

Tucker
ENERGY SERVICES

MICRO LOG

Company VAL ENERGY, LLC
Well EASTMAN UNIT V 1-16 OWWO
Field FROG HOLLOW
County COWLEY
State KANSAS
Country USA
API No. 15-035-23740-00-01

File No : TUL-61371
Company : VAL ENERGY, LLC
Well : EASTMAN UNIT V 1-16 OWWO
Field : FROG HOLLOW
County : COWLEY
State : KANSAS
Country : USA
API No : 15-035-23740-00-01

Location :
2640' FSL & 2310' FEL
W/2 W/2 E2

LSD : Sect : 16 Twp : 32S Rge : 5E

Permanent Datum: GL Elevations: KB 1345.00 Ft CNT PIT
Drilling Measured From: KB DF 1344.00 LDT
Log Measured From: KB GL 1336.00 MST
Above Permanent Datum: 9.00 Ft

Date	11-28-2018		
Run Number	0		
Depth--Driller	3703.0	Ft	
Depth--Logger	3700.0	Ft	
First Reading	3676.0	Ft	
Last Reading	219.0	Ft	
Casing--Driller	219.0	Ft	
Casing--Logger	219.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	8.6		
Fluid Loss	12.8		
PH/Viscosity	10.0	60.0	
Sample Source	MEASURED		
RM@Measured Temp.	0.300	@ 83 F	
RMF@Measured Temp	0.260	@ 83 F	
RMC@Measured Temp.	0.350	@ 83 F	
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.240	@ 105 F	
Time Circulation Stopped	11-27-2018 11:00 pm		
Max Recorded Temp.	105	F	
Equipment/Base	TRK-126	TULSA	
Recorded By	B.BAILEY		
Witnessed By	J.GUICK		

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)	Top (Ft)
7.875	3703.00	8.625	17.00	219.00	0.00

Run Number	0	
Date	11-28-2018	
Date/Time On Bottom	11-28-2018 2:26 am	
Depth to Fluid	0.0 Ft	
Salinity	0.000	
RMF@BHT	0.200 @ 105 F	
RMC@BHT	0.280 @ 105 F	

Run Number 0

Comments

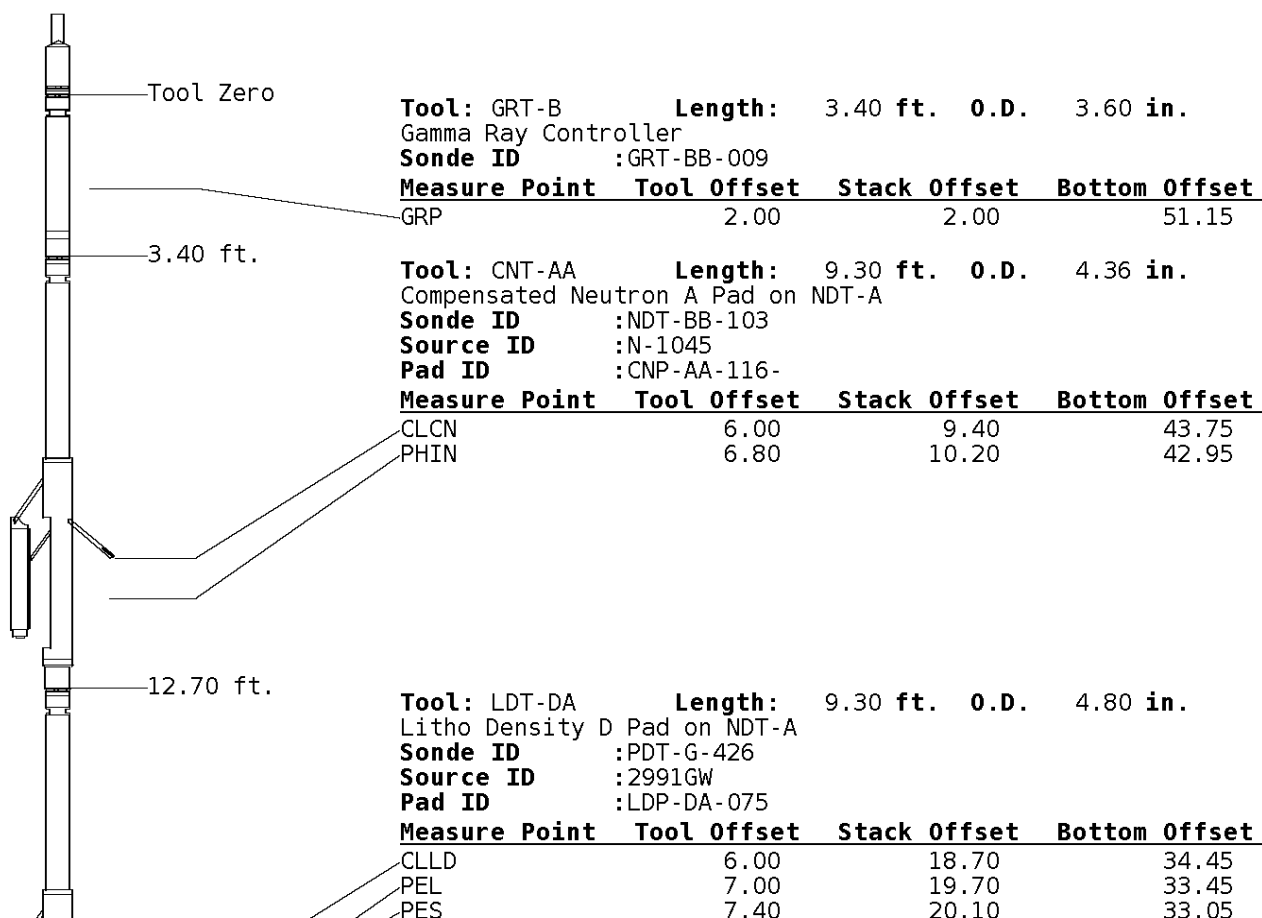
ALL PRESENTATION PER CUSTOMER REQUEST
 GRT,CNT,LDT,MLT,PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR & BOREHOLE VOLUME CALCULATED USING 5.5 PRODUCTION CASING
 PHIN IS CALIPER CORRECTED
 DETAIL IS PRESENTED FROM TD TO SCG

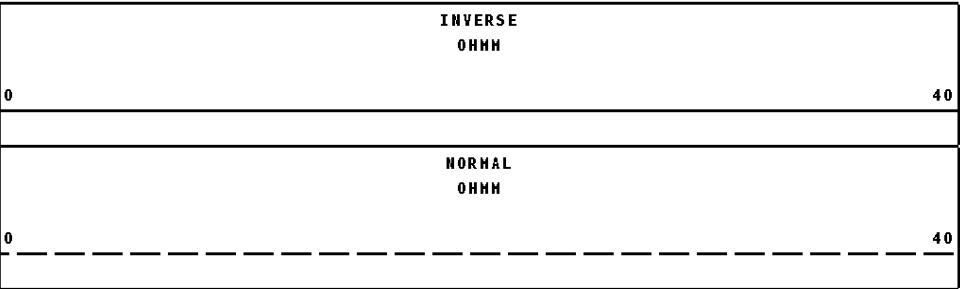
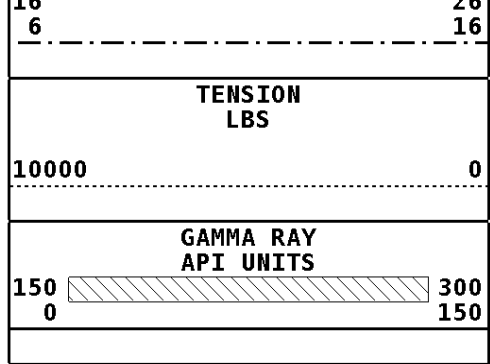
GRT; GRP
 CNT; PHIN, CLCNIN
 LDT; PORL, LCORN, PECLN, LDENN, CLLDIN
 MLT; NOR_RF, INV_RF, MSCLPIN.
 PIT; ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS;
 K.WARREN

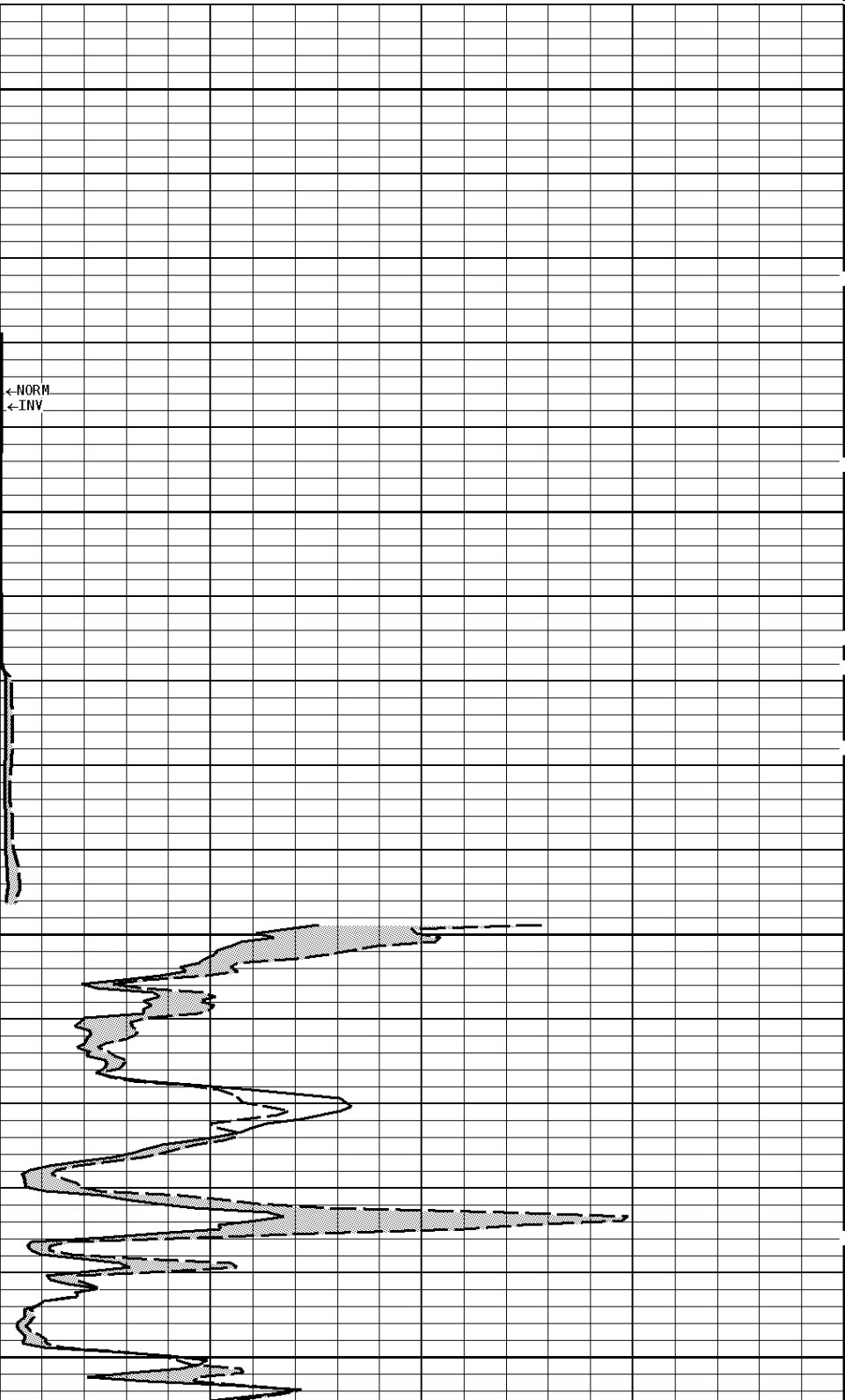
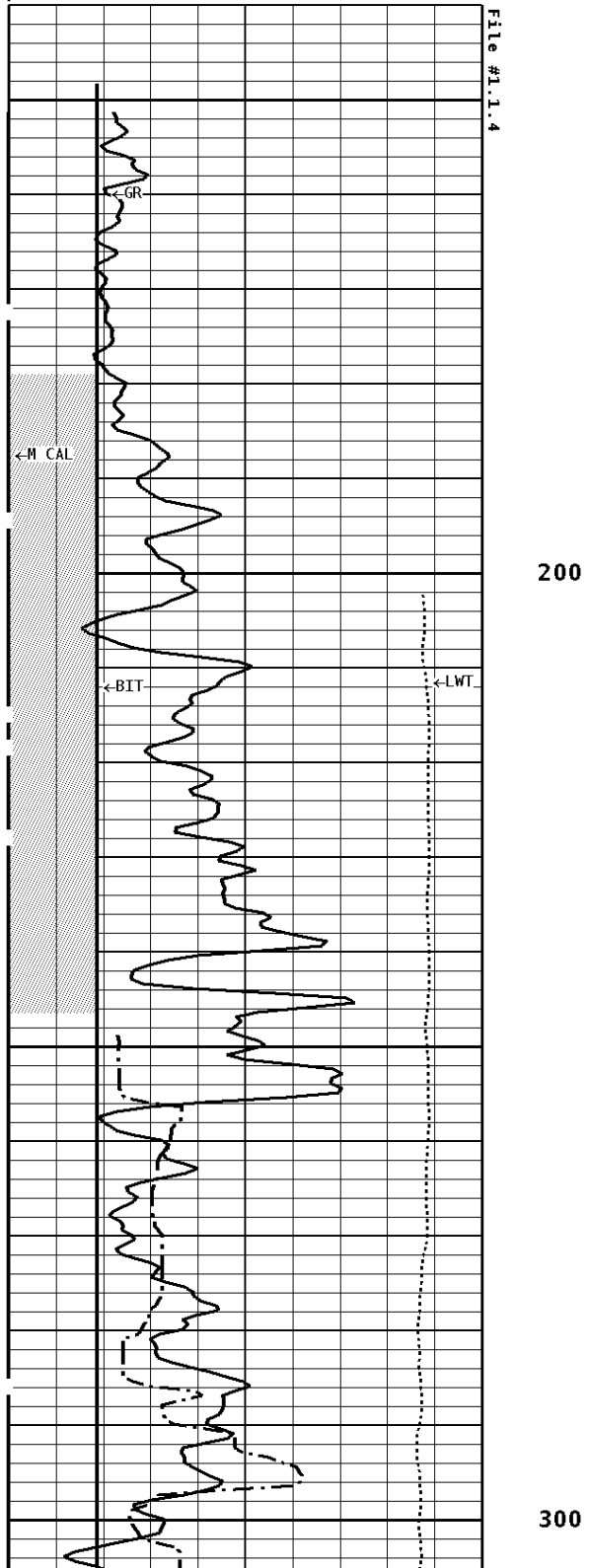
Tool String Schematic

