

Tucker

WIRELINE SERVICES

MICRO
LOG

File No. : TUL-56702
 Company : BRUNGARDT OIL & LEASING, INC
 Well : SELLEN'S 'A' #1
 Field :
 Country : RUSSELL
 State : KANSAS
 Country : USA

Location : API#: 15-167-23641-00-00
 400' FNL & 400' FWL
 SE NW NW NW

Sect : 12 Twp : 13S Rge : 14W

Recorded By : B.BAILEY
 Witnessed By : B.HUTCHINSON

Date : OCT 25 2010
 Run No. : 1

Permanent Datum : GL
 Drilling Measured From : KB
 Log Measured From : KB
 Above Permanent Datum : 5.00 FT

Depth--Driller : 3180.0 FT
 Depth--Logger : 3179.0 FT
 Bottom Log Interval : 3156.0 FT
 Top Log Interval : 1500.0 FT

Casing Depth--Driller: 219.0 FT
 Casing Depth--Logger : 219.0 FT
 Casing Diameter : 8.625 IN

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

Elevations :
 KB : 1635.00 FT
 DF : 1634.00 FT
 GL : 1630.00 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 : 9.100 SG
 Viscosity : 46.000 SEC
 pH : 9.500
 Fluid Loss : 10.400
 Salinity : 0.000 KPPM

RM Source : MEASURED
 RM : 0.900 OHMM at 66 F
 RM at BHT : 0.637 OHMM at 96 F

RMF Source : CALCULATED
 RMF : 0.765 OHMM at 66 F
 RMF at BHT : 0.542 OHMM at 96 F

RMC Source : CALCULATED
 RMC : 1.025 OHMM at 66 F

RMC : 1.035 OHMM at 66 F
 RMC at BHT : 0.733 OHMM at 96 F
 Max Recorded Temp. : 96 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	32.00	219.00

- 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.
 DERTAIL FROM TD TO 1500' AS PER CUSTOMER REQUEST.

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

OPERATORS:
 M.BURKE
 R.AUSTIN

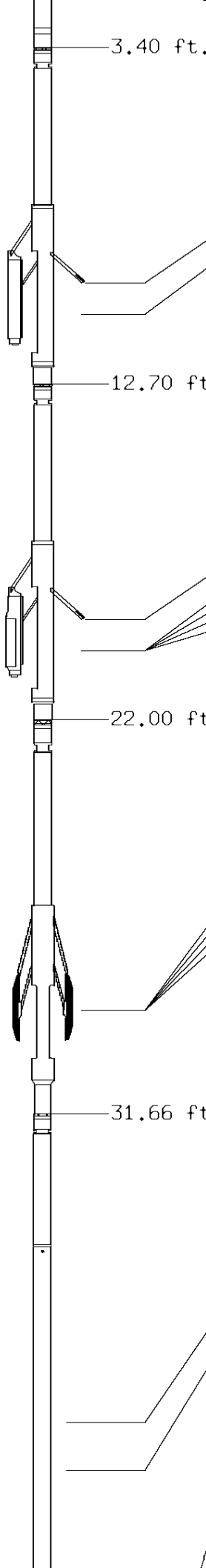
THANK YOU FOR USING TUCKER WIRELINE SERVICES!

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 Bottom Offset
GRTB	3.00 3.00 50.95



GRP 2.00 2.00 50.95

3.40 ft.

Tool: CNT **Length: 9.30 ft. O.D.: 4.36 in.**
Sonde ID : CNP-AA-116
Source ID : N-1044
Pad ID : CNP-AA-116

<u>Measure Point</u>	<u>Stack Offset</u>	<u>Tool Offset</u>	<u>Bottom Offset</u>
CLCN	9.40	6.00	43.55
PHIN	10.24	6.84	42.71

12.70 ft.

Tool: LDTNG **Length: 9.30 ft. O.D.: 4.80 in.**
Sonde ID : LDP-NG-02
Source ID : CSV-587
Pad ID : LDP-NG-02

<u>Measure Point</u>	<u>Stack Offset</u>	<u>Tool Offset</u>	<u>Bottom Offset</u>
CLLD	18.70	6.00	34.25
PEL	19.70	7.00	33.25
PES	20.10	7.40	32.85
LDEN	19.70	7.00	33.25
LCOR	19.70	7.00	33.25

22.00 ft.

Tool: MST **Length: 9.66 ft. O.D.: 6.00 in.**
Sonde ID : MST_DA_029

<u>Measure Point</u>	<u>Stack Offset</u>	<u>Tool Offset</u>	<u>Bottom Offset</u>
MSFL	29.60	7.60	23.35
CLMR	29.60	7.60	23.35
MSFN	29.60	7.60	23.35
MSFI	29.60	7.60	23.35

31.66 ft.

Tool: PIT **Length: 21.29 ft. O.D.: 3.62 in.**
Sonde ID : PIT-AB-14

<u>Measure Point</u>	<u>Stack Offset</u>	<u>Tool Offset</u>	<u>Bottom Offset</u>
ILD	40.58	8.92	12.37
ILM	41.76	10.10	11.20
SFLU	49.15	17.49	3.81
SP	52.26	20.60	0.69

LWT — 52.95 ft.

TENSION
LBS

10000 0

BIT SIZE
INCHES (IN)

6 16

GAMMA RAY
API UNITS

150 300
0 150

CALIPER MICRO
INCHES (IN)

16 26
6 16

MICRO-INVERSE
OHMM

0 40

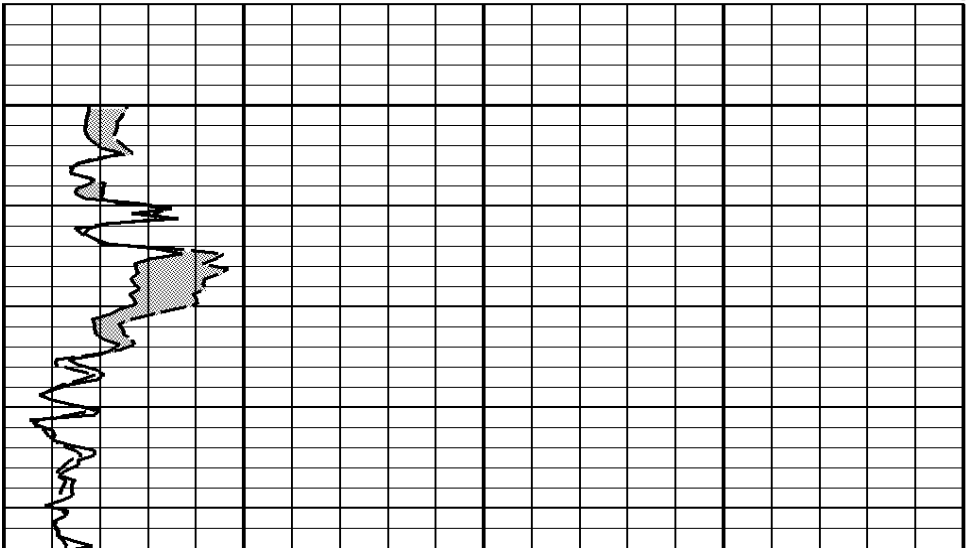
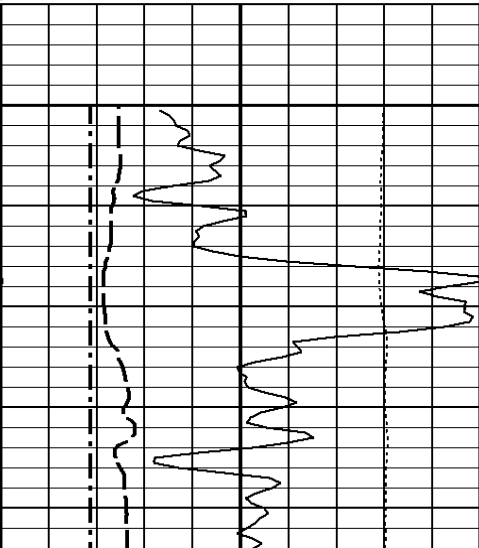
MICRO-NORMAL
OHMM

