HALLIBURTON

ARRAY COMPENSATED TRUE RESISTIVITY LOG

COMPANY	SANDRIDGE EXPLORATION
WELL	RENEE 2230 1-2
FIELD/BLOCK	STUART
COUNTY	FINNEY
STATE	KANSAS

COMPANY SANDRIDGE EXPLORATION

WELL RENEE 2230 1-2

FIELD/BLOCK STUART

COUNTY FINNEY STATE KANSAS

API No. 15-055-21774-00-01

Location NW SE NE SW
1968' FSL1987' FWL

Other Services:
DSNT/SDLT
MICRO

Sect. 2 Twp. 22S Rge. 30W

Permanent Datum GL Elev. 2778.0 ft

Log measured from KB 10.0 ft above perm. Datum

Drilling measured from KB

Elev.: K.B. 2788.0 ft
D.F. 2786.0 ft
G.L. 2778.0 ft

Date	05-Apr-13		
Run No.	ONE		
Depth - Driller	5595.00 ft		
Depth - Logger	5517.0 ft		
Bottom - Logged Interval	5507.0 ft		
Top - Logged Interval	418.0 ft		
Casing - Driller	8.625 in @ 412.0 ft	@	@
Casing - Logger	418.0 ft		
Bit Size	7.875 in	@	@
Type Fluid in Hole	WATER BASED MUD		
Density / Viscosity	8.5 ppg / 49.00 s/qt		
PH / Fluid Loss	10.50 pH / 3.6 cptm		
Source of Sample	FLOWLINE		
Rm @ Meas. Temperature	1.300 ohmm @ 75.00 degF	@	@
Rmf @ Meas. Temperature	1.08 ohmm @ 75.00 degF	@	@
Rmc @ Meas. Temperature	1.520 ohmm @ 75.00 degF	@	@
Source Rmf / Rmc	MEASURED / MEASURED		
Rm @ BHT	0.93 ohmm @ 107.0 degF	@	@
Time Since Circulation	6.0 hr		
Time on Bottom	05-Apr-13 04:16		
Max. Rec. Temperature	107.0 degF @ 5517.0 ft	@	@
Equipment / Location	10546696 / LIBERAL		
Recorded By	THOMAS HYDE		
Witnessed By	R. MADRID	M. RODEN	

Fold here

Service Ticket No.: 900328508 API Serial No.: 15-055-21774-00-01 PGM Version: WL INSITE R3.8.0 (Build 2)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE

Date	Sample No.				
Depth-Driller					
Type Fluid in Hole					
Density	Viscosity				
Ph	Fluid Loss				
Source of Sample					
Rm @ Meas. Temp		@		@	
Rmf @ Meas. Temp.		@		@	
Rmc @ Meas. Temp.		@		@	
Source Rmf	Rmc				
Rm @ BHT		@		@	
Rmf @ BHT		@		@	
Rmc @ BHT		@		@	

RESISTIVITY SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA

Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
ONE	ACRT	N/A	1.5" S.O.	N/A
	I962			
	S11005909			

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	

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	5517	418	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5INCH CASING

CHLORIDES REPORTED AT 4500 MG/L

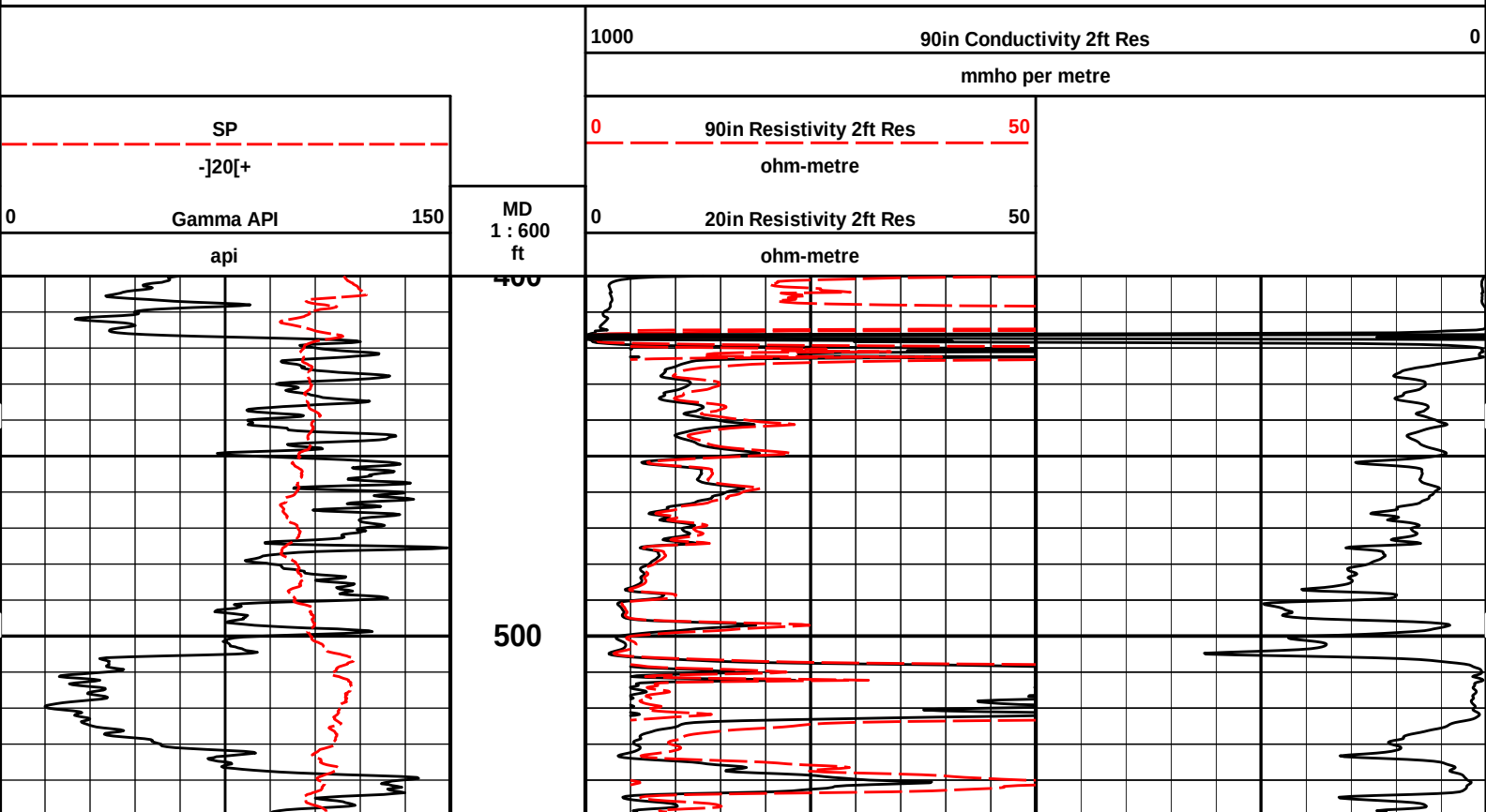
TODAY'S CREW M. GRAHAM B. TERRELL

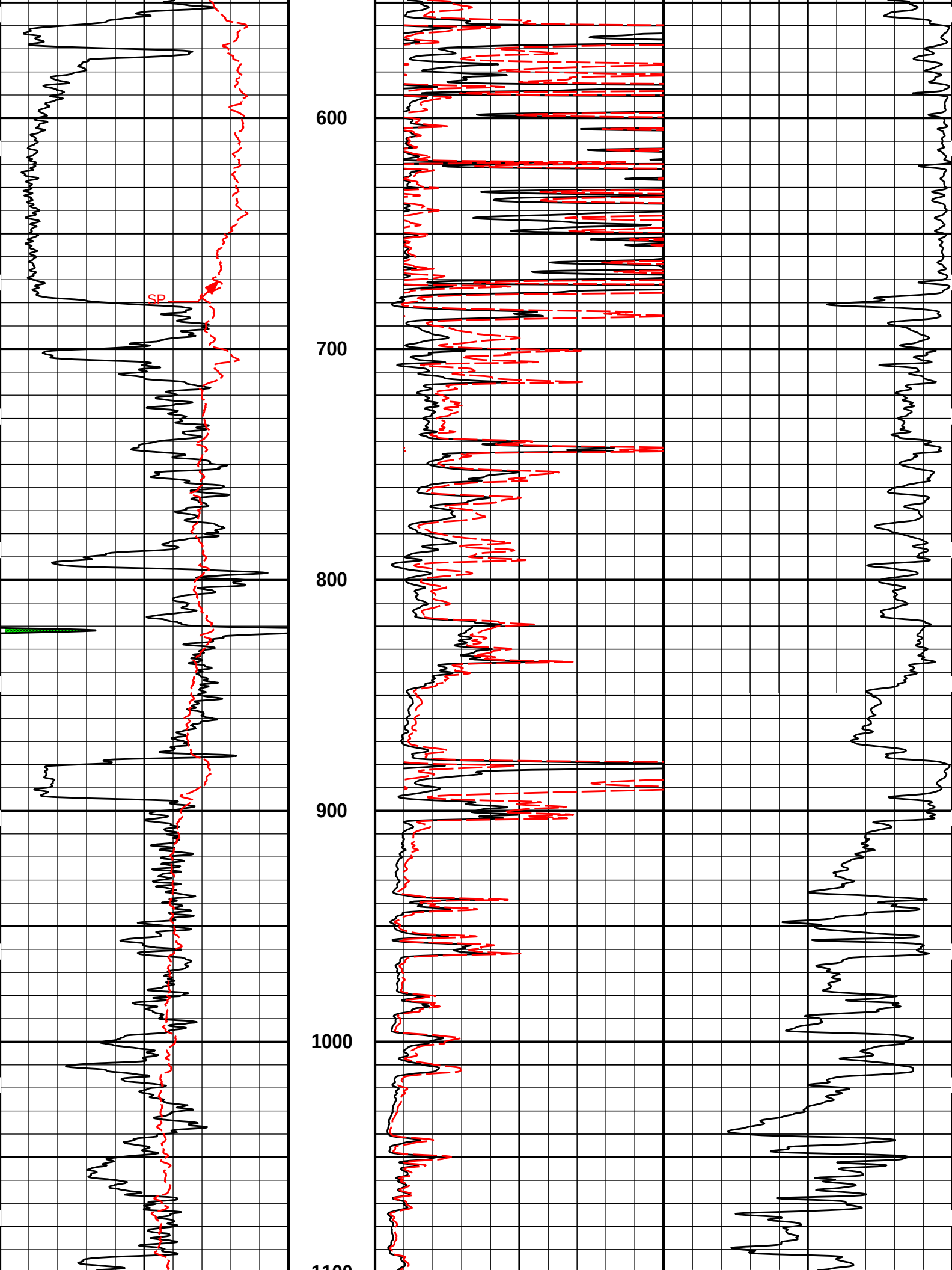
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KANSAS 620-624-8123

HALLIBURTON

Plot Time: 05-Apr-13 05:56:32
Plot Range: 400 ft to 5522.25 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005
Plot File: \\-LOCAL-\RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_2_lib

