

HALIBURTON ARRAY COMPENSATED TRUE RESISTIVITY LOG

COMPANY										OXY USA INC.									
WELL										ENTERPRISES A-4									
FIELD/BLOCK										DIADEN									
COUNTY										HASKELL									
STATE										KANSAS									
Permanent Datum Log measured from Drilling measured from										Sect. 21 Twp. 30S Rge. 32W Elev. 2880.0 ft 11.0 ft above perm. Datum									
Date Run No. Depth - Driller Depth - Logger Bottom - Logged Interval Top - Logged Interval Casing - Driller Casing - Logger Bit Size Type Fluid in Hole Density PH Source of Sample Rm @ Meas. Temperature Rmf @ Meas. Temperature Rmc @ Meas. Temperature Source Rmf Rm @ BHT Time Since Circulation Time on Bottom Max. Rec. Temperature Equipment Recorded By Witnessed By										G.L. KB KB 16-Sep-13 ONE 5189.00 ft 5188.0 ft 5178 1526 8.625 in 1526.0 ft 7.875 in WATER BASED MUD 9.2 ppg 11.30 pH MUD PIT 0.720 ohmm 0.61 ohmm 0.830 ohmm CALCULATED 0.46 ohmm 11.0 hr 17-Sep-13 00:39 138.0 degF 11230668 S. INGERSOLL G. FLAGG									
Other Services: DSN / SDL MICROLOG BSAT ACRT										Elev.: K.B. D.F. G.L. 2891.0 ft 2890.0 ft 2880.0 ft									

Fold here

Service Ticket No.: 900741885										API Serial No.: 15081220290000										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													
Rmc @ Meas. Temp.										@		@		10800784															
Source Rmf	Rmc																												
Rm @ BHT										@		@																	
Rmf @ BHT										@		@																	
Rmc @ BHT										@		@																	
EQUIPMENT DATA																													
GAMMA					ACOUSTIC					DENSITY					NEUTRON														
Run No.	ONE		Run No.	ONE		Run No.	ONE		Run No.	ONE																			
Serial No.	10748374		Serial No.	10747684		Serial No.	10714945		Serial No.	10755066																			
Model No.	GTET		Model No.	BSAT		Model No.	SDLT		Model No.	DSNT																			
Diameter	3.625"		No. of Cent.	2		Diameter	5.3"		Diameter	3.625"																			
Detector Model No.	T-102		Spacing	.5'		Log Type	GAM-GAM		Log Type	NEU-NEU																			
Type	SCINT					Source Type	CS-137		Source Type	AM-241BE																			
Length	8"		LSA [Y/N]			Serial No.	5073GW		Serial No.	DSN-436																			
Distance to Source	N/A		FWDA [Y/N]			Strength	1.5 CI		Strength	15 CI																			
LOGGING DATA																													

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	5188	1526	REC	0	150	30	-10	47.6 us/ft	30	-10	2.71 gm/cc	30	-10	LIME		
DIRECTIONAL INFORMATION																
Maximum Deviation								@	KOP							@
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING.																
CHLORIDES REPORTED AT 5000 mg/L.																

HALLIBURTON

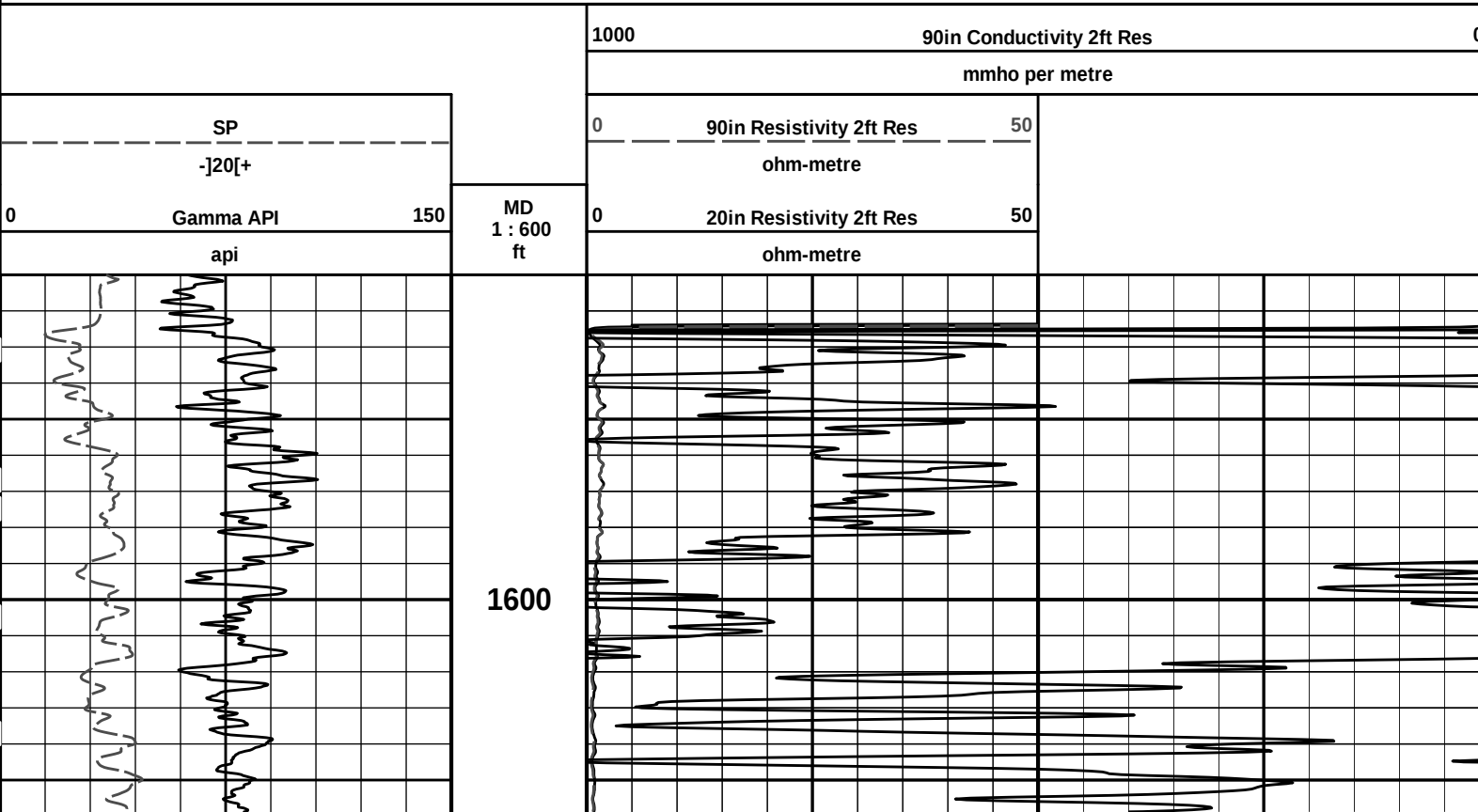
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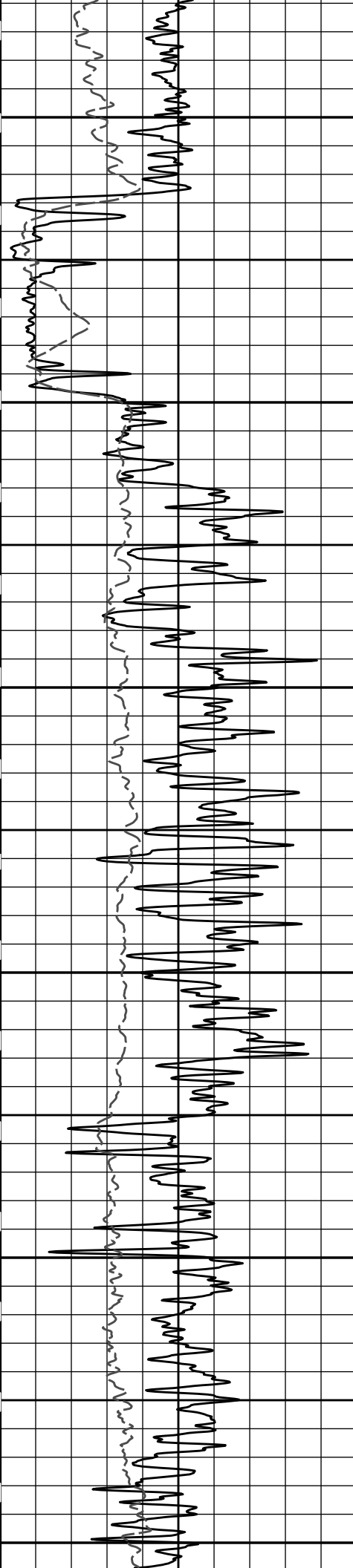
Plot Range: 1510 ft to 5191.5 ft

Data: ENTERPRISES_A4\Well Based\IR1 CASING\

Plot File: \\-LOCAL-\\ENTERPRISES_A4\Well Based\ACRT\ACRT_2.lib

2 INCH MAIN LOG





1700

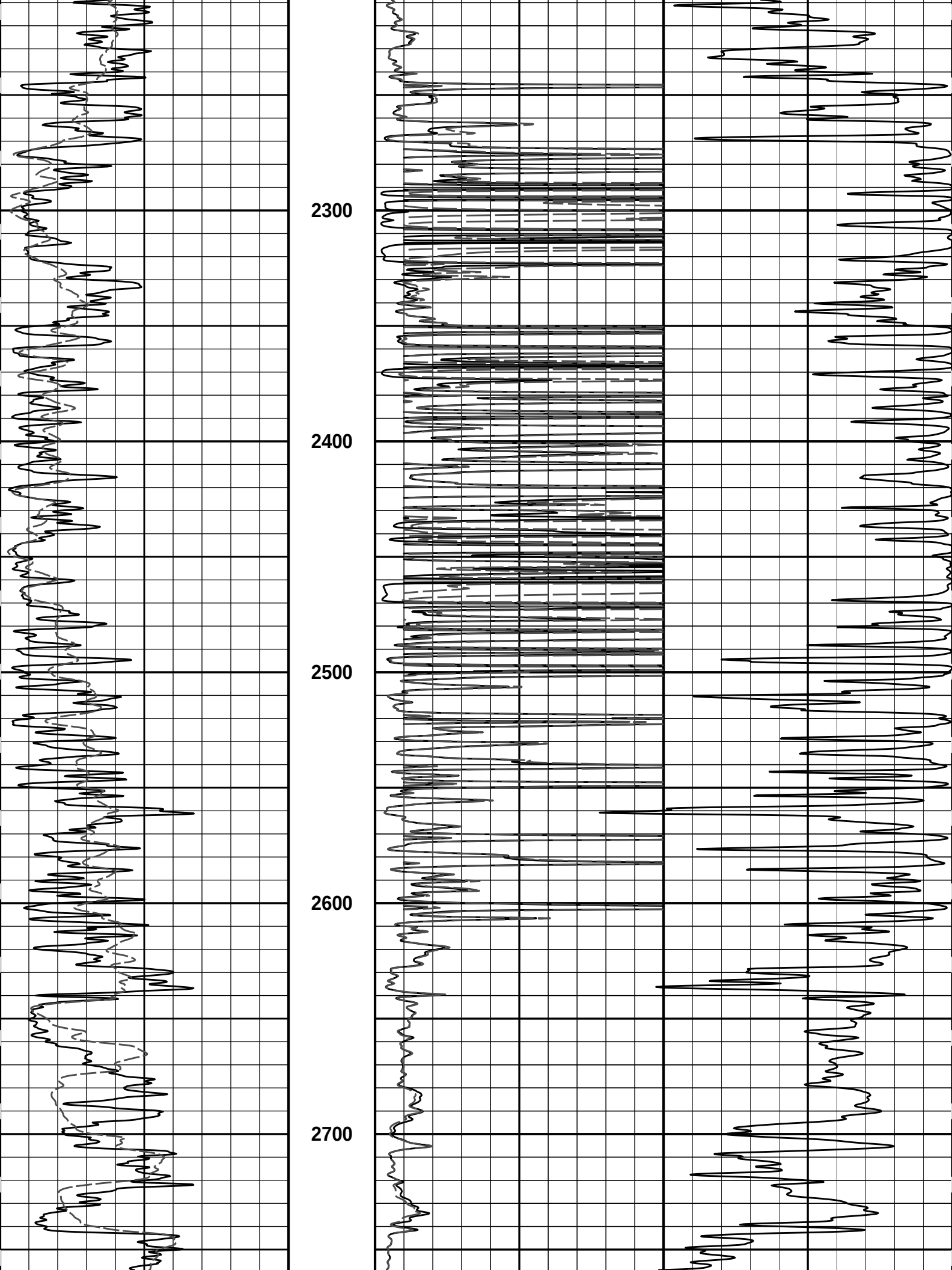
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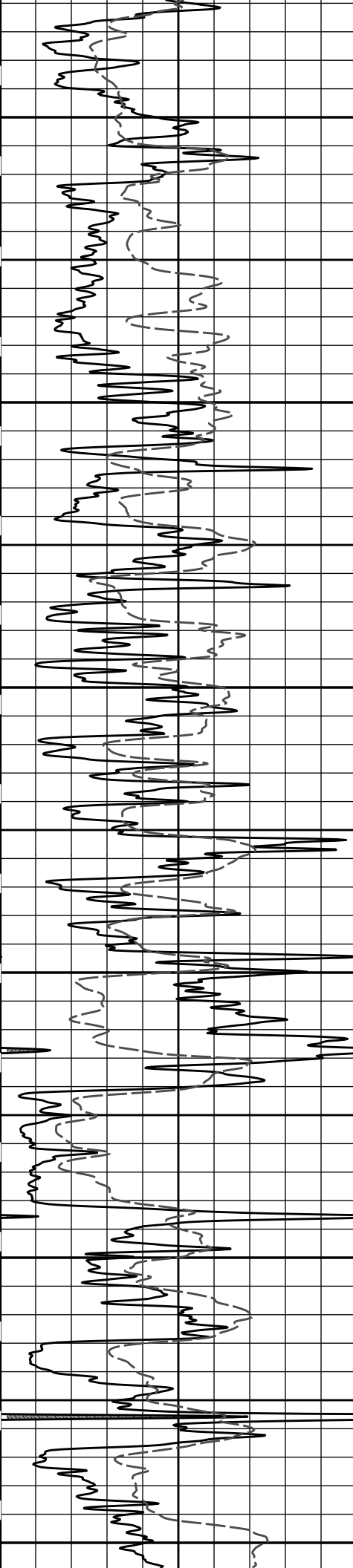
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2000

2100

2200





2800

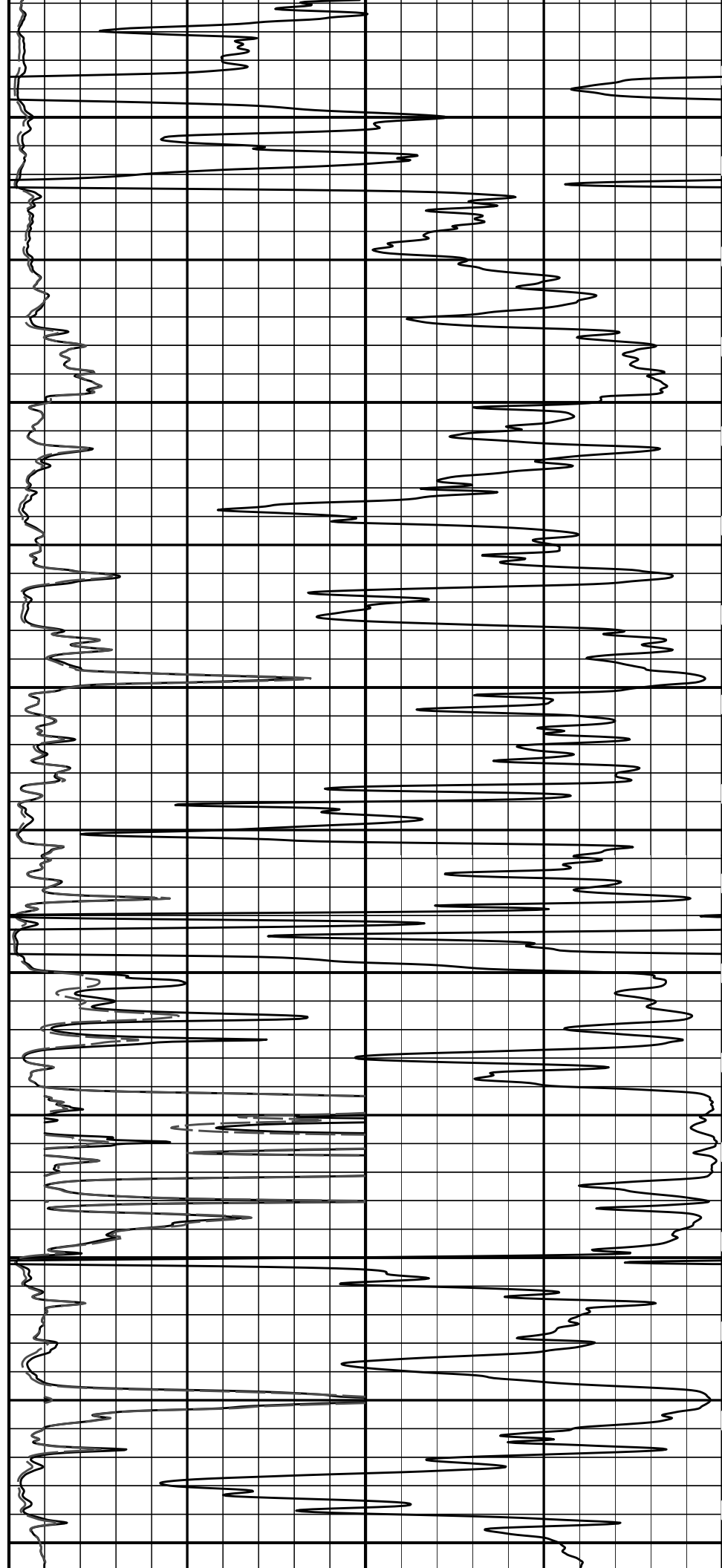
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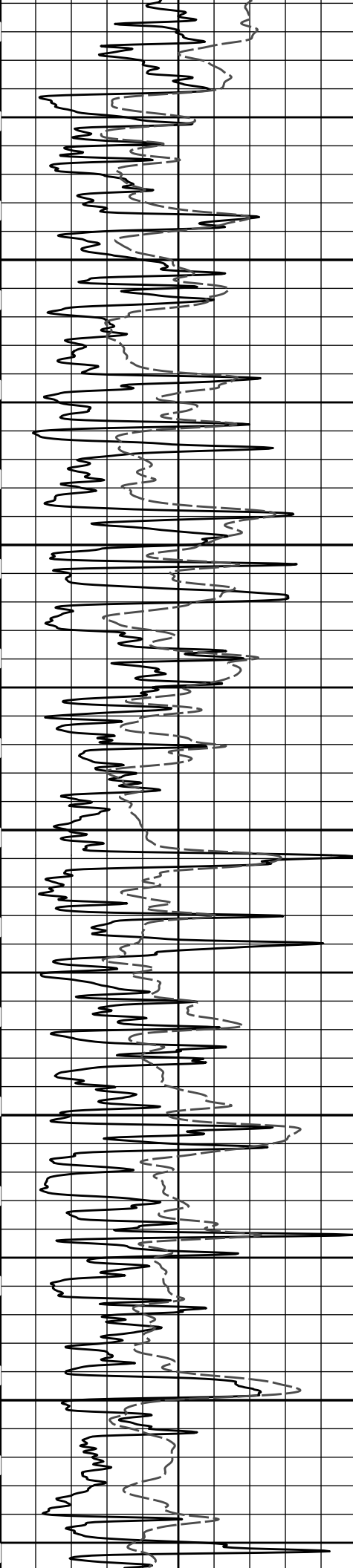
3000

