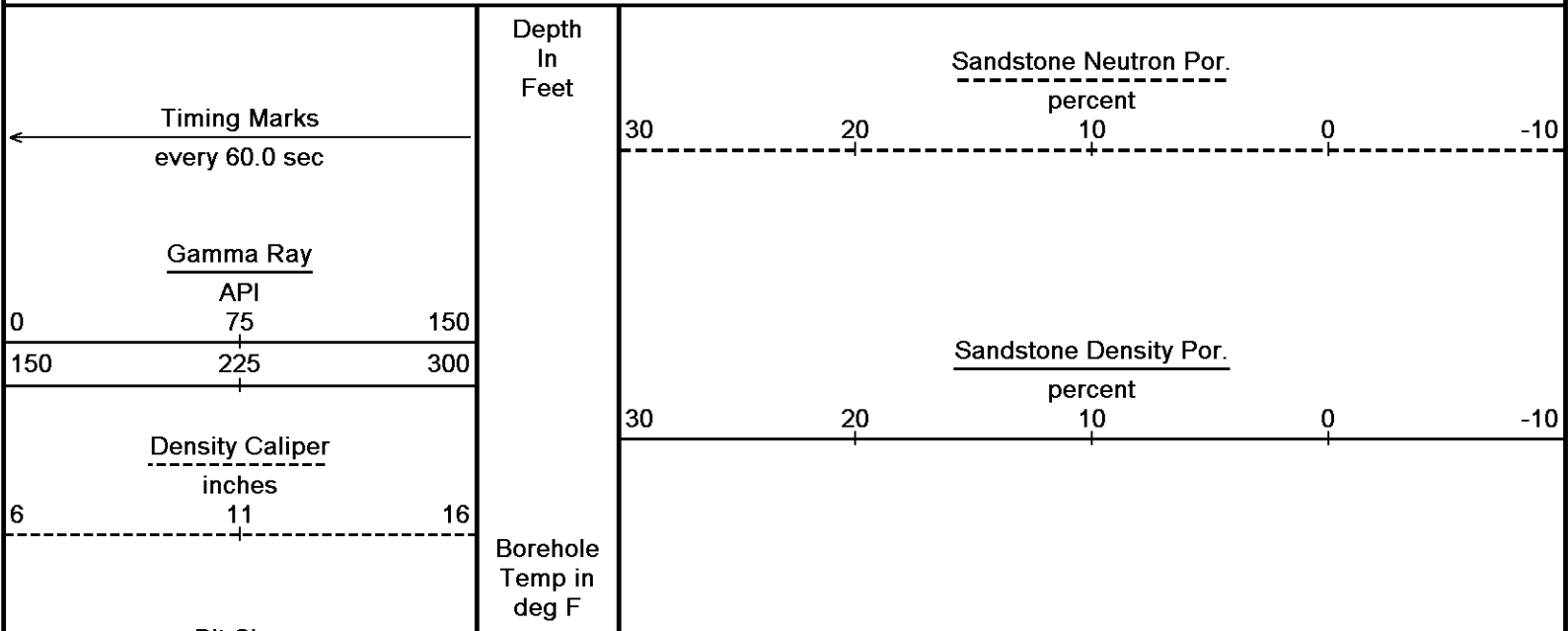


Depth Based Data - Maximum Sampling Increment 10.0cm Filename: C:\Data\Unit James 1-8\James 1-8 Main.dta System Versions: Plotted with 15.03.5939	Plotted on 12-DEC-2015 23:02 Recorded on 5 Inch Main Pass
---	--

↑	5 INCH LIMESTONE MAIN - ANHYDRITE SECTION	↑
---	---	---

↓	5 Inch Main Pass	↓
---	------------------	---

Depth Based Data - Maximum Sampling Increment 10.0cm Filename: C:\Data\Unit James 1-8\James 1-8 Main.dta System Versions: Plotted with 15.03.5939	Plotted on 12-DEC-2015 23:02 Recorded on 5 Inch Main Pass
---	--



Bit Size

inches

6 11 16

DST Uphole Tension

pounds

5000 0

Replay

Scale

1:240

420

← BIT

← GRGC

450

Casing

Shoe

500

95°

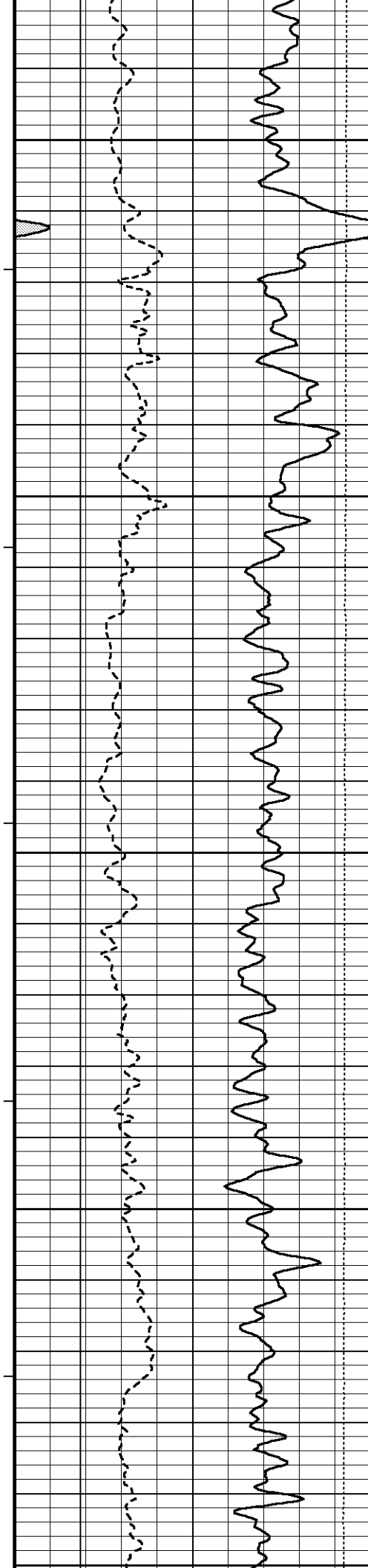
550

PE

barns/electron

0 5 10

NPRS



95°

600

96°

650

97°

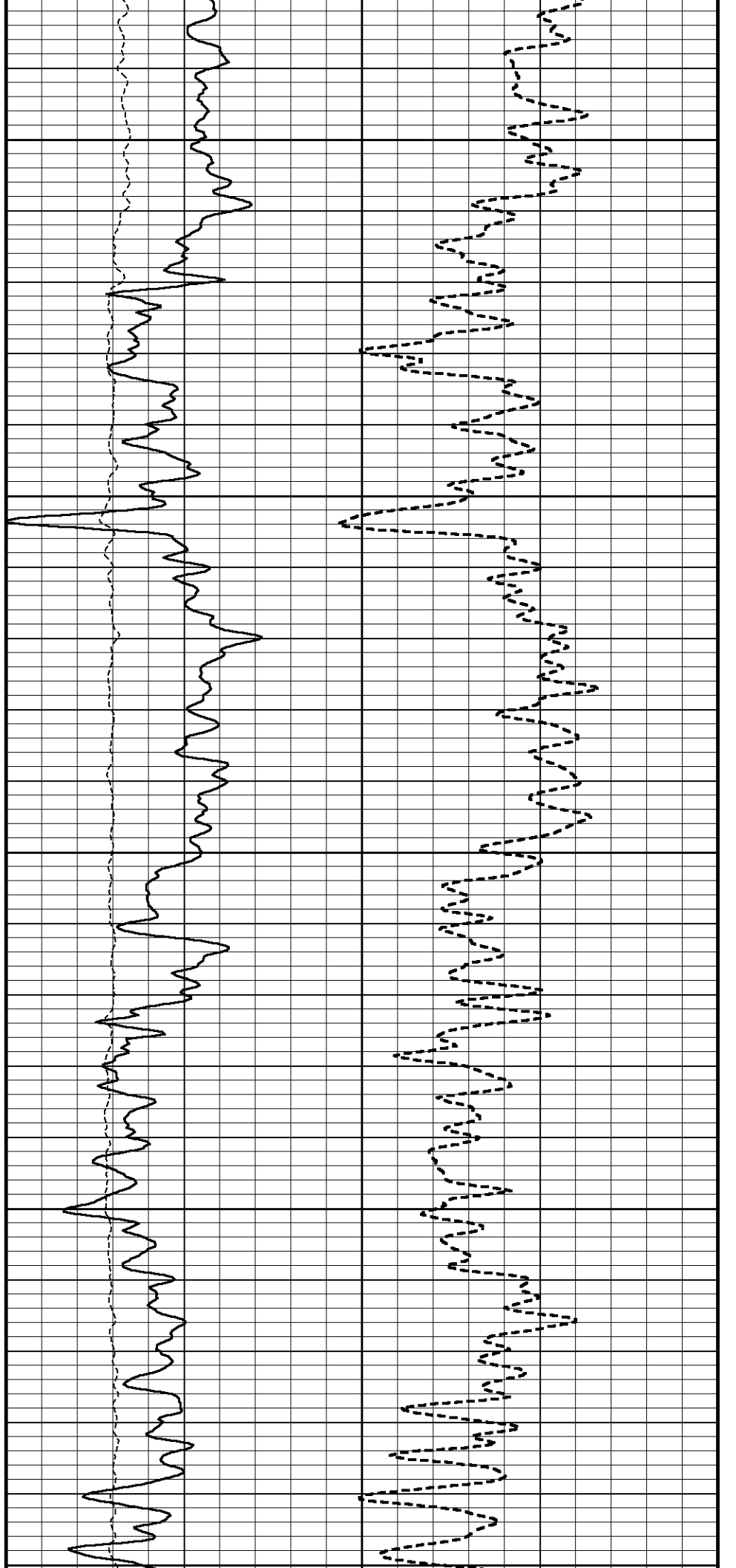
700

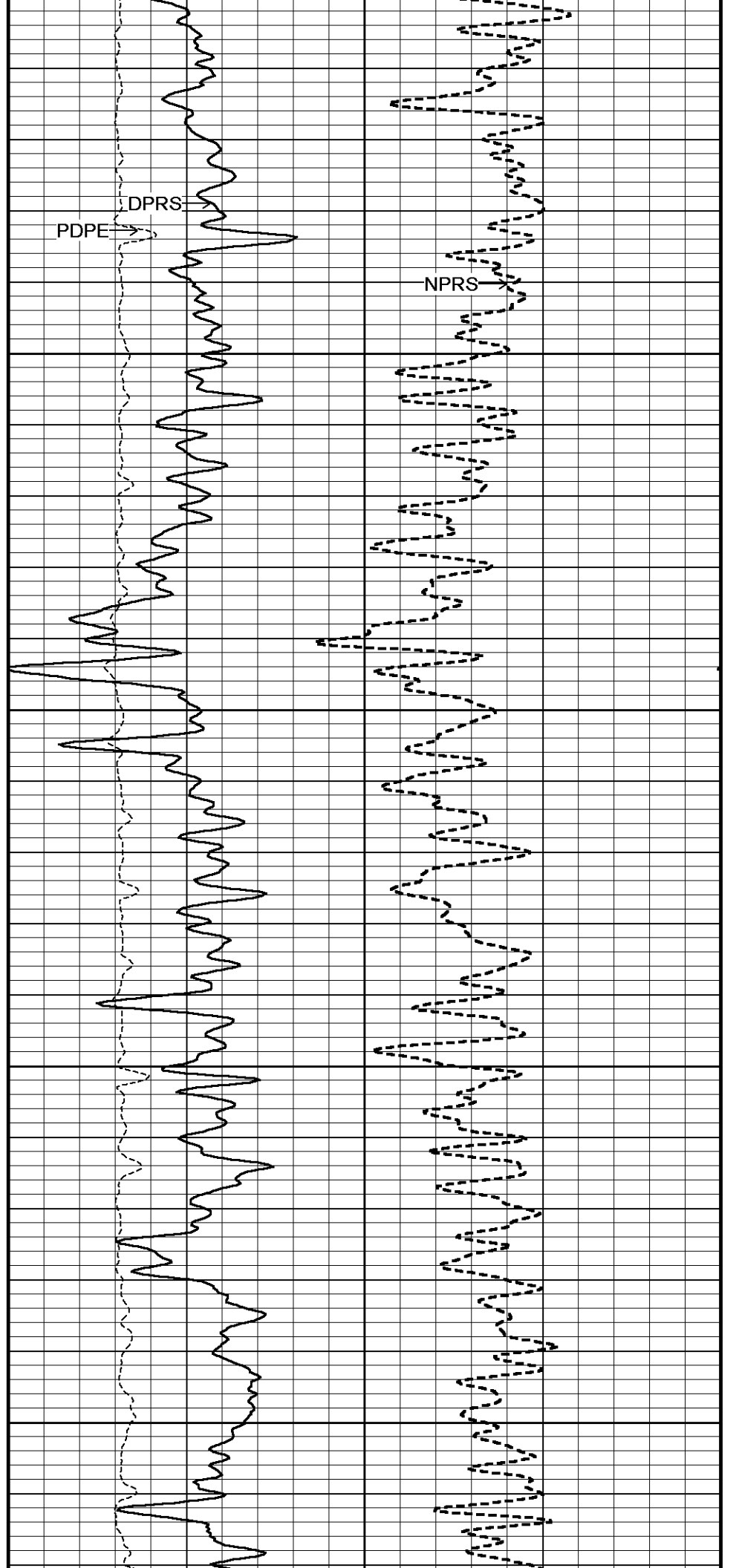
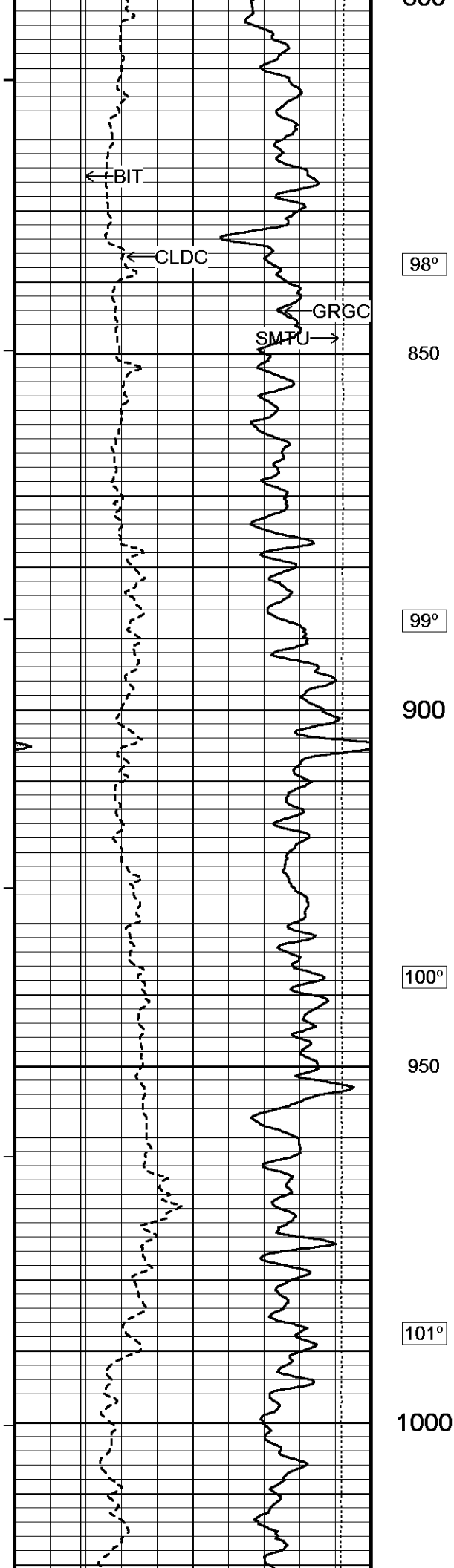
98°

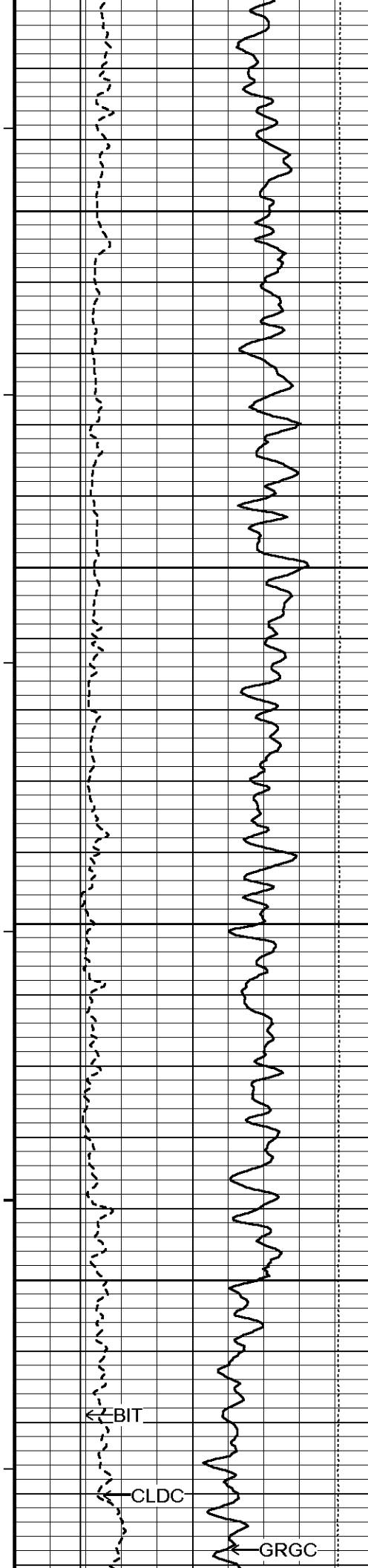
750

98°

800







101°

1050

102°

1100

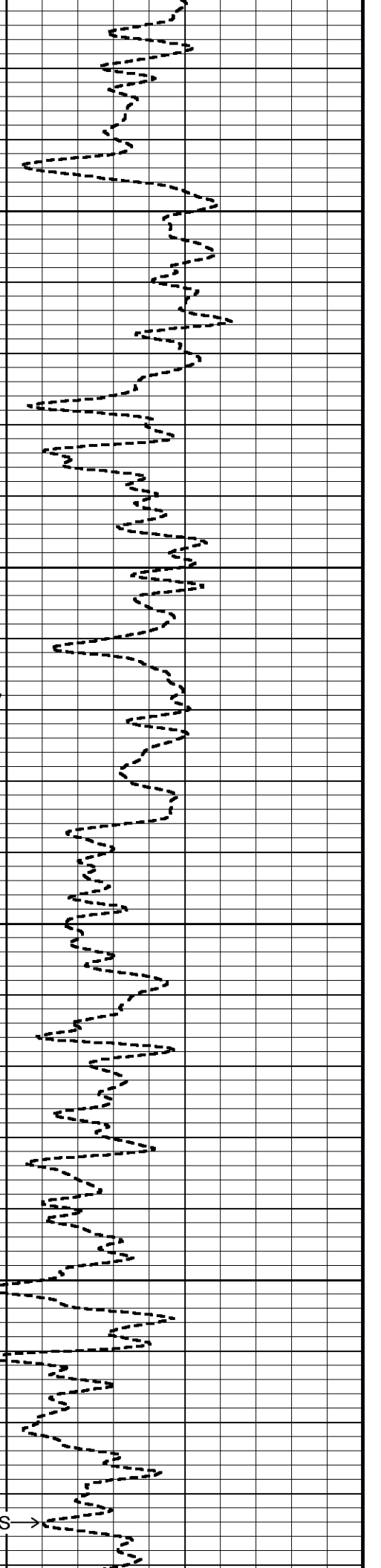
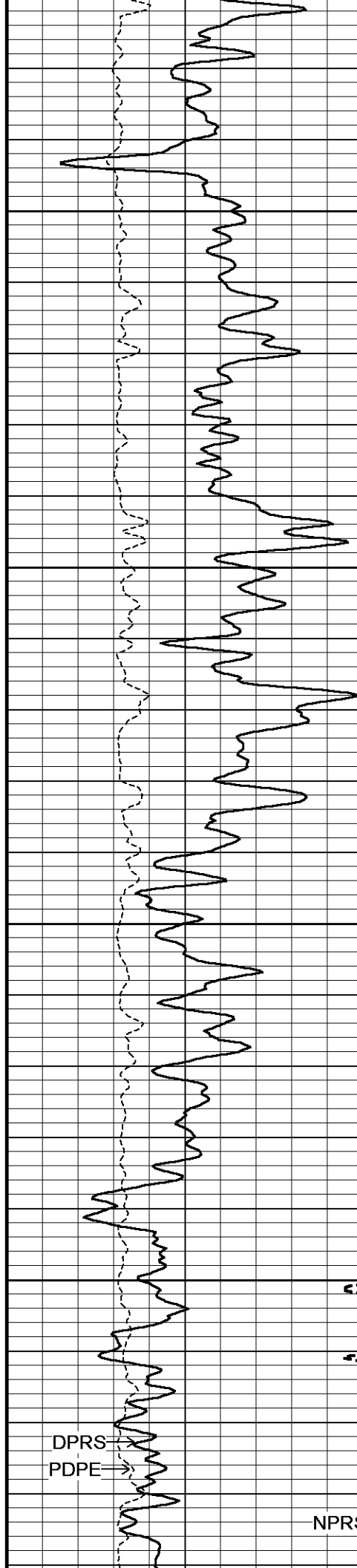
102°

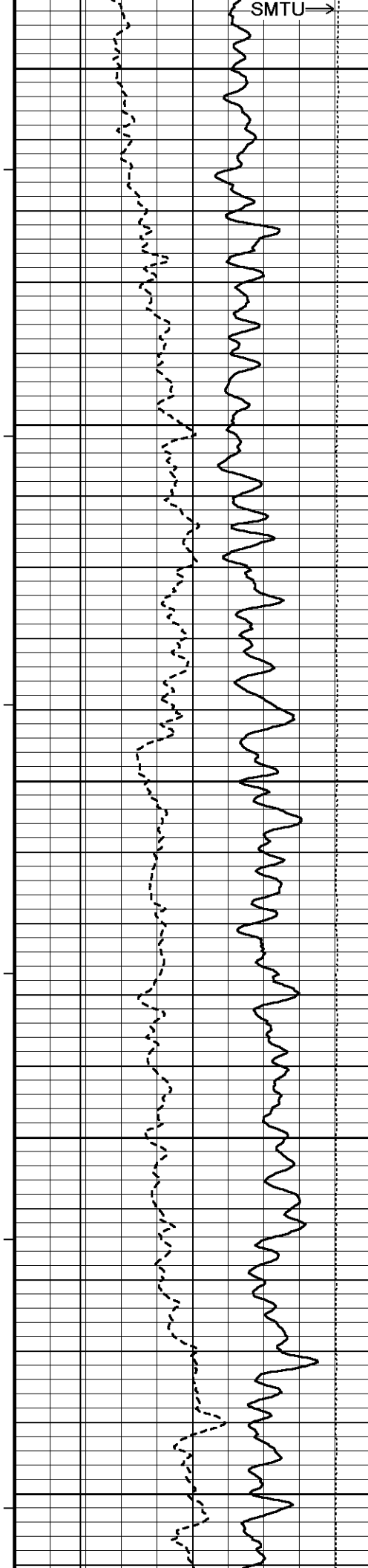
1150

103°

1200

104°





1250

104°

1300

105°

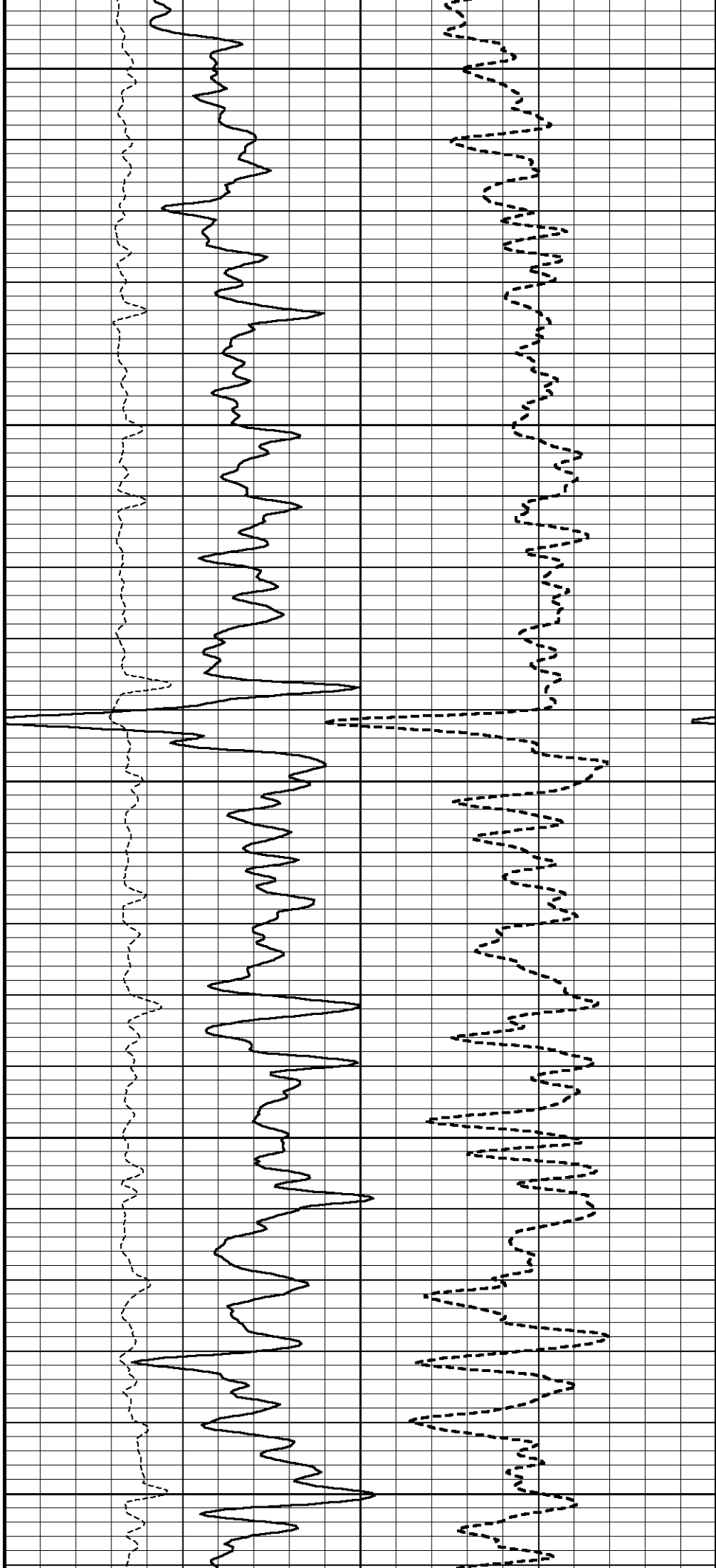
1350

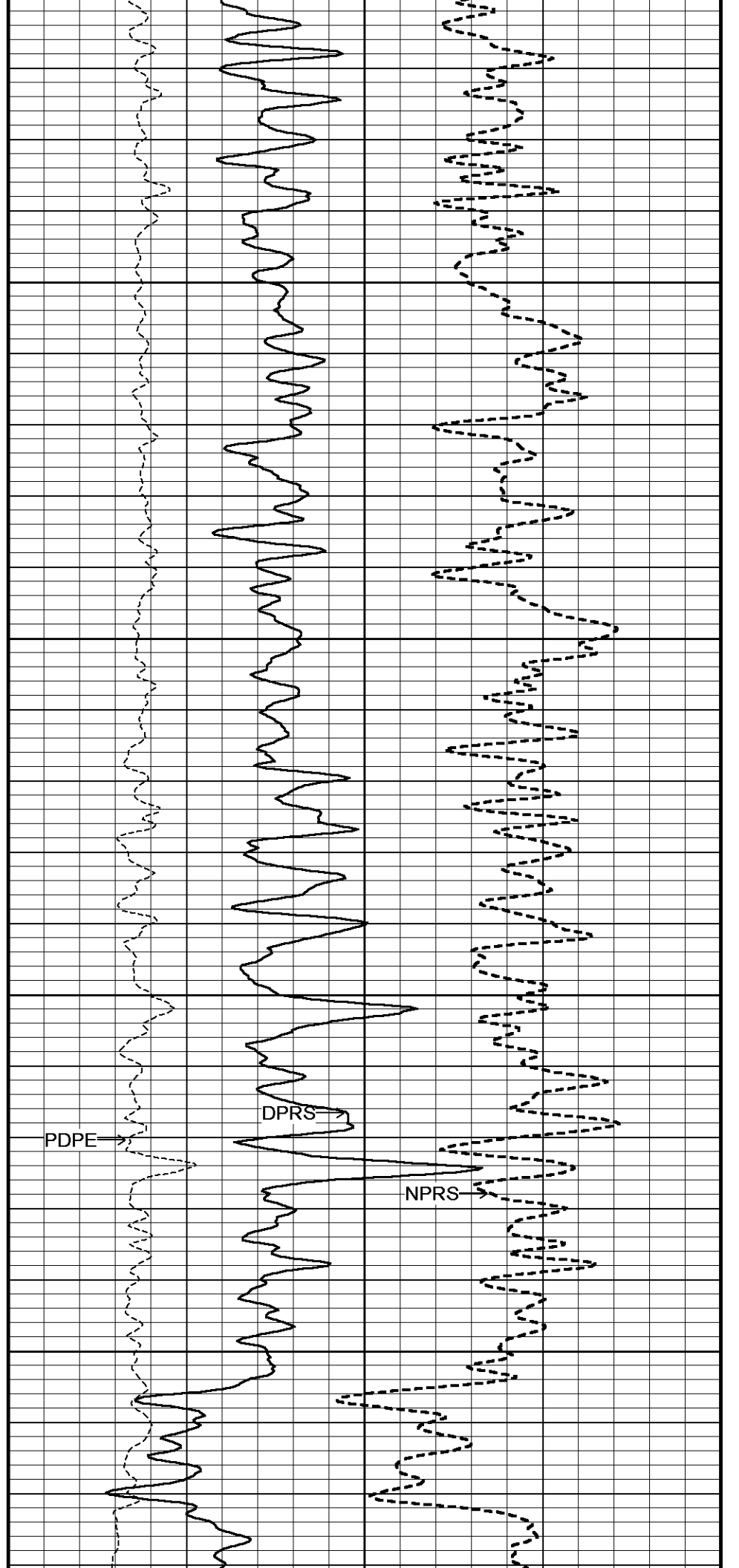
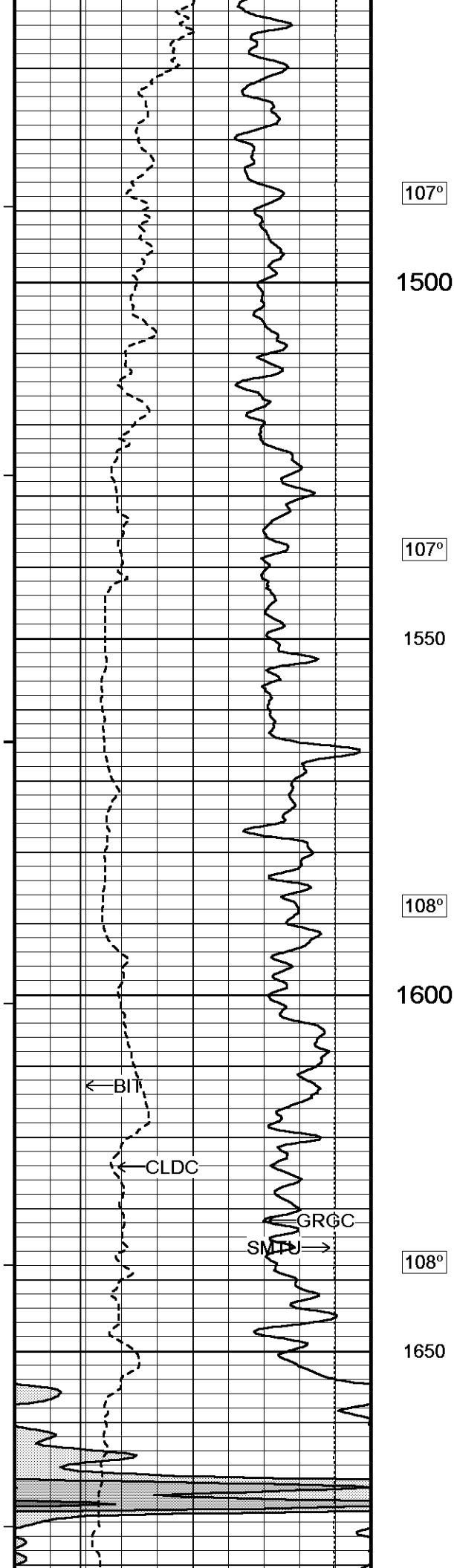
105°

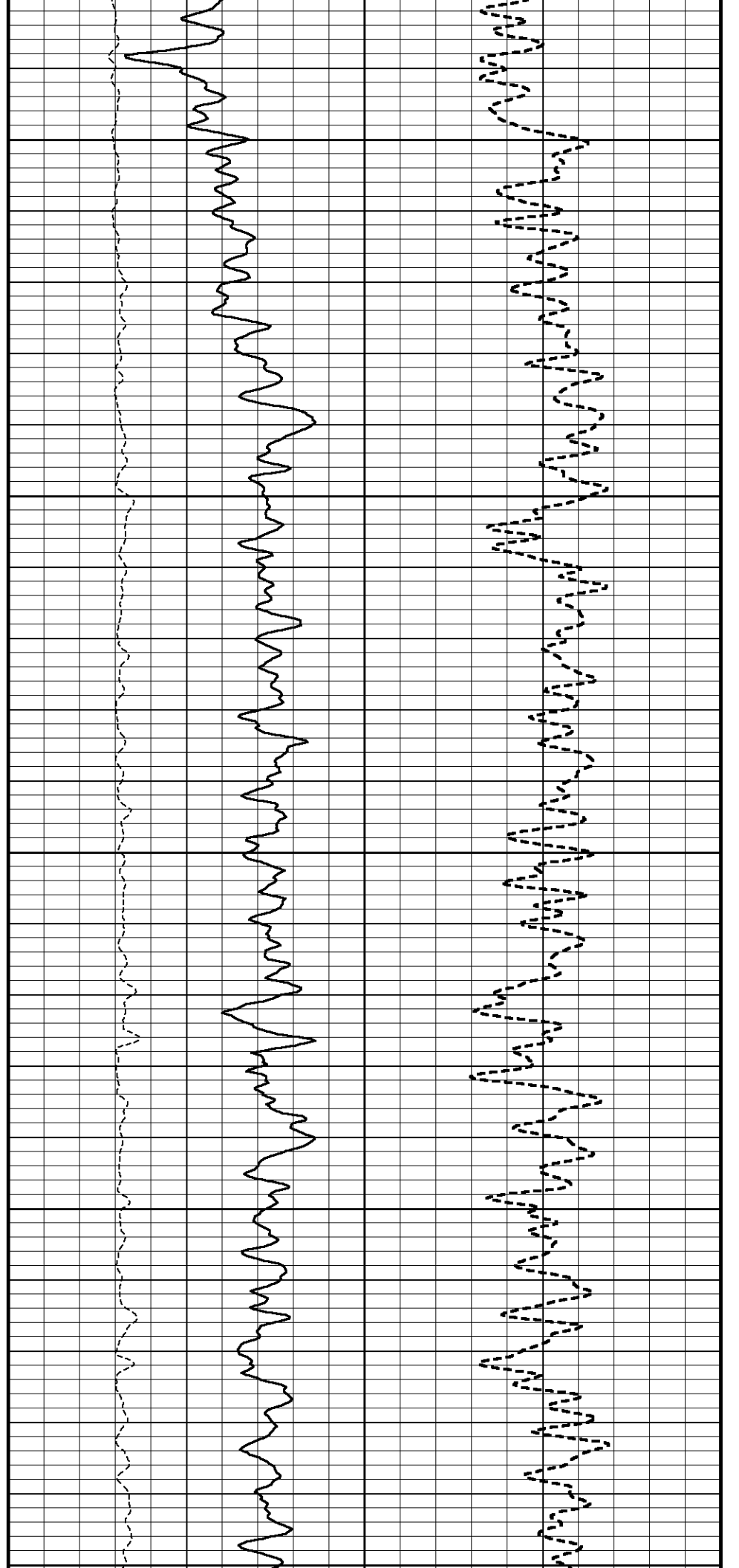
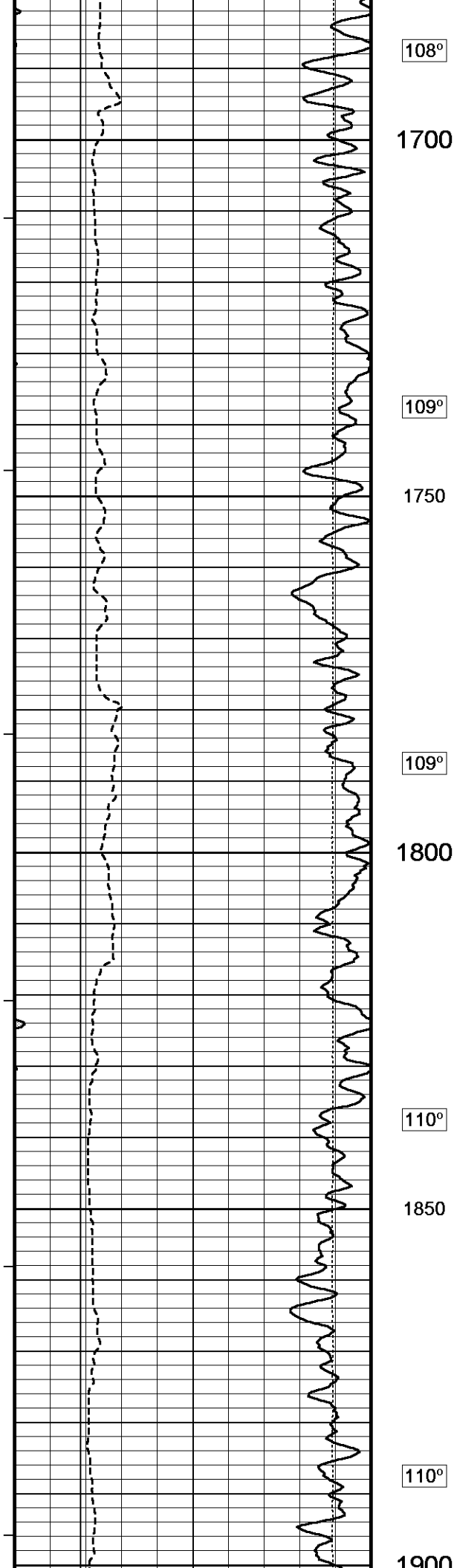
1400

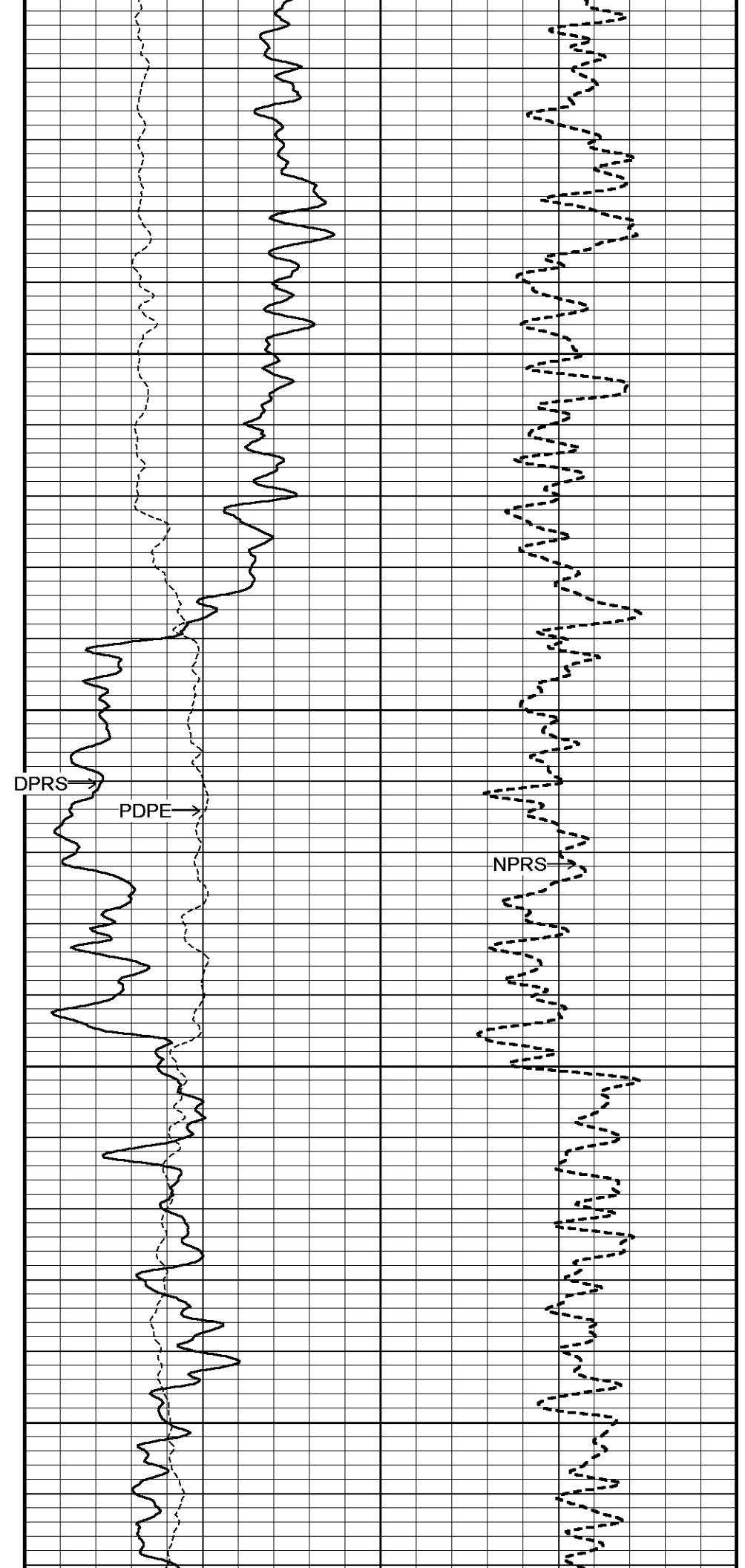
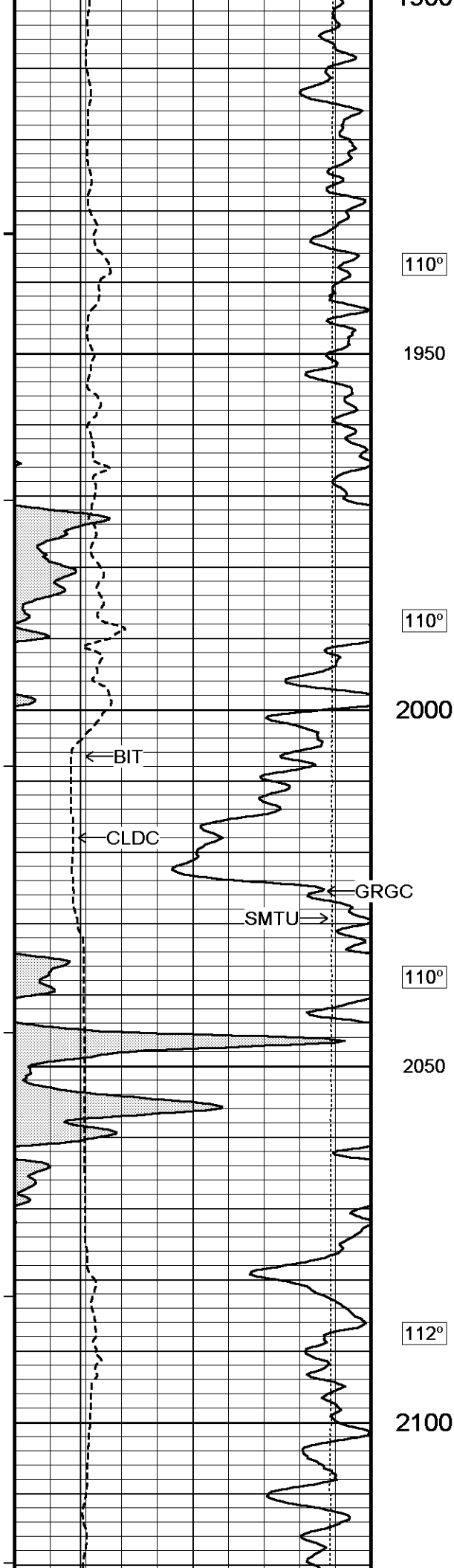
106°

1450











112°

2150

113°

2200

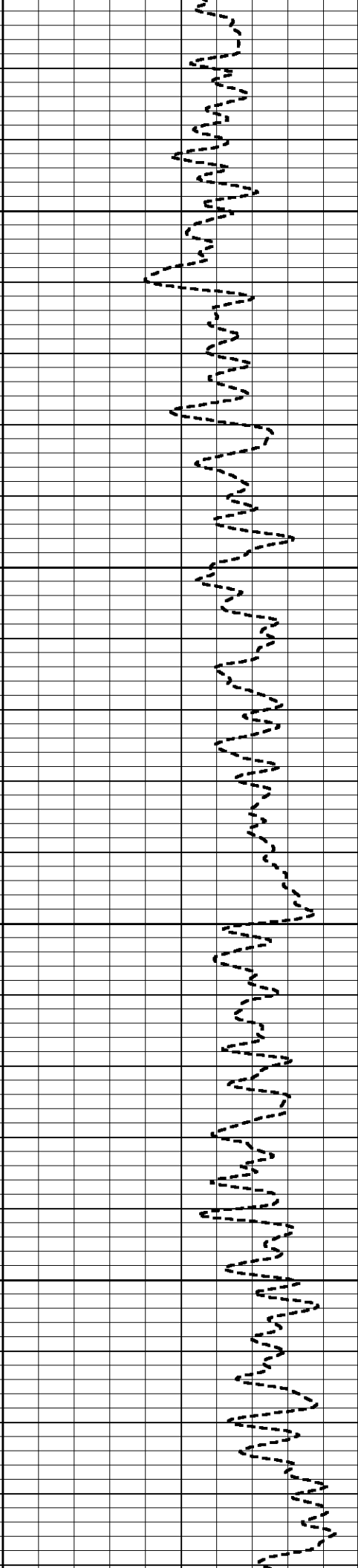
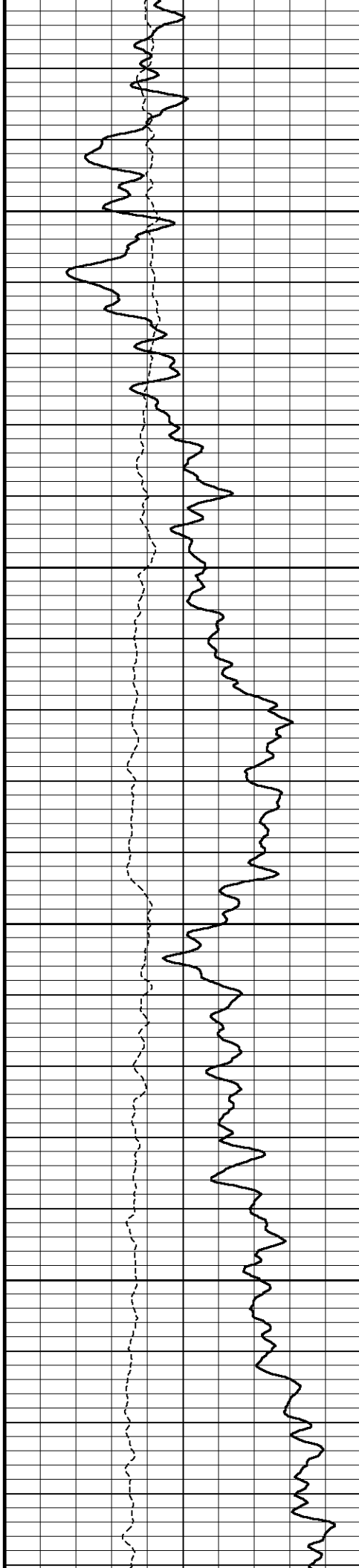
113°

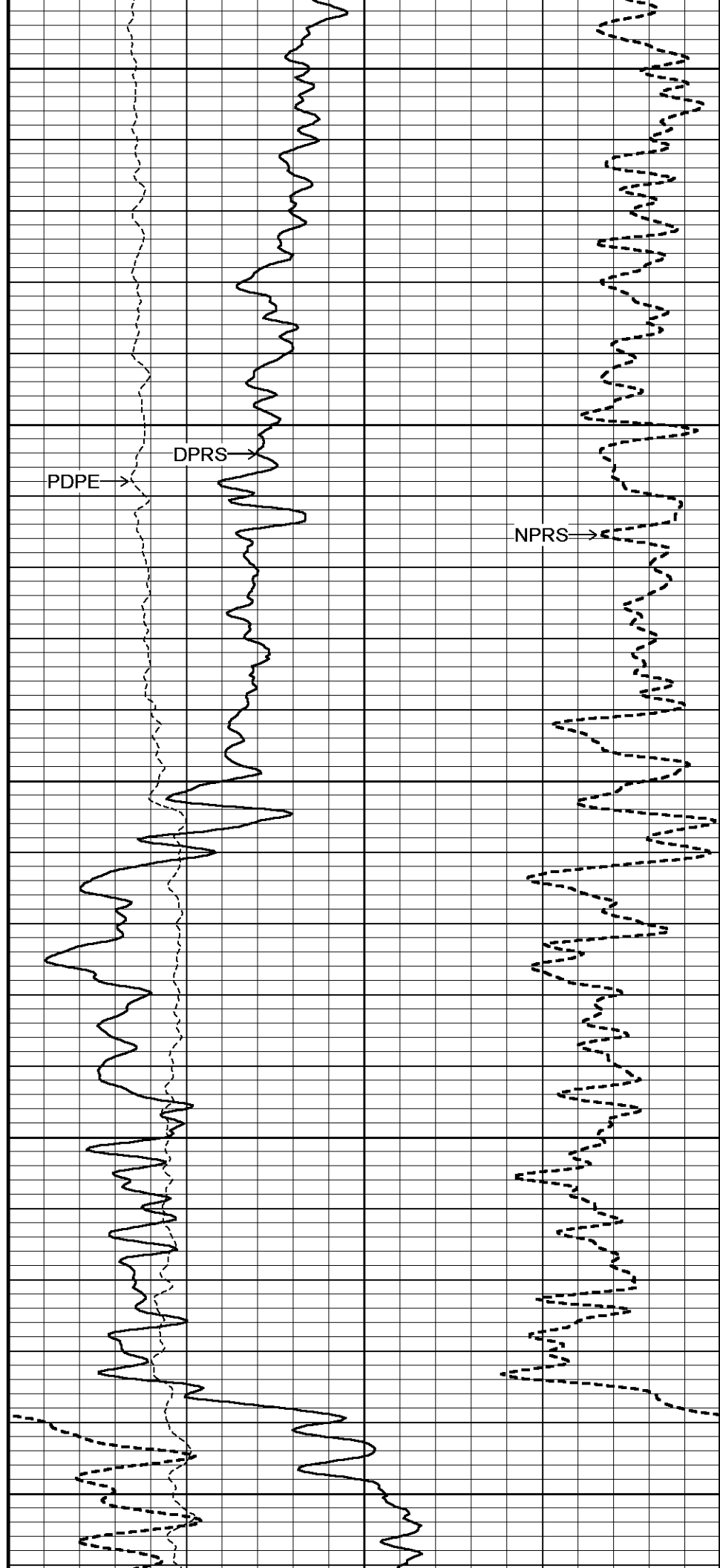
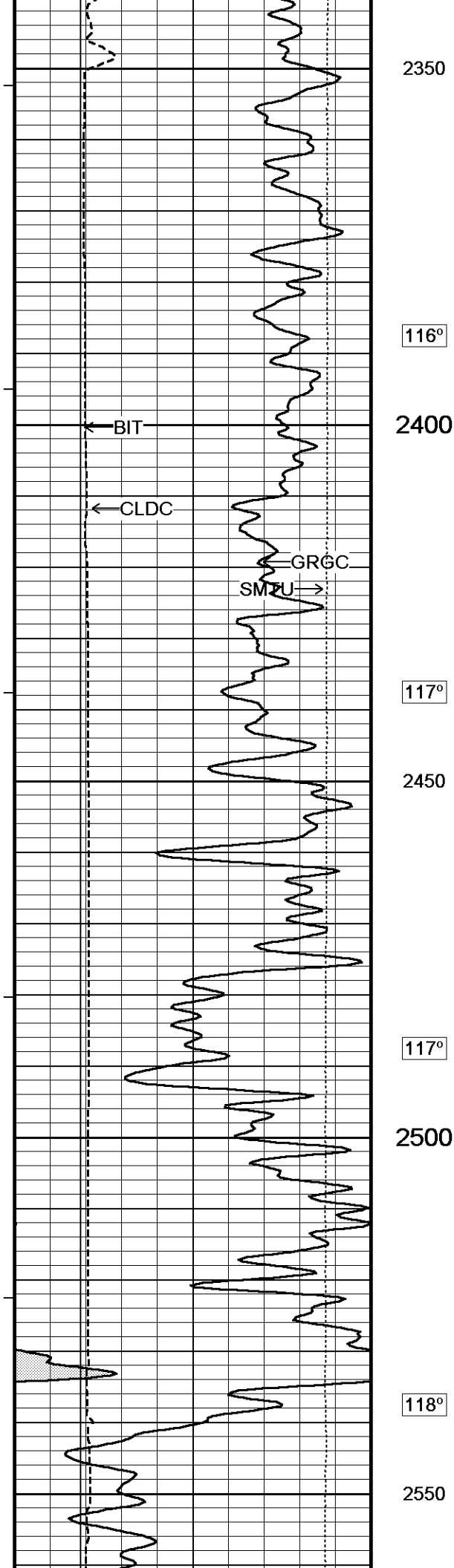
2250

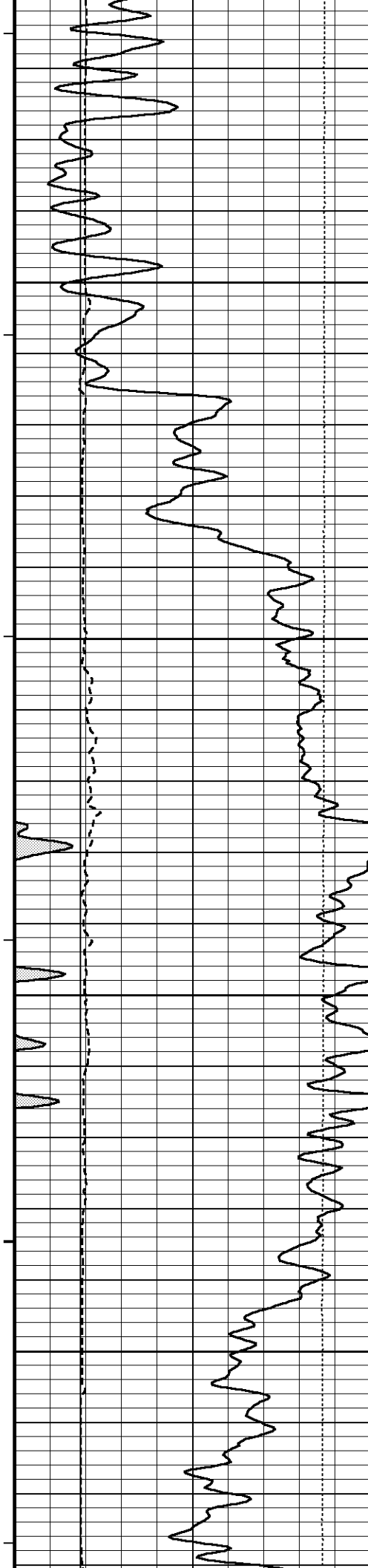
114°

2300

115°







119°

2600

119°

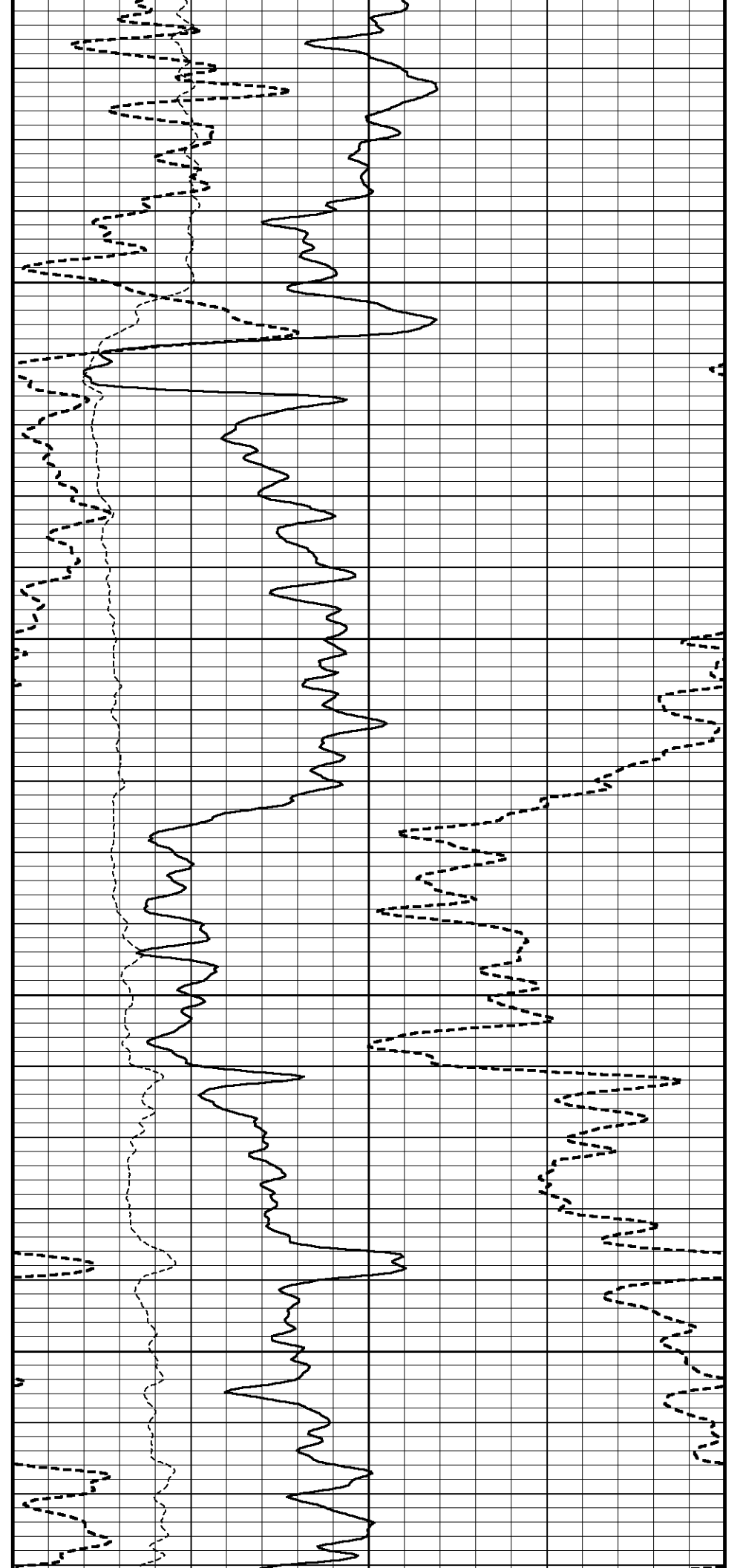
2650

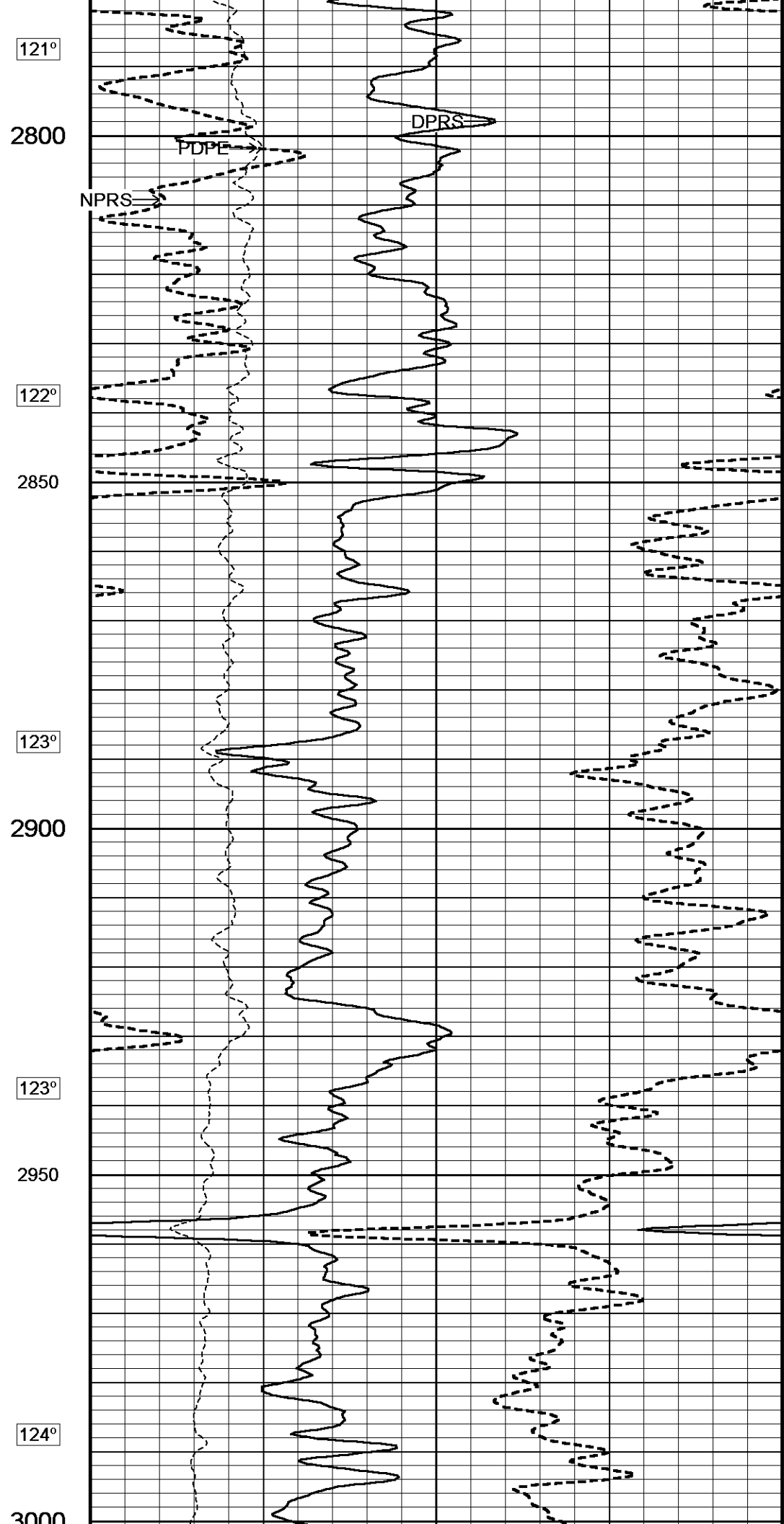
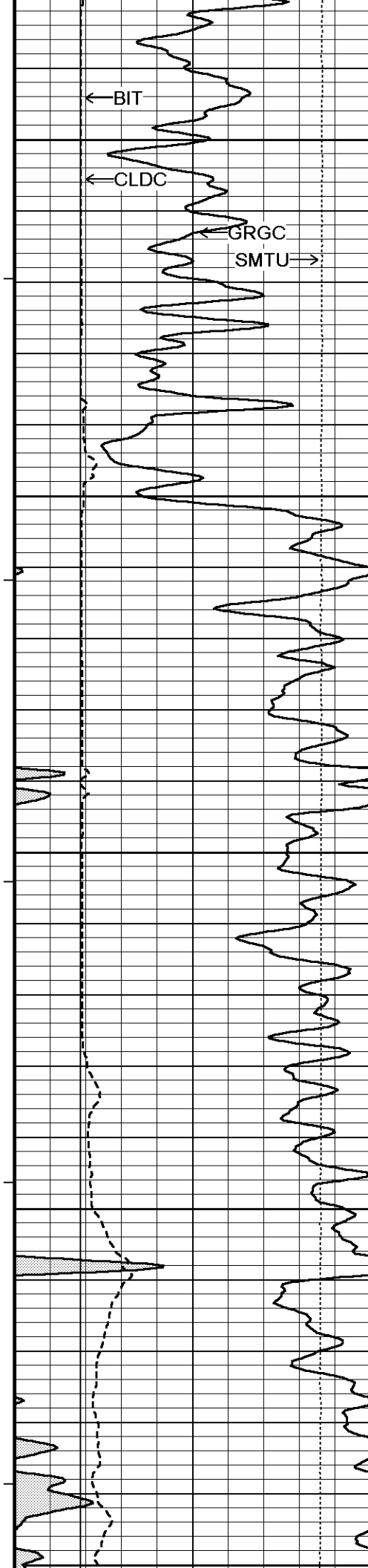
120°

