

HALLIBURTON

ARRAY COMPENSATED TRUE RESISTIVITY LOG

COMPANY				OXY USA INC			
WELL				HENTSCHEL C-2			
FIELD				MUSTANG EAST			
COUNTY				MORTON			
STATE				KANSAS			
Permanent Datum		GL		API No.		15-129-21941	Other Services: MICROLOG BSAT DSNT, SDLT
Log measured from		KB		Location		1100' FNL & 2222' FEL SE SW NW NE	
Drilling measured from		KB		Sect.		8	
Date		03-Sep-12		Twp.		33S	Rge.
Run No.		ONE		Elev.		42W	
Depth - Driller		3950.00 ft		Elev. 3523.0 ft			
Depth - Logger		3910.0 ft		Elev. 3537.0 ft			D.F.
Bottom - Logged Interval		3900.0 ft		Elev. 3536.0 ft			
Top - Logged Interval		1384.0 ft		Elev. 3523.0 ft			
Casing - Driller		8.625 in	@	D.F.			G.L.
Casing - Logger		1384.0 ft		G.L.			
Bit Size		7.875 in	@	G.L.			
Type Fluid in Hole		WATER BASED MUD		G.L.			G.L.
Density		9.1 ppq	46.00 s/qt	G.L.			
PH		10.10 pH	8.4 cp/m	G.L.			
Source of Sample		FLOWLINE		G.L.			G.L.
Rm @ Meas. Temperature		0.700 ohmm	@ 75.00 degF	G.L.			
Rmf @ Meas. Temperature		0.63 ohmm	@ 75.00 degF	G.L.			
Rmc @ Meas. Temperature		0.950 ohmm	@ 75.00 degF	G.L.			
Source Rmf		MEASURED	MEASURED	G.L.			G.L.
Rm @ BHT		0.71 ohmm	@ 75.0 degF	G.L.			
Time Since Circulation		8.0 hr		G.L.			
Time on Bottom		03-Sep-12 20:02		G.L.			G.L.
Max. Rec. Temperature		123.0 degF	@ 3910.0 ft	G.L.			
Equipment		10782954	LIBERAL	G.L.			
Recorded By		J. BOLLOW		G.L.			G.L.
Witnessed By		J. GILL		G.L.			
				G.L.			

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Service Ticket No.: 9788870						API Serial No.: 15-129-21941						PGM Version: WL INSITE R3.6.0 (Build 3)																	
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES																	
Date		Sample No.										Type Log		Depth		Scale Up Hole		Scale Down Hole											
Depth-Driller																													
Type Fluid in Hole																													
Density		Viscosity																											
Ph		Fluid Loss																											
Source of Sample												RESISTIVITY EQUIPMENT DATA																	
Rm @ Meas. Temp				@				@				Run No.		Tool Type & No.		Pad Type		Tool Pos.		Other									
Rmf @ Meas. Temp.				@				@				ONE		ACRT		N/A		1.5 S.O.		N/A									
Rmc @ Meas. Temp.				@				@						I776_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.		10748374				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.		GTET				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					

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	3910	1384	REC	0	150									
DIRECTIONAL INFORMATION														
Maximum Deviation @								KOP @						
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING														
CHLORIDES REPORTED AT 2500 MG/L														
LCM REPORTED AT 8 LB/BBL														
GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION														
TODAY'S CREW: F. VILLA & J. ALBERTS														
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KS. 620-624-8123														
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.														
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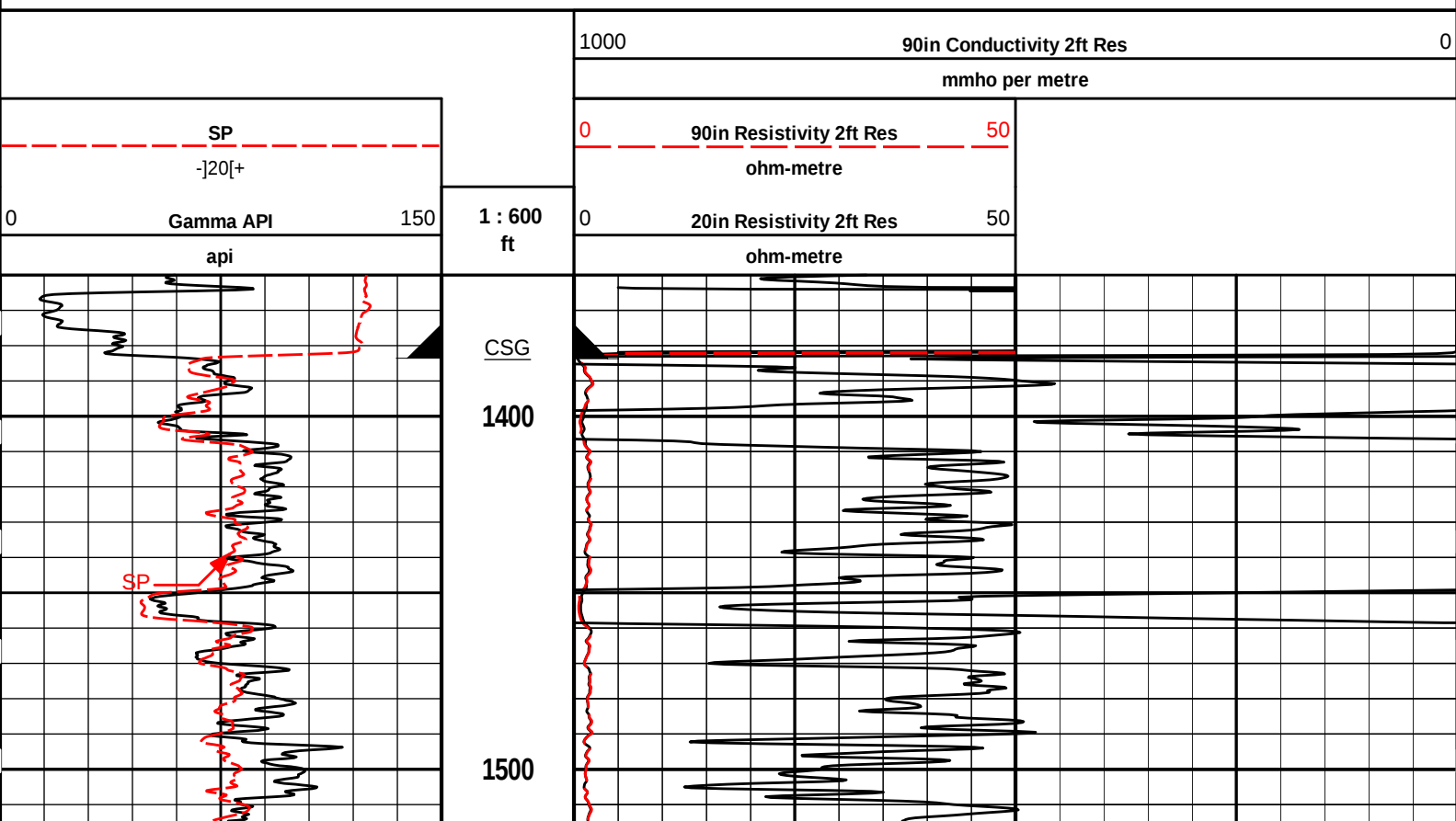
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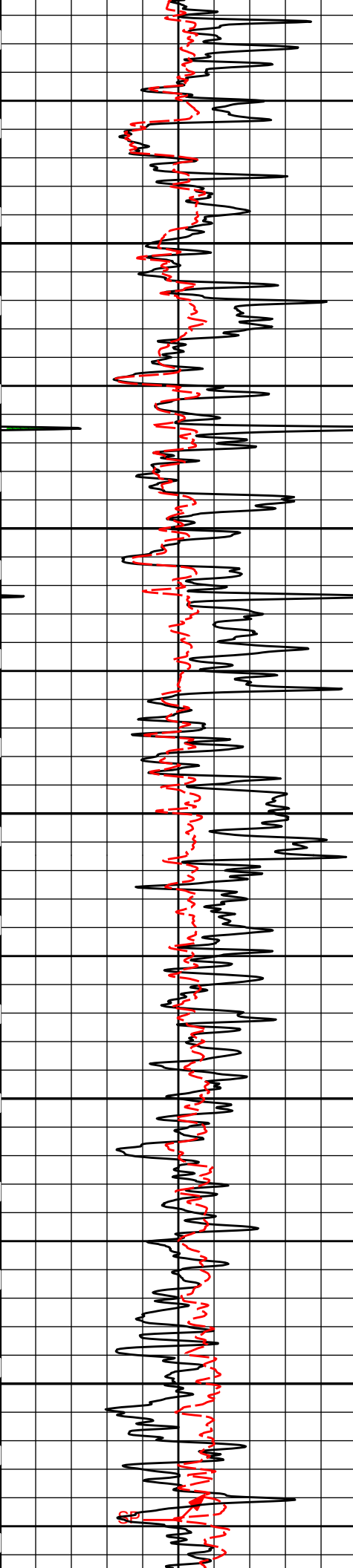
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Data: HENTSCHEL_C_2\Well Based\CASING\

Plot File: \\-LOCAL-\\HENTSCHEL_C_2\\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\\ACRT\\ACRT_2_lib

2 INCH MAIN LOG





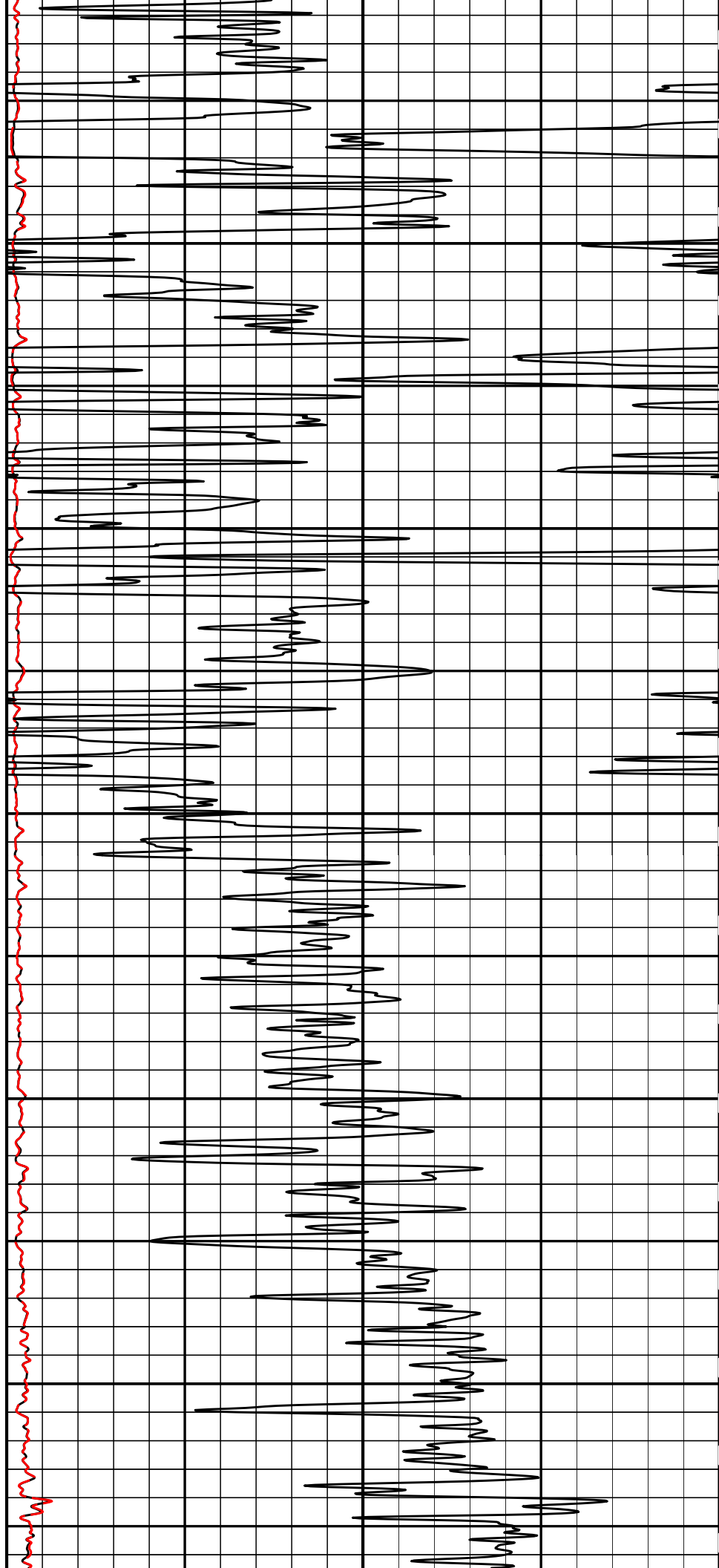
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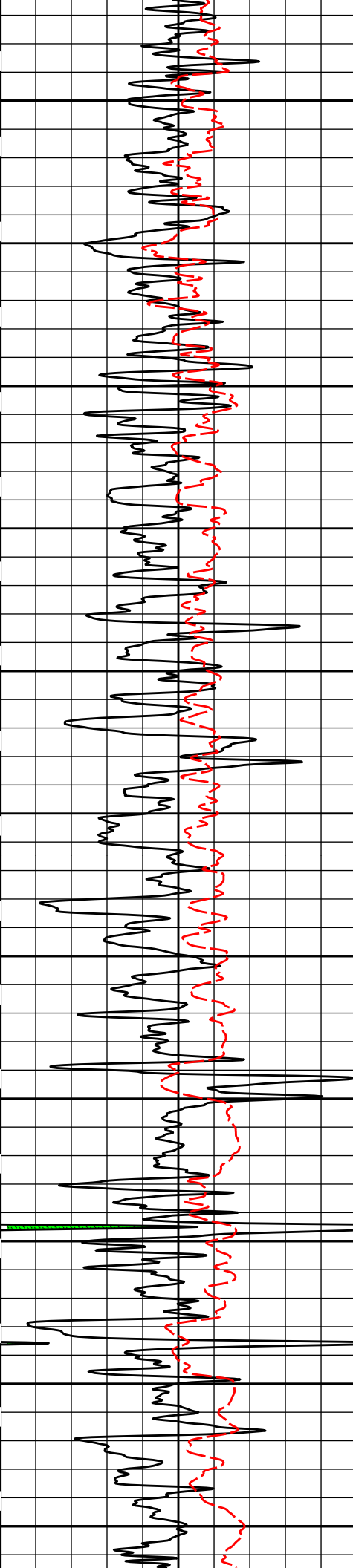
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1800

