

HALIBURTON

ARRAY COMPENSATED
TRUE RESISTIVITY
LOG

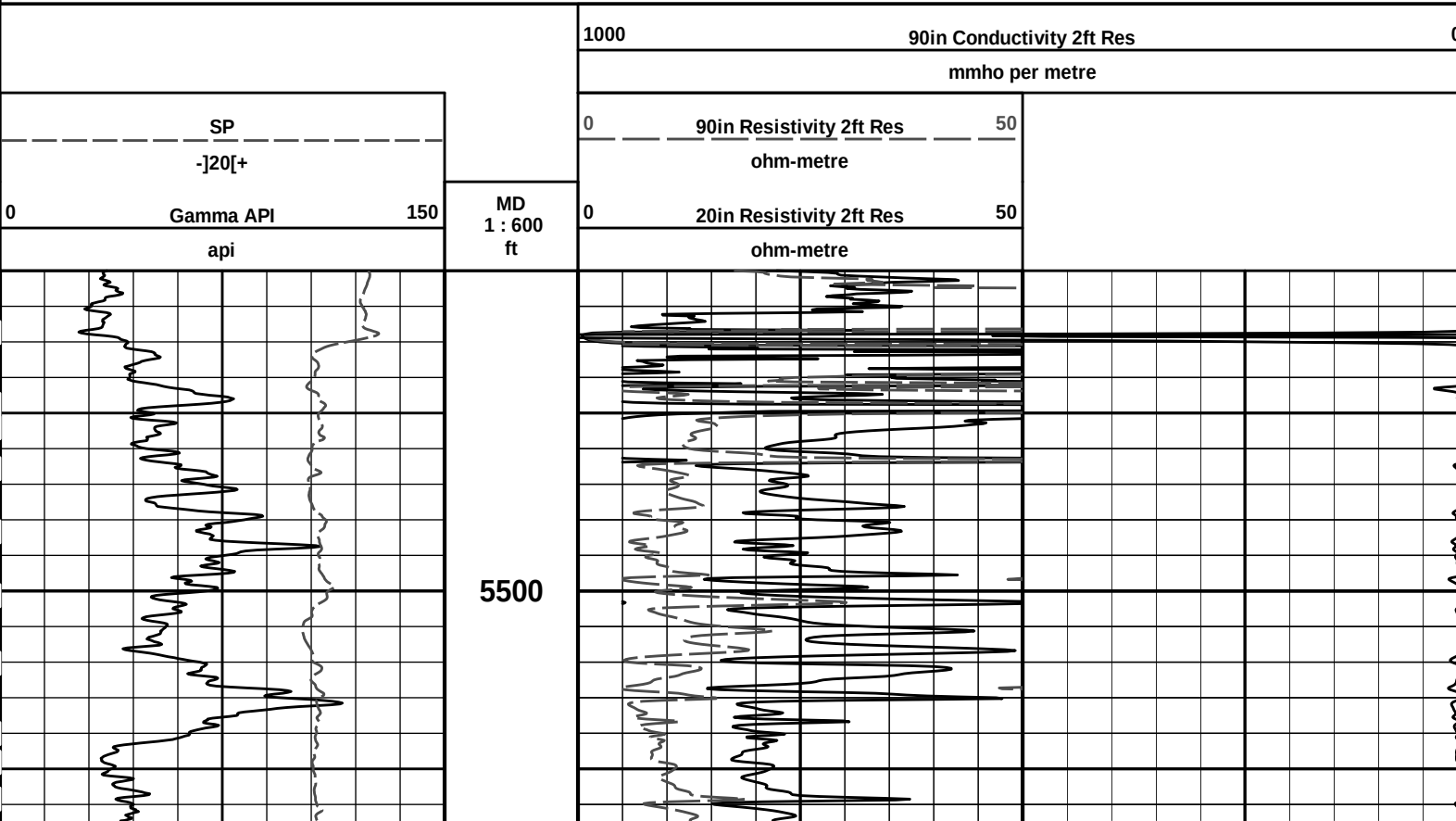
COMPANY		SANDRIDGE ENERGY	
WELL		TOEWS 2629 1-21H	
FIELD		GRAY	
COUNTY		KANSAS	
STATE		KANSAS	
Permanent Datum		GL	
Log measured from		KB	
Drilling measured from		KB	
Date		22-Jul-12	
Run No.		ONE	
Depth - Driller		9366.00 ft	
Depth - Logger		9366.0 ft	
Bottom - Logged Interval		9327.0 ft	
Top - Logged Interval		5428.0 ft	
Casing - Driller		7.000 in @ 5410.0 ft	
Casing - Logger		5428.0 ft	
Bit Size		6.125 in @	
Type Fluid in Hole		WATER BASED MUD	
Density		8.7 ppq 30.00 s/qt	
PH		7.50 pH 10.0 cp/m	
Source of Sample		MUD PIT	
Rm @ Meas. Temperature		0.350 ohmm @ 85.00 degF @	
Rmf @ Meas. Temperature		0.35 ohmm @ 80.00 degF @	
Rmc @ Meas. Temperature		0.400 ohmm @ 80.00 degF @	
Source Rmf		MEAS	
Rm @ BHT		0.20 ohmm @ 142.0 degF @	
Time Since Circulation		21.3 hr	
Time on Bottom		23-Jul-12 09:33	
Max. Rec. Temperature		142.0 degF @ 9336.0 ft @	
Equipment		10546696 LIBERAL	
Recorded By		C. HAVERKAMP	
Witnessed By		O. ESPARZA	

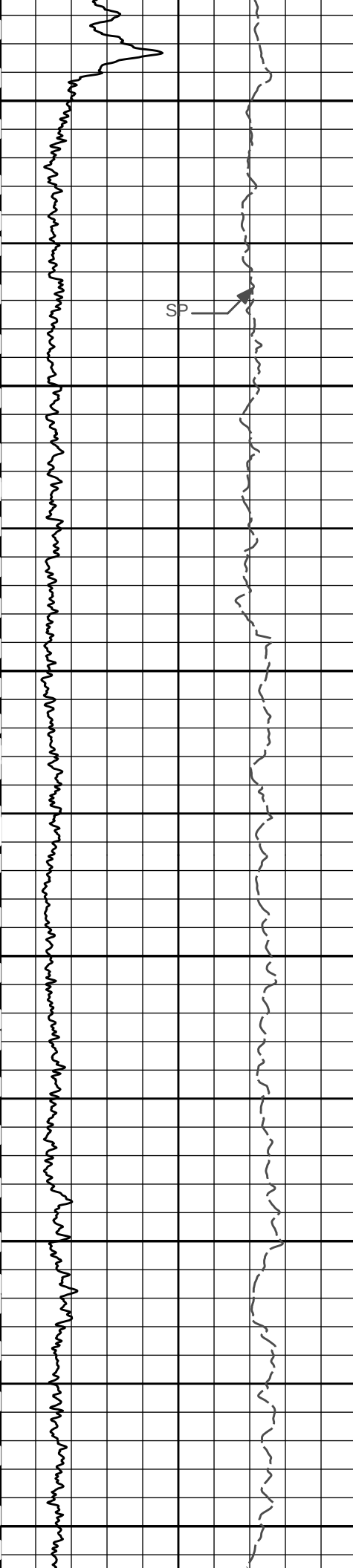
Service Ticket No.: 9687450		API Serial No.: 15-069-20378		PGM Version: WL INSITE R3.6.0 (Build 3)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
Type Fluid in Hole							
Density	Viscosity						
Ph	Fluid Loss						
Source of Sample				RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.
Rmf @ Meas. Temp.	@	@		ONE	ACRT	1" S.O.	FREE
Rmc @ Meas. Temp.	@	@			I5059_S8385		
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.	
Serial No.	11039640	Serial No.		Serial No.		Serial No.	
Model No.	GTET	Model No.		Model No.		Model No.	
Diameter	3.625	No. of Cent.		Diameter		Diameter	
Detector Model No.	T-102	Spacing		Log Type		Log Type	
Type	SCINT			Source Type		Source Type	
Length	8"	LSA [Y/N]		Serial No.		Serial No.	
Distance to Source	10'	FWDA [Y/N]		Strength		Strength	

GENERAL			GAMMA		ACOUSTIC		DENSITY		NEUTRON					
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	TD	CSG	REC	0	150									
DIRECTIONAL INFORMATION														
Maximum Deviation @								KOP @						
Remarks: SP-GTET-CSNG-DSNT-SDLT-ACRT RAN IN COMBINATION.														
ANNULAR HOLE VOLUME CALCULATED FOR 4.5 INCH CASING.														
CHLORIDES REPORTED AT 10000 MG/L. NO LCM REPORTED.														
POST-JOB SURVEYS NOT PERFORMED DUE TO WELLSITE CONDITIONS.														
YOUR CREW: P. COBLE, K. KING														
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES. LIBERAL, KS 620-624-8123														
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.														
HALLIBURTON														

HALLIBURTON Plot Time: 23-Jul-12 17:36:38
Plot Range: 5410 ft to 9336.92 ft
Data: TOEWS_2629_1_21\Well Based\R1_CASING\
Plot File: \\LOCAL-1\TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\ACRT\ACRT_2.lib

2 INCH MAIN LOG





5600

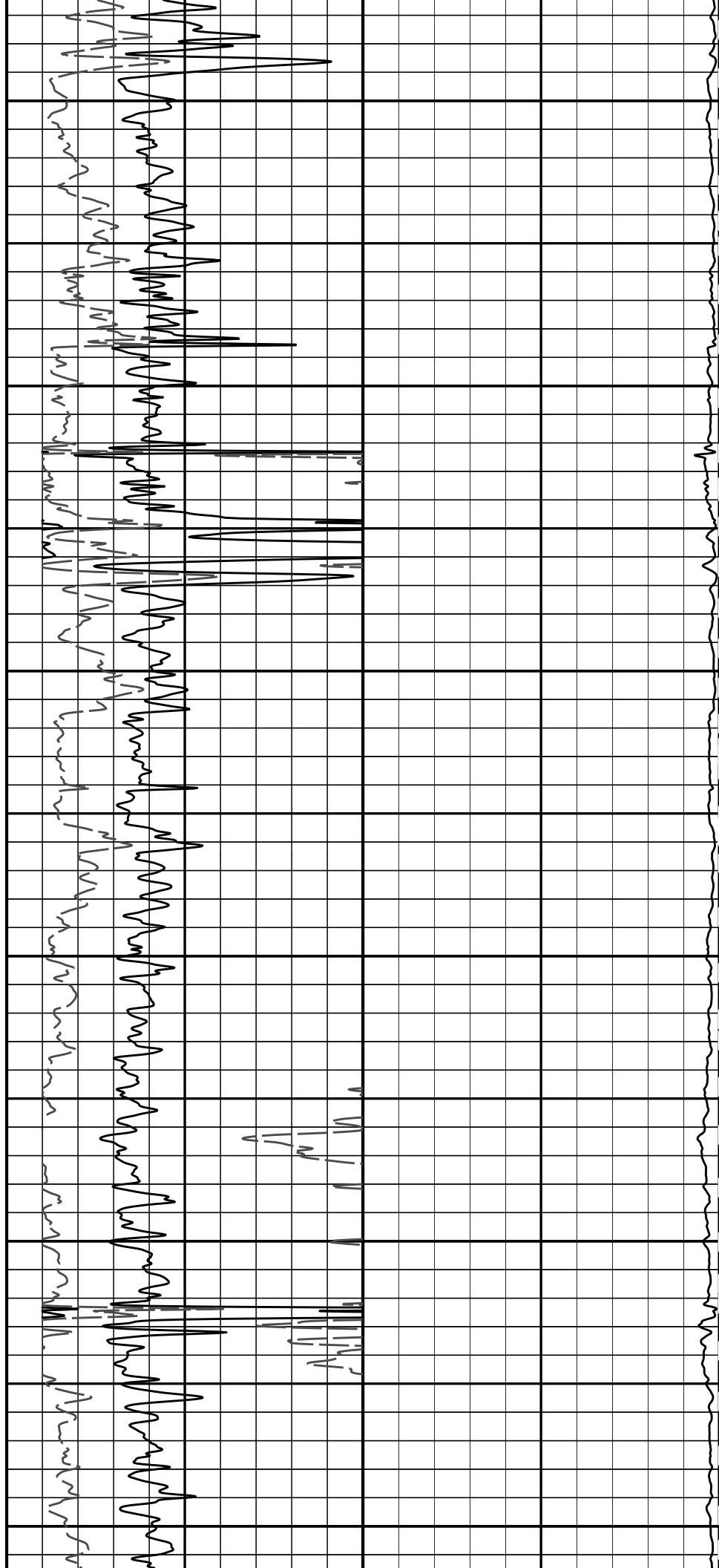
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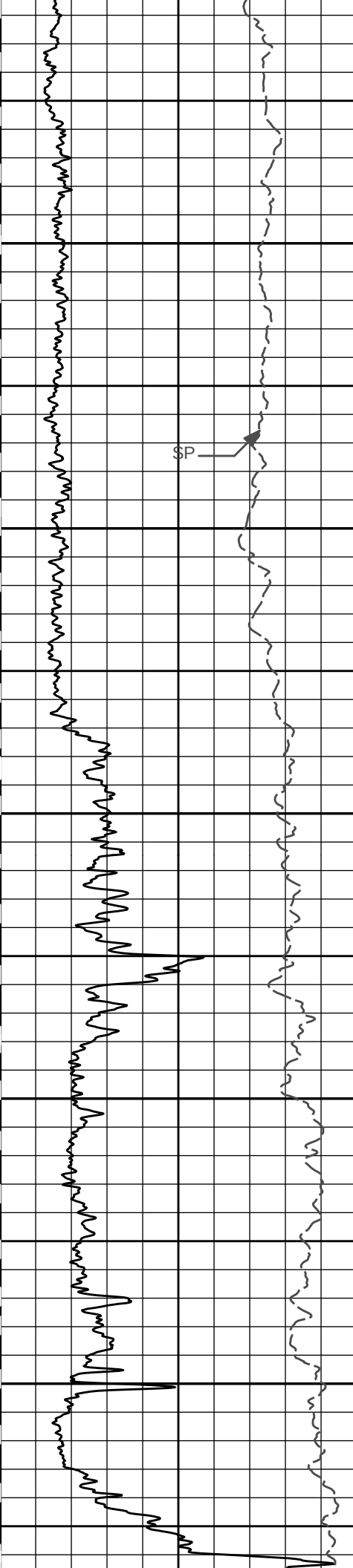
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5900

6000

6100





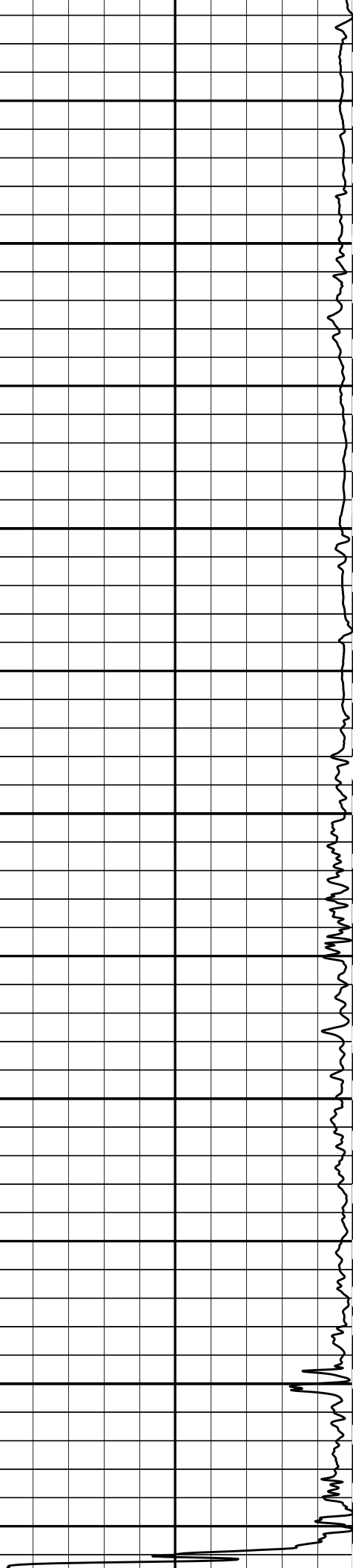
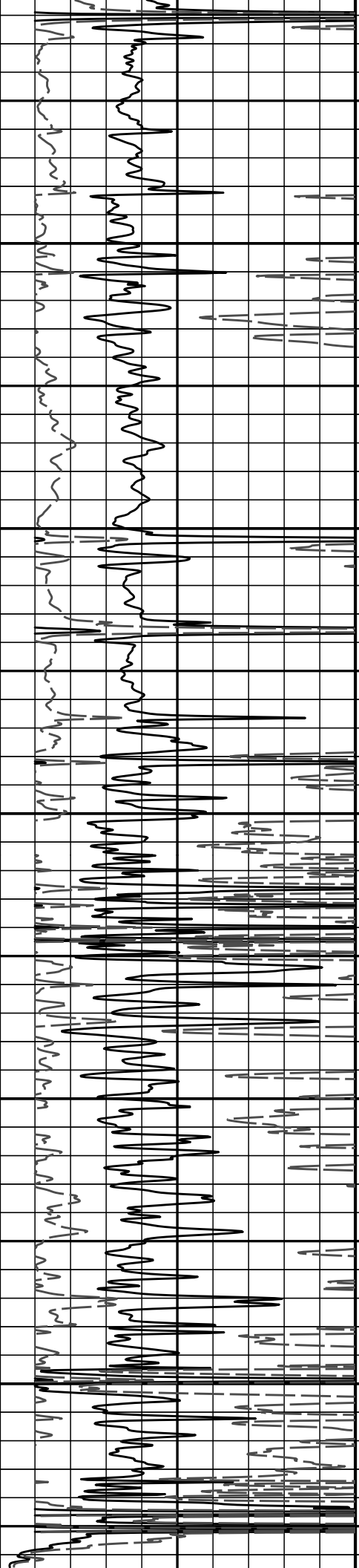
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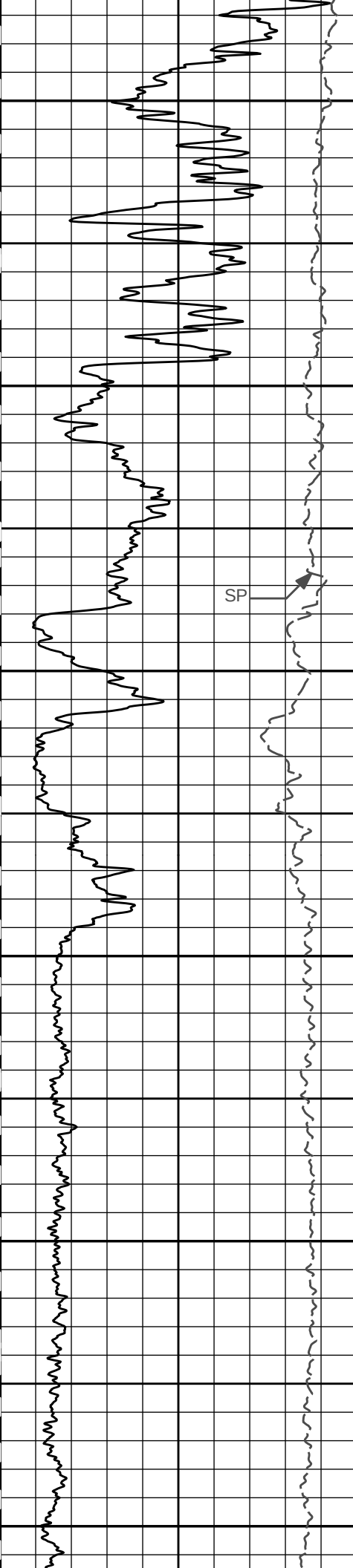
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6600





