

Tucker

DUAL INDUCTION RESISTIVITY LOG

WIRELINER SERVICES

Company ANDERSON ENERGY, INC. Well PRAIRIE FARMS-HARRIS #1 Field BETZ SOUTHWEST County NESS State KANSAS Country USA API No. 15-135-25337-0000		File No : TUL-56028 Company : ANDERSON ENERGY, INC. Well : PRAIRIE FARMS-HARRIS #1 Field : BETZ SOUTHWEST County : NESS State : KANSAS Country : USA API No : 15-135-25337-0000	
Location : 1950' FNL & 1050' FEL SW NW SE NE		LSD : Sect : 17 Twp : 20S Rge : 21W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 2259.00	CNT
Log Measured From:	KB	DF 2258.00	CST
Above Permanent Datum:	8.00 Ft	GL 2251.00	PIT
Date	2012-01-27		
Run Number	1		
Depth--Driller	4650.0 Ft		
Depth--Logger	4642.0 Ft		
First Reading	4642.0 Ft		
Last Reading	265.0 Ft		
Casing--Driller	265.0 Ft		
Casing--Logger	265.0 Ft		
Bit Size	7.875 In		
Casing Size	8.625 In		
Hole Fluid Type	WBM		
Density	9.3 LBS/GAL		
Fluid Loss	8.4 CC		
PH/Viscosity	10.5 @ 47.0 SEC		
Sample Source	MEASURED		
RMF@Measured Temp.	1.300 @ 55 F		
RMF@Measured Temp	1.040 @ 55 F		
RMF@Measured Temp.	1.560 @ 55 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.610 @ 125 F		
Time Circulation Stopped	2012-01-27 08:14		
Max Recorded Temp.	125 F		
Equipment/Base	TRK 127 TULSA		
Recorded By	S. TYLER / B. BAILEY		
Witnessed By	R. FISHER		

The customer is hereby warned that by providing the log data herein, T. W. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. W. S. does not guarantee or warrant either expressly or impliedly, the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by T. W. S. personnel. Any interpretation, conversion or recommendation is not part of the consideration for the agreement between the parties and is not part of any part of the charge by T. W. S. for its services. Any user of the log data is warned that said user is not entitled to rely on interpretations, conversions or recommendations as aforesaid.

Bitsize Intervals		Casing Strings		
Size (In)	Bottom (Ft)	Size (In)	Weight (Lbs)	Bottom (Ft)
7.875	4650.00	8.625	32.00	265.00

Run Number	1	
Date	2012-01-27	
Date/Time On Bottom	2012-01-27 10:14	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	0.490 @ 125 F	
RMC@BHT	0.730 @ 125 F	

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT, CST AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED UISING 5.500" PRODUCTION CASING.

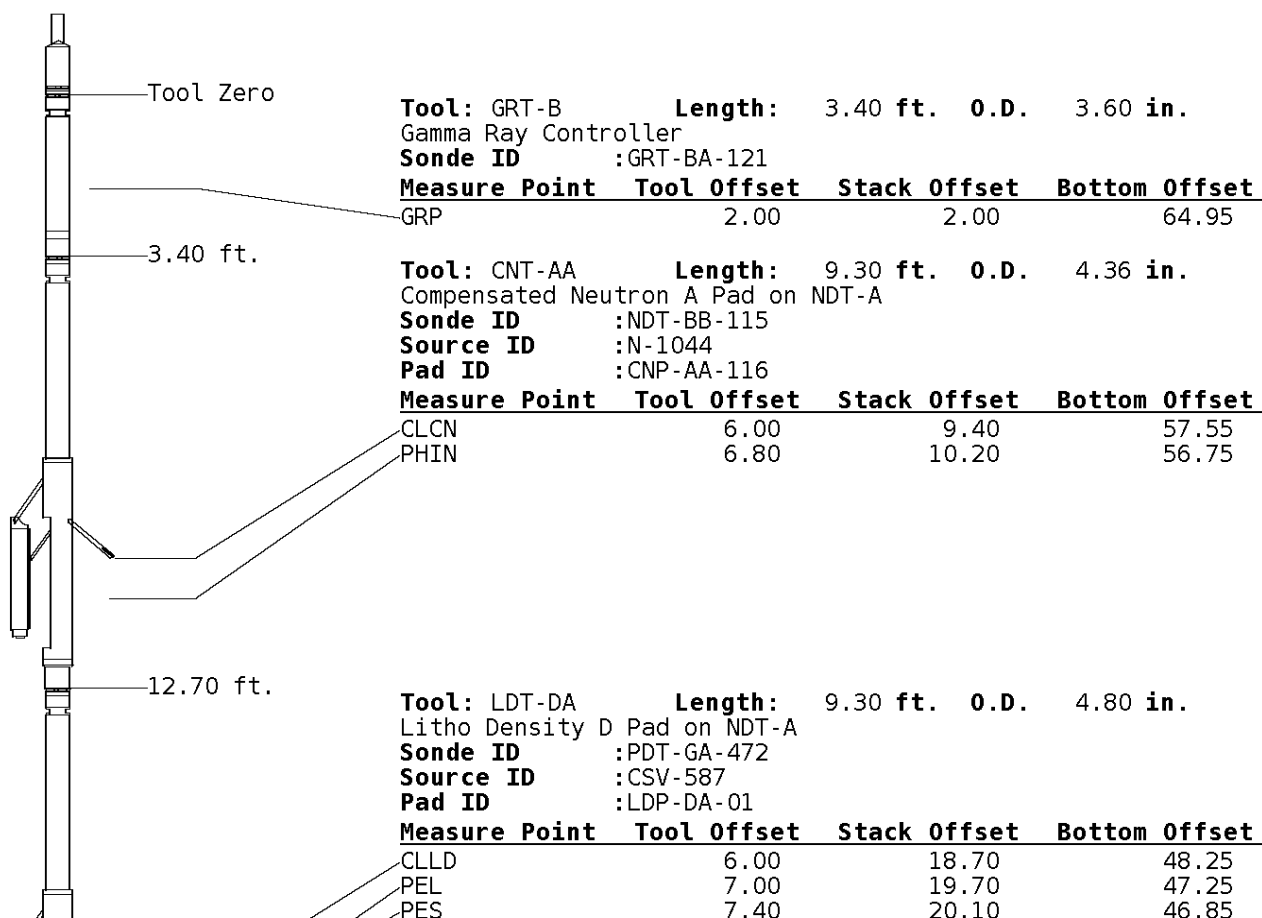
GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_R, INV_R, MSCLPIN.
 CST: PORS, DDCDTE, TT1PF, TT3PF, ITT.
 PIT: ILD, ILM, SPU, SFLAEC

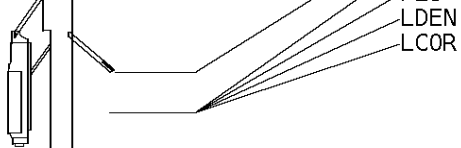
OPERATORS:

J.T
 N.

Tool String Schematic

Total Tool Length - 66.95 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



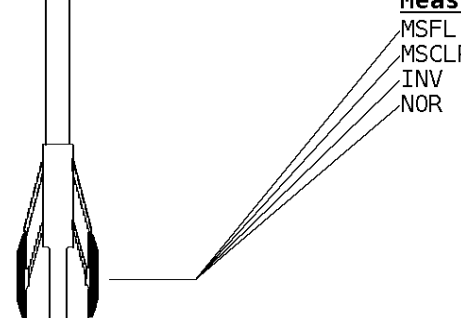


7.20 19.90 47.05
7.20 19.90 47.05

22.00 ft.

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
Micro Spherically Focused (IC)
Sonde ID :MST-DA-36

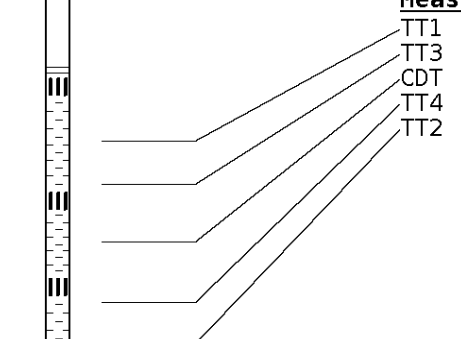
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	37.35
MSCLP	7.60	29.60	37.35
INV	7.60	29.60	37.35
NOR	7.60	29.60	37.35



31.66 ft.

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
Open Hole Sonic
Sonde ID :CST-AB-38

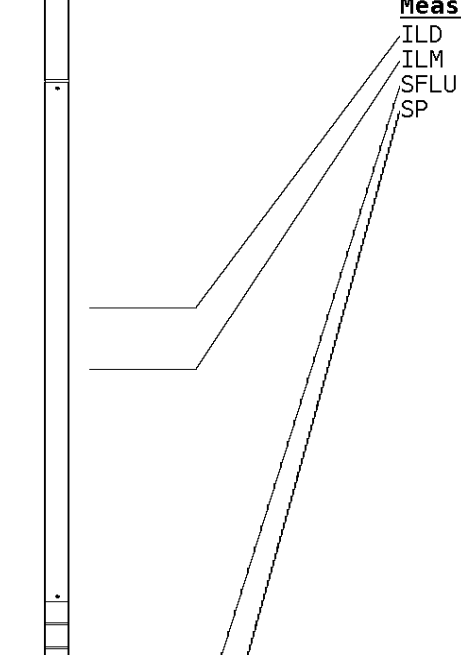
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	36.46	30.49
TT3	5.80	37.46	29.49
CDT	7.30	38.96	27.99
TT4	8.80	40.46	26.49
TT2	9.80	41.46	25.49



45.46 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-18

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	54.38	12.56
ILM	10.10	55.56	11.39
SFLU	17.49	62.95	4.00
SP	20.60	66.06	0.88



LWT 66.95 ft.

