HALLIBURTON

ARRAY COMPENSATED TRUE RESISTIVITY LOG

COMPANY	SANDRIDGE ENERGY
WELL	ALEXANDER 3114 1-1
FIELD/BLOCK	SKINNER
COUNTY	BARBER
STATE	KANSAS

COMPANY	SANDRIDGE ENERGY		
WELL	ALEXANDER 3114 1-1		
FIELD/BLOCK	SKINNER		
COUNTY	BARBER	STATE	KANSAS

API No. 15007241200000

Location SW-SW-SE-SE 200' FSL 1056' FEL

Other Services: MICRO DSNT/SDLT CSNG MRIL

Sect. 1 Twp. 31S Rge. 14W

Permanent Datum	GL	Elev. 1668.0 ft	Elev.: K.B.	1685.0 ft
Log measured from	KB	, 17.0 ft above perm. Datum	D.F.	1683.0 ft
Drilling measured from	KB		G.L.	1668.0 ft

Date		02-Feb-14					
Run No.		ONE					
Depth - Driller		4782.00 ft					
Depth - Logger		4776.0 ft					
Bottom - Logged Interval		4766.0 ft					
Top - Logged Interval		1048.0 ft					
Casing - Driller		9.625 in @ 1052.0 ft		@		@	
Casing - Logger		1048.0 ft					
Bit Size		8.750 in		@		@	
Type Fluid in Hole		WATER BASED MUD					
Density	Viscosity	9.3 ppg	50.00 s/qt				
PH	Fluid Loss	10.50 pH	5.2 cptm				
Source of Sample		MUD PIT					
Rm @ Meas. Temperature		0.450 ohmm @ 60.00 degF		@		@	
Rmf @ Meas. Temperature		0.40 ohmm @ 60.00 degF		@		@	
Rmc @ Meas. Temperature		0.520 ohmm @ 60.00 degF		@		@	
Source Rmf	Rmc	MEASURED	MEASURED				
Rm @ BHT		0.26 ohmm @ 108.0 degF		@		@	
Time Since Circulation		5.0 hr					
Time on Bottom		03-Feb-14 03:50					
Max. Rec. Temperature		108.0 degF @ 4776.0 ft		@		@	
Equipment	Location	11072142	LIBERAL				
Recorded By		THOMAS HYDE					
Witnessed By		B. TOMLISON		T. BOARDMAN			

Fold here

Service Ticket No.: 901088163 API Serial No.: 15007241200000 PGM Version: WL INSITE R3.8.4 (Build 5)

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
	I11055059			
	S11038385			

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.	
Serial No.	11021139	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	18'	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	4776	1048	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks: CHLORIDES REPORTED AT 4000 MG/L

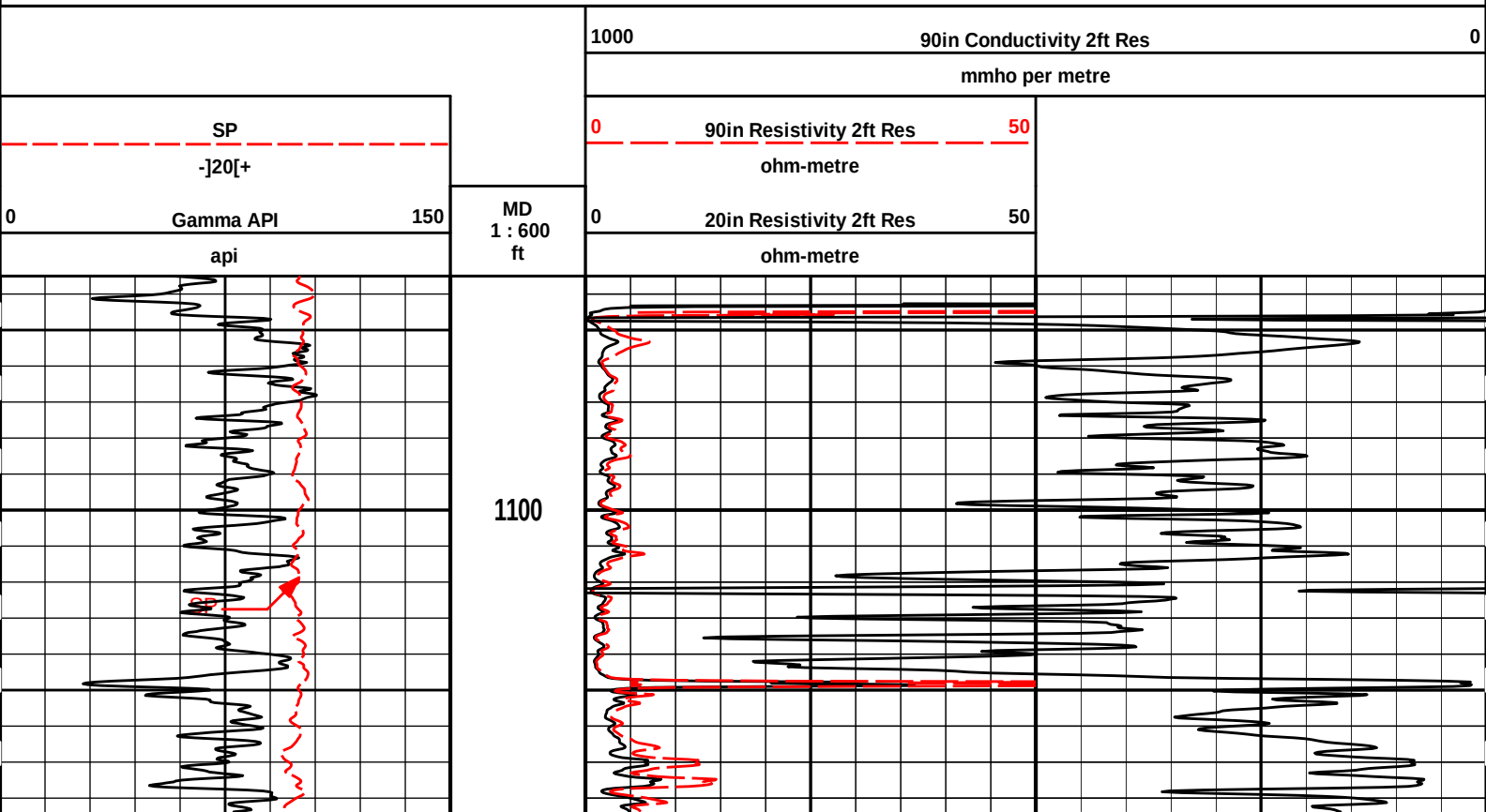
TODAY'S CREW M. GRAHAM F. VILLA

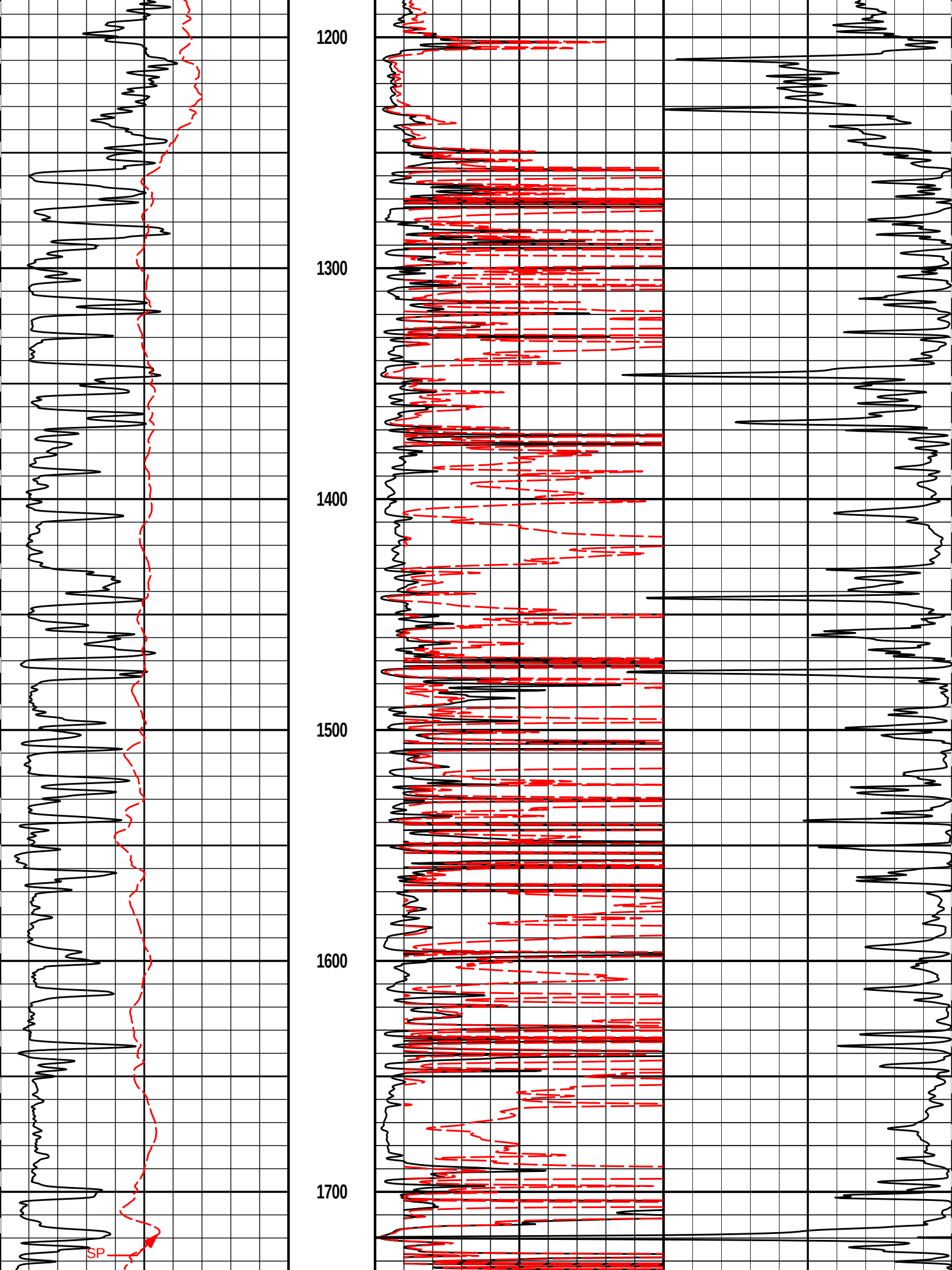
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KANSAS 620-624-8123

HALLIBURTON

Plot Time: 03-Feb-14 07:09:00
Plot Range: 1035 ft to 4778.33 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_2_lib

