

Tucker

WIRELINE SERVICES

DUAL INDUCTION RESISTIVITY LOG

File No. : TUL-55288
Company : BECKER OIL CORP
Well : SHRIMISE #1
Field : WILDCAT
County : HODGEMAN
State : KANSAS
Country : USA

Location : API # 15-083-2163
1800' FSL & 13850' FEL
NE SE NW SE

Sect : 12 Twp : 24S Rge : 24W

Recorded By : T. MONTGOMERY
Witnessed By : C. BECKER

Date : APR 17 2010
Run No. : 1

Permanent Datum : GL
Drilling Measured From : KB
Log Measured From : KB
Above Permanent Datum : 8.00 FT

Depth--Driller : 4880.0 FT
Depth--Logger : 4881.0 FT
Bottom Log Interval : 4880.0 FT
Top Log Interval : 370.0 FT

Casing Depth--Driller : 372.0 FT
Casing Depth--Logger : 370.0 FT
Casing Diameter : 8.625 IN

Bit Size : 7.875 IN
Unit No. : 125
Location : OKC

Elevations :
KB : 2475.00 FT
DF : 2474.00 FT
GL : 2467.00 FT

Additional Services

CST
CNT
LDT

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.

Run Number 1

Depth To Fluid 0.0 FT
Fluid Type In Hole : CHEMICAL
Density : 9.200 LBS/GAL
Viscosity : 48.000 SEC/QT
pH : 9.500
Fluid Loss : 8.400 mL/30min
Salinity : 0.000

RM Source : MEASURED
RM : 1.400 OHMM at 70 F
RM at BHT : 1.073 OHMM at 120 F

RMF Source : CALCULATED
RMF : 1.190 OHMM at 70 F
RMF at BHT : 0.858 OHMM at 120 F

RMC Source : CALCULATED
RMC : 1.610 OHMM at 70 F

RMC :	1.610	OHMM at	70	F
RMC at BHT :	1.287	OHMM at	120	F
Max Recorded Temp. :			120	F
Time Circulation Stopped :	DEC 20 2009 @ 15:00			
Operating Rig Time, Hrs. :	3.0			

- Source Serial Numbers -

Gamma	CSV-C2
Neutron	N-1043

- Sonde Serial Numbers -

GRTB	GRT-BA-017
CNT	CNP-AA-106
LDTNG	LDP-DA-065
CST	CST-AB-003
PIT_B	PIT-AB-005

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
8.625	24.00	372.00

- Comments -

ALL PRESENTATIONS AS PER CLIENT REQUEST.

GRT, CNT, LDT, CST, PIT RAN IN COMBINATION.
 2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.
 4.50" PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUME.
 NO STANDOFF DEPLOYED ON PIT TOOL.
 CALIPERS ORIENTED ON THE X-Y AXIS.
 PHIN IS CALIPER CORRECTED.
 DETAIL PRESENTED FROM TD UP TO 2881'.
 DETAIL PRESENTED FROM TD 2500' TO 2800'.

GRP - GRP

CNT - PHIN, CLCNIN

LDT - LDEN, PECL, LCOR, PORL, CLLDIN

MINERAL VOLUME - VM31, VM33

CST- PORS,ITT, TT1, TT3

PIT - SFLAEC, ILDEC, CIRDEC, PIRMDS, SPU
 THANK YOU FOR CHOOSING TUCKER WIRELINE SERVICES!

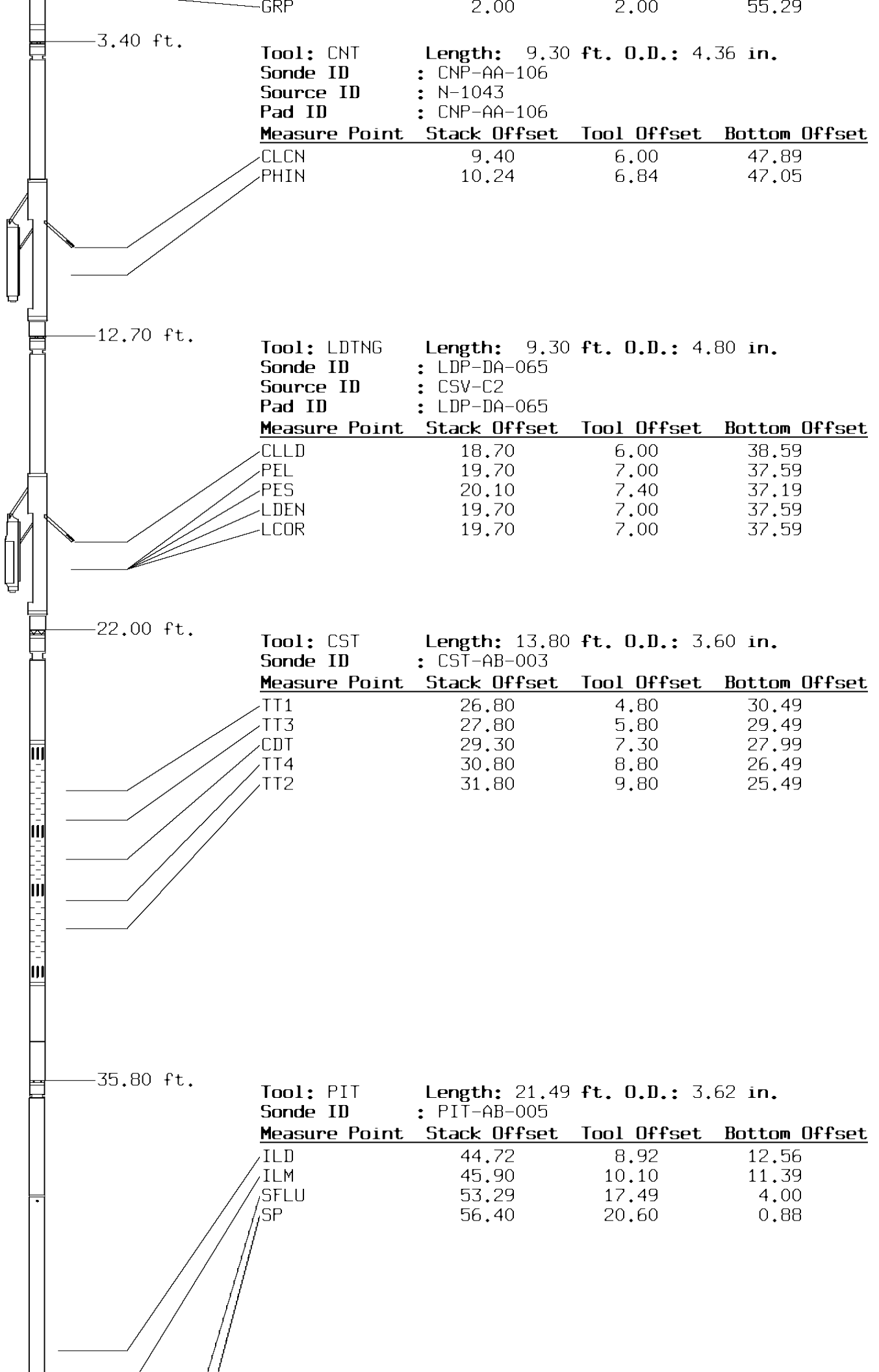
C. VANCE

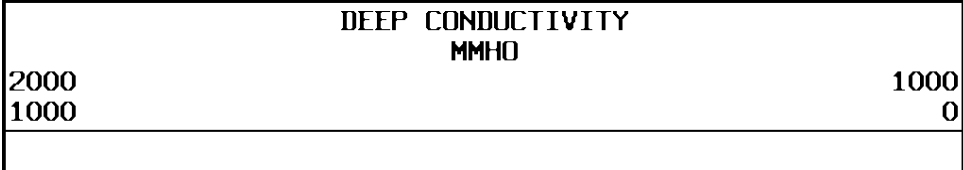
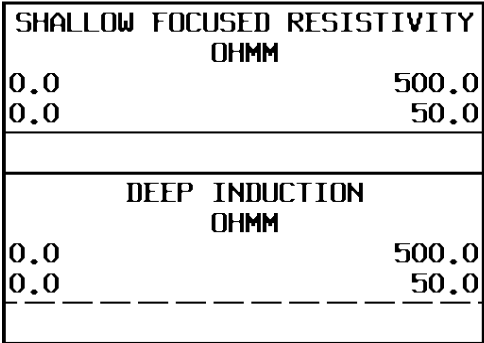
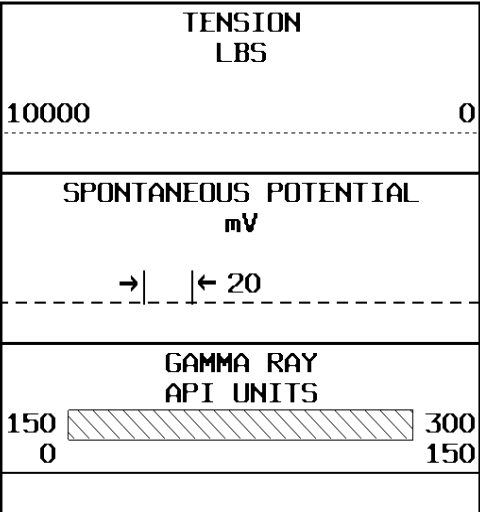
Tool String Schematic

Total Tool Length -	57.29 ft.
Maximum Outside diameter -	4.80 in.
Net Weight in Air -	971.00 lbs.

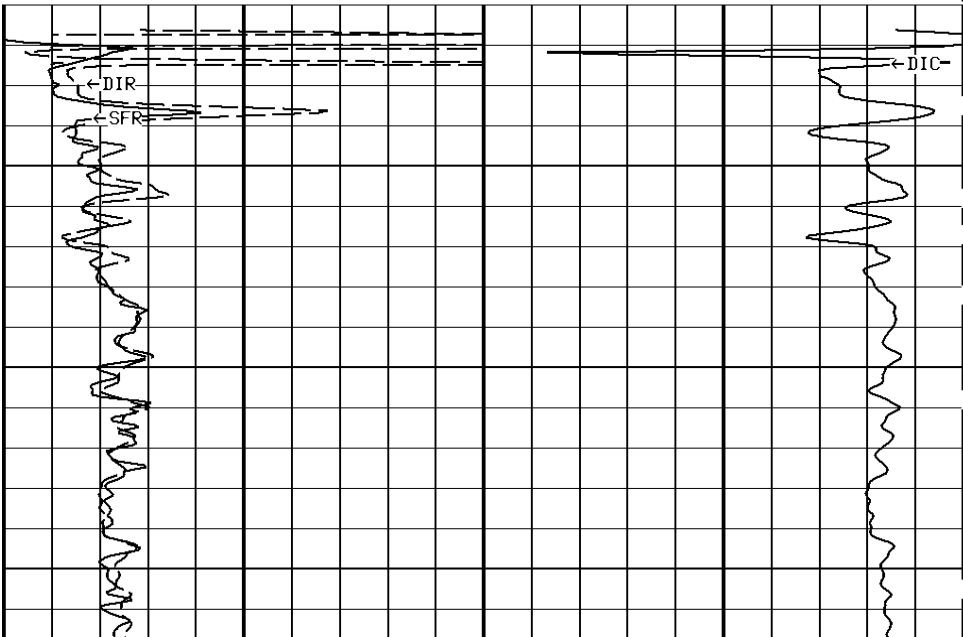
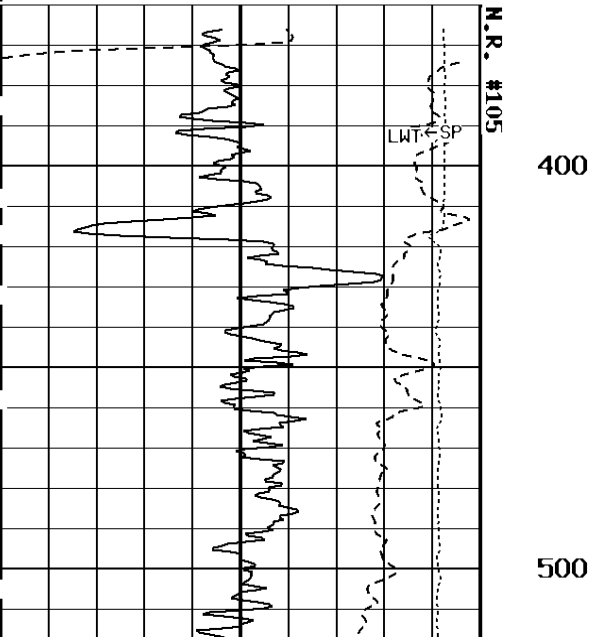


Tool: GRTB	Length: 3.40 ft. O.D.: 3.60 in.
Sonde ID	: GRT-BA-017
<u>Measure Point</u>	<u>Stack Offset</u> <u>Tool Offset</u> <u>Bottom Offset</u>
GRP	2.00 2.00 55.29





1:600 SECTION
2 INCH



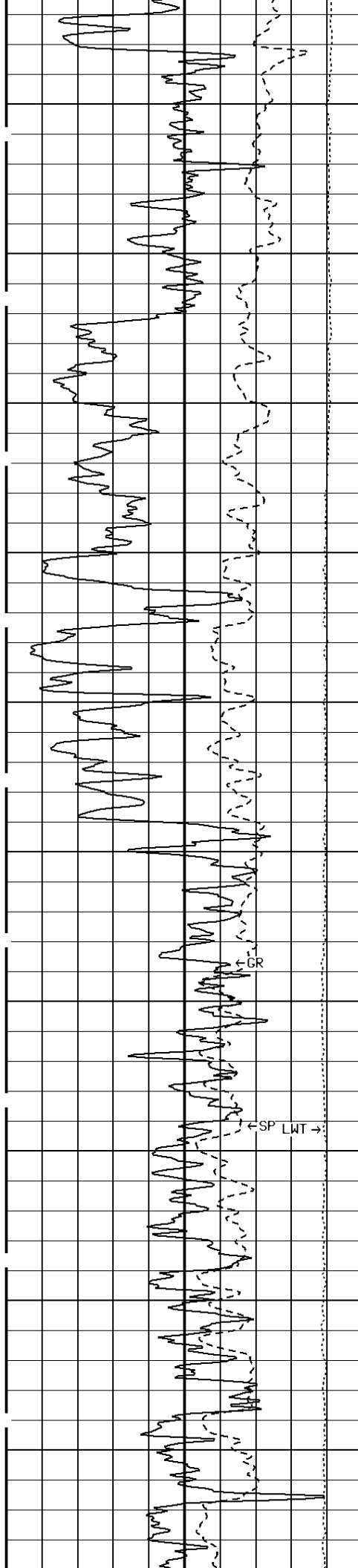
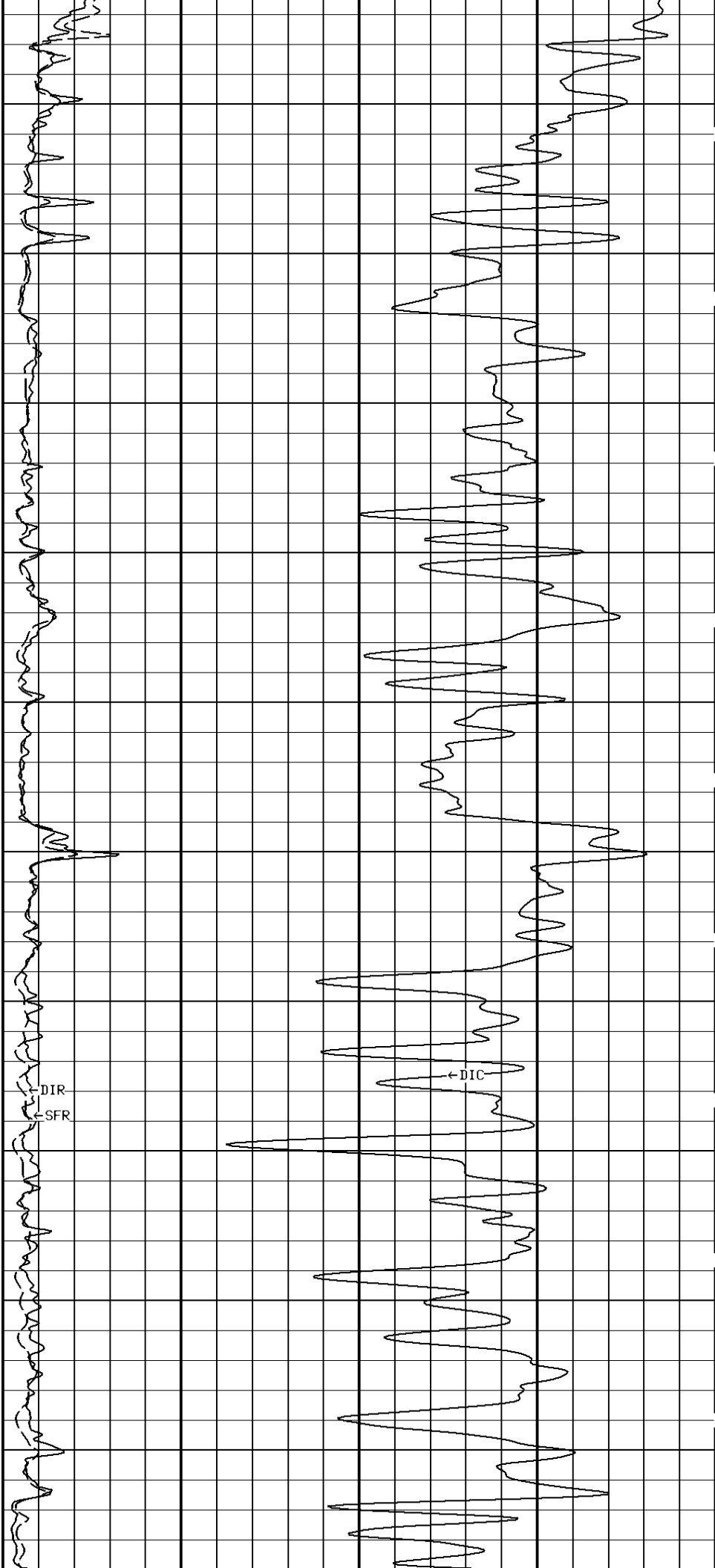
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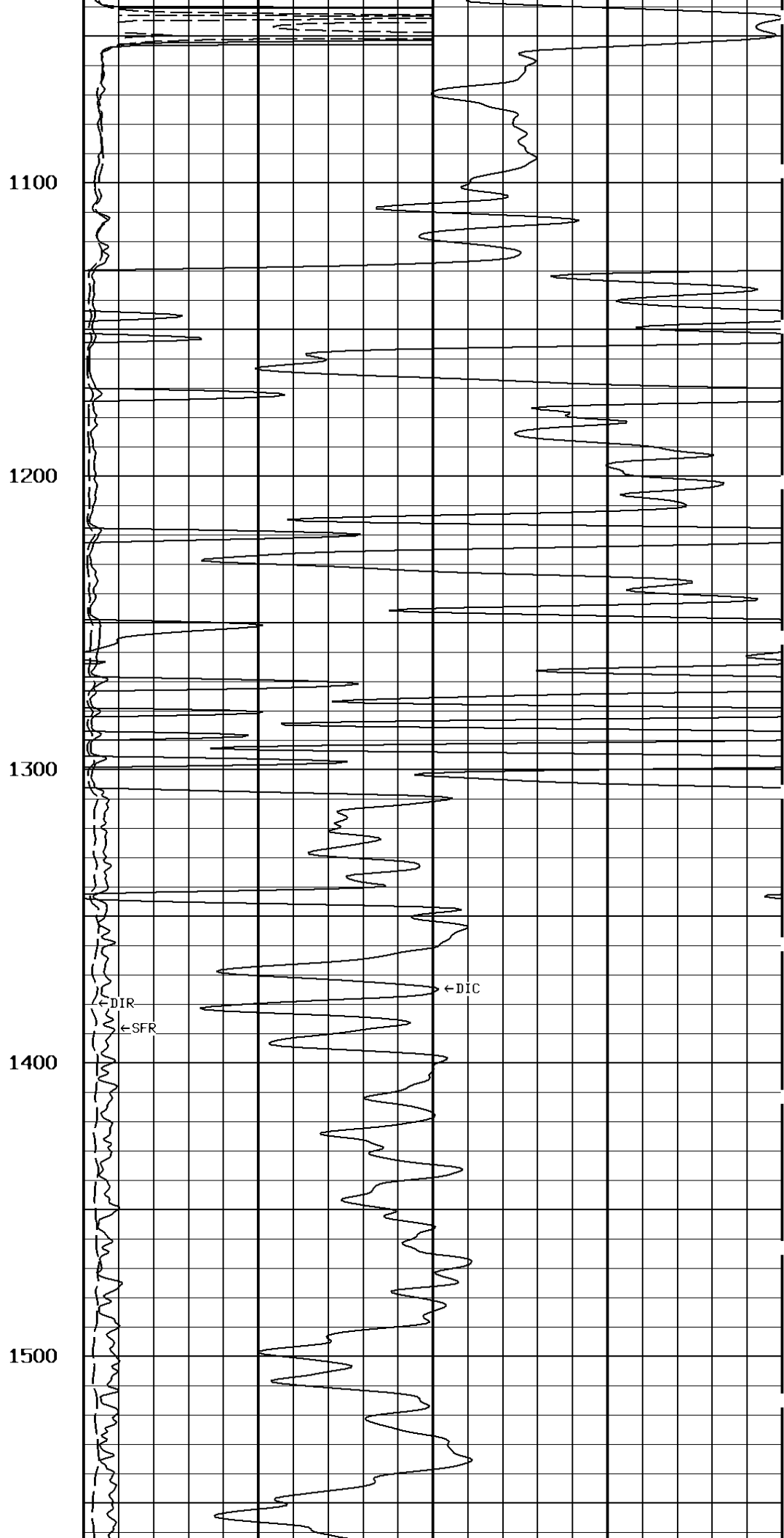
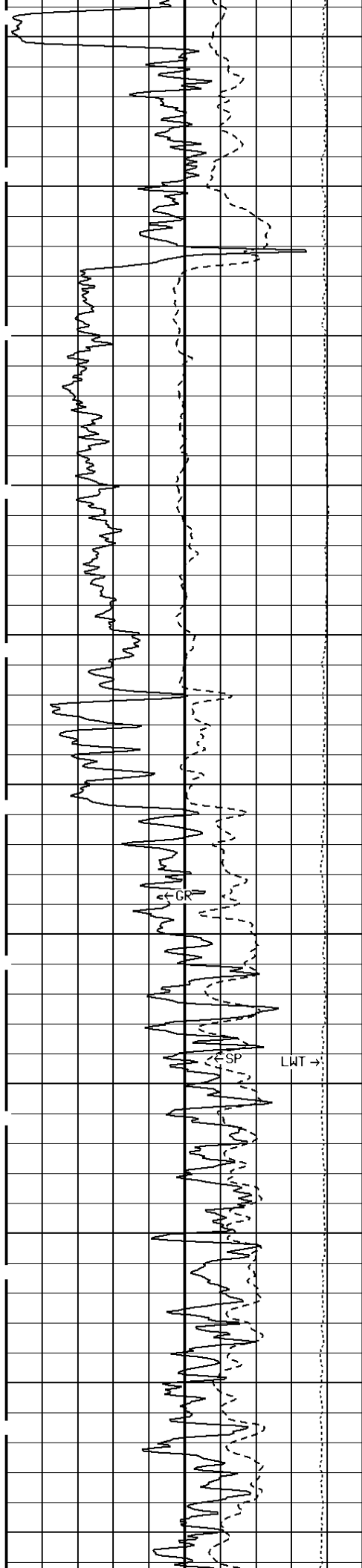
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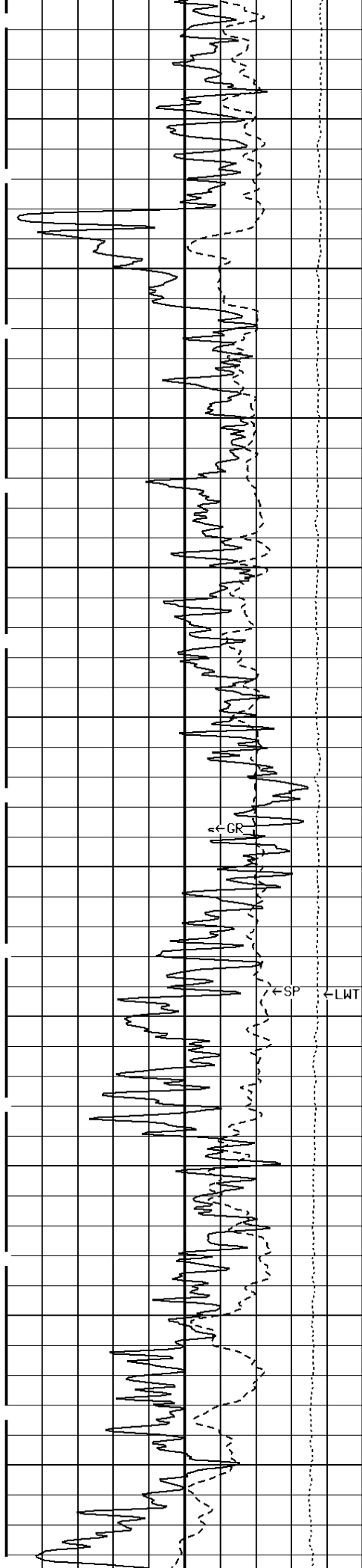
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900

