

Tucker

BOREHOLE COMPENSATED
SONIC LOG
WIRELINER SERVICES

Company : LB EXPLORATION INC. Well : WOLKINS #15-1 Field : MEDICINE LODGE-BOGGS County : BARBER State : KANSAS Country : USA API No. : 15-007-23860-00-00		File No : TUL-57682 Company : LB EXPLORATION INC. Well : WOLKINS #15-1 Field : MEDICINE LODGE-BOGGS County : BARBER State : KANSAS Country : USA API No : 15-007-23860-00-00	
Location : 660' FSL & 330' FEL E2 SE SE		LSD : Sect : 15 Twp : 33S Rge : 13W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 1612.00	SGT
Log Measured From:	KB	DF 1611.00	CNT
Above Permanent Datum:	13.00 Ft	GL 1599.00	LDT
Date	04-11-2012		
Run Number	1		
Depth--Driller	5150.0	Ft	
Depth--Logger	5150.0	Ft	
First Reading	5125.0	Ft	
Last Reading	355.0	Ft	
Casing--Driller	356.0	Ft	
Casing--Logger	355.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	9.5	LBS/GAL	
Fluid Loss	22.0	CC	
PH/Viscosity	8.0	58.0 SEC	
Sample Source	MEASURED		
RMF@Measured Temp.	0.450	@ 68 F	
RMF@Measured Temp	0.380	@ 68 F	
RMF@Measured Temp.	0.520	@ 68 F	
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.230	@ 138 F	
Time Circulation Stopped			
Max Recorded Temp.	138	F	
Equipment/Base	123	TULSA	
Recorded By	R. FRANKLIN, S. DAVIS		
Witnessed By	S. PETERMANN		

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	5150.00	8.625	32.00	356.00

Run Number	1	
Date	04-11-2012	
Date/Time On Bottom	04-11-2012 15:15	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	0.190 @ 138 F	
RMC@BHT	0.270 @ 138 F	

Run Number 1

Comments

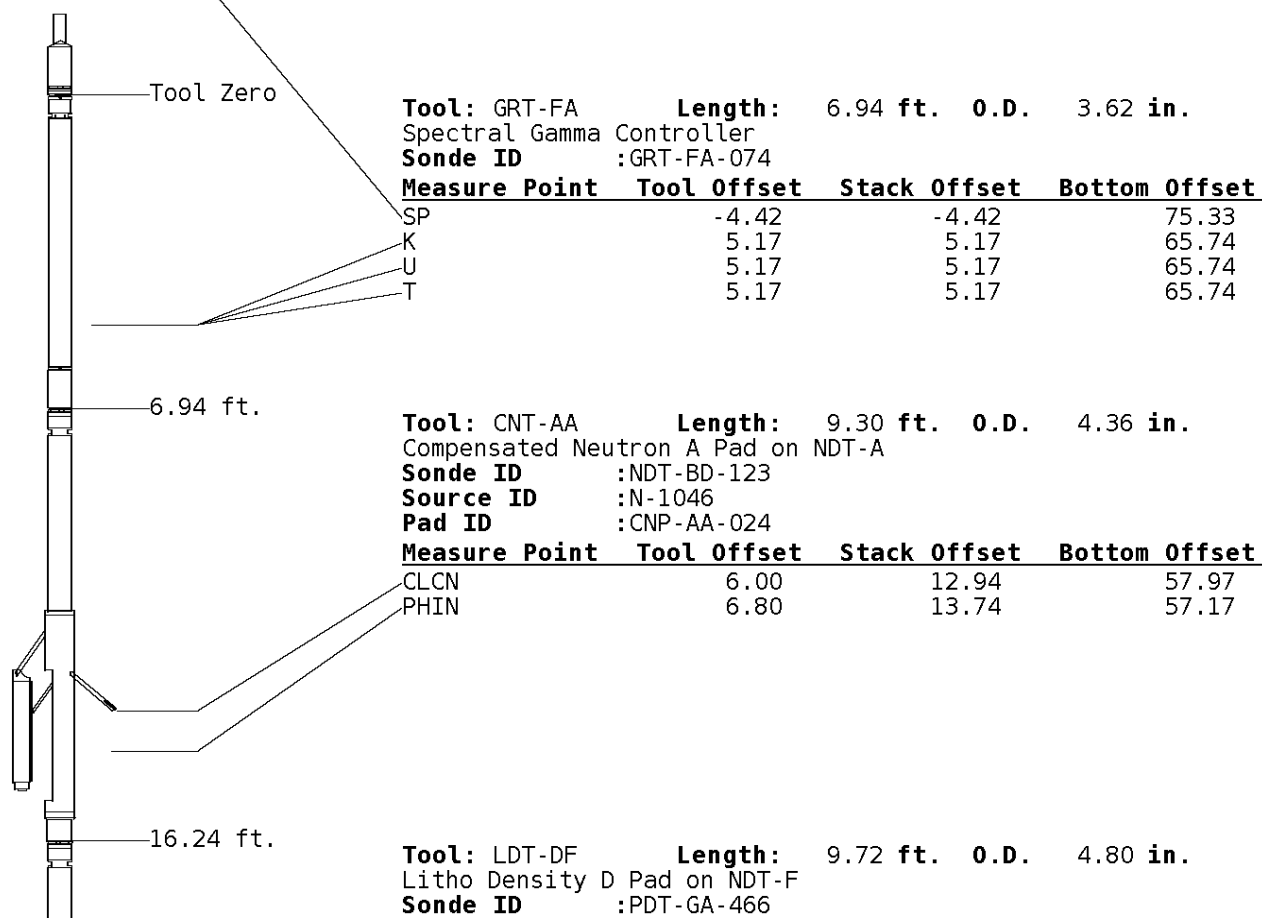
ALL PRESENTATIONS AS PER CUSTOMER REQUEST.
 SGT, CNT, LDT, MLT, CST, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.50" PRODUCTION CASING.
 PHIN IS CALIPER CORRECETD.

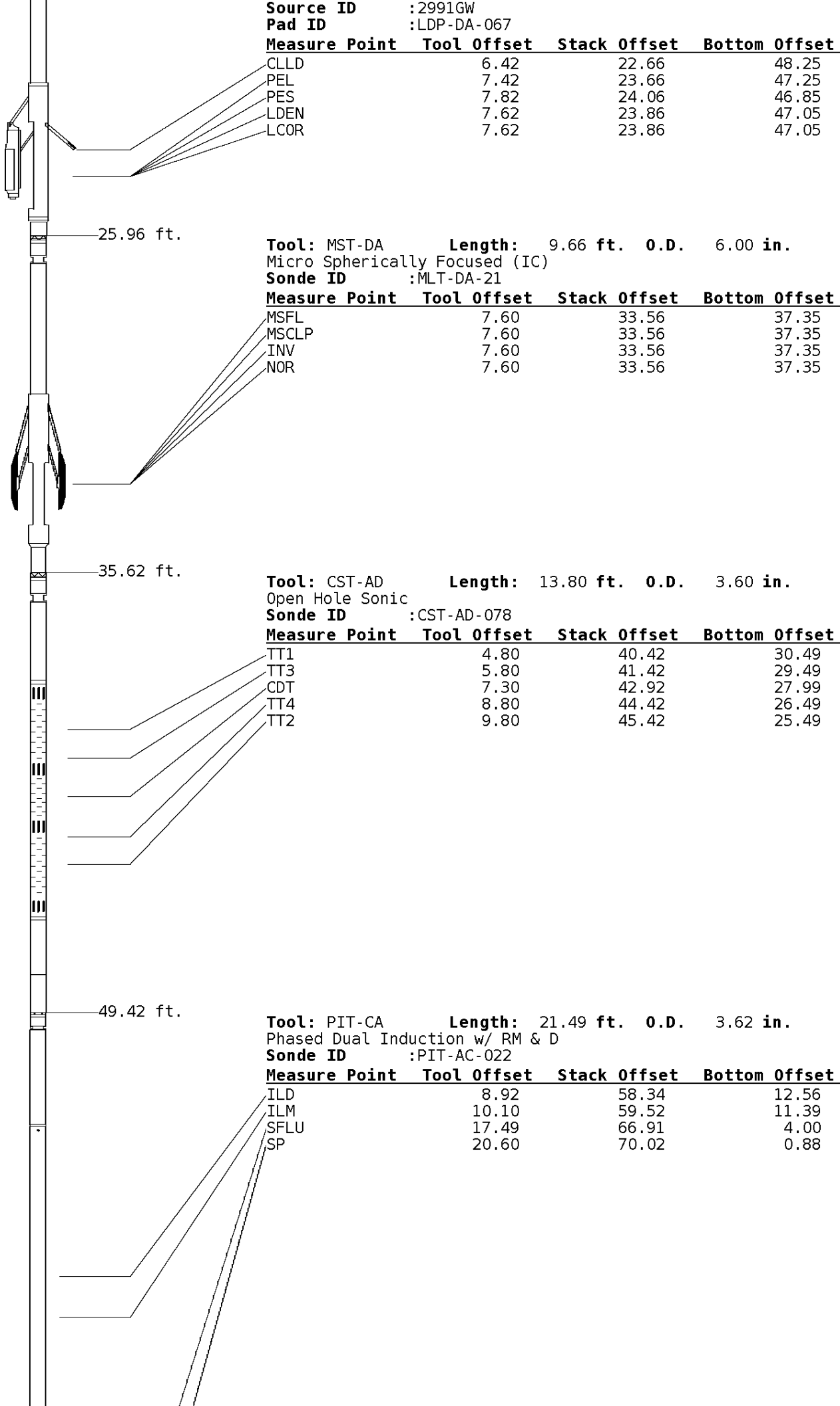
GRT: GRP, GRX, UFGRP, S-KK, S-TK, S-UK.
 CNT: PHIN, CLCNIN, PHXN,
 LDT: PORL, PXRL, LCORN, LCORNX, PECLN, PECLNX, LDENN, LDENNX, PORLLS, CLLDIN.
 MLT: NOR_RF, INV_RF, MSCLPIN.
 CST: PORS, CDTF, ITT, TT1PF, TT2PF, TT3PF, TT4PF.
 PIT: ILD, ILM, SPU, SFLAEC.

OPERATORS:
 N. LOYD
 B. STEPHENS

Tool String Schematic

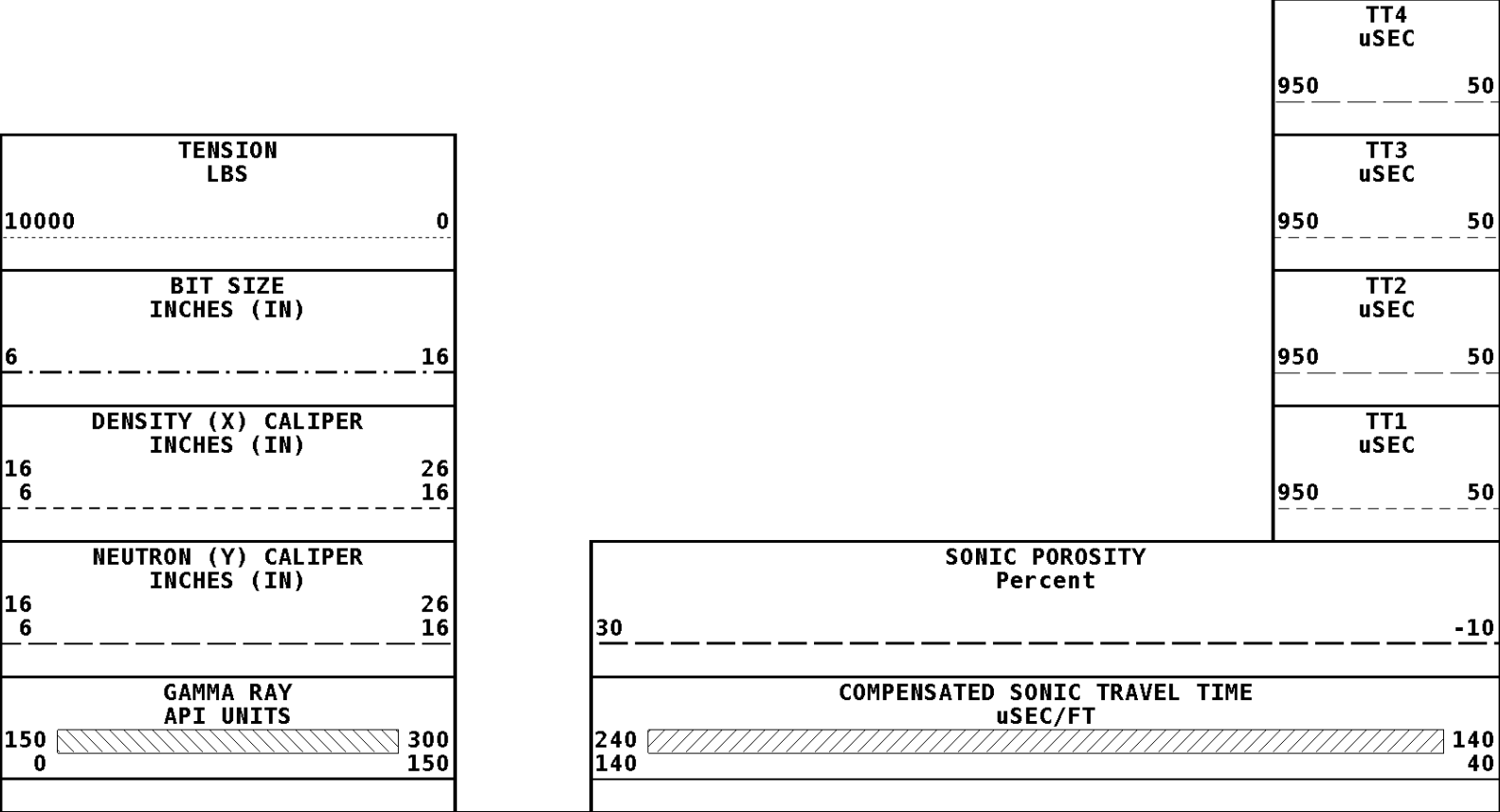
Total Tool Length - 70.91 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1202.00 lbs.



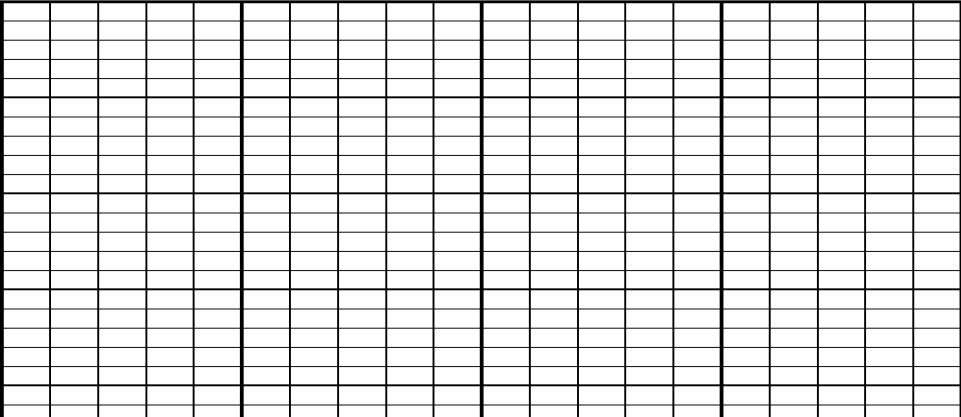
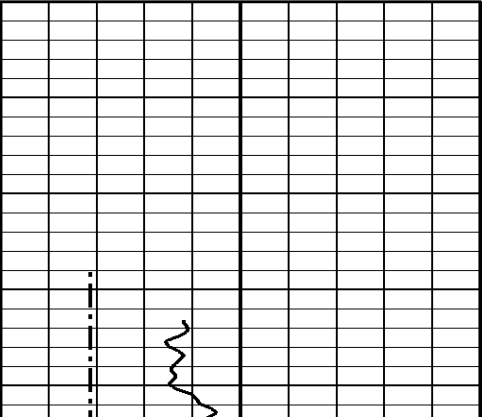


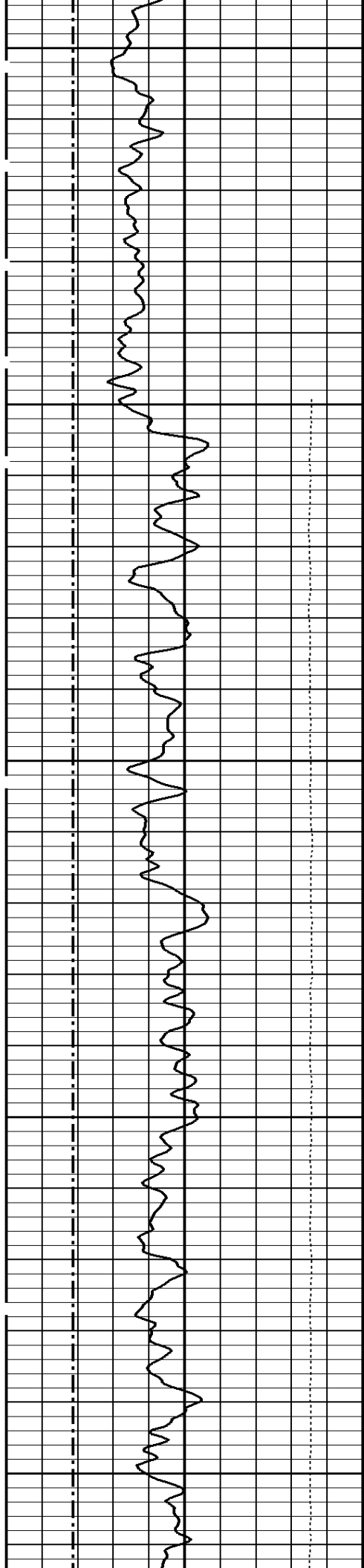


Well File: LBE WOL 15-1 APR 11_SGTQUINT	Scale: 1:240
Segment: V1.D1.S5 MAIN	Acquired: 2012-04/11 15:34 3.2.0-10367
Reference: 0	Processed: 2012-04/11 19:08 3.2.0-10367



