

Company	CASILLAS PETROLEUM CORP
Well	HAMKER #20-3
Field	LETTE
County	HASKELL
State	KANSAS
Country	USA
API No.	15-081-22204-00-00

File No	: HAYS-70387
Company	: CASILLAS PETROLEUM CORP
Well	: HAMKER #20-3
Field	: LETTE
County	: HASKELL
State	: KANSAS
Country	: USA
API No	: 15-081-22204-00-00

Location :	1420' FSL & 660' FWL
	S/2 S/2 NW SW

LSD :	Sect : 20	Twp : 30S	Rge : 31W
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Permanent Datum:		GL	Elevations:		Services:	
Drilling Measured From:	KB	KB	KB 2858.00	Ft	CNT	CST
Log Measured From:	KB	KB	DF 2857.00	Ft	LDT	PIT
Above Permanent Datum:	0.00	Ft	GL 2846.00	Ft		
Date	12-07-2019					
Run Number	1					
Depth--Driller	5721.0	Ft				
Depth--Logger	5716.0	Ft				
First Reading	5705.0	Ft				
Last Reading	4500.0	Ft				
Casing--Driller	1823.0	Ft				
Casing--Logger	1826.0	Ft				
Bit Size	7.875	In				
Casing Size	8.625	In				
Hole Fluid Type	WBM					
Density	9.3					
Fluid Loss	4.6					
PH/Viscosity	11.0	57.0				
Sample Source	MEASURED					
RM@Measured Temp.	2.000	@ 60 F				
RMF@Measured Temp	0.850	@ 60 F				
RMCM@Measured Temp.	1.150	@ 60 F				
Source RMF/RMC	CALCULATED	CALCULATED				
RM@BHT	1.000	@ 125 F				
Time Circulation Stopped	12-07-2019 03:00					
Max Recorded Temp.	125	F				
Equipment/Base	TRK-137	HAYS				
Recorded By	B.BAILEY					
Witnessed By	DAVID					

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	5721.00	8.625	32.00	1832.00	0.00

Run Number	1		
Date	12-07-2019		
Date/Time On Bottom	12-07-2019 09:45		
Depth to Fluid	0.0 Ft		
Salinity	0.000		
RMF@BHT	0.850 @ 125 F		
RMC@BHT	1.150 @ 125 F		

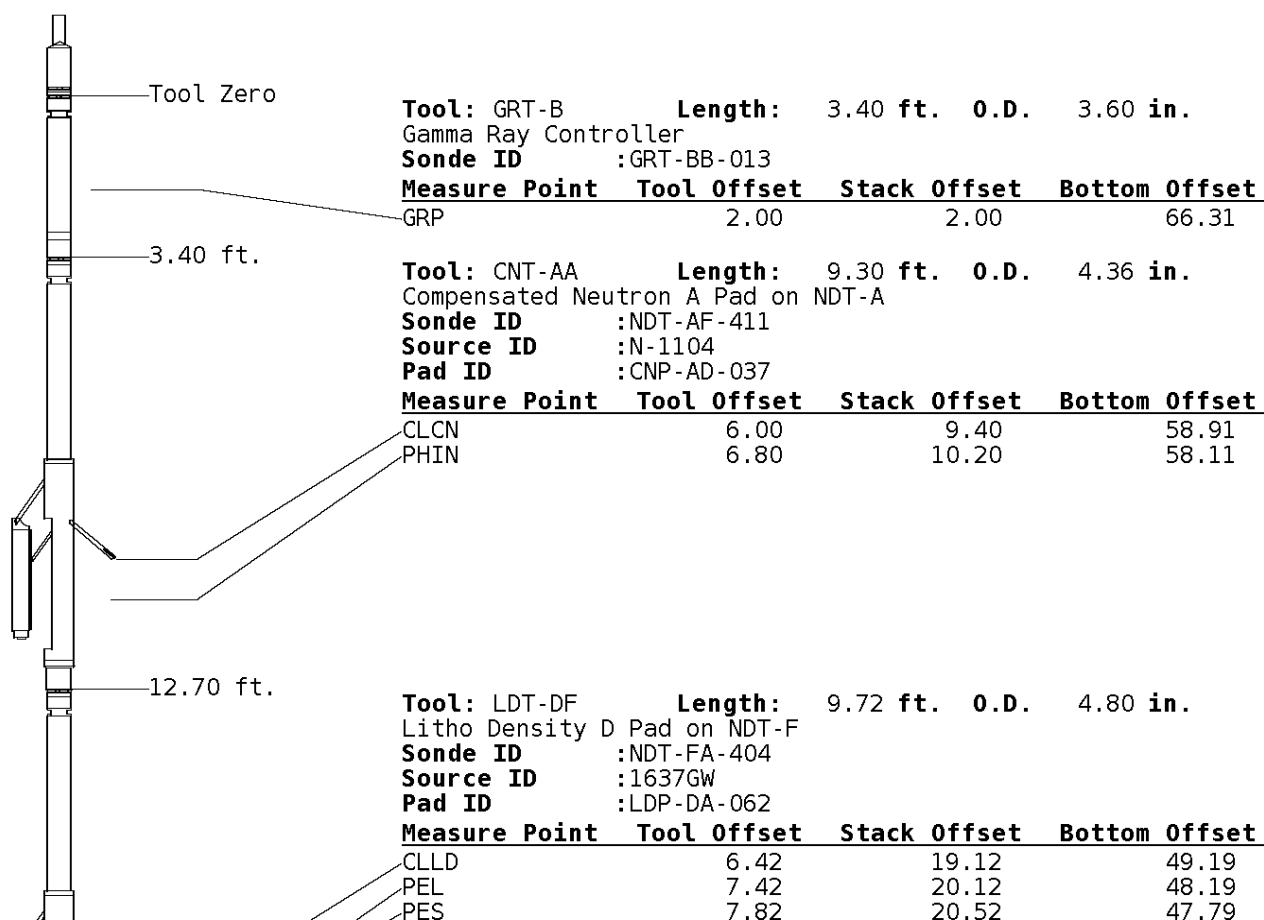
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
GRT, CNT, LDT, MLT, CST, AND PIT RUN IN COMBINATION
CALIPERS ORIENTED ON X-Y AXIS
2.71 G/CC USED TO CALCULATE POROSITY
ANNULAR HOLE VOLUME CALCULATED USING 5.50" PRODUCTION CASING
PHIN IS CALIPER CORRECTED

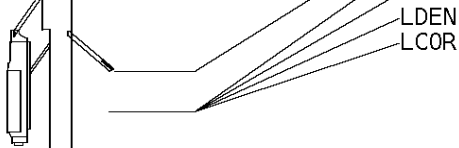
GRT: GRP.
CNT: PHIN, CLCNIN.
LDT: PORL, LCORN, PECLN, LDENN, CLLDIN.
MLT: NOR_RF, INV_RF, MSCLPIN.
CST: PORL, ITT, CDTF, TT1, TT2, TT3, TT4.
PIT: ILD, ILM, SFLAEC, CIRD, SPU

OPERATORS:

Tool String Schematic

Total Tool Length - 68.31 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



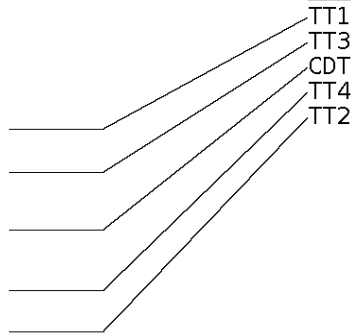


LDEN	7.62	20.32	47.99
LCOR	7.62	20.32	47.99

22.42 ft.

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

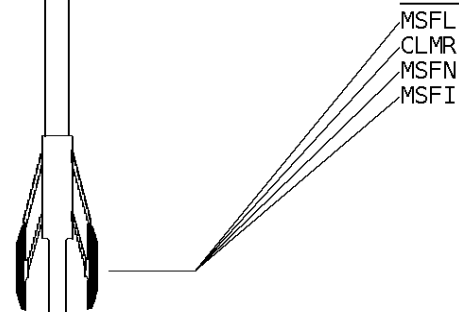
<u>Measure Point</u>	<u>Tool Offset</u>	<u>Stack Offset</u>	<u>Bottom Offset</u>
TT1	4.80	27.22	41.09
TT3	5.80	28.22	40.09
CDT	7.30	29.72	38.59
TT4	8.80	31.22	37.09
TT2	9.80	32.22	36.09



36.22 ft.

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

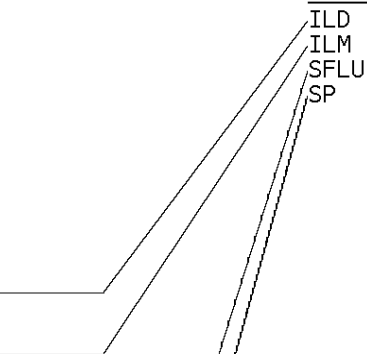
<u>Measure Point</u>	<u>Tool Offset</u>	<u>Stack Offset</u>	<u>Bottom Offset</u>
MSFL	8.90	45.12	23.19
CLMR	7.60	43.82	24.49
MSFN	8.90	45.12	23.19
MSFI	8.90	45.12	23.19



46.82 ft.