Well File: ANDERSON PRARIE FARMS JAN27_QUINK

Scale: 1:600

Segment: V1.D1.S11 ASMAIN

Acquired: Not Available

Reference: 0

Processed: Not Available

RXO/RT

-160 40

TENSION
LBS

10000 0

SPONTANEOUS POTENTIAL
mV

→ | ← 20

GAMMA RAY
API UNITS

150 0 300 150

SHALLOW FOCUSED RESISTIVITY
OHMM

0.0 500.0
0.0 50.0

DEEP INDUCTION
OHMM

0.0 500.0
0.0 50.0

DEEP CONDUCTIVITY
MMHO

2000 1000 1000 0

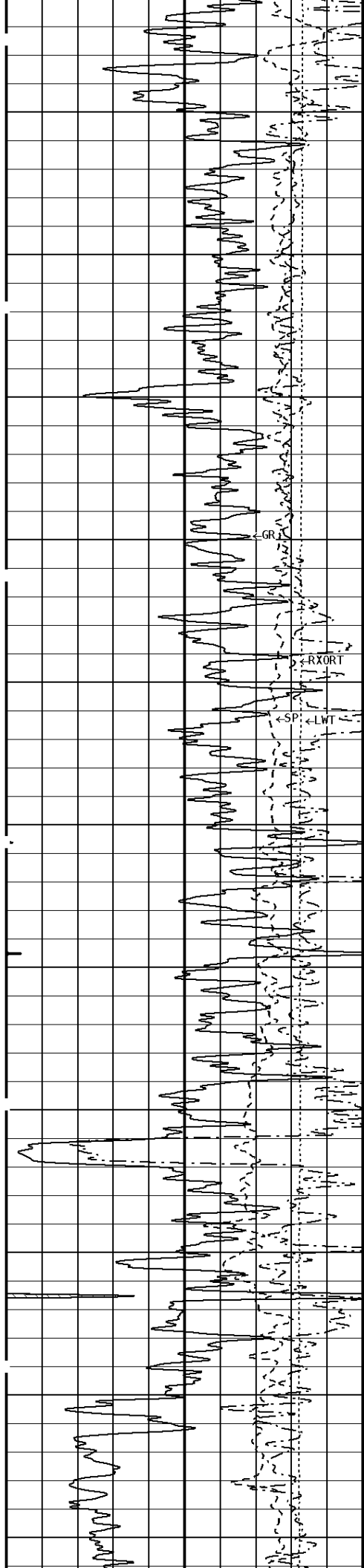
1:600 SECTION
2 INCH

File #1.1.11

200

300

400



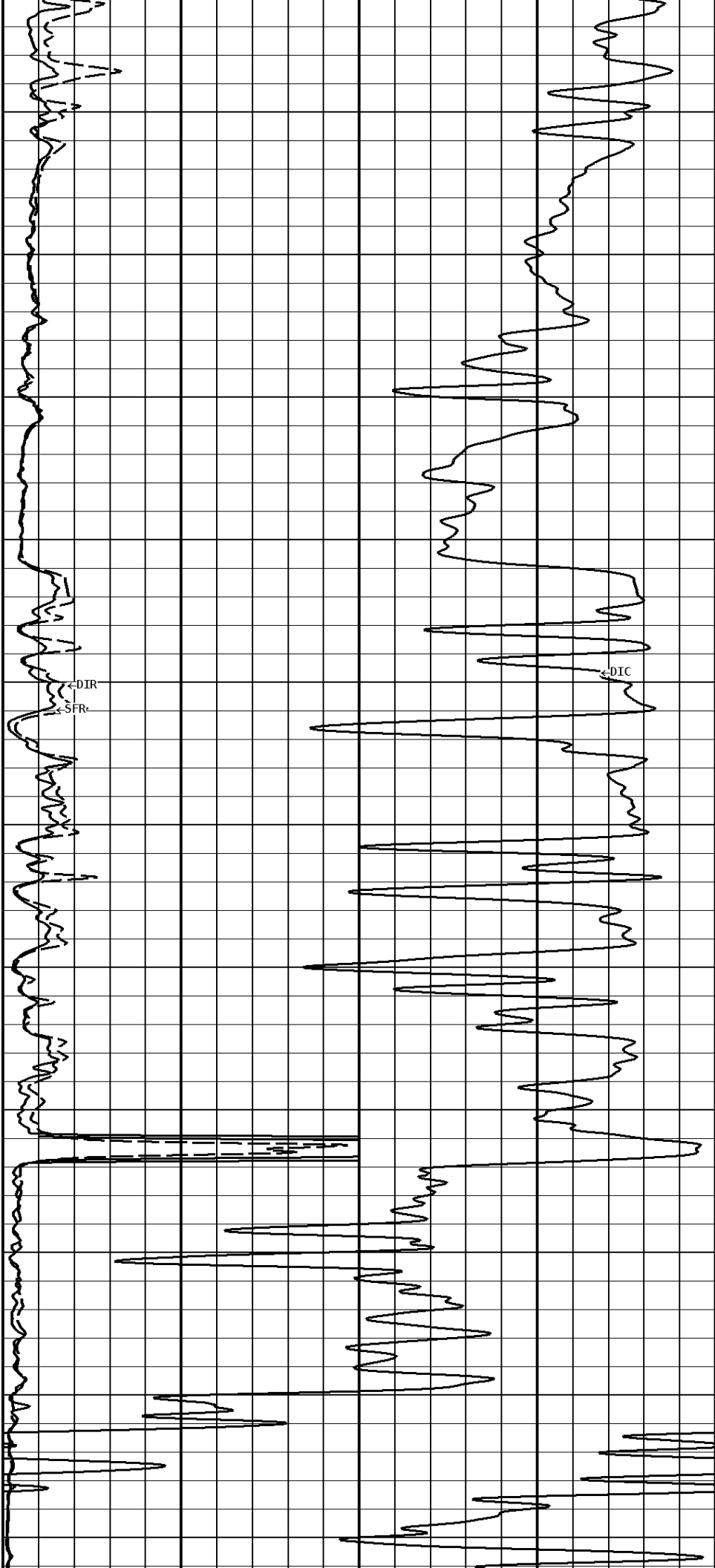
500

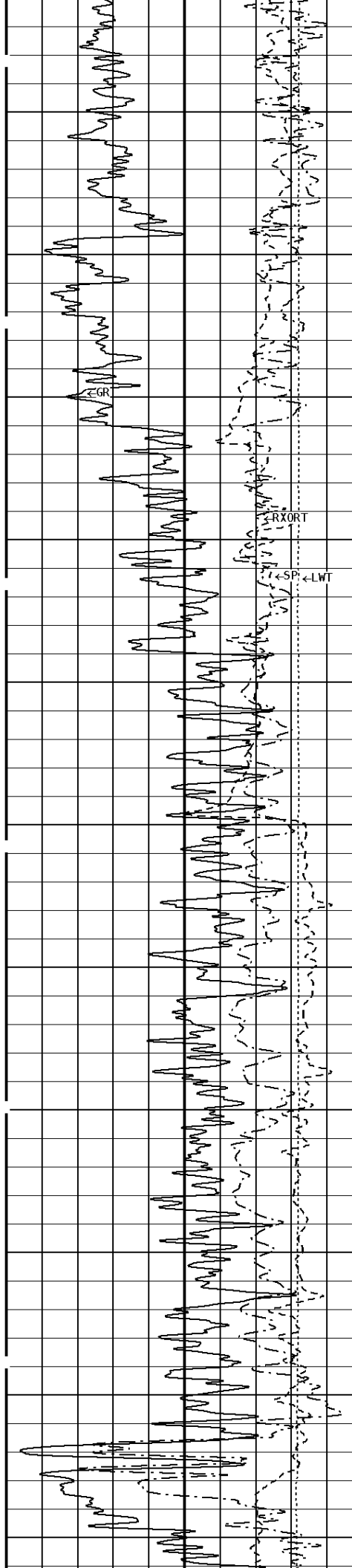
600

700

800

900





1000

1100

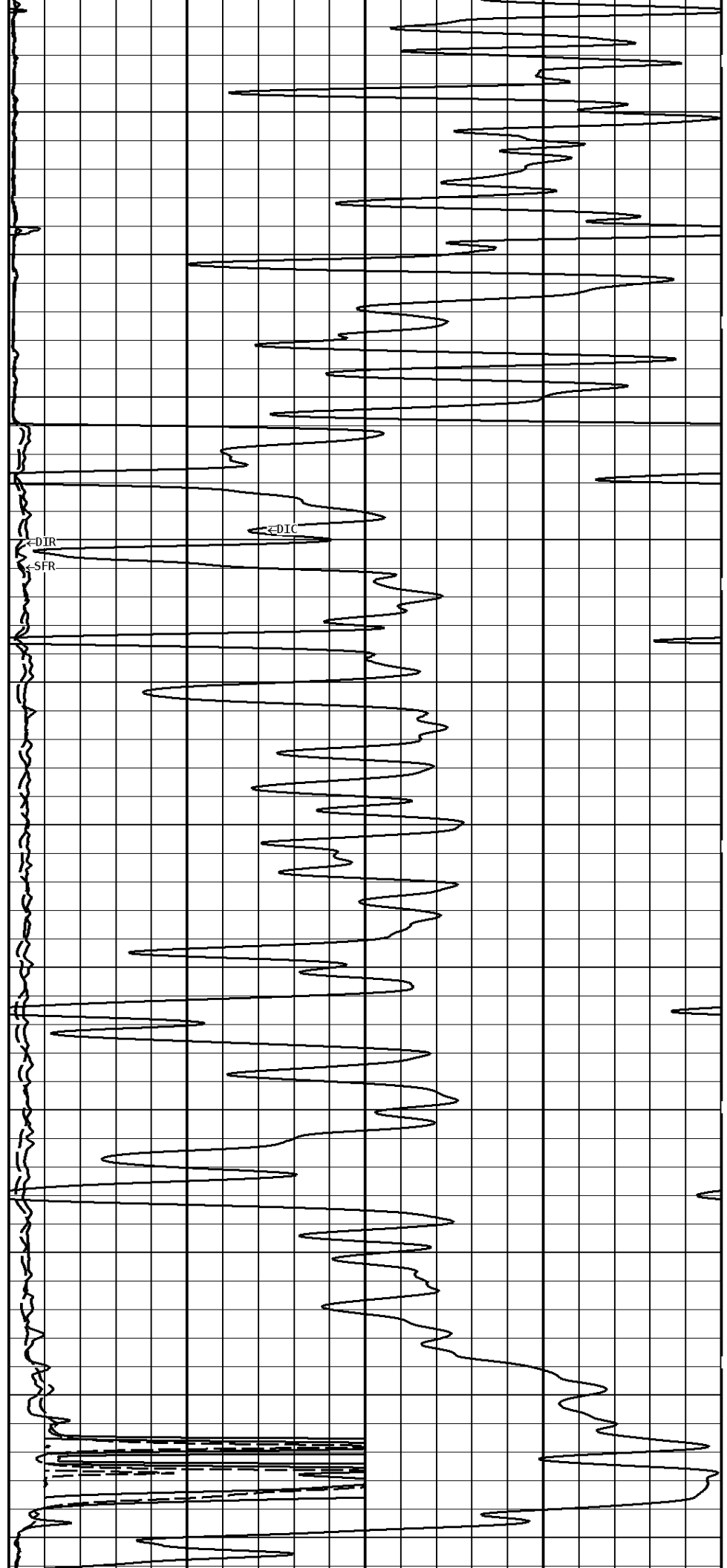
1200

1300

1400

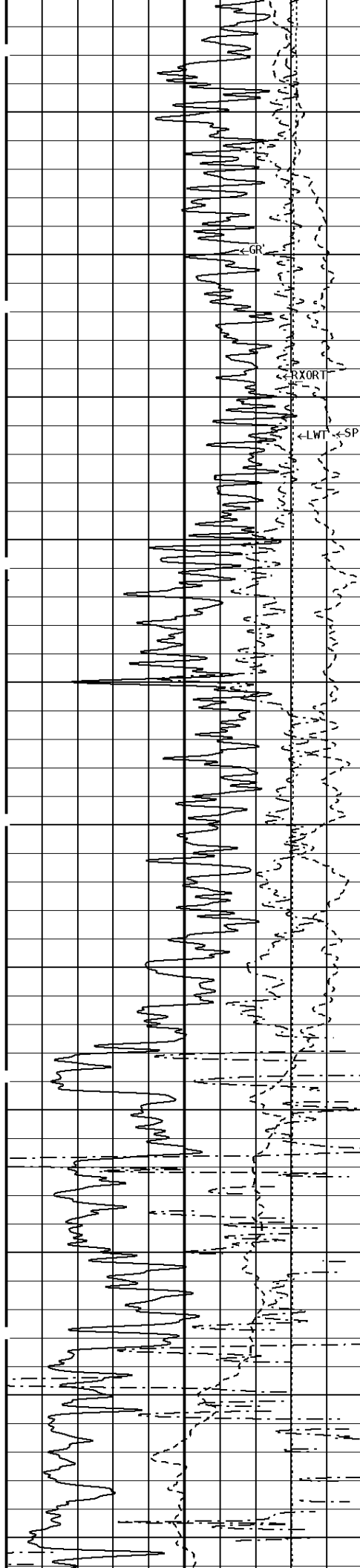
1500

←RXORT
←SP ←LWT



←DIR
←SFR

←DIC



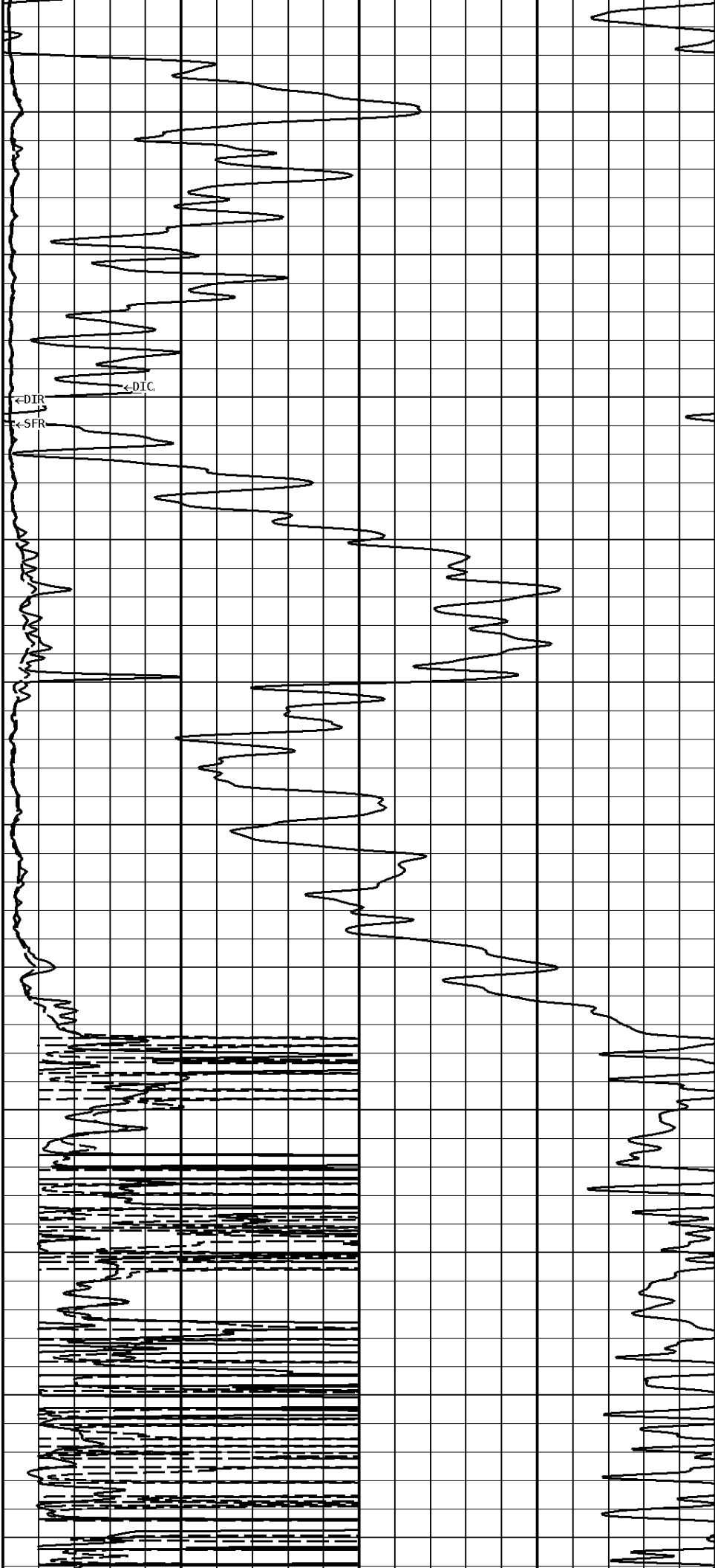
1600

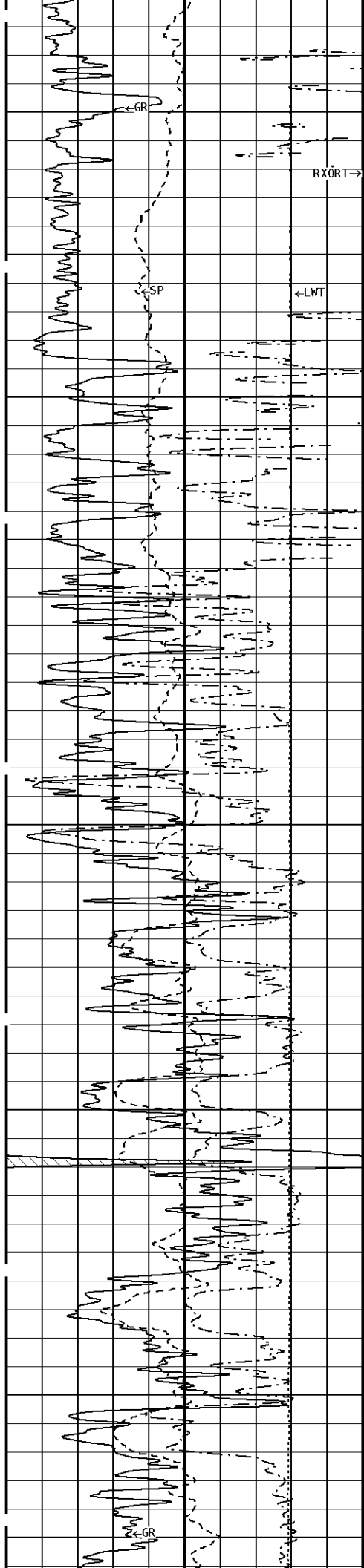
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1800

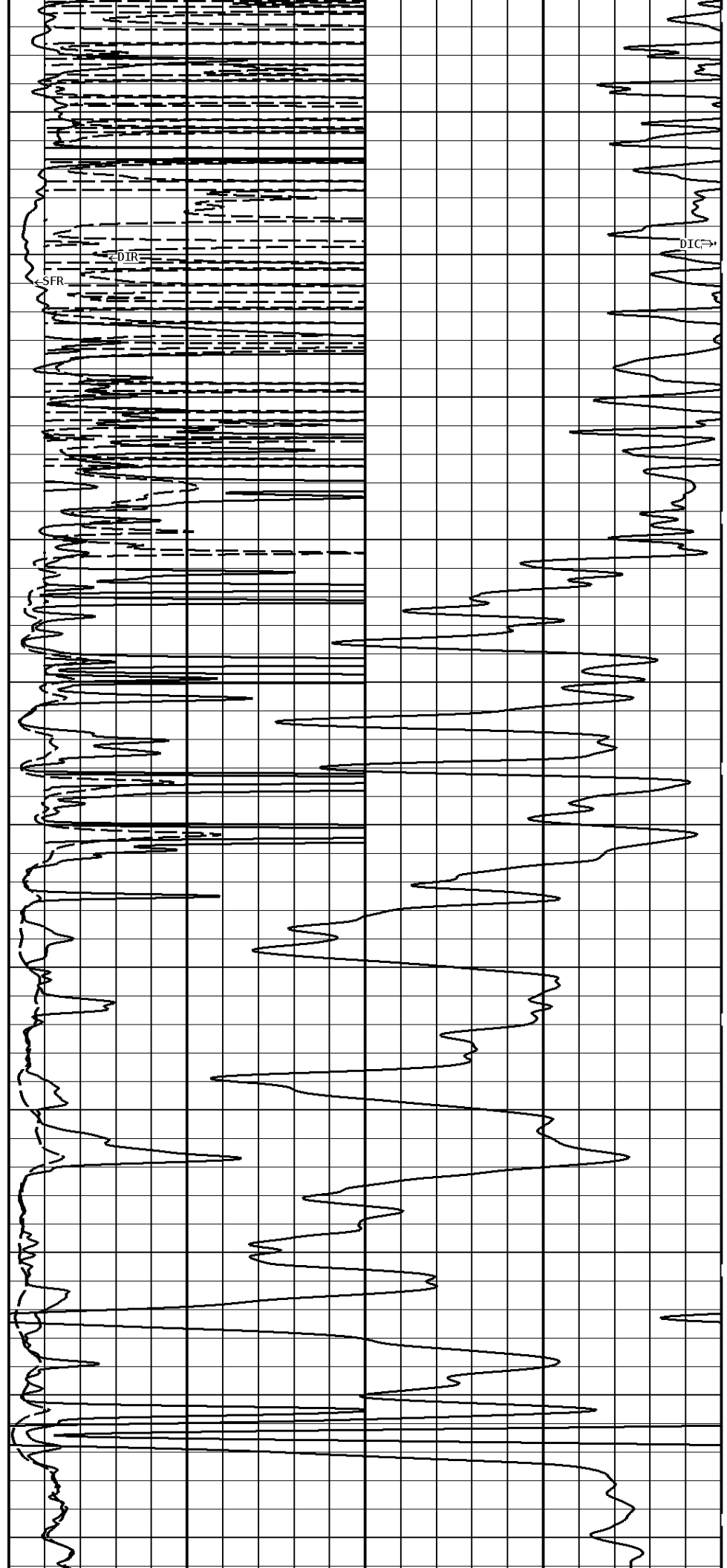
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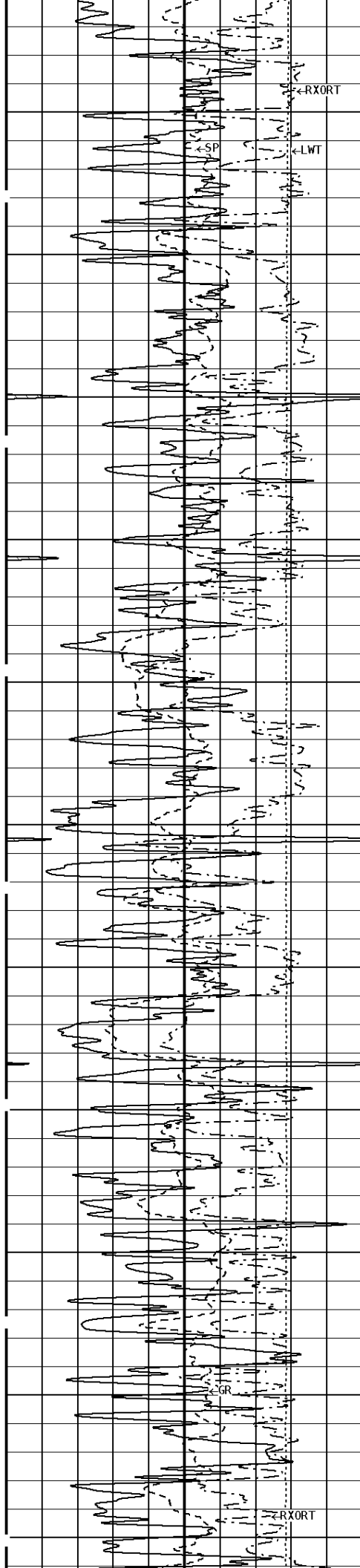
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2100
2200
2300
2400
2500
2600





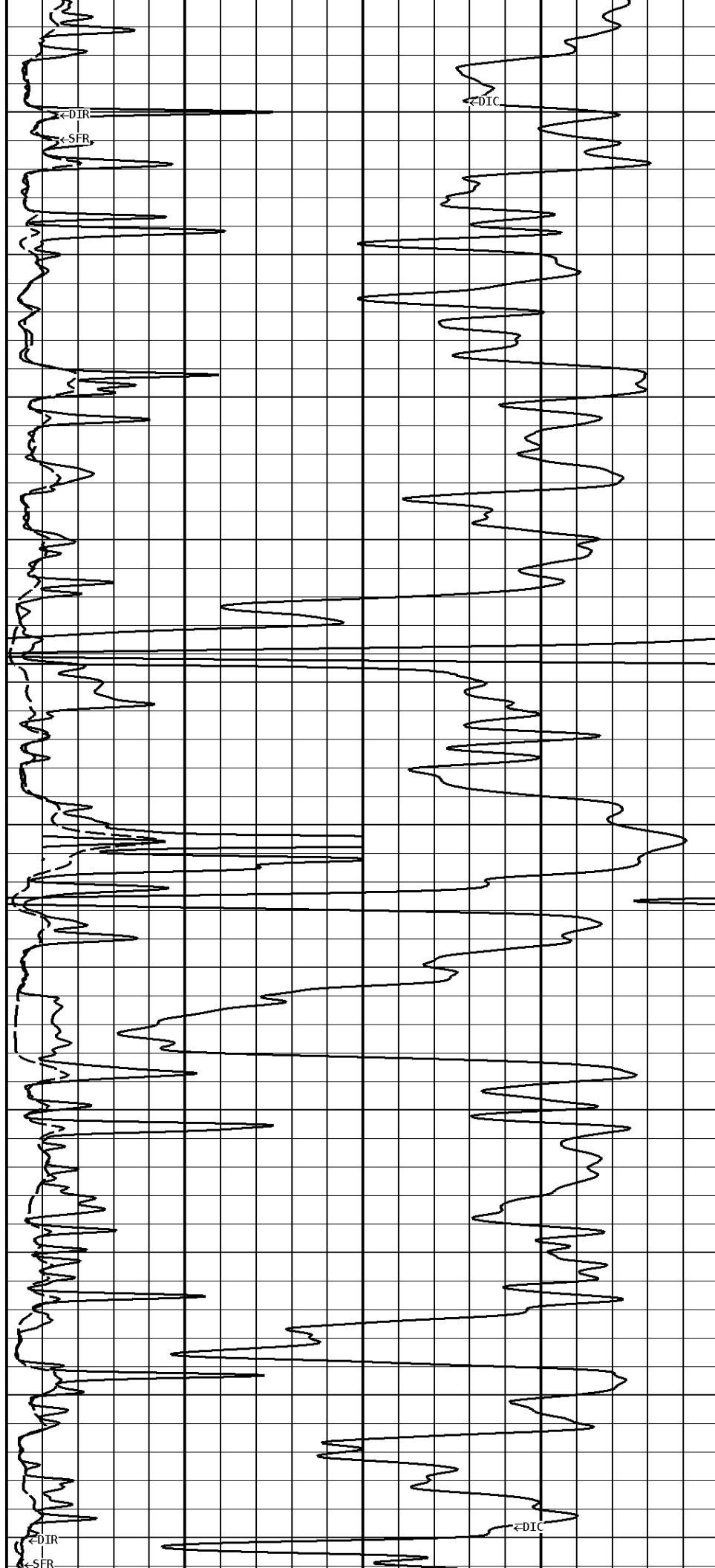
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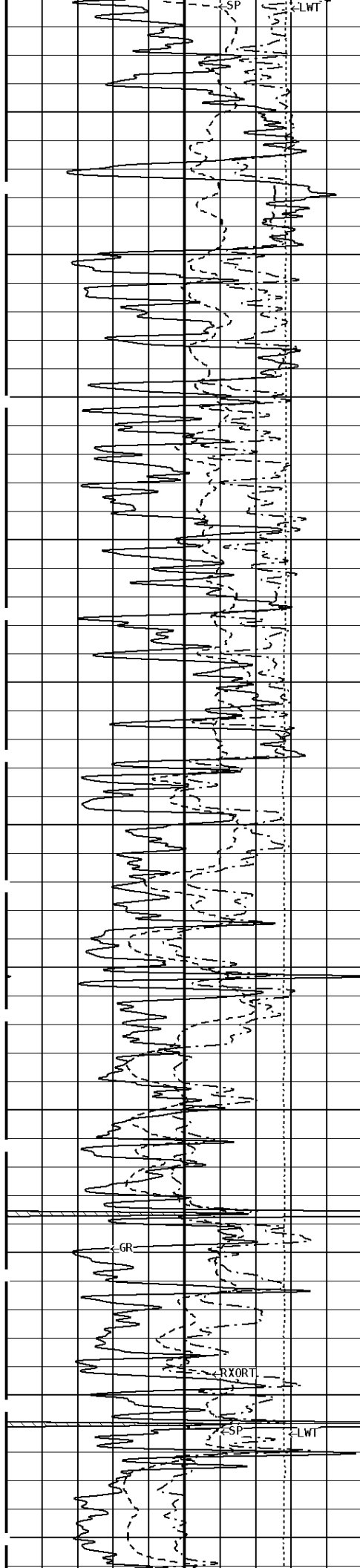
2800

2900

3000

3100





3200

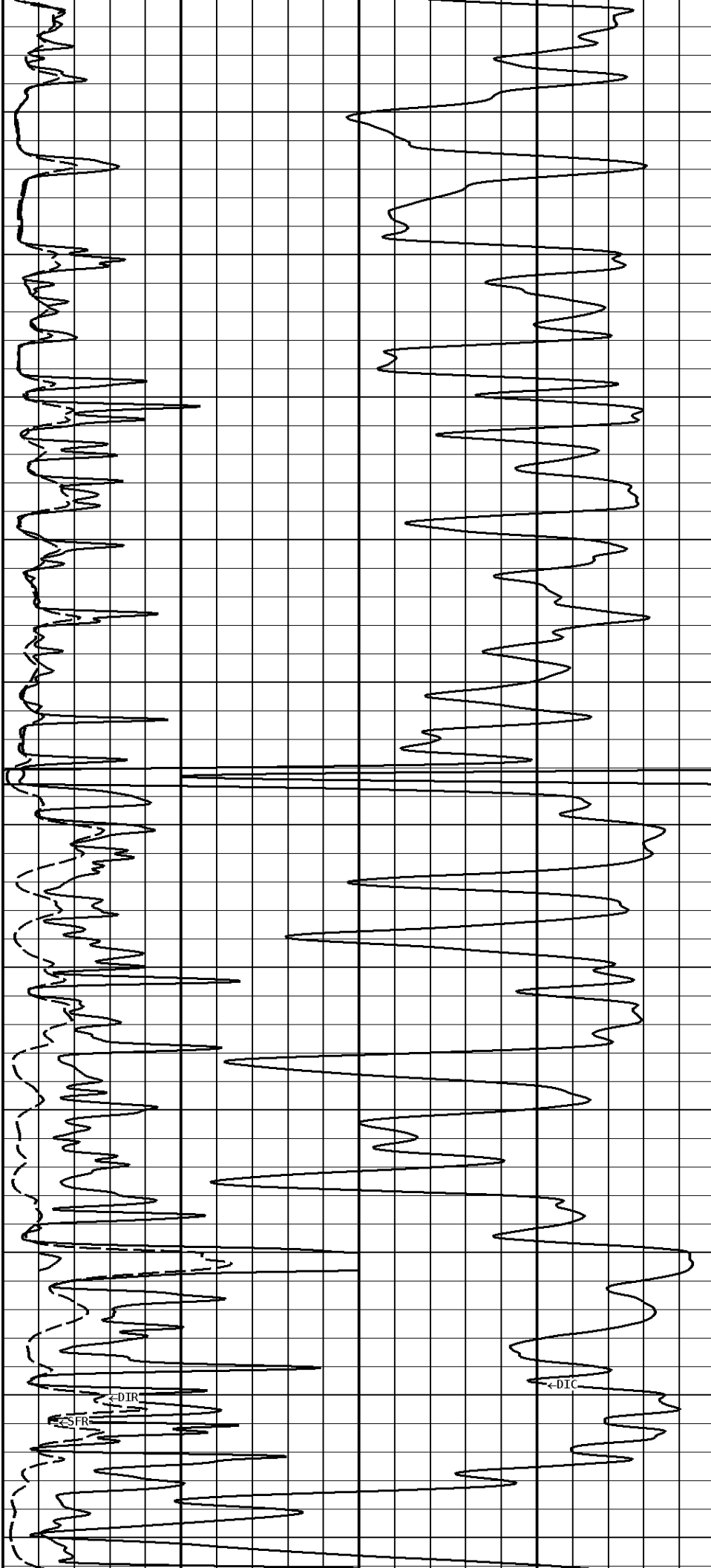
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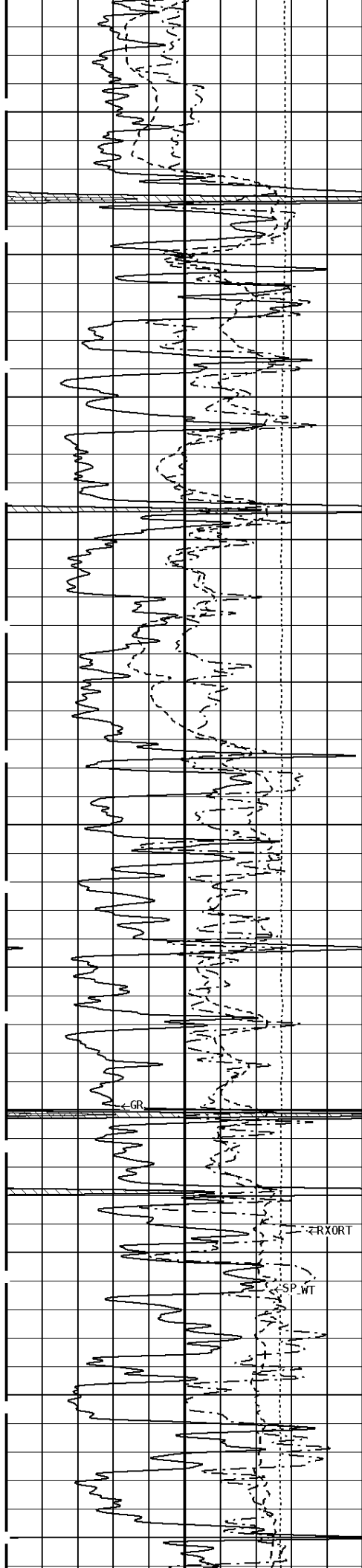
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3500

3600

3700





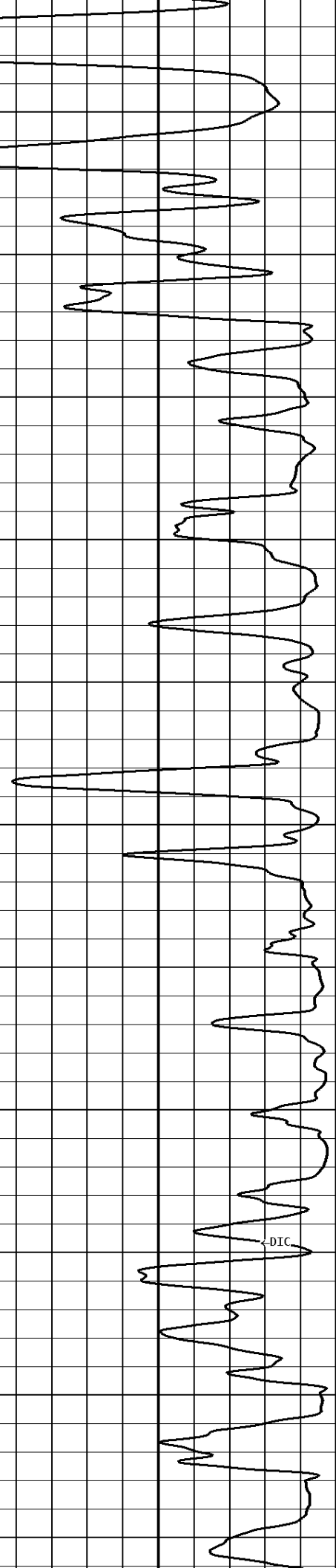
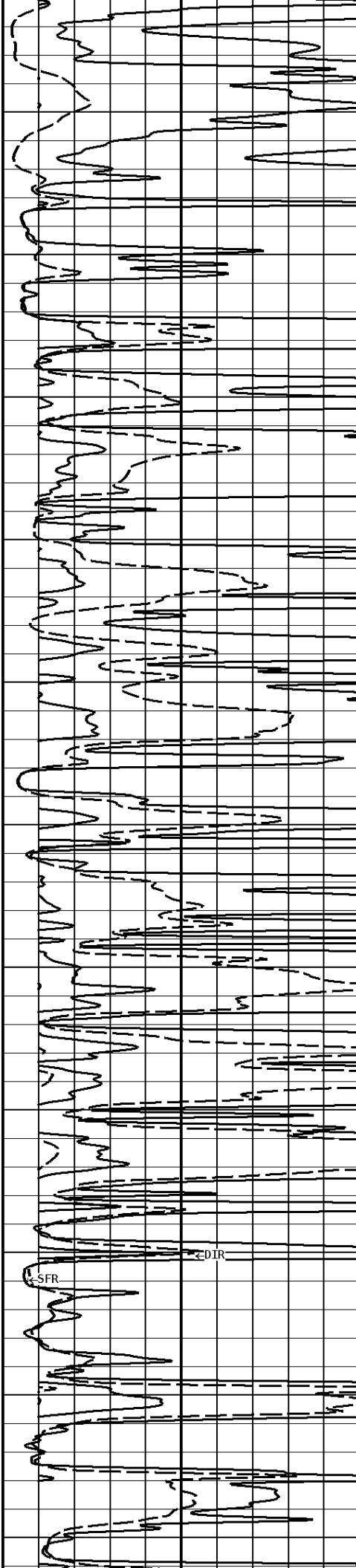
3800