2 INCH MAIN LOG

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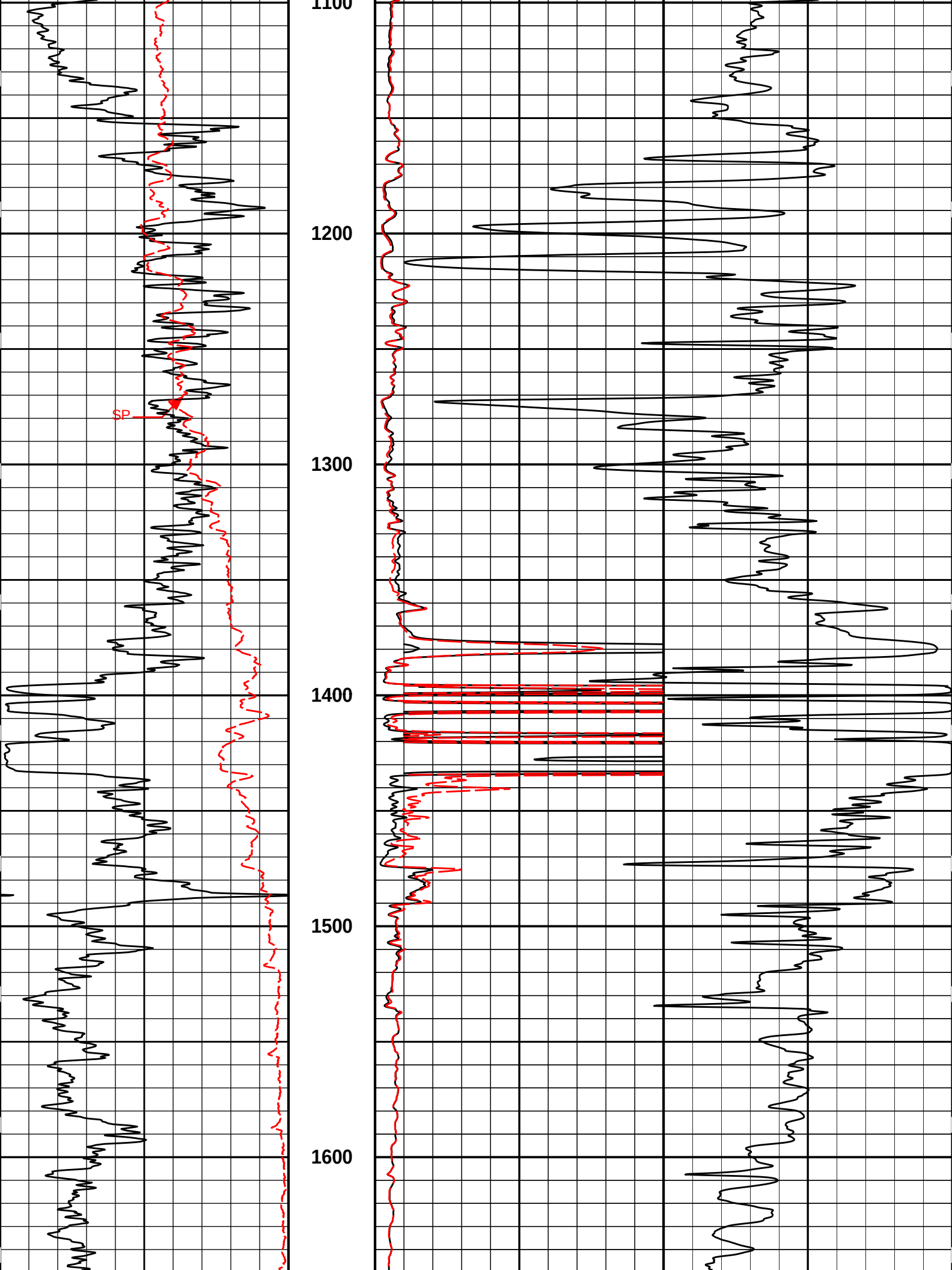
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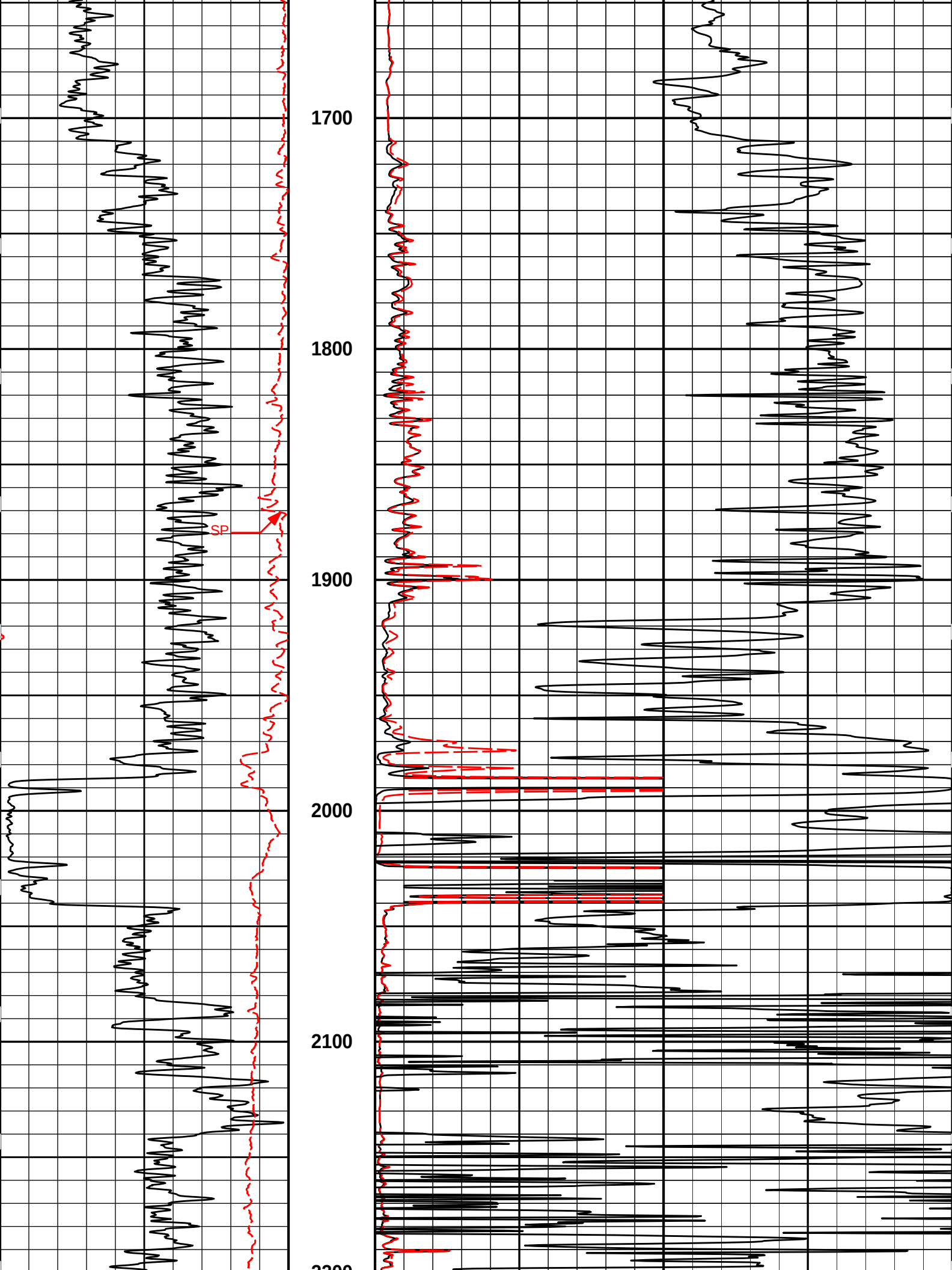
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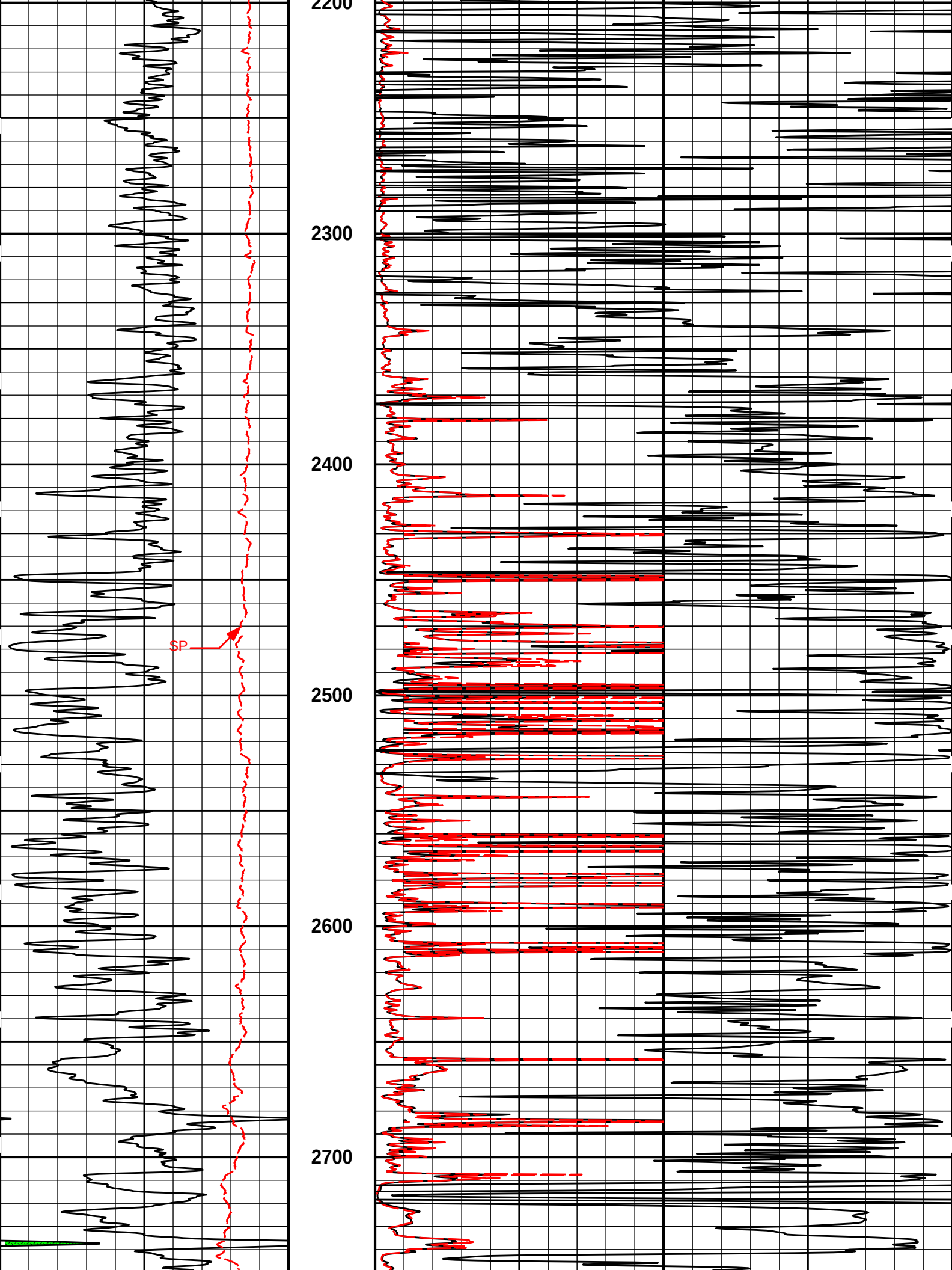
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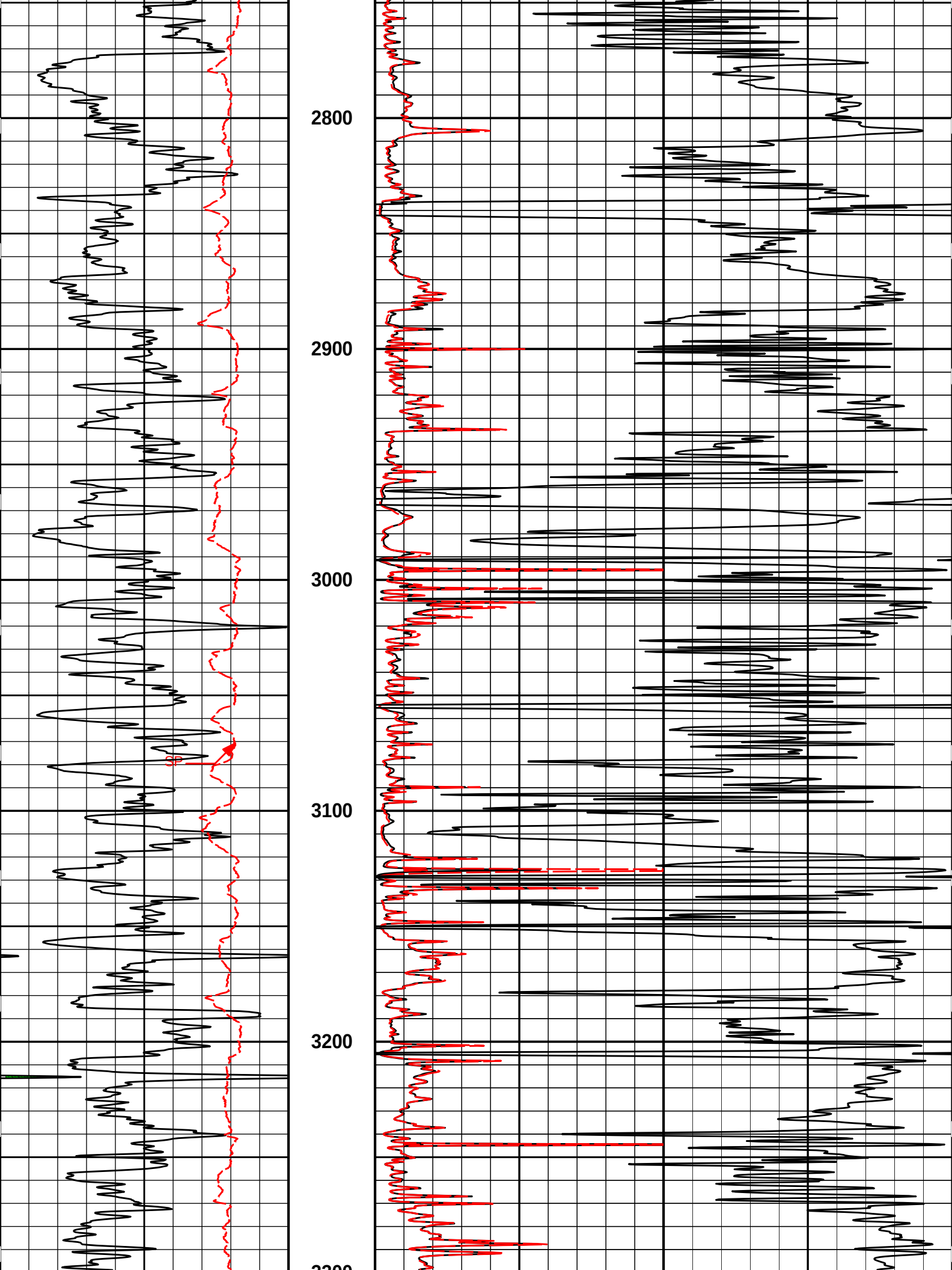
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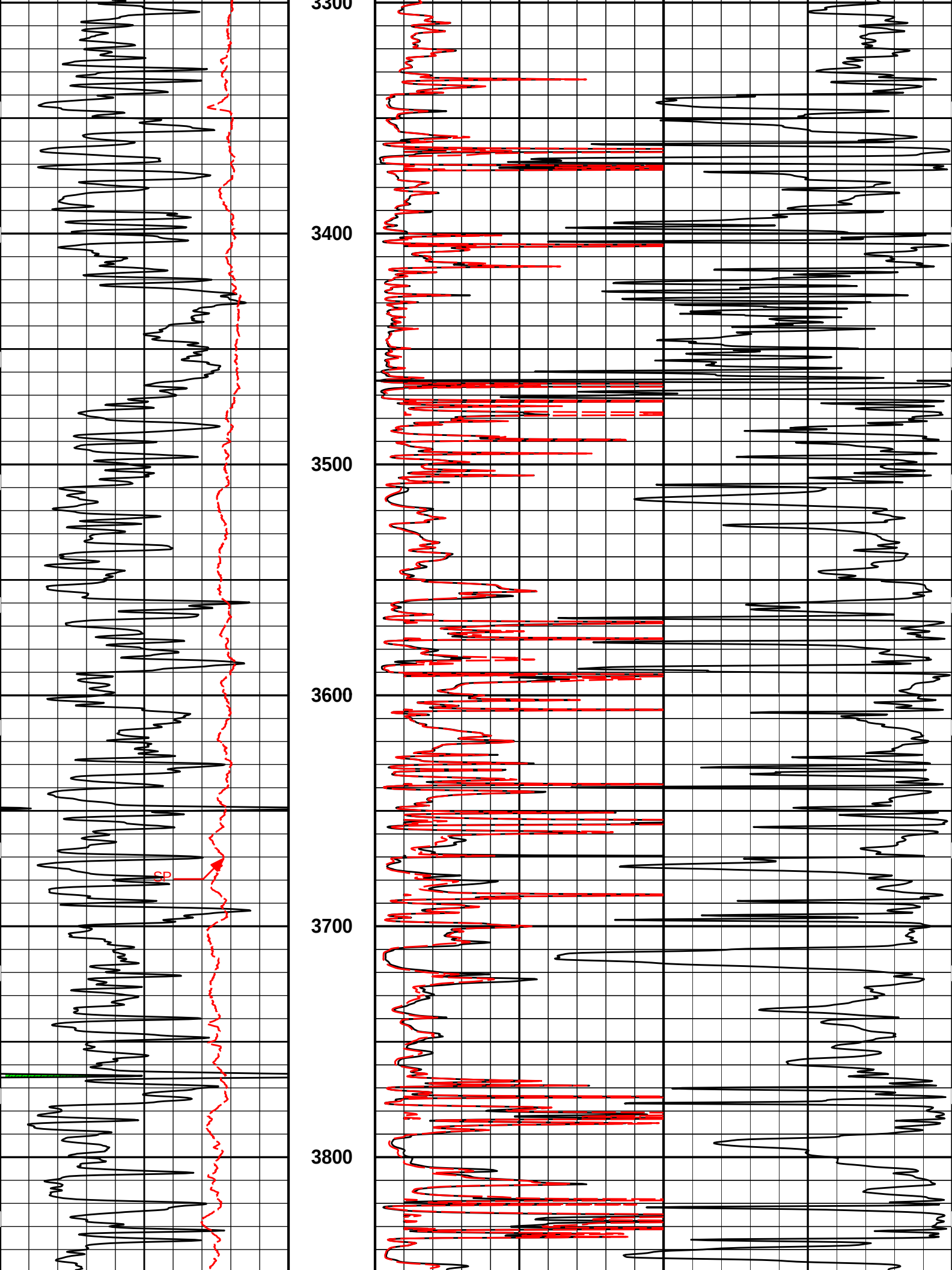
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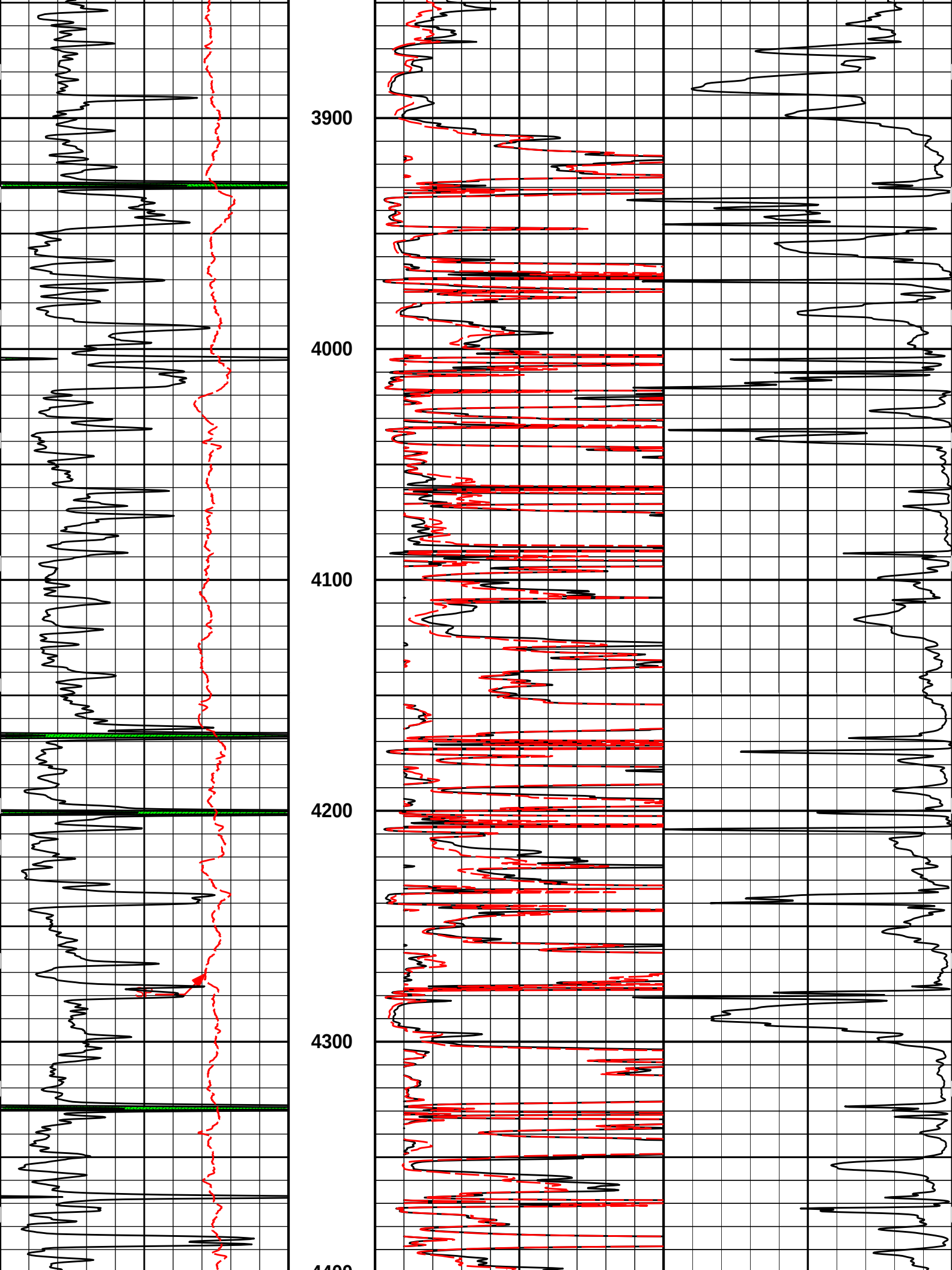
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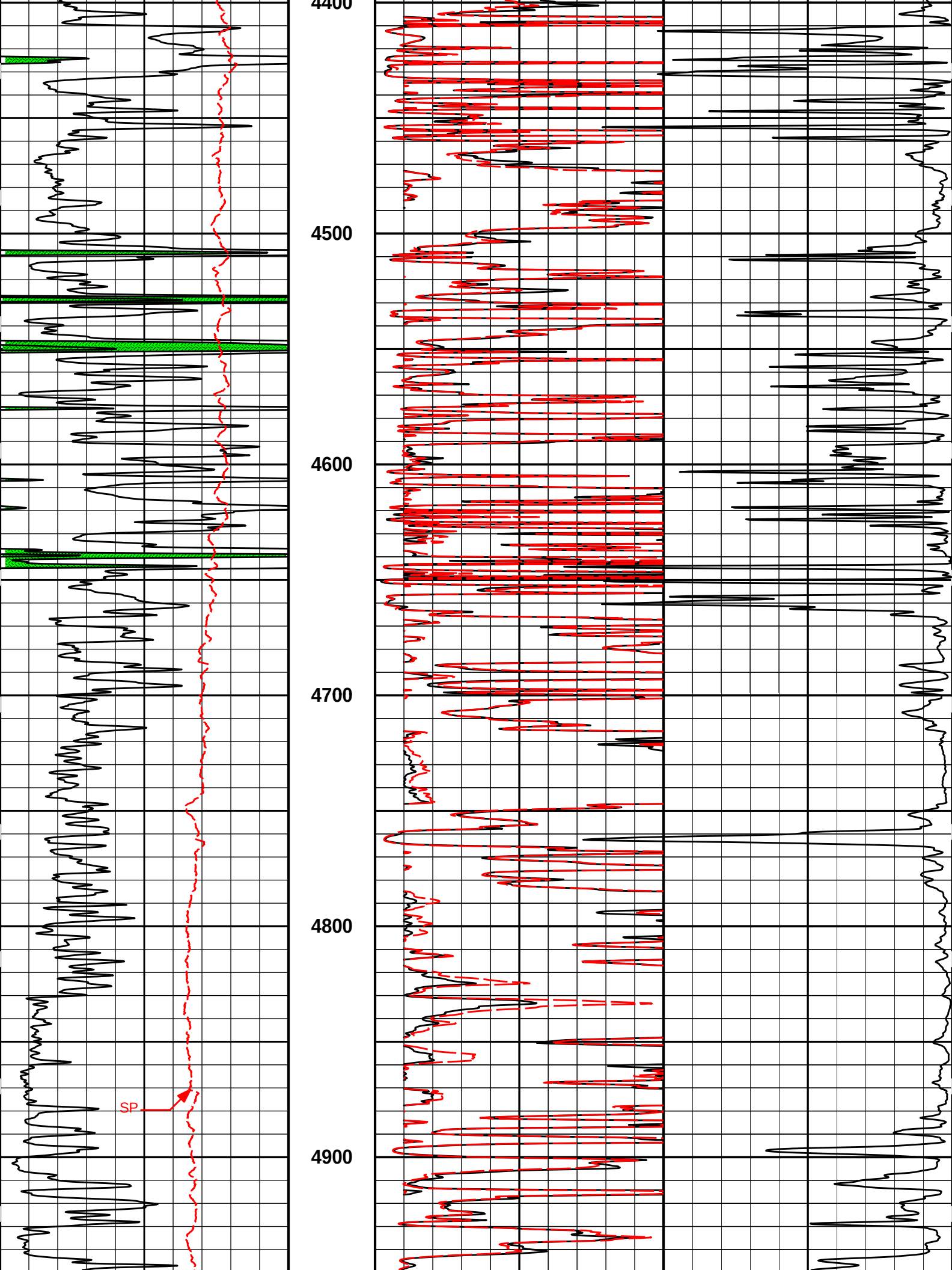
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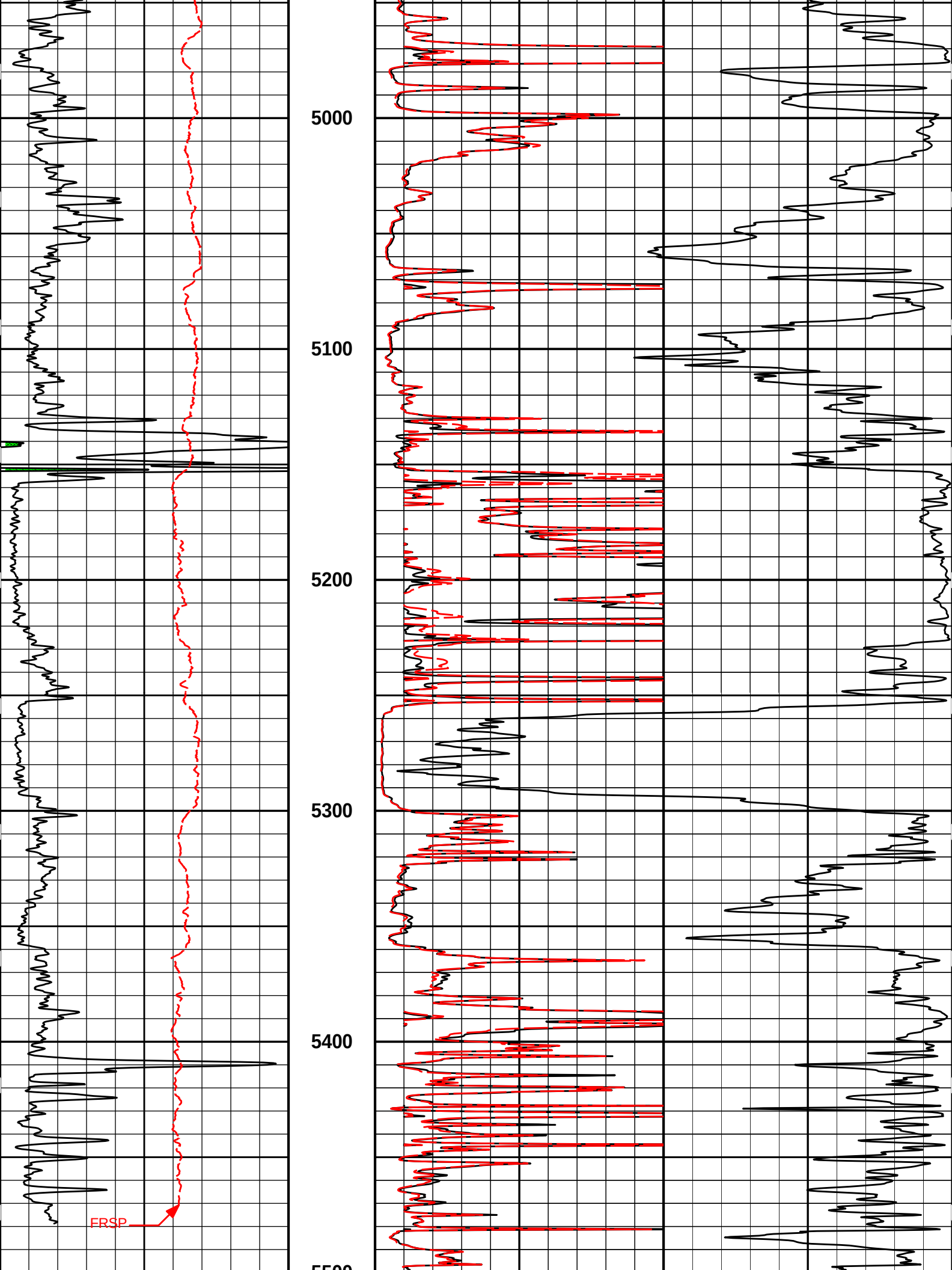
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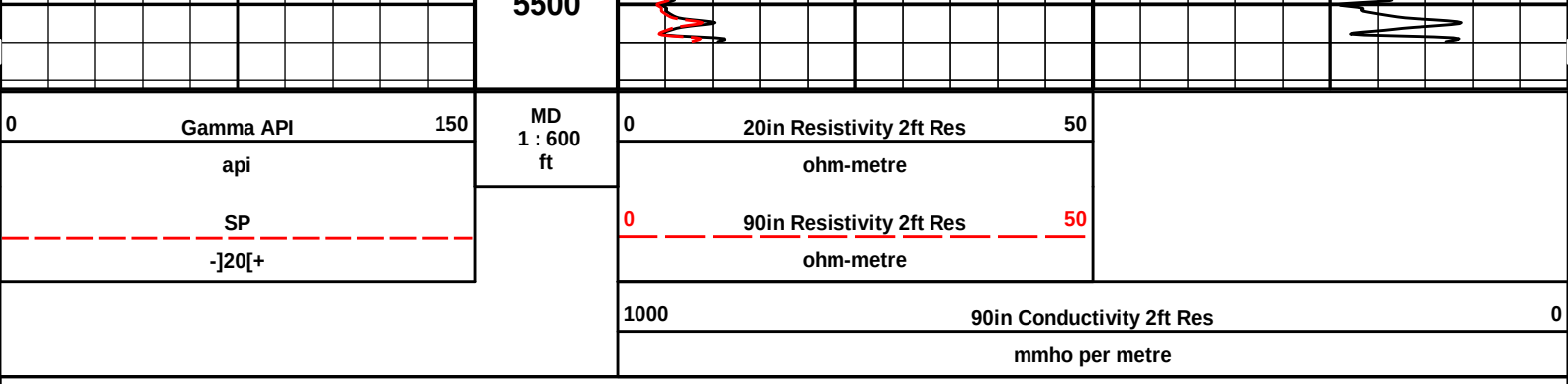


