

**SPECTRAL DENSITY
DUAL SPACED NEUTRON
ARRAY COMPENSATED
TRUE RESISTIVITY**

Fold here

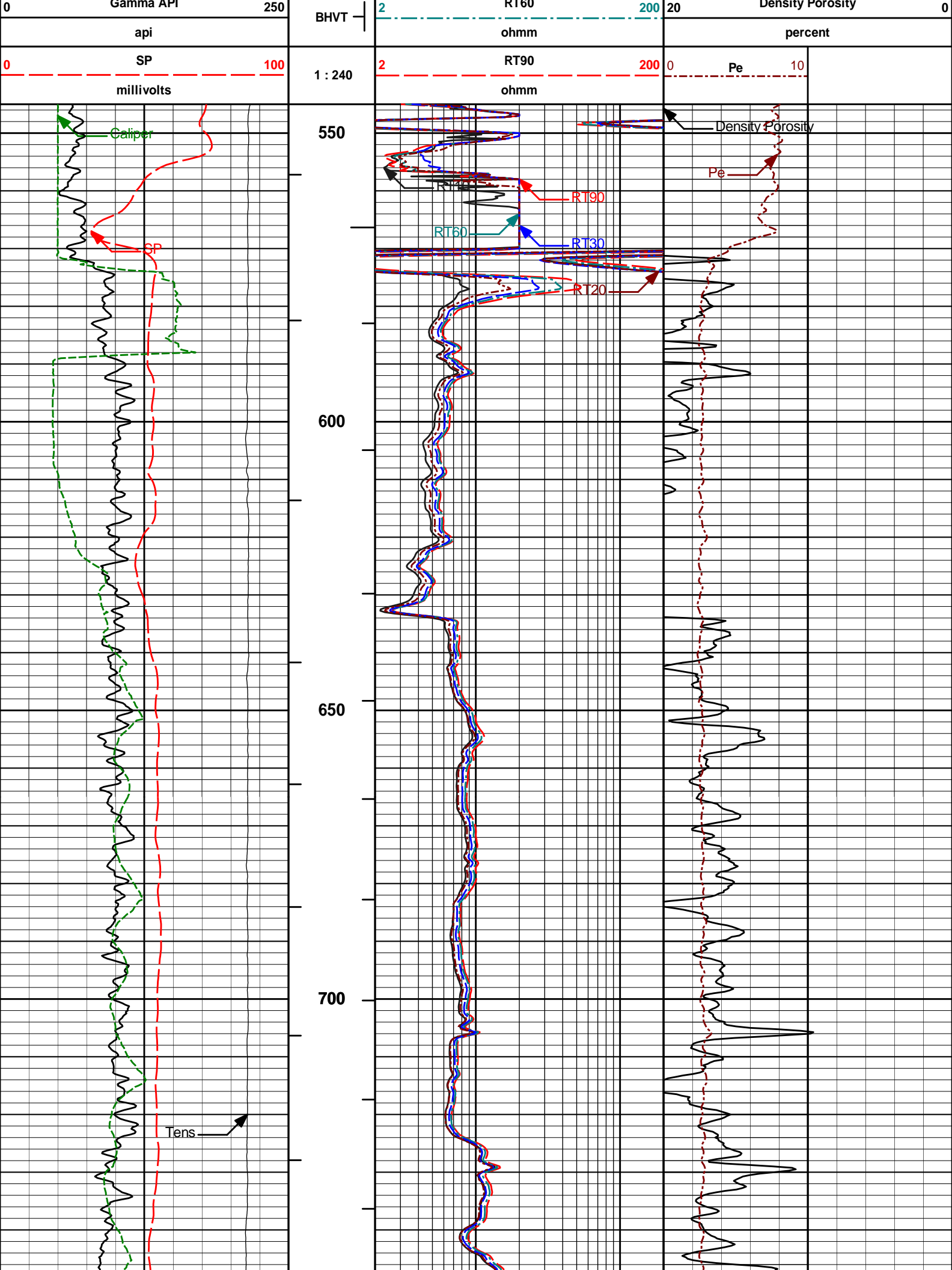
Service Ticket No.: 9303602						API Serial No.: 05123350020000						PGM Version: WL INSITE R3.4.4 (Build 2)					
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES											
Date	Sample No.					Type Log	Depth	Scale Up Hole	Scale Down Hole								
Depth-Driller																	
Type 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 787-797	N/A	1.5" S.O.	N/A							
Rmc @ Meas. Temp.		@		@													
Source Rmf	Rmc																
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.	11259758	Serial No.		Serial No.	11812177	Serial No.	10935690										
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT										
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625"										
Detector Model No.	102A	Spacing		Log Type	GAM/GAM	Log Type	NEU/NEU										
Type	SCINT			Source Type	Cs137	Source Type	Am241Be										
Length	8"	LSA [Y/N]		Serial No.	5256 GW	Serial No.	DSN 430										
Distance to Source	10'	FWDA [Y/N]		Strength	1.5 Ci	Strength	15 Ci										