2700

121°

2750







3000

124°

3050

125°

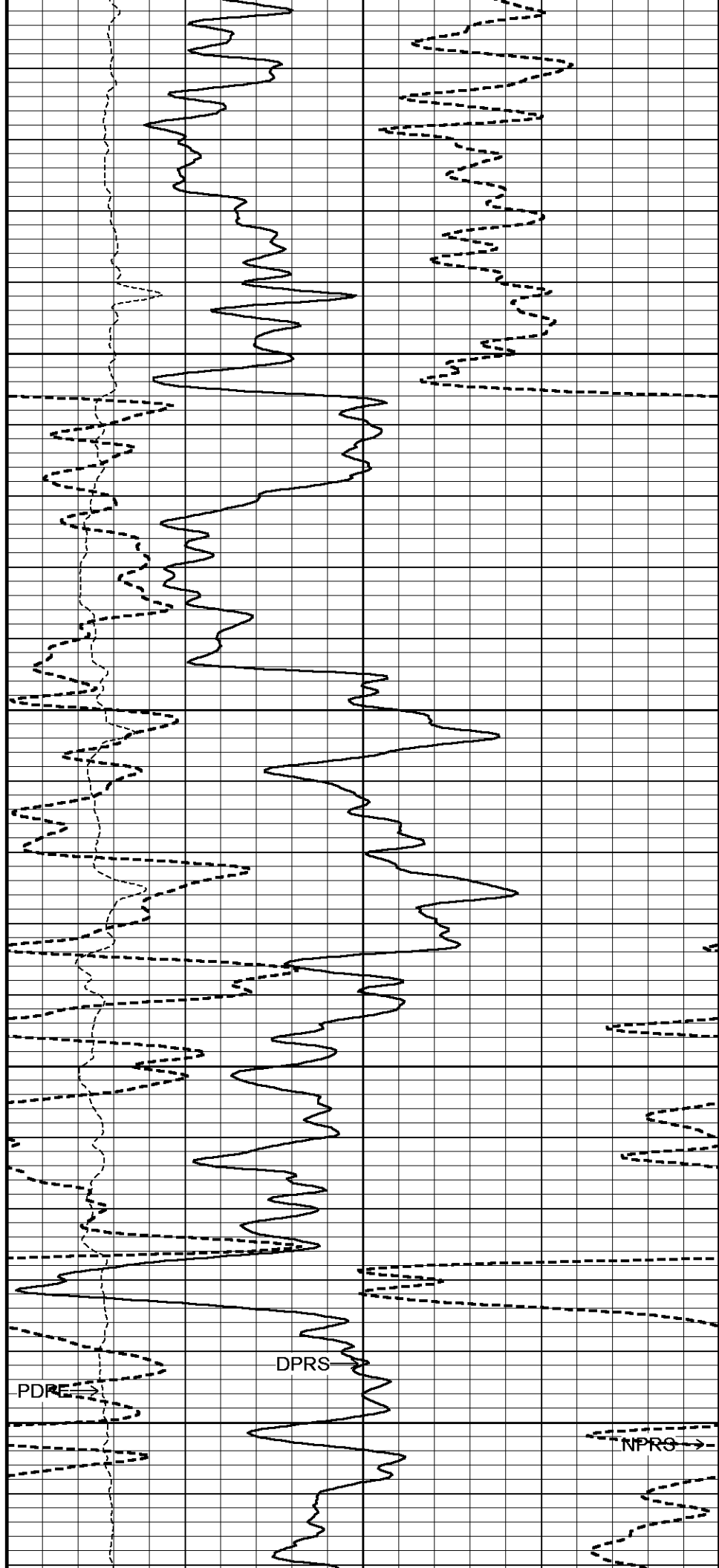
3100

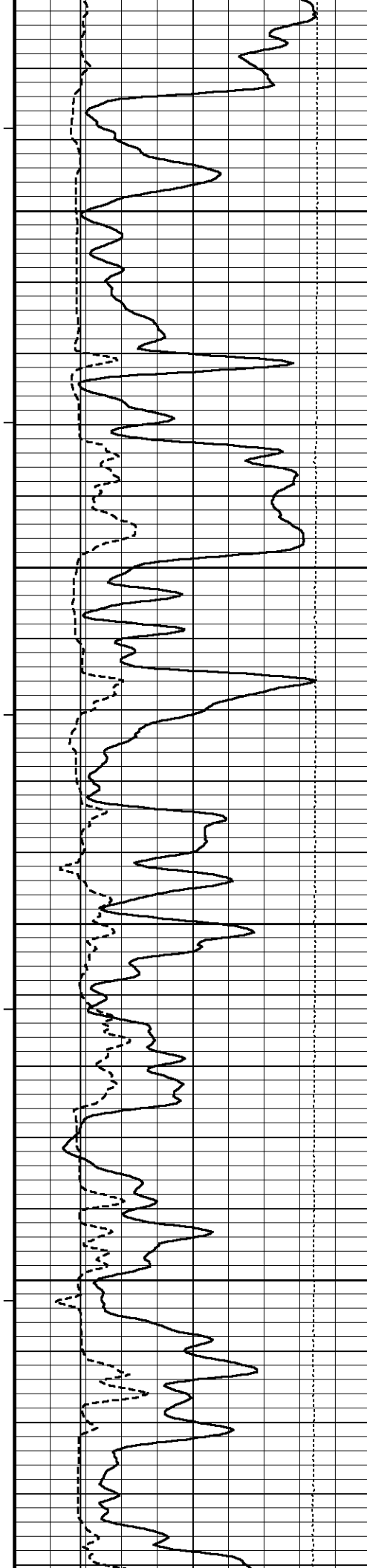
125°

3150

126°

3200





126°

3250

127°

3300

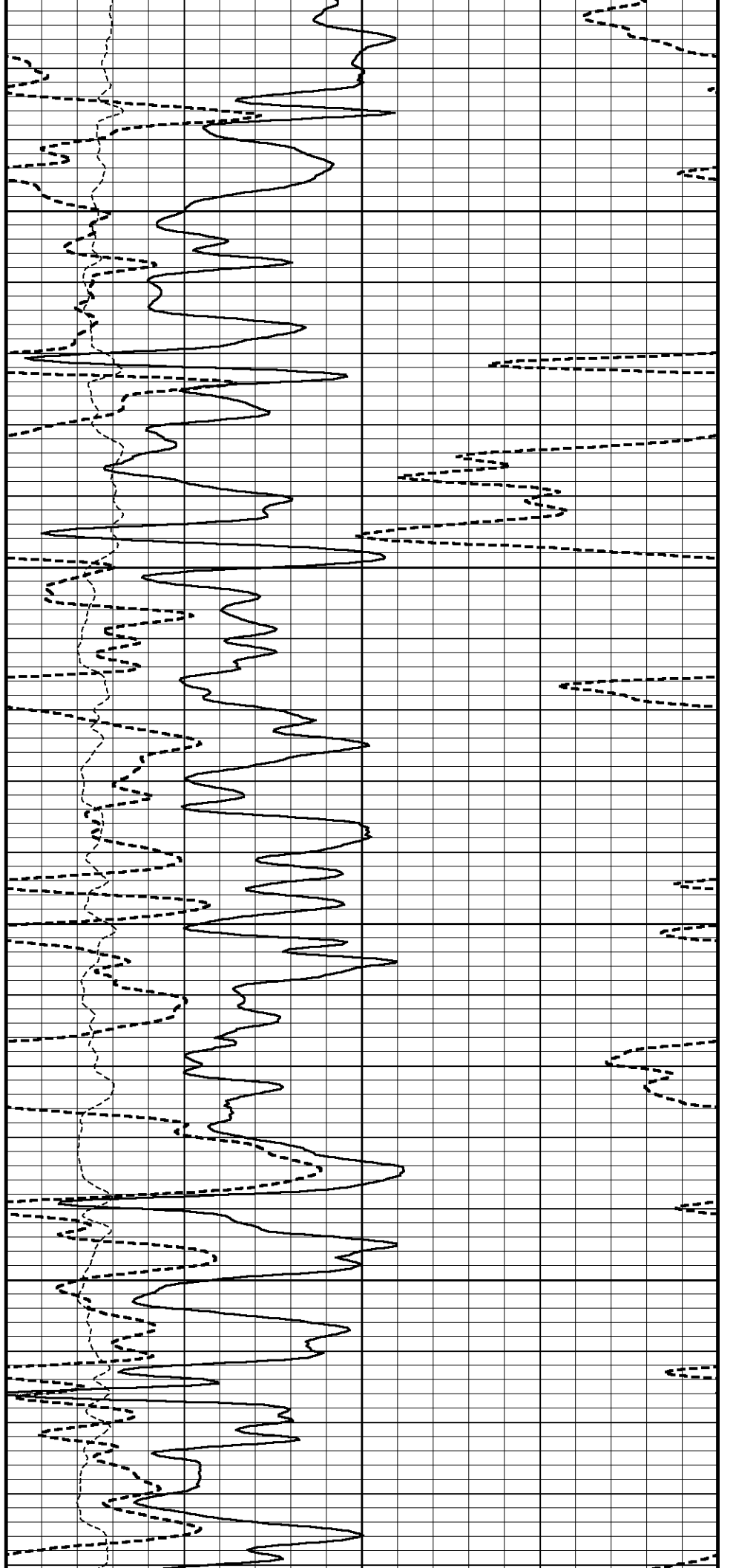
128°

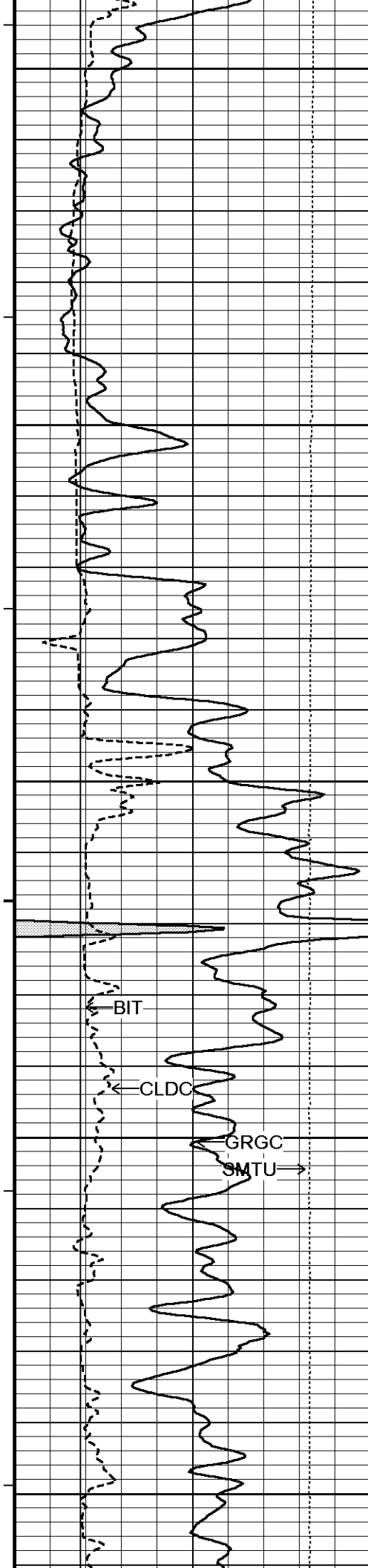
3350

128°

3400

129°





3450

129°

3500

129°

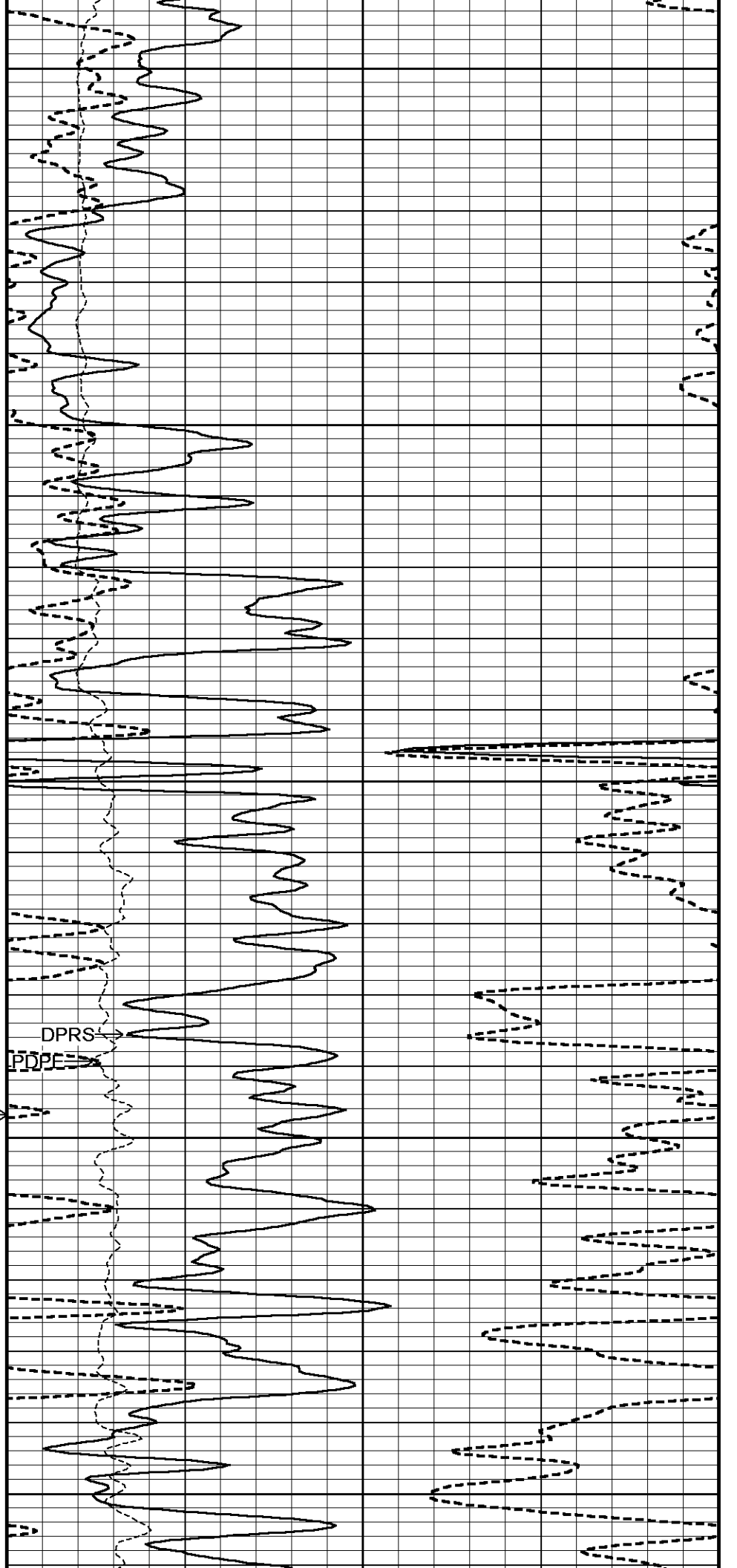
3550

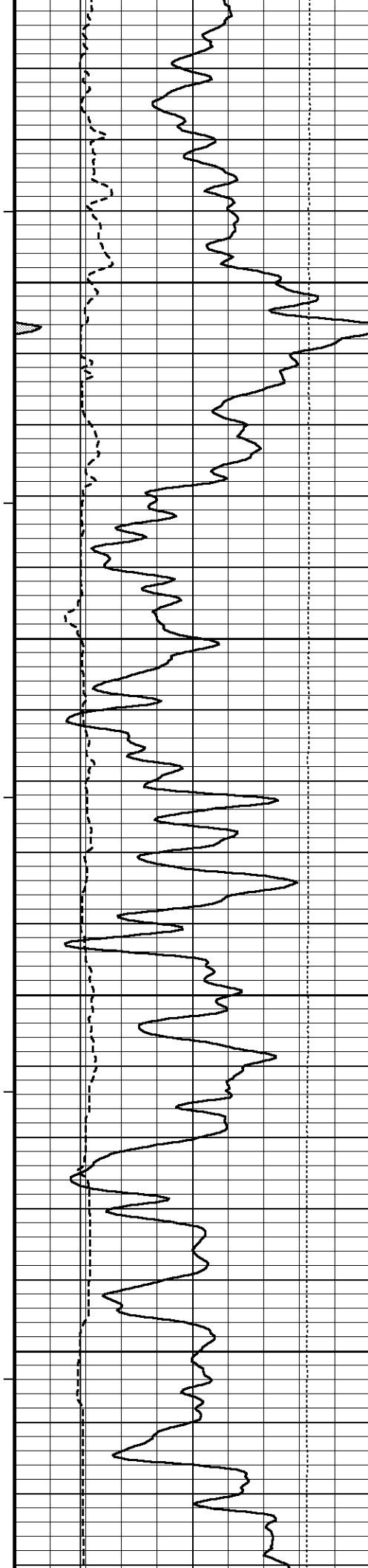
130°

NPRS
3600

130°

3650





131°

3700

132°

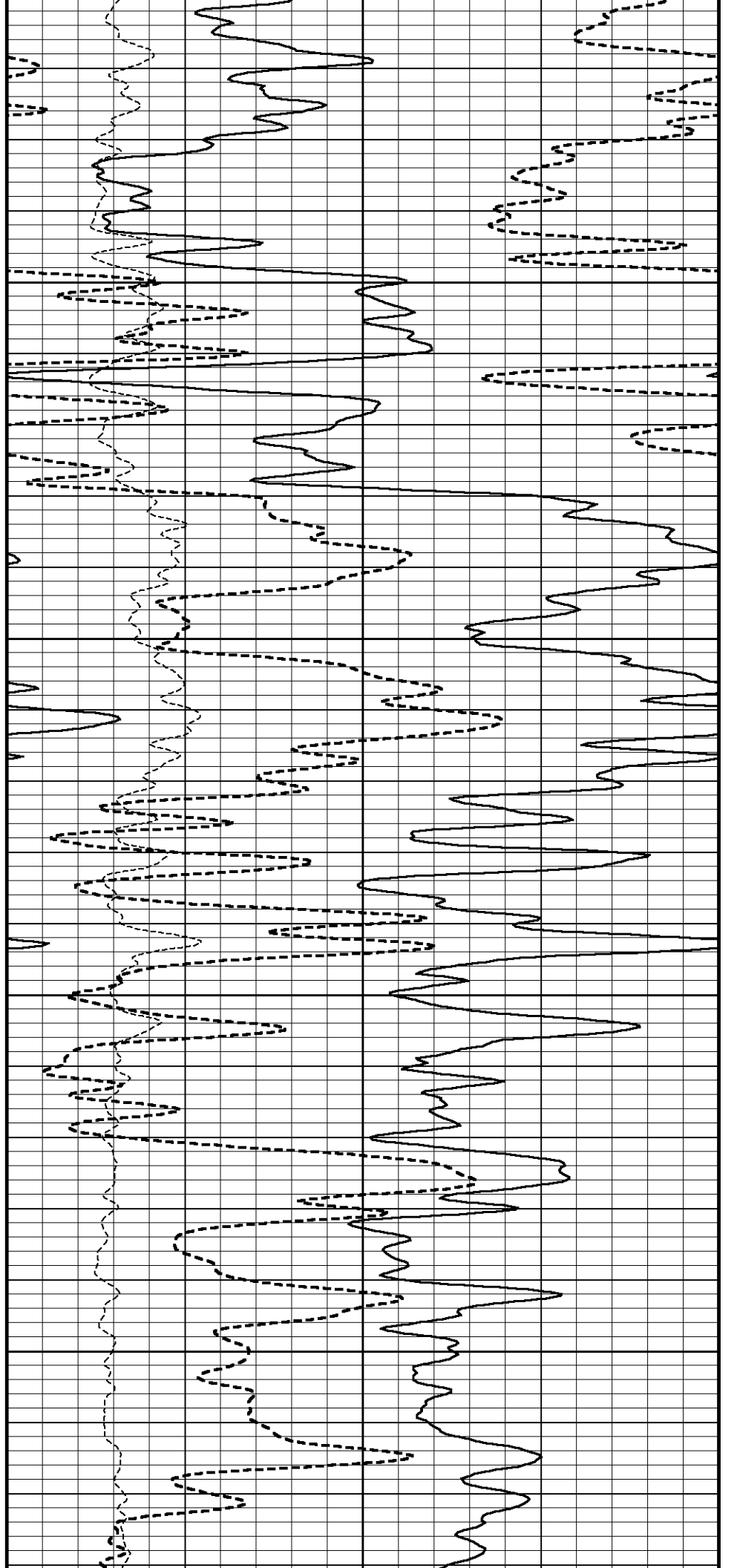
3750

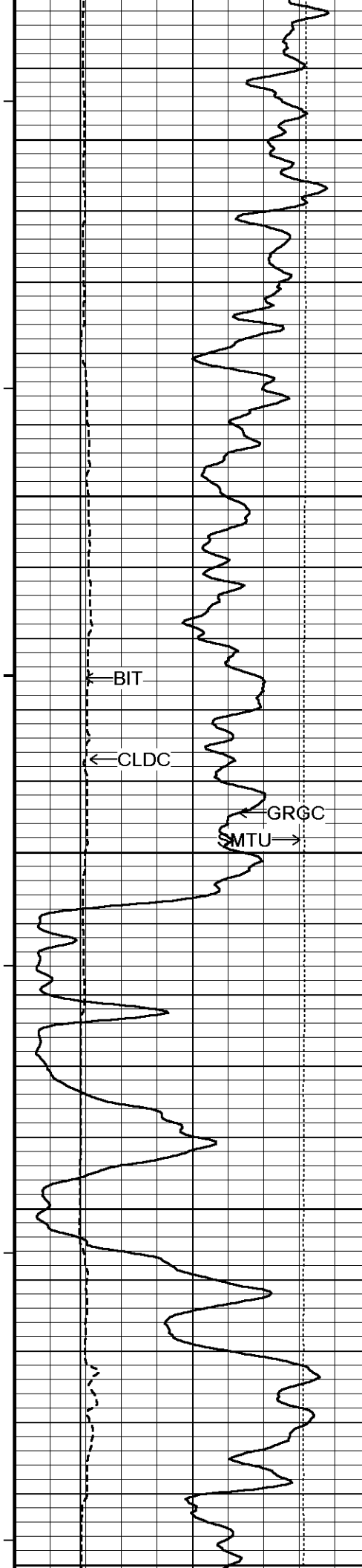
133°

3800

133°

3850





133°

3900

134°

3950

135°

NPRS

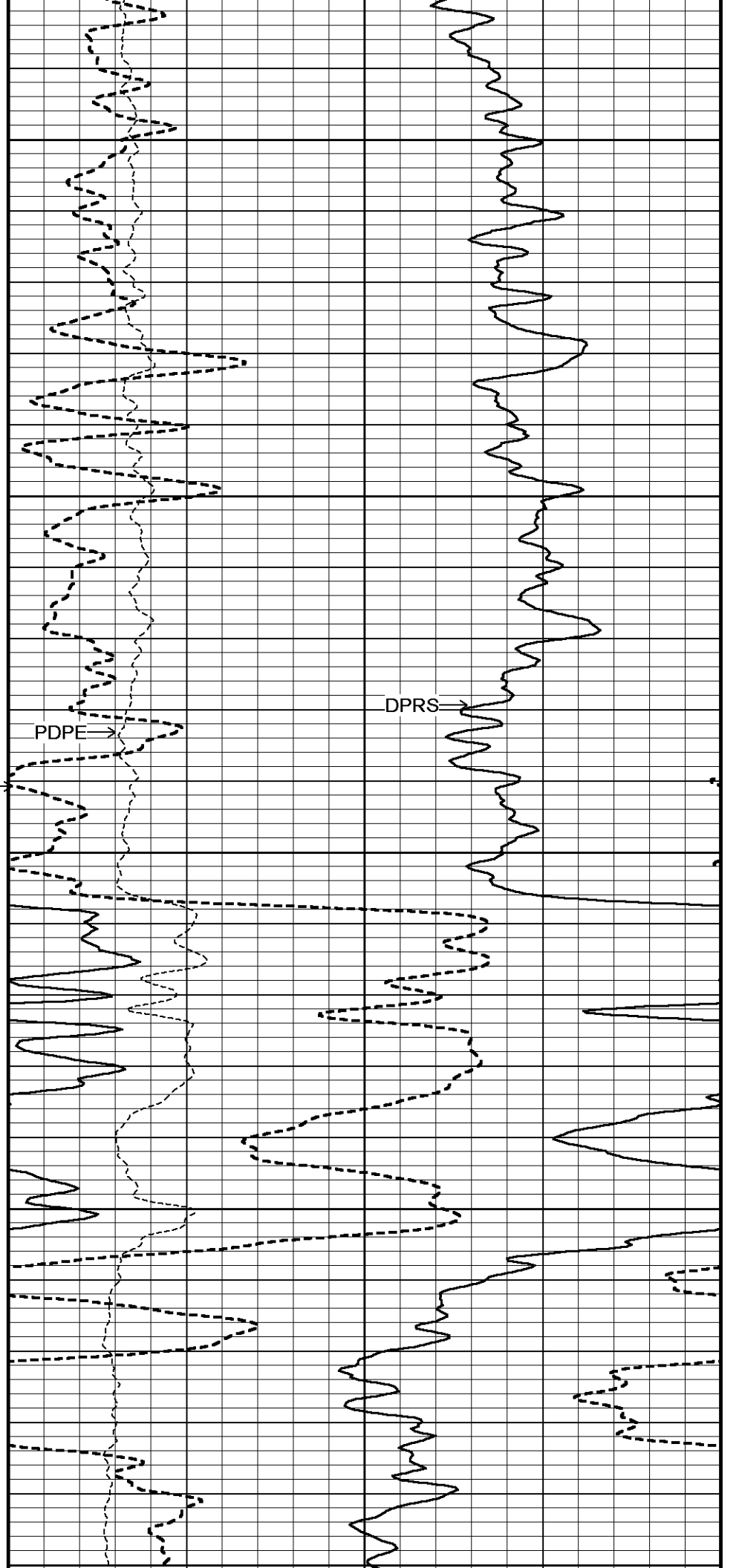
4000

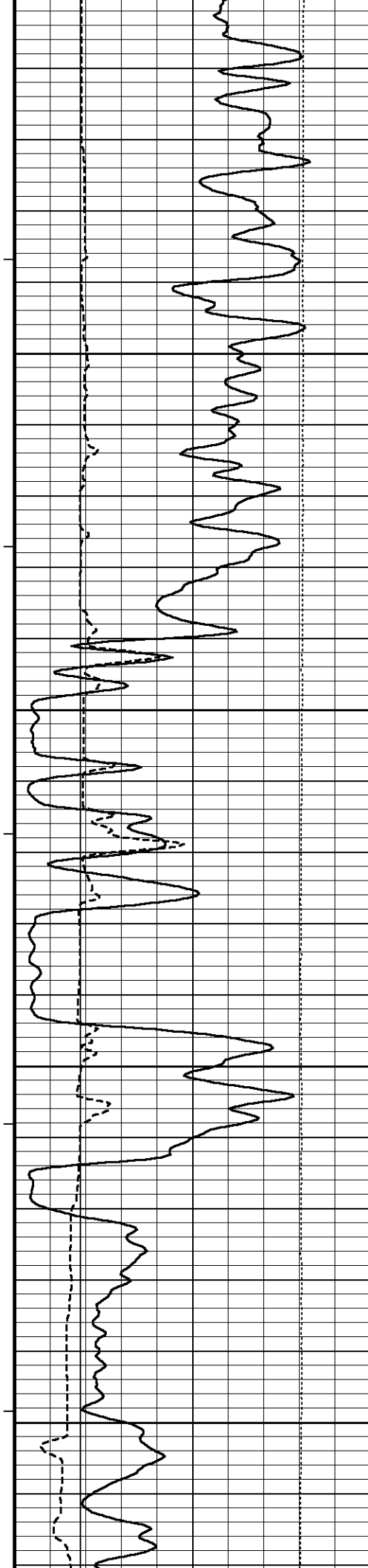
135°

4050

135°

4100





4100

136°

4150

136°

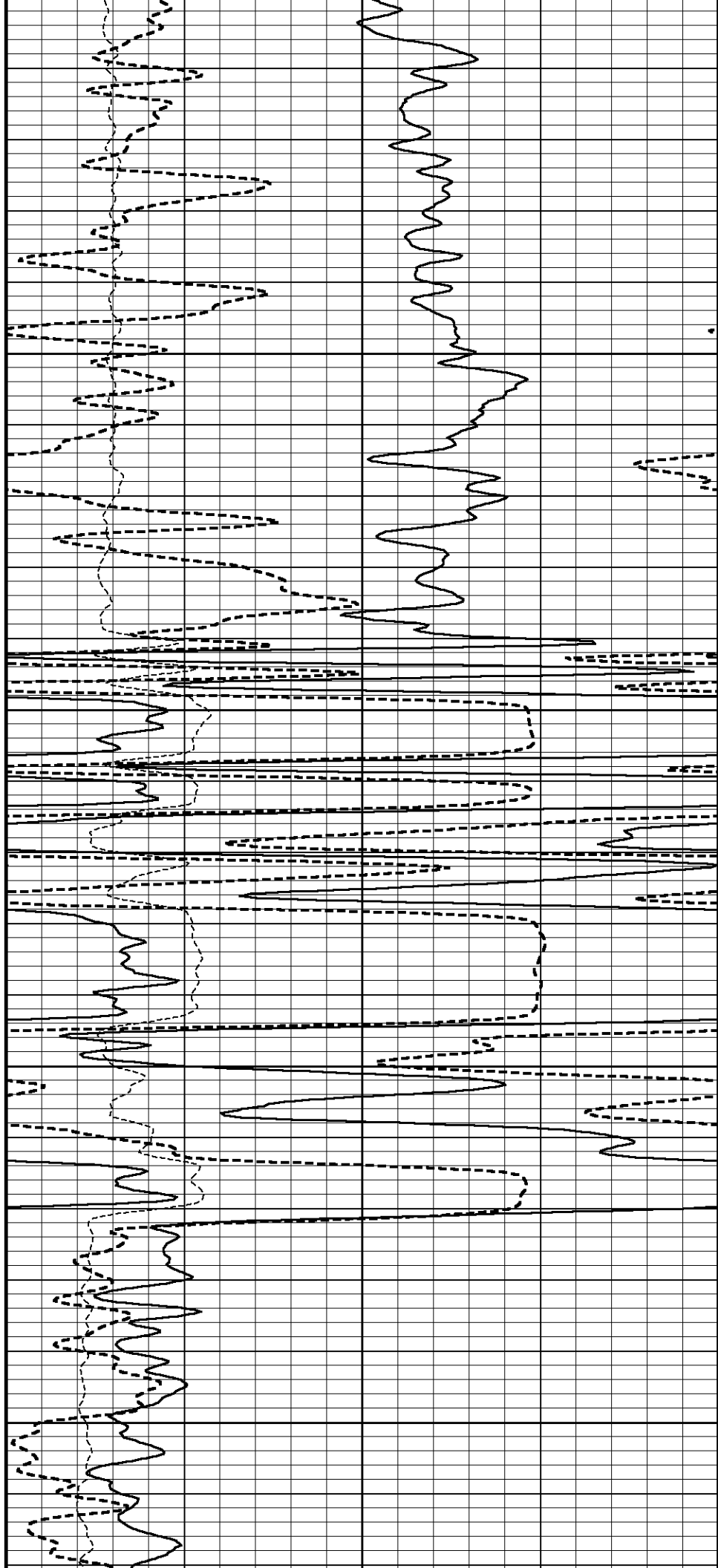
4200

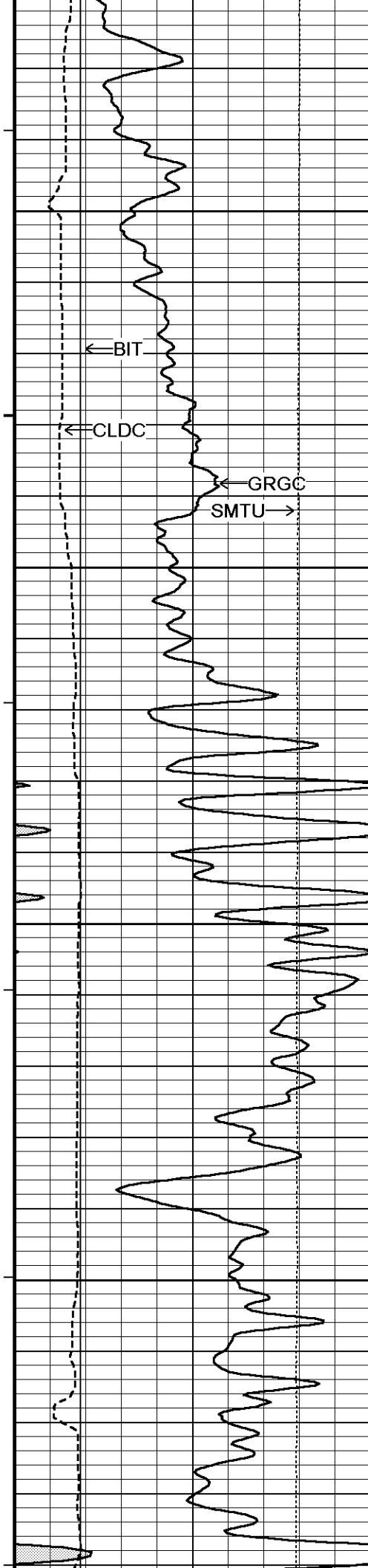
137°

4250

137°

4300





138°

4350

← BIT

← CLDC

← GRGC

SMTU →

NPRS
138°

4400

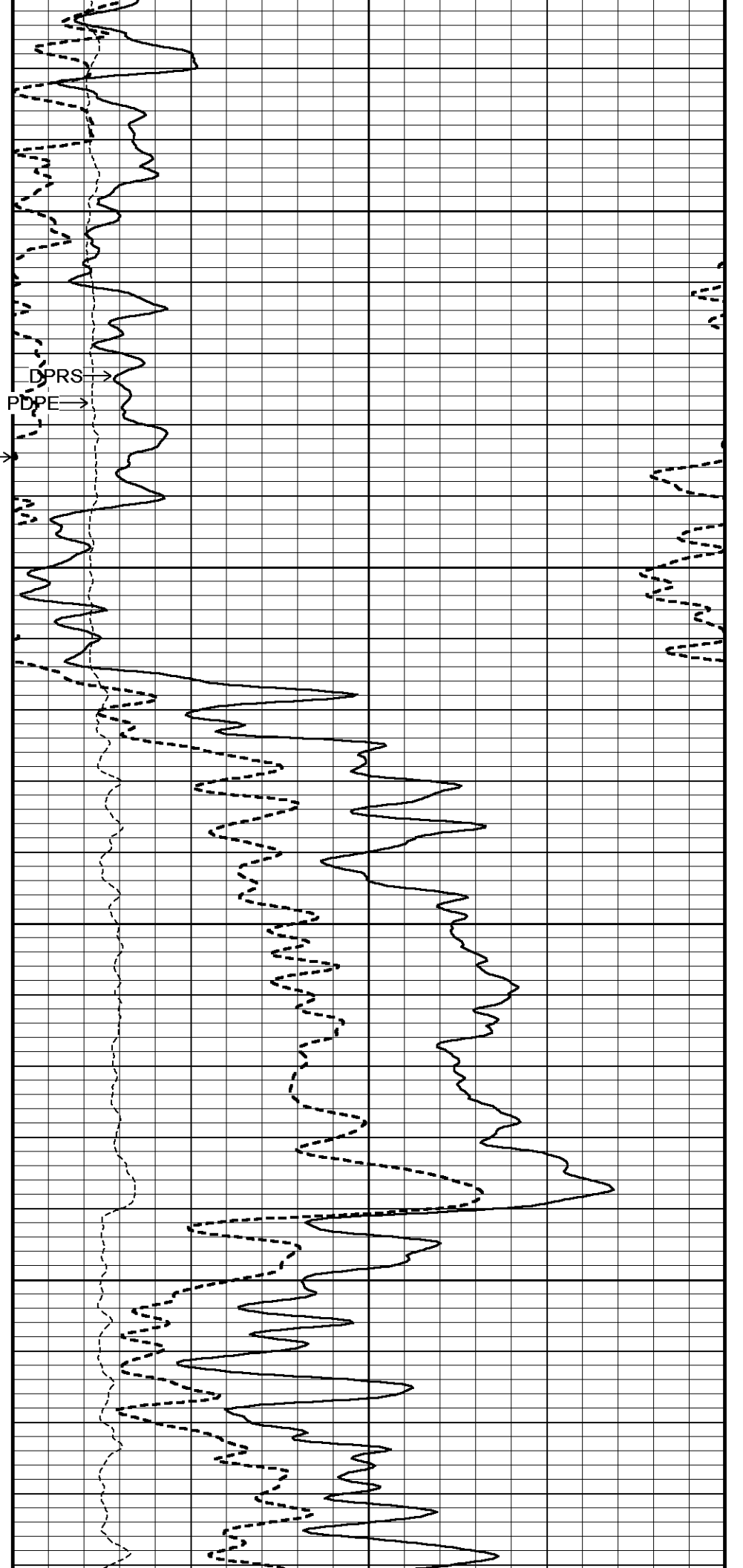
139°

4450

139°

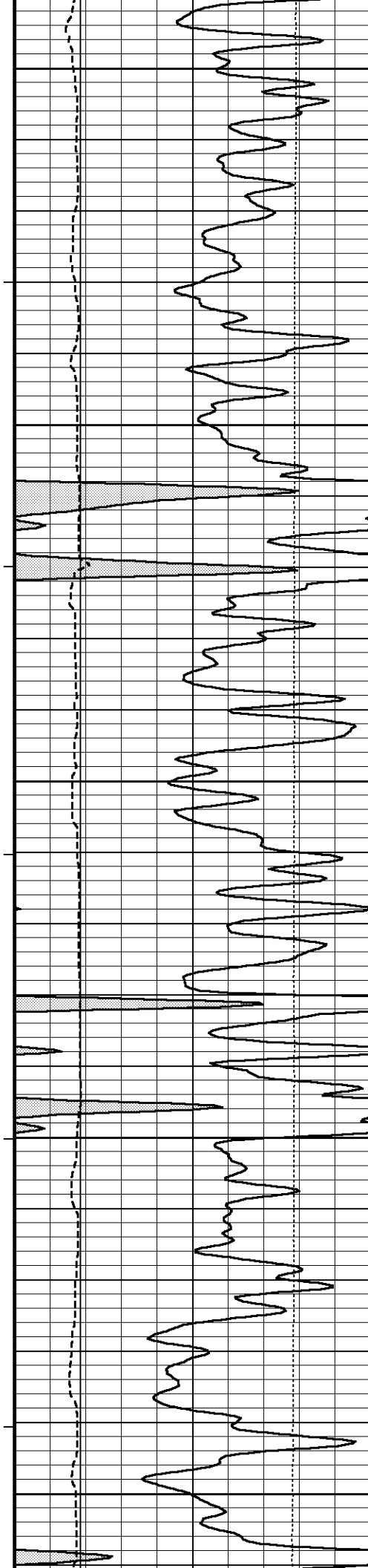
4500

139°



DPRS →

PDPE →



4550

140°

4600

140°

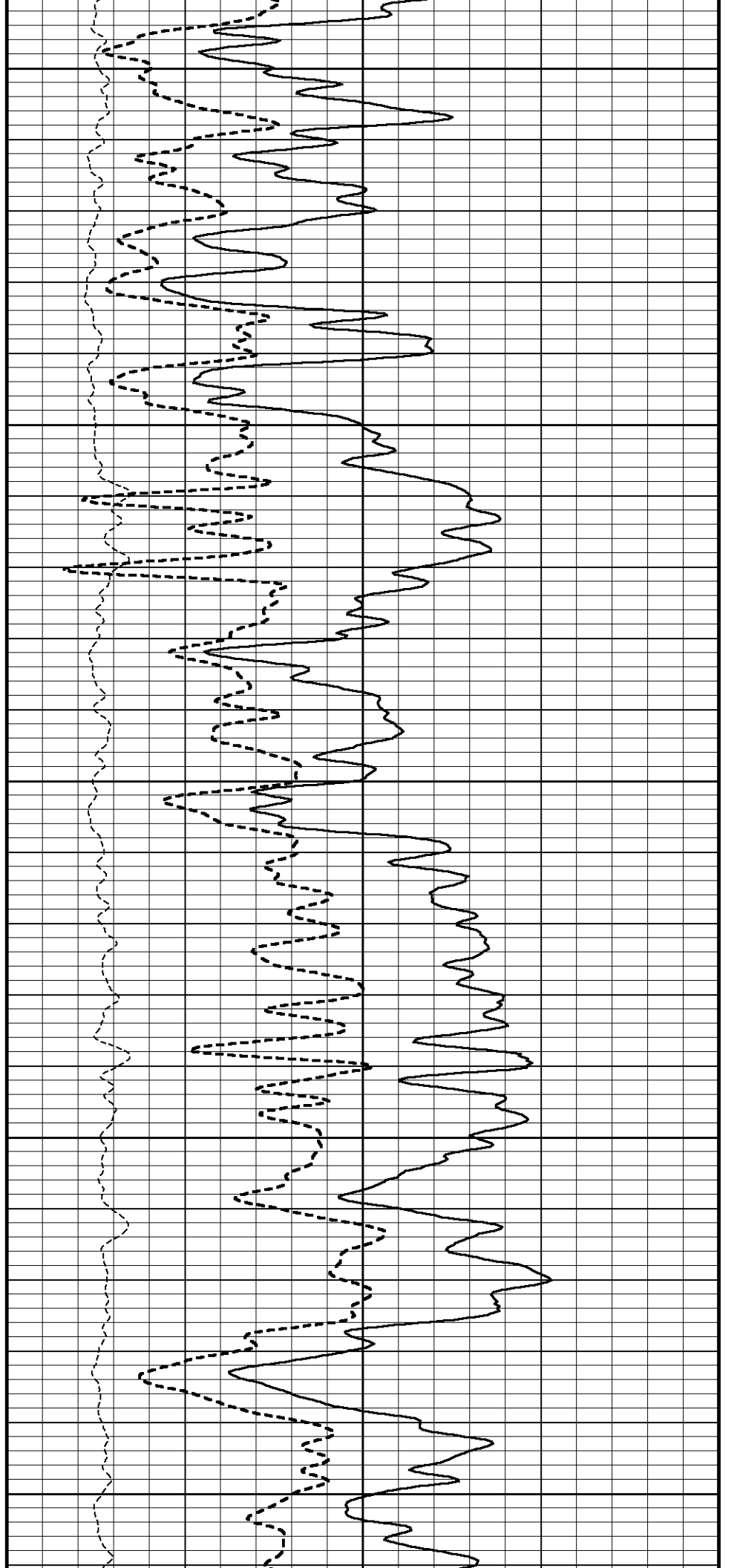
4650

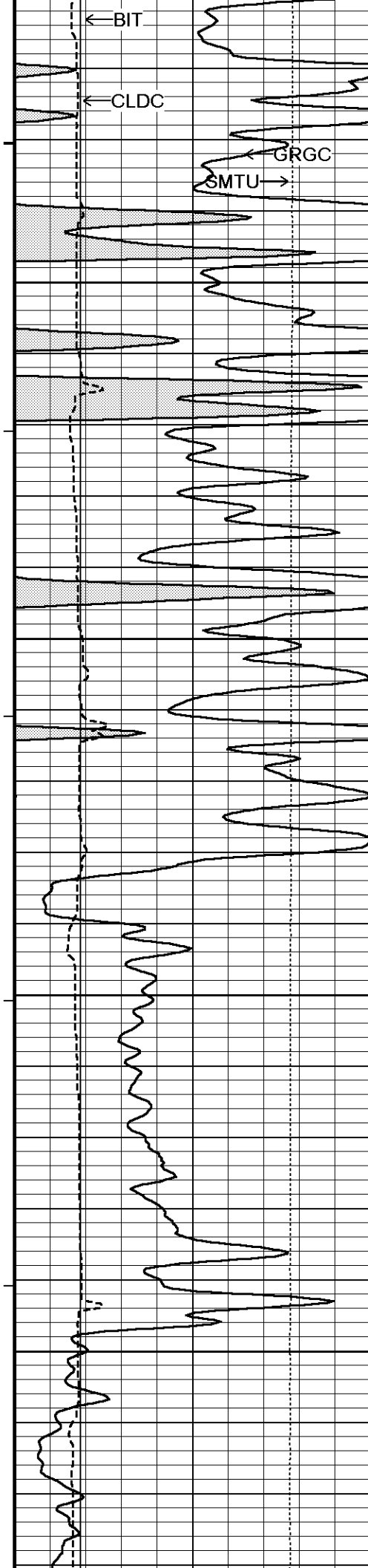
141°

4700

142°

4750





142°

4800

142°

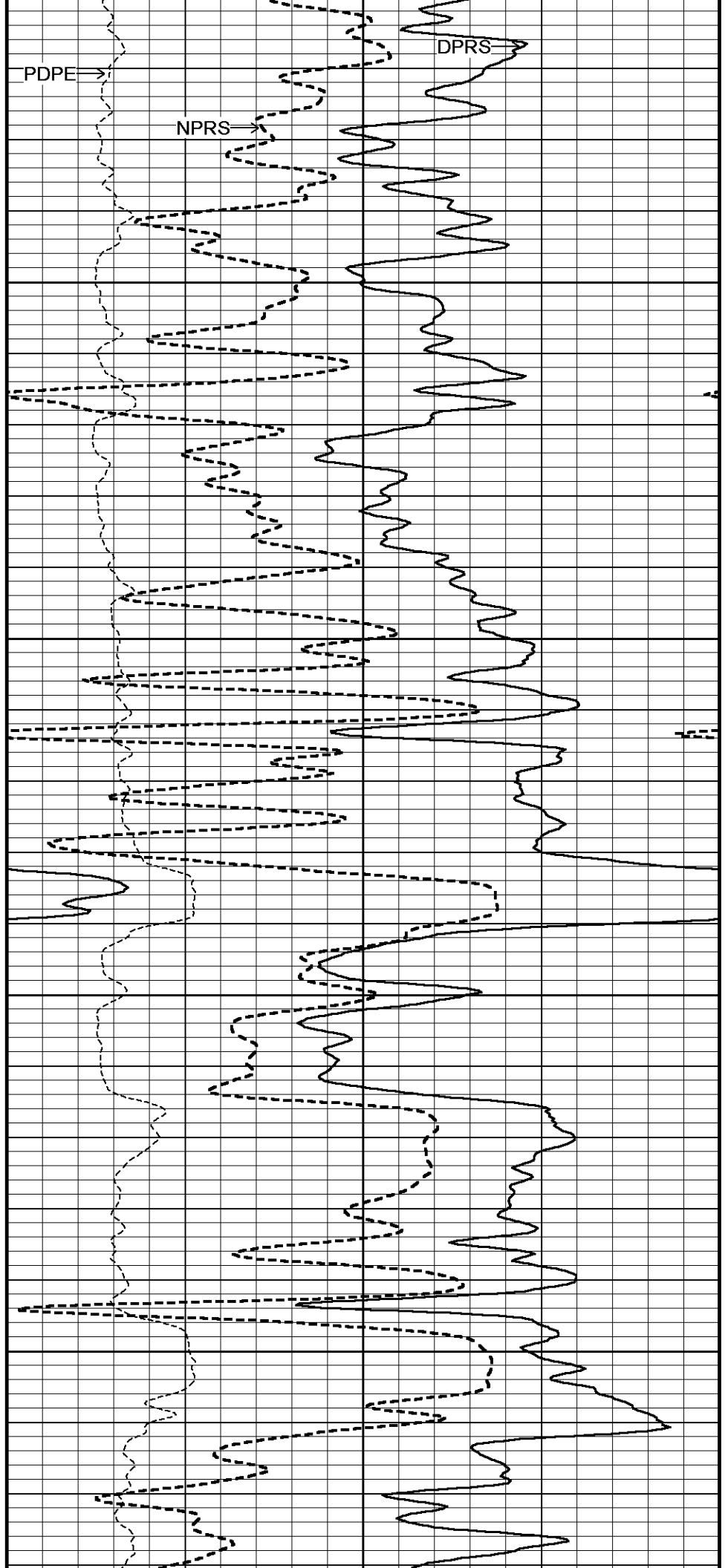
4850

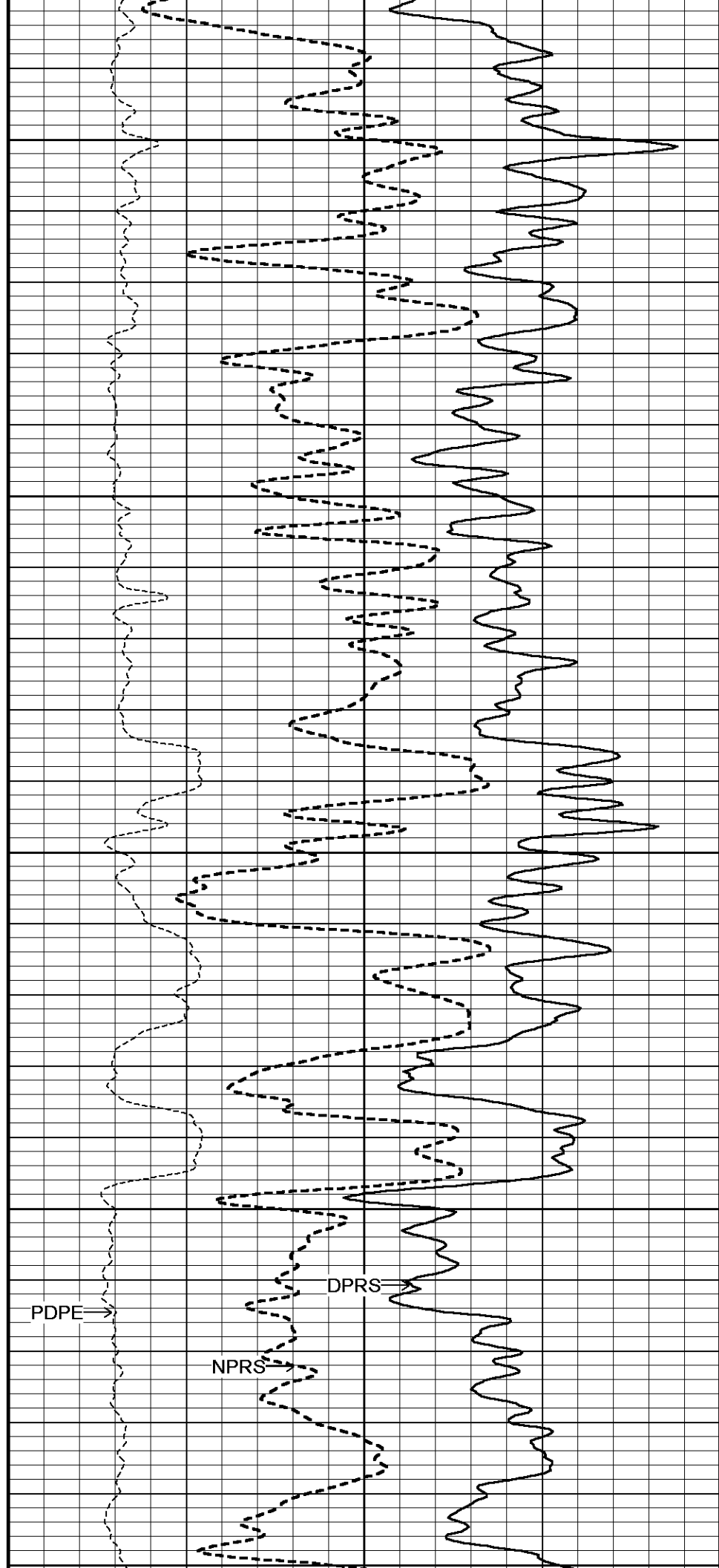
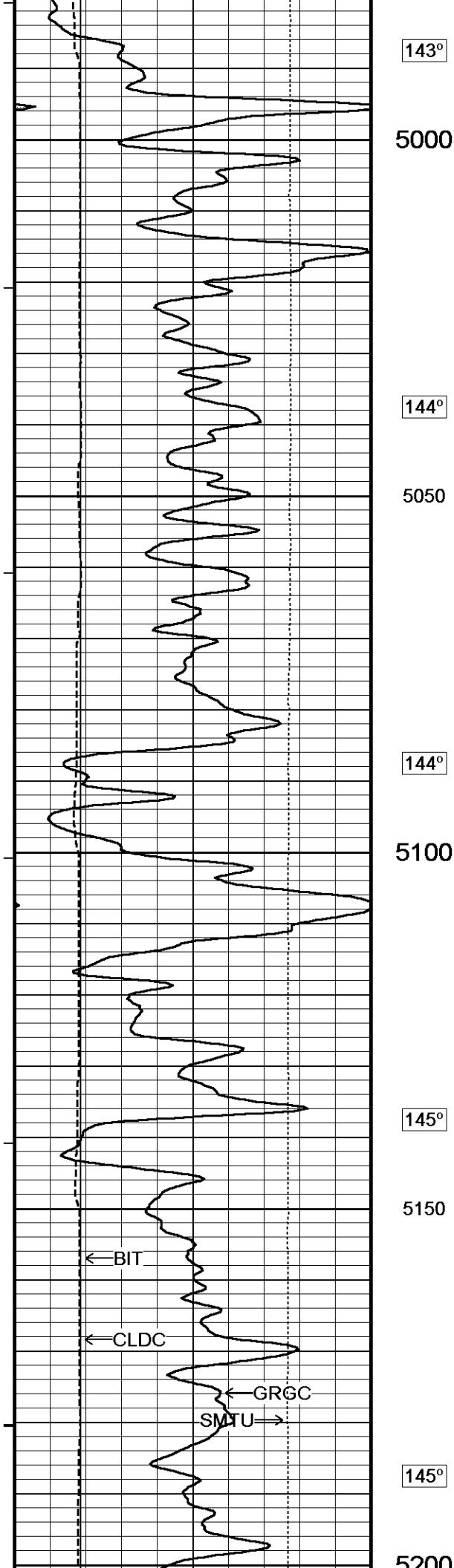
143°