1000







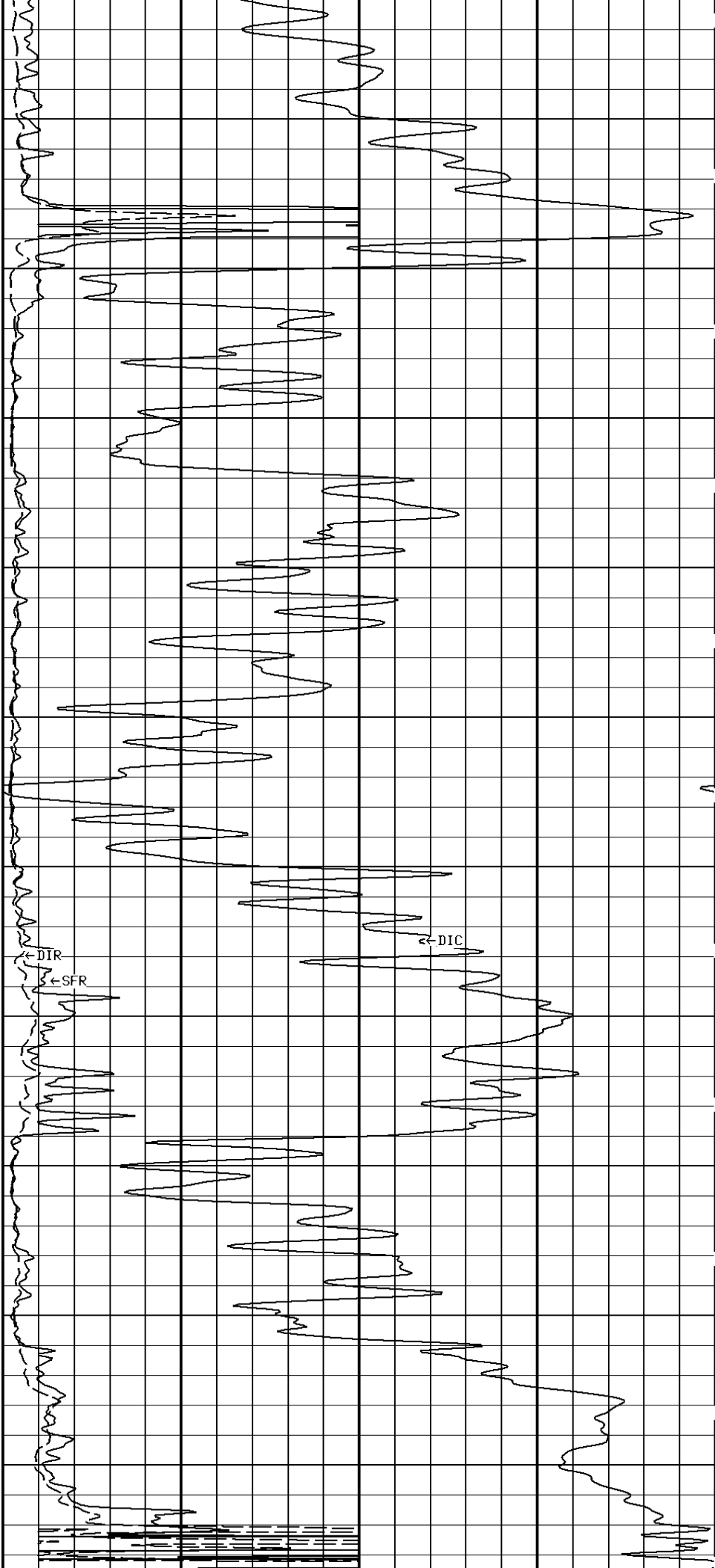
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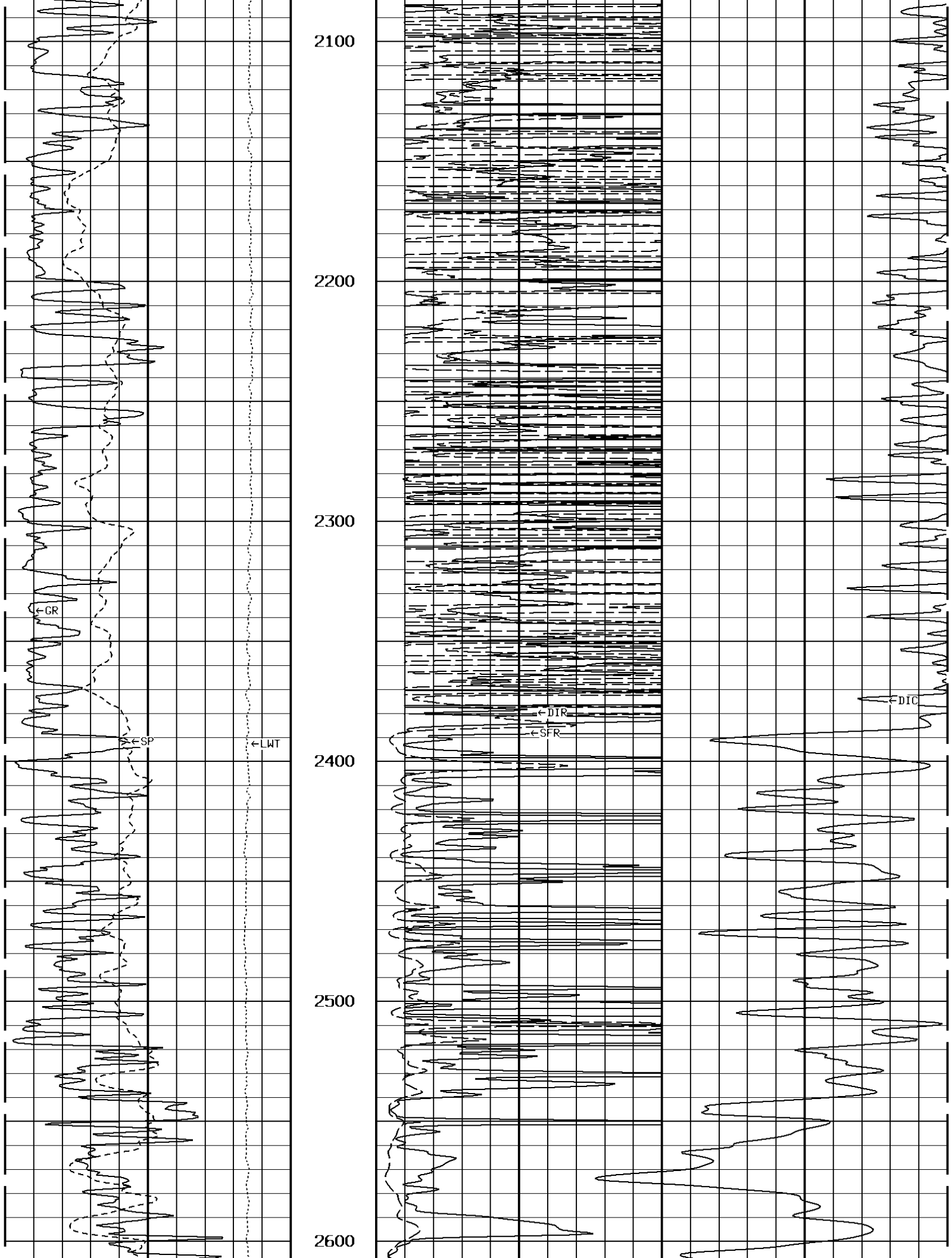
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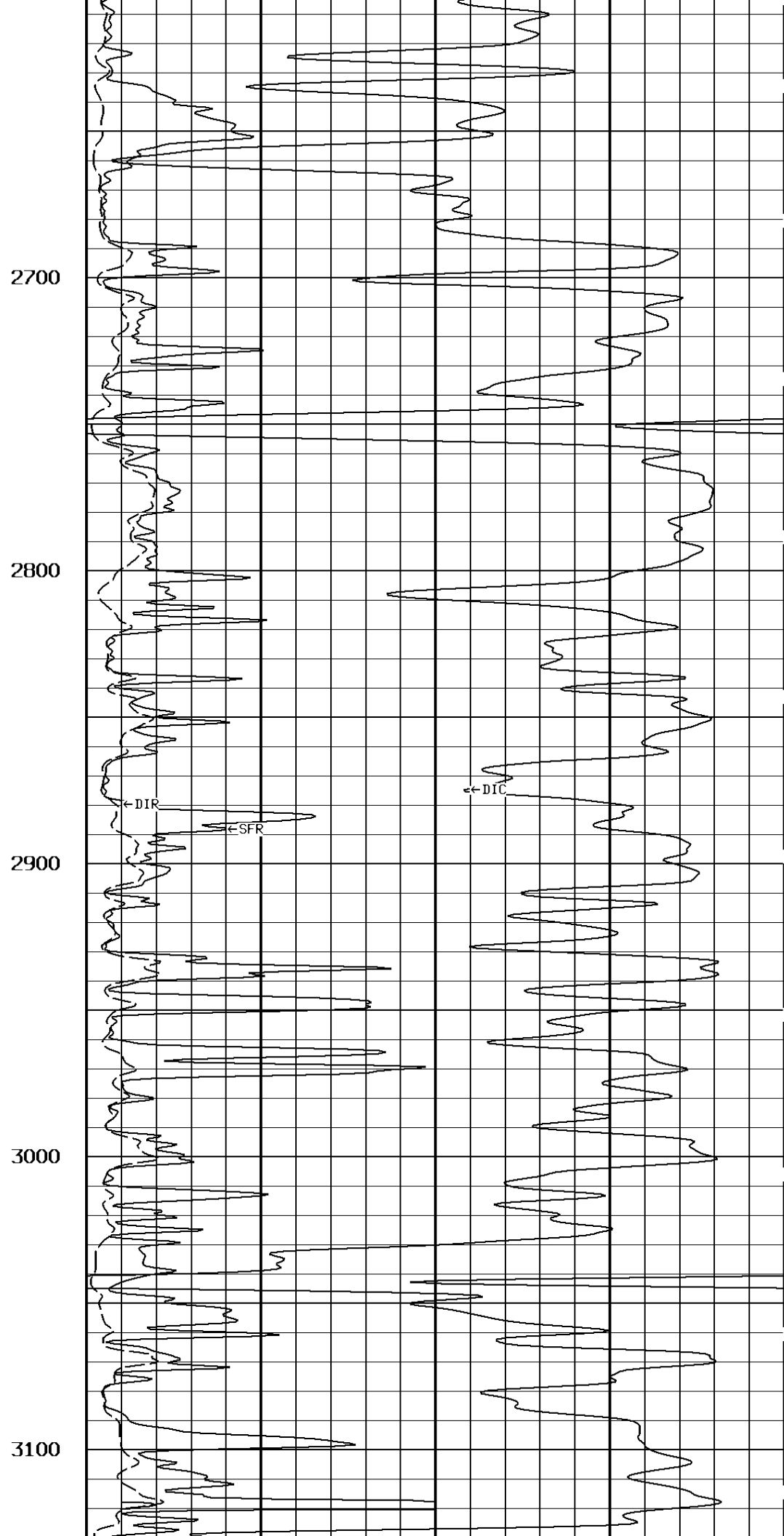
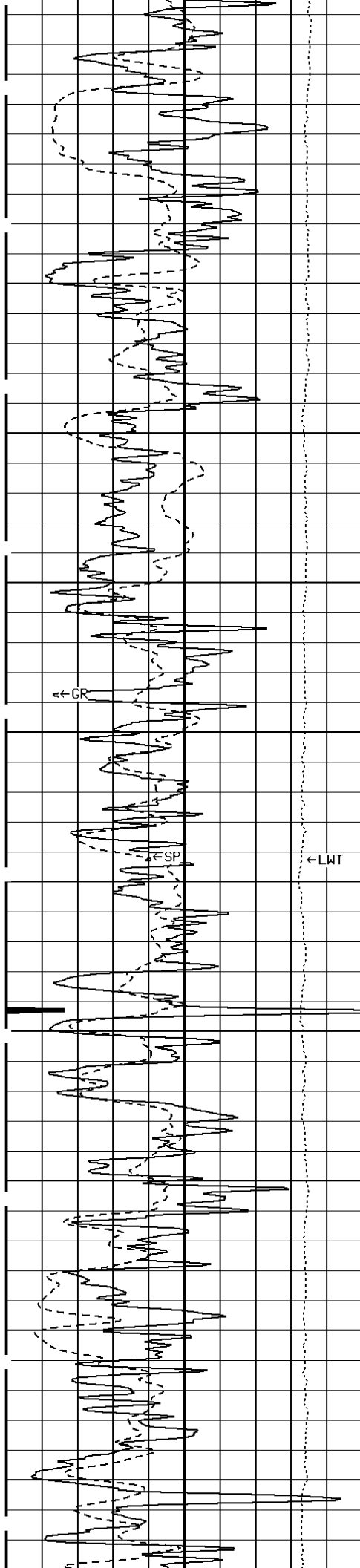
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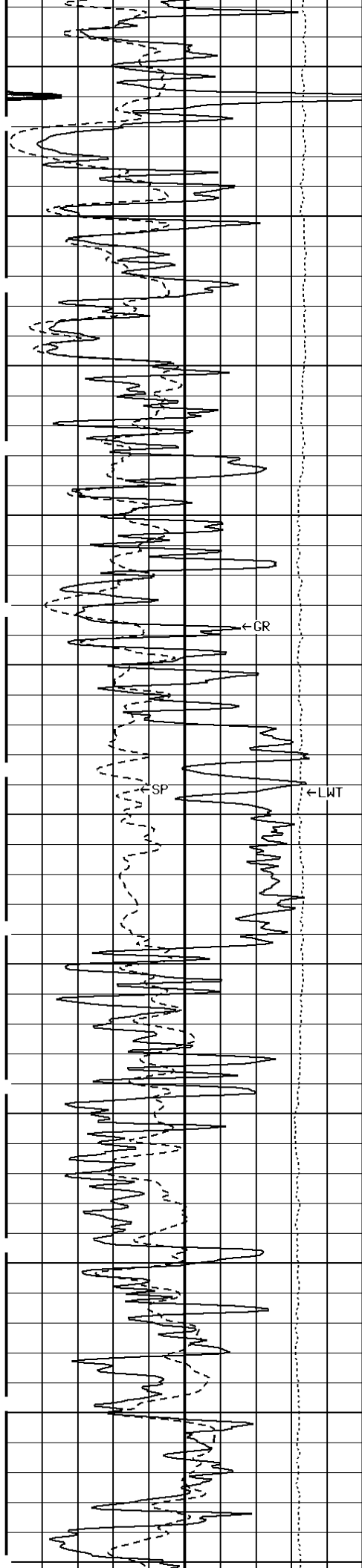
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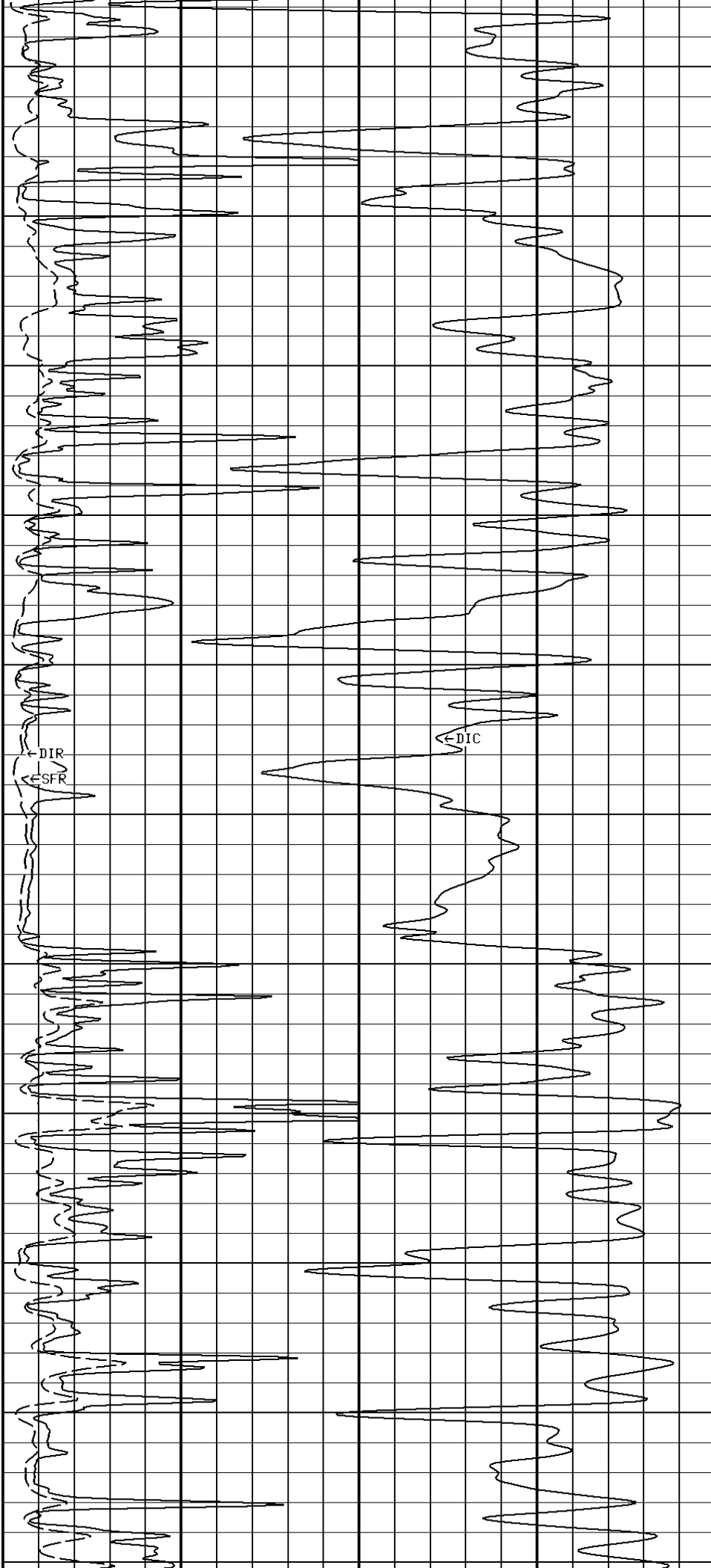
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3300