6700

6800

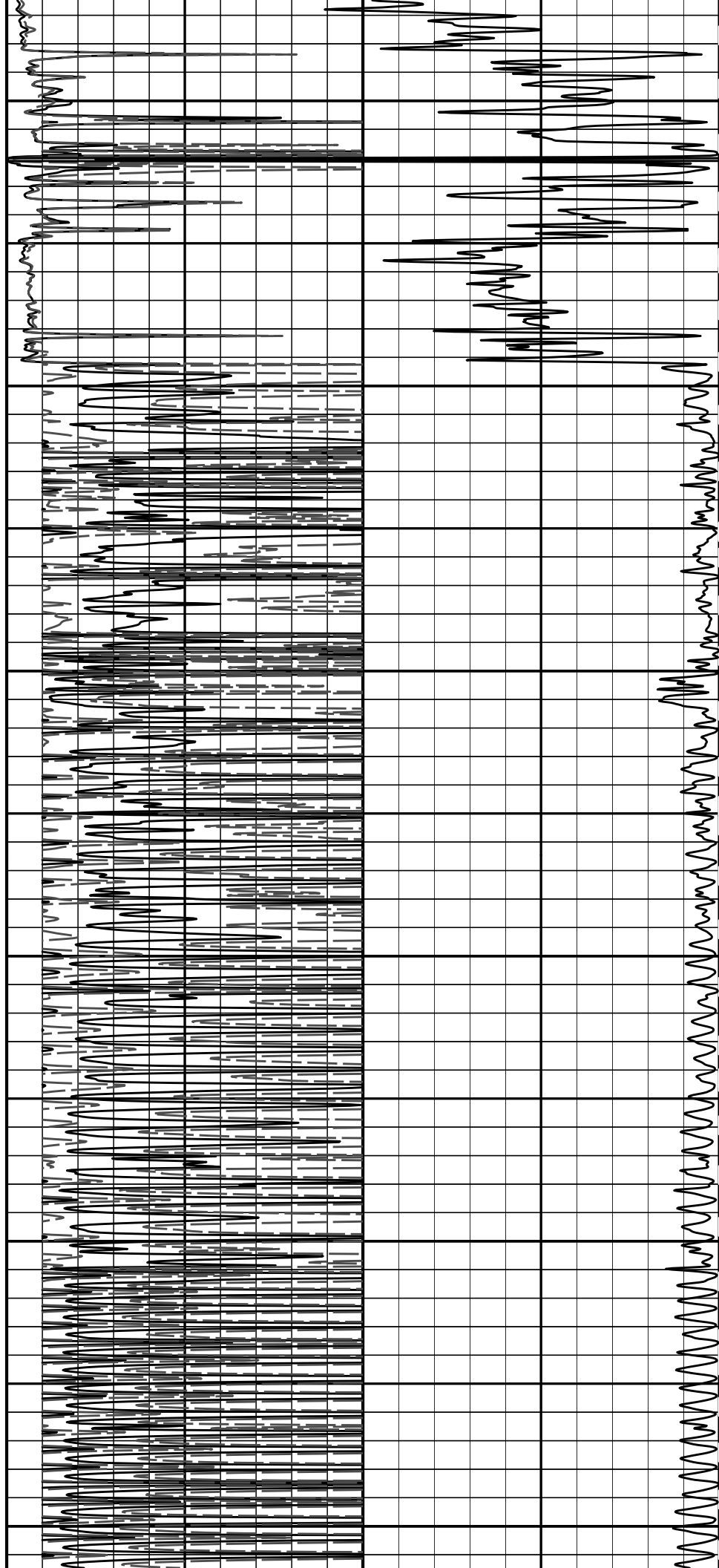
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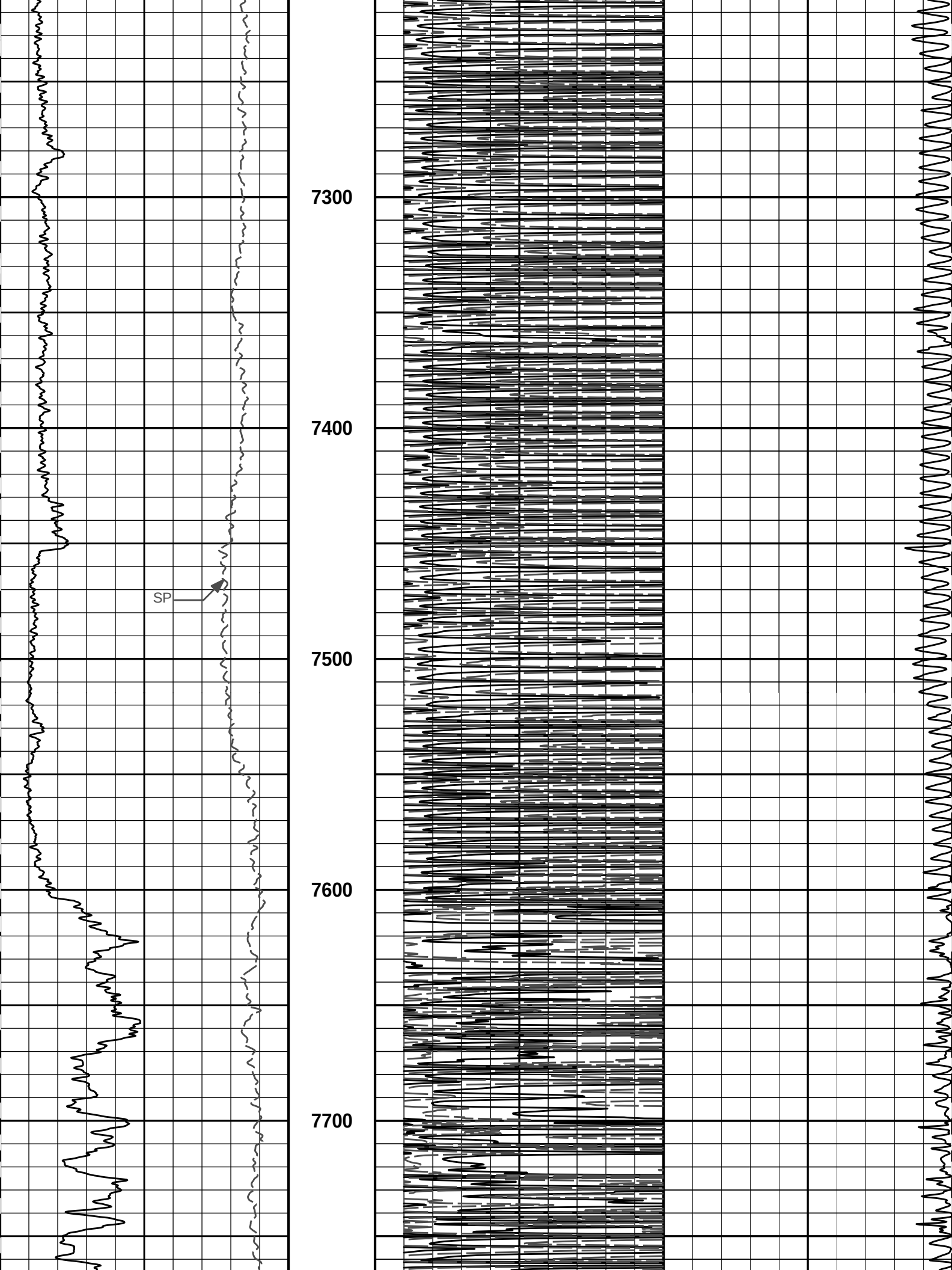
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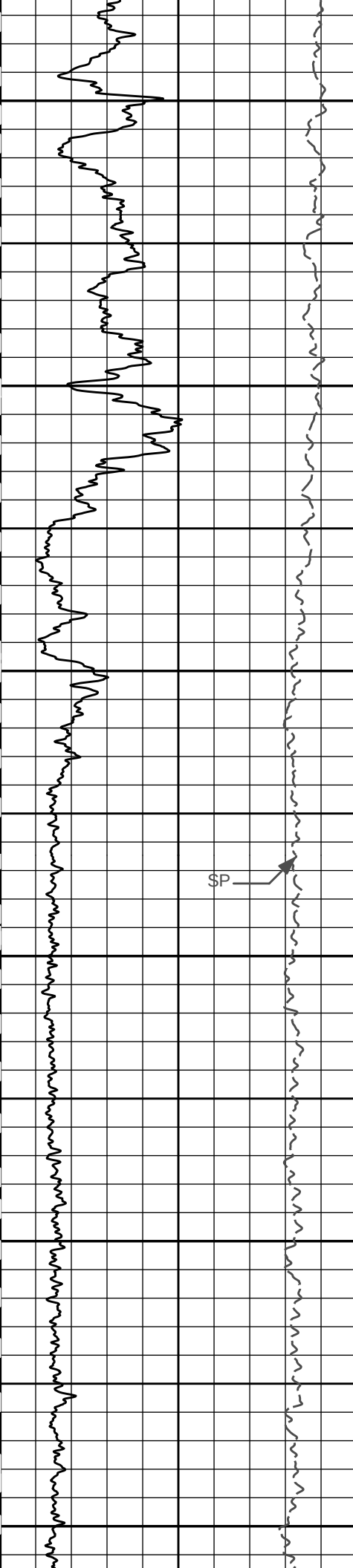
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7200

SP







7800

7900

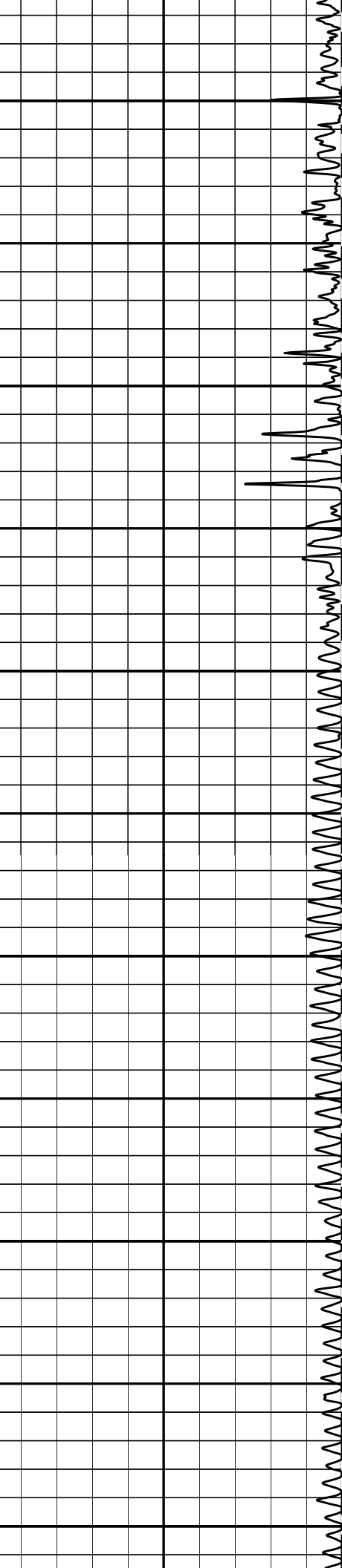
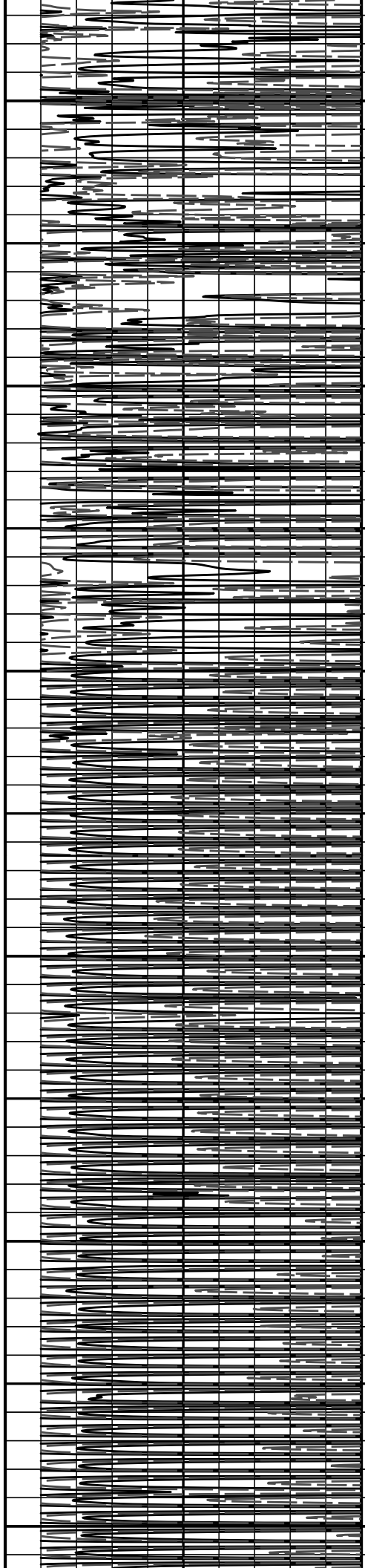
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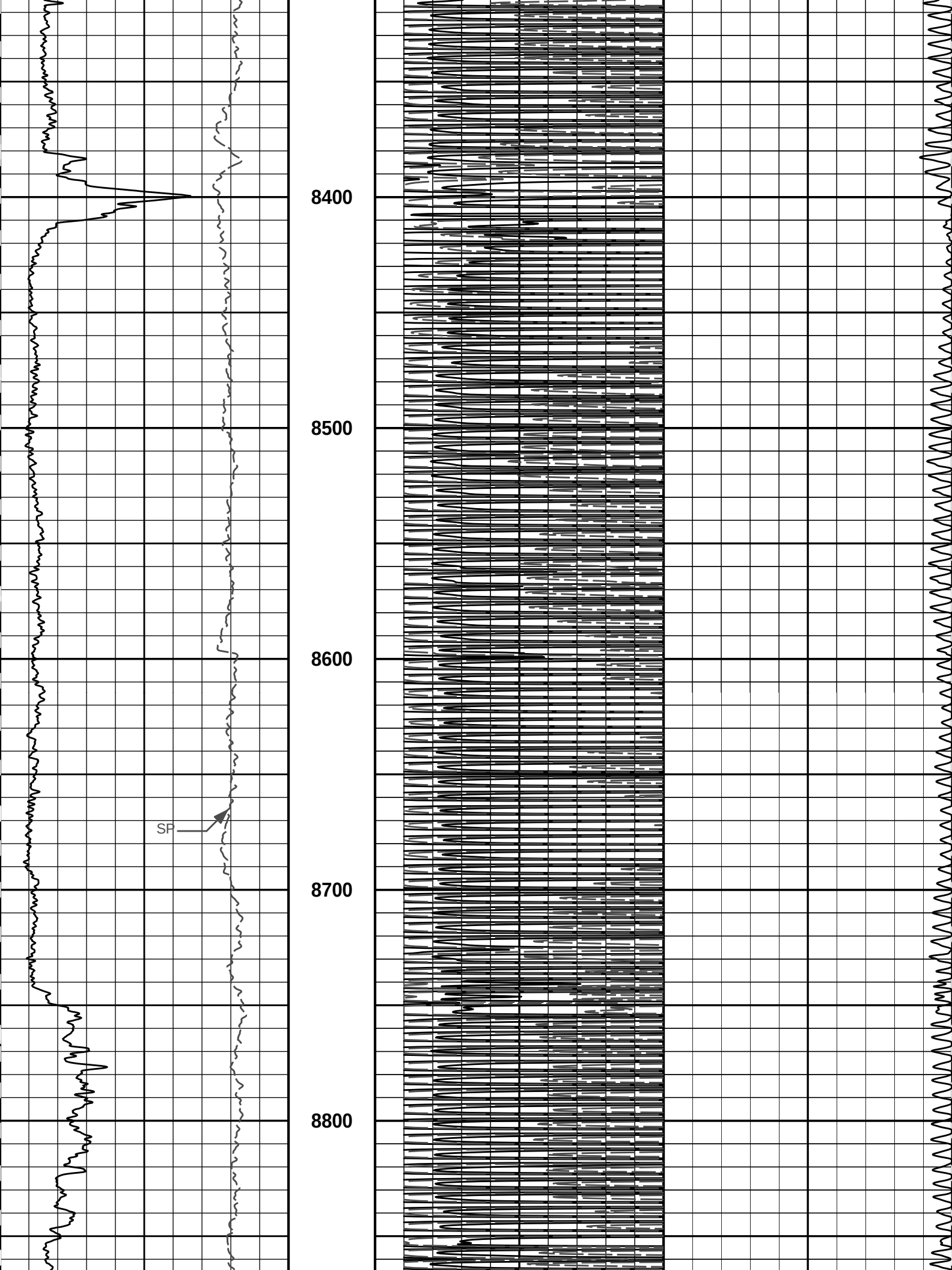
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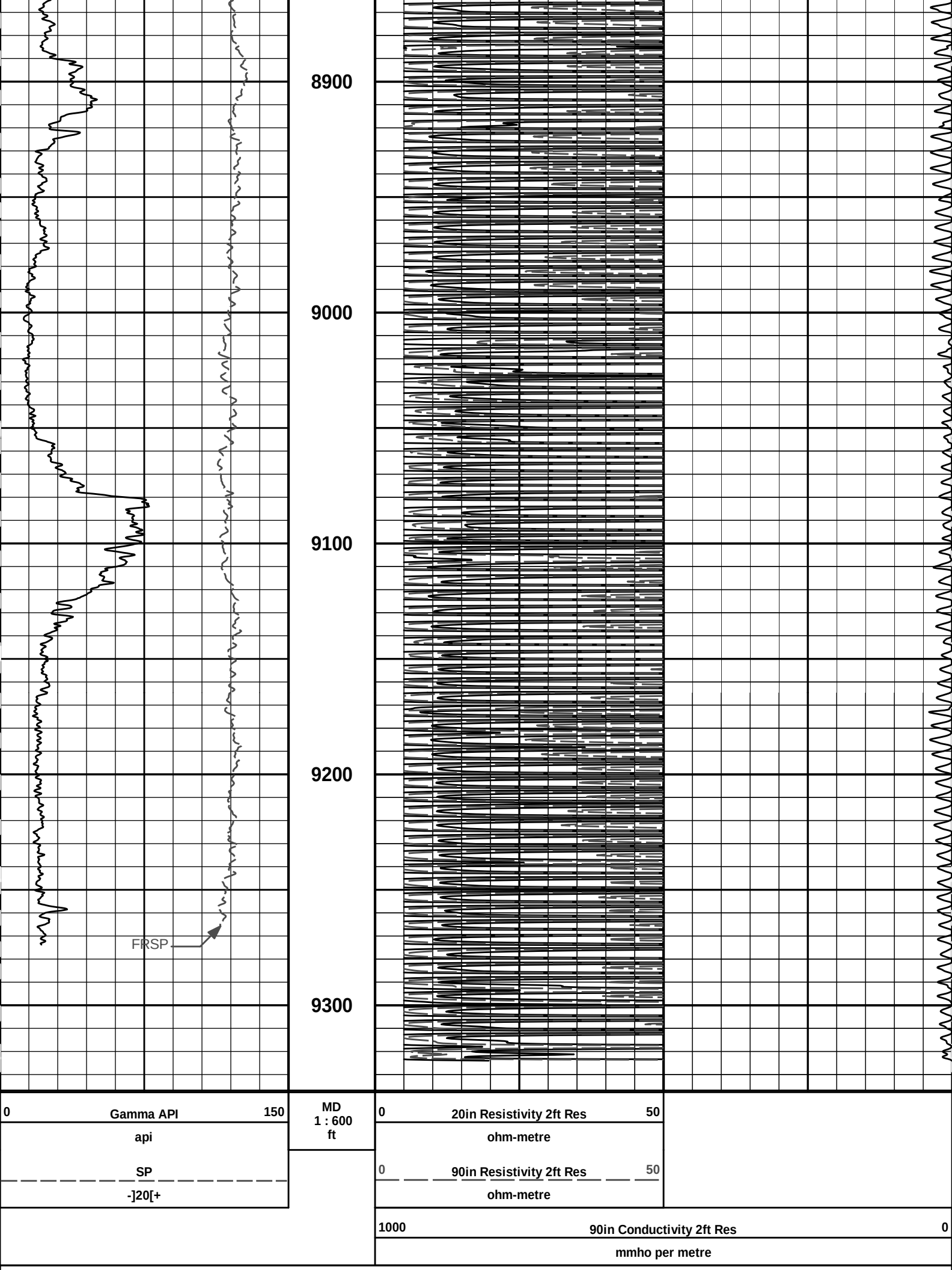
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8300

