

Tucker

WIRELINE SERVICES

MICRO
LOG

File No. : TUL-56726
Company : LARSON ENGINEERING INC.
Well : ELDRIDGE #4-32
Field :
County : WABAUNSEE
State : KANSAS
Country : USA

Location : API#: 15-197-20286
1867' FNL & 2131' FWL
SW-NE-SE-NW

Sect : 32 Twp : 14S Rge : 10E

Recorded By : R.NITZ
Witnessed By : L. NICHOLSON

Date : OCT 24 2010
Run No. : 1

Permanent Datum : GL
Drilling Measured From : KB
Log Measured From : KB
Above Permanent Datum : 10.00 FT

Depth--Driller : 3448.0 FT
Depth--Logger : 3449.0 FT
Bottom Log Interval : 3423.0 FT
Top Log Interval : 312.0 FT

Casing Depth--Driller: 312.0 FT
Casing Depth--Logger : 312.0 FT
Casing Diameter : 8.625 IN

Bit Size : 7.875 IN
Unit No. : 127
Location : TULSA

Elevations :
KB : 1510.00 FT
DF : FT
GL : 1500.00 FT

Additional Services

CNT
LDT
PIT

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.

Run Number 1

Depth To Fluid 0.0 FT
Fluid Type In Hole : WBM
Density : 9.400 SG
Viscosity : 54.000 SEC
pH : 8.000
Fluid Loss : 9.000
Salinity : 1800.000 KPPM

RM Source : MEASURED
RM : 1.400 OHMM at 69 F
RM at BHT : 0.890 OHMM at 108 F

RMF Source : CALCULATED
RMF : 1.050 OHMM at 69 F
RMF at BHT : 0.670 OHMM at 108 F

RMC Source : CALCULATED
RMC : 1.000 OHMM at 69 F

RMC :	1.000	OHMM at	69	F
RMC at BHT :	0.810	OHMM at	108	F
Max Recorded Temp. :			108	F
Time Circulation Stopped :				
Operating Rig Time, Hrs. :			2.0	

- Source Serial Numbers -

Gamma	CSV-587
Neutron	N-1044

- Sonde Serial Numbers -

GRTB	GRT-BA-14
CNT	CNP-AA-116
LDTNG	LDP-NG-02
MSTNG	MST DA- 029
PIT	PIT-AB-14

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
8.625	23.00	312.00

- Comments -

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.

GRT, CNT, LDT, MLT, PIT RAN IN COMBINATION
 CALIPERS ORIENTED ON THE X-Y AXIS.
 PHIN IS CALIPER CORRECTED.
 2.71 G/CC USED TO CALCULATE POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.500" PRODUCTION CASING.
 1 LB/GAL LCM

GRT: GRP.
 CNT: PHIN, CLCNIN.
 LDT: PORL, LCON, PECLN, CLLDIN, LDENN, PORLLS, PECSN.
 MLT: INV R, NOR R, MSCLPIN.
 PIT: ILD, ILM, CIRD, SFLAEC, SPU.

OPERATORS: S3
 R.AUSTIN

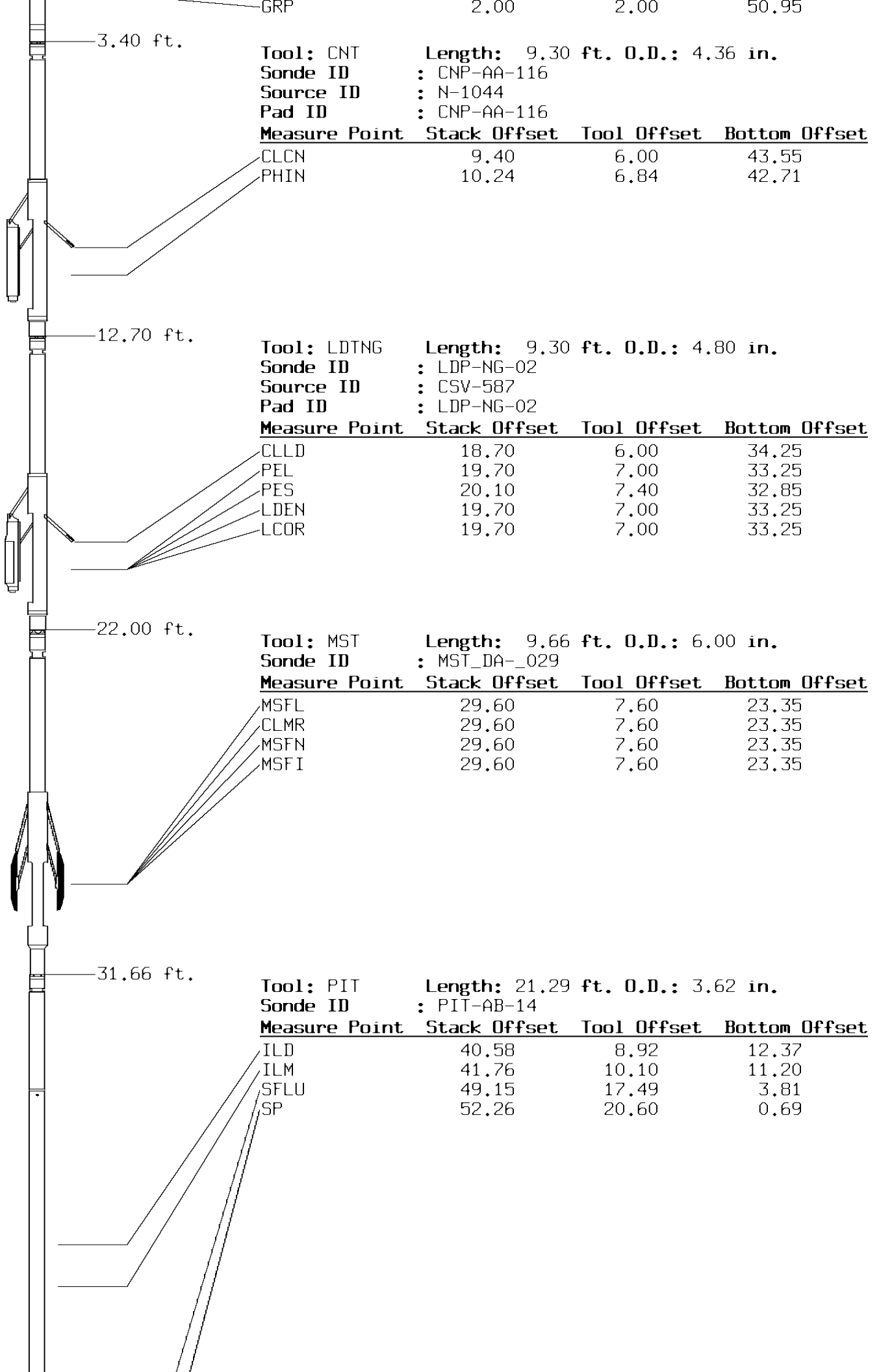
THANK YOU FOR USING TUCKER WIRELINE SERVICES!

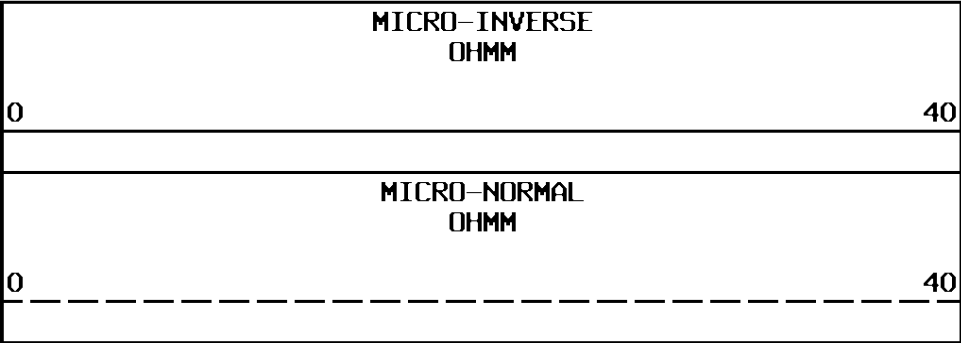
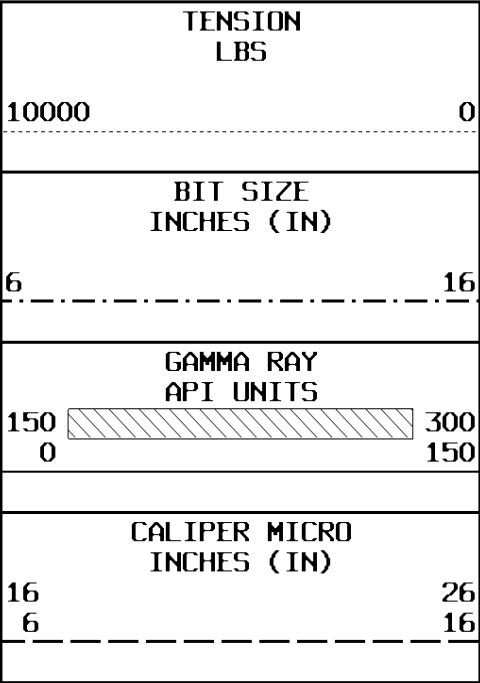
Tool String Schematic

Total Tool Length - 52.95 ft.
 Maximum Outside diameter - 6.00 in.
 Net Weight in Air - 943.00 lbs.

