

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
 CASING MESURED FROM GL AT 212' SO ADD 9FT BECAUSE LOGGER MEASURED FORM GL

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:
 J.VAUGH
 D.RAGSDALE
 D.LEGLEITER

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 **Length:** 3.40 ft. **O.D.** 3.60 in.
 Gamma Ray Controller

Sonde ID :GRT-BC-038

Measure Point **Tool Offset** **Stack Offset** **Bottom Offset**

Tool: CNT-AA **Length:** 9.30 ft. **O.D.** 4.36 in.
 Compensated Neutron A Pad on NDT-A

Sonde ID :NDT-AF-411

Source ID :N-1104

Pad ID :CNP-AE-41

Measure Point **Tool Offset** **Stack Offset** **Bottom Offset**

Tool: LDT-DA **Length:** 9.30 ft. **O.D.** 4.80 in.
 Litho Density D Pad on NDT-A

Sonde ID :NDT-FA-404

Source ID :1637GW

Pad ID :LDP-DA-062

Measure Point **Tool Offset** **Stack Offset** **Bottom Offset**



7.20 19.90 33.25
 7.20 19.90 33.25

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC,D)
Sonde ID :MST-DA-29

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-AC-043

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

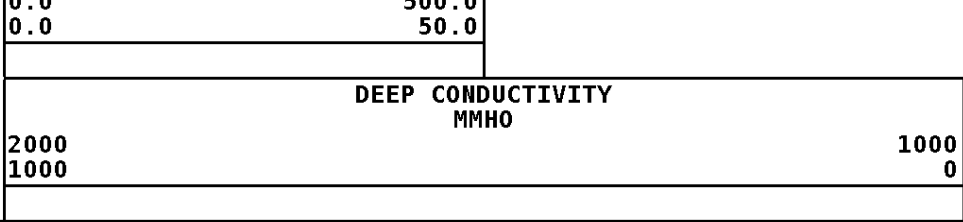
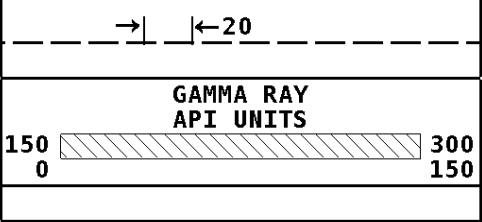
Well File: ENTRANSCO D-WIEBE 32-1 NOV 8 MST **Scale:** 1:600 **Format:** DIL-600
Segment: V1.D1.S6 Reprocess MAIN **Acquired:** 2019-11/08 07:32 3.4.1-13972
Reference: 0 **Processed:** 2019-11/08 08:32 3.4.1-13972

TENSION LBS	0
10000	0

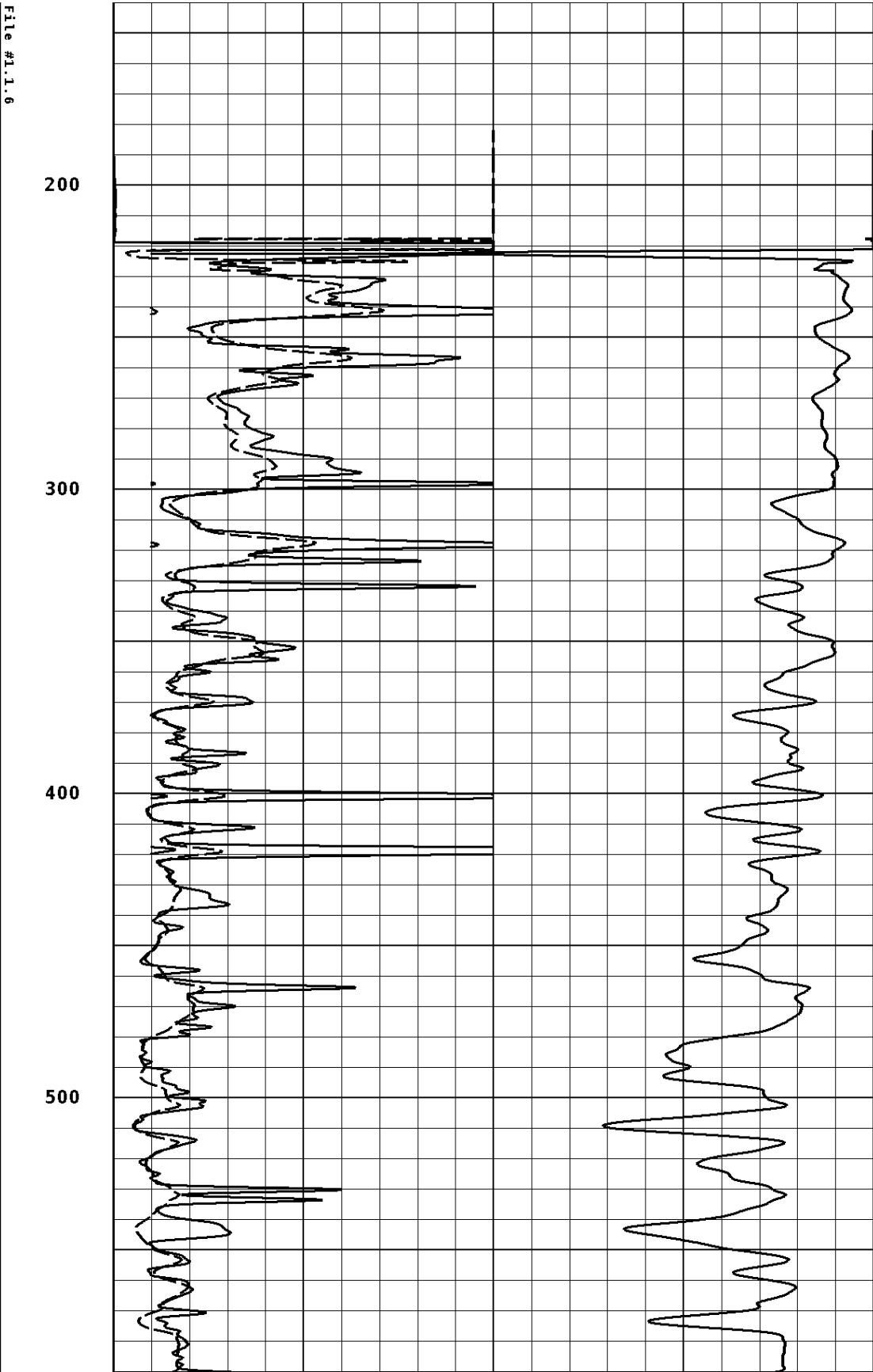
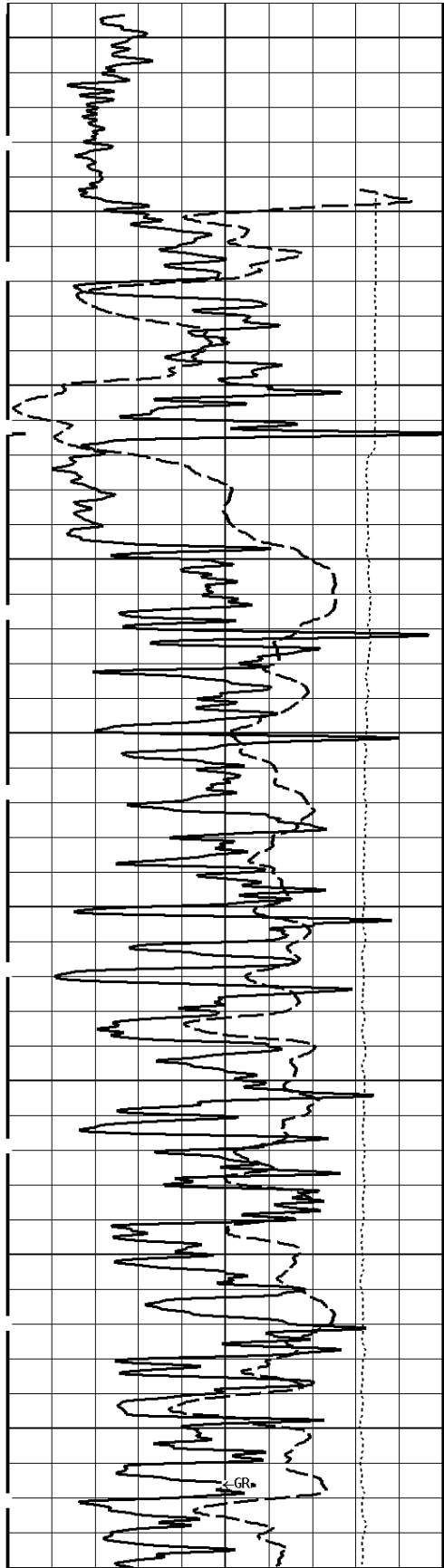
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0.0	50.0
0.0	50.0

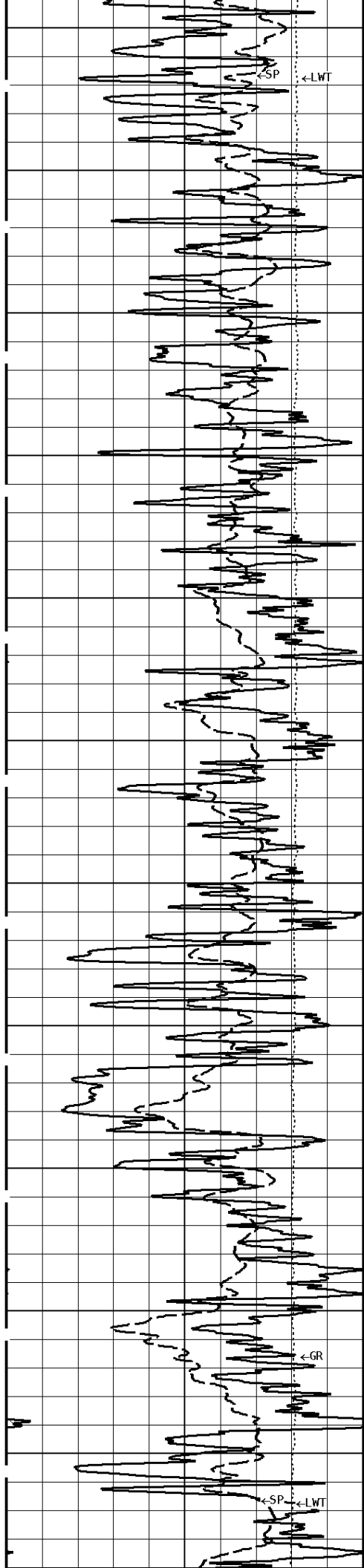
SPONTANEOUS POTENTIAL mV	0.0
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SHALLOW FOCUSED RESISTIVITY OHMM	500.0
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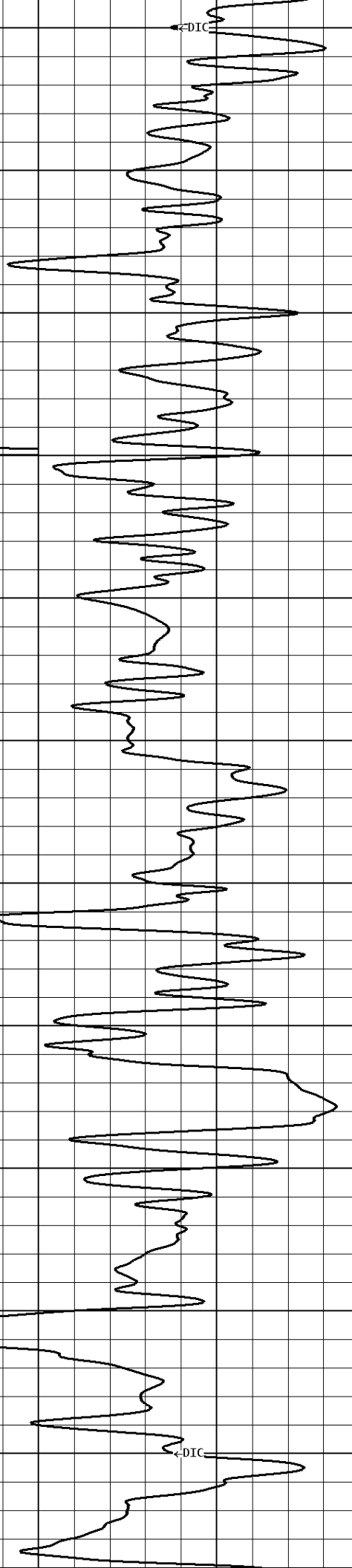
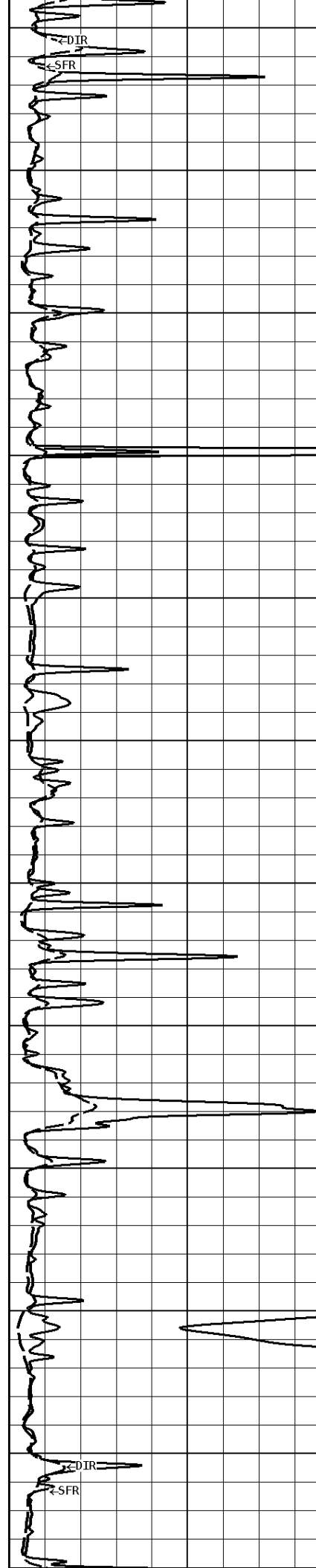