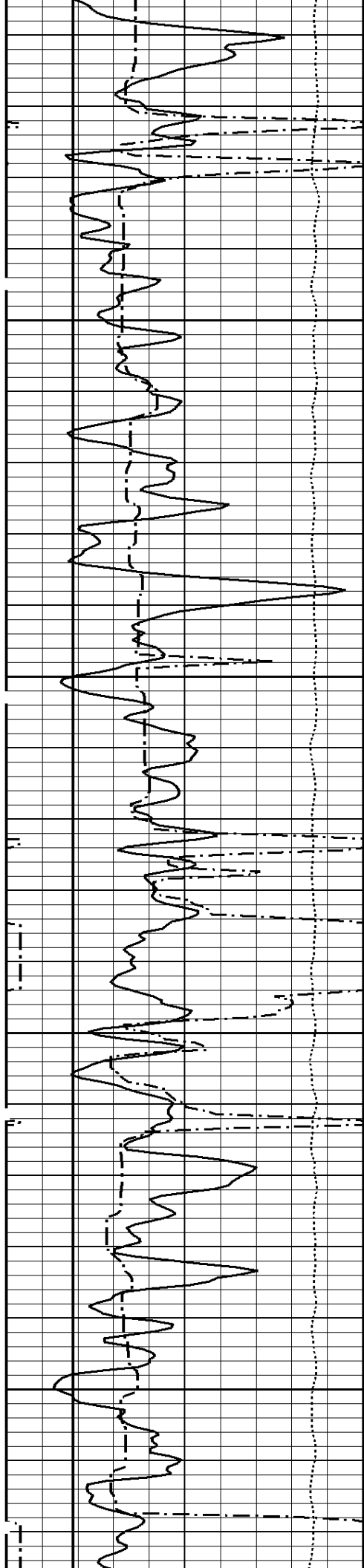
Total Tool Length - 53.15 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 943.00 lbs.





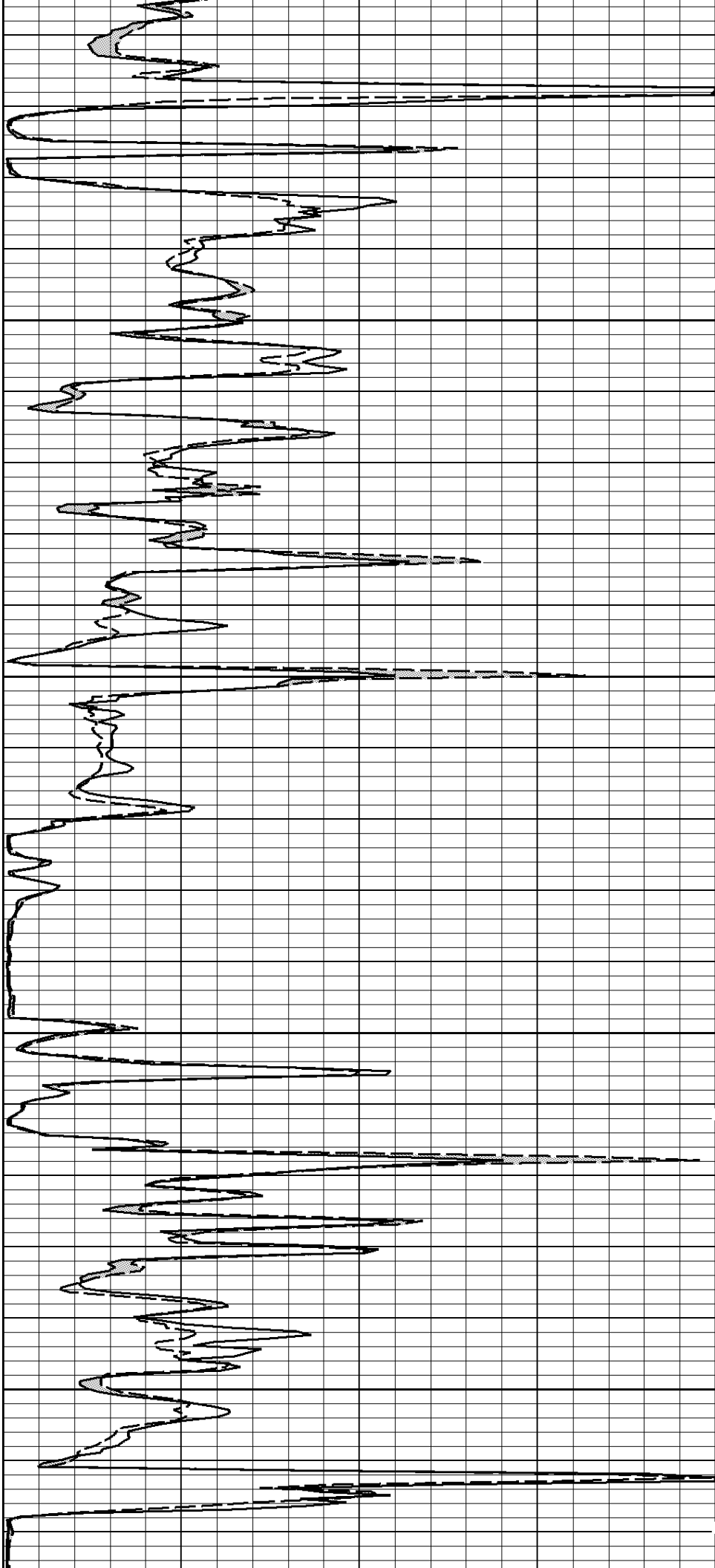
1:240 MAIN SECTION

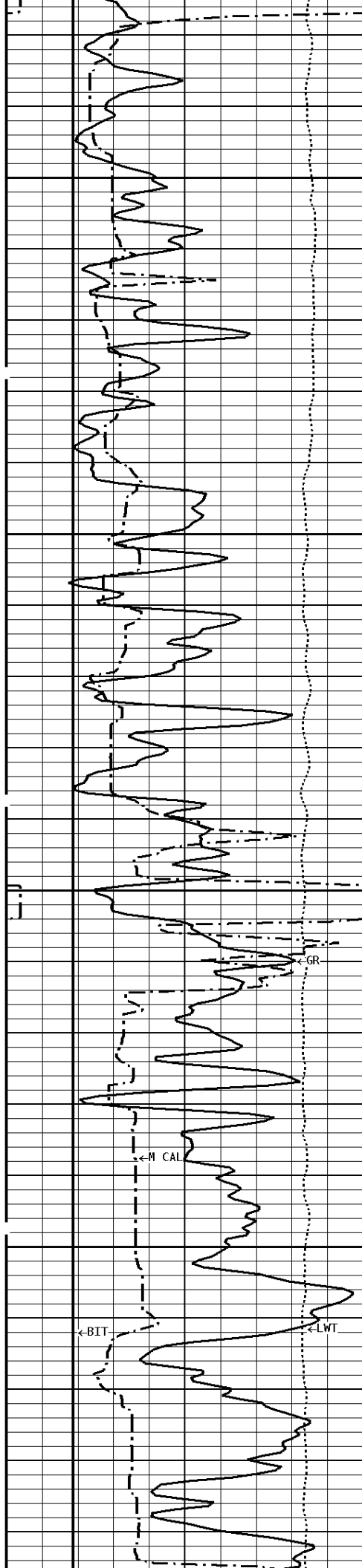




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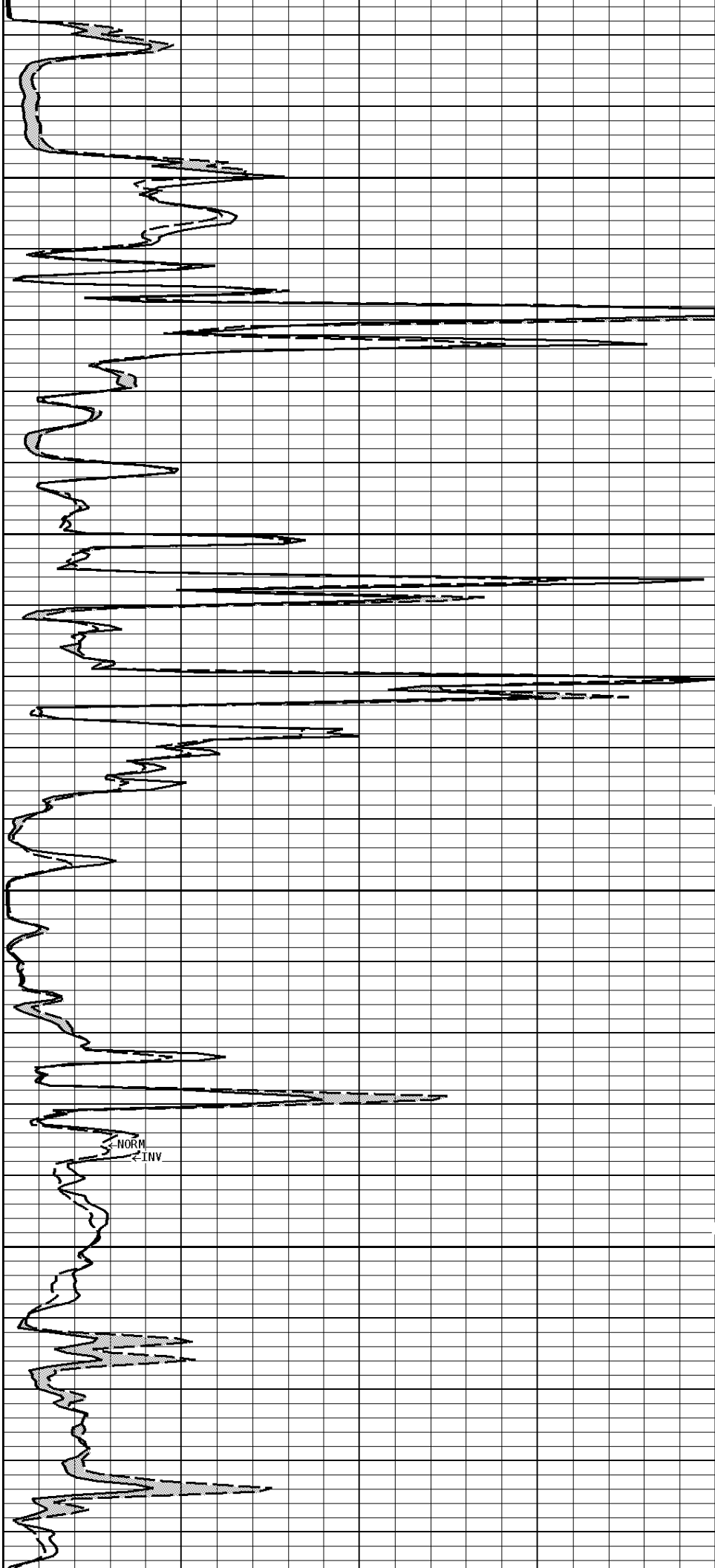
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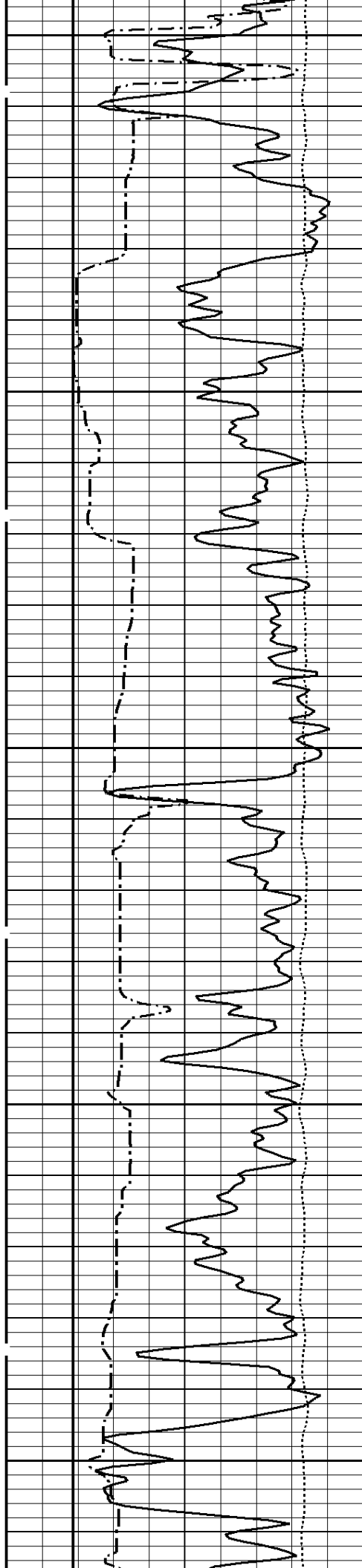




