

HALLIBURTON

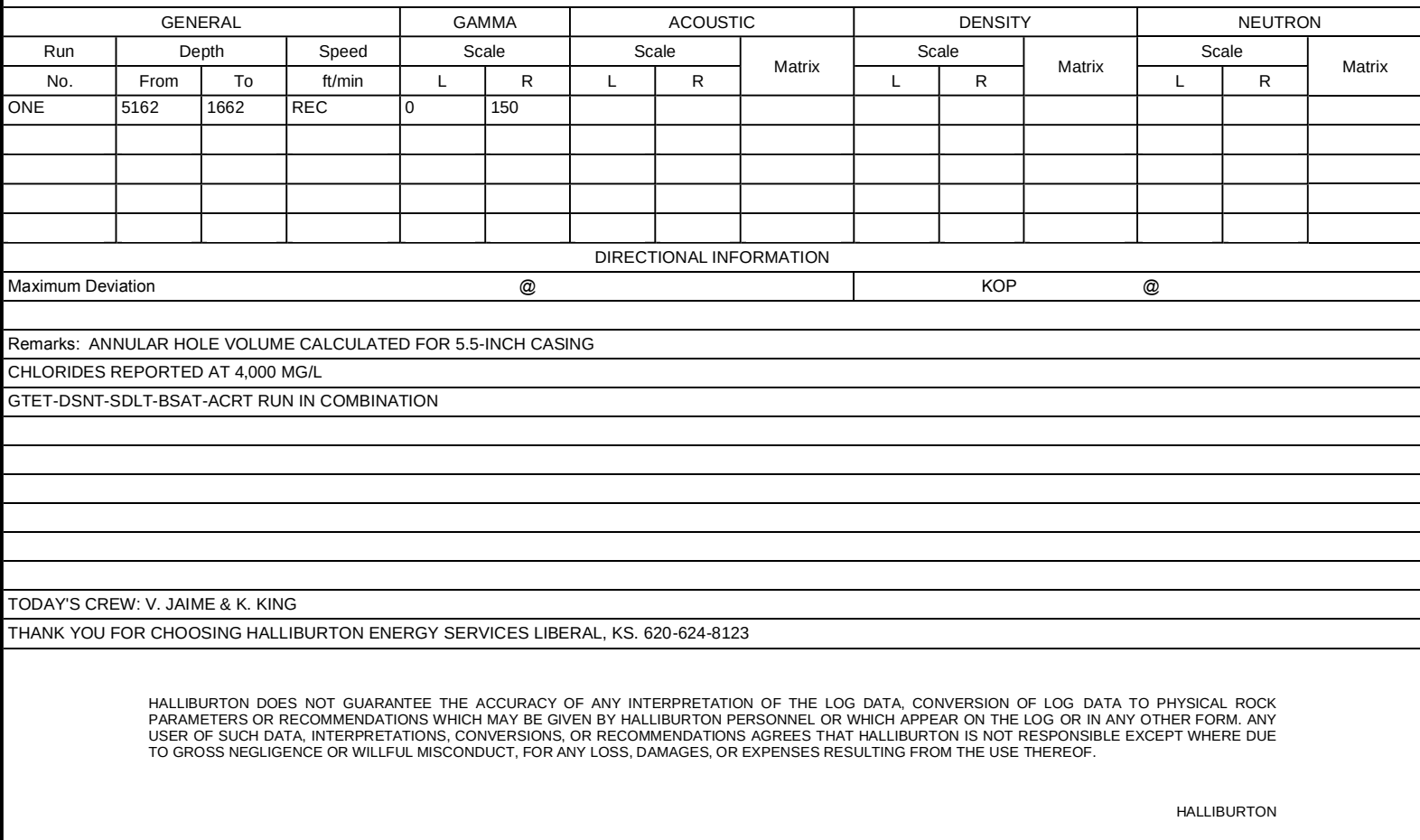
ARRAY COMPENSATED TRUE RESISTIVITY LOG

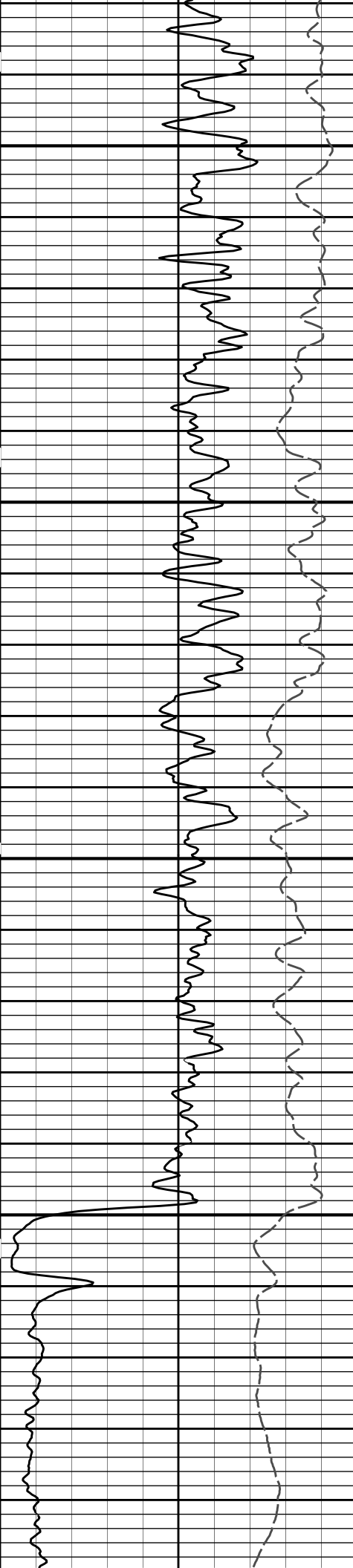
COMPANY		OXY USA INC.		
WELL		DRUSSEL E-2		
FIELD/BLOCK		HUGOTON GAS AREA		
COUNTY		FINNEY		
STATE		KANSAS		
Permanent Datum		G.L.		
Log measured from		KB		
Drilling measured from		KB		
Date		12-Jul-13		
Run No.		ONE		
Depth - Driller		5170.00 ft		
Depth - Logger		5162.0 ft		
Bottom - Logged Interval		5152.0 ft		
Top - Logged Interval		1662.0 ft		
Casing - Driller		8.625 in @ 1662.0 ft		
Casing - Logger		1662.0 ft		
Bit Size		7.875 in @		
Type Fluid in Hole		WATER BASED MUD		
Density		9.7 ppg		
Viscosity		53.00 s/qt		
PH		10.70 pH		
Source of Sample		MUD PIT		
Rm @ Meas. Temperature		0.800 ohmm @ 122.00 degF		
Rmf @ Meas. Temperature		0.65 ohmm @ 75.00 degF		
Rmc @ Meas. Temperature		1.050 ohmm @ 75.00 degF		
Source Rmf		MEASURED		
Rm @ BHT		0.72 ohmm @ 137.0 degF		
Time Since Circulation		6.0 hr		
Time on Bottom		12-Jul-13 19:05		
Max. Rec. Temperature		137.0 degF @ 5162.0 ft		
Equipment		11230668 LIBERAL		
Recorded By		J. BOLLOW		
Witnessed By		G. BILBY		

COMPANY	OXY USA INC.		
WELL	DRUSSEL E-2		
FIELD/BLOCK	HUGOTON GAS AREA		
COUNTY	FINNEY		
STATE	KANSAS		
API No.	1505522270000		
Location	(SHL) 648' FSL & 2347' FWL		
Sect.	36	Twp.	25S
Rge.	33W		
Other Services: MICROLOG DSNT, SDLT BSAT			
Elev.	K.B.	2906.0 ft	
D.F.	2905.0 ft		
G.L.	2895.0 ft		

Fold here

Service Ticket No.: 9005822238				API Serial No.: 15055222270000				PGM Version: WL INSITE R3.8.4 (Build 5)							
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.		Other	
Rmf @ Meas. Temp.		@		@		ONE		ACRT		N/A		CENT		N/A	
Rmc @ Meas. Temp.		@		@				1776_S775							
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.		10811258		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			
LOGGING DATA															

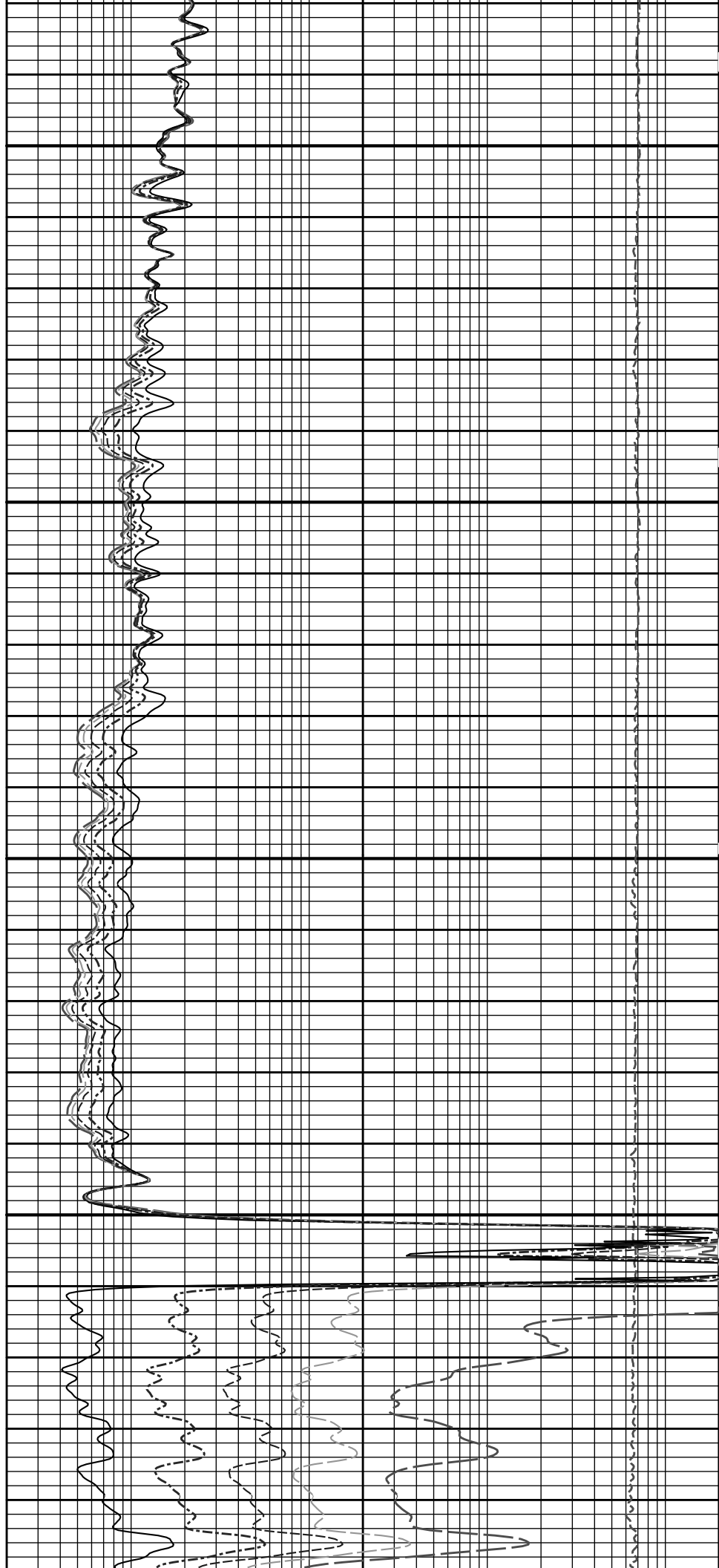


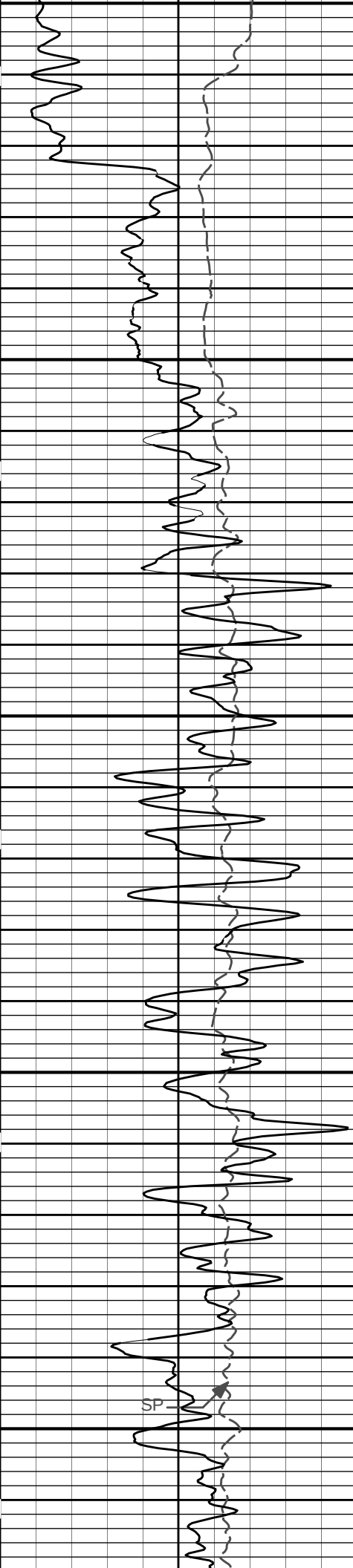


1700

1800

1900

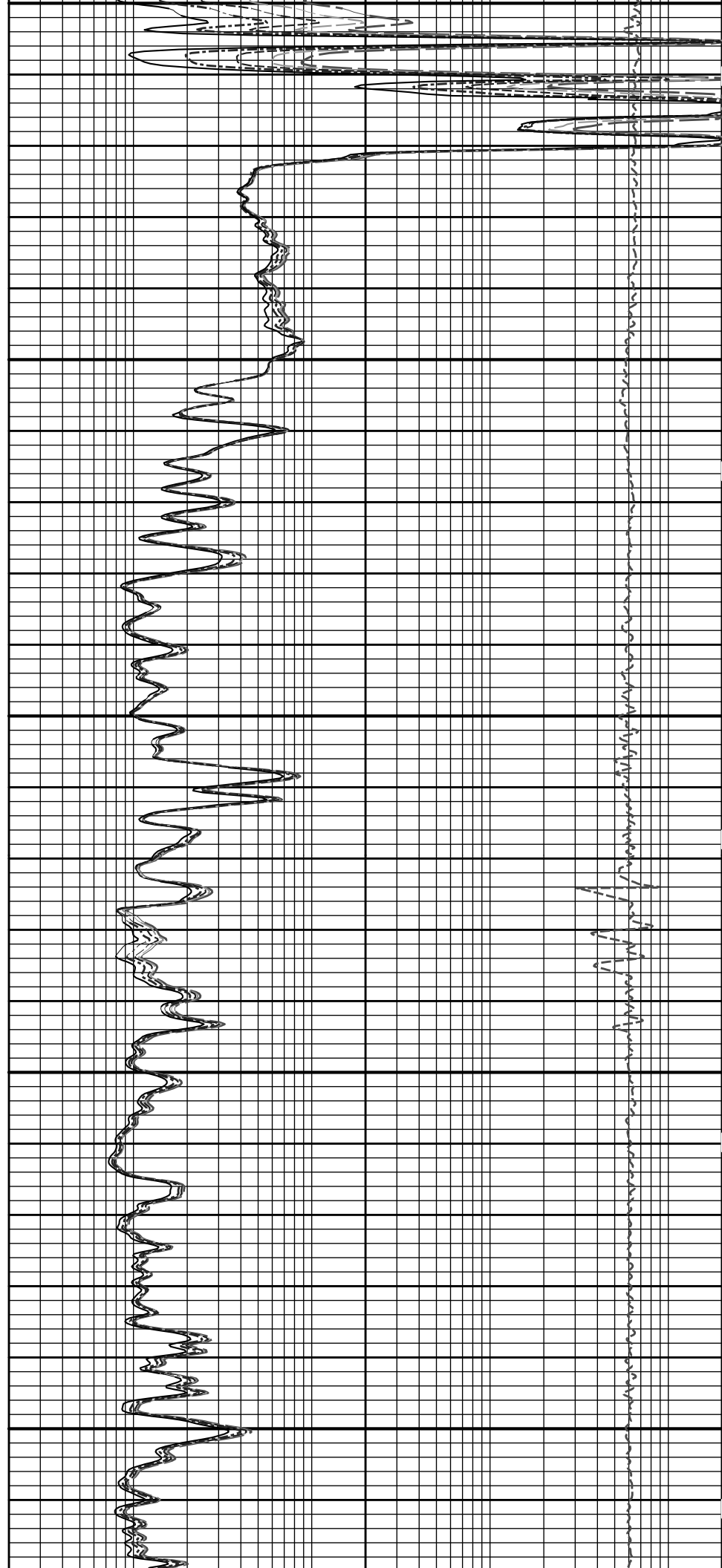


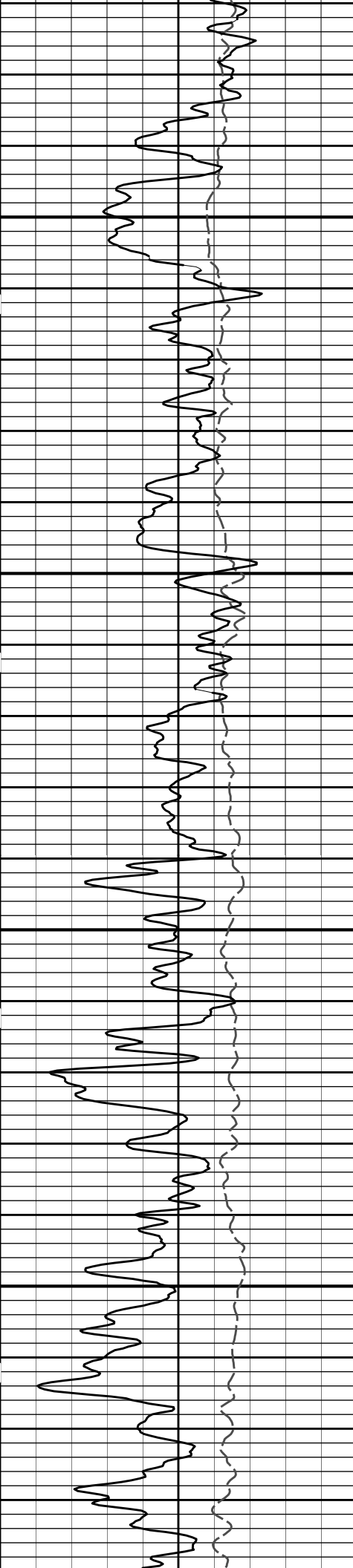


1900

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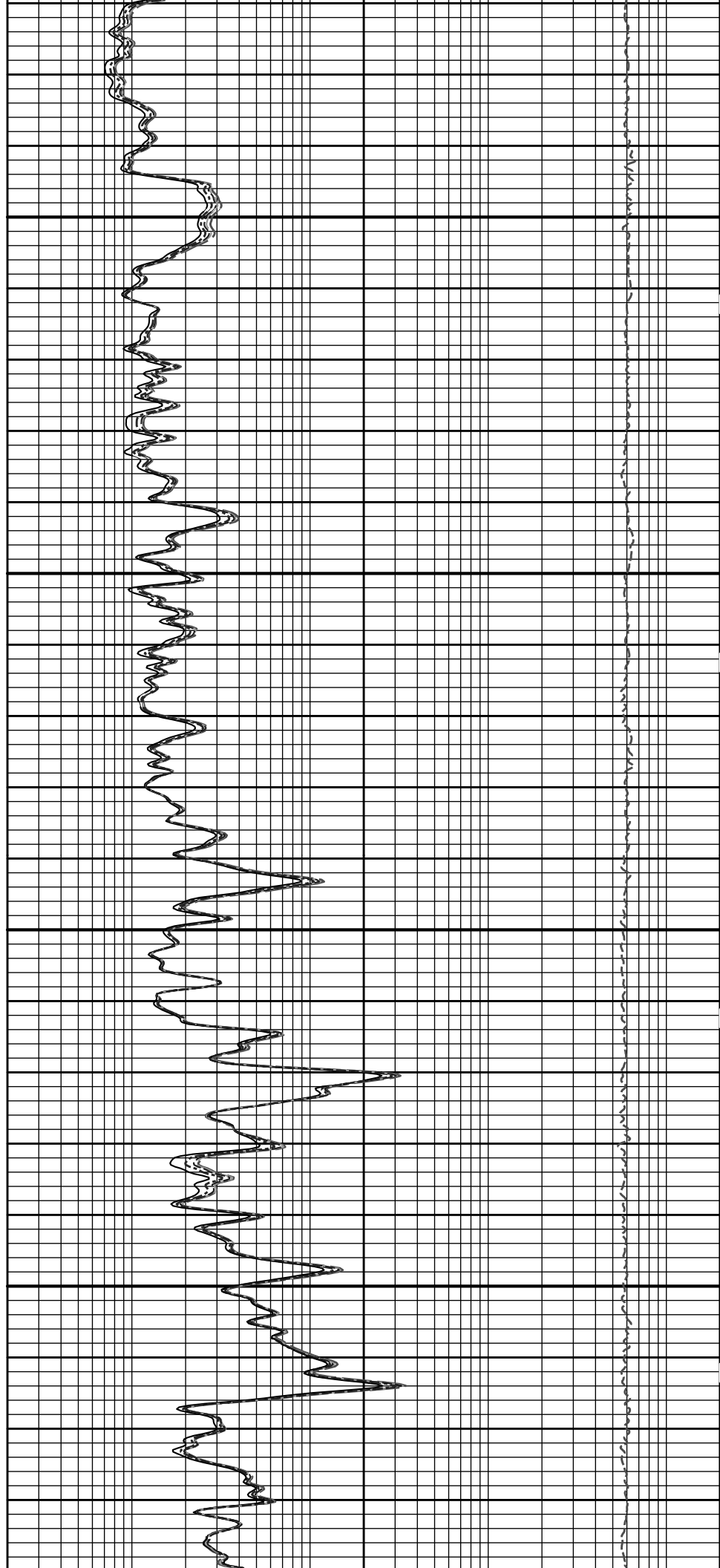
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2200