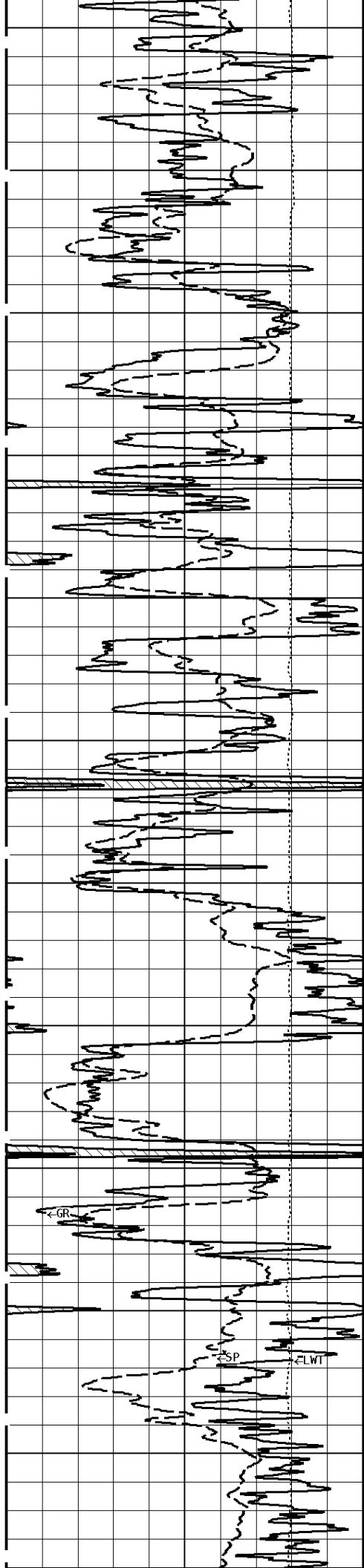
1:600 MAIN SECTION





600
700
800
900
1000
1100





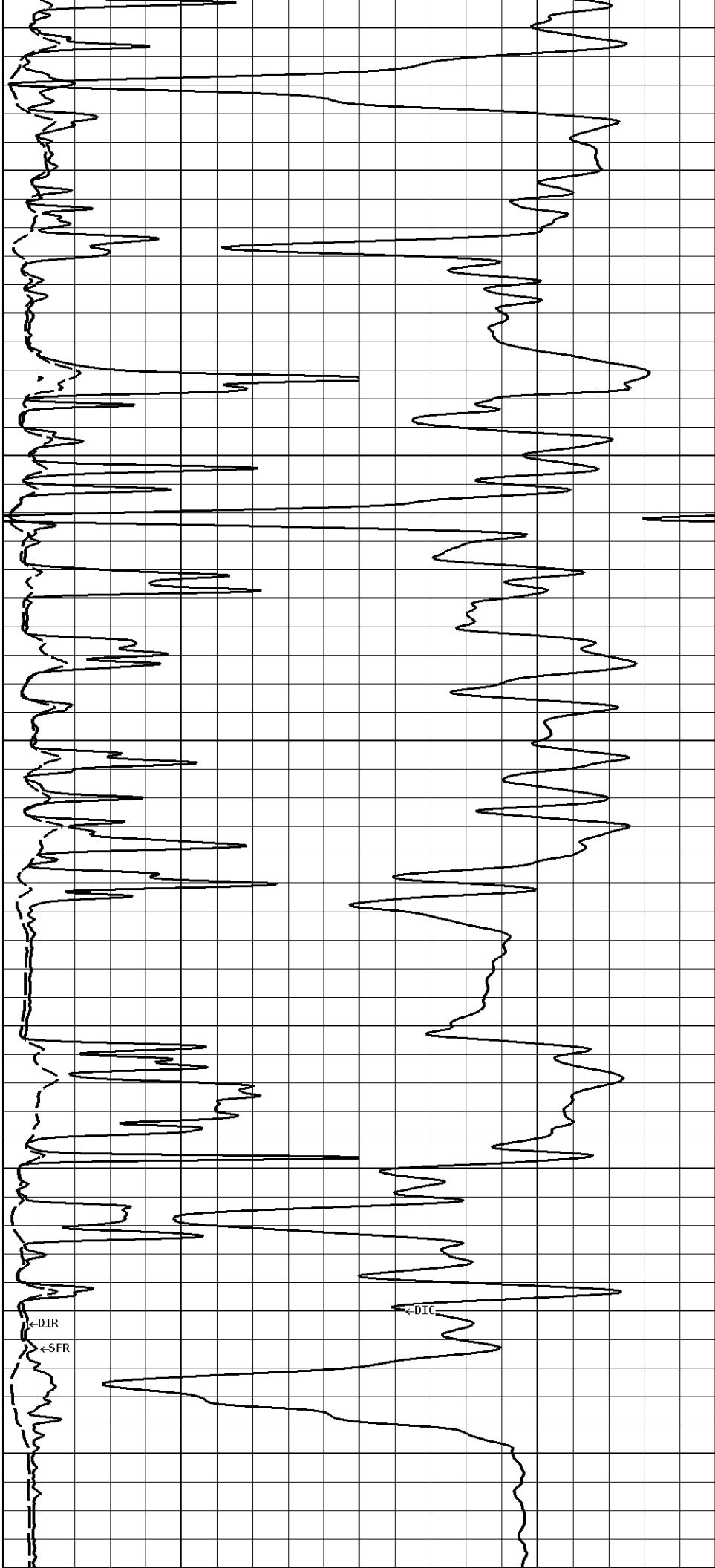
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1300

1400

1500

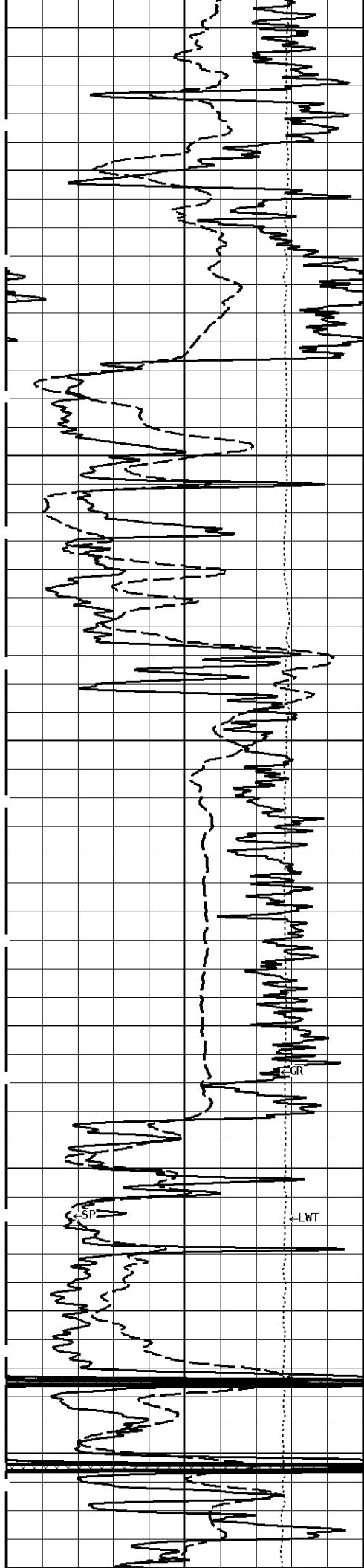
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DIR

SFR

DIC



1700

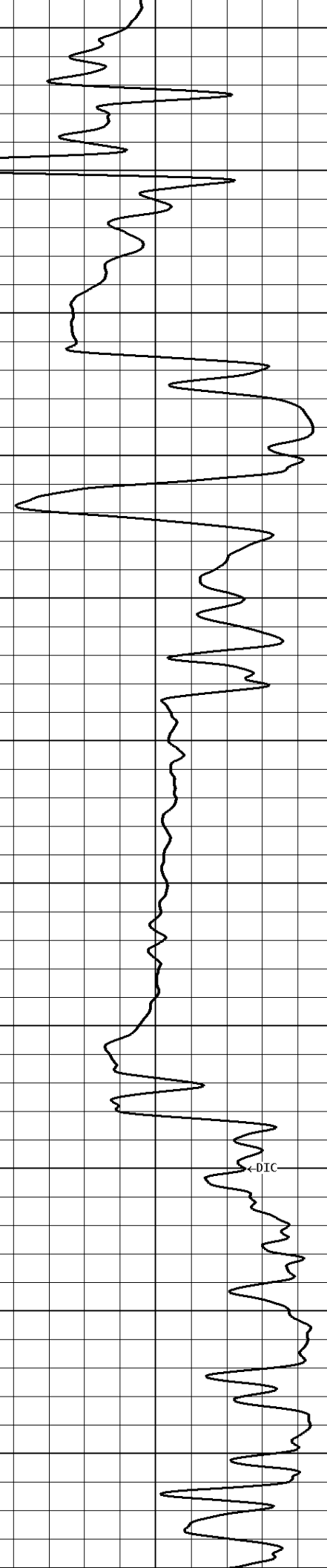
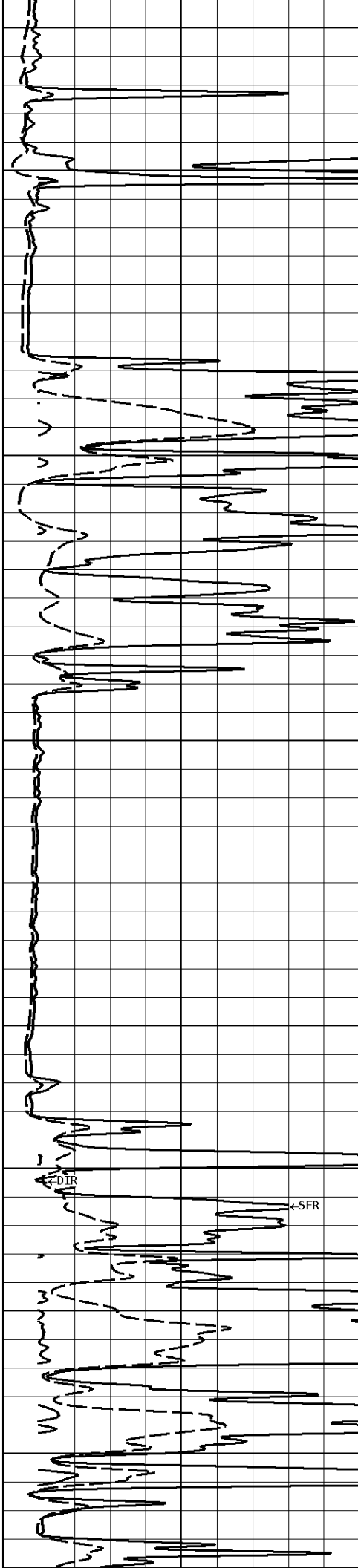
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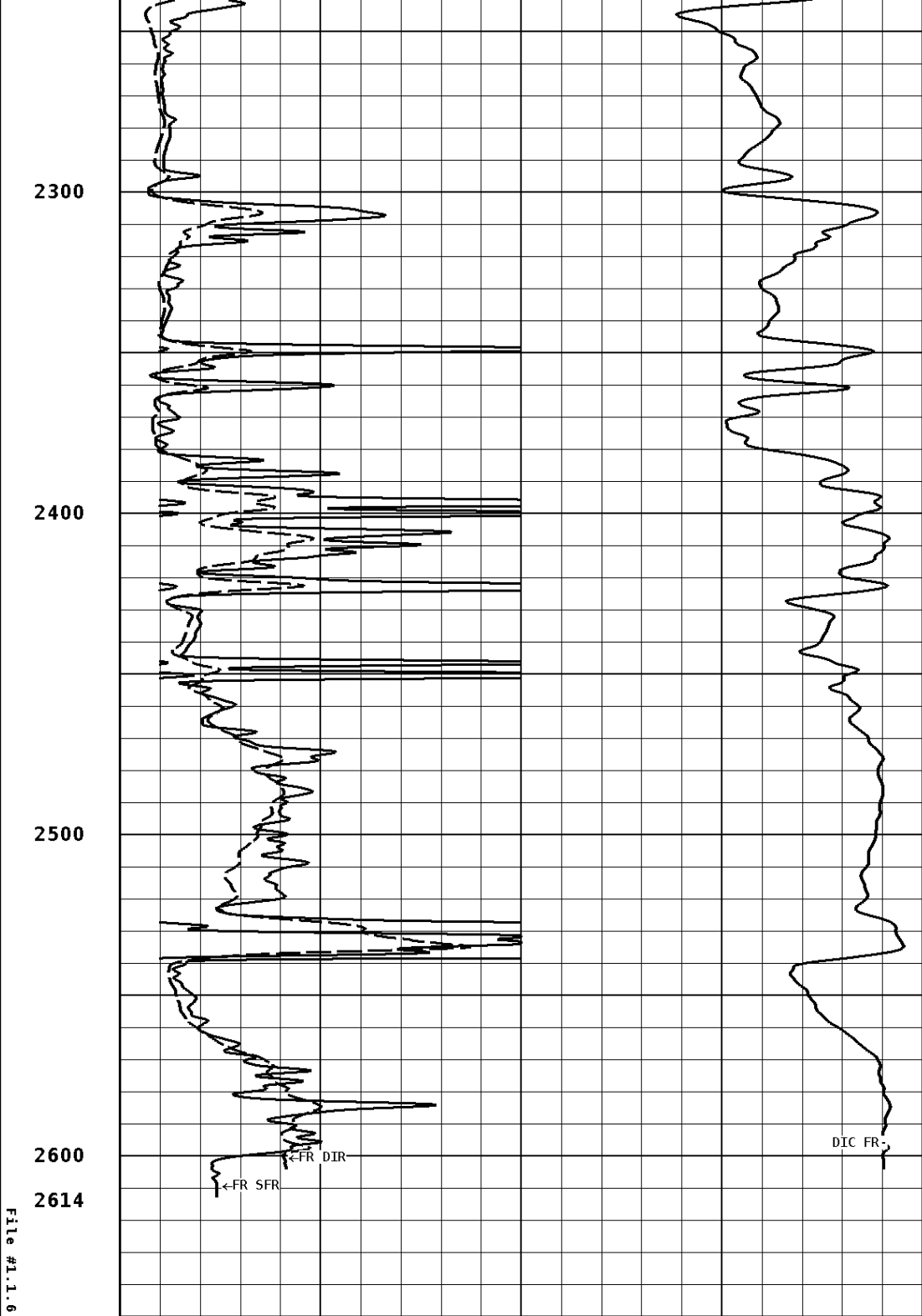
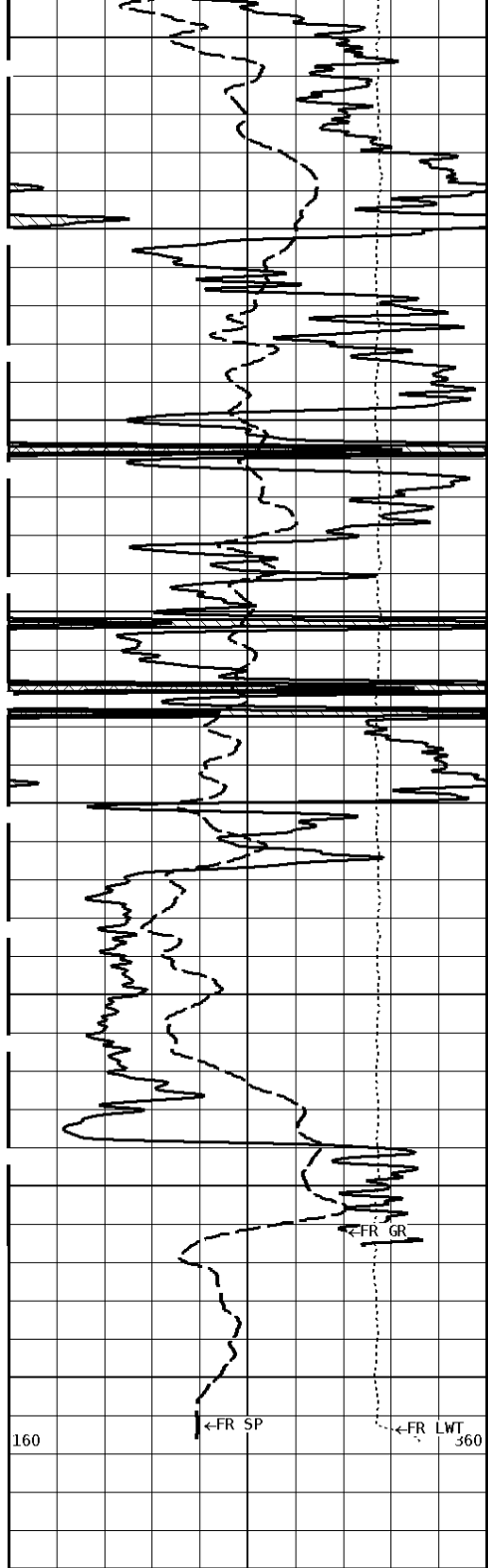
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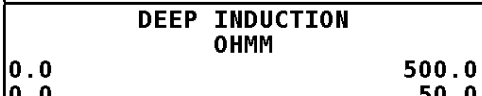
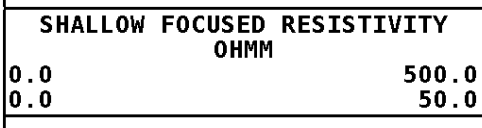
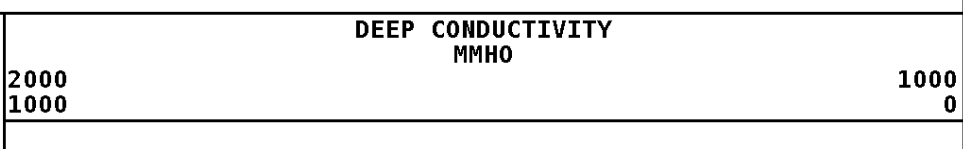
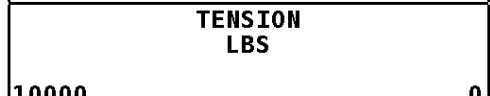
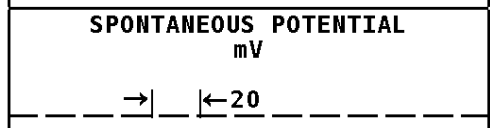
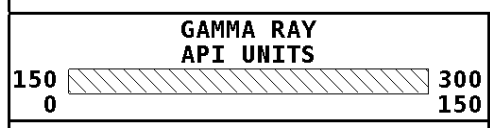
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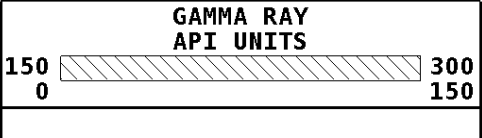
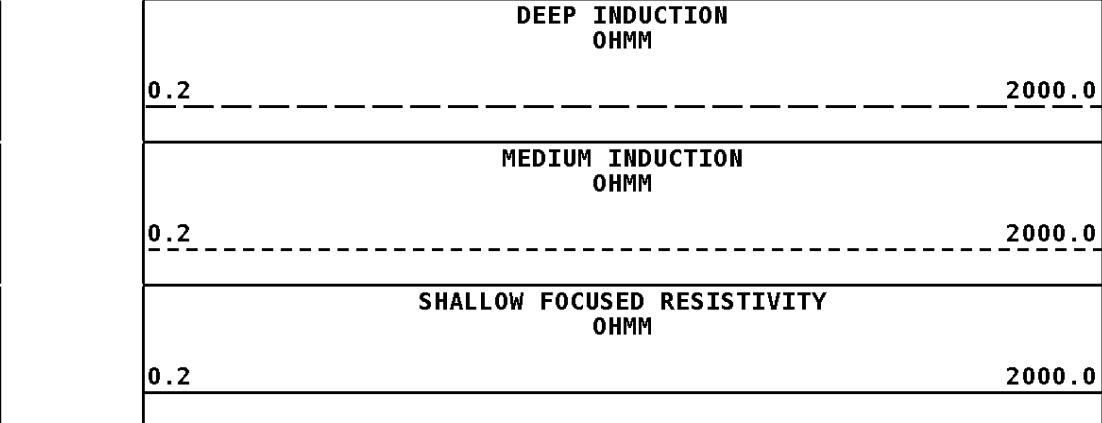
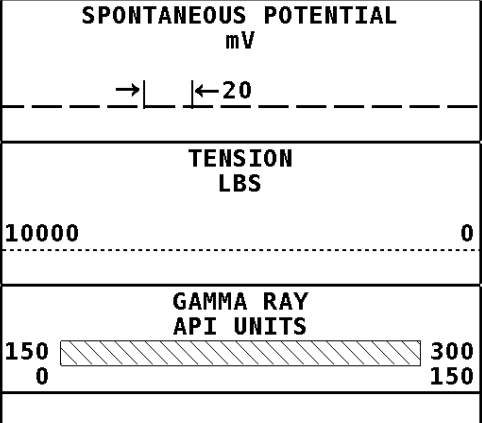
1:600 MAIN SECTION