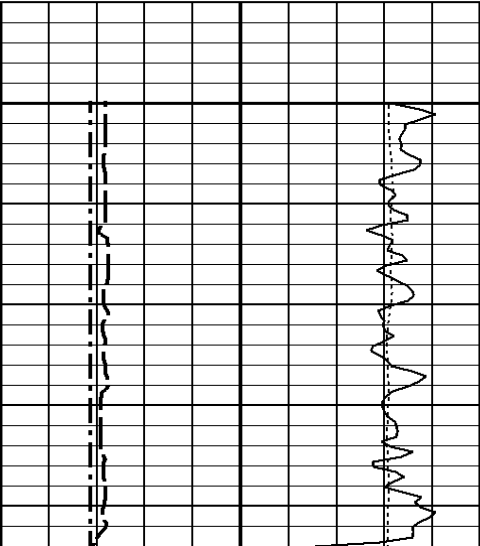


Tool: GRTB	Length: 3.40 ft.	O.D.: 3.60 in.
Sonde ID	: GRT-BA-14	
Measure Point	Stack Offset	Tool Offset
GRTB	3.00	3.00
		50.95

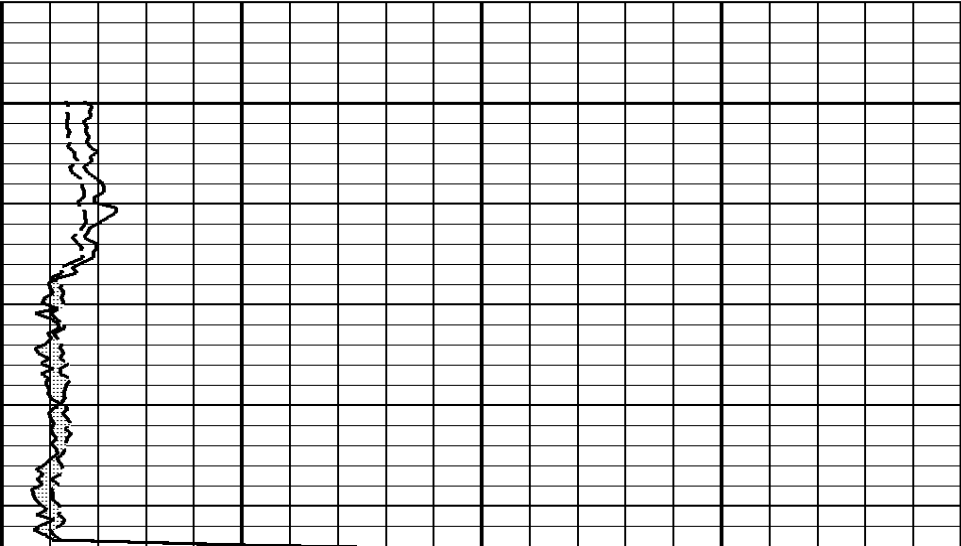


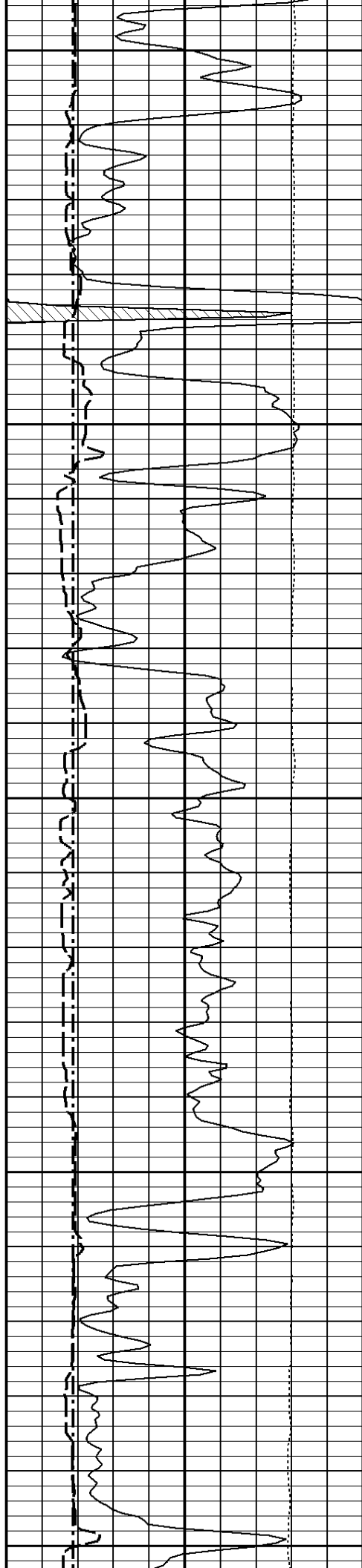


1:240 MAIN SECTION



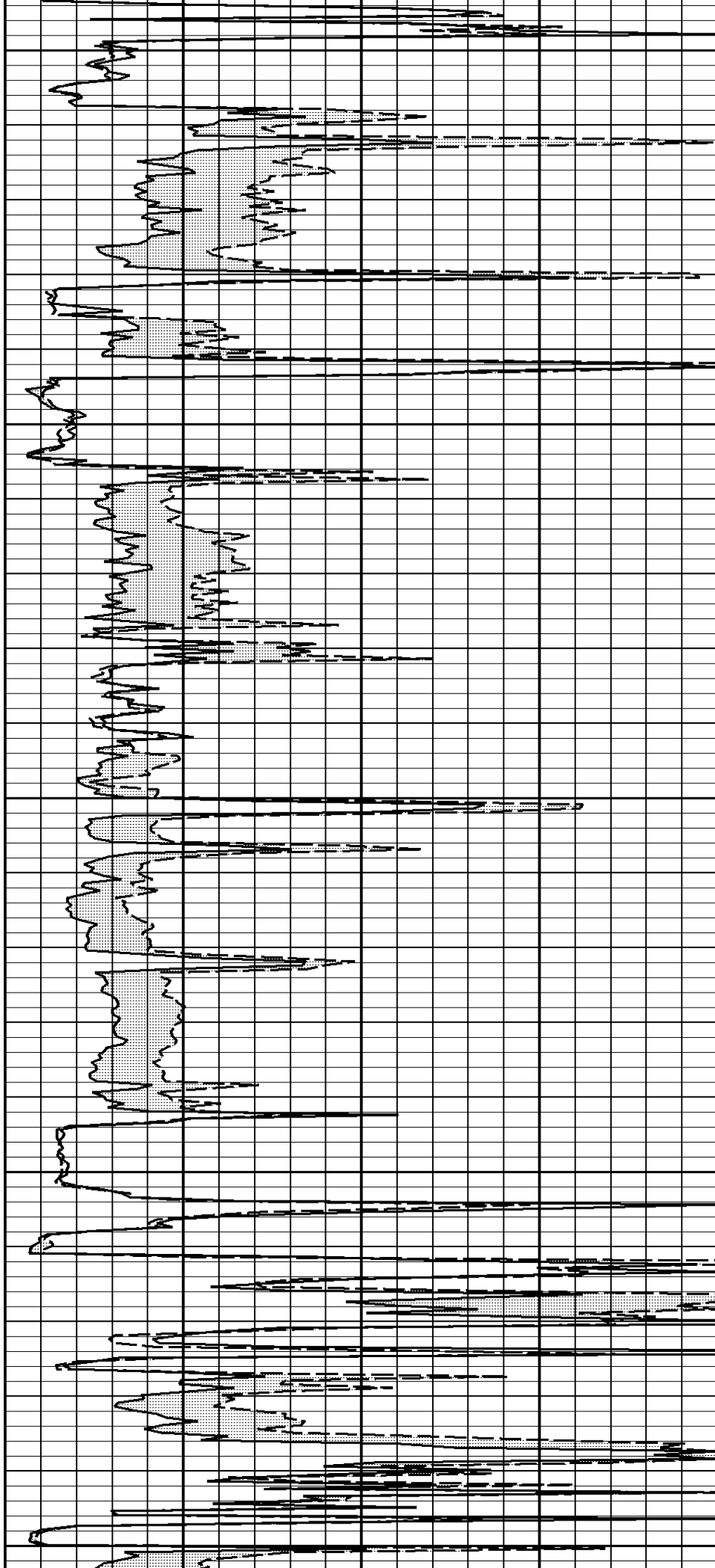
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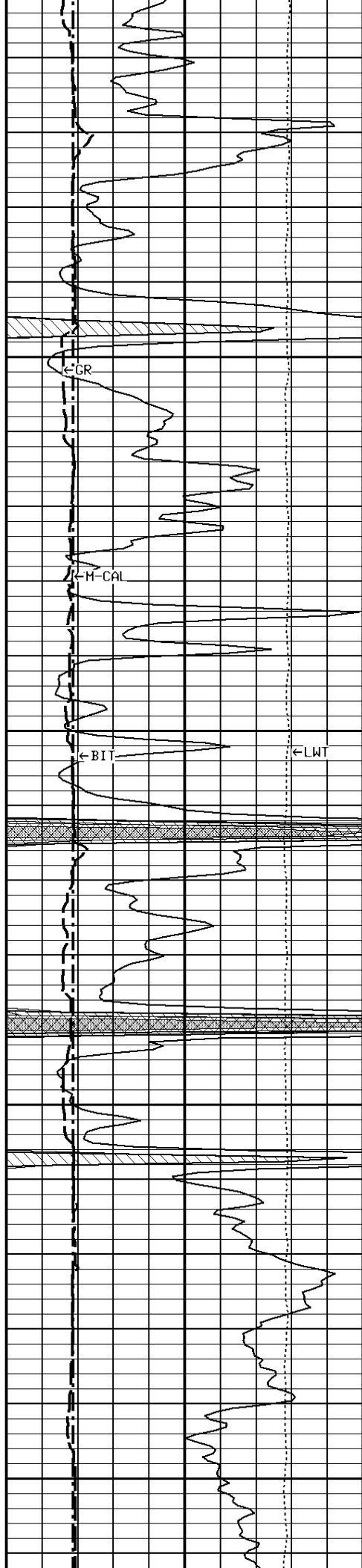