HALLIBURTON

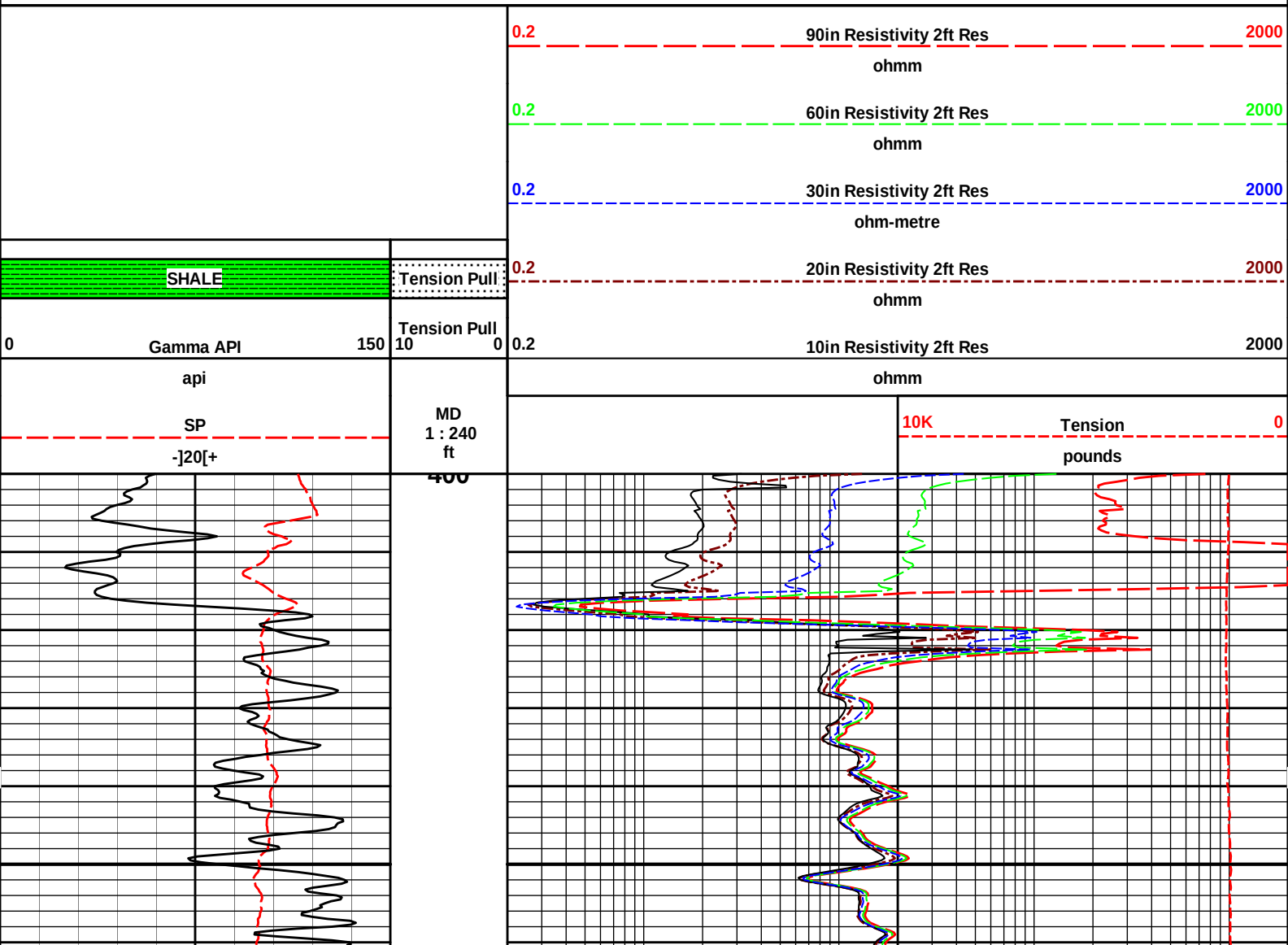
Plot Time: 05-Apr-13 05:56:37
Plot Range: 400 ft to 5522.25 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005\
Plot File: \\-LOCAL-\RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_2_lib

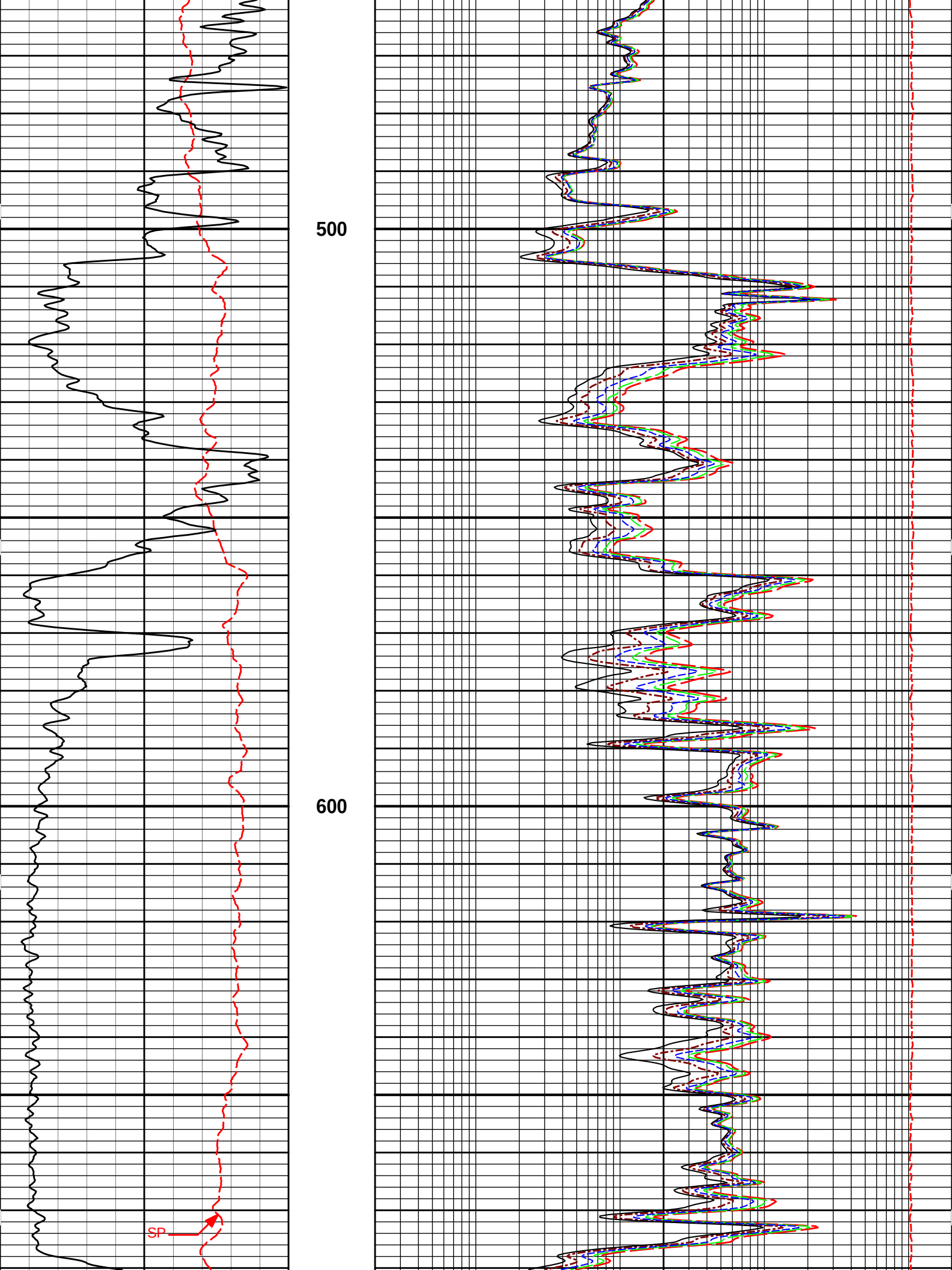
2 INCH MAIN LOG

HALLIBURTON

Plot Time: 05-Apr-13 05:56:37
Plot Range: 400 ft to 5522.25 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005\
Plot File: \\-LOCAL-\RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_5_main_lib

