

STEP

MICRO LOG

energy services

Company MERIT ENERGY COMPANY, LLC Well WENU #403 Field EUBANK NORTH County HASKELL State KANSAS Country USA API No. 15-081-22211-0000		File No : TUL-70418 Company : MERIT ENERGY COMPANY, LLC Well : WENU #403 Field : EUBANK NORTH County : HASKELL State : KANSAS Country : USA API No : 15-081-22211-0000	
Location : 2023 FSL & 873' FEL SE NW NE SE		LSD : Sect : 4 Twp : 28S Rge : 34W	
Permanent Datum: Drilling Measured From: GL KB Elevations: KB 3089.00 Services: CNT MLT Log Measured From: KB KB DF 3088.00 LDT PIT Above Permanent Datum: 1200 Ft GL 3077.00 Ft CST		Date 12-30-2019	
Run Number	1		
Depth--Driller	5604.0	Ft	
Depth--Logger	5612.0	Ft	
First Reading	5589.0	Ft	
Last Reading	1774.0	Ft	
Casing--Driller	1774.0	Ft	
Casing--Logger	1774.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	9.2		
Fluid Loss	6.0		
PH/Viscosity	11.0	56.0	
Sample Source	MEASURED		
RM@Measured Temp.	4.000	@ 50 F	
RMF@Measured Temp	3.200	@ 50 F	
RMG@Measured Temp.	4.800	@ 50 F	
Source RMF/RMG	CALCULATED	CALCULATED	
RM@BHT	1.600	@ 134 F	
Time Circulation Stopped	12-30-2019 09:15		
Max Recorded Temp.	134	F	
Equipment/Base	1022	HAYS, KS	
Recorded By	SHELDON TYLER		
Witnessed By	MARTIN LANGE RODNEY GONZALES		

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	5604.00	8.625	32.00	1774.00	0.00

Run Number	1	
Date	12-30-2019	
Date/Time On Bottom	12-30-2019 13:15	
Depth to Fluid	0.0 Ft	
Salinity	1050.000	
RMF@BHT	1.280 @ 134 F	
RMC@BHT	1.920 @ 134 F	

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
GRT, CNT, LDT, CST, MLT AND PIT RUN IN COMBINATION
CALIPERS ORIENTED ON X-Y AXIS
2.71 G/CC USED TO CALCULATE POROSITY
ANNULAR HOLE VOLUME CALCULATED USING 5.5" PRODUCTION CASING
PHIN IS CALIPER CORRECTED
REPEAT PIT, MICRO AN SONIC ONLY ON 2ND RUN
NO REPEAT ON DENSITY, OR NEUTRON DUE TO CALIPER NOT CLOSING, LOGGED OUT
LAT 37.640267 LONG -101.038048
CUSTOMER REQUESTED DETAIL PULLED TO 3900' REPEAT TO 5200'

GRT: GRP, GRX
CST: PORS, CDTF, TTIPF, TT2PF, TT3PF, TT4PF, ITT
CNT: PHIN, CLCNIN, PHXN
LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN, PRXL, PECLX, LDENNX, LCORX
MLT: NOR_RF, INV_RF, MSCLPIN
PIT: ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS:
B.BROWN

Well File: MERIT ENERGY WENU 403_DEC30_QUINT	Scale: 1:240	Format: MST-240
Segment: V1.D3.S1 FINAL MAIN	Acquired: Not Available	
Reference: 0	Processed: Not Available	

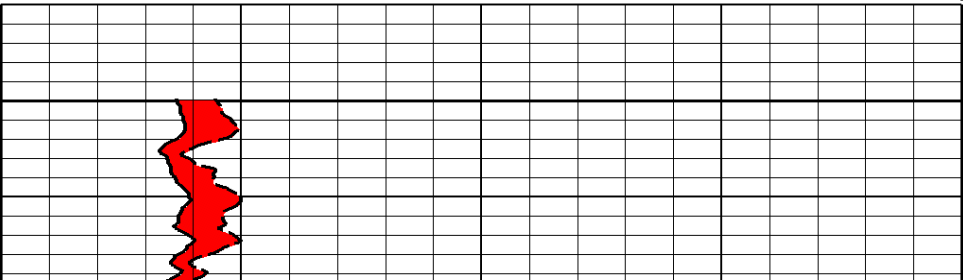
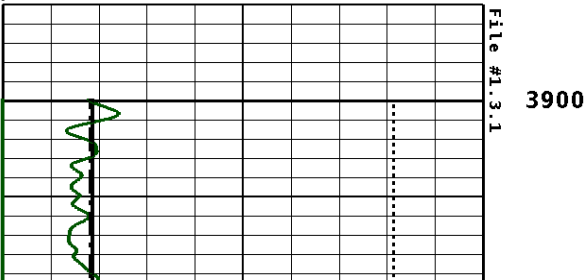
BIT SIZE INCHES (IN)	
6	16
CALIPER MICRO INCHES (IN)	
16	26
6	16