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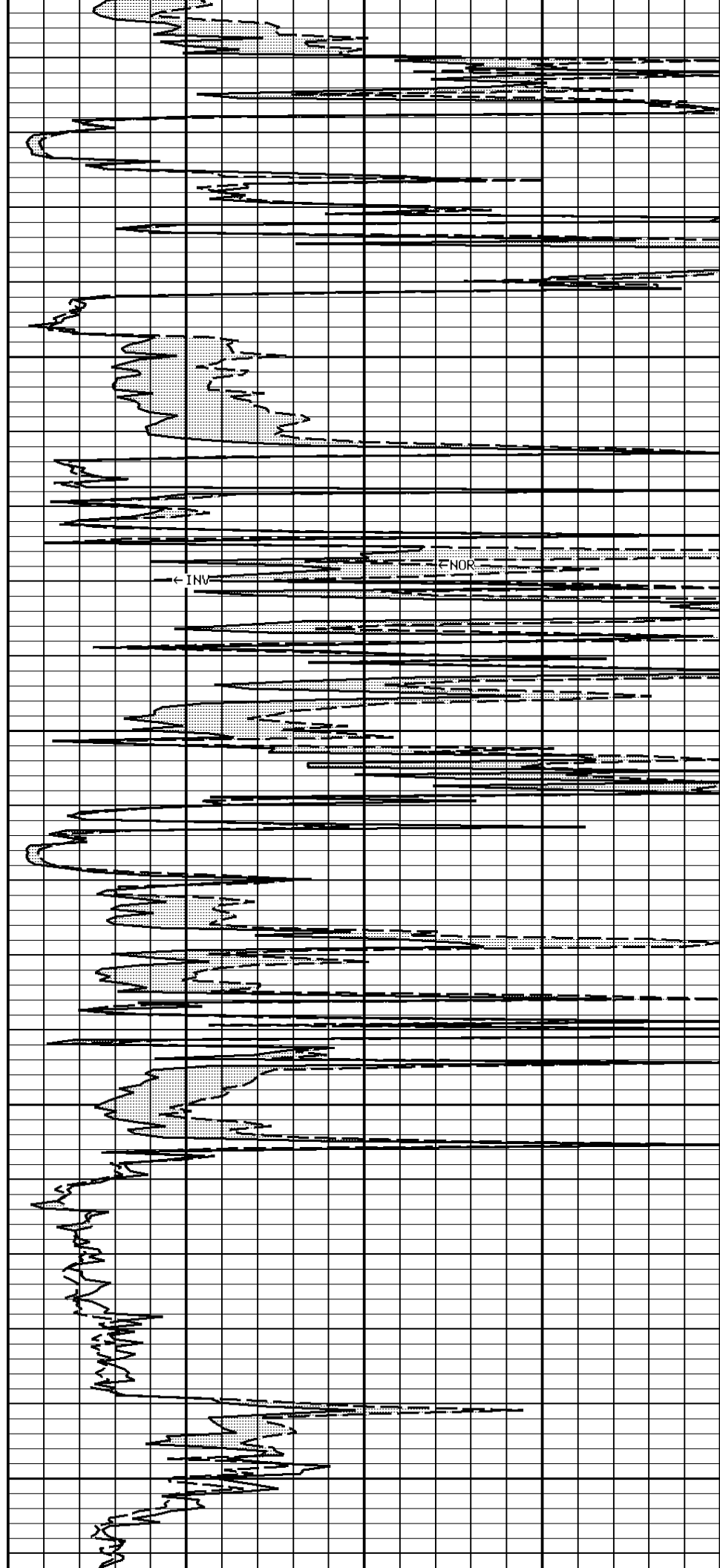
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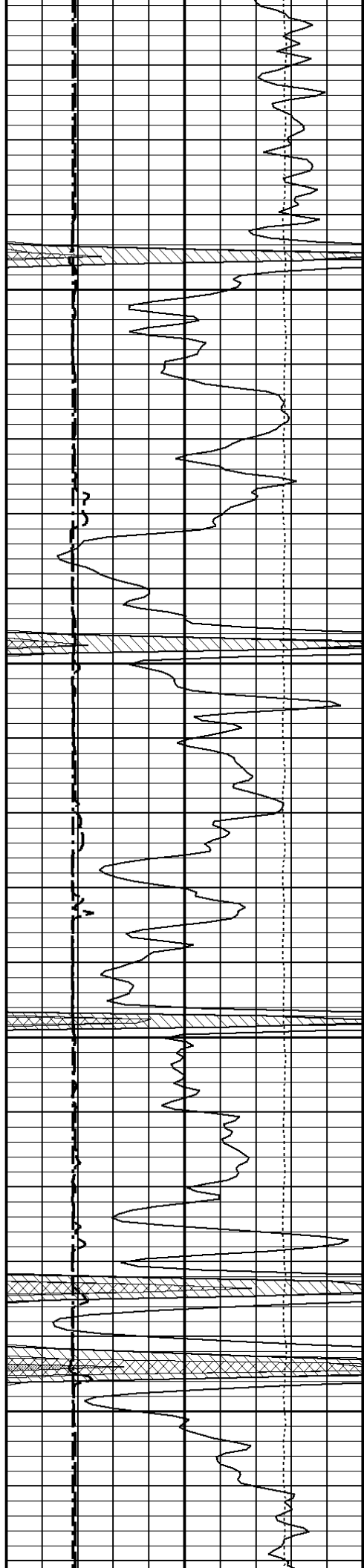




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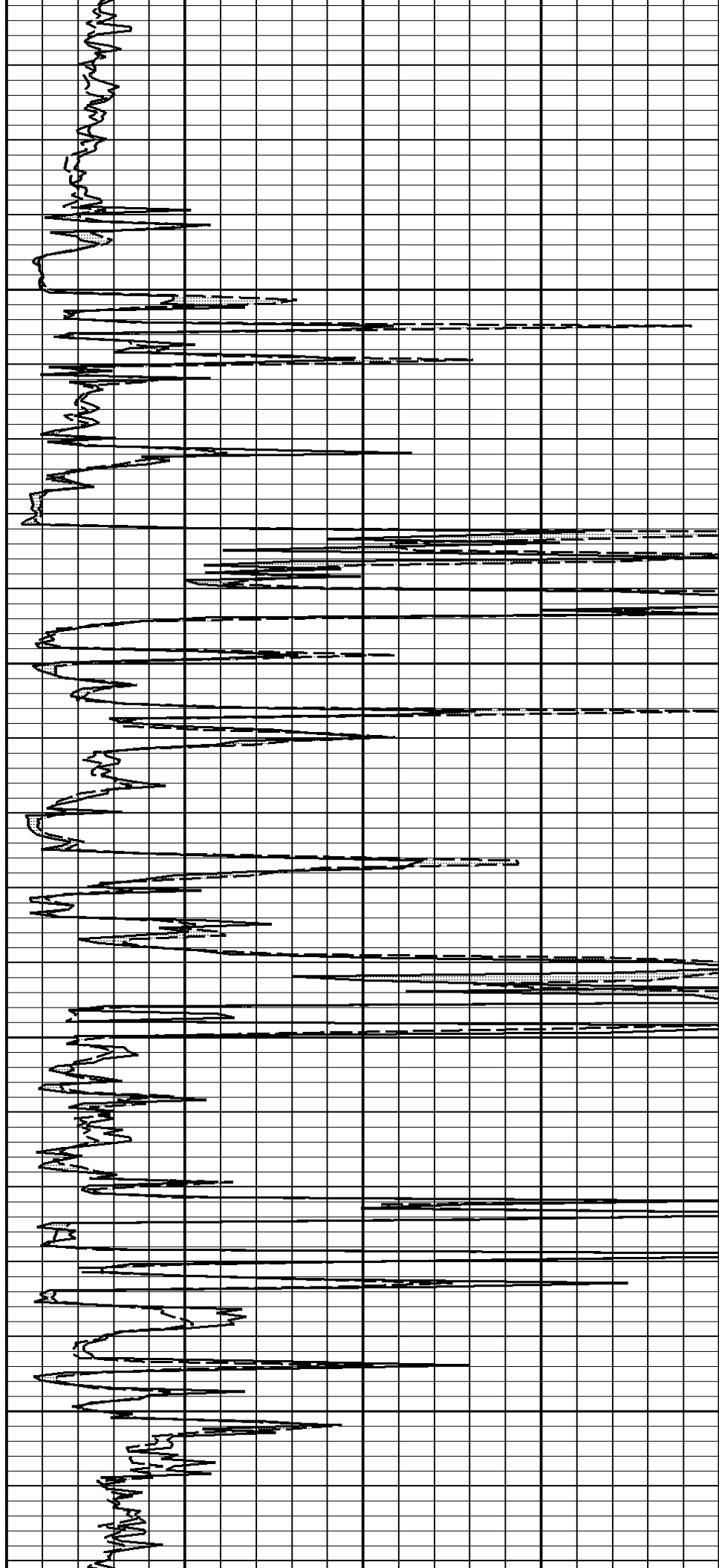
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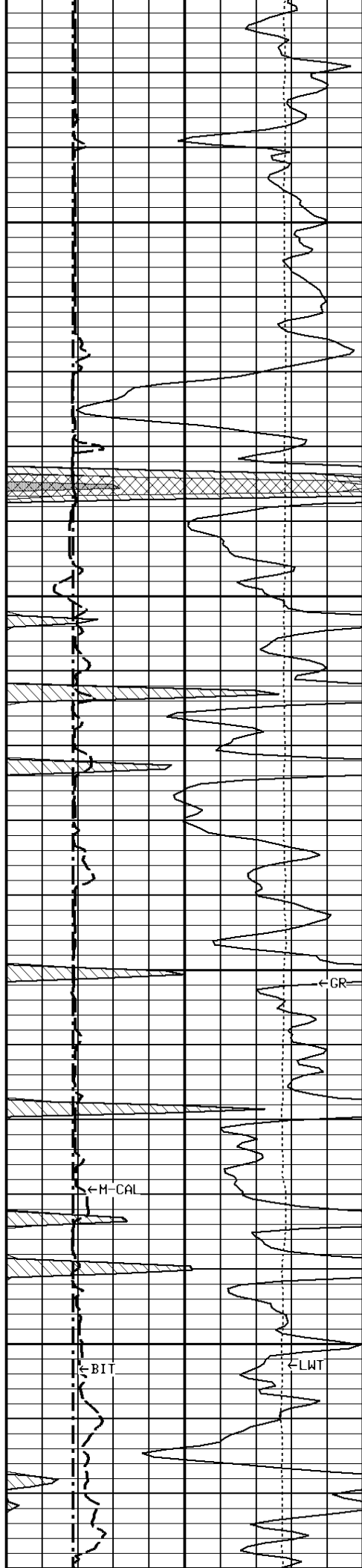




