

Tucker
WIRELINE SERVICES

BOREHOLE COMPENSATED

SONIC LOG

Company KINNEY OIL COMPANY
Well GRIMM # 1 - 32
Field WILDCAT
County NEMAHA
State KANSAS
Country USA
API No. 015-131-20232-00-00

File No : TUL57744
Company : KINNEY OIL COMPANY
Well : GRIMM # 1 - 32
Field : WILDCAT
County : NEMAHA
State : KANSAS
Country : USA
API No : 015-131-20232-00-00

Location :
 2300' FNL & 1400' FEL
 NE SE SW NE

LSD : **Sect** : 32 **Twp** : 1S **Rge** : 14E

Permanent Datum:	GL	Elevations:		Services:	
Drilling Measured From:	KB	KB 1275.00	Ft	CNT	CST
Log Measured From:	KB	DF 1274.00	Ft	LDT	PIT
Above Permanent Datum:	10.00 Ft	GL 1265.00	Ft	MLT	
Date	2012-04-28				
Run Number	1				
Depth--Driller	3963.0	Ft			
Depth--Logger	3955.0	Ft			
First Reading	3946.0	Ft			
Last Reading	262.0	Ft			
Casing--Driller	262.0	Ft			
Casing--Logger	262.0	Ft			
Bit Size	7.875	In			
Casing Size	8.625	In			
Hole Fluid Type	CHEMICAL				
Density	9.4	LBS/GAL			
Fluid Loss	4.0	CC			
PH/Viscosity	9.5	48.0 SEC			
Sample Source	MEASURED				
RM@Measured Temp.	6.000	@ 74 F			
RMF@Measured Temp	4.800	@ 74 F			
RMC@Measured Temp.	7.200	@ 74 F			
Source RMF/RMC	CALCULATED/CALCULATED				
RM@BHT	3.894	@ 114 F			
Time Circulation Stopped	2012-04-28 10:00				
Max Recorded Temp.	114	F			
Equipment/Base	TRK 127	TULSA			
Recorded By	R. AUSTIN				
Witnessed By	J. KINNEY, S. MILLER				

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	3963.00	8.625	32.00	262.00

Run Number	1		
Date	2012-04-28		
Date/Time On Bottom	2012-04-28 17:55		
Depth to Fluid	0.0 Ft		
Salinity	500.000 PPM		
RMF@BHT	3.115 @ 114 F		
RMC@BHT	4.673 @ 114 F		

Run Number 1

Comments

RUN 1 = GRT, CST AND MLT RUN IN COMBINATION.
 RUN 2 = GRT, CNT, LDT 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.

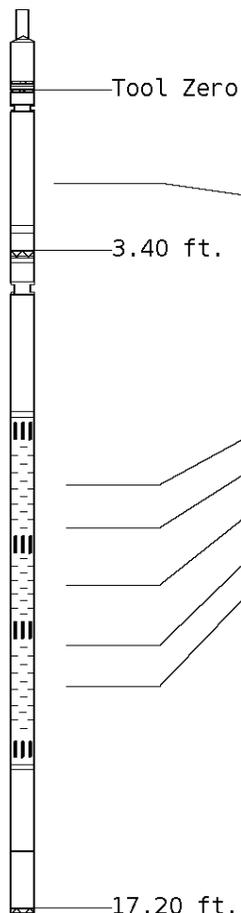
TOOLS STUCK IN HOLE AT APPROX 1810'. DATA PRESENTED WAS GATHERED RUN 1 UPLOG AND
 RUN 2 DOWNLOG, REPEAT AND MAIN PASS TD TO 1810'

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

OPERATORS:
 M.BURKE
 N. BURDEN

Tool String Schematic

Total Tool Length - 26.86 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 486.00 lbs.



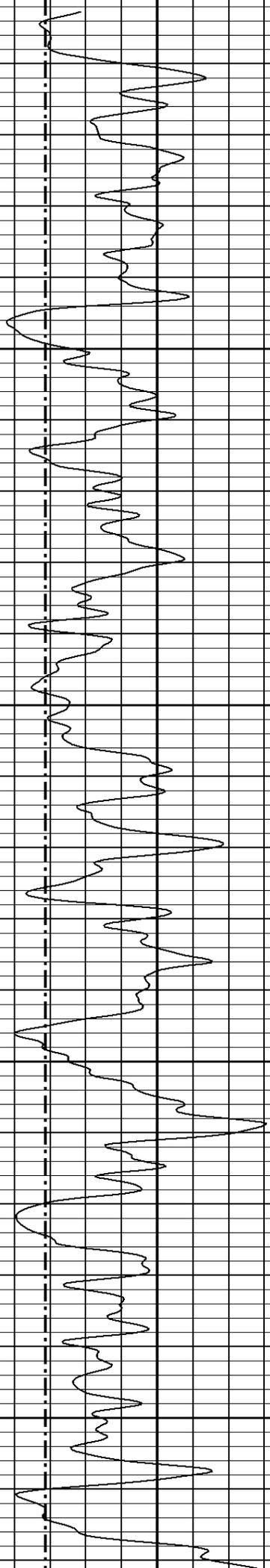
Tool: GRT-B **Length:** 3.40 ft. **O.D.** 3.60 in.
 Gamma Ray Controller
Sonde ID : GRT-BA-15

Measure Point	Tool Offset	Stack Offset	Bottom Offset
GRP	2.00	2.00	24.86

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
 Open Hole Sonic
Sonde ID : CST-AB-012

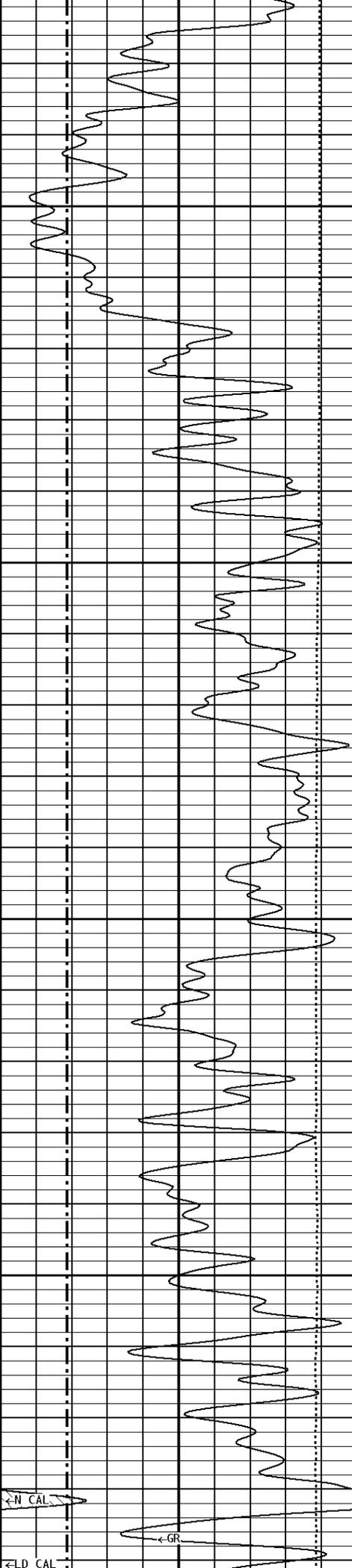
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	8.20	18.66
TT3	5.80	9.20	17.66
CDT	7.30	10.70	16.16
TT4	8.80	12.20	14.66
TT2	9.80	13.20	13.66

Tool: CST-BA **Length:** 3.66 ft. **O.D.** 3.60 in.



