

Tucker
ENERGY SERVICES

PHASED INDUCTION

SHALLOW FOCUS SP LOG

Company TOTO ENERGY LLC Well GREENE #24-1 Field CARPENTER County PAWNEE State KANSAS Country USA API No. 15-145-21721		File No : TUL- Company : TOTO ENERGY LLC Well : GREENE #24-1 Field : CARPENTER County : PAWNEE State : KANSAS Country : USA API No : 15-145-21721	
Location : 2290' FSL & 1650' FWL S2 NW NE SW		LSD : Sect : 24 Twp : 23S Rge : 17W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 2085.00	CNT
Log Measured From:	KB	DF 2084.00	PIT
Above Permanent Datum:	11.00 Ft	GL 2074.00	MLT
Date	05-31-2013		
Run Number	1		
Depth--Driller	4570.0 Ft		
Depth--Logger	4566.0 Ft		
First Reading	4566.0 Ft		
Last Reading	432.0 Ft		
Casing--Driller	432.0 Ft		
Casing--Logger	432.0 Ft		
Bit Size	7.875 In		
Casing Size	8.625 In		
Hole Fluid Type	WBM		
Density	9.3 LBS/GAL		
Fluid Loss	17.2 CC		
PH/Viscosity	8.5 MEASURED 54.0 SEC		
Sample Source	MEASURED		
RM@Measured Temp.	0.900 @ 75 F		
RMF@Measured Temp	0.770 @ 75 F		
RM@Measured Temp.	1.040 @ 75 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.550 @ 0 F		
Time Circulation Stopped	0 F		
Max Recorded Temp.	TRK 119 TULSA		
Equipment/Base	S. DAVIS		
Recorded By	T. MADDEN		
Witnessed By			

The customer is hereby warned that by providing the log data herein, T. E. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. E. 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. E. 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. E. 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	4570.00	8.625	24.00	432.00

Run Number	1	
Date	05-31-2013	
Date/Time On Bottom	05-31-2013 5:30 am	
Depth to Fluid	0.0 Ft	
Salinity	14900.000 PPM	
RMF@BHT	0.470 @ 0 F	
RMC@BHT	0.630 @ 0 F	

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.
 GRT, CNT, LDT, MLT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.50" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED

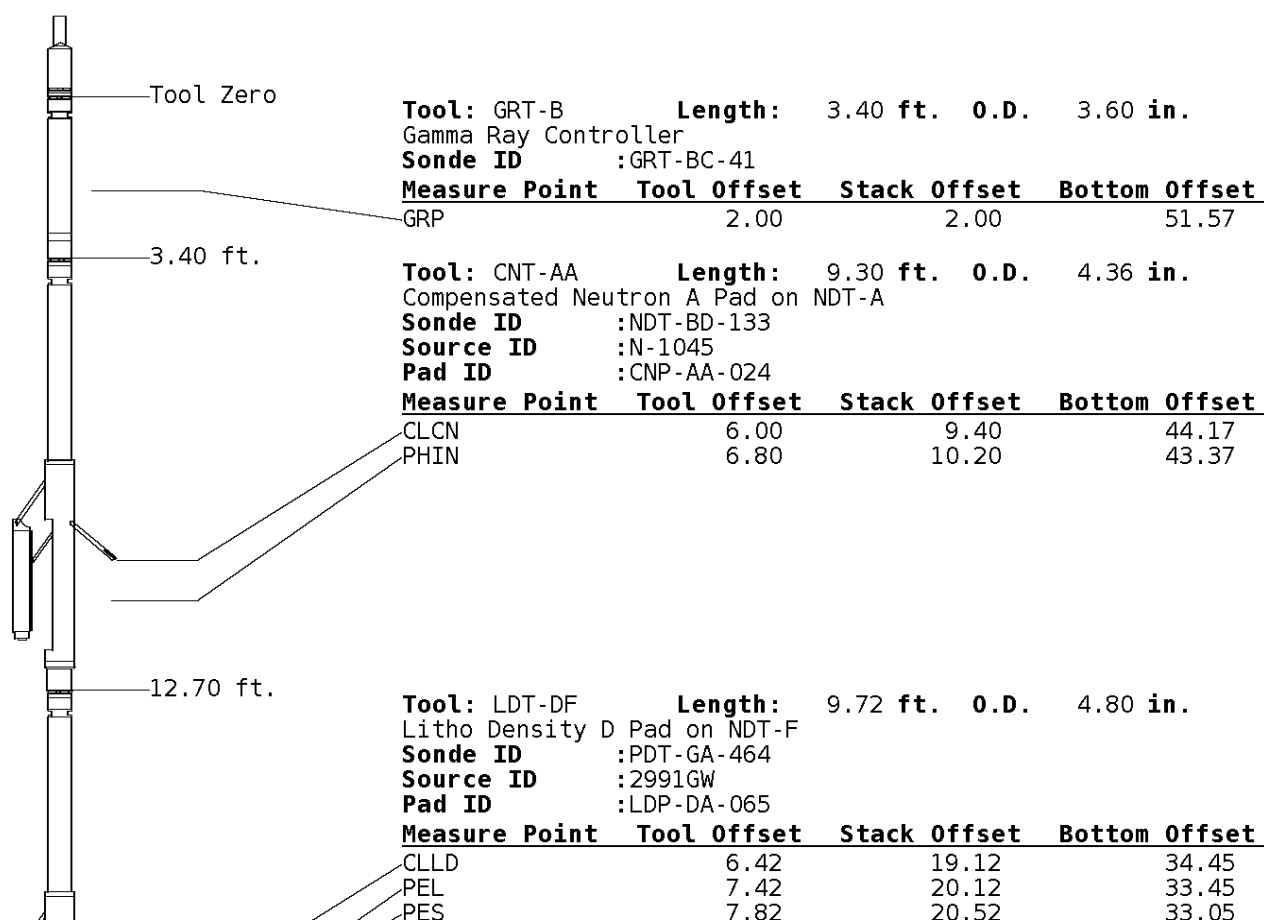
GRT: GRP.
 CNT: PHIN, CLCNIN.
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_RF, INV_RF, MSCLPIN.
 PIT: ILD, ILM, SPU, SFLAEC, CIRD.

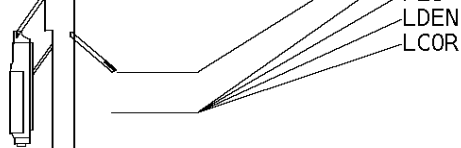
OPERATORS:

J. KLINE
 A. DJAHO

Tool String Schematic

Total Tool Length - 53.57 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 943.00 lbs.





7.62	20.32	33.25
7.62	20.32	33.25

22.42 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	30.02	23.55
MSCLP	7.60	30.02	23.55
INV	7.60	30.02	23.55
NOR	7.60	30.02	23.55



32.08 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-12

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	41.00	12.56
ILM	10.10	42.18	11.39
SFLU	17.49	49.57	4.00
SP	20.60	52.68	0.88



LWT 53.57 ft.

TENSION
LBS

10000 0

SPONTANEOUS POTENTIAL
mV

DEEP INDUCTION
OHMM

0.0 500.0
0.0 50.0

SHALLOW FOCUSED RESISTIVITY
OHMM

0.0 500.0

Well File: toto-gre-24-1-mstk-may-31

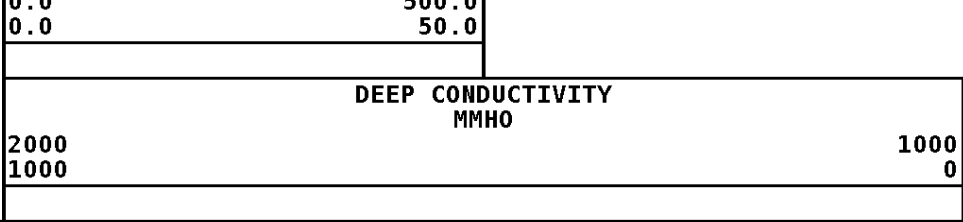
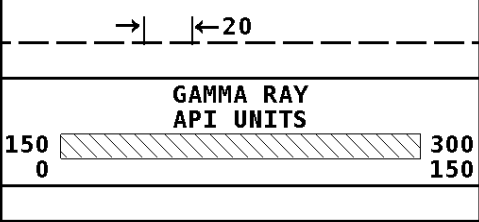
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Segment: V1.D1.S7 MAIN

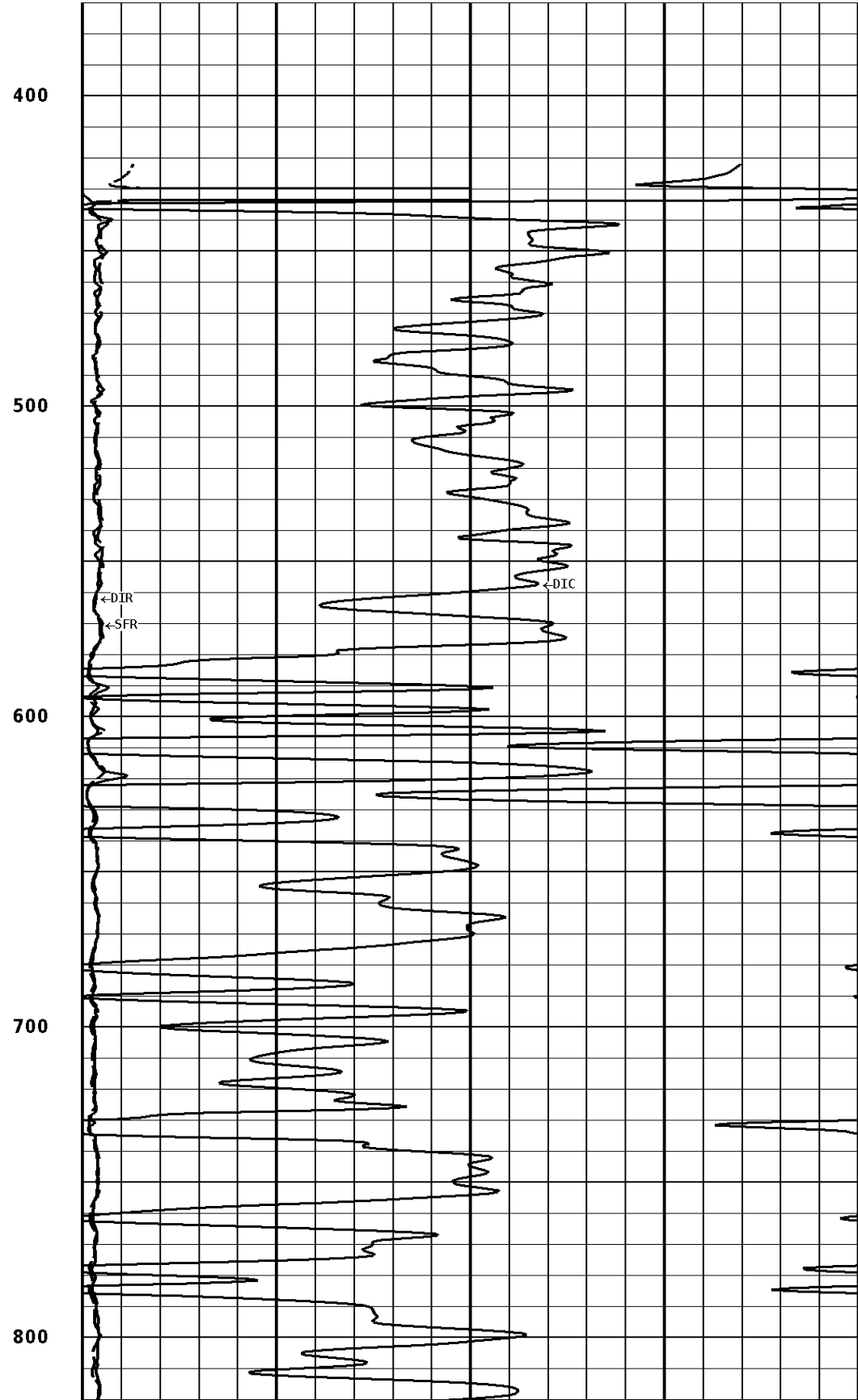
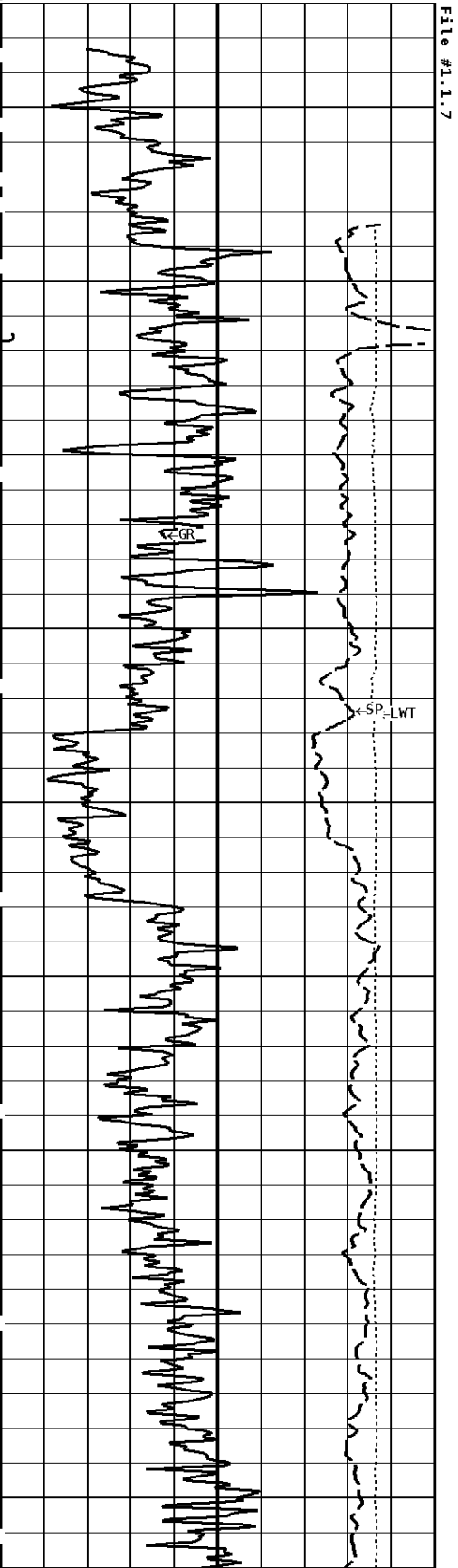
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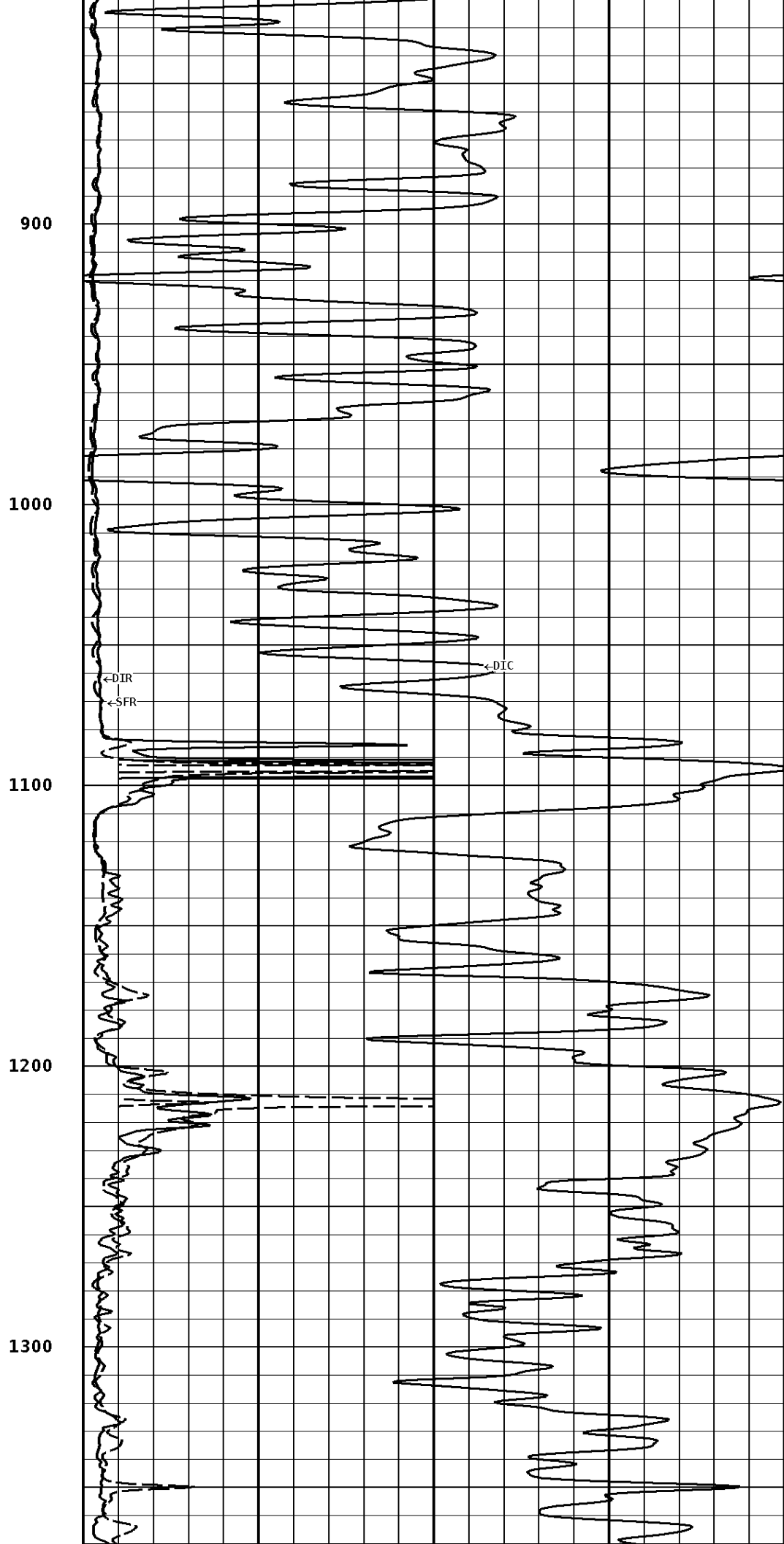
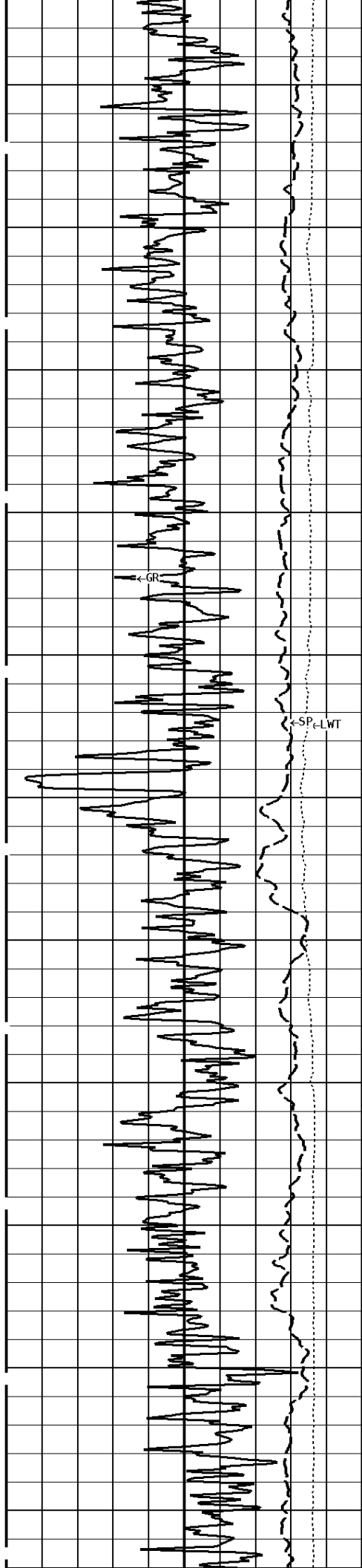
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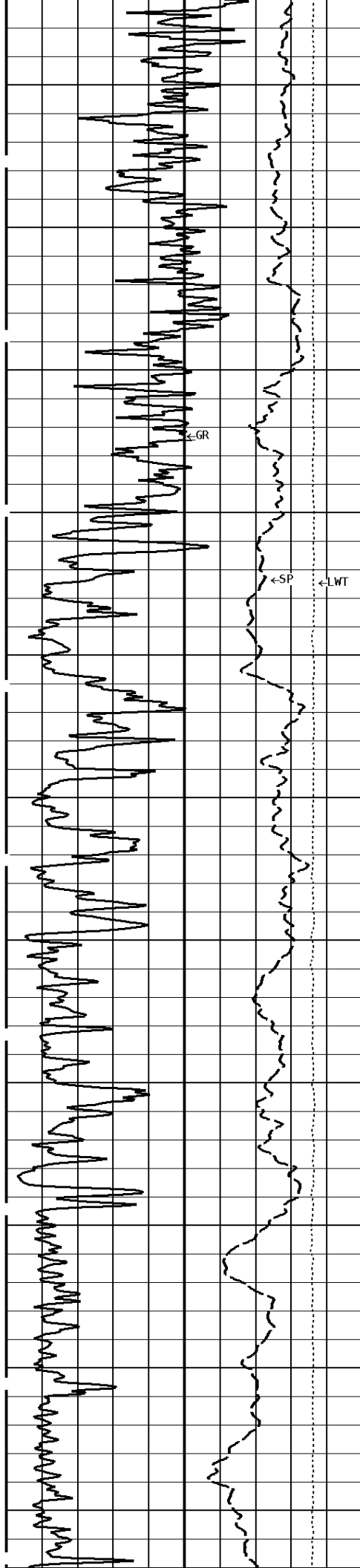
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1:600 MAIN SECTION







1400

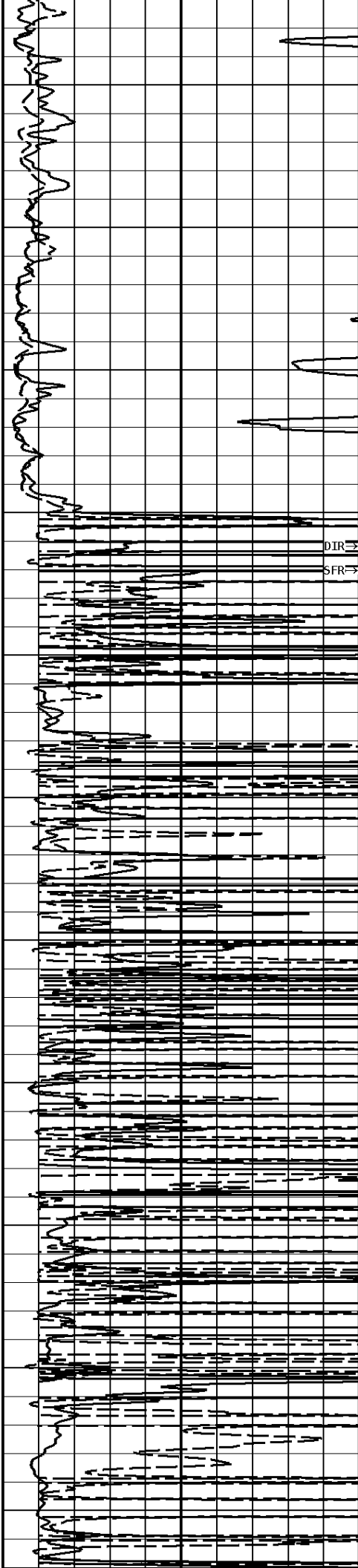
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1600