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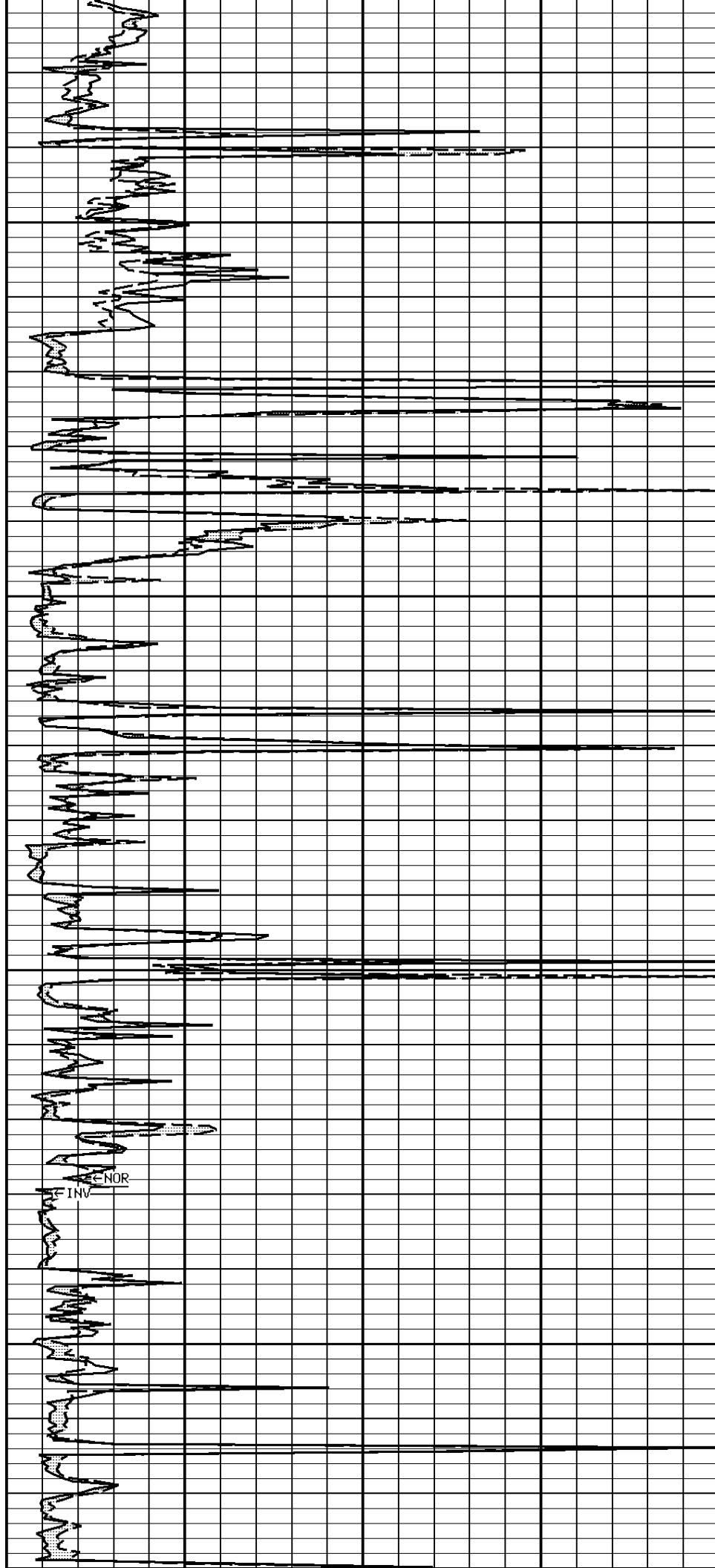
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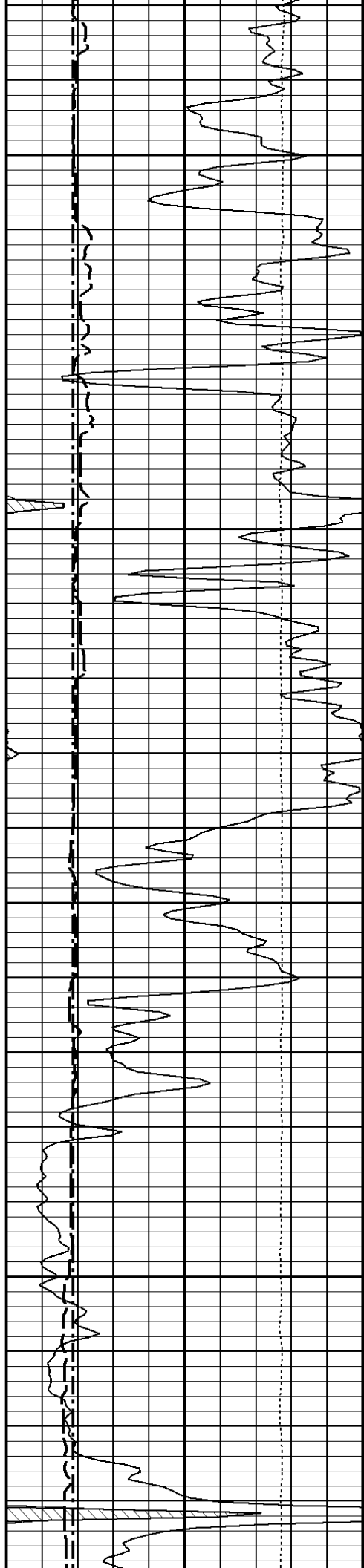