SP







0	Gamma API	150
	api	
	SP	
	-20[+	

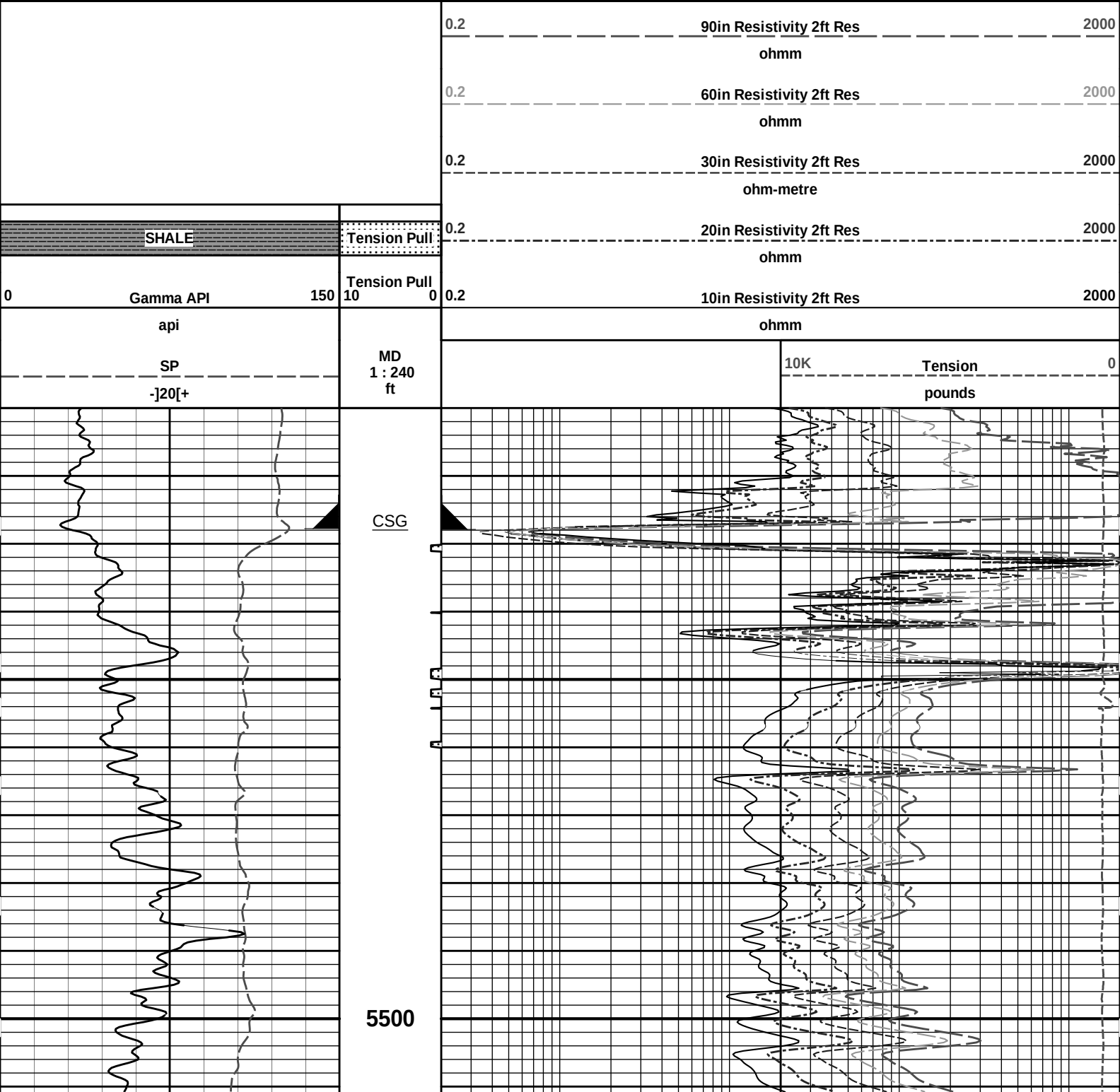
MD
1 : 600
ft

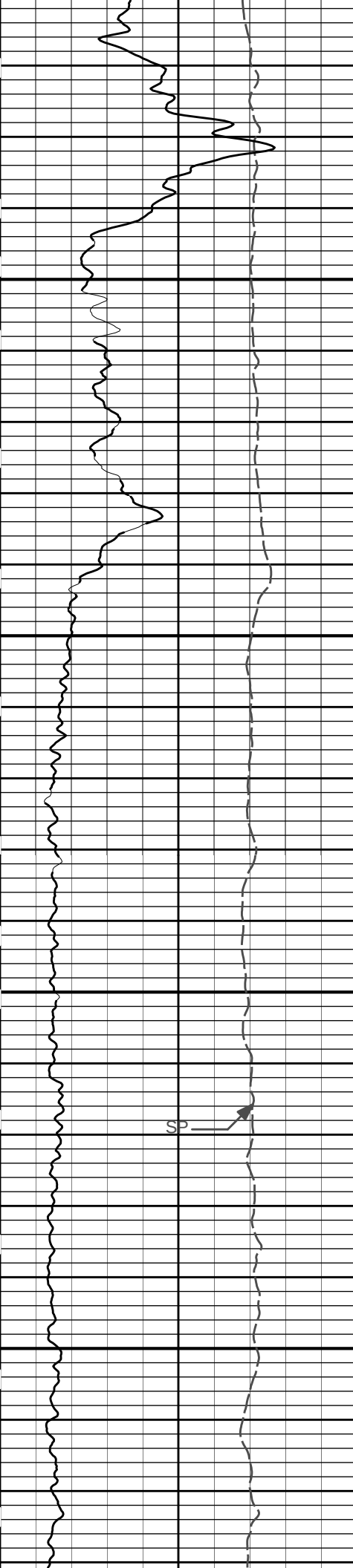
0	20in Resistivity 2ft Res	50
	ohm-metre	
0	90in Resistivity 2ft Res	50
	ohm-metre	

1000	90in Conductivity 2ft Res	0
	mmho per metre	

2 INCH MAIN LOG

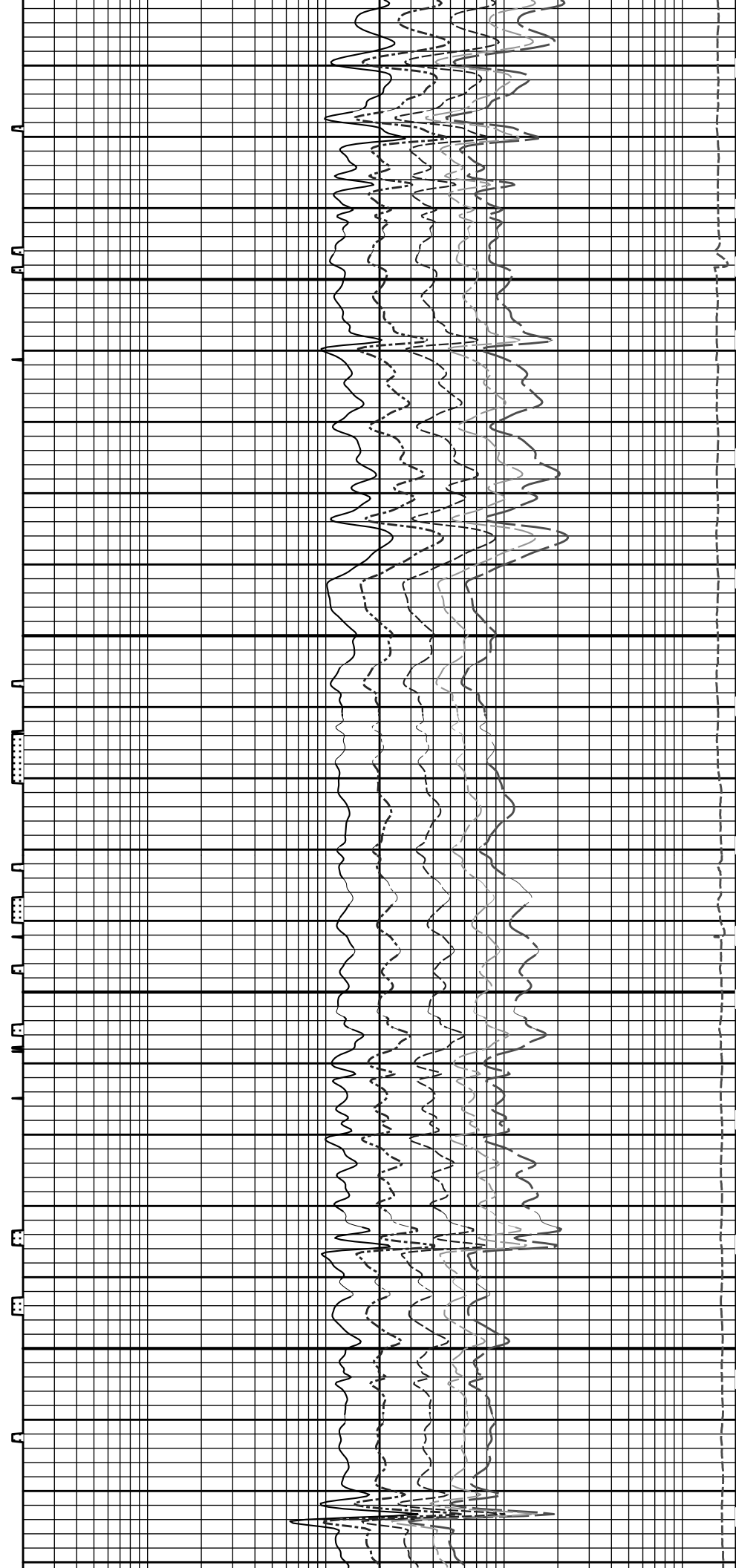
5 INCH MAIN LOG

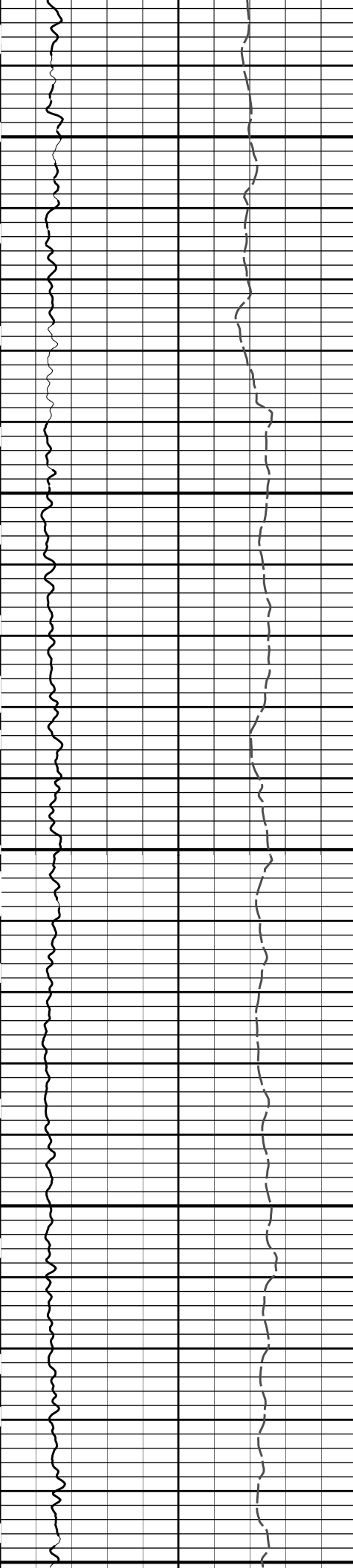




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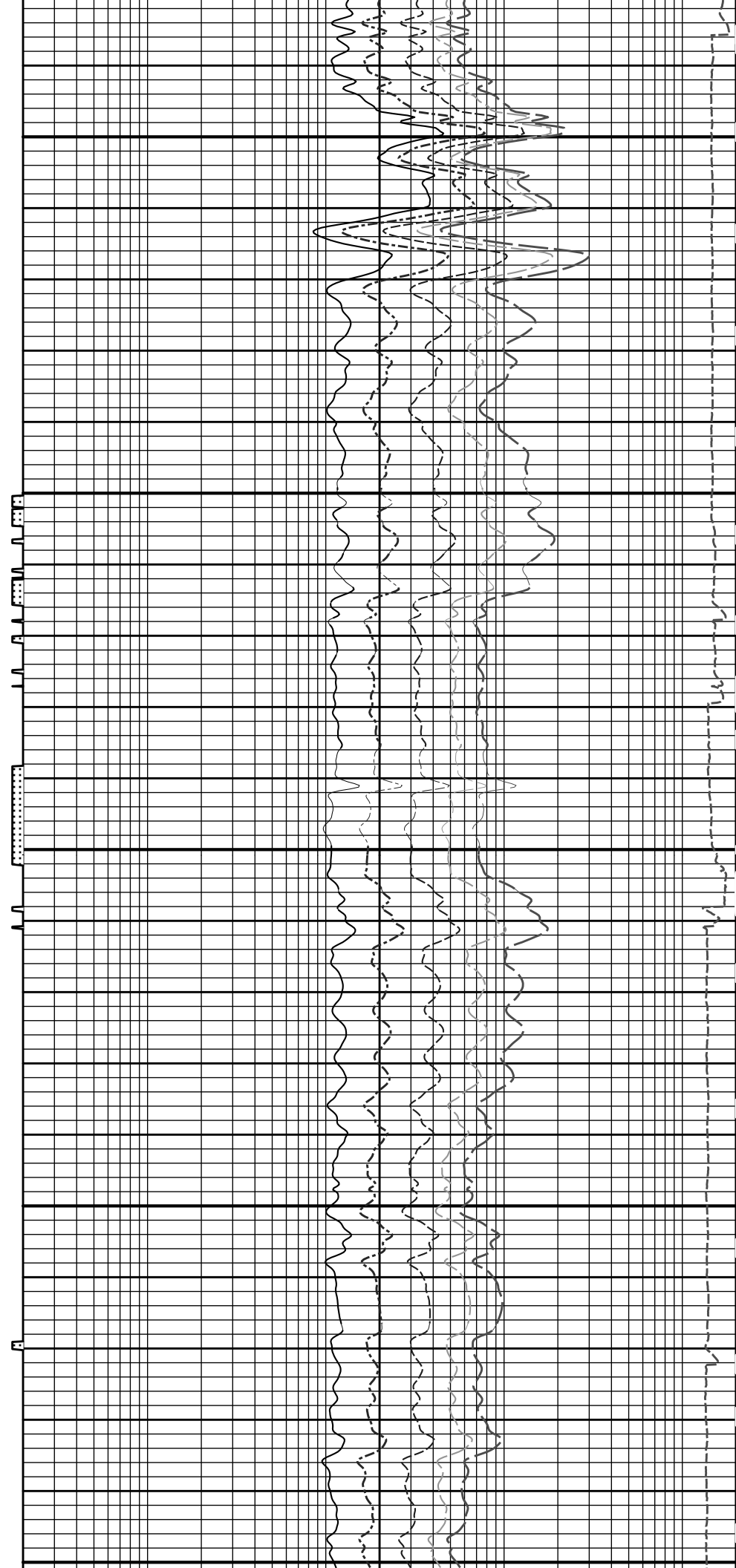
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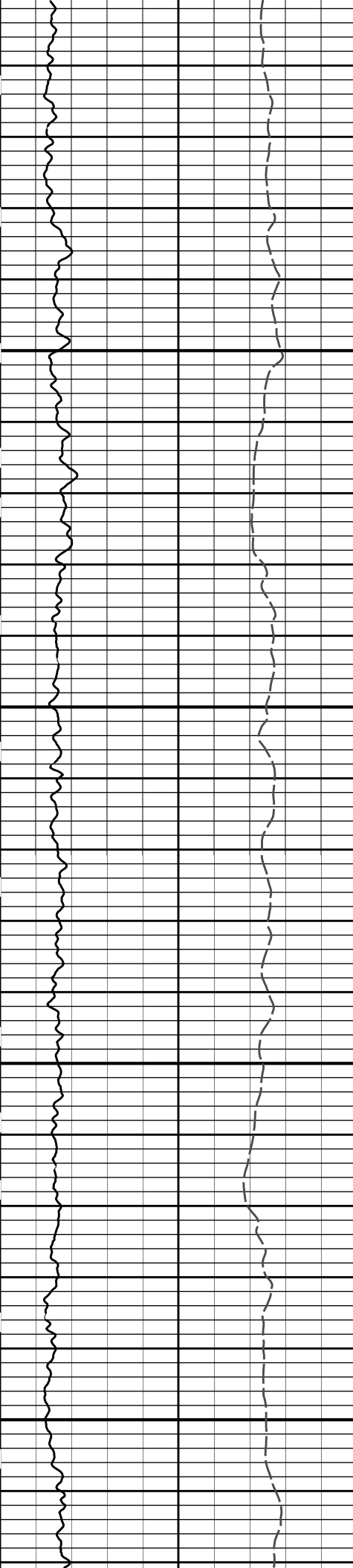




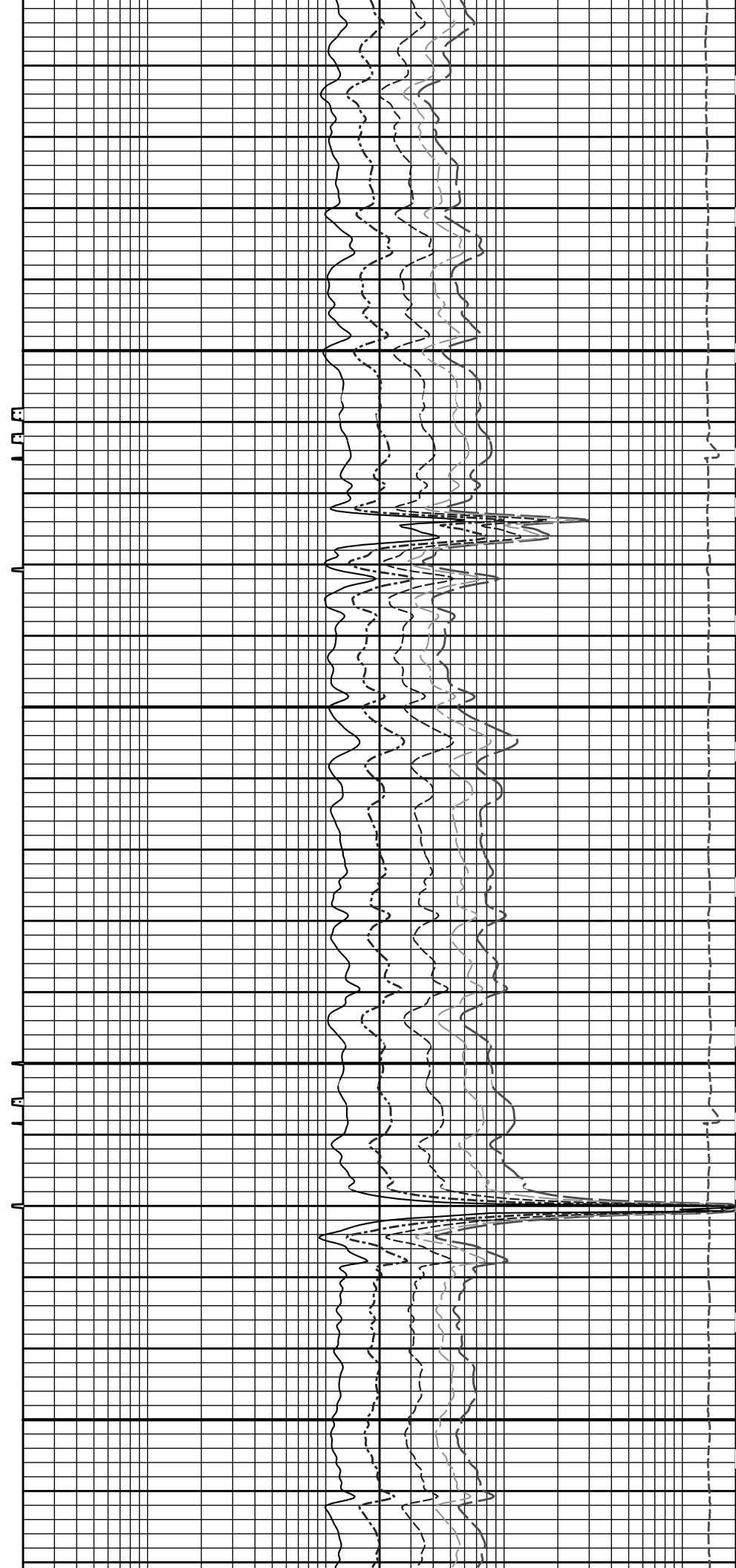
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5900





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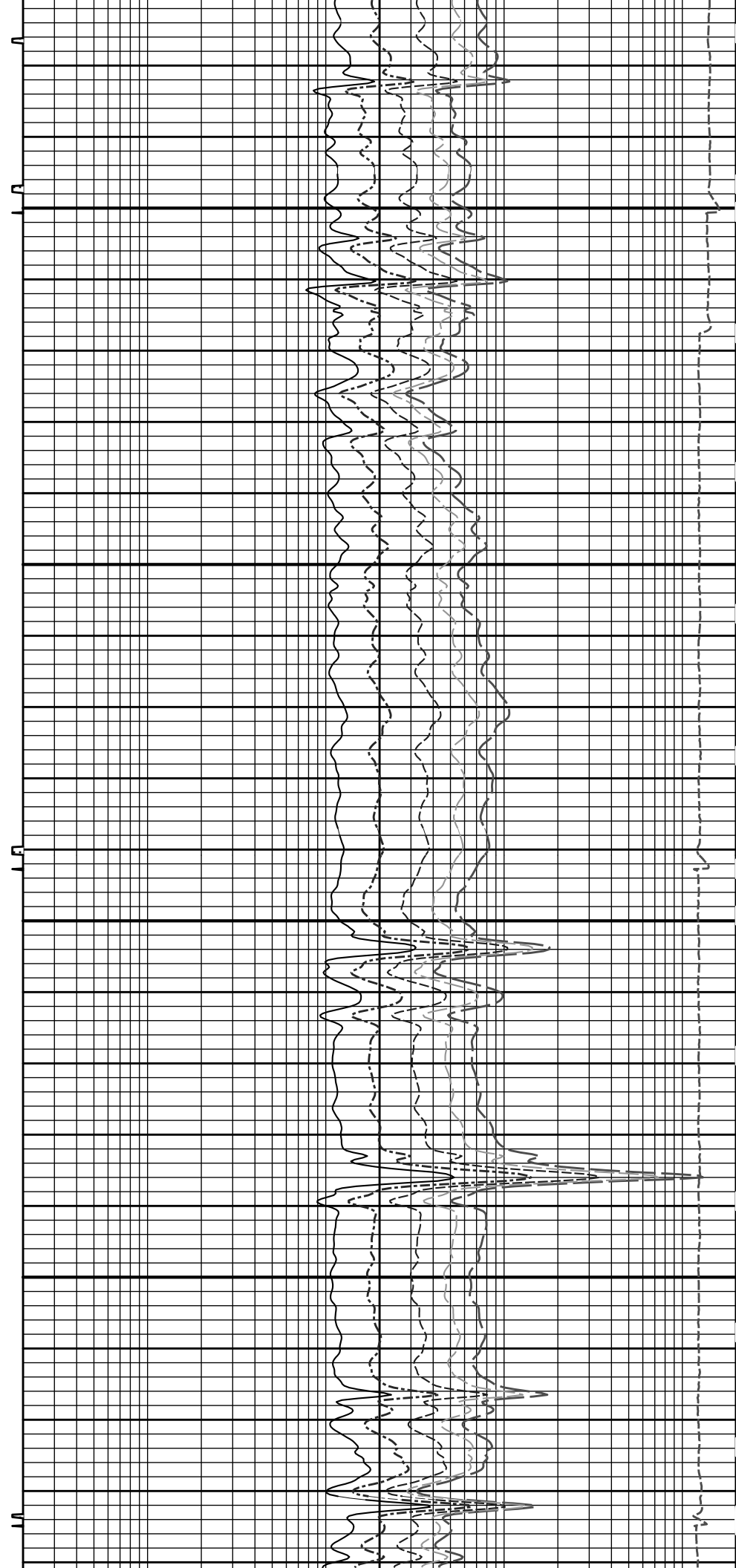