2 INCH MAIN LOG

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1400
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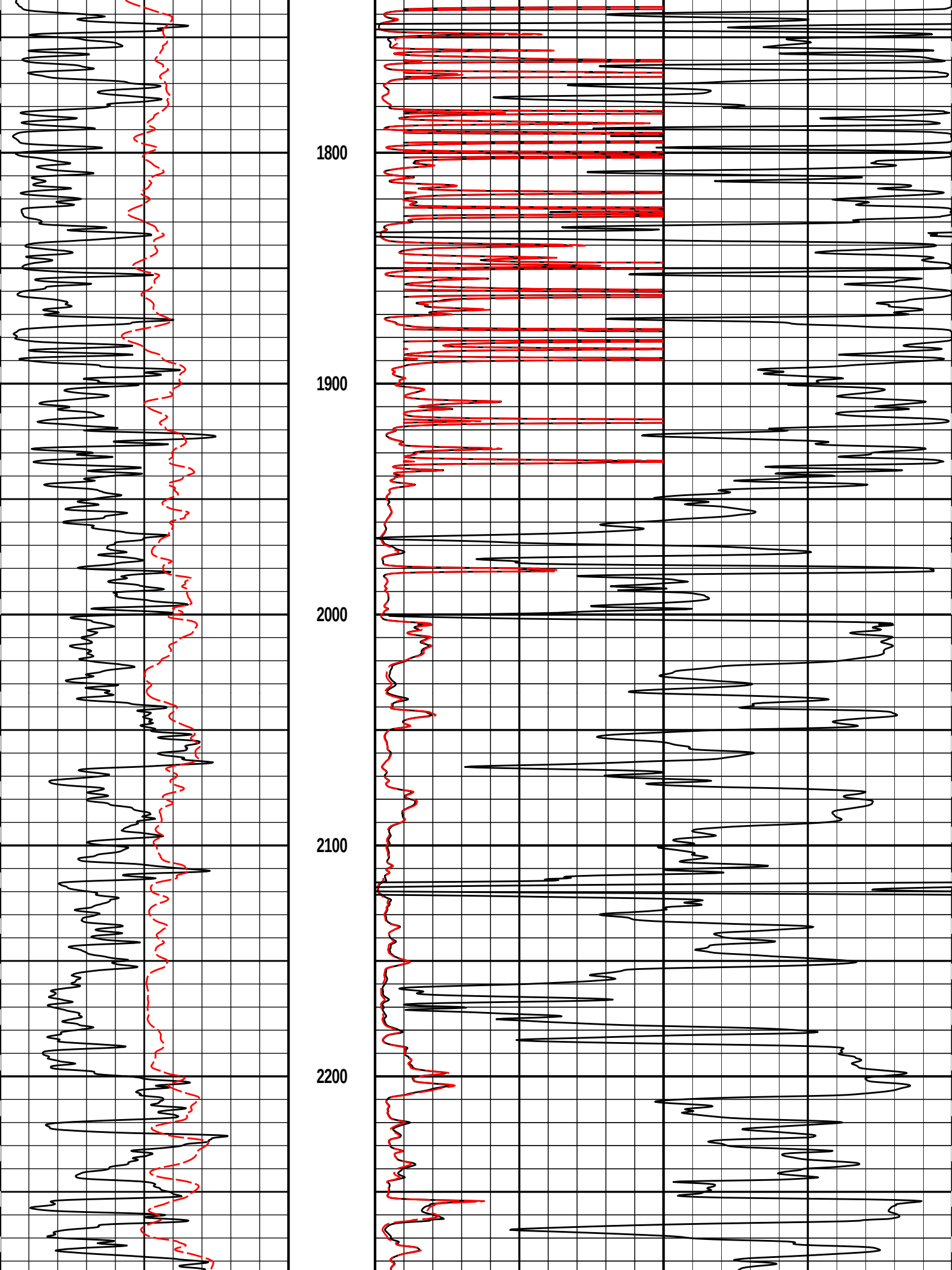
1600
1700
SP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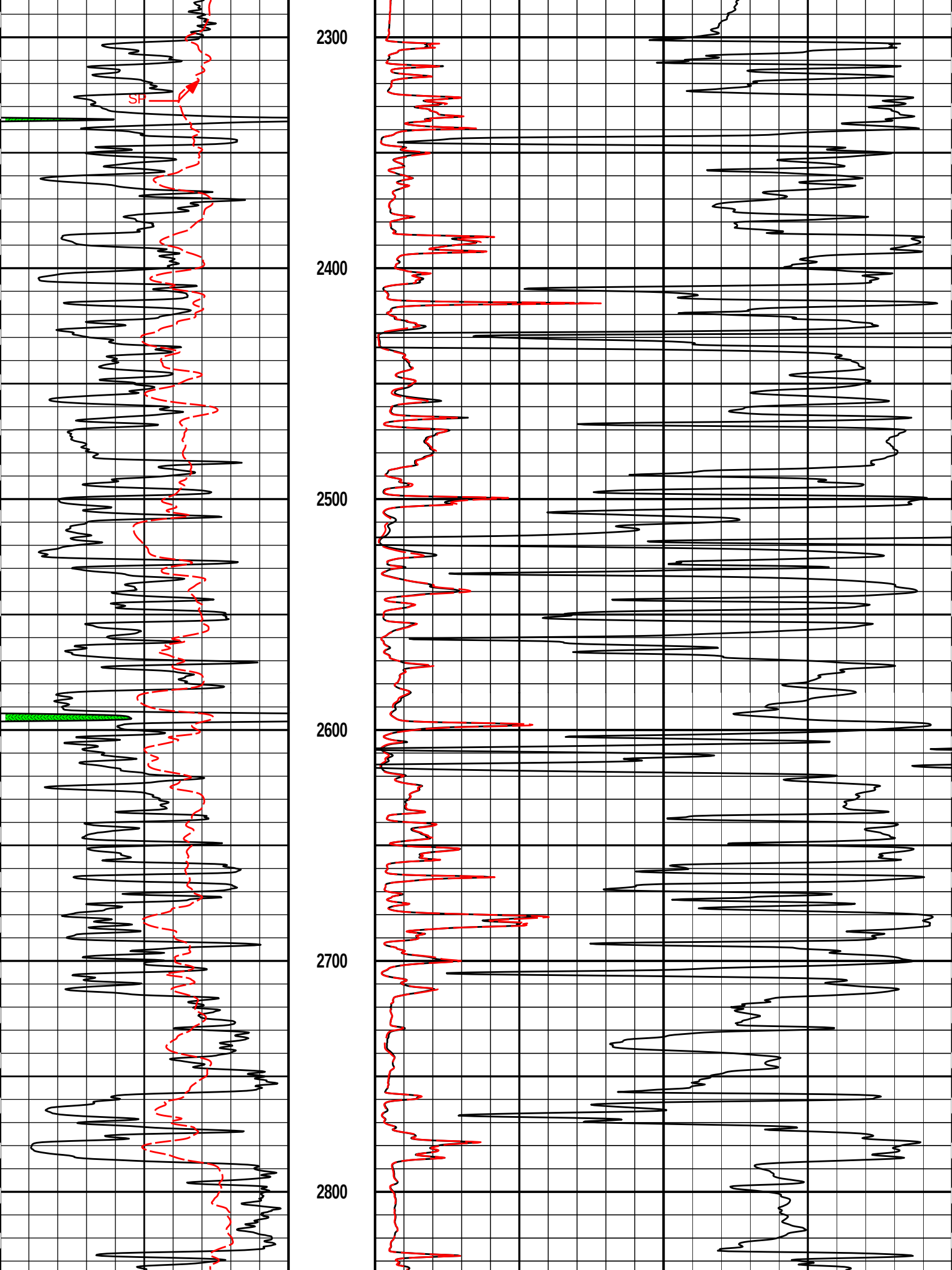
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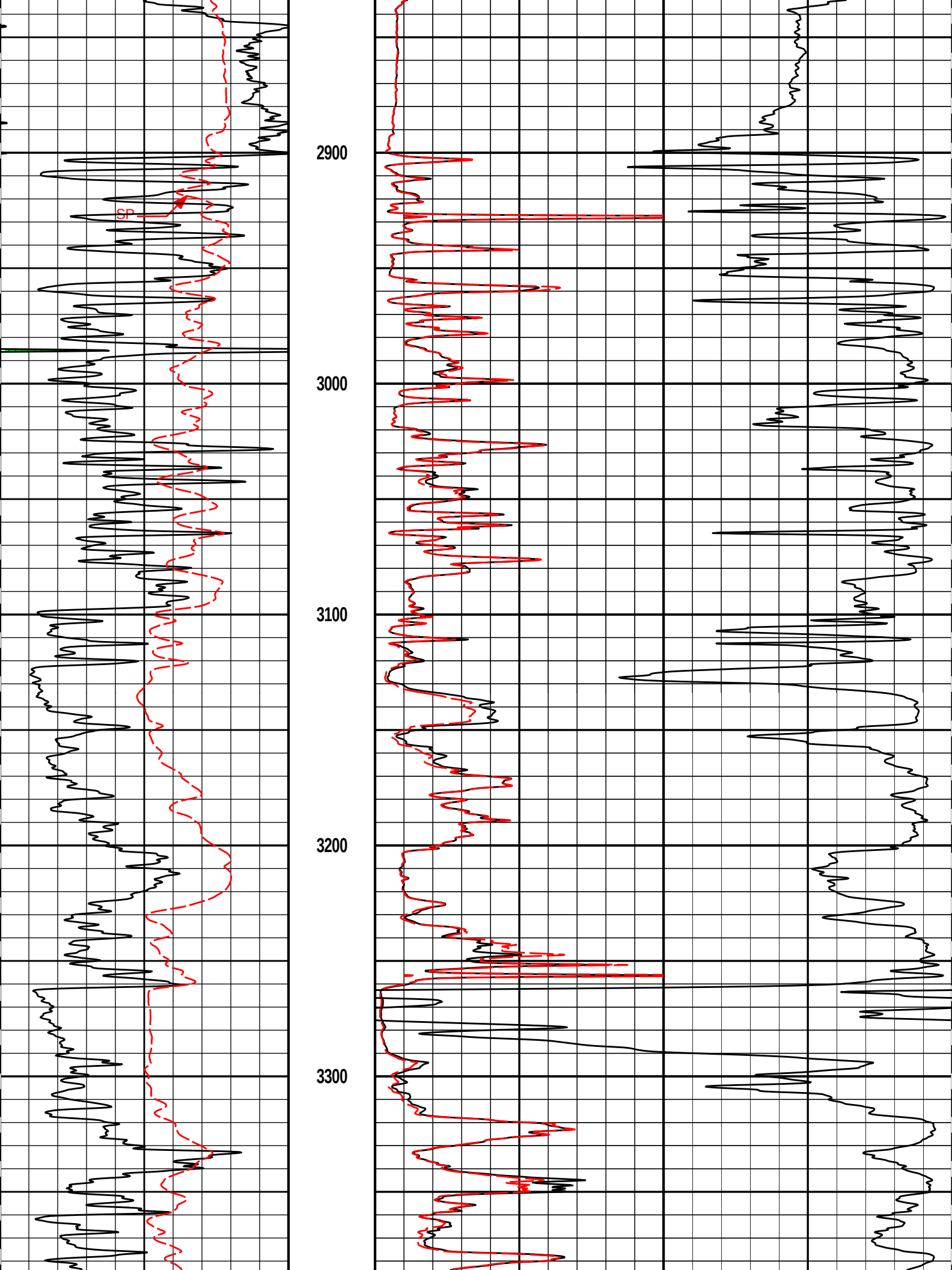
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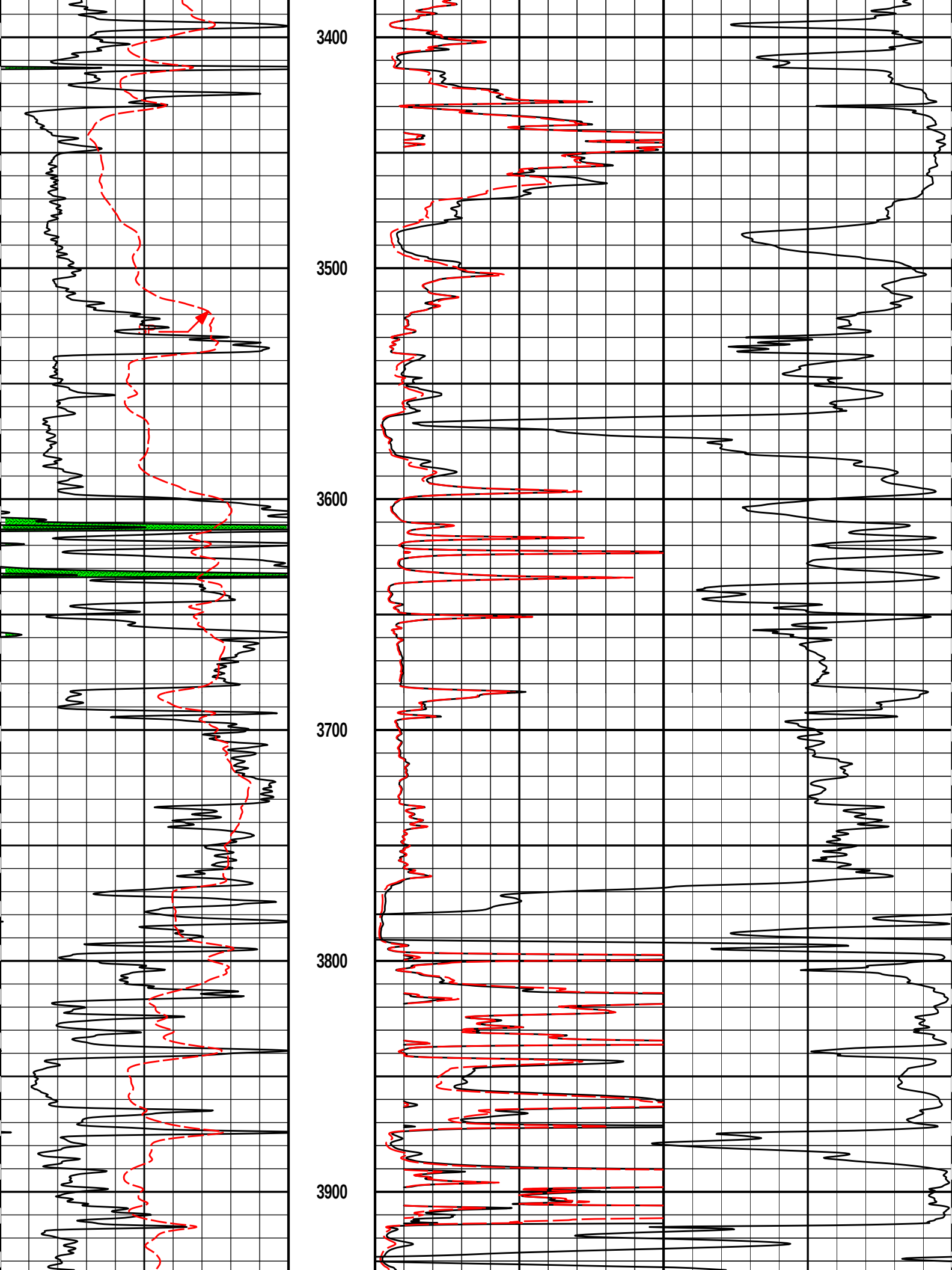
3300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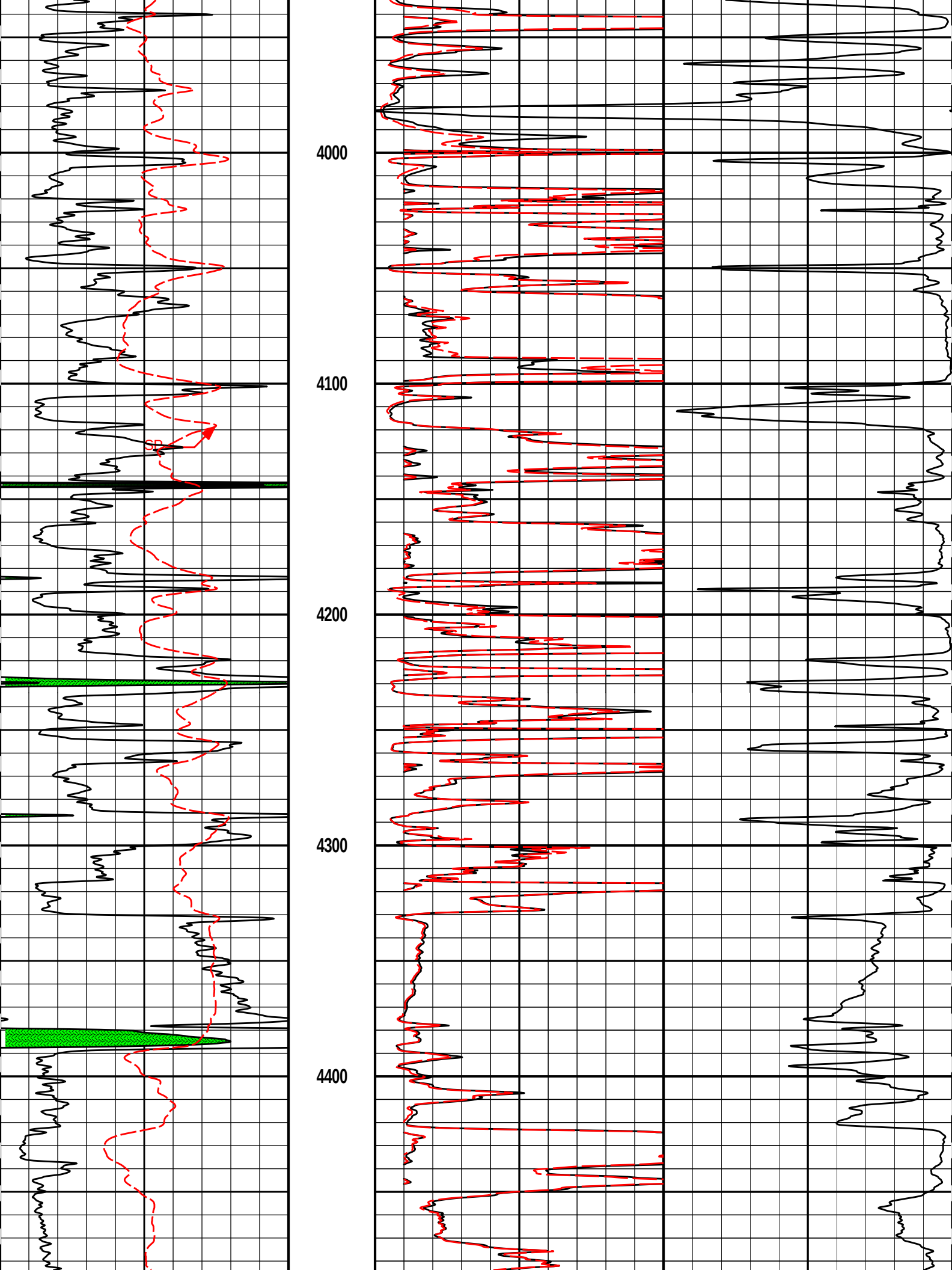
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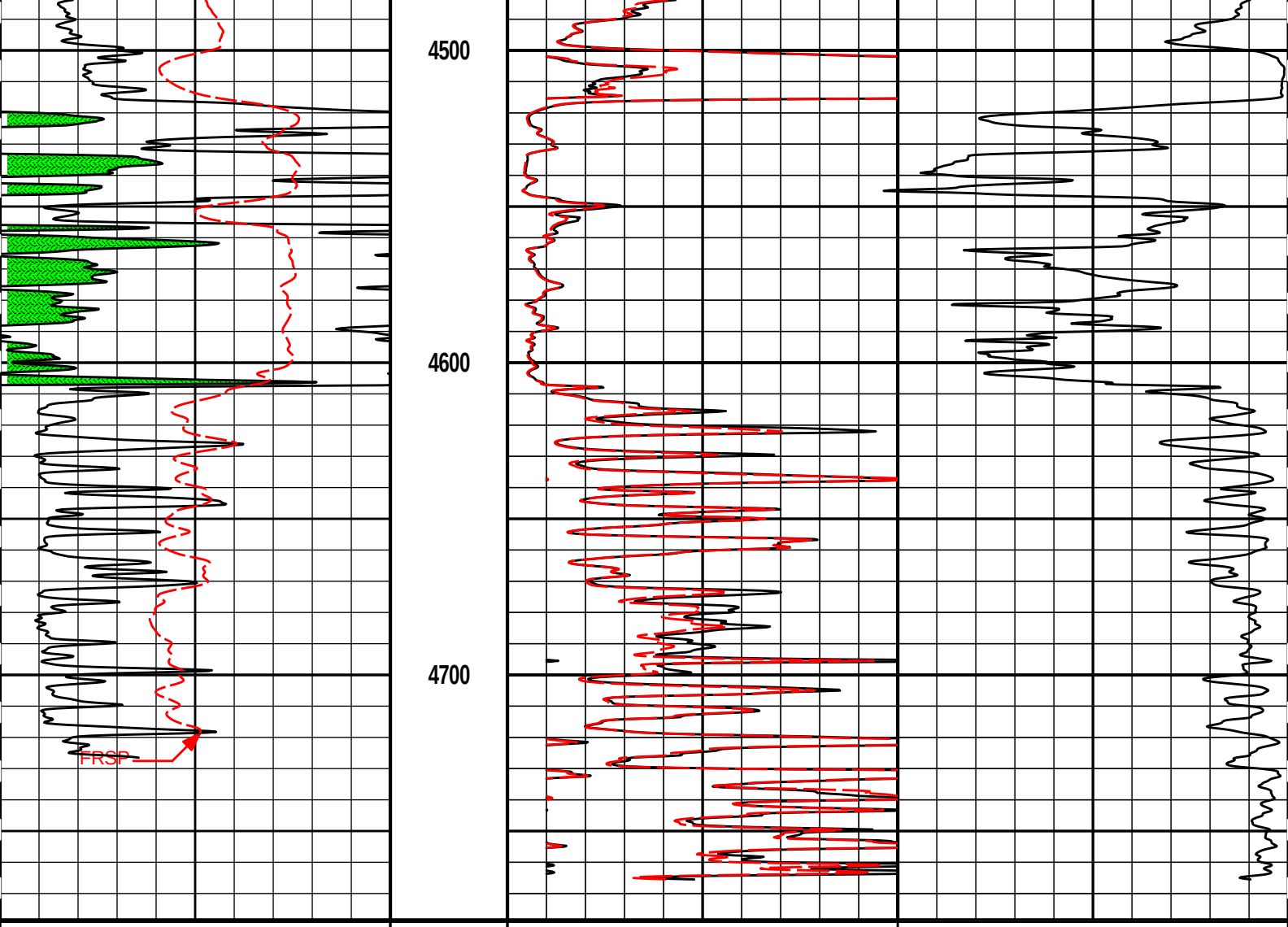
4100
SB
4200
4300
4400



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: 03-Feb-14 07:09:30
Plot Range: 1035 ft to 4778.33 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004\
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_2_lib