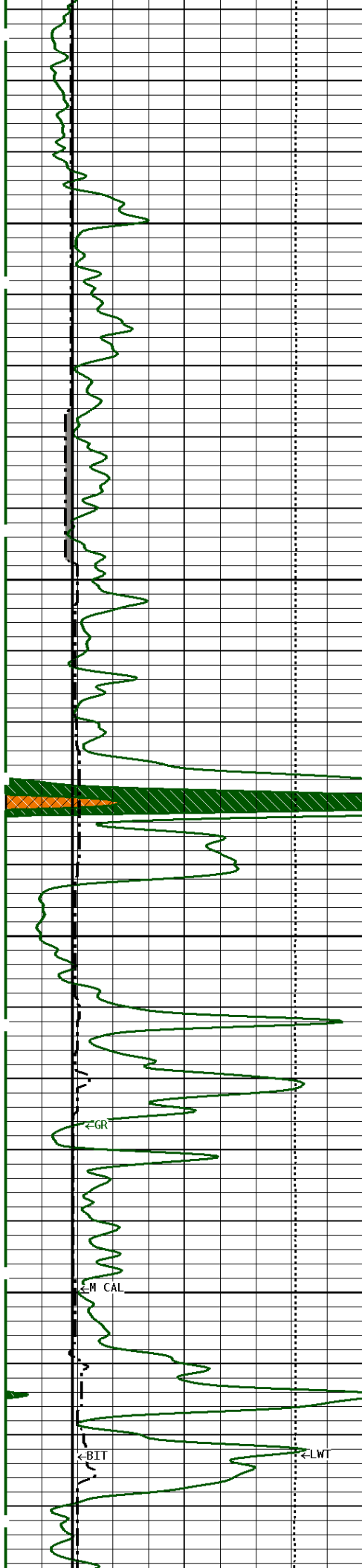
TENSION LBS	
10000	0

GAMMA RAY API UNITS	
150	300
0	150

INVERSE OHMM	
0	40
NORMAL OHMM	
0	40

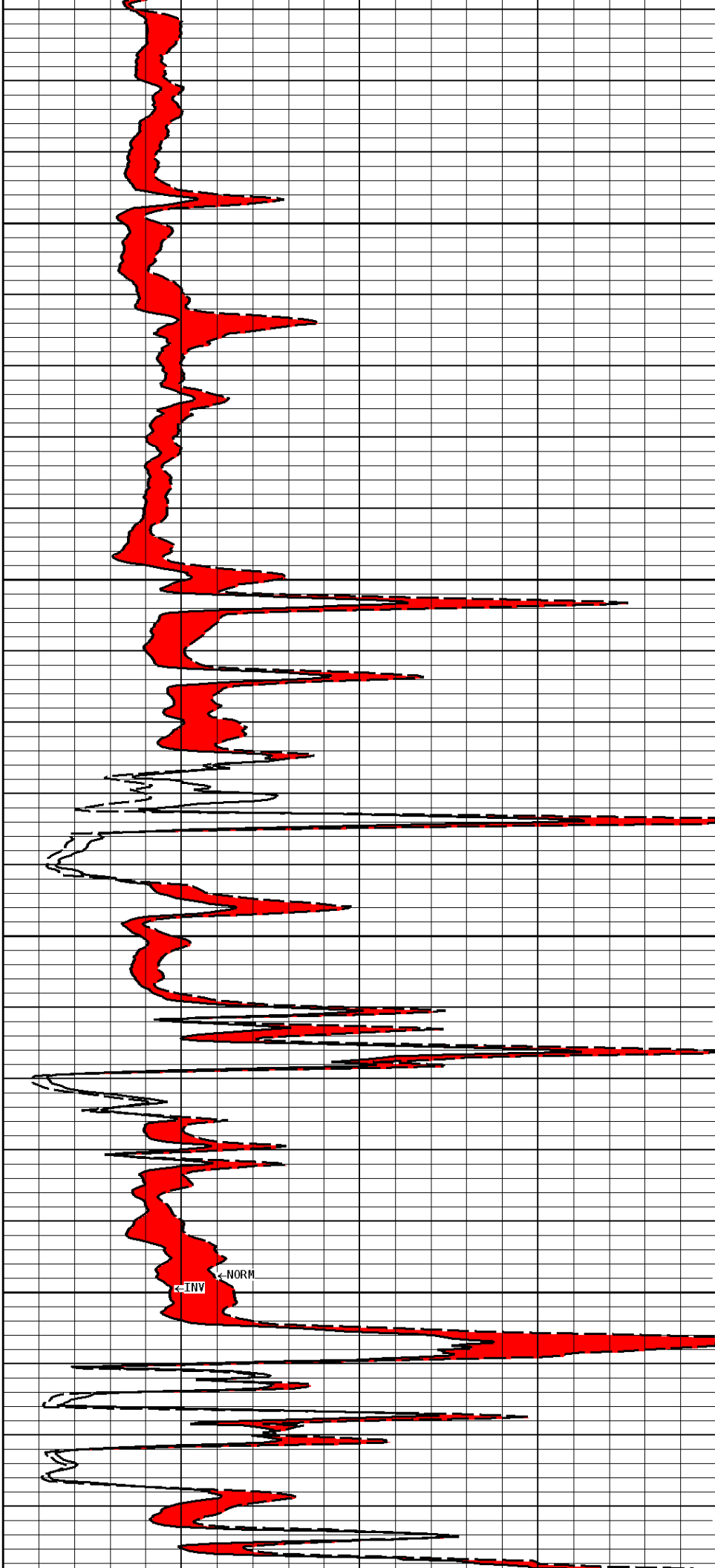
1:240 MAIN SECTION

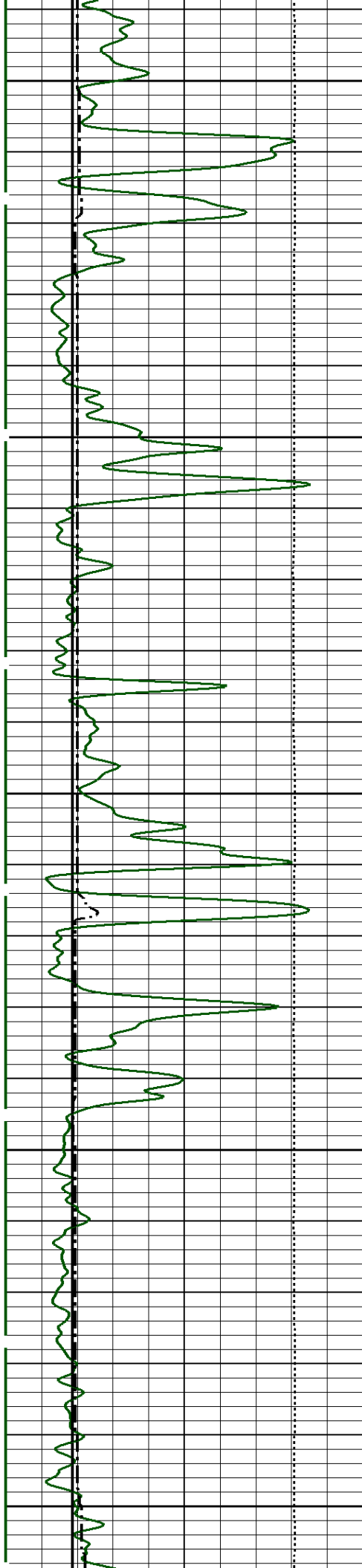




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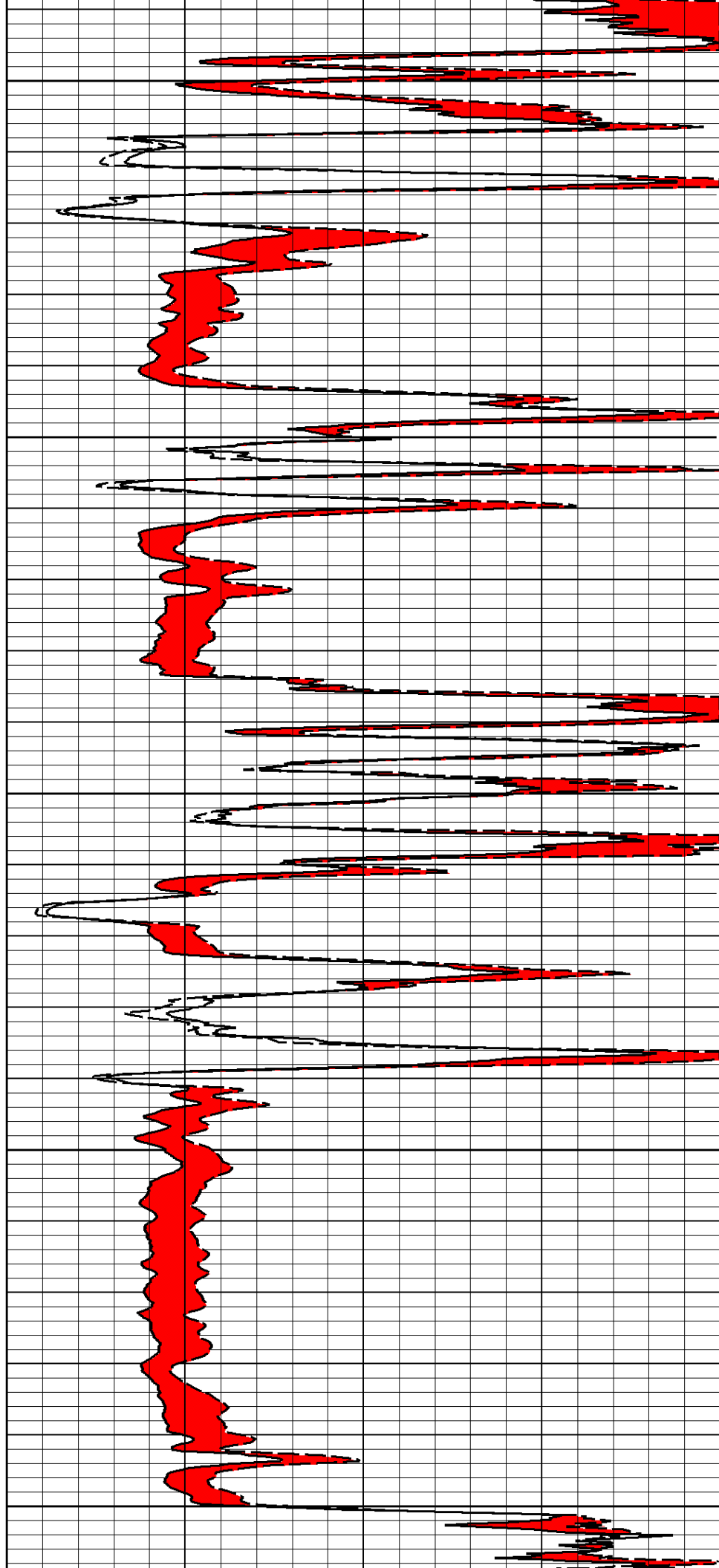
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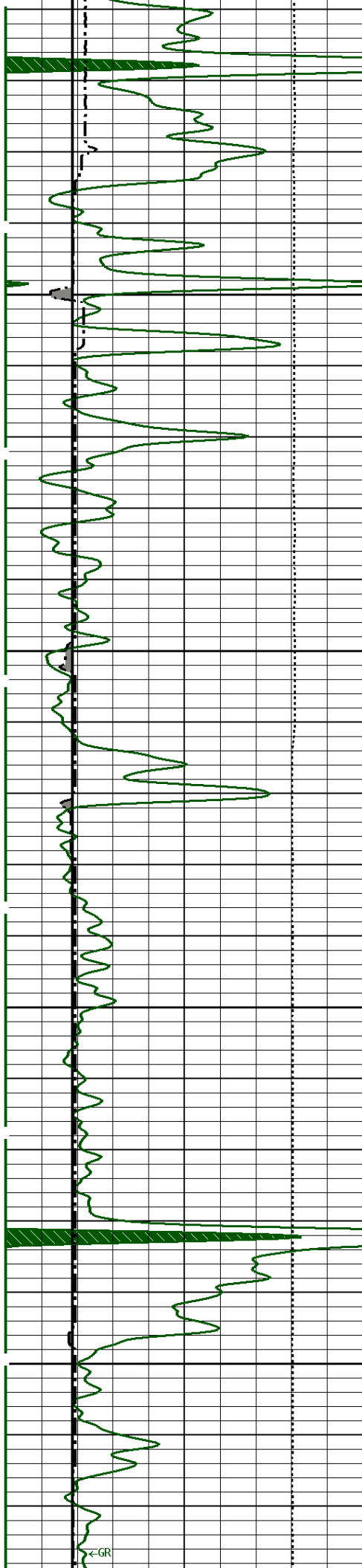