LOGGING DATA																	
GENERAL		GAMMA		ACOUSTIC		DENSITY		NEUTRON									

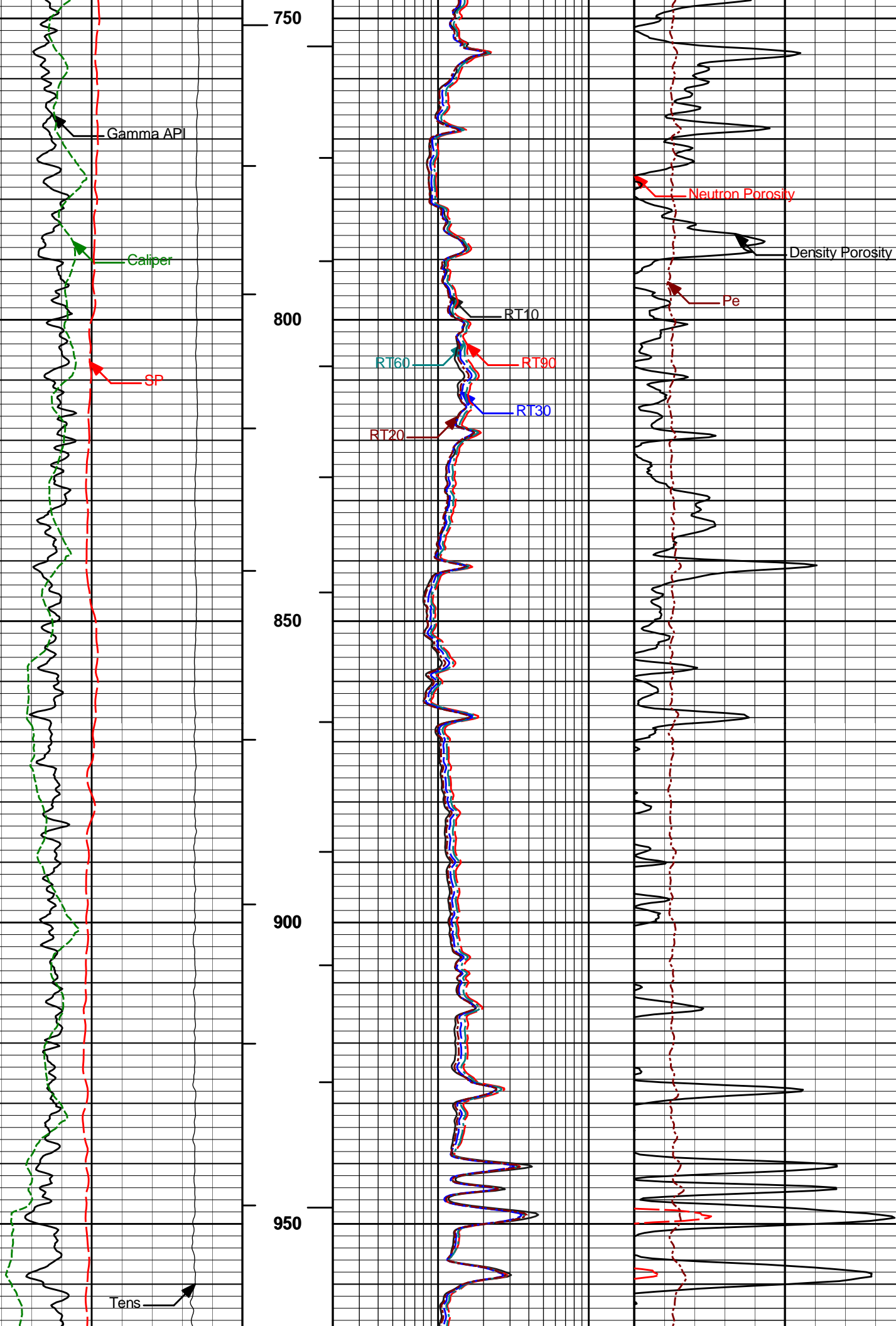
GENERAL			GAMMA		ACOUSTIC		DENSITY		NEUTRON							
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix		
No.	From	To	ft/min	L	R	L	R		L	R		L	R			
ONE	TD	7597	REC	0	250				20%	0%	2.65 g/cc	20%	0%	SAND		
ONE	7597	7318	REC	0	250				20%	0%	2.68 g/cc	20%	0%	SAND		
ONE	7318	6700	REC	0	250				20%	0%	2.71 g/cc	20%	0%	LIME		
ONE	6700	CSG	REC	0	250				20%	0%	2.68 g/cc	20%	0%	SAND		
DIRECTIONAL INFORMATION																
Maximum Deviation									@	KOP						@
Remarks:																
RWCH/GTET/DSNT/SDLT/ACRT RAN IN COMBINATION																
ANNULAR HOLE VOLUME CALCULATED FOR 4.5 INCH PRODUCTION CASING																
TENSION PULLS, WASHOUTS, AND BOREHOLE RUGOSITY AFFECT TOOL RESPONSE																
CREW: M. BURNETT, S. HERMAN																
RIG: ENSIGN 33																
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES -- BRIGHTON, CO -- (303) 825-4346																
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.																