2 INCH MAIN LOG

HALLIBURTON

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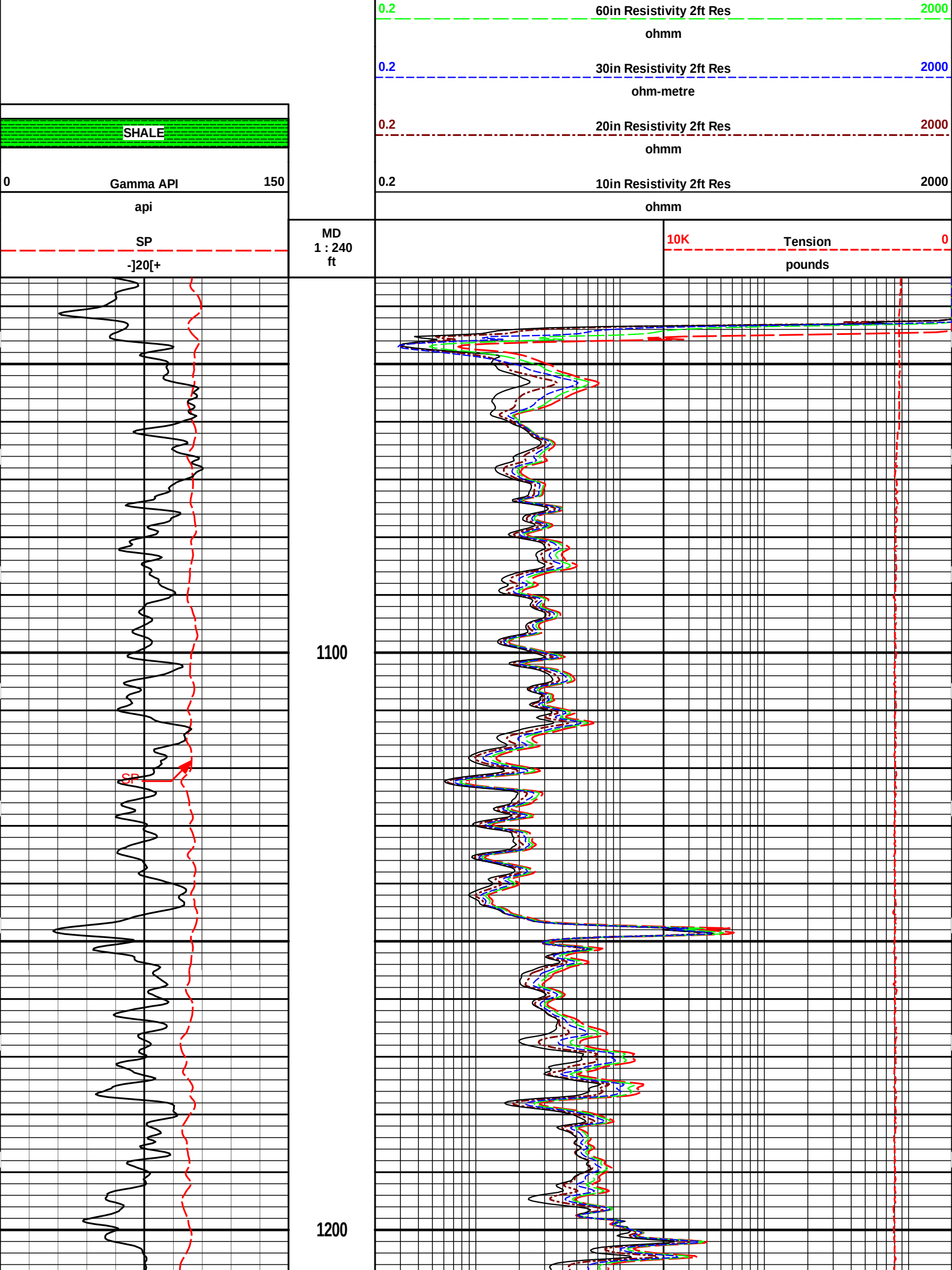
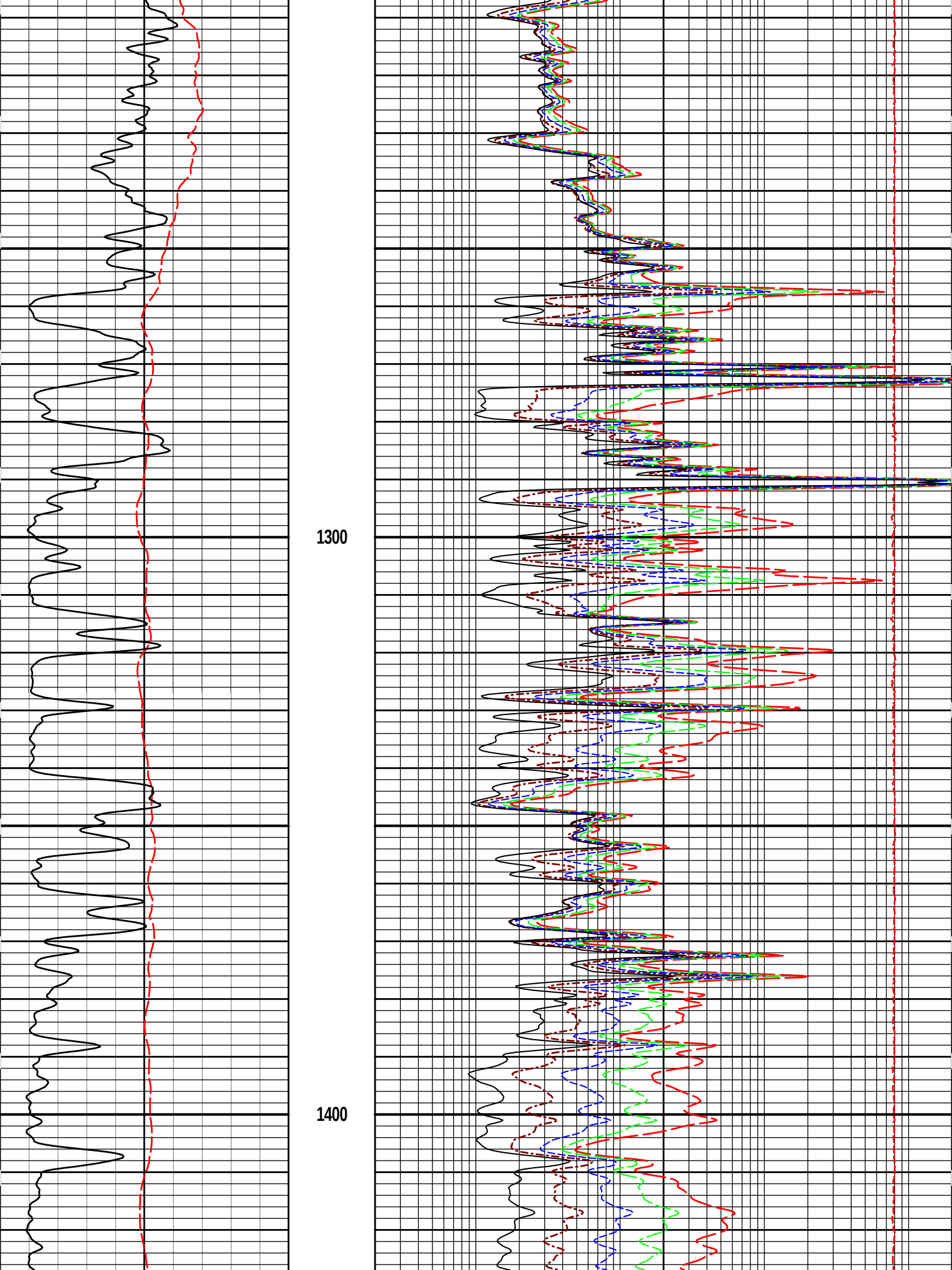
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_5_main_lib

