

STEP

MICRO LOG

energy services

Company GRAND MESA OPERATING COMPANY Well PREISSER #1-34 Field WILDCAT County RENO State KANSAS Country USA API No. 15-155-21771-00-00		File No : HAYS-70428 Company : GRAND MESA OPERATING COMPANY Well : PREISSER #1-34 Field : WILDCAT County : RENO State : KANSAS Country : USA API No : 15-155-21771-00-00	
Location : 330' ENL & 1620' FEL E2 NE NW NE		LSD : Sect : 34 Twp : 24S Rge : 09W	
Permanent Datum: Drilling Measured From: Log Measured From: Above Permanent Datum:	GL KB KB 11.00 Ft	Elevations: KB 1687.00 DF 1688.00 GL 1677.00	Services: GRT CNP MLT PIT LD
Date	12-14-2019		
Run Number	1		
Depth--Driller	4140.0 Ft		
Depth--Logger	4140.0 Ft		
First Reading	4118.0 Ft		
Last Reading	266.0 Ft		
Casing--Driller	266.0 Ft		
Casing--Logger	266.0 Ft		
Bit Size	7.875 In		
Casing Size	8.625 In		
Hole Fluid Type	WBM		
Density	9.4		
Fluid Loss	11.6		
PH/Viscosity	9.0	53.0	
Sample Source	MEASURED		
RM@Measured Temp.	1.400 @ 58 F		
RMF@Measured Temp	1.190 @ 58 F		
RMG@Measured Temp.	1.610 @ 58 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.720 @ 119 F		
Time Circulation Stopped	12-14-2019 05:57		
Max Recorded Temp.	119	F	
Equipment/Base	TRK-137	HAYS	
Recorded By	B.BAILEY		
Witnessed By	KENT MATSON		

The customer is hereby warned that by providing the log data herein, STEP Energy Services does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. STEP Energy Services 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 STEP Energy Services 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 STEP Energy Services 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	4140.00	8.625	17.00	266.00	0.00

Run Number	1	
Date	12-14-2019	
Date/Time On Bottom	12-14-2019 11:57	
Depth to Fluid	0.0 Ft	
Salinity	10400.000	
RMF@BHT	0.610 @ 119 F	
RMC@BHT	0.830 @ 119 F	

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.

GRT, CNT, LDT, CST, MLT, AND PIT RUN IN COMBINATION.

2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

5.5" PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUME.

CALIPERS ORIENTED ON X-Y AXIS.

PHIN IS CALIPER CORRECTED

GRT: GRP

CNT: PHIN, PHINDOL, CLCNIN

LDT: PORL, PORLDOL, LCORN, LDENN, PECLN, CLLDIN

MLT: MSFI, MSFN, CLMRIN.

PIT: ILD, ILM, SFLAEC, SPU, CIRD

OPERATORS:

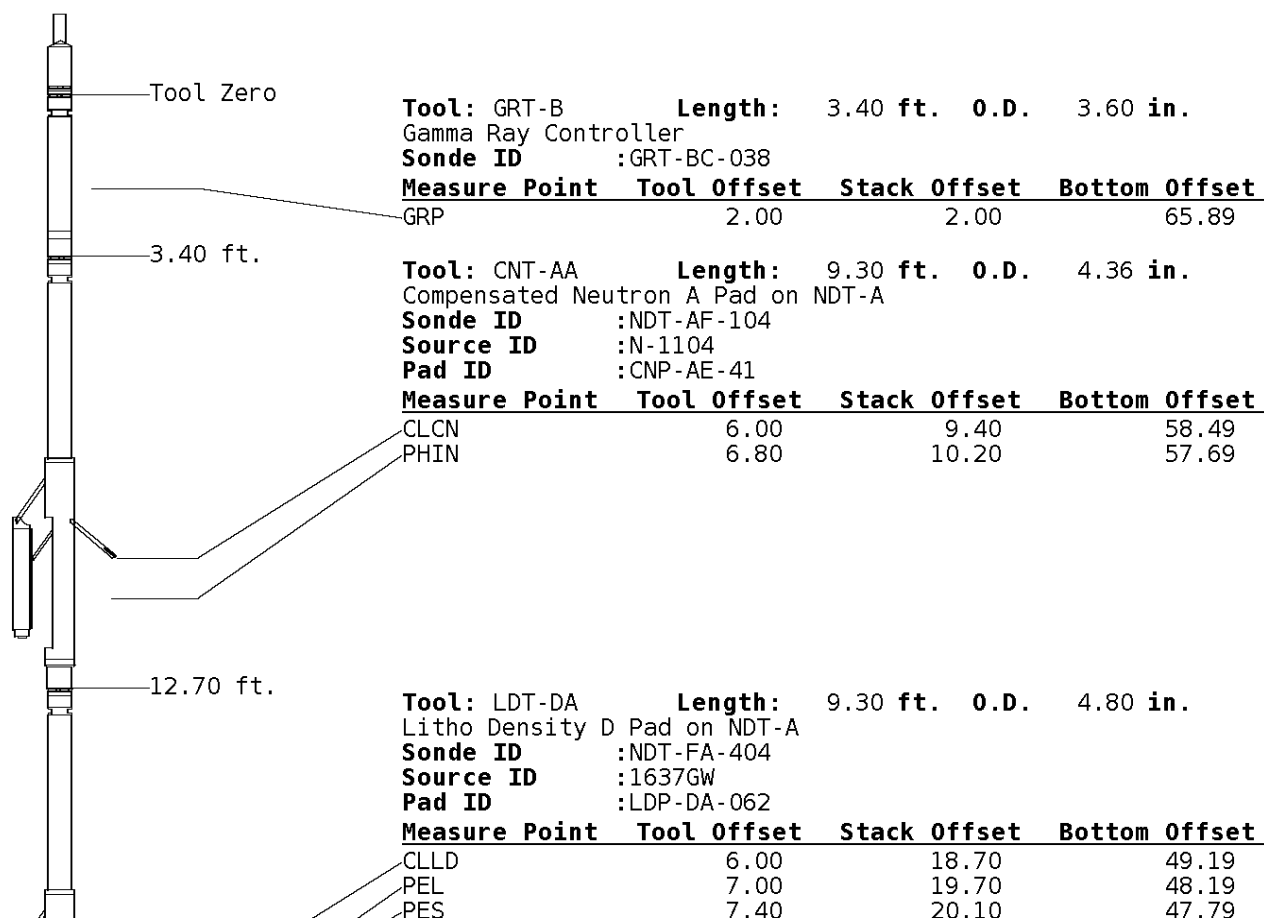
D.LEGLEGITER

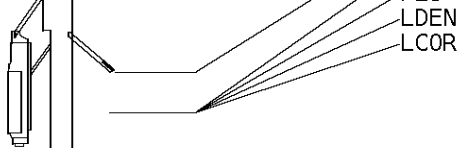
D.RAGSDALE

J.VAUGHN

Tool String Schematic

Total Tool Length - 67.89 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



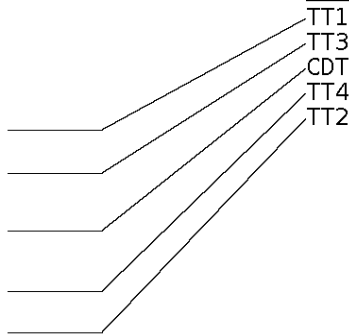


7.20	19.90	47.99
7.20	19.90	47.99

22.00 ft.

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
Open Hole Sonic
Sonde ID : CST-AB-24

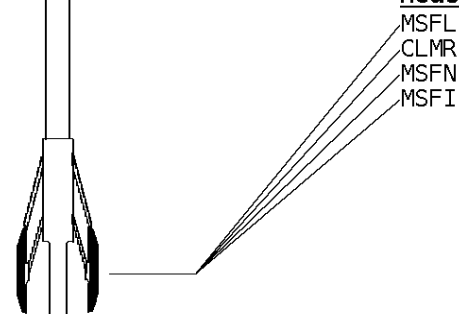
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	26.80	41.09
TT3	5.80	27.80	40.09
CDT	7.30	29.30	38.59
TT4	8.80	30.80	37.09
TT2	9.80	31.80	36.09



35.80 ft.

Tool: MLT-AB **Length:** 10.60 ft. **O.D.** 6.00 in.
Micro Log Tool
Sonde ID : MLT-012

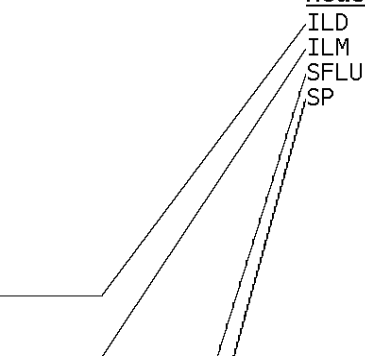
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	8.90	44.70	23.19
CLMR	7.60	43.40	24.49
MSFN	8.90	44.70	23.19
MSFI	8.90	44.70	23.19



46.40 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Phased Dual Induction w/ RM & D
Sonde ID : PIT-AC-043

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	55.32	12.56
ILM	10.10	56.50	11.39
SFLU	17.49	63.89	4.00
SP	20.60	67.00	0.88



LWT 67.89 ft.

Well File: GRAND MESA PREISSER 1-34 DEC-14 QUINT

Scale: 1:240

Format: MST-240

Segment: V1.D1.S3 mn

Acquired: 2019-12/14 12:23 3.4.1-13972

Reference: 0

Processed: 2019-12/14 12:23 3.4.1-13972

BIT SIZE
INCHES (IN)

6 16

CALIPER MICRO
INCHES (IN)

16 26
6 16

TENSION
LBS

10000 0

GAMMA RAY
API UNITS

150 300
0 150

INVERSE
OHMM

0 40

NORMAL
OHMM

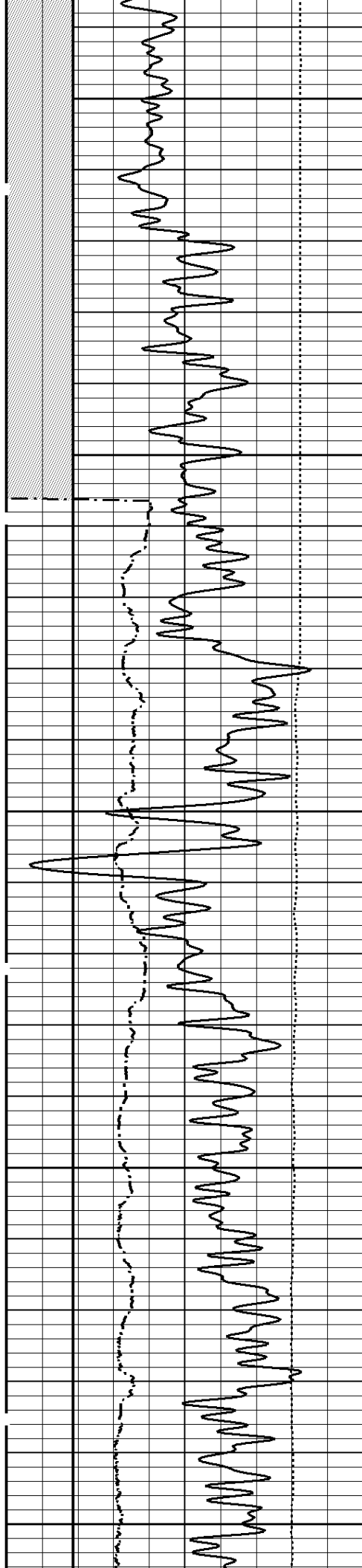
0 40

1:240 MAIN SECTION

File #1.1.3

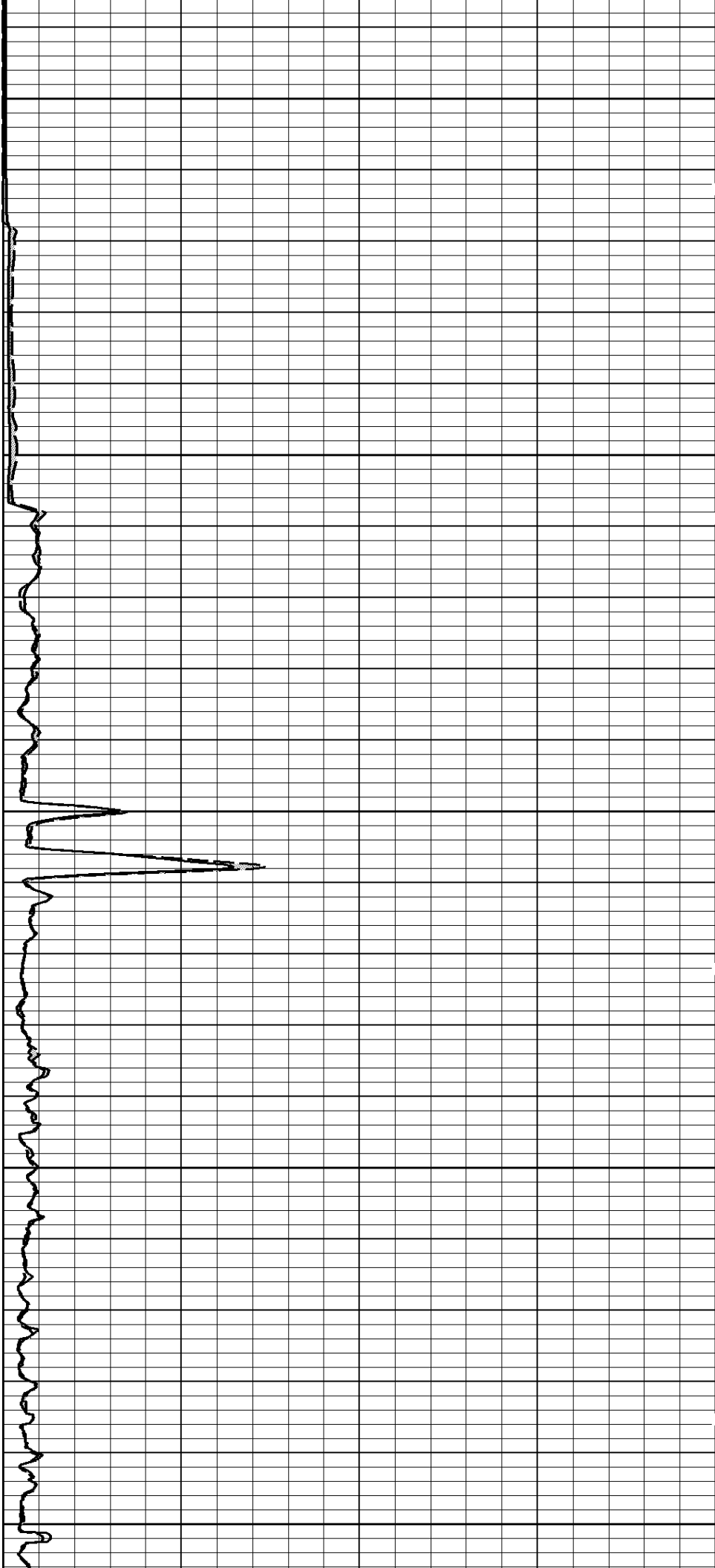
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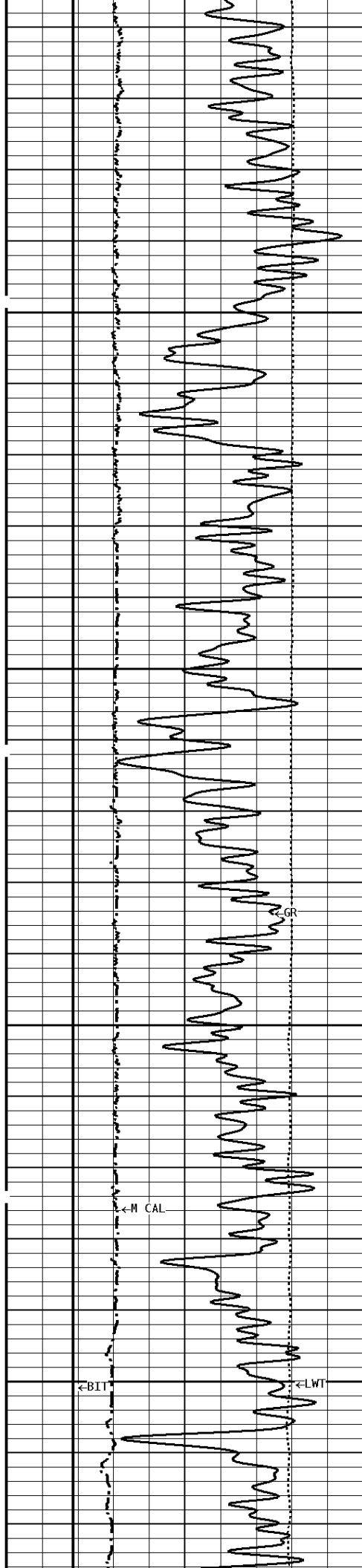
200