3400

3500

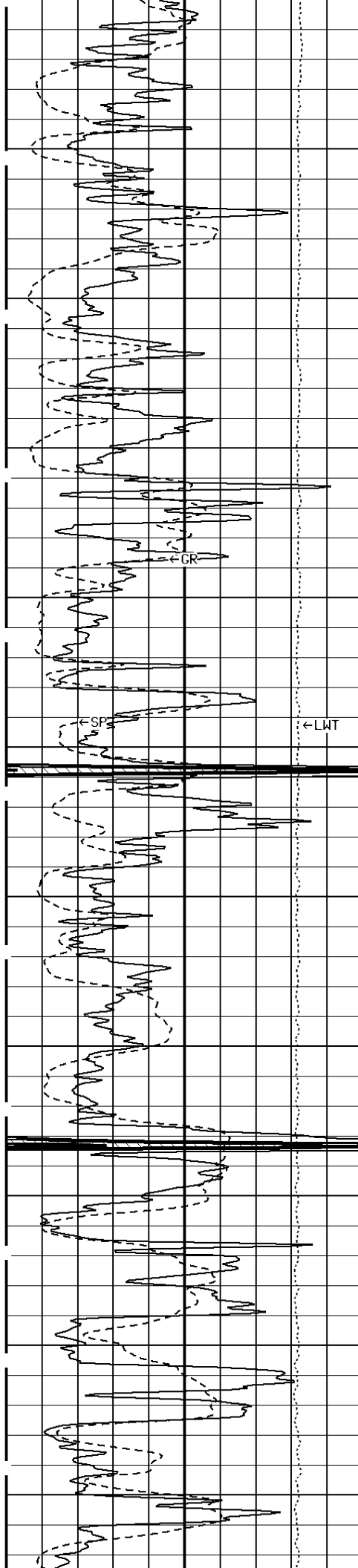
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DIR

ESFR

DIC



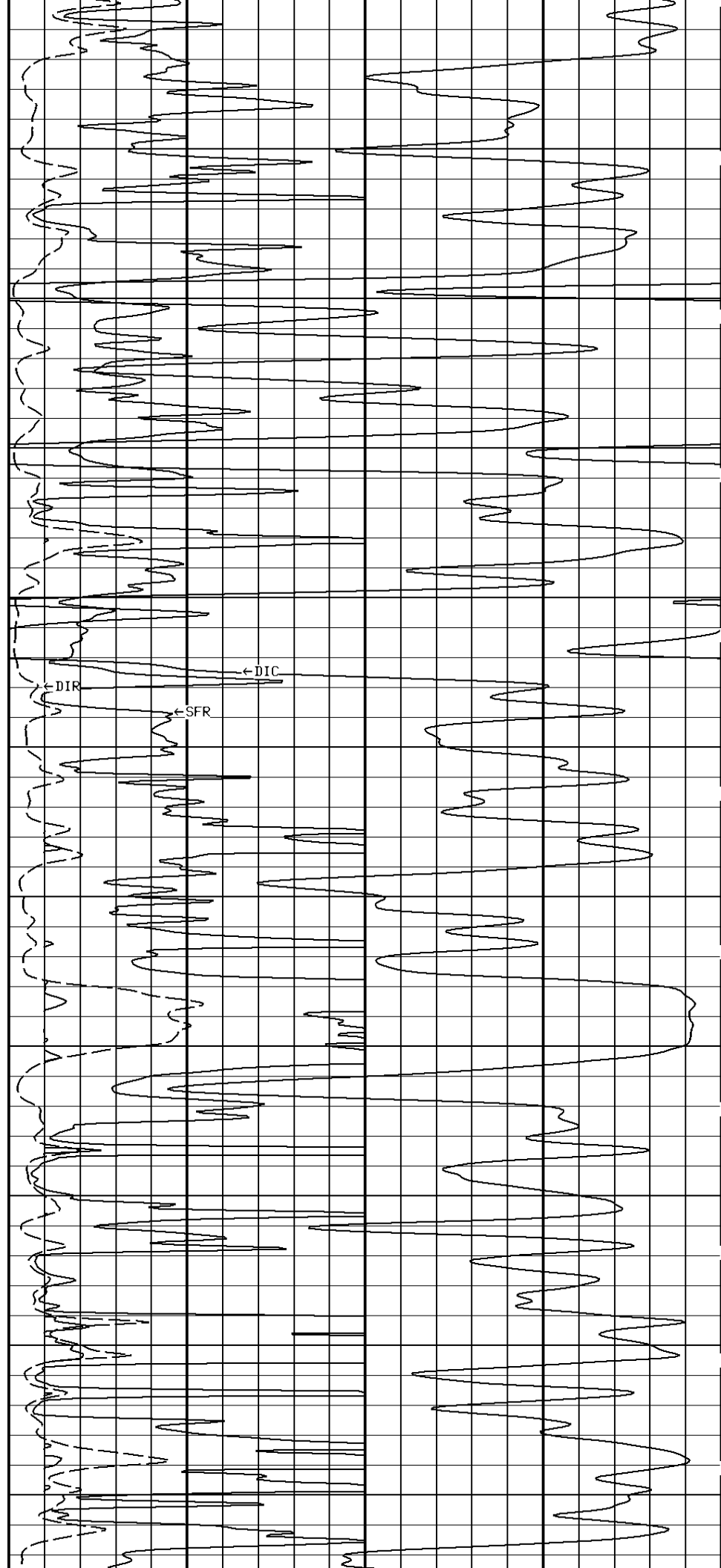
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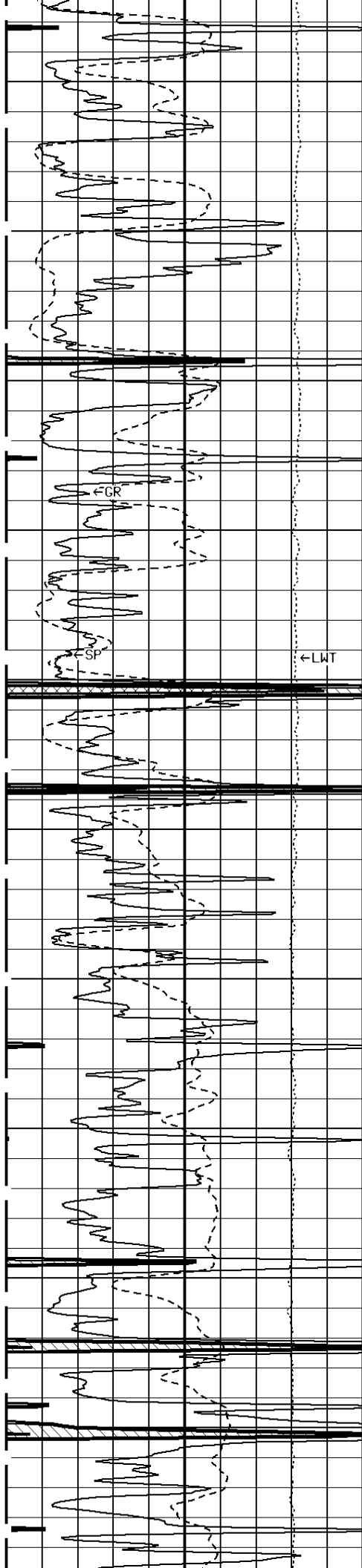
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3900

4000

4100





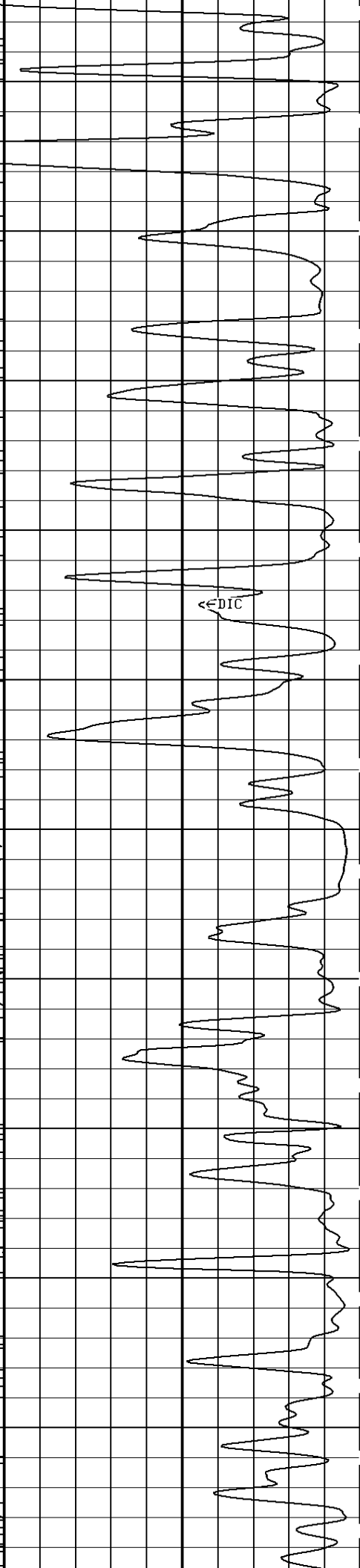
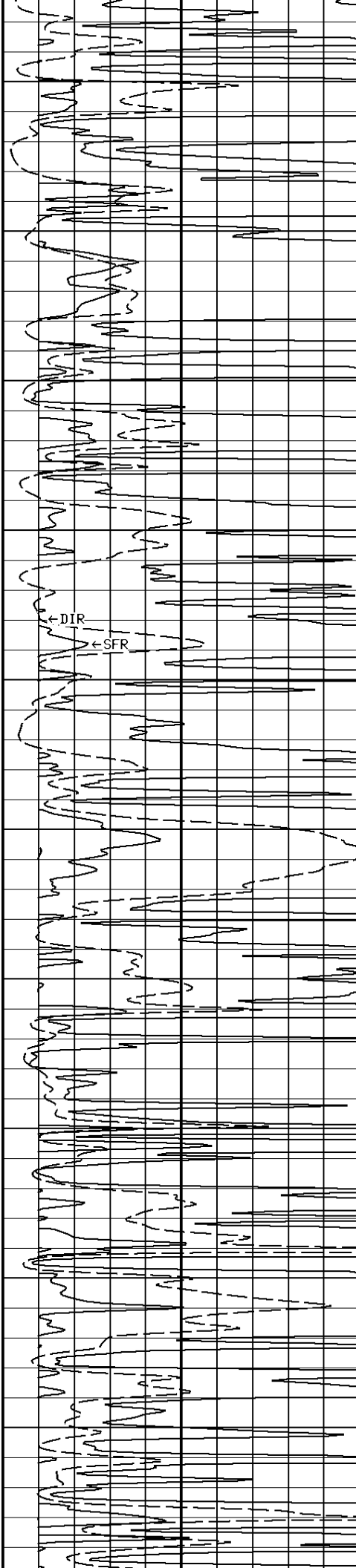
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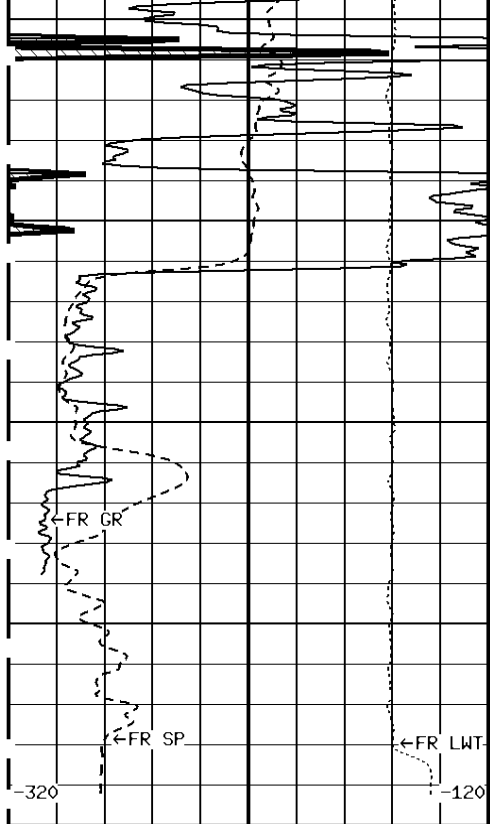
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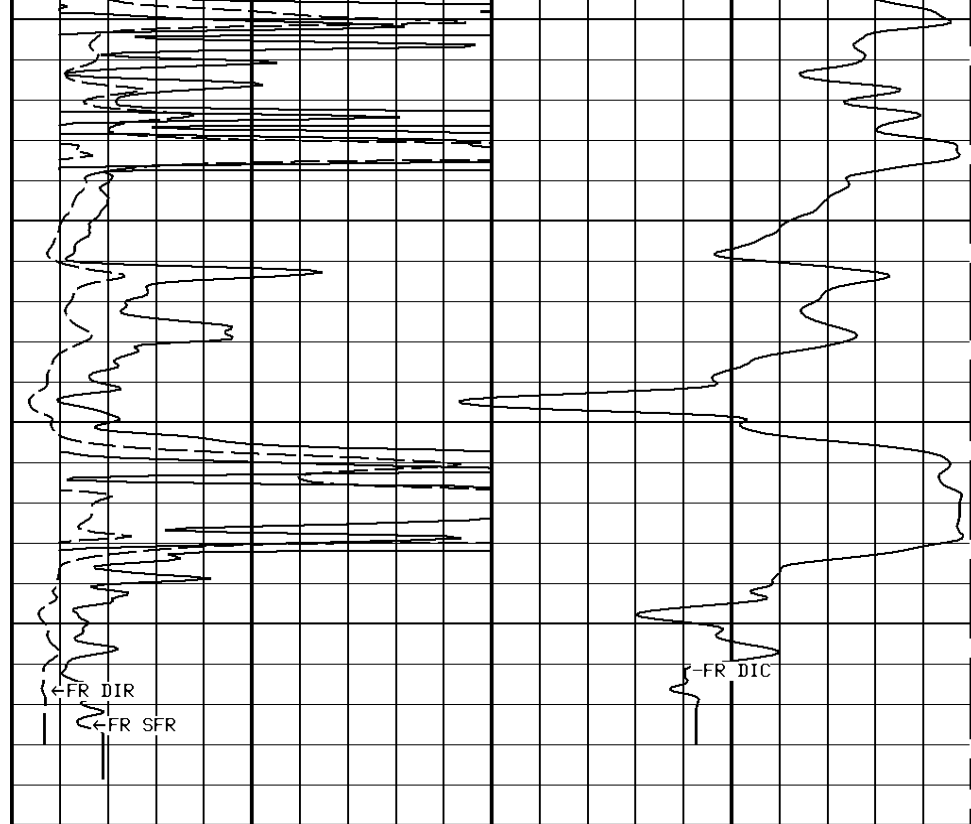
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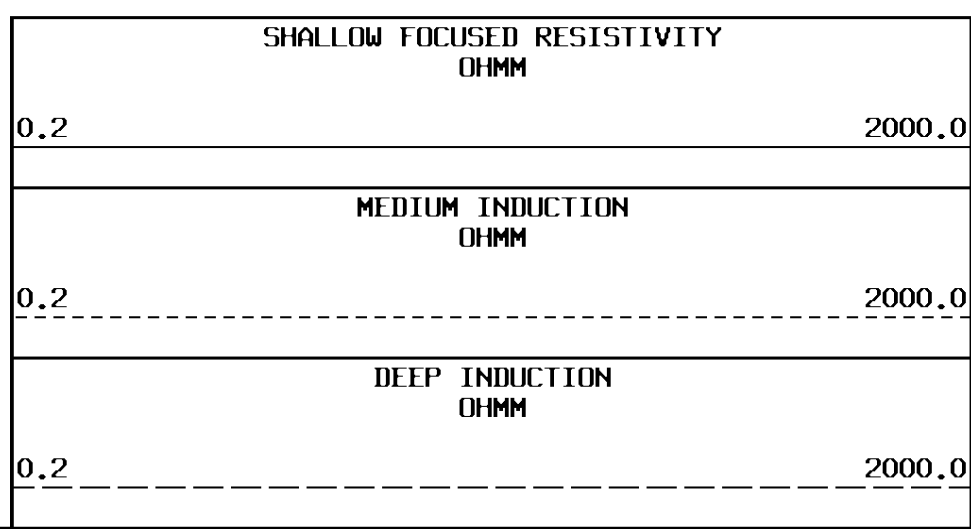
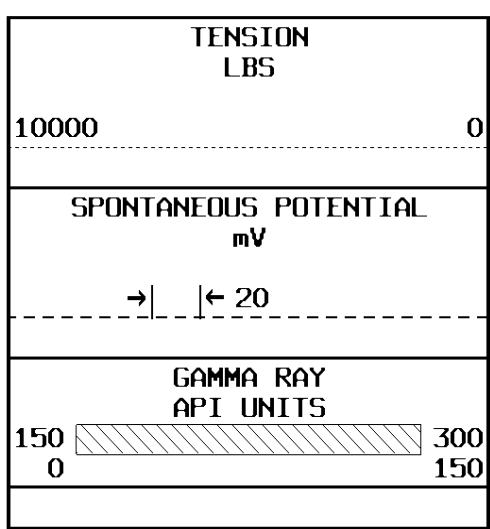
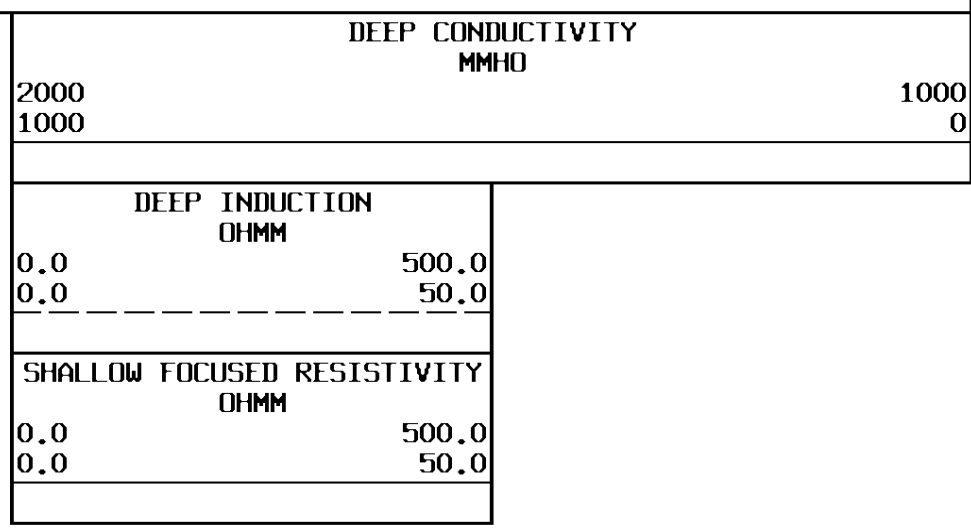
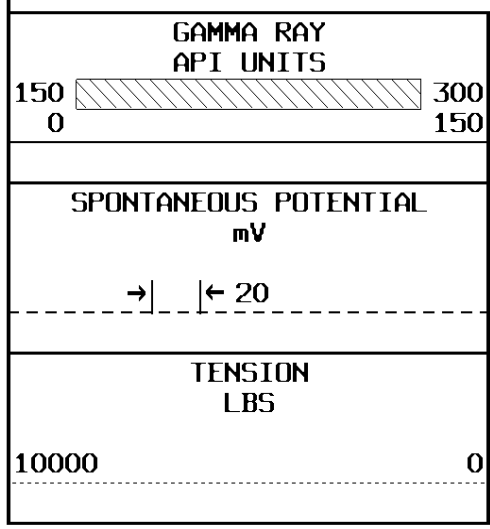