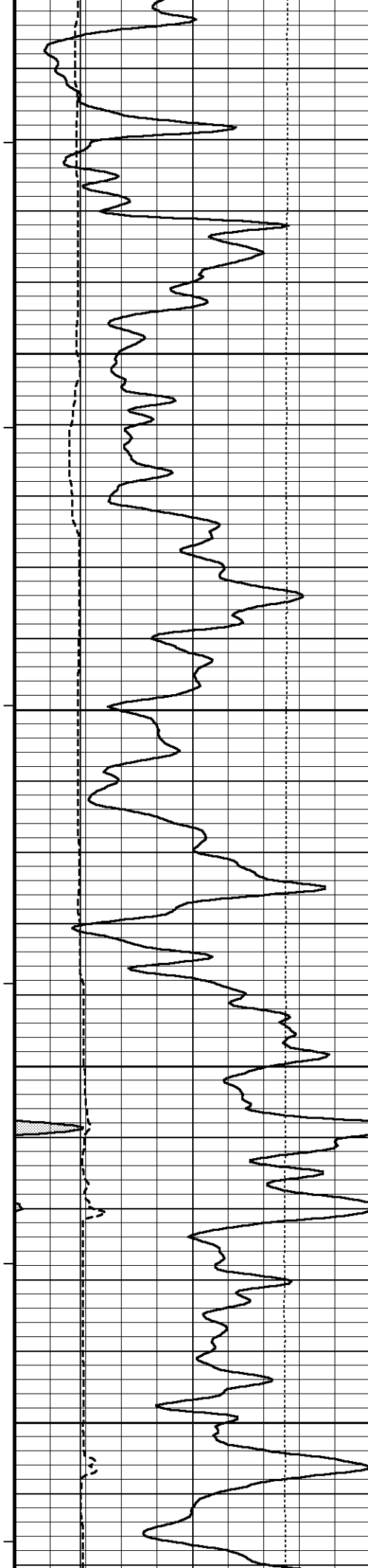
4900

143°

4950







5200

146°

5250

147°

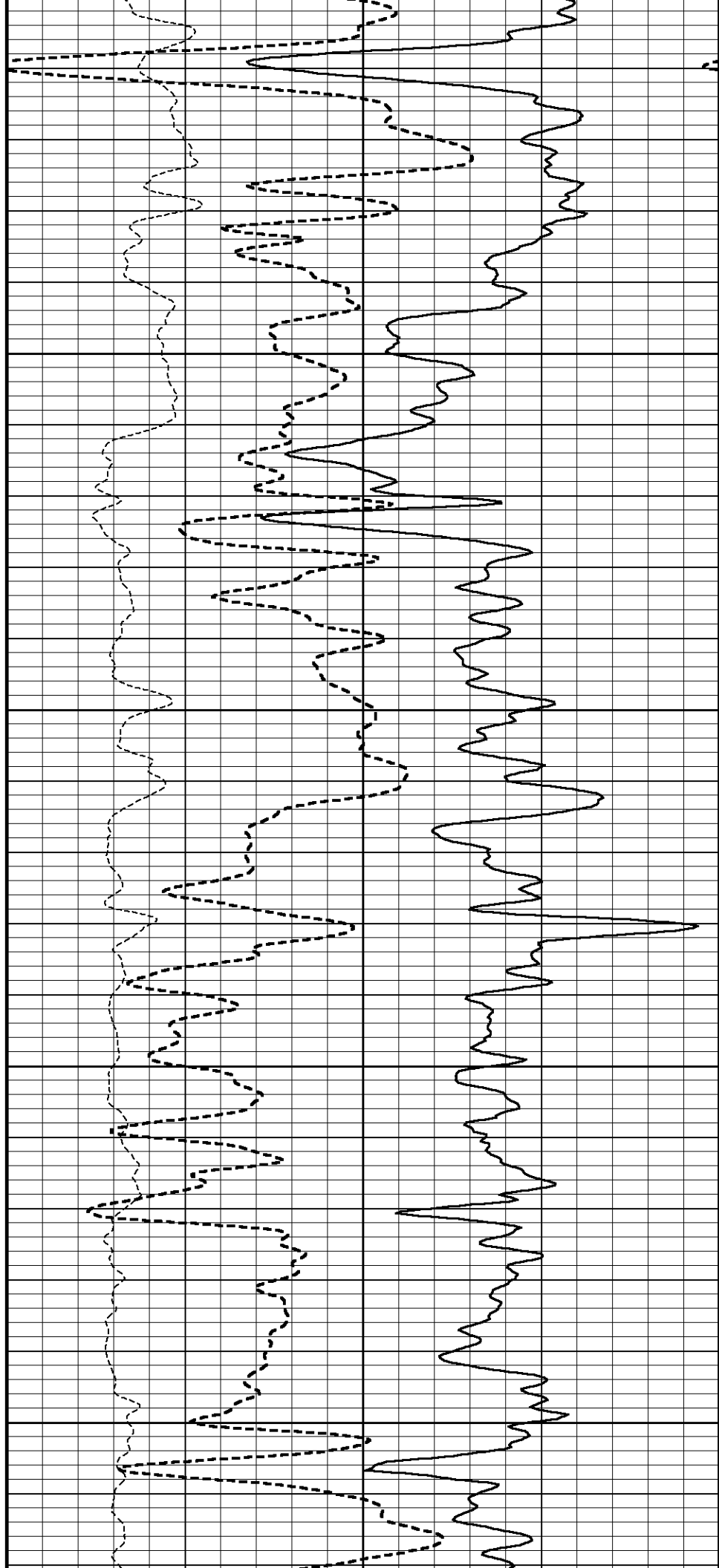
5300

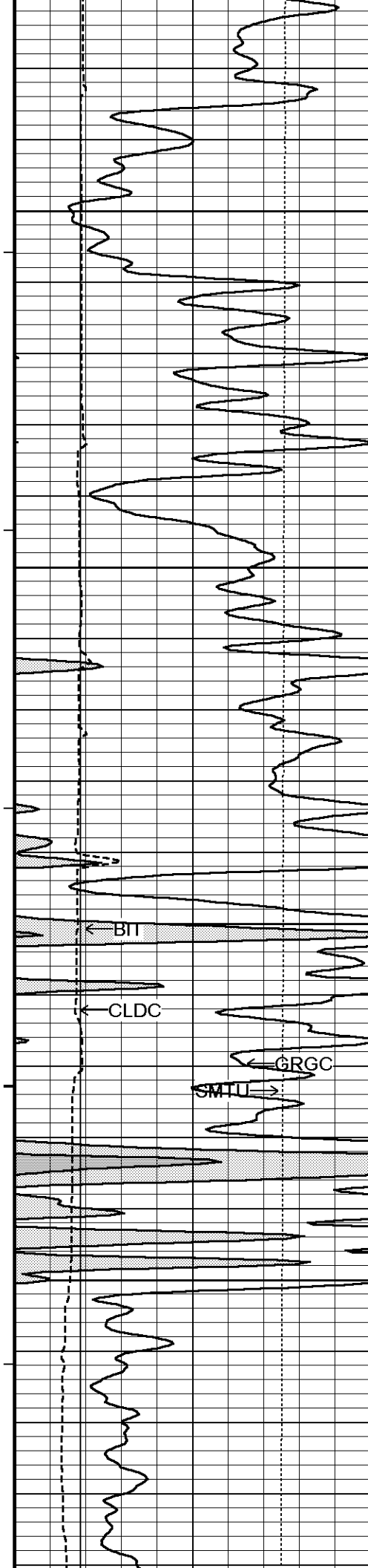
147°

5350

147°

5400





147°

5450

148°

5500

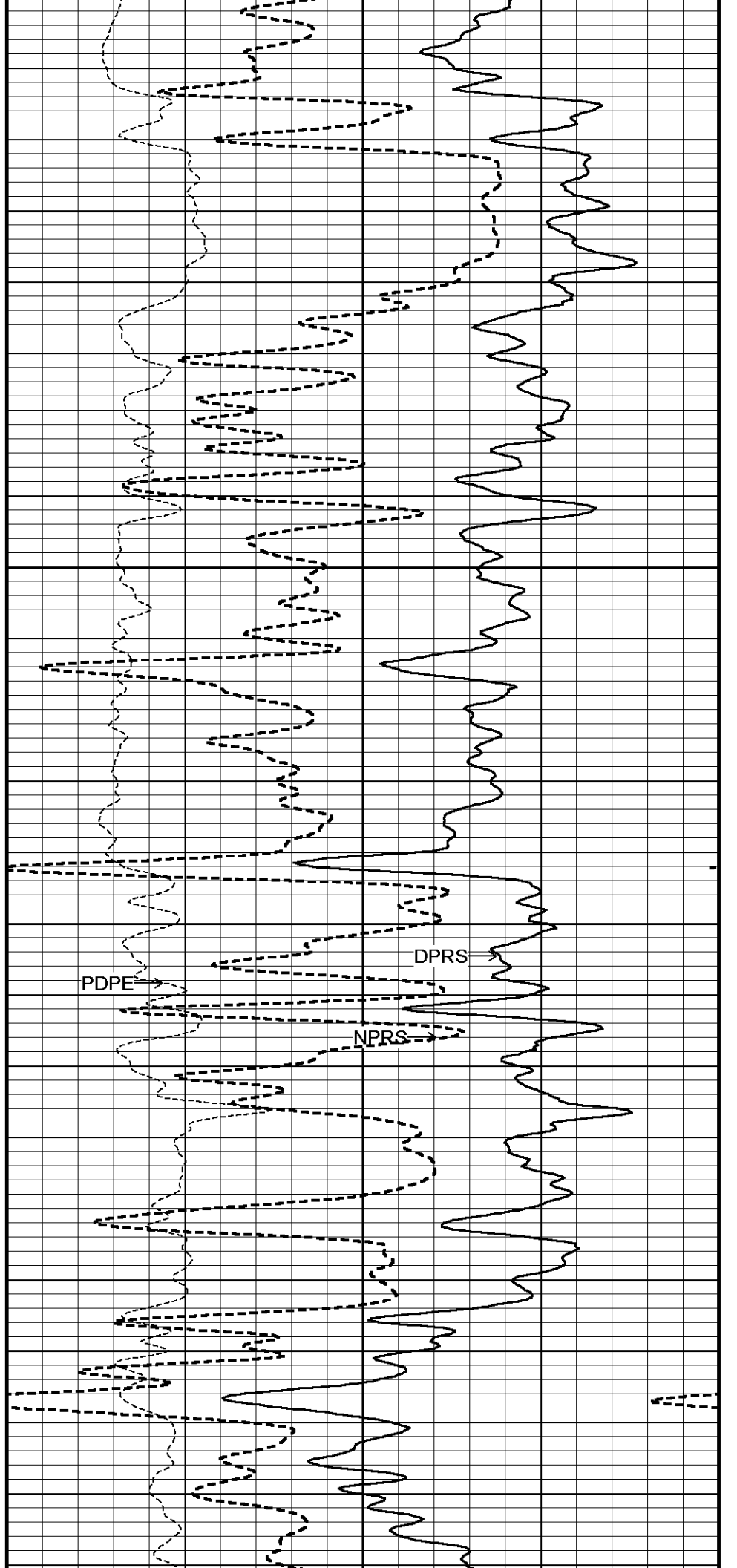
148°

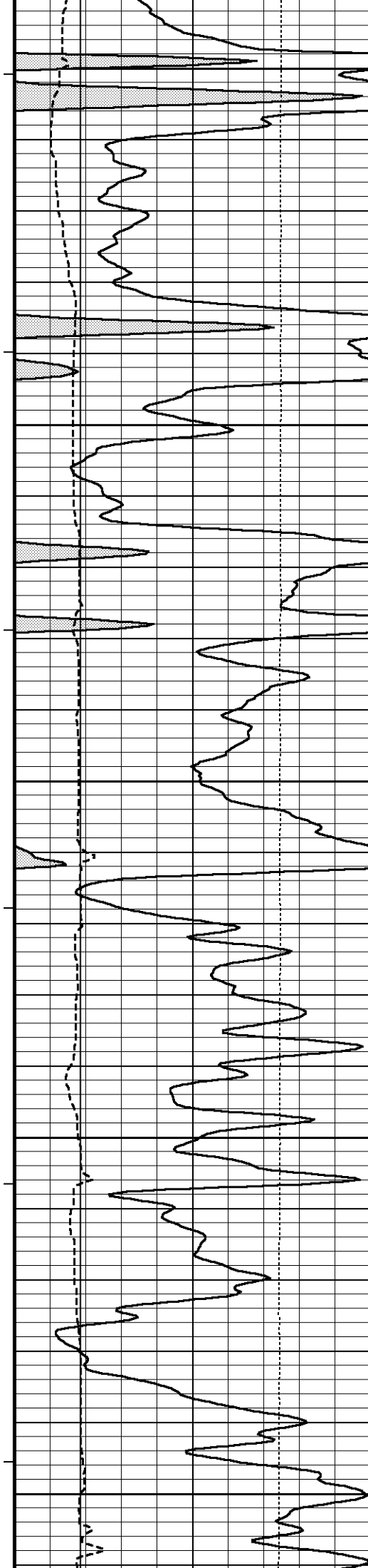
5550

148°

5600

149°





5650

150°

5700

150°

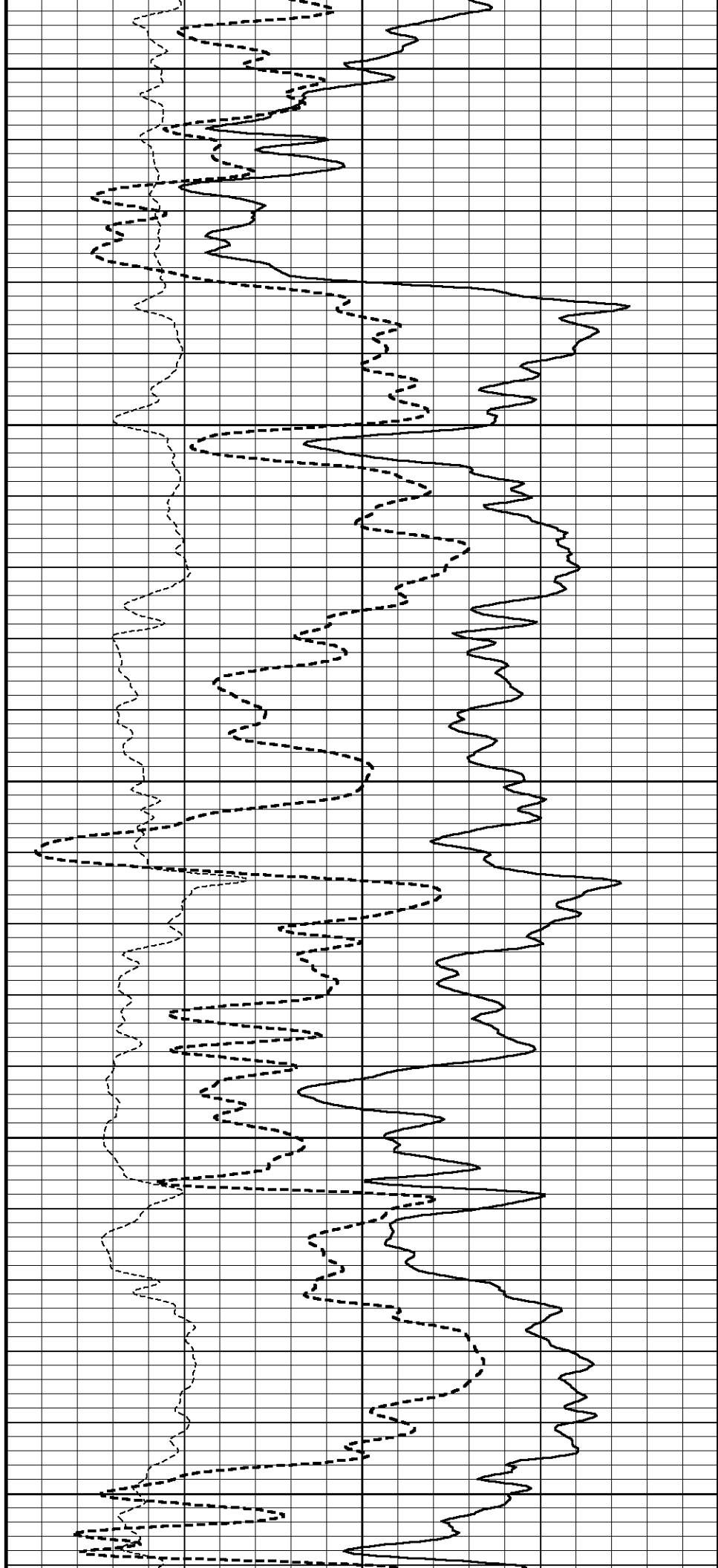
5750

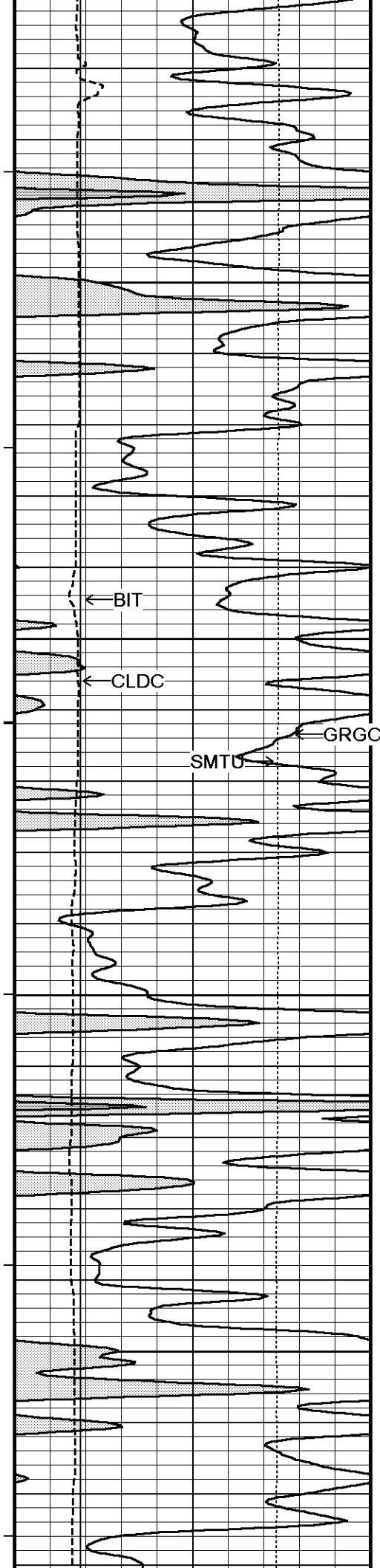
151°

5800

151°

5850





152°

5900

152°

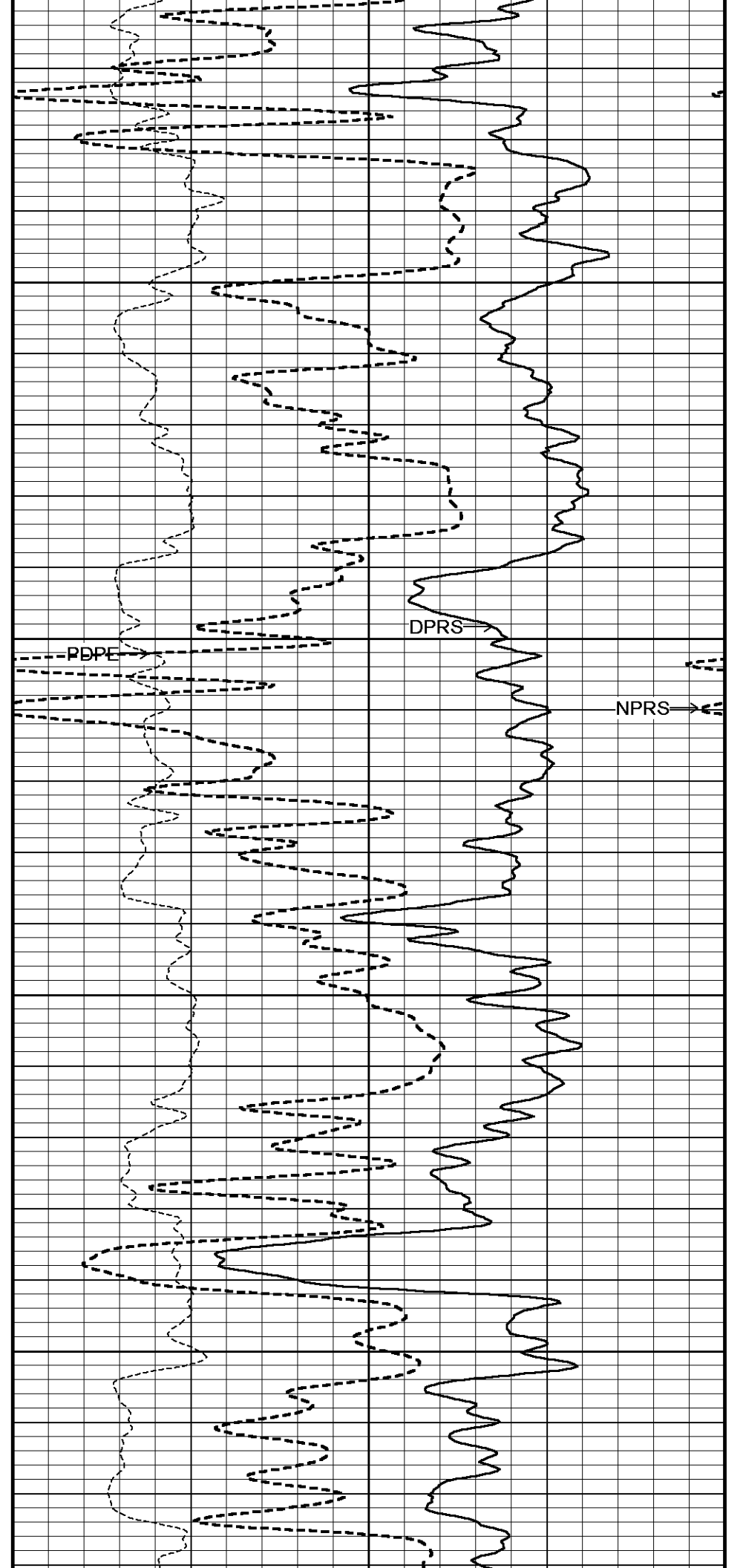
5950

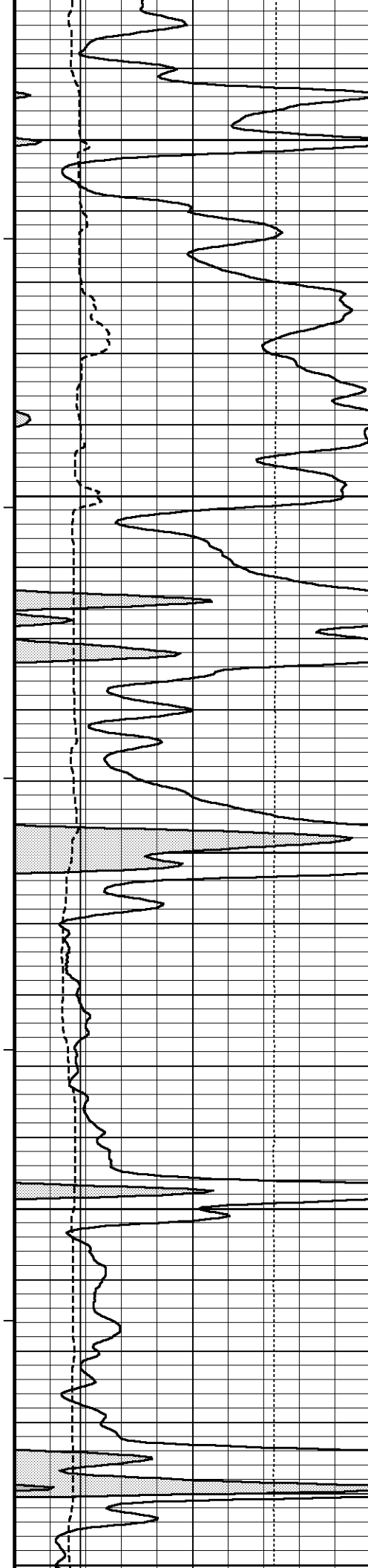
153°

6000

153°

6050





153°

6100

154°

6150

155°

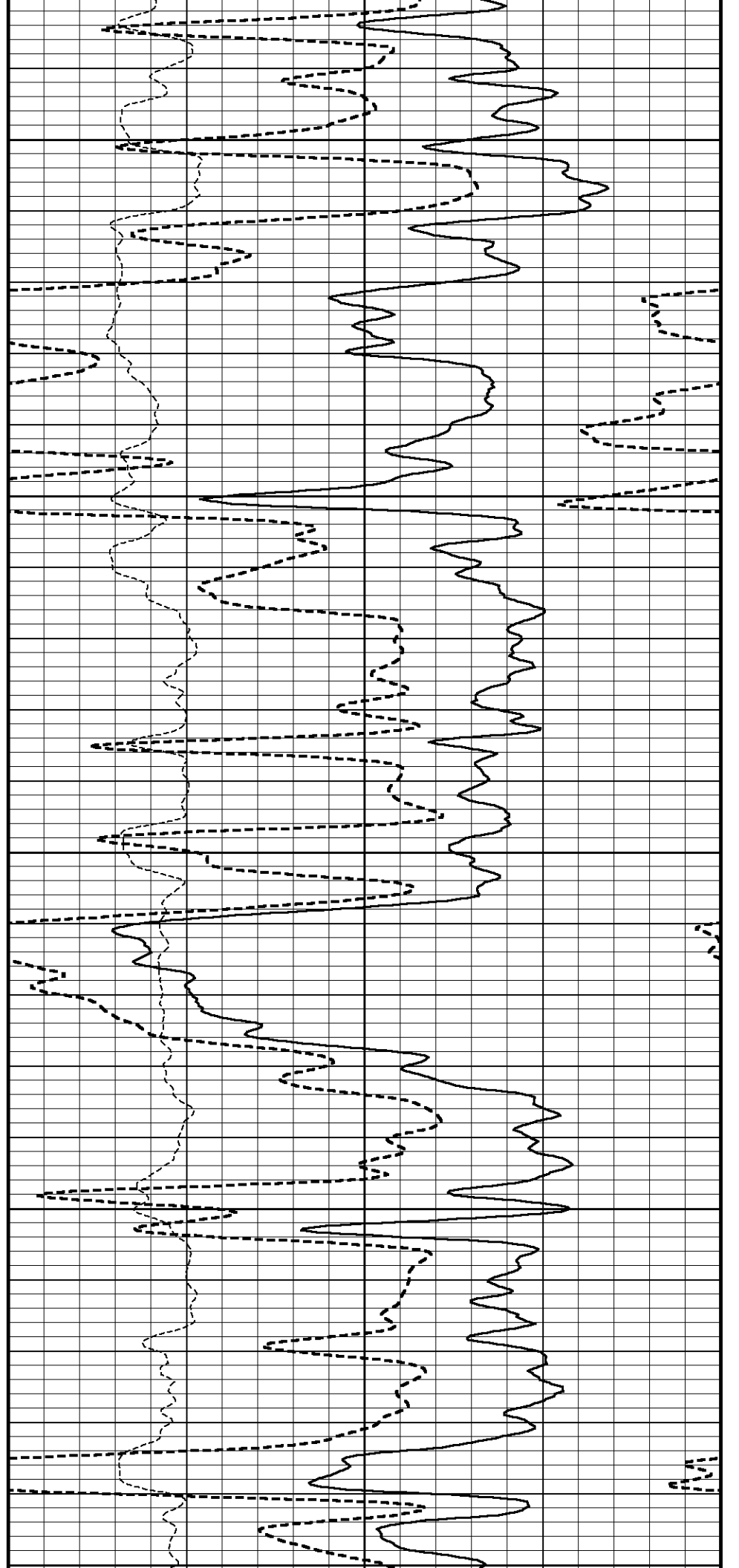
6200

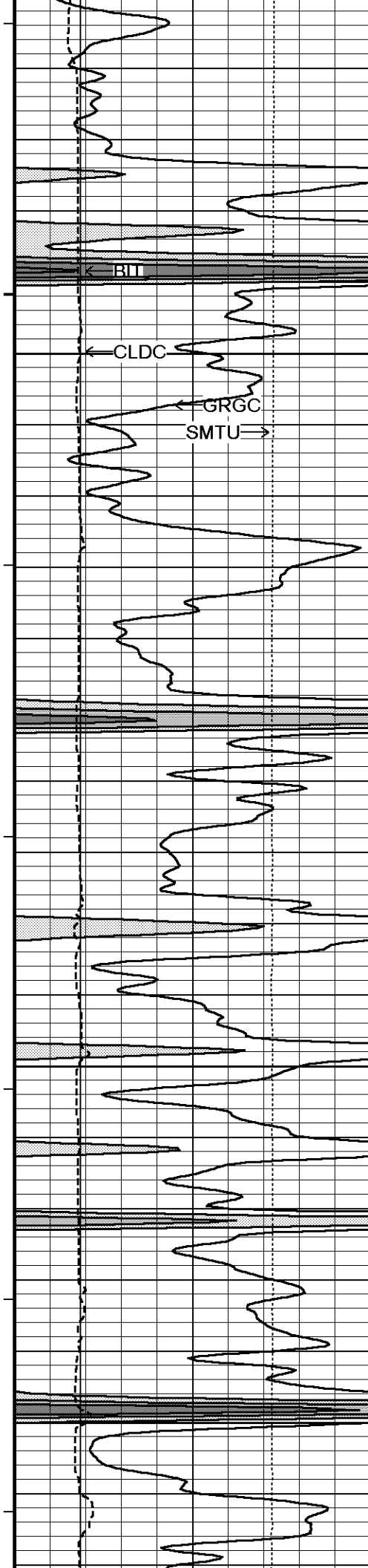
156°

6250

156°

6300





6300

157°

6350

157°

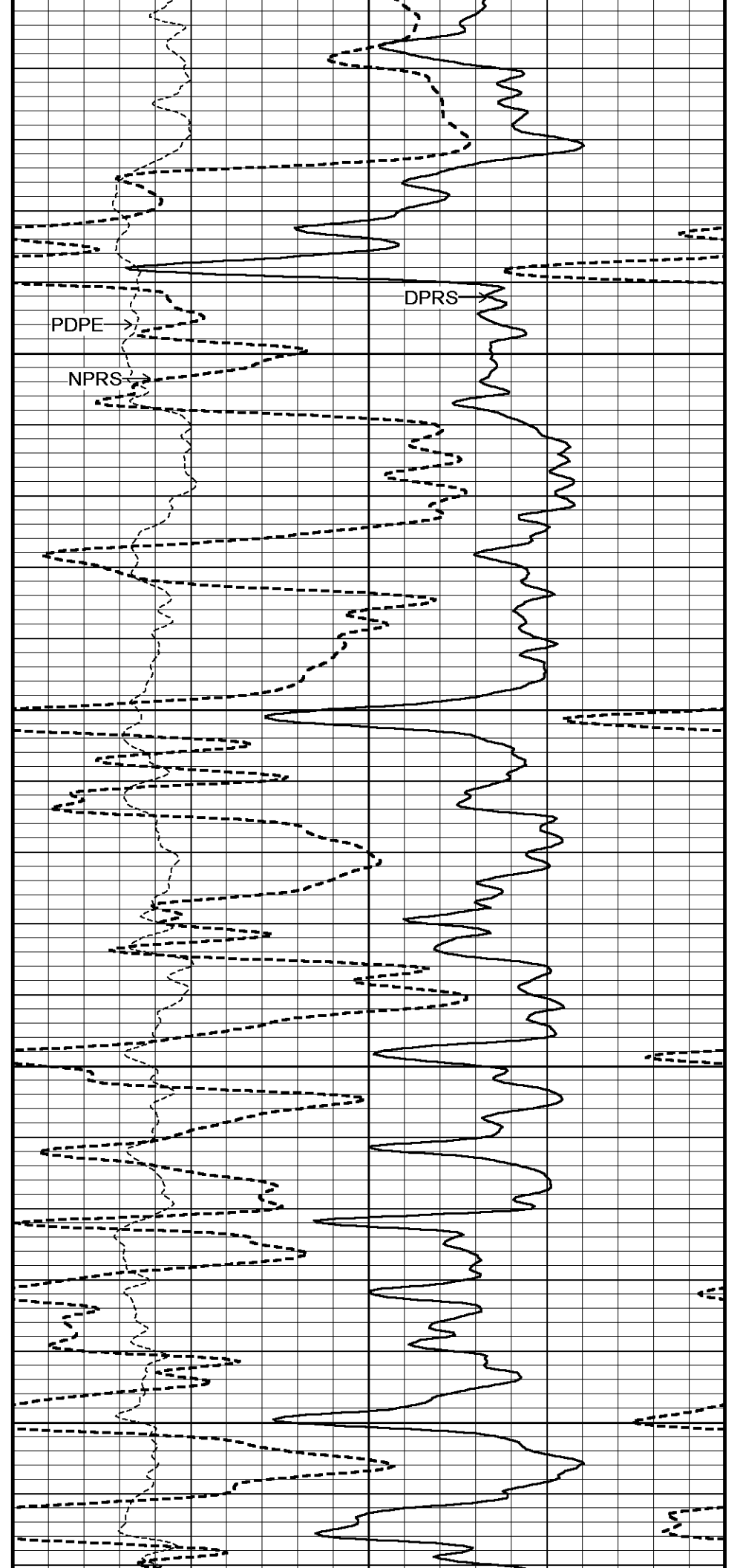
6400

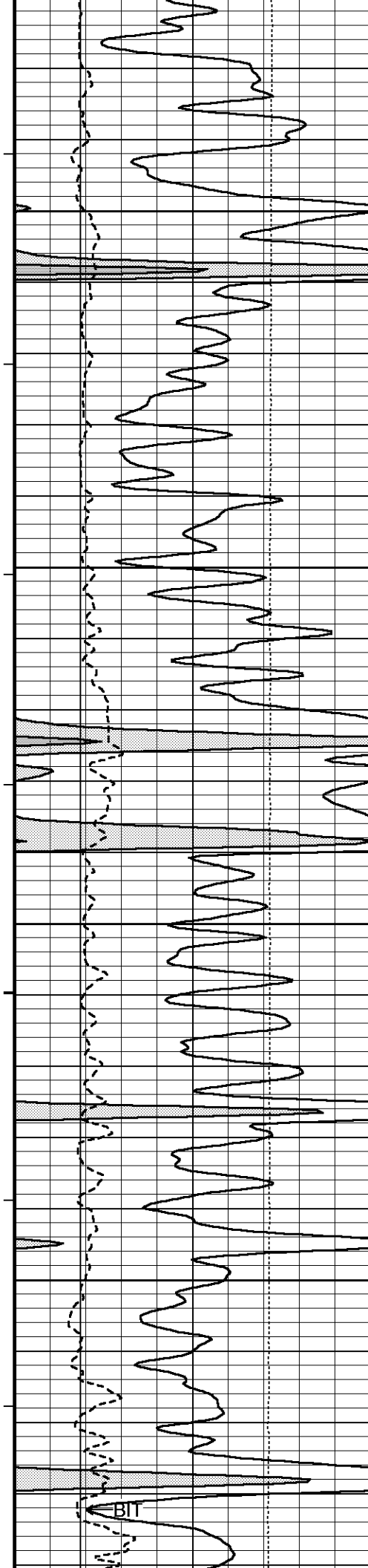
158°

6450

158°

6500





159°

6550

159°

6600

160°

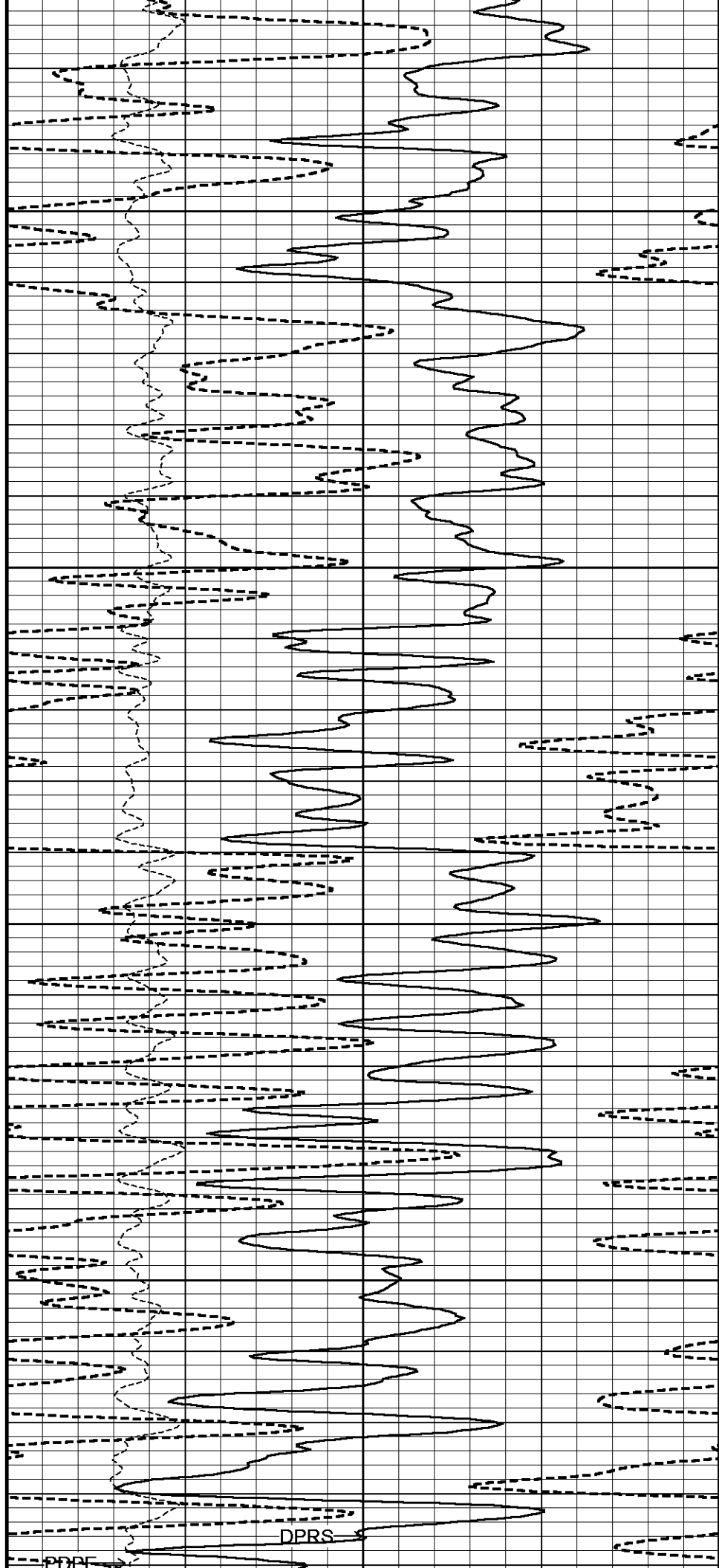
6650

160°

6700

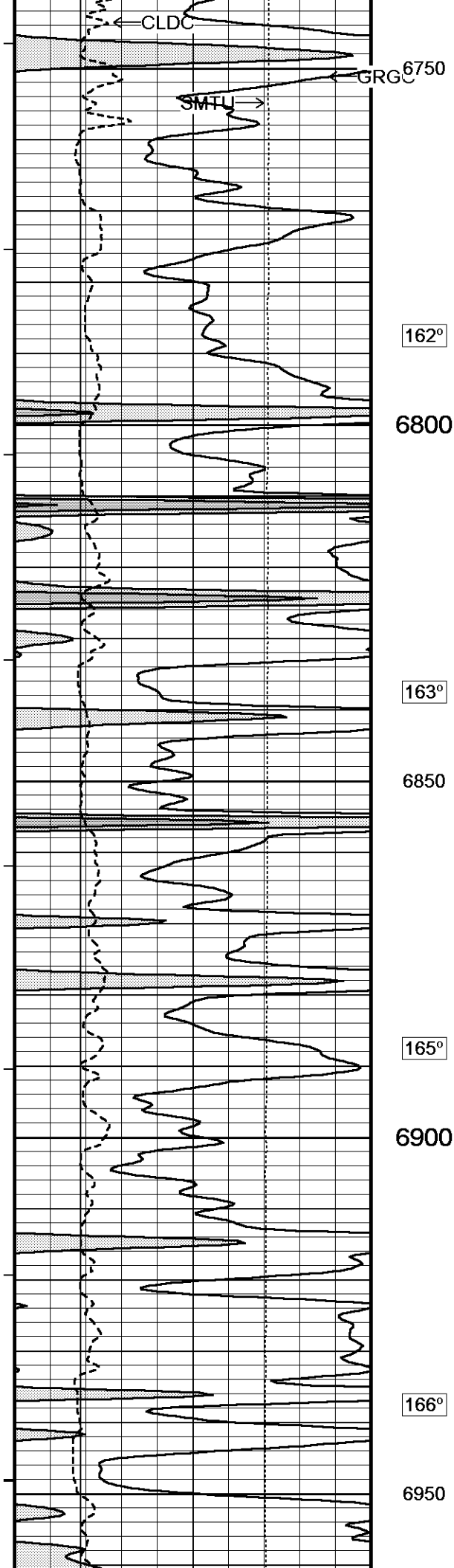
BIT

161°



DPRS

DPRF



162°

6800

163°

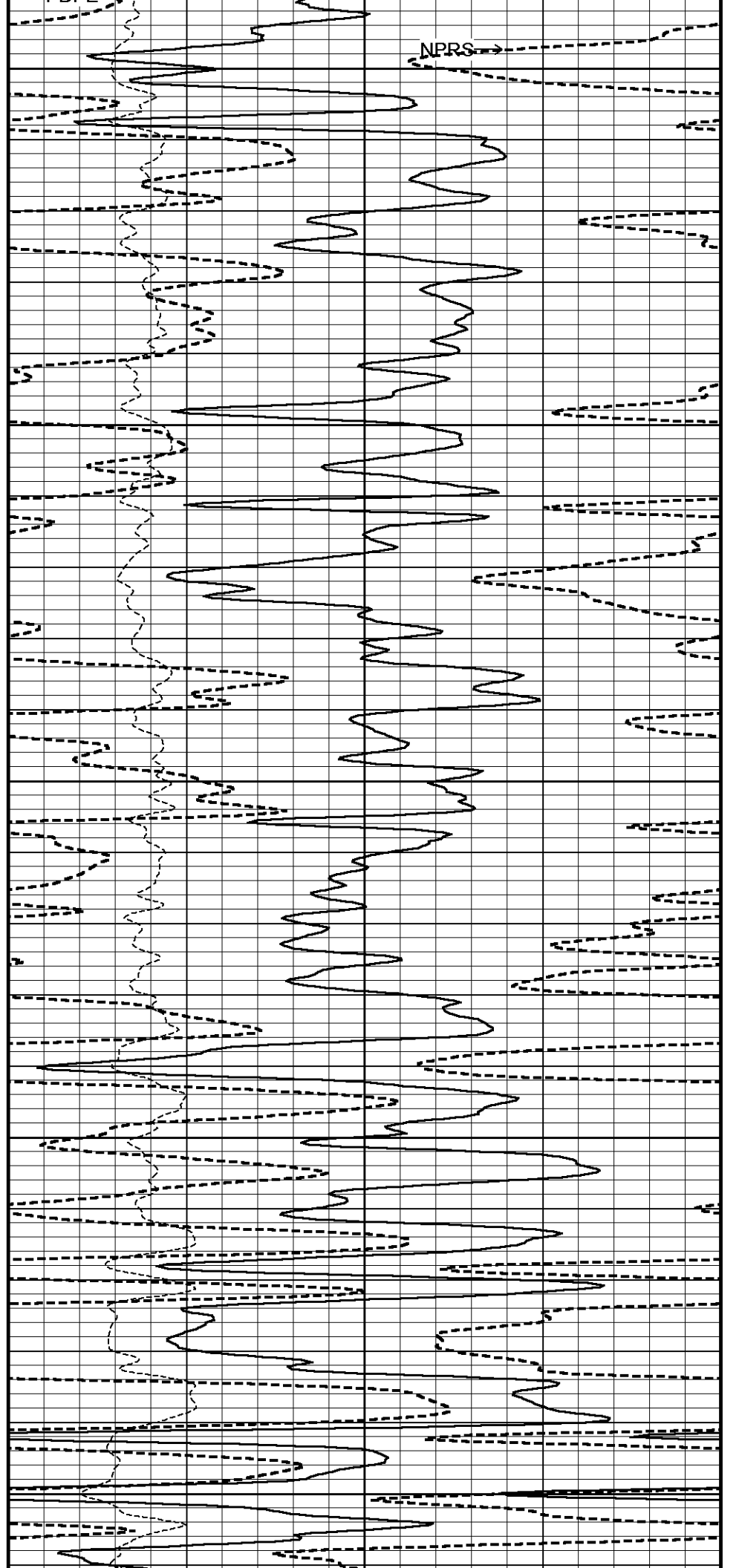
6850

165°

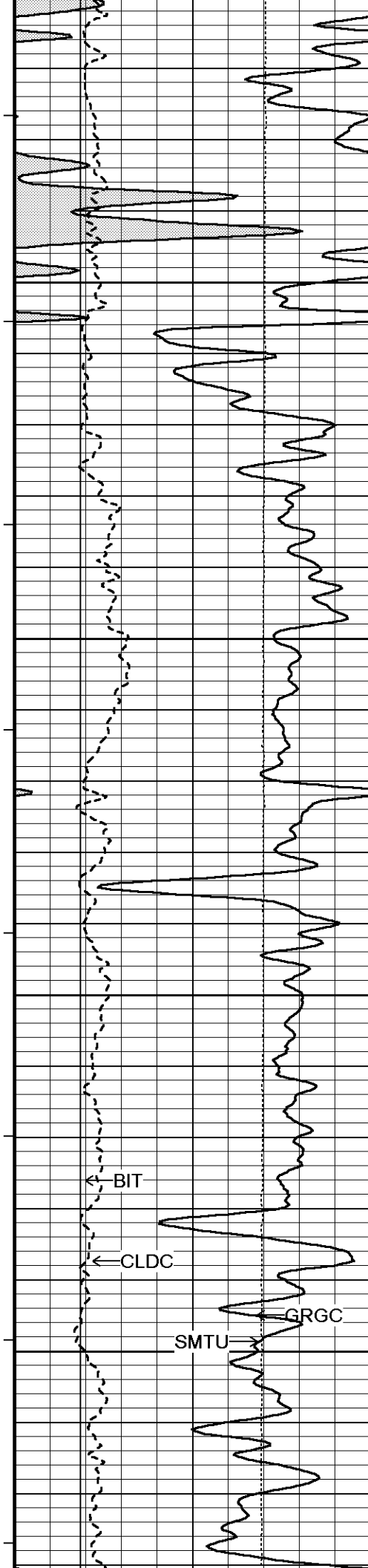
6900

166°

6950



NPRS



166°

7000

166°

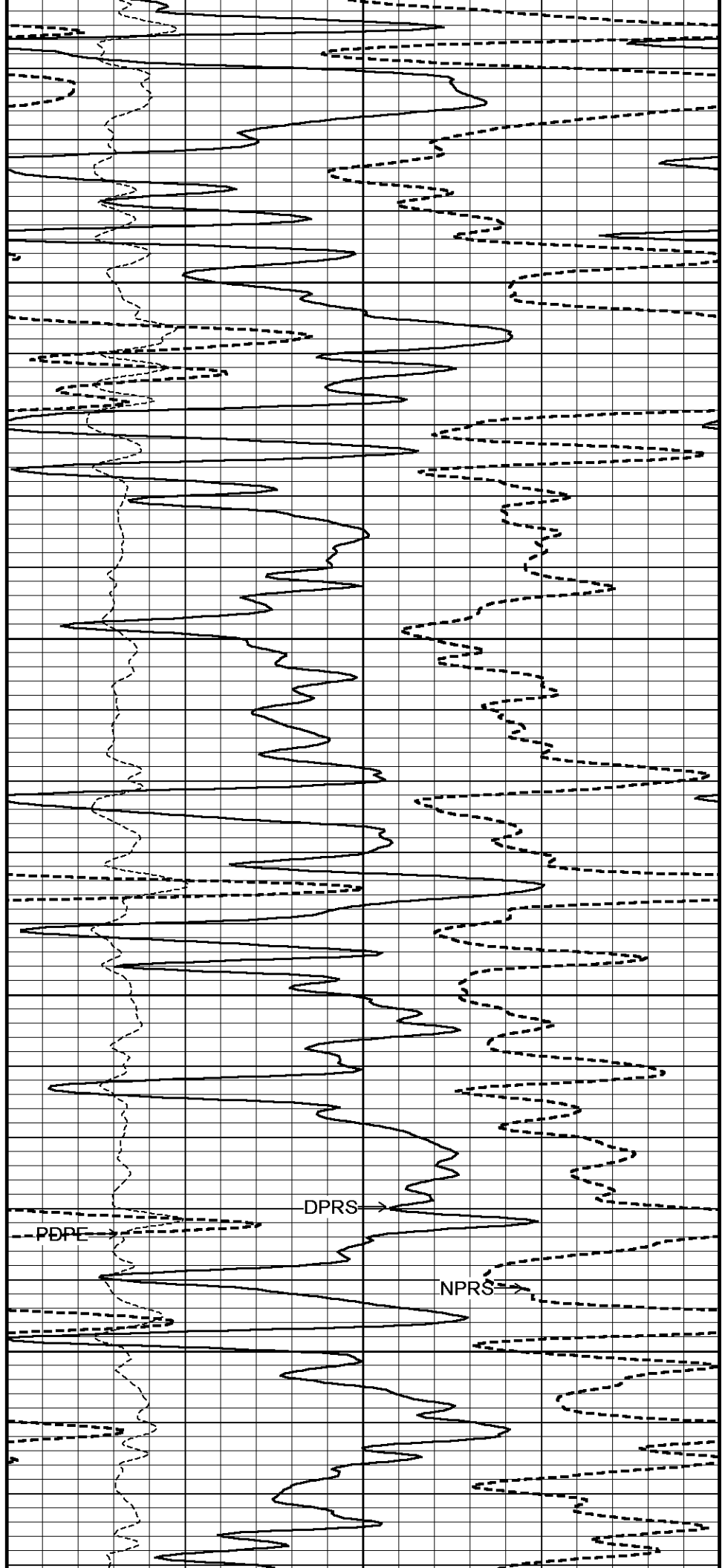
7050

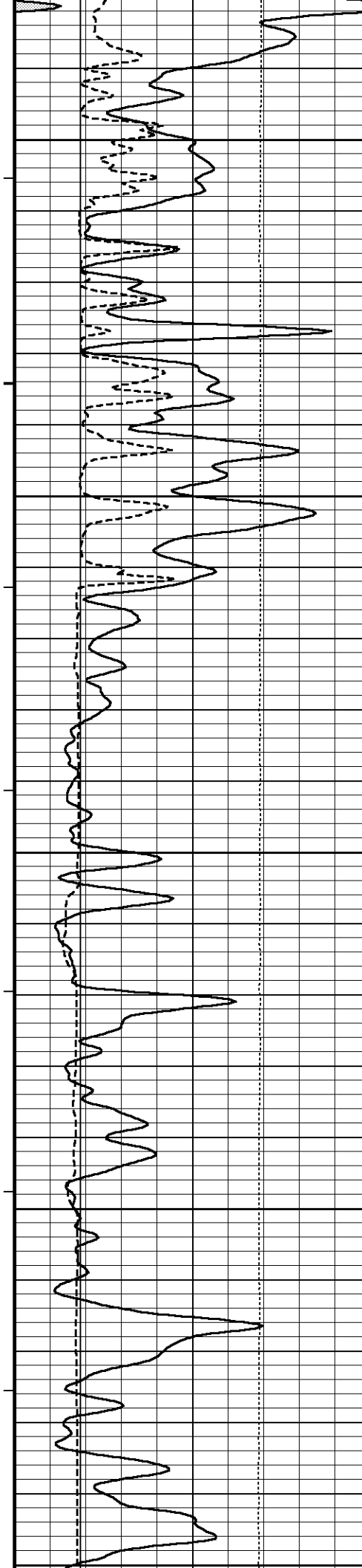
167°

7100

168°

7150





170°

7200

173°

7250

174°

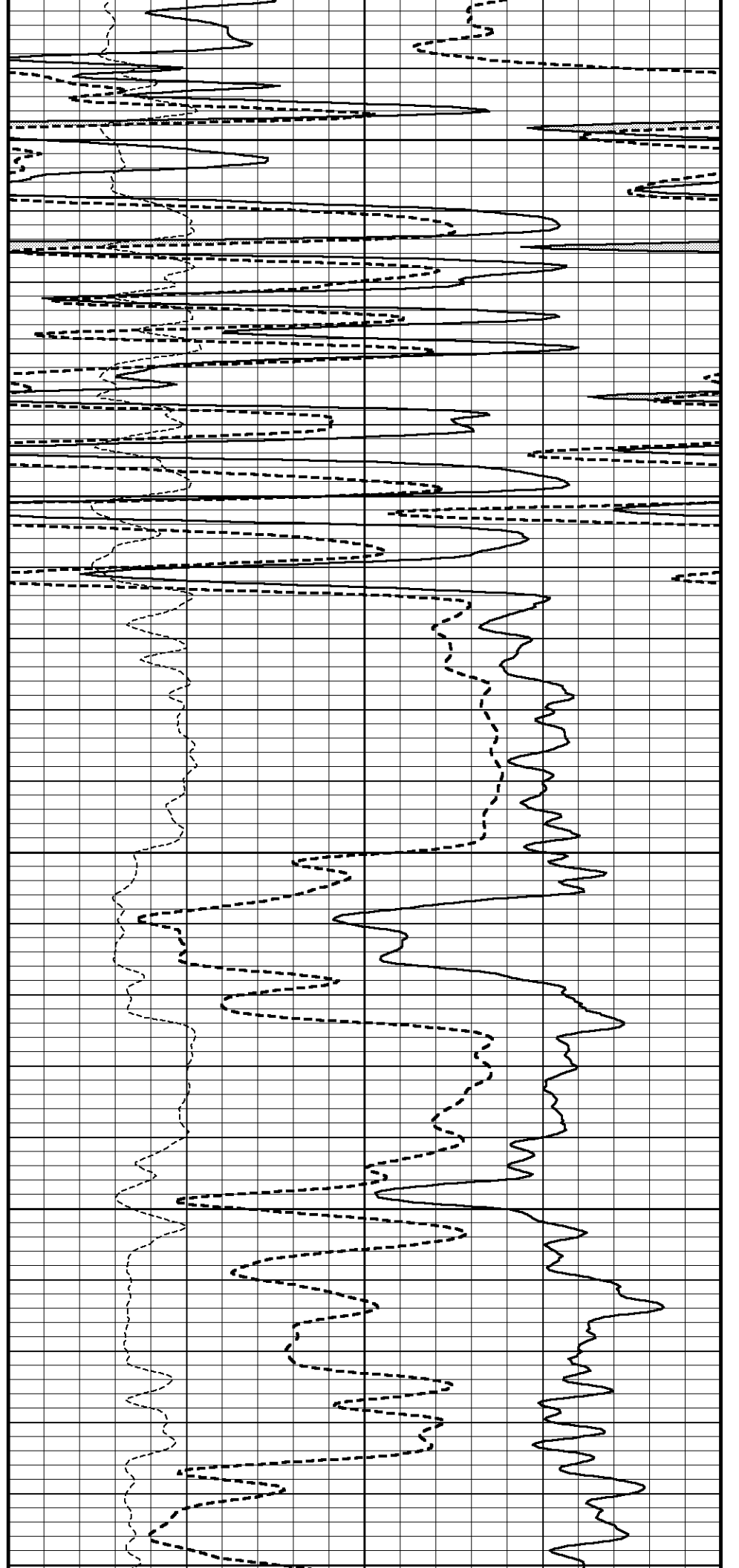
7300

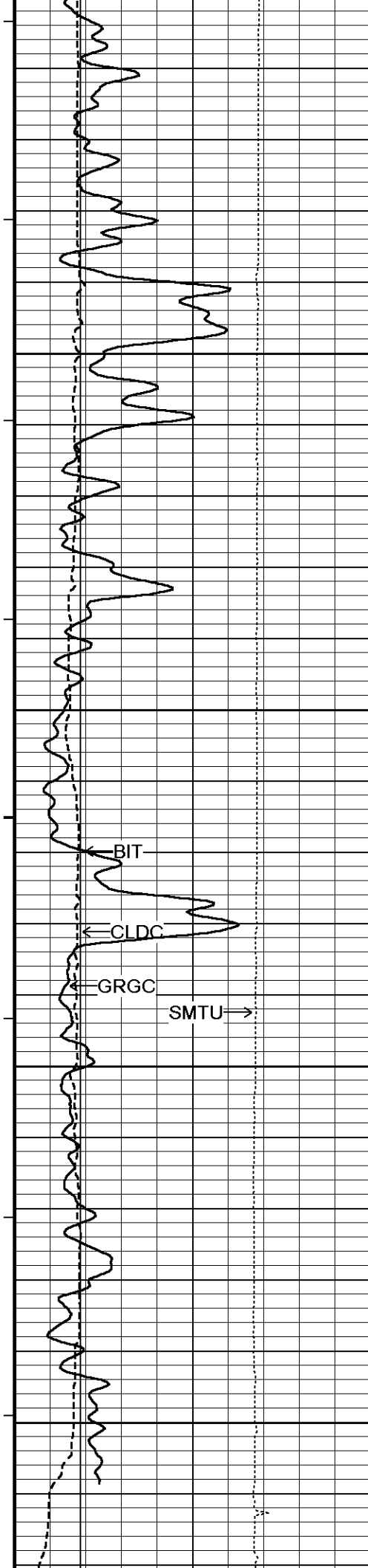
175°

7350

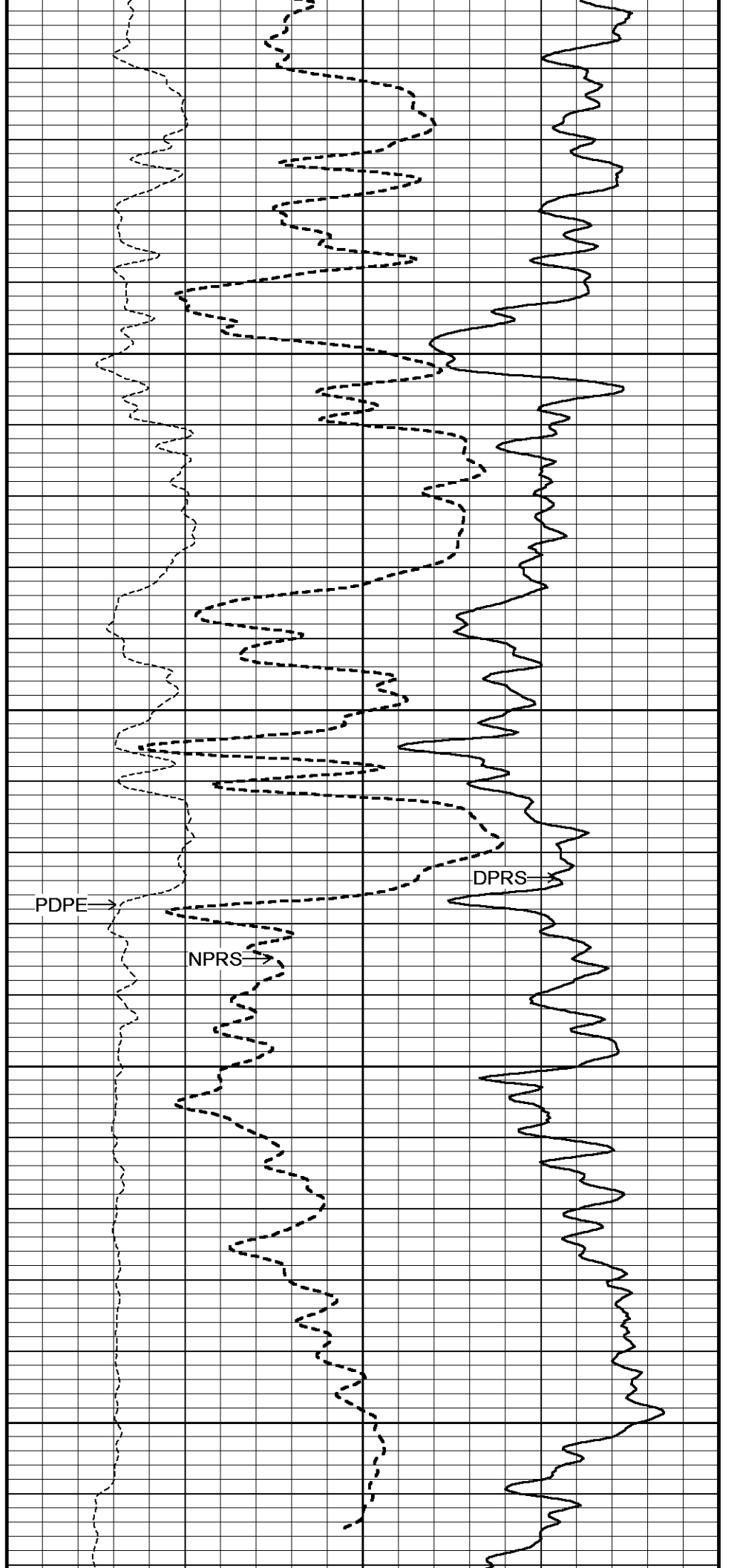
176°

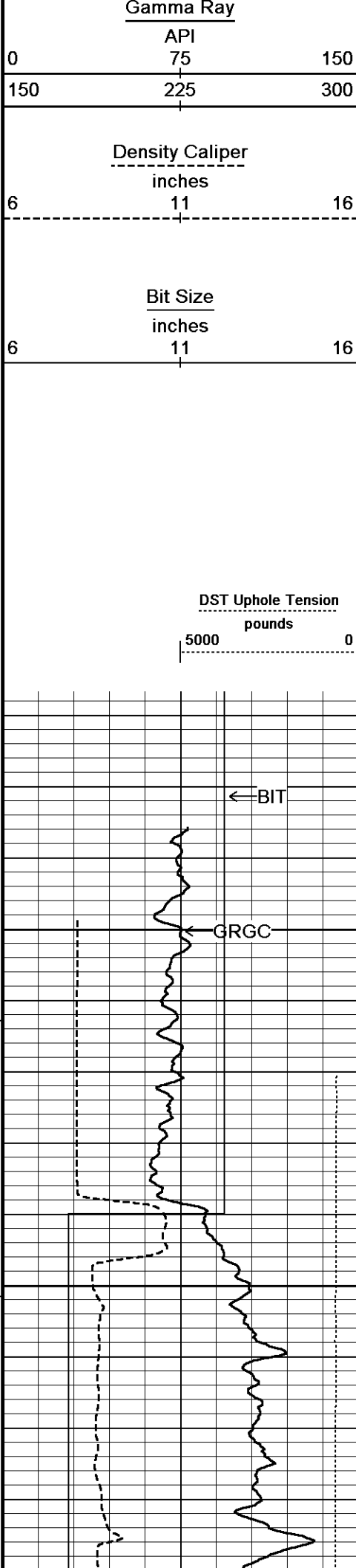
7400





7400
177°
7450
179°
7500
181°
7550
180°
7600



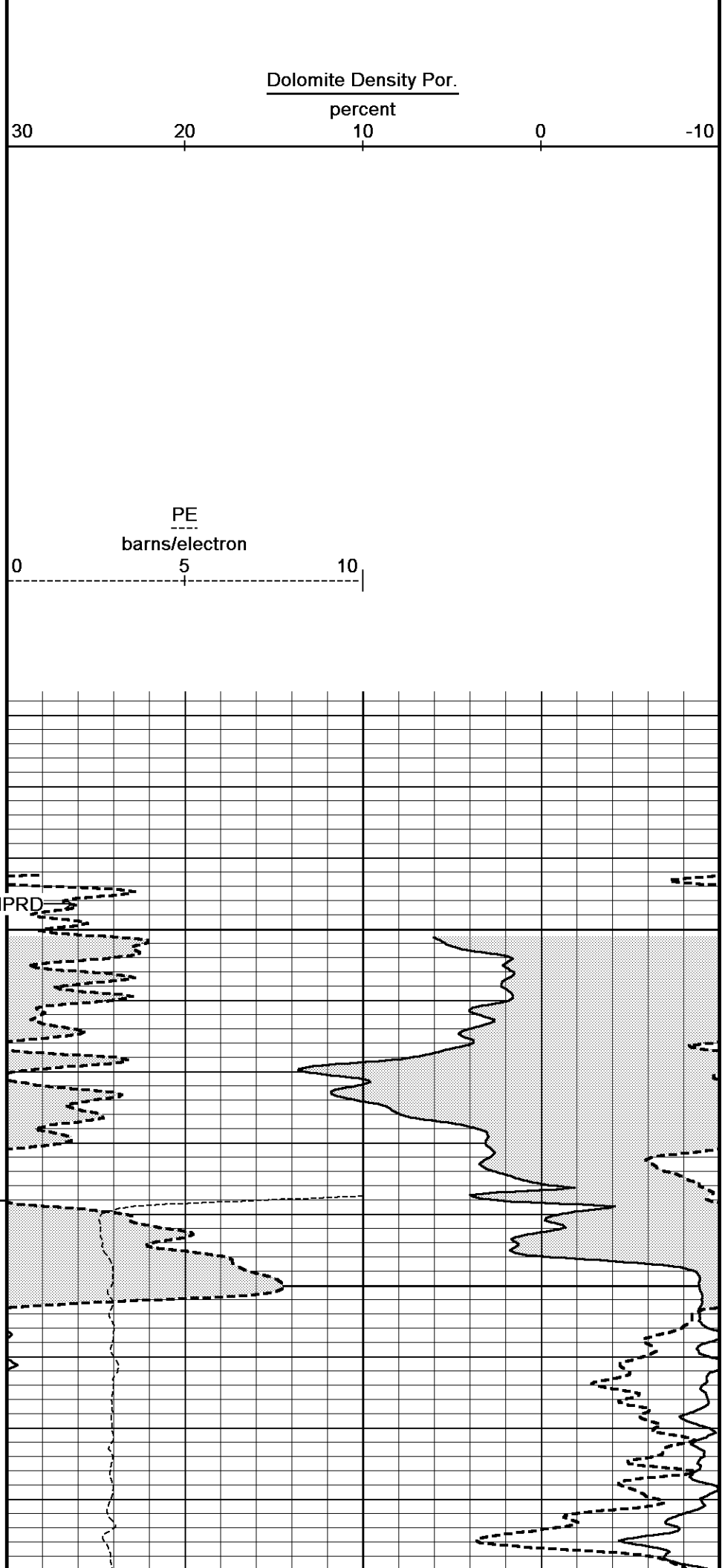


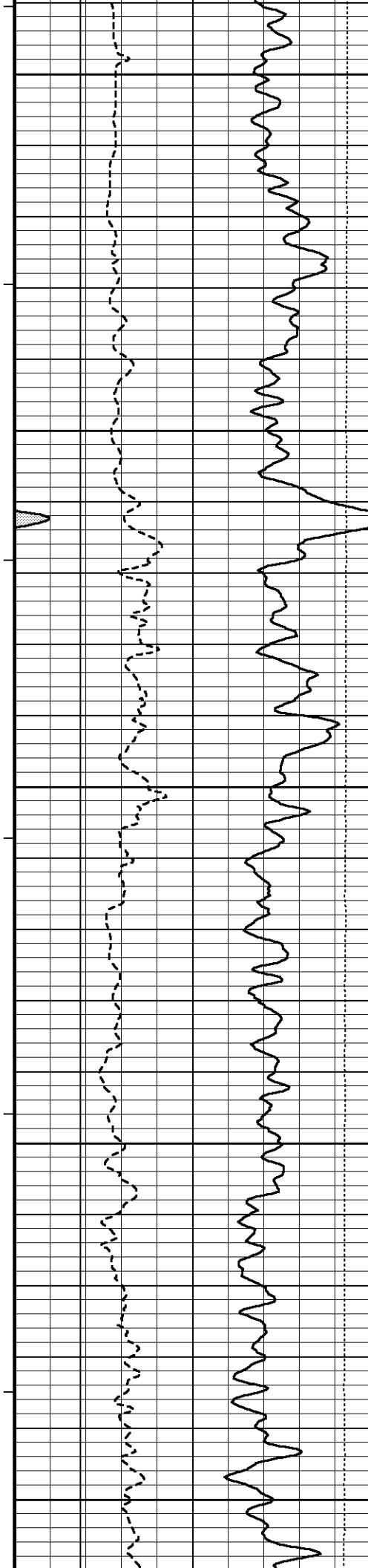
Borehole
Temp in
deg F

Replay
Scale
1:240

Casing
Type

95°





550

95°

600

96°

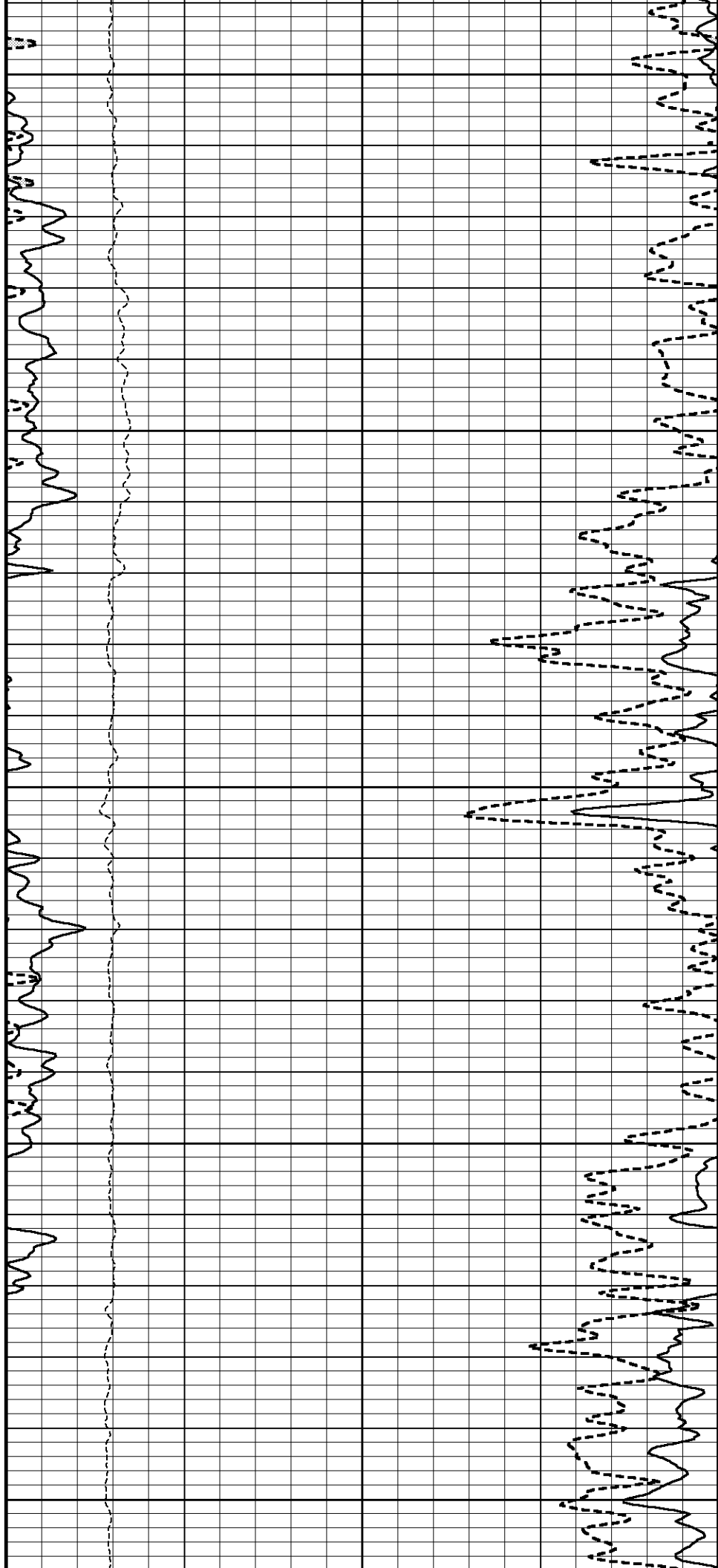
650

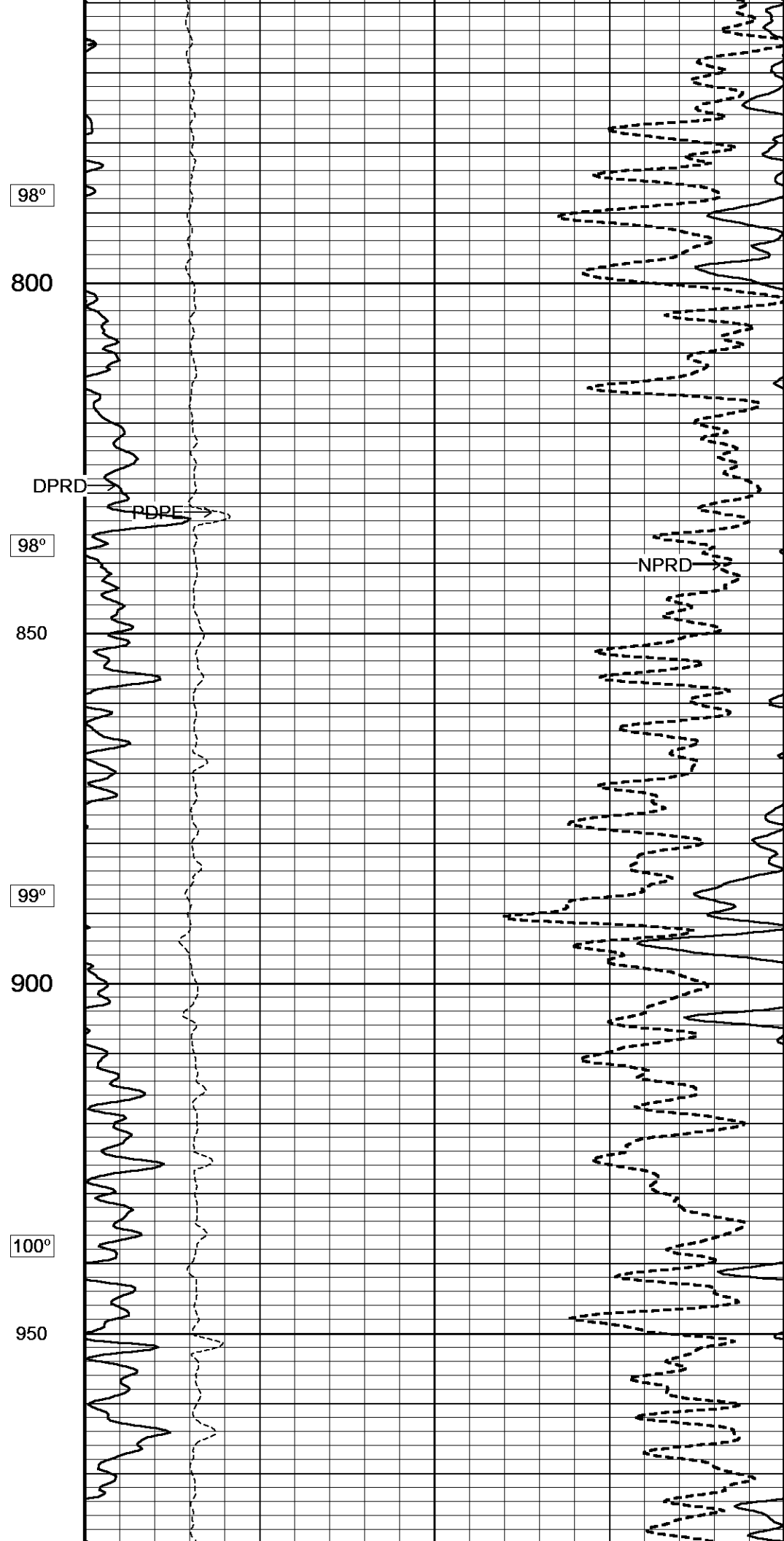
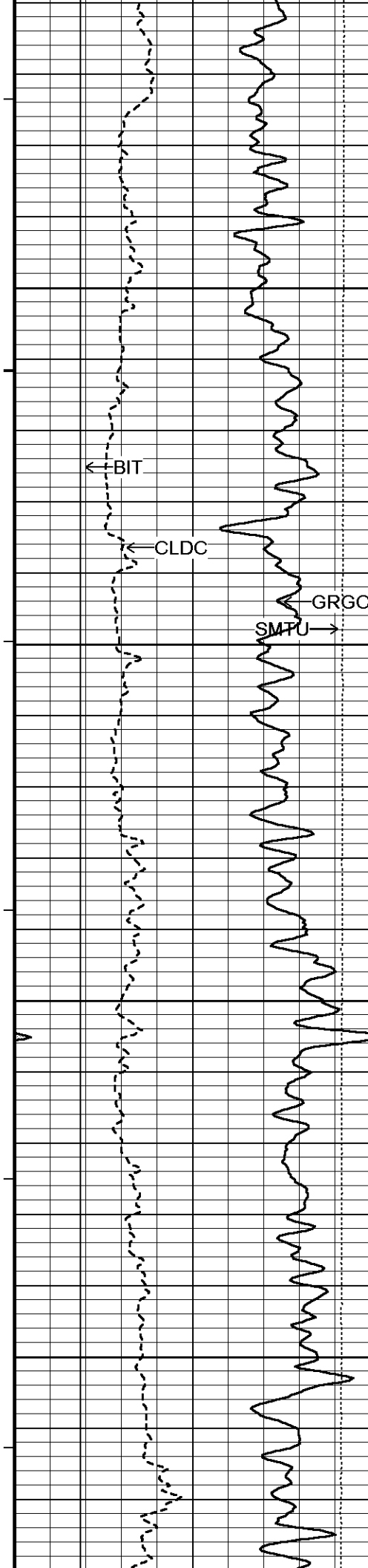
97°

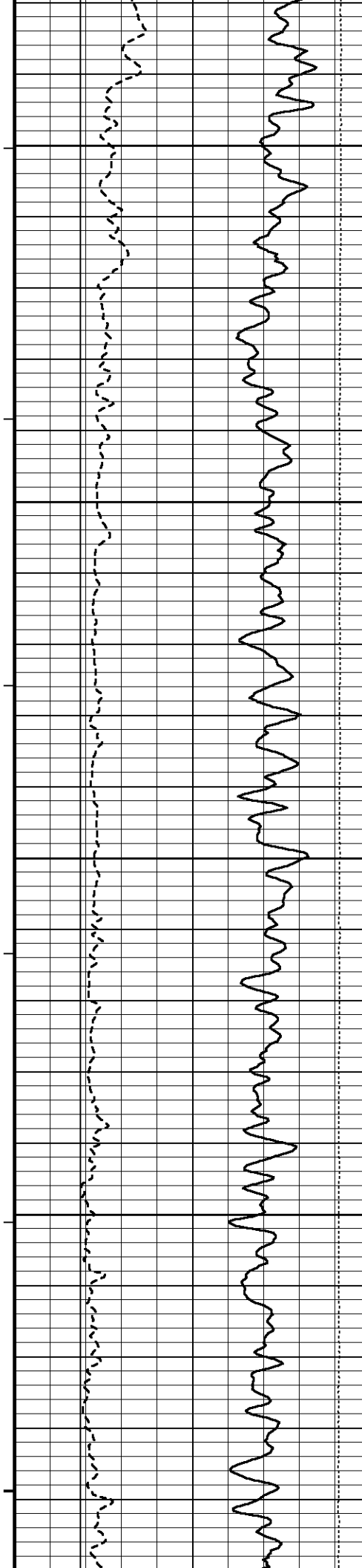
700

98°

750







101°

1000

101°

1050

102°

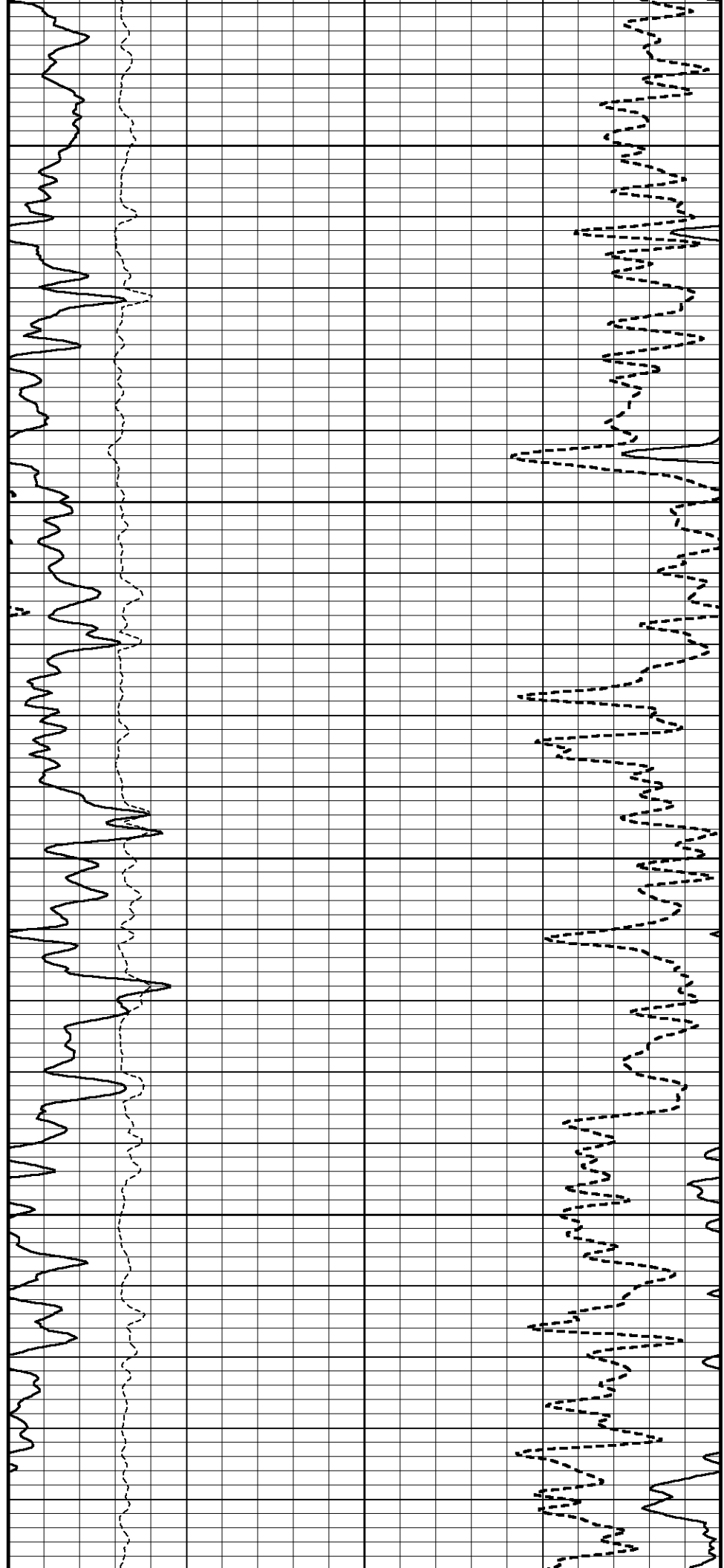
1100

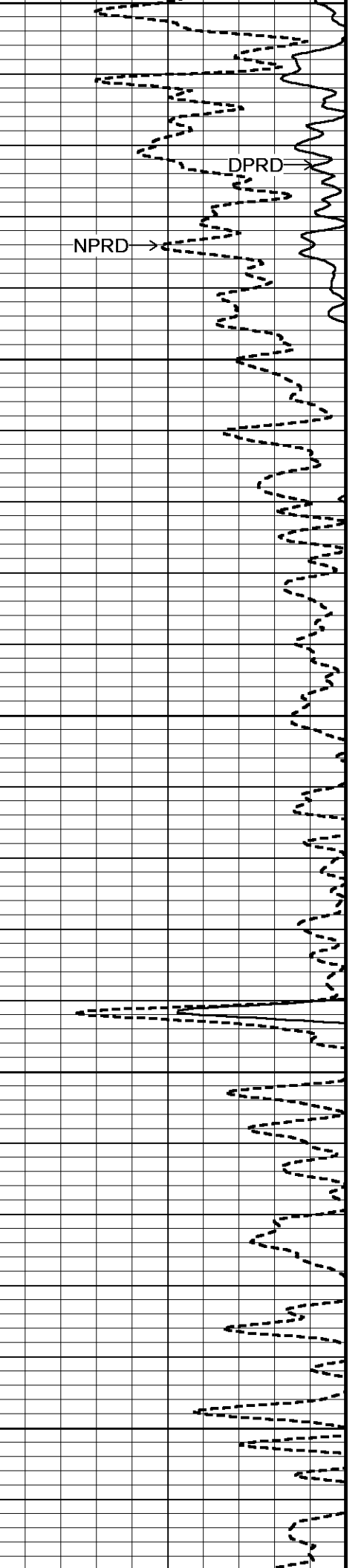
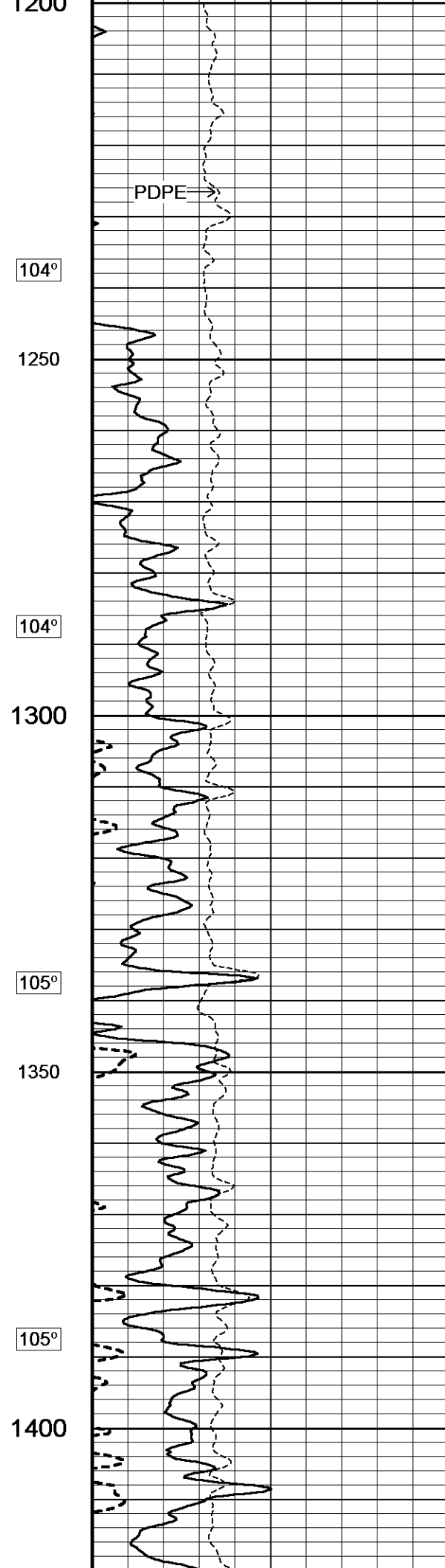
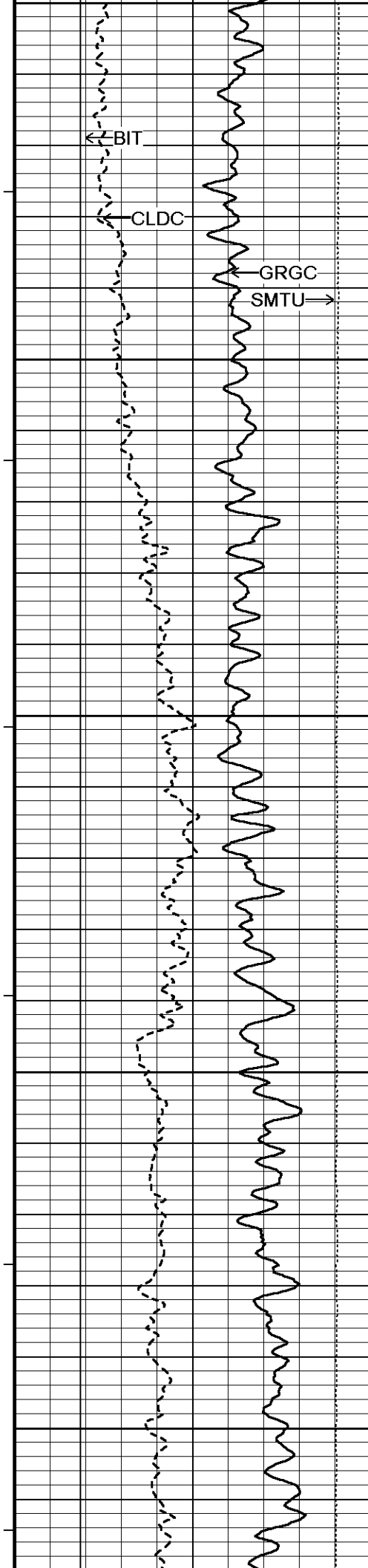
102°