5 INCH MAIN LOG

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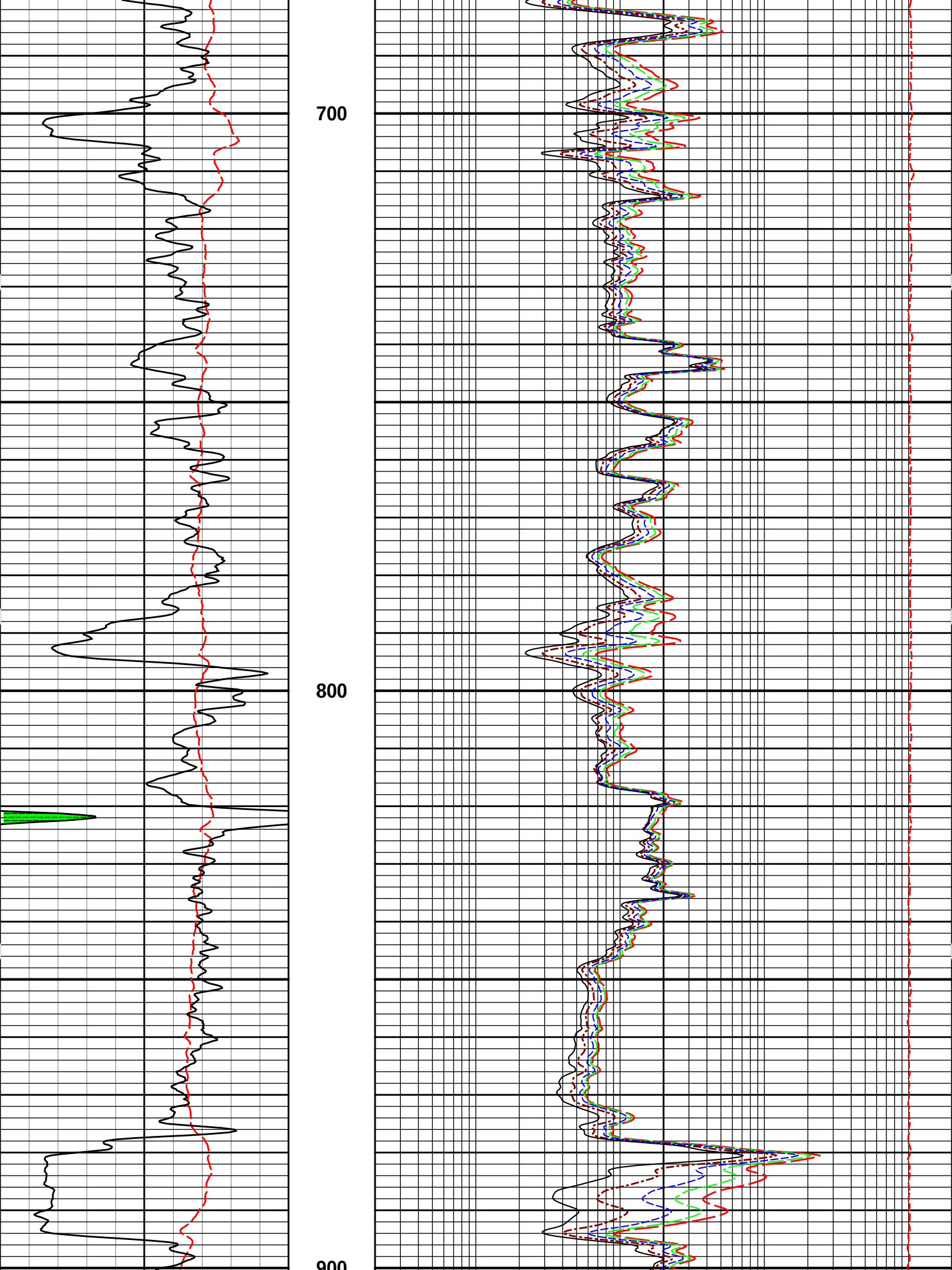
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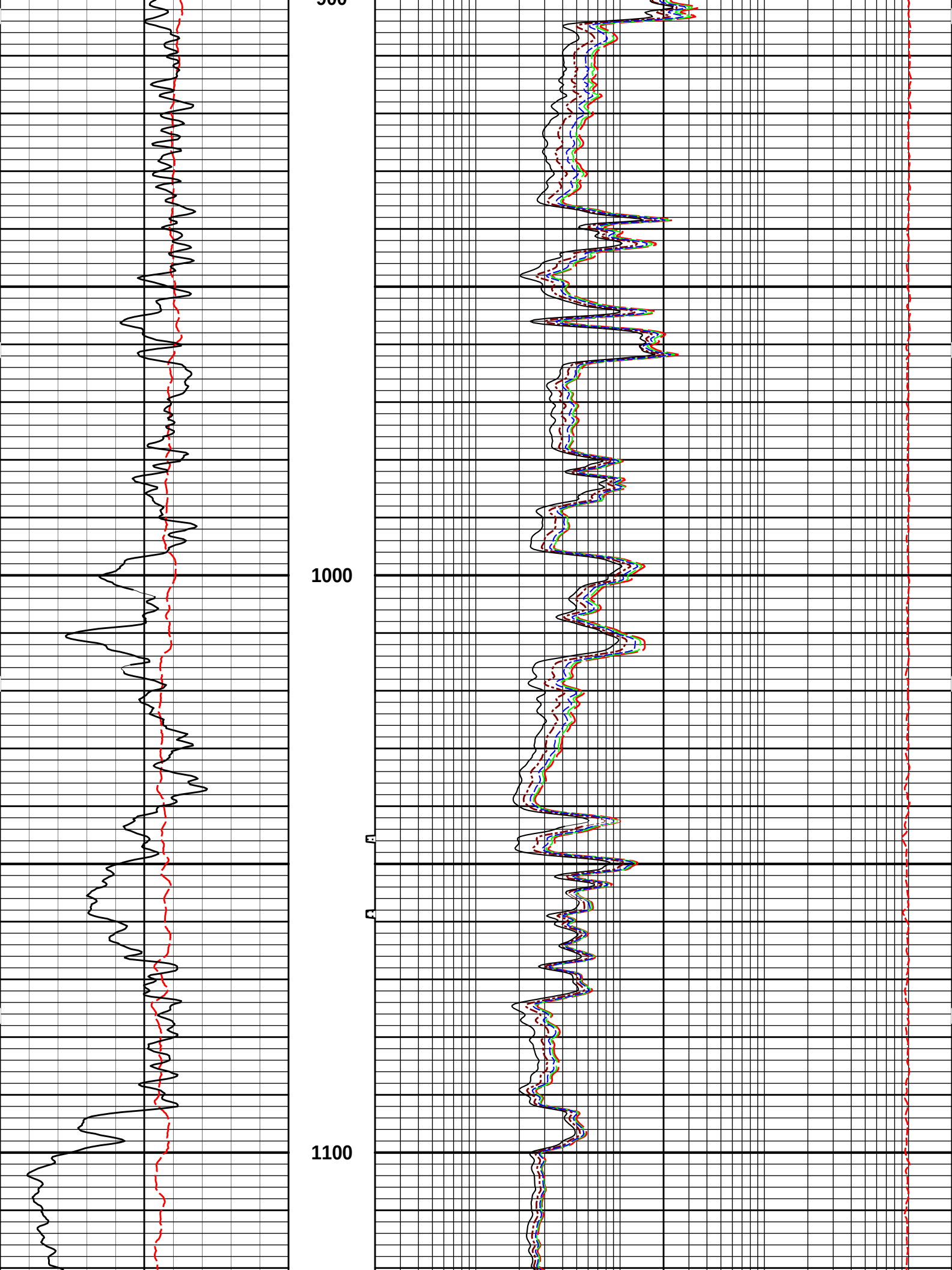
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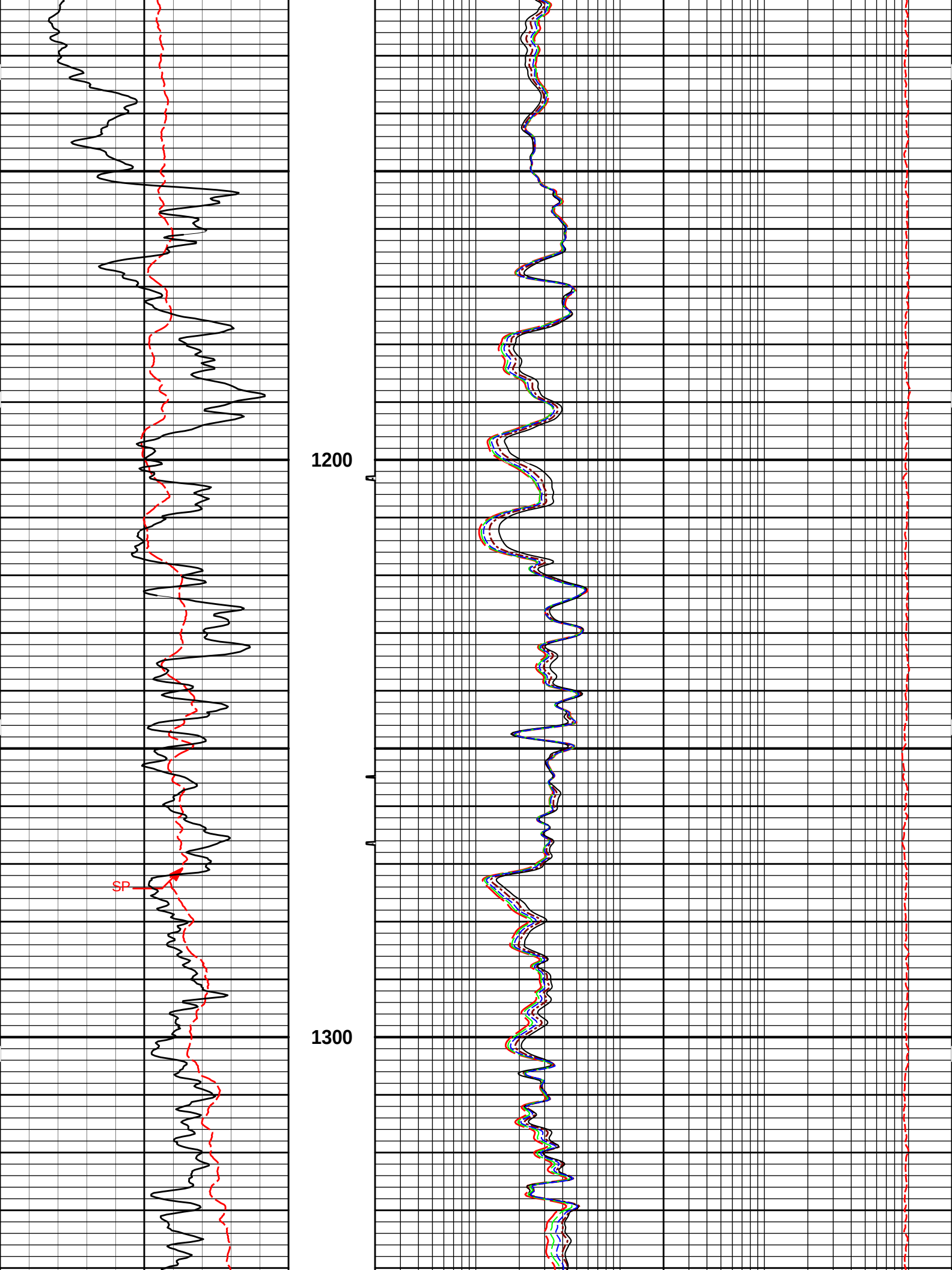
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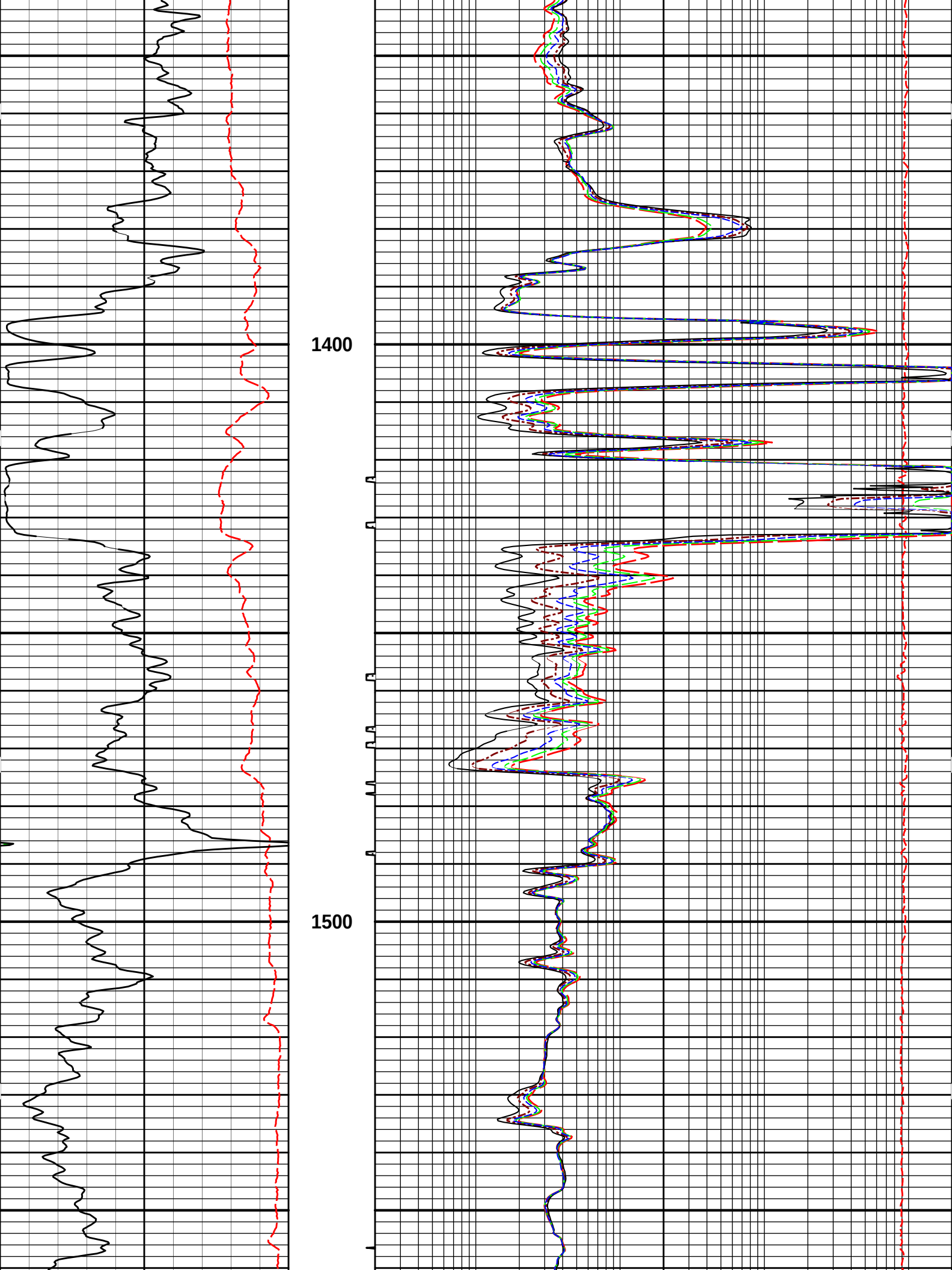
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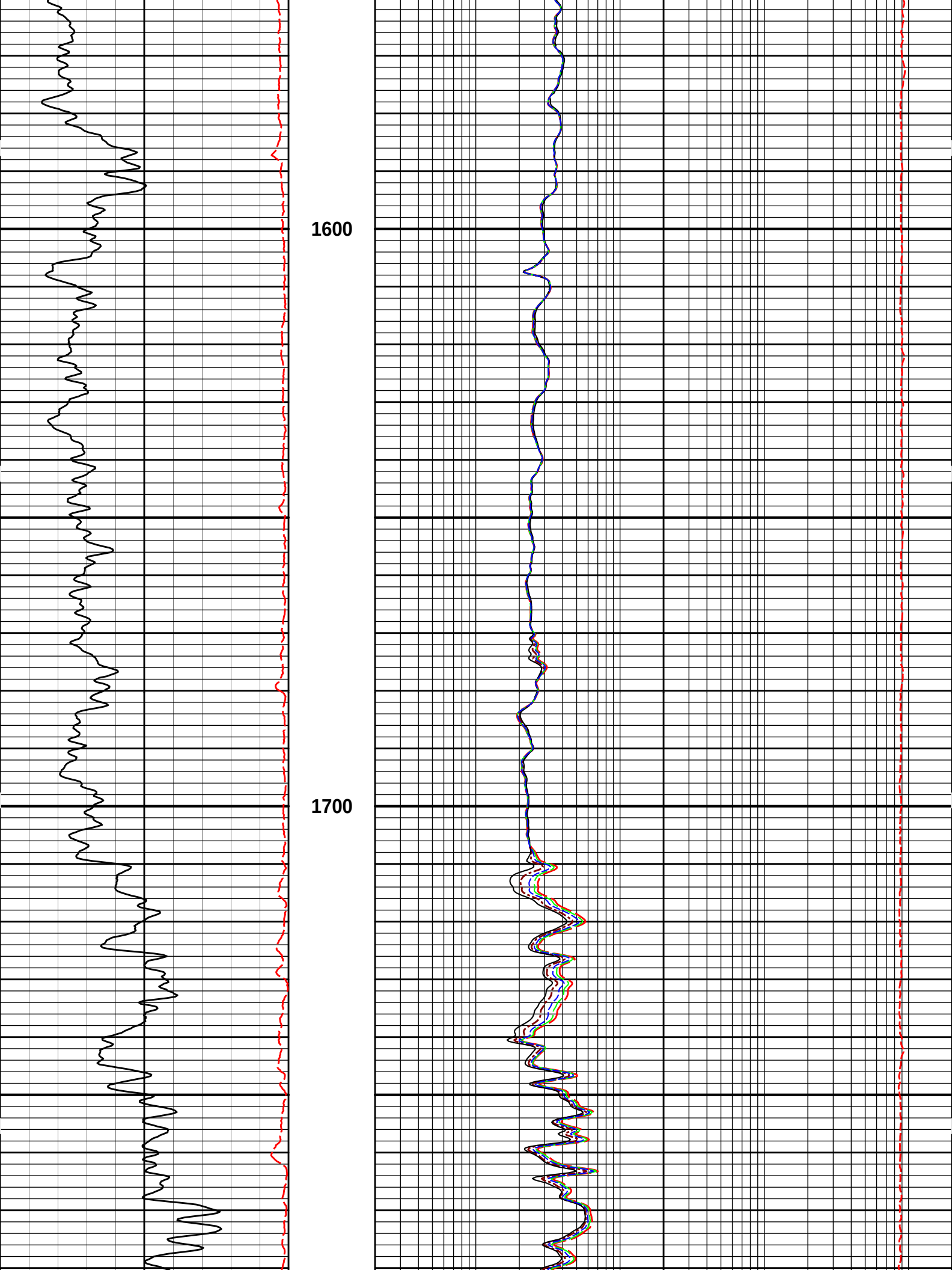
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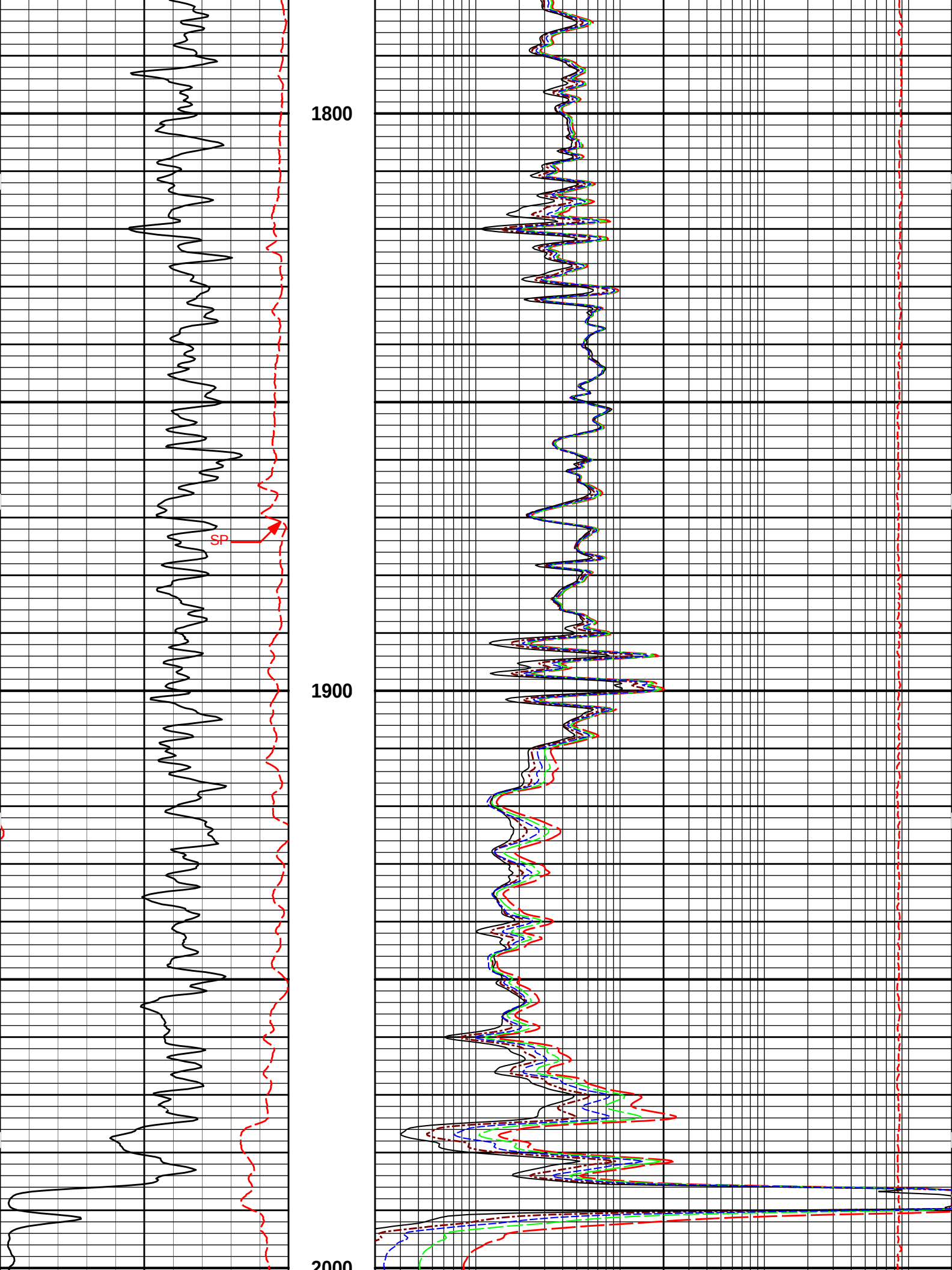
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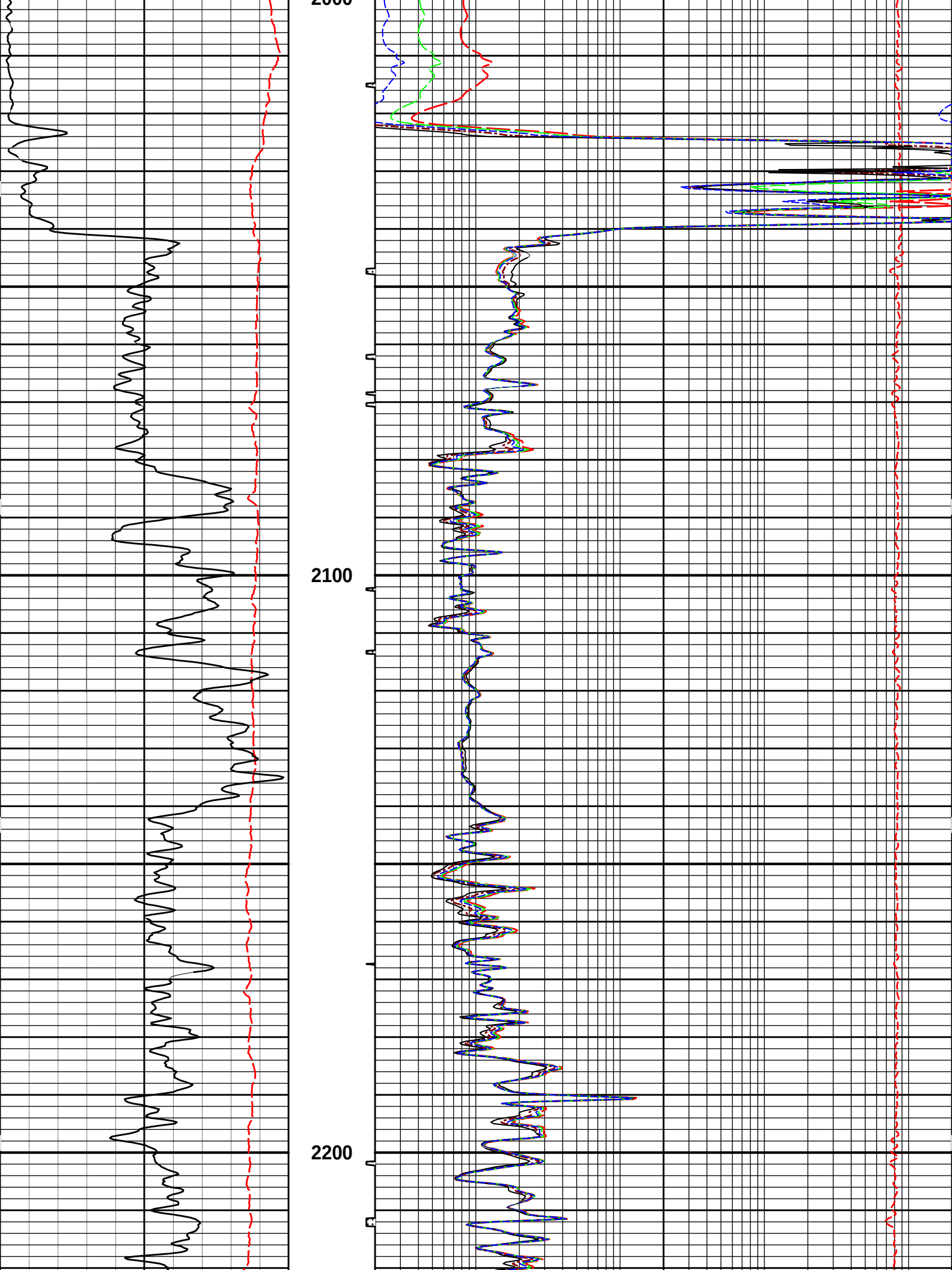
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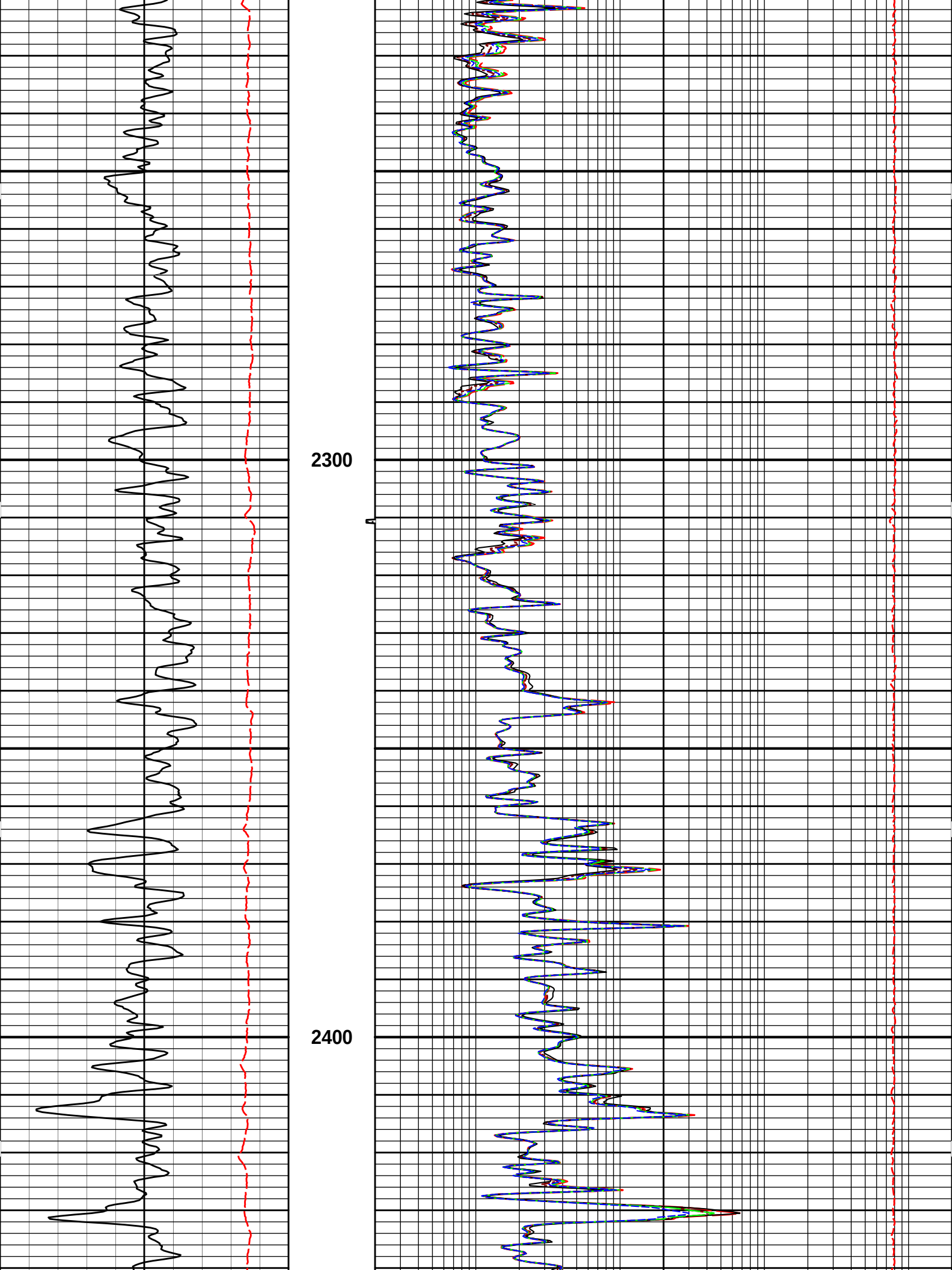