4700
4800
4881



1:600 SECTION
2 INCH

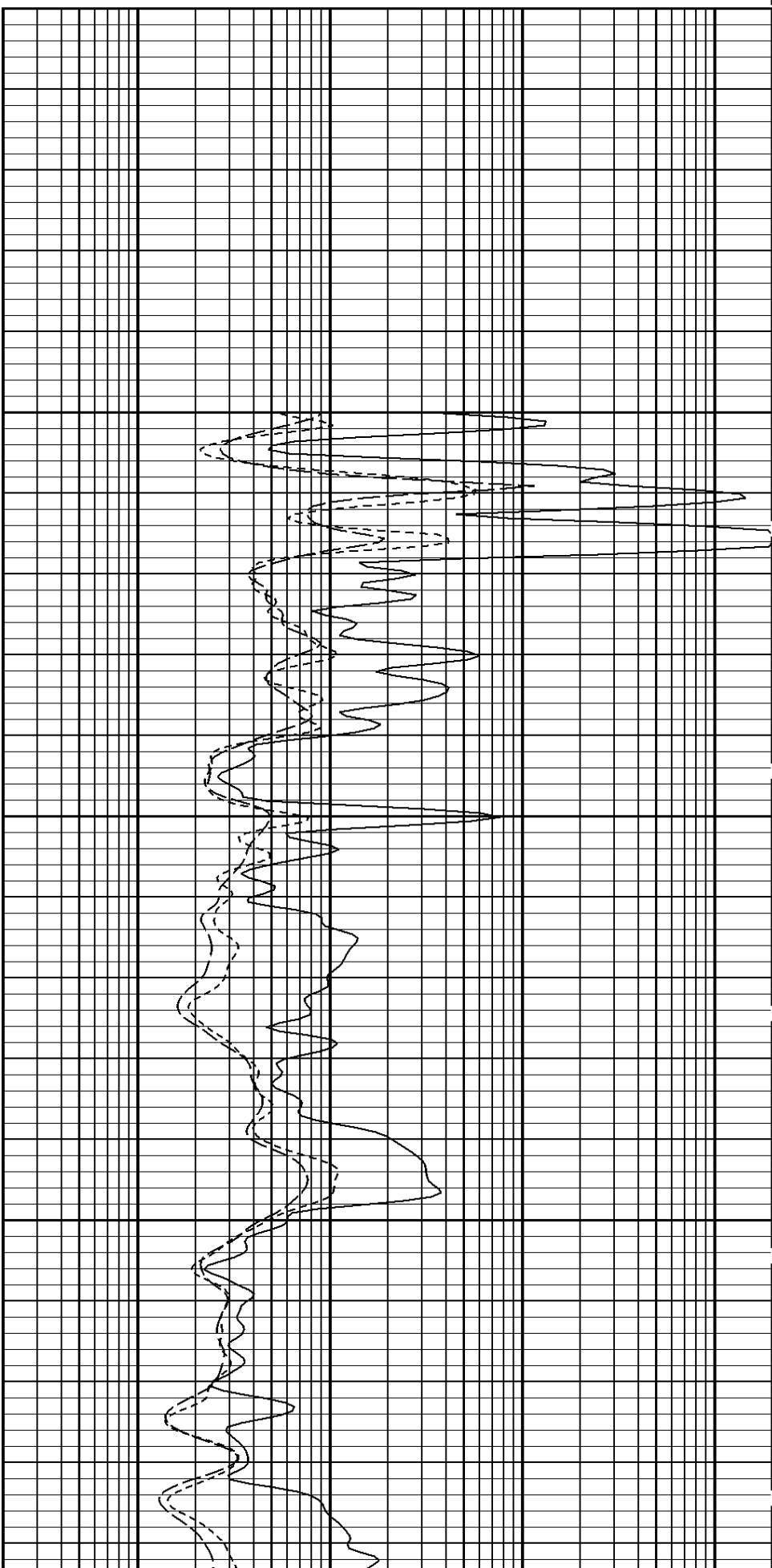
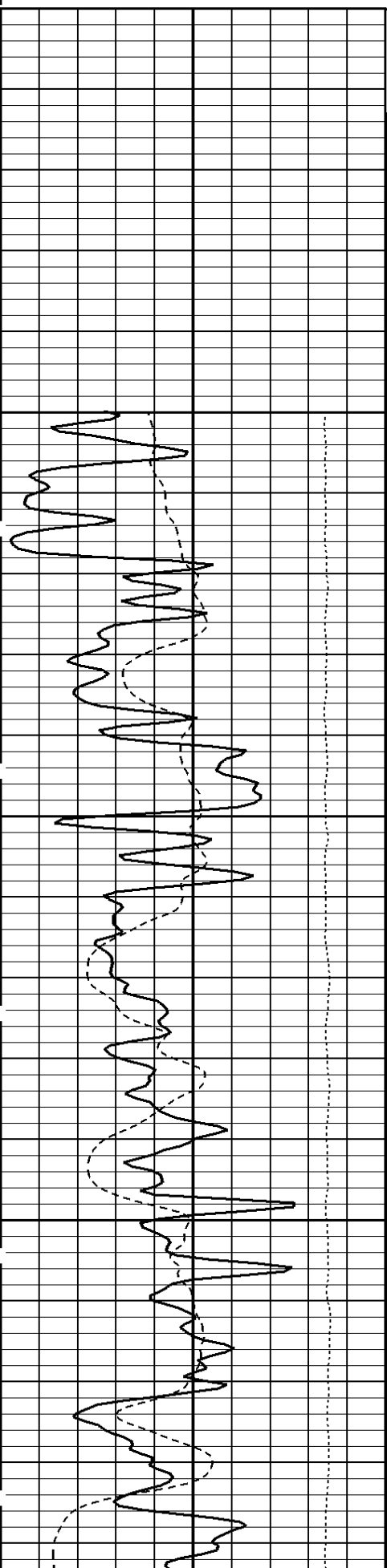


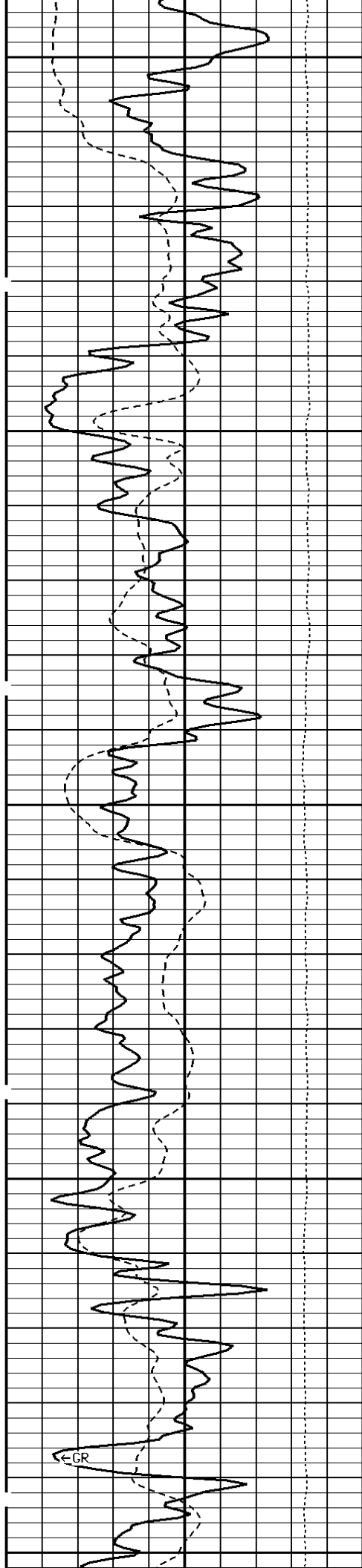
1:240 MAIN SECTION

File #107

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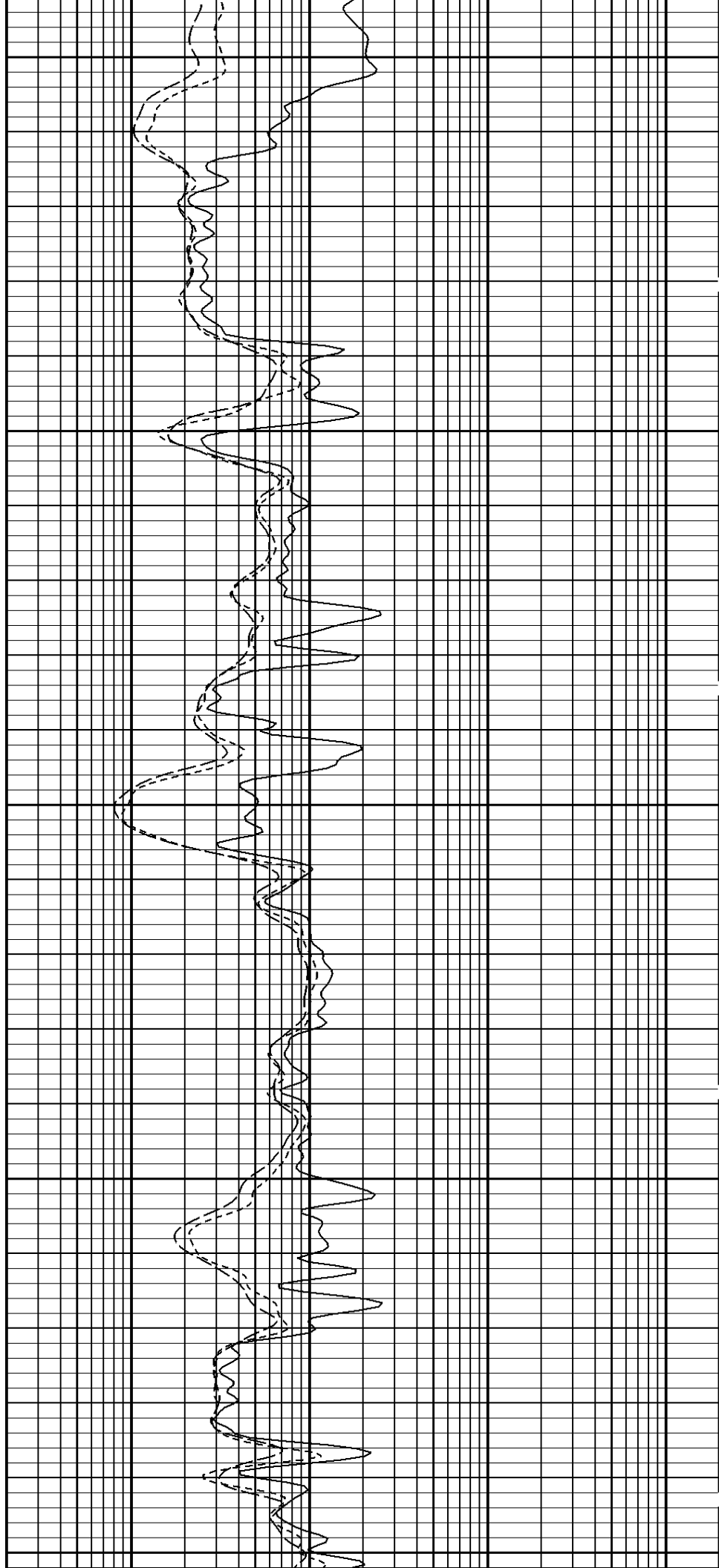
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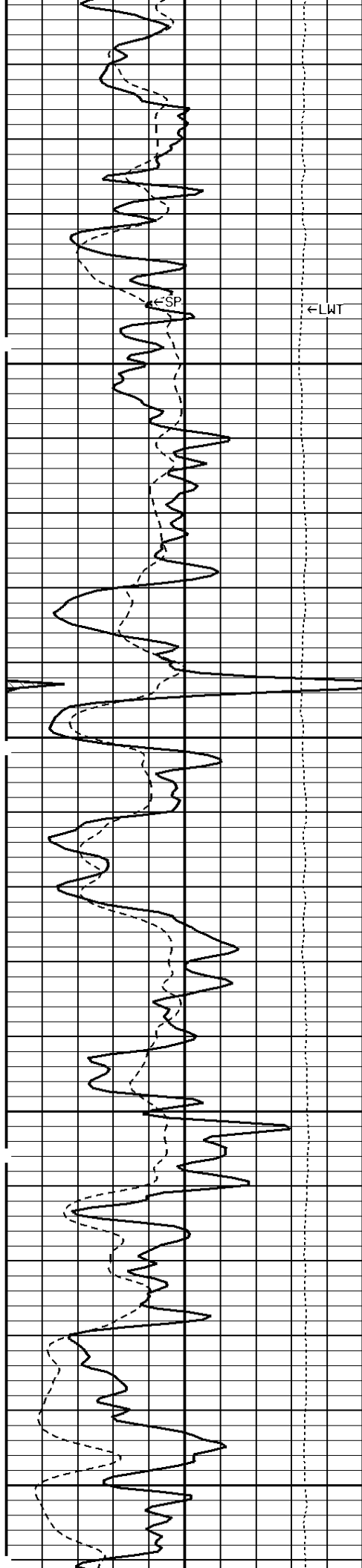




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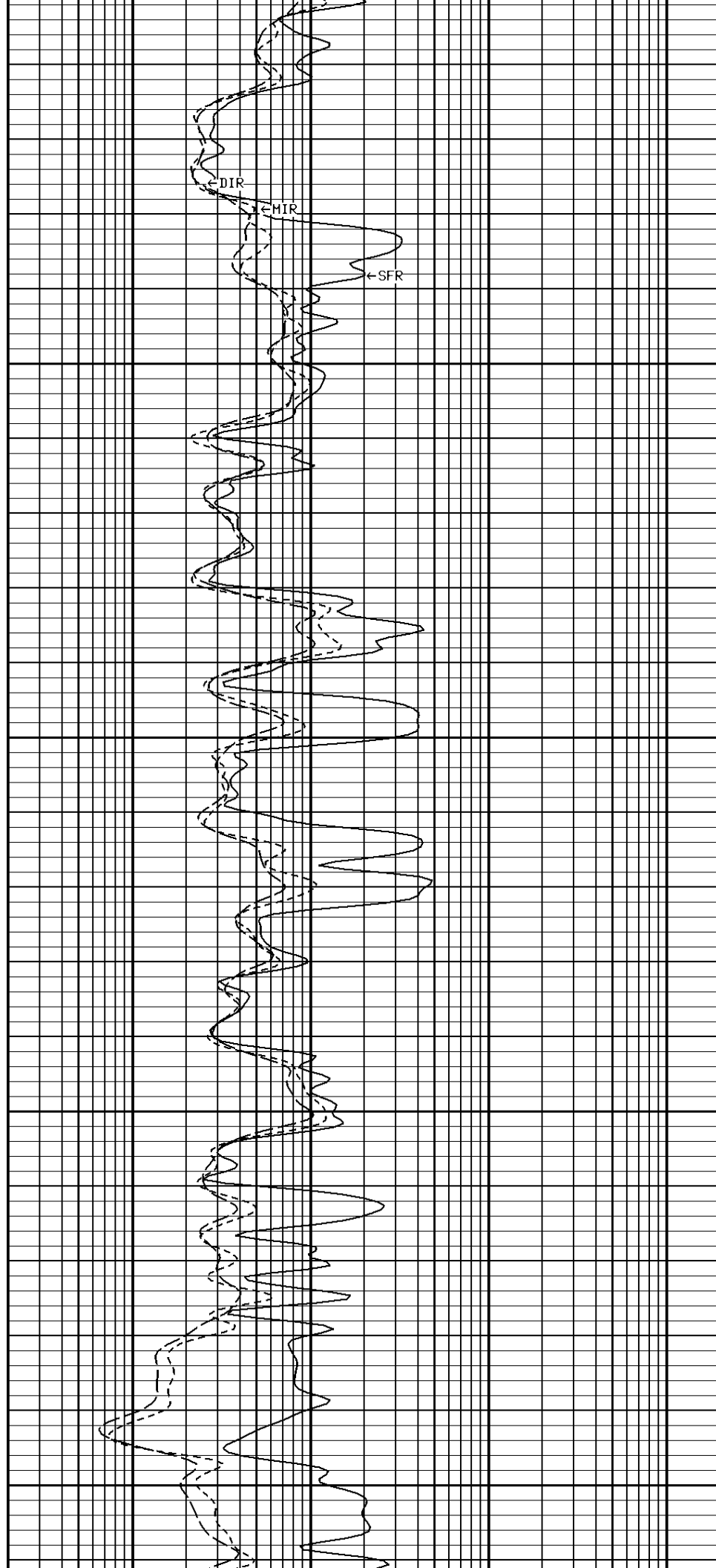
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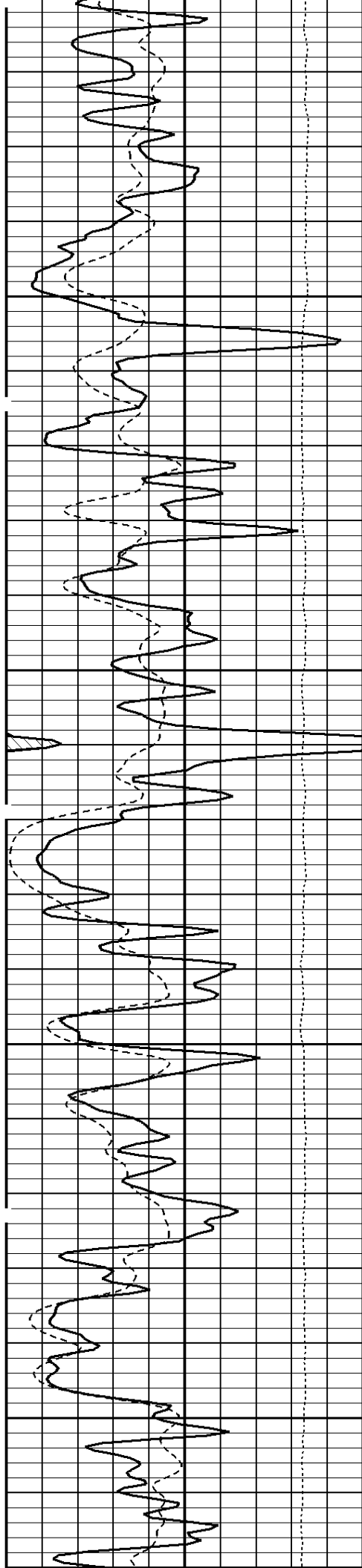




