

Tucker
ENERGY SERVICES

MICRO LOG

Company	VAL ENERGY INC.
Well	THELMA #1-24
Field	
County	COWLEY
State	KANSAS
Country	USA
API No.	15-035-234845-00-01
File No	TUL-61567
Company	VAL ENERGY INC.
Well	THELMA #1-24
Field	
County	COWLEY
State	KANSAS
Country	USA
API No	15-035-234845-00-01
Location	2310' FSL & 2970' FEL NE NE SW
LSD	Sect : 24 Twp : 32S Rge : 05E

Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 1295.00	CNT PIT
Log Measured From:	KB	DF 1294.00	LDT
Above Permanent Datum:	9.00 Ft	GL 1286.00	MLT
Date	2017-09-08		
Run Number	1		
Depth--Driller	3600.0	Ft	
Depth--Logger	3599.0	Ft	
First Reading	3576.0	Ft	
Last Reading	278.0	Ft	
Casing--Driller	300.0	Ft	
Casing--Logger	278.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	8.8		
Fluid Loss	0.0		
PH/Viscosity	9.8	55.0	
Sample Source	MEASURED		
RM@Measured Temp.	0.200	@ 80 F	
RMF@Measured Temp	0.170	@ 80 F	
RMC@Measured Temp.	0.230	@ 80 F	
Source RMF/RMC	CALCULATED	CALCULATED	
RM@BHT	0.140	@ 115 F	
Time Circulation Stopped			
Max Recorded Temp.	115	F	
Equipment/Base	TRK 126	TULSA	
Recorded By	R. FRANKLIN		
Witnessed By	R. SMITH		

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	3600.00	8.625	0.00	280.00	0.00

Run Number	1	
Date	2017-09-08	
Date/Time On Bottom	2017-09-08 11:00	
Depth to Fluid	0.0 Ft	
Salinity	19500.000	
RMF@BHT	0.120 @ 115 F	
RMC@BHT	0.160 @ 115 F	

Run Number 1

Comments

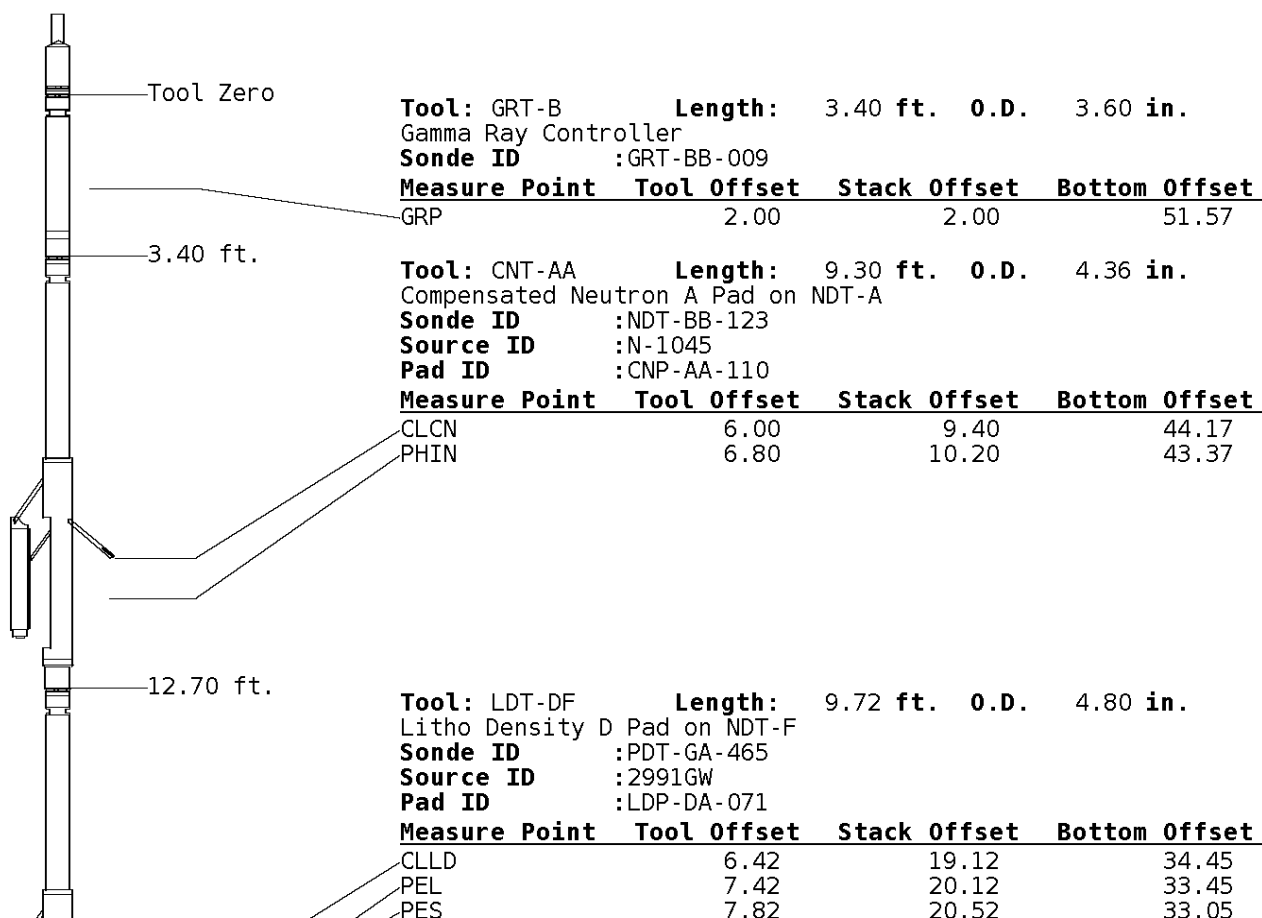
ALL PRESENTATION PER CUSTOMER REQUEST
 GRT,CNT,LDT,MLT,PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR & BOREHOLE VOLUME CALCULATED USING 5.5 PRODUCTION CASING
 PHIN IS CALIPER CORRECTED
 DETAIL IS PRESENTED FROM TD TO SCG

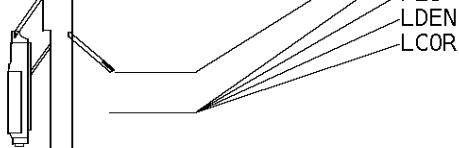
GRT; GRP,
 CNT; PHIN, CLCNIN
 LDT; PORL, LCORN, PECLN, LDENN, CLLDIN
 MLT; NOR_RF, INV_RF, MSCLPIN.
 PIT; ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS;
 B. BROWN
 B. BAILEY

Tool String Schematic

Total Tool Length - 53.57 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 943.00 lbs.



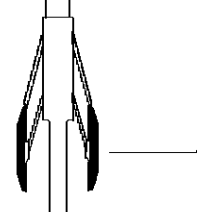


Tool	Length	O.D.	Bottom Offset
LDEN	7.62	20.32	33.25
LCOR	7.62	20.32	33.25

22.42 ft.

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
Sonde ID :MST-DA-025

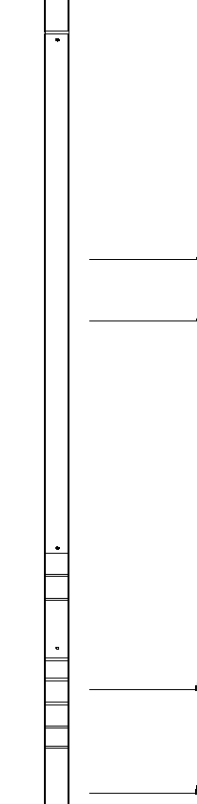
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	30.02	23.55
MSCLP	7.60	30.02	23.55
INV	7.60	30.02	23.55
NOR	7.60	30.02	23.55



32.08 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Sonde ID :PIT-AC-043

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	41.00	12.56
ILM	10.10	42.18	11.39
SFLU	17.49	49.57	4.00
SP	20.60	52.68	0.88



LWT 53.57 ft.