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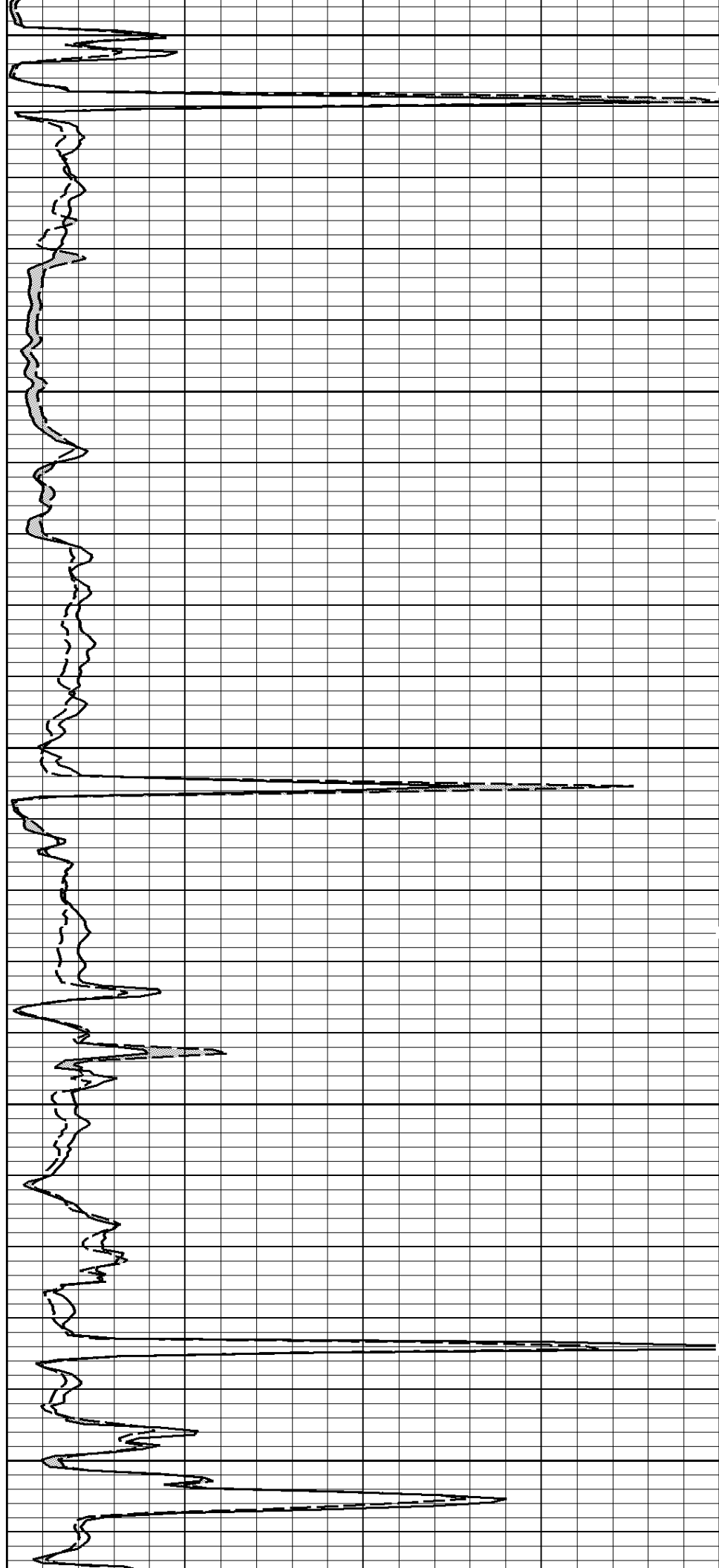
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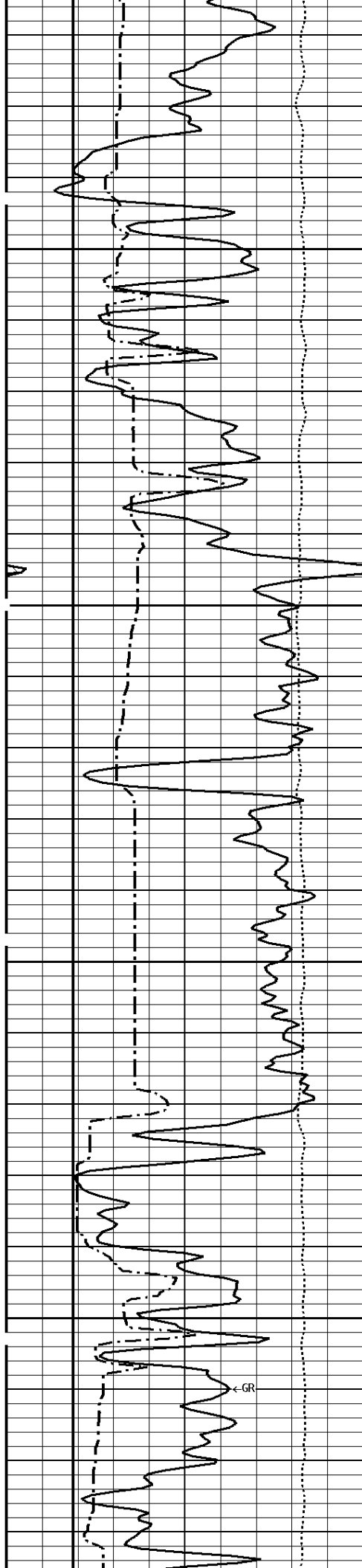




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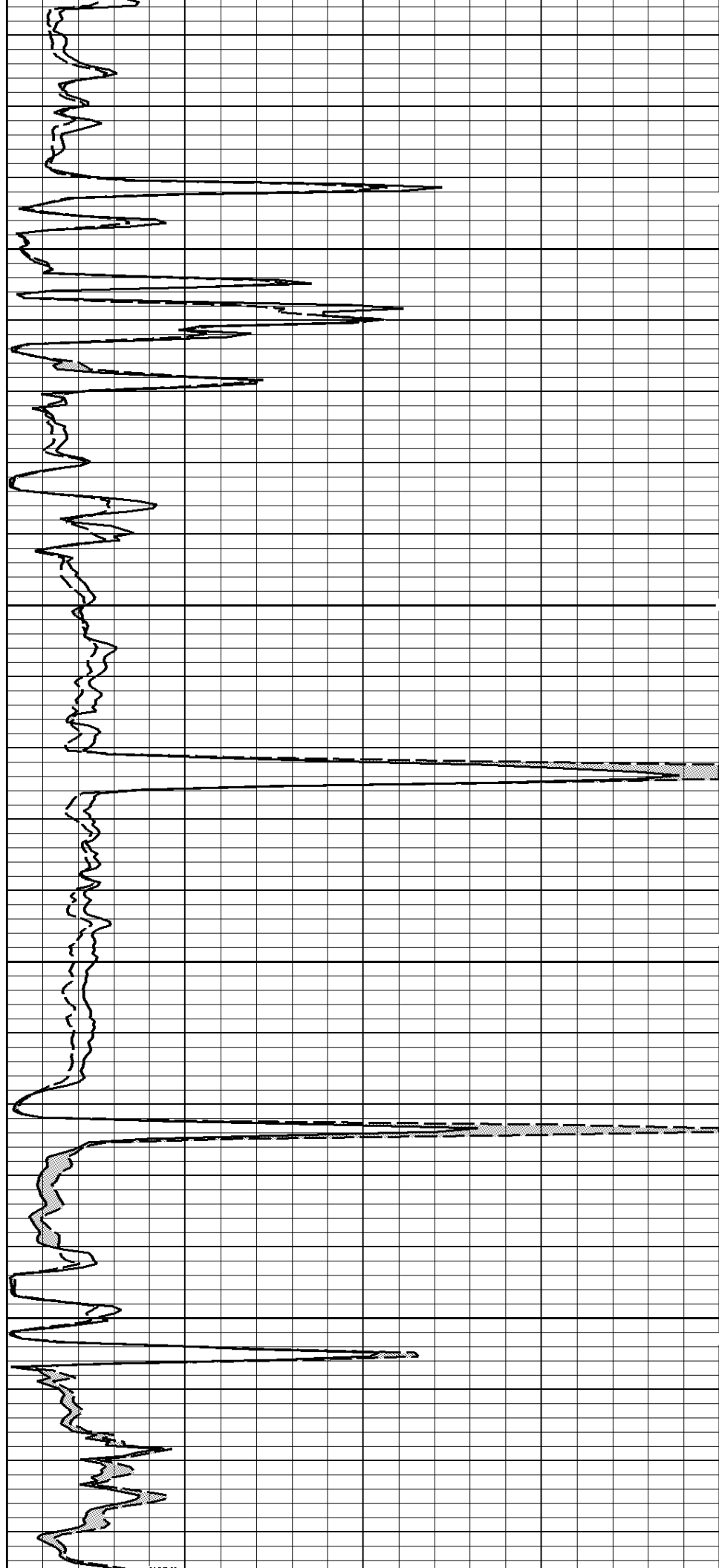
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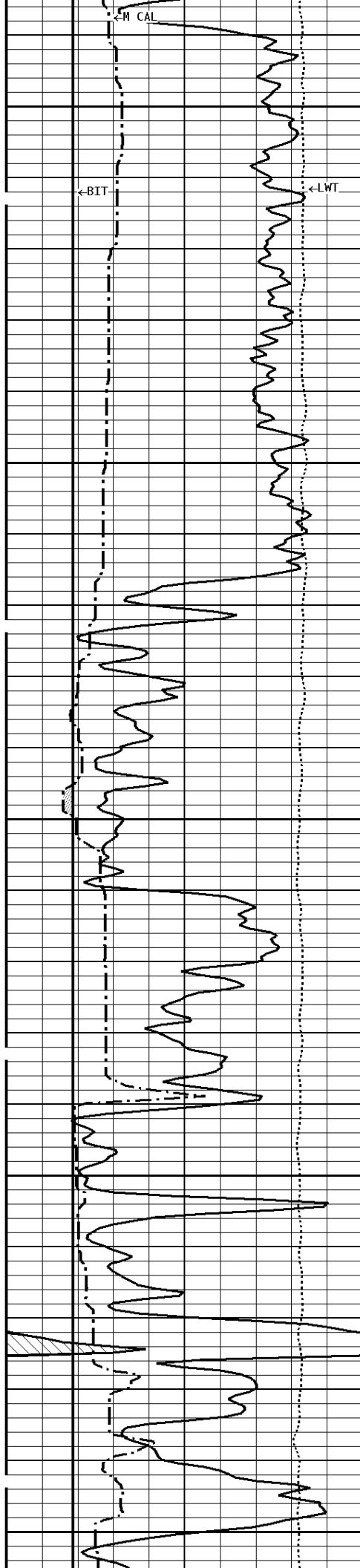