3900

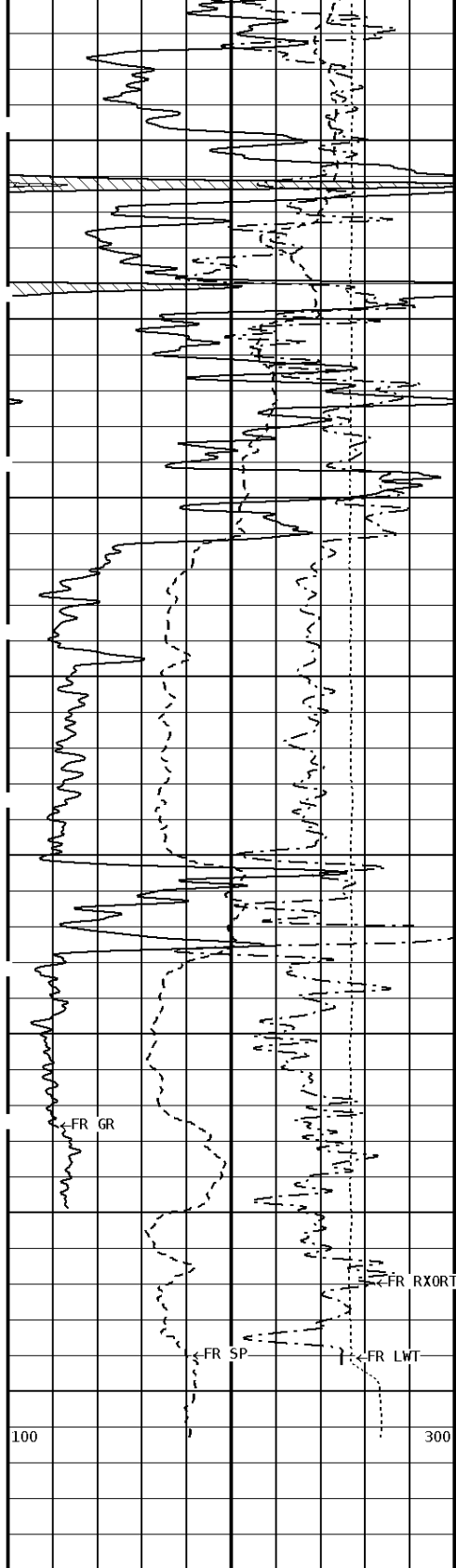
4000

4100

4200



DIR



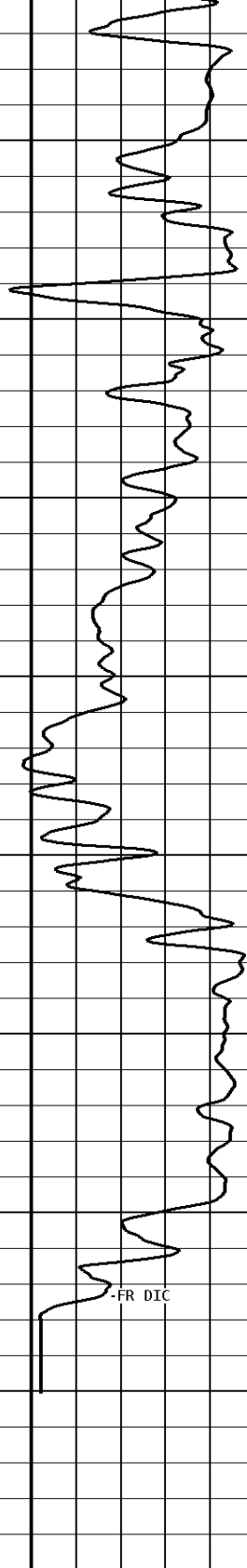
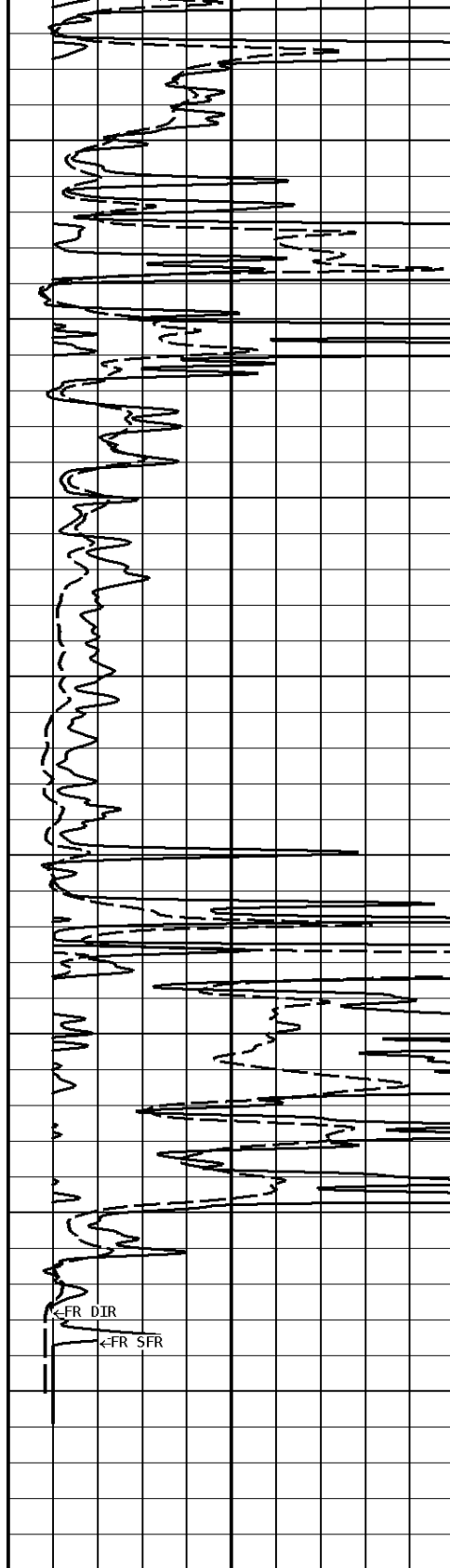
4300

4400

4500

4600

4642



1:600 SECTION
2 INCH

GAMMA RAY
API UNITS

150 0 300 150

SPONTANEOUS POTENTIAL
mV

→ ← 20

DEEP CONDUCTIVITY
MMHO

2000
1000

1000
0

DEEP INDUCTION
OHMM

0.0
0.0

500.0
50.0

TENSION LBS	
10000	0
RX0/RT	
-160	40

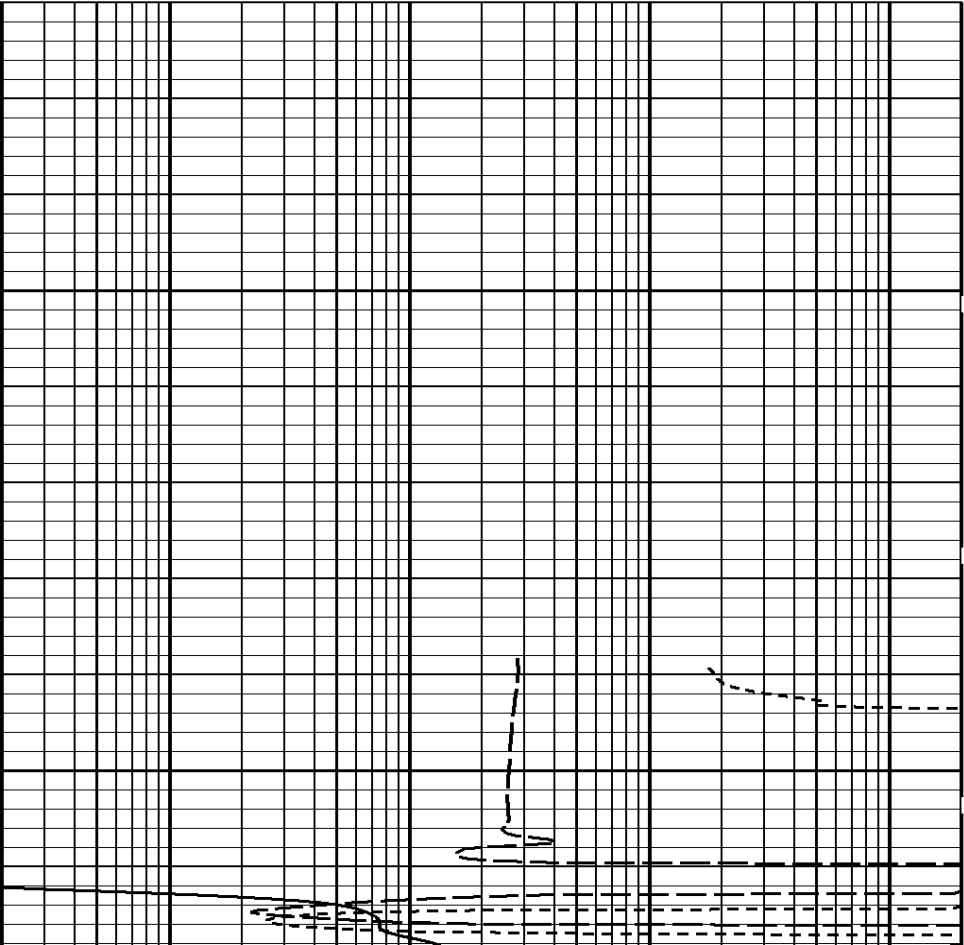
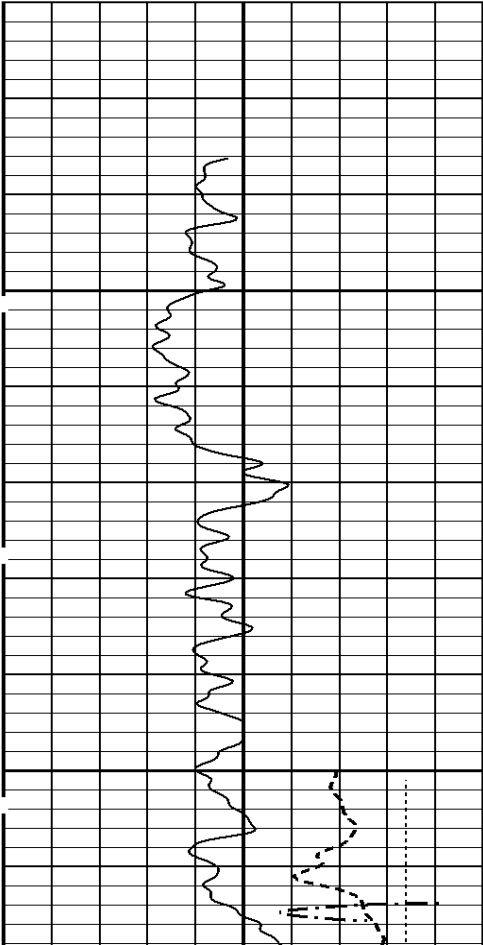
SHALLOW FOCUSED RESISTIVITY OHMM	
0.0	500.0
0.0	50.0

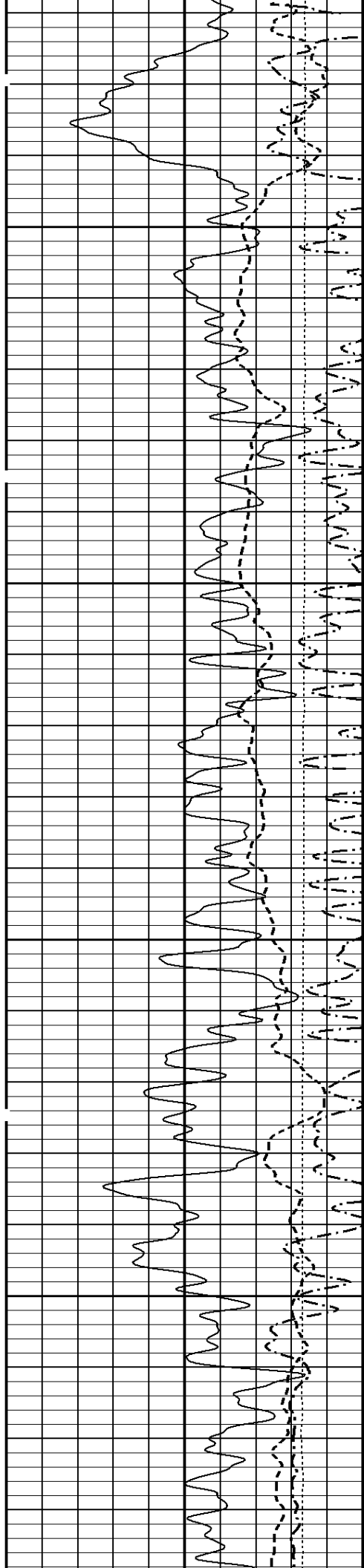
Well File: ANDERSON_PRARIE_FARMS_JAN27_QUINK	Scale: 1:240
Segment: V1.D1.S11 ASMAIN	Acquired: Not Available
Reference: 0	Processed: Not Available

RX0/RT	
-160	40
TENSION LBS	
10000	0
SPONTANEOUS POTENTIAL mV	
→ ←20	
GAMMA RAY API UNITS	
150	300
0	150

SHALLOW FOCUSED RESISTIVITY OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0
DEEP INDUCTION OHMM	
0.2	2000.0

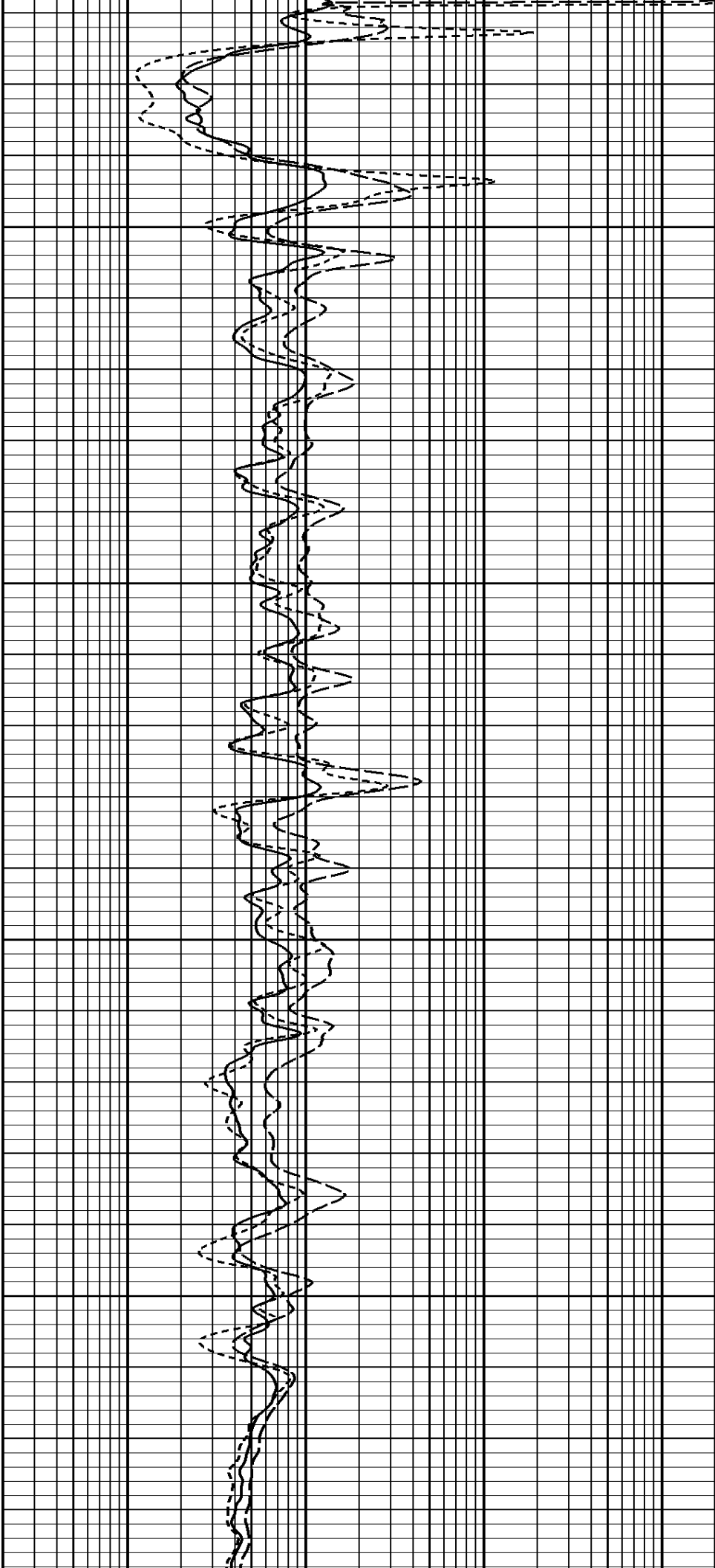
1:240 MAIN SECTION	
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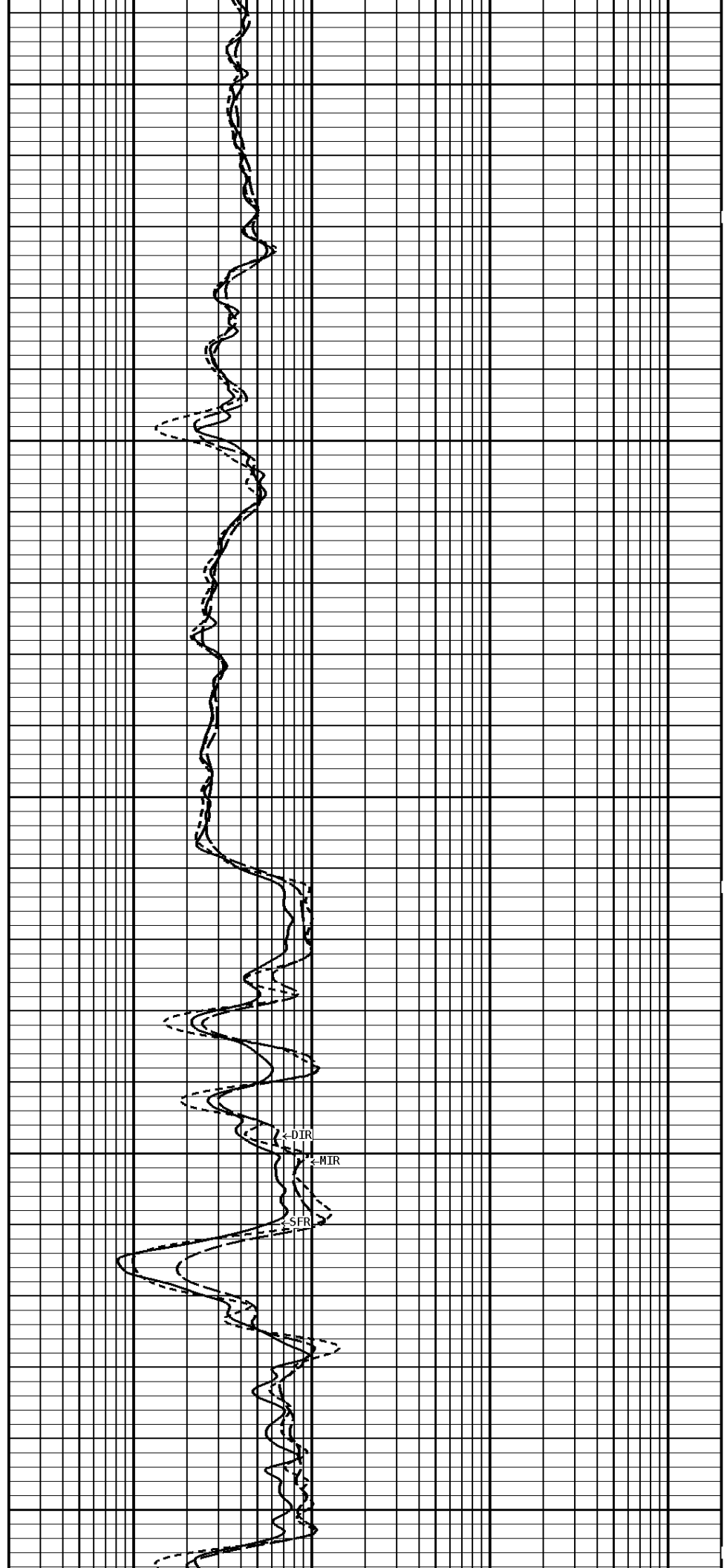
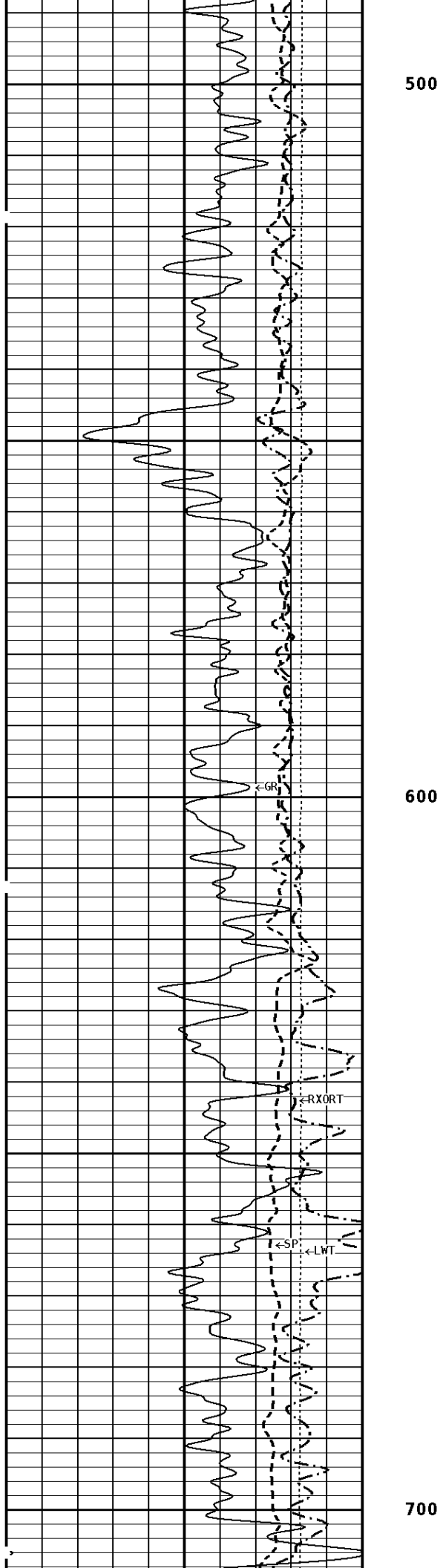