Well File: VAL_THELMA 1-24_SEP_8_MSTK

Scale: 1:240 **Format:** MST-240

Segment: V1.D1.S6 MAIN

Acquired: 2017-09/08 11:16 3.4.0-13756

Reference: 0

Processed: 2017-09/08 12:24 3.4.0-13756

**BIT SIZE
INCHES (IN)**

6 16

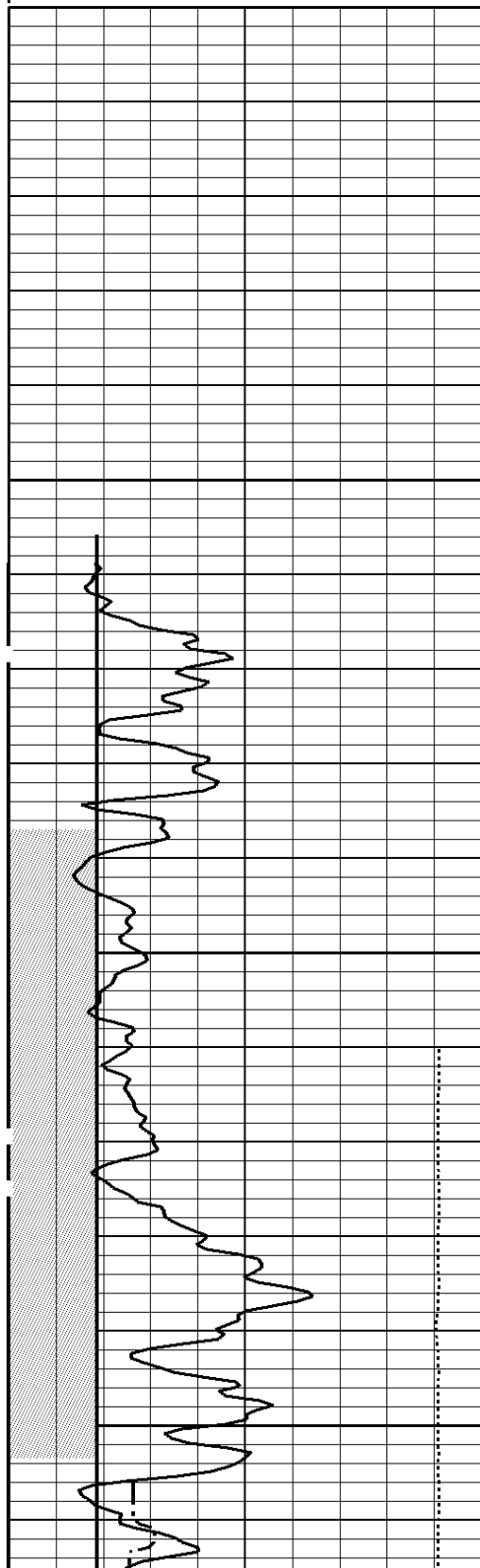
**CALIPER MICRO
INCHES (IN)**

16 26

16	26
6	16
TENSION LBS	
10000	0
GAMMA RAY API UNITS	
150	300