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
ohmm
0.2
10in Resistivity 2ft Res
2000
ohmm
SHALE
0
Gamma API
150
api
SP
-]20[+
MD
1 : 240
ft
10K
Tension
0
pounds
1100
SP
1200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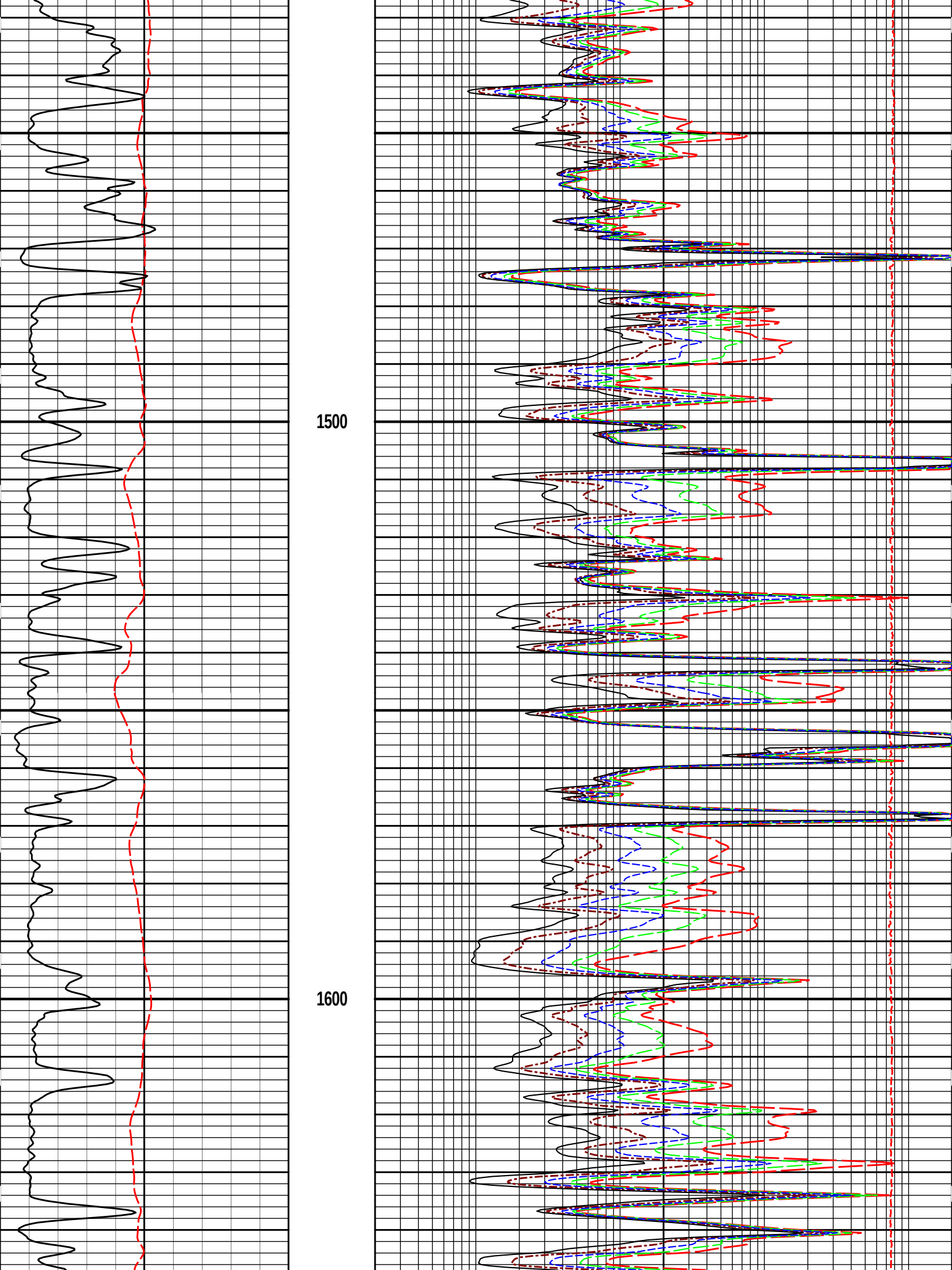
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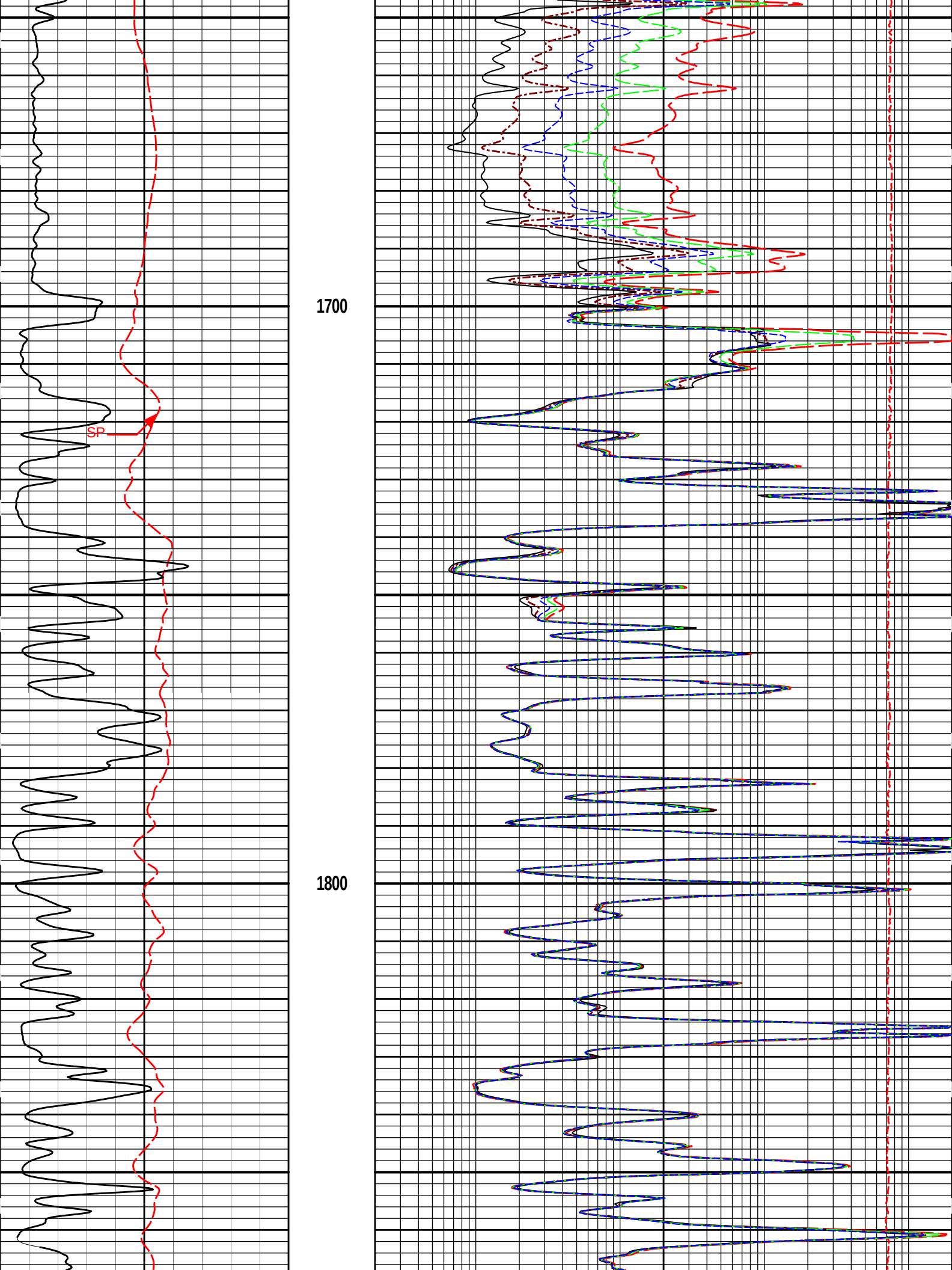
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1700
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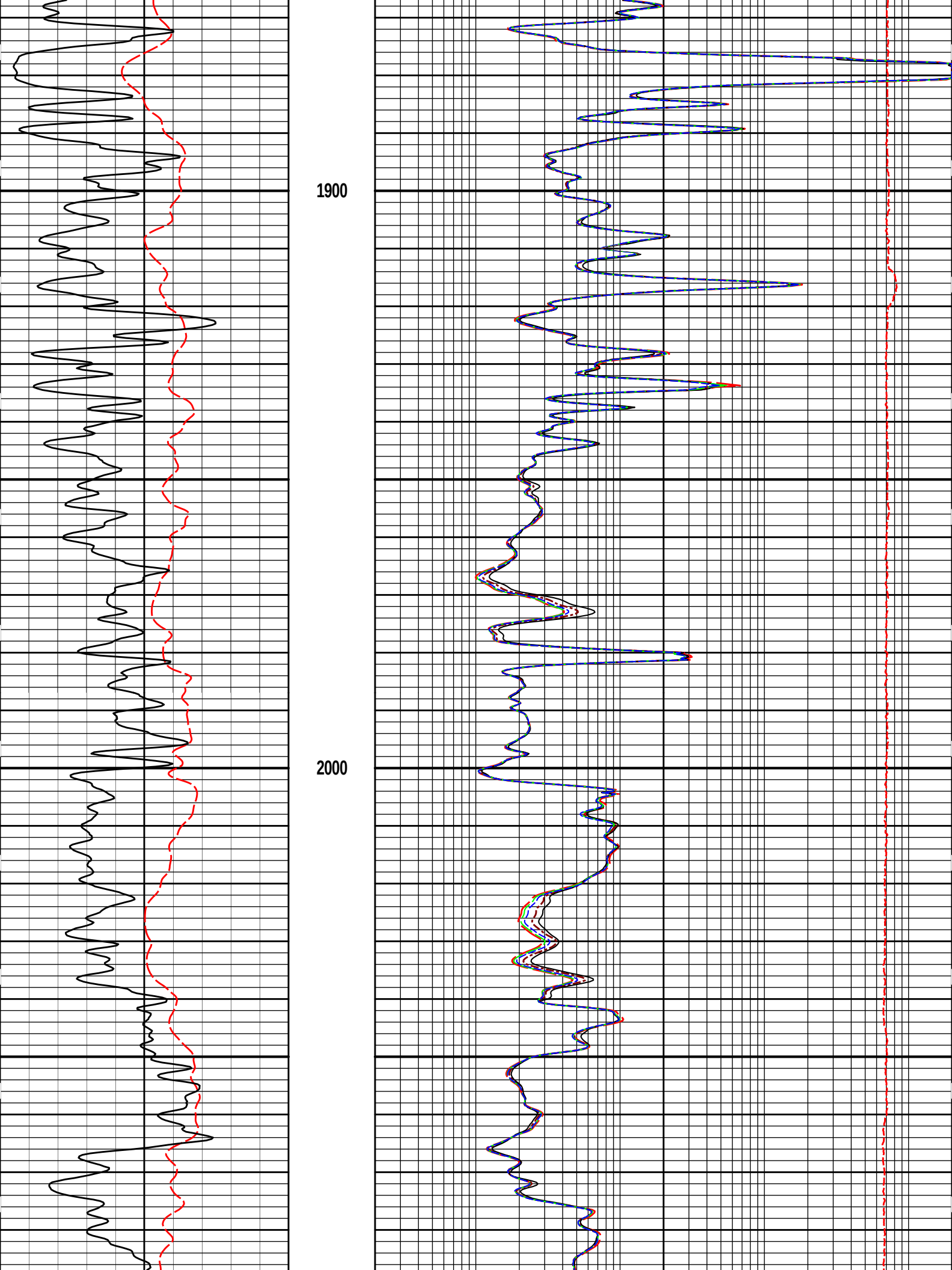
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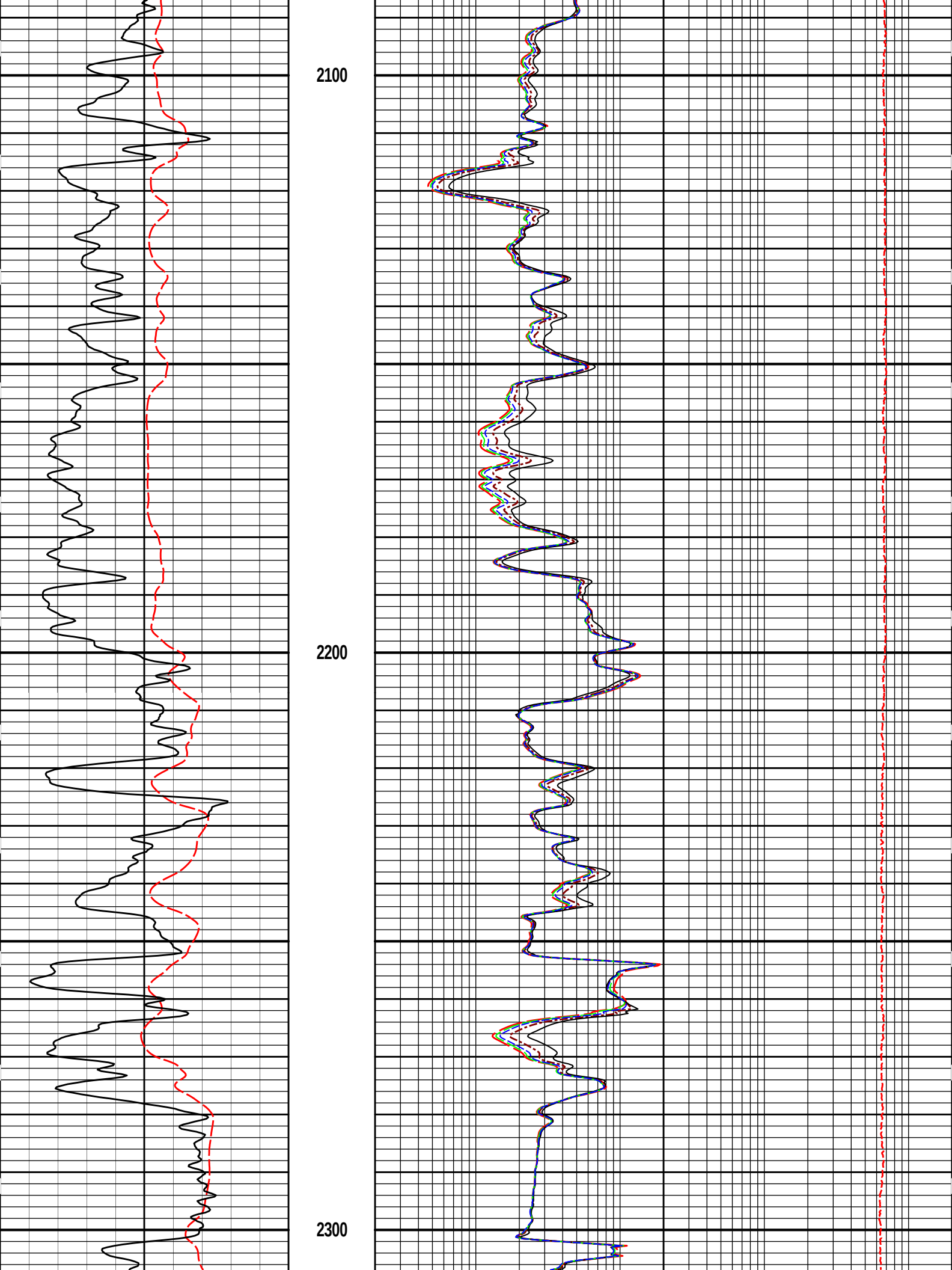