1700

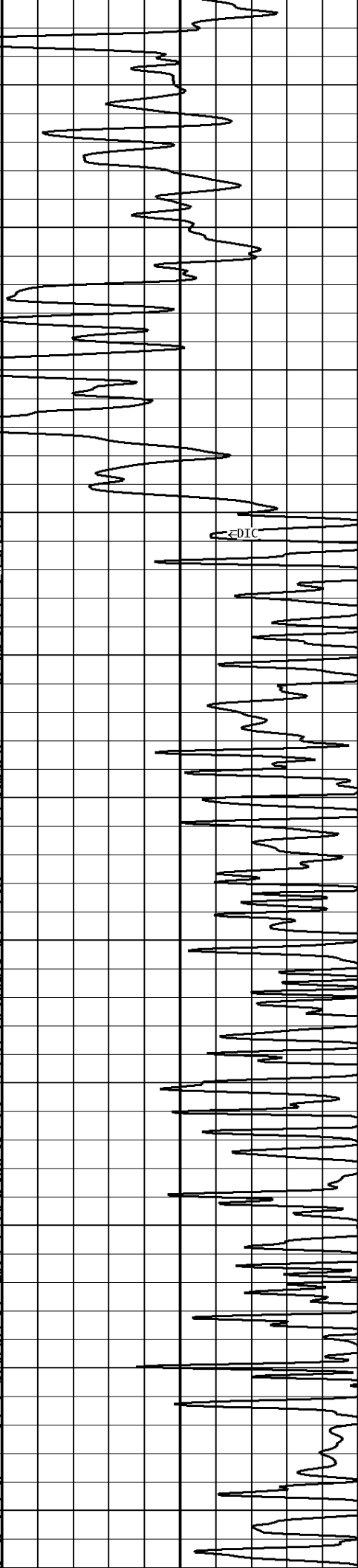
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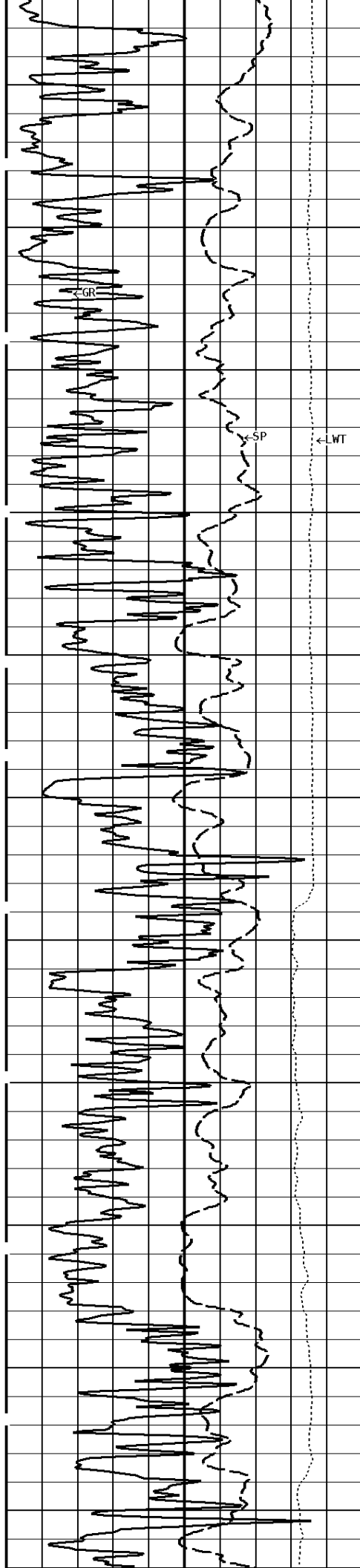


DIR

SFR



DIC



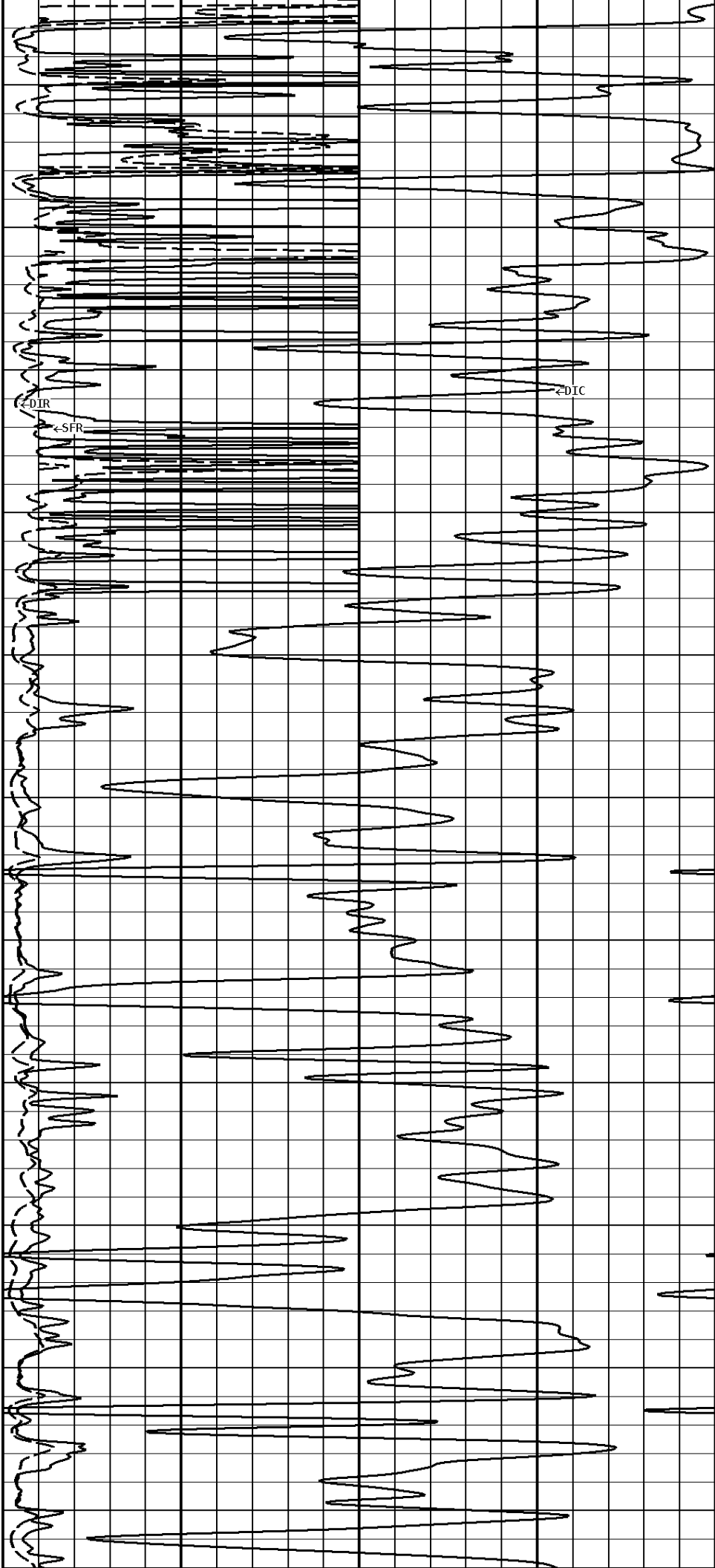
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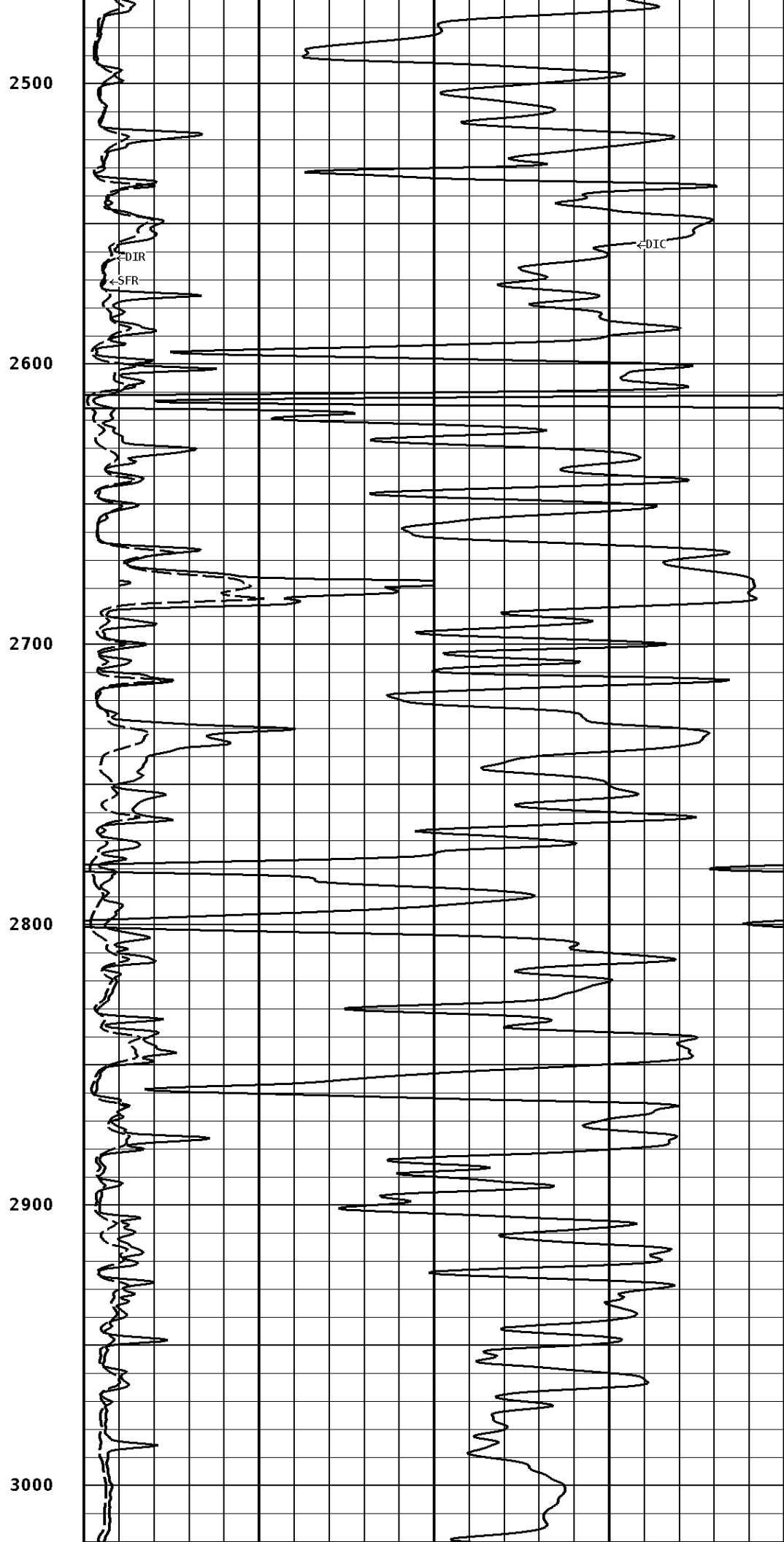
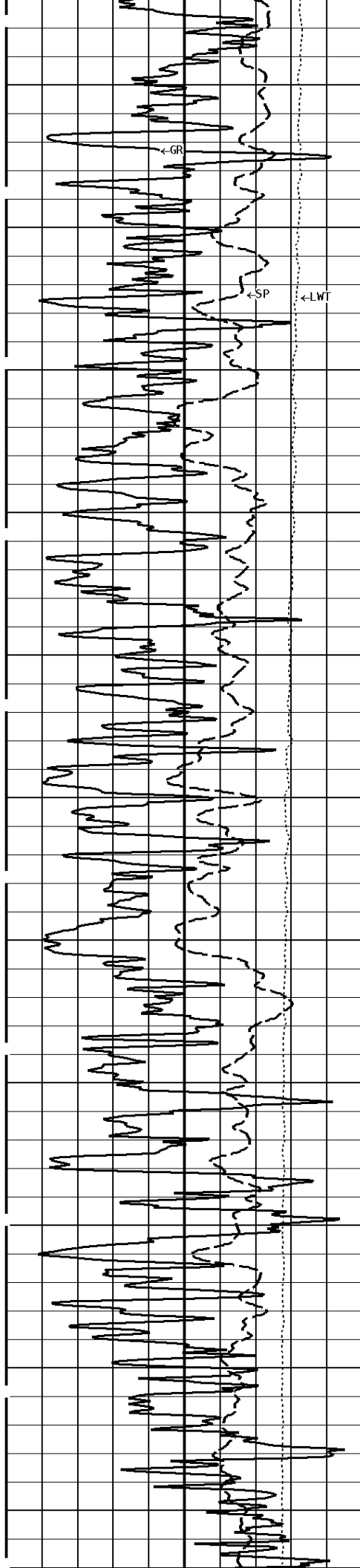
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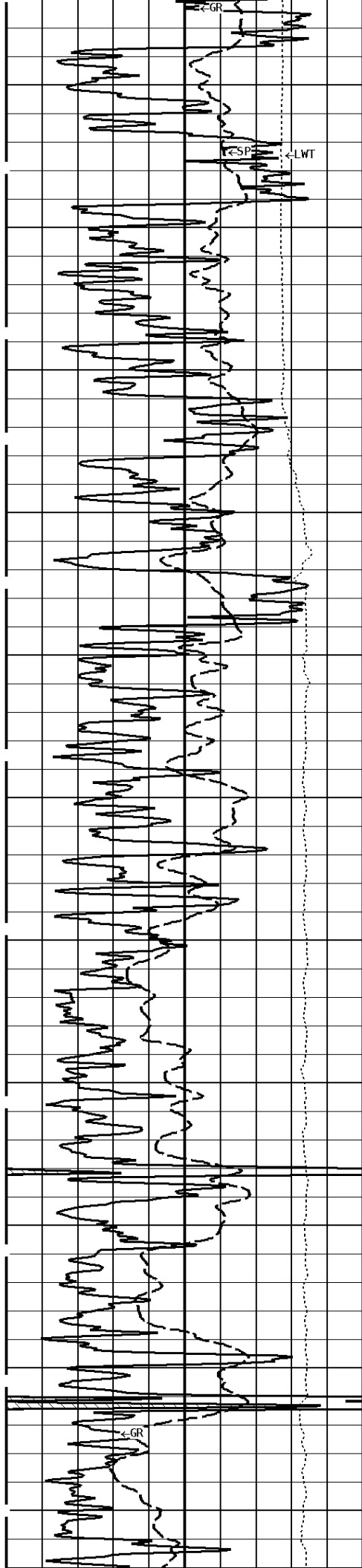
2200

2300

2400







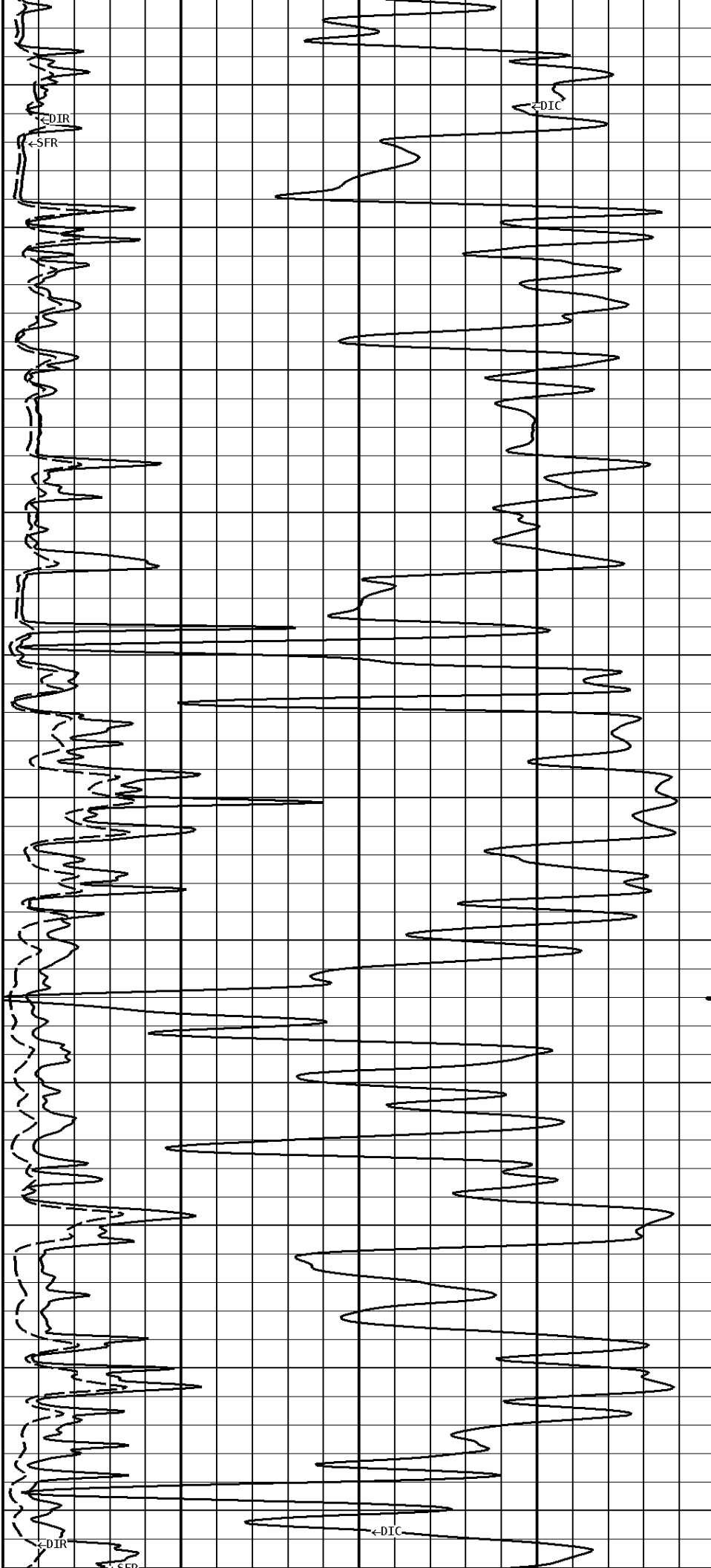
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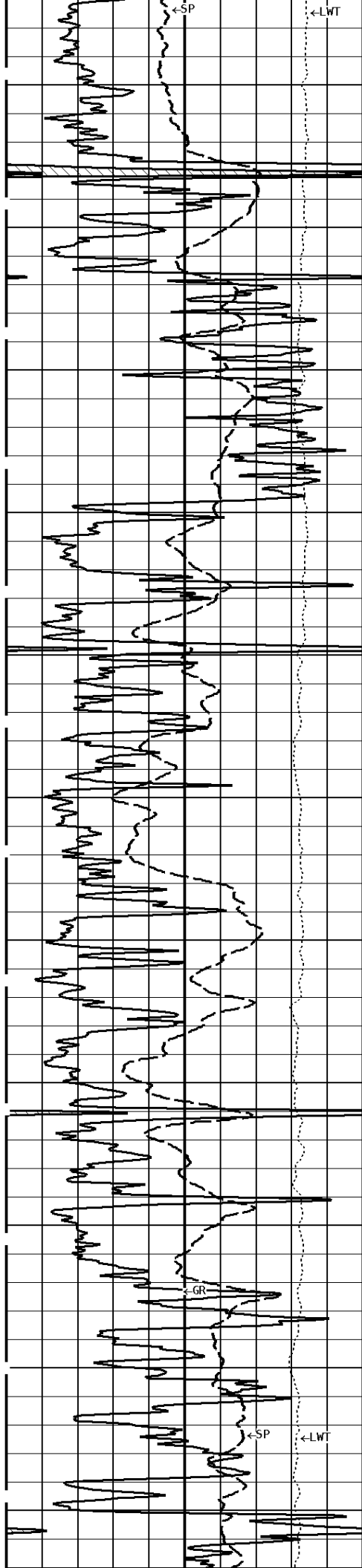
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3300