HALLIBURTON																

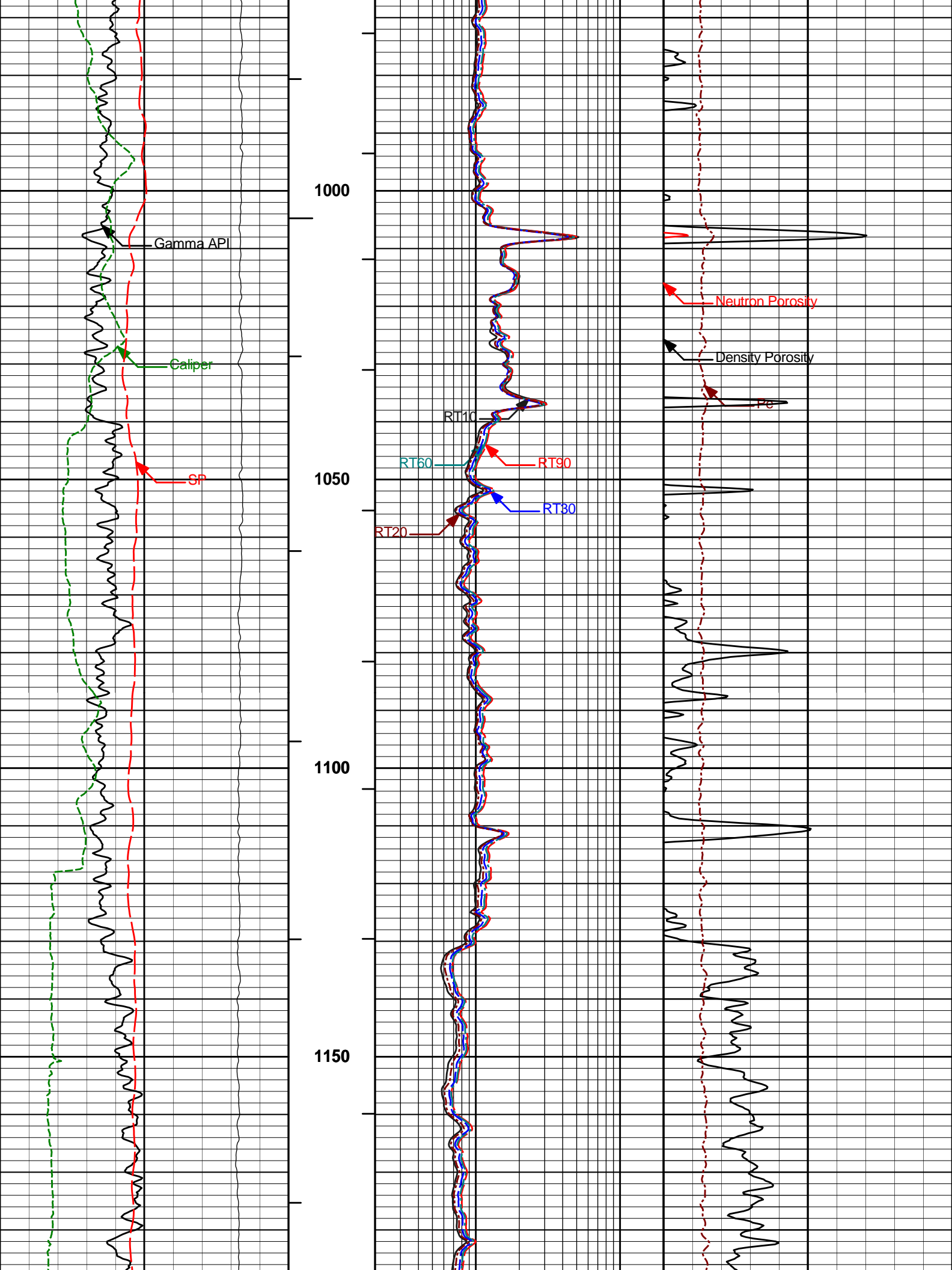
HALLIBURTON

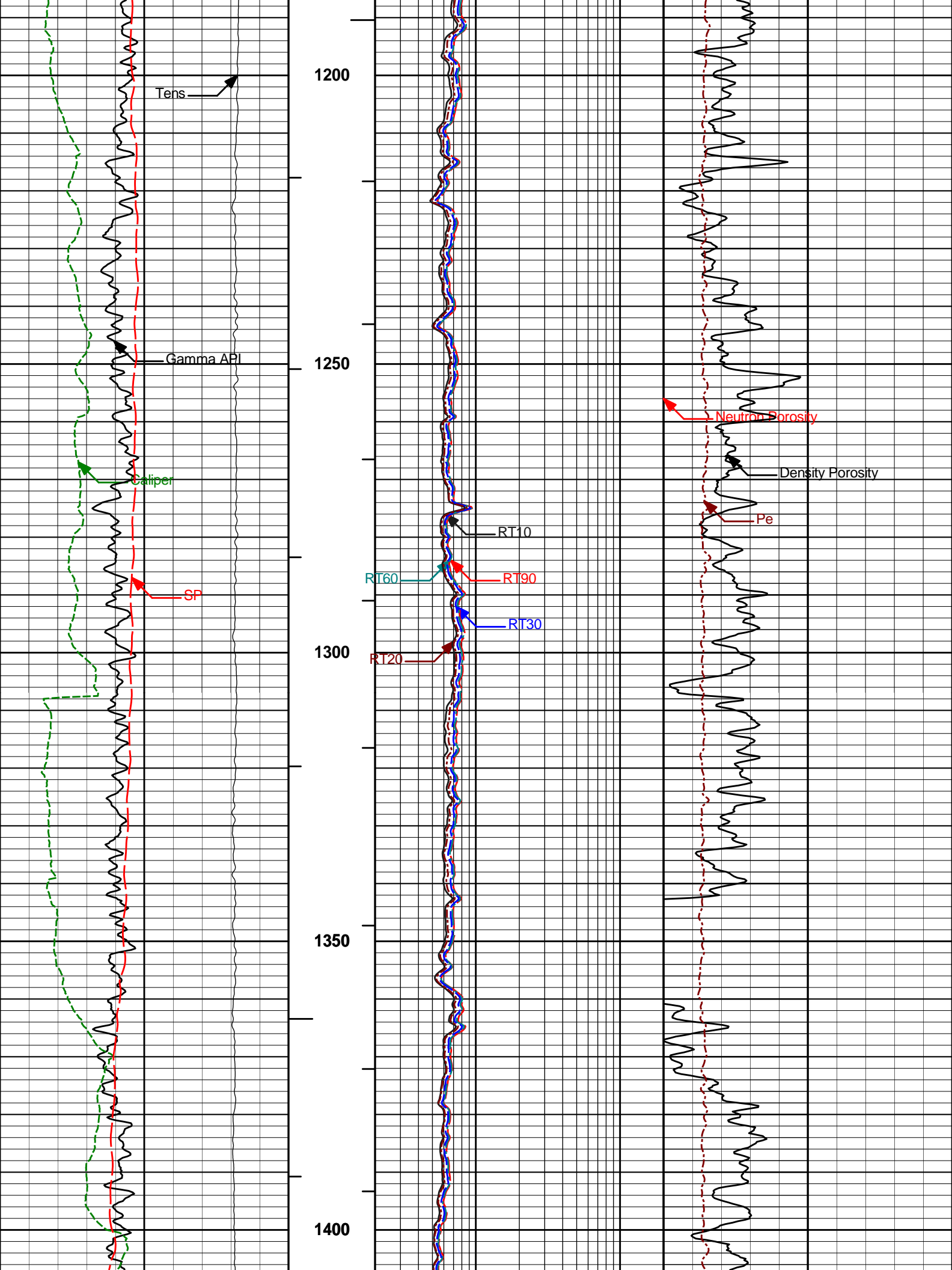
PARAMETERS REPORT

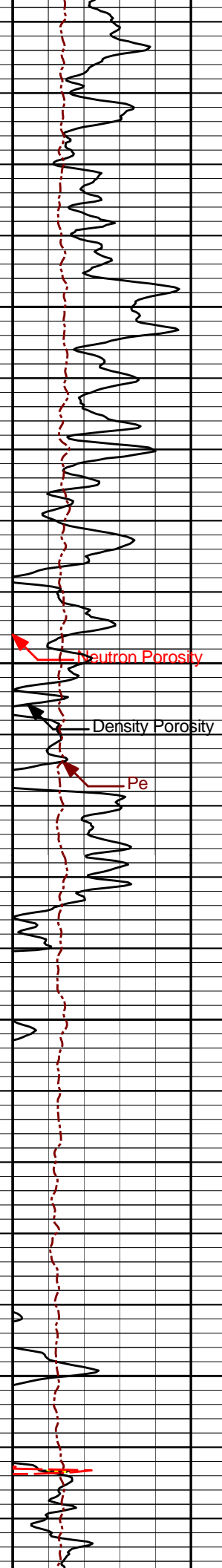
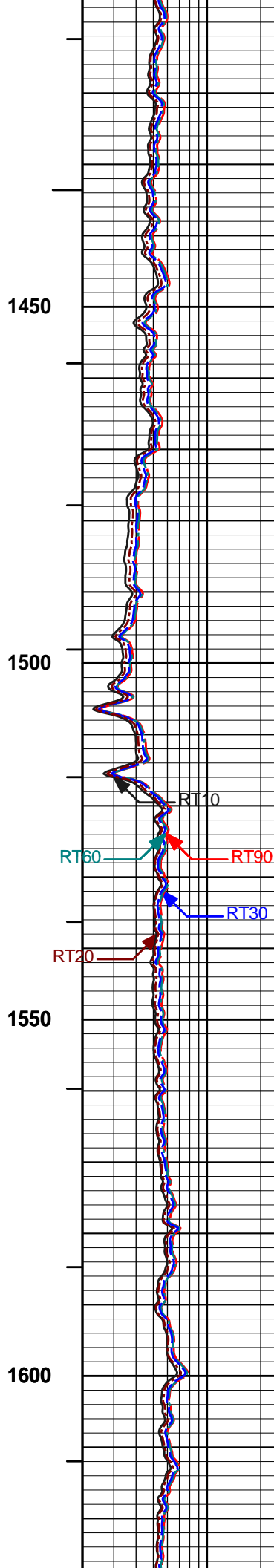
