

Tucker
ENERGY SERVICES

PHASED INDUCTION
SHALLOW FOCUS SP LOG

Company: CHIEFTAIN OIL CO., INC
Well: BLEVINS A SWD #1
Field: MAYBERRY
County: BARBER
State: KANSAS
Country: USA
API No.: 15-007-24177-0000

File No.: TUL-59635
Company: CHIEFTAIN OIL CO., INC
Well: BLEVINS A SWD #1
Field: MAYBERRY
County: BARBER
State: KANSAS
Country: USA
API No.: 15-007-24177-0000

Location:
 1970' FSL & 450' FWL
 NE SW NW SW

LSD: **Sect:** 25 **Twp:** 34S **Rge:** 11W

Permanent Datum:	GL	Elevations:		Services:	
Drilling Measured From:	KB	KB 1367.00	Ft	CNT	PIT
Log Measured From:	KB	DF 1366.00	Ft	LDT	
Above Permanent Datum:	1200 Ft	GL 1355.00	Ft	MLT	
Date:	06-29-2014				
Run Number	1				
Depth--Driller	5451.0 Ft				
Depth--Logger	5451.0 Ft				
First Reading	5451.0 Ft				
Last Reading	1029.0 Ft				
Casing--Driller	1029.0 Ft				
Casing--Logger	1029.0 Ft				
Bit Size	7.875 In				
Casing Size	8.625 In				
Hole Fluid Type	CHEM-GEL				
Density	9.0				
Fluid Loss	10.5				
PH/Viscosity	9.5	53.0			
Sample Source	MEASURED				
RM@Measured Temp.	2.000 @ 75 F				
RMF@Measured Temp	1.600 @ 75 F				
RMG@Measured Temp.	2.400 @ 75 F				
Source RMF/RMG	CALCULATED/CALCULATED				
RM@BHT	1.180 @ 132 F				
Time Circulation Stopped	06-29-2014 12:00 pm				
Max Recorded Temp.	132 F				
Equipment/Base	127	TULSA			
Recorded By	SHELDON TYLER				
Witnessed By	DAVID BARKER				

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	5451.00	8.625	32.00	1029.00	0.00

Run Number	1	
Date	06-29-2014	
Date/Time On Bottom	06-29-2014 3:00 pm	
Depth to Fluid	0.0	Ft
Salinity	6800.000	
RMF@BHT	0.940	@ 132 F
RMG@BHT	1.420	@ 132 F

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, 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

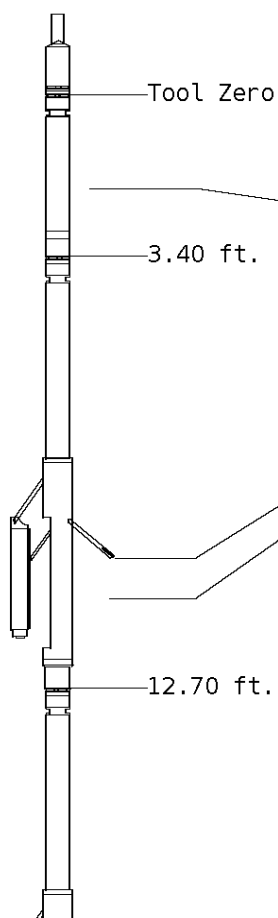
CUSTOMER REQUESTED DETAIL PULLED TO 3300'

GRT: GRP, GRX
 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

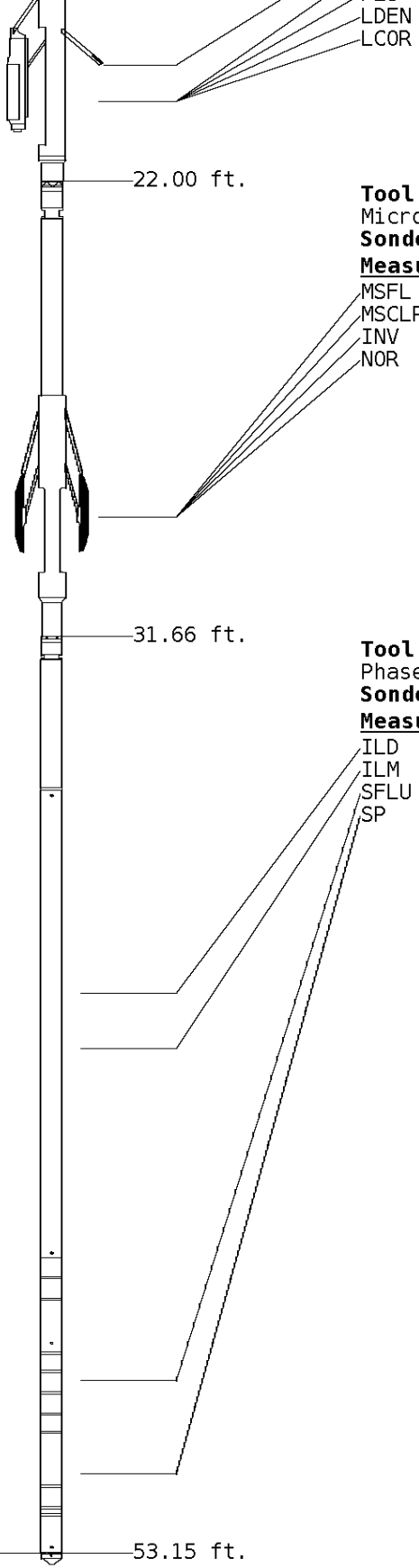
OPERATORS: +4
 J.JOHNSON
 A.DJAHO

Tool String Schematic

Total Tool Length - 53.15 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 943.00 lbs.



Tool: GRT-B Gamma Ray Controller	Length: 3.40 ft.	O.D.: 3.60 in.		
Sonde ID :GRT-BB-117				
Measure Point	Tool Offset	Stack Offset	Bottom Offset	
GRP	2.00	2.00	51.15	
Tool: CNT-AA Compensated Neutron A Pad on NDT-A	Length: 9.30 ft.	O.D.: 4.36 in.		
Sonde ID :NDT-AC-027				
Source ID :N-1044				
Pad ID :CNP-AE-42				
Measure Point	Tool Offset	Stack Offset	Bottom Offset	
CLCN	6.00	9.40	43.75	
PHIN	6.80	10.20	42.95	
Tool: LDT-DA Litho Density D Pad on NDT-A	Length: 9.30 ft.	O.D.: 4.80 in.		
Sonde ID :NDT-BB-129				
Source ID :CSV-587				
Pad ID :LDP-DA-50				
Measure Point	Tool Offset	Stack Offset	Bottom Offset	
CLLD	6.00	18.70	34.45	
PEL	7.00	19.70	33.45	
PES	7.40	20.10	33.05	



LDEN	7.20	19.90	33.25
LCOR	7.20	19.90	33.25

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC)
Sonde ID :MST-DA-25

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	23.55
MSCLP	7.60	29.60	23.55
INV	7.60	29.60	23.55
NOR	7.60	29.60	23.55

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-CA-062

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	40.58	12.56
ILM	10.10	41.76	11.39
SFLU	17.49	49.15	4.00
SP	20.60	52.26	0.88

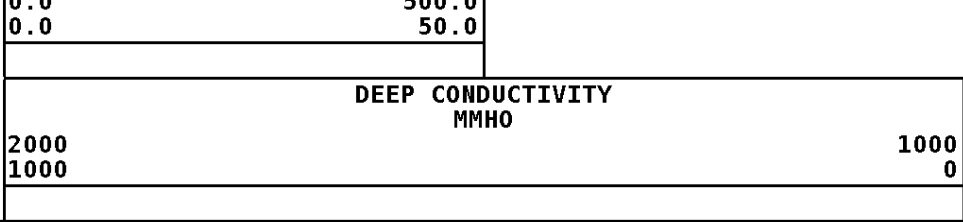
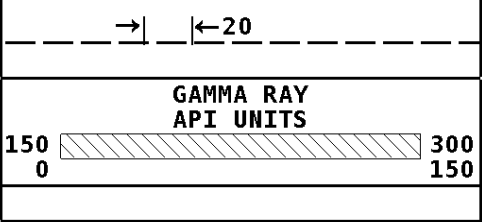
Well File: CHIEFTAIN OIL BLEVINS A SWD 1_JUNE29_MSTK **Scale:** 1:600 **Format:** DIL-600
Segment: V1.D1.S5 Reprocess of MAIN **Acquired:** 2014-06/29 18:59 3.5.0-12850
Reference: 0 **Processed:** 2014-06/29 20:13 3.5.0-12850

TENSION LBS	0
10000	0

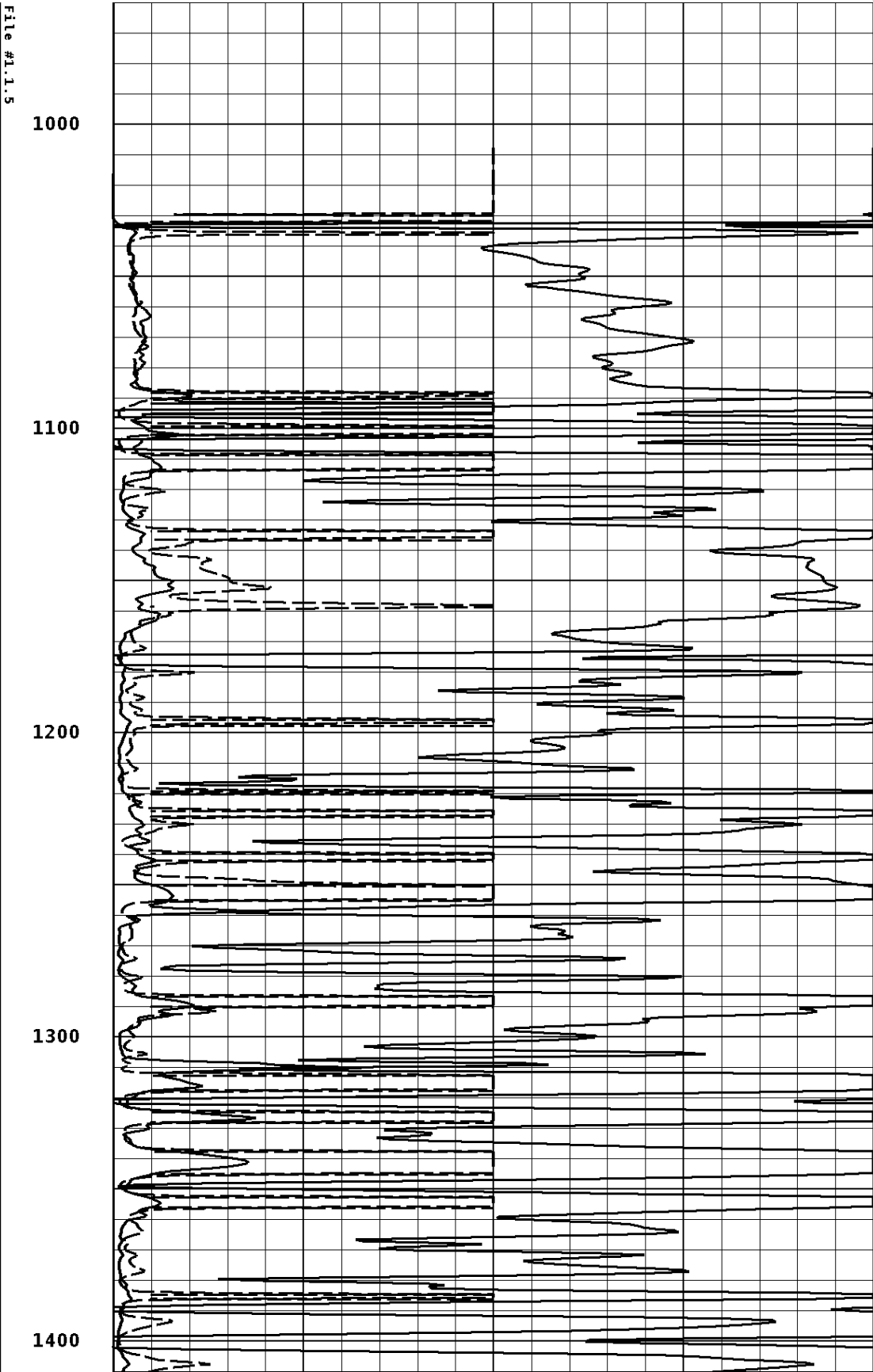
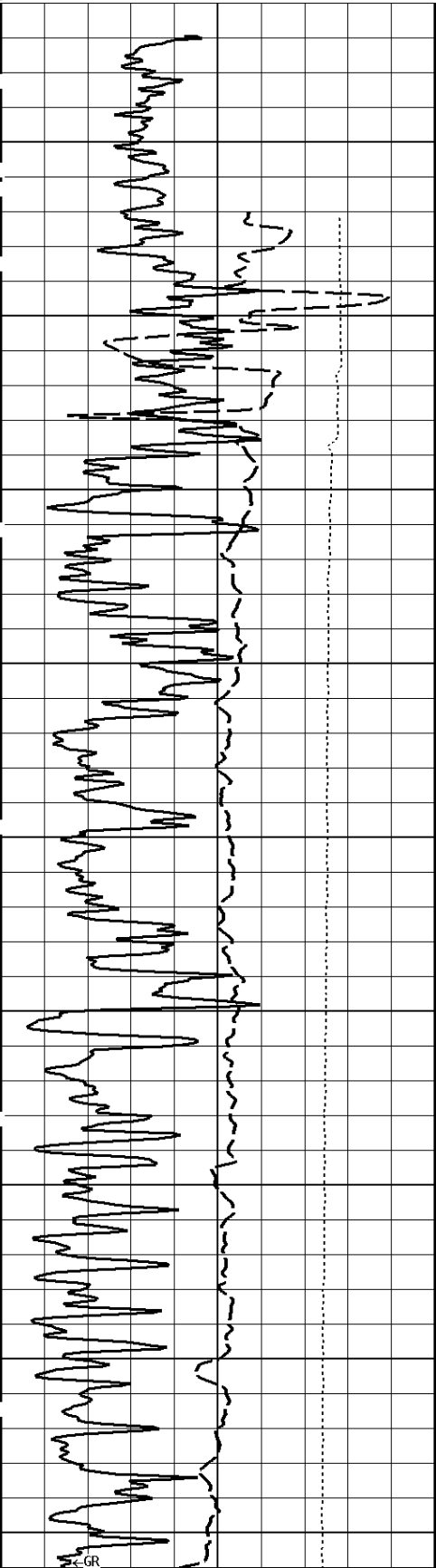
DEEP INDUCTION OHMM	500.0
0.0	50.0
0.0	50.0

SPONTANEOUS POTENTIAL mV	
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SHALLOW FOCUSED RESISTIVITY OHMM	500.0
0.0	500.0



1:600 MAIN SECTION



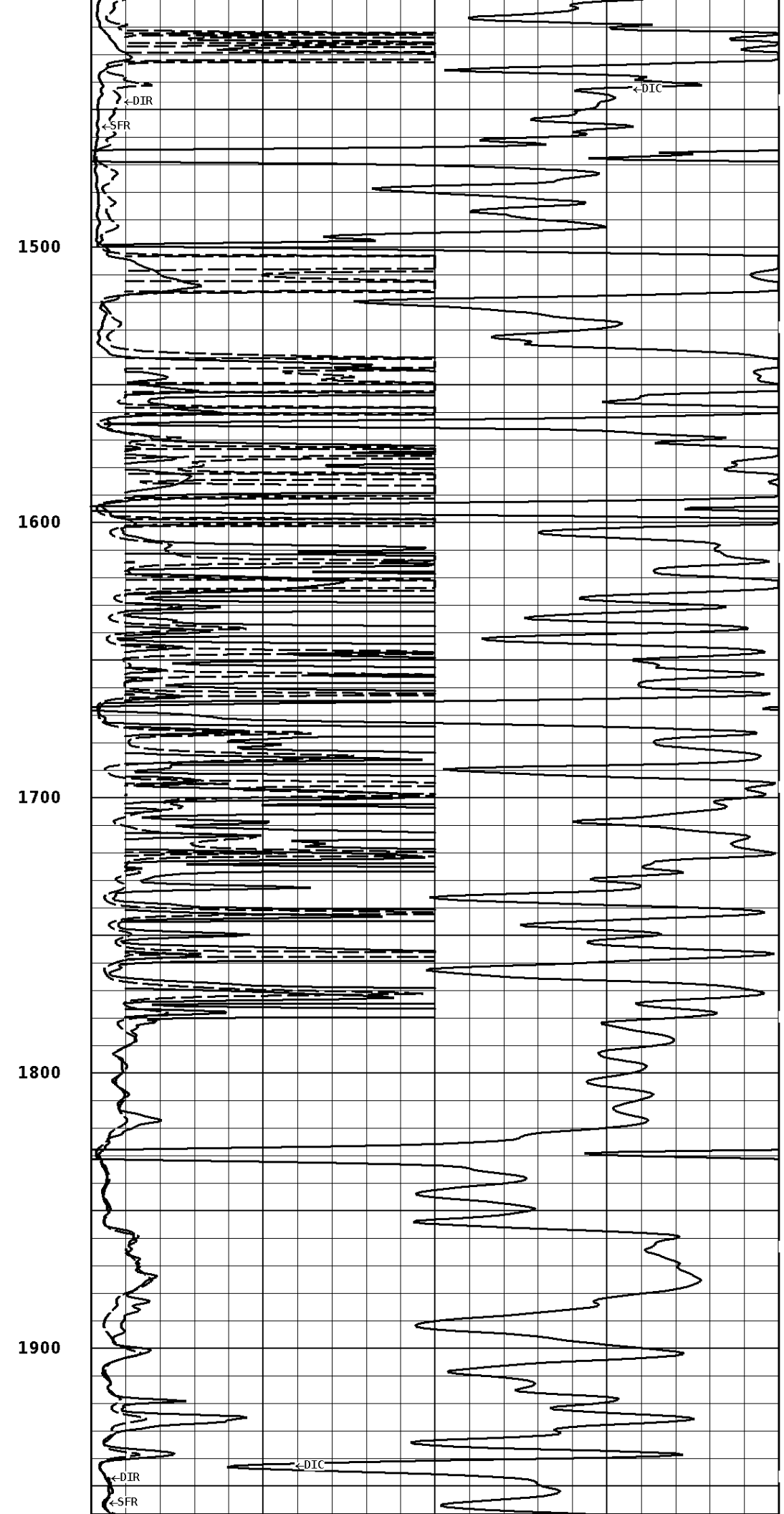
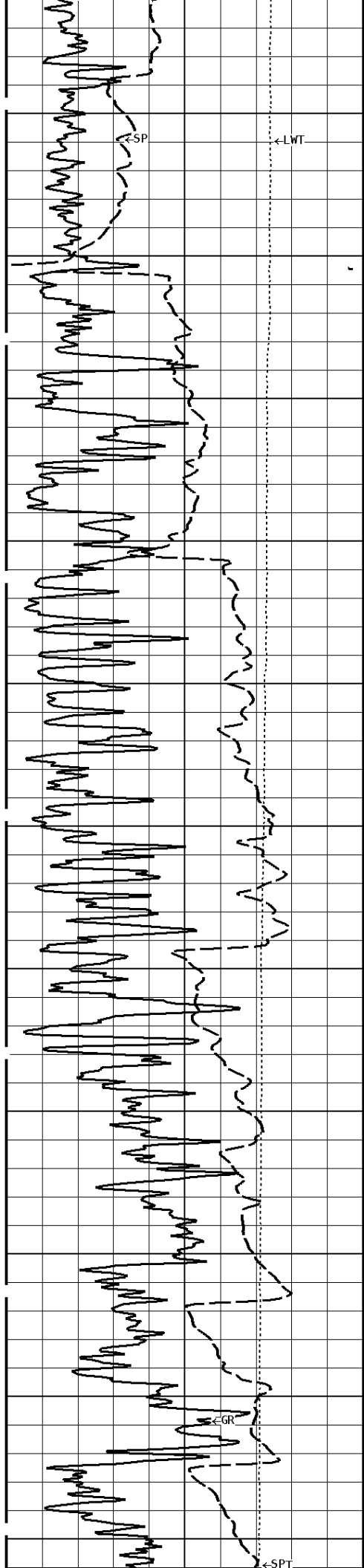
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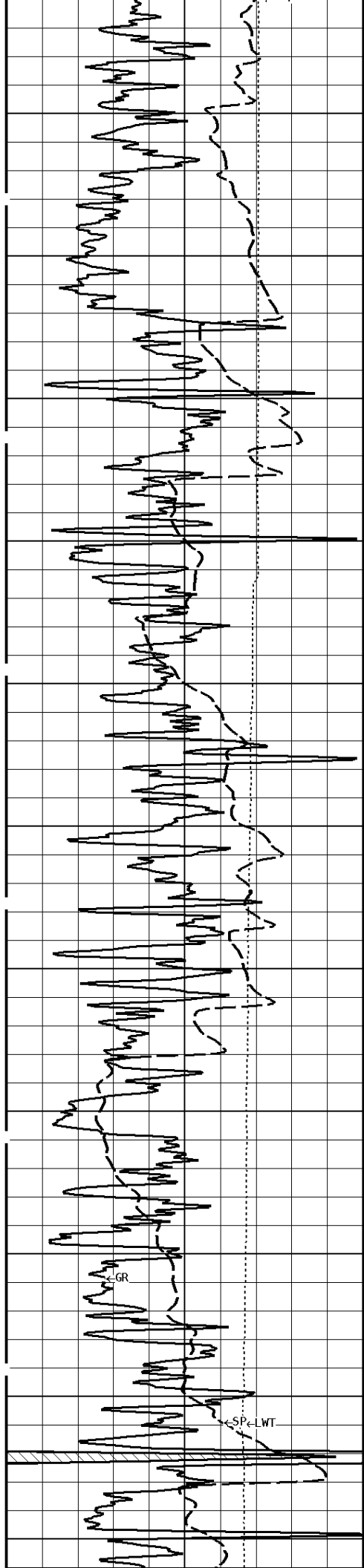
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1200