3400

3500





3600

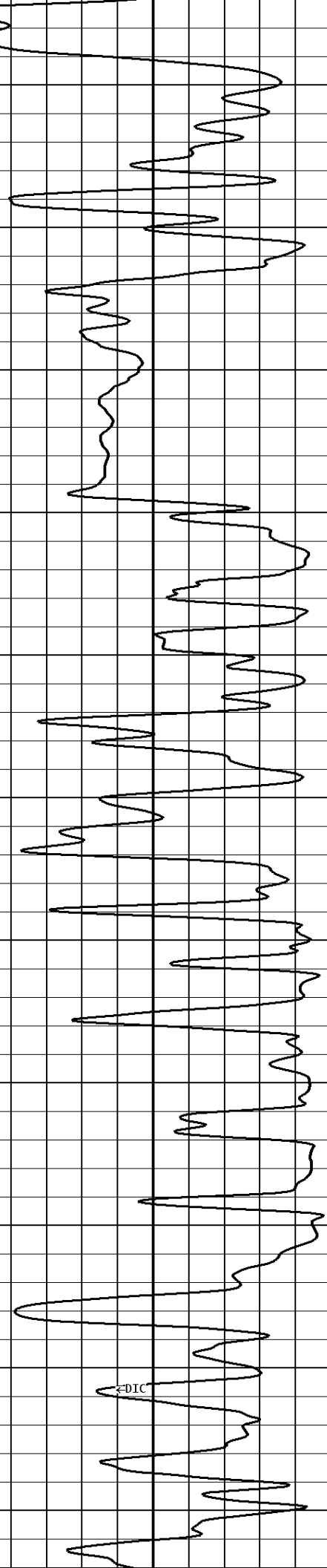
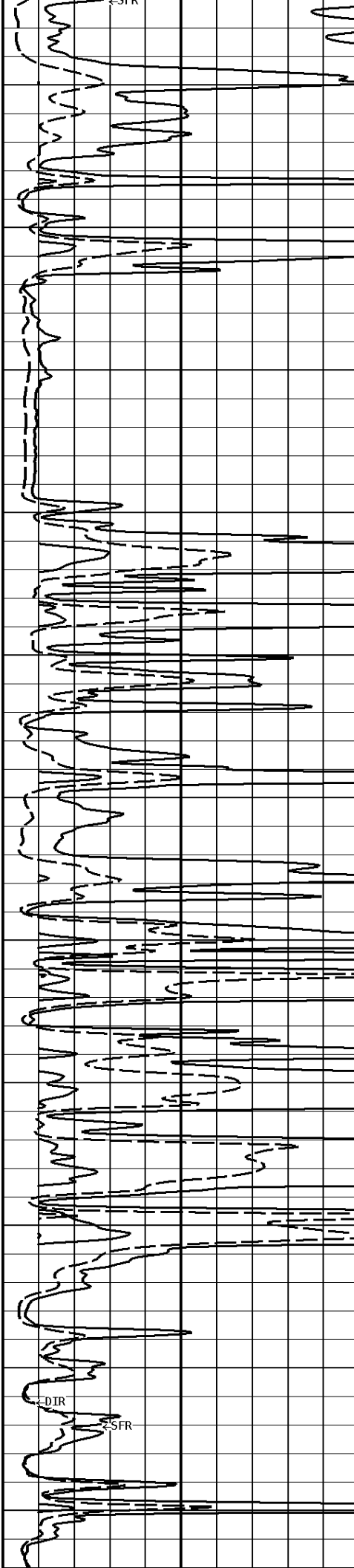
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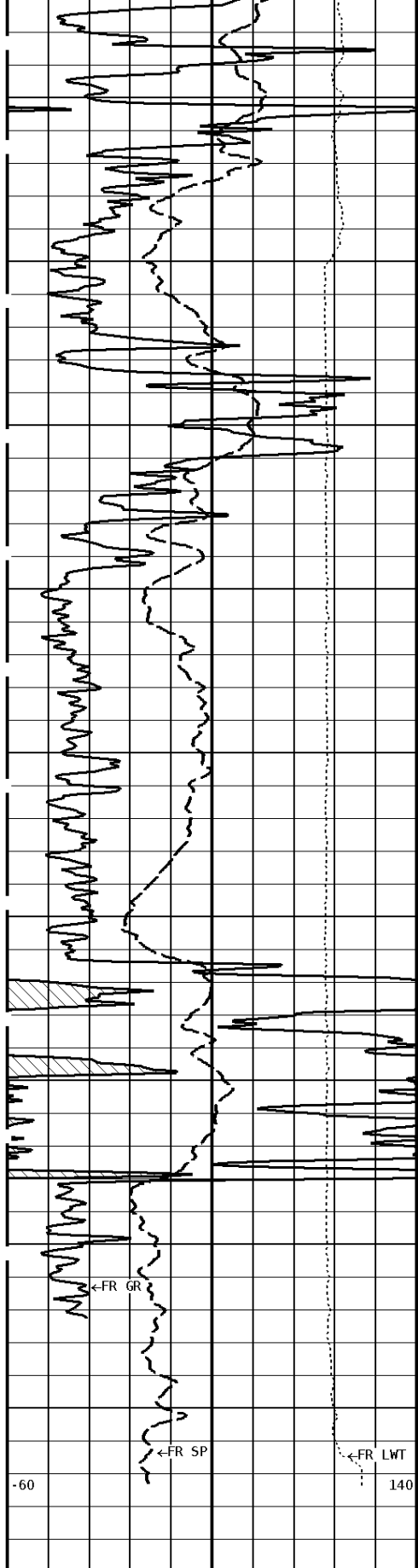
3900

4000

4100

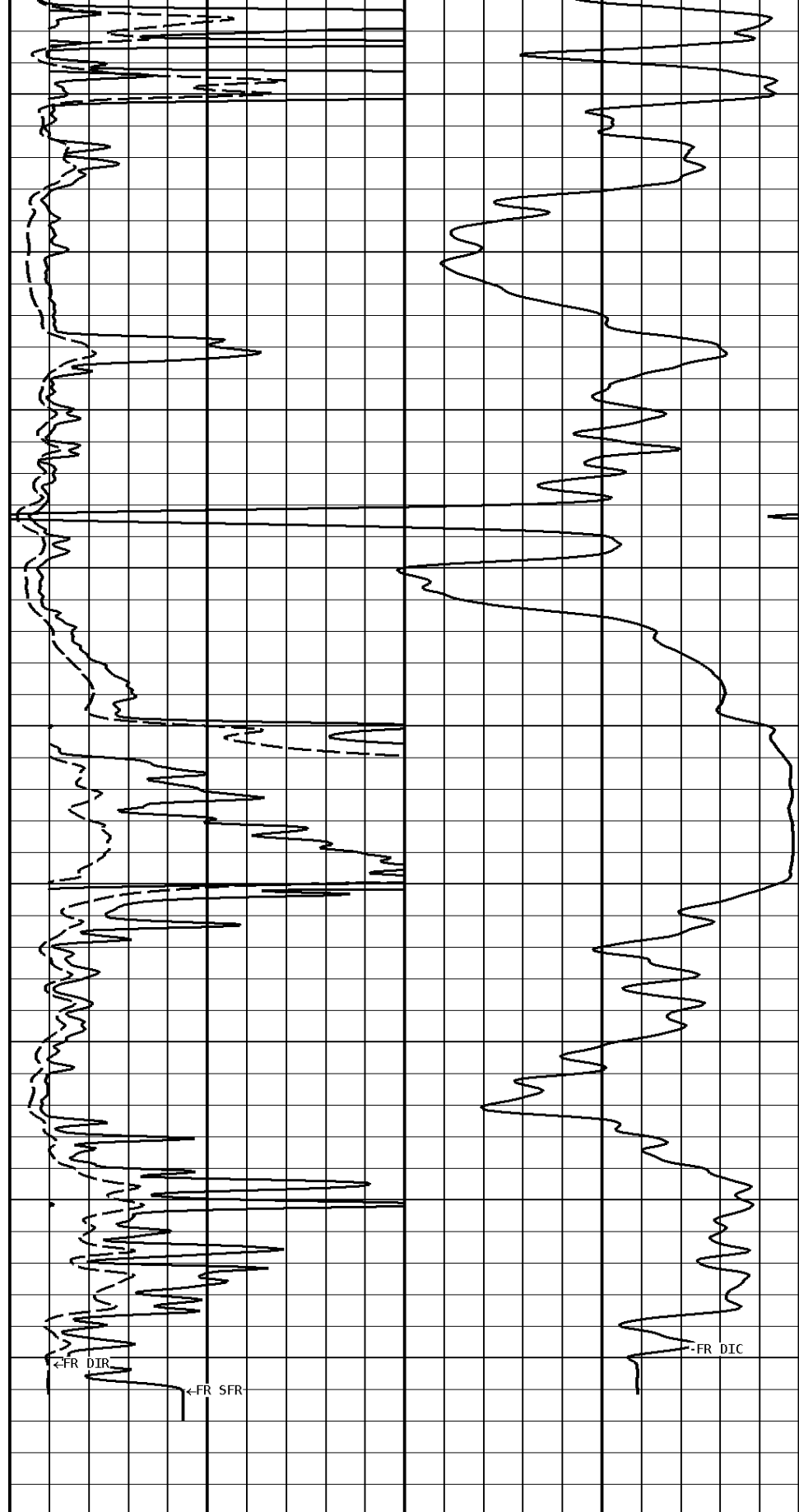


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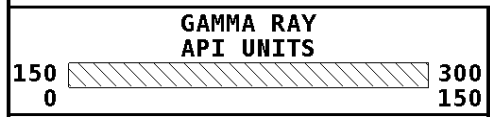


File #1.1.7

4200
4300
4400
4500
4566



1:600 MAIN SECTION



SPONTANEOUS POTENTIAL mV	
→	←20
TENSION LBS	
10000	0

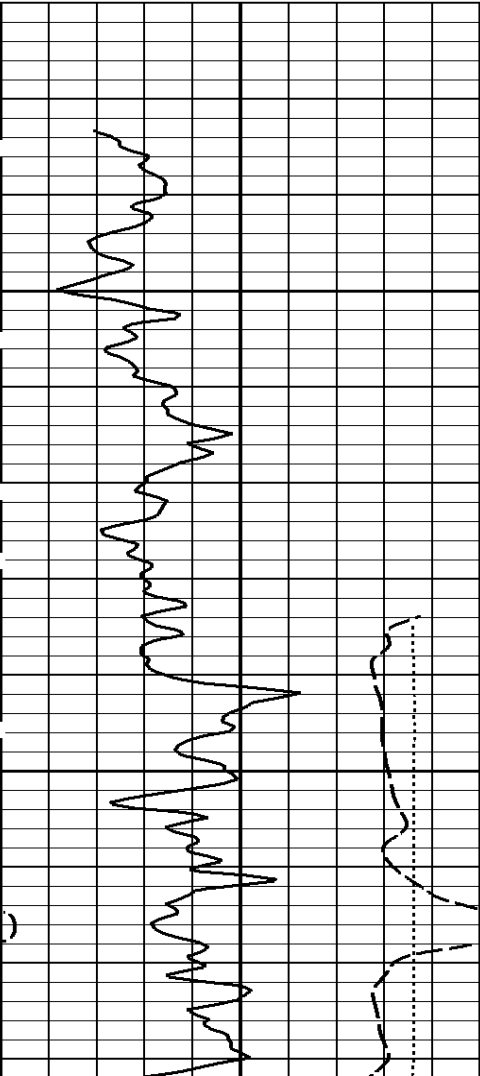
SHALLOW FOCUSED RESISTIVITY OHMM	
0.0	500.0
0.0	50.0
DEEP INDUCTION OHMM	
0.0	500.0
0.0	50.0

Well File: toto-gre-24-1-mstk-may-31
Segment: V1.D1.S7 MAIN
Reference: 0

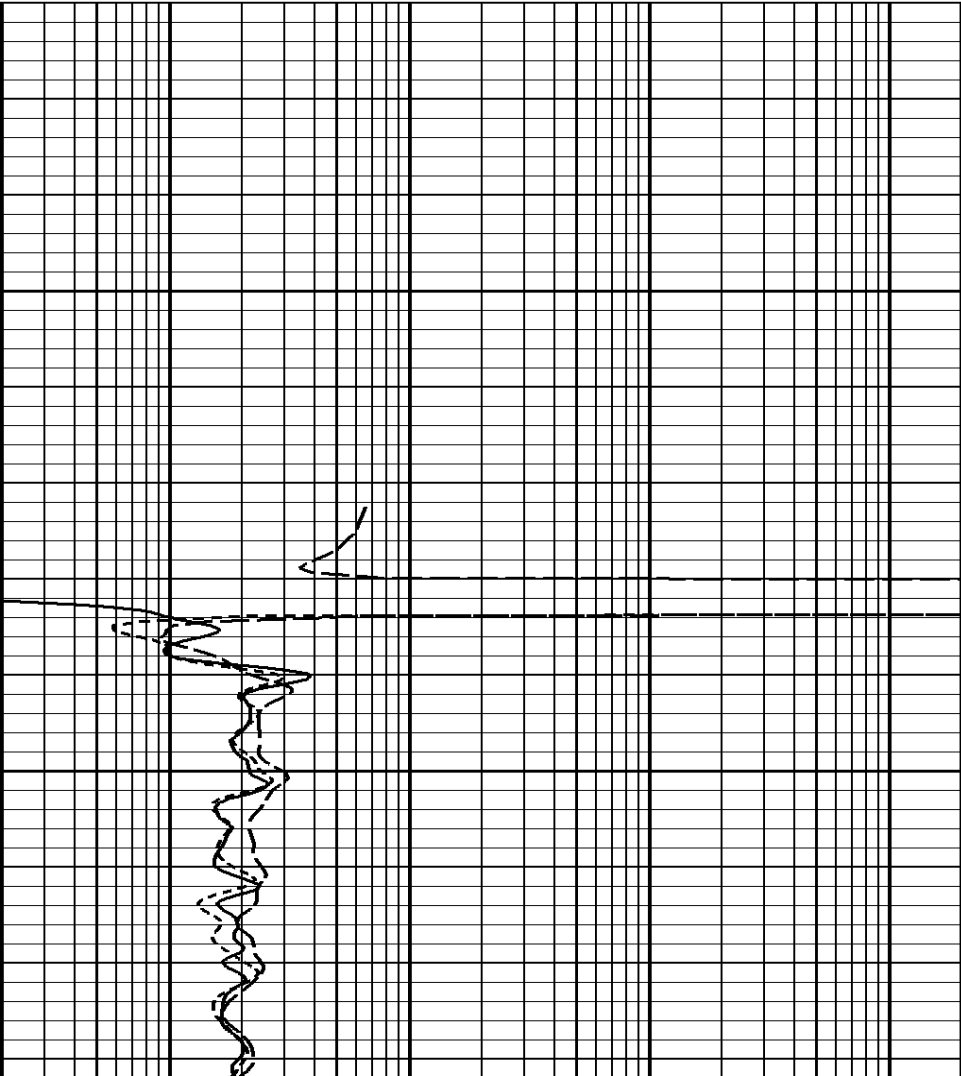
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Processed: 2013-05/31 07:15 3.2.0-11855

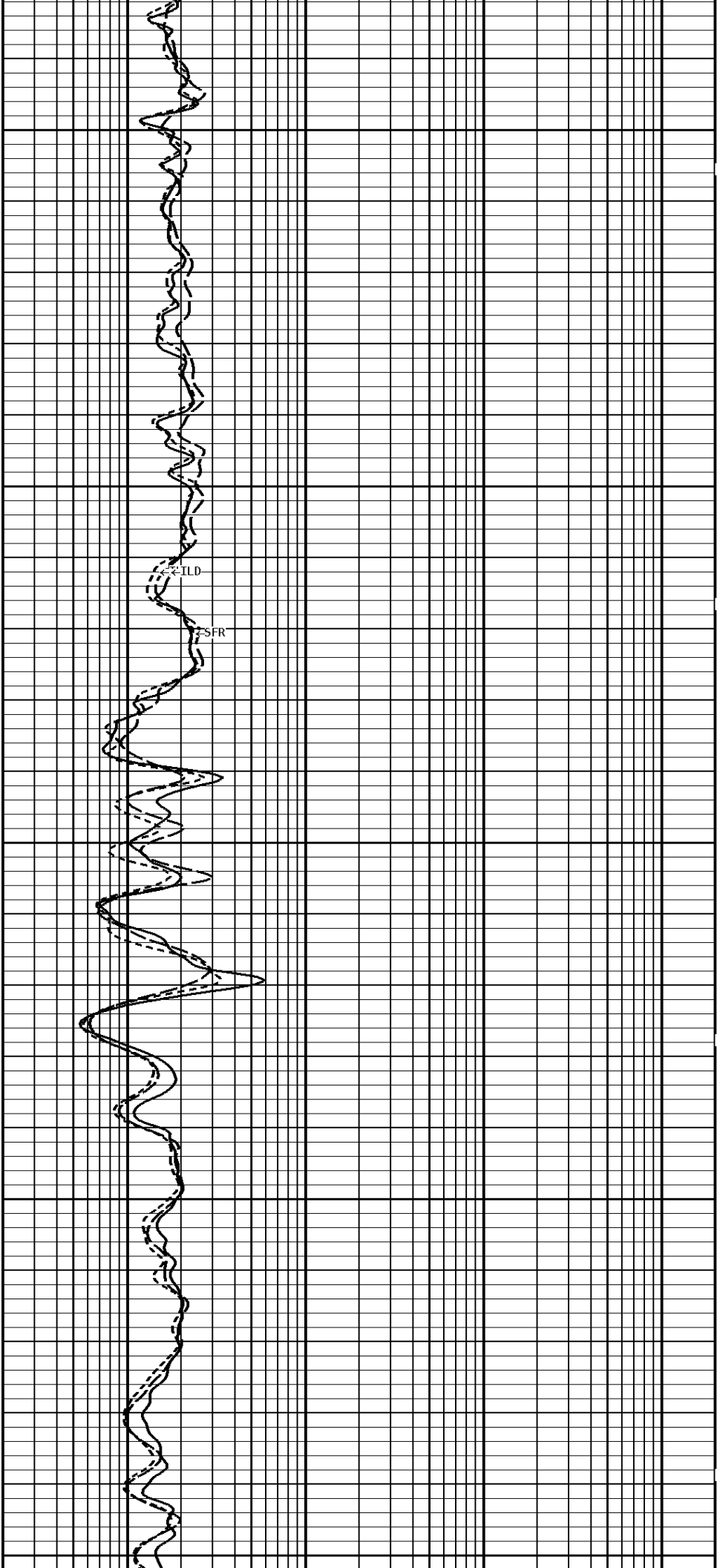
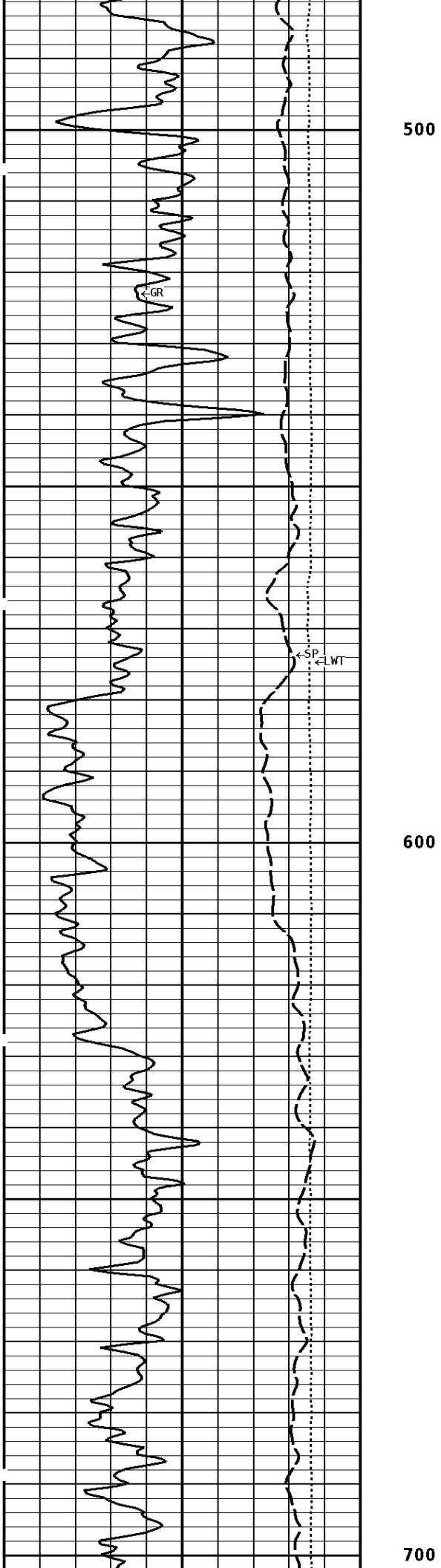
SPONTANEOUS POTENTIAL mV → ←20 TENSION LBS 10000 0 GAMMA RAY API UNITS 150 0 300 150	DEEP INDUCTION OHMM	
	0.2	2000.0
	MEDIUM INDUCTION OHMM	
	0.2	2000.0
	SHALLOW FOCUSED RESISTIVITY OHMM	
	0.2	2000.0

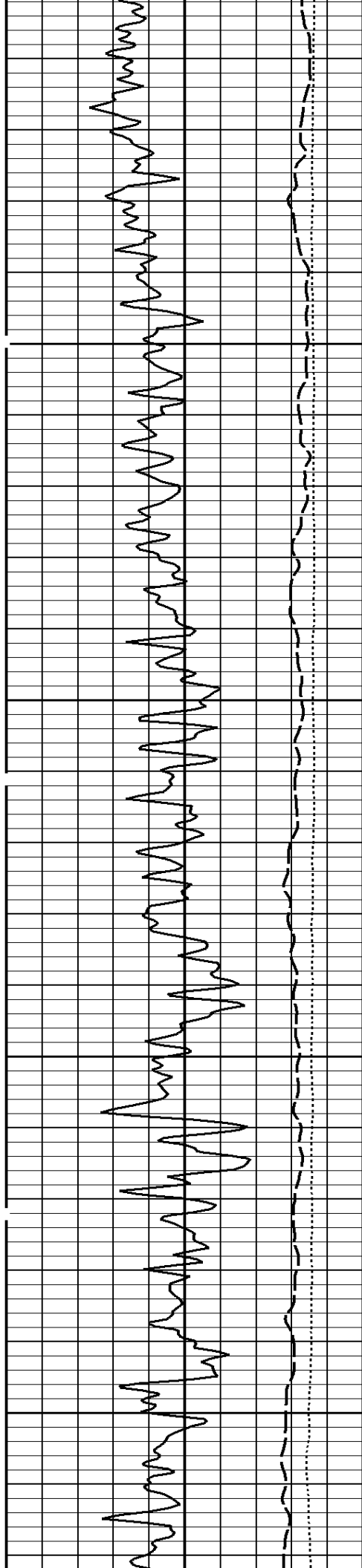
1:240 MAIN SECTION



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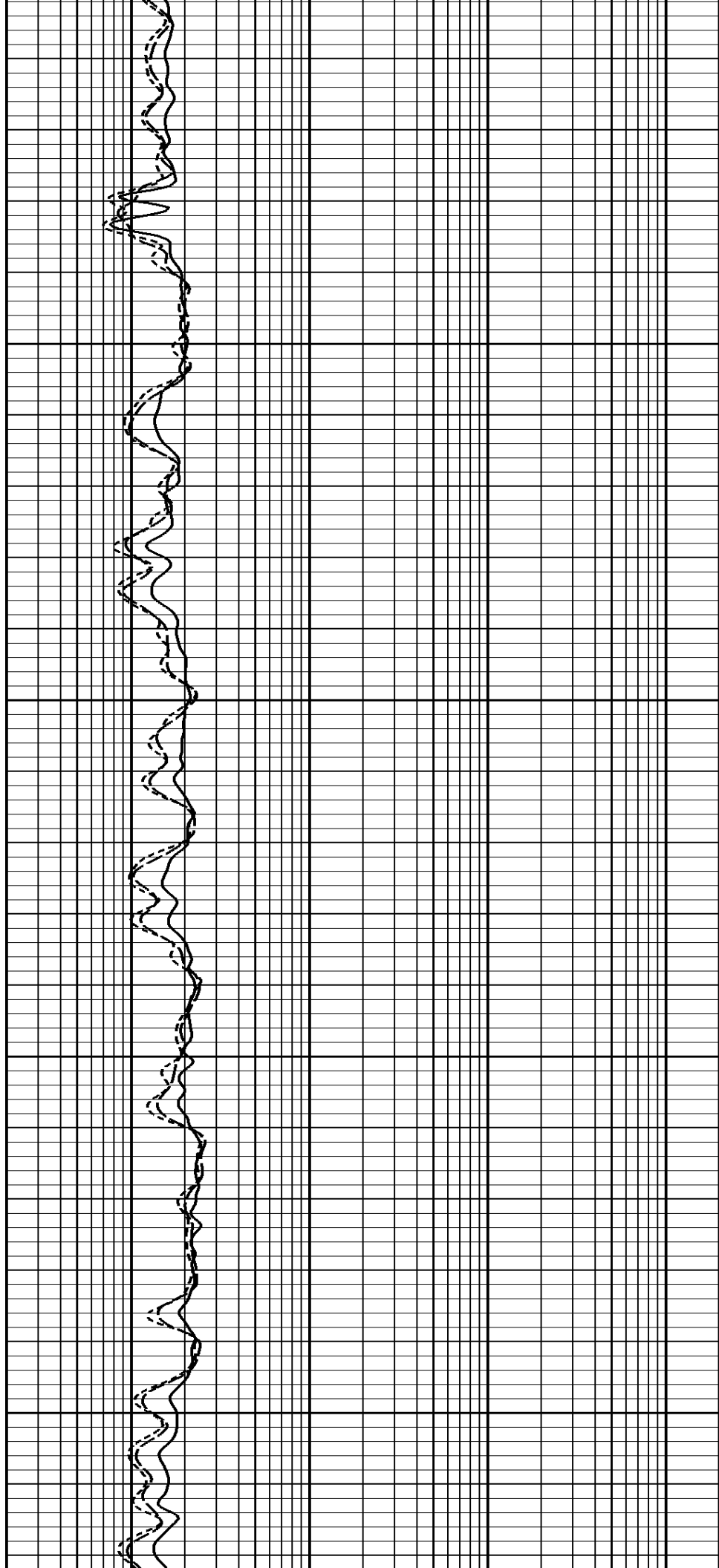