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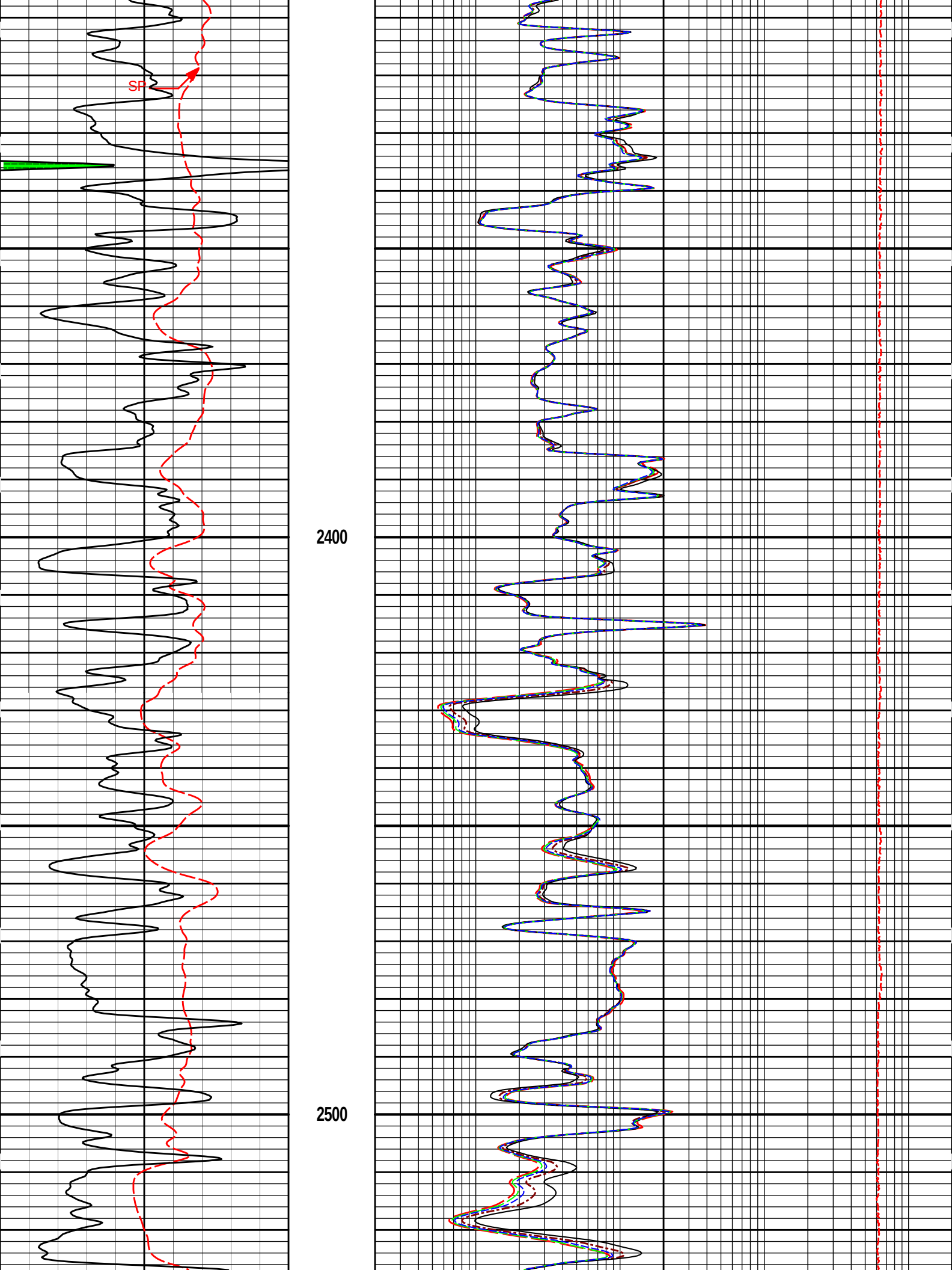
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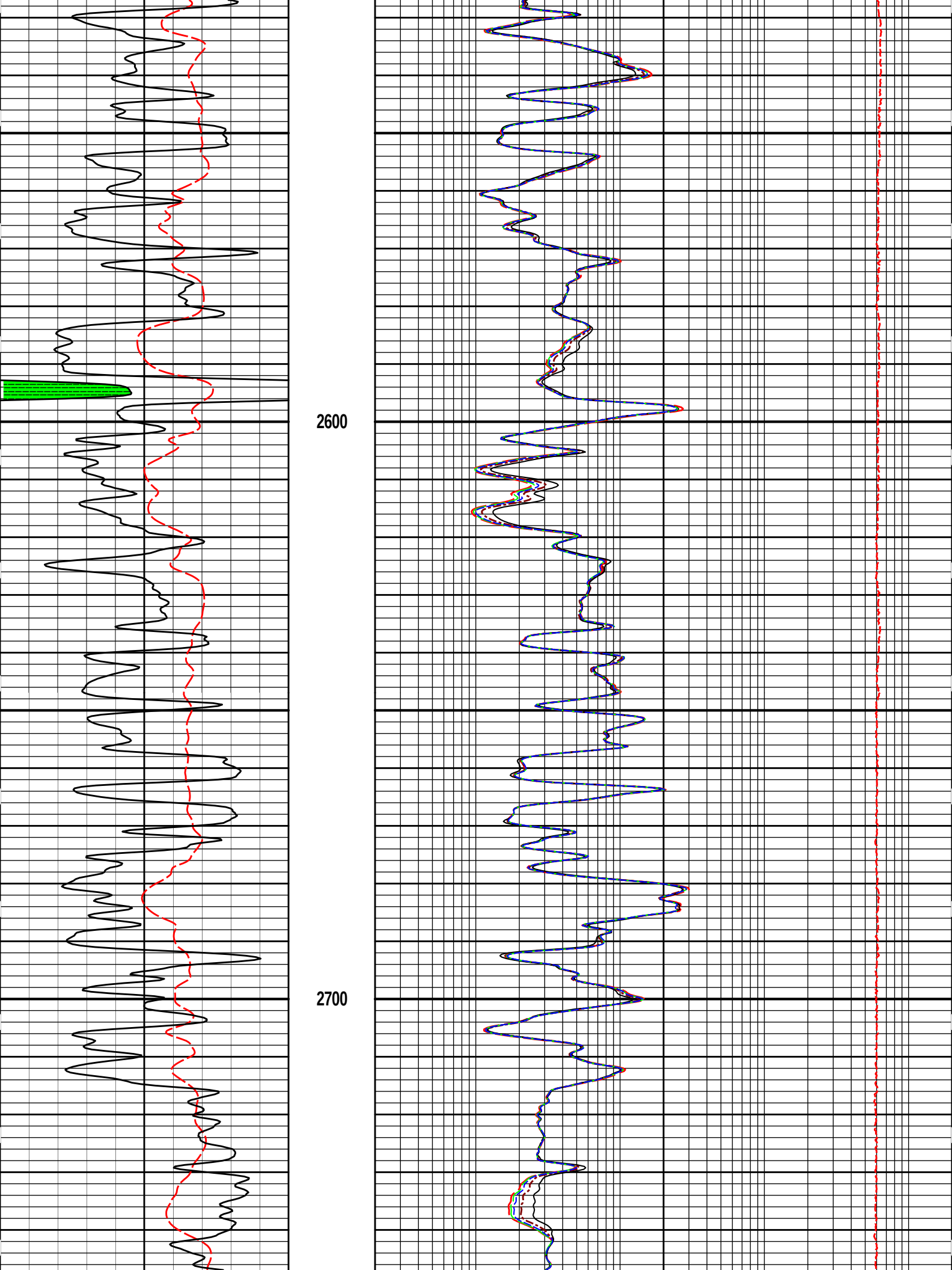
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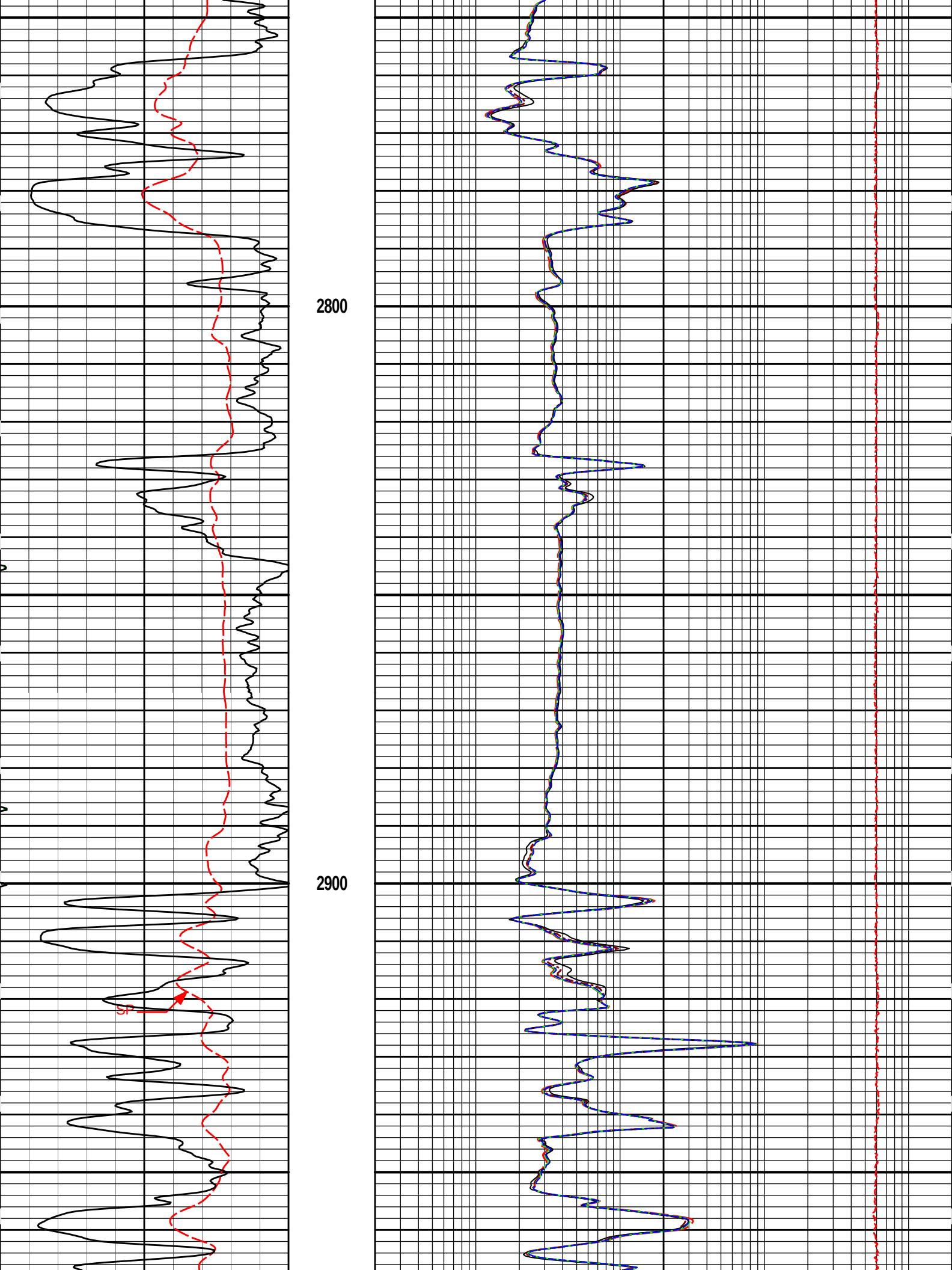
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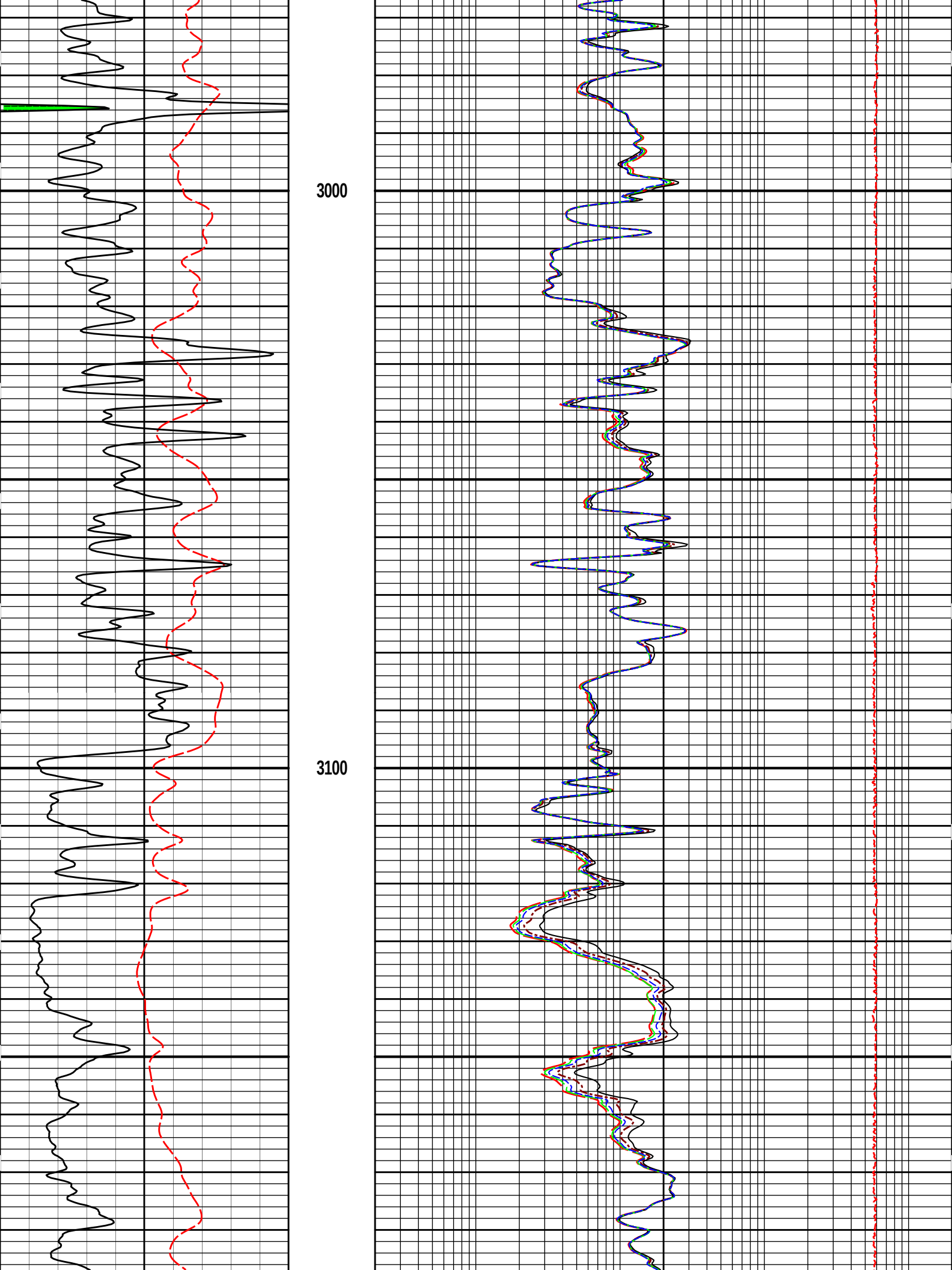
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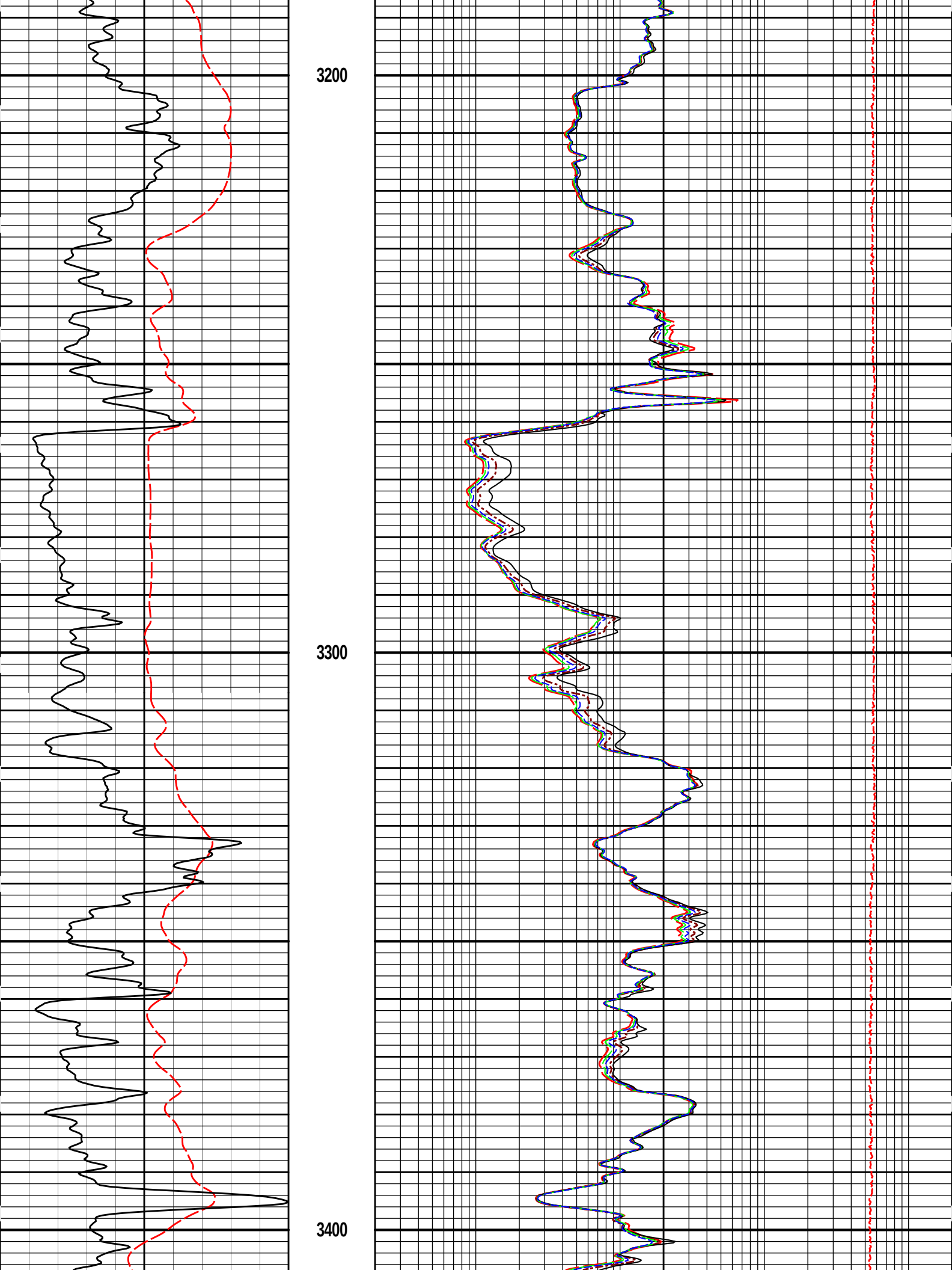
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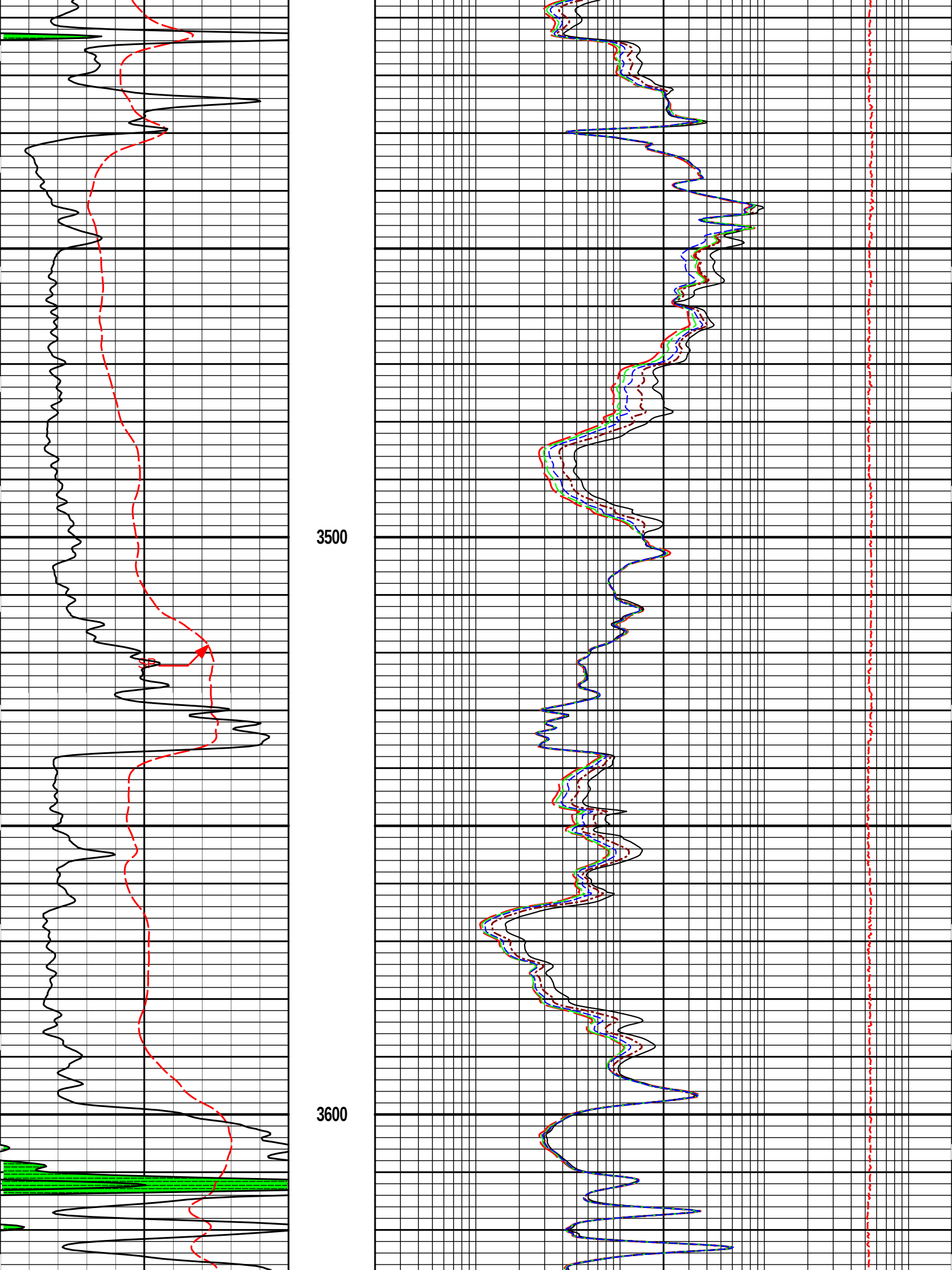