300

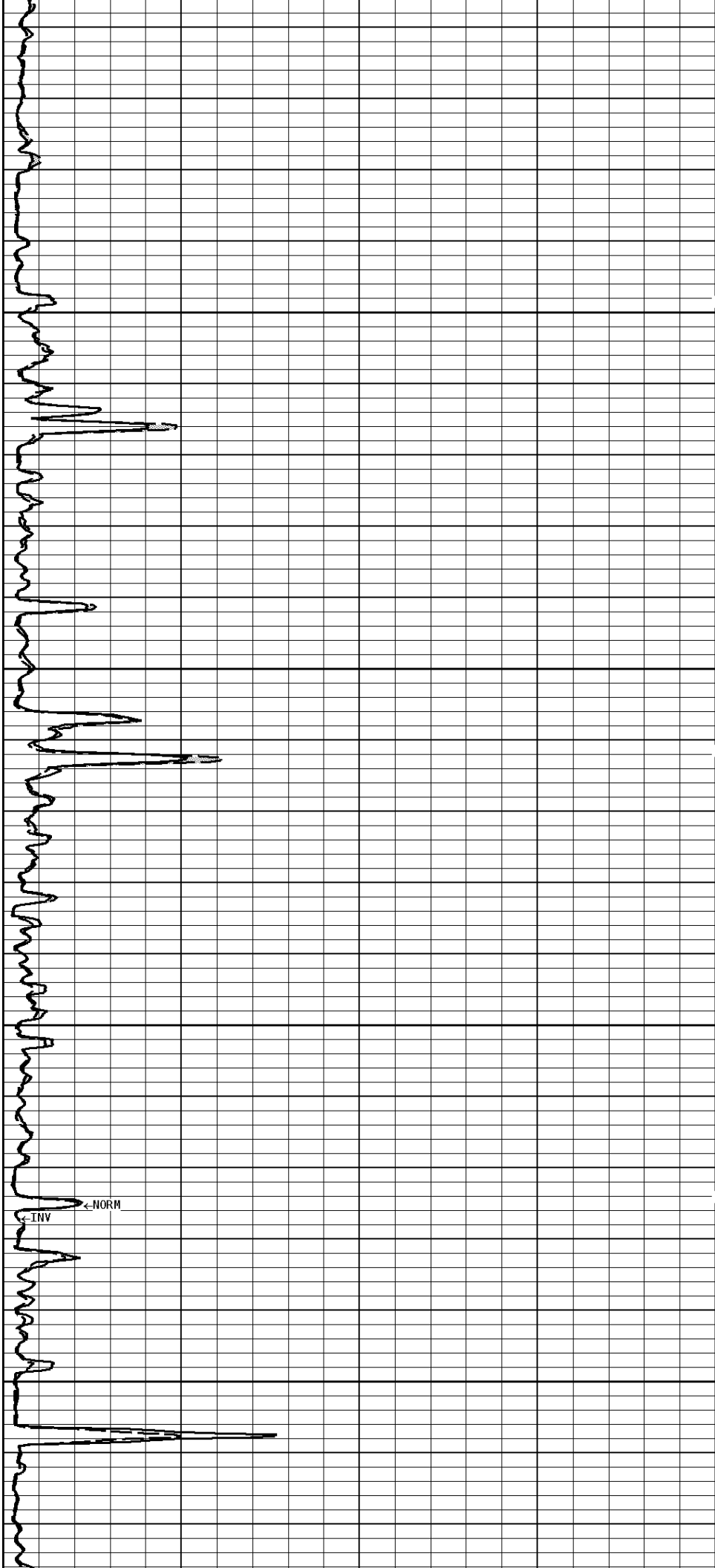
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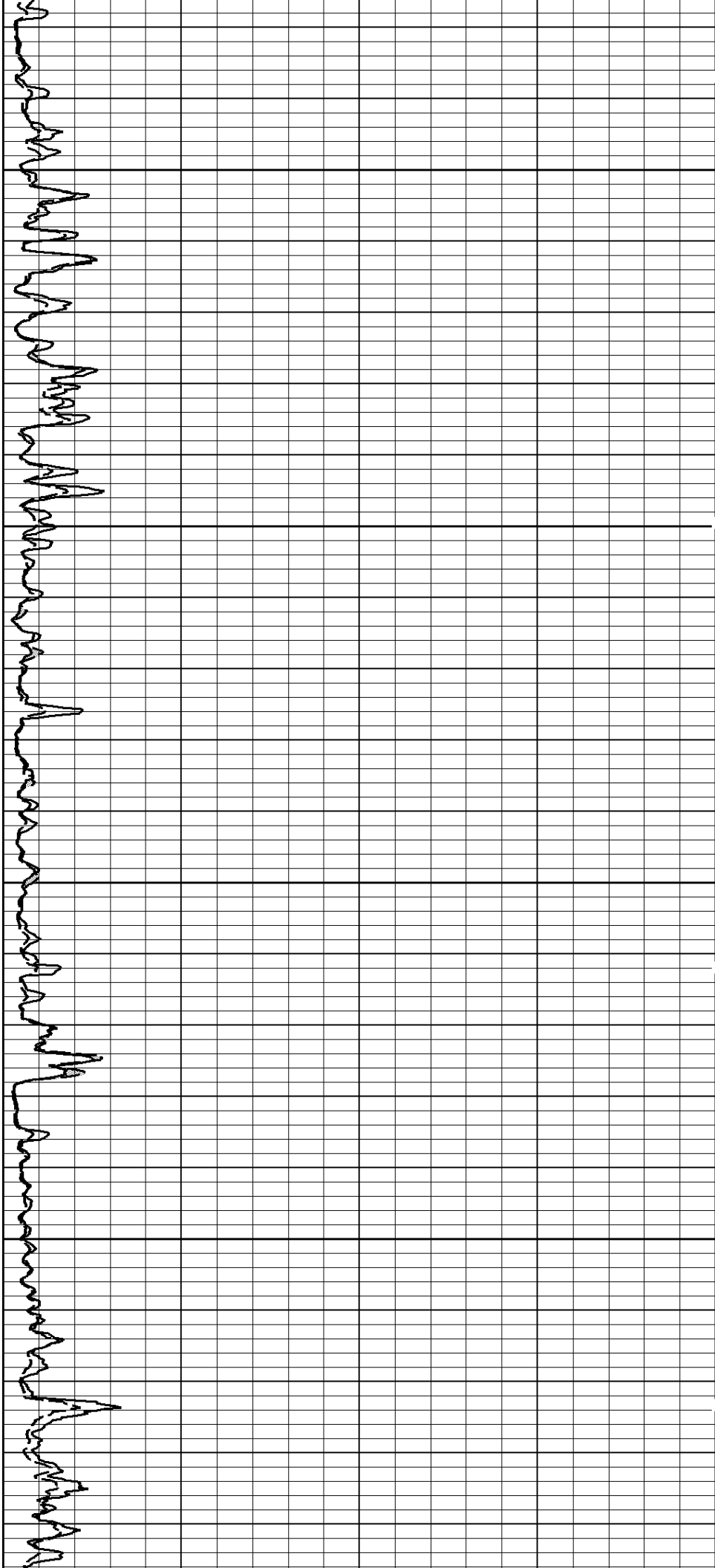




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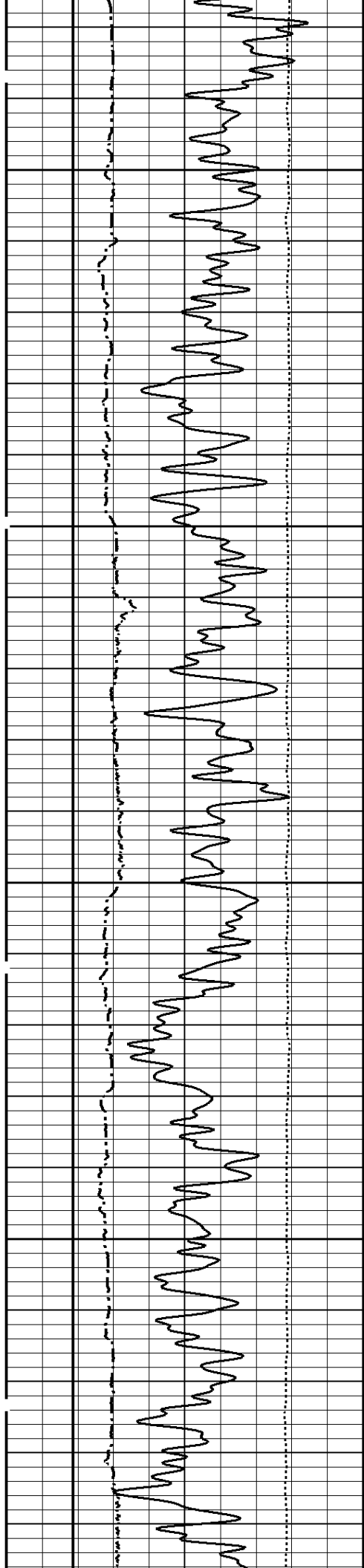
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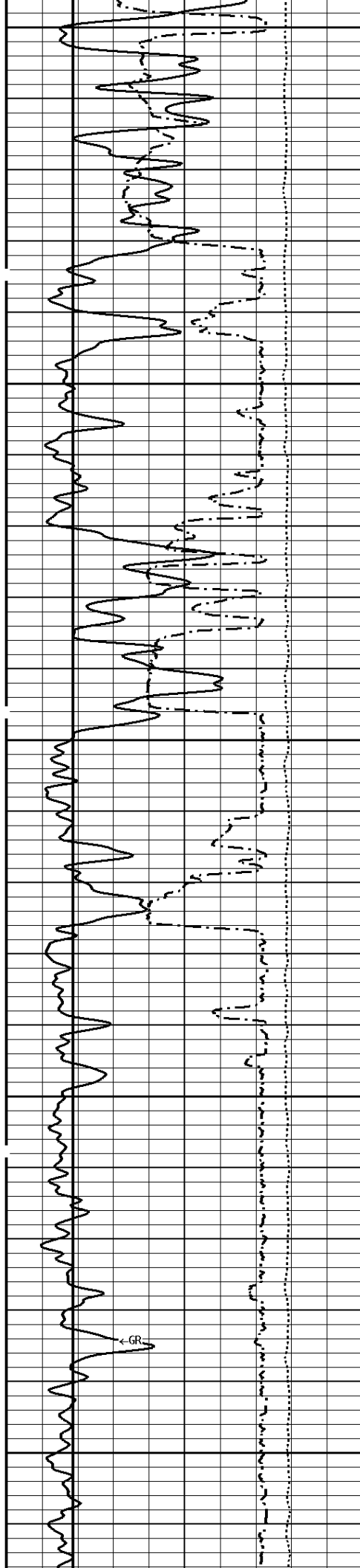