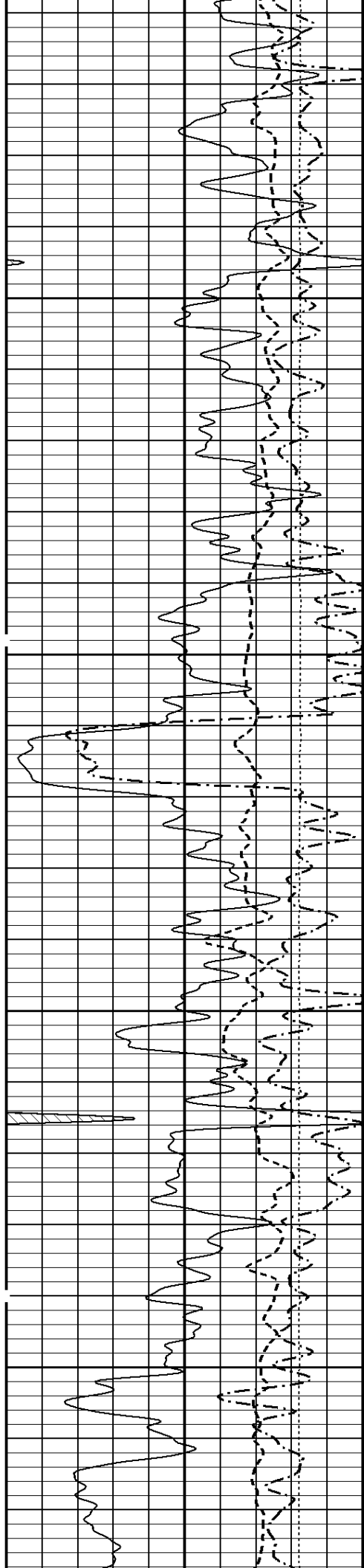


300

400

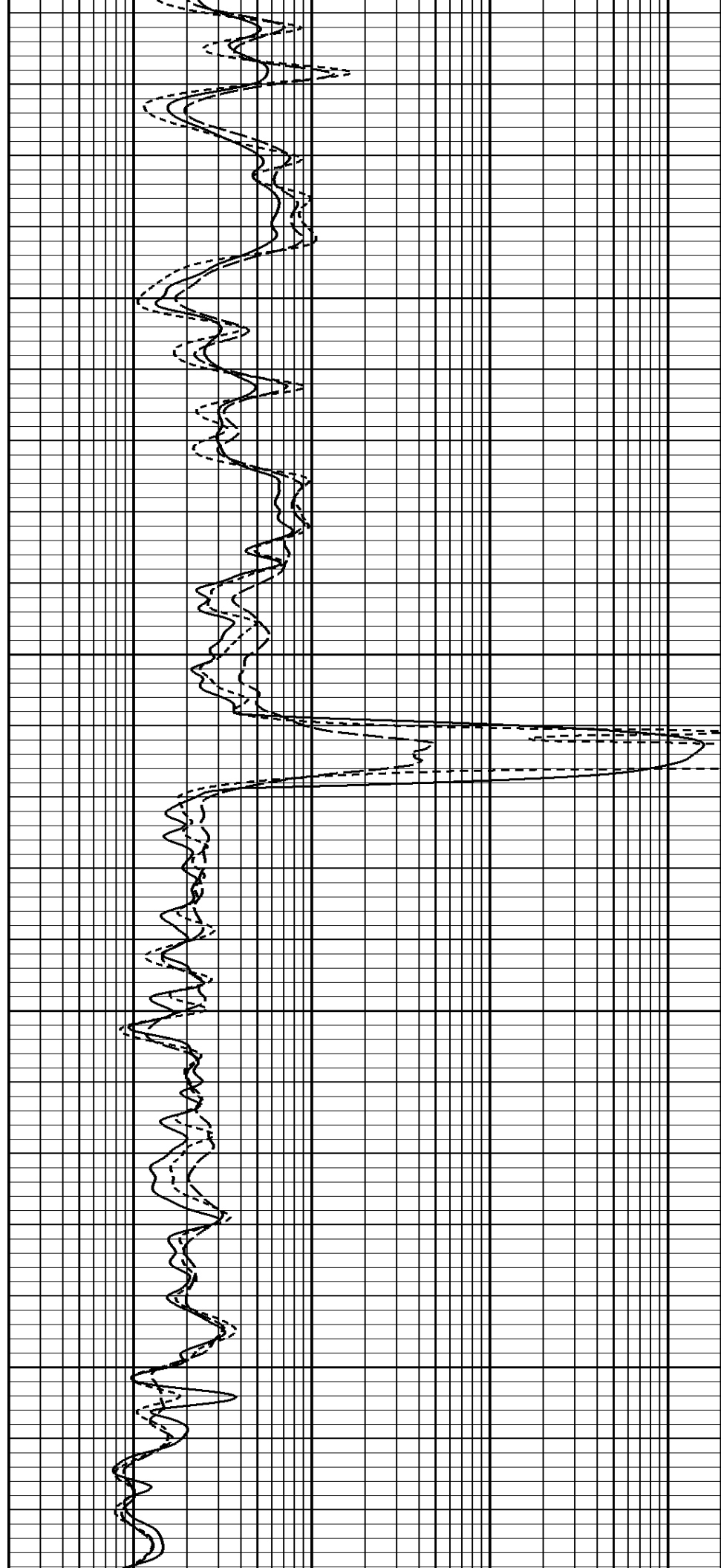


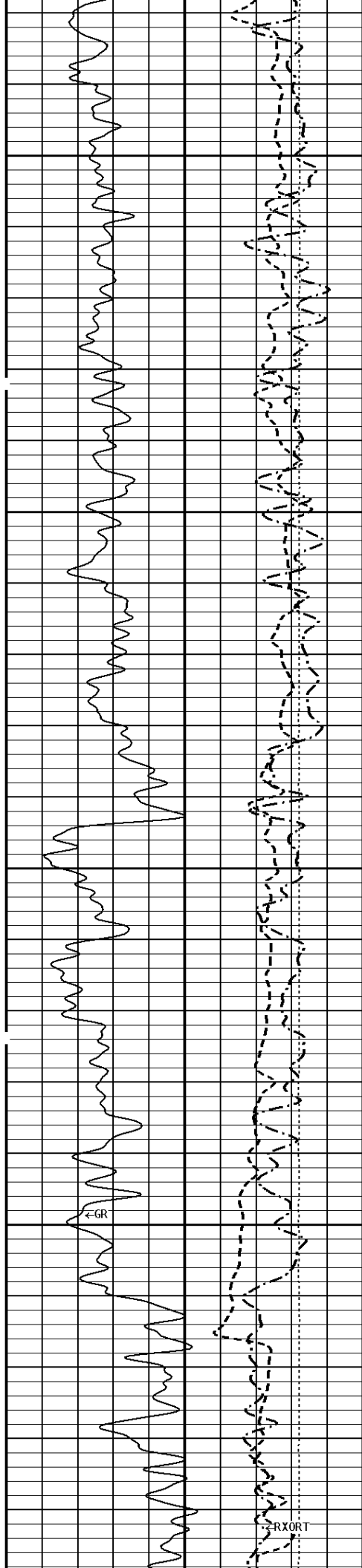




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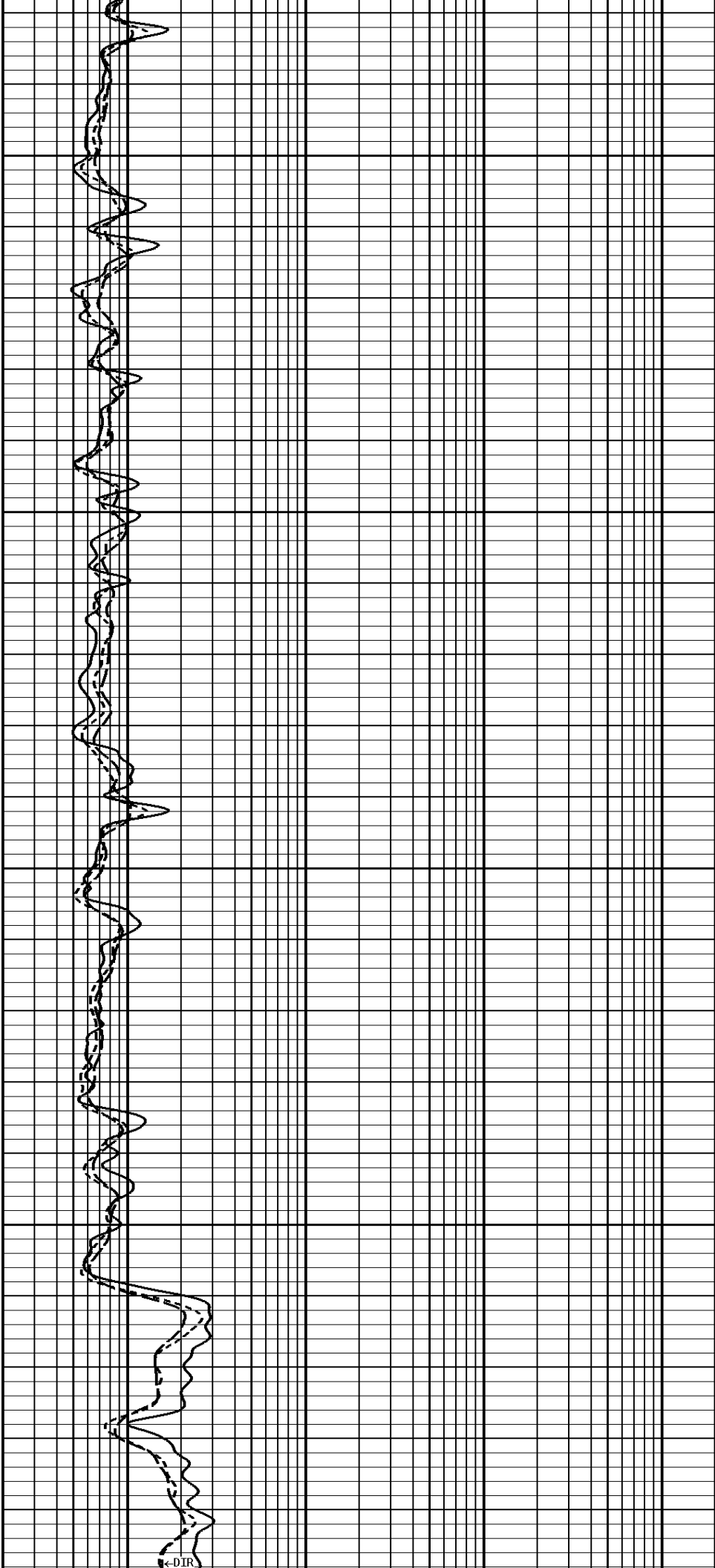
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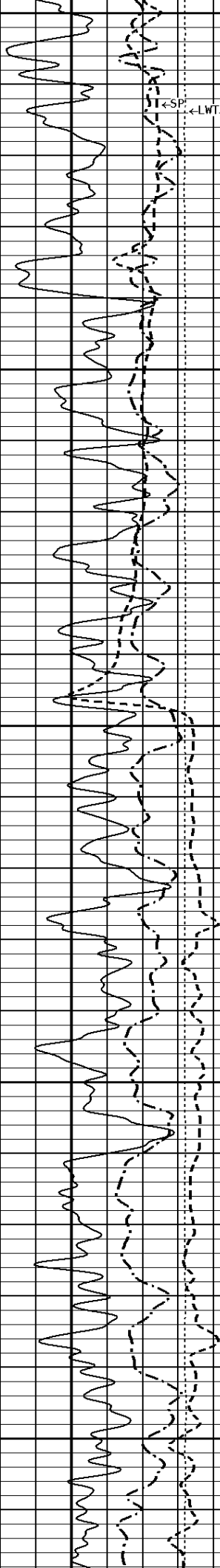




1000

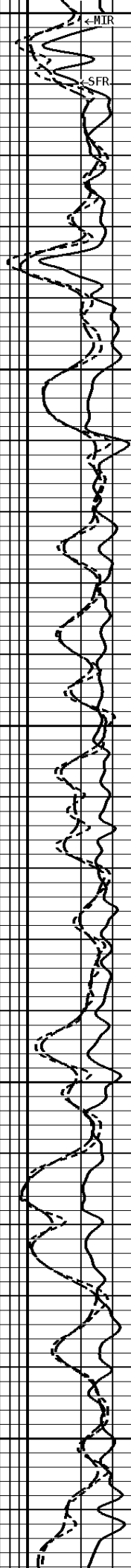
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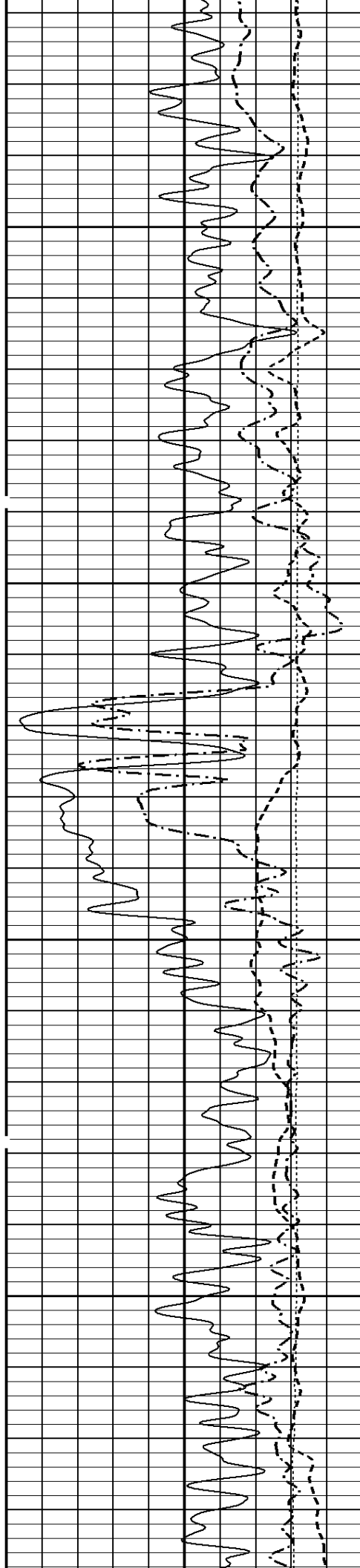




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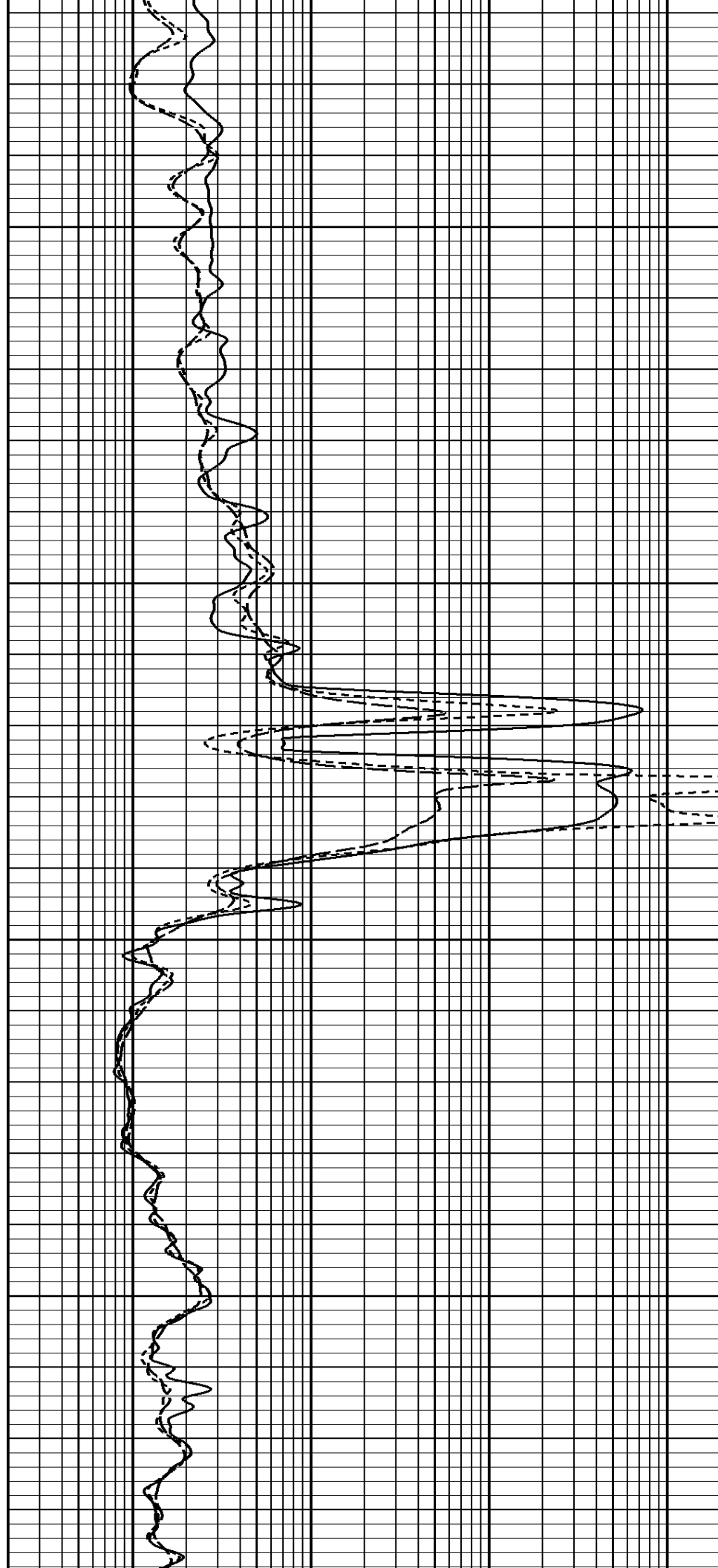
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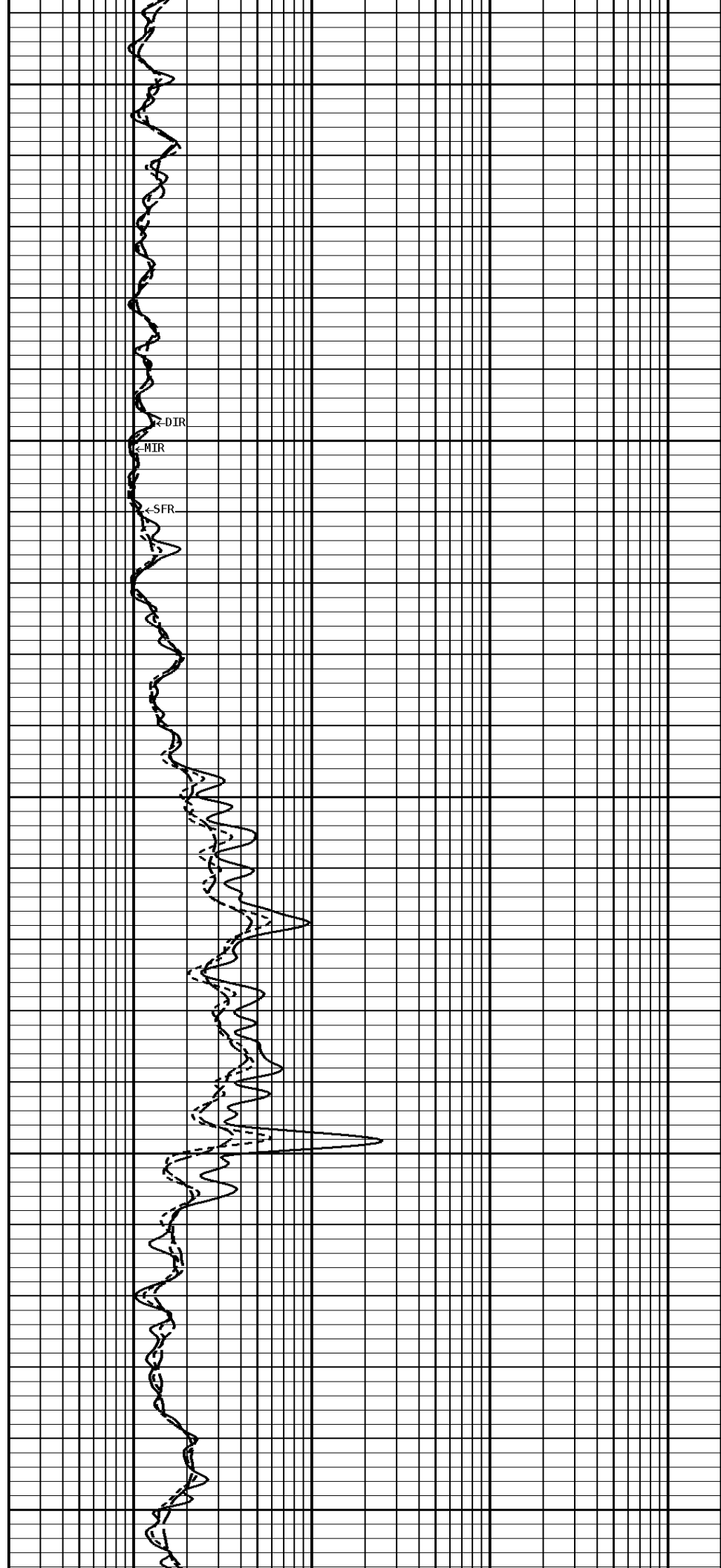
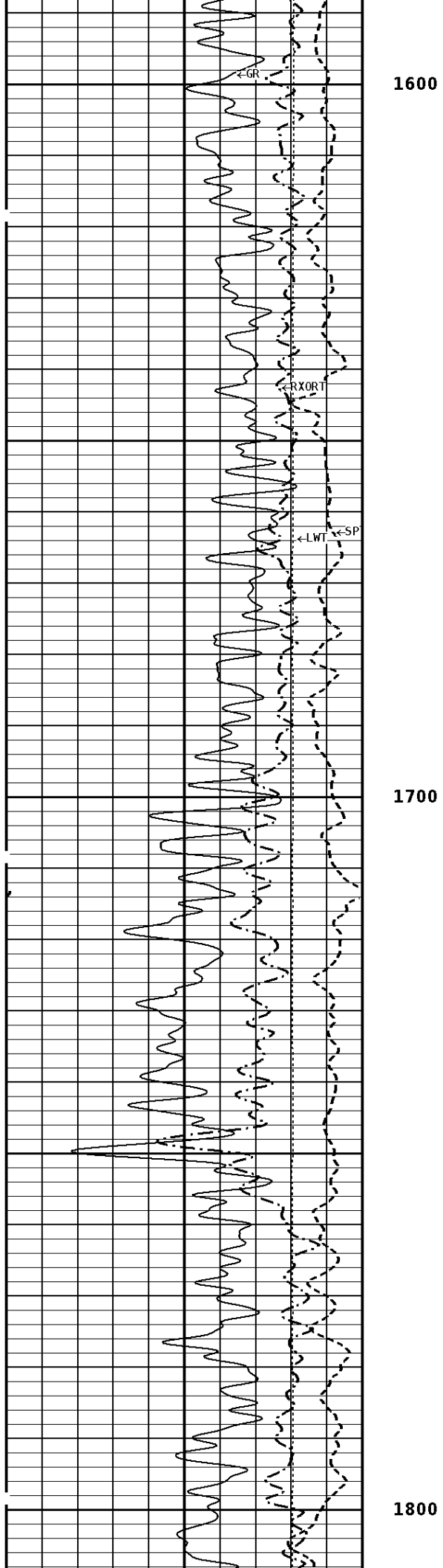