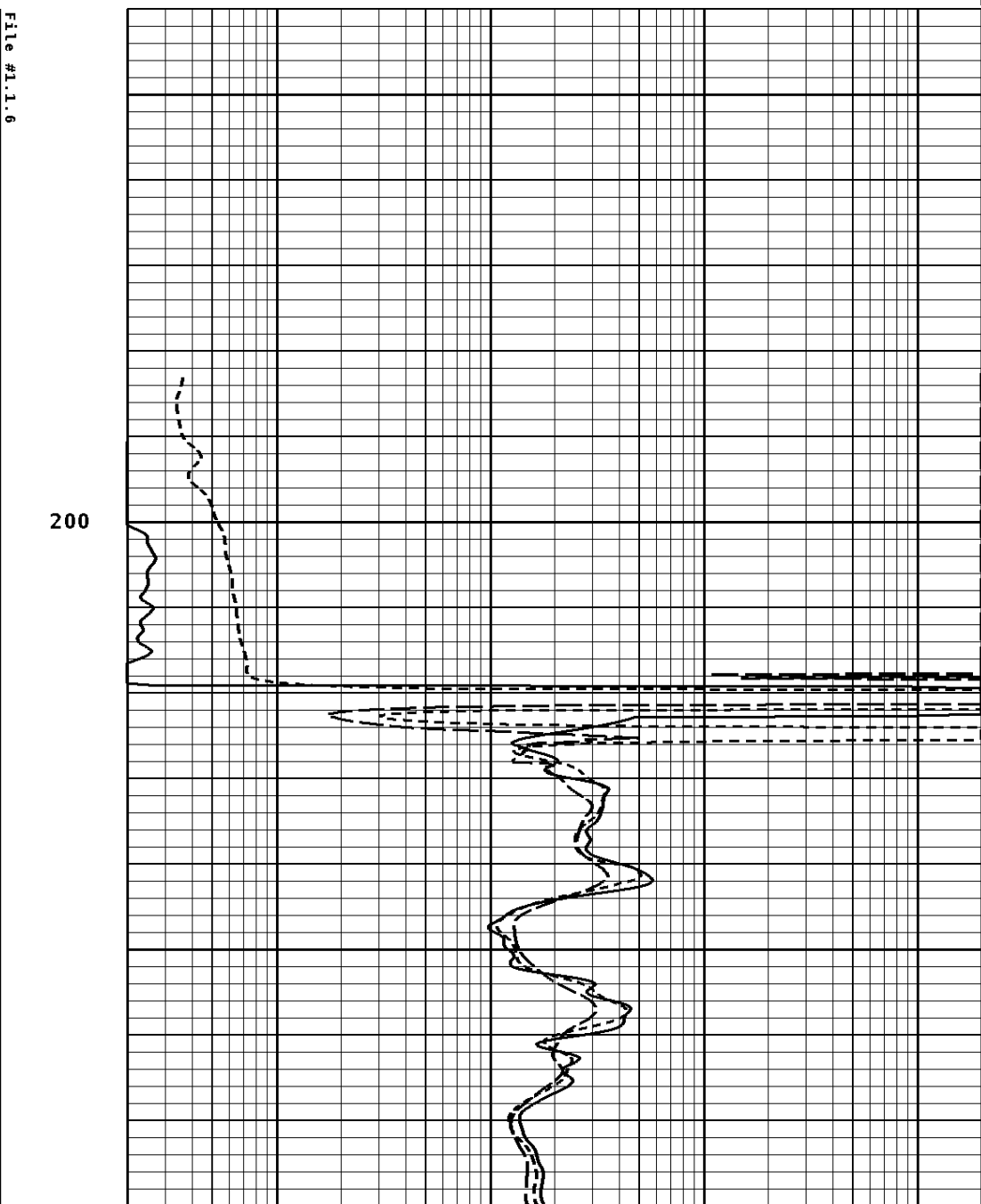
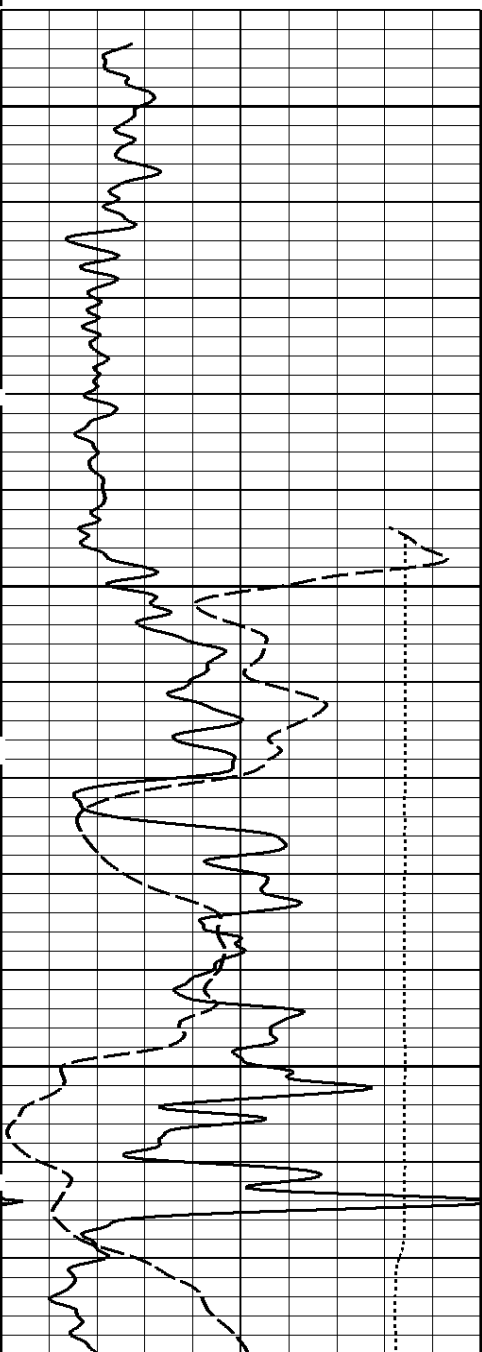
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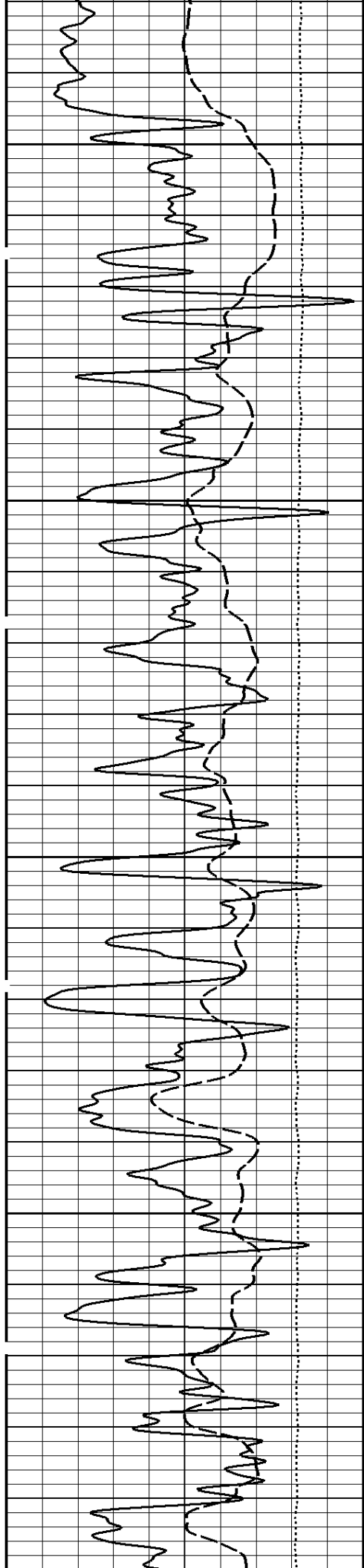
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 Segment: V1.D1.S6 Reprocess MAIN Acquired: 2019-11/08 07:32 3.4.1-13972
 Reference: 0 Processed: 2019-11/08 08:32 3.4.1-13972