1:240 MAIN SECTION

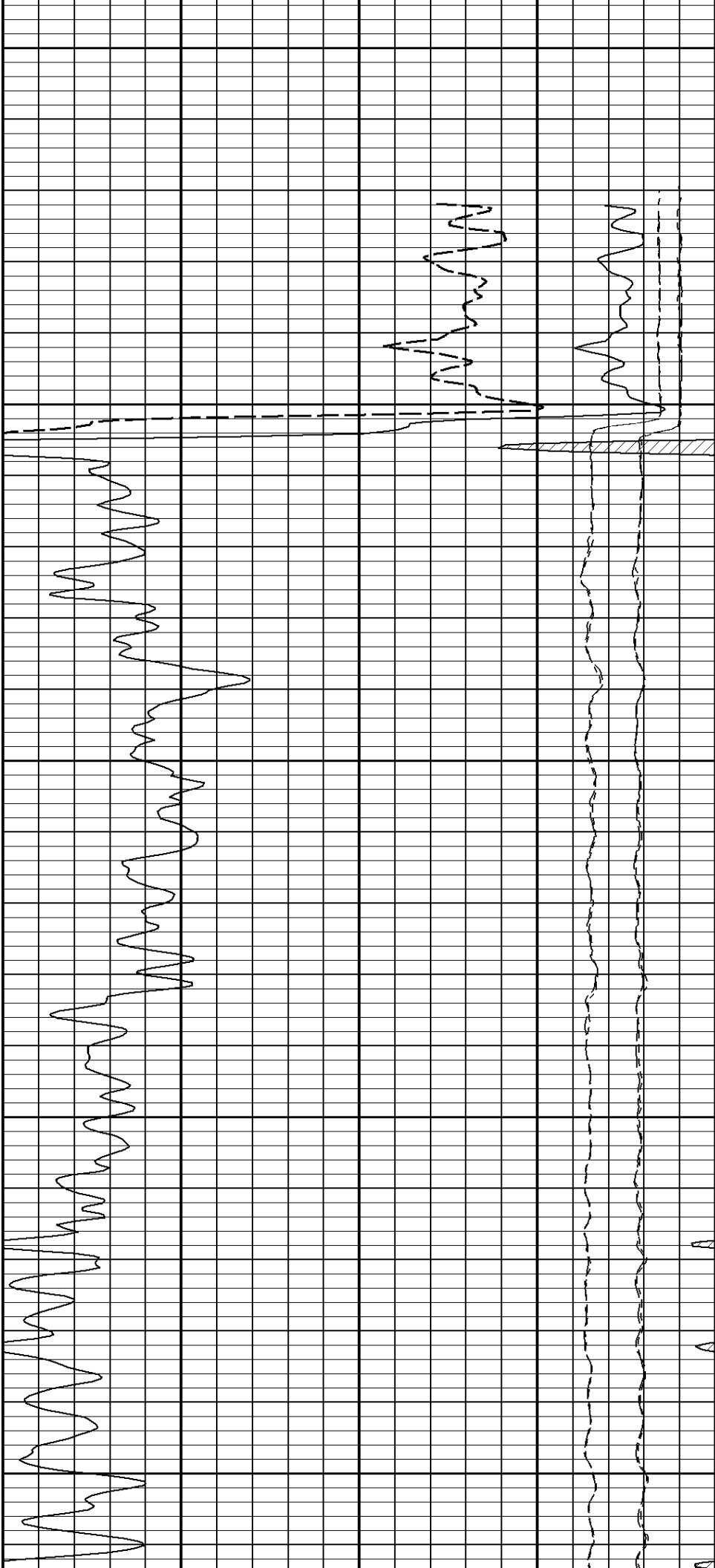


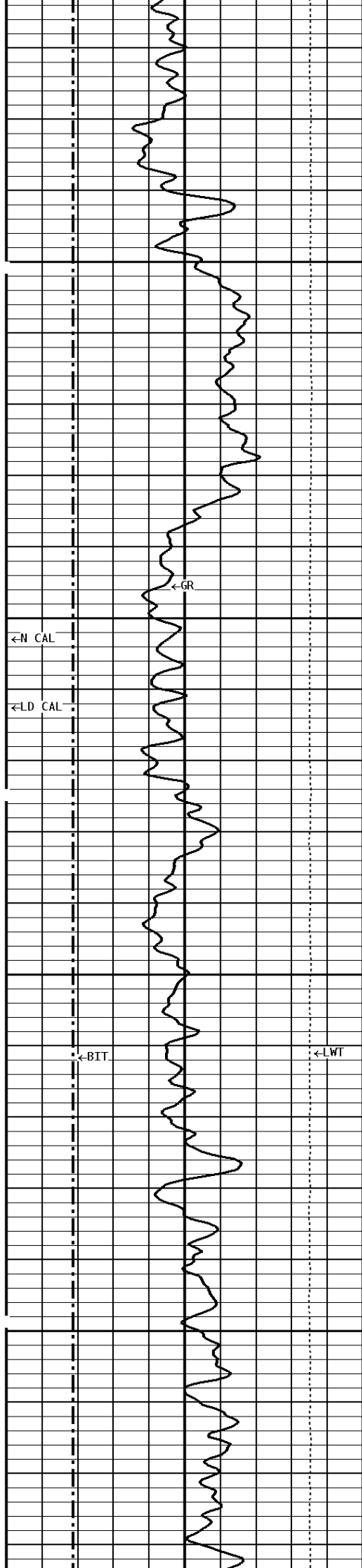


300

400

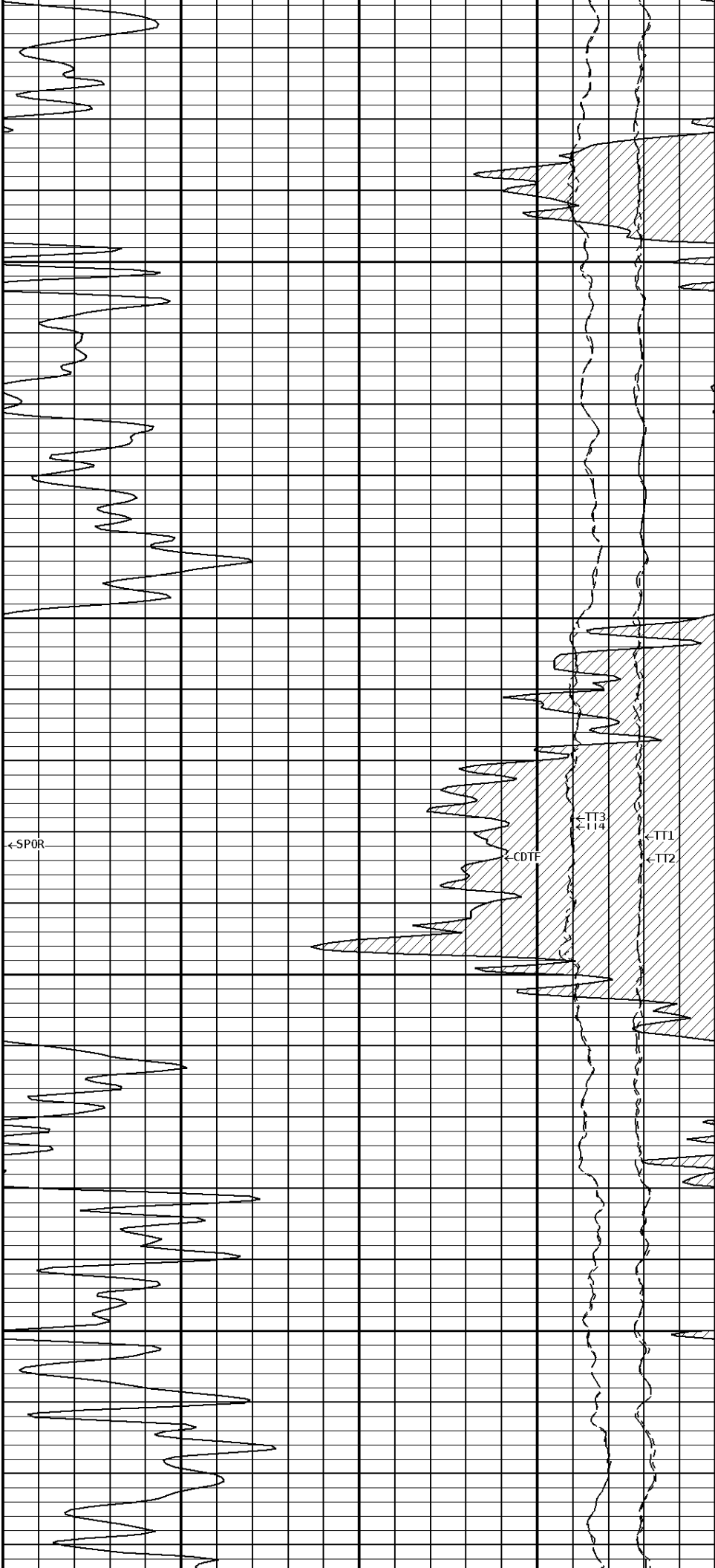
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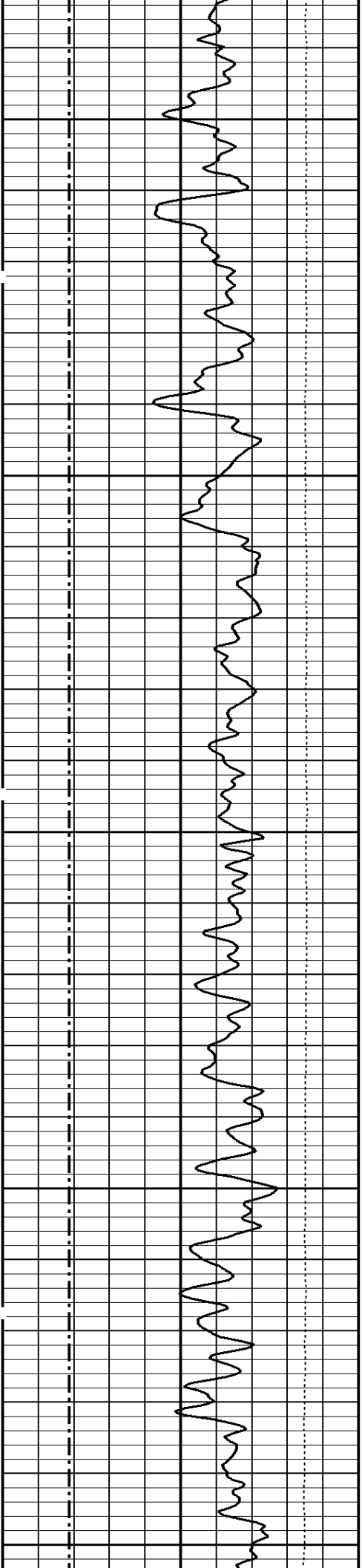




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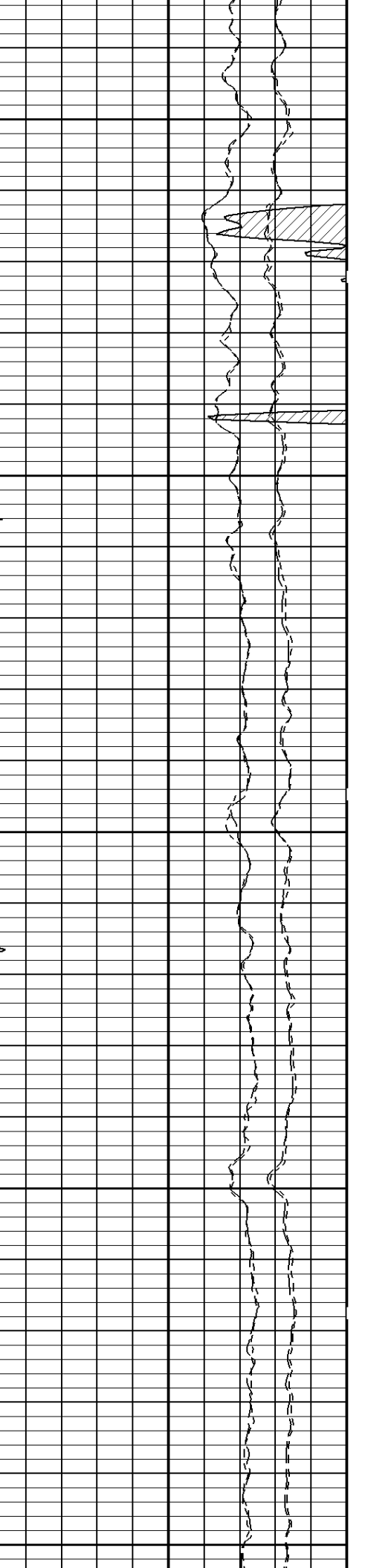
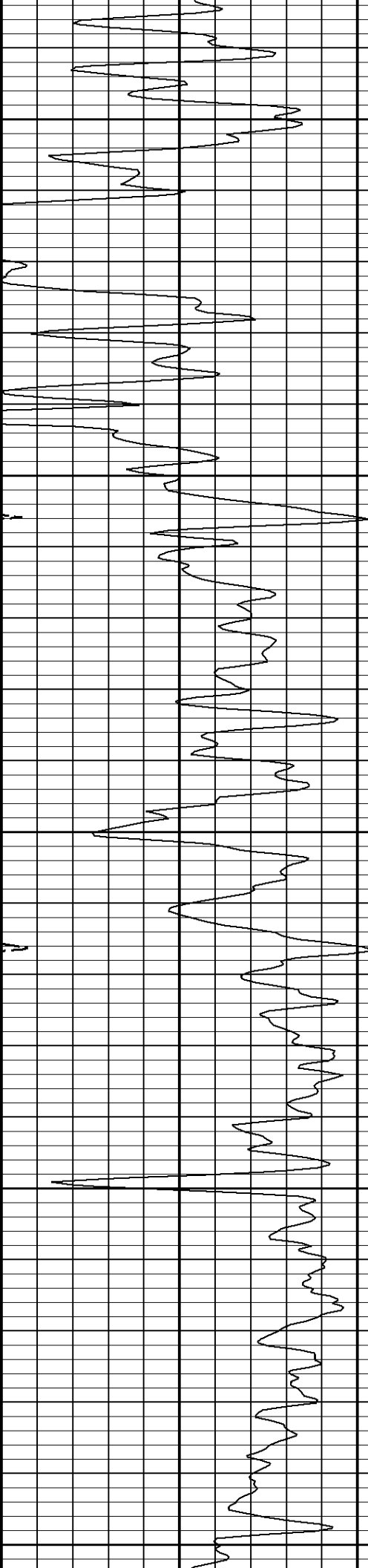
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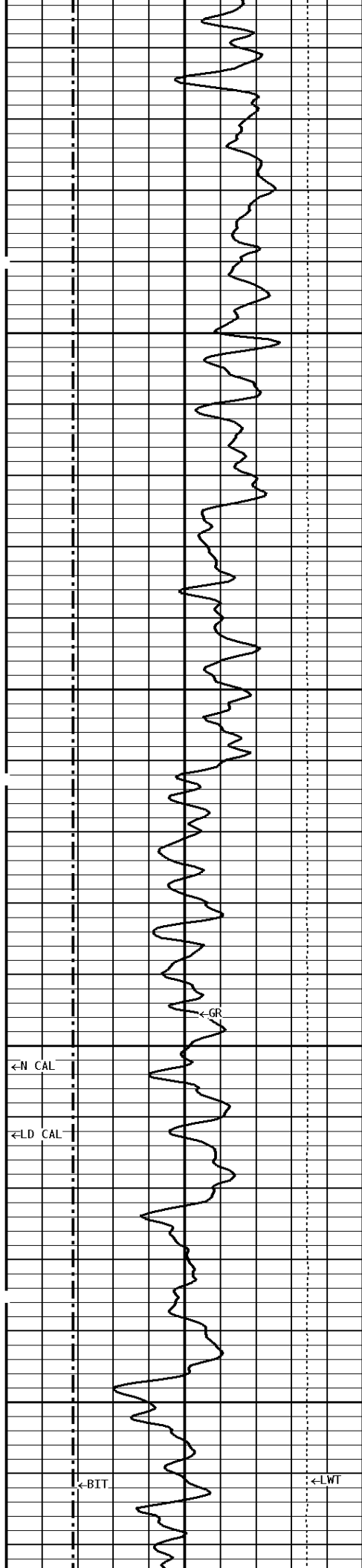




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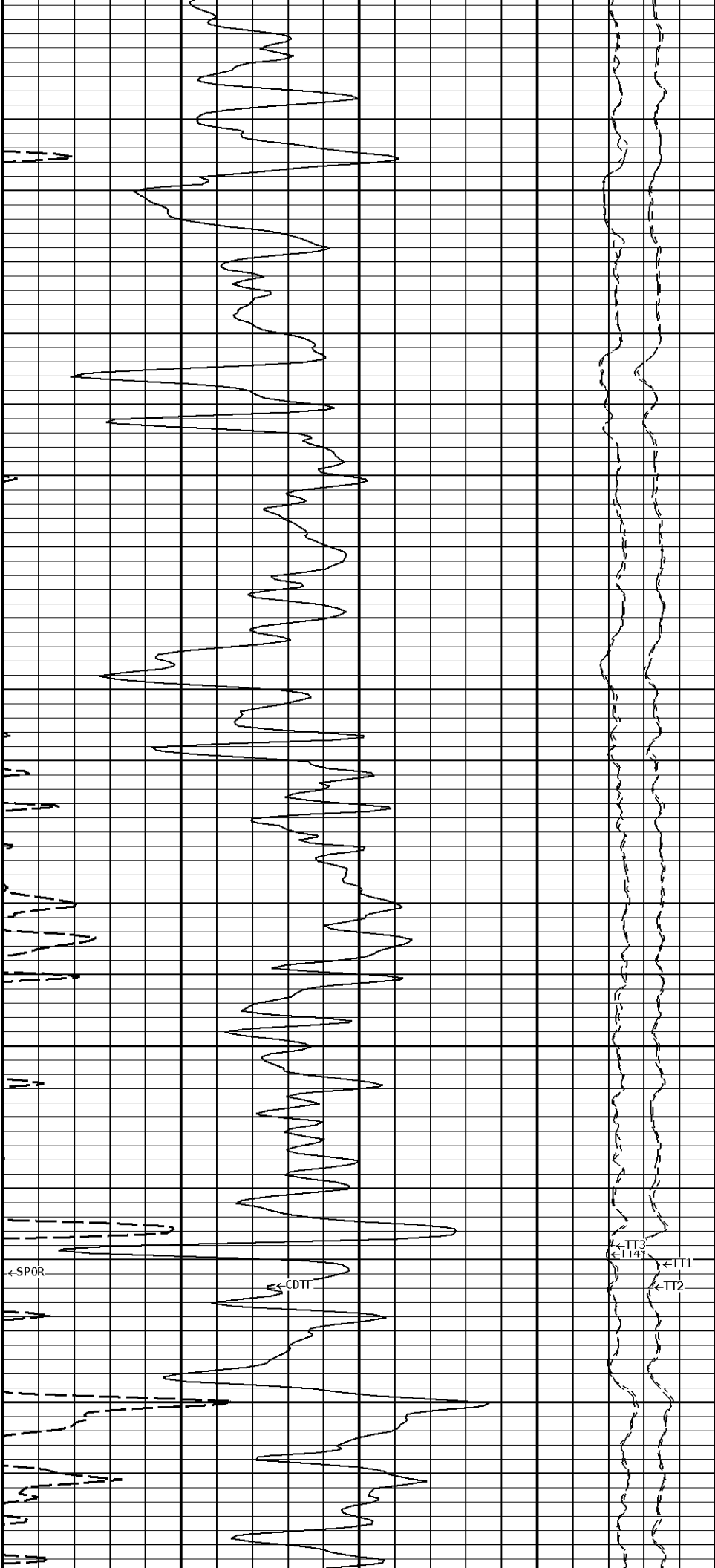
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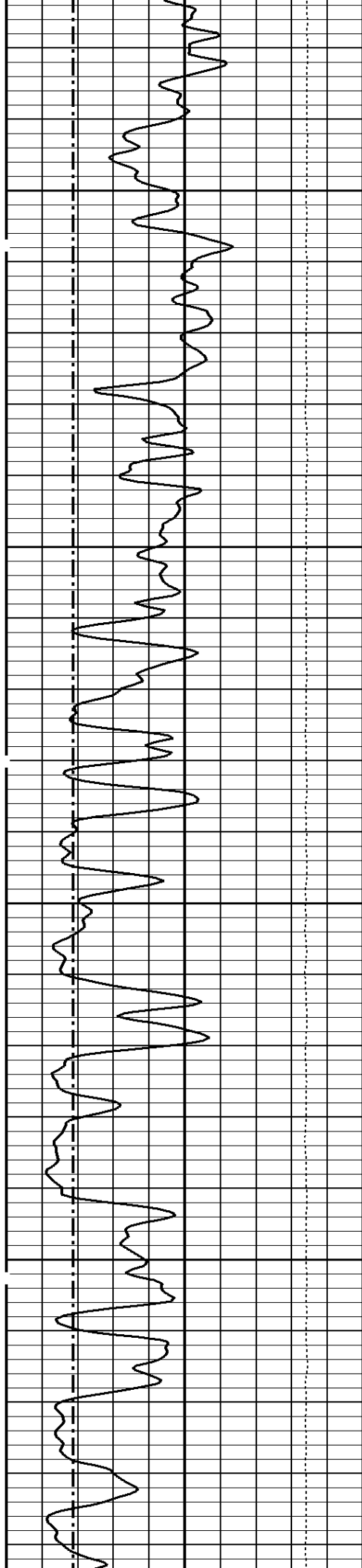