0	150

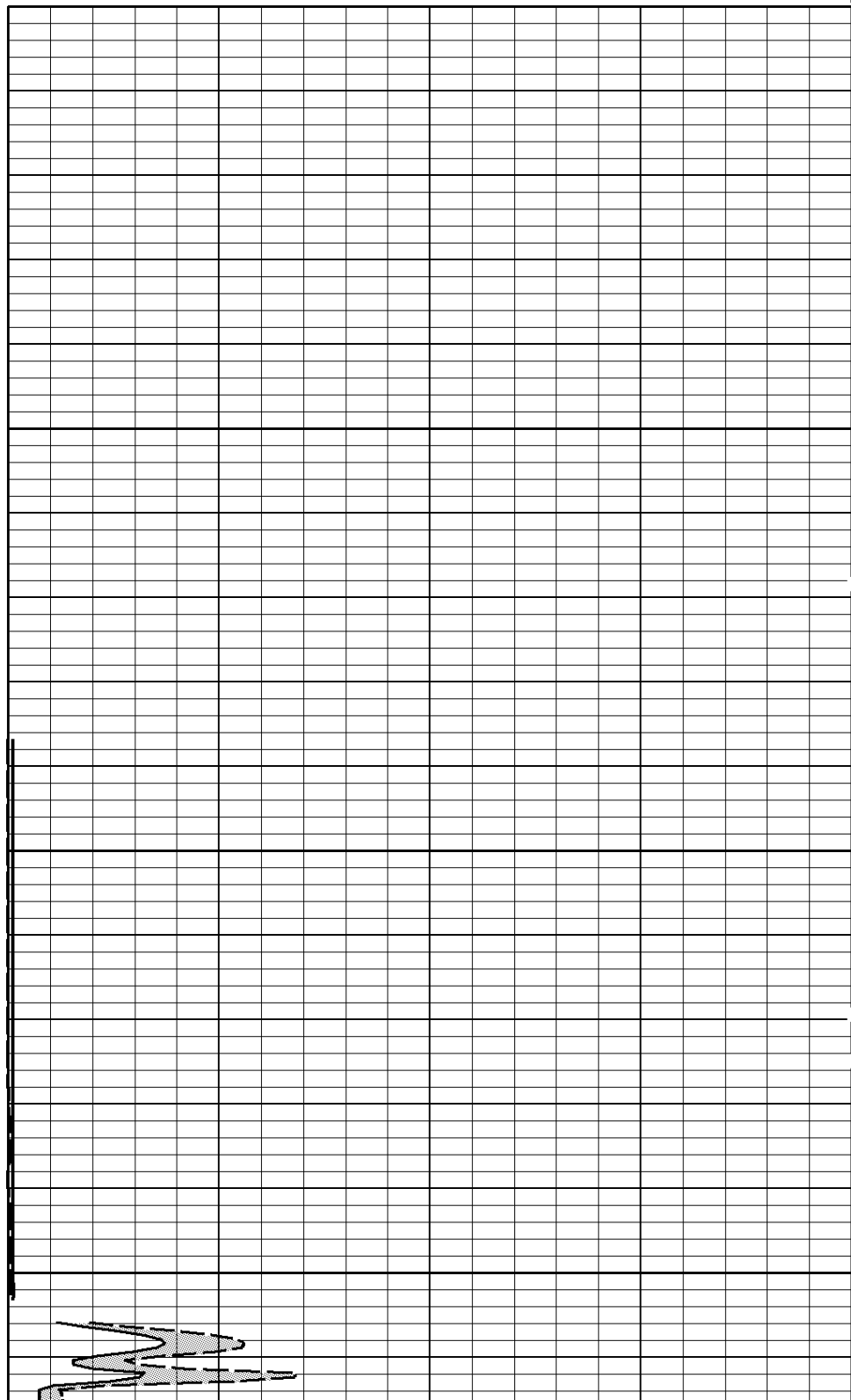
INVERSE OHMM	
0	40
NORMAL OHMM	
0	40

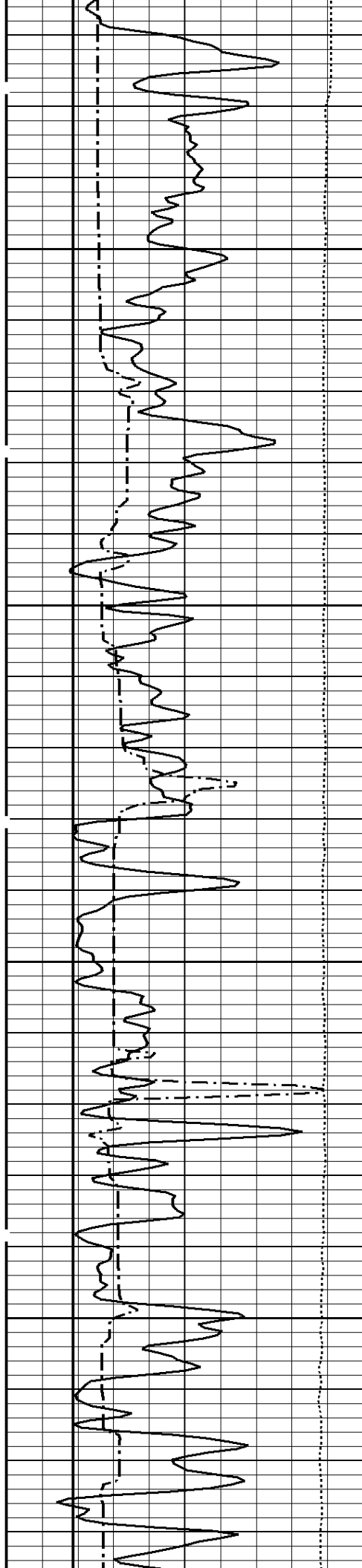
1:240 MAIN SECTION



200

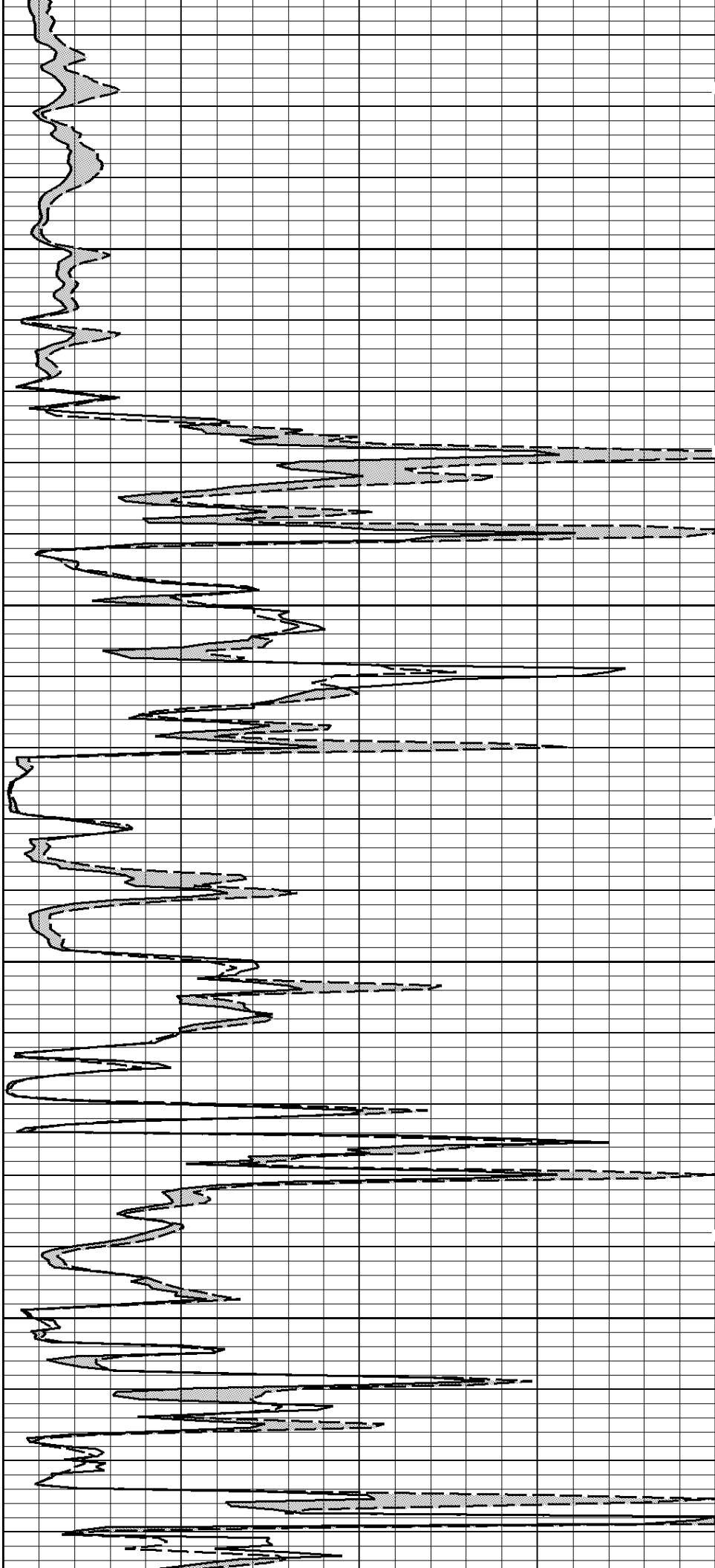
300

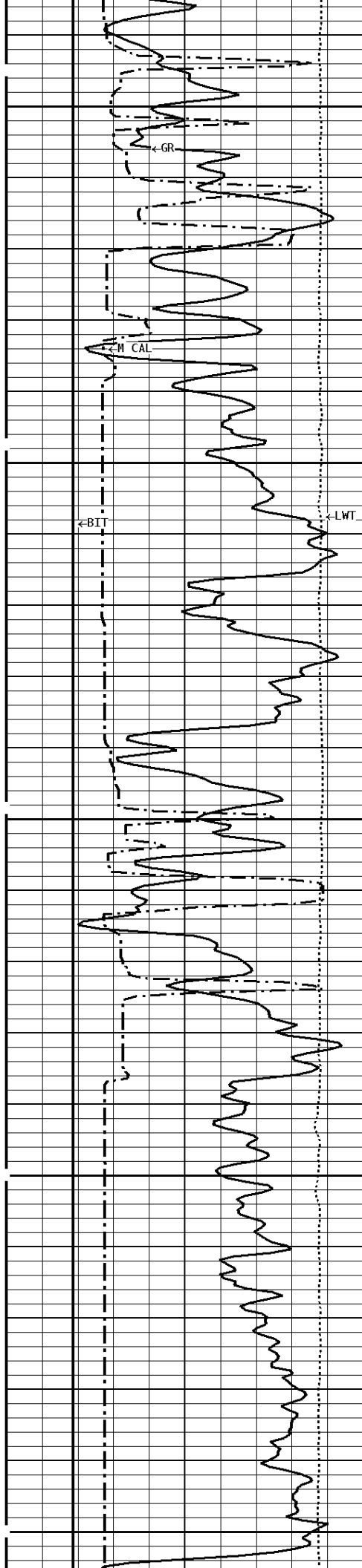




400

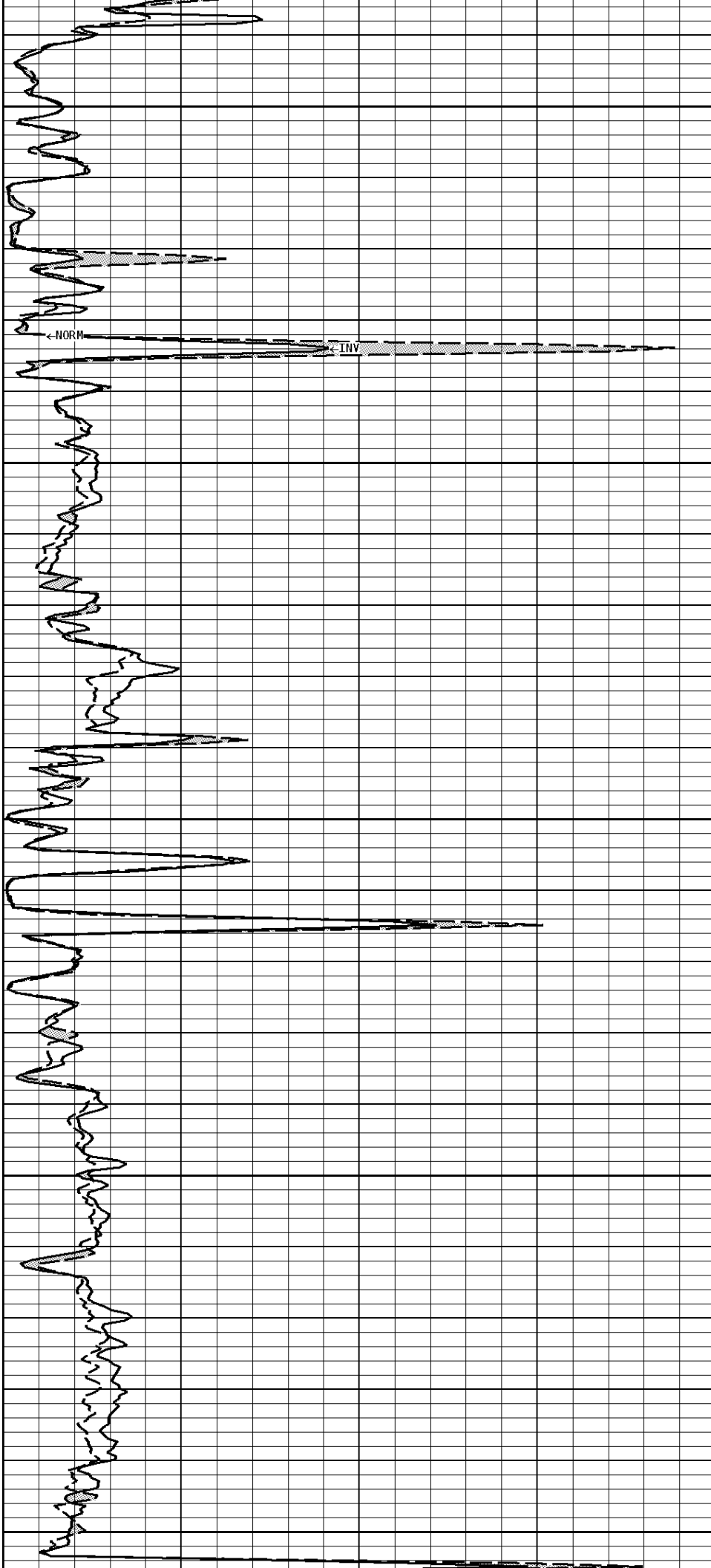
500

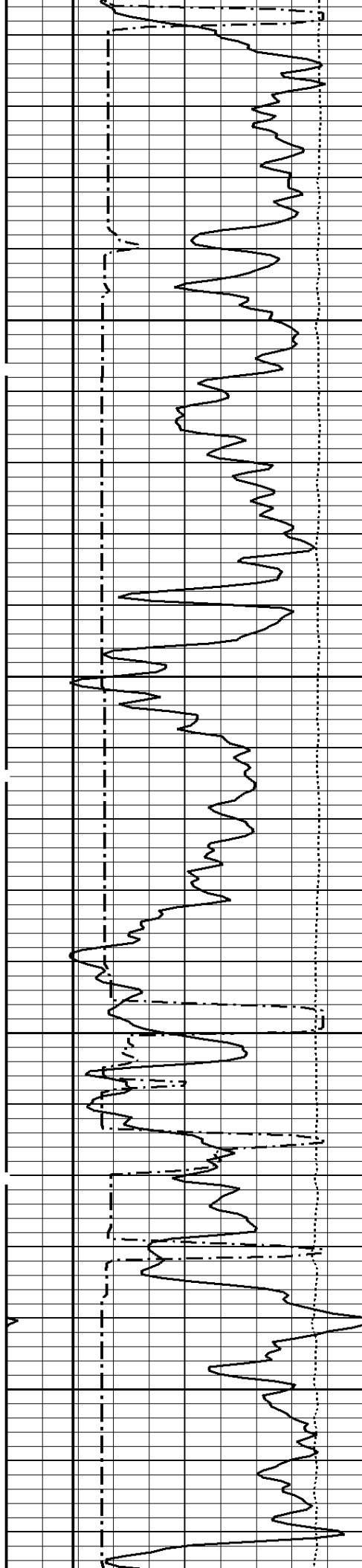




600