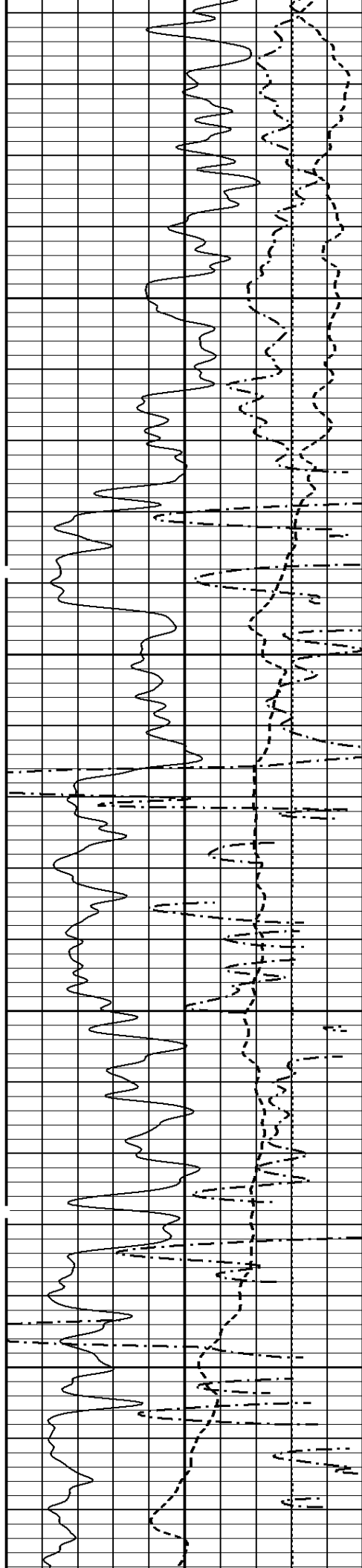


1400

1500

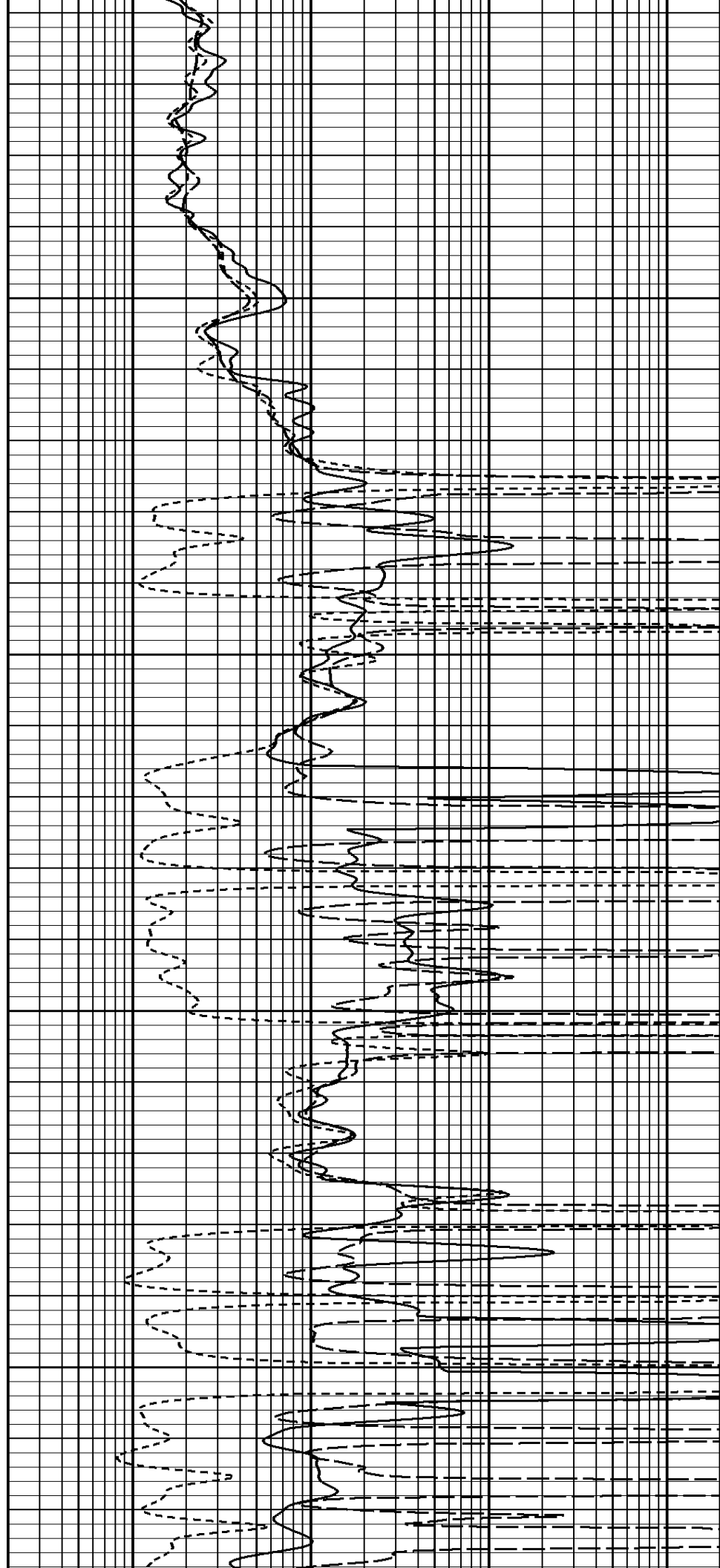


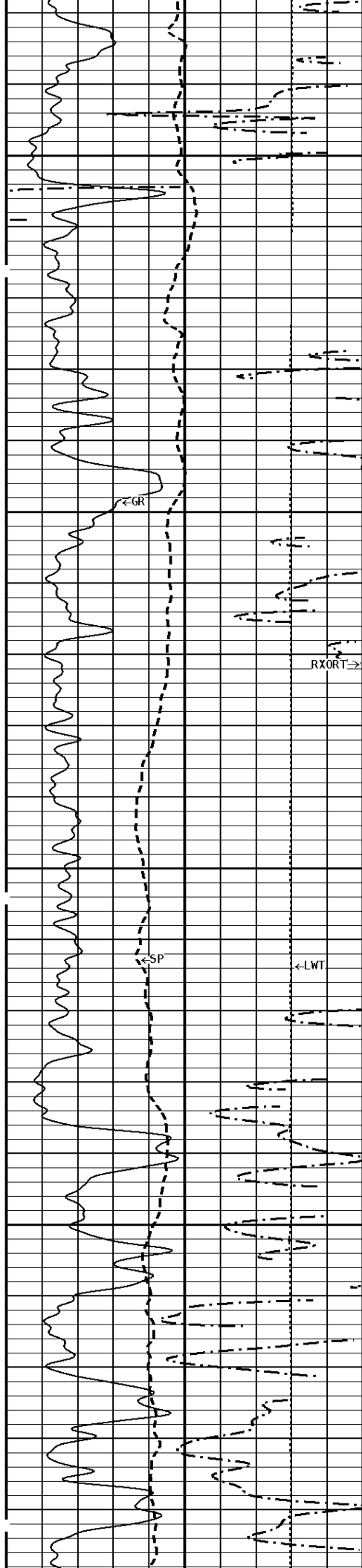




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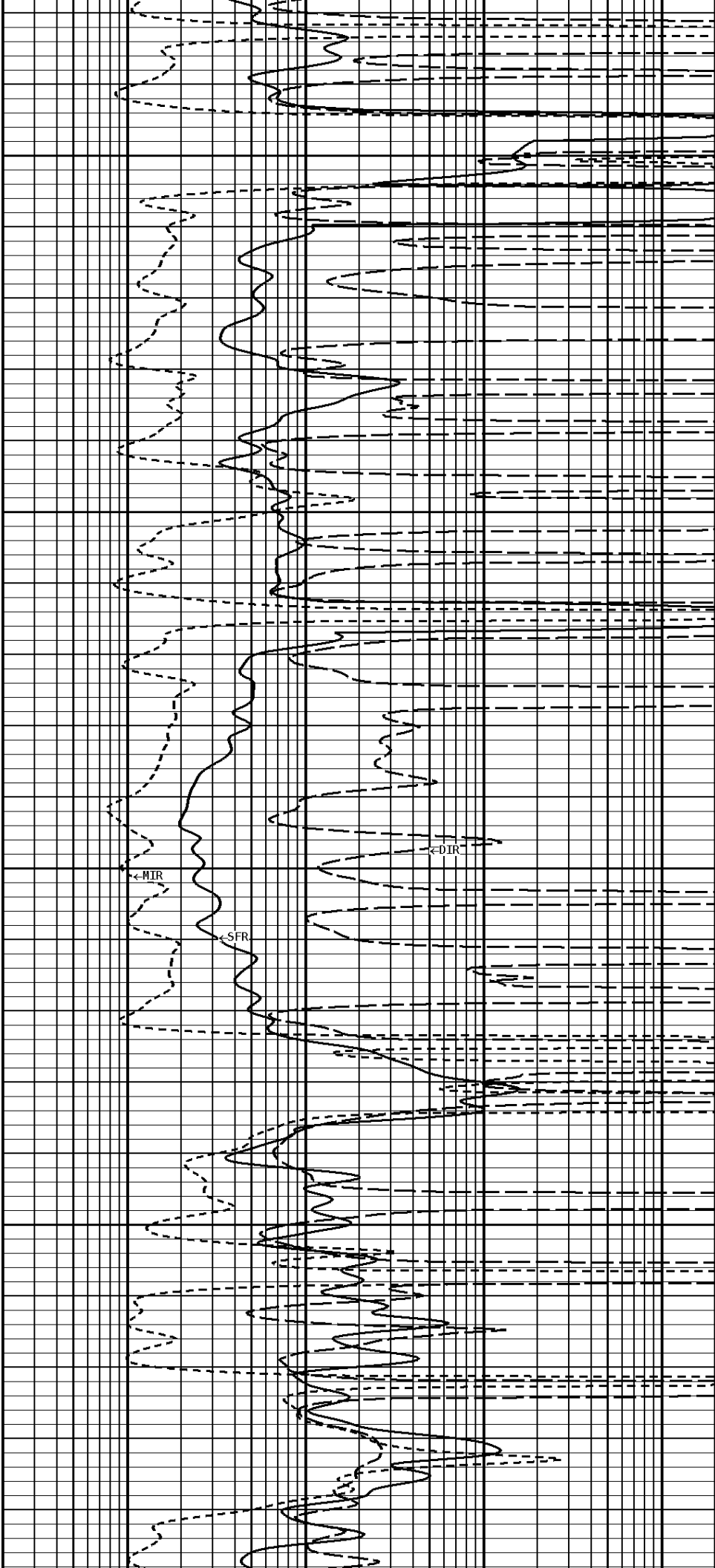
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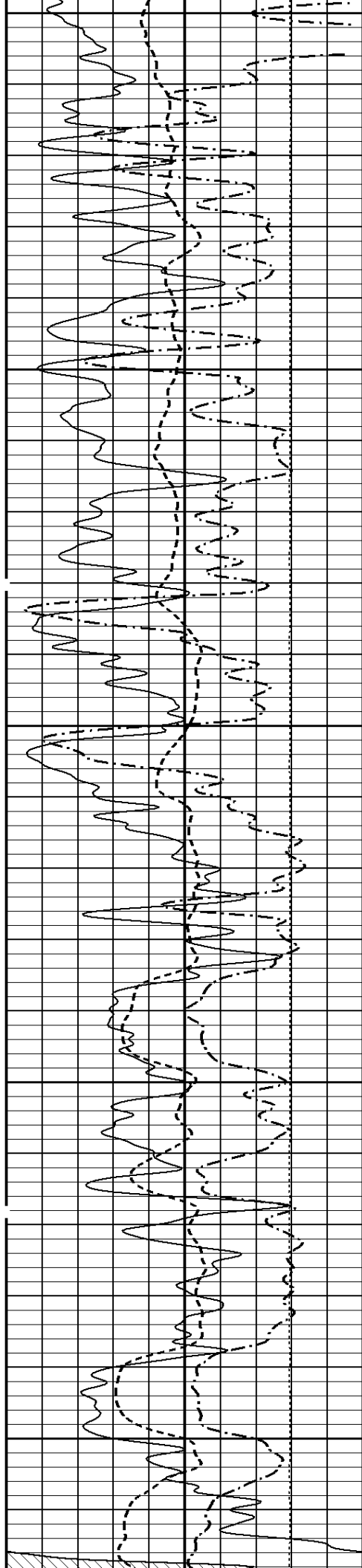




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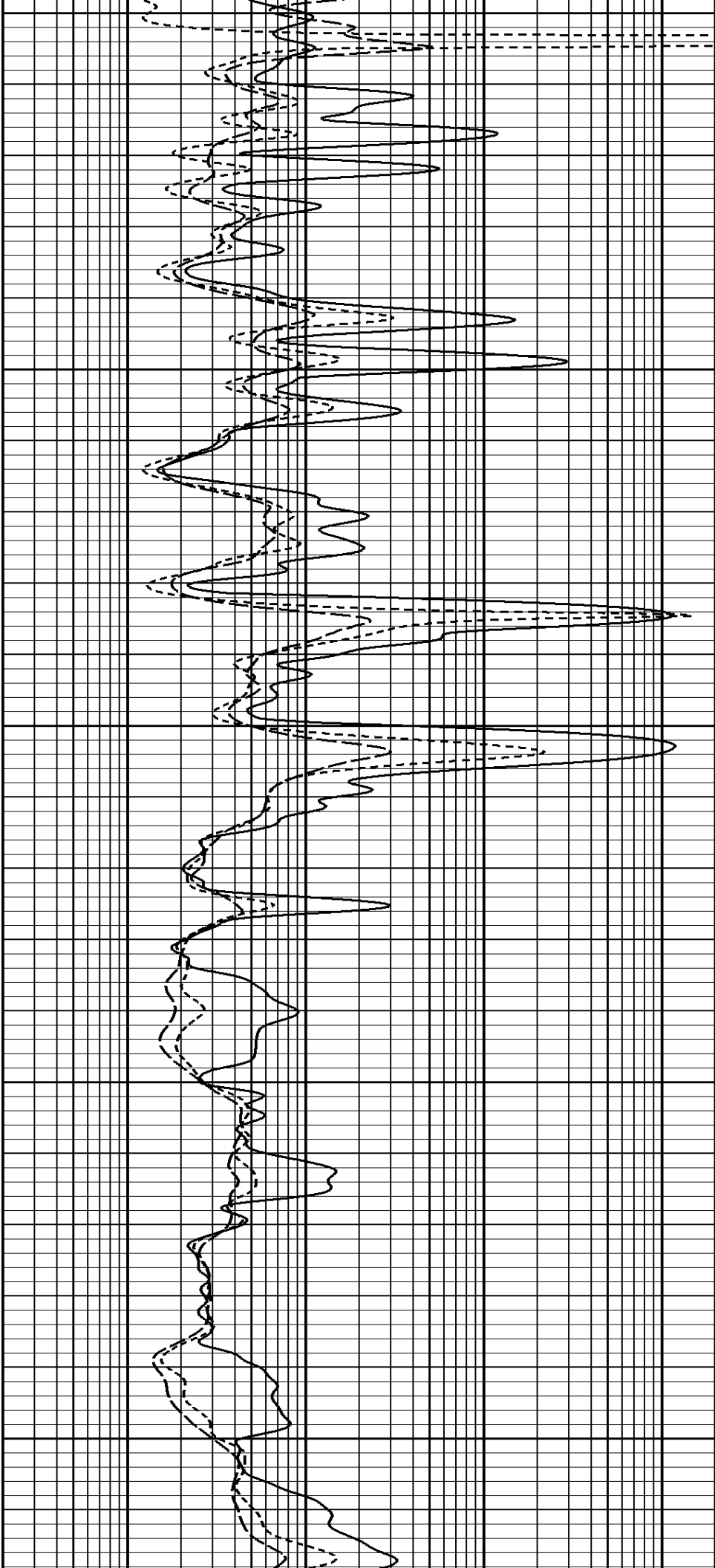
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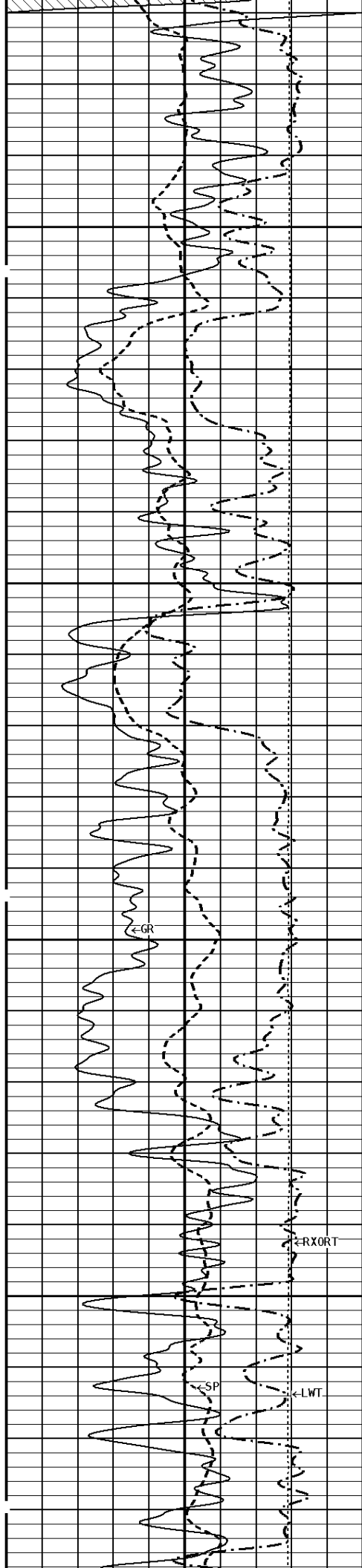




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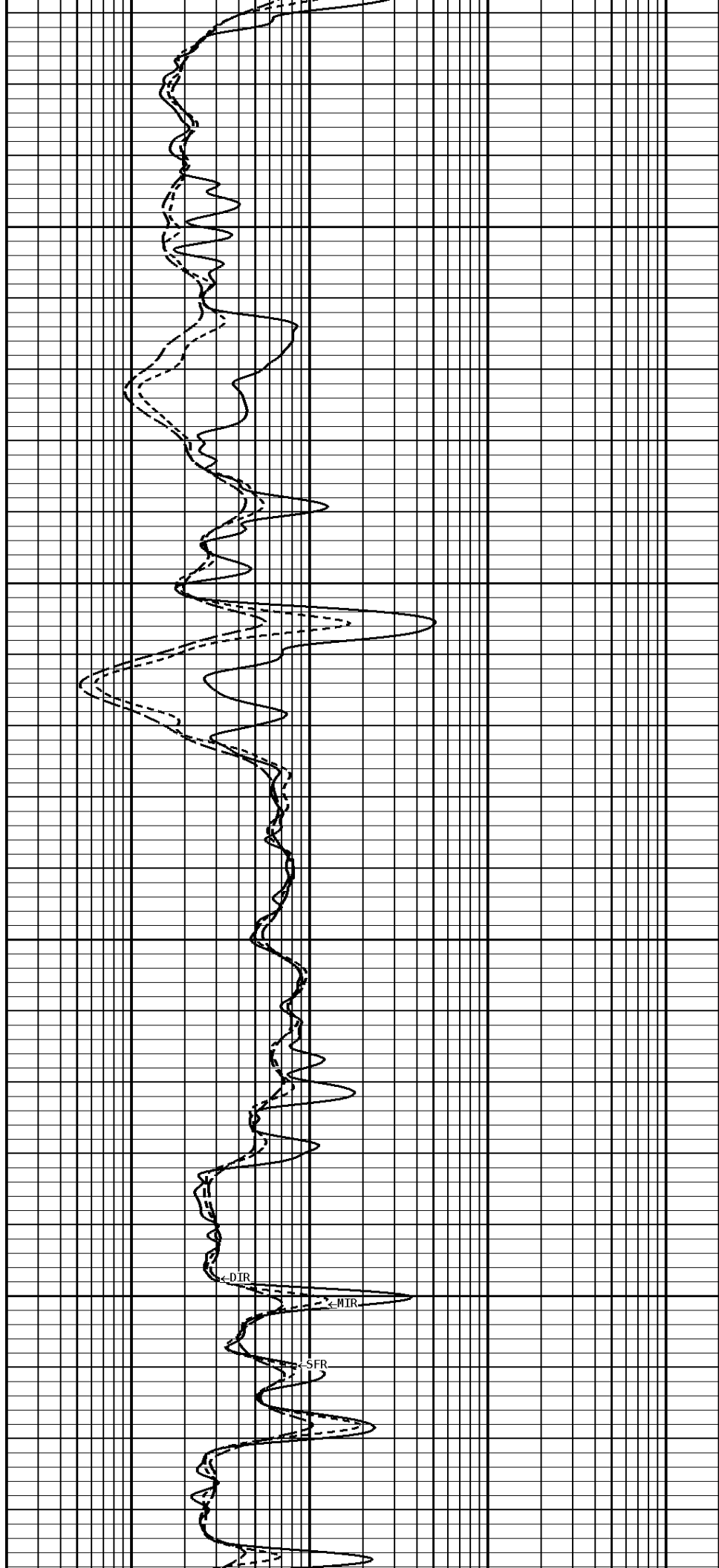
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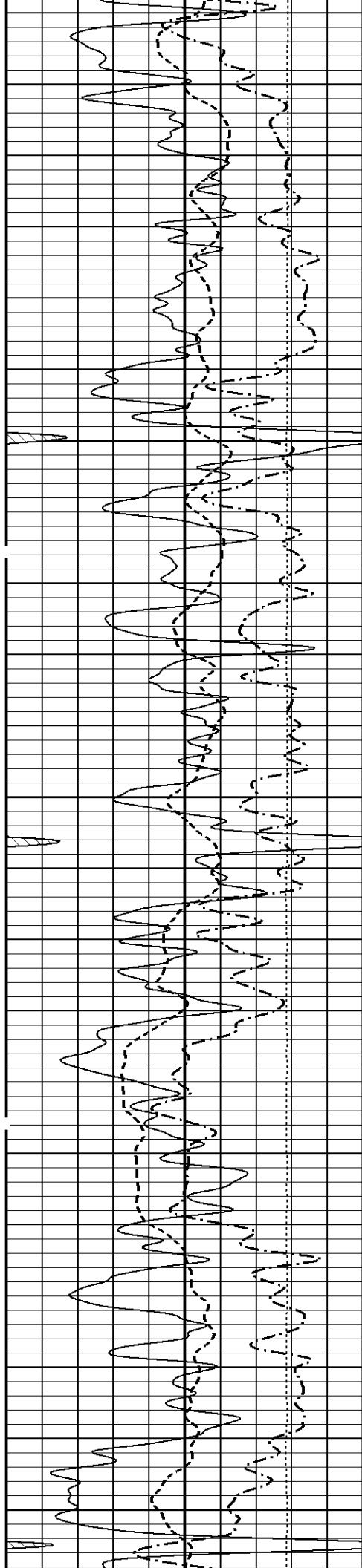