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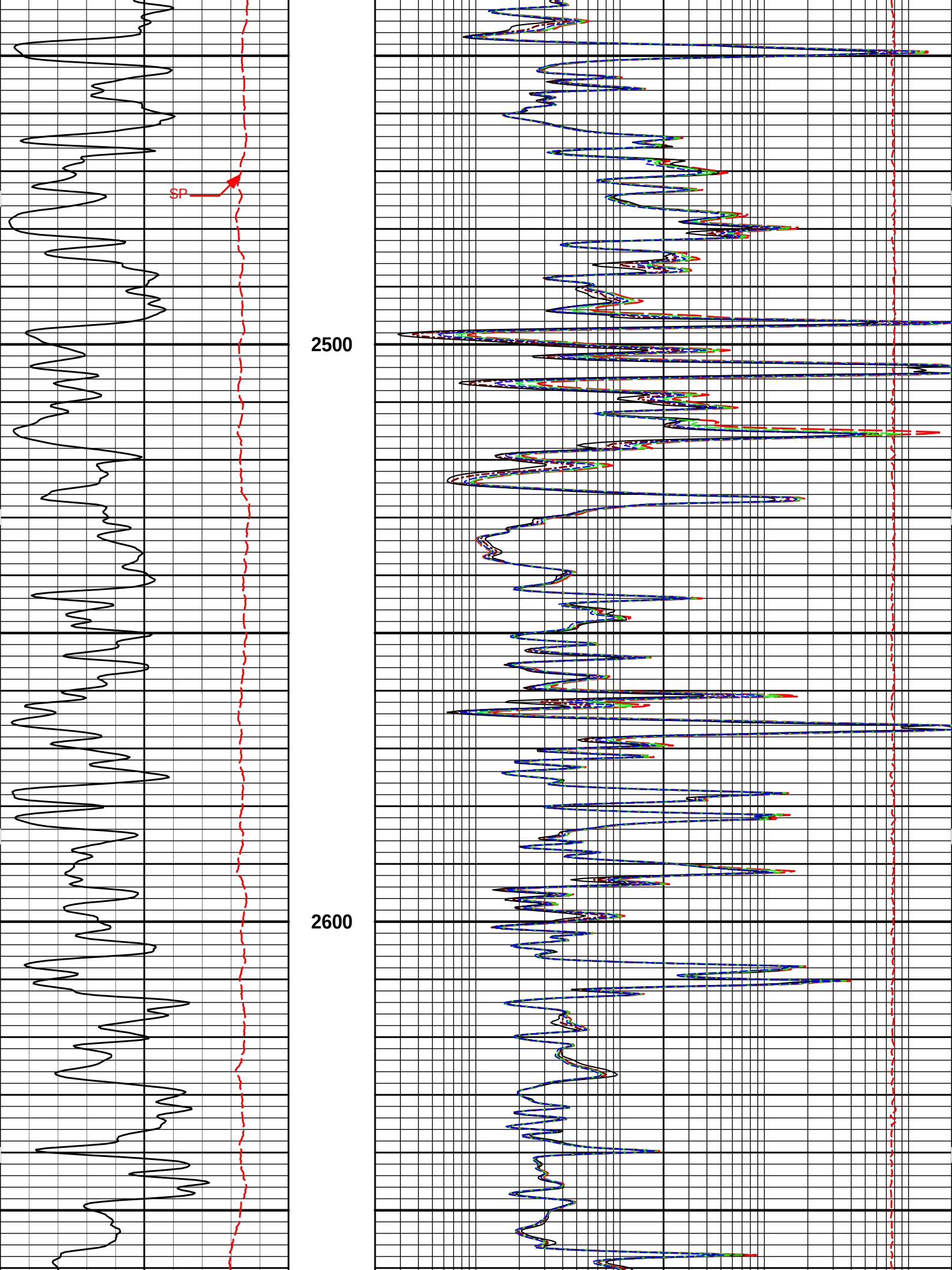
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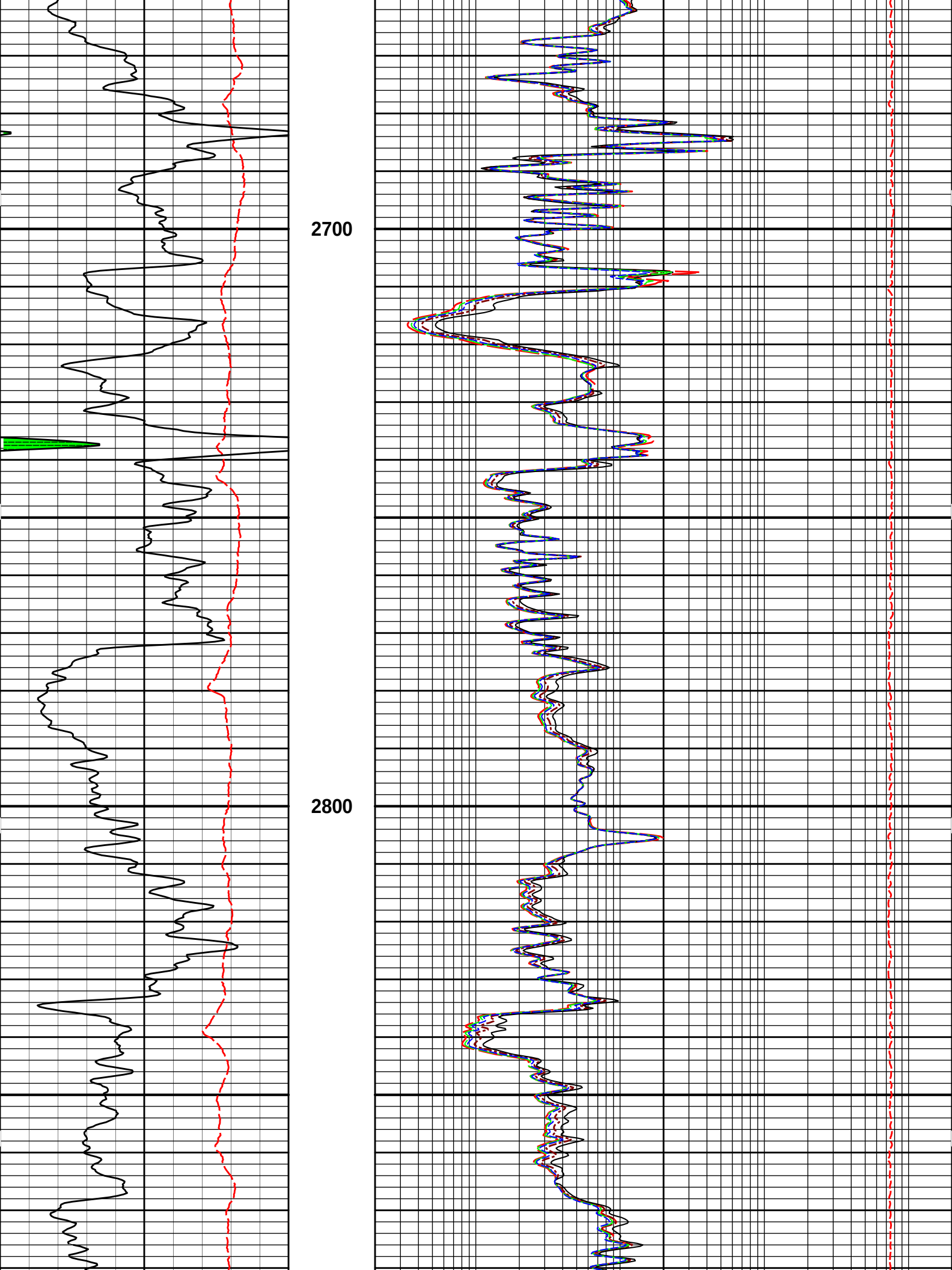
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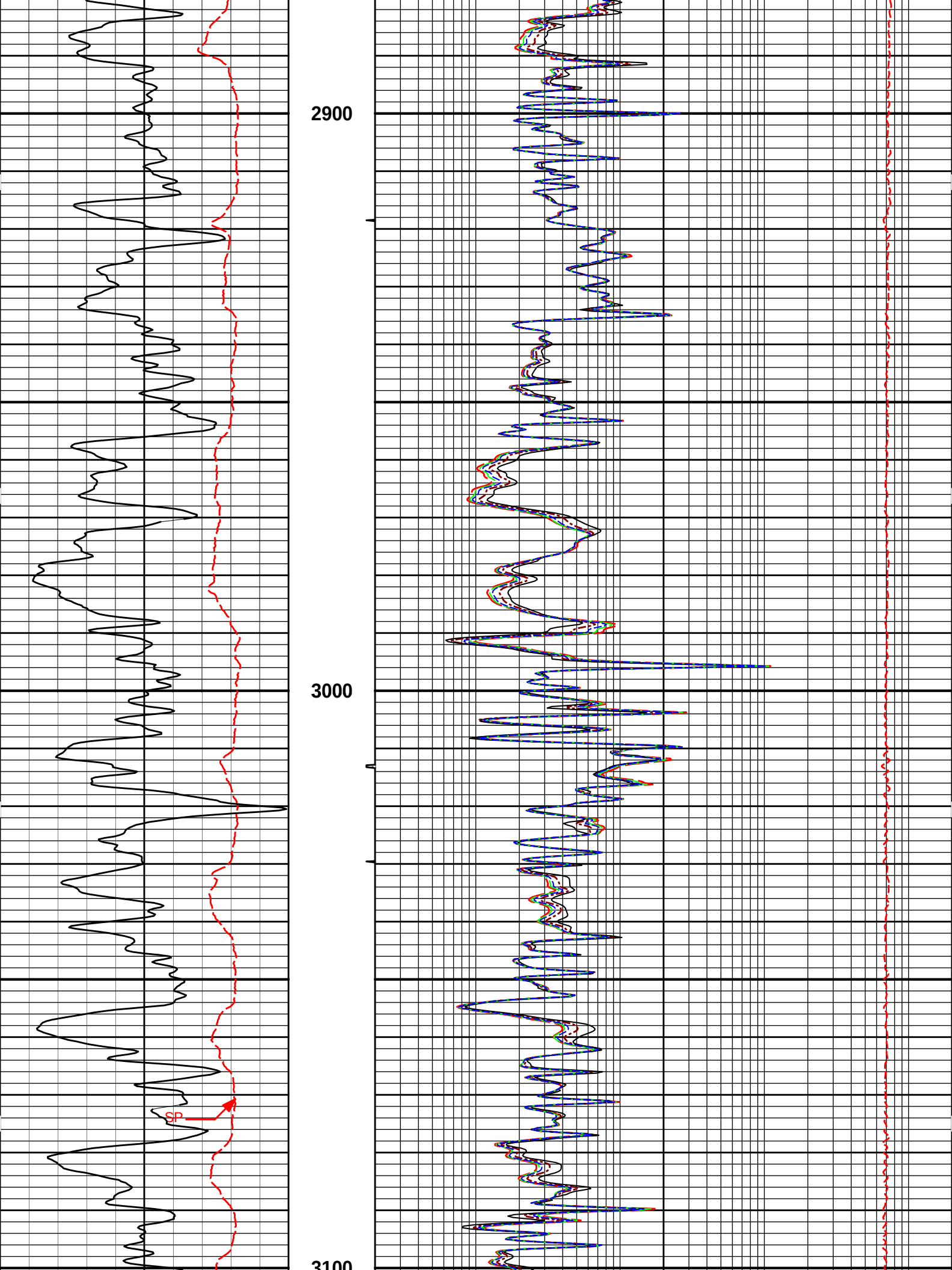
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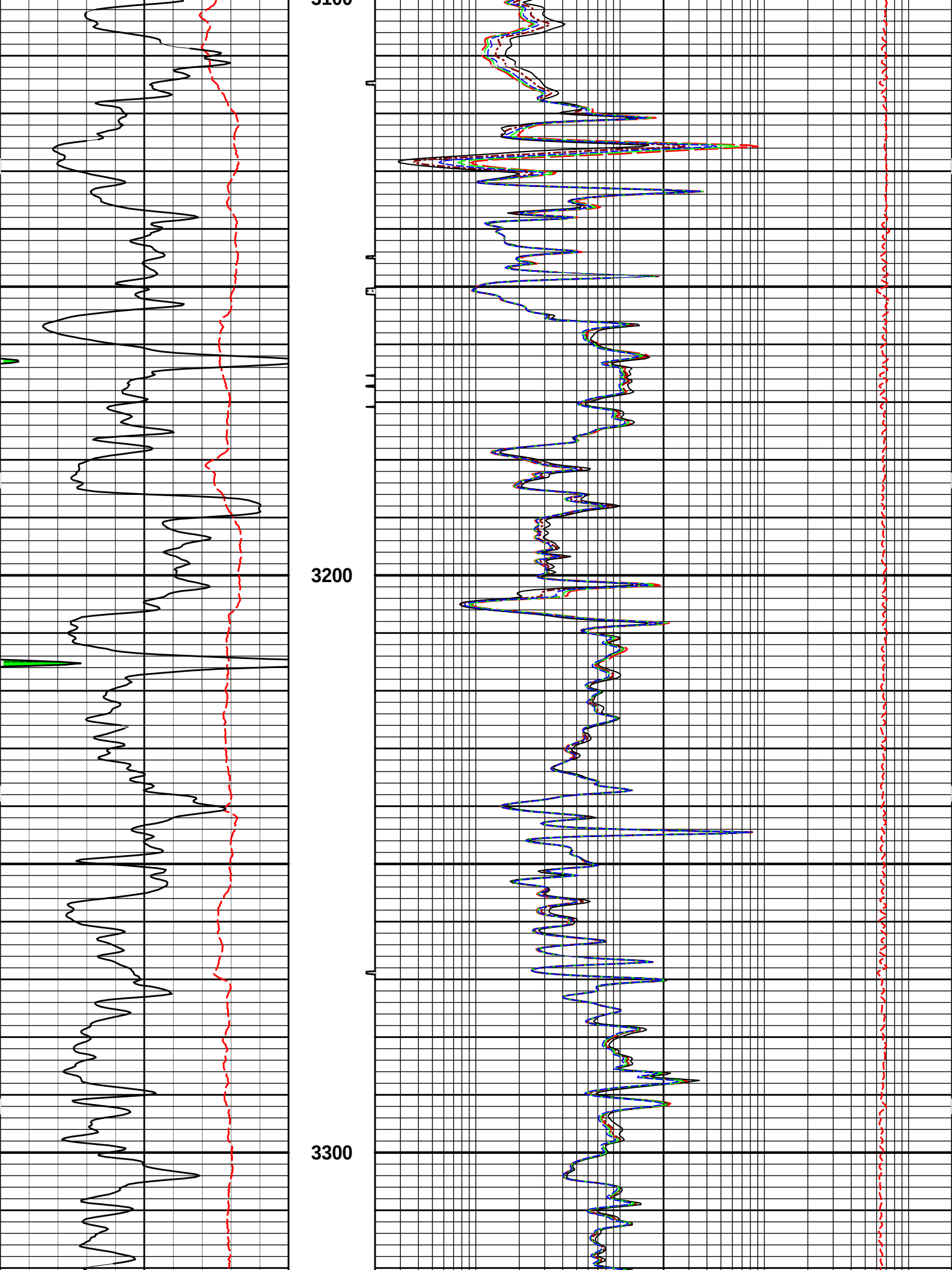
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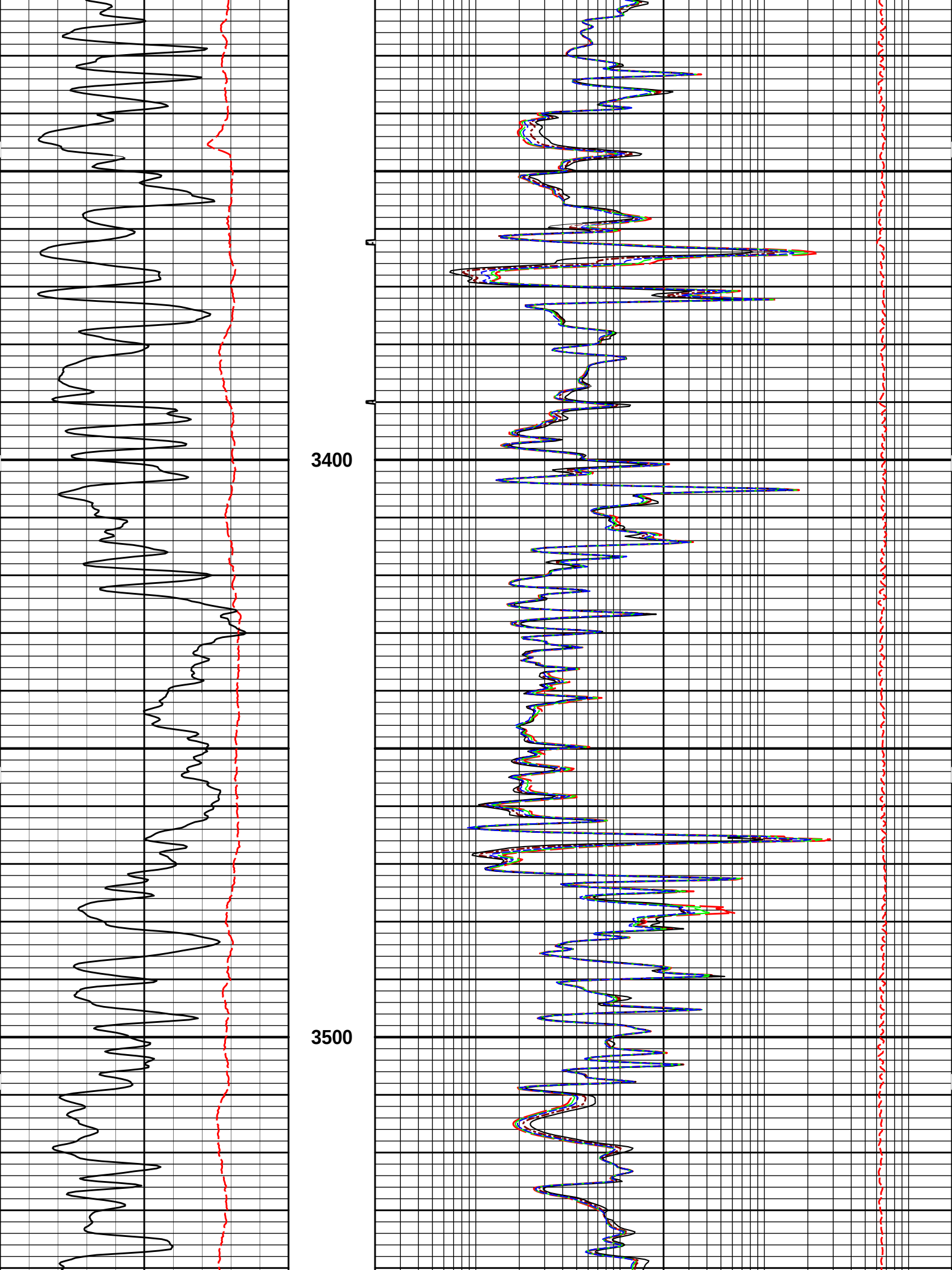
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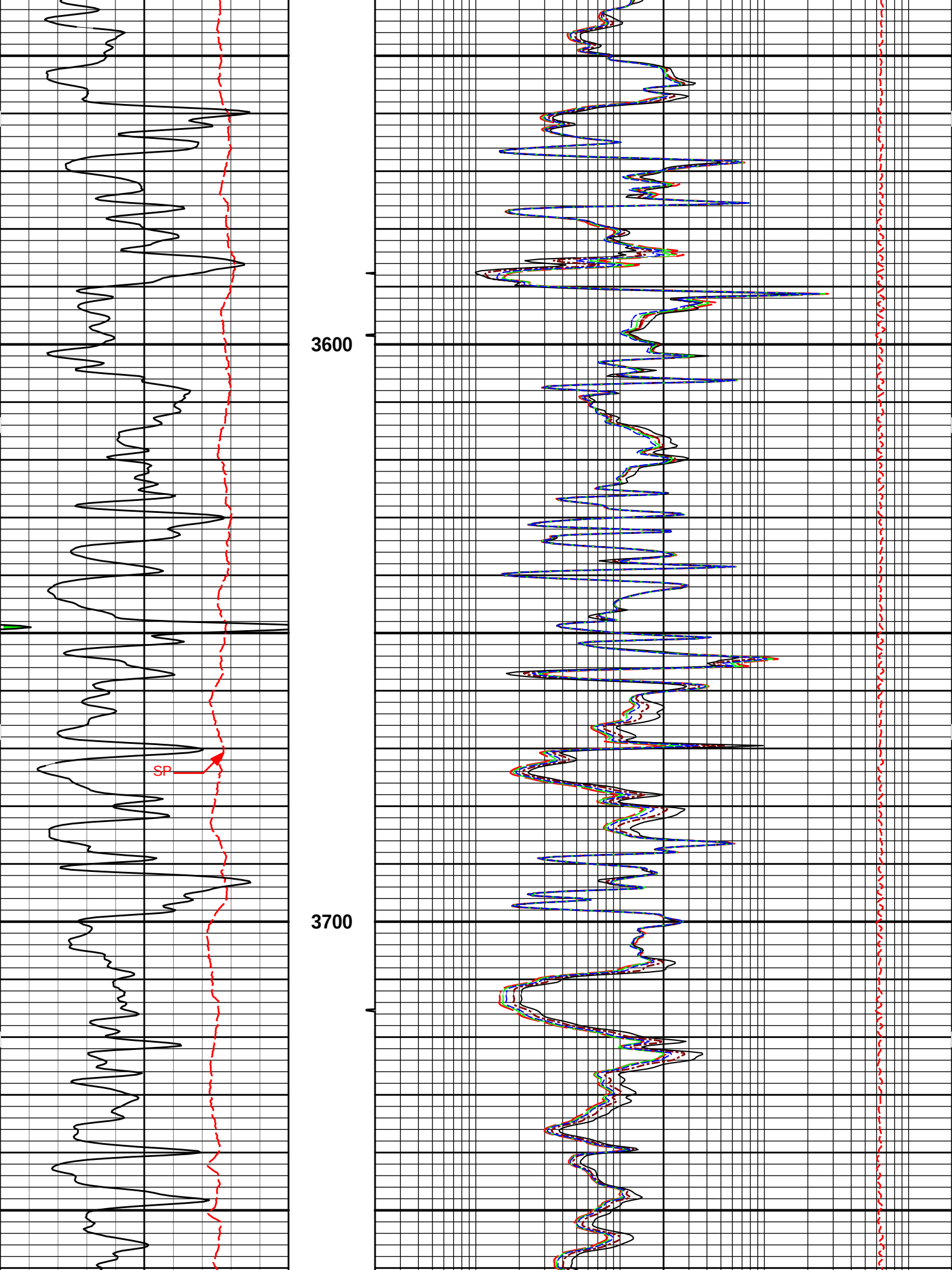
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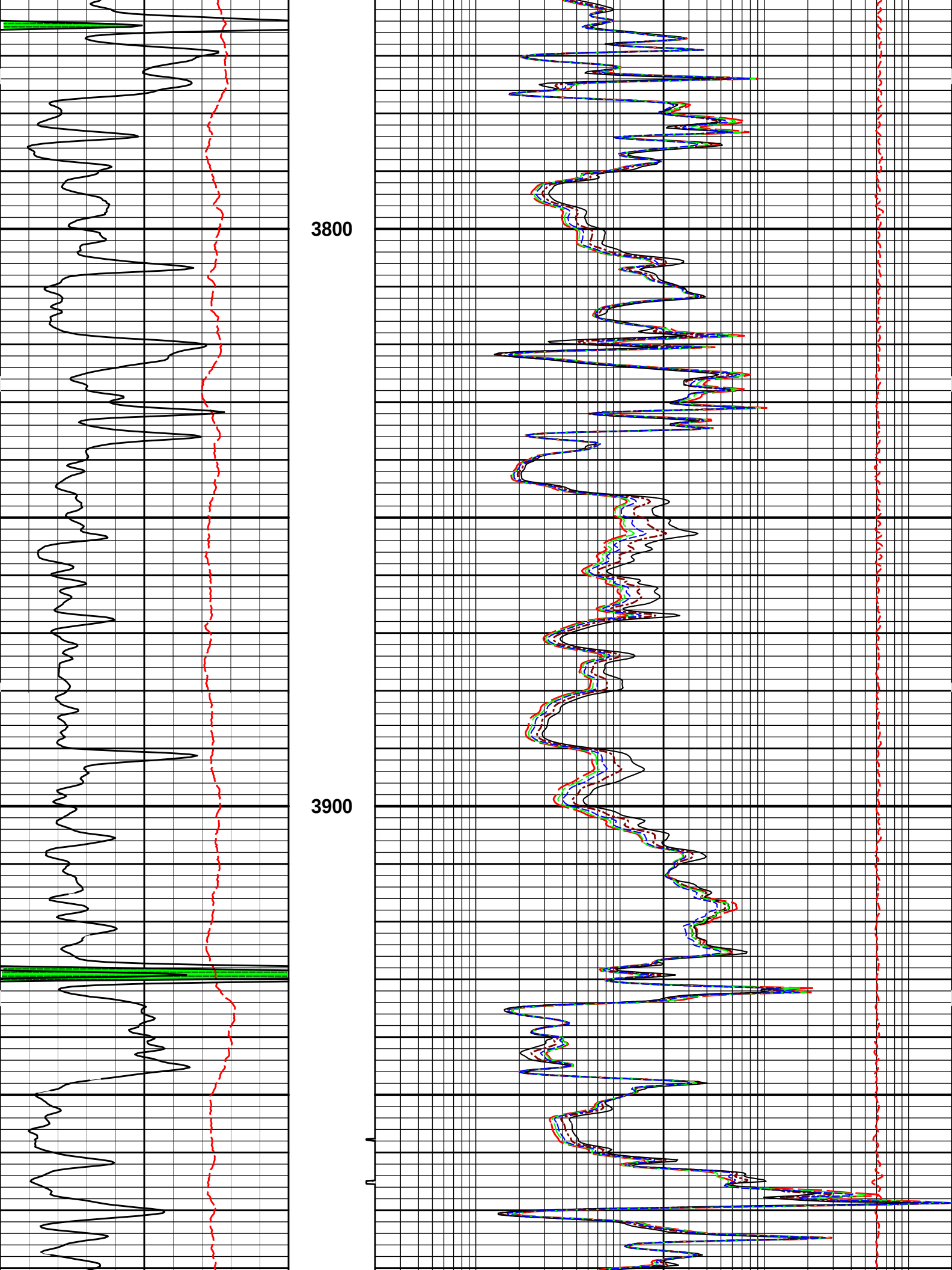