1900

2000





2100

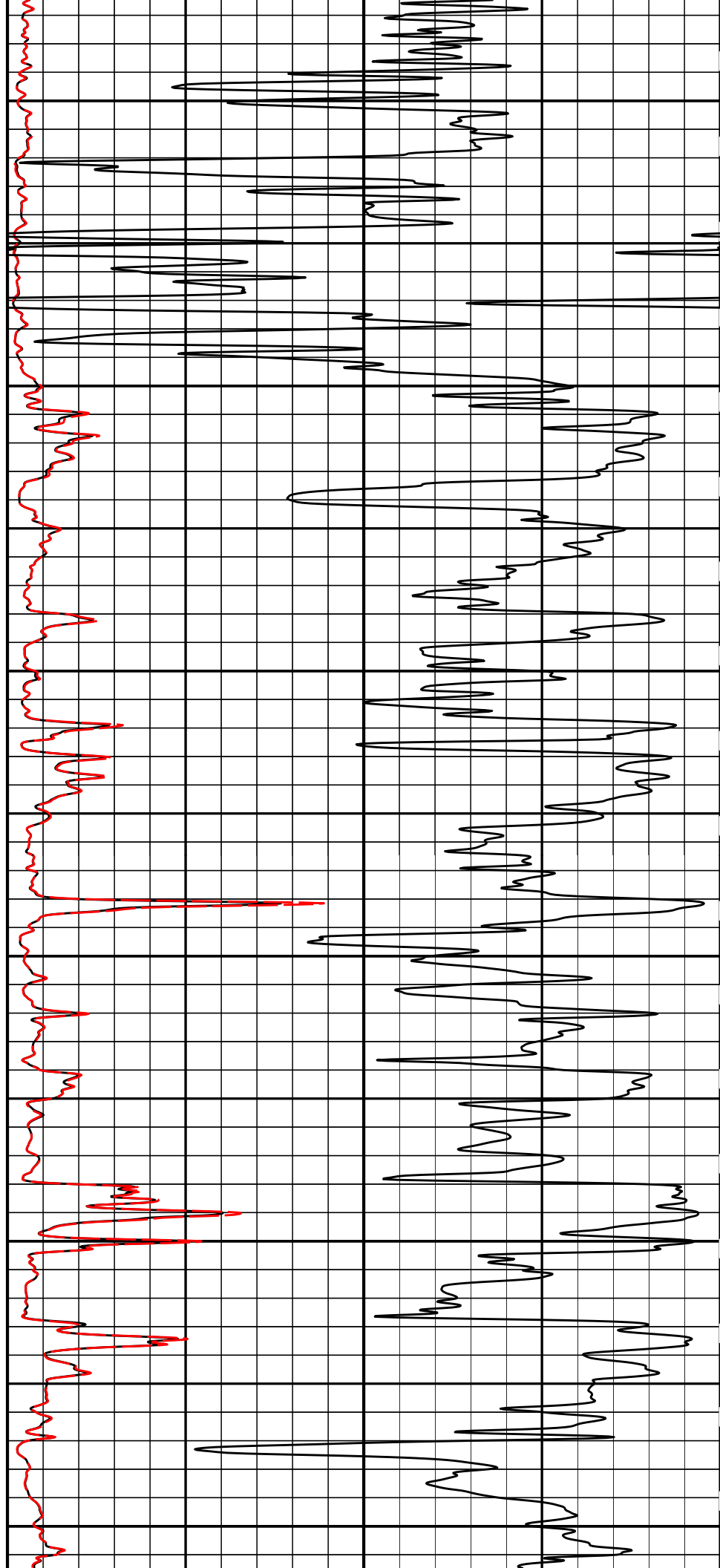
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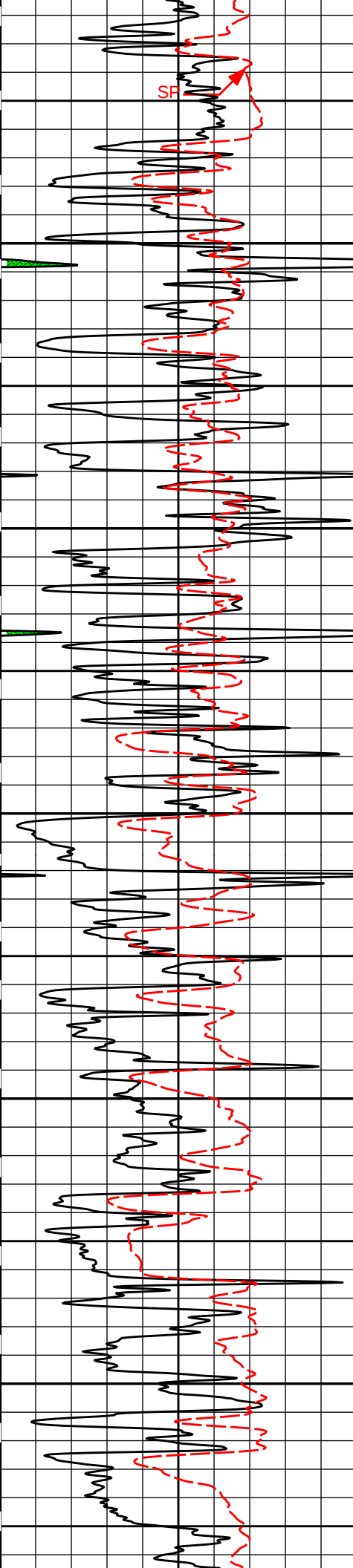
2300

2400

2500

2600





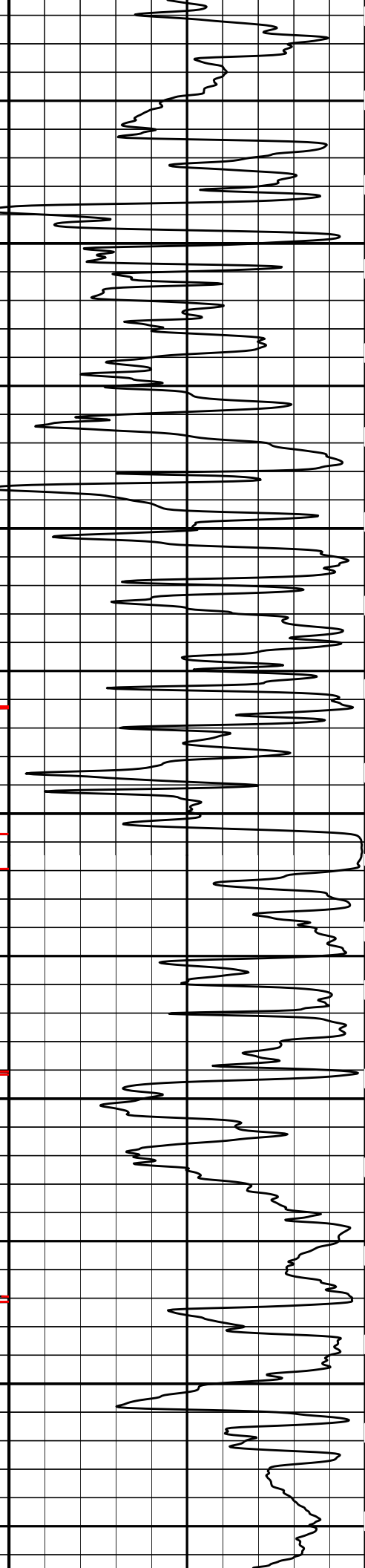
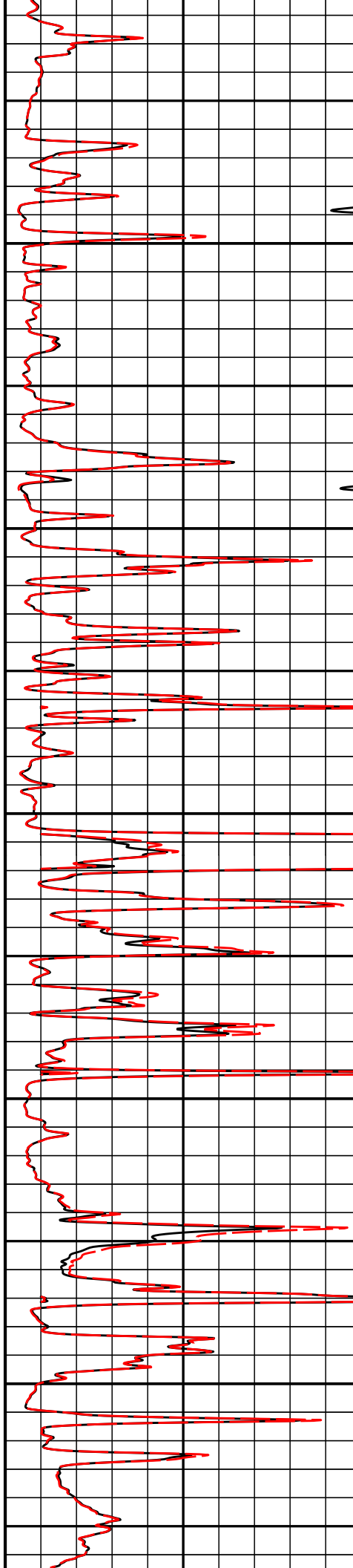
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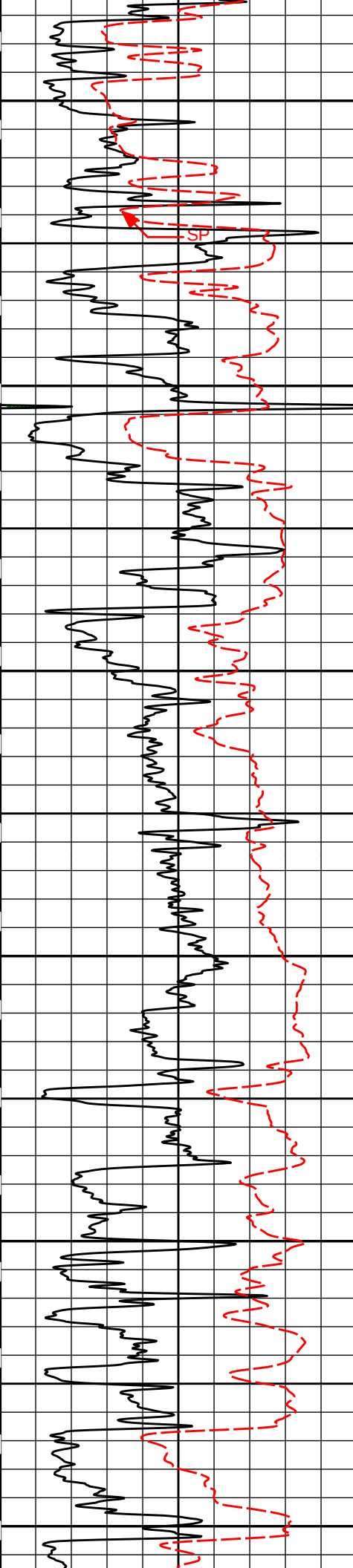
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2900

3000

3100





3200

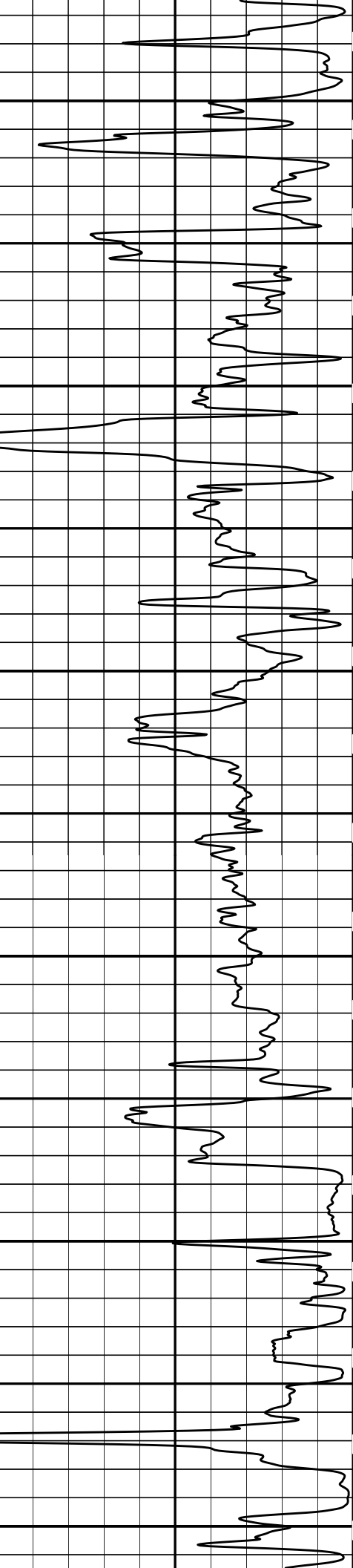
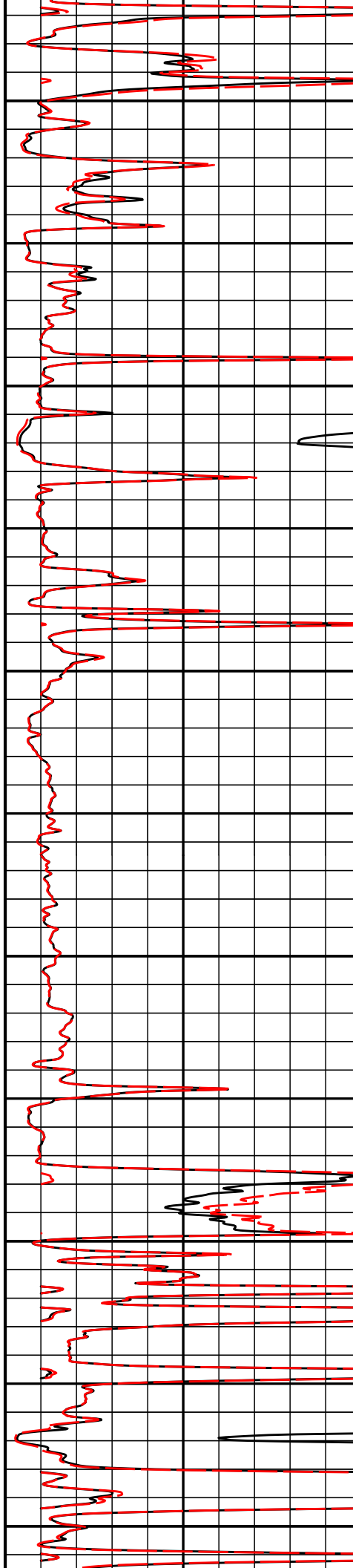
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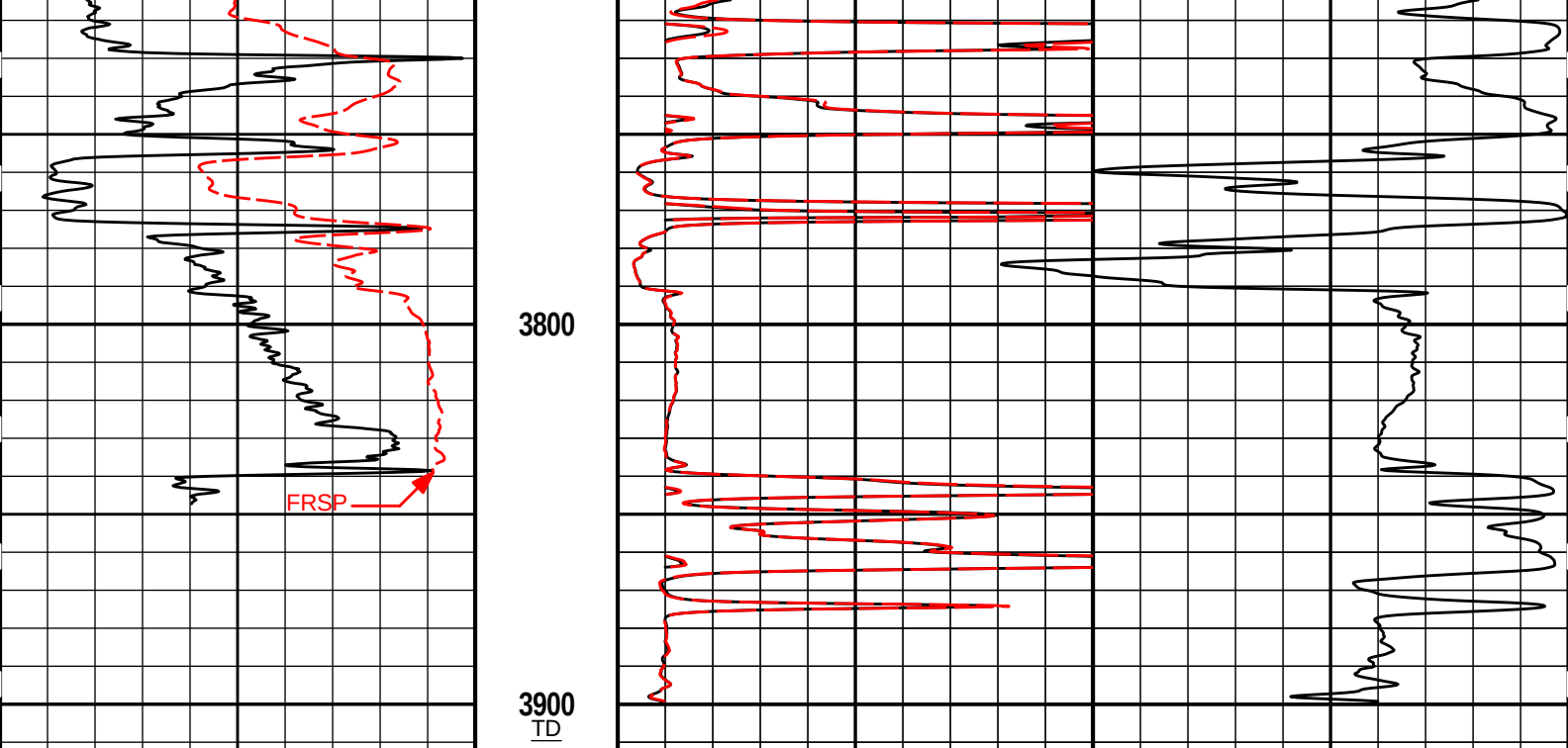
3400

3500

3600

3700





0	Gamma API	150	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		

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Plot Time: 03-Sep-12 23:13:34
Plot Range: 1360 ft to 3912.42 ft
Data: HENTSCHEL_C_2\Well Based\CASING\
Plot File: \\-LOCAL-\\HENTSCHEL_C_2\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\ACRT\ACRT_2_lib