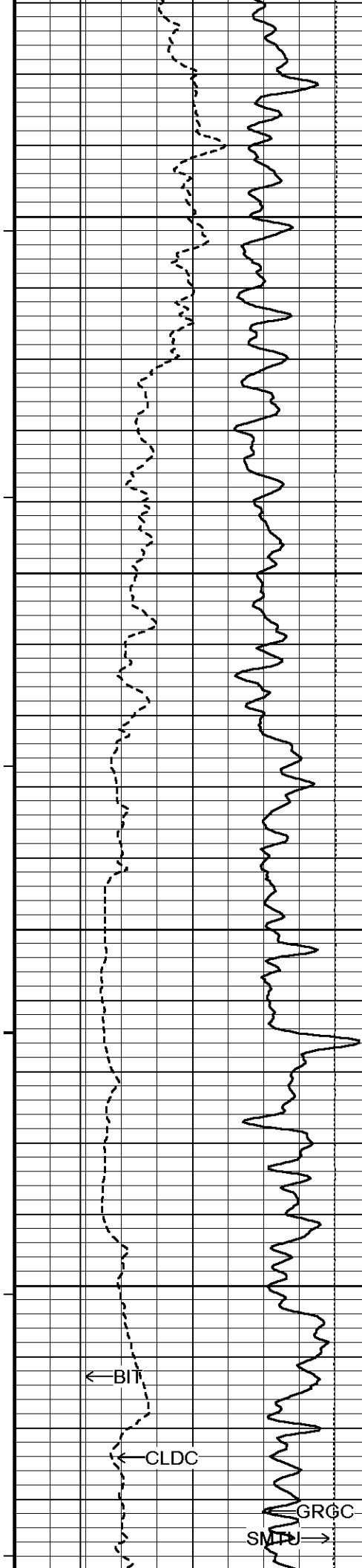
1150

103°

1200







106°

1450

107°

1500

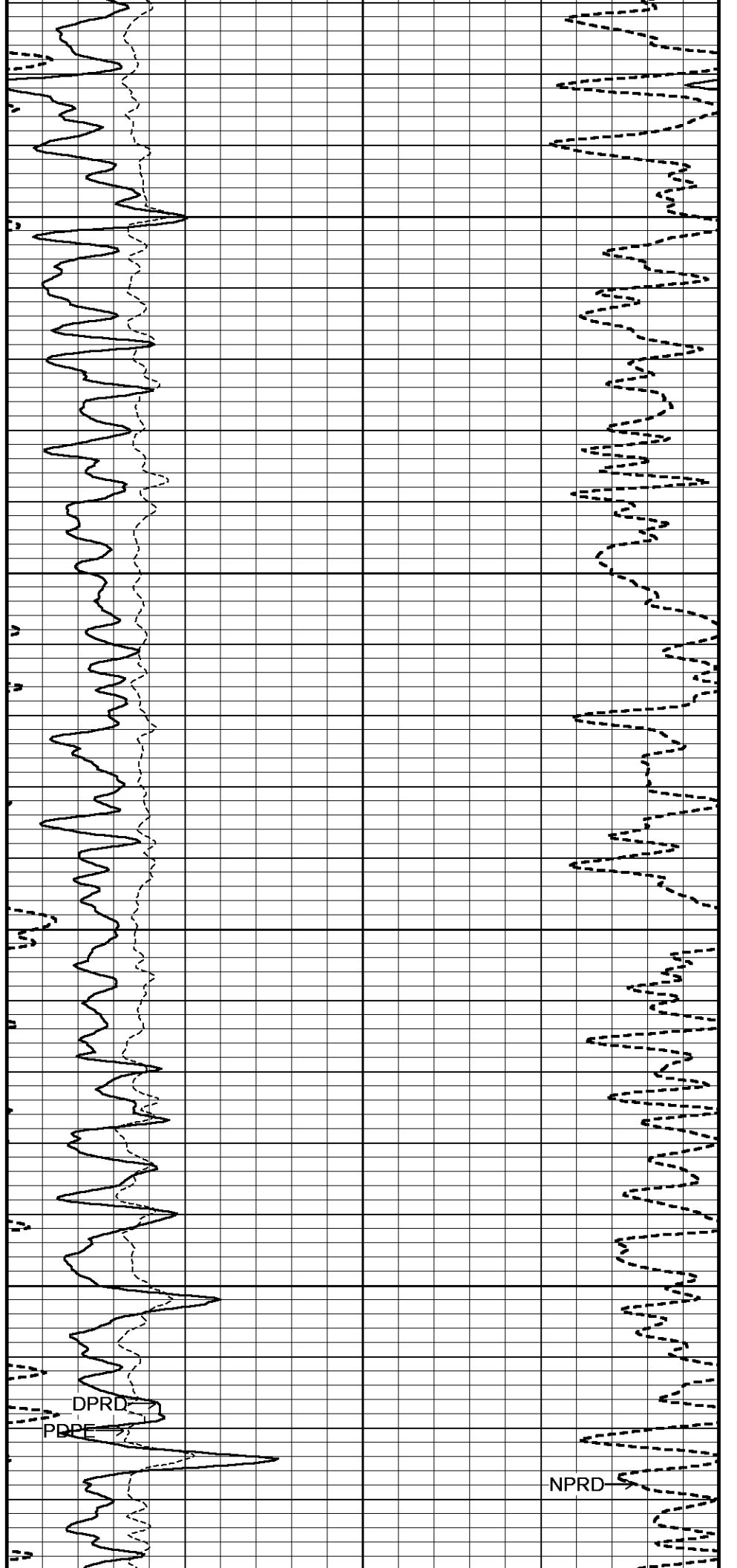
107°

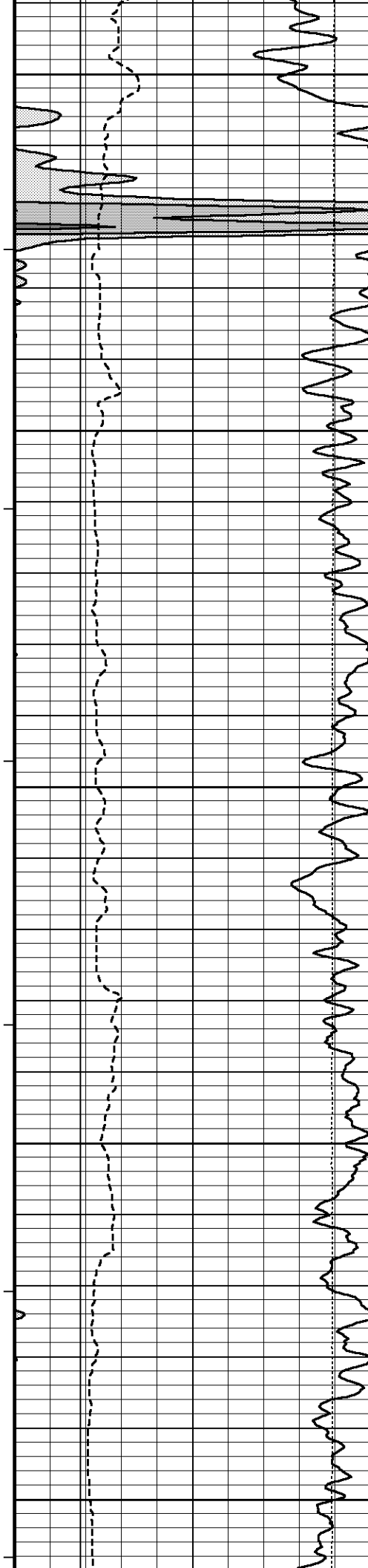
1550

108°

1600

108°





1650

108°

1700

109°

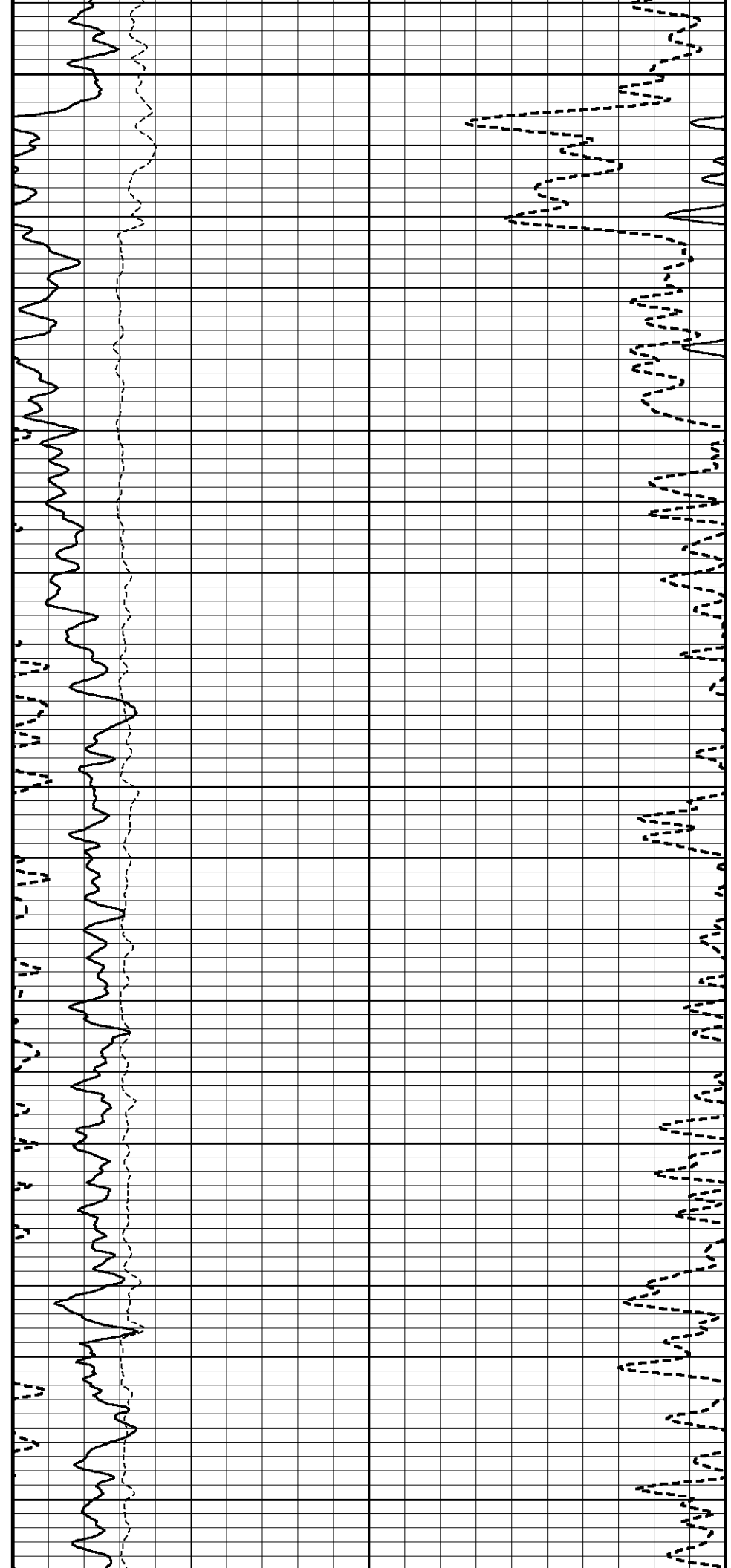
1750

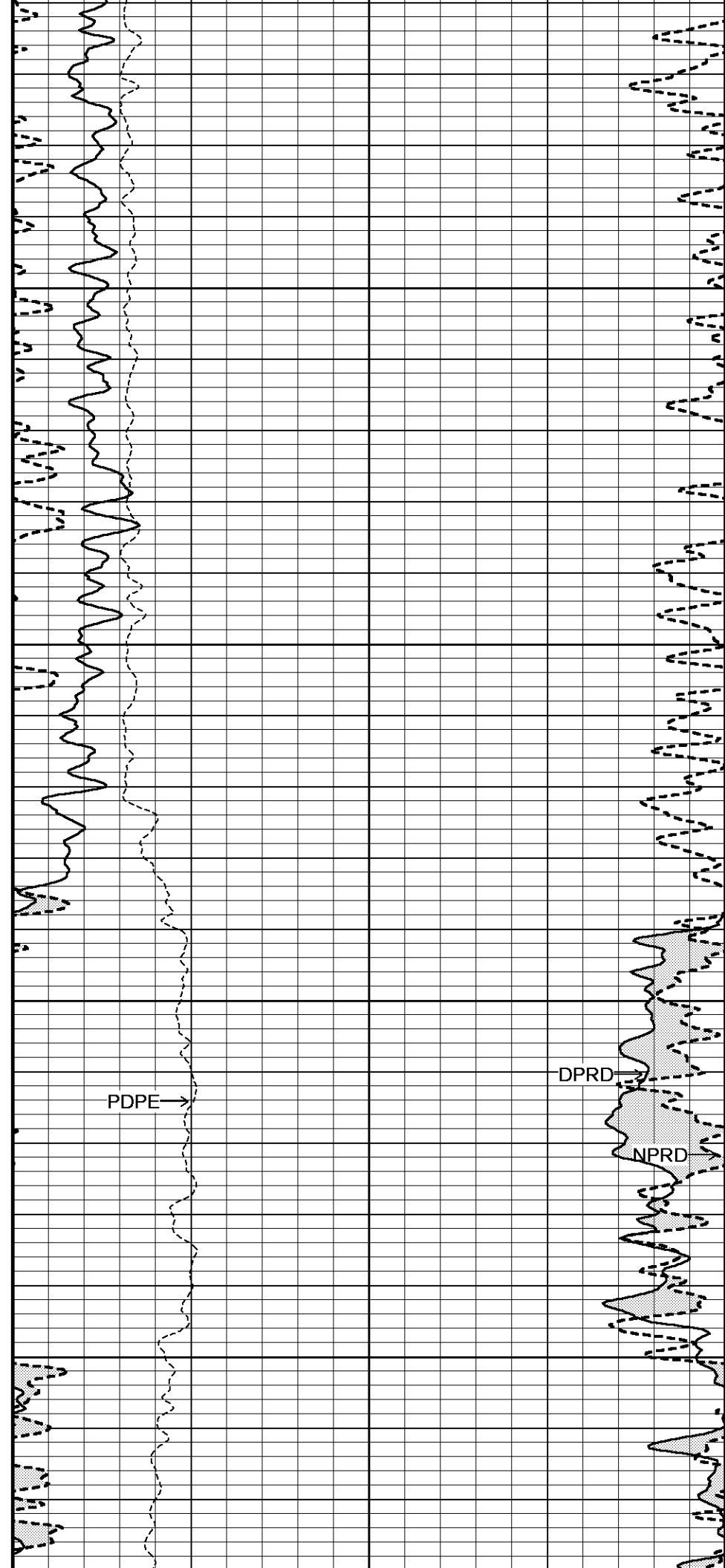
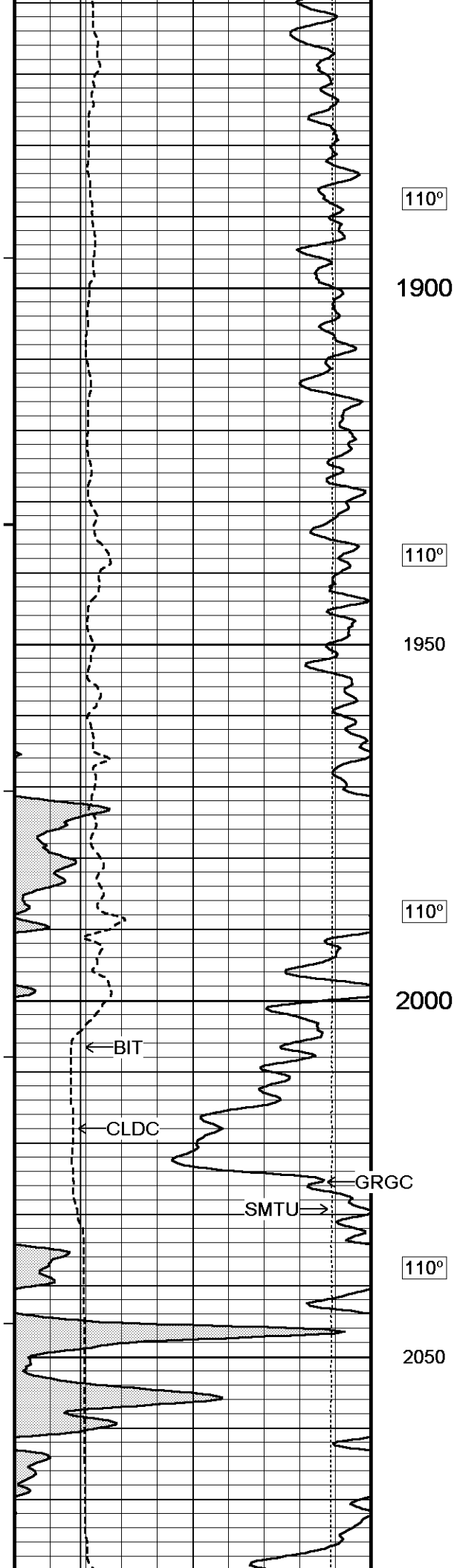
109°

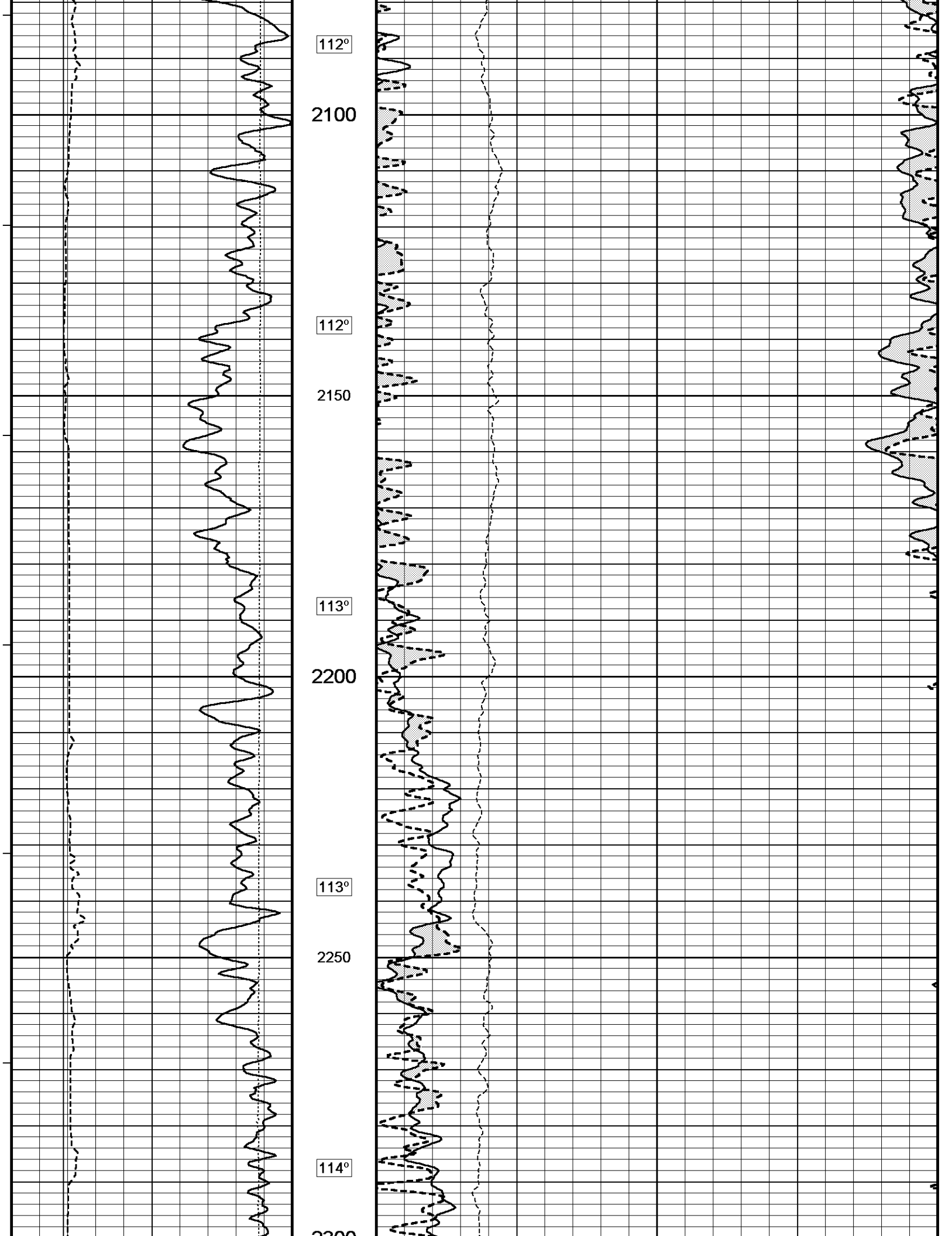
1800

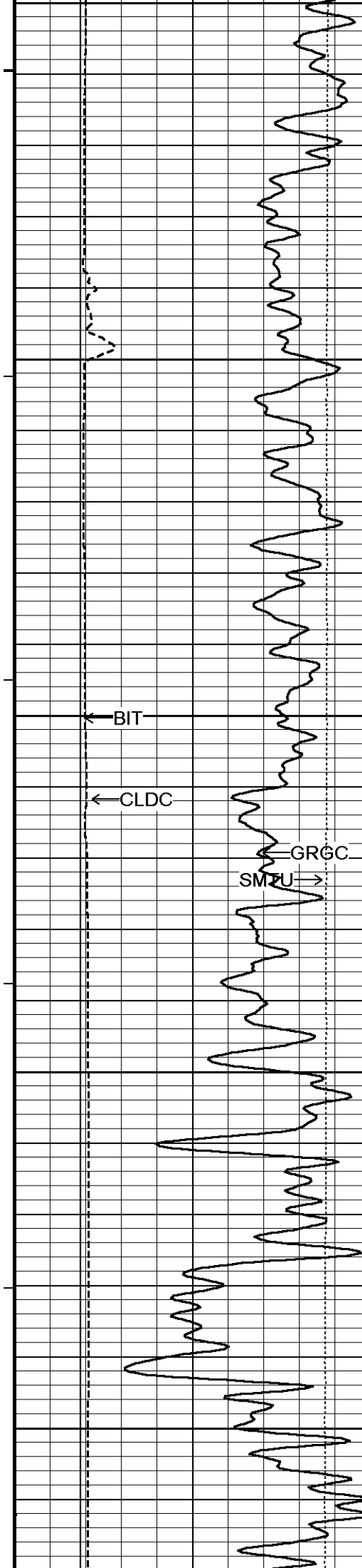
110°

1850

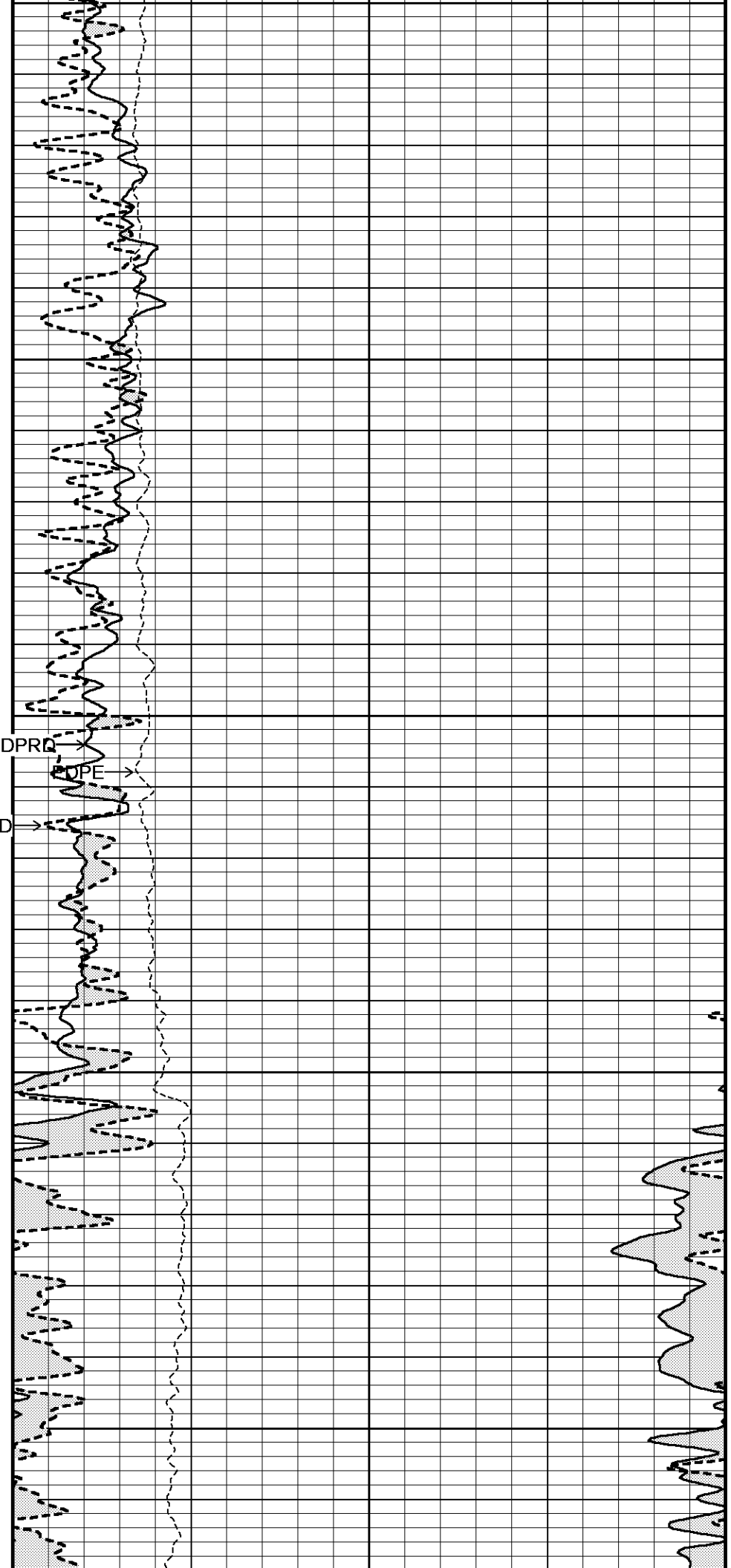


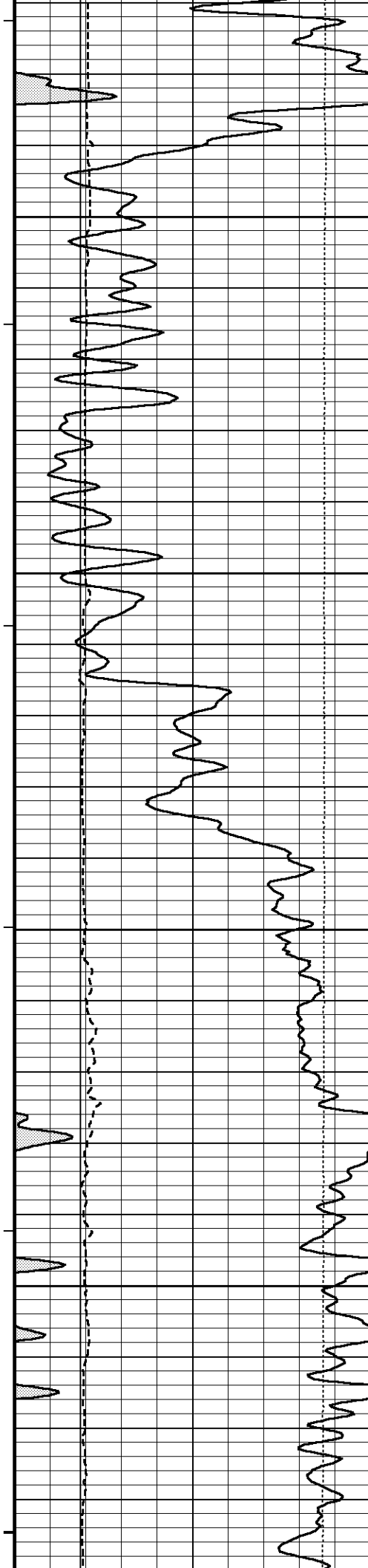






2300
115°
2350
116°
2400
DPRQ
DPE
NPRD
117°
2450
117°
2500





118°

2550

119°

2600

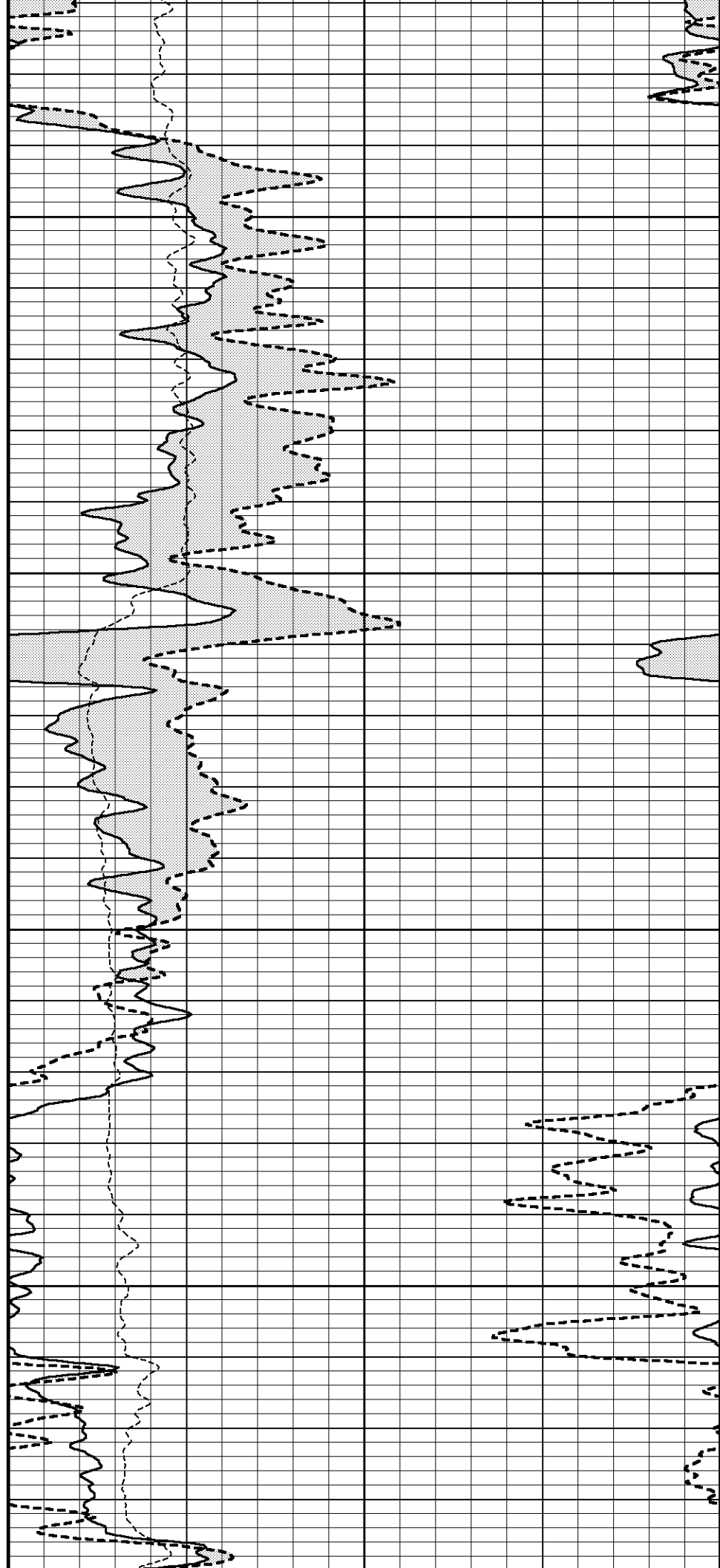
119°

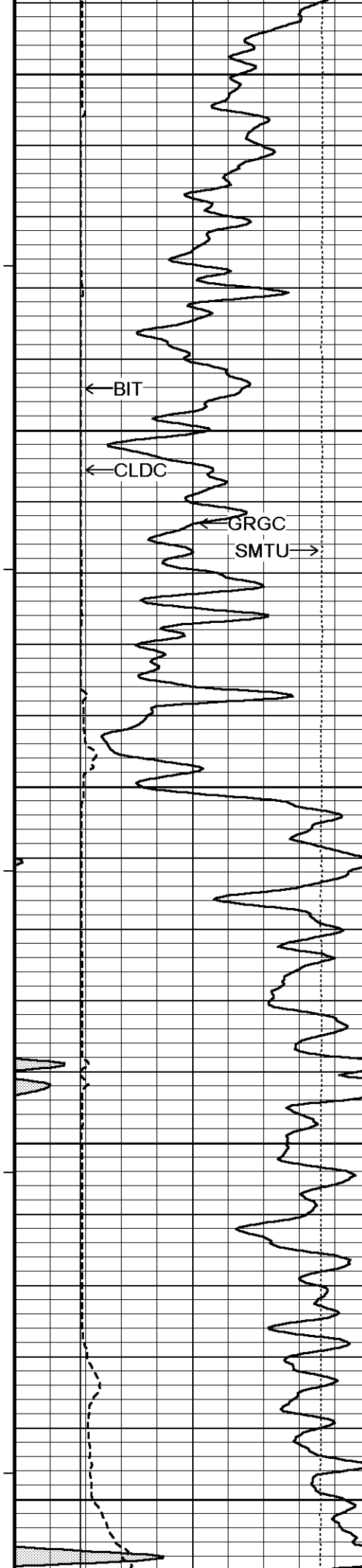
2650

120°

2700

121°





2750

121°

2800

122°

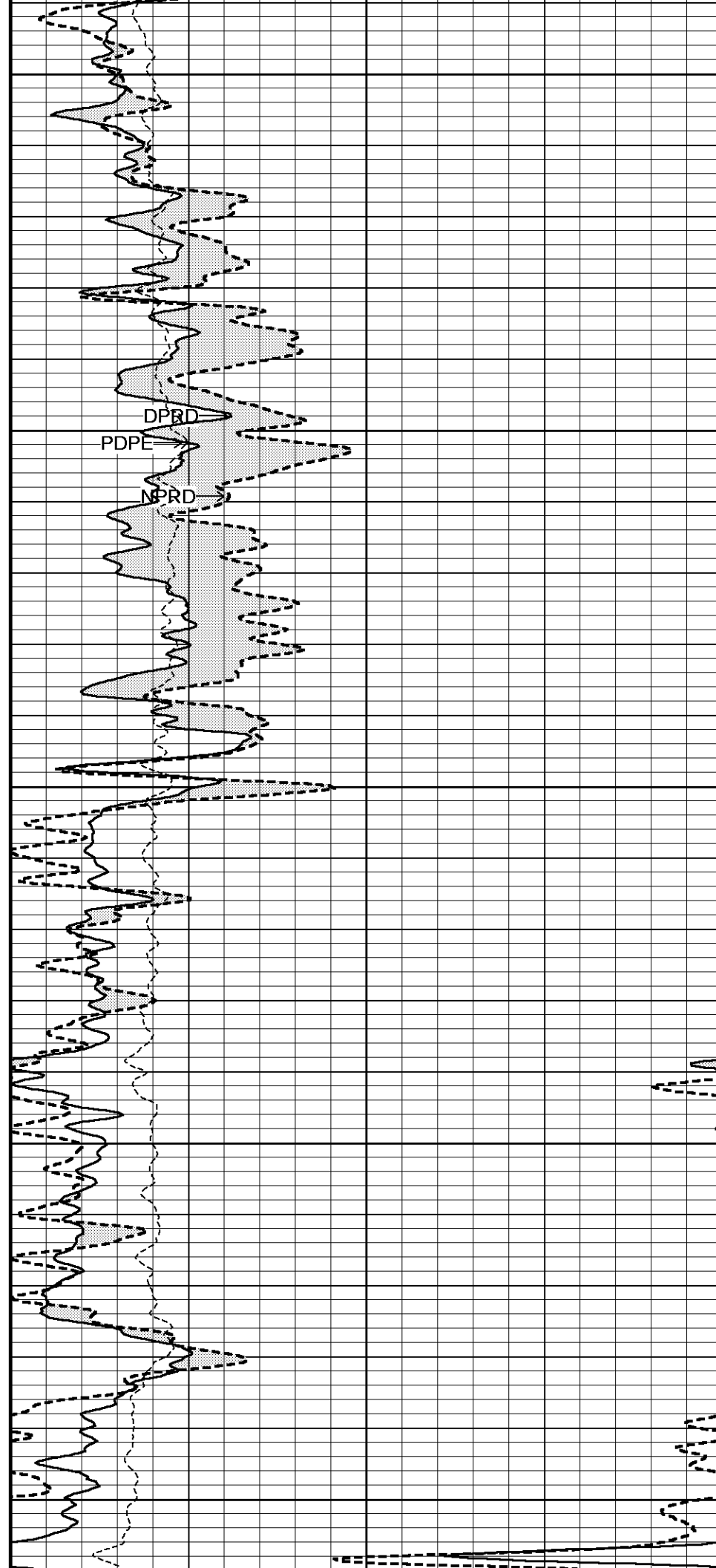
2850

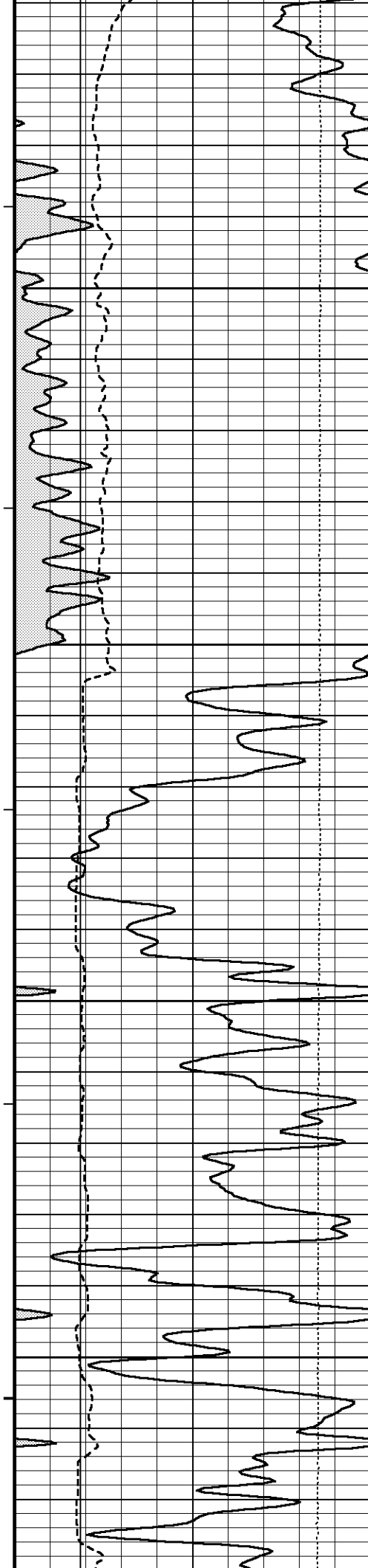
123°

2900

123°

2950





124°

3000

124°

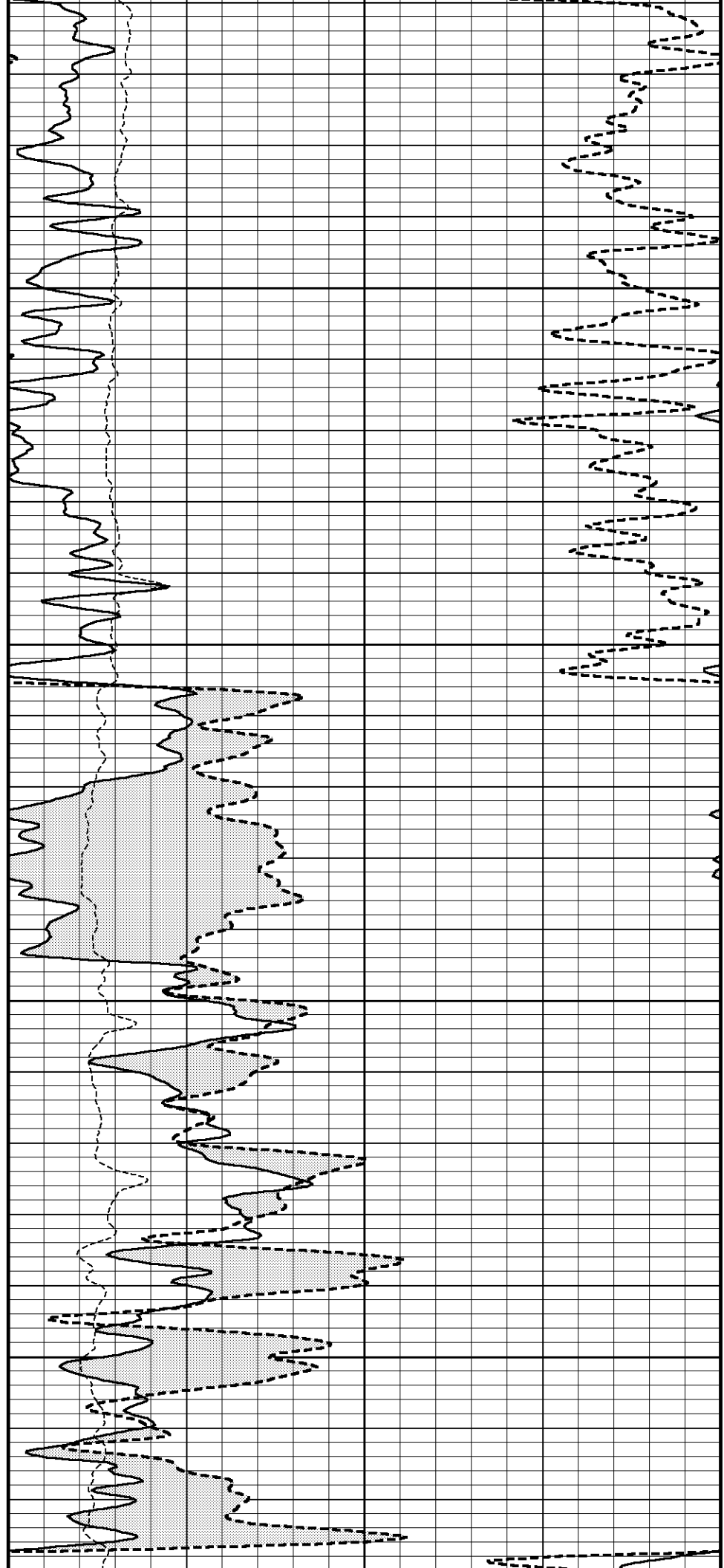
3050

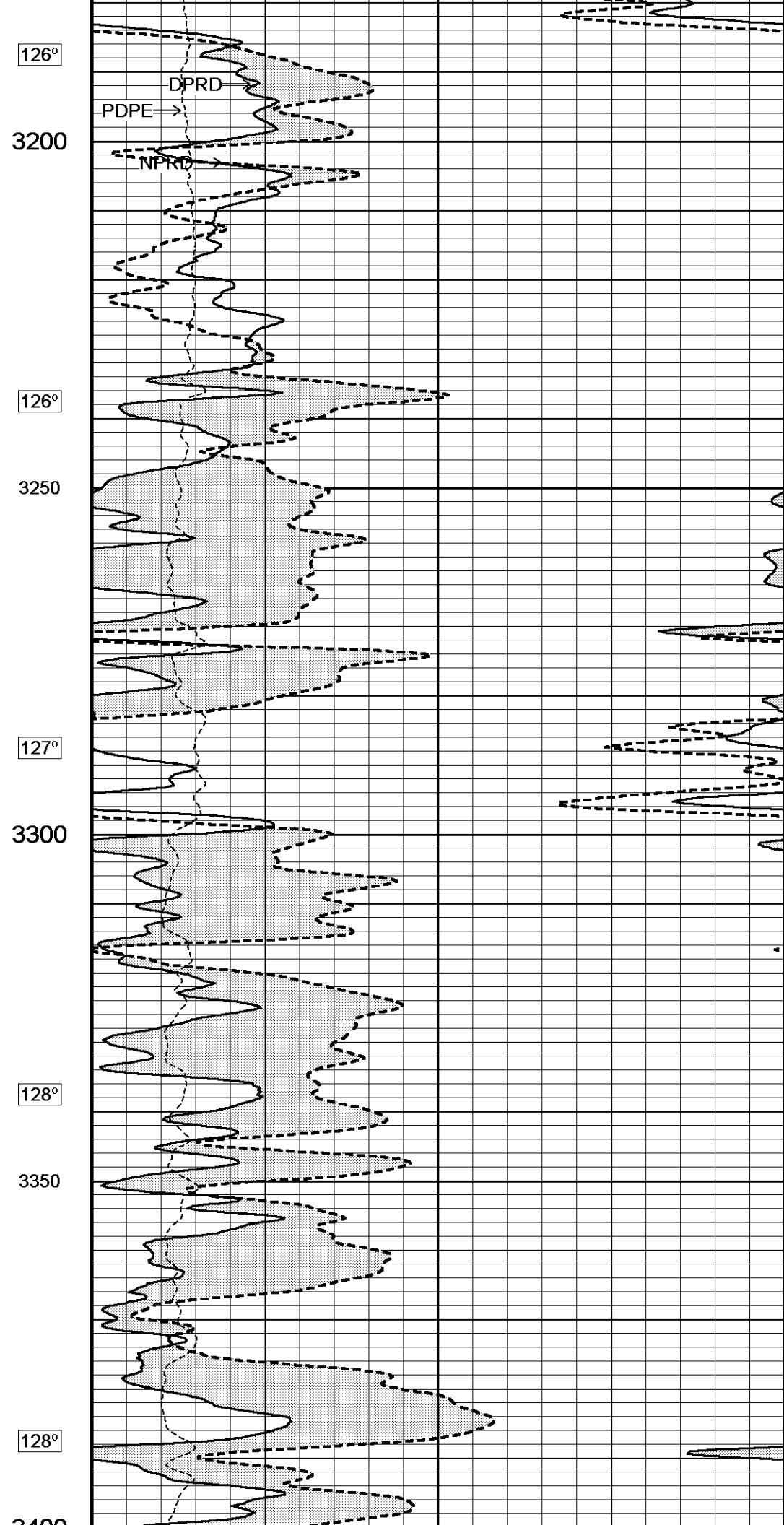
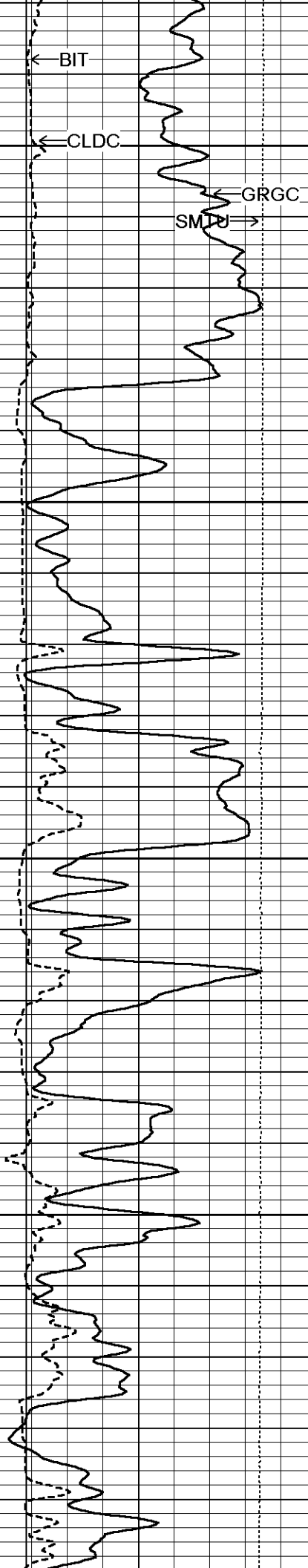
125°

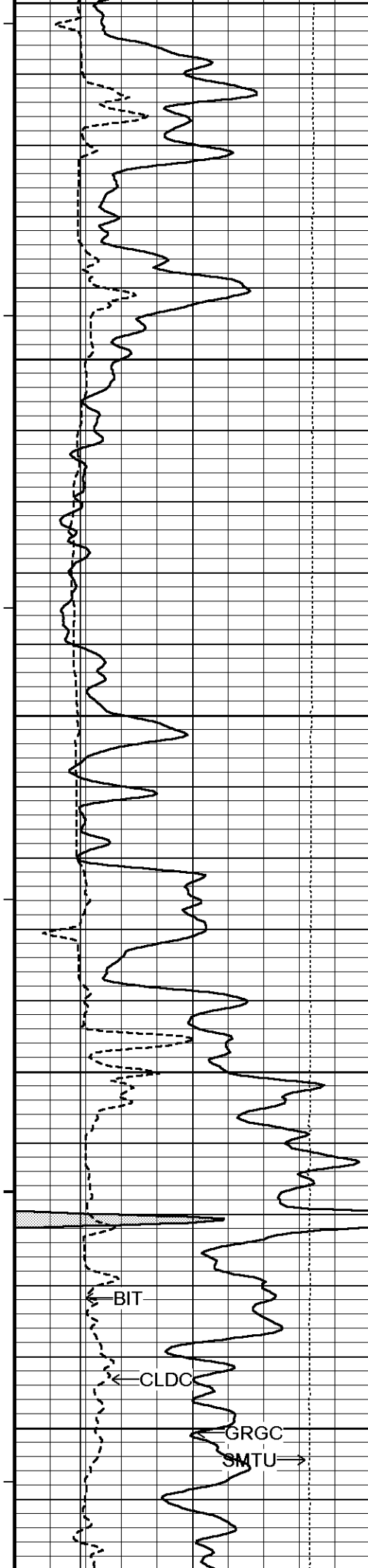
3100

125°

3150







3400

129°

3450

129°

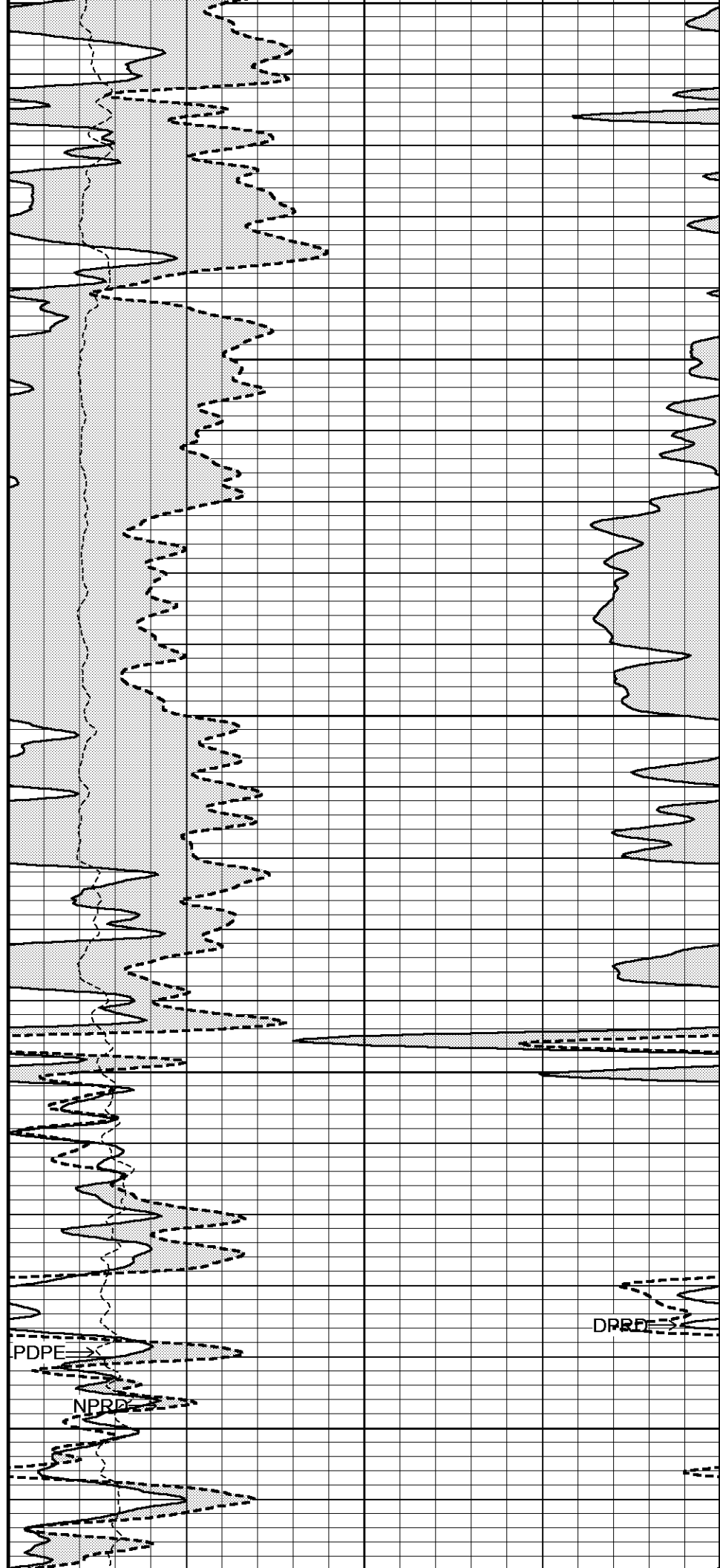
3500

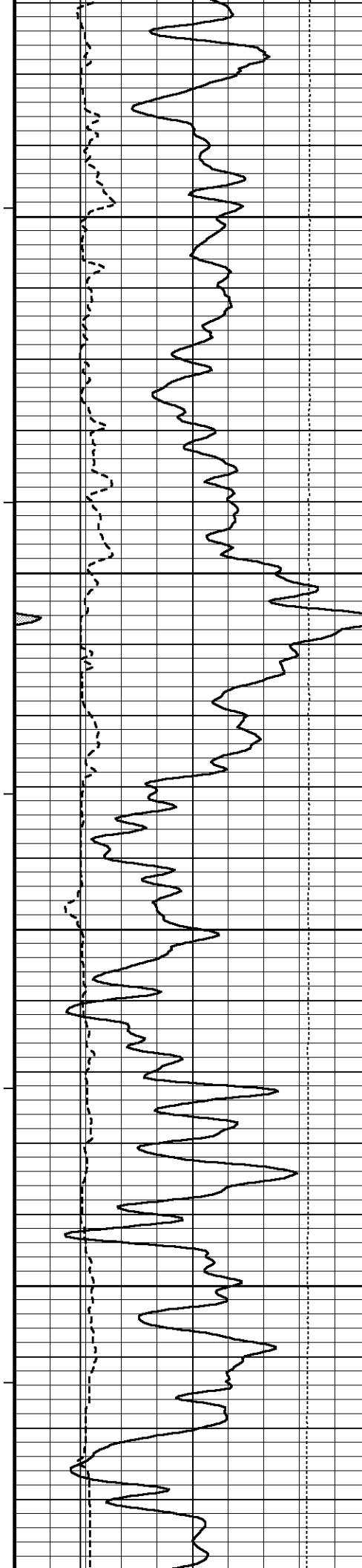
129°

3550

130°

3600





130°

3650

131°

3700

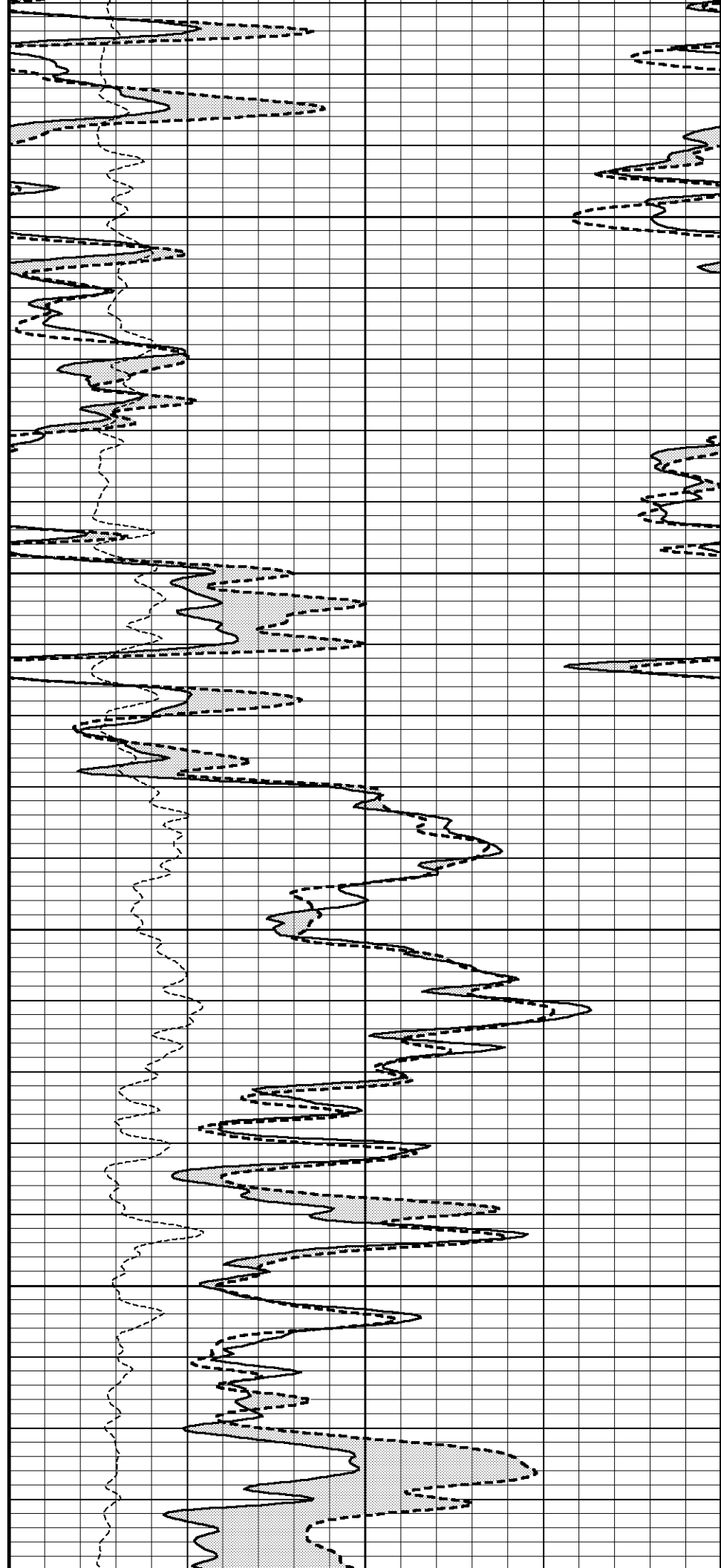
132°

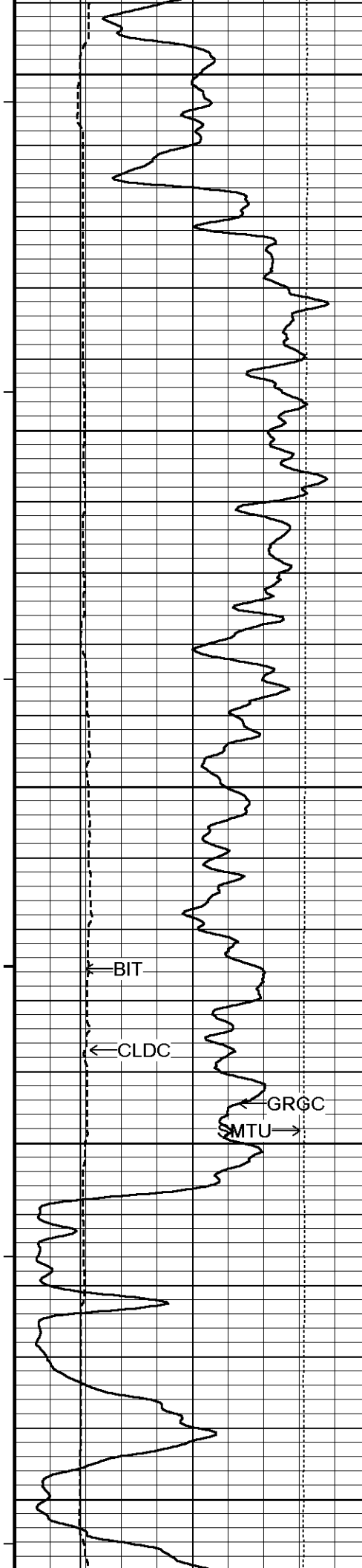
3750

133°

3800

133°





3850

133°

3900

134°

3950

BIT

CLDC

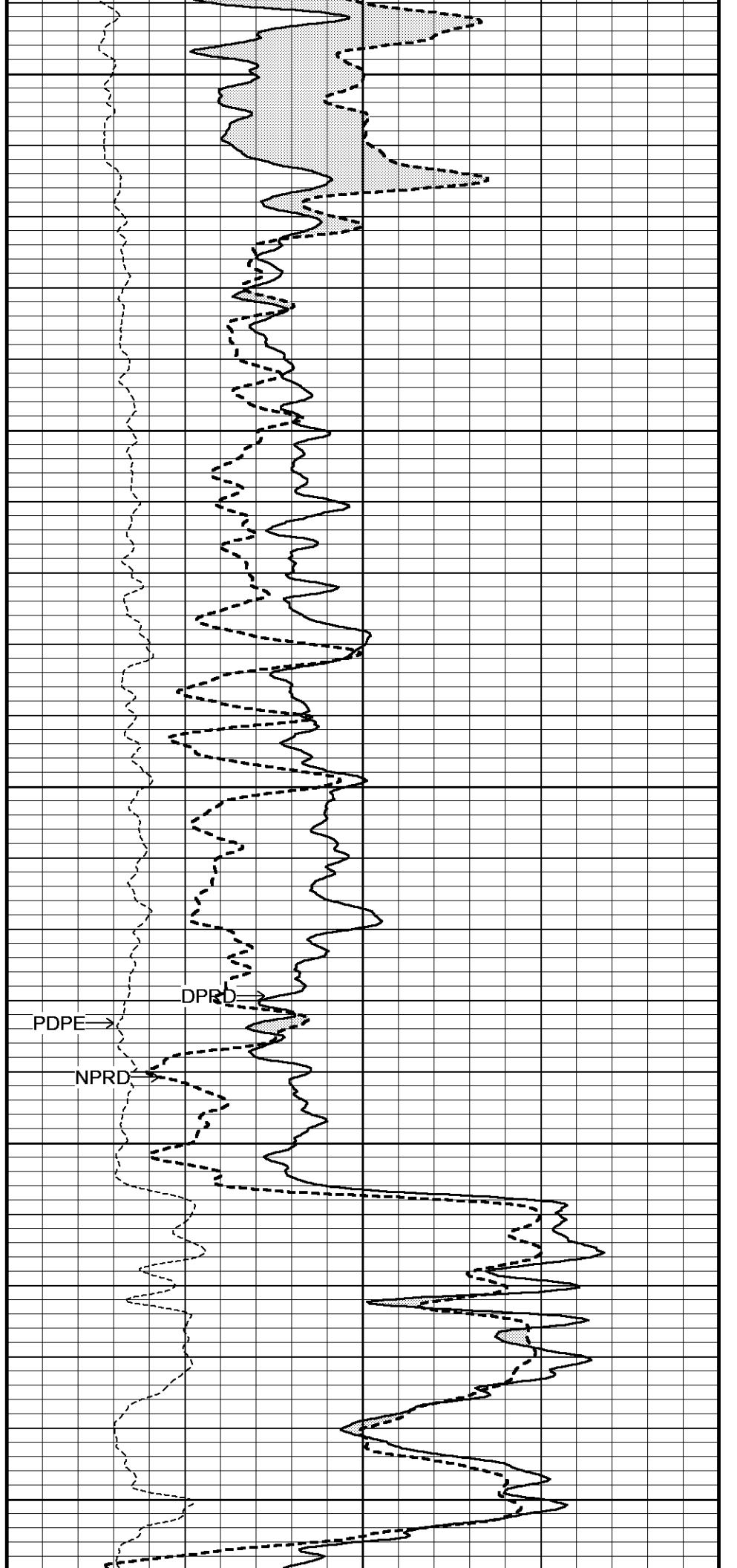
GRGC

MTU

4000

135°

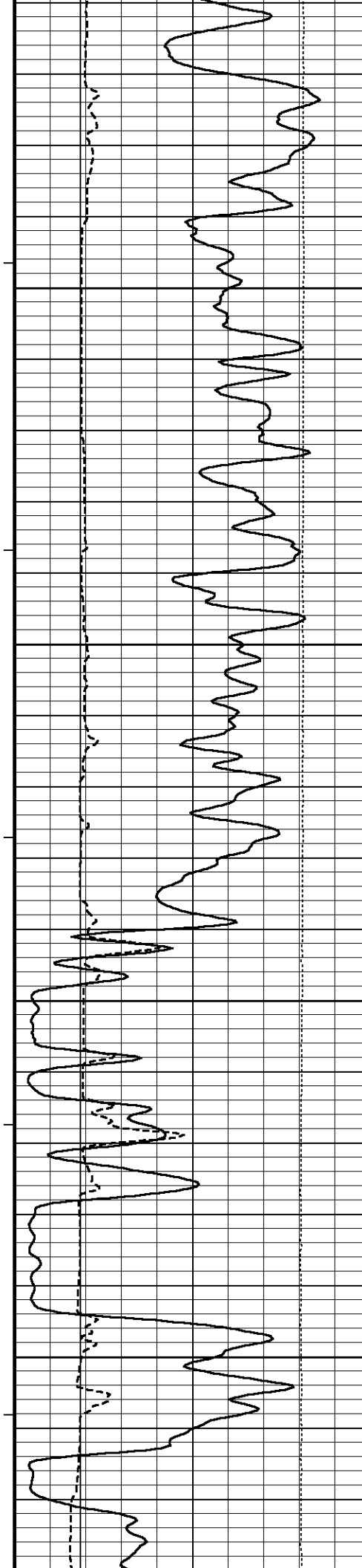
4050



PDPE

DPRD

NPRD



135°

4100

136°

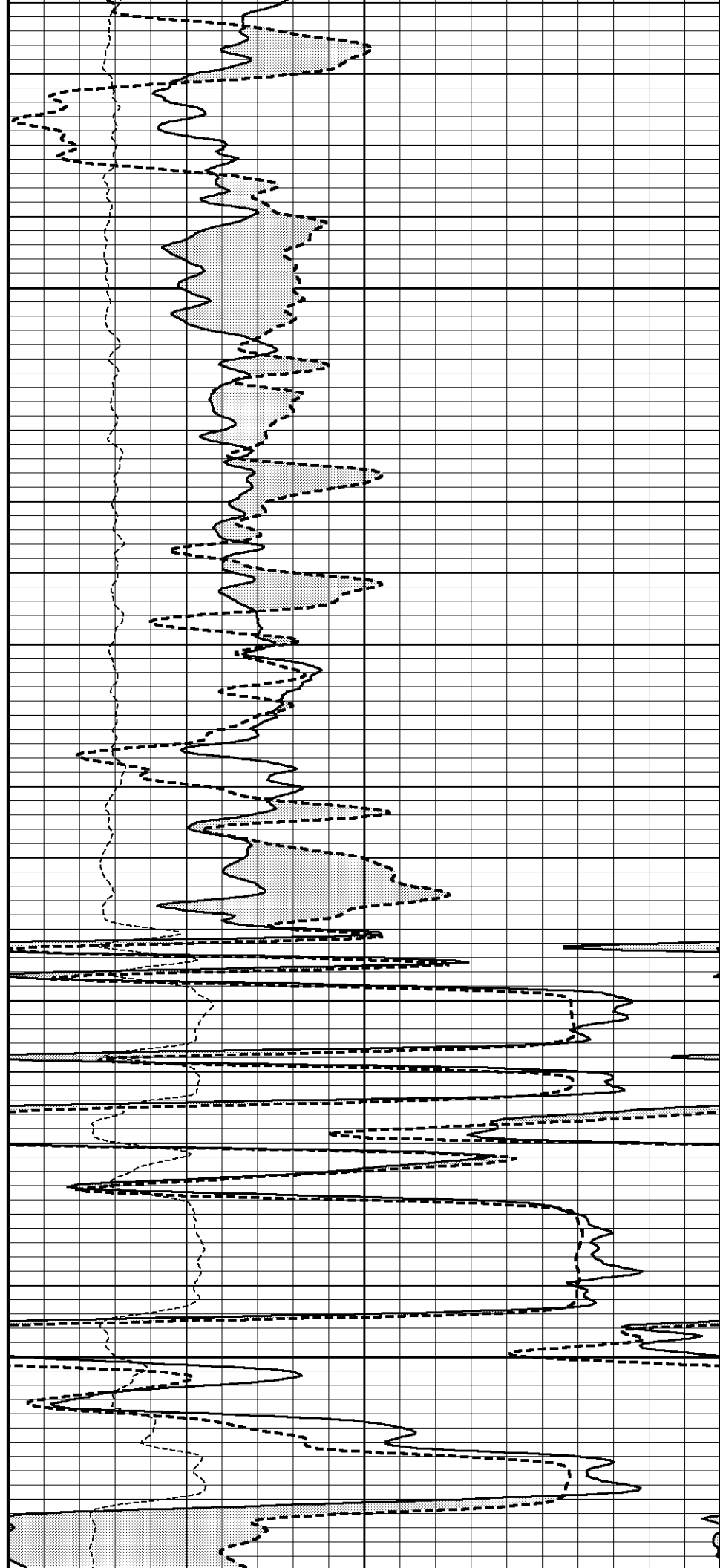
4150

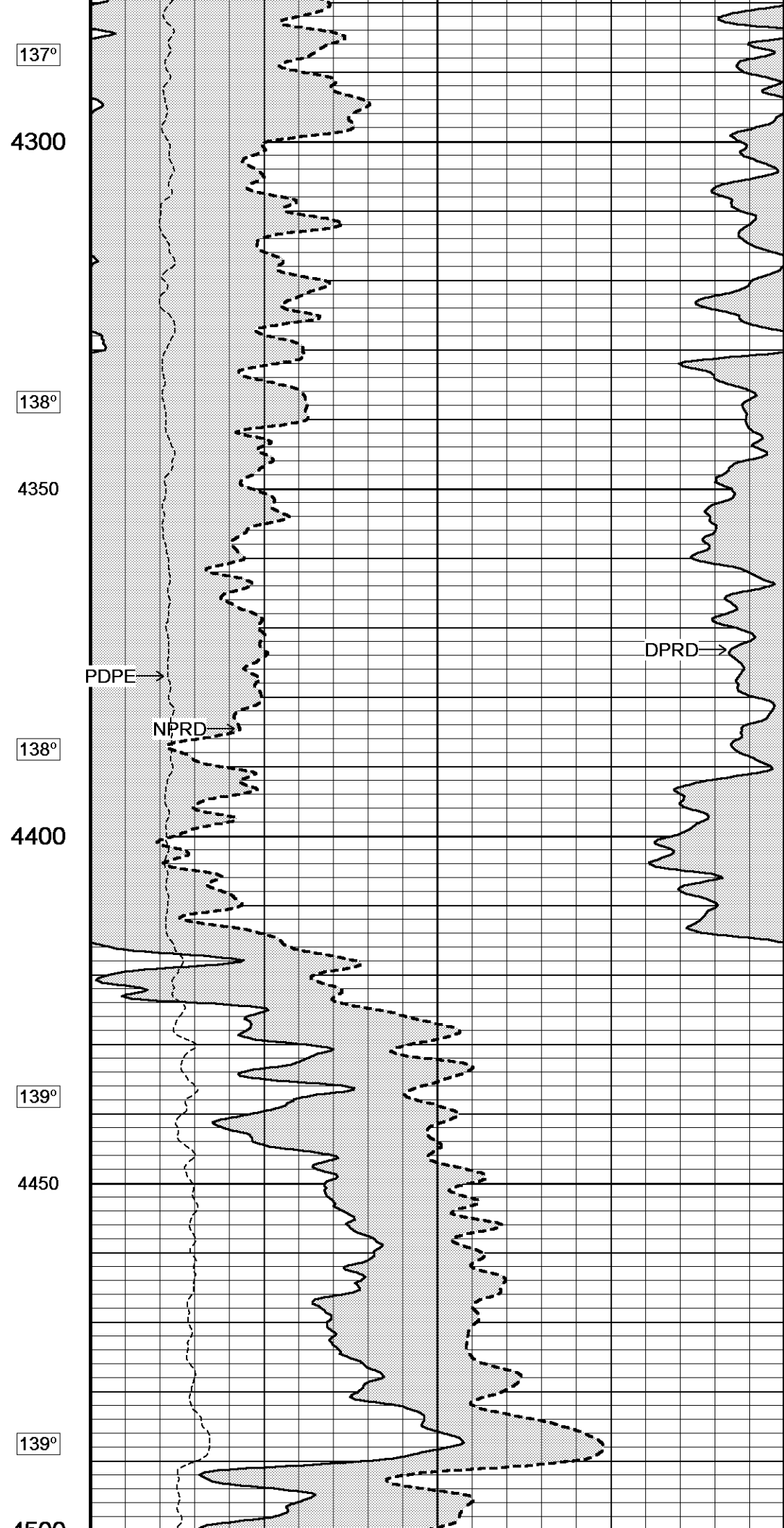
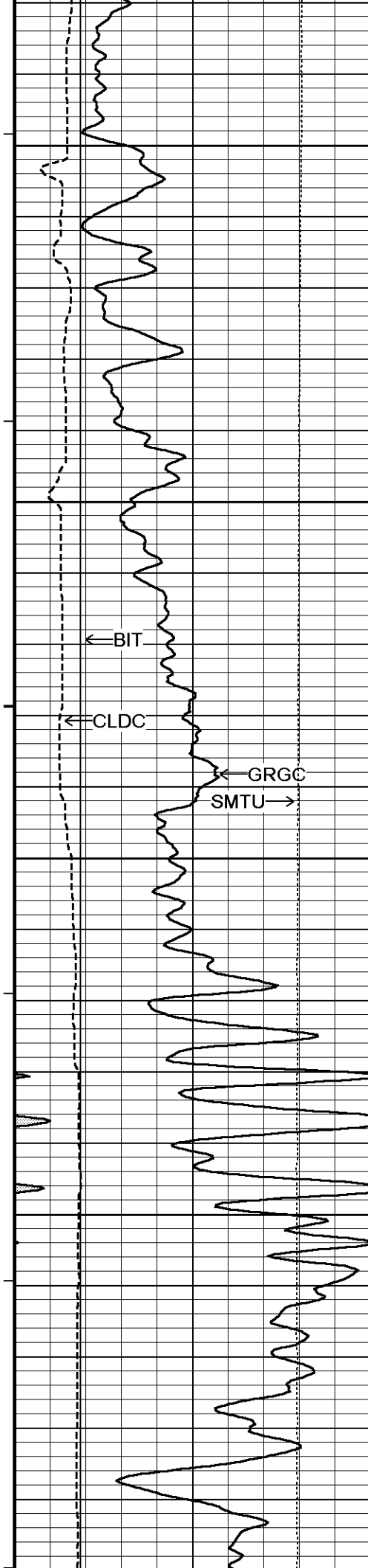
136°