1300

1400





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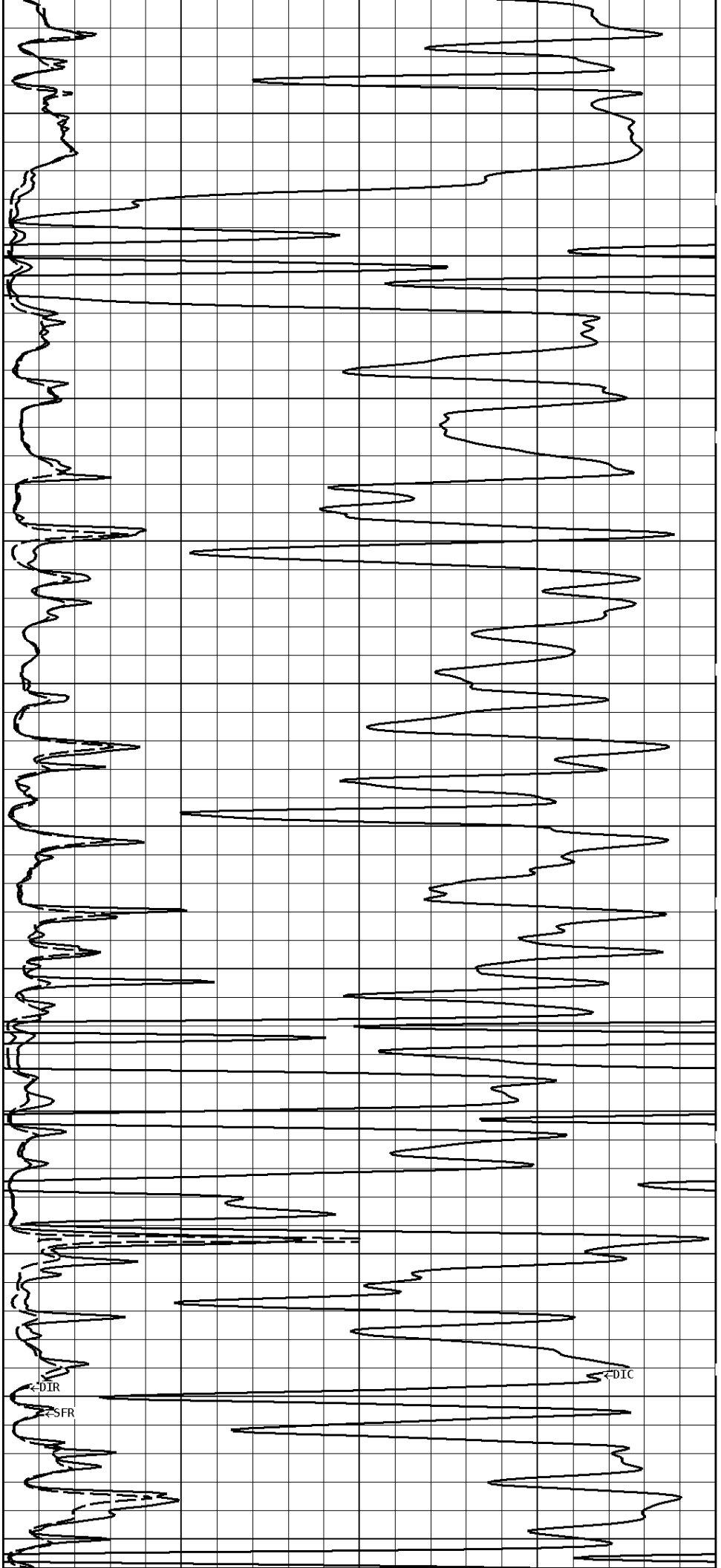
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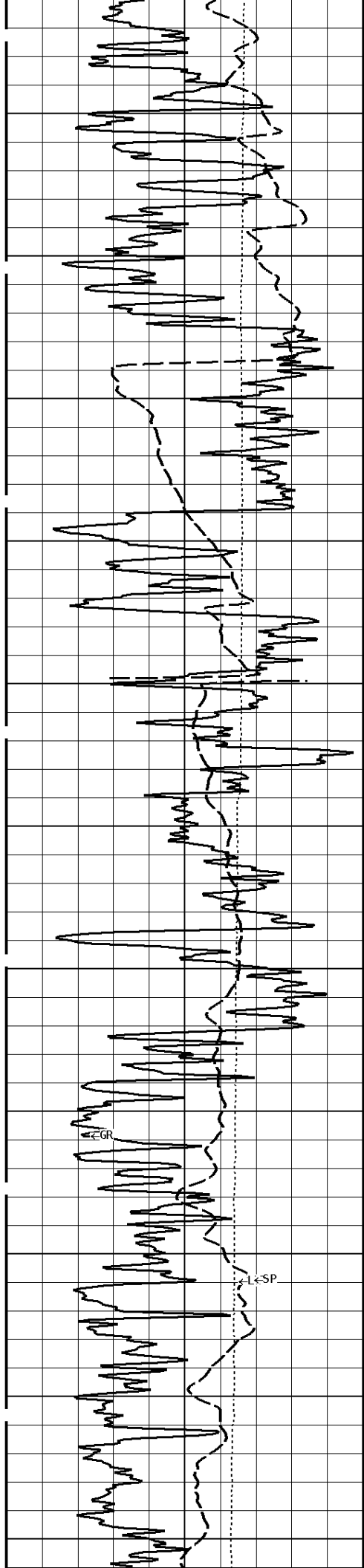
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2300

2400

2500





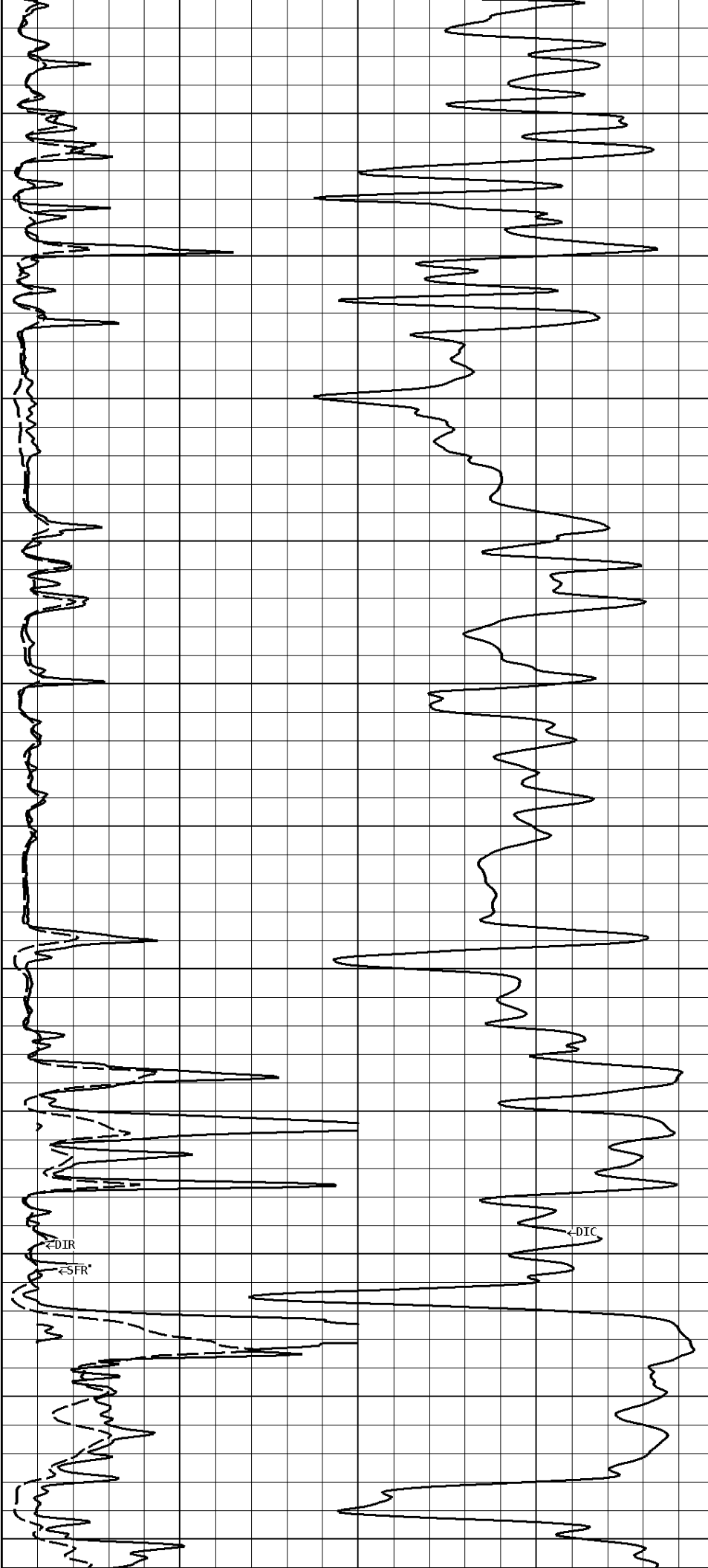
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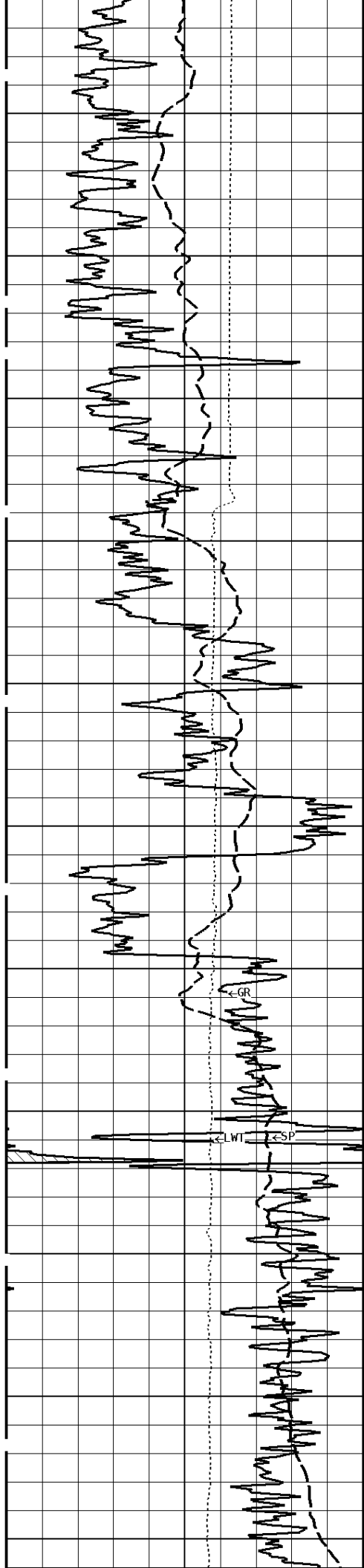
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2800

2900

3000





3100

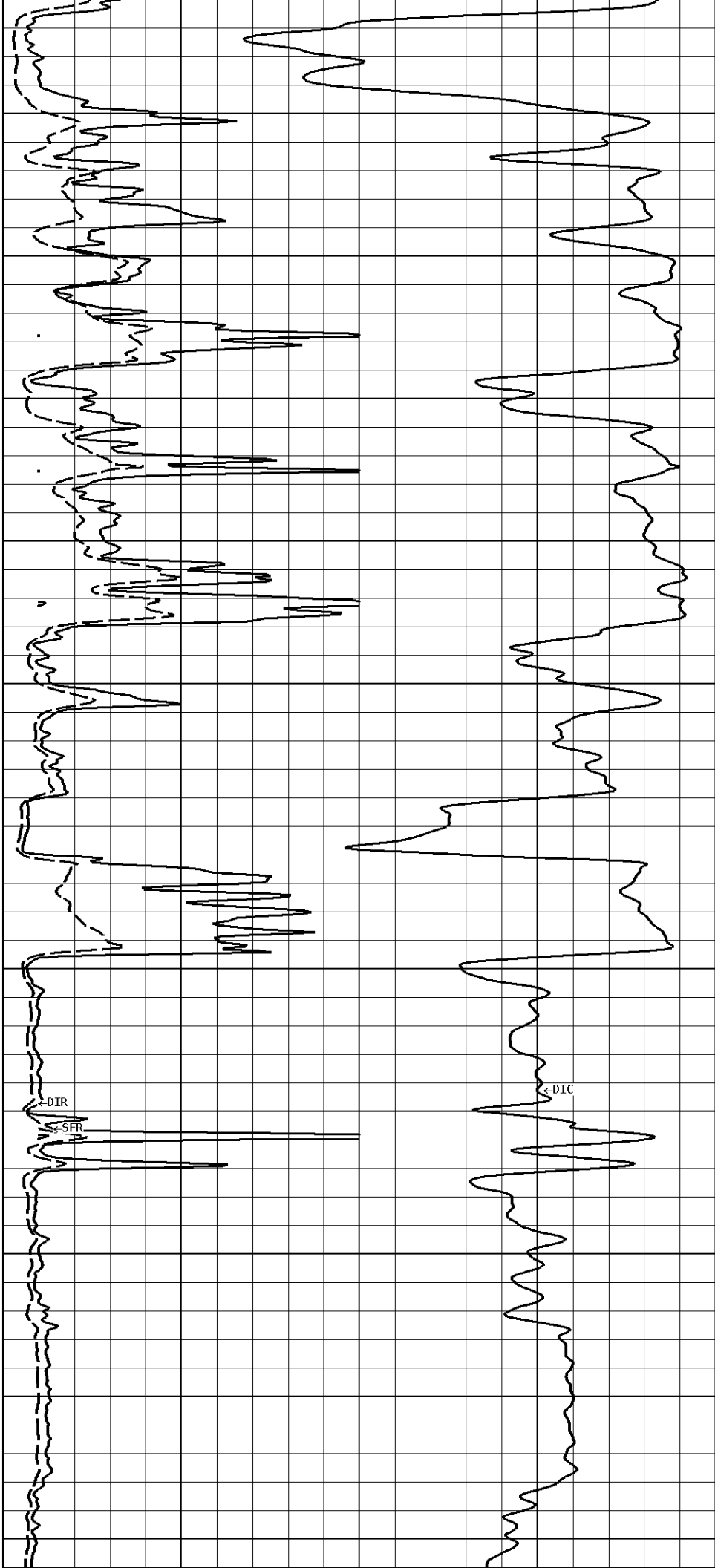
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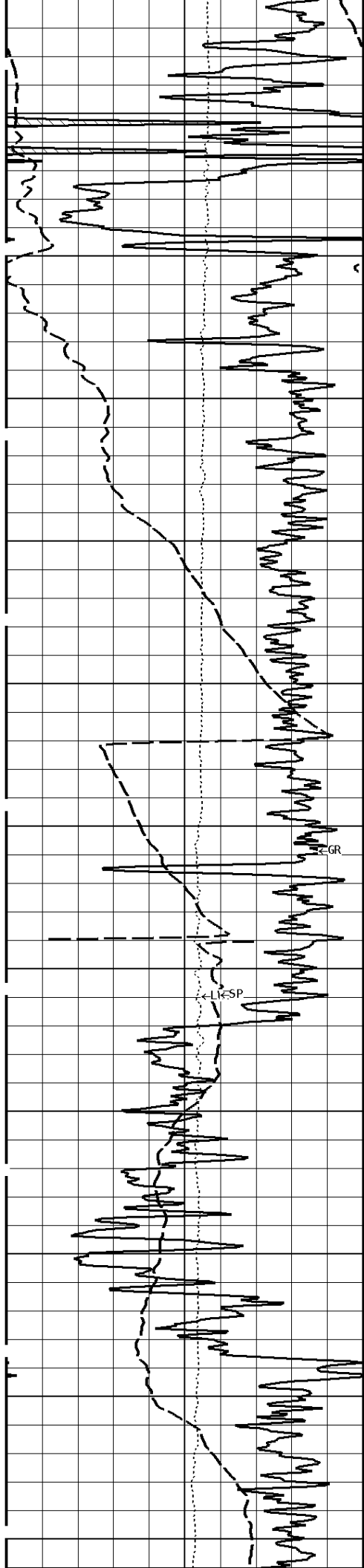
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3500