1:240 MAIN SECTION

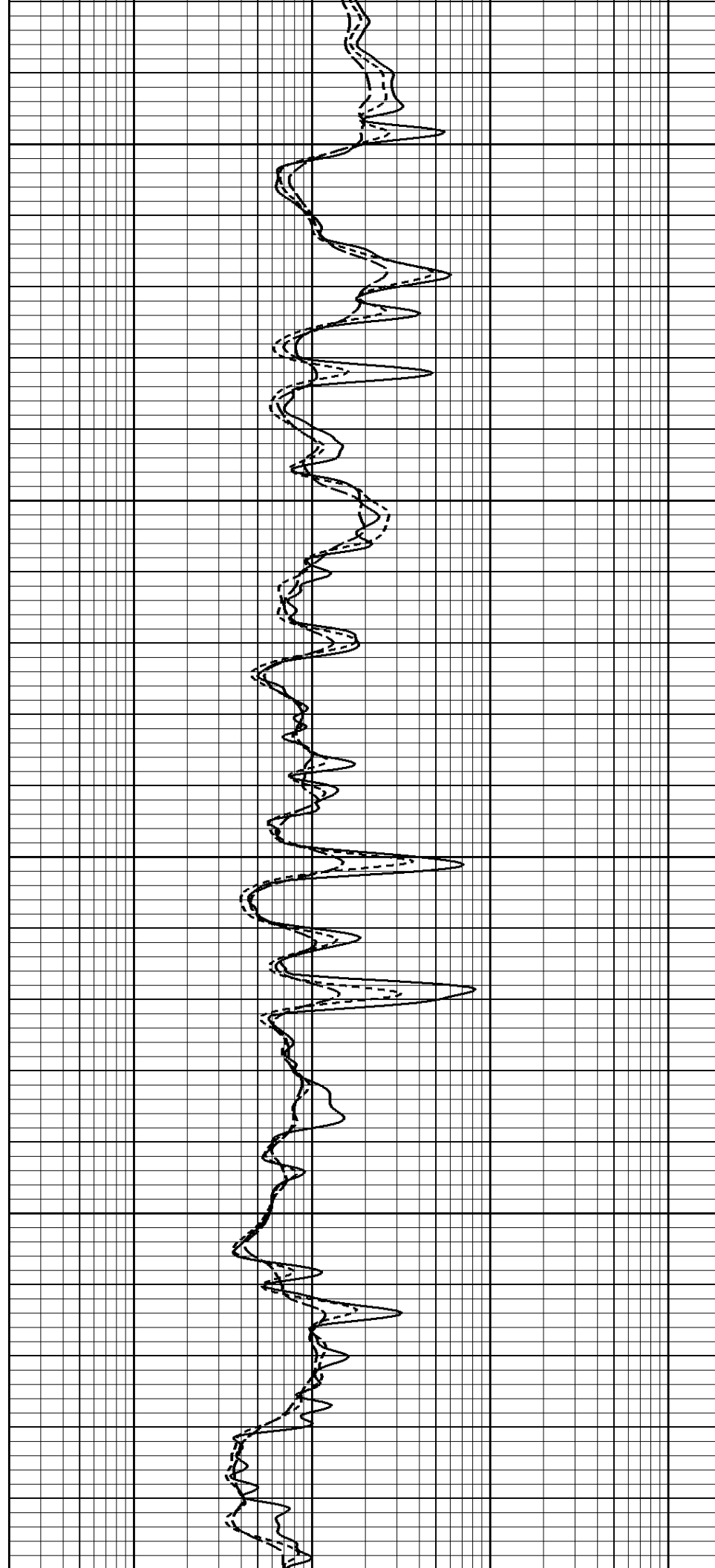




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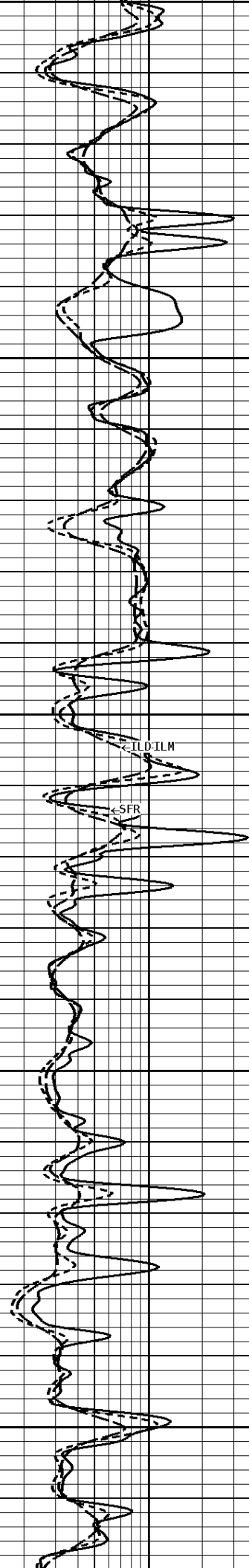
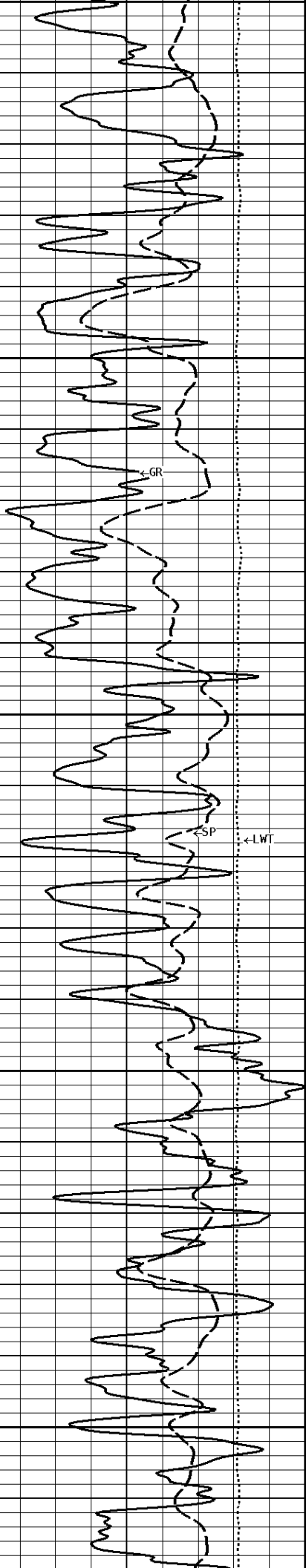
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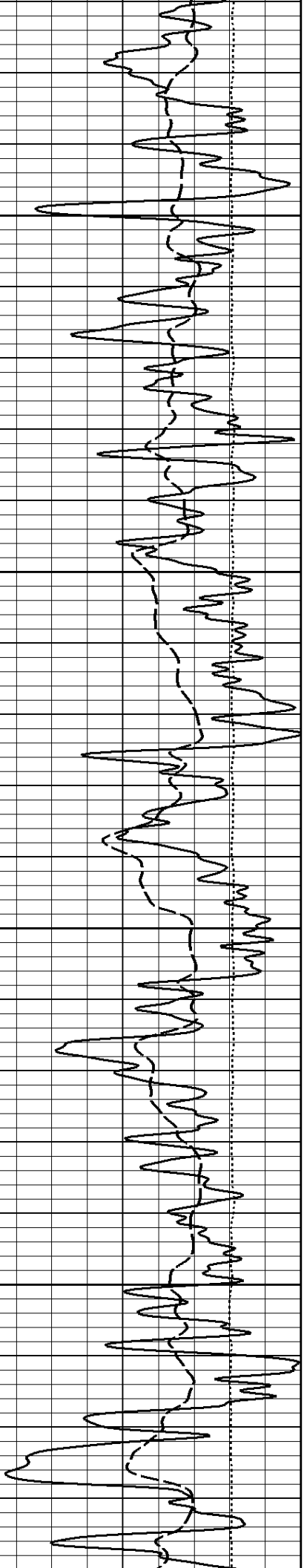


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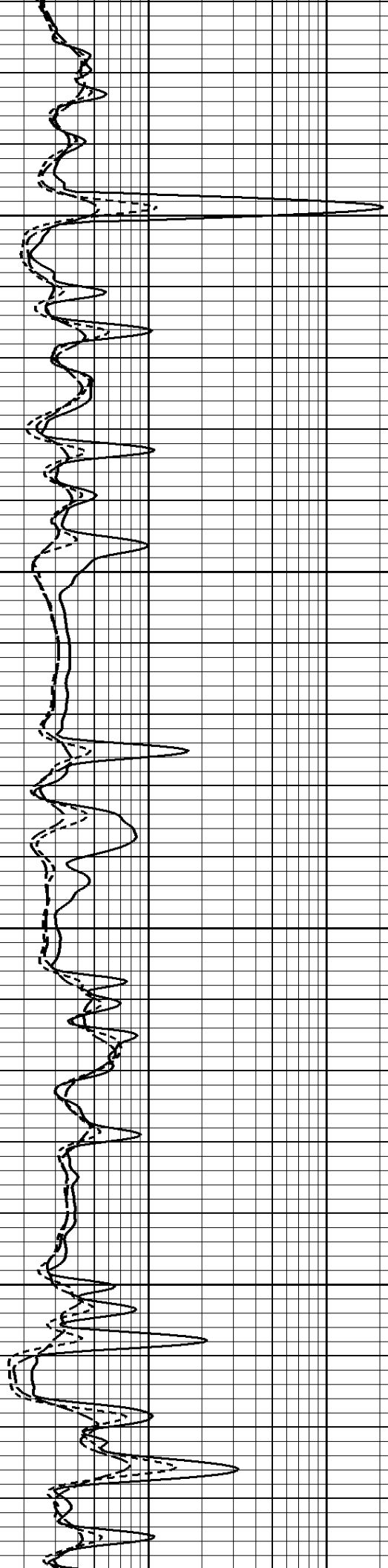
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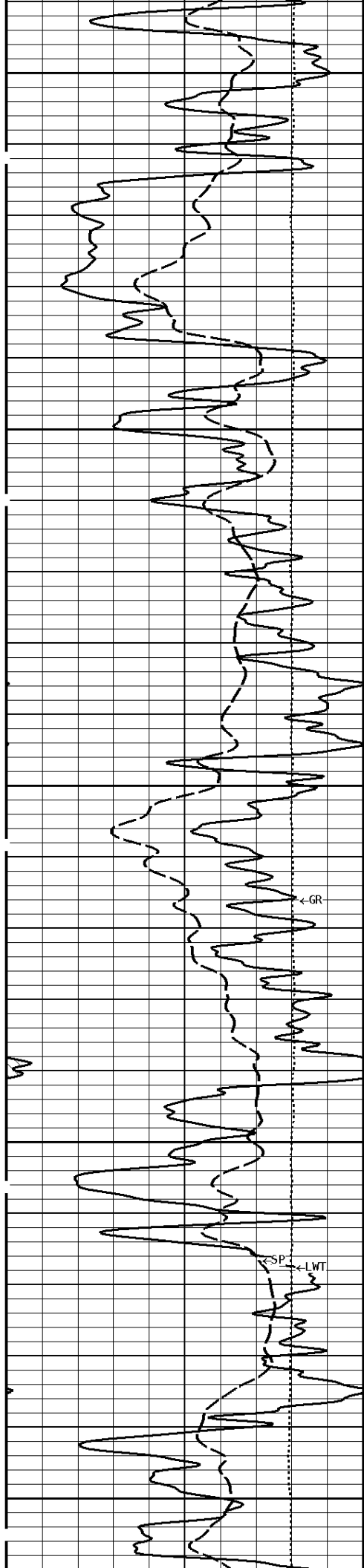




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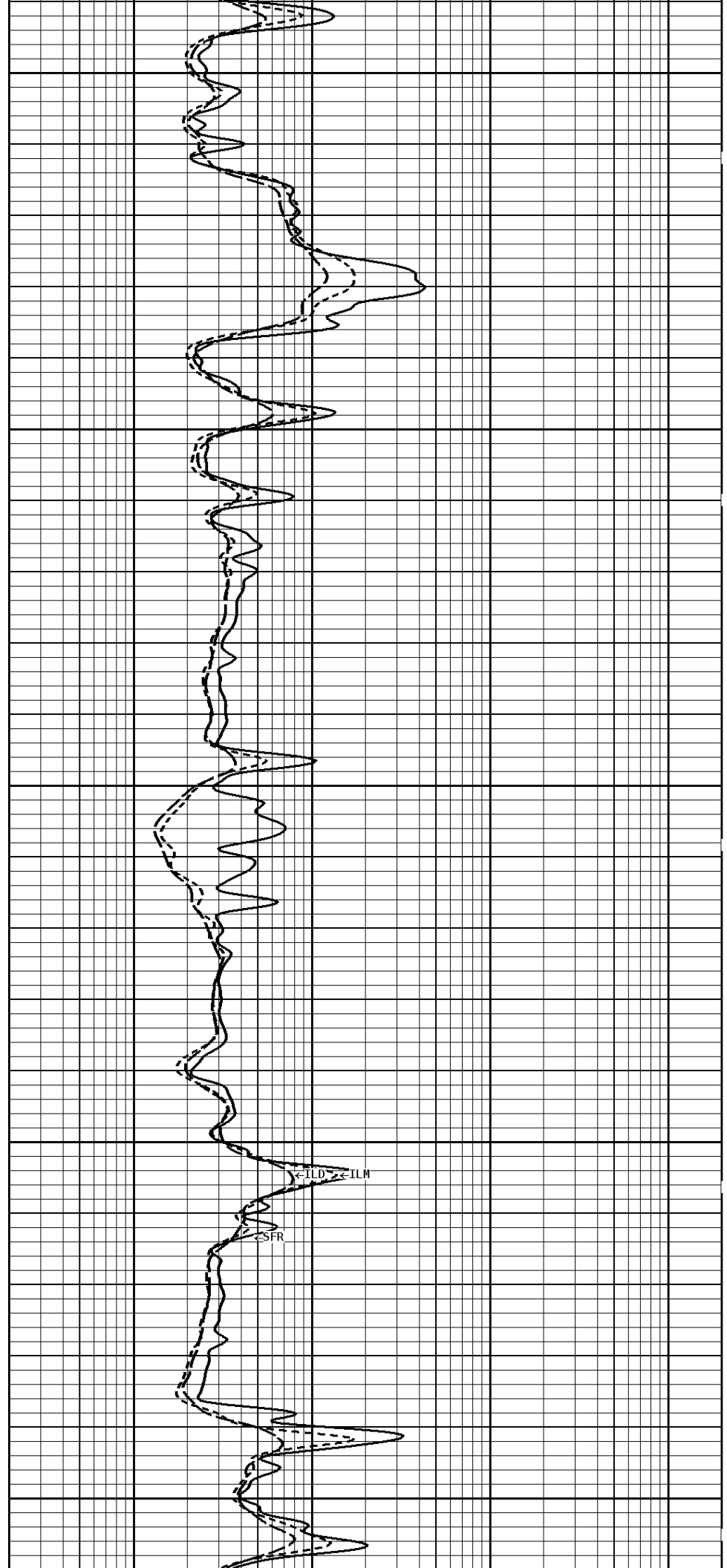
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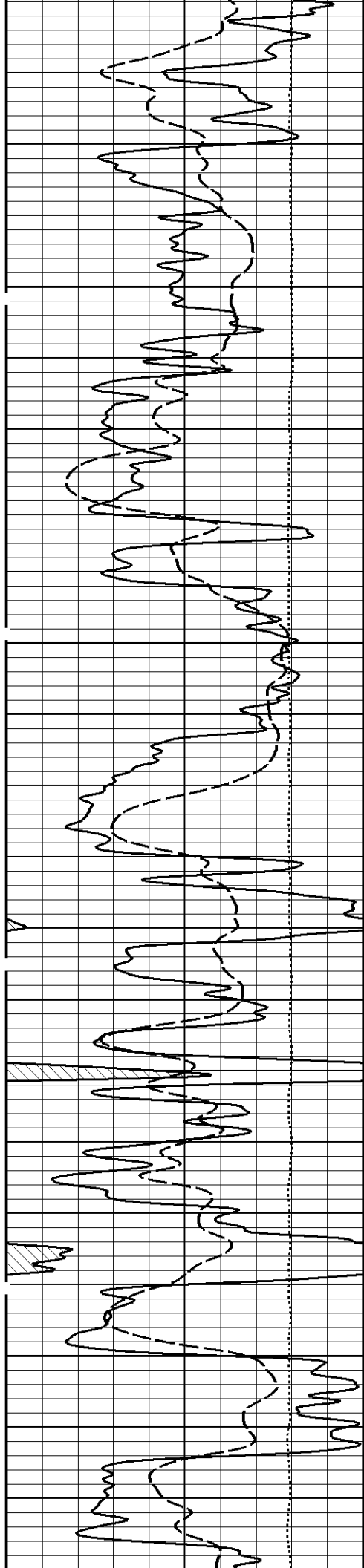