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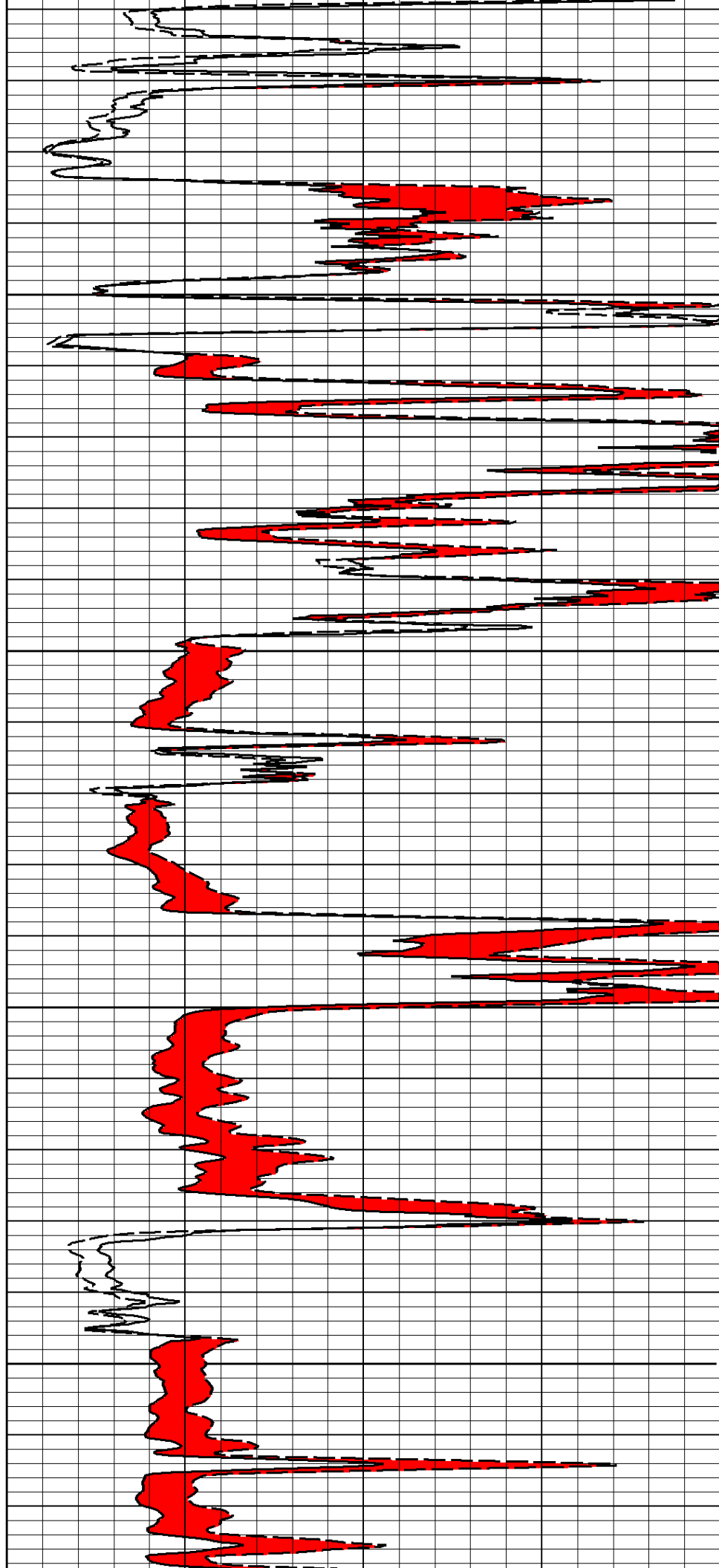
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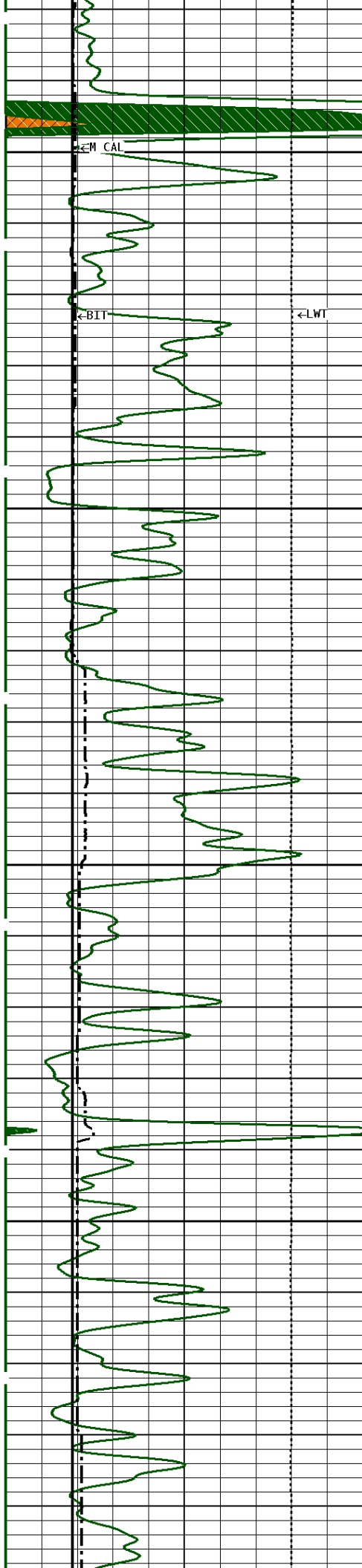