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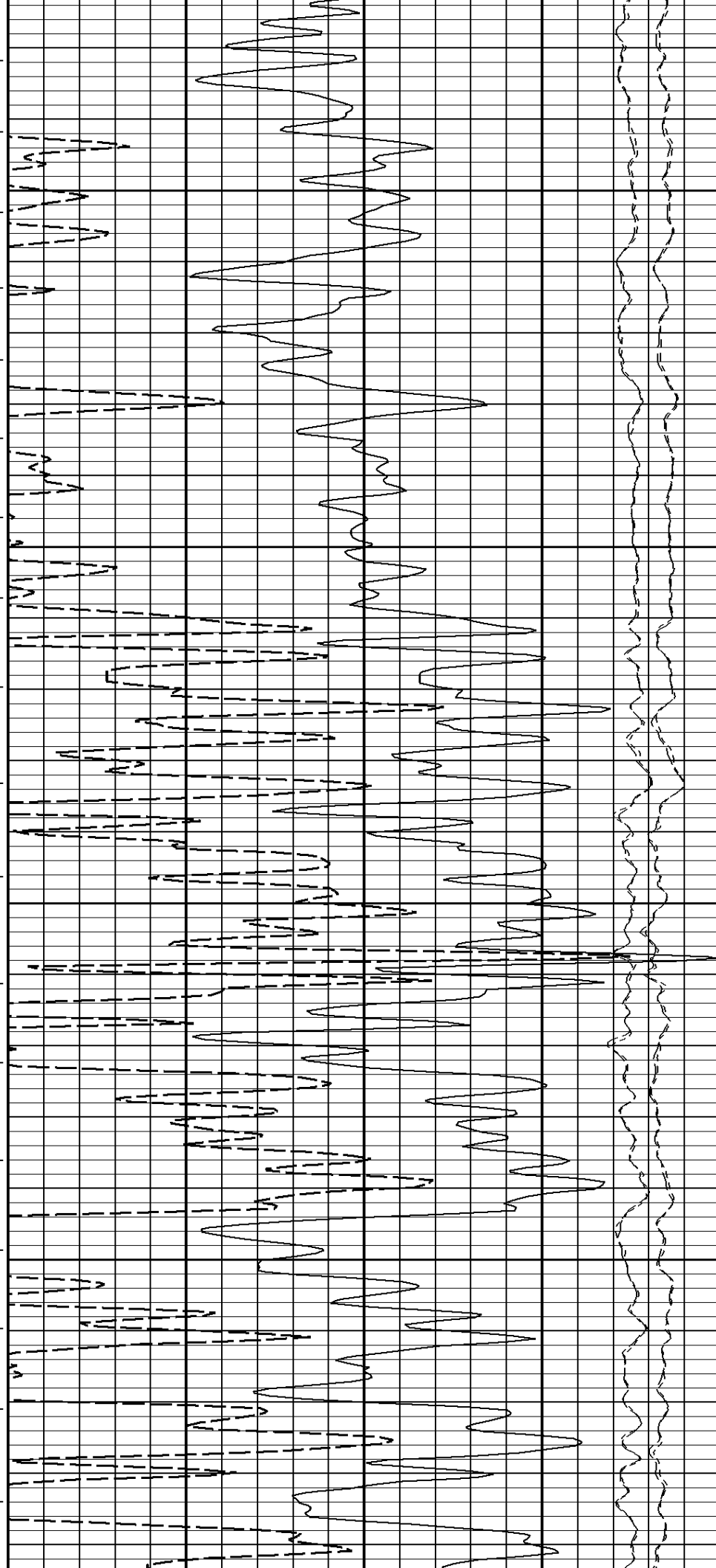
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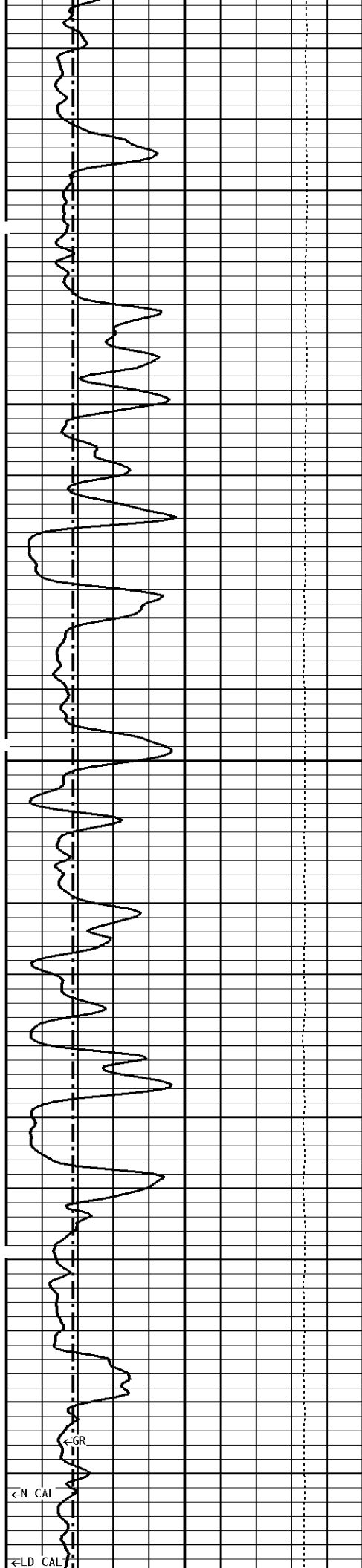




1200

1300

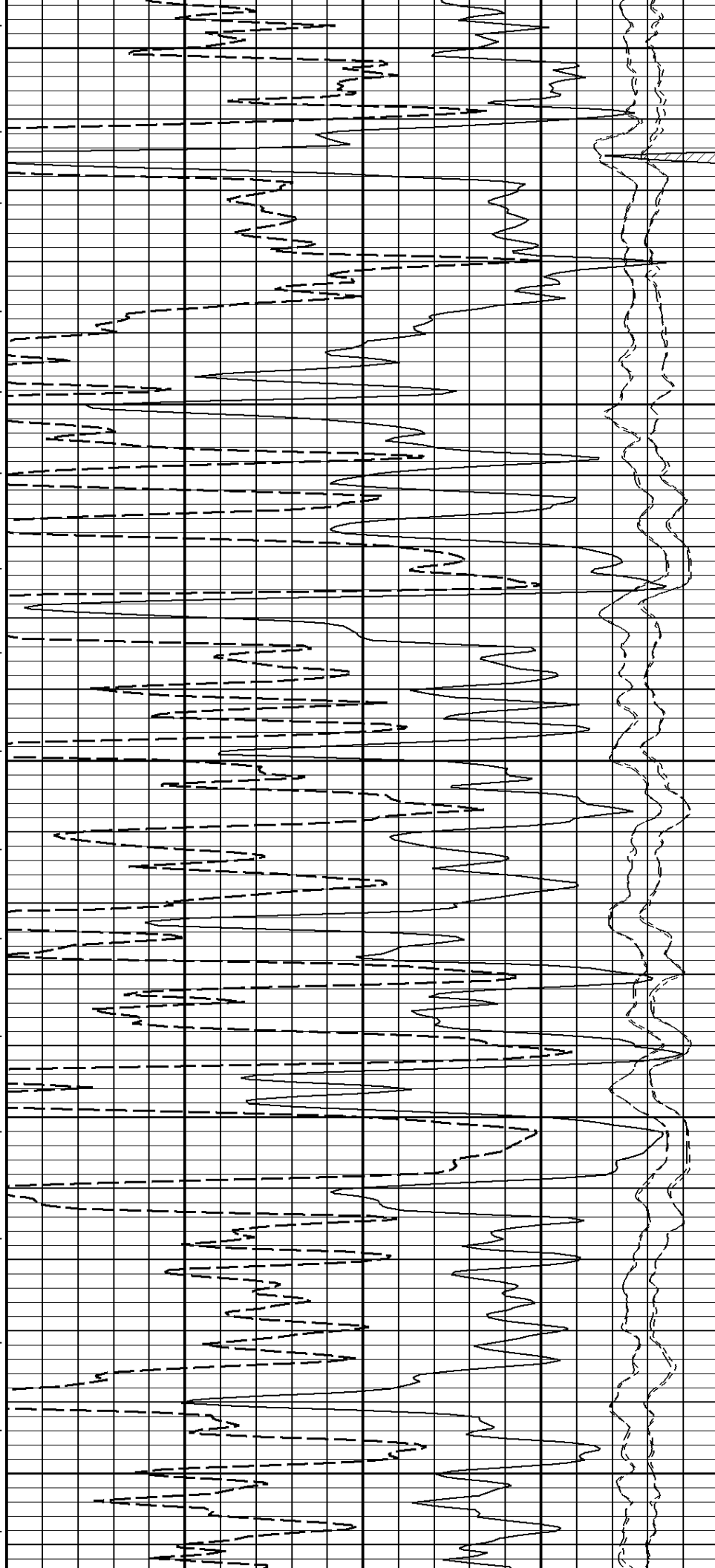


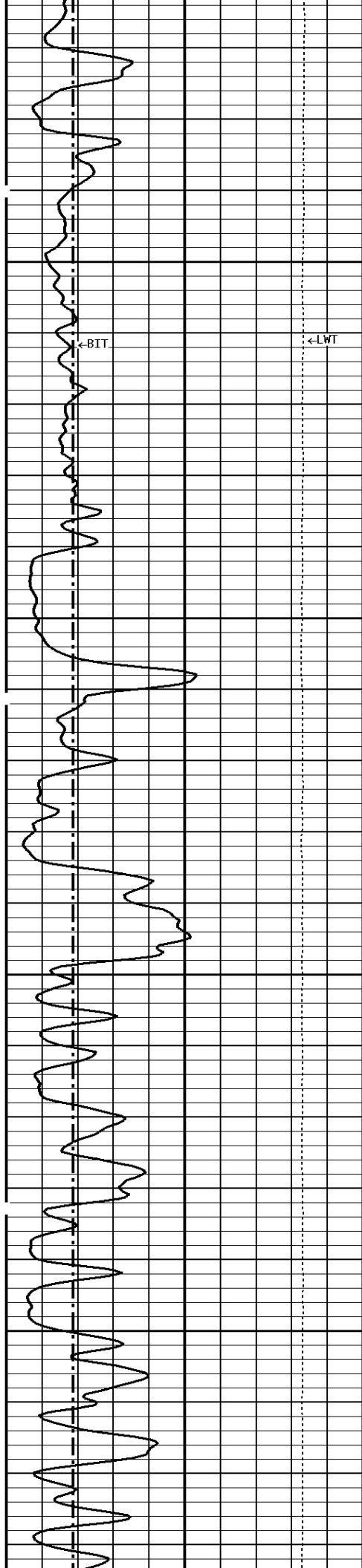


1400

1500

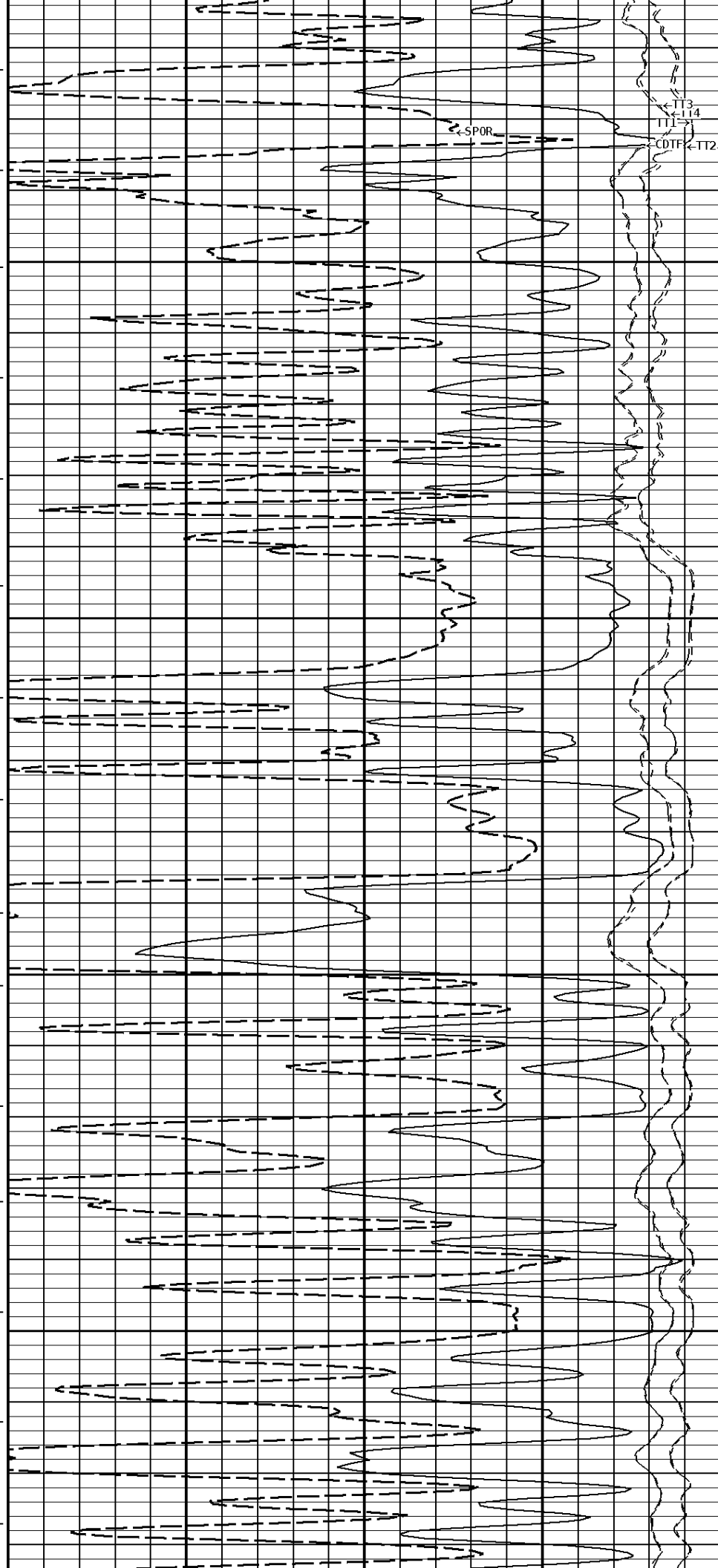
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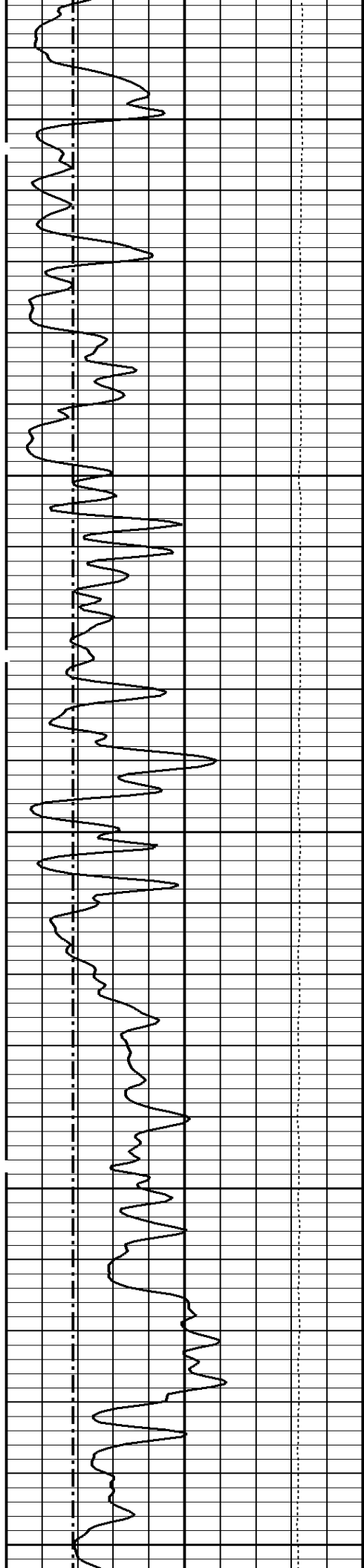