700

800

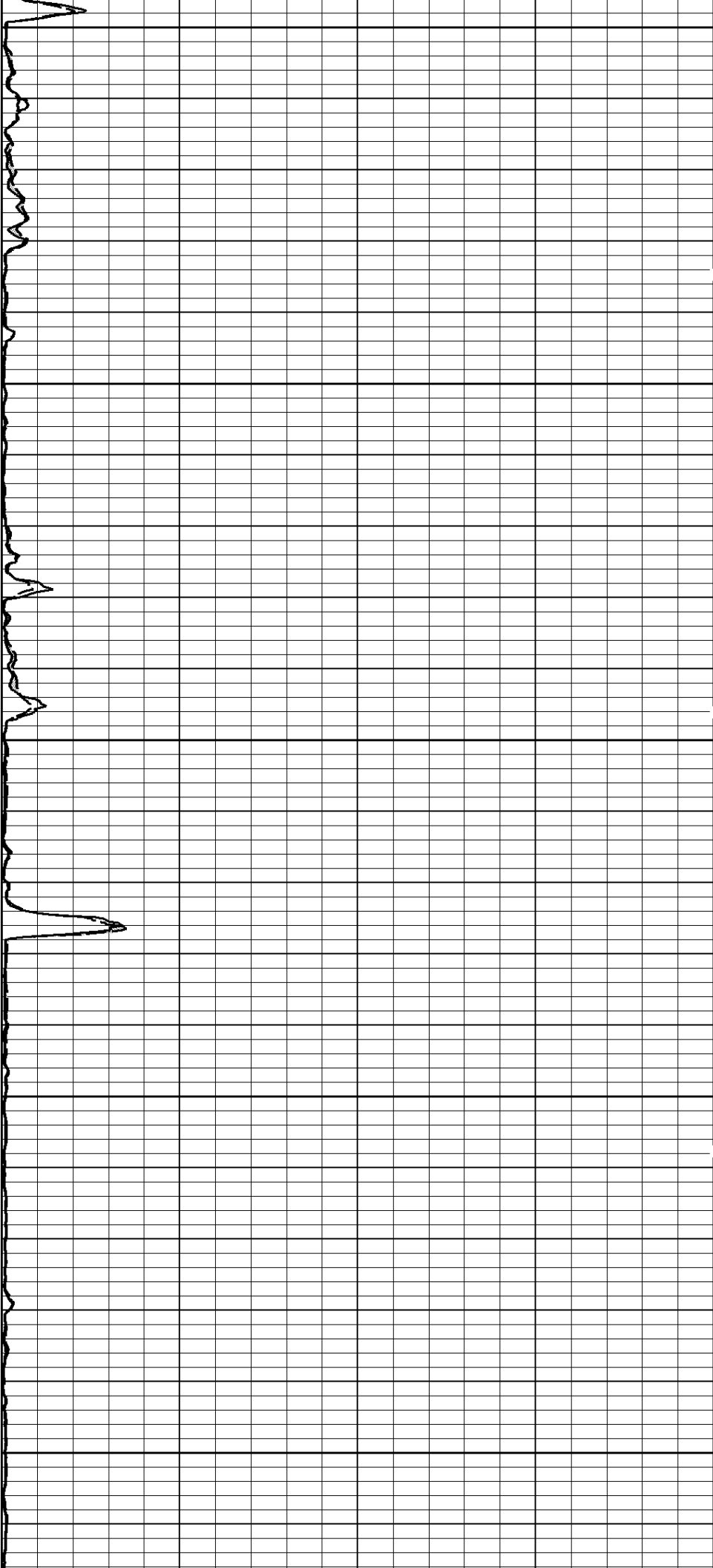


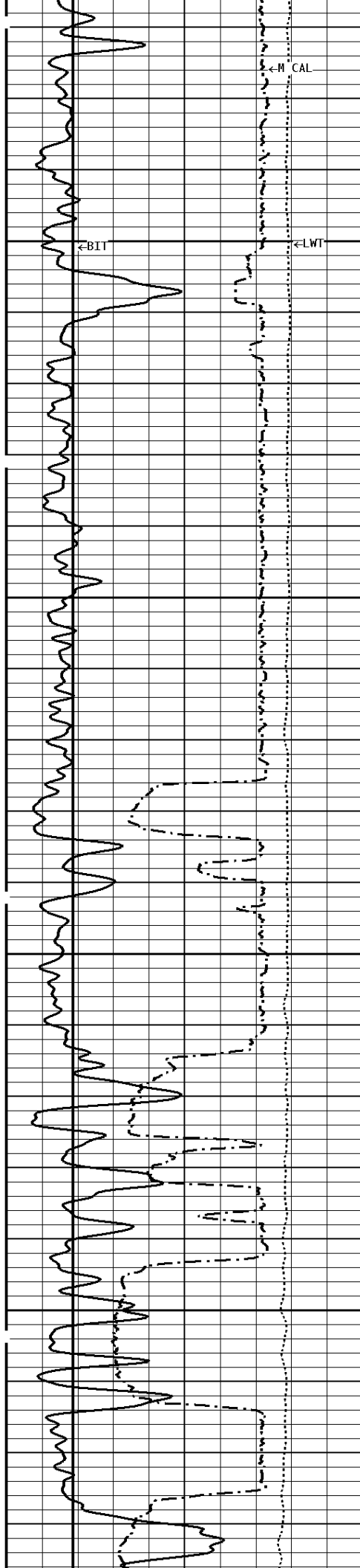


900

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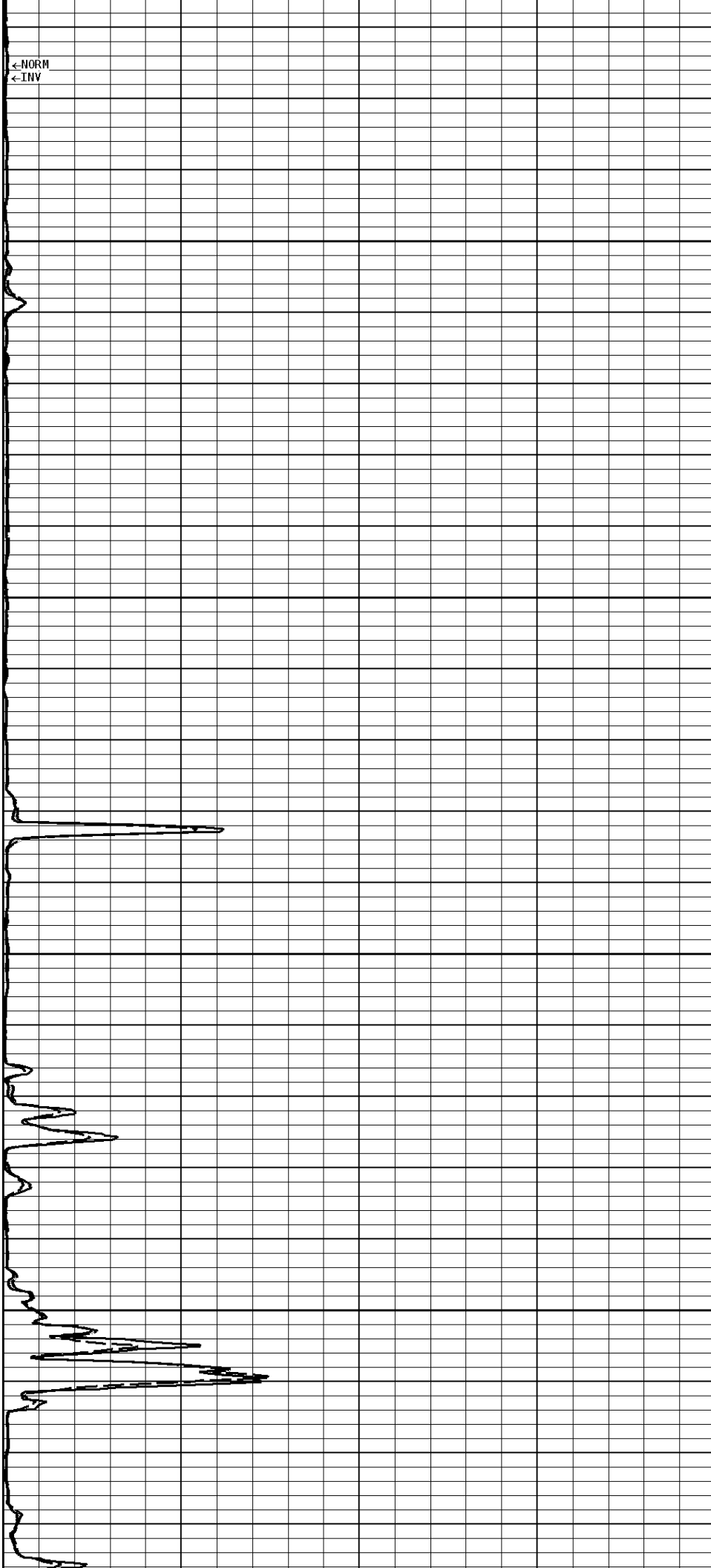
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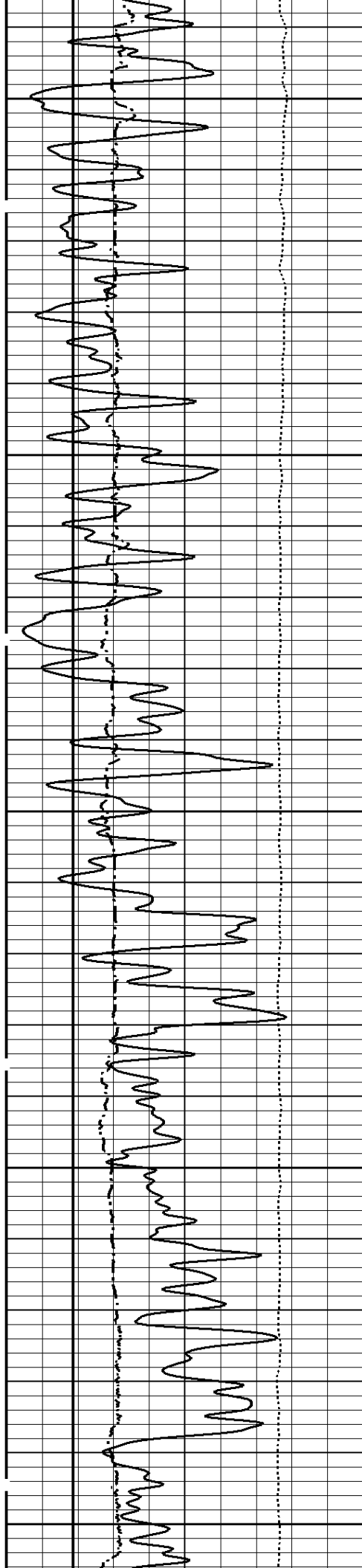




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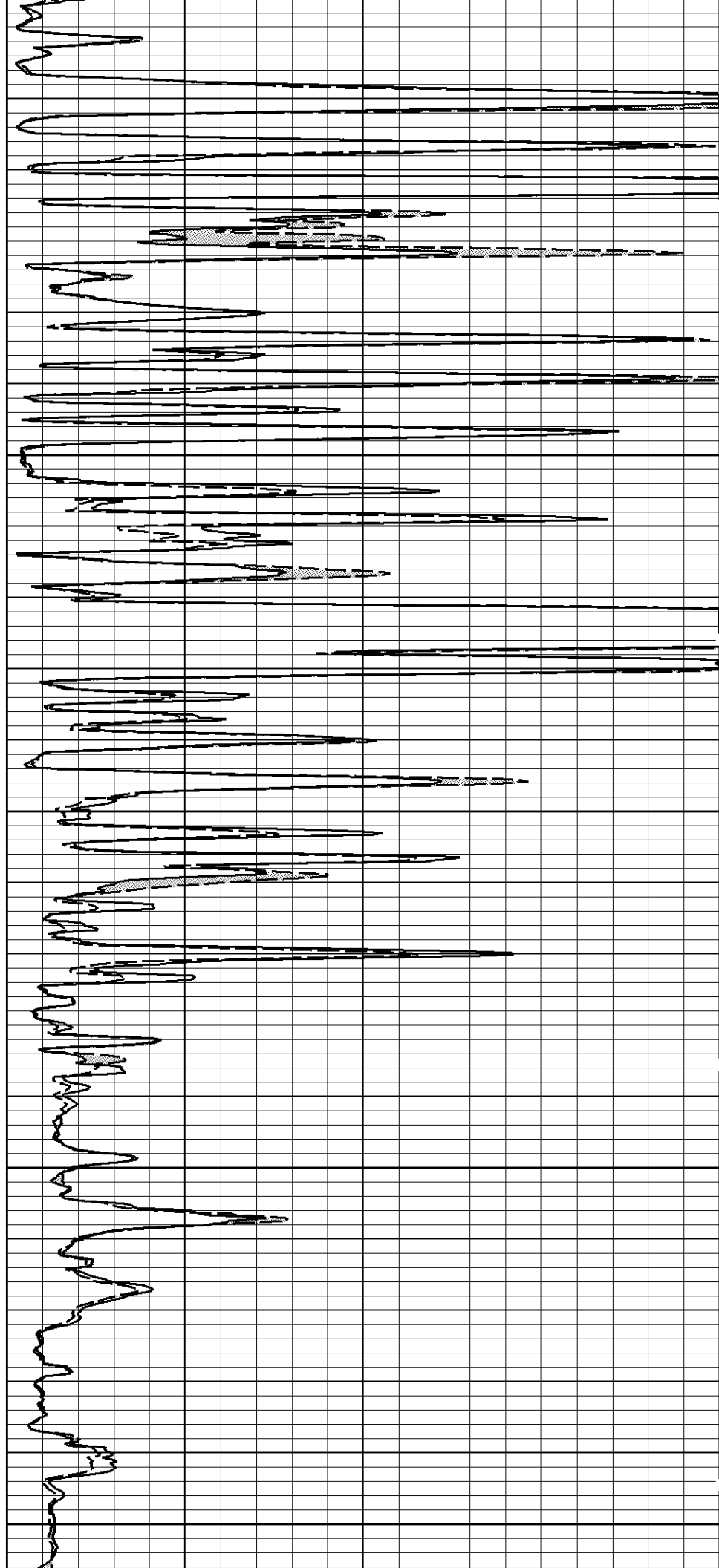
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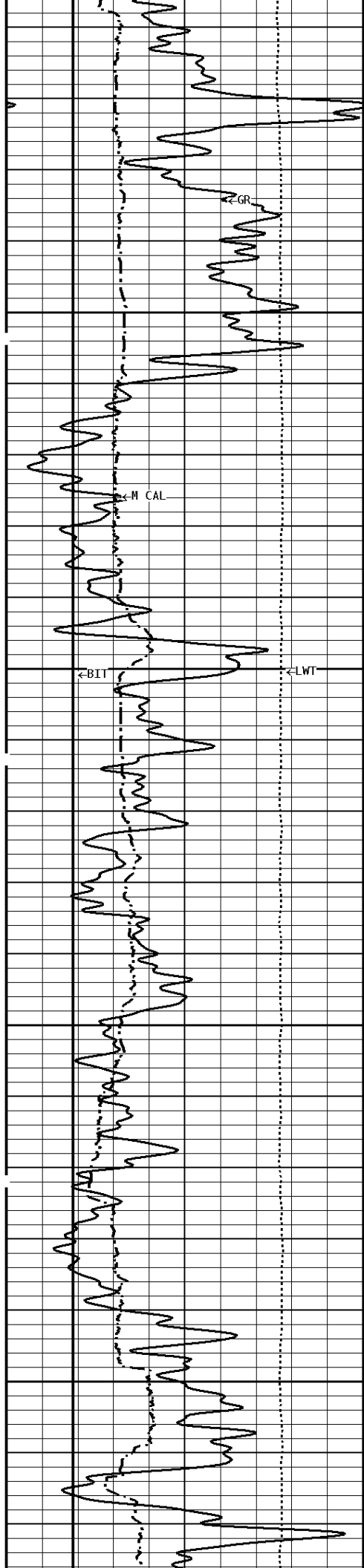