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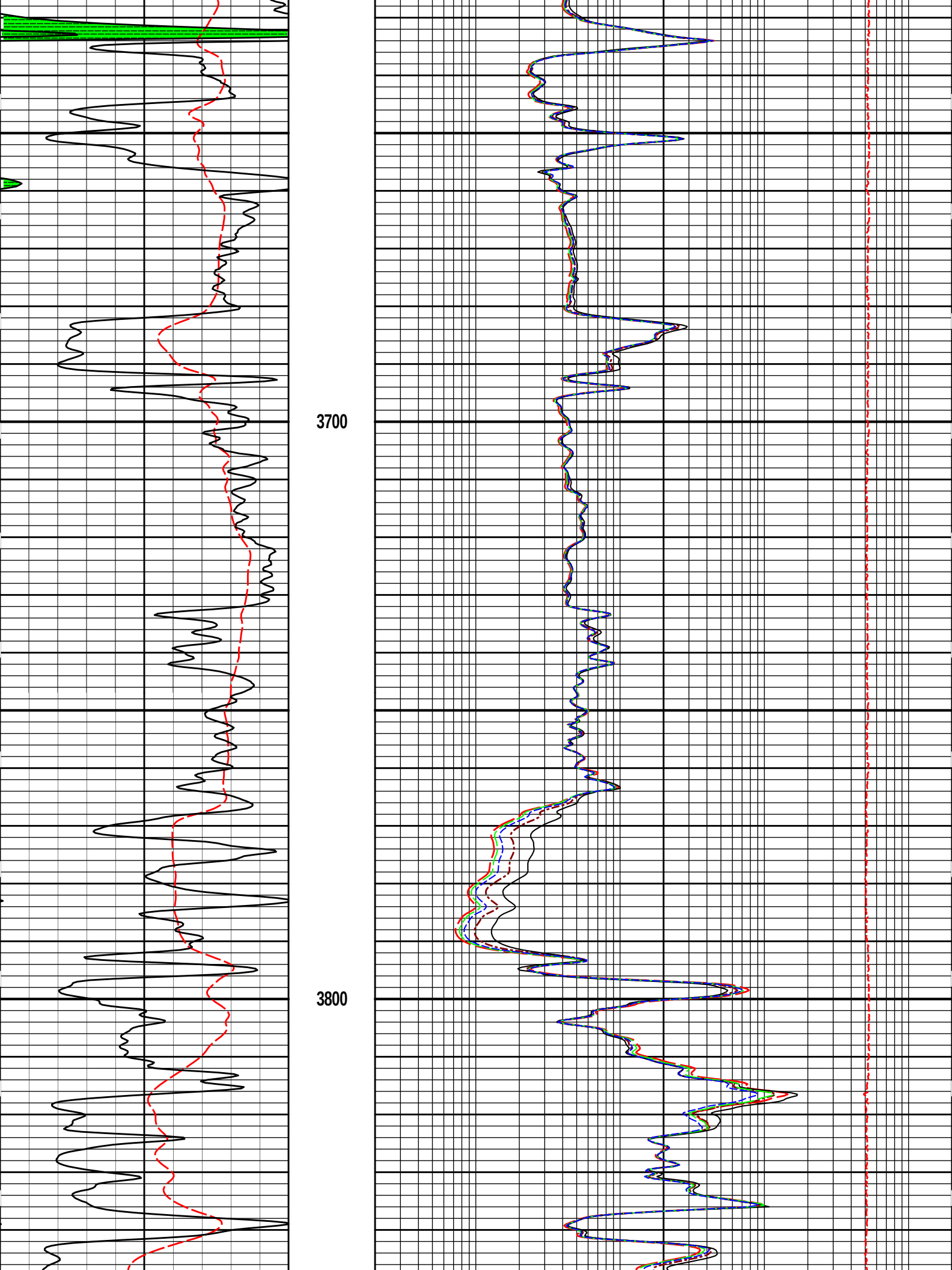
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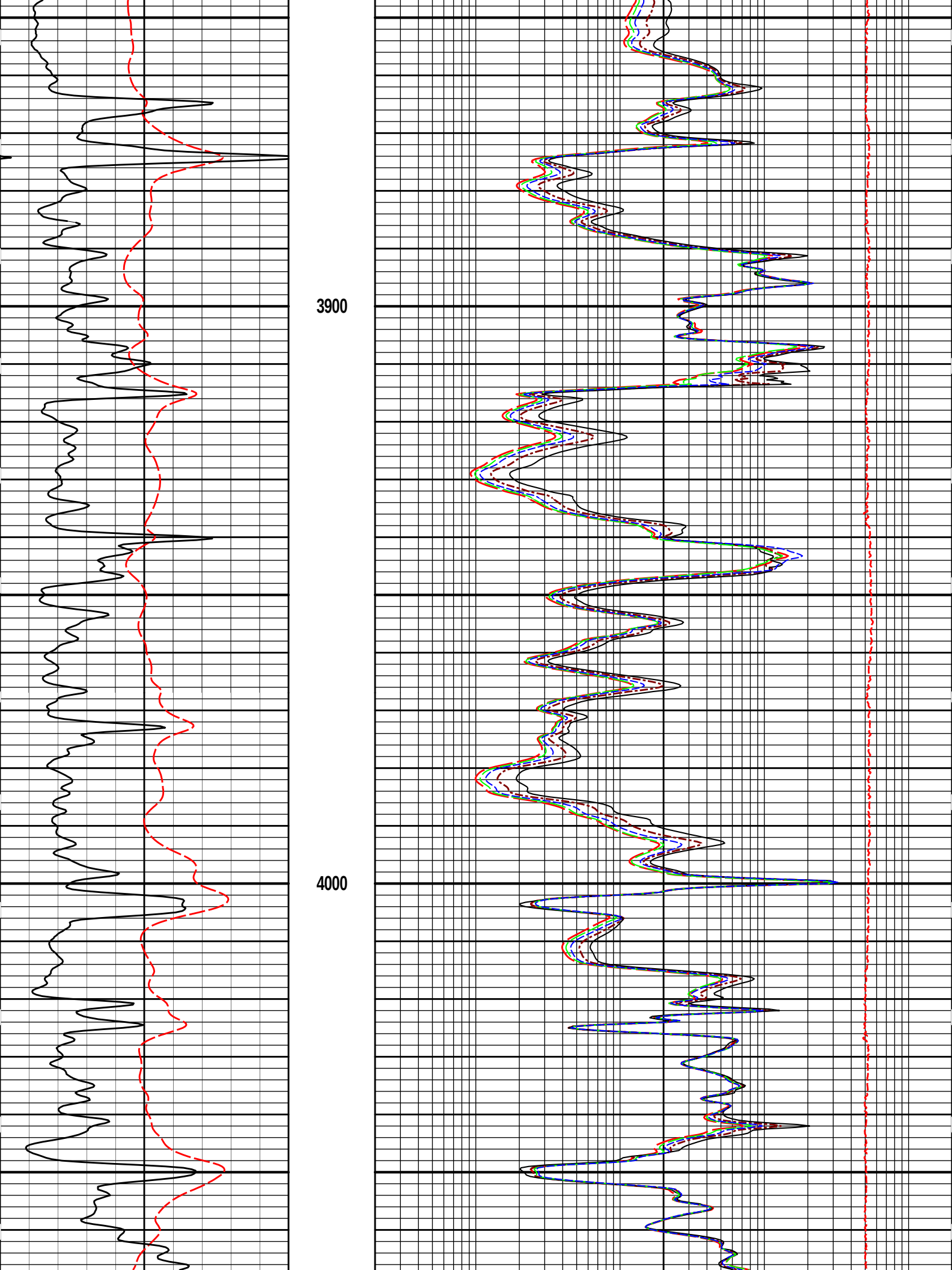
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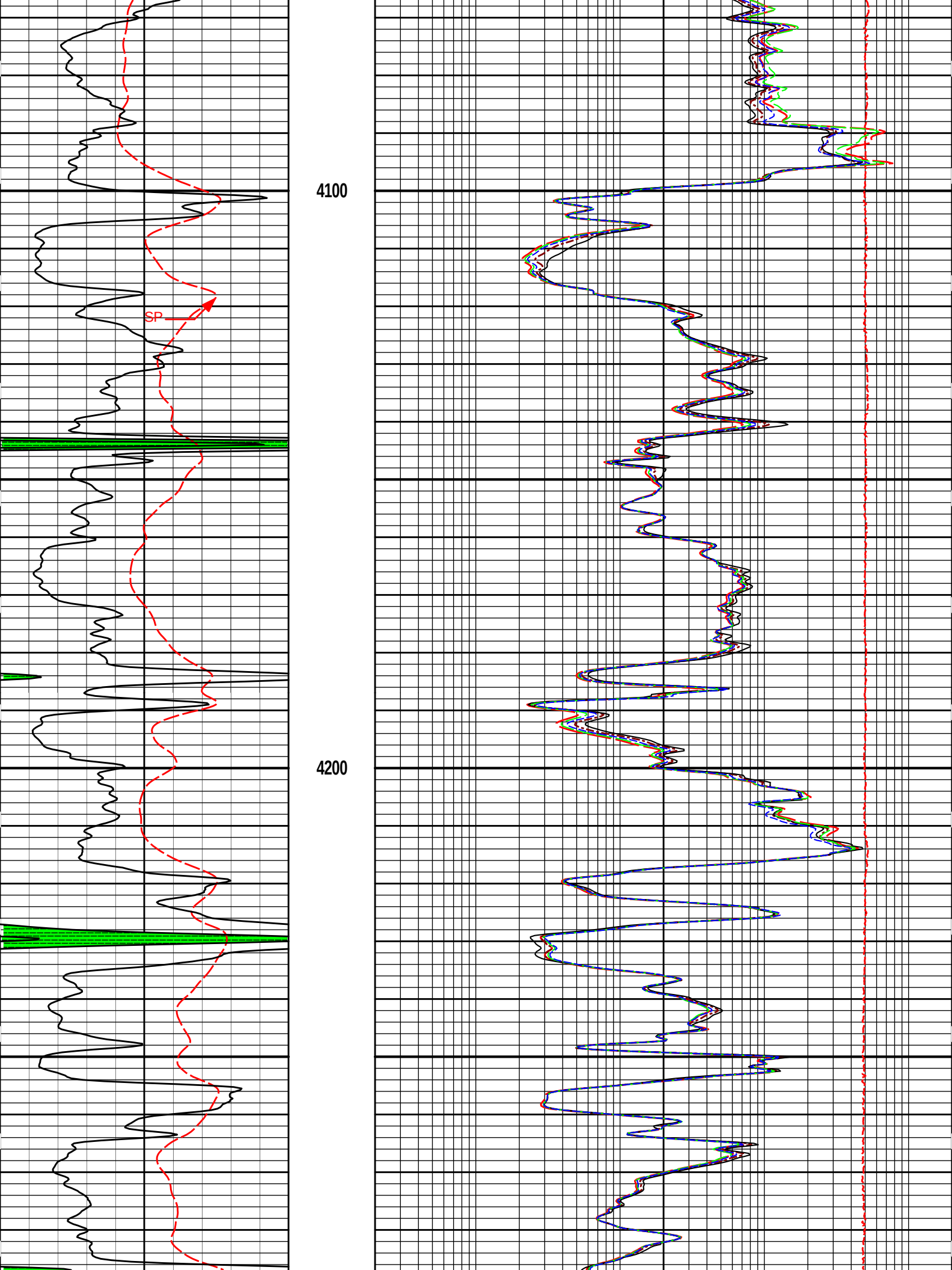
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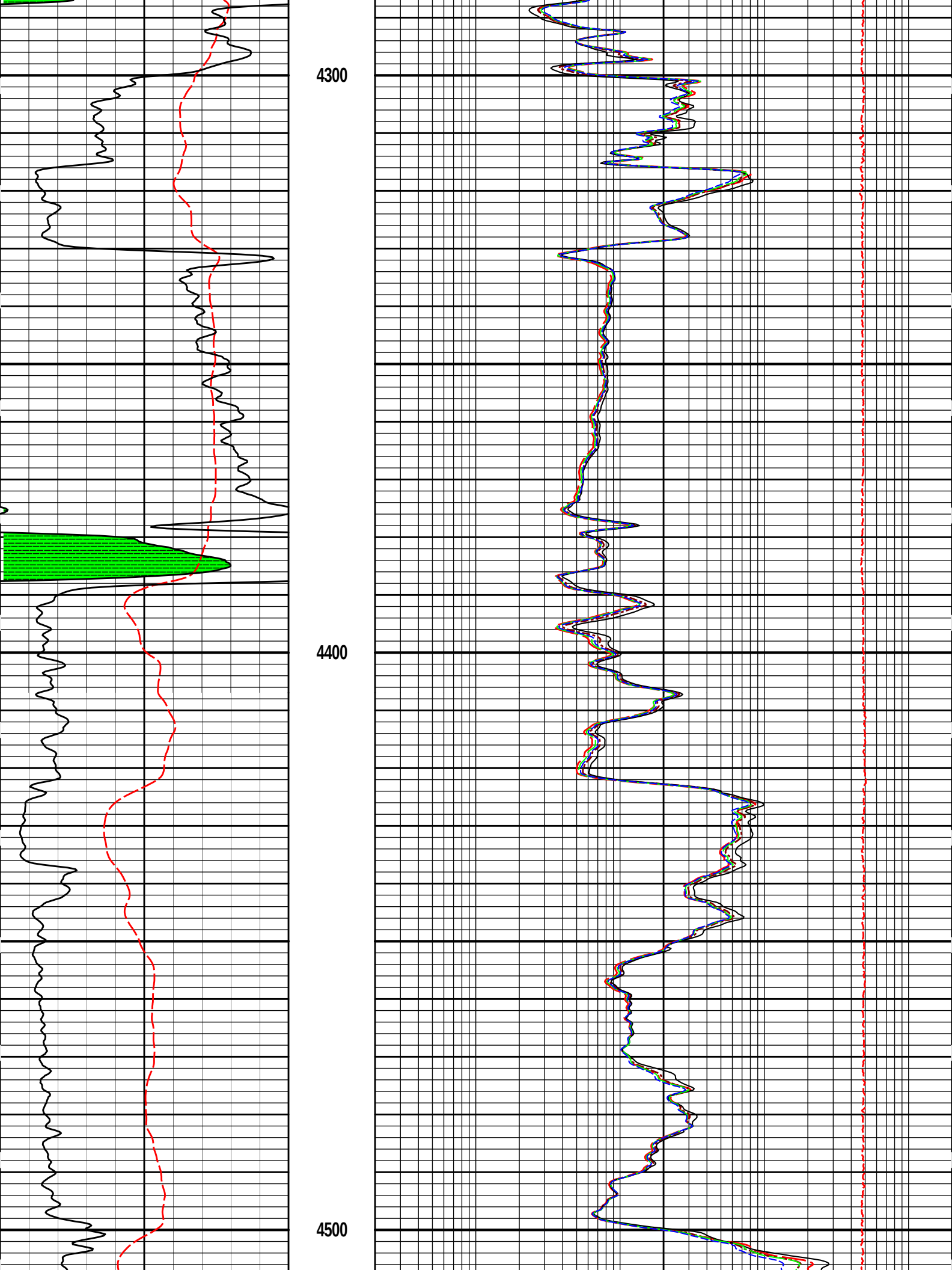
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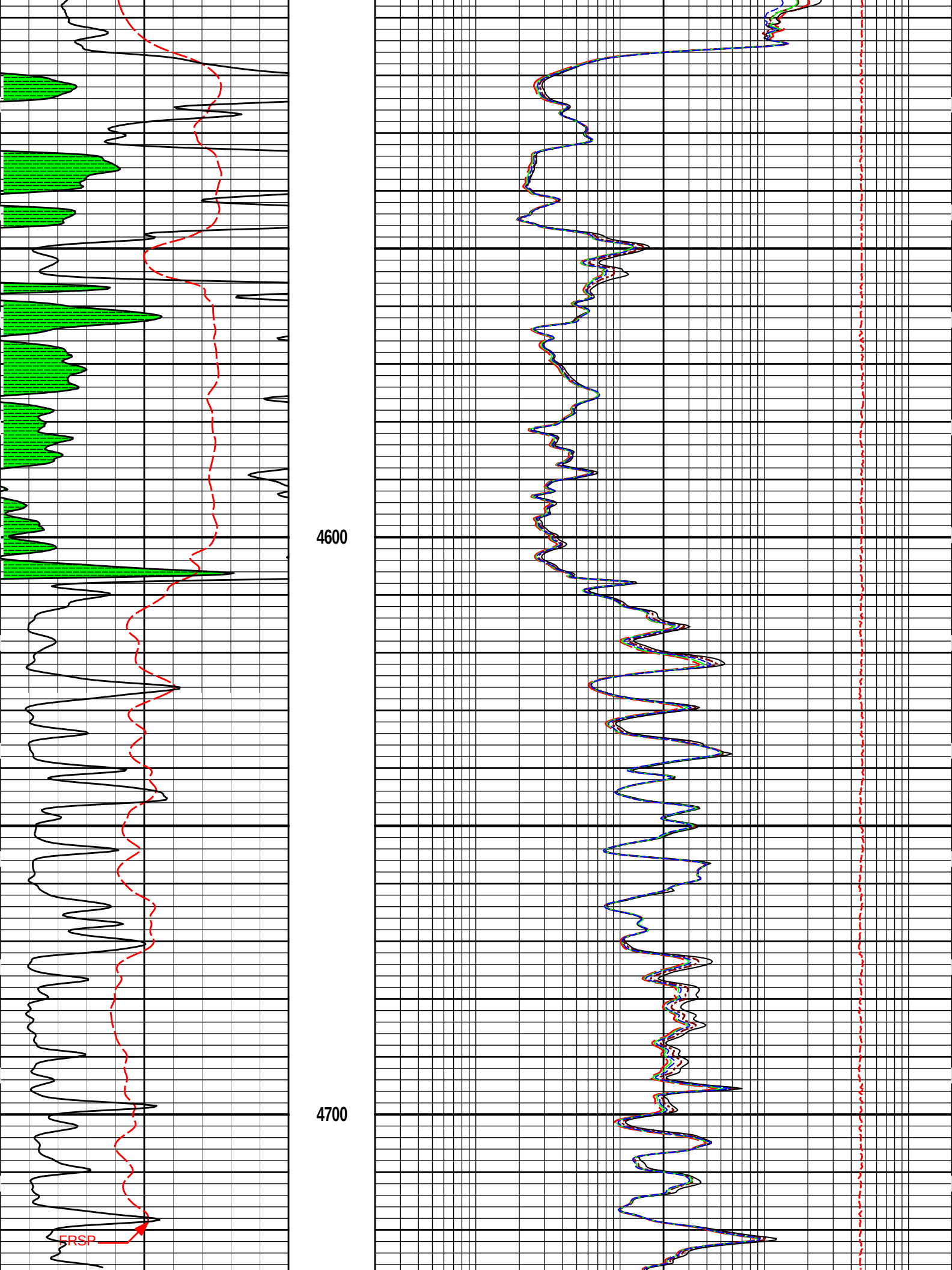
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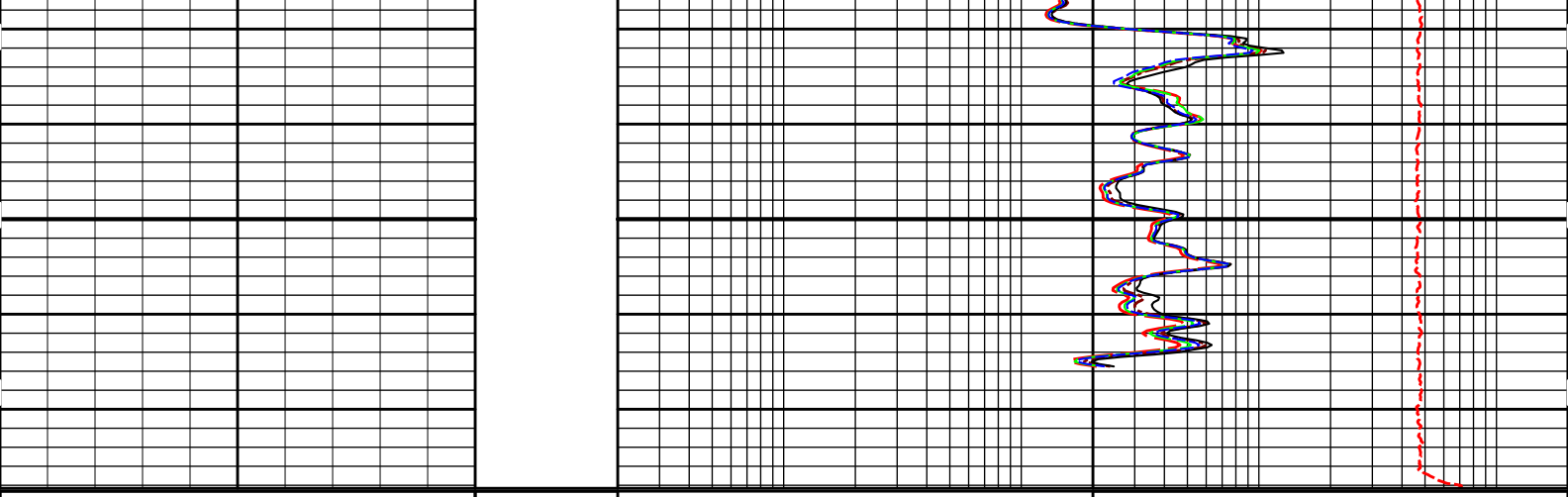