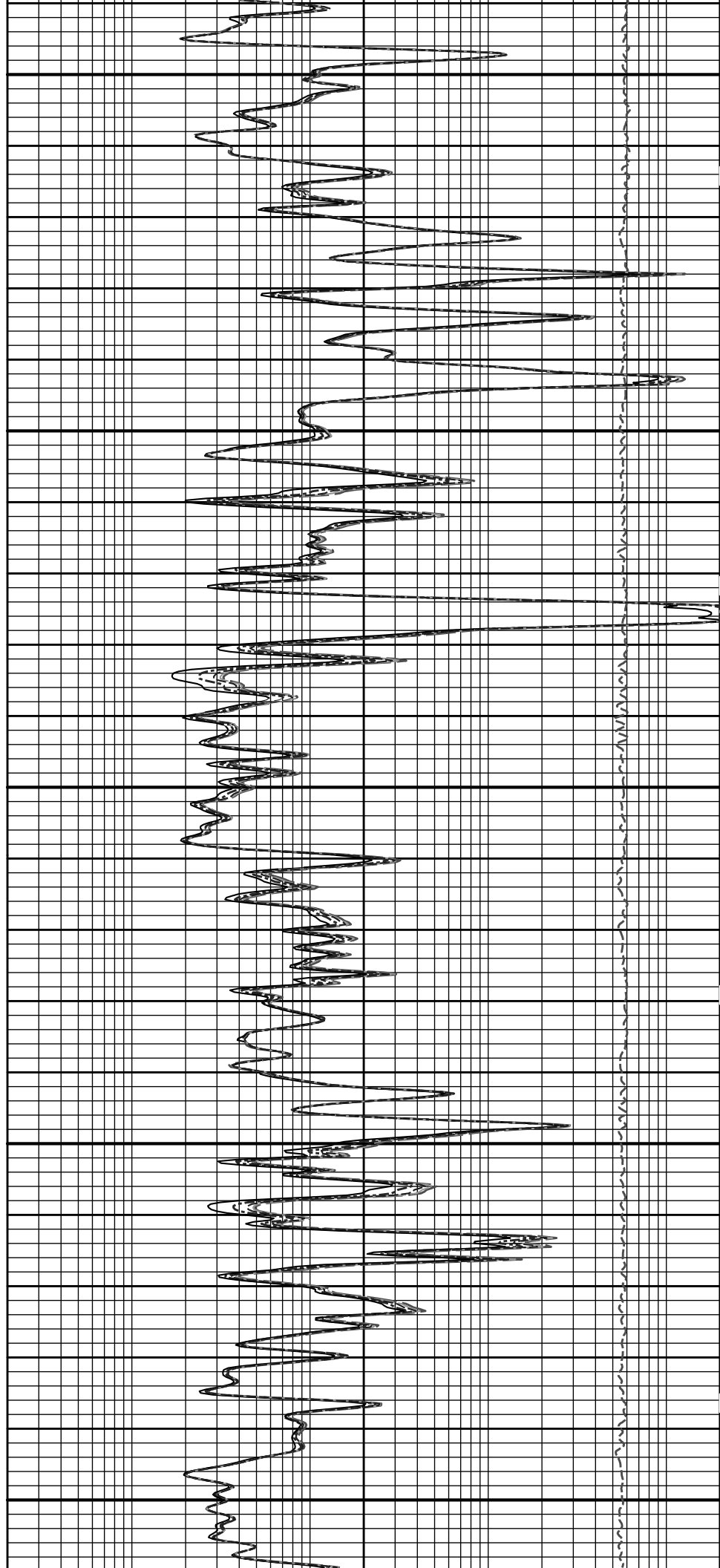
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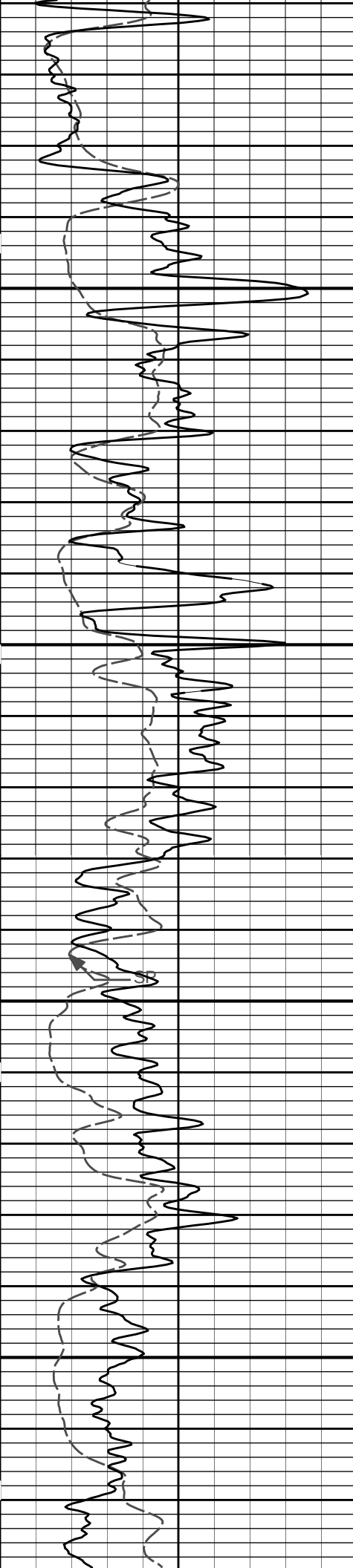




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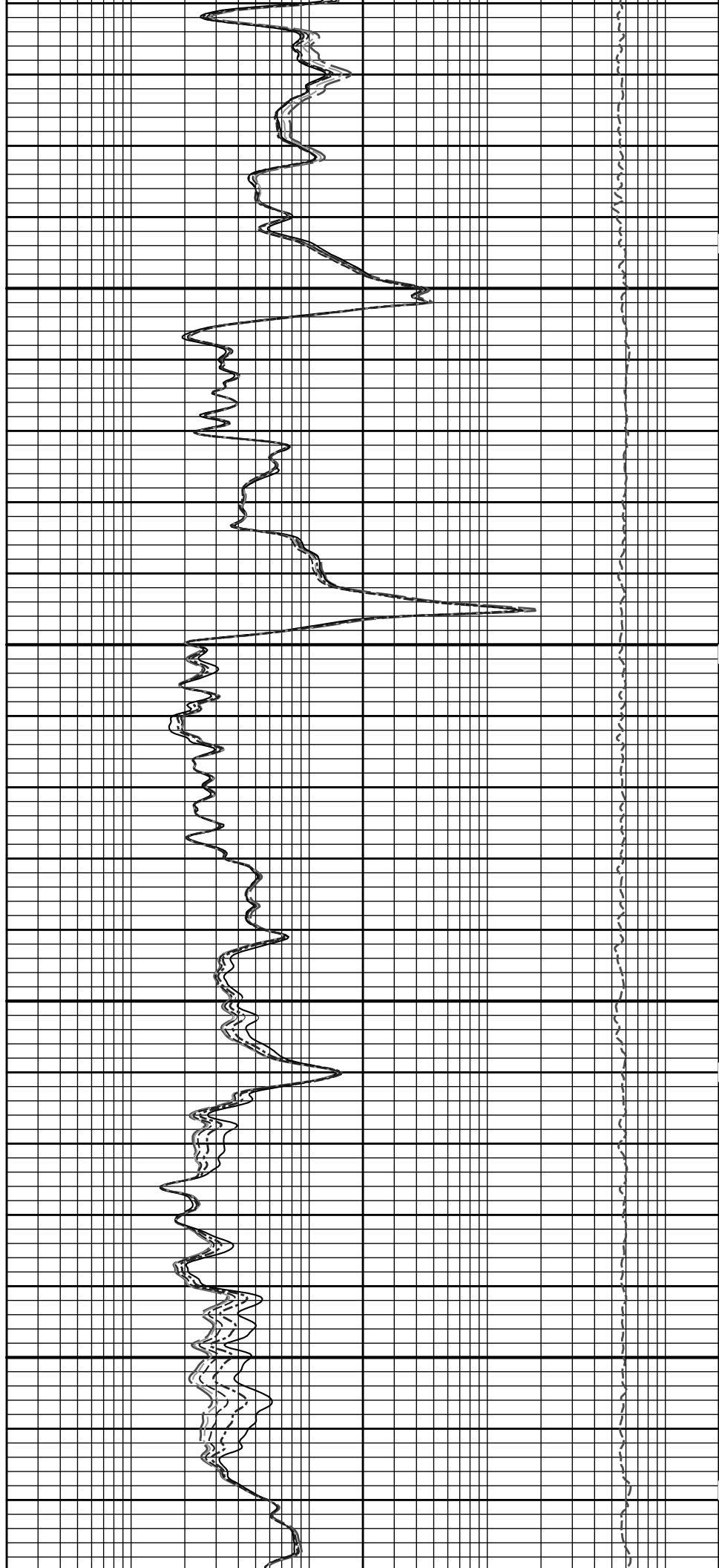
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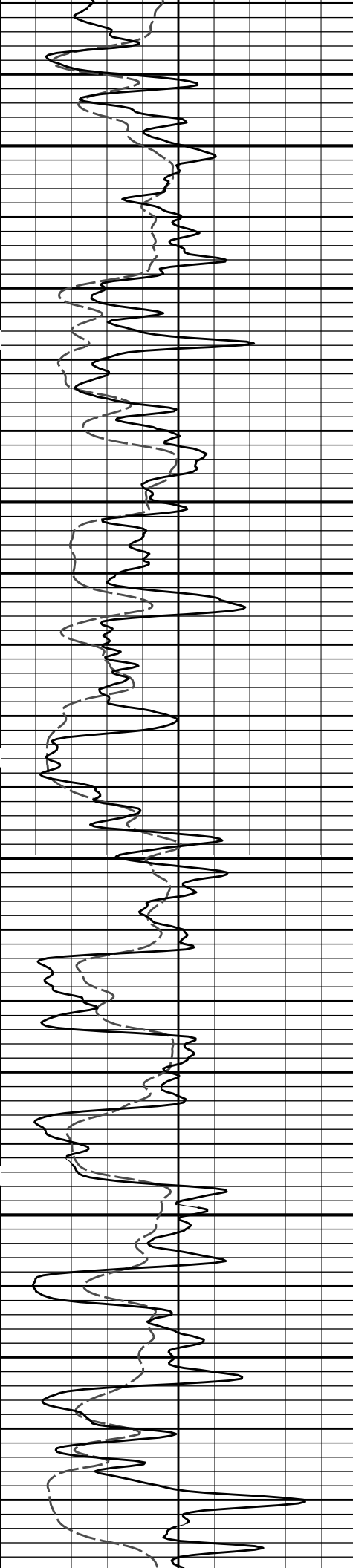




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2700

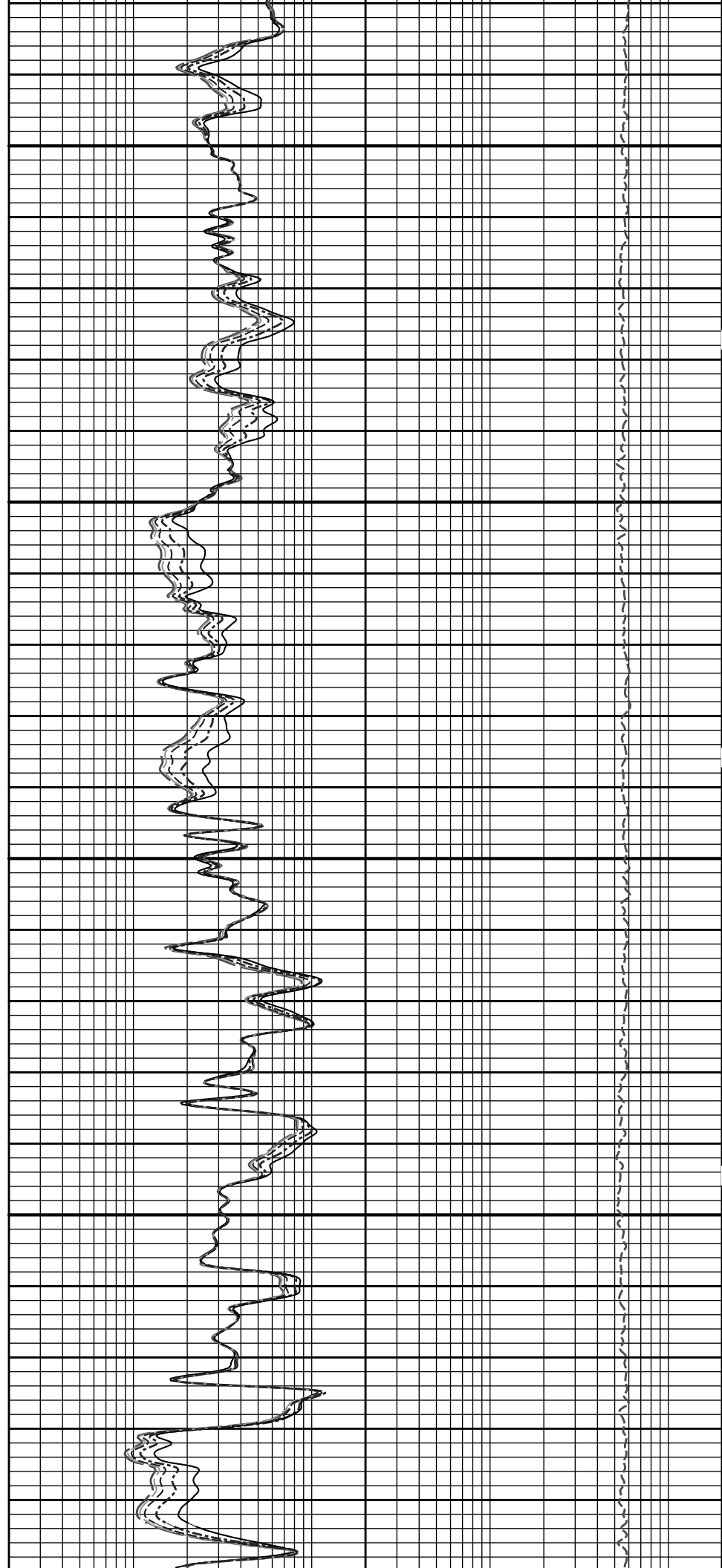


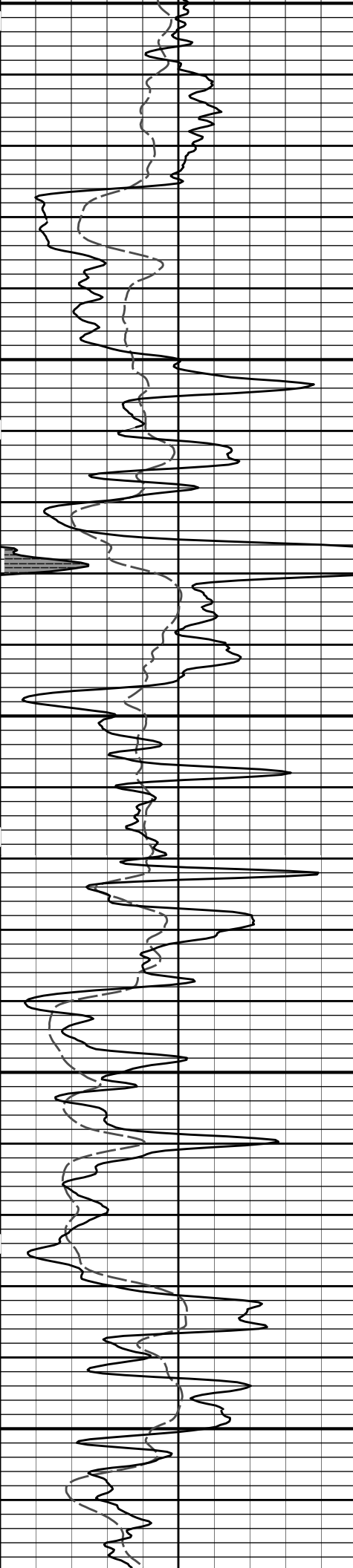


2800

2900

3000

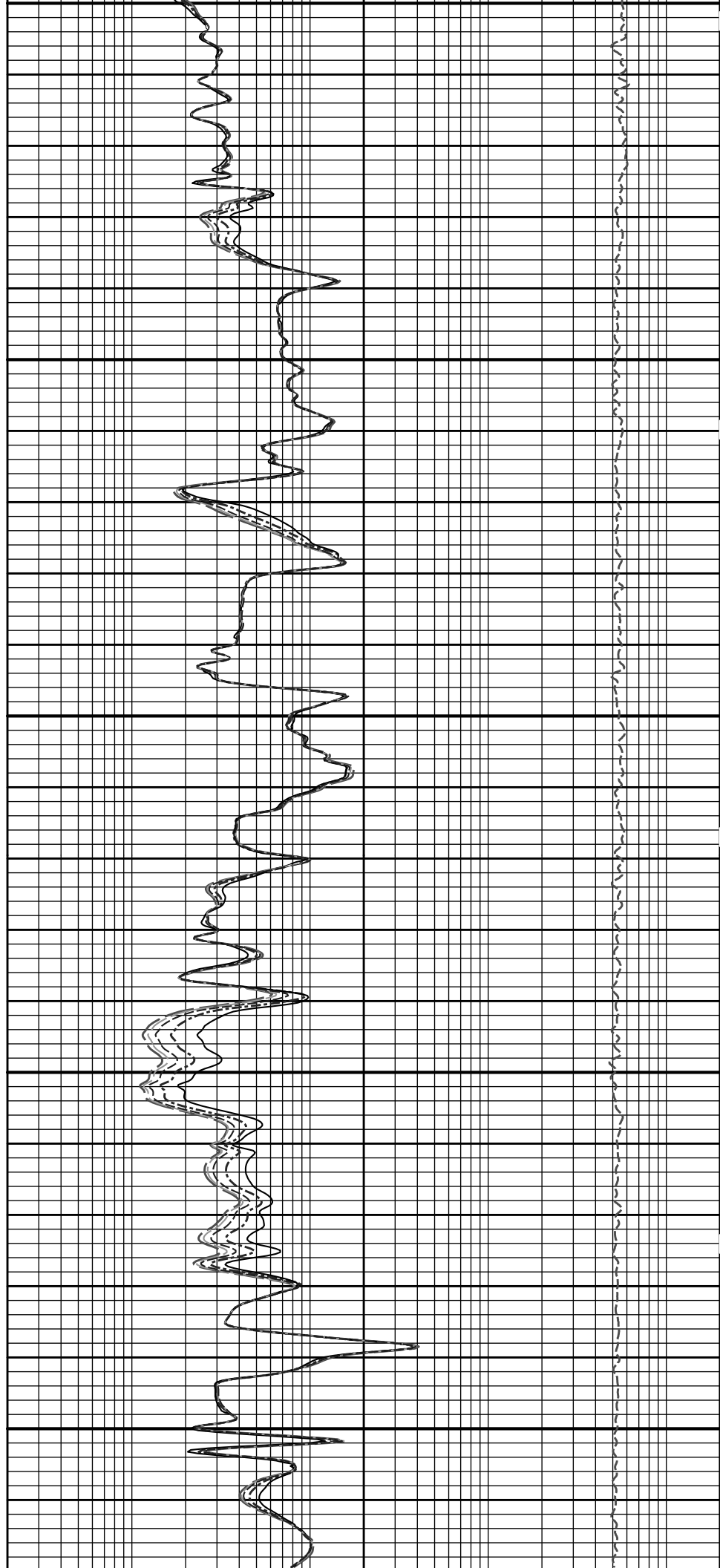


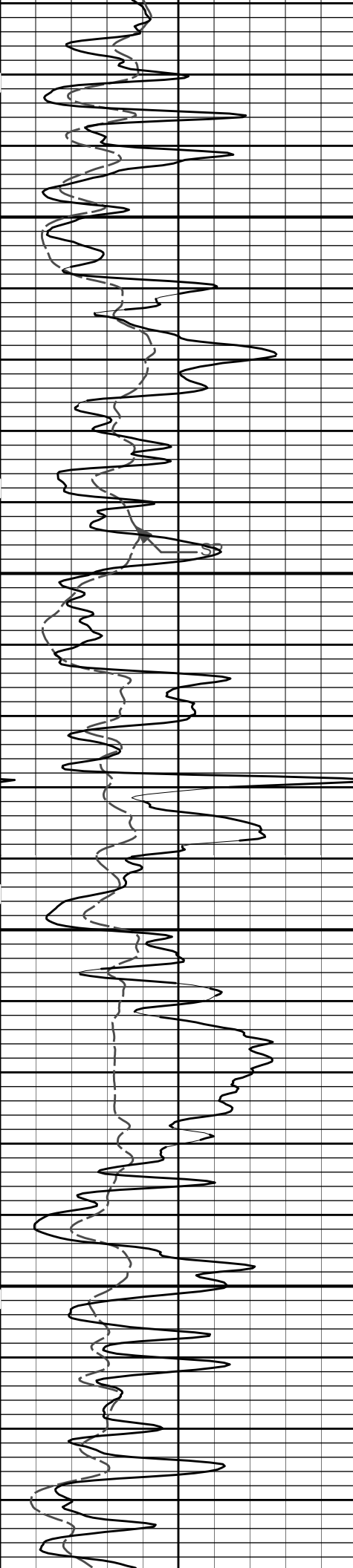


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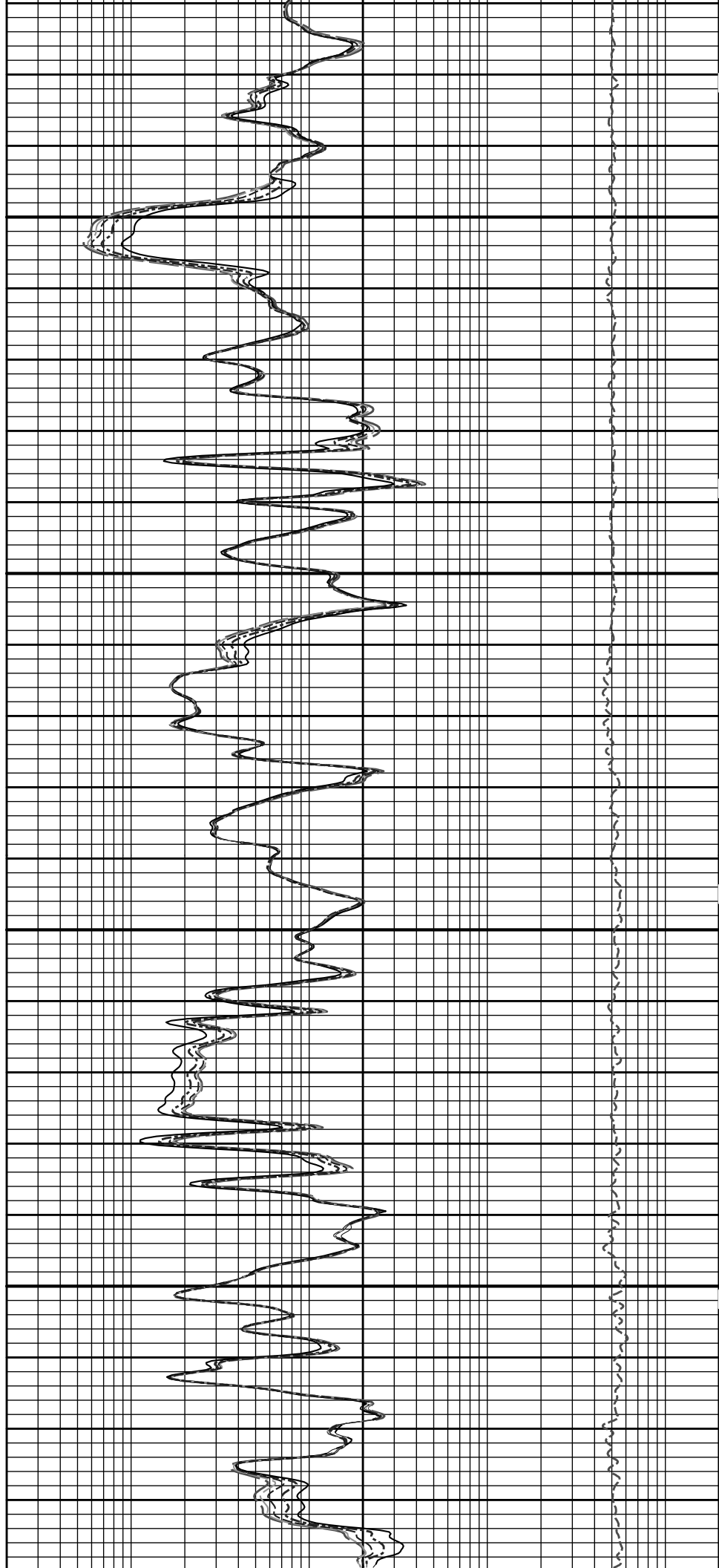
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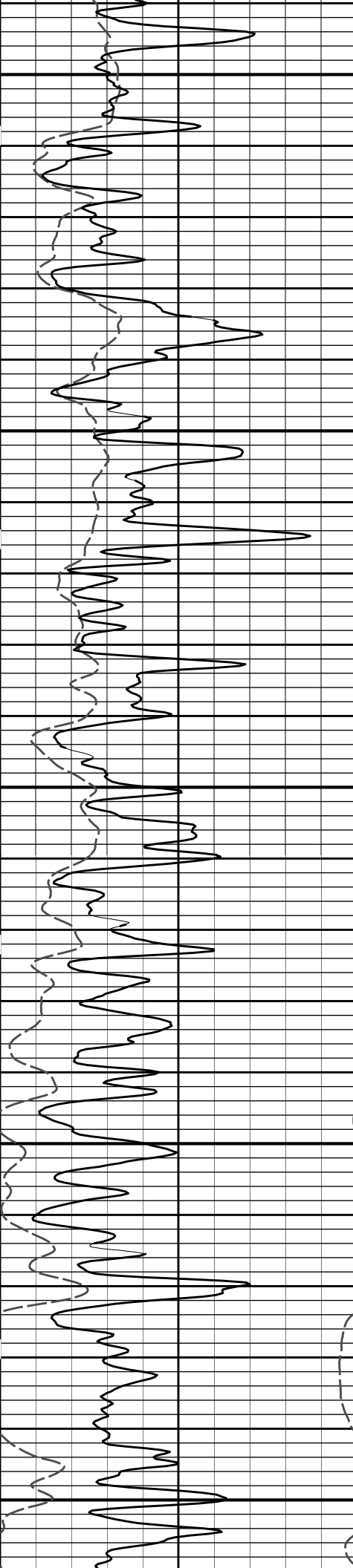