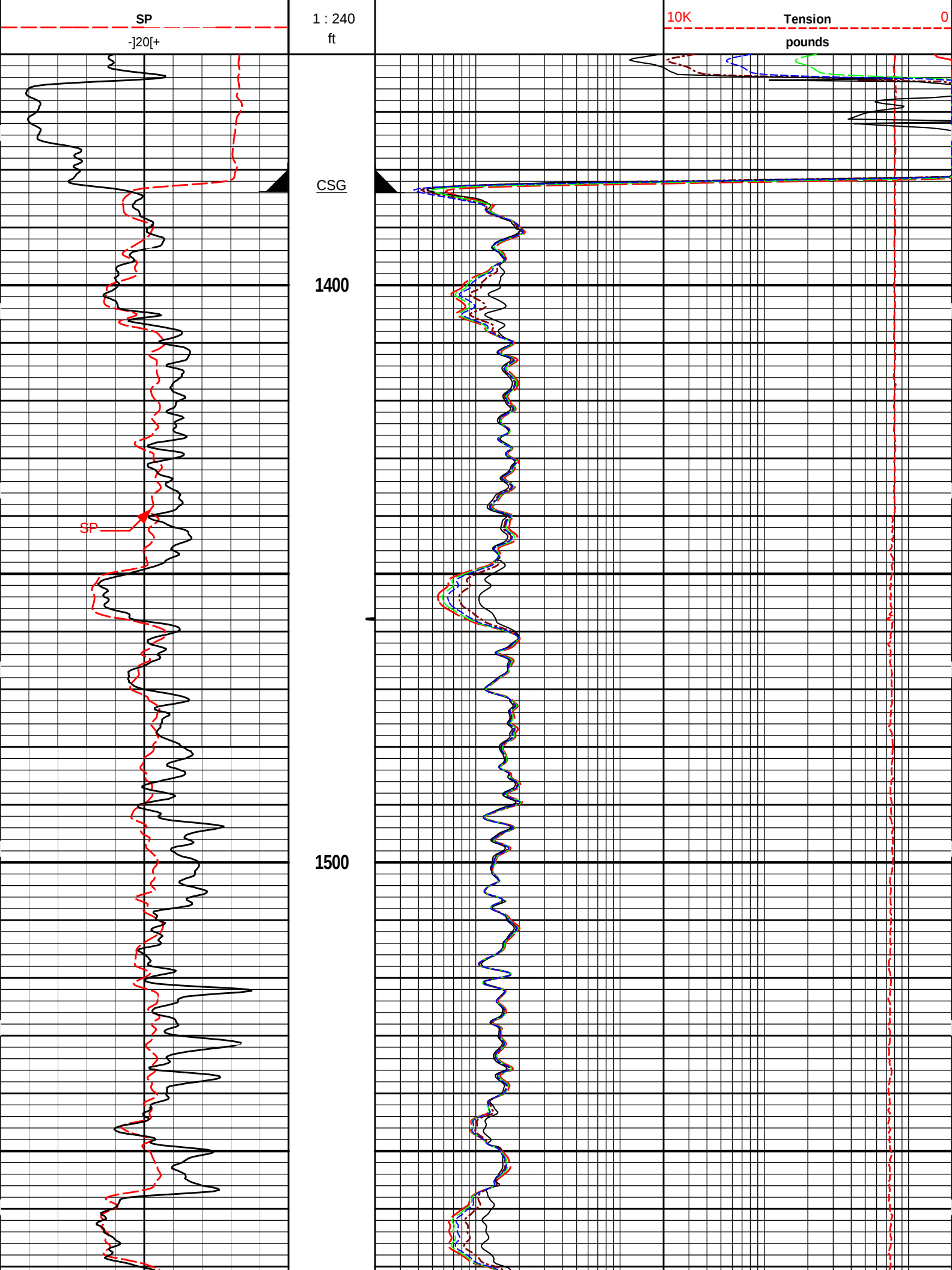
2 INCH MAIN LOG

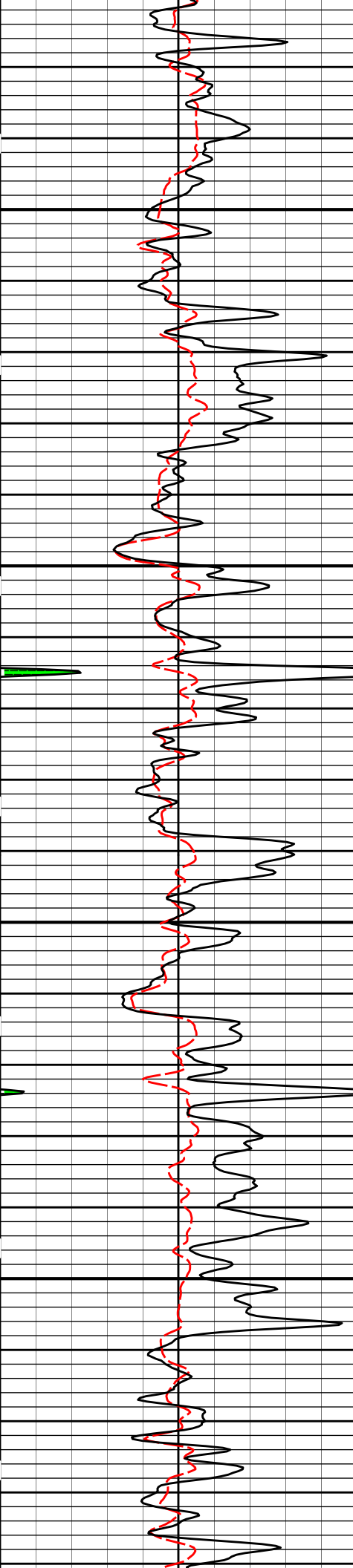
HALLIBURTON

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5 INCH MAIN LOG

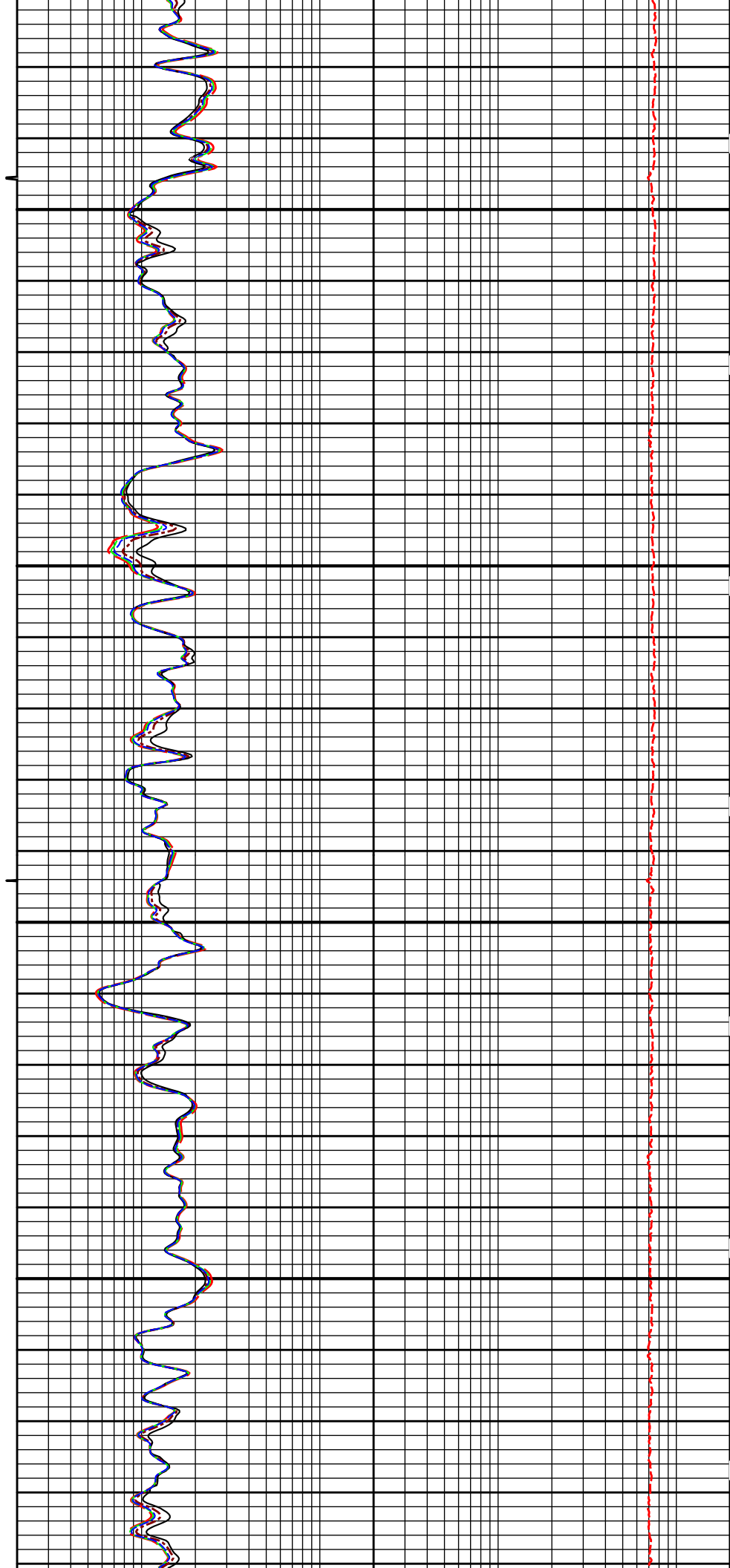
			0.2	90in Resistivity 2ft Res	2000
				ohmm	
			0.2	60in Resistivity 2ft Res	2000
				ohmm	
			0.2	30in Resistivity 2ft Res	2000
				ohm-metre	
	SHALE	Tension Pull	0.2	20in Resistivity 2ft Res	2000
				ohmm	
0	Gamma API	Tension Pull	0.2	10in Resistivity 2ft Res	2000
	api	10		ohmm	