4200

137°

4250







4500

139°

4550

140°

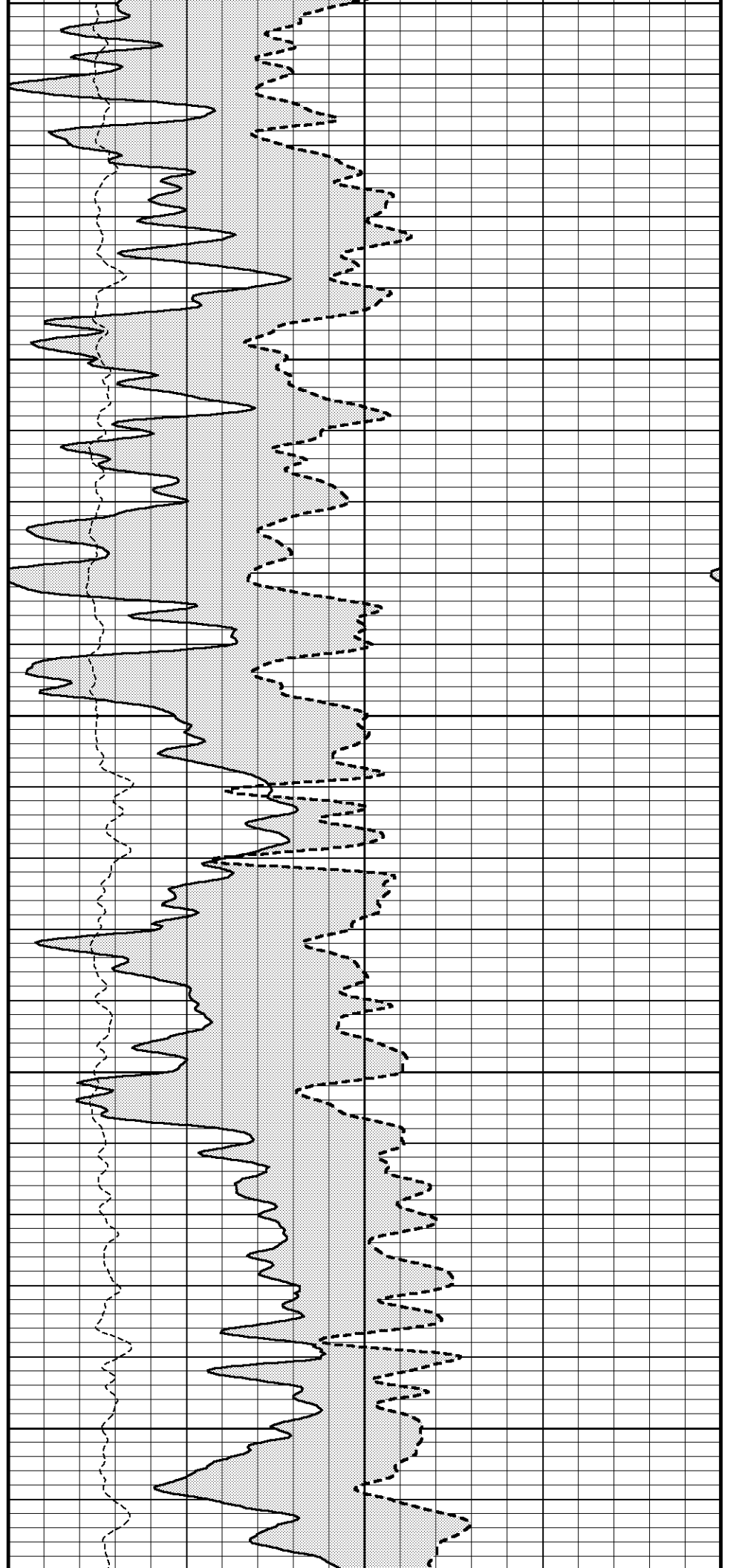
4600

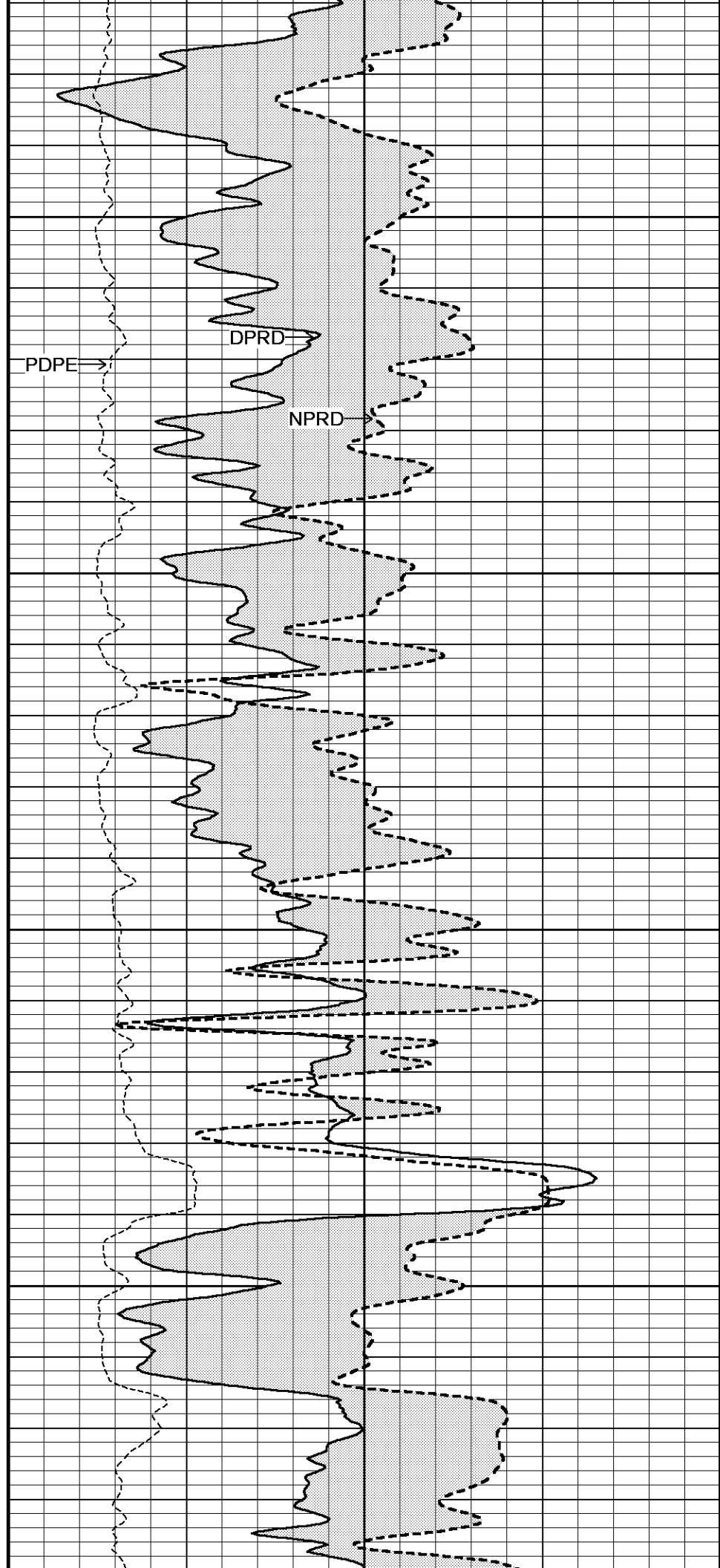
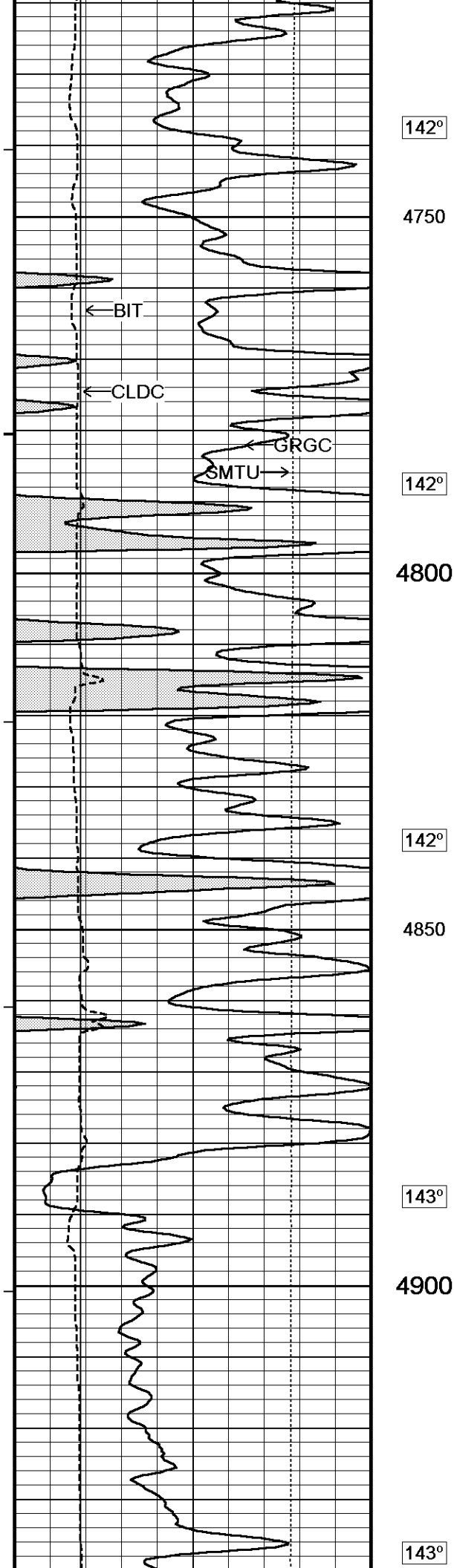
140°

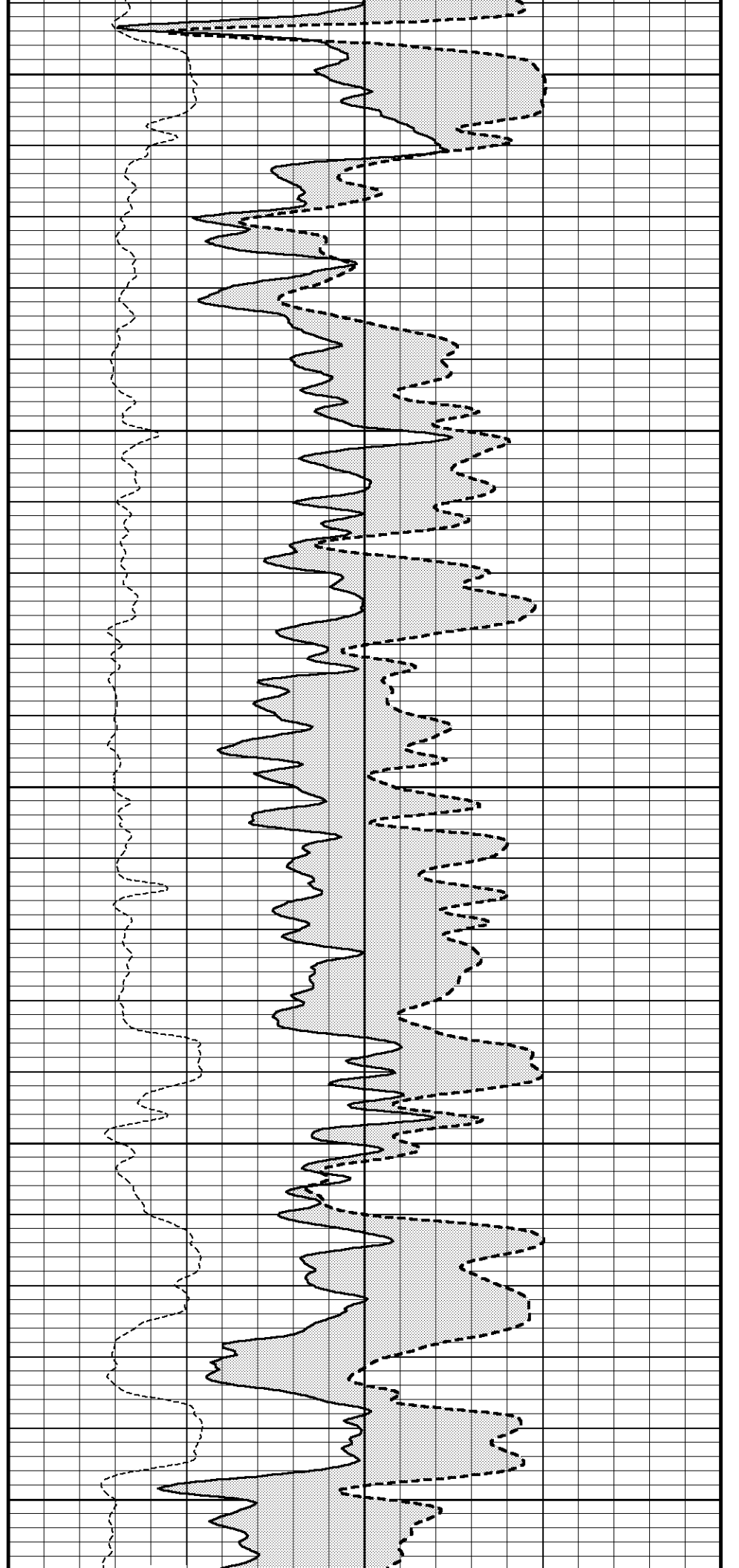
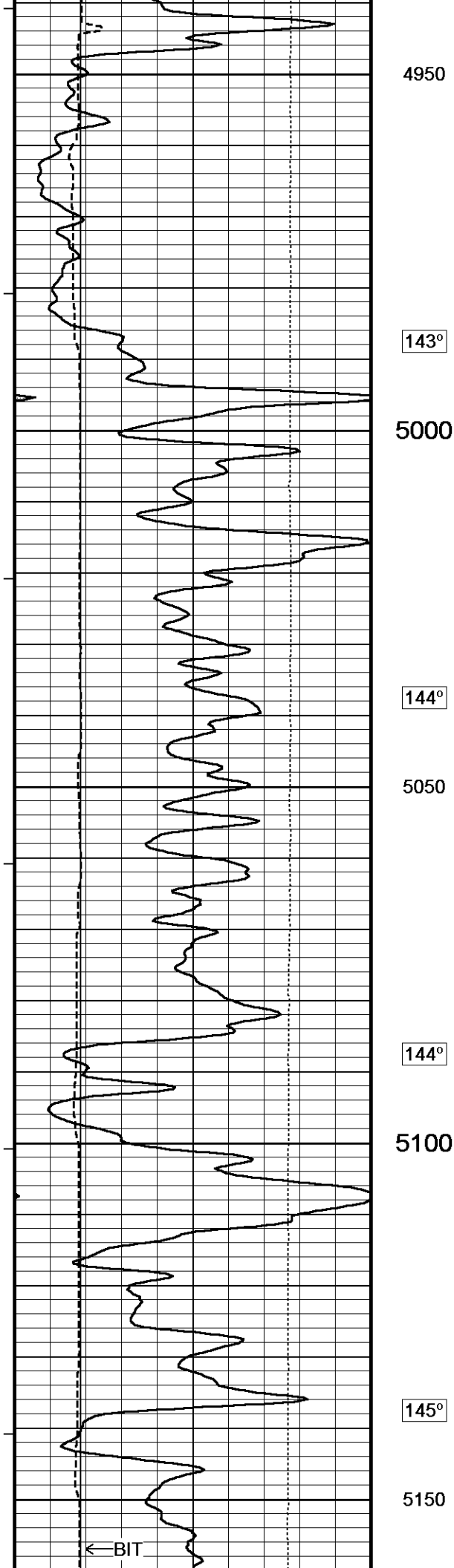
4650

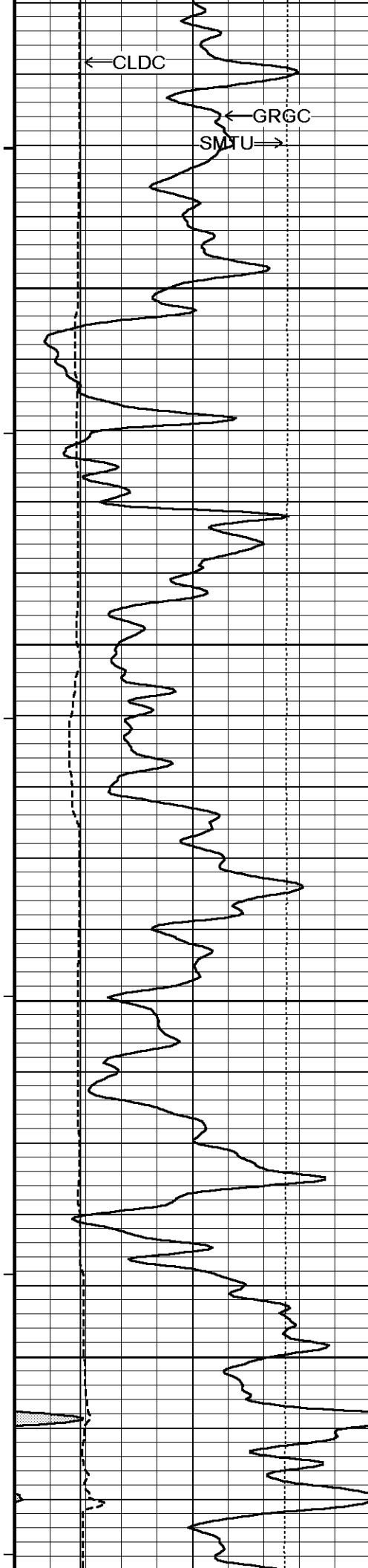
141°

4700









145°

5200

146°

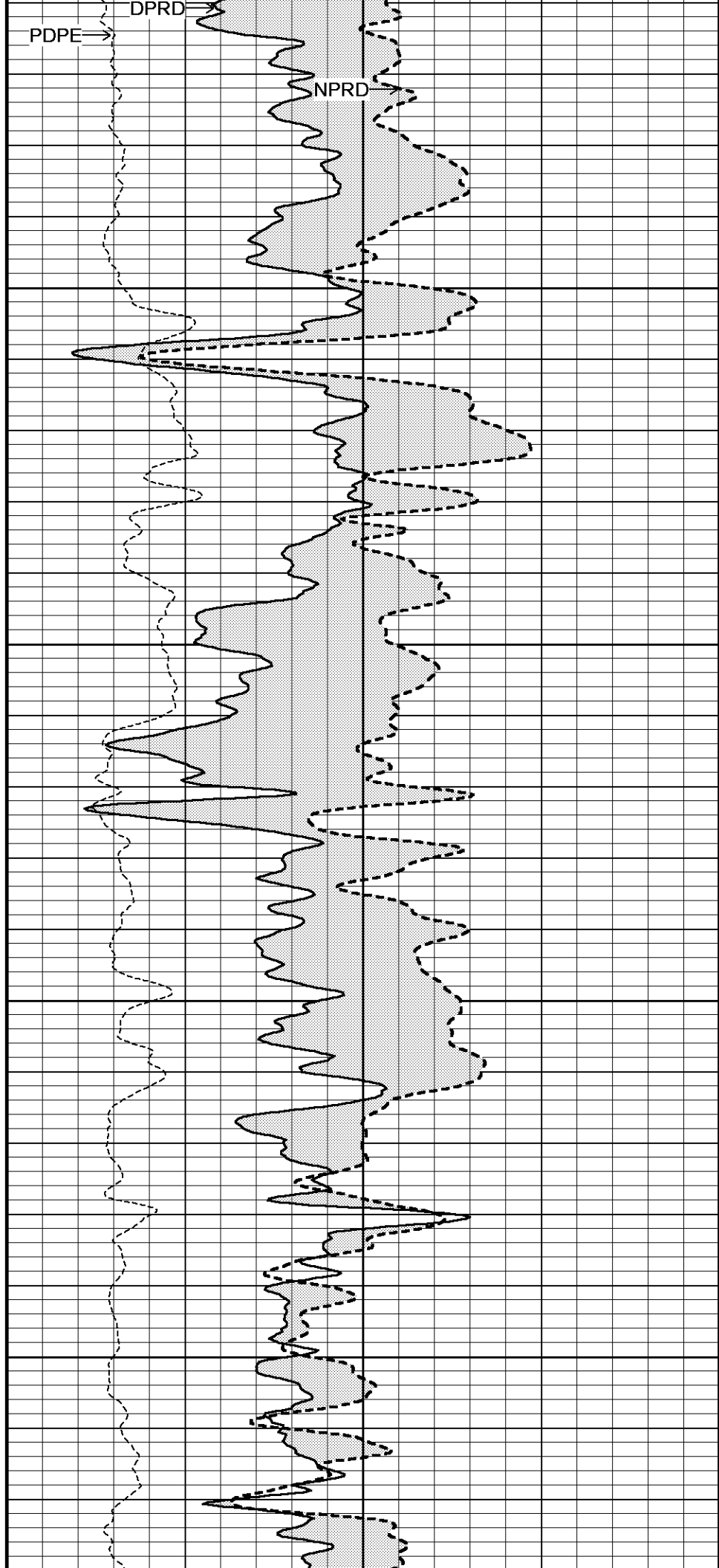
5250

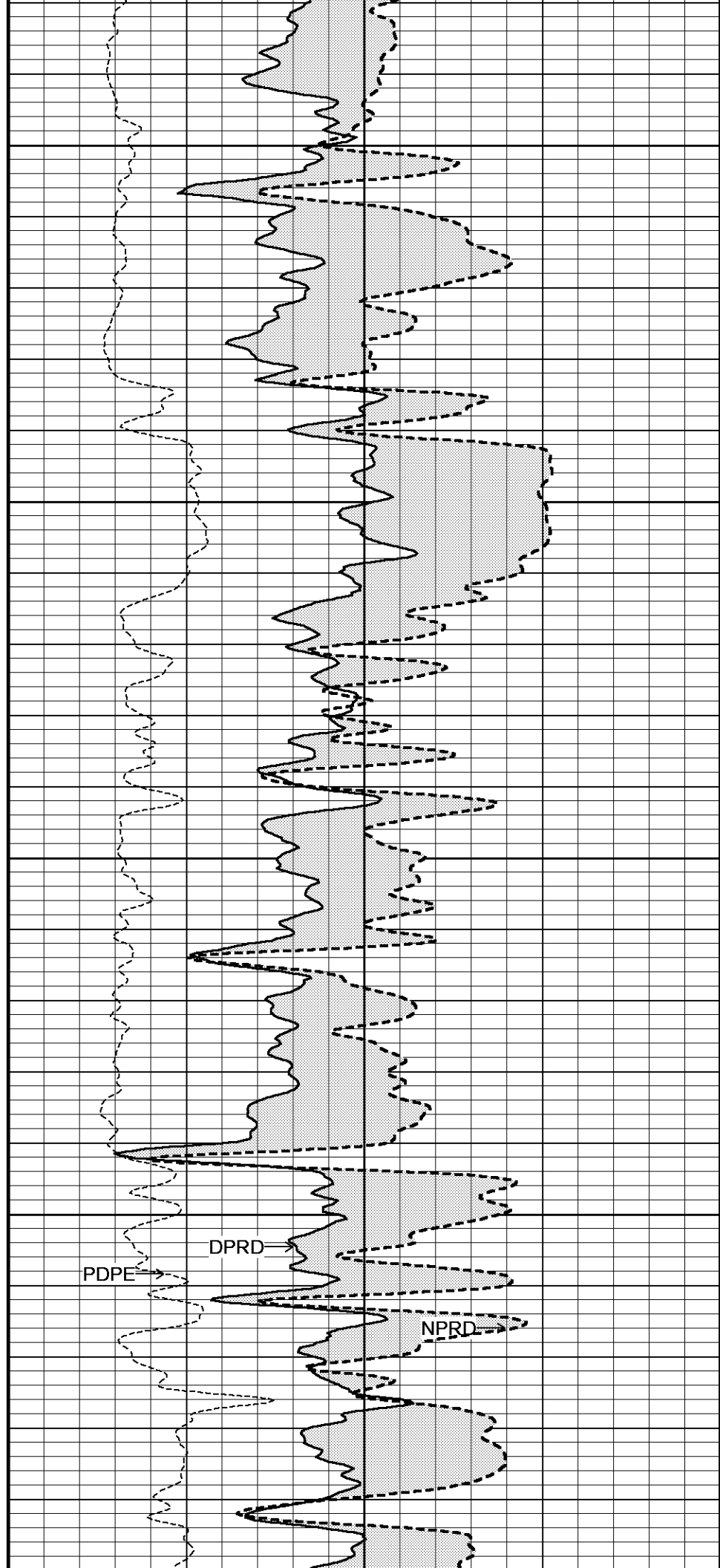
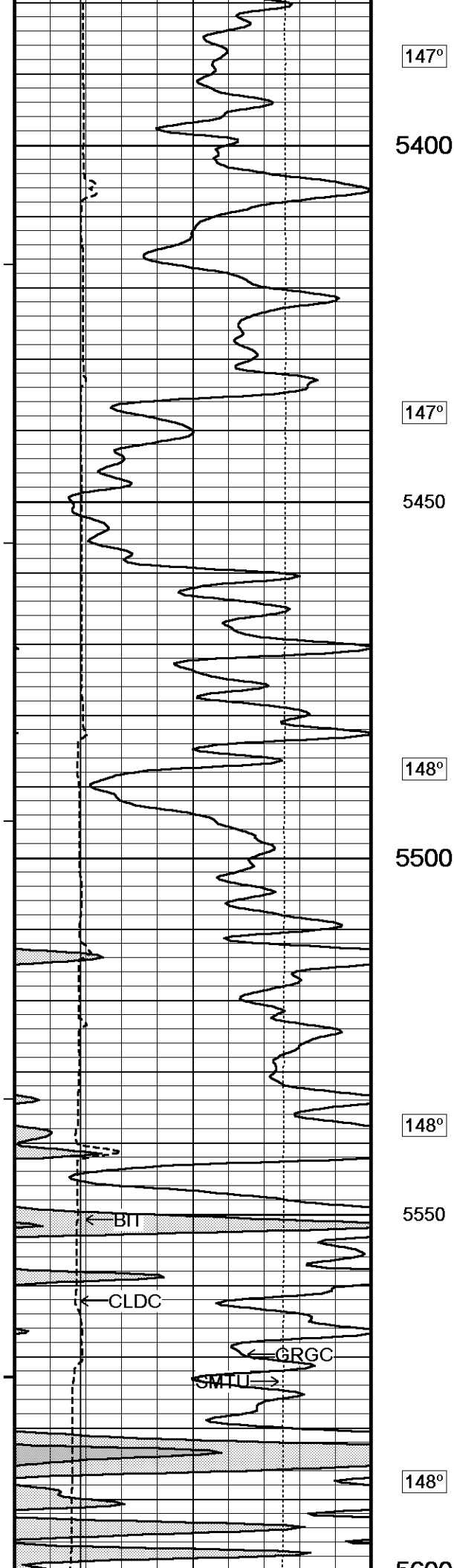
147°

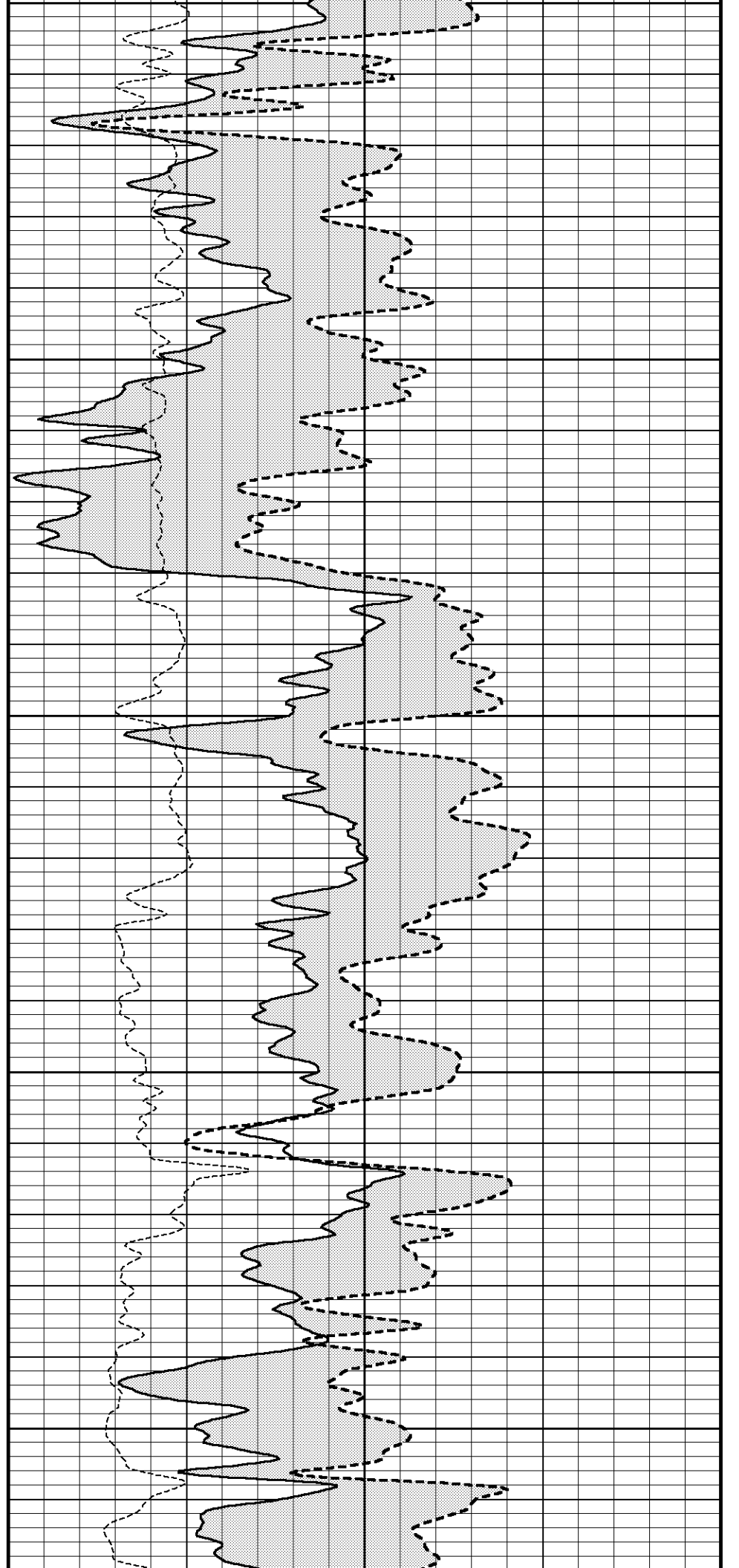
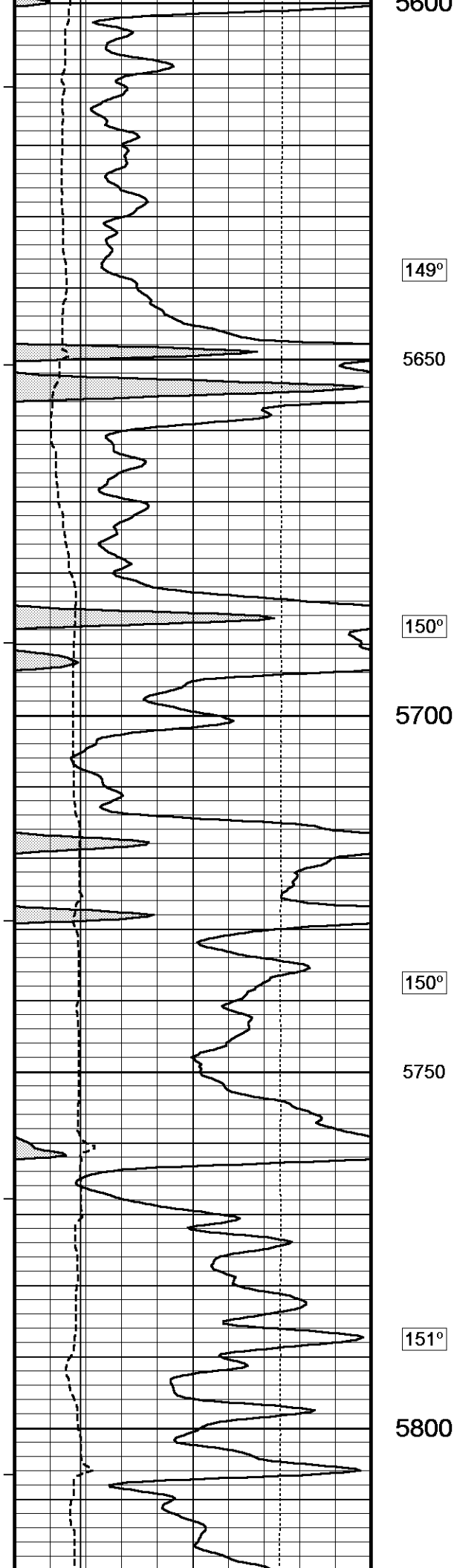
5300

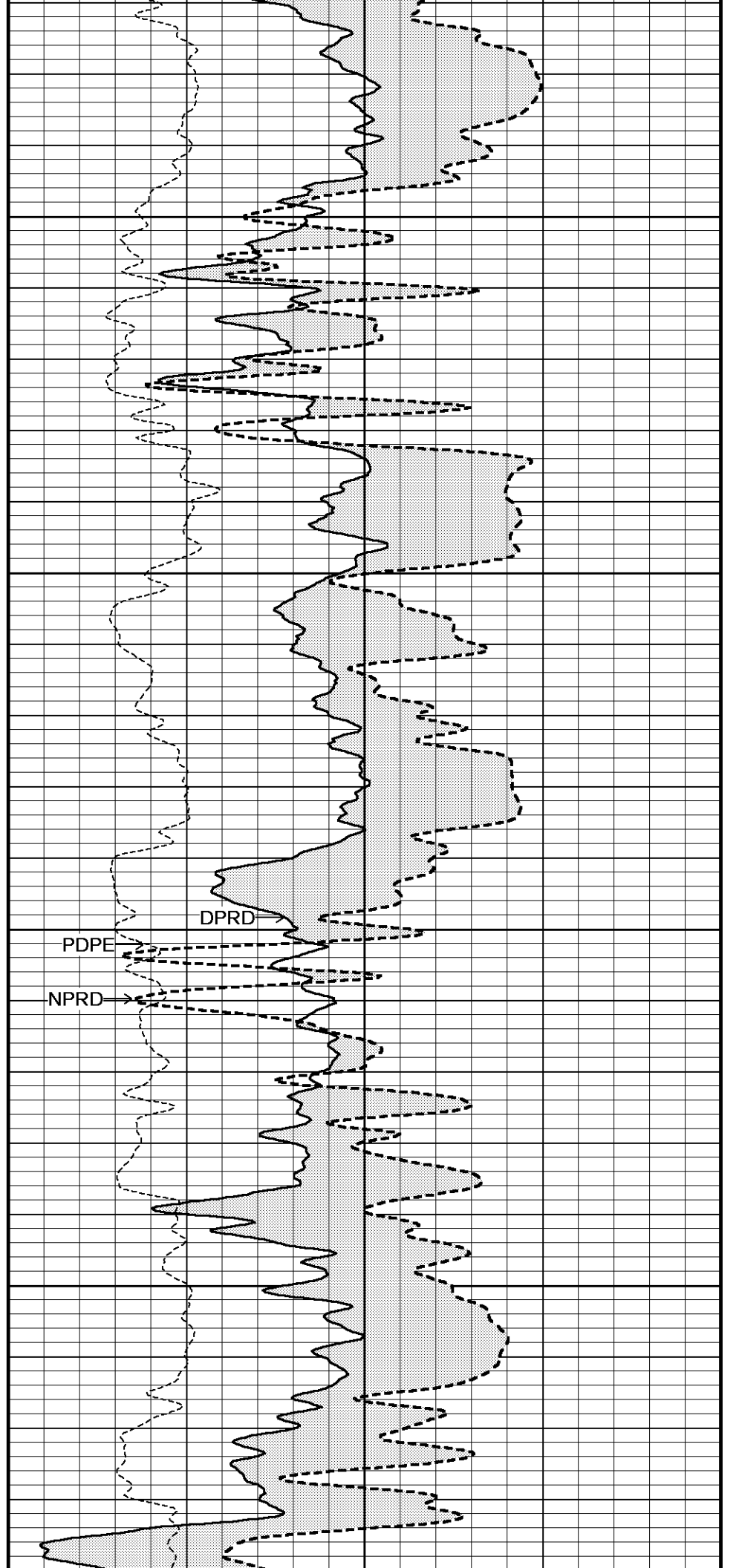
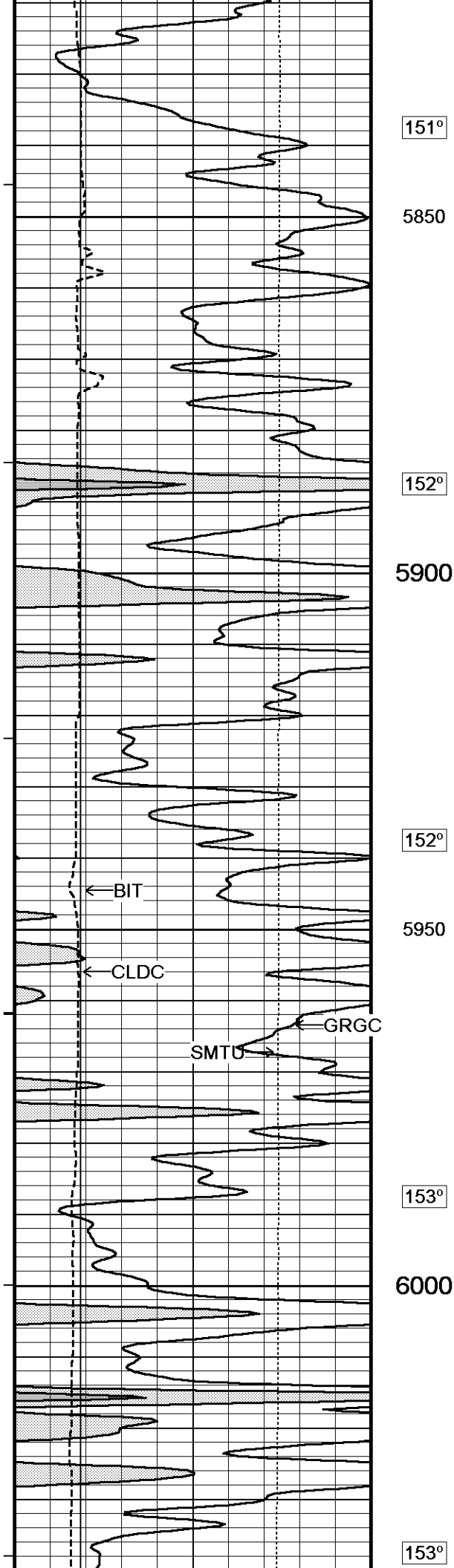
147°

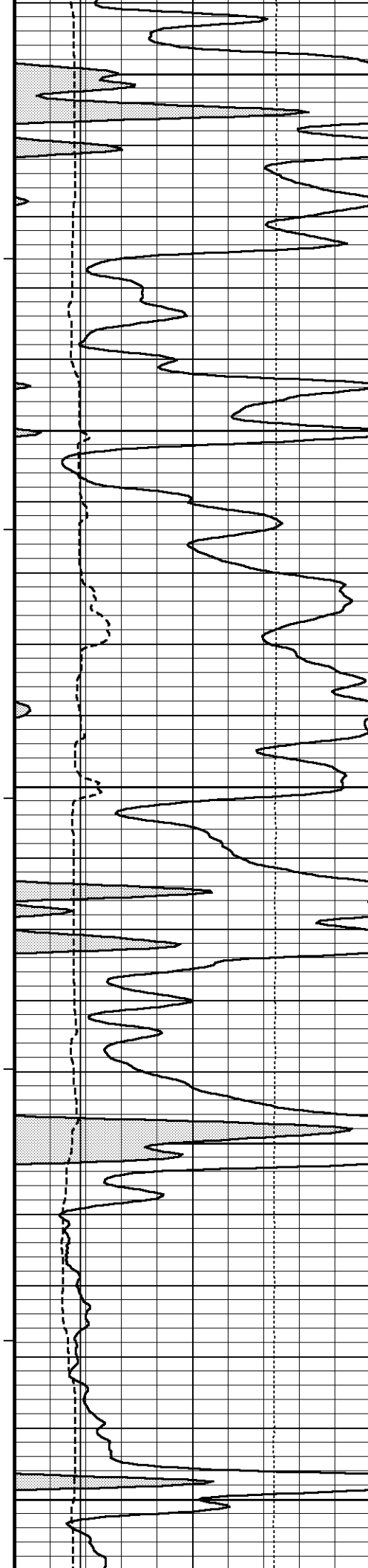
5350











6050

153°

6100

154°

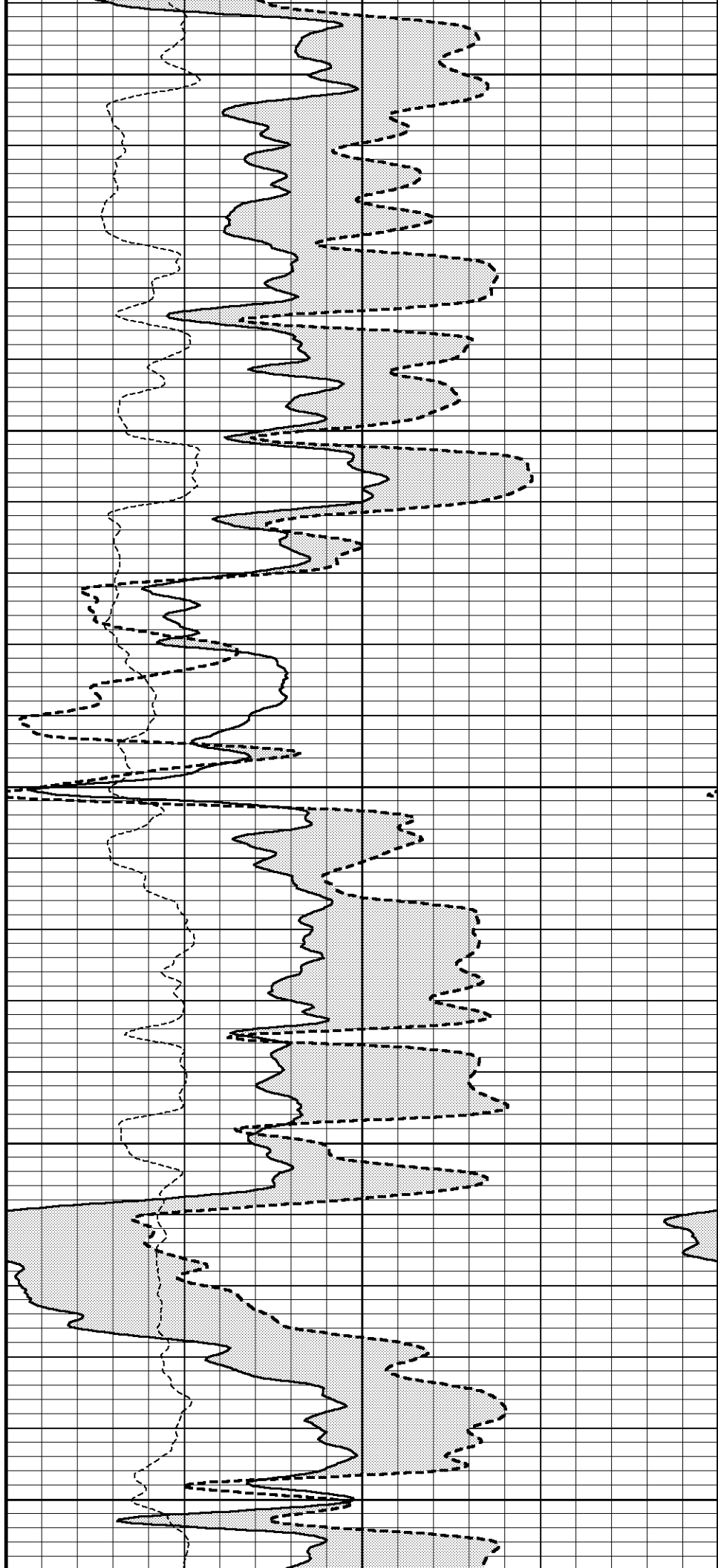
6150

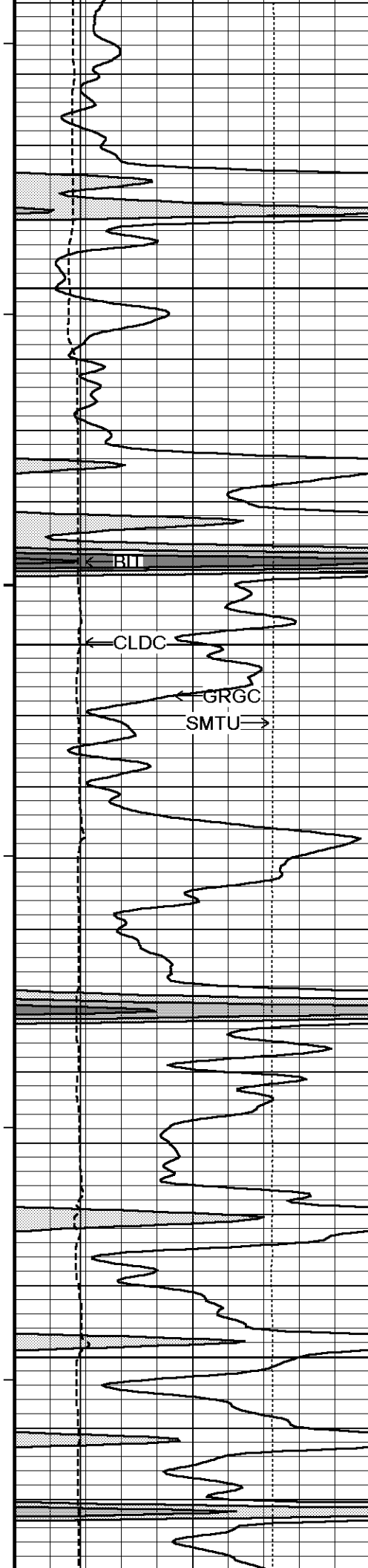
155°

6200

156°

6250





156°

6300

157°

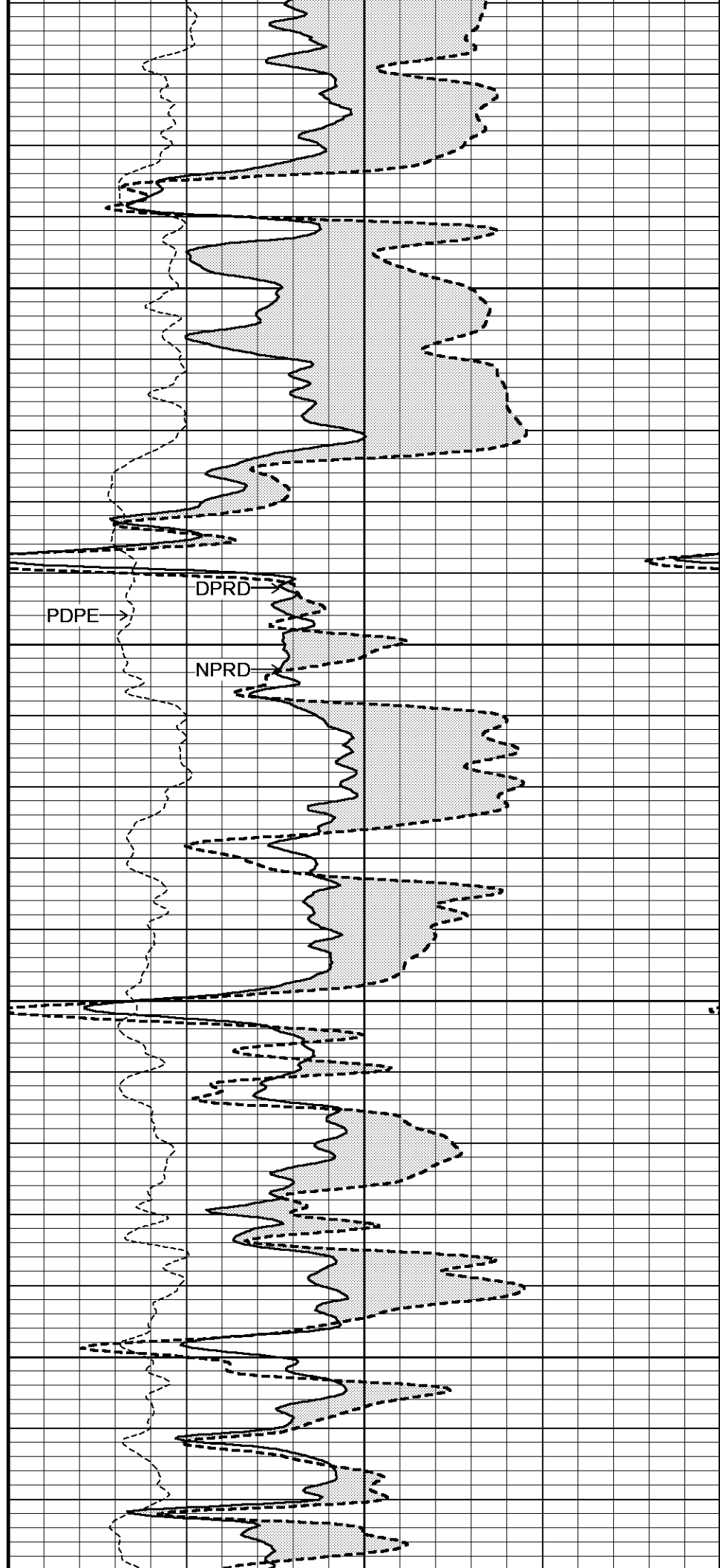
6350

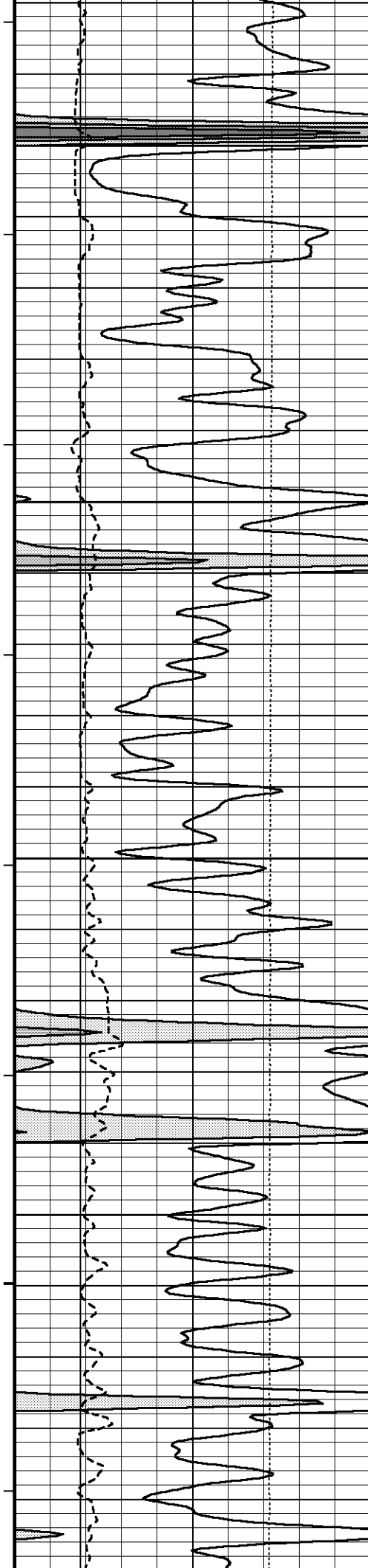
157°

6400

158°

6450





158°

6500

159°

6550

159°

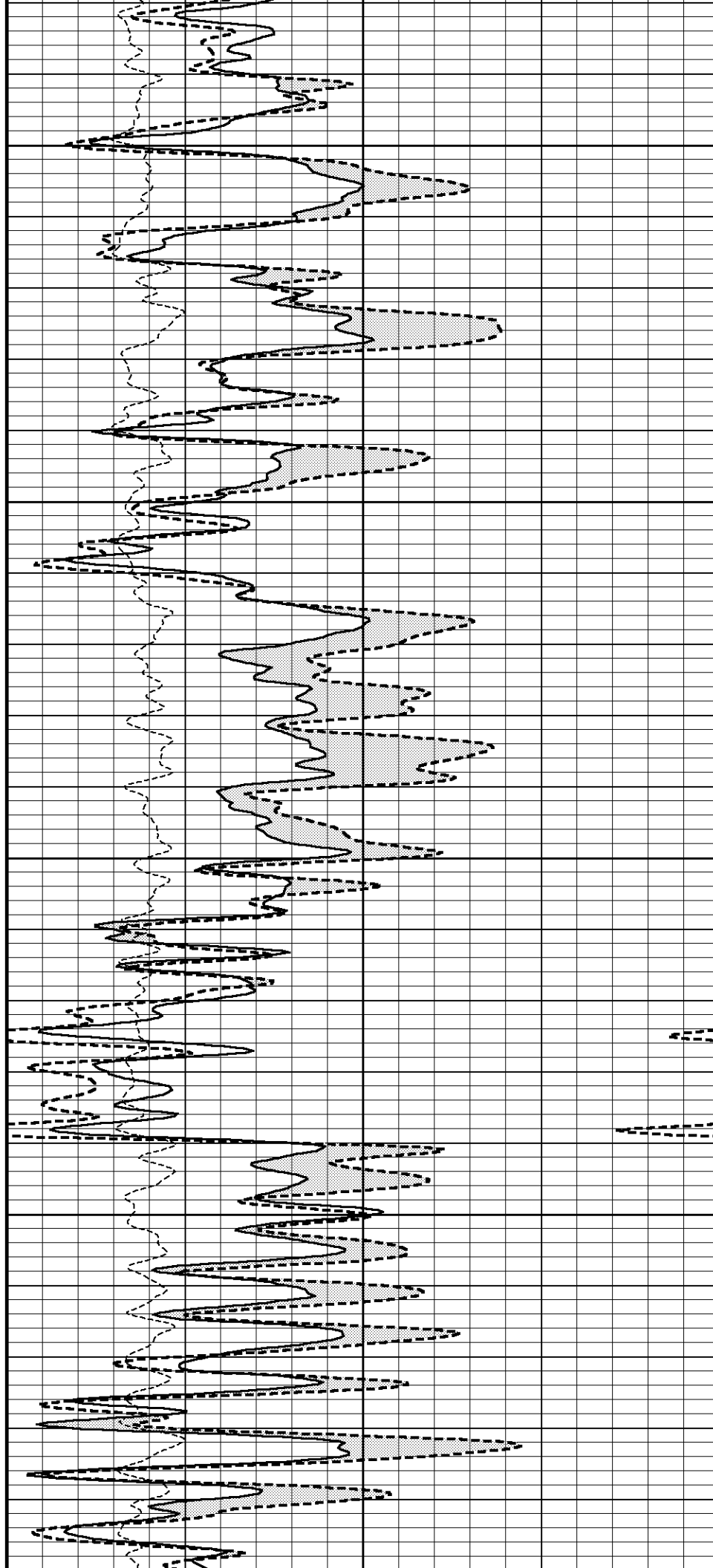
6600

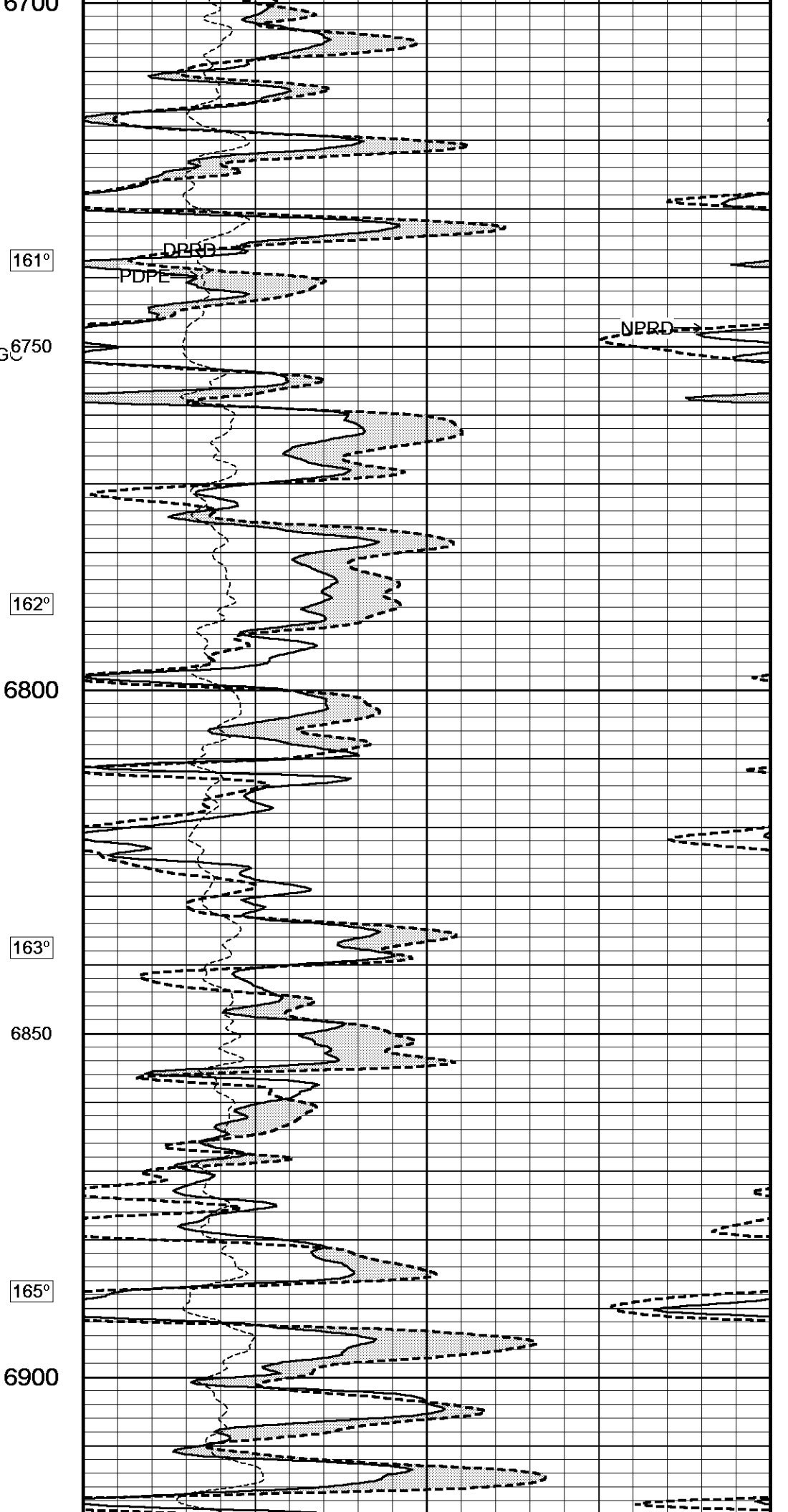
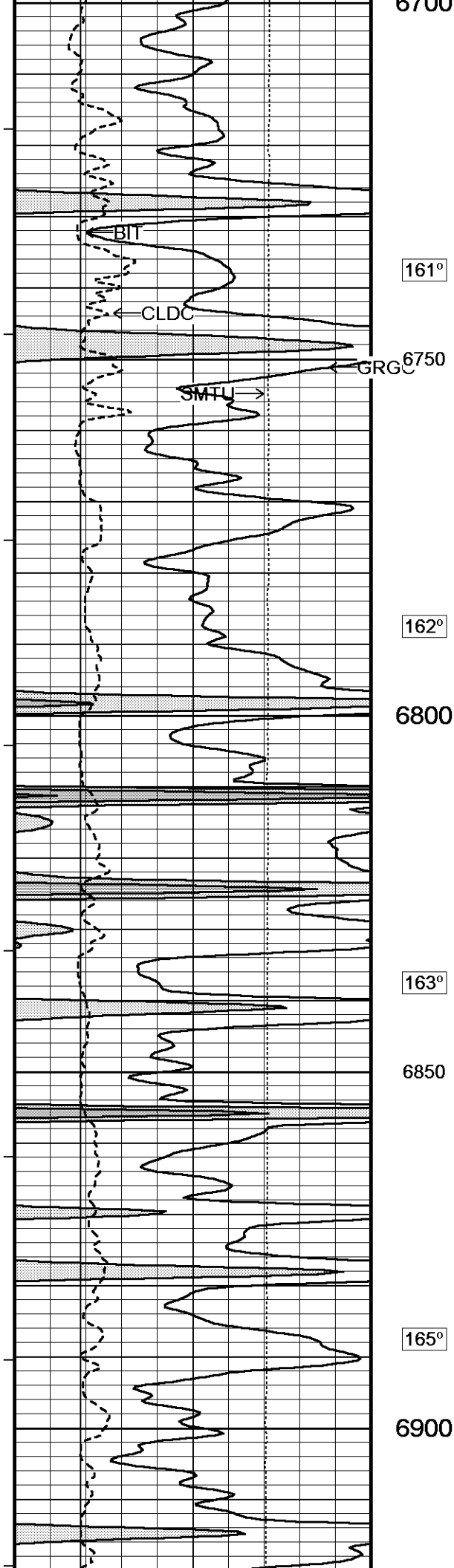
160°