1000

1100

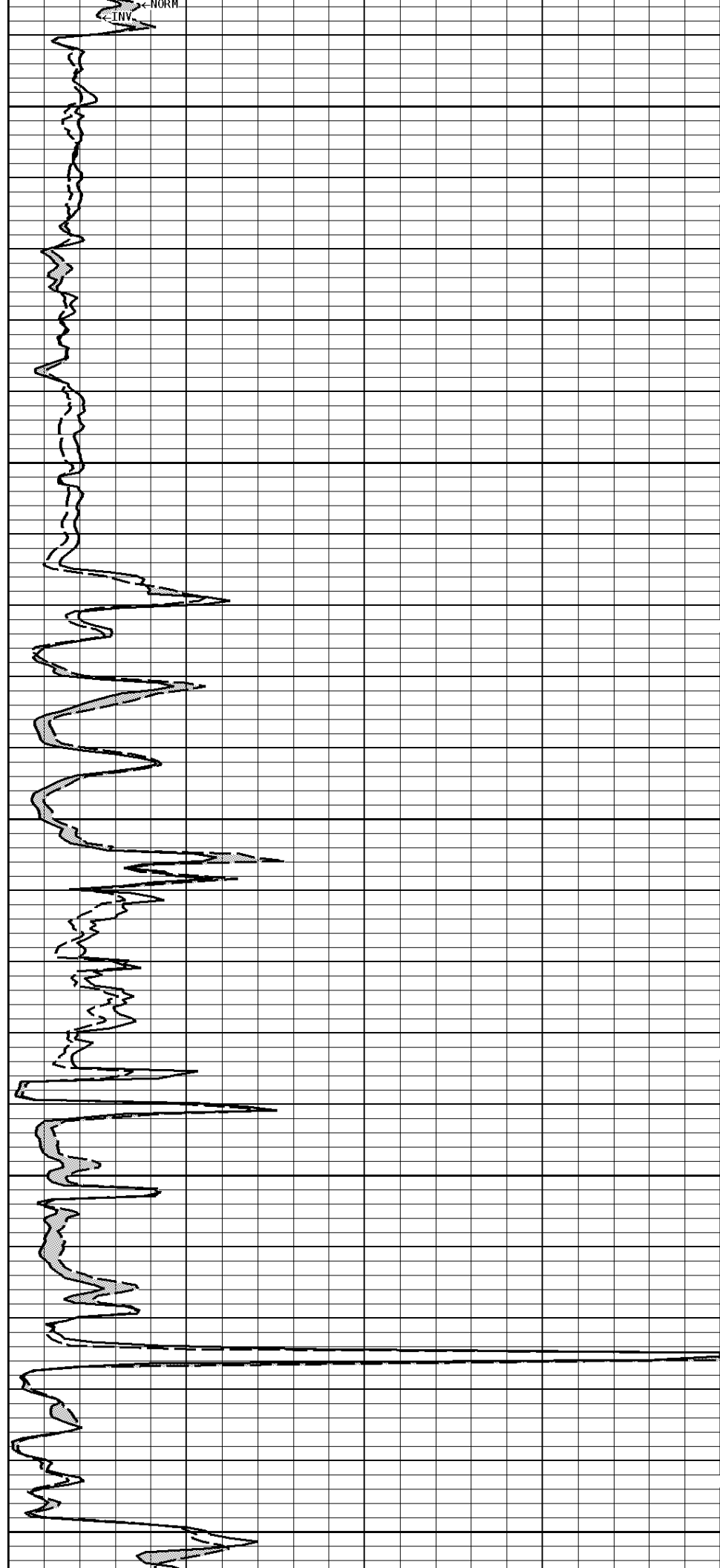


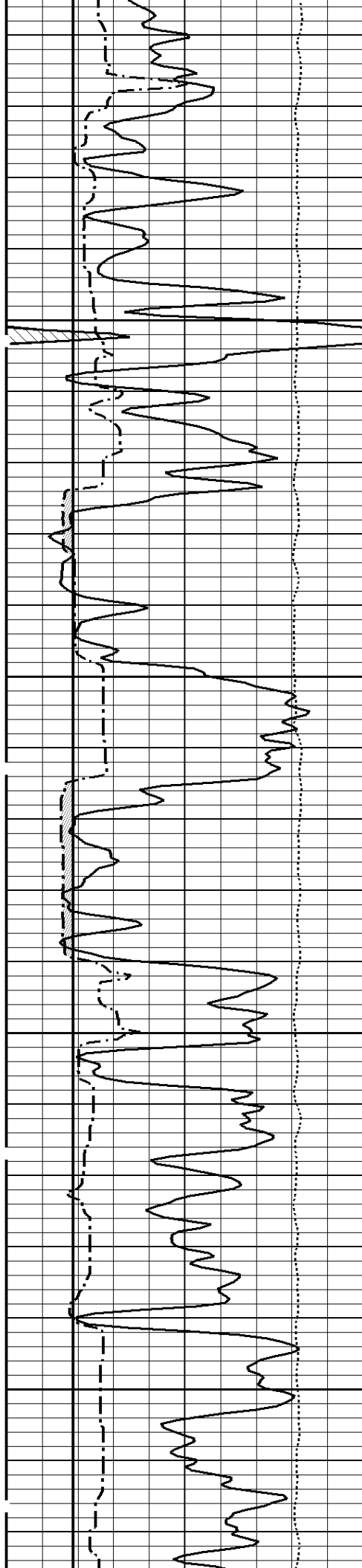


1200

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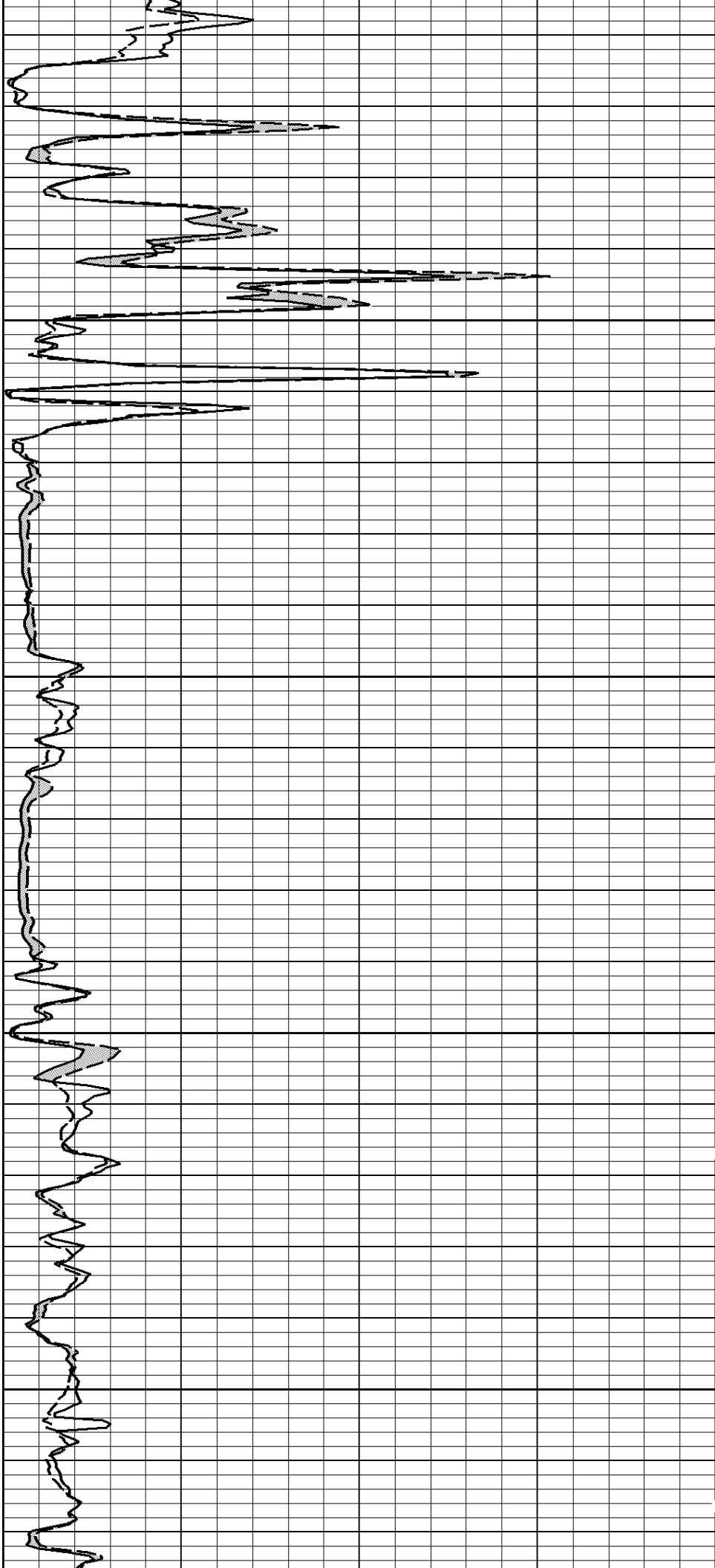
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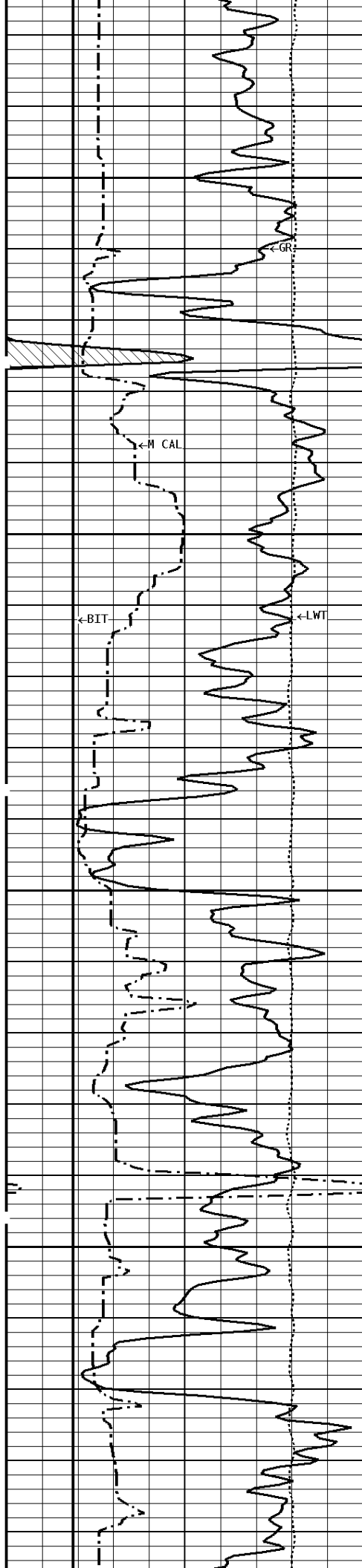




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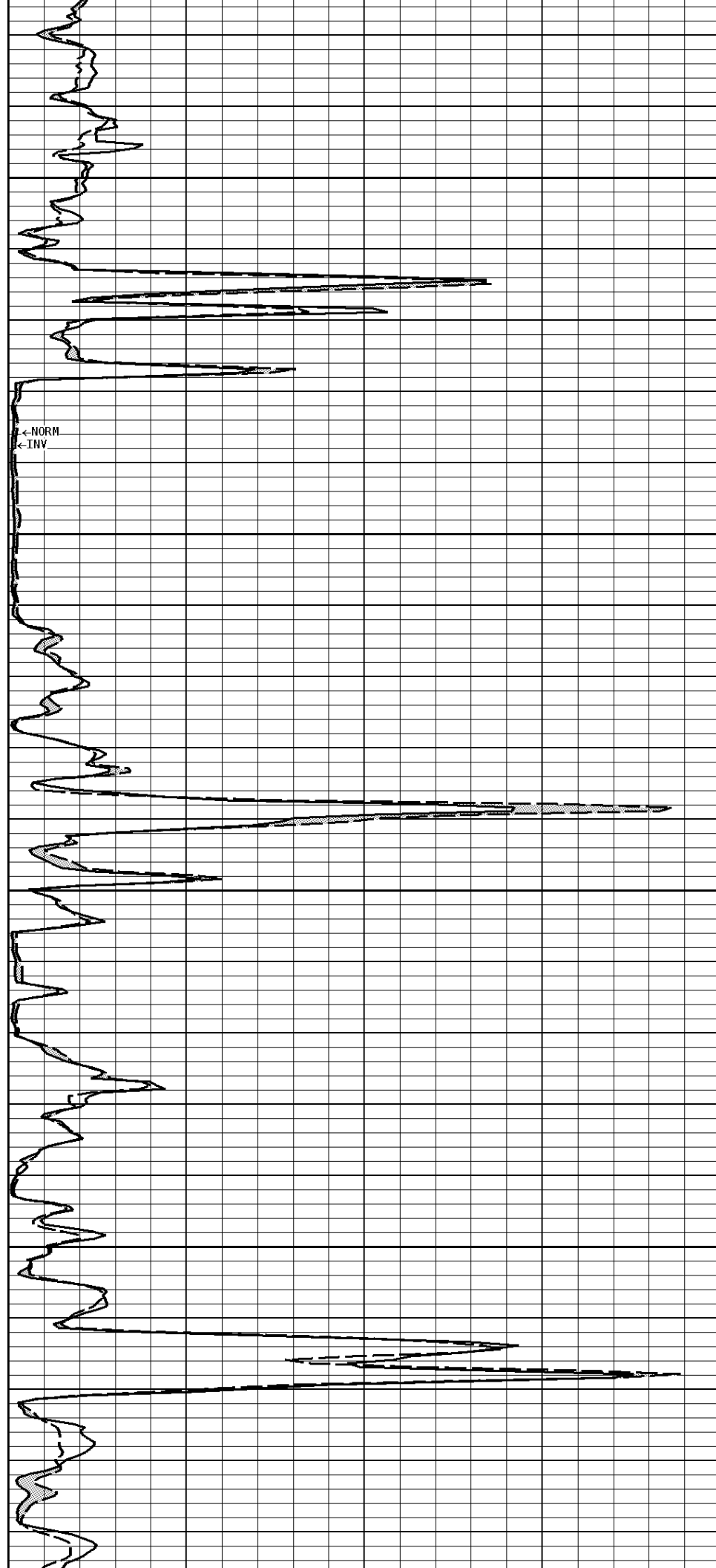
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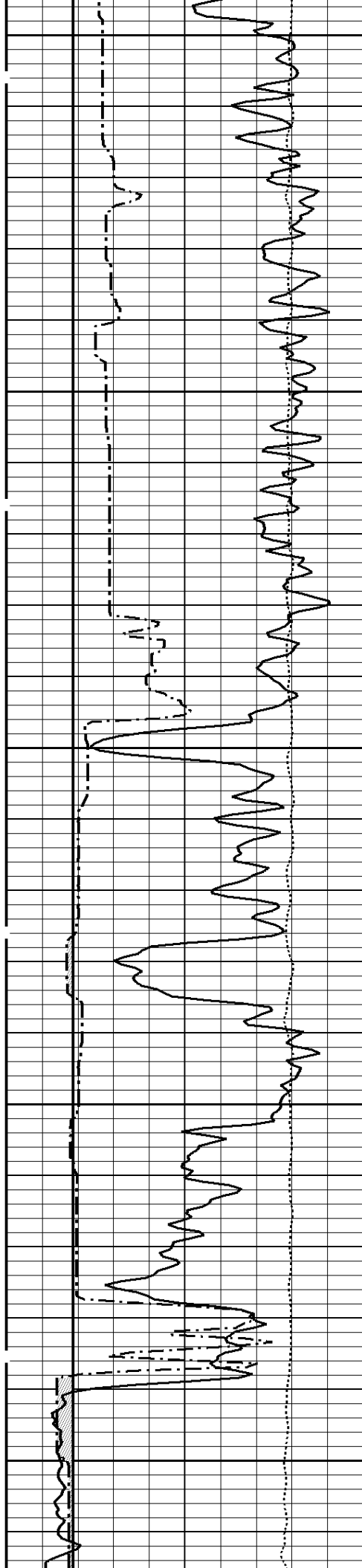