3600





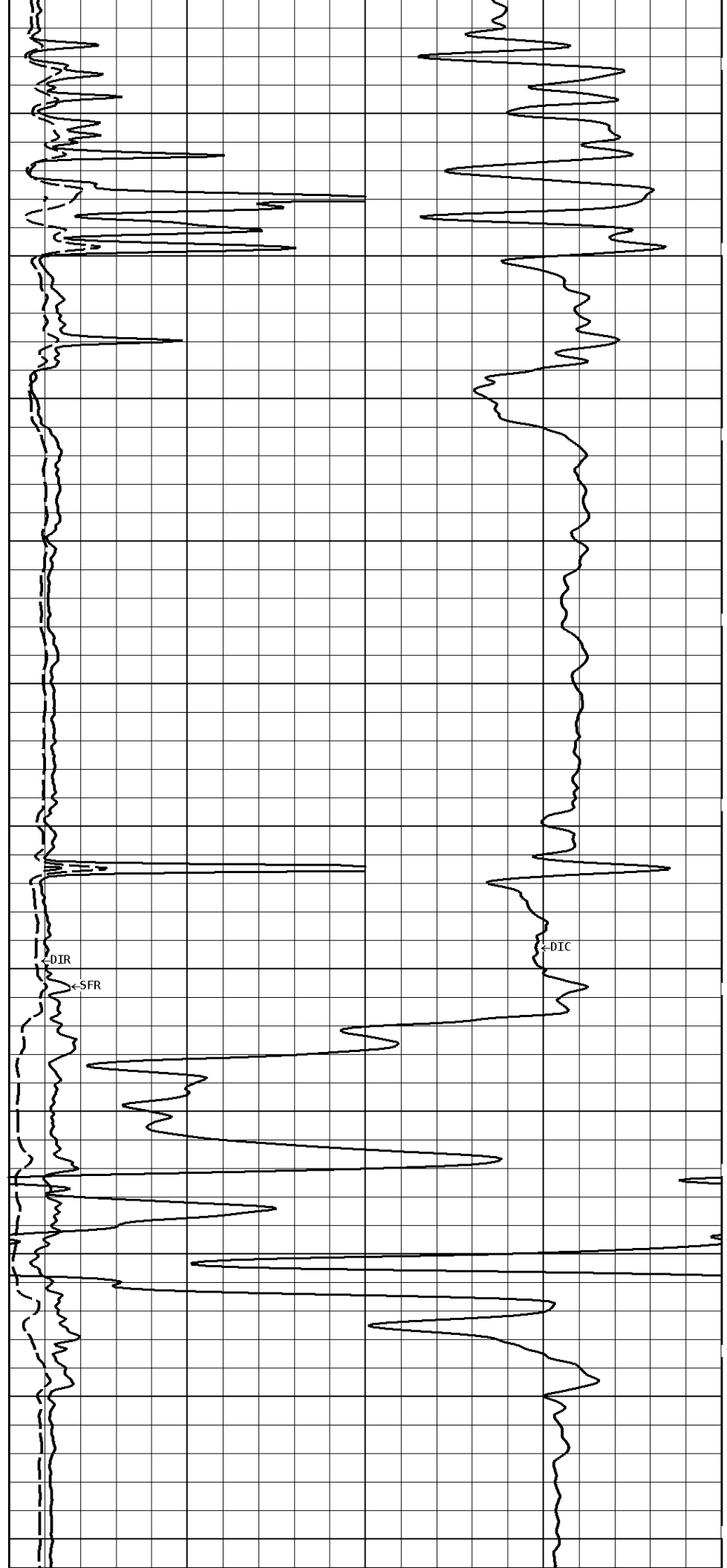
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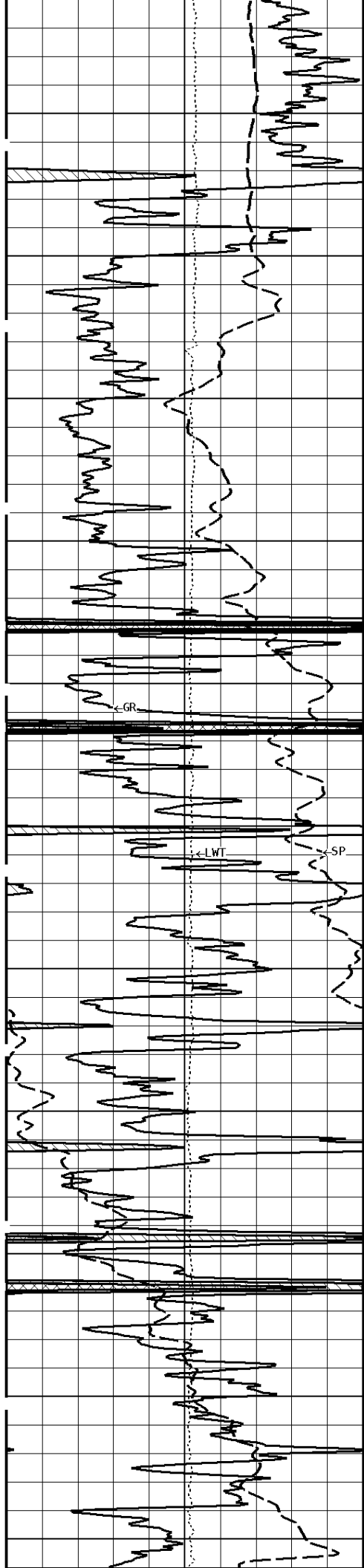
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3900

4000

4100





4200

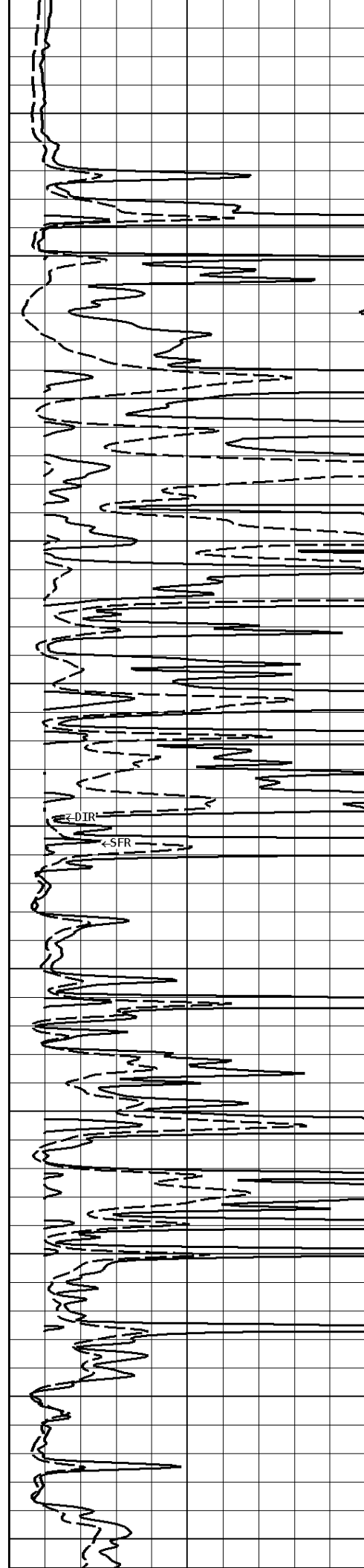
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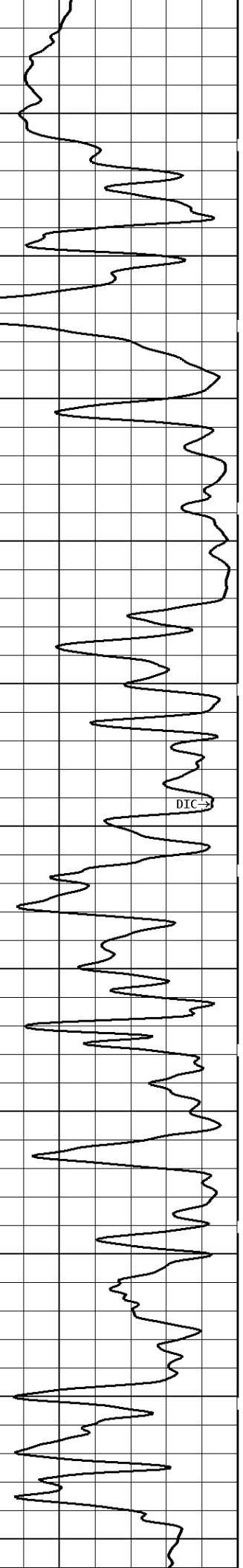
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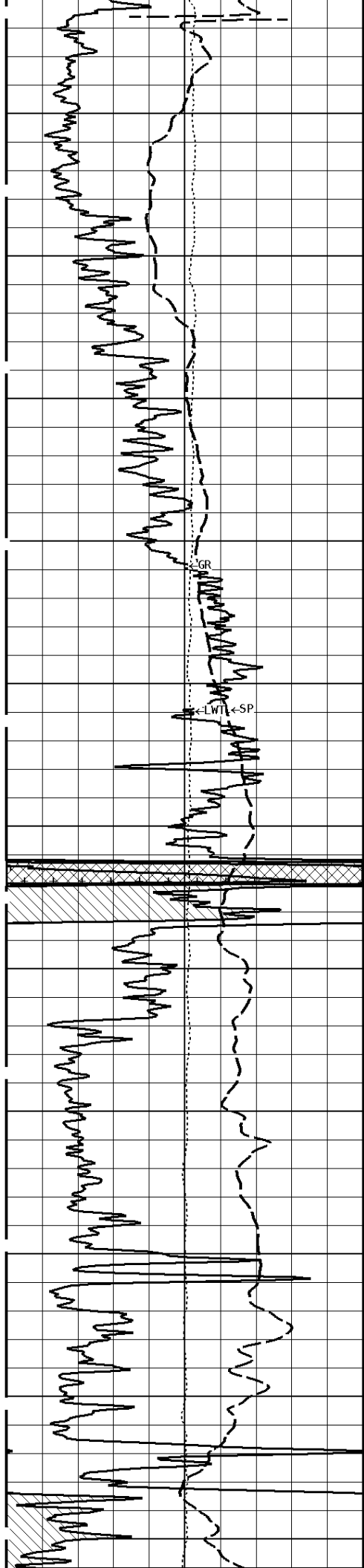


DIR

SFR



DIC



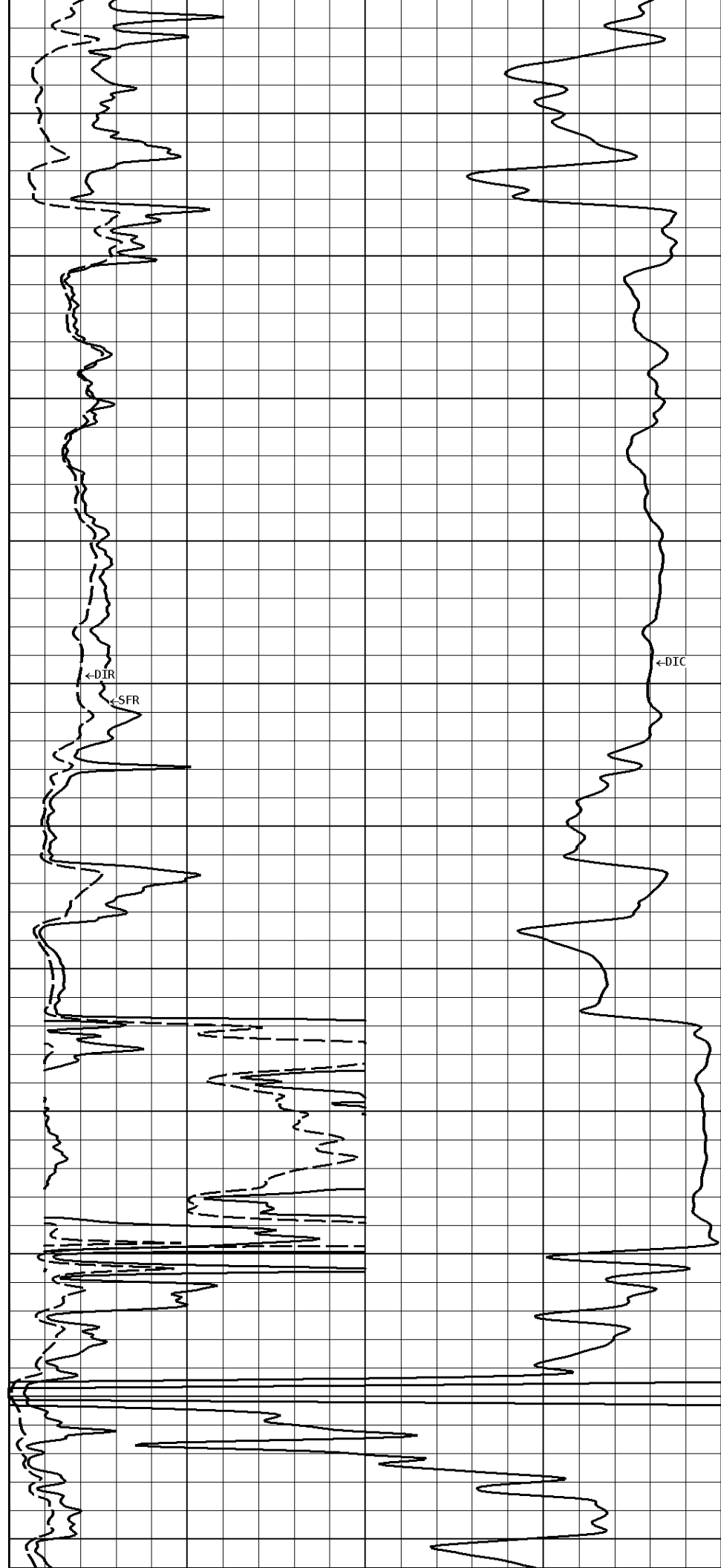
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4900

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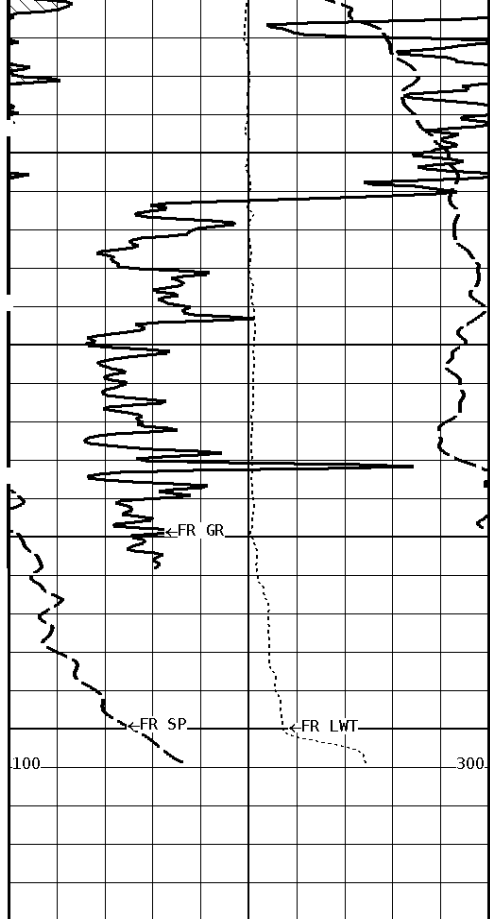
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←DIC