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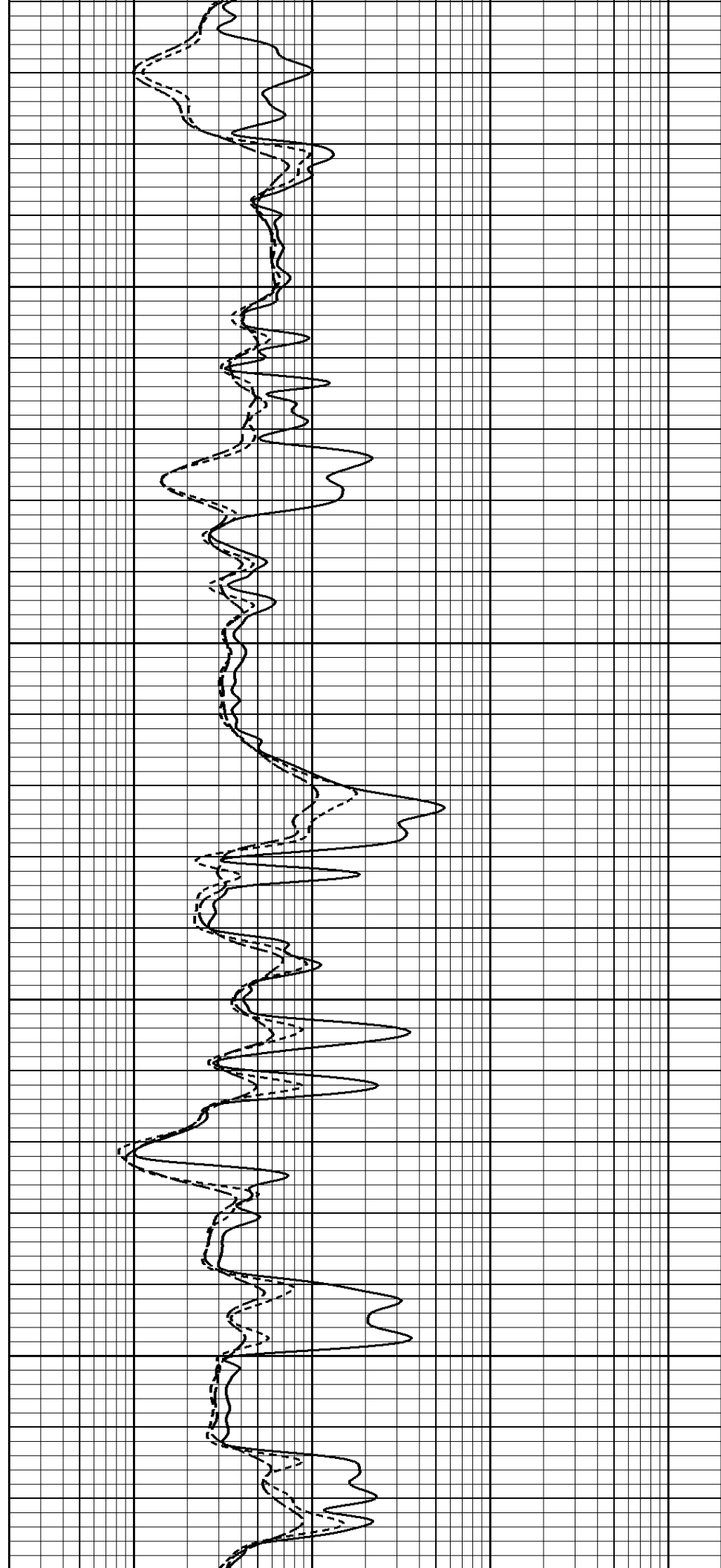
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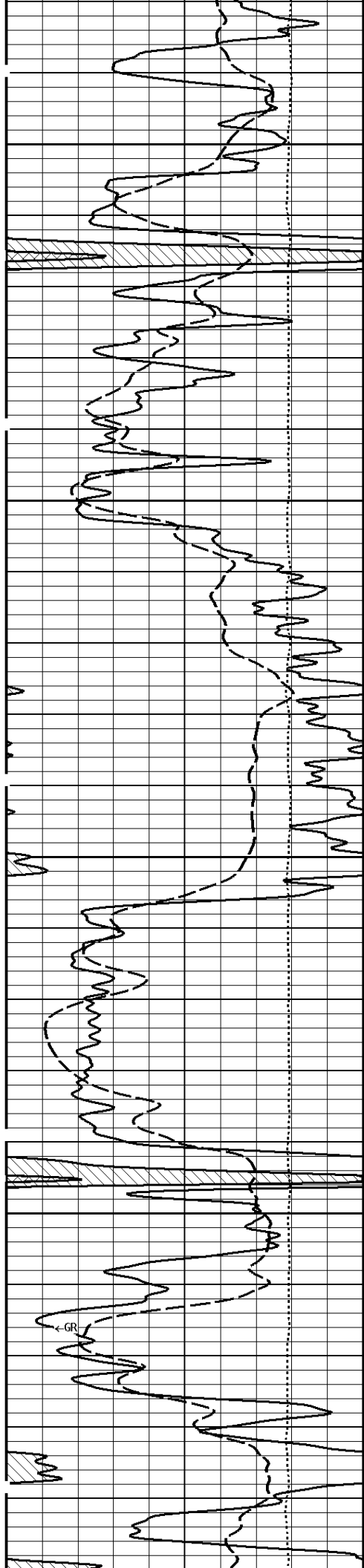




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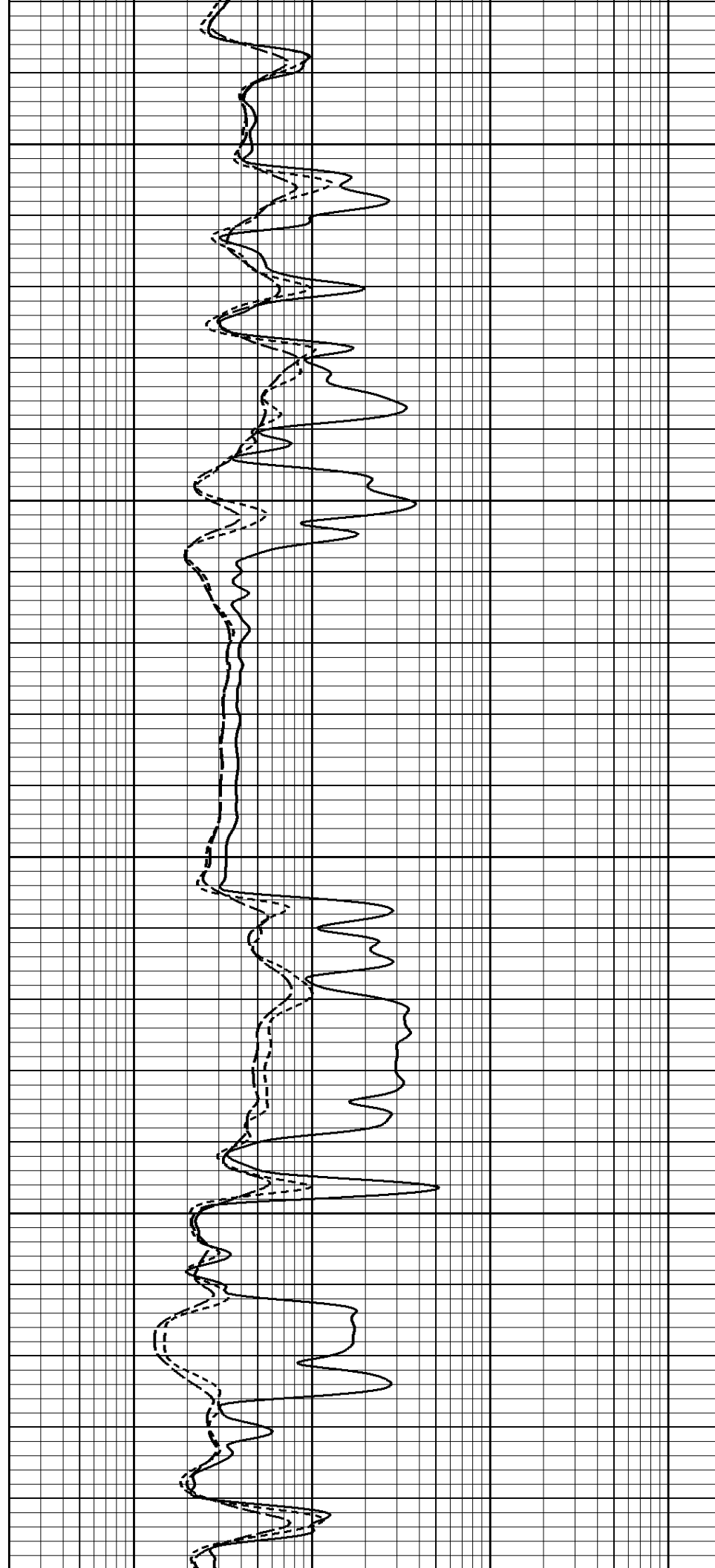




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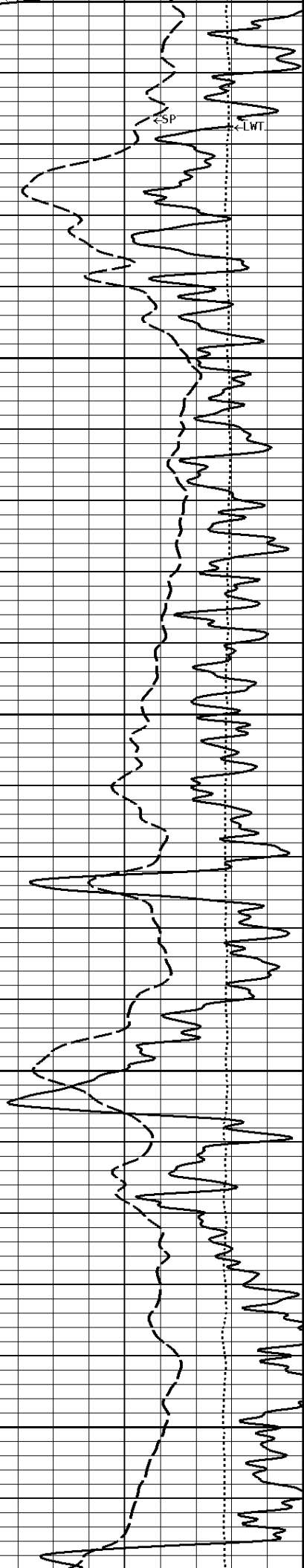
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1600



1600

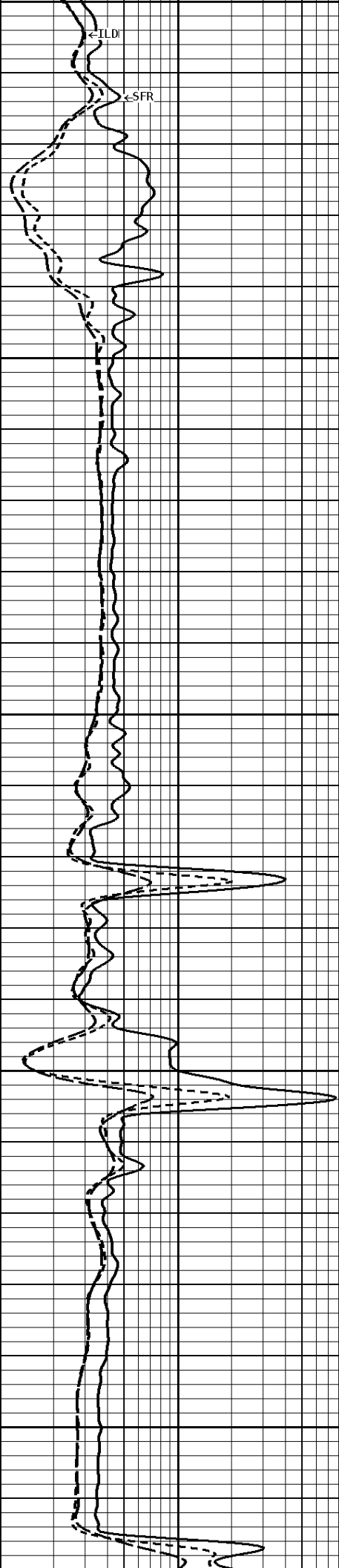
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←LWT

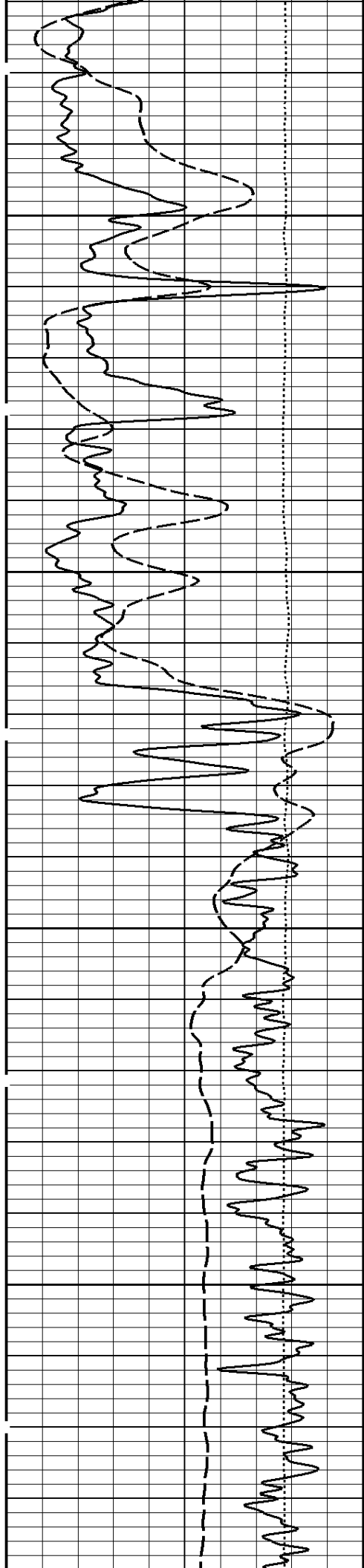


1700

1800

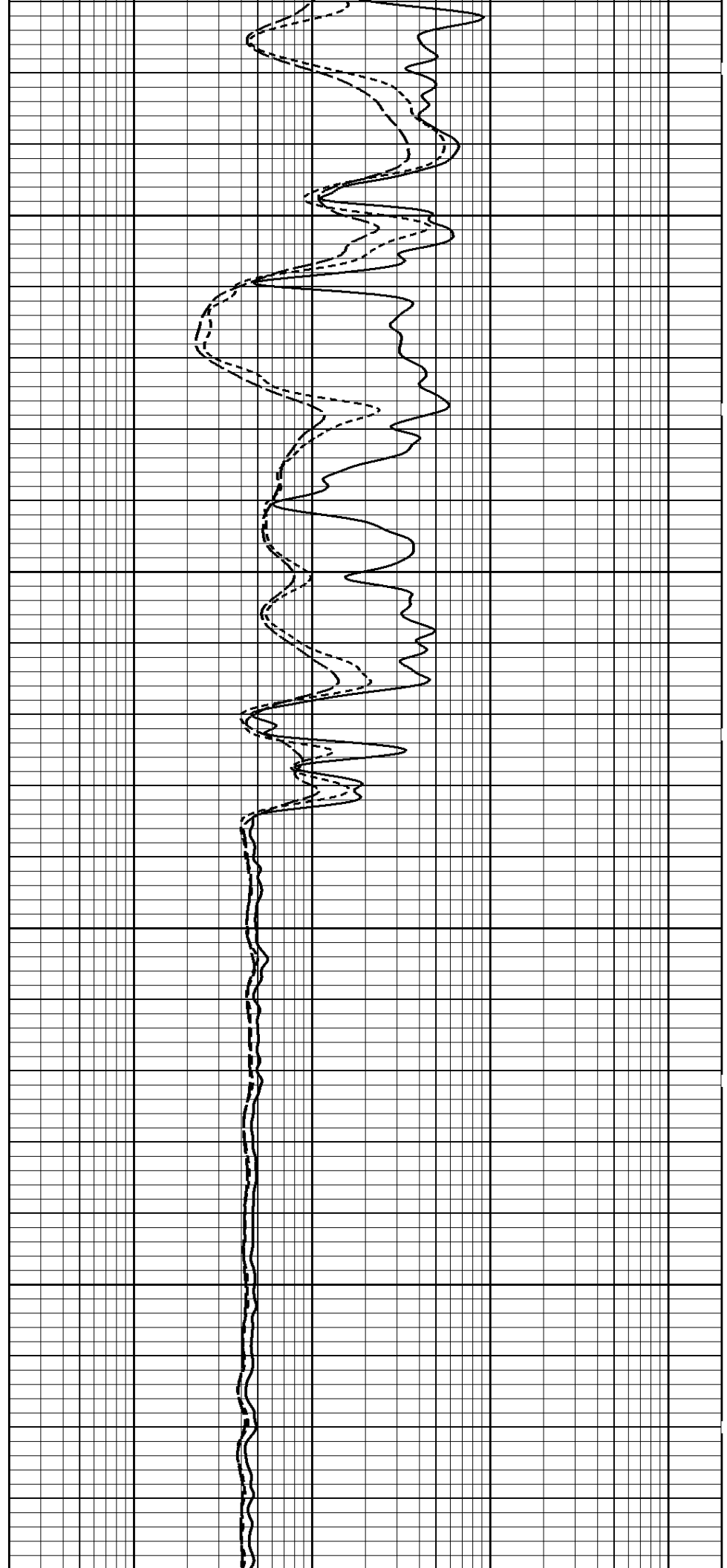
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←SFR