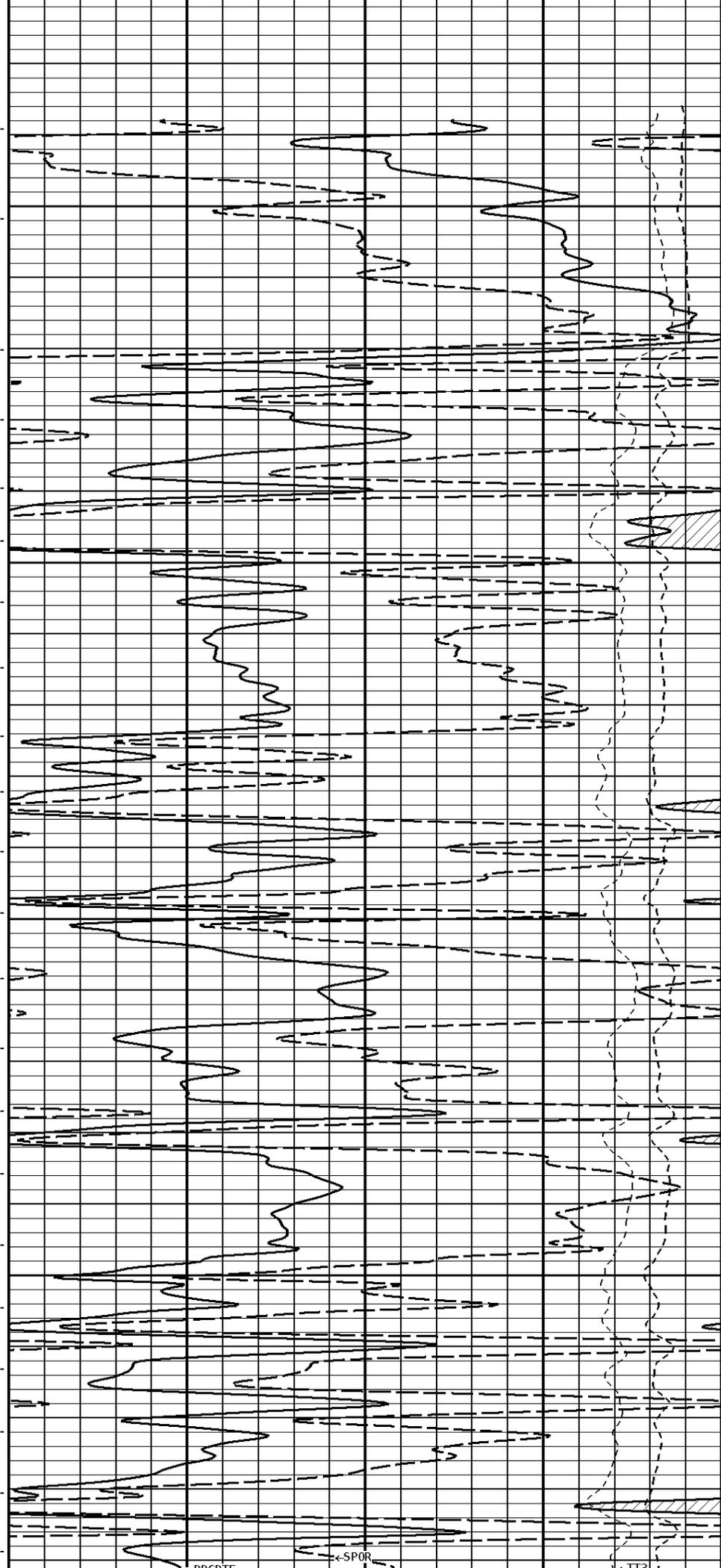
100

200



300

400



←N CAL

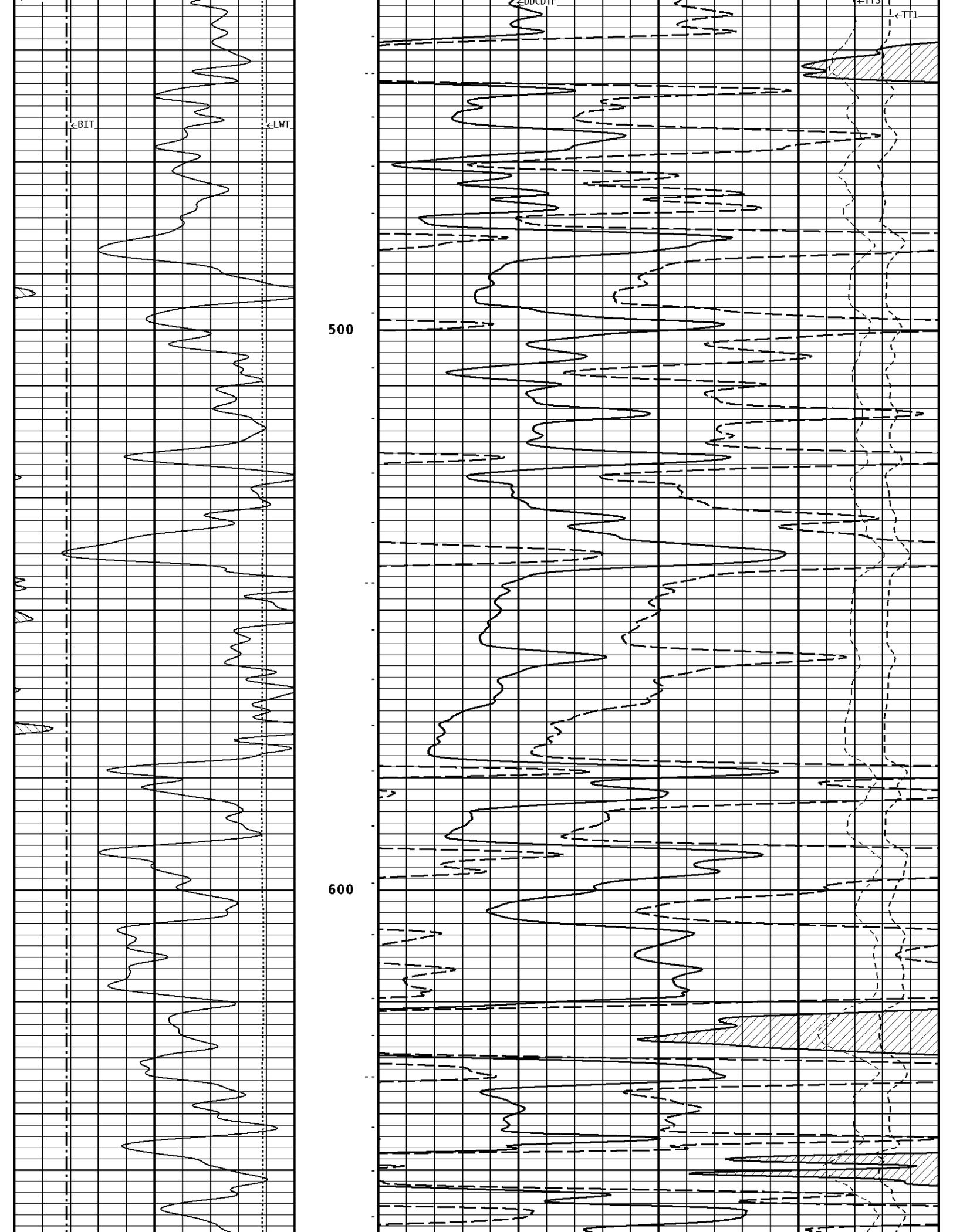
←LD CAL

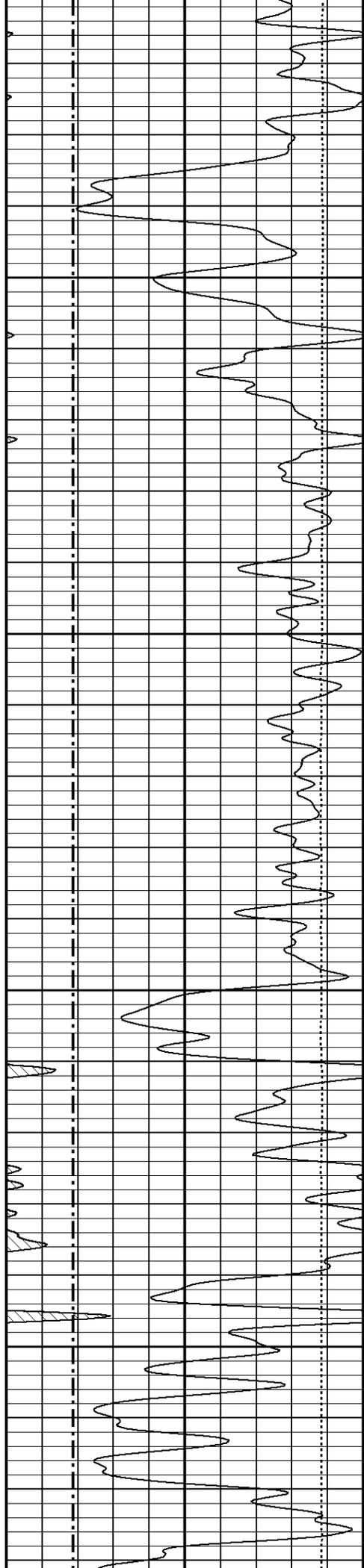
←GR

←PCATE

←SPOR

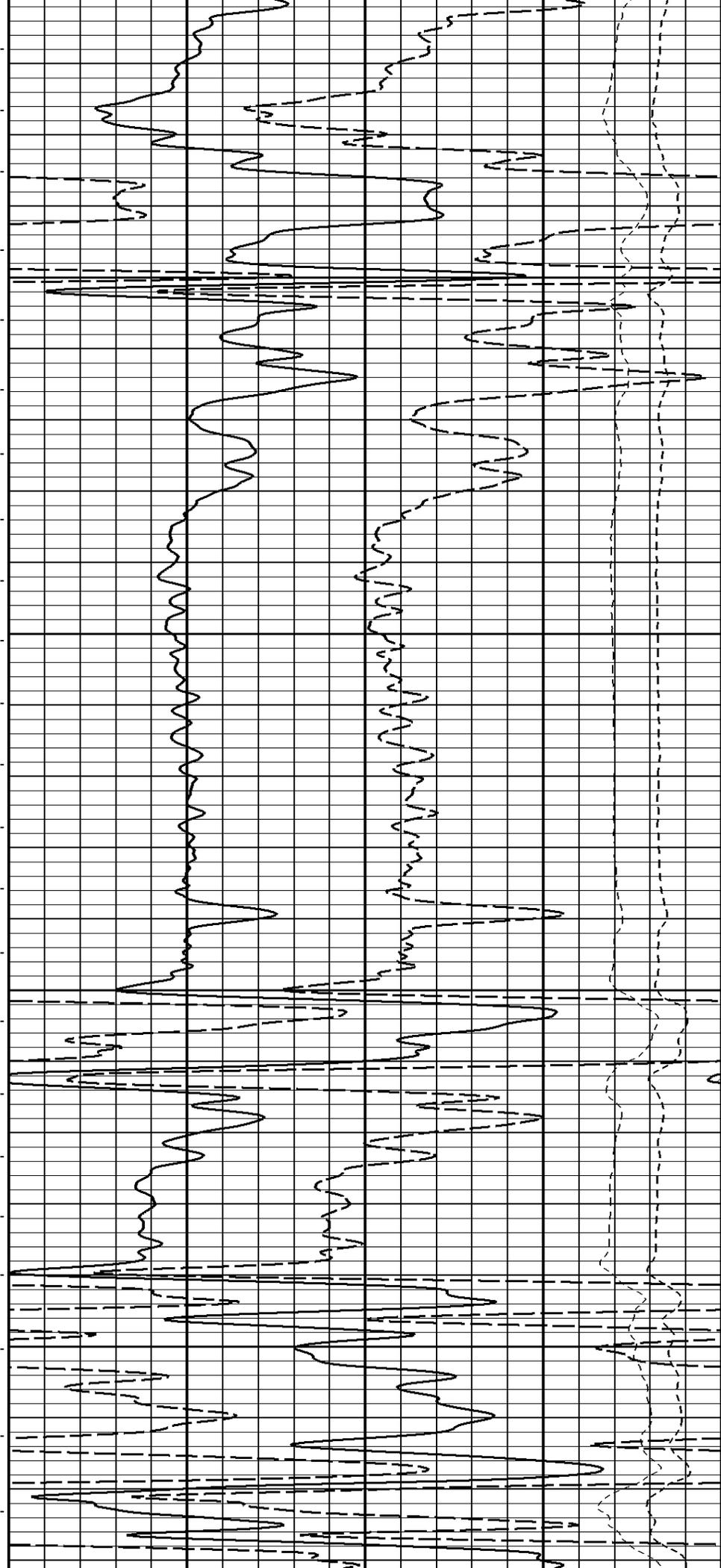
←TT2

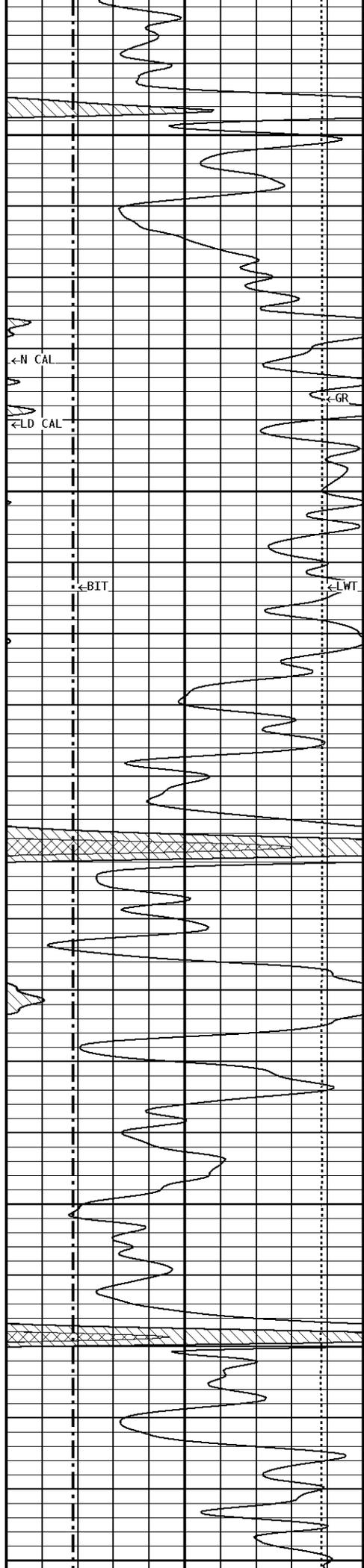




700

800

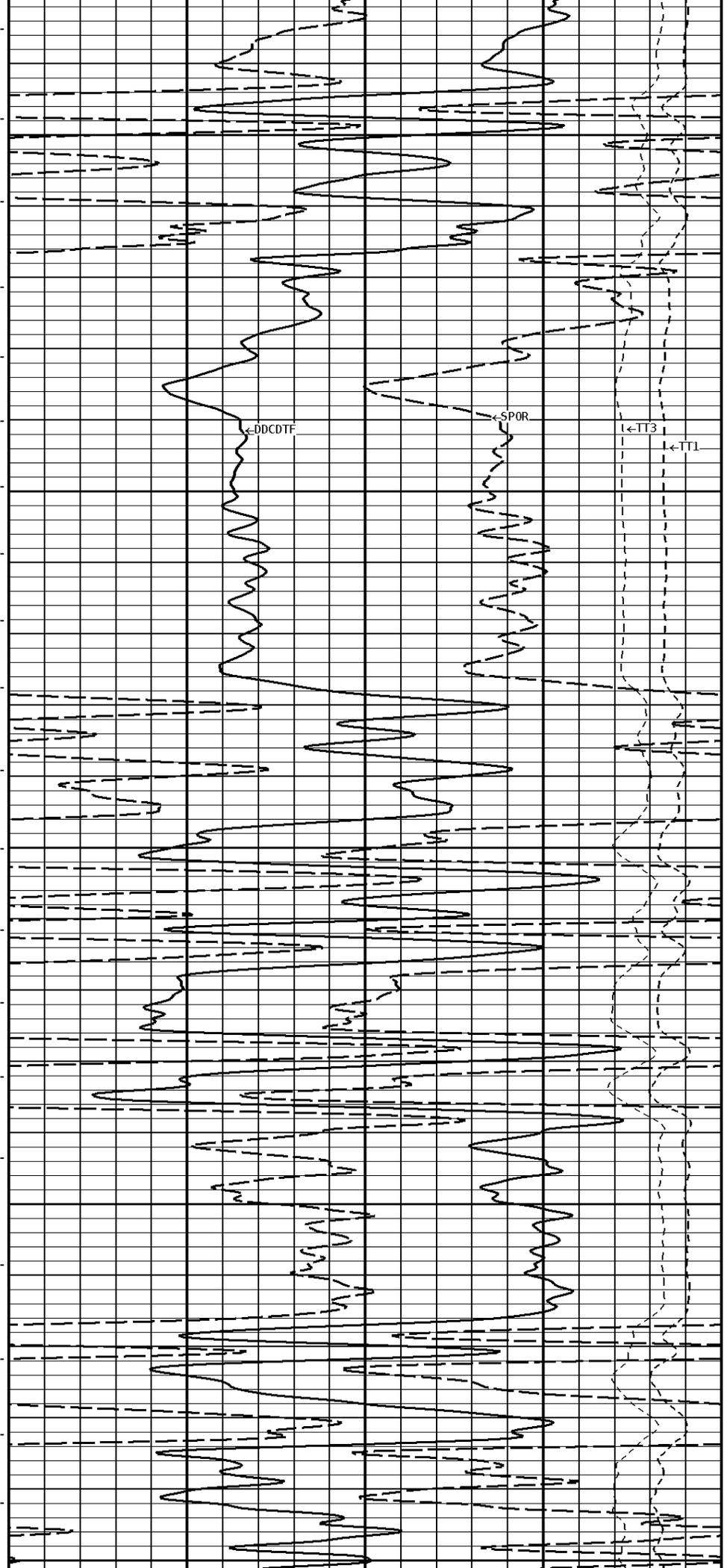


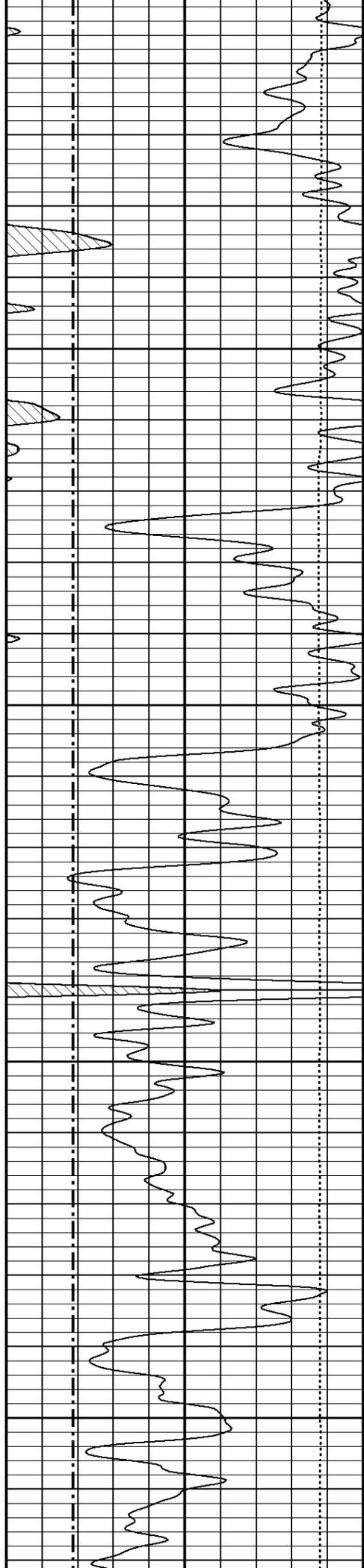