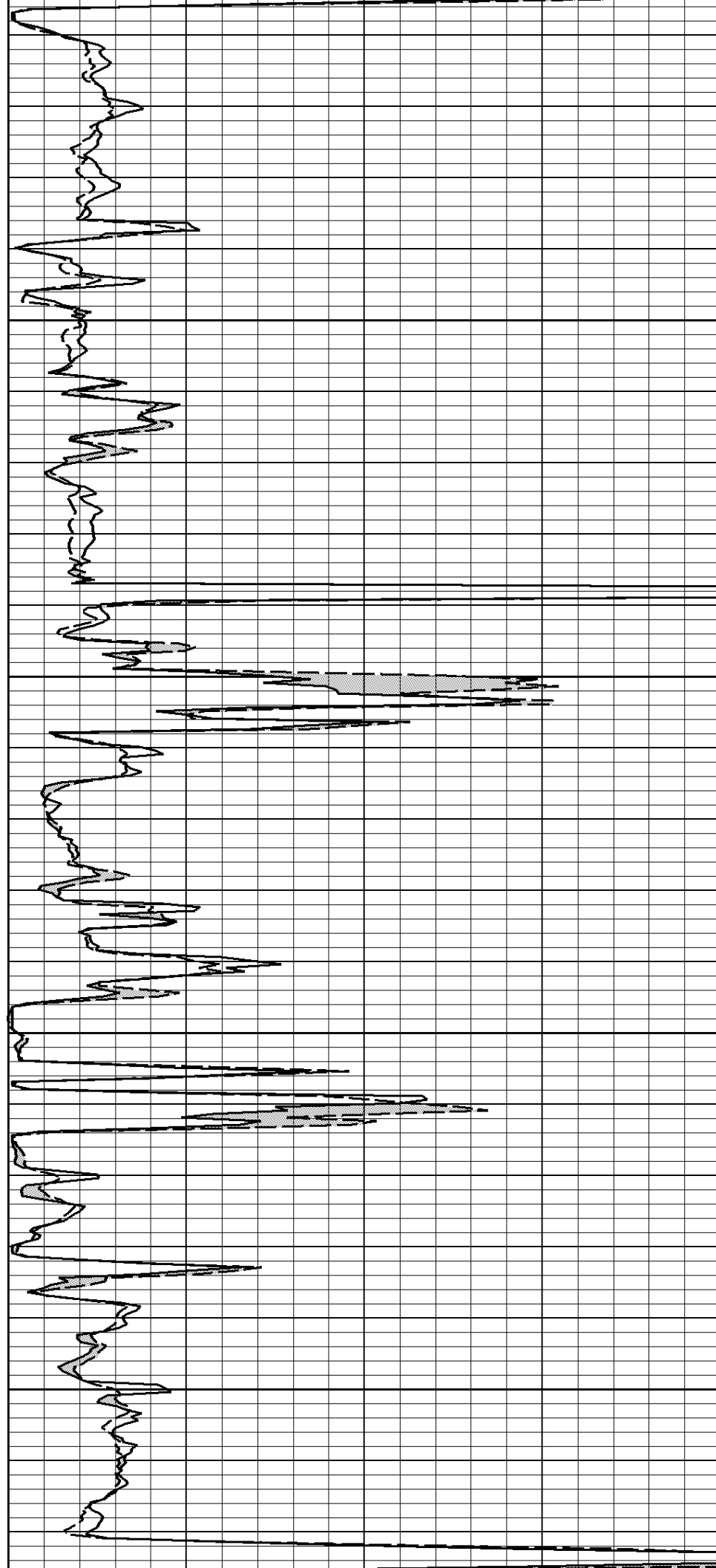
700

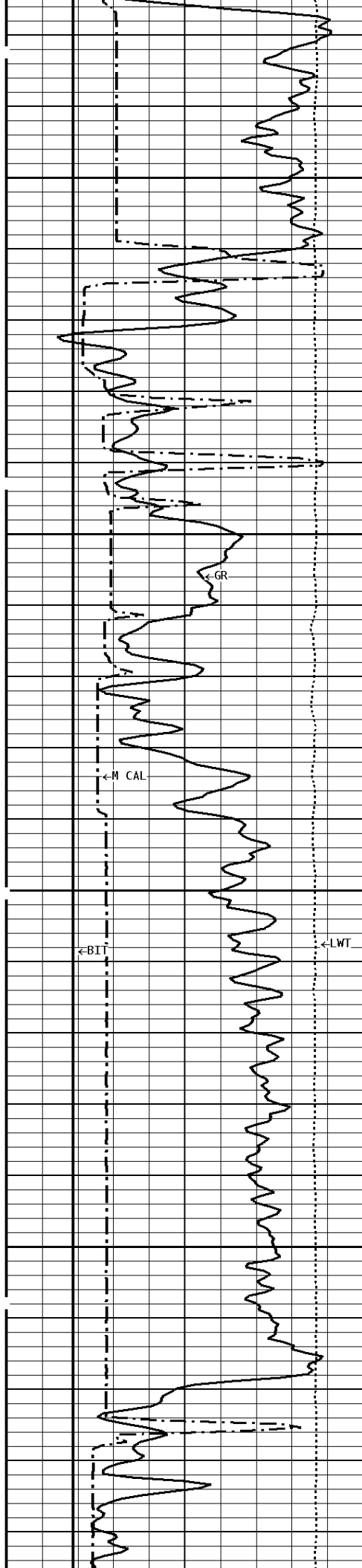




800

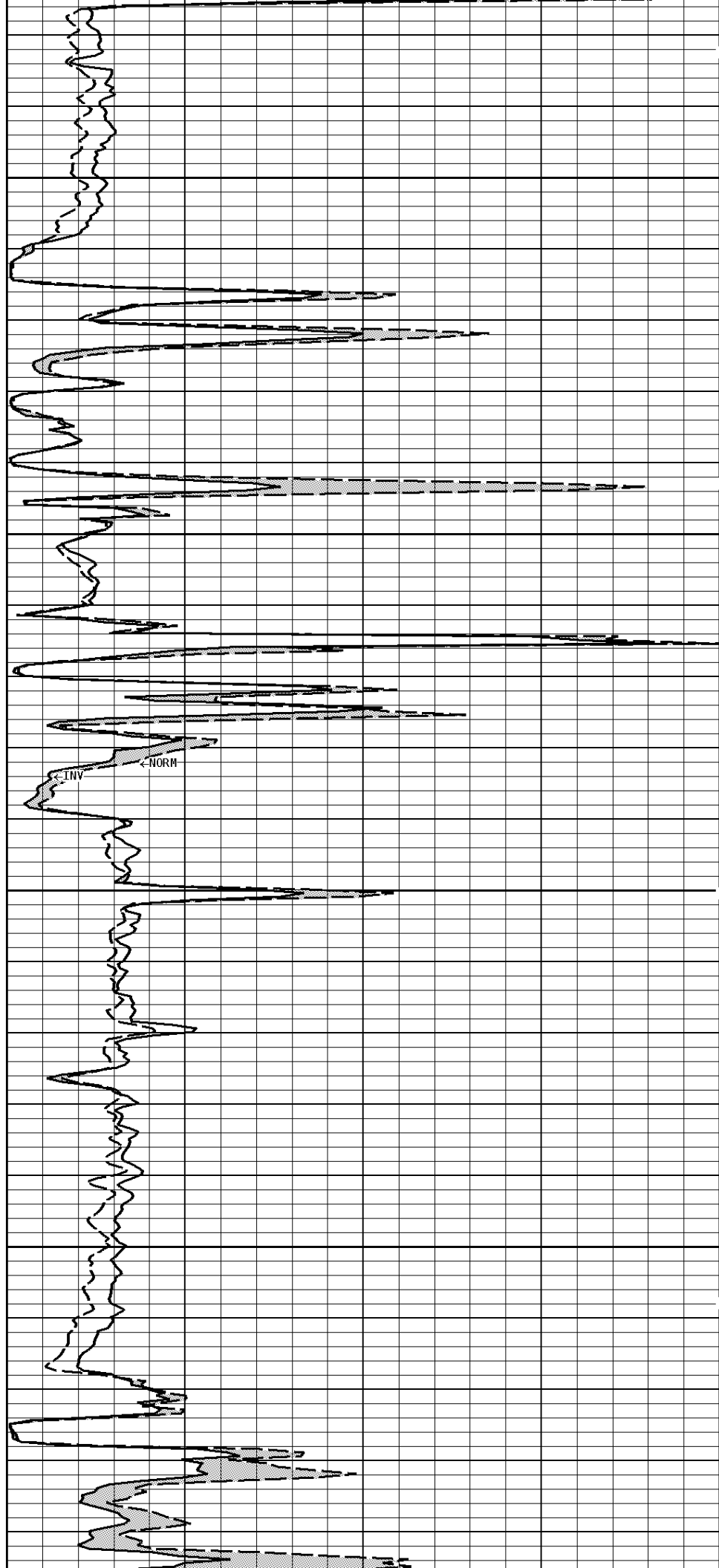
900

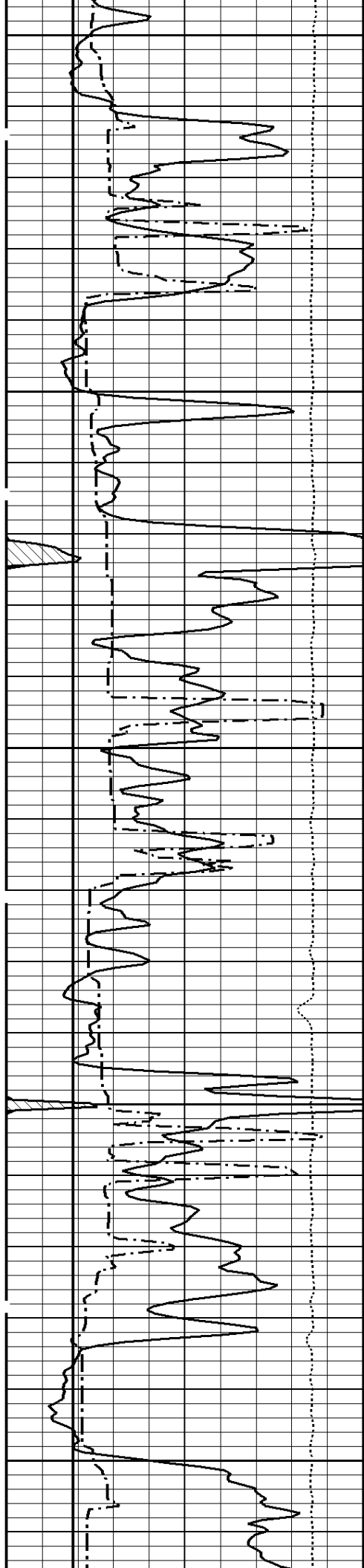




1000

1100

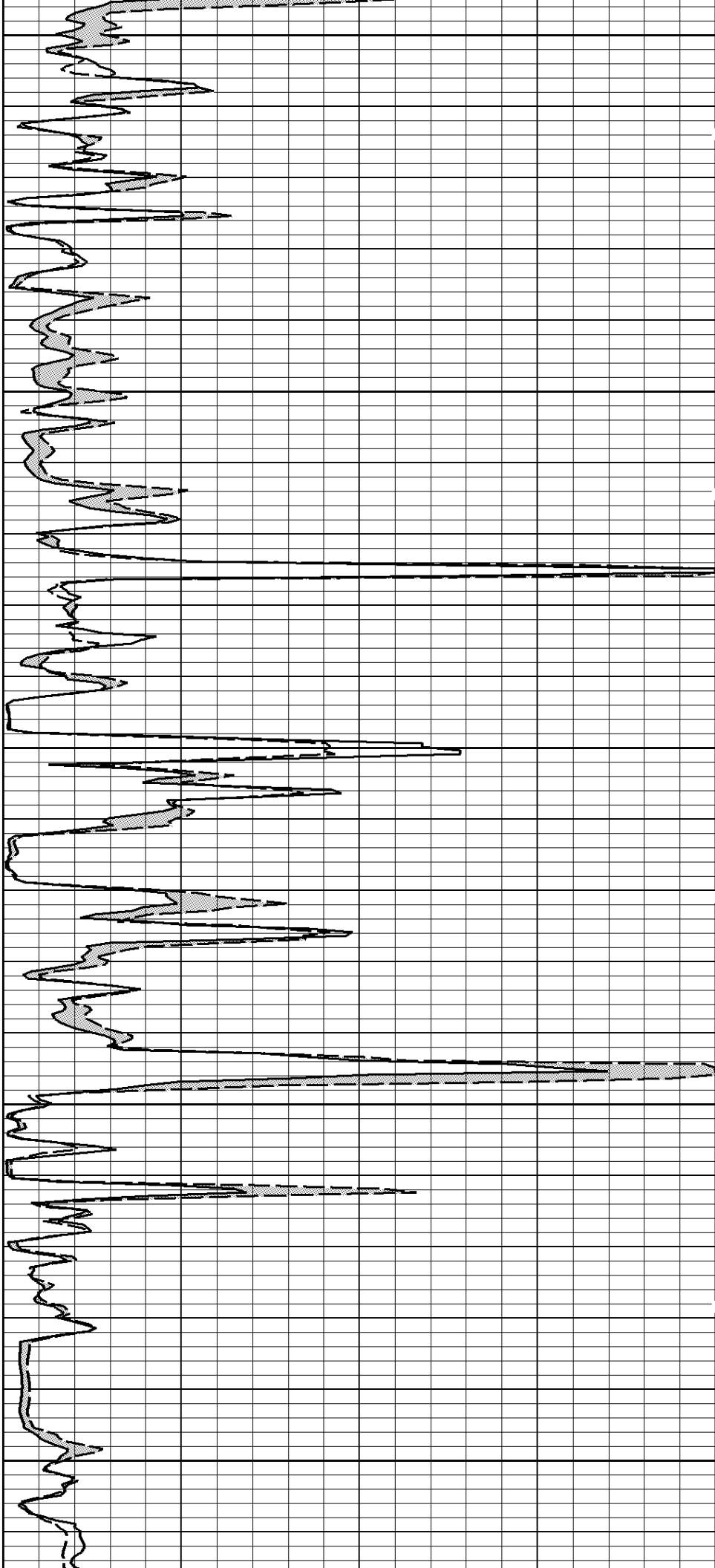


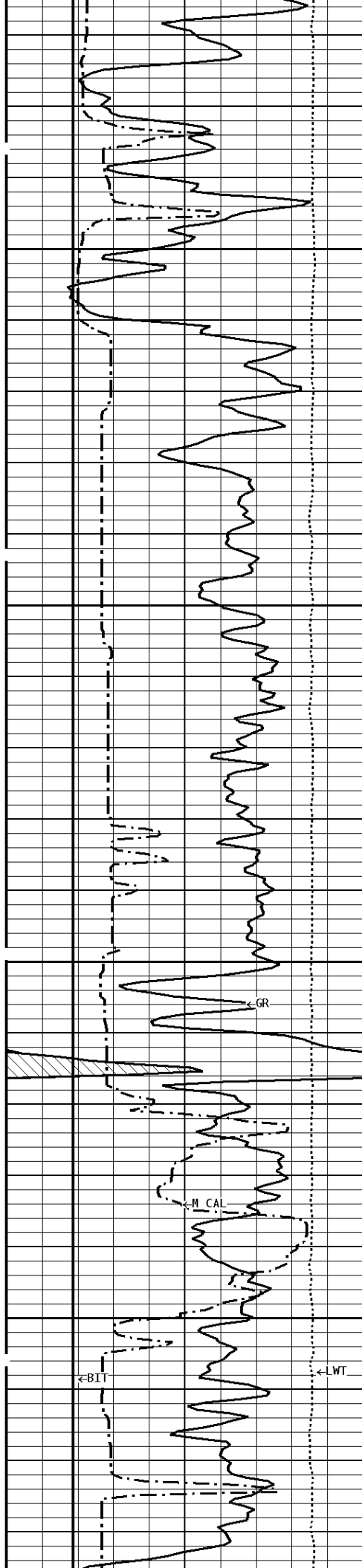


1200

1300

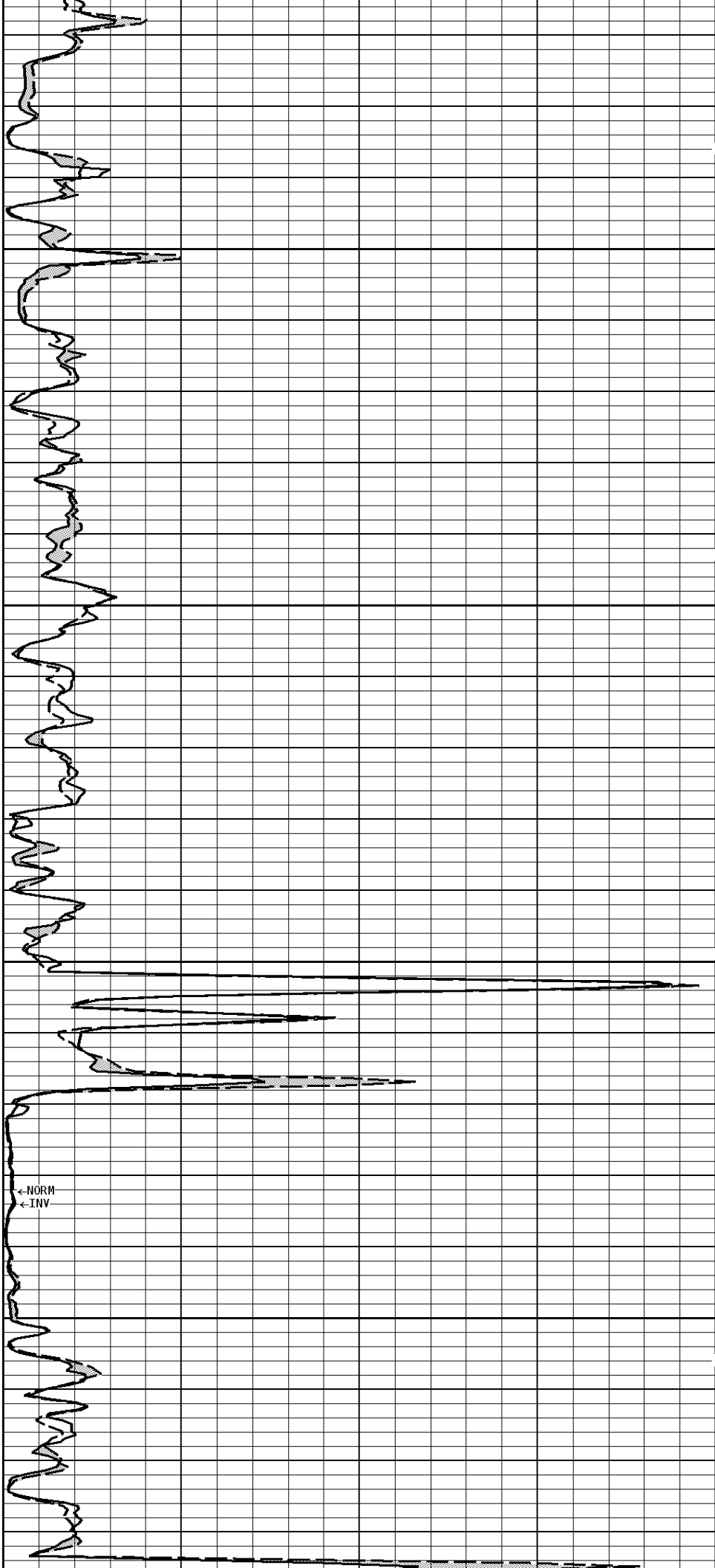
1400

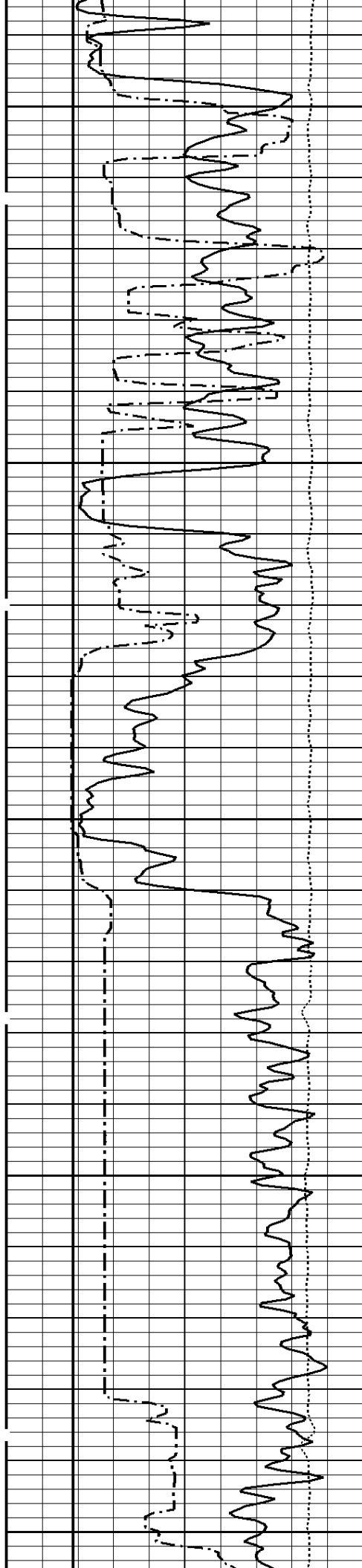