←DIR

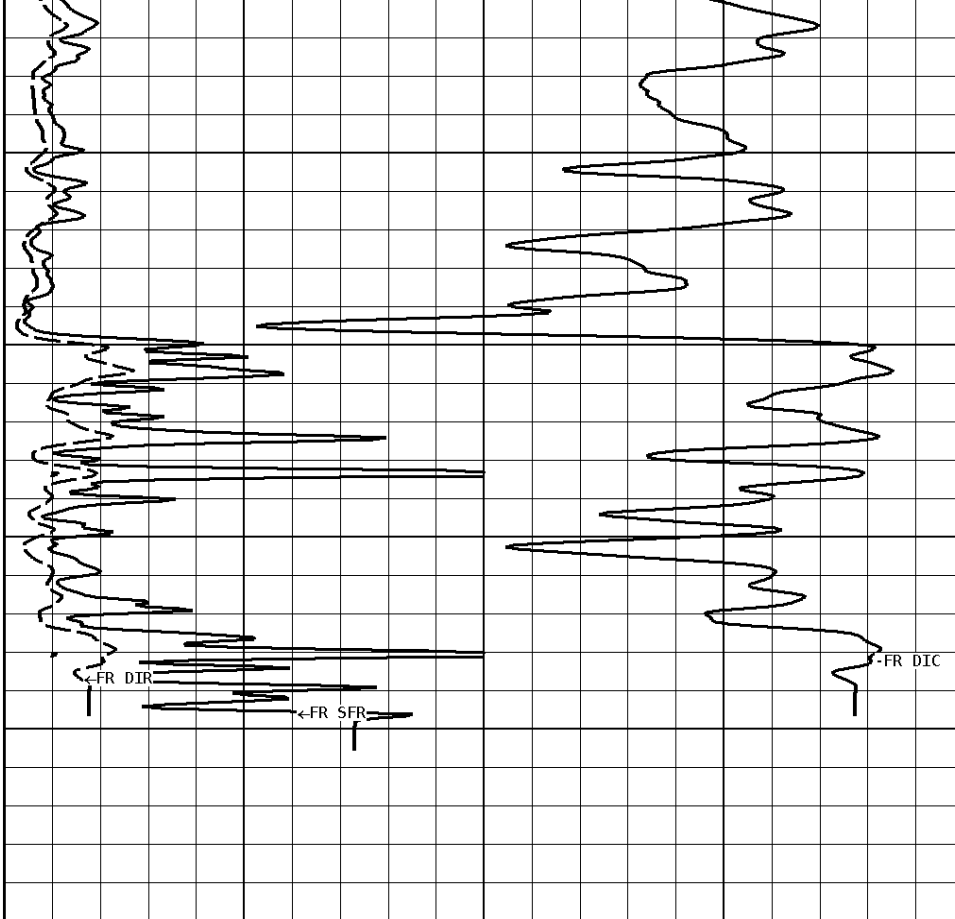
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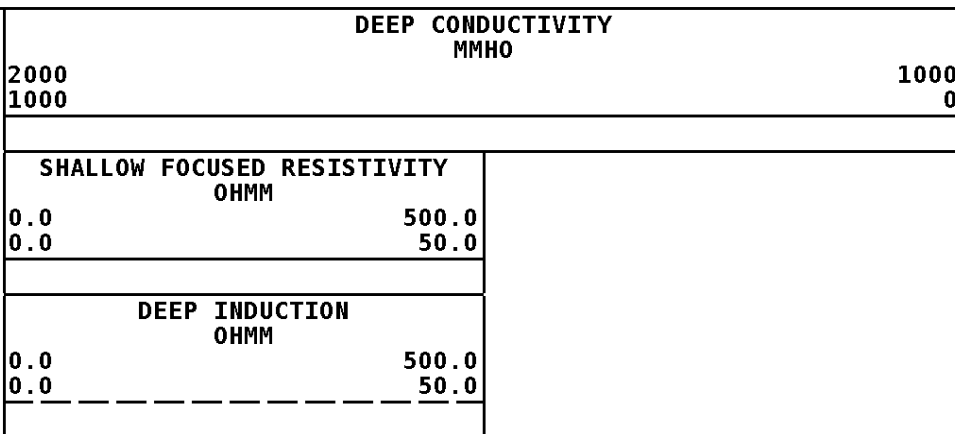
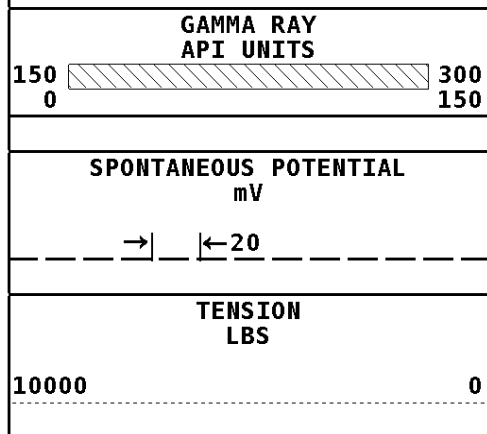
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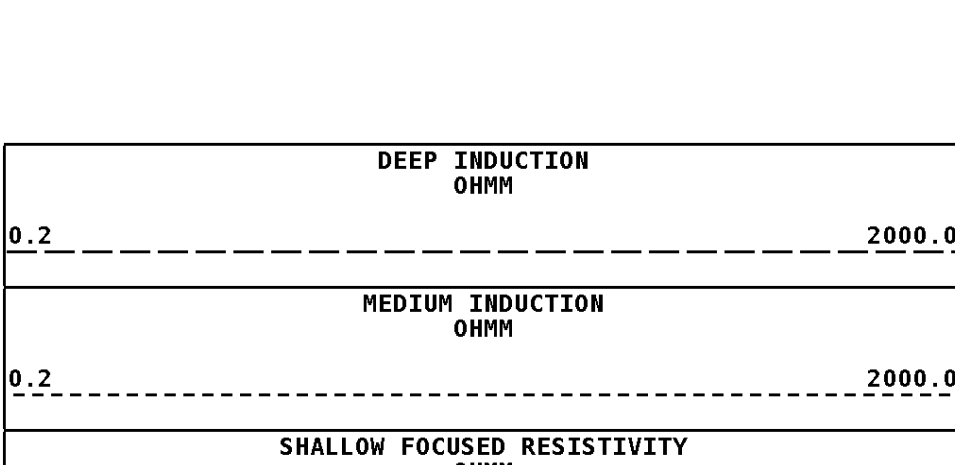
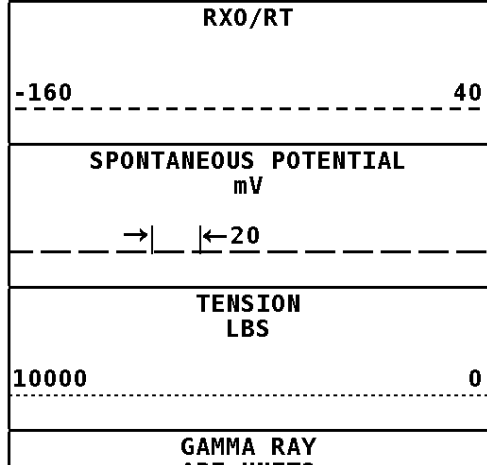
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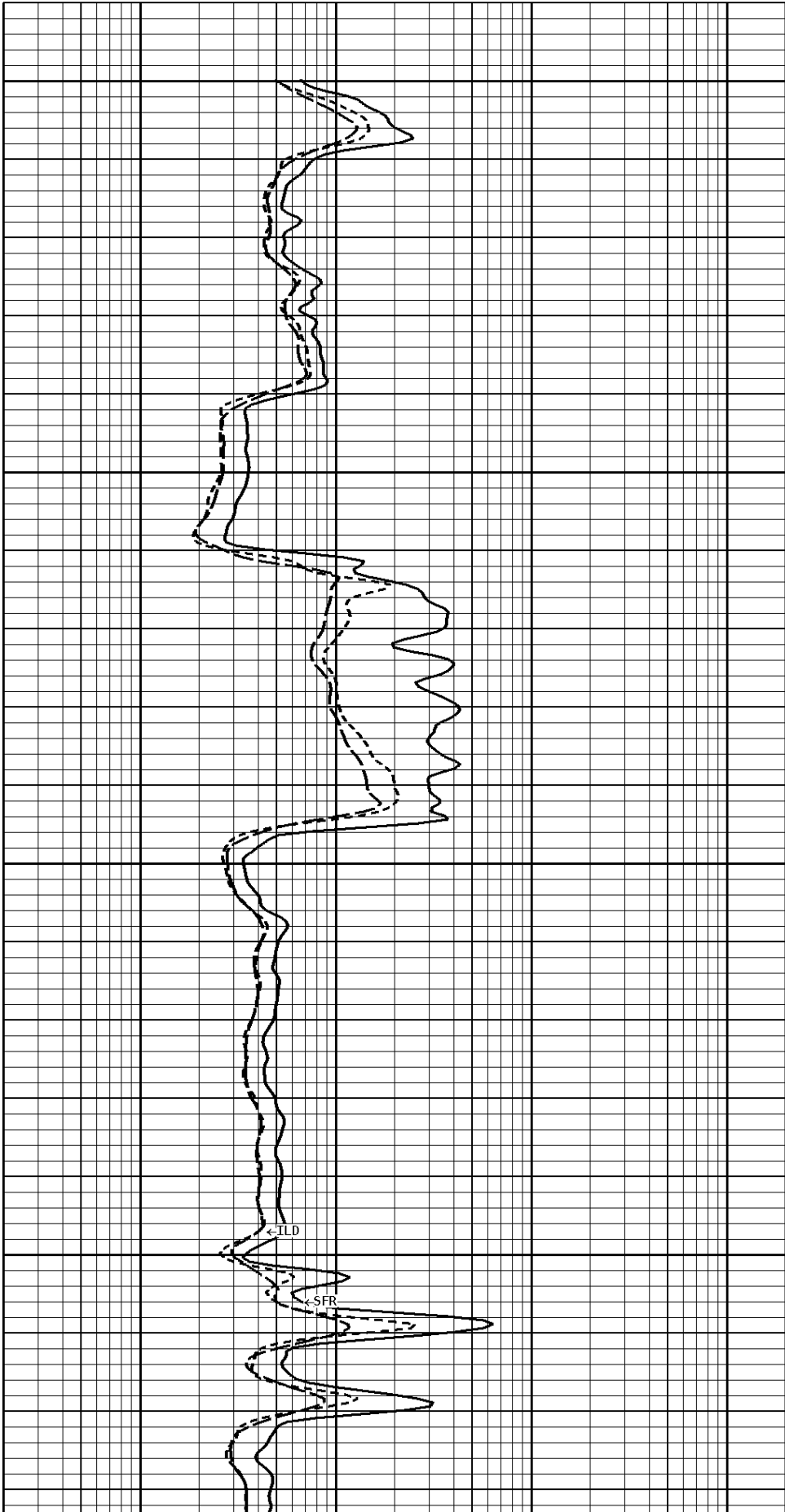
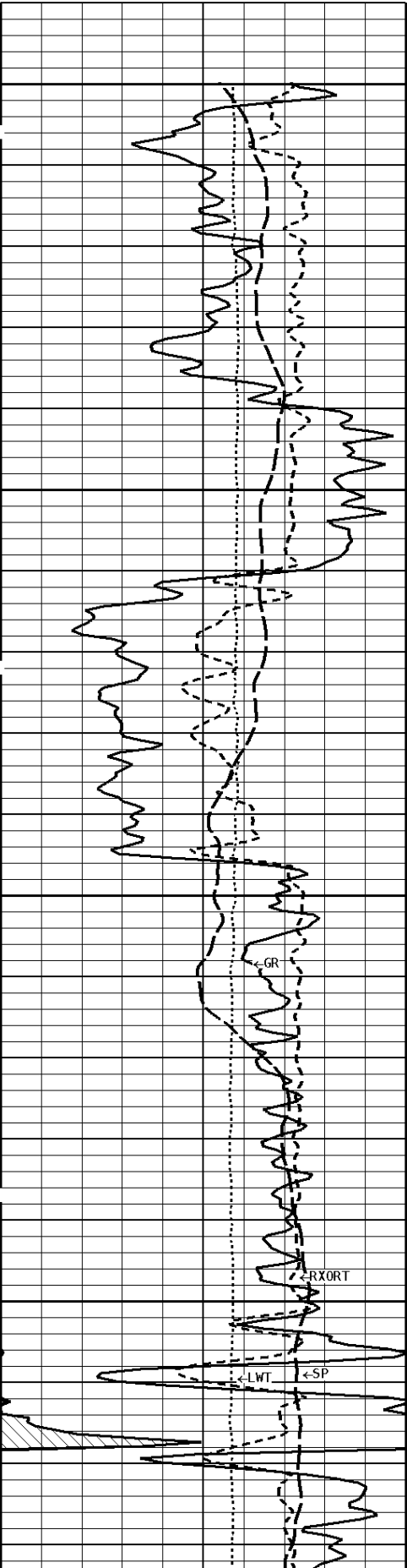
1:600 MAIN SECTION

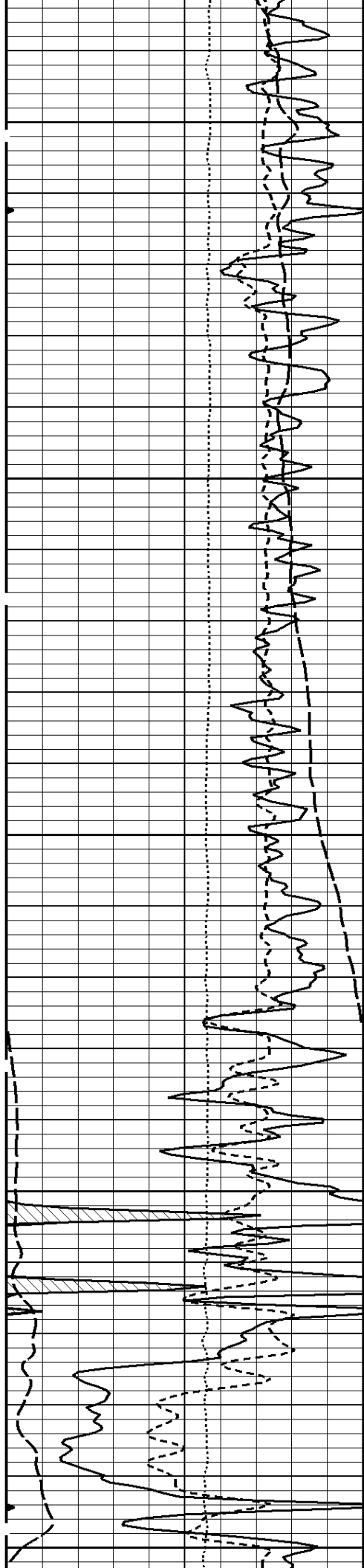


Well File: CHIEFTAIN OIL BLEVINS A SWD 1 JUNE29_MSTK Scale: 1:240 Format: DIL-240
 Segment: V1.D1.S5 Reprocess of MAIN Acquired: 2014-06/29 18:59 3.5.0-12850
 Reference: 0 Processed: 2014-06/29 20:13 3.5.0-12850