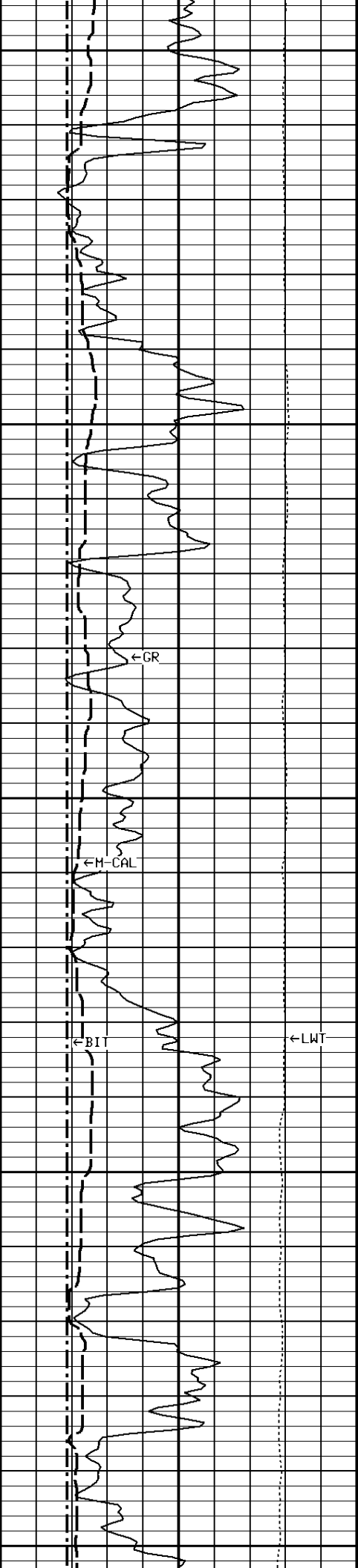
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1:240 MAIN SECTION

File #714

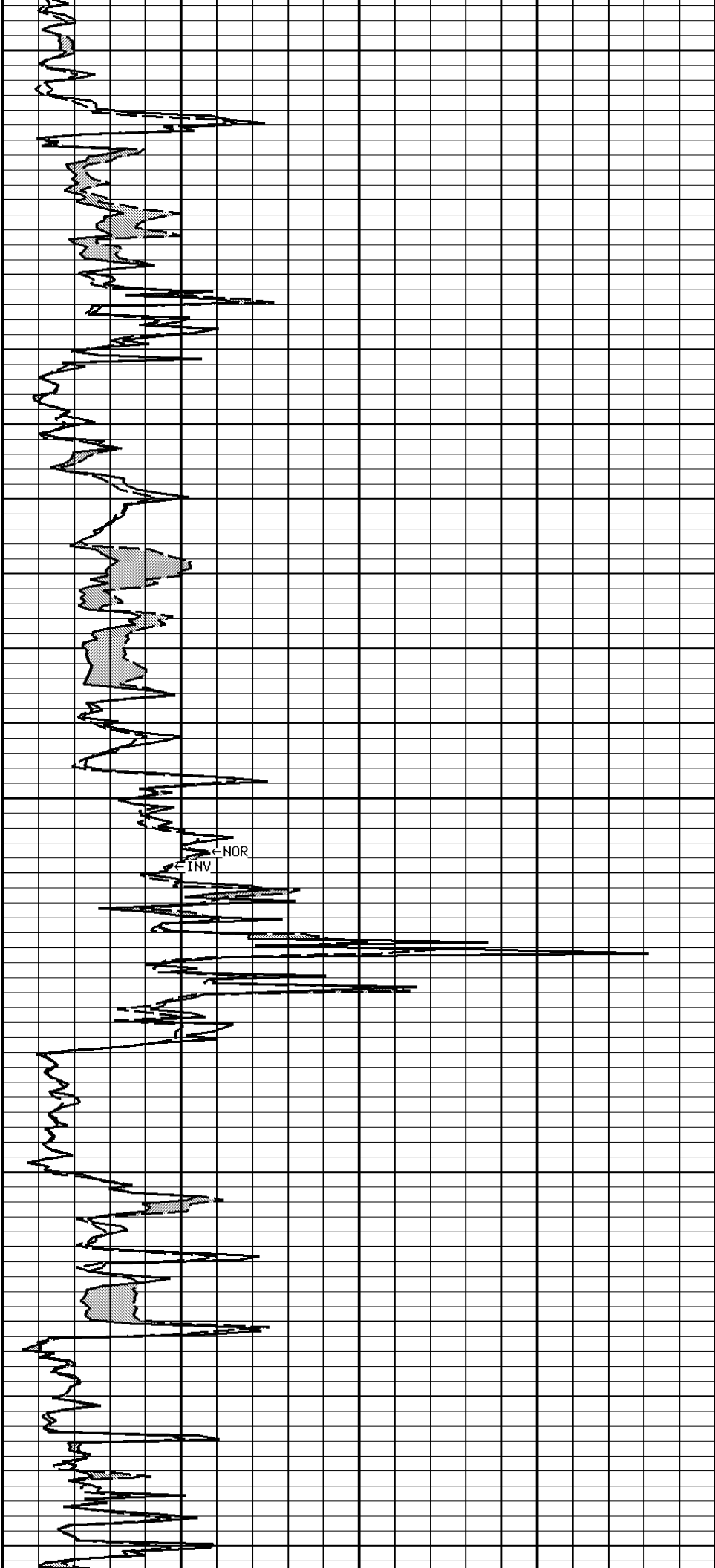
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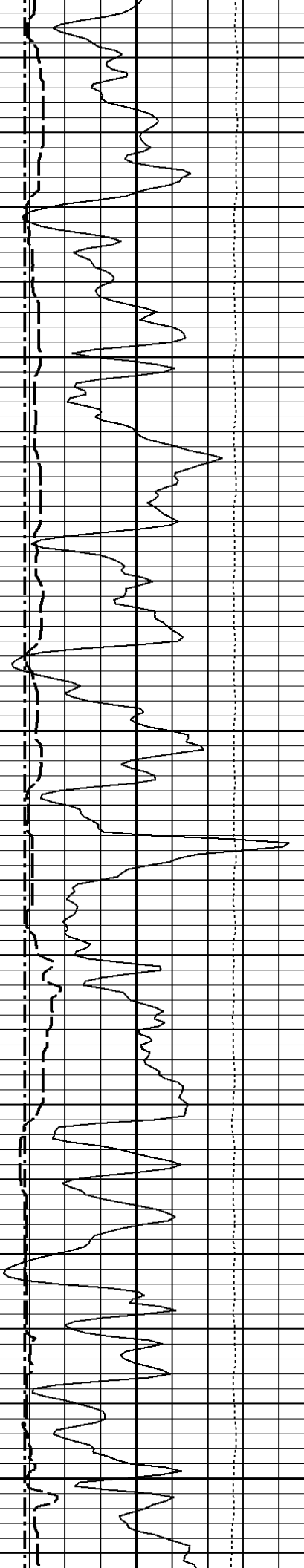