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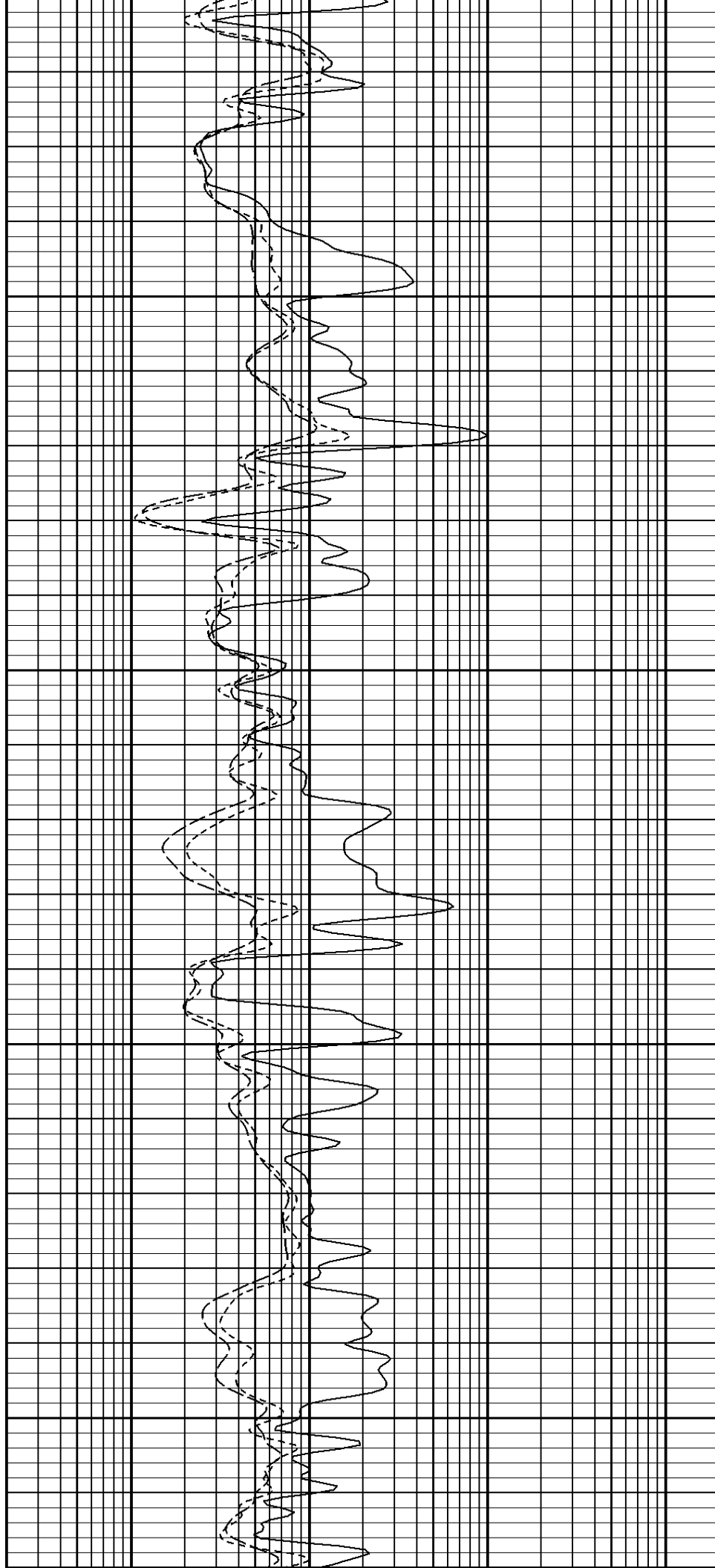
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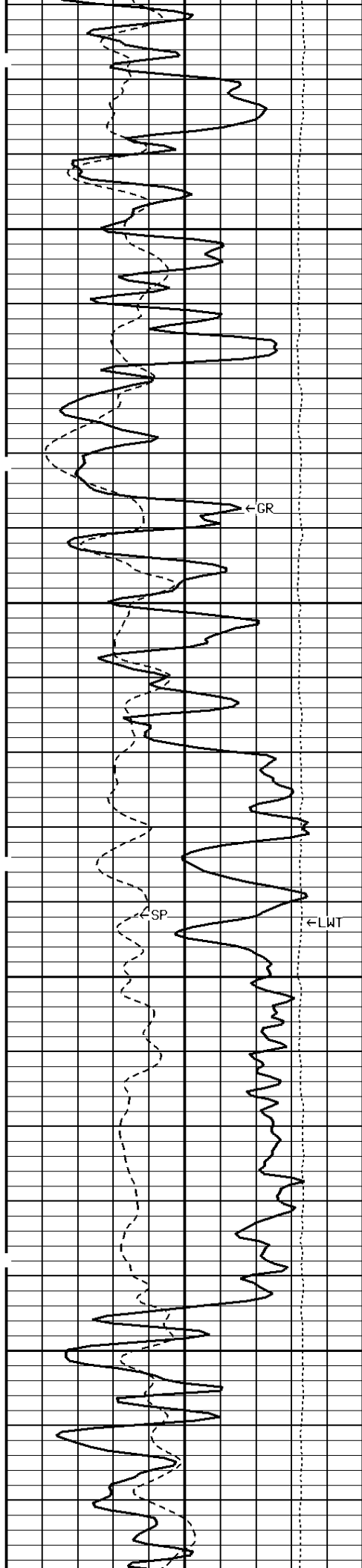




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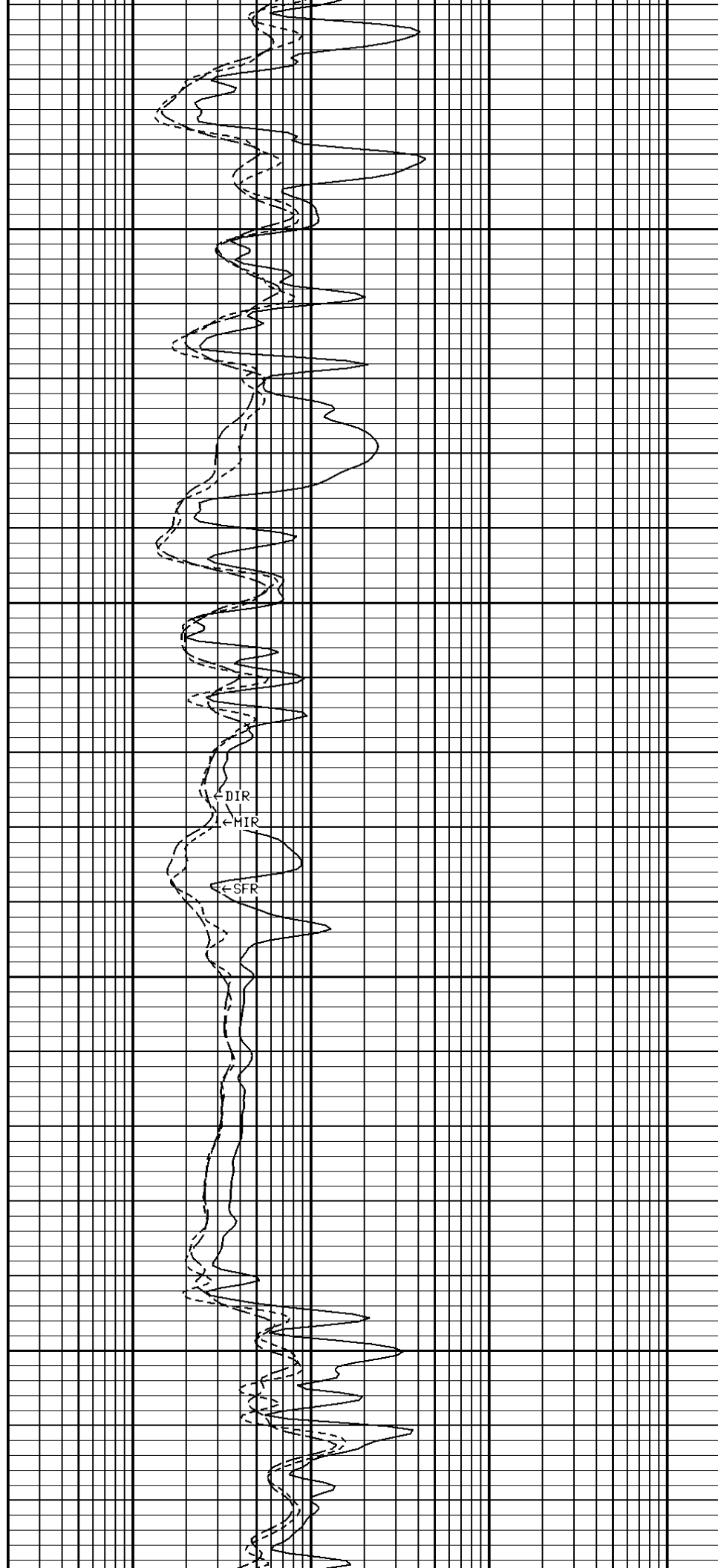
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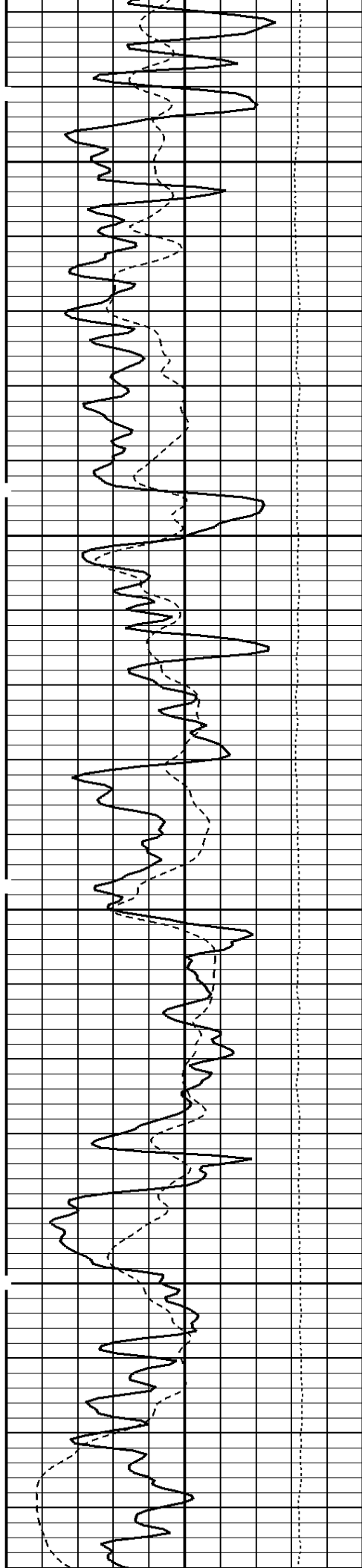




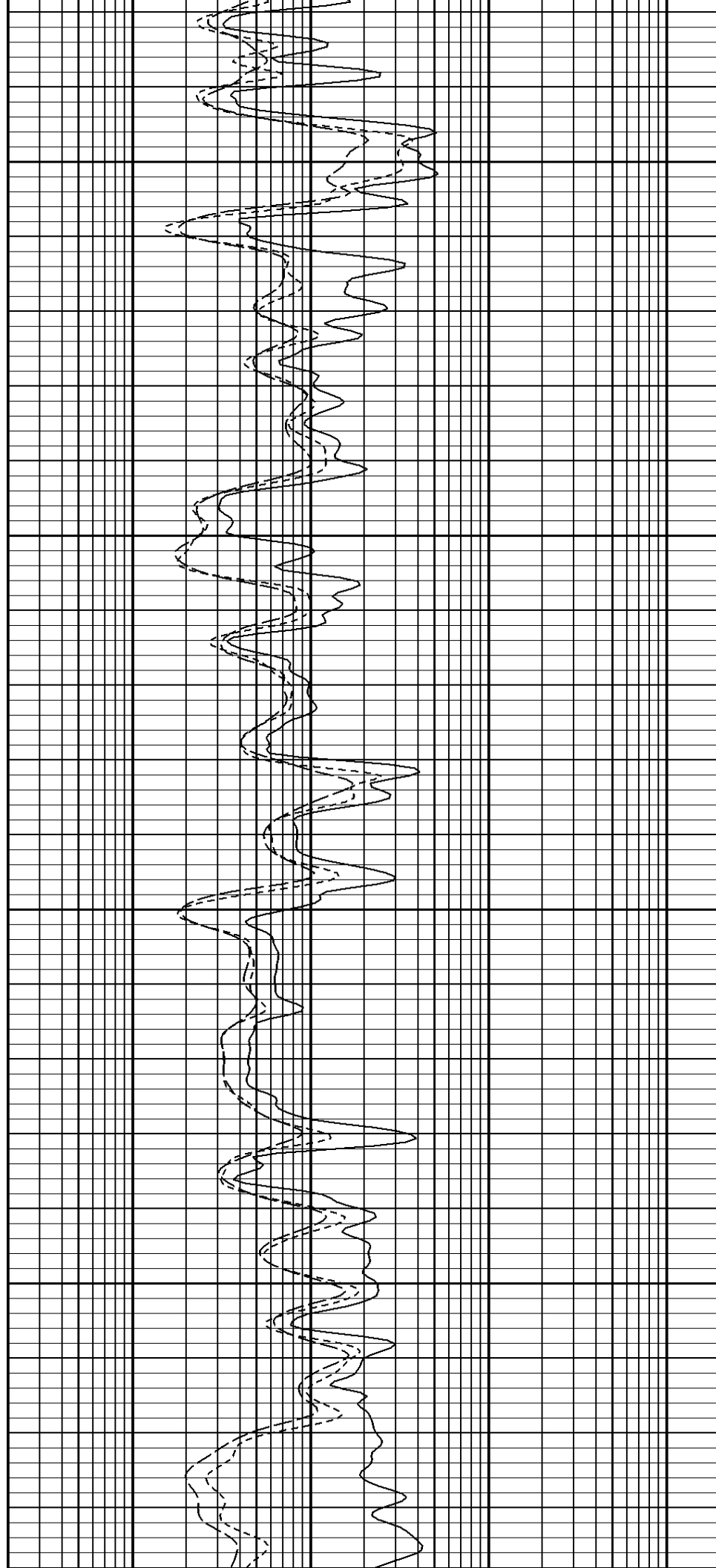
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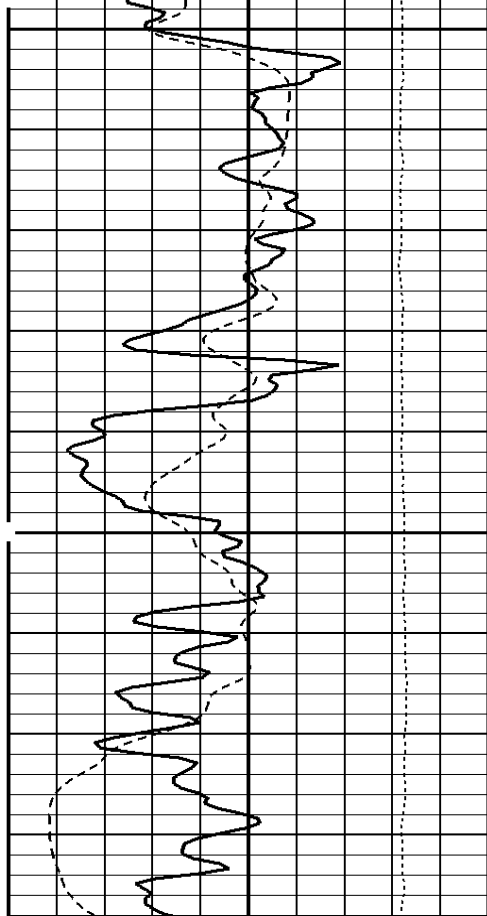