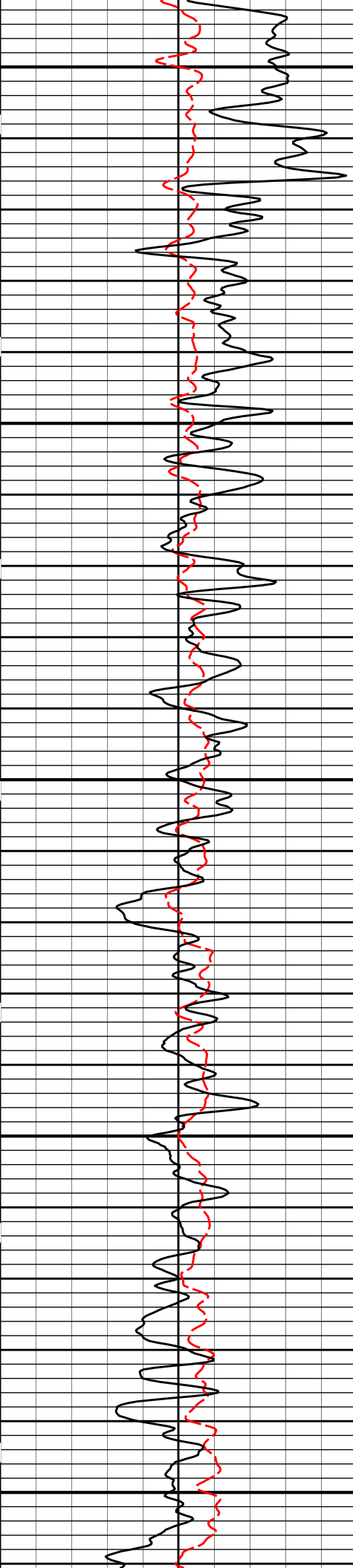




1600

1700

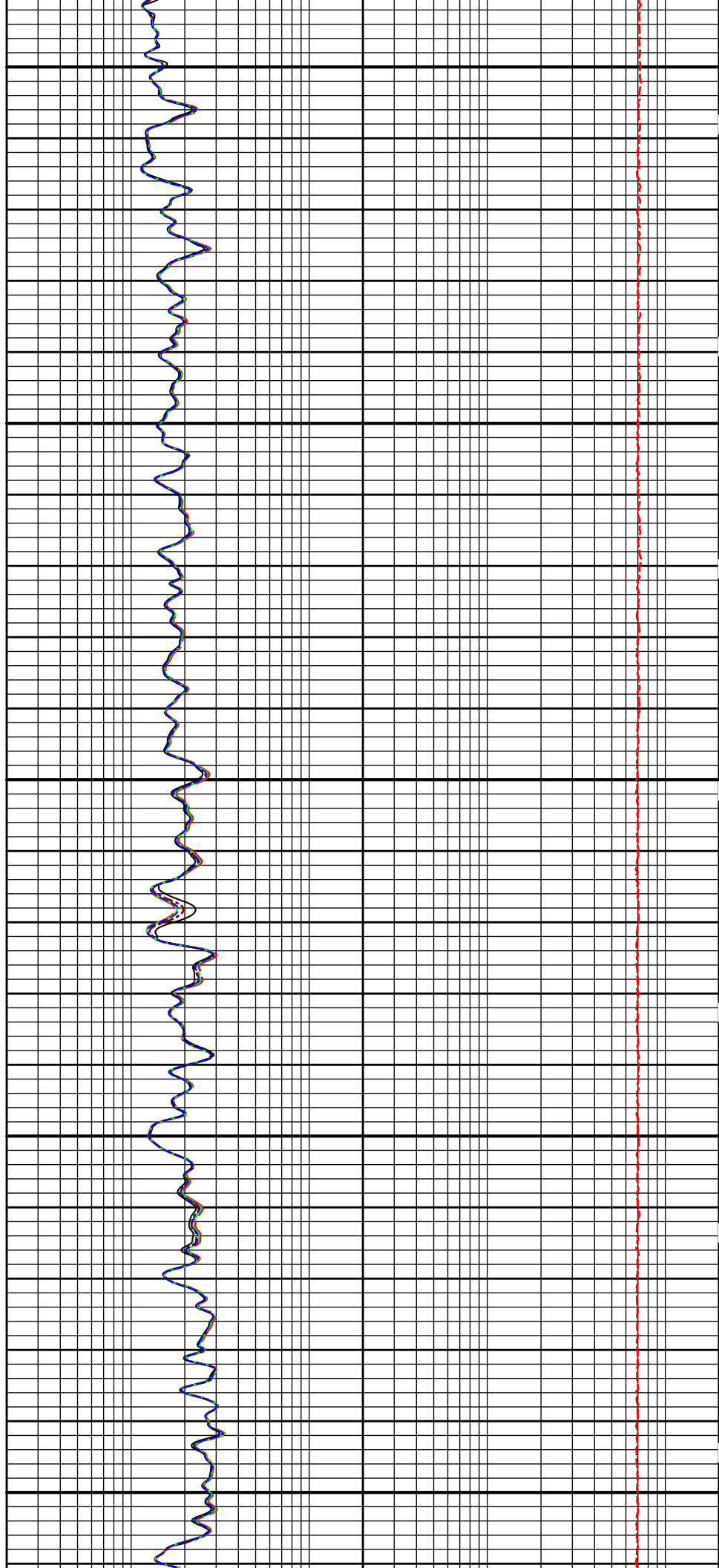


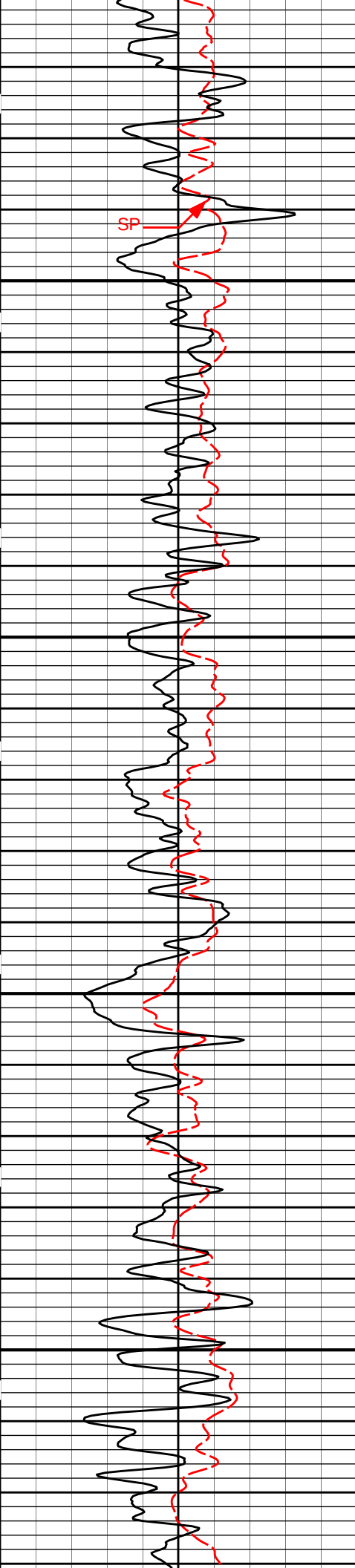


1800

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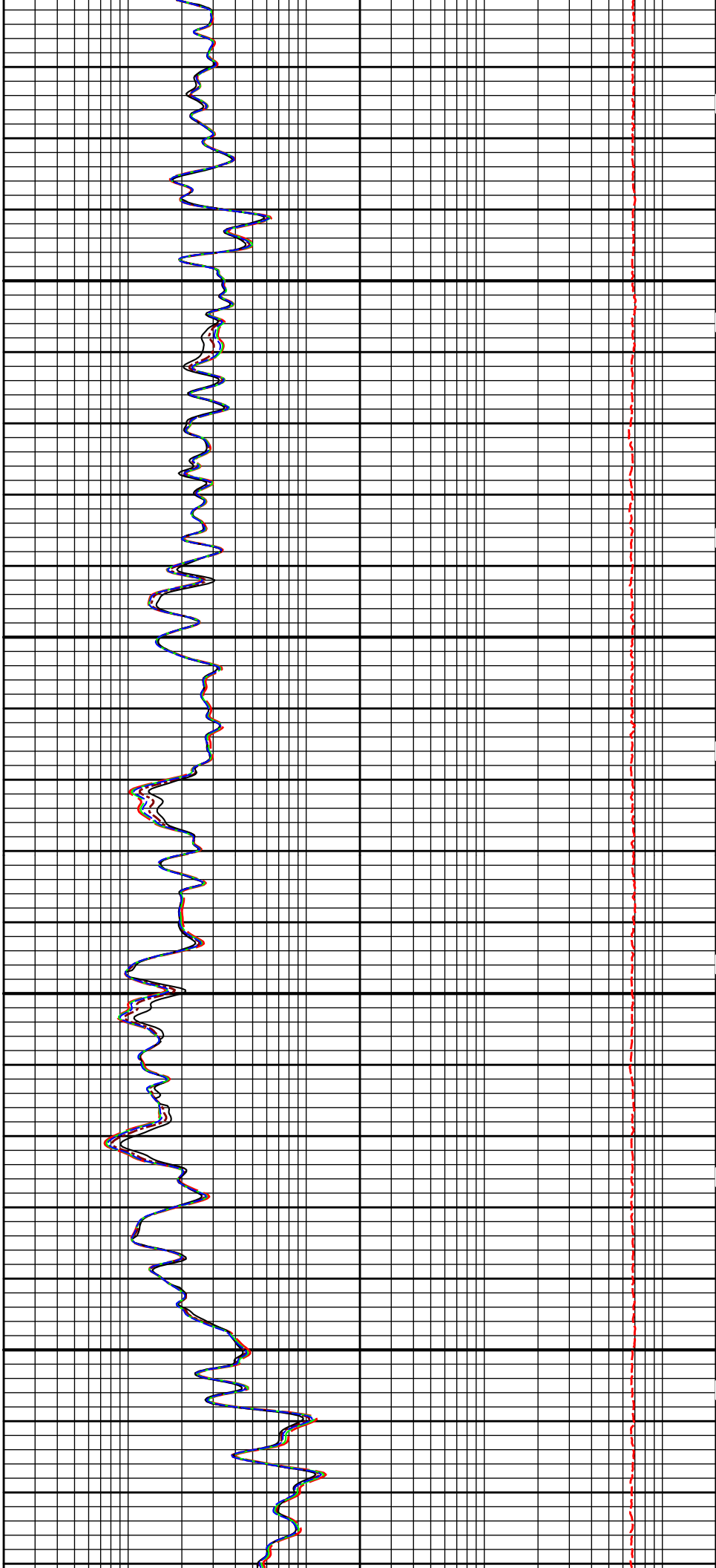
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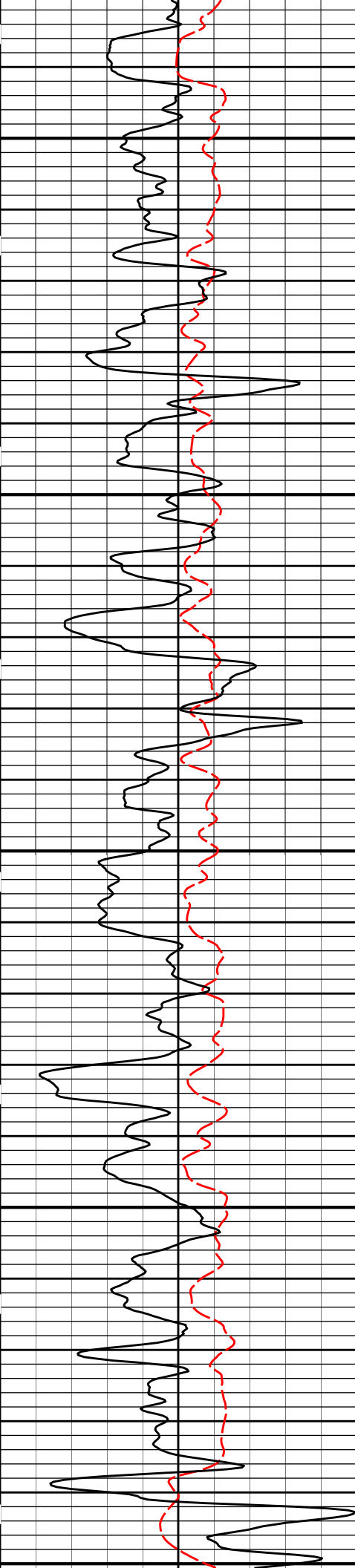




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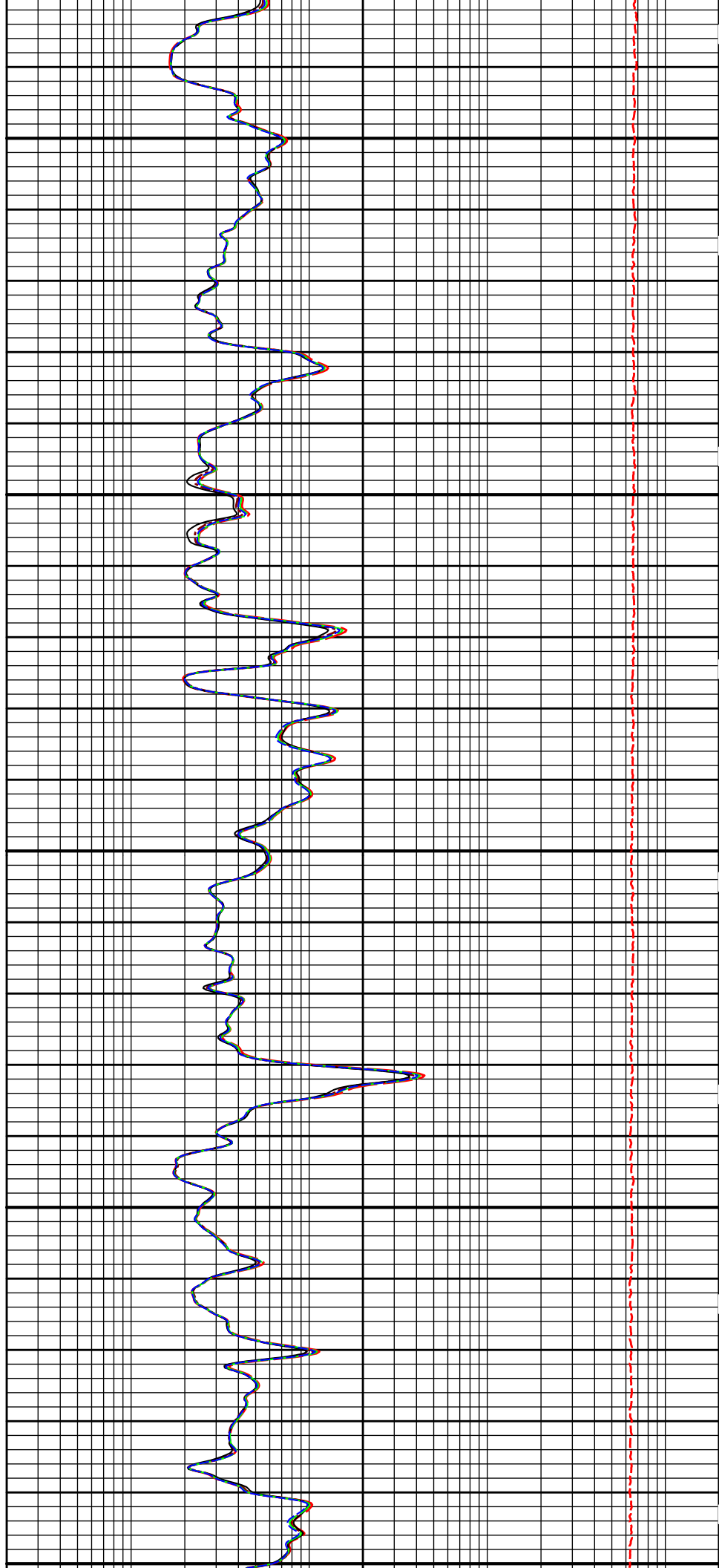
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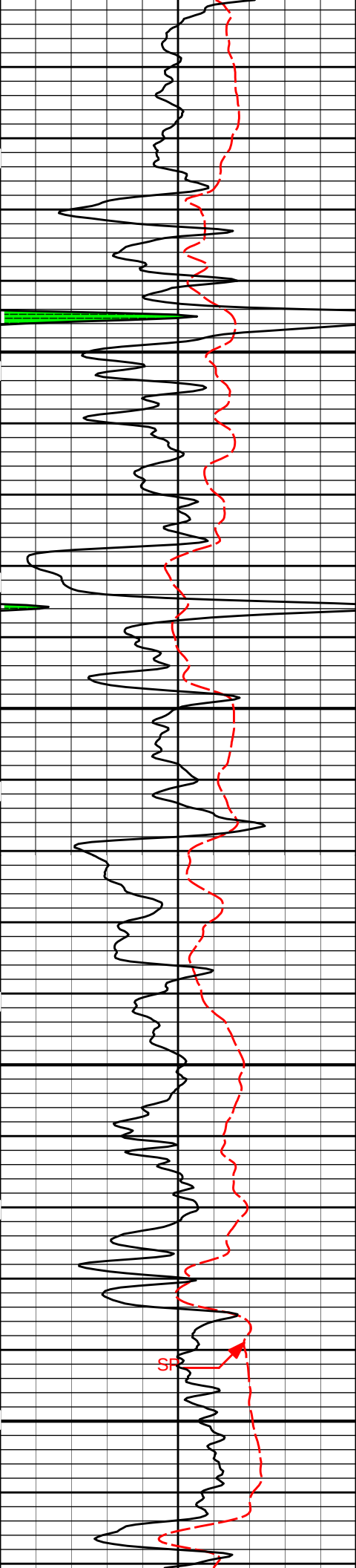




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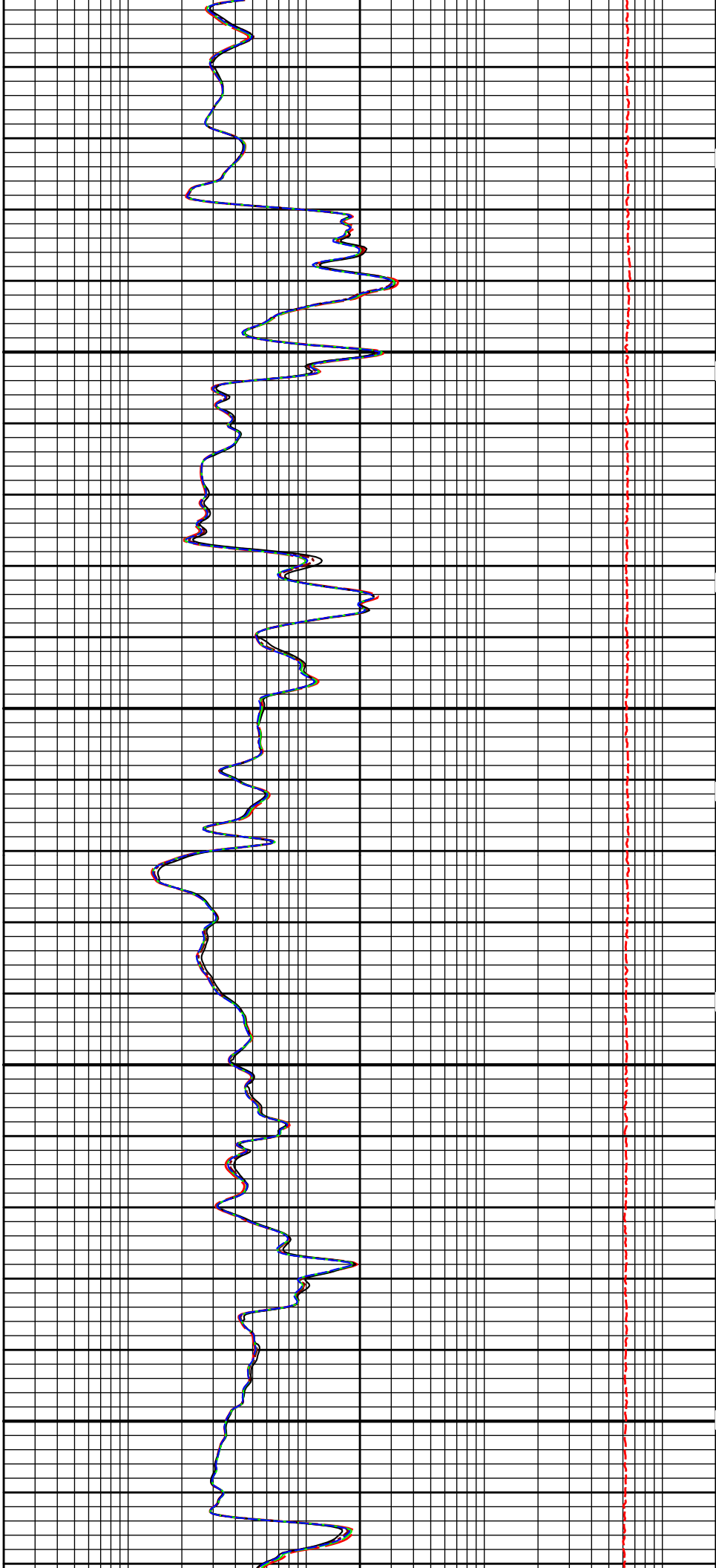
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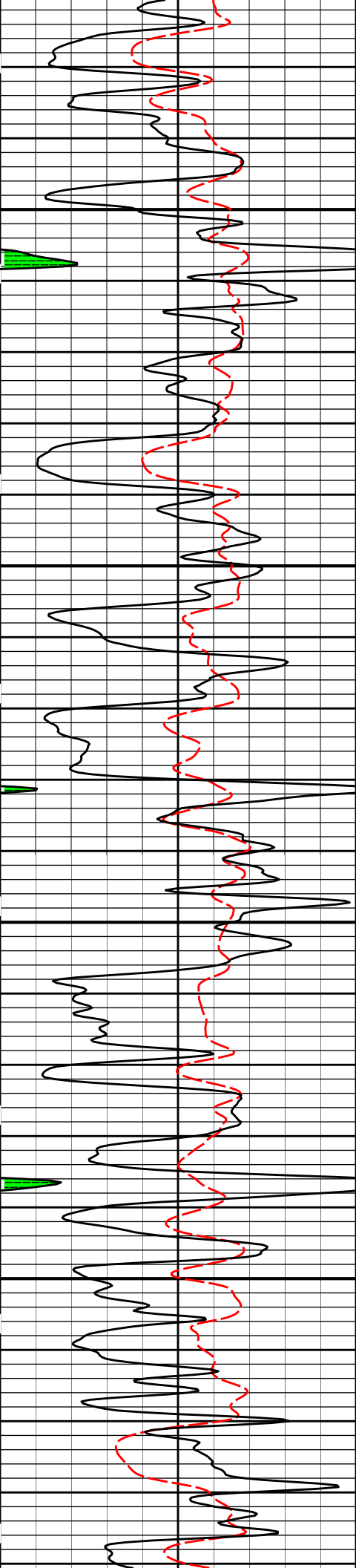