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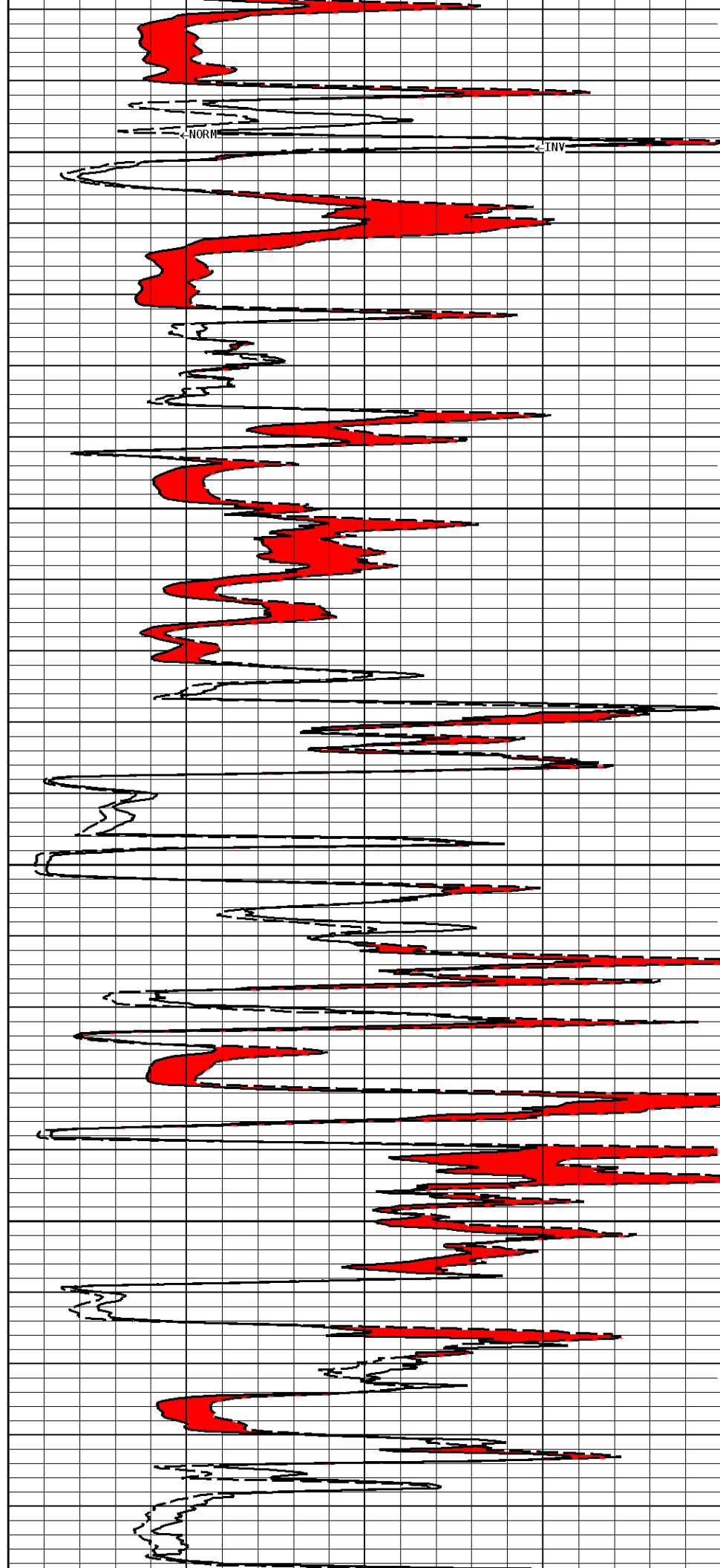
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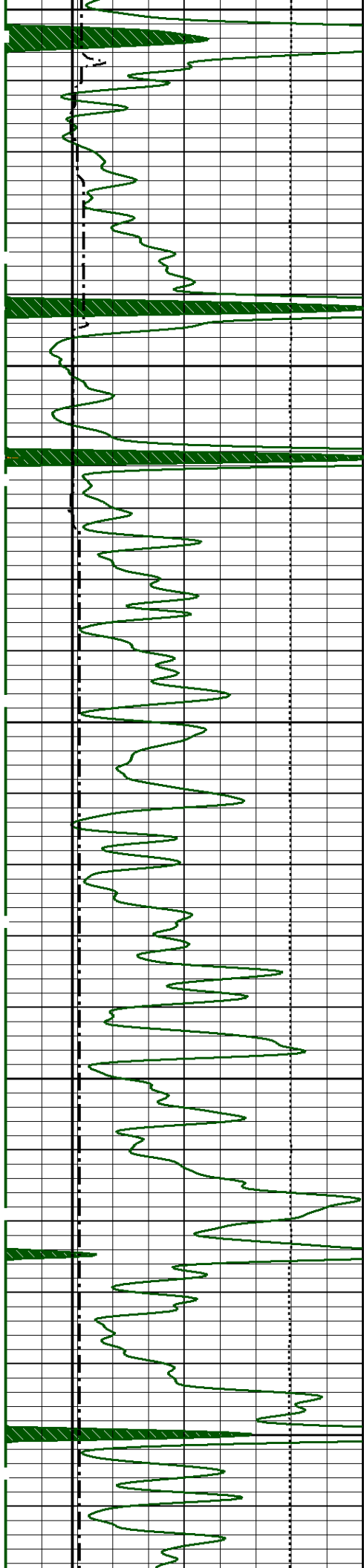