1500

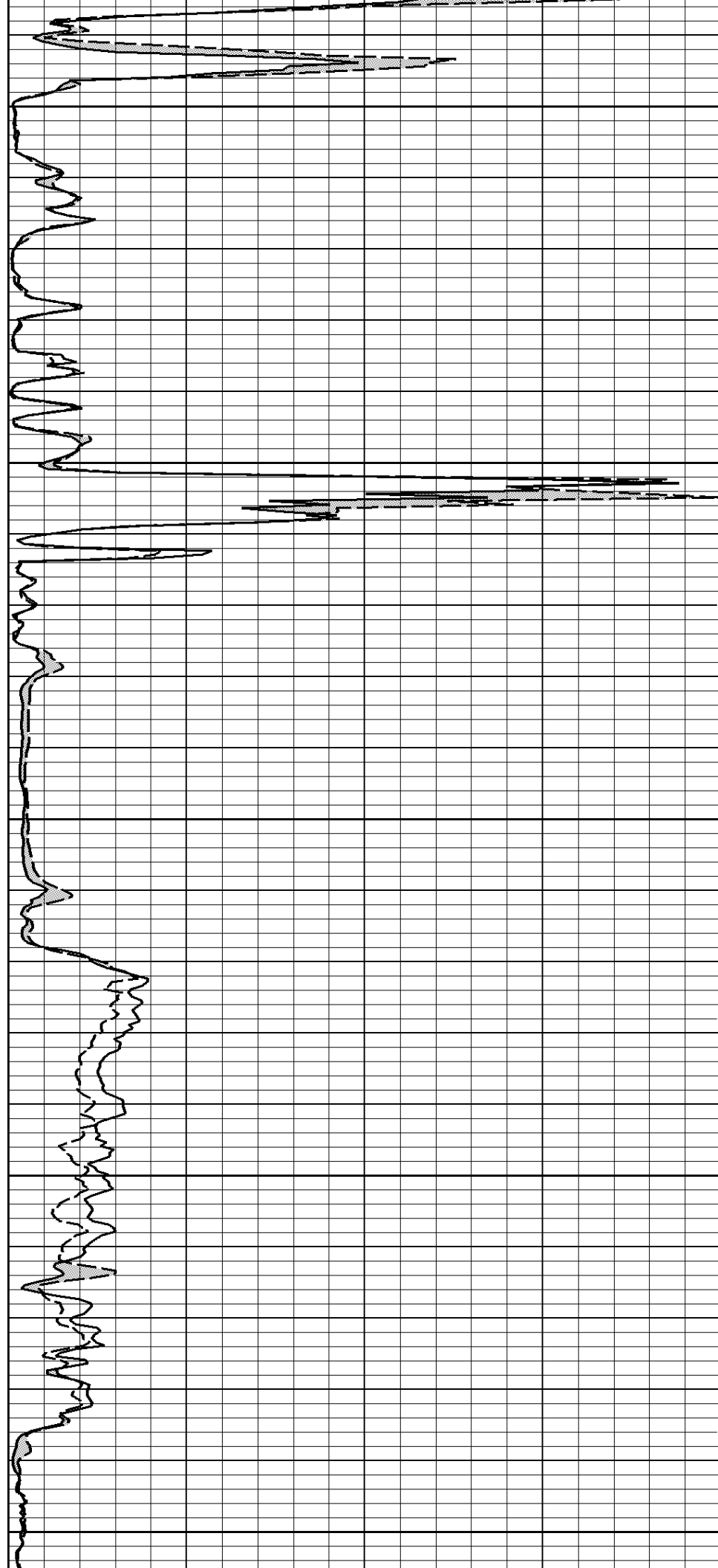
1600

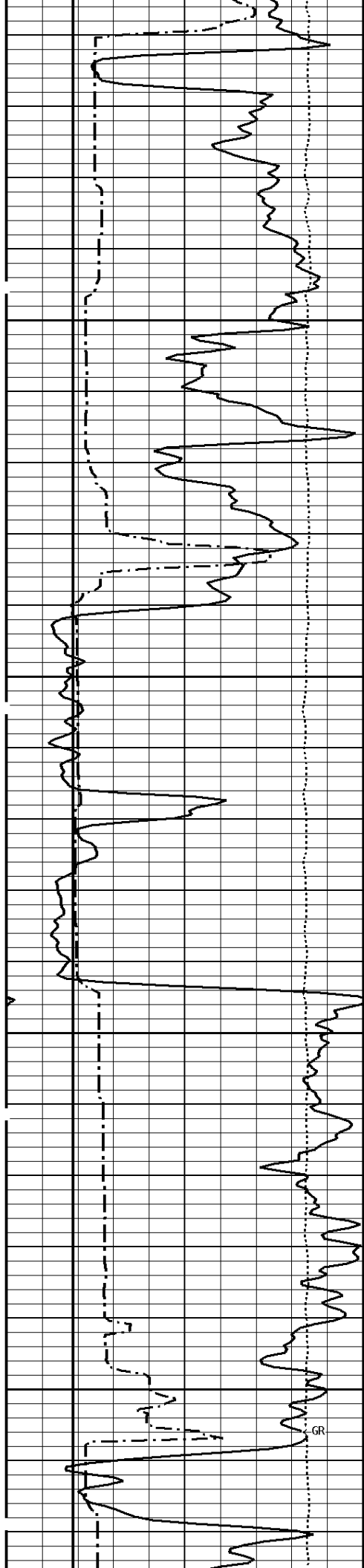




1700

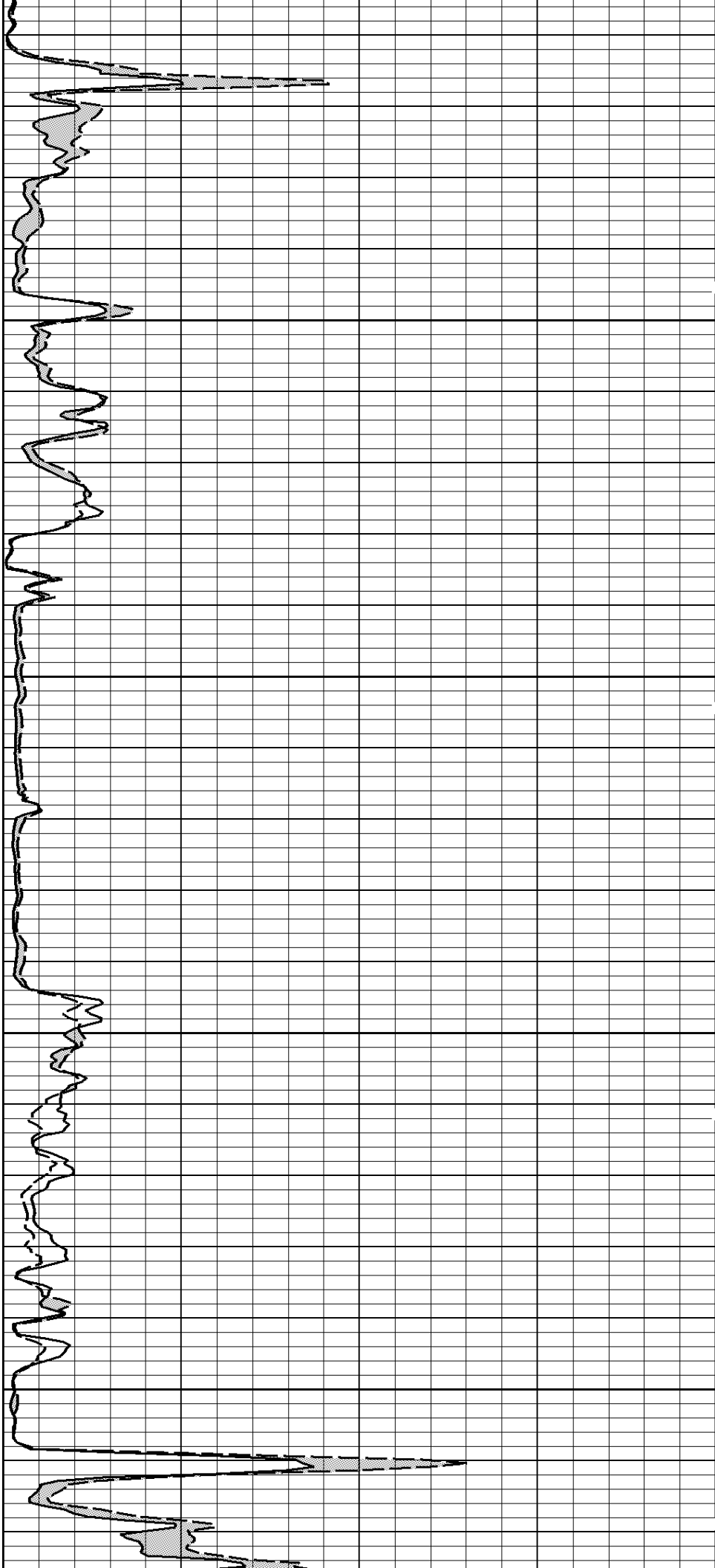
1800

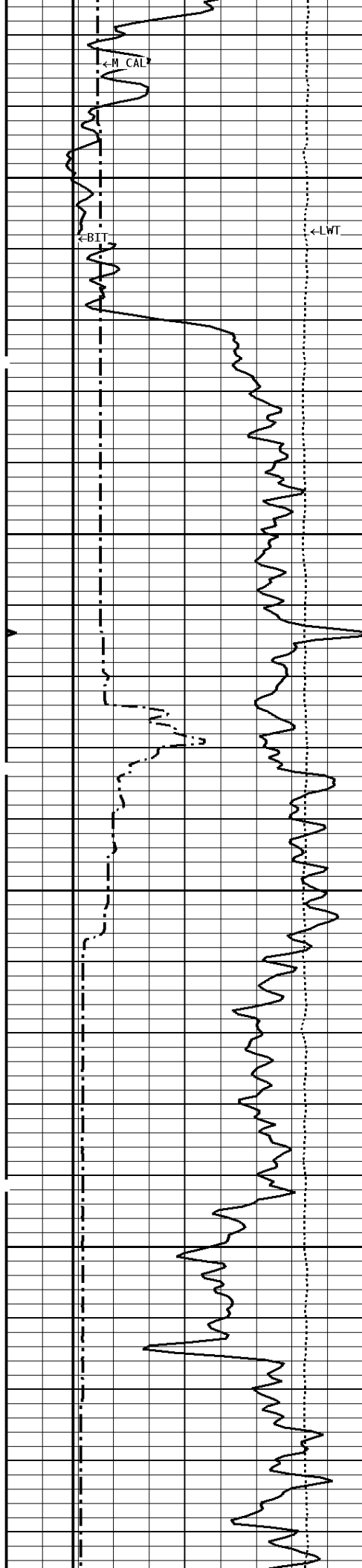




1900

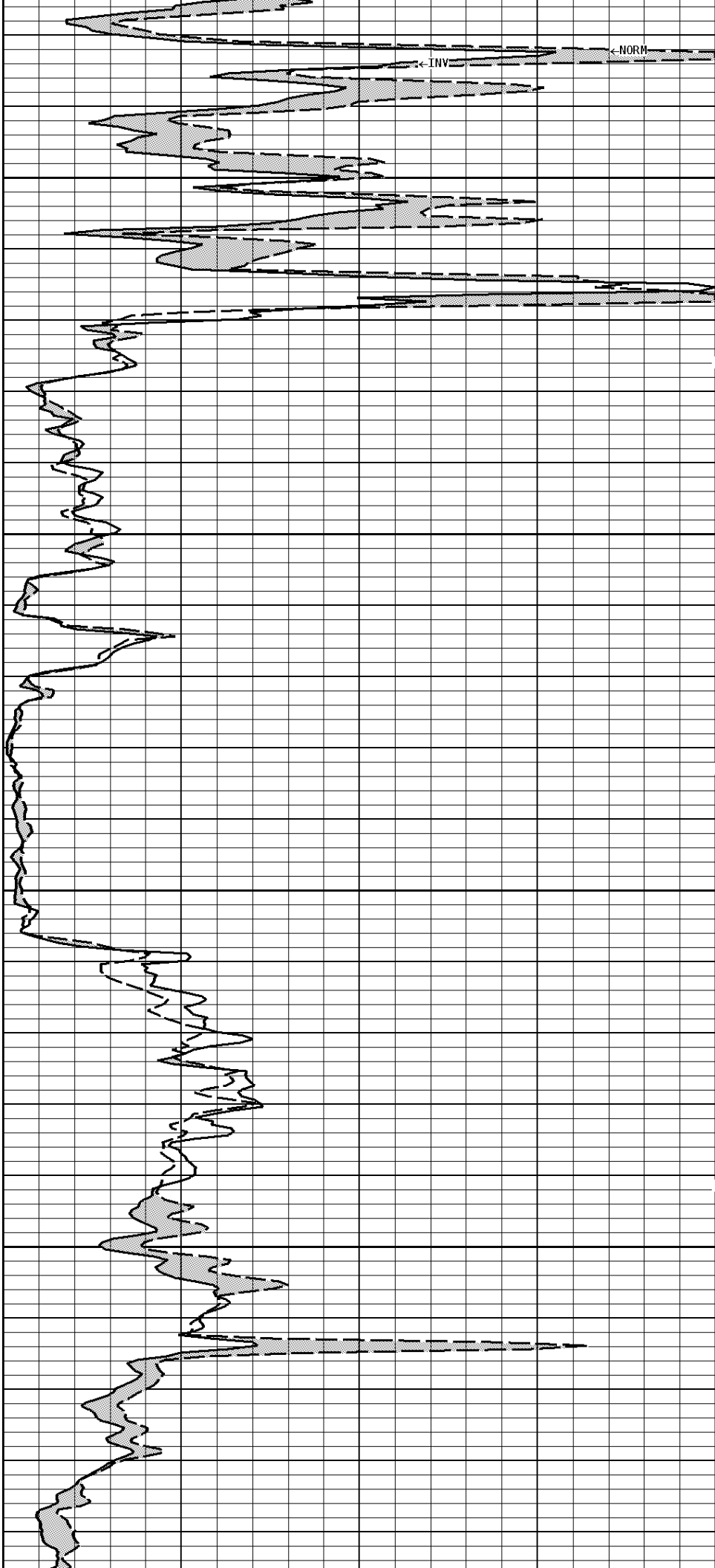
2000

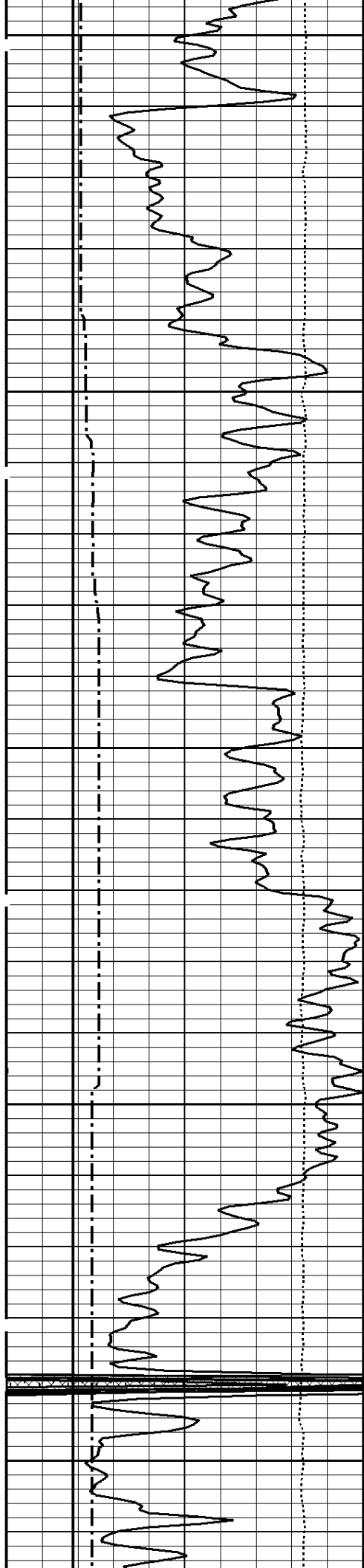




2100

2200

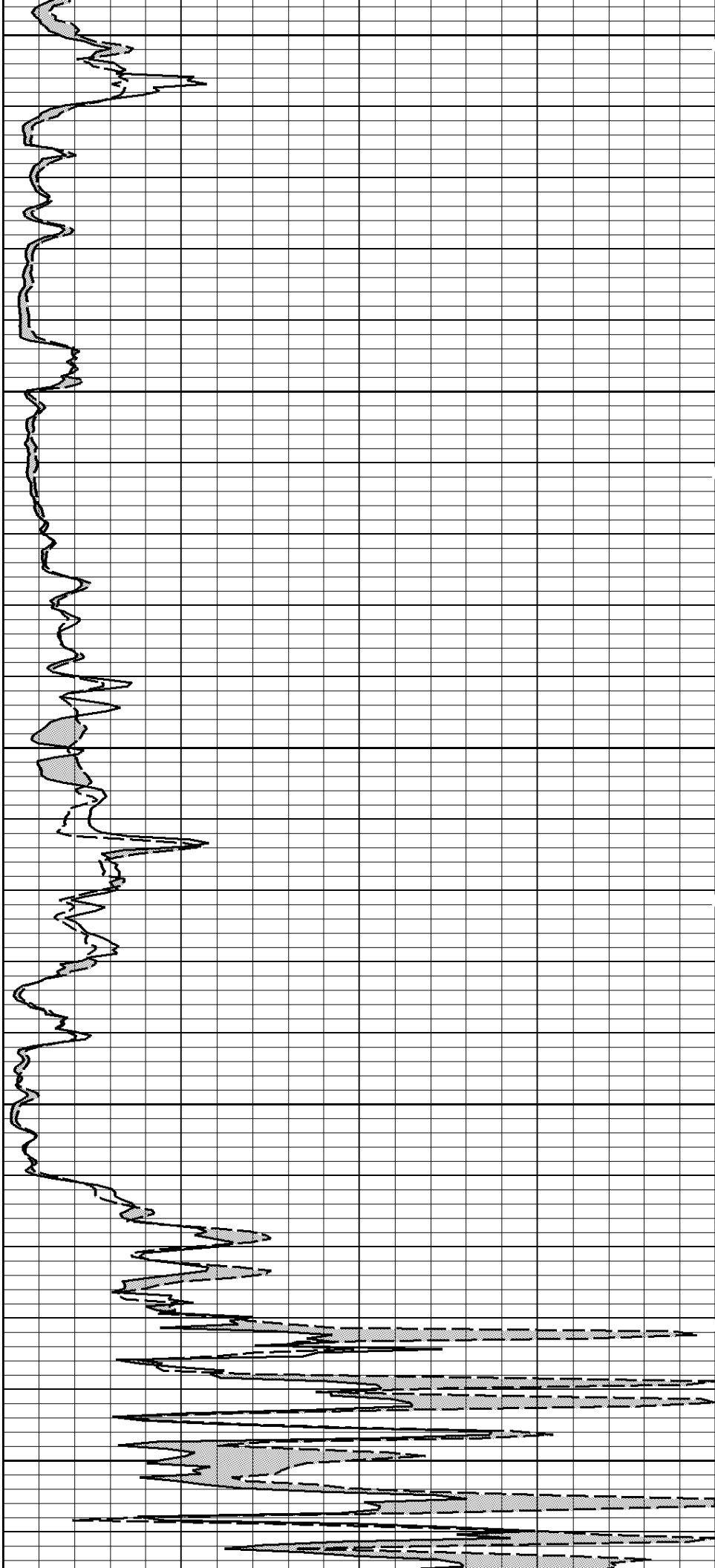