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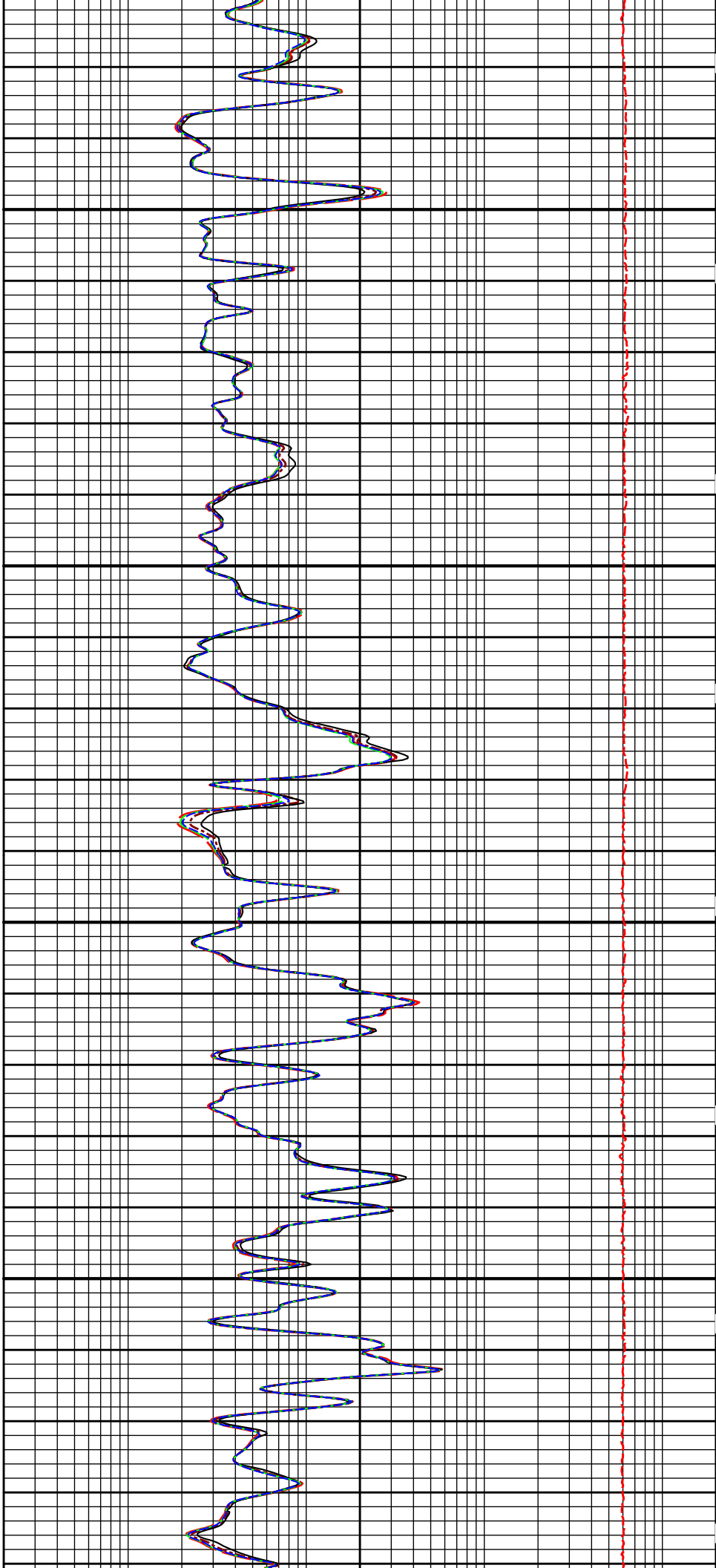
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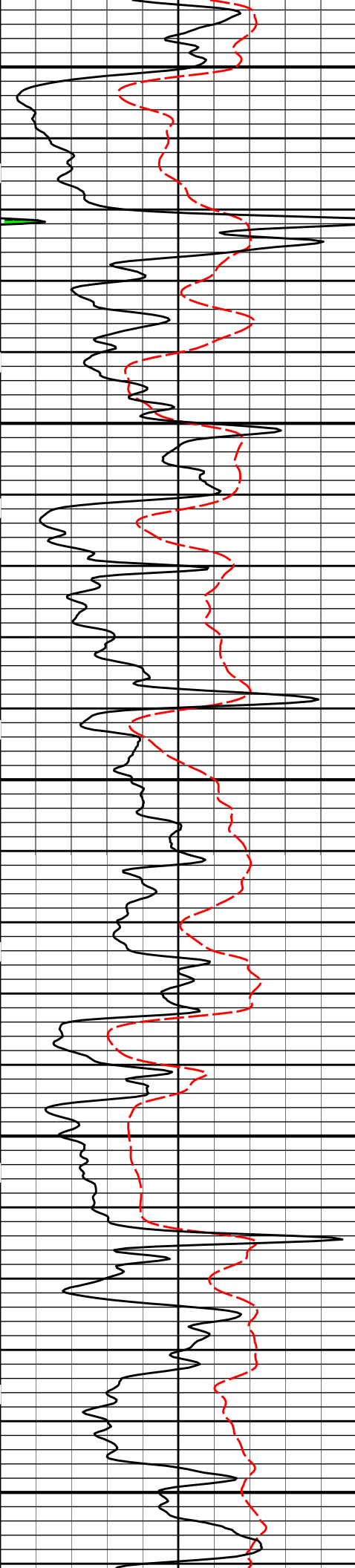




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2800

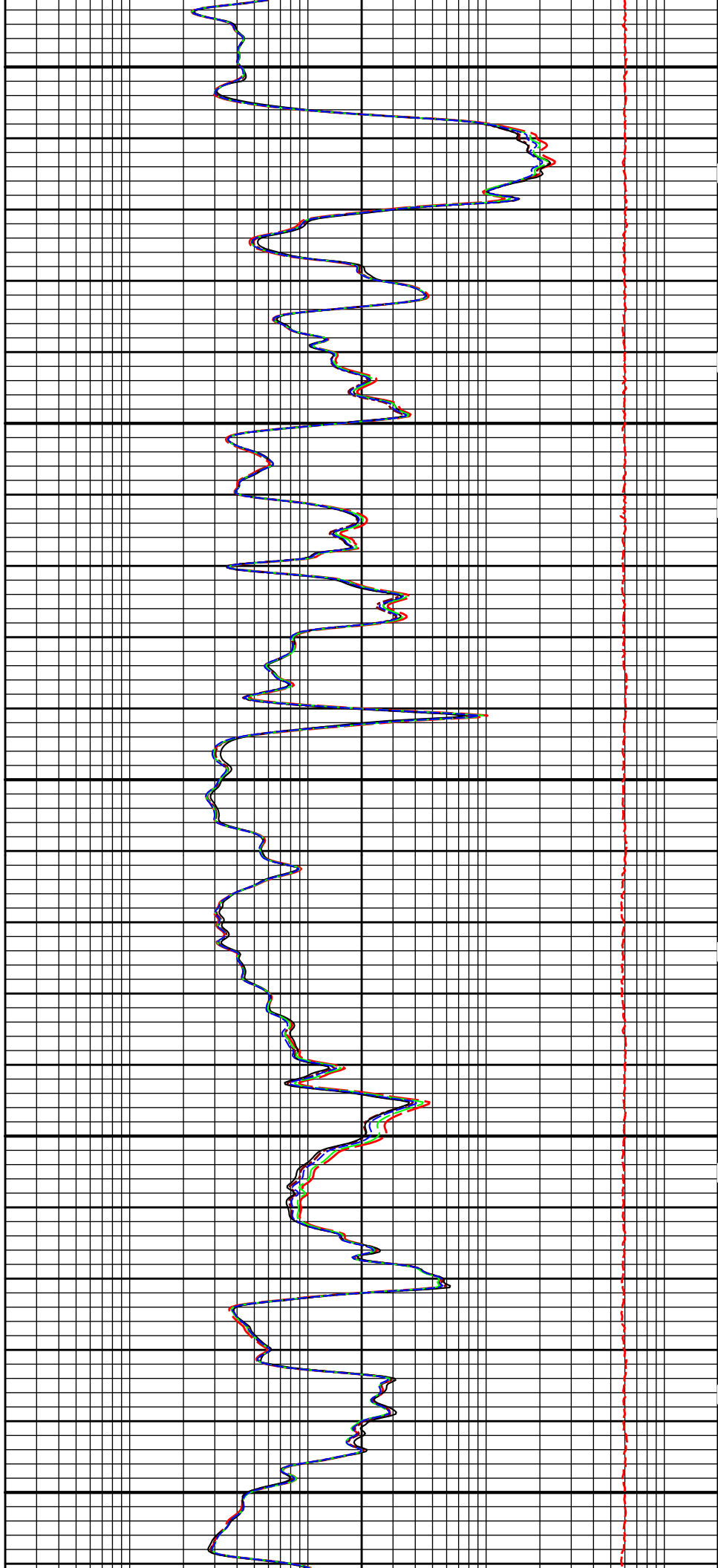


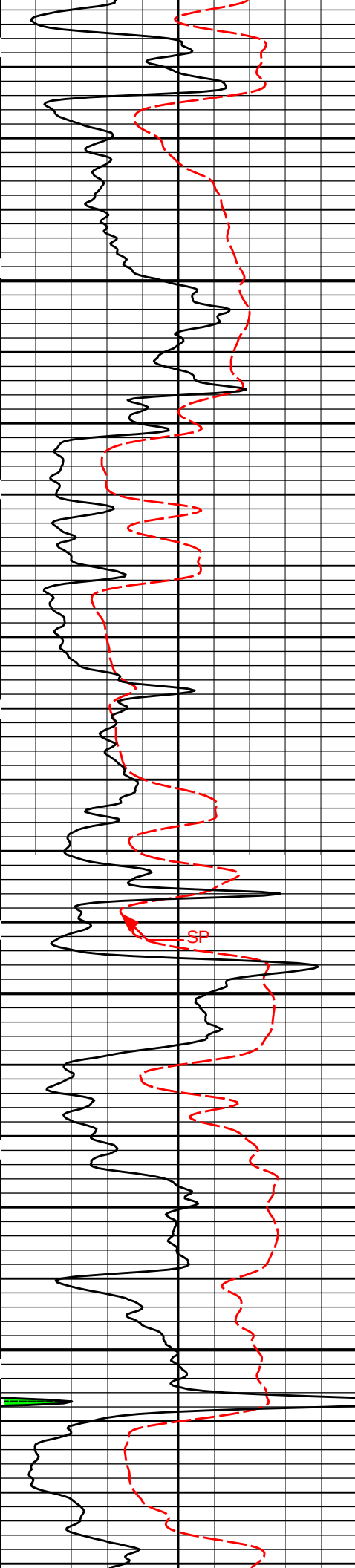


2900

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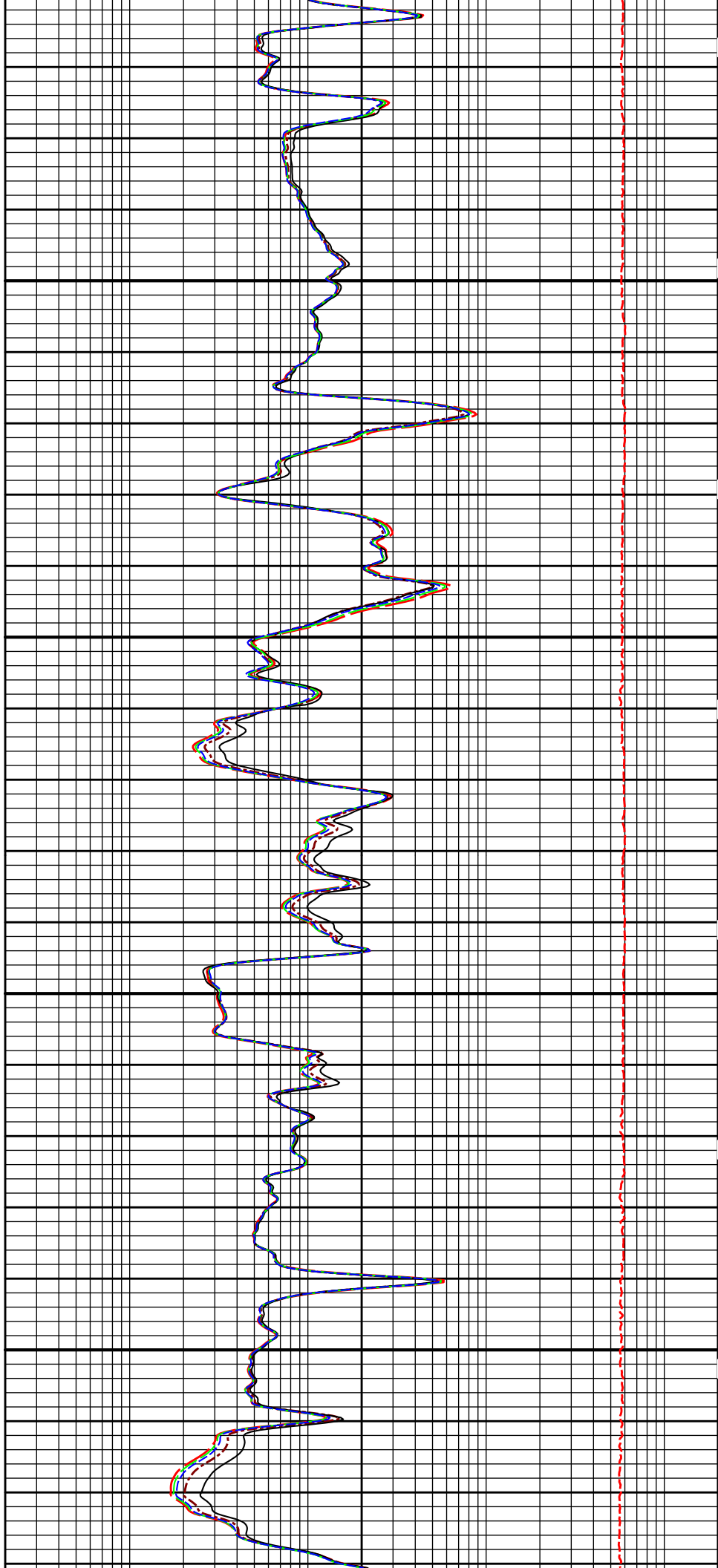
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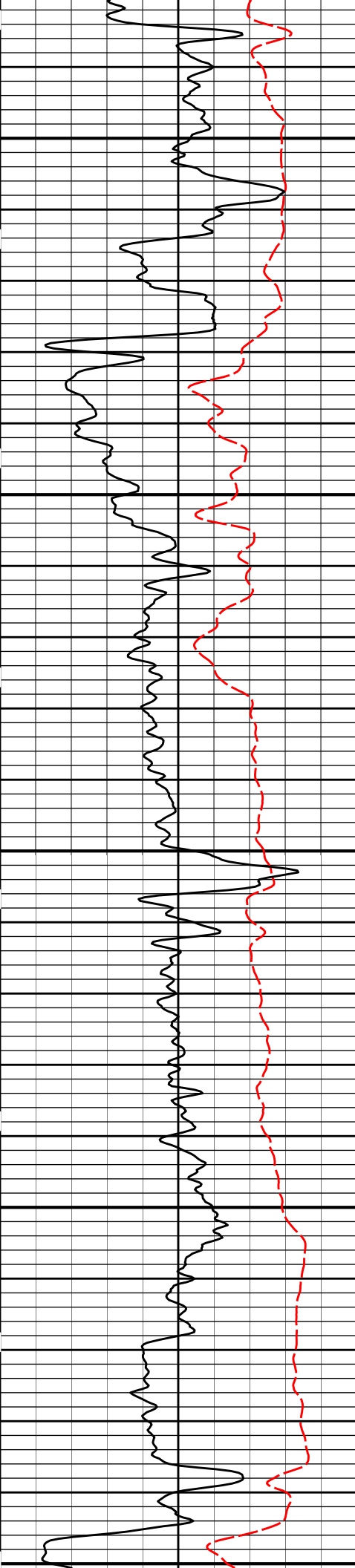