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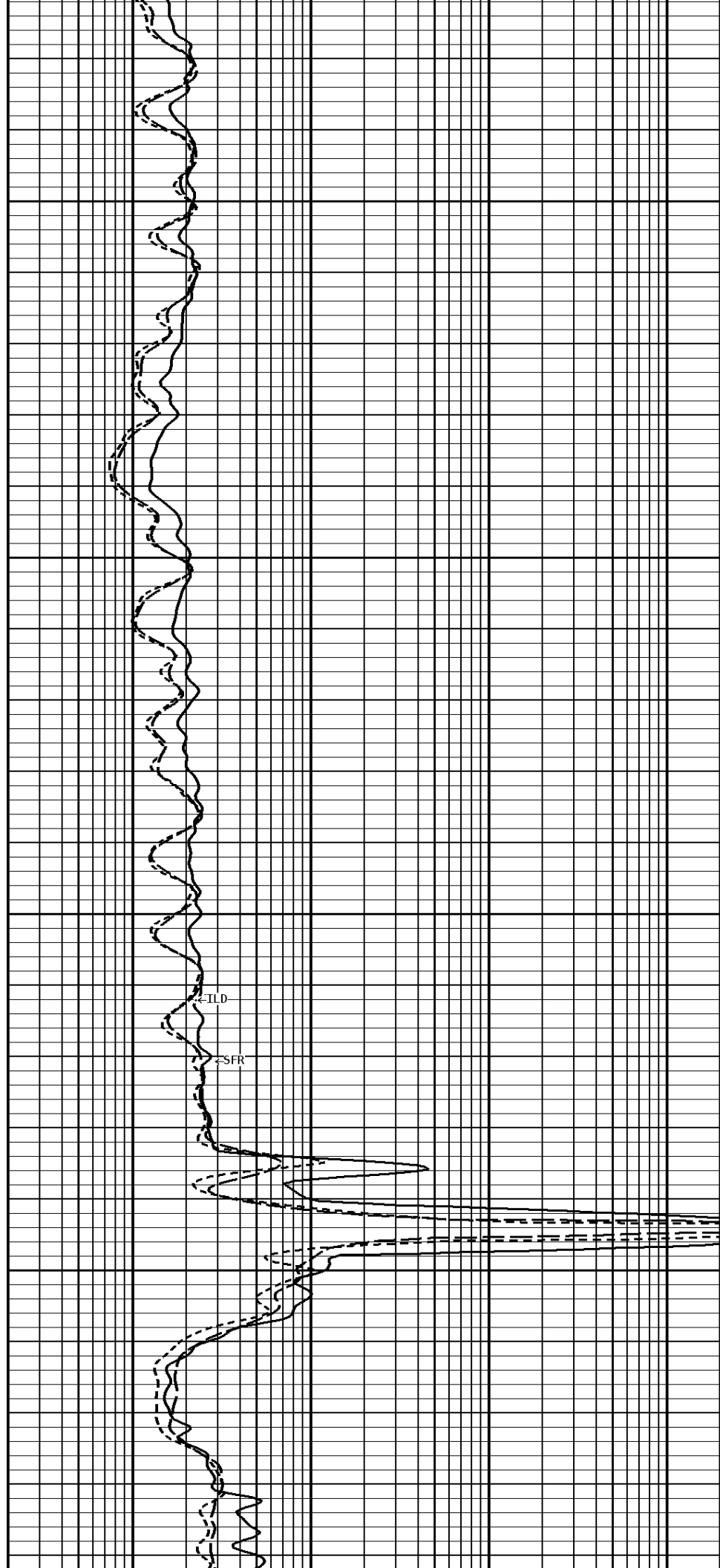
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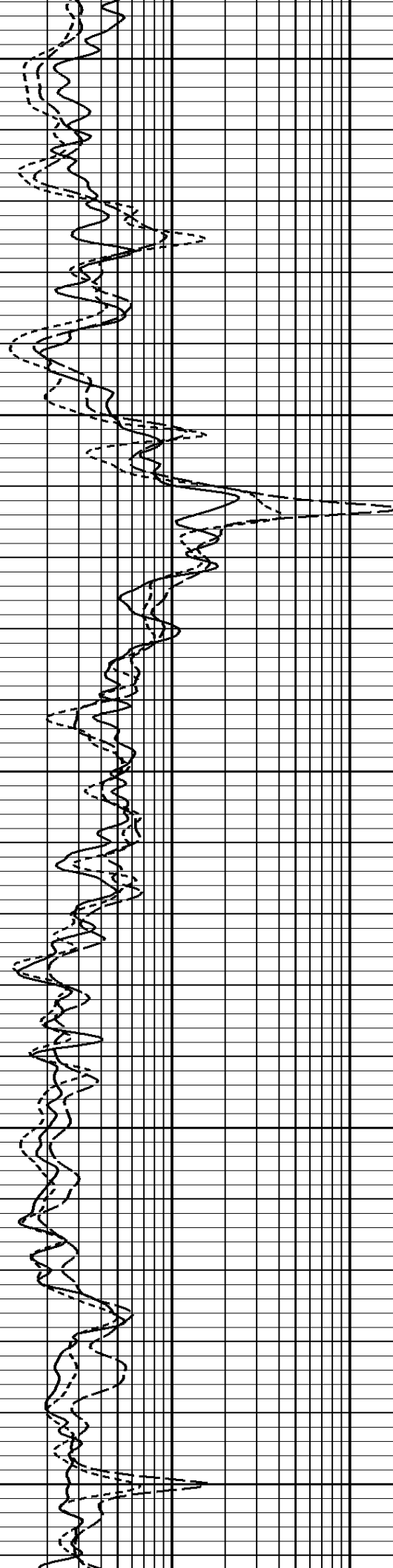
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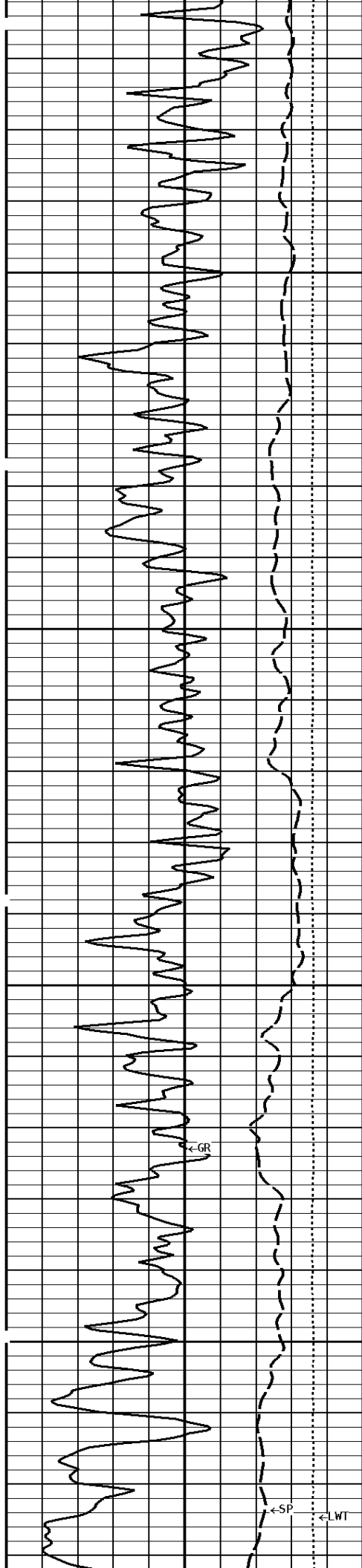




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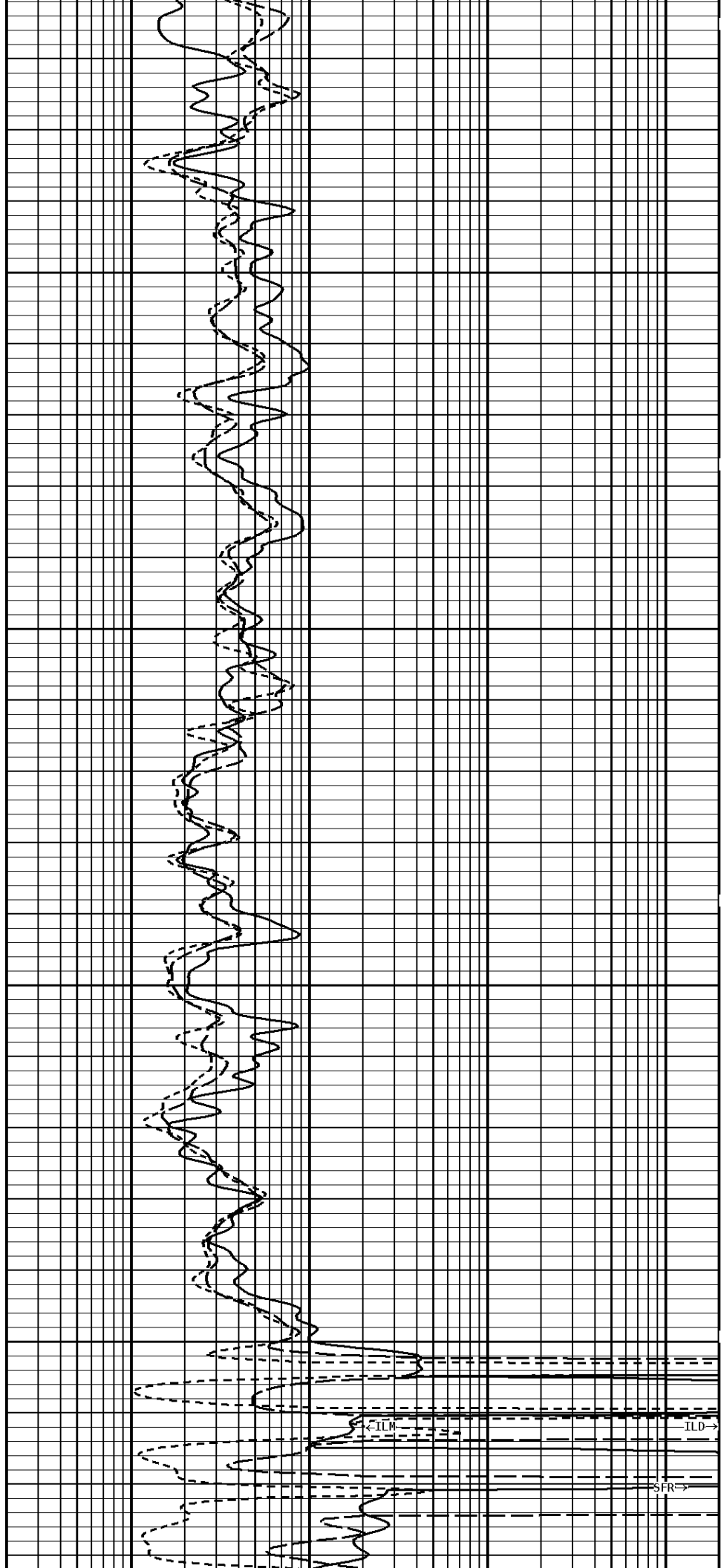
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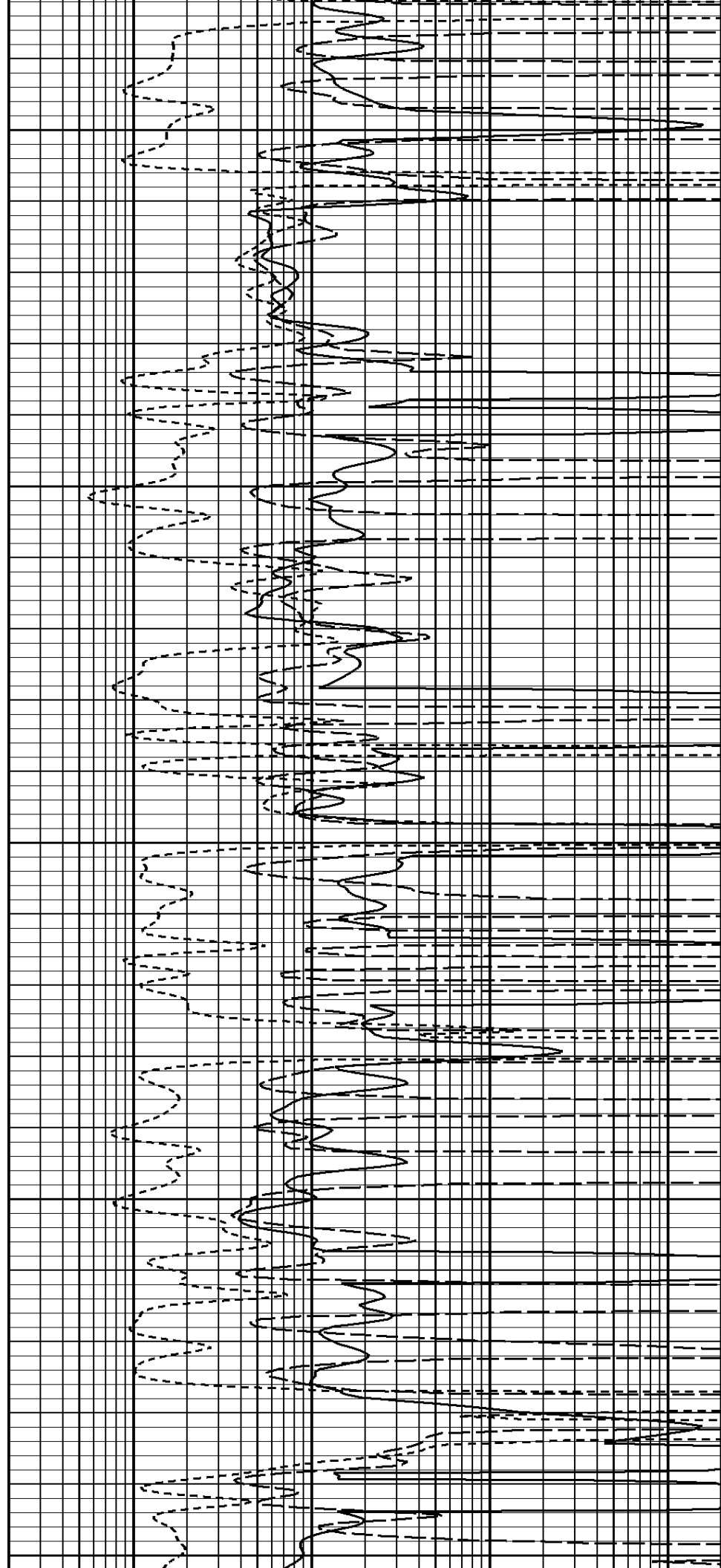
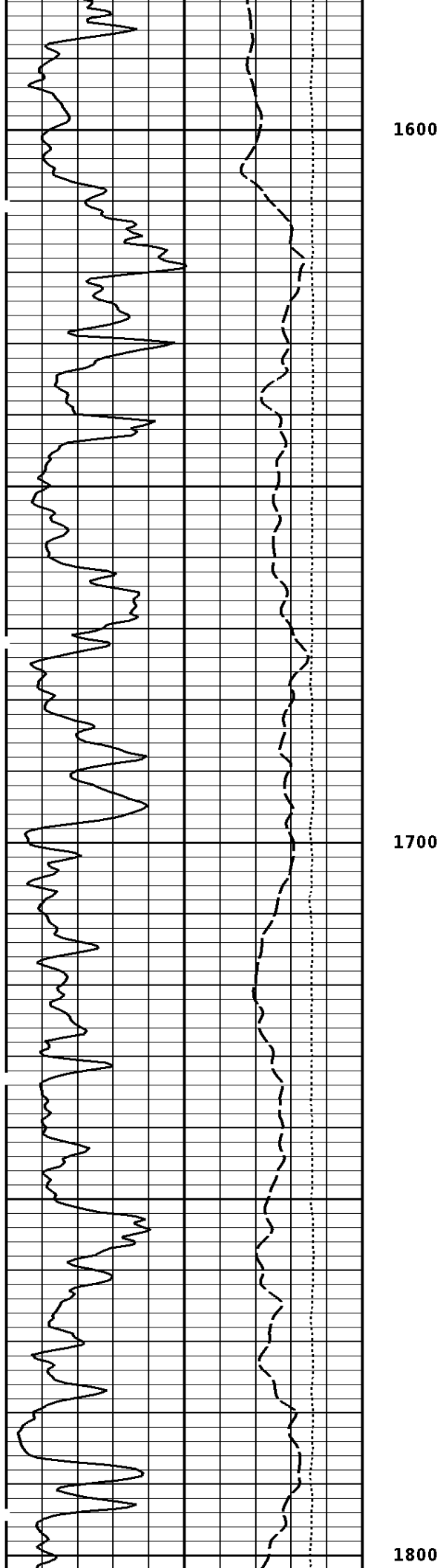


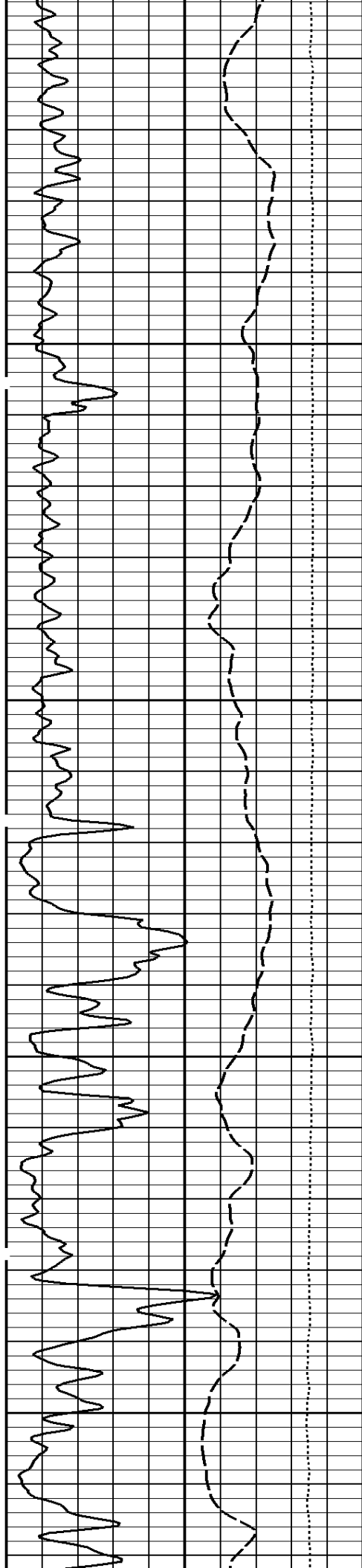


1400

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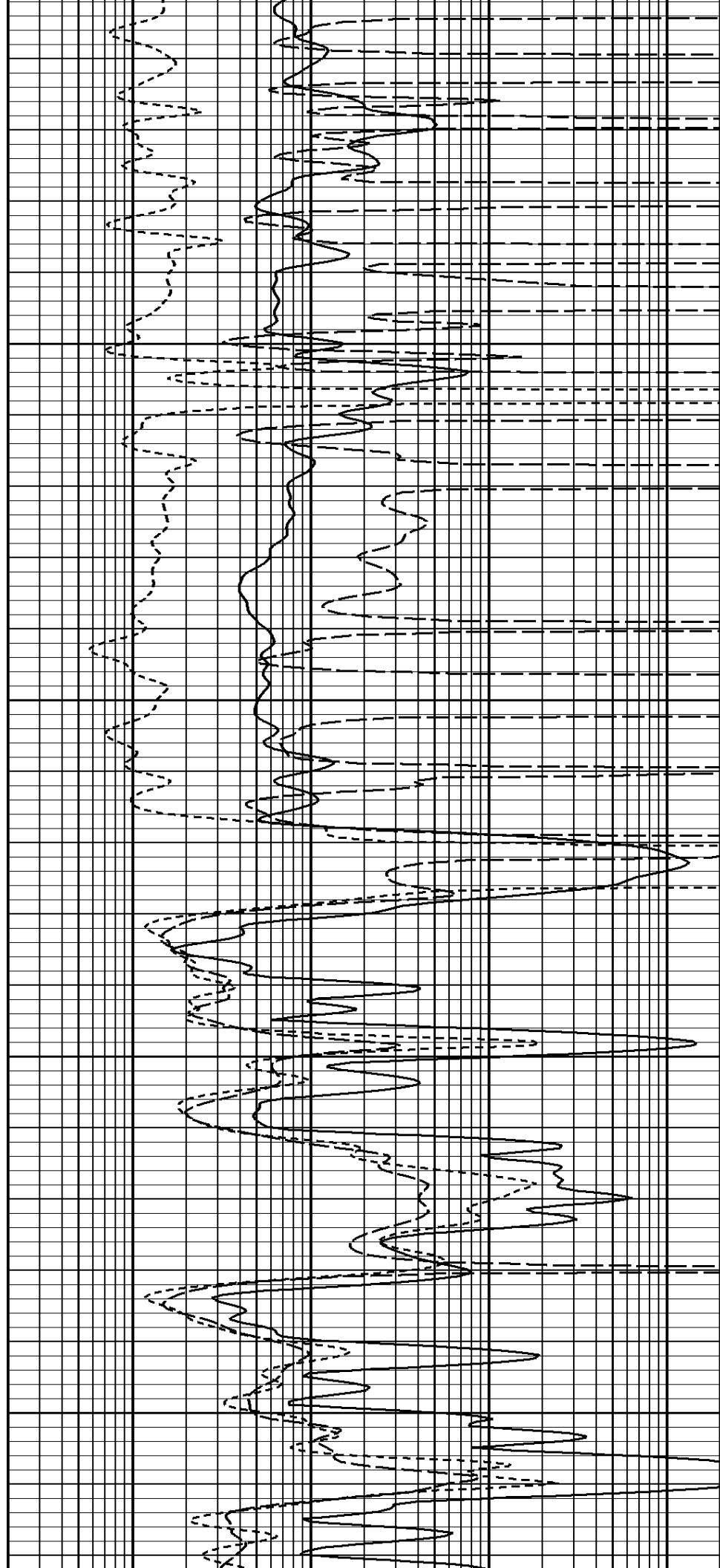