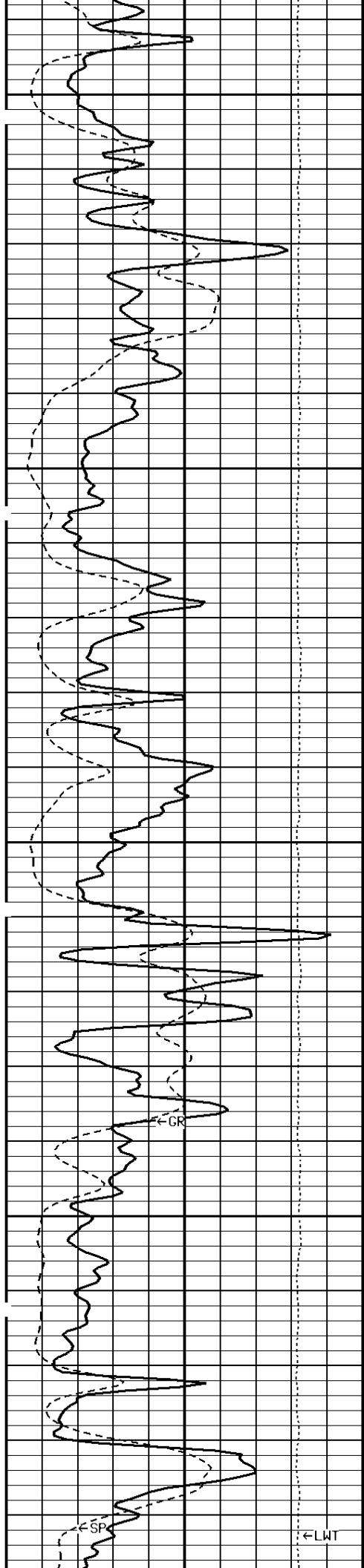


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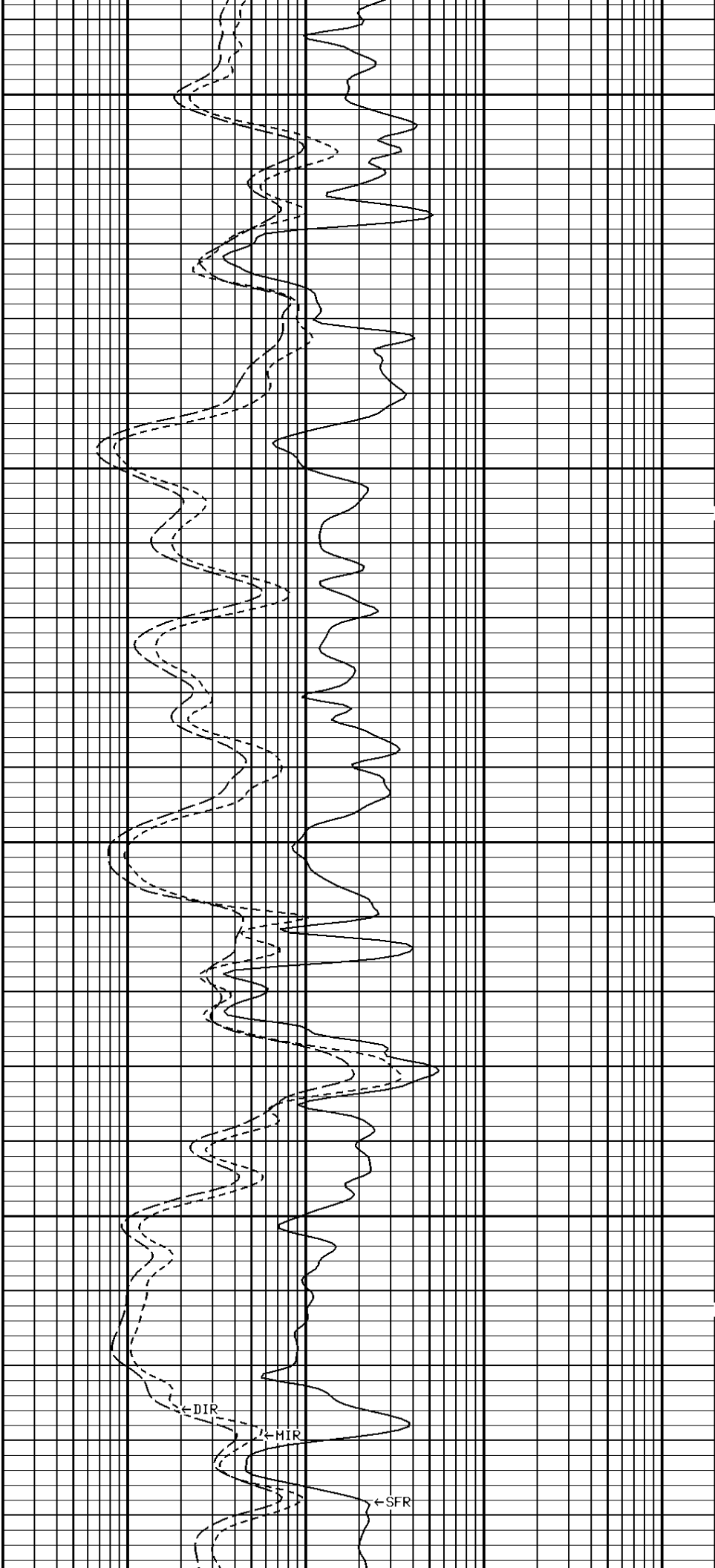
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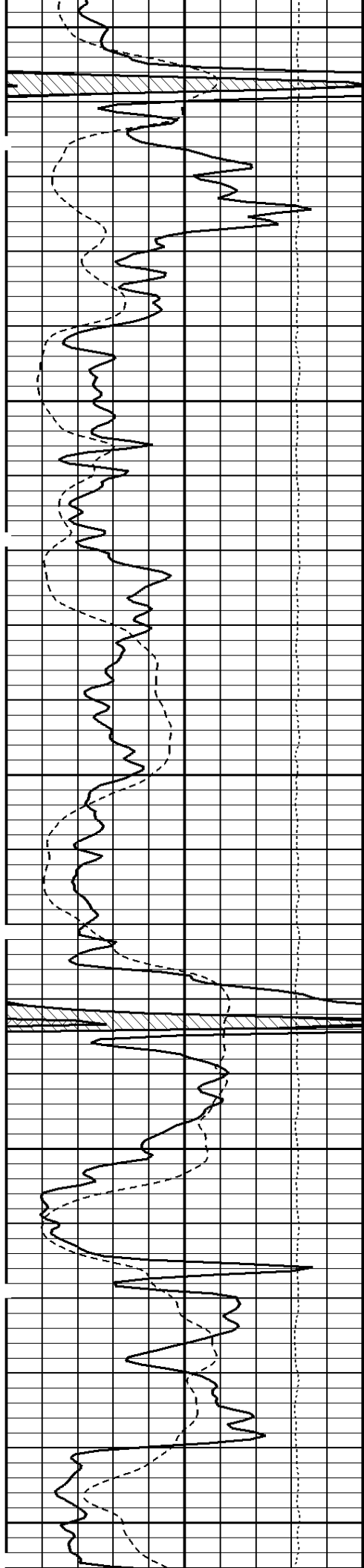




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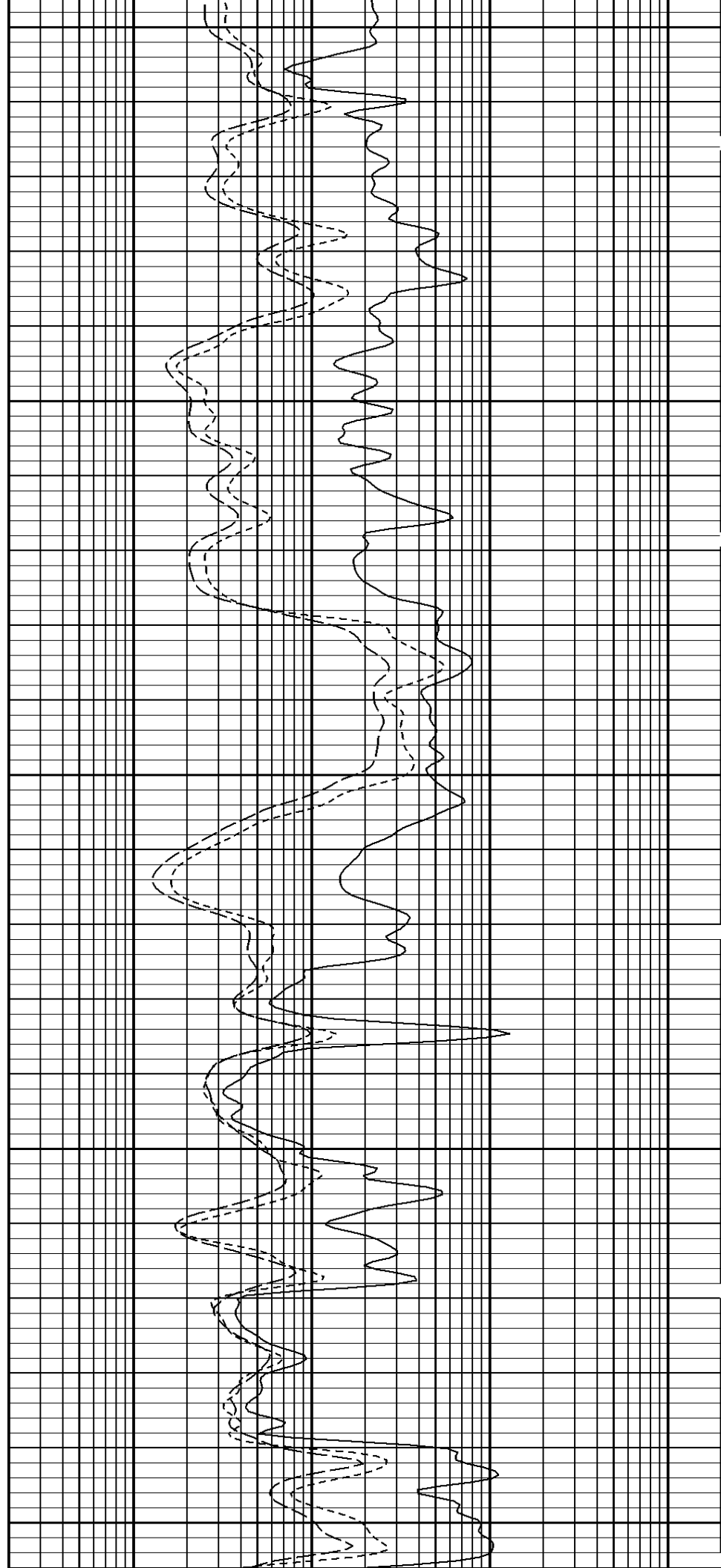


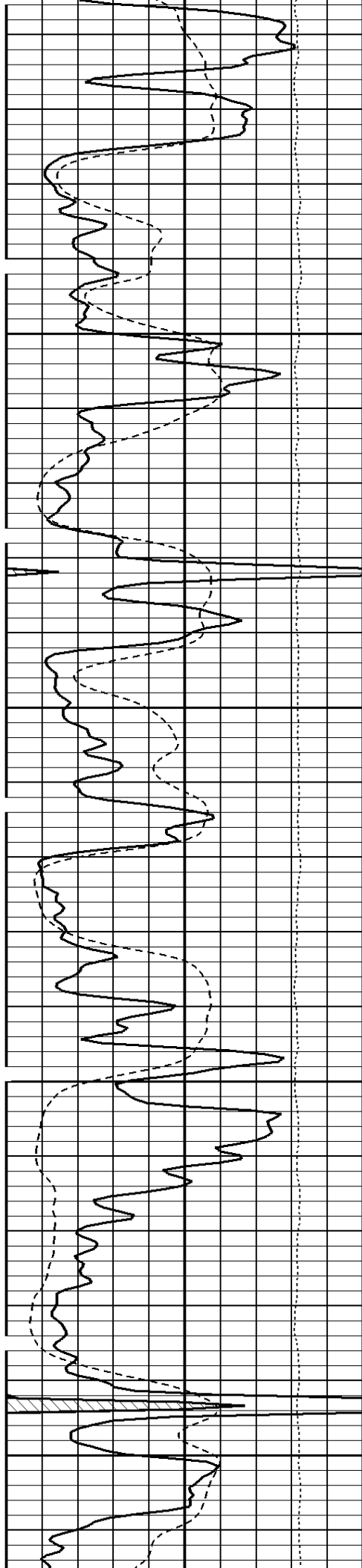


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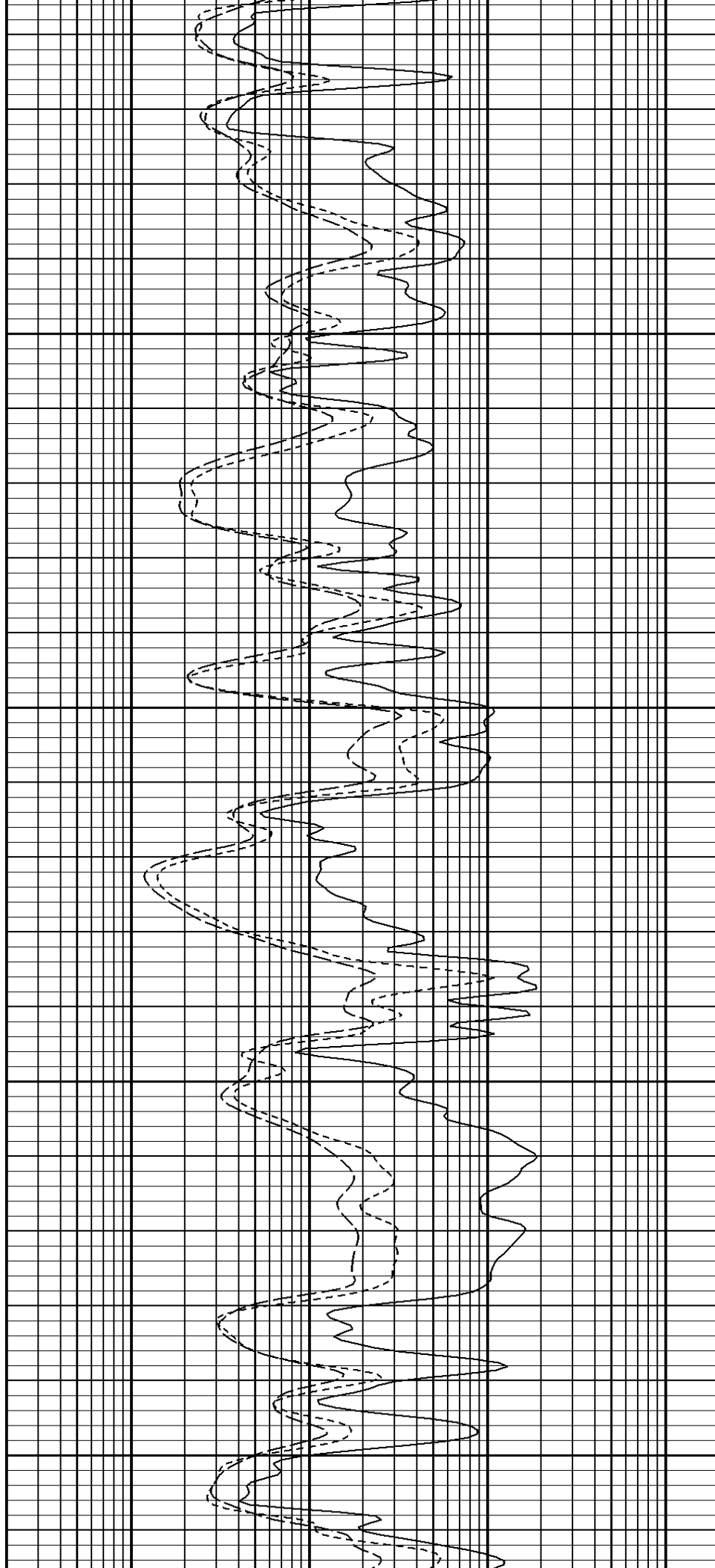
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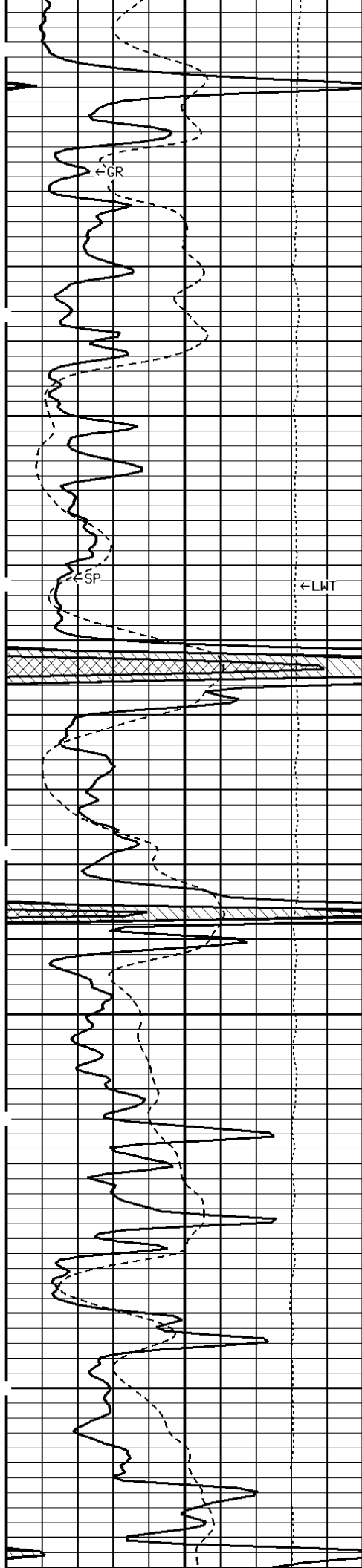




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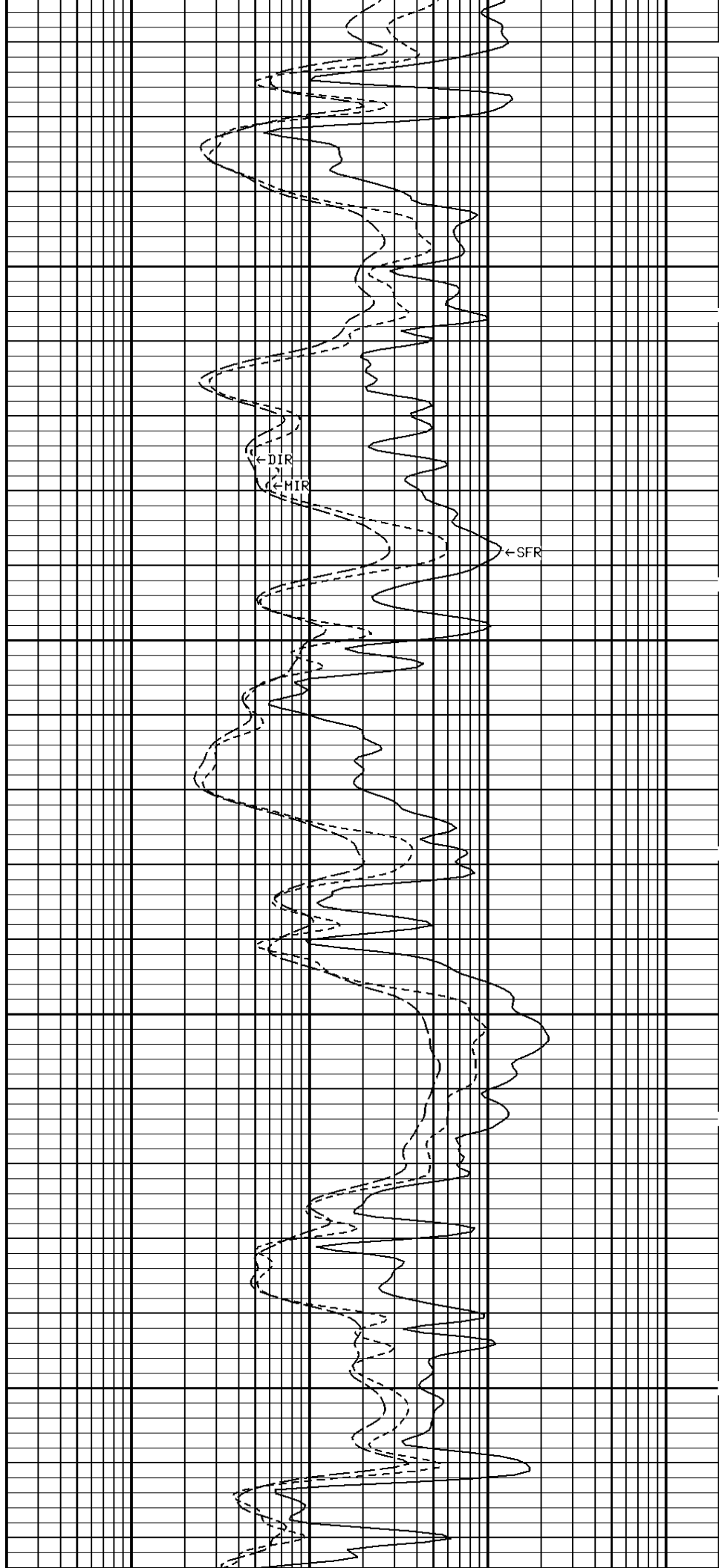
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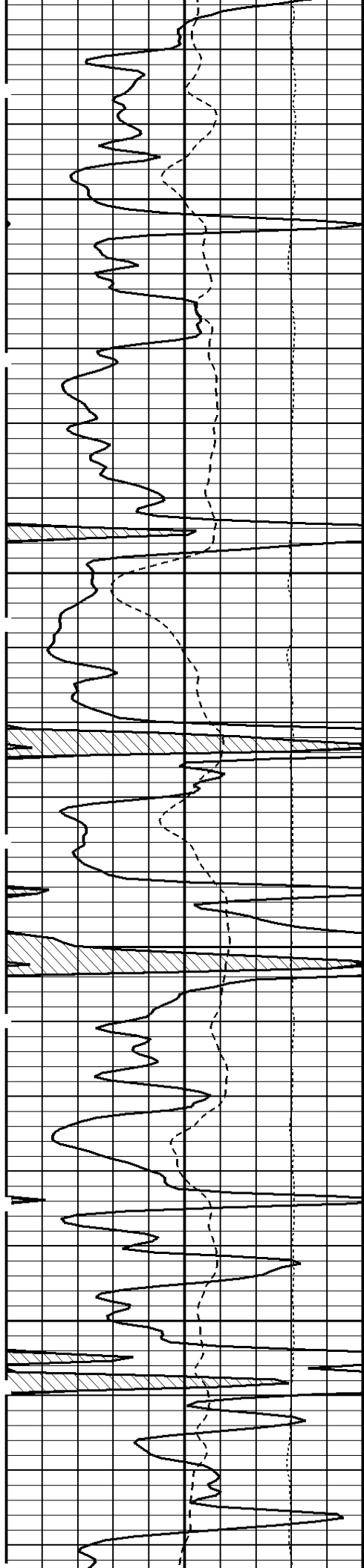