SP

-]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: 03-Feb-14 07:09:35
Plot Range: 1035 ft to 4778.33 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004\
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_5_main_lib

5 INCH MAIN LOG

HALLIBURTON

Plot Time: 03-Feb-14 07:09:35
Plot Range: 4500 ft to 4779.17 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-002\
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_5_repeat_lib

REPEAT SECTION

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

ohmm

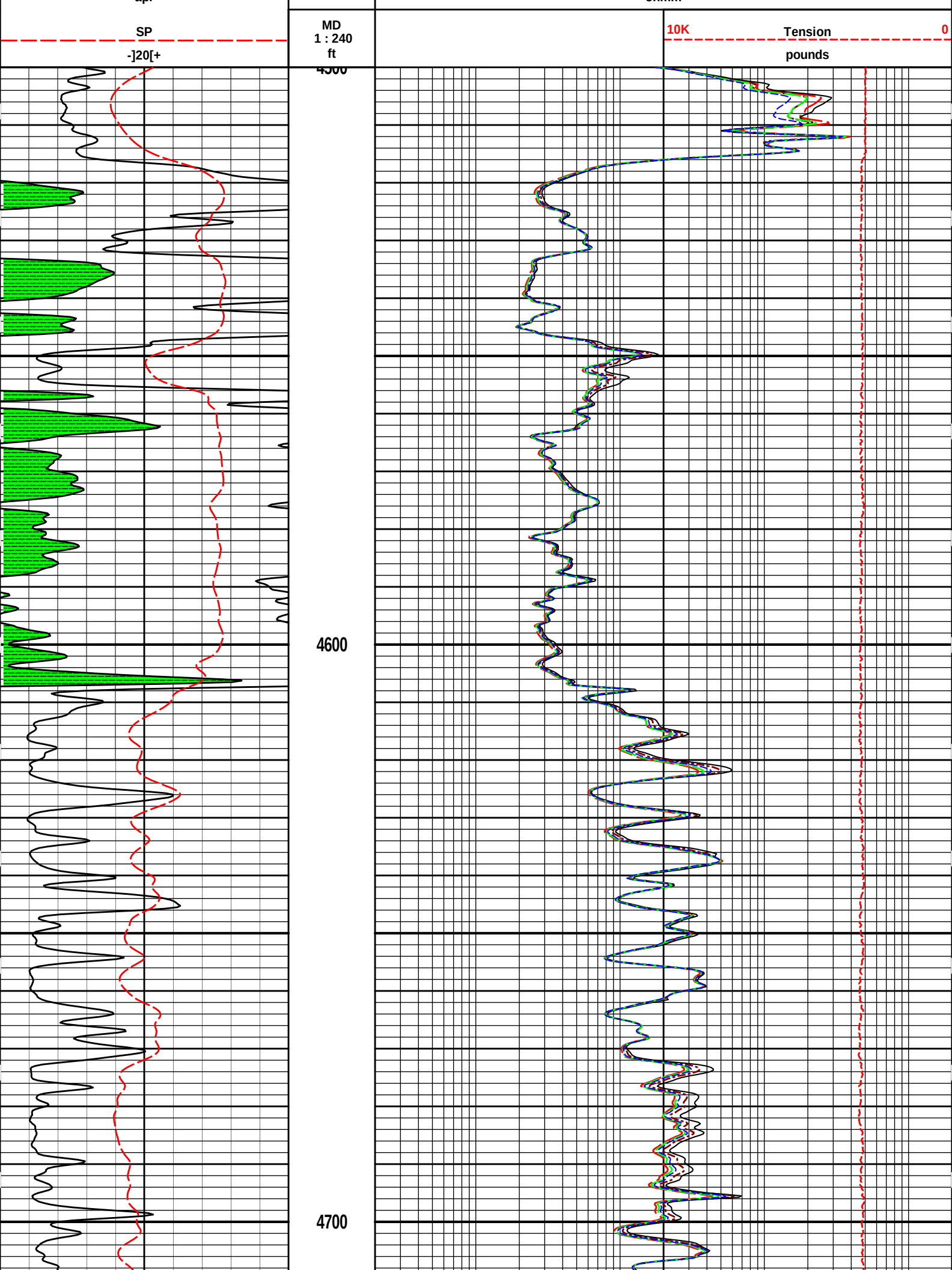
0.2 10in Resistivity 2ft Res 2000

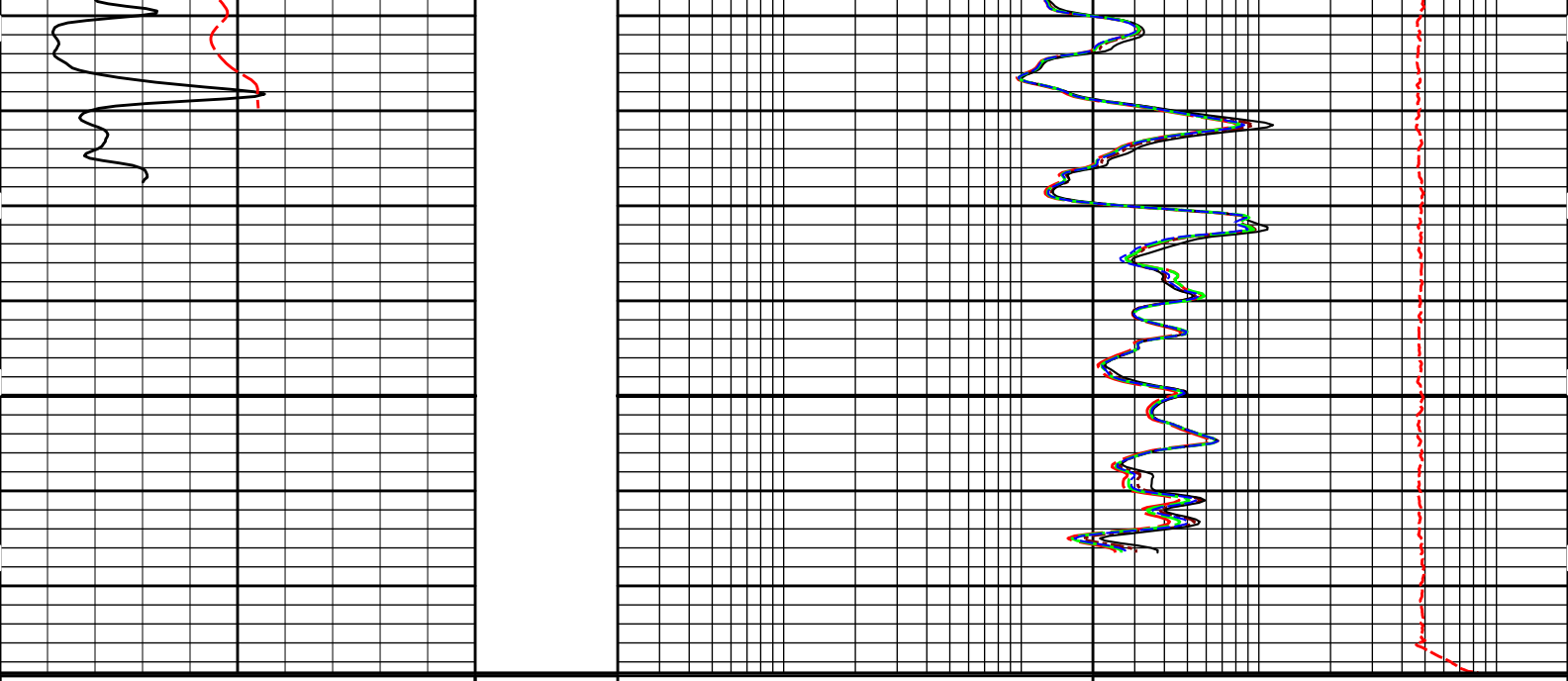
ohmm

SHALE

0 Gamma API 150

api


SP
-]20[+
MD
1 : 240
ft
10K
Tension
0
pounds
4600
4700



SP	MD	10K Tension 0
-]20[+	1 : 240 ft	pounds
0 Gamma API 150		0.2 10in Resistivity 2ft Res 2000
api		ohmm
SHALE		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: 03-Feb-14 07:09:39
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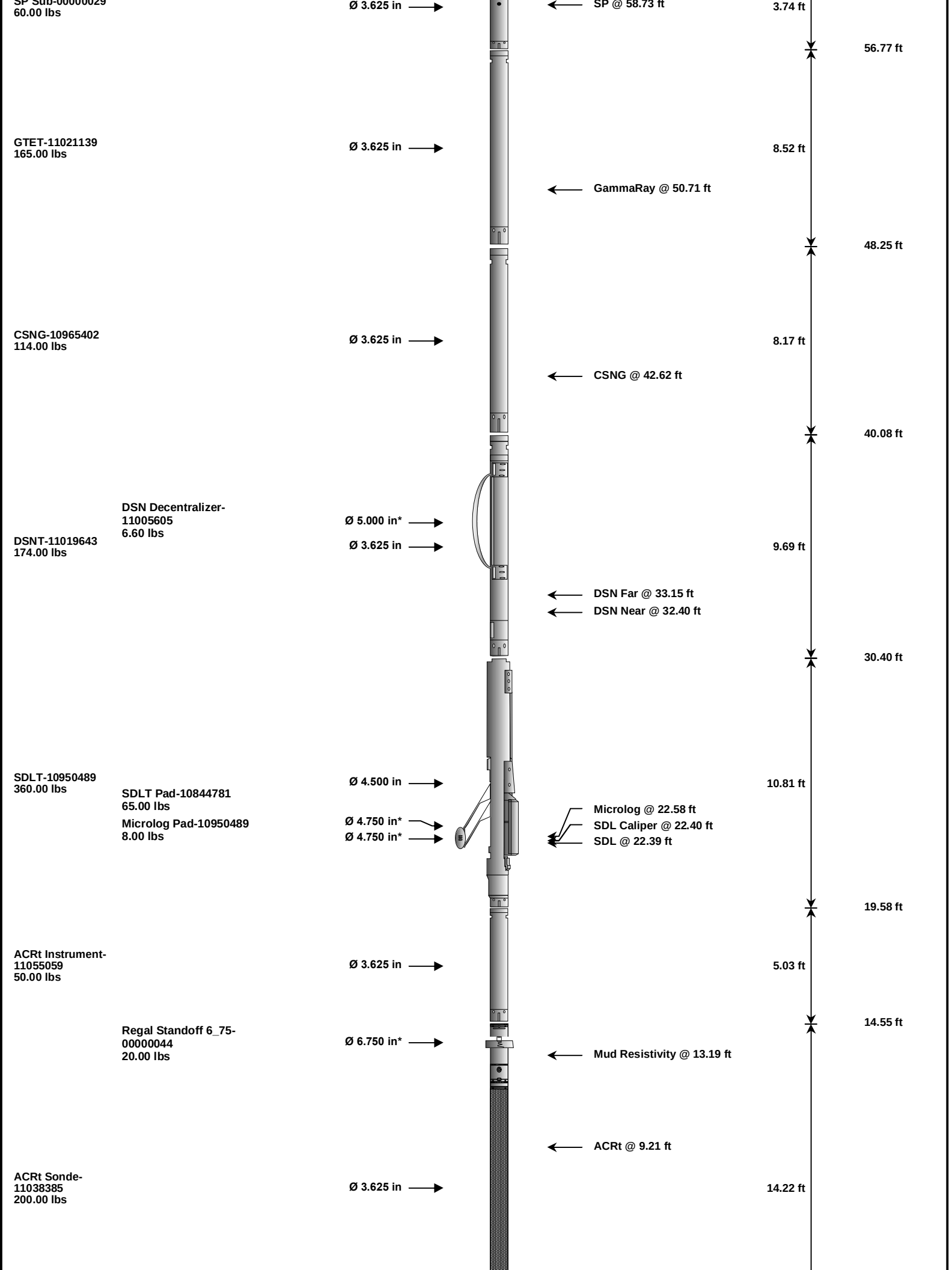
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\ACRT\ACRT_5_repeat_lib

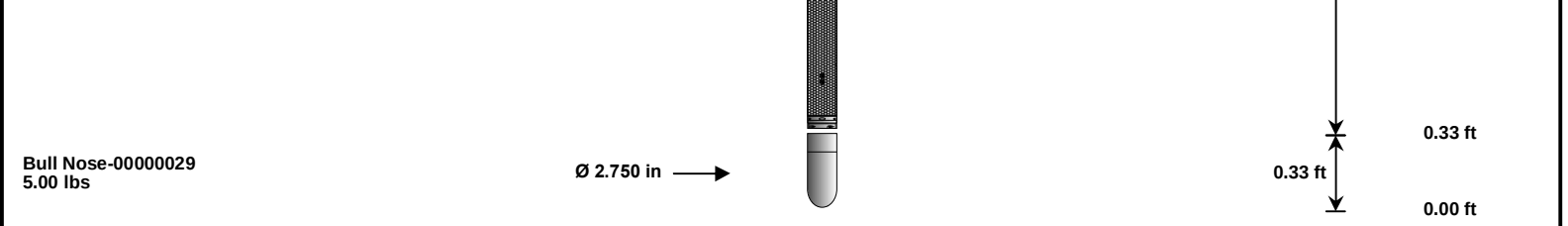
REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
RWCH-12156658 135.00 lbs		Ø 3.625 in		Load Cell @ 63.07 ft BH Temperature @ 62.51 ft	6.25 ft	66.76 ft
						60.51 ft


SP Sub-00000029
60.00 lbs
Ø 3.625 in
SP @ 58.73 ft
3.74 ft
56.77 ft
GTET-11021139
165.00 lbs
Ø 3.625 in
8.52 ft
GammaRay @ 50.71 ft
48.25 ft
CSNG-10965402
114.00 lbs
Ø 3.625 in
8.17 ft
CSNG @ 42.62 ft
40.08 ft
DSN Decentralizer-
11005605
6.60 lbs
Ø 5.000 in*
DSNT-11019643
174.00 lbs
Ø 3.625 in
9.69 ft
DSN Far @ 33.15 ft
DSN Near @ 32.40 ft
30.40 ft
SDLT-10950489
360.00 lbs
Ø 4.500 in
10.81 ft
SDLT Pad-10844781
65.00 lbs
Microlog Pad-10950489
8.00 lbs
Ø 4.750 in*
Ø 4.750 in*
Microlog @ 22.58 ft
SDL Caliper @ 22.40 ft
SDL @ 22.39 ft
19.58 ft
ACRt Instrument-
11055059
50.00 lbs
Ø 3.625 in
5.03 ft
14.55 ft
Regal Standoff 6_75-
00000044
20.00 lbs
Ø 6.750 in*
Mud Resistivity @ 13.19 ft
ACRt @ 9.21 ft
ACRt Sonde-
11038385
200.00 lbs
Ø 3.625 in
14.22 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	12156658	135.00	6.25		60.51	300.00
SP	SP Sub	00000029	60.00	3.74		56.77	300.00
GTET	Gamma Telemetry Tool	11021139	165.00	8.52		48.25	60.00
CSNG	Compensated Spectral Natural Gamma	10965402	114.00	8.17		40.08	15.00
DSNT	Dual Spaced Neutron	11019643	174.00	9.69		30.40	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	*	33.73	300.00
SDLT	Spectral Density Tool	10950489	360.00	10.81		19.58	60.00
SDLP	Density Insite Pad	10844781	65.00	2.55	*	21.79	60.00
MICP	Microlog Pad	10950489	8.00	1.00	*	22.08	60.00
ACRt	Array Compensated True Resistivity Instrument Section	11055059	50.00	5.03		14.55	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11038385	200.00	14.22		0.33	300.00
RSOF	Regal Standoff 6.75in	00000044	20.00	0.52	*	13.48	300.00
BLNS	Bull Nose	00000029	5.00	0.33		0.00	300.00
Total			**1,362.60**	**66.76**			

* Not included in Total Length and Length Accumulation.