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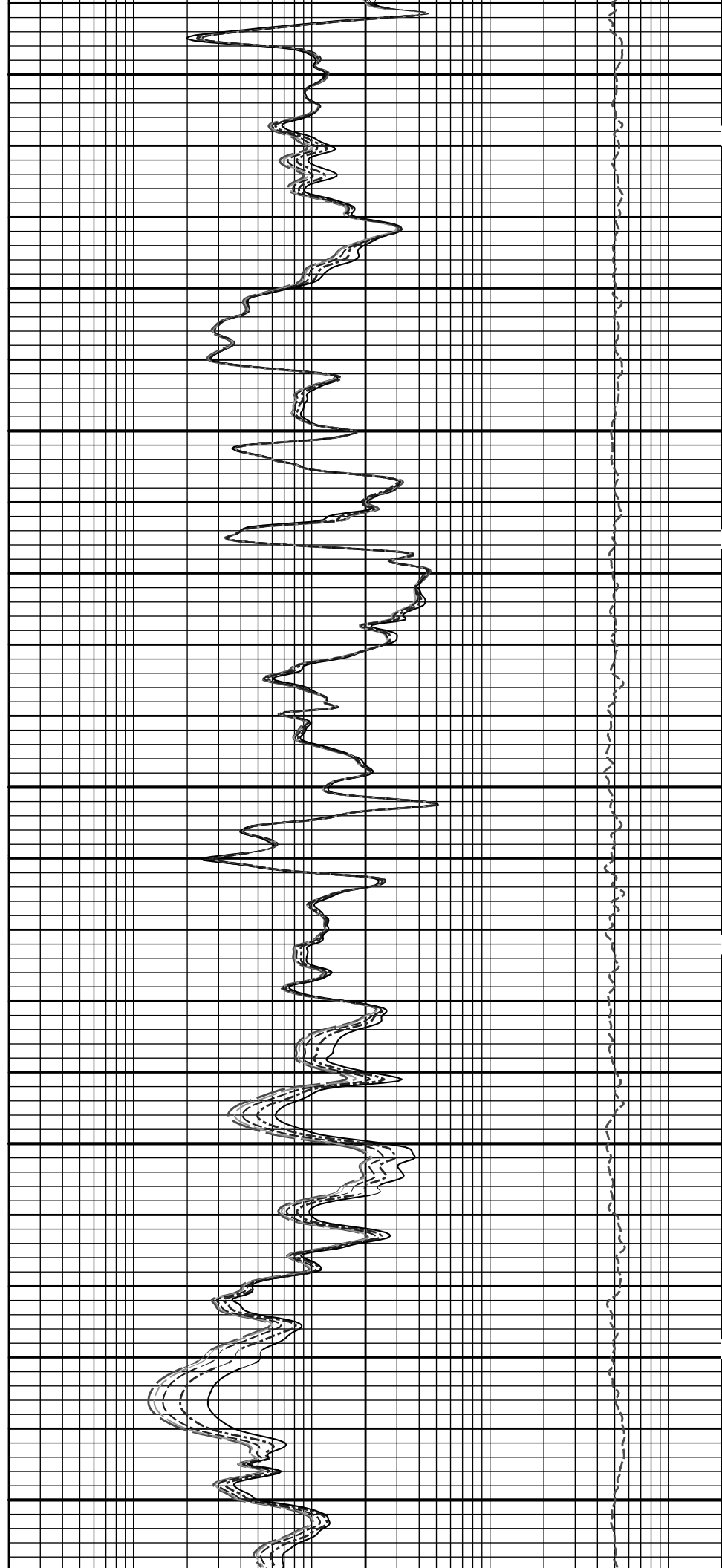
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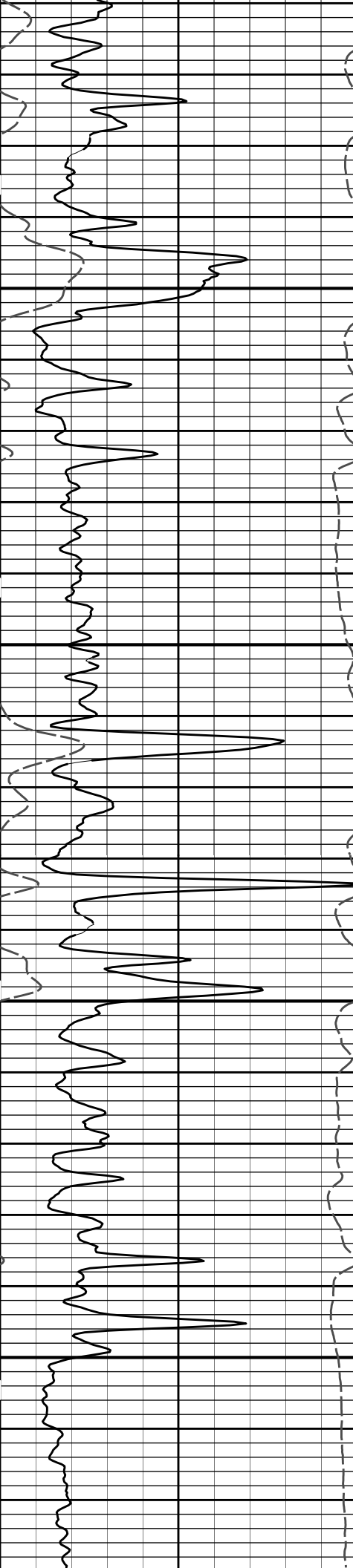




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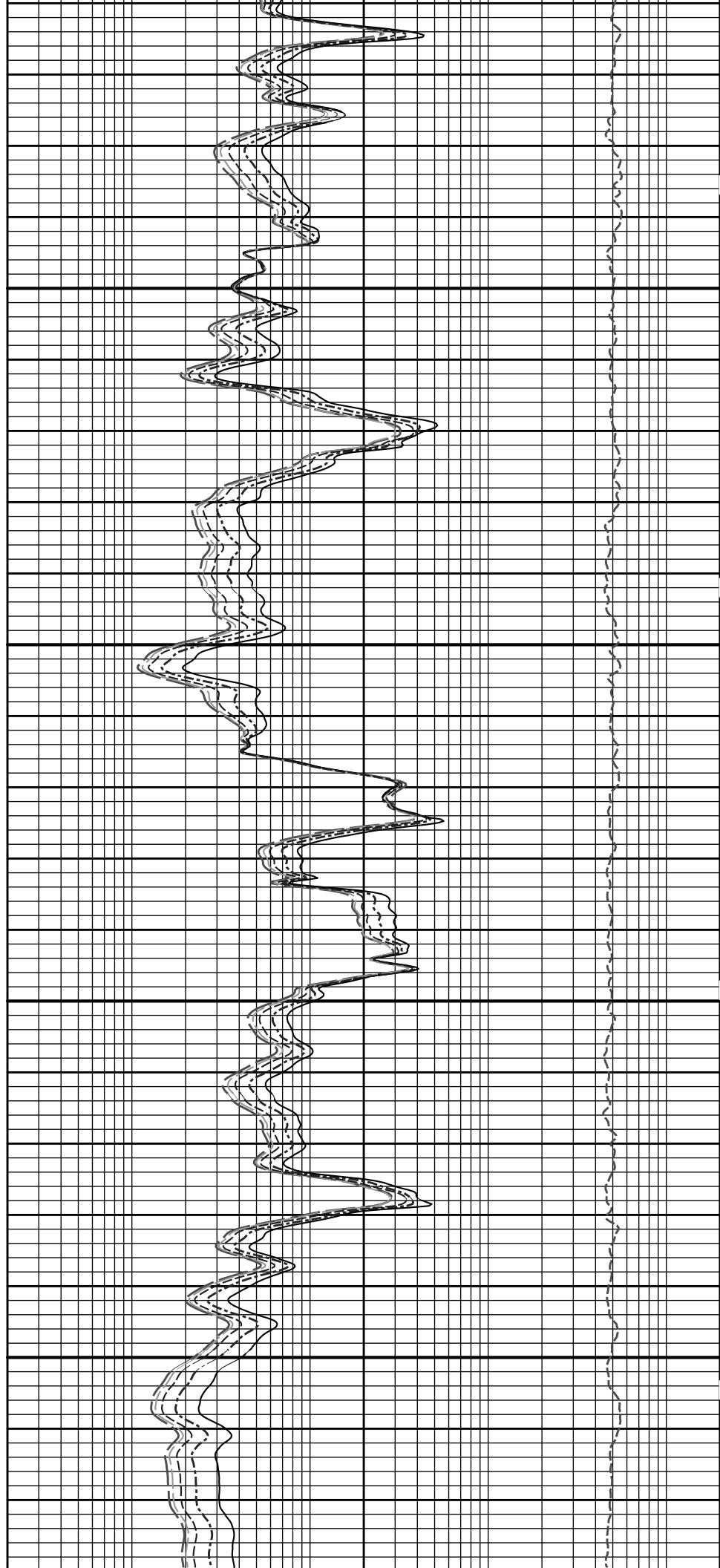
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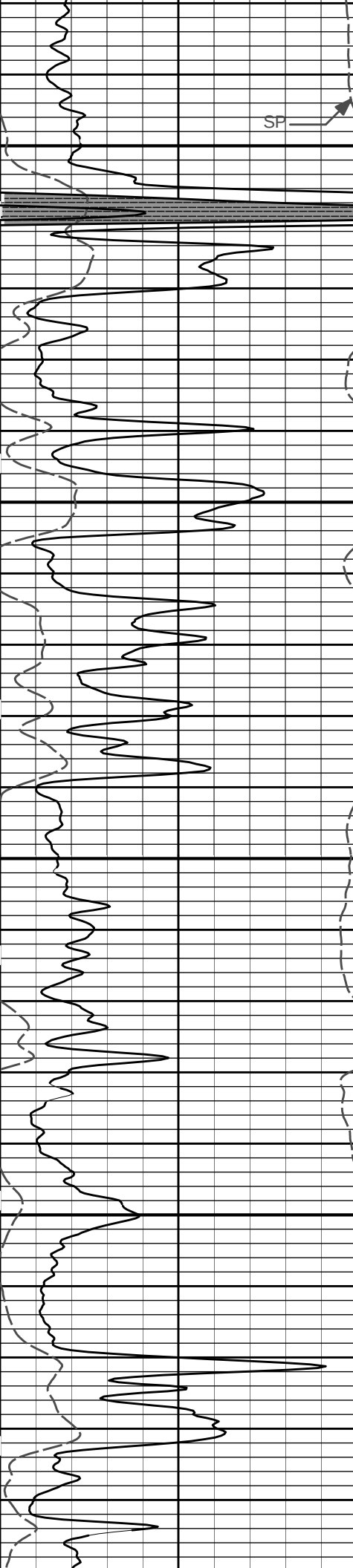