3200

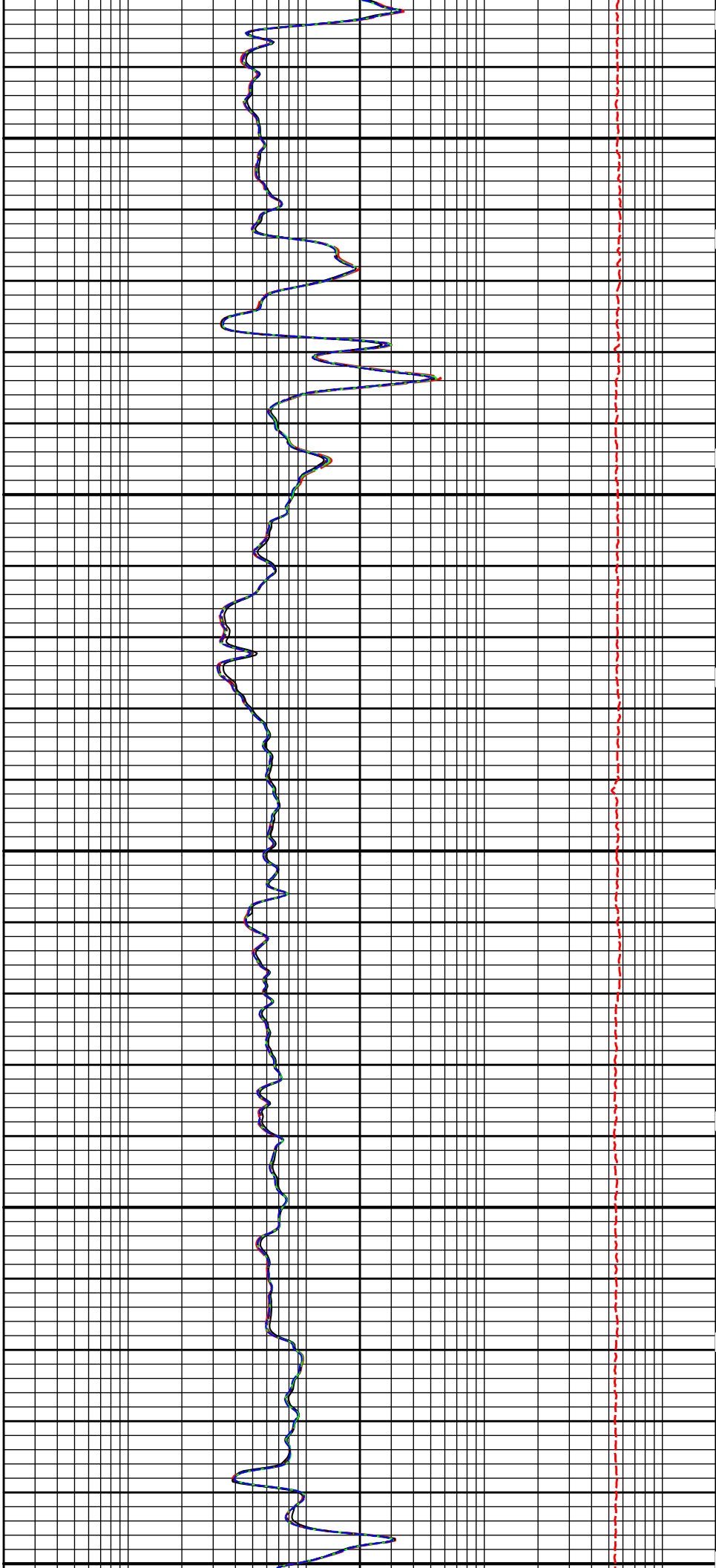
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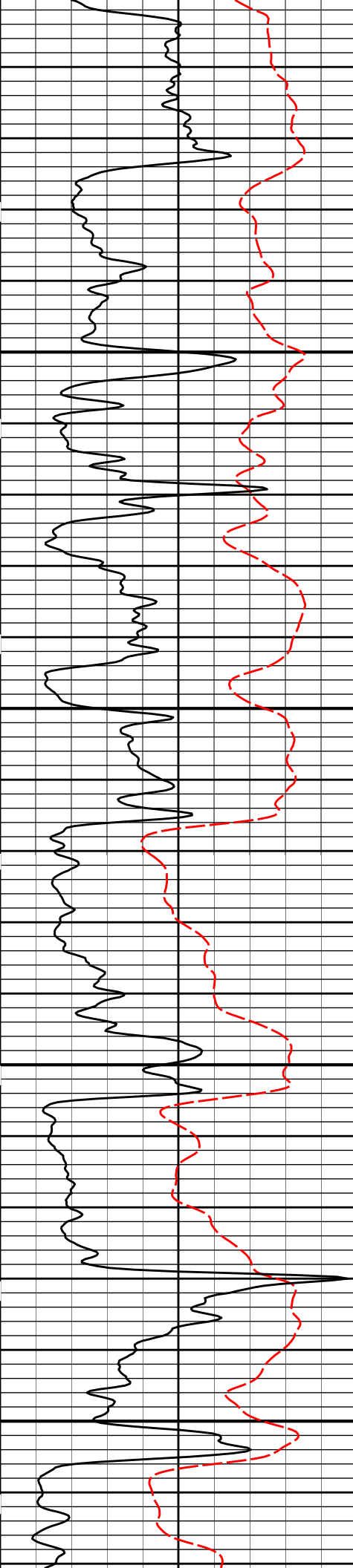




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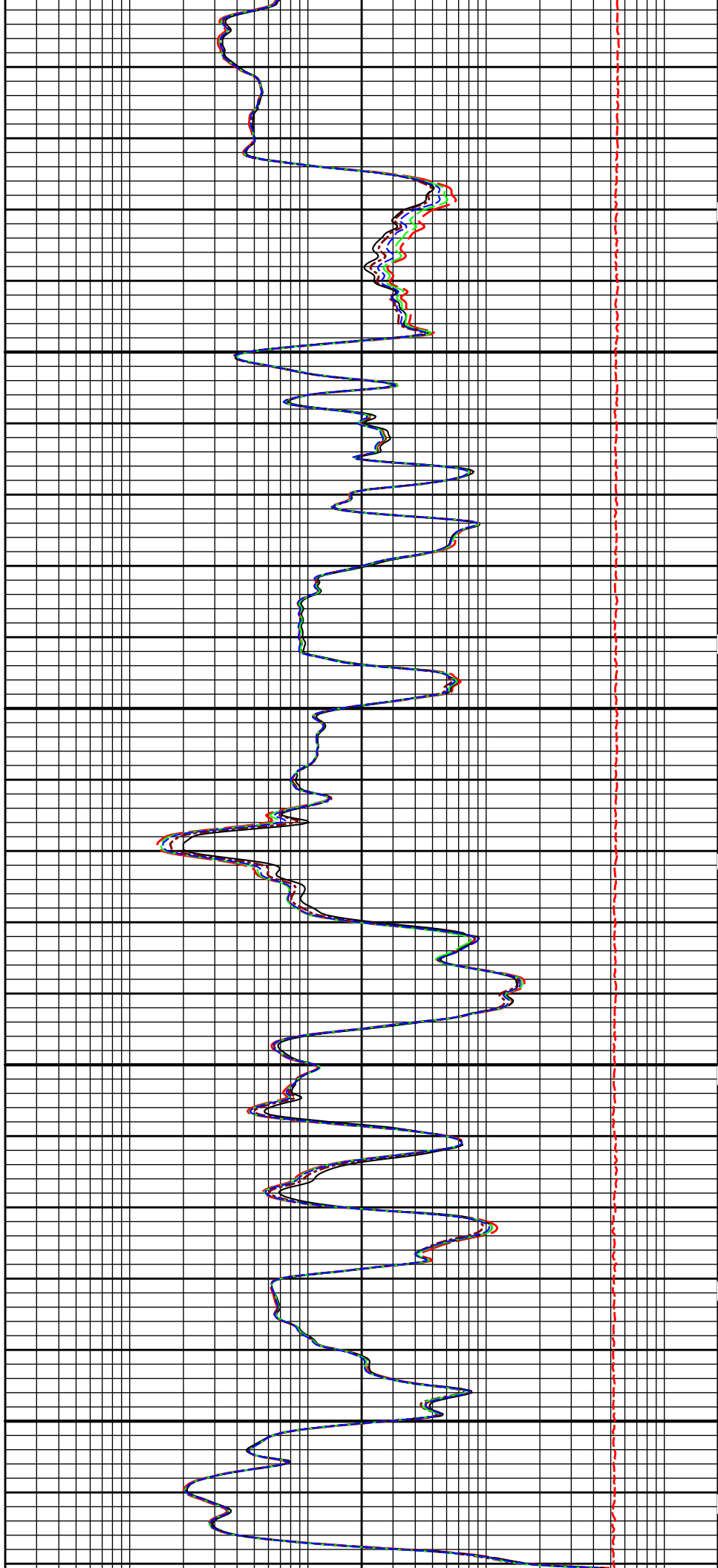
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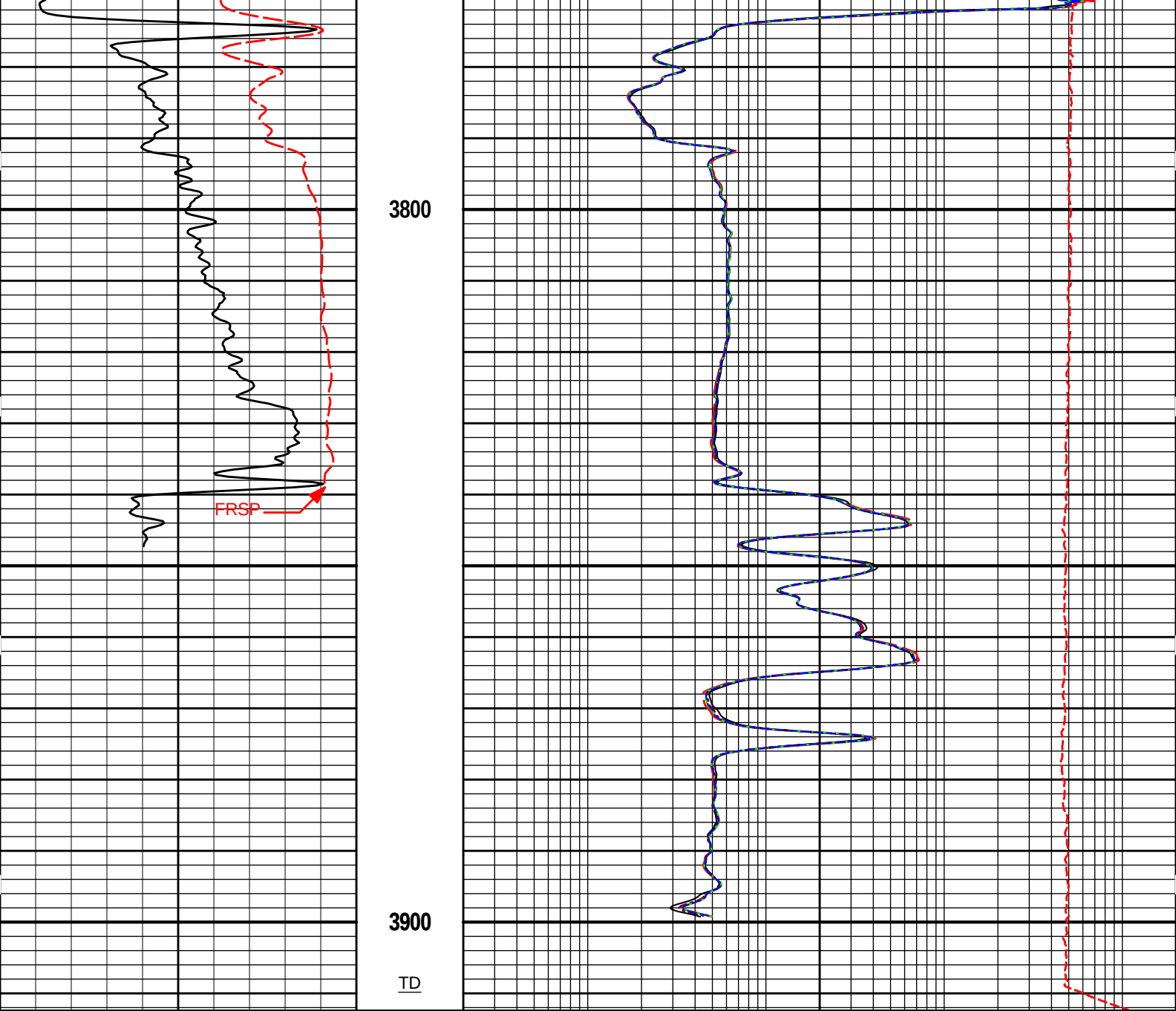




3600

3700





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

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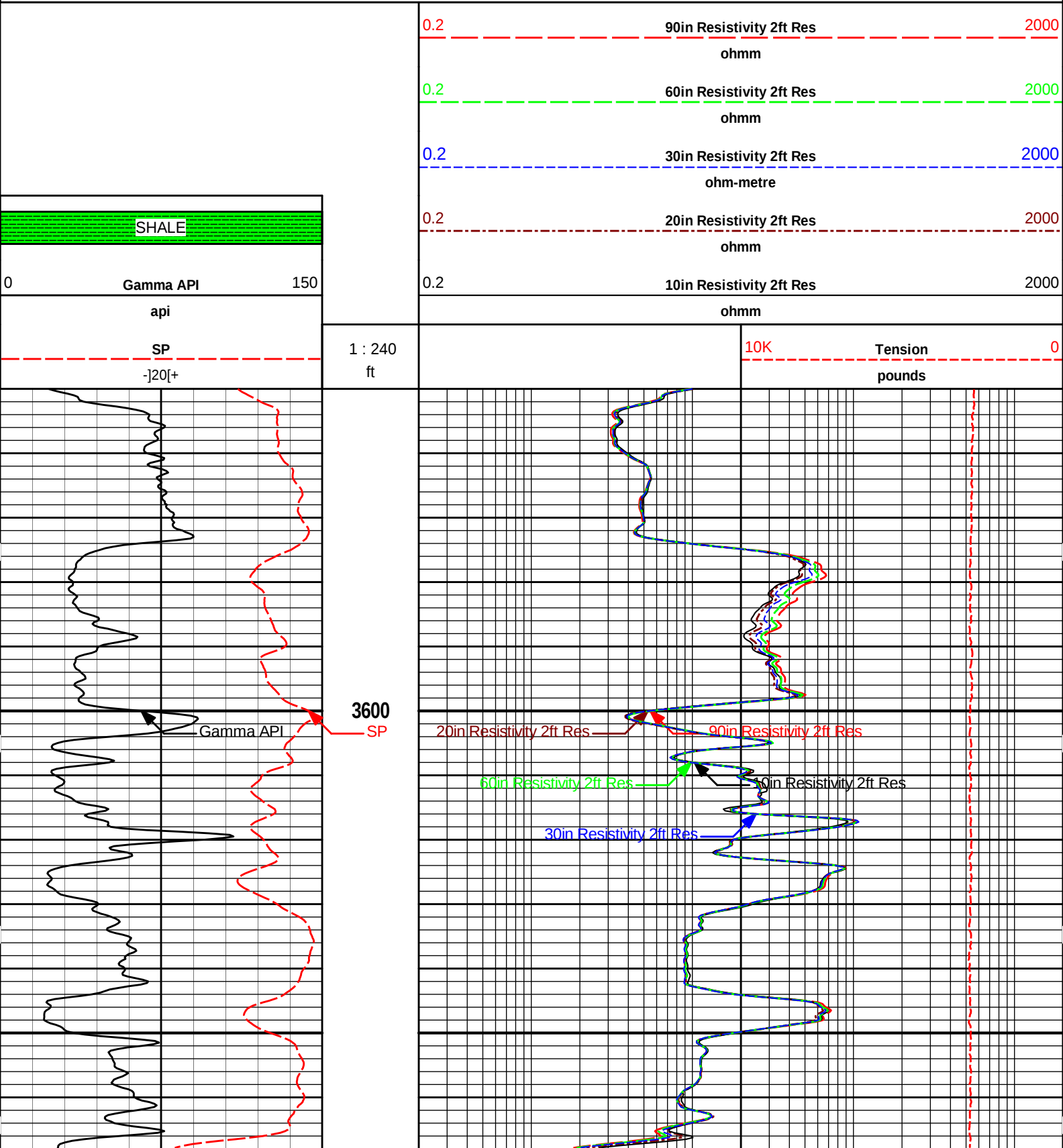
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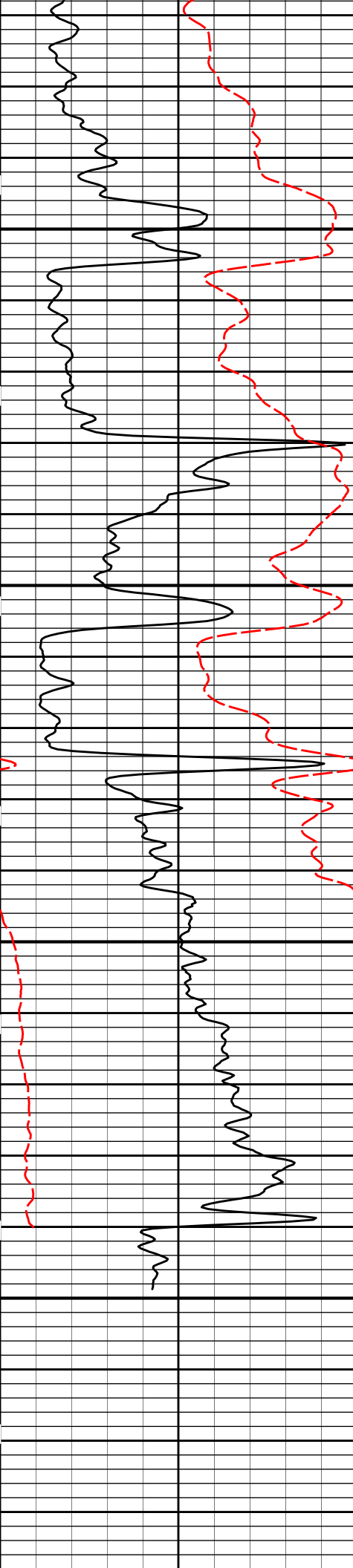
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 03-Sep-12 23:13:41
Plot Range: 3550 ft to 3913.92 ft
Data: HENTSCHEL_C_2\Well Based\REPEAT\
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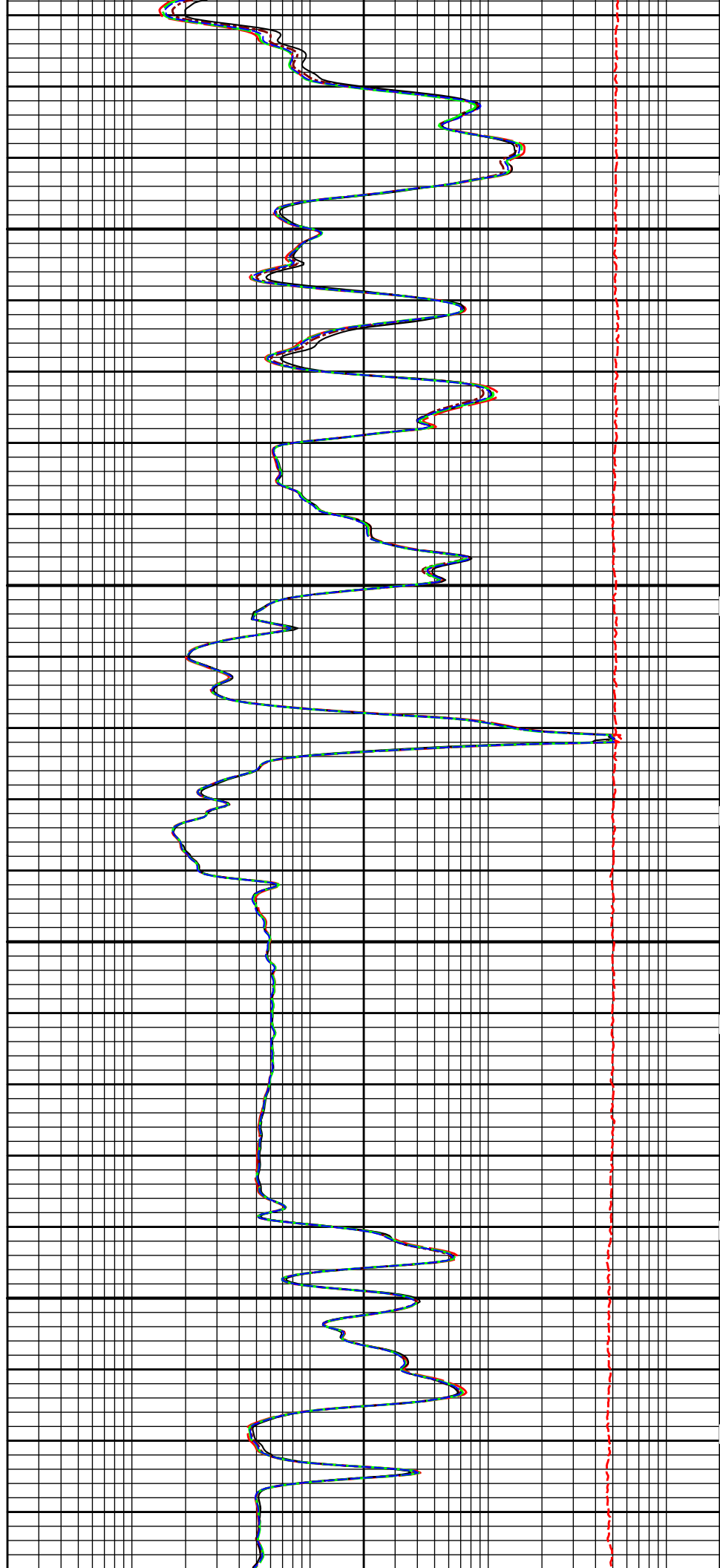
REPEAT SECTION