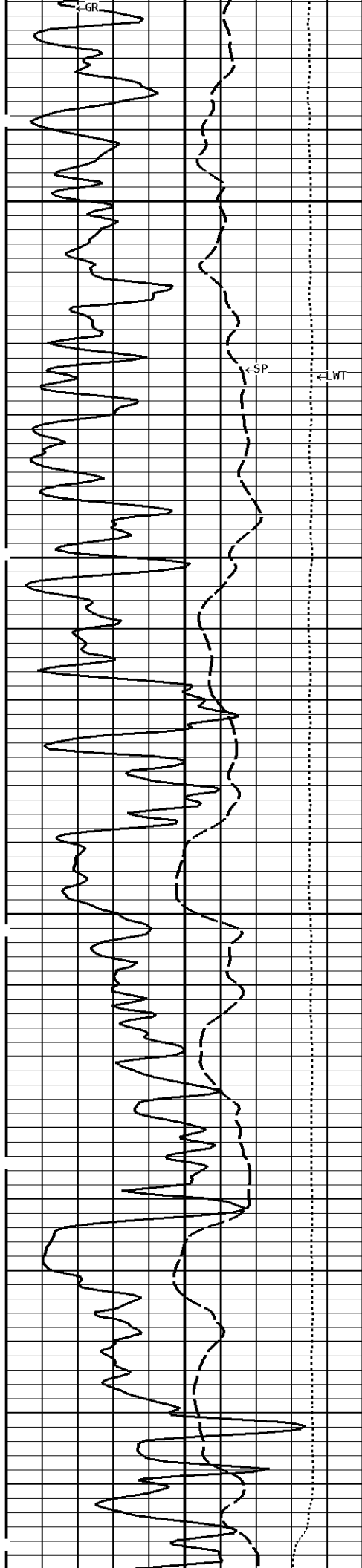




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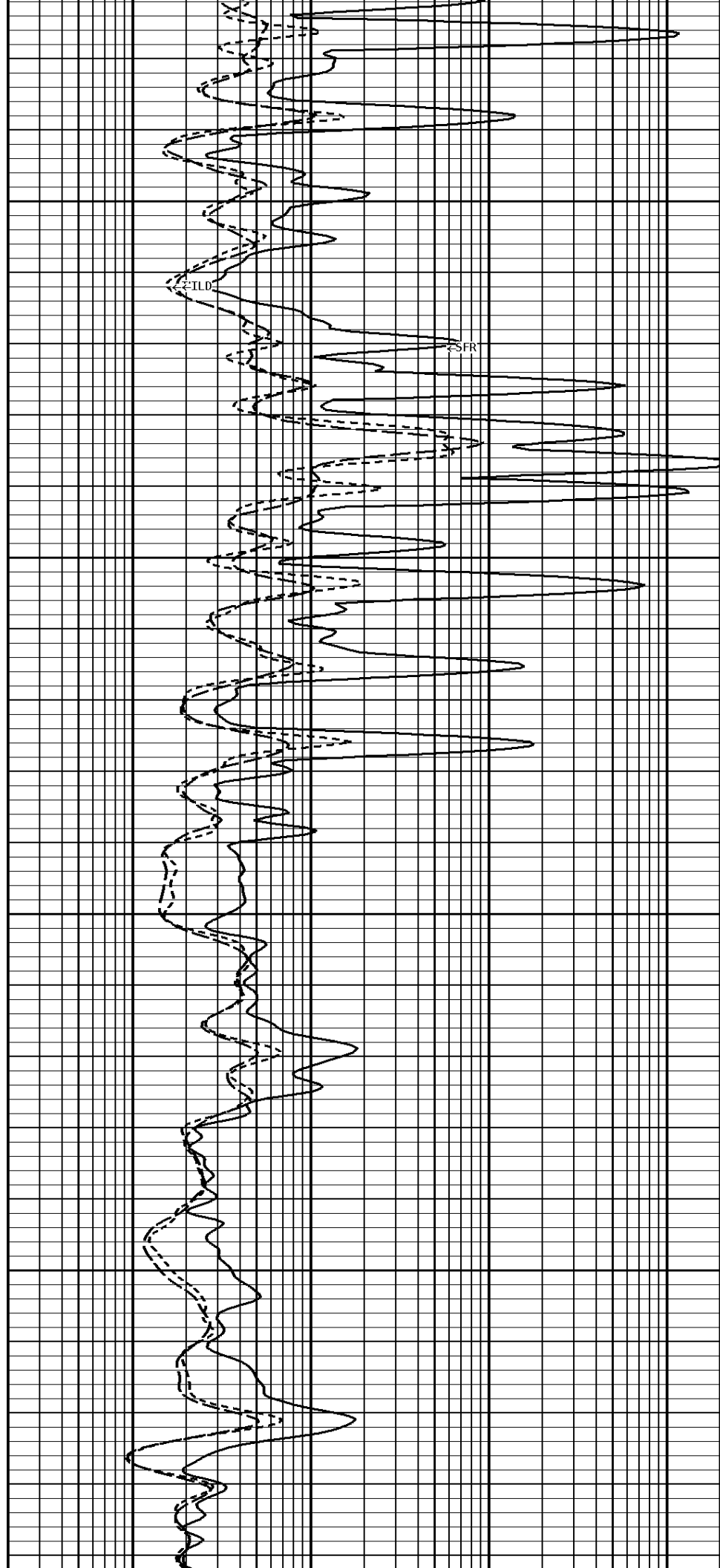
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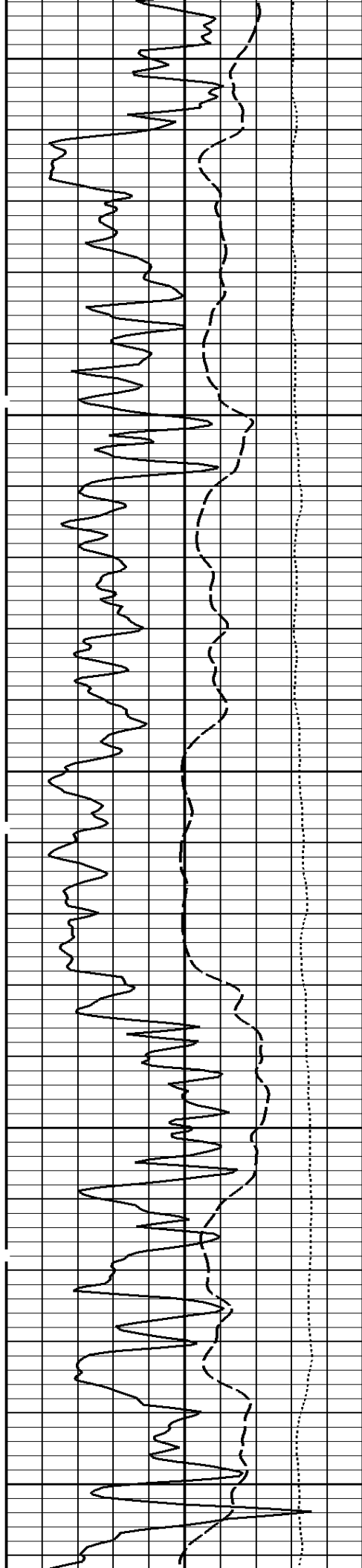




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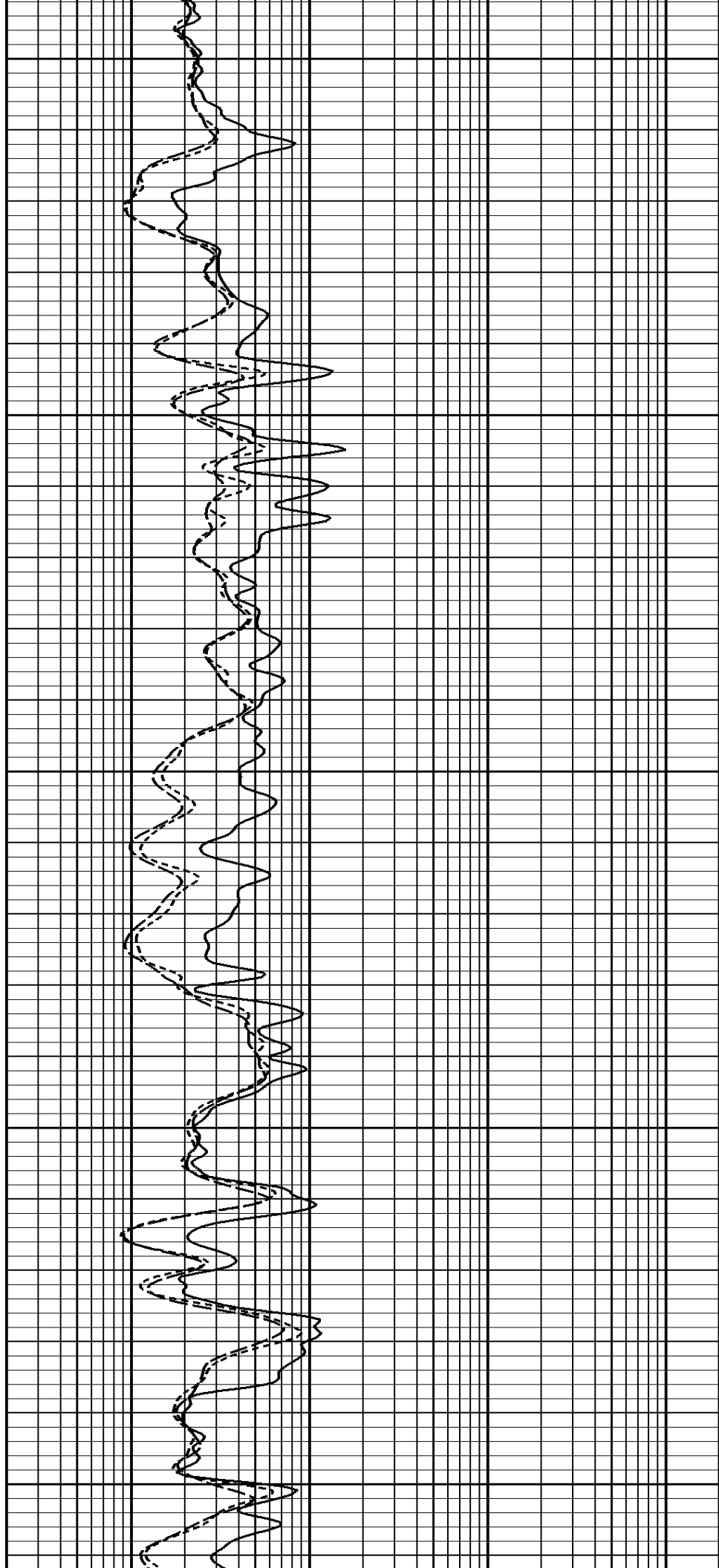
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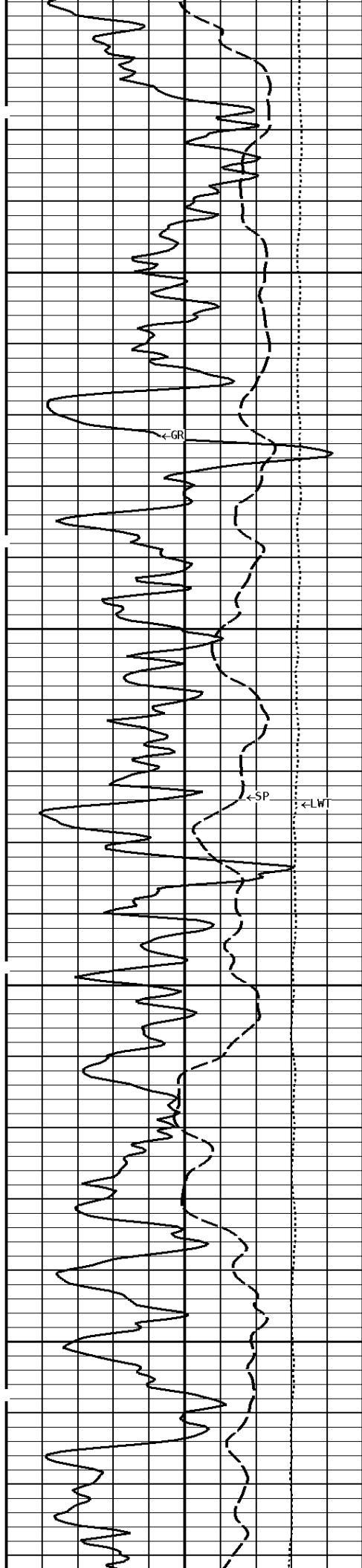




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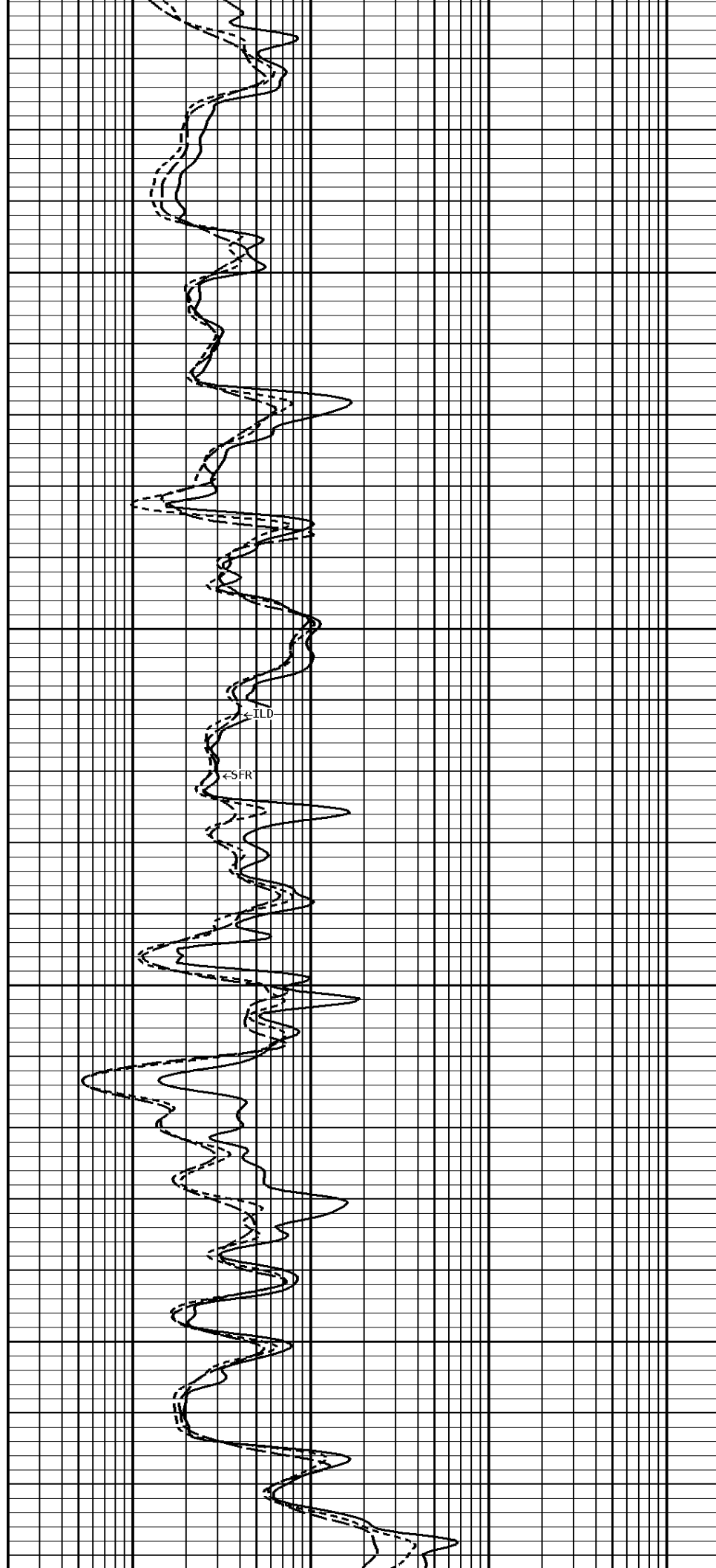
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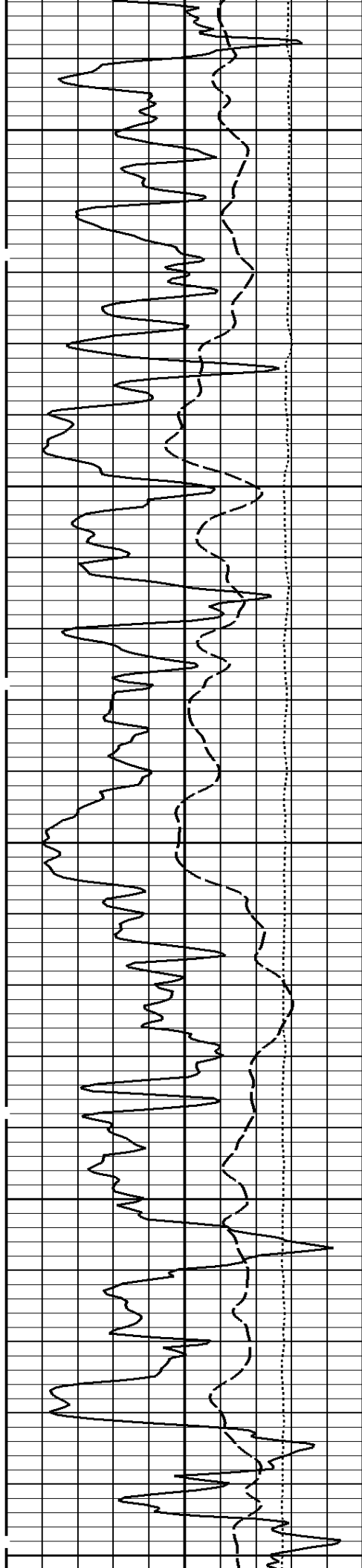




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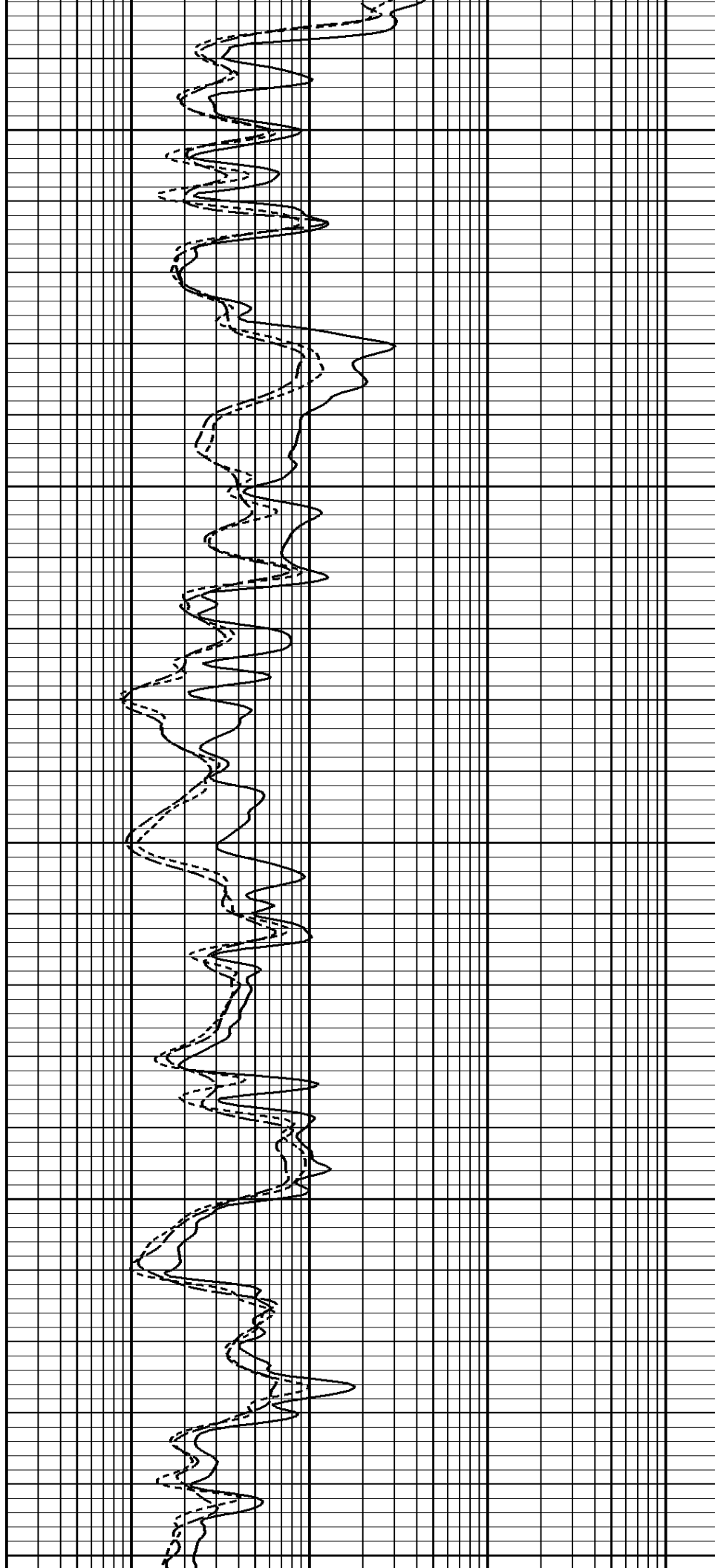