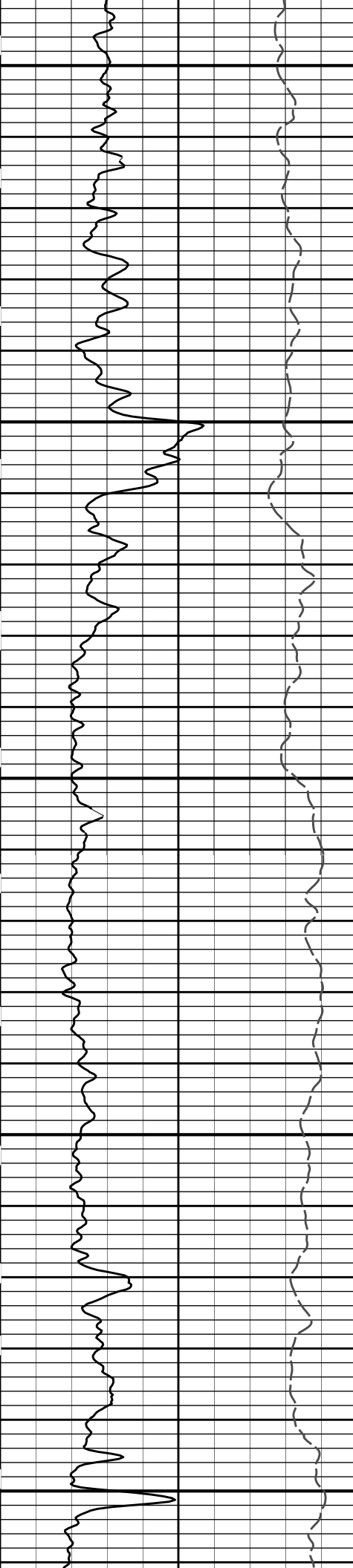
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6200

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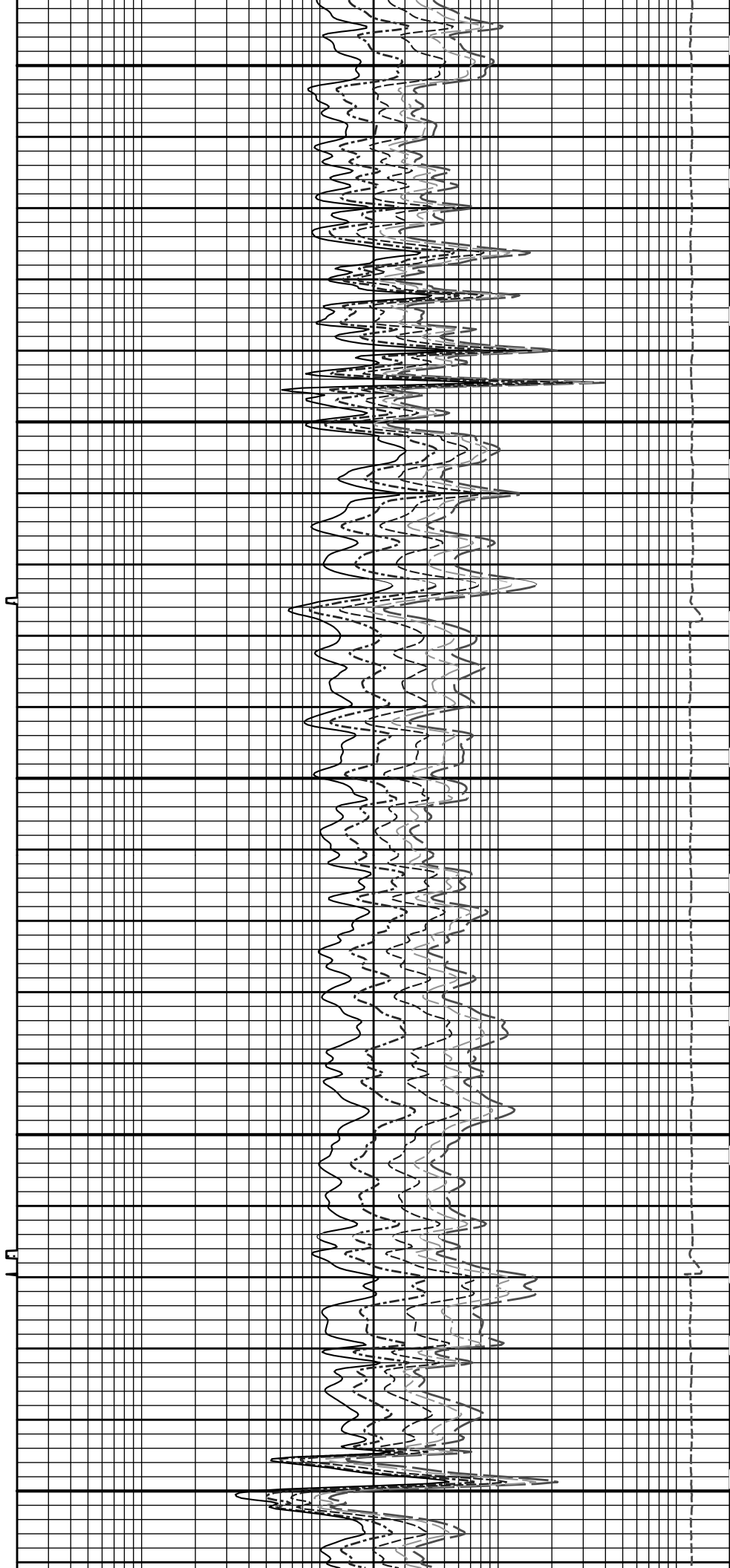




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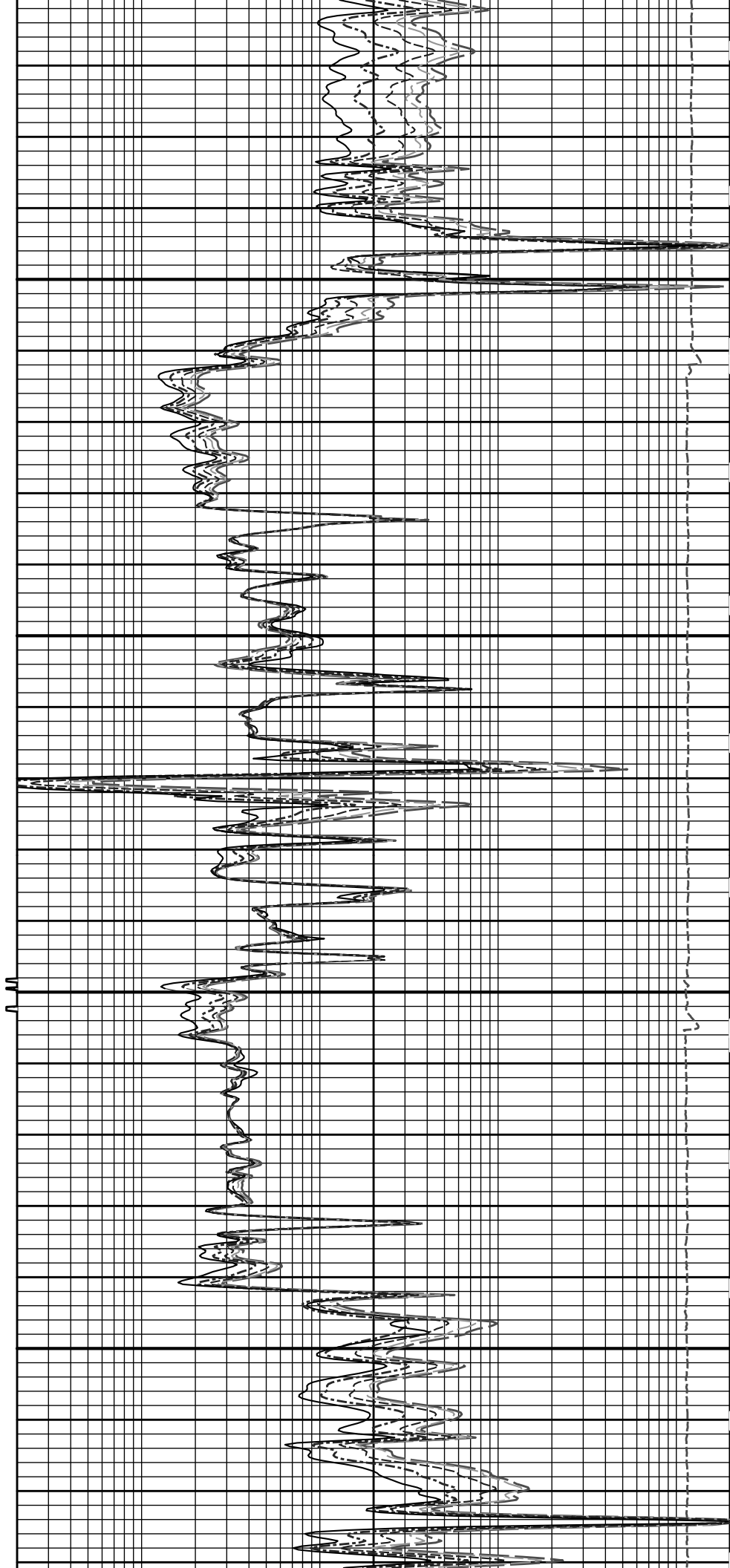
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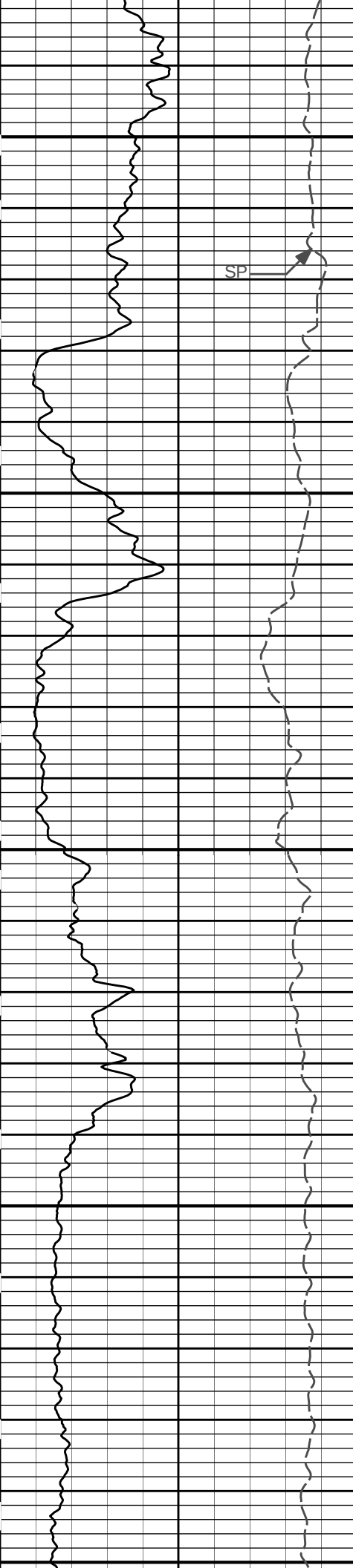




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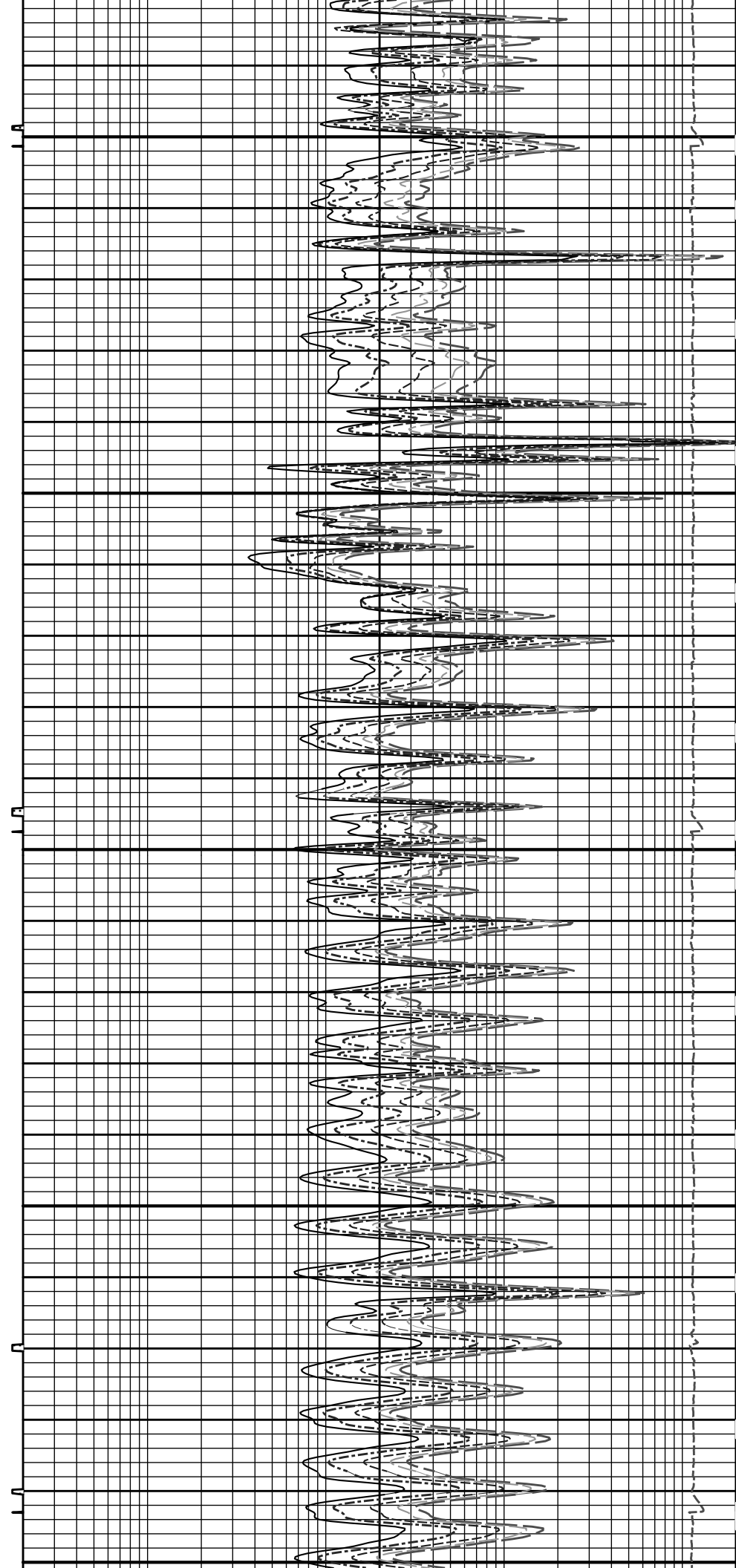
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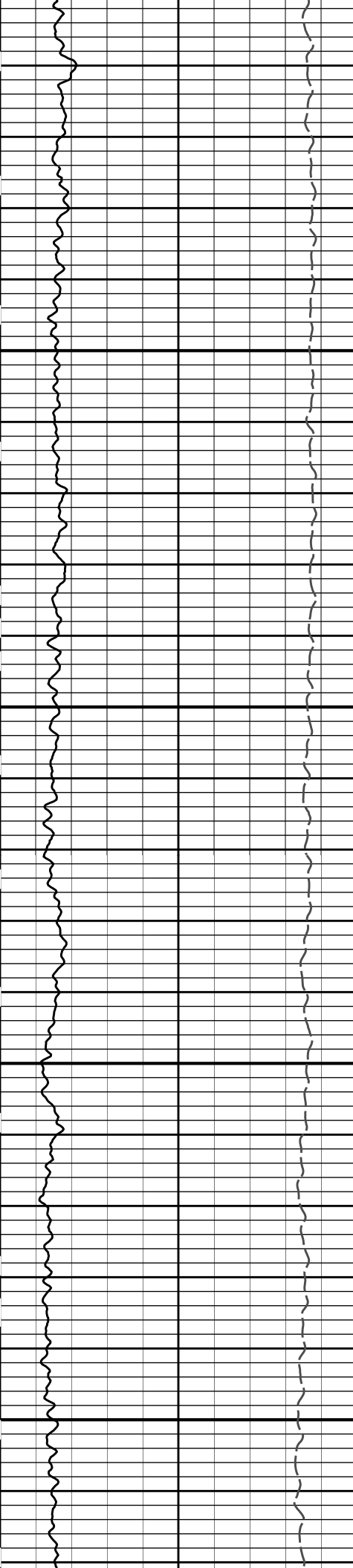




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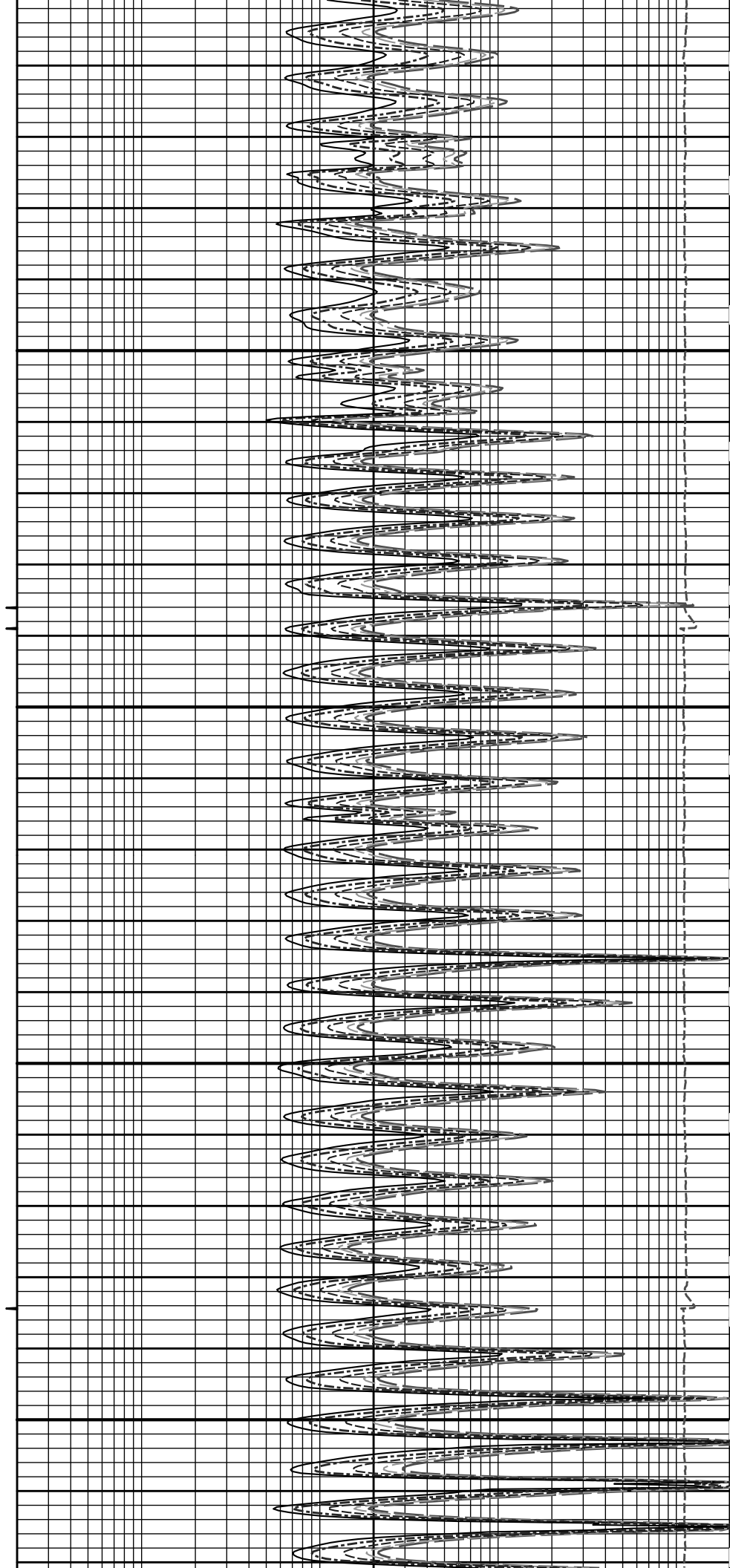
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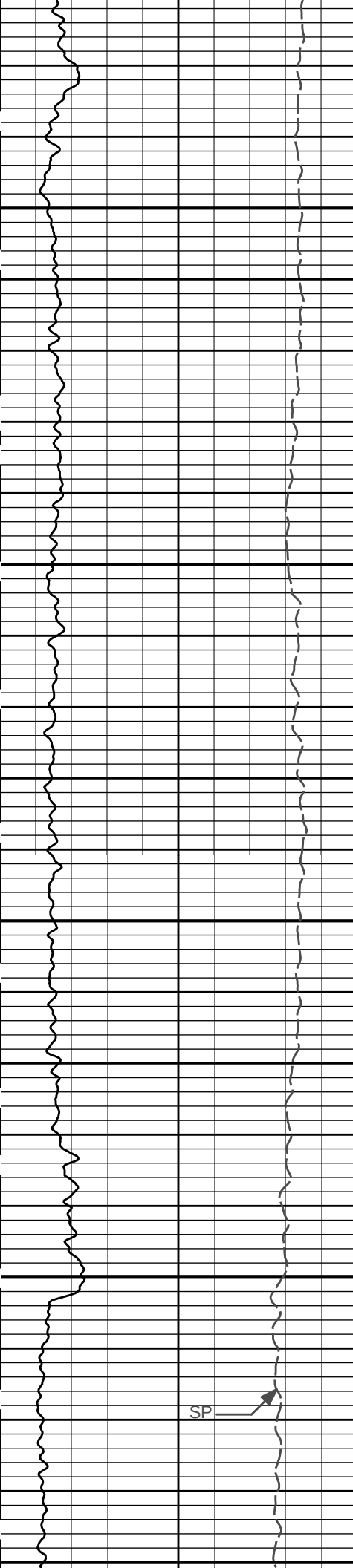