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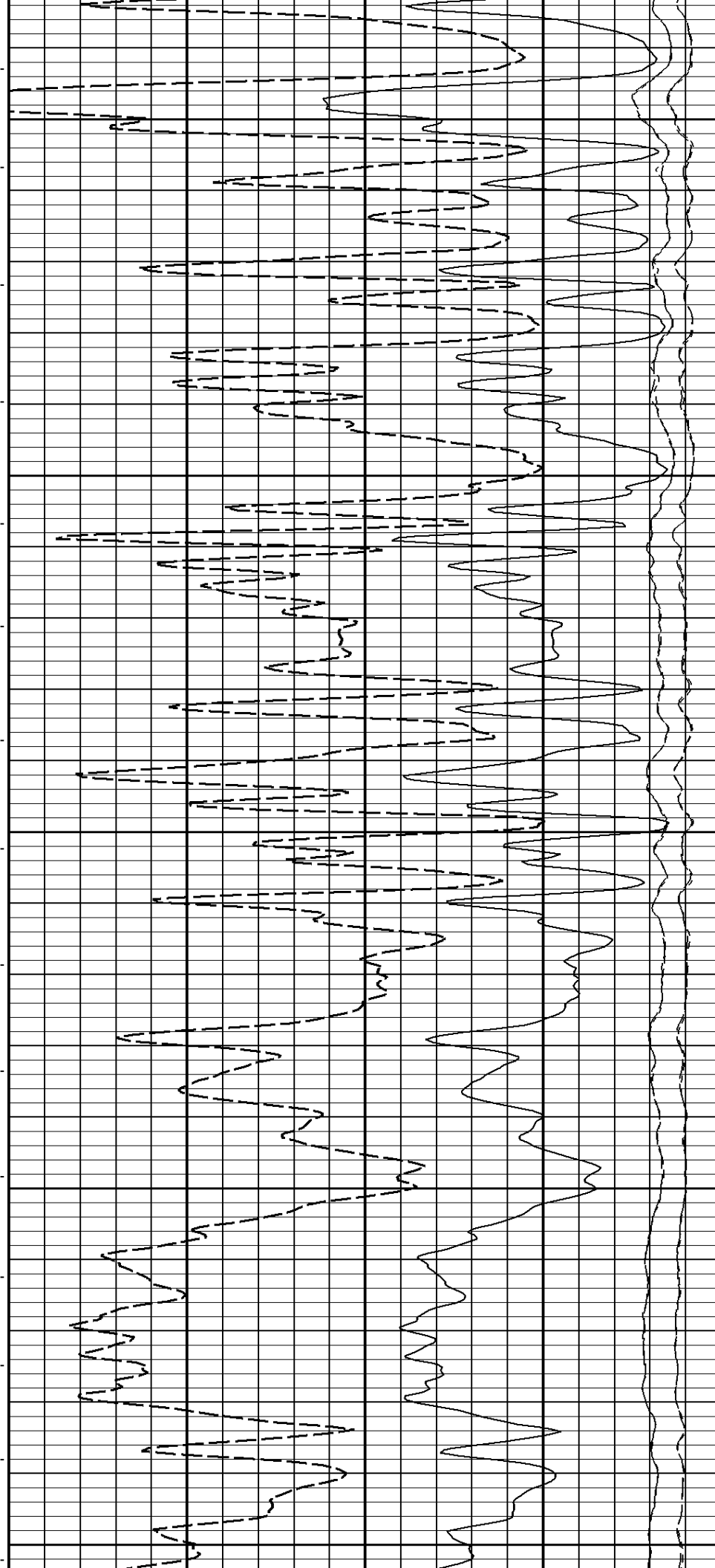
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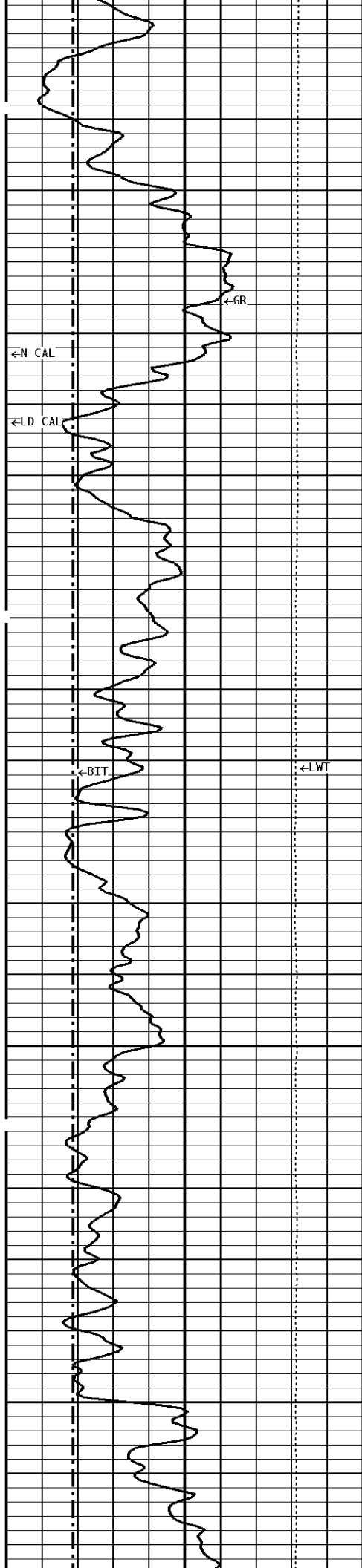




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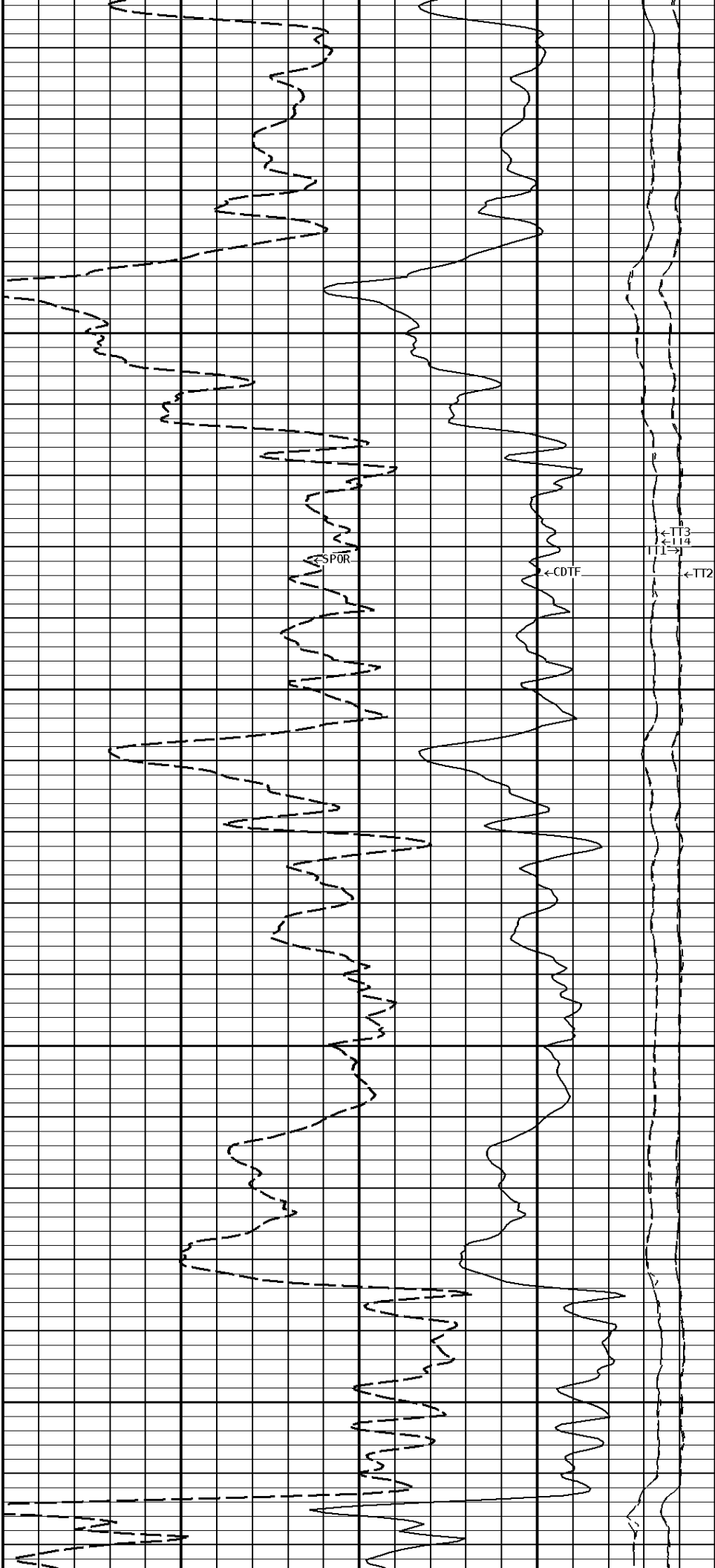
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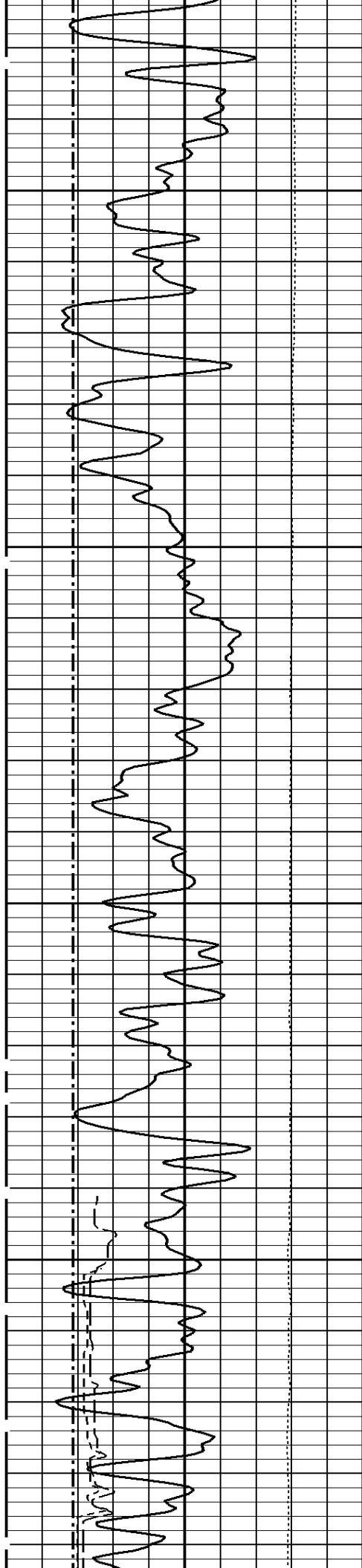




2100

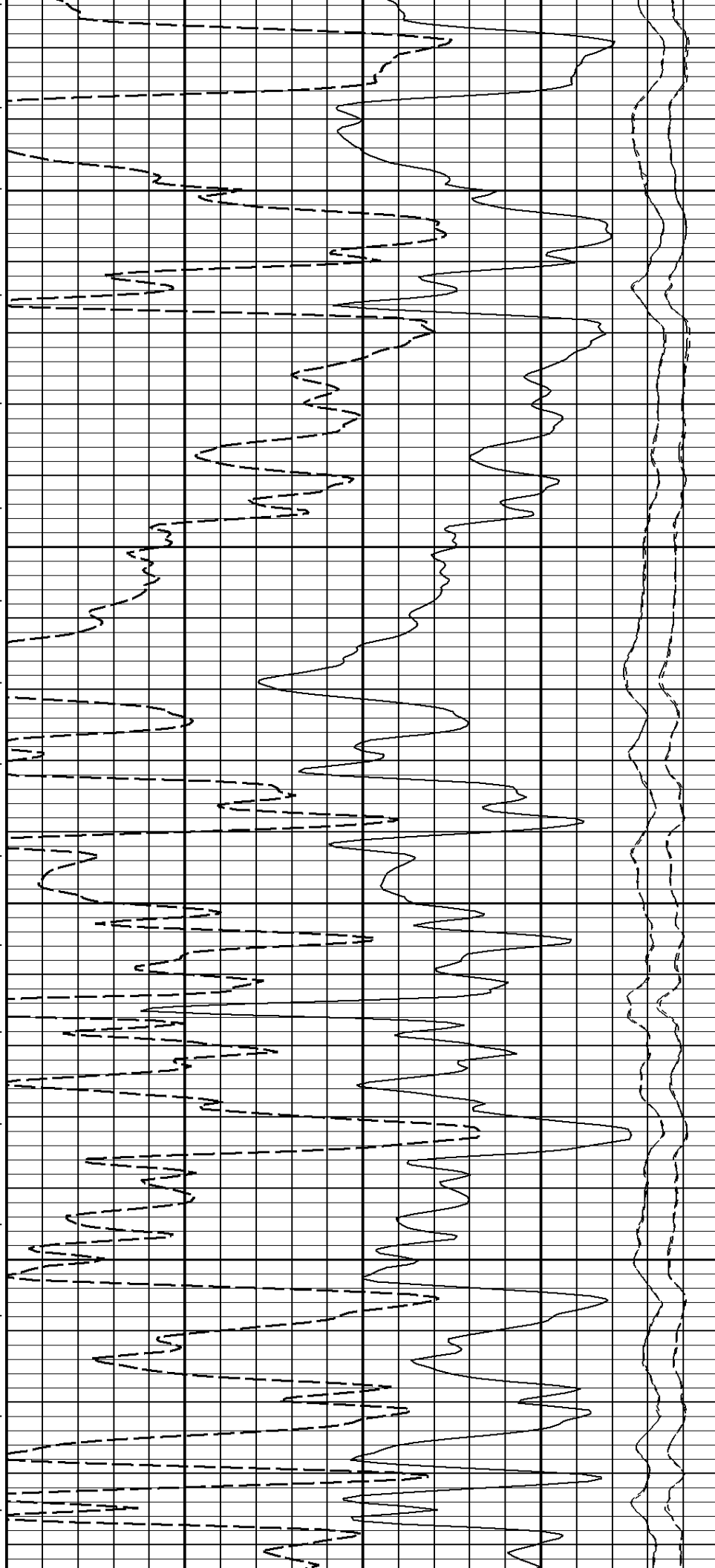
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2300

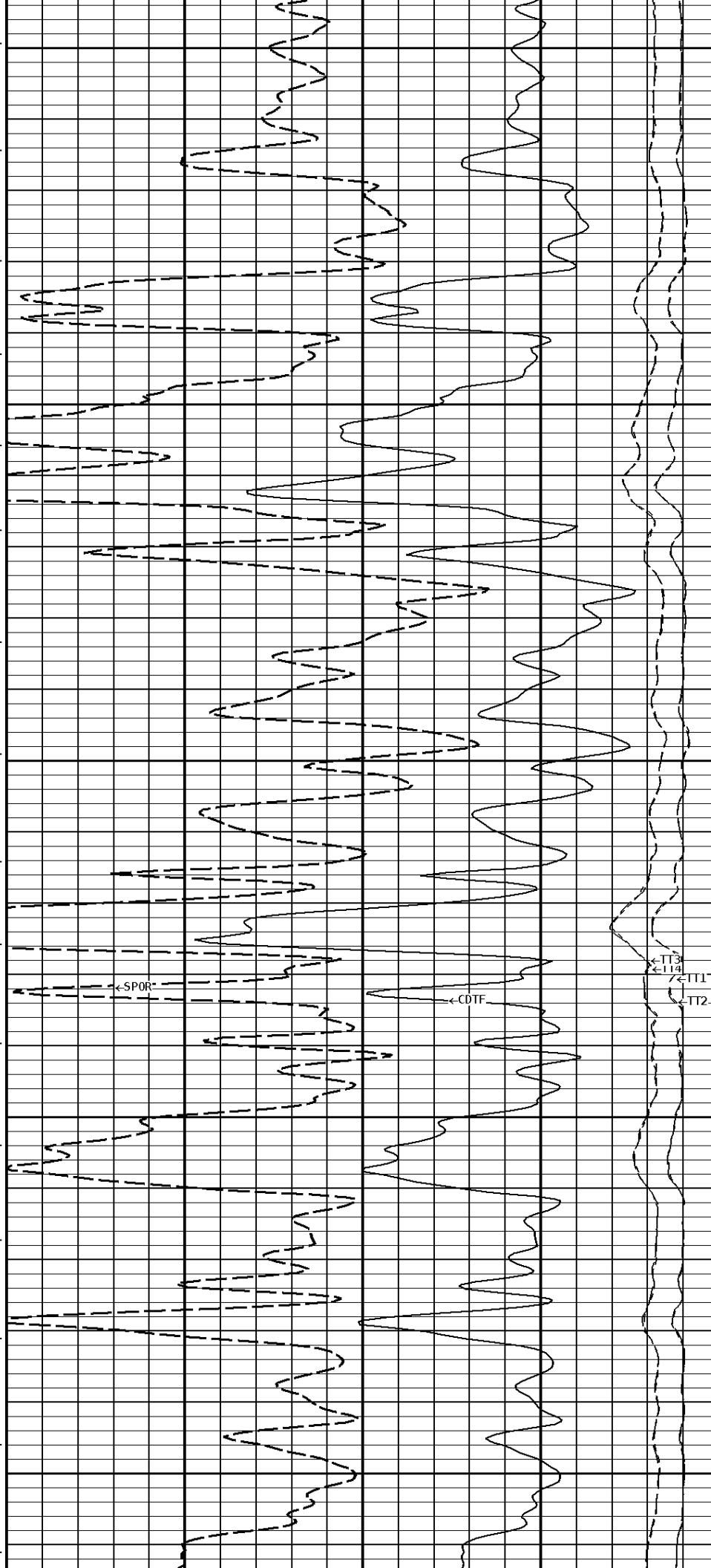
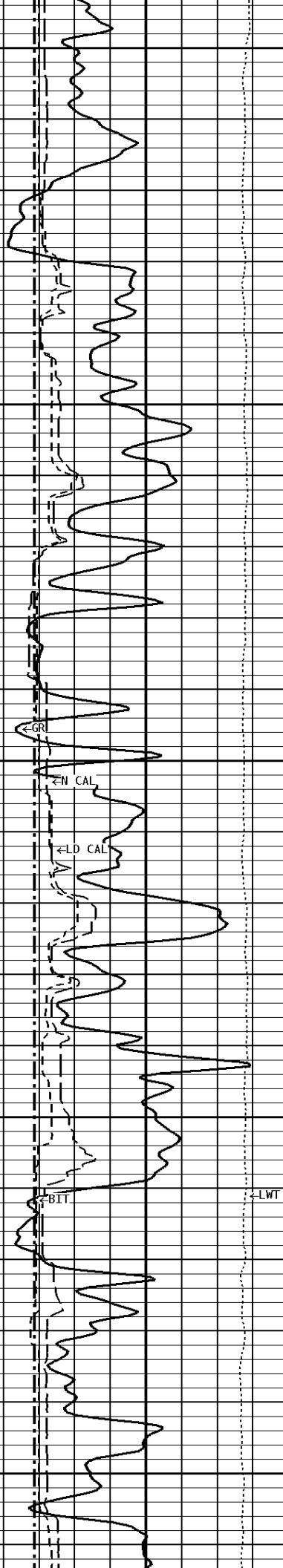
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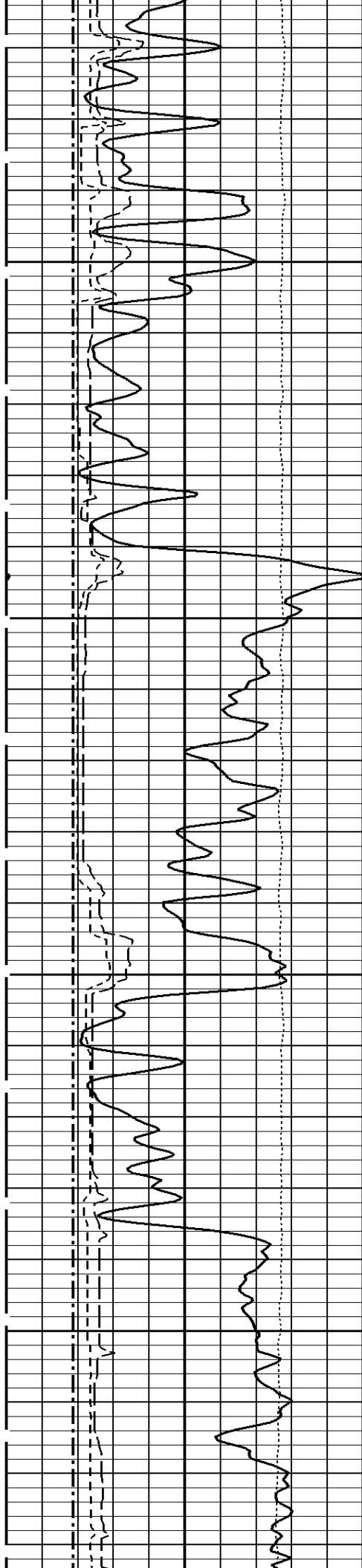