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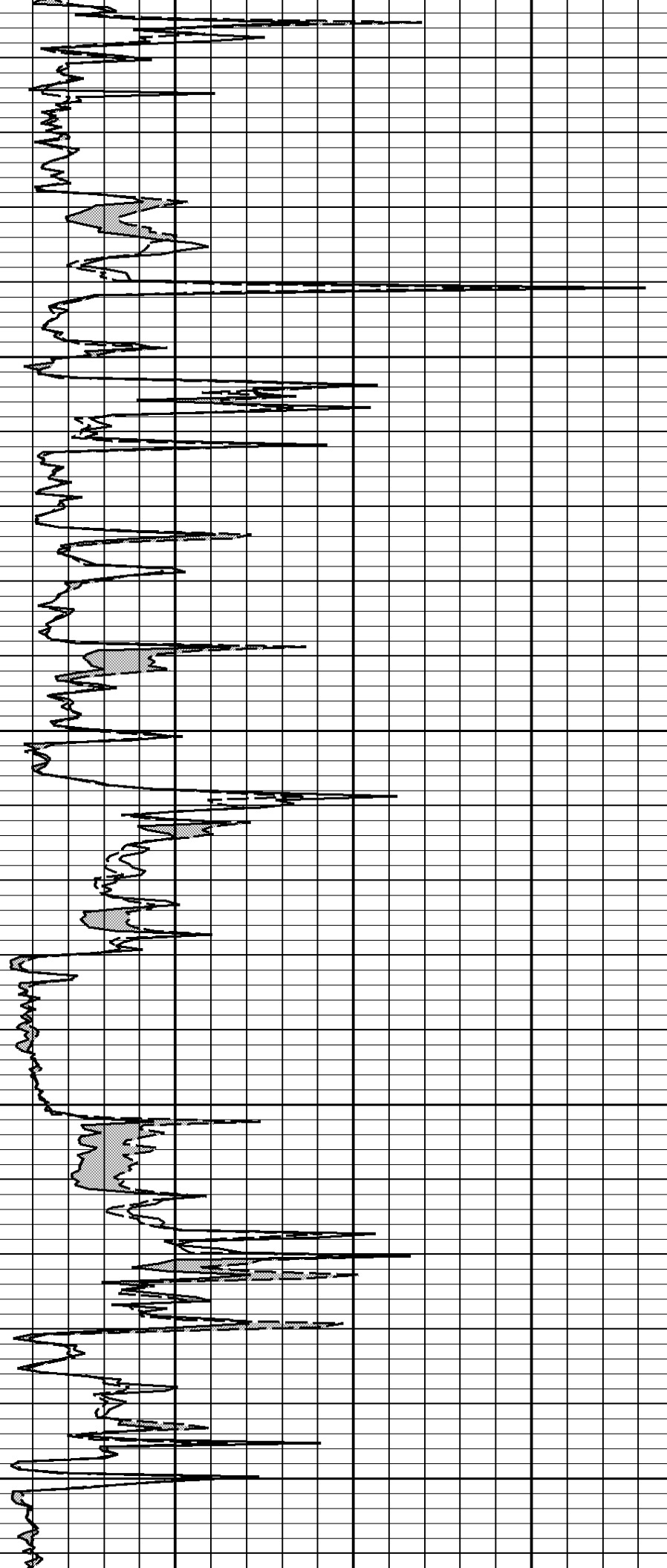
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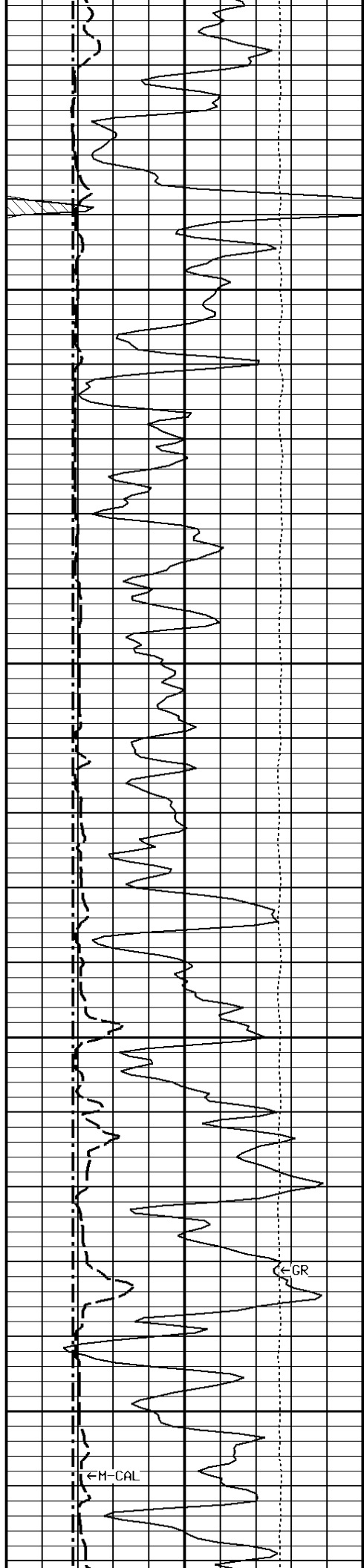




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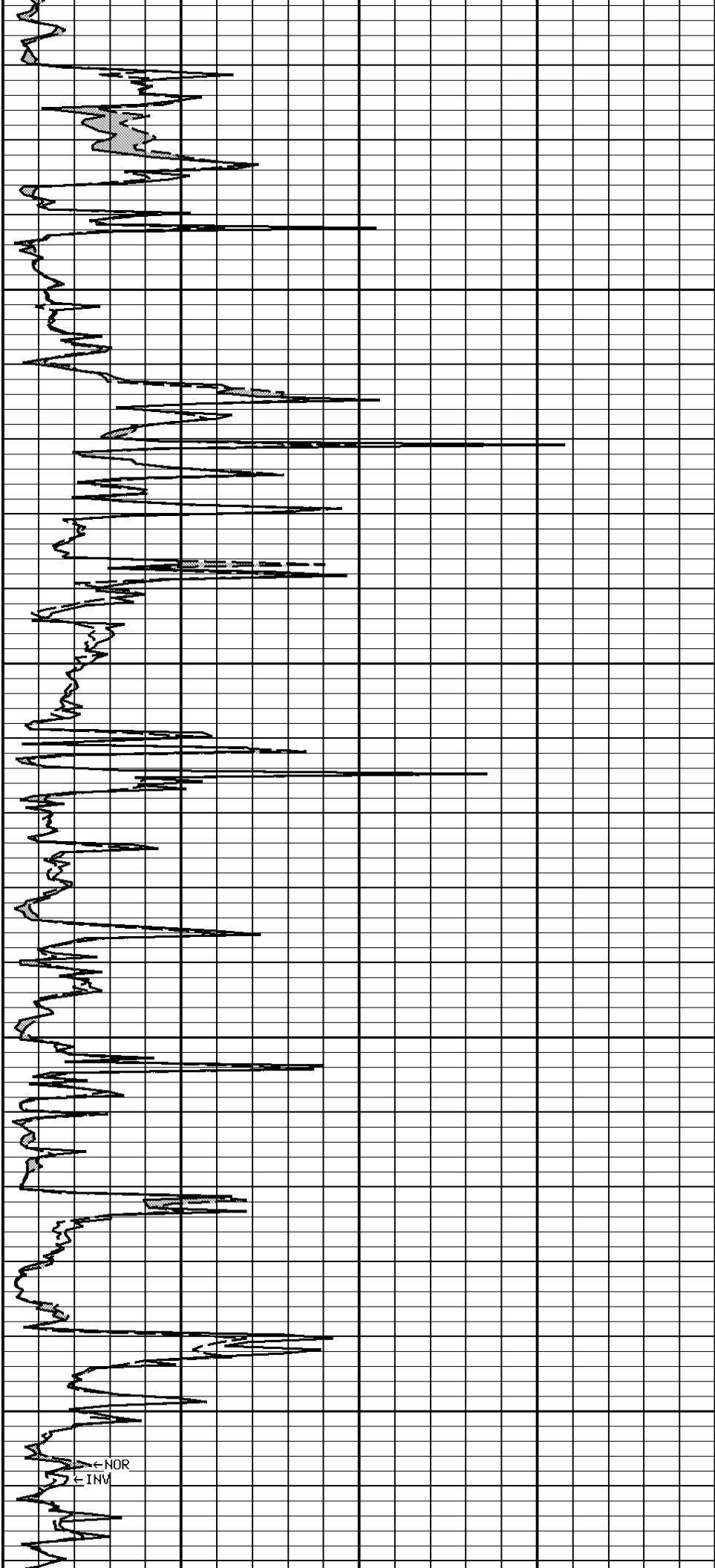
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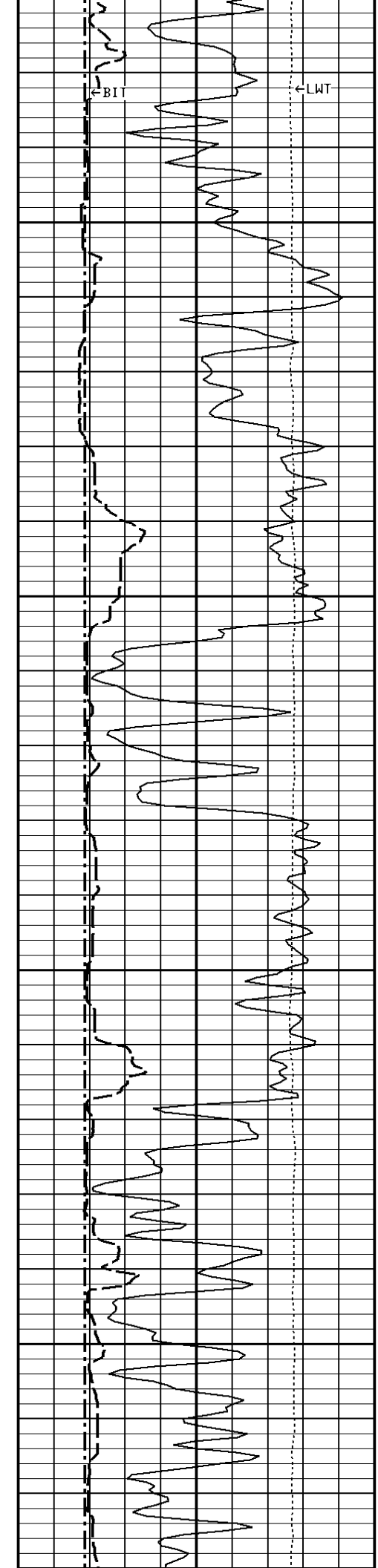