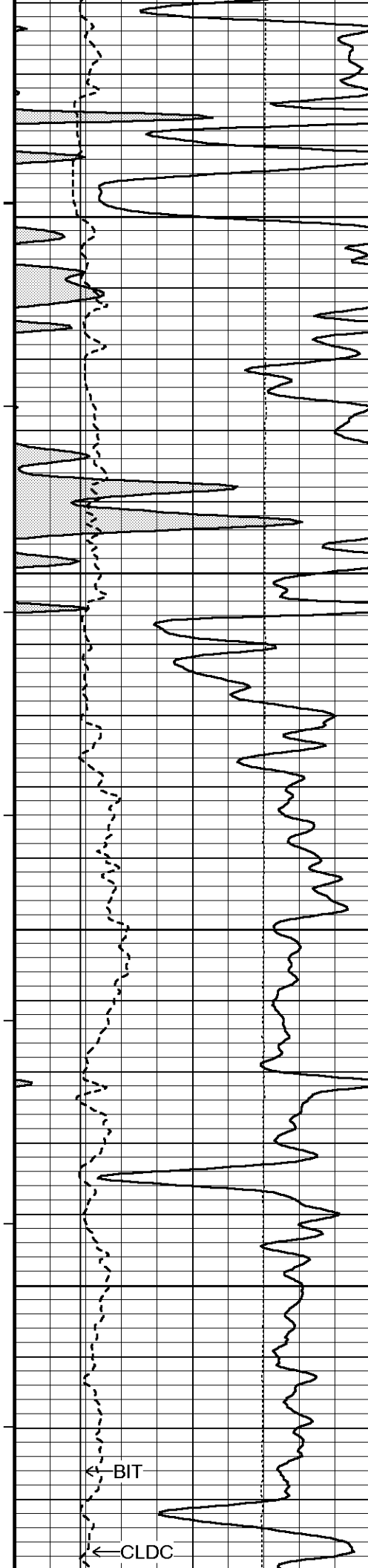
6650

160°

6700







166°

6950

166°

7000

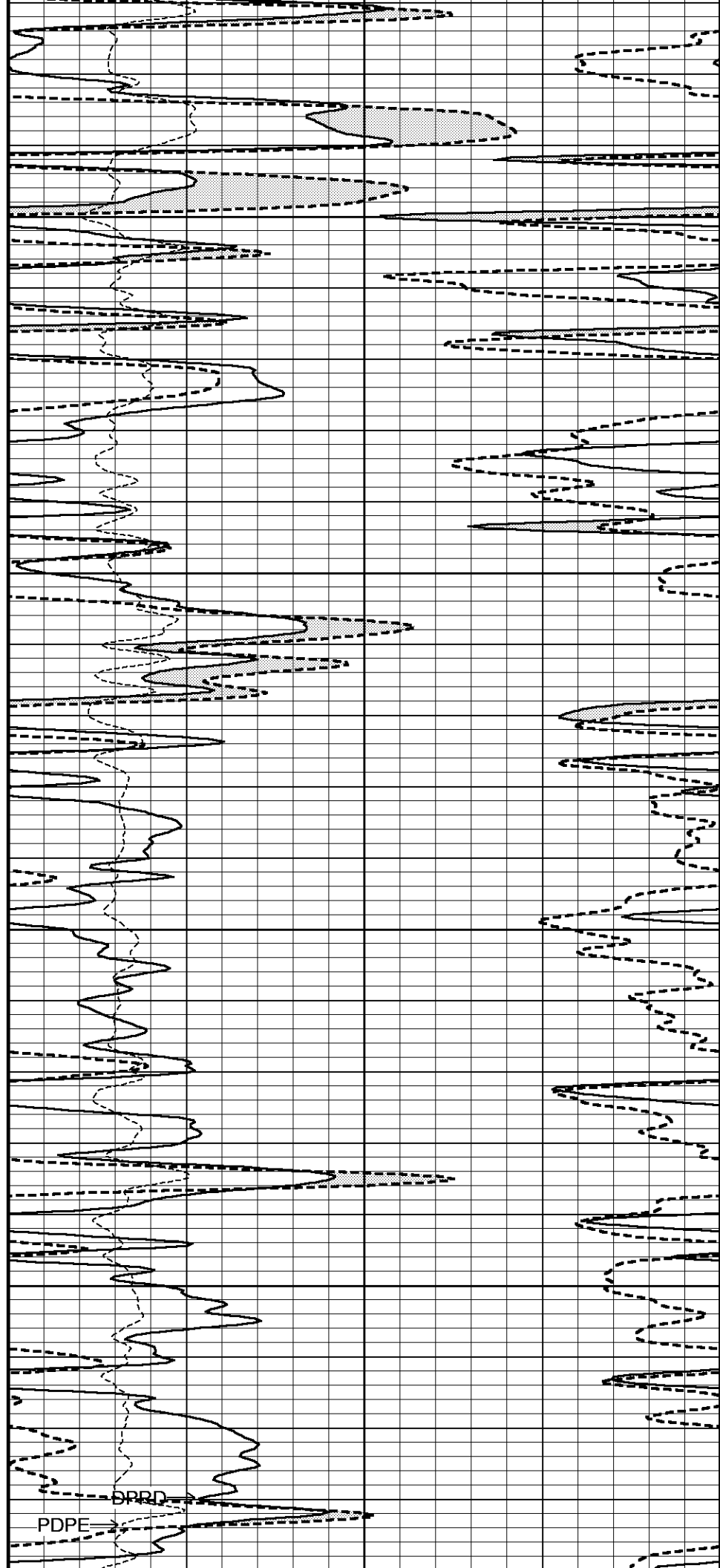
166°

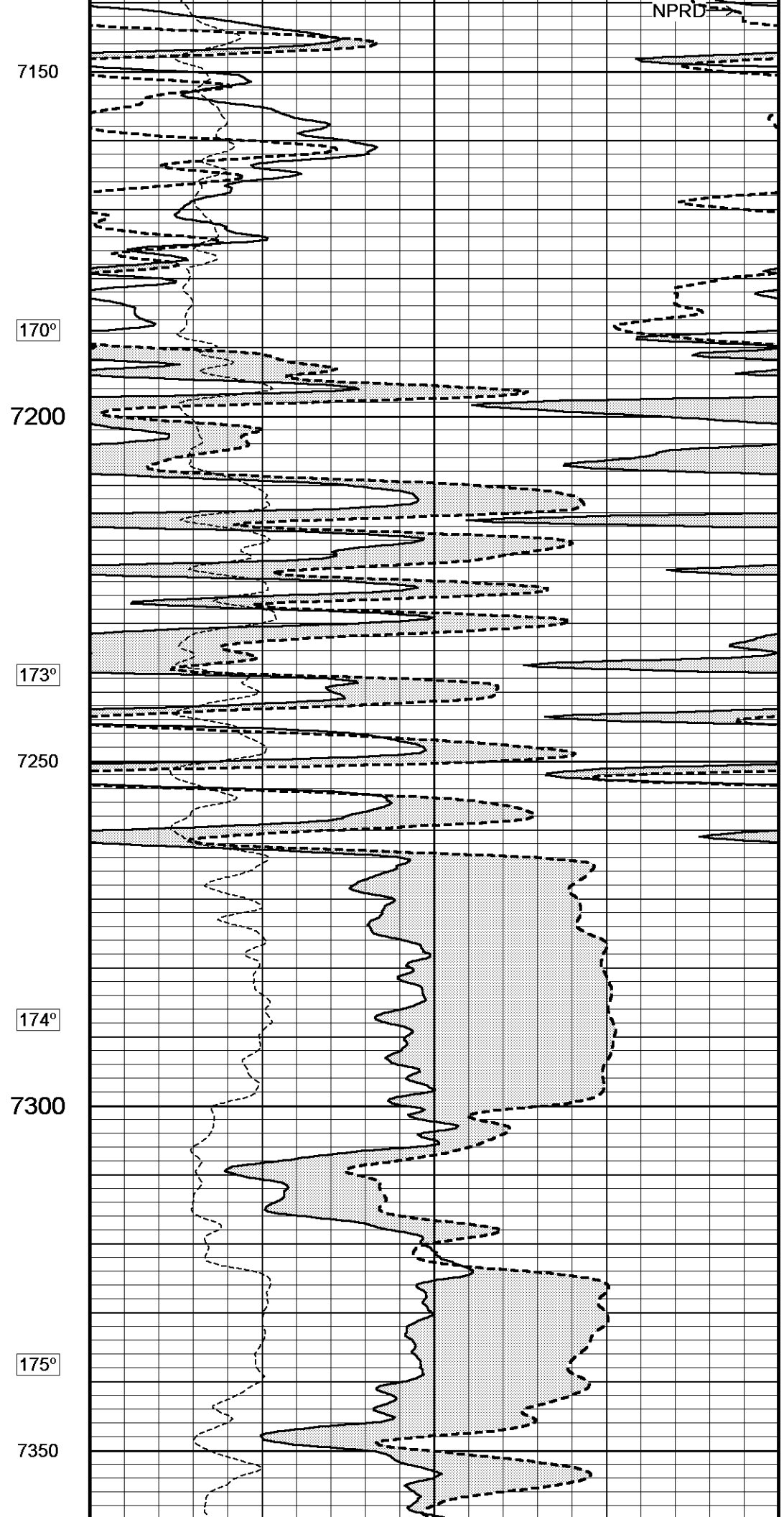
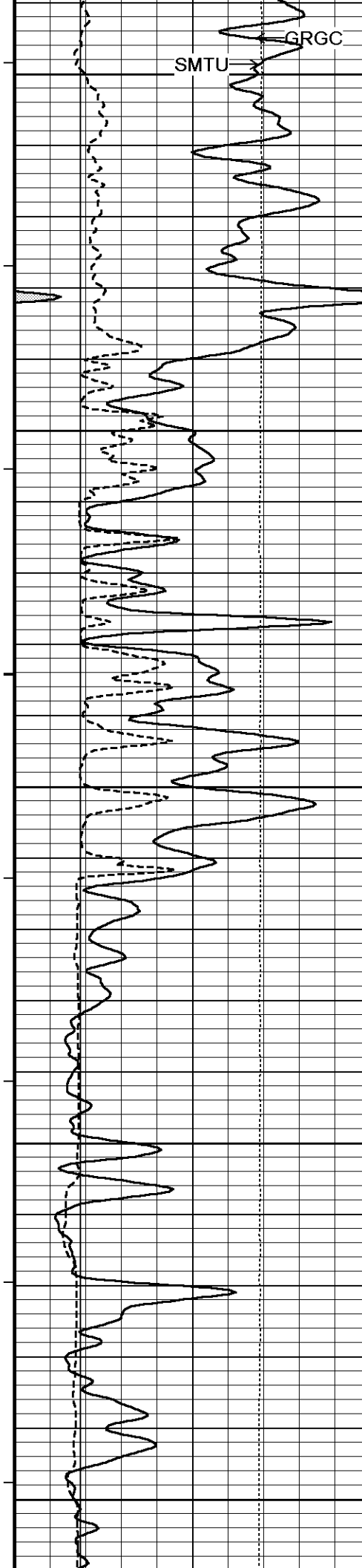
7050

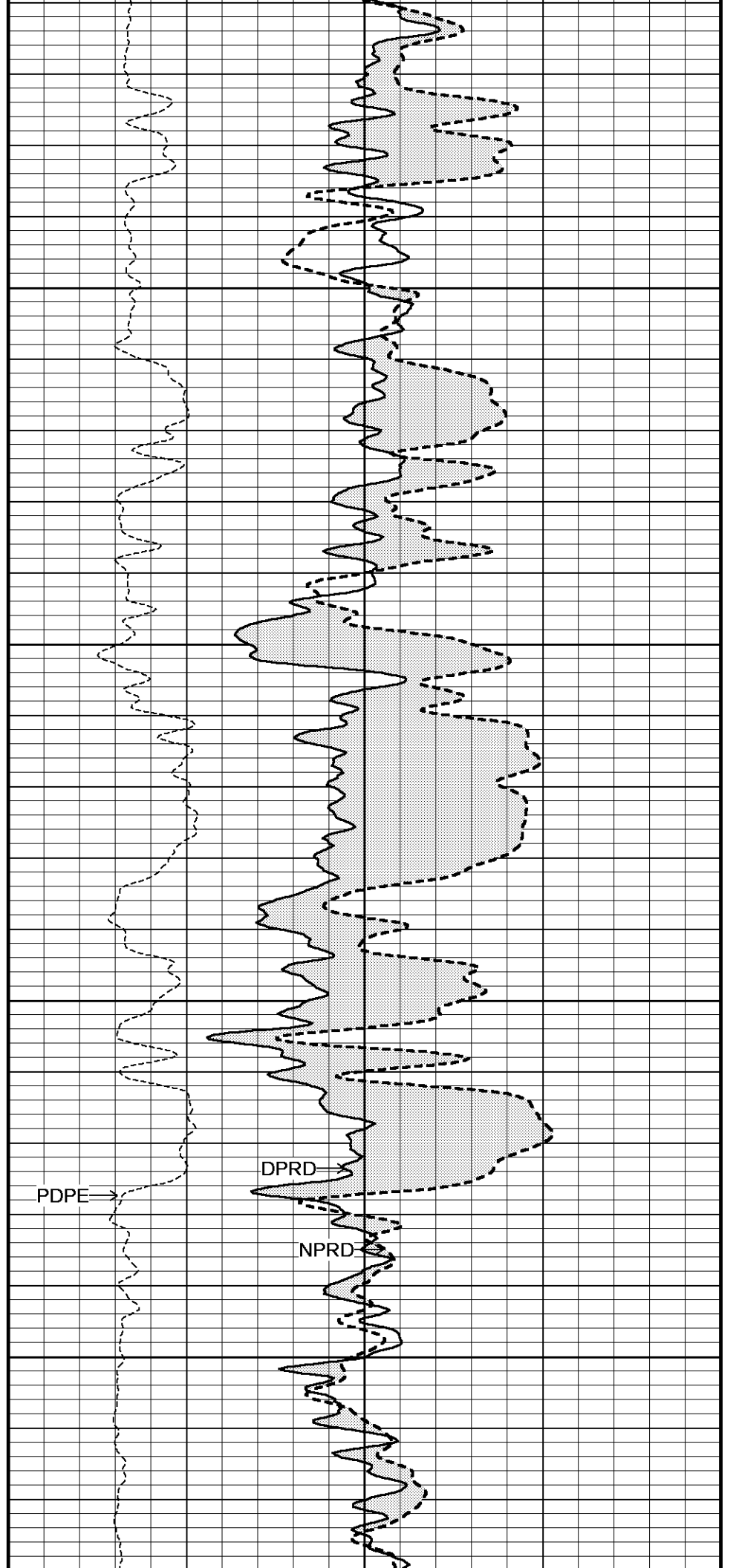
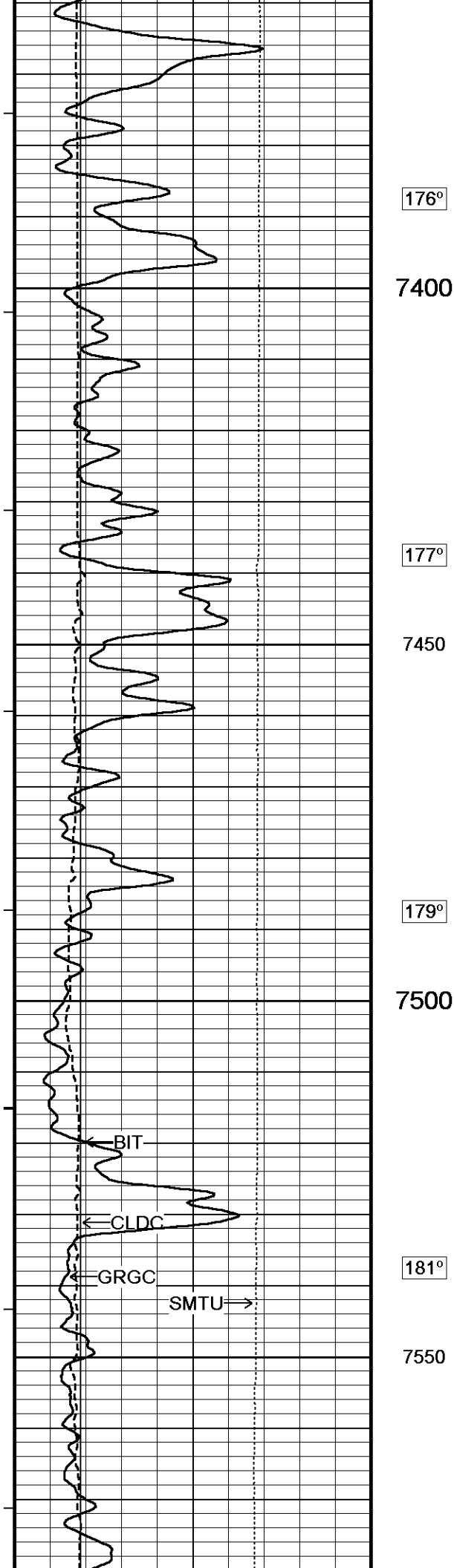
167°

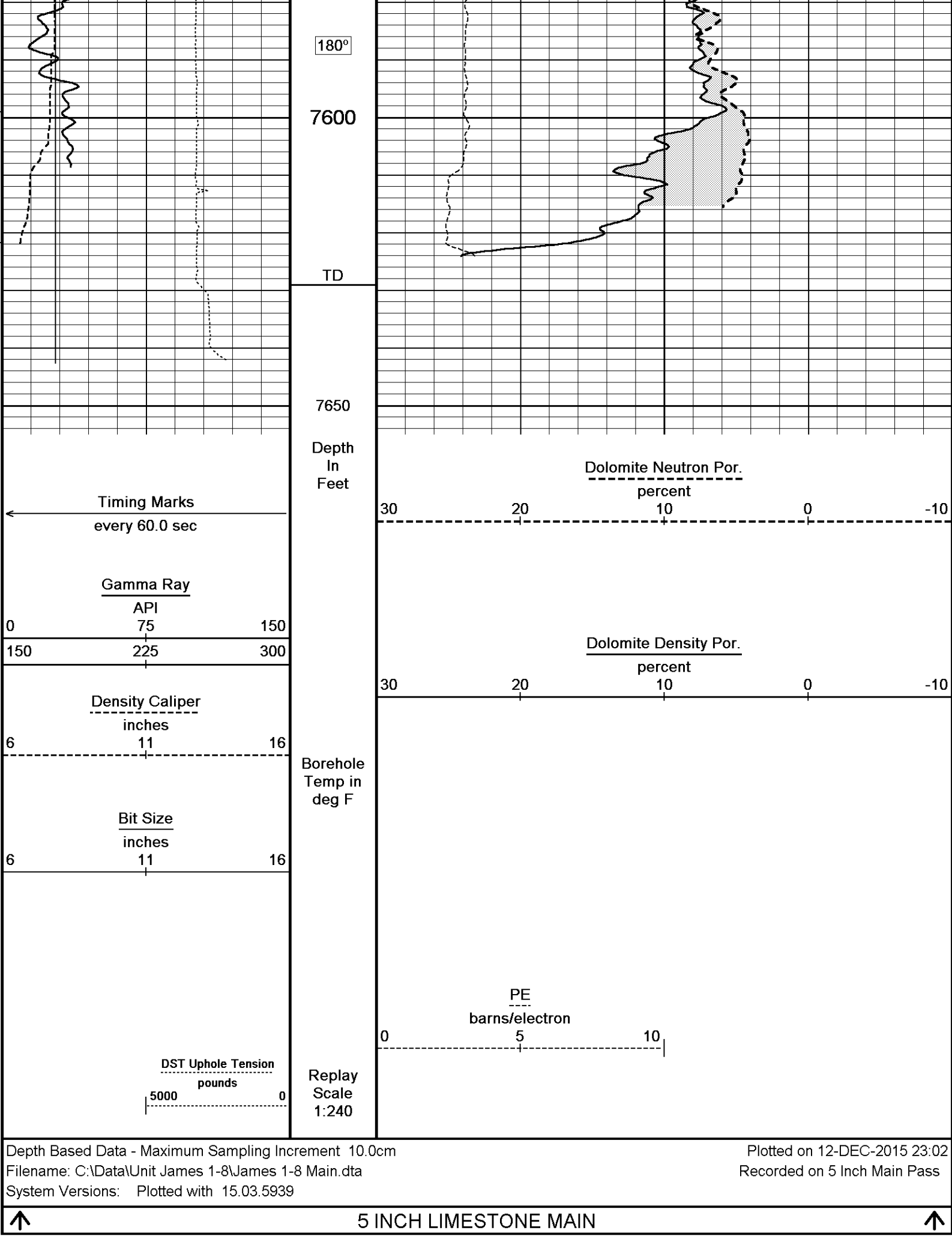
7100

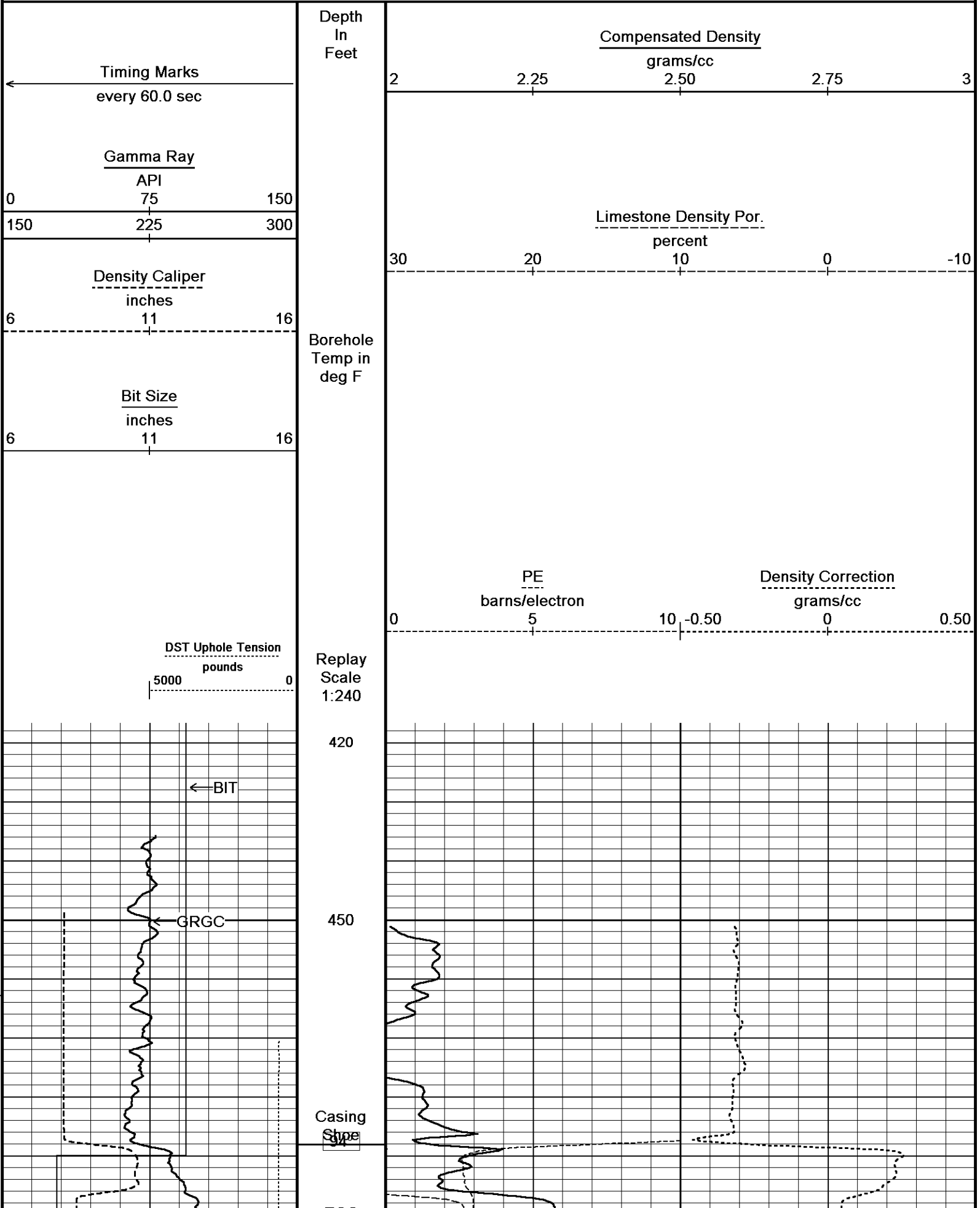
168°

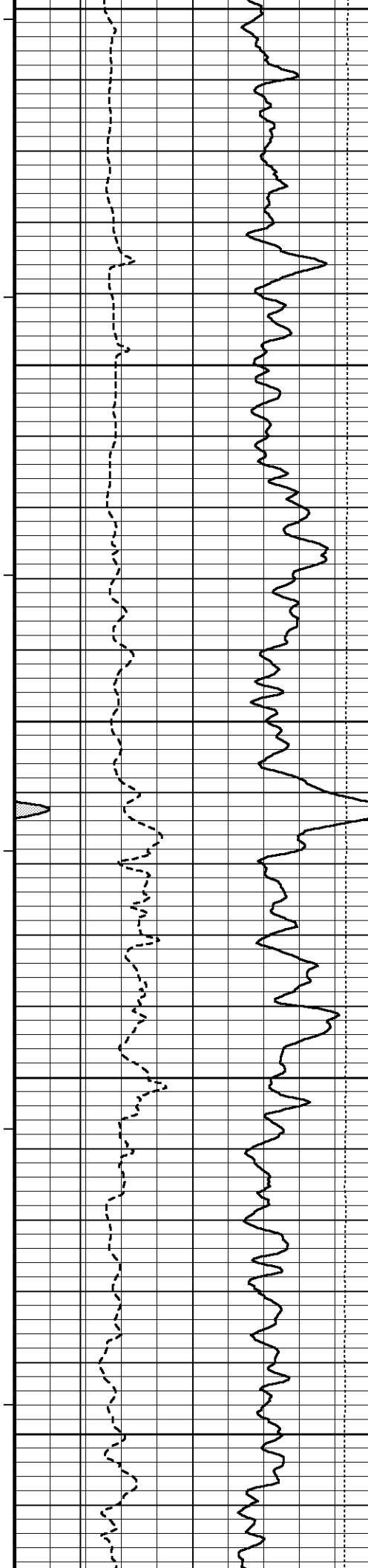












500

95°

550

95°

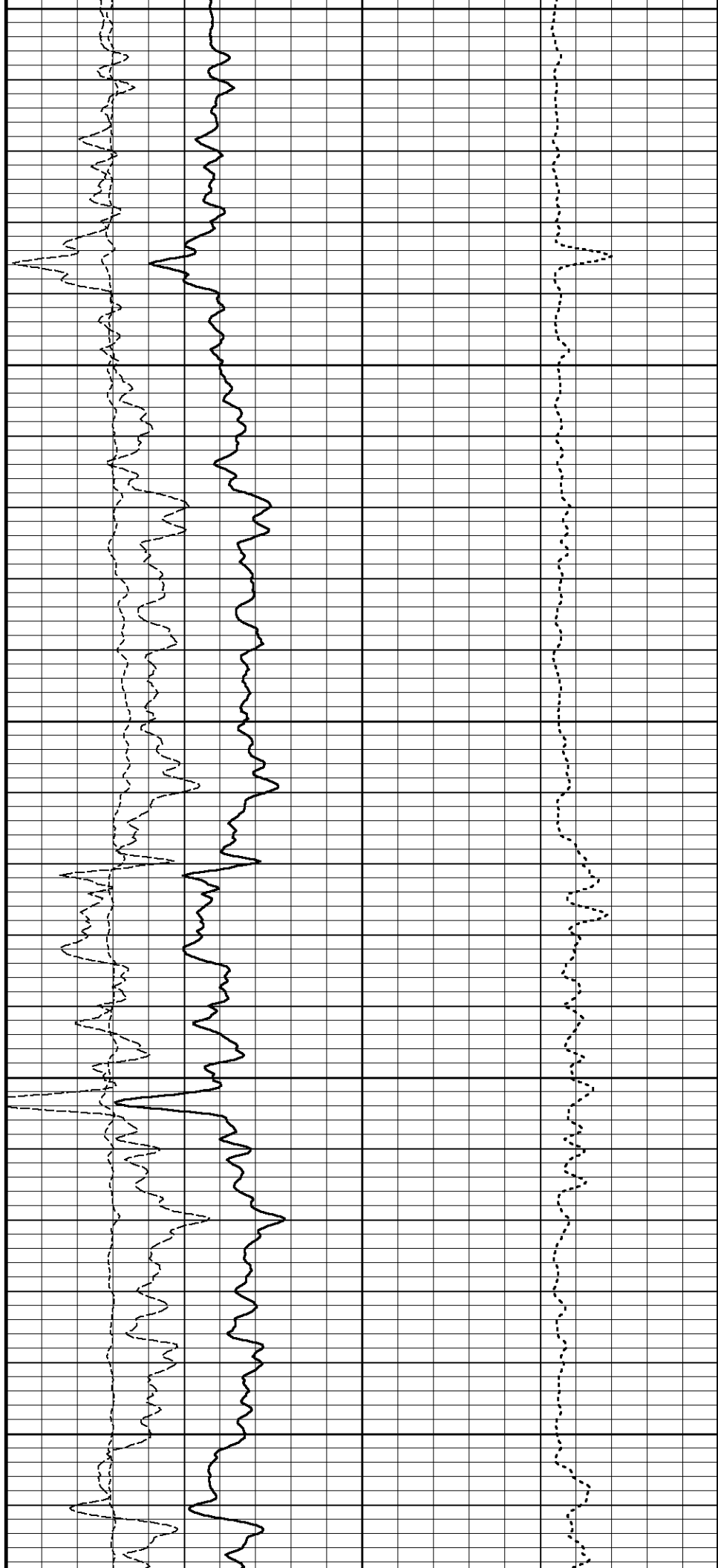
600

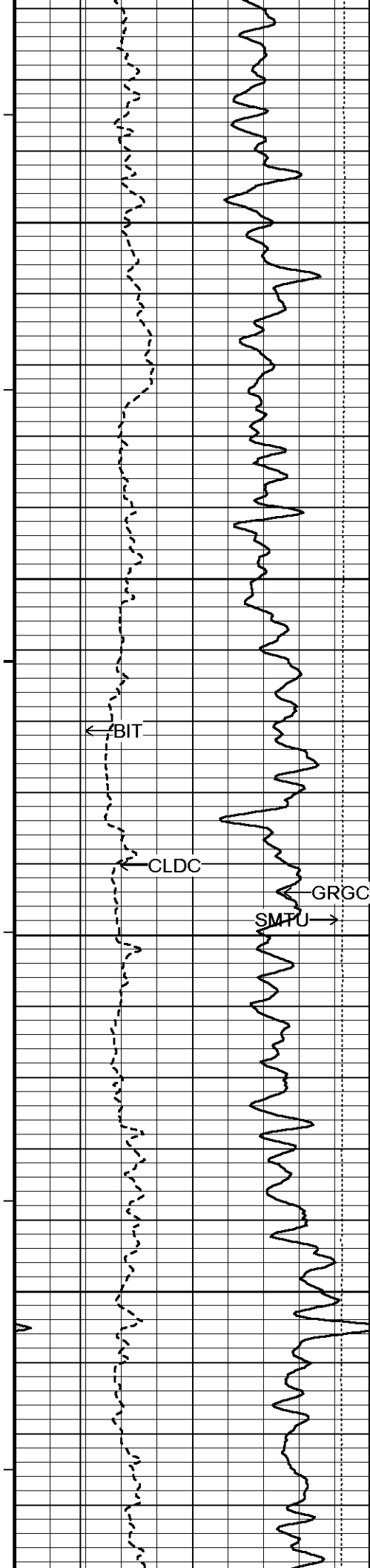
96°

650

97°

700





98°

750

98°

800

← BIT

CLDC

GRGC

SMTU →

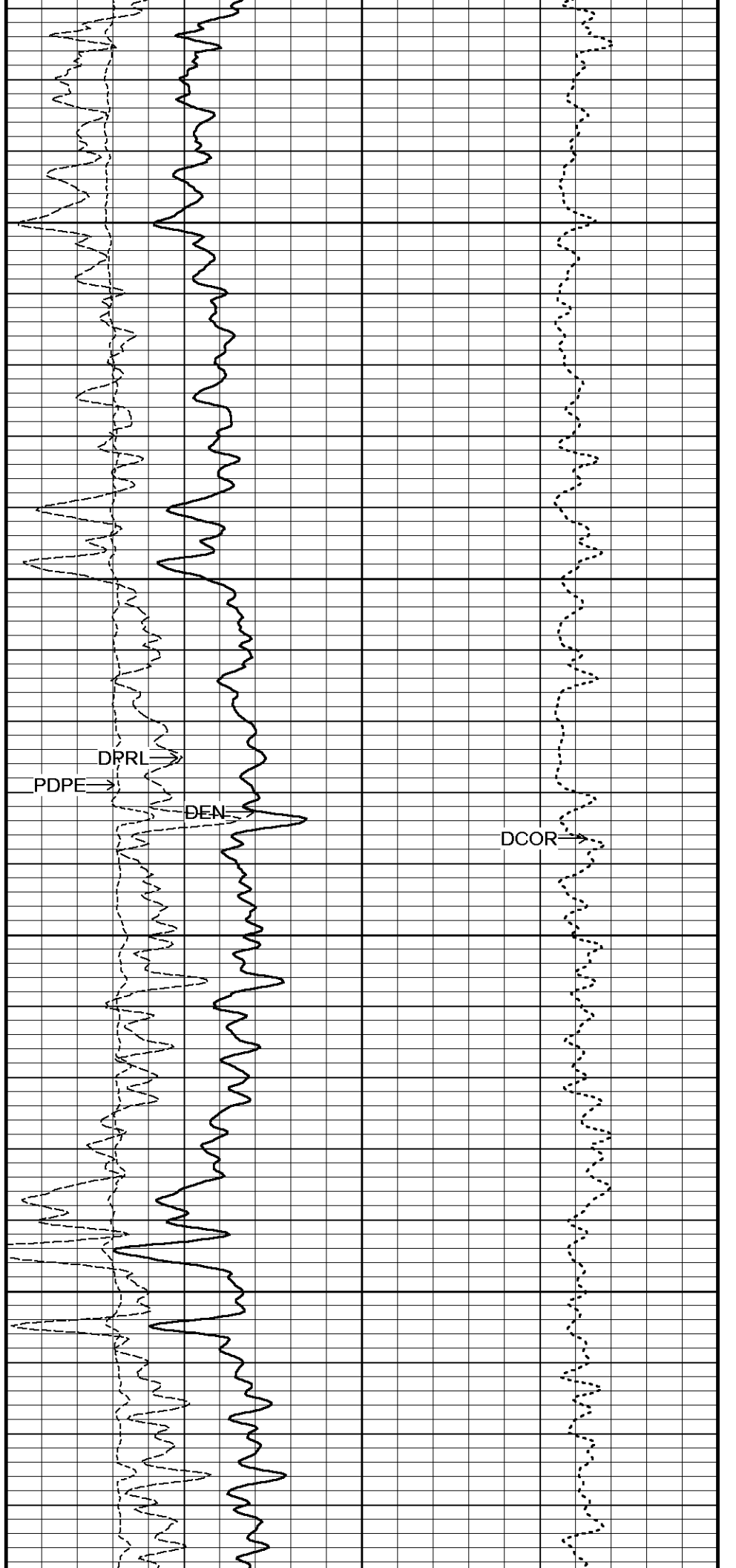
98°

850

99°

900

100°

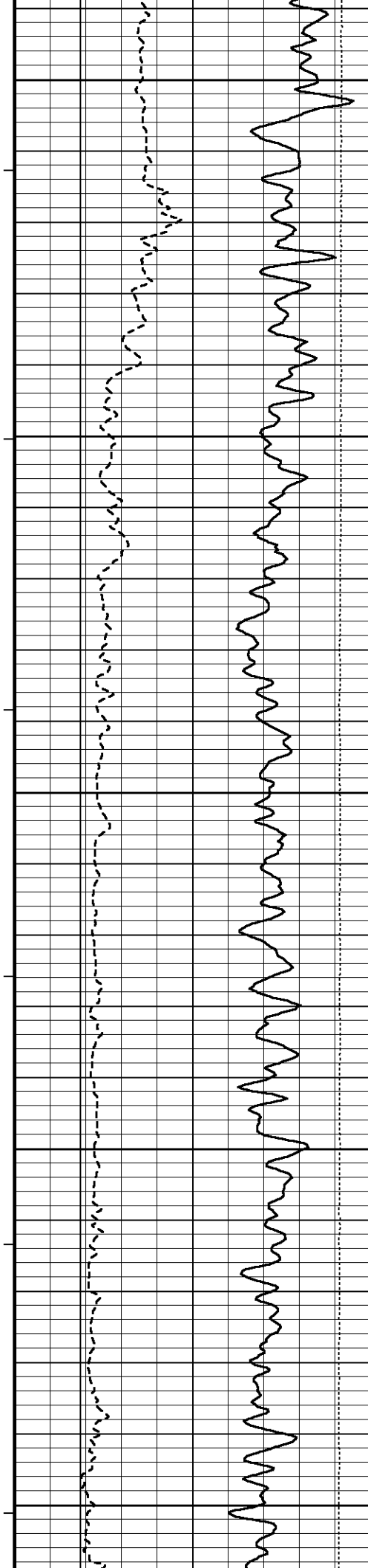


PDPE →

DPRL →

DEN →

DCOR →



950

101°

1000

101°

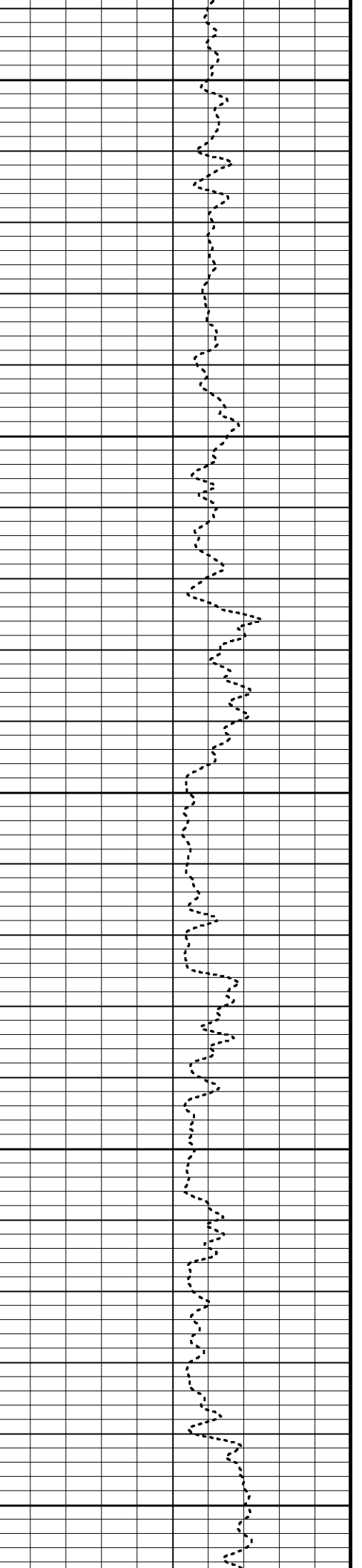
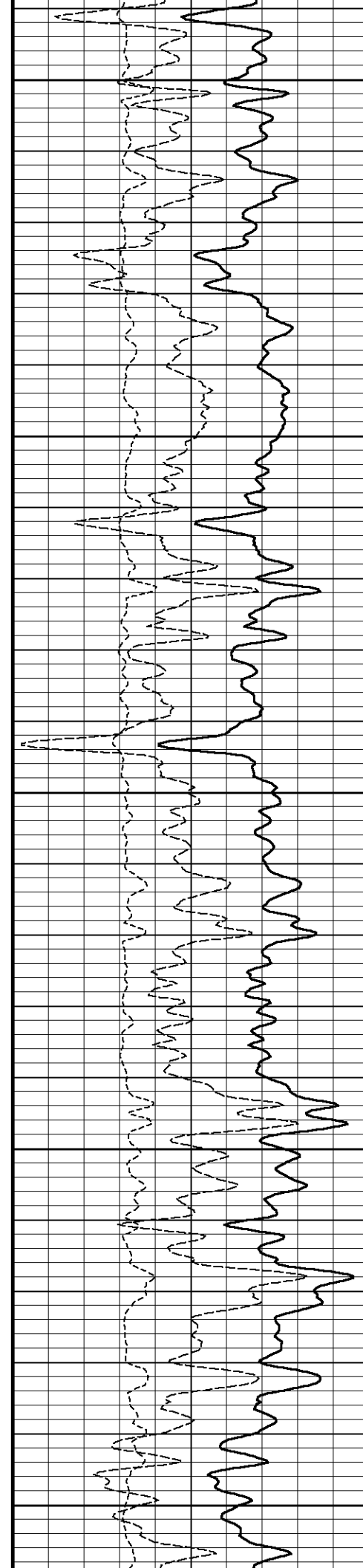
1050

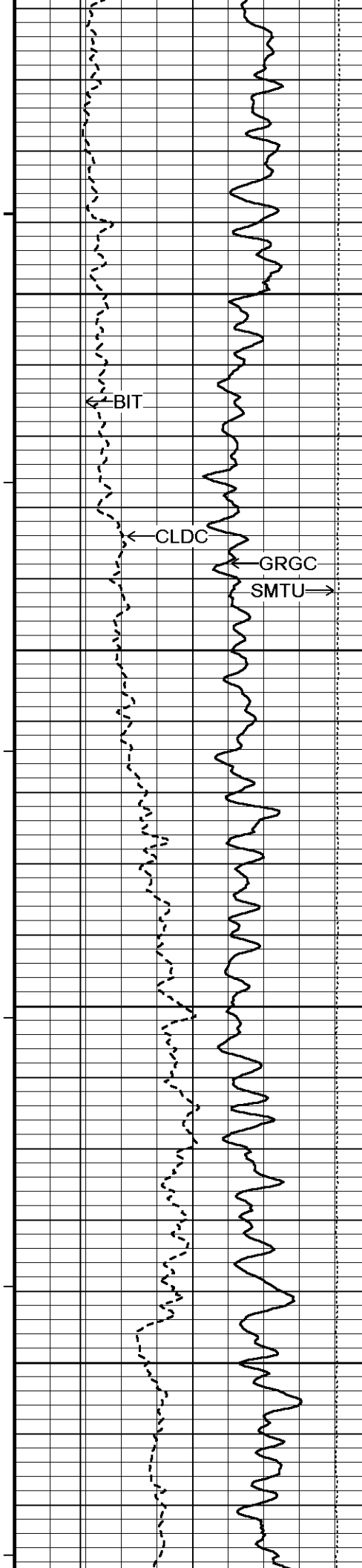
102°

1100

102°

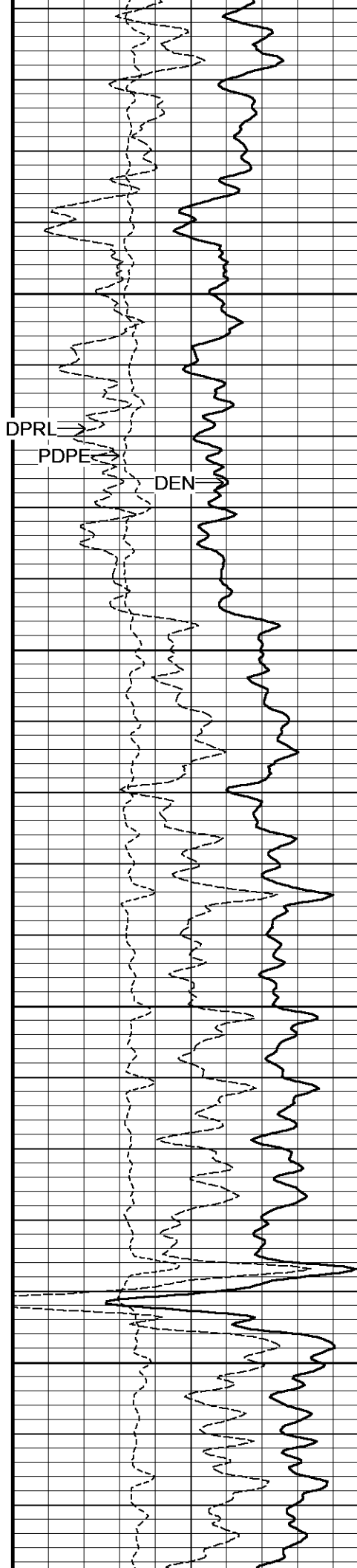
1150





103°

1200



104°

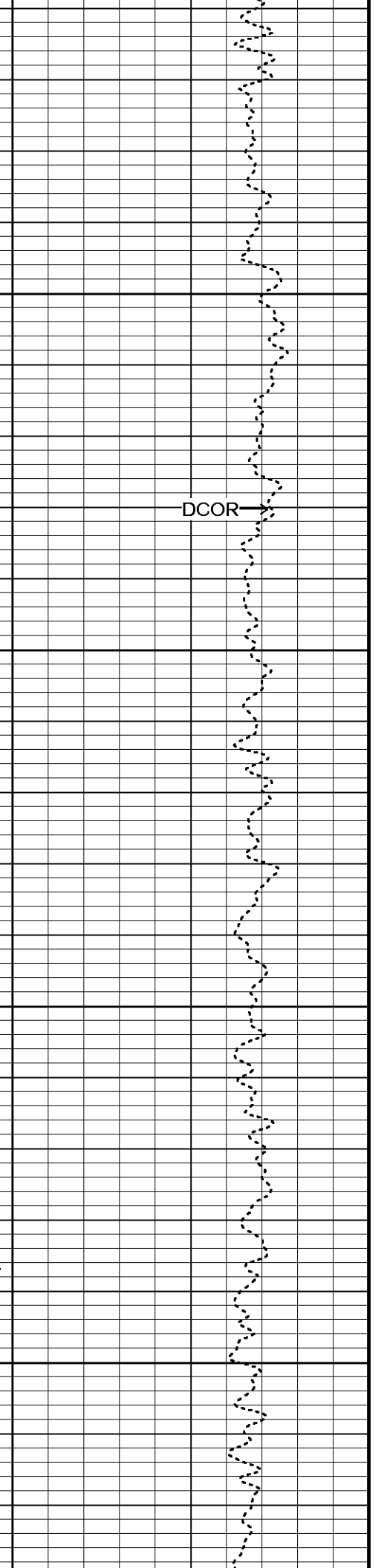
1250

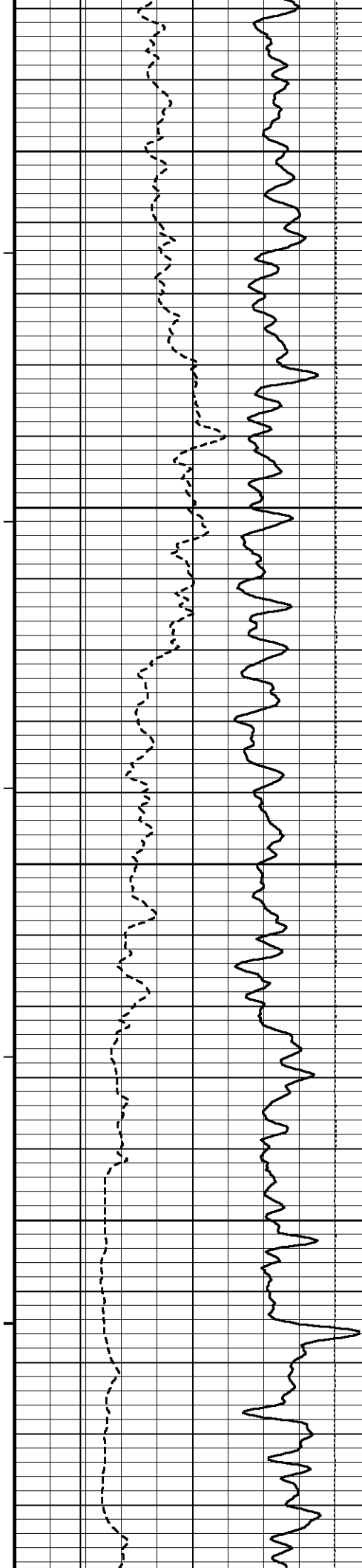
104°

1300

105°

1350





105°

1400

106°

1450

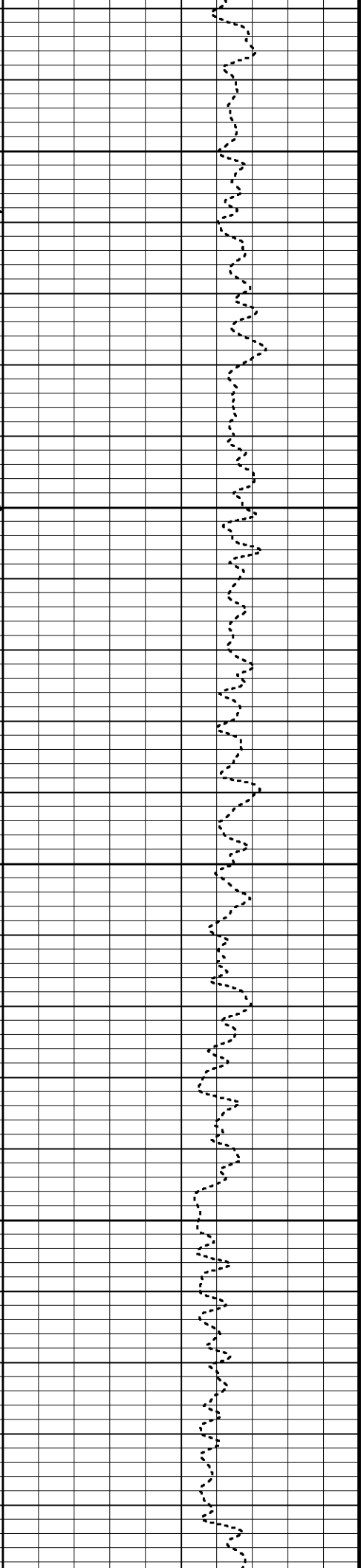
107°

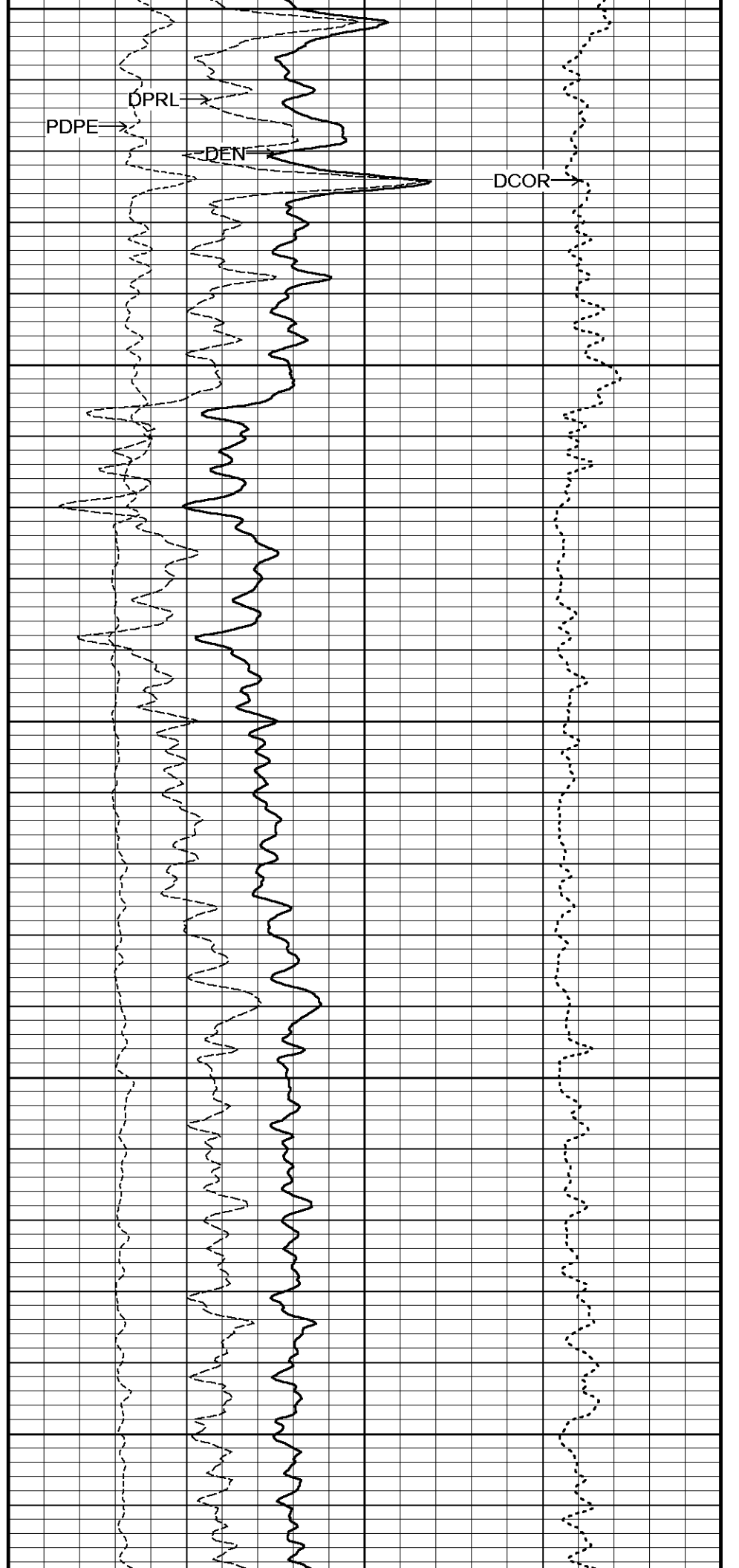
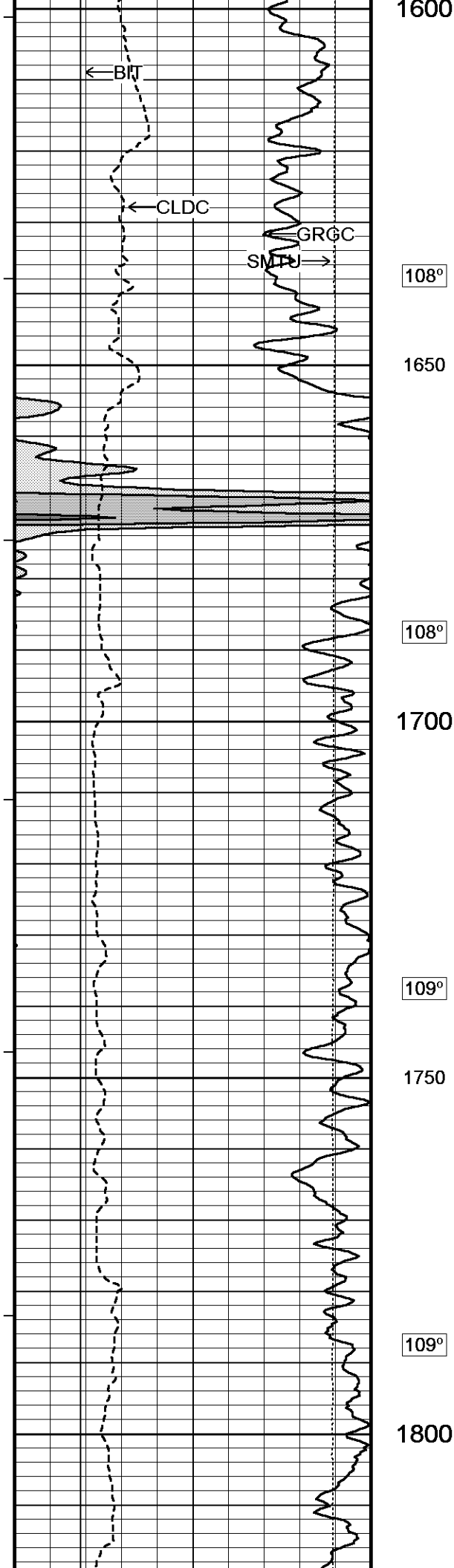
1500

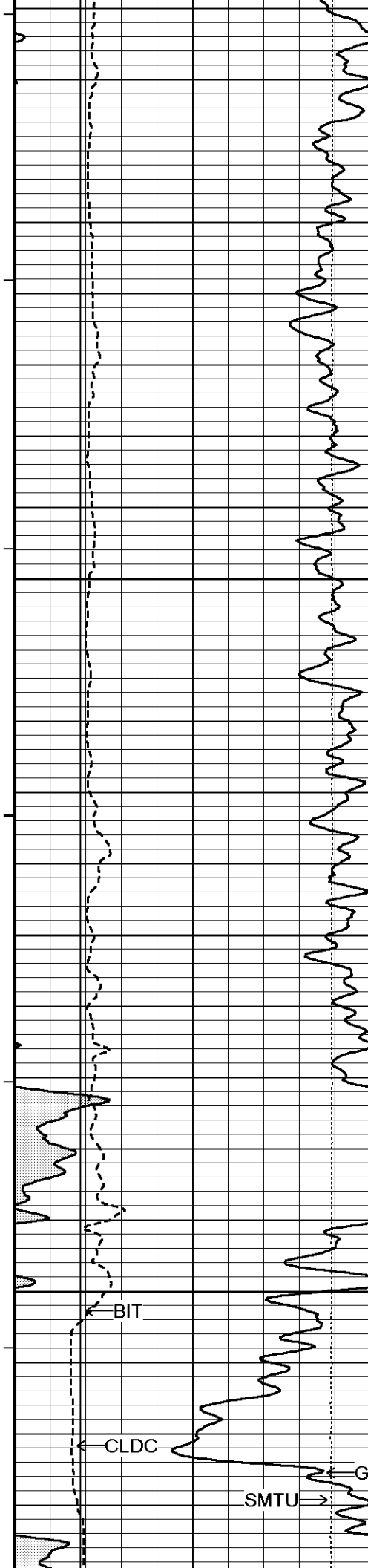
107°

1550

108°







110°

1850

110°

1900

110°

1950

110°

2000

DPRL →

PDPE →

DEN →

DCOR →

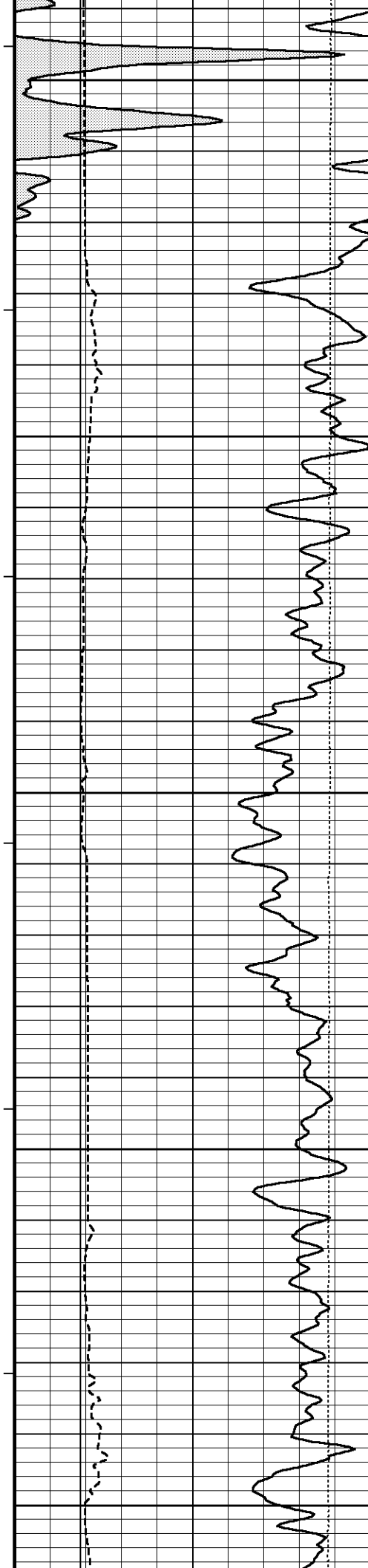
BIT

CLDC

SMTU →

GRGC

110°



2050

112°

2100

112°

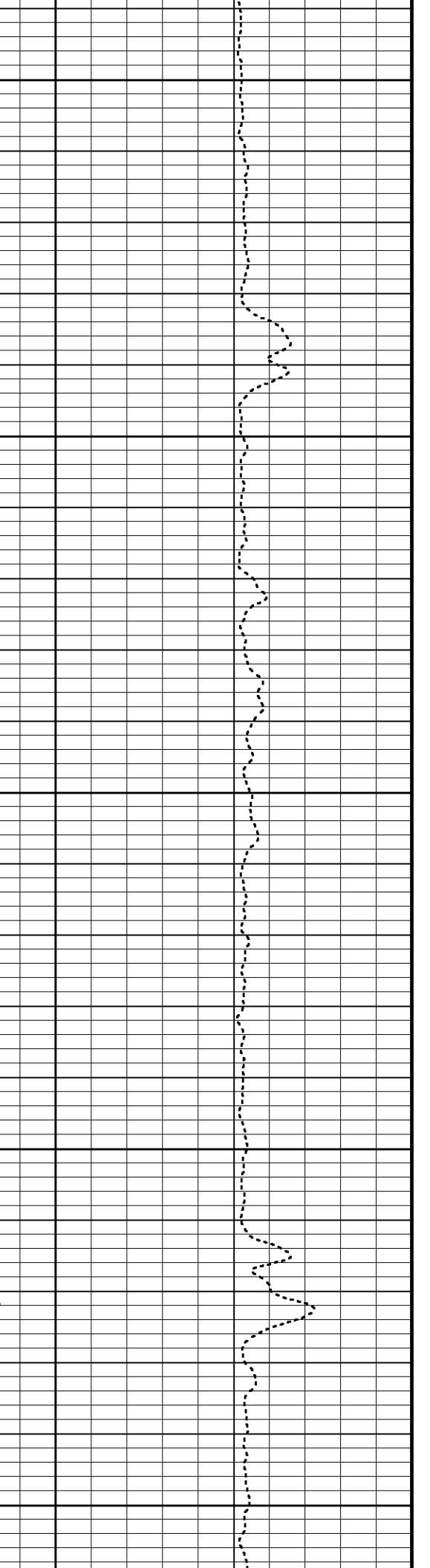
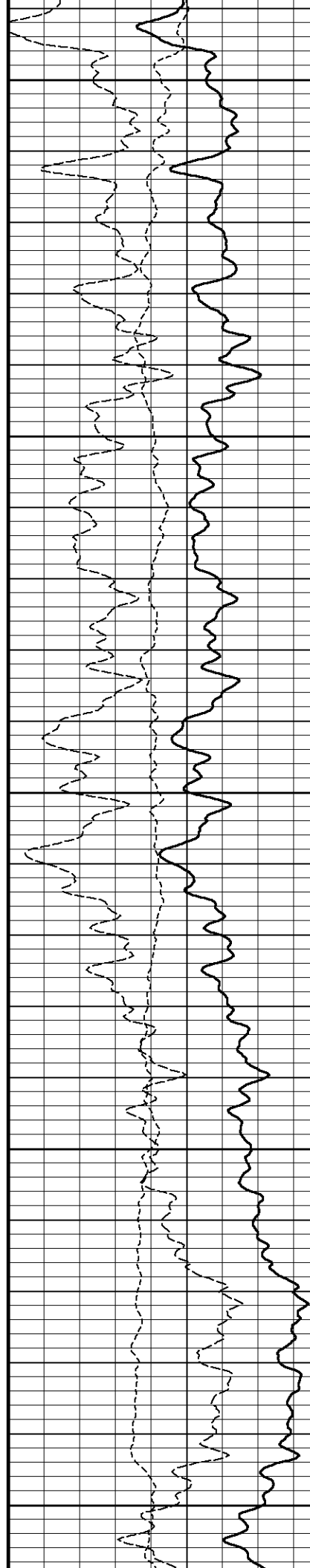
2150