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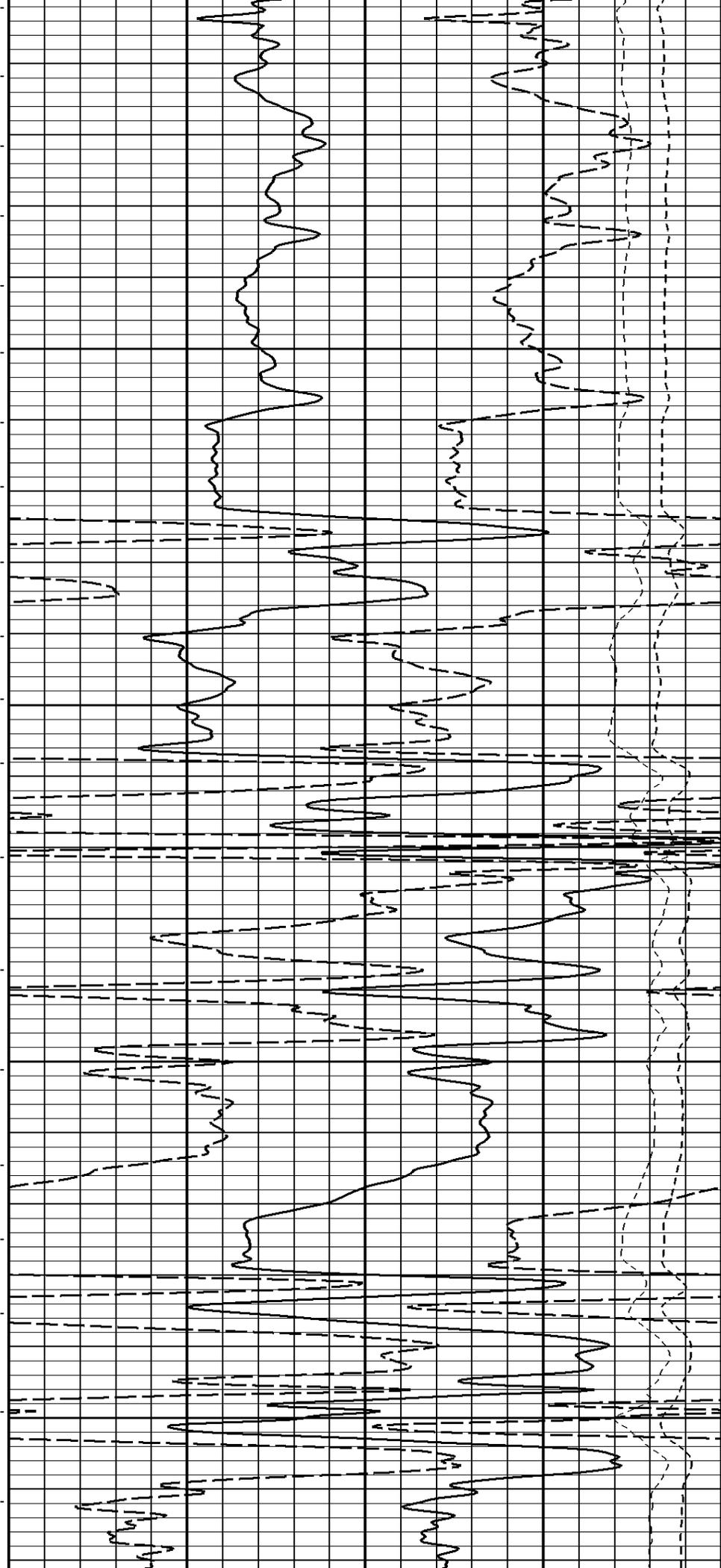
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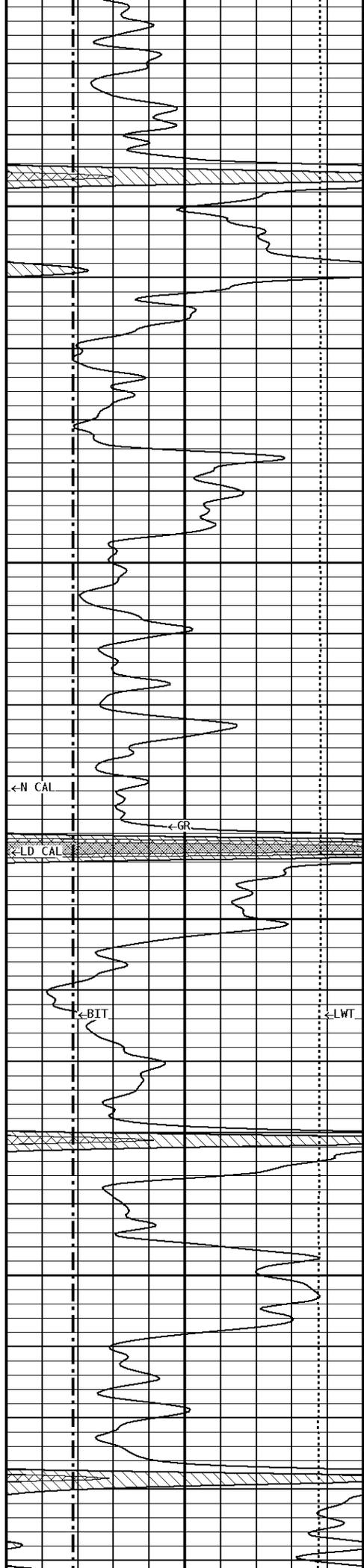




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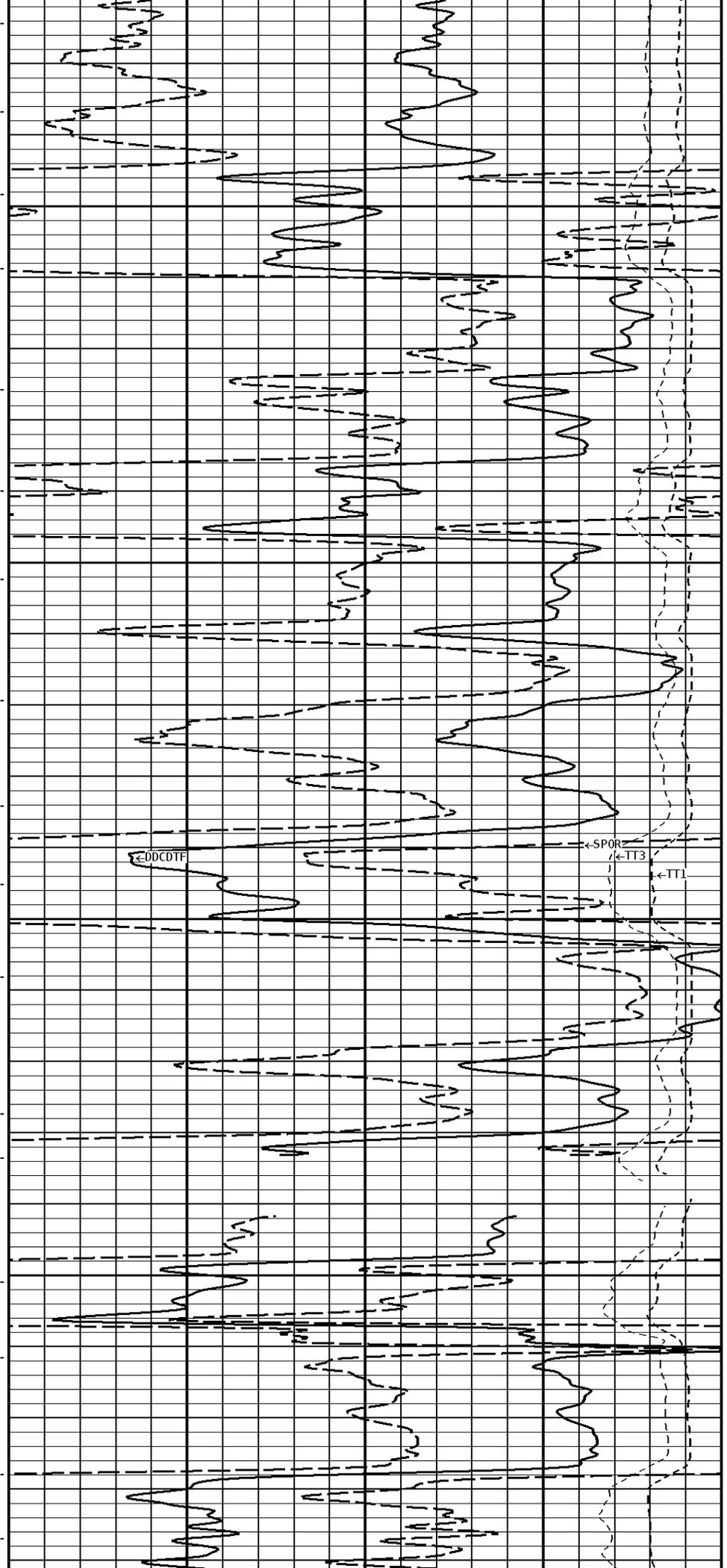
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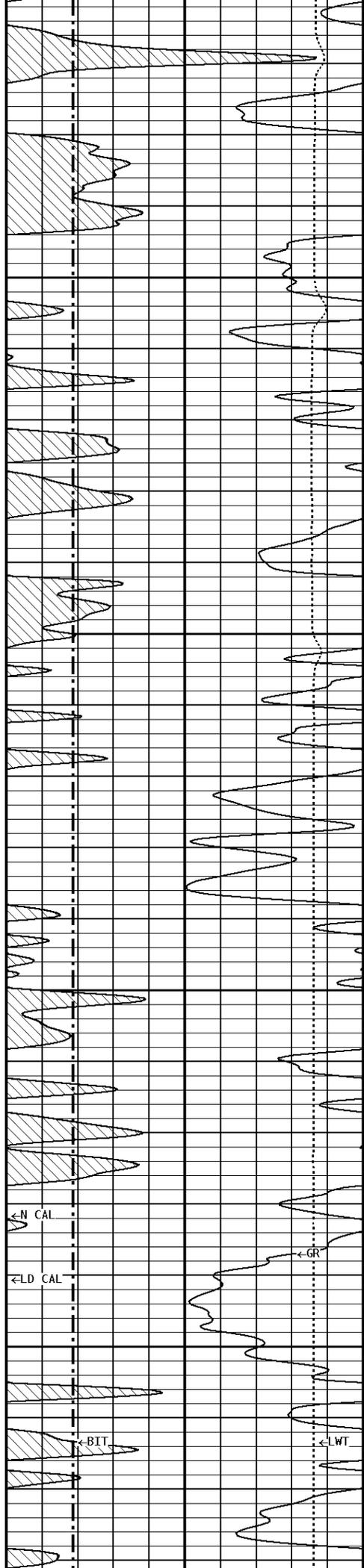