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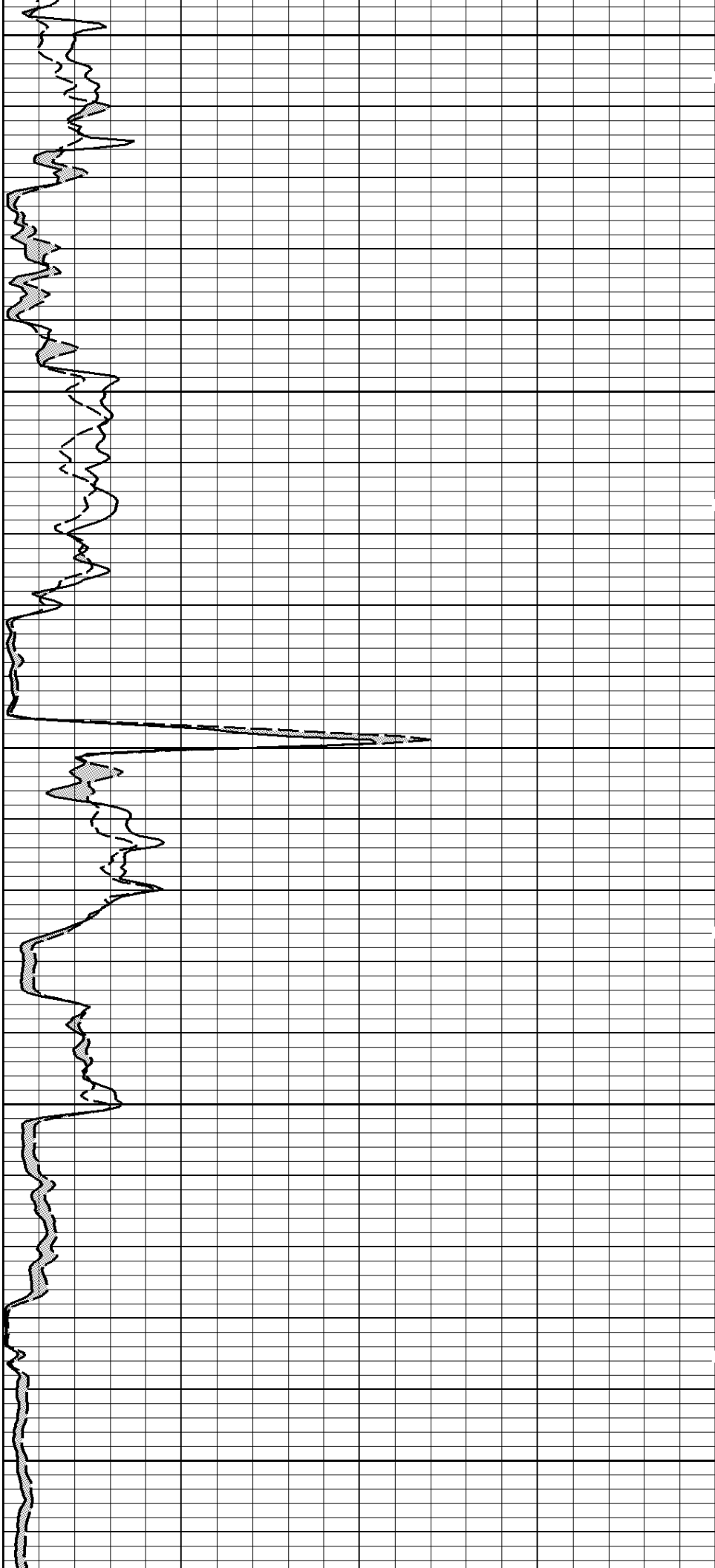
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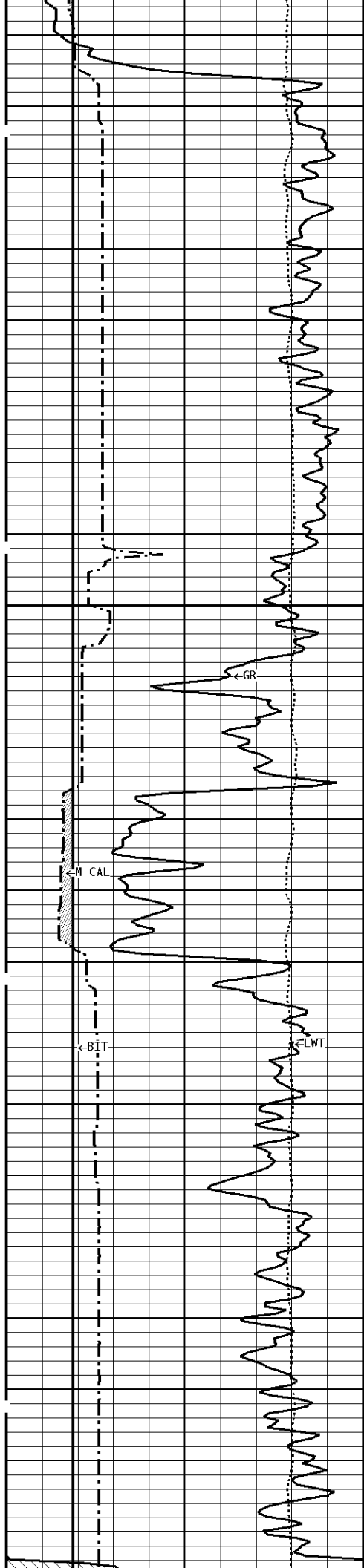




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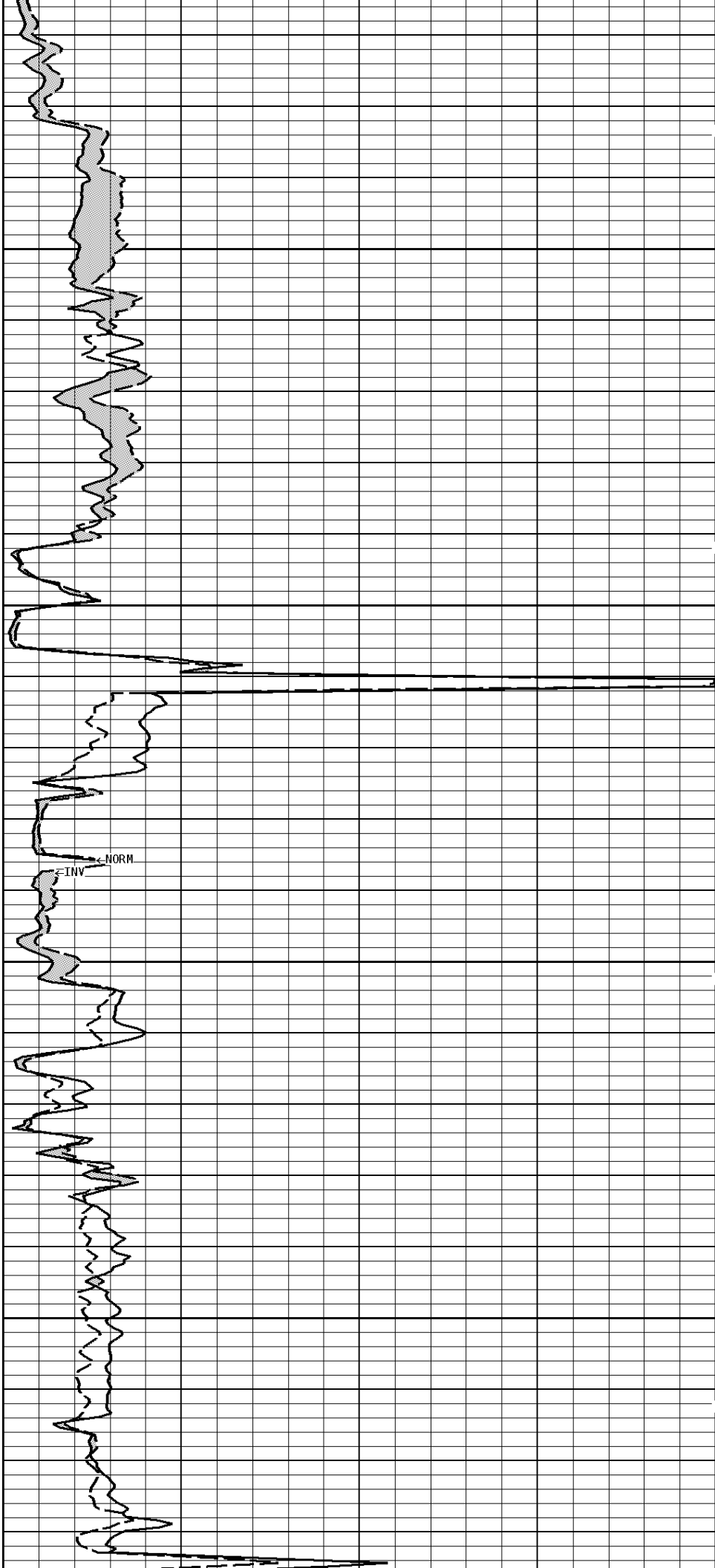
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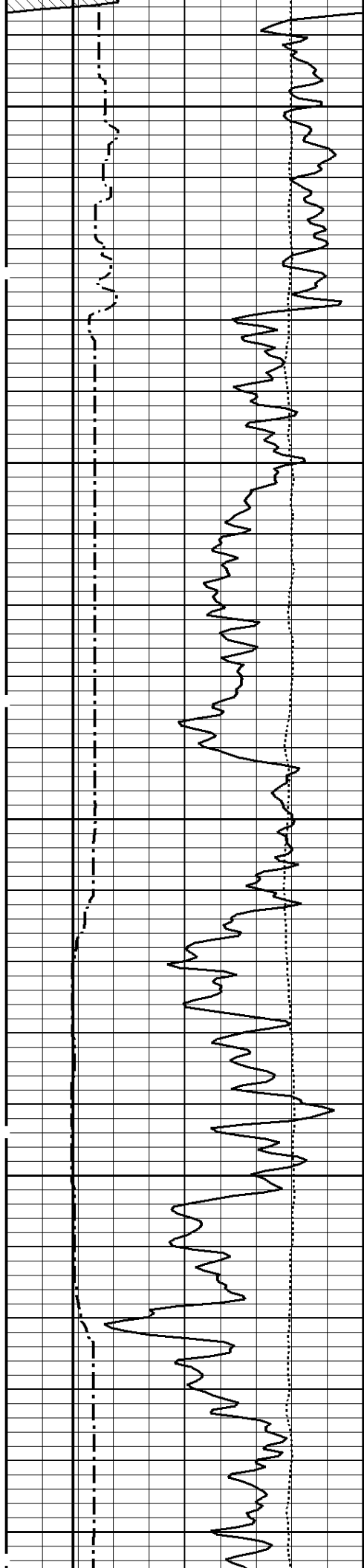