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

<u>Measure Point</u>	<u>Tool Offset</u>	<u>Stack Offset</u>	<u>Bottom Offset</u>
ILD	8.92	55.74	12.56
ILM	10.10	56.92	11.39
SFLU	17.49	64.31	4.00
SP	20.60	67.42	0.88



LWT 68.31 ft.

Well File: casillas hamker 20-3 dec-7-2019_qst

Segment: V1.D1.S6 mn

Reference: 0

Scale: 1:240

Format: MST-240

Acquired: 2019-12/07 11:10 3.4.1-13972

Processed: 2019-12/07 11:10 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

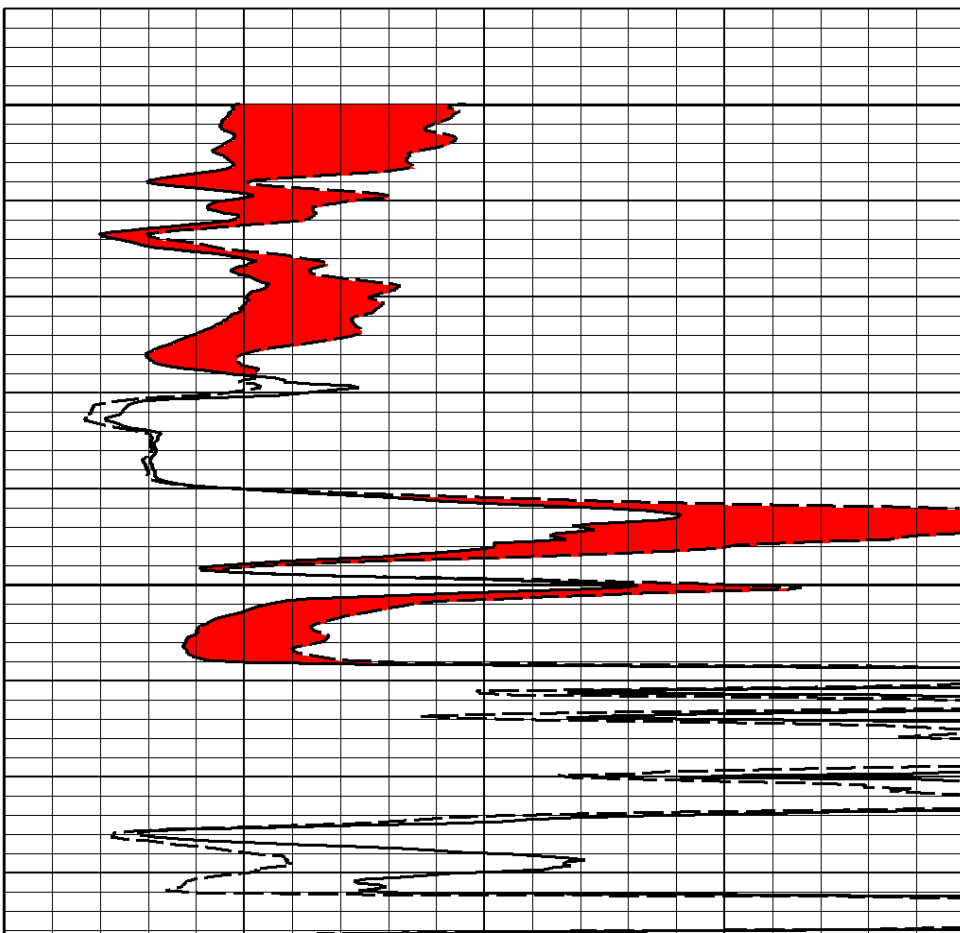
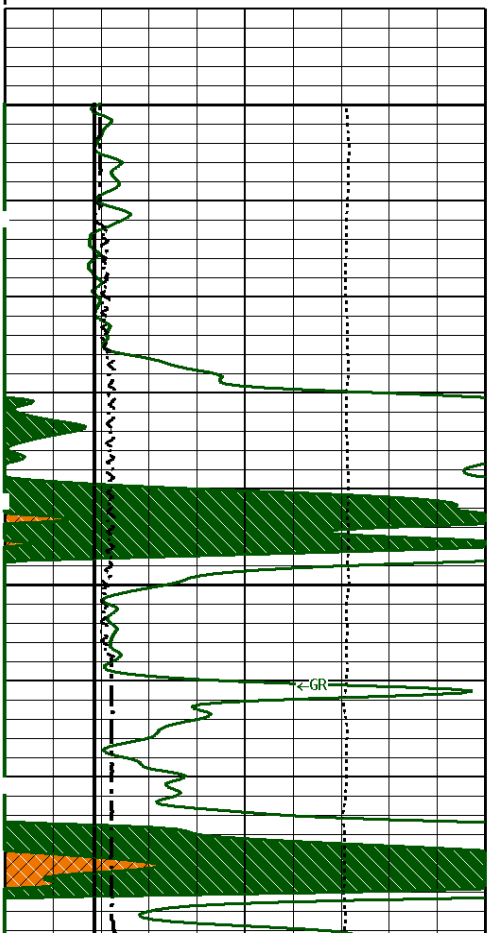
INVERSE
OHMM