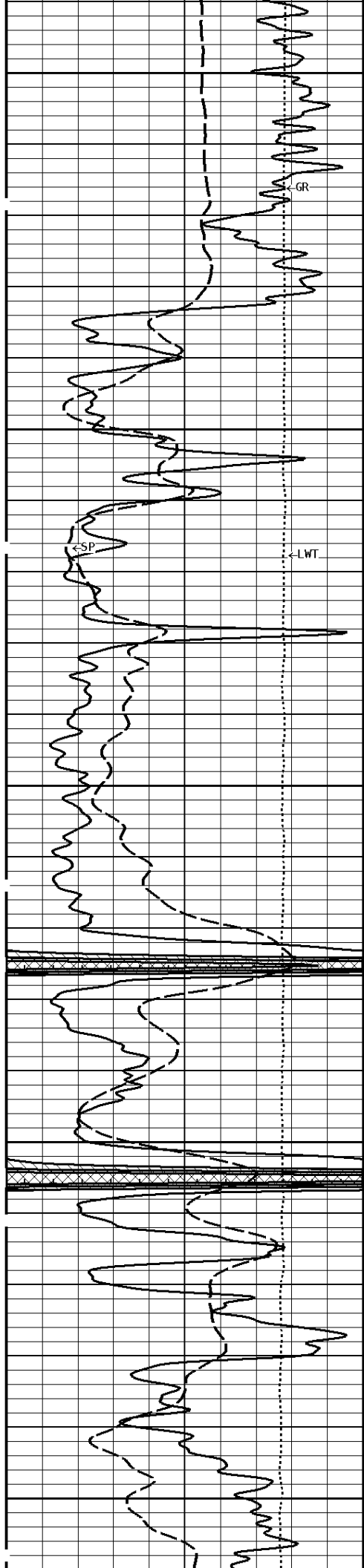




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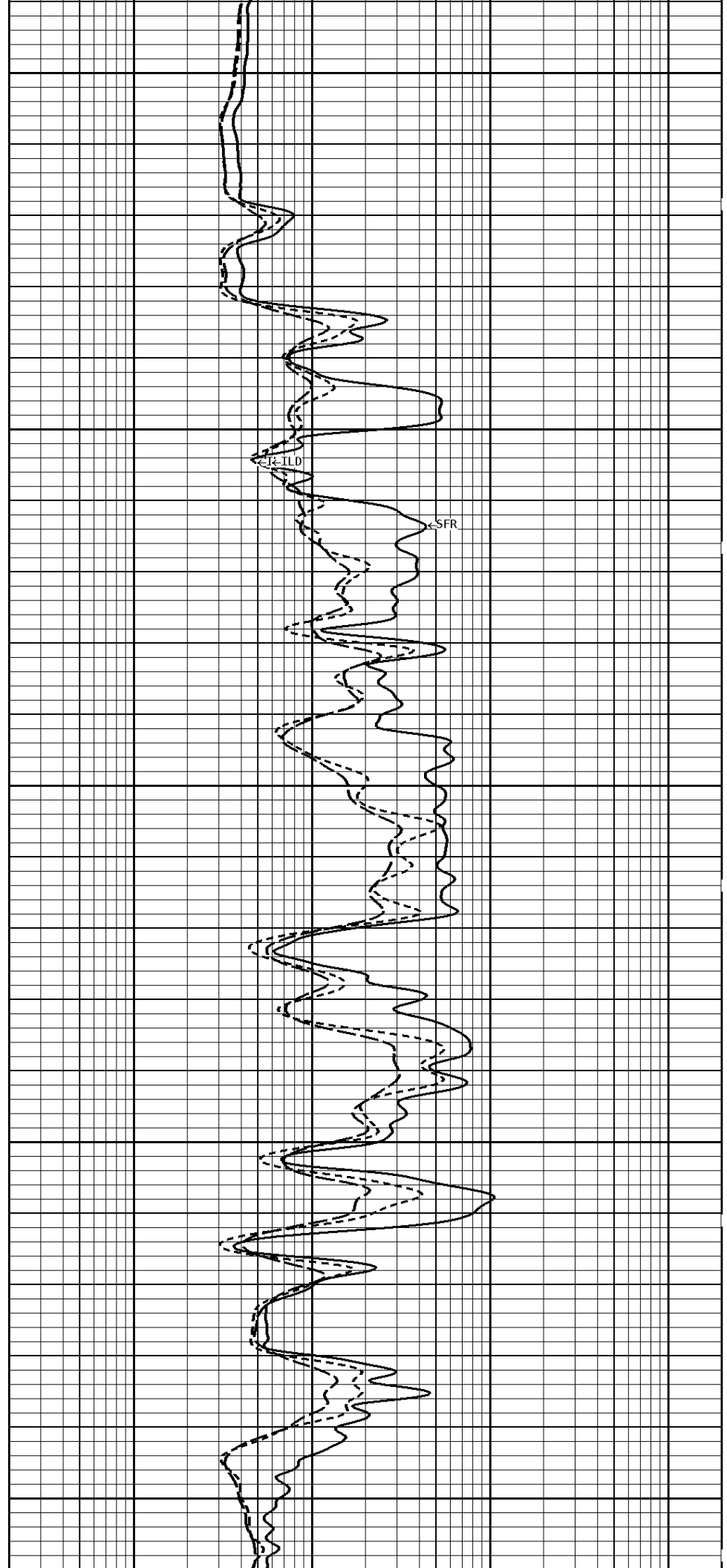
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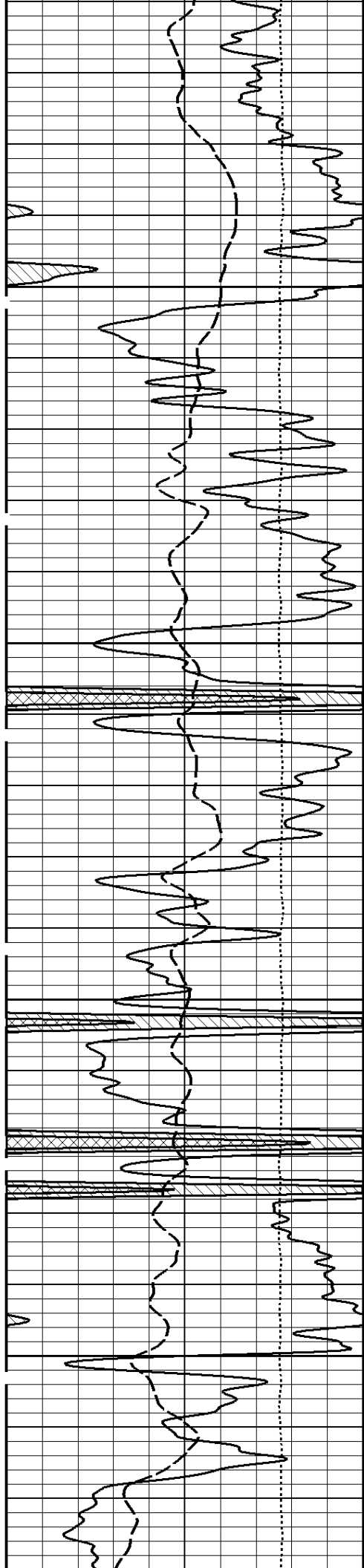




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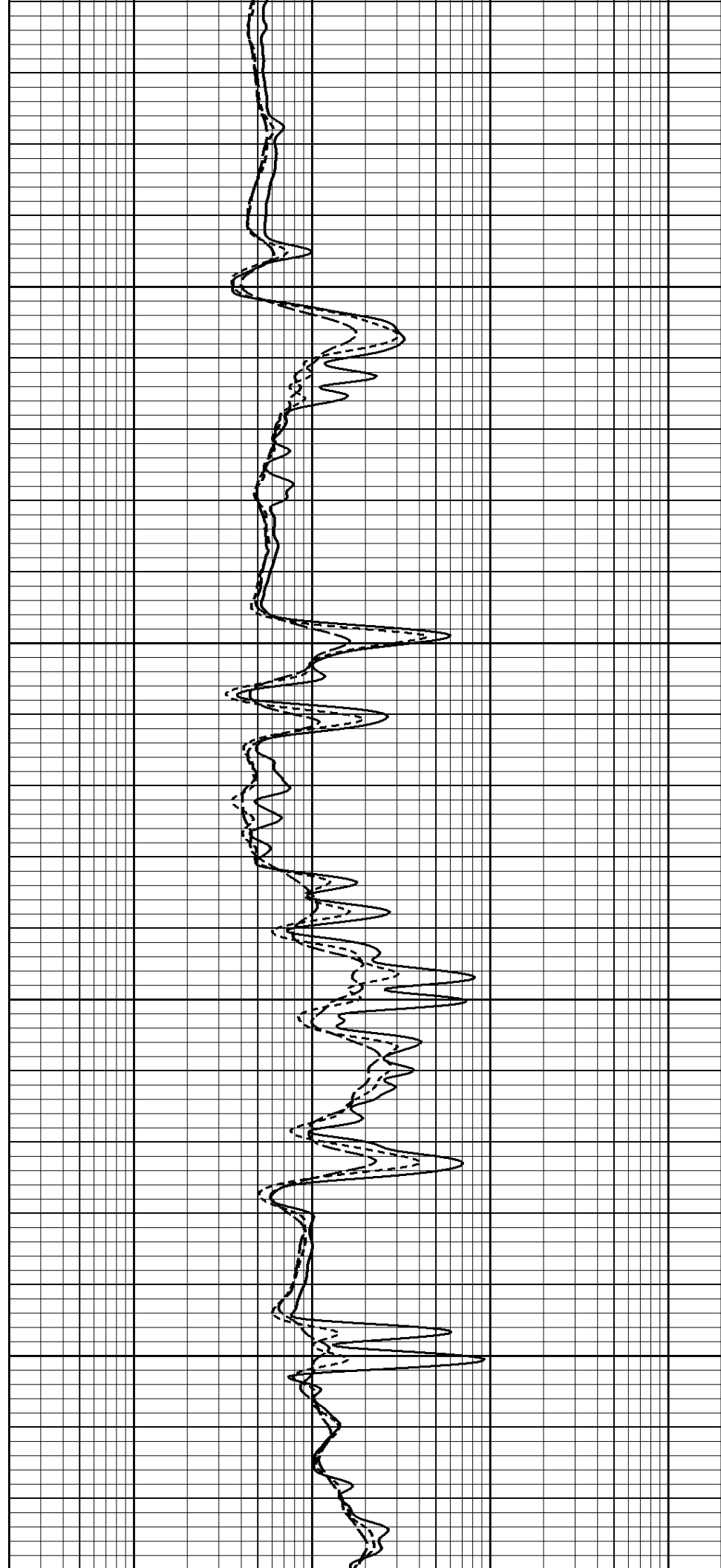
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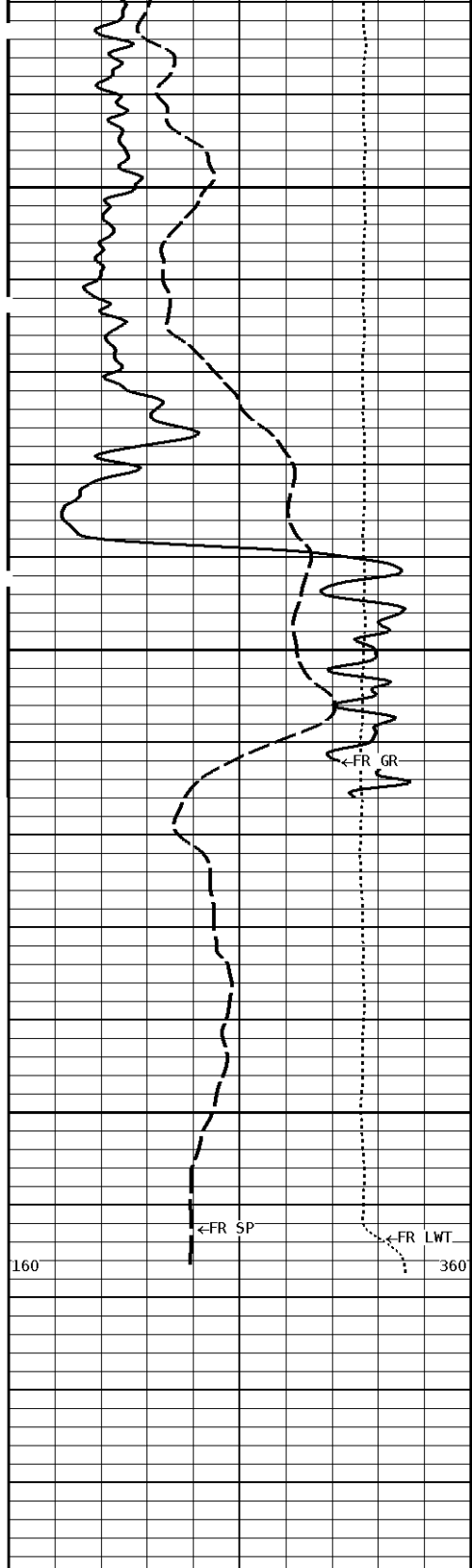




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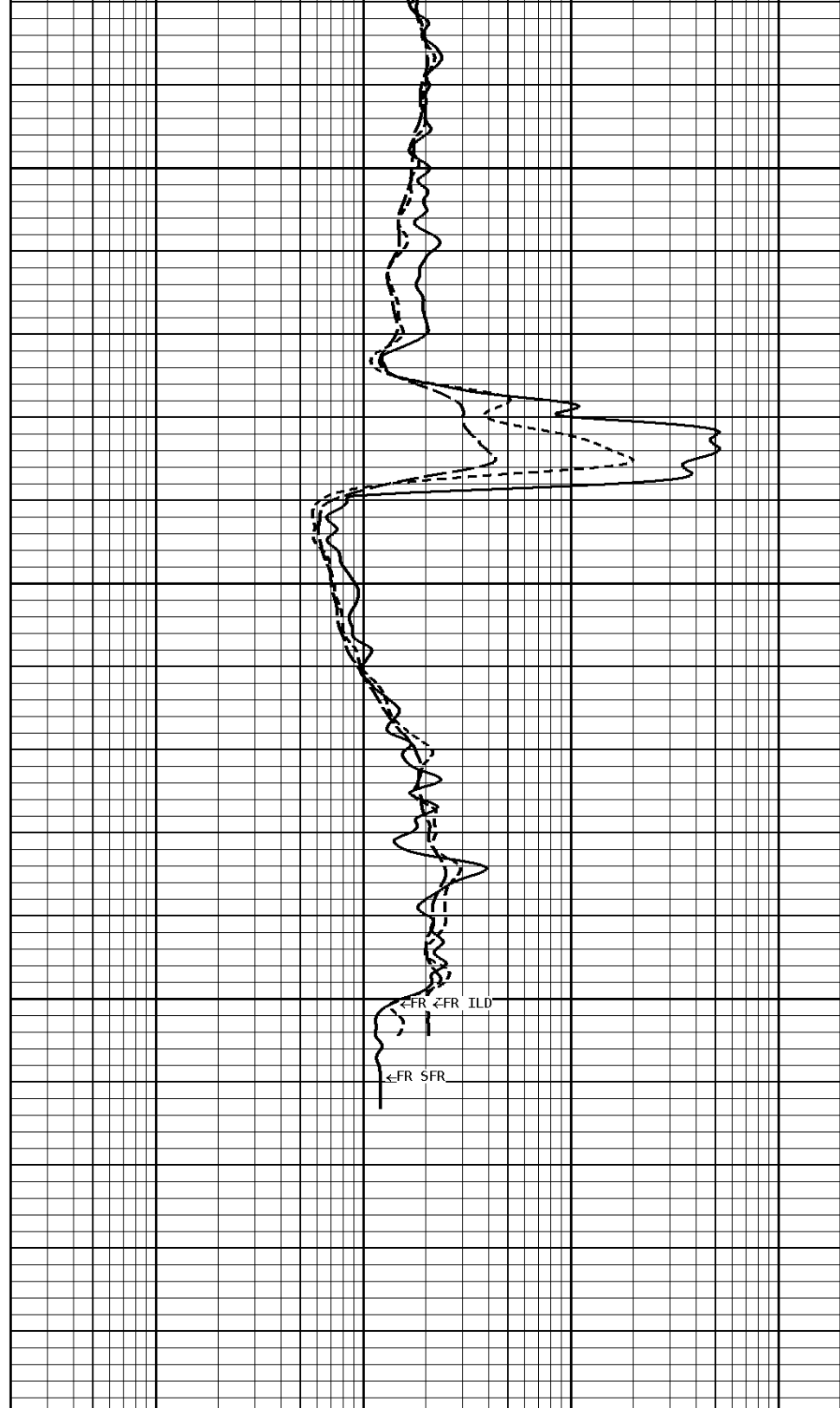
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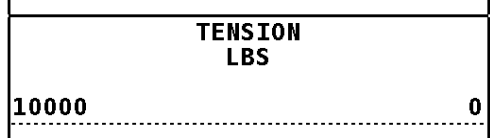
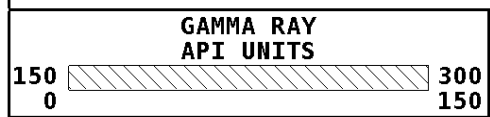