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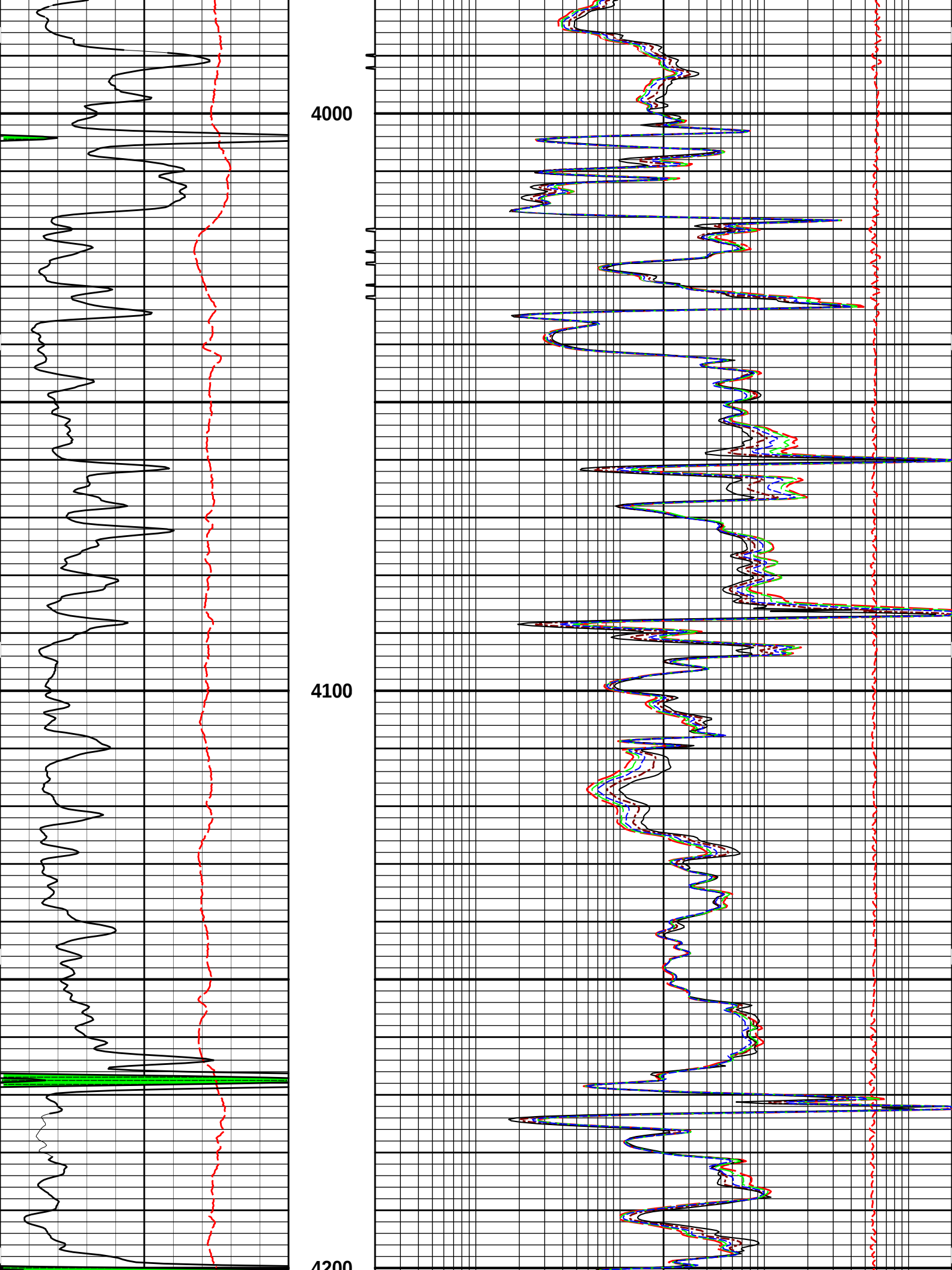
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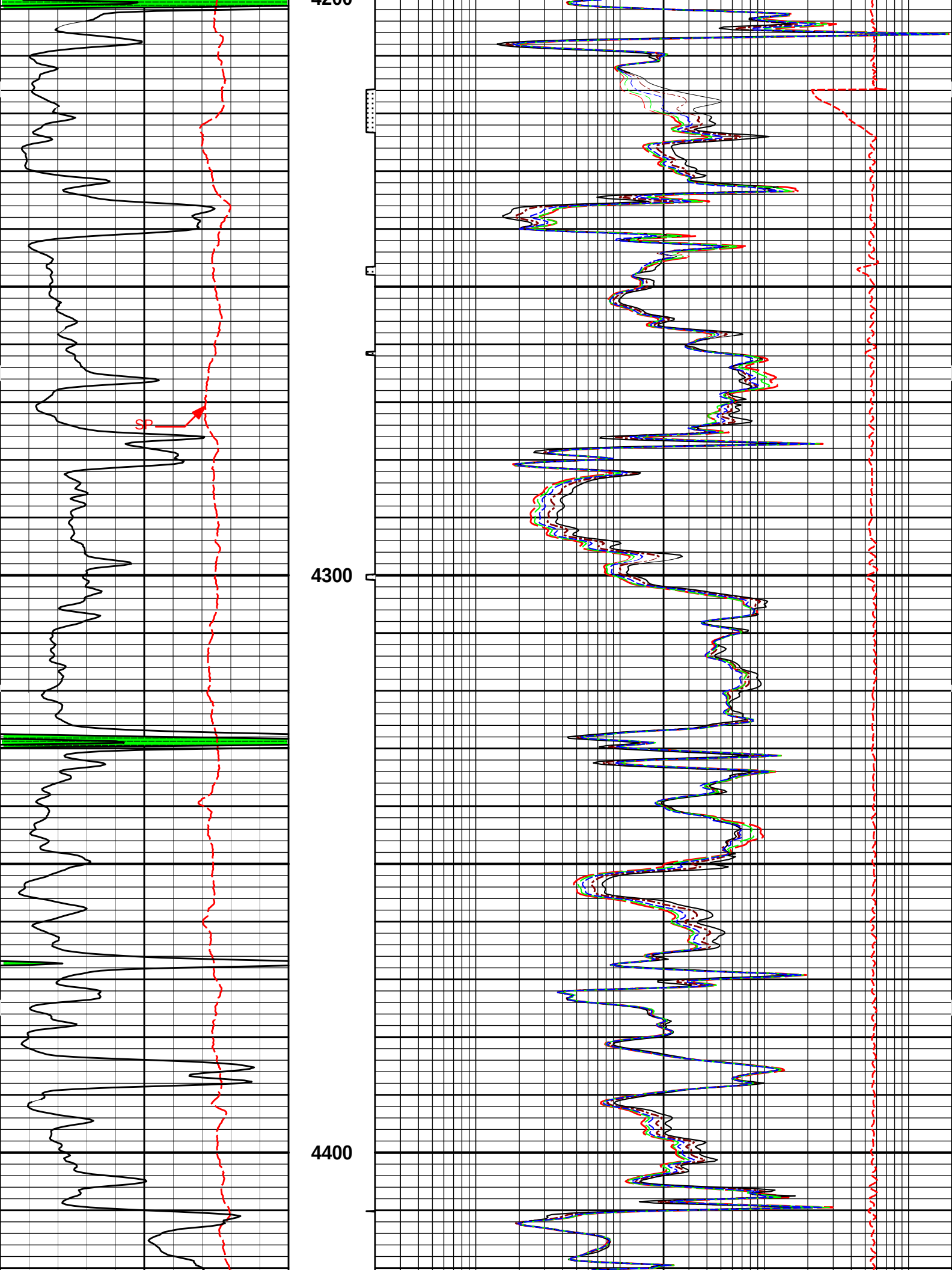
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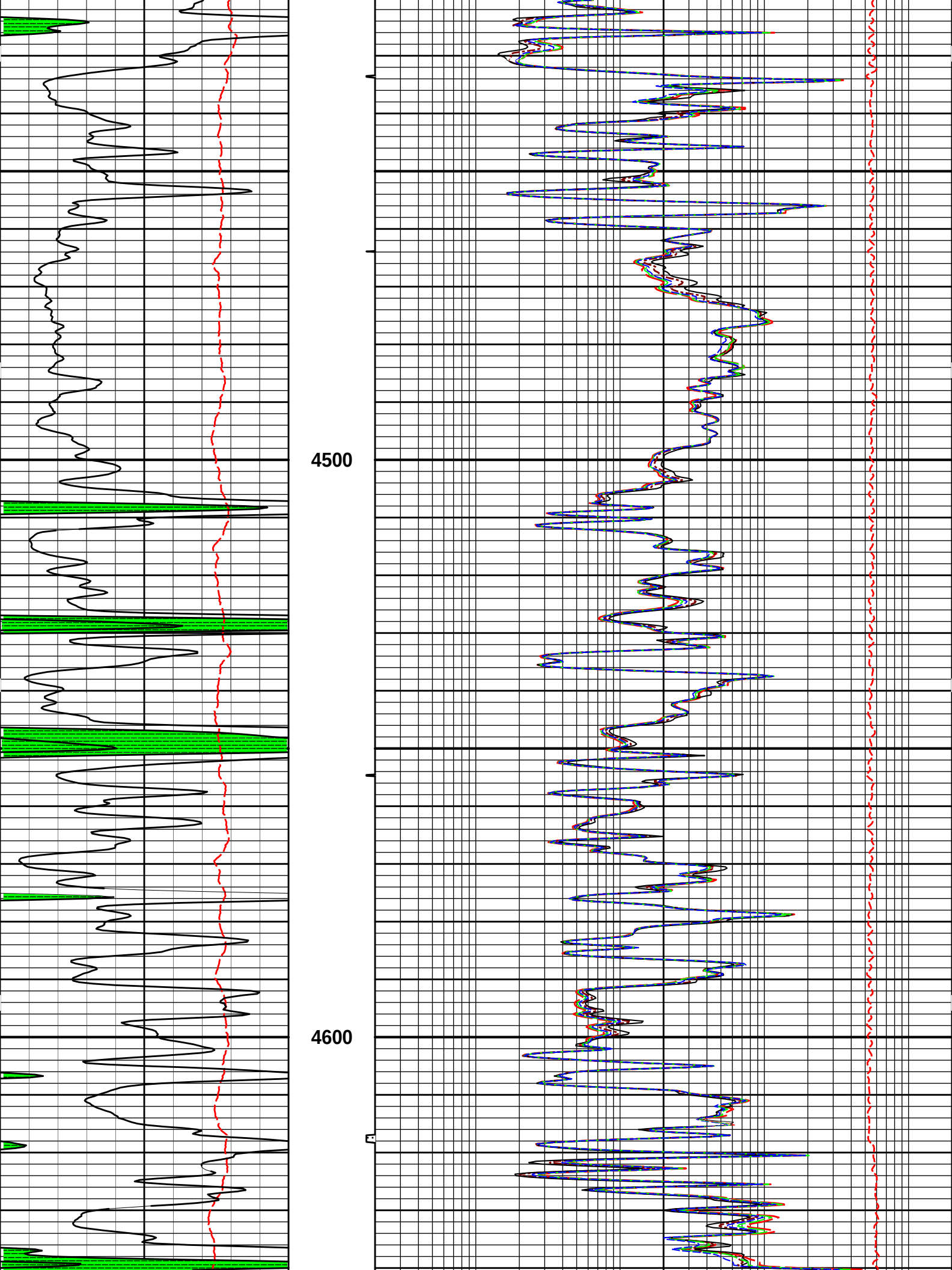
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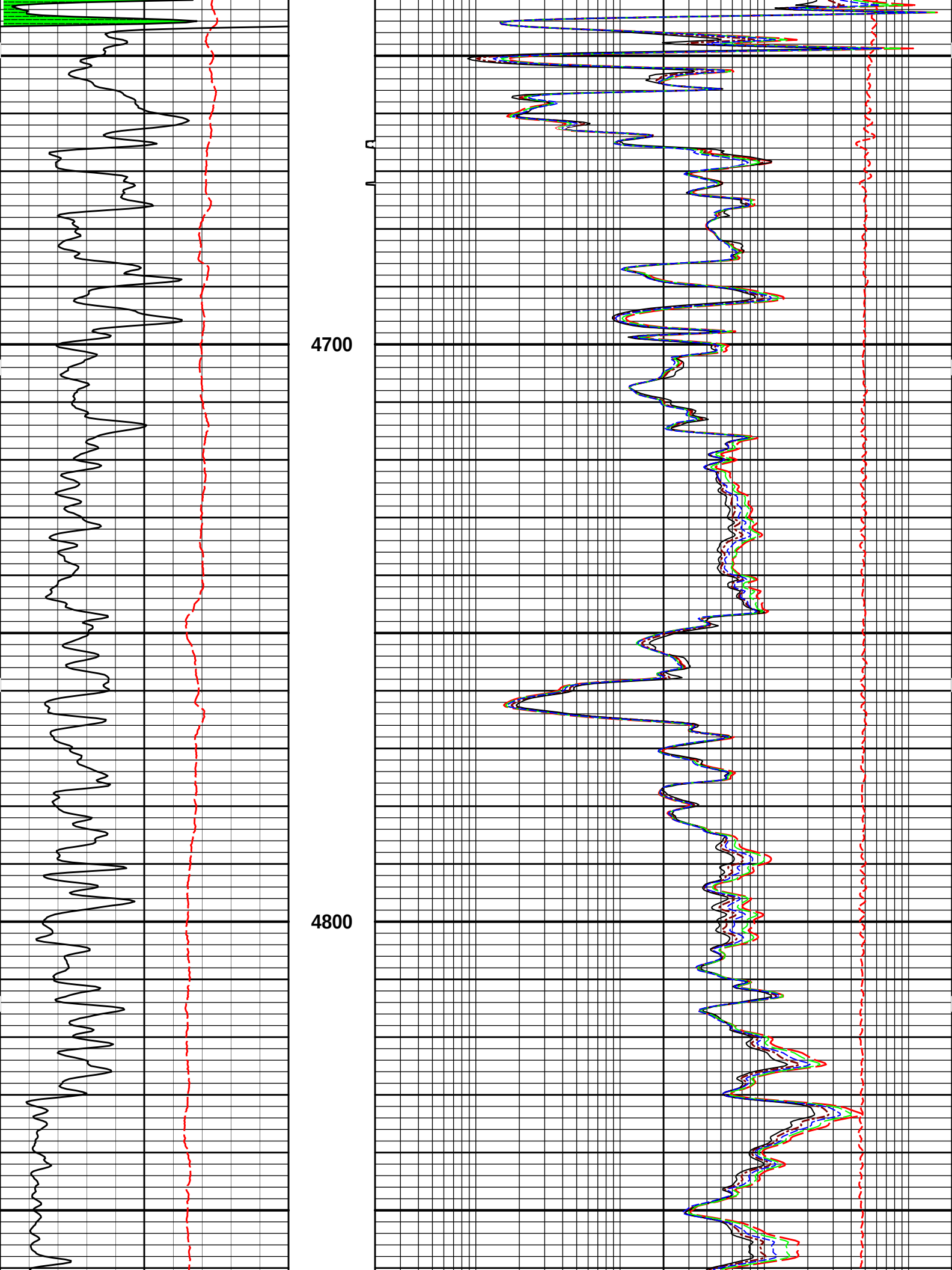
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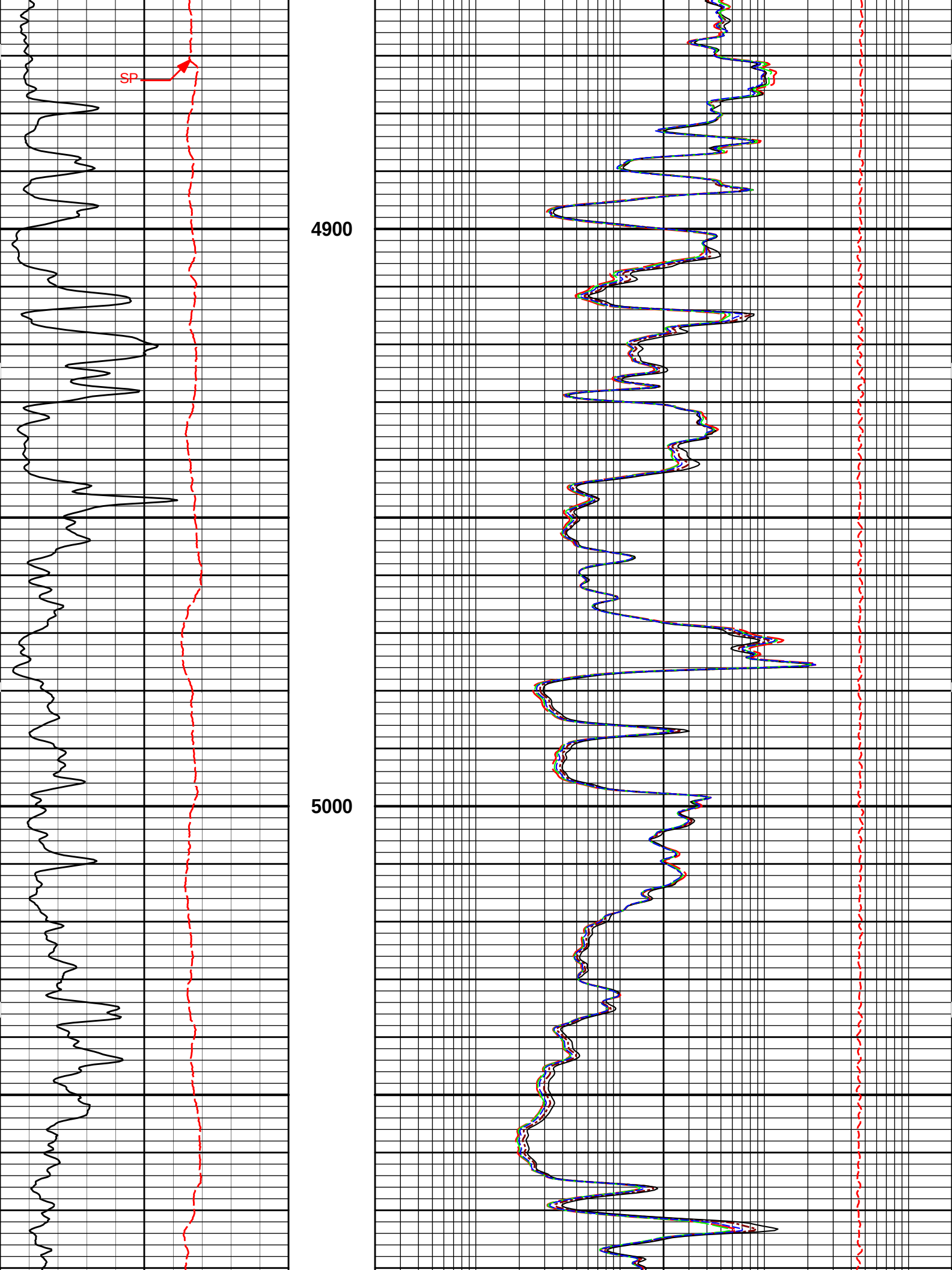
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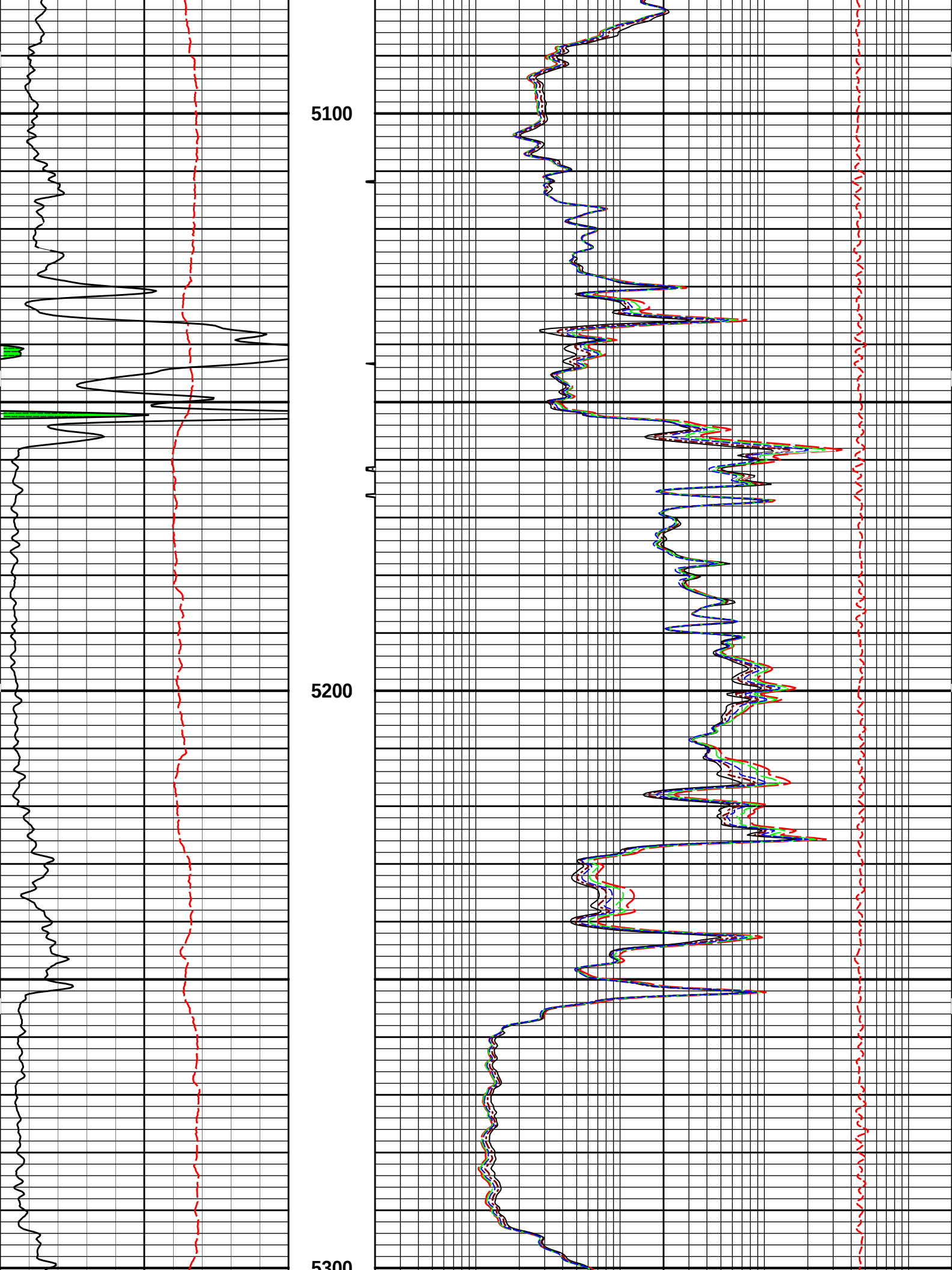
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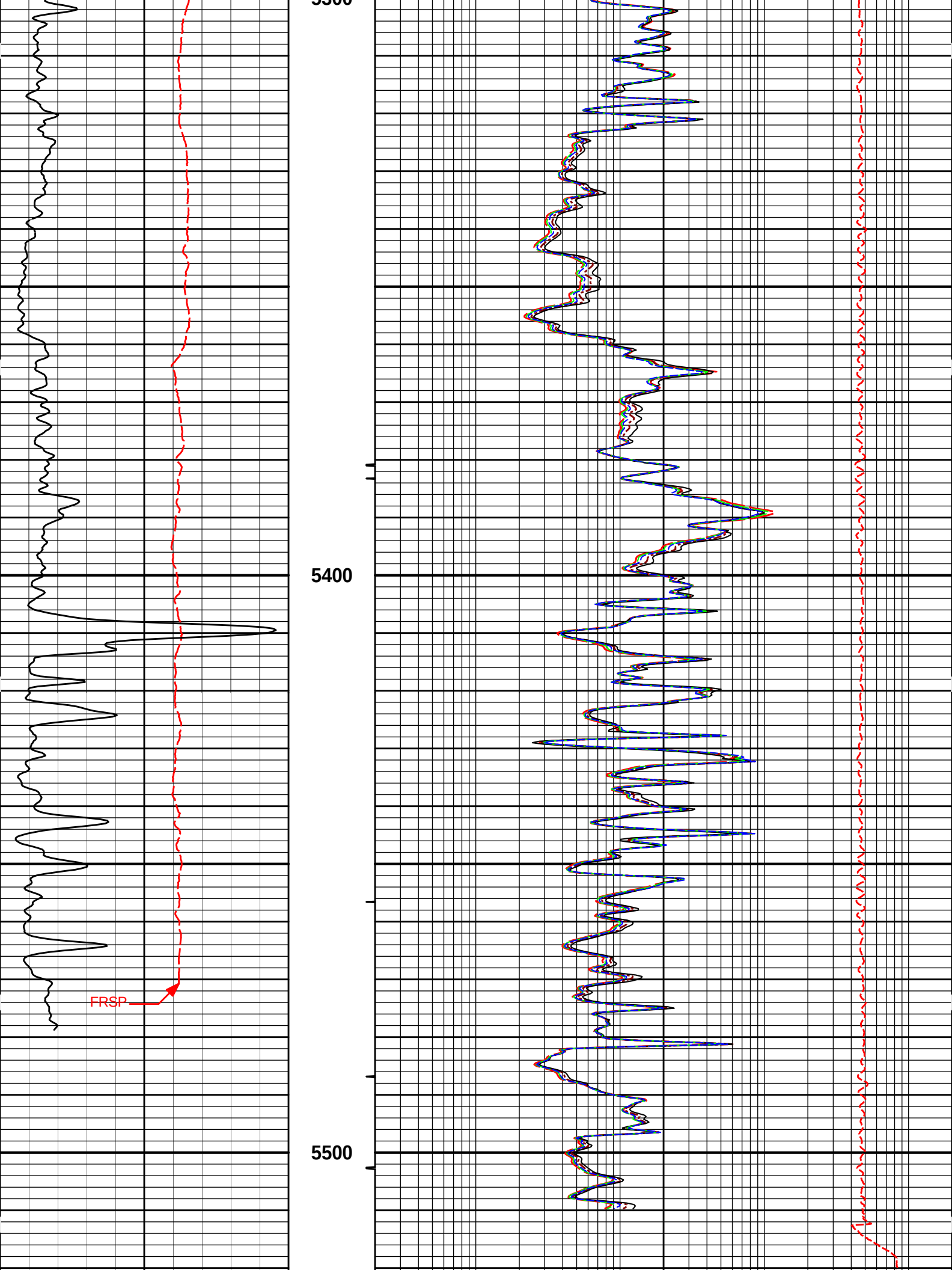
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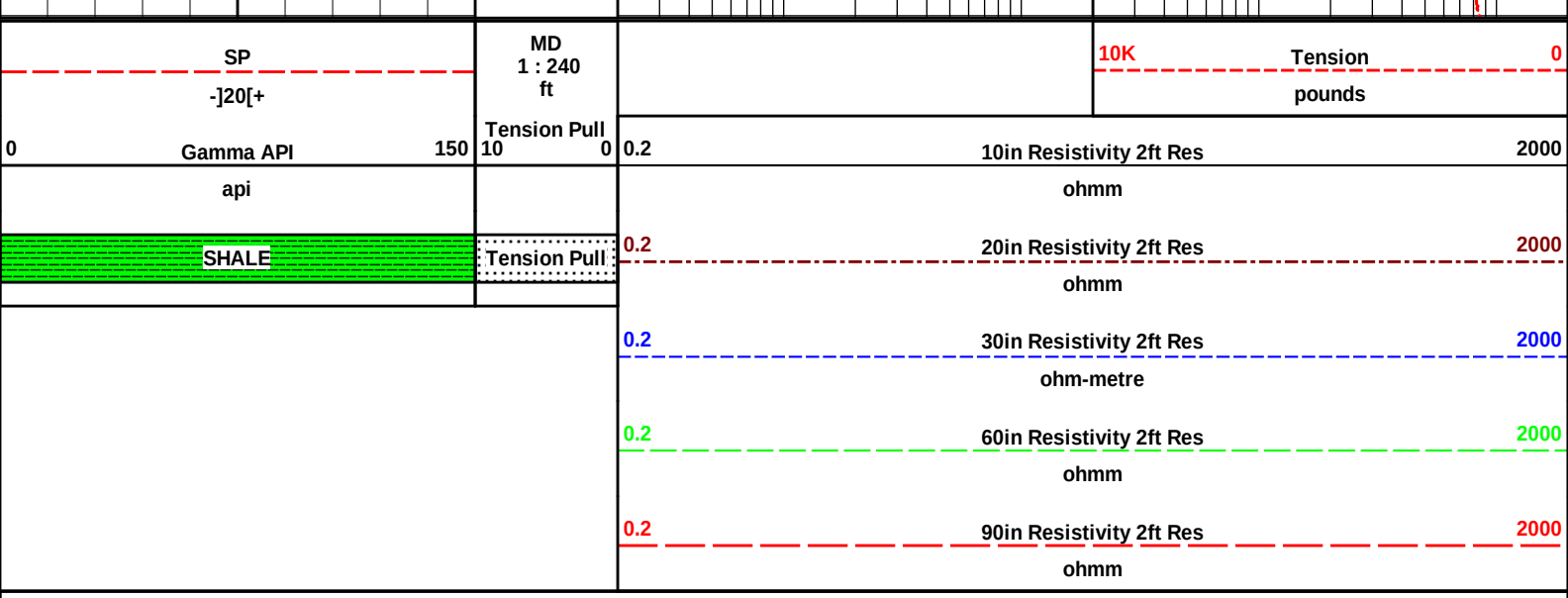