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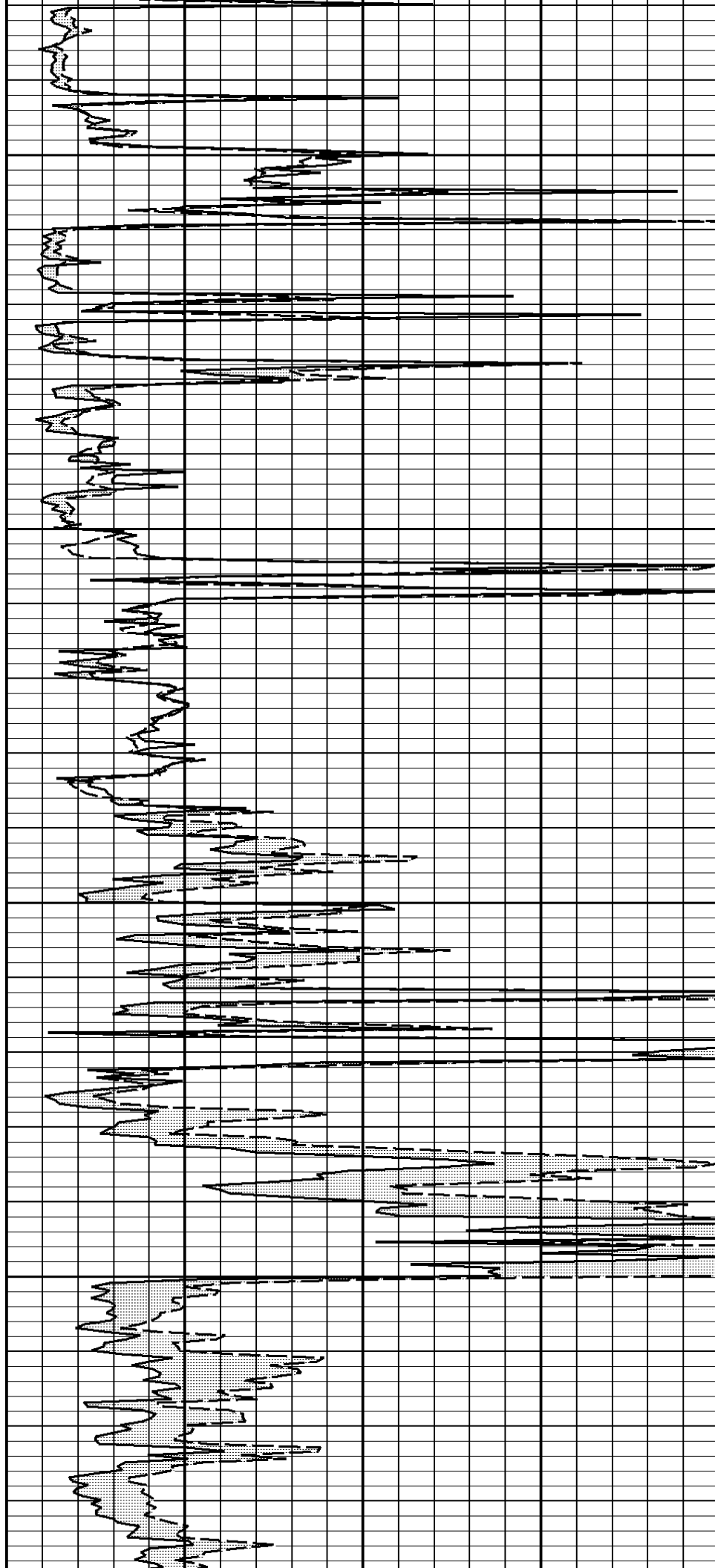
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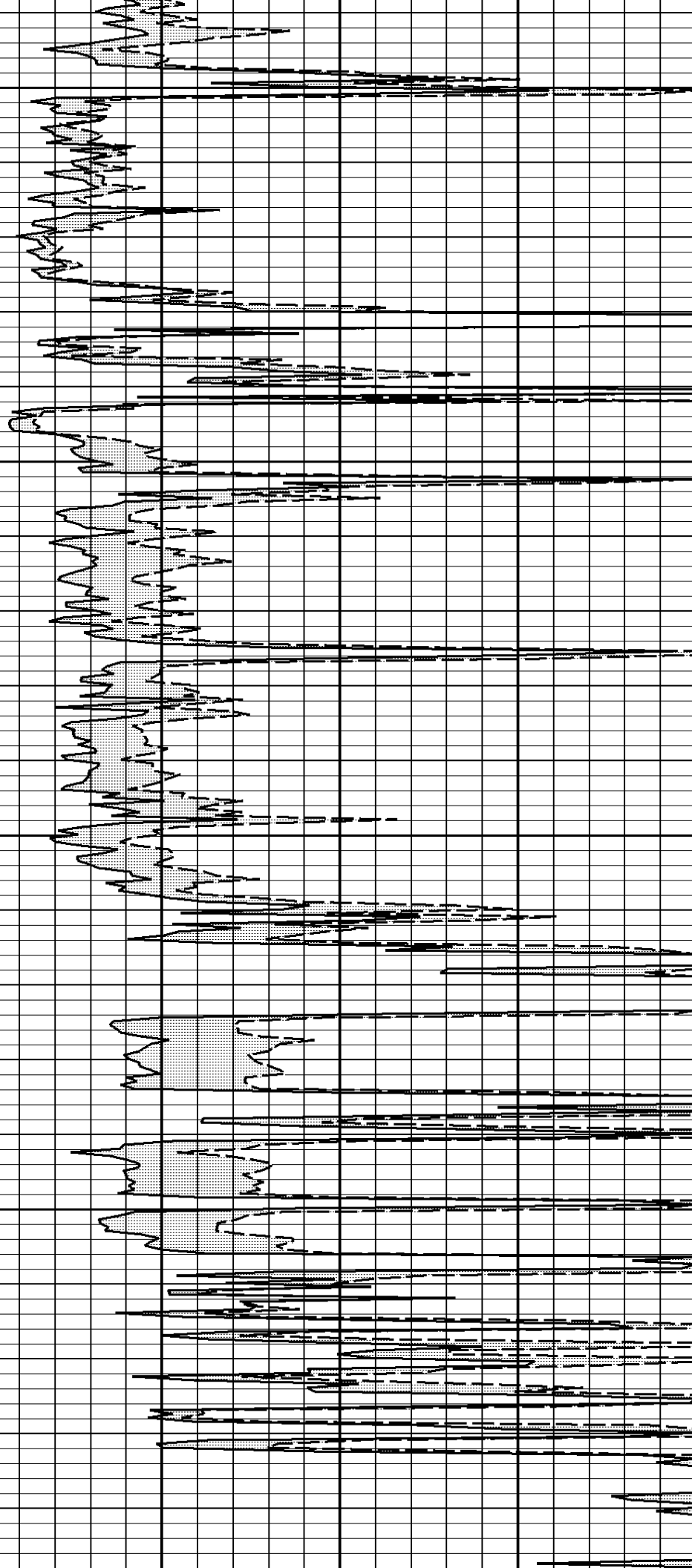
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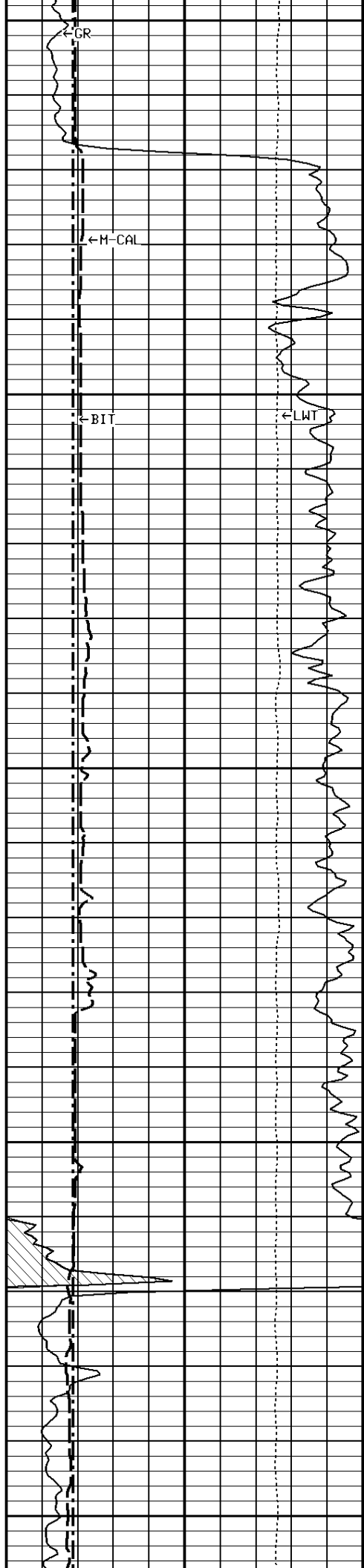
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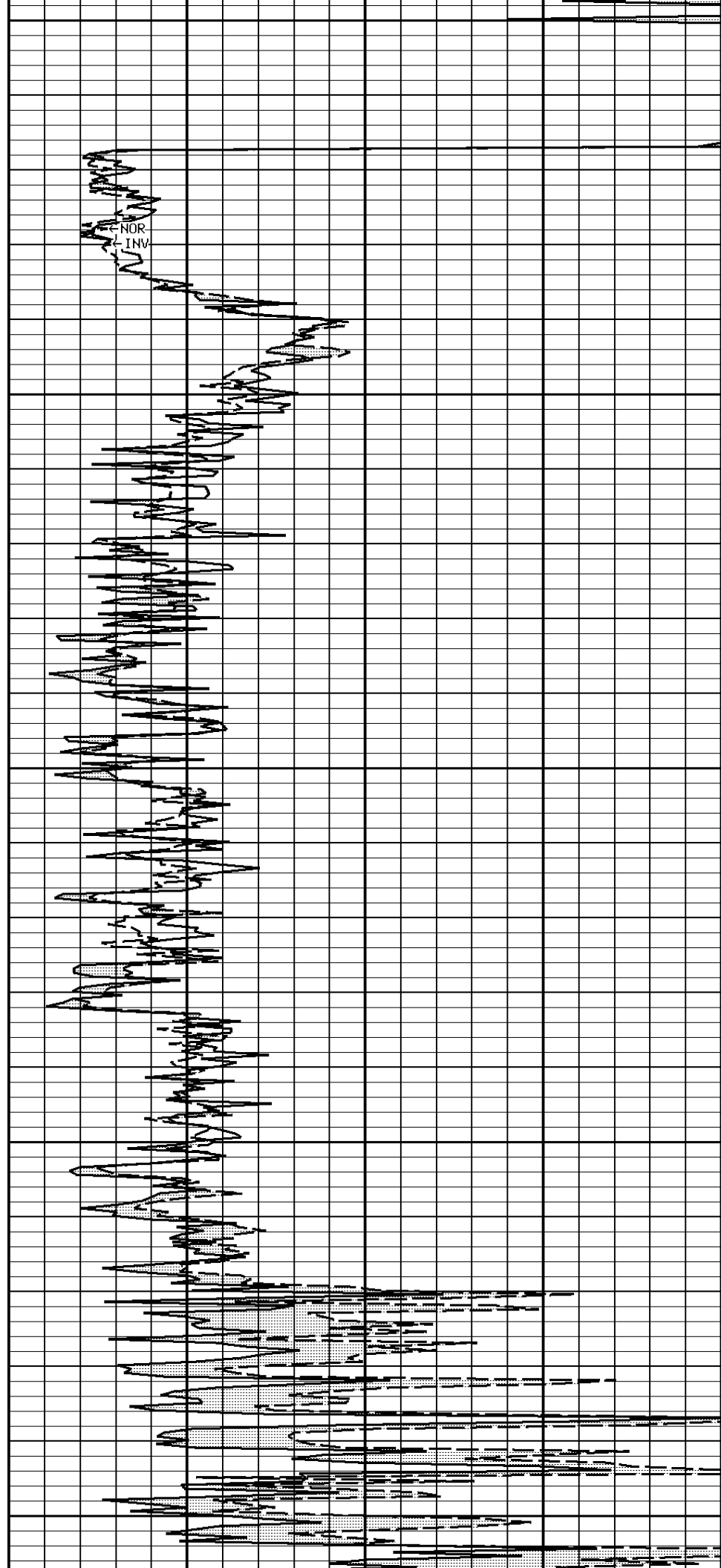