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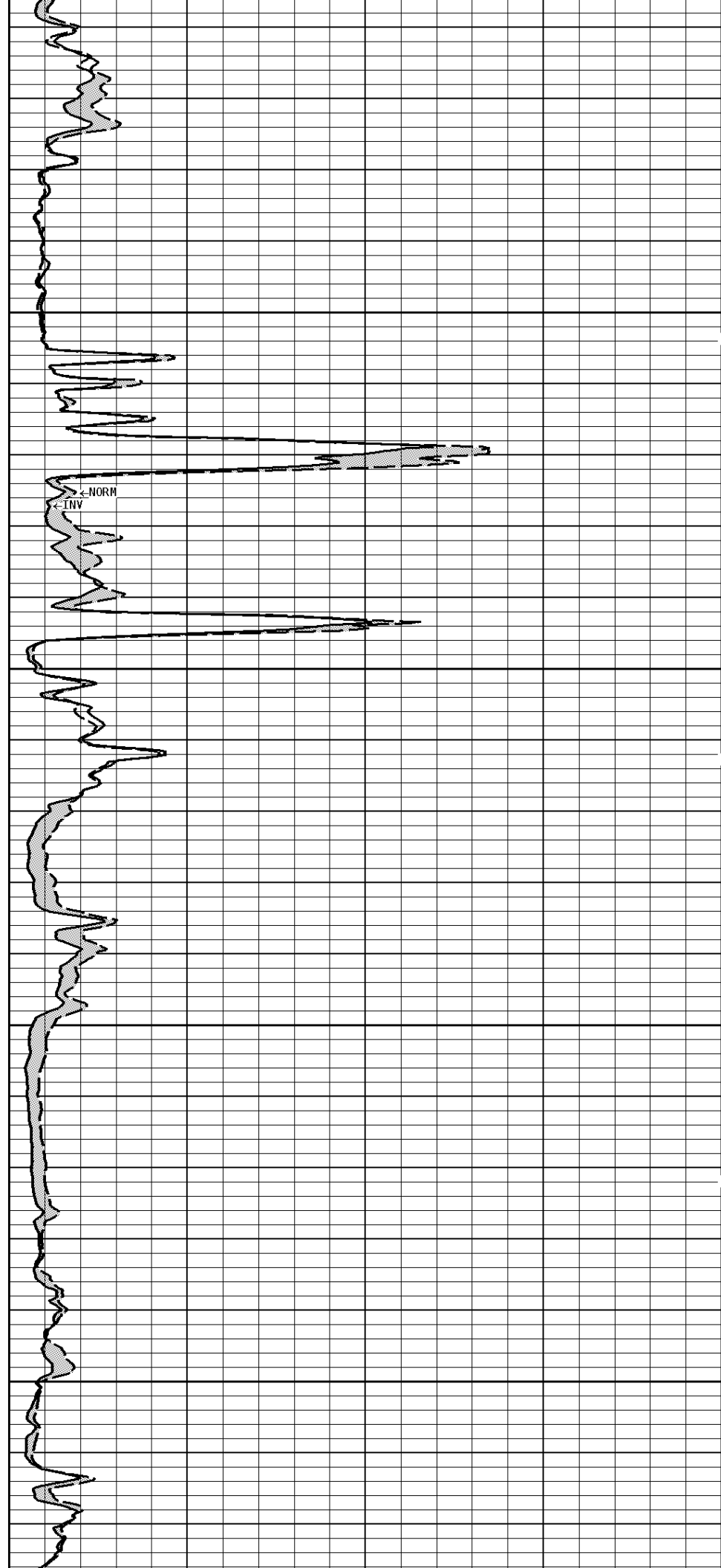
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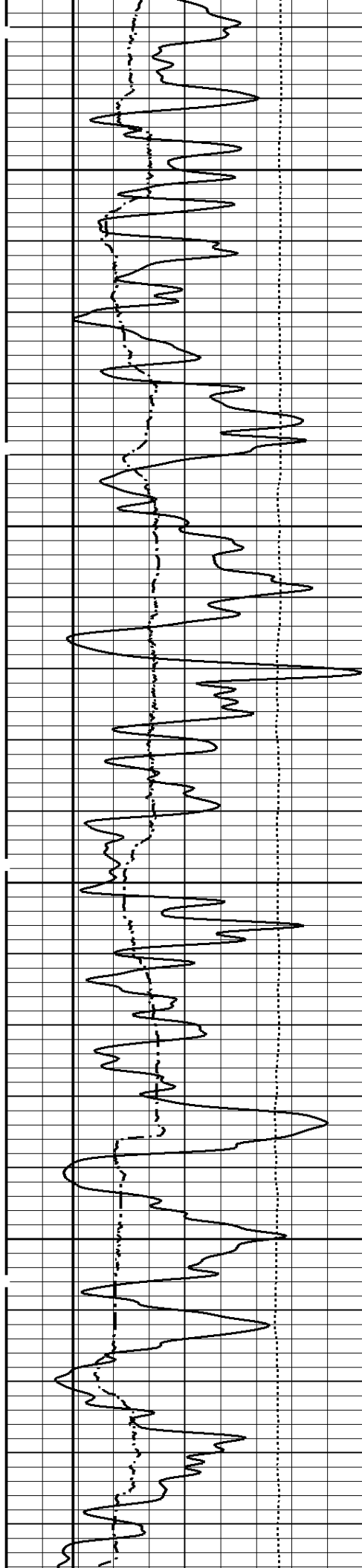




1600

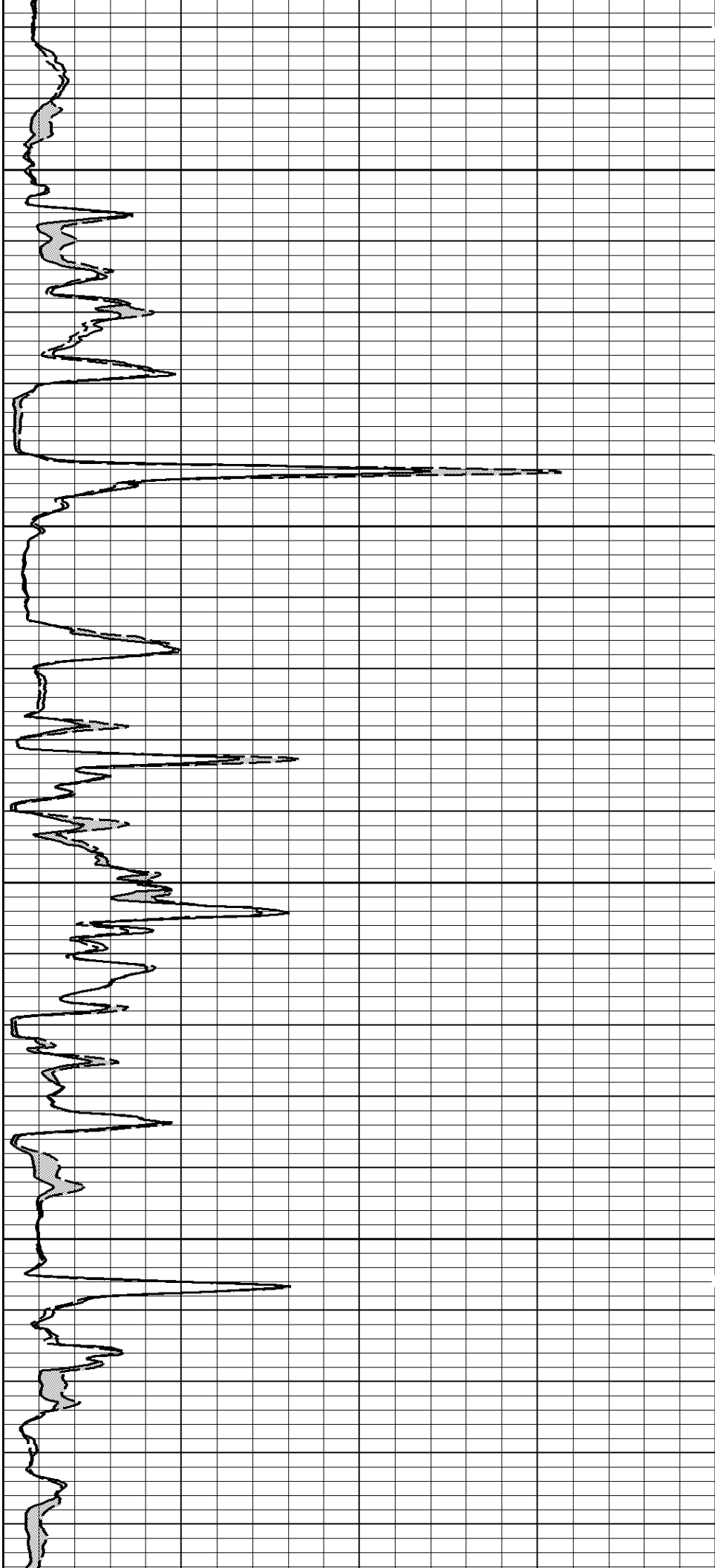
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1800

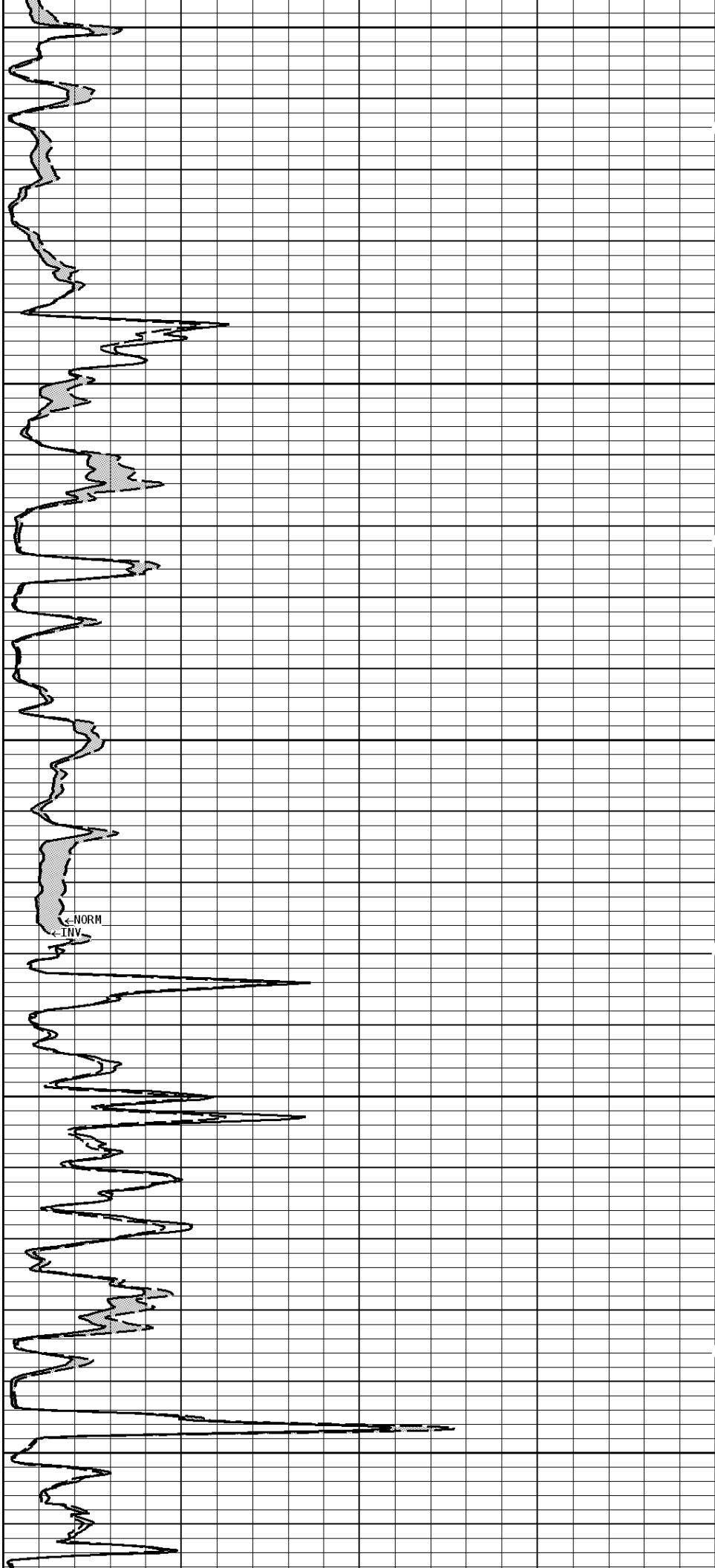
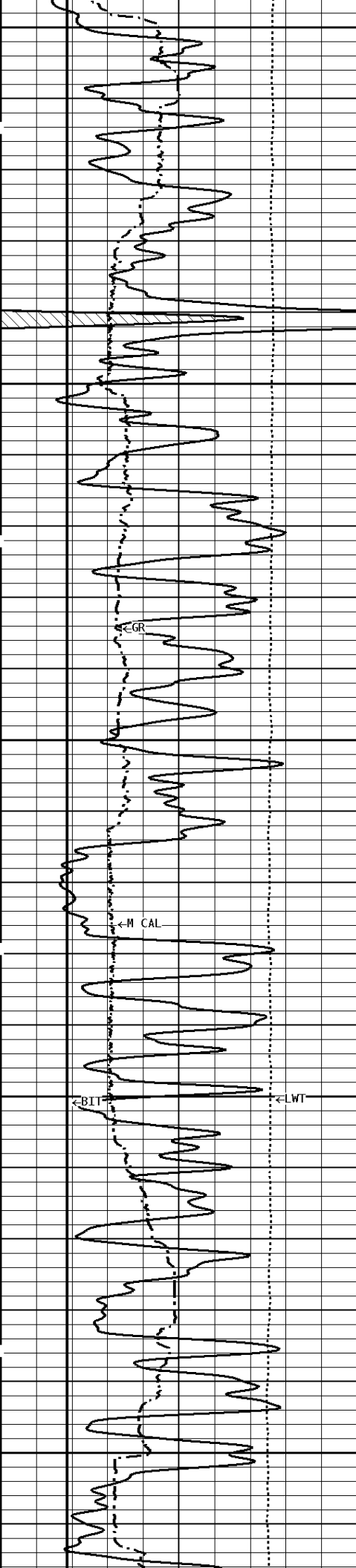
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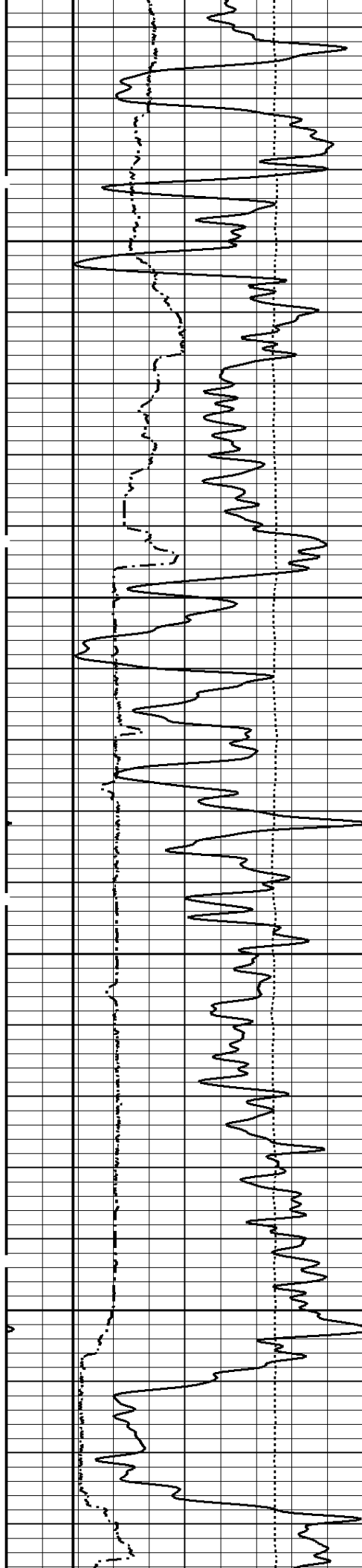