File #1.1.6

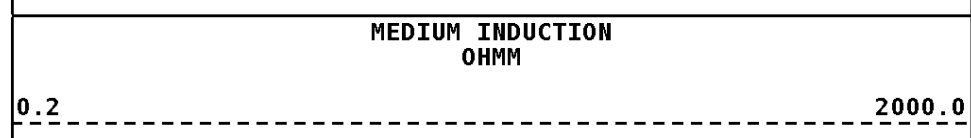
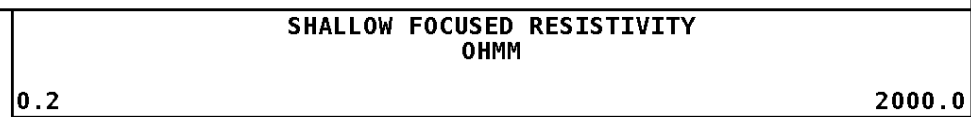
2500
2600
2614



1:240 MAIN SECTION



SPONTANEOUS POTENTIAL



DEEP INDUCTION

mV

→ | ← 20

OHMM

0.2

2000.0

* Borehole Zone Factors *

Zone 1 99999.0 to 0.0 Feet	
Drill Bit Size _____	7.875 in
Casing Diameter _____	5.500 in
BHT Depth _____	2615.000 ft
Borehole Temperature _____	95.0 degF
Temperature Gradient _____	1.00 DFHF
Resistivity Of Mud _____	0.200 ohmm
Resistivity Of Mud Temperature _____	35.00 degF

Well File: ENTRANSCO D-WIEBE 32-1 NOV 8 MST

Scale: 1:240

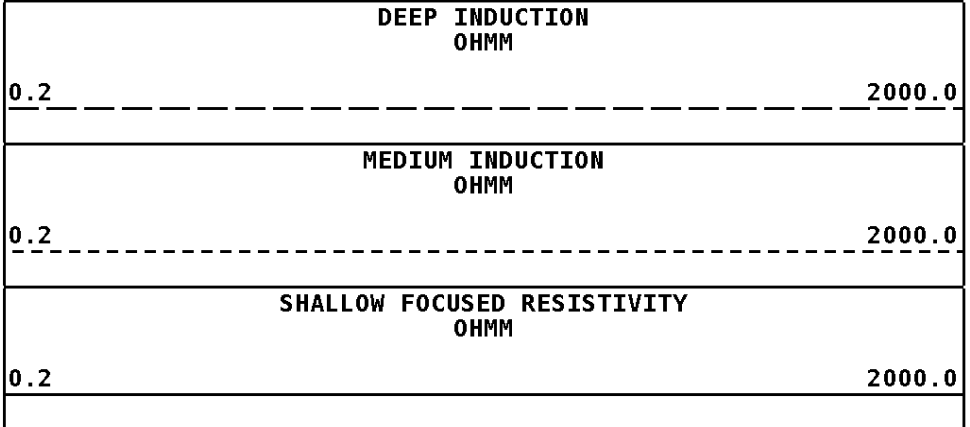
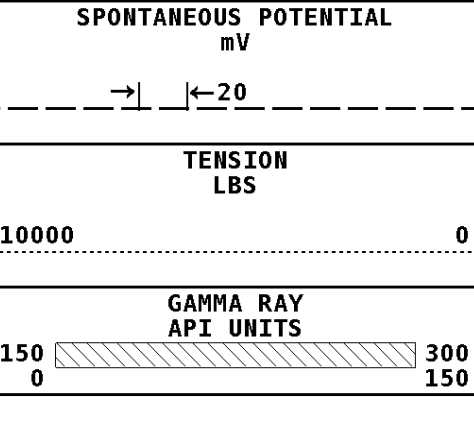
Format: DIL-240

Segment: V1.D1.S4 Reprocess REPEAT

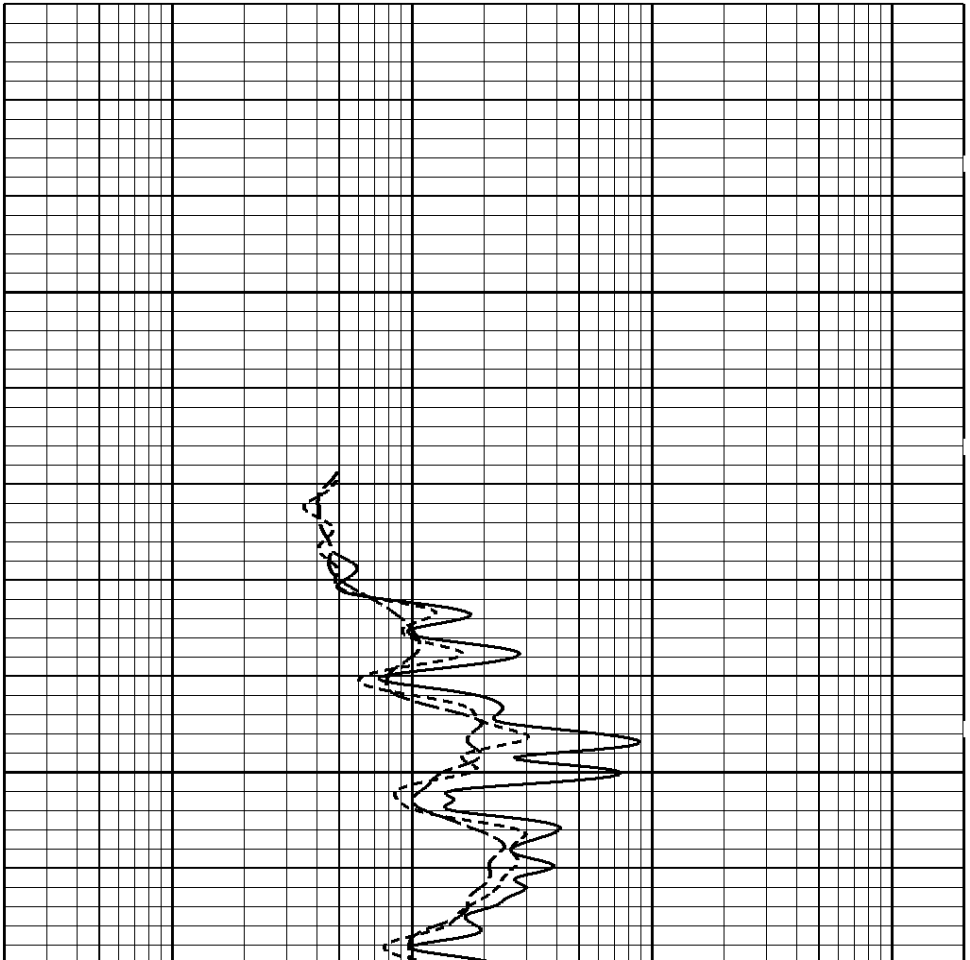
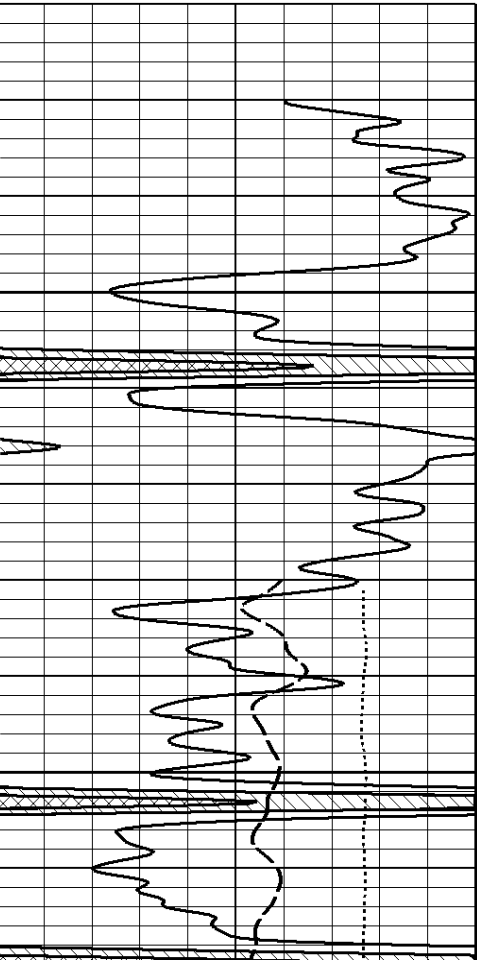
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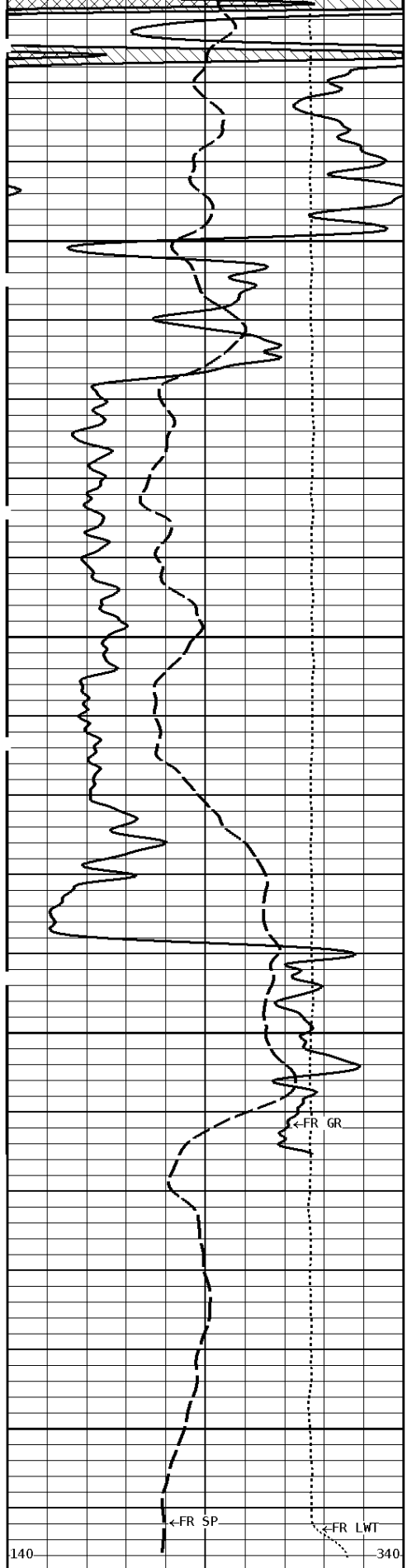
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Processed: 2019-11/08 08:31 3.4.1-13972



1:240 REPEAT SECTION



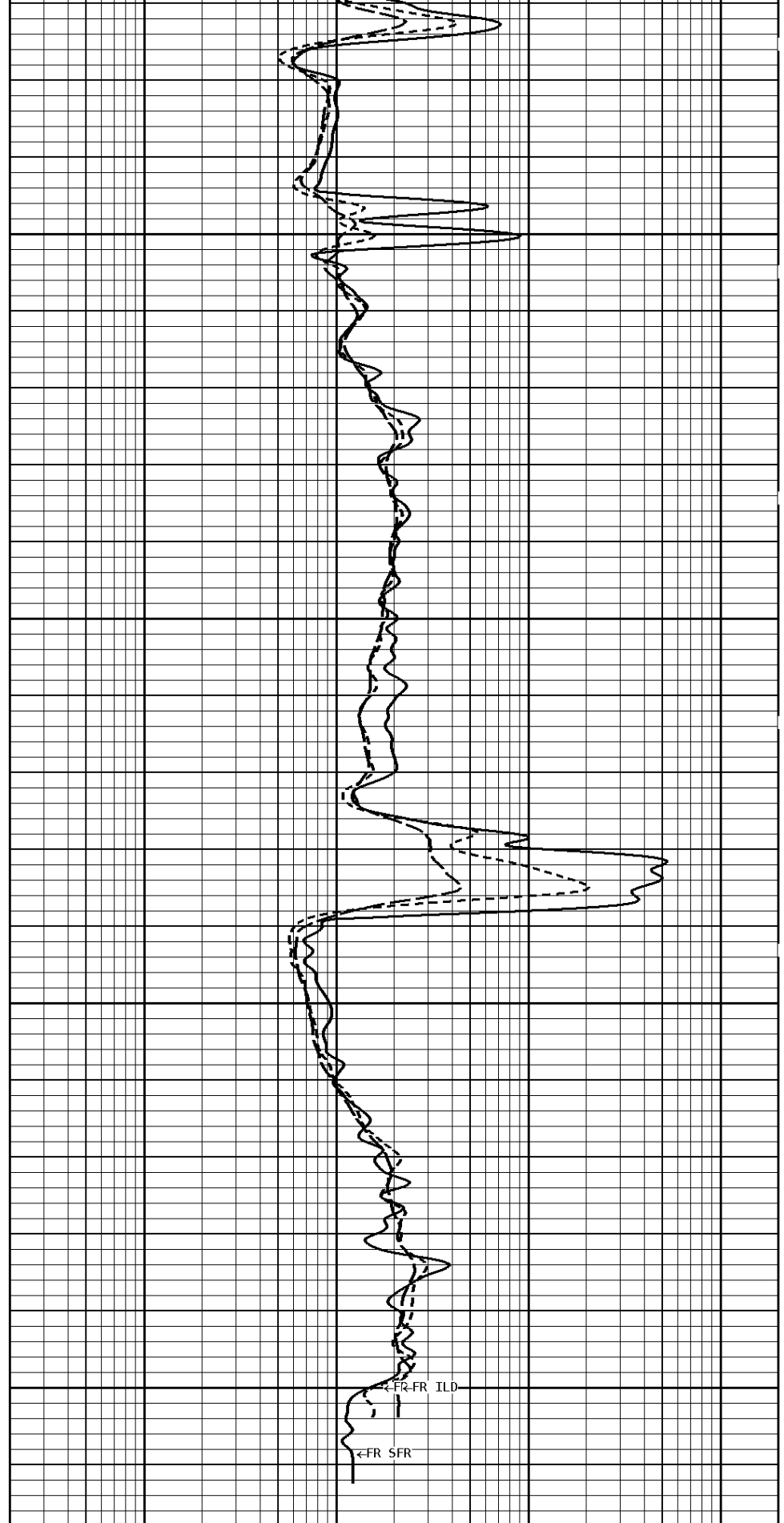


2500

2600

2613

140 340



<FR-ILD

<FR SFR

1:240 REPEAT SECTION

GAMMA RAY API UNITS
TENSION LBS
SPONTANEOUS POTENTIAL mV

SHALLOW FOCUSED RESISTIVITY OHMM
MEDIUM INDUCTION OHMM
DEEP INDUCTION OHMM

* Borehole Zone Factors *

Zone 1	99999.0	to	0.0	Feet
Drill Bit Size			7.875	in
Casing Diameter			5.500	in
BHT Depth			2615.000	ft
Borehole Temperature			95.0	degF
Temperature Gradient			1.00	DFHF
Resistivity Of Mud			0.200	ohmm
Resistivity Of Mud Temperature			35.00	degF