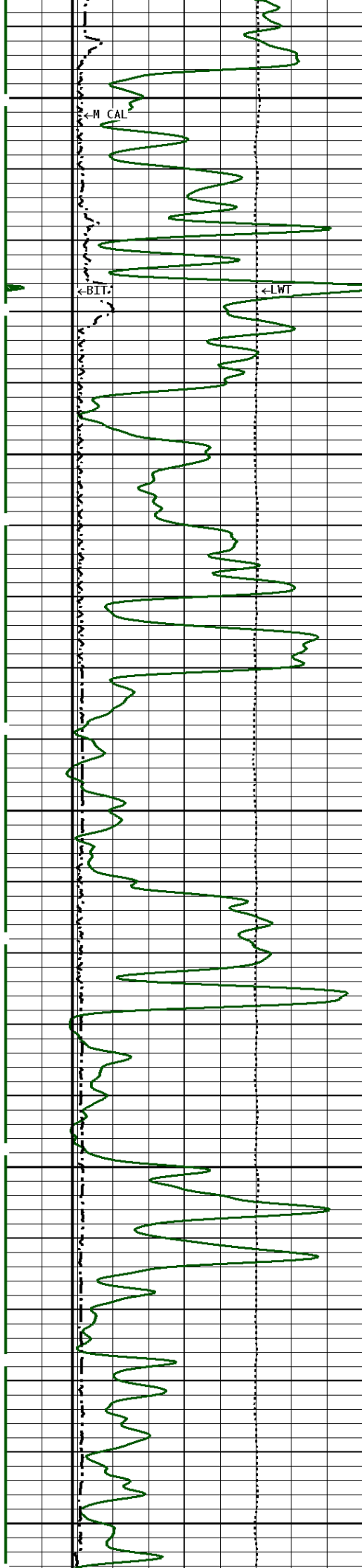
0 40

NORMAL
OHMM

0 40

1:240 MAIN SECTION

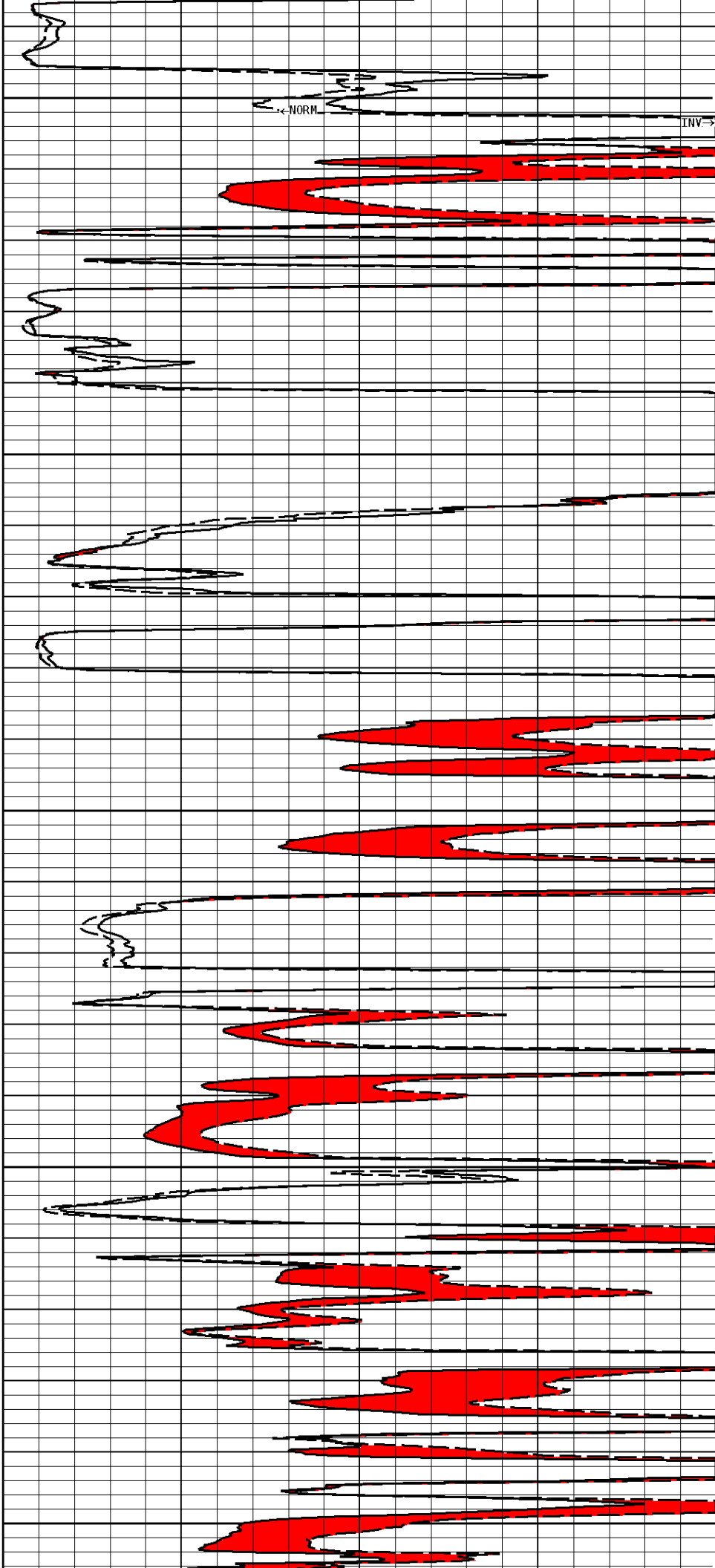


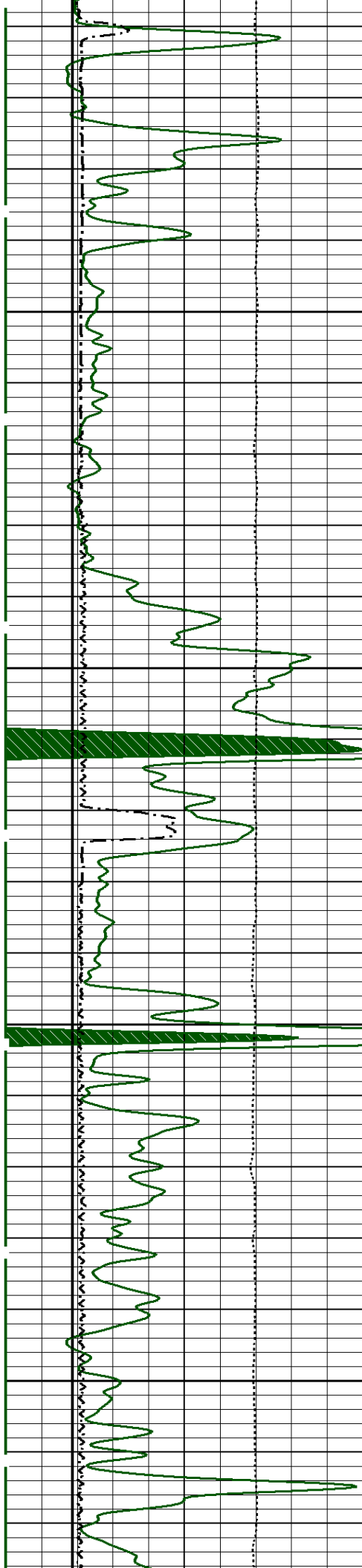


4200

4300

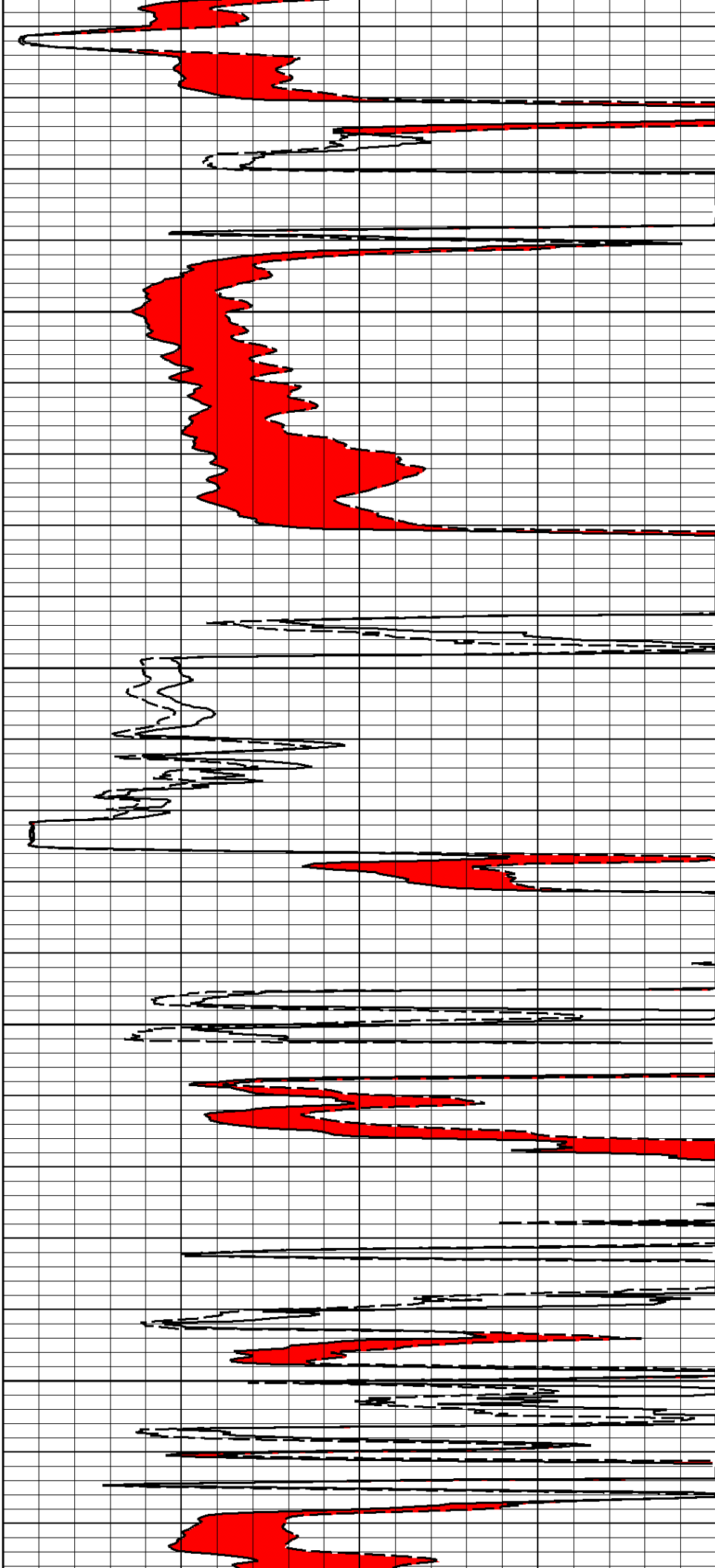
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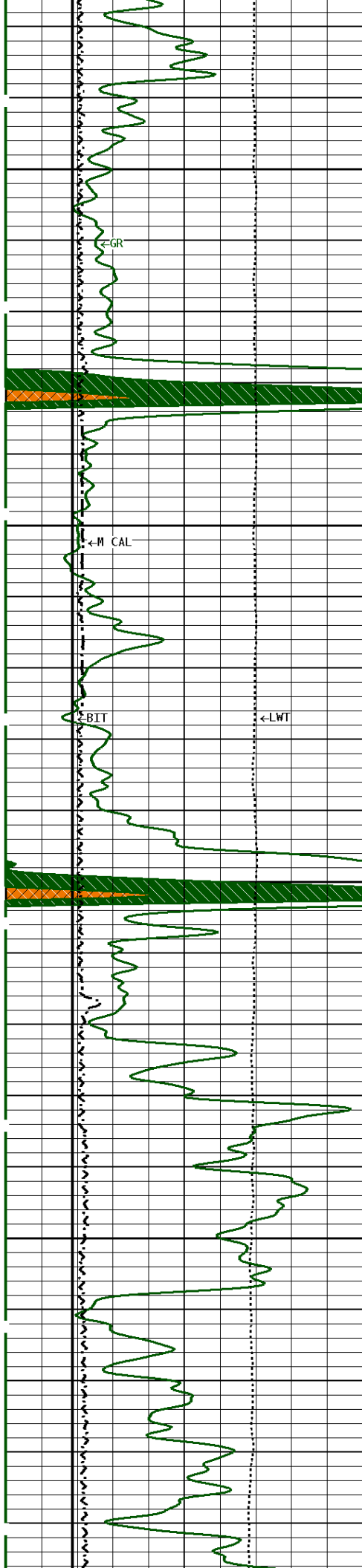