Data: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\IDLE **Date: 02-Feb-14 22:30:32**

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	**GTET - 11021139**	**Reference Calibration Date:**	**16-Nov-13 17:40:06**
Engineer:	**SHELDON INGERSOLL**	**Calibration Date:**	**10-Jan-14 15:05:07**
Software Version:	**WL INSITE R3.8.4 (Build 5)**	**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	82.2	84.2	api
Background + Calibrator	345.4	353.9	api
Calibrator	263.2	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11021139**	**Reference Calibration Date:**	**10-Jan-14 15:05:07**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**02-Feb-14 07:30:28**
Software Version:	**WL INSITE R3.8.4 (Build 5)**	**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	84.2	52.9	api
Background + Calibrator	353.9	320.1	api
Calibrator	269.6	267.2	api

Shop	Field	Difference	Tolerance
269.6	267.2	2.4	+/- 9.00

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name:	**ACRt Sonde - 11038385**	**Reference Calibration Date:**	**04-Sep-13 09:24:57**
Engineer:	**SHELDON INGERSOLL**	**Calibration Date:**	**18-Nov-13 11:45:56**
Software Version:	**WL INSITE R3.8.4 (Build 5)**	**Calibration Version:**	**1**
Host Tool Name:	**ACRt Instrument - 11055059**		

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	1.03	1.05	0.95	1.03	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	1.01	1.05	0.95	1.01	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
A1 (80")	-5	-1.68	2	-6	-5.27	-2	-8	-4.59	-2
A2 (50")	-7	-2.34	0	-7	-3.55	0	-7	-4.54	0
A3 (29")	-27	-14.40	-9	-9	-4.26	-3	-7	-2.47	-1
A4 (17")	-180	-104.26	-60	-45	-32.84	-15	-39	-25.65	-13
A5 (10")	N/A	N/A	N/A	-150	-80.85	-50	-80	-40.98	-10
A6 (6")	N/A	N/A	N/A	175	338.11	525	90	167.75	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.86	1.3
36K	1.0	1.34	2.0
72K	1.0	1.60	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-11021139						
Gamma Ray Calibrator	269.6	267.2	----------	2.4	+/- 9.00	api
ACRt Sonde-11038385						
Mud Cell	1.00	----------	----------	0.00	----------	ohm-m

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PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	8.750	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.300	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	4672.00	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	
	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 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: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\IDLE **Date: 02-Feb-14 22:44:42**

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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	58.73	NO	
SP	Spontaneous Potential	58.73	BLK	1.250
SPR	Raw Spontaneous Potential	58.73	NO	
SPO	Spontaneous Potential Offset	58.73	NO	
	GTET			
TPUL	Tension Pull	50.71	NO	
GR	Natural Gamma Ray API	50.71	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	50.71	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	50.71	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
	CSNG			
TPUL	Tension Pull	42.62	NO	
STAT	Status	42.62	NO	
FRMC	Tool Frame Count	42.62	BLK	0.250
TFRM	Total Frames	42.62	NO	

TFRM	Total Frames	42.62	NO	
LSPD	Line Speed	42.62	BLK	0.250
CTIM	Accumulation time for sample	42.62	BLK	0.250
NOIS	Spectral Noise	42.62	BLK	0.250
STAB	Stabilizer Voltage in mv	42.62	BLK	0.250
STBP	Stabilizer 60 KEV Peak	42.62	BLK	0.250
AMER	Americium	42.62	BLK	0.250
FTMP	Flask PCB Temperature	42.62	BLK	0.250
SPEL	Low Energy Spectrum	42.62	BLK	0.250
SPEH	High Energy Spectrum	42.62	BLK	0.250
SSP	Stabilization Energy Spectrum	42.62	BLK	0.250
CSPC	CSNG Lo Hi Spectrum Data	42.62	NO	
	DSNT			
TPUL	Tension Pull	32.30	NO	
RNDS	Near Detector Telemetry Counts	32.40	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.15	TRI	0.583
DNTT	DSN Tool Temperature	32.40	NO	
DSNS	DSN Tool Status	32.30	NO	
ERND	Near Detector Telemetry Counts EVR	32.40	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.15	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.40	NO	
	SDLT			
TPUL	Tension Pull	22.40	NO	
PCAL	Pad Caliper	22.40	TRI	0.250
ACAL	Arm Caliper	22.40	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 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	22.39	NO	
NAB	Near Above	22.21	BLK	0.920
NHI	Near Cesium High	22.21	BLK	0.920
NLO	Near Cesium Low	22.21	BLK	0.920
NVA	Near Valley	22.21	BLK	0.920
NBA	Near Barite	22.21	BLK	0.920
NDE	Near Density	22.21	BLK	0.920
NPK	Near Peak	22.21	BLK	0.920
NLI	Near Lithology	22.21	BLK	0.920
NBAU	Near Barite Unfiltered	22.21	BLK	0.250
NLIU	Near Lithology Unfiltered	22.21	BLK	0.250
FAB	Far Above	22.56	BLK	0.250
FHI	Far Cesium High	22.56	BLK	0.250
FLO	Far Cesium Low	22.56	BLK	0.250
FVA	Far Valley	22.56	BLK	0.250
FBA	Far Barite	22.56	BLK	0.250
FDE	Far Density	22.56	BLK	0.250
FPK	Far Peak	22.56	BLK	0.250
FLI	Far Lithology	22.56	BLK	0.250
PTMP	Pad Temperature	22.40	BLK	0.920
NHV	Near Detector High Voltage	21.79	NO	
FHV	Far Detector High Voltage	21.79	NO	
ITMP	Instrument Temperature	21.79	NO	
DDHV	Detector High Voltage	21.79	NO	
	Microlog Pad			
TPUL	Tension Pull	22.58	NO	
MINV	Microlog Lateral	22.58	BLK	0.750
MNOR	Microlog Normal	22.58	BLK	0.750

MINOR Microlog Normal 22.00 BER 0.750

Data: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\IDLE Date: 02-Feb-14 22:44:49

COMPANY	**SANDRIDGE ENERGY**
WELL	**ALEXANDER 3114 1-1**
FIELD	**SKINNER**
COUNTY	**BARBER** STATE **KANSAS**

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ARRAY COMPENSATED TRUE RESISTIVITY LOG

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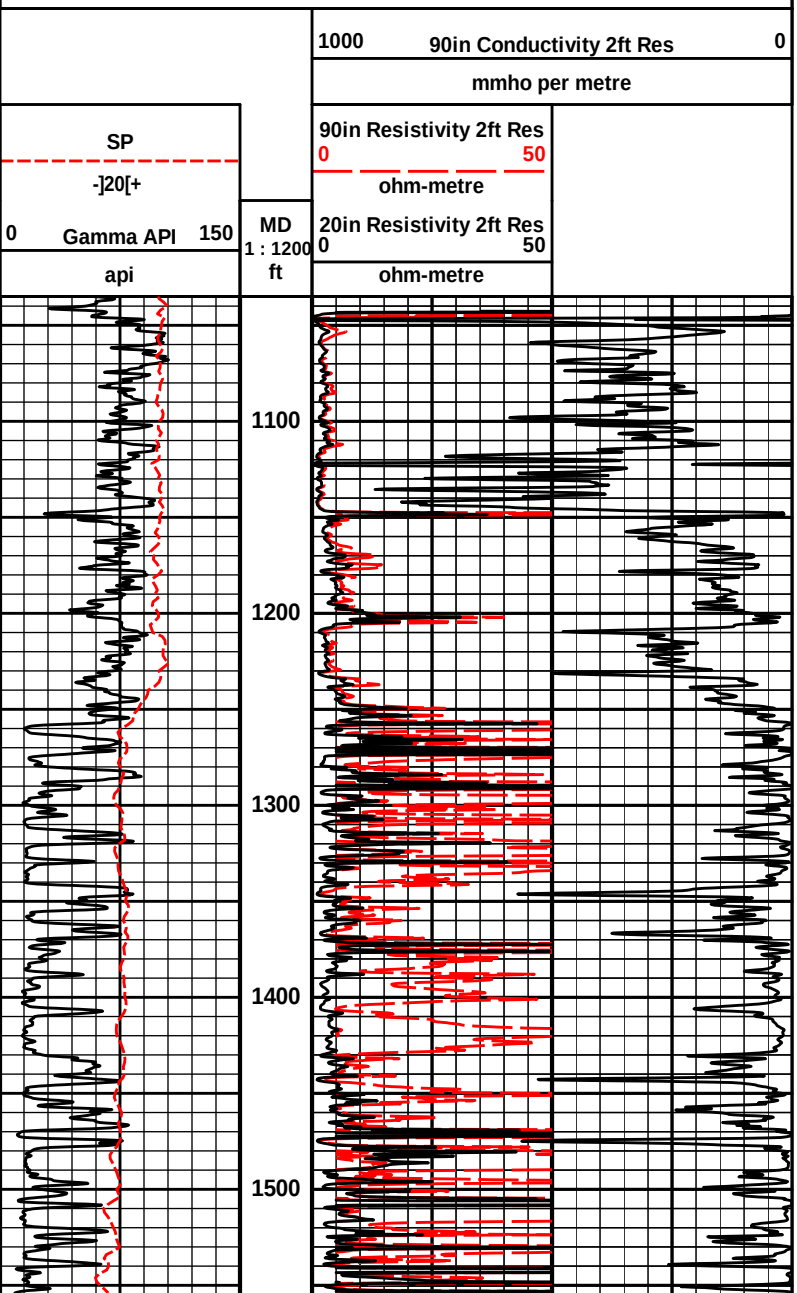
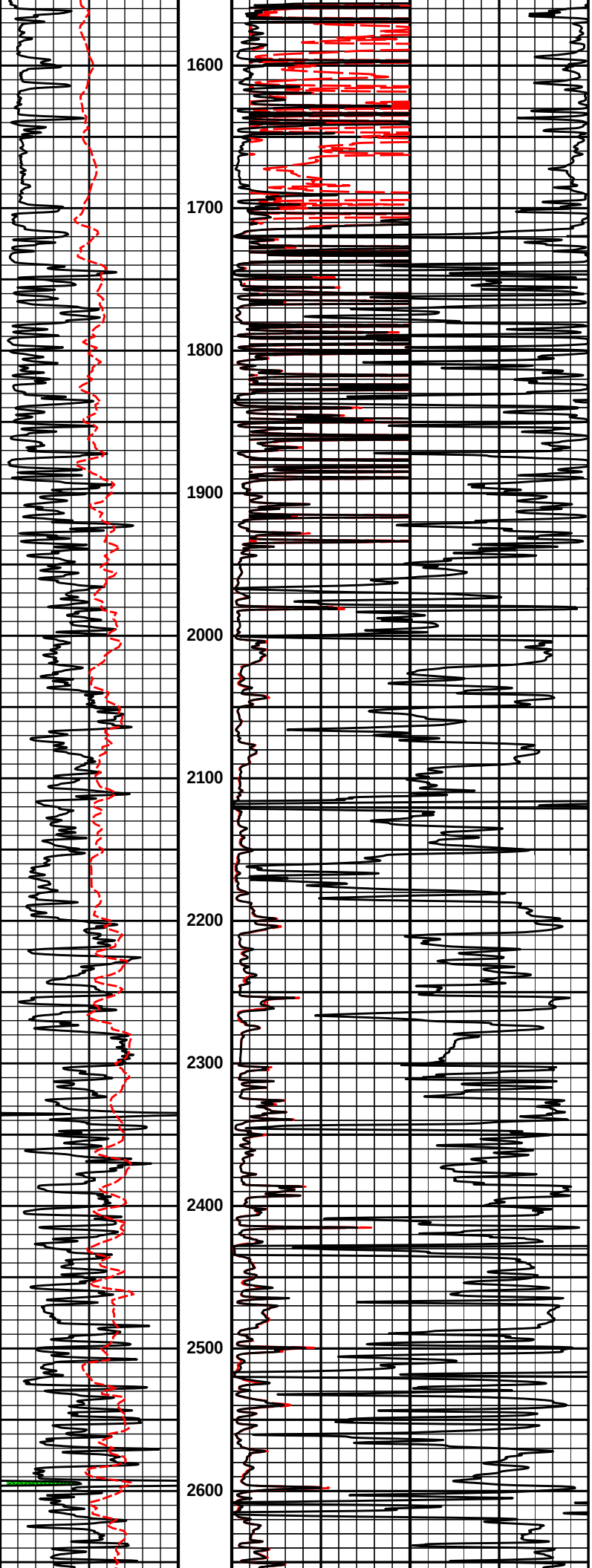
Plot Time: 03-Feb-14 07:09:39
Plot Range: 1035 ft to 4765.5 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004\
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\...\ACRT_1_lib

1 INCH MAIN LOG

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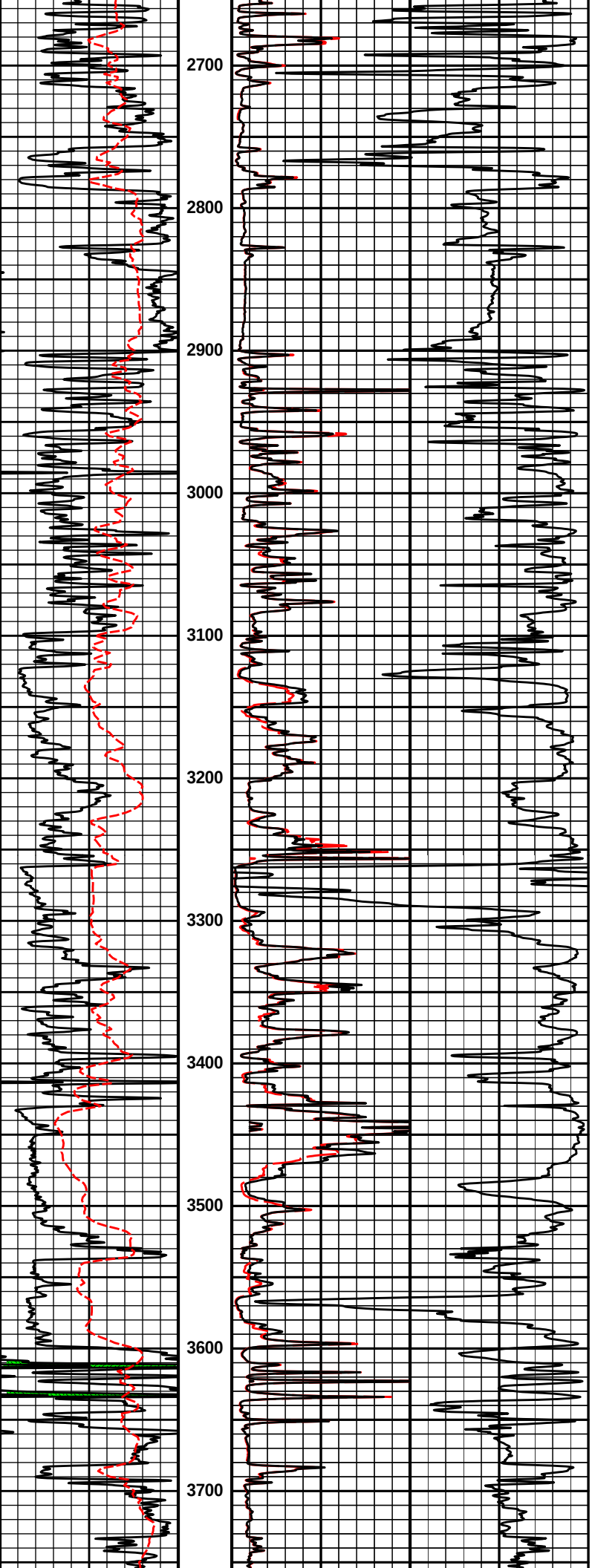
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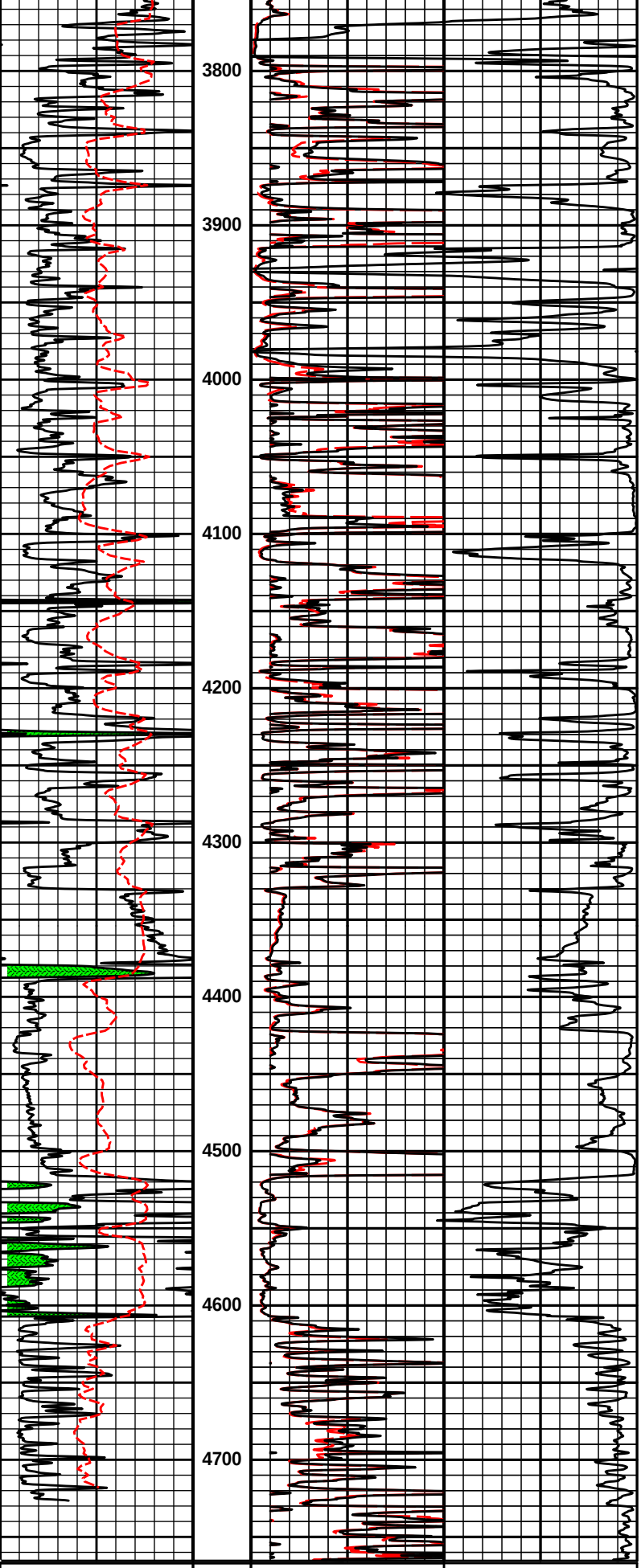

0 Gamma API 150	MD 1 : 1200 ft	20in Resistivity 2ft Res 0 50
api		ohm-metre
SP		90in Resistivity 2ft Res 0 50

-]20[+	ohm-metre	
	1000 90in Conductivity 2ft Res	0
	mmho per metre	

HALLIBURTON

Plot Time: 03-Feb-14 07:09:41
Plot Range: 1035 ft to 4765.5 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004\
Plot File: \\-LOCAL-\ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\...\ACRT_1_lib

1 INCH MAIN LOG