4600

4700

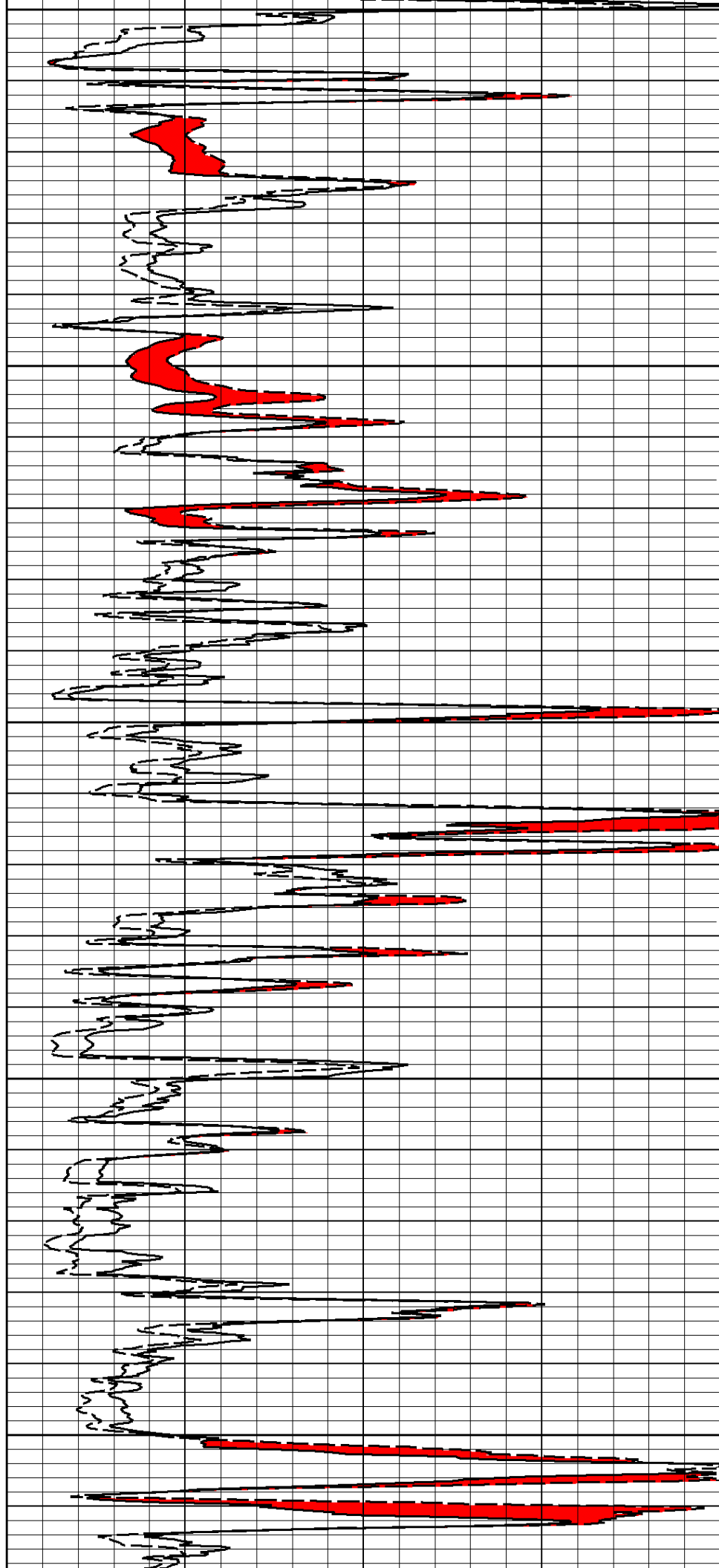


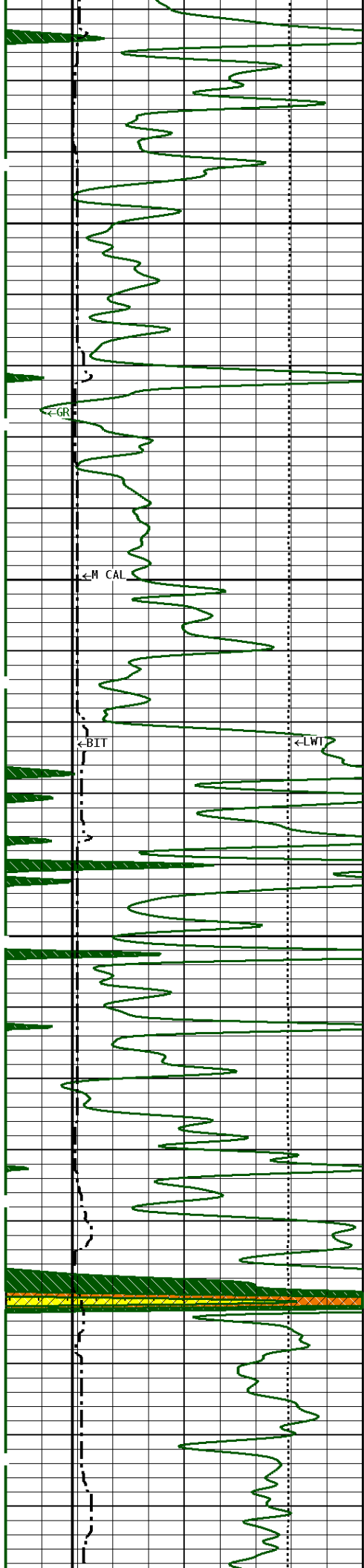


4800

4900

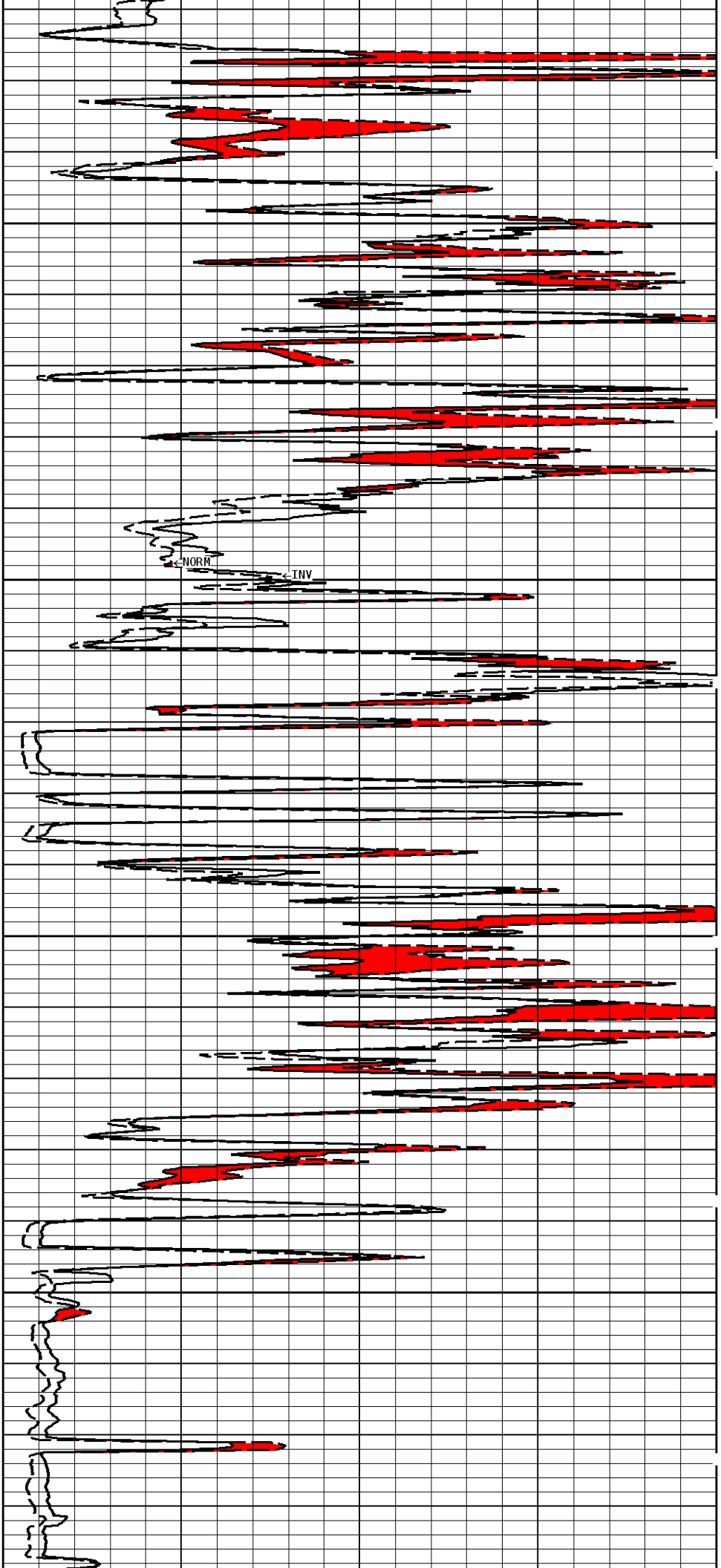
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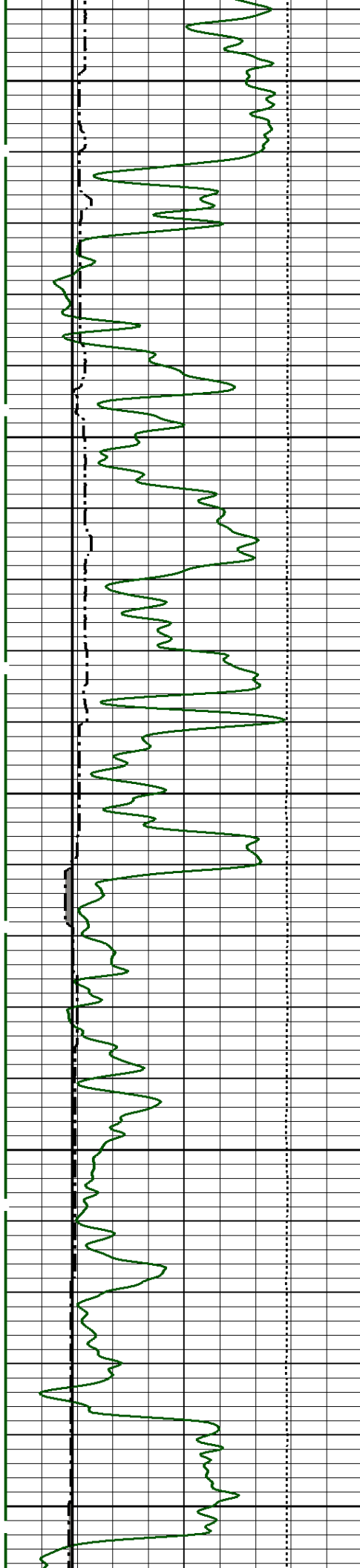