3100

3200

3300





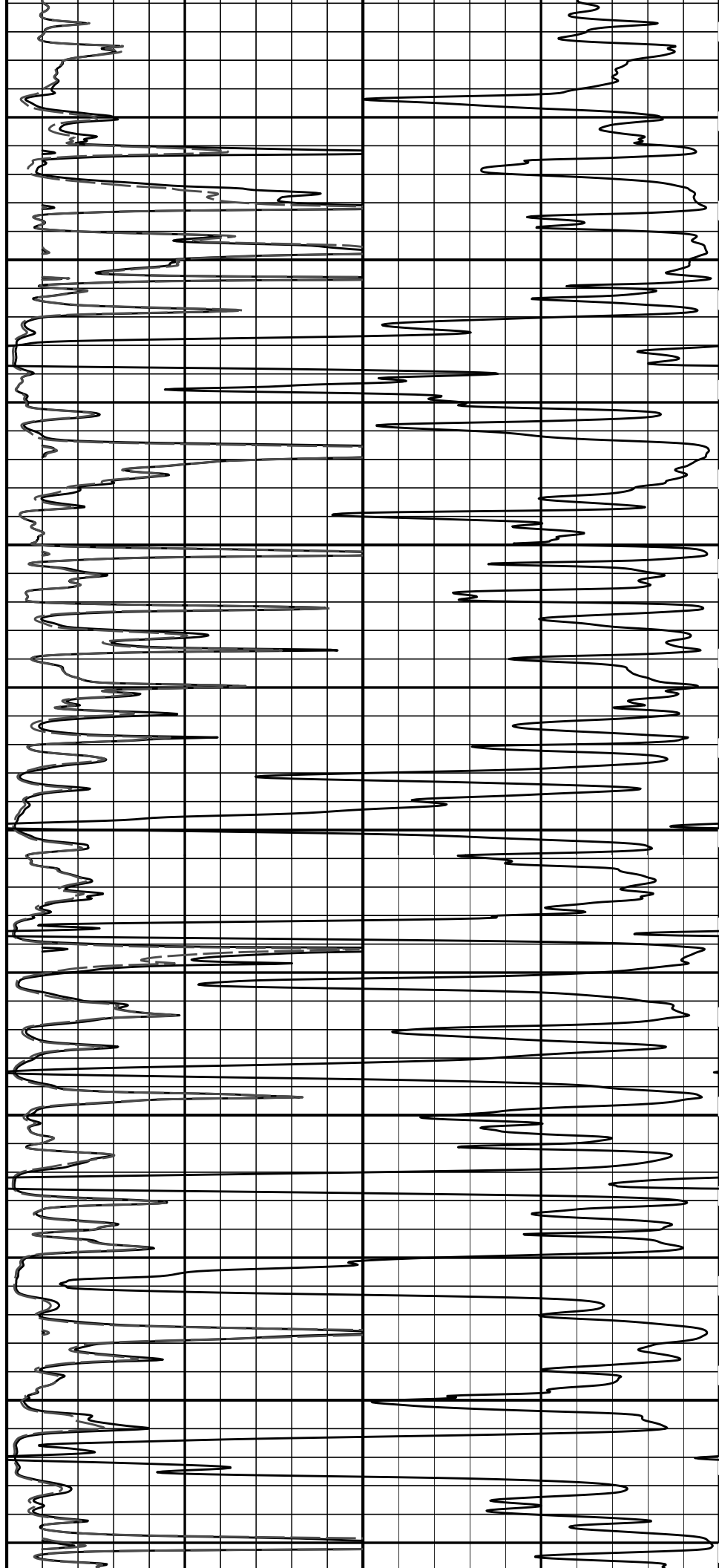
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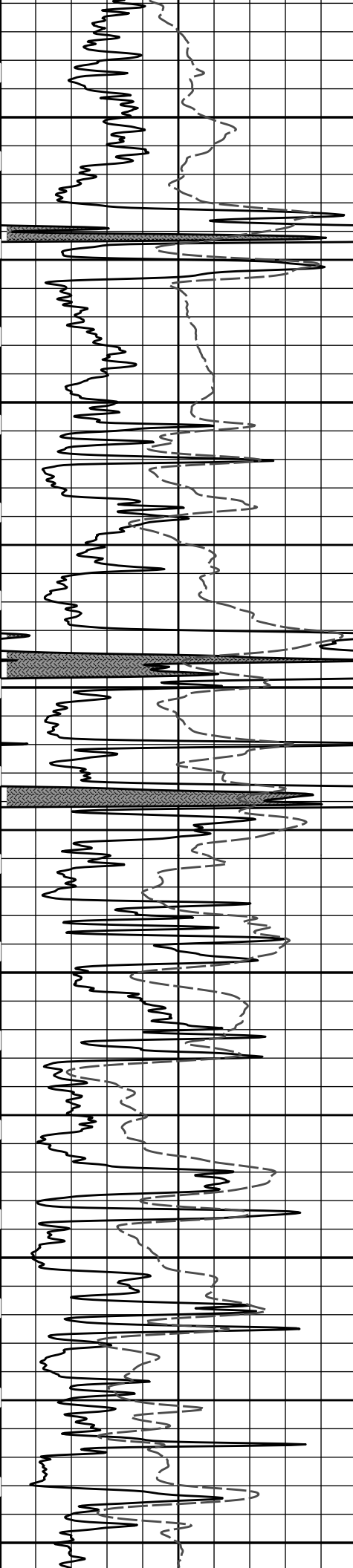
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3600

3700

3800





3900

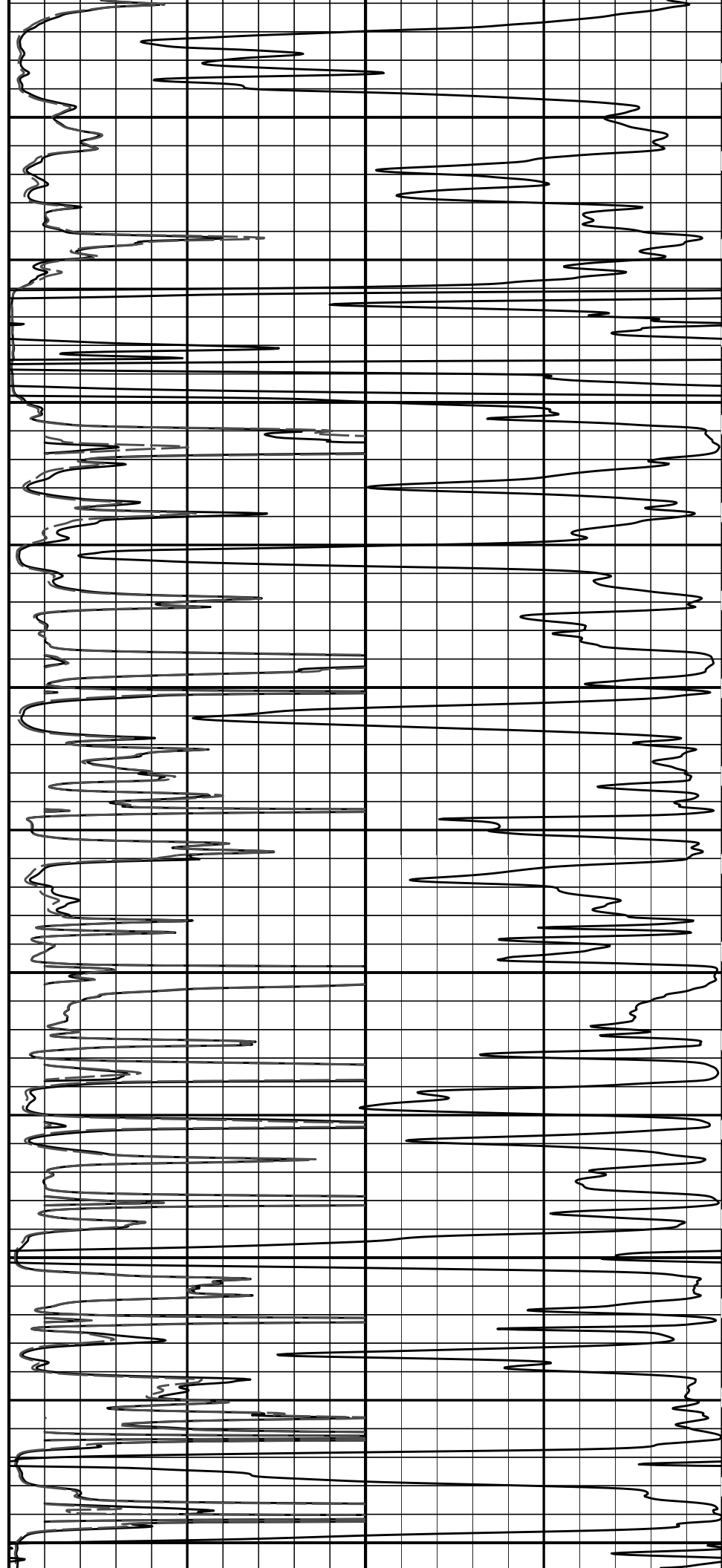
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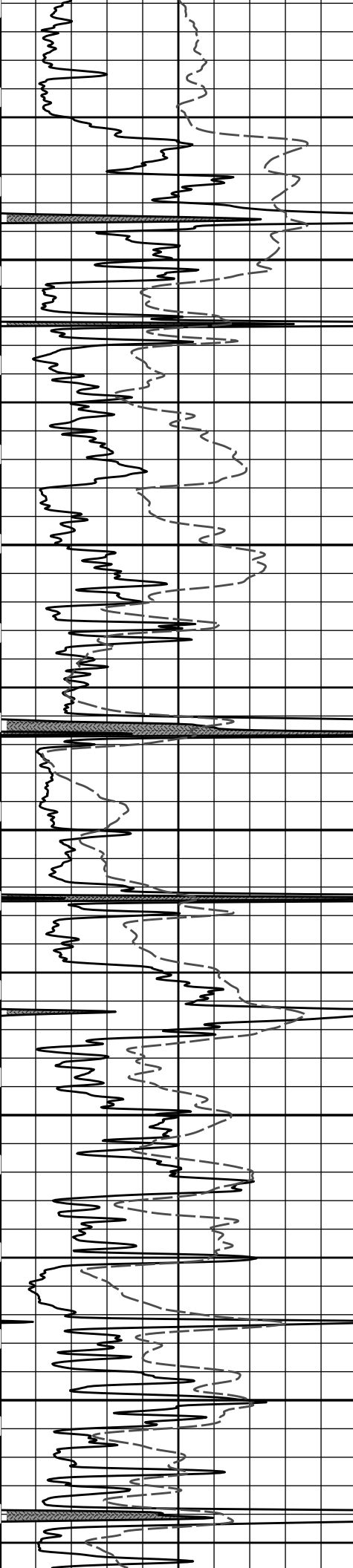
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4200

4300

4400





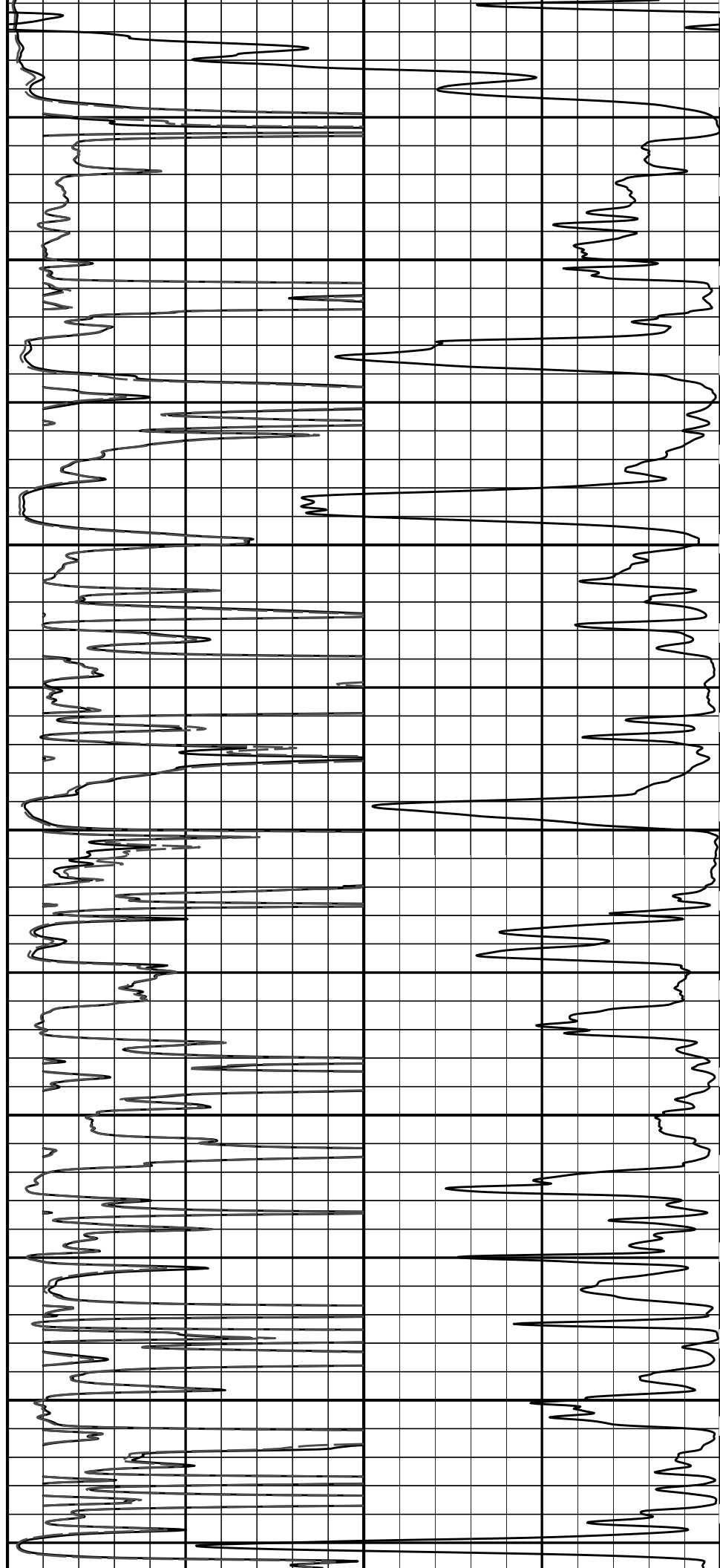
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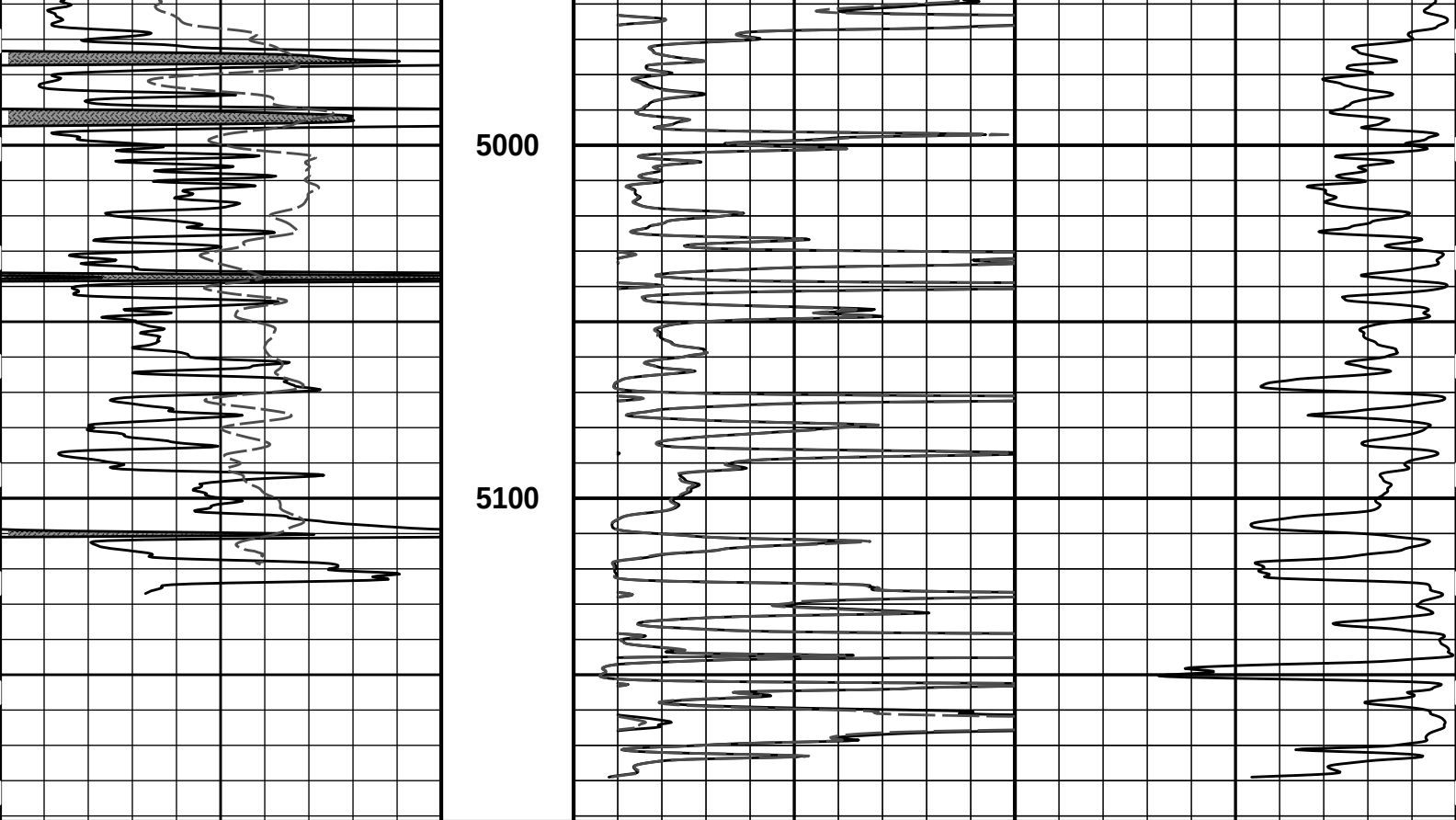
4600

4700

4800

4900





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

Plot Time: 17-Sep-13 02:46:33
Plot Range: 1510 ft to 5191.5 ft
Data: ENTERPRISES_A4\Well Based\IR1 CASING\
Plot File: \\-LOCAL-ENTERPRISES_A4\Well Based\ACRT\ACRT_2_lib

2 INCH MAIN LOG

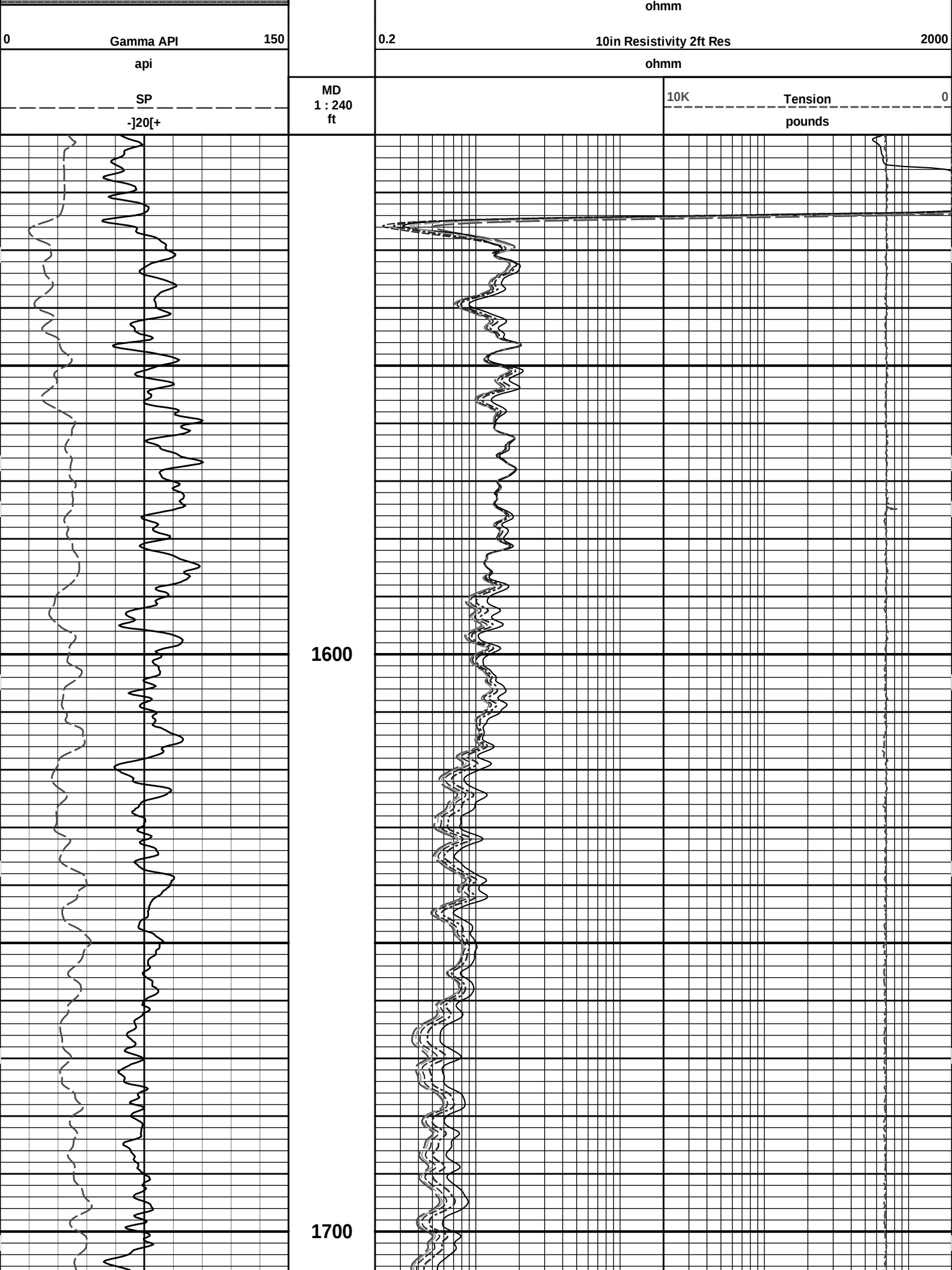
HALLIBURTON

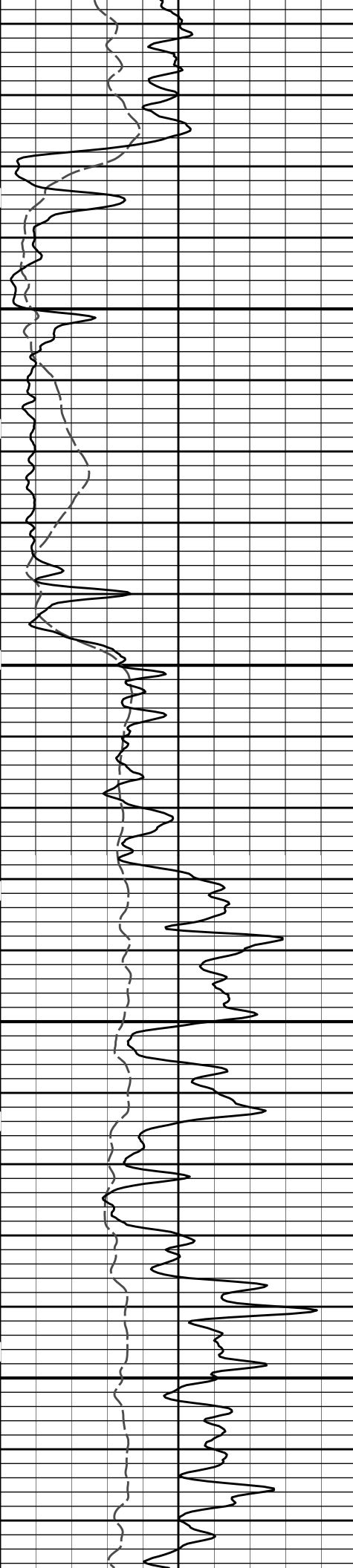
Plot Time: 17-Sep-13 02:46:33
Plot Range: 1510 ft to 5191.5 ft
Data: ENTERPRISES_A4\Well Based\IR1 CASING\
Plot File: \\-LOCAL-ENTERPRISES_A4\Well Based\ACRT\ACRT_5_main_lib