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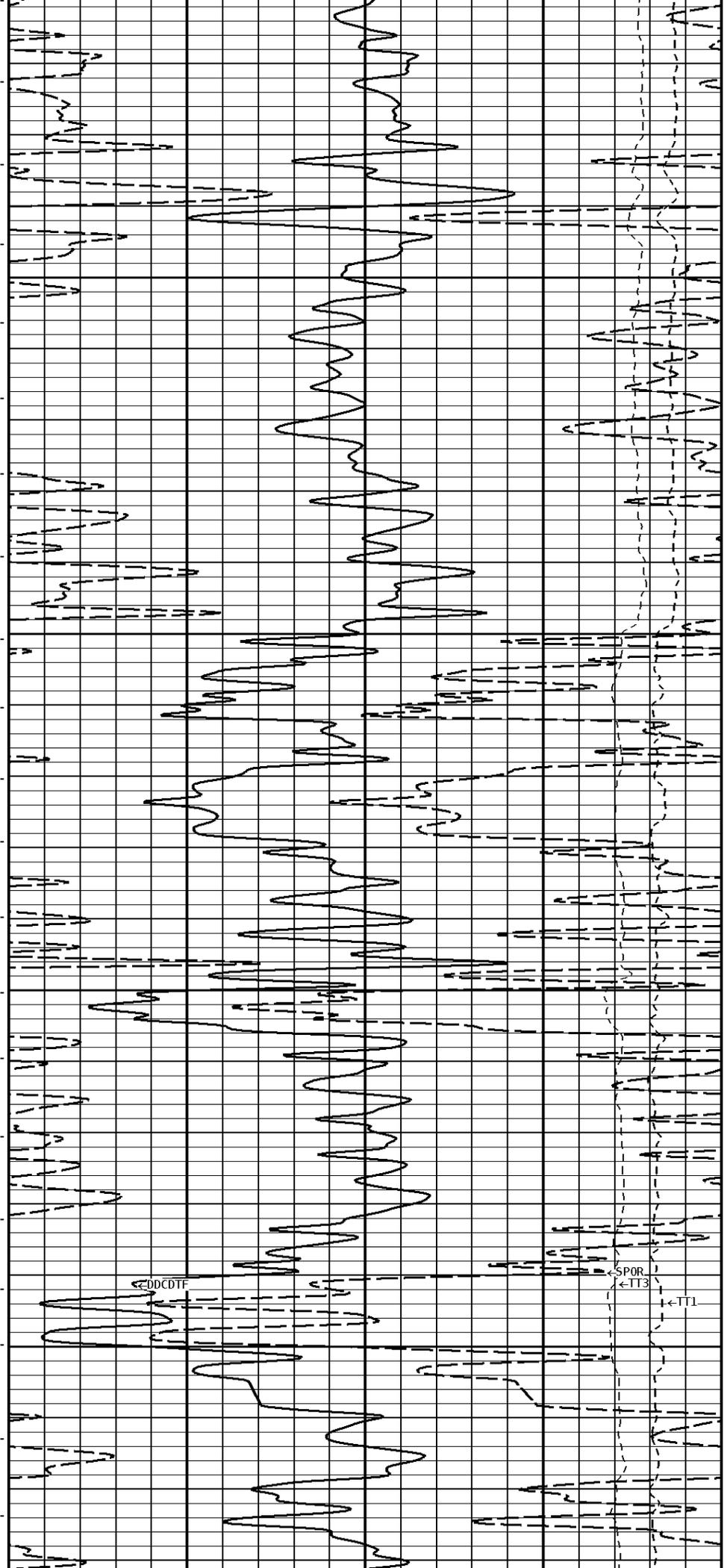
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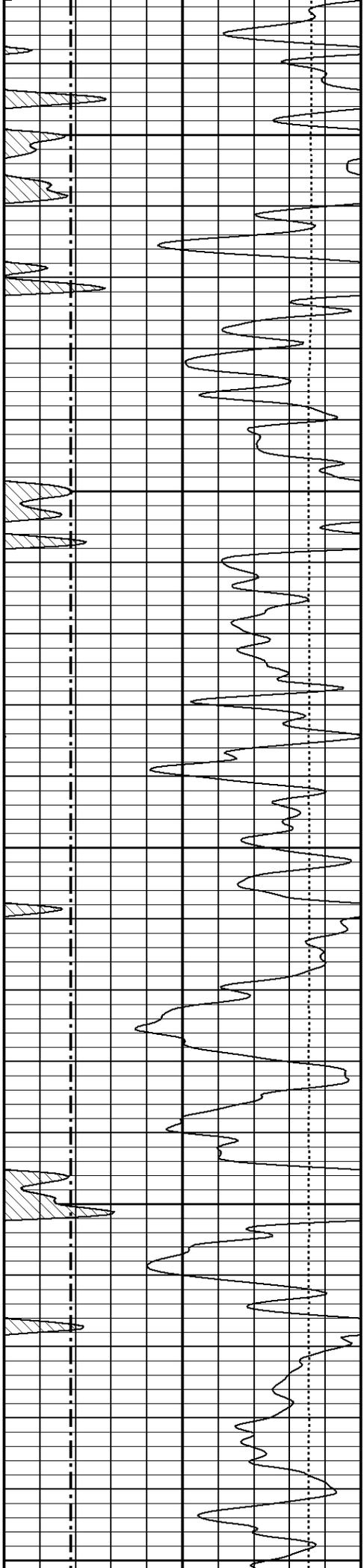




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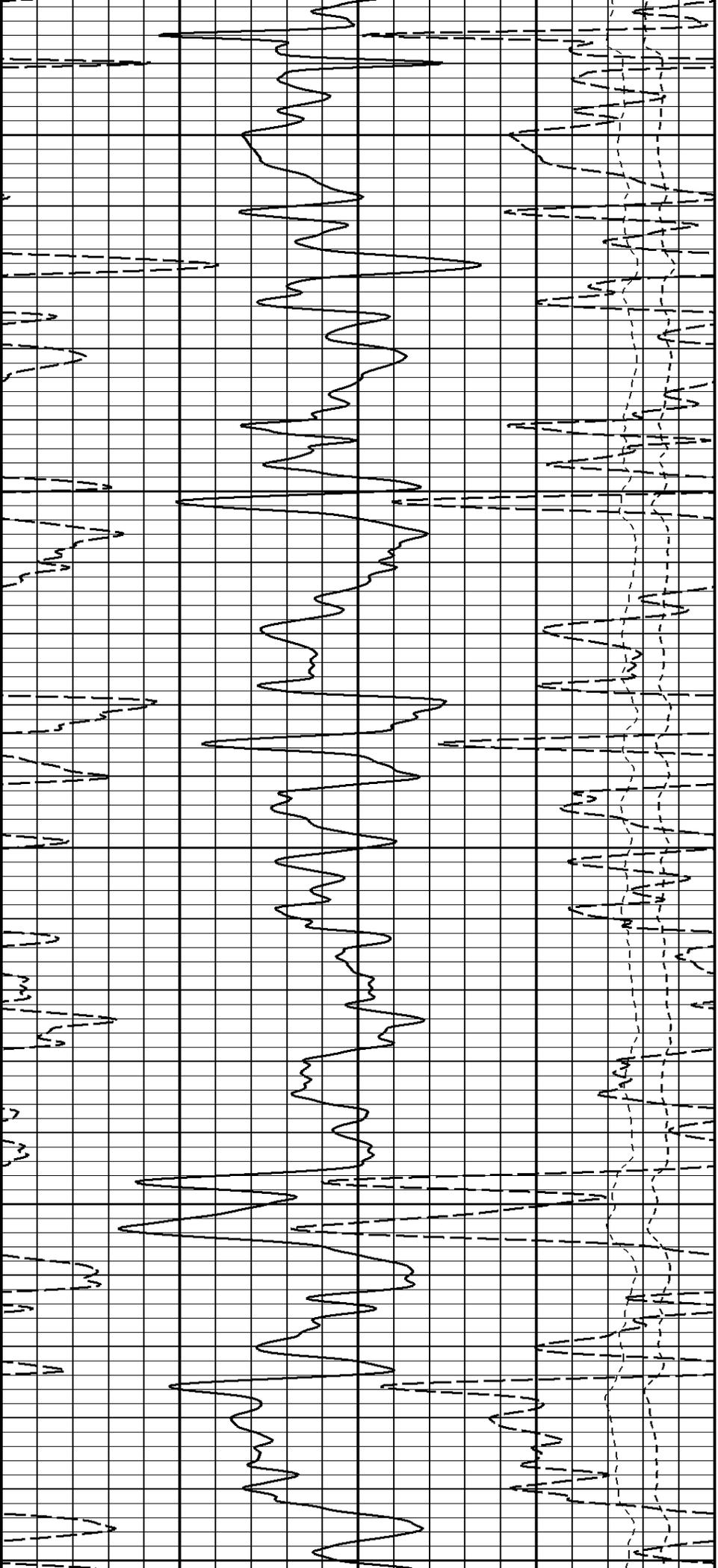


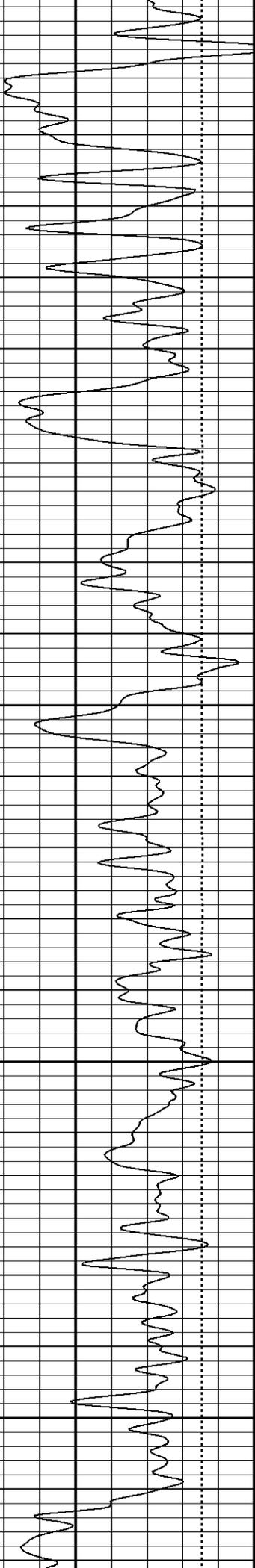


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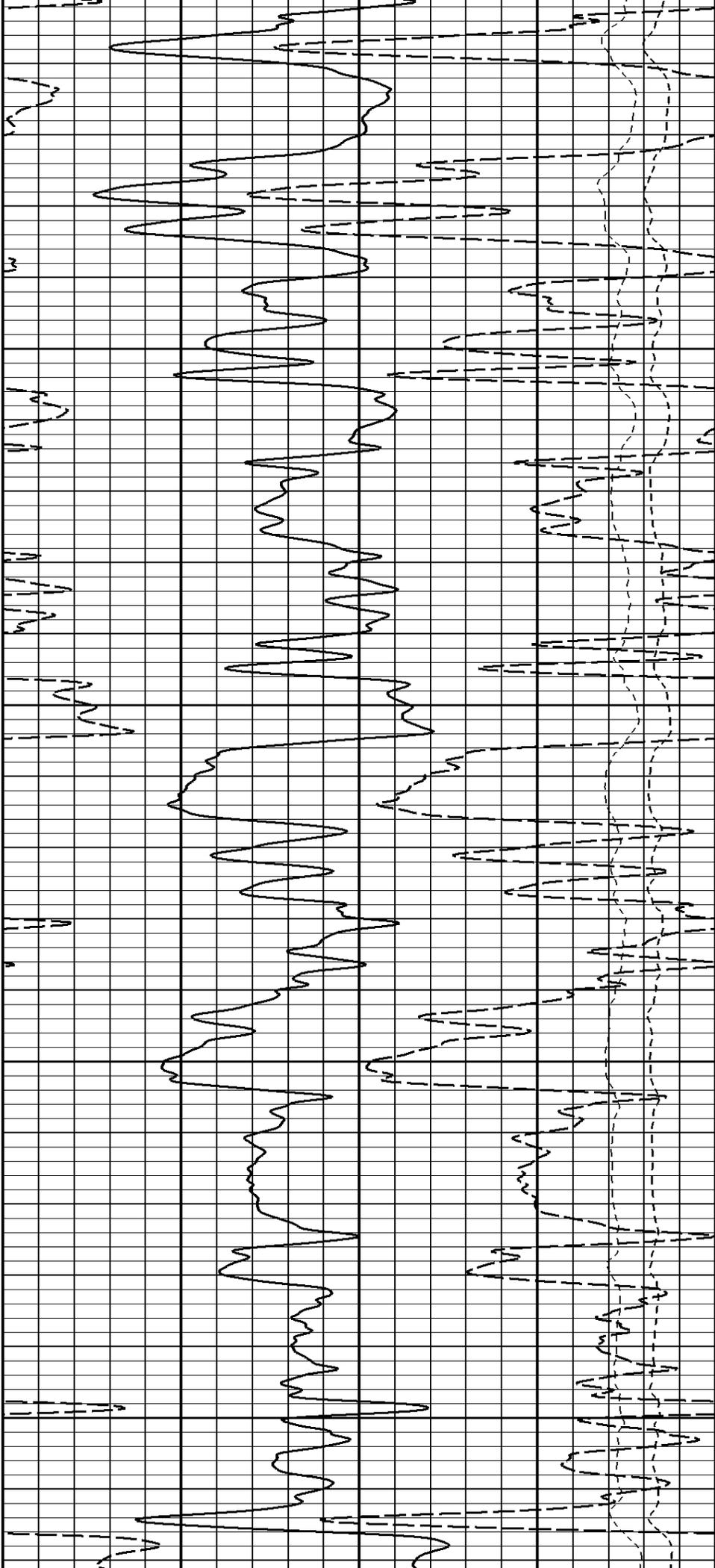
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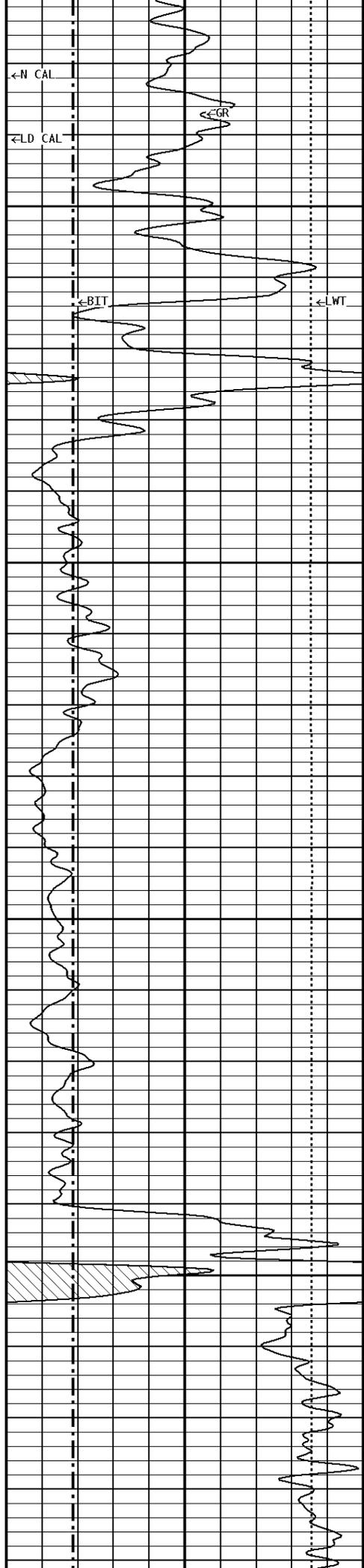