HALLIBURTON

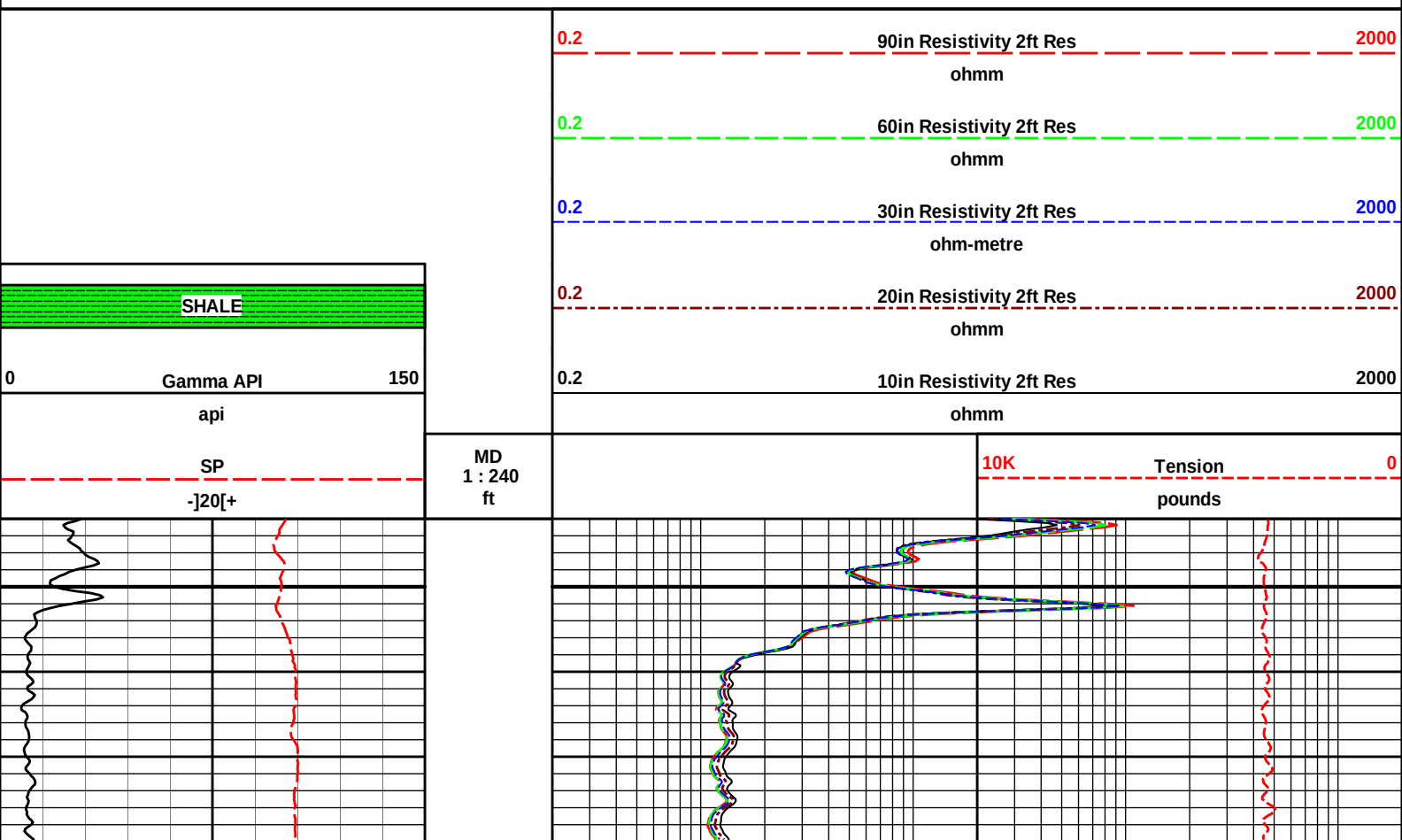
Plot Time: 05-Apr-13 05:56:50
Plot Range: 400 ft to 5522.25 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005\
Plot File: \\-LOCAL-\RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_5_main_lib

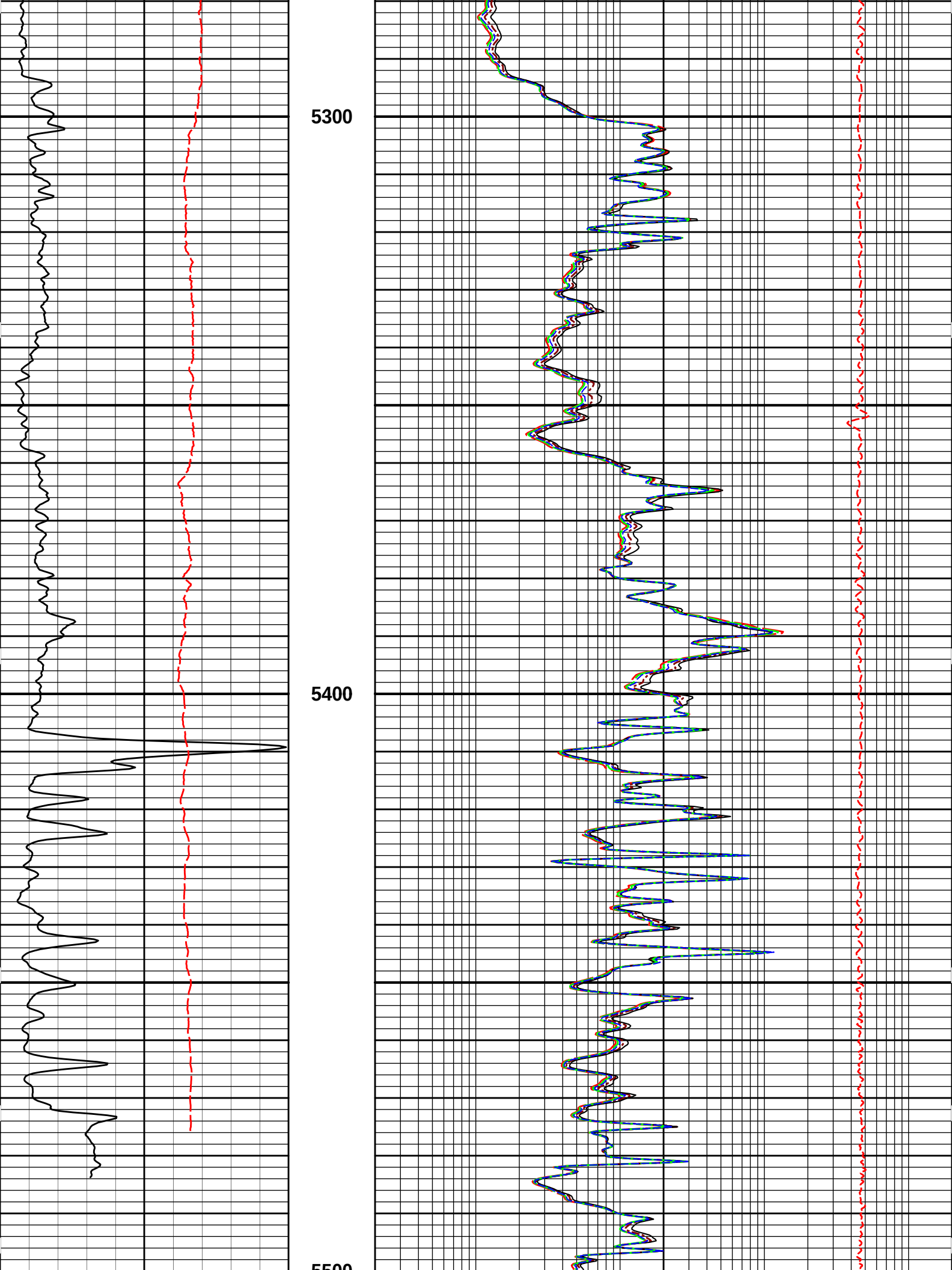
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 05-Apr-13 05:56:50
Plot Range: 5242 ft to 5527.67 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-004\
Plot File: \\-LOCAL-\RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\ACRT\ACRT_5_repeat_lib

REPEAT SECTION

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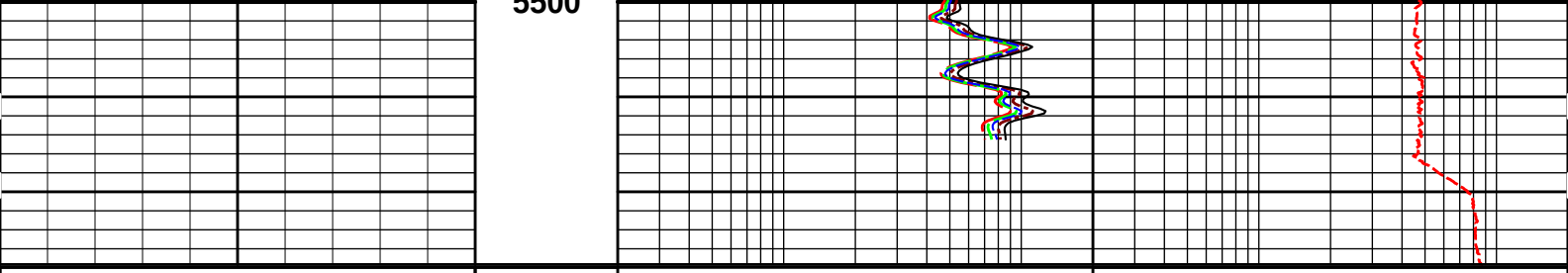

SP
-]20[+
0 Gamma API 150
api
SHALE

MD
1 : 240
ft

10K Tension 0
pounds

0.2 10in Resistivity 2ft Res 2000
ohmm
0.2 20in Resistivity 2ft Res 2000
ohmm
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: 05-Apr-13 05:56:52
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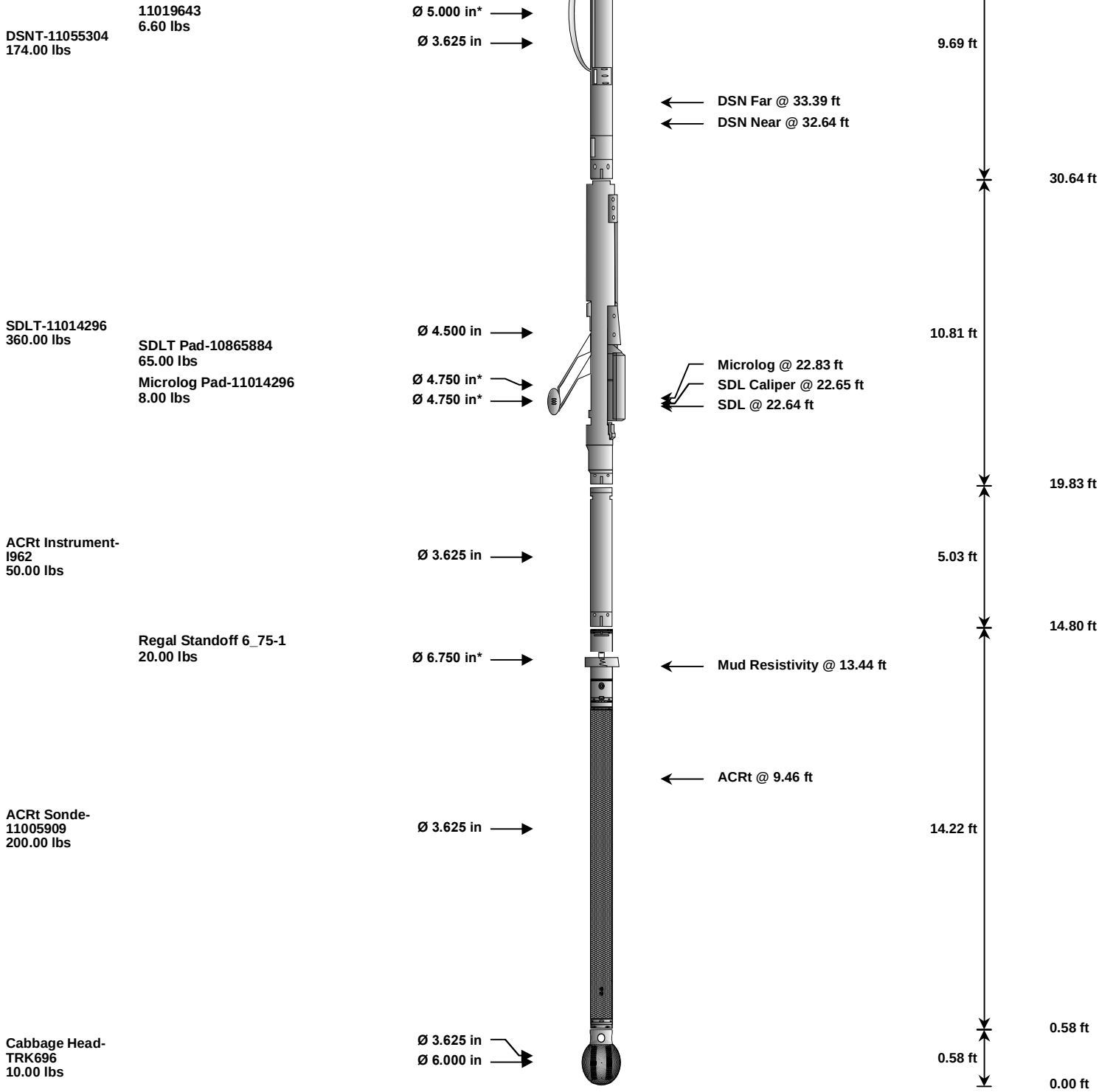
REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						55.62 ft
CH_HOS-CH_696 37.50 lbs		Ø 2.750 in		Temperature @ 54.59 ft	3.03 ft	
						52.59 ft
SP Sub-11441455 60.00 lbs		Ø 3.625 in		SP @ 50.81 ft	3.74 ft	
						48.85 ft
GTET-11039640 165.00 lbs		Ø 3.625 in		GammaRay @ 42.79 ft	8.52 ft	
						40.33 ft
	DSN Decentralizer-					



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
CH_HOS	Hostile Cable Head with Load Cell	CH_696	37.50	3.03		52.59	300.00
SP	SP Sub	11441455	60.00	3.74		48.85	300.00
GTET	Gamma Telemetry Tool	11039640	165.00	8.52		40.33	60.00
DSNT	Dual Spaced Neutron	11055304	174.00	9.69		30.64	60.00
DCNT	DSN Decentralizer	11019643	6.60	5.13	*	33.97	300.00
SDLT	Spectral Density Tool	11014296	360.00	10.81		19.83	60.00
SDLP	Density Insite Pad	10865884	65.00	2.55	*	22.04	60.00
MICP	Microlog Pad	11014296	8.00	1.00	*	22.33	60.00
ACRt	Array Compensated True Resistivity Instrument Section	I962	50.00	5.03		14.80	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11005909	200.00	14.22		0.58	300.00
RSOF	Regal Standoff 6.75in	1	20.00	0.52	*	13.42	300.00
CBHD	Cabbage Head	TRK696	10.00	0.58		0.00	300.00
Total			**1,156.10**	**55.62**			

* Not included in Total Length and Length Accumulation.