5 INCH MAIN LOG

	0.2	90in Resistivity 2ft Res	2000
		ohmm	
	0.2	60in Resistivity 2ft Res	2000
		ohmm	
	0.2	30in Resistivity 2ft Res	2000
		ohm-metre	
	0.2	20in Resistivity 2ft Res	2000

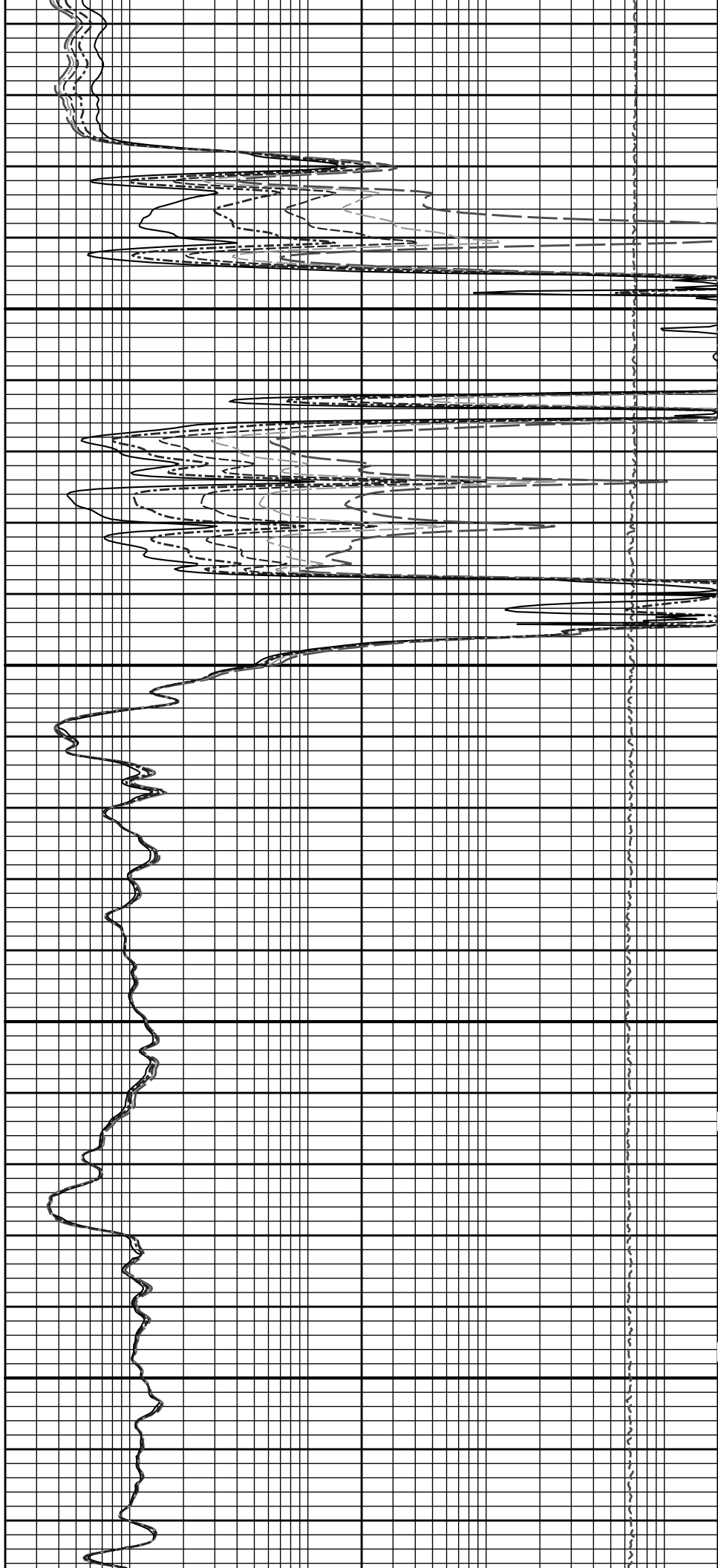
SHALE

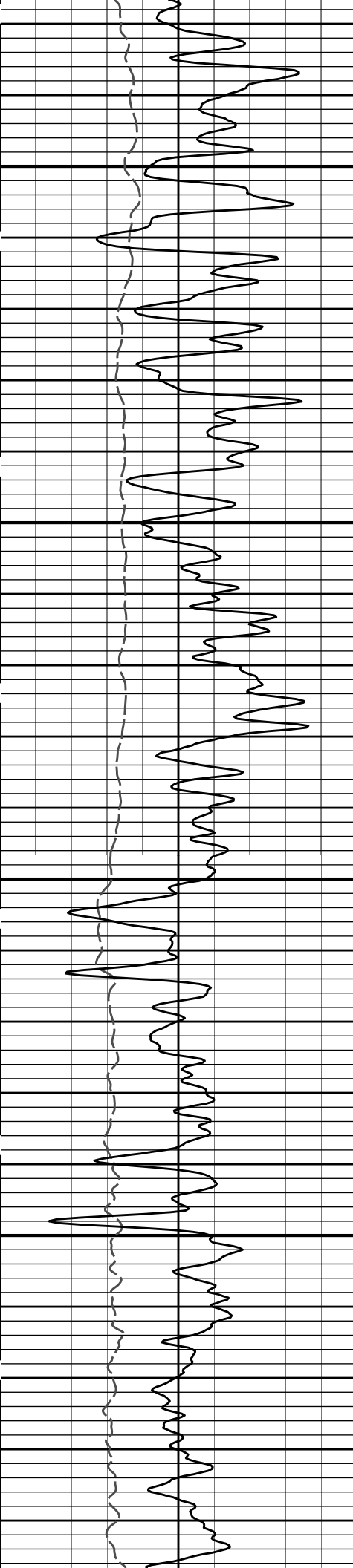




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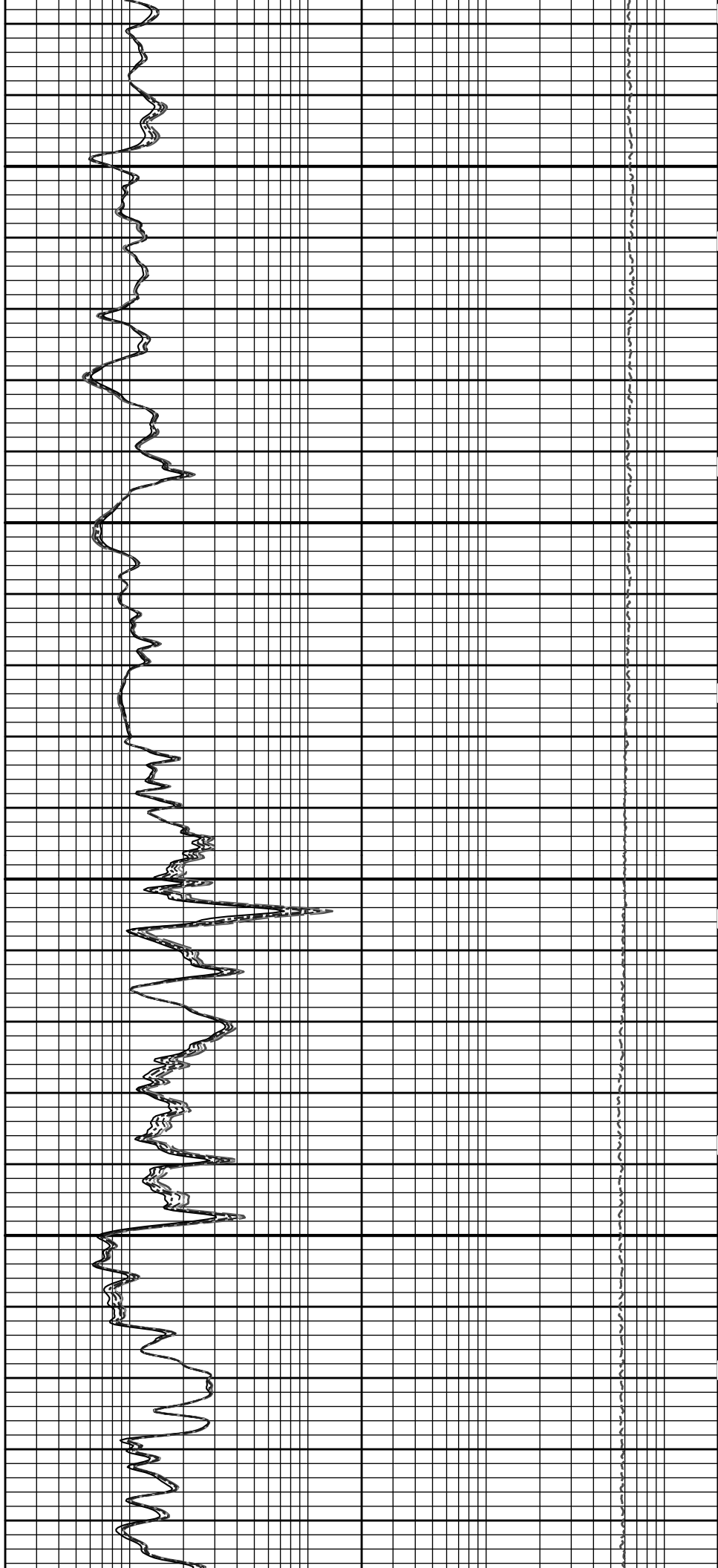
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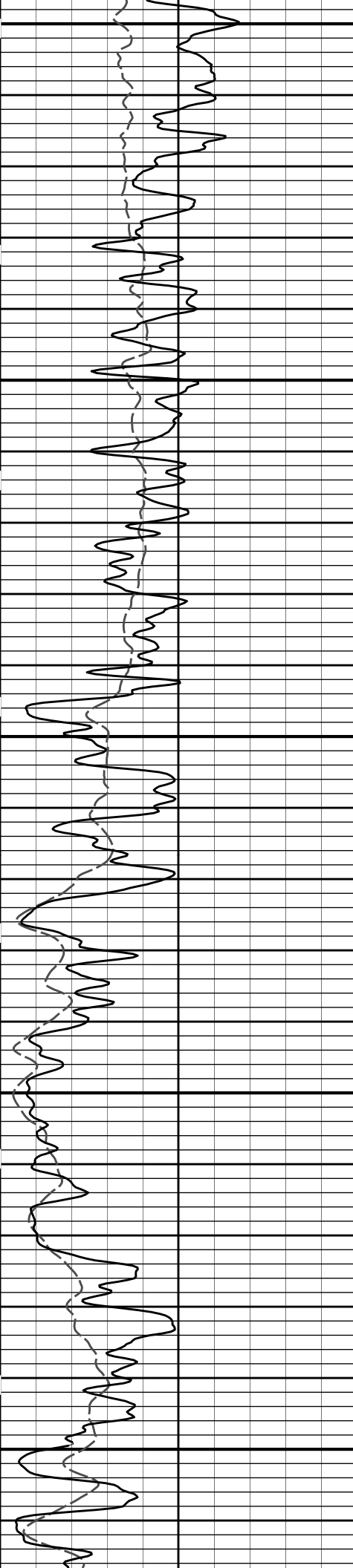




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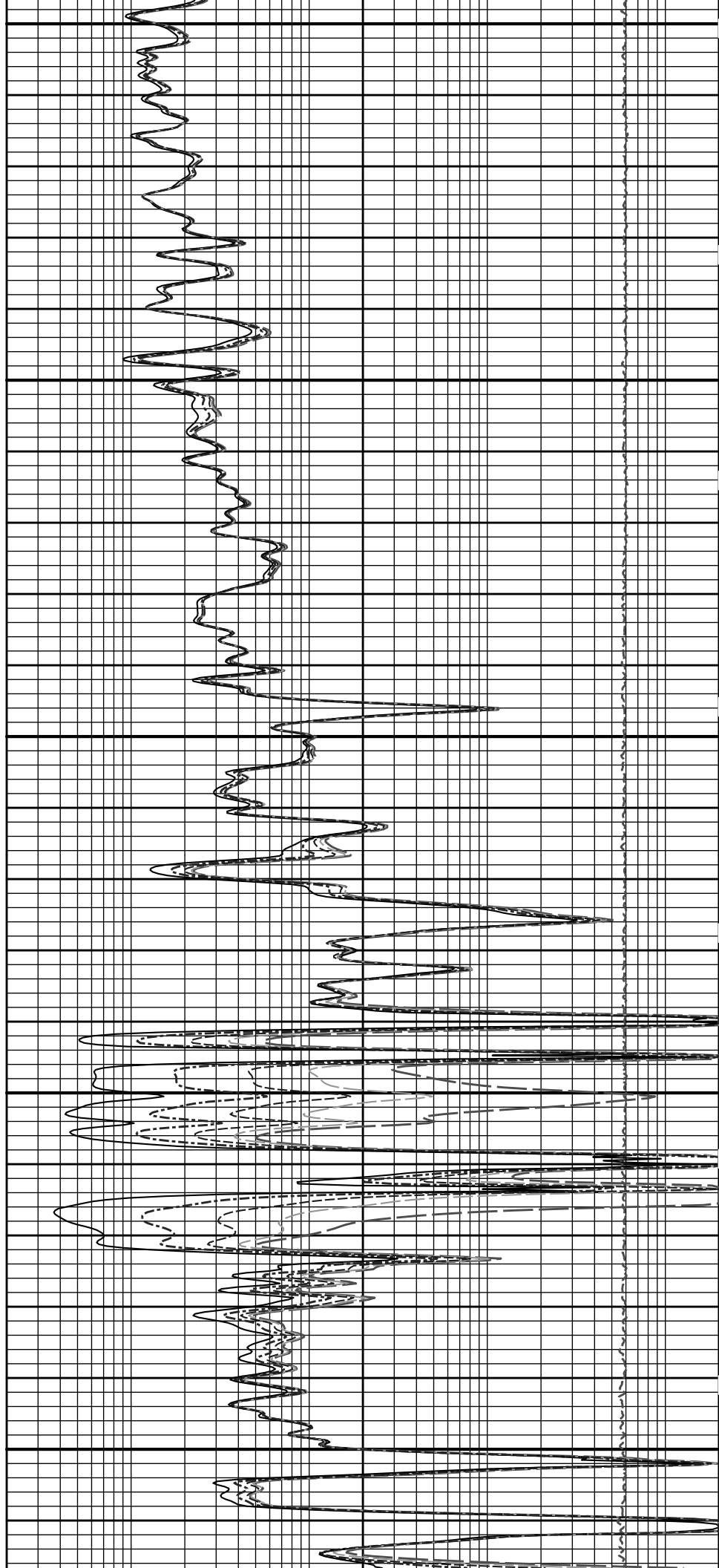
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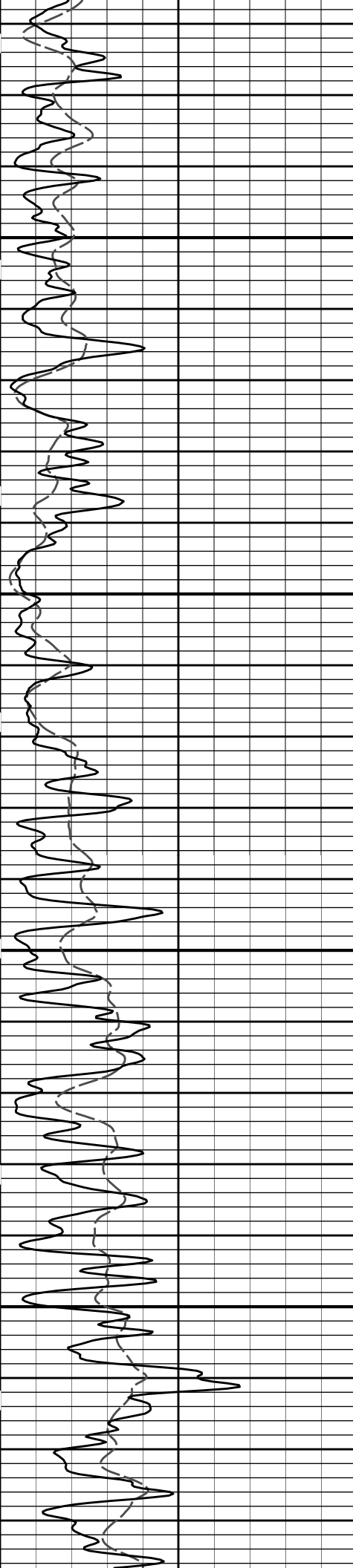




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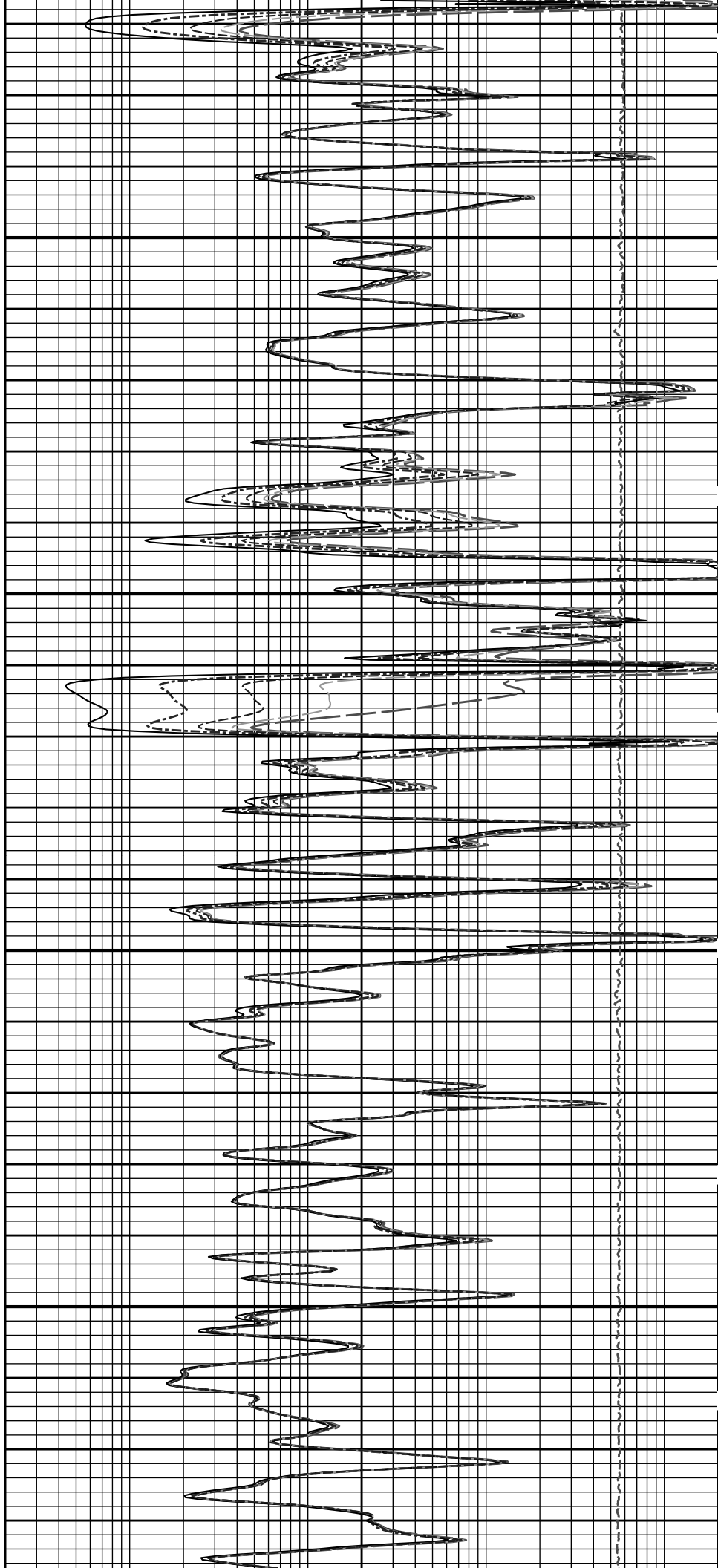
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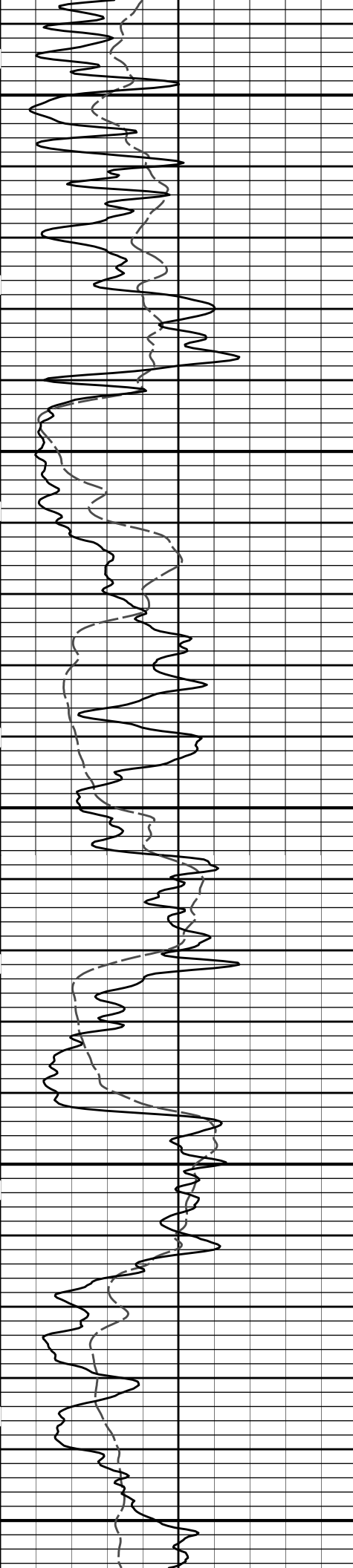