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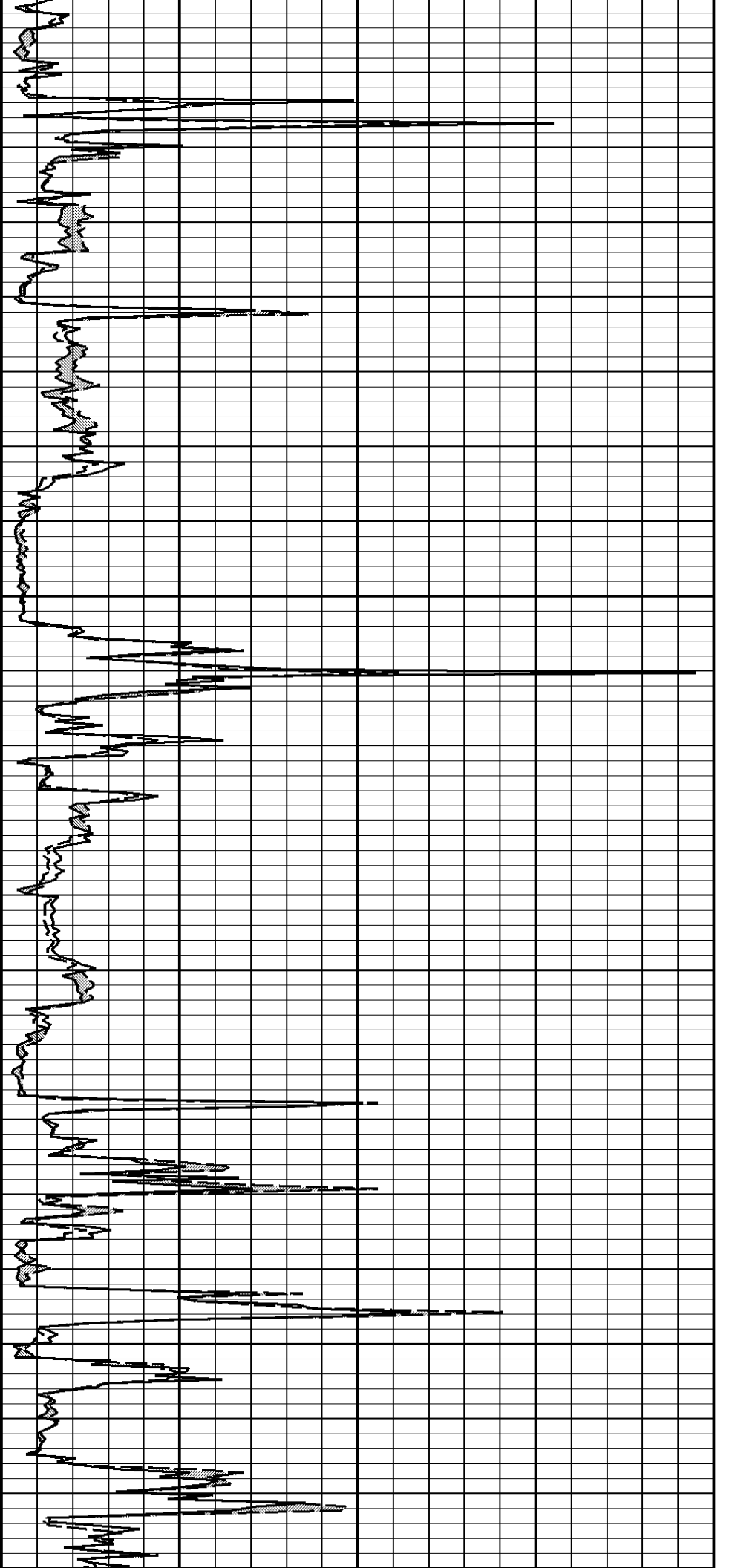
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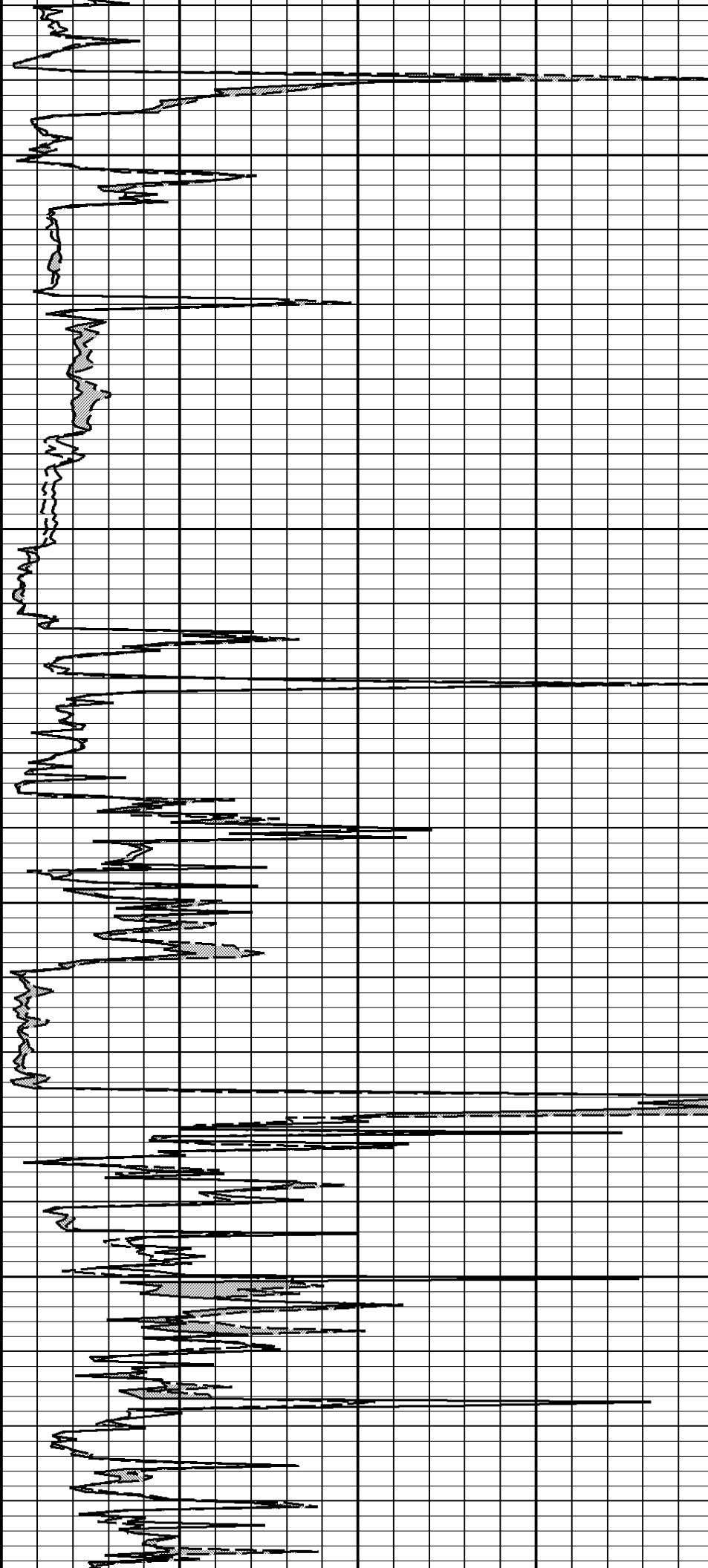
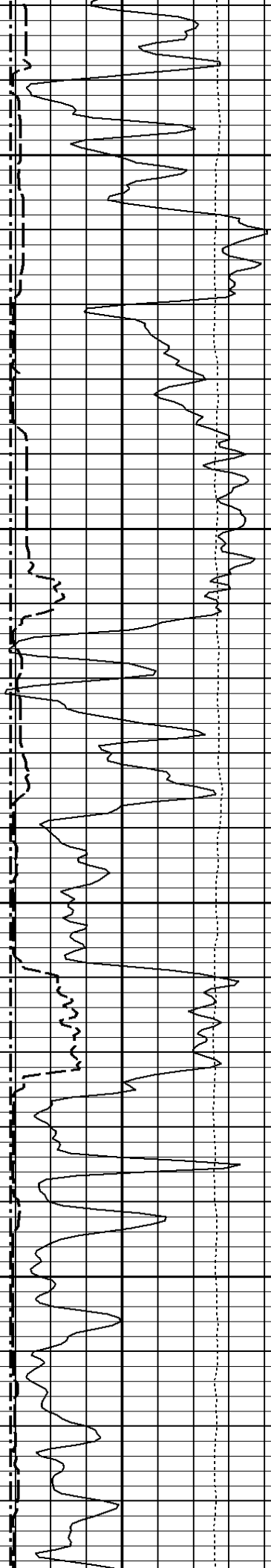