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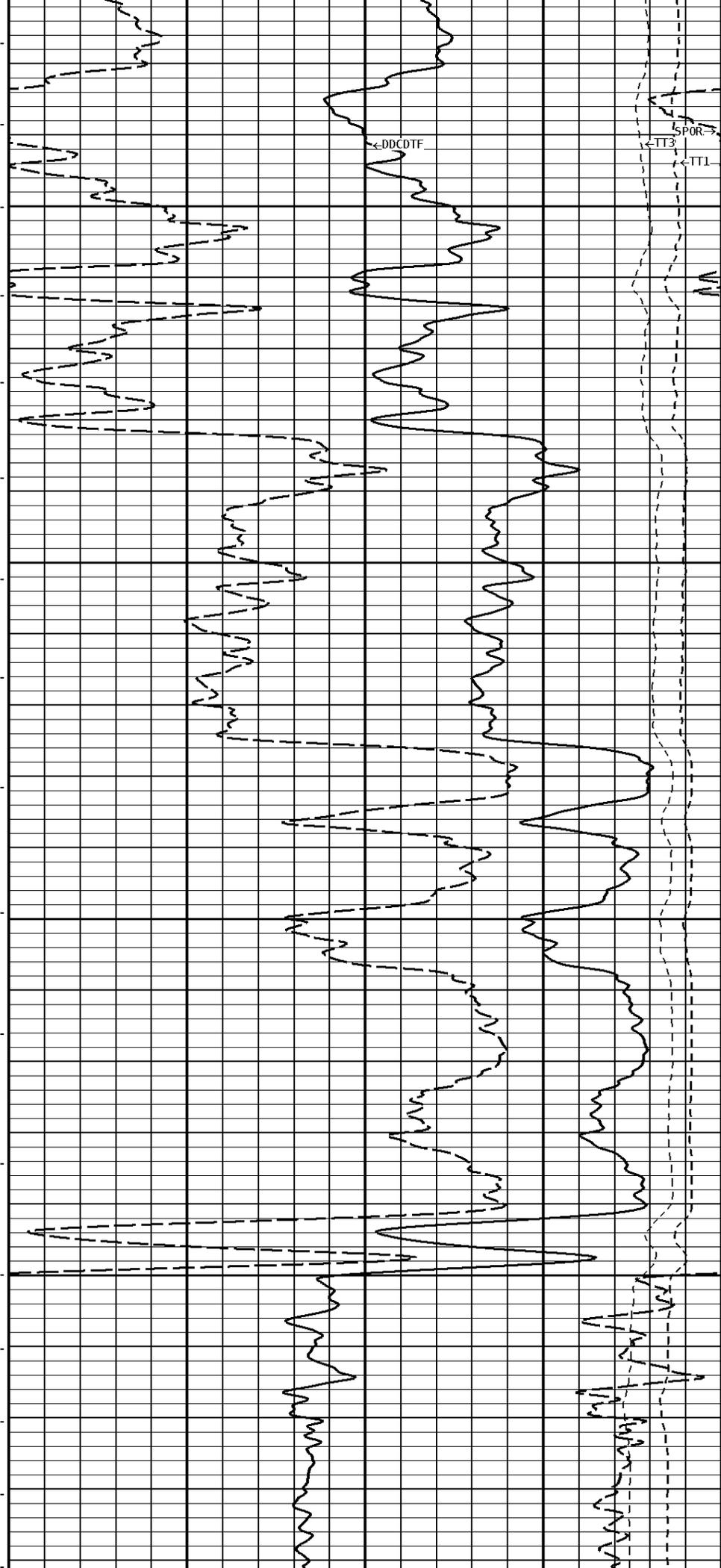
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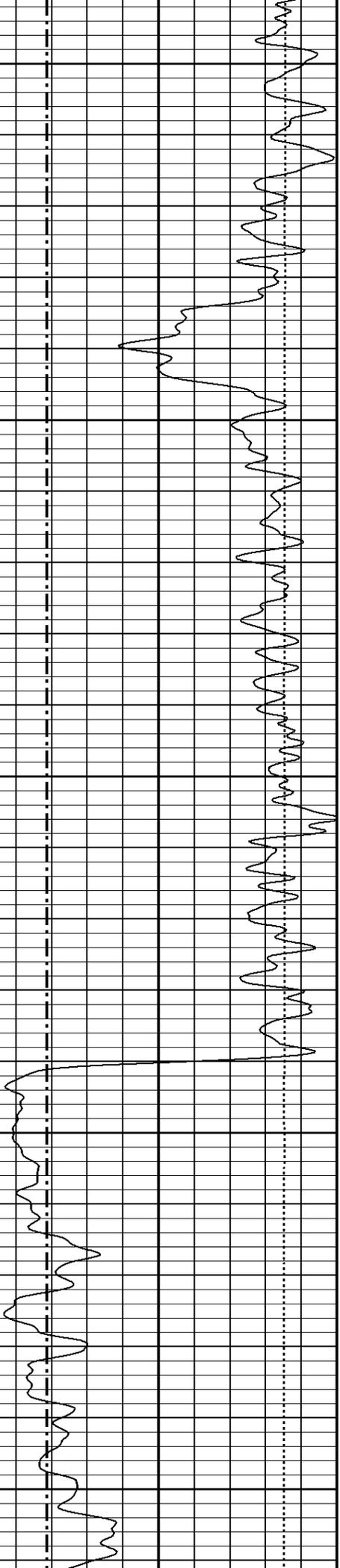




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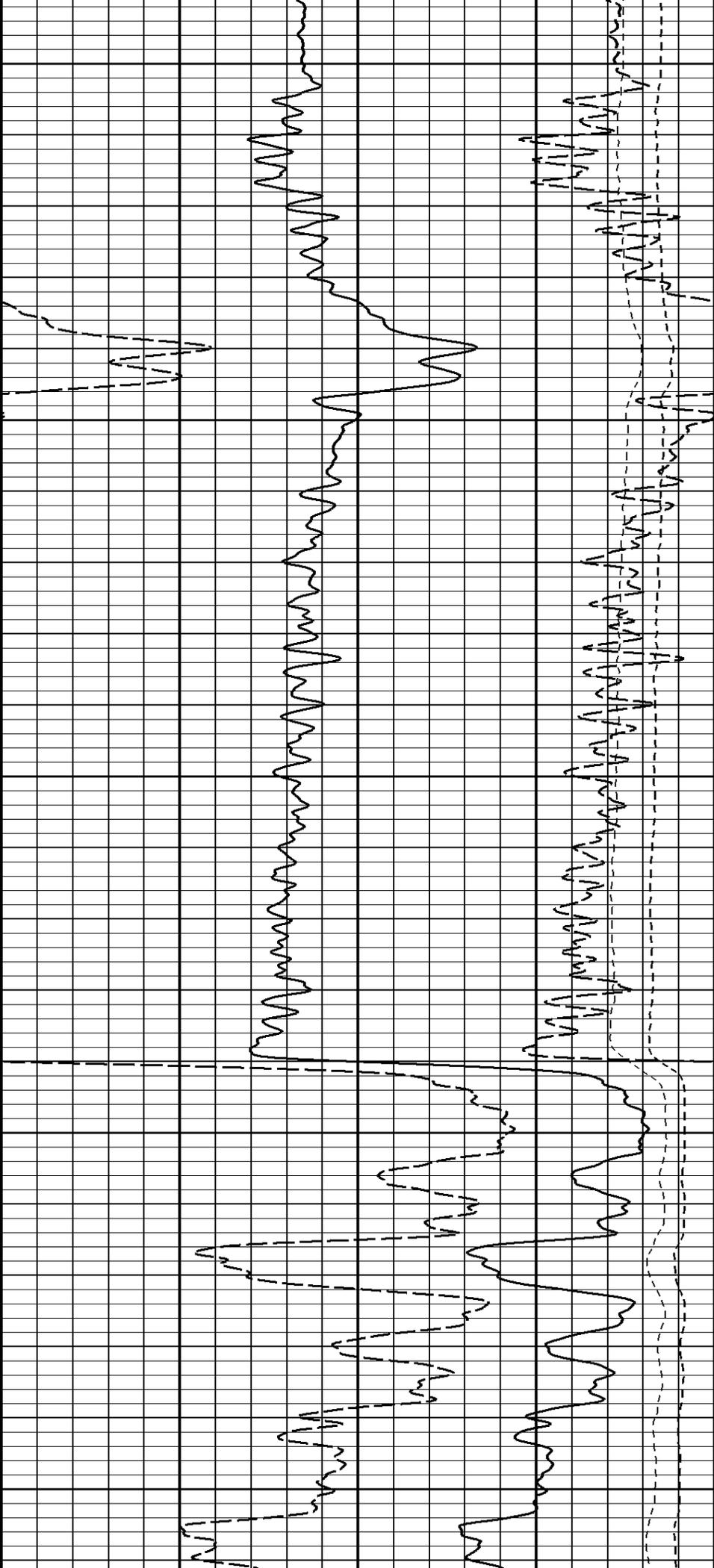
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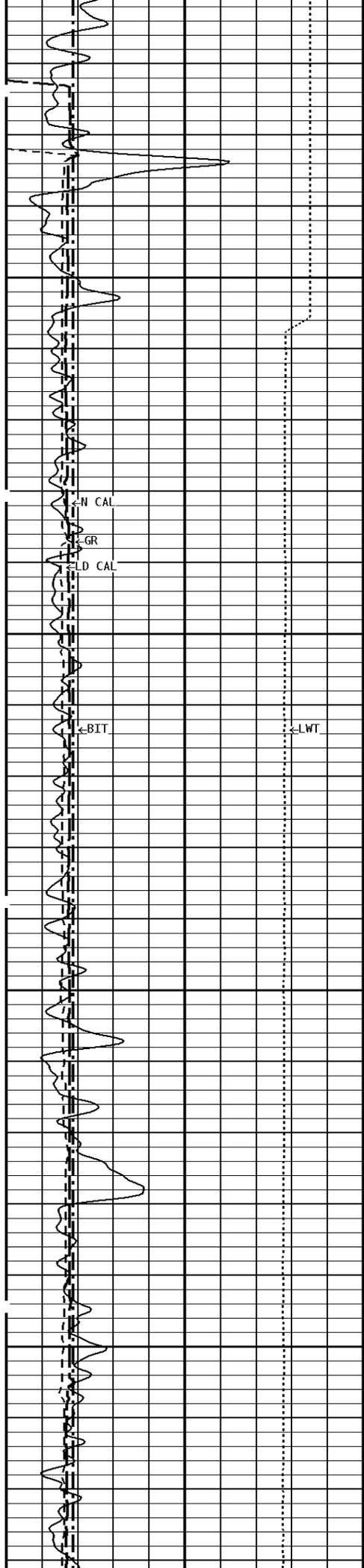