2400

2500

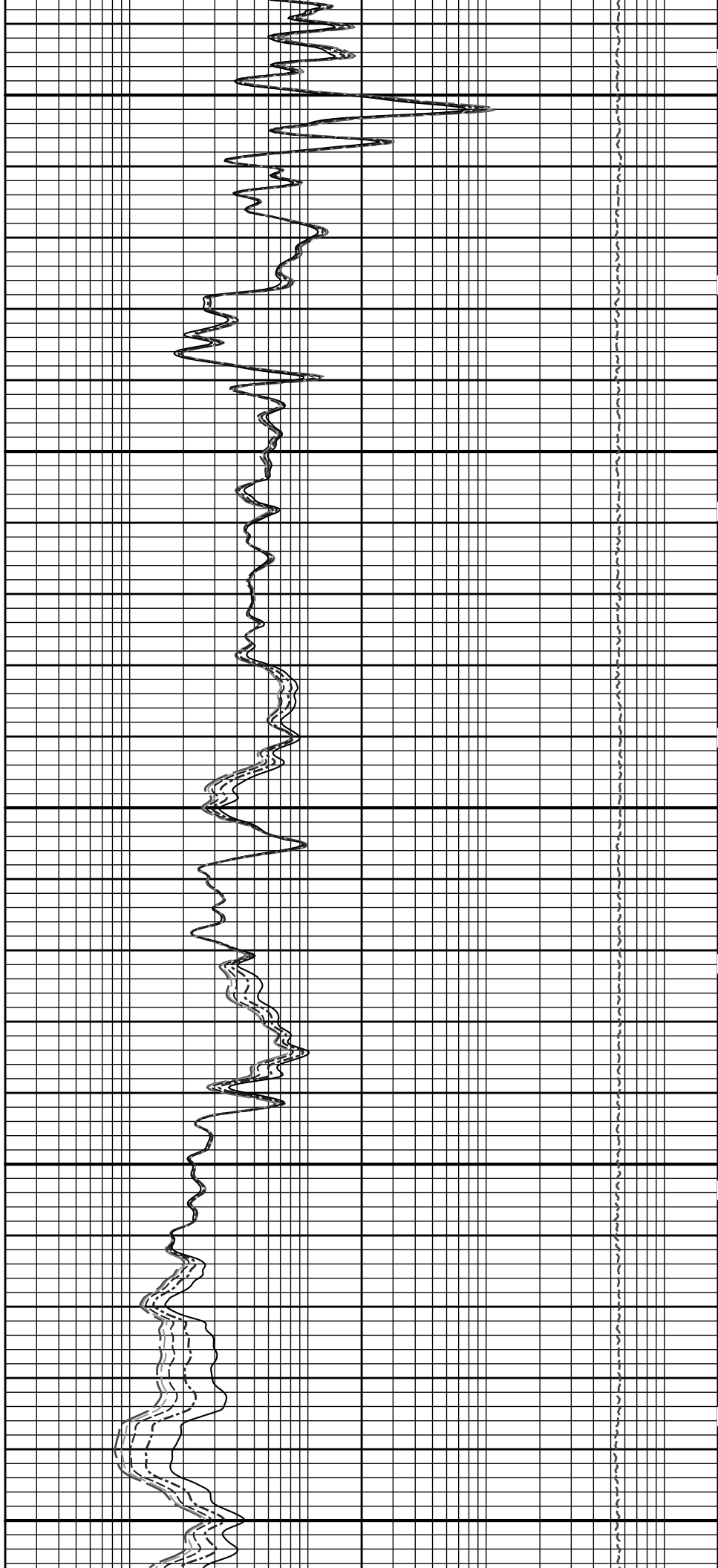


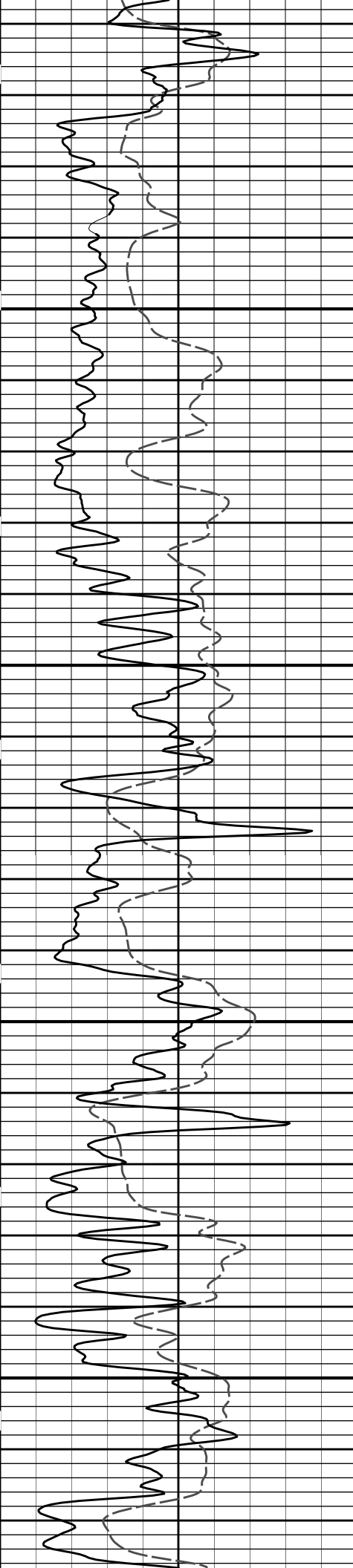


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2700

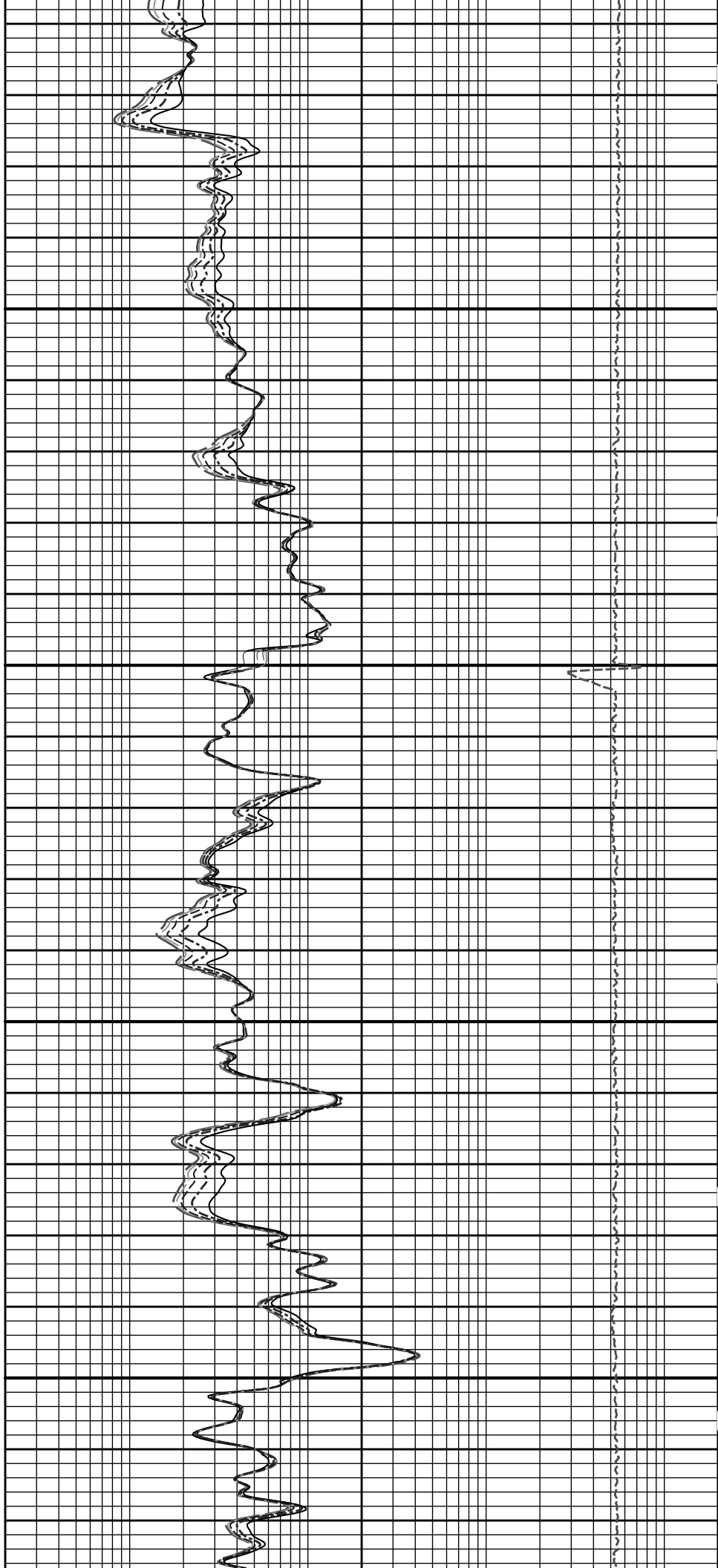
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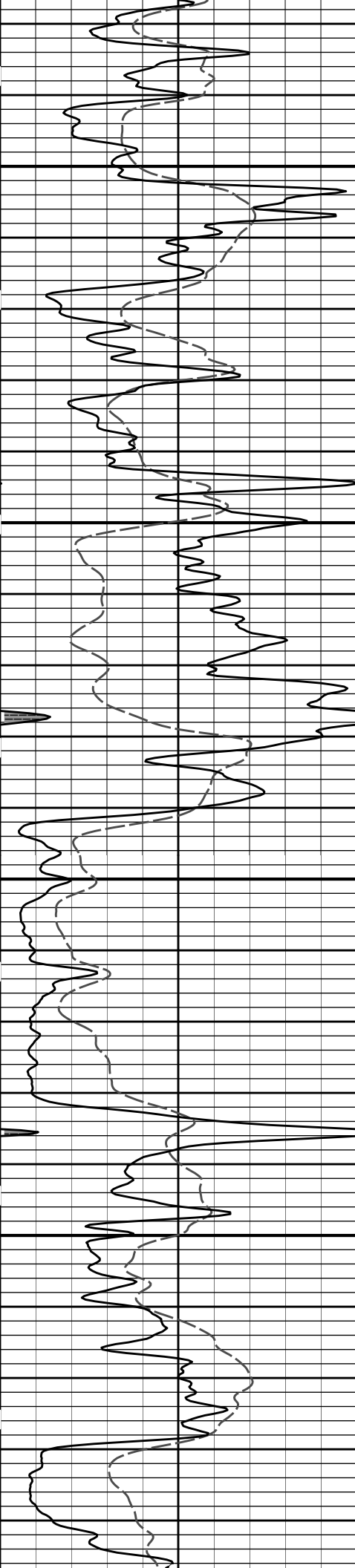




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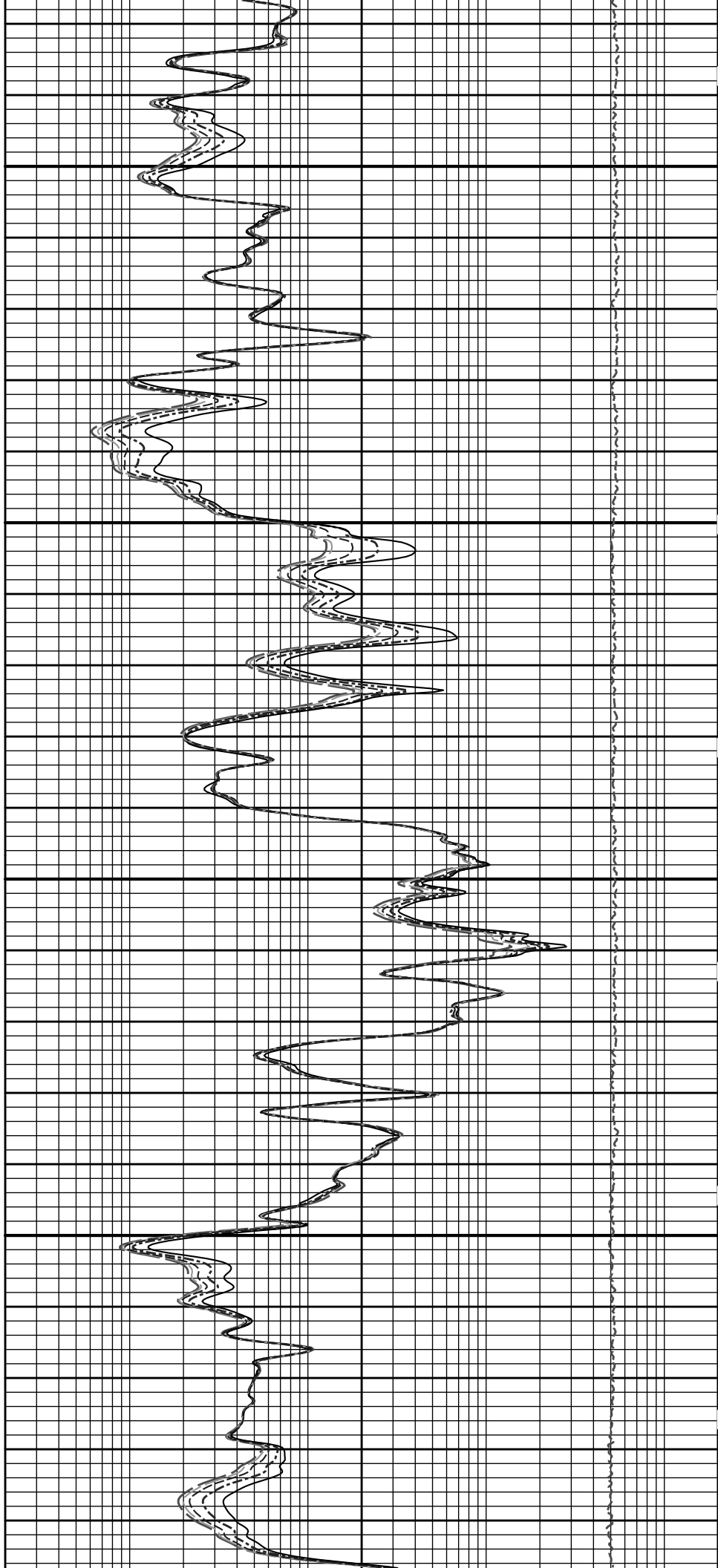
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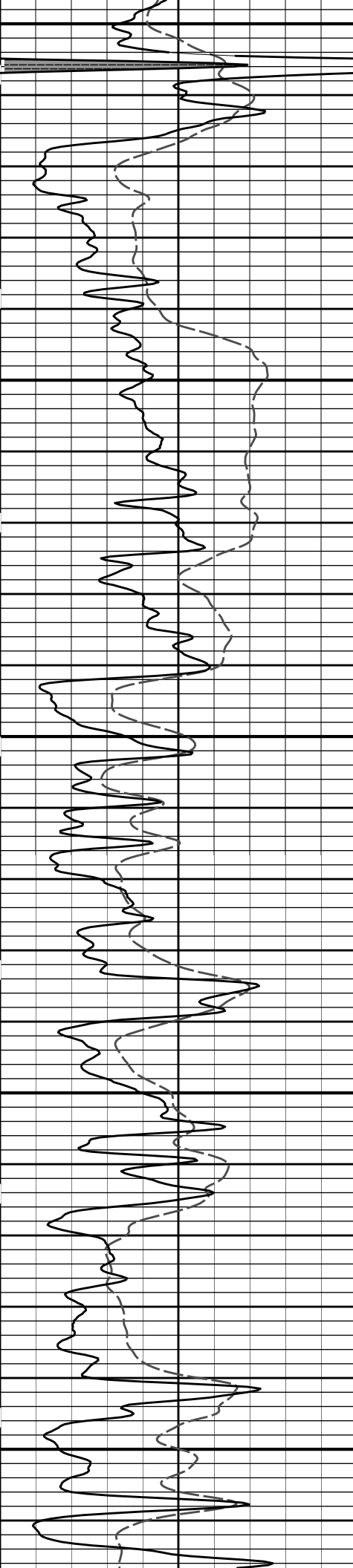




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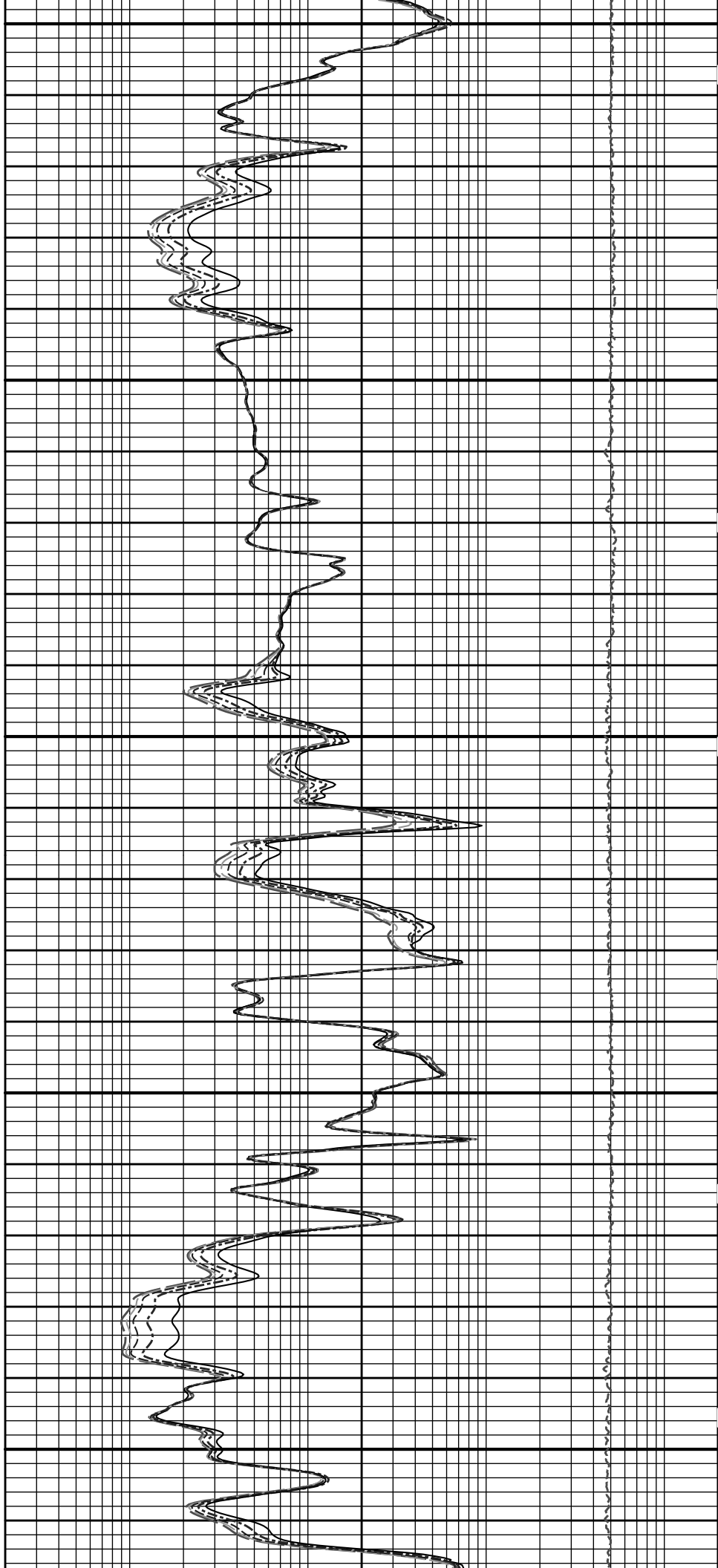
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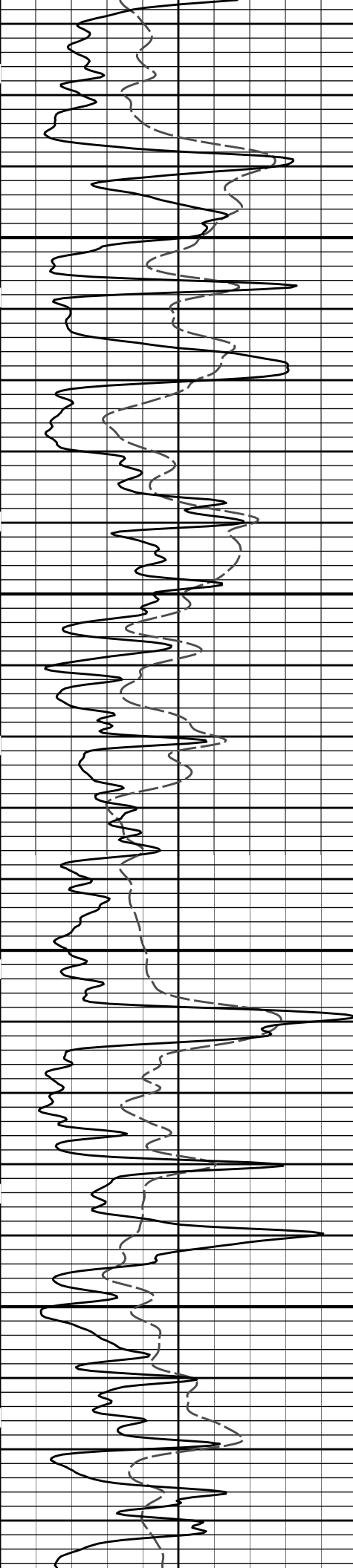