4500

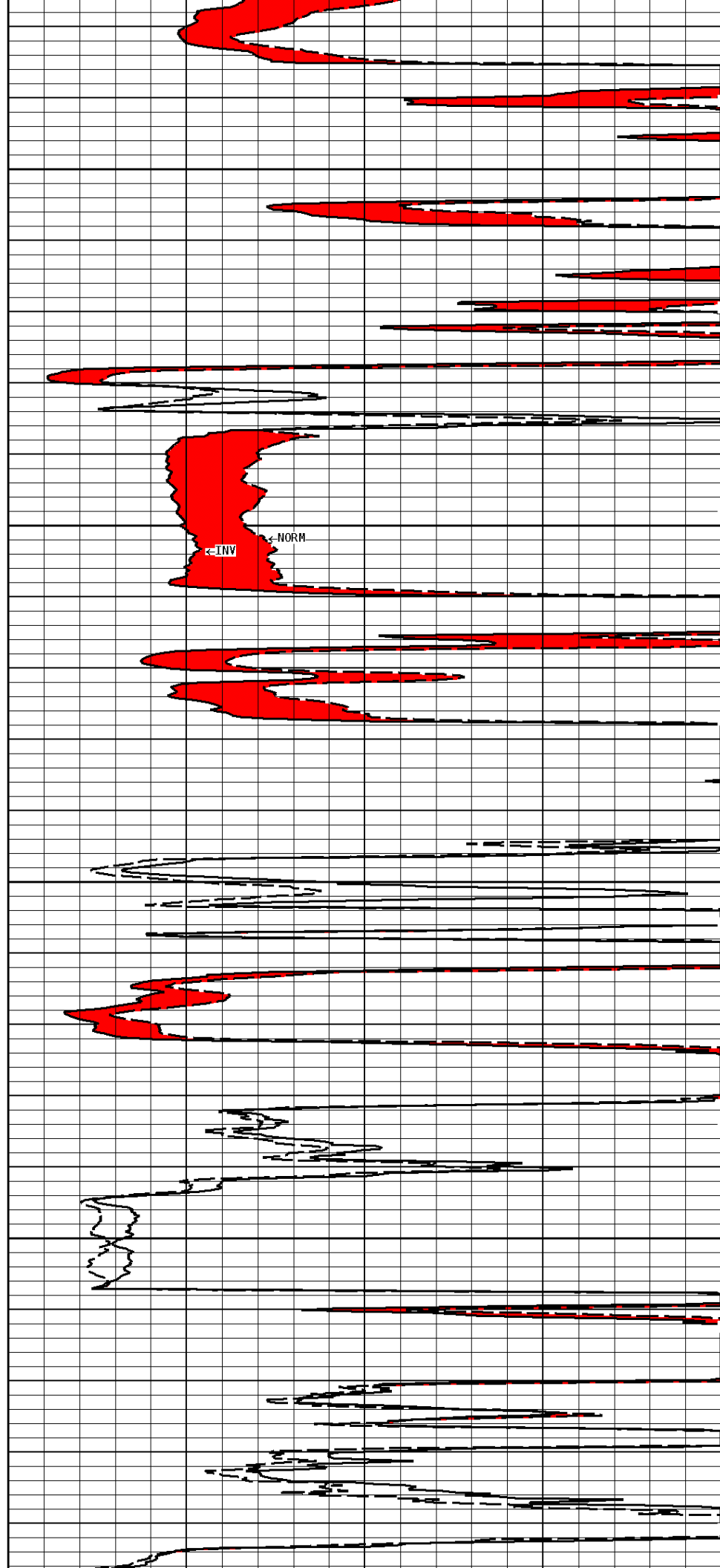
4600

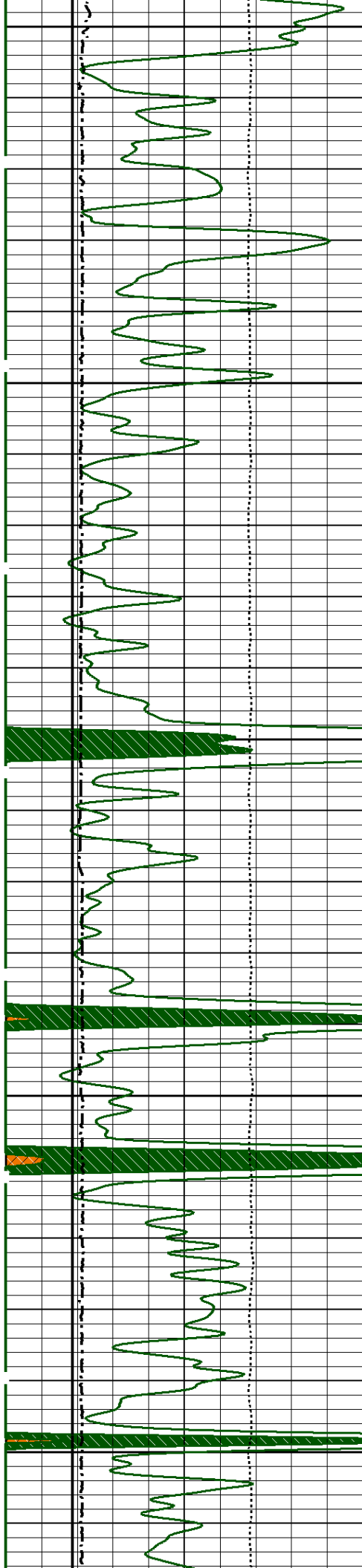




4700

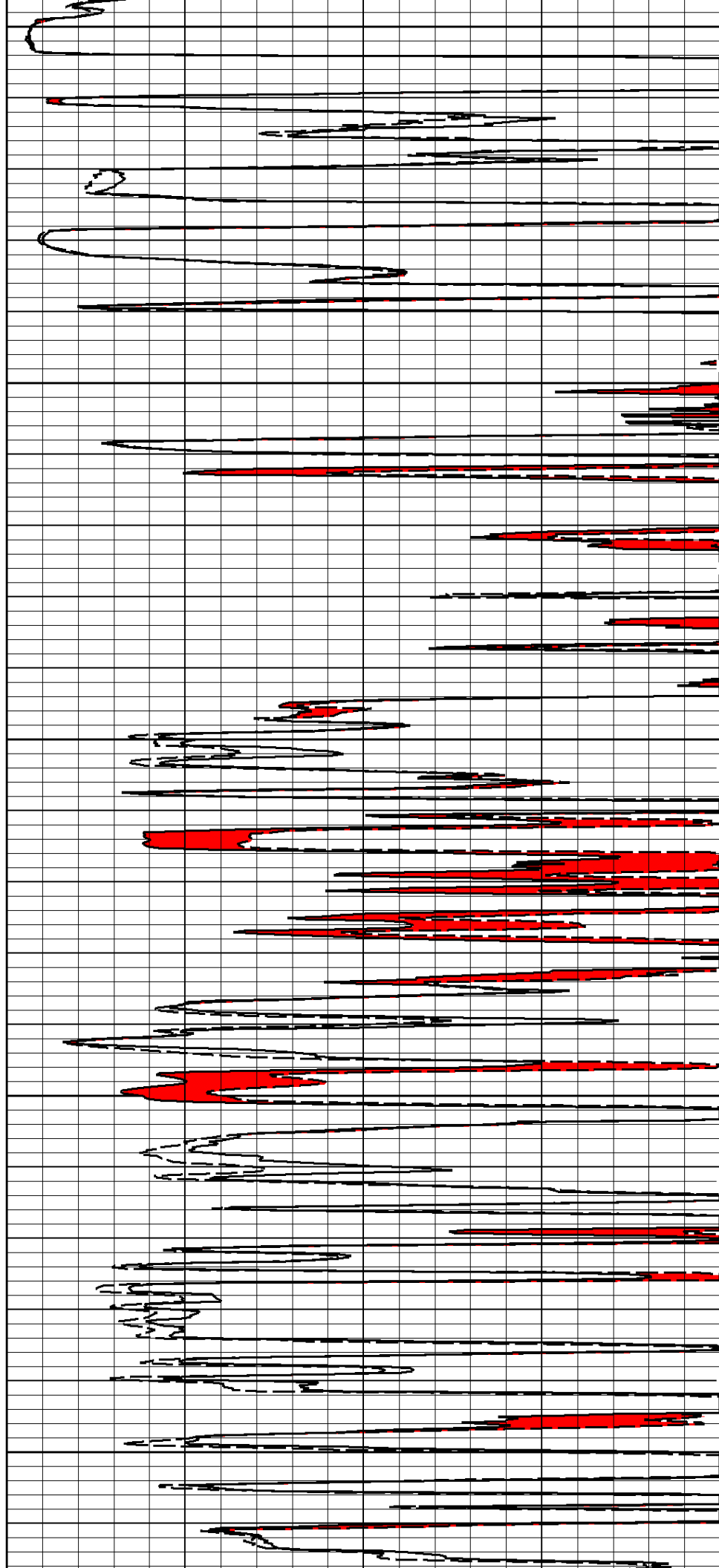
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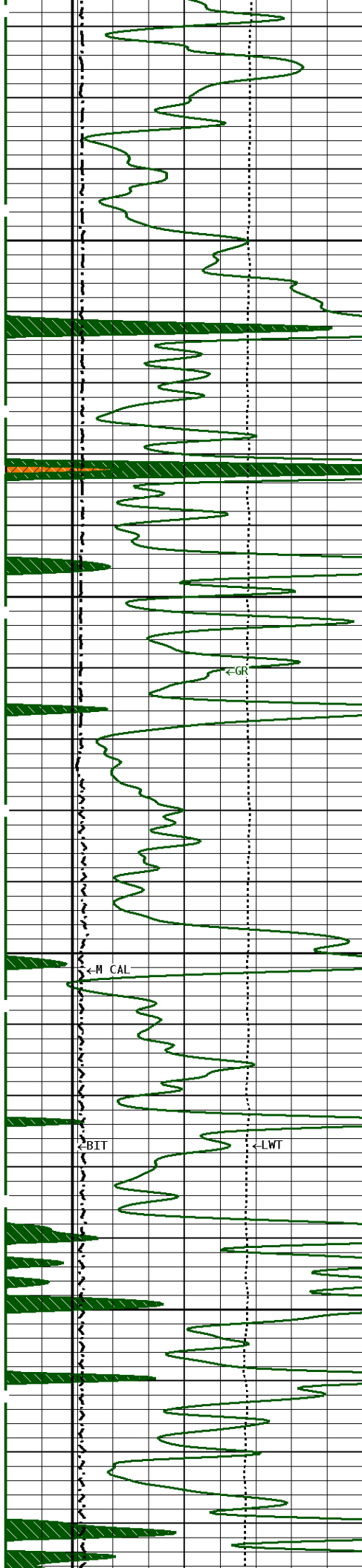