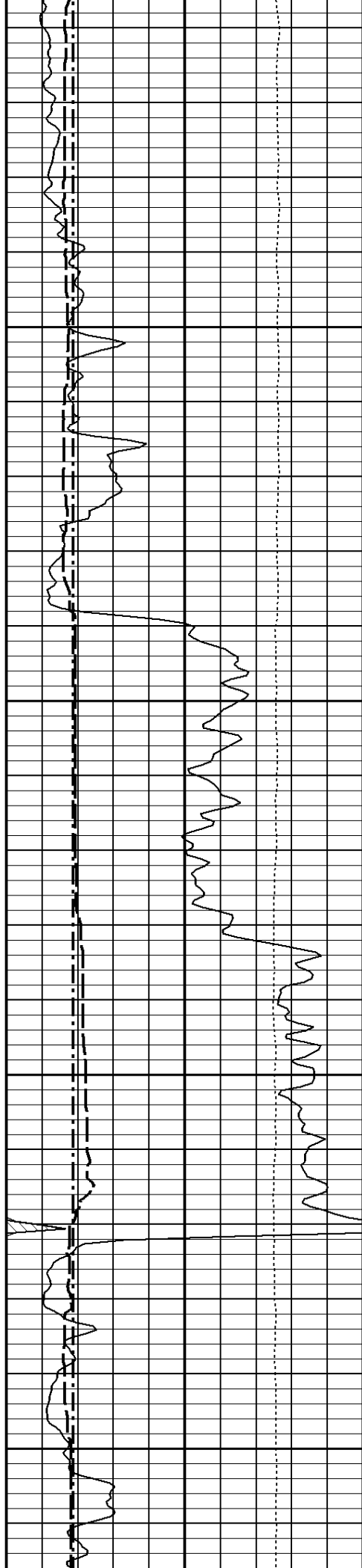


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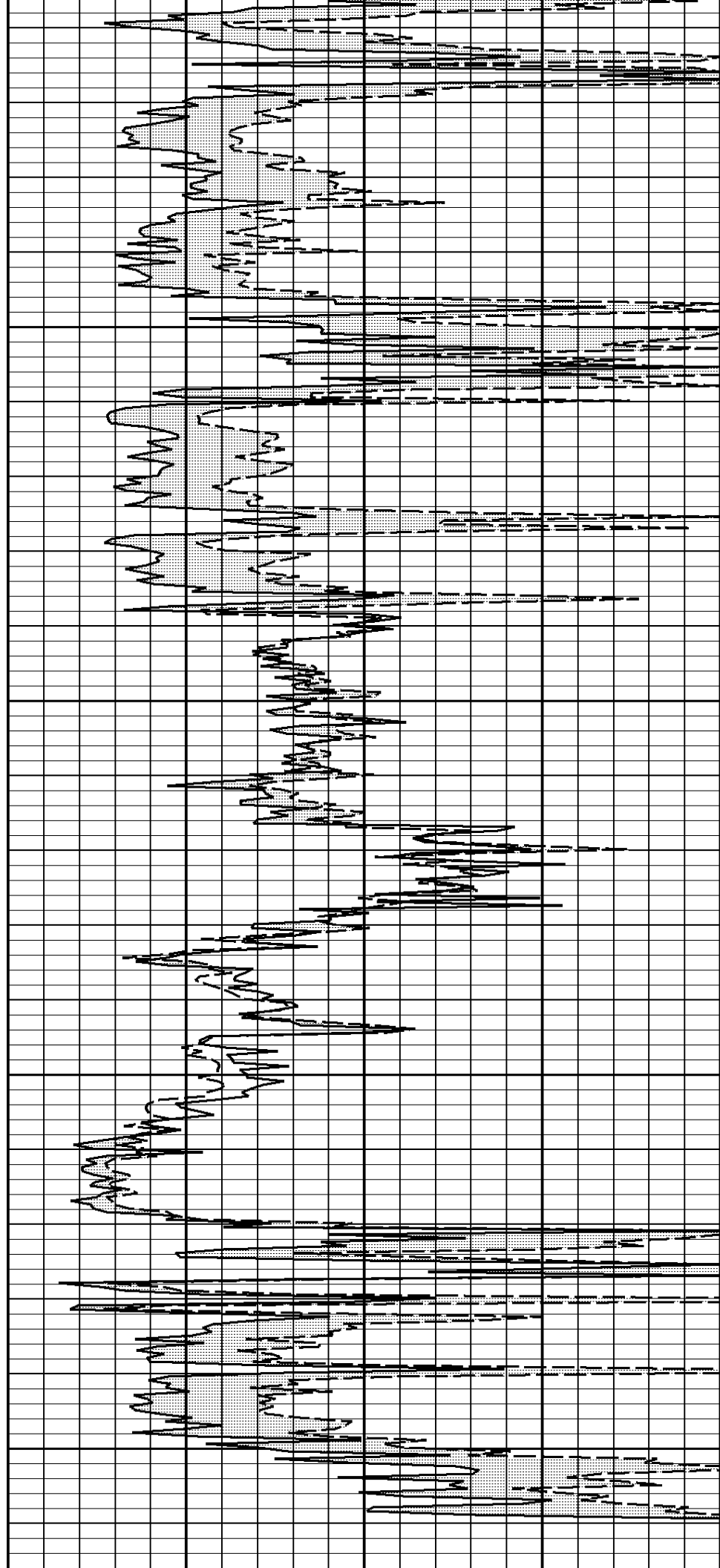
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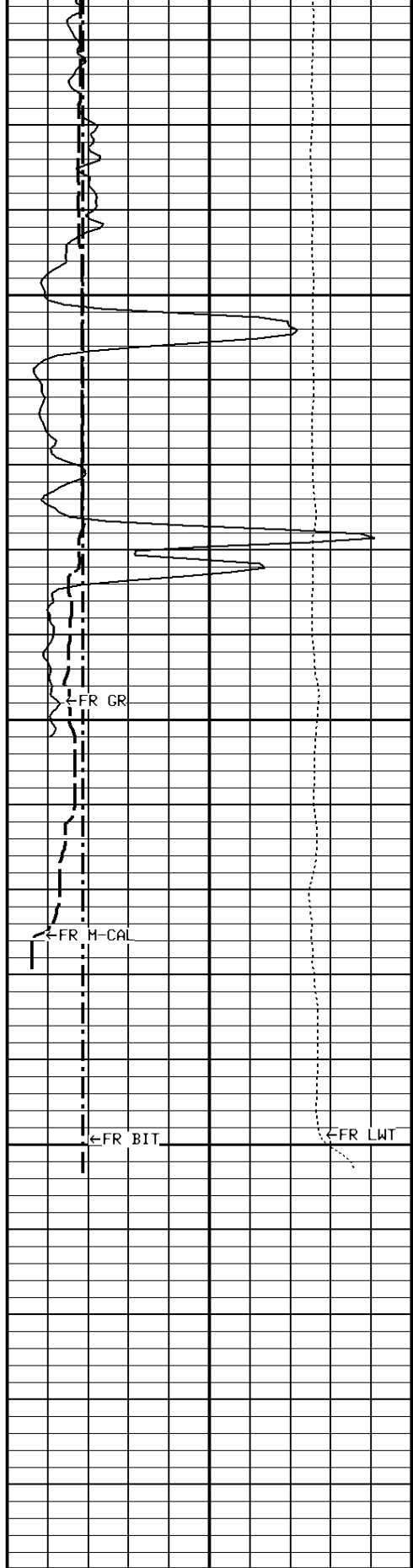




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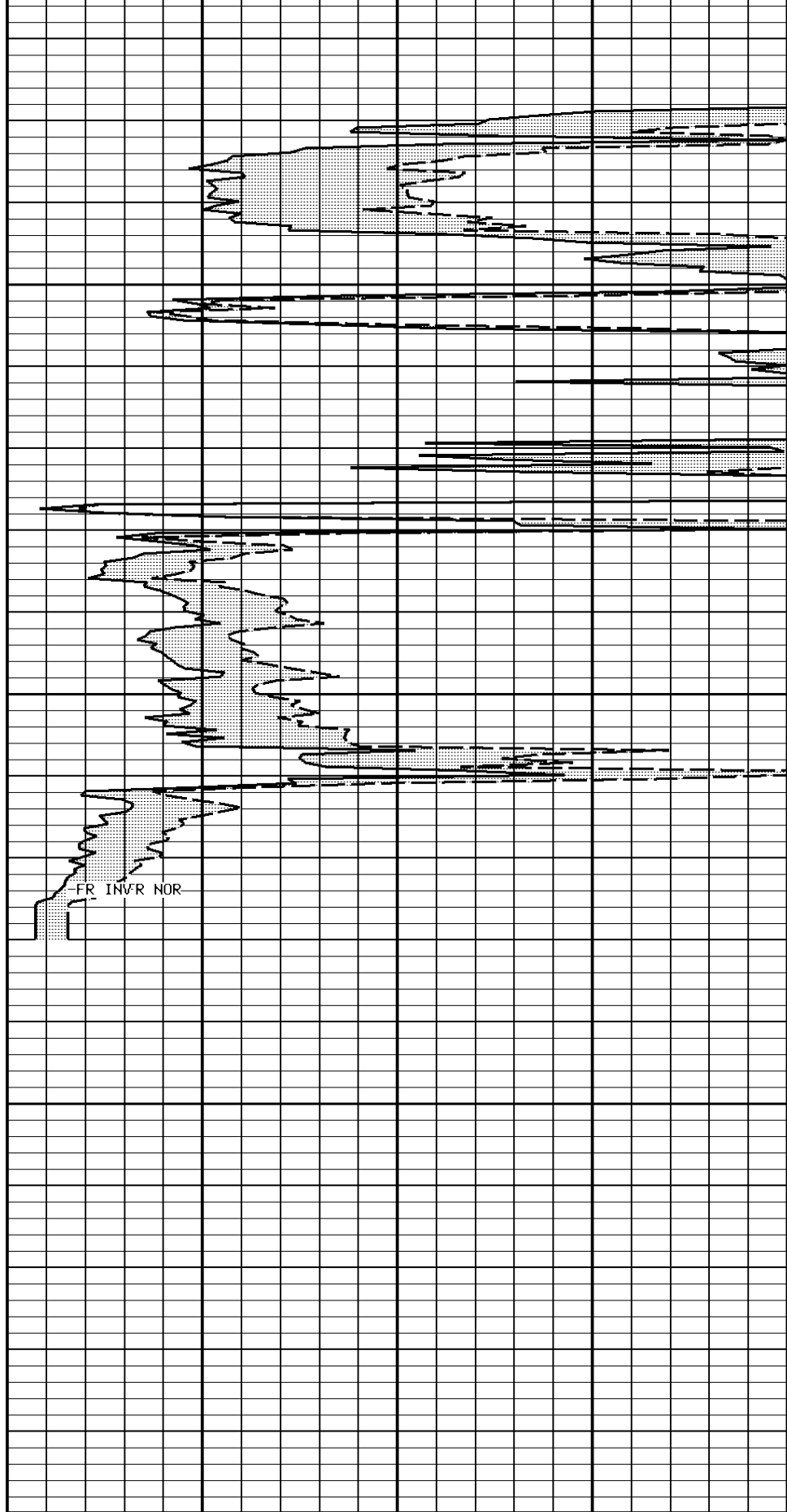