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3800



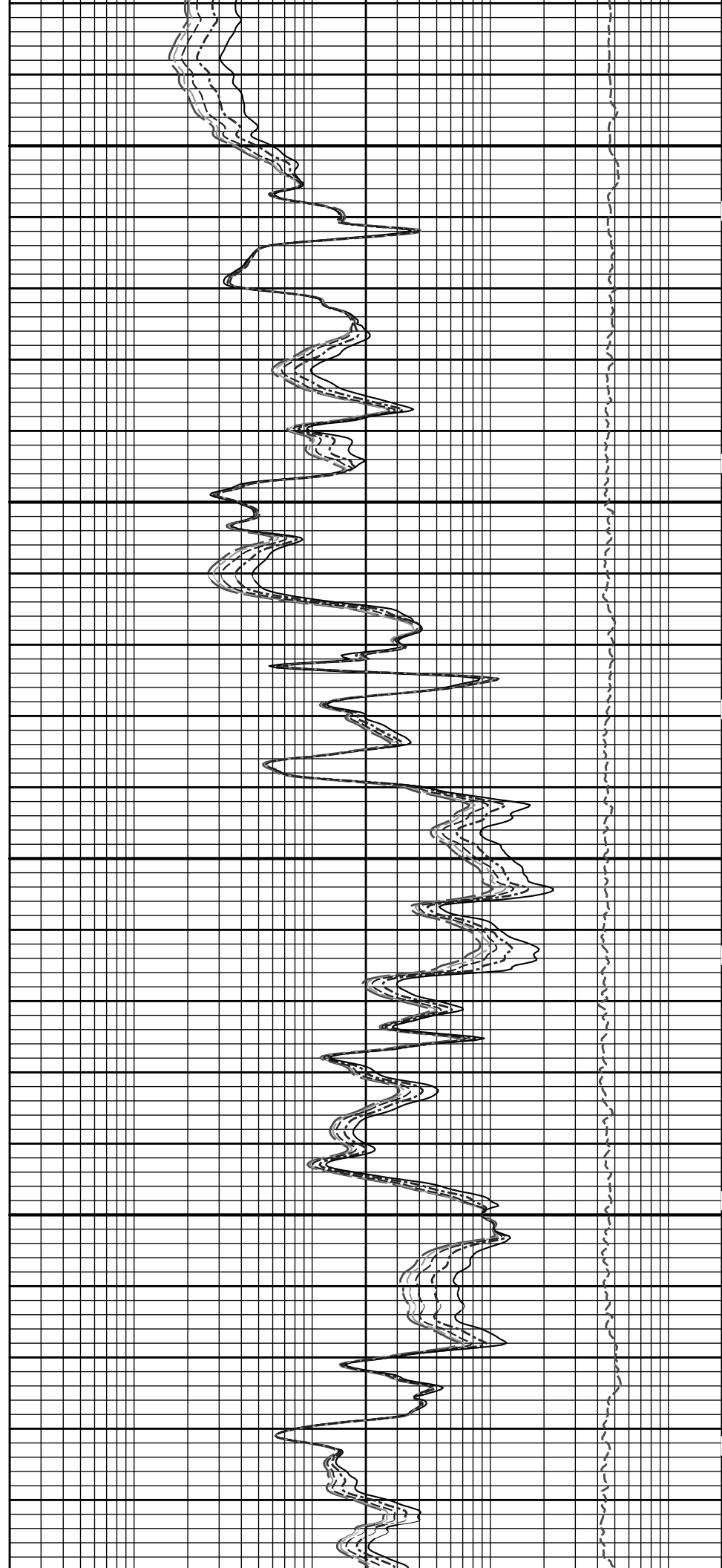


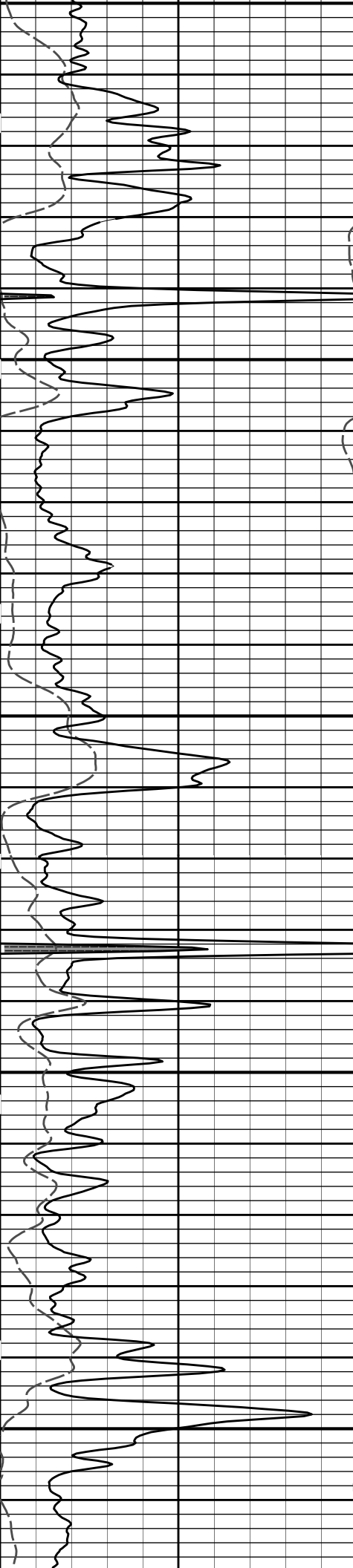
SP

3900

4000

4100

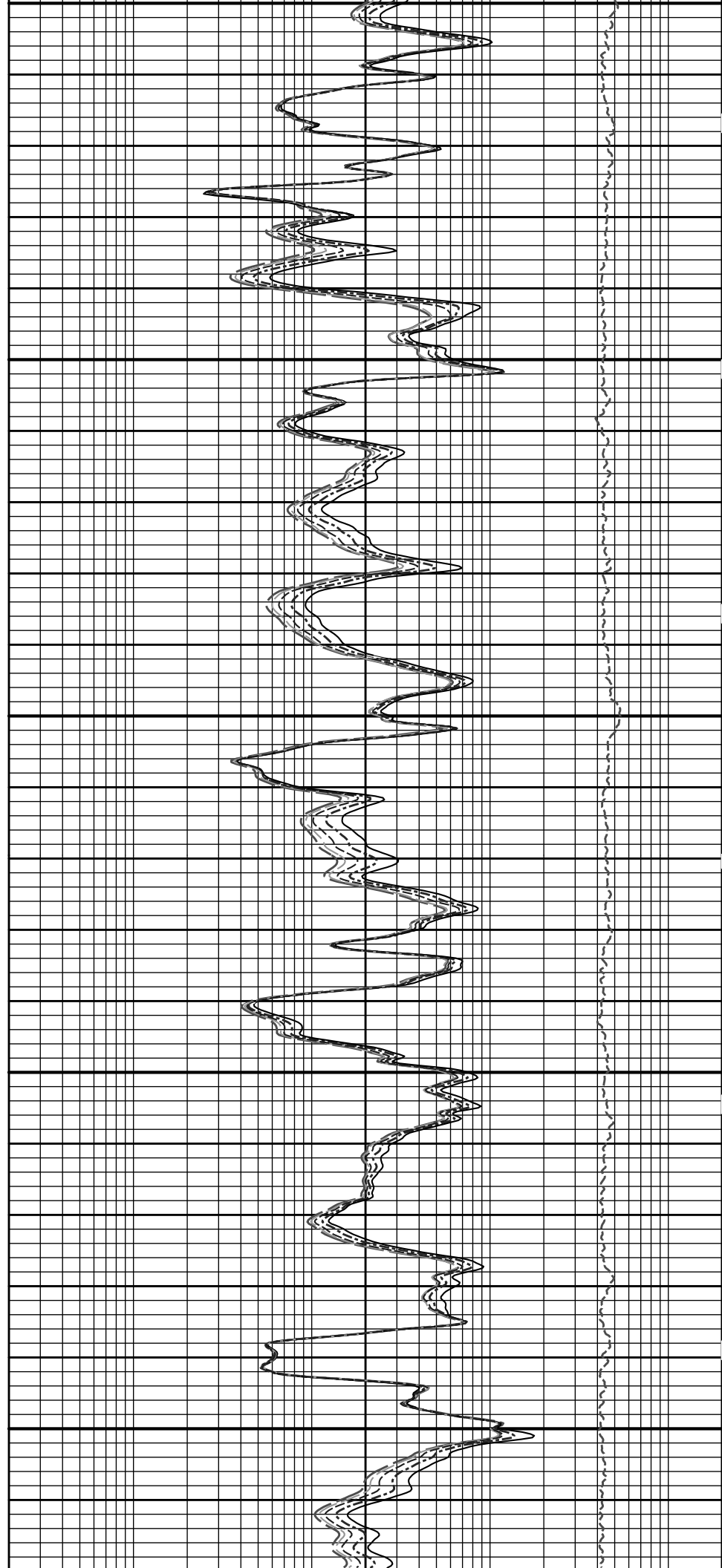


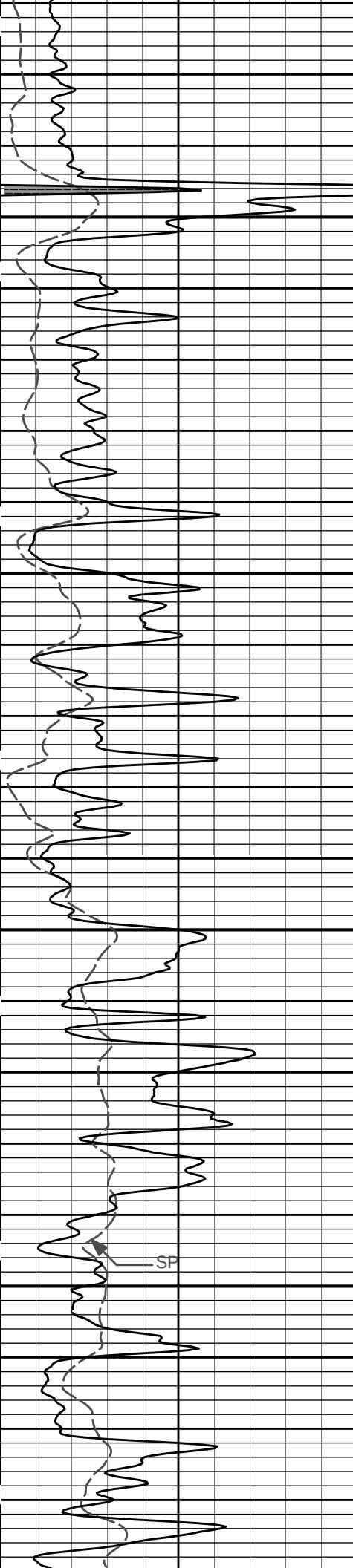


4100

4200

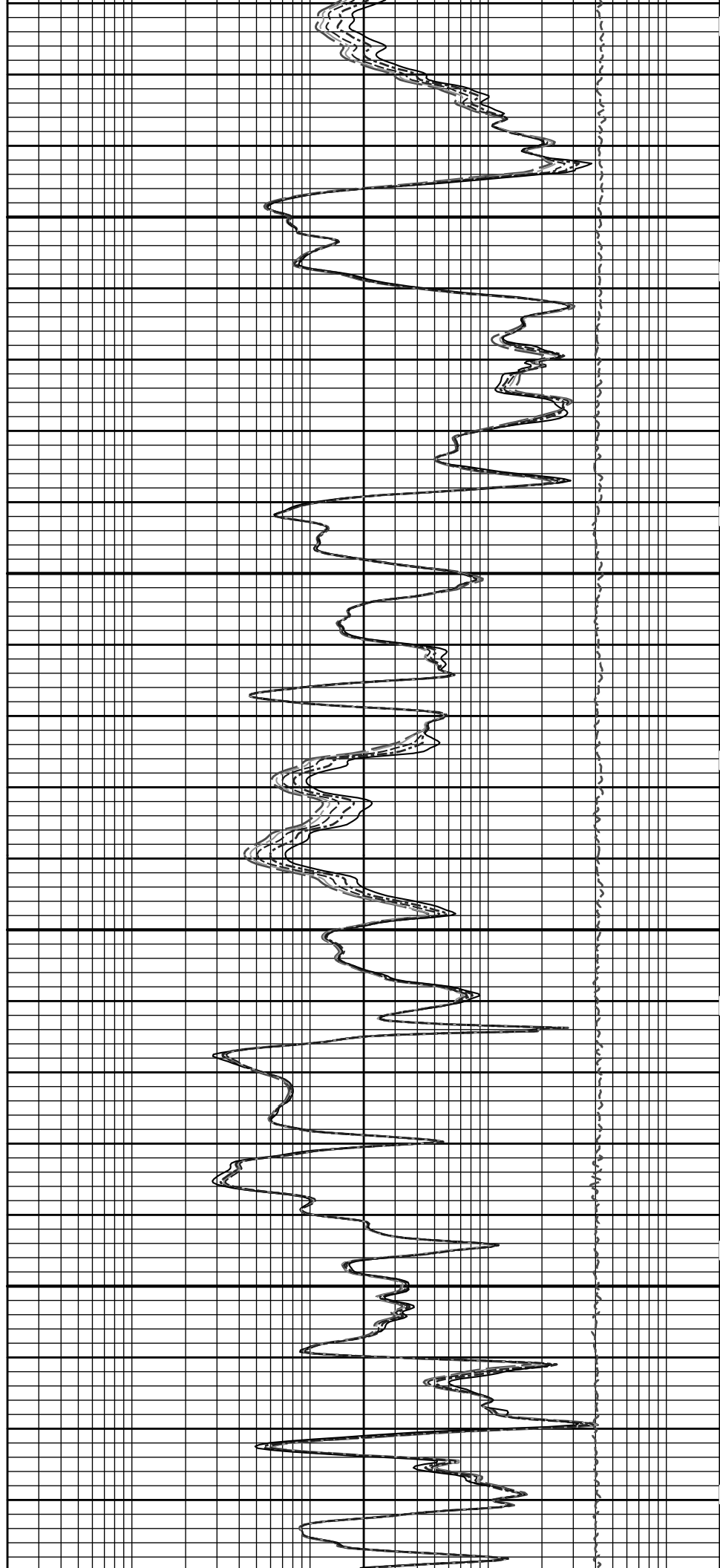
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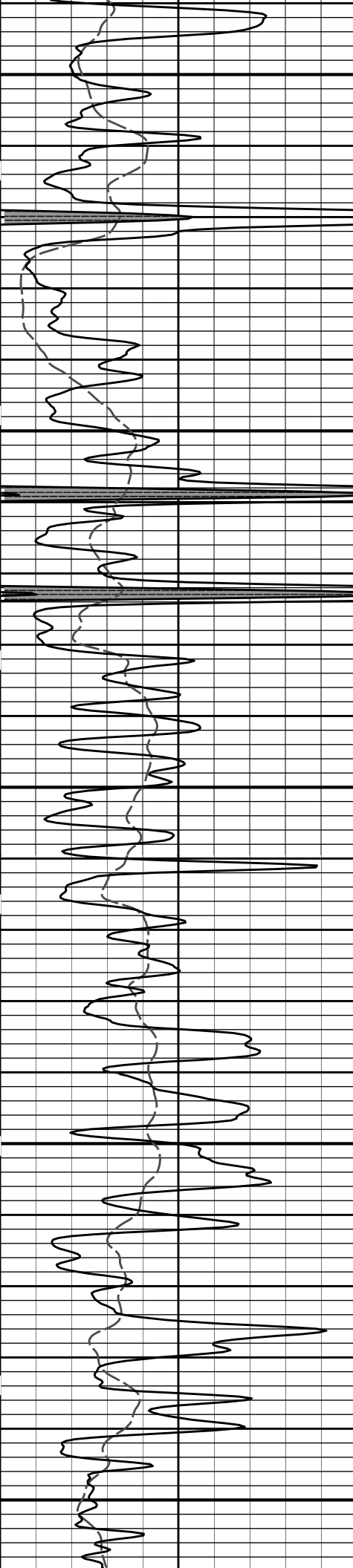




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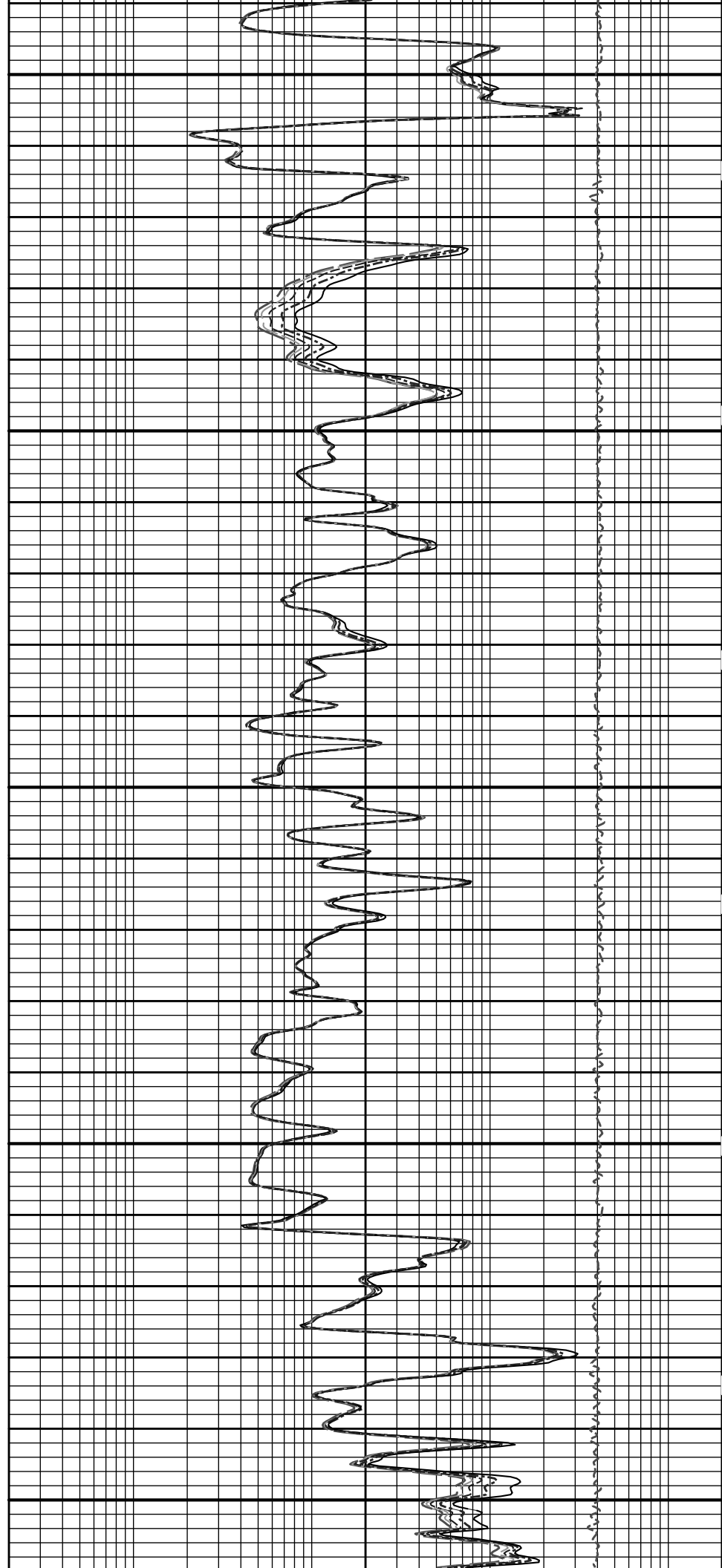
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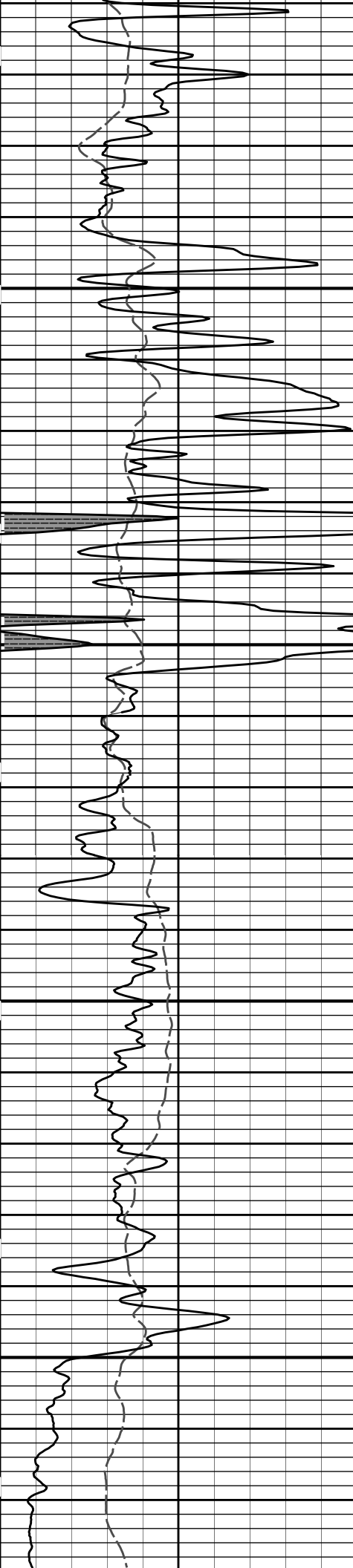




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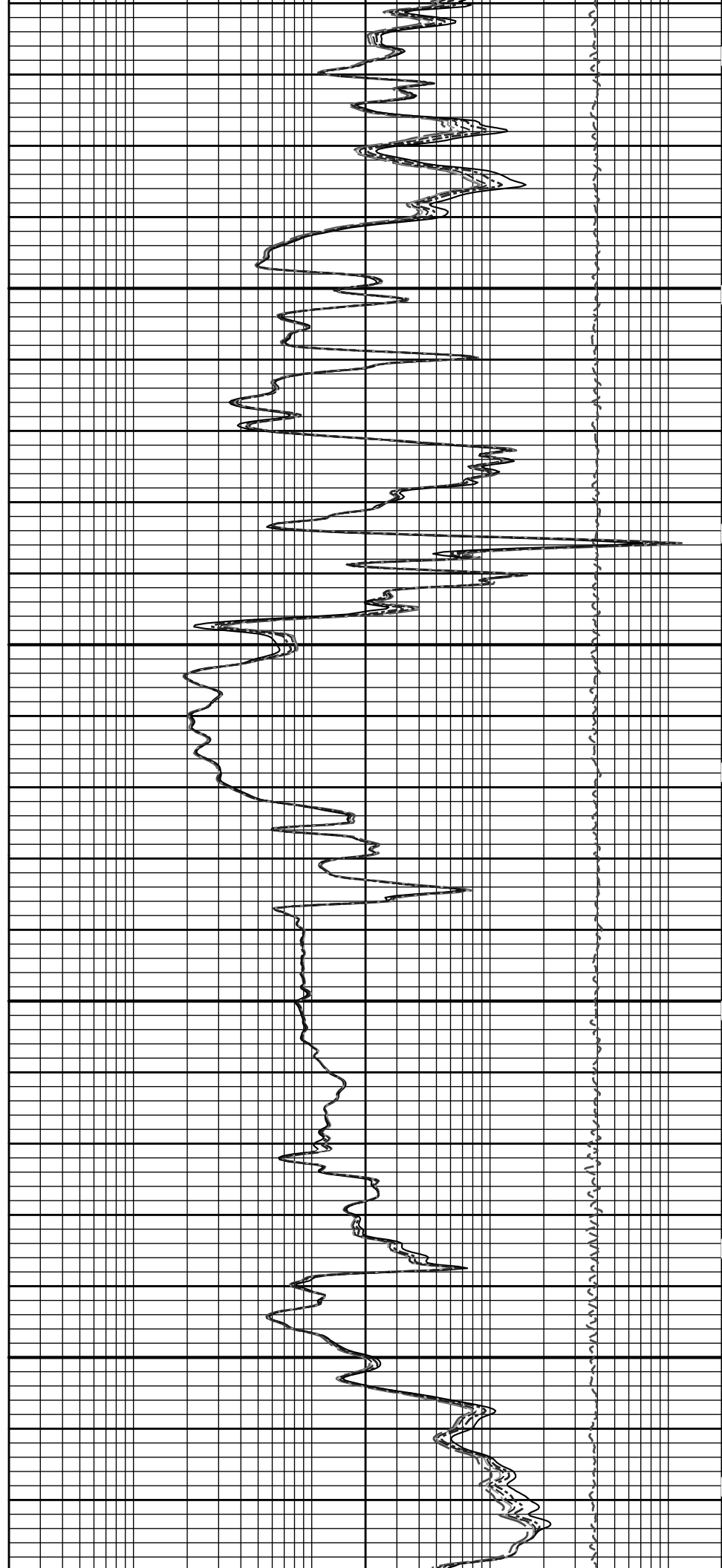
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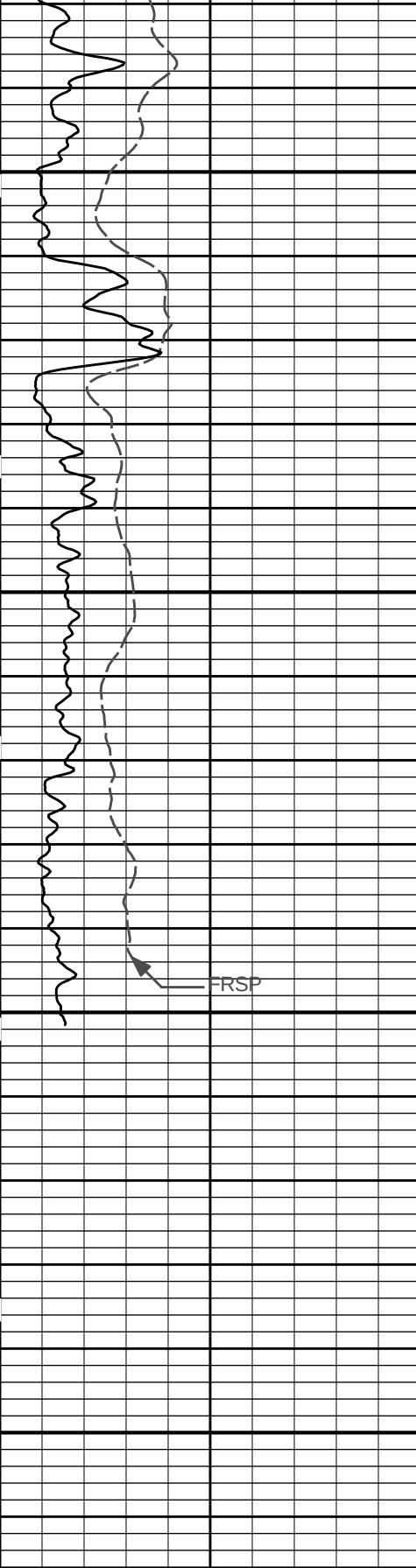




4800

4900





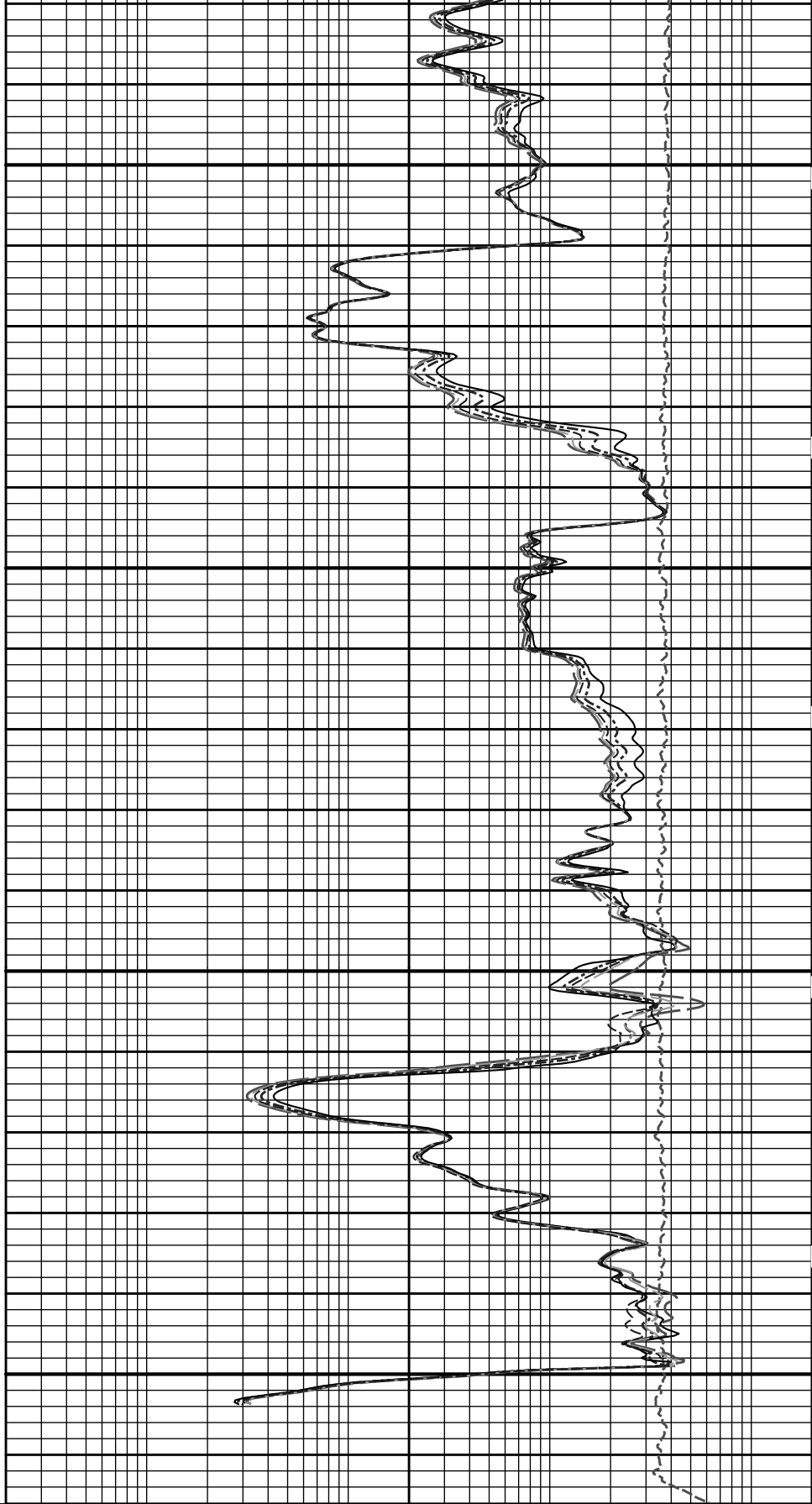
5000

5100

FRSP

SP		
-]20[+		
0	Gamma API	150
api		
SHALE		

MD 1 : 240 ft



10K	Tension	0
pounds		
0.2	10in Resistivity 2ft Res	2000
ohmm		
0.2	20in Resistivity 2ft Res	2000
ohmm		

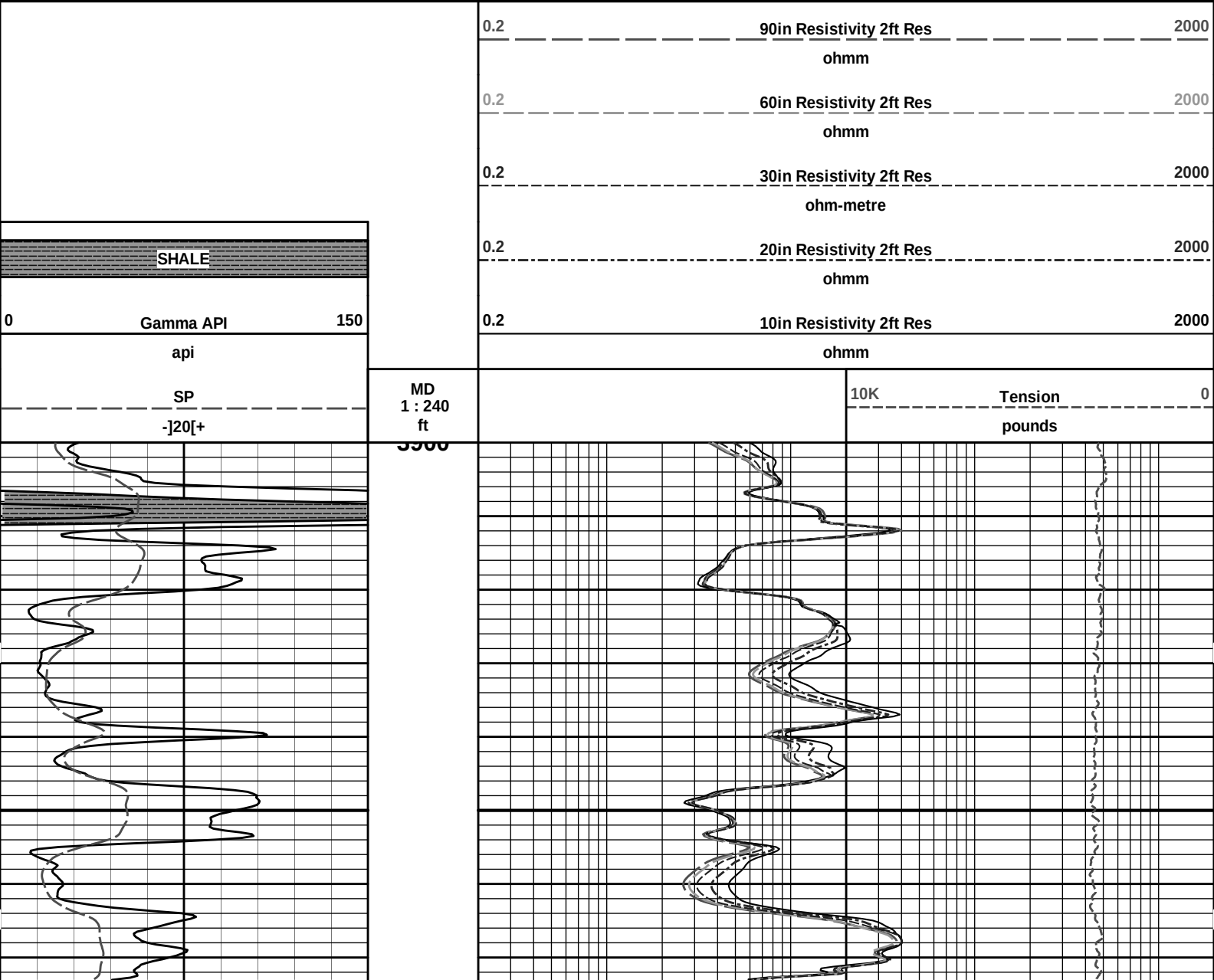
	0.2	30in Resistivity 2ft Res	2000
		ohm-metre	
	0.2	60in Resistivity 2ft Res	2000
		ohmm	
	0.2	90in Resistivity 2ft Res	2000
		ohmm	