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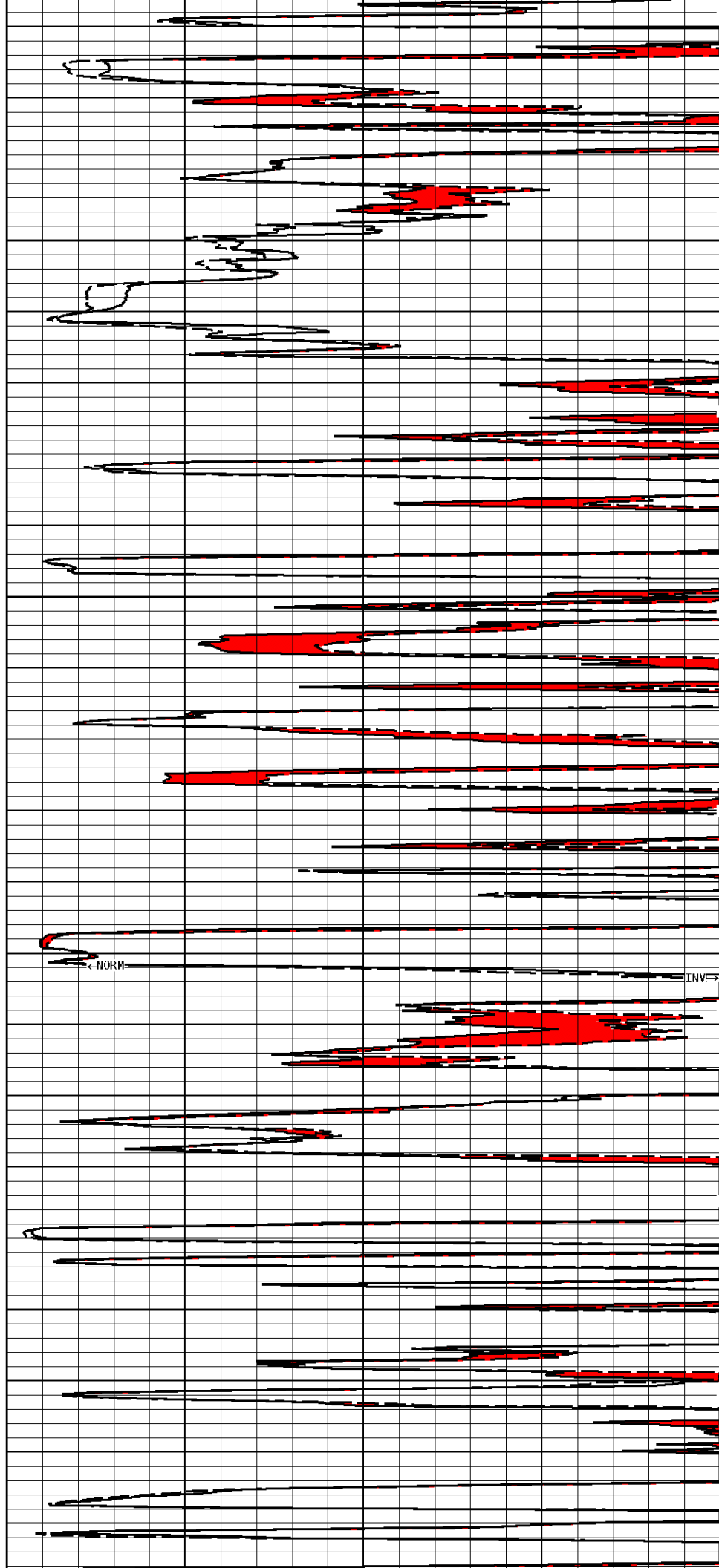
5000

