

HALLIBURTON

ARRAY COMPENSATED
TRUE RESISTIVITY
LOG

COMPANY		BIRD DOG OIL, LLC	
WELL		HALL-GATES 2-5	
FIELD/BLOCK		GATES	
COUNTY		STAFFORD	
STATE		KANSAS	
Permanent Datum Log measured from Drilling measured from	GL	Elev. 1896.0 ft	
	KB	9.0 ft above perm. Datum	
	KB	Elev.: K.B. 1896.0 ft	
	KB	D.F. 1905.0 ft	
Date	18-Oct-19	G.L. 1905.0 ft	
Run No.	ONE		
Depth - Driller	3850.0 ft		
Depth - Logger	3850.0 ft		
Bottom - Logged Interval	3841.00 ft		
Top - Logged Interval	432.00 ft		
Casing - Driller	8.625 in	@	
Casing - Logger	432.0 ft	@	
Bit Size	7.875 in	@	
Type Fluid in Hole	Water Based Mud	@	
Density	9.00 g/cc	58.00 s/qt	
PH	10.50 pH	10.0 cpm	
Source of Sample	MUDPI		
Rm @ Meas. Temperature	0.51 ohmm	@ 75.00 degF	@
Rmf @ Meas. Temperature	0.47 ohmm	@ 75.00 degF	@
Rmc @ Meas. Temperature	0.58 ohmm	@ 75.00 degF	@
Source Rmf	MEAS	MEAS	
Rm @ BHT	0.35 ohmm	@ 111.0 degF	@
Time Since Circulation	5.0 hr		
Time on Bottom	18-Oct-19 09:00		
Max. Rec. Temperature	111.00 degF	@ 3850.0 ft	@
Equipment	Location	12156883	EL RENO, OK
Recorded By	JORGE ORLANDO PEREZ		
Witnessed By	JUSTIN CARTER		

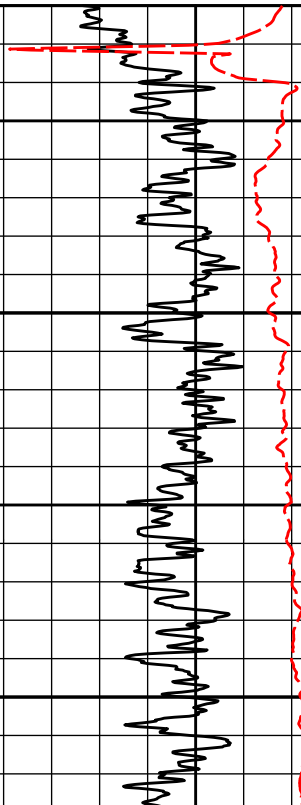
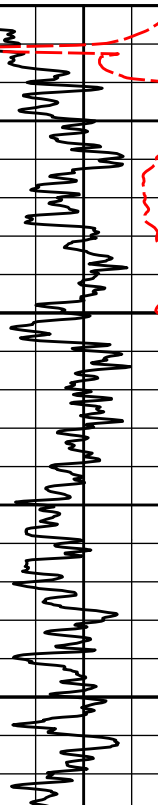
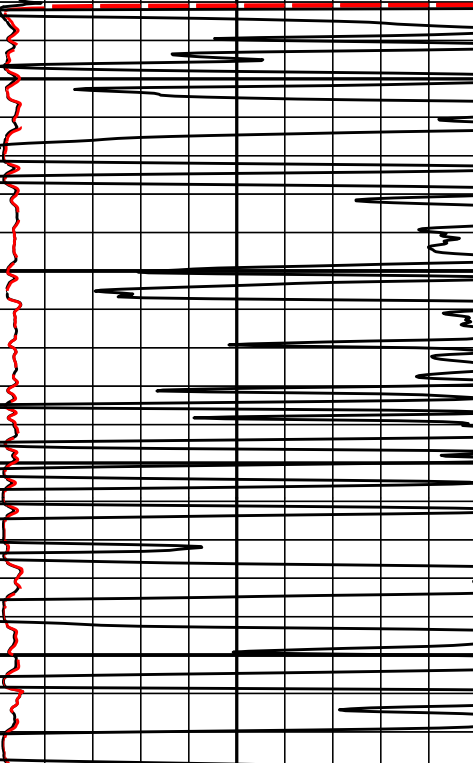
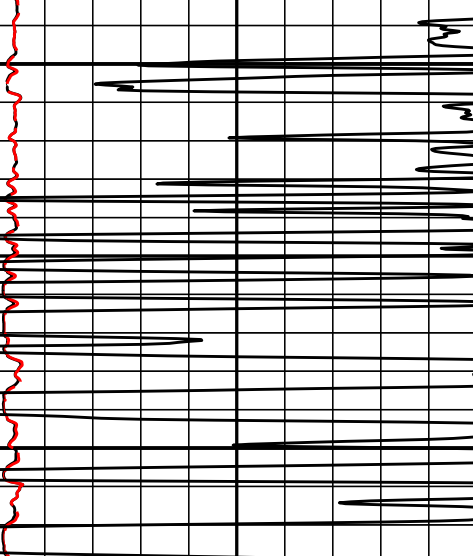
Service Ticket No.: 906051745				API No.: 15-185-24062-00-00		PGM Version: WL INSITE R6.2.7 (Build 7)								
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES								
Date	Sample No.					Type Log	Depth	Scale Up Hole	Scale Down Hole					
Depth-Driller														
Type Fluid in 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.		@		@			I-11830684							
Source Rmf	Rmc						S-11830728							
Rm @ BHT		@		@										
Rmf @ BHT		@		@										
Rmc @ BHT		@		@										
EQUIPMENT DATA														
GAMMA			ACOUSTIC			DENSITY			NEUTRON					
Run No.	ONE		Run No.			Run No.	ONE		Run No.	ONE				
Serial No.	11013113		Serial No.			Serial No.	10960494		Serial No.	11055304				
Model No.	GTET		Model No.			Model No.	SDLT		Model No.	DSNT				
Diameter	3.625"		No. of Cent.			Diameter	5.5"		Diameter	3.625"				
Detector Model No.	T-102		Spacing			Log Type	GAM-GAM		Log Type	NEU-NEU				
Type	SCINT					Source Type	CS137		Source Type	AM241BE				
Length	8"		LSA [Y/N]			Serial No.	5475GW		Serial No.	DSN-436				
Distance to Source	N/A		FWDA [Y/N]			Strength	1.78 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		L	R		L	R	
ONE	TD	CSC	REC	0	150				20	10	2.71 gr/cc	20	10	TIME

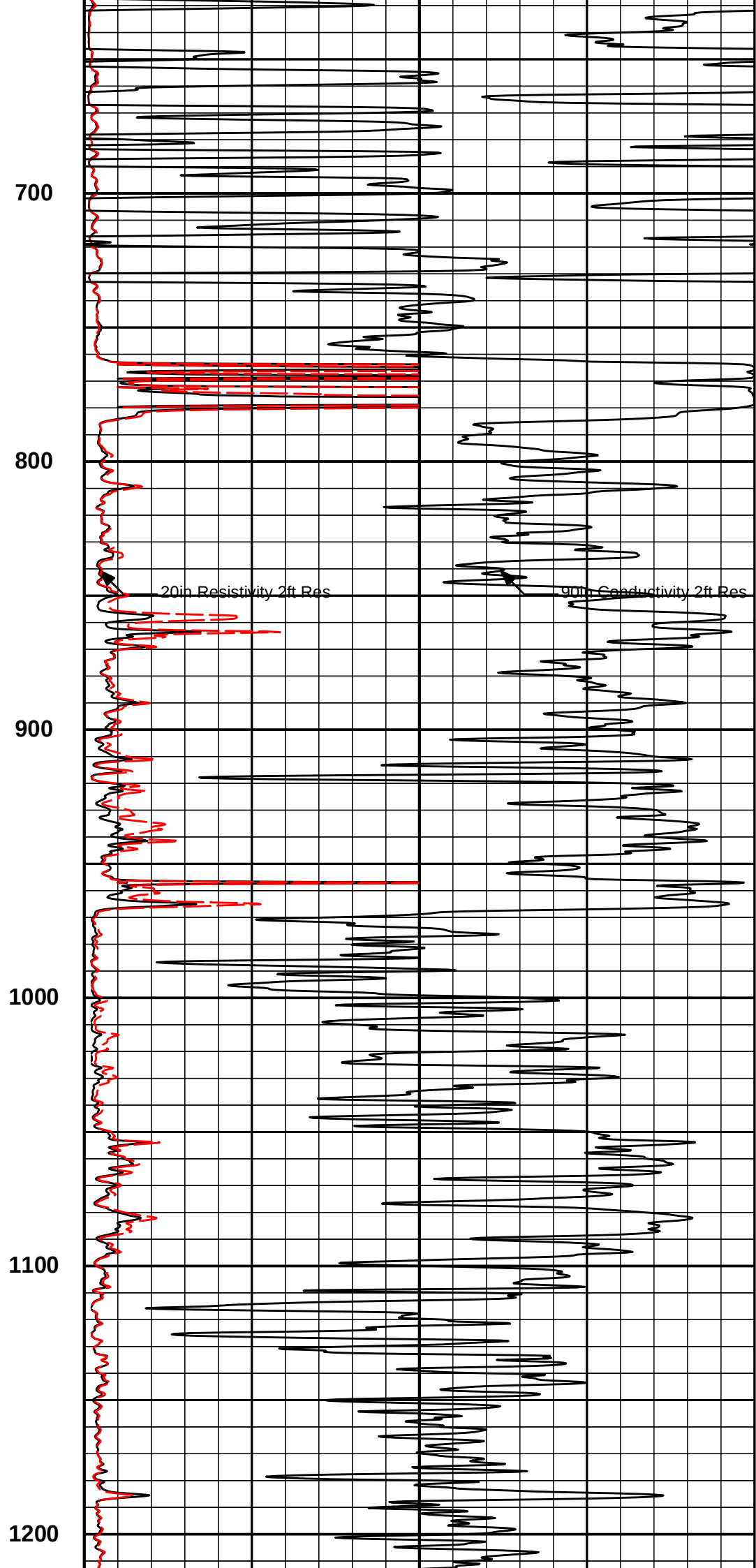
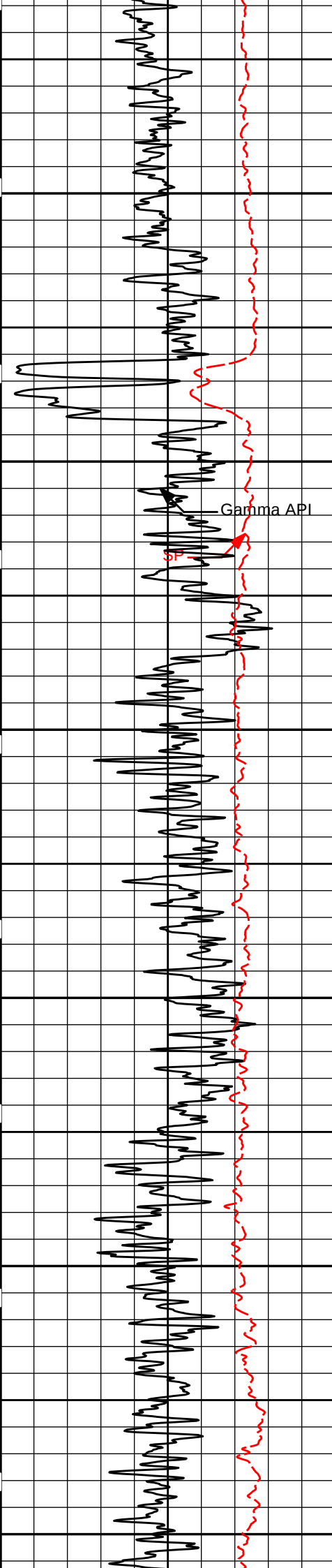
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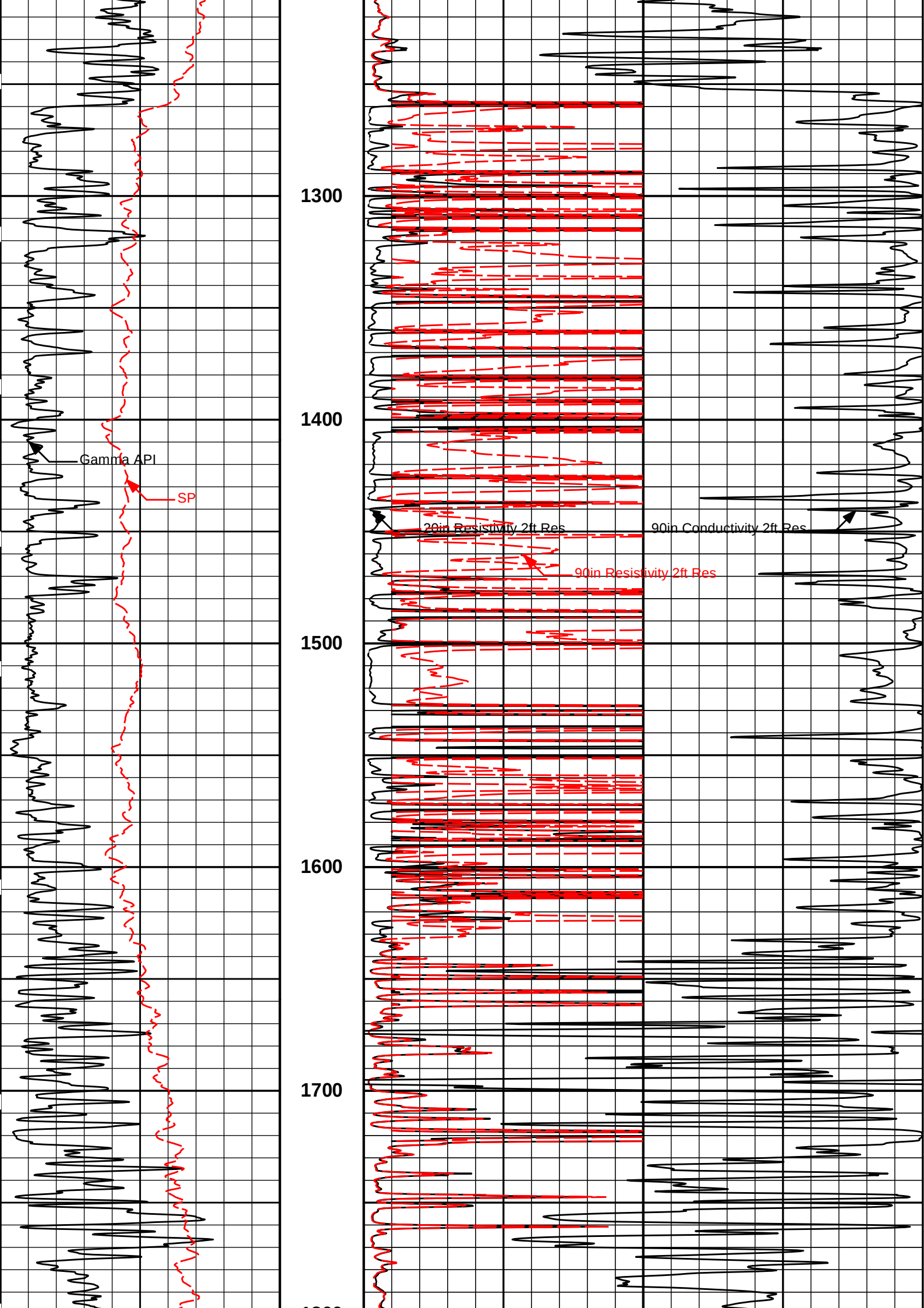
HALLIBURTON