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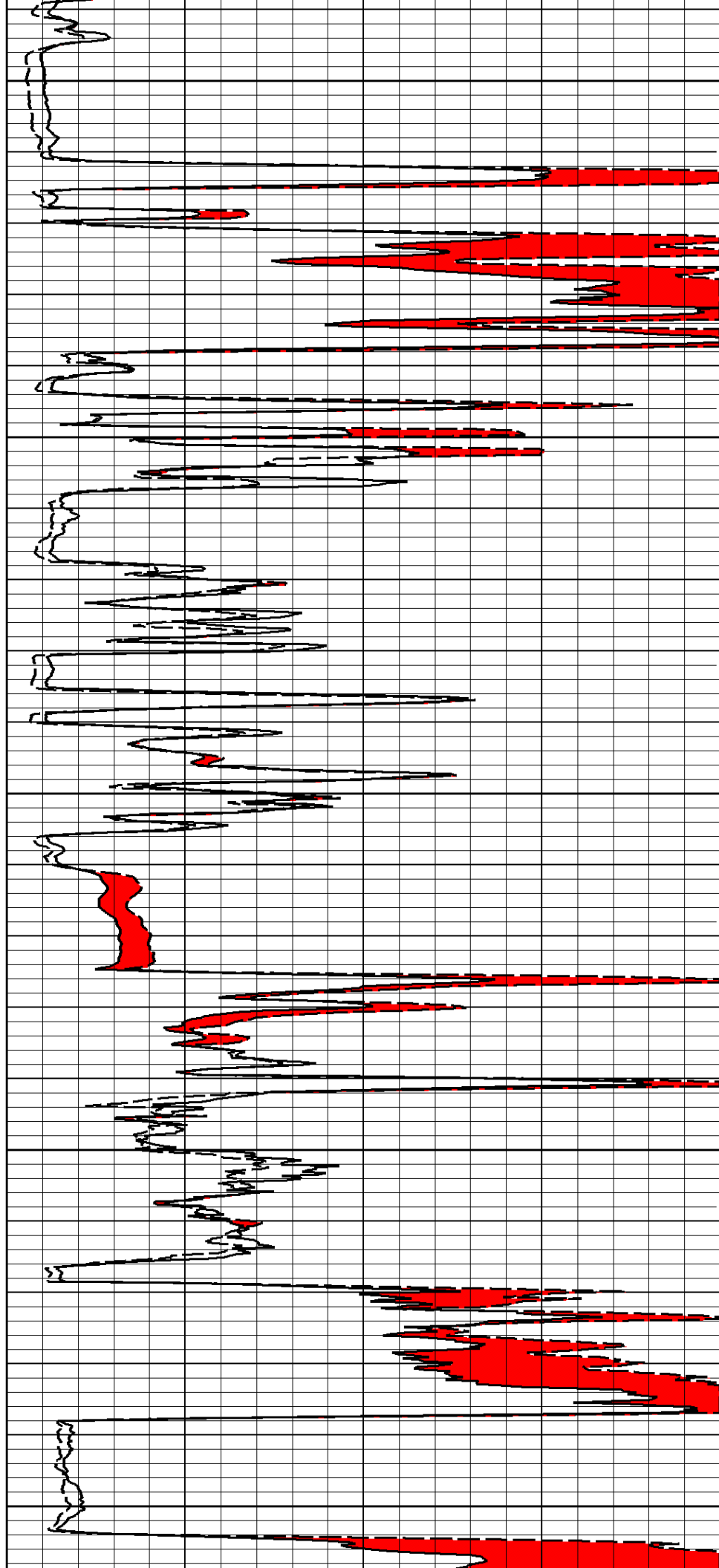
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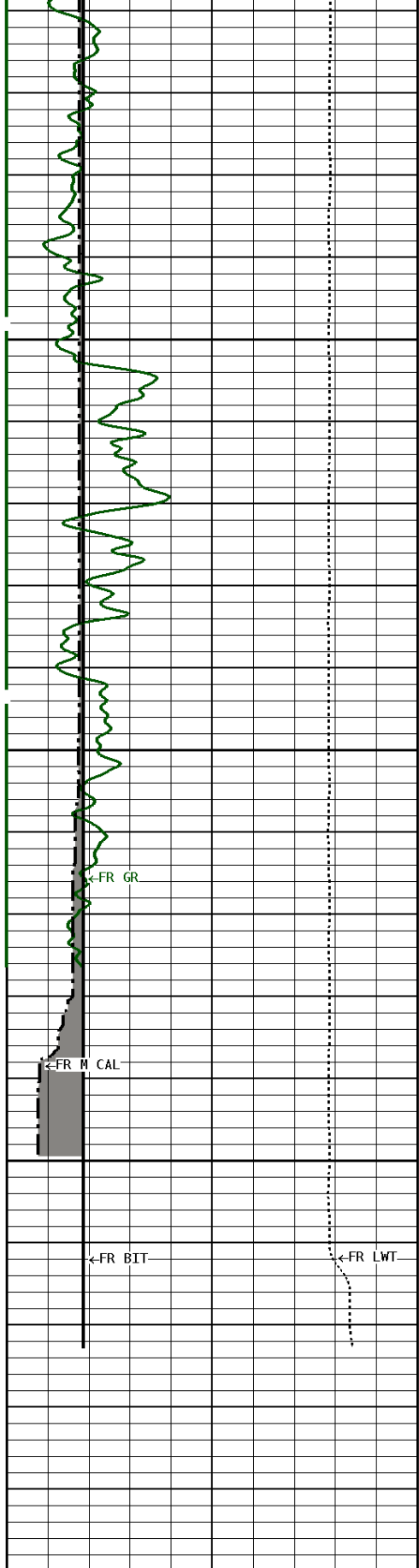