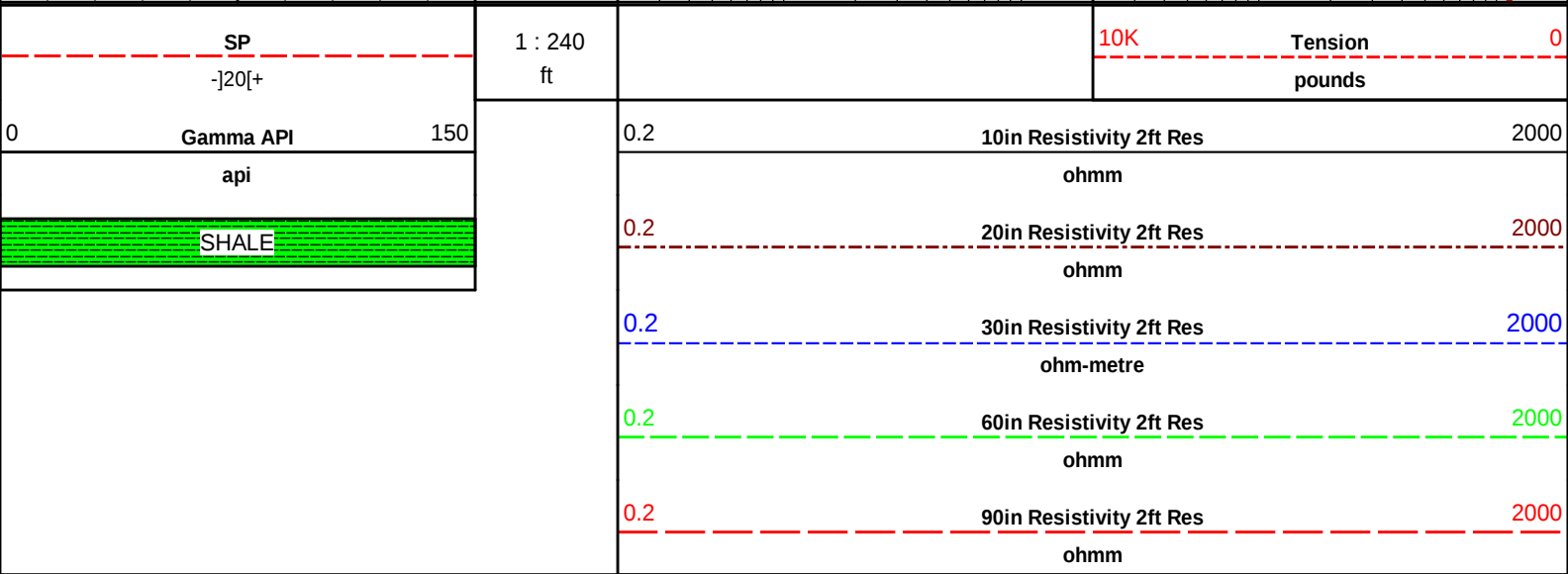
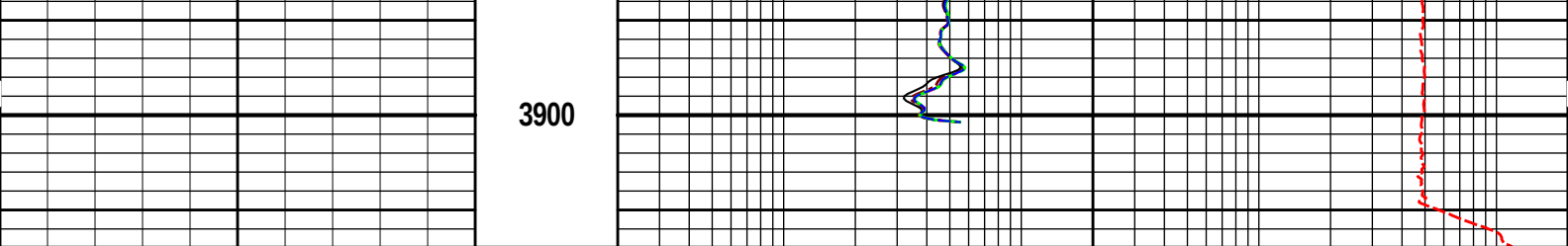




3700

3800





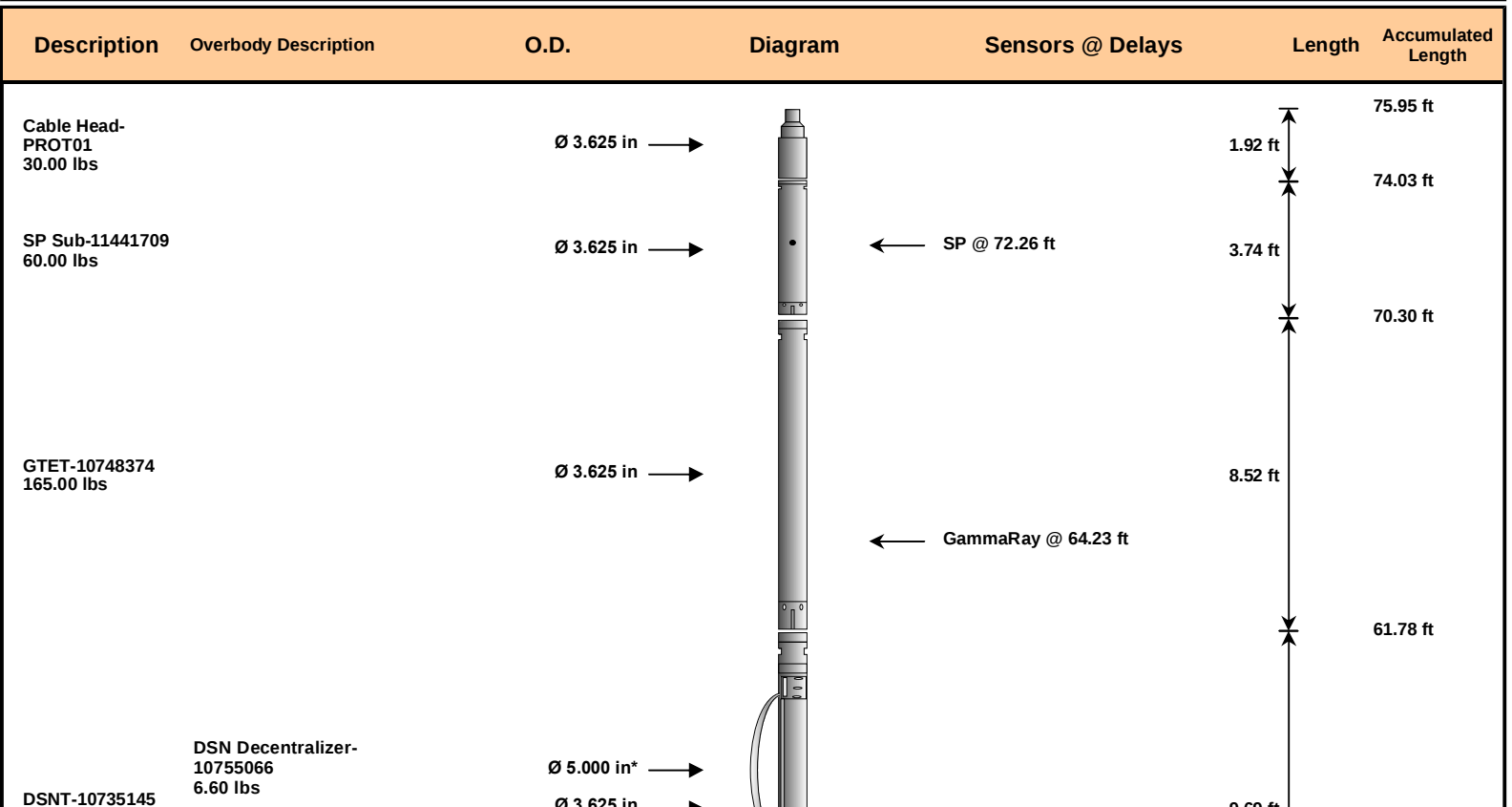
HALLIBURTON

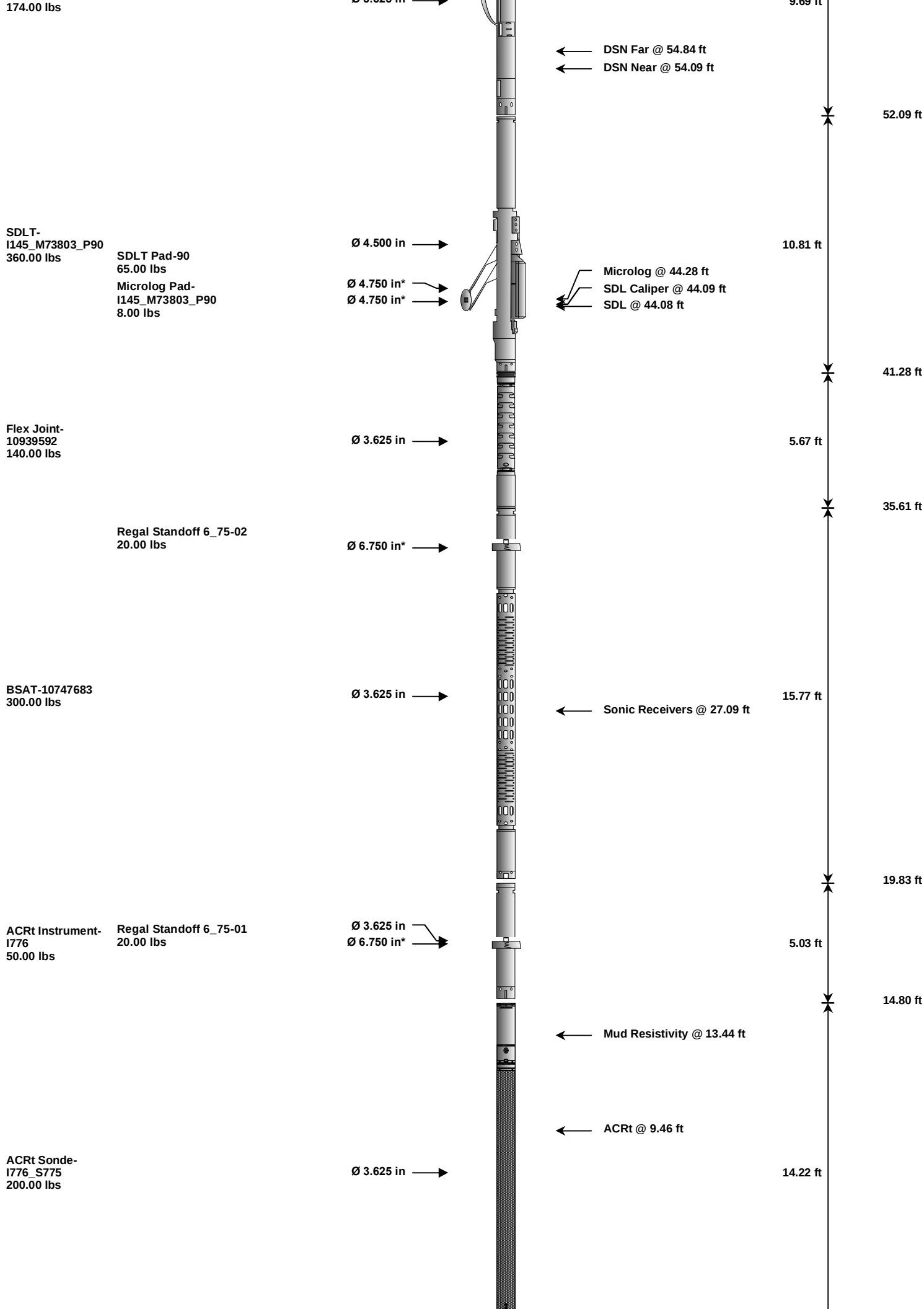
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REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT





Cabbage Head-
TRK954
10.00 lbs

Ø 3.625 in
Ø 6.000 in



0.58 ft
0.00 ft

Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
CH	Standard OH Cable Head	PROT01	30.00	1.92	74.03	300.00
SP	SP Sub	11441709	60.00	3.74	70.30	300.00
GTET	Gamma Telemetry Tool	10748374	165.00	8.52	61.78	60.00
DSNT	Dual Spaced Neutron	10735145	174.00	9.69	52.09	60.00
DCNT	DSN Decentralizer	10755066	6.60	5.13	* 55.42	300.00
SDLT	Spectral Density Tool	I145_M73803_P90	360.00	10.81	41.28	60.00
MICP	Microlog Pad	I145_M73803_P90	8.00	1.00	* 43.78	60.00
SDLP	Density Insite Pad	90	65.00	2.55	* 43.49	60.00
FLEX	Flex Joint	10939592	140.00	5.67	35.61	300.00
BSAT	Borehole Sonic Array Tool	10747683	300.00	15.77	19.83	60.00
RSOF	Regal Standoff 6.75in	02	20.00	0.52	* 33.69	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I776	50.00	5.03	14.80	300.00
RSOF	Regal Standoff 6.75in	01	20.00	0.52	* 17.02	300.00
ACRt	Array Compensated True Resistivity Sonde Section	I776_S775	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	TRK954	10.00	0.58	0.00	300.00
Total			1,608.60	75.95		
						* Not included in Total Length and Length Accumulation.
Data: HENTSCHEL_C_210001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHIDLE					Date: 03-Sep-12 20:07:28	