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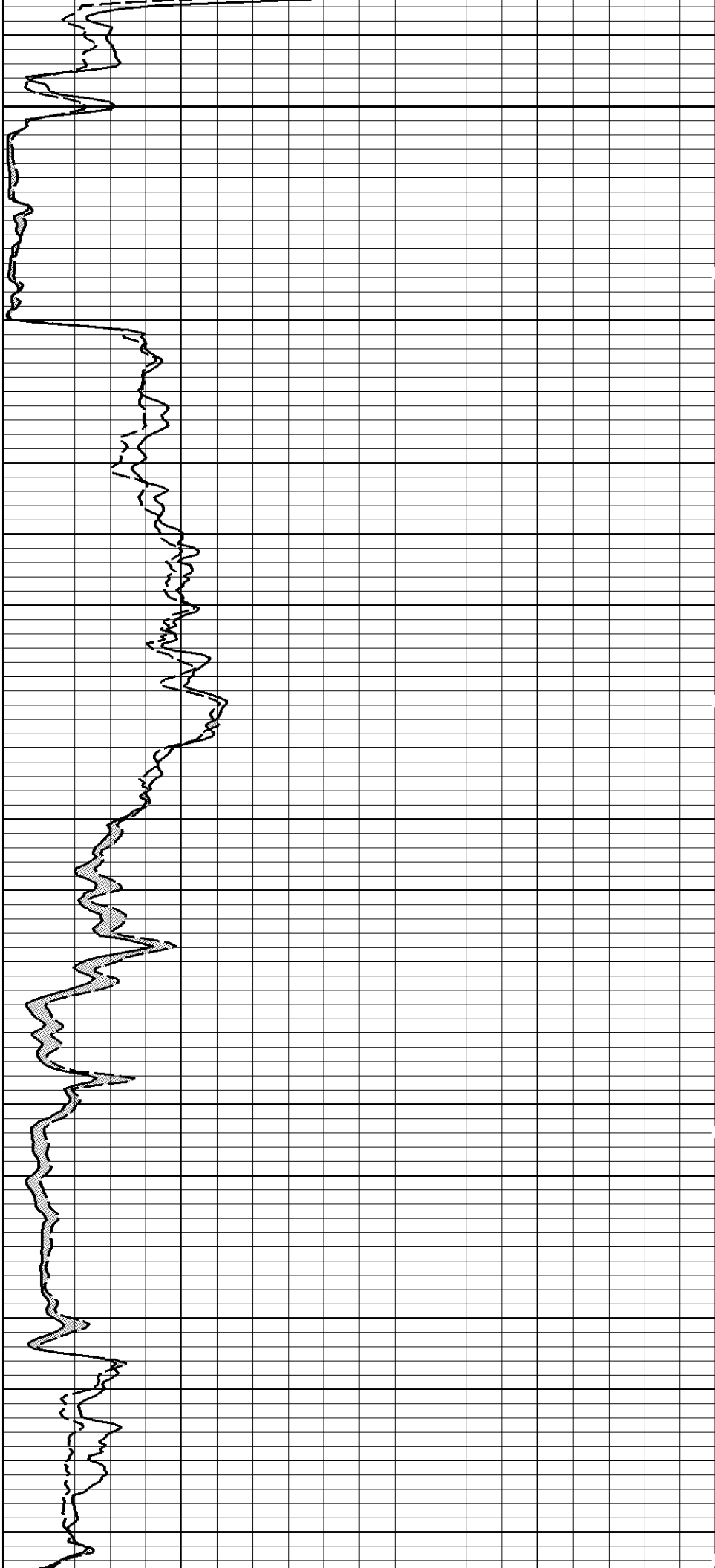


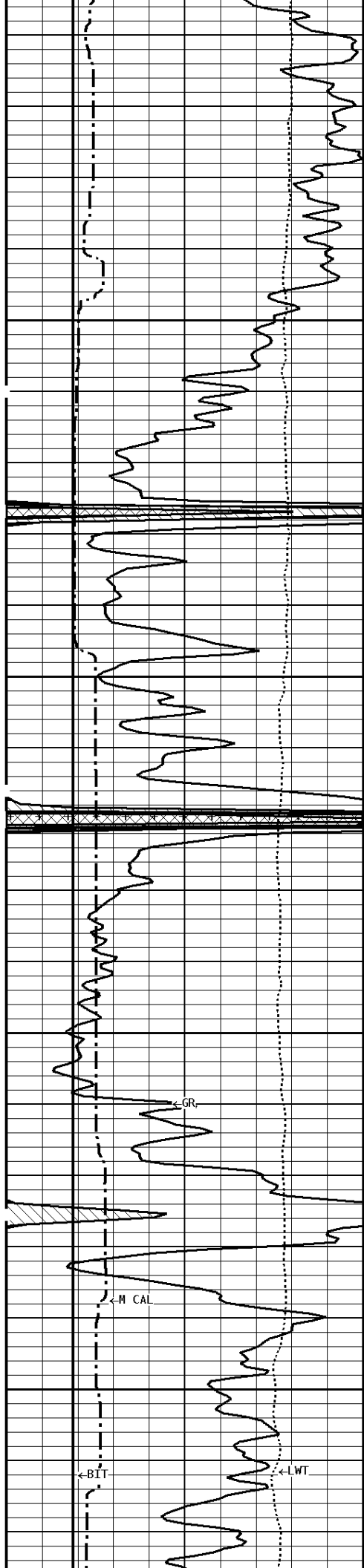


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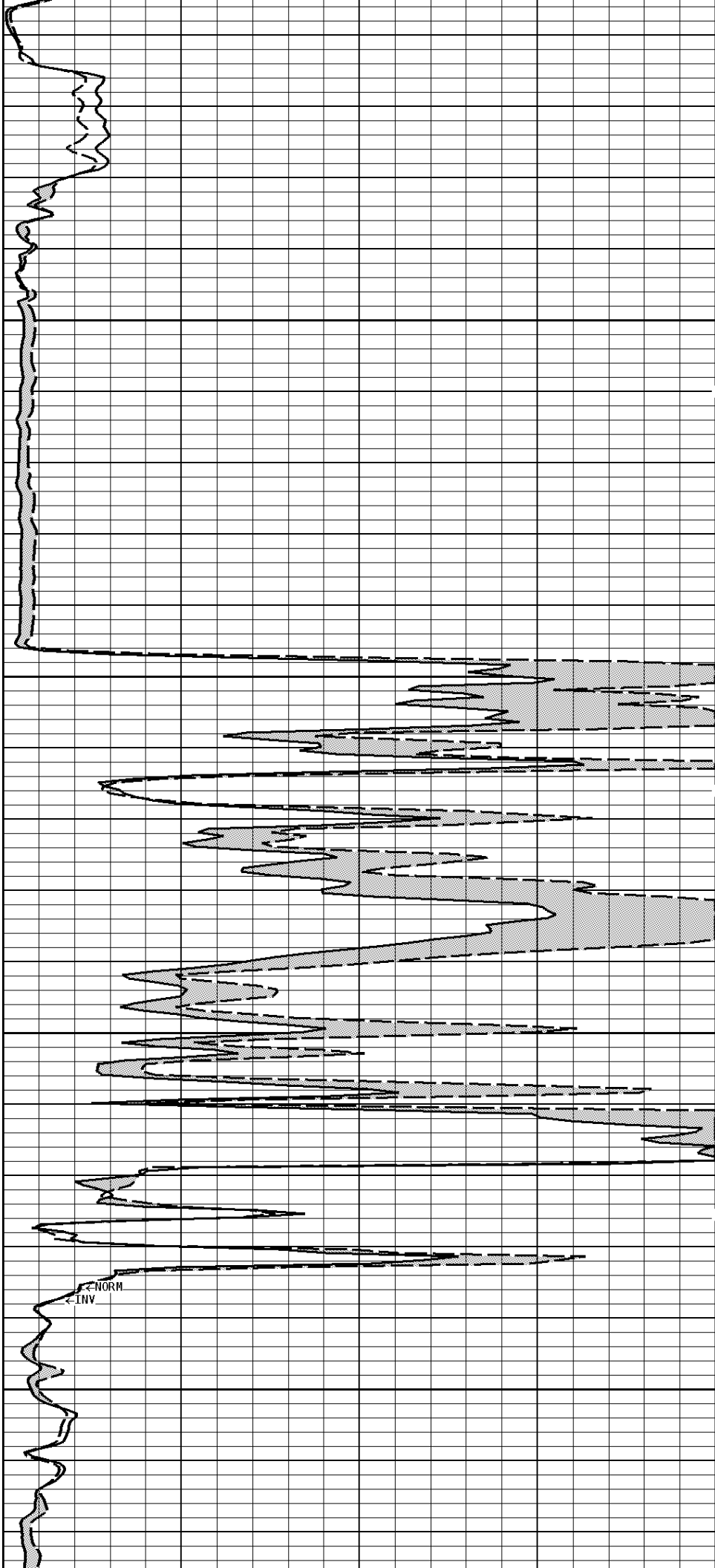
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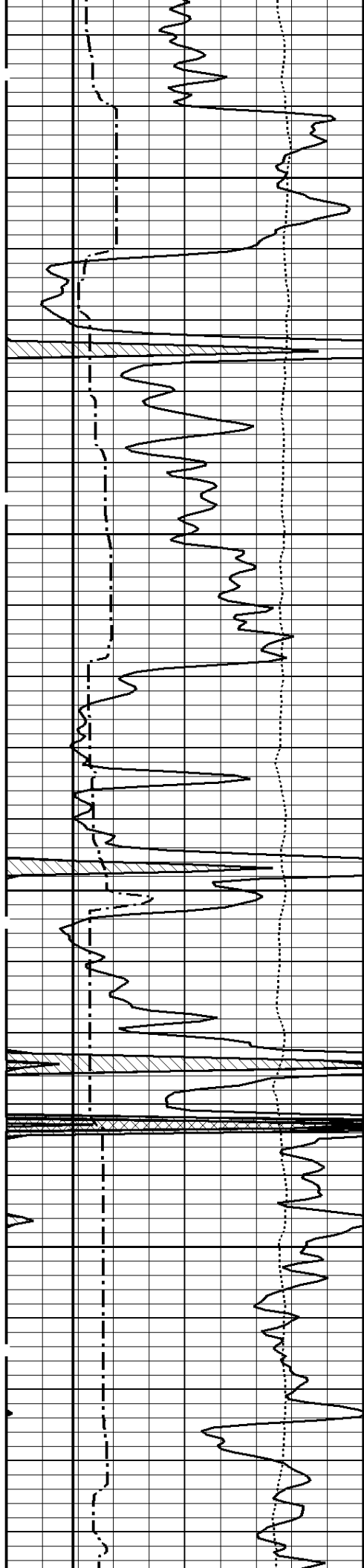