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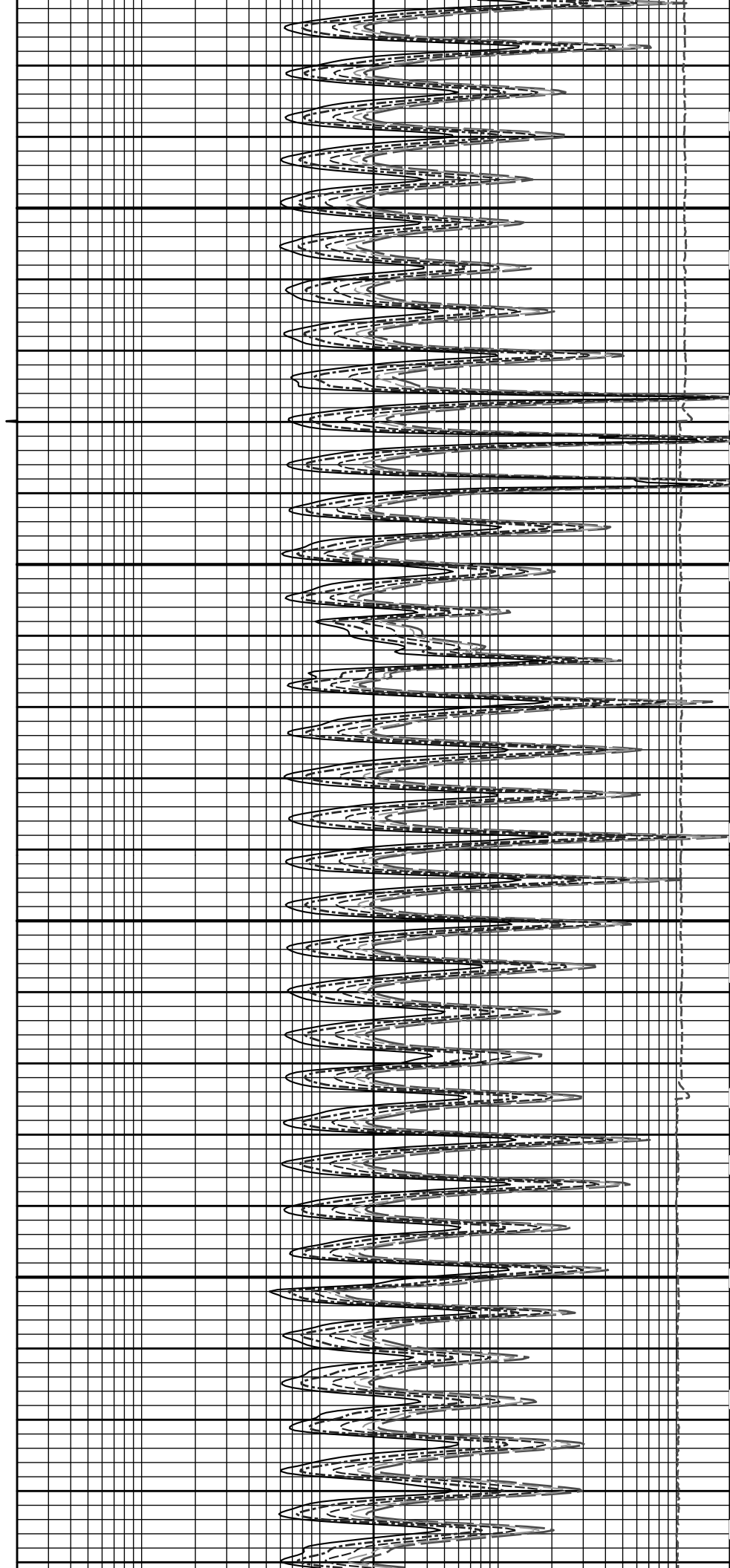


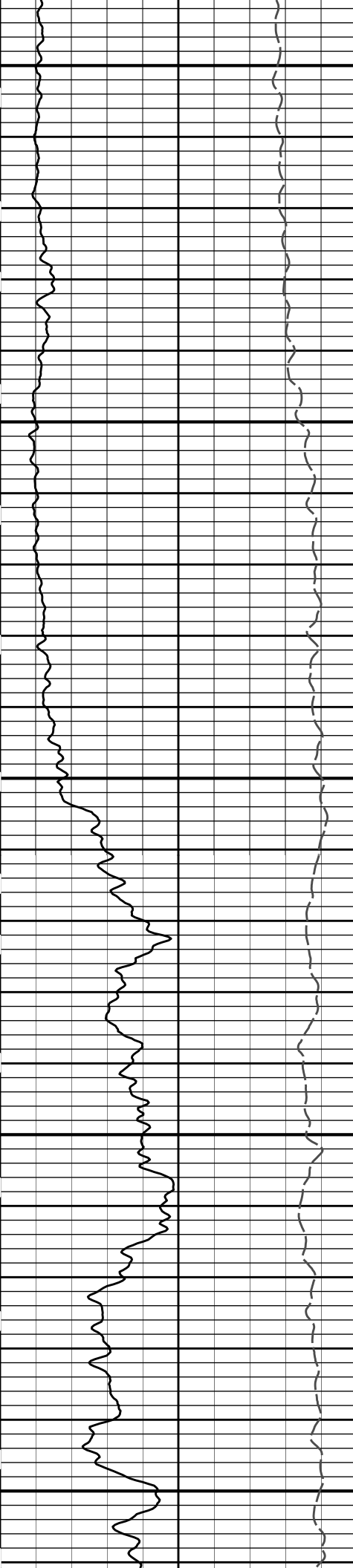


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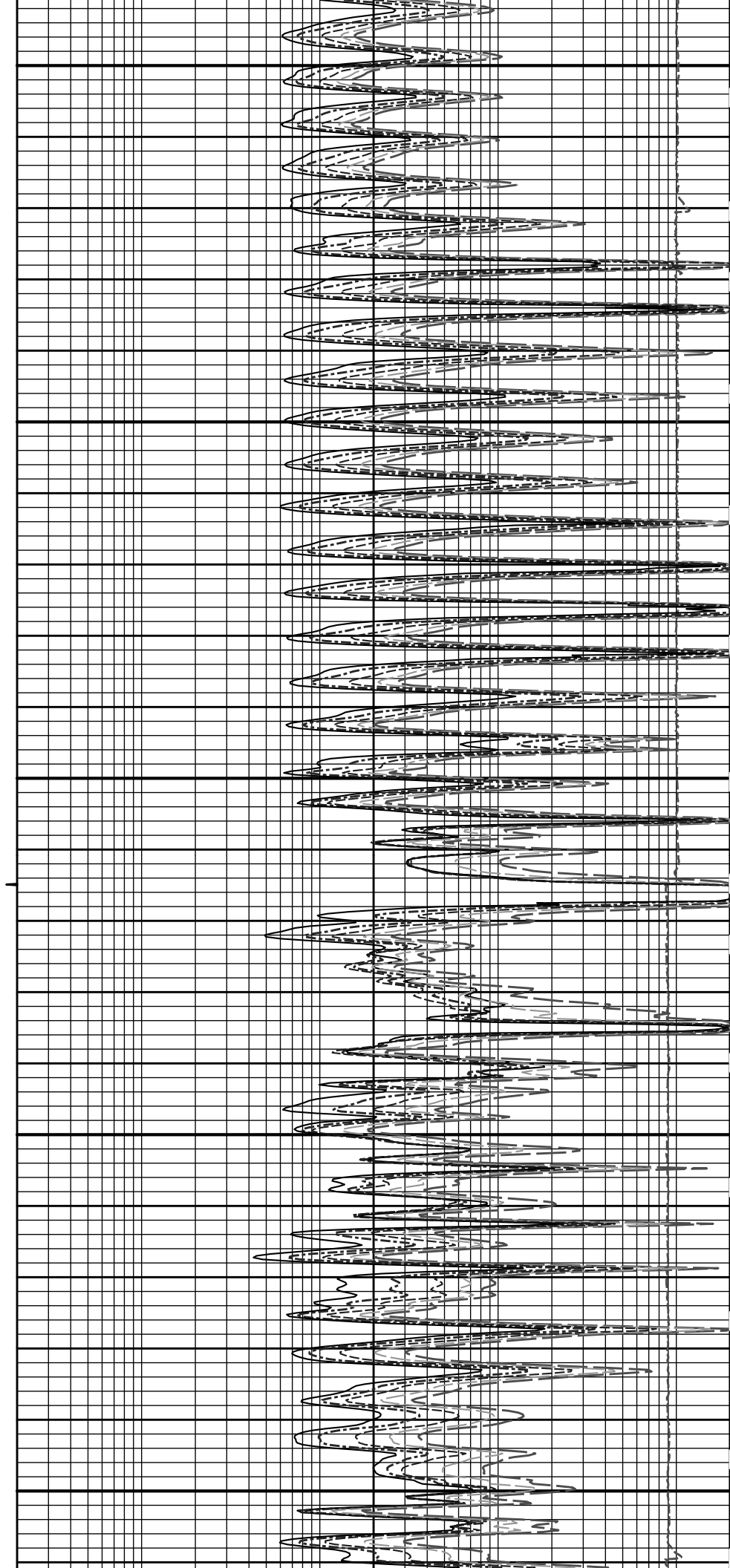


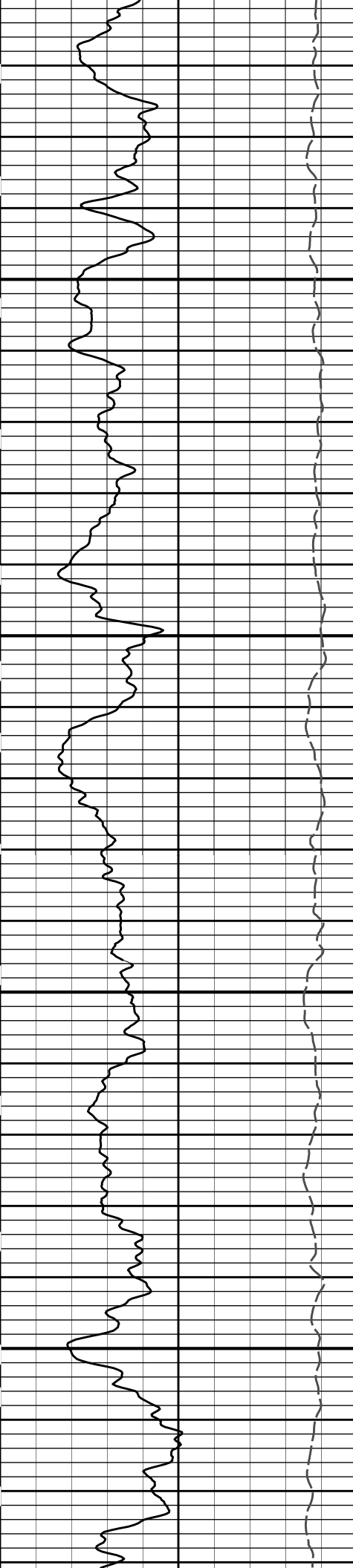


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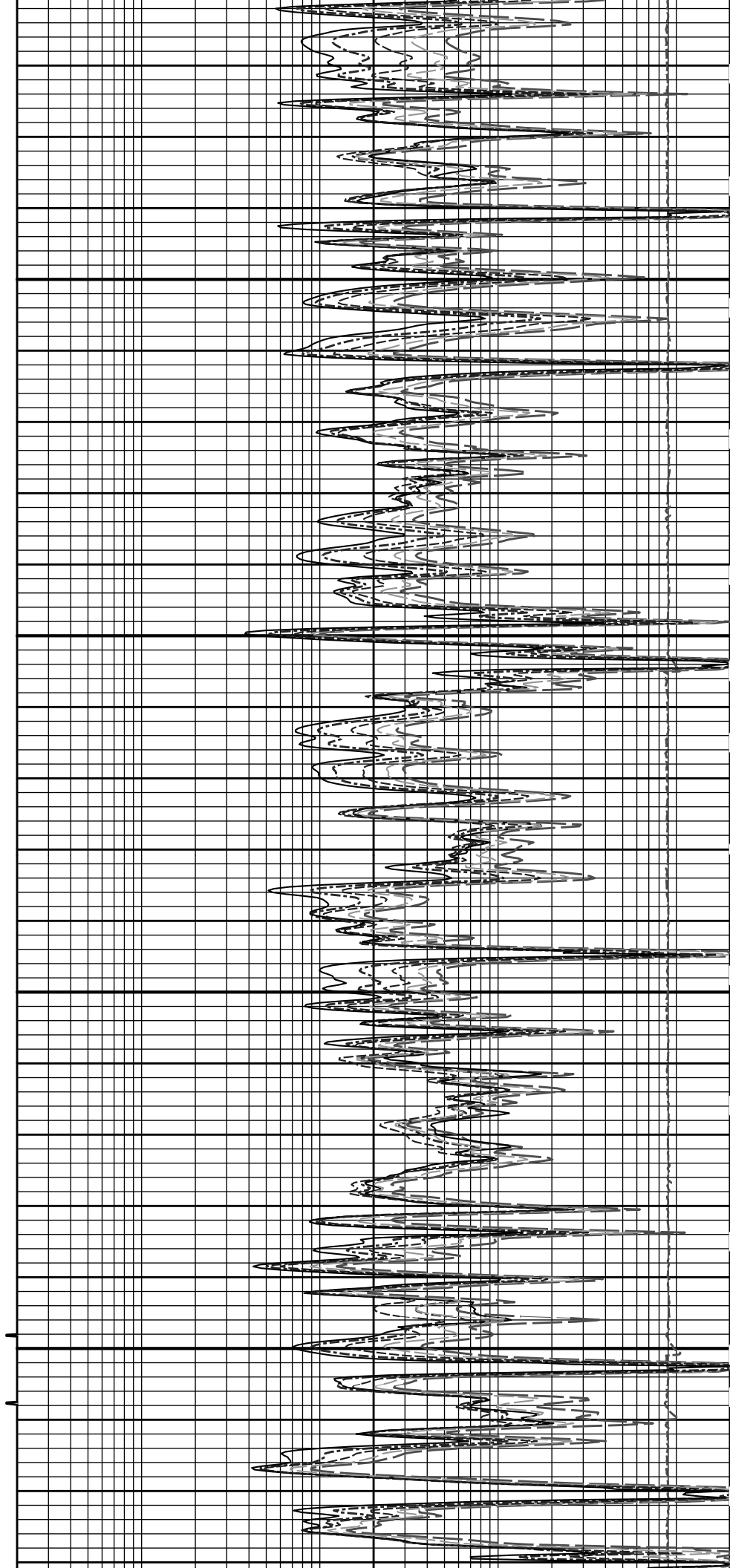
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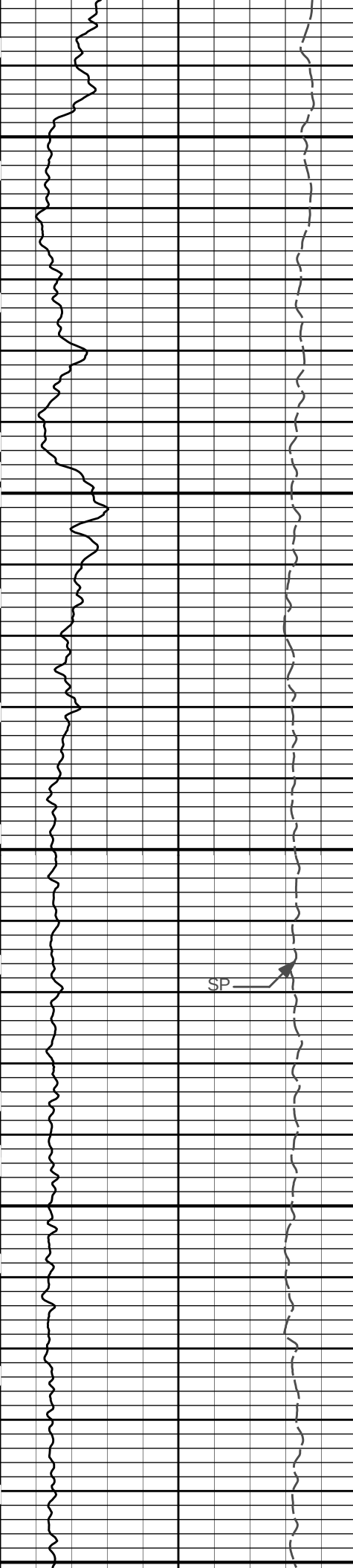