2500

2600

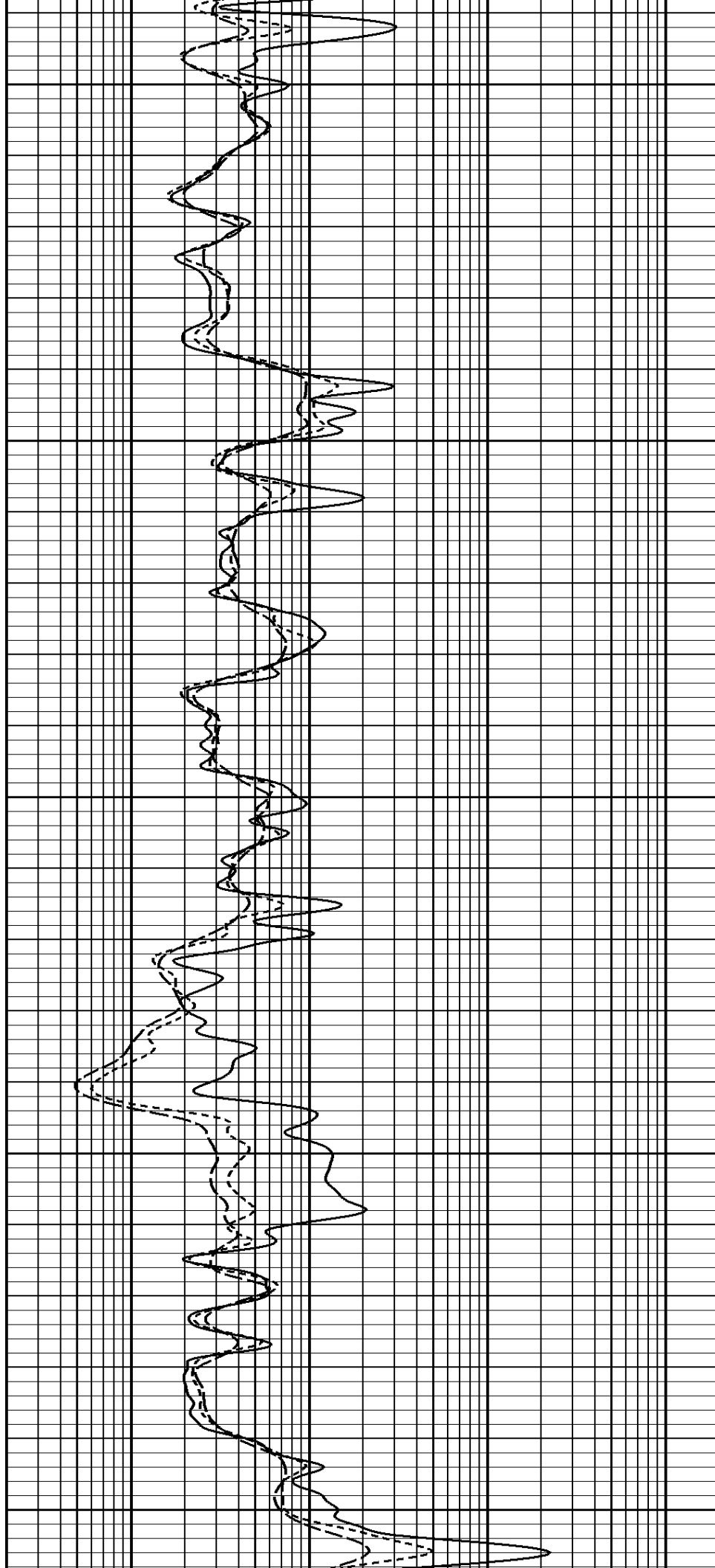


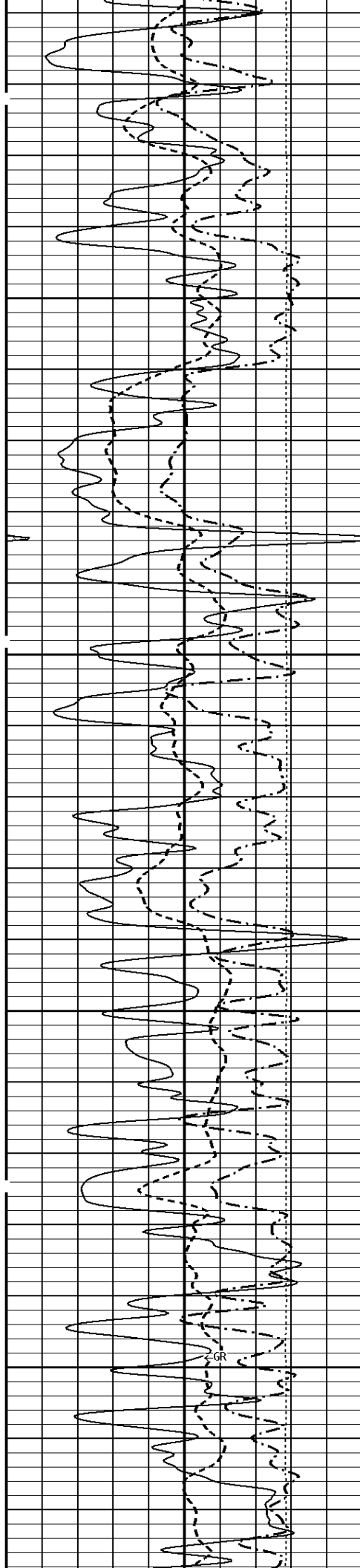


2700

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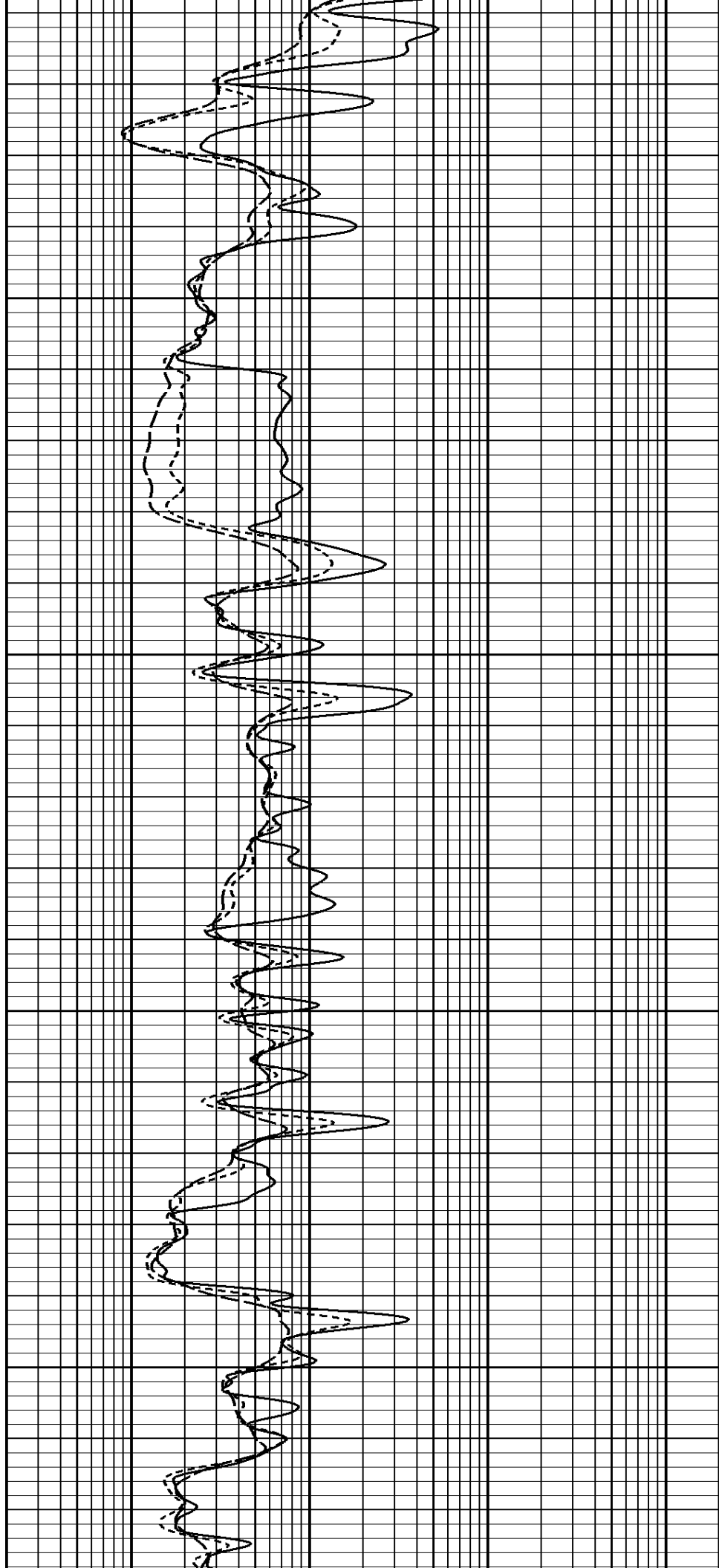
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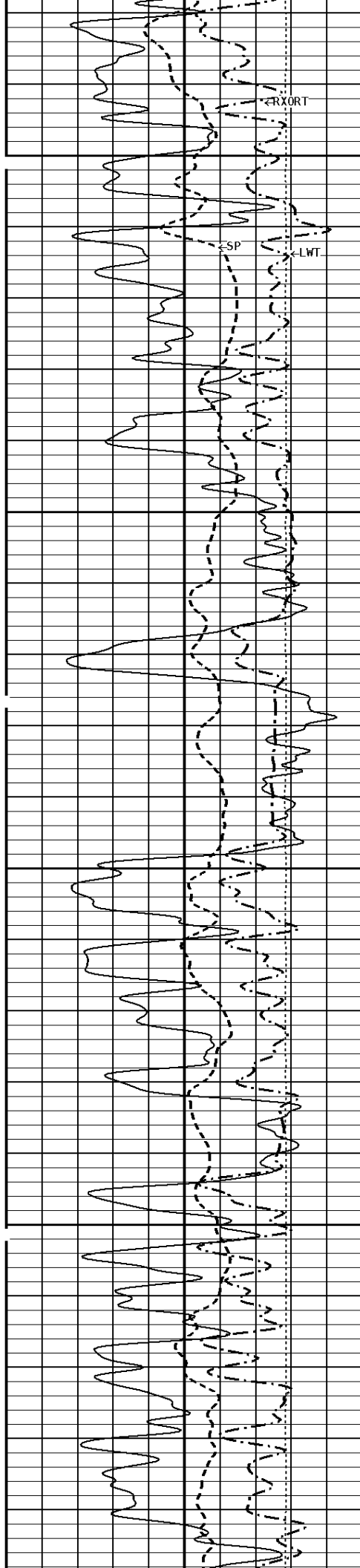




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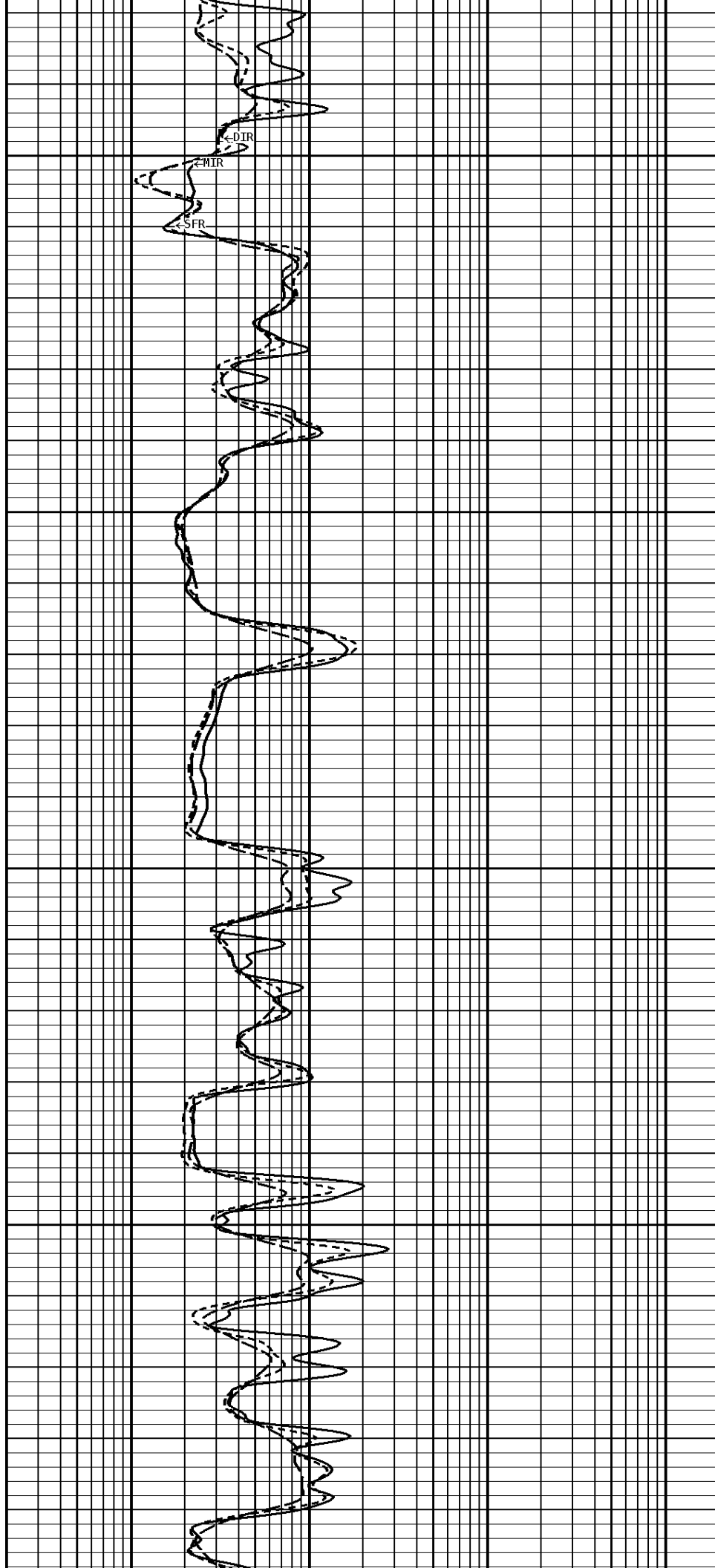
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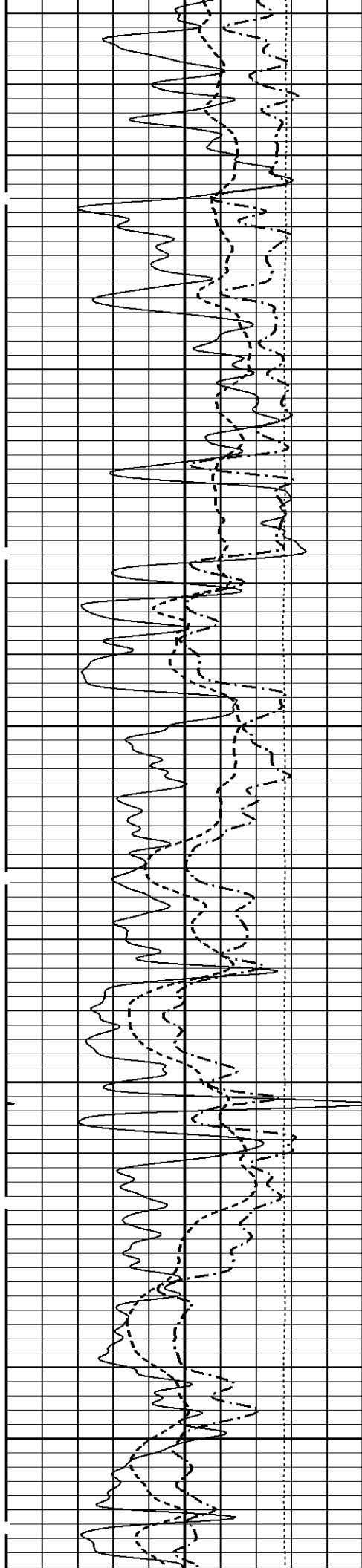




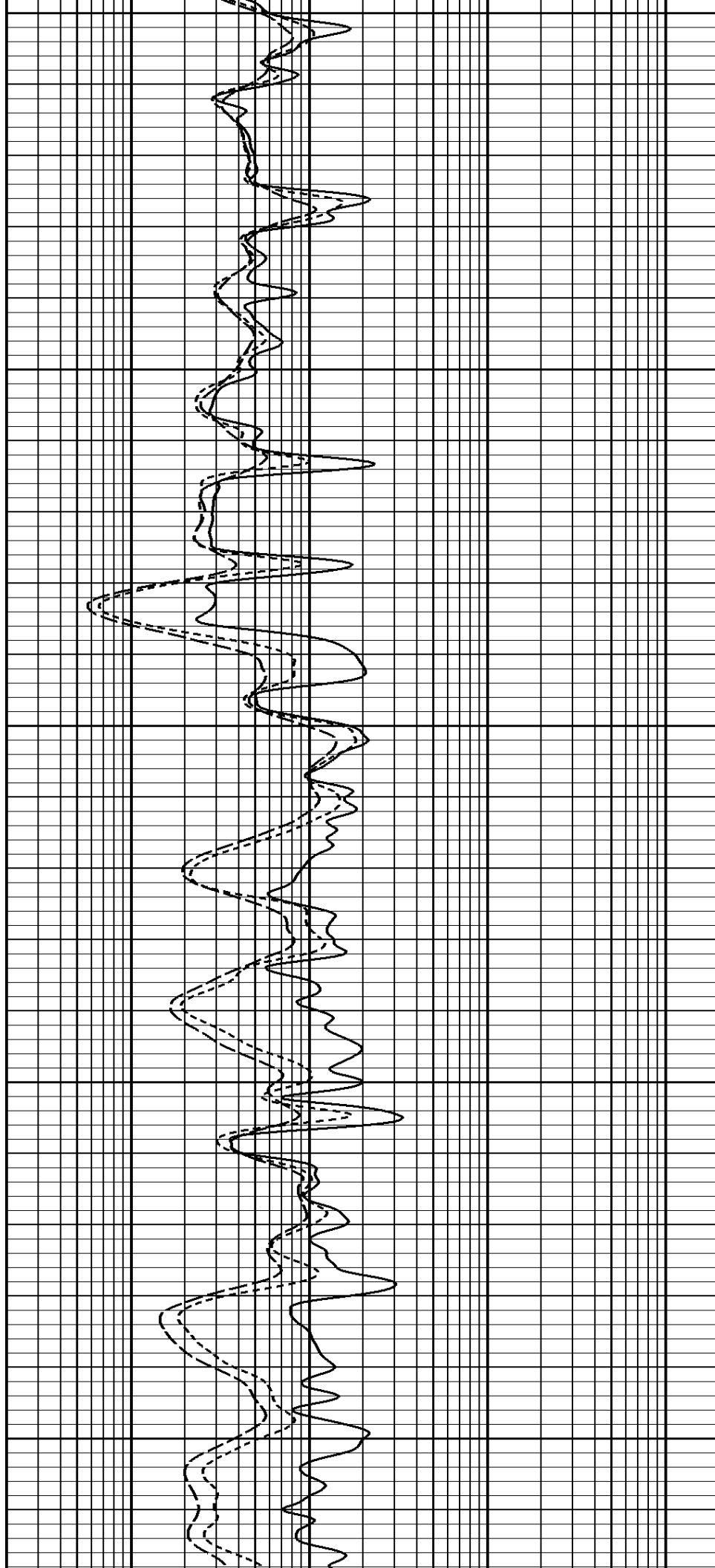
3200

3300

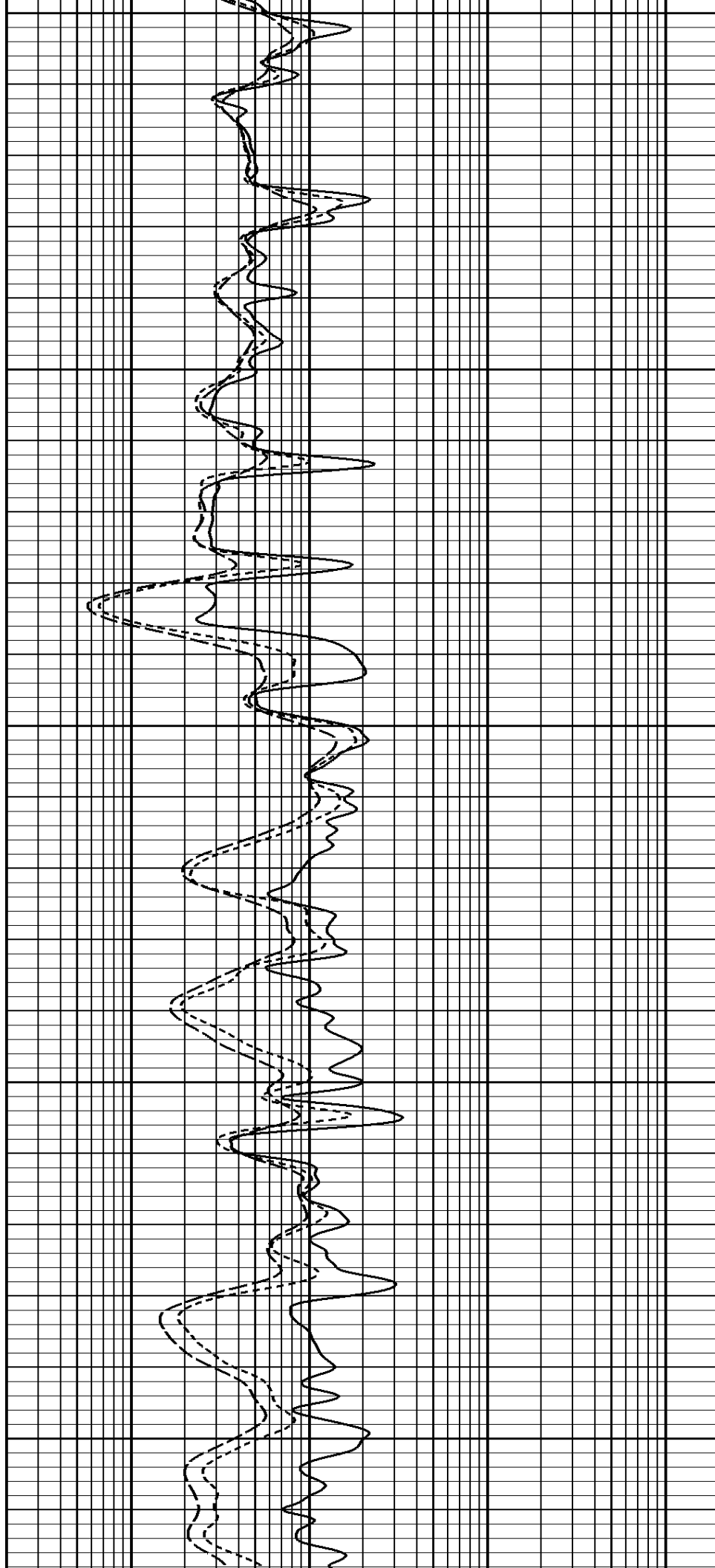
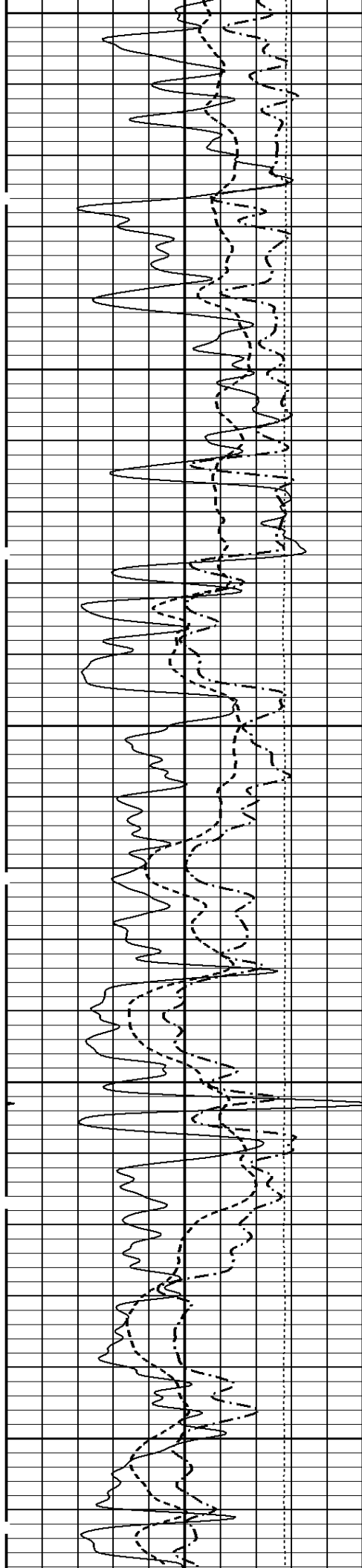


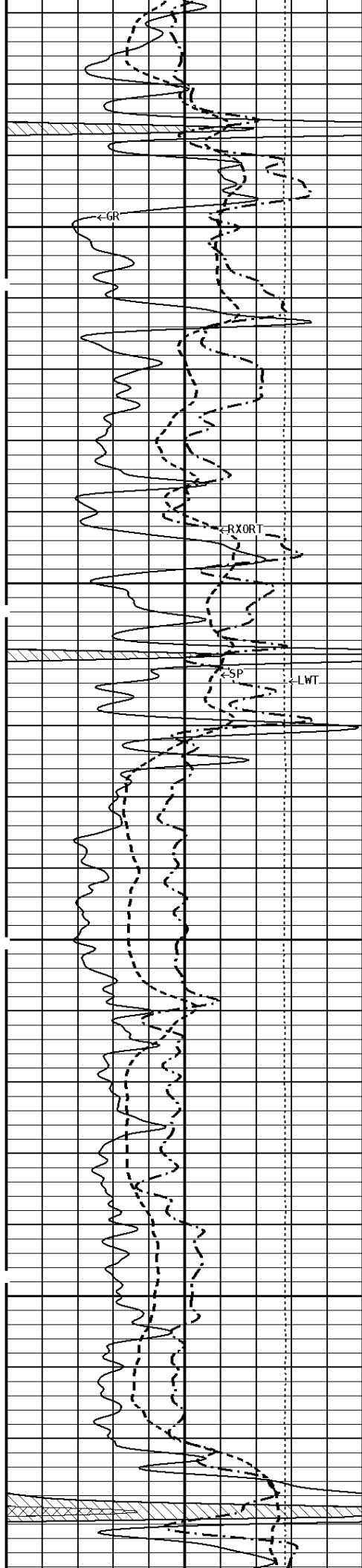


3400



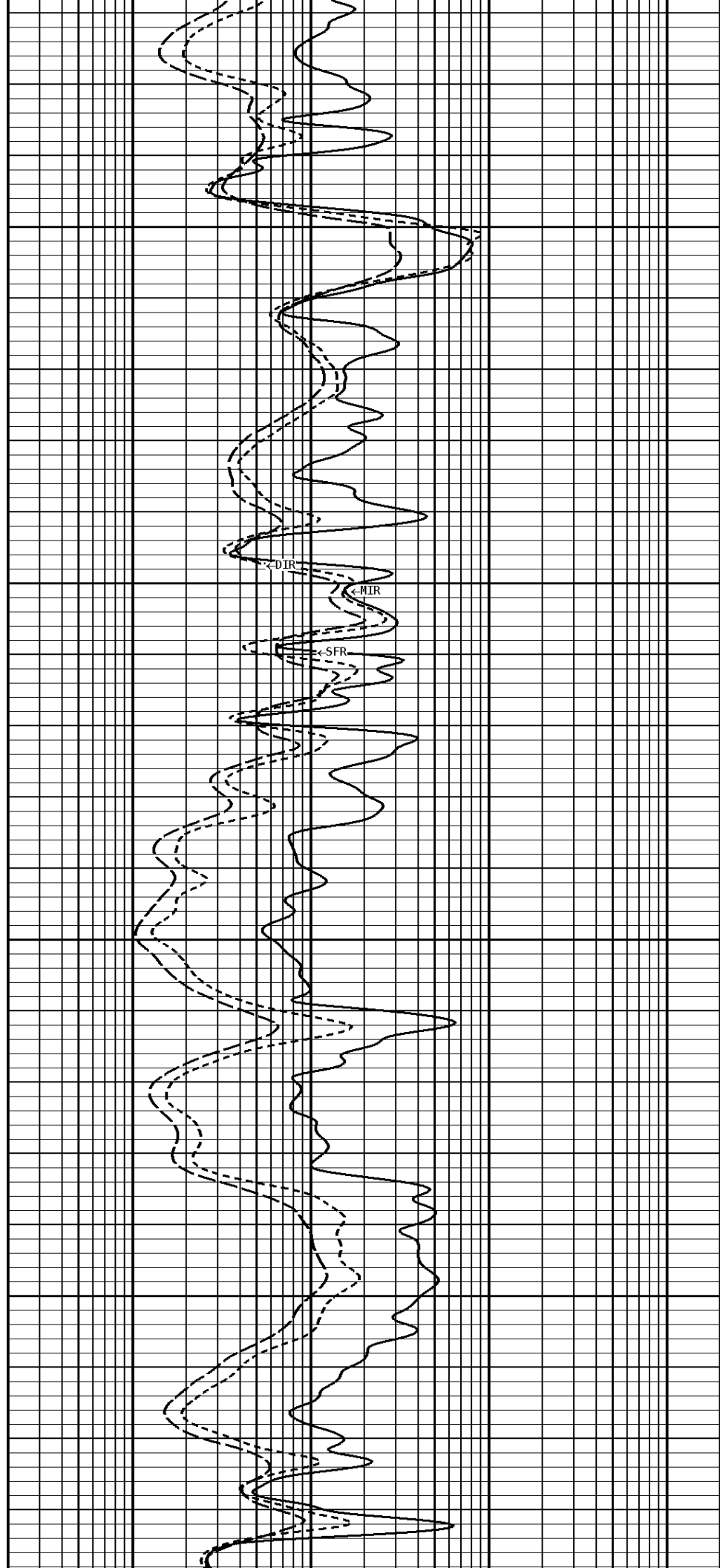
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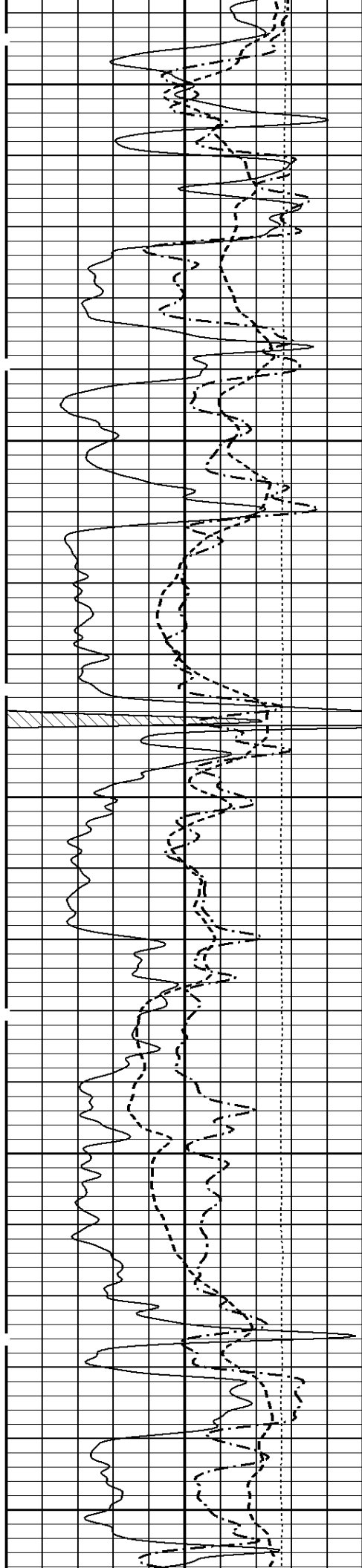