2000

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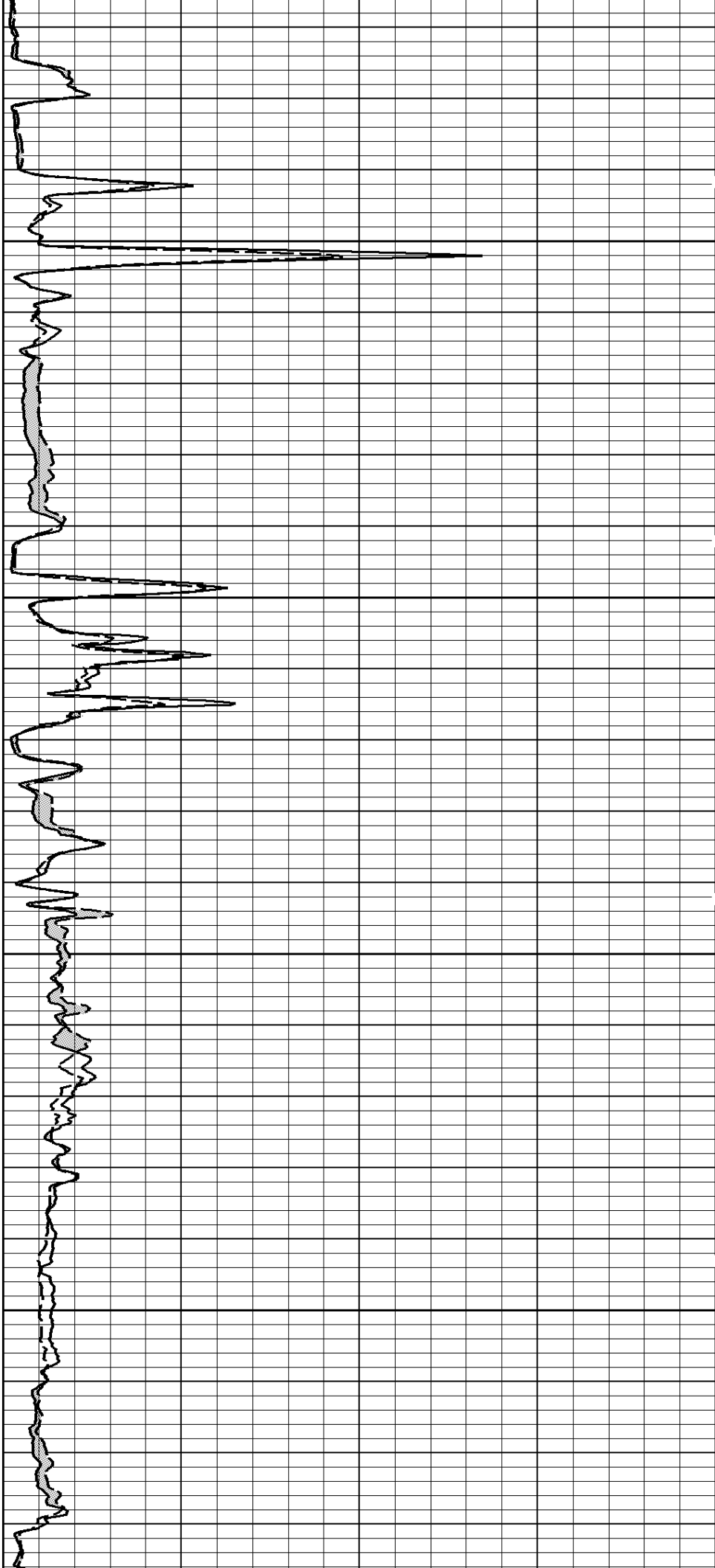
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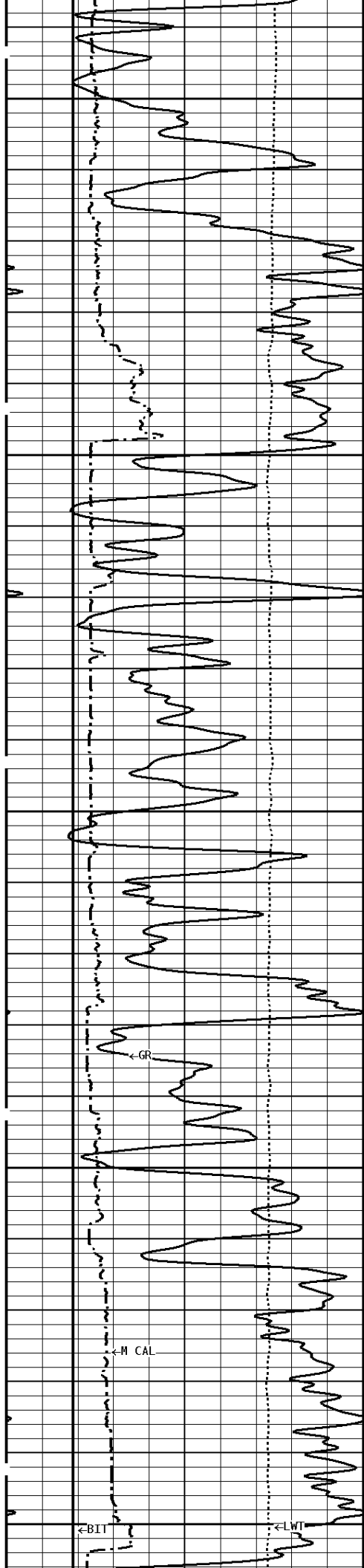




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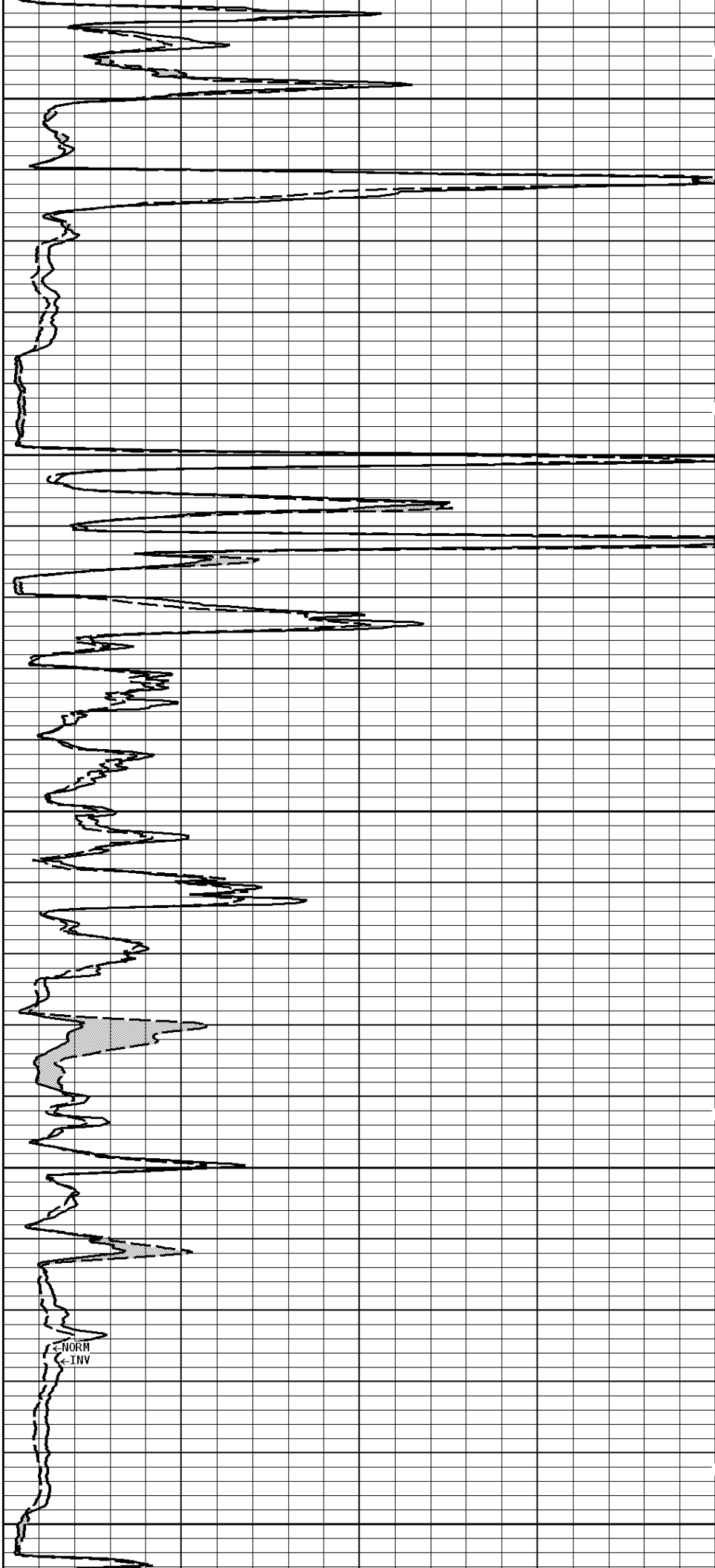
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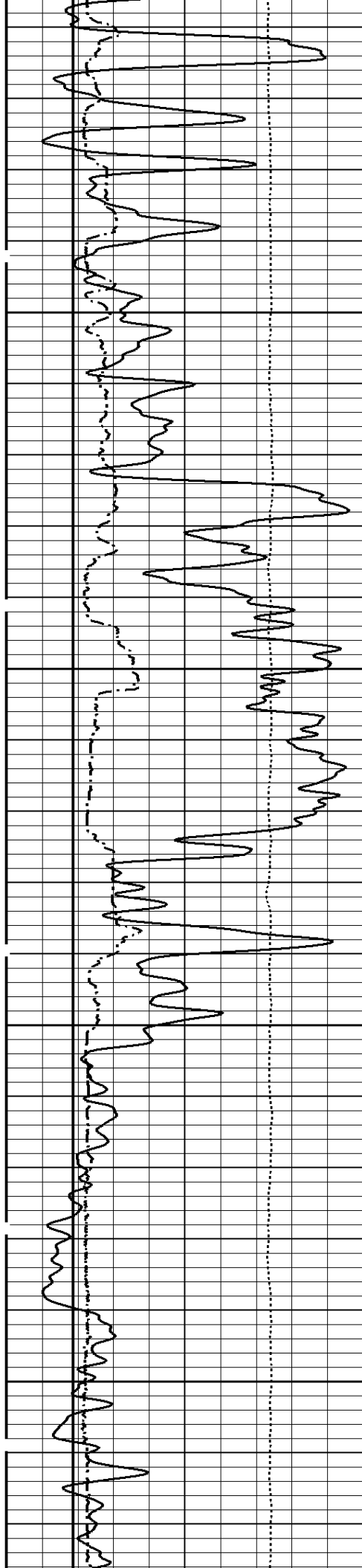




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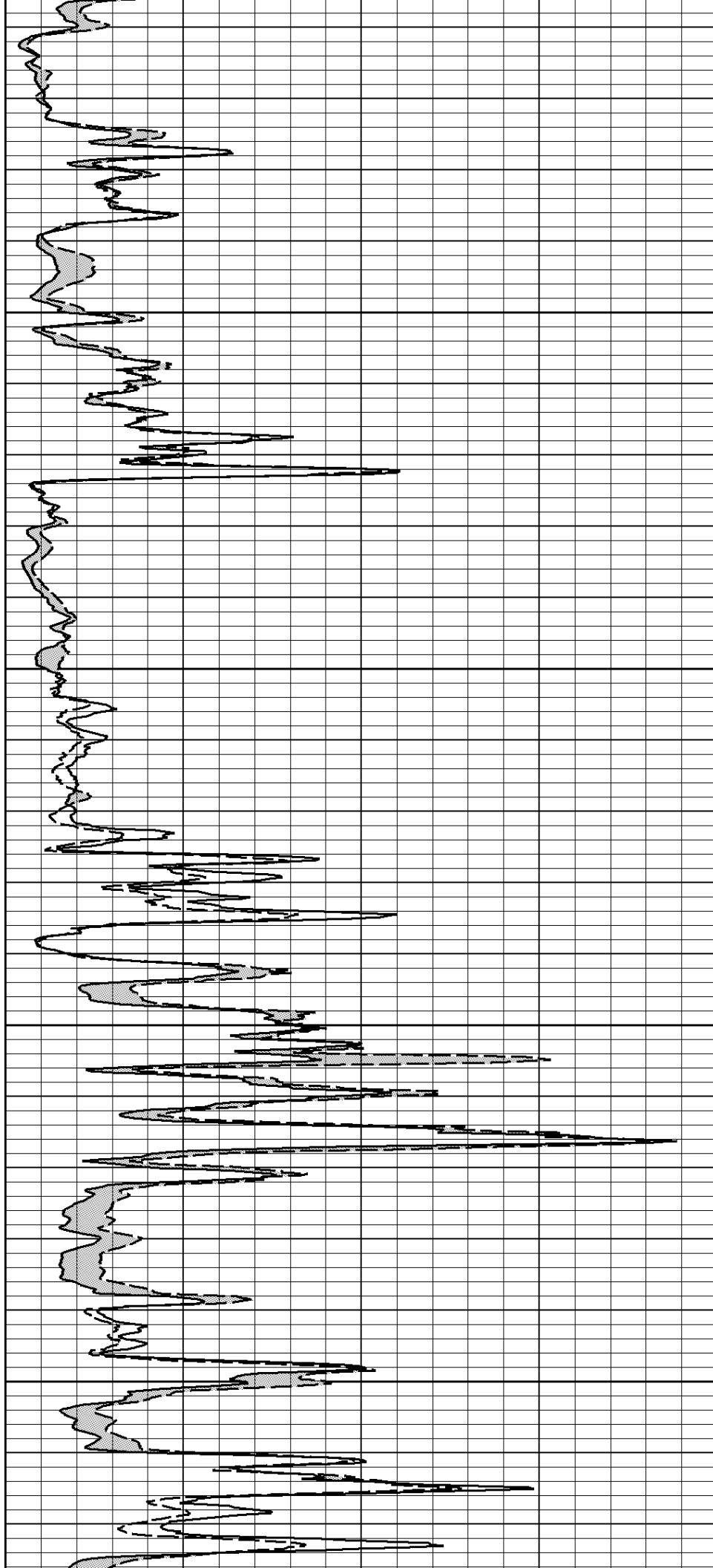
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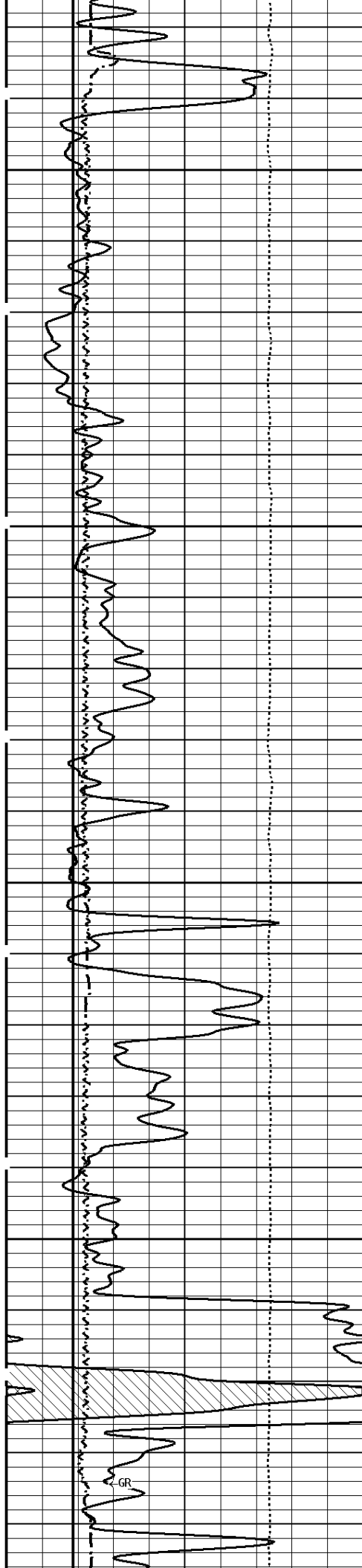