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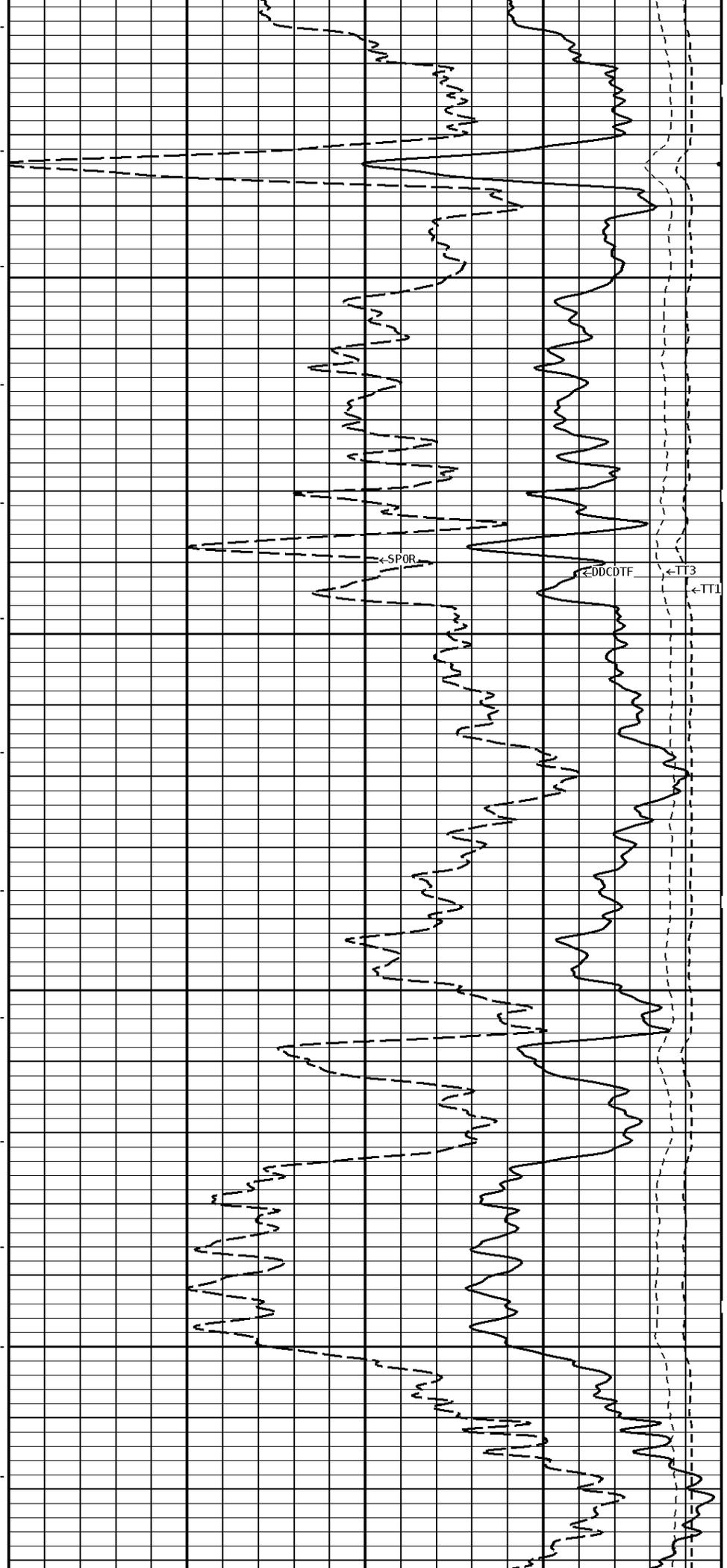
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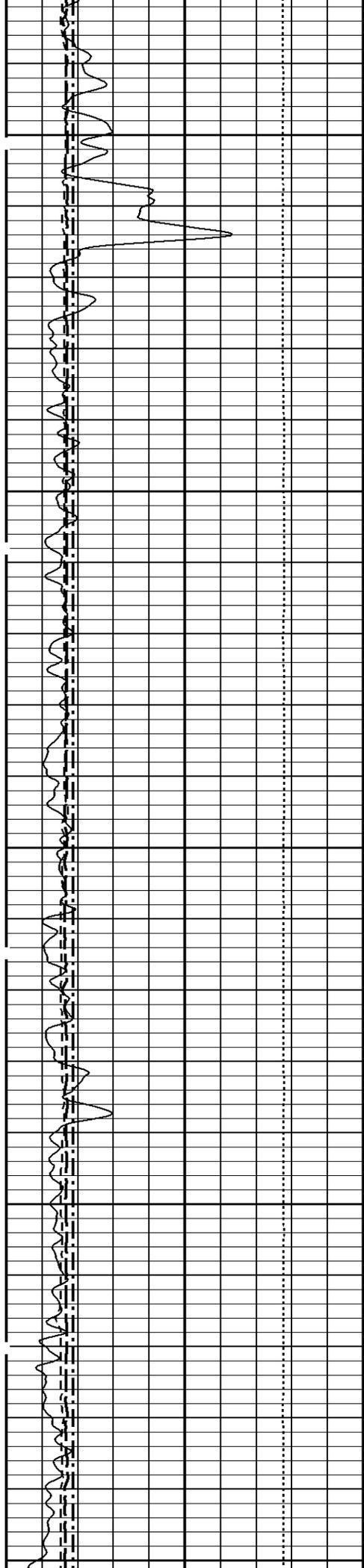




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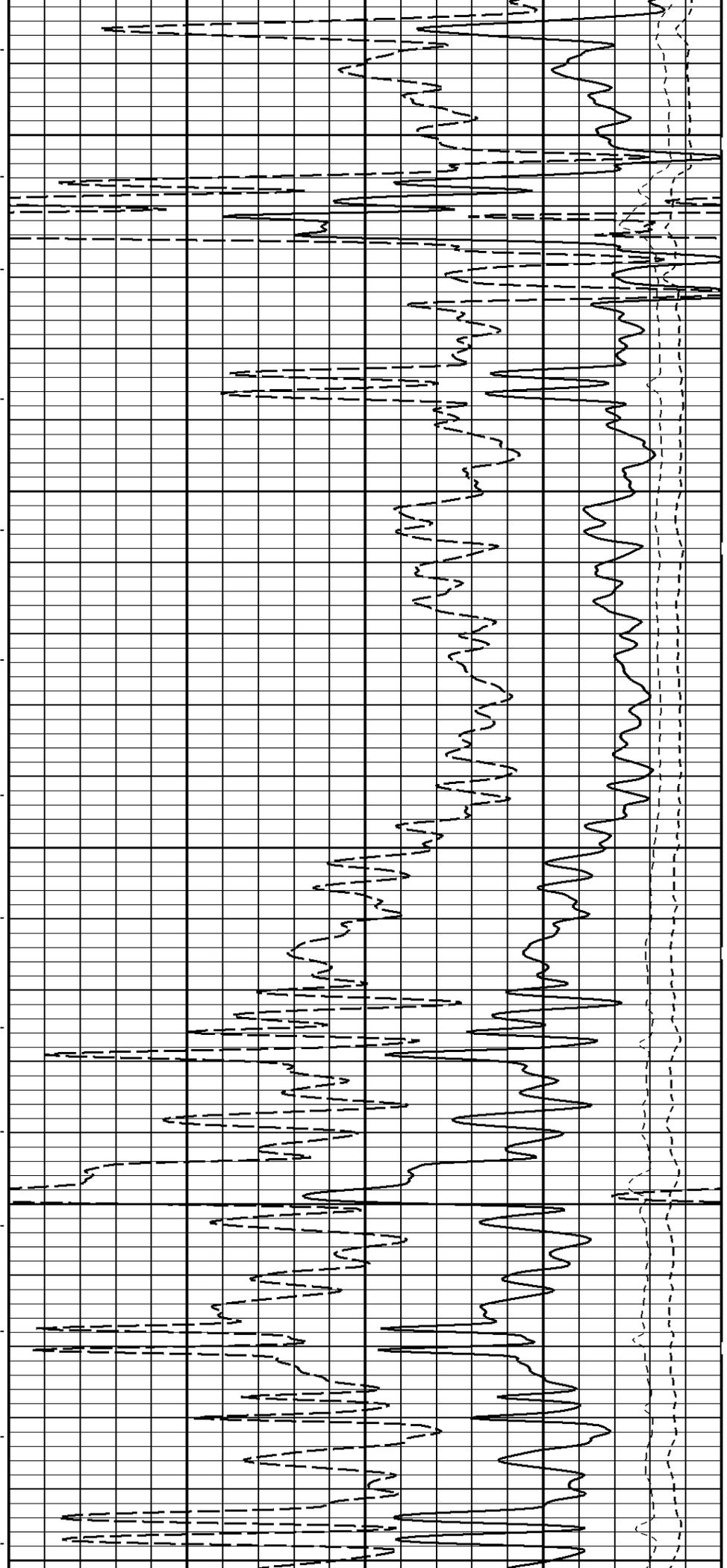


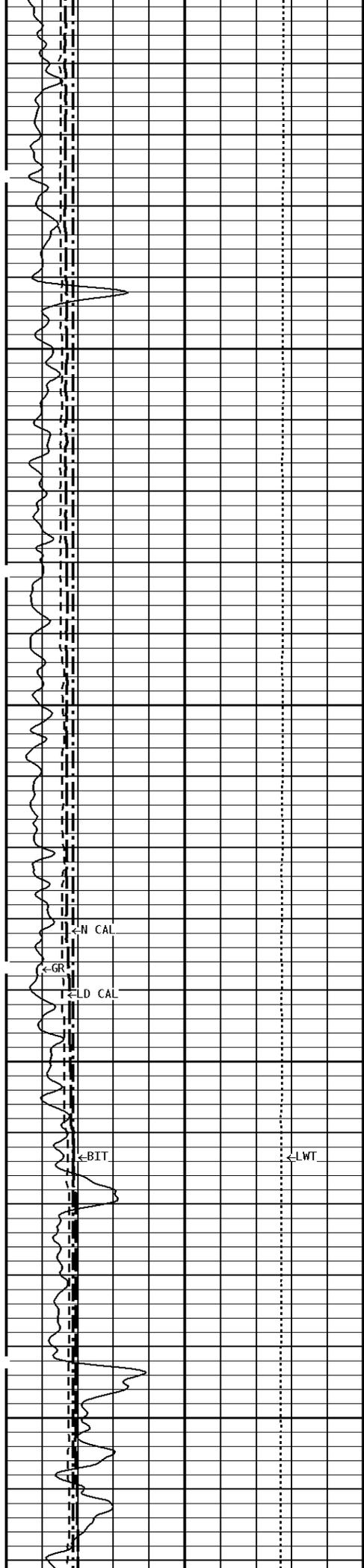


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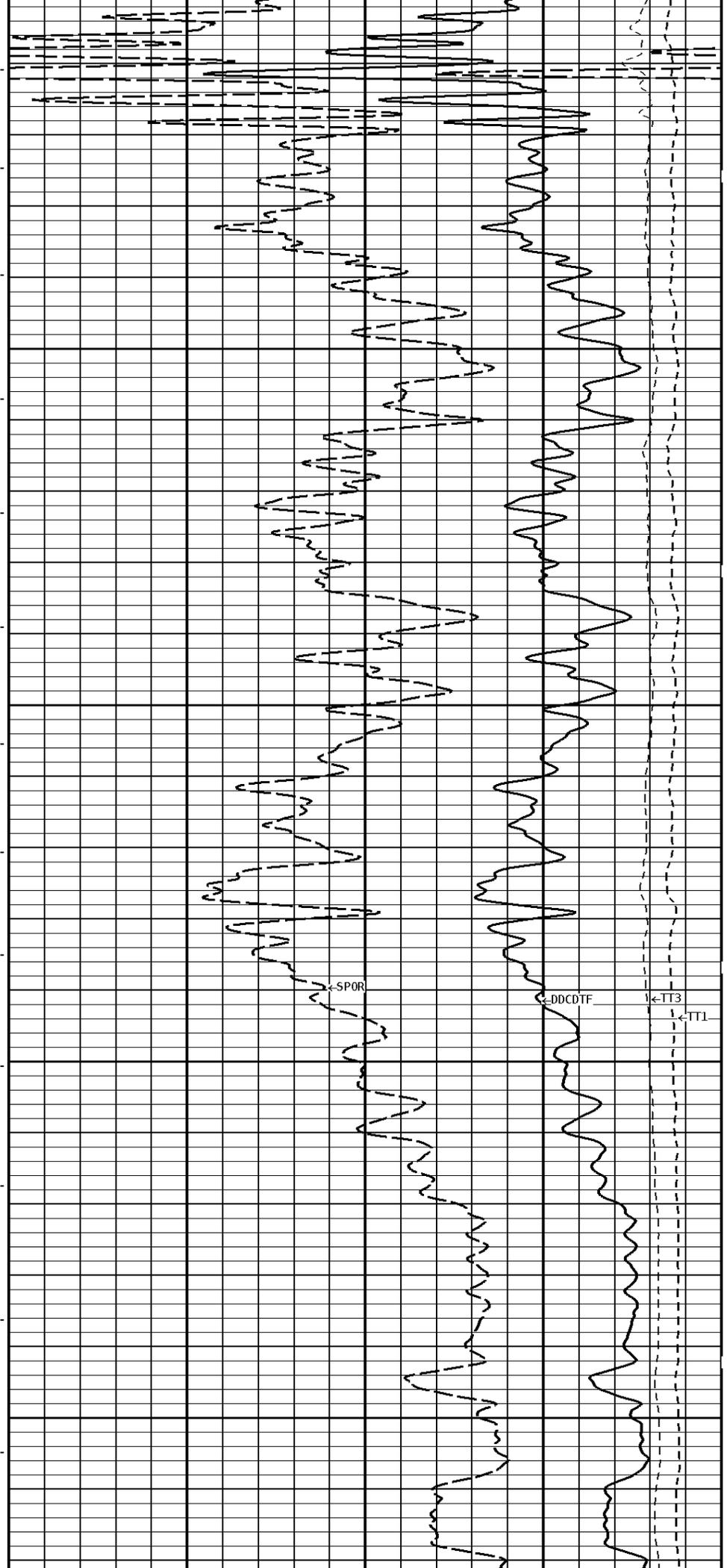
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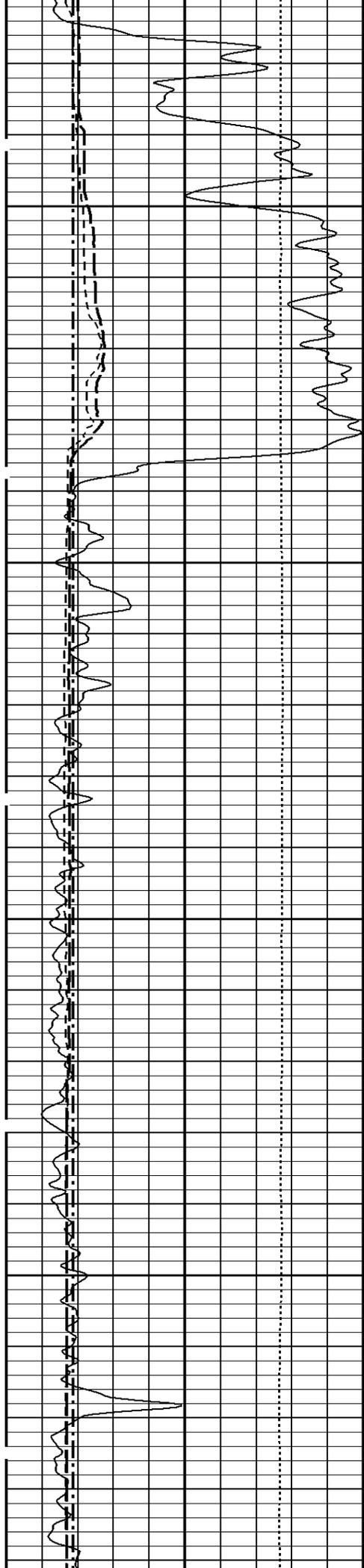