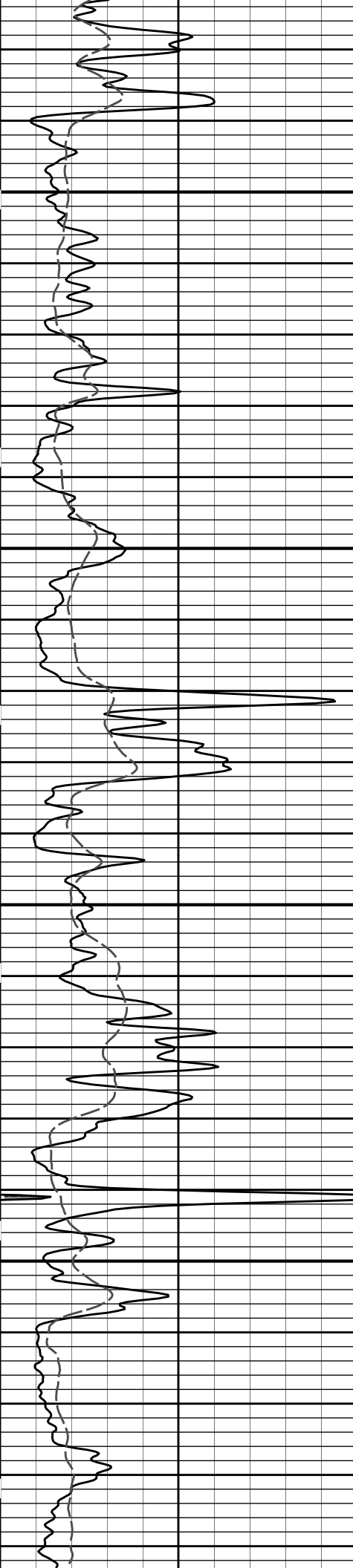
HALLIBURTON

Plot Time: 12-Jul-13 21:11:18
Plot Range: 1650 ft to 5166.17 ft
Data: DRUSSEL_E-1\Well Based\CASING\
Plot File: \\-LOCAL-\\DRUSSEL_E-1\\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_5_main_lib

5 INCH MAIN LOG

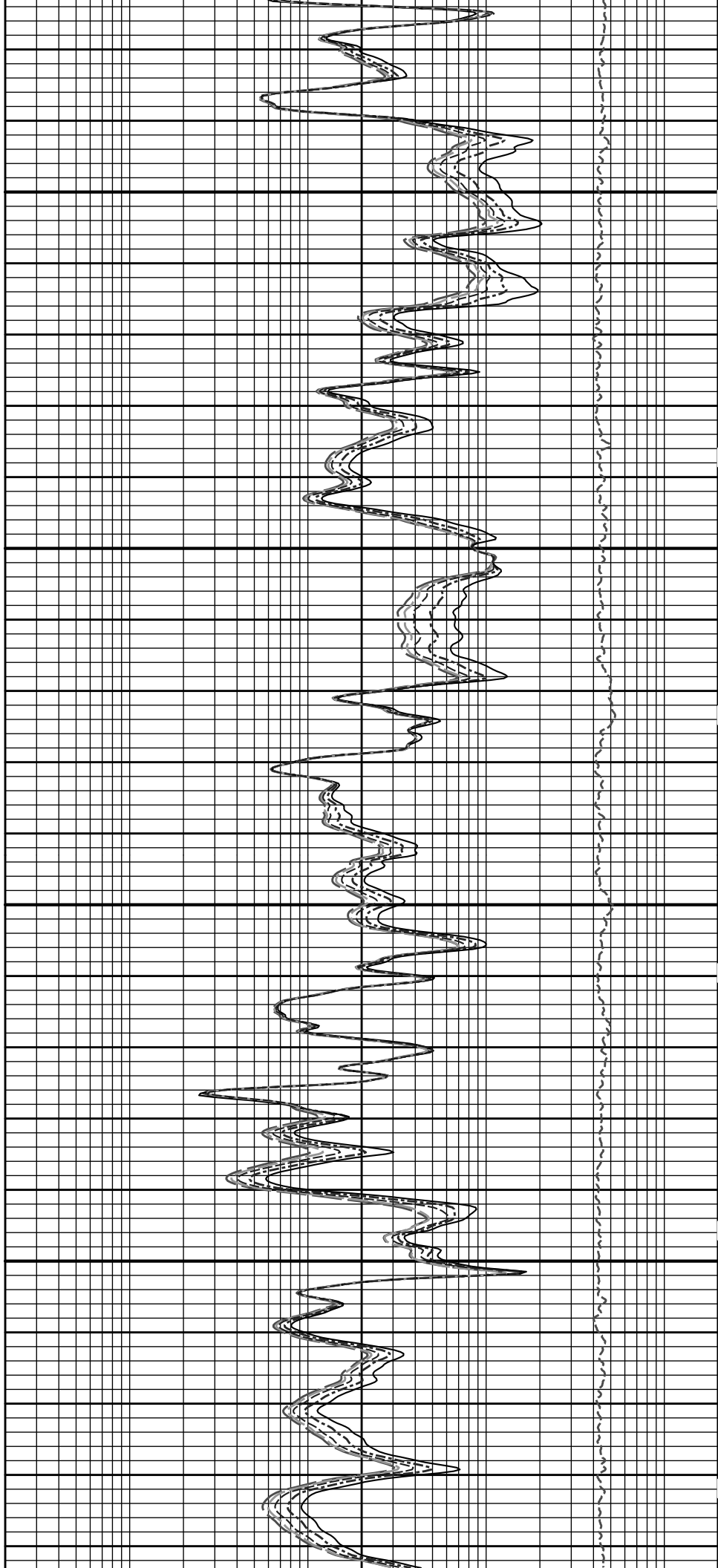
	HALLIBURTON		
	Plot Time: 12-Jul-13 21:11:18		
	Plot Range: 3900 ft to 5165.33 ft		
	Data: DRUSSEL_E-1\Well Based\REPEAT\		
	Plot File: \\-LOCAL-\\DRUSSEL_E-1\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_5_repeat_lib		
REPEAT SECTION			

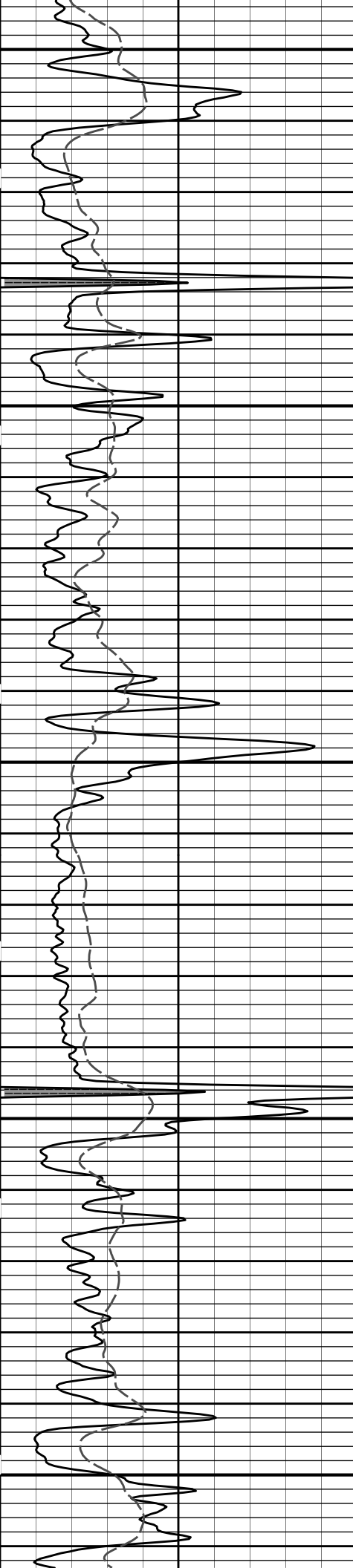




4000

4100

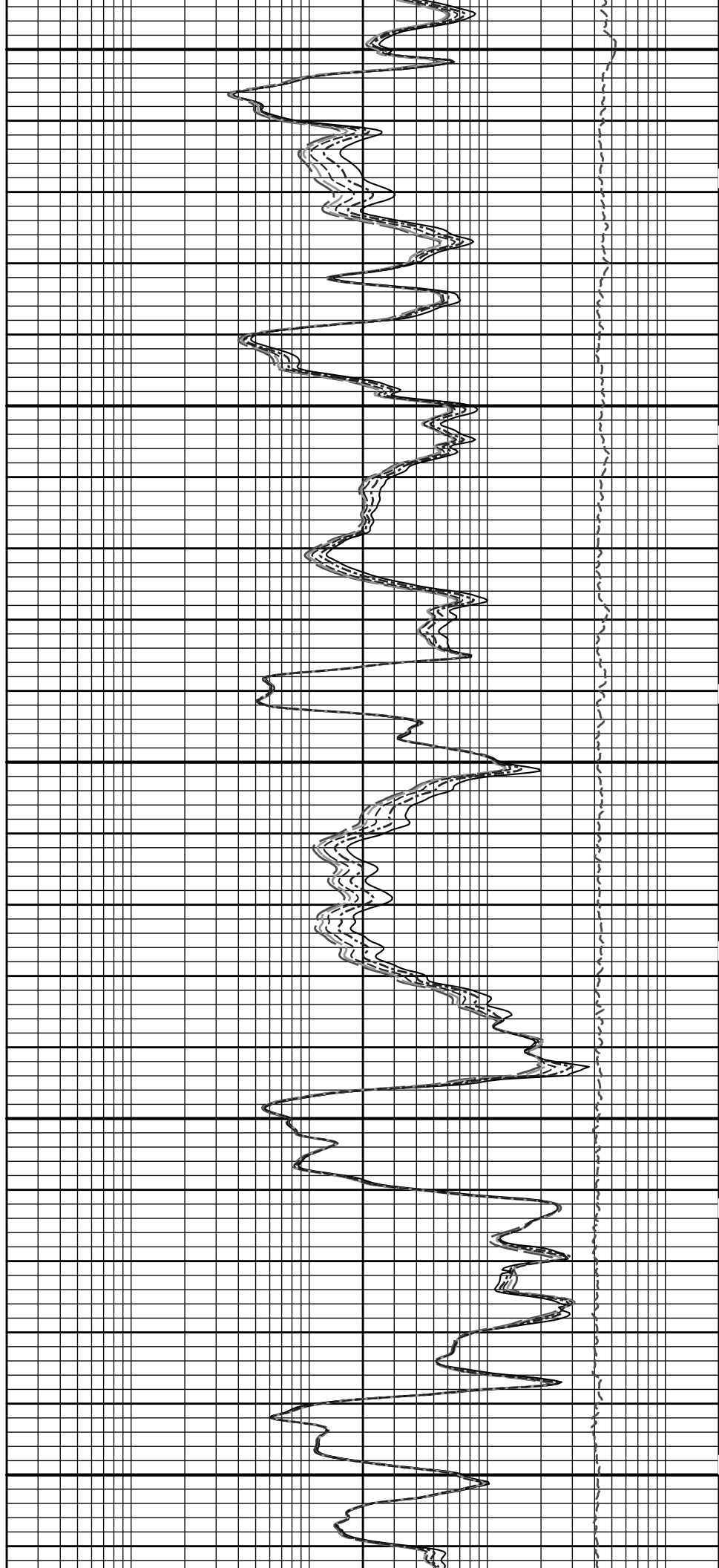


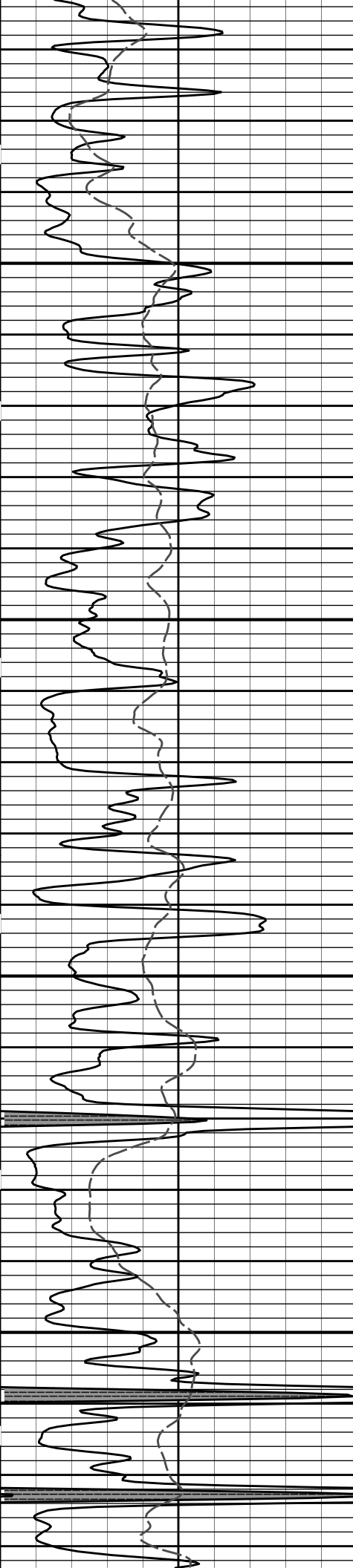


4200

4300

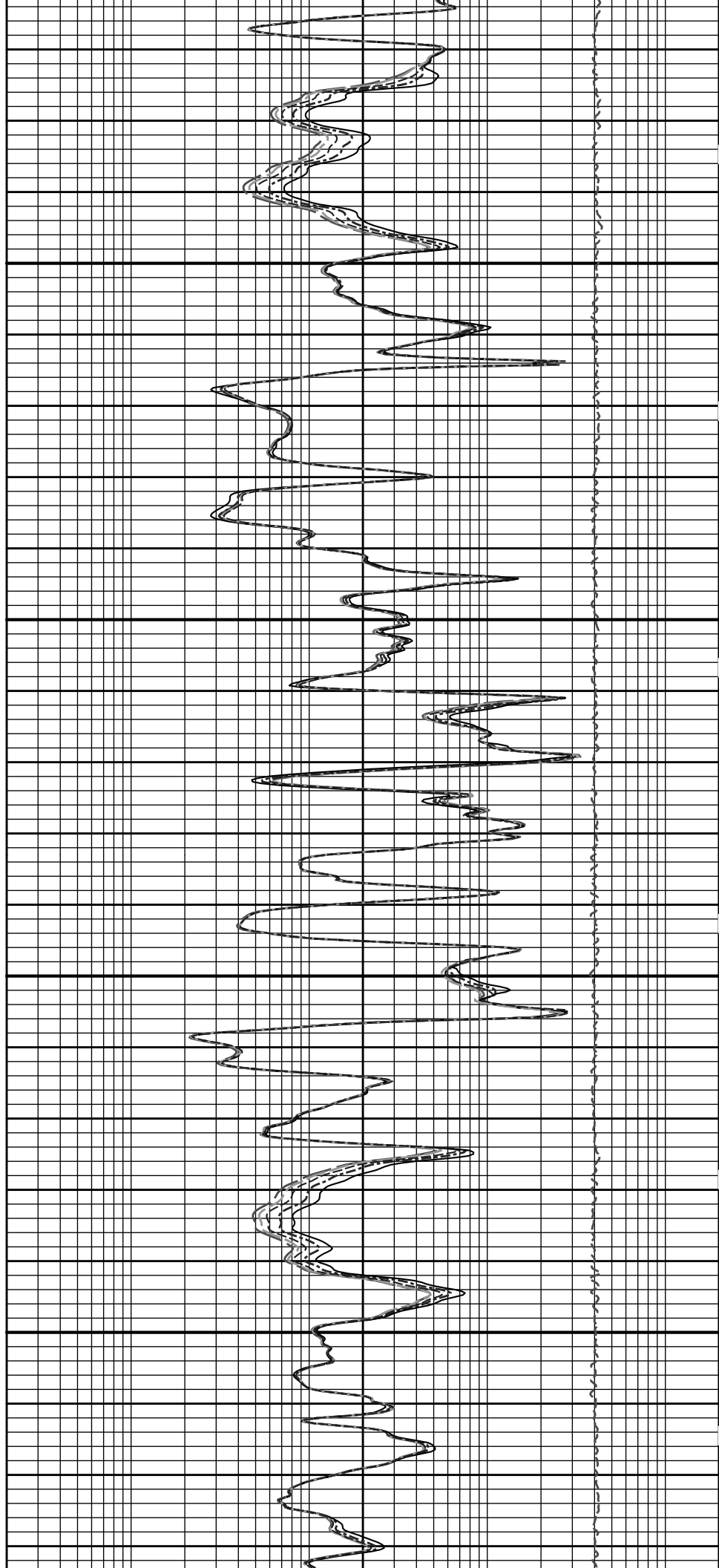
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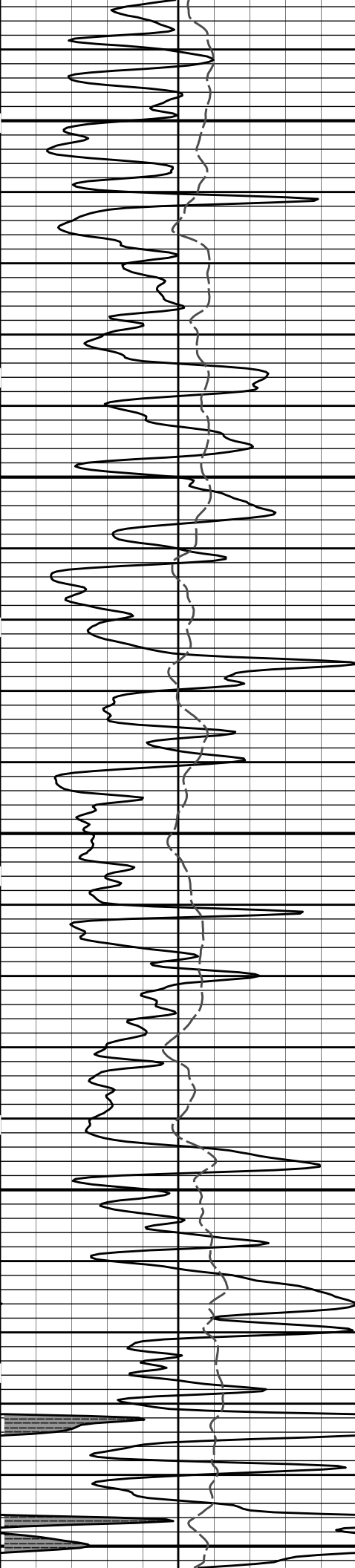




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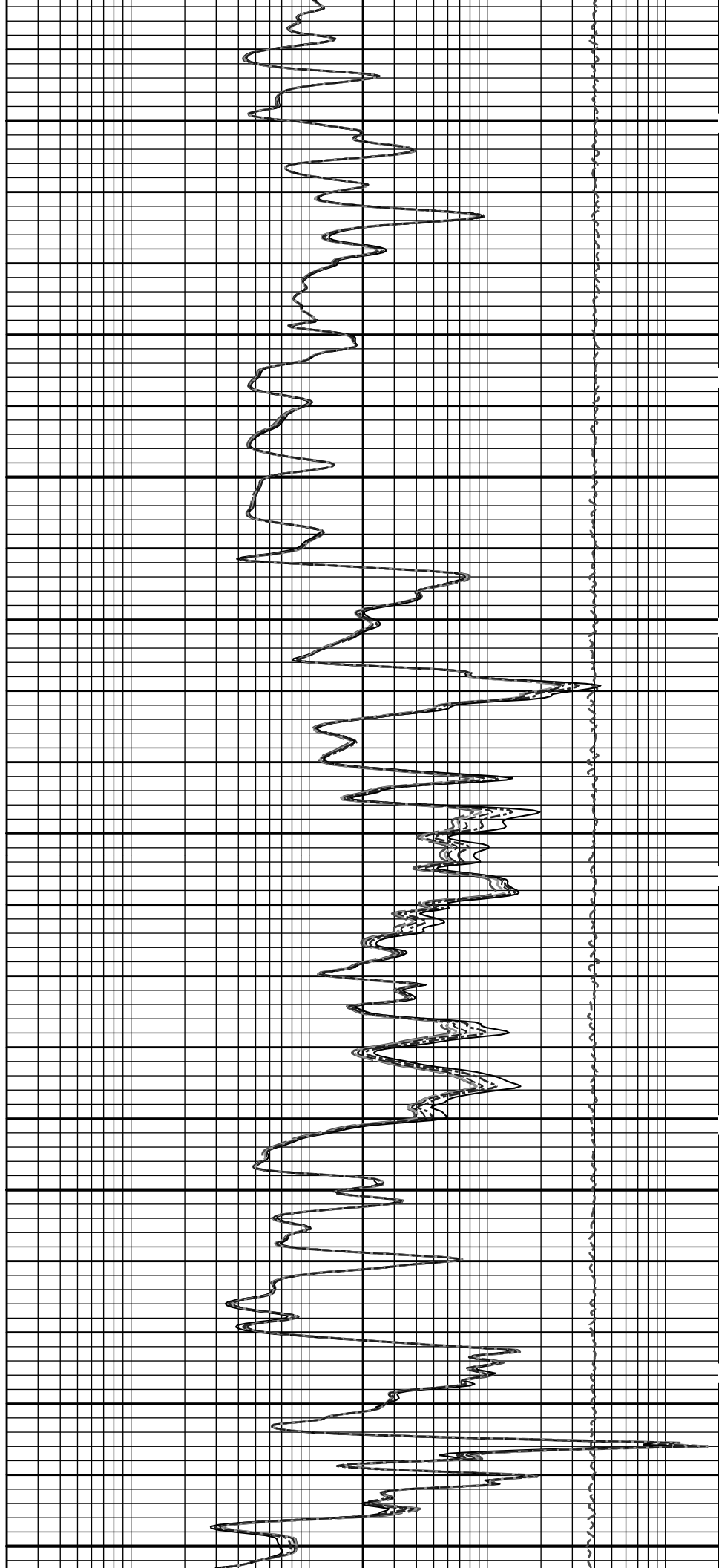
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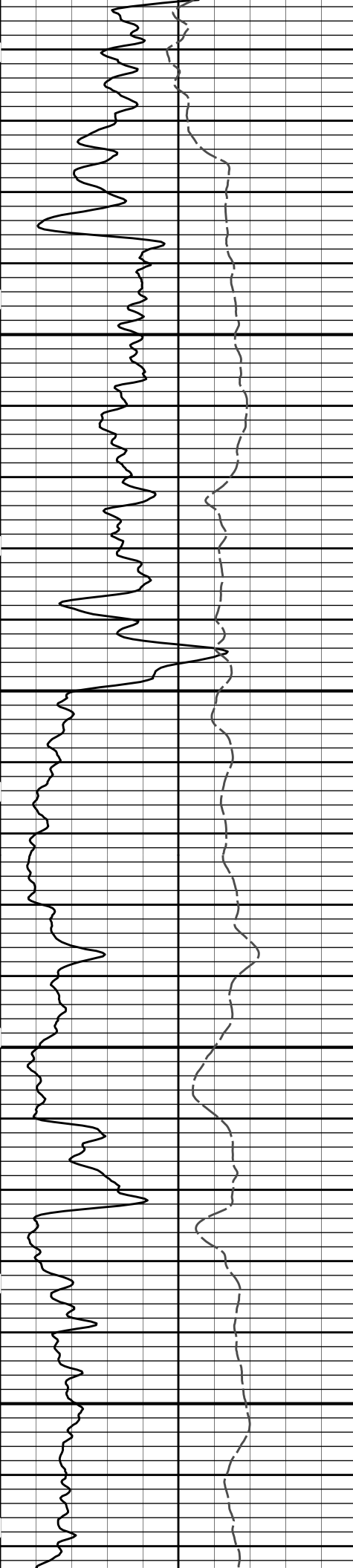