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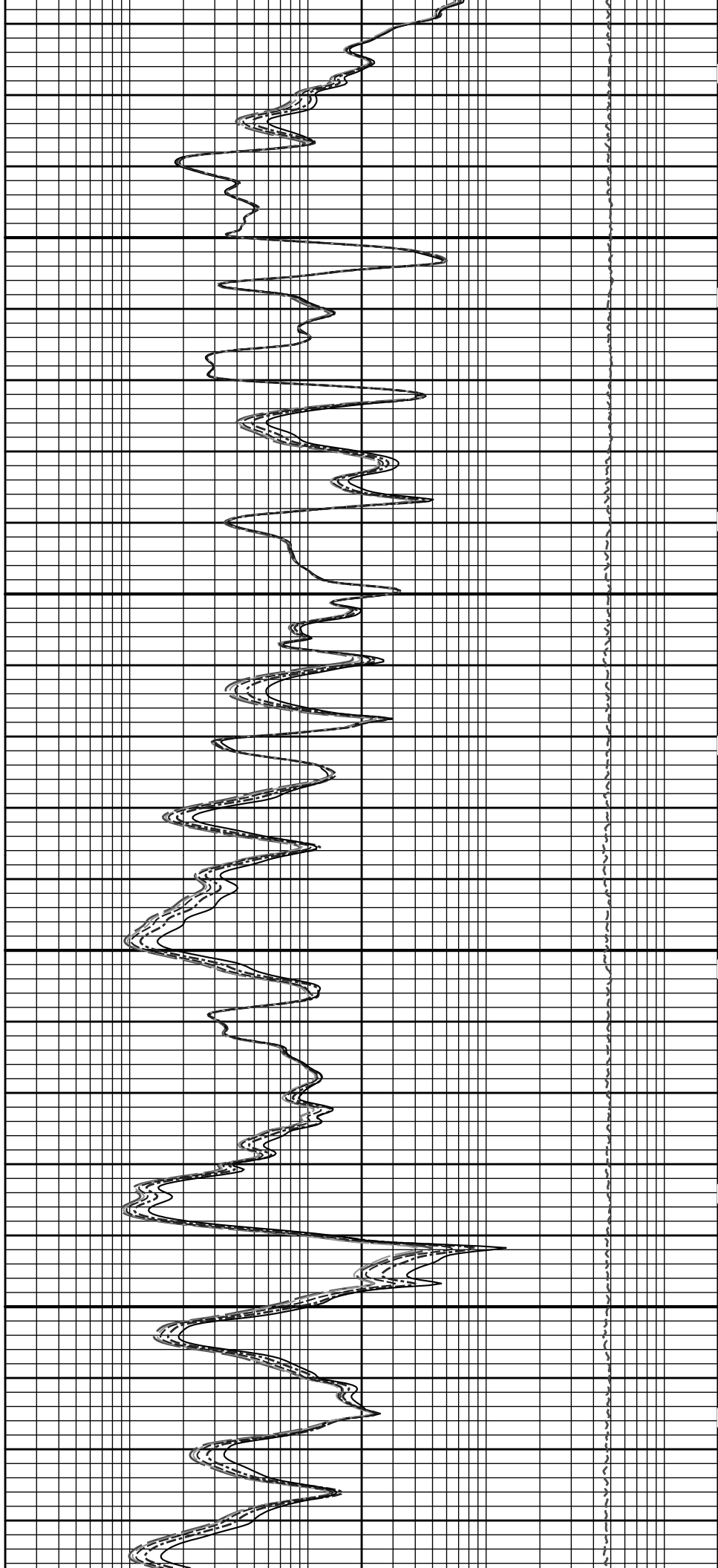
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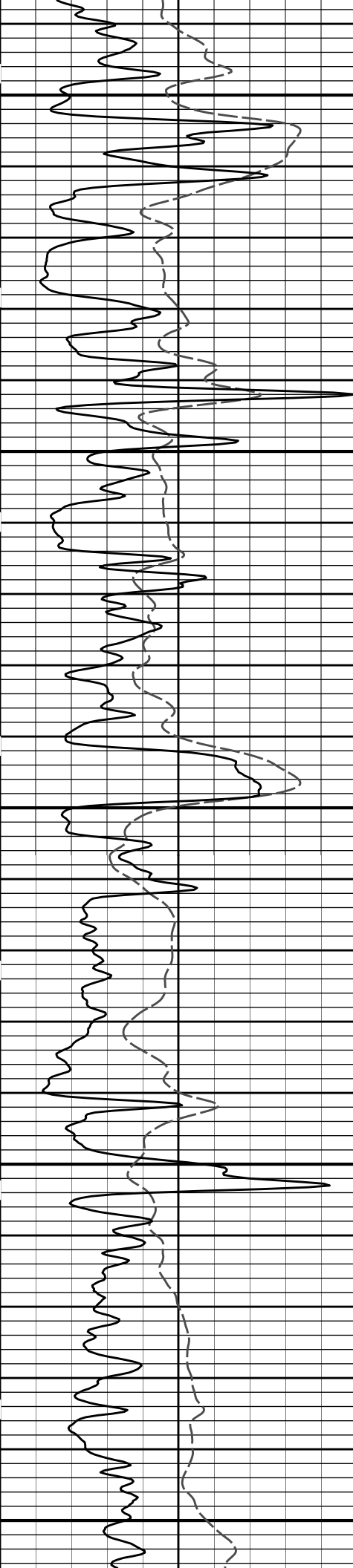




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3600

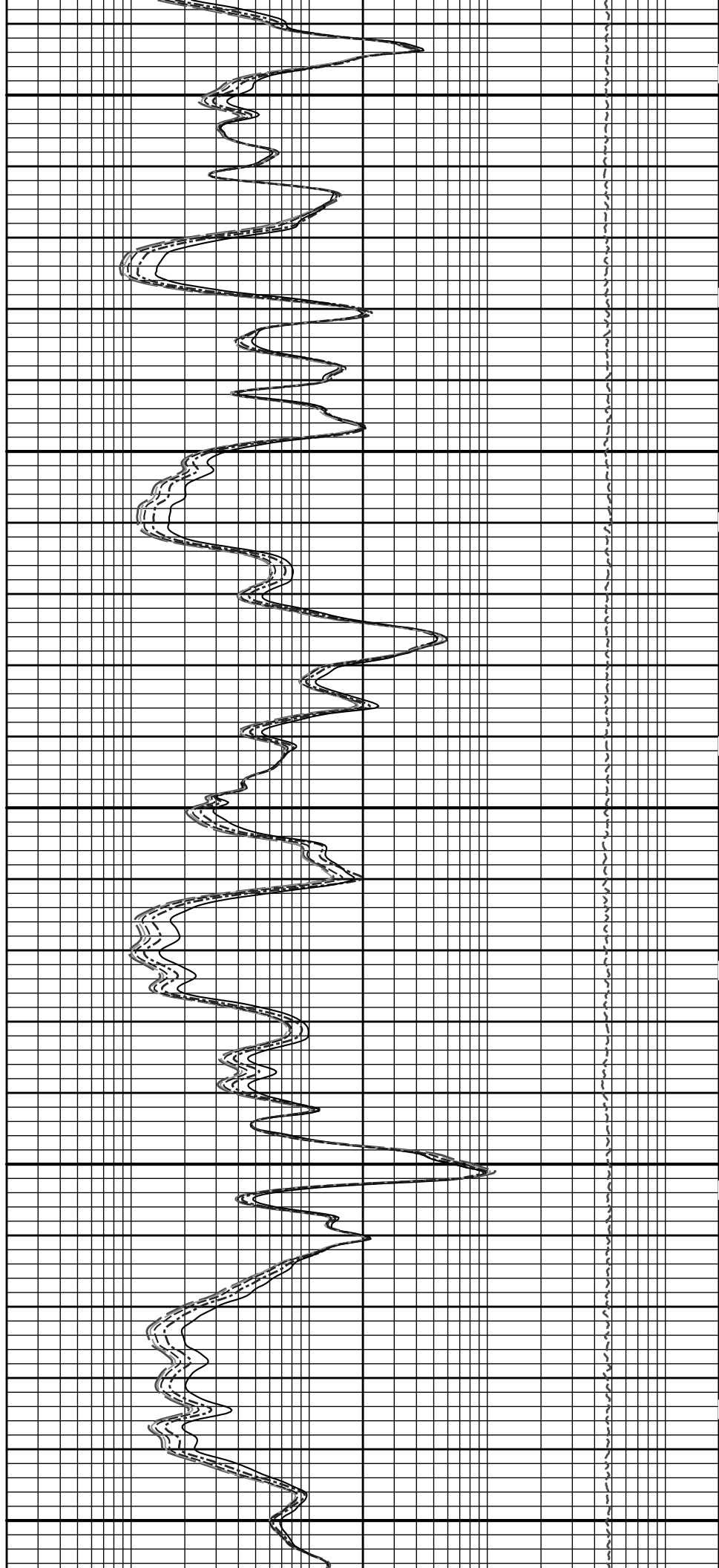


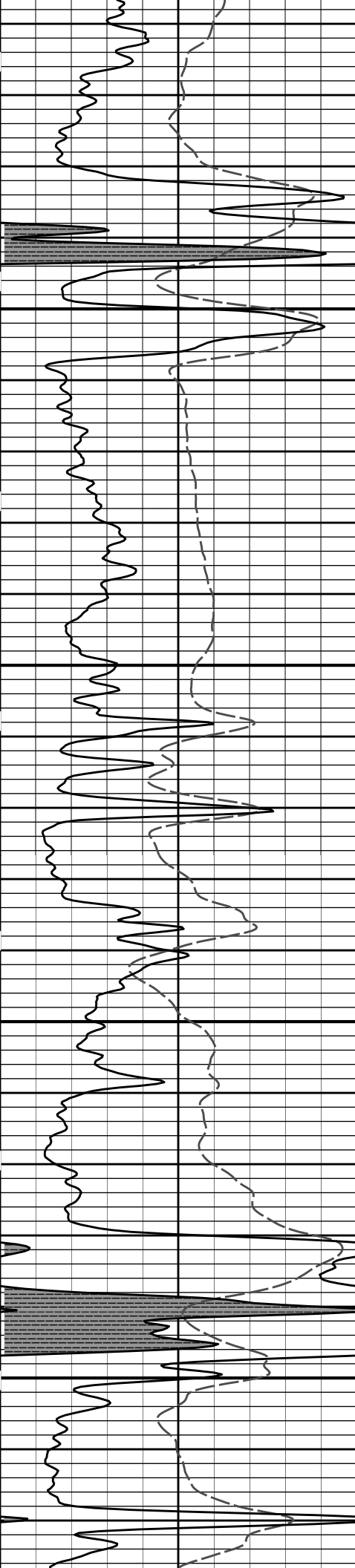


3700

3800

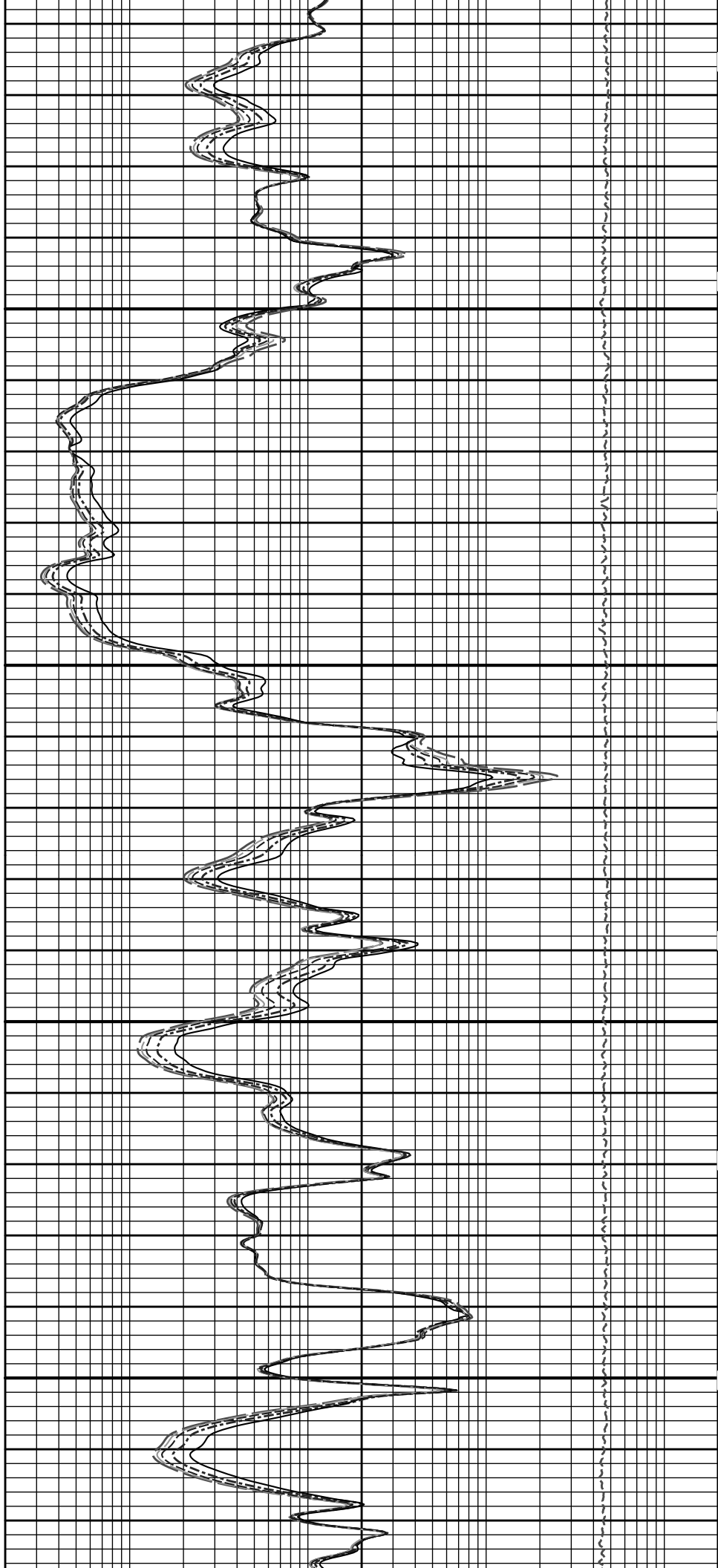
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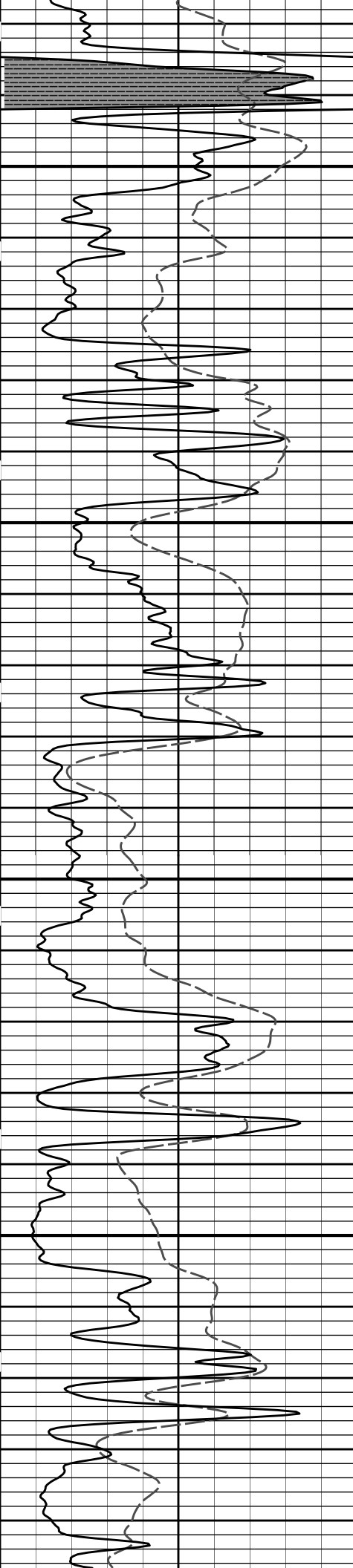




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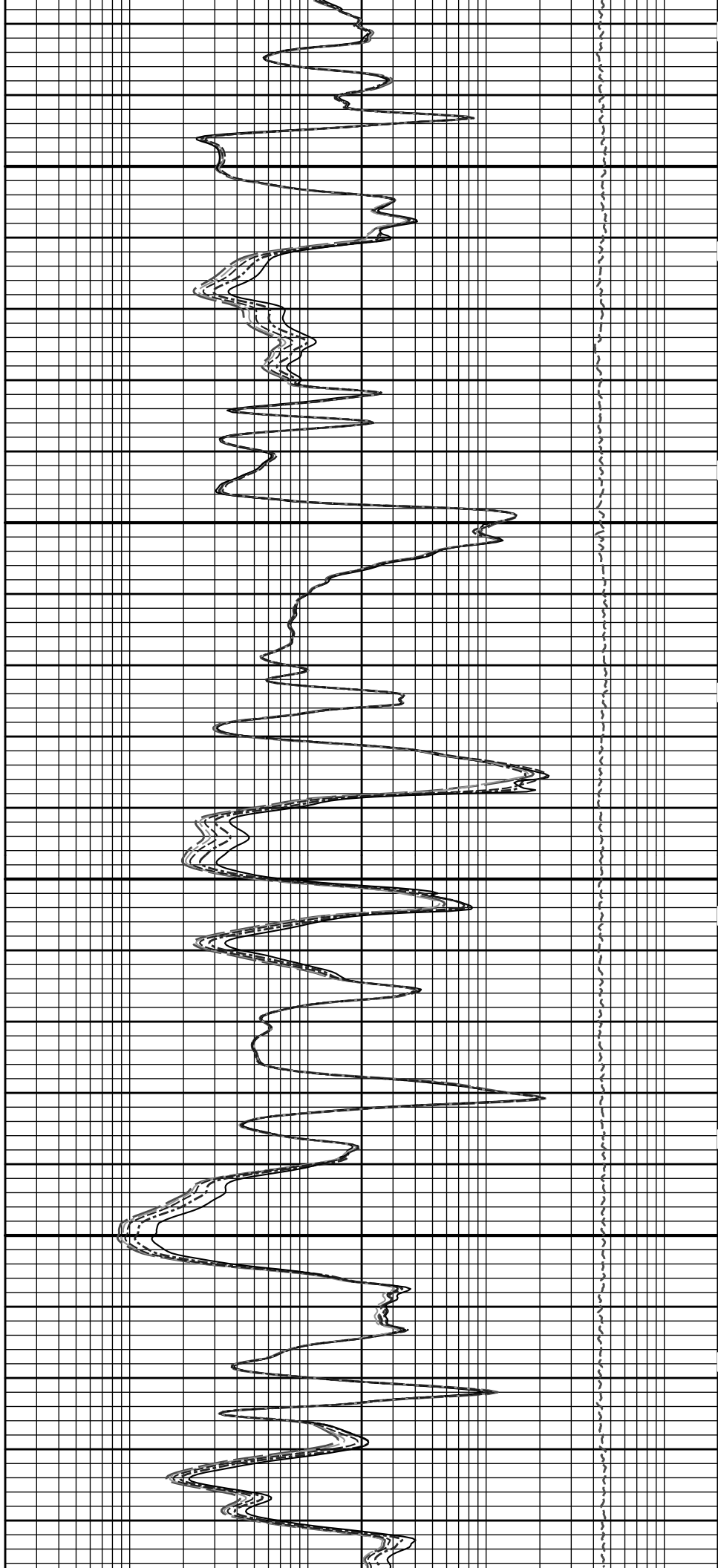
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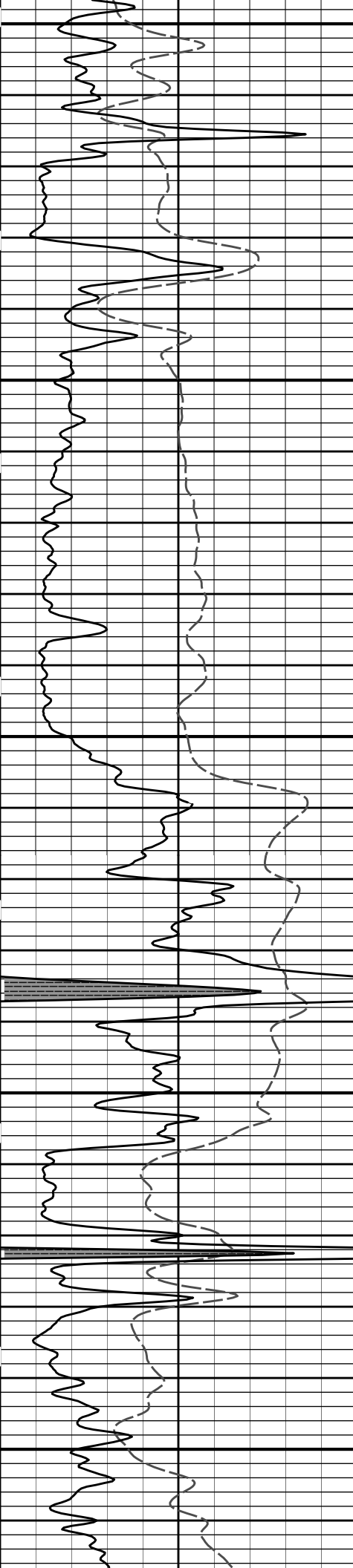