5300

5400

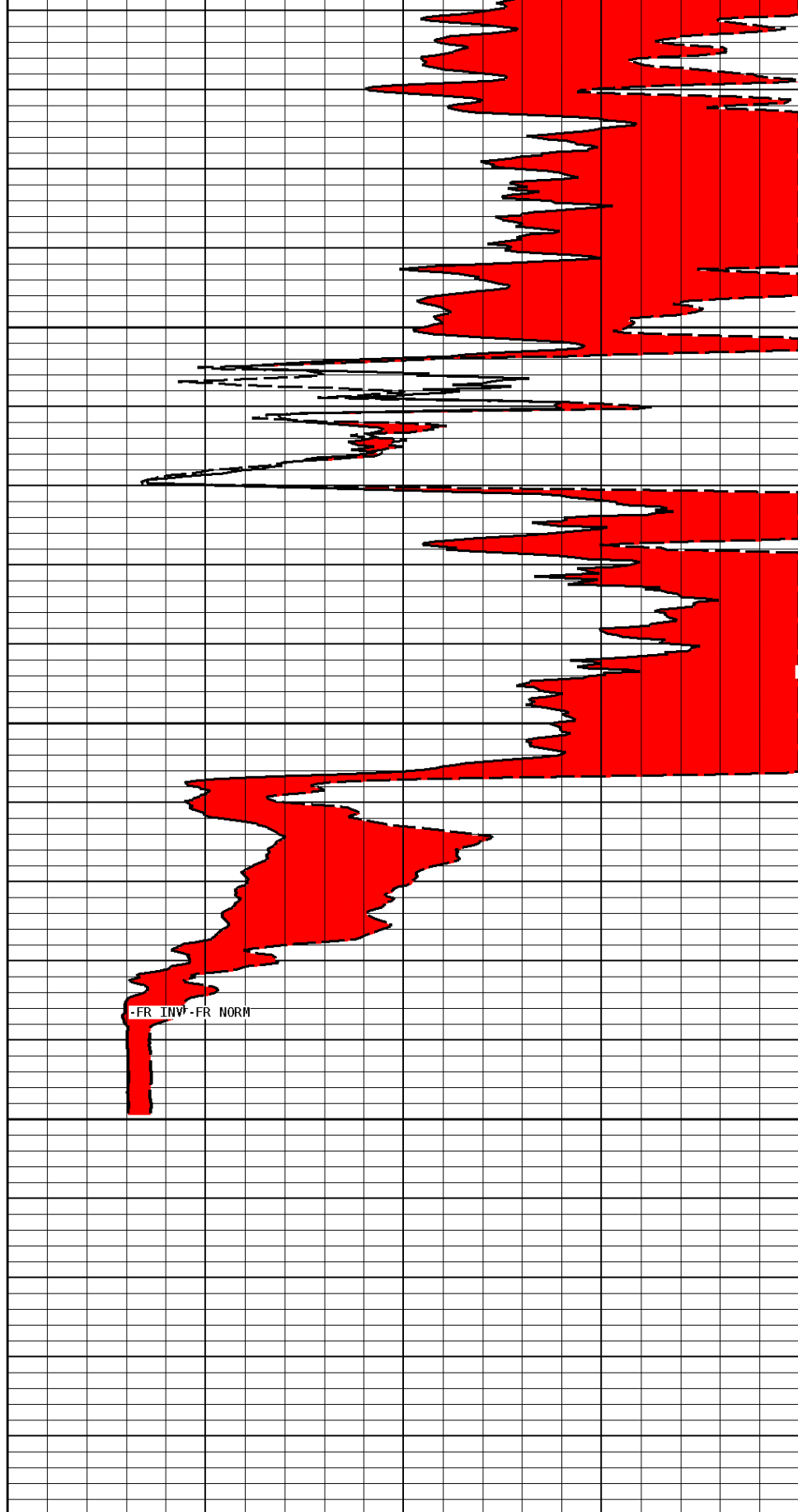




5500

5600

5612



1:240 MAIN SECTION

GAMMA RAY
API UNITS

150 0 300 150

NORMAL
OHMM

0

40

TENSION LBS	
10000	0
CALIPER MICRO INCHES (IN)	
16	26
6	16
BIT SIZE INCHES (IN)	
6	16

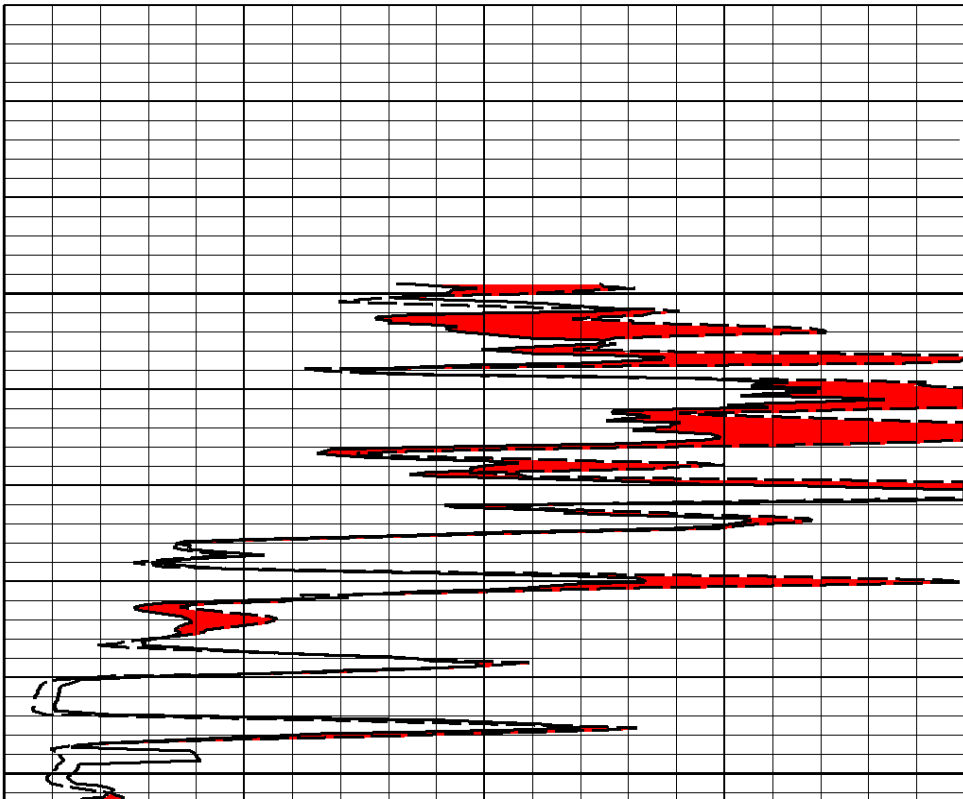
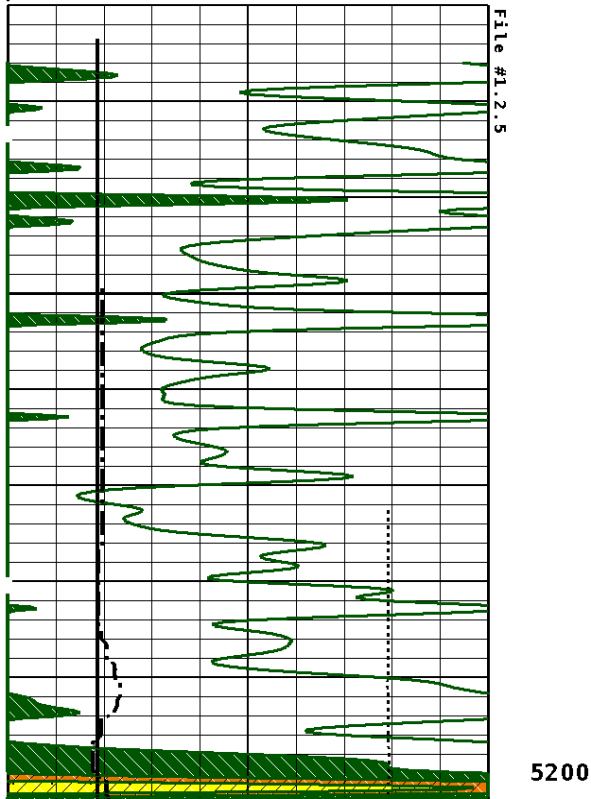
INVERSE OHMM	
0	40

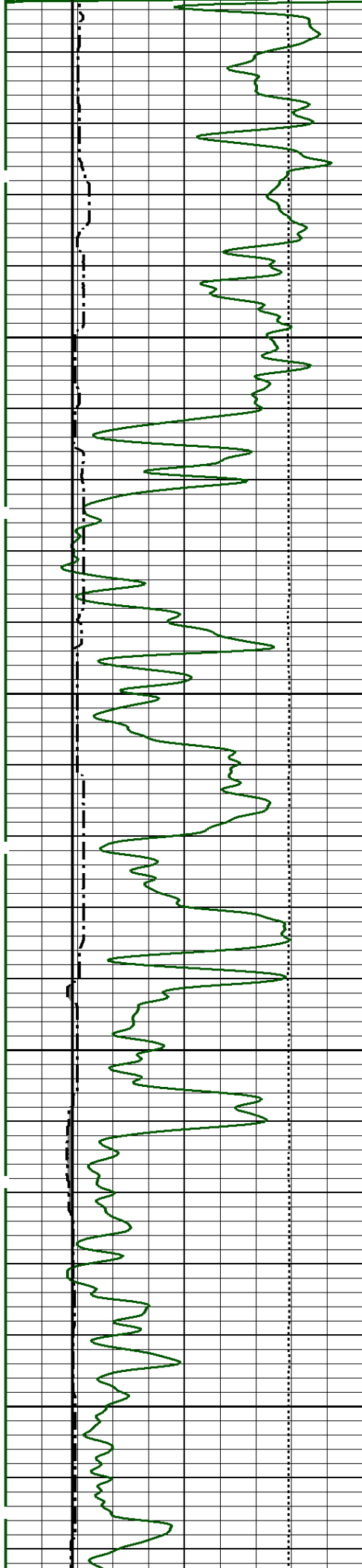
Well File:	MERIT ENERGY WENU 403 DEC30 QUINT	Scale:	1:240	Format:	MST-240
Segment:	V1.D2.S5 Reprocess of REPEAT CST, MLT, PIT	Acquired:	2019-12/30 16:58 3.4.1-13968	Processed:	2019-12/30 19:06 3.4.1-13968
Reference:	0				