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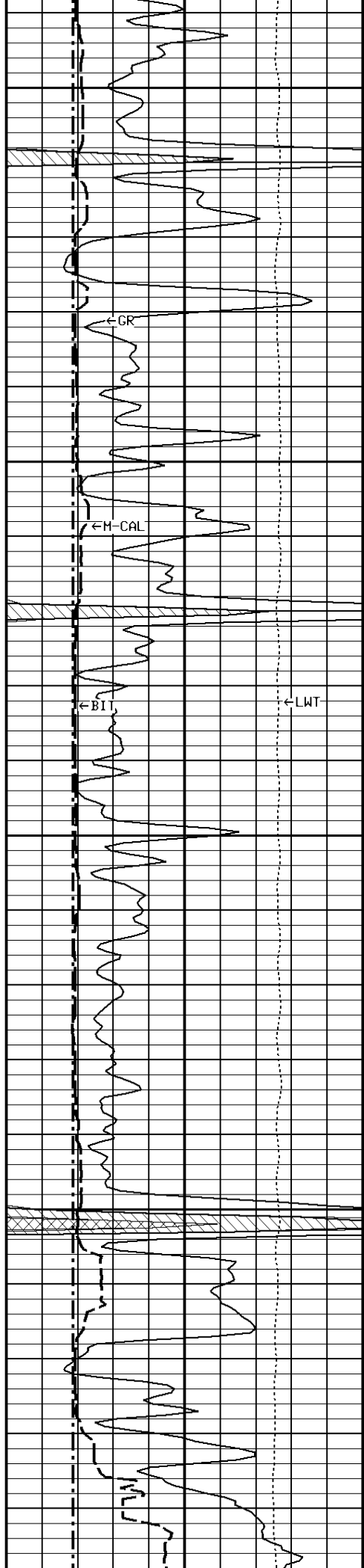
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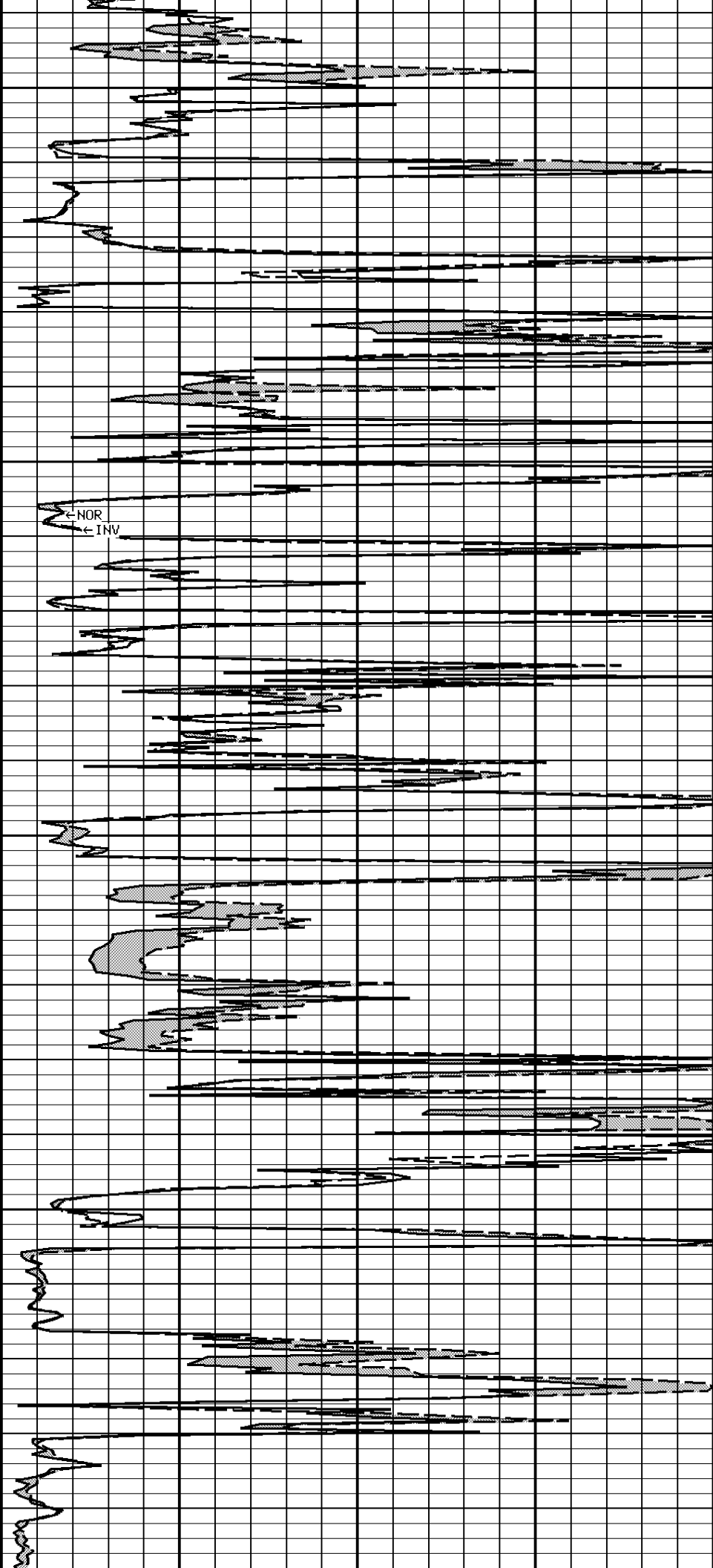
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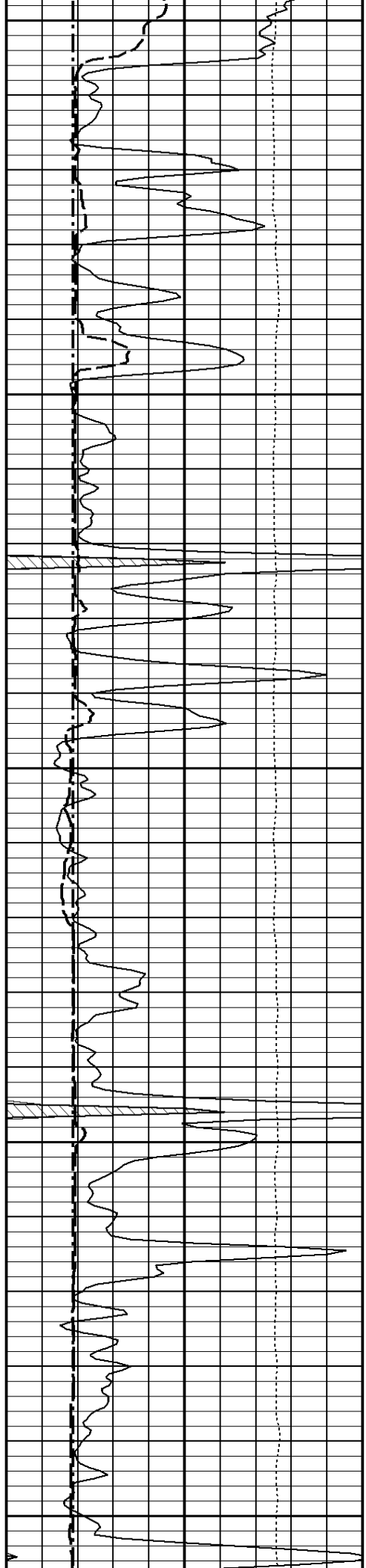




