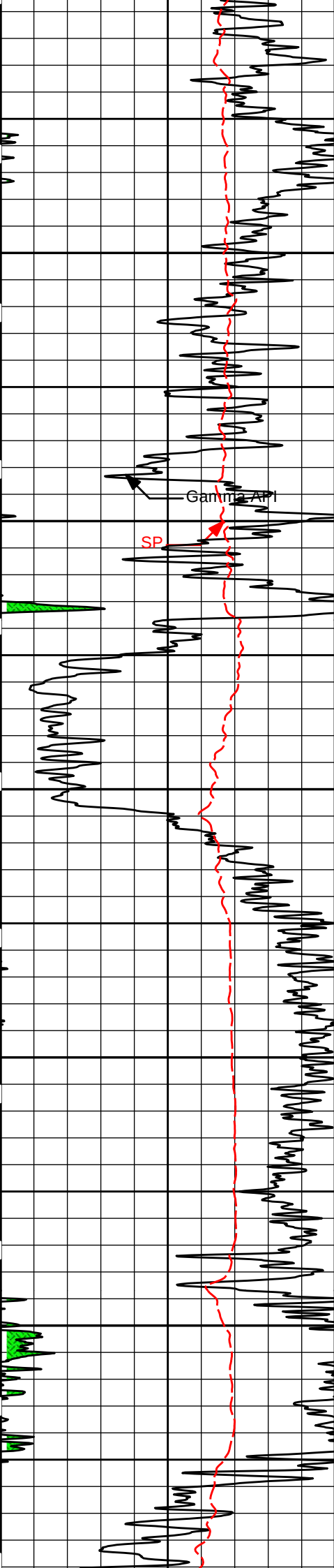


HALLIBURTON										ARRAY COMPENSATED TRUE RESISTIVITY LOG									
CULBREATH OIL & GAS COMPANY, LLC					CULBREATH OIL & GAS COMPANY, LLC														
RIEDEL #1-5					RIEDEL #1-5														
WILDCAT					WILDCAT														
SHERIDAN					SHERIDAN														
KANSAS					KANSAS														
COMPANY					COMPANY														
WELL					WELL														
FIELD/BLOCK					FIELD/BLOCK														
COUNTY					COUNTY														
STATE					STATE														
Permanent Datum					GL					Other Services: DSNT/SDLT MICROLOG IDT ACRT									
Log measured from					KB					10.0 ft above perm. Datum					Elev.: K.B. D.F. G.L.				
Drilling measured from					KB										2653.0 ft 2653.0 ft 2643.0 ft				
Date					28-Oct-16														
Run No.					ONE														
Depth - Driller					4230.0 ft														
Depth - Logger					4230.0 ft														
Bottom - Logged Interval					4241.00 ft														
Top - Logged Interval					268.00 ft														
Casing - Driller					8.625 in					@ 269.0 ft					@				
Casing - Logger					268.0 ft														
Bit Size					7.875 in					@					@				
Type Fluid in Hole					Water Based Mud														
Density		Viscosity		9.1 ppg		58.00 s/qt													
PH		Fluid Loss		9.50 pH		5.2 cpm													
Source of Sample					MUD PIT														
Rm @ Meas. Temperature					0.93 ohmm @ 75.00 degF					@					@				
Rmf @ Meas. Temperature					0.79 ohmm @ 75.00 degF					@					@				
Rmc @ Meas. Temperature					1.12 ohmm @ 75.00 degF					@					@				
Source Rmf		Rmc		MEAS		MEAS													
Rm @ BHT				0.63 ohmm @ 113.0 degF				@				@							
Time Since Circulation					4.00 hr														
Time on Bottom					28-Oct-16 17:00														
Max. Rec. Temperature				113.00 degF @ 4250.0 ft				@				@							
Equipment		Location		11072142		EL RENO													
Recorded By					JORGE ORLANDO PEREZ														
Witnessed By					RICHARD BELL														

Service Ticket No.: 903627714						API No.: 15-179-21423-00-00						PGM Version: WL INSITE R5.0.5 (Build 8)							
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES													
Date	Sample No.					Type Log	Depth	Scale Up Hole		Scale Down Hole									
Depth-Driller																			
Type Fluid in Hole																			
Density	Viscosity																		
Ph	Fluid Loss																		
Source of Sample						RESISTIVITY EQUIPMENT DATA													
Rm @ Meas. Temp		@		@		Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other									
Rmf @ Meas. Temp.		@		@		ONE	ACRT	N/A	CENT	N/A									
Rmc @ Meas. Temp.		@		@			I-11022962												
Source Rmf	Rmc						S-11005909												
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.		11013114		Serial No.		10939050		Serial No.		10950489		Serial No.		11019643					
Model No.		GTET		Model No.		BSAT		Model No.		SDLT		Model No.		DSNT					
Diameter		3.625"		No. of Cent.		2		Diameter		5.5"		Diameter		3.625"					
Detector Model No.		T-102		Spacing		EVEN		Log Type		GAM-GAM		Log Type		NEU-NEU					
Type		SCINT						Source Type		CS137		Source Type		AM241BE					
Length		8"		LSA [Y/N]				Serial No.		5168GW		Serial No.		DSN-424					
Distance to Source		N/A		FWDA [Y/N]				Strength		1.5 Ci		Strength		15.0 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	Matrix		L	R	Matrix		L	R	Matrix	
ONE	TD	CSG	PEC	0		150	30	10	47.6 uSec/ft	30	10	2.71 gr/cc		30	10	LIME			

ONE	TD	CSG	REC	0	150	30	-10	47.0 uSec/ft	30	-10	2.71 g/cc	30	-10	TIME	
DIRECTIONAL INFORMATION															
Maximum Deviation							@	KOP							@
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING															
CHLORIDES REPORTED AT 2000 ppm															



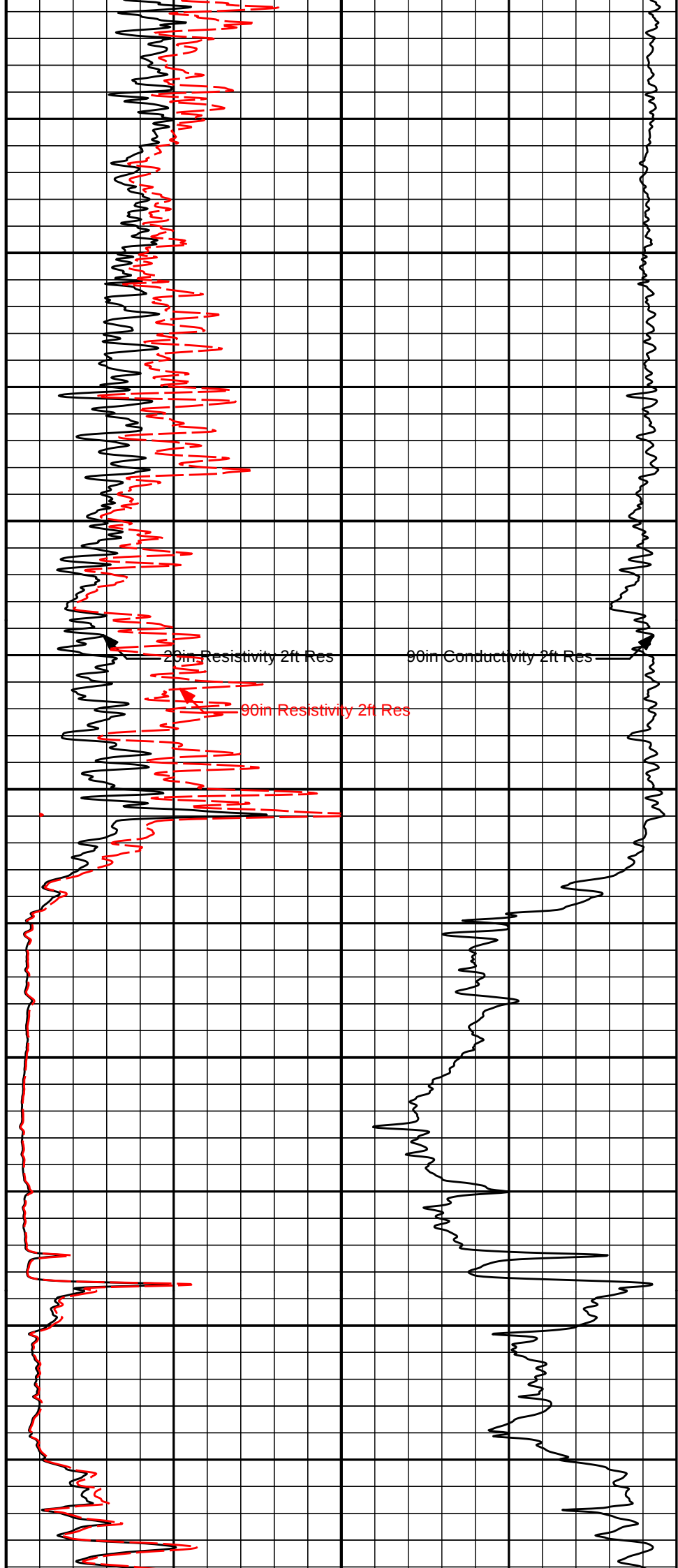
500

600

700

800

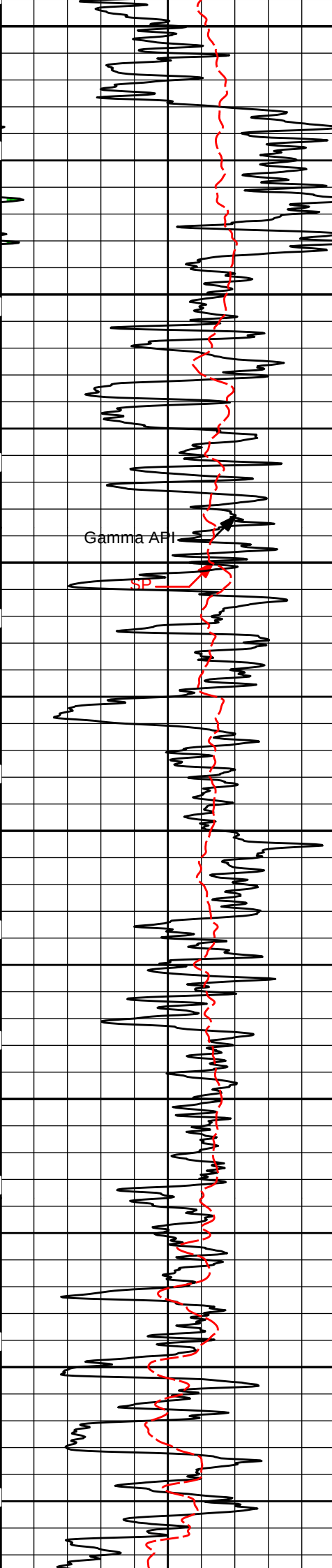
900



20in Resistivity 2ft Res

90in Resistivity 2ft Res

90in Conductivity 2ft Res



1000

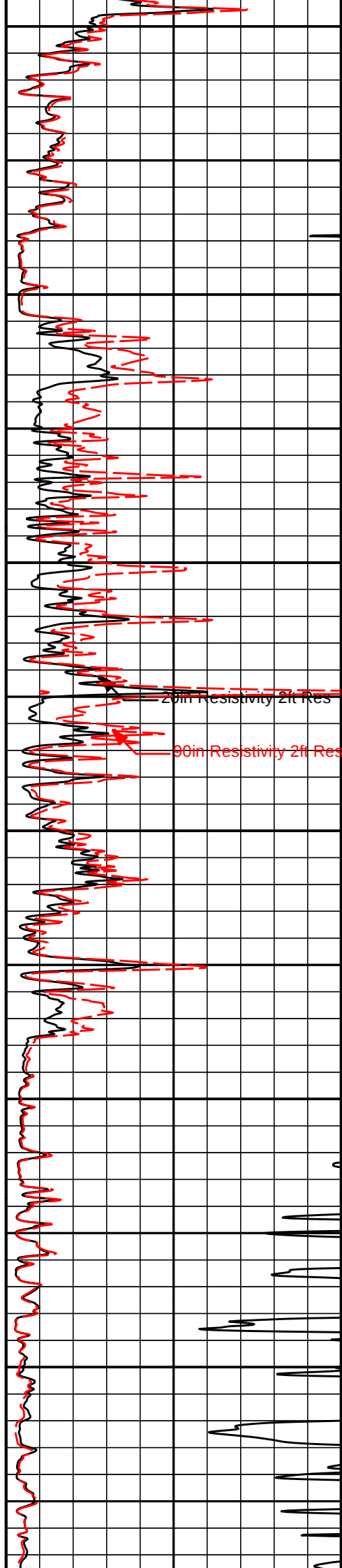
1100

1200

1300

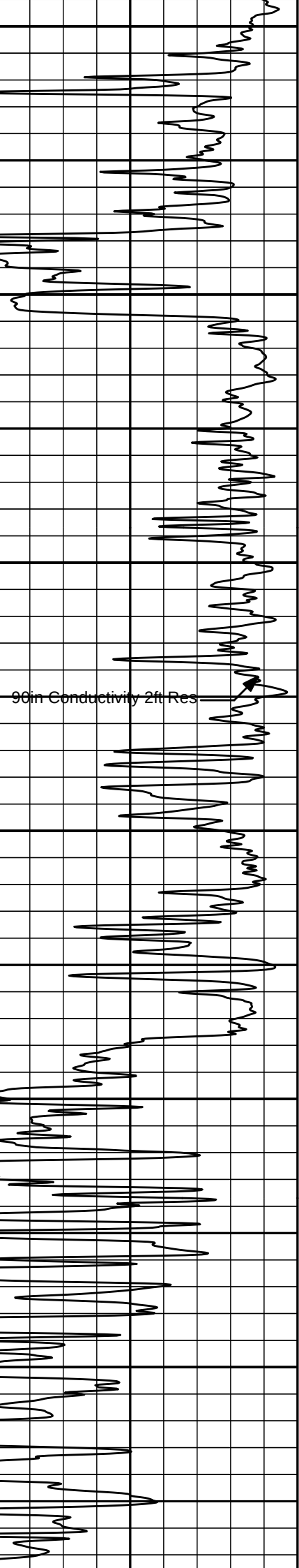
1400

1500

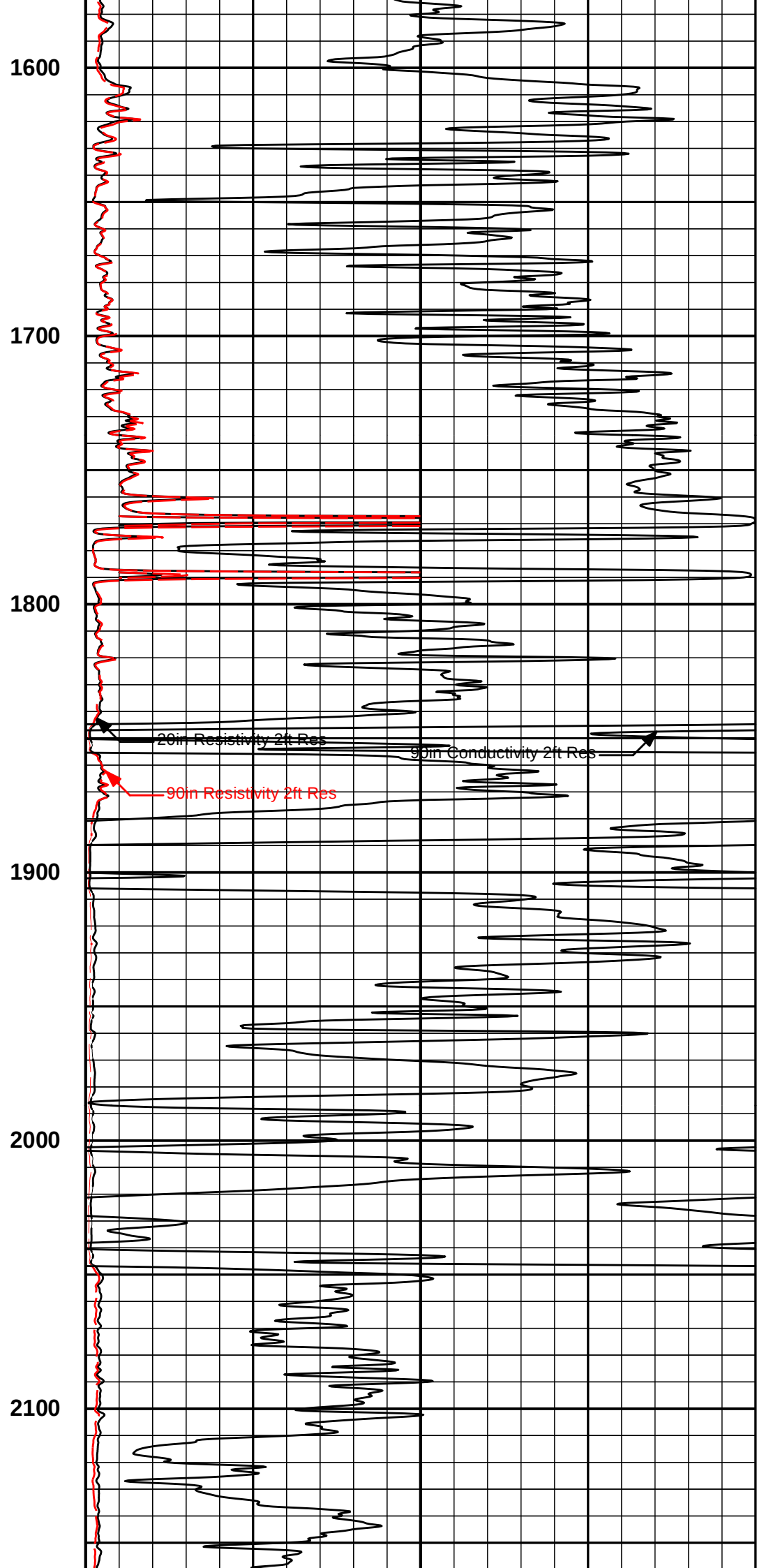
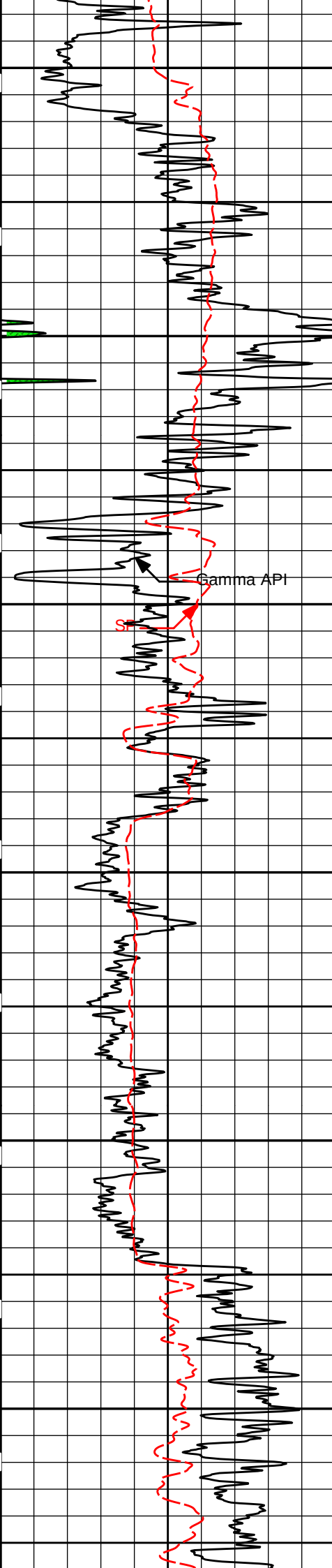