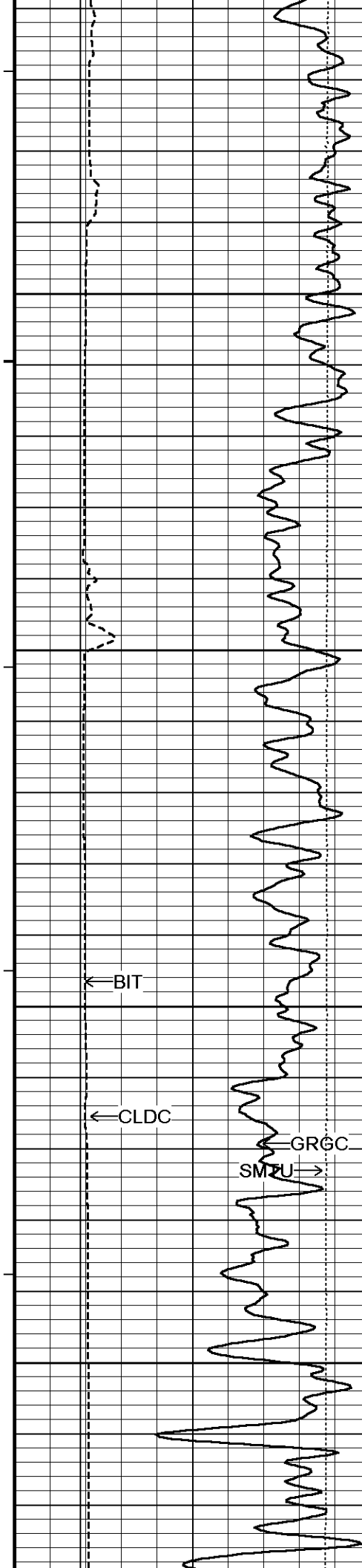
113°

2200

113°

2250





114°

2300

115°

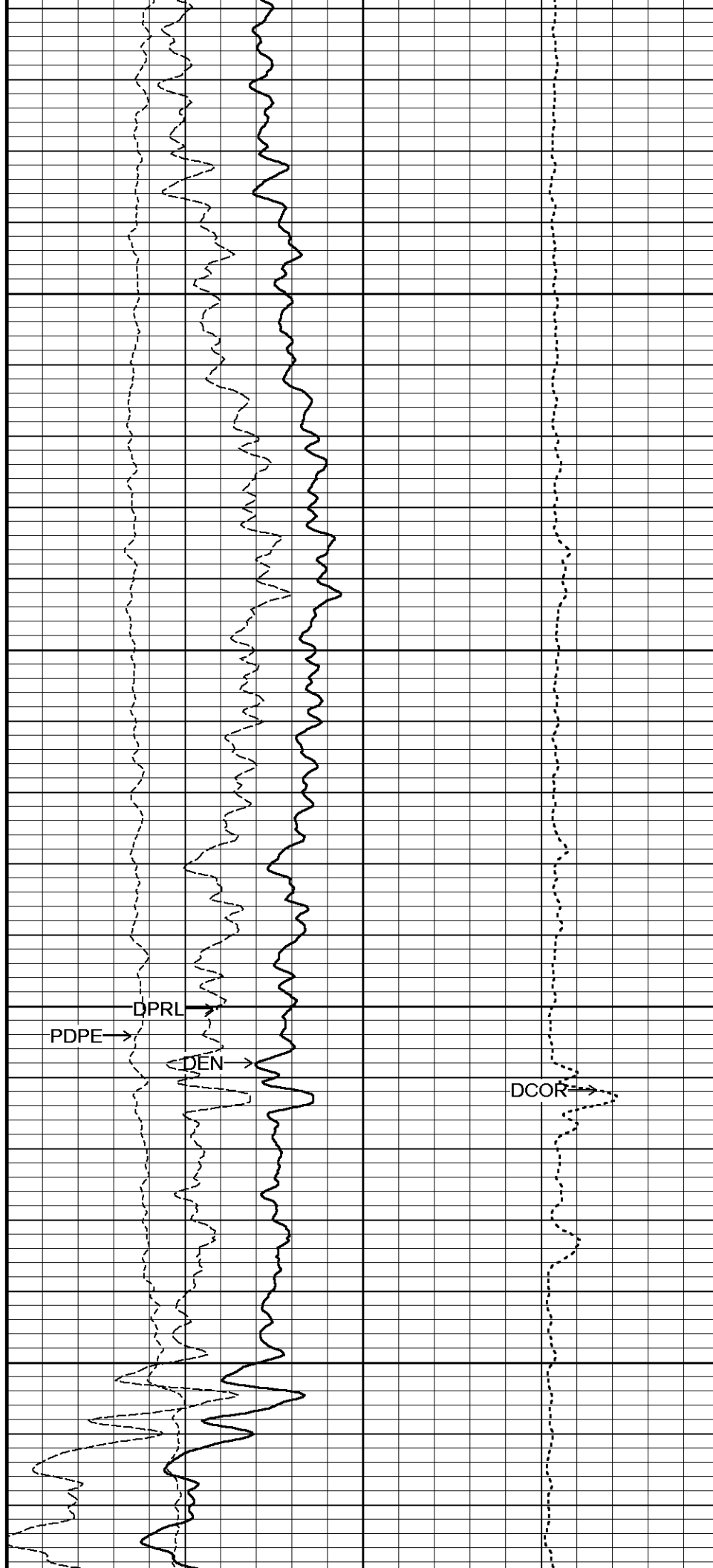
2350

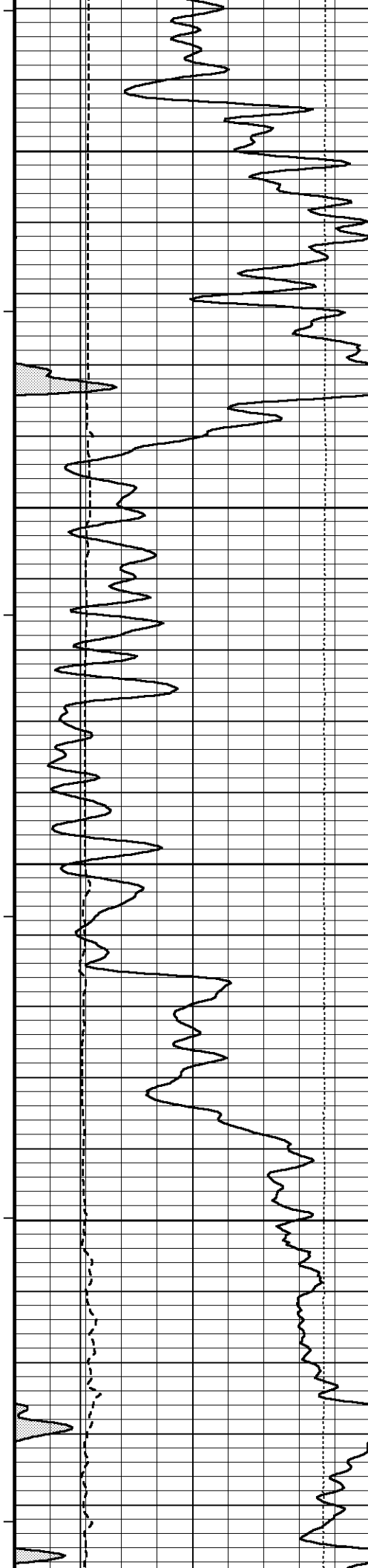
116°

2400

117°

2450





117°

2500

118°

2550

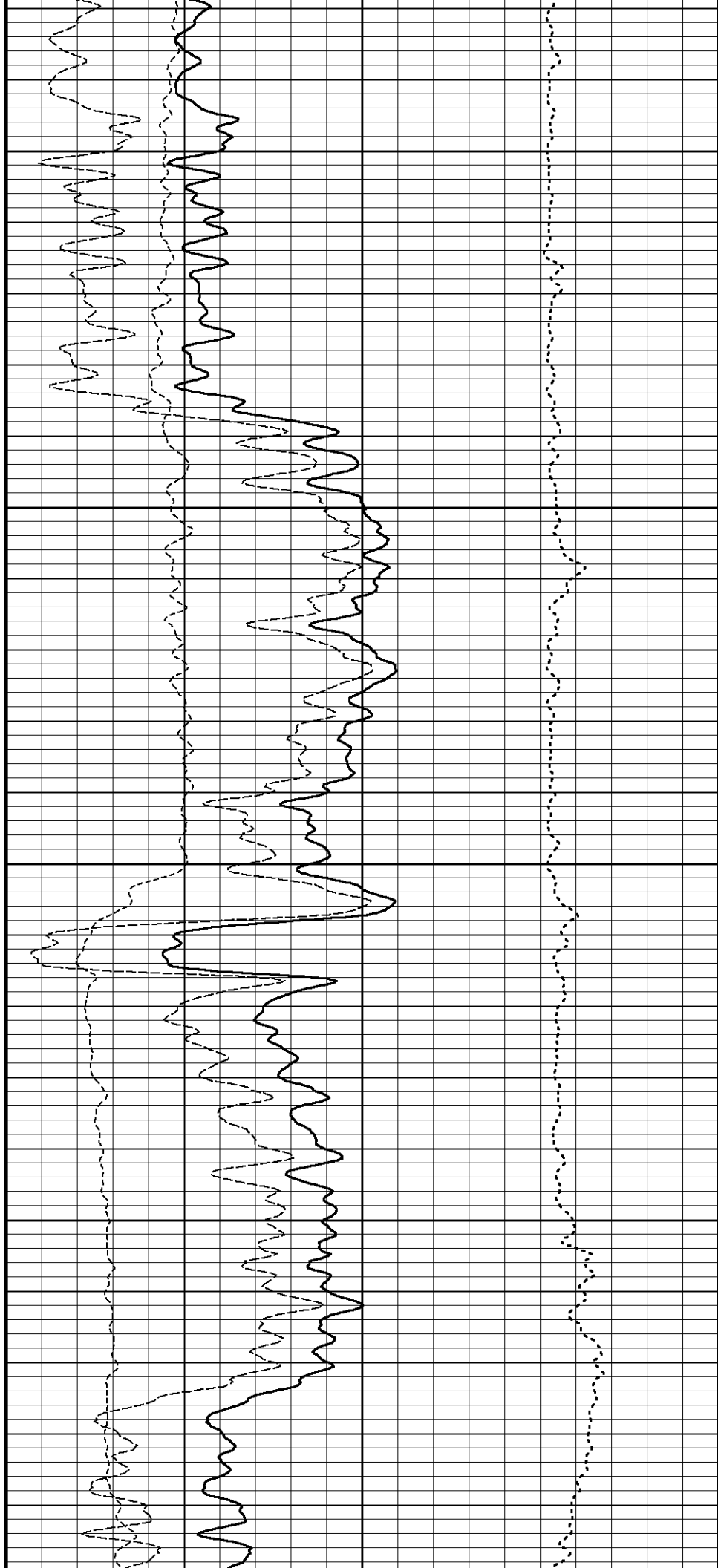
119°

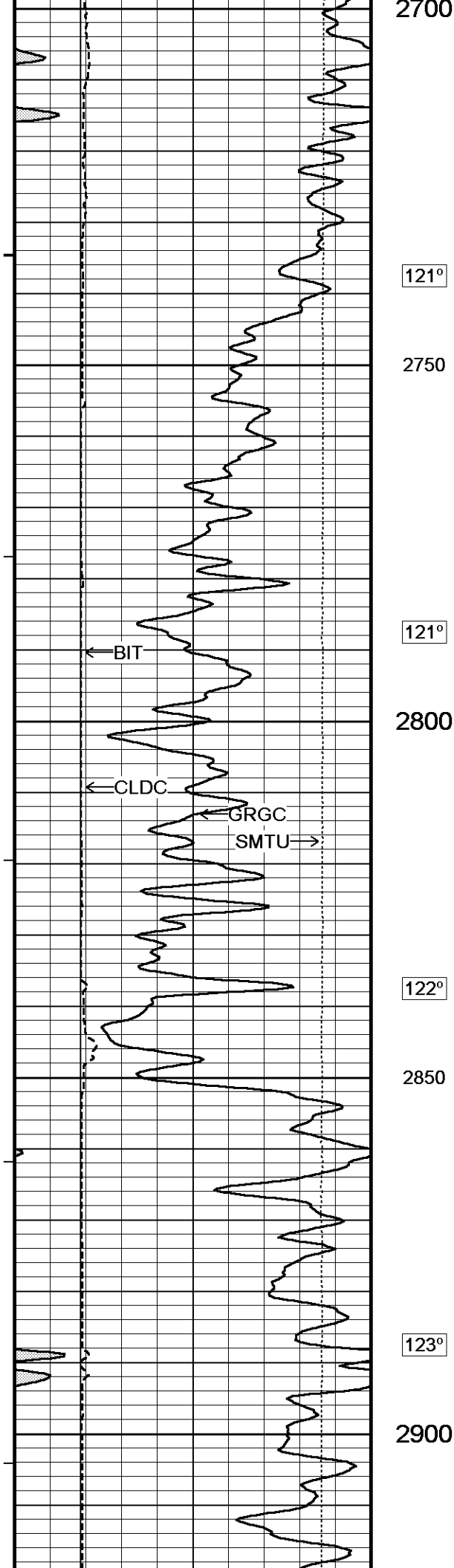
2600

119°

2650

120°





2700

121°

2750

121°

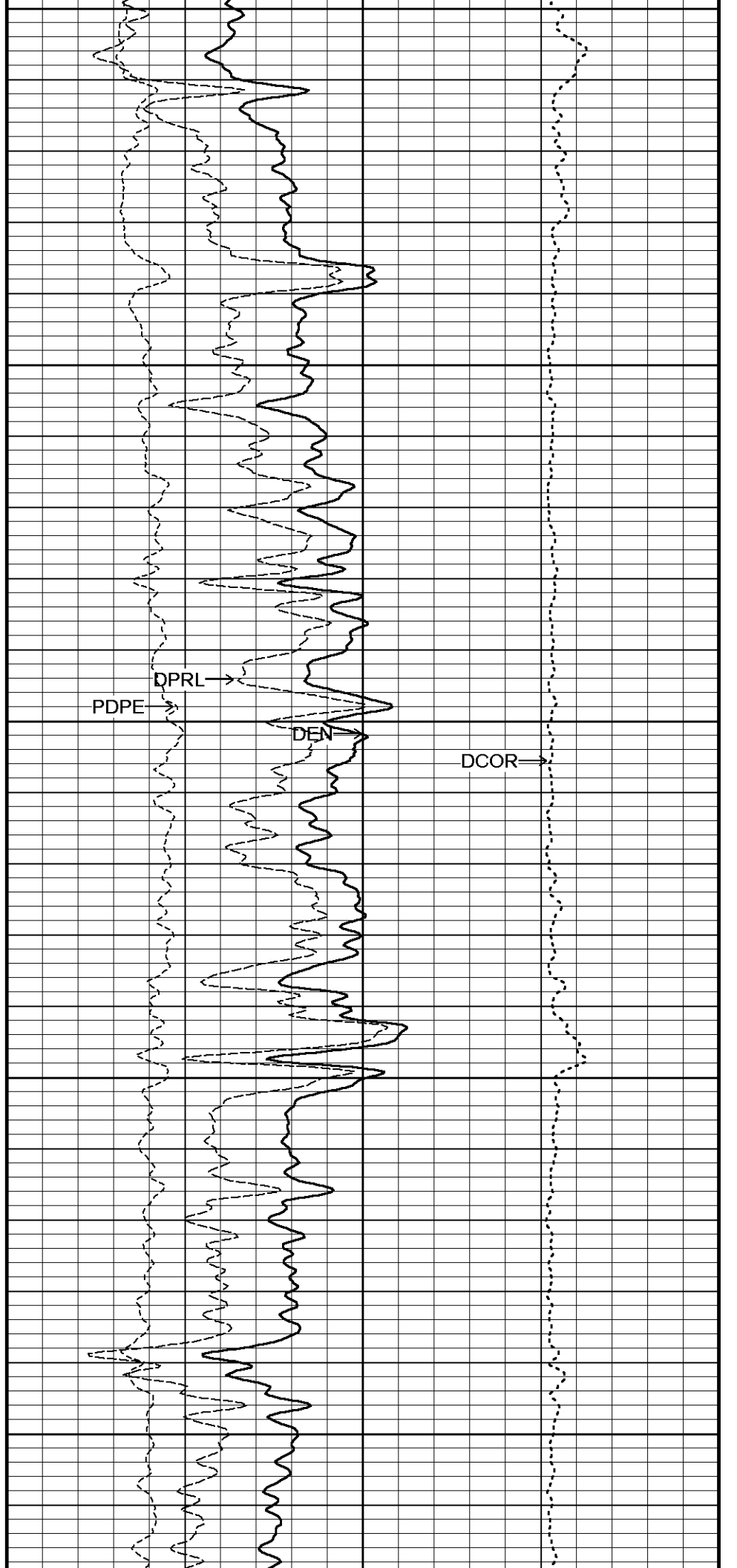
2800

122°

2850

123°

2900

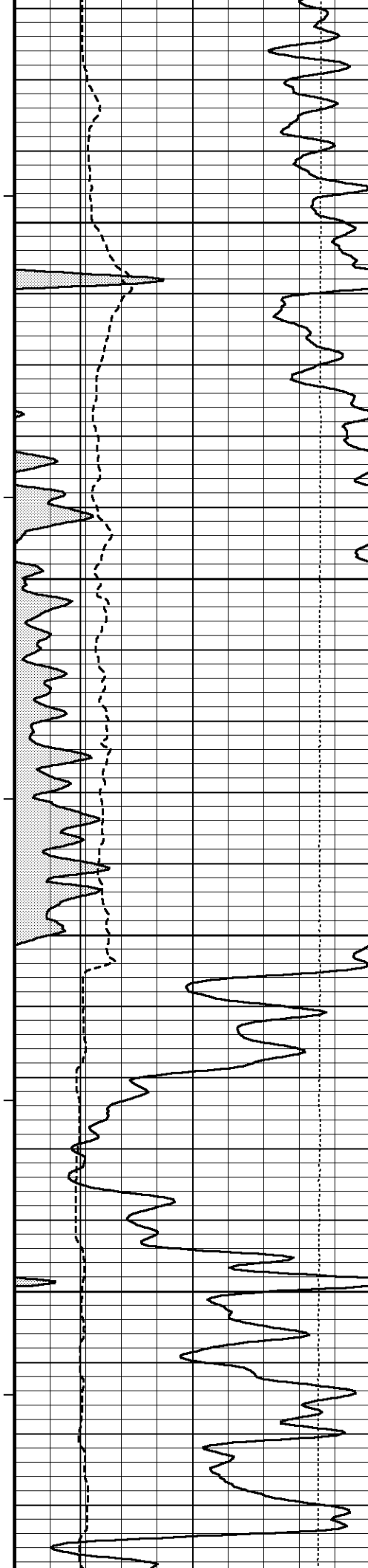


DPRL

PDPE

DEN

DCOR



123°

2950

124°

3000

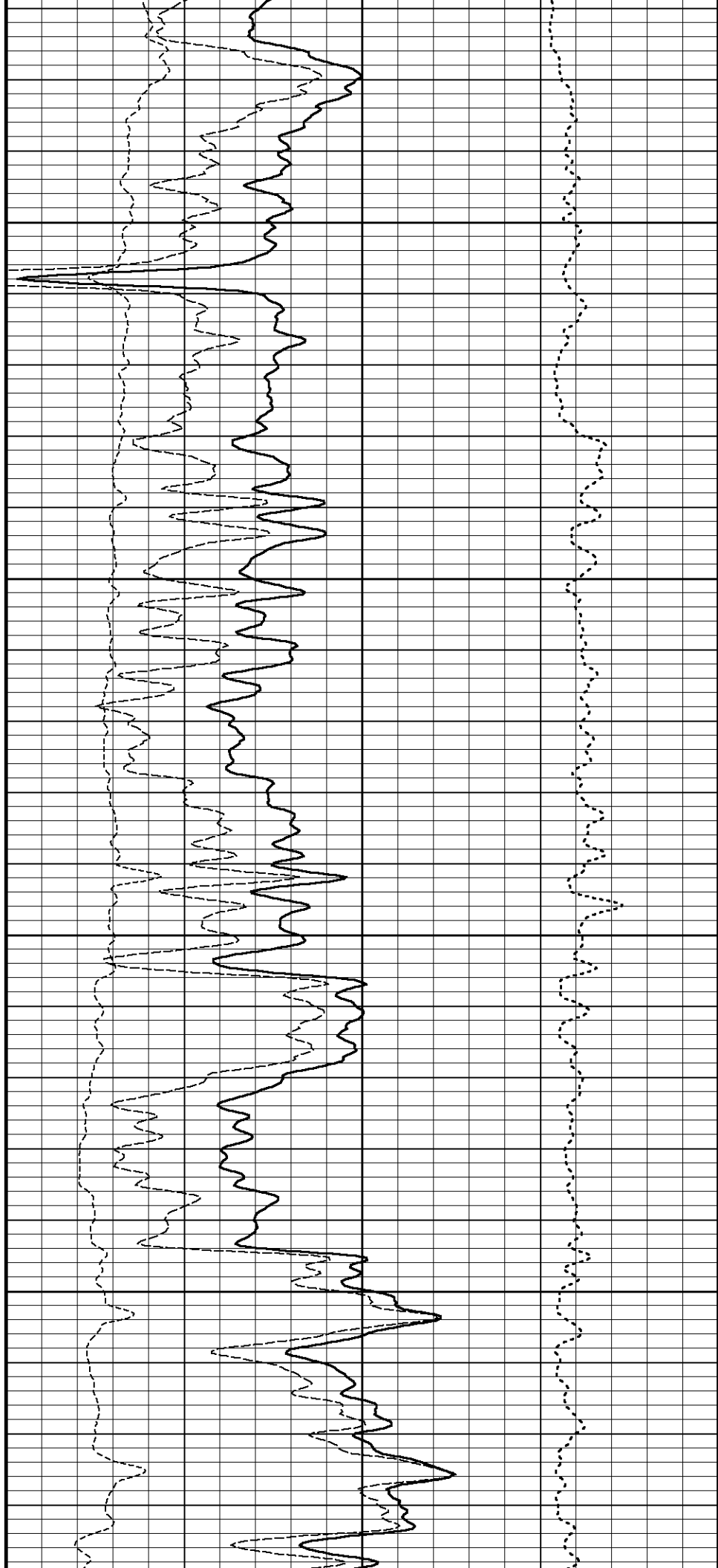
124°

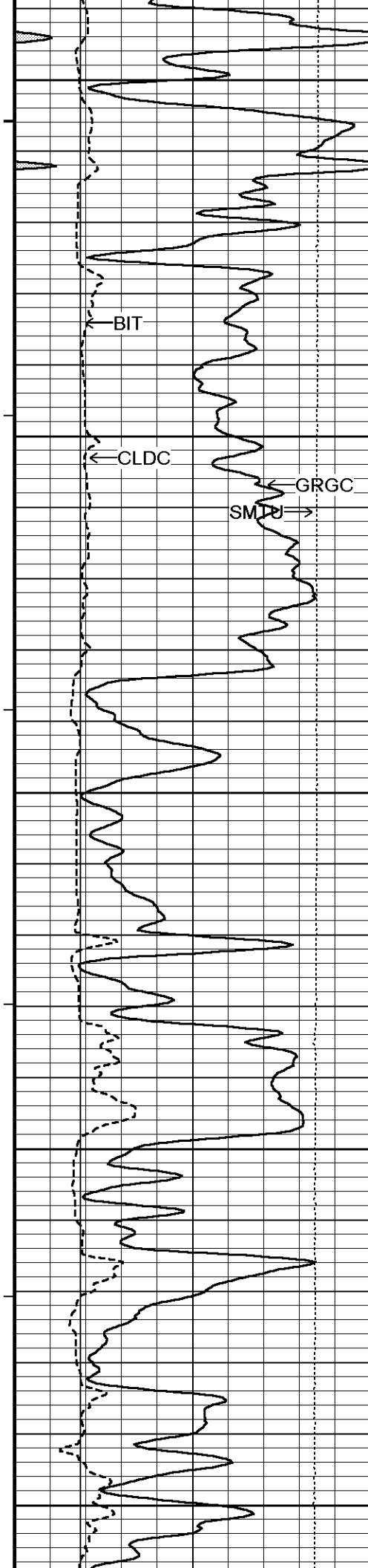
3050

125°

3100

125°





3150

126°

3200

126°

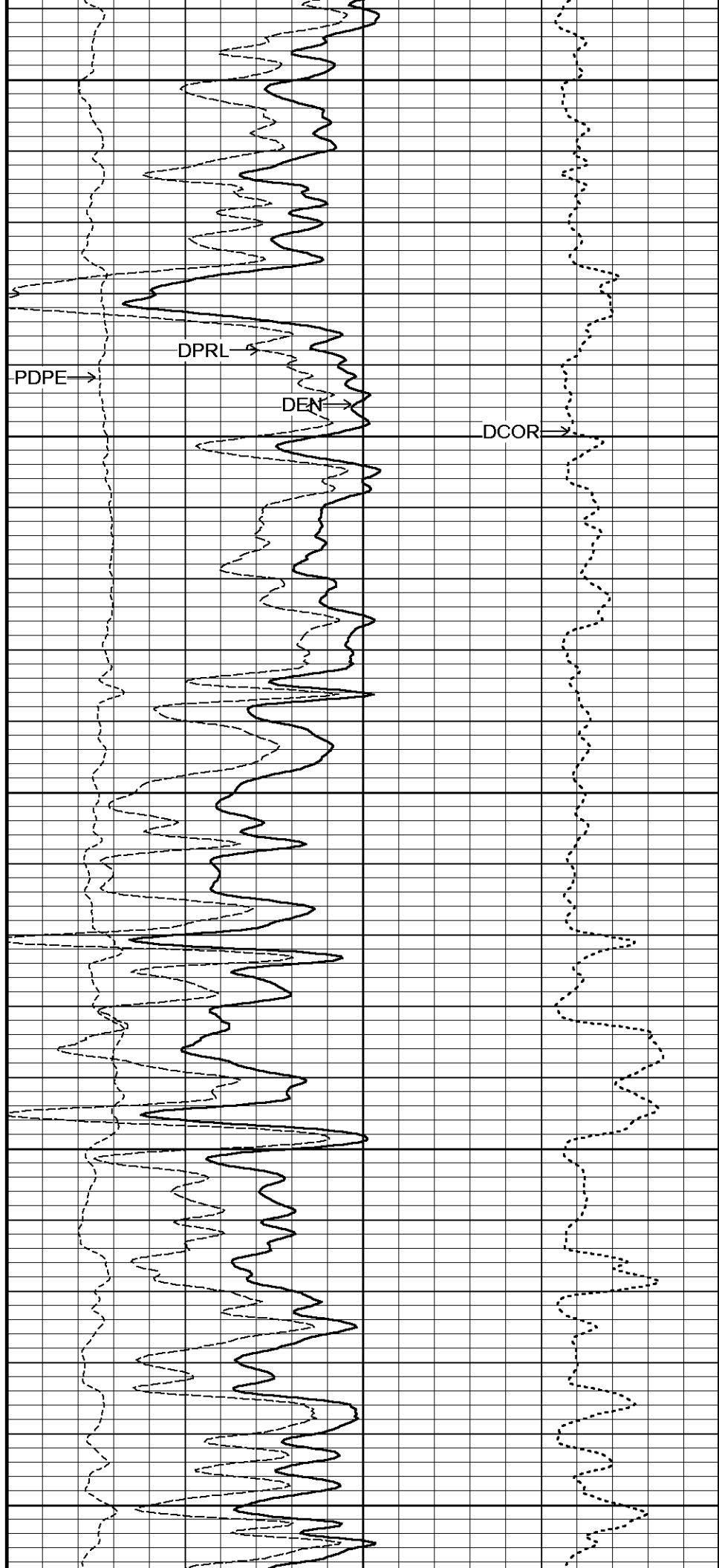
3250

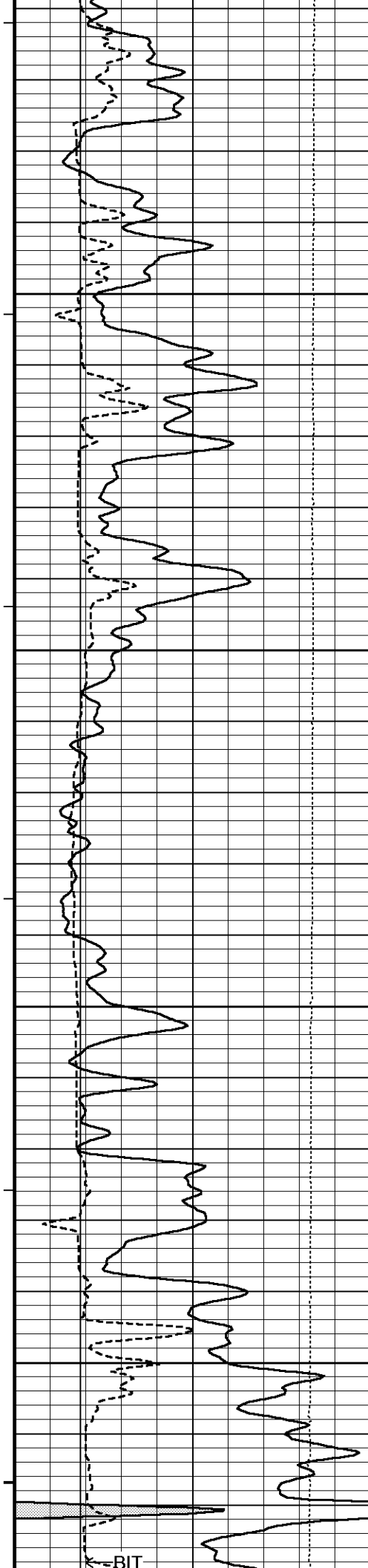
127°

3300

128°

3350





128°

3400

129°

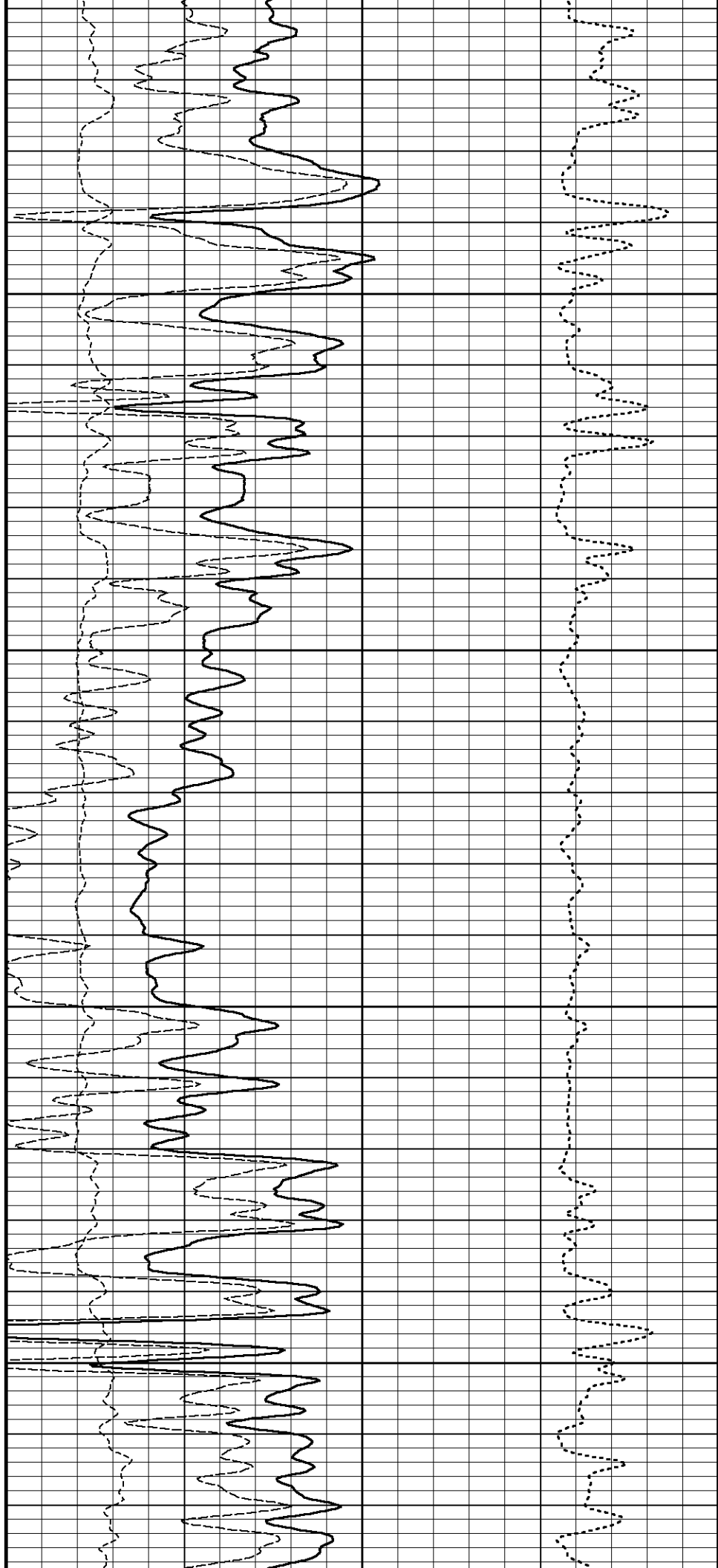
3450

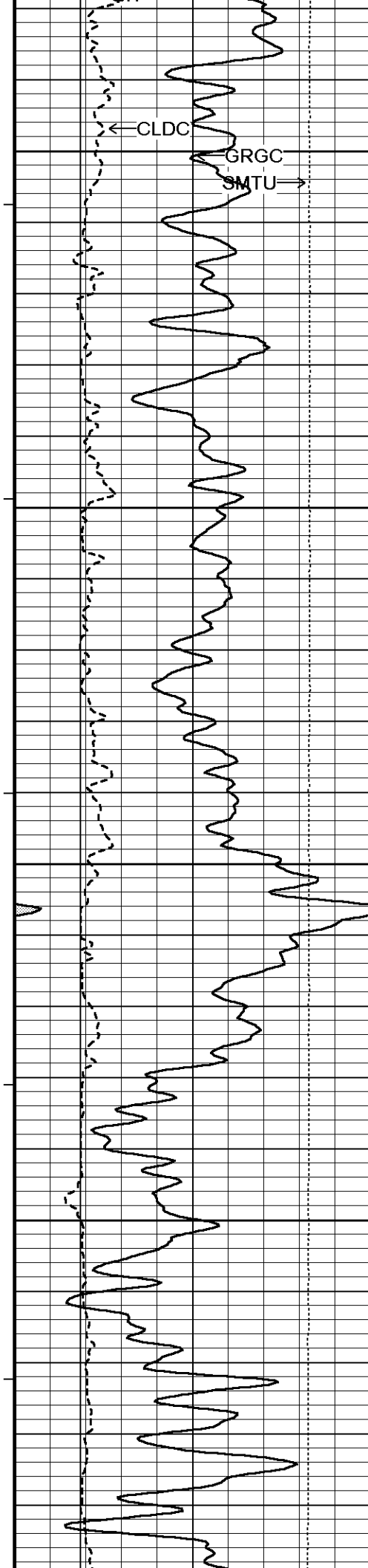
129°

3500

129°

3550





130°

3600

130°

3650

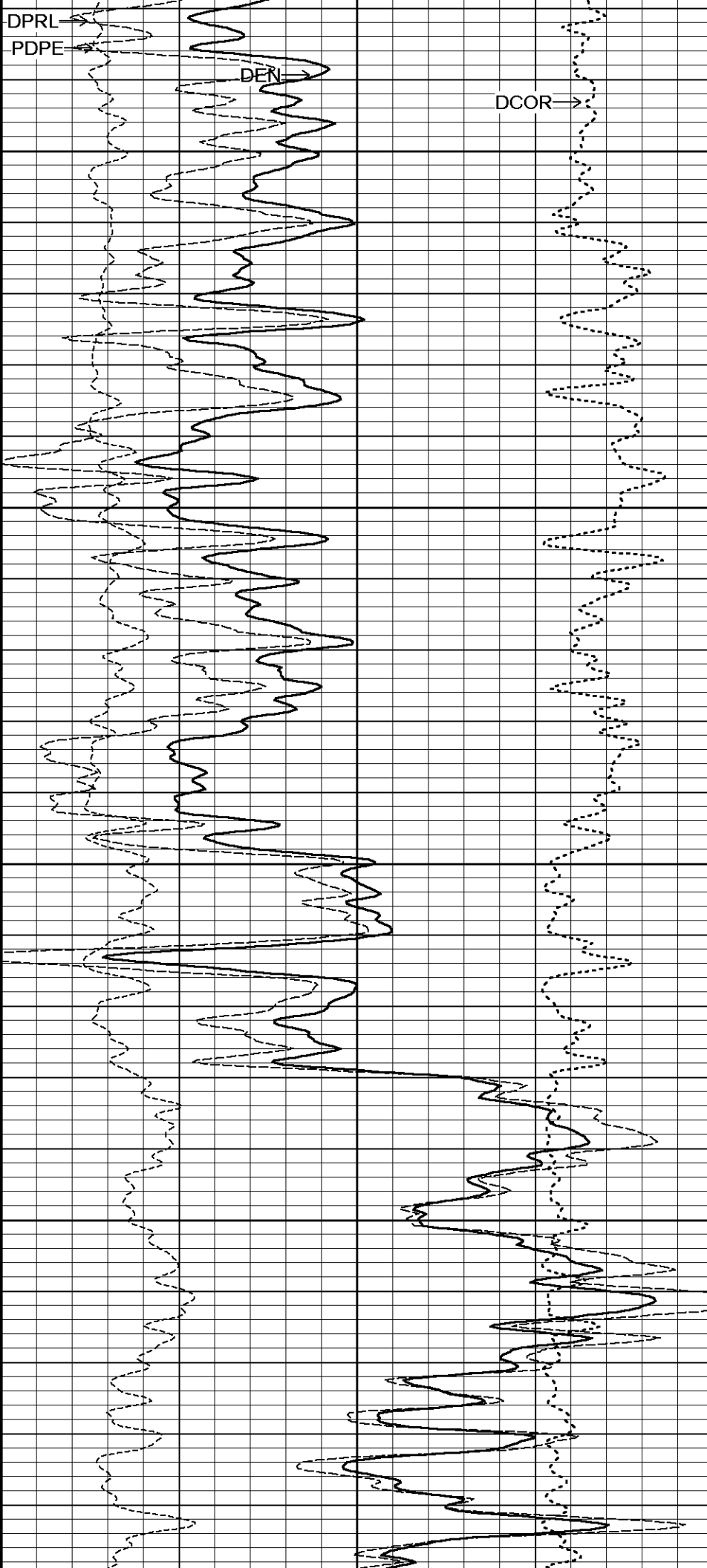
131°

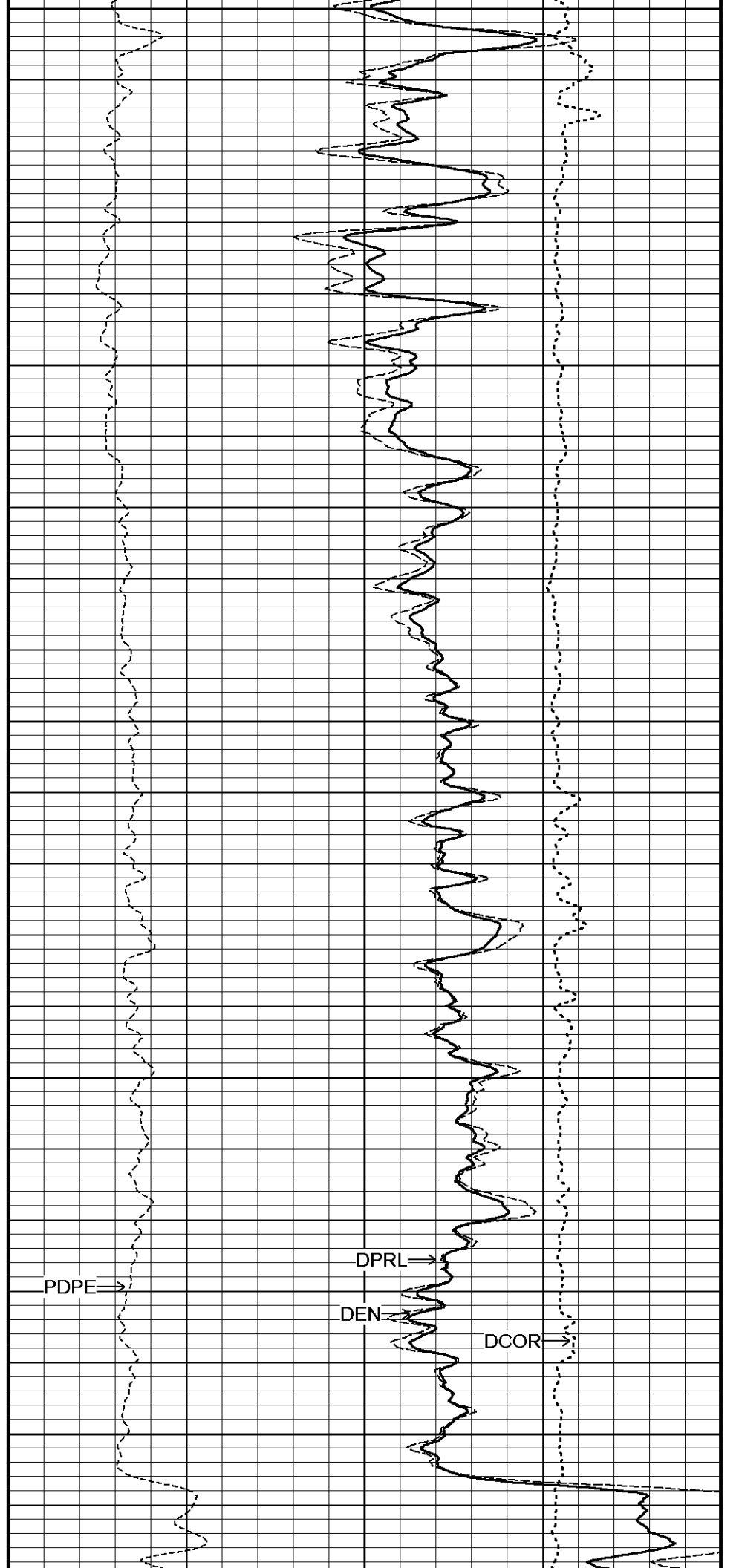
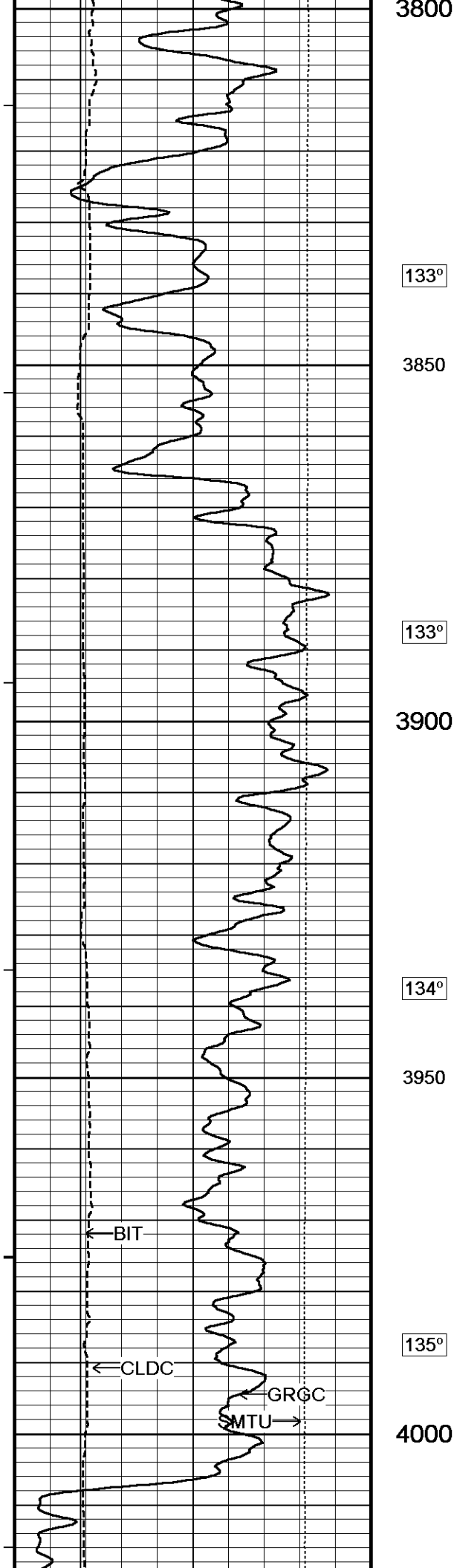
3700

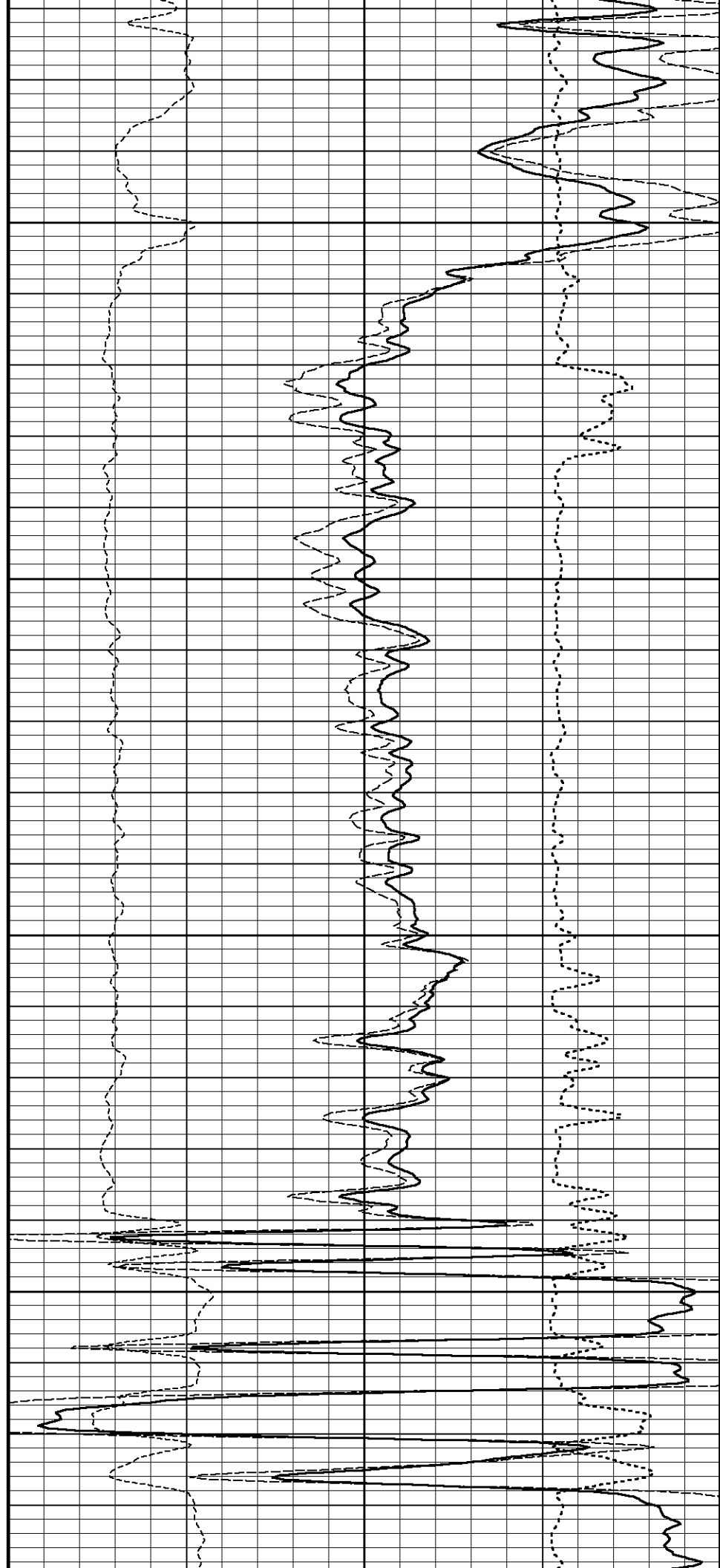
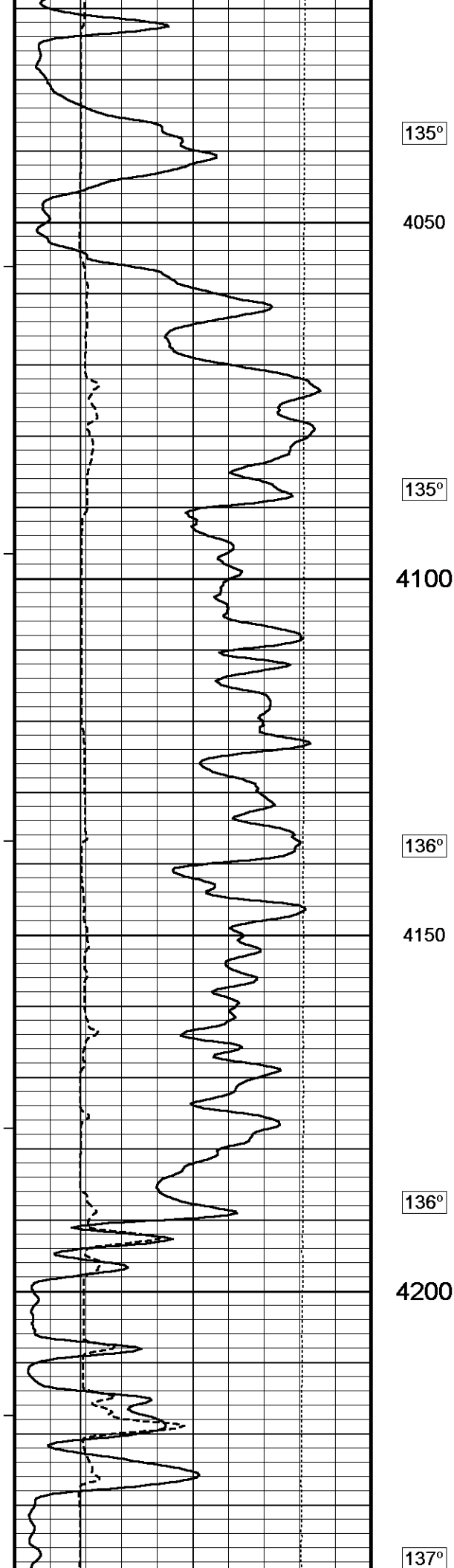
132°

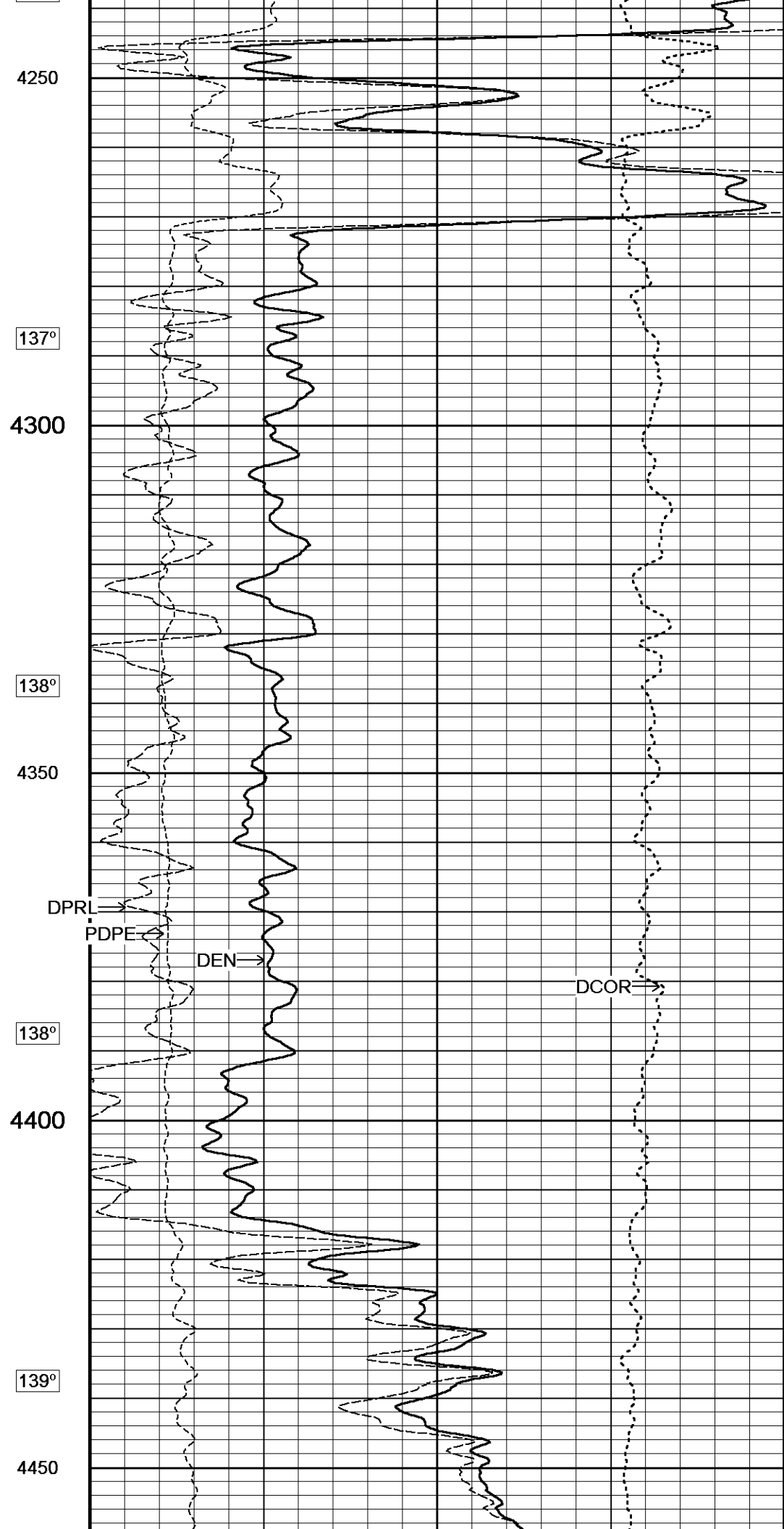
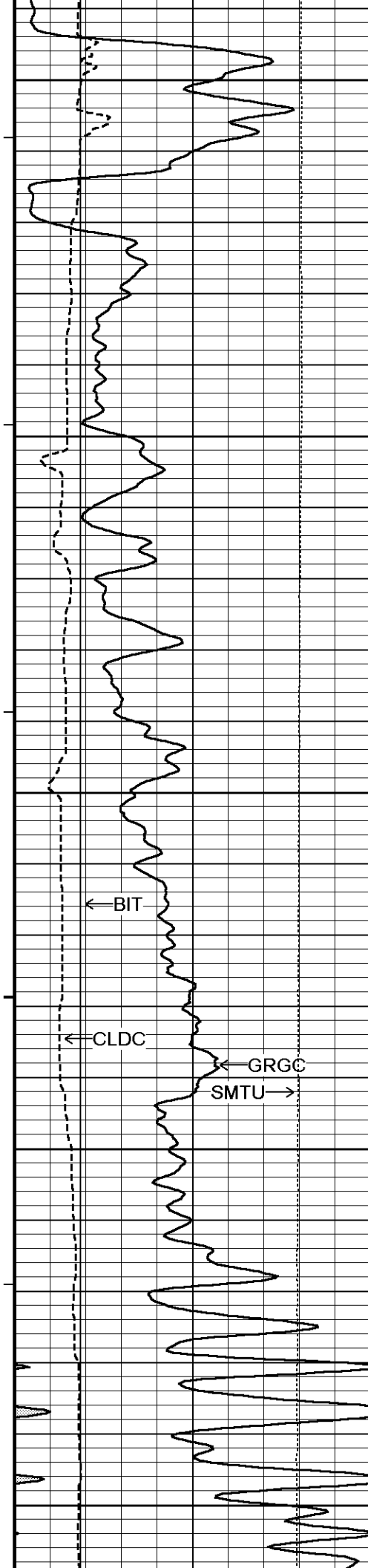
3750

133°









4250

137°

4300

138°

4350

138°

4400

139°

4450



139°

4500

139°

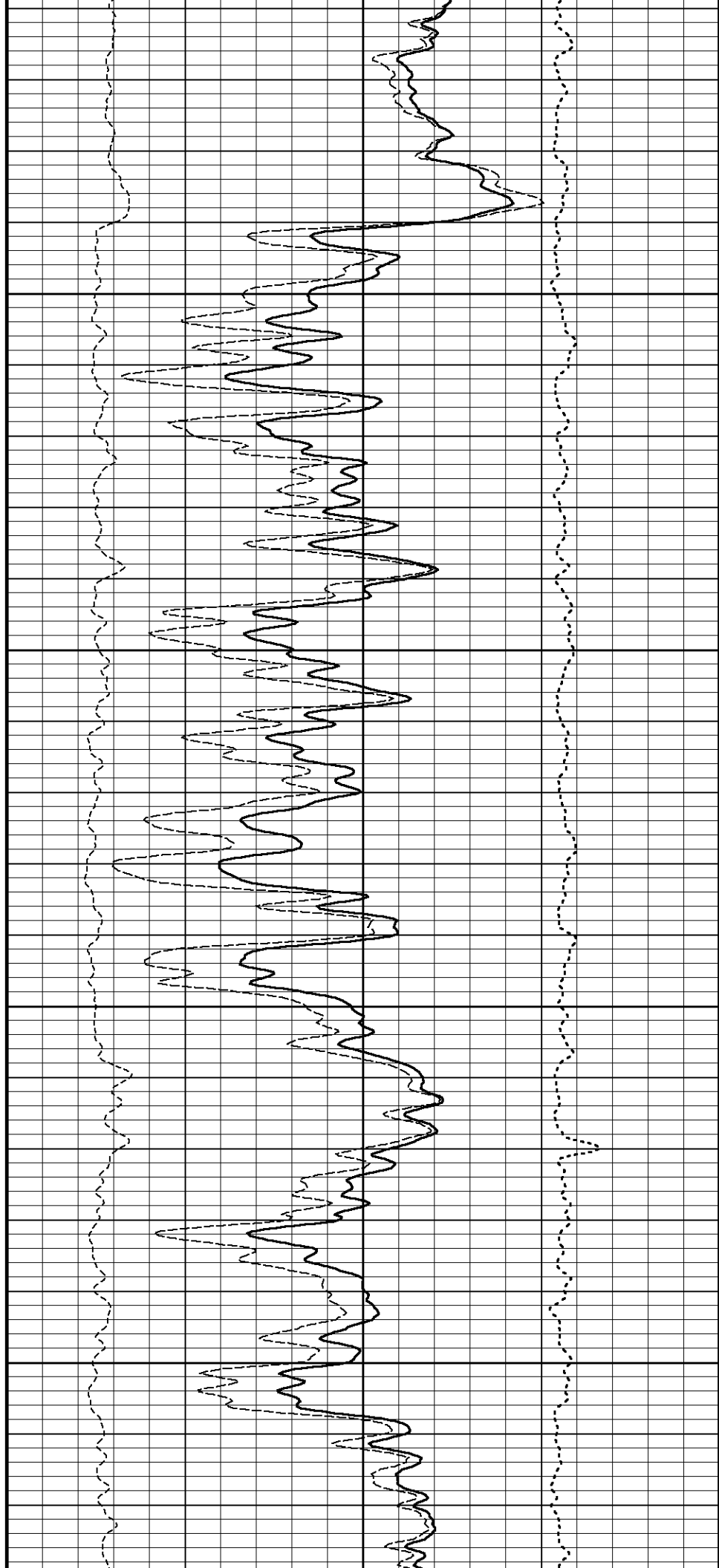
4550

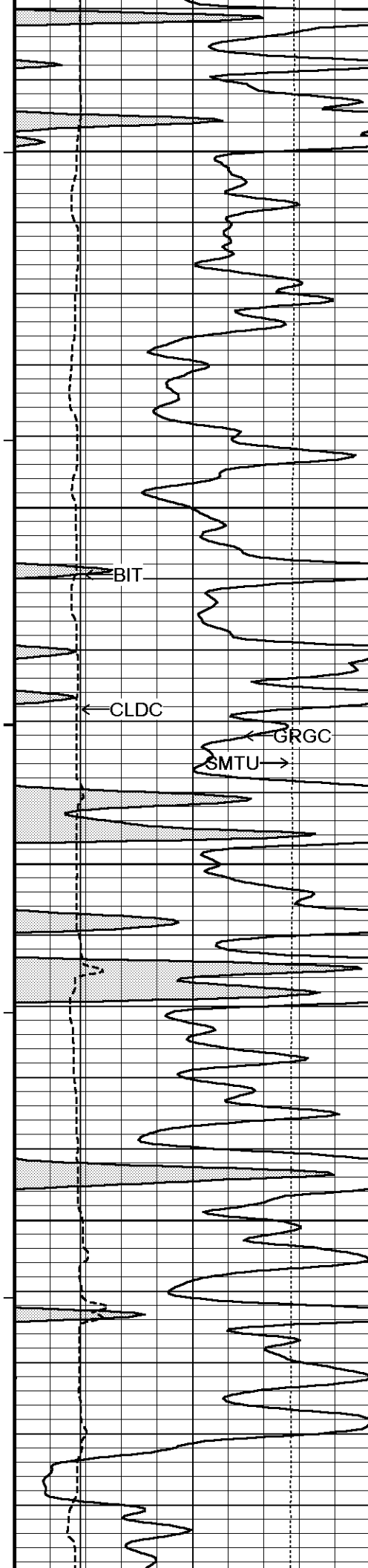
140°

4600

140°

4650





141°

4700

142°

4750

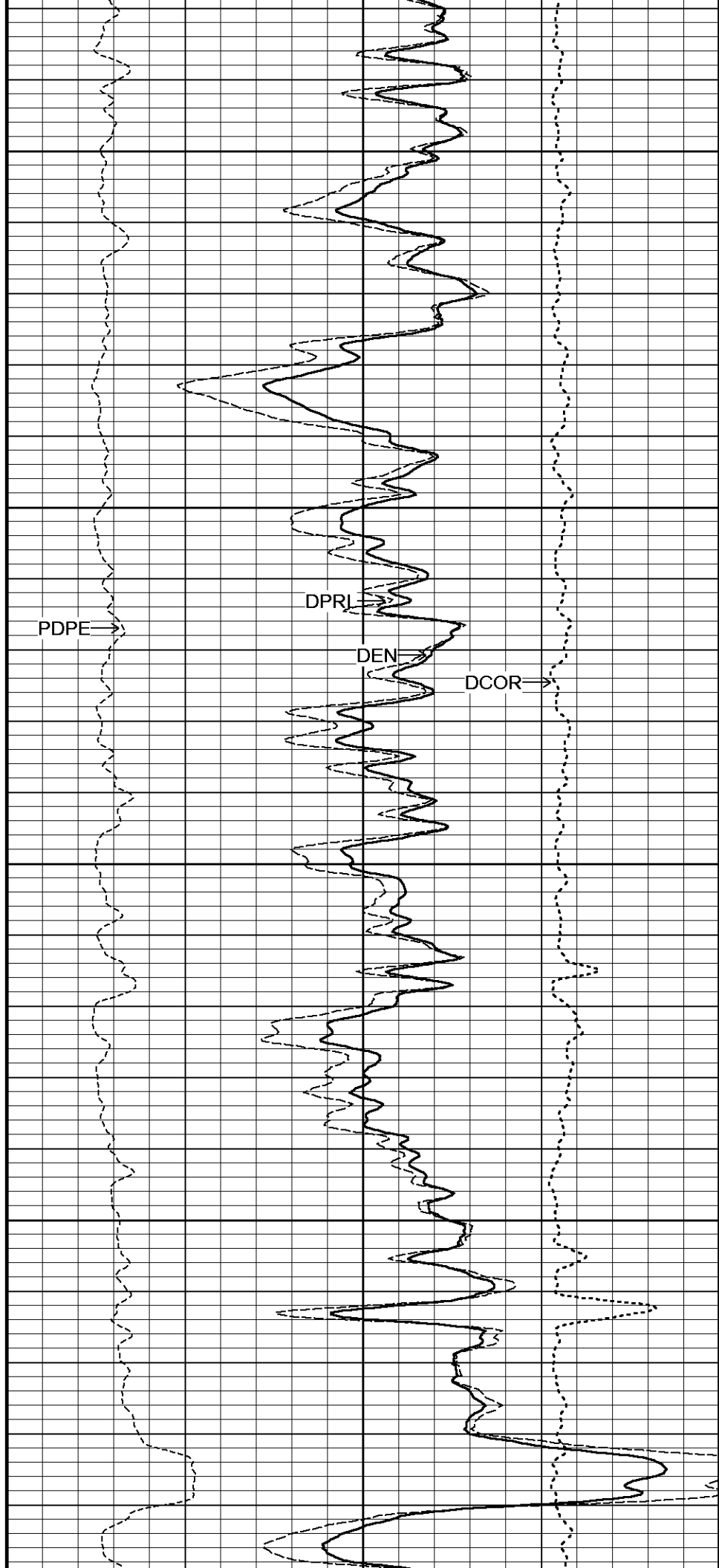
142°

4800

142°

4850

143°

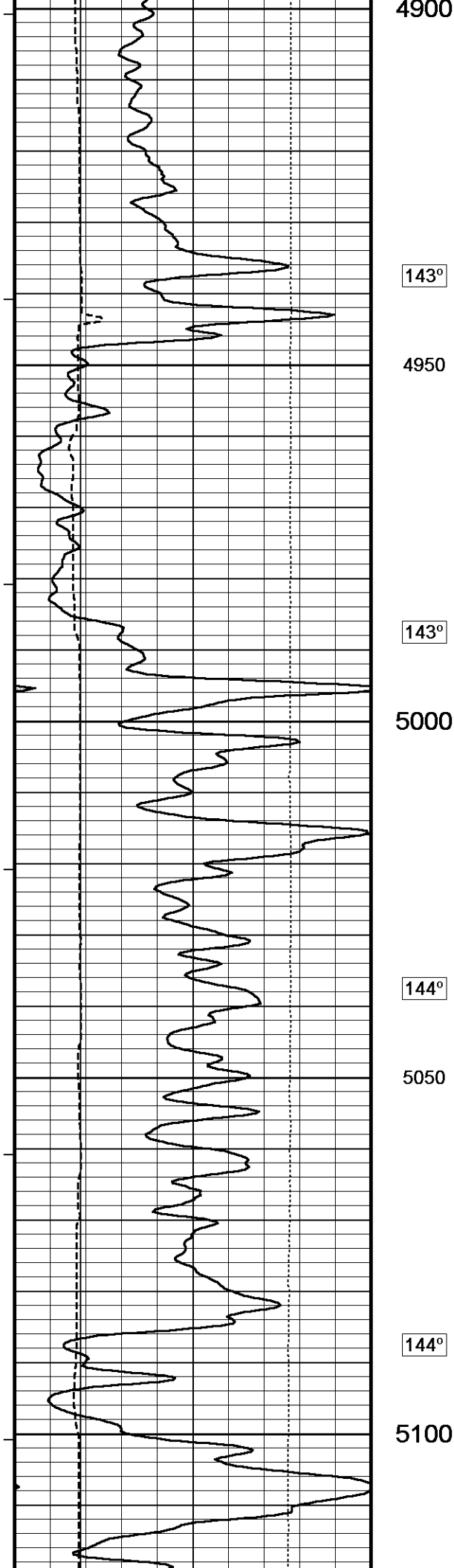


PDPE

DPRI

DEN

DCOR



4900

143°

4950

143°

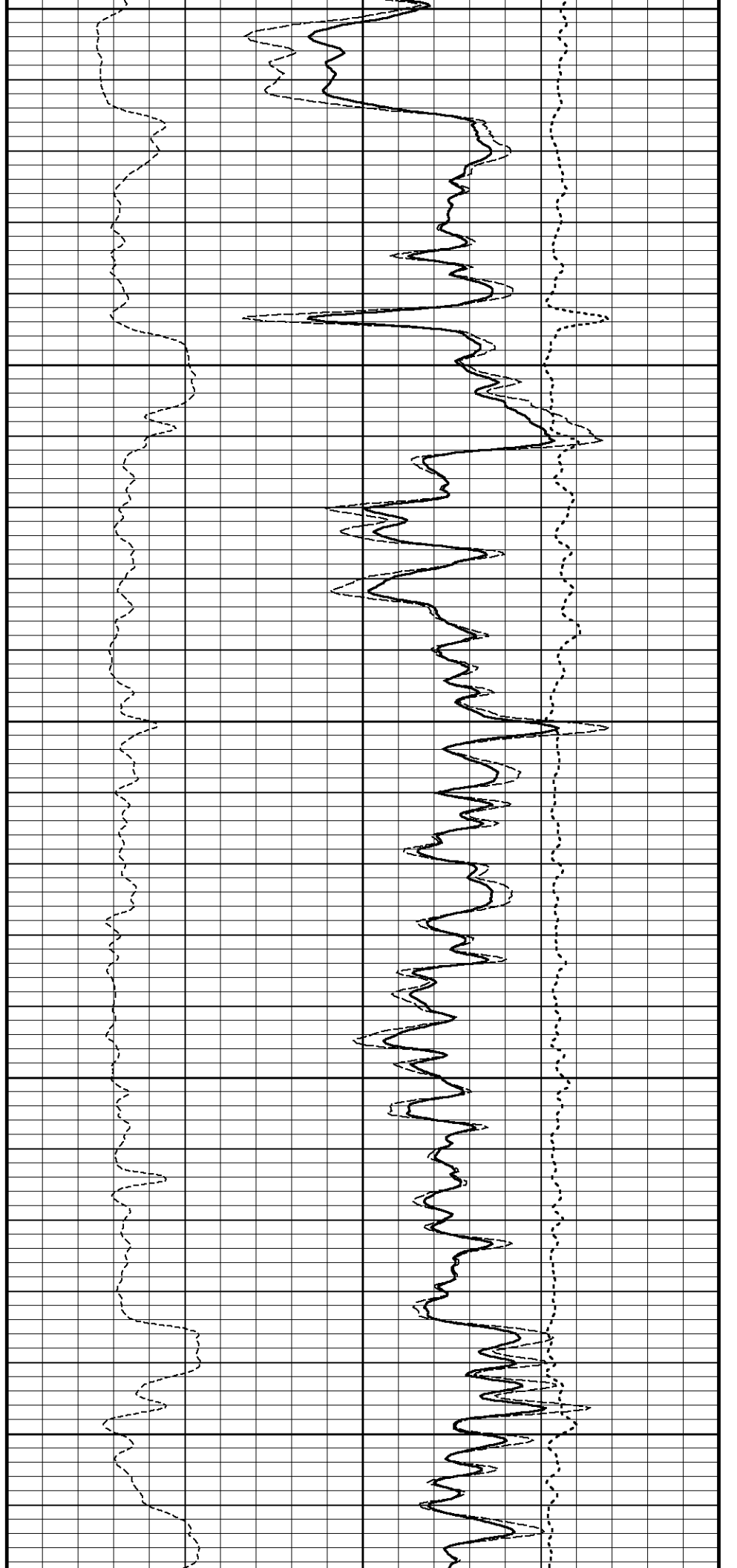
5000

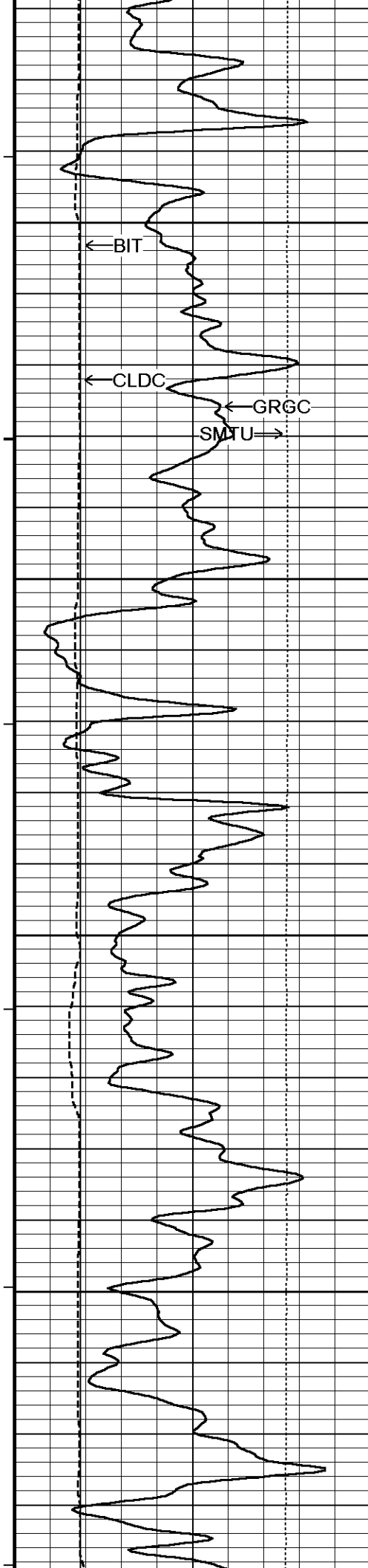
144°

5050

144°

5100





145°

5150

145°

5200

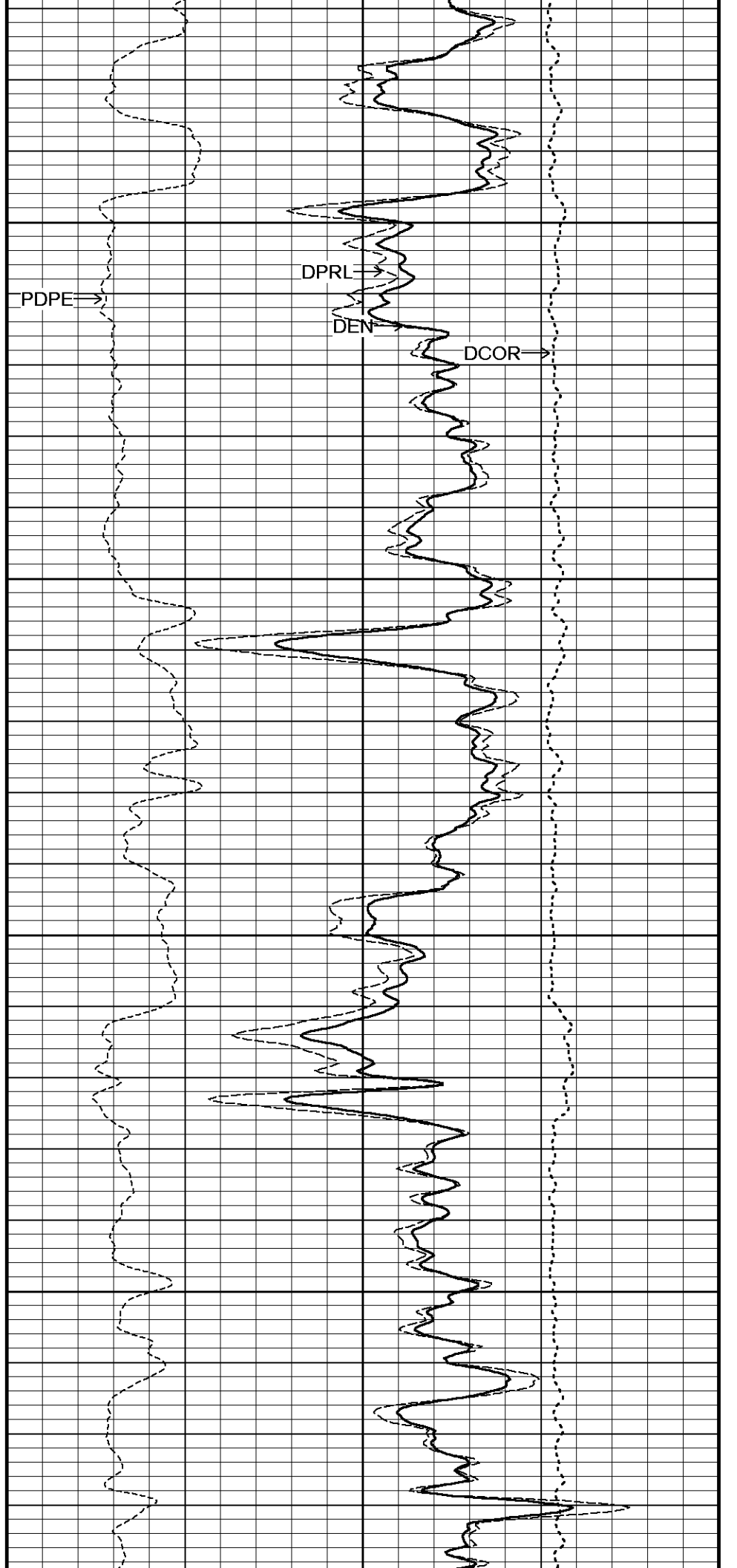
146°

5250

147°

5300

147°

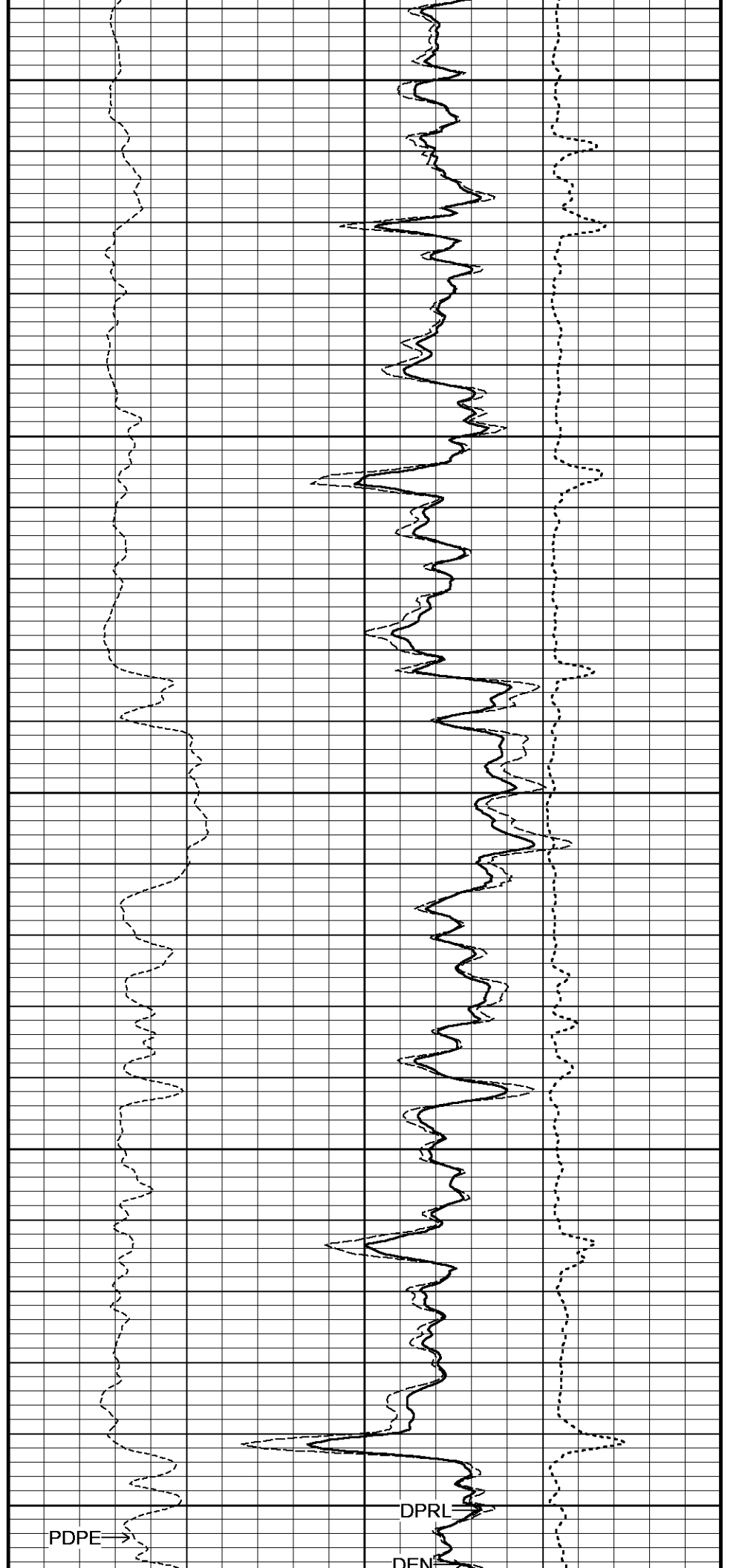
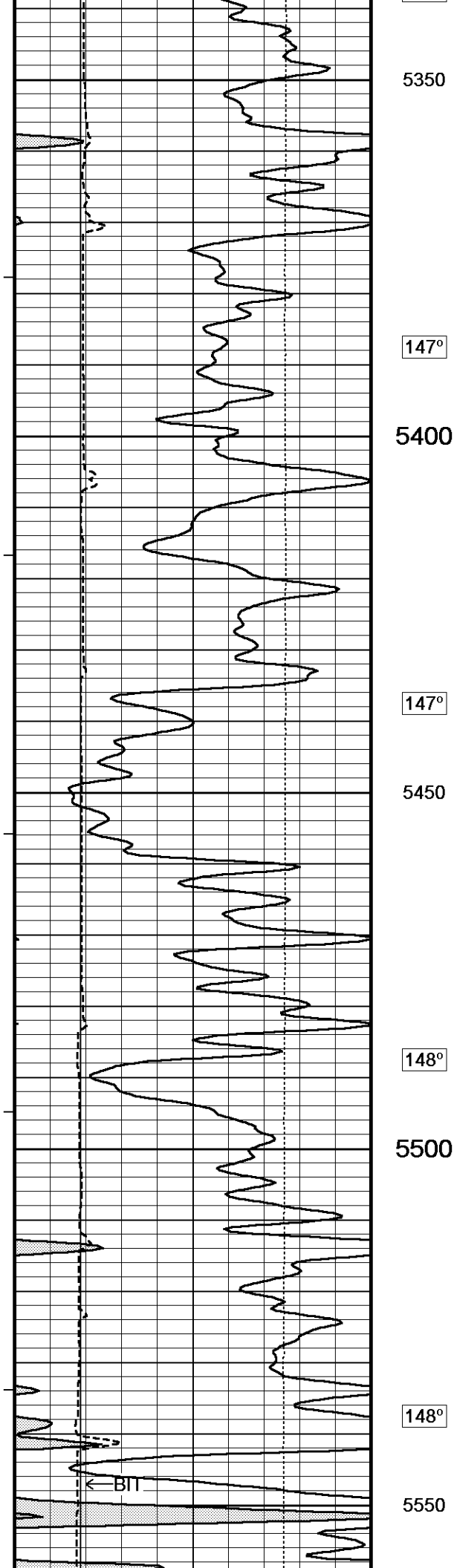