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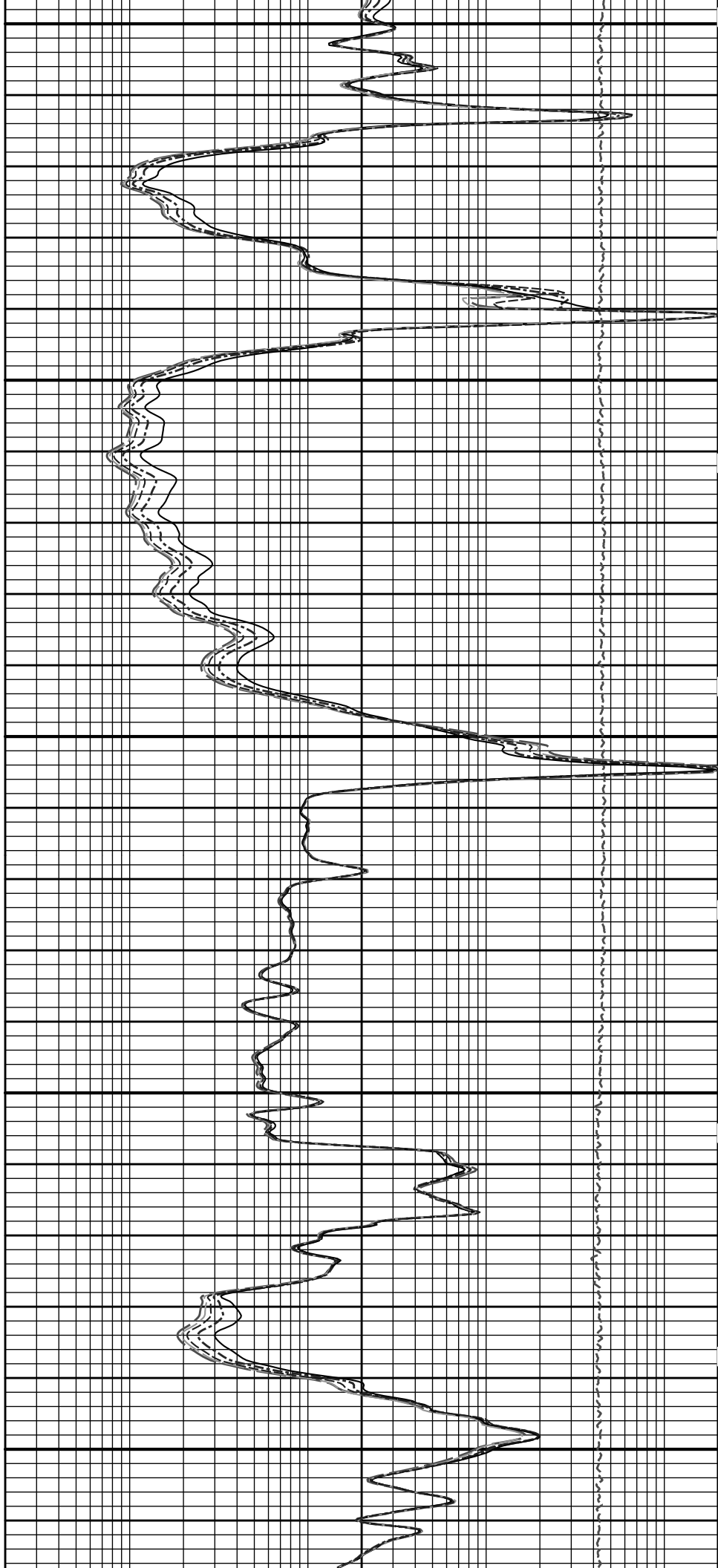
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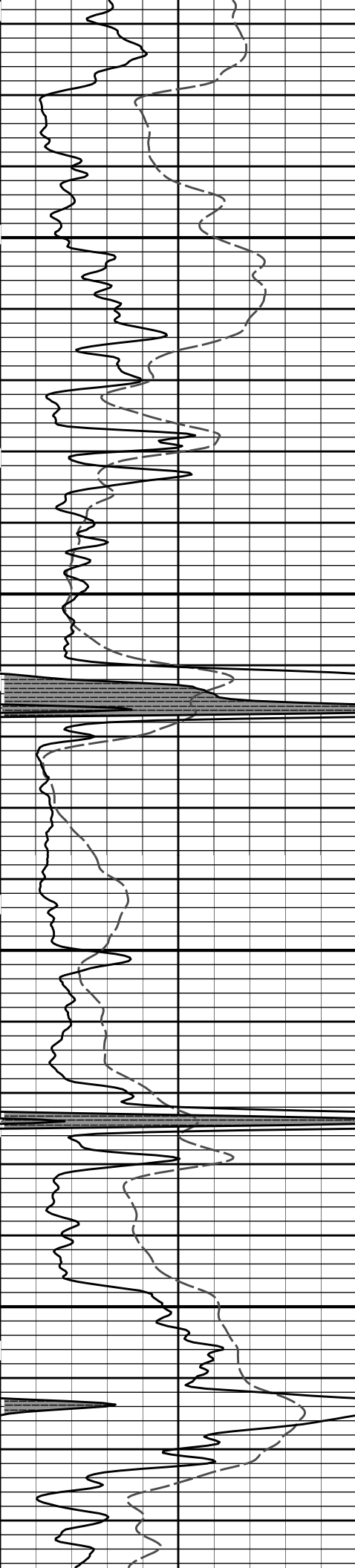




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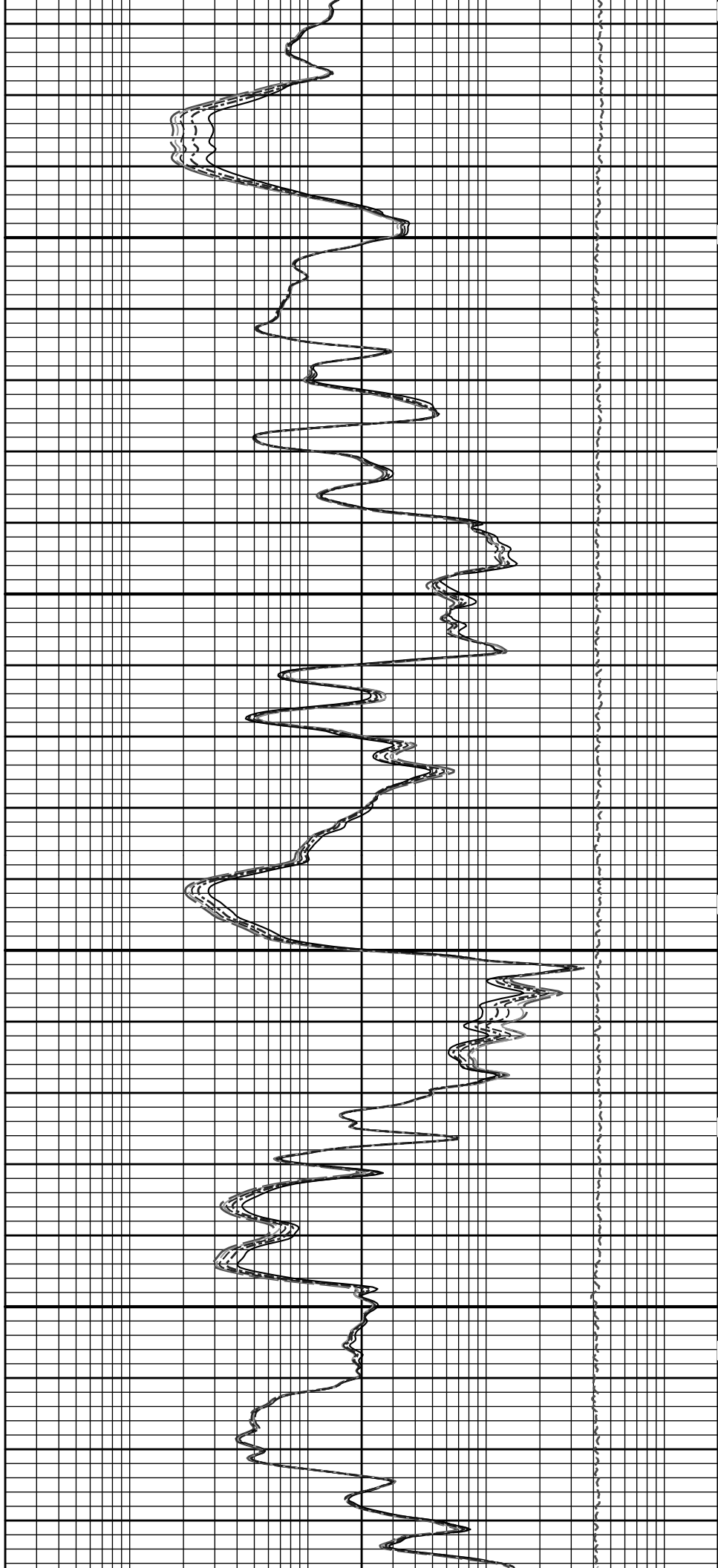
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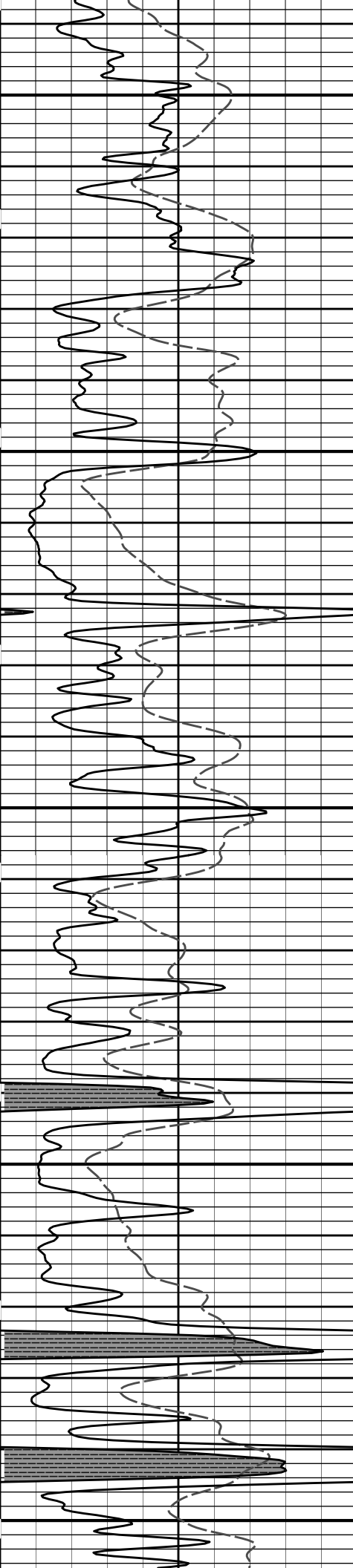




4600

4700

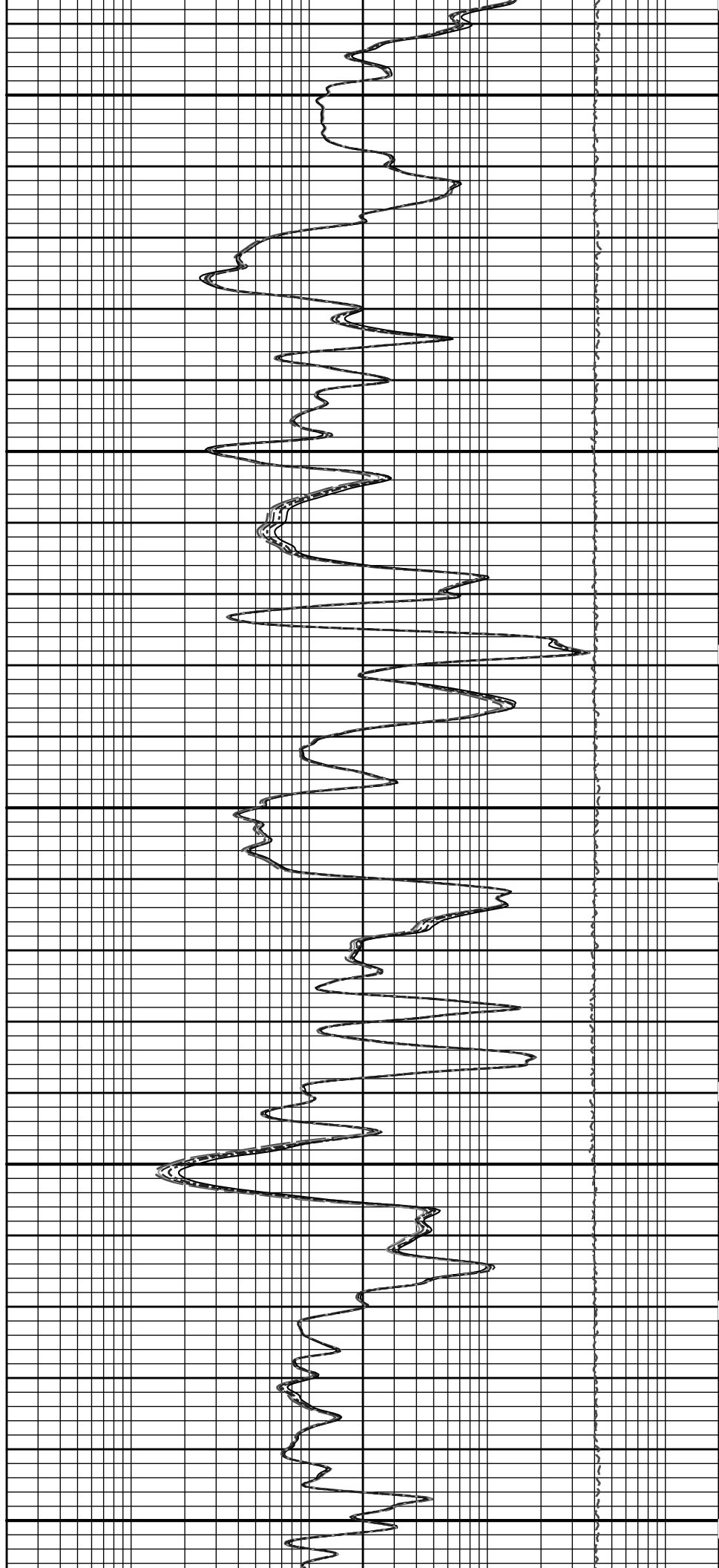


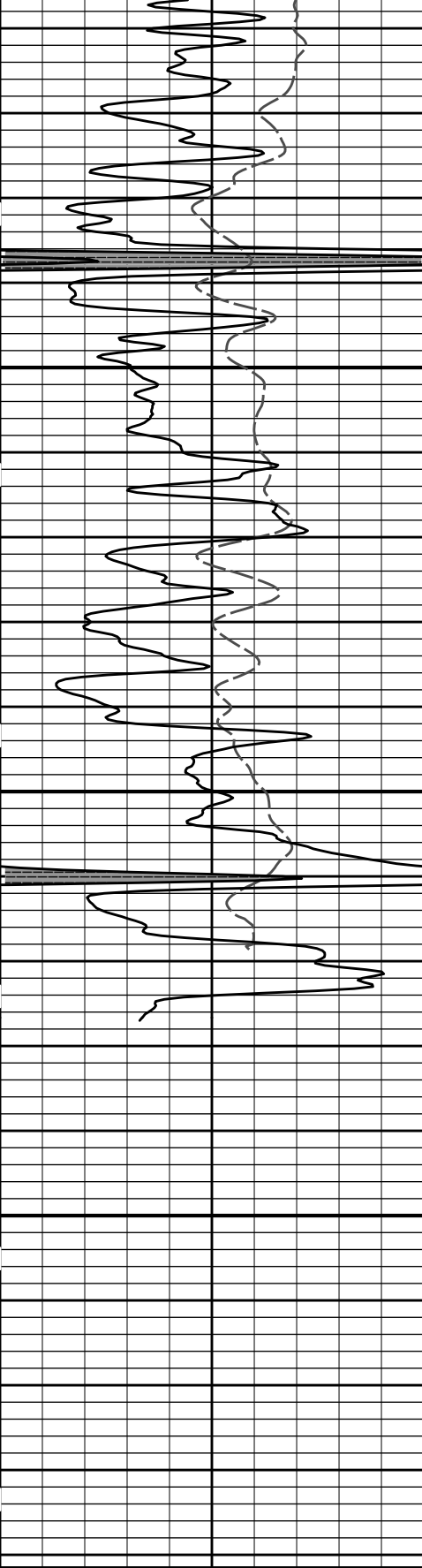


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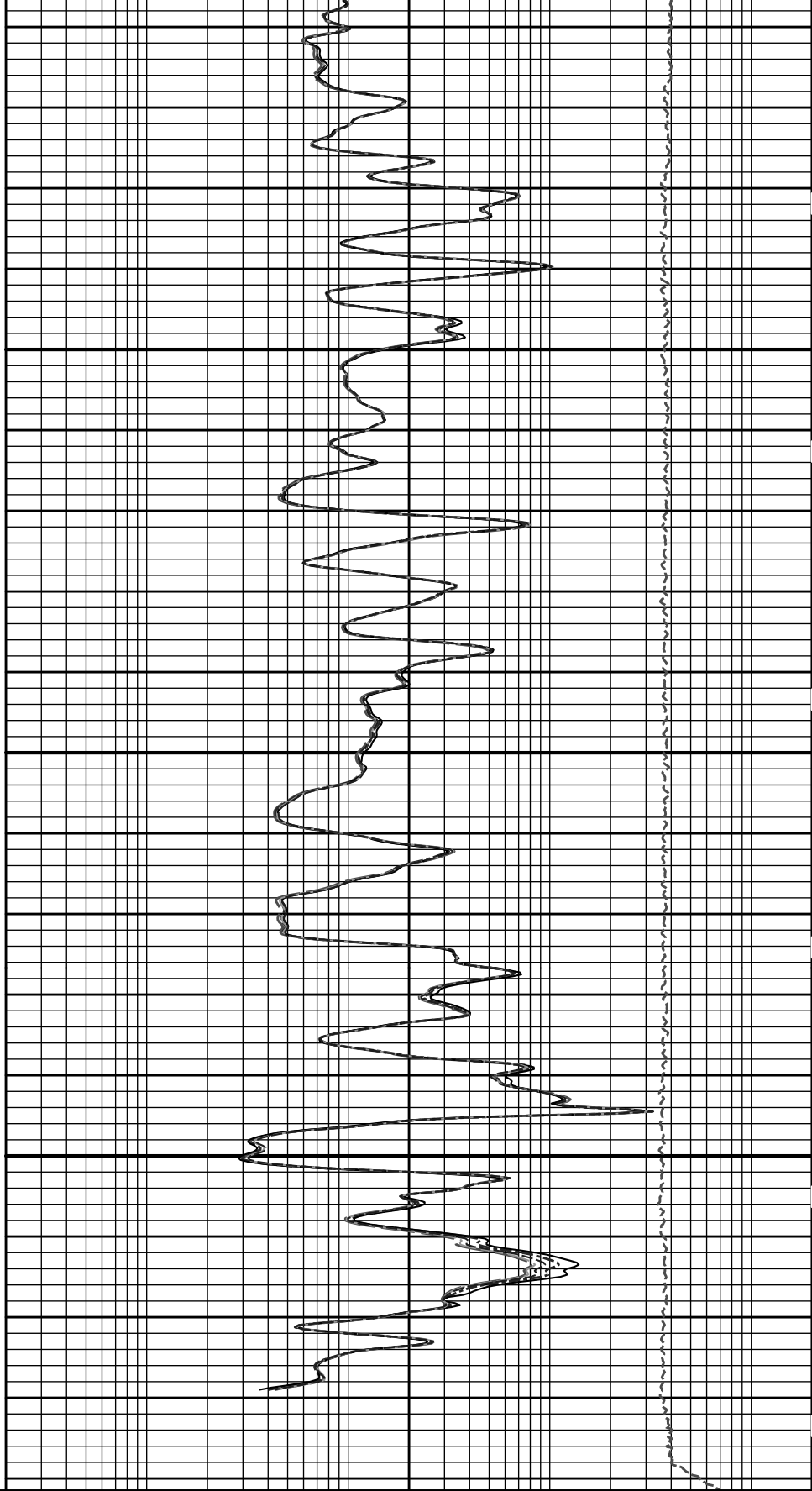
4900

5000





5100



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

MD
1 : 240
ft

0.2	10in Resistivity 2ft Res	2000
ohmm		
0.2	20in Resistivity 2ft Res	2000
ohmm		
0.2	30in Resistivity 2ft Res	2000

10K	Tension	0
pounds		

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

HALLIBURTON

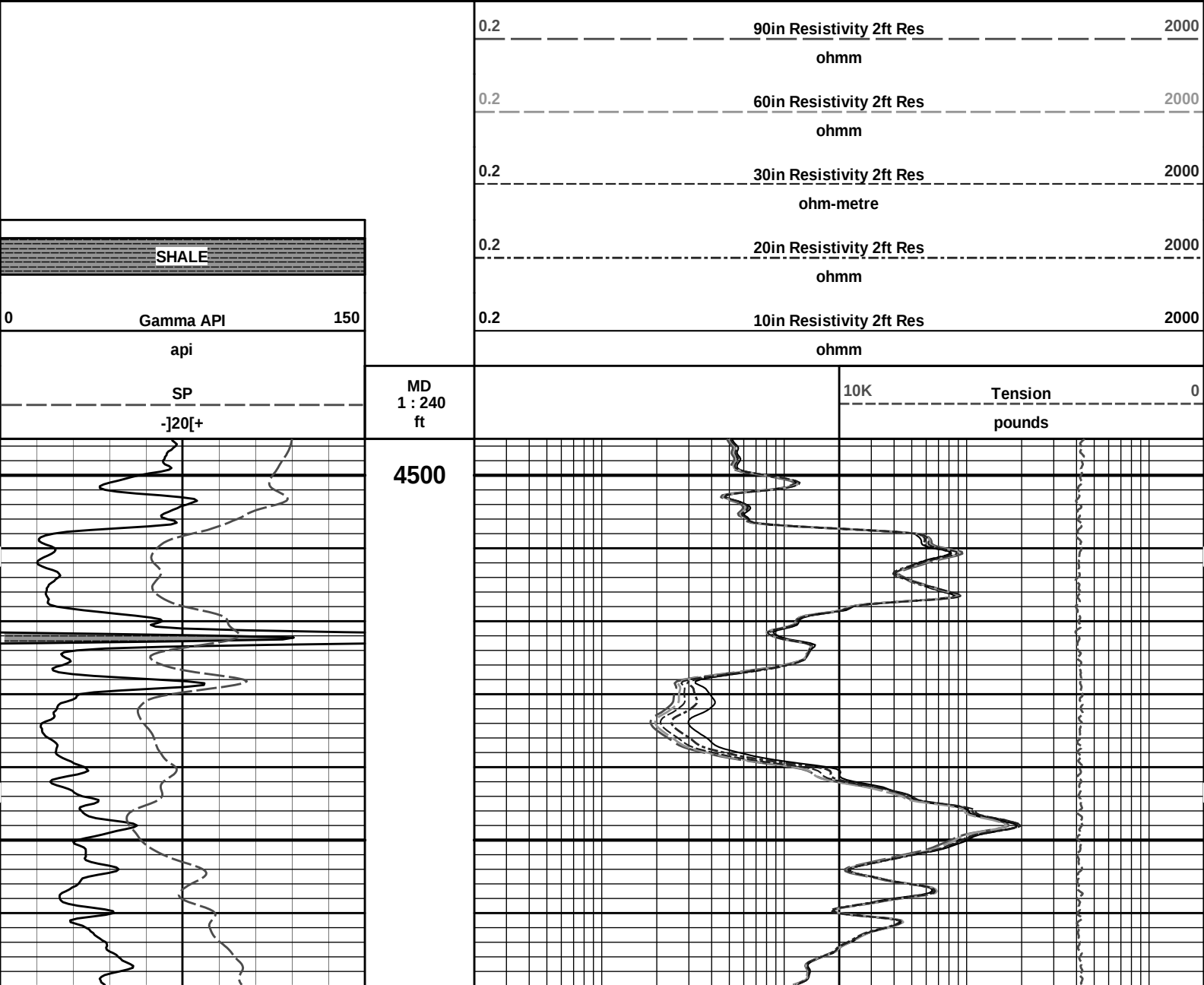
Plot Time: 17-Sep-13 02:46:39
Plot Range: 1510 ft to 5191.5 ft
Data: ENTERPRISES_A4\Well Based\IR1 CASING\
Plot File: \\-LOCAL-\\ENTERPRISES_A4\Well Based\ACRT\ACRT_5_main_lib