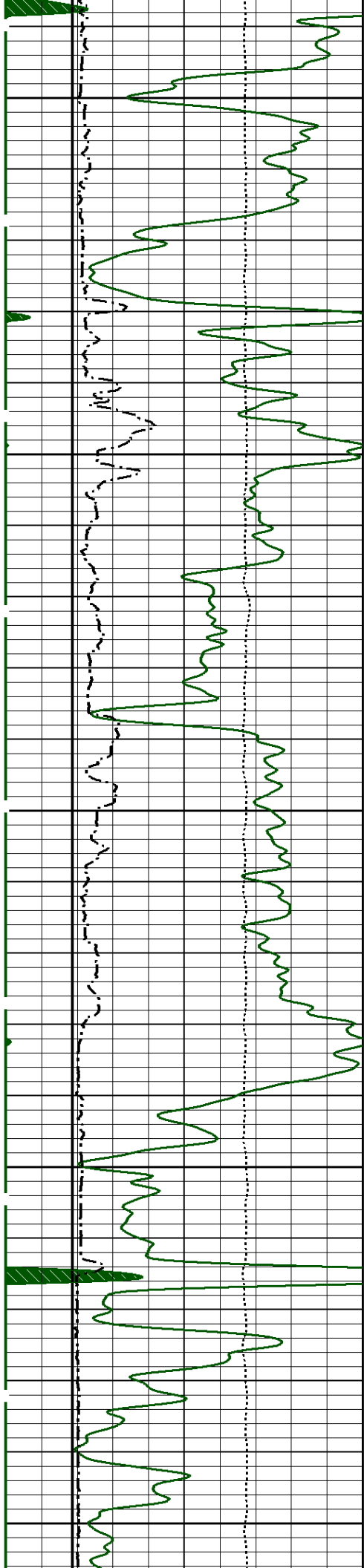




5100

5200

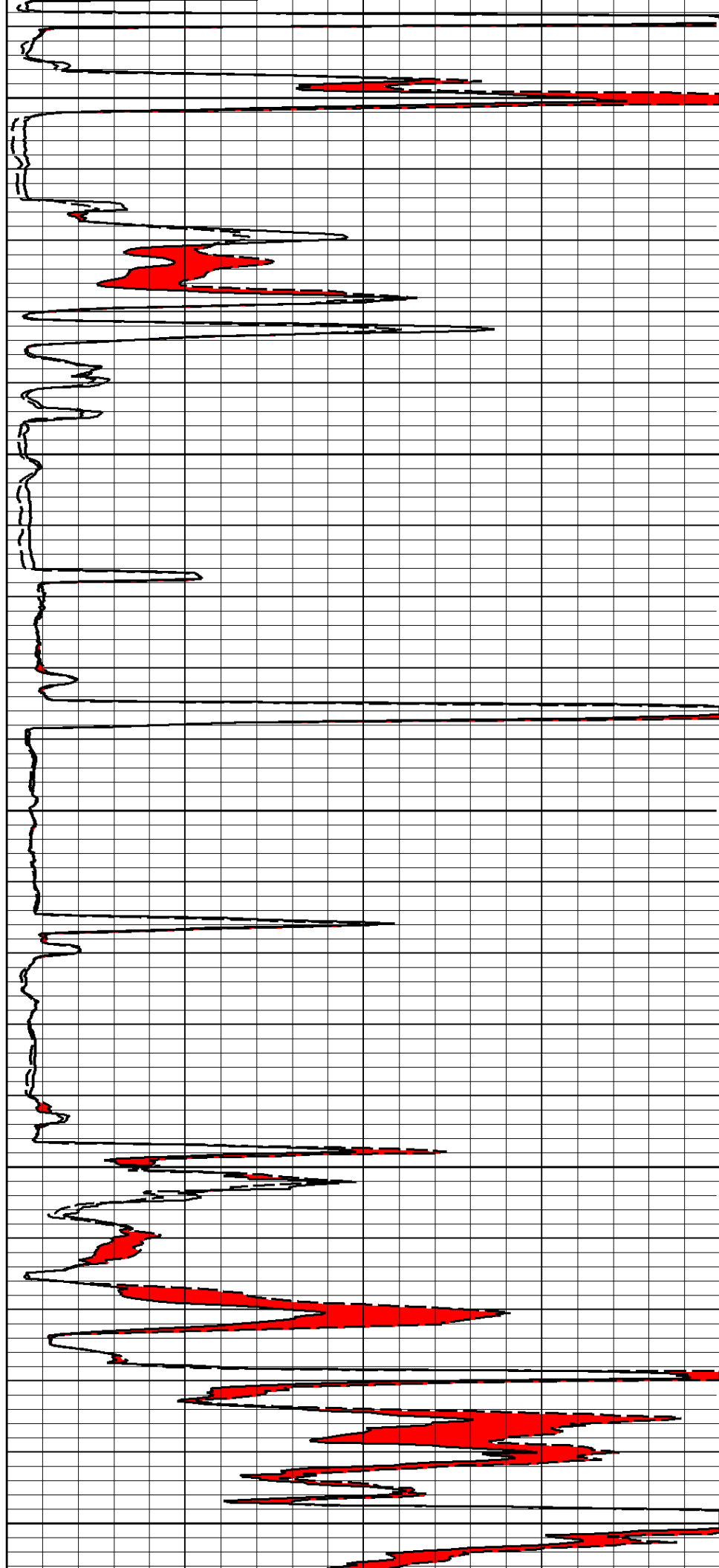


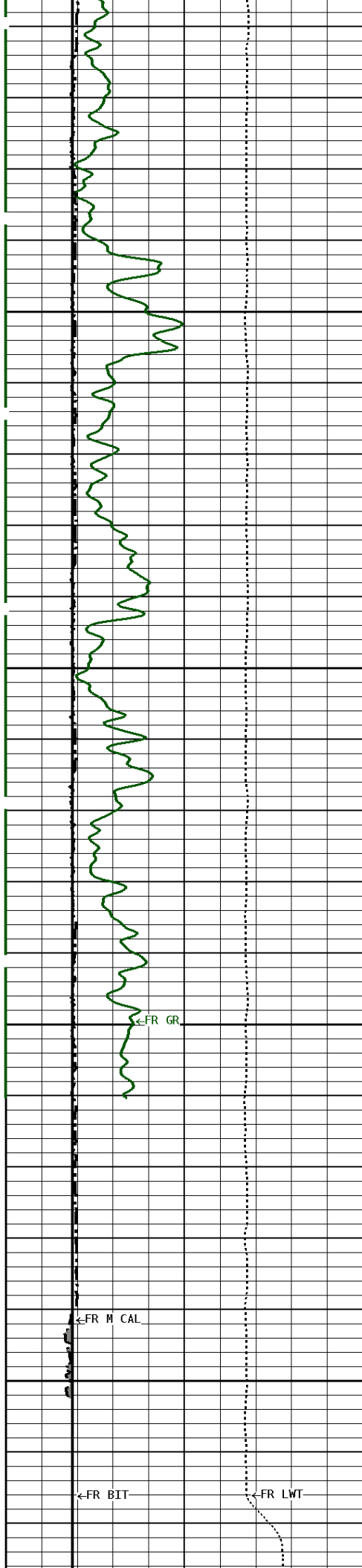


5300

5400

5500

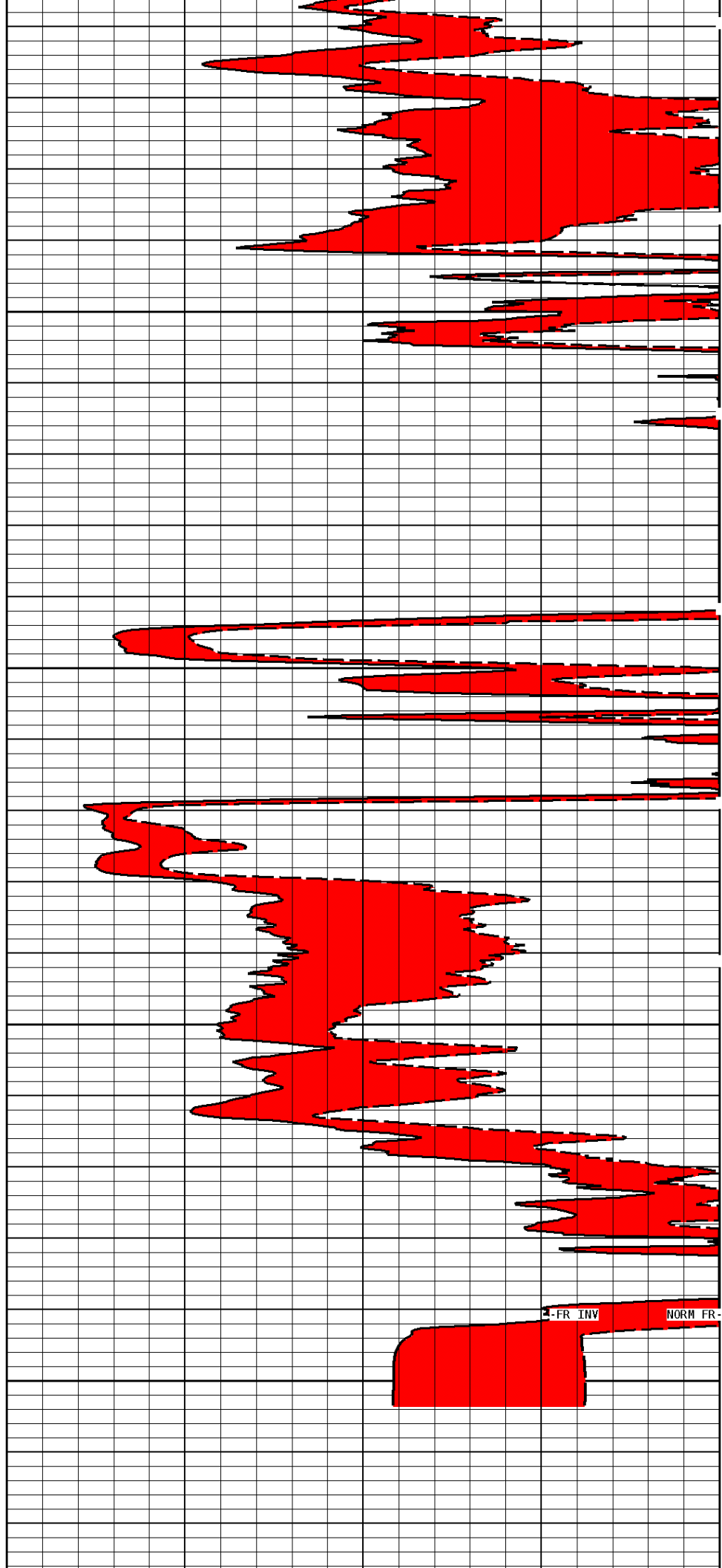




5600

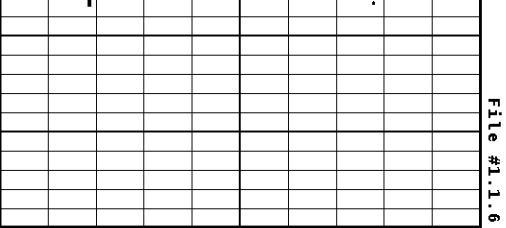
5700

5716

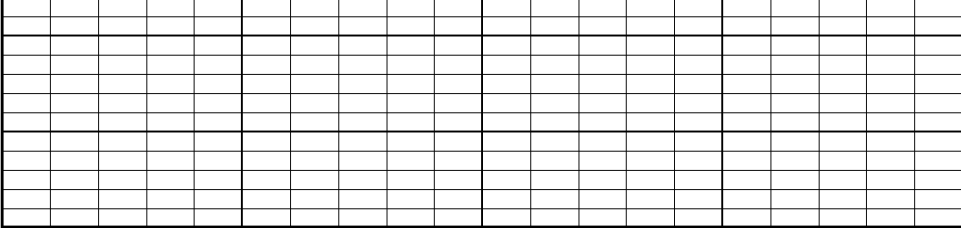


FR INV

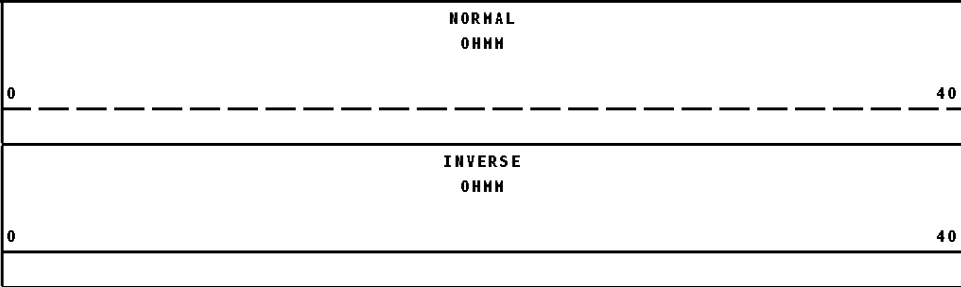
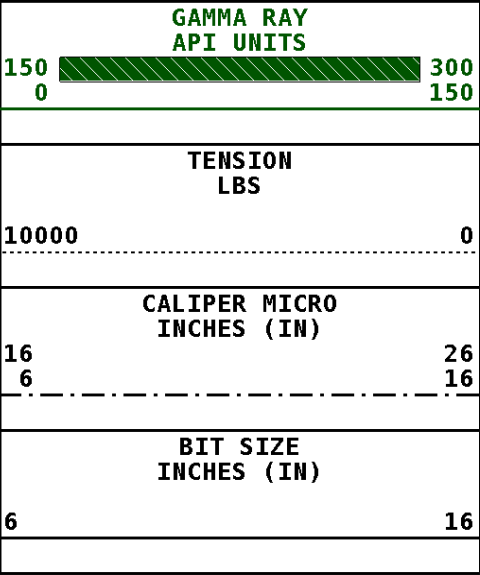
NORM FR



File #1.1.6



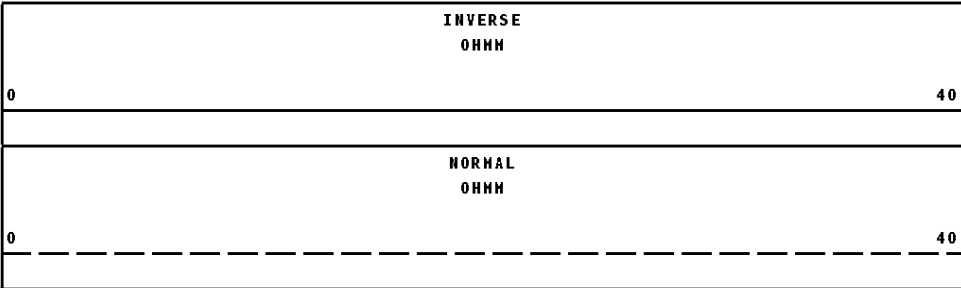