1:240 MAIN SECTION

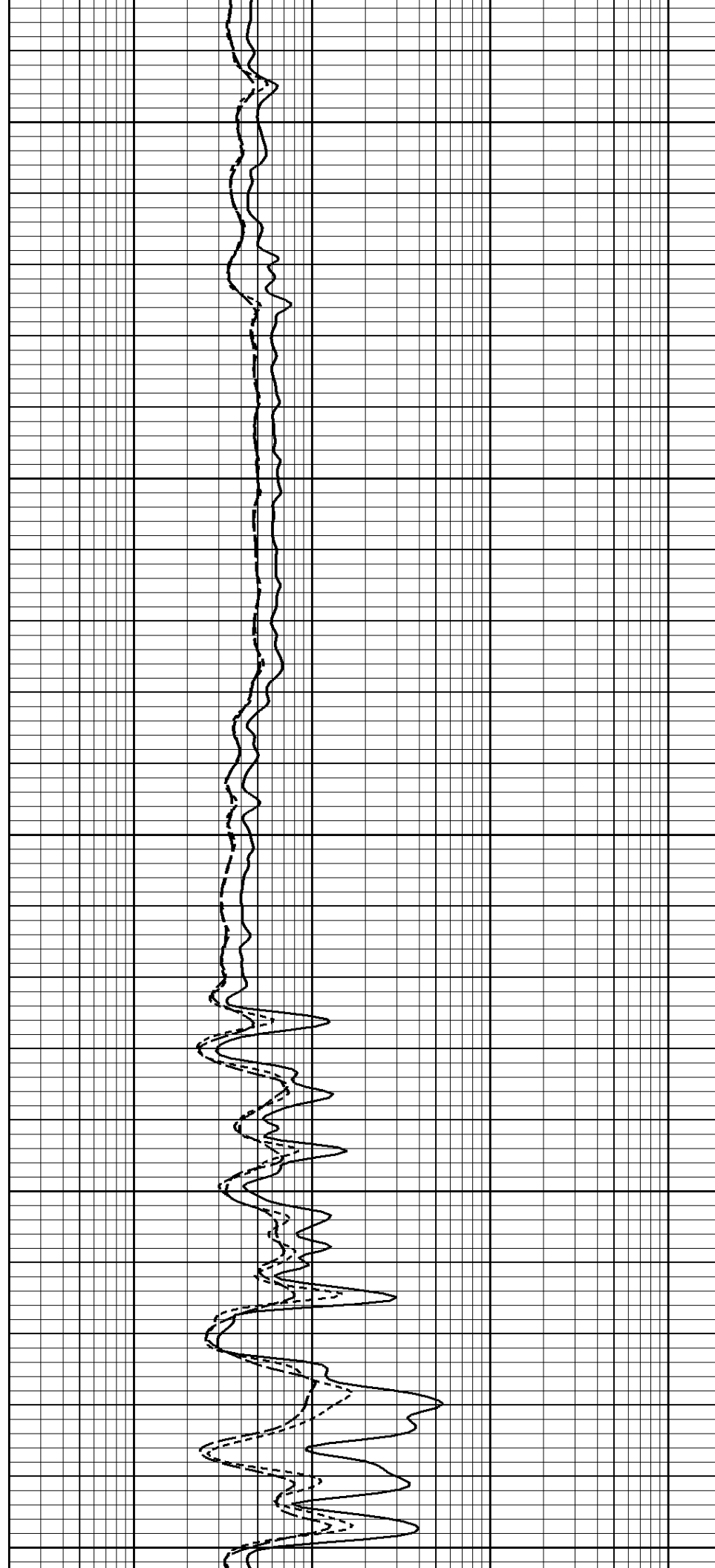


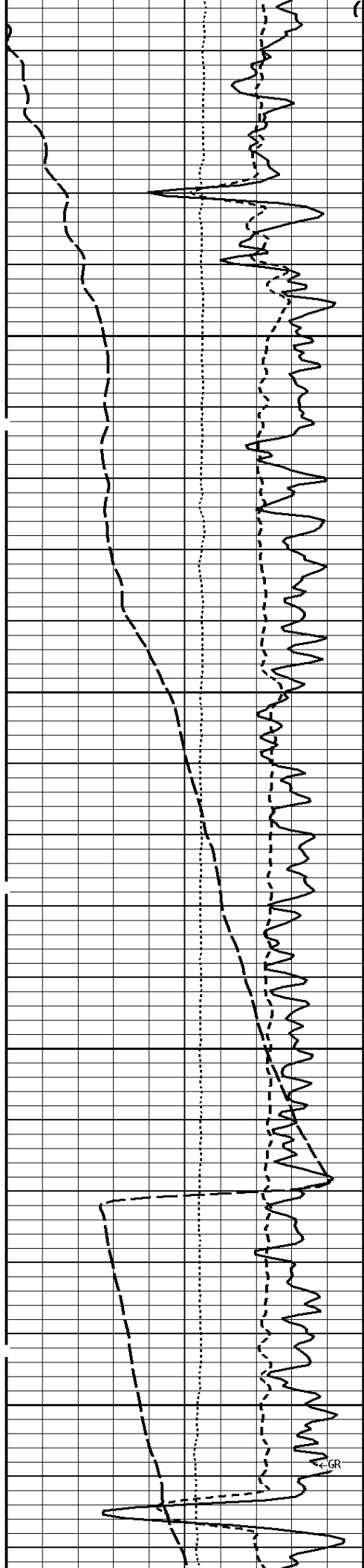


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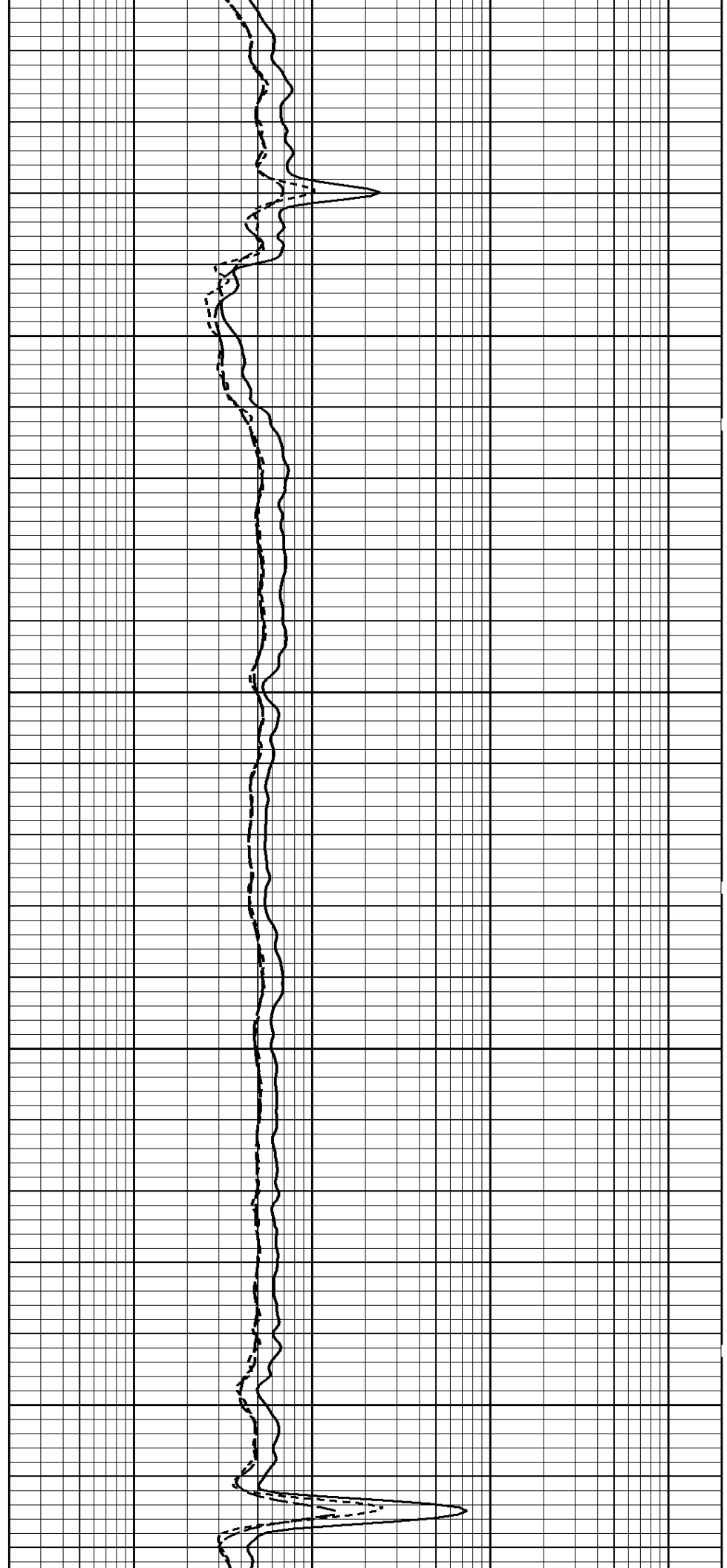
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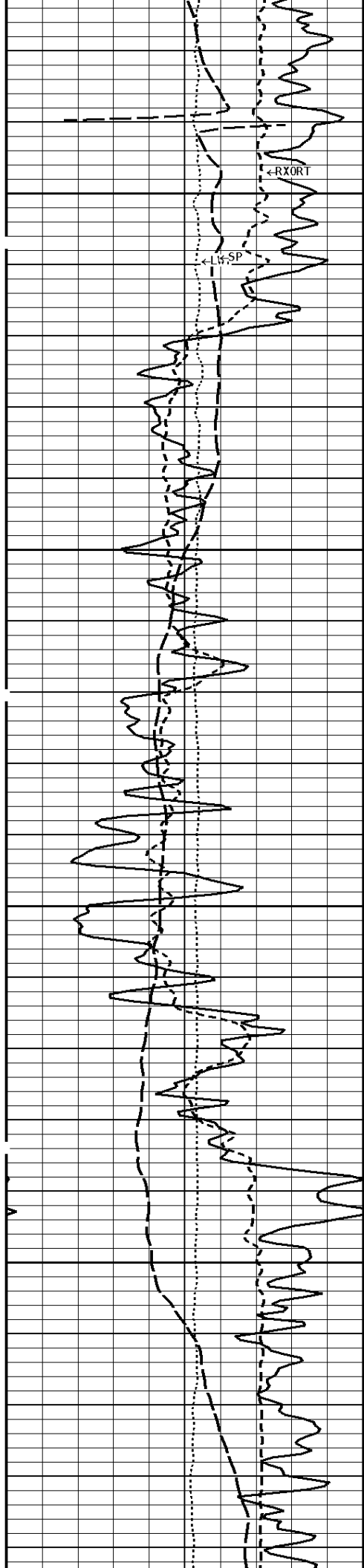




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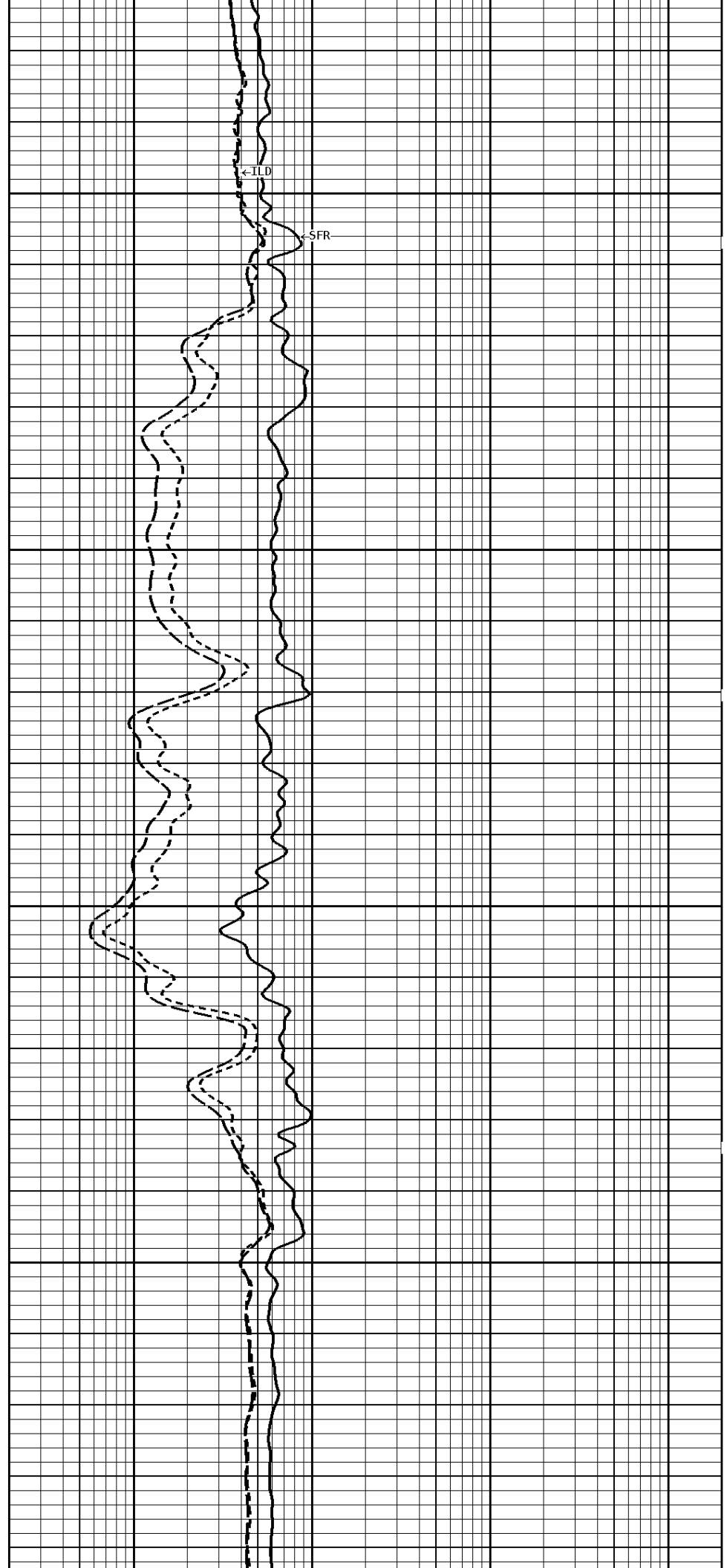
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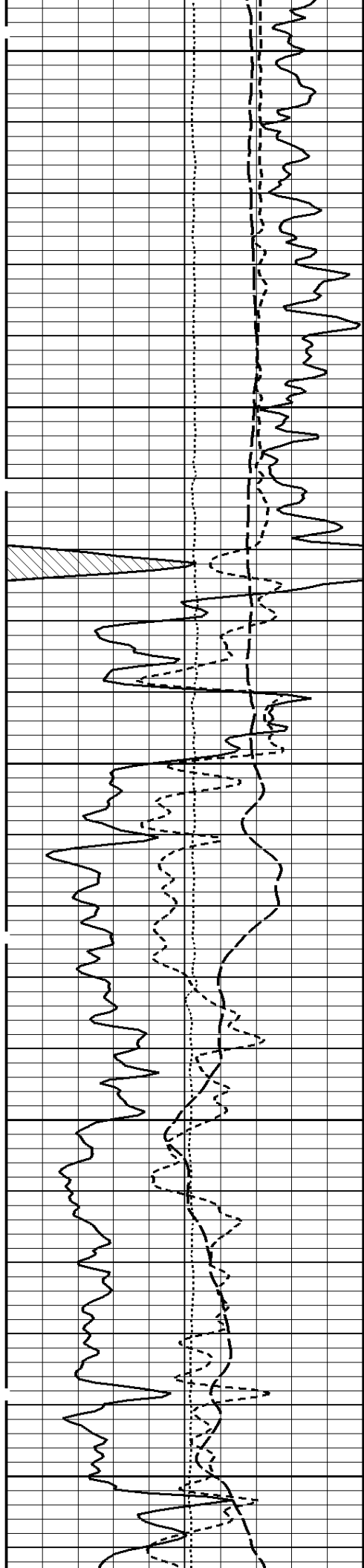




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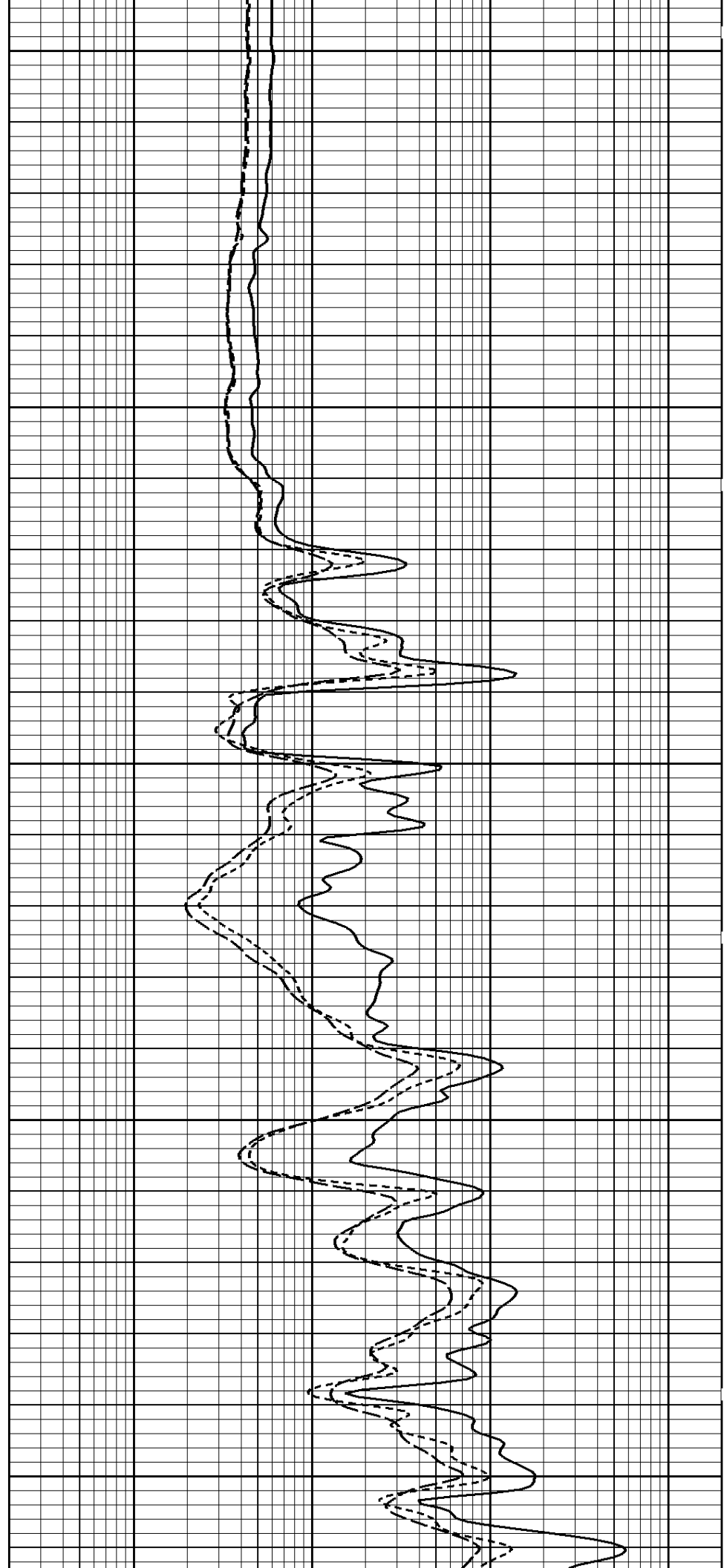
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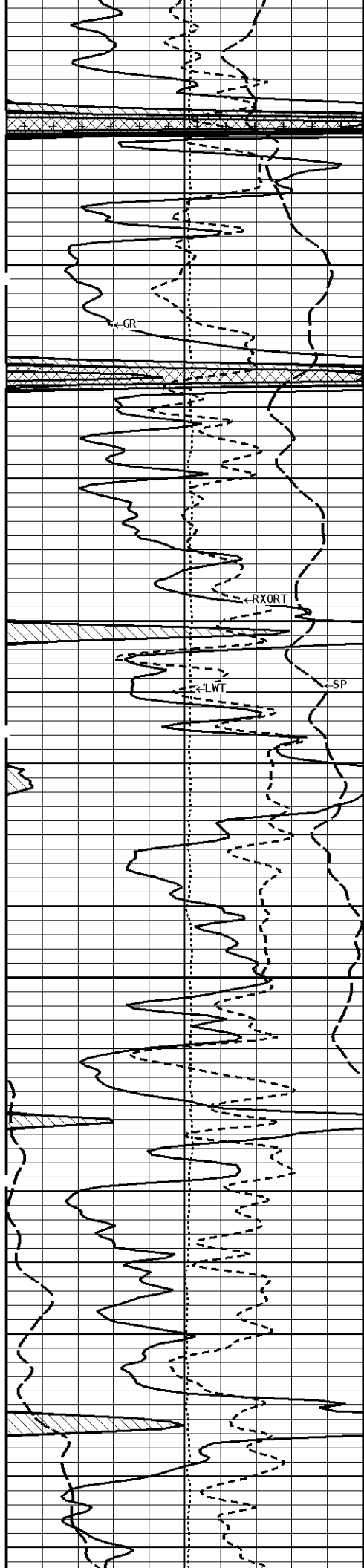




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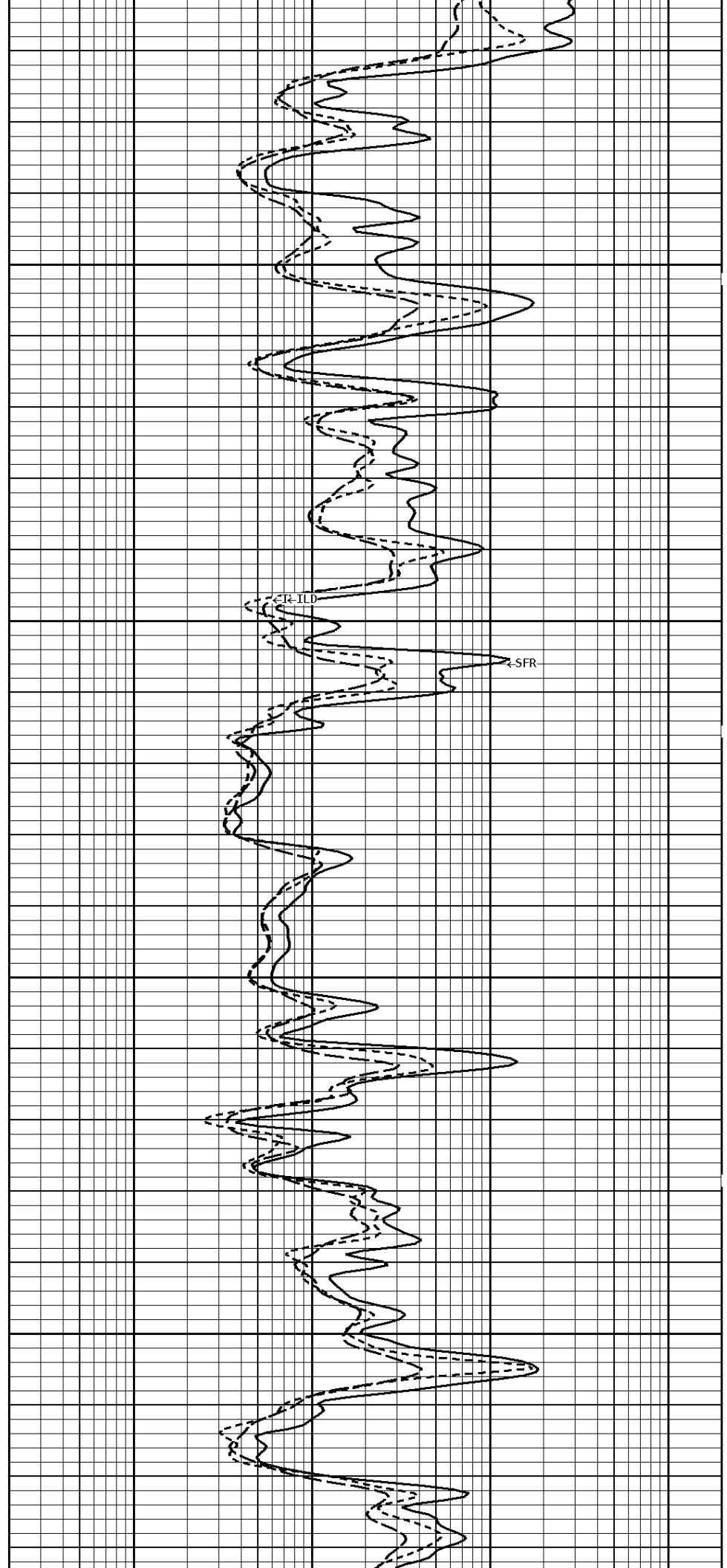
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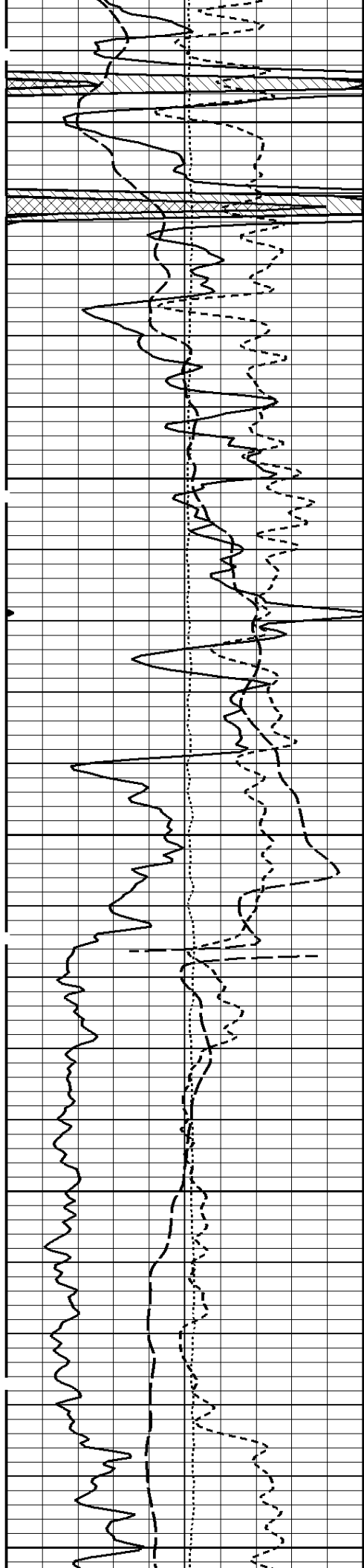