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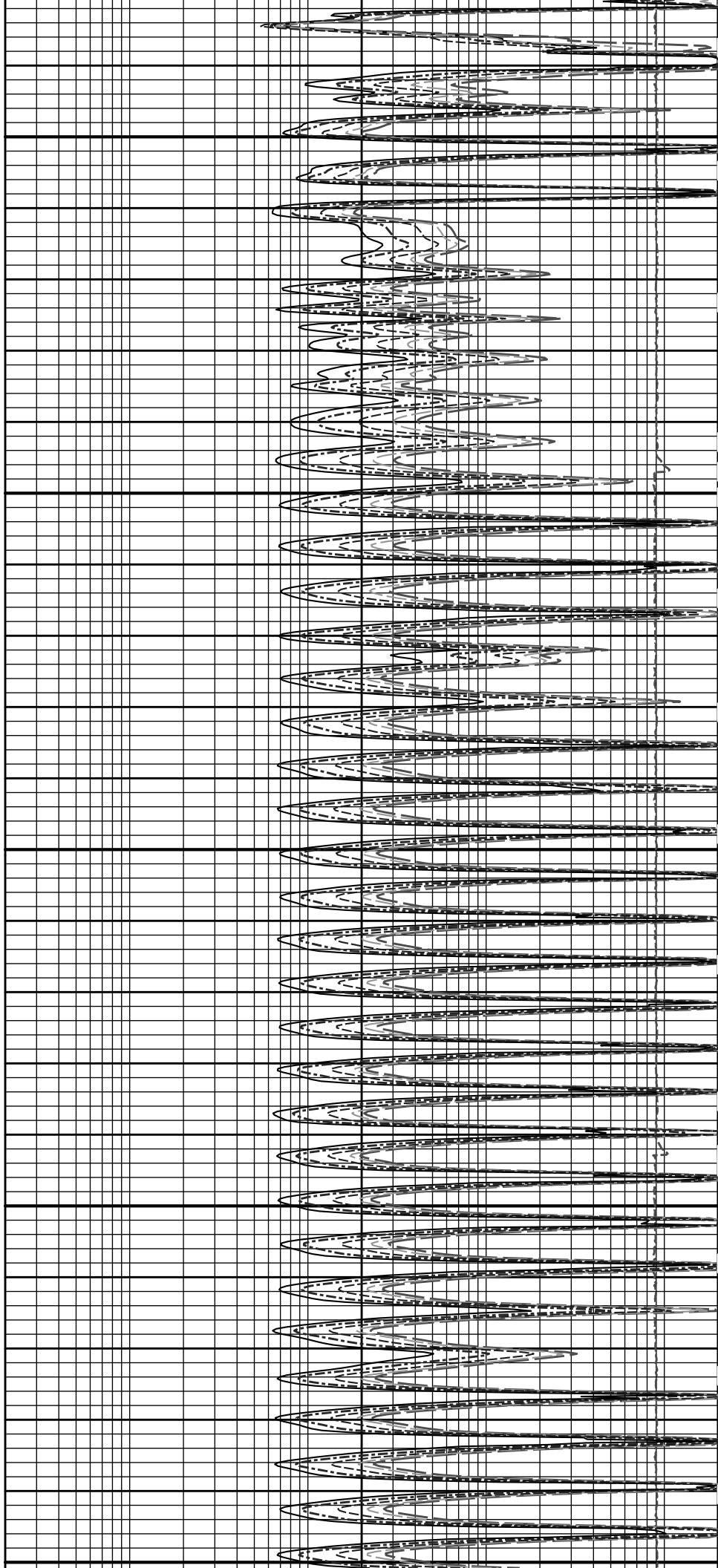
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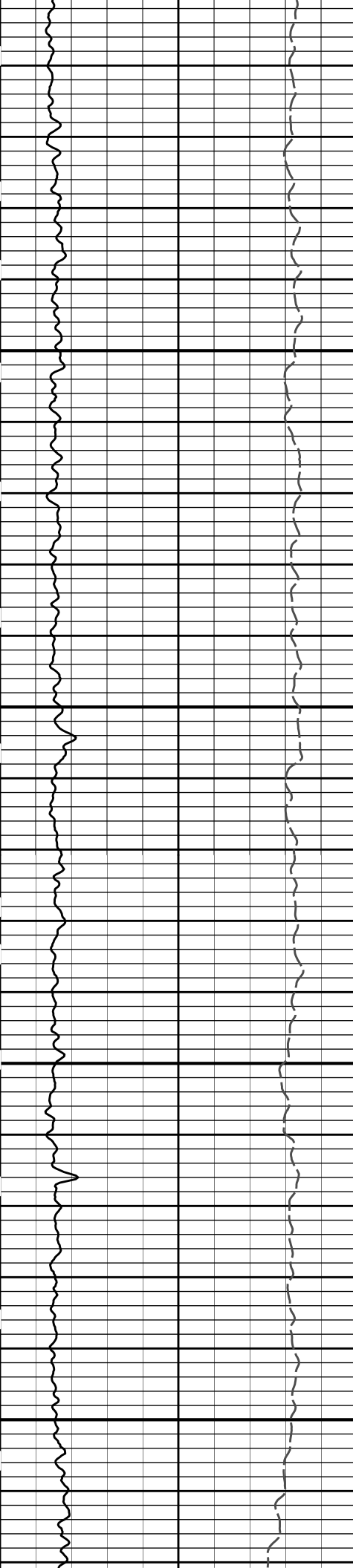




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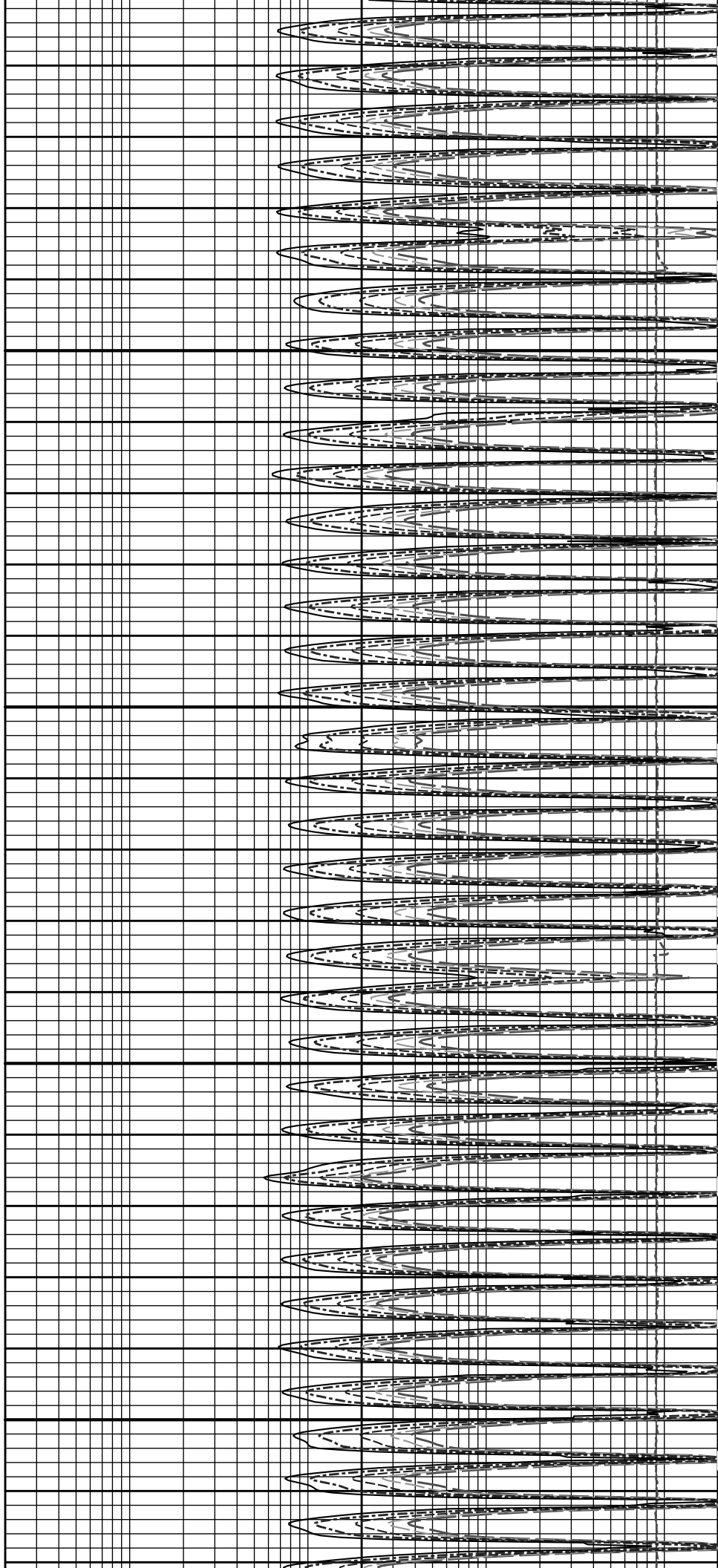
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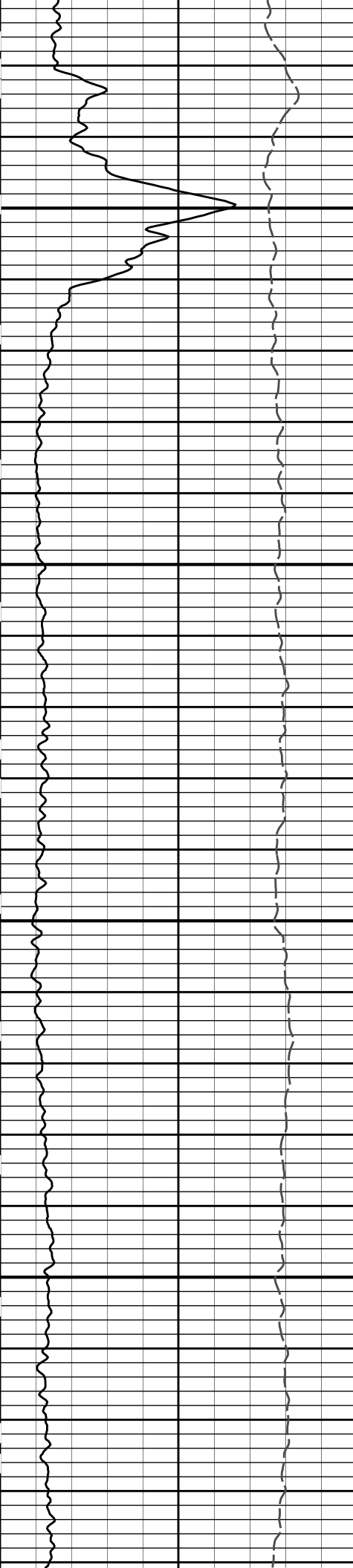




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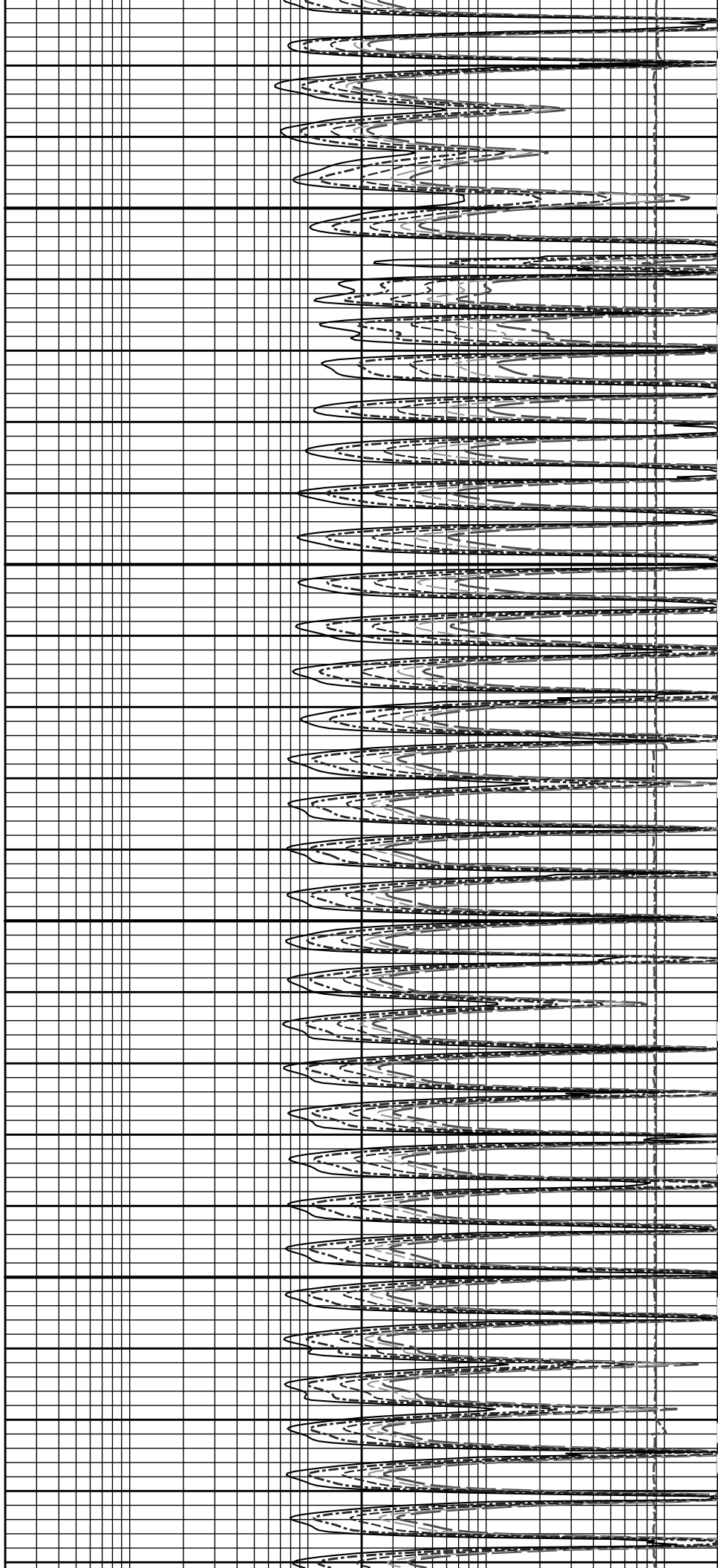
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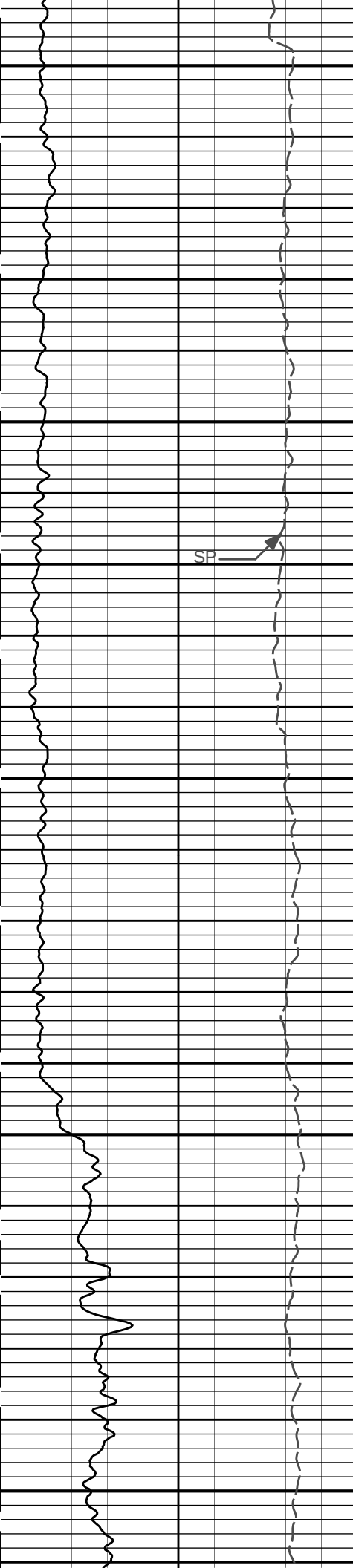




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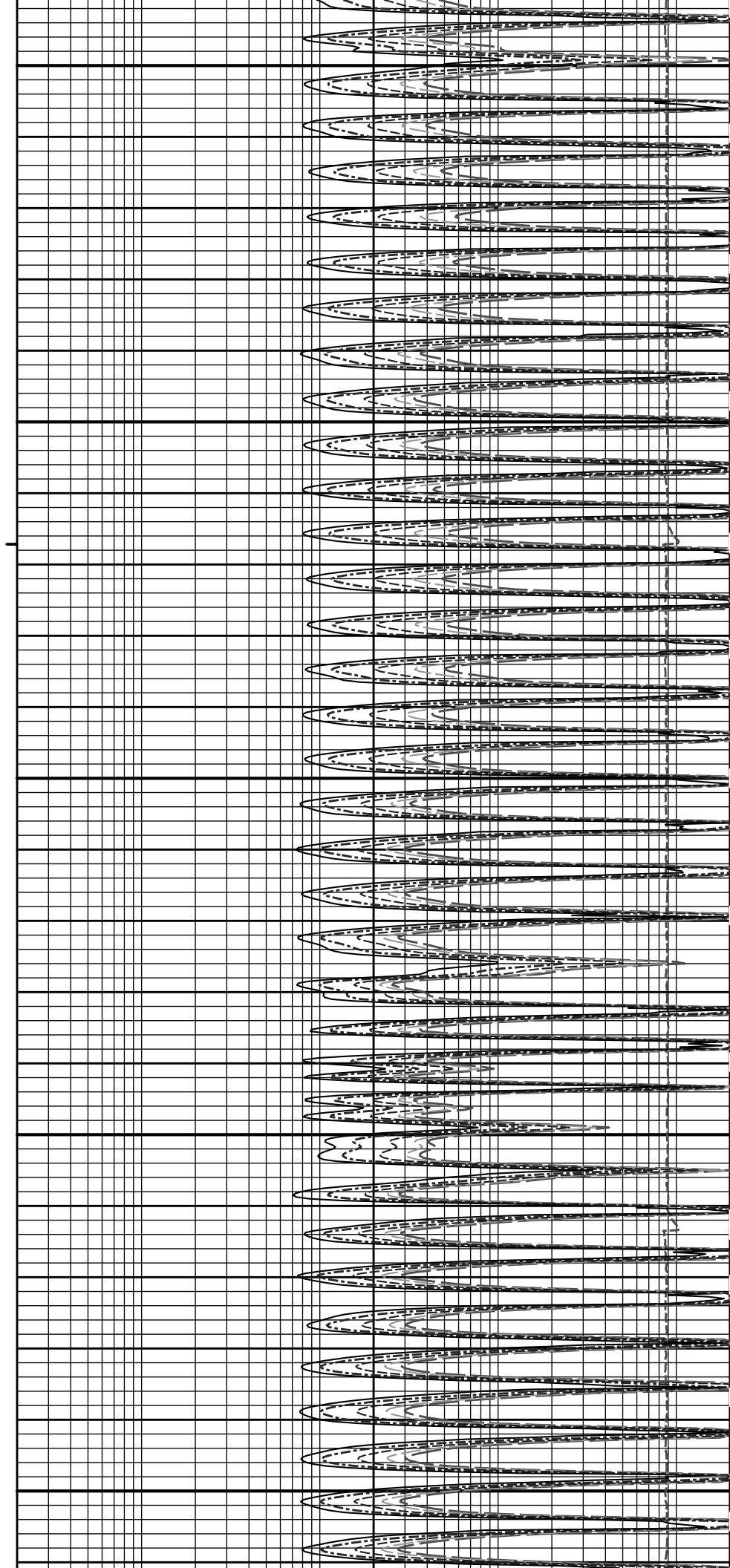