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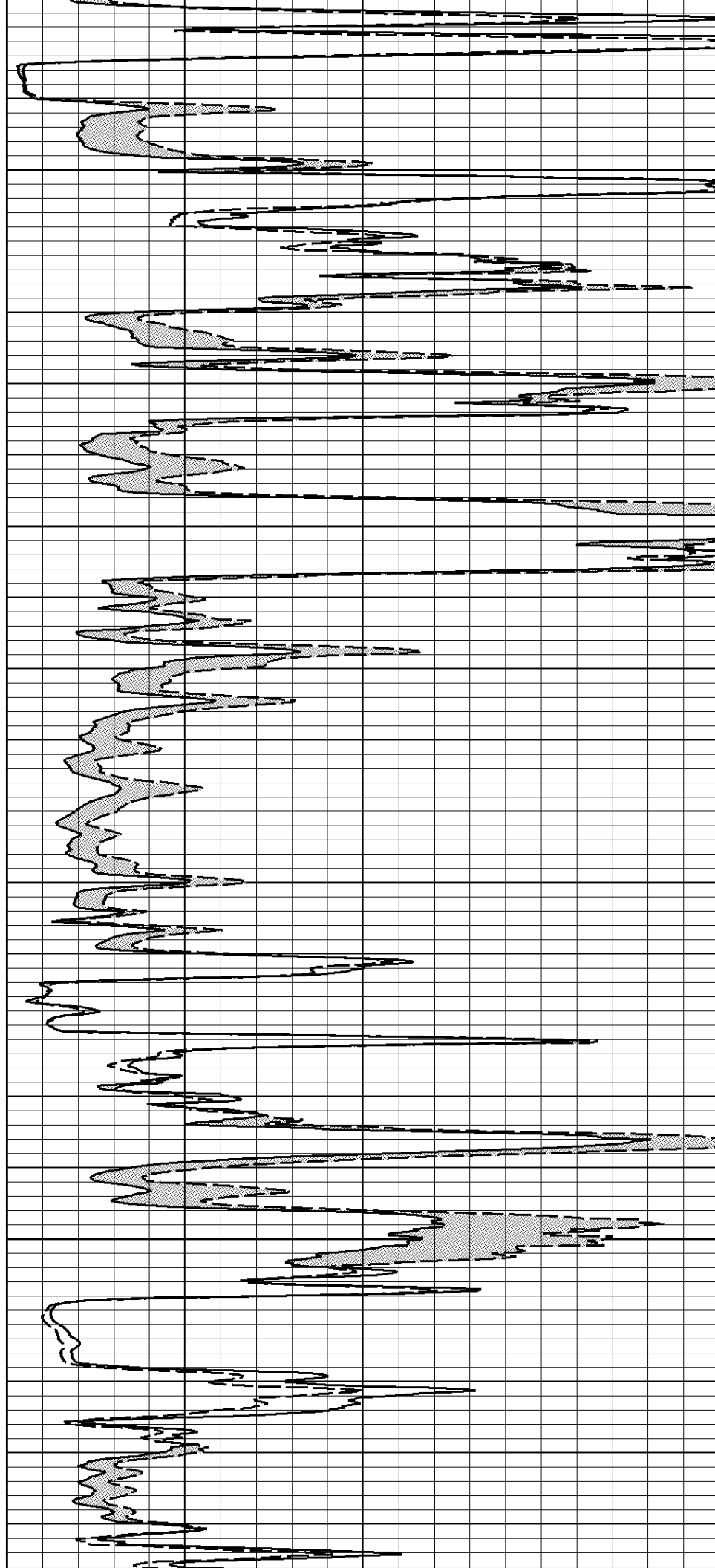
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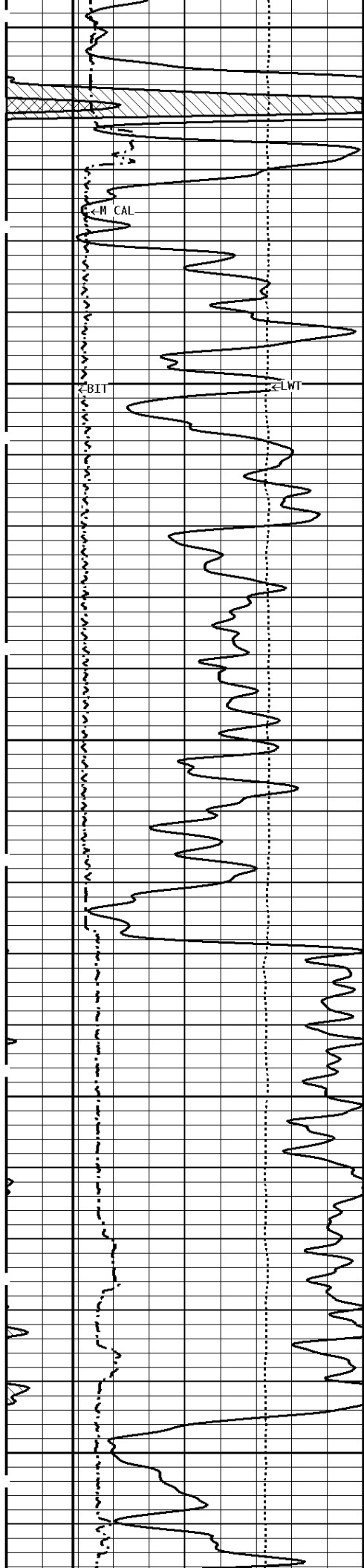




2900

3000

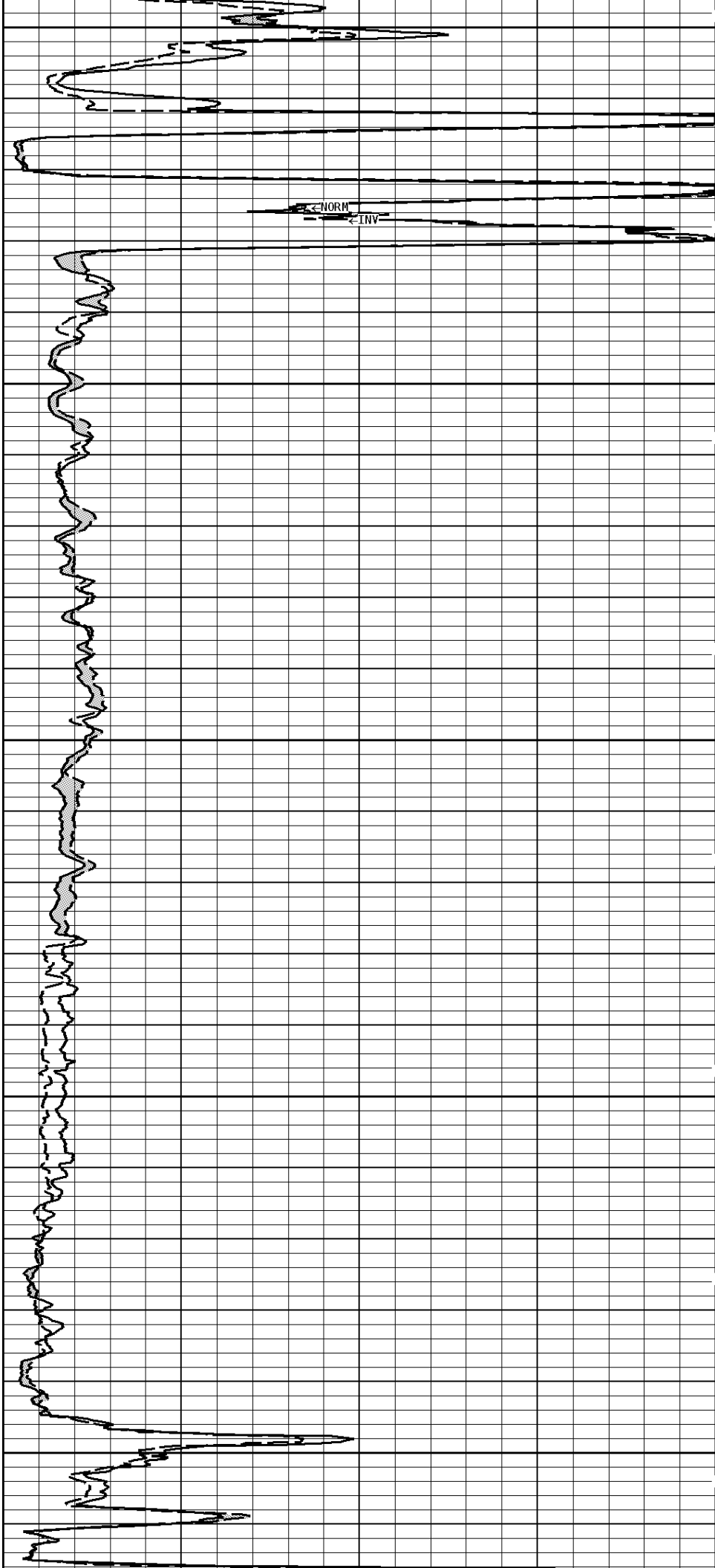


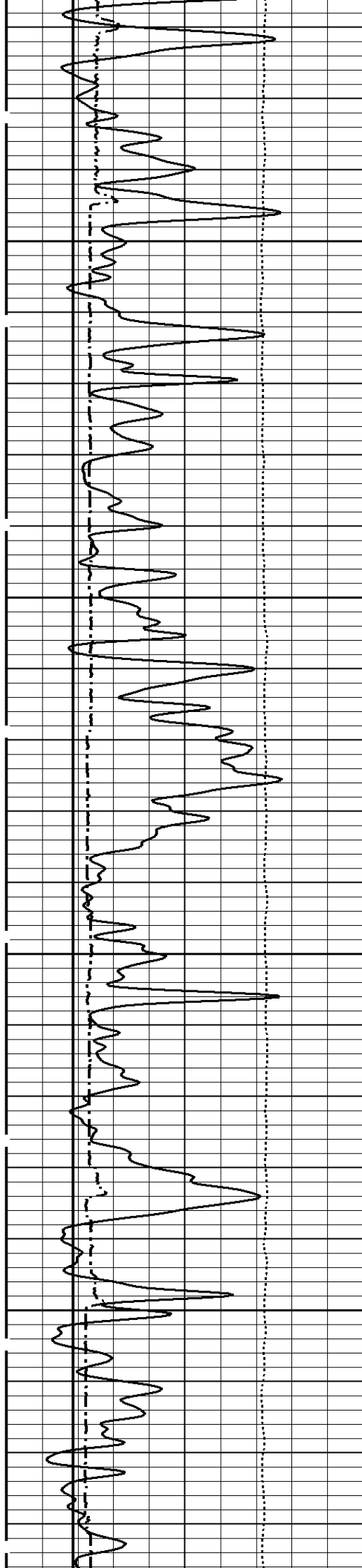


3100

3200

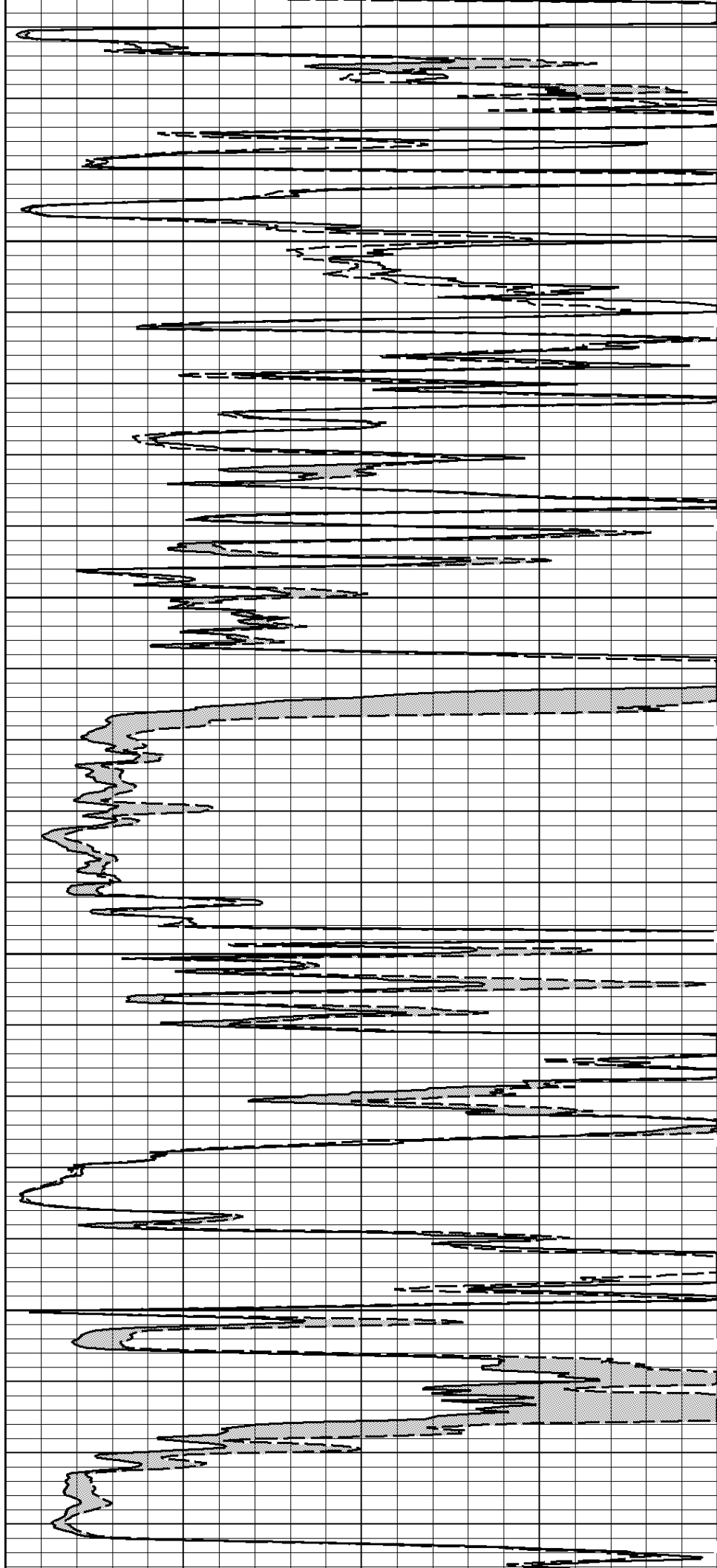
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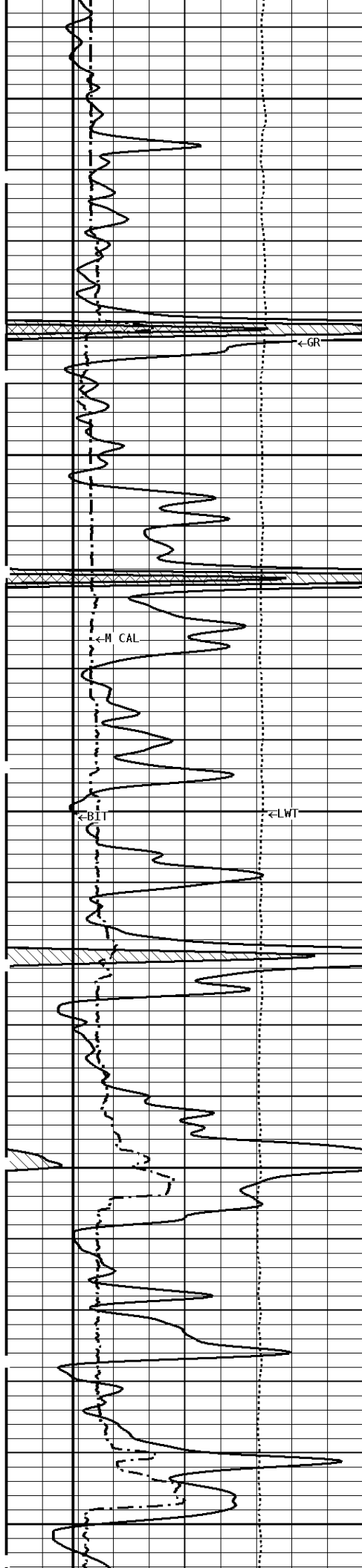