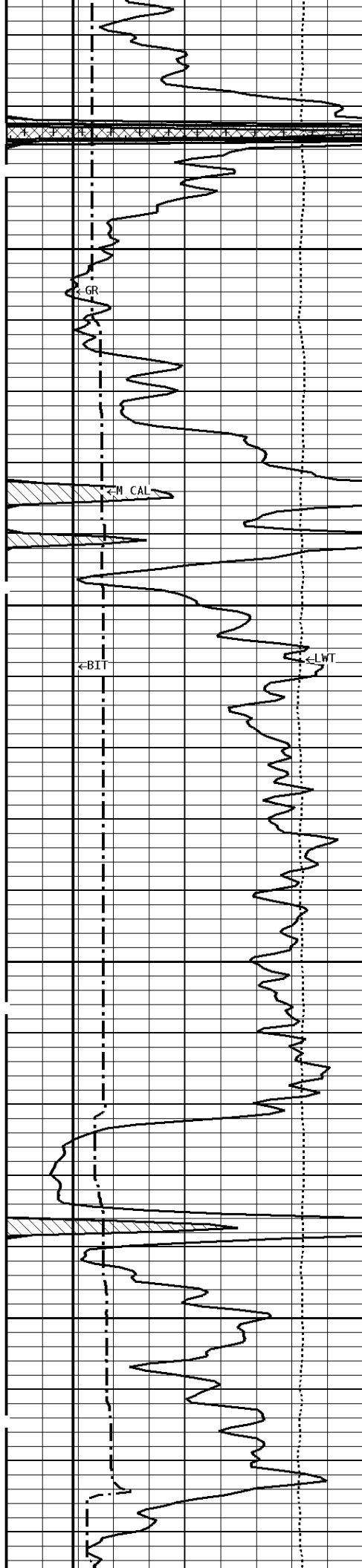


2300

2400

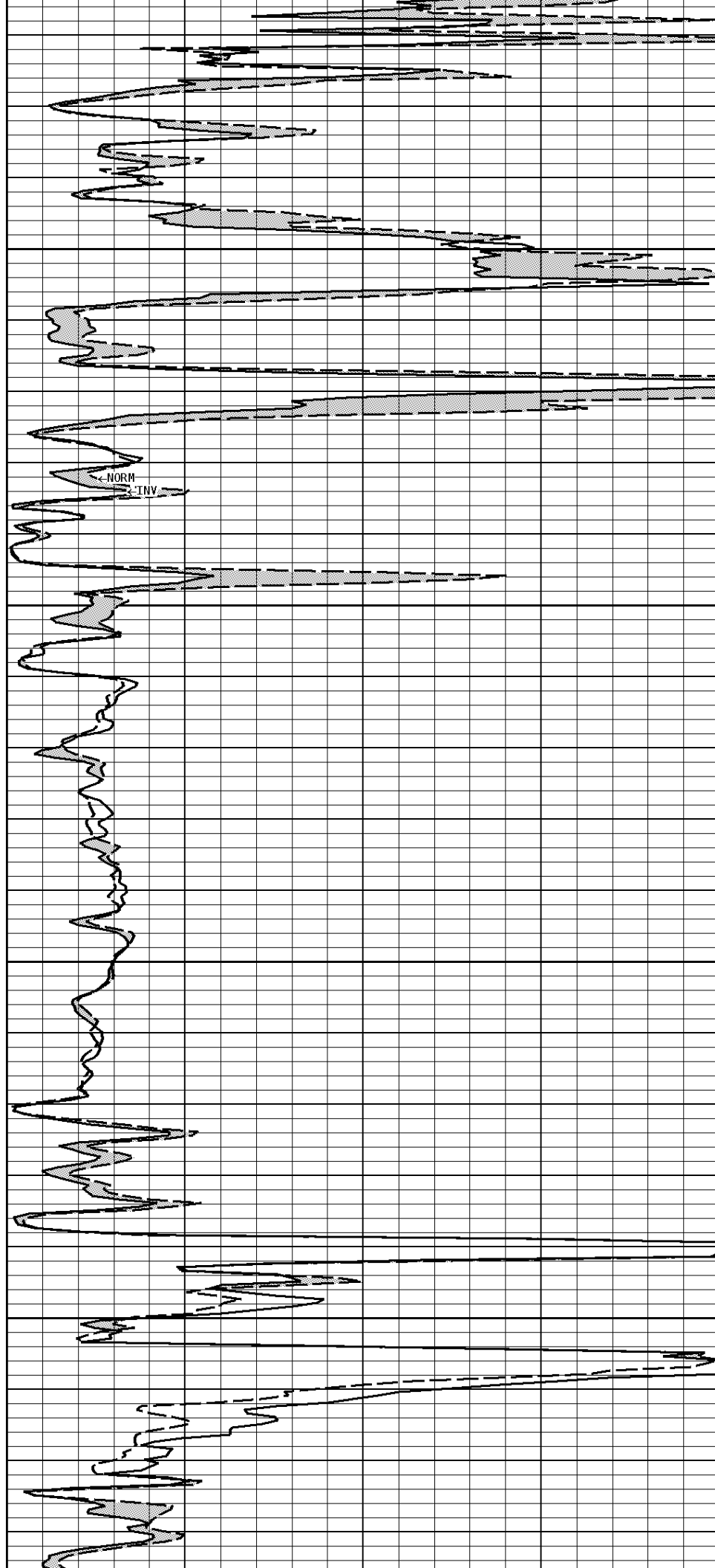
2500

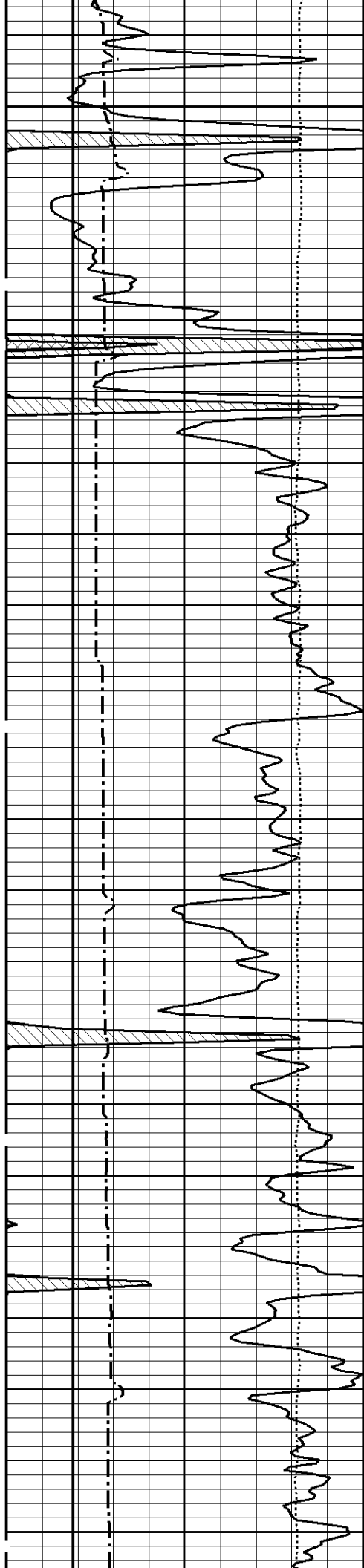




2600

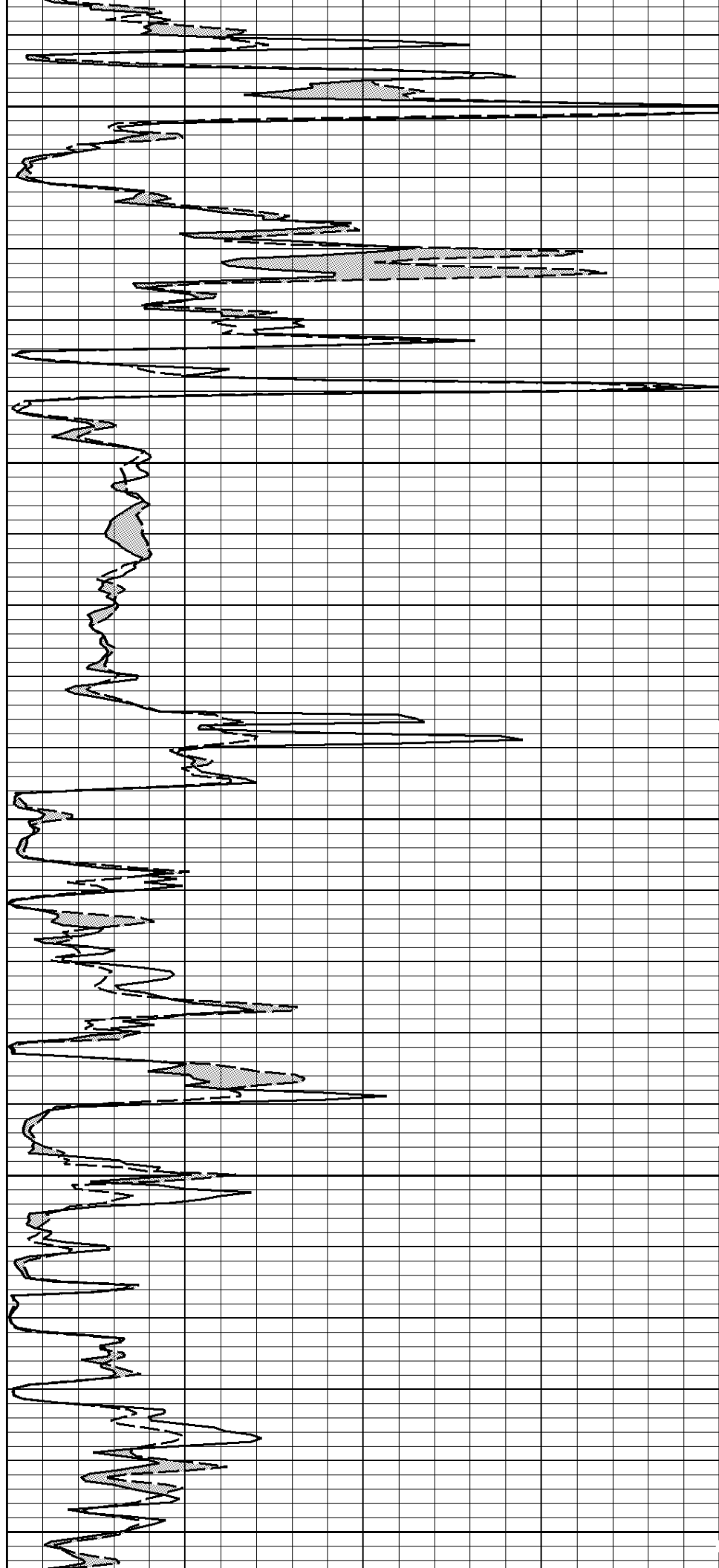
2700

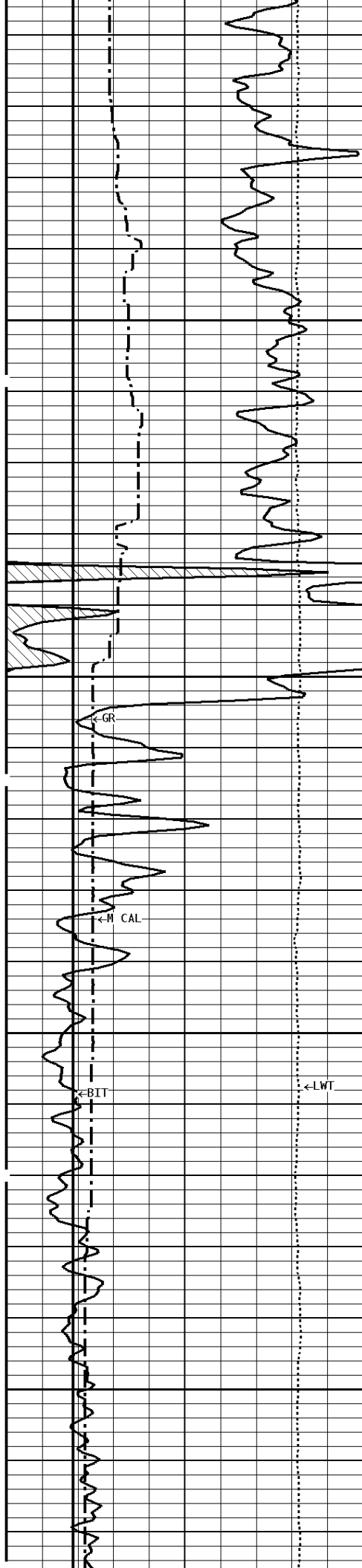




2800

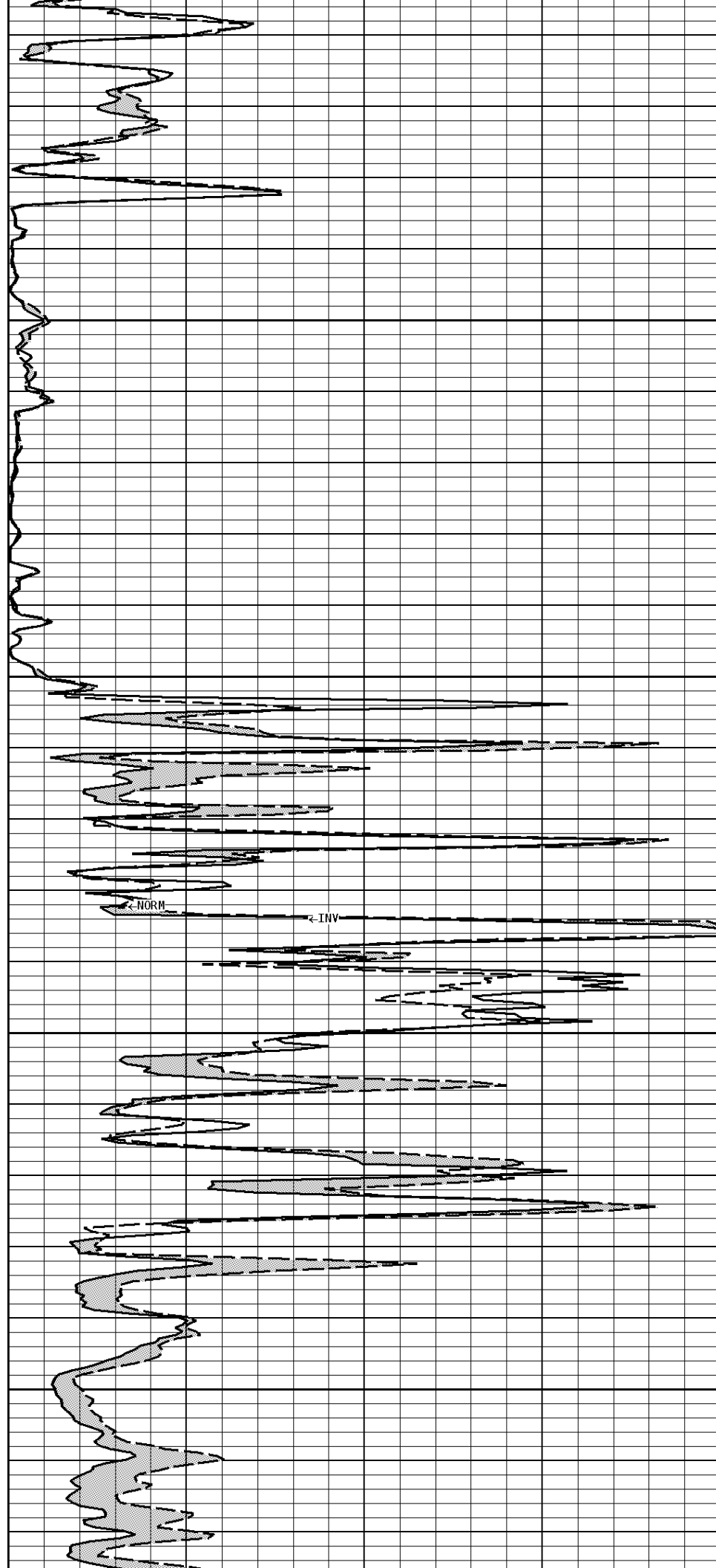
2900

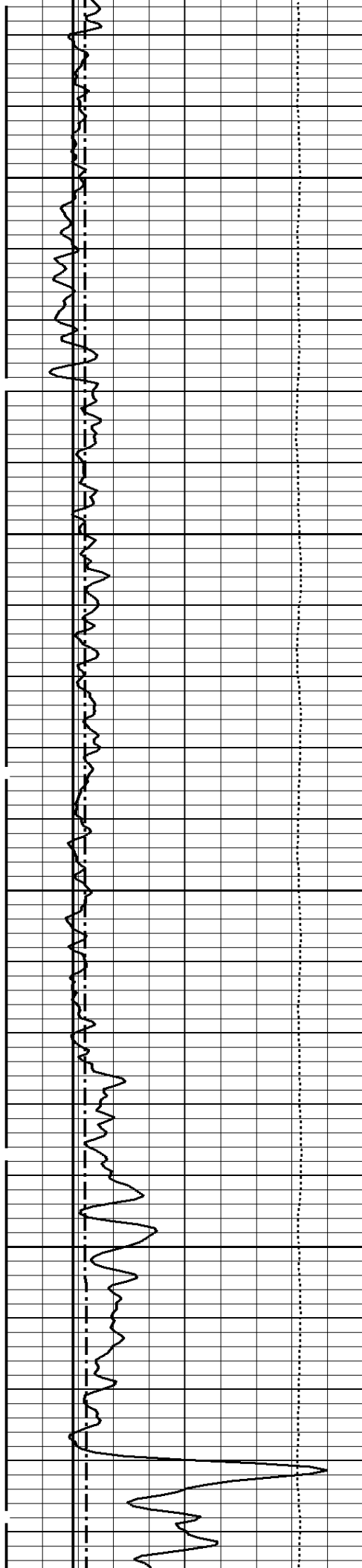




3000