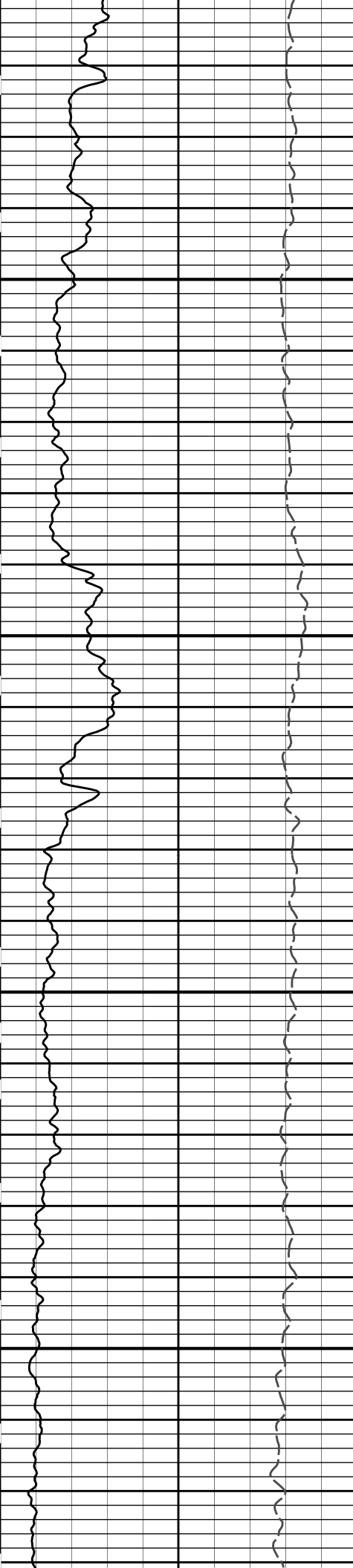


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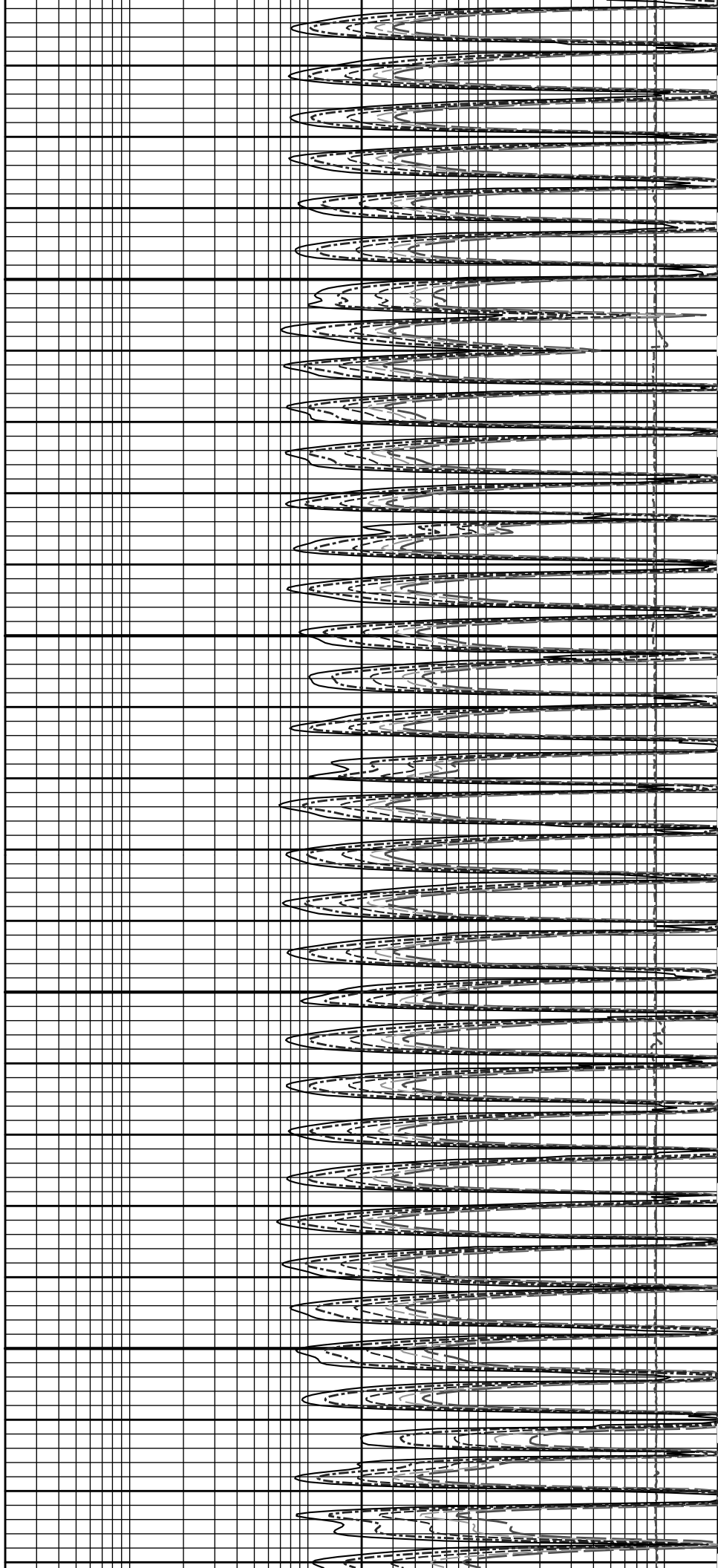
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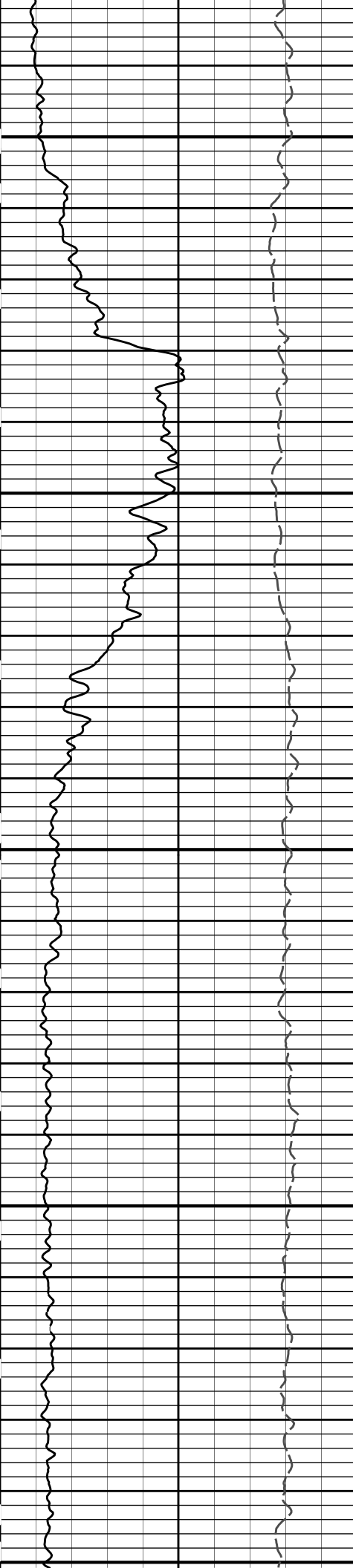




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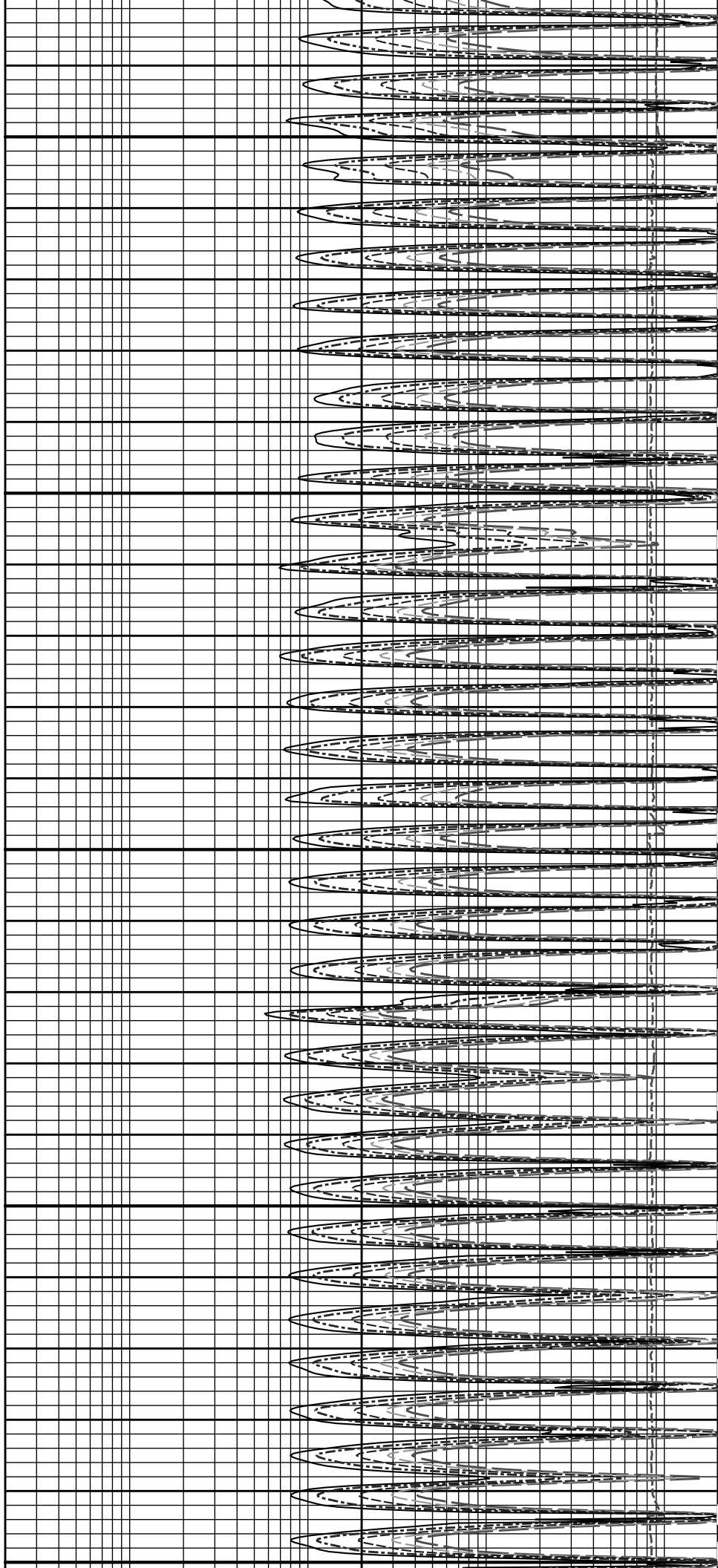
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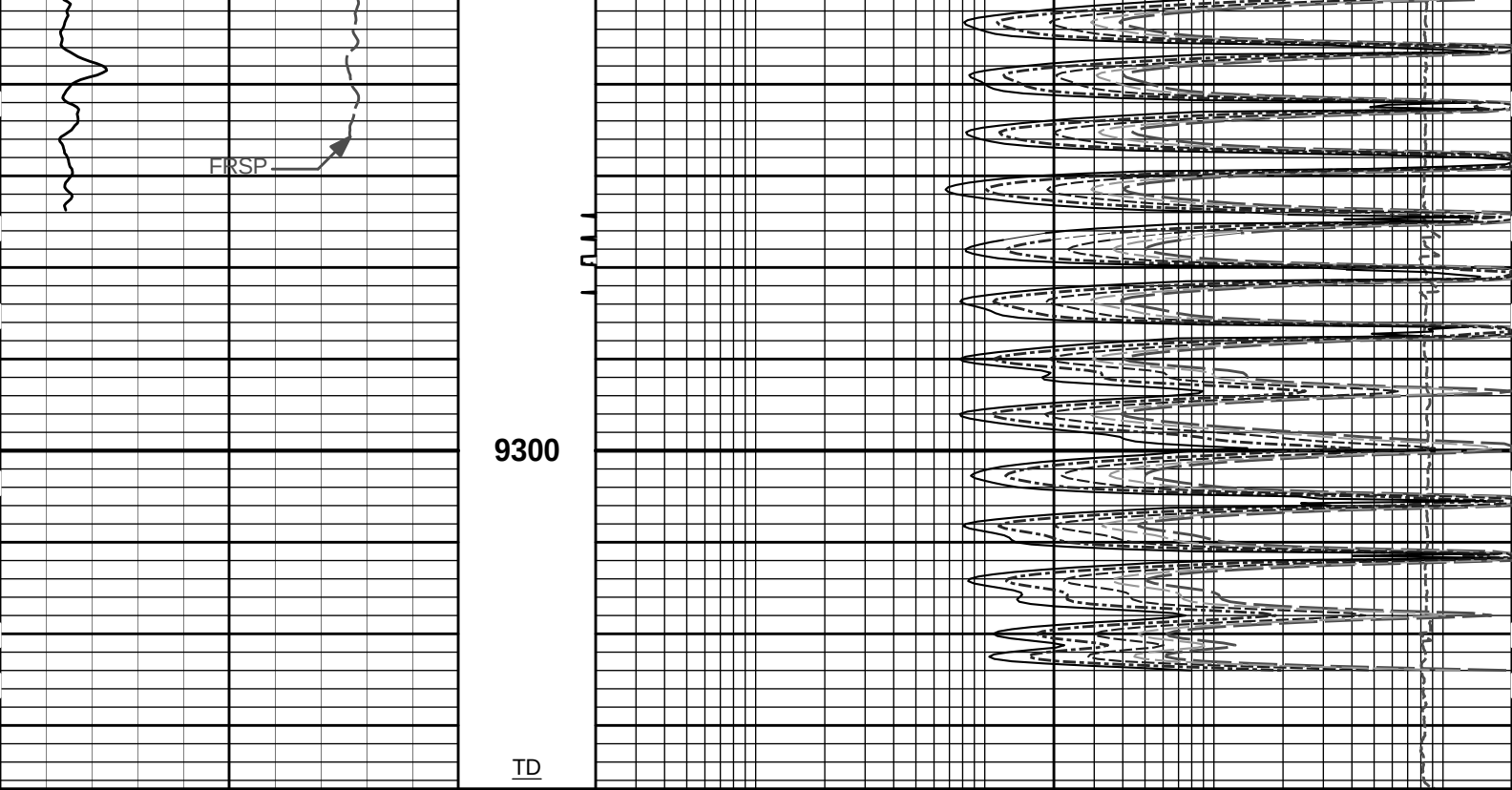




9100

9200





SP		MD 1 : 240 ft	10K Tension 0	
-]20[+			pounds	
0	Gamma API 150	Tension Pull 10 0	0.2 10in Resistivity 2ft Res 2000	
api			ohmm	
SHALE		Tension Pull	0.2 20in Resistivity 2ft Res 2000	
			ohmm	
			0.2 30in Resistivity 2ft Res 2000	
			ohm-metre	
		0.2	60in Resistivity 2ft Res 2000	
		ohmm		
		0.2	90in Resistivity 2ft Res 2000	
		ohmm		

HALLIBURTON

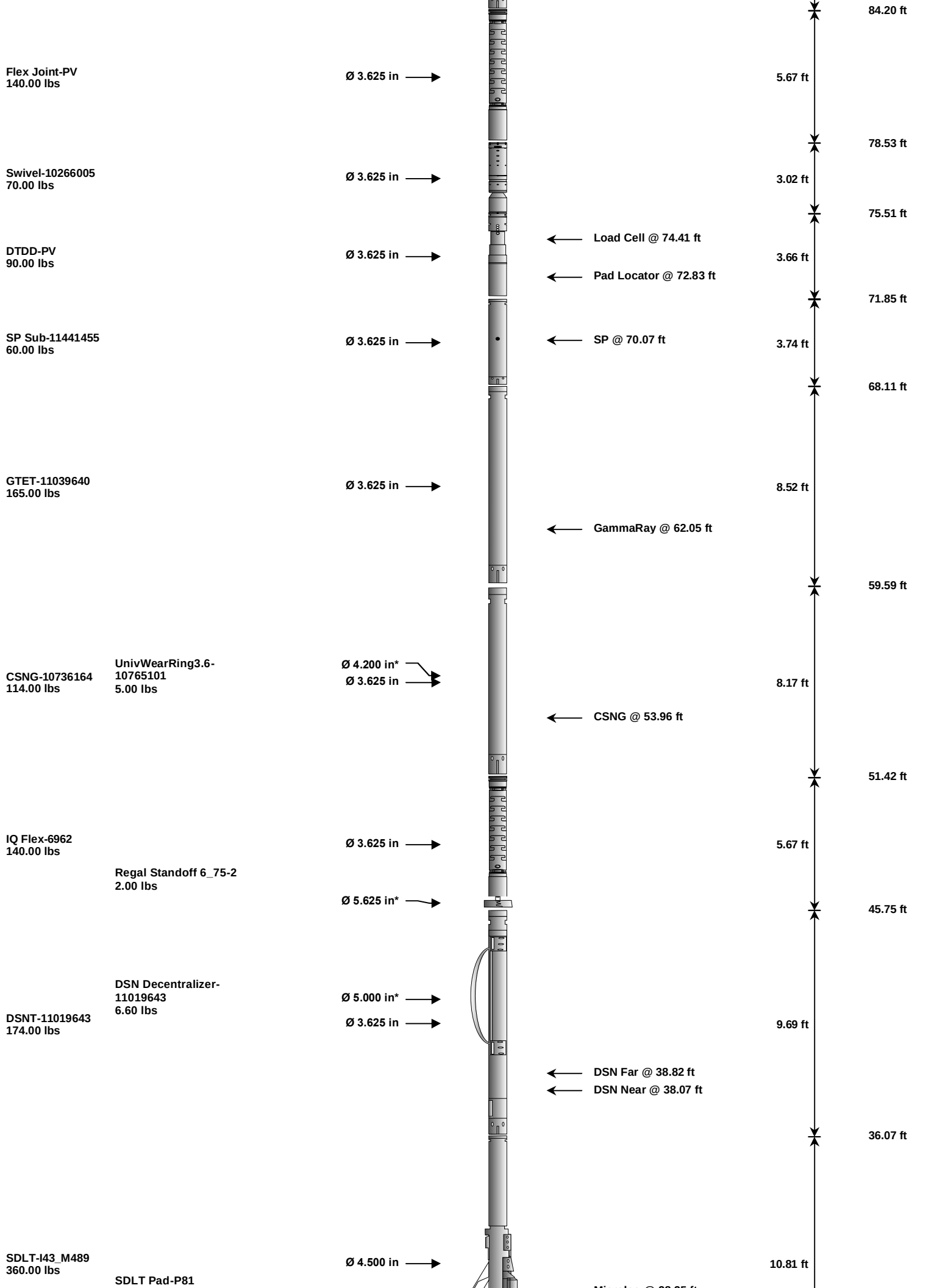
Plot Time: 23-Jul-12 17:37:42
Plot Range: 5410 ft to 9336.92 ft
Data: TOEWS_2629_1_21\Well Based\IR1_CASING\
Plot File: \\LOCAL-TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\ACRT\ACRT_5_main_lib

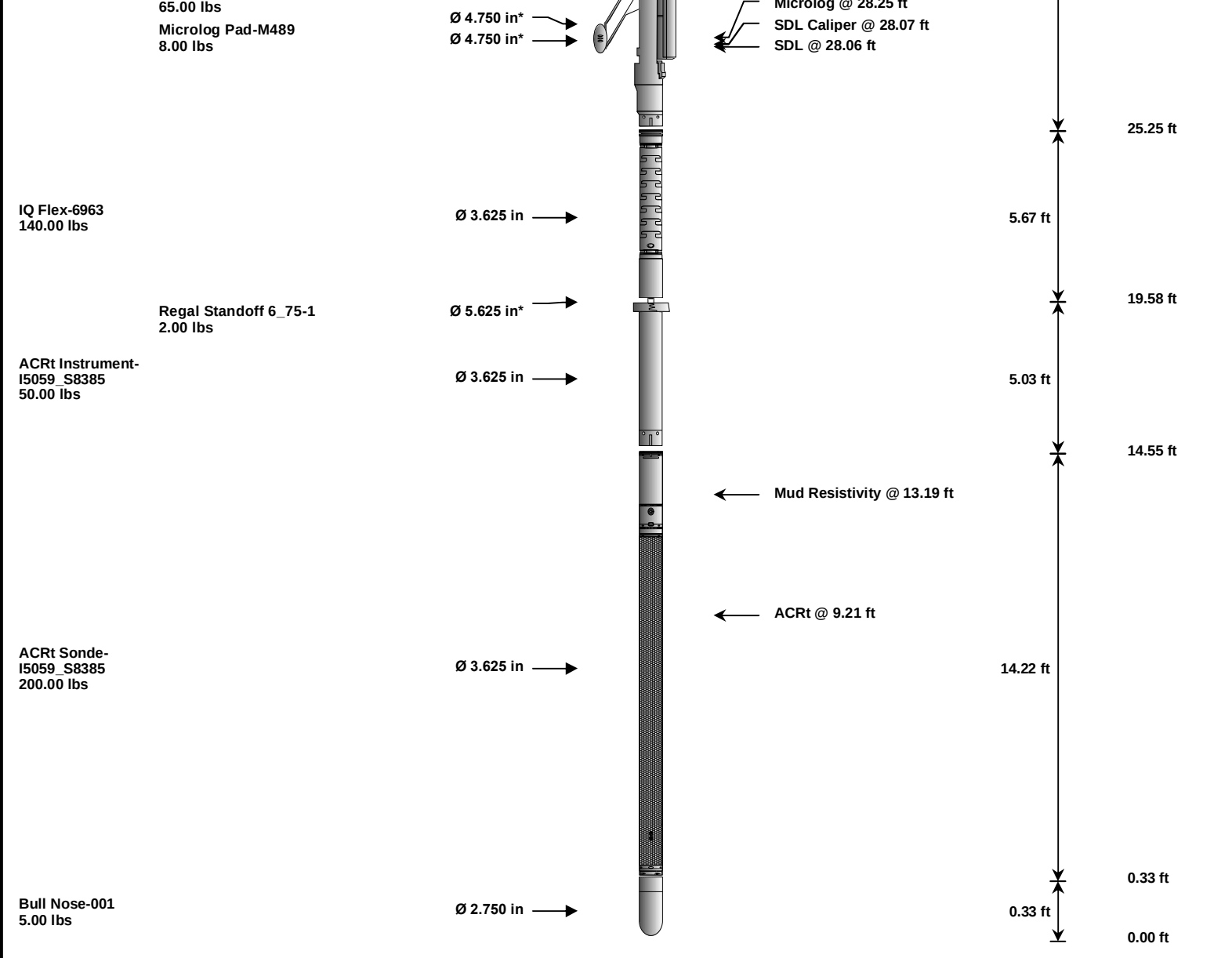
5 INCH MAIN LOG

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
Spacer-PV 45.00 lbs		Ø 3.625 in			4.50 ft	88.70 ft





Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
SPC	Test		PV	45.00	4.50	84.20	100.00
FLEX	Flex Joint		PV	140.00	5.67	78.53	300.00
SWVL	MCSA-D Multiconductor Swivel		10266005	70.00	3.02	75.51	300.00
DTDD	Downhole Tension Device		PV	90.00	3.66	71.85	300.00
SP	SP Sub		11441455	60.00	3.74	68.11	300.00
GTET	Gamma Telemetry Tool		11039640	165.00	8.52	59.59	60.00
CSNG	Compensated Spectral Natural Gamma		10736164	114.00	8.17	51.42	15.00
UWR3P6	Universal Wear Ring 3 5-8 inch		10765101	5.00	0.35	*	55.50 300.00
IQF	IQ Flex tool		6962	140.00	5.67		45.75 300.00
RSOF	Regal Standoff 6.75in		2	2.00	0.52	*	45.75 300.00
DSNT	Dual Spaced Neutron		11019643	174.00	9.69		36.07 60.00
DCNT	DSN Decentralizer		11019643	6.60	5.13	*	39.40 300.00
SDLT	Spectral Density Tool		I43_M489	360.00	10.81		25.25 60.00
MICP	Microlog Pad		M489	8.00	1.00	*	27.75 60.00
SDLP	Density Insite Pad		P81	65.00	2.55	*	27.46 60.00
IQF	IQ Flex tool		6963	140.00	5.67		19.58 300.00
ACRt	Array Compensated True Resistivity Instrument Section		I5059_S8385	50.00	5.03		14.55 300.00
RSOF	Regal Standoff 6.75in		1	2.00	0.52	*	19.06 300.00
ACRt	Array Compensated True Resistivity Sonde Section		I5059_S8385	200.00	14.22		0.33 300.00
BLNS	Bull Nose		001	5.00	0.33		0.00 300.00
Total				1,841.60	88.70		
* Not included in Total Length and Length Accumulation.							
Data: TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\IDLE							
Date: 23-Jul-12 12:26:43							