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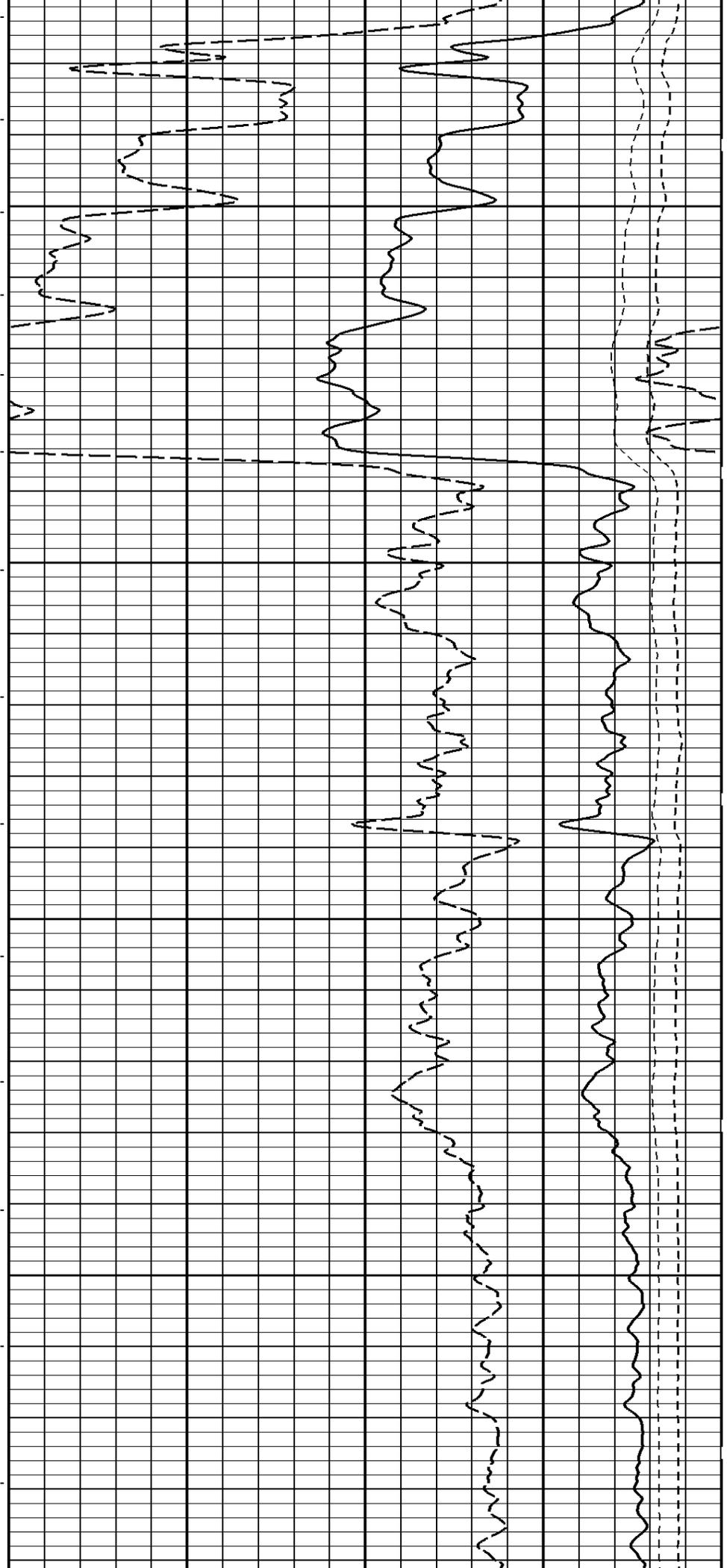
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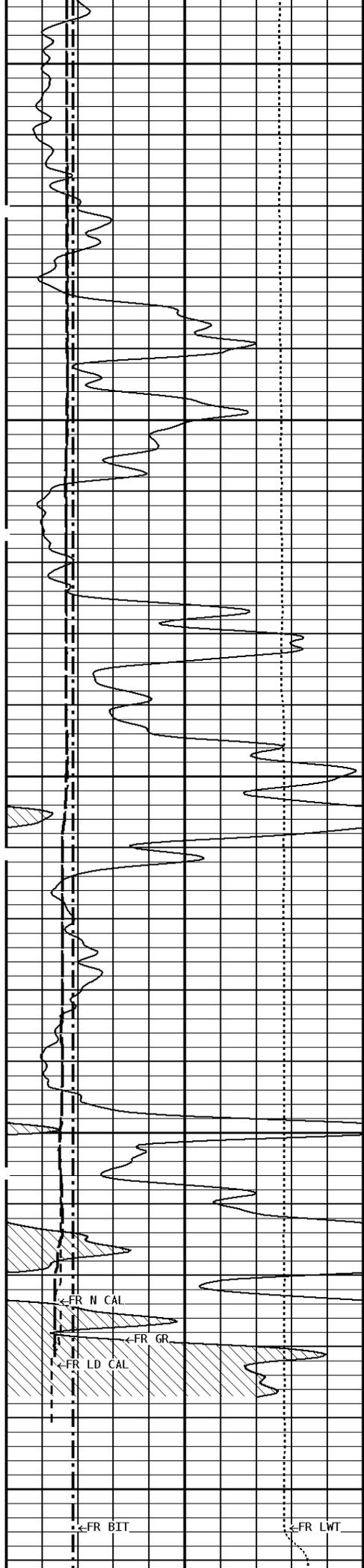




3600

3700

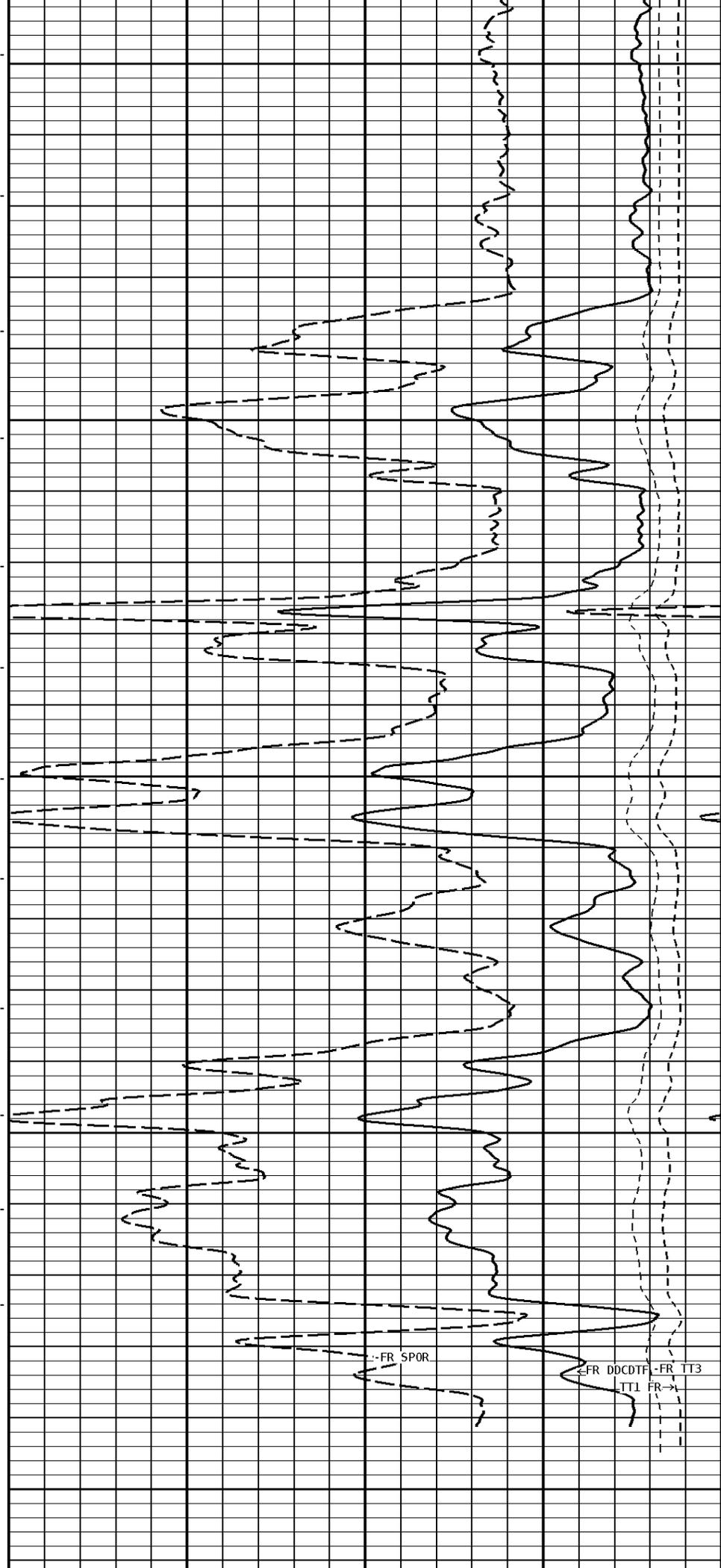




3800

3900

3955



FR SPOR

FR DDCDTF

FR TT3

TT1 FR

File #1.9.1

1:240 MAIN SECTION

GAMMA RAY API UNITS	
150 0	300 150
NEUTRON (Y) CALIPER INCHES (IN)	
16 6	26 16
DENSITY (X) CALIPER INCHES (IN)	
16 6	26 16
BIT SIZE INCHES (IN)	
6	16
TENSION LBS	
10000	0

SONIC POROSITY Percent	
70 30	30 -10
COMPENSATED SONIC TRAVEL TIME uSEC/FT	
240 140	140 40

TT1 uSEC	
950	50
TT3 uSEC	
950	50

Well File: KINNEY GRIMM-1-32_APR28_QSTK	Scale: 1:240
Segment: V1.D4.S1 MERGED REPEAT PASSES	Acquired: Not Available
Reference: 0	Processed: Not Available

TENSION LBS	
10000	0
BIT SIZE INCHES (IN)	
6	16
DENSITY (X) CALIPER INCHES (IN)	
16 6	26 16
NEUTRON (Y) CALIPER INCHES (IN)	
16 6	26 16
GAMMA RAY	