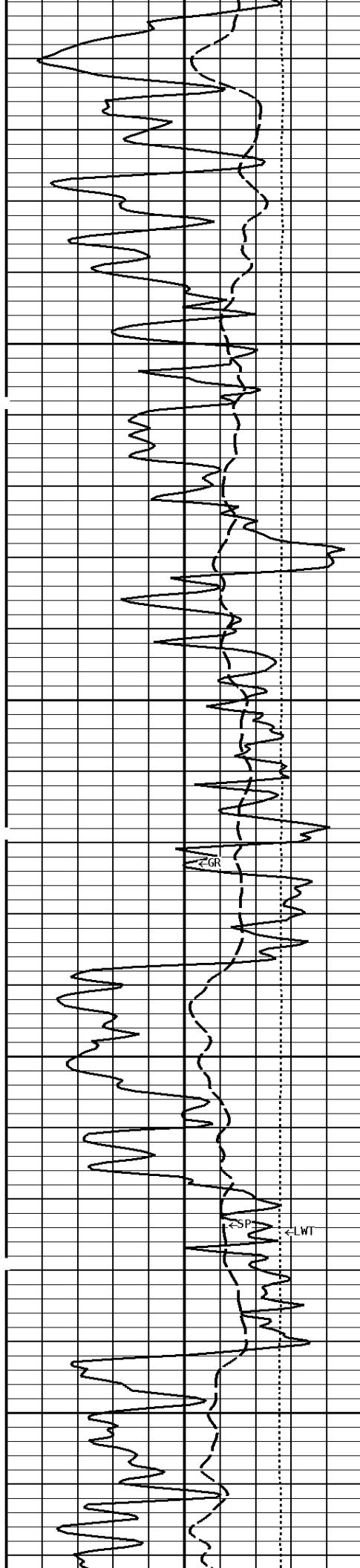


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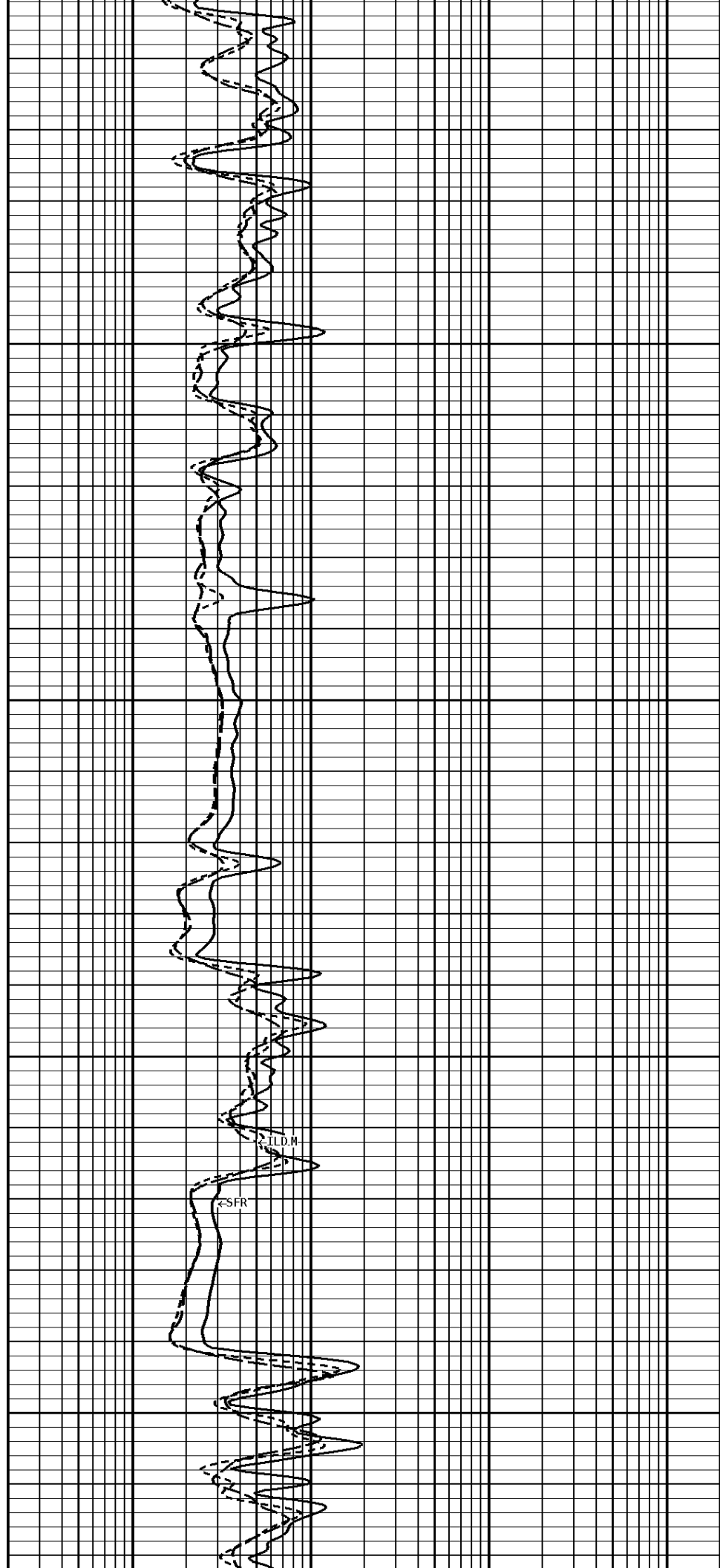
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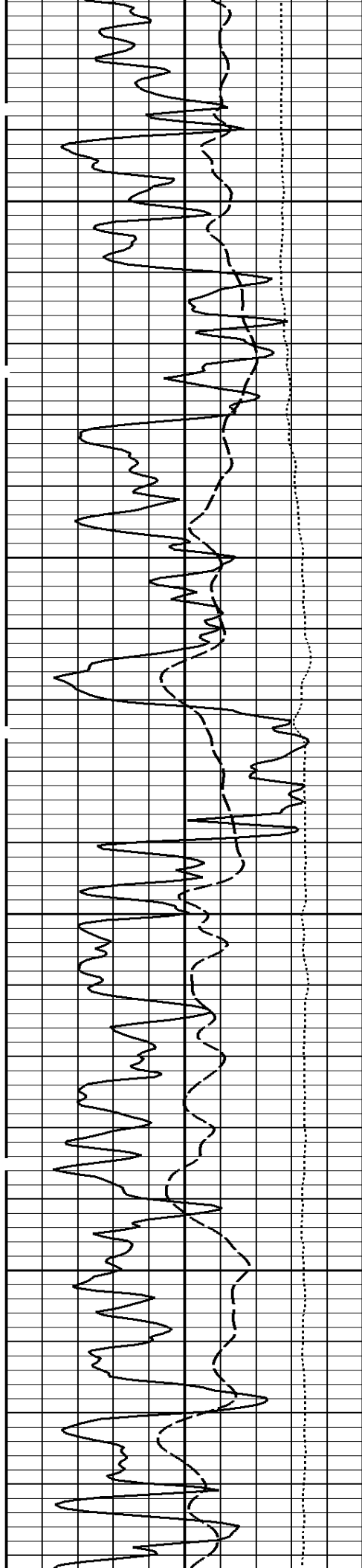




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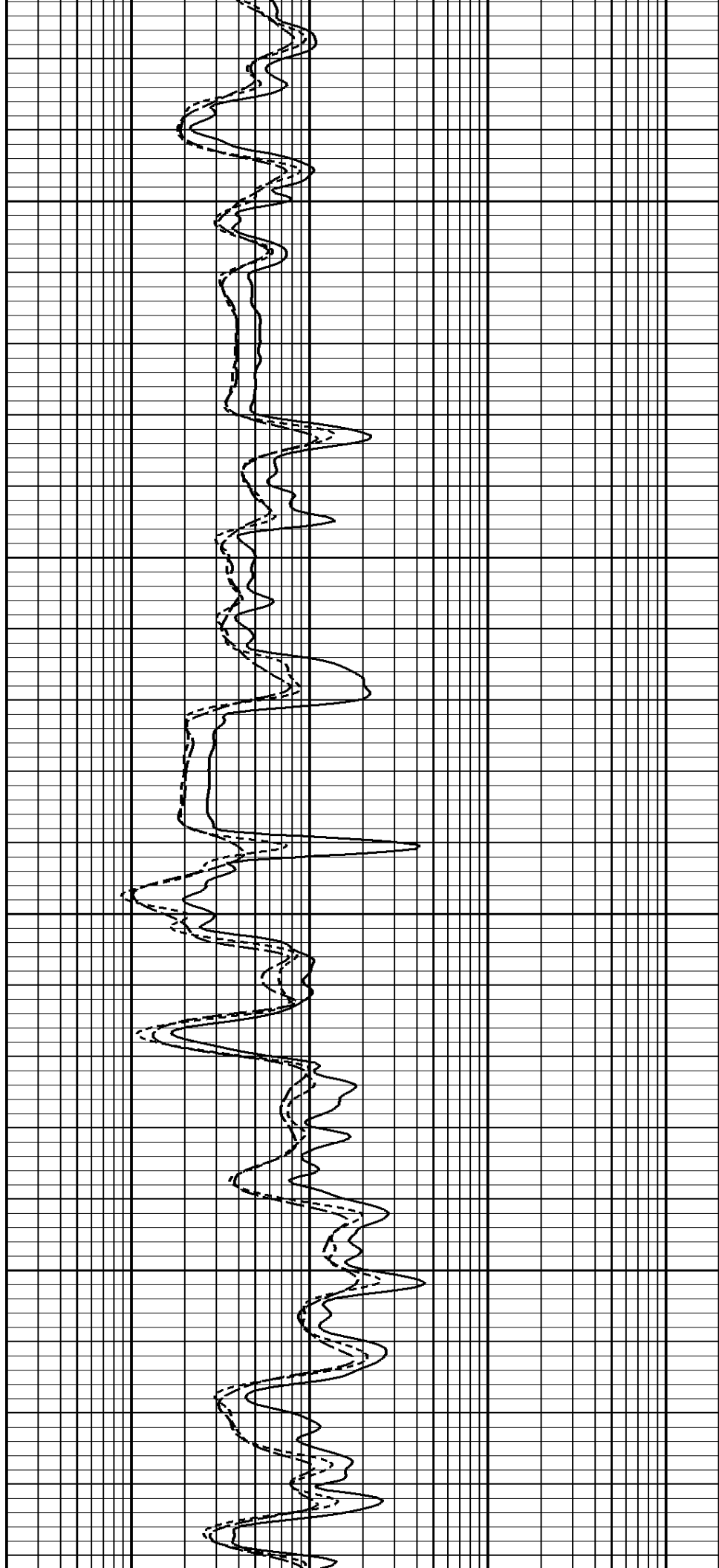
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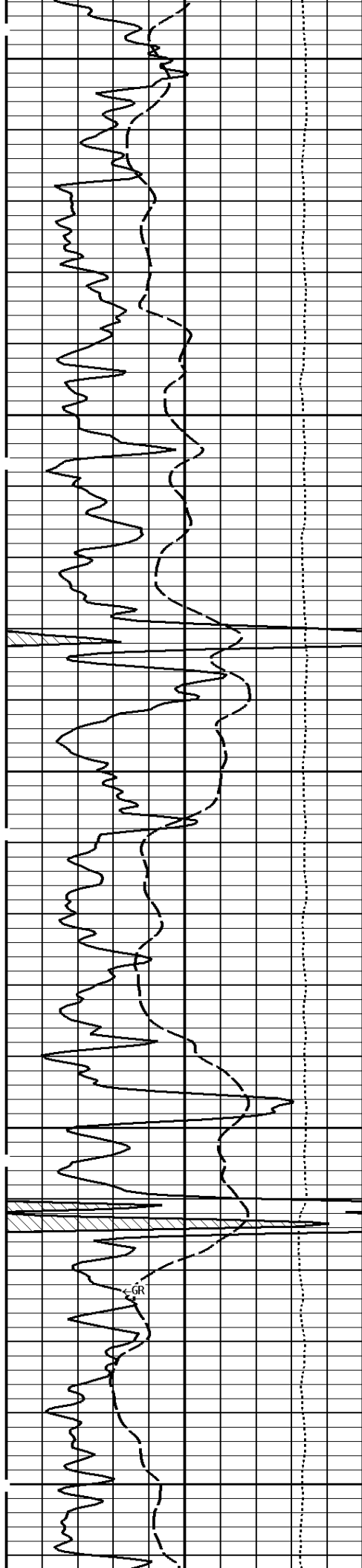




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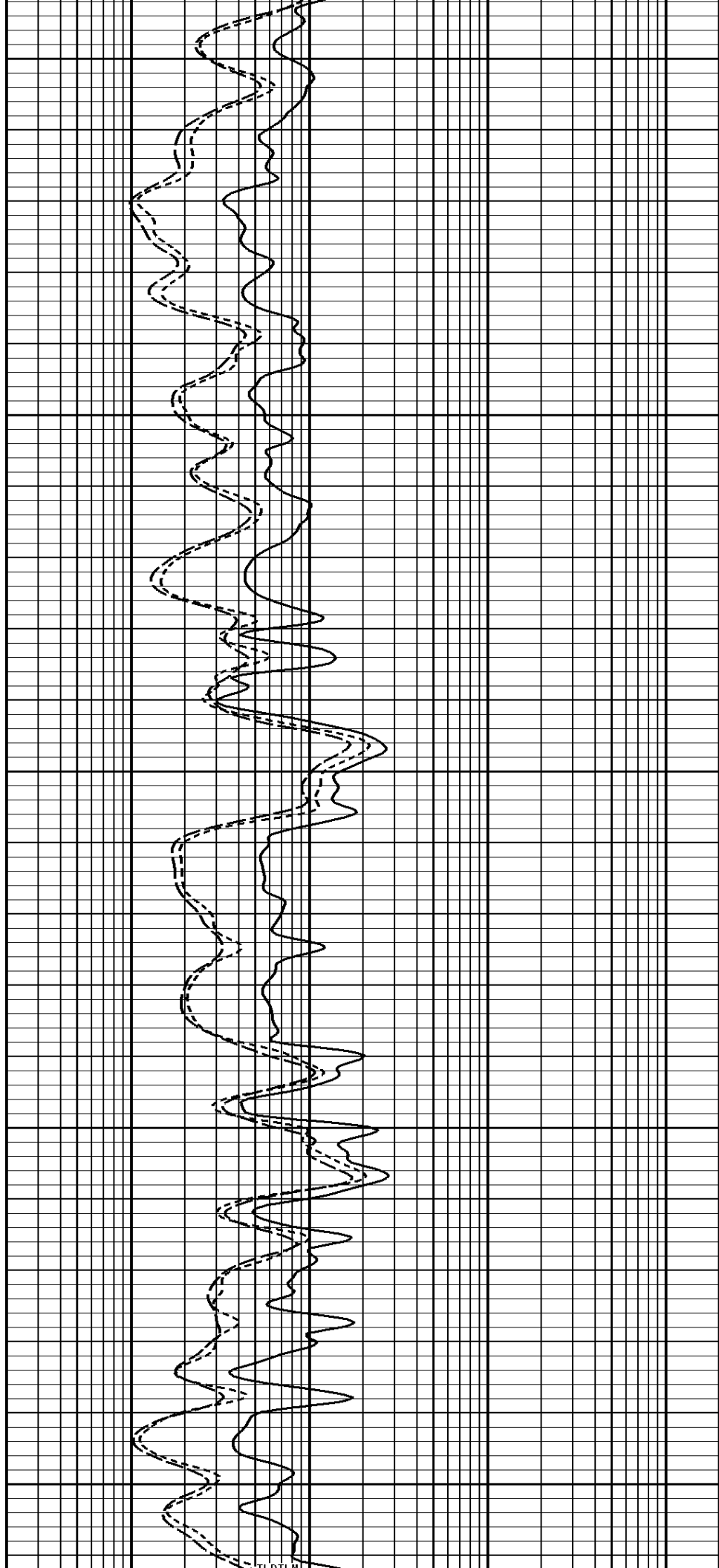
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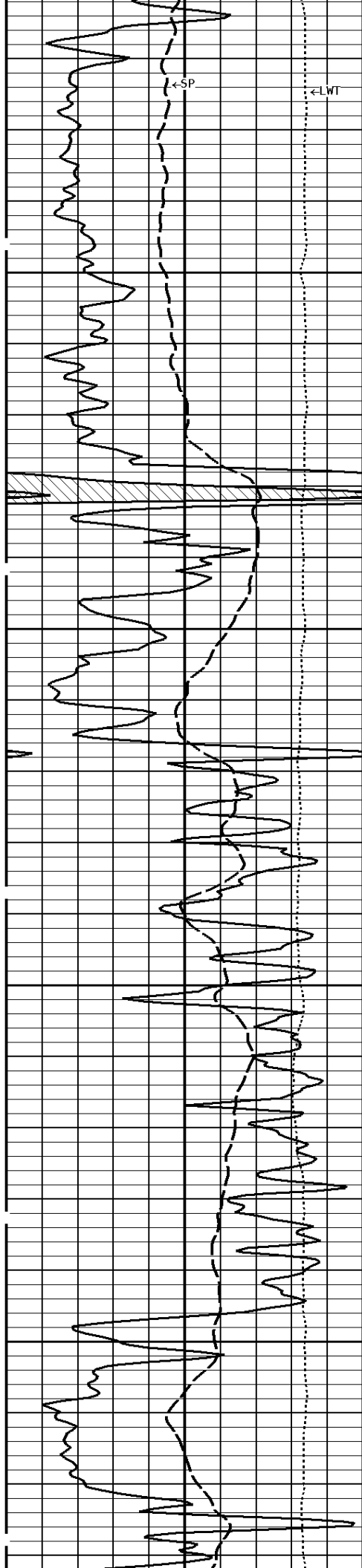




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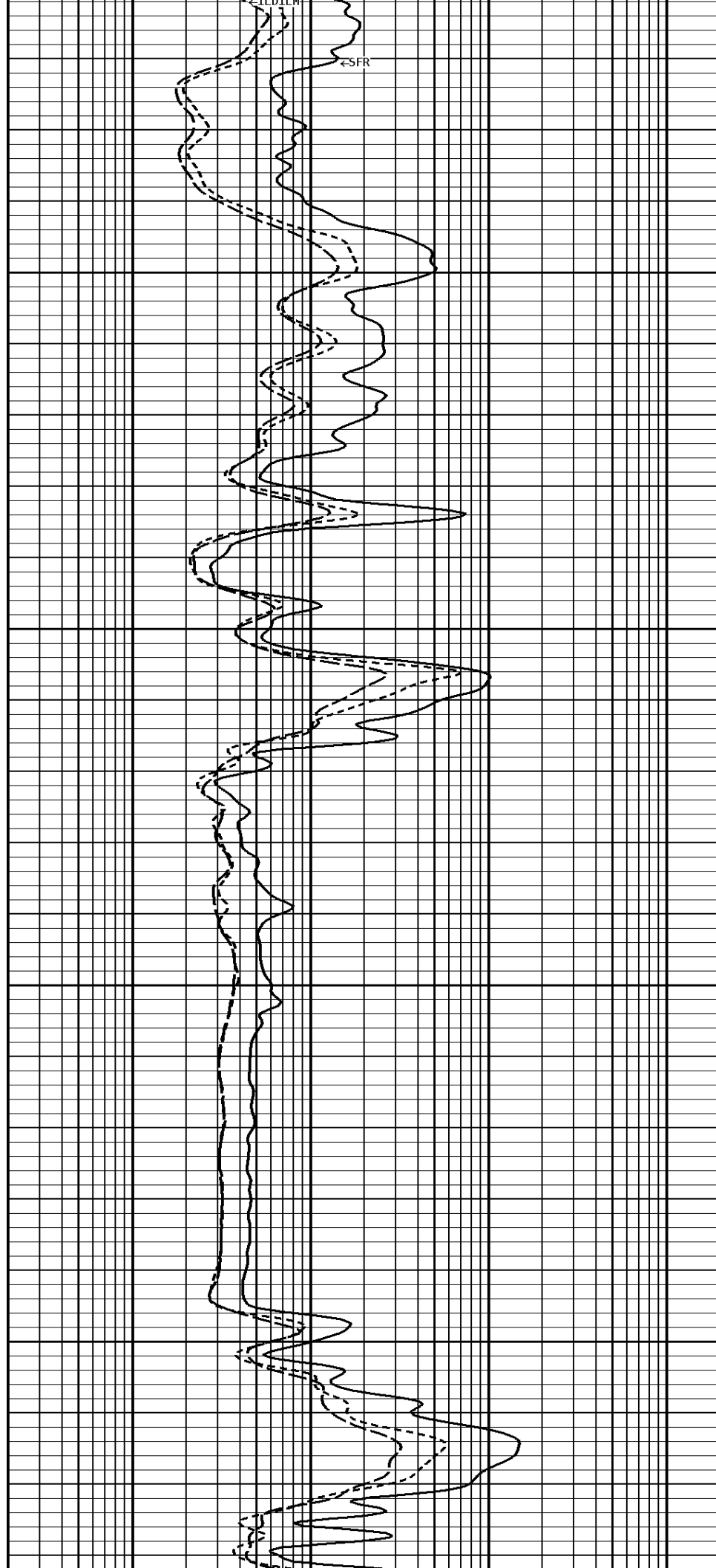
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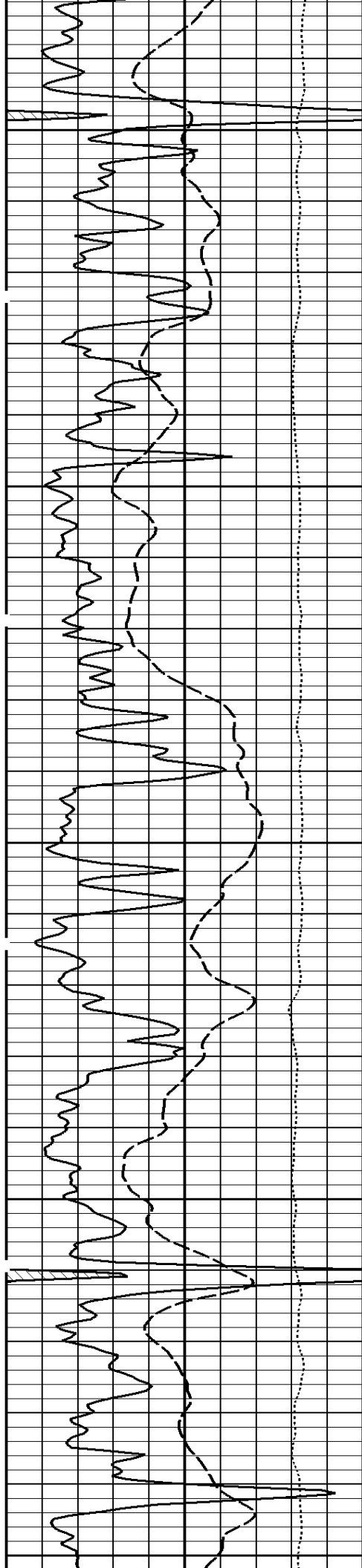