2500

2600

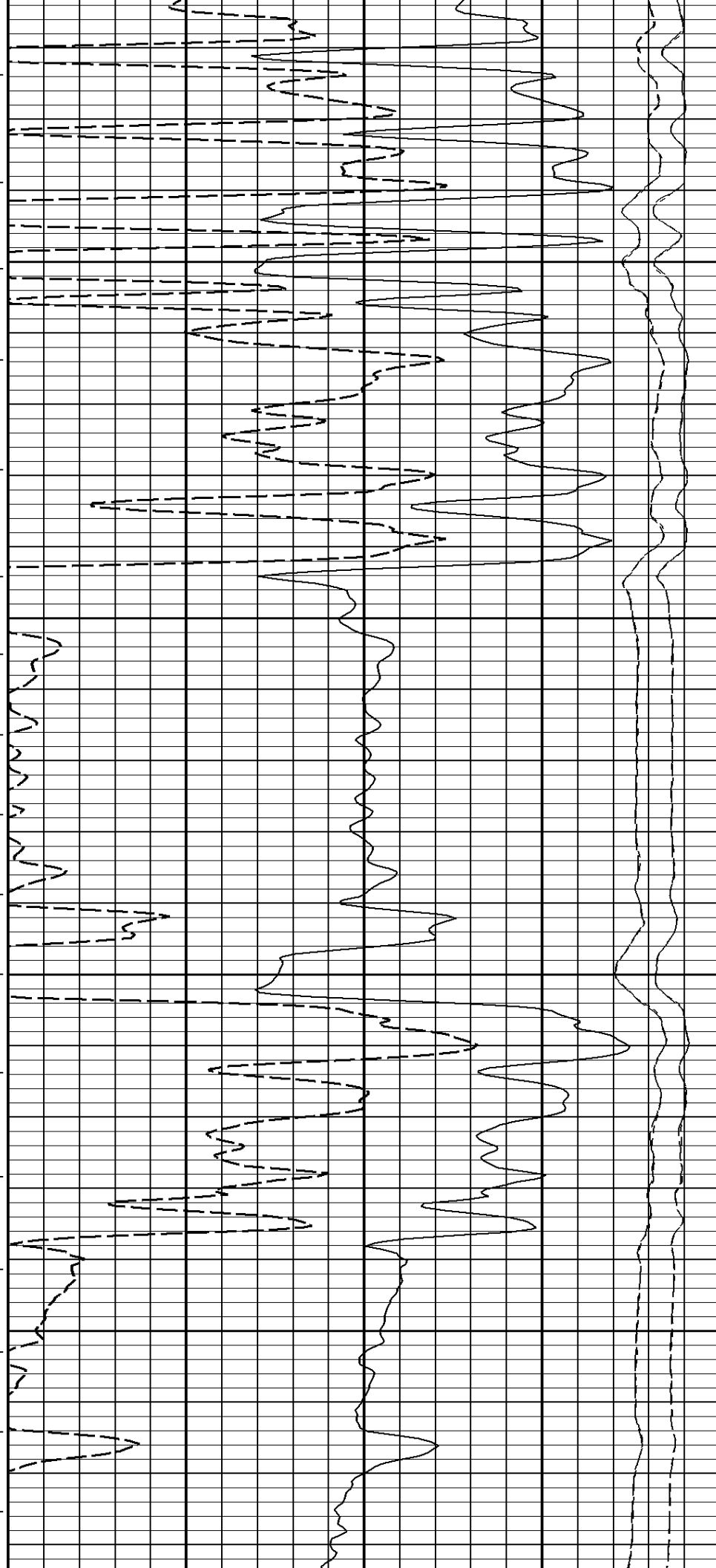
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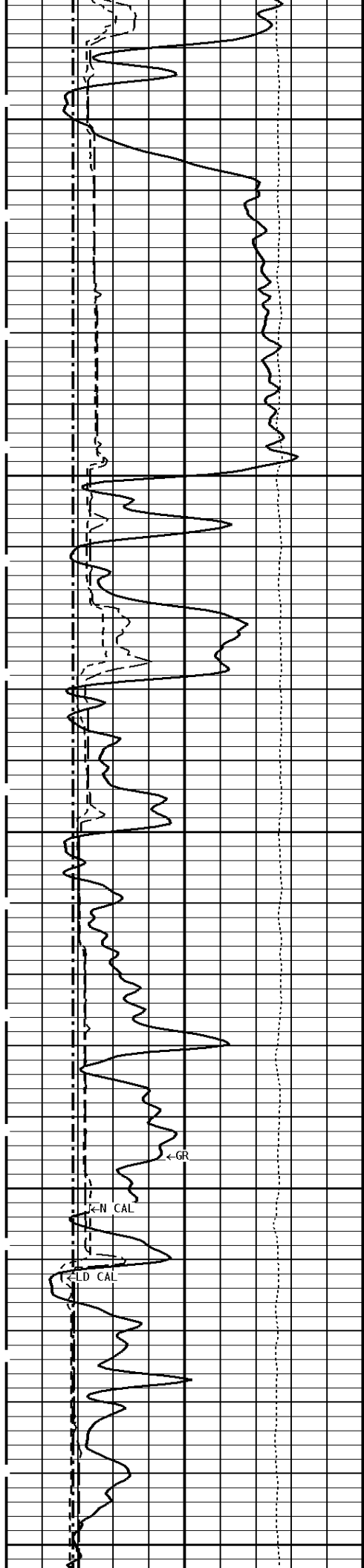




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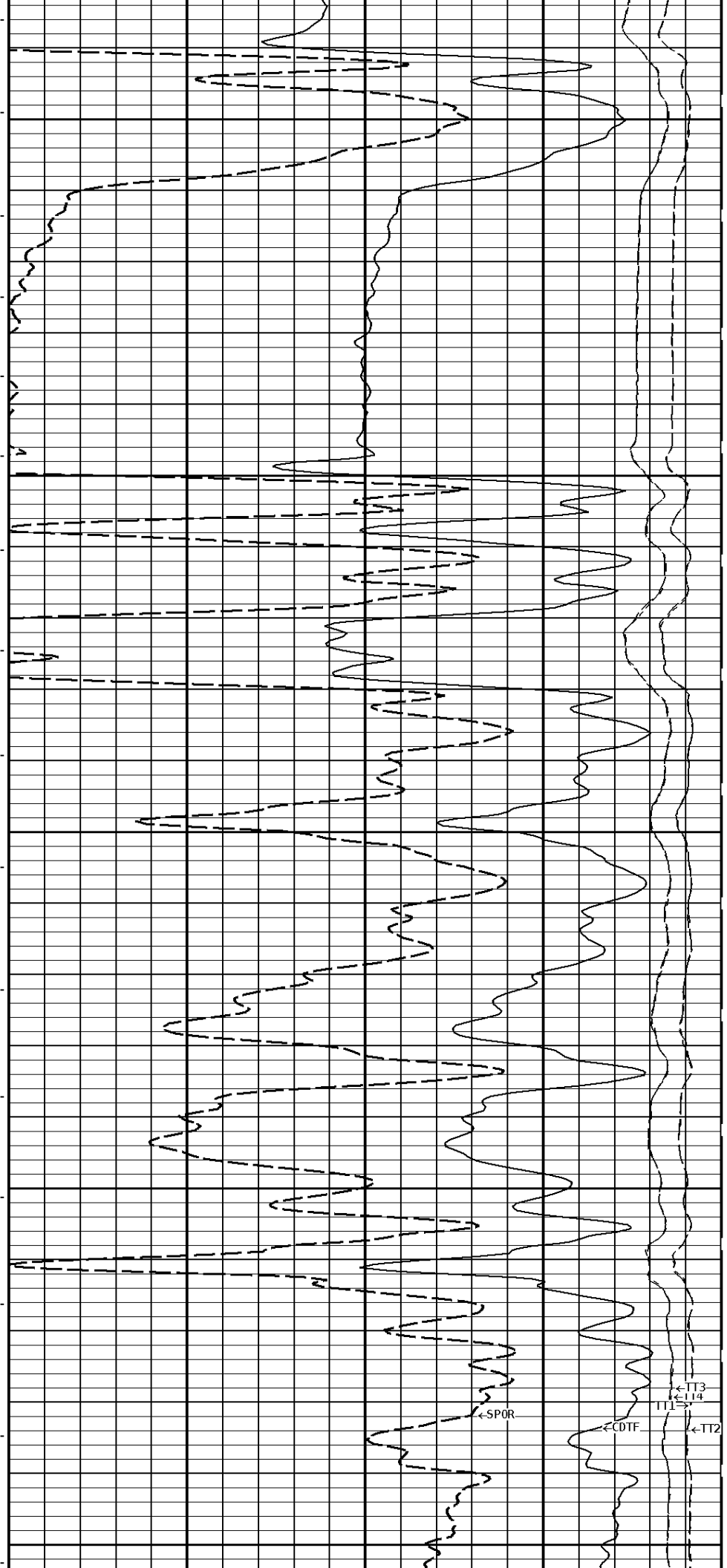
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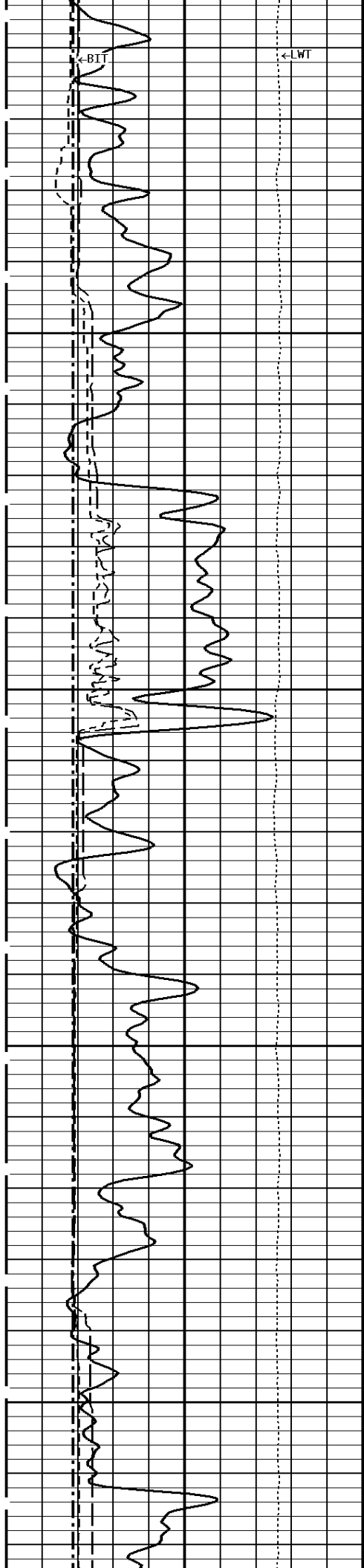




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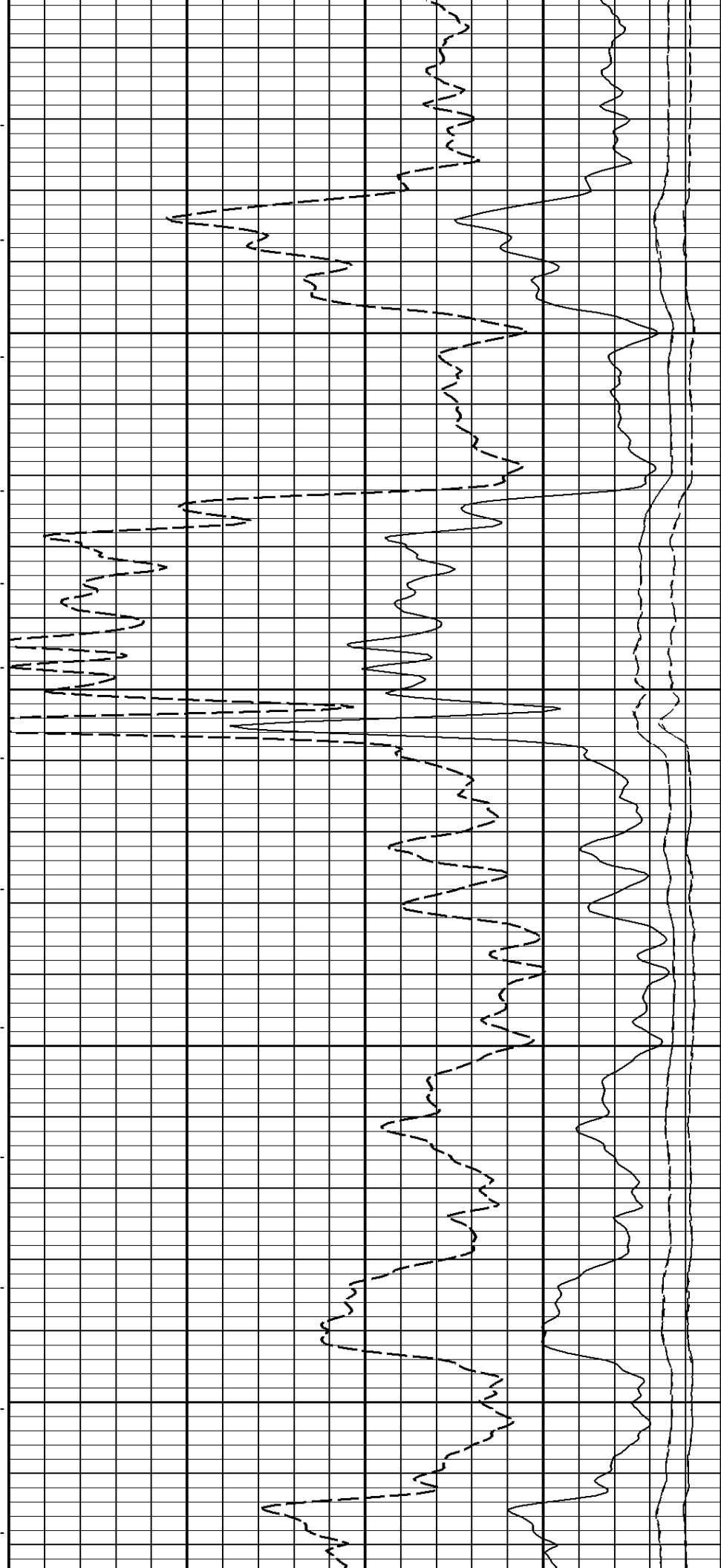
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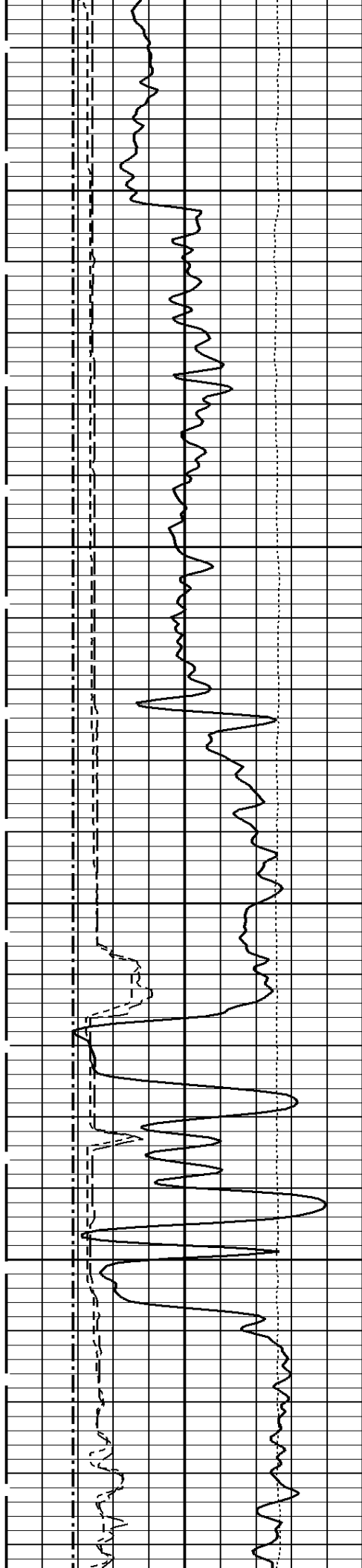