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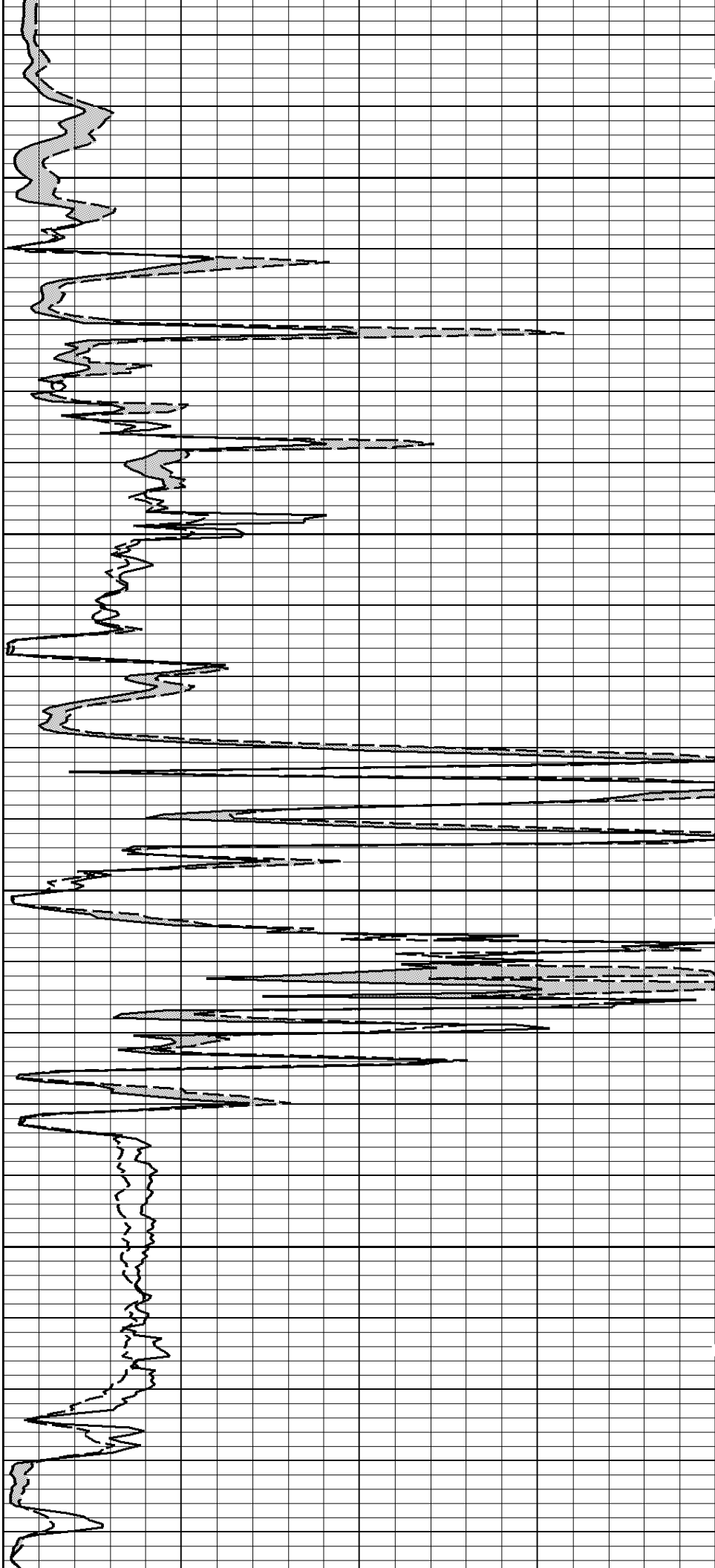
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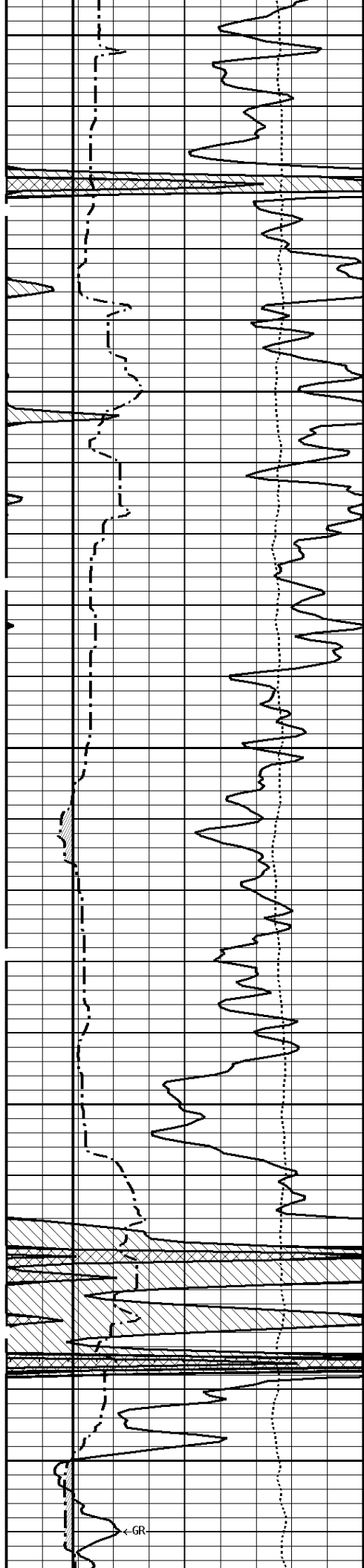




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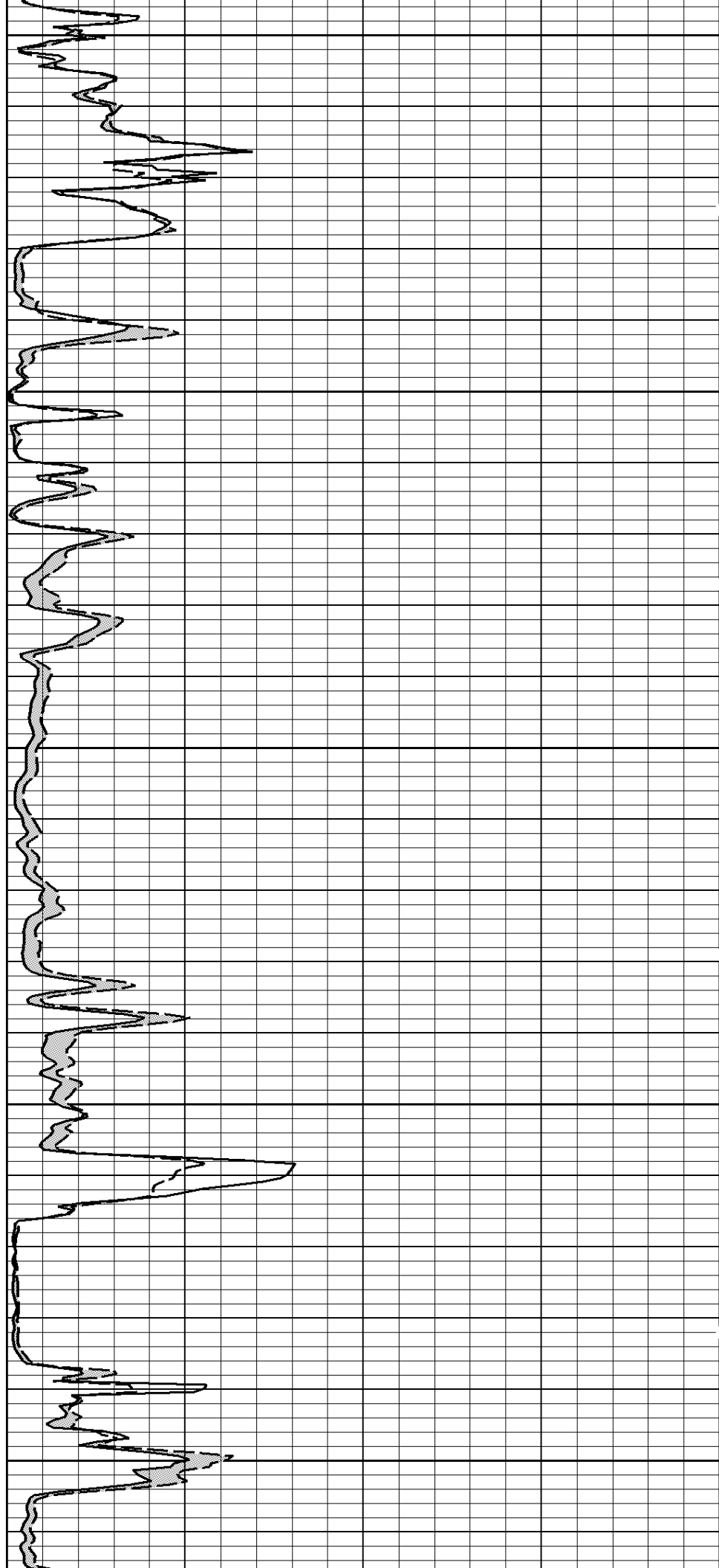
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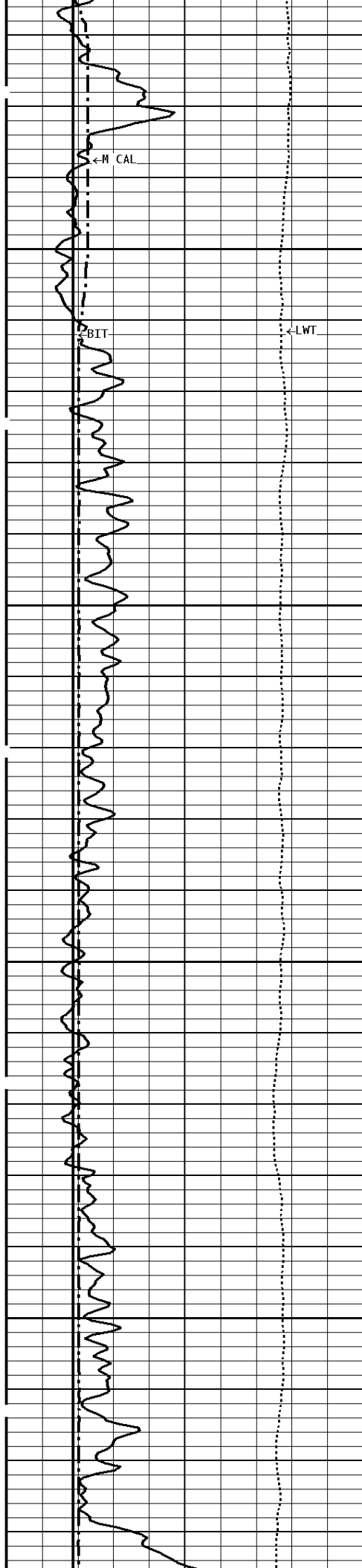




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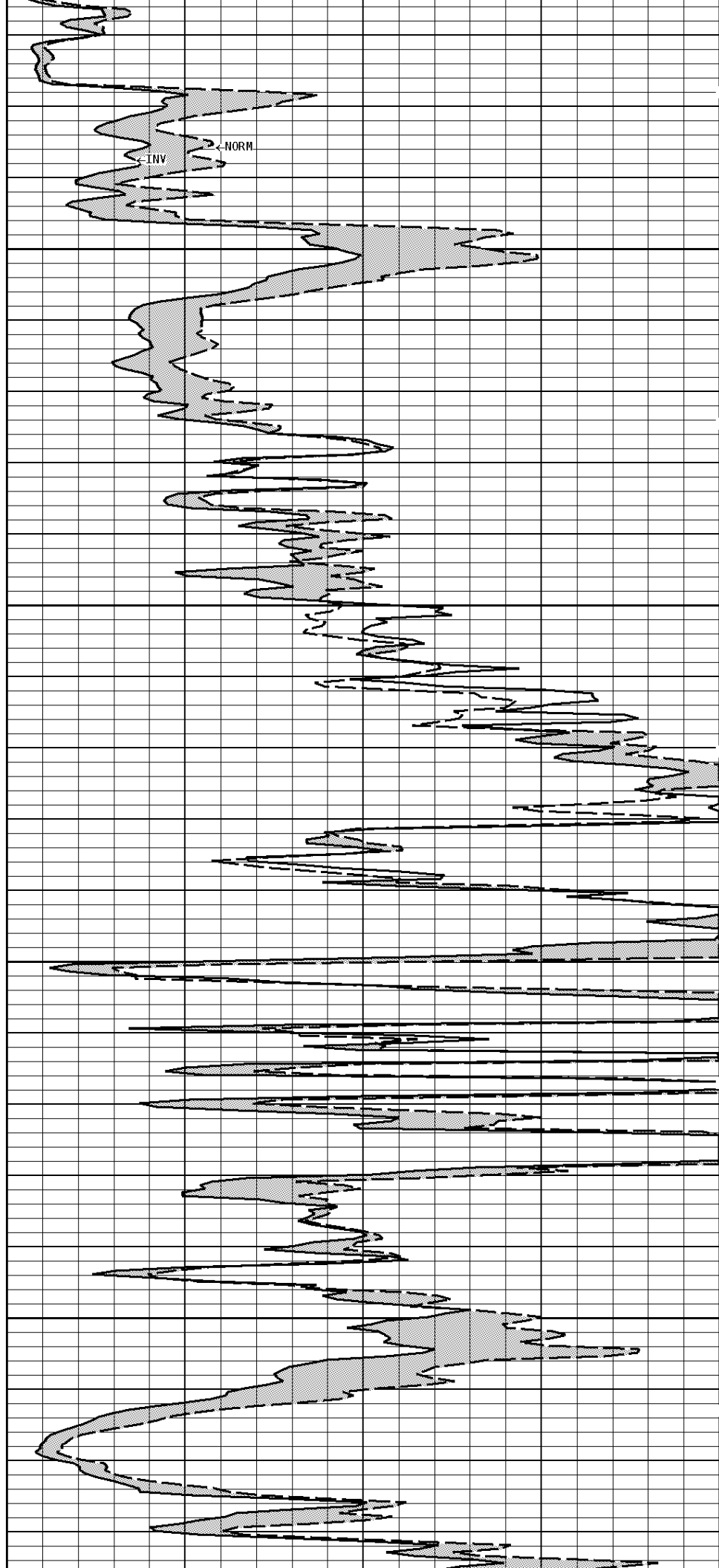
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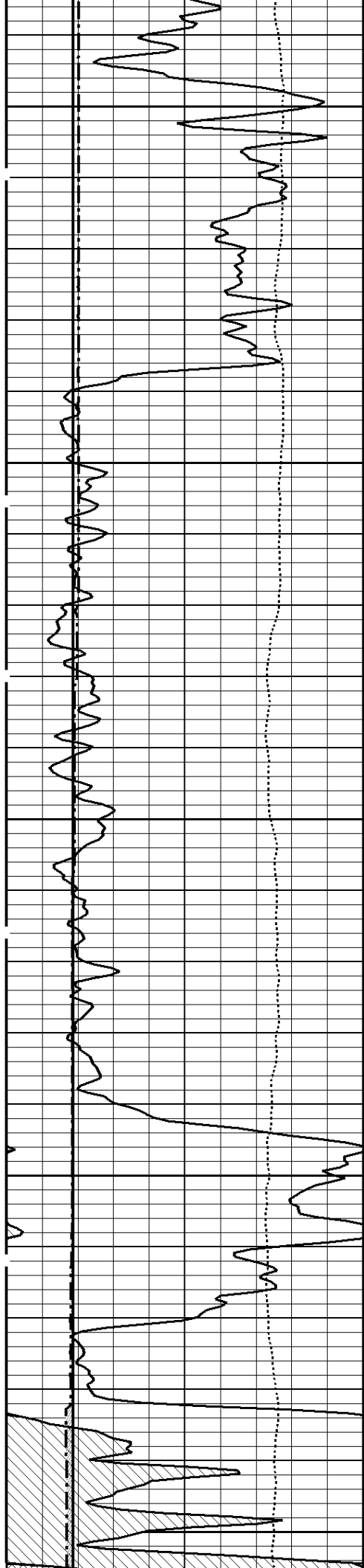