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3700

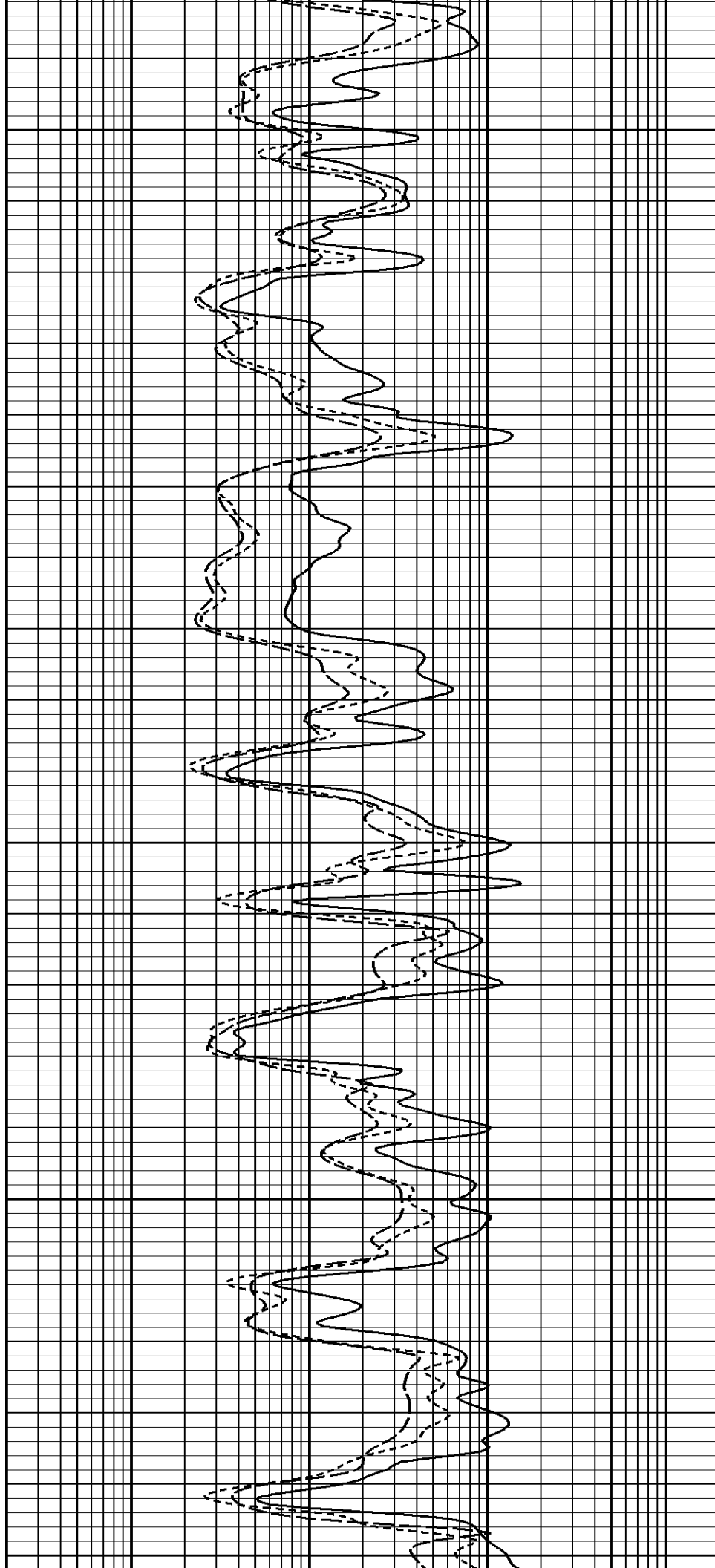


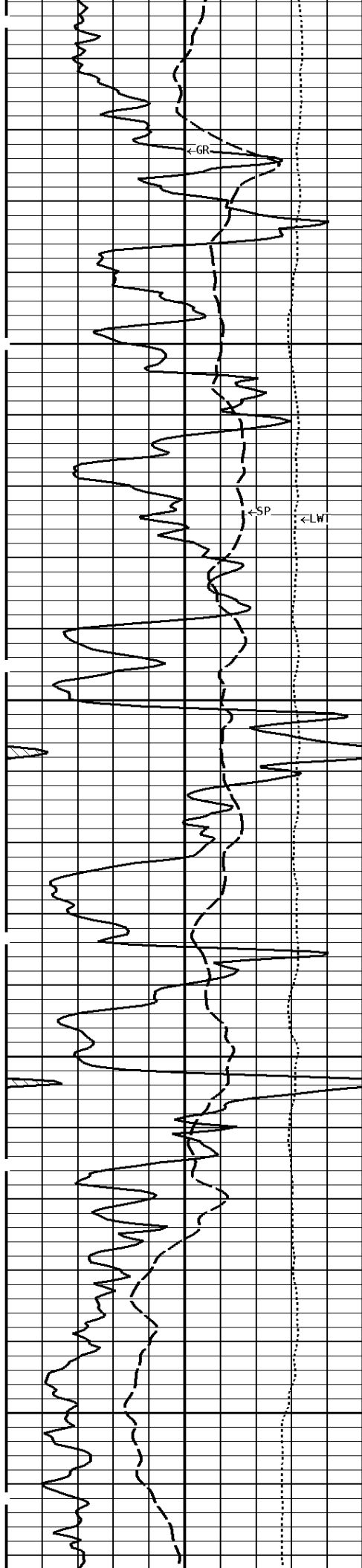


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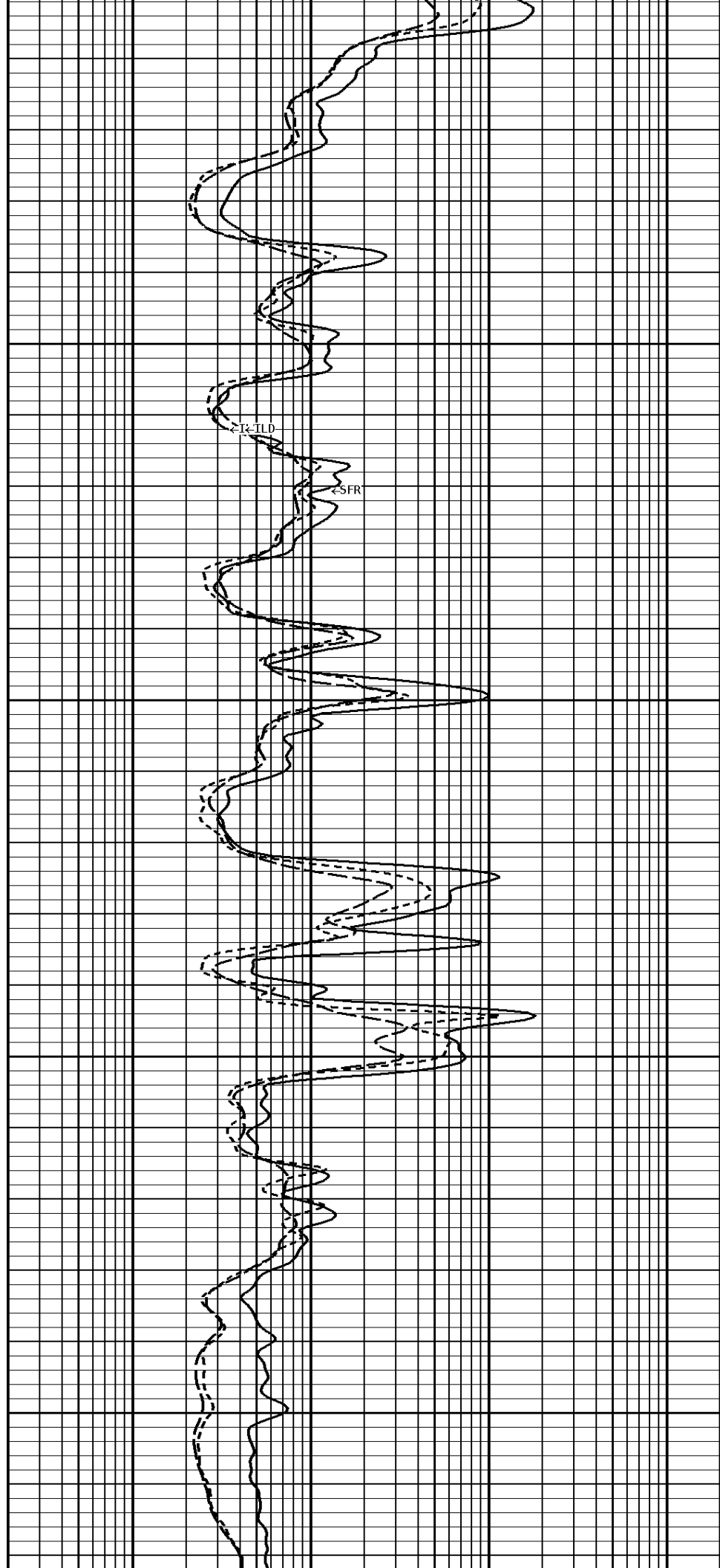
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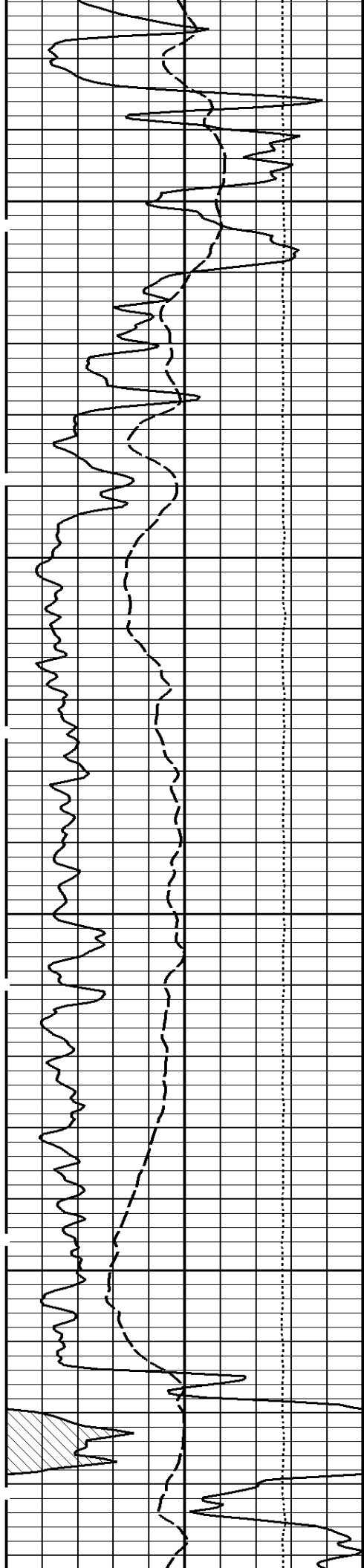




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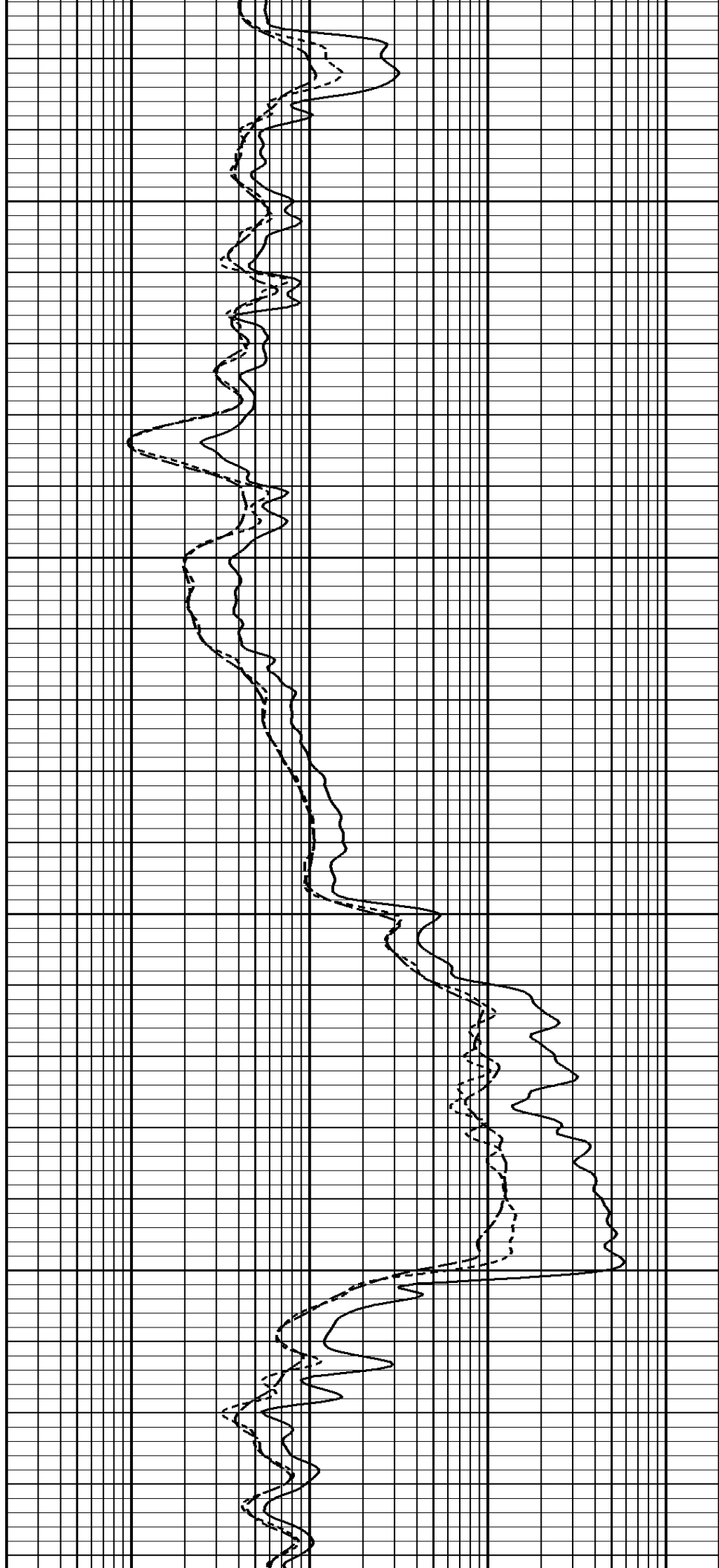
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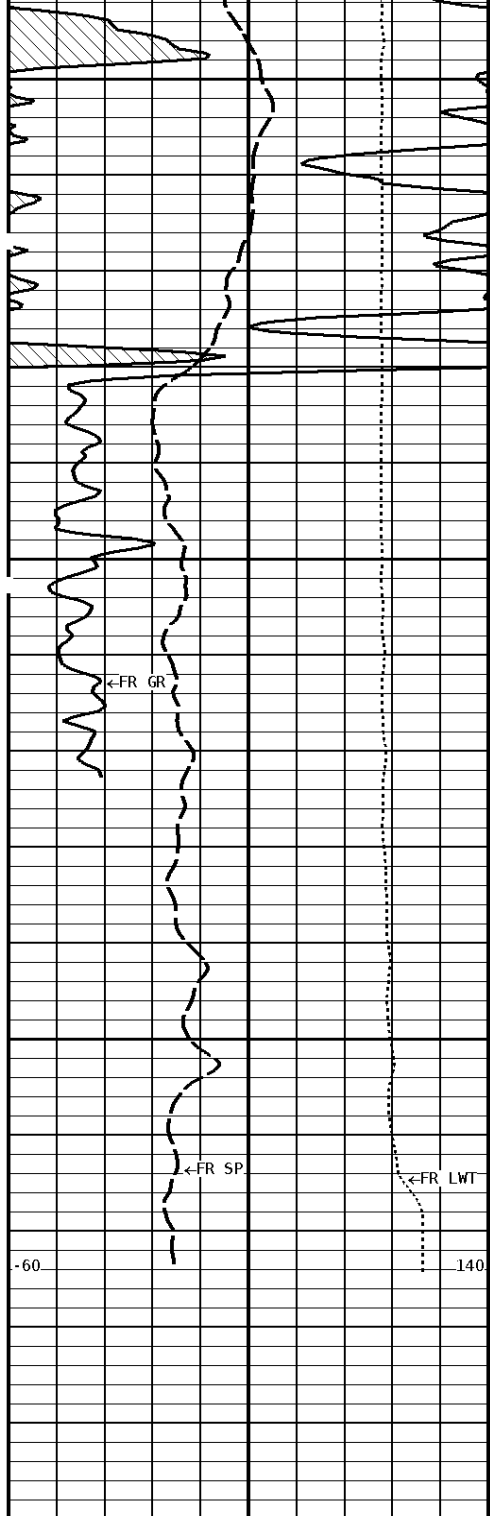




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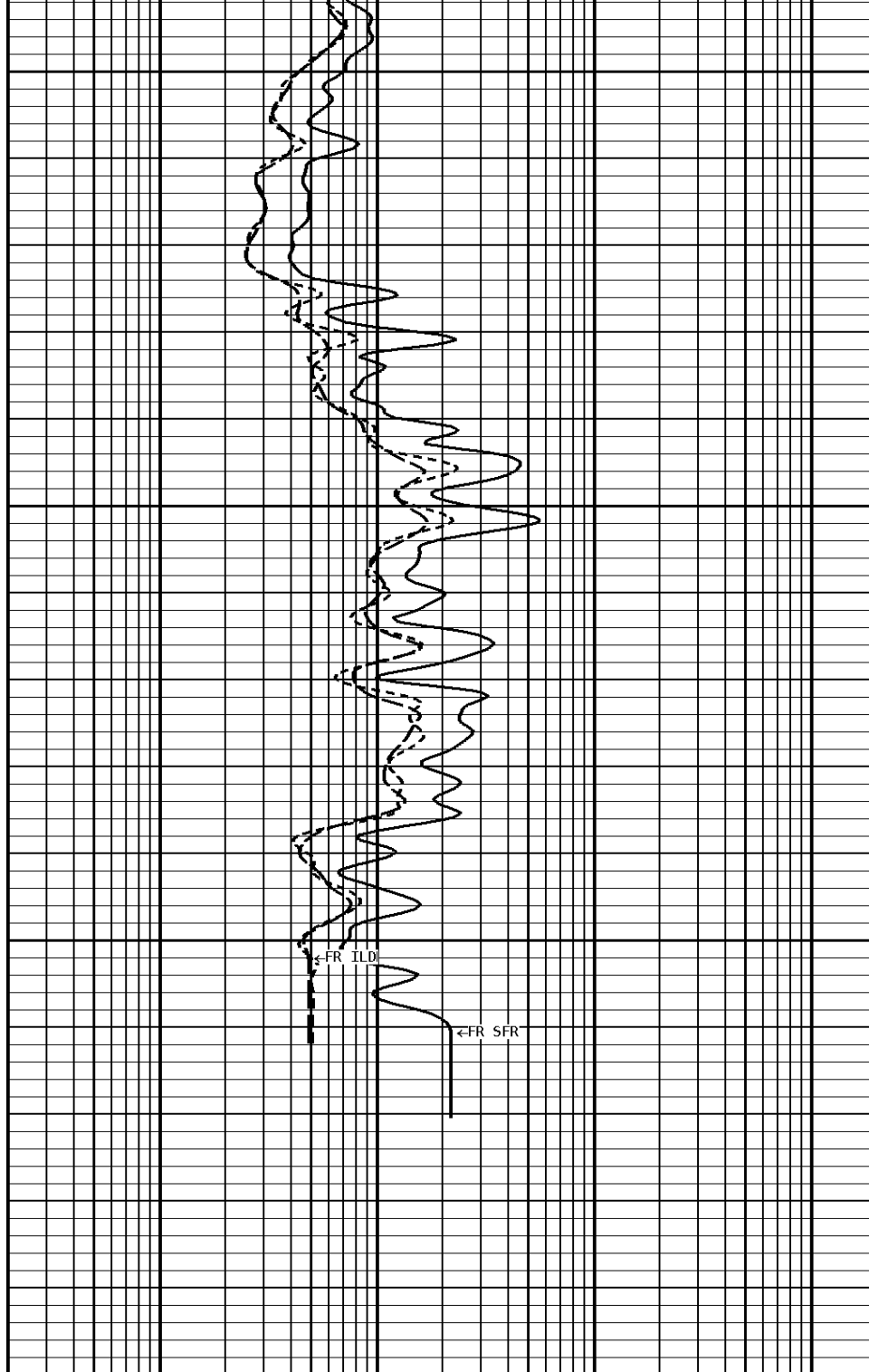
4400





4500

4566



1:240 MAIN SECTION

GAMMA RAY
API UNITS

150 0 300 150

TENSION
LBS

10000 0

SPONTANEOUS POTENTIAL
mV

→ ← 20

SHALLOW FOCUSED RESISTIVITY
OHMM

0.2 2000.0

MEDIUM INDUCTION
OHMM

0.2 2000.0

DEEP INDUCTION
OHMM

0.2 2000.0

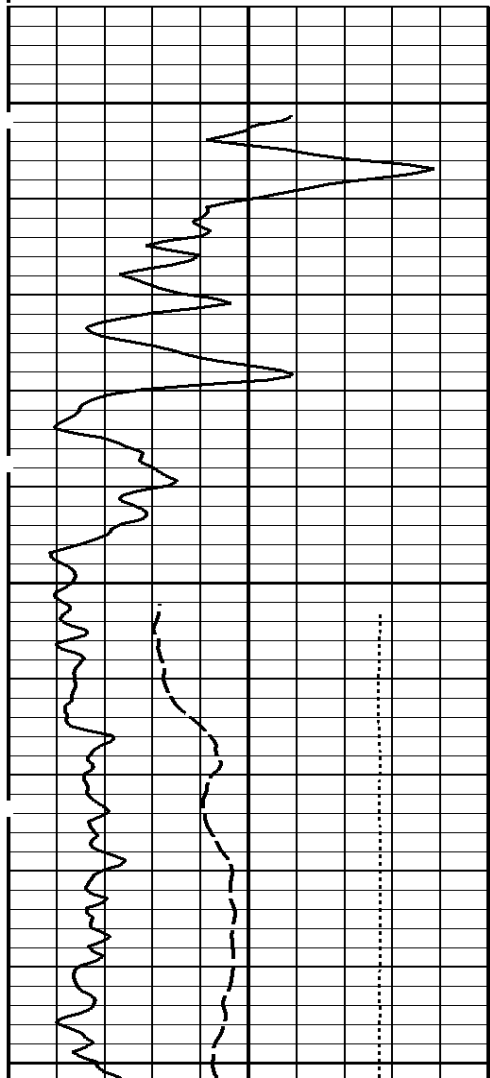
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet			
Drill Bit Size	_____	7.875	in
Casing Diameter	_____	5.500	in
BHT Depth	_____	4570.000	ft
Borehole Temperature	_____	127.0	degF
Temperature Gradient	_____	1.00	DFHF
Resistivity Of Mud	_____	0.900	ohm/m
Resistivity Of Mud Temperature	_____	75.00	degF