* Calibration Summary *

Shop Calibration					
GRT-B					
Performed : 24-JUN-2019			Time : 12:20		
Sensor Suite : GR-GR5			ID : GRT-BC-038		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GRAPI	
	36	266	160		
Shop Calibration					
PIT-CA					
Performed : 10-MAY-2019			Time : 11:27		
Sensor Suite : P-IND-T			ID : PIT-AC-043		
	Measured		Calibrated		Units
	R	X	R	X	
Air	131492	129685	0.0	0.0	MMHOS
Zero	131066	131062	-18.1	59.6	MMHOS
Reference	244915	244454	4981.9	5059.6	MMHOS
Loop	130404	210498	3515.7	3611.2	MMHOS
Sonde Error			-0.5	-1.7	MMHOS
Cond			4981.9	5059.6	MMHOS
	Measured		Calibrated		Units
	R	X	R	X	
Air	131939	129230	0.0	-0.0	MMHOS
Zero	131079	131067	-15.6	35.3	MMHOS
Reference	220620	224092	1984.4	2035.3	MMHOS
Loop	129308	206166	1595.4	1712.8	MMHOS
Sonde Error			-0.6	-7.8	MMHOS
Cond			1984.4	2035.3	MMHOS
	Measured		Calibrated		Units
	Low	High	Low	High	
	16980.0	56920.0	70.0	350.0	DEGF
Performed : 10 May 2019			Time : 14:03		

Performed : 10-May-2019

Time : 14:03

Sensor Suite : SFL

ID : PIT-AC-043

	Internal				Units
	Measured		Calibrated		
	Zero	Reference	Zero	Reference	
Im	32732.6	48929.1	0.0	7028.0	uA
Ib	32768.6	49680.1	0.0	1750.0	mA
MOM1	32722.0	56290.6	0.0	175.0	mV
Equivalent SFL				43.97	OHMM

Performed : 10-MAY-2019

Time : 11:16

Sensor Suite : P-SP

ID : PIT-AC-043

	Internal				Units
	Measured		Calibrated		
	Zero	Reference	Zero	Reference	
	32774.5	58935.9	0.0	1000.0	mV

Well File: ENTRANSCO D-WIEBE 32-1 NOV 8 MST

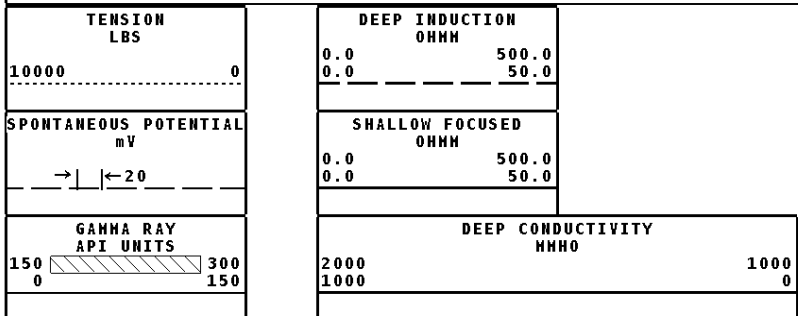
Scale: 1:1200 Format: DIL1200

Segment: V1.D1.S6 Reprocess MAIN

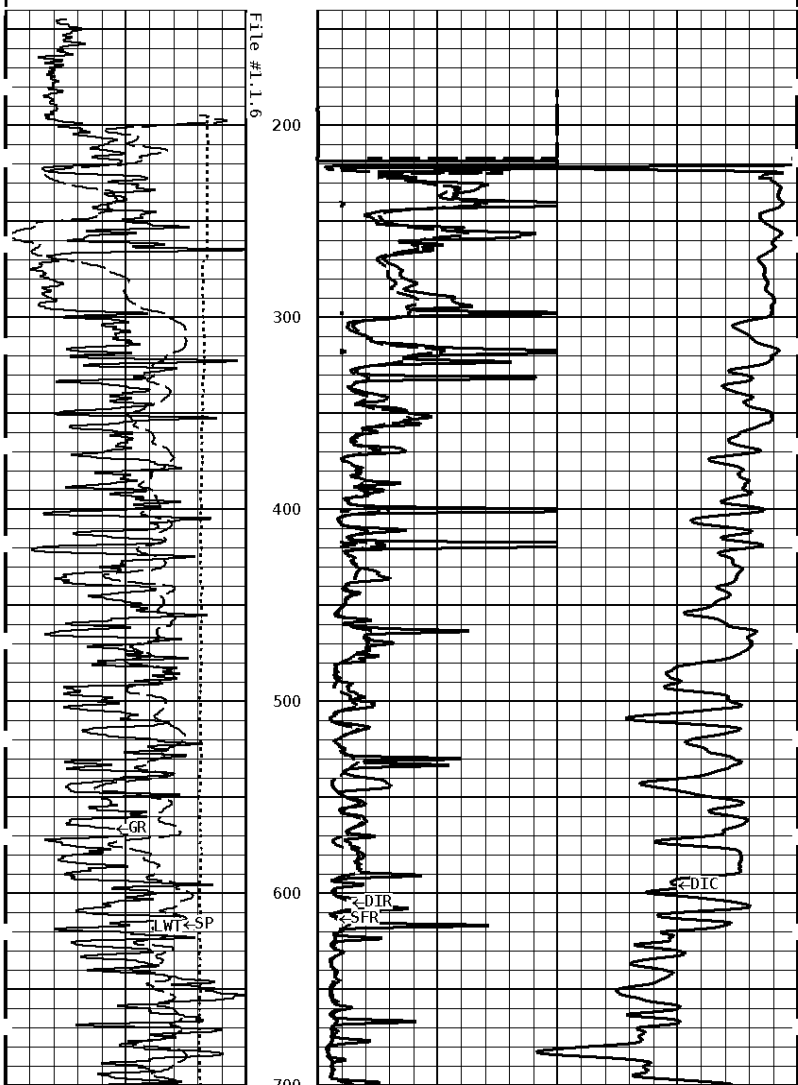
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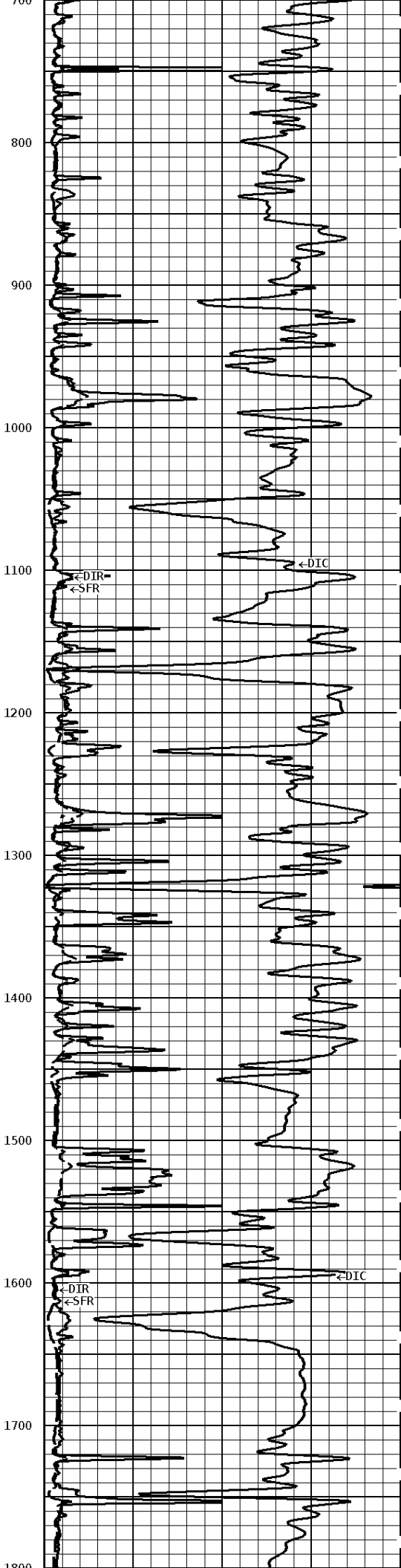
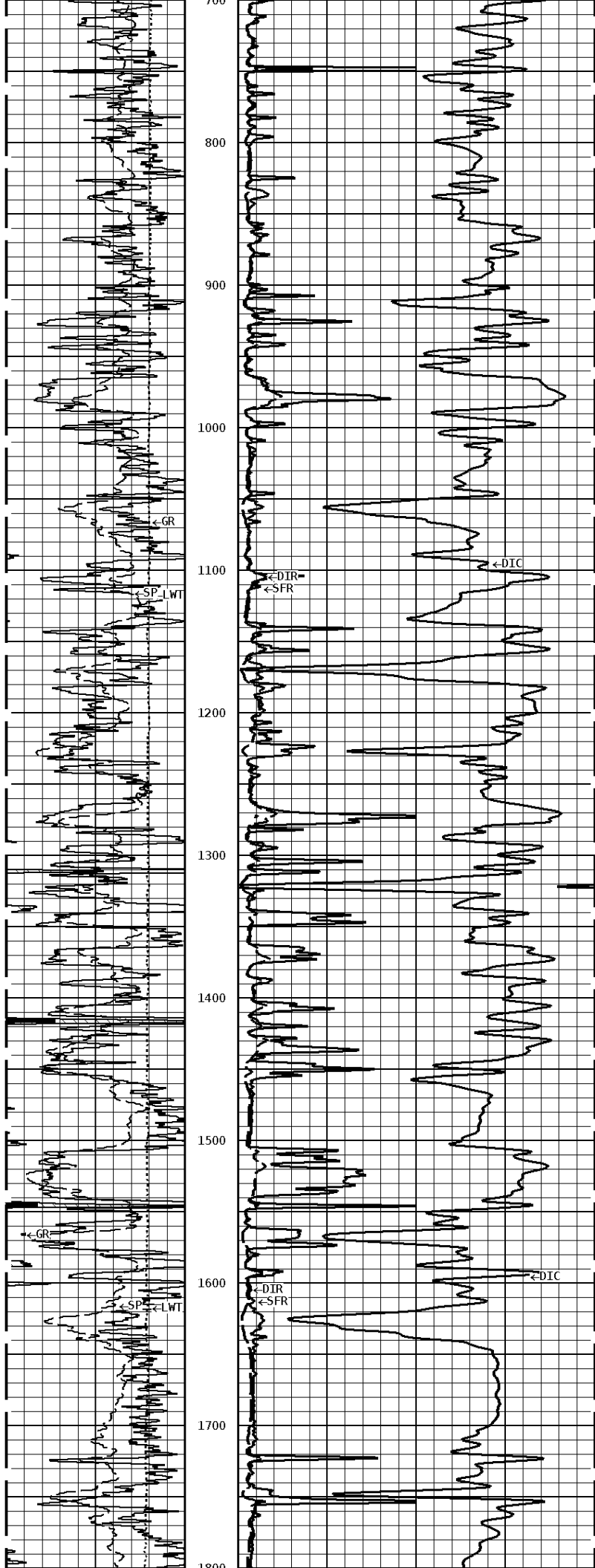
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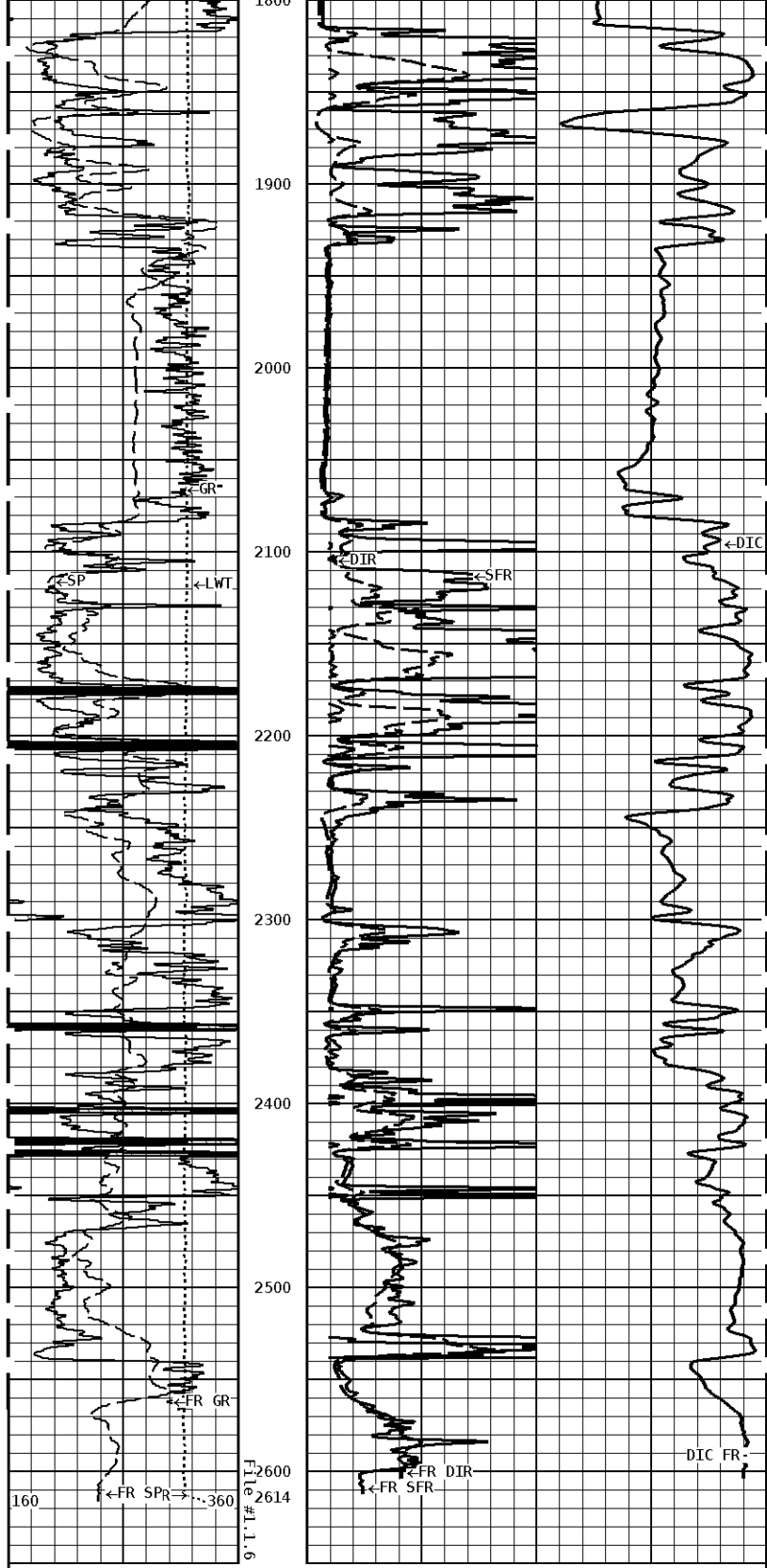
Processed: 2019-11/08 08:32 3.4.1-13972



1:1200 MAIN SECTION







1:1200 MAIN SECTION

GAMMA RAY API UNITS 150 0 300 0 150	DEEP CONDUCTIVITY MHMM 2000 1000 1000 0	
SPONTANEOUS POTENTIAL mV → ← 20	SHALLOW FOCUSED OHMM 0.0 500.0 0.0 50.0	
TENSION LBS 10000 0	DEEP INDUCTION OHMM 0.0 500.0 0.0 50.0	



Company: ENTRANSCO ENERGY, LLC
Well: D. WIEBE #32-1
Location: 1925' FSL & 350' FWL
Logged: 11-08-2019
K.B. Elev: 1495.0 Ft