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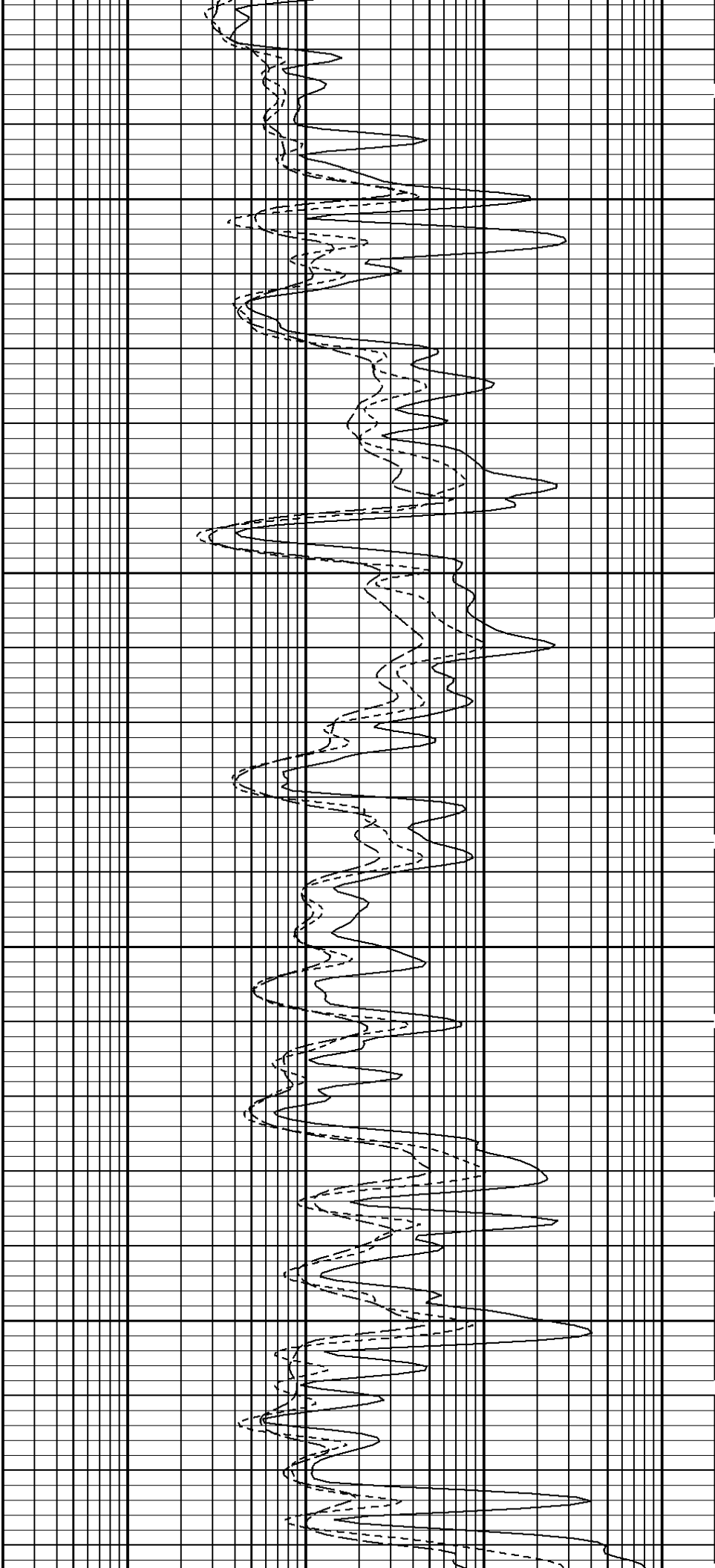
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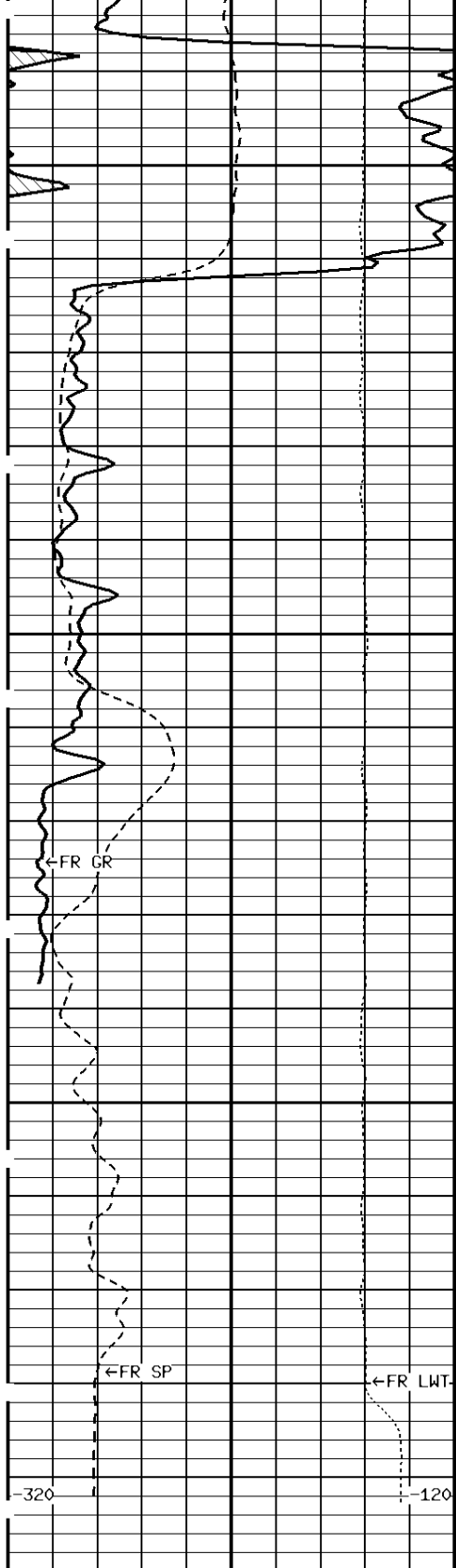




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4700



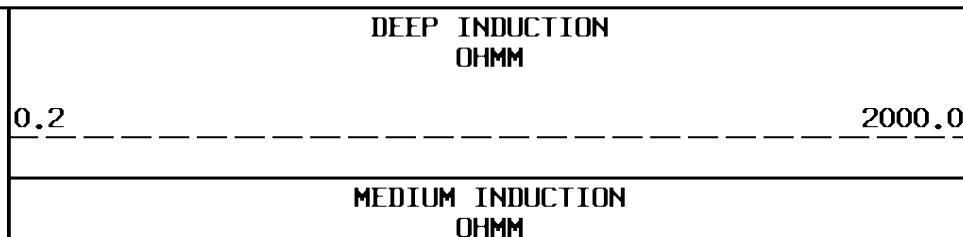
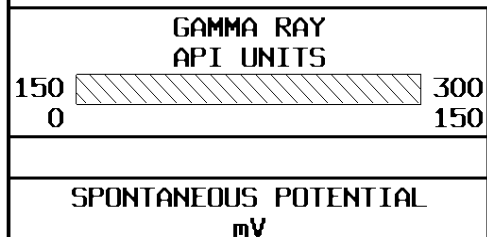
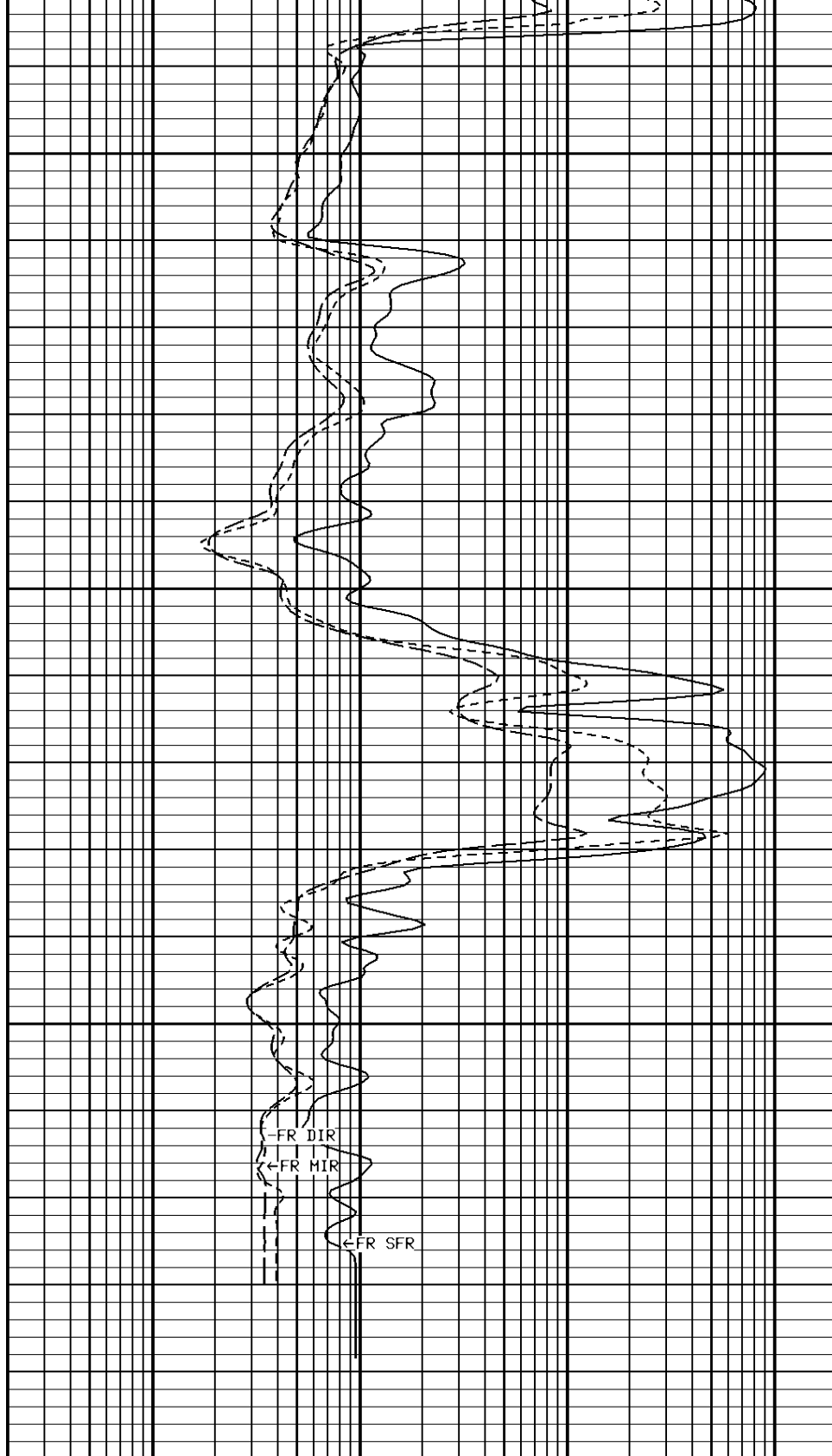


4800

4881

File #107

1:240 MAIN SECTION



→ ← 20	
TENSION LBS	
10000	0

0.2		2000.0
SHALLOW FOCUSED RESISTIVITY OHMM		
0.2		2000.0

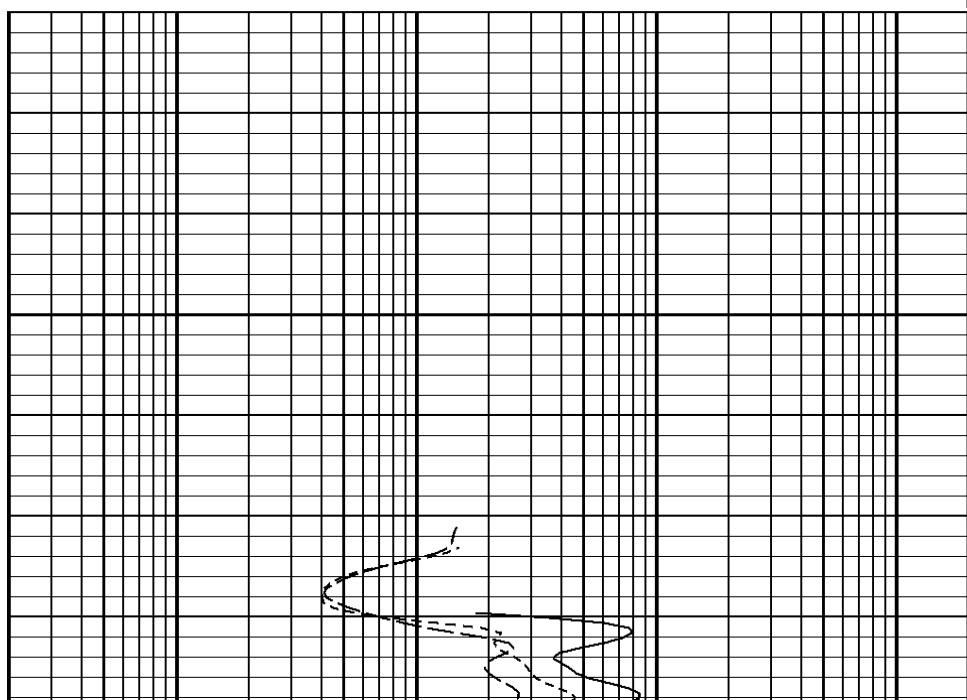
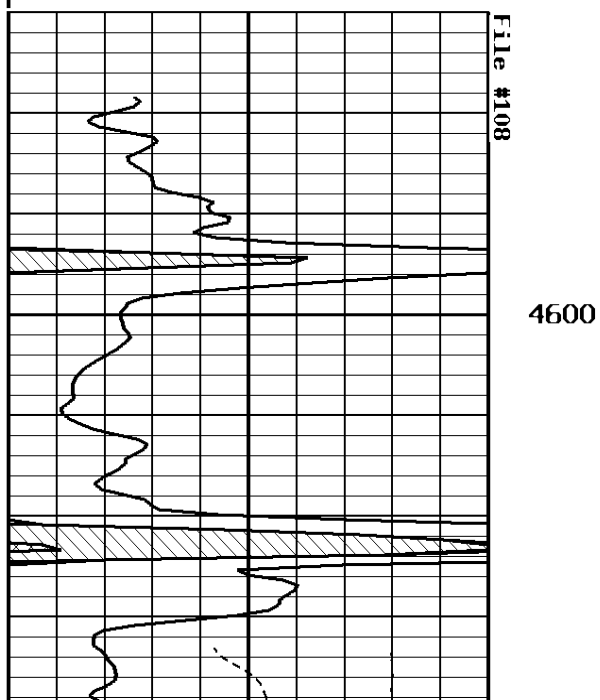
* Borehole Zone Factors *

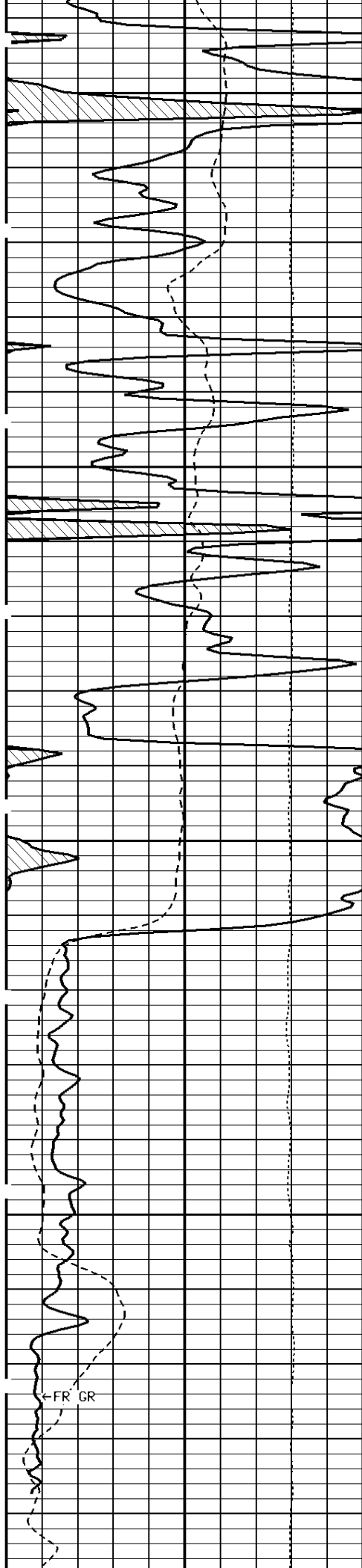
Zone 1 99999.0 to 0.0 F		
Drill Bit Size	7.875	IN
BHT Depth	4880.000	F
Borehole Temperature	70.0	DEGF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	1.40	OHMM
Standoff	1.5	
Resistivity Of Mud Temperature	71.00	DEGF

TENSION LBS	
10000	0
SPONTANEOUS POTENTIAL mV	
→ ← 20	
GAMMA RAY API UNITS	
150 0	300 150

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

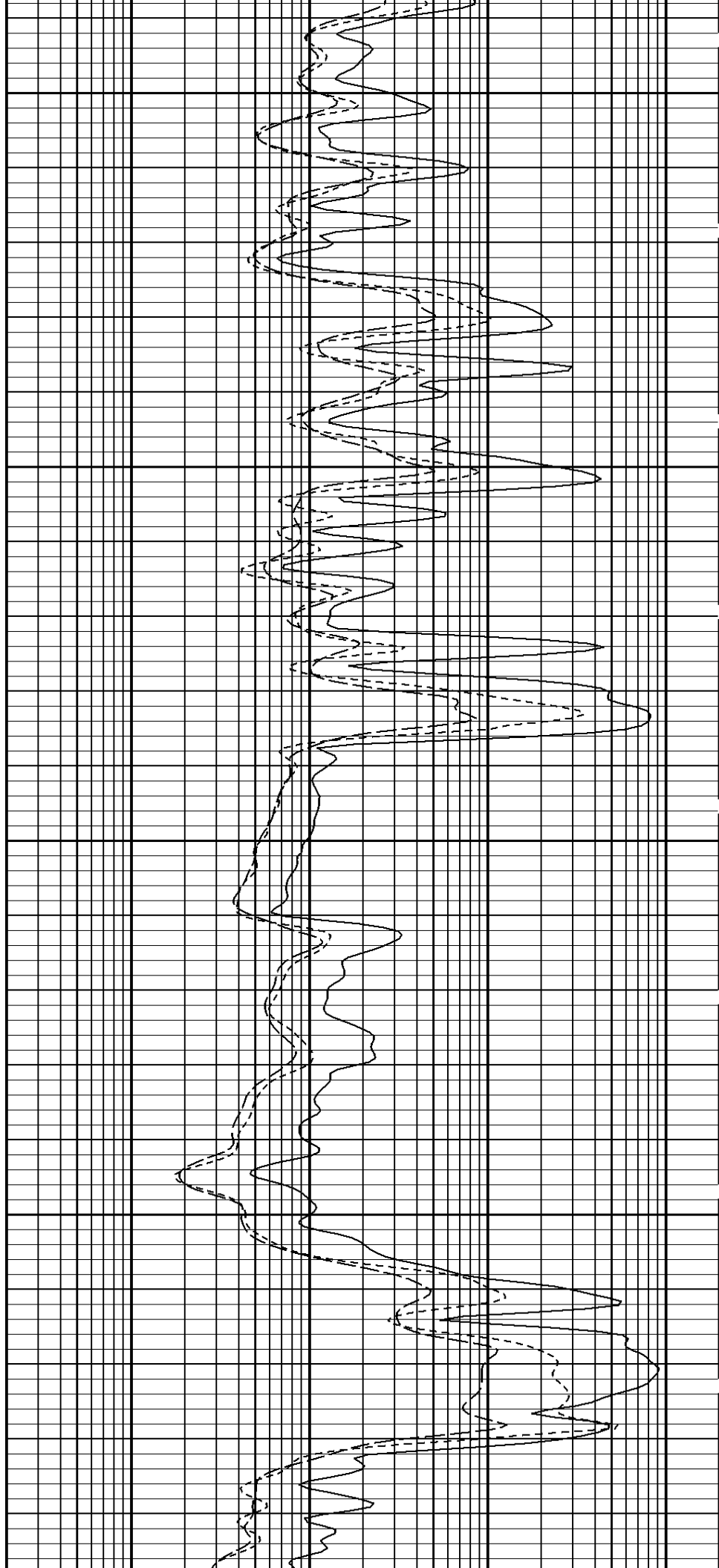
1:240 REPEAT SECTION

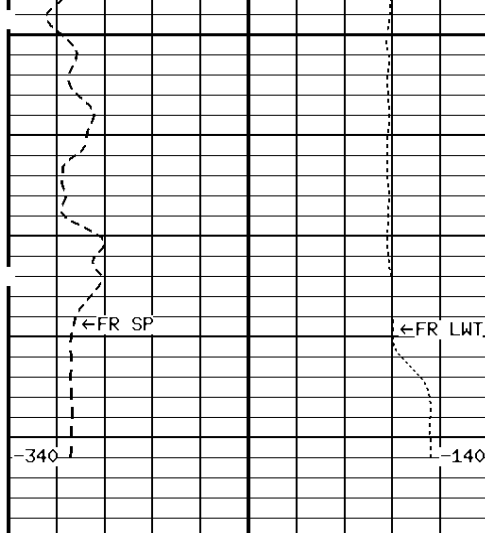




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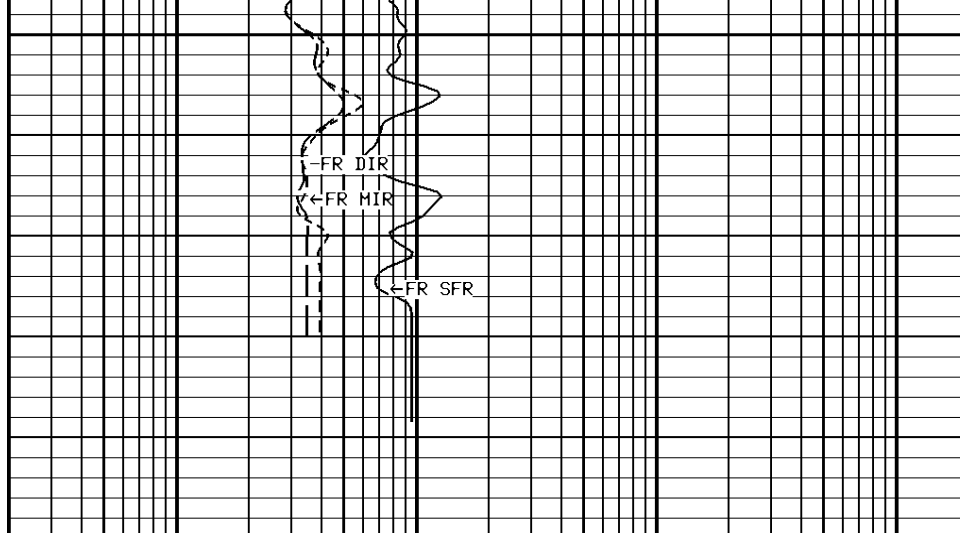
4800