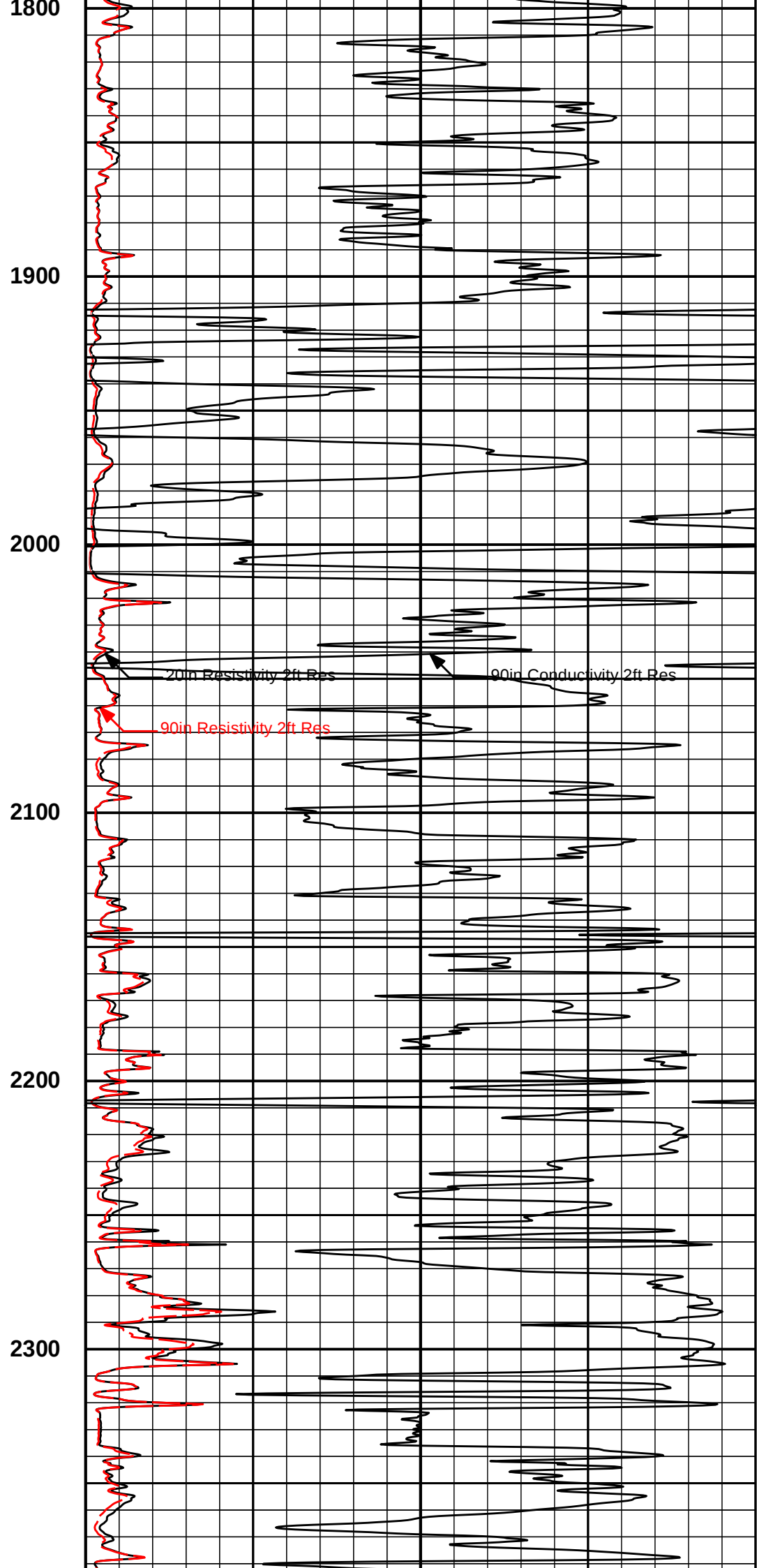
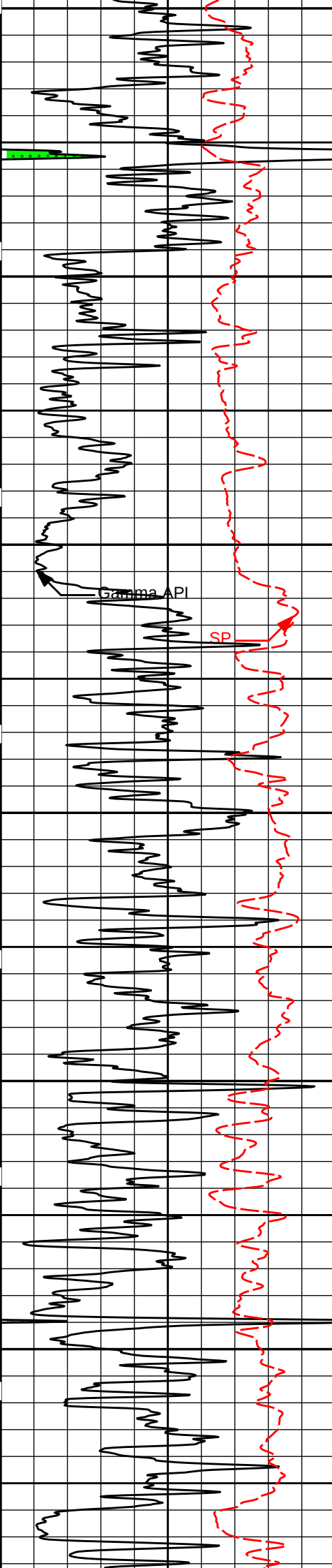
Plot Time: 18-Oct-19 10:02:59
Plot Range: 420 ft to 3853.42 ft
Data: HALL-GATES_2-5\Well Based\MAIN\
Plot File: \\-LOCAL-HALL-GATES_2-5\Well Based\ACRT\ACRT_2_MAIN

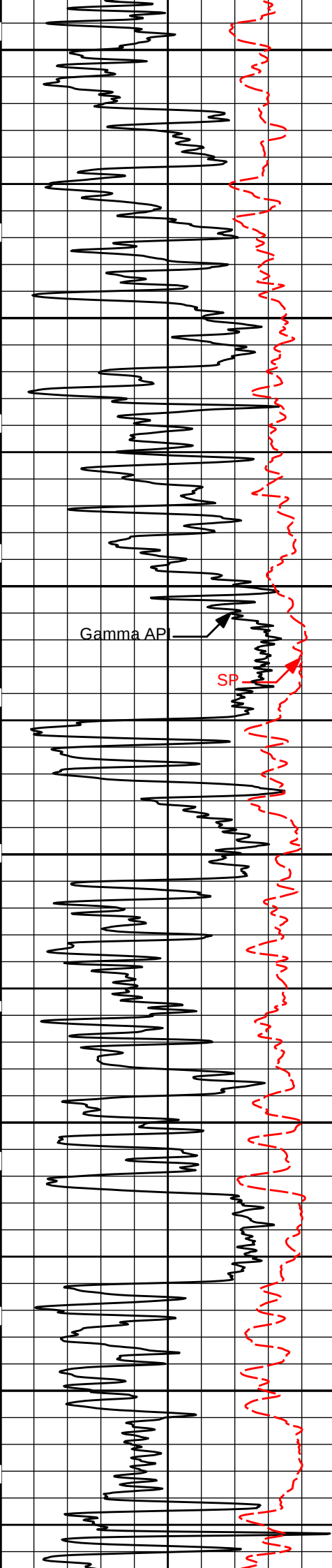
2 INCH MAIN LOG

		1000	90in Conductivity 2ft Res		
			mmho per metre		
SP -120[+]		0	90in Resistivity 2ft Res ohm-metre	50	
0	Gamma API 150	1 : 600 ft	0	20in Resistivity 2ft Res ohm-metre	50
		500			
					
		600			









2400

2500

2600

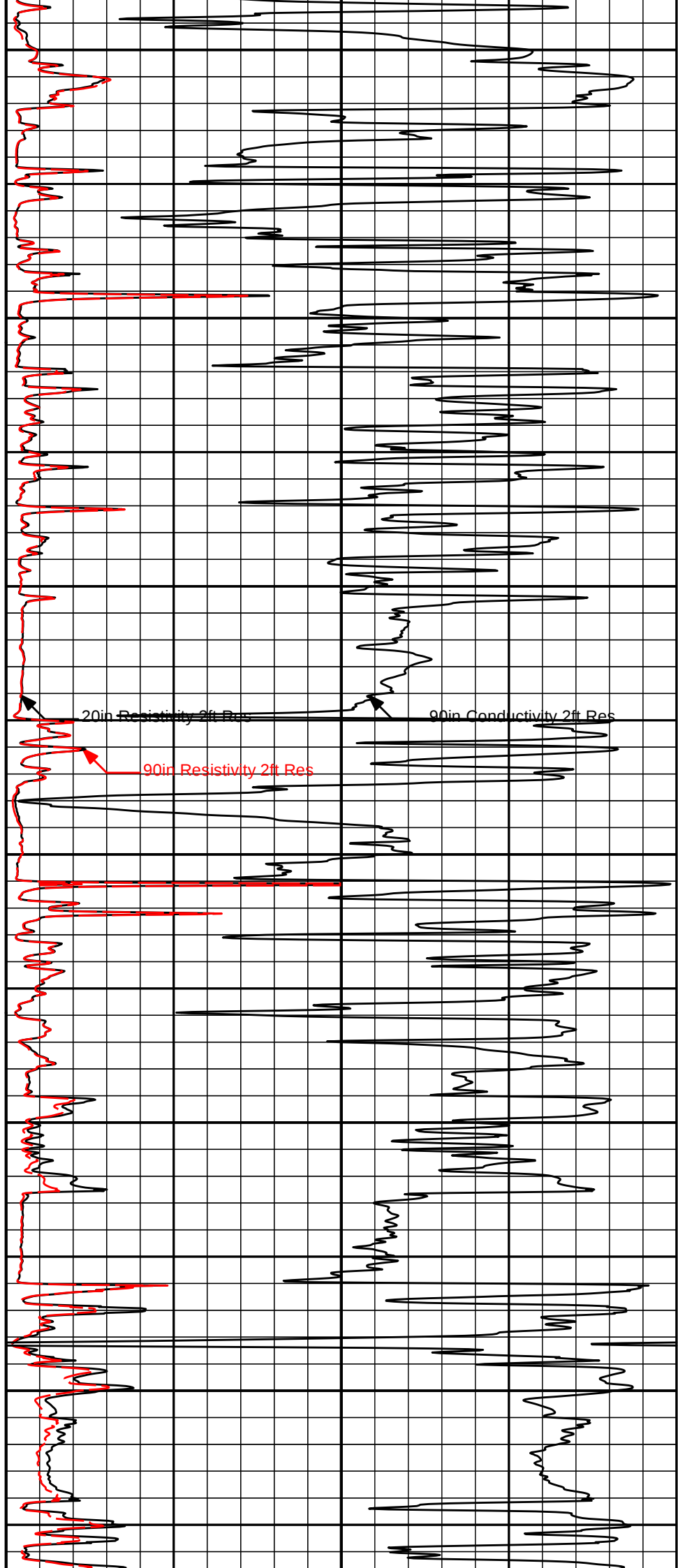
2700

2800

2900

Gamma API

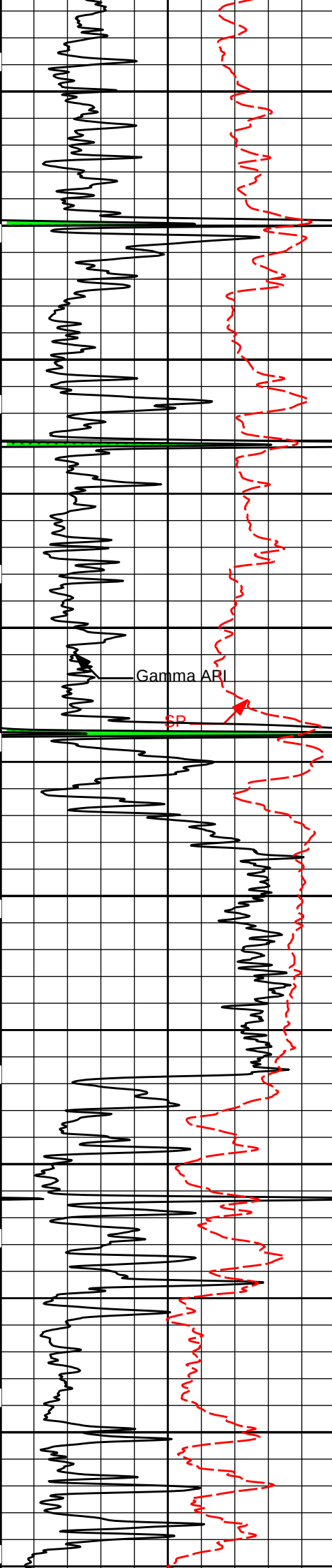
SP



20in Resistivity 2ft Res

90in Resistivity 2ft Res

90in Conductivity 2ft Res



3000

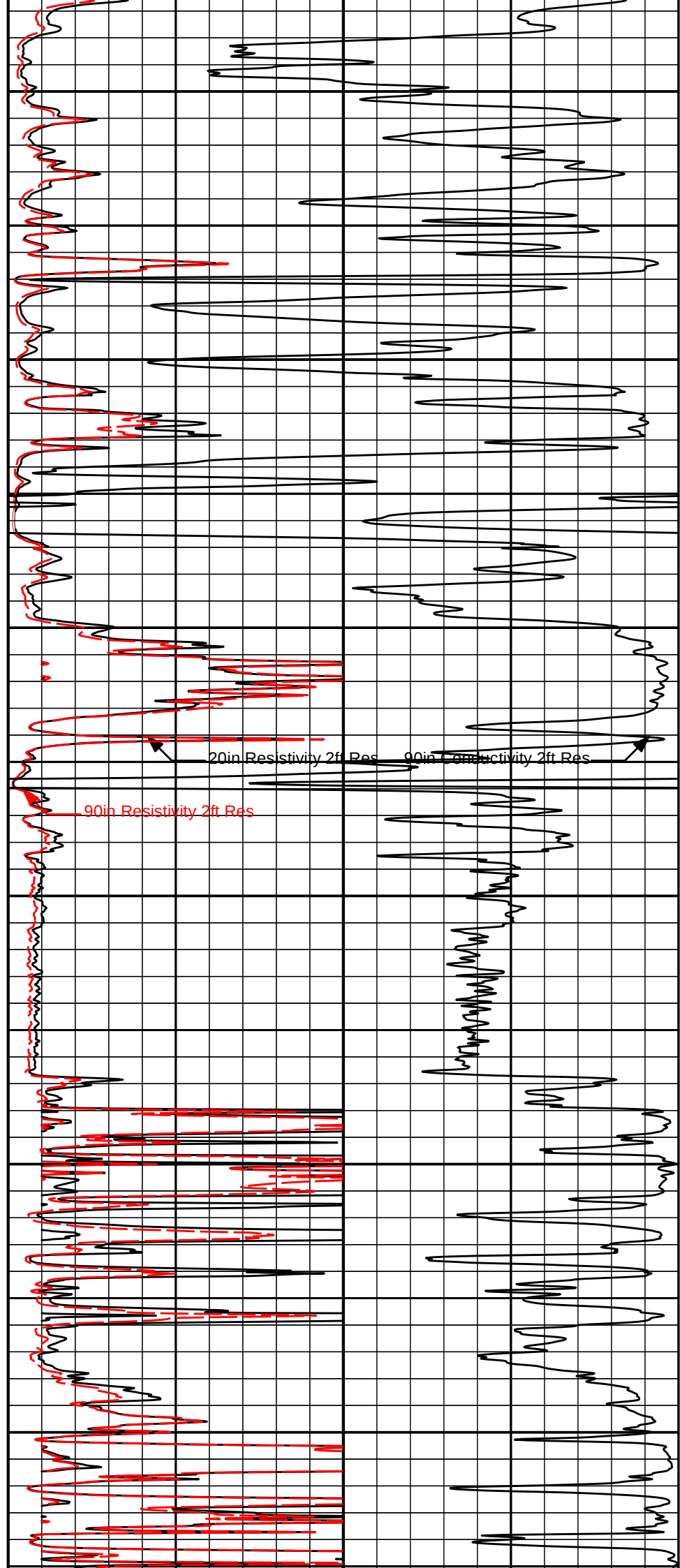
3100

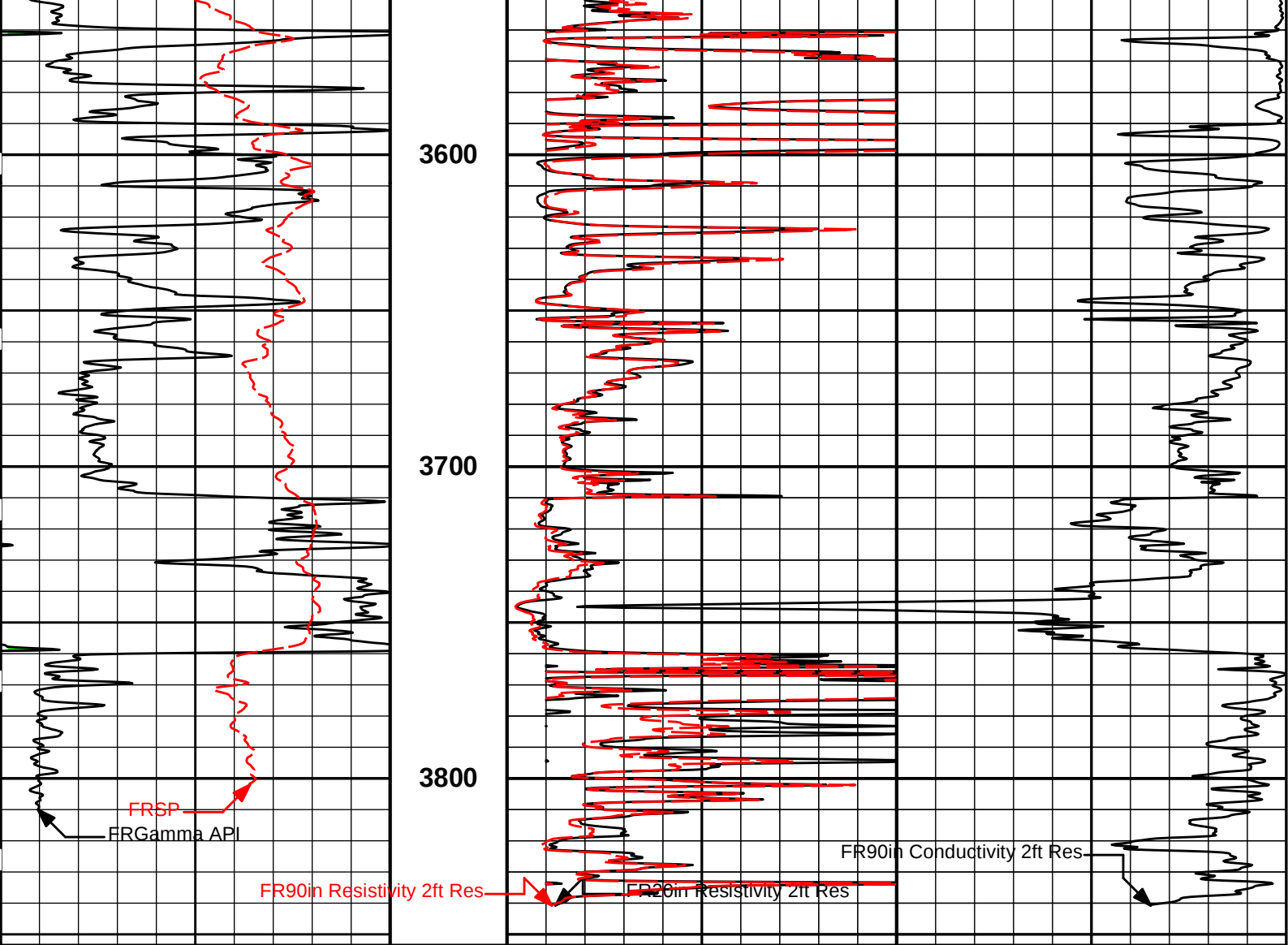
3200

3300

3400

3500





0	Gamma API	150	1 : 600	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: 18-Oct-19 10:03:01
Plot Range: 420 ft to 3853.42 ft
Data: HALL-GATES_2-5\Well Based\MAIN\
Plot File: \\-LOCAL-HALL-GATES_2-5\Well Based\ACRT\ACRT_2_MAIN