3600

3700

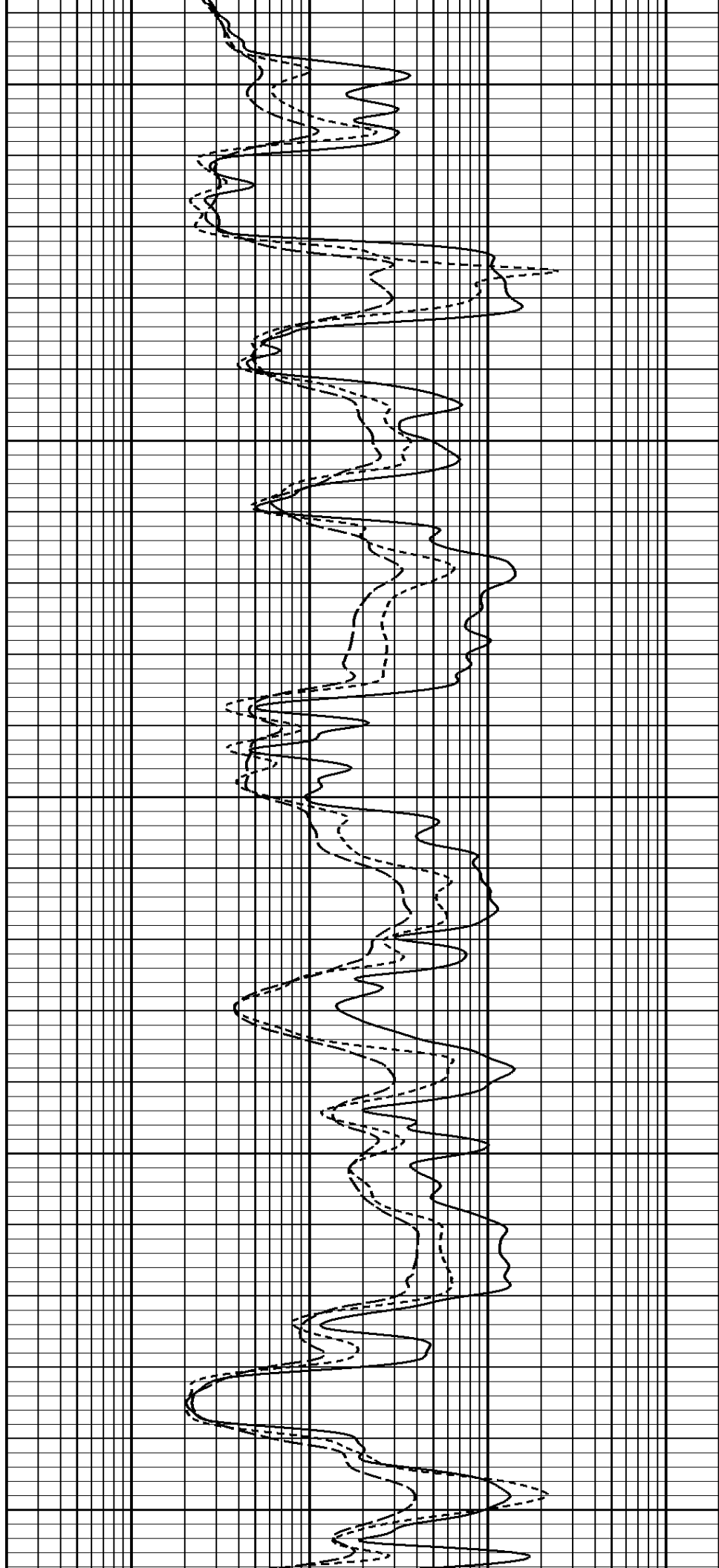


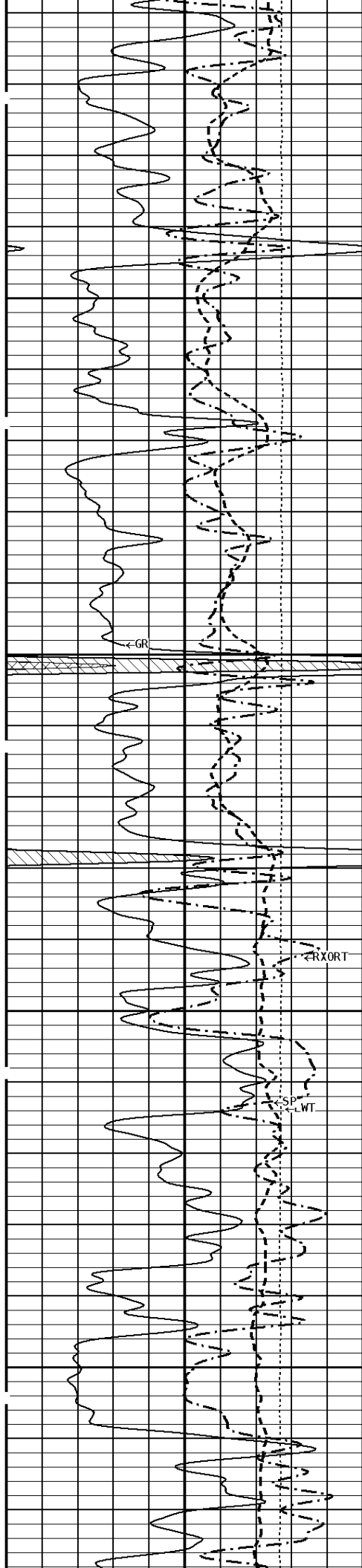


3800

3900

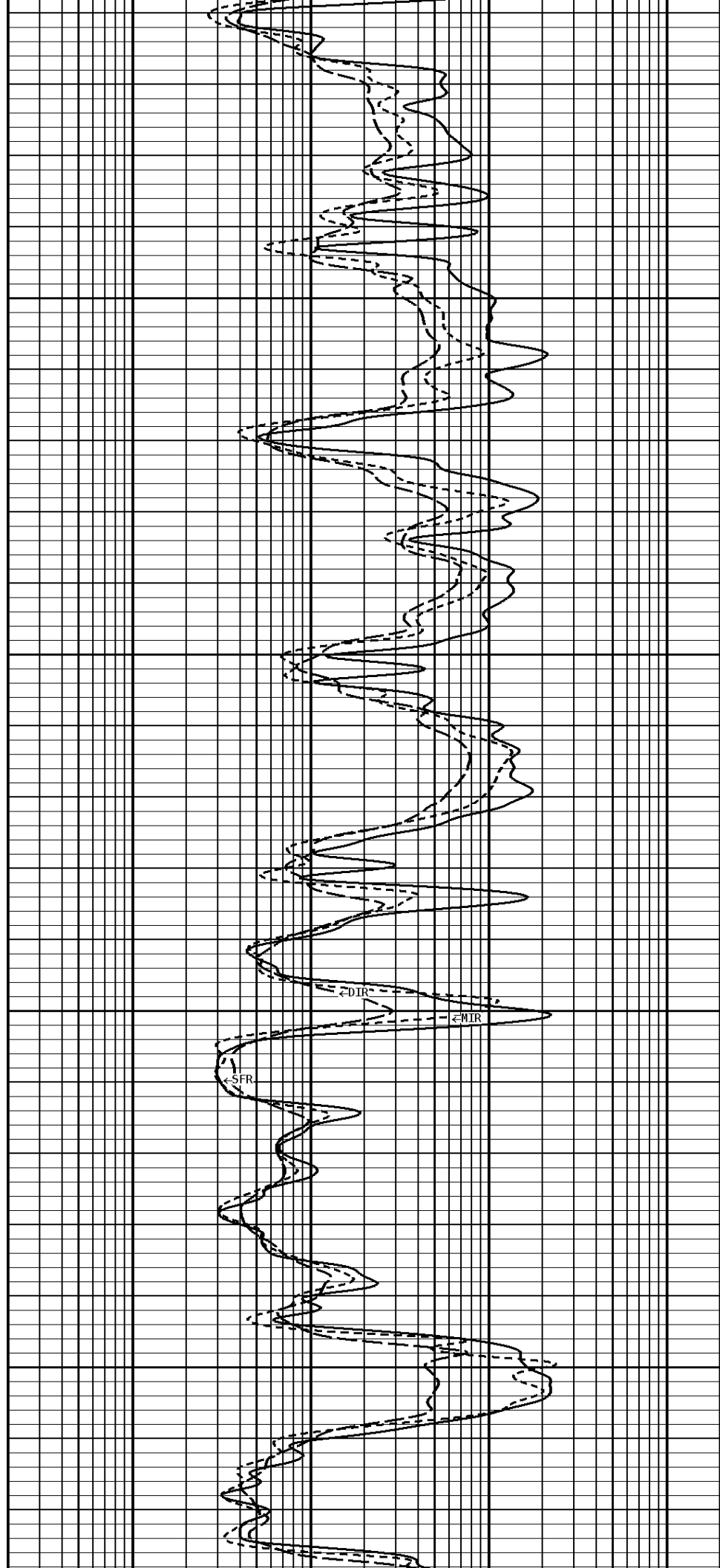
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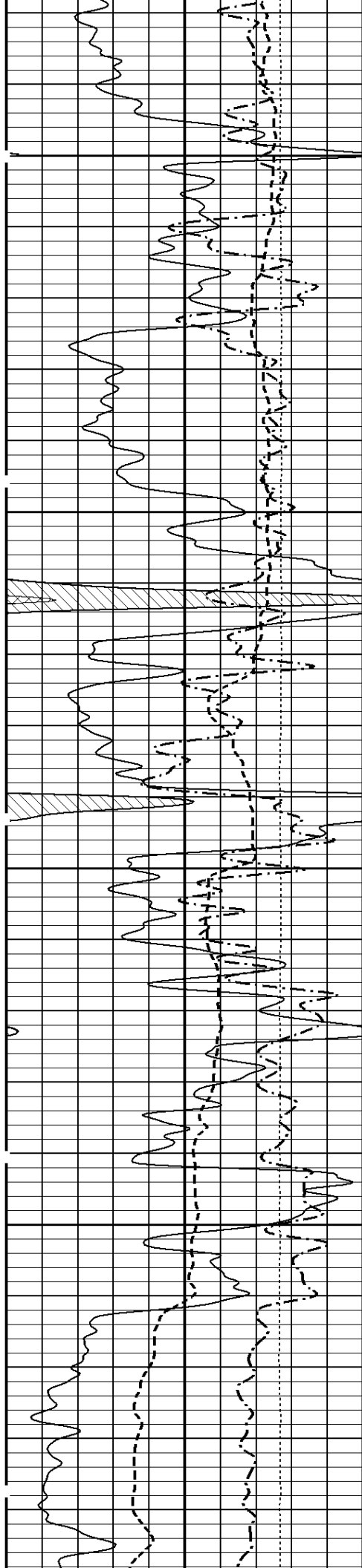




4100

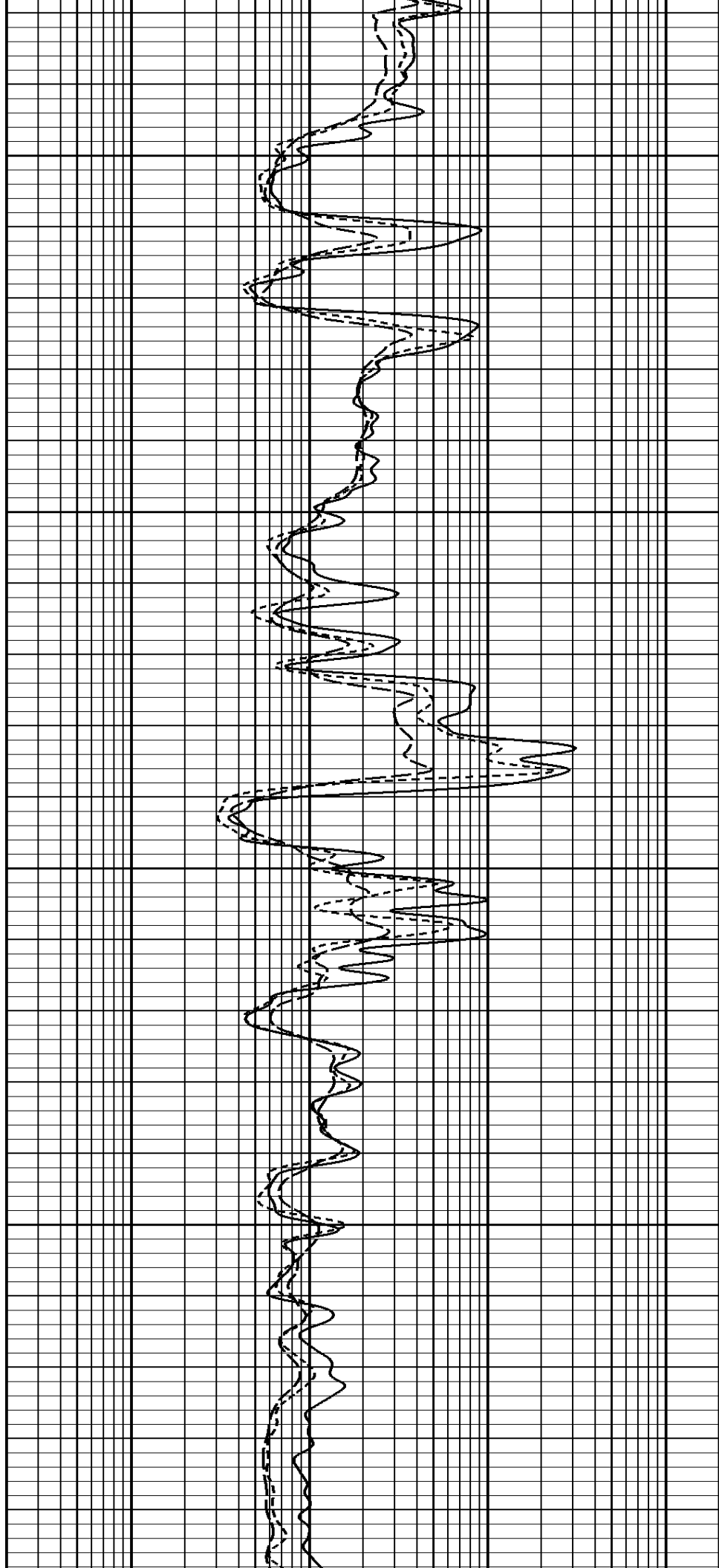
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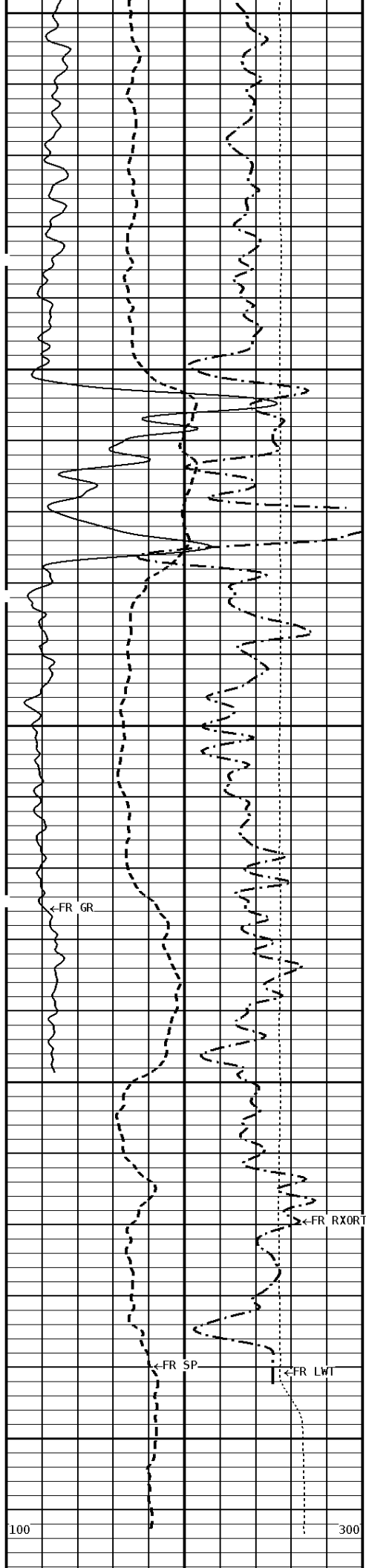




4300

4400

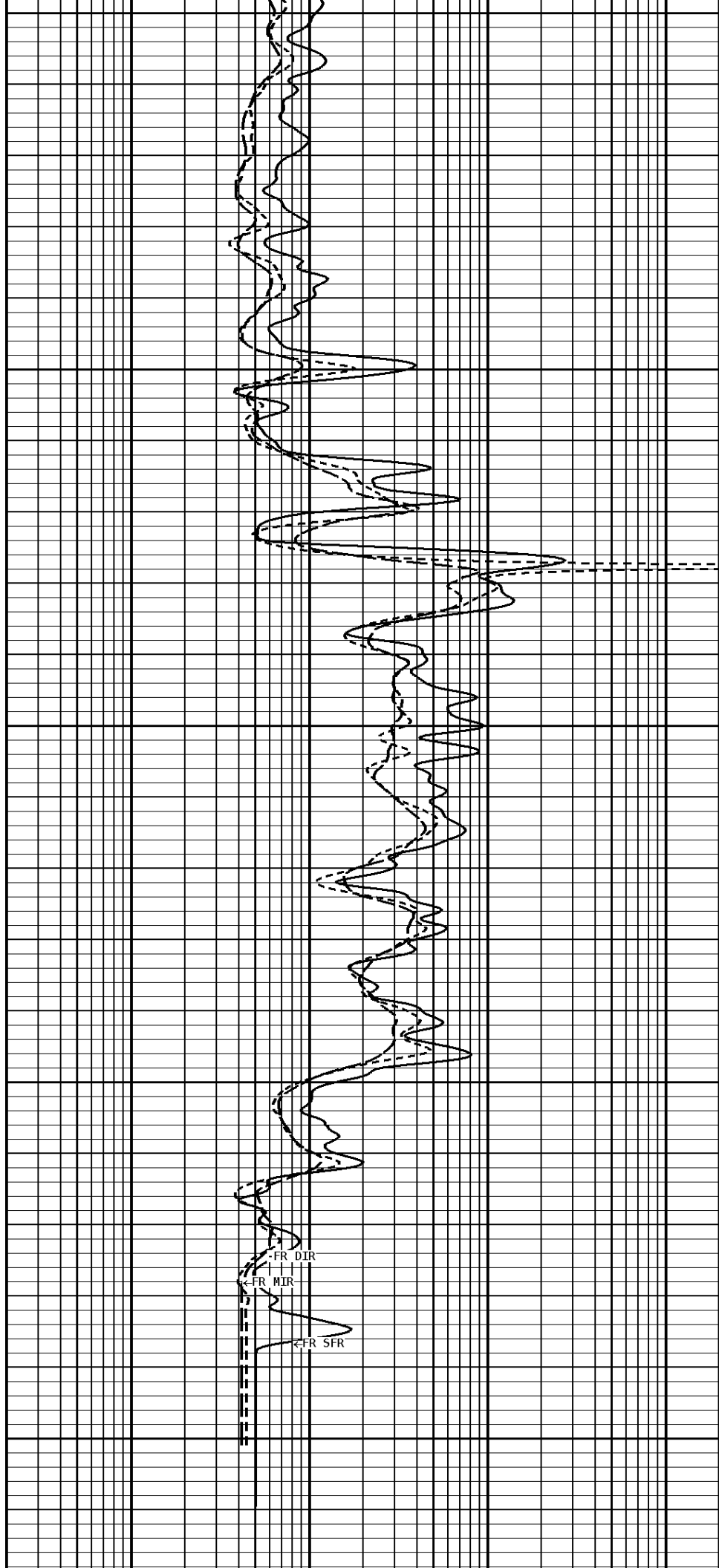




4500

4600

4642



File #1.1.11

A blank sheet of graph paper featuring a uniform grid of small squares. The grid is composed of thin black lines forming a continuous pattern across the entire page. There are no margins, text, or other markings present.