4880

File #108



1:240 REPEAT SECTION

GAMMA RAY API UNITS	
150	300
0	150
SPONTANEOUS POTENTIAL mV	
→	← 20
TENSION LBS	
10000	0

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 F		
Drill Bit Size	7.875	IN
BHT Depth	4880.000	F
Borehole Temperature	70.0	DEGF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	1.40	OHMM
Standoff	1.5	
Resistivity Of Mud Temperature	71.00	DEGF

* Calibration Summary *

Shop Calibration GRTB					
Performed : 12-Feb-2009			Time : 15:11		
Sensor Suite : GR-GR5			ID : GRT-BA-017		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	56	371	175		GRAPI
Shop Calibration PIT_B					
Performed : 26-Mar-2009			Time : 11:07		

Performed : 26-May-2009
Sensor Suite : P-IND-T

Time : 11:03
ID : PIT-AB-005

Medium

	Measured		Calibrated		Units
	R	X	R	X	
Air	130333	130973	0.7	0.7	MMHOS
Zero	131063	131068	0.0	0.0	MMHOS
Reference	250554	250694	5000.0	5000.0	MMHOS
Loop	150975	175462	2723.9	996.5	MMHOS
Sonde Error			-5.8	2.1	MMHOS
Cond			5000.0	5000.0	MMHOS

Deep

	Measured		Calibrated		Units
	R	X	R	X	
Air	128820	131187	0.5	0.1	MMHOS
Zero	131079	131073	0.0	0.0	MMHOS
Reference	232778	234129	2000.0	2000.0	MMHOS
Loop	149315	175981	1272.9	466.4	MMHOS
Sonde Error			-5.2	-4.6	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 : 26-May-2009
Sensor Suite : SFL

Time : 10:58
ID : PIT-AB-005

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Im	32782.3	50586.3	0.0	7028.0	uA
Ib	32765.4	49967.4	0.0	1750.0	mA
MOM1	32784.3	57282.1	0.0	175.0	mV
Equivalent SFL				43.97	OHMM

Performed : 26-May-2009
Sensor Suite : P-SP

Time : 10:47
ID : PIT-AB-005

Internal

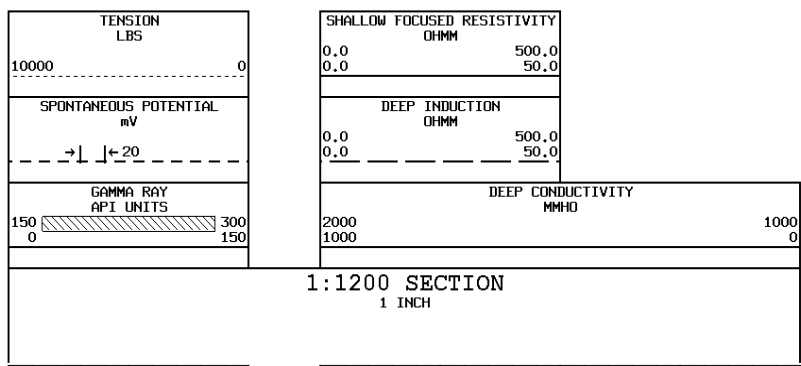
	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
	32786.3	58899.8	0.0	1000.0	mV

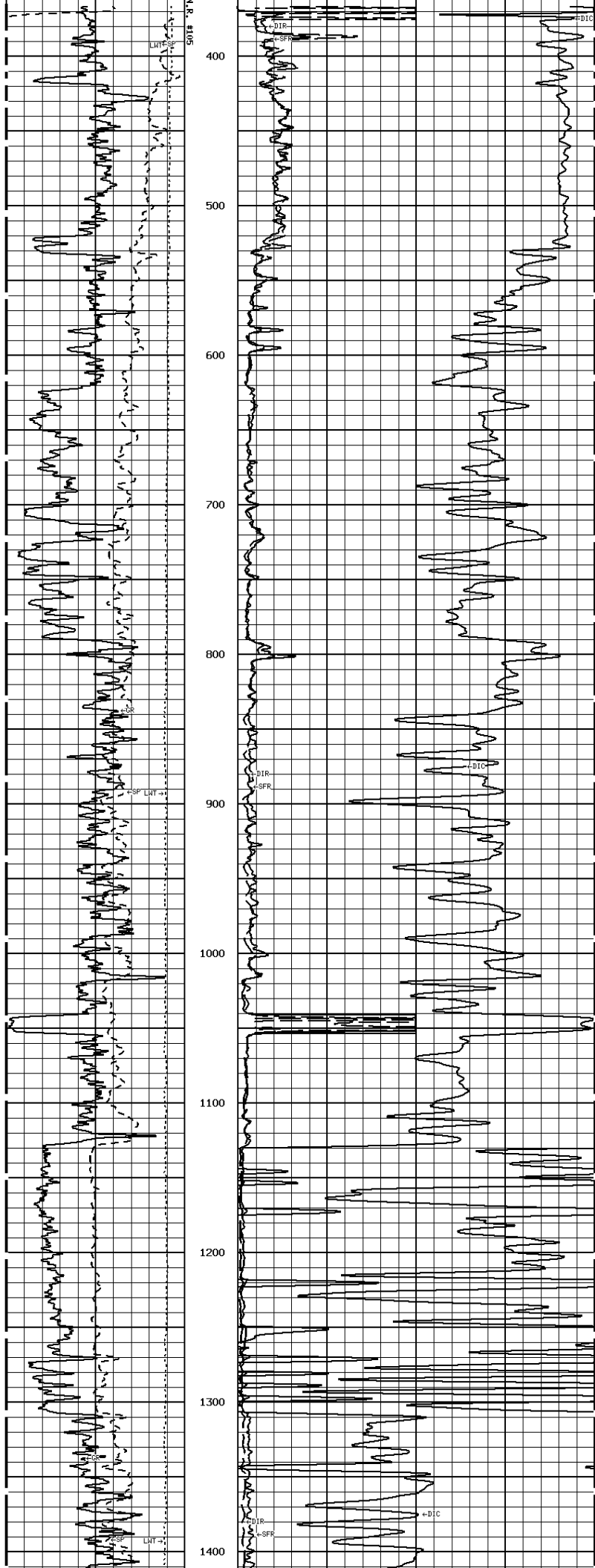
Performed : 26-MAY-2009
Sensor Suite : P-RMUD

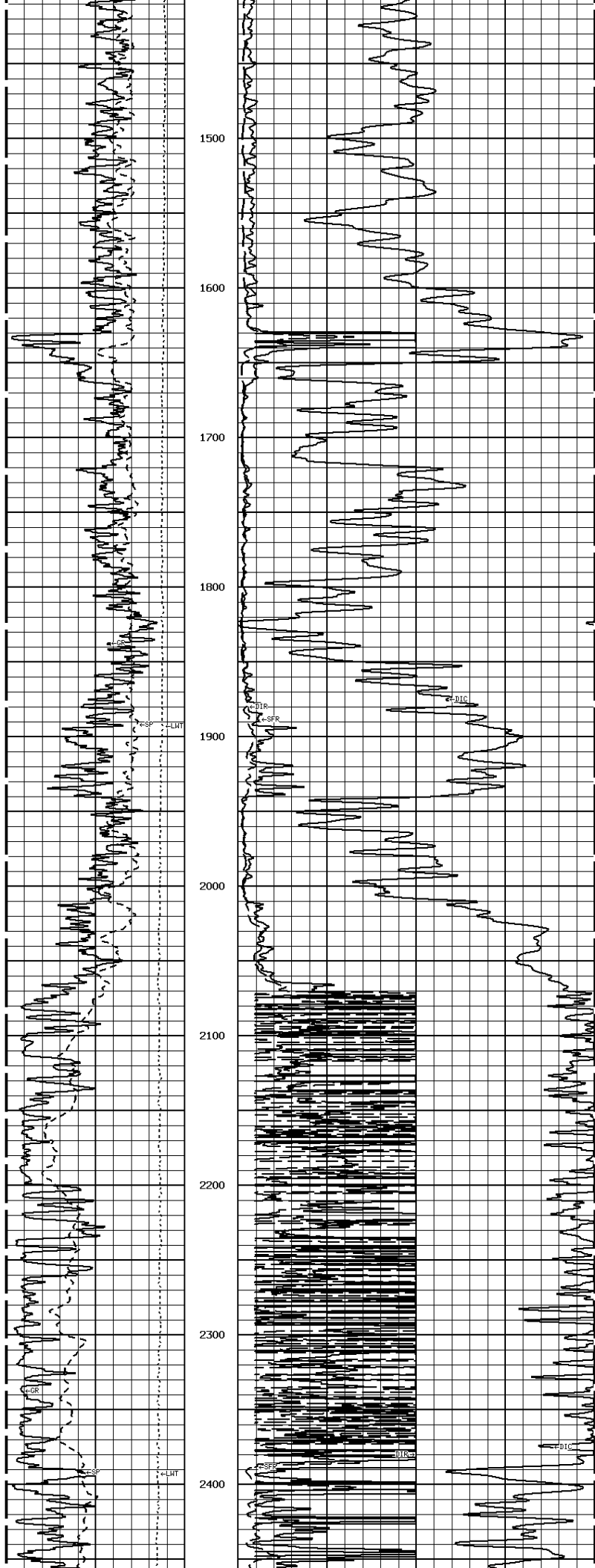
Time : 11:15
ID : PIT-AB-005

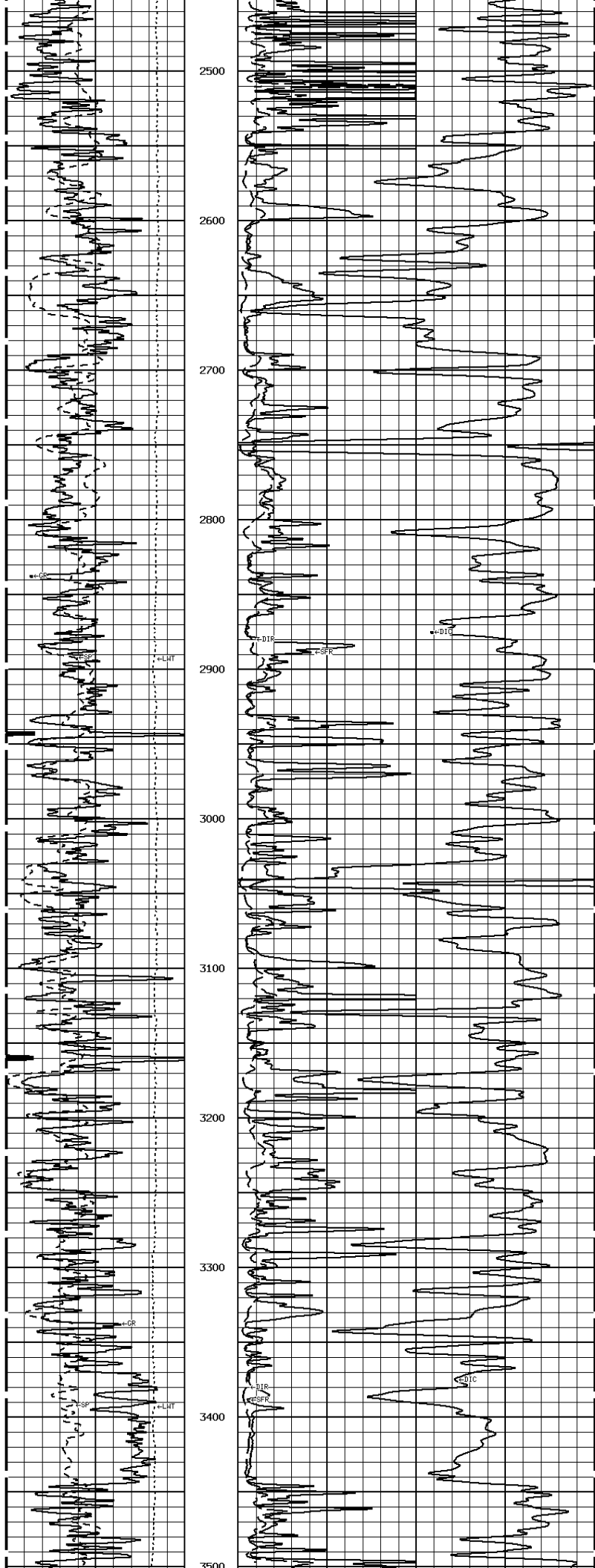
Internal

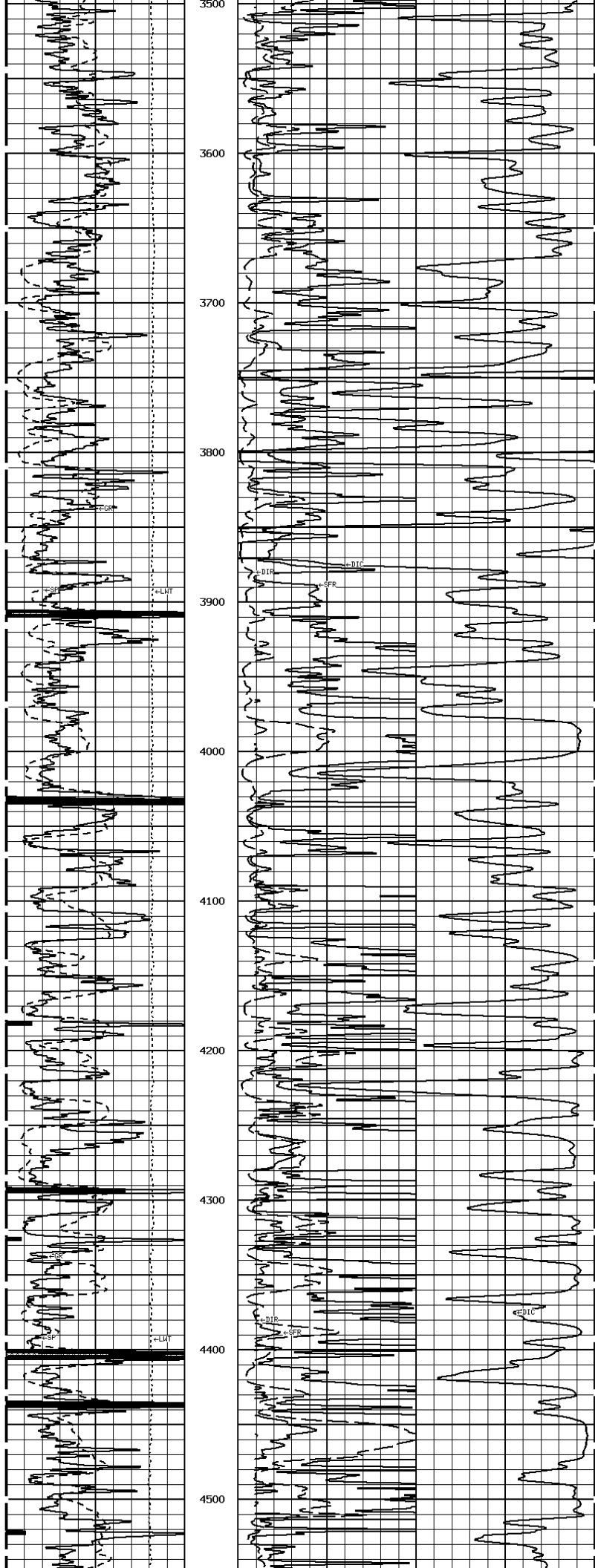
	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Rmi	0.0	34825.0	0.0	290.6	mA
Rmv	0.0	34825.0	0.0	290.6	mV
Equivalent Rm				0.0871	OHMM

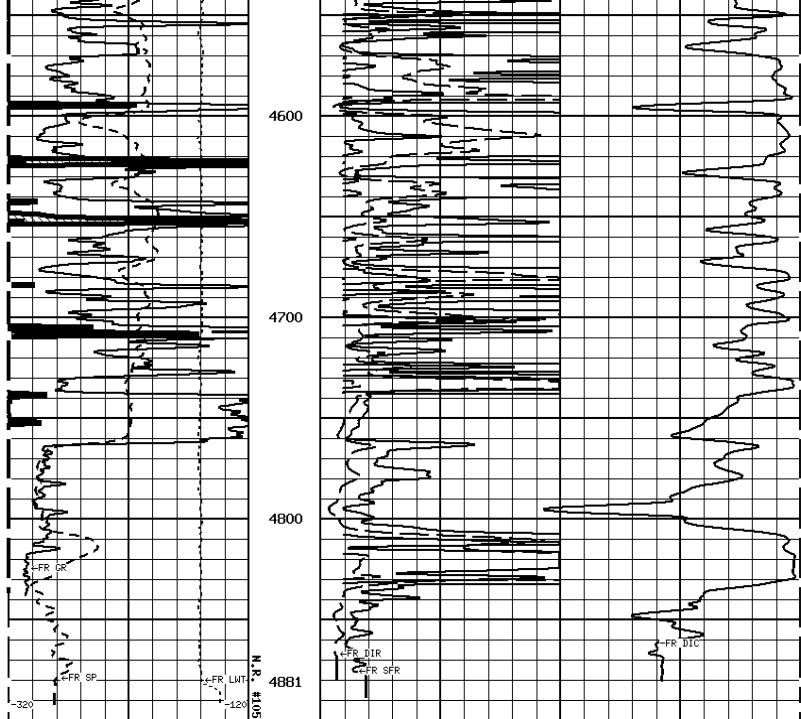












1:1200 SECTION
1 INCH

GAMMA RAY API UNITS		DEEP CONDUCTIVITY MMHO	
150	300	2000	1000
0	150	1000	0
SPONTANEOUS POTENTIAL mV		DEEP INDUCTION OHMM	
→ ← 20		0.0	500.0
		0.0	50.0
TENSION LBS		SHALLOW FOCUSED RESISTIVITY OHMM	
10000	0	0.0	500.0
		0.0	50.0