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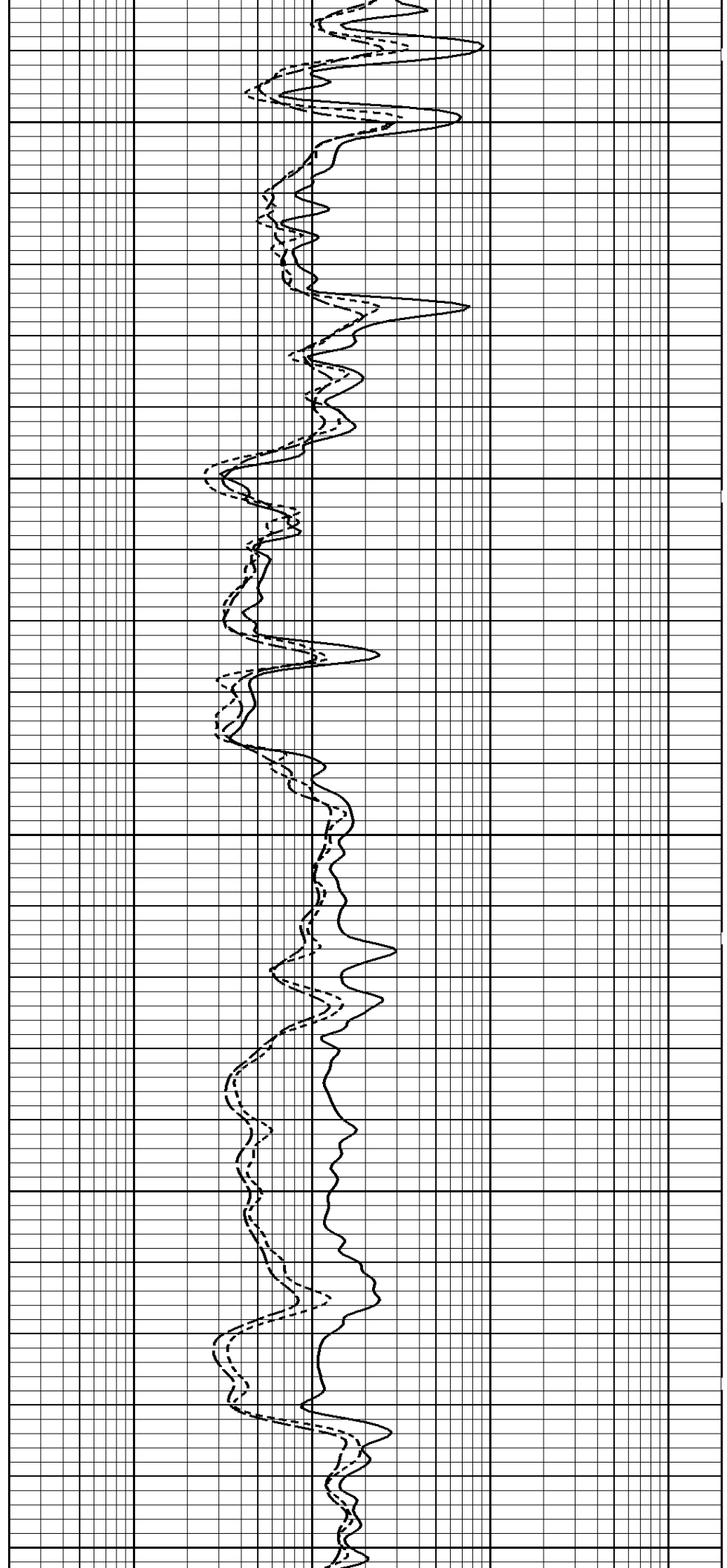


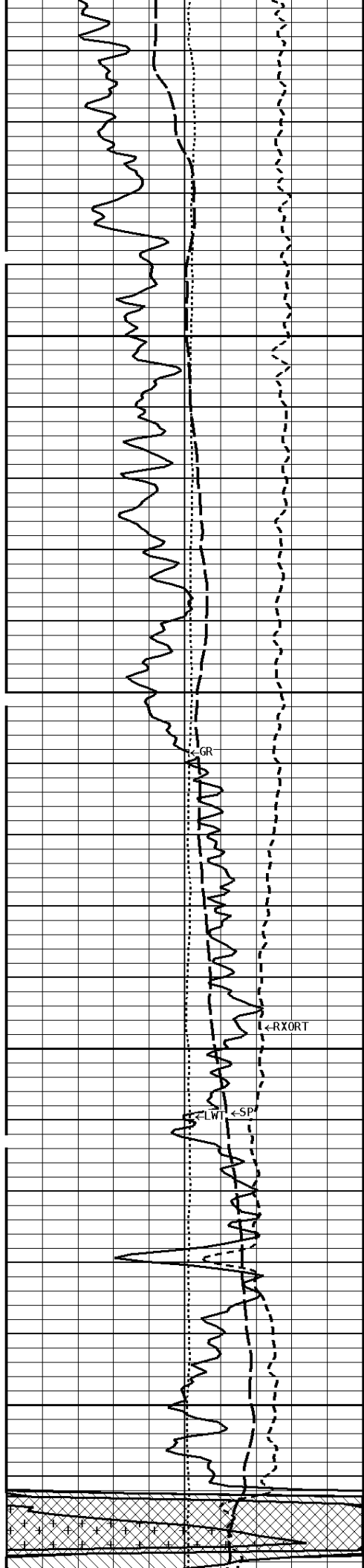


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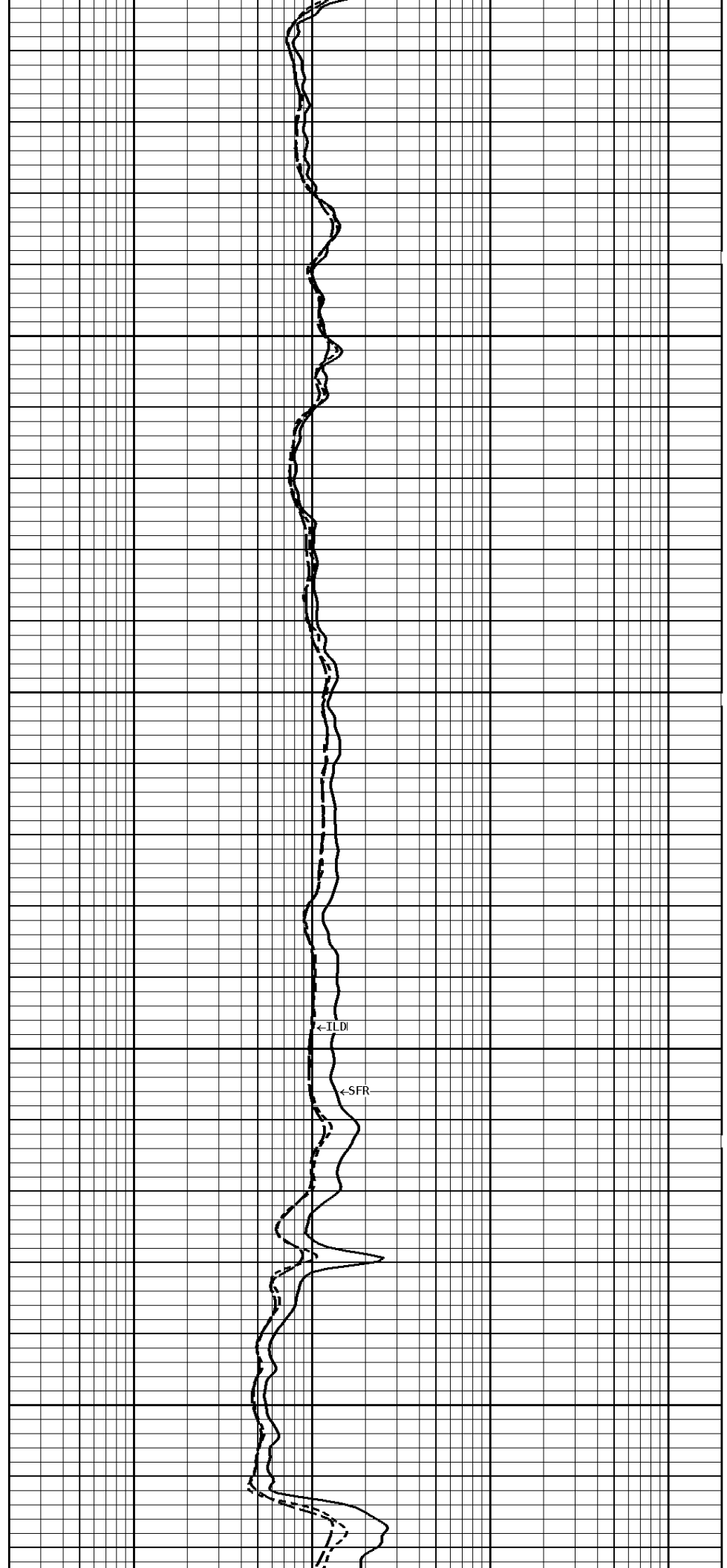
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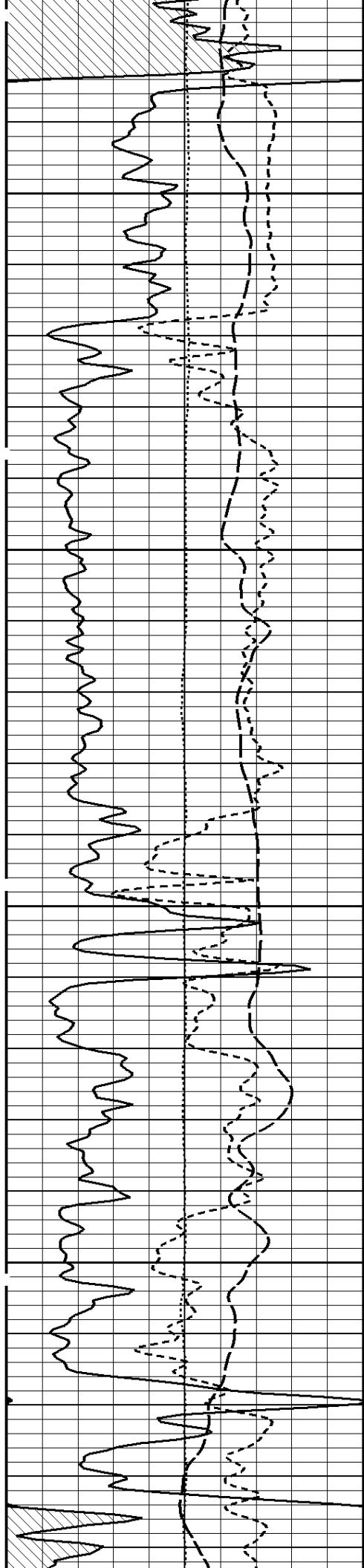




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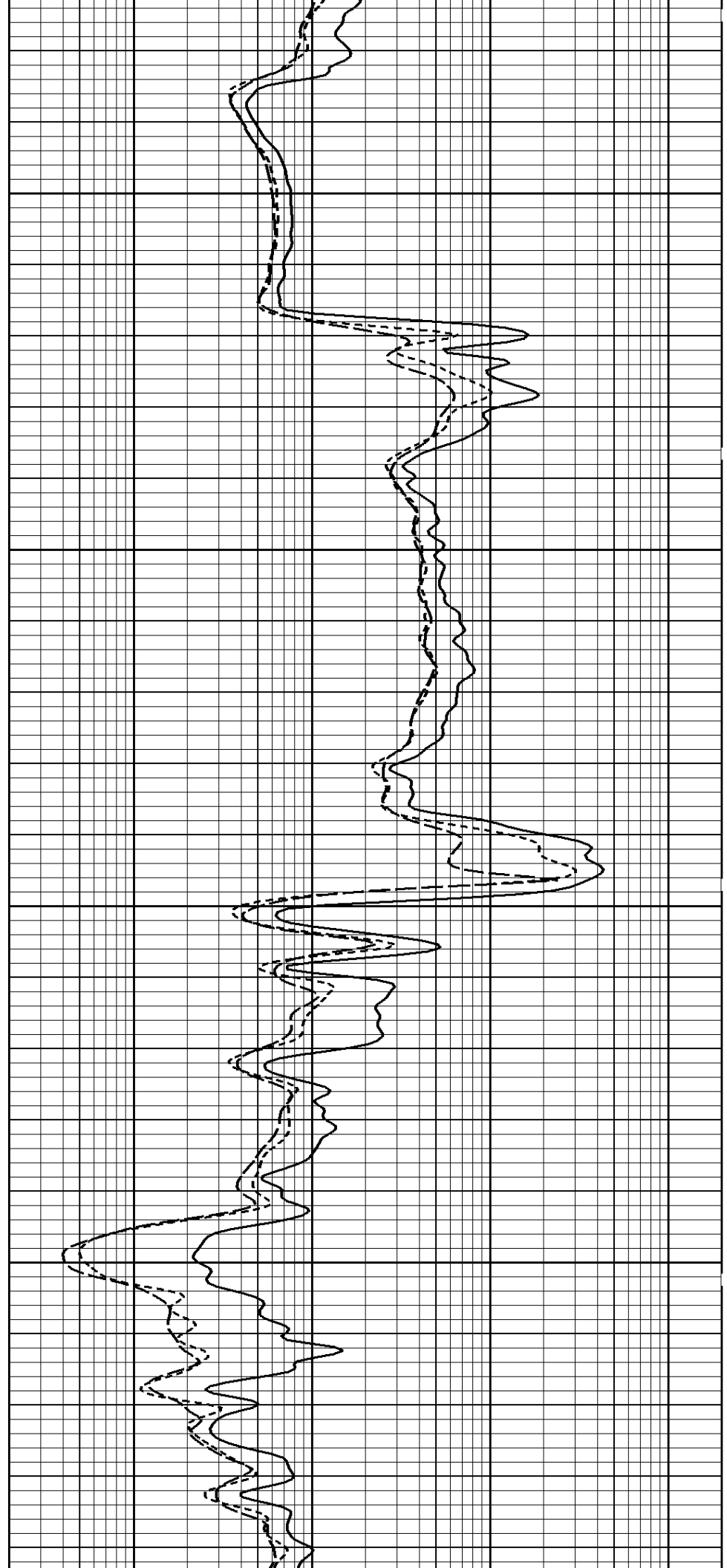
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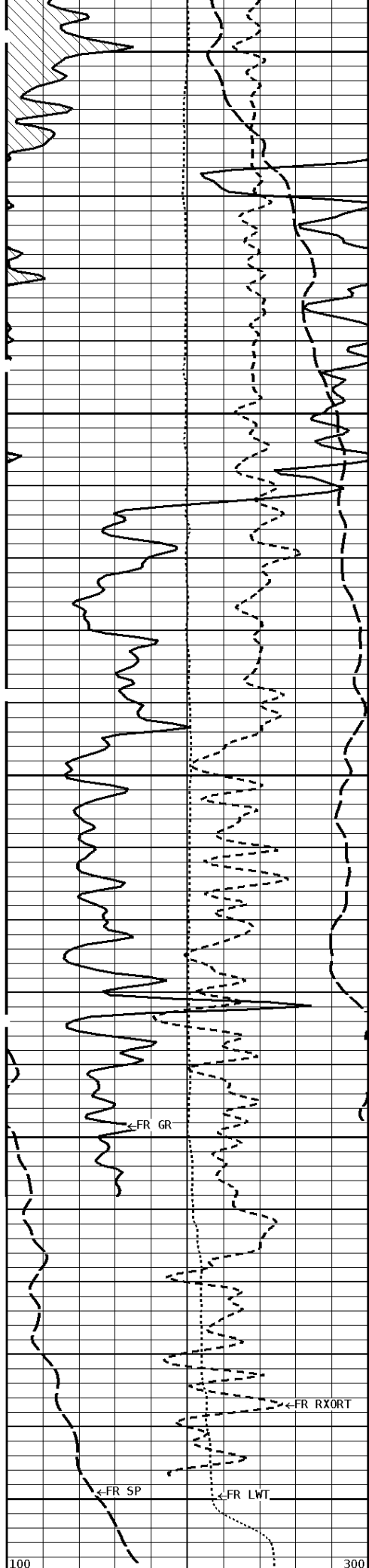