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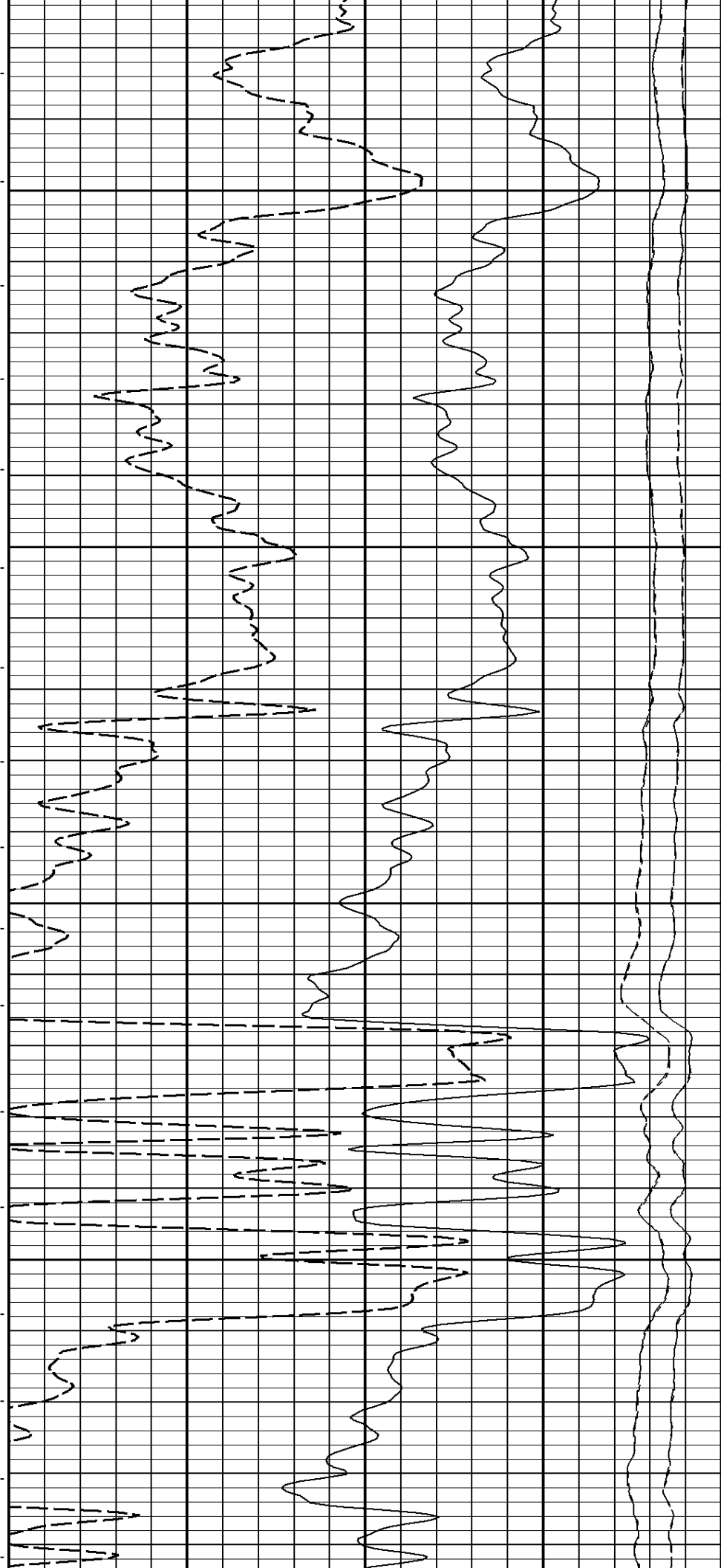
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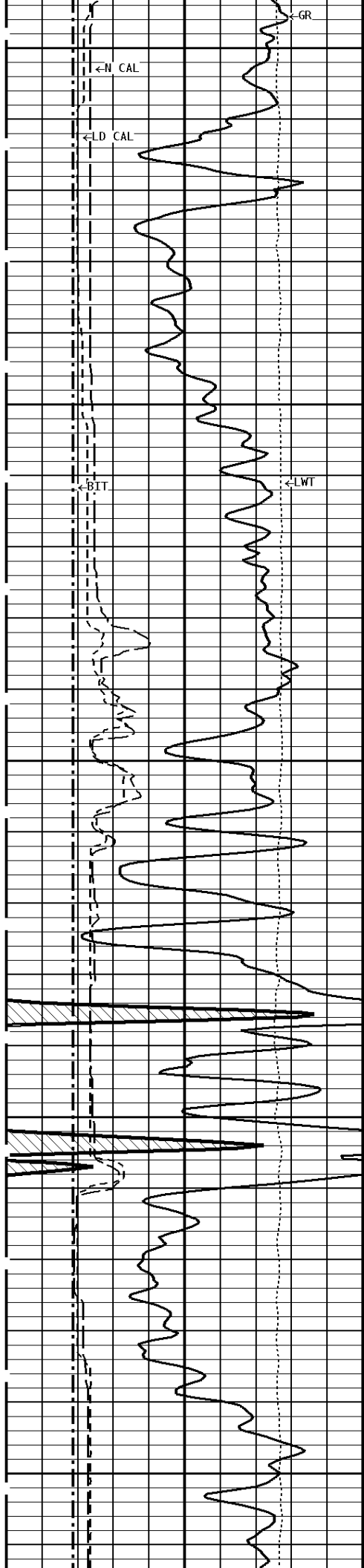




3400

3500

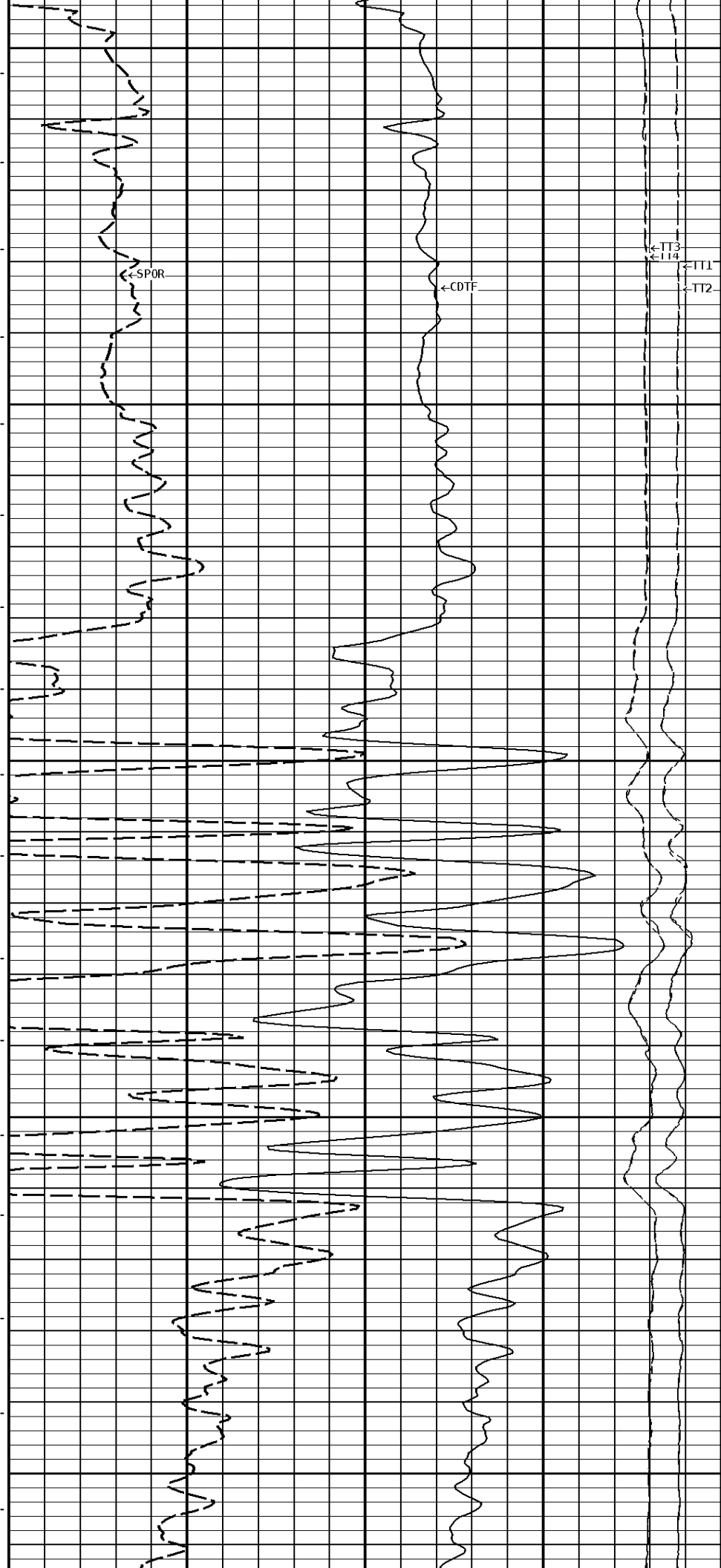


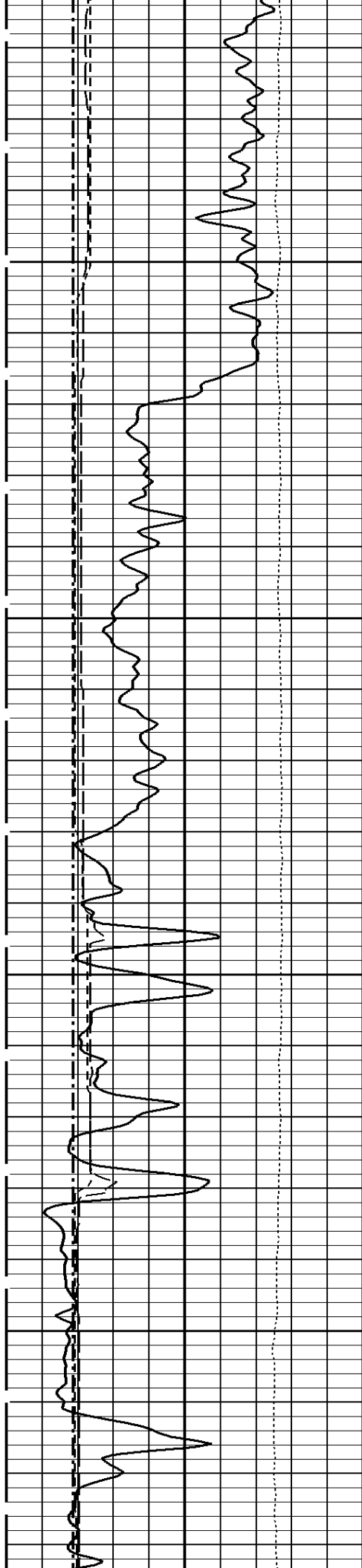


3600

3700

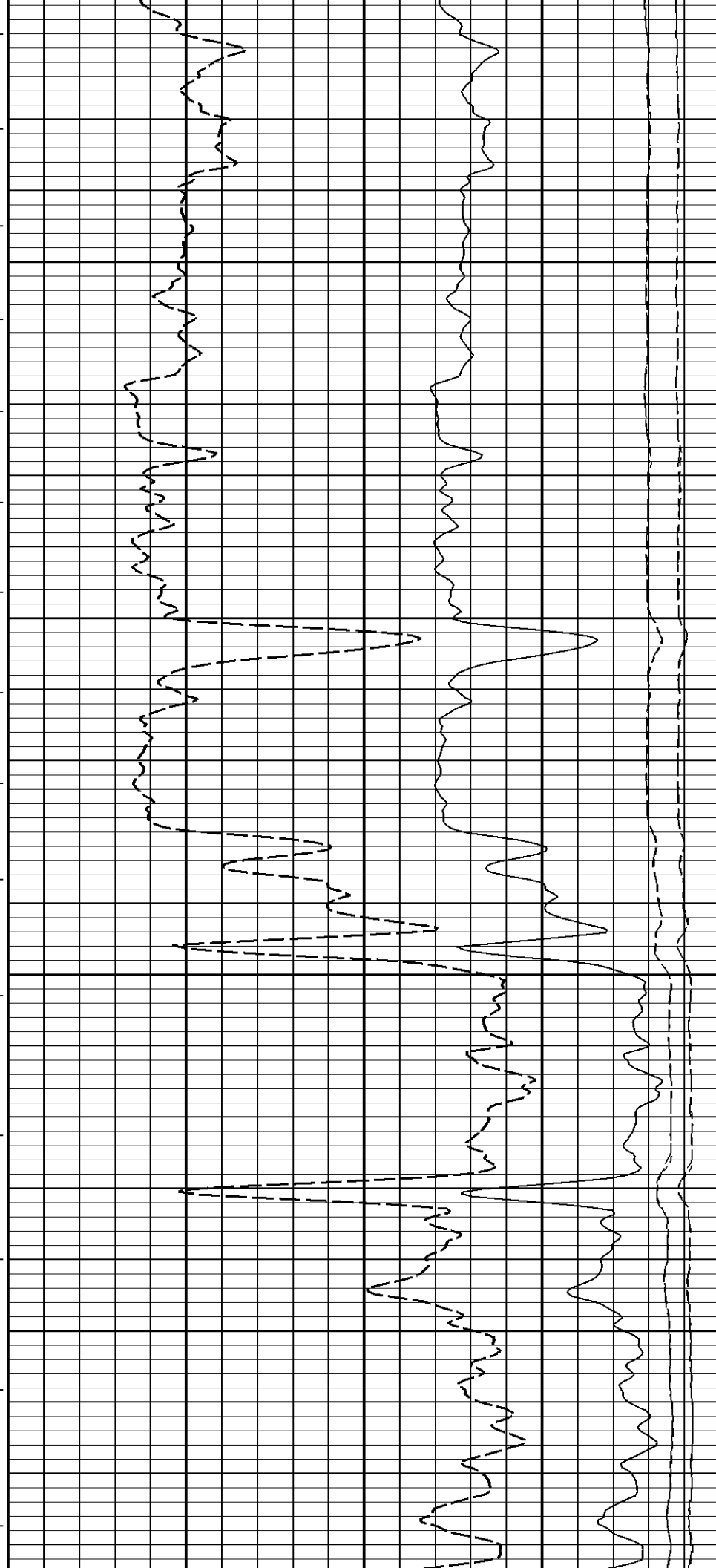
3800

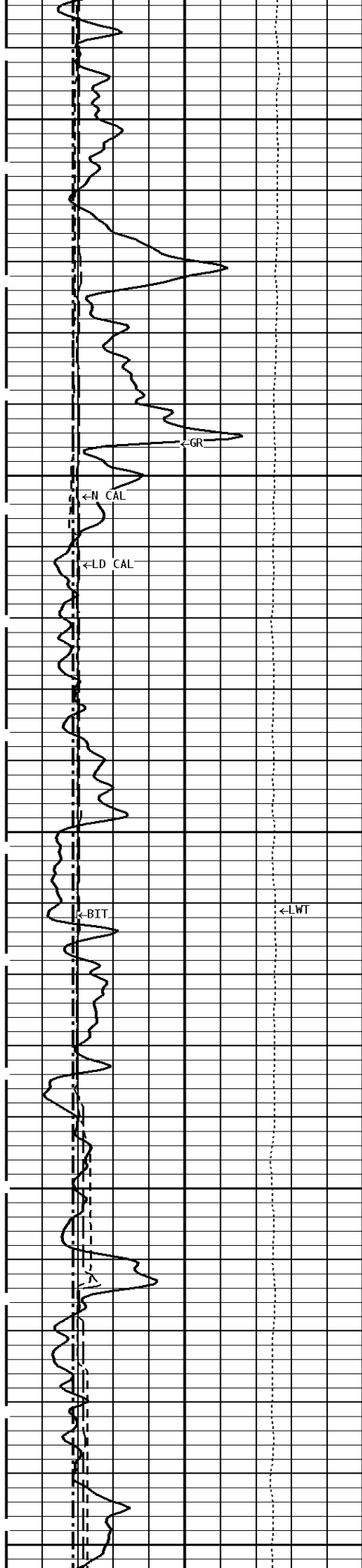




3900

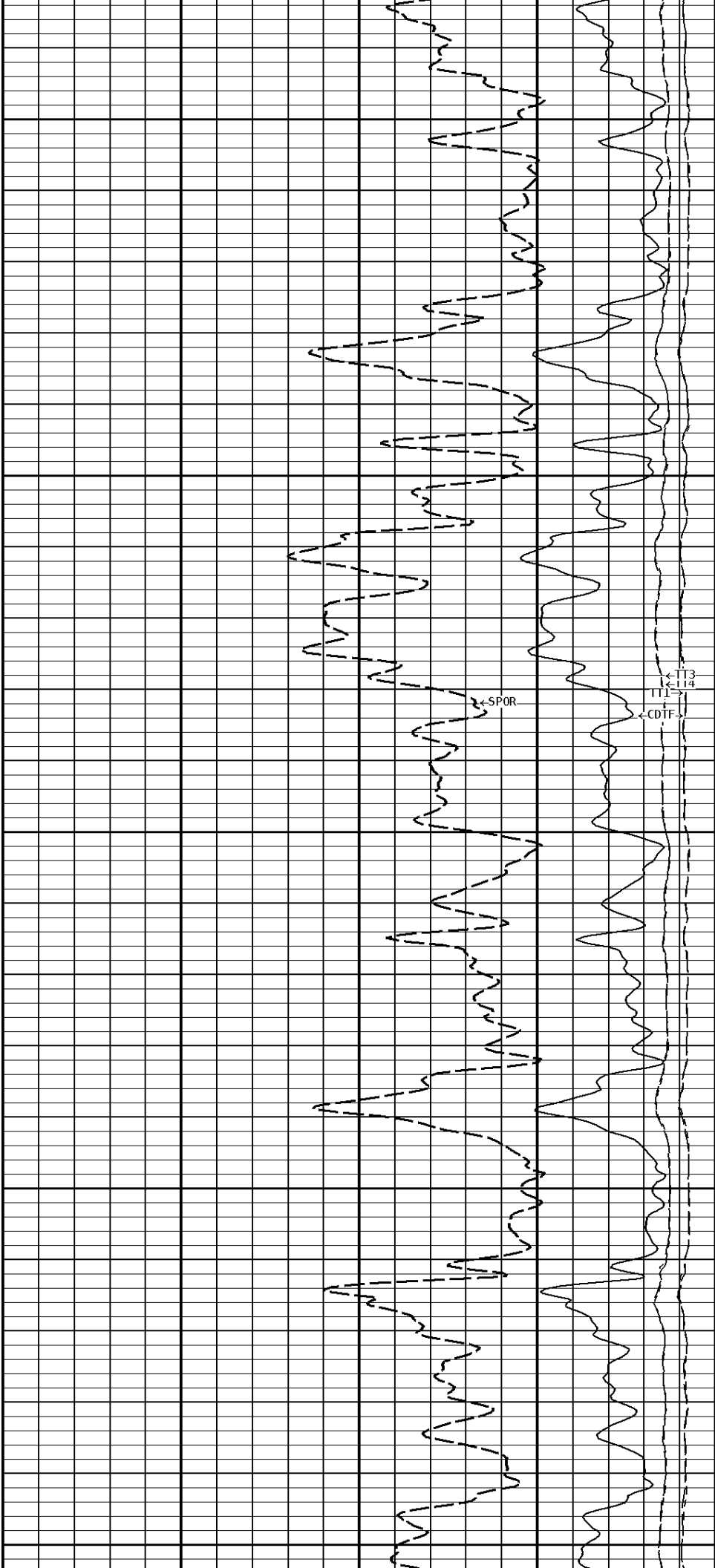
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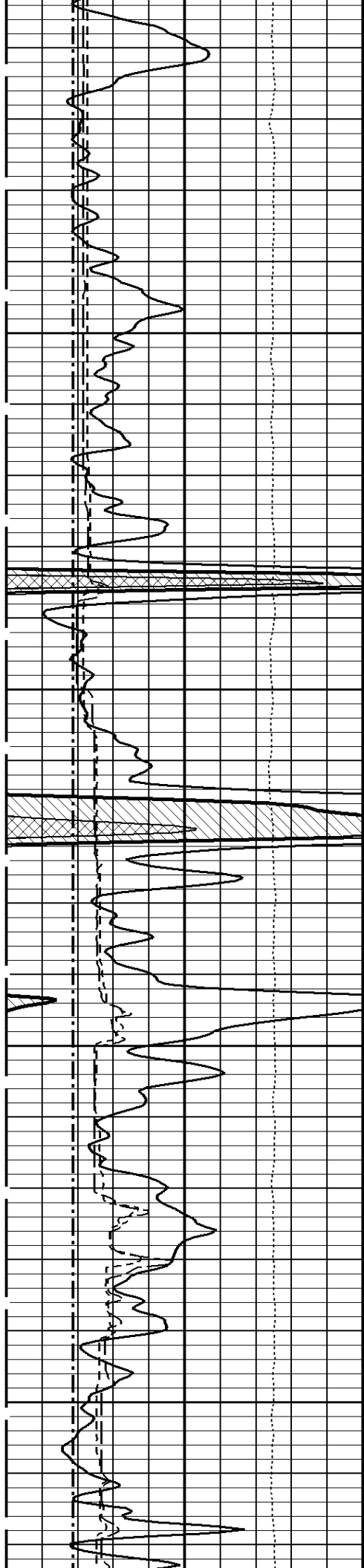