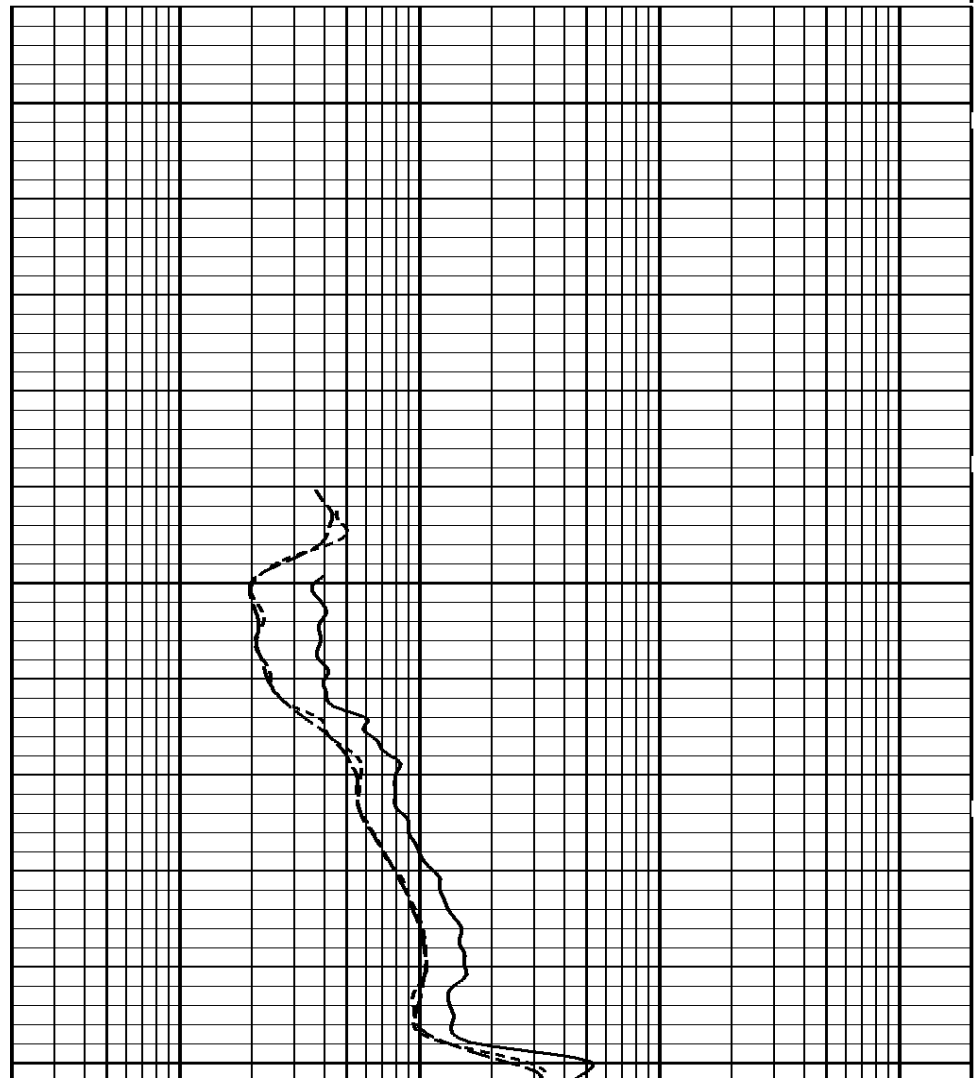
Well File: toto-gre-24-1-mstk-may-31	Scale: 1:240
Segment: V1.D1.S8 REPEAT	Acquired: 2013-05/31 05:31 3.2.0-11855
Reference: 0	Processed: 2013-05/31 07:15 3.2.0-11855

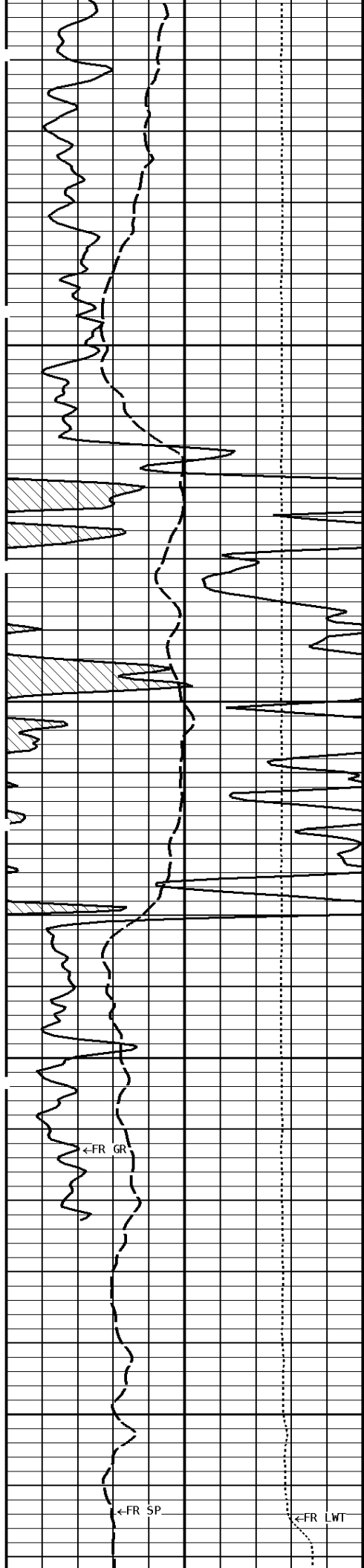
SPONTANEOUS POTENTIAL mV → ← 20 TENSION LBS 10000 _____ 0 GAMMA RAY API UNITS 150 300 0 _____ 150		DEEP INDUCTION OHMM 0.2 _____ 2000.0 MEDIUM INDUCTION OHMM 0.2 _____ 2000.0 SHALLOW FOCUSED RESISTIVITY OHMM 0.2 _____ 2000.0
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1:240 REPEAT SECTION



4300

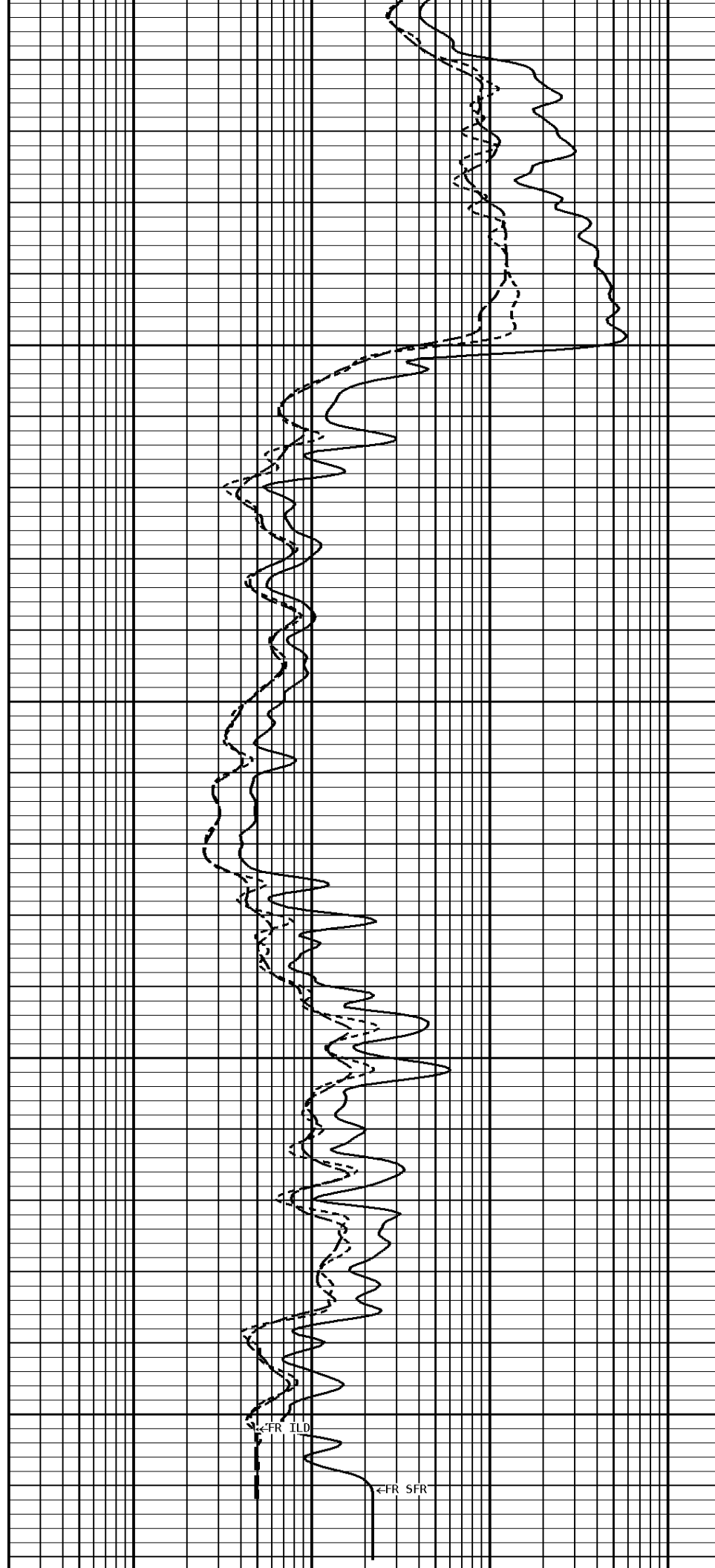




4400

4500

4566



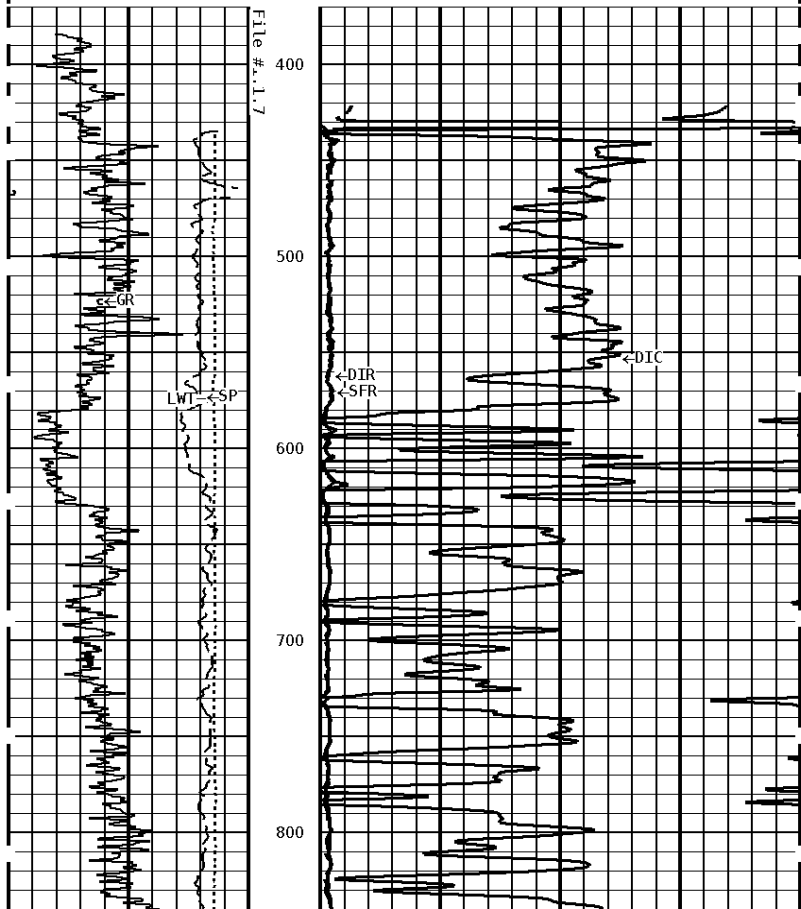
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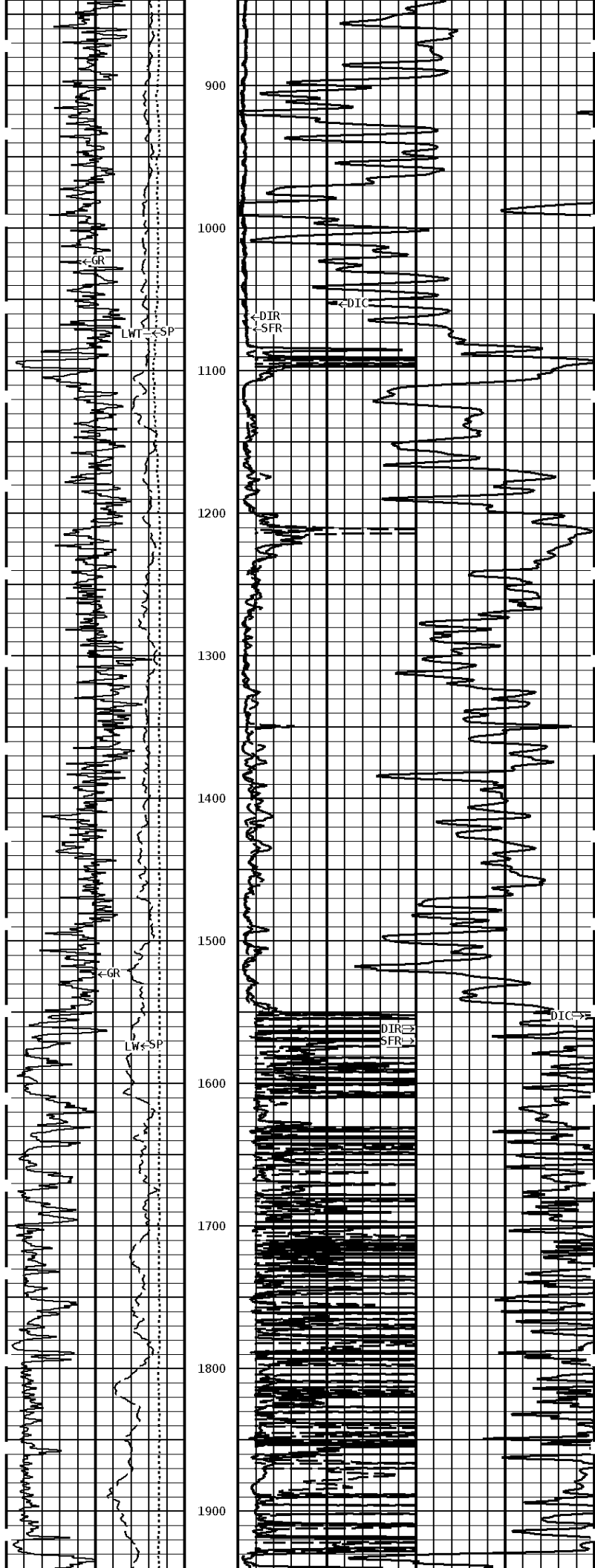
4500

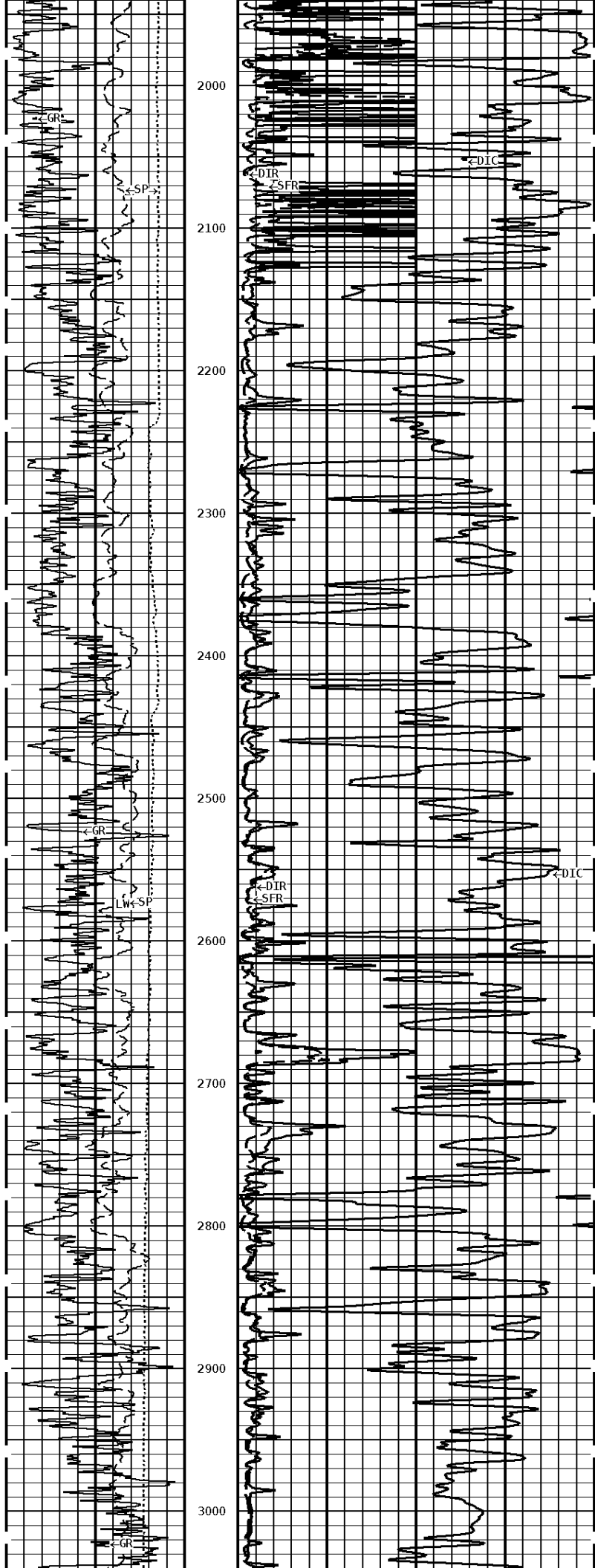
4566

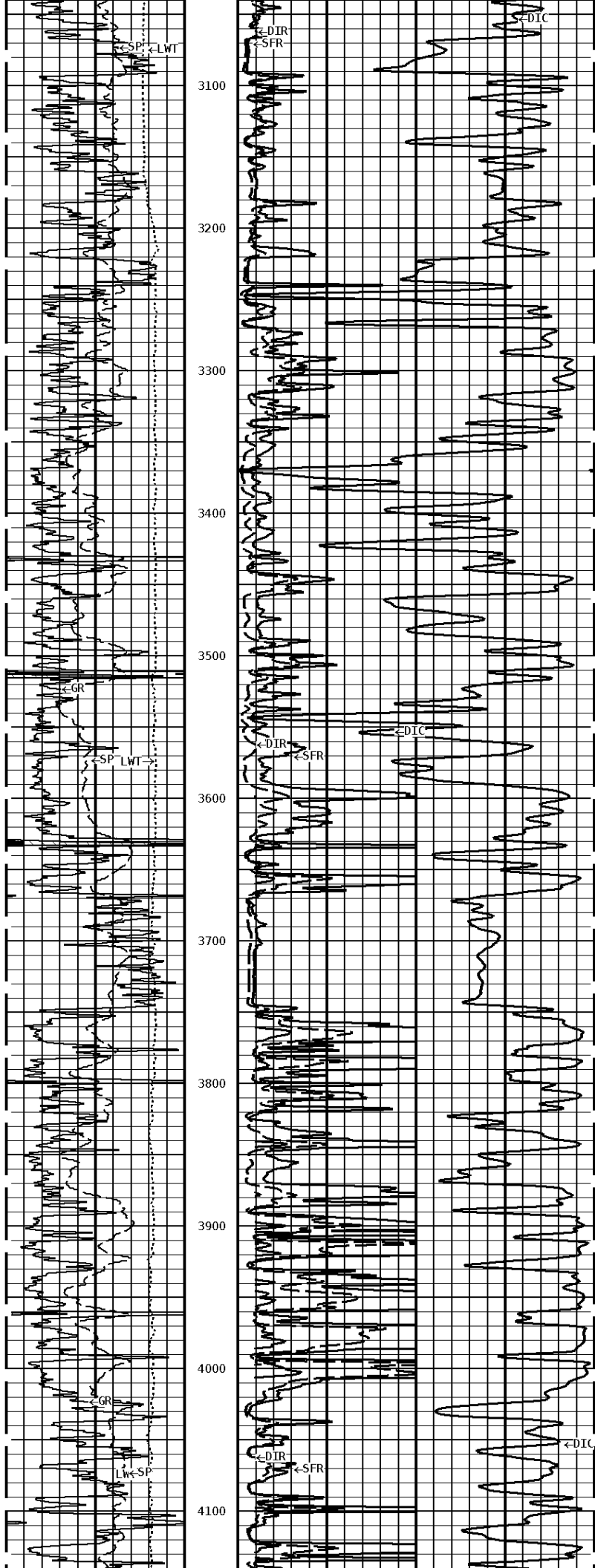
Well File: toto-gre-24-1-mstk-may-31	Scale: 1:1200
Segment: V1.D1.S7 MAIN	Acquired: 2013-05/31 05:48 3.2.0-11855
Reference: 0	Processed: 2013-05/31 07:15 3.2.0-11855

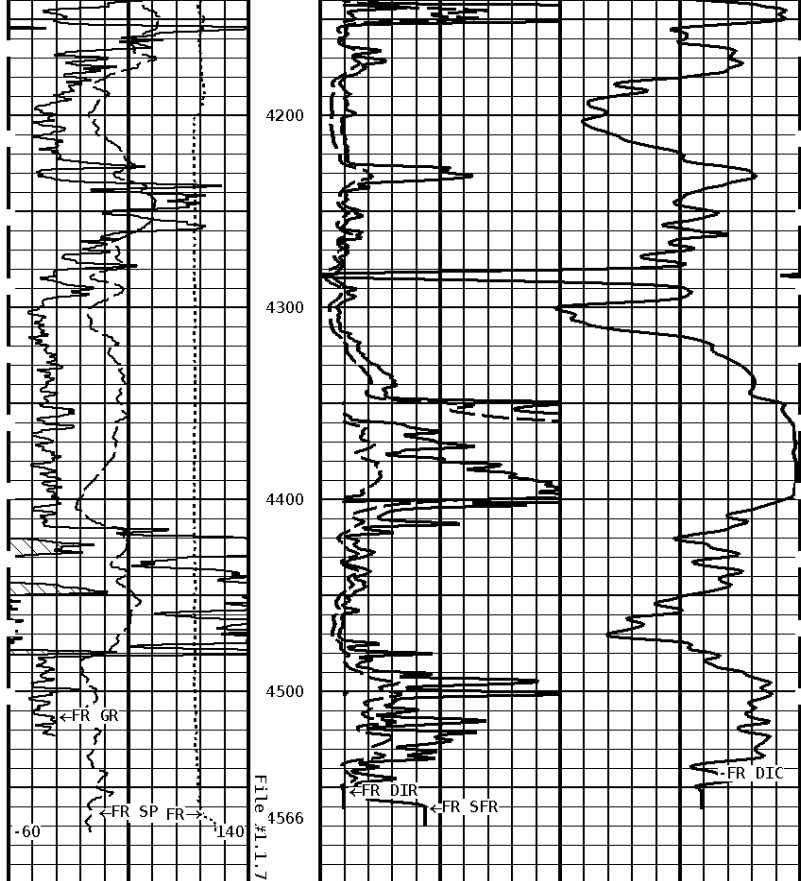
1:1200 MAIN SECTION











1:1200 MAIN SECTION

GAMMA RAY API UNITS	
150	300
0	150

SPONTANEOUS POTENTIAL mV	
→	← 20

TENSION LBS	
10000	0

DEEP CONDUCTIVITY MHMO	
2000	1000
1000	0

SHALLOW FOCUSED OHMM	
0.0	500.0
0.0	50.0

DEEP INDUCTION OHMM	
0.0	500.0
0.0	50.0



Tucker
ENERGY SERVICES

Company: TOT0 ENERGY LLC
 Well: GREENE #24-1
 Location: 2290' FSL & 1650' FWL
 Logged: 05-31-2013
 K.B. Elev: 2085.0 Ft