COMPENSATED SONIC TRAVEL TIME uSEC/FT	
240 140	140 40
SONIC POROSITY	

TT3 uSEC	
950	50
TT1 uSEC	
950	50

API UNITS

150 0 300 150

Percent

70 30

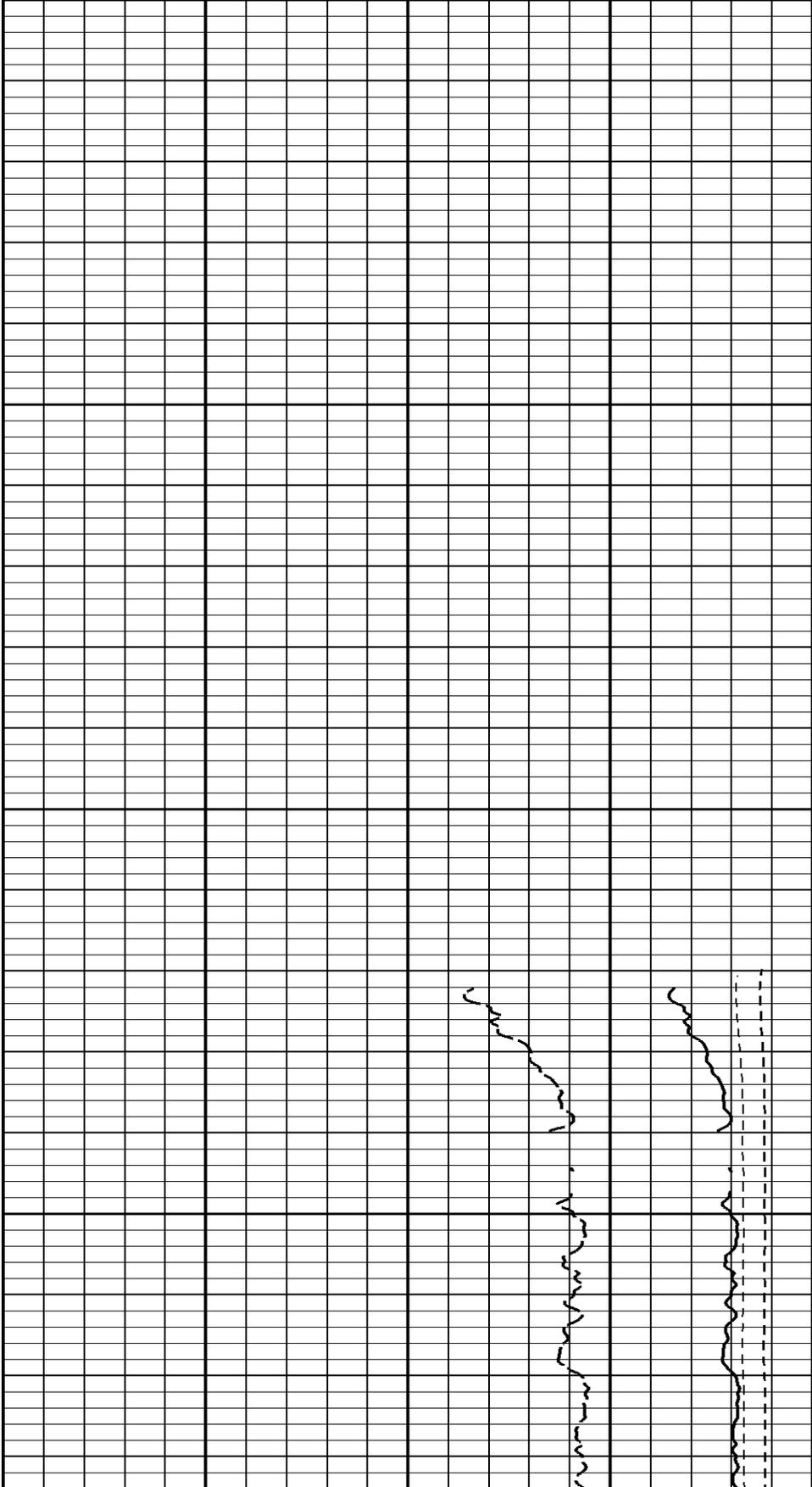
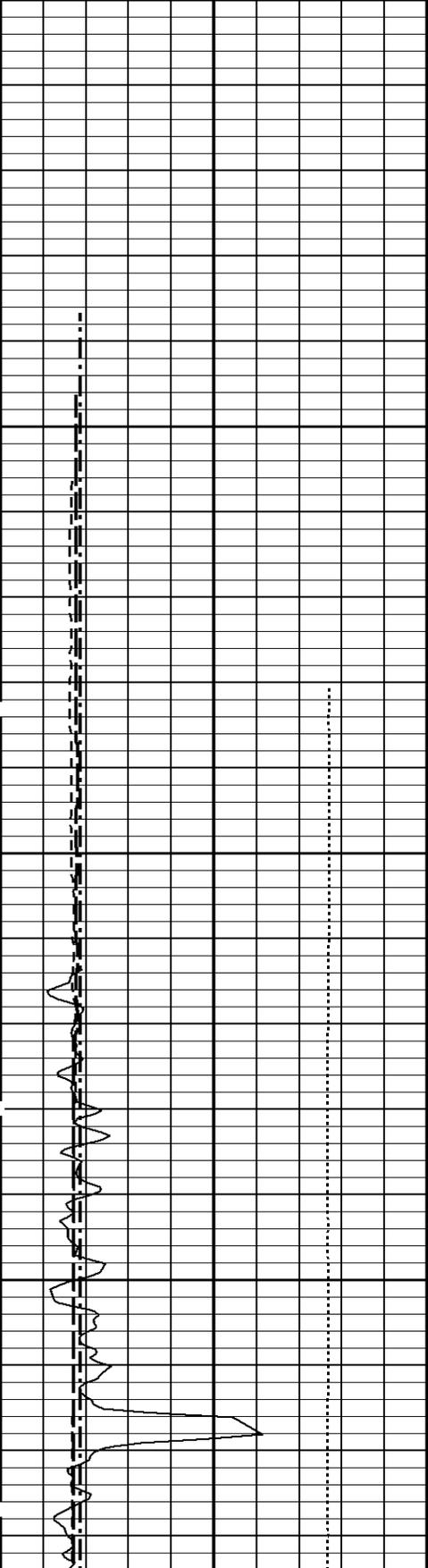
30 -10

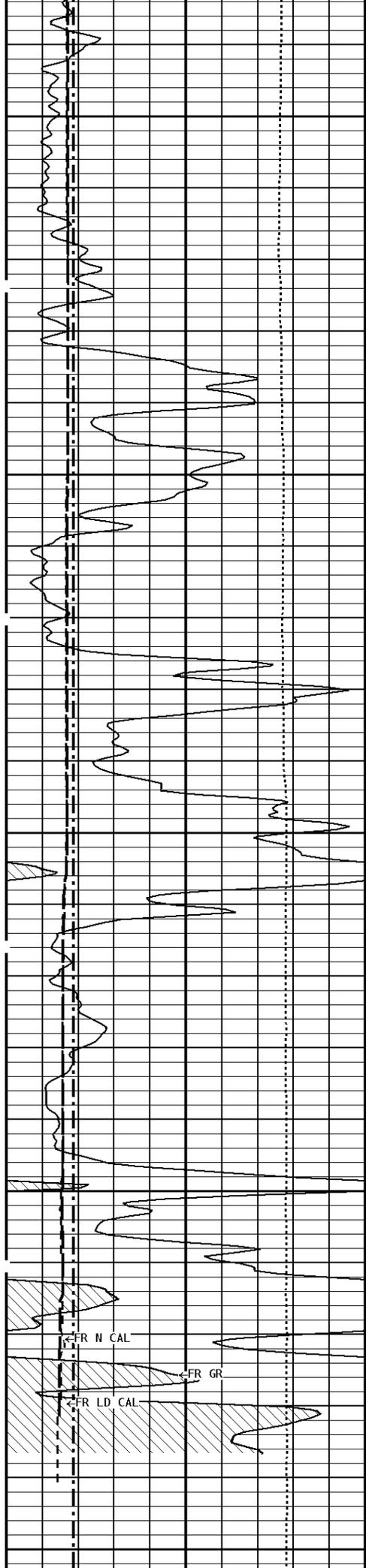
1:240 REPEAT SECTION

File #1.4.1

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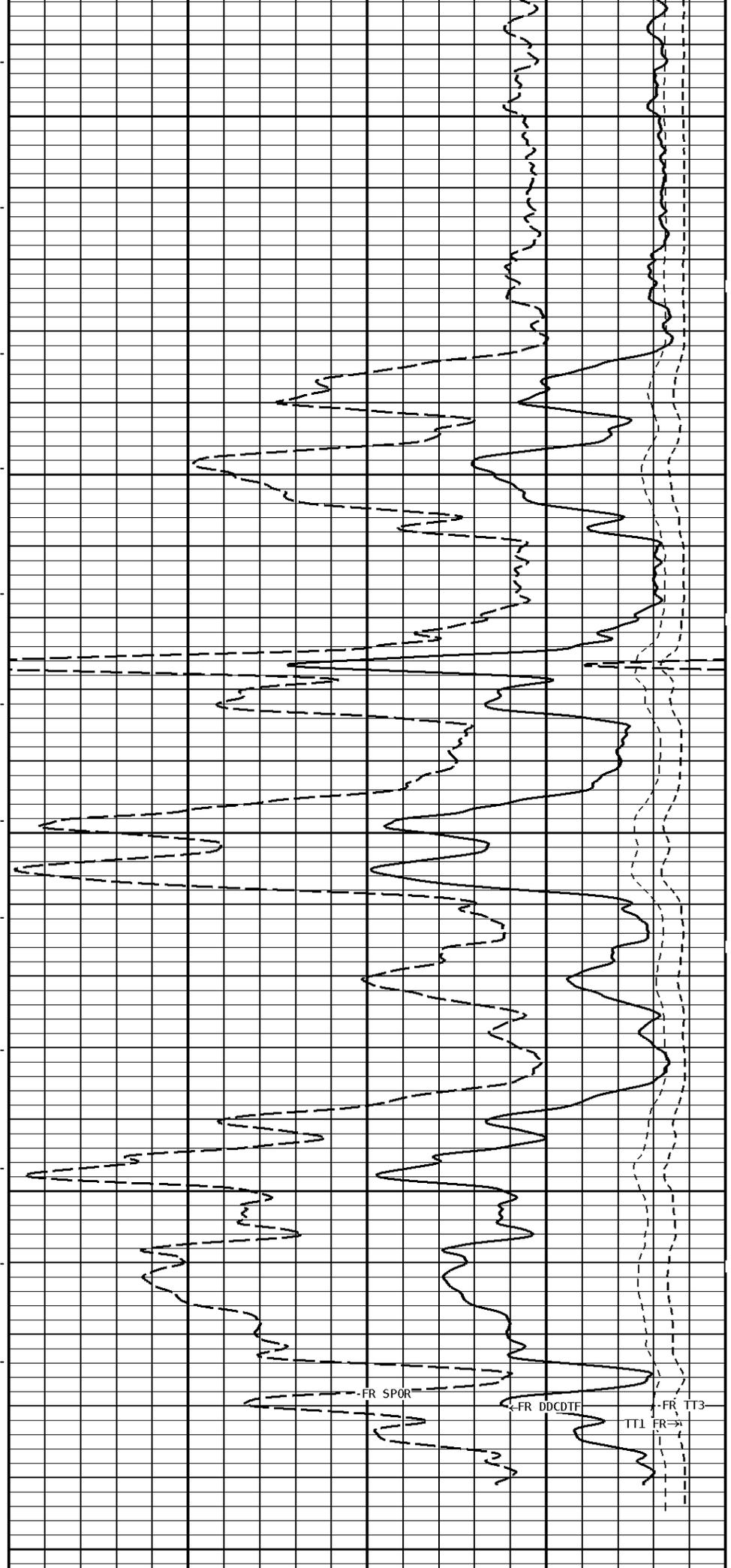
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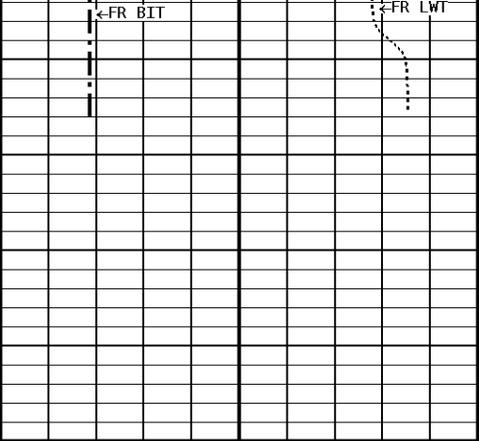


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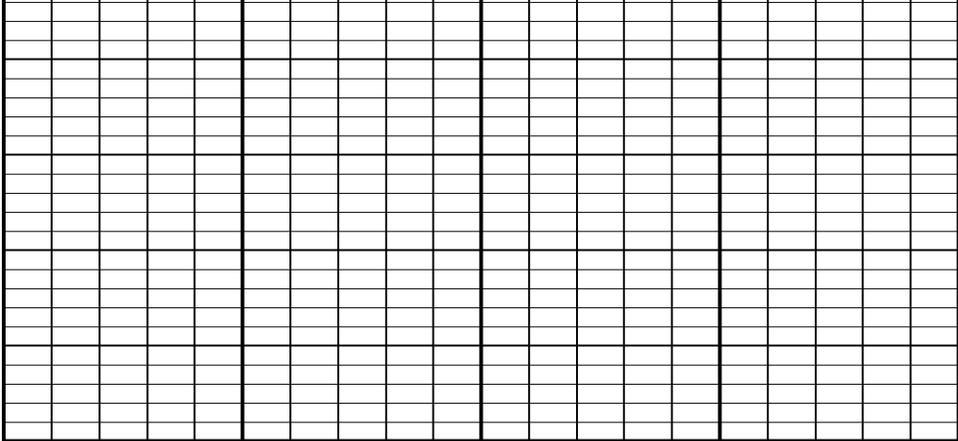
3900



3955



File #1.4.1



1:240 REPEAT SECTION

GAMMA RAY API UNITS	
150 0	300 150
NEUTRON (Y) CALIPER INCHES (IN)	
16 6	26 16
DENSITY (X) CALIPER INCHES (IN)	
16 6	26 16
BIT SIZE INCHES (IN)	
6	16
TENSION LBS	
10000	0

SONIC POROSITY Percent	
70 30	30 -10
COMPENSATED SONIC TRAVEL TIME uSEC/FT	
240 140	140 40
TT1 uSEC	
950	50
TT3 uSEC	
950	50

*** Calibration Summary ***

Shop Calibration GRT-B					
Performed : 24-FEB-2012		Time : 17:32			
Sensor Suite : GR-GR5		ID : GRT-BA-15			
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	54	360	175	CPS	GRAPI
Shop Calibration CST-AD					
Performed : 18-APR-2012		Time : 15:49			
Sensor Suite : SON-ANA		ID : CST-AB-012			
Transit Time					
T/R Pair	Measured	Calibrated	Units		
T1R1	208.5	208.5	uS		
T2R2	208.5	208.5	uS		
T1R2	322.5	322.5	uS		
T2R1	322.5	322.5	uS		
Amplitude					
T/R Pair	Measured	Calibrated	Units		
T1R1	90.00	90.00	mV		
T2R2	90.00	90.00	mV		
T1R2	78.00	78.00	mV		

T1R2
T2R1

78.00
78.00

78.00
78.00

mv
mV



Tucker

WIRELINE SERVICES

Company: KINNEY OIL COMPANY
Well: GRIMM # 1 - 32
Location: 2300' FNL & 1400' FEL
Logged: 2012-04-28
K.B. Elev: 1275.0