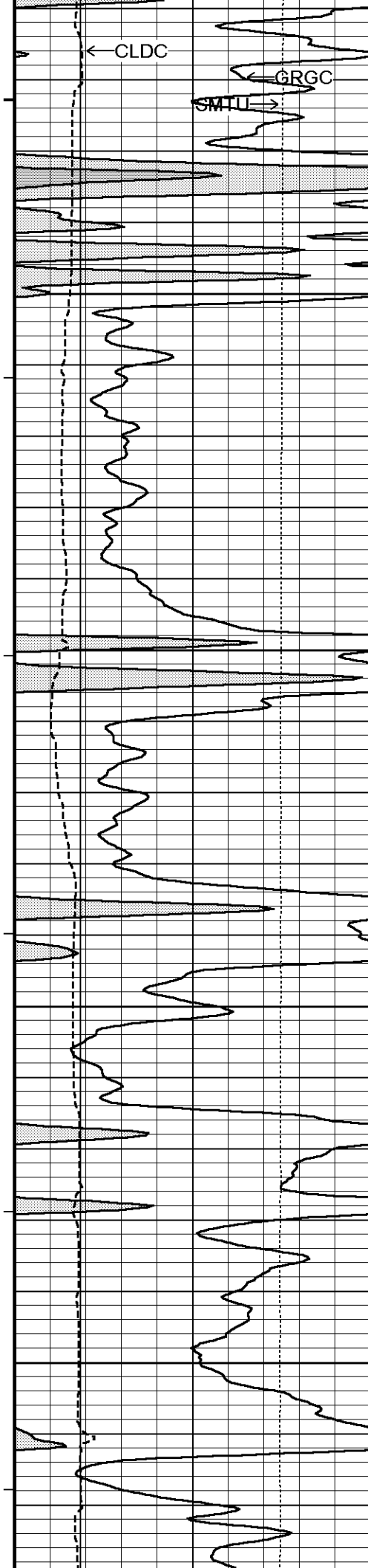
PDPE

DPRL

DEN

DCOR





148°

5600

149°

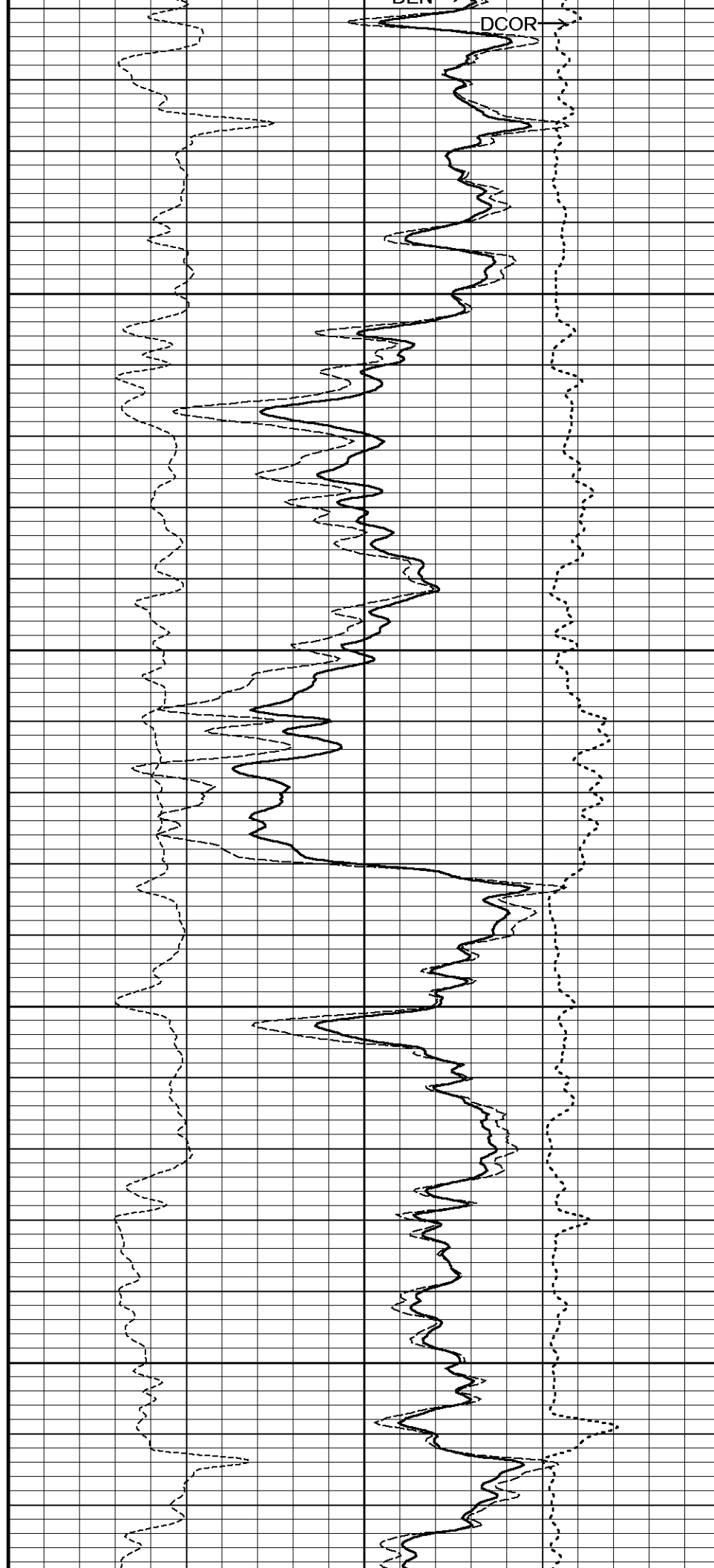
5650

150°

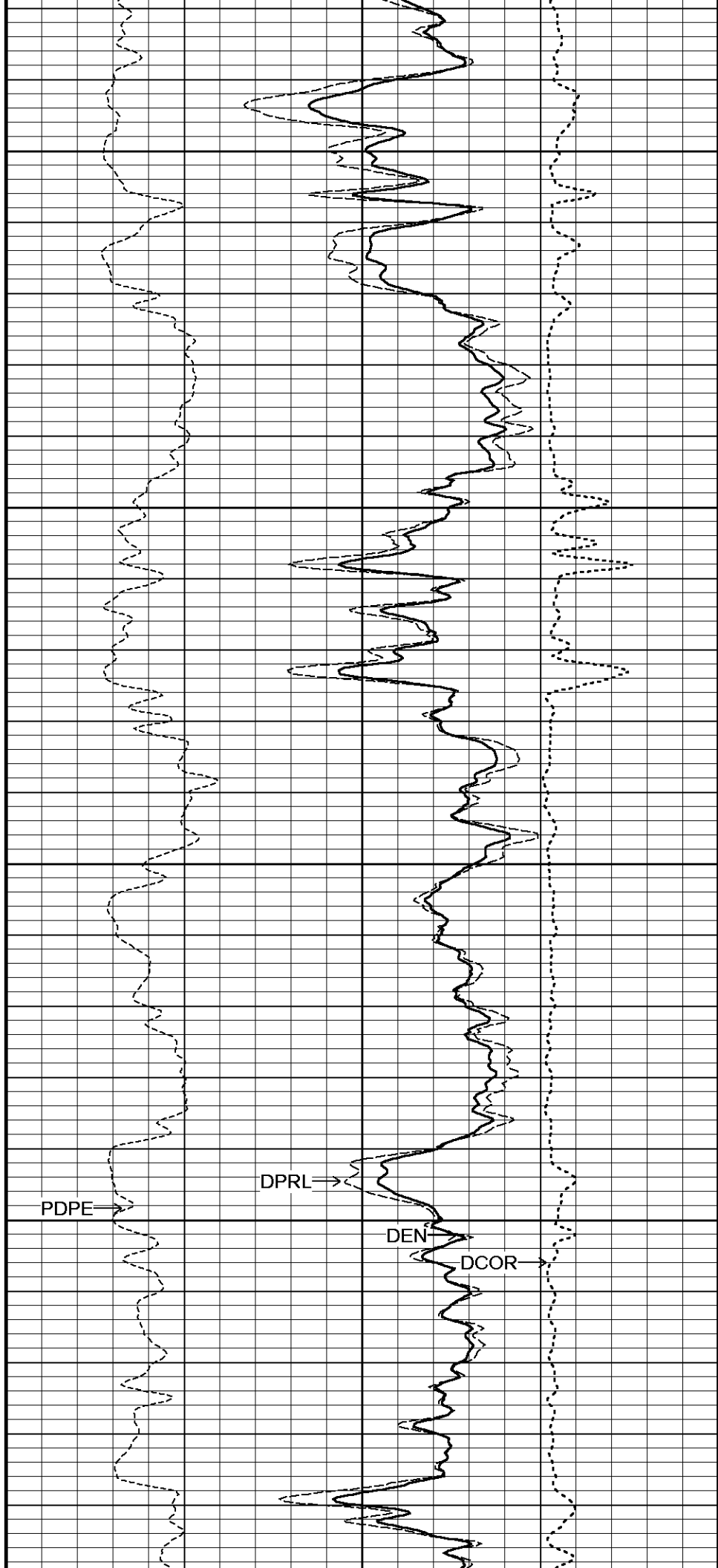
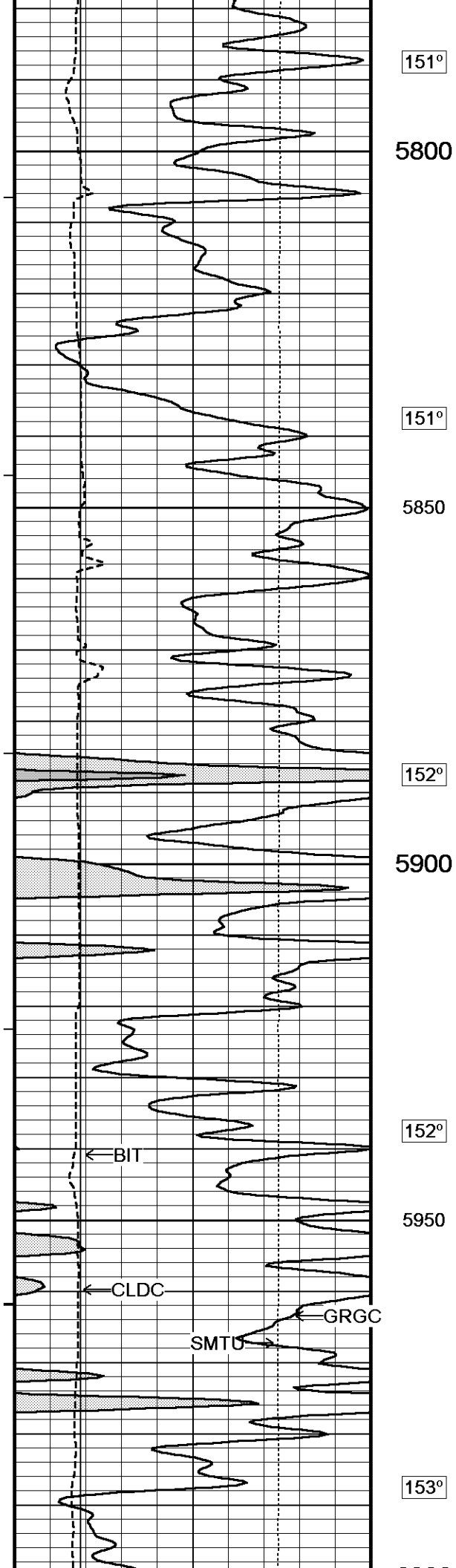
5700

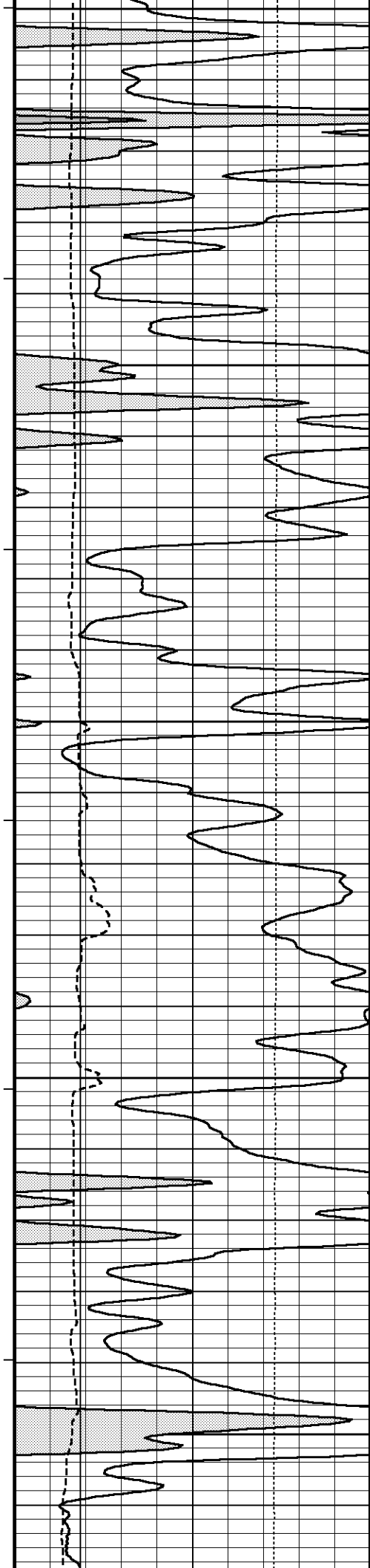
150°

5750



DCOR





6000

153°

6050

153°

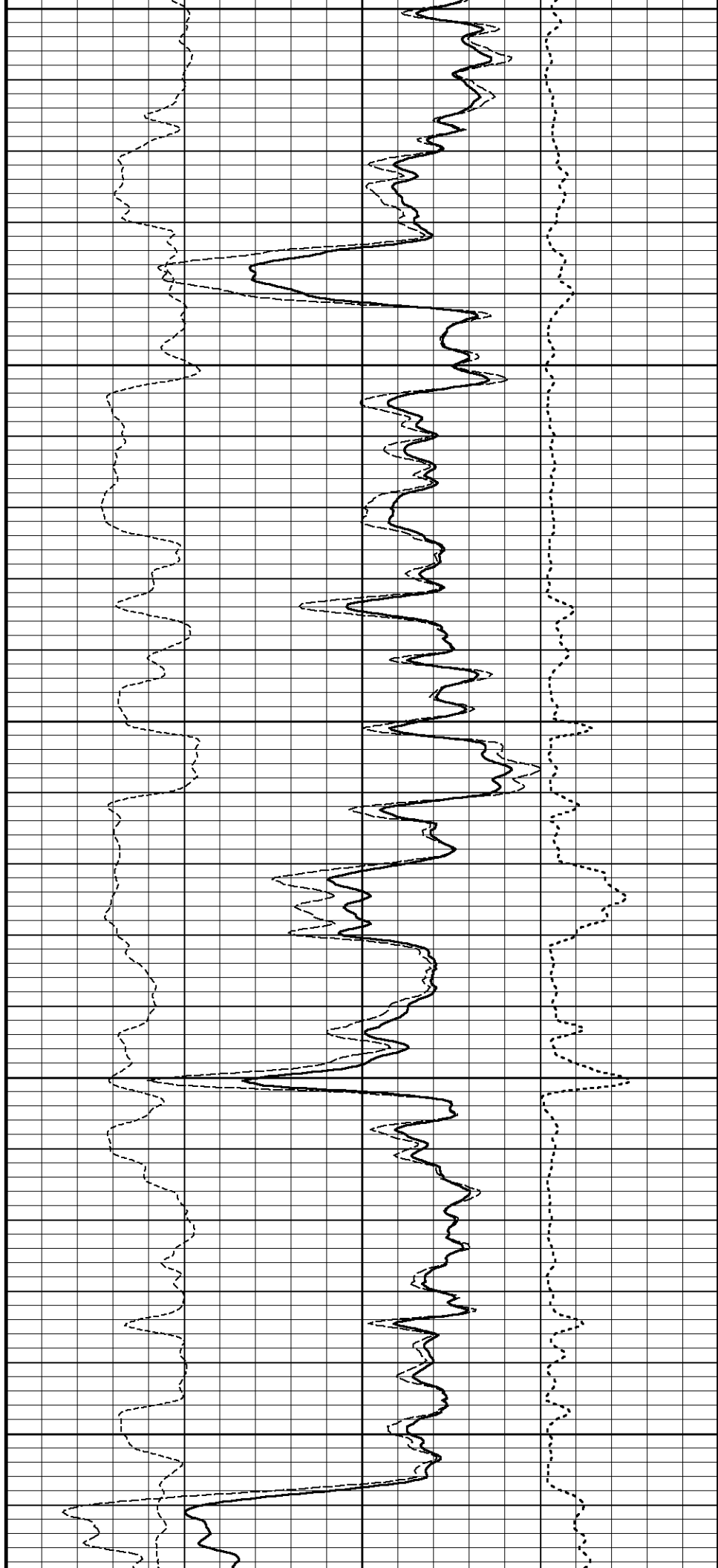
6100

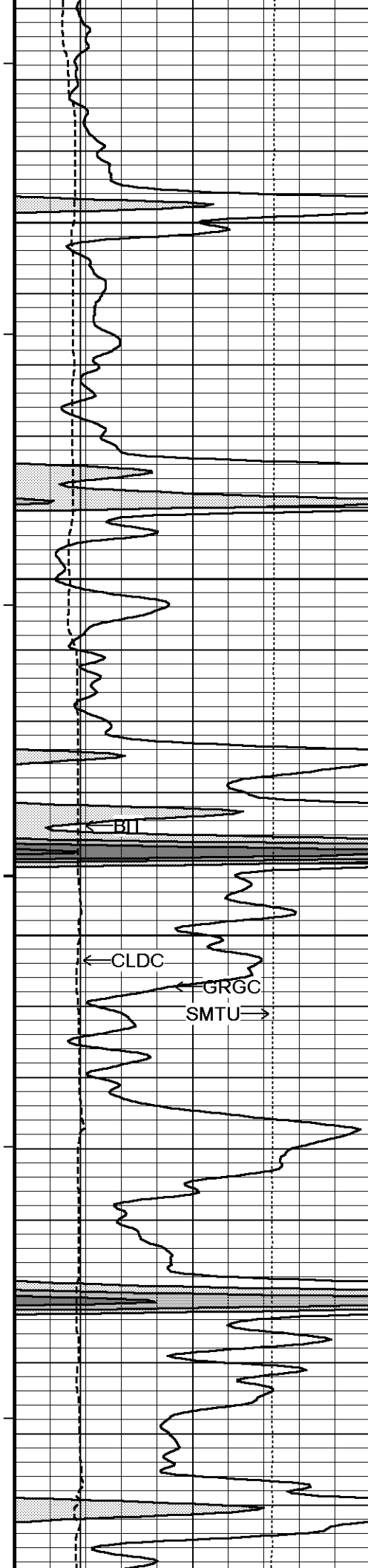
154°

6150

155°

6200





156°

6250

156°

6300

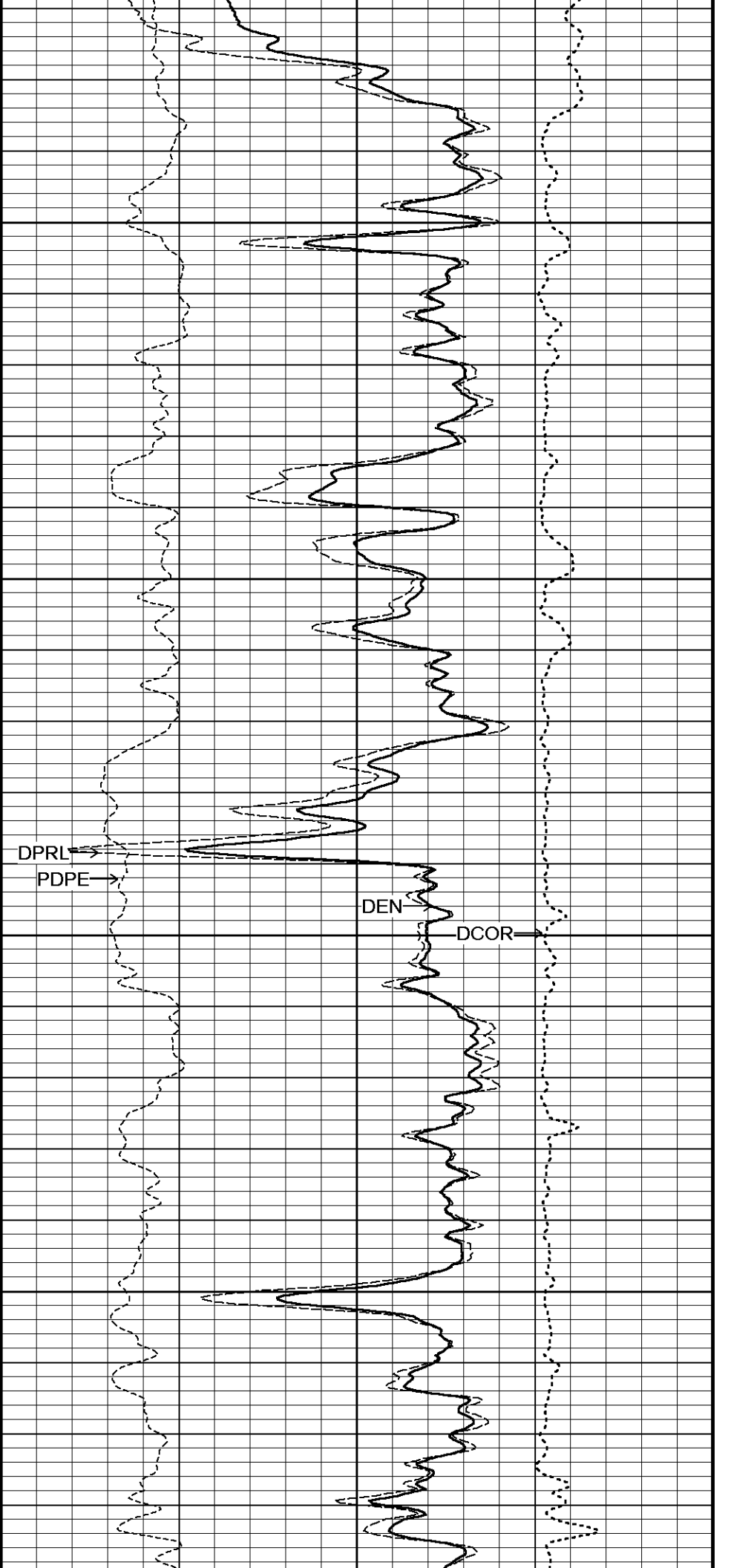
157°

6350

157°

6400

158°

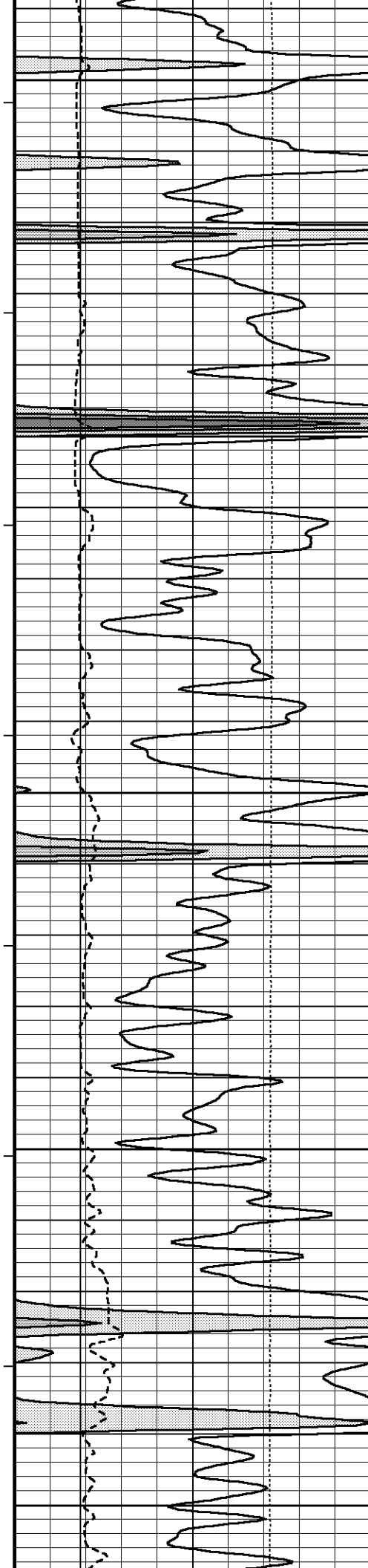


DPRL

PDPE

DEN

DCOR



6450

158°

6500

159°

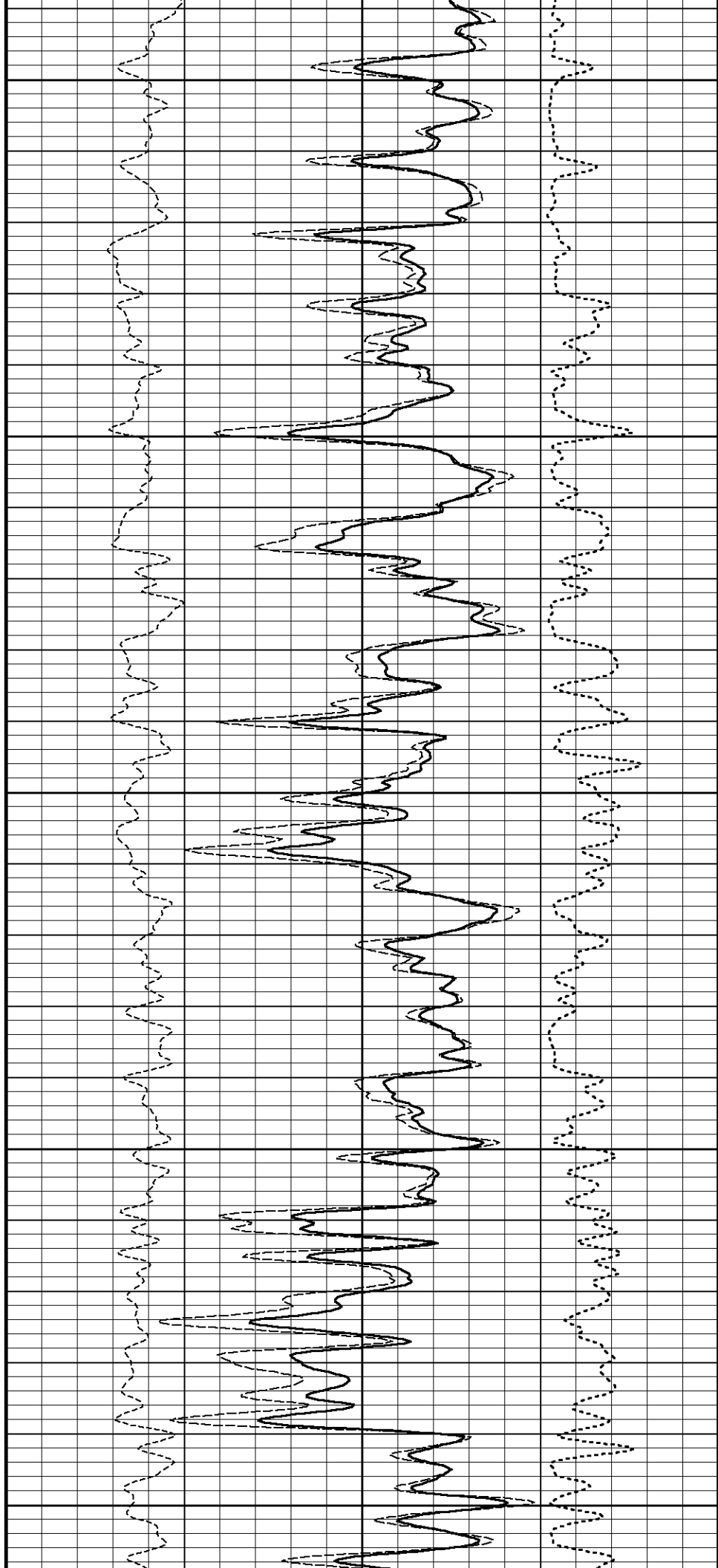
6550

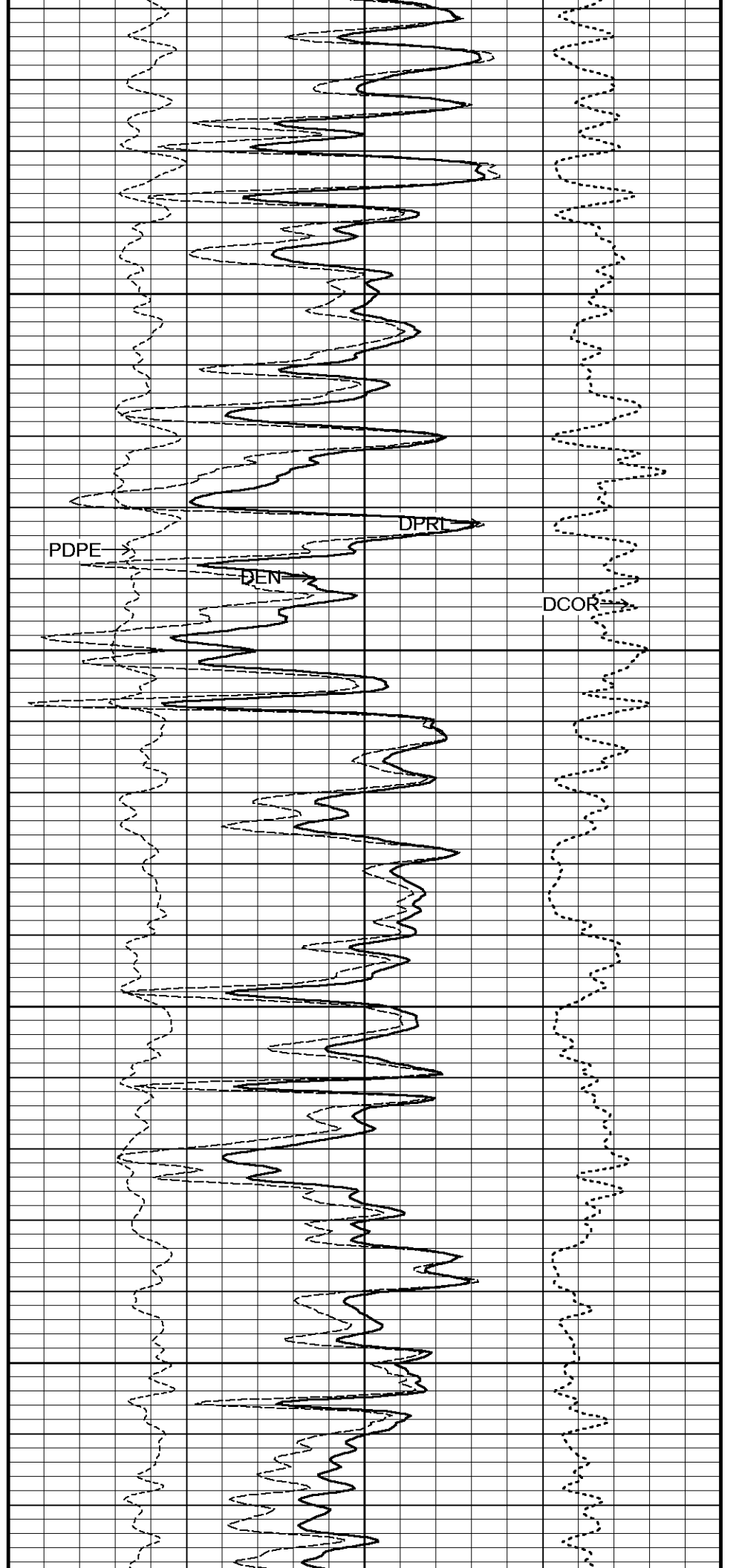
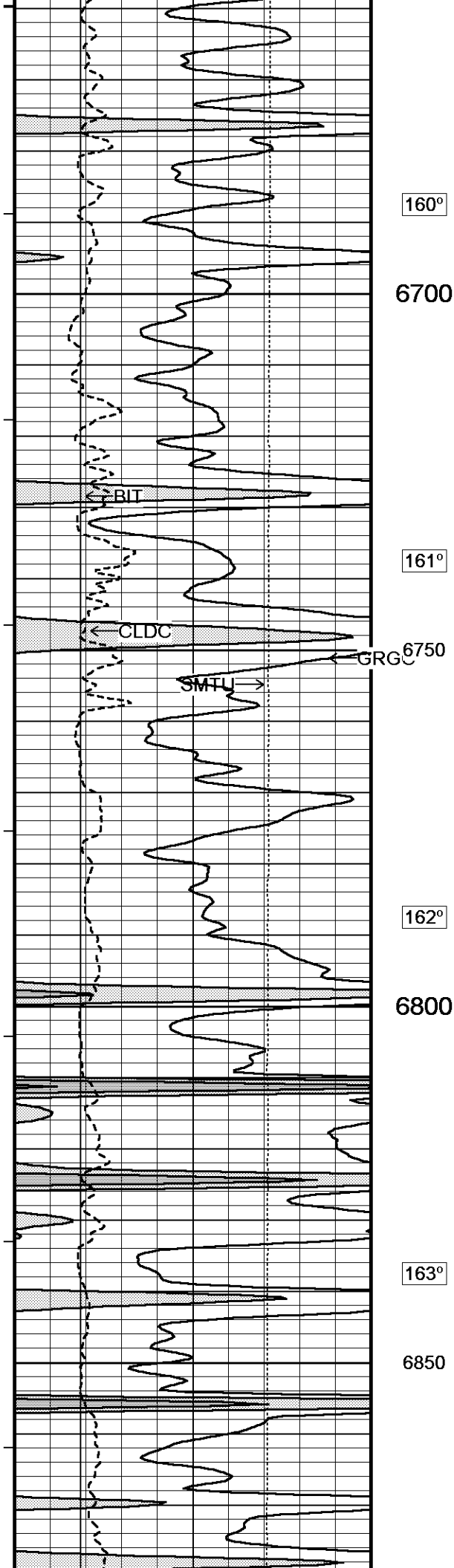
159°

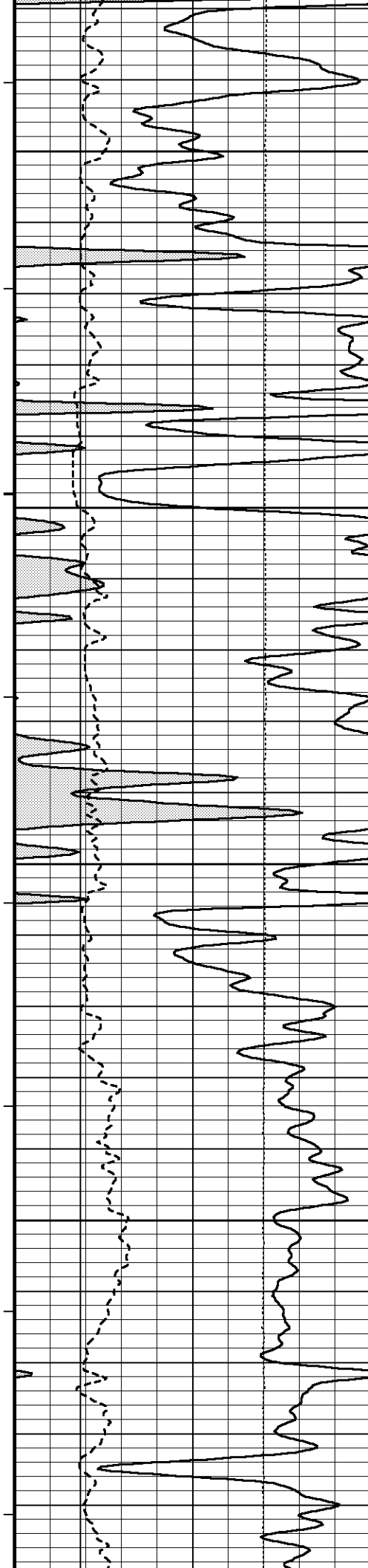
6600

160°

6650







165°

6900

166°

6950

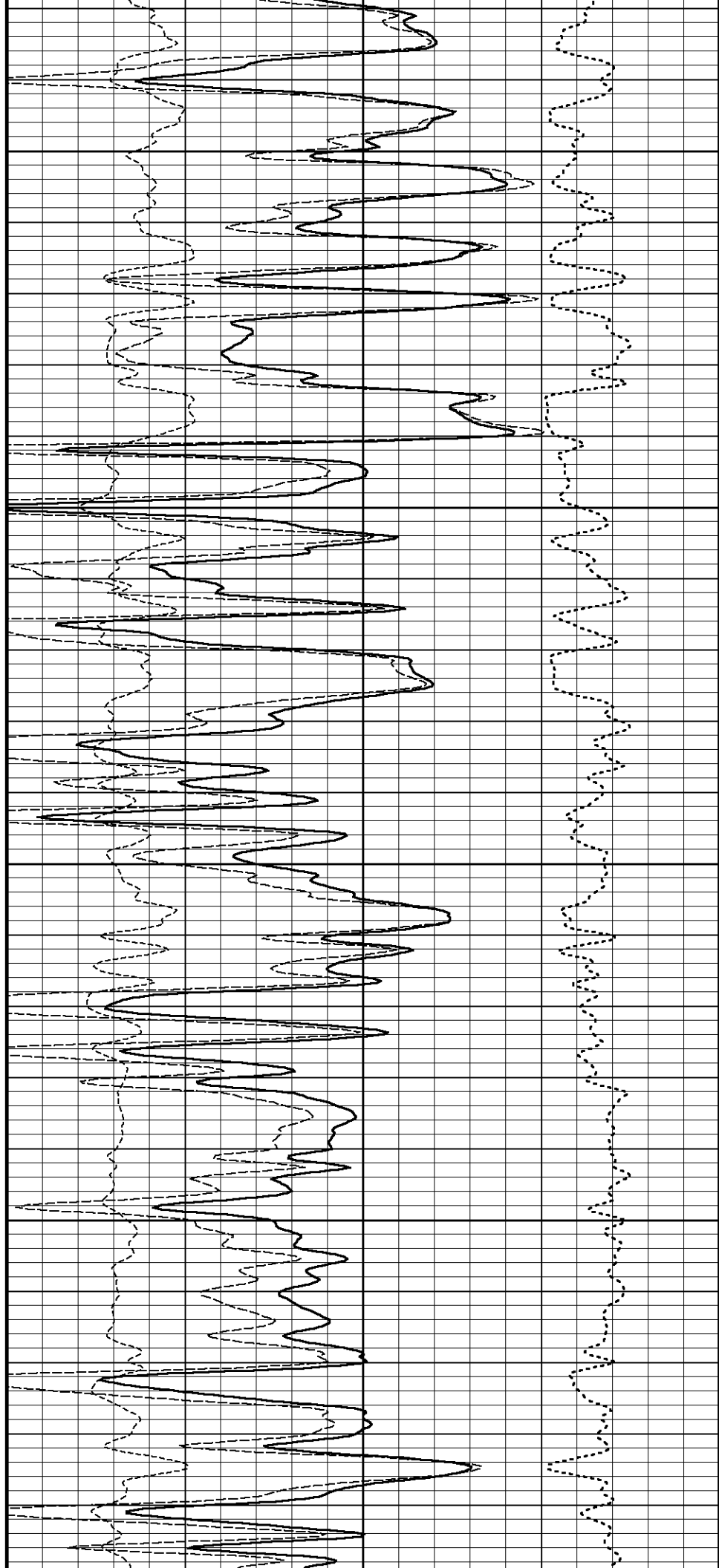
166°

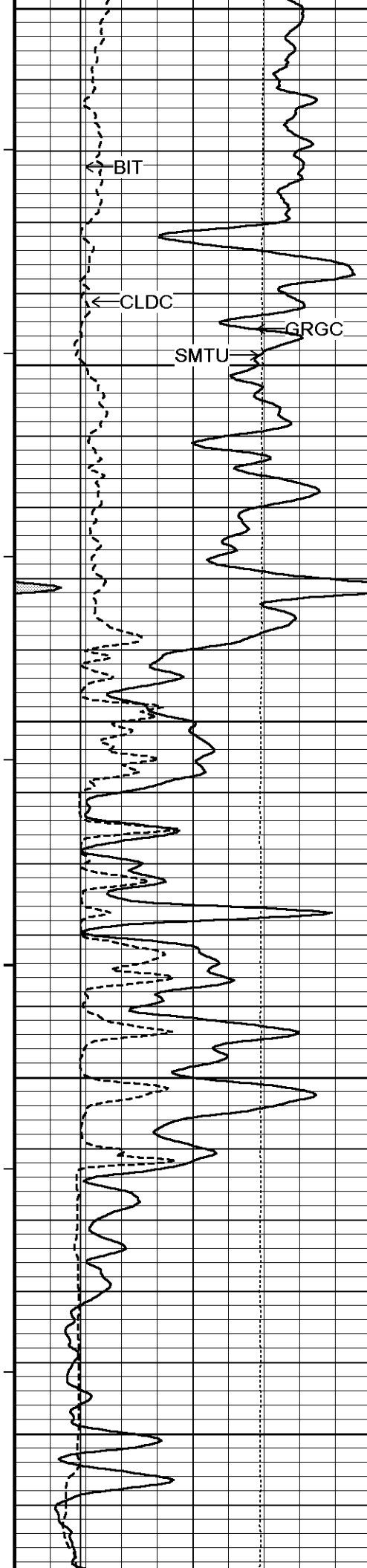
7000

166°

7050

167°





7100

168°

7150

170°

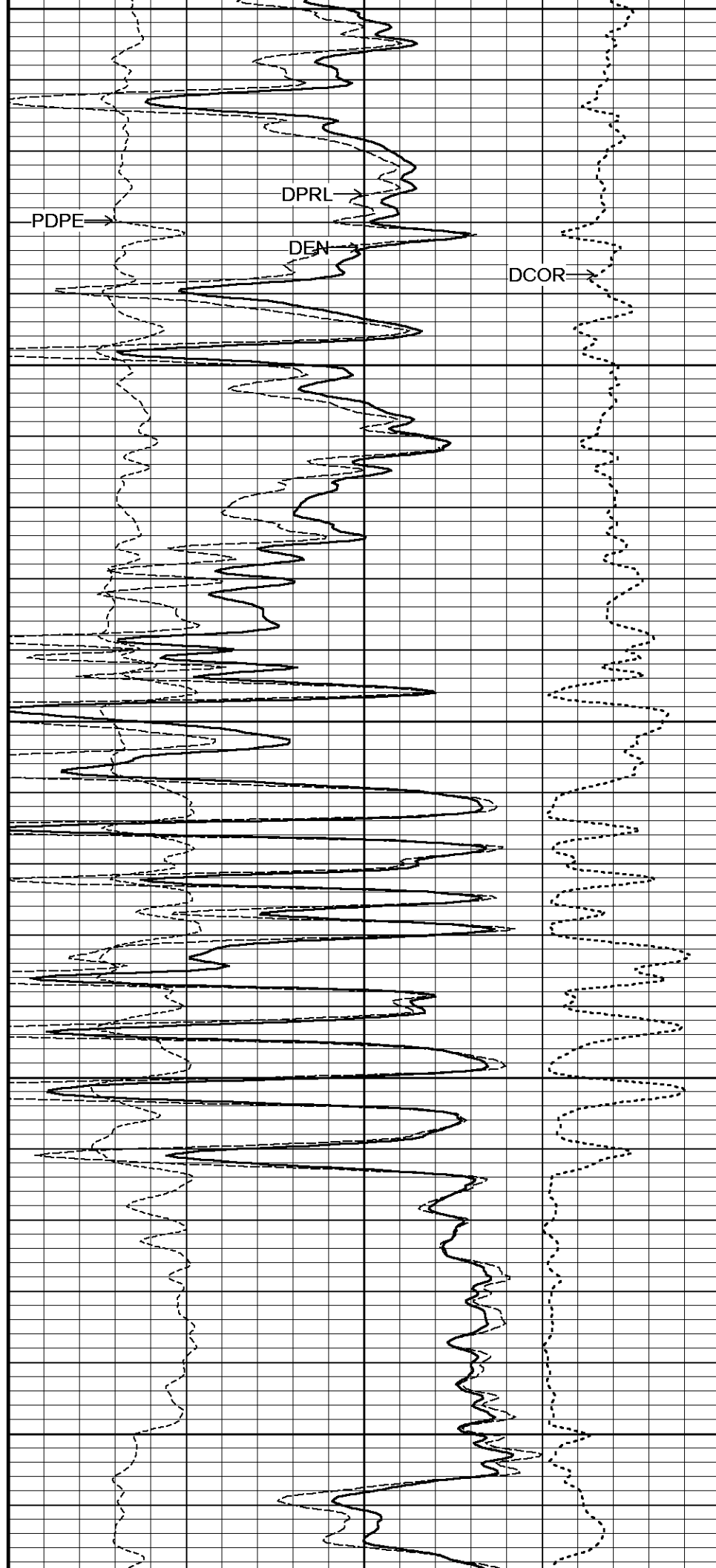
7200

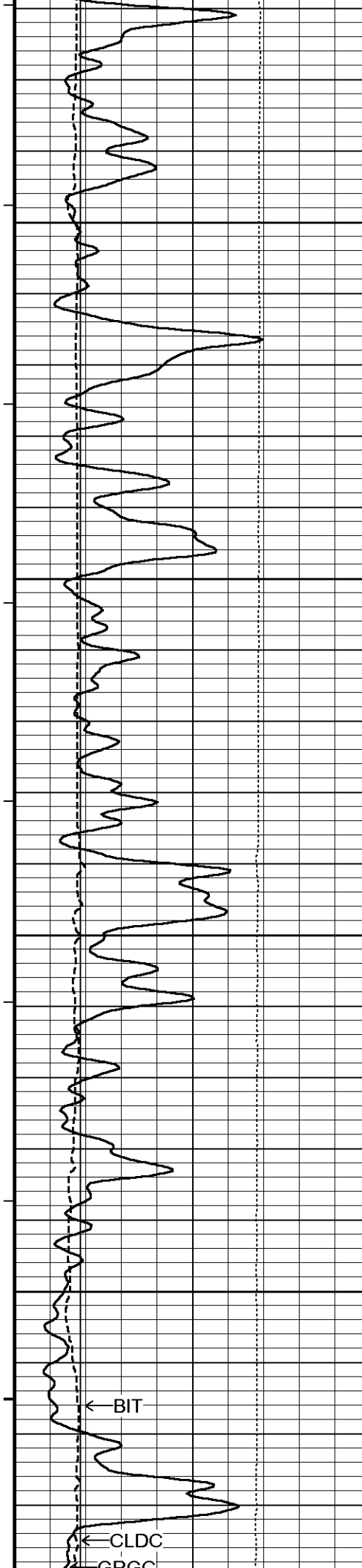
173°

7250

174°

7300





175°

7350

176°

7400

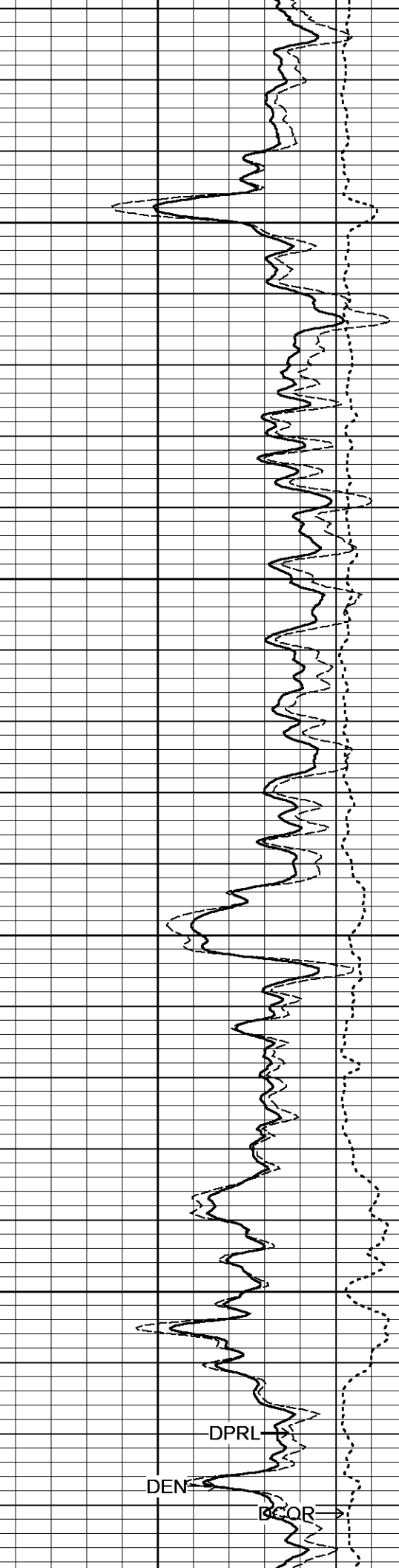
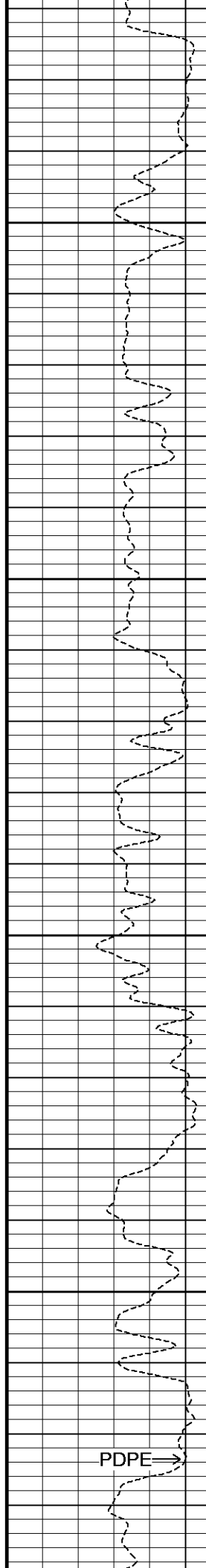
177°

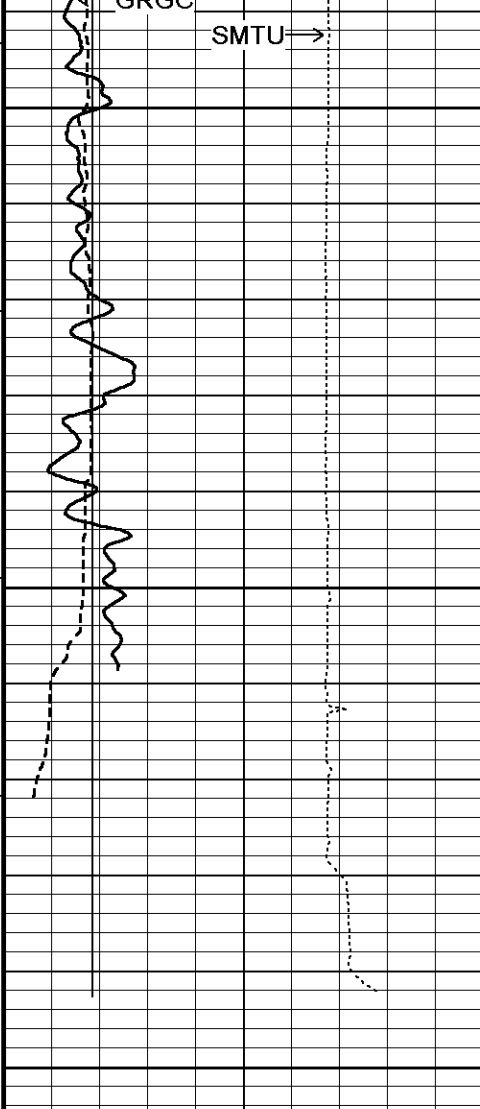
7450

179°

7500

181°





7550

180°

7600

TD

7650

Depth
In
Feet

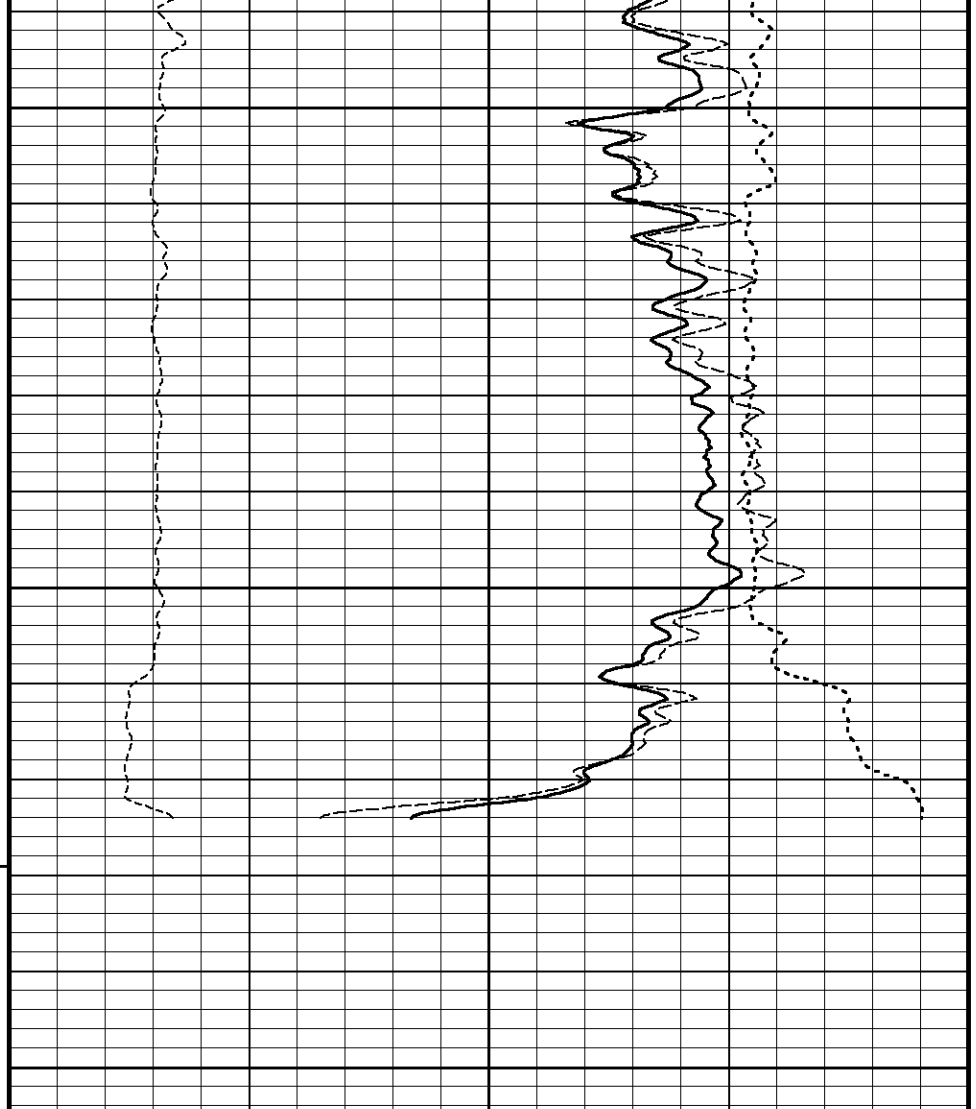
← Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
6 11 16

Bit Size
inches
6 11 16

Borehole
Temp in
deg F



Compensated Density
grams/cc
2 2.25 2.50 2.75 3

Limestone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
Density Correction
grams/cc

DST Uphole Tension
pounds
5000 0

Replay
Scale
1:240

0 5 10 -0.50 0 0.50

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 12-DEC-2015 23:02

Filename: C:\Data\Unit James 1-8\James 1-8 Main.dta

Recorded on 5 Inch Main Pass

System Versions: Plotted with 15.03.5939



5 INCH BULK DENSITY MAIN



BEFORE SURVEY CALIBRATION

C:\Data\Unit James 1-8\James 1-8 Main.dta

General Constants All 000

Last Edited on 12-DEC-2015,10:57

General Parameters

Mud Resistivity	1.920	ohm-metres
Mud Resistivity Temperature	56.000	degrees F
Water Level	0.000	feet
Borehole Fluid Processing	Wet Hole	

Hole/Annular Volume and Differential Caliper Parameters

HVOL Method	Single Caliper	
HVOL Caliper 1	None	
HVOL Caliper 2	N/A	
Annular Volume Diameter	5.500	inches
Caliper for Differential Caliper	None	

Rwa Parameters


Porosity used	Base Density Porosity
Resistivity used	Array Ind. One Res Rt
RWA Constant A	0.610
RWA Constant M	2.150
SW/APOR Tool Source	0.000

Gamma Calibration MCG-D.K 431

Field Calibration on 08-DEC-2015,11:44

	Measured	Calibrated (API)
Background	98	65
Calibrator (Gross)	1135	761
Calibrator (Net)	1037	696

Gamma Calibration Tolerances MCG-D.K 431

Ratio 1.490  Counts/API

Gamma Constants MCG-D.K 431

Last Edited on 12-DEC-2015,04:33

Gamma Calibrator Number	696	
GRC-M Calibrator Jig in Use?	NO	
Inactive Background Jig in Use?	NO	
Mud Density	1.13	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Potassium Equivalence	Chloride	
K Mud Concentration	0.00	%

High Resolution Temperature Calibration MCG-D.K 431

Field Calibration on 08-DEC-2015,11:34

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG-D.K 431

Last Edited on 31-JUL-2014,11:55

Pre-filter Length 11

Photo Density Calibration MPD-C.J 434

Base Calibration on 09-DEC-2015 17:08

Field Check on 09-DEC-2015 17:17

Density Calibration		Measured		Calibrated (sdu)	
Base Calibration		Near	Far	Near	Far
Background		1105	1244		
Reference 1		59469	26818	59494	30754
Reference 2		25076	2498	26390	2598

Field Check at Base

1105.0 1243.7

Field Check

1106.4 1242.8

PE Calibration

Base Calibration		Measured		Calibrated
		WS	WH	Ratio
Background		201	994	
Reference 1		24503	59282	0.417
Reference 2		7118	24950	0.289

Field Check at Base

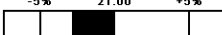
200.8 994.5


Field Check

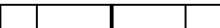
201.1 990.2

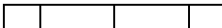
Photo Density Calibration Tolerances MPD-C.J 434

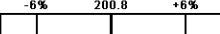
Near Density Ratio 2.43 

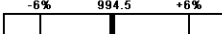
Far Density Ratio 20.40 

PE Calibration 0.122 

Near Den. Field Check 1106.4 

Far Den. Field Check 1242.8 

PE WS Field Check 201.1 

PE WH Field Check 990.2 

Density Constants MPD-C.J 434

Last Edited on 12-DEC-2015,04:33

Density Source Id	P74840B	
Nylon Calibrator Number	766	
Aluminium Calibrator Number	856	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.13	gm/cc
Mud Density Z/A Multiplier	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	
Matrix Density (gm/cc)	Depth (ft)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

Caliper Calibration MPD-C.J 434

Base Calibration on 09-DEC-2015 17:29

Field Calibration on 09-DEC-2015 17:31

Base Calibration		Calibrator Size (in)	
Reading No	Measured		
1	16753	3.99	
2	25280	5.96	
3	34000	8.03	
4	41984	9.86	
5	51202	11.93	
6	N/A	N/A	

Field Calibration

Measured Caliper (in)
8.02

Actual Caliper (in)
8.03

Caliper Calibration Tolerances MPD-C.J 434

Long Arm Field Cal.

8.02

7.63	8.03	8.43
------	------	------

 in

DOWNHOLE EQUIPMENT

C:\Data\Unit James 1-8\James 1-8 Main.dta

Cablehead, 11 pin

CBH-C 217 LG: 2.40 ft WT: 24.3 lb OD: 2.240 in

11C-11B Compact Tool Adaptor

MTA-K.A 189 LG: 1.53 ft WT: 13.2 lb OD: 2.240 in

Compact Swivel Head Adaptor

SHA-J.A 450 LG: 2.30 ft WT: 22.0 lb OD: 2.244 in

Compact Comms Gamma

MCG-D.K 431 LG: 8.70 ft WT: 63.9 lb OD: 2.244 in

Compact Neutron

MDN-C.A 480 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

Compact Density/Caliper

MPD-C.J 434 LG: 9.59 ft WT: 90.4 lb OD: 2.449 in

Compact Focussed Electric

MFE-C.A 396 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Induction

MAI-C.A 455 LG: 10.81 ft WT: 48.5 lb OD: 2.240 in

Total Length: 46.41 ft Weight: 361.6 lb



Tool Zero (0.13ft from bottom)

All measurements relative to tool zero.

COMPANY

UNIT PETROLEUM COMPANY

WELL

JAMES #1-2

FIELD

WILDCAT

PROVINCE/COUNTY

LINCOLN

COUNTRY/STATE

USA / COLORADO

Elevation Kelly Bushing 5138.00 feet

Elevation Drill Floor 5136.00 feet

Elevation Ground Level 5123.00 feet

First Reading feet

Depth Driller 7635.00 feet

Depth Logger 7629.00 feet



COMPENSATED NEUTRON

PHOTO DENSITY