4100

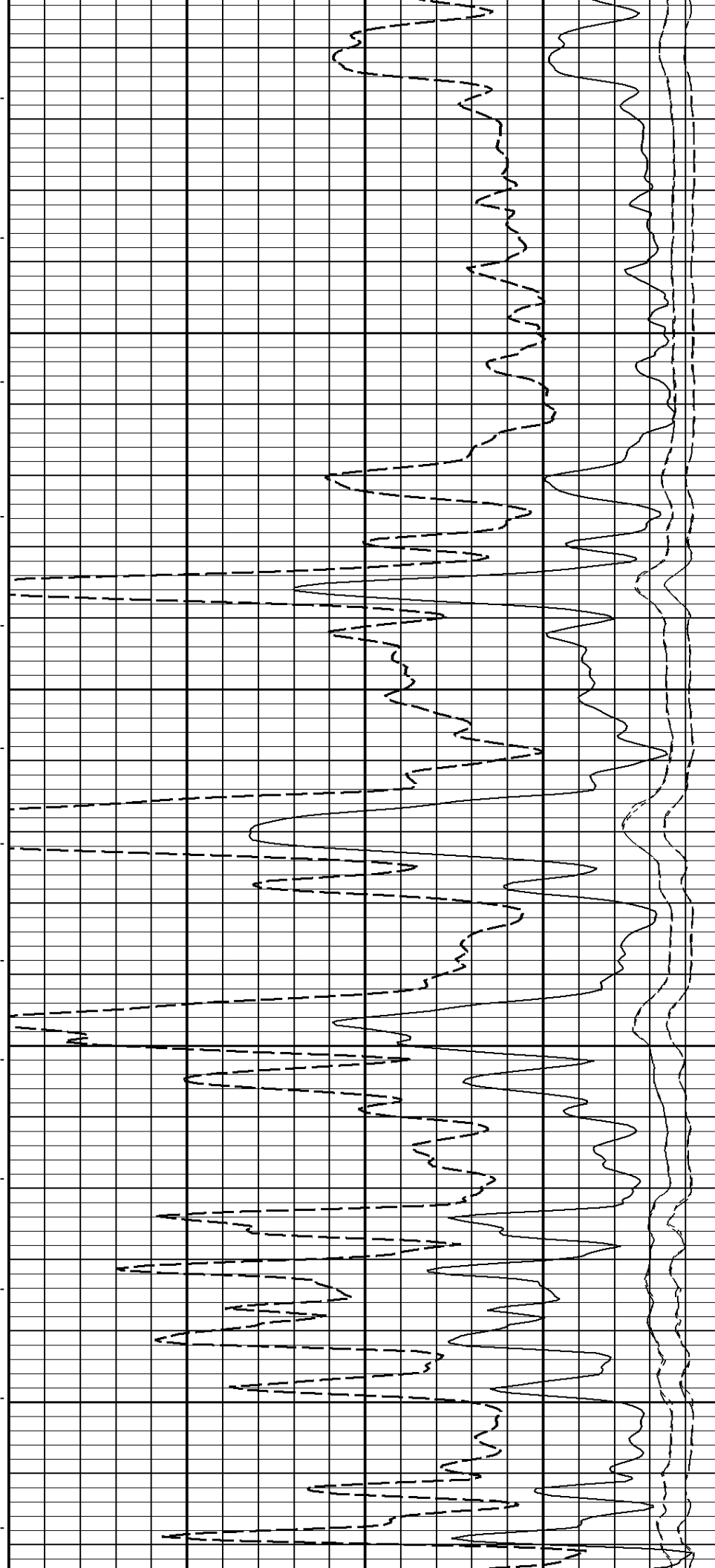
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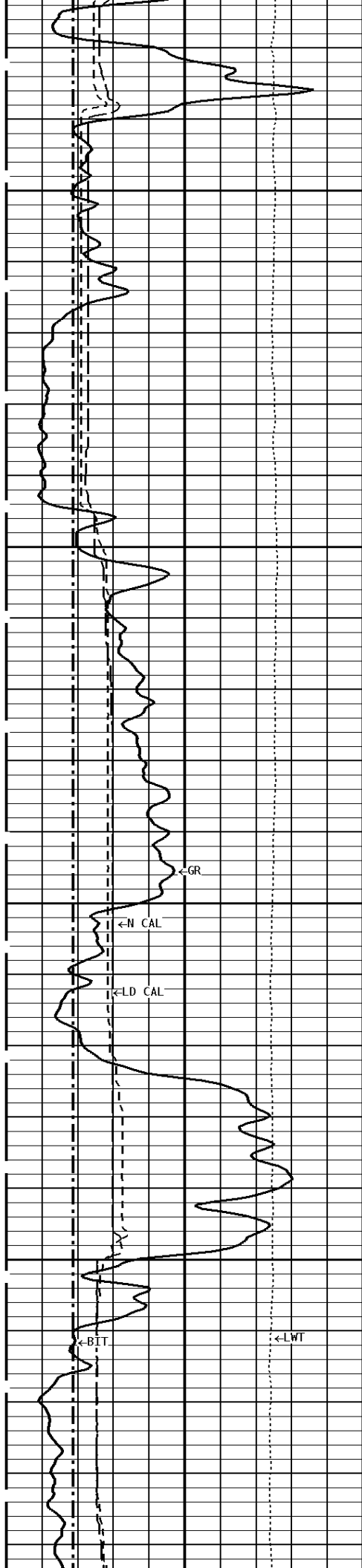




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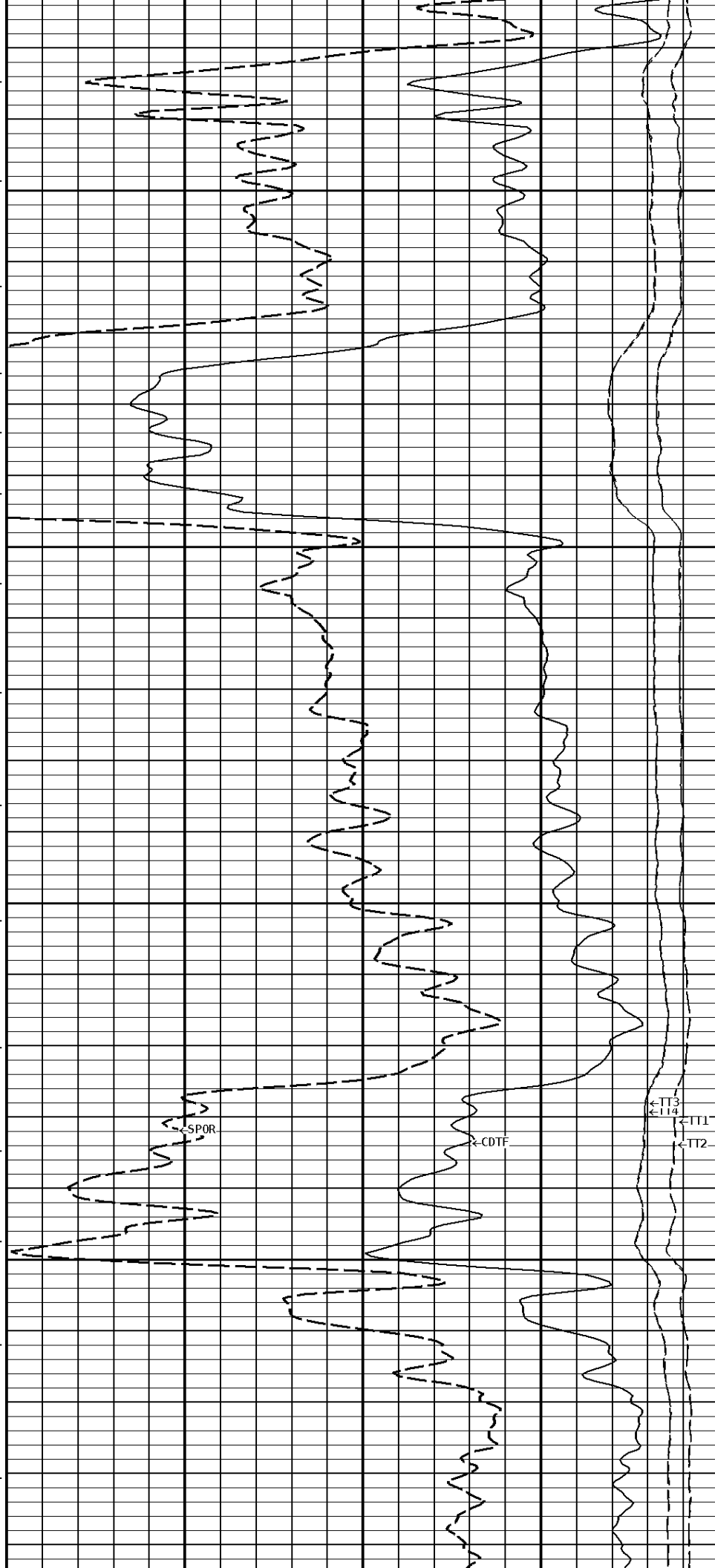
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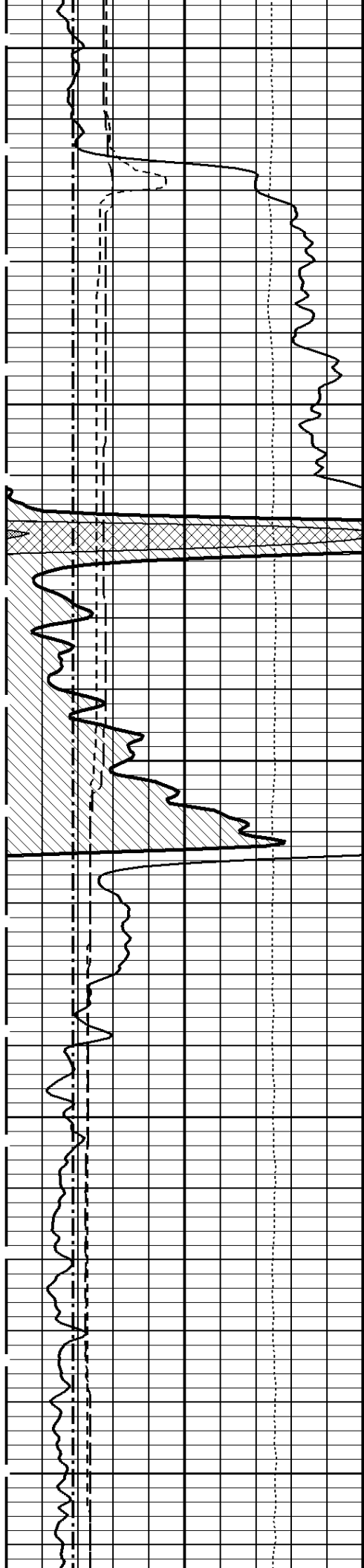




4500

4600

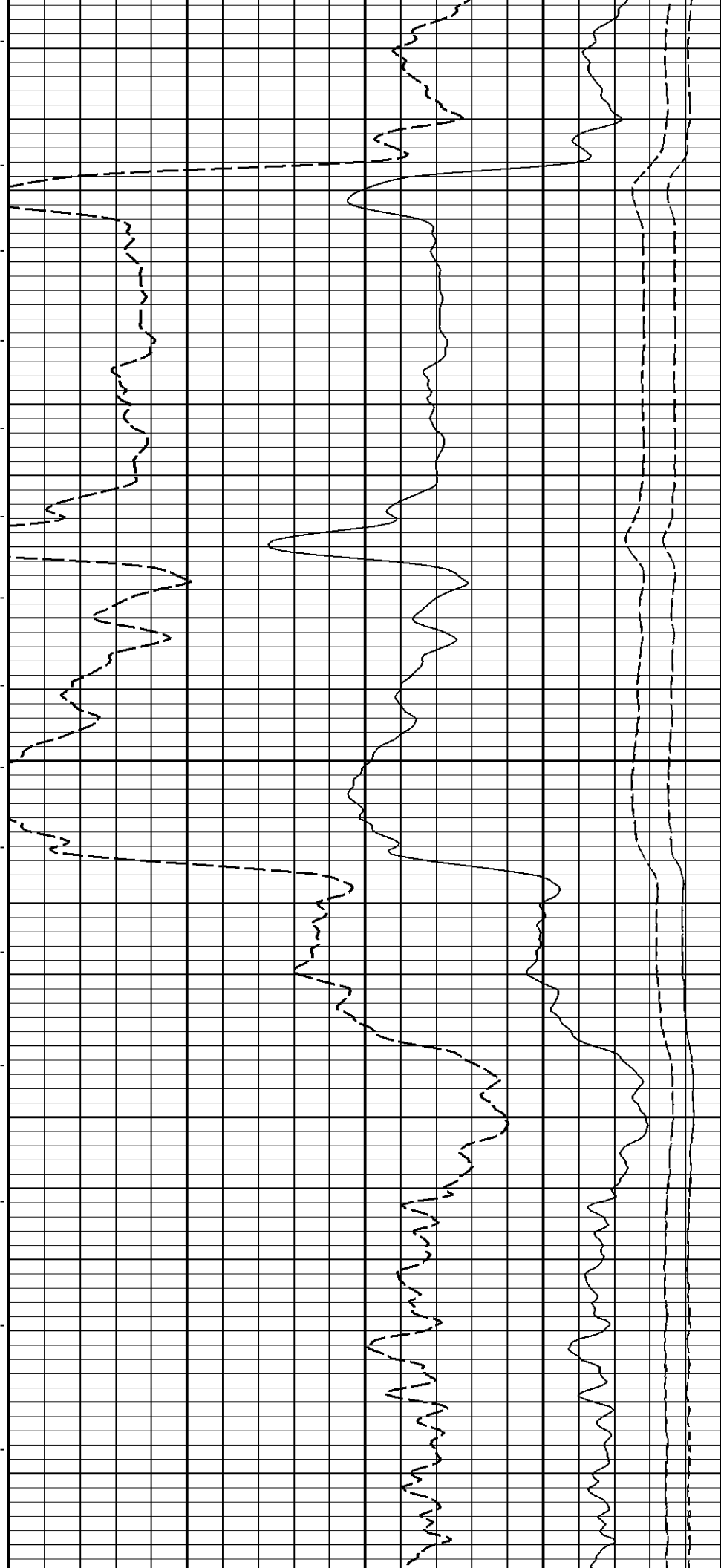


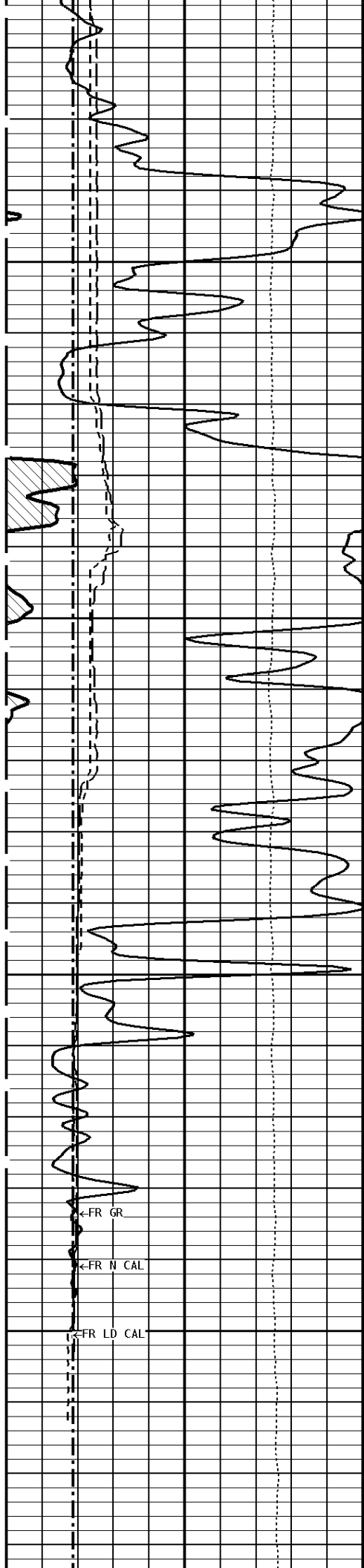


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4800

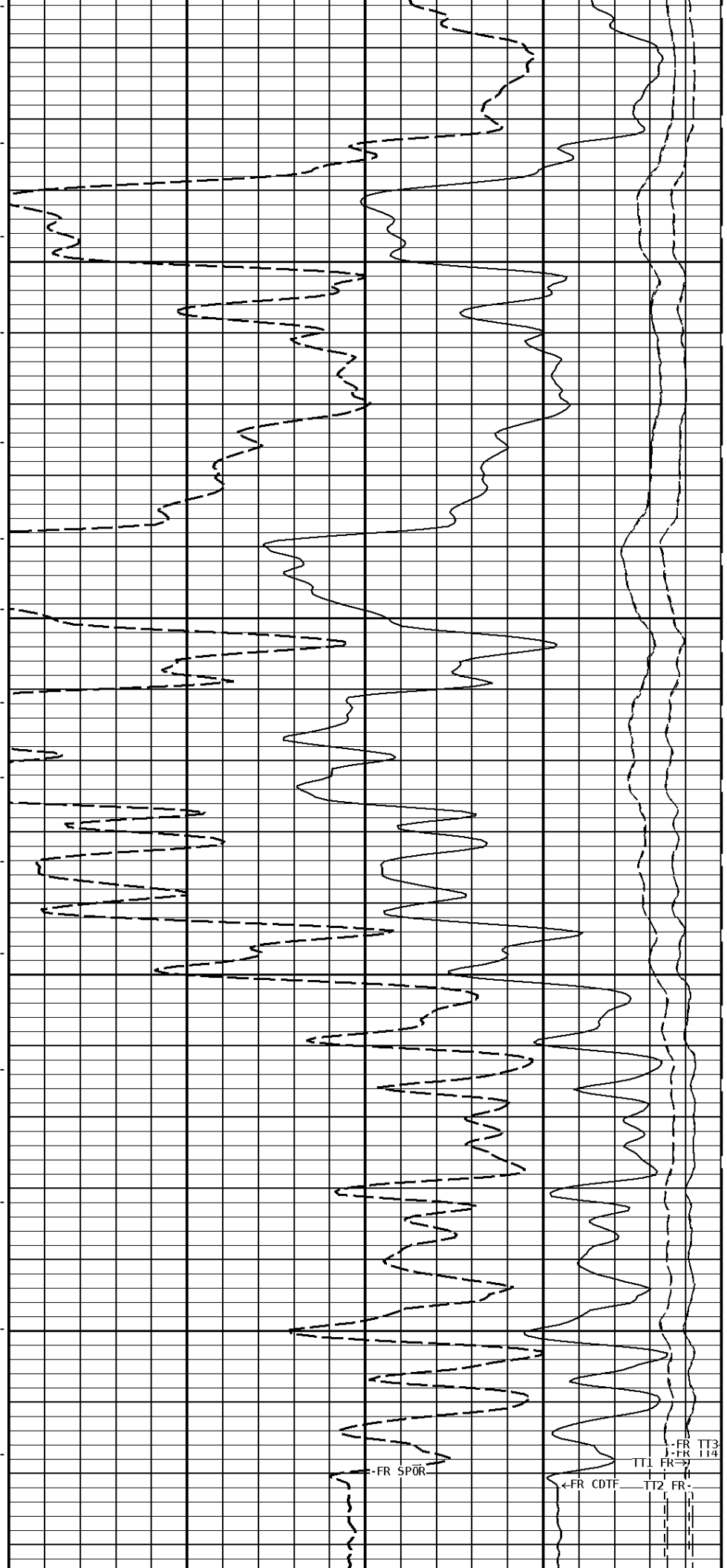
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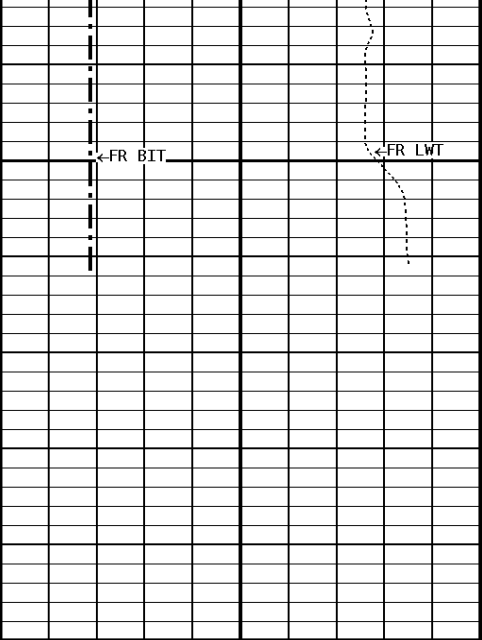