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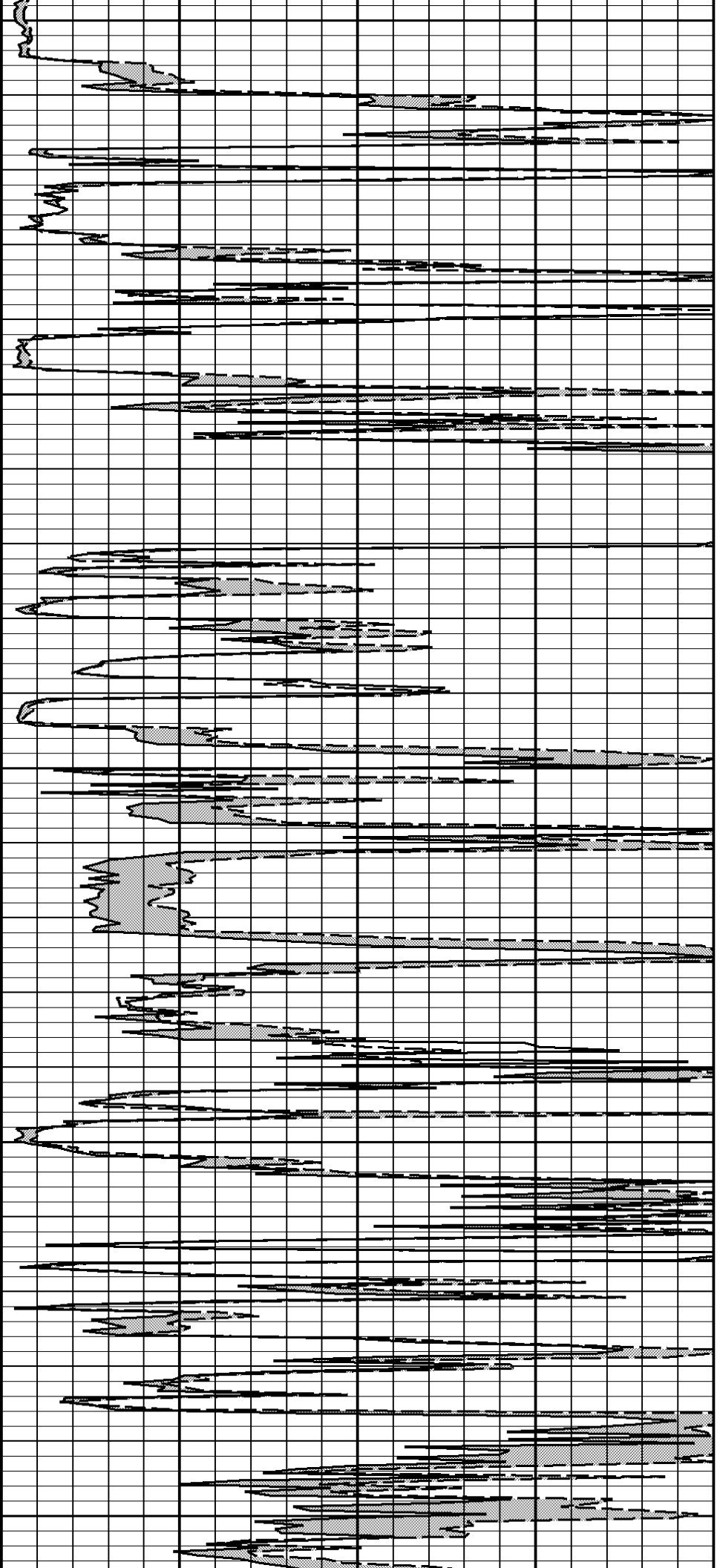