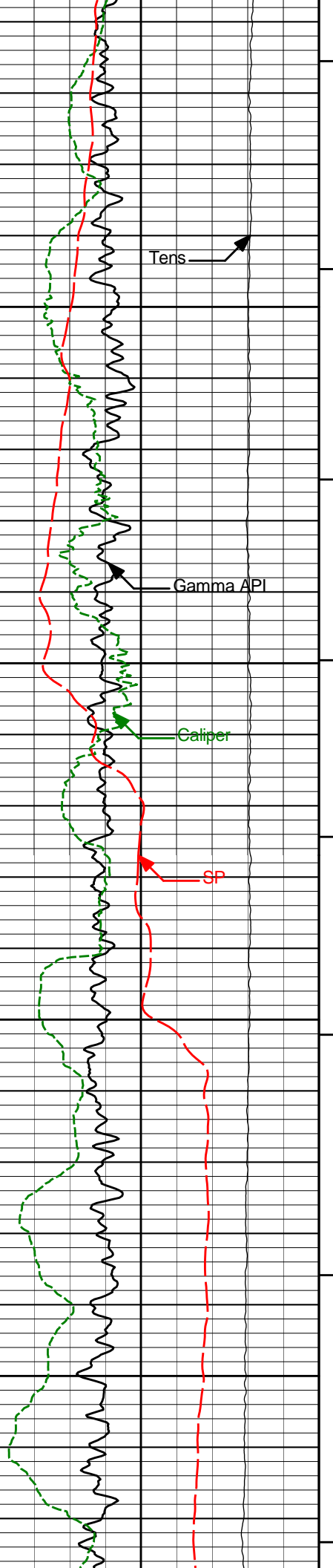
Depth ((ft))	Tool Name	Description	Value	Units
TOP				
	DSNT	Neutron Lithology	Sandstone	
	SDLT Pad	Formation Density Matrix	2.680	g/cc
6700.00				
	DSNT	Neutron Lithology	Limestone	