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION			
Tool Name:	GTET - 10811258	Reference Calibration Date:	29-Jun-12 10:47:38
Engineer:	C. HAVERKAMP	Calibration Date:	11-Aug-12 06:02:48
Software Version:	WL INSITE R3.6.0 (Build 3)	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	33.3	33.0	api
Background + Calibrator	267.7	265.0	api
Calibrator	234.4	232.0	api
NATURAL GAMMA RAY TOOL FIELD CALIBRATION			
Tool Name:	GTET - 10811258	Reference Calibration Date:	11-Aug-12 06:02:48
Engineer:	SHELDON INGERSOLL	Calibration Date:	22-Aug-12 15:07:15
Software Version:	WL INSITE R3.6.0 (Build 3)	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	33.0	25.8	api
Background + Calibrator	265.0	258.3	api
Calibrator	232.0	232.5	api
Shop	Field	Difference	Tolerance

Shop		Field		Difference		Tolerance			
232.0		232.5		-0.5		+/- 9.00			
ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION									
Tool Name: ACRt Sonde - I1256_S0784				Reference Calibration Date: 11-Jul-12 09:38:13					
Engineer: J. BOLLUM				Calibration Date: 18-Aug-12 11:56:49					
Software Version: WL INSITE R3.6.0 (Build 3)				Calibration Version: 1					
Host Tool Name: ACRt Instrument - I256									
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	1.01	1.05	0.95	0.99	1.05
A2 (50")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.00	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	1.02	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.01	1.05	0.95	1.00	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.99	1.05	0.95	0.98	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	-0.52	2	-6	-3.86	-2	-8	-4.83	-2
A2 (50")	-7	-1.82	0	-7	-3.65	0	-7	-4.36	0
A3 (29")	-27	-16.08	-9	-9	-4.66	-3	-7	-3.36	-1
A4 (17")	-180	-98.38	-60	-45	-32.76	-15	-39	-26.74	-13
A5 (10")	N/A	N/A	N/A	-150	-98.00	-50	-80	-49.23	-10
A6 (6")	N/A	N/A	N/A	175	296.60	525	90	157.59	270
TRANSMITTER CURRENT GAIN				R-MUD VERIFICATION					
Signal	Lower	R	Upper	Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)		
12K	0.6	0.87	1.3	Mud Cell	0.95	1.00	1.05		
36K	1.0	1.20	2.0						
72K	1.0	1.55	2.0						
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	232.5	-----	-0.5	+/- 9.00	api			
ACRt Sonde-I1256_S0784									
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m			
Data: HENTSCHEL_C-310001 SP-GTET-DSNT-SDLT-BSAT-ACRT-CHWDL						Date: 03-Sep-12 21:00:03			

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	9.100	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	3950.00	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	
	SDI T Pad	SPVT	SDI T 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: HENTSCHEL_C_2I0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHIDLE			Date: 03-Sep-12 20:59:37	

HALLIBURTON INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
SP Sub				
PLTC	Plot Control Mask	72.25	NO	
SP	Spontaneous Potential	72.25	BLK	1.250
SPR	Raw Spontaneous Potential	72.25	NO	
SPO	Spontaneous Potential Offset	72.25	NO	
GTET				
TPUL	Tension Pull	64.23	NO	
GR	Natural Gamma Ray API	64.23	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	64.23	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	64.23	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.99	NO	
RNDS	Near Detector Telemetry Counts	54.09	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.84	TRI	0.583
DNTT	DSN Tool Temperature	54.09	NO	
DSNS	DSN Tool Status	53.99	NO	
ERND	Near Detector Telemetry Counts EVR	54.09	BLK	0.000

ERFD	Far Detector Telemetry Counts EVR	54.84	BLK	0.000
ENTM	DSN Tool Temperature EVR	54.09	NO	
SDLT				
TPUL	Tension Pull	44.09	NO	
PCAL	Pad Caliper	44.09	TRI	0.250
ACAL	Arm Caliper	44.09	TRI	0.250
BSAT				
TPUL	Tension Pull	27.09	NO	
STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
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 Reference 12 KHz Real Signal	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	44.08	NO	
NAB	Near Above	43.90	BLK	0.920
NHI	Near Cesium High	43.90	BLK	0.920
NLO	Near Cesium Low	43.90	BLK	0.920
NVA	Near Valley	43.90	BLK	0.920
NBA	Near Barite	43.90	BLK	0.920
NDE	Near Density	43.90	BLK	0.920
NPK	Near Peak	43.90	BLK	0.920
NLI	Near Lithology	43.90	BLK	0.920
NBAU	Near Barite Unfiltered	43.90	BLK	0.250
NLIU	Near Lithology Unfiltered	43.90	BLK	0.250
FAB	Far Above	44.26	BLK	0.250
FHI	Far Cesium High	44.26	BLK	0.250
FLO	Far Cesium Low	44.26	BLK	0.250
FVA	Far Valley	44.26	BLK	0.250
FBA	Far Barite	44.26	BLK	0.250
FDE	Far Density	44.26	BLK	0.250
FPK	Far Peak	44.26	BLK	0.250
FLI	Far Lithology	44.26	BLK	0.250
PTMP	Pad Temperature	44.09	BLK	0.920
NHV	Near Detector High Voltage	43.49	NO	
FHV	Far Detector High Voltage	43.49	NO	
ITMP	Instrument Temperature	43.49	NO	
DDHV	Detector High Voltage	43.49	NO	

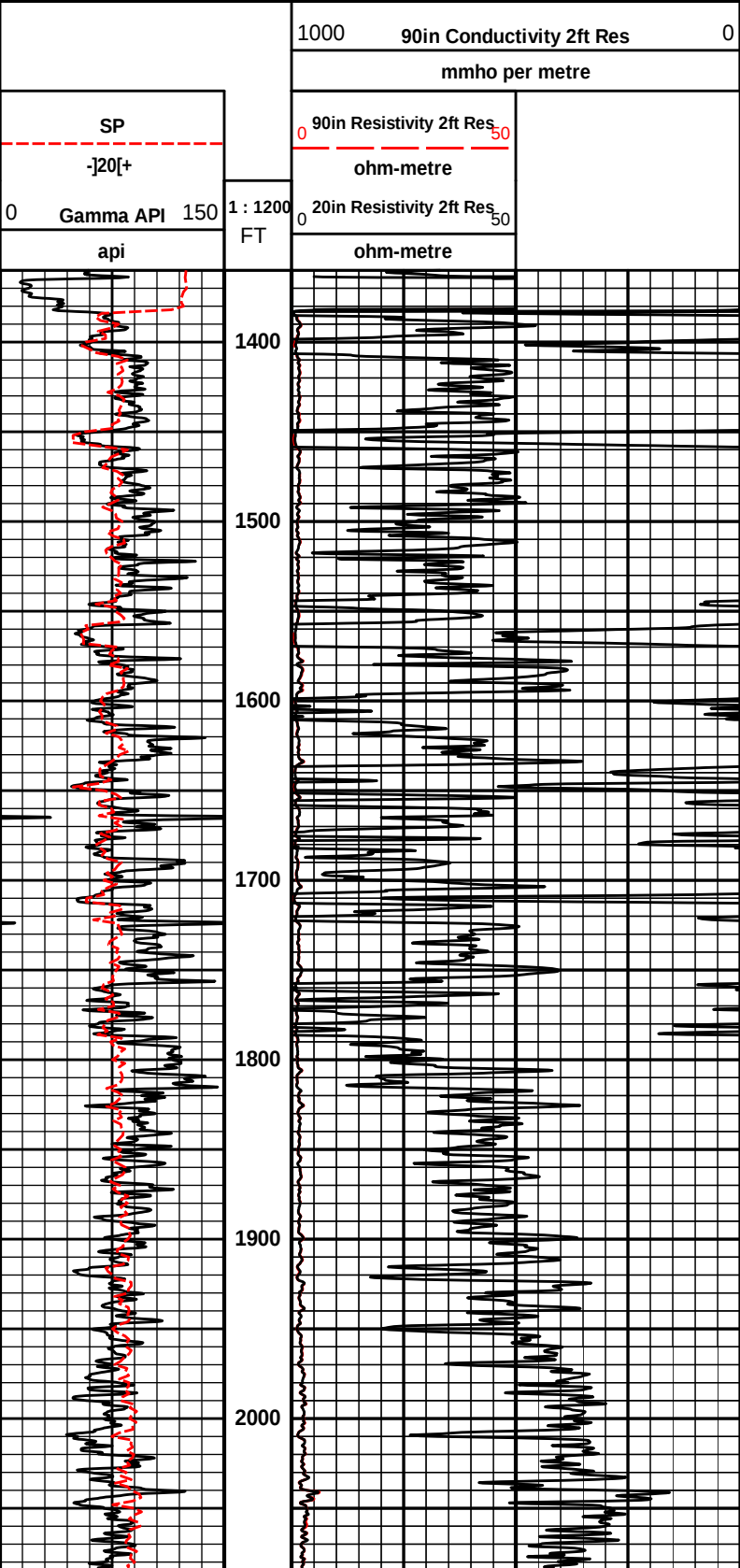
Microlog Pad				
TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750
Data: HENTSCHEL_C_2I0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CHIIDLE			Date: 03-Sep-12 21:52:50	

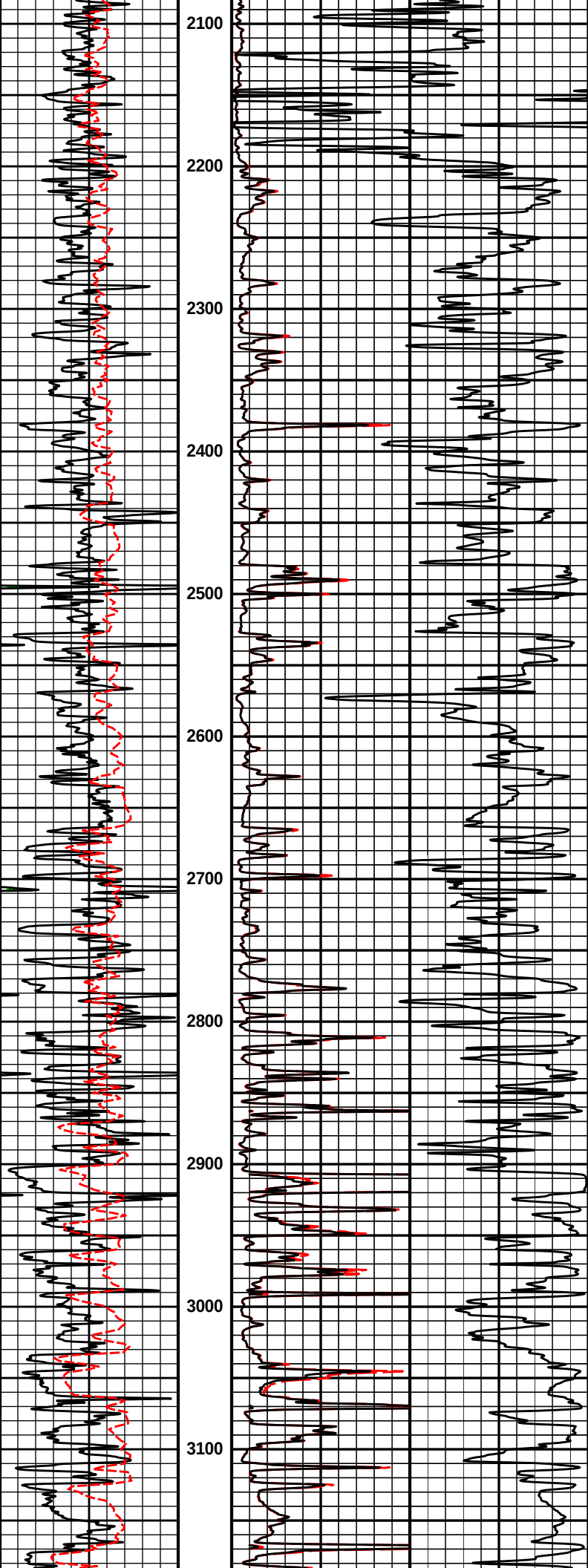
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WELL	HENTSCHEL C-2		
FIELD	MUSTANG EAST		
COUNTY	MORTON	STATE	KANSAS

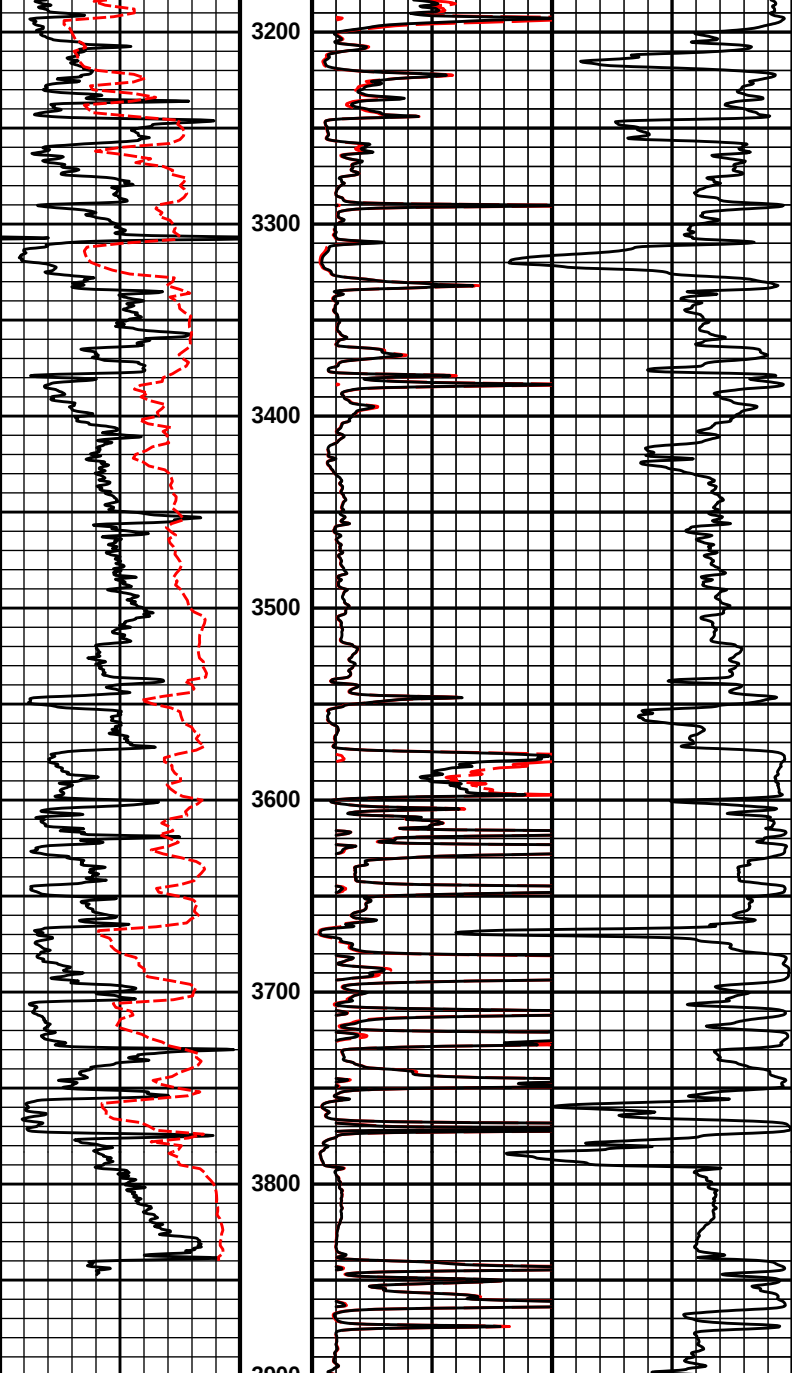
HALLIBURTON

Plot Time: 03-Sep-12 23:13:43
Plot Range: 1360 ft to 3899.25 ft
Data: HENTSCHEL_C_2\Well Based\CASING\
Plot File: \\LOCAL\HENTSCHEL_C_2\...ACRT_1.lib

1 INCH MAIN LOG







0	Gamma API	150	1 : 1200	0	20in Resistivity 2ft Res	50	
	api		FT		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-Sep-12 23:13:46
Plot Range: 1360 ft to 3899.25 ft
Data: HENTSCHEL_C_2\Well Based\CASING\
Plot File: \\LOCAL\HENTSCHEL_C_2\...ACRT_1.lib

1 INCH MAIN LOG