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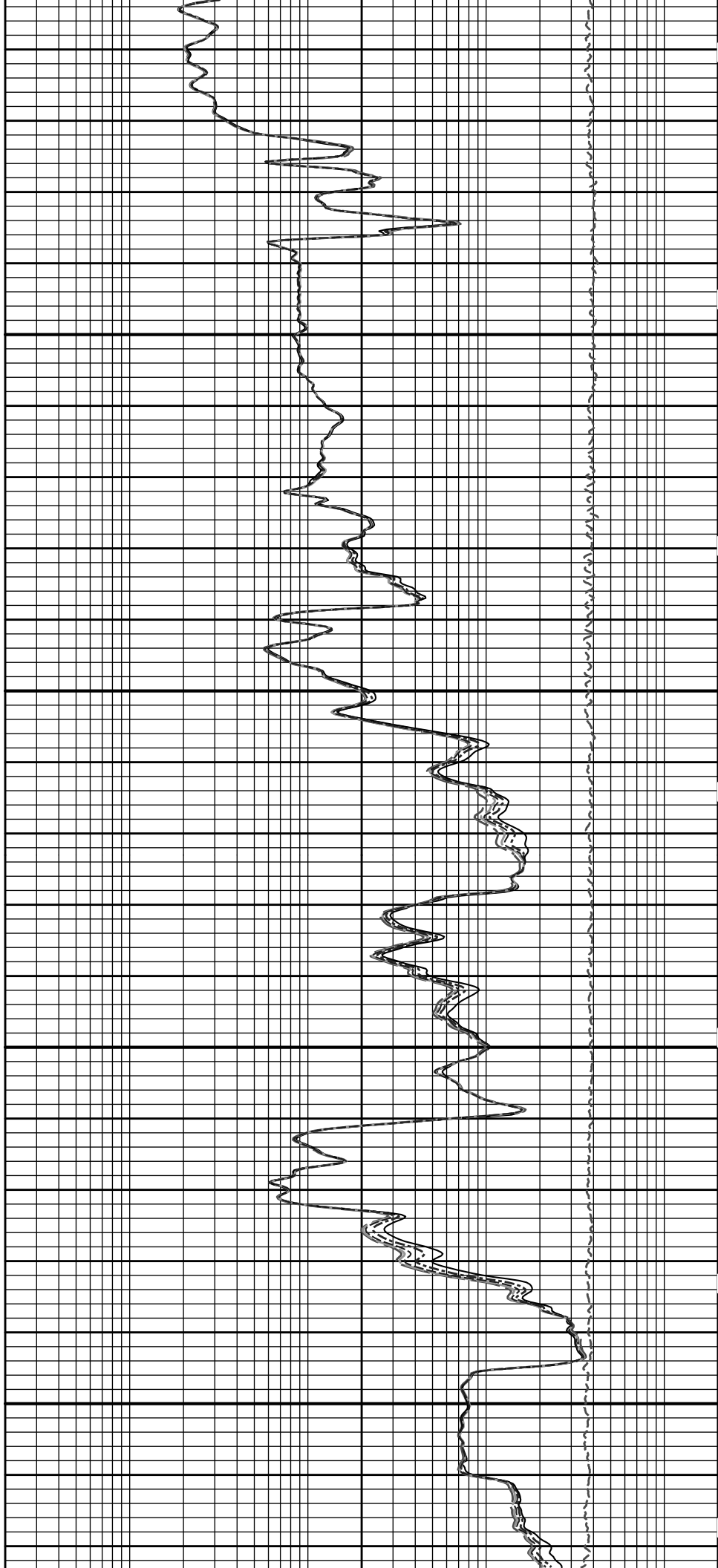
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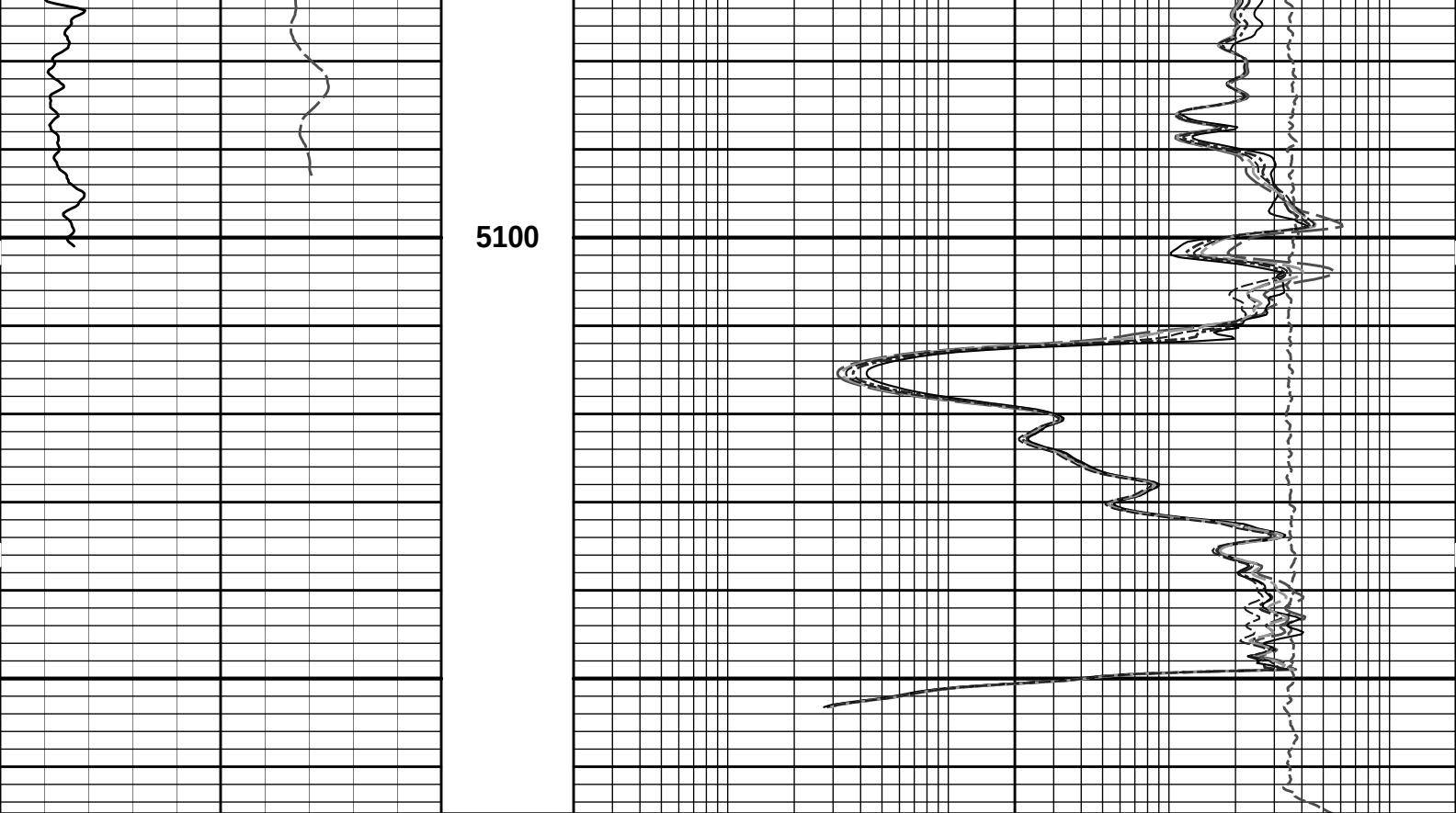




4900

5000





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

HALLIBURTON

Plot Time: 12-Jul-13 21:11:34
Plot Range: 3900 ft to 5165.33 ft
Data: DRUSSEL_E-1\Well Based\REPEAT\
Plot File: \\-LOCAL-\\DRUSSEL_E-1\\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIACRT\ACRT_5_repeat_lib

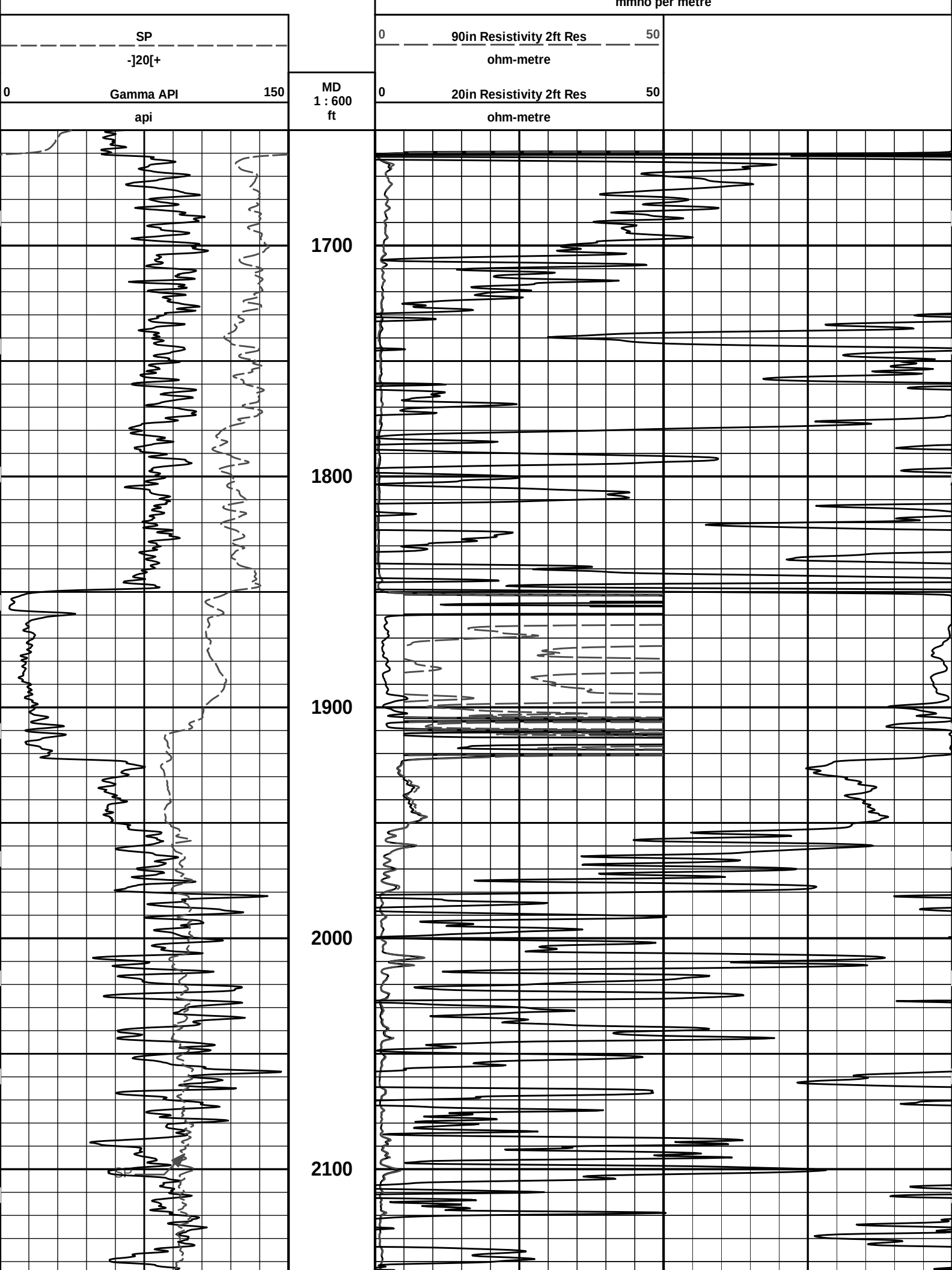
REPEAT SECTION

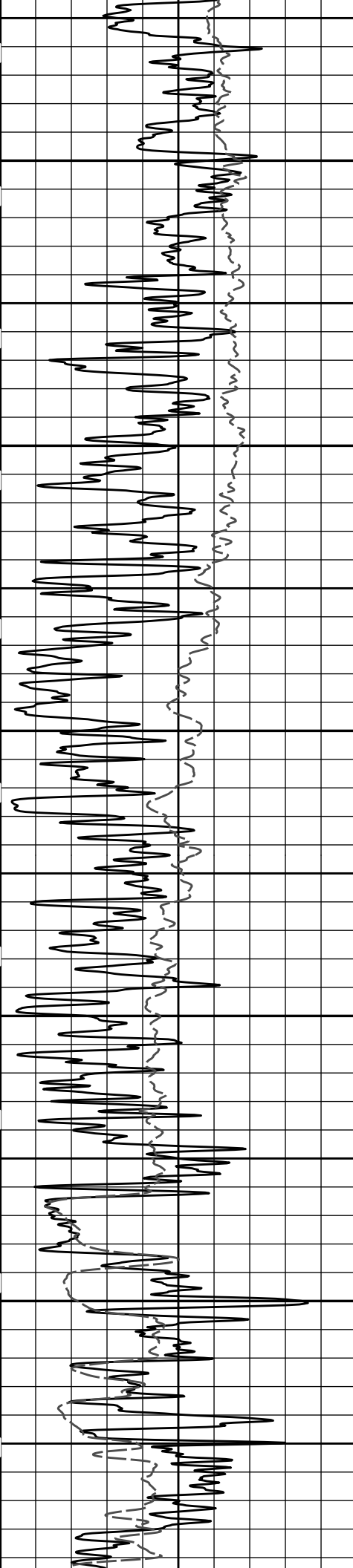
HALLIBURTON

Plot Time: 12-Jul-13 21:11:34
Plot Range: 1650 ft to 5166.17 ft
Data: DRUSSEL_E-1\Well Based\CASING\
Plot File: \\-LOCAL-\\DRUSSEL_E-1\\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIACRT\ACRT_2_lib

2 INCH MAIN LOG

	1000	90in Conductivity 2ft Res	0
		mmho per metre	





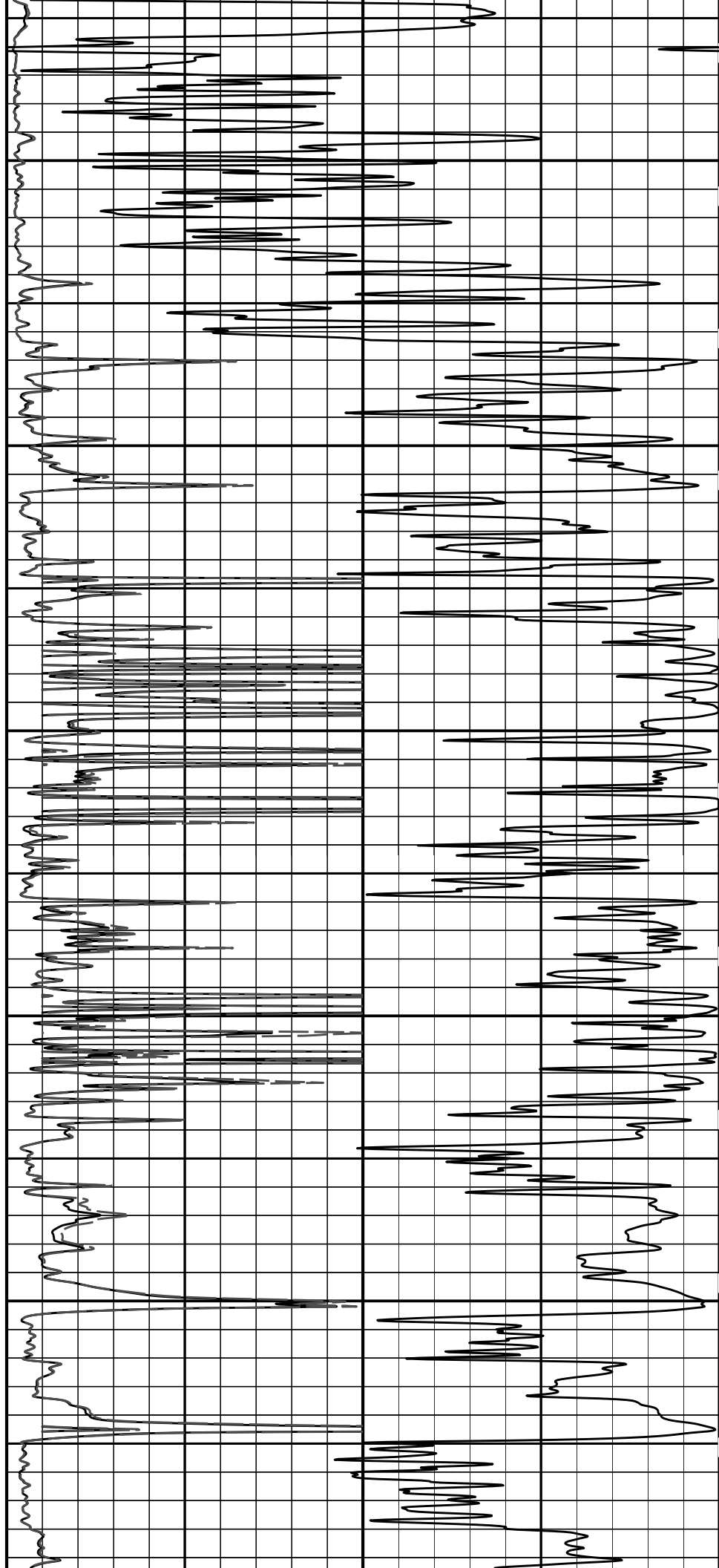
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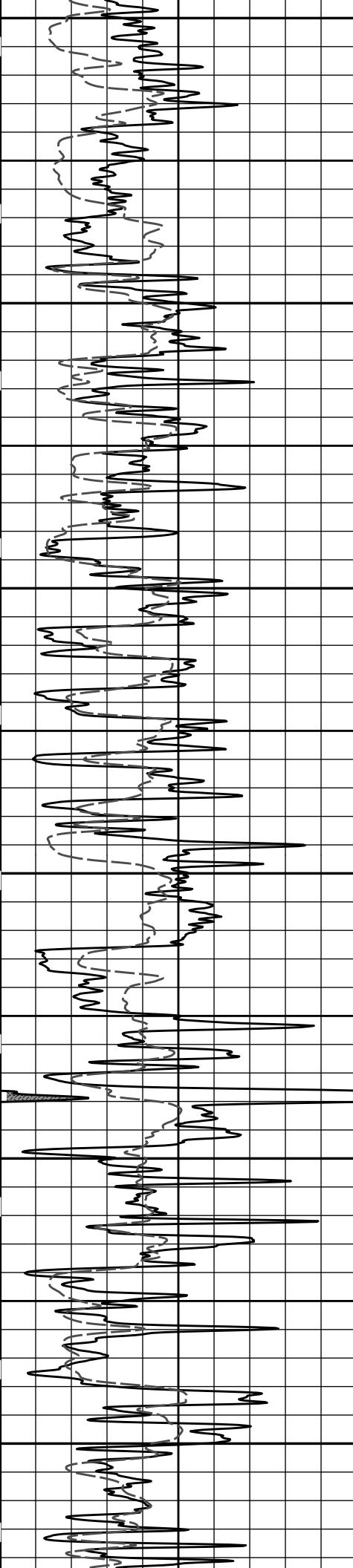
2300

2400

2500

2600





2700

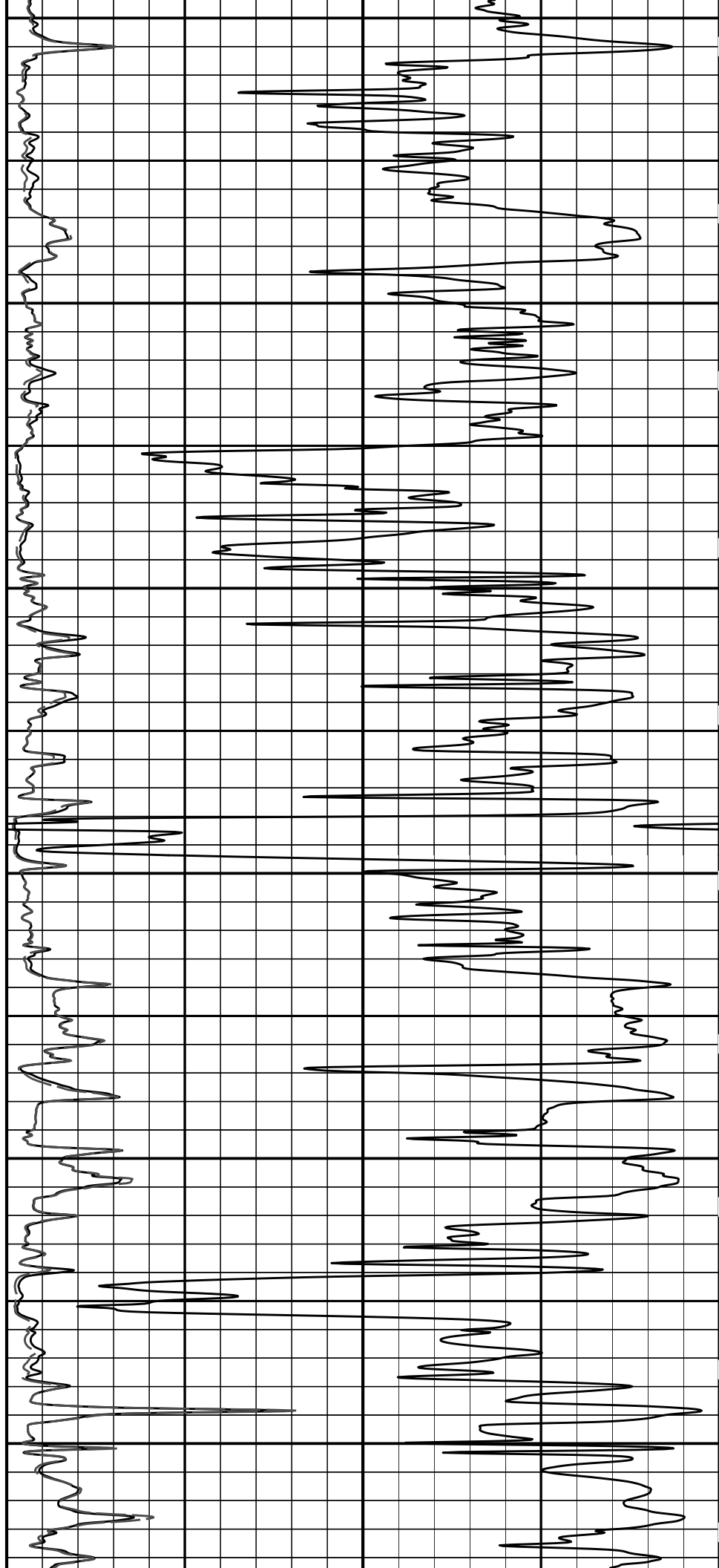
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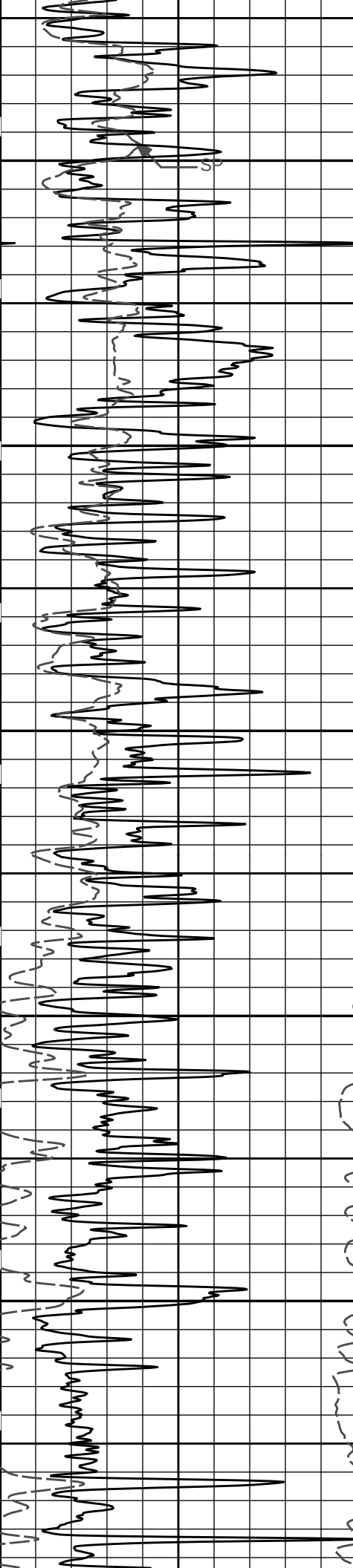
2900