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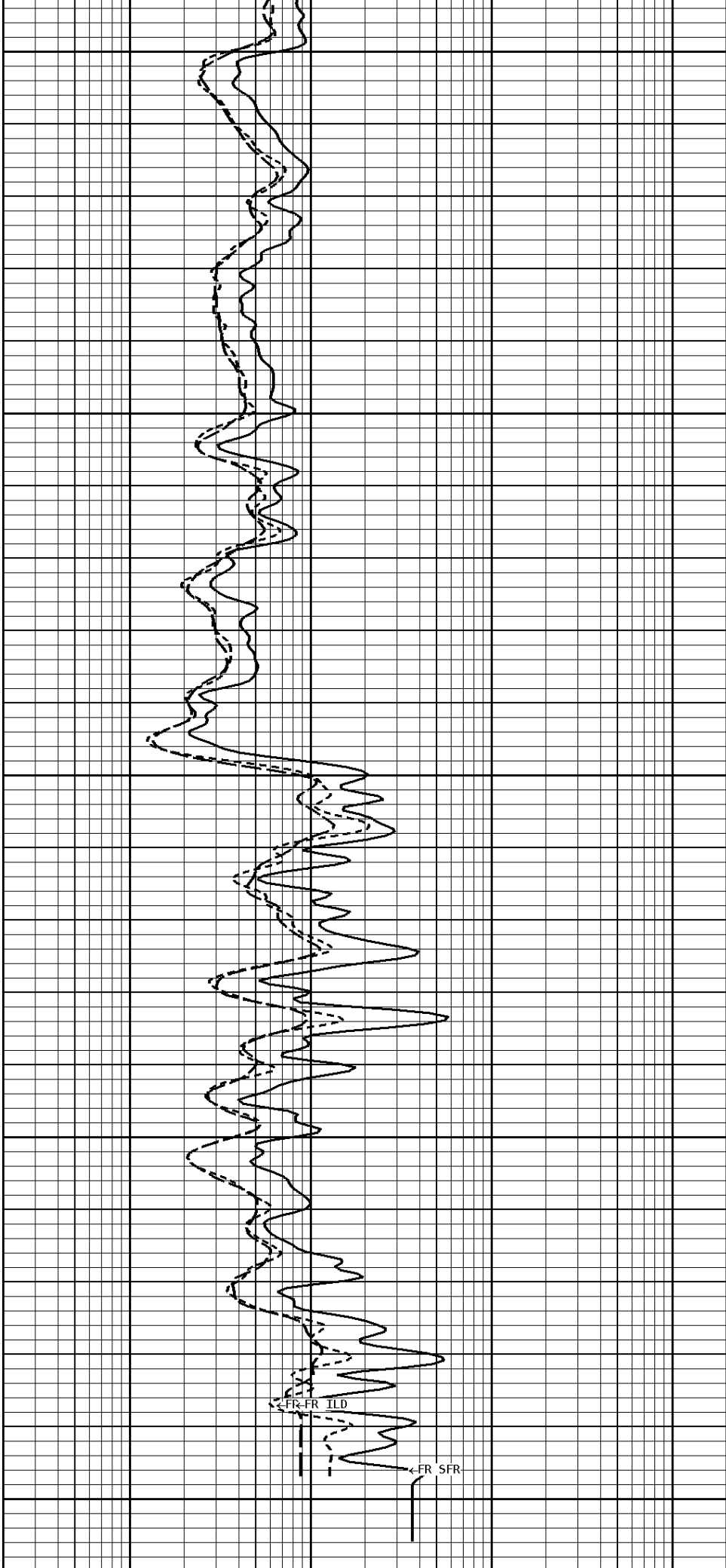




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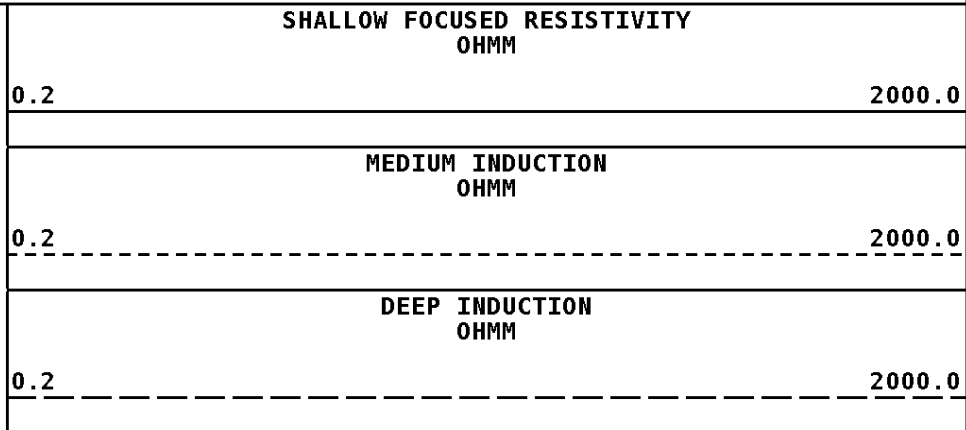
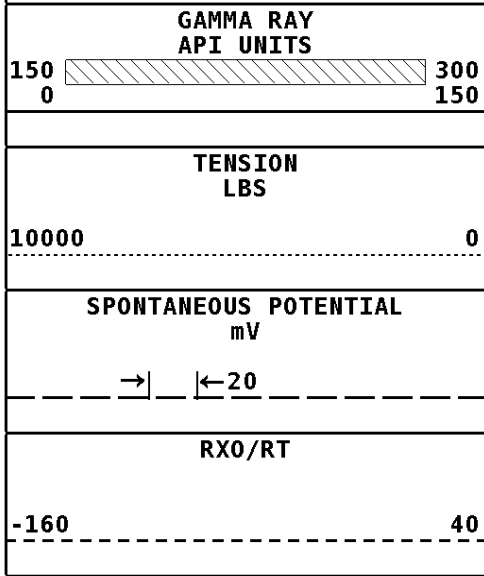
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5451



File #1.1.5

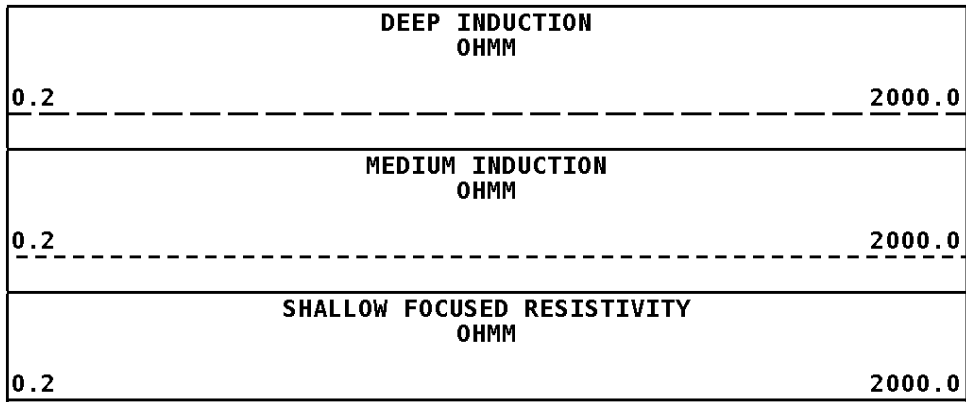
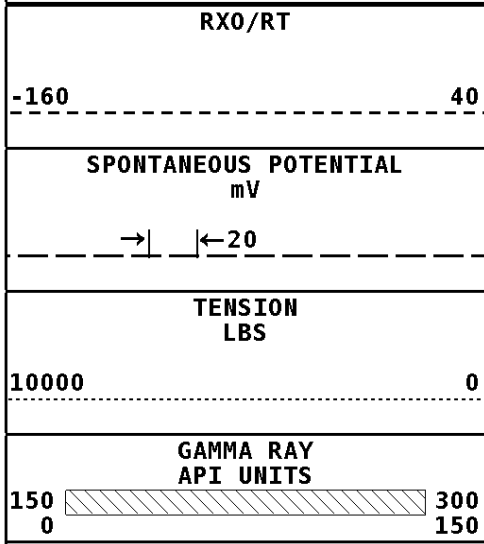
1:240 MAIN SECTION



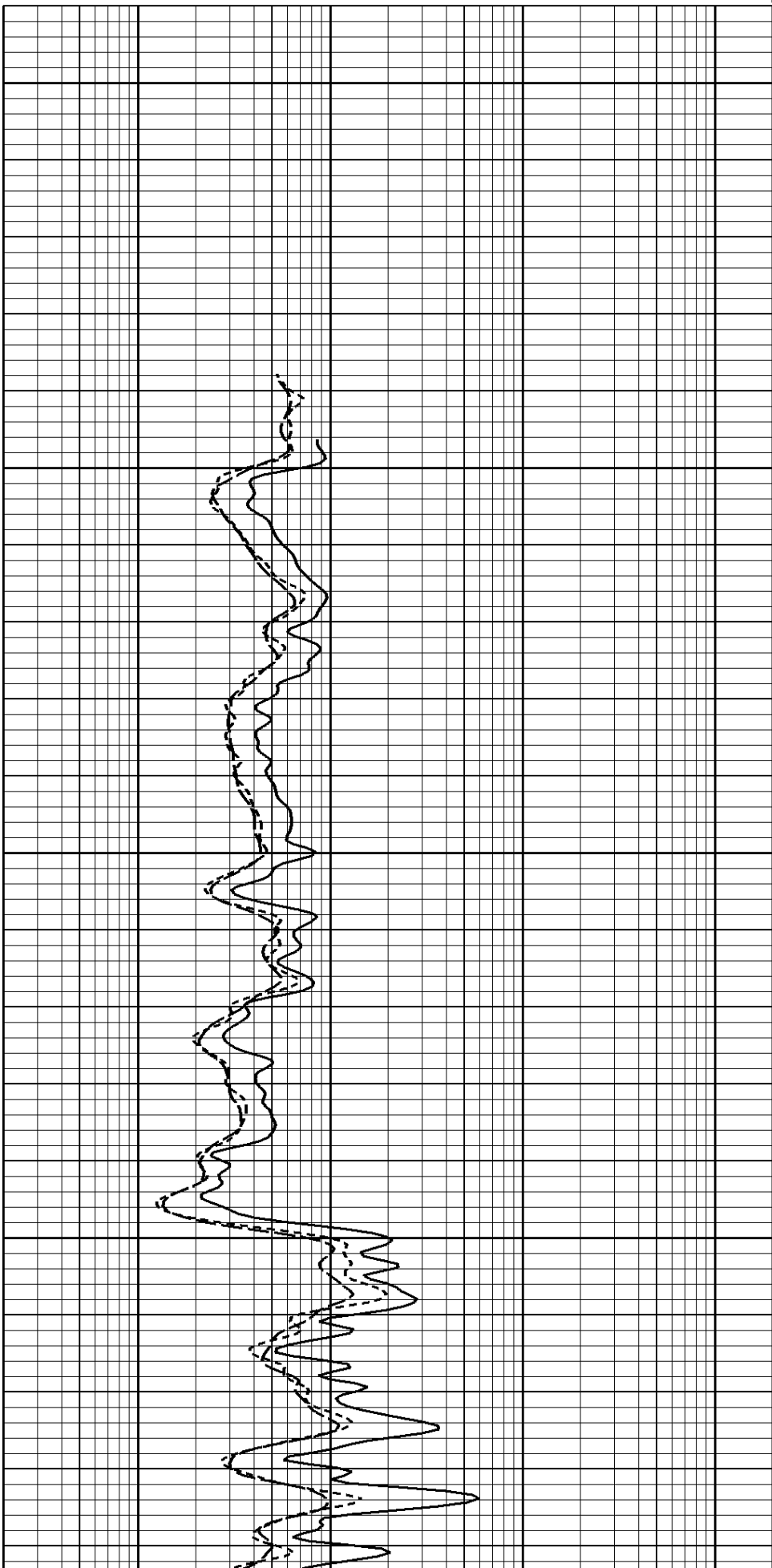
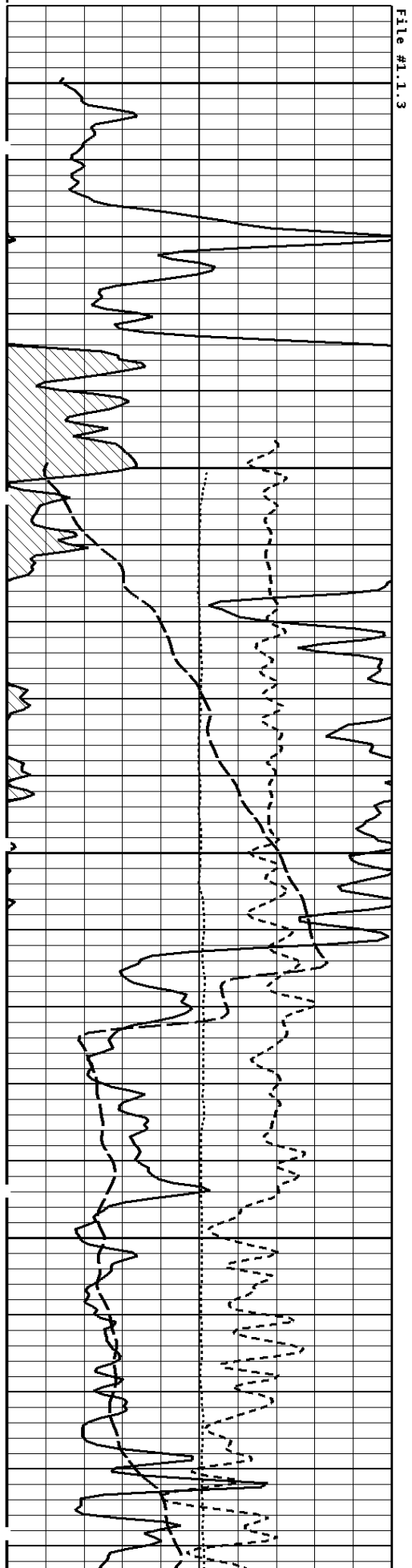
*** Borehole Zone Factors ***

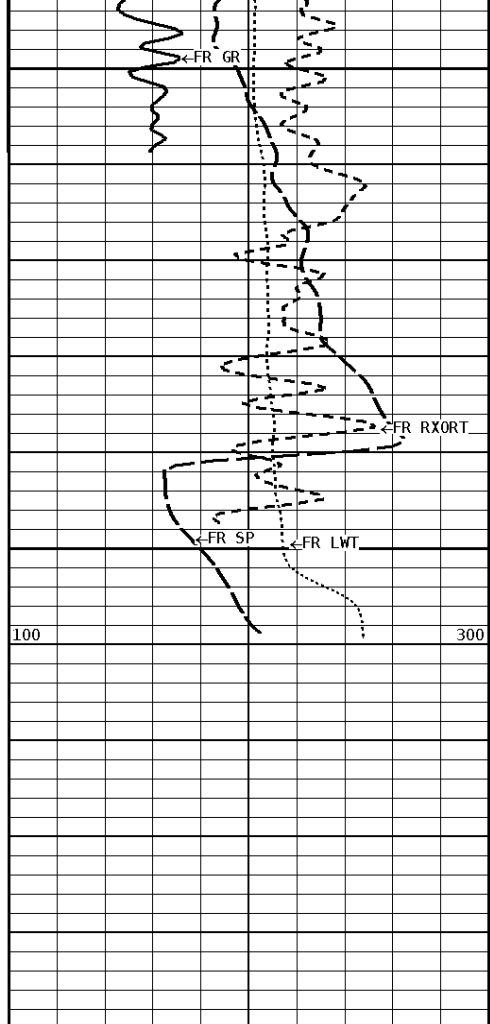
Zone 1	99999.0	to	0.0	Feet
Drill Bit Size			7.875	in
Casing Diameter			5.500	in
BHT Depth			5451.000	ft
Borehole Temperature			132.0	degF
Temperature Gradient			1.00	DFHF
Resistivity Of Mud			2.000	ohm/m
Resistivity Of Mud Temperature			75.00	degF

Well File: CHIEFTAIN OIL BLEVINS A SWD 1 JUNE29_MSTK	Scale: 1:240	Format: DIL-240
Segment: V1.D1.S3 Reprocess of REPEAT	Acquired: 2014-06/29 18:48 3.5.0-12850	
Reference: 0	Processed: 2014-06/29 18:56 3.5.0-12850	



1:240 REPEAT SECTION



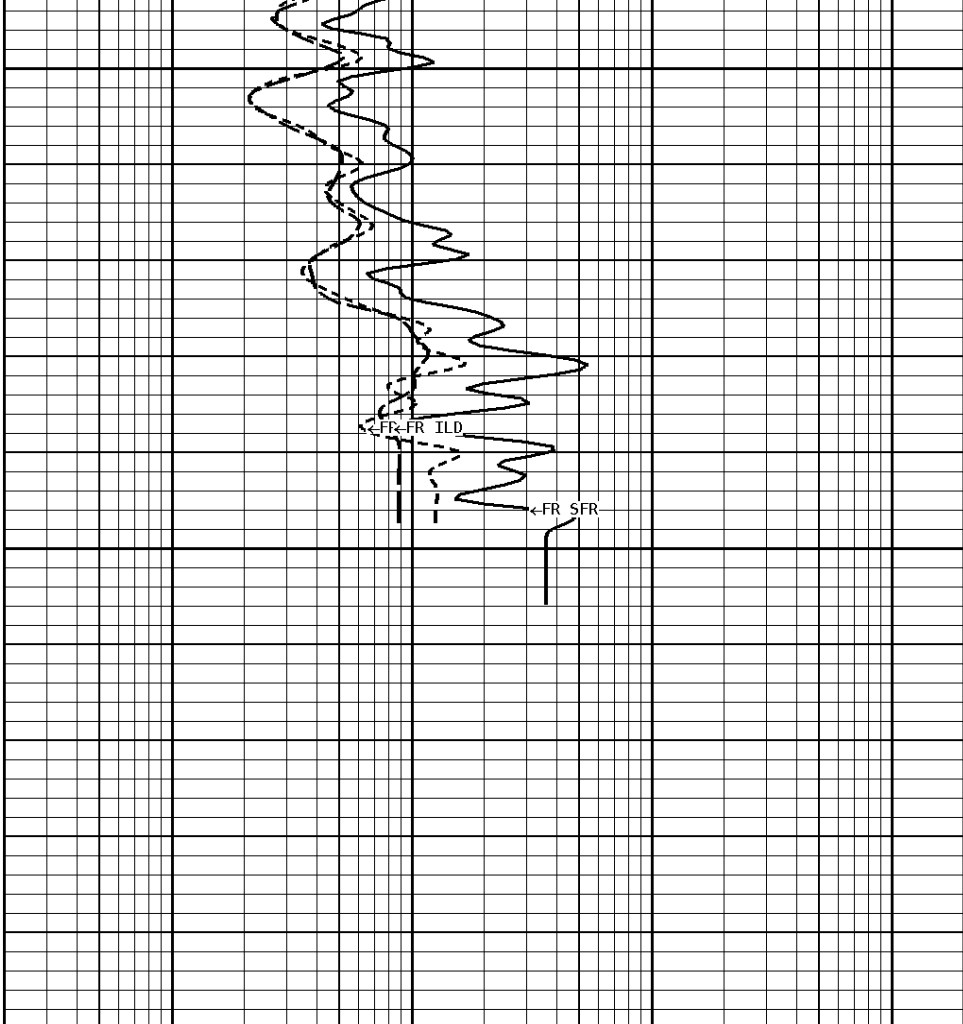


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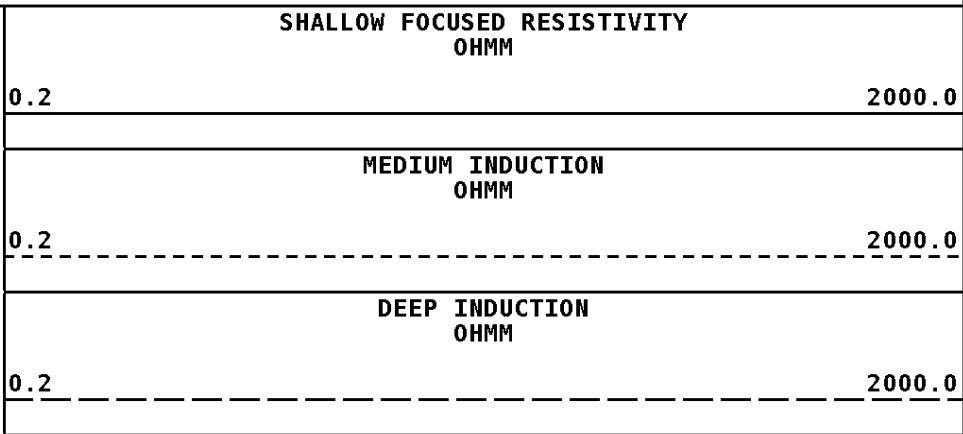
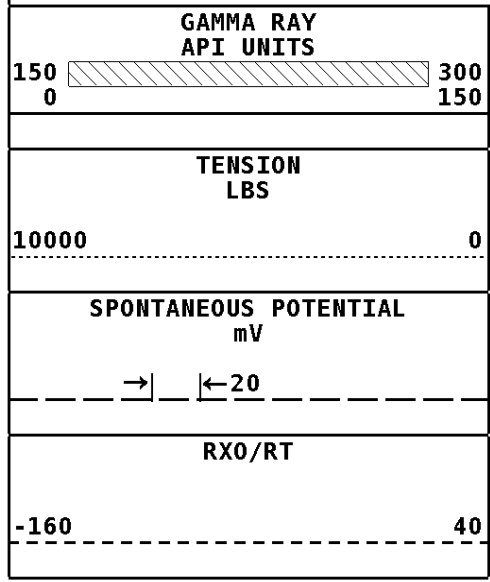
5451