CALIBRATION REPORT

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name:	ACRt Sonde - I5059_S8385	Reference Calibration Date:	12-Jul-12 16:18:52
Engineer:	T. HYDE	Calibration Date:	12-Jul-12 16:29:47
Software Version:	WL INSITE R3.6.0 (Build 3)	Calibration Version:	1
Host Tool Name:	ACRt Instrument - I5059_S8385		

TYPICAL GAIN RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.03	1.05	0.95	1.04	1.05	0.95	1.04	1.05
A2 (50")	0.95	1.01	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A3 (29")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A4 (17")	0.95	1.01	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.01	1.05	0.95	1.01	1.05
A6 (6")	N/A	N/A	N/A	0.95	1.00	1.05	0.95	1.00	1.05

TYPICAL SONDE OFFSET RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-1.40	2	-6	-4.43	-2	-8	-4.52	-2
A2 (50")	-7	-2.26	0	-7	-3.72	0	-7	-4.52	0
A3 (29")	-27	-13.36	-9	-9	-3.56	-3	-7	-2.73	-1
A4 (17")	-180	-107.06	-60	-45	-33.57	-15	-39	-26.06	-13
A5 (10")	N/A	N/A	N/A	-150	-82.67	-50	-80	-41.94	-10
A6 (6")	N/A	N/A	N/A	175	341.28	525	90	170.50	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.92	1.3
36K	1.0	1.37	2.0
72K	1.0	1.63	2.0

R-MUD VERIFICATION

Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	1.00	1.05

PASS/FAIL SUMMARY

GAIN RANGE CHK	PASS
SONDE OFFSET RANGE CHK	PASS
Tx CURRENT GAIN	PASS
Rmud VERIFICATION	PASS

TOOL OK TO LOG

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
ACRt Sonde-I5059_S8385						
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	6.125	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	8.650	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	10000.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	9366.00	ft
	SHARED	BHT	Bottom Hole Temperature	140.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	CSNG	CGOK	Process CSNG Data?	Yes	
	CSNG	CENT	Is Tool Centralized?	No	
	CSNG	GBOK	Gamma Enviromental Corrections?	Yes	
	CSNG	BARF	Barite Correction Factor	1.00	
	CSNG	ORDG	Use Fixed Gain	No	
	CSNG	ORDO	Use Fixed Offset	No	
	CSNG	ORDR	Use Fixed Resolution Degradation Factor	No	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Limestone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	SDLT Pad	DNOK	Process Density?	Yes	
	SDLT Pad	DNOK	Process Density EVR?	No	
	SDLT Pad	CB	Logging Calibration Blocks?	No	
	SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
	SDLT Pad	DTWN	Disable temperature warning	No	
	SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
	SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc

Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Up	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
BOTTOM				
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HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
DTDD				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	70.07	NO	
SP	Spontaneous Potential	70.07	BLK	1.250
SPR	Raw Spontaneous Potential	70.07	NO	
SPO	Spontaneous Potential Offset	70.07	NO	
GTET				
TPUL	Tension Pull	62.05	NO	
GR	Natural Gamma Ray API	62.05	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	62.05	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	62.05	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
CSNG				
TPUL	Tension Pull	53.96	NO	
STAT	Status	53.96	NO	
FRMC	Tool Frame Count	53.96	BLK	0.250
TFRM	Total Frames	53.96	NO	
LSPD	Line Speed	53.96	BLK	0.250
CTIM	Accumulation time for sample	53.96	BLK	0.250
NOIS	Spectral Noise	53.96	BLK	0.250
STAB	Stabilizer Voltage in mv	53.96	BLK	0.250
STBP	Stabilizer 60 KEV Peak	53.96	BLK	0.250
AMER	Americium	53.96	BLK	0.250
FTMP	Flask PCB Temperature	53.96	BLK	0.250
SPEL	Low Energy Spectrum	53.96	BLK	0.250
SPEH	High Energy Spectrum	53.96	BLK	0.250
SSP	Stabilization Energy Spectrum	53.96	BLK	0.250
CSPC	CSNG Lo Hi Spectrum Data	53.96	NO	

DSNT				
TPUL	Tension Pull	37.97	NO	
RNDS	Near Detector Telemetry Counts	38.07	BLK	1.417
RFDS	Far Detector Telemetry Counts	38.82	TRI	0.583
DNTT	DSN Tool Temperature	38.07	NO	
DSNS	DSN Tool Status	37.97	NO	
ERND	Near Detector Telemetry Counts EVR	38.07	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	38.82	BLK	0.000
ENTM	DSN Tool Temperature EVR	38.07	NO	
SDLT				
TPUL	Tension Pull	28.07	NO	
PCAL	Pad Caliper	28.07	TRI	0.250
ACAL	Arm Caliper	28.07	TRI	0.250
ACRt Sonde				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	2.73	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000

F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	
SDLT Pad				
TPUL	Tension Pull	28.06	NO	
NAB	Near Above	27.88	BLK	0.920
NHI	Near Cesium High	27.88	BLK	0.920
NLO	Near Cesium Low	27.88	BLK	0.920
NVA	Near Valley	27.88	BLK	0.920
NBA	Near Barite	27.88	BLK	0.920
NDE	Near Density	27.88	BLK	0.920
NPK	Near Peak	27.88	BLK	0.920
NLI	Near Lithology	27.88	BLK	0.920
NBAU	Near Barite Unfiltered	27.88	BLK	0.250
NLIU	Near Lithology Unfiltered	27.88	BLK	0.250
FAB	Far Above	28.23	BLK	0.250
FHI	Far Cesium High	28.23	BLK	0.250
FLO	Far Cesium Low	28.23	BLK	0.250
FVA	Far Valley	28.23	BLK	0.250
FBA	Far Barite	28.23	BLK	0.250
FDE	Far Density	28.23	BLK	0.250
FPK	Far Peak	28.23	BLK	0.250
FLI	Far Lithology	28.23	BLK	0.250
PTMP	Pad Temperature	28.07	BLK	0.920
NHV	Near Detector High Voltage	27.46	NO	
FHV	Far Detector High Voltage	27.46	NO	
ITMP	Instrument Temperature	27.46	NO	
DDHV	Detector High Voltage	27.46	NO	
Microlog Pad				
TPUL	Tension Pull	28.25	NO	
MINV	Microlog Lateral	28.25	BLK	0.750
MNOR	Microlog Normal	28.25	BLK	0.750
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COMPANY	SANDRIDGE ENERGY		
WELL	TOEWS 2629 1-21H		
FIELD			
COUNTY	GRAY	STATE	KANSAS
HALLIBURTON		ARRAY COMPENSATED TRUE RESISTIVITY	

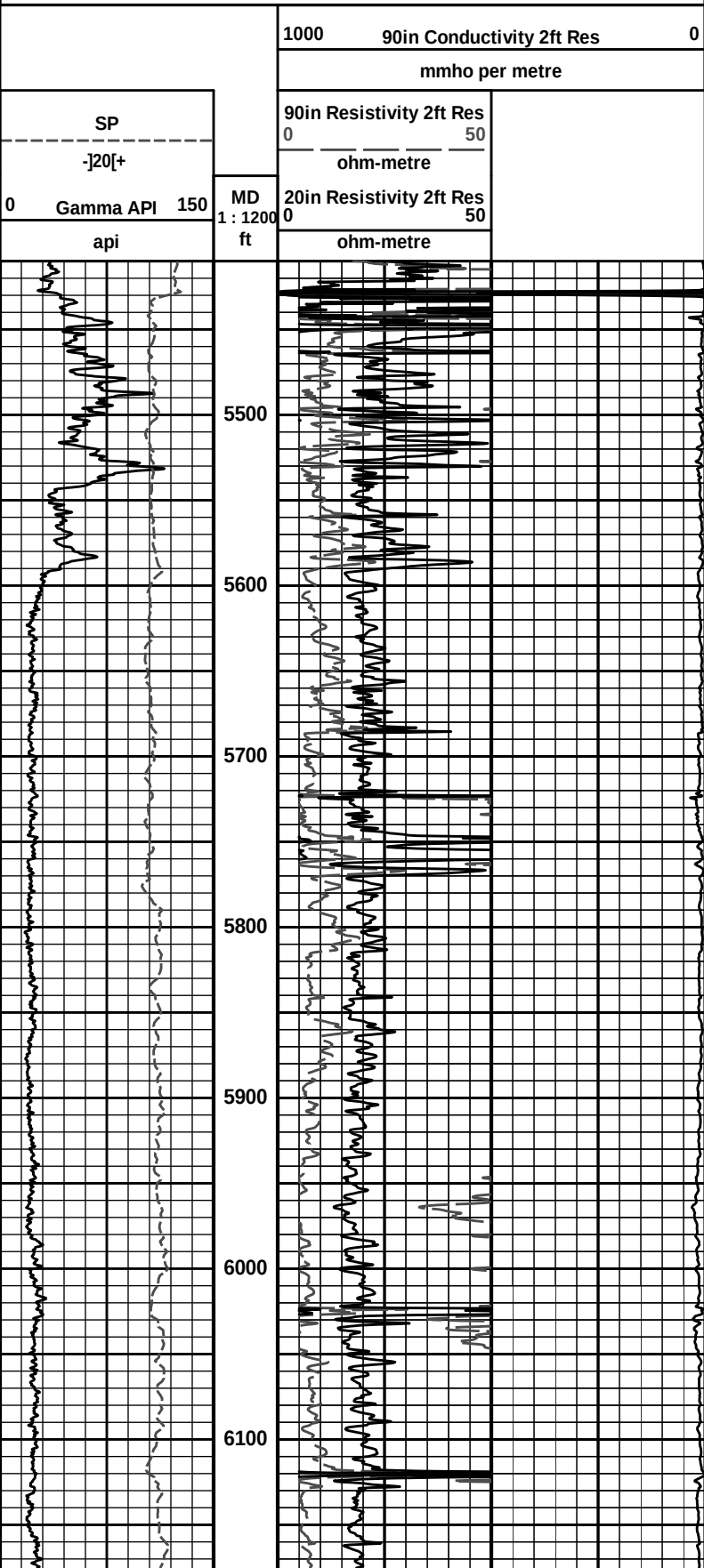
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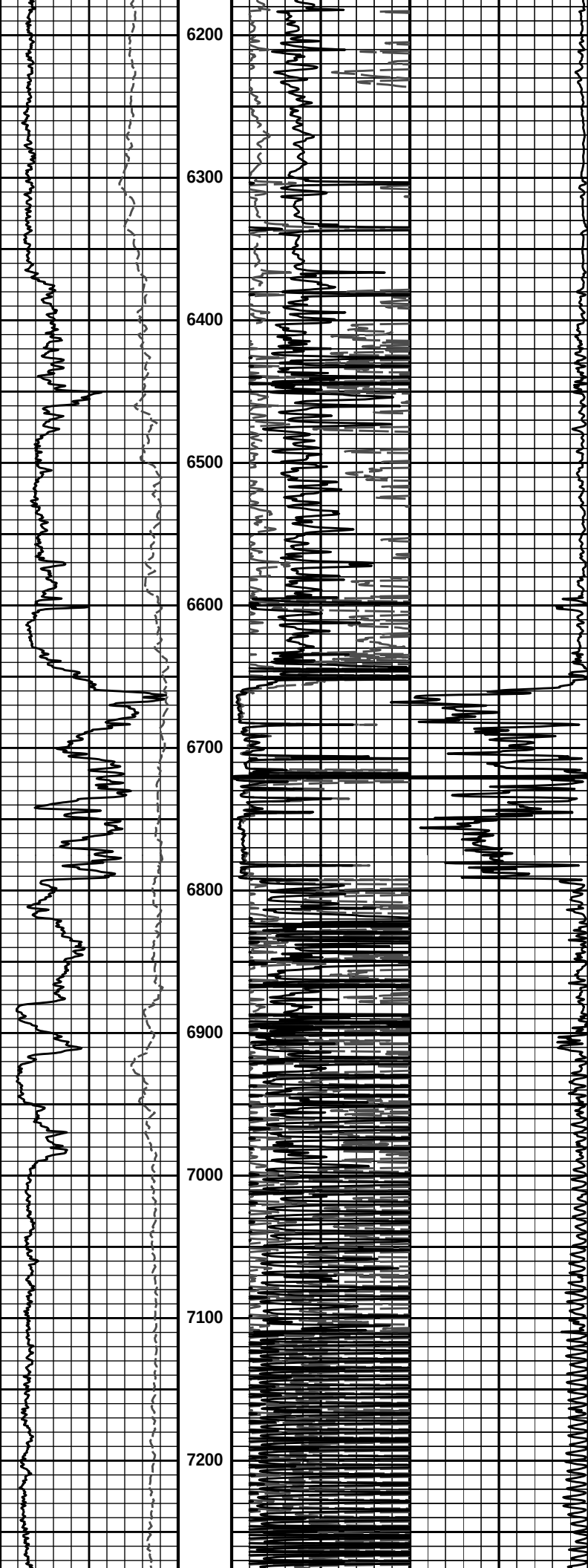
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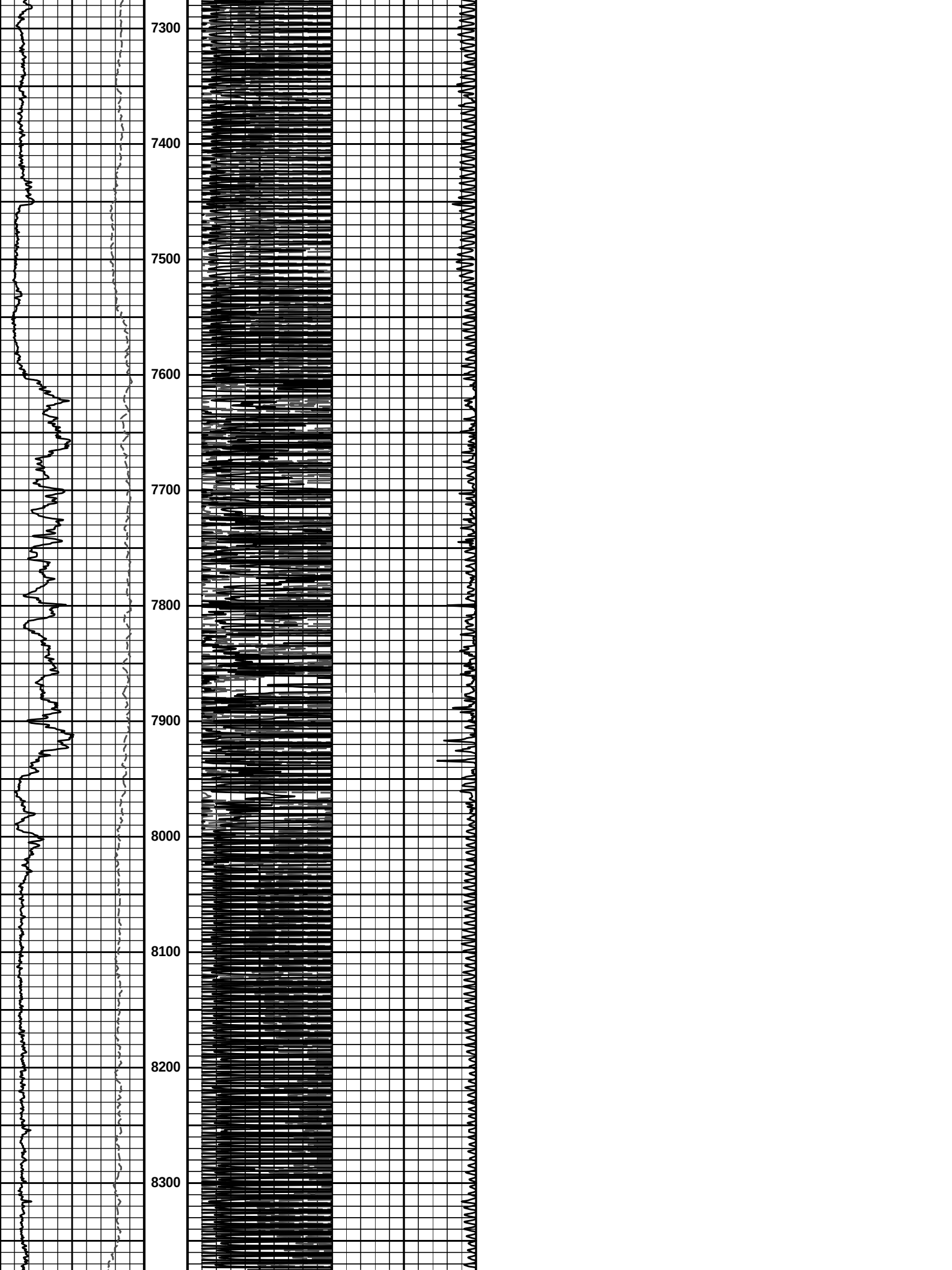
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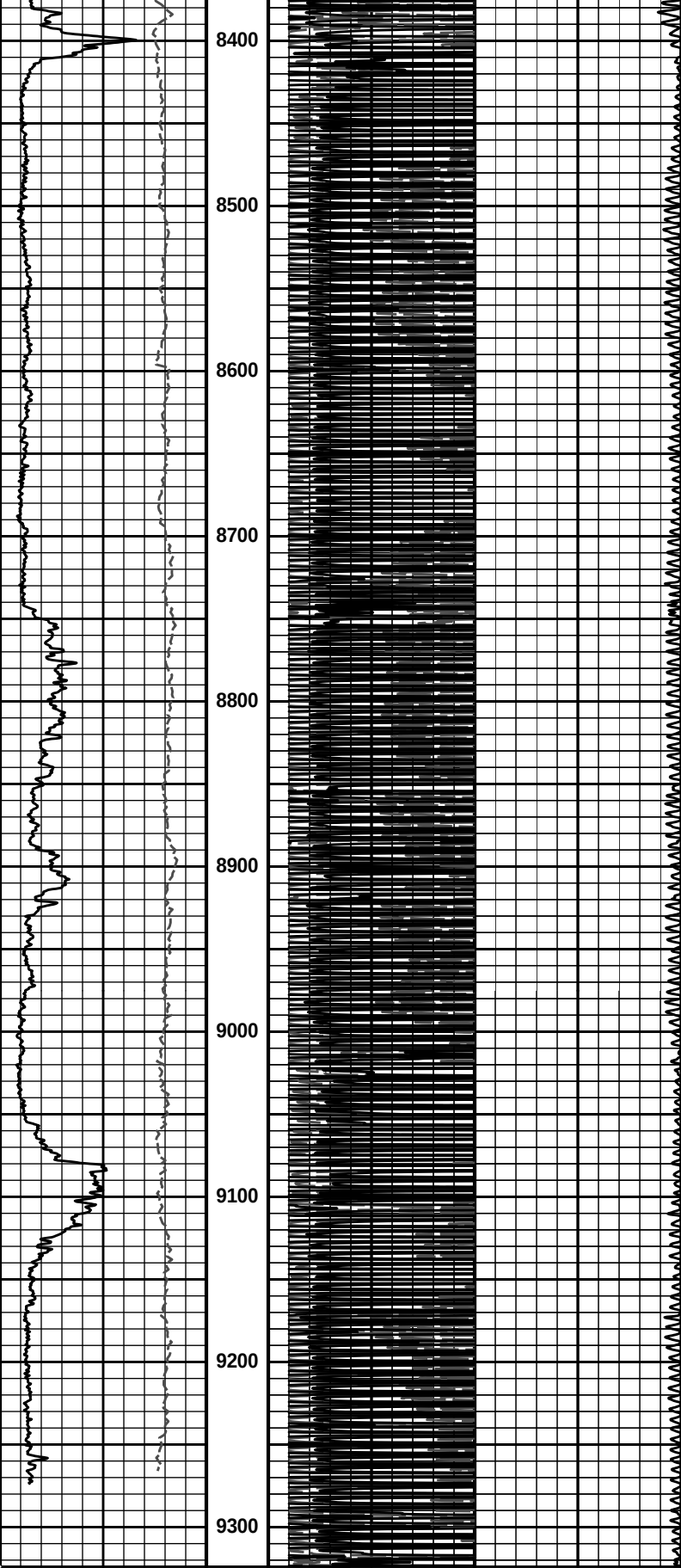
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1 INCH MAIN LOG







0	Gamma API	150	MD 1 : 1200 ft	20in Resistivity 2ft Res		0
	api			ohm-metre		
-	SP			90in Resistivity 2ft Res		0
	-20[+			ohm-metre		
				1000 90in Conductivity 2ft Res		0
				mmho per metre		

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Plot Time: 23-Jul-12 17:37:46
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1 INCH MAIN LOG