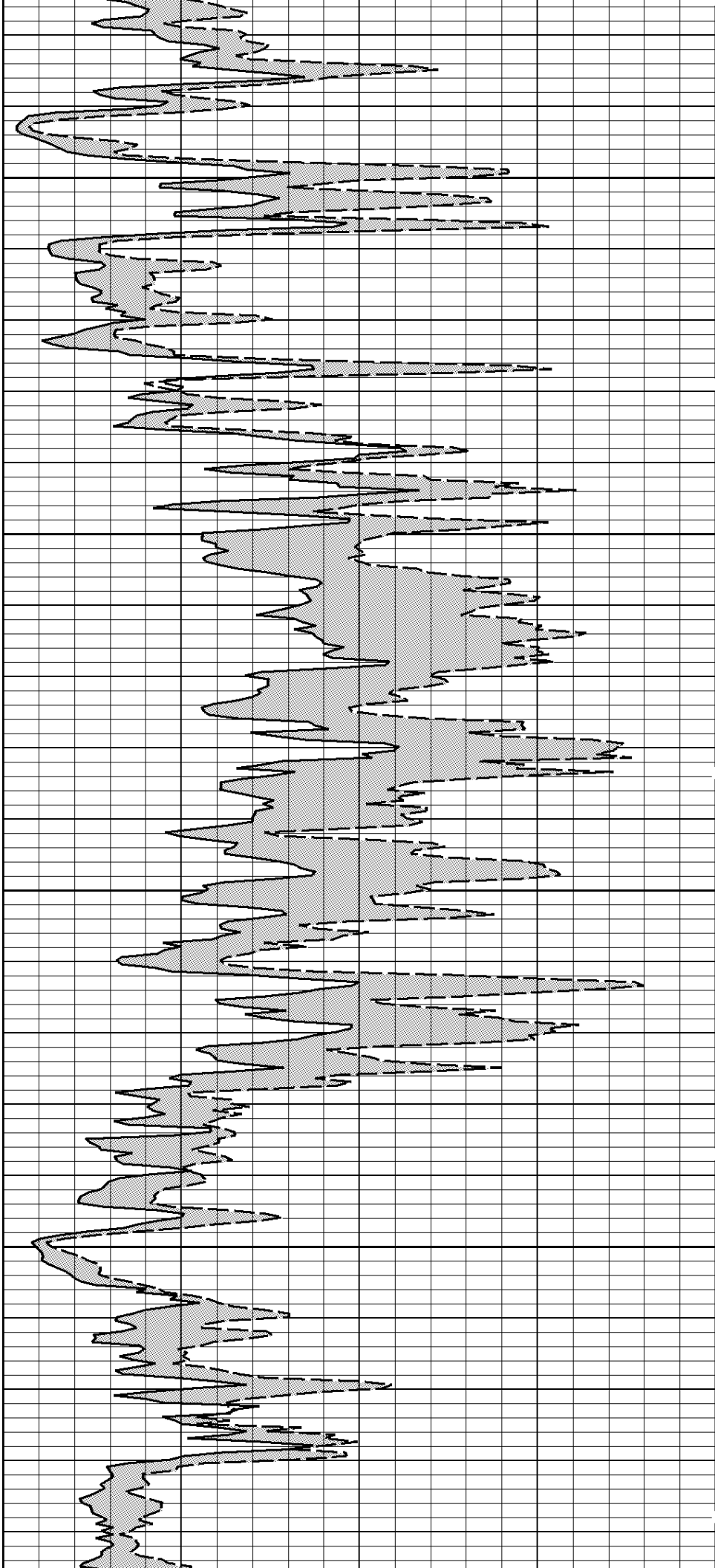
3100

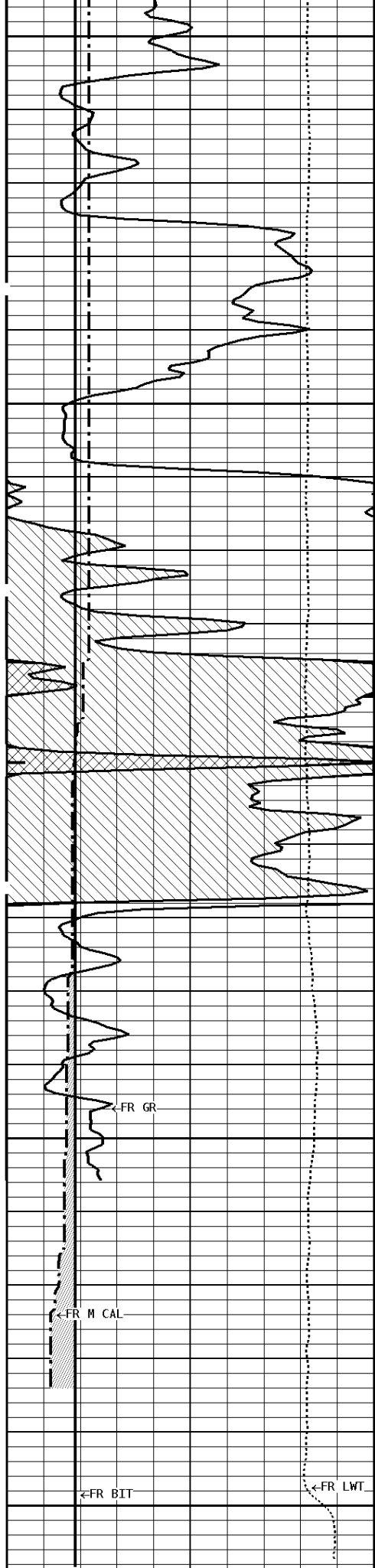




3200

3300

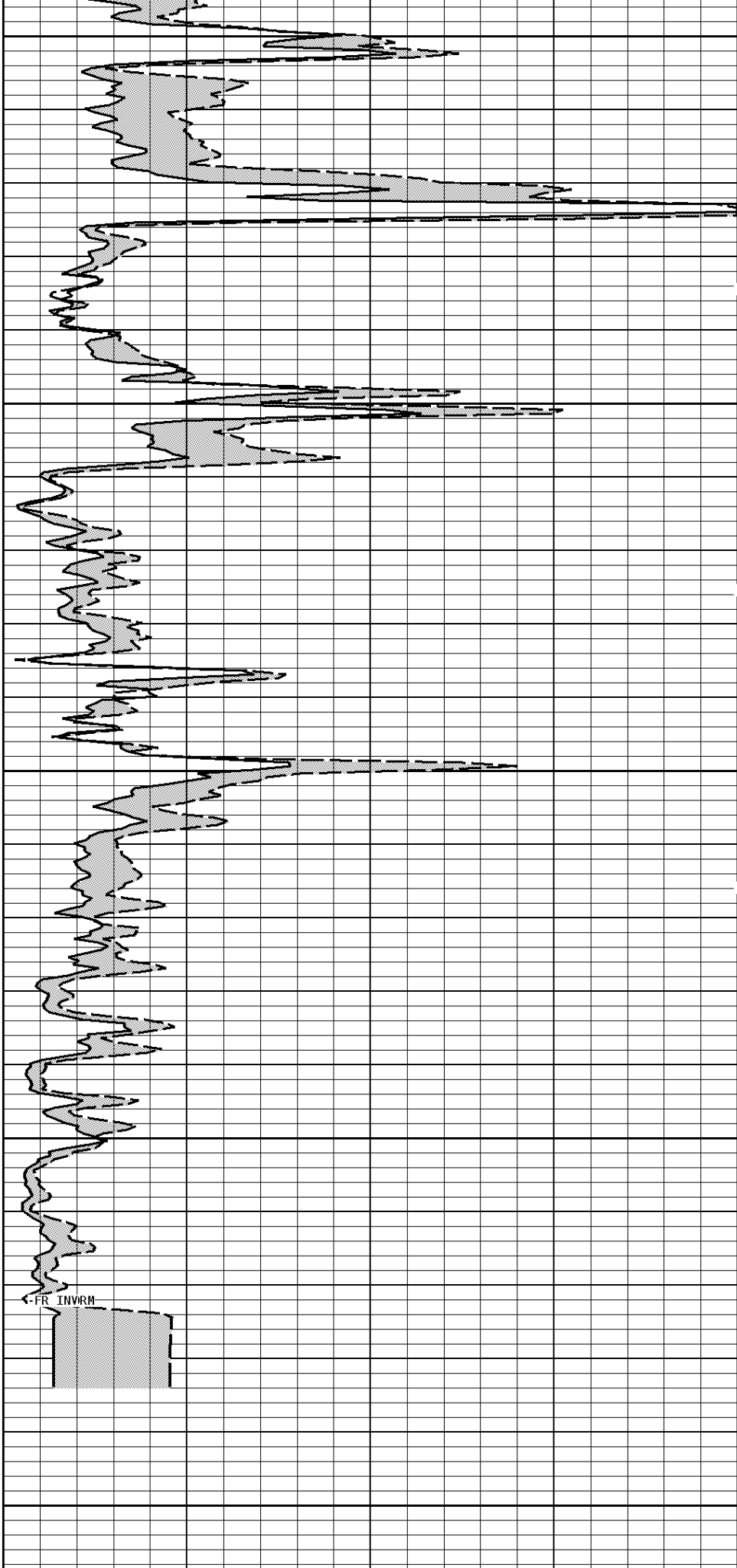


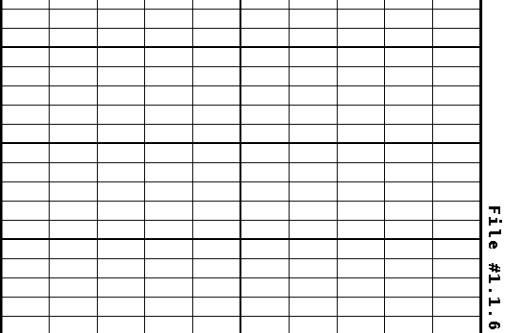


3400

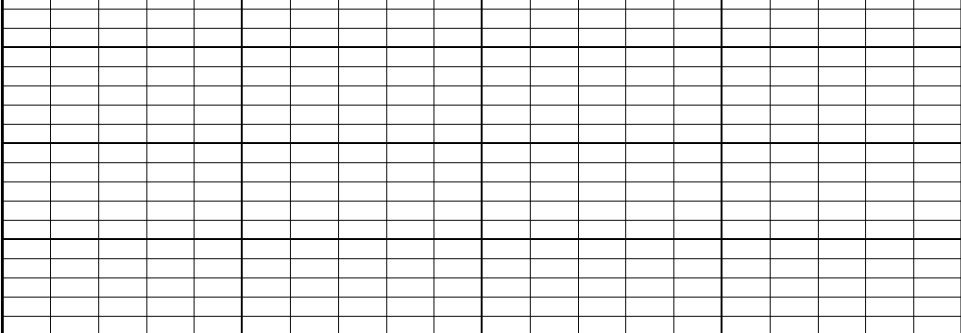
3500

3599





File #1.1.6



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				
MSTNG Normal Correction				
MSTNG Inverse Correction				