100 300

File #1.1.3



1:240 REPEAT SECTION



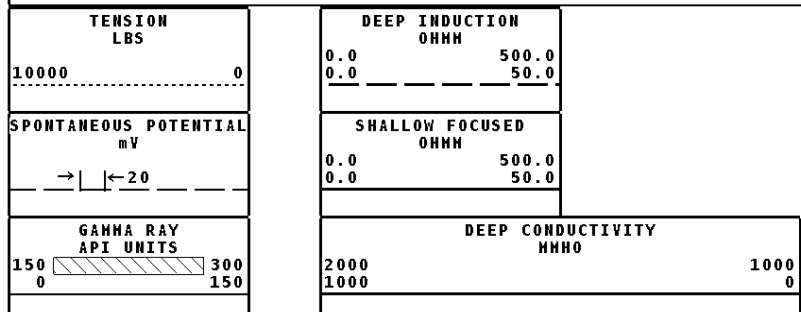
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet		
Drill Bit Size	7.875	in
Casing Diameter	5.500	in
BHT Depth	5451.000	ft
Borehole Temperature	132.0	degF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	2.000	ohm/m
Resistivity Of Mud Temperature	75.00	degF

*** Calibration Summary ***

Shop Calibration						
GRT-B						
Performed : 27-JUN-2014			Time : 09:08			
Sensor Suite : GR-GR5			ID : GRT-BB-117			
	Measured	Units	Calibrated	Units		
GR	Background	Jig	Jig			
	43	344	175	GRAPI		
Shop Calibration						
PIT-CA						
Performed : 15-APR-2014			Time : 14:04			
Sensor Suite : P-IND-T			ID : PIT-CA-062			
Medium						
	Measured	Units	Calibrated	Units		
	R	X	R	X		
Air	130583	130713	-0.1	-0.1	MMHOS	
Zero	131074	131072	27.3	6.4	MMHOS	
Reference	253427	250043	5027.3	5006.4	MMHOS	
Loop	130592	221688	3823.7	3823.0	MMHOS	
Sonde Error			-1.3	-15.8	MMHOS	
Cond			5027.3	5006.4	MMHOS	
Deep						
	Measured	Units	Calibrated	Units		
	R	X	R	X		
Air	129032	131483	-0.0	0.1	MMHOS	
Zero	131074	131059	39.8	-17.0	MMHOS	
Reference	233823	231658	2039.8	1983.0	MMHOS	
Loop	129039	222242	1804.5	1804.3	MMHOS	
Sonde Error			-8.5	-8.7	MMHOS	
Cond			2039.8	1983.0	MMHOS	
Temperature						
	Measured	Units	Calibrated	Units		
	Low	High	Low	High		
	16980.0	56920.0	70.0	350.0	DEGF	
Performed : 15-Apr-2014			Time : 13:51			
Sensor Suite : SFL			ID : PIT-CA-062			
Internal						
	Measured	Units	Calibrated	Units		
	Zero	Reference	Zero	Reference		
Im	32763.3	48949.7	0.0	7028.0	uA	
Ib	32767.3	48756.3	0.0	1750.0	mA	
MOM1	32726.5	57507.3	0.0	175.0	mV	
Equivalent SFL				43.97	OHMM	
Performed : 15-Apr-2014			Time : 13:49			
Sensor Suite : P-SP			ID : PIT-CA-062			
Internal						
	Measured	Units	Calibrated	Units		
	Zero	Reference	Zero	Reference		
	32765.9	58980.4	0.0	1000.0	mV	

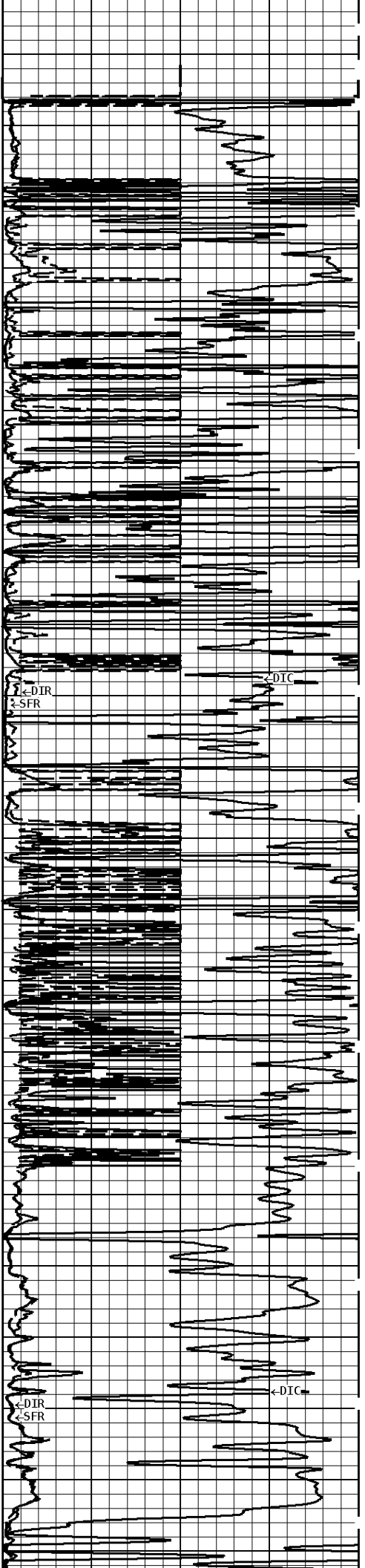
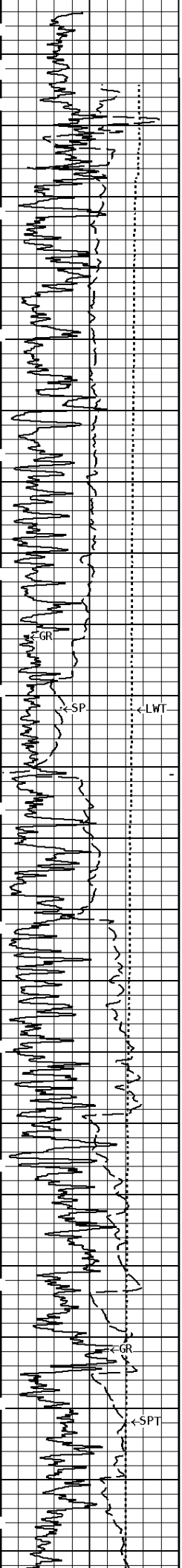
Well File: CHIEFTAIN OIL BLEVINS A SWD 1 JUNE29 MSTK	Scale: 1:1200	Format: DIL1200
Segment: V1.D1.S5 Reprocess of MAIN	Acquired: 2014-06/29 18:59 3.5.0-12850	
Reference: 0	Processed: 2014-06/29 20:13 3.5.0-12850	

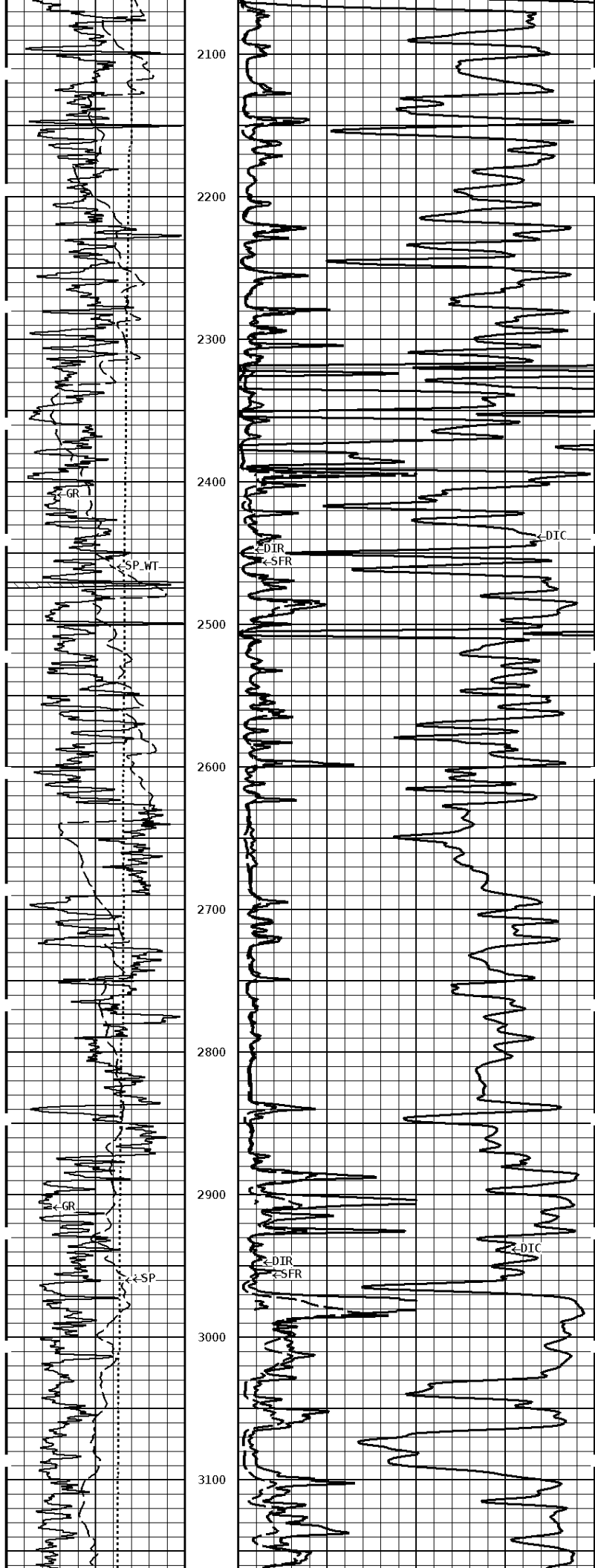


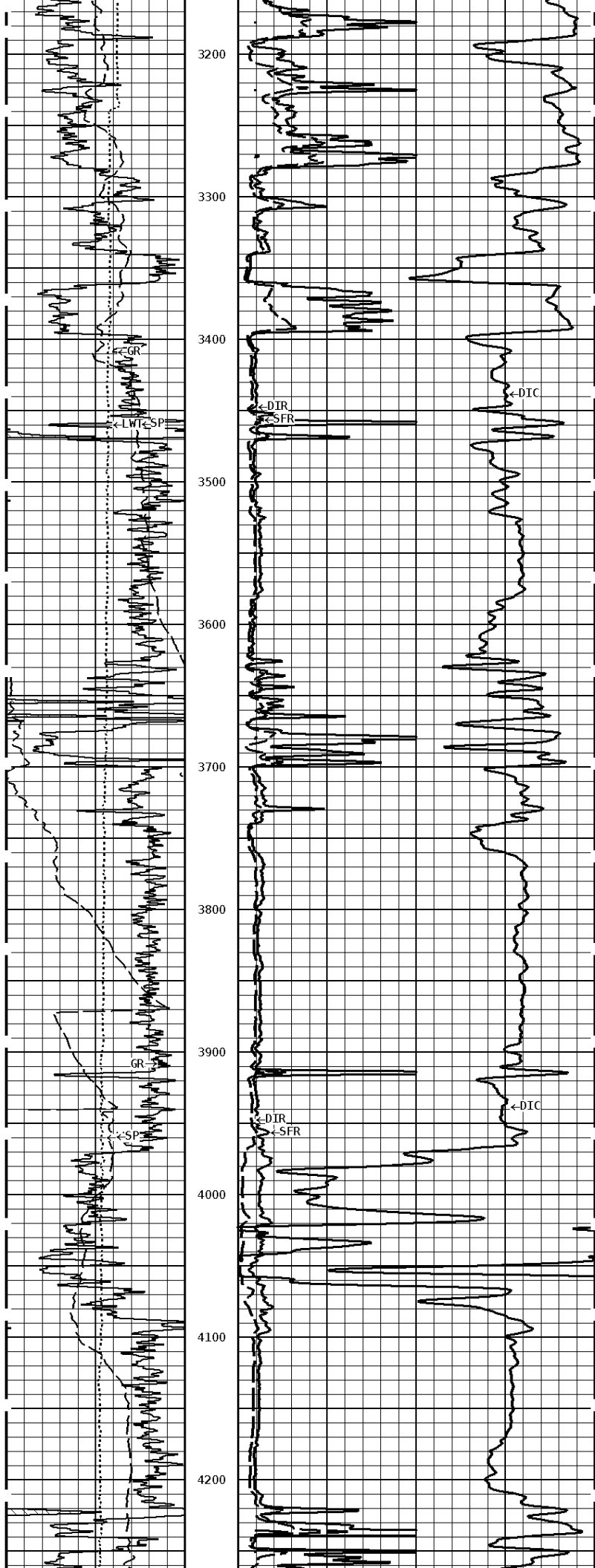
1:1200 MAIN SECTION

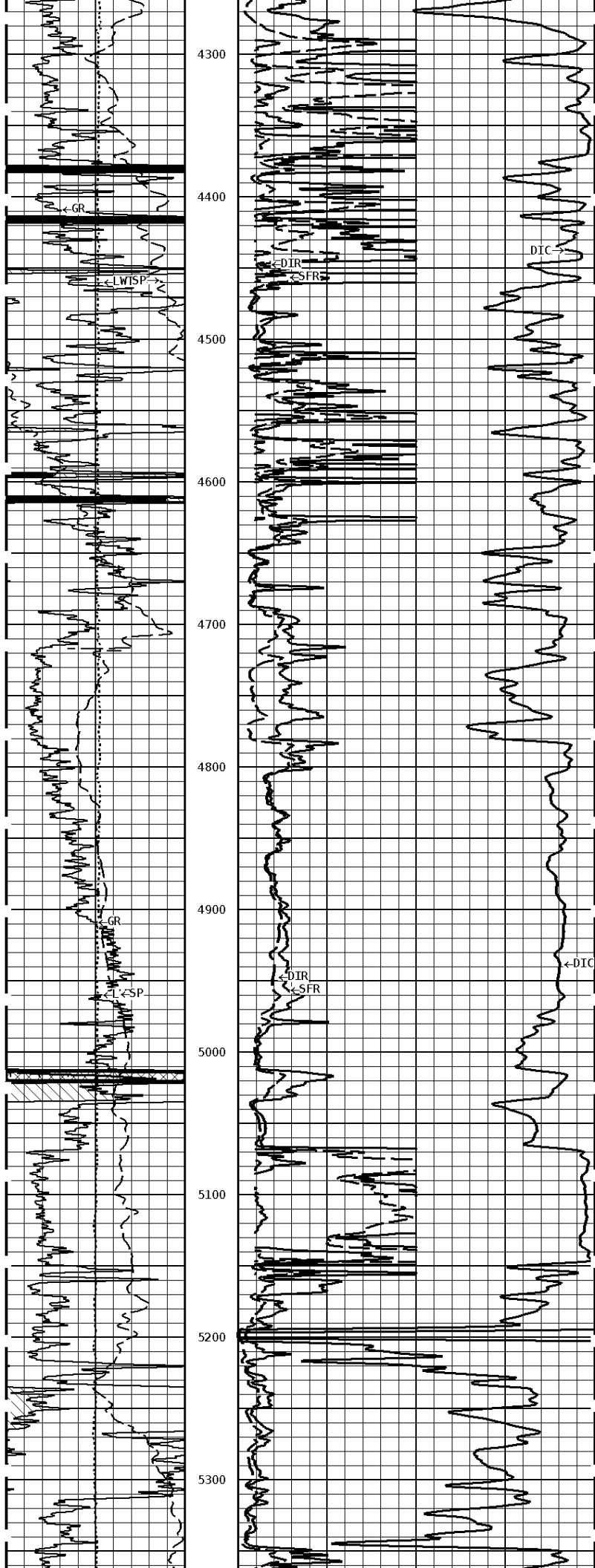
File #1.1.5

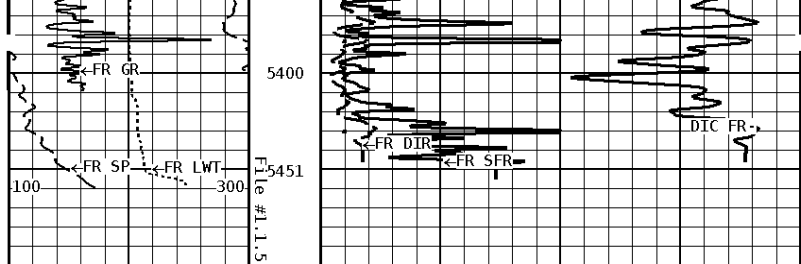
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000



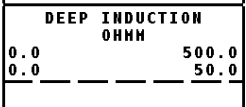
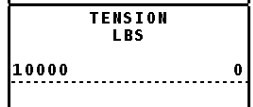
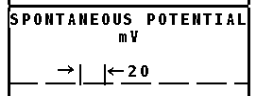
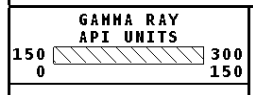








1:1200 MAIN SECTION



Tucker
ENERGY SERVICES

Company: CHIEFTAIN OIL CO., INC
 Well: BLEVINS A SWD #1
 Location: 1970' FSL & 450' FWL
 Logged: 06-29-2014
 K.B. Elev: 1367.0 Ft