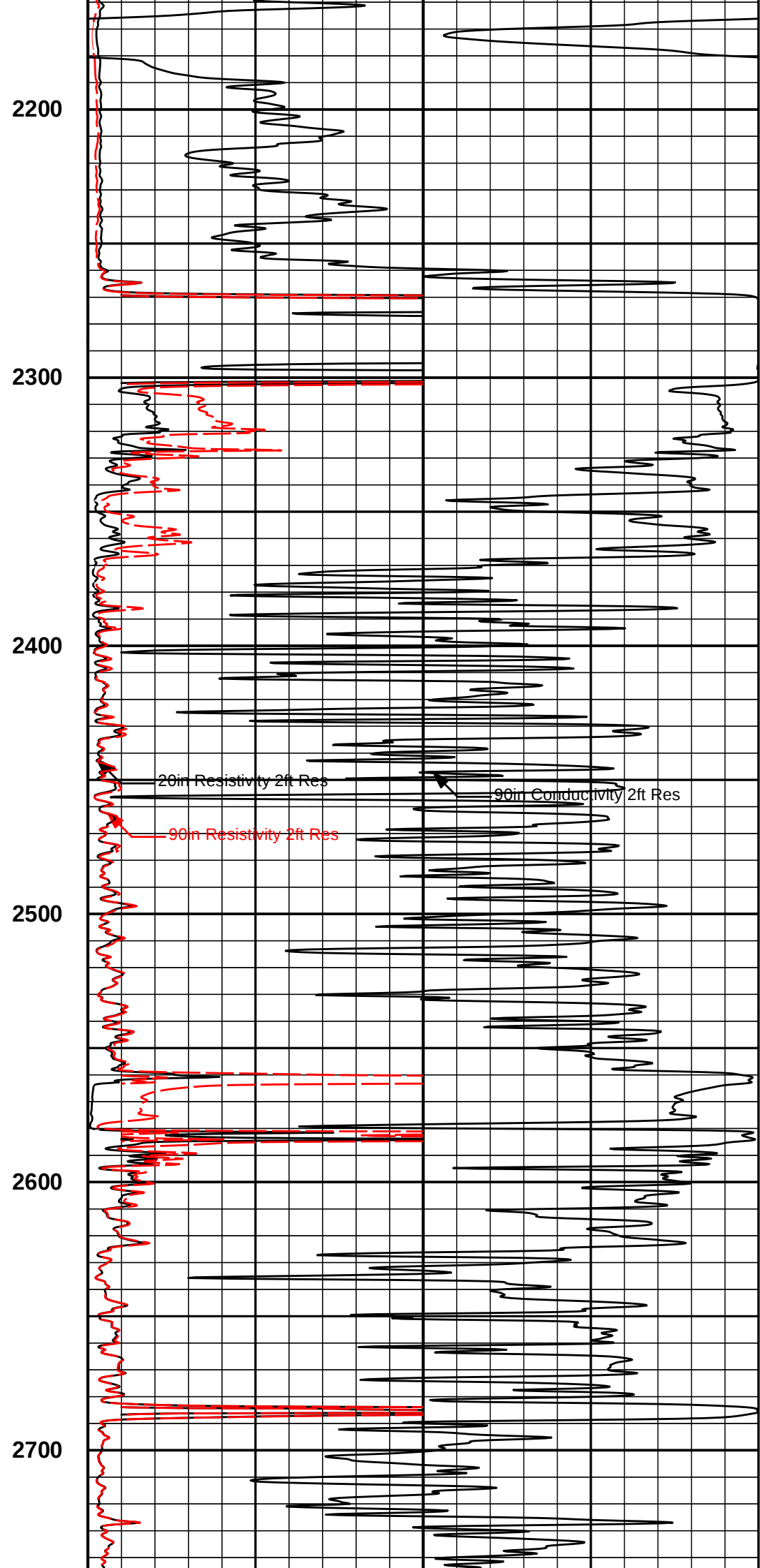
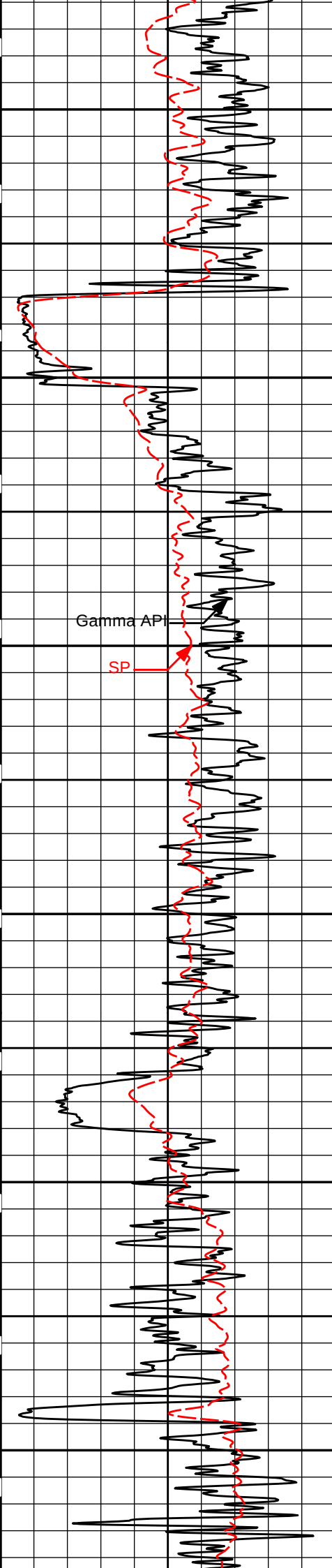
20in Resistivity 2ft Res

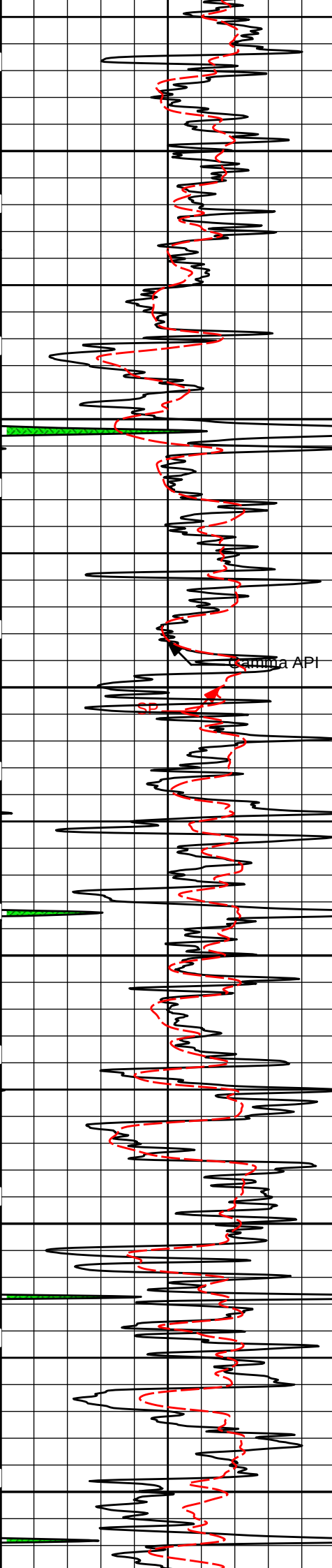
90in Resistivity 2ft Res



90in Conductivity 2ft Res







2800

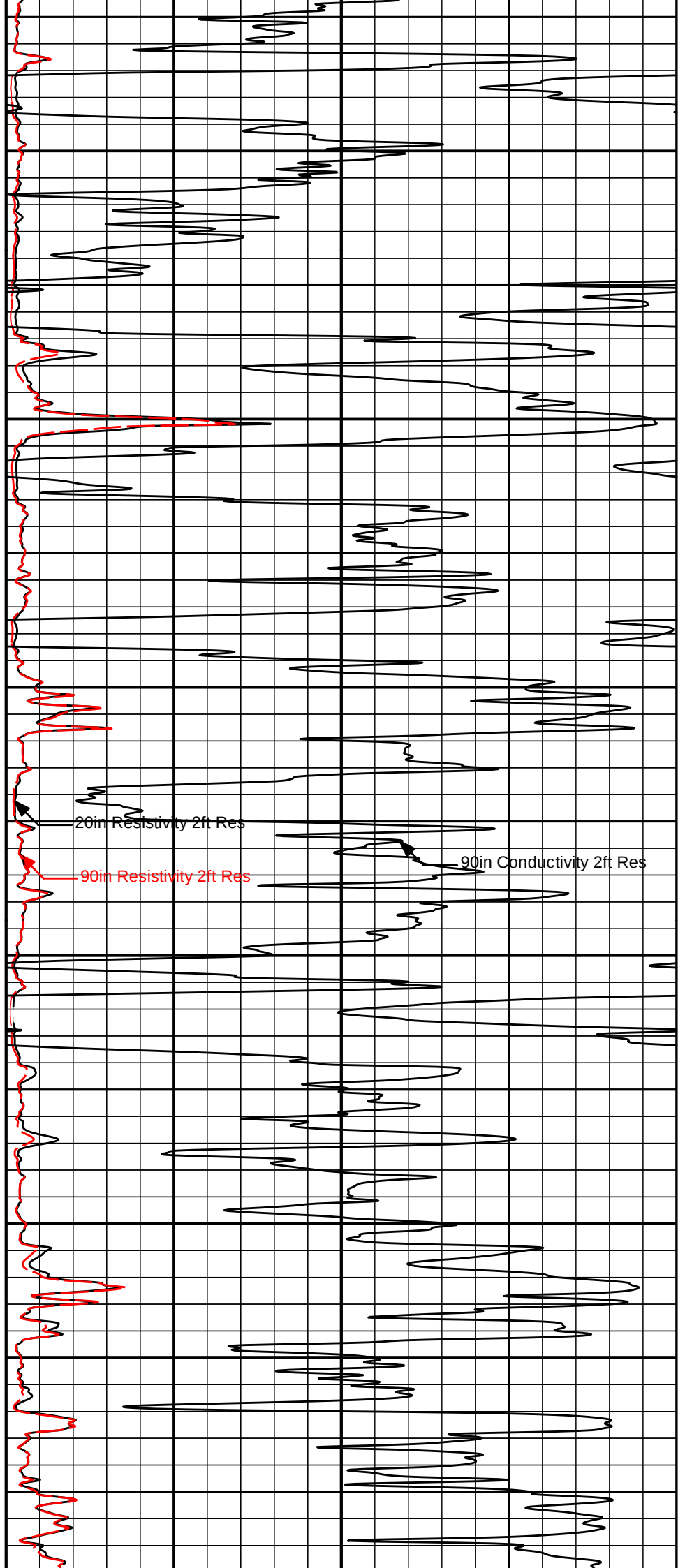
2900

3000

3100

3200

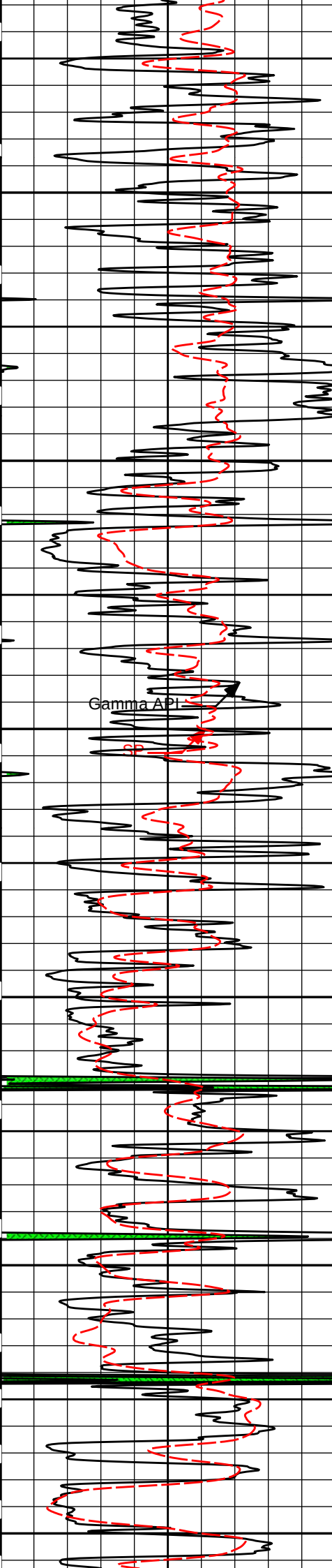
3300



20in Resistivity 2ft Res

90in Resistivity 2ft Res

90in Conductivity 2ft Res



3400

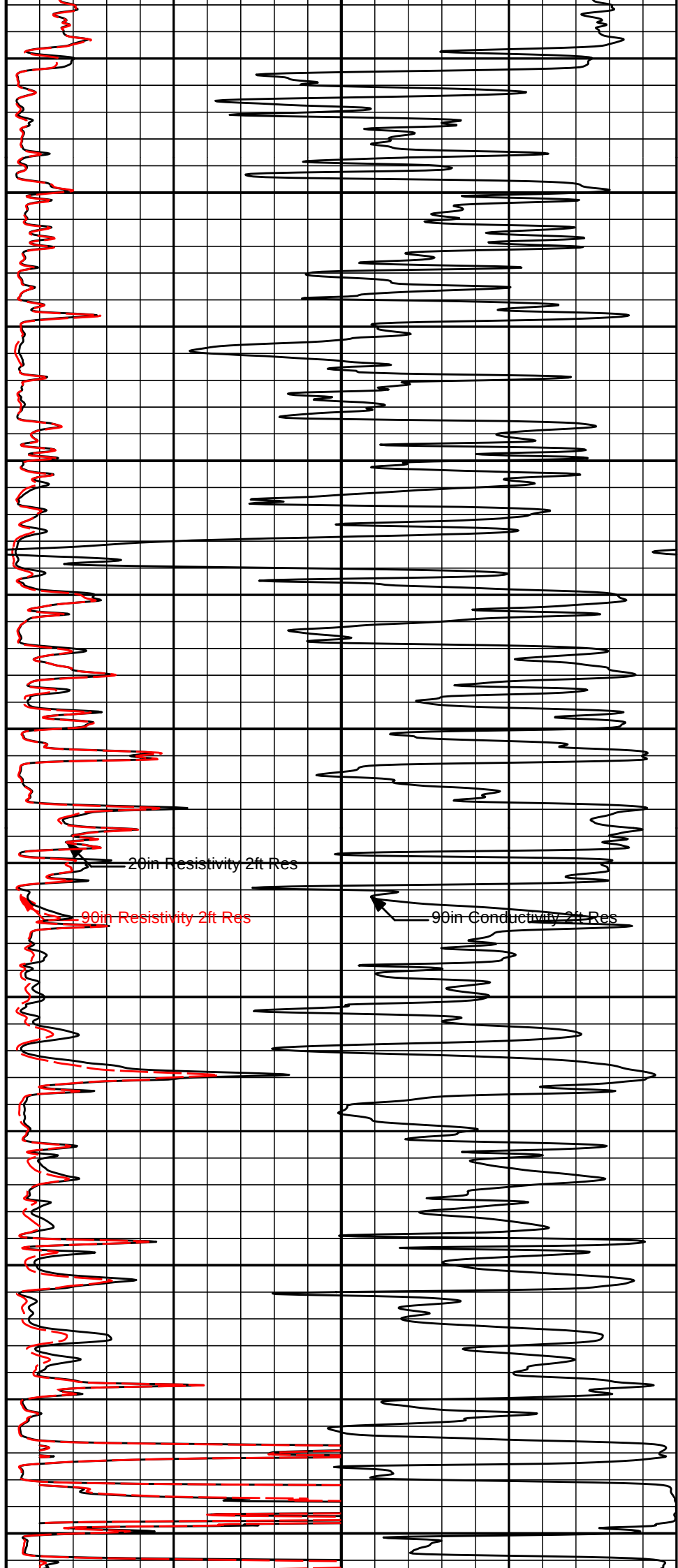
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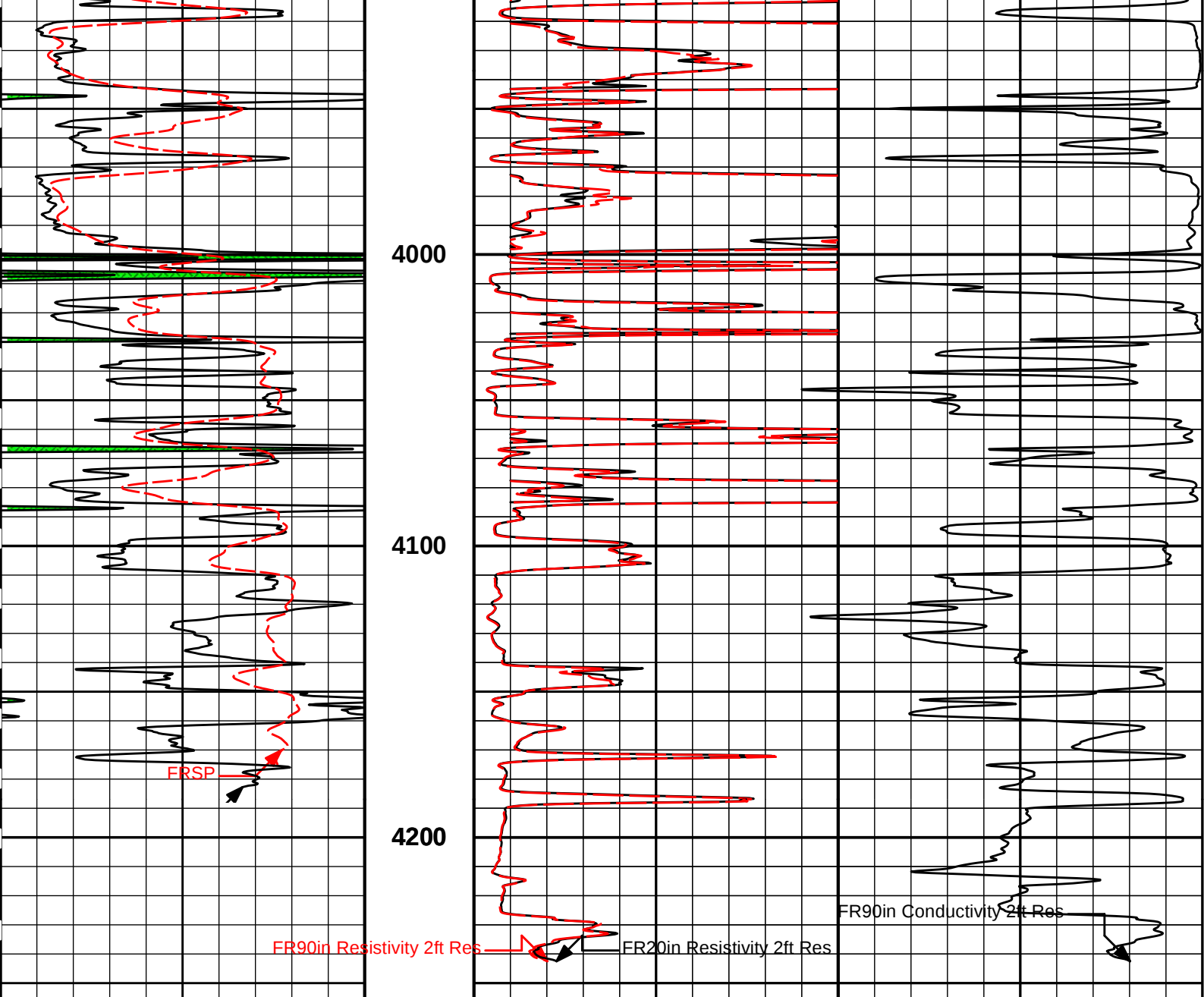
3600

3700

3800

3900





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	

HALLIBURTON

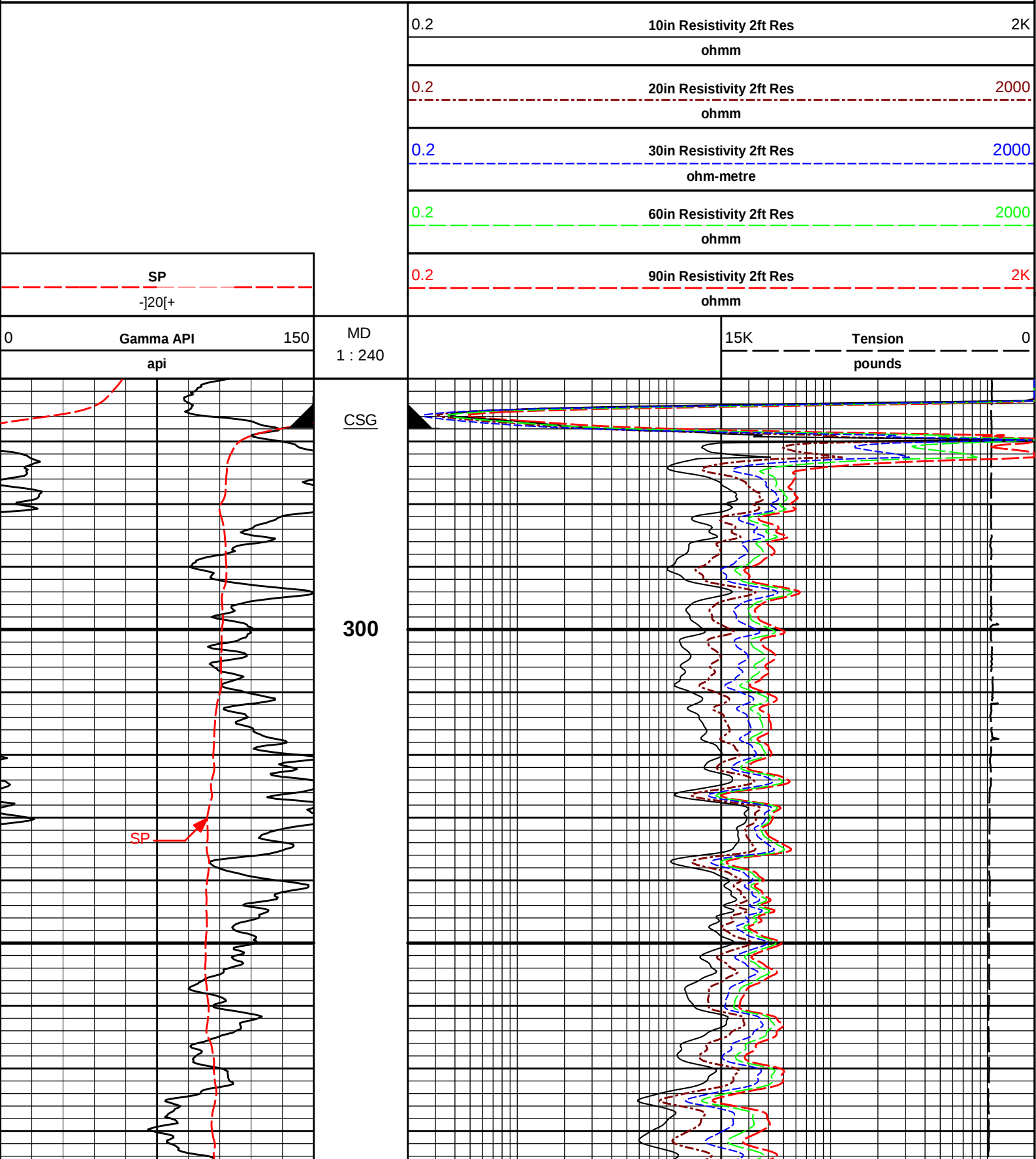
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Plot Range: 260 ft to 4255.17 ft
Data: RIEDEL_1-5\Well Based\MAIN\
Plot File: \\-LOCAL-\\RIEDEL_1-5\Well Based\ACRT\ELR_ACRT_2_MAIN