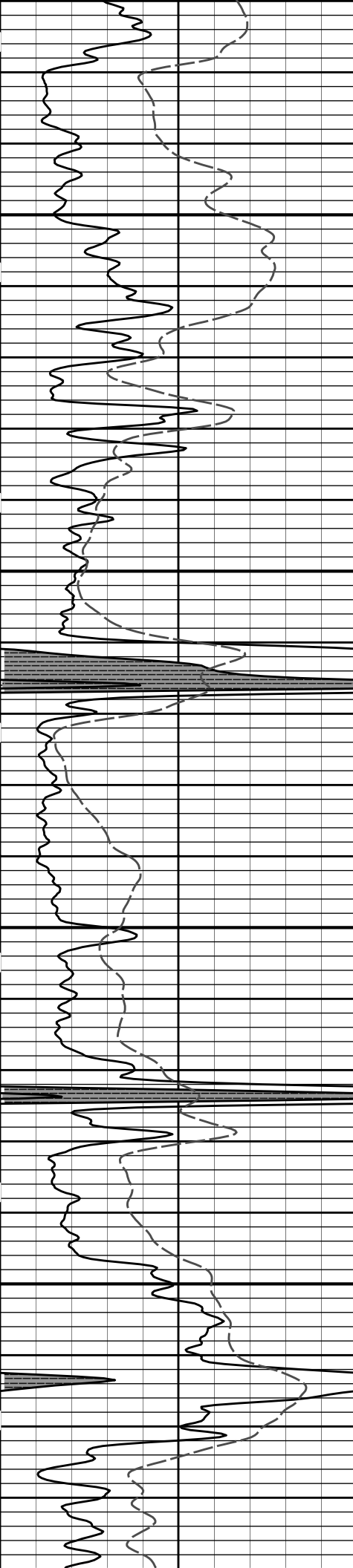
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 17-Sep-13 02:46:39
Plot Range: 4495 ft to 5193.75 ft
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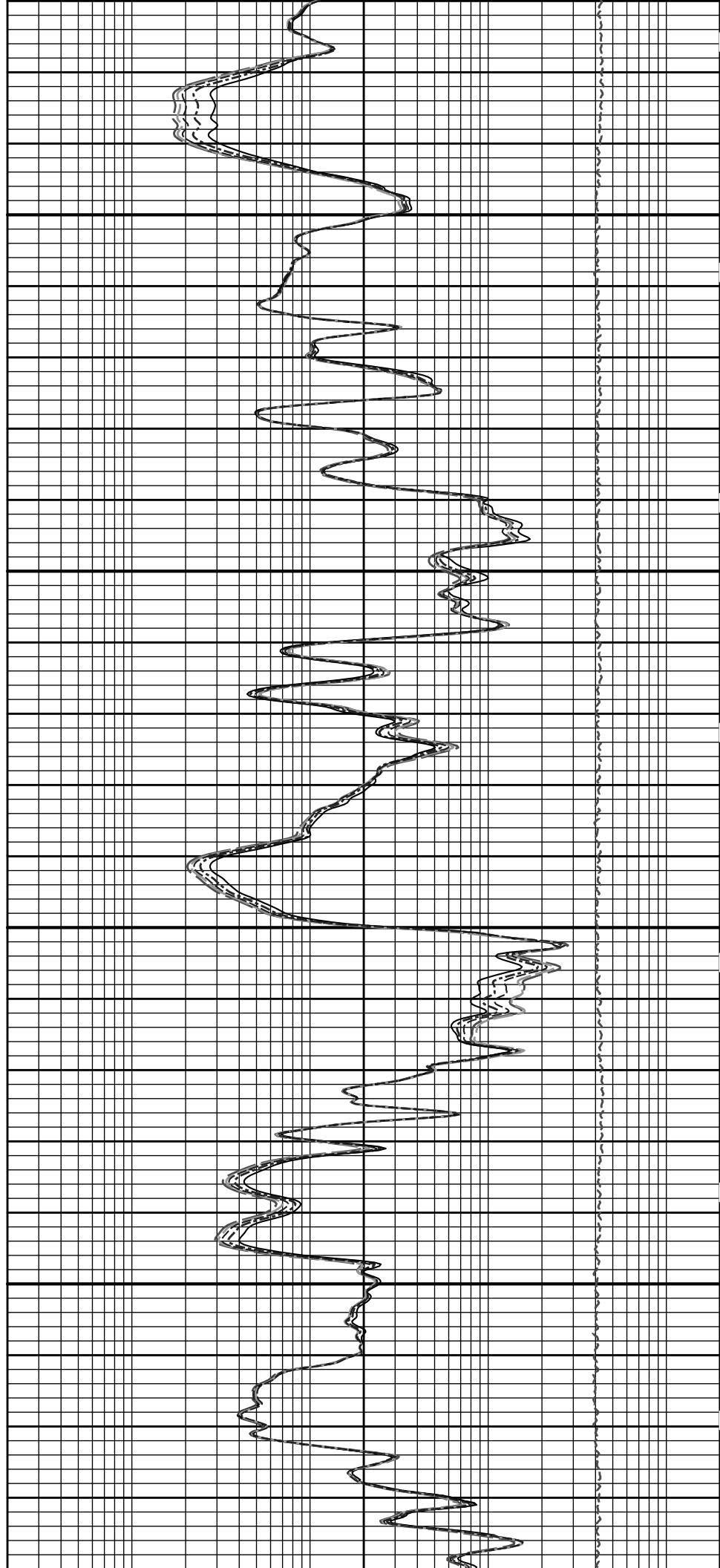
REPEAT SECTION

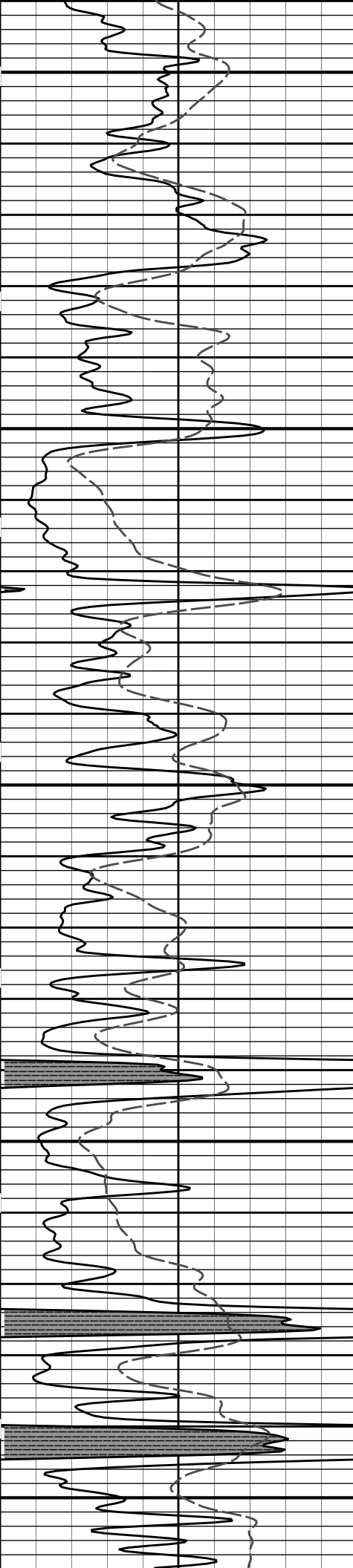




4600

4700

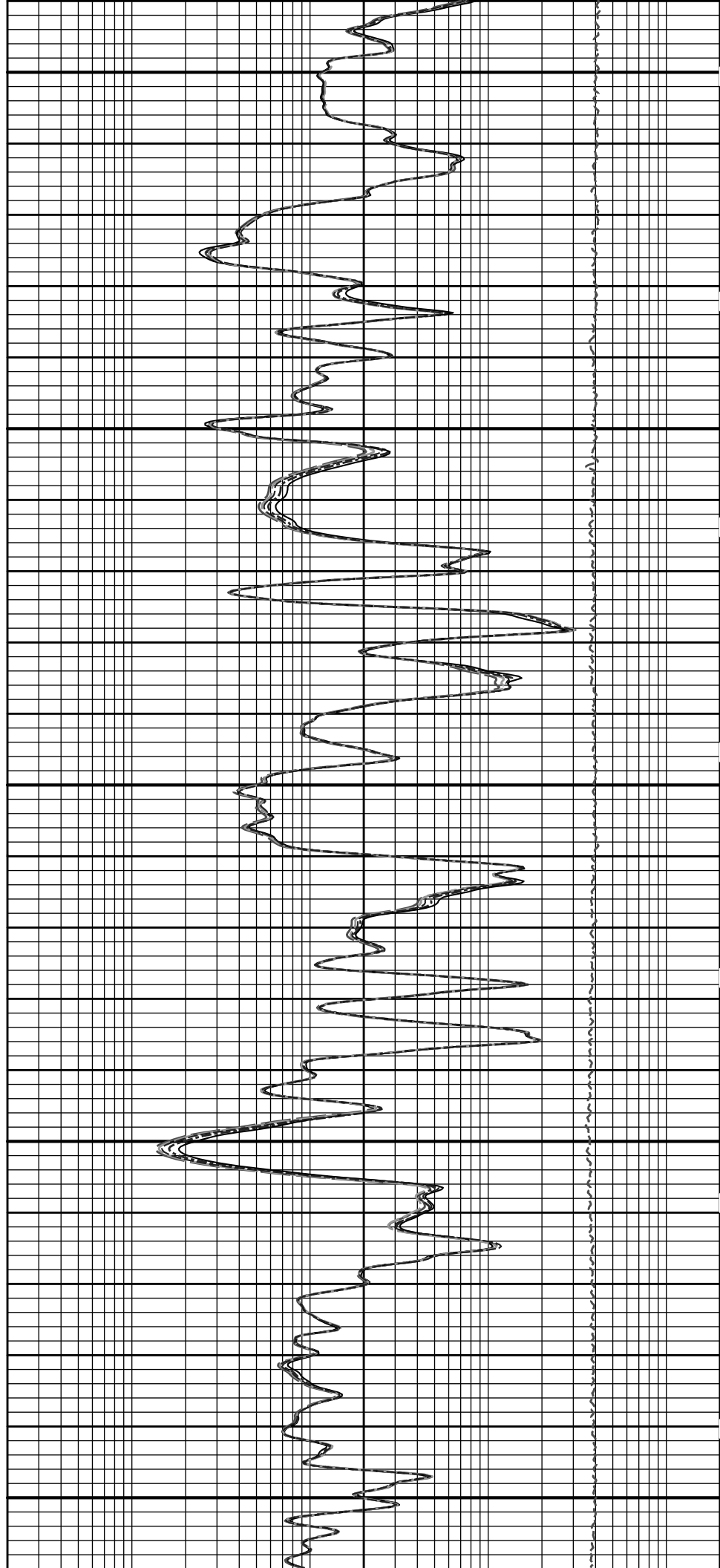


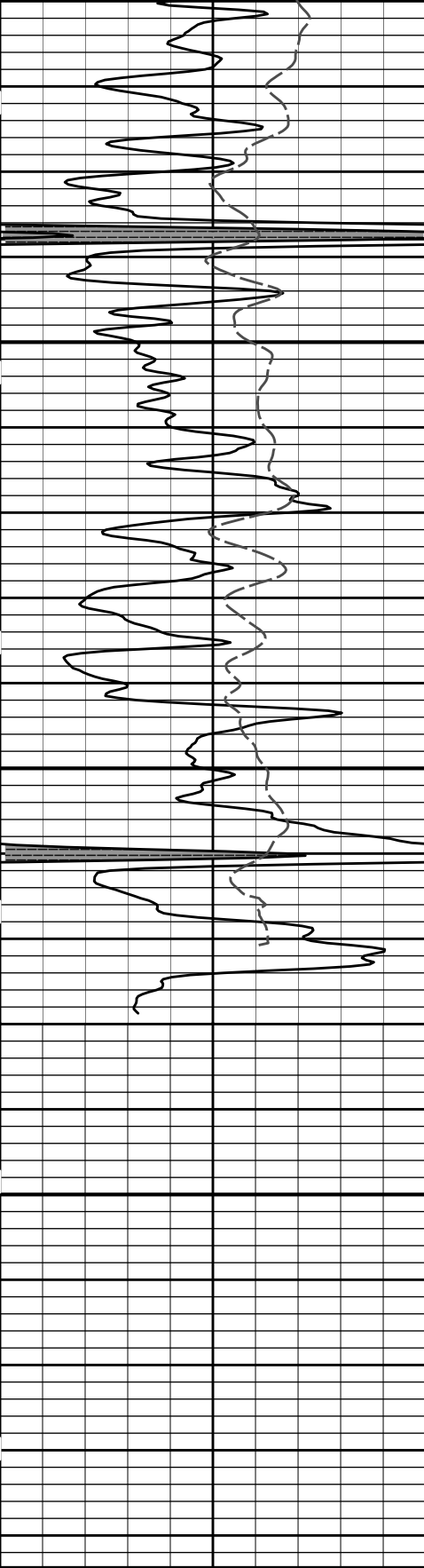


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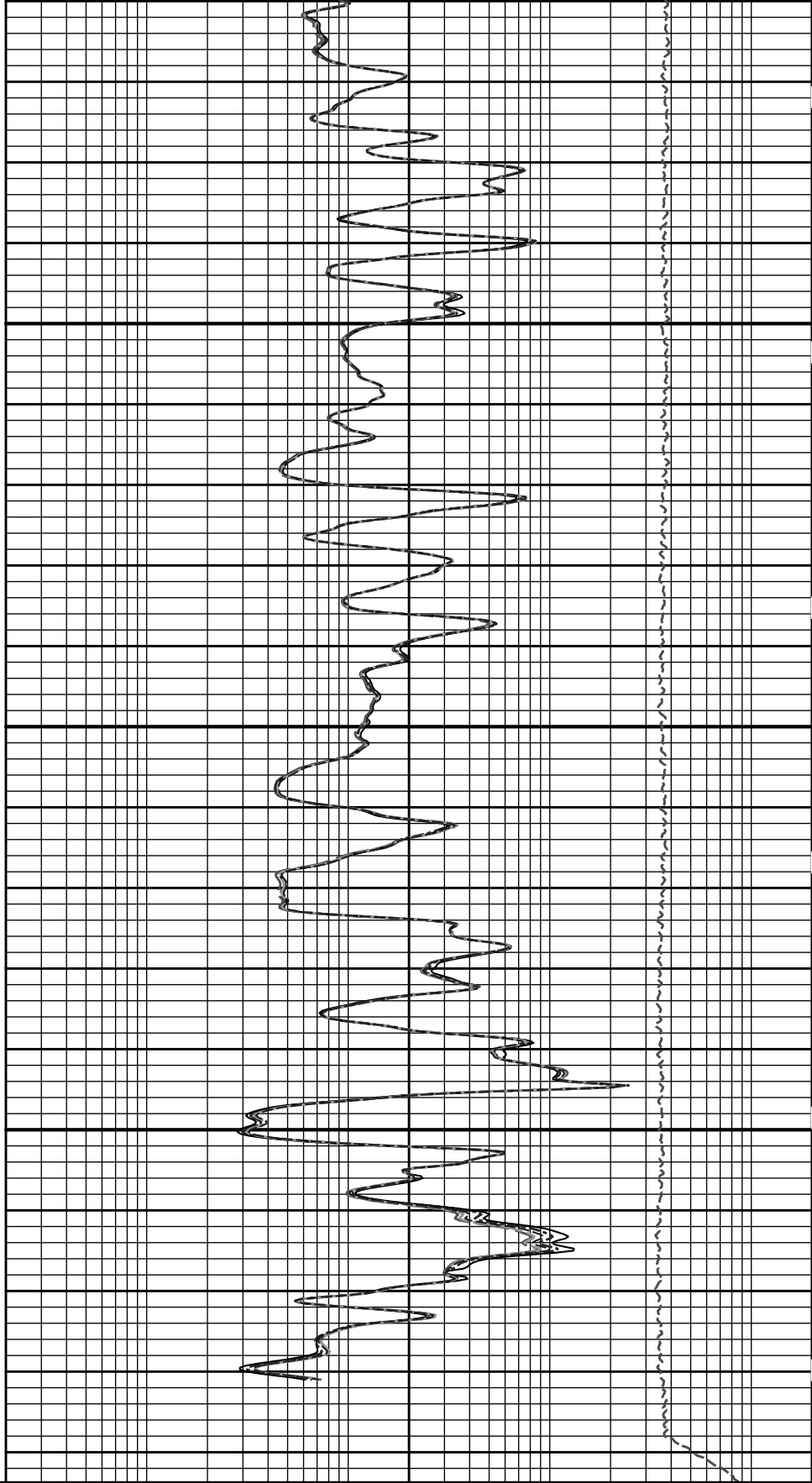
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5000





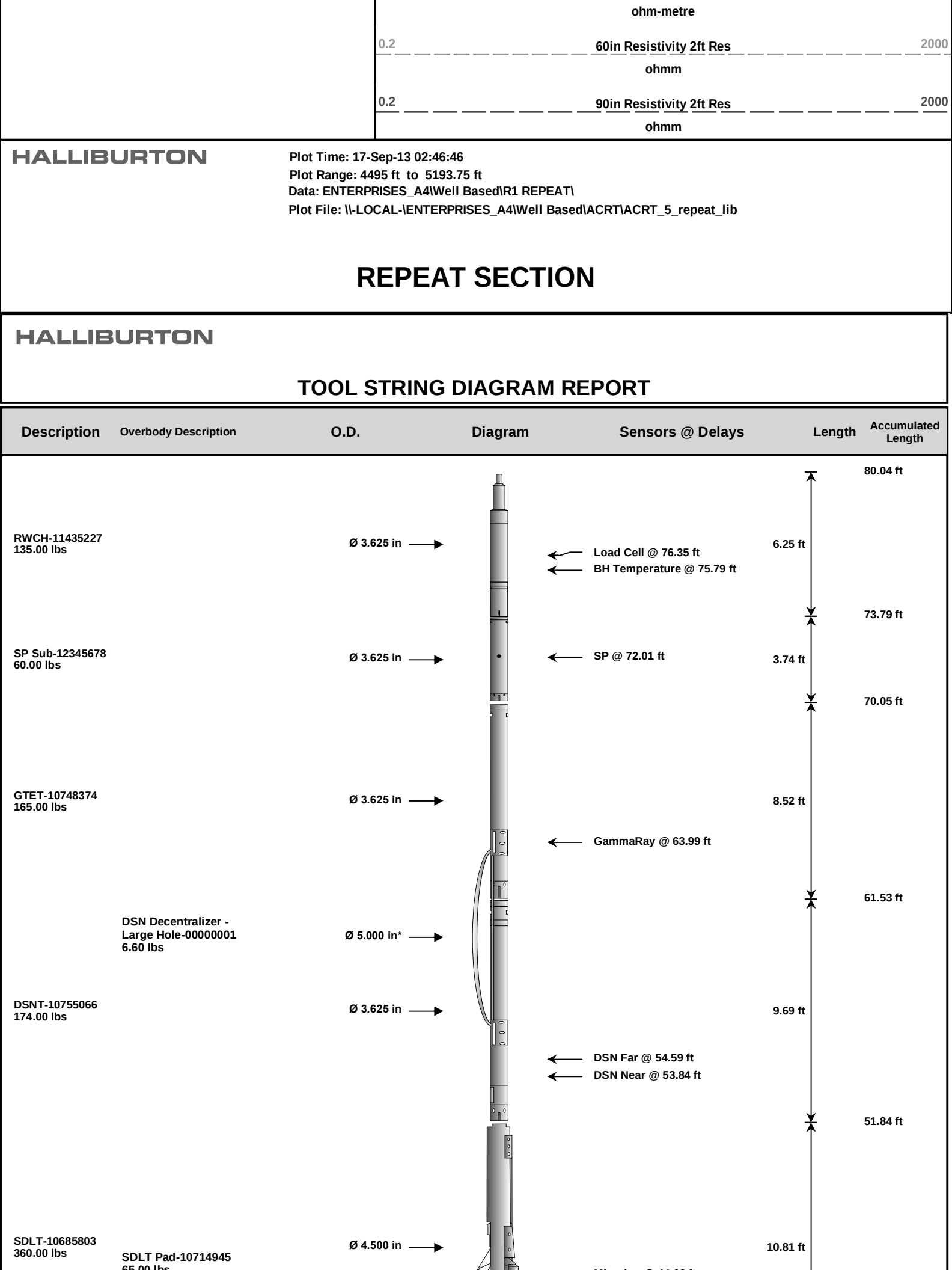
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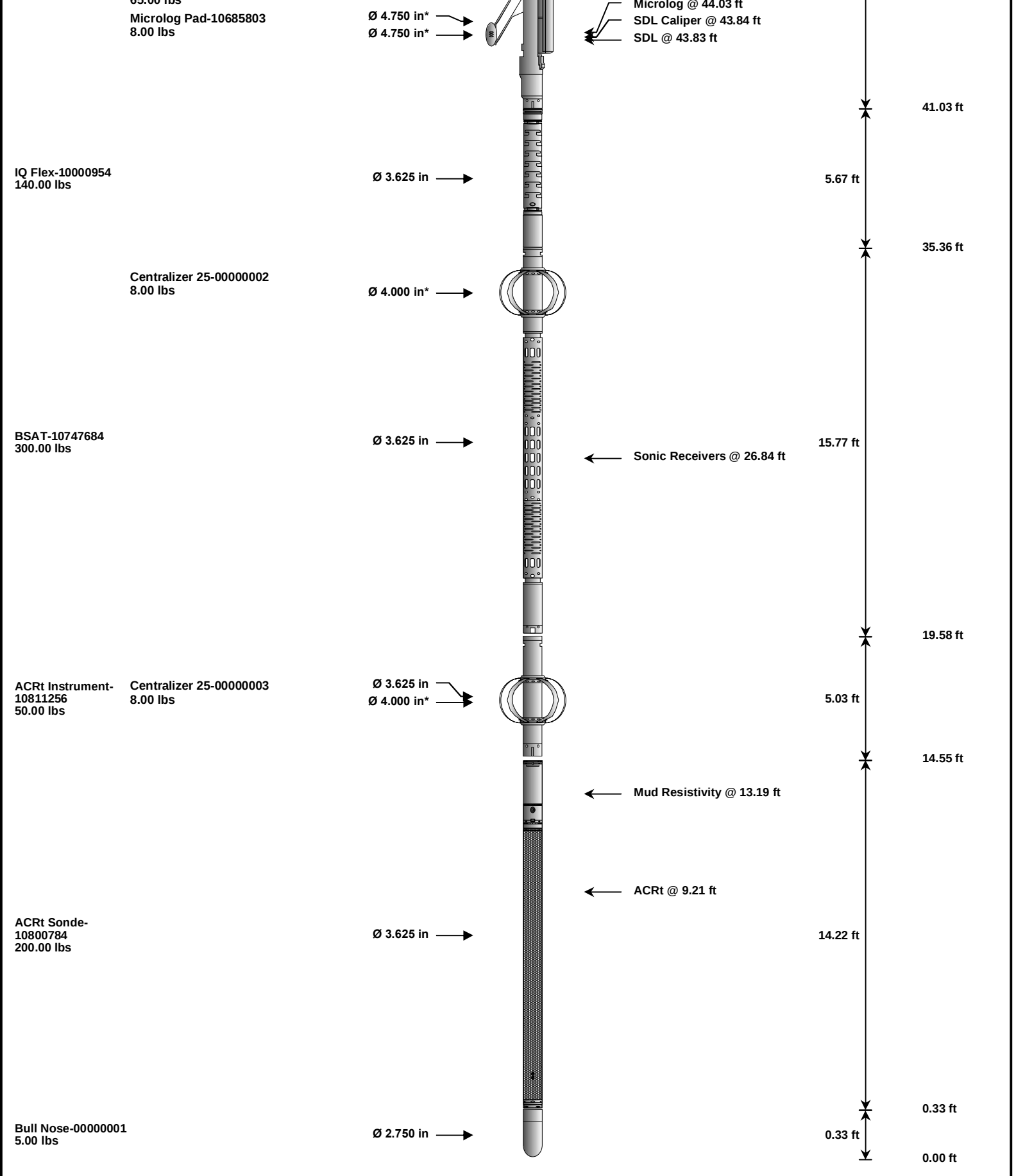