Data: RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 05-Apr-13 02:10:16**

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	**GTET - 11039640**	**Reference Calibration Date:**	**14-Jan-13 11:39:27**
Engineer:	**J. BOLLOM**	**Calibration Date:**	**13-Feb-13 13:51:32**
Software Version:	**WL INSITE R3.8.0 (Build 2)**	**Calibration Version:**	**1**

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Measurement	Measured	Calibrated	Units
Background	77.6	79.8	api
Background + Calibrator	339.7	349.5	api
Calibrator	262.1	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11039640**	**Reference Calibration Date:**	**13-Feb-13 13:51:32**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**04-Apr-13 12:20:16**
Software Version:	**WL INSITE R3.8.0 (Build 2)**	**Calibration Version:**	**1**

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	79.8	54.7	api
Background + Calibrator	349.5	332.0	api
Calibrator	269.6	277.3	api

Shop	Field	Difference	Tolerance
269.6	277.3	-7.7	+/- 9.00

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name:	**ACRt Sonde - 11005909**	**Reference Calibration Date:**	**31-Jan-13 14:33:59**
Engineer:	**J. BOLLOM**	**Calibration Date:**	**02-Mar-13 10:26:52**
Software Version:	**WL INSITE R3.8.0 (Build 2)**	**Calibration Version:**	**1**
Host Tool Name:	**ACRt Instrument - I962**		

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	1.01	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	1.00	1.05	0.95	1.00	1.05	0.95	1.00	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.00	1.05	0.95	1.00	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.99	1.05	0.95	0.99	1.05

TYPICAL SONDE OFFSET RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper

	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-0.55	2	-6	-3.56	-2	-8	-5.10	-2
A2 (50")	-7	-1.61	0	-7	-3.49	0	-7	-4.59	0
A3 (29")	-27	-14.61	-9	-9	-4.71	-3	-7	-2.75	-1
A4 (17")	-180	-100.99	-60	-45	-30.69	-15	-39	-25.67	-13
A5 (10")	N/A	N/A	N/A	-150	-99.76	-50	-80	-45.18	-10
A6 (6")	N/A	N/A	N/A	175	288.01	525	90	152.36	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.87	1.3
36K	1.0	1.35	2.0
72K	1.0	1.58	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
GTET-11039640						
Gamma Ray Calibrator	269.6	277.3	----------	-7.7	+/- 9.00	api
ACRt Sonde-11005909						
Mud Cell	1.00	----------	----------	0.00	----------	ohm-m

Data: RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 05-Apr-13 02:18:30**

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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	8.500	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	5595.00	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	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?	No	
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

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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	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	50.81	NO	
SP	Spontaneous Potential	50.81	BLK	1.250
SPR	Raw Spontaneous Potential	50.81	NO	
SPO	Spontaneous Potential Offset	50.81	NO	
GTET				
TPUL	Tension Pull	42.79	NO	
GR	Natural Gamma Ray API	42.79	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	42.79	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	42.79	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	32.54	NO	
RNDS	Near Detector Telemetry Counts	32.64	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.39	TRI	0.583
DNTT	DSN Tool Temperature	32.64	NO	
DSNS	DSN Tool Status	32.54	NO	
ERND	Near Detector Telemetry Counts EVR	32.64	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.39	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.64	NO	
SDLT				
TPUL	Tension Pull	22.65	NO	
PCAL	Pad Caliper	22.65	TRI	0.250
ACAL	Arm Caliper	22.65	TRI	0.250
ACRt Sonde				
TPUL	Tension Pull	2.97	NO	
F1R1	ACRT 12KHz - 80in R value	9.22	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	9.22	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.72	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.72	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	5.22	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	5.22	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	4.22	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	4.22	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.72	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.72	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.47	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.47	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	9.22	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	9.22	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.72	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.72	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	5.22	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	5.22	BLK	0.000

F2R4	ACRT 36KHz - 17in R value	4.22	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	4.22	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.72	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.72	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.47	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.47	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	9.22	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	9.22	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.72	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.72	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	5.22	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	4.22	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	4.22	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.72	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.72	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.47	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.47	BLK	0.000
RMUD	Mud Resistivity	12.76	BLK	0.000
F1RT	Transmitter Current Raw 12K X Receiver	2.97	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.97	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.97	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.97	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.97	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.97	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.97	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.97	BLK	0.000
ITMP	Instrument Temperature	2.97	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.97	NO	
TIDV	Instrument Temperature Derivative	2.97	NO	
TUDV	Upper Temperature Derivative	2.97	NO	
TLDV	Lower Temperature Derivative	2.97	NO	
TRBD	Receiver Board Temperature	2.97	NO	

SDLT Pad				
TPUL	Tension Pull	22.64	NO	
NAB	Near Above	22.46	BLK	0.920
NHI	Near Cesium High	22.46	BLK	0.920
NLO	Near Cesium Low	22.46	BLK	0.920
NVA	Near Valley	22.46	BLK	0.920
NBA	Near Barite	22.46	BLK	0.920
NDE	Near Density	22.46	BLK	0.920
NPK	Near Peak	22.46	BLK	0.920
NLI	Near Lithology	22.46	BLK	0.920
NBAU	Near Barite Unfiltered	22.46	BLK	0.250
NLIU	Near Lithology Unfiltered	22.46	BLK	0.250
FAB	Far Above	22.81	BLK	0.250
FHI	Far Cesium High	22.81	BLK	0.250
FLO	Far Cesium Low	22.81	BLK	0.250
FVA	Far Valley	22.81	BLK	0.250
FBA	Far Barite	22.81	BLK	0.250
FDE	Far Density	22.81	BLK	0.250
FPK	Far Peak	22.81	BLK	0.250
FLI	Far Lithology	22.81	BLK	0.250
PTMP	Pad Temperature	22.65	BLK	0.920

NHV	Near Detector High Voltage	22.04	NO	
FHV	Far Detector High Voltage	22.04	NO	
ITMP	Instrument Temperature	22.04	NO	
DDHV	Detector High Voltage	22.04	NO	

Microlog Pad

TPUL	Tension Pull	22.83	NO	
MINV	Microlog Lateral	22.83	BLK	0.750
MNOR	Microlog Normal	22.83	BLK	0.750

Data: RENEE_2230_1_2\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 05-Apr-13 02:21:42**

COMPANY	**SANDRIDGE EXPLORATION**
WELL	**RENEE 2230 1-2**
FIELD	**STUART**
COUNTY	**FINNEY** STATE **KANSAS**

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ARRAY COMPENSATED TRUE RESISTIVITY LOG

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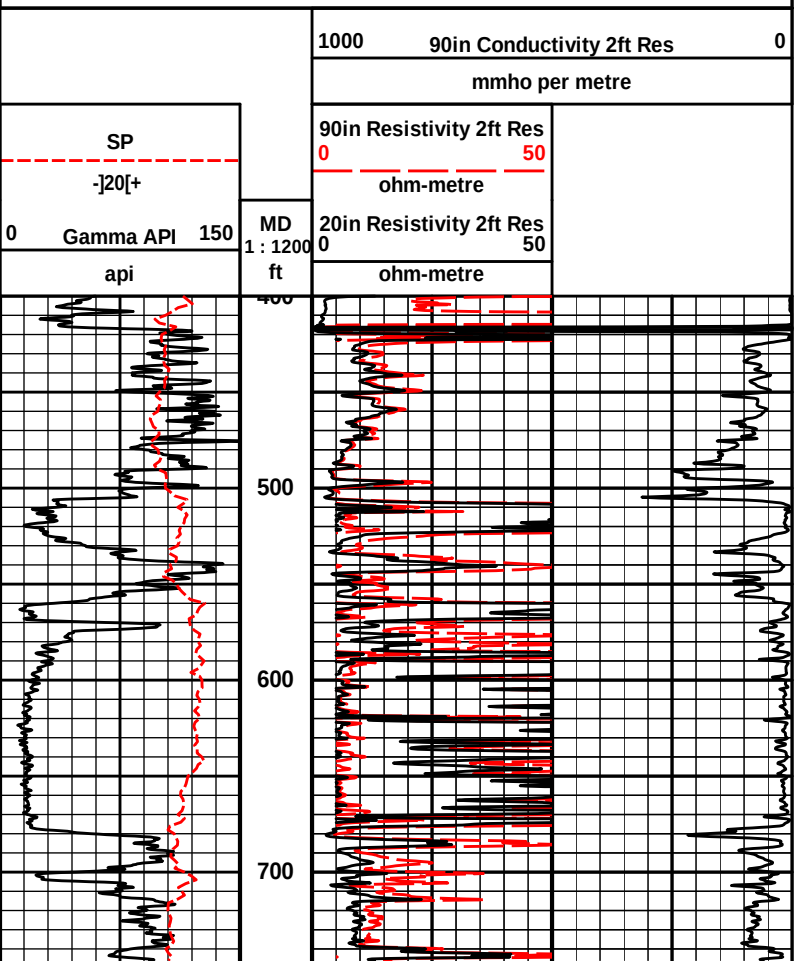
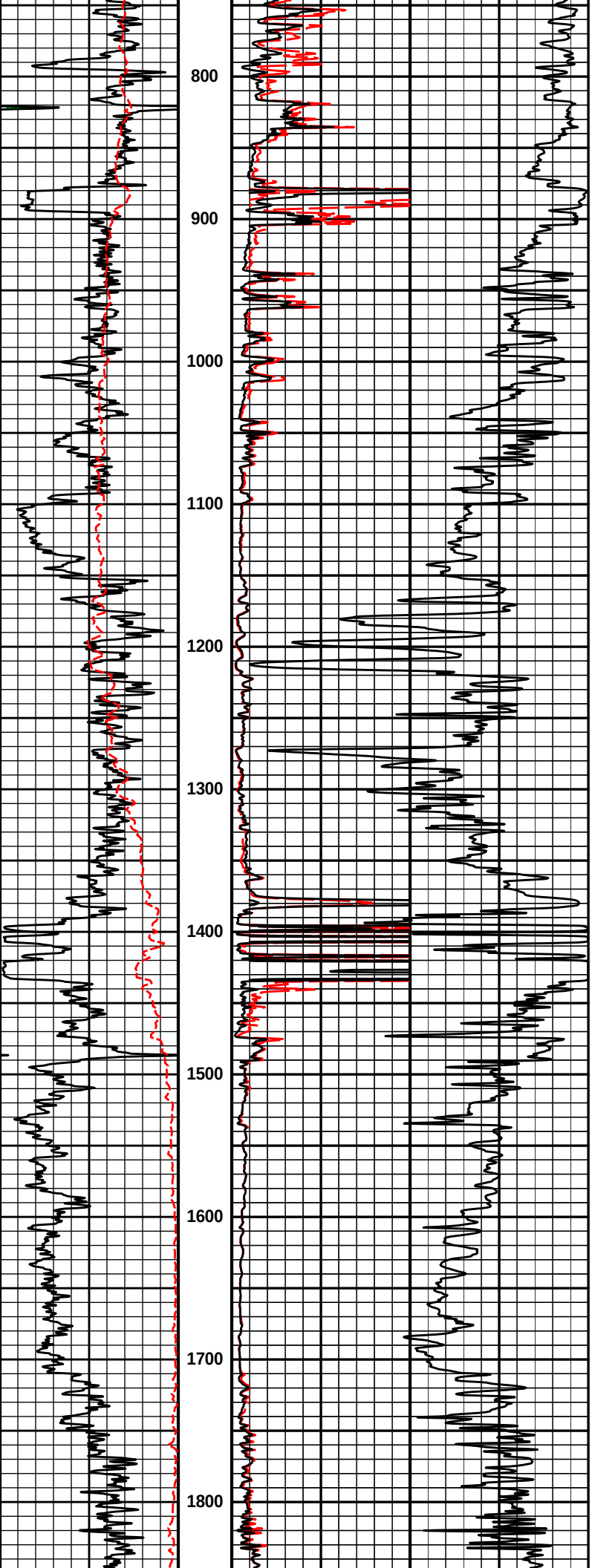
Plot Time: 05-Apr-13 05:56:52
Plot Range: 400 ft to 5509.75 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005
Plot File: \\-LOCAL-\RENEE_2230_1_2\...\ACRT_1_lib

1 INCH MAIN LOG

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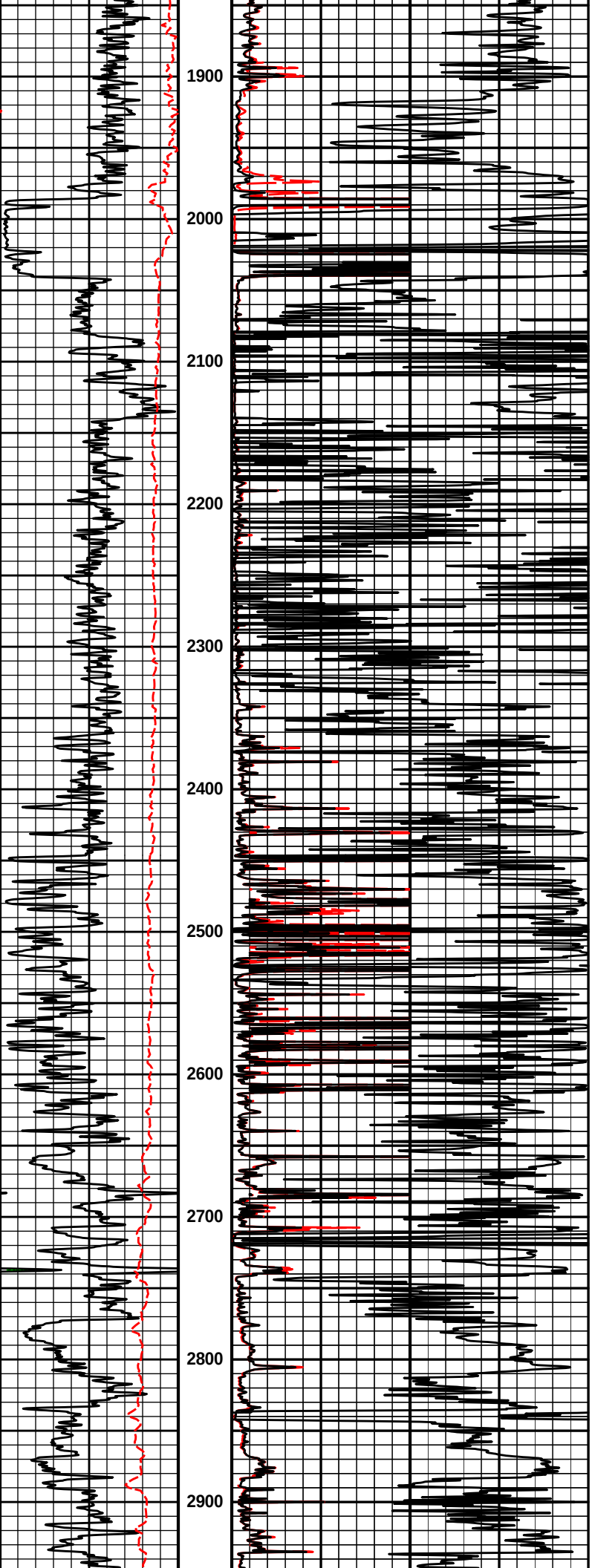
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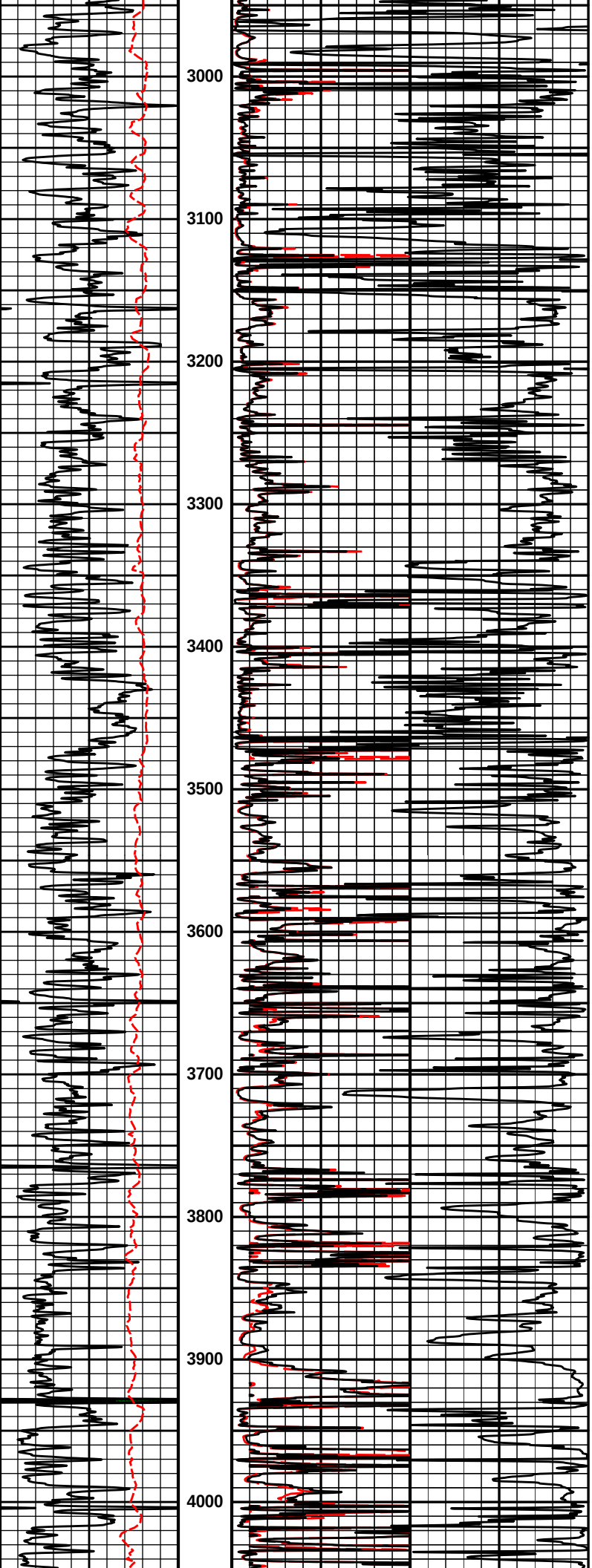
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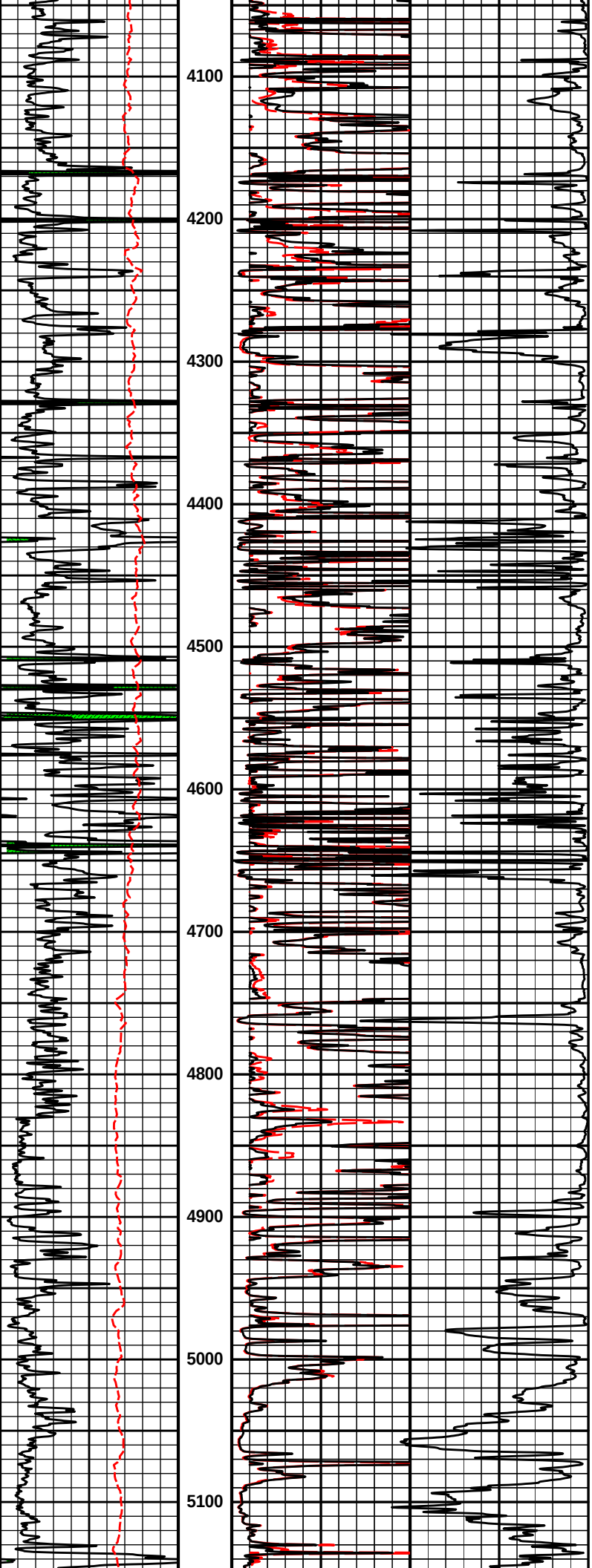
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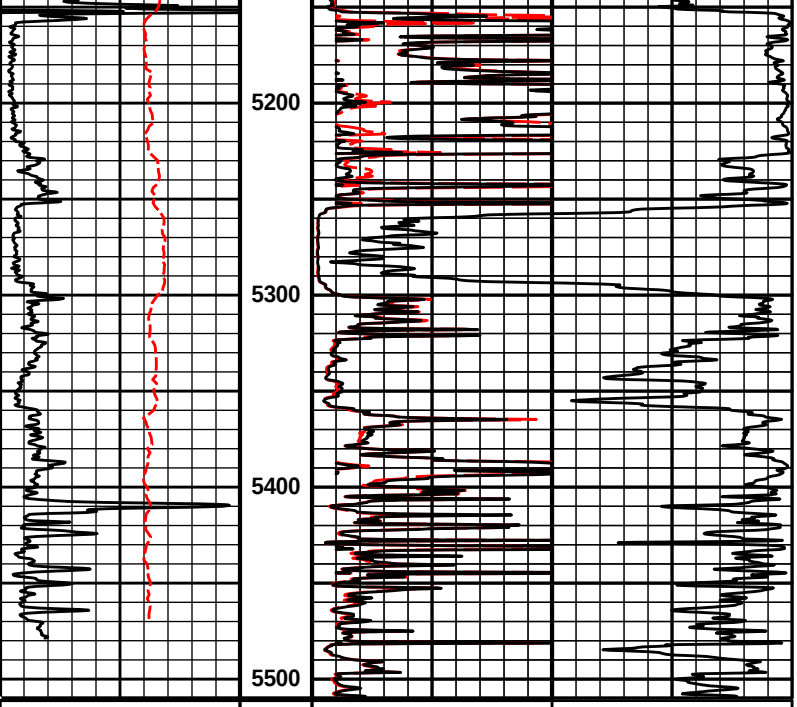

0 Gamma API 150	MD 1 : 1200 ft	20in Resistivity 2ft Res 0 50
api		ohm-metre
SP		90in Resistivity 2ft Res 0 50
-]20[+		ohm-metre
		1000 90in Conductivity 2ft Res 0
		mmho per metre

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Plot Time: 05-Apr-13 05:56:55
Plot Range: 400 ft to 5509.75 ft
Data: RENEE_2230_1_2\Well Based\DAQ-0001-005\
Plot File: \\-LOCAL-\RENEE_2230_1_2\...\ACRT_1_lib

1 INCH MAIN LOG