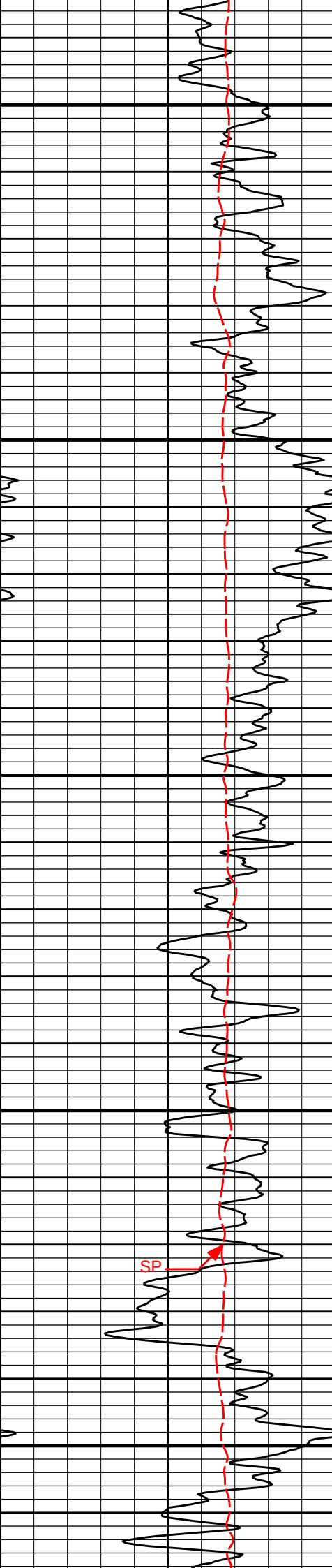
2 IN = 100 FT MD
MAIN PASS

HALLIBURTON

Plot Time: 28-Oct-16 19:17:04
Plot Range: 260 ft to 4255.17 ft
Data: RIEDEL_1-5\Well Based\MAIN\
Plot File: \\-LOCAL-\\RIEDEL_1-5\Well Based\ACRT\ELR_ACRT_2_MAIN

5 IN = 100 FT MD
MAIN PASS

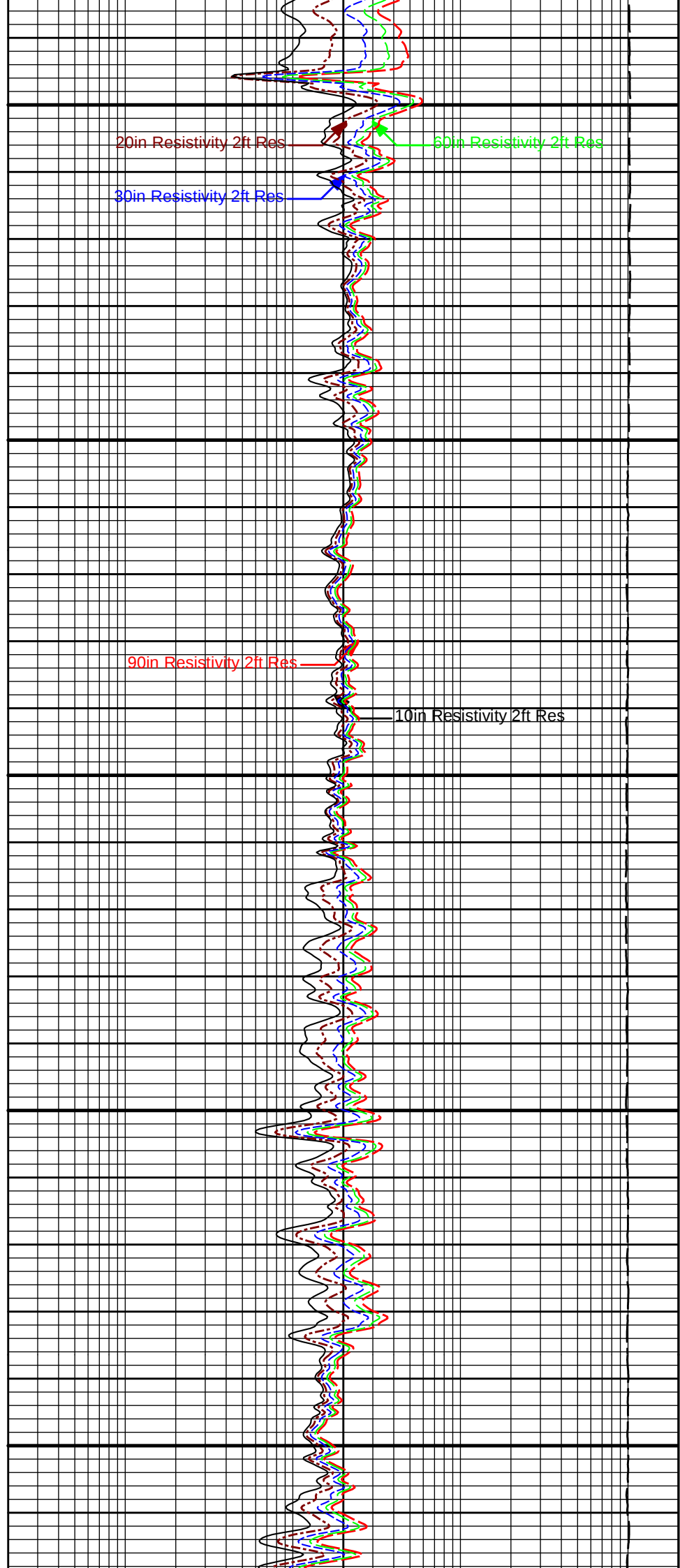


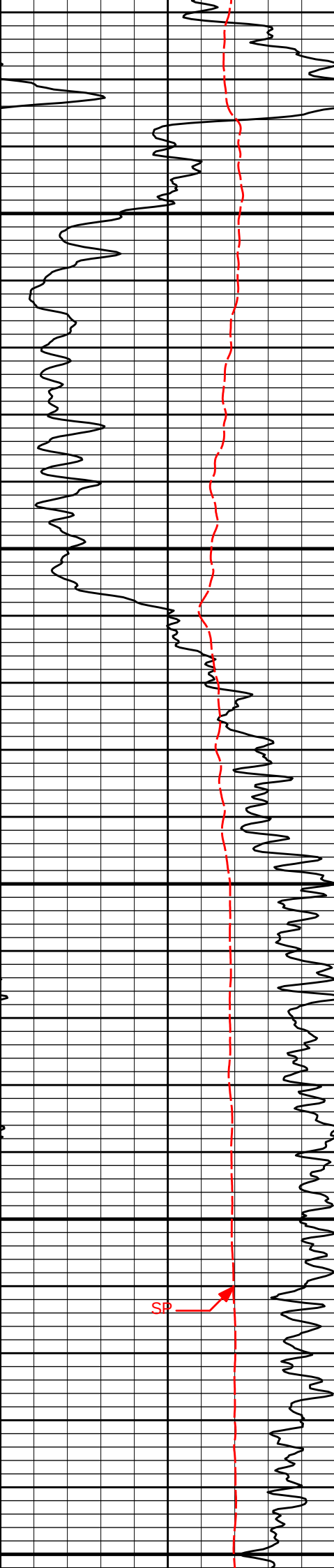


400

500

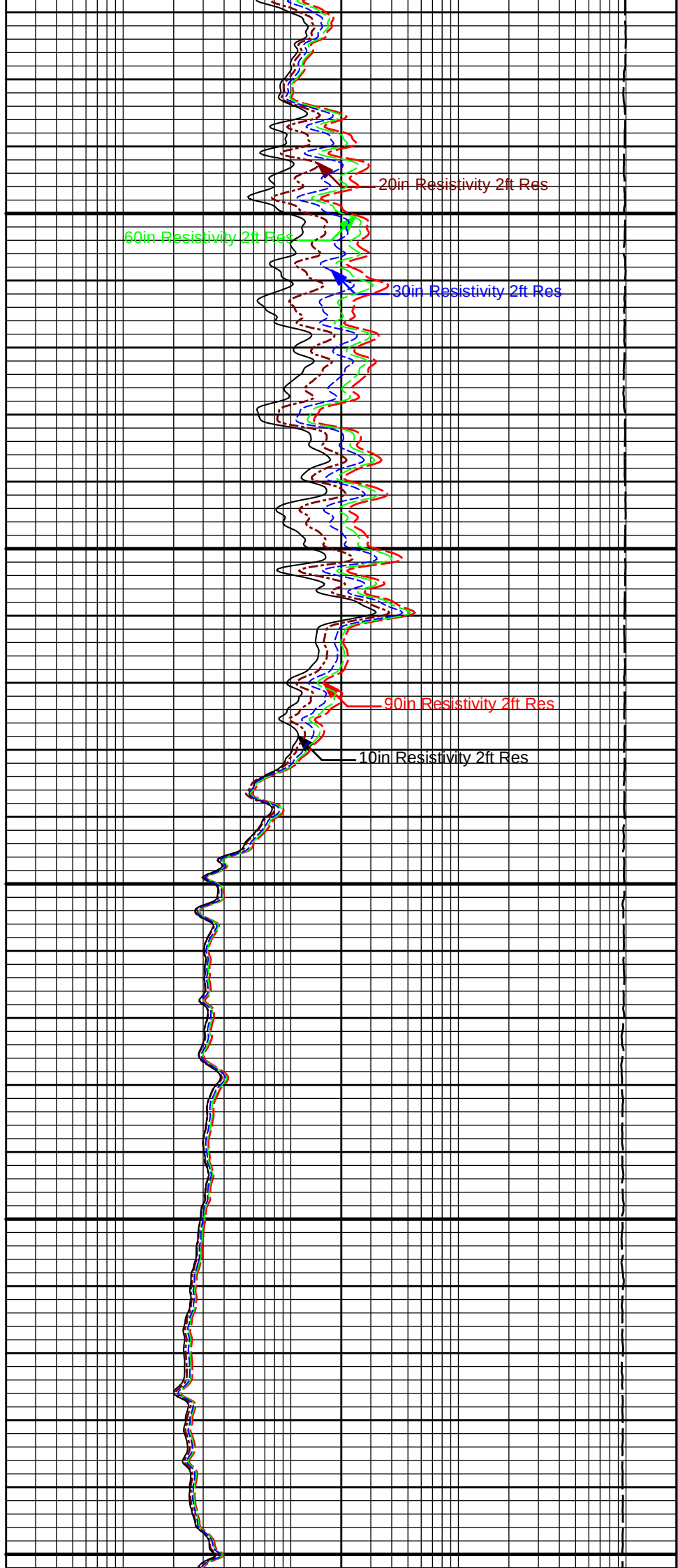
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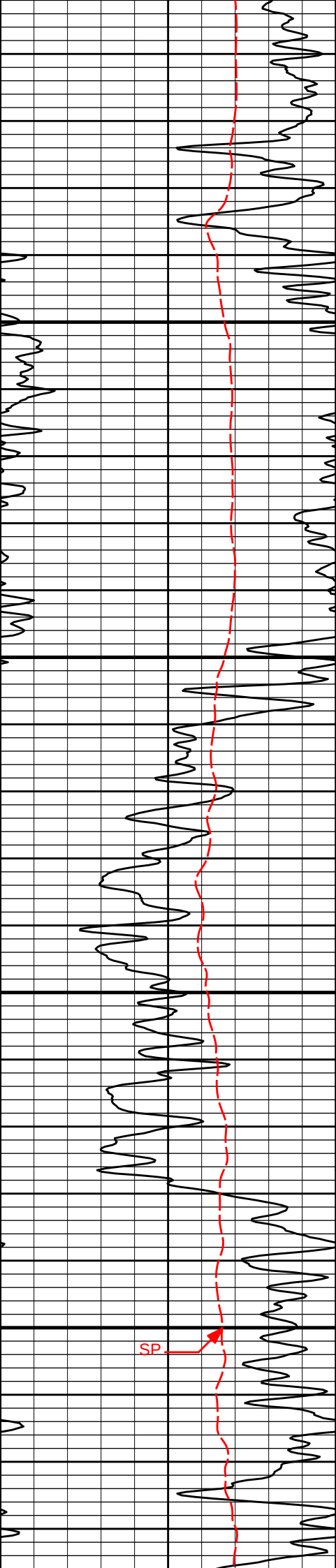




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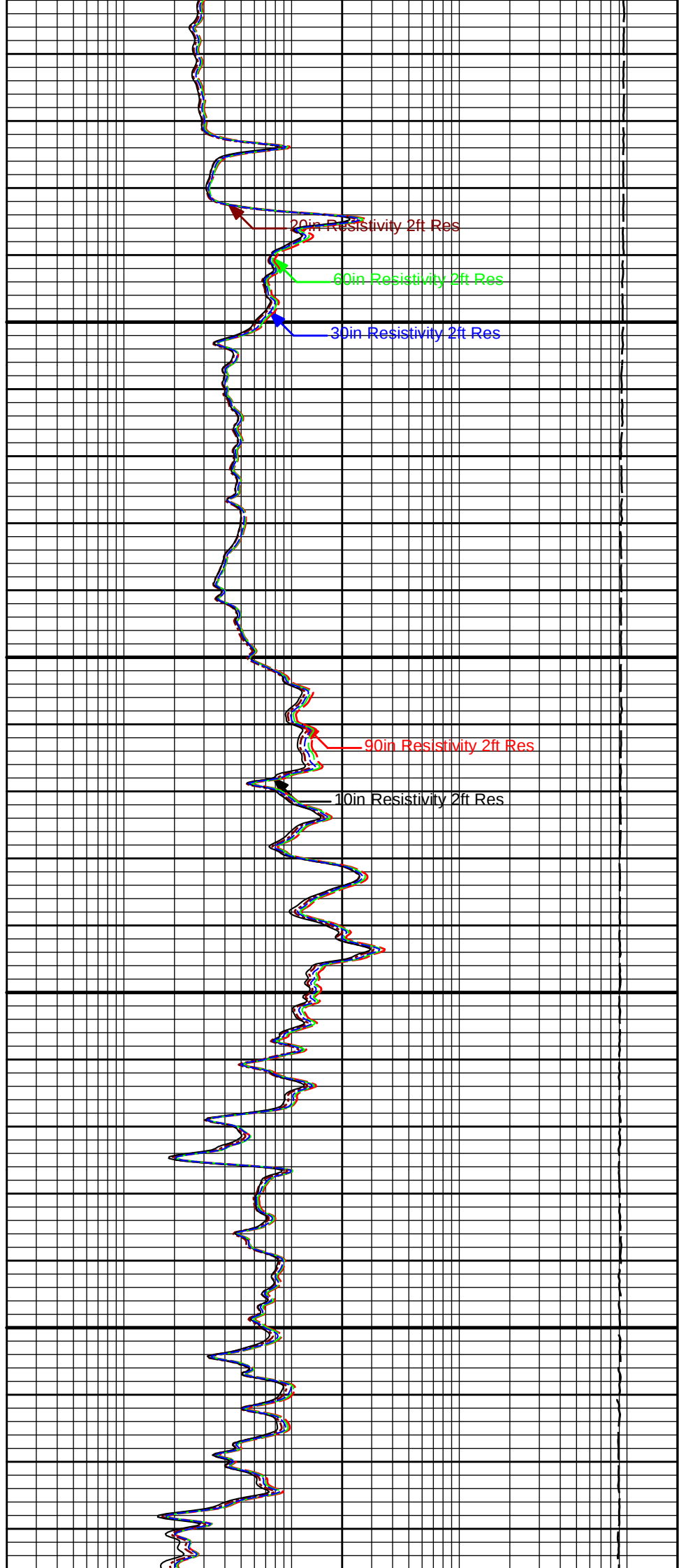
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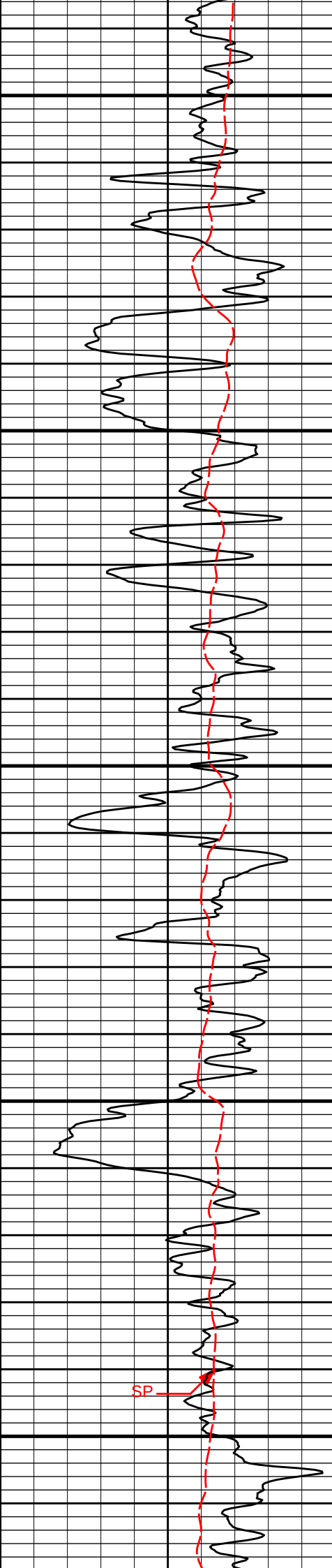