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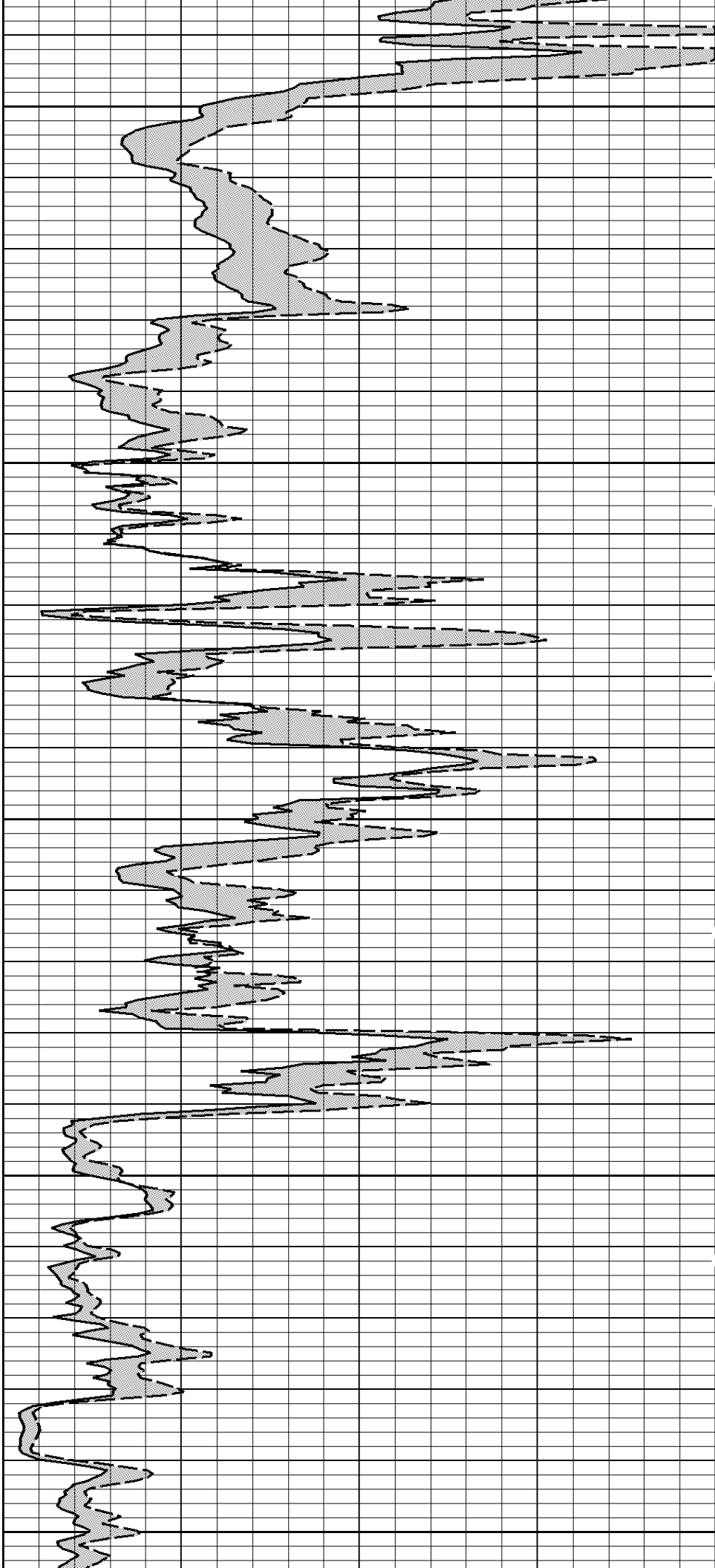


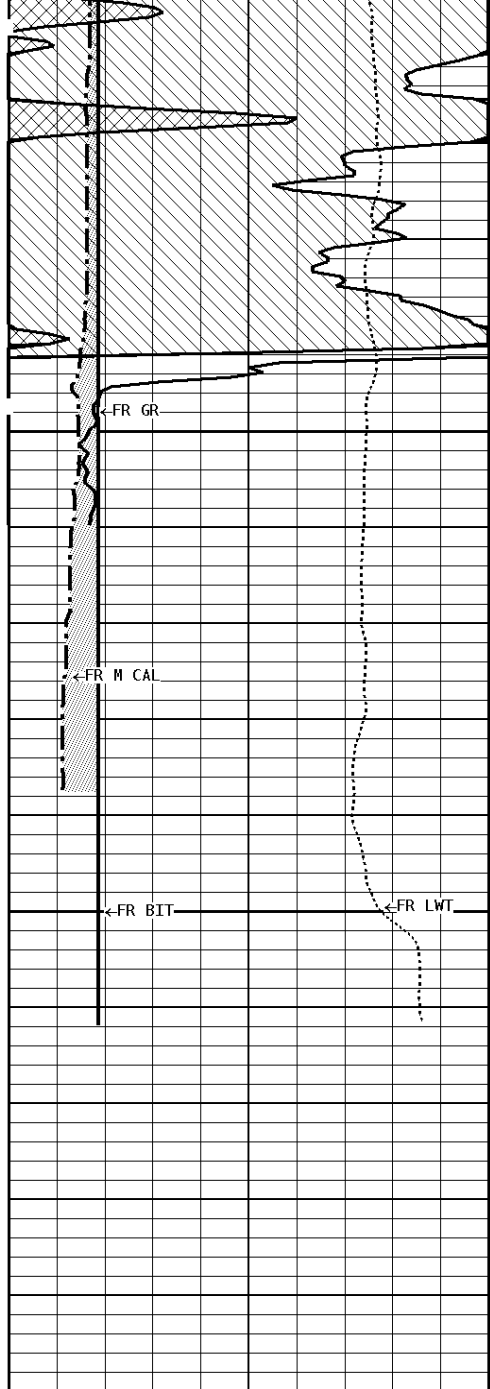


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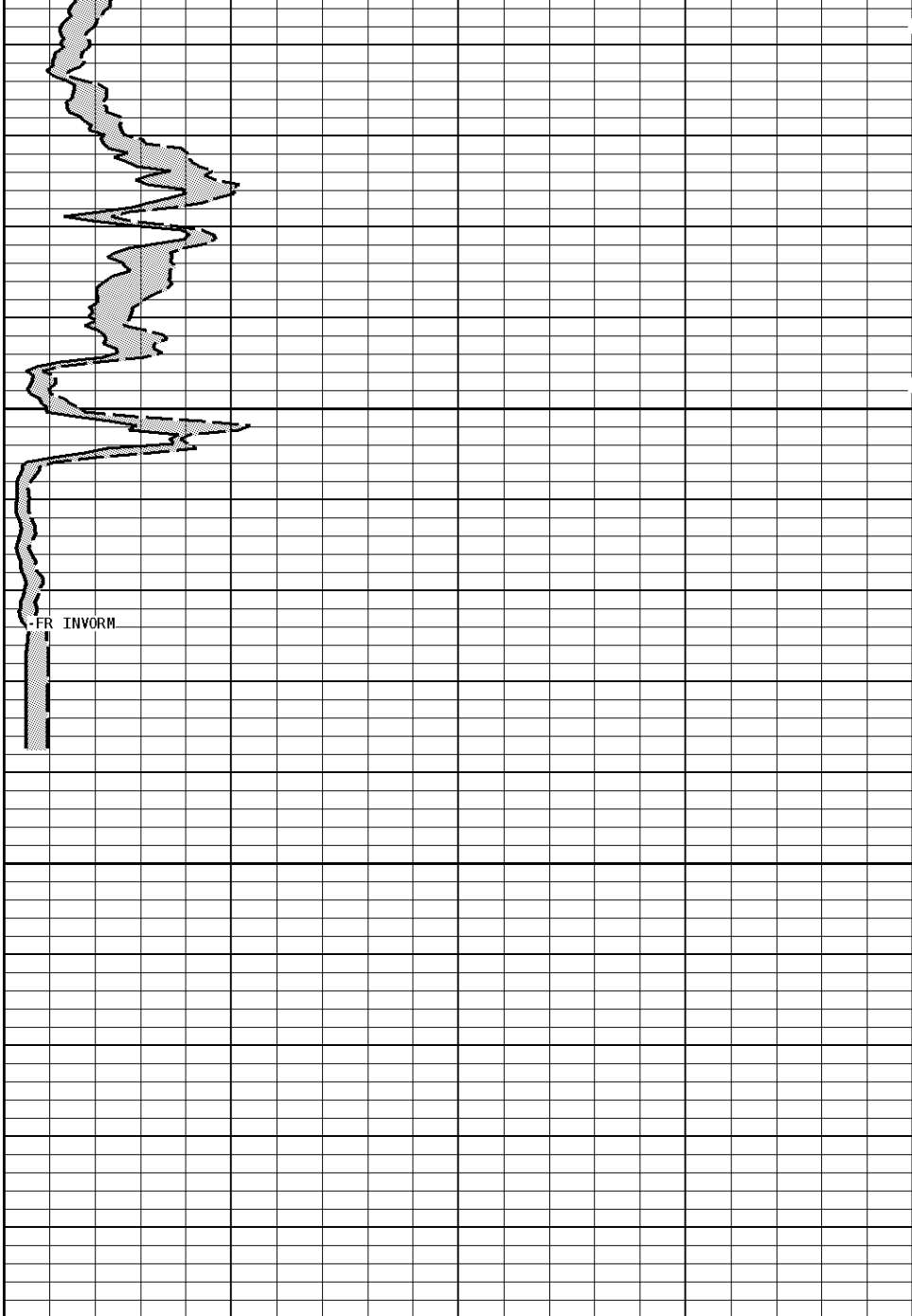
3600





File #1.1.4

3700



1:240 MAIN SECTION

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

NORMAL OHMM	
0	40
INVERSE OHMM	
0	40

*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet			
Drill Bit Size	_____	7.875	in
MSTNG Normal Correction	_____	0.00	ohmm
MSTNG Inverse Correction	_____	0.00	ohmm

*** Calibration Summary ***

Shop Calibration GRT-B						
Performed : 01-OCT-2018			Time : 10:33			
Sensor Suite : GR-GR5			ID : GRT-BB-009			
	Measured	Units	Calibrated	Units		
	Background	Jig	Jig			
GR	58	336	CPS	160	GRAPI	

Shop Calibration MST-DA						
Performed : 21-NOV-2018			Time : 12:15			
Sensor Suite : CALI-MSN			ID : MST-DA-28			
	Jig - Measured		Jig - Calibrated		Units	
	Ring#1	Ring#2	Ring#1	Ring#2		
CL # 1	7.5	11.8	6.0	12.0	IN.	

Performed : 21-Nov-2018			Time : 12:16			
Sensor Suite : MSTDA-NI			ID : MST-DA-28			
	Internal					
	Measured	Units	Calibrated	Units		
	Zero	Reference	Zero	Reference		
INV-V	220.0	30274.6	0.00	1546.00	MV	
NOR-V	158.0	30096.2	0.00	1546.00	MV	
IN-C	153.5	30427.6	0.00	15.46	UA	
INV-R				32.34	OHMM	
NOR-R				55.11	OHMM	



Company: VAL ENERGY, LLC
 Well: EASTMAN UNIT V 1-16 OWWO
 Location: 2640' FSL & 2310' FEL
 Logged: 11-28-2018
 K.B. Elev: 1345.0 Ft