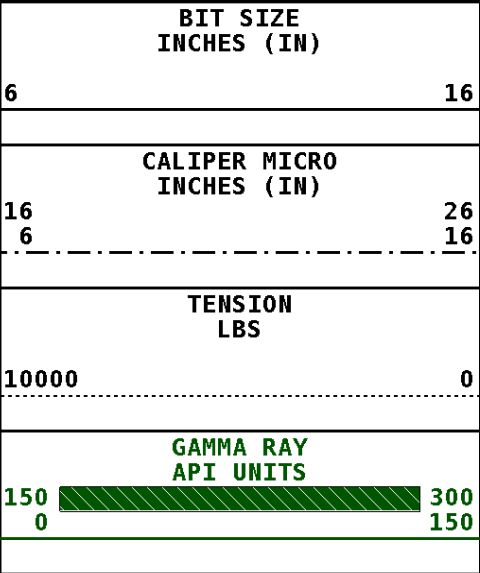
1:240 MAIN SECTION



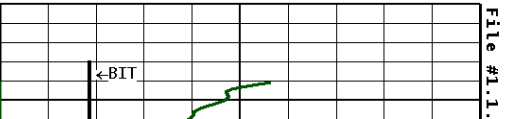
* Borehole Zone Factors *

Zone 1	99999.0	to	0.0	Feet
Drill Bit Size			7.875	in

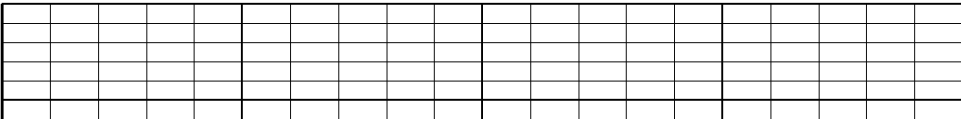
Well File:	casillas_hamker_20-3 dec-7-2019_qst	Scale:	1:240	Format:	MST-240
Segment:	V1.D1.S5 Reprocess REPEAT	Acquired:	2019-12/07 10:48 3.4.1-13972		
Reference:	0	Processed:	2019-12/07 11:08 3.4.1-13972		