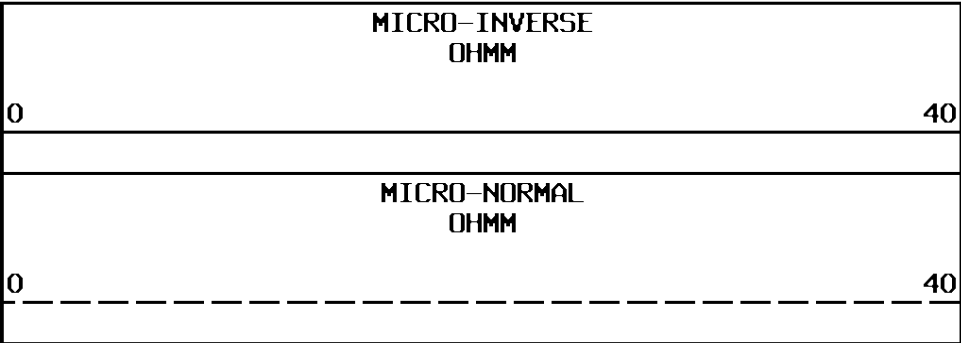
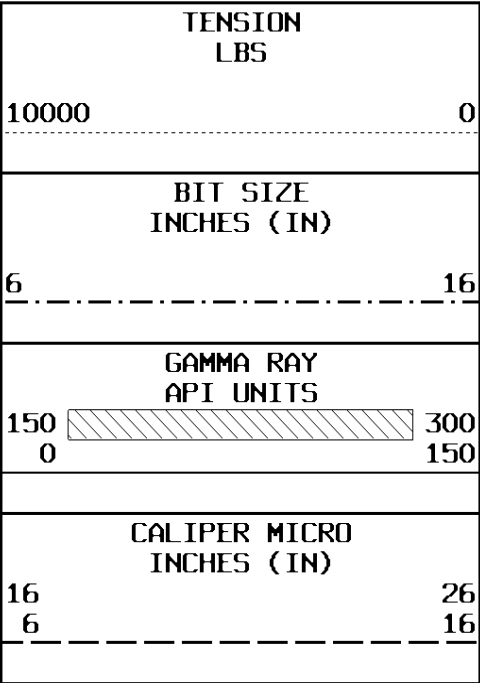
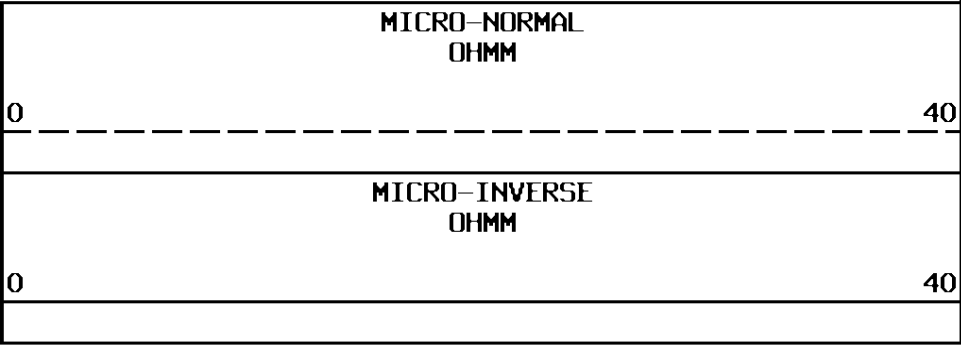
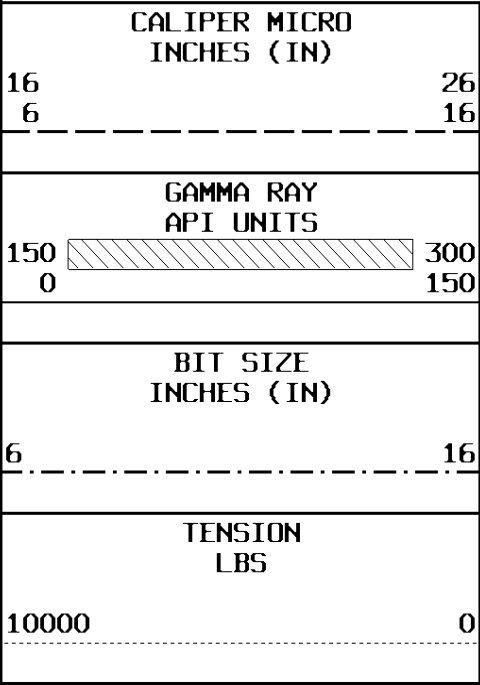
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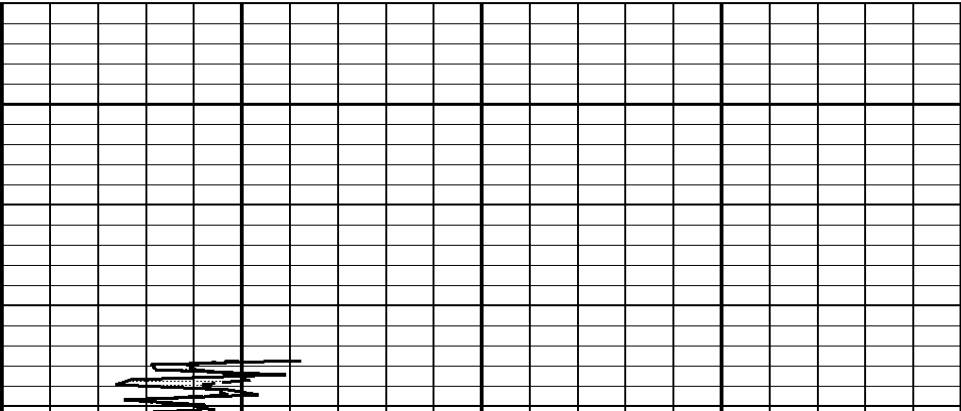
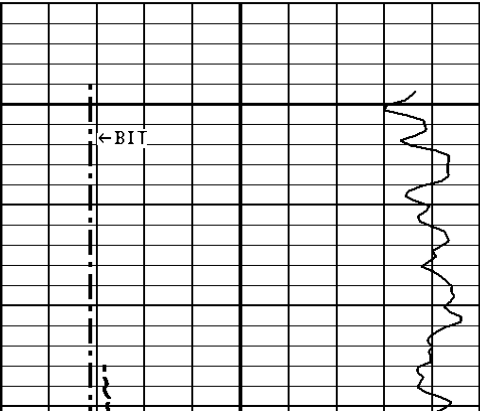
File #3