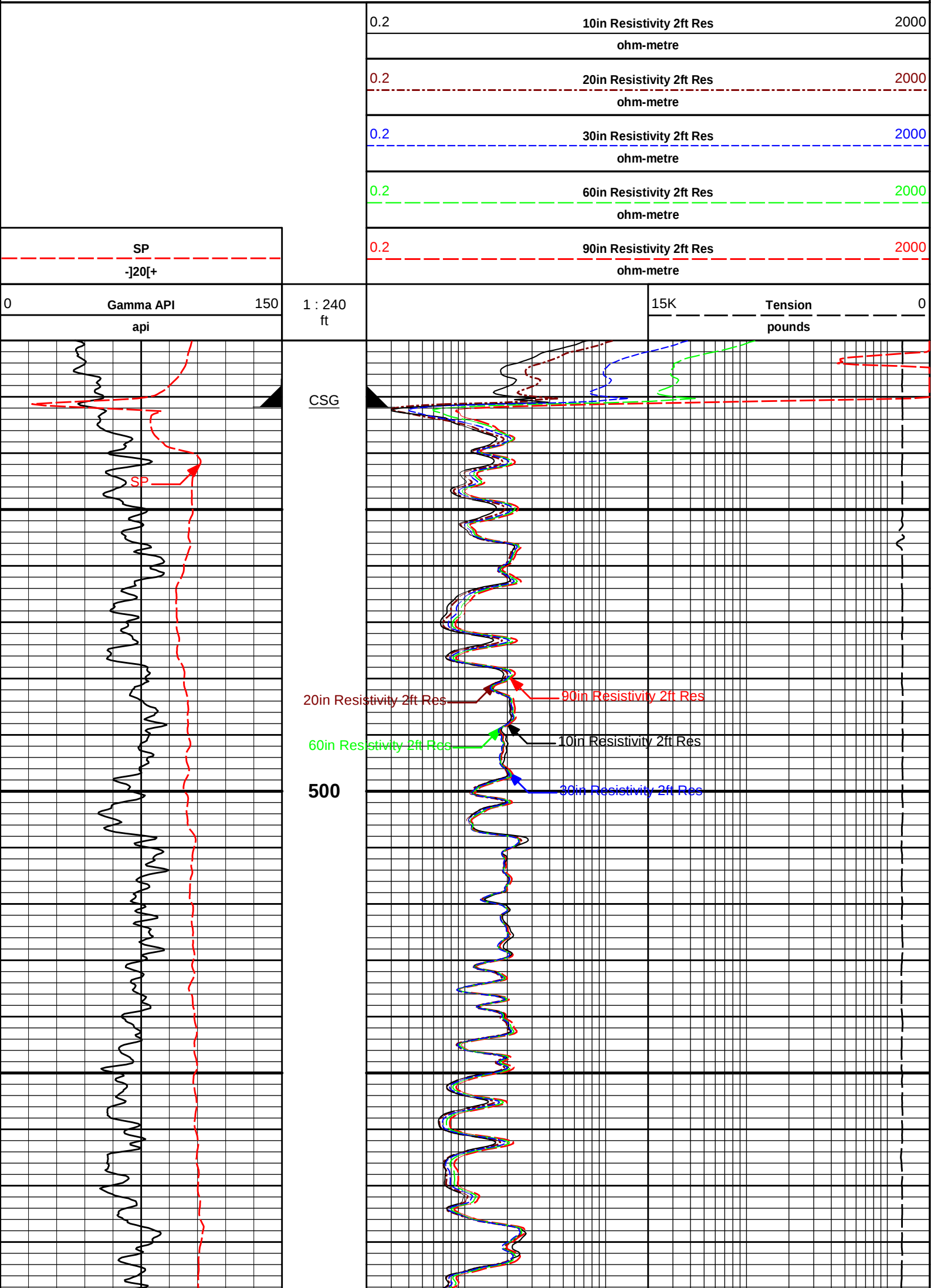
2 INCH MAIN LOG

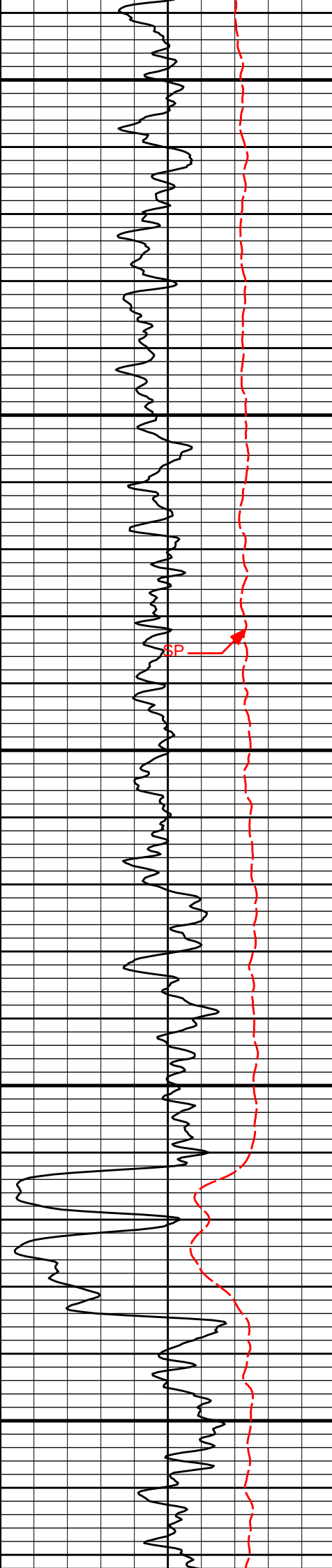
HALLIBURTON

Plot Time: 18-Oct-19 10:03:02
Plot Range: 420 ft to 3853.42 ft
Data: HALL-GATES_2-5\Well Based\MAIN\
Plot File: \\-LOCAL-HALL-GATES_2-5\Well Based\ACRT\ACRT_5inch_MAIN

5 INCH MAIN LOG

MEASURED DEPTH
MAIN SECTION 5" PER 100'