900

1000

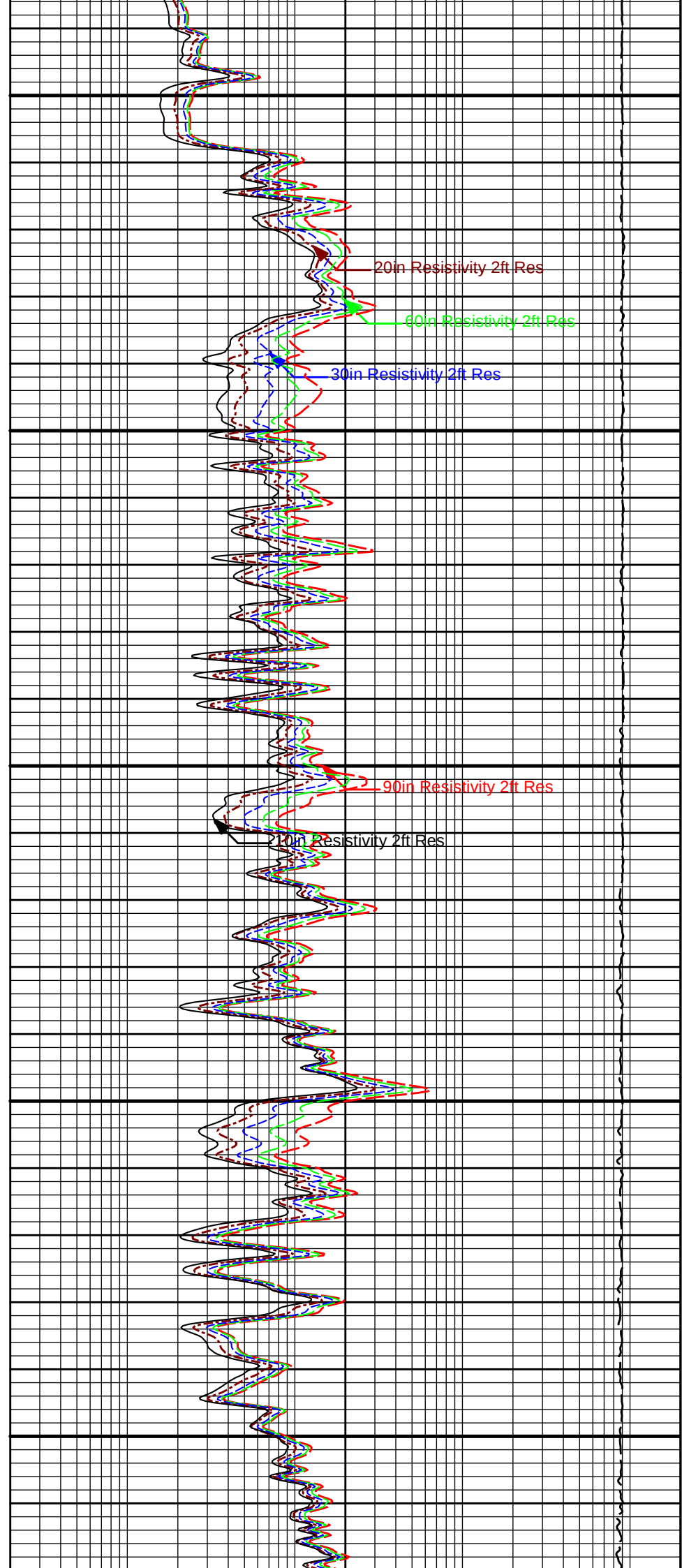


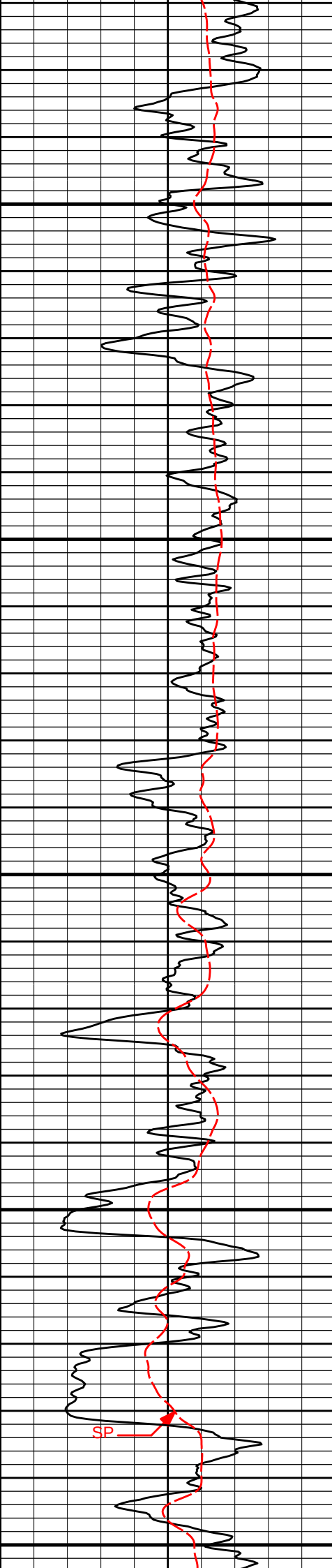


1100

1200

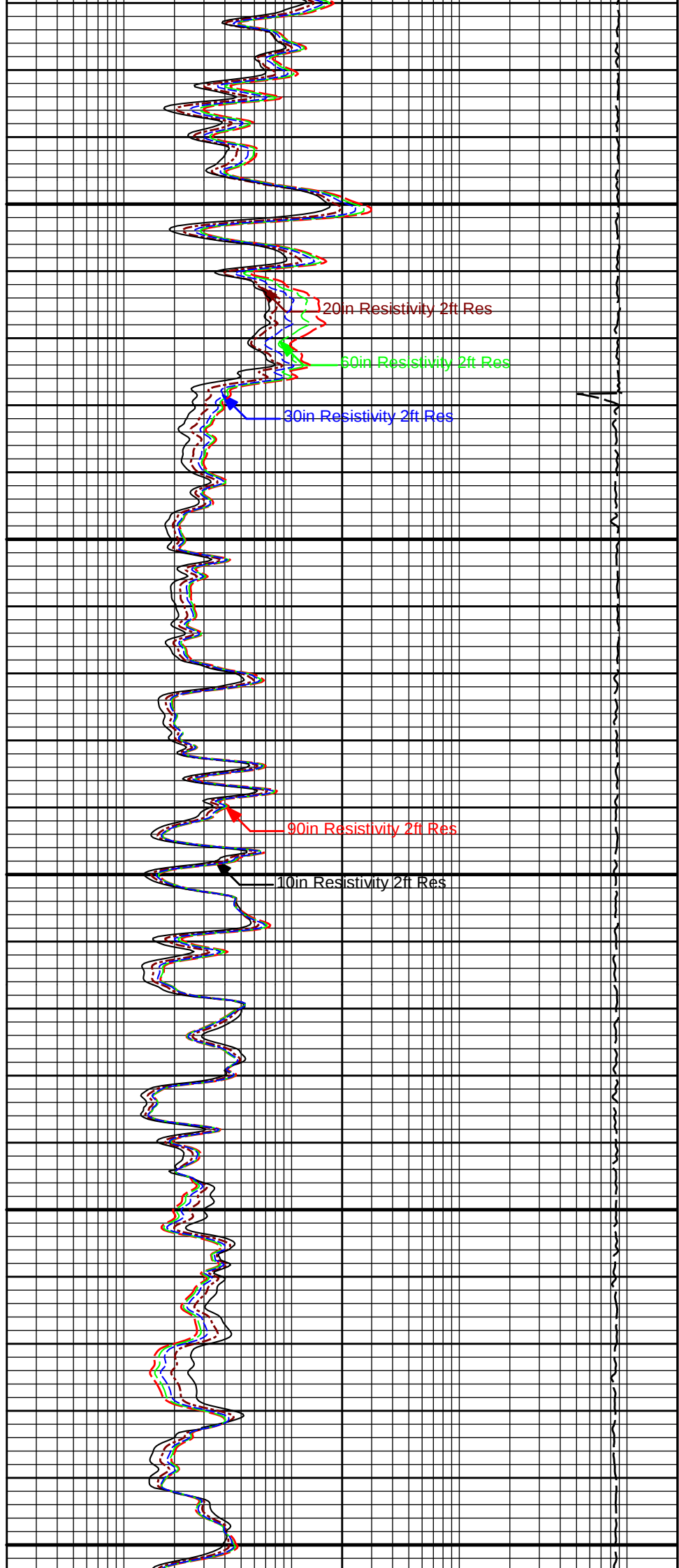
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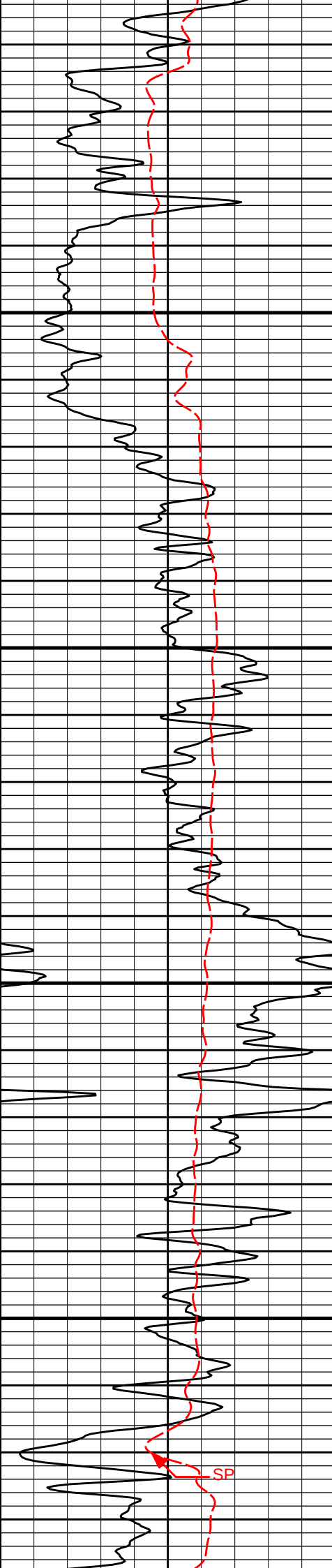




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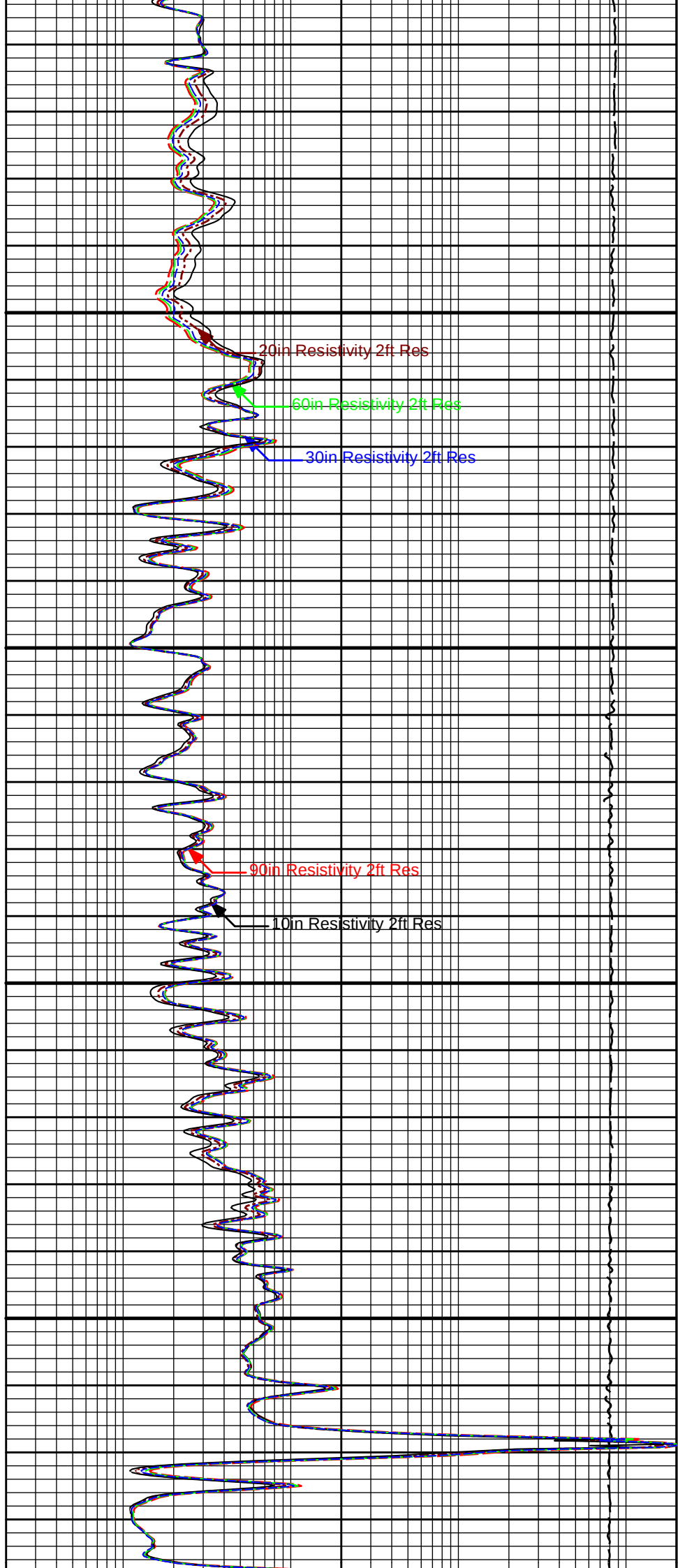
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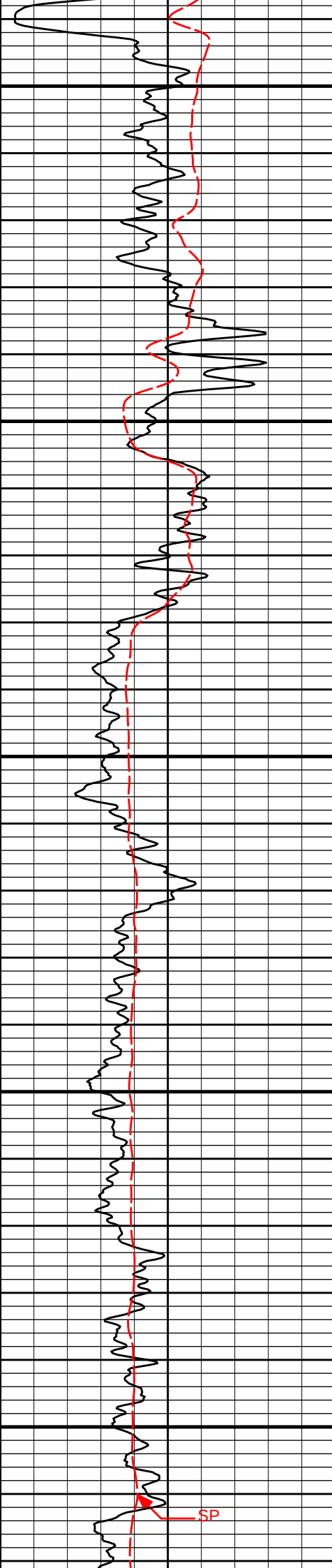