	SDLT Pad	Formation Density Matrix	2.710	g/cc
7318.00				
	SDLT Pad	Formation Density Matrix	2.680	g/cc
7597.00				
	SHARED	Bit Size	7.875	in
	SHARED	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	Mud Base	Water	
	SHARED	Borehole Fluid Weight	9.700	ppg
	SHARED	Weighting Agent	Barite	
	SHARED	Borehole salinity	0.00	ppm
	SHARED	Formation Salinity NaCl	0.00	ppm
	SHARED	Percent K in Mud by Weight?	0.00	%
	SHARED	Mud Resistivity	1.590	ohmm
	SHARED	Temperature of Mud	70.7	degF
	SHARED	Logging Interval is Cased?	No	
	SHARED	AHV Casing OD	4.500	in
	SHARED	Surface Temperature	50.0	degF
	SHARED	Total Well Depth	7997.00	ft
	SHARED	Bottom Hole Temperature	215.0	degF

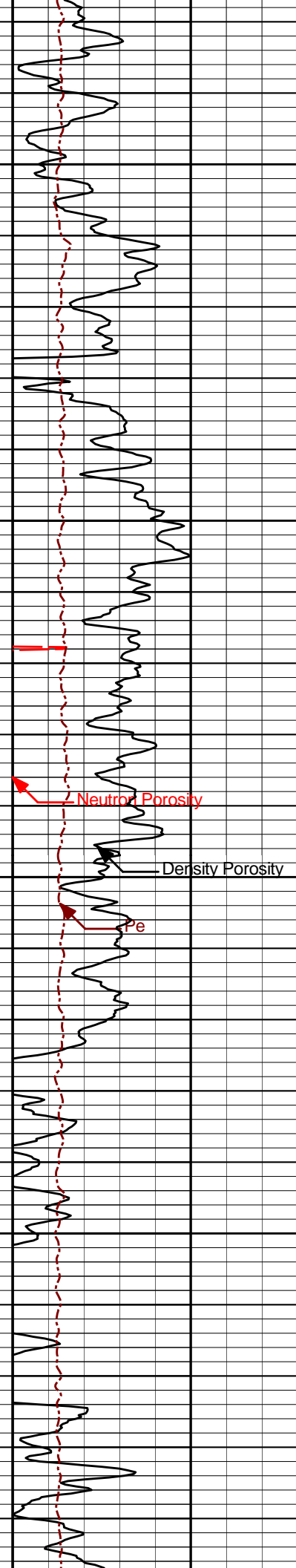