1:240 MAIN SECTION

GAMMA RAY API UNITS 150 0 300 150	
SPONTANEOUS POTENTIAL mV → ← 20 -----	
TENSION LBS 10000 0 -----	
RX0/RT -160 40 -----	

DEEP INDUCTION OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0
SHALLOW FOCUSED RESISTIVITY OHMM	
0.2	2000.0

*** Borehole Zone Factors ***

Zone 1 99999.0 to 2.0 Feet		
Temperature Gradient_____	1.00	DFHF
BHT Depth_____	4650.000	ft
Borehole Temperature_____	125.0	degF
Drill Bit Size_____	7.875	in
Resistivity Of Mud_____	0.200	ohm/m
Resistivity Of Mud Temperature_____	55.00	degF
Zone 2 2.0 to 0.0 Feet		
Temperature Gradient_____	1.00	DFHF
BHT Depth_____	4650.000	ft
Borehole Temperature_____	125.0	degF
Drill Bit Size_____	7.875	in
Resistivity Of Mud_____	0.200	ohm/m
Resistivity Of Mud Temperature_____	55.00	degF

Well File: ANDERSON_PRARIE_FARMS_JAN27_QUINK	Scale: 1:240
Segment: V1.D1.S8 SCREPEAT	Acquired: Not Available
Reference: 0	Processed: Not Available

RX0/RT	
-160	40
TENSION LBS	
10000	0
SPONTANEOUS POTENTIAL mV	
→	←20

SHALLOW FOCUSED RESISTIVITY OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0

GAMMA RAY
API UNITS

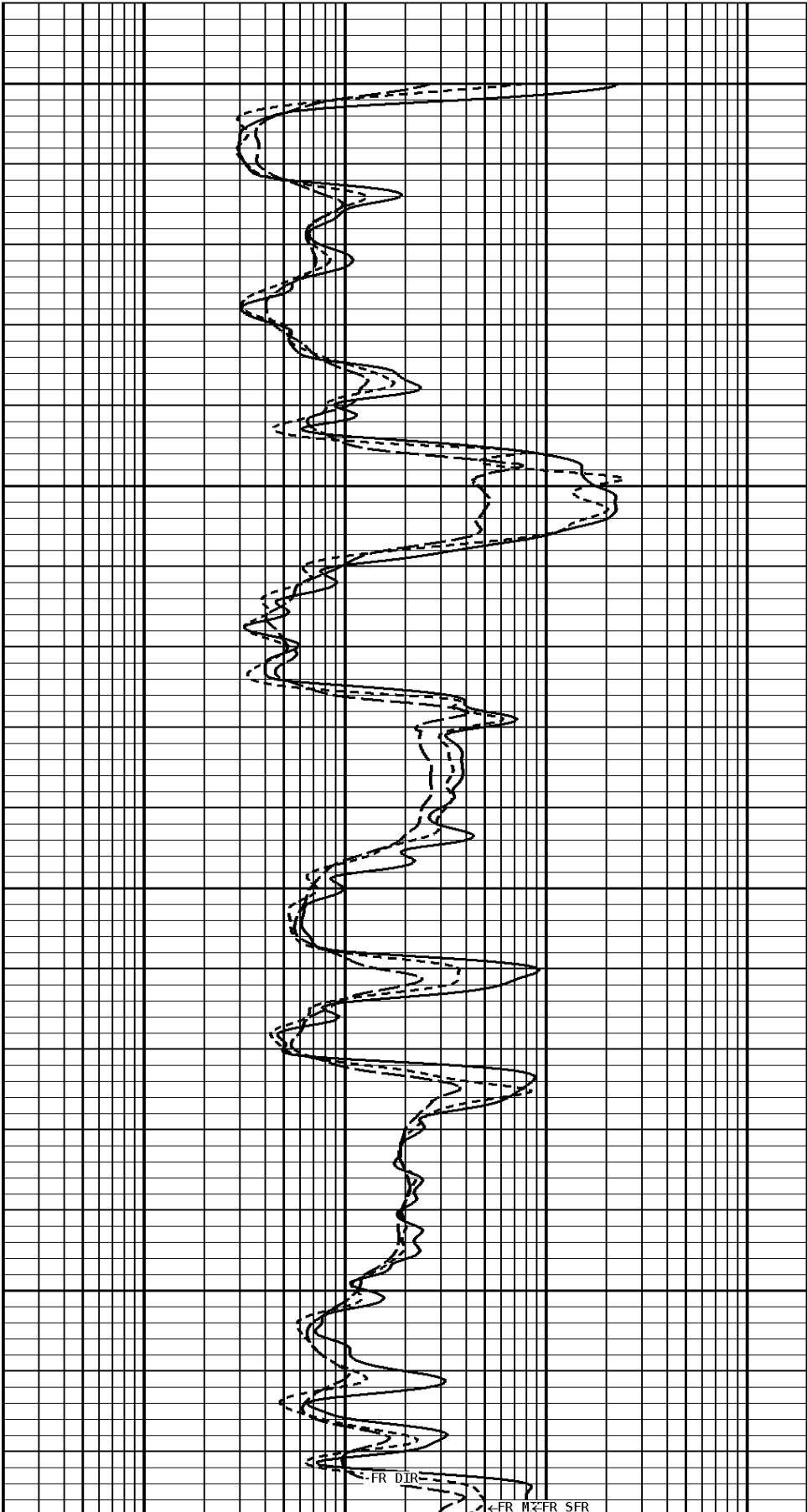
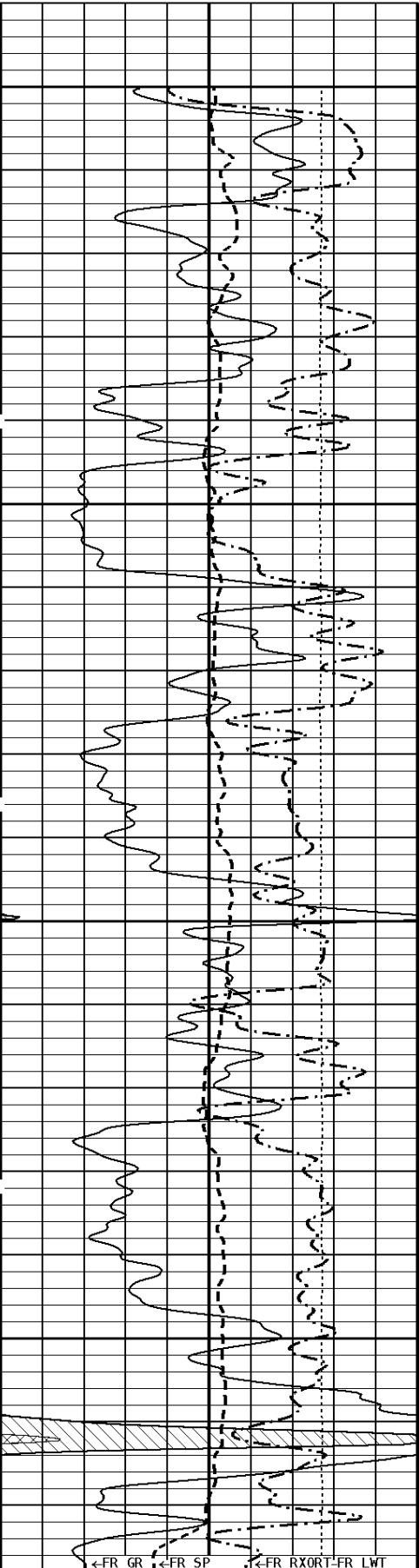
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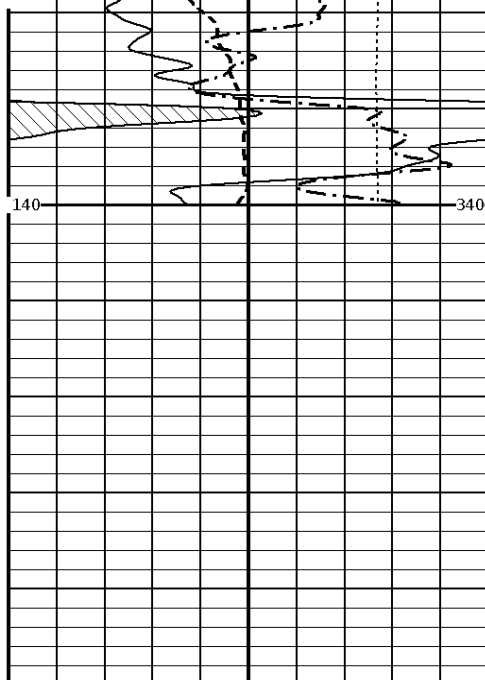
DEEP INDUCTION
OHMM

0.2

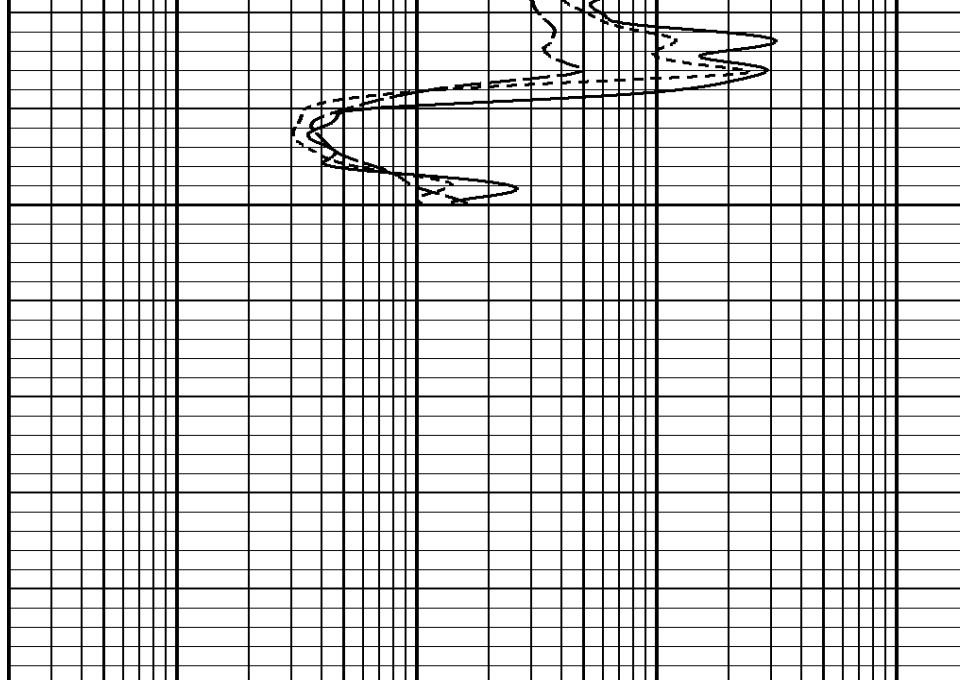
2000.0

1:240 REPEAT SECTION





File #1.1.8



1:240 REPEAT SECTION

GAMMA RAY API UNITS	
150	300
0	150
SPONTANEOUS POTENTIAL mV	
→	←20
TENSION LBS	
10000	0
RXO/RT	
-160	40

DEEP INDUCTION OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0
SHALLOW FOCUSED RESISTIVITY OHMM	
0.2	2000.0

* Borehole Zone Factors *

Zone 1	99999.0	to	0.0	Feet
Drill Bit Size			7.875	in
BHT Depth			4650.000	ft
Borehole Temperature			125.0	degF
Temperature Gradient			1.00	DFHF
Resistivity Of Mud			0.200	ohm/m
Resistivity Of Mud Temperature			55.00	degF

* Calibration Summary *

Shop Calibration GRT-B					
Performed : 16-May-2011			Time : 10:12		
Sensor Suite : GR-GR5			ID : GRT-BA-121		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GRAPI	
	51	355	175		
Shop Calibration PIT-CA					
Performed : 10-MAY-2009			Time : 10:06		

Performed : 18-MAY-2009 Time : 10:06
Sensor Suite : P-IND-T ID : PIT-AB-18

Medium

	Measured		Calibrated		Units
	R	X	R	X	
Air	131380	130013	0.2	0.4	MMHOS
Zero	131067	131066	0.0	0.0	MMHOS
Reference	252628	252684	5000.0	5000.0	MMHOS
Loop	151831	174542	2672.1	989.9	MMHOS
Sonde Error			-2.0	-4.3	MMHOS
Cond			5000.0	5000.0	MMHOS

Deep

	Measured		Calibrated		Units
	R	X	R	X	
Air	129385	131252	0.1	0.1	MMHOS
Zero	131079	131072	0.0	0.0	MMHOS
Reference	230616	232102	2000.0	2000.0	MMHOS
Loop	149042	174745	1256.1	466.1	MMHOS
Sonde Error			-3.3	0.2	MMHOS
Cond			2000.0	2000.0	MMHOS

Temperature

	Measured		Calibrated		Units
	Low	High	Low	High	
	16980.0	56920.0	70.0	350.0	DEGF

Performed : 18-May-2009 Time : 10:04
Sensor Suite : SFL ID : PIT-AB-18

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Im	32765.1	50517.2	0.0	7028.0	uA
Ib	32772.1	50309.4	0.0	1750.0	mA
MOM1	32830.8	57160.2	0.0	175.0	mV
Equivalent SFL				43.97	OHMM

Performed : 18-May-2009 Time : 09:50
Sensor Suite : P-SP ID : PIT-AB-18

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
	32790.5	58989.2	0.0	1000.0	mV

Performed : 20-Dec-2007 Time : 12:53
Sensor Suite : P-RMUD ID : PIT-AB-18

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Rmi	0.0	238.4	0.0	290.6	mA
Rmv	0.0	198.0	0.0	290.6	mV
Equivalent Rm				0.9037	OHMM

Well File: ANDERSON PRARIE FARMS JAN27_QUINK

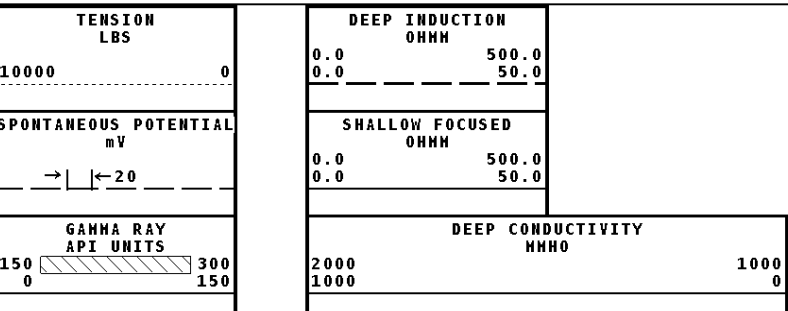
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Segment: V1.D1.S11 ASMAIN

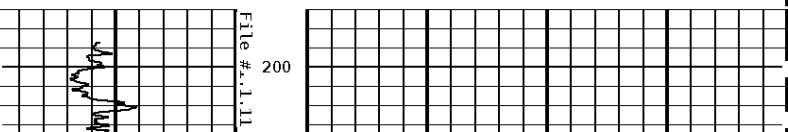
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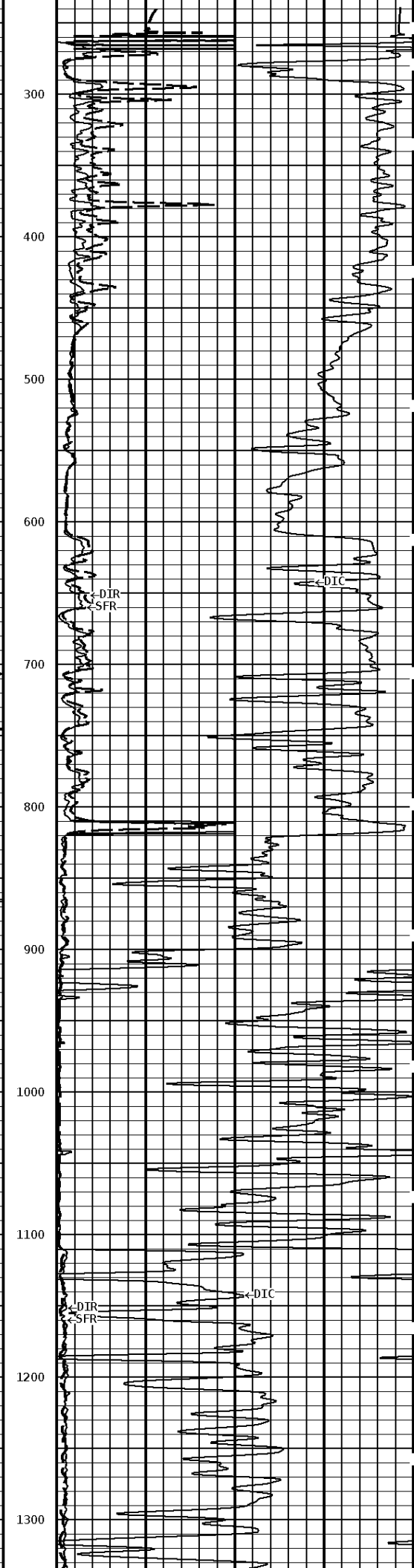
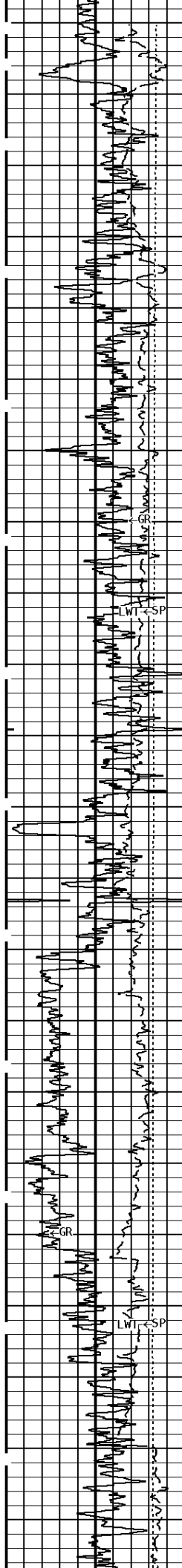
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Processed: Not Available



1:1200 MAIN SECTION





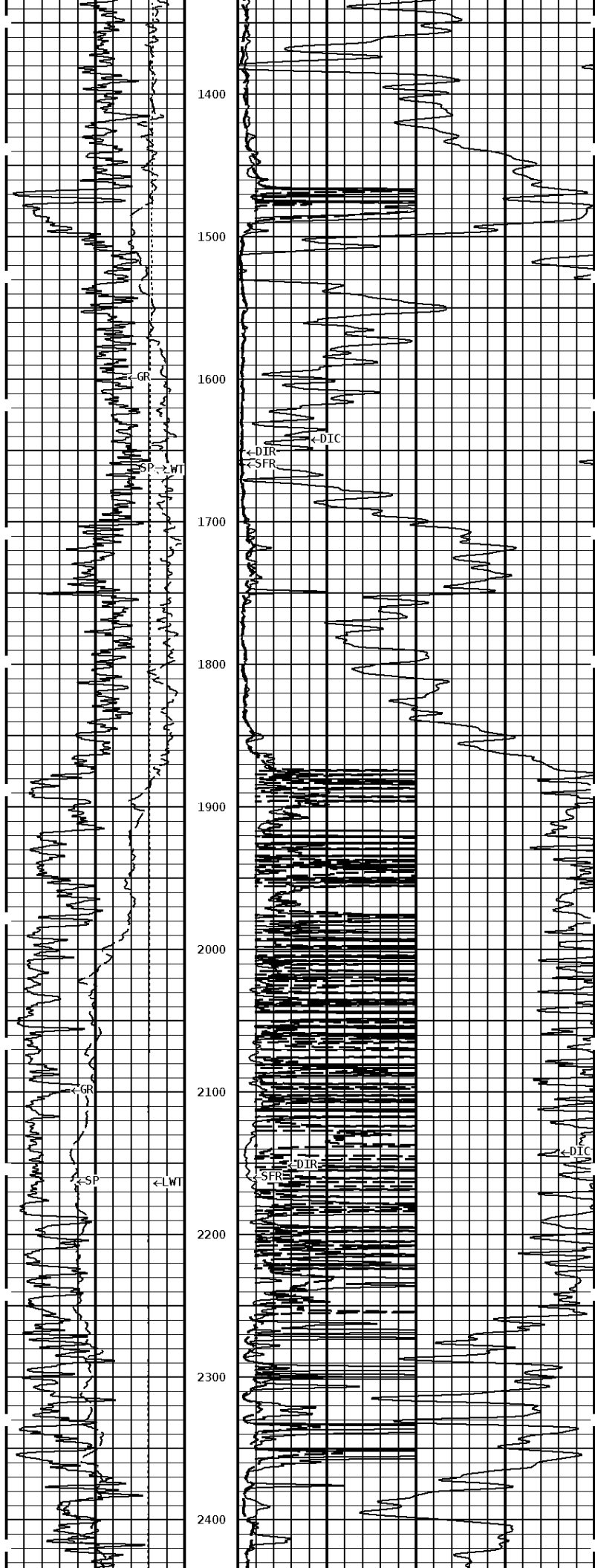
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1100
1200
1300

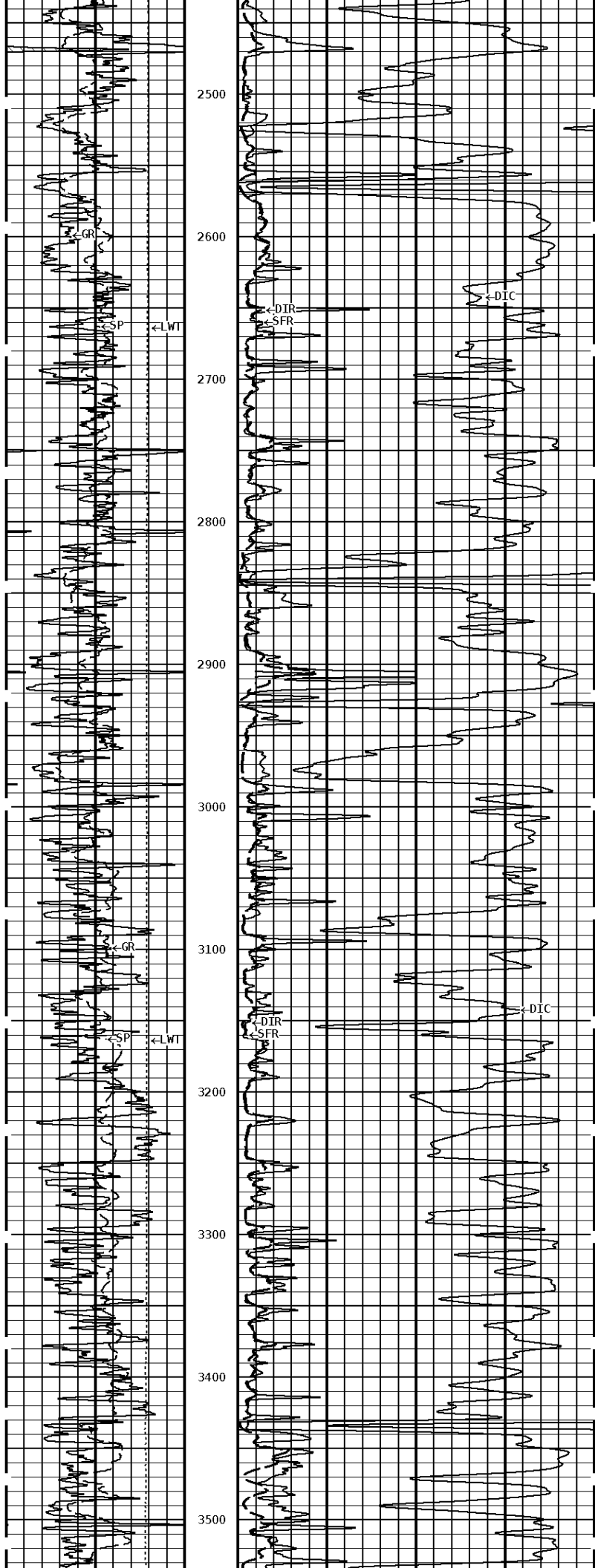
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SFR

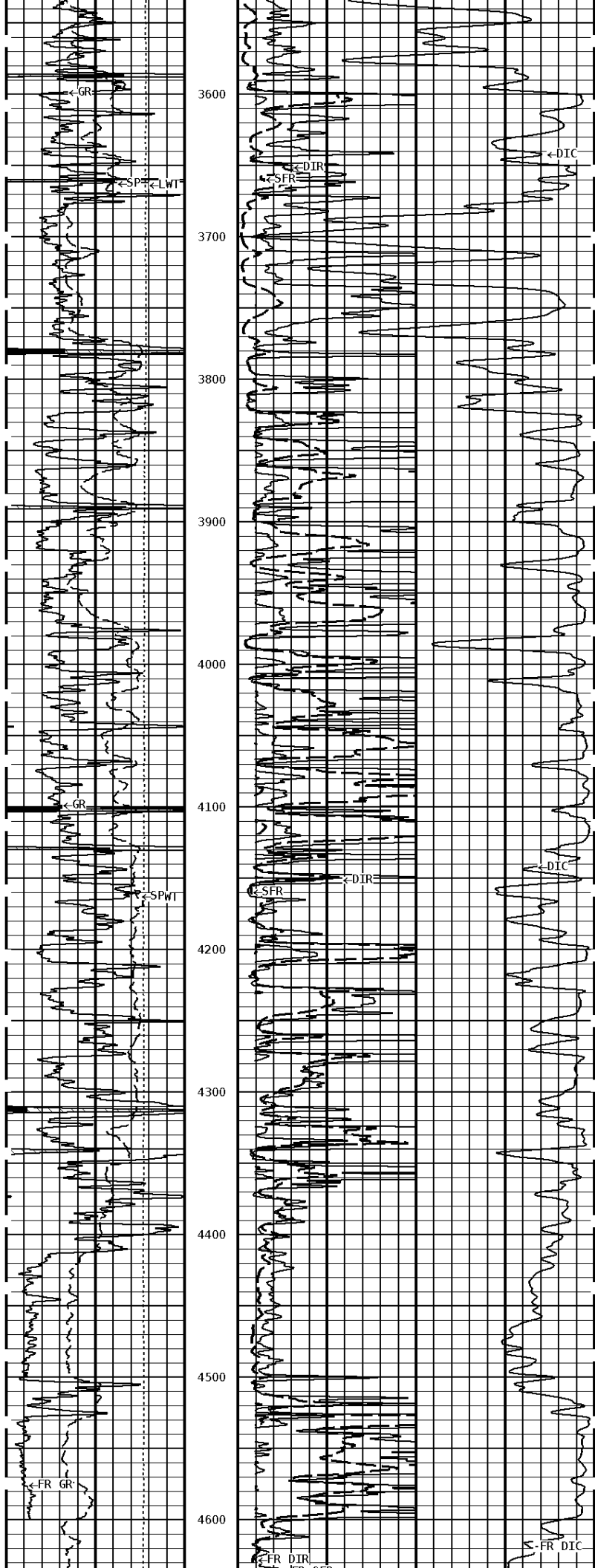
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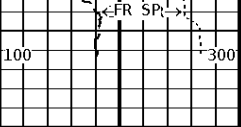
DIR
SFR

DIR
SFR

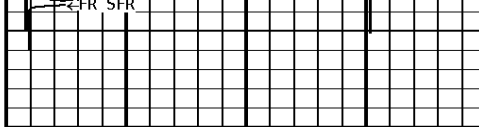








4642
le #1.1.11



1:1200 MAIN SECTION