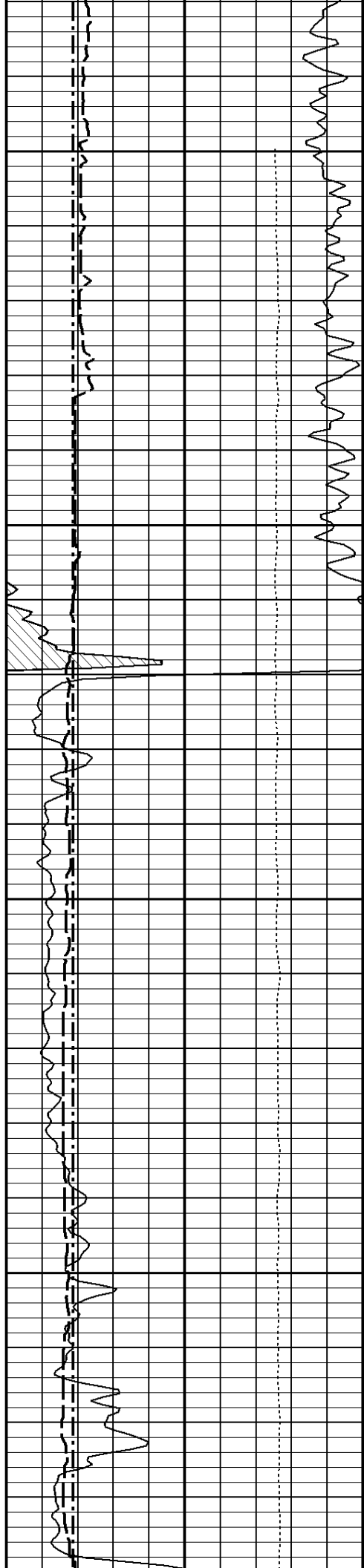


1:240 MAIN SECTION



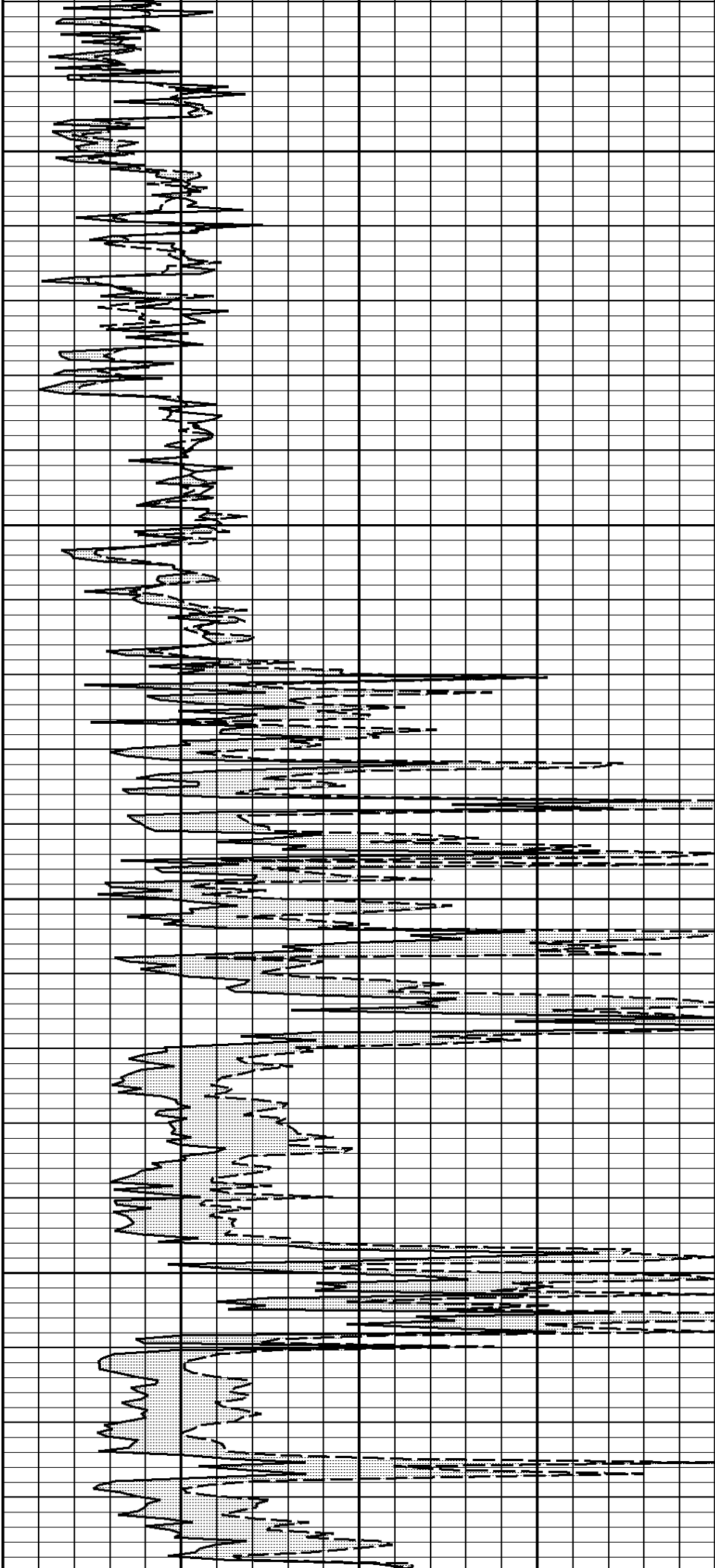
1:240 REPEAT SECTION

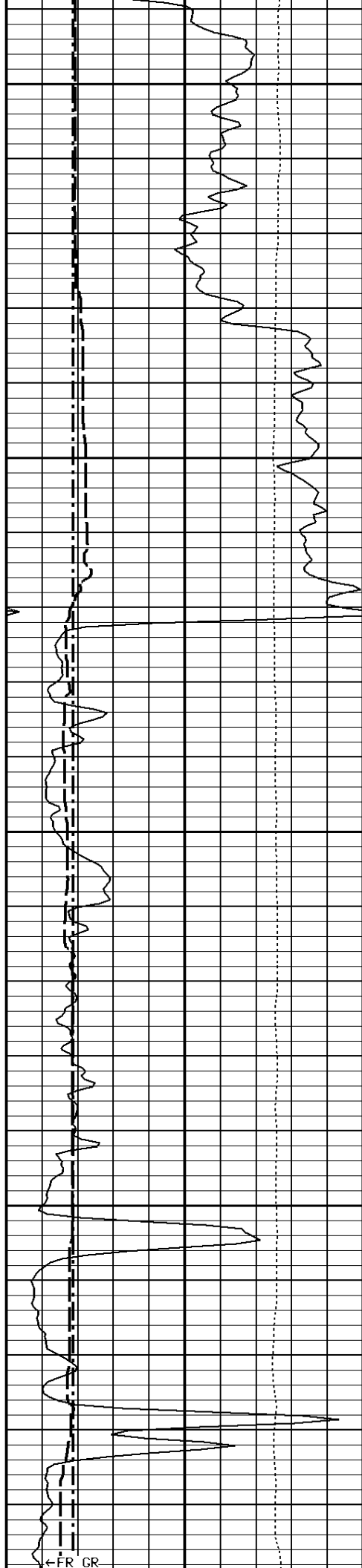




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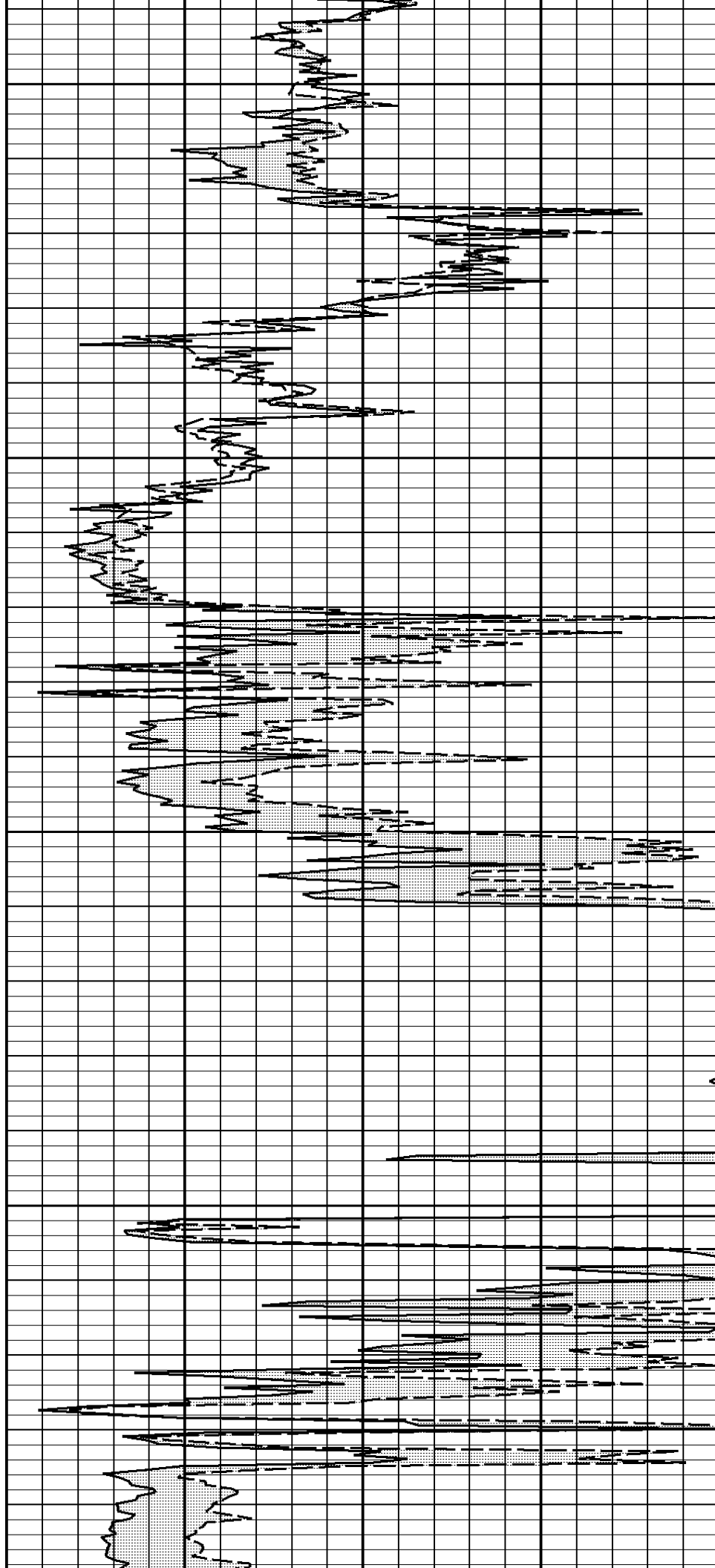
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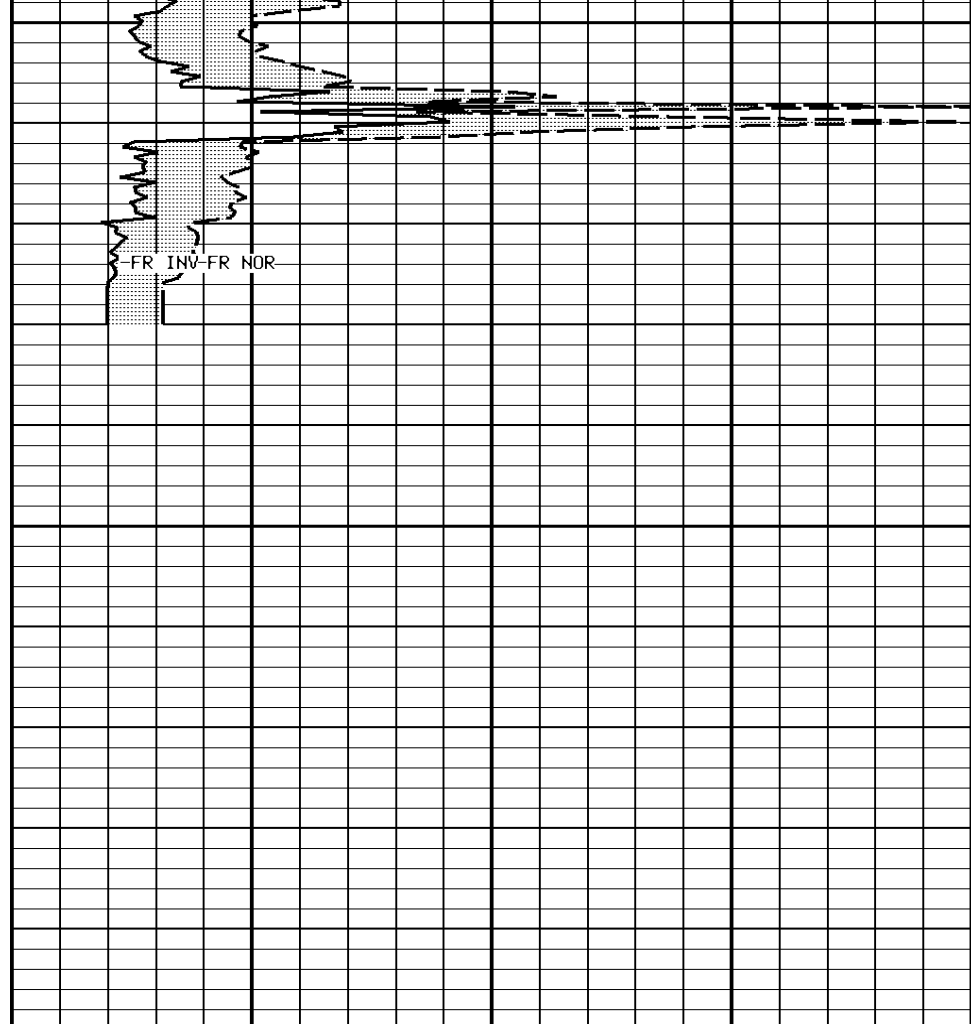
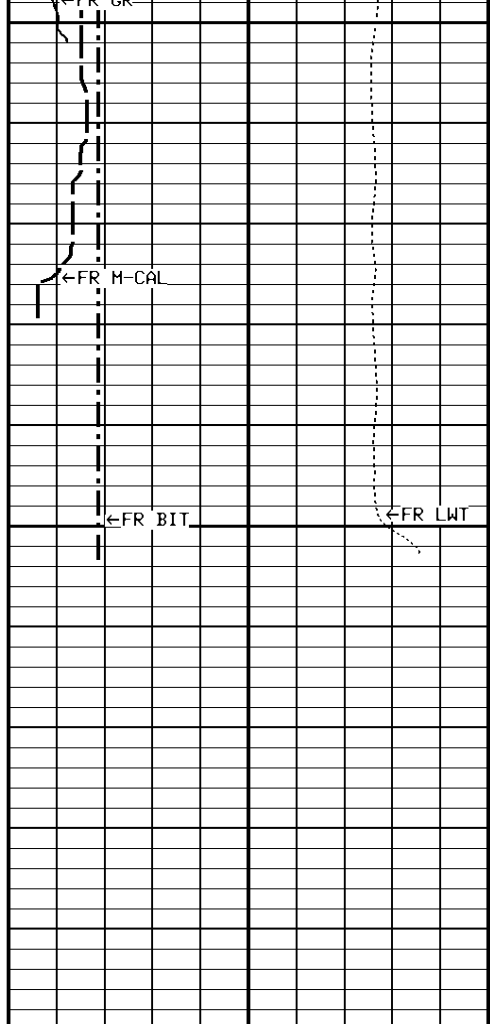




3200

3300





1:240 REPEAT SECTION

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

MICRO-NORMAL OHMM	
0	40
MICRO-INVERSE OHMM	
0	40

Shop Calibration GRTB

Performed : 21-Aug-2009 Time : 15:26
Sensor Suite : GR-GR5 ID : GRT-BA-14

	Measured	Units	Calibrated	Units
GR	Background Jig		Jig	
	49 347	CPS	175	GRAPI

Shop Calibration MSTNG

Performed : 24-JUN-2010 Time : 10:21
Sensor Suite : MSNG-NI ID : MST_DA-_029

	Internal					
	Measured	Units	Calibrated		Units	
	Zero	Reference	Zero	Reference		
INV-V	85.0	29766.5	0.00	1546.00		MV
NOR-V	158.0	30932.1	0.00	1546.00		MV
IN-C	153.0	60292.6	0.00	15.46		UA
INV-R				32.34		OHMM
NOR-R				55.11		OHMM

Performed : 24-JUN-2010 Time : 11:11
Sensor Suite : CALI-MSN ID : MST_DA-_029

	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.3	13.3	6.0	12.0	IN.