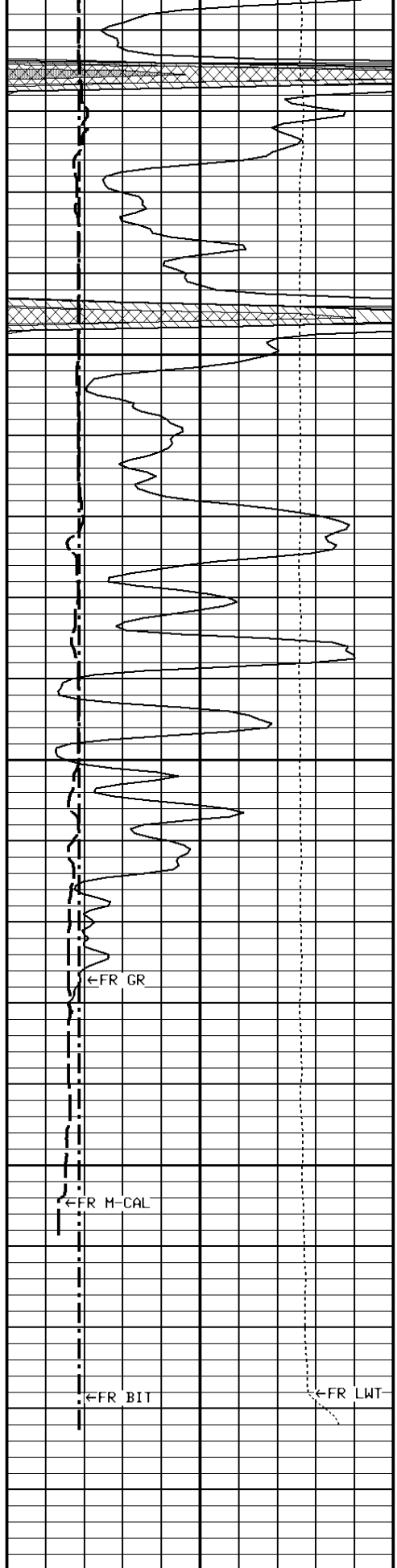


2800

2900

3000

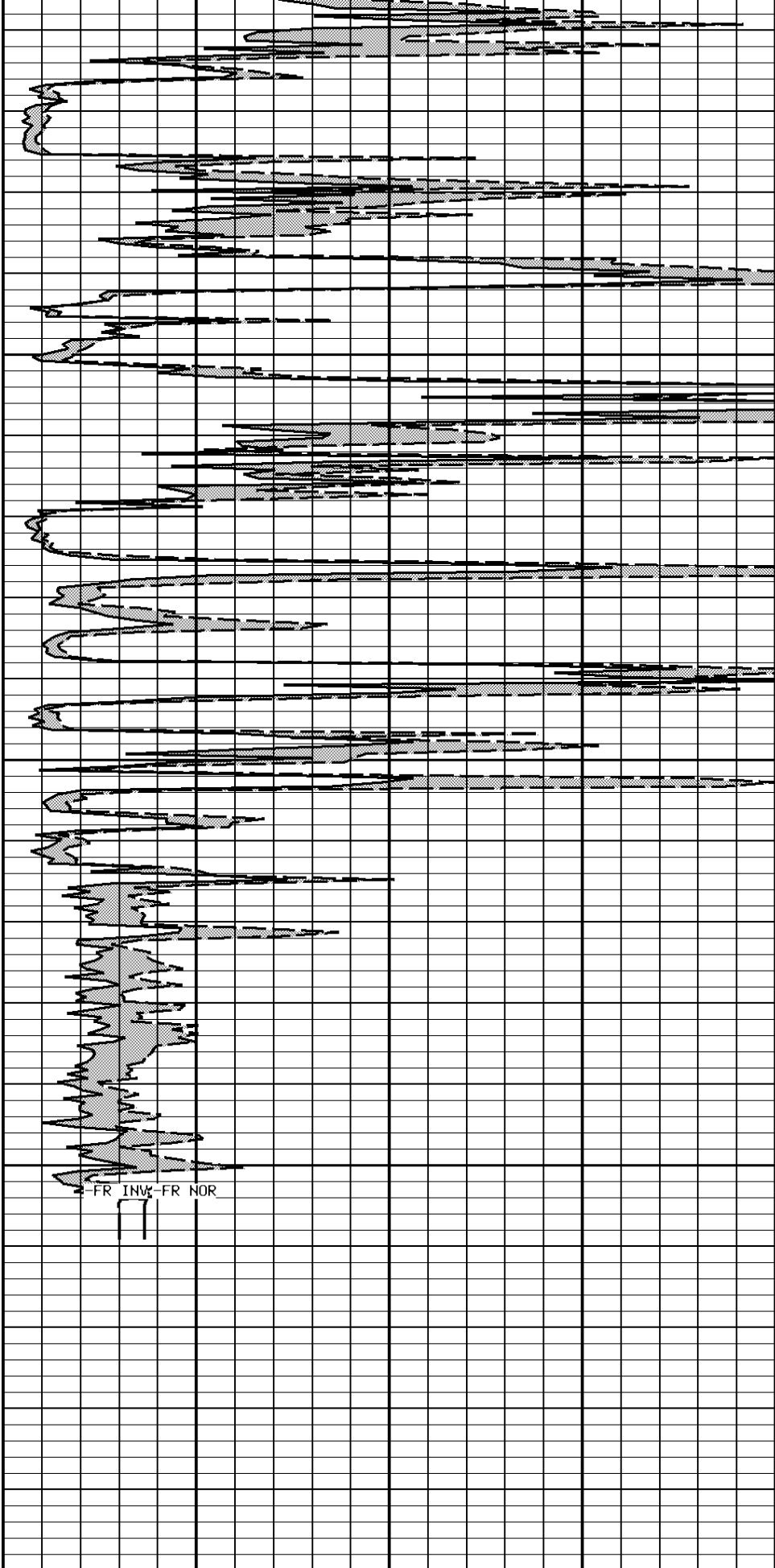




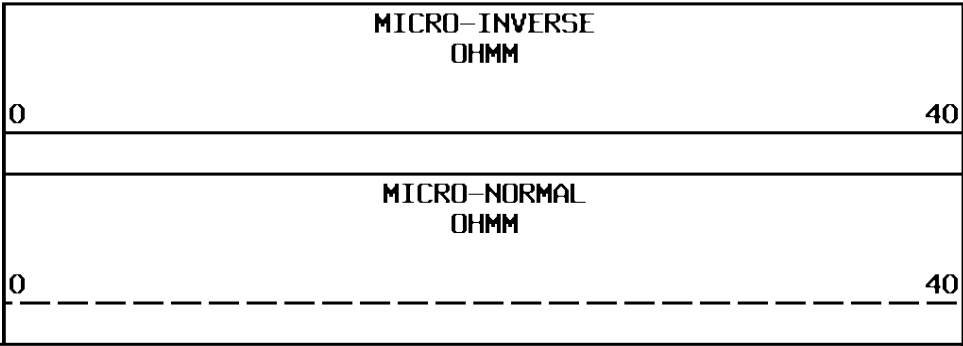
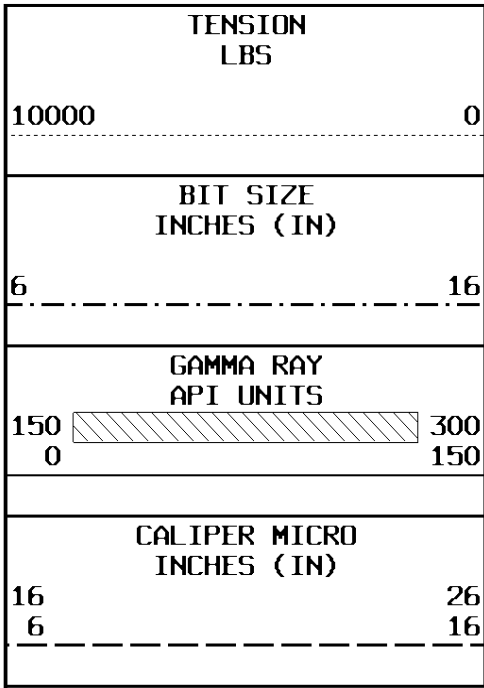
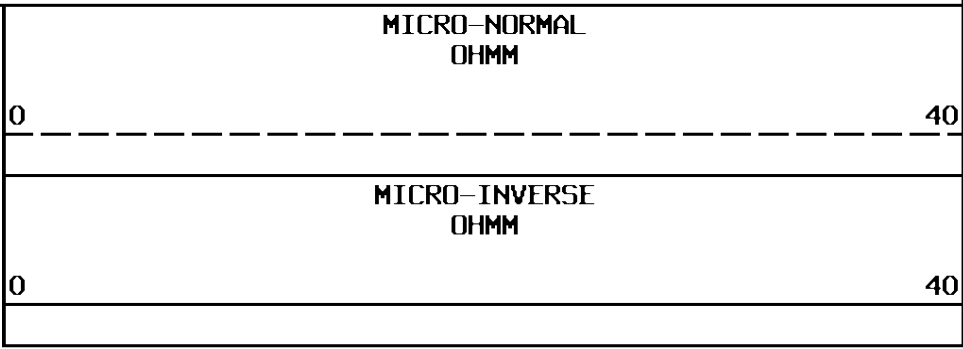
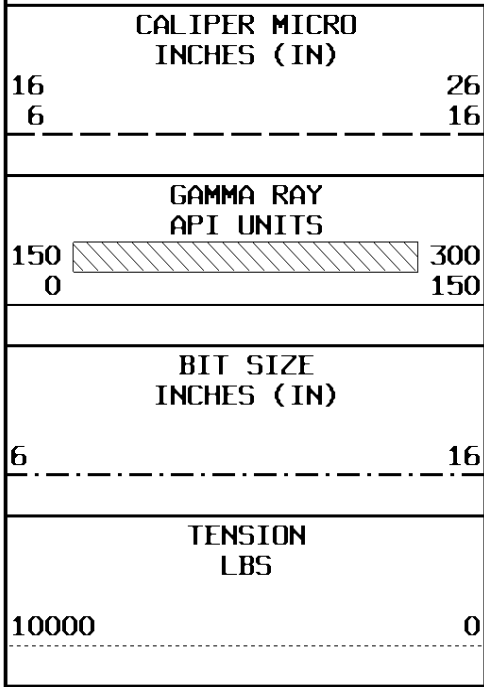
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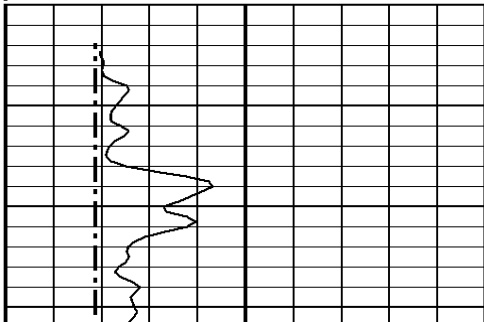
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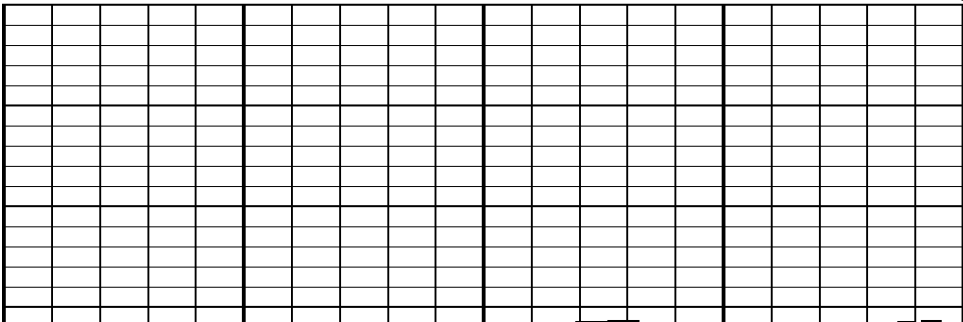
1:240 MAIN SECTION