Well File:	VAL_THELMA 1-24 SEP 8 MSTK	Scale:	1:240	Format:	MST-240
Segment:	V1.D1.S5 REPEAT	Acquired:	2017-09/08 11:05 3.4.0-13756		
Reference:	0	Processed:	2017-09/08 12:24 3.4.0-13756		

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

INVERSE OHMM	
0	40
NORMAL OHMM	
0	40

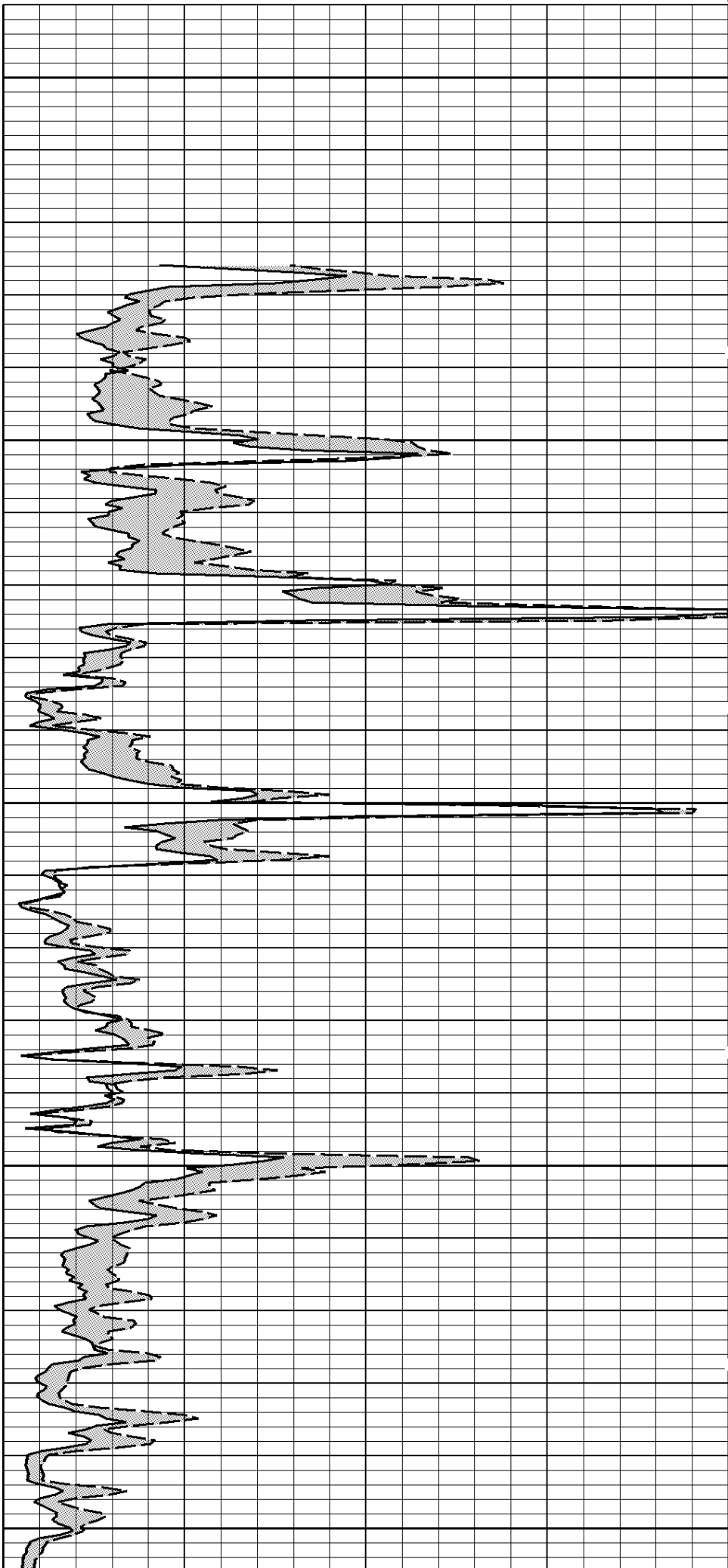
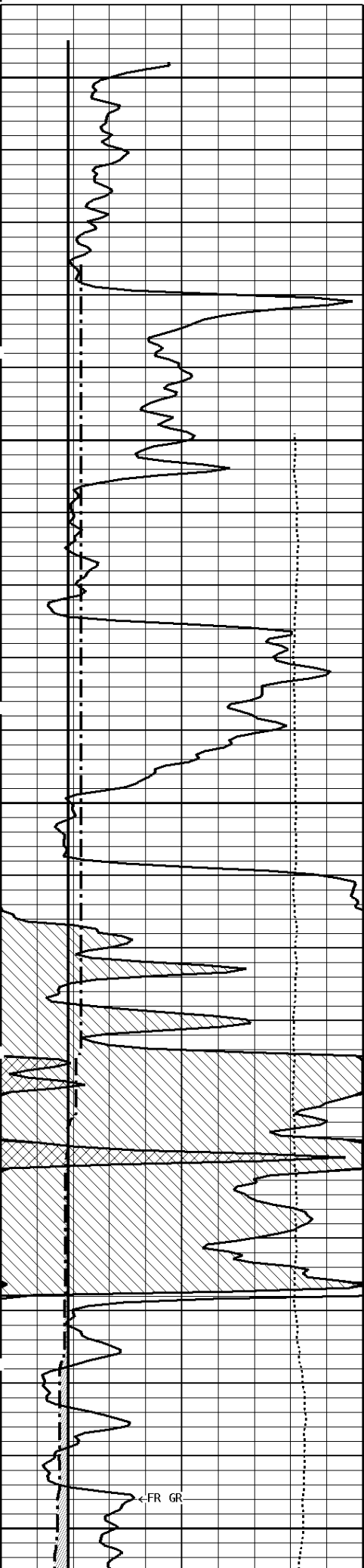
1:240 REPEAT SECTION

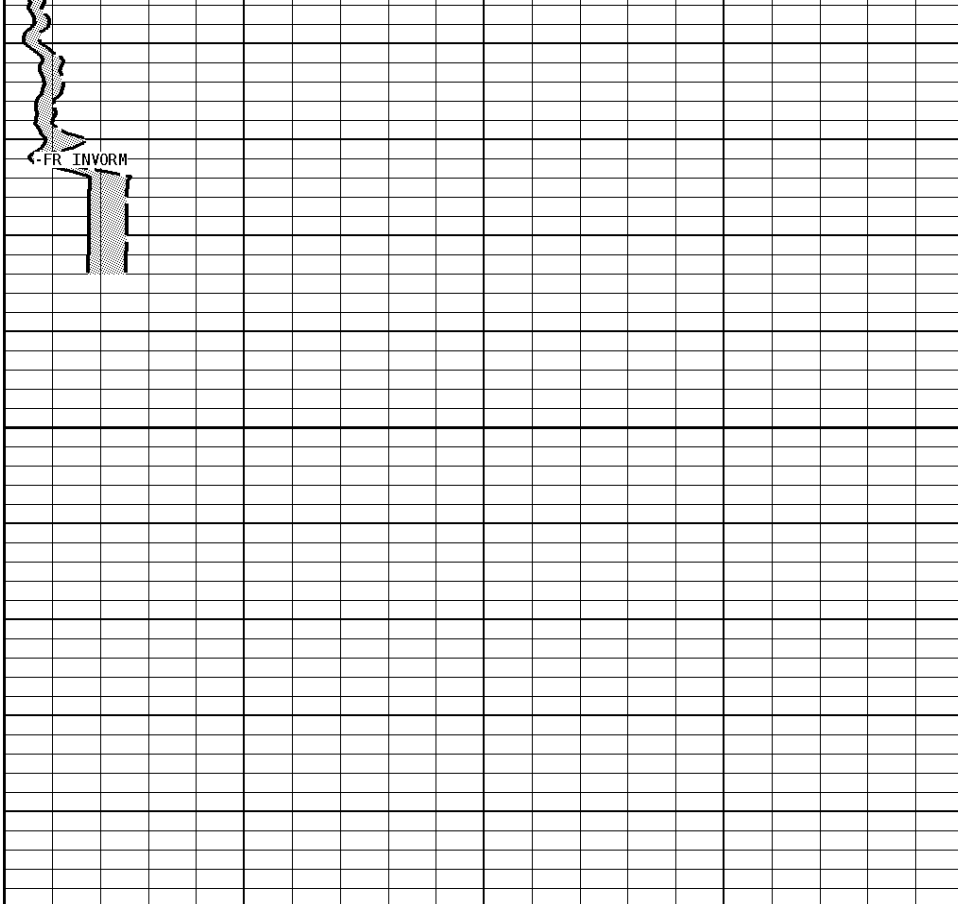
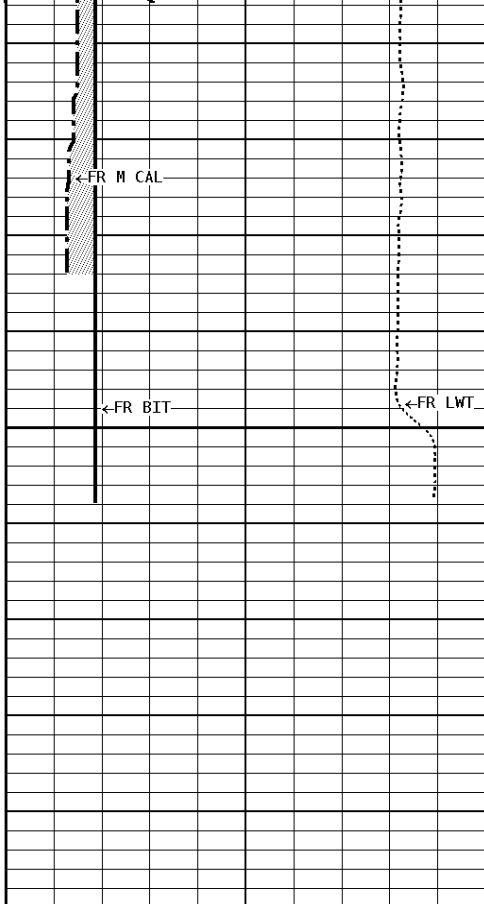
File #1.1.5

3400

3500

←FR GR





1:240 REPEAT SECTION

GAMMA RAY API UNITS	
150	300
0	150
TENSION LBS	
10000	0
CALIPER MICRO INCHES (IN)	
16	26
6	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		-0.50	ohmm
MSTNG Inverse Correction		0.00	ohmm

* Calibration Summary *

Shop Calibration GRT-B			
Performed :	02-MAY-2017	Time :	10:27
Sensor Suite :	GR-GR5	ID :	GRT-BB-009
Measured	Units	Calibrated	Units

GR	Background	Measured	Jig	Units	Calibrated	Jig	Units
	46	361	CPS	175	GRAPI		
Shop Calibration MST-DA Performed : 02-MAY-2017 Time : 10:17 Sensor Suite : CALI-MSN ID : MST-DA-025 Jig - Measured Jig - Calibrated Units Ring#1 Ring#2 Ring#1 Ring#2 CL # 1 7.9 13.2 6.0 12.0 IN.							
Performed : 02-May-2017 Time : 10:11 Sensor Suite : MSTDA-NI ID : MST-DA-025 Internal Measured Calibrated Zero Reference Units Zero Reference Units INV-V 0.0 30518.3 0.00 1546.00 MV NOR-V 2.7 30492.5 0.00 1546.00 MV IN-C 1.6 58932.3 0.00 15.46 UA INV-R 32.34 OHMM NOR-R 55.11 OHMM							



Tucker
ENERGY SERVICES

Company: VAL ENERGY INC.
Well: THELMA #1-24
Location: 2310' FSL & 2970' FEL
Logged: 2017-09-08
K.B. Elev: 1295.0 Ft