600

700

800

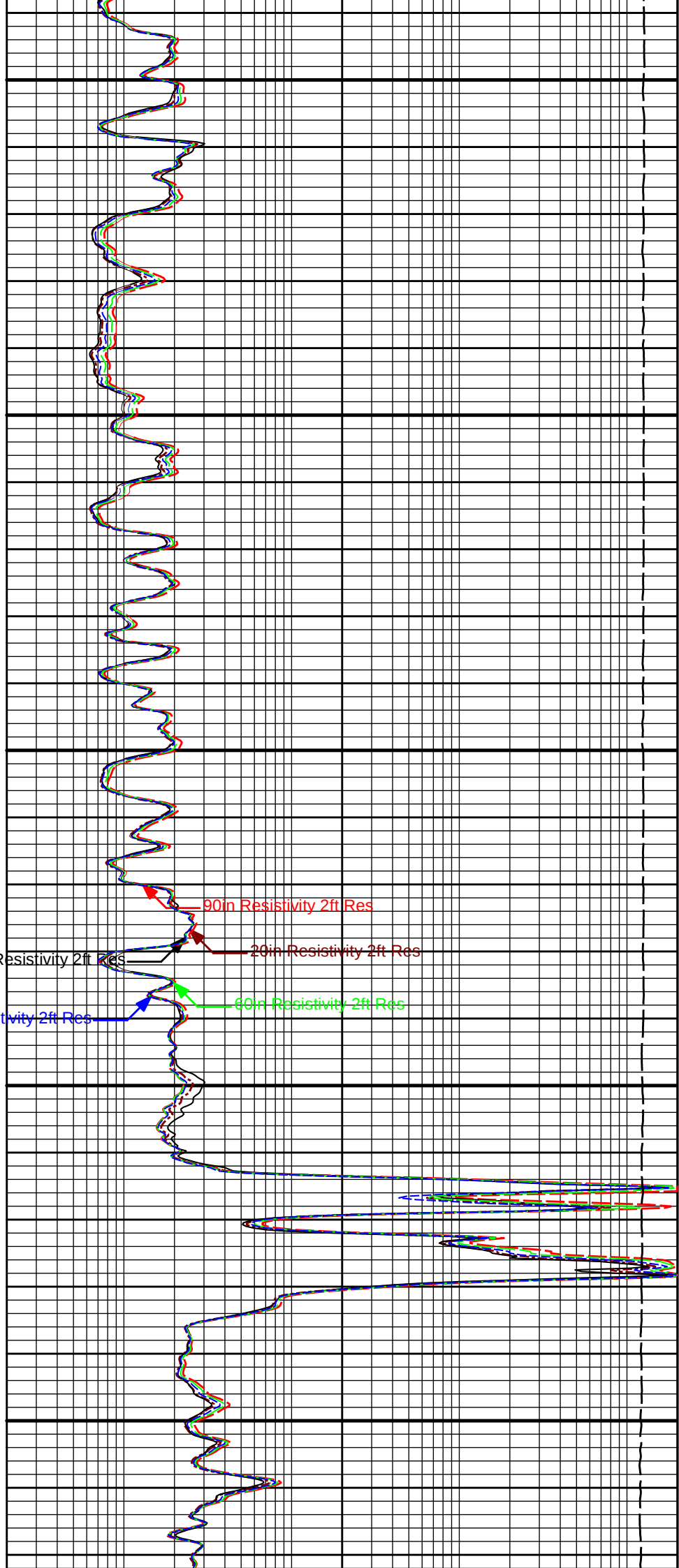
90in Resistivity 2ft Res

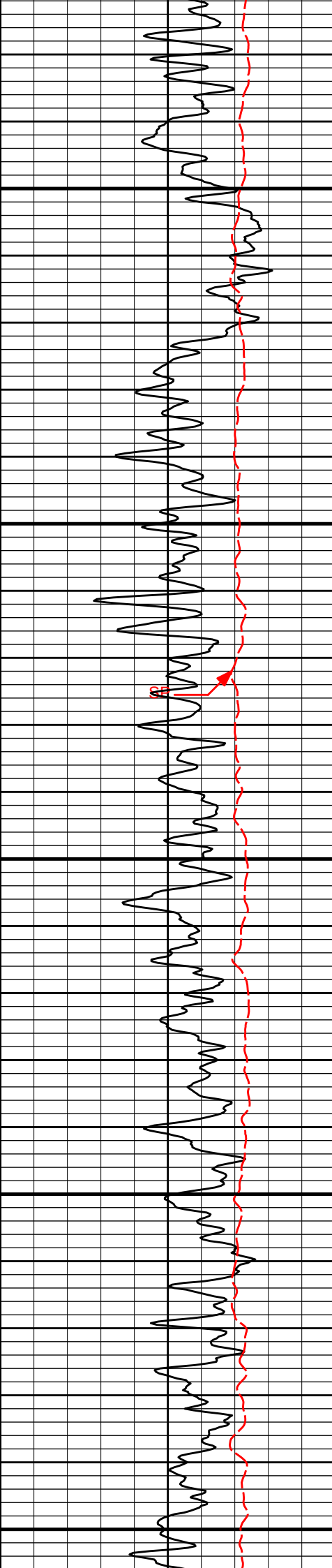
20in Resistivity 2ft Res

60in Resistivity 2ft Res

30in Resistivity 2ft Res

10in Resistivity 2ft Res



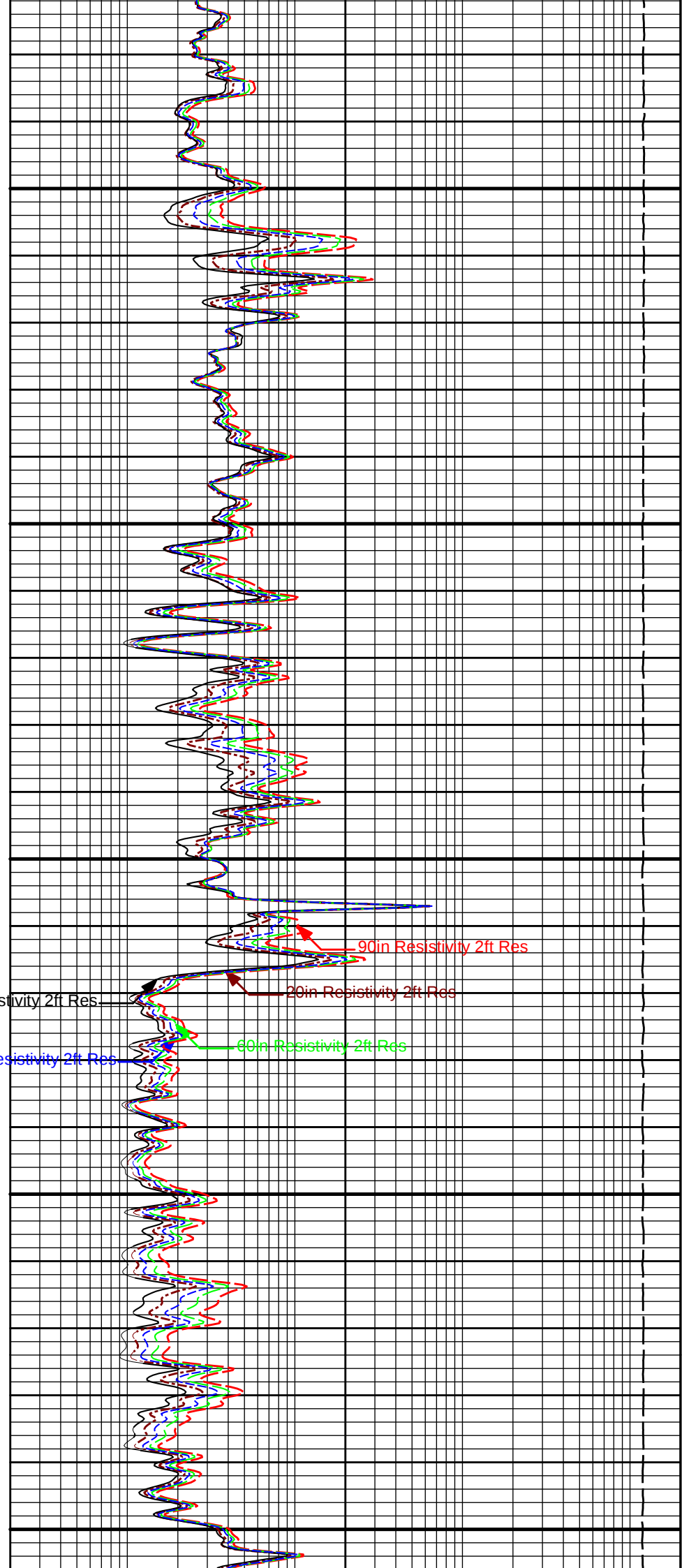


900

10in Resistivity 2ft Res

1000

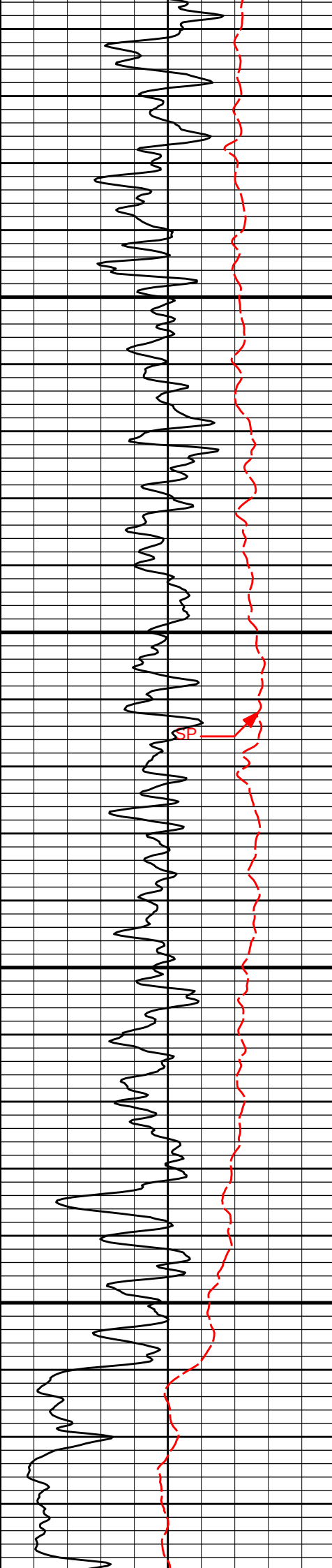
30in Resistivity 2ft Res



90in Resistivity 2ft Res

20in Resistivity 2ft Res

60in Resistivity 2ft Res



1100

1200

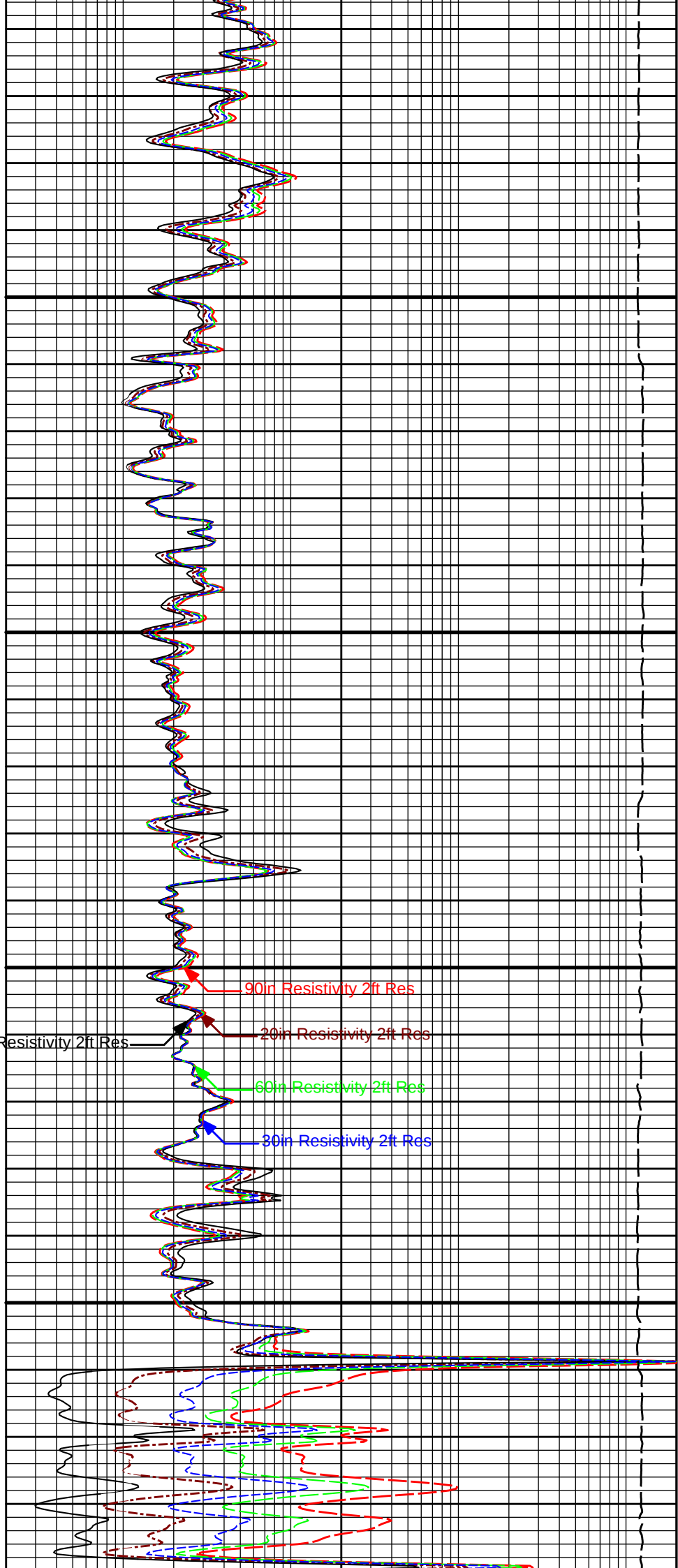
10in Resistivity 2ft Res

90in Resistivity 2ft Res

20in Resistivity 2ft Res

60in Resistivity 2ft Res

30in Resistivity 2ft Res





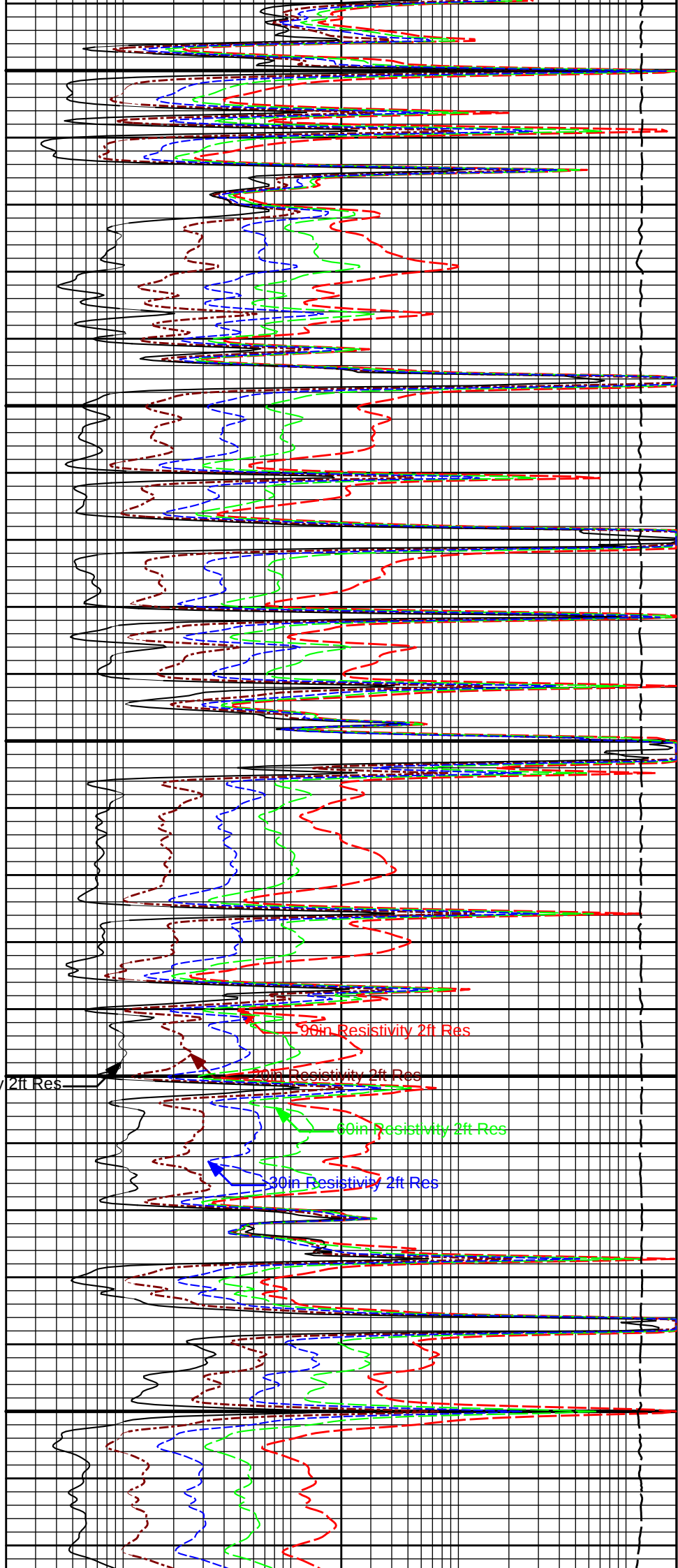
1300

1400

1500

SP

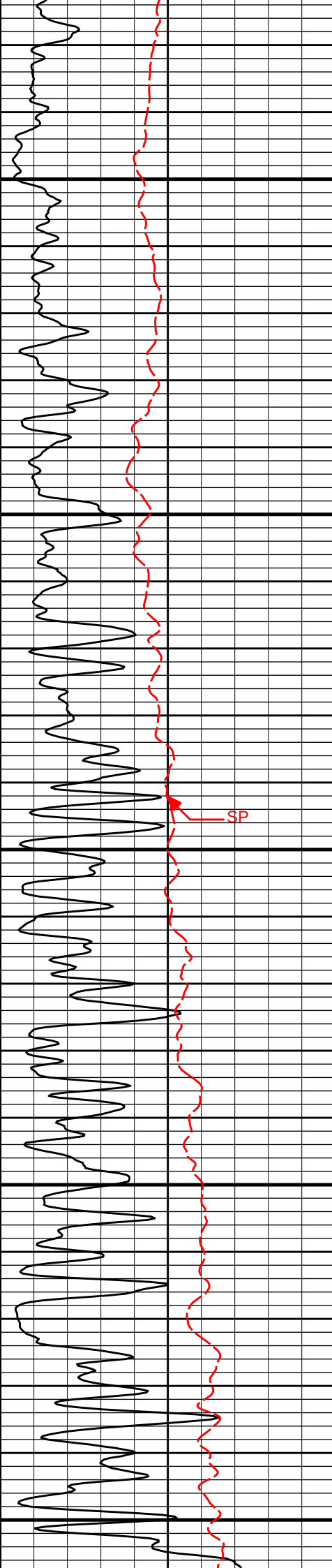
10in Resistivity 2ft Res