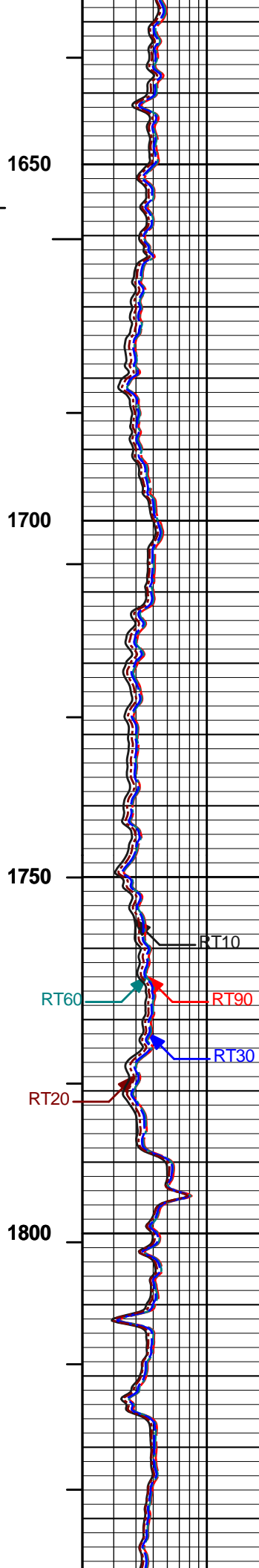
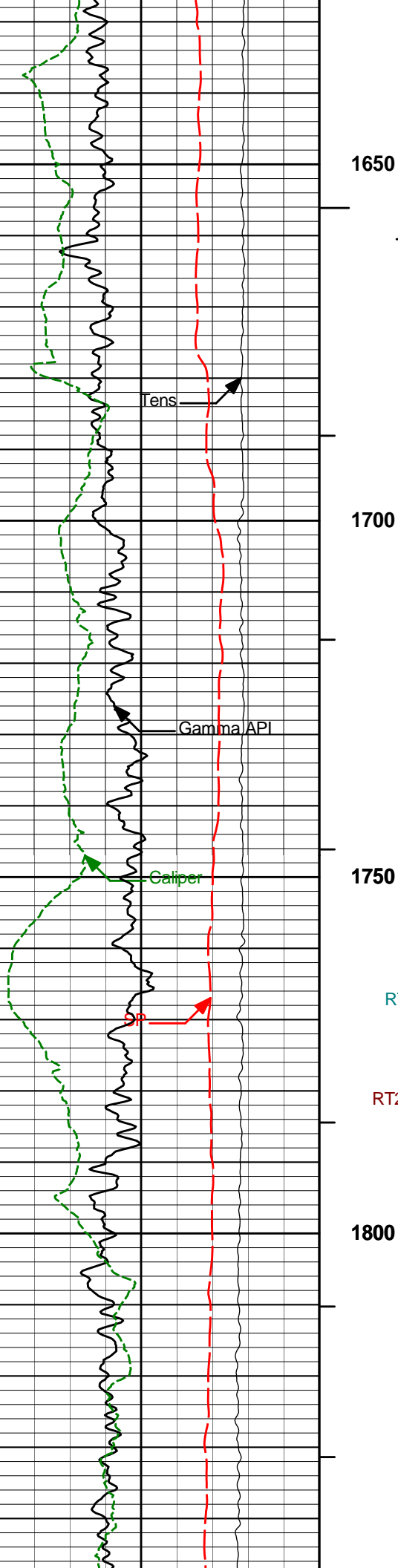


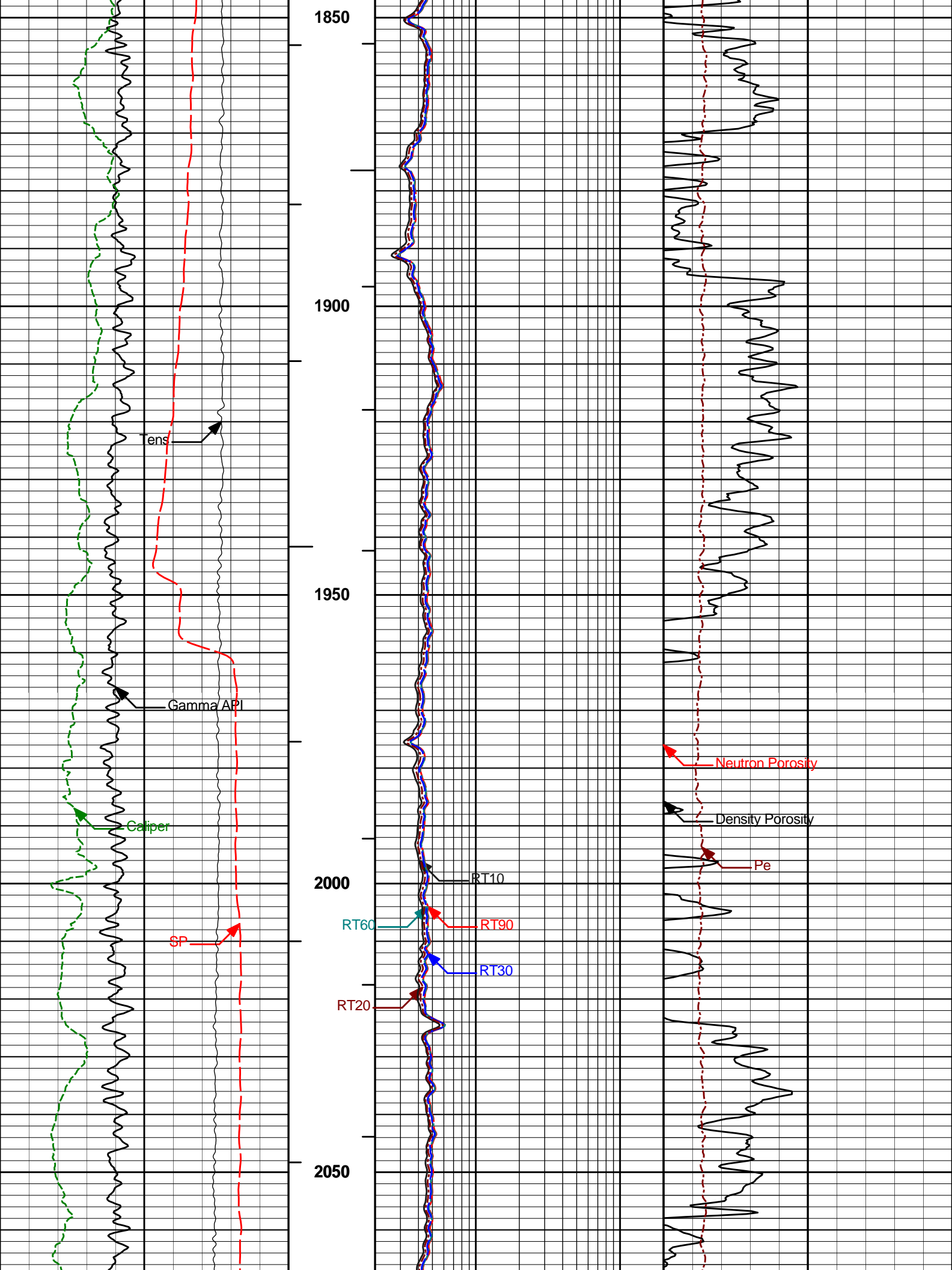


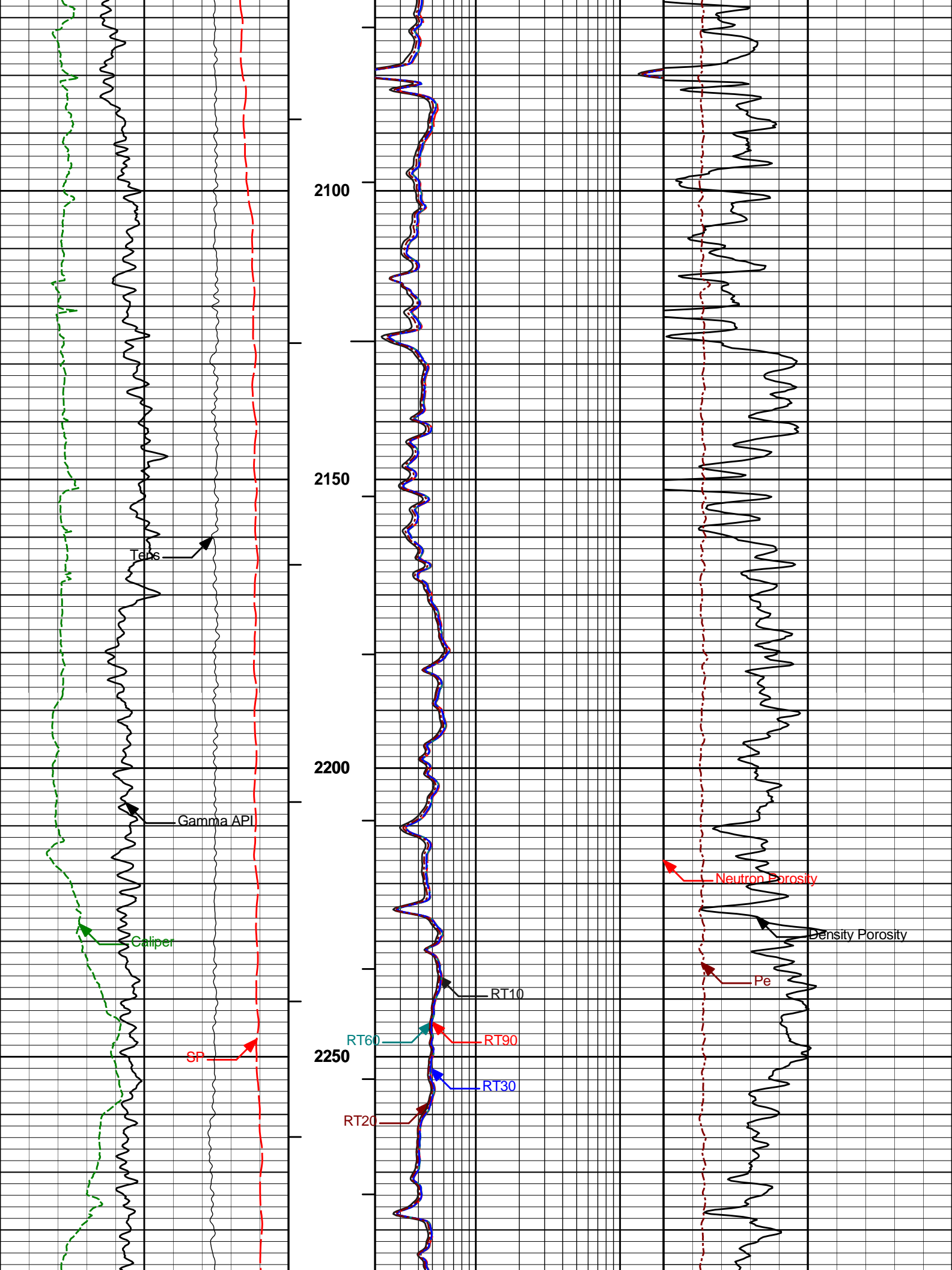


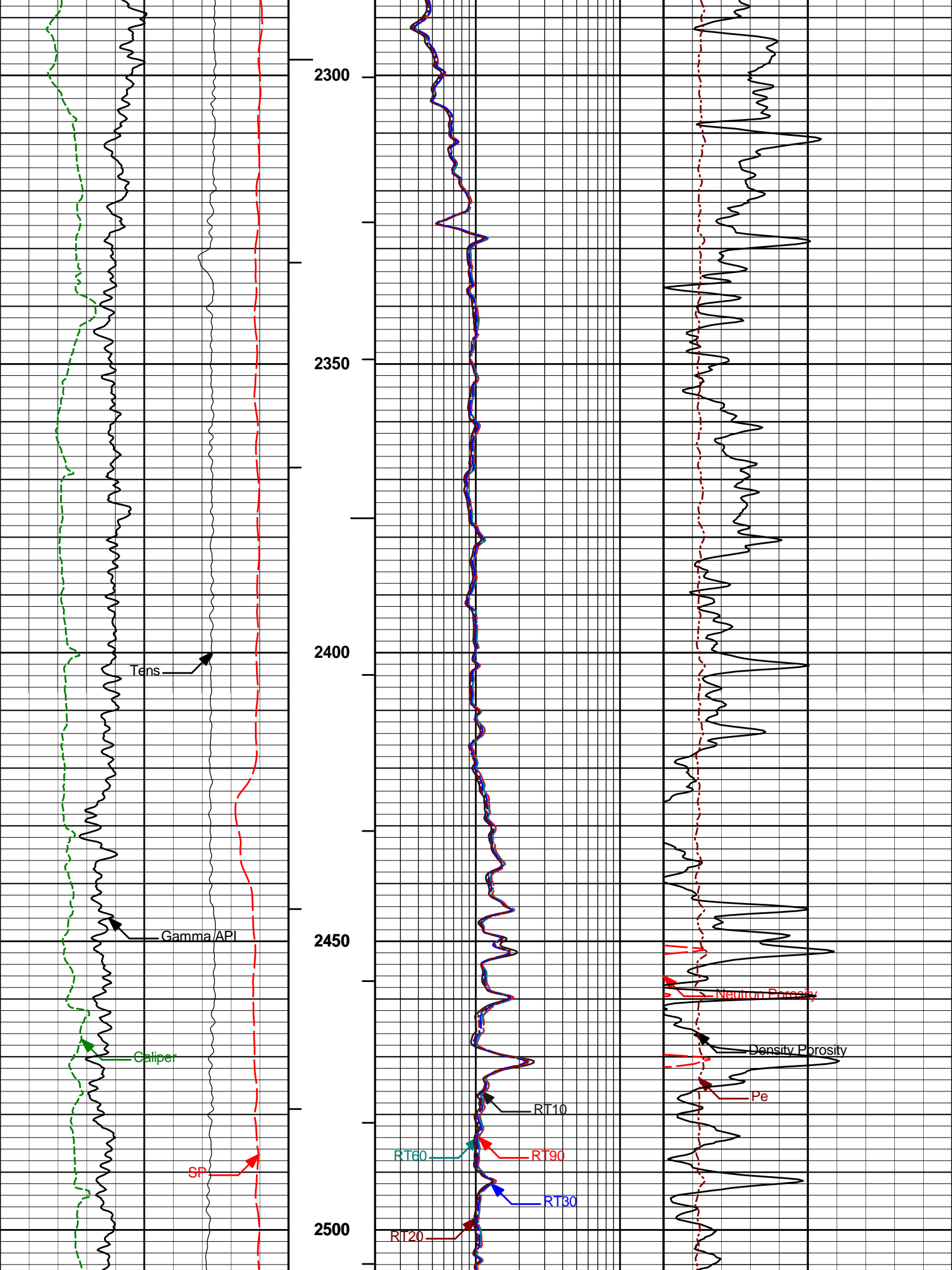