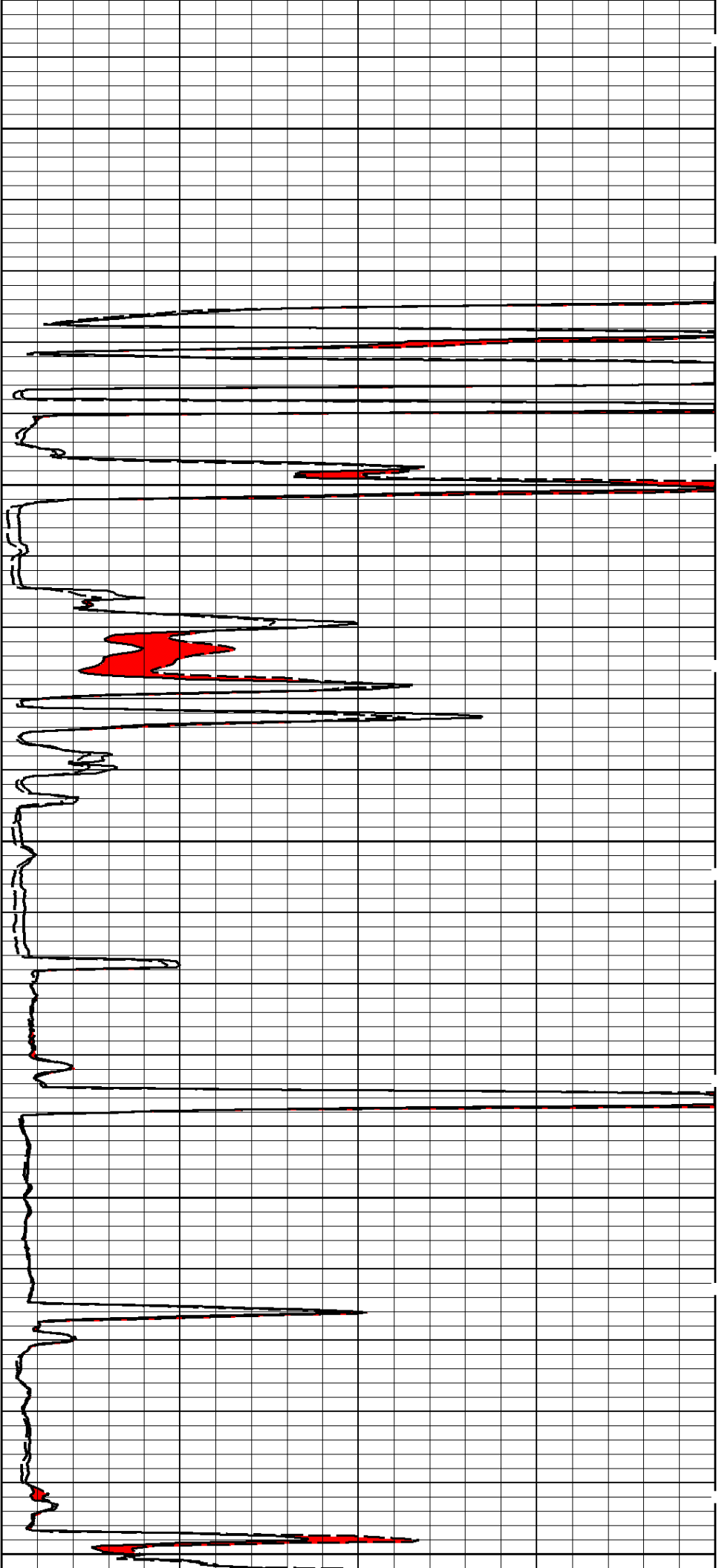


1:240 REPEAT SECTION



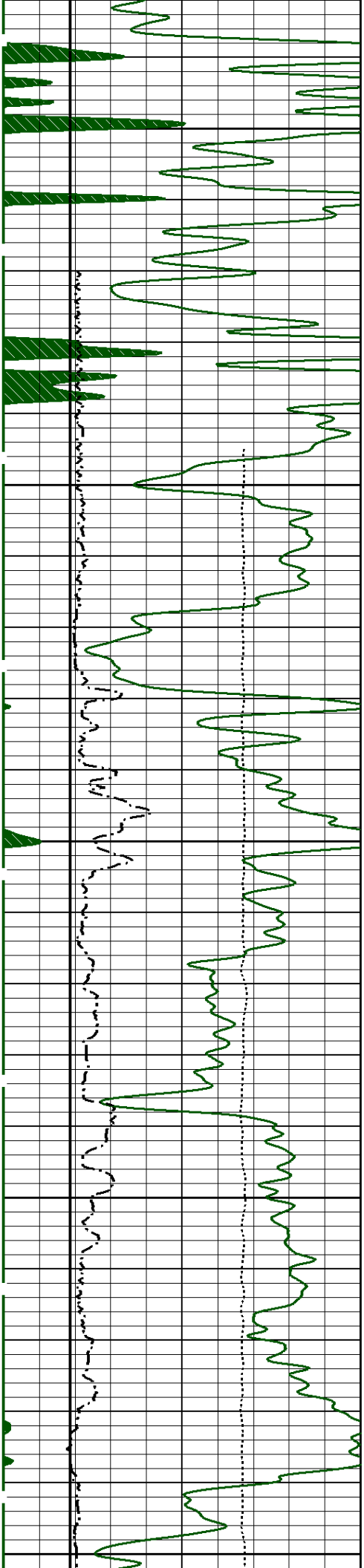
File #1.1.

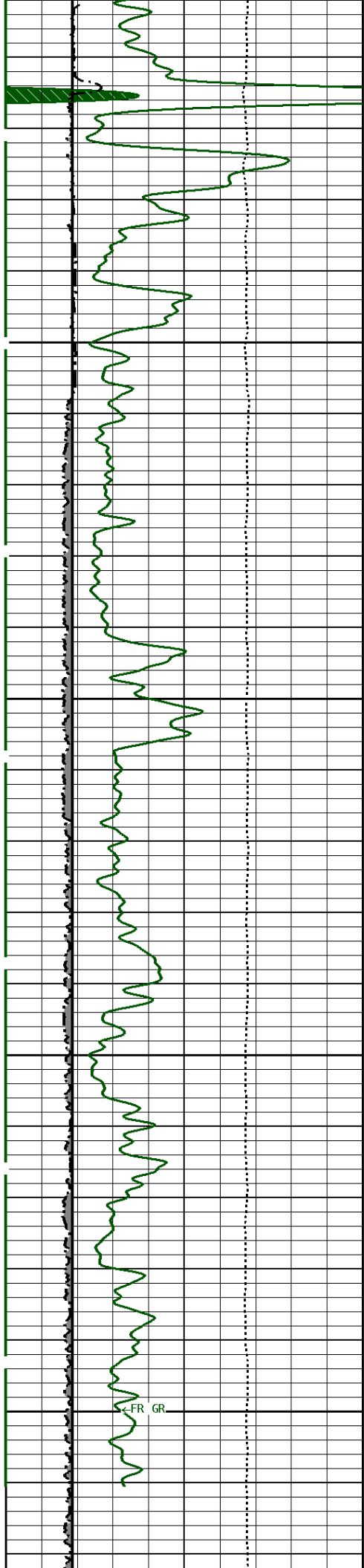




5300

5400

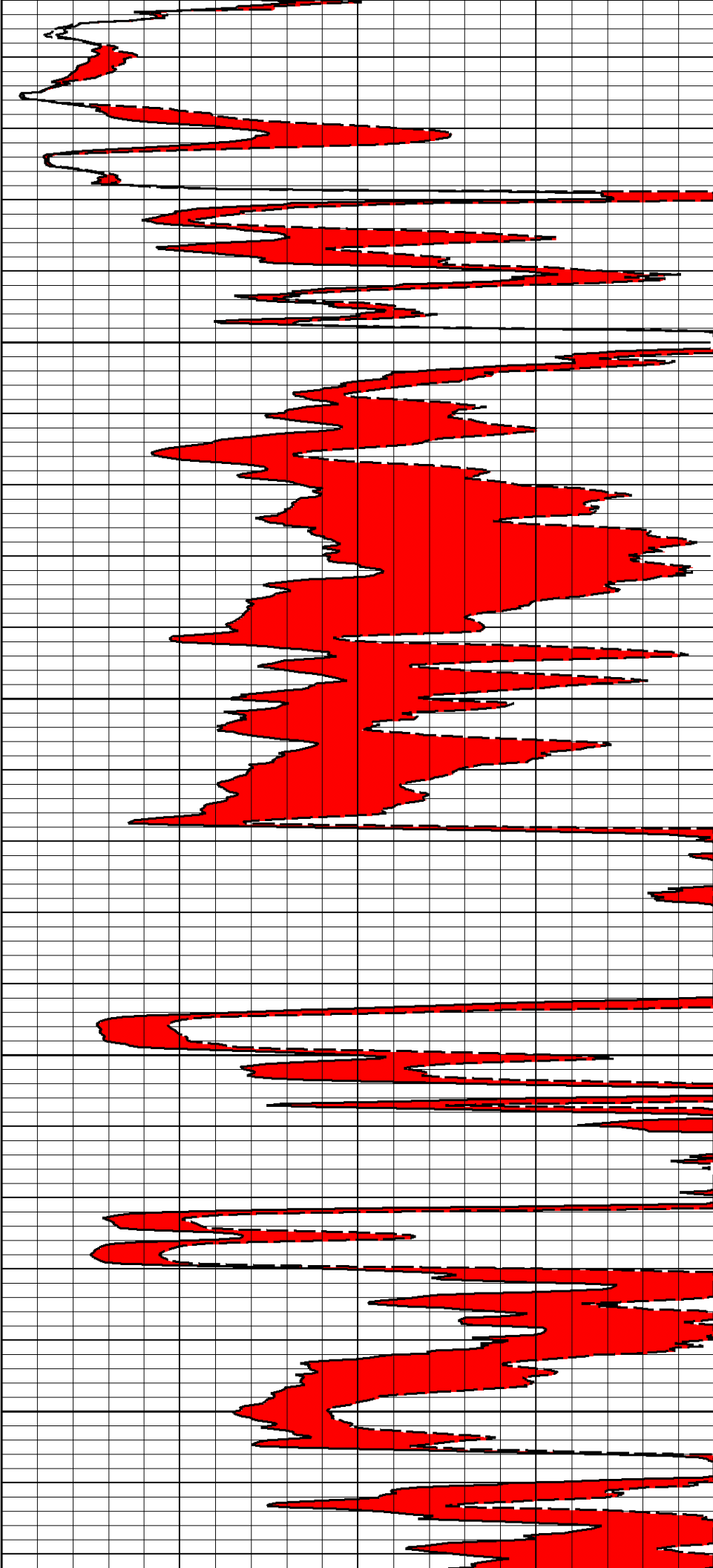


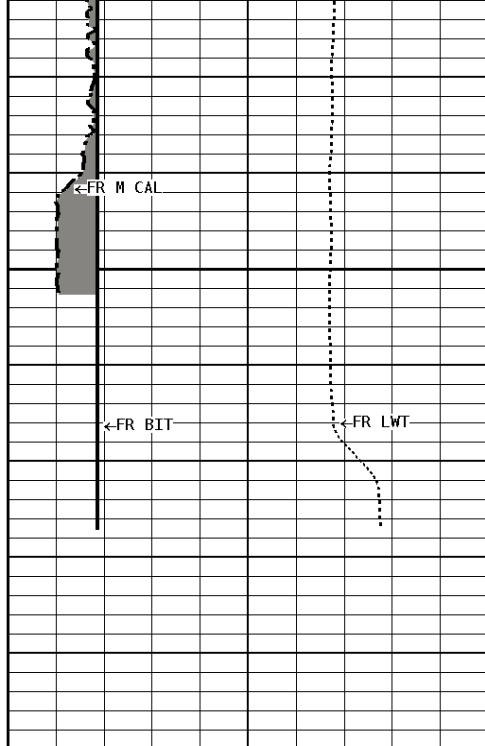


5500

5600

CFR GR.





File #1.1.5

5700

5716



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 : 04-Jun-2019			Time : 09:53		
Sensor Suite : GR-GR5			ID : GRT-BB-013		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GRAPI	
	44	314	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	



Company: CASILLAS PETROLEUM CORP
 Well: HAMKER #20-3
 Location: 1420' FSL & 660' FWL
 Logged: 12-07-2019
 K.B. Elev: 2858.0 Ft