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

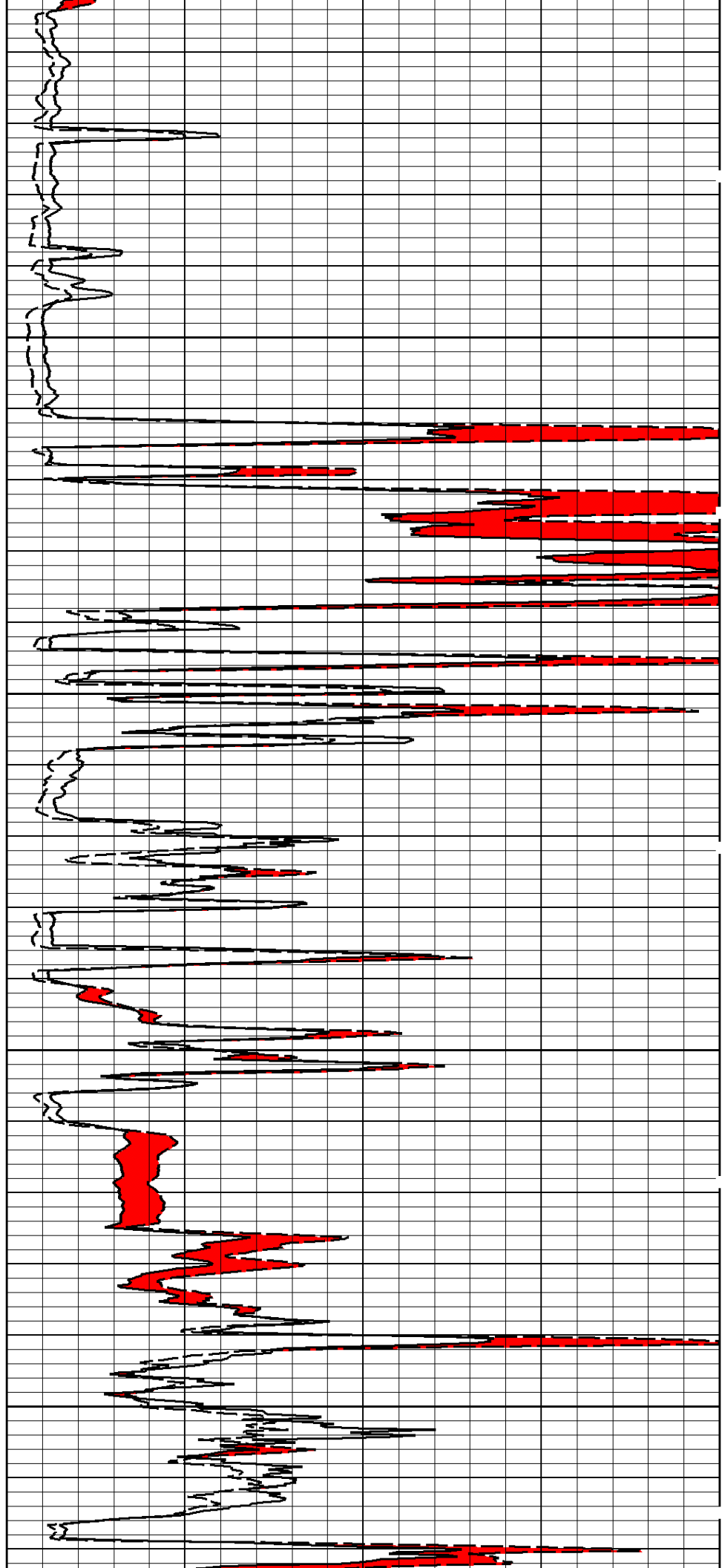
1:240 REPEAT SECTION

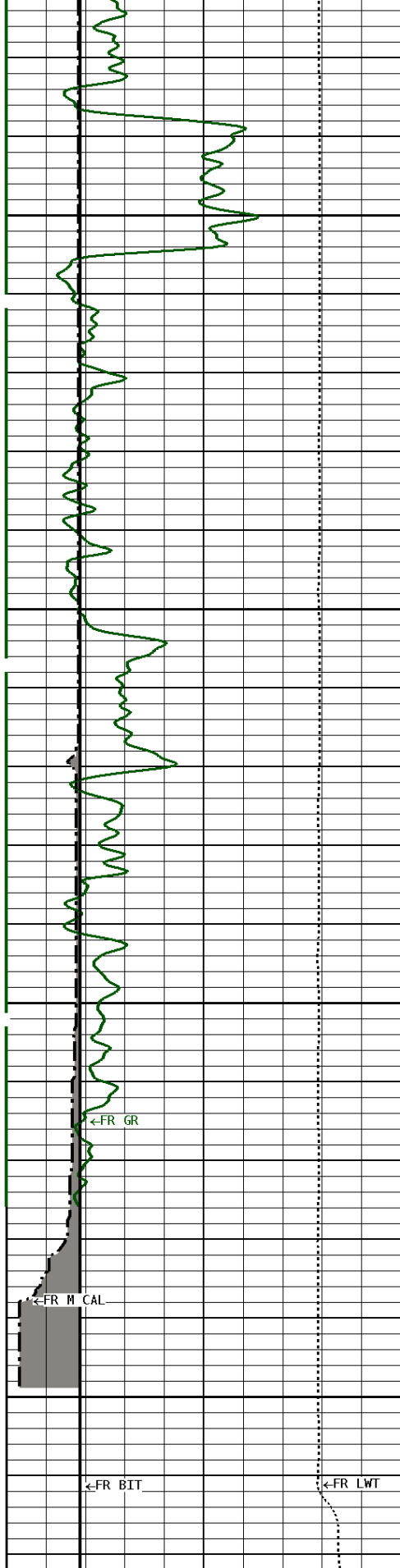




5300

5400



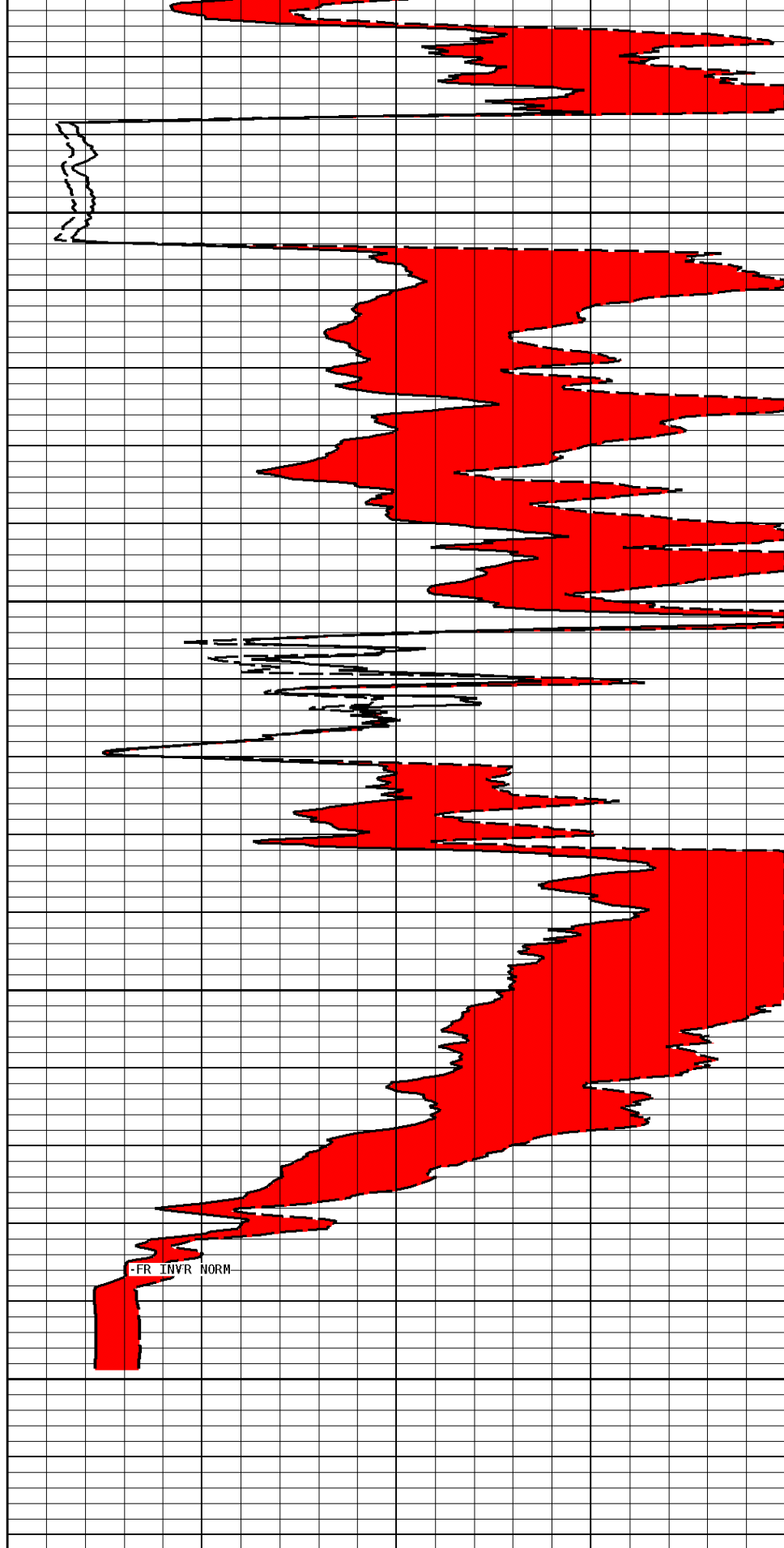


5500

5600

5611

File 3



←FR INVR NORM

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		0.00	ohmm
MSTNG Inverse Correction		1.00	ohmm

* Calibration Summary *

Shop Calibration GRT-B						
Performed : 01-NOV-2019			Time : 10:40			
Sensor Suite : GR-GR5			ID : GRT-BA-14			
	Measured	Units	Calibrated	Units		
	Background	Jig	Jig			
GR	64	323	CPS	160	GRAPI	

Shop Calibration MST-DA						
Performed : 07-OCT-2019			Time : 23:16			
Sensor Suite : CALI-MSN			ID : MST-DA-024			
	Jig - Measured		Jig - Calibrated		Units	
	Ring#1	Ring#2	Ring#1	Ring#2		
CL # 1	7.0	11.4	6.0	12.0	IN.	

Performed : 27-SEP-2019			Time : 13:20			
Sensor Suite : MSTDA-NI			ID : MST-DA-024			
	Internal		Calibrated		Units	
	Measured	Units	Zero	Reference	Units	
	Zero	Reference				
INV-V	0.0	29853.4	0.00	1546.00	MV	
NOR-V	0.0	29711.1	0.00	1646.00	MV	
IN-C	0.0	58914.6	0.00	15.46	UA	
INV-R				32.34	OHMM	
NOR-R				58.67	OHMM	



Company: MERIT ENERGY COMPANY, LLC
Well: WENU #403
Location: 2023' FSL & 873' FEL
Logged: 12-30-2019