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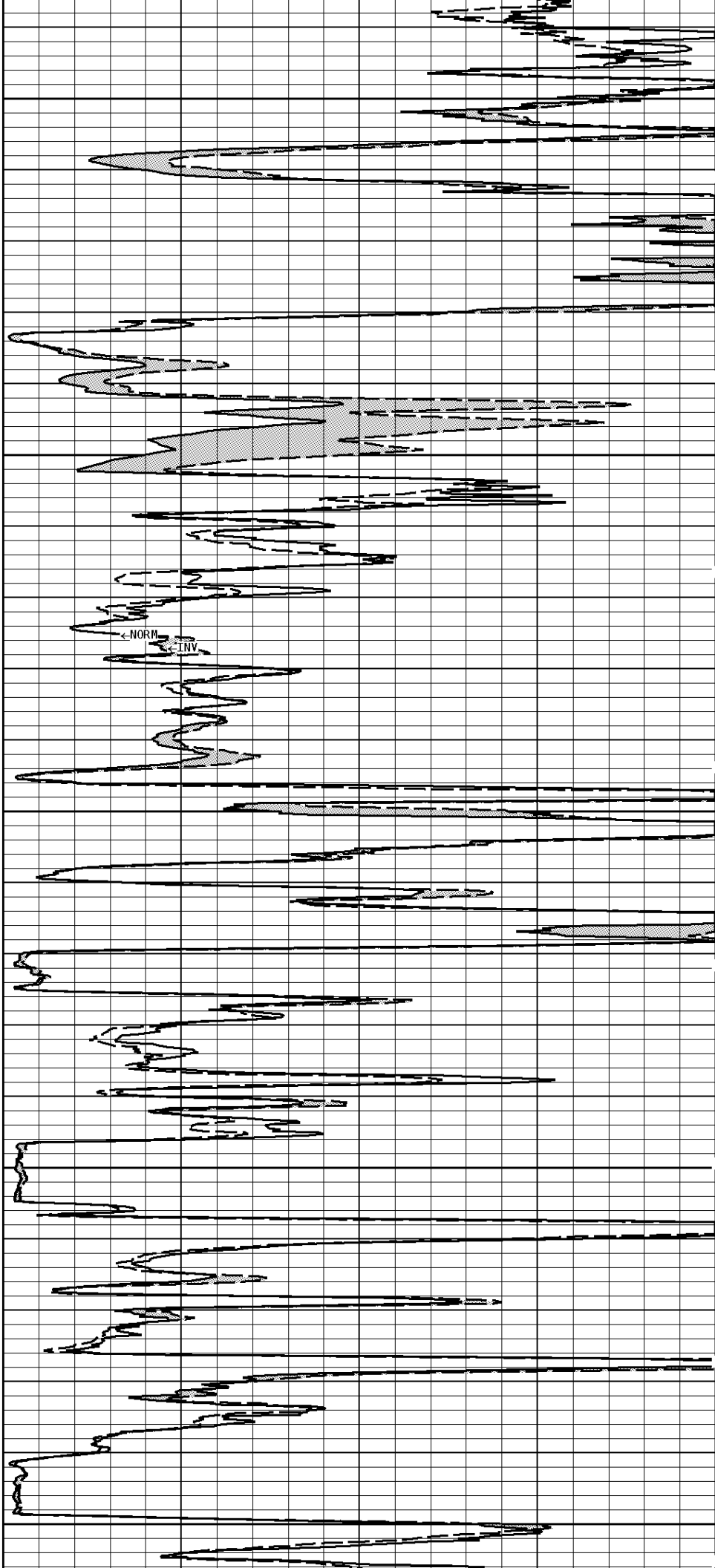
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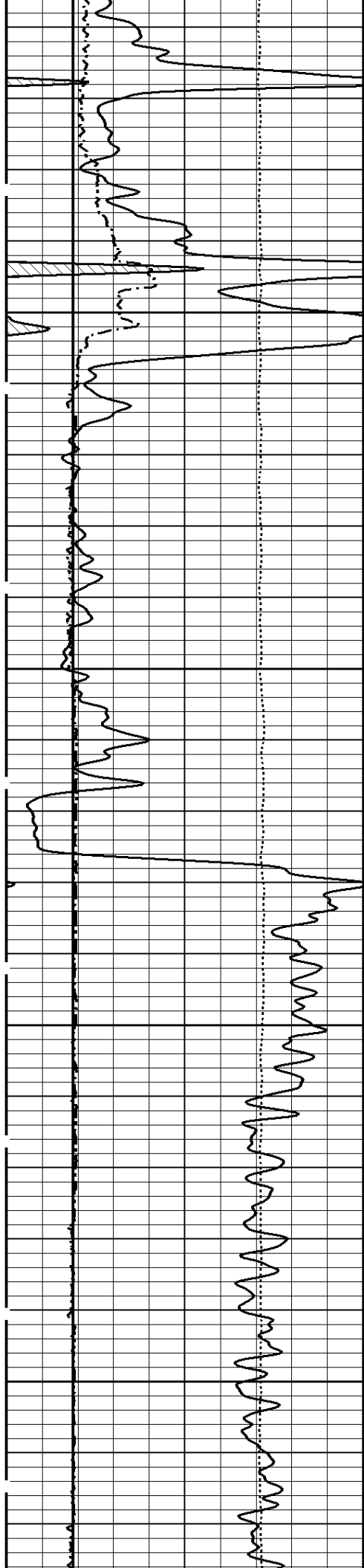




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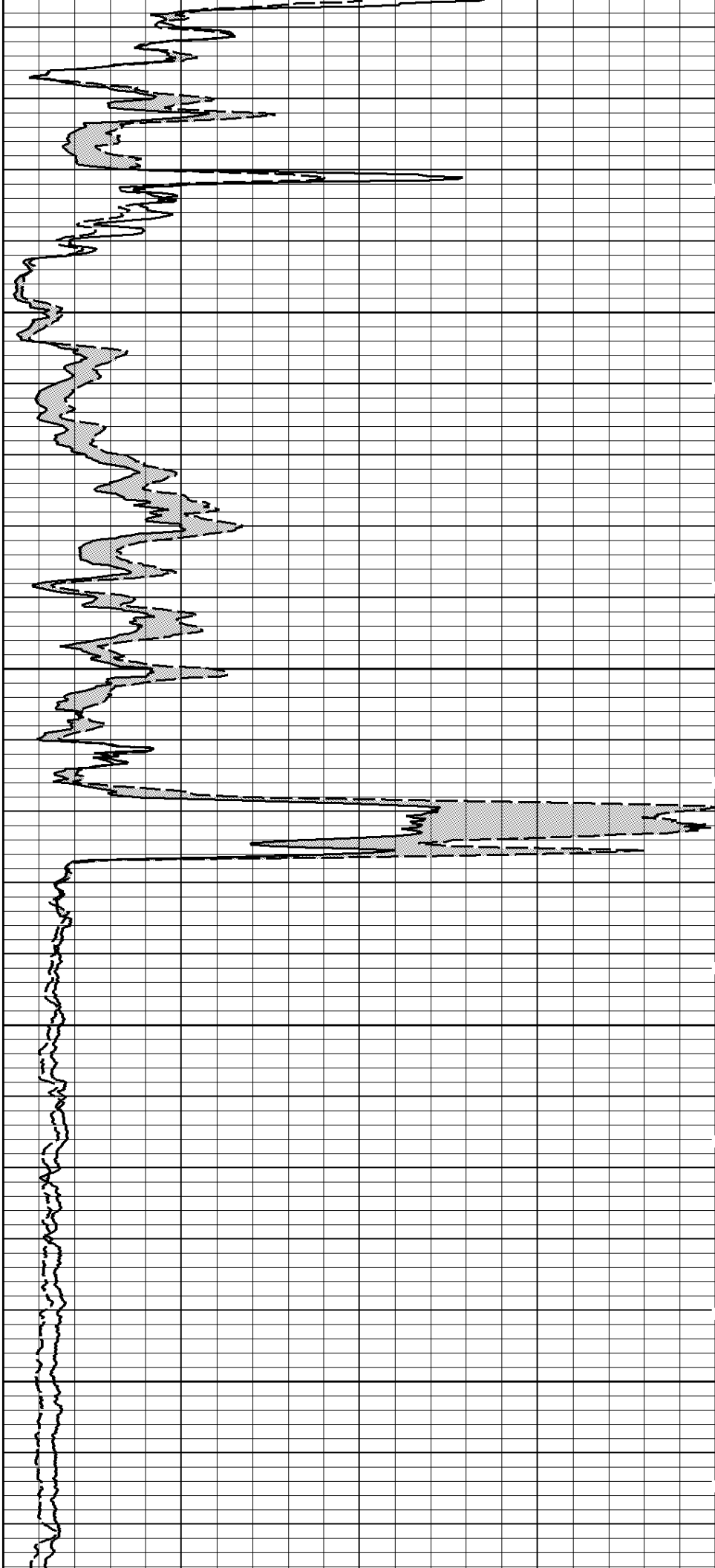
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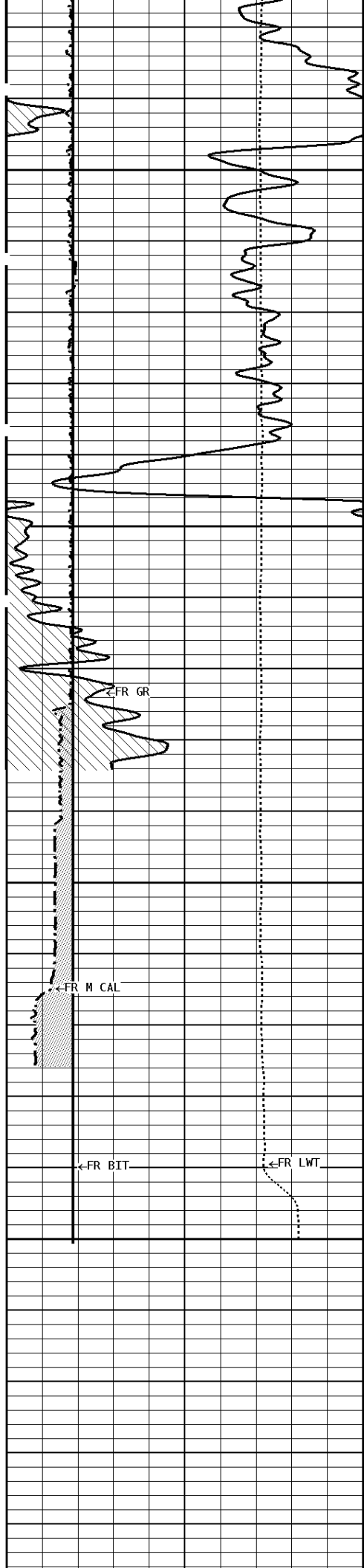




3800

3900



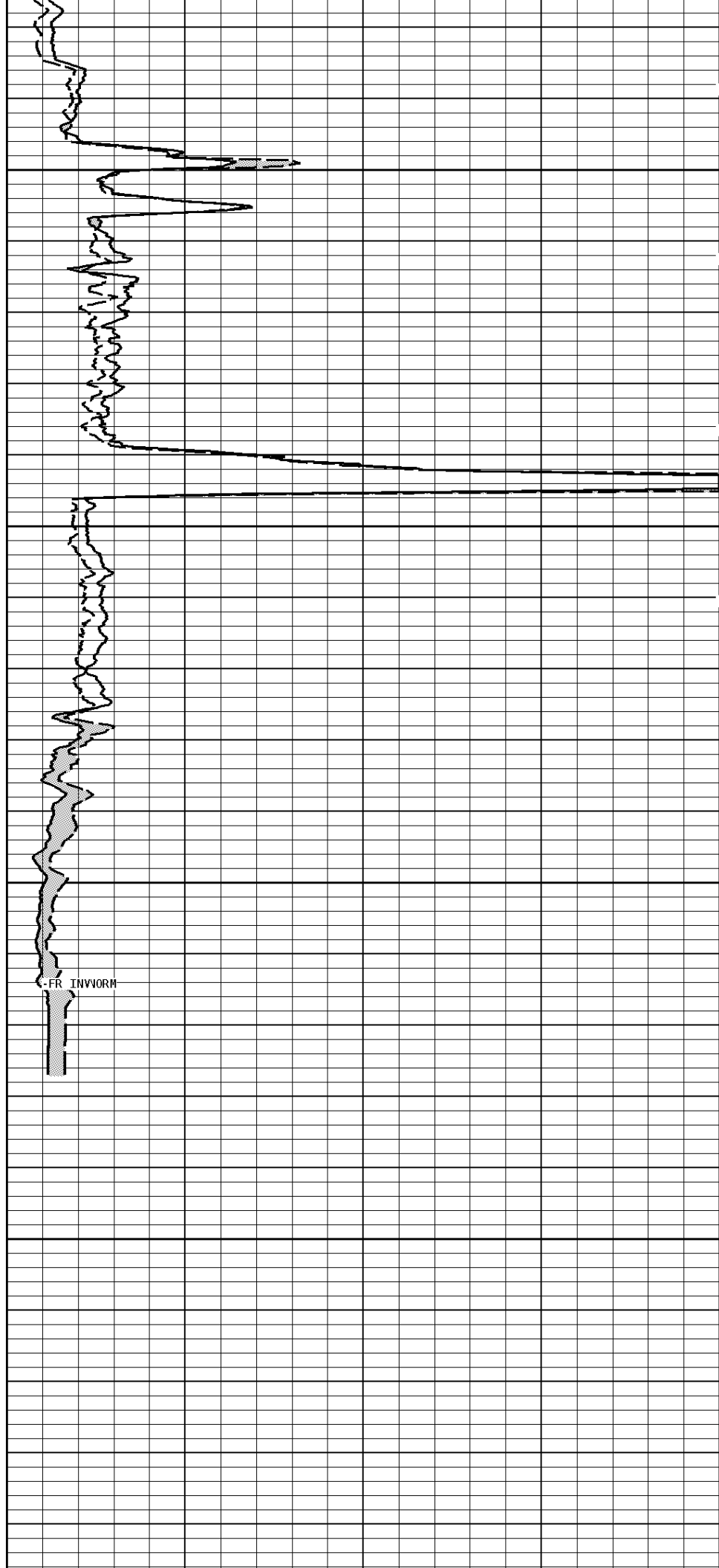


4000

4100

4140

File #1..