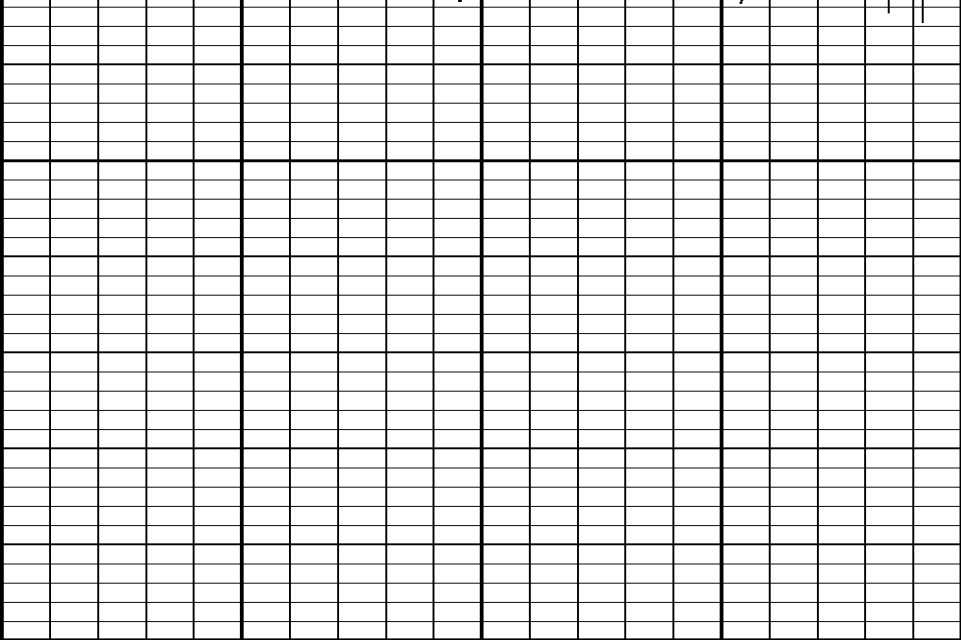
5000

5100





5150



1:240 MAIN SECTION

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

COMPENSATED SONIC TRAVEL TIME uSEC/FT	
240	140
140	40
SONIC POROSITY Percent	
30	-10
TT1 uSEC	
950	50
TT2 uSEC	
950	50
TT3 uSEC	
950	50
TT4 uSEC	
950	50

Well File: LBE WOL 15-1 APR 11_SGTQUINT	Scale: 1:240
Segment: V1.D1.S4 REPEAT	Acquired: 2012-04/11 15:14 3.2.0-10367
Reference: 0	Processed: 2012-04/11 19:08 3.2.0-10367

TENSION LBS	
10000	0

TT4 uSEC	
950	50
TT3 uSEC	
950	50

BIT SIZE INCHES (IN)	
6	16

DENSITY (X) CALIPER INCHES (IN)	
16	26
6	16

NEUTRON (Y) CALIPER INCHES (IN)	
16	26
6	16

GAMMA RAY API UNITS	
150	300
0	150

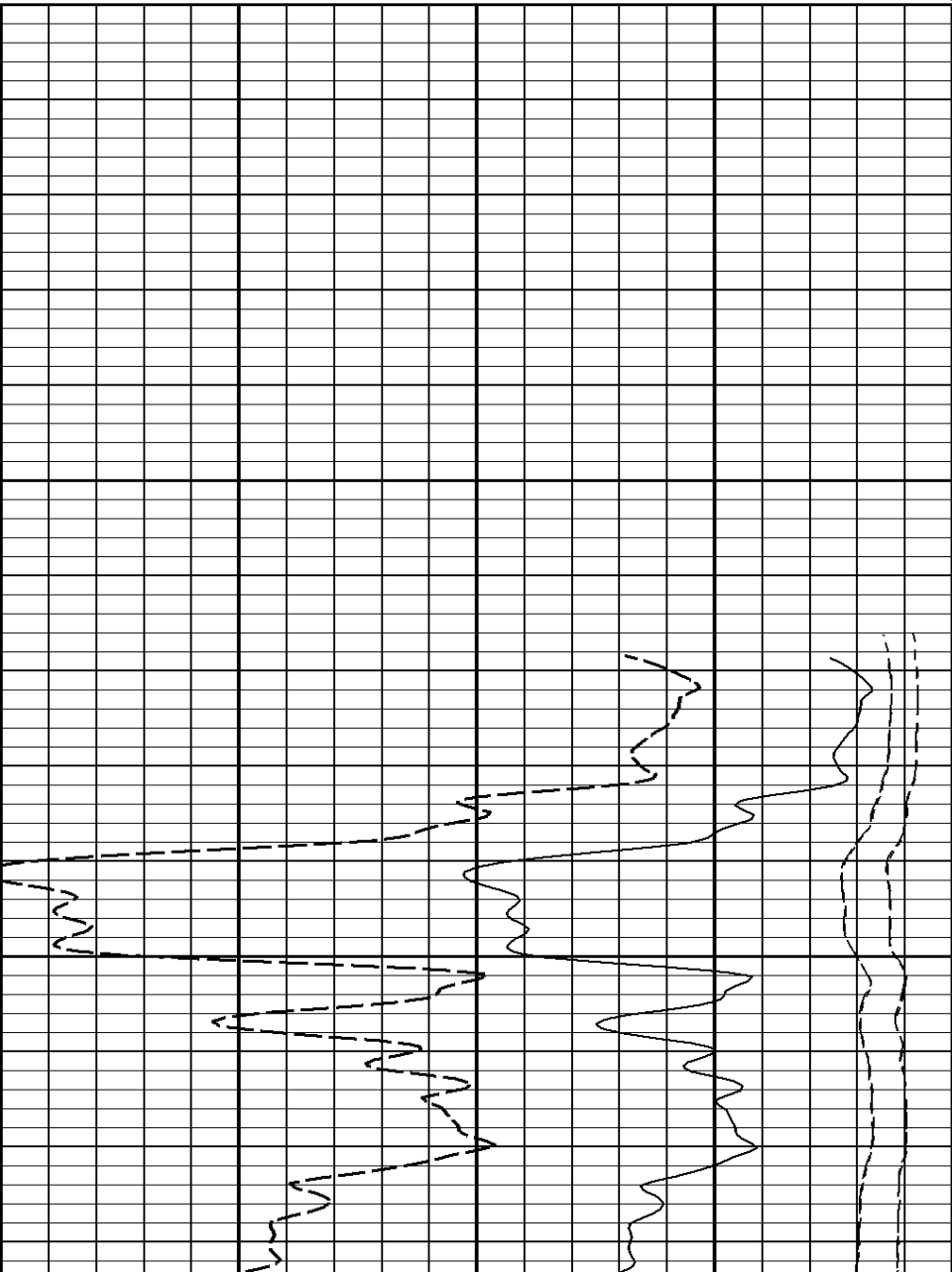
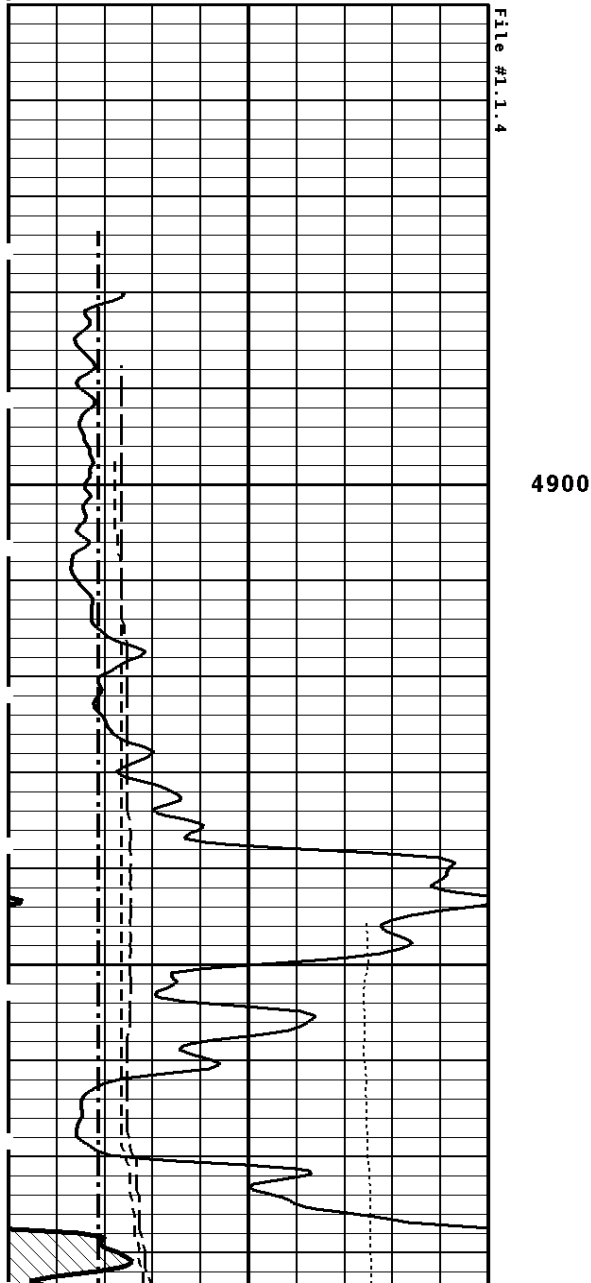
TT2 uSEC	
950	50

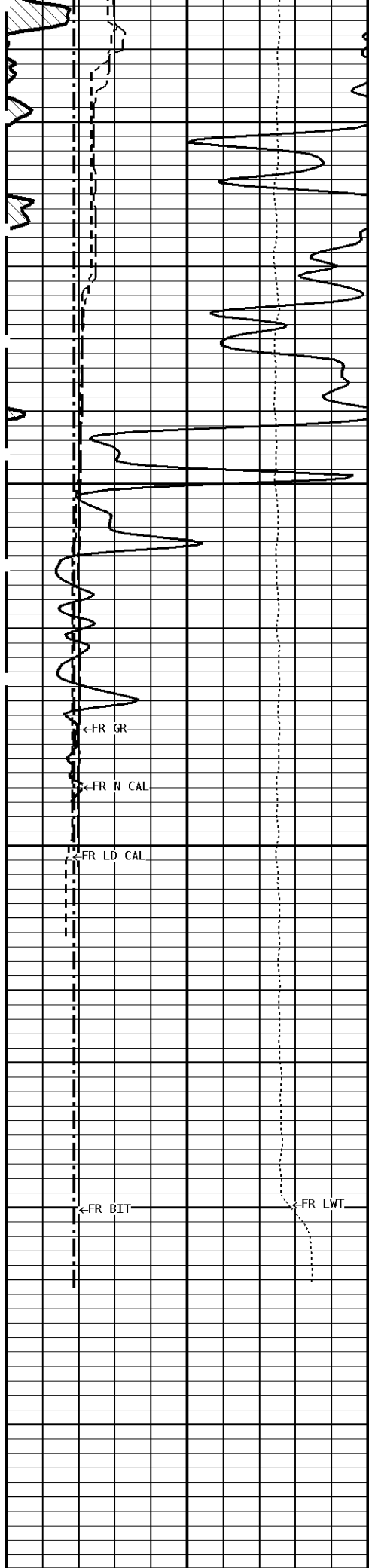
TT1 uSEC	
950	50

SONIC POROSITY Percent	
30	-10

COMPENSATED SONIC TRAVEL TIME uSEC/FT	
240	140
140	40

1:240 REPEAT SECTION



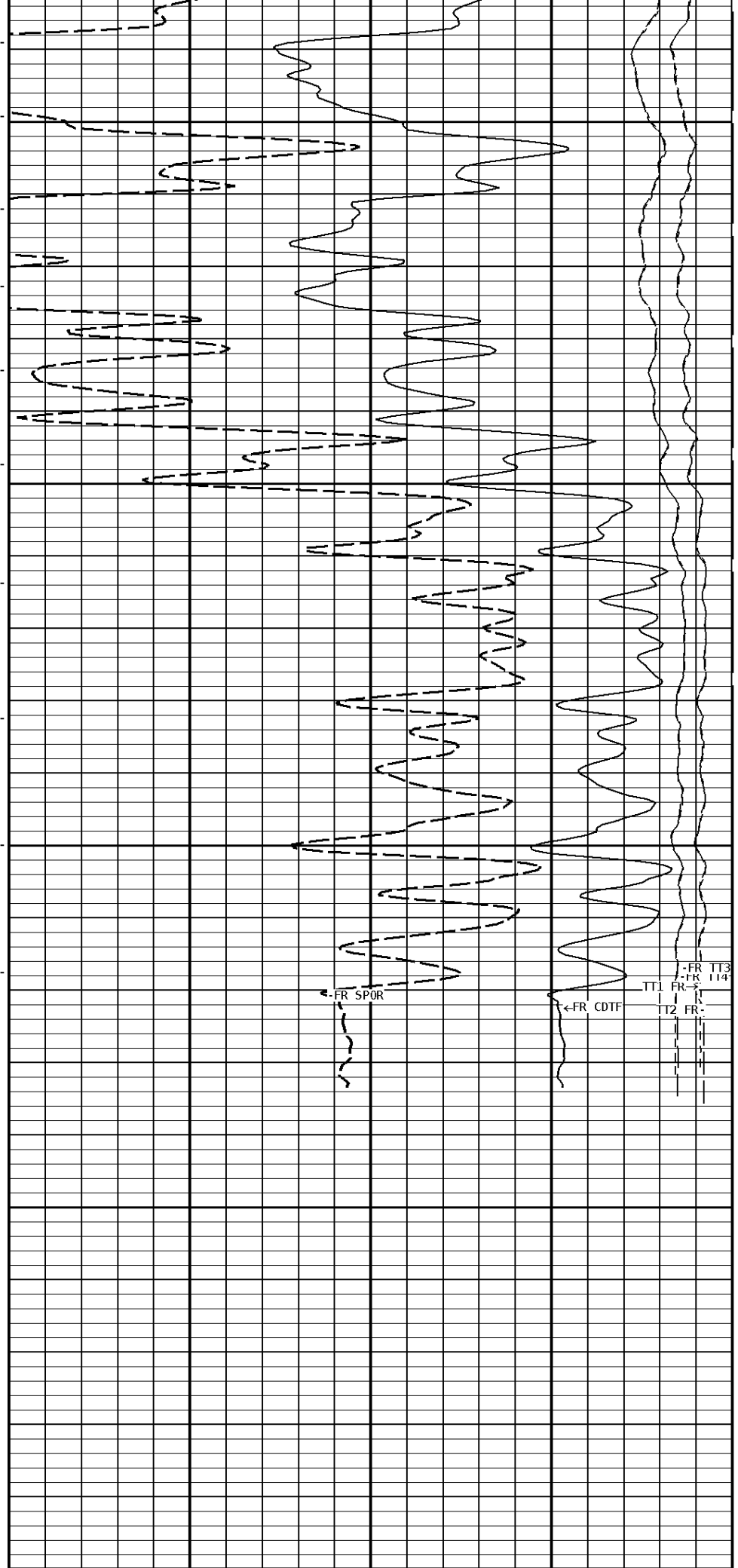


File #1.1.4

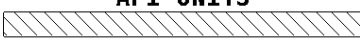
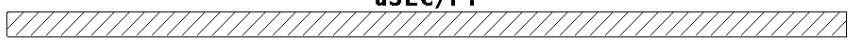
5000

5100

5150



1:240 REPEAT SECTION

GAMMA RAY API UNITS 150  300 0 150		COMPENSATED SONIC TRAVEL TIME uSEC/FT 240  140 140 40	
NEUTRON (Y) CALIPER INCHES (IN) 16 26 6 16		SONIC POROSITY Percent 30 -10	
DENSITY (X) CALIPER INCHES (IN) 16 26 6 16		TT1 uSEC 950 50	
BIT SIZE INCHES (IN) 6 16		TT2 uSEC 950 50	
TENSION LBS 10000 0		TT3 uSEC 950 50	
		TT4 uSEC 950 50	

*** Calibration Summary ***

Shop Calibration CNT-AA Performed : 10-Apr-2012 Time : 09:56 Sensor Suite : BHC NEUT ID : CNP-AA-024 Source ID : N-1046					
	Tank		Verification		Units
N/F	Measured	Calibrated	Jig		
Porosity	3.8829	3.6893	3.6889		%
	23.6	20.5	20.5		
Shop Calibration LDT-DF Performed : 26-OCT-2011 Time : 09:52 Sensor Suite : CALI-LTH ID : PDT-GA-466					
	Jig - Measured		Jig - Calibrated		Units
CL # 1	Ring#1 Ring#2	Ring#1 Ring#2			IN.
	8.7 12.0	6.0 12.0			
Shop Calibration CST-AD Performed : 15-AUG-2011 Time : 09:37 Sensor Suite : SON-ANA ID : CST-AD-078					
	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
T2R1	78.00	78.00			mV