1600

1700

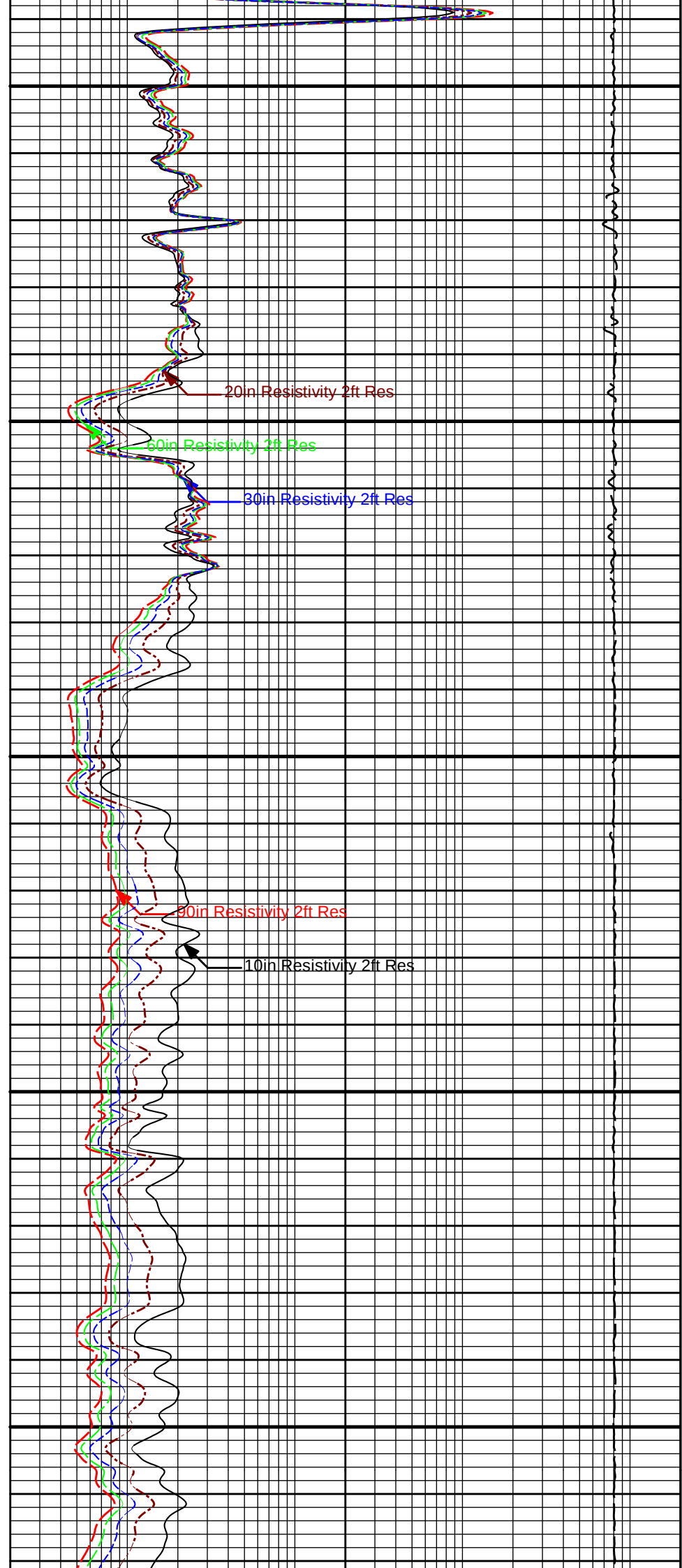




1800

1900

2000



20in Resistivity 2ft Res

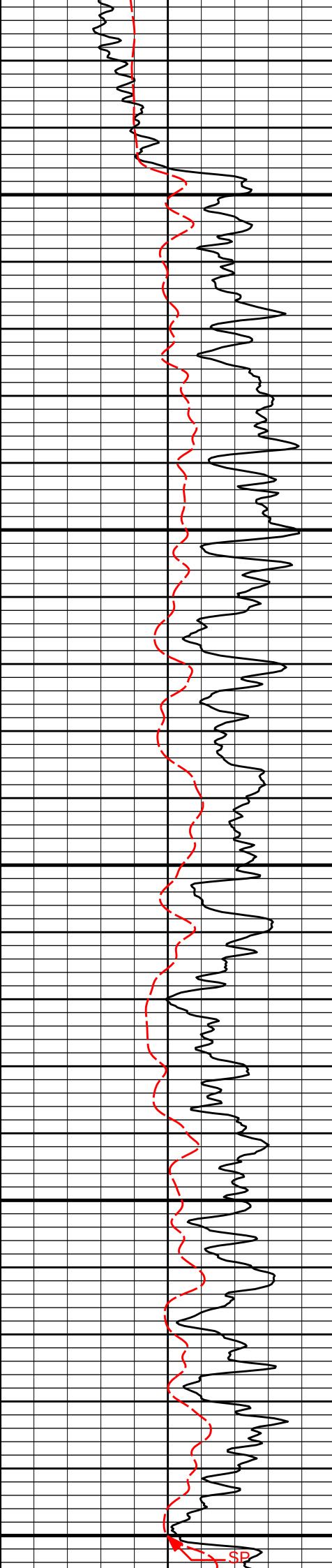
60in Resistivity 2ft Res

30in Resistivity 2ft Res

80in Resistivity 2ft Res

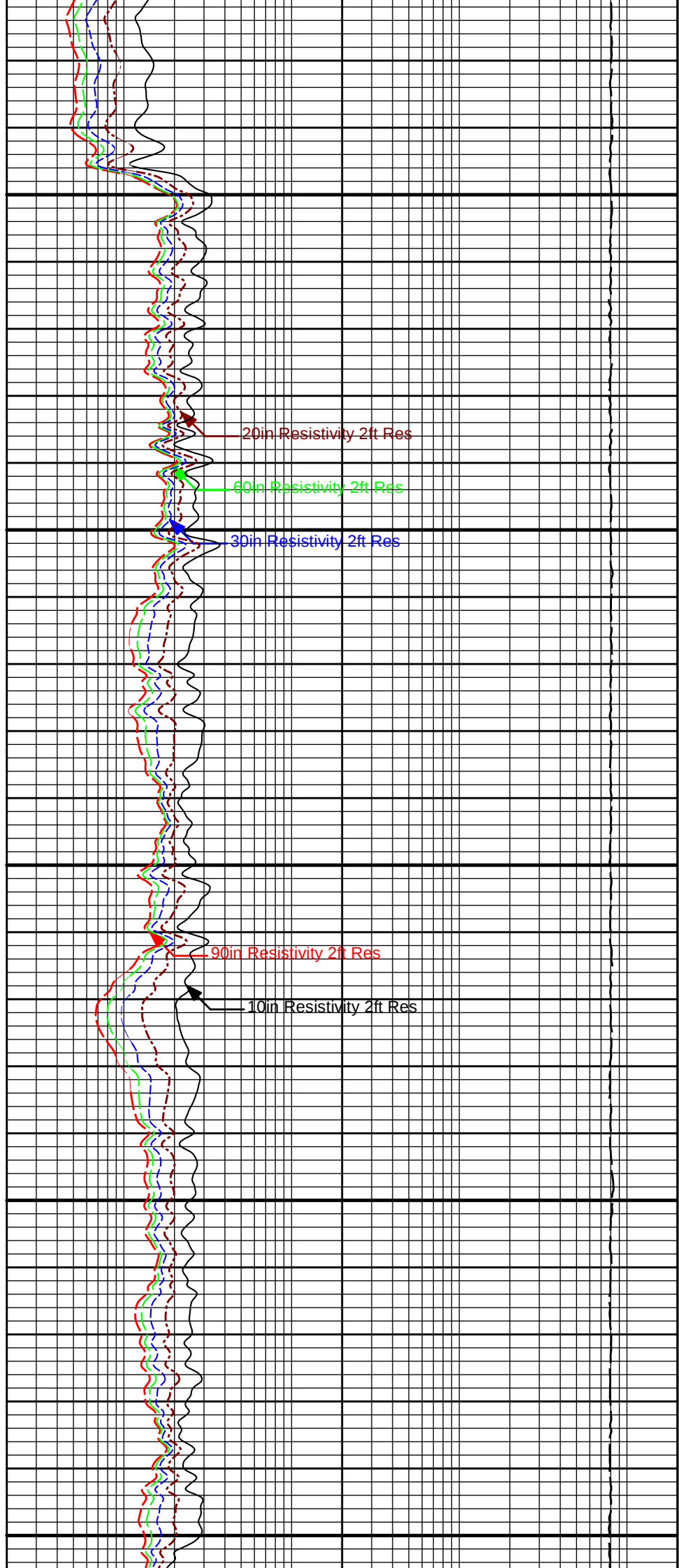
10in Resistivity 2ft Res

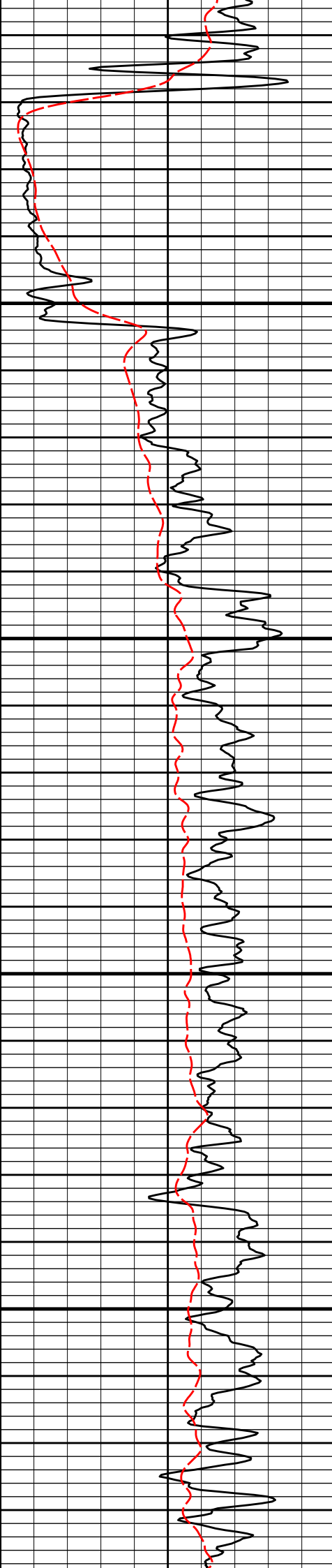
SP



2100

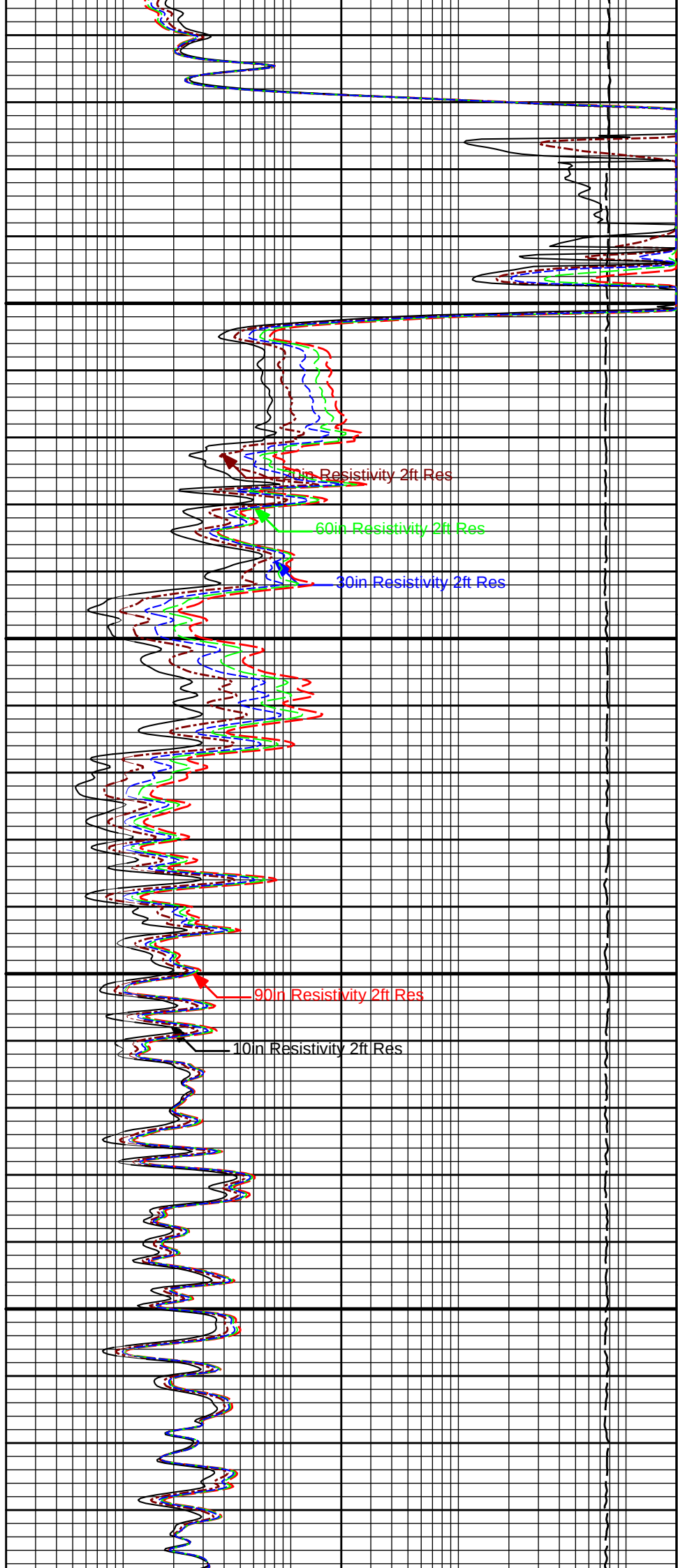
2200

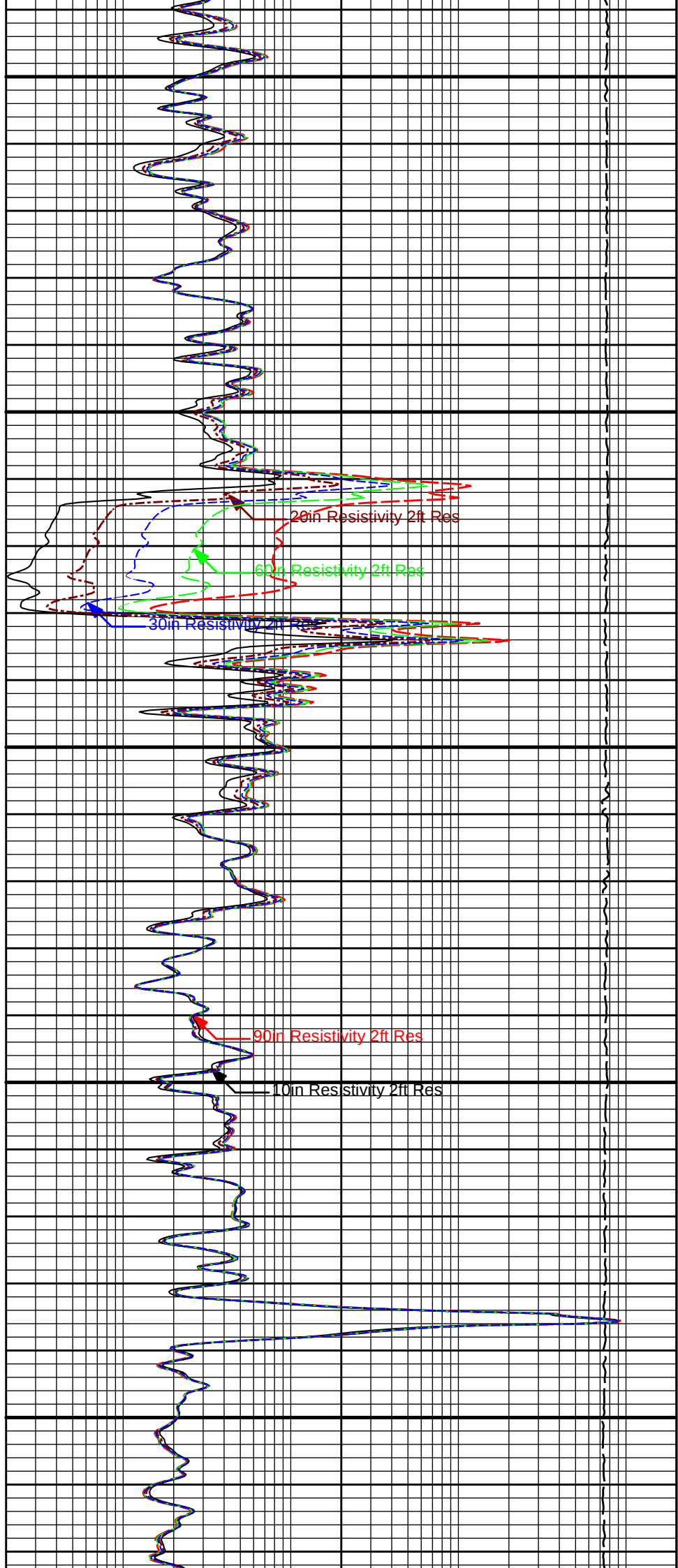
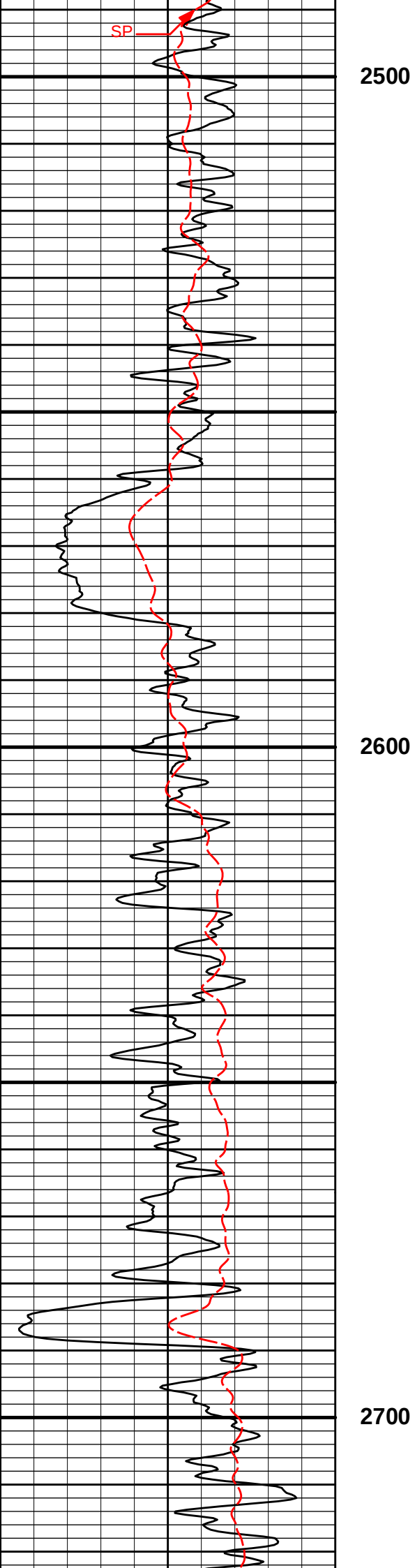


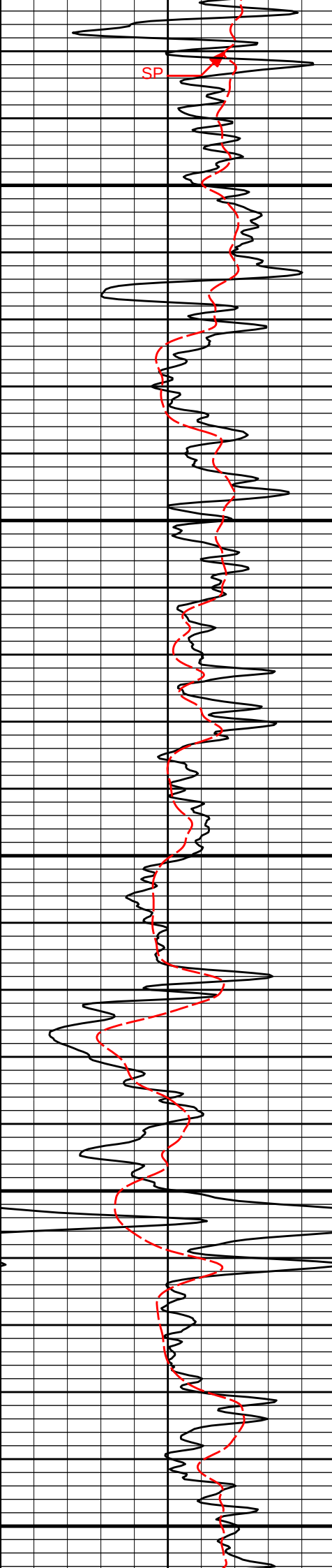


2300

2400

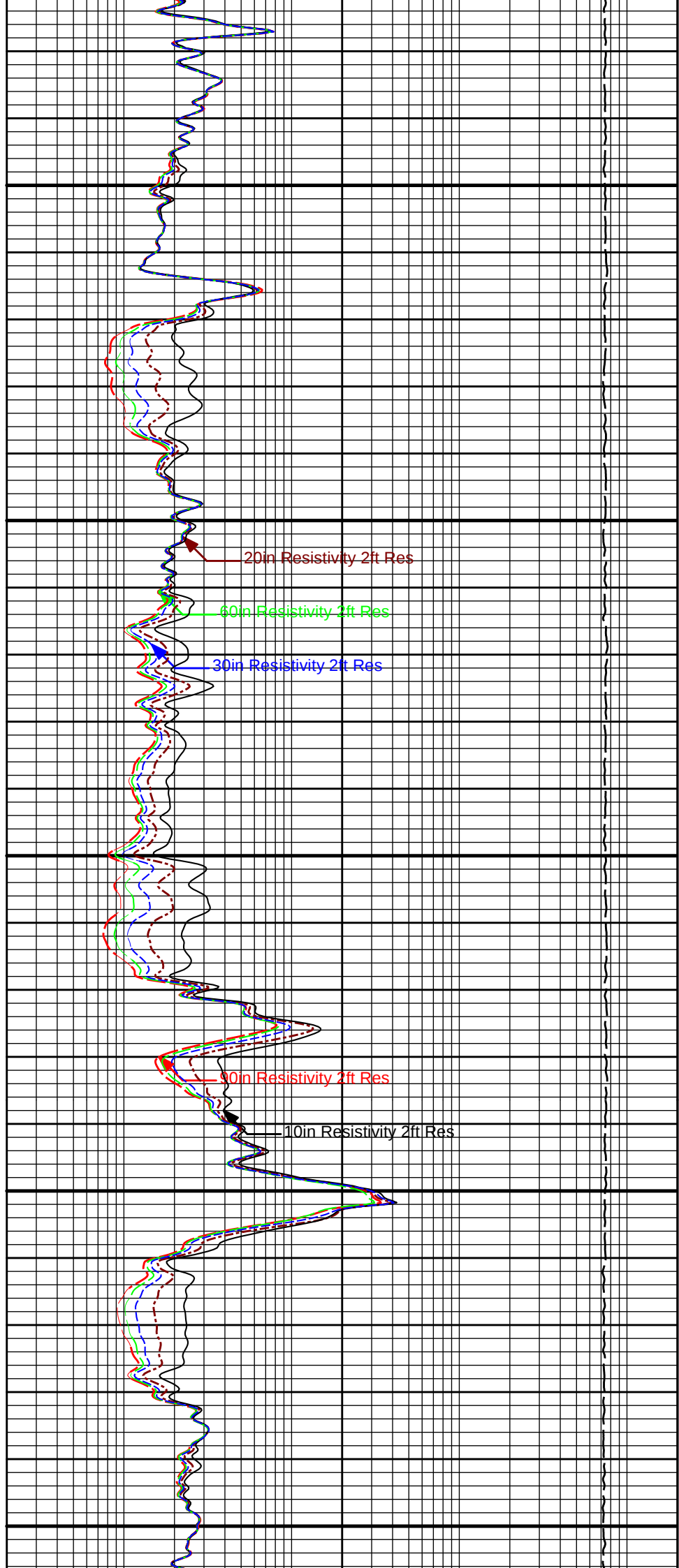


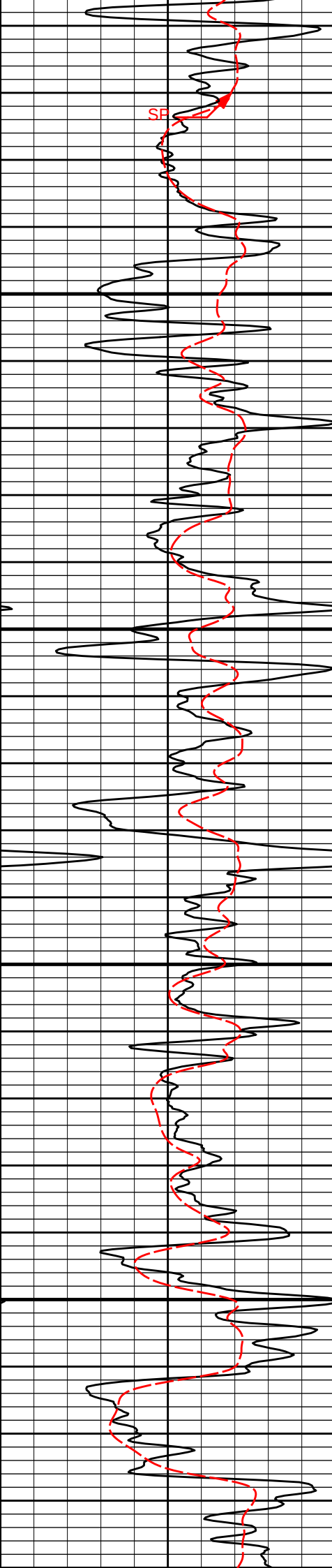




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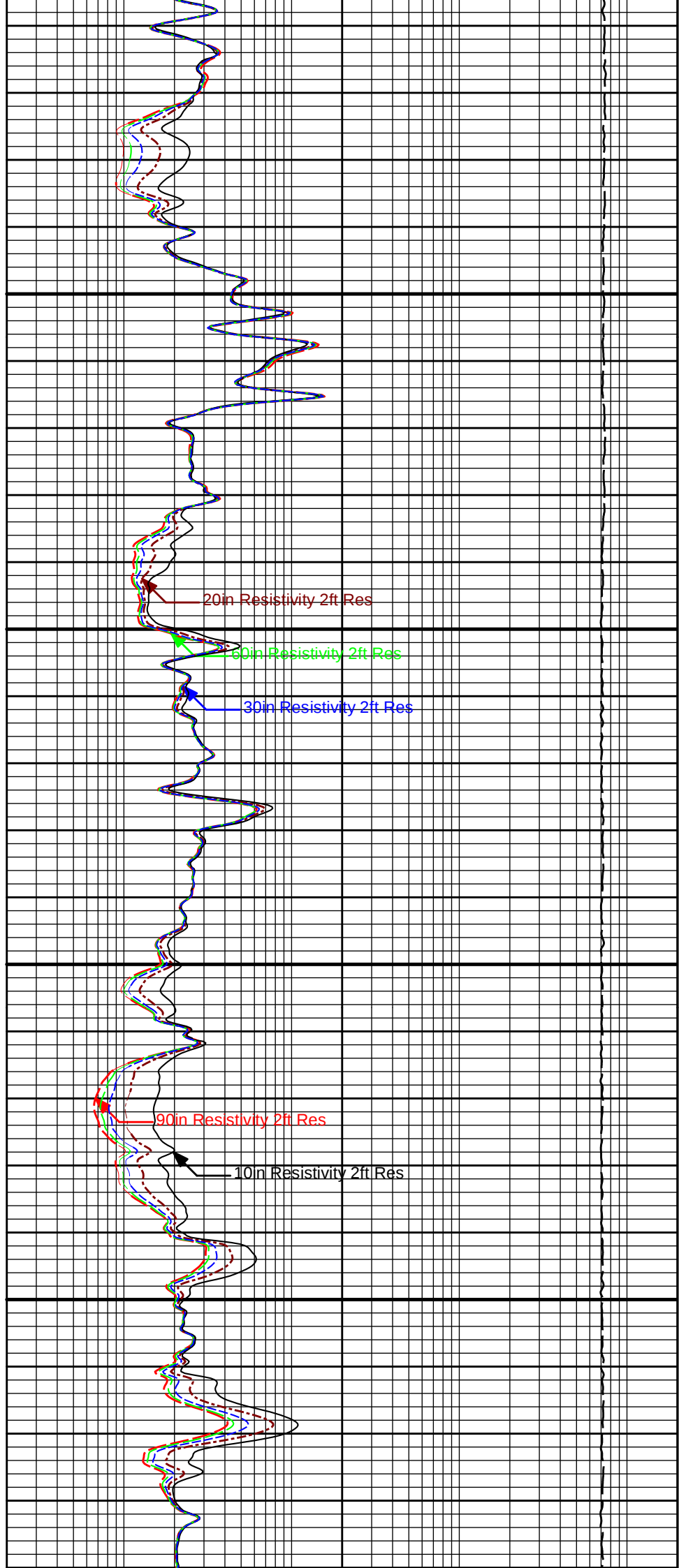
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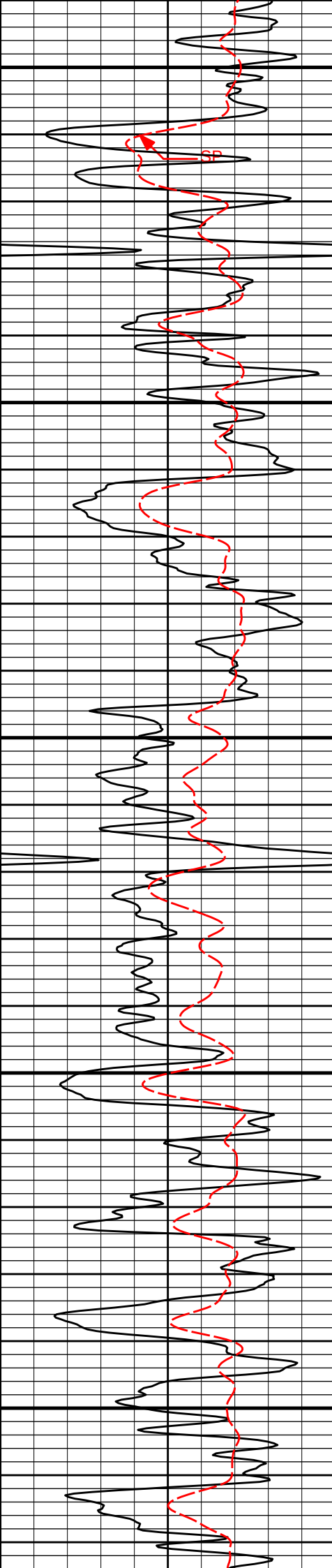