90in Resistivity 2ft Res

60in Resistivity 2ft Res

30in Resistivity 2ft Res



1600

1700

10in Resistivity 2ft Res

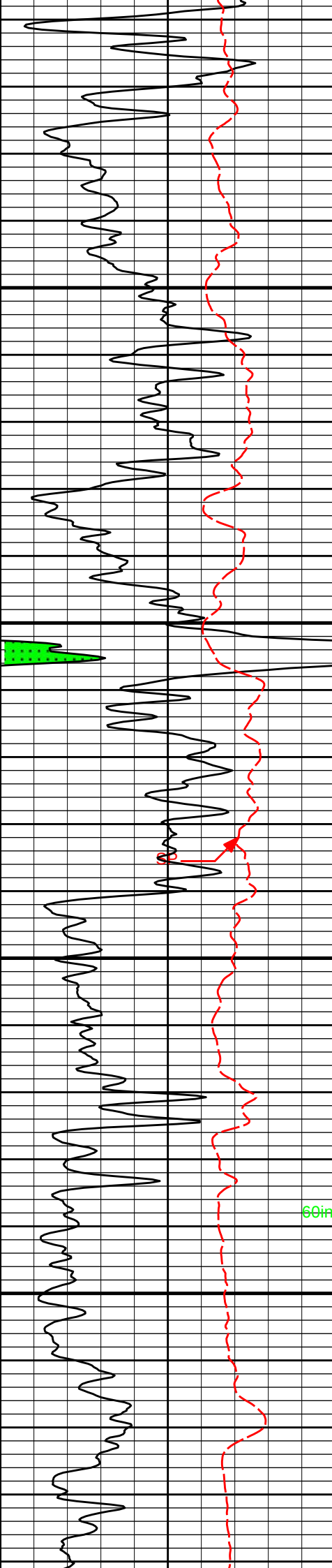
90in Resistivity 2ft Res

20in Resistivity 2ft Res

60in Resistivity 2ft Res

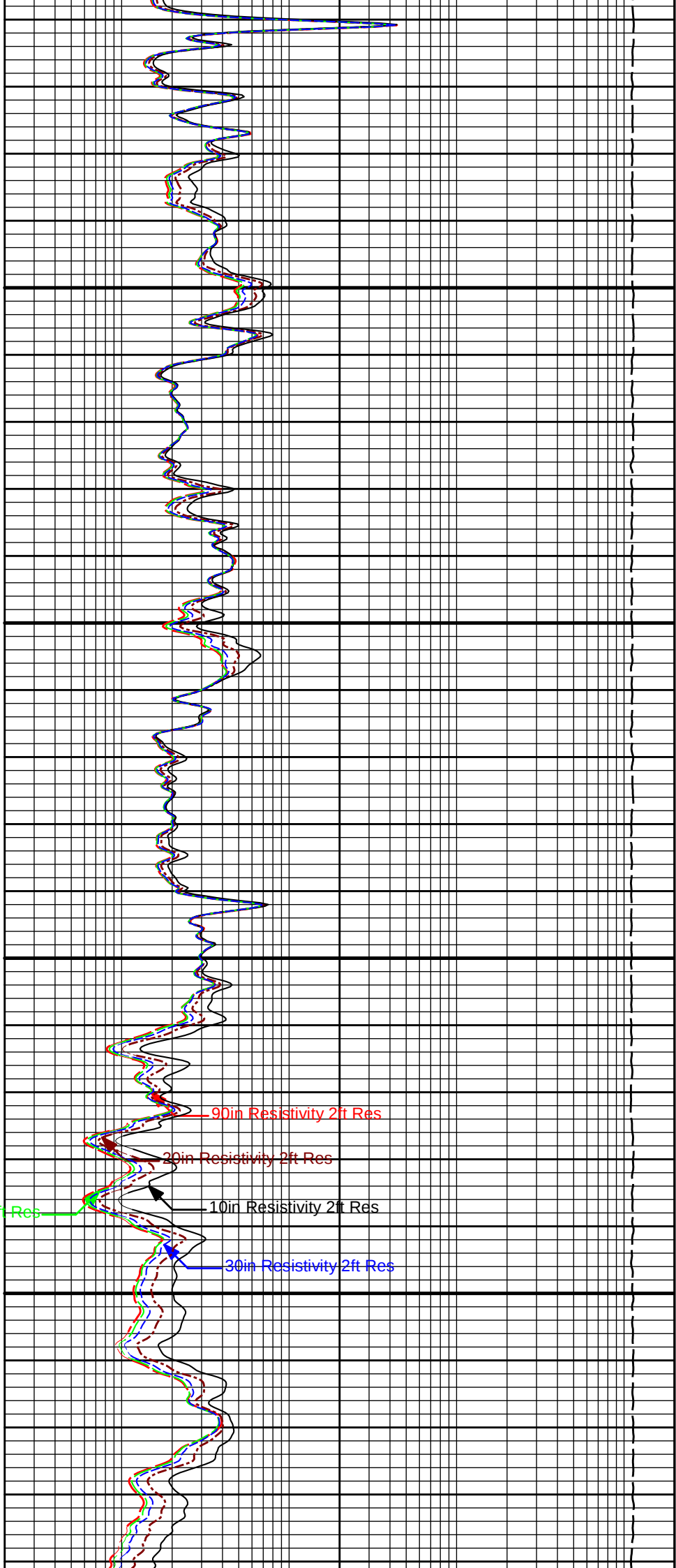
30in Resistivity 2ft Res

SP



1800

1900



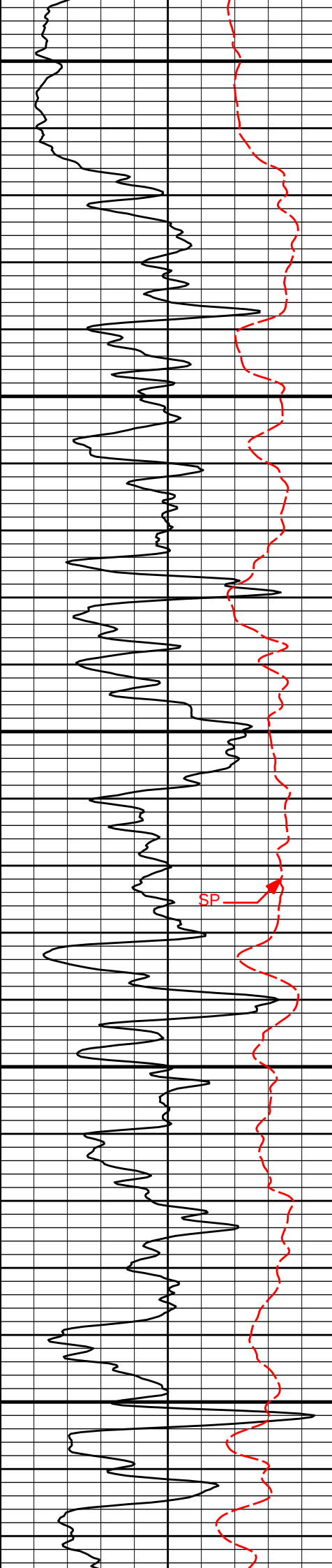
90in Resistivity 2ft Res

20in Resistivity 2ft Res

10in Resistivity 2ft Res

30in Resistivity 2ft Res

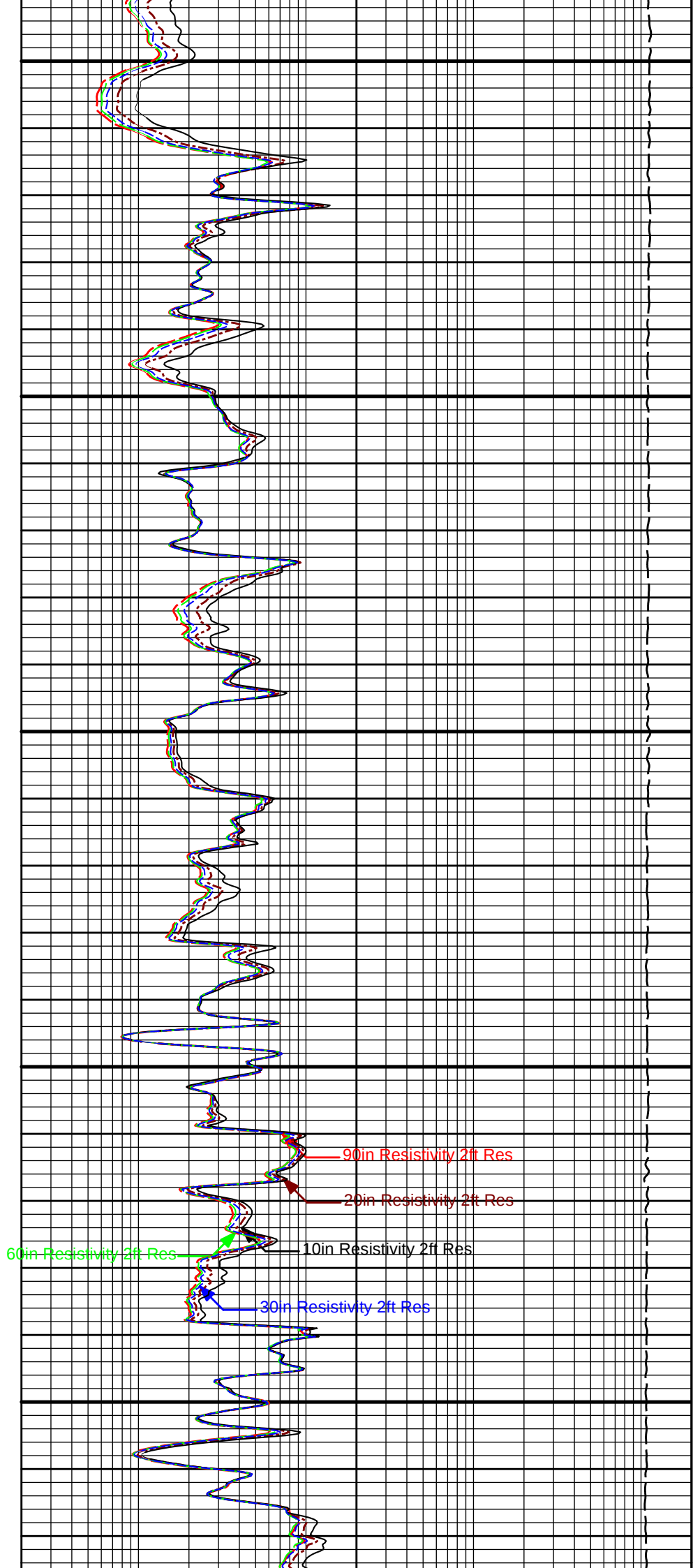
60in Resistivity 2ft Res

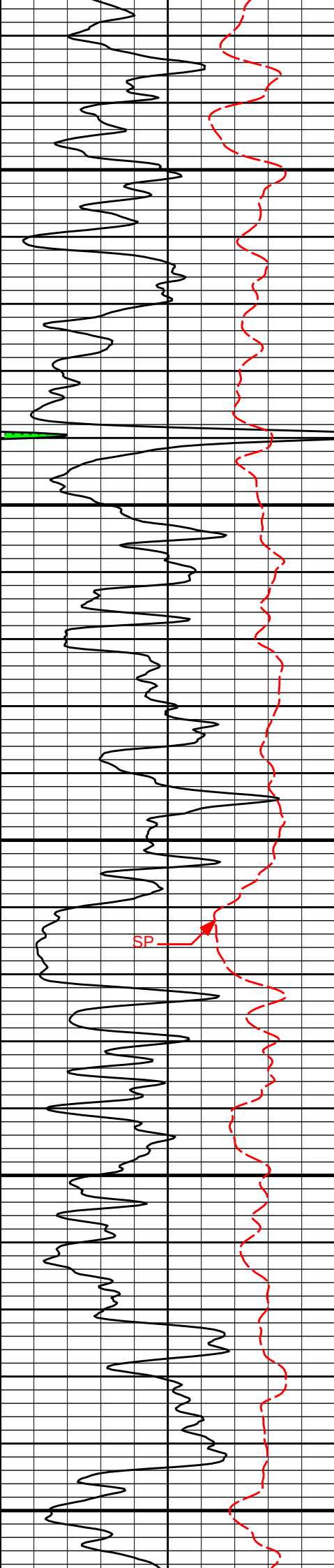


2000

2100

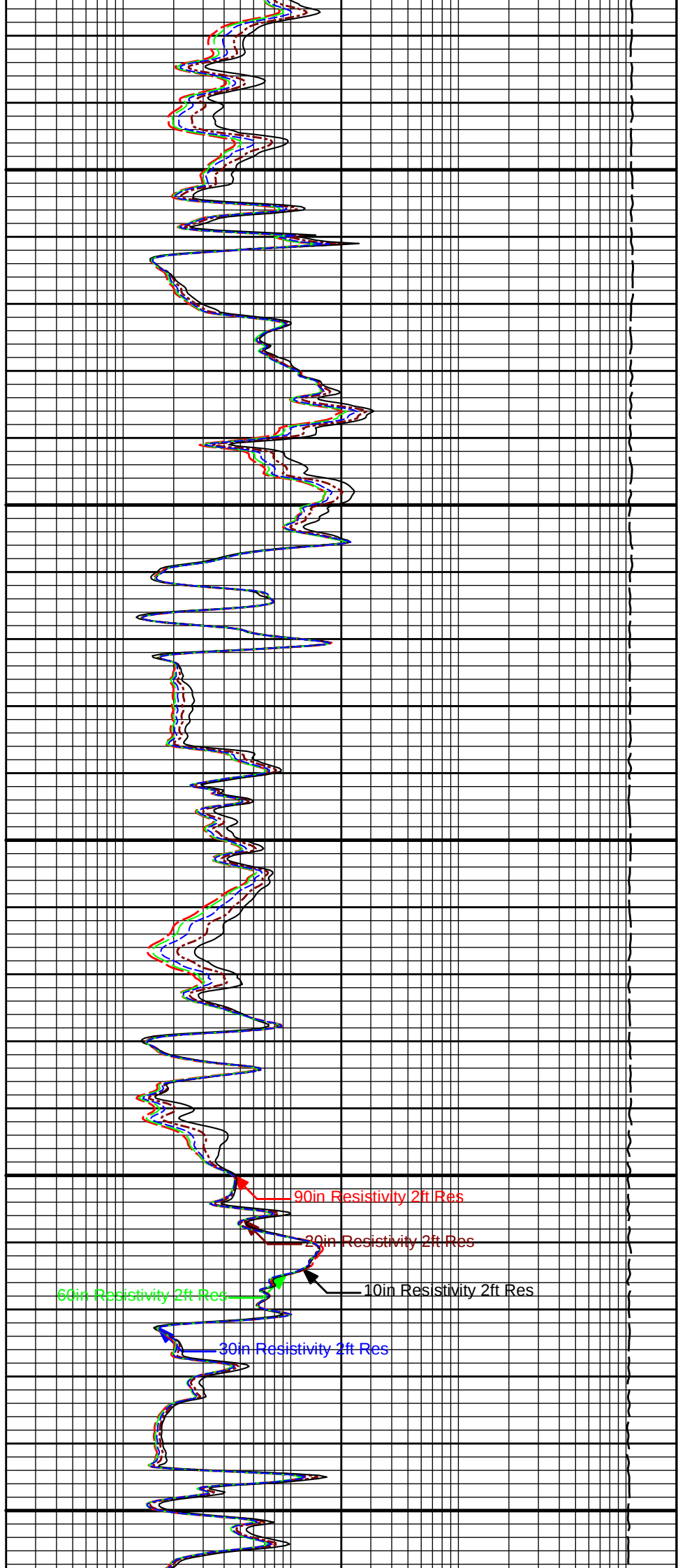
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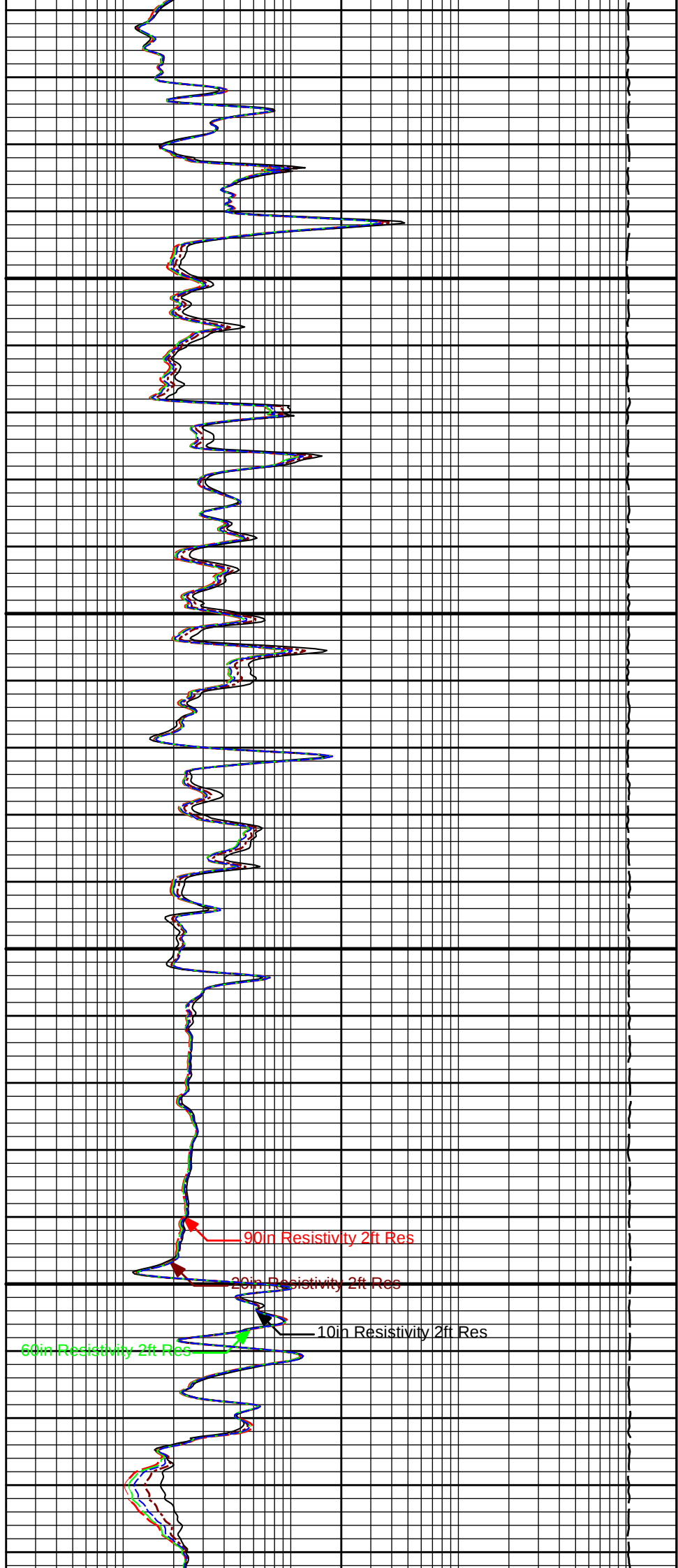
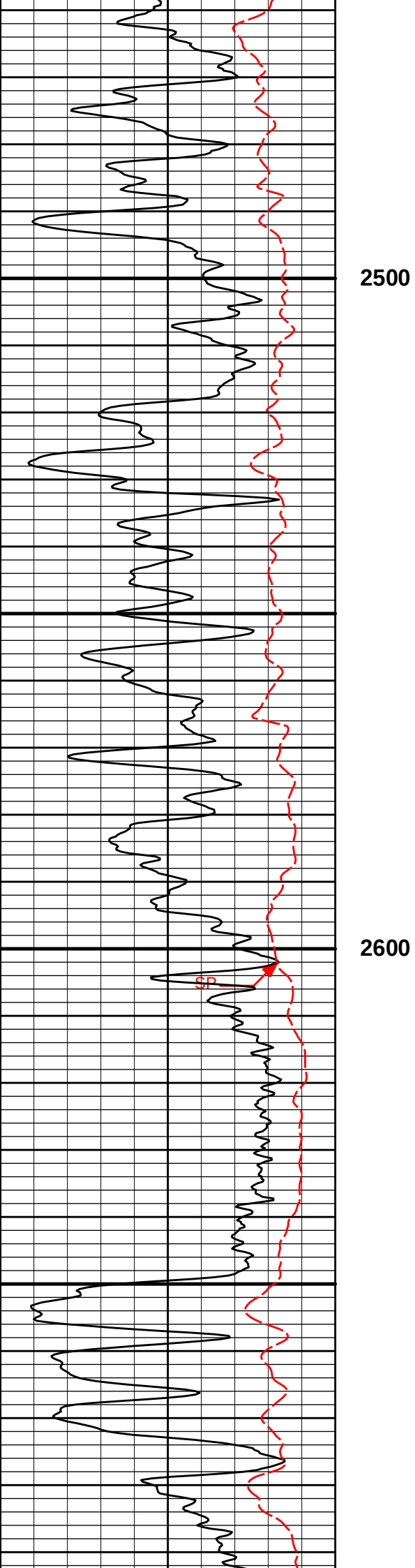