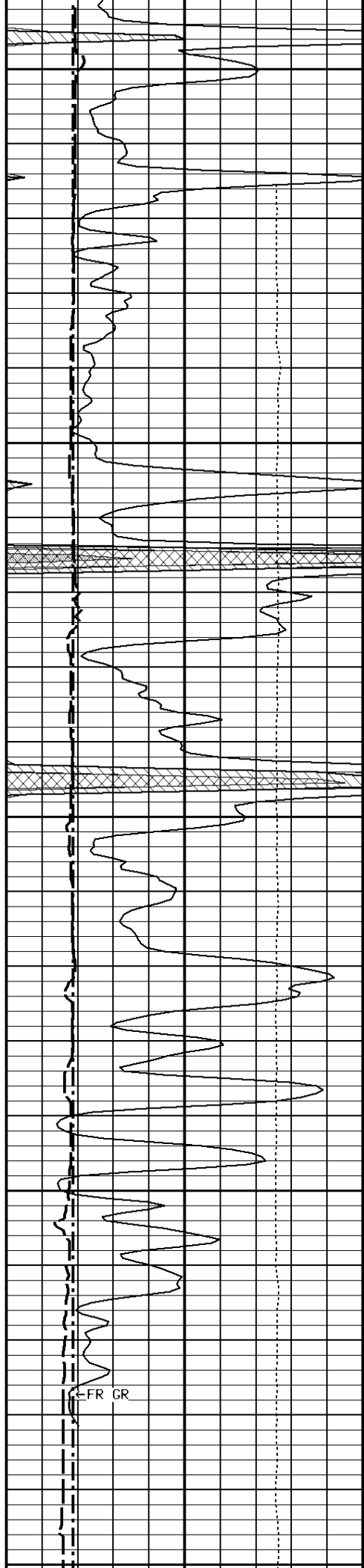


1:240 REPEAT SECTION



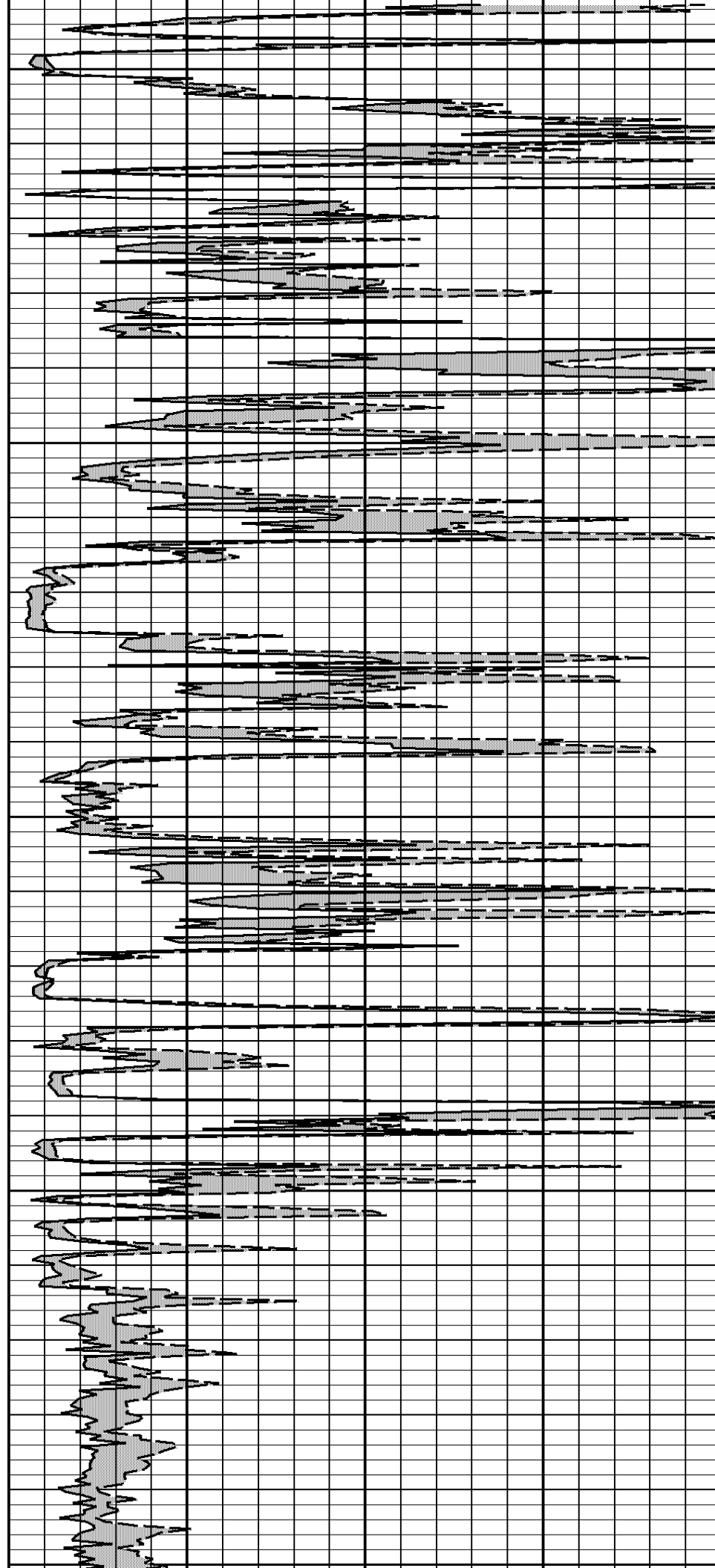
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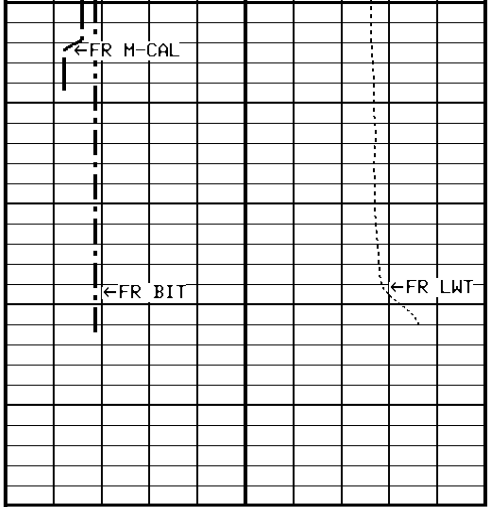




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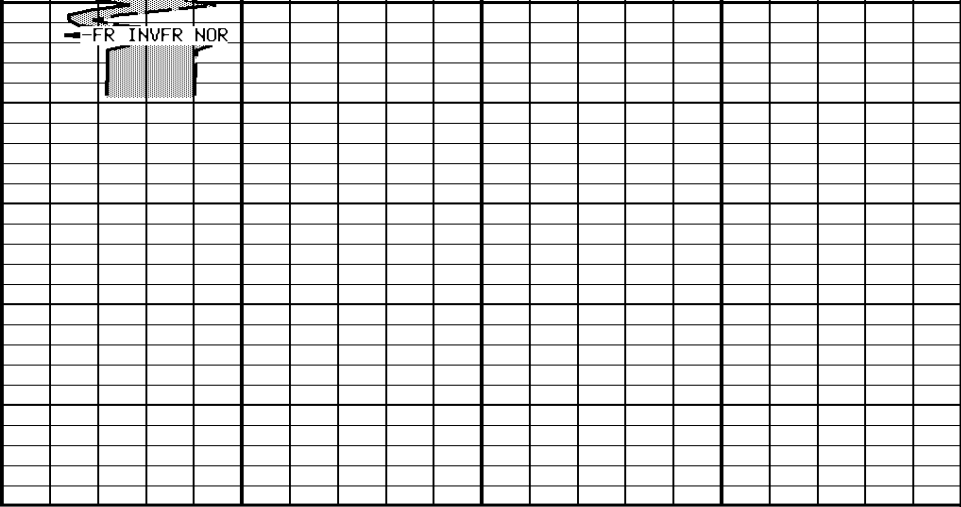
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3179

File #715



1:240 REPEAT SECTION

CALIPER MICRO INCHES (IN)	
16 6	26 16

GAMMA RAY API UNITS	
150 0	300 150

BIT SIZE INCHES (IN)	
6	16

TENSION LBS	
10000	0

MICRO-NORMAL OHMM	
0	40

MICRO-INVERSE OHMM	
0	40

* Calibration Summary *

Shop Calibration						
GRTB						
Performed : 21-Aug-2009			Time : 15:26			
Sensor Suite : GR-GR5			ID : GRT-BA-14			
	Measured	Units	Calibrated	Units		
	Background	Jig	Jig			
GR	49	347	175	CPS	GRAPI	
Shop Calibration						
MSTNG						
Performed : 24-JUN-2010			Time : 10:21			
Sensor Suite : MSNG-NI			ID : MST_DA-_029			
	Measured	Units	Calibrated	Units		
	Zero	Reference	Zero	Reference		
		Units		Units		

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.