3000

3100

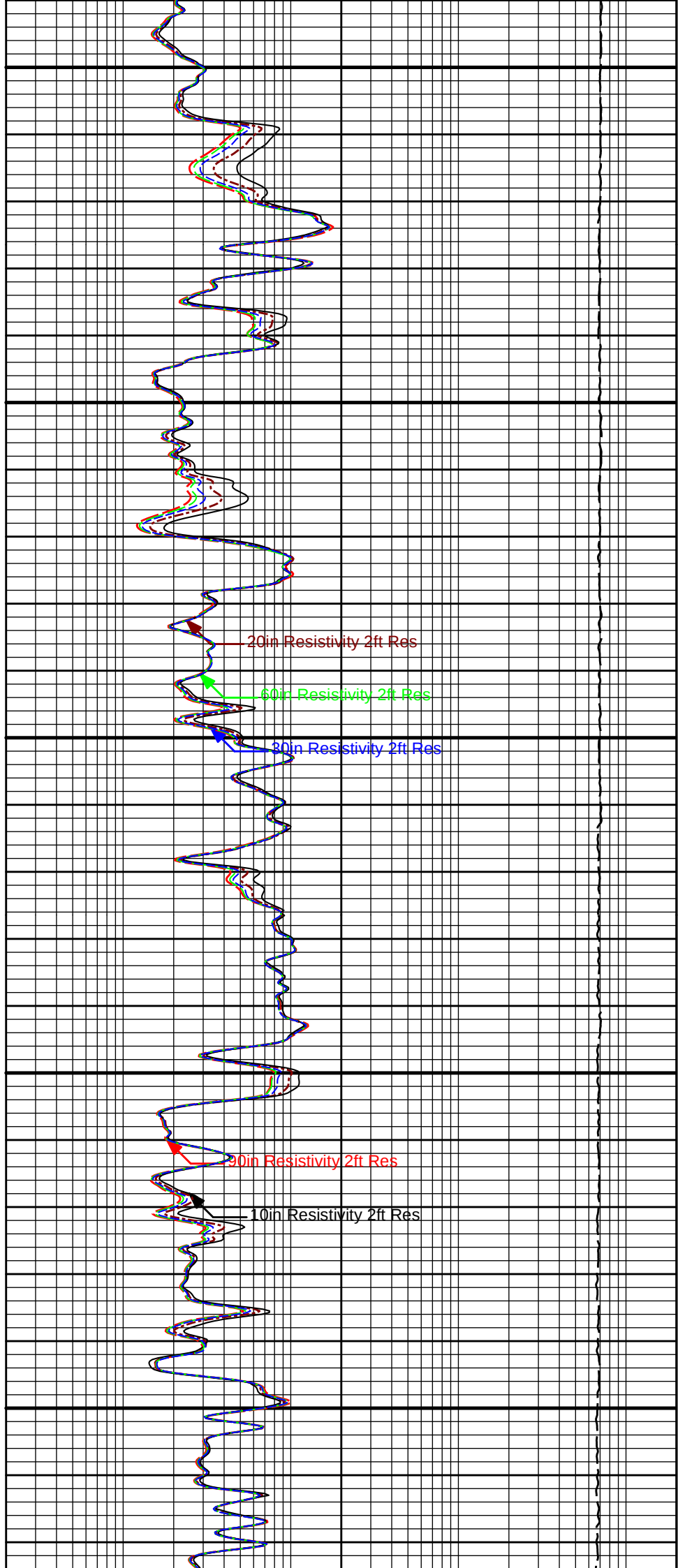


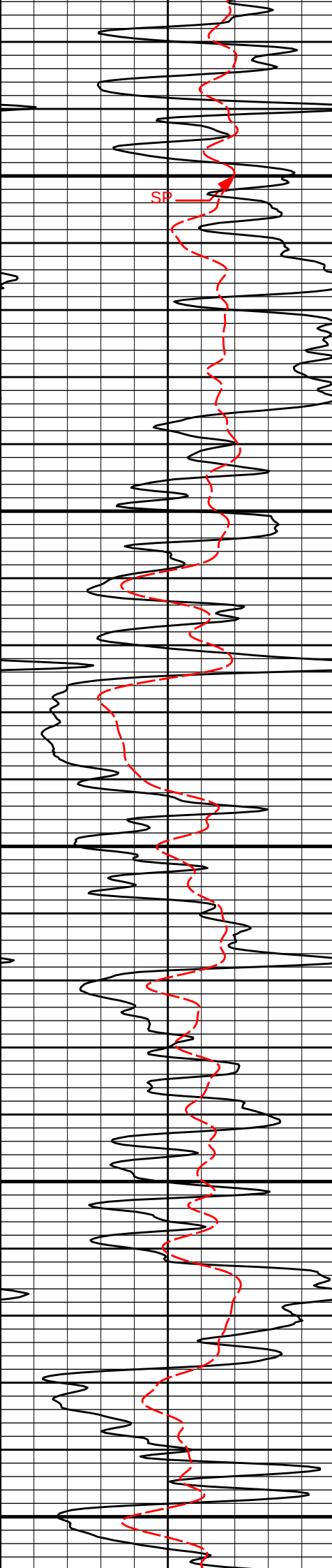


3200

3300

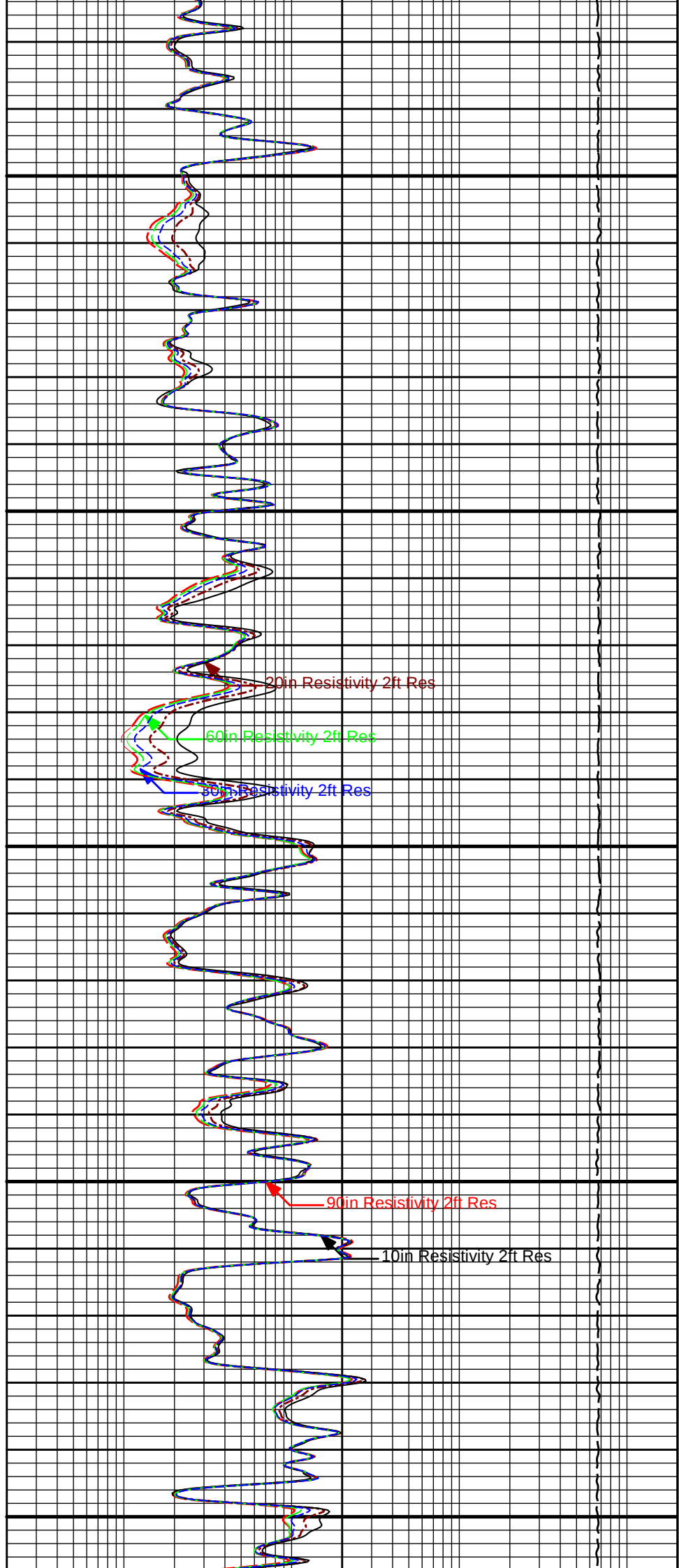
3400

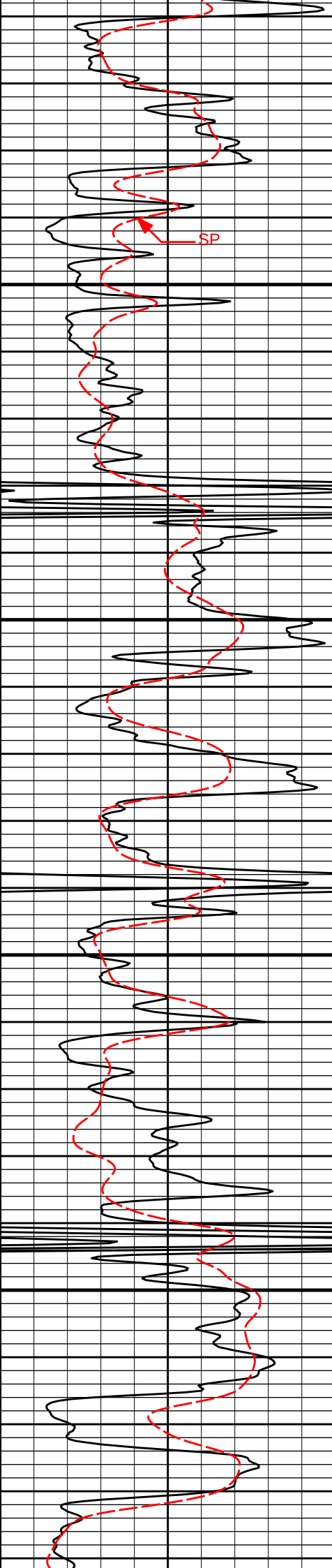




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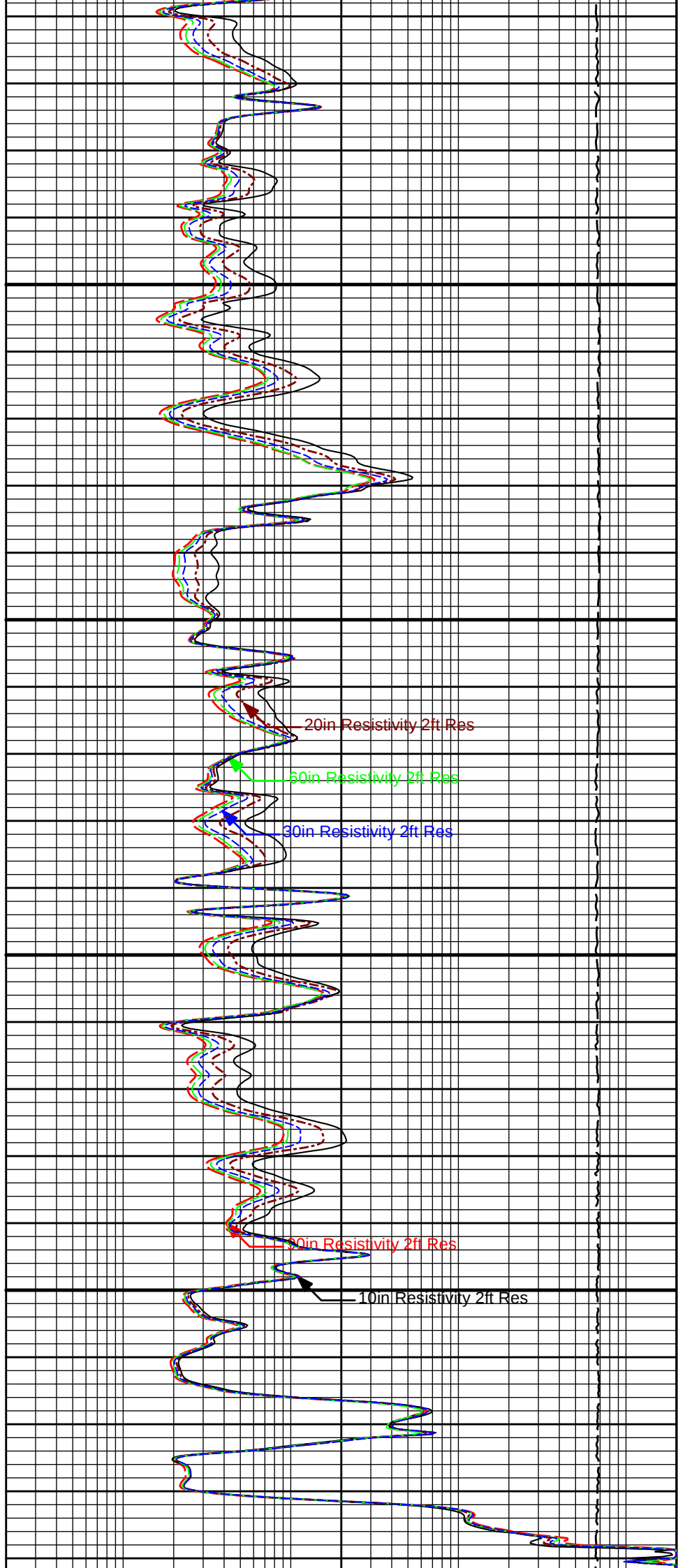
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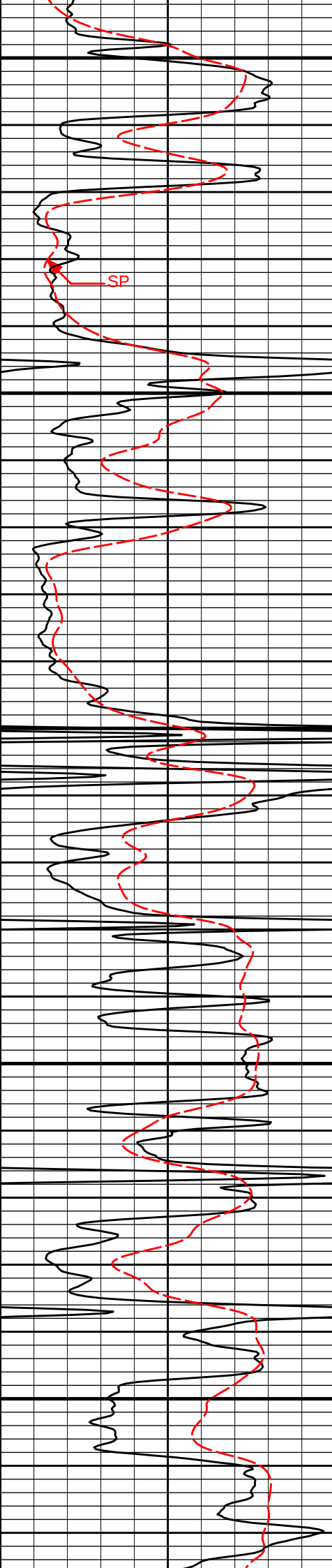