3000

3100

3200





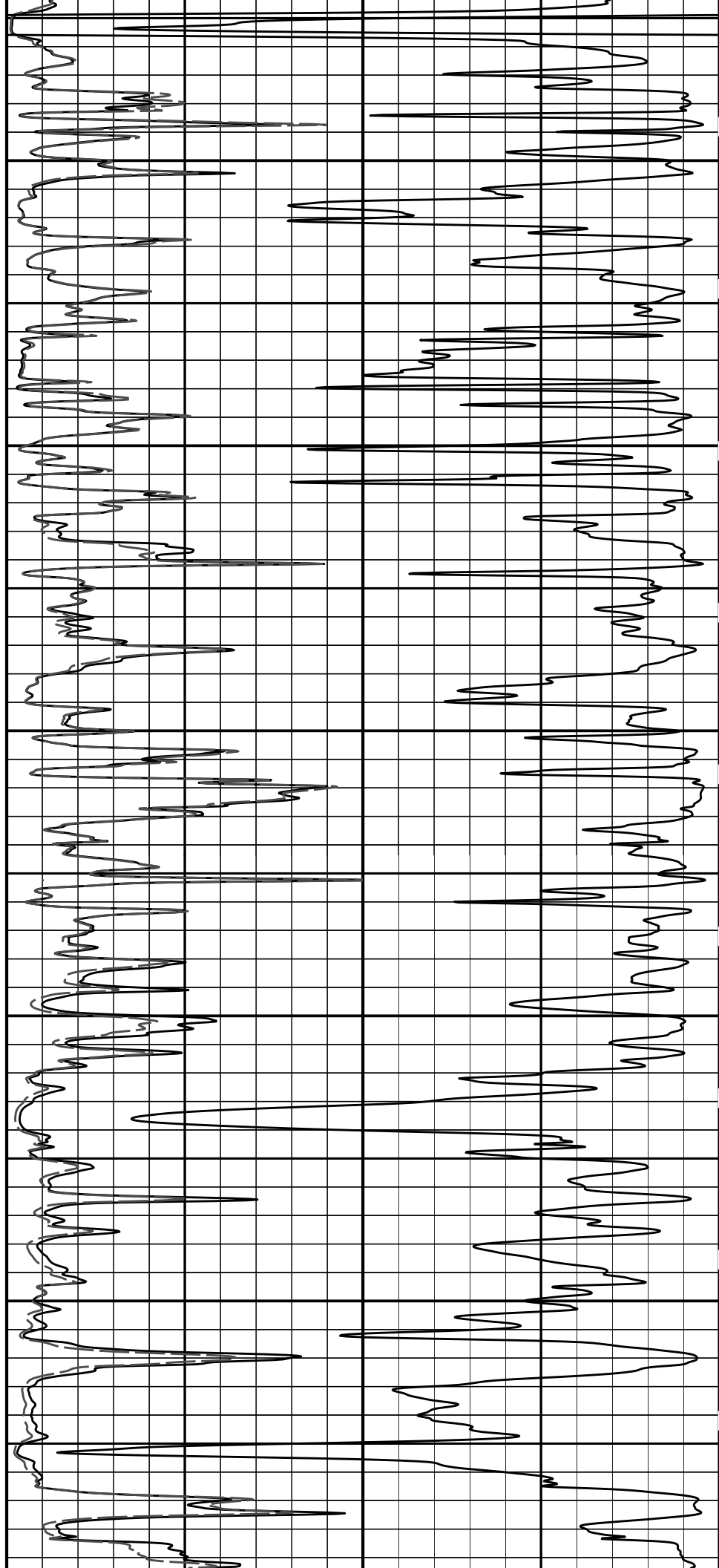
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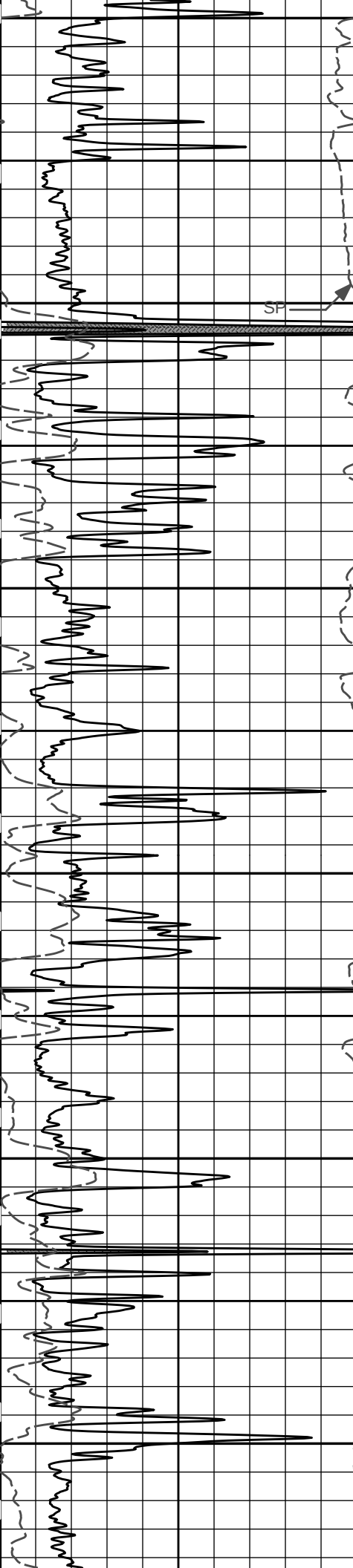
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3500

3600

3700





3800

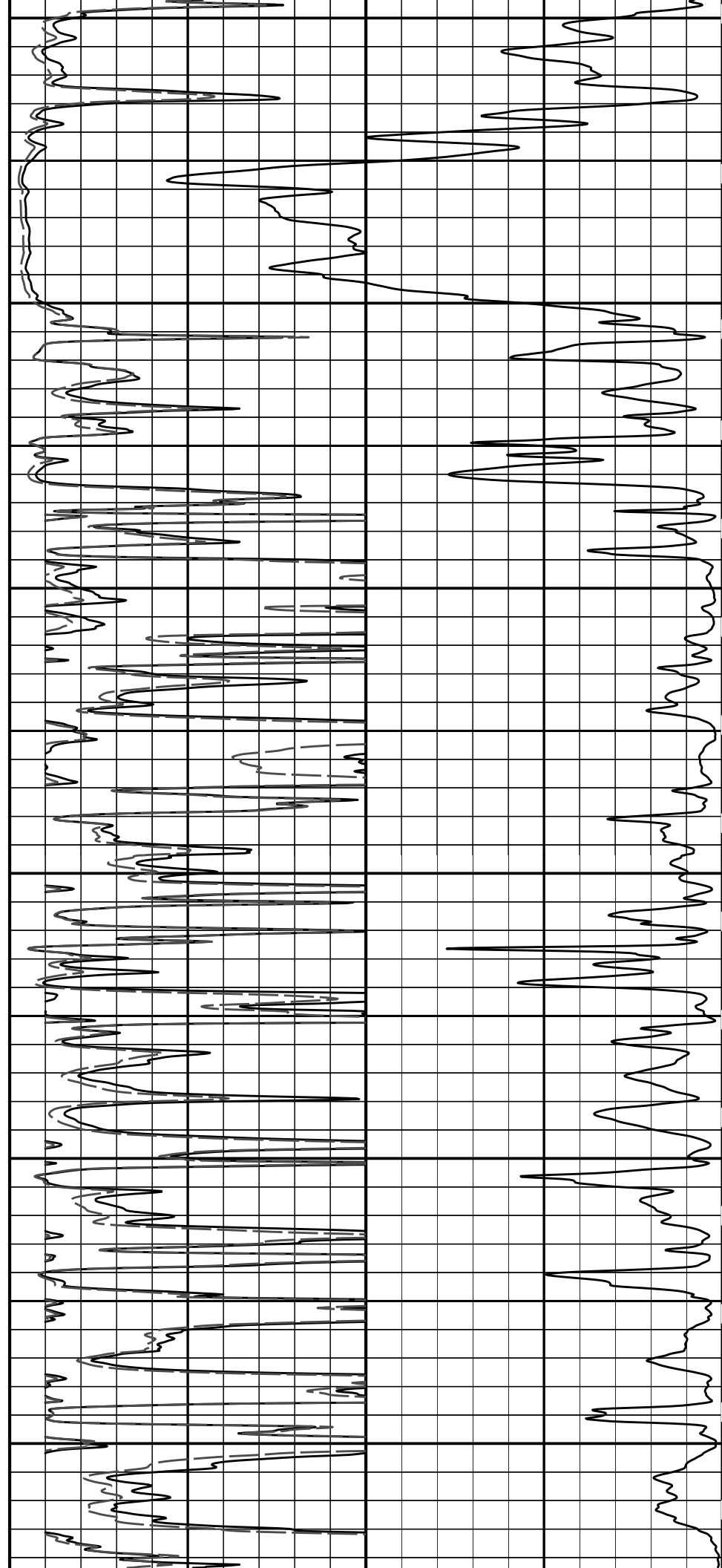
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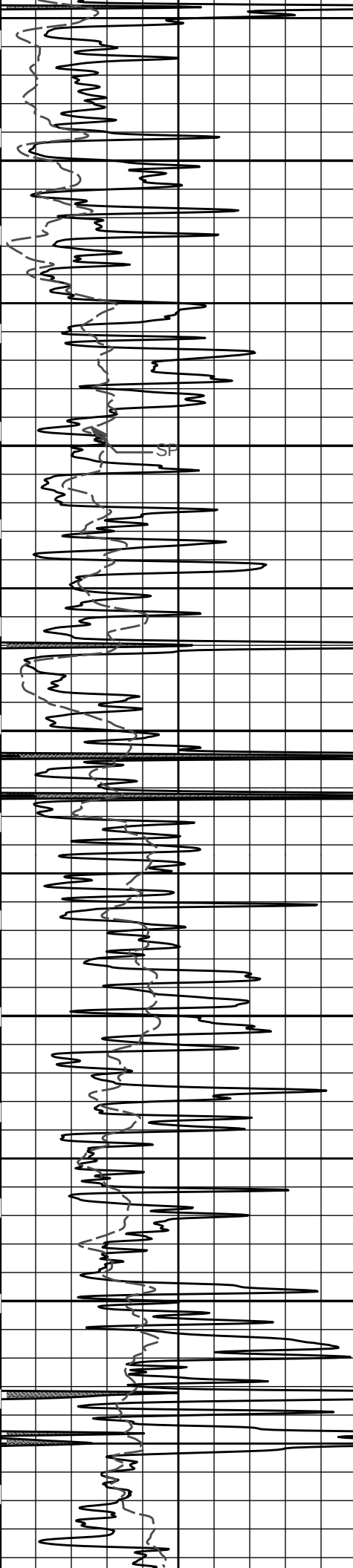
4000

4100

4200

4300





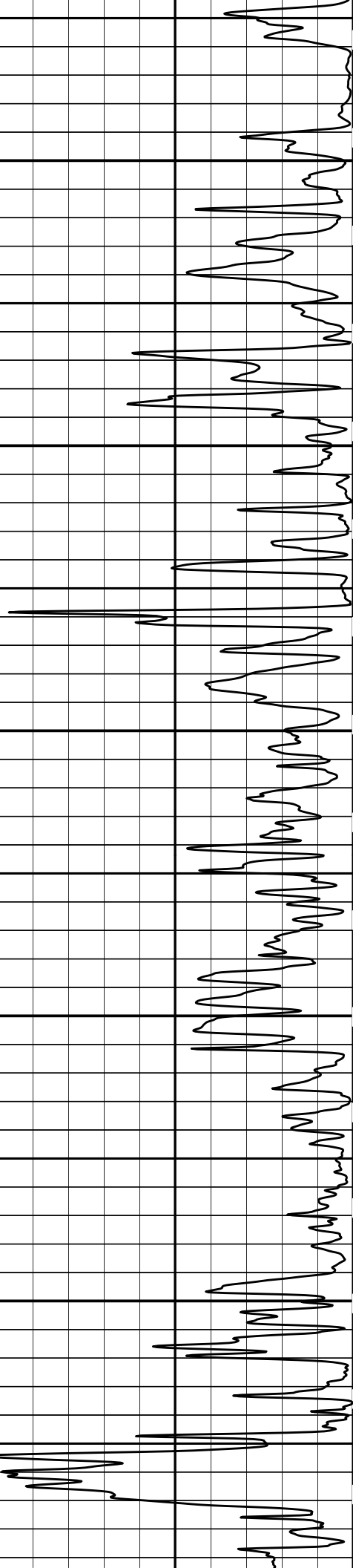
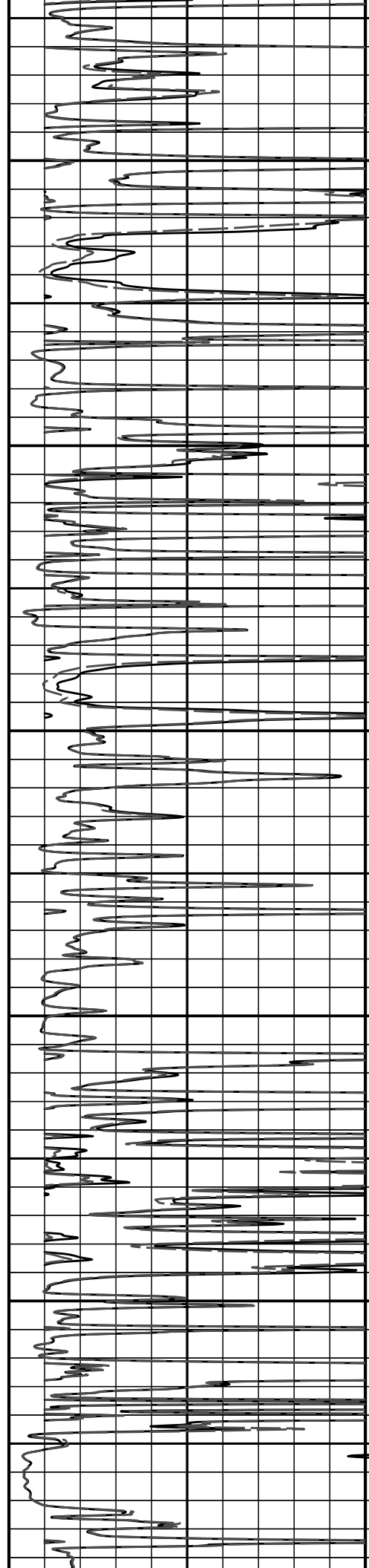
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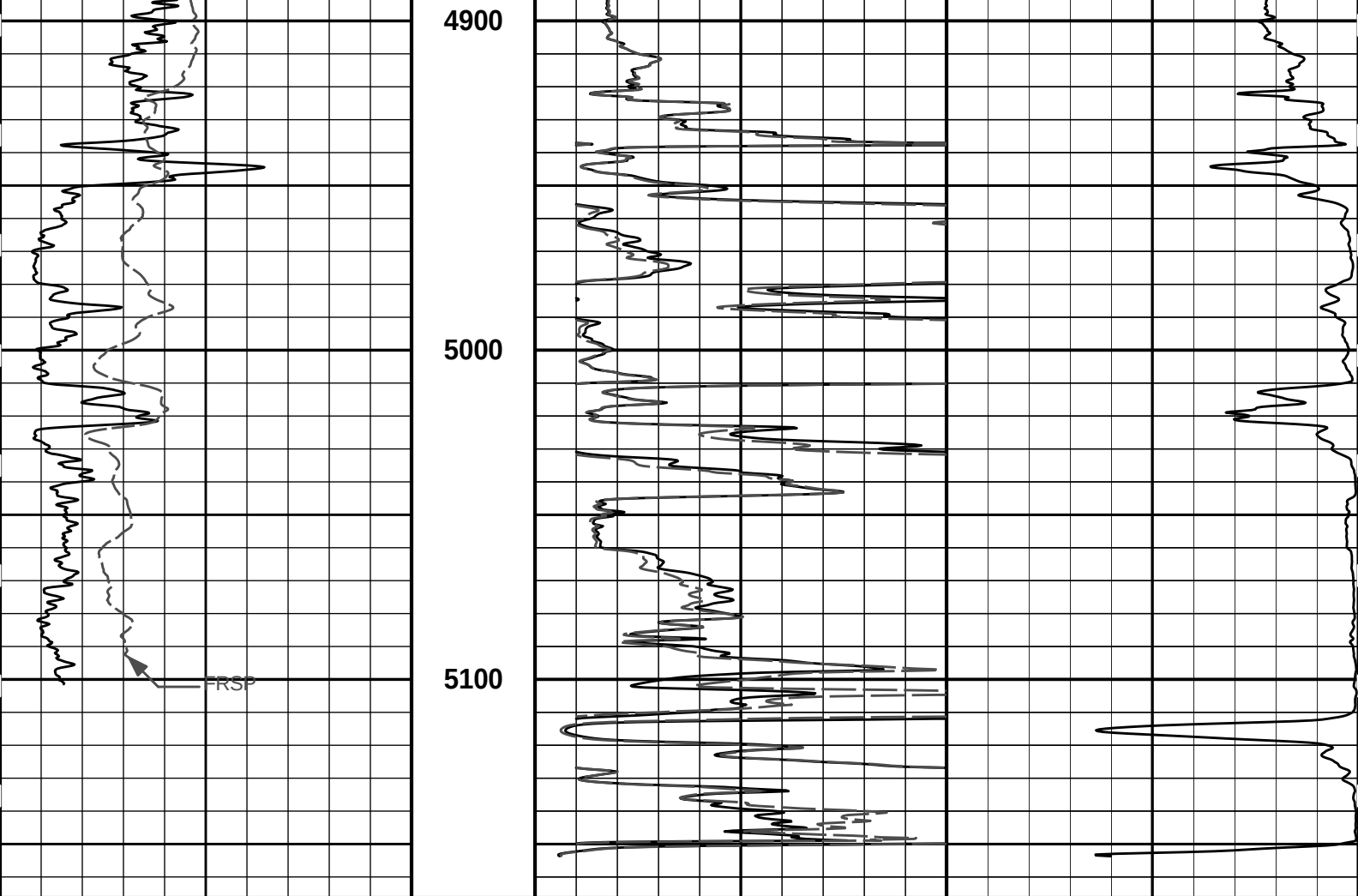
4500

4600

4700

4800





0	Gamma API	150	MD 1 : 600 ft	0	20in Resistivity 2ft Res	50		
	api				ohm-metre			
	SP			0	90in Resistivity 2ft Res	50		
	-]20[+				ohm-metre			
				1000	90in Conductivity 2ft Res		0	
				mmho per metre				