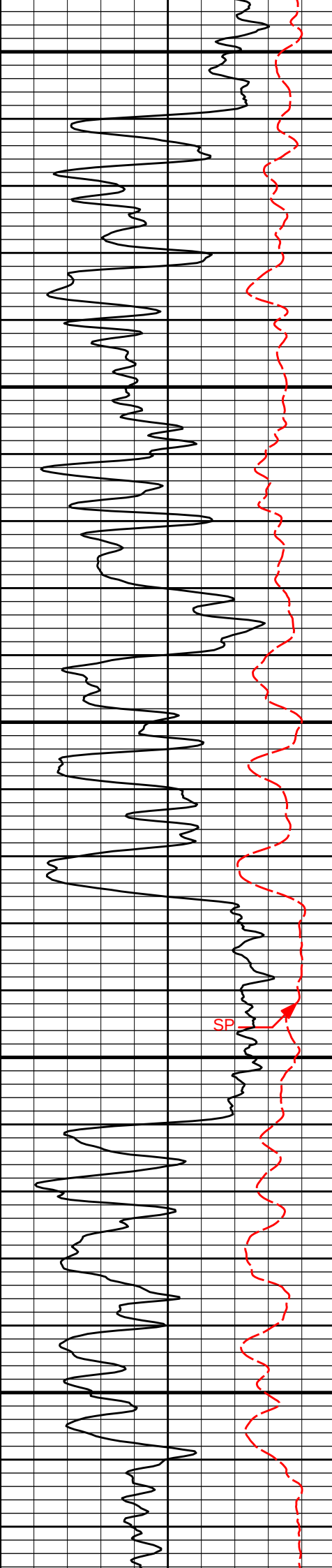


2300

2400



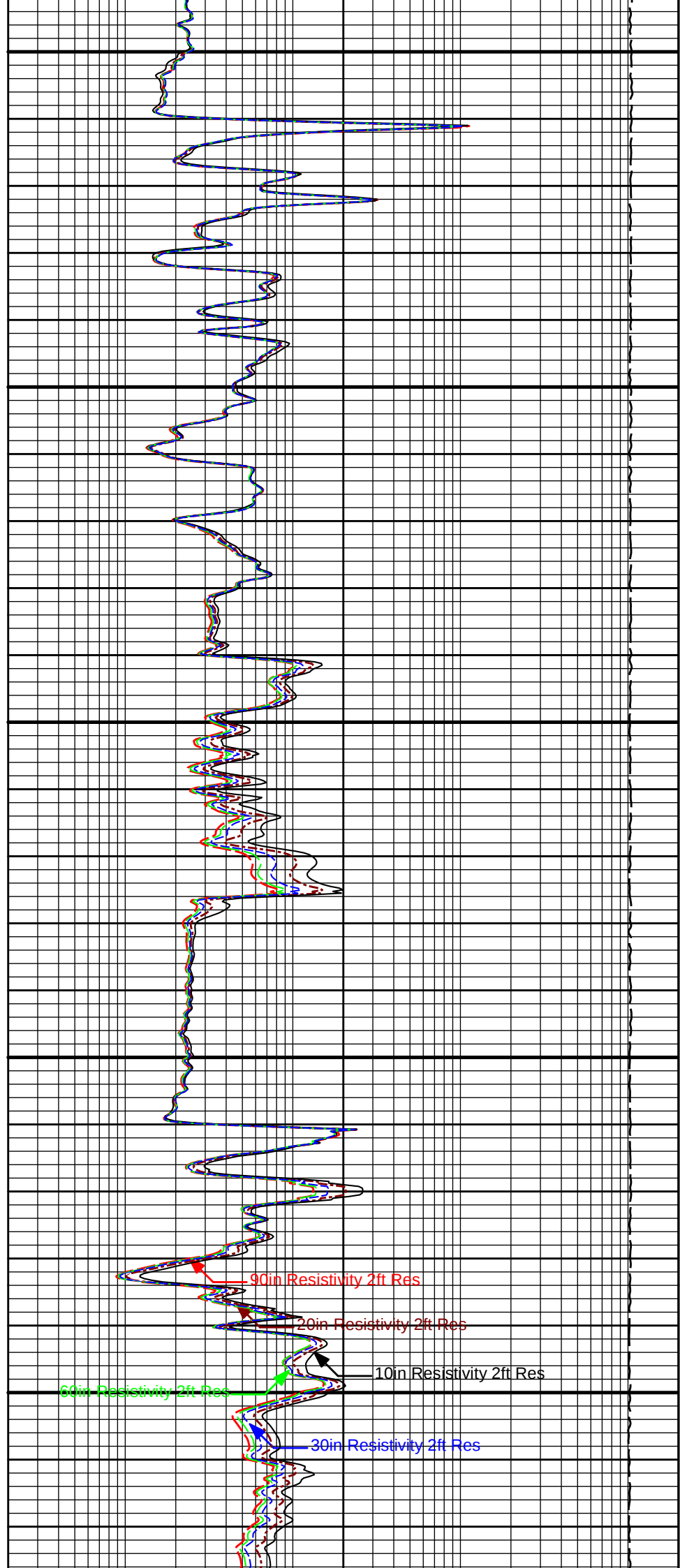


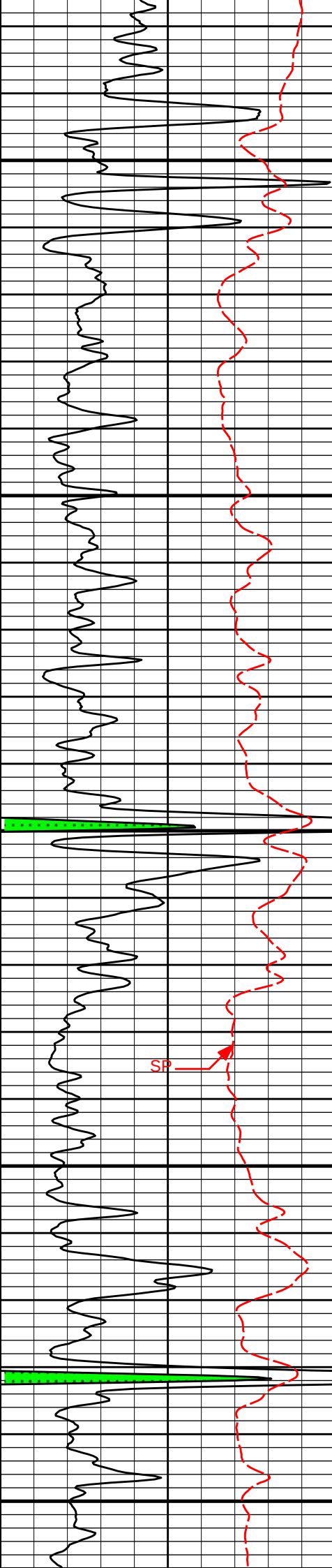


2700

2800

2900

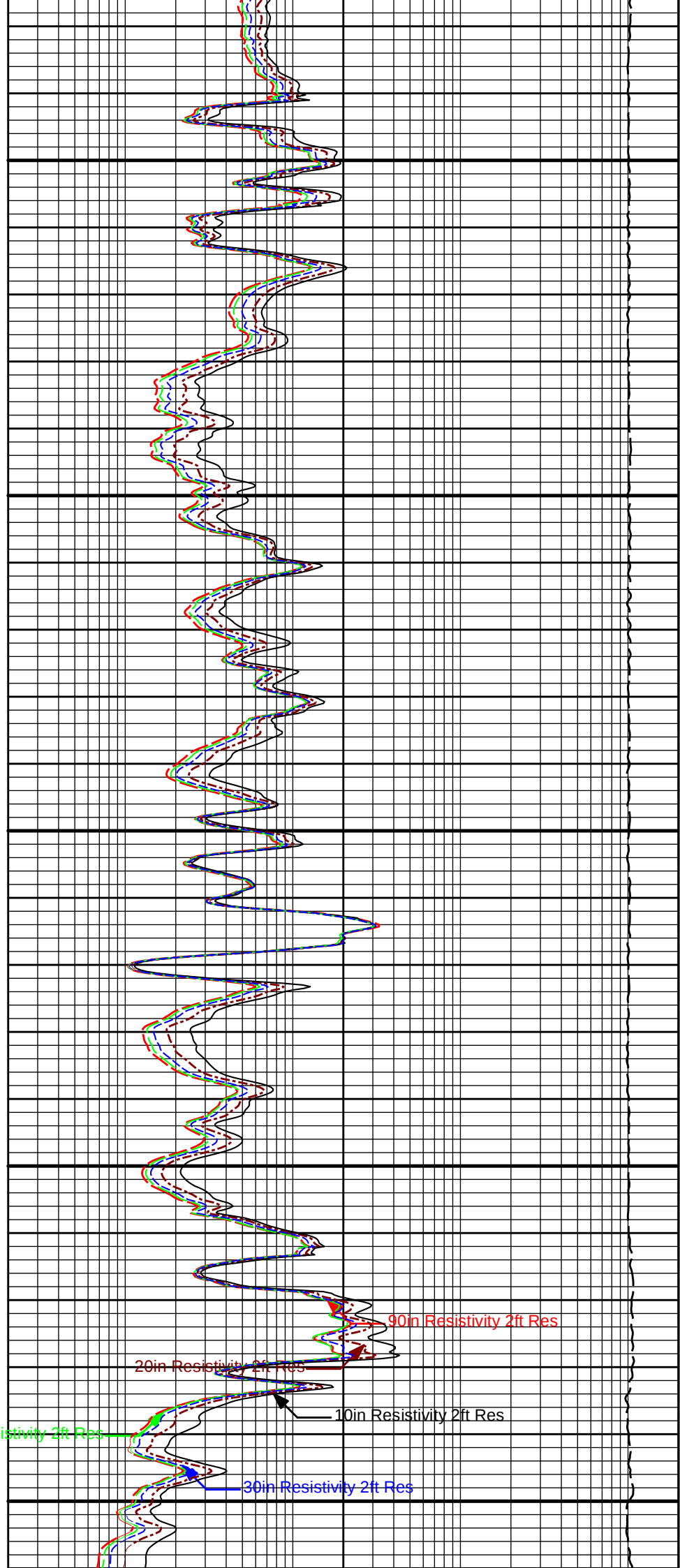


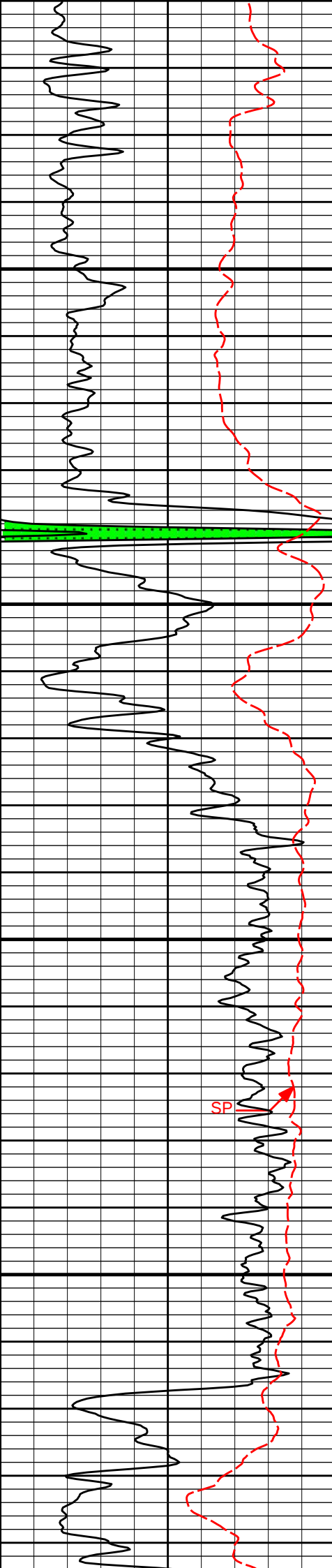


3000

3100

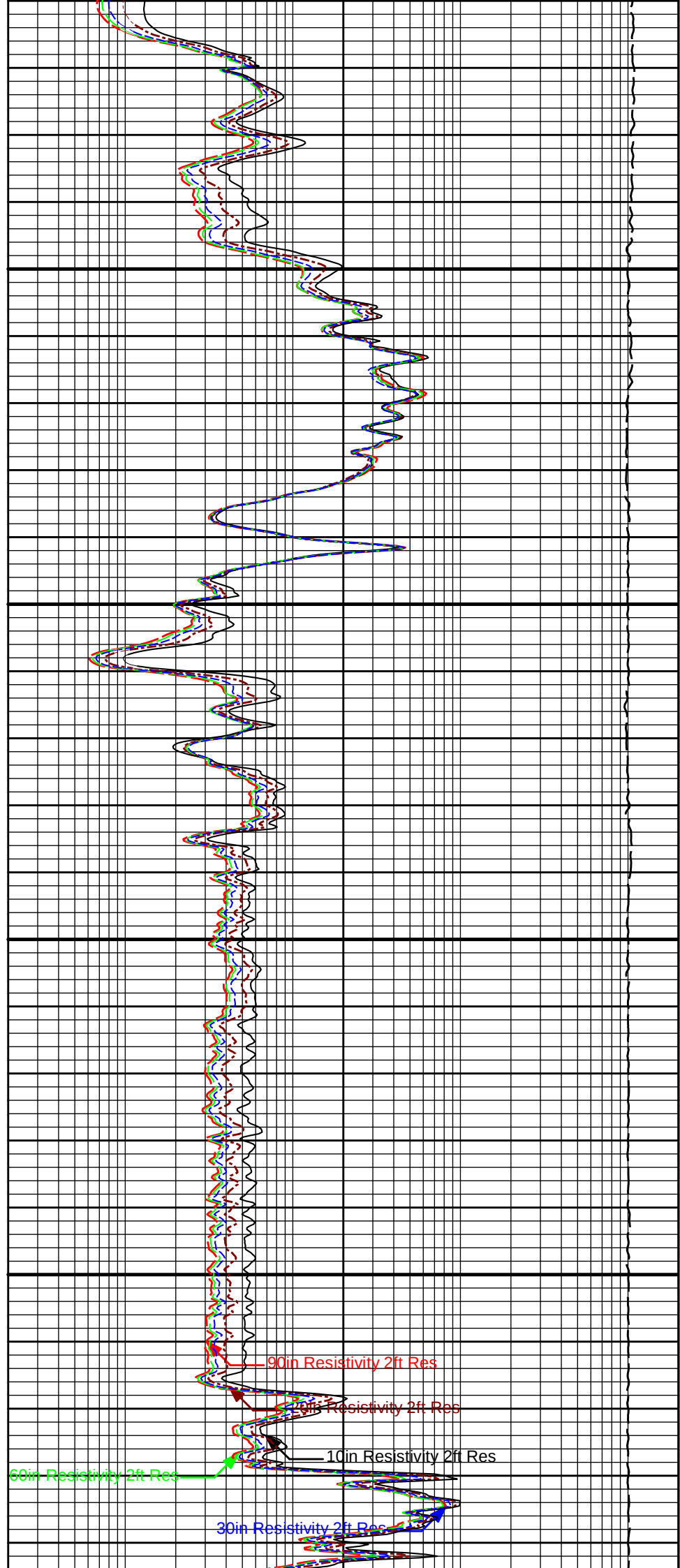
60in Resistivity 2ft Res

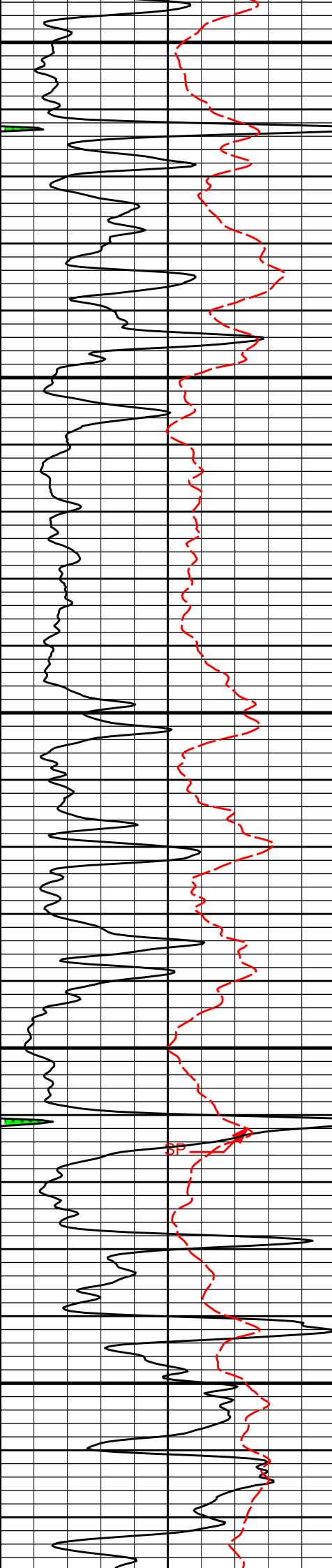




3200

3300

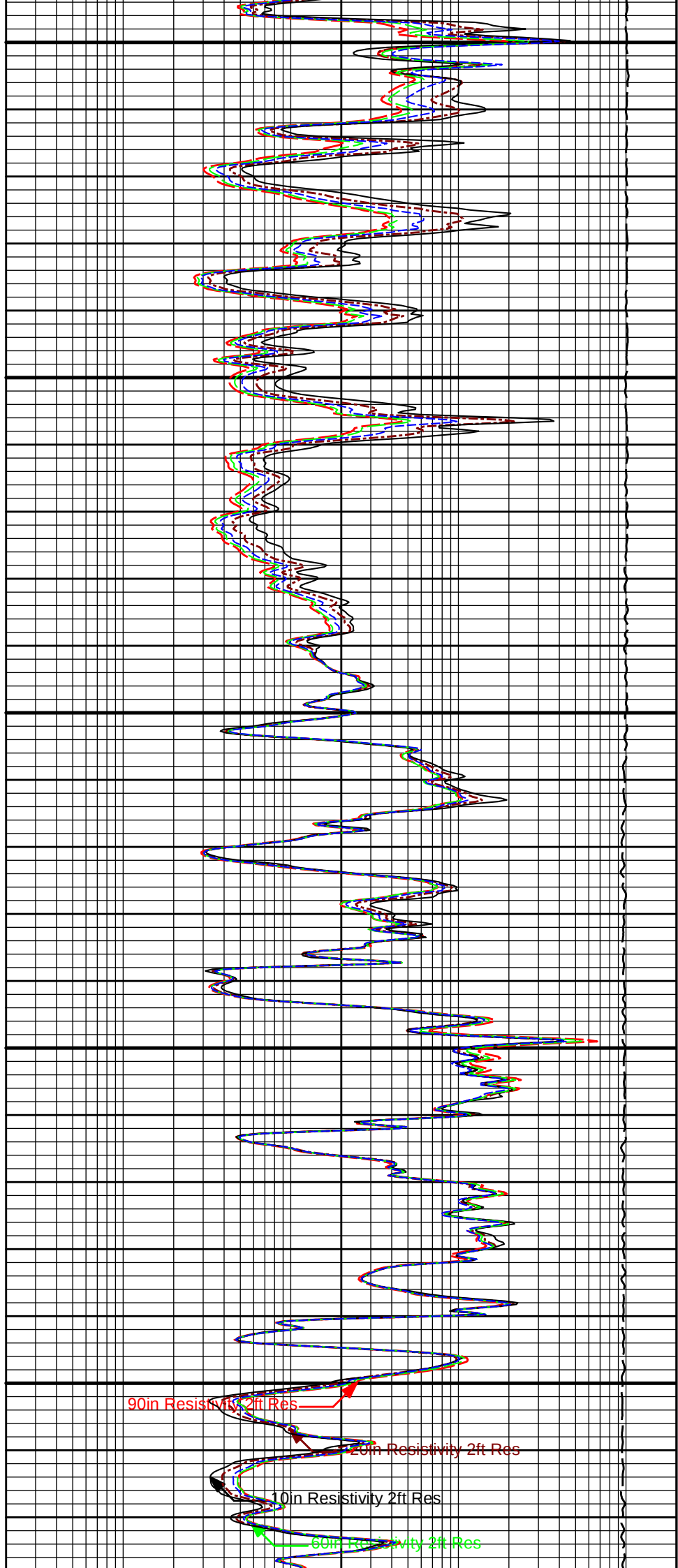


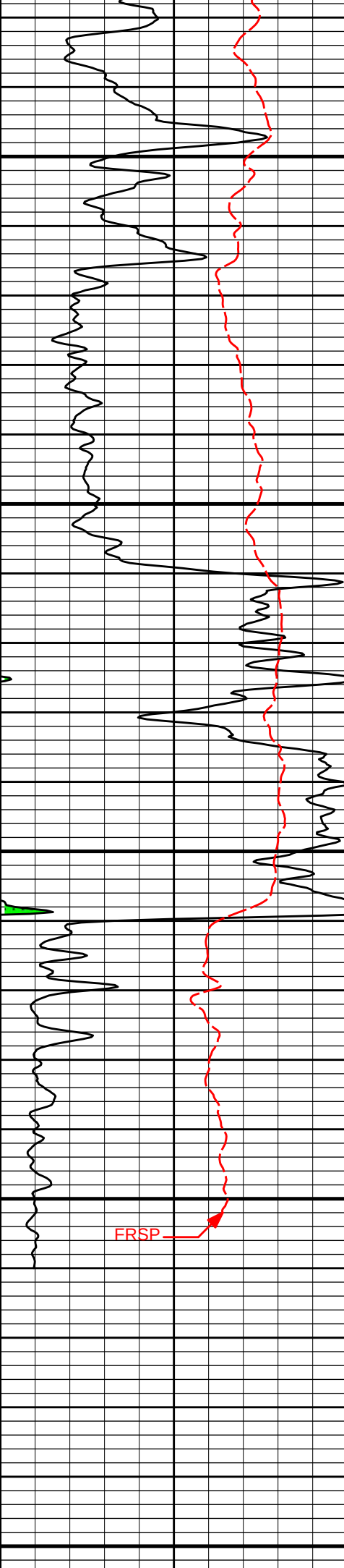


3400

3500

3600

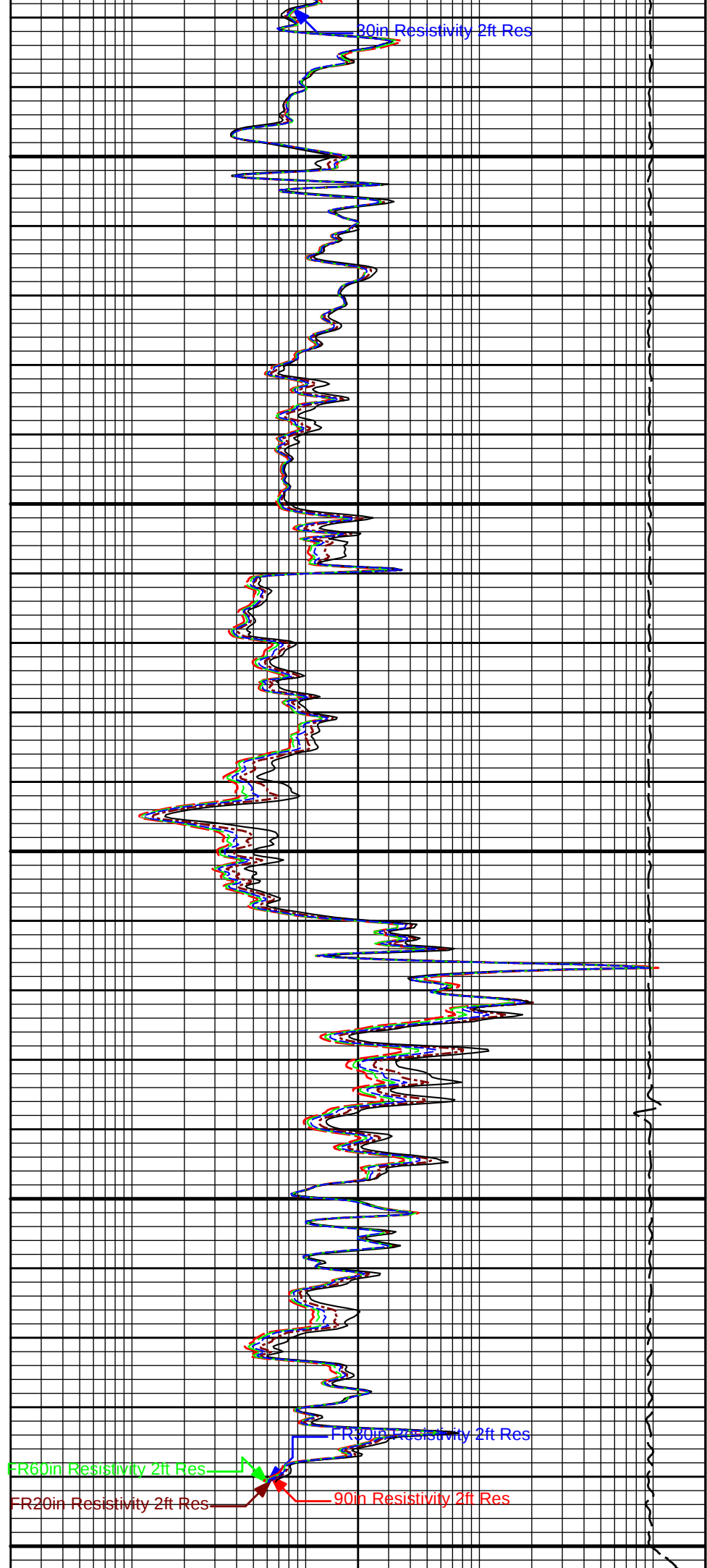




3700

3800

TD



30in Resistivity 2ft Res

FR30in Resistivity 2ft Res

FR60in Resistivity 2ft Res

FR20in Resistivity 2ft Res

90in Resistivity 2ft Res

api SP -]20[+		0.2	90in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	60in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	30in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	20in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	10in Resistivity 2ft Res	2000
			ohm-metre	