3700

3800

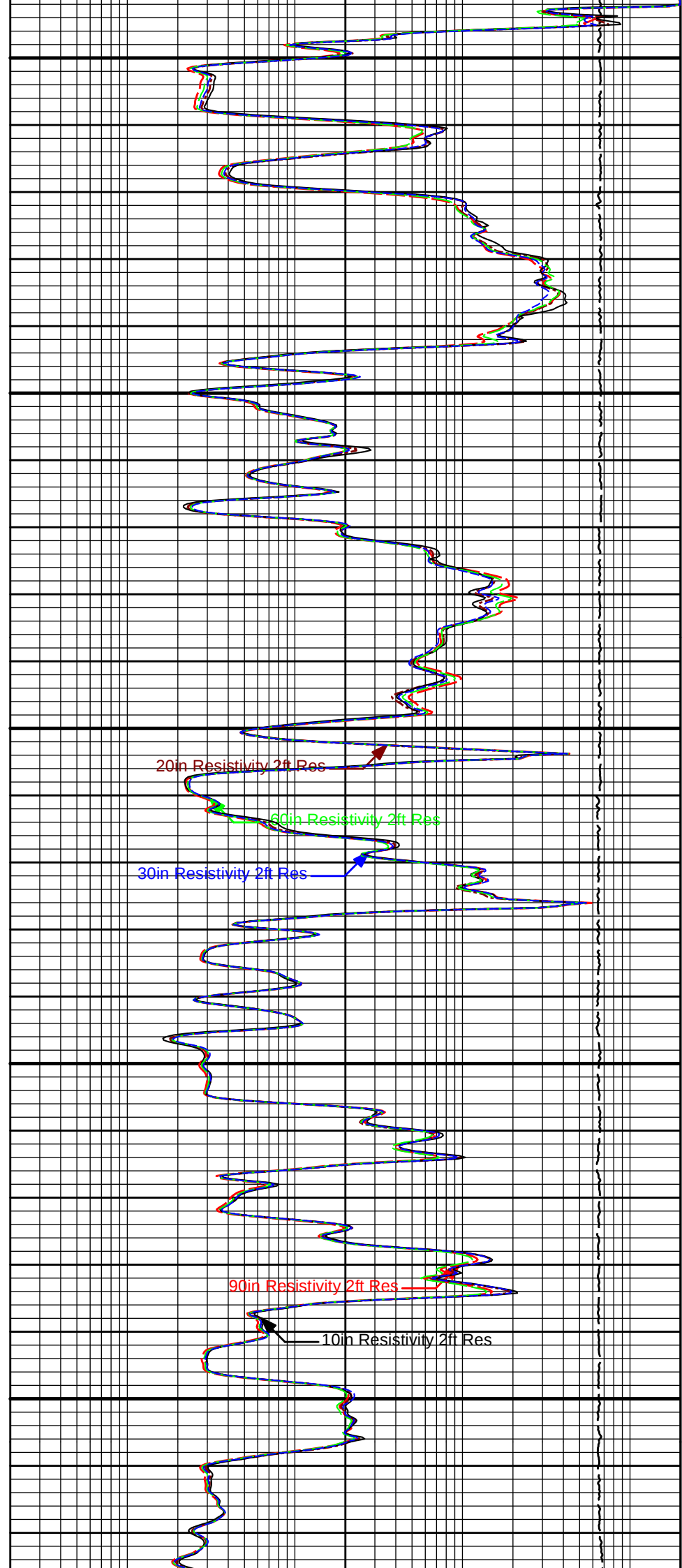


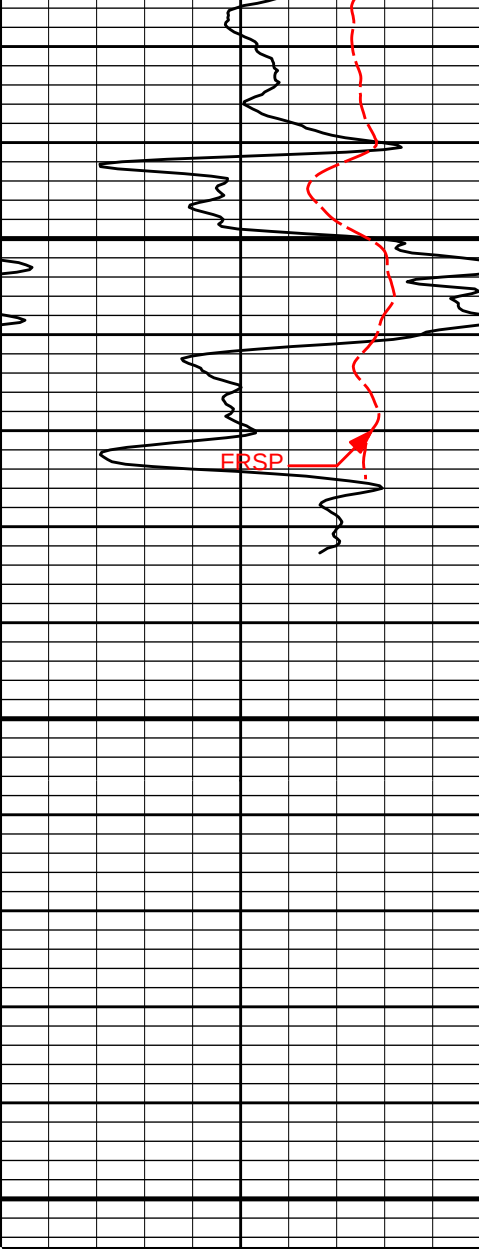


3900

4000

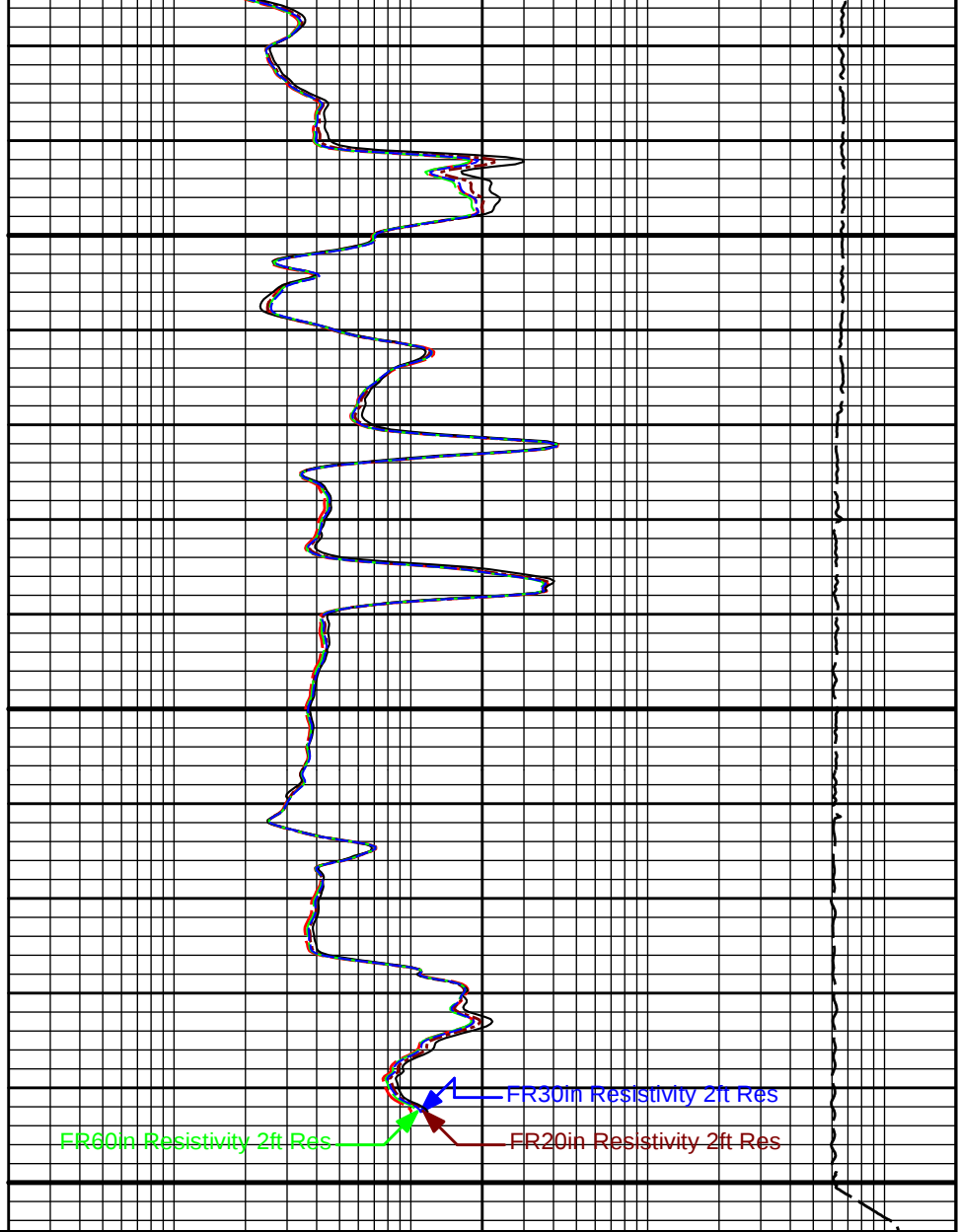
4100





4200

TD



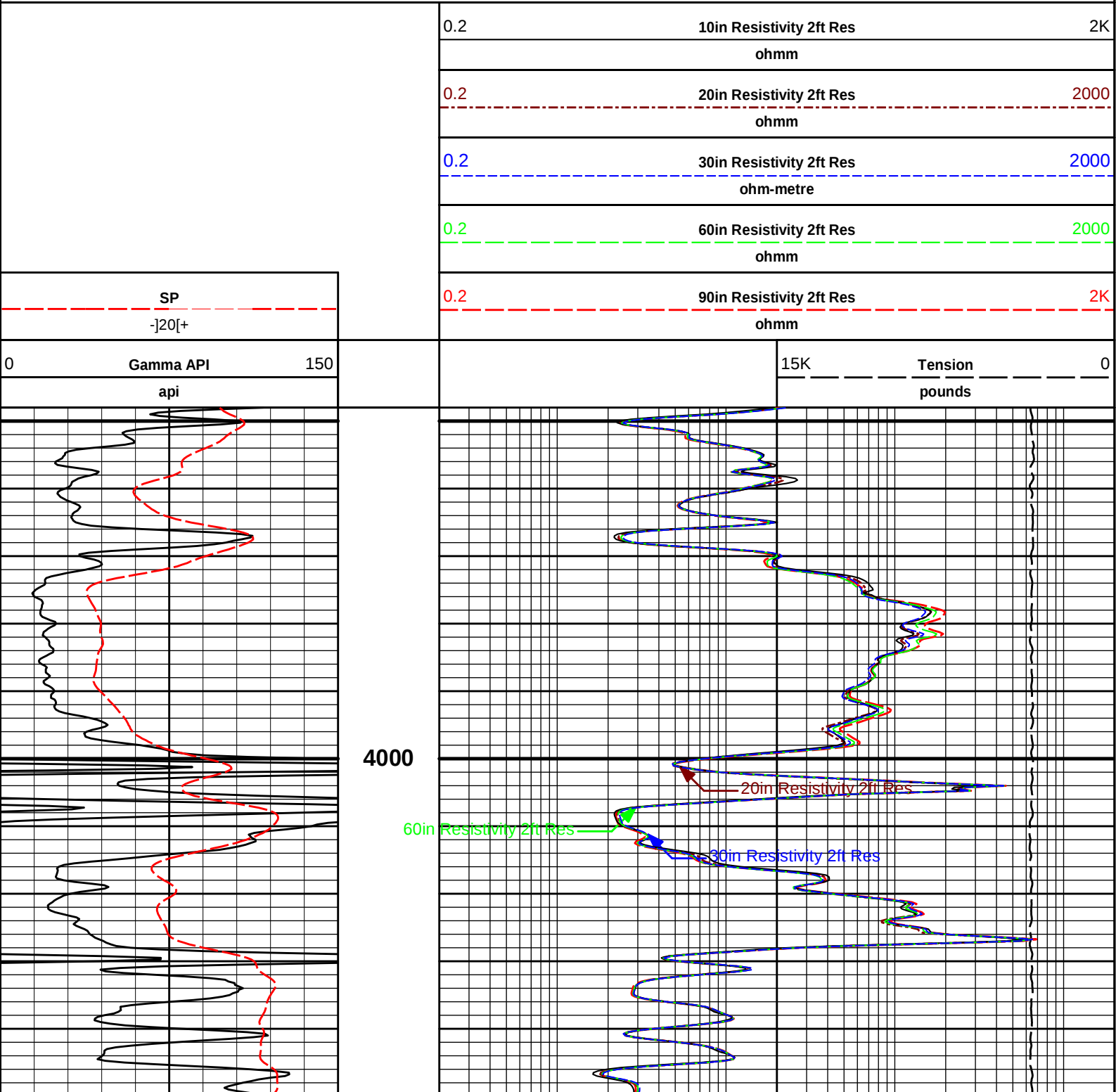
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	api		1 : 240		pounds	
	SP					
	-]20[+					
			0.2	90in Resistivity 2ft Res		2K
				ohmm		
			0.2	60in Resistivity 2ft Res		2000
				ohmm		
			0.2	30in Resistivity 2ft Res		2000
				ohm-metre		
			0.2	20in Resistivity 2ft Res		2000
				ohmm		
			0.2	10in Resistivity 2ft Res		2K
				ohmm		

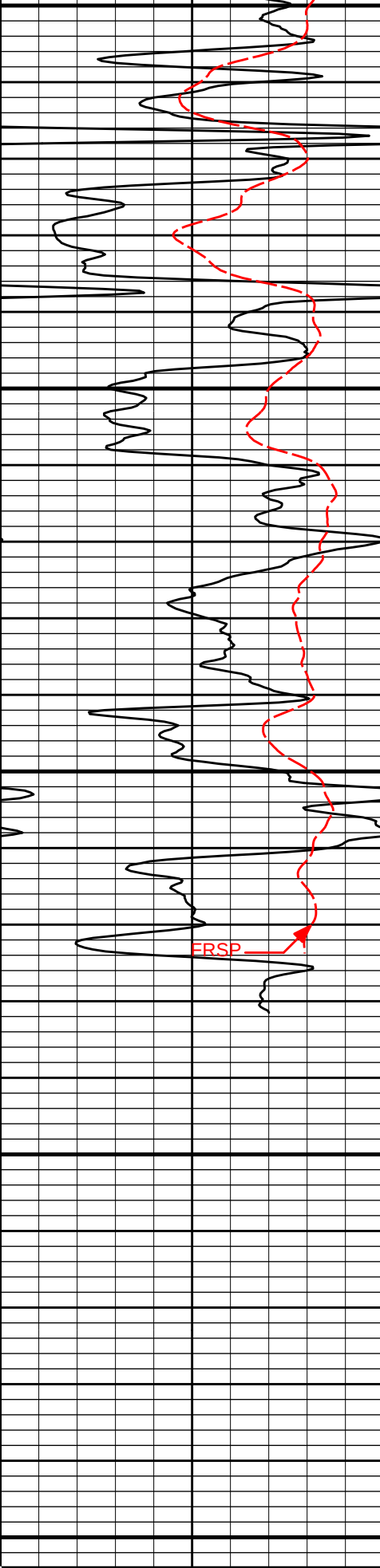
HALLIBURTON

Plot Time: 28-Oct-16 19:17:07
Plot Range: 260 ft to 4255.17 ft
Data: RIEDEL_1-5\Well Based\MAIN\
Plot File: \\LOCAL-RIEDEL_1-5\Well Based\ACRT\ELR_ACRT_5_MAIN

**5 IN = 100 FT MD
MAIN PASS**

5 IN = 100 FT MD
REPEAT PASS

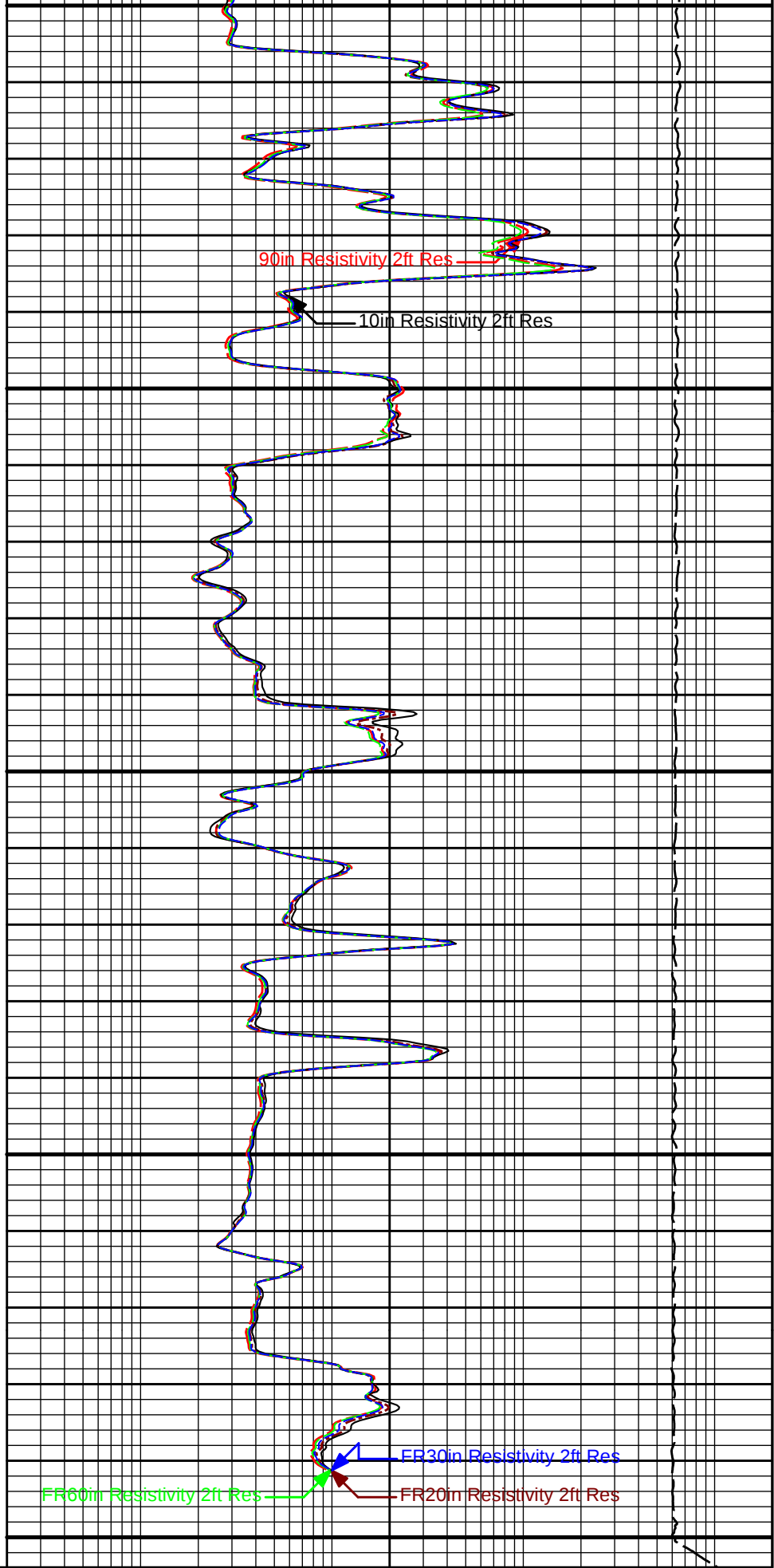




4100

4200

0	Gamma API	150
	api	
	SP	
	-]20[+	



15K	Tension	0
	pounds	
0.2	90in Resistivity 2ft Res	2K
	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	2K
		ohmm	

HALLIBURTON

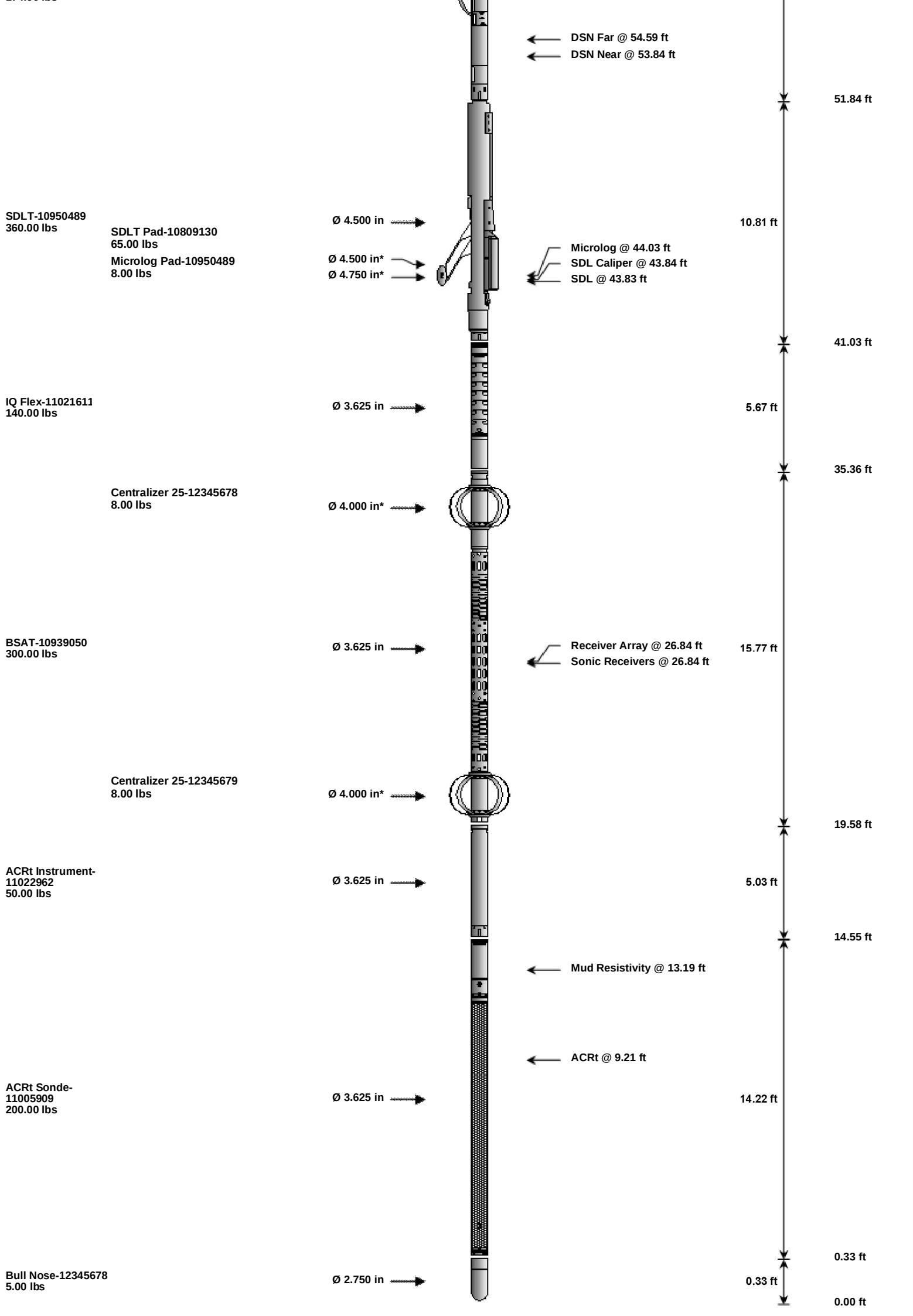
Plot Time: 28-Oct-16 19:17:09
Plot Range: 3948 ft to 4253.92 ft
Data: RIEDEL_1-5\Well Based\REPEAT\
Plot File: \\-LOCAL-\\RIEDEL_1-5\Well Based\ACRT\ELR_ACRT_5_REPEAT

5 IN = 100 FT MD
REPEAT PASS

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-00000025 37.50 lbs		Ø 2.750 in →		← Temperature @ 84.32 ft	2.25 ft	84.57 ft
XOHD-12345678 20.00 lbs		Ø 2.750 in → Ø 3.625 in →			0.95 ft	82.32 ft
SP Sub-11441455 60.00 lbs		Ø 3.625 in →		← SP @ 79.59 ft	3.74 ft	81.37 ft
				← Z-Accelerometer @ 77.18 ft		77.63 ft
GTET-11013114 165.00 lbs		Ø 3.625 in →			8.52 ft	
				← GammaRay @ 71.57 ft		69.11 ft
IDT-11231094 150.00 lbs		Ø 3.625 in →			7.58 ft	
						61.53 ft
	DSN Decentralizer-11019643 6.60 lbs	Ø 5.000 in* → Ø 3.625 in →			9.69 ft	
DSNT-11019643 174.00 lbs						



Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
CH_HOS	Hostile Cable Head with Load Cell		00000025	37.50	2.25	82.32	300.00
XOHD	Hostile to Dits Cross Over		12345678	20.00	0.95	81.37	300.00
SP	SP Sub		11441455	60.00	3.74	77.63	300.00
GTET	Gamma Telemetry Tool		11013114	165.00	8.52	69.11	60.00
IDT	Insite Directional Tool		11231094	150.00	7.58	61.53	60.00
DSNT	Dual Spaced Neutron		11019643	174.00	9.69	51.84	60.00
DCNT	DSN Decentralizer		11019643	6.60	5.13	*	55.17
SDLT	Spectral Density Tool		10950489	360.00	10.81	41.03	60.00
SDLP	Density Insite Pad		10809130	65.00	2.55	*	43.24
MICP	Microlog Pad		10950489	8.00	1.00	*	43.53
IQF	IQ Flex tool		11021611	140.00	5.67	35.36	300.00
BSAT	Borehole Sonic Array Tool		10939050	300.00	15.77	19.58	60.00
OBCEN	Centralizer - 25 in. Overbody		12345679	8.00	2.08	*	19.89
OBCEN	Centralizer - 25 in. Overbody		12345678	8.00	2.08	*	32.71
ACRt	Array Compensated True Resistivity Instrument Section		11022962	50.00	5.03	14.55	120.00
ACRt	Array Compensated True Resistivity Sonde Section		11005909	200.00	14.22	0.33	120.00
BLNS	Bull Nose		12345678	5.00	0.33	0.00	300.00
Total				1,757.10	84.57		
* Not included in Total Length and Length Accumulation.							
Data: RIEDEL_1-5\0001 GTET-IDT-DSN-SDL-BSAT-ACRT\IDLE							
Date: 28-Oct-16 15:09:26							



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	2000.00	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	CSTR	Compressive Strength	1000.00	psia
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	4230.00	ft
	SHARED	BHT	Bottom Hole Temperature	113.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	IDT	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	IDT	
	SHARED	TEMM	CBM Temperature Master Tool	GTET	
	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	
Rwa / CrossPlot	BHSM	Borehole Size Source Tool	SDLT	
Rwa / CrossPlot	ROIN	Input for RO Calculation	Rwa	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GEOK	Process Gamma Ray EVR?	Yes	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
GTET	BHSM	Borehole Size Source Tool	SDLT	
IDT	WRTI	Survey Writing Interval	30	ft
IDT	SOPT	Smoothing Option	None	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	Yes	
DSNT	NLIT	Neutron Lithology	Limestone	
DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTT	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	
DSNT	BHSM	Borehole Size Source Tool	SDLT	
SDLT	CLOK	Process Caliper Outputs?	Yes	
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	Yes	
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
SDLT Pad	BHSM	Borehole Size Source Tool	SDLT	
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 Pore Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	Limestone 47.6	
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	RMAX	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
ACRt Sonde	BHSM	Borehole Size Source Tool	SDLT	
ACRt Sonde	MBFL	Apply Corkscrew Effect?	No	
BOTTOM				
Data: RIEDEL_1-5I0001 GTET-IDT-DSN-SDL-BSAT-ACRTIDLE			Date: 28-Oct-16 15:24:19	

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11013114				Reference Calibration Date: 22-Dec-15 09:34:24					
Engineer: MICHAEL RICHTER				Calibration Date: 04-Oct-16 13:37:27					
Software Version: WL INSITE R5.0.5 (Build 8)				Calibration Version: 1					
Calibrator Source S/N: TB-146									
Calibrator API Reference:265.00 api									
Equivalent Calibrator API Reference:269.6 api									
		Measurement		Measured		Calibrated		Units	
		Background		37.2		46.4		api	
		Background + Calibrator		253.2		316.1		api	
		Calibrator		216.0		269.6		api	

NATURAL GAMMA RAY TOOL FIELD CALIBRATION									
Tool Name: GTET - 11013114				Reference Calibration Date: 04-Oct-16 13:37:27					
Engineer: MICHAEL RICHTER				Calibration Date: 09-Oct-16 14:00:11					
Software Version: WL INSITE R5.0.5 (Build 8)				Calibration Version: 1					
Calibrator Source S/N: TB-146									
Calibrator API Reference:265.00 api									
Equivalent Calibrator API Reference:269.6 api									
		Field Verification		Shop		Field		Units	
		Background		46.4		61.9		api	
		Background + Calibrator		316.1		337.4		api	
		Calibrator		269.6		275.5		api	

12K	0.6	0.91	1.3	Mud Cell	0.95	1.00	1.05
36K	1.0	1.36	2.0				
72K	1.0	1.60	2.0				
PASS/FAIL SUMMARY							
GAIN RANGE CHK				PASS			
SONDE OFFSET CHK				PASS			
TOOL OK TO LOG							

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11013114						
Gamma Ray Calibrator	269.6	275.5	-----	-5.9	+/- 9.00	api
ACRt Sonde-11005909						
Mud Cell	1.00	-----	-----	0	-----	ohm-m
Data: RIEDEL_1-5\0001 GTET-IDT-DSN-SDL-BSAT-ACRT\IDLE						
Date: 28-Oct-16 15:22:53						

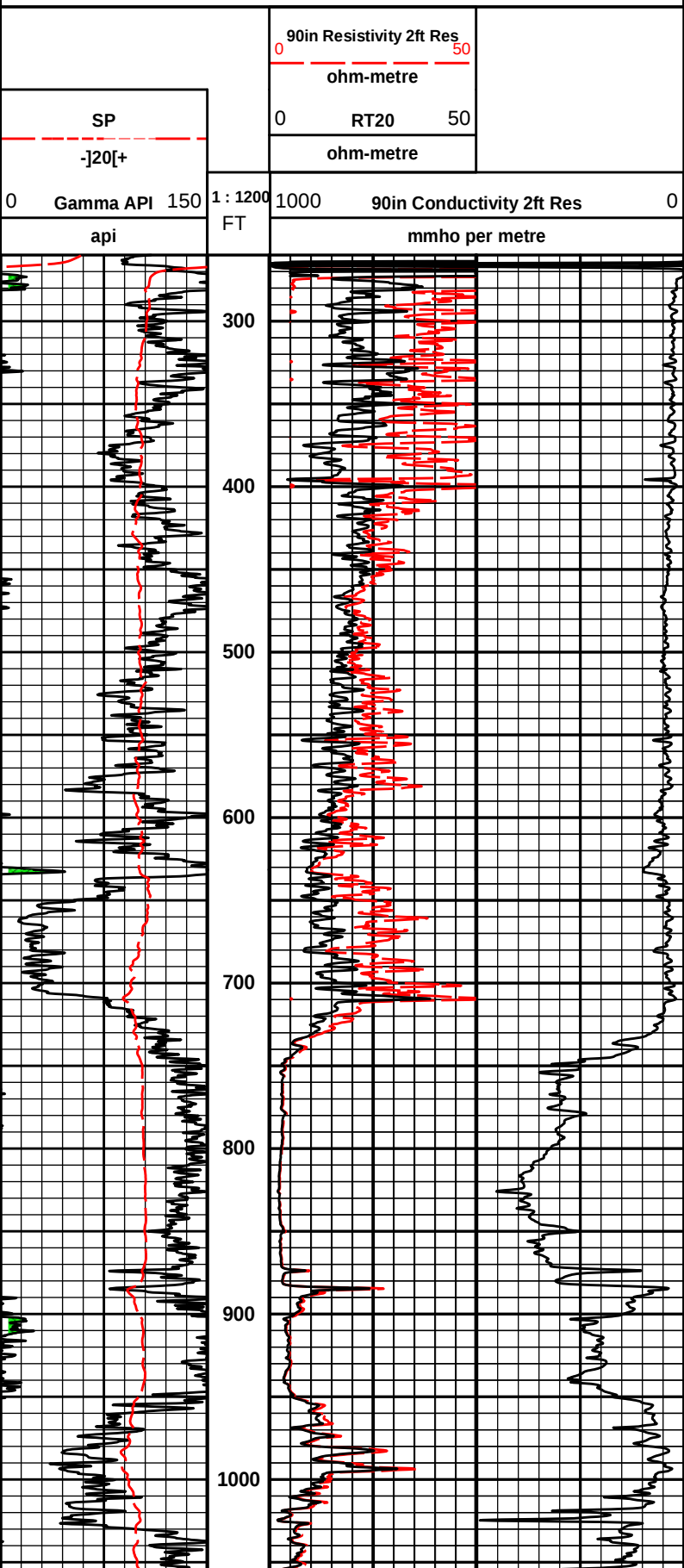
HALLIBURTON						
INPUTS, DELAYS AND FILTERS TABLE						

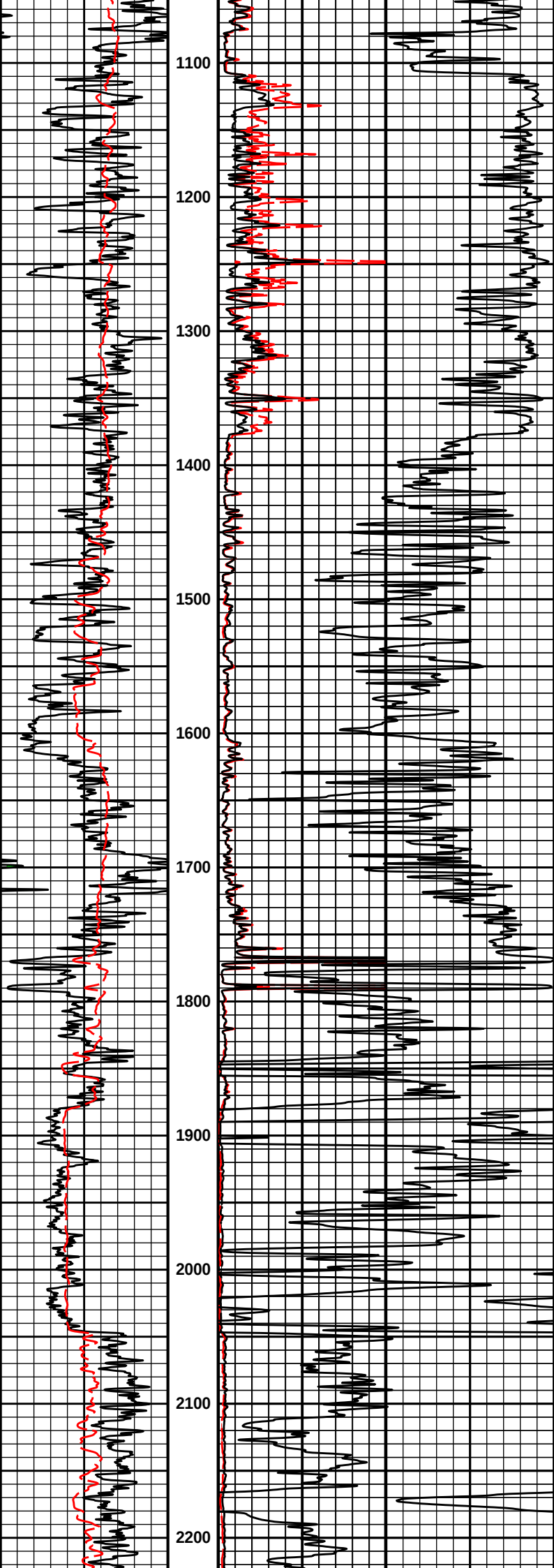
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
Rwa / CrossPlot				
TPUL	Tension Pull	84.57	NO	
BS	Bit Size	84.57	NO	
HDIA	Measured Hole Diameter	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	79.59	NO	
SP	Spontaneous Potential	79.59	BLK	1.250
SPR	Raw Spontaneous Potential	79.59	NO	
SPO	Spontaneous Potential Offset	79.59	NO	
GTET				
TPUL	Tension Pull	71.57	NO	
GR	Natural Gamma Ray API	71.57	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	71.57	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	71.57	W	1.416 , 0.750
HDIA	Measured Hole Diameter	0.00	NO	
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
IDT				
TPUL	Tension Pull	62.53	NO	
ACCX	Accelerometer X	62.53	NO	
ACCY	Accelerometer Y	62.53	NO	
ACCZ	Accelerometer Z	62.53	NO	
MAGX	magnetometer x with unit	62.53	NO	
MAGY	Magnetometer Y with unit	62.53	NO	
MAGZ	magnetometer z with unit	62.53	NO	
IAMP	Accelerometer Temperature	62.53	NO	

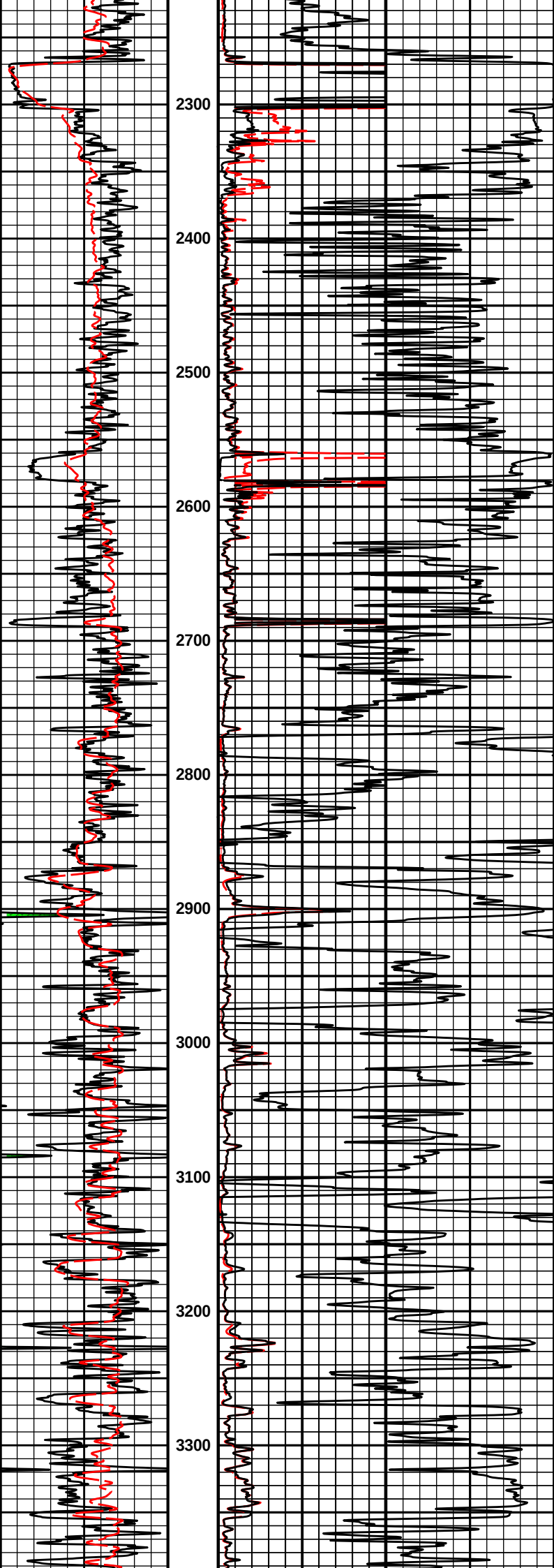
AMP	Accelerometer Temperature	62.53	NO	
MTMP	Magnetometer Temperature	62.53	NO	
DSNT				
TPUL	Tension Pull	53.74	NO	
RNDS	Near Detector Telemetry Counts	53.84	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.59	TRI	0.583
DNTT	DSN Tool Temperature	53.84	NO	
DSNS	DSN Tool Status	53.74	NO	
ERND	Near Detector 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	
HDIA	Measured Hole Diameter	0.00	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

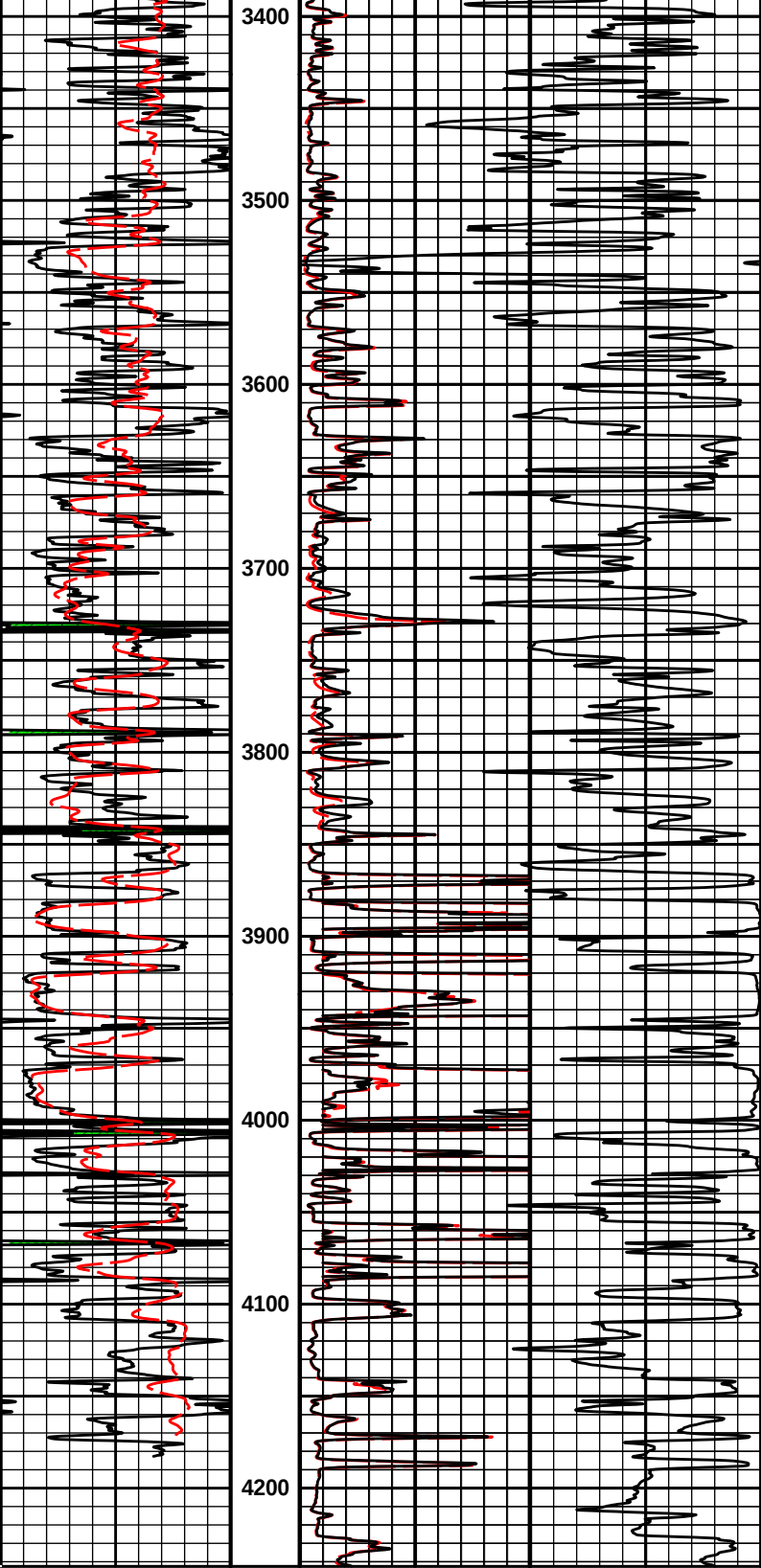
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	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	
HDIA	Measured Hole Diameter	0.00	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
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	
HDIA	Measured Hole Diameter	0.00	NO	
Data: RIEDEL_1-5\0001 GTET-IDT-DSN-SDL-BSAT-ACRT\IDLE				Date: 28-Oct-16 15:24:32

1 IN = 100 FT MD
MAIN PASS









0	Gamma API	150	1 : 1200	1000	90in Conductivity 2ft Res	0
	api		FT		mmho per metre	
	SP			0	RT20	50
	-]20[+				ohm-metre	
				0	90in Resistivity 2ft Res	50
					ohm-metre	

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Plot Time: 28-Oct-16 19:17:15
Plot Range: 260 ft to 4242.5 ft
Data: RIEDEL_1-5\Well Based\MAIN\
Plot File: \\LOCAL-RIEDEL_1-5\Well Based\ACRTIELR_ACRT_1_MAIN

1 IN = 100 FT MD
MAIN PASS

COMPANY	CULBREATH OIL & GAS COMPANY, LLC		
WELL	RIEDEL #1-5		
FIELD	WILDCAT		
COUNTY	SHERIDAN	STATE	KANSAS

HALLIBURTON

ARRAY COMPENSATED
TRUE RESISTIVITY
LOG