HALLIBURTON

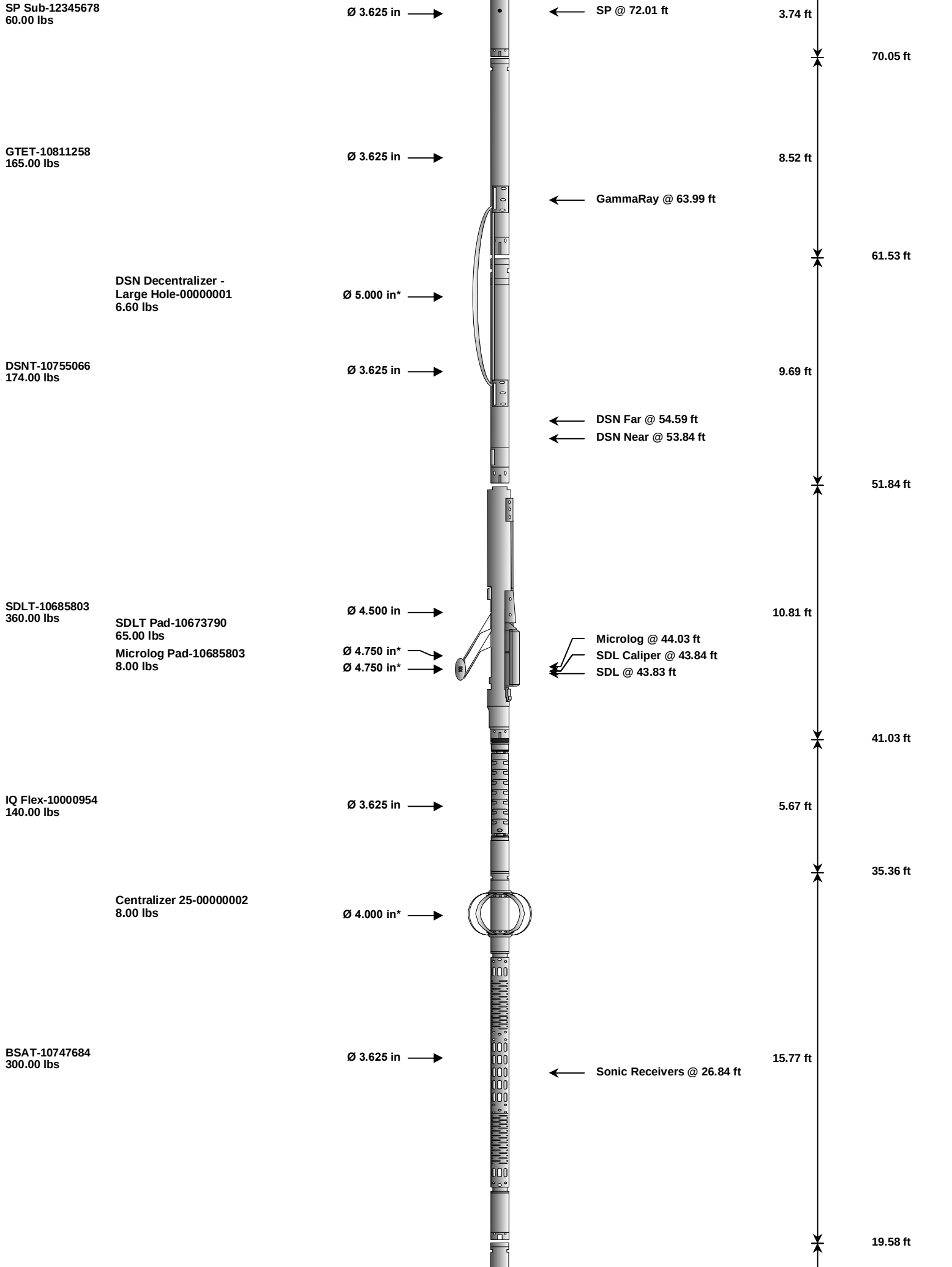
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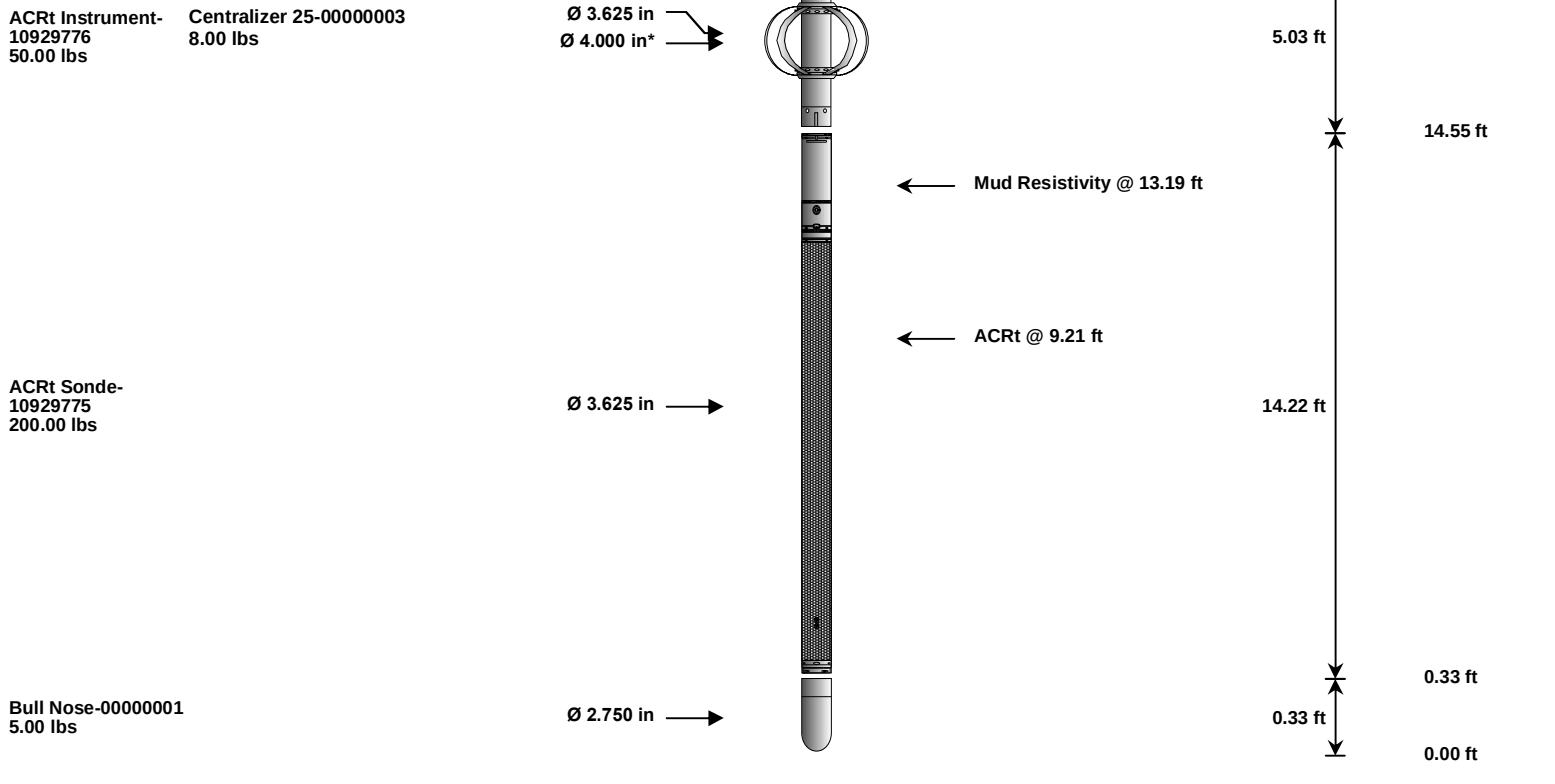
2 INCH MAIN LOG

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-954 37.50 lbs		Ø 2.750 in		← Temperature @ 76.74 ft	3.03 ft	77.77 ft
XOHD-00000001 20.00 lbs		Ø 2.750 in			0.95 ft	74.74 ft
		Ø 3.625 in				73.79 ft





Background	35.8	34.7	api
Background + Calibrator	274.6	266.7	api
Calibrator	238.8	232.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION			
Tool Name:	GTET - 10811258	Reference Calibration Date:	01-Jul-13 12:19:31
Engineer:	S. INGERSOLL	Calibration Date:	11-Jul-13 11:27:35
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Calibrator API Reference:228.00 api

Equivalent Calibrator API Reference:232.0 api

Field Verification	Shop	Field	Units
Background	34.7	43.7	api
Background + Calibrator	266.7	268.3	api
Calibrator	232.0	224.6	api
Shop	Field	Difference	Tolerance
232.0	224.6	7.4	+/- 9.00

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION			
Tool Name:	ACRt Sonde - 10929775	Reference Calibration Date:	04-May-13 10:38:01
Engineer:	J. BOLLUM	Calibration Date:	21-Jun-13 11:07:27
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1
Host Tool Name:	ACRt Instrument - 10929776		

TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.02	1.05	0.95	1.02	1.05	0.95	1.01	1.05
A2 (50")	0.95	1.02	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A3 (29")	0.95	1.00	1.05	0.95	1.01	1.05	0.95	1.00	1.05
A4 (17")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.02	1.05	0.95	1.02	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	-1.85	2	-6	-4.44	-2	-8	-4.49	-2
A2 (50")	-7	-2.92	0	-7	-4.22	0	-7	-4.27	0
A3 (29")	-27	-14.77	-9	-9	-4.64	-3	-7	-2.81	-1
A4 (17")	-180	-103.87	-60	-45	-32.62	-15	-39	-25.57	-13
A5 (10")	N/A	N/A	N/A	-150	-120.52	-50	-80	-55.86	-10
A6 (6")	N/A	N/A	N/A	175	277.84	525	90	137.99	270

TRANSMITTER CURRENT GAIN			
Signal	Lower	R	Upper
12K	0.6	0.88	1.3
36K	1.0	1.20	2.0
72K	1.0	1.46	2.0

R-MUD VERIFICATION			
Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	0.99	1.05

PASS/FAIL SUMMARY

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
GTET-10811258						
Gamma Ray Calibrator	232.0	224.6	-----	7.4	+/- 9.00	api
ACRt Sonde-10929775						
Mud Cell	0.99	-----	-----	0.00	-----	ohm-m
Data: DRUSSEL_E-110001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE					Date: 12-Jul-13 17:50:34	

HALLIBURTON						
PARAMETERS REPORT						

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.700	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	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	5.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	5170.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	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	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	

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	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	No	
DSNT	NLIT	Neutron Lithology	Limestone	
DSNT	DSNO	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	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Frequency Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Frequency Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	User define	
BSAT	DTMA	Delta -T Matrix	47.60	uspf
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wylie	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
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_____				
Data: DRUSSEL_E-110001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH1DLE			Date: 12-Jul-13 17:49:25	

HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP_GammaRay				

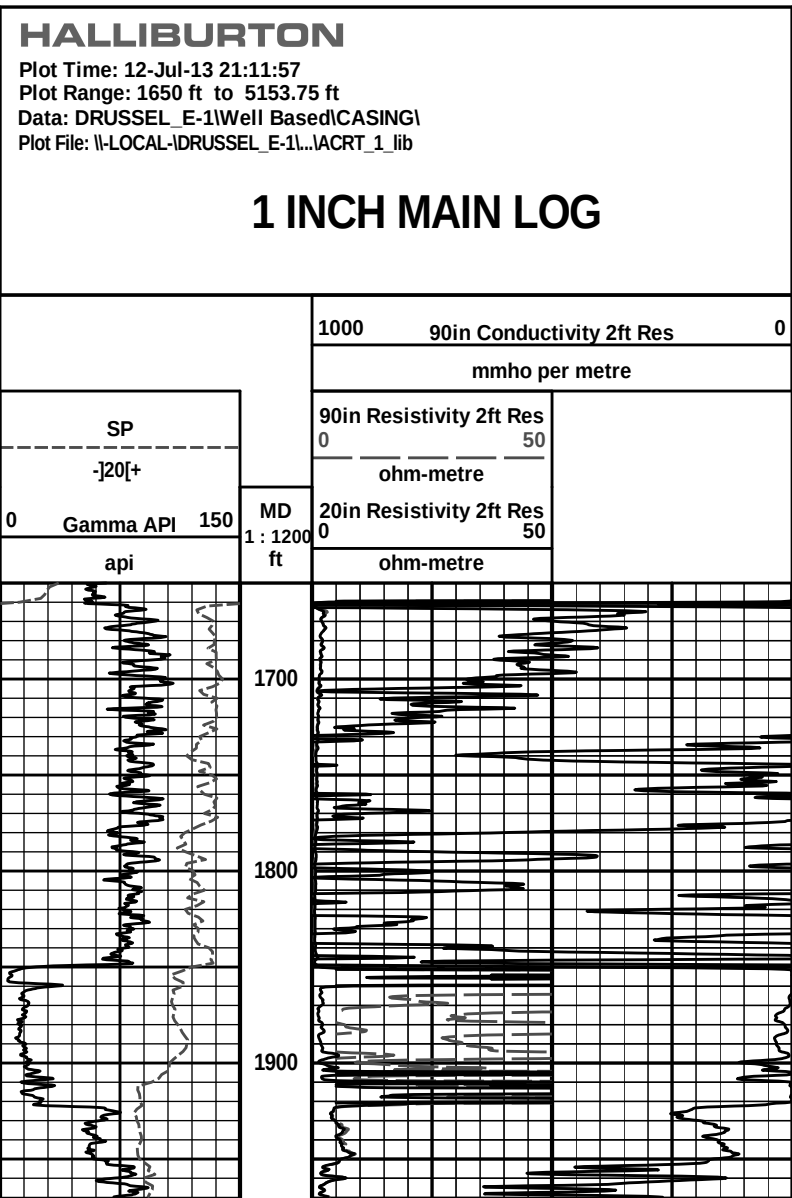
SP Sub				
PLTC	Plot Control Mask	72.01	NO	
SP	Spontaneous Potential	72.01	BLK	1.250
SPR	Raw Spontaneous Potential	72.01	NO	
SPO	Spontaneous Potential Offset	72.01	NO	
GTET				
TPUL	Tension Pull	63.99	NO	
GR	Natural Gamma Ray API	63.99	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	63.99	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	63.99	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.74	NO	
RNDS	Near Detector Telemetry Counts	53.84	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.59	TRI	0.583
DNTT	DSN Tool Temperature	53.84	NO	
DSNS	DSN Tool Status	53.74	NO	
ERND	Near Detector Telemetry Counts EVR	53.84	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.59	BLK	0.000
ENTM	DSN Tool Temperature EVR	53.84	NO	
SDLT				
TPUL	Tension Pull	43.84	NO	
PCAL	Pad Caliper	43.84	TRI	0.250
ACAL	Arm Caliper	43.84	TRI	0.250
BSAT				
TPUL	Tension Pull	26.84	NO	
STAT	Status	26.84	NO	
DLYT	Delay Time	26.84	NO	
SI	Sample Interval	26.84	NO	
TXRX	Raw Telemetry 10 Receivers	26.84	NO	
FRMC	Tool Frame Count	26.84	NO	
GMOD	Gain processing mode	19.58	NO	
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

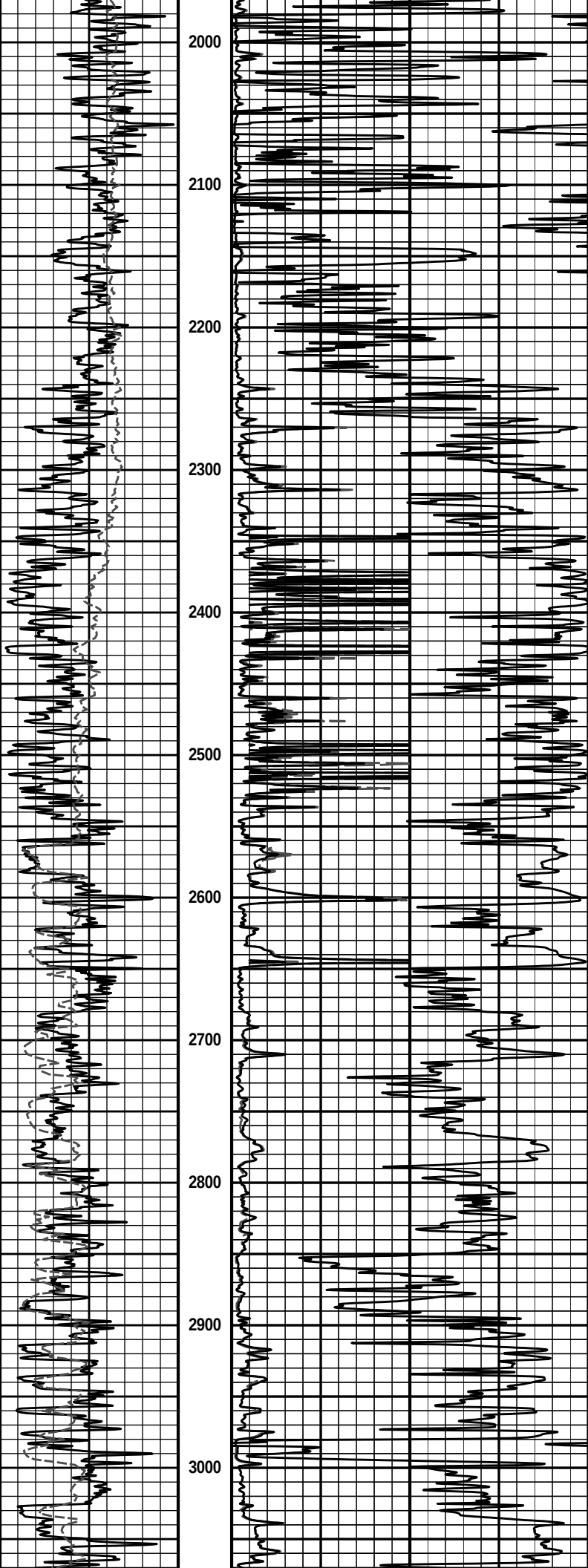
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	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 Current Raw 12K X Receiver	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	43.83	NO	
NAB	Near Above	43.66	BLK	0.920
NHI	Near Cesium High	43.66	BLK	0.920
NLO	Near Cesium Low	43.66	BLK	0.920
NVA	Near Valley	43.66	BLK	0.920
NBA	Near Barite	43.66	BLK	0.920
NDE	Near Density	43.66	BLK	0.920
NPK	Near Peak	43.66	BLK	0.920
NLI	Near Lithology	43.66	BLK	0.920
NBAU	Near Barite Unfiltered	43.66	BLK	0.250
NLIU	Near Lithology Unfiltered	43.66	BLK	0.250
FAB	Far Above	44.01	BLK	0.250
FHI	Far Cesium High	44.01	BLK	0.250
FLO	Far Cesium Low	44.01	BLK	0.250
FVA	Far Valley	44.01	BLK	0.250
FBA	Far Barite	44.01	BLK	0.250
FDE	Far Density	44.01	BLK	0.250
FPK	Far Peak	44.01	BLK	0.250
FLI	Far Lithology	44.01	BLK	0.250

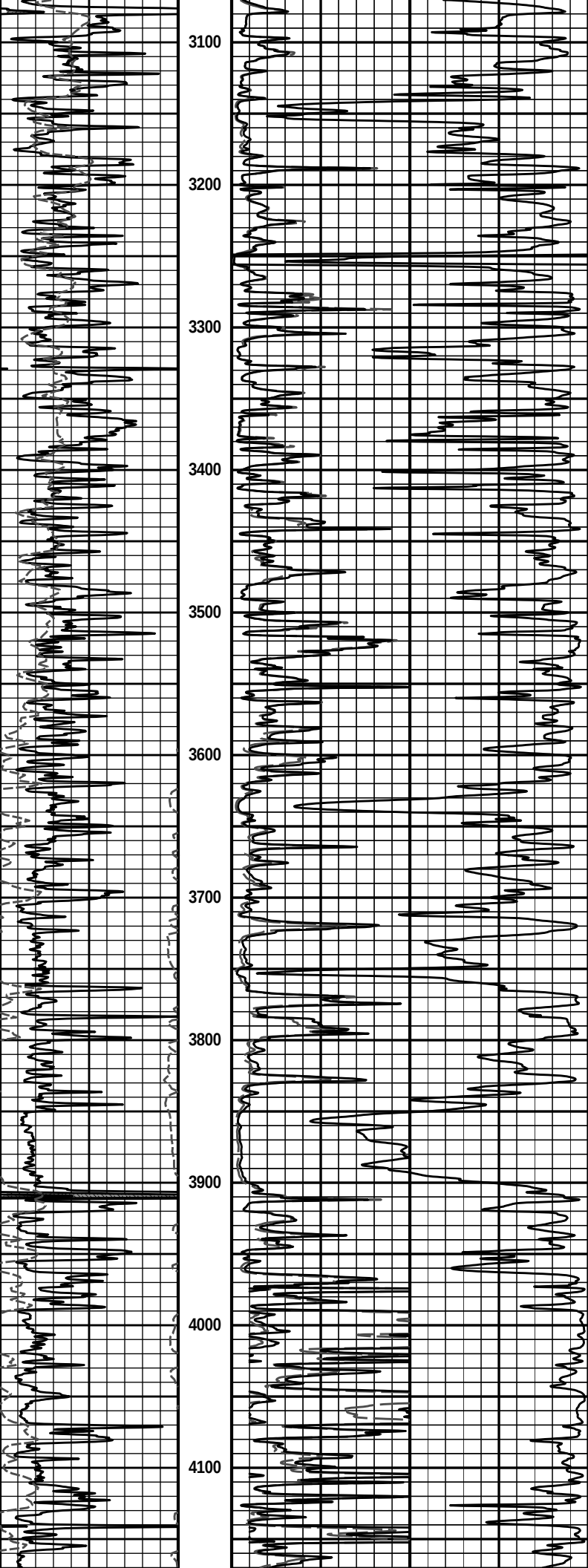
PTMP	Pad Temperature	43.84	BLK	0.920
NHV	Near Detector High Voltage	43.24	NO	
FHV	Far Detector High Voltage	43.24	NO	
ITMP	Instrument Temperature	43.24	NO	
DDHV	Detector High Voltage	43.24	NO	

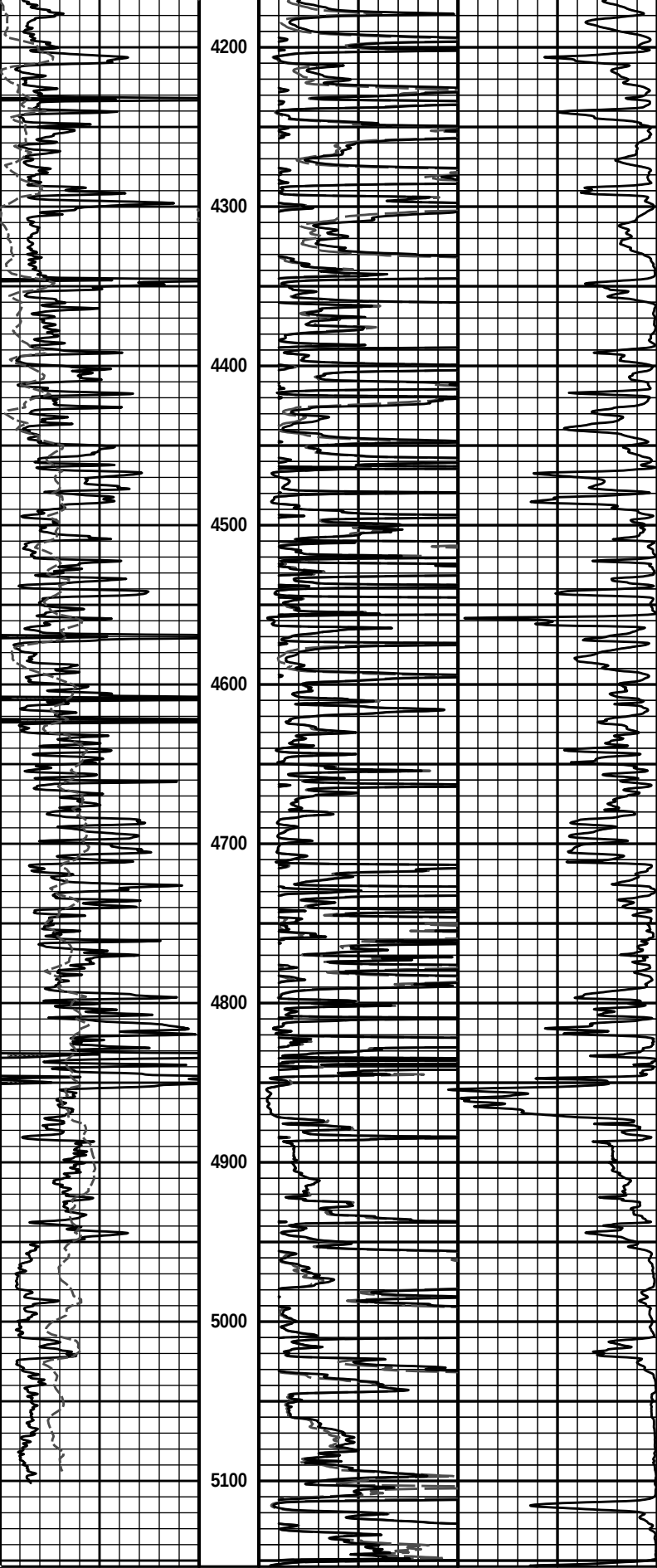
Microlog Pad				
TPUL	Tension Pull	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750
Data: DRUSSEL_E-1\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE				Date: 12-Jul-13 17:49:07

COMPANY	OXY USA INC.		
WELL	DRUSSEL E-2		
FIELD	HUGOTON GAS AREA		
COUNTY	FINNEY	STATE	KANSAS
HALLIBURTON		ARRAY COPMPENSATED TRUE RESISTIVITY LOG	









0	Gamma API	150	MD 1 : 1200 ft	20in Resistivity 2ft Res	0	50
				ohm-metre		
	api			90in Resistivity 2ft Res	0	50
	SP			ohm-metre		
	-20[+]					

1000	90in Conductivity 2ft Res	0
mmho per metre		

HALLIBURTON

Plot Time: 12-Jul-13 21:12:03
Plot Range: 1650 ft to 5153.75 ft
Data: DRUSSEL_E-1\Well Based\CASING\
Plot File: \\-LOCAL-IDRUSSEL_E-1...\ACRT_1.lib

1 INCH MAIN LOG