HALLIBURTON

Plot Time: 18-Oct-19 10:03:05

Plot Range: 420 ft to 3853.42 ft

Data: HALL-GATES_2-5\Well Based\MAIN\

Plot File: \\-LOCAL-IHALL-GATES_2-5\Well Based\ACRT\ACRT_5inch_MAIN

5 INCH MAIN LOG

HALLIBURTON

Plot Time: 18-Oct-19 10:03:05

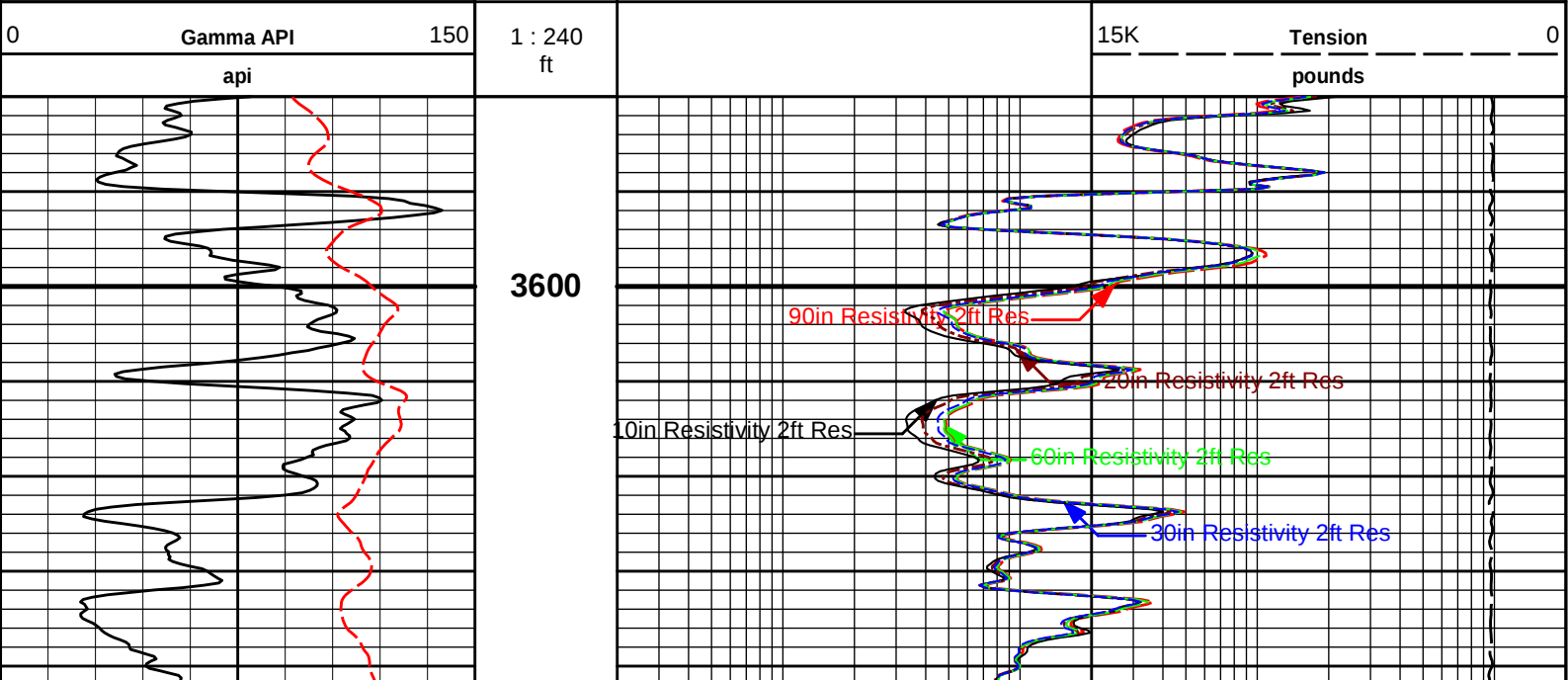
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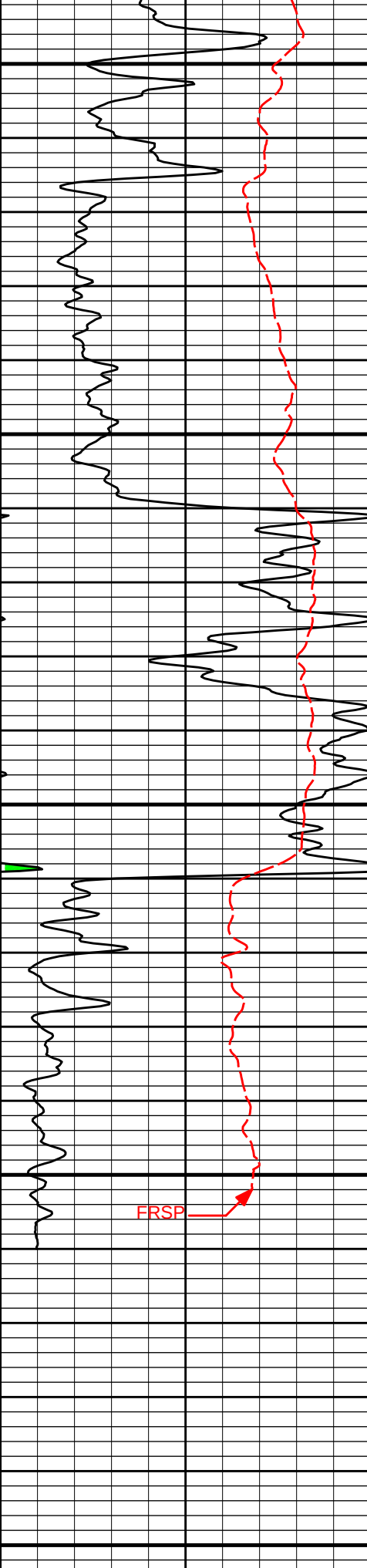
Data: HALL-GATES_2-5\Well Based\REPEAT\

Plot File: \\-LOCAL-IHALL-GATES_2-5\Well Based\ACRT\ACRT_5inch_REPEAT

REPEAT SECTION

		0.2	10in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	20in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	30in Resistivity 2ft Res	2000
			ohm-metre	
		0.2	60in Resistivity 2ft Res	2000
			ohm-metre	
SP -]20[+		0.2	90in Resistivity 2ft Res	2000
			ohm-metre	



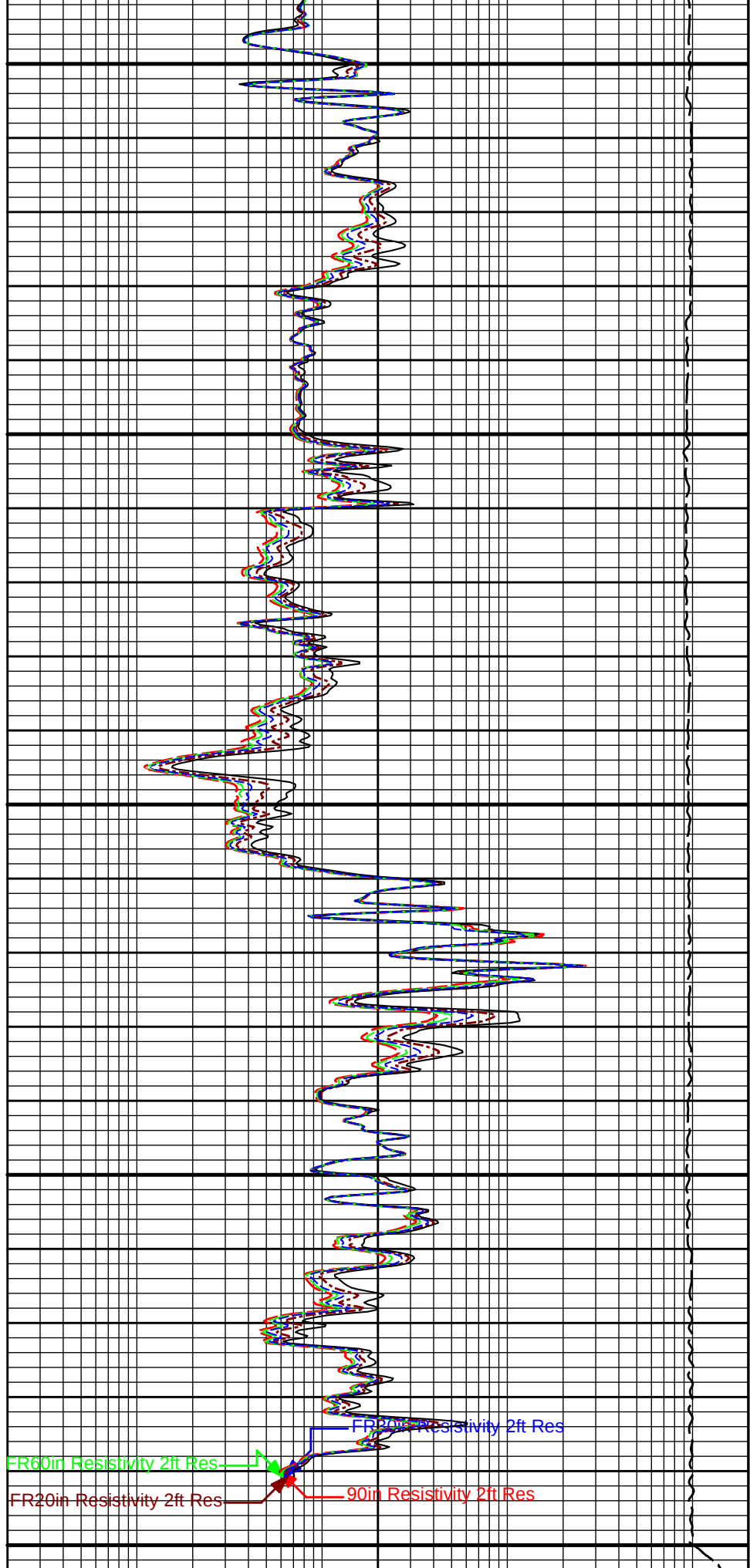


3700

3800

0	Gamma API	150
	api	
	SP	
	-j20[+	

1 : 240
ft



FR60in Resistivity 2ft Res
FR20in Resistivity 2ft Res
90in Resistivity 2ft Res

15K	Tension	0
	pounds	
0.2	90in Resistivity 2ft Res	2000
	ohm-metre	

	0.2	60in Resistivity 2ft Res	2000
		ohm-metre	
	0.2	30in Resistivity 2ft Res	2000
		ohm-metre	
	0.2	20in Resistivity 2ft Res	2000
		ohm-metre	
	0.2	10in Resistivity 2ft Res	2000
		ohm-metre	

HALLIBURTON

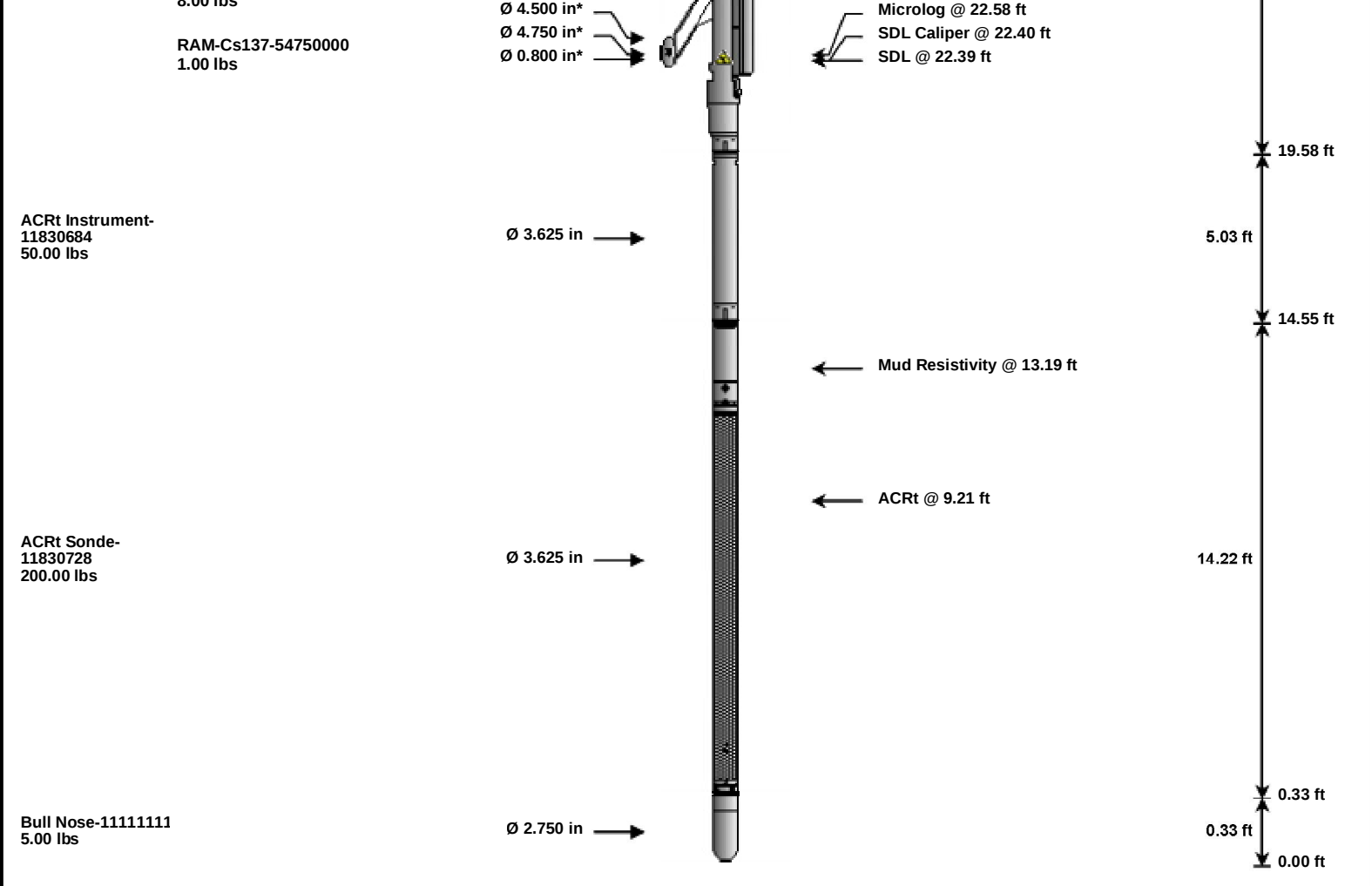
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Data: HALL-GATES_2-5\Well Based\REPEAT\
Plot File: \\LOCAL\HALL-GATES_2-5\Well Based\ACRT\ACRT_5inch_REPEAT

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						58.59 ft
		Ø 2.310 in →		← Fishing Neck @ 57.71 ft		
RWCH-11830866 135.00 lbs		Ø 3.625 in →		← Load Cell @ 54.91 ft ← BH Temperature @ 54.34 ft	6.25 ft	
	Weak Point Solid-11111111 0.01 lbs	Ø 0.010 in* →				52.34 ft
SP Sub-11812437 60.00 lbs		Ø 3.625 in →		← SP @ 50.56 ft	3.74 ft	
				← Z-Accelerometer @ 48.15 ft		48.60 ft
GTET-11013113 165.00 lbs		Ø 3.625 in →			8.52 ft	
				← GammaRay @ 42.54 ft		40.08 ft
DSNT-11055304 174.00 lbs		Ø 3.625 in →			9.69 ft	
				← DSN Far @ 33.15 ft ← DSN Near @ 32.40 ft		30.40 ft
SDLT-10960494 360.00 lbs	SDLT Pad-11213308 65.00 lbs Microlog Pad-10960494 8.00 lbs	Ø 4.500 in →			10.81 ft	



Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head		11830866	135.00	6.25	52.34	300.00
WPSS	Weak Point Solid		11111111	0.01	0.01	* 52.34	300.00
SP	SP Sub		11812437	60.00	3.74	48.60	300.00
GTET	Gamma Telemetry Tool		11013113	165.00	8.52	40.08	60.00
DSNT	Dual Spaced Neutron		11055304	174.00	9.69	30.40	60.00
SDLT	Spectral Density Tool		10960494	360.00	10.81	19.58	60.00
SDLP	Density Insite Pad		11213308	65.00	2.55	* 21.79	60.00
Cs137	Logging Source, SDLT-I, 1.78 Ci - Cs137		54750000	1.00	0.80	* 22.02	300.00
MICP	Microlog Pad		10960494	8.00	1.00	* 22.08	60.00
ACRt	Array Compensated True Resistivity Instrument Section		11830684	50.00	5.03	14.55	120.00
ACRt	Array Compensated True Resistivity Sonde Section		11830728	200.00	14.22	0.33	120.00
BLNS	Bull Nose		11111111	5.00	0.33	0.00	300.00
Total				1,223.01	58.59		
* Not included in Total Length and Length Accumulation.							
Data: HALL-GATES_2-510001 GTET-DSN-SDL-ACRT_DRIVERSIDLE						Date: 18-Oct-19 07:39:30	

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	9.000	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	CSTR	Compressive Strength	1000.00	psia
SHARED	ST	Surface Temperature	75.0	degF
SHARED	TD	Total Well Depth	10000.00	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	CBM Temperature Master Tool	GTET	
SHARED	MSAL	Water-base mud filtrate salinity	0.00	ppm
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?	No	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
GTET	BHSM	Borehole Size Source Tool	SDLT	
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	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	UCLA	Classic Neutron Parameter utilized?	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?	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
SDLT Pad	BHSM	Borehole Size Source Tool	SDLT	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Up	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	

ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	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: HALL-GATES_2-5I0001 GTET-DSN-SDL-ACRT_DRIVERS\002 18-Oct-19 08:29 Dn @310.0f			Date: 18-Oct-19 08:31:18	

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION				
Tool Name:	GTET - 11013113	Reference Calibration Date:	28-Jun-19 15:56:38	
Engineer:	WOLTEMATH	Calibration Date:	06-Sep-19 13:50:19	
Software Version:	WL INSITE R6.2.7 (Build 7)	Calibration Version:	1	

Calibrator Source S/N: TB79			
Calibrator API Reference:222.00 api			
Equivalent Calibrator API Reference:225.9 api			
Measurement	Measured	Calibrated	Units
Background	24.7	24.0	api
Background + Calibrator	257.5	249.9	api
Calibrator	232.8	225.9	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION				
Tool Name:	GTET - 11013113	Reference Calibration Date:	06-Sep-19 13:50:19	
Engineer:	WHITLOCK	Calibration Date:	14-Oct-19 13:05:41	
Software Version:	WL INSITE R6.2.7 (Build 7)	Calibration Version:	1	

Calibrator Source S/N: TB79			
Calibrator API Reference:222.00 api			
Equivalent Calibrator API Reference:225.9 api			
Field Verification	Shop	Field	Units
Background	24.0	28.0	api
Background + Calibrator	249.9	251.5	api
Calibrator	225.9	223.5	api
Shop	Field	Difference	Tolerance
225.9	223.5	2.4	+/- 9.00

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION			
Tool Name:	ACRt Sonde - 11830728	Reference Calibration Date:	30-May-19 11:16:08
Engineer:	WOLTEMATH	Calibration Date:	13-Sep-19 20:21:53
Software Version:	WL INSITE R6.2.7 (Build 7)	Calibration Version:	1
Host Tool Name:	ACRt Instrument - 11830684		

TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.0004	1.05	0.95	1.0013	1.05	0.95	0.9998	1.05
A2 (50")	0.95	1.0150	1.05	0.95	1.0168	1.05	0.95	1.0173	1.05
A3 (29")	0.95	0.9979	1.05	0.95	0.9984	1.05	0.95	0.9983	1.05
A4 (17")	0.95	1.0023	1.05	0.95	1.0009	1.05	0.95	1.0026	1.05

A5 (10")	N/A	N/A	N/A	0.95	0.9938	1.05	0.95	0.9950	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9818	1.05	0.95	0.9829	1.05
SONDE OFFSET									
Subarray	R12KHz			R36KHz			R72KHz		
	(mmho/m)			(mmho/m)			(mmho/m)		
A1 (80")	-2.153			-4.901			-4.506		
A2 (50")	-1.721			-3.378			-4.438		
A3 (29")	-12.789			-3.654			-2.938		
A4 (17")	-92.270			-29.726			-23.852		
A5 (10")	N/A			-72.821			-37.267		
A6 (6")	N/A			277.352			144.700		
TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION				
Signal	Lower	R	Upper		Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)	
12K	0.6	0.86	1.3		Mud Cell	0.95	0.99	1.05	
36K	1.0	1.81	2.0						
72K	1.0	1.10	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-11013113						
Gamma Ray Calibrator	225.9	223.5	-----	2.4	+/- 9.00	api
ACRt Sonde-11830728						
Mud Cell	0.99	-----	-----	0	-----	ohm-m
Data: HALL-GATES_2-5I0001 GTET-DSN-SDL-ACRT_DRIVERS\IDLE					Date: 18-Oct-19 07:49:51	

HALLIBURTON

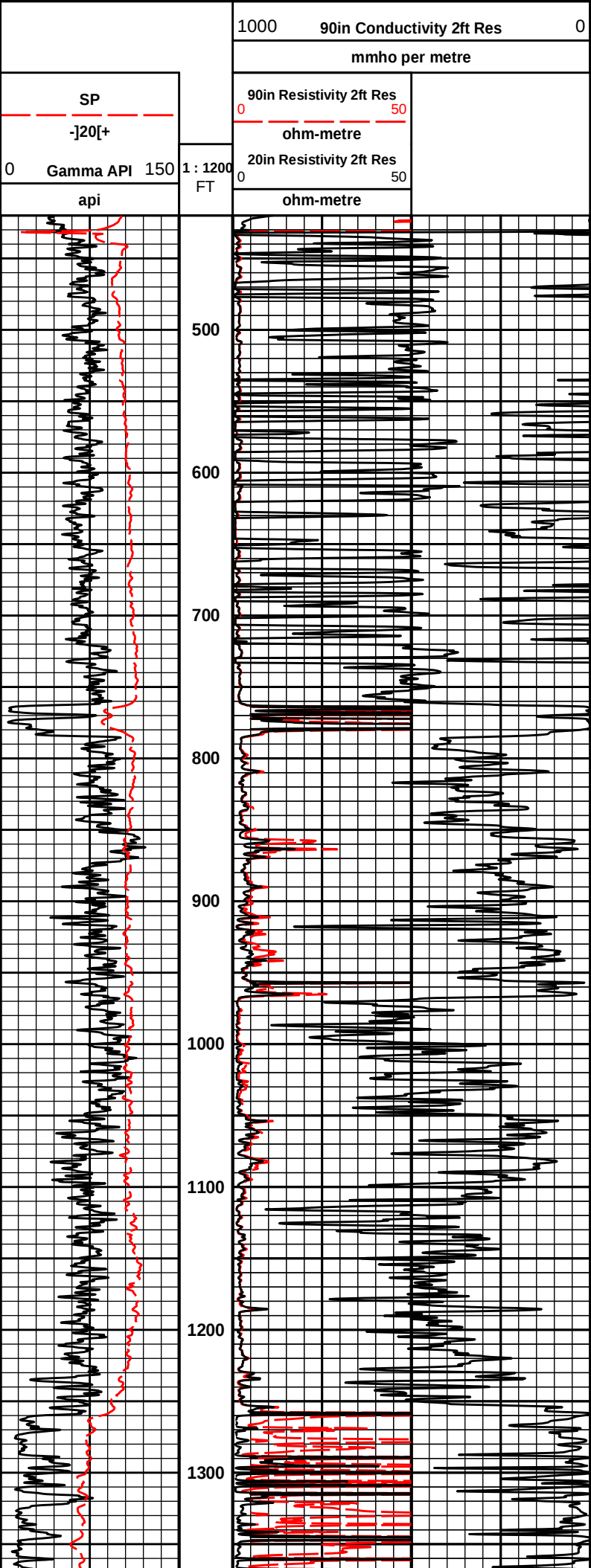
INPUTS, DELAYS AND FILTERS TABLE

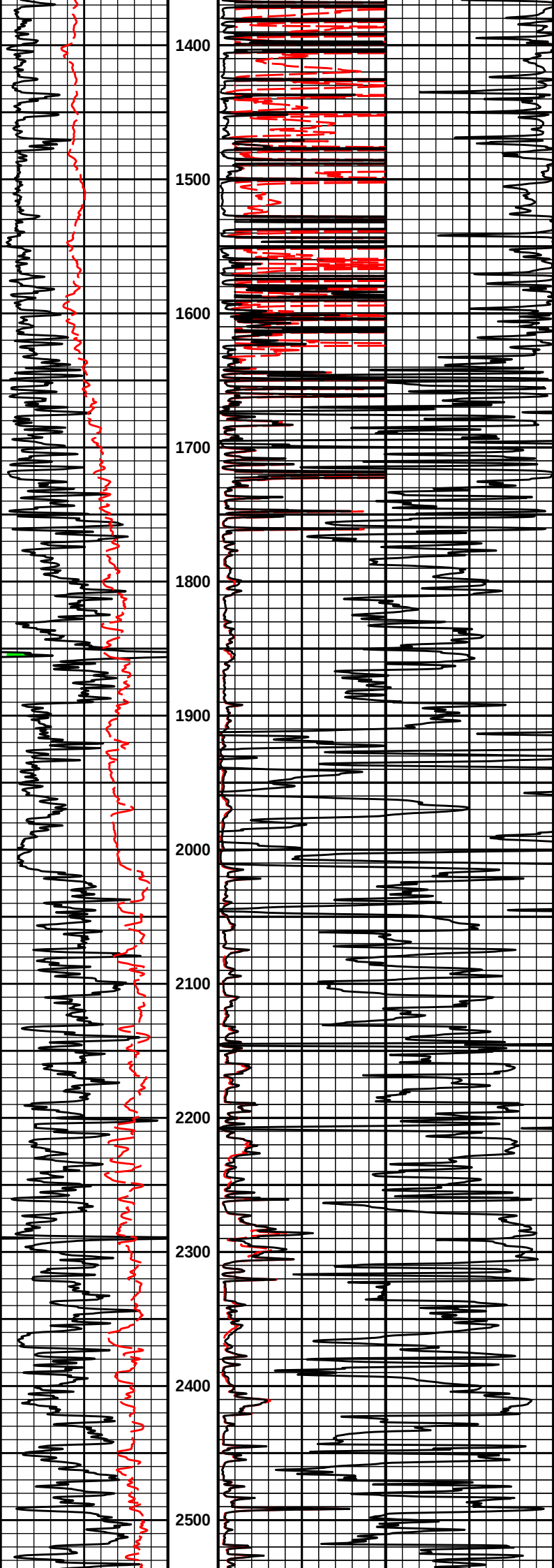
Mnemonic		Input Description	Delay (ft)	Depth Filter Type	Depth Filter Length (ft)	Time Filter Type	Time Filter Length (sec)
Depth Panel							
TENS	Tension		0.00	NO		NO	
Rwa / CrossPlot							
TPUL	Tension Pull		58.59	NO		NO	
BS	Bit Size		58.59	NO		NO	
HDIA	Measured Hole Diameter		0.00	NO		NO	
RWCH							
DHTN	DownholeTension		0.00	BLK	0.000	NO	
SP Sub							
PLTC	Plot Control Mask		50.56	NO		NO	
SP	Spontaneous Potential		50.56	BLK	1.250	NO	
SPR	Raw Spontaneous Potential		50.56	NO		NO	
SPO	Spontaneous Potential Offset		50.56	NO		NO	

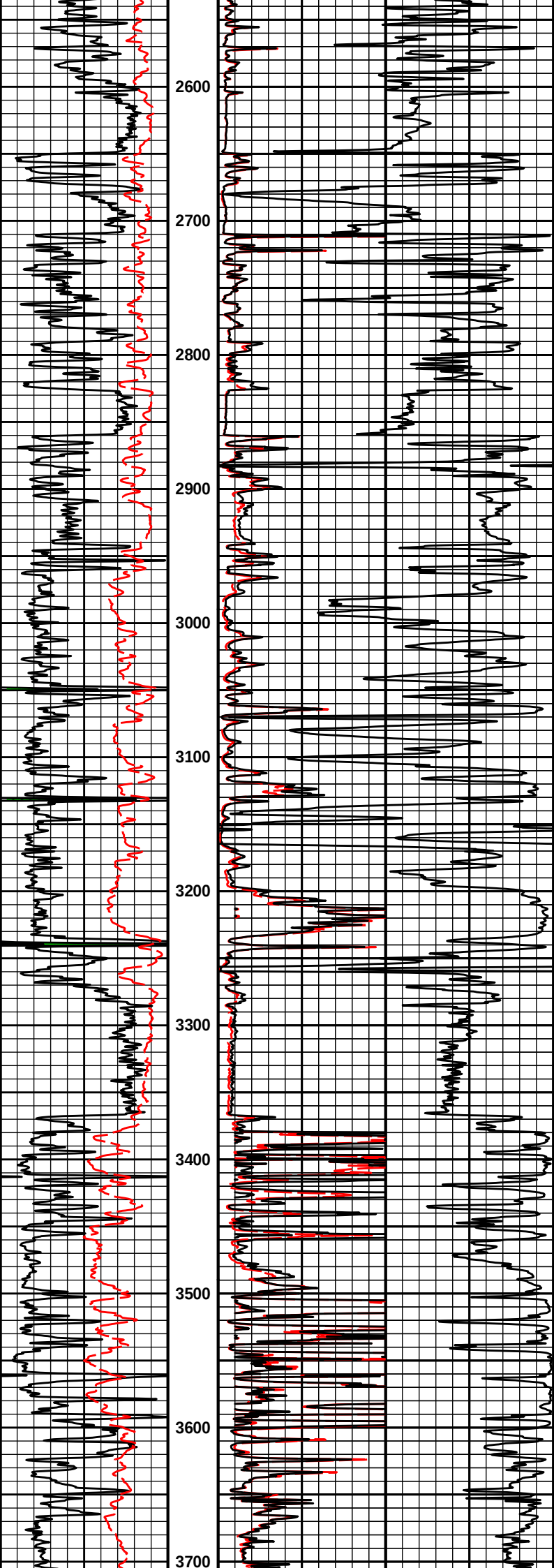
GTET					
TPUL	Tension Pull	42.54	NO		NO
GR	Natural Gamma Ray API	42.54	TRI	1.750	NO
GRU	Unfiltered Natural Gamma Ray API	42.54	NO		NO
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	42.54	W	1.416 , 0.750	NO
HDIA	Measured Hole Diameter	0.00	NO		NO
ACCZ	Accelerometer Z	0.00	BLK	0.083	NO
DEVI	Inclination	0.00	NO		NO
DSNT					
TPUL	Tension Pull	32.30	NO		NO
RNDS	Near Detector Telemetry Counts	32.40	BLK	1.417	NO
RFDS	Far Detector Telemetry Counts	33.15	TRI	0.583	NO
DNTT	DSN Tool Temperature	32.40	NO		NO
DSNS	DSN Tool Status	32.30	NO		NO
ERND	Near Detector Telemetry Counts EVR	32.40	BLK	0.000	NO
ERFD	Far Detector Telemetry Counts EVR	33.15	BLK	0.000	NO
ENTM	DSN Tool Temperature EVR	32.40	NO		NO
HDIA	Measured Hole Diameter	0.00	NO		NO
SDLT					
TPUL	Tension Pull	22.40	NO		NO
PCAL	Pad Caliper	22.40	TRI	0.250	NO
ACAL	Arm Caliper	22.40	TRI	0.250	NO
ACRt Sonde					
TPUL	Tension Pull	2.73	NO		NO
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000	NO
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000	NO
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000	NO
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000	NO
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000	NO
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000	NO
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000	NO
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000	NO
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000	NO
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000	NO
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000	NO
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000	NO
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000	NO
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000	NO
F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000	NO
F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000	NO
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000	NO
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000	NO
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000	NO
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000	NO
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000	NO
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000	NO
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000	NO
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000	NO
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000	NO
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000	NO
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000	NO
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000	NO
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000	NO
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000	NO
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000	NO
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000	NO

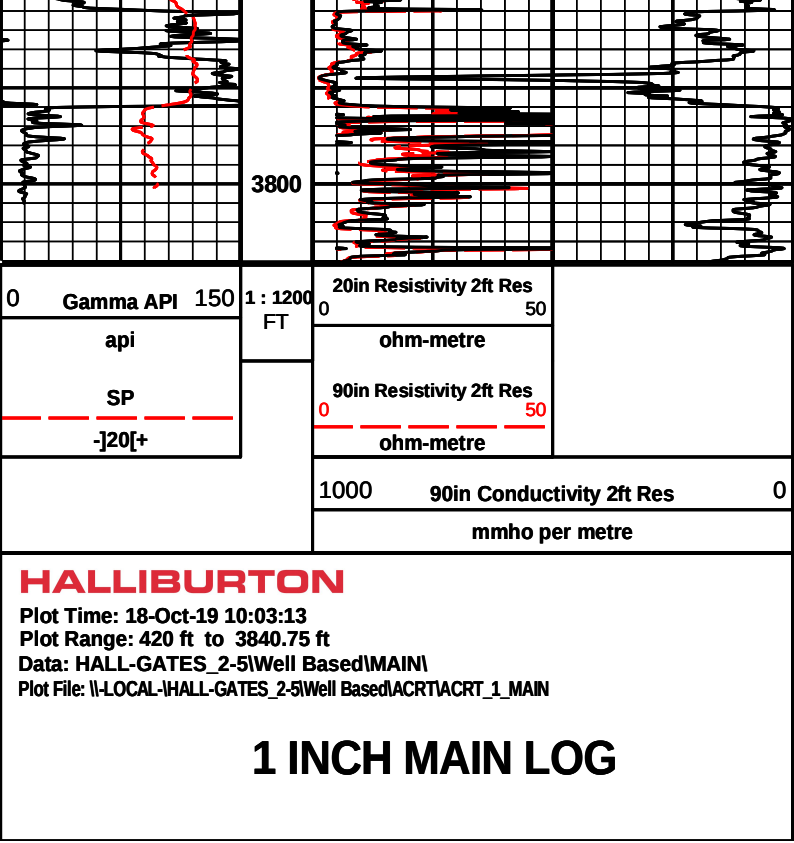
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000	NO
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000	NO
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000	NO
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000	NO
RMUD	Mud Resistivity	12.52	BLK	0.000	NO
F1RT	Transmitter Reference 12 KHz Real Signal	2.73	BLK	0.000	NO
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000	NO
F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000	NO
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000	NO
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000	NO
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000	NO
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000	NO
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000	NO
ITMP	Instrument Temperature	2.73	BLK	0.000	NO
TCVA	Temperature Correction Values Loop Off	2.73	NO		NO
TIDV	Instrument Temperature Derivative	2.73	NO		NO
TUDV	Upper Temperature Derivative	2.73	NO		NO
TLDV	Lower Temperature Derivative	2.73	NO		NO
TRBD	Receiver Board Temperature	2.73	NO		NO
HDIA	Measured Hole Diameter	0.00	NO		NO
Microlog Pad					
TPUL	Tension Pull	22.58	NO		NO
MINV	Microlog Lateral	22.58	BLK	0.750	NO
MNOR	Microlog Normal	22.58	BLK	0.750	NO
SDLT Pad					
TPUL	Tension Pull	22.39	NO		NO
NAB	Near Above	22.21	BLK	0.920	NO
NHI	Near Cesium High	22.21	BLK	0.920	NO
NLO	Near Cesium Low	22.21	BLK	0.920	NO
NVA	Near Valley	22.21	BLK	0.920	NO
NBA	Near Barite	22.21	BLK	0.920	NO
NDE	Near Density	22.21	BLK	0.920	NO
NPK	Near Peak	22.21	BLK	0.920	NO
NLI	Near Lithology	22.21	BLK	0.920	NO
NBAU	Near Barite Unfiltered	22.21	BLK	0.250	NO
NLIU	Near Lithology Unfiltered	22.21	BLK	0.250	NO
FAB	Far Above	22.56	BLK	0.250	NO
FHI	Far Cesium High	22.56	BLK	0.250	NO
FLO	Far Cesium Low	22.56	BLK	0.250	NO
FVA	Far Valley	22.56	BLK	0.250	NO
FBA	Far Barite	22.56	BLK	0.250	NO
FDE	Far Density	22.56	BLK	0.250	NO
FPK	Far Peak	22.56	BLK	0.250	NO
FLI	Far Lithology	22.56	BLK	0.250	NO
PTMP	Pad Temperature	22.40	BLK	0.920	NO
NHV	Near Detector High Voltage	21.79	NO		NO
FHV	Far Detector High Voltage	21.79	NO		NO
ITMP	Instrument Temperature	21.79	NO		NO
DDHV	Detector High Voltage	21.79	NO		NO
HDIA	Measured Hole Diameter	0.00	NO		NO
Data: HALL-GATES_2-510001 GTET-DSN-SDL-ACRT_DRIVERS\IDLE					Date: 18-Oct-19 08:13:20

1 INCH MAIN LOG









COMPANY	BIRD DOG OIL, LLC		
WELL	HALL-GATES 2-5		
FIELD	GATES		
COUNTY	STAFFORD	STATE	KANSAS
HALLIBURTON		ARRAY COMPENSATED TRUE RESISTIVITY LOG	