SP		
- 20 +		
0	Gamma API	150
api		
SHALE		

MD 1 : 240 ft

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





Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head		11435227	135.00	6.25	73.79	300.00
SP	SP Sub		12345678	60.00	3.74	70.05	300.00
GTET	Gamma Telemetry Tool		10748374	165.00	8.52	61.53	60.00
DSNT	Dual Spaced Neutron		10755066	174.00	9.69	51.84	60.00
DCNT	DSN Decentralizer Large Hole		00000001	6.60	9.42	55.17	300.00
SDLT	Spectral Density Tool		10685803	360.00	10.81	41.03	60.00
WSP	Wireline Pad		10000954	140.00	5.67	41.03	60.00
BSAT	BSAT		10747684	300.00	15.77	26.84	60.00
ACRt	ACRt Instrument		10811256	50.00	5.03	13.19	60.00
ACRt	ACRt Sonde		10800784	200.00	14.22	9.21	60.00
Bull Nose	Bull Nose		00000001	5.00	0.33	0.00	60.00

MICP	Microlog Pad	10685803	8.00	1.00	*	43.53	60.00
SDLP	Density Insite Pad	10714945	65.00	2.55	*	43.24	60.00
IQF	IQ Flex tool	10000954	140.00	5.67		35.36	300.00
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77		19.58	60.00
OBCEN	Centralizer - 25 in. Overbody	00000002	8.00	2.08	*	32.51	300.00
ACRt	Array Compensated True Resistivity Instrument Section	10811256	50.00	5.03		14.55	300.00
OBCEN	Centralizer - 25 in. Overbody	00000003	8.00	2.08	*	15.87	300.00
ACRt	Array Compensated True Resistivity Sonde Section	10800784	200.00	14.22		0.33	300.00
BLNS	Bull Nose	00000001	5.00	0.33		0.00	300.00
Total			1,684.60	80.04			
* Not included in Total Length and Length Accumulation.							
Data: ENTERPRISES_A4I0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNIDLE							
Date: 16-Sep-13 22:22:32							

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	9.200	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	1.000	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	5189.00	ft	
	SHARED	BHT	Bottom Hole Temperature	135.0	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	Wyllie	
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				
Data: ENTERPRISES_A4\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BN\005 17-Sep-13 00:39 Up @5192.3f			Date: 17-Sep-13 02:05:55	

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CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	GTET - 10748374	Reference Calibration Date:	02-Aug-13 14:20:06
Engineer:	THOMAS HYDE	Calibration Date:	03-Sep-13 10:36:47
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Calibrator Source S/N: TB-185

Calibrator API Reference:228.00 api

Equivalent Calibrator API Reference:232.0 api

Measurement	Measured	Calibrated	Units
Background	44.2	44.4	api
Background + Calibrator	275.0	276.4	api
Calibrator	232.0	232.0	api

Calibrator				230.8		232.0		api	
NATURAL GAMMA RAY TOOL FIELD CALIBRATION									
Tool Name:		GTET - 10748374				Reference Calibration Date:		03-Sep-13 10:36:47	
Engineer:		THOMAS HYDE				Calibration Date:		16-Sep-13 15:22:09	
Software Version:		WL INSITE R3.8.4 (Build 5)				Calibration Version:		1	
Calibrator Source S/N: TB-185									
Calibrator API Reference:228.00 api									
Equivalent Calibrator API Reference:232.0 api									
		Field Verification		Shop		Field		Units	
		Background		44.4		42.7		api	
		Background + Calibrator		276.4		276.3		api	
		Calibrator		232.0		233.6		api	
		Shop		Field		Difference		Tolerance	
		232.0		233.6		-1.6		+/- 9.00	
ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION									
Tool Name:		ACRt Sonde - 10800784				Reference Calibration Date:		21-Jun-13 10:45:53	
Engineer:		SHELDON INGERSOLL				Calibration Date:		04-Sep-13 10:26:29	
Software Version:		WL INSITE R3.8.4 (Build 5)				Calibration Version:		1	
Host Tool Name:		ACRt Instrument - 10811256							
TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.01	1.05	0.95	1.02	1.05	0.95	1.00	1.05
A2 (50")	0.95	1.01	1.05	0.95	1.02	1.05	0.95	1.01	1.05
A3 (29")	0.95	1.00	1.05	0.95	1.00	1.05	0.95	0.99	1.05
A4 (17")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	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	0.99	1.05	0.95	0.98	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	-0.41	2	-6	-3.82	-2	-8	-4.47	-2
A2 (50")	-7	-1.88	0	-7	-3.68	0	-7	-4.13	0
A3 (29")	-27	-16.12	-9	-9	-4.62	-3	-7	-3.19	-1
A4 (17")	-180	-98.12	-60	-45	-32.97	-15	-39	-27.03	-13
A5 (10")	N/A	N/A	N/A	-150	-99.34	-50	-80	-50.24	-10
A6 (6")	N/A	N/A	N/A	175	294.99	525	90	155.05	270
TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION				
Signal	Lower		R	Upper	Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)	
12K		0.6		1.3	Mud Cell	0.95	1.00	1.05	
36K		1.0		2.0					
72K		1.0		2.0					
PASS/FAIL SUMMARY									
GAIN RANGE CHK					PASS				
SONDE OFFSET RANGE CHK					PASS				

SONDE OFF SET RANGE CHK	PASS
Tx CURRENT GAIN	PASS
Rmud VERIFICATION	PASS

TOOL OK TO LOG

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10748374						
Gamma Ray Calibrator	232.0	233.6	-----	-1.6	+/- 9.00	api
ACRt Sonde-10800784						
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m

Data: ENTERPRISES_A4\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BN\005 17-Sep-13 00:39 Up @5192.3f **Date: 17-Sep-13 02:09:36**

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INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
RWCH				
DHTN	DownholeTension	0.00	BLK	0.000
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

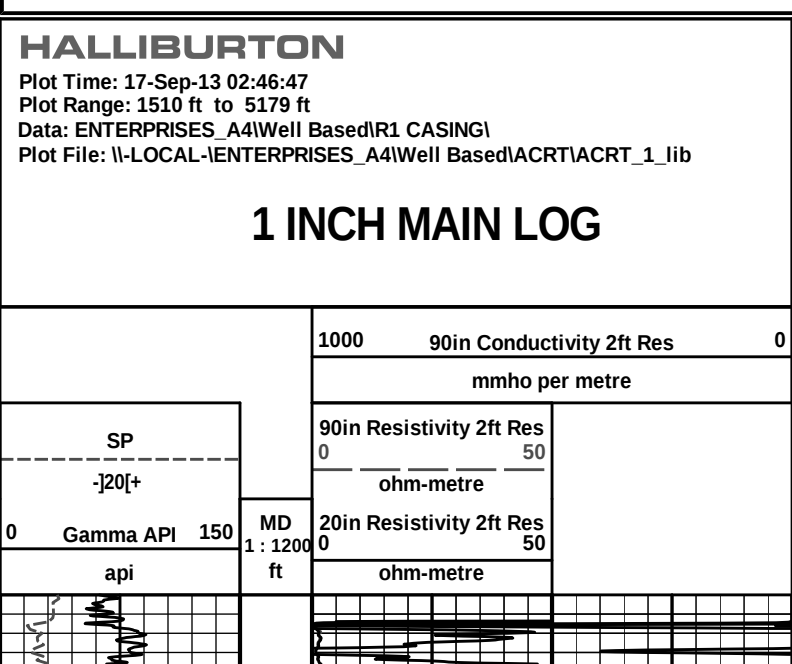
TPUL	Tension Pull	26.84	NO	
STAT	Status	26.84	NO	
DLYT	Delay Time	26.84	NO	
SI	Sample Interval	26.84	NO	
TXRX	Raw Telemetry 10 Receivers	26.84	NO	
FRMC	Tool Frame Count	26.84	NO	
GMOD	Gain processing mode	19.58	NO	
ACRt Sonde				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
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
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

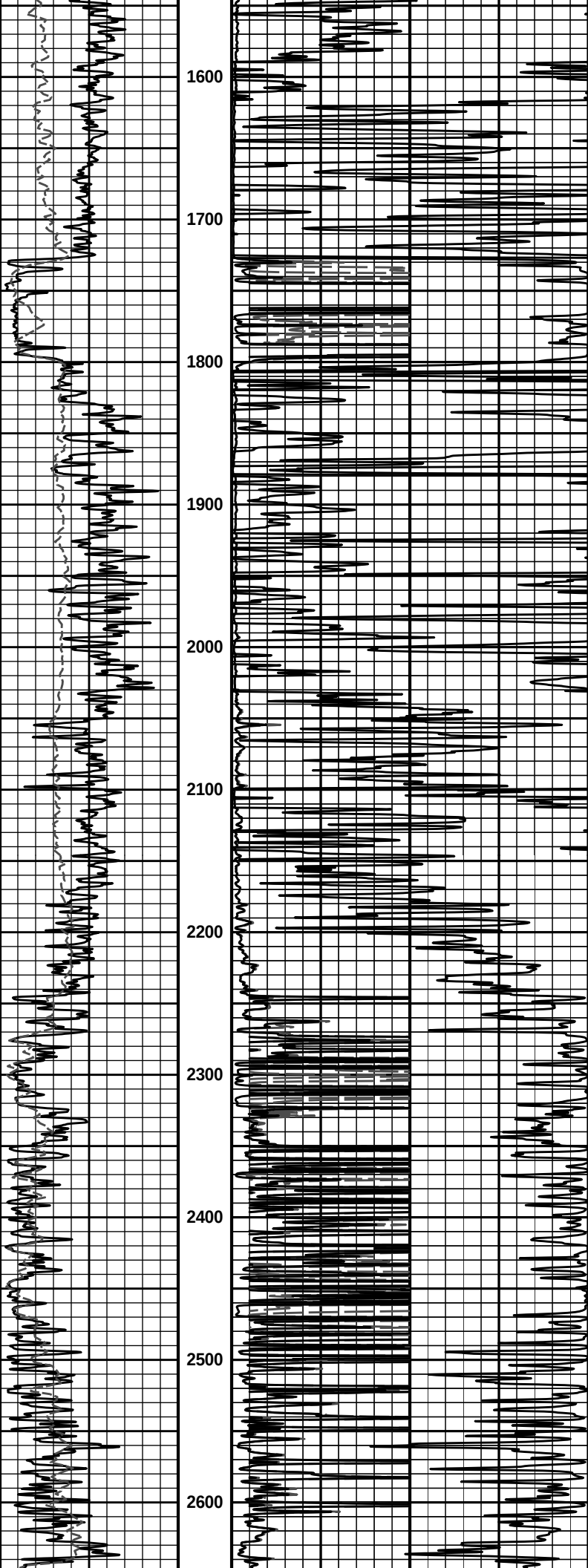
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	

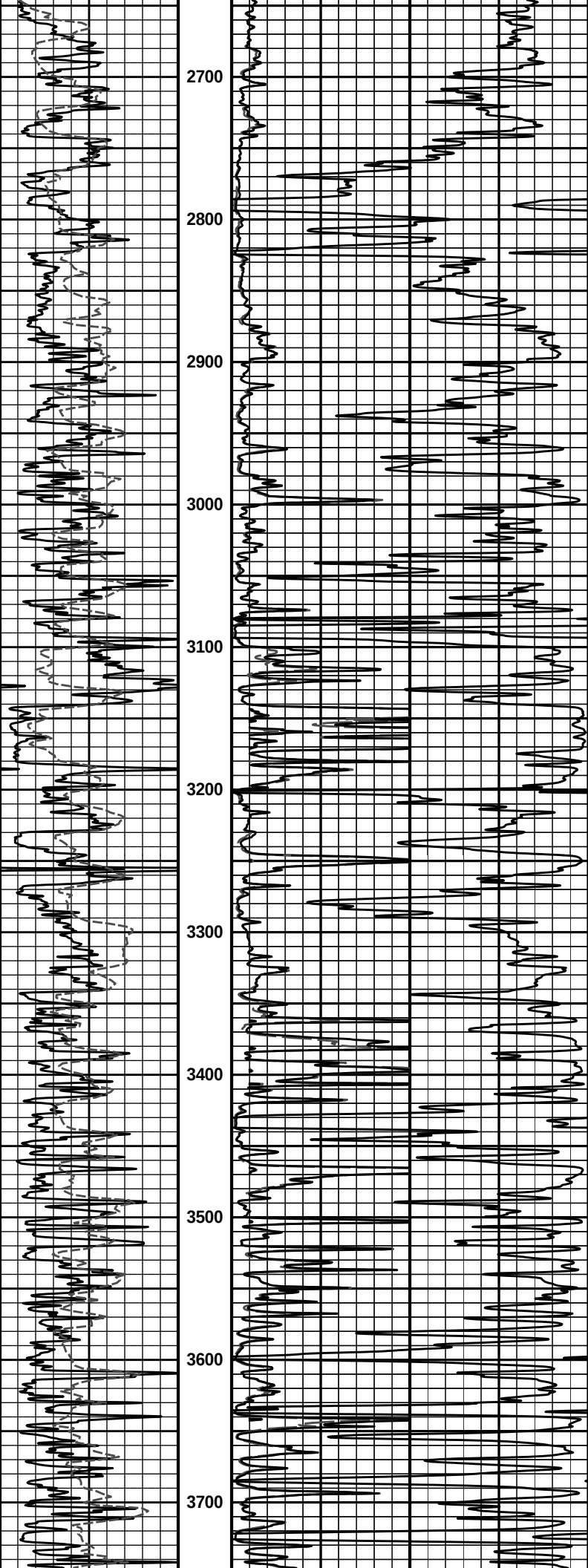
SDLT Pad				
TPUL	Tension Pull	43.83	NO	
NAB	Near Above	43.66	BLK	0.920
NHI	Near Cesium High	43.66	BLK	0.920
NLO	Near Cesium Low	43.66	BLK	0.920
NVA	Near Valley	43.66	BLK	0.920
NBA	Near Barite	43.66	BLK	0.920
NDE	Near Density	43.66	BLK	0.920
NPK	Near Peak	43.66	BLK	0.920
NLI	Near Lithology	43.66	BLK	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	

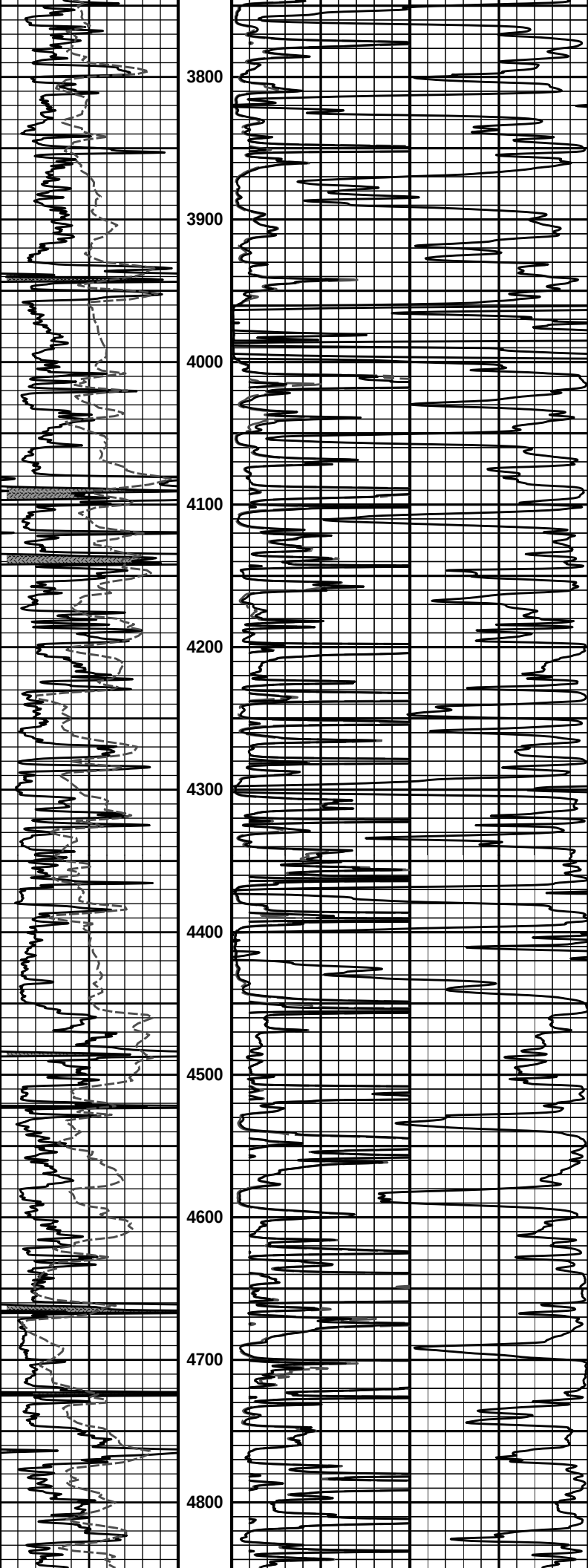
Microlog Pad				
TPUL	Tension Pull	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750

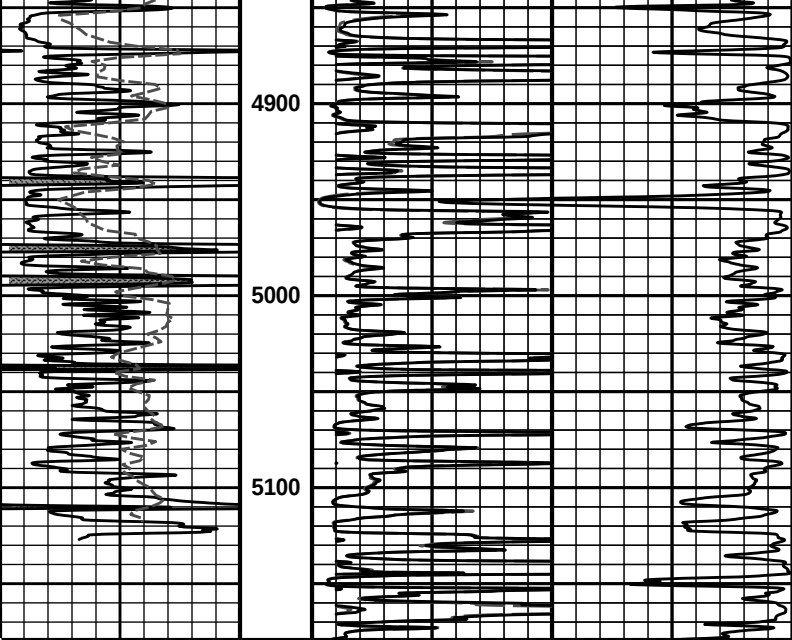
Data: ENTERPRISES_A4\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BN\005 17-Sep-13 00:39 Up @5192.3f Date: 17-Sep-13 02:04:59











0	Gamma API	150	MD	20in Resistivity 2ft Res	
	api		1 : 1200	0	50
			ft	ohm-metre	
	SP			90in Resistivity 2ft Res	
	-20[+			0	50
				ohm-metre	
				1000	90in Conductivity 2ft Res
					0
					mmho per metre

HALLIBURTON
Plot Time: 17-Sep-13 02:46:49
Plot Range: 1510 ft to 5179 ft
Data: ENTERPRISES_A4\Well Based\IR1 CASING\
Plot File: \\-LOCAL-ENTERPRISES_A4\Well Based\ACRT\ACRT_1_lib

1 INCH MAIN LOG

COMPANY	OXY USA INC.		
WELL	ENTERPRISES A-4		
FIELD	DIADEN		
COUNTY	HASKELL	STATE	KANSAS
HALLIBURTON		ARRAY COMPENSATED TRUE RESISTIVITY LOG	