1.3

1:240 MAIN SECTION

	NORMAL	
	OHMM	
0		40

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INVERSE OHMM	
0	40

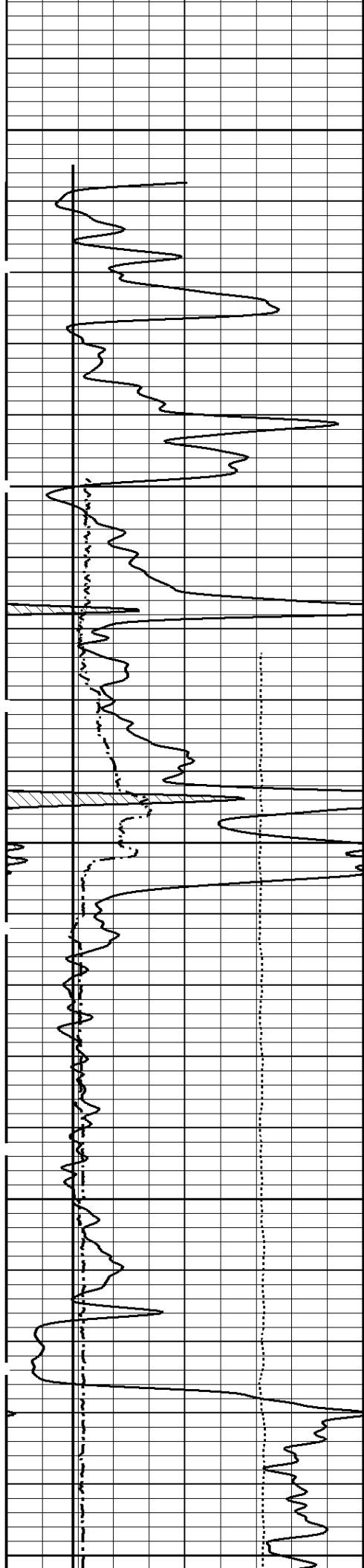
Zone 1 99999.0 to 0.0 Feet
 Drill Bit Size_____ 7.875 in

NORMAL OHMM
0 40

1:240 REPEAT SECTION	
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File #1.1.2

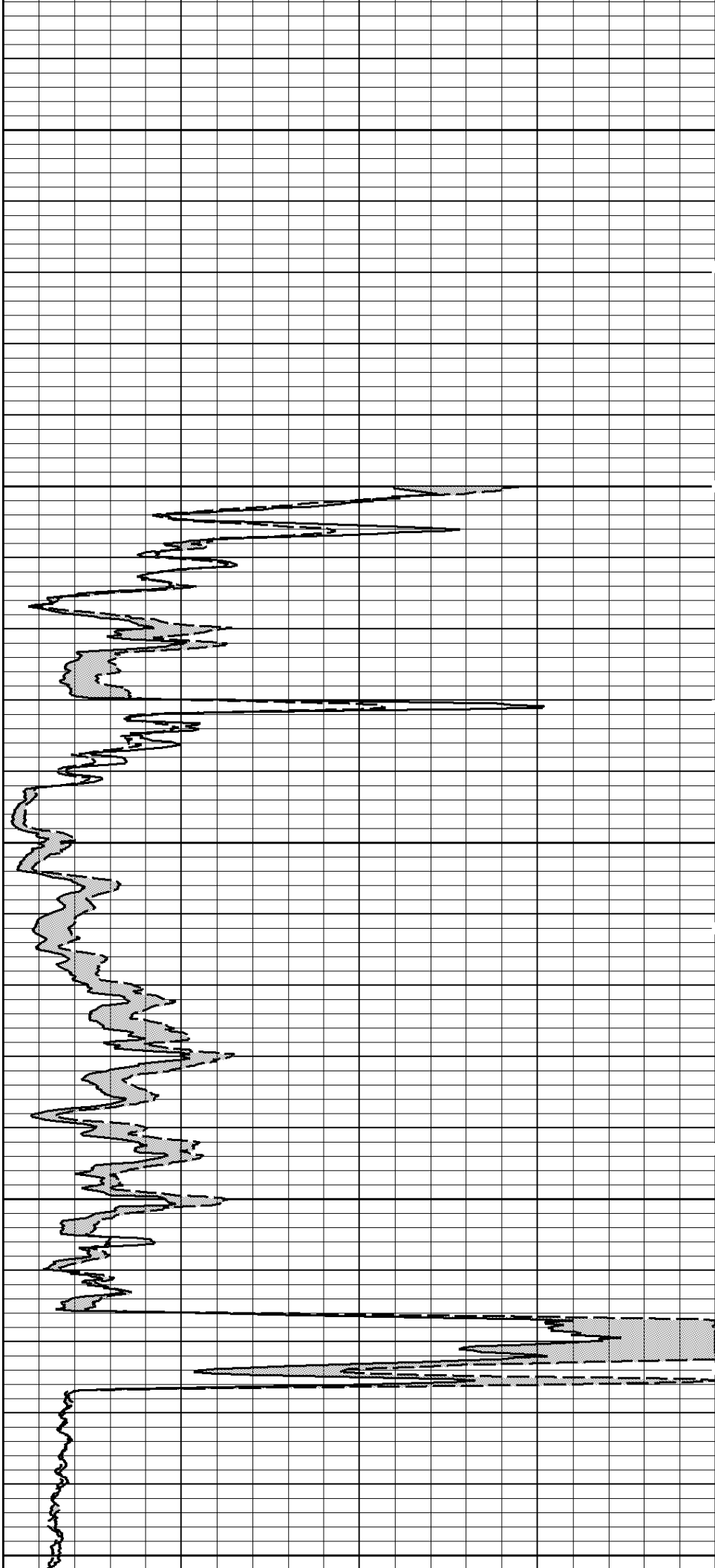
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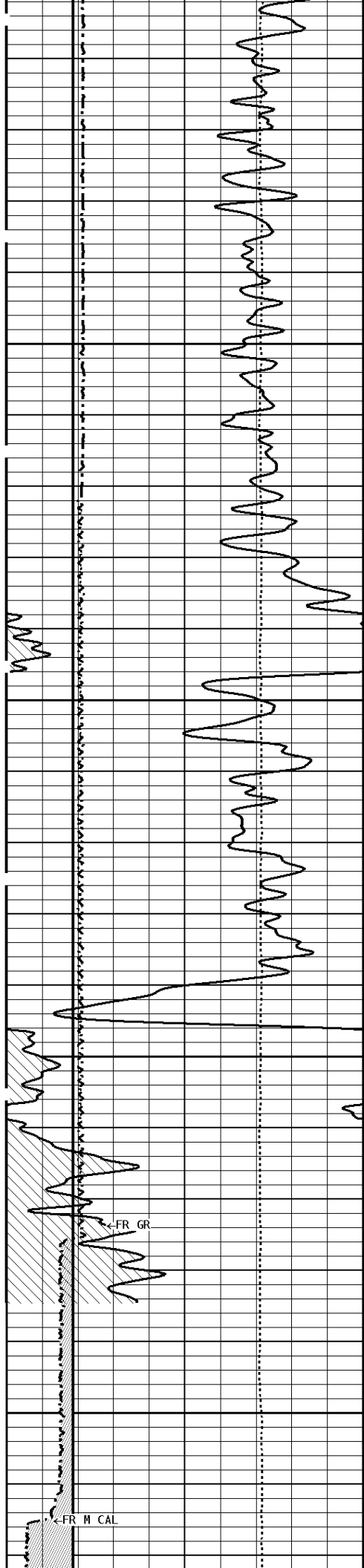


3700

3800

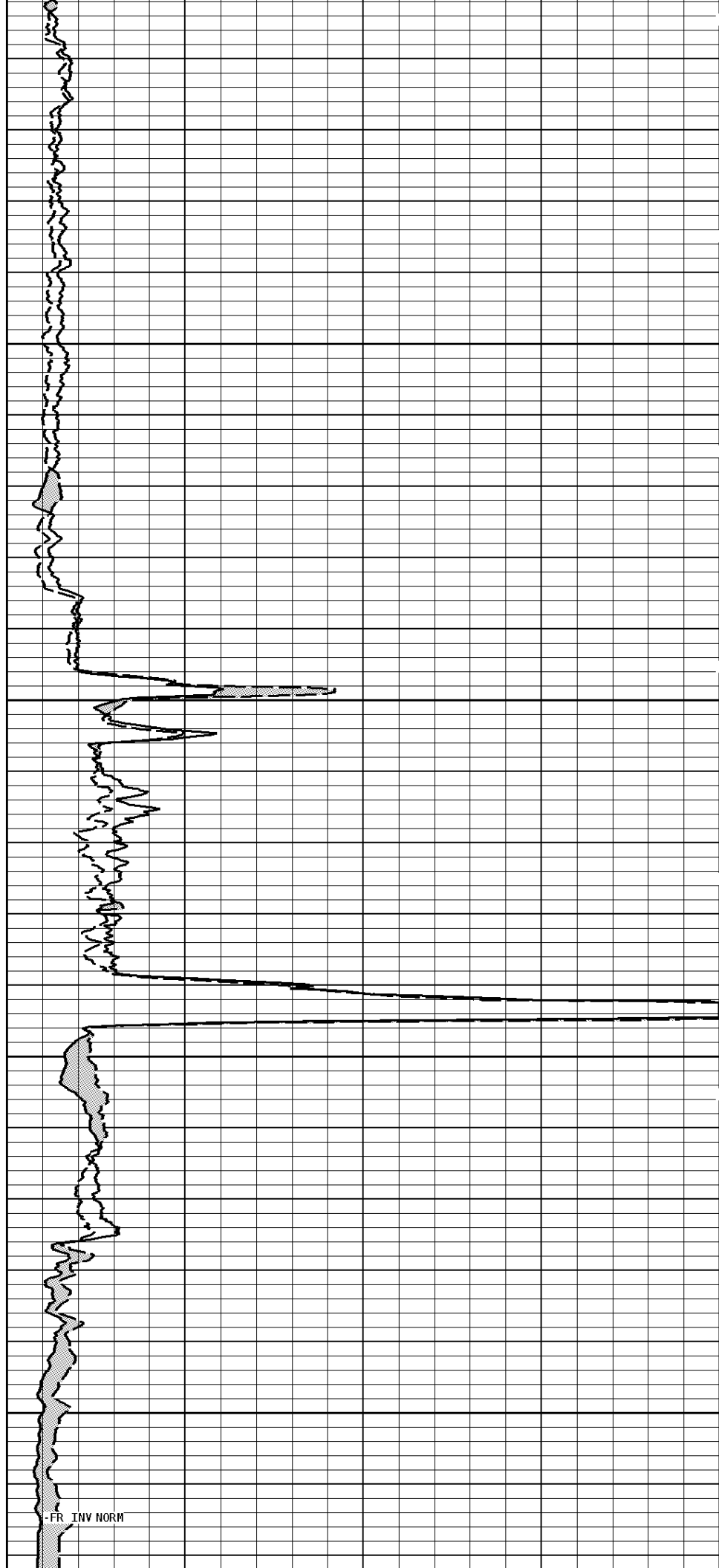
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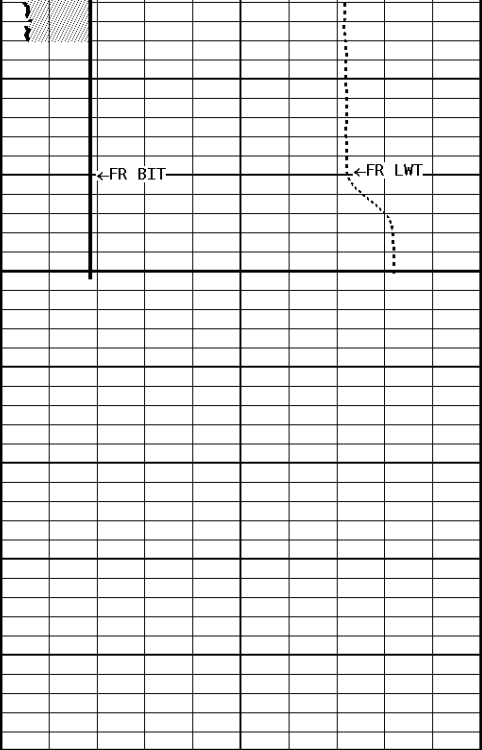




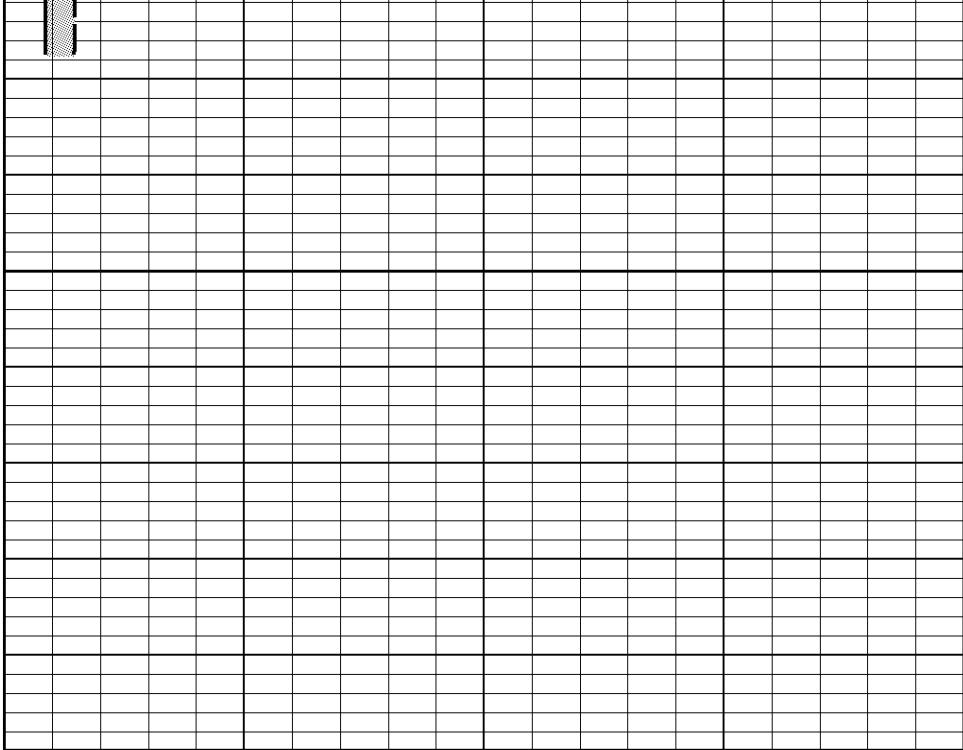
4000

4100





4140



1:240 REPEAT 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		

*** Calibration Summary ***

Shop Calibration					
GRT-B					
Performed : 24-JUN-2019			Time : 12:20		
Sensor Suite : GR-GR5			ID : GRT-BC-038		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GR-API	
	36	266	160		
		CPS			
Shop Calibration					
MLT-AB					
Performed : 03-JUN-2019			Time : 15:59		
Sensor Suite : CAL-MSFL			ID : MLT-012		

CL # 1	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
	12.4	15.4	6.0	12.0	IN.
Performed : 03-Jun-2019			Time : 16:08		
Sensor Suite : MS-NI			ID : MLT-012		
	Jig#1	Jig#2	Verifier	Units	
VN-0	522.41	3592.20	3592.82		
VN-90	322.29	4426.00	4426.45		
MPNR Measured	3.07	28.50	28.51		
MPNR Calibrated	2.00	20.00	20.00	OHMM	
VI-0	379.00	5381.38	5381.98		
VI-90	608.31	4363.26	4364.08		
MPIR Measured	3.58	34.64	34.64		
MPIR Calibrated	2.00	20.00	20.00	OHMM	

STEP
energy services

Company: GRAND MESA OPERATING COMPANY

Well: PREISSER #1-34

Location: 330' FNL & 1620' FEL

Logged: 12-14-2019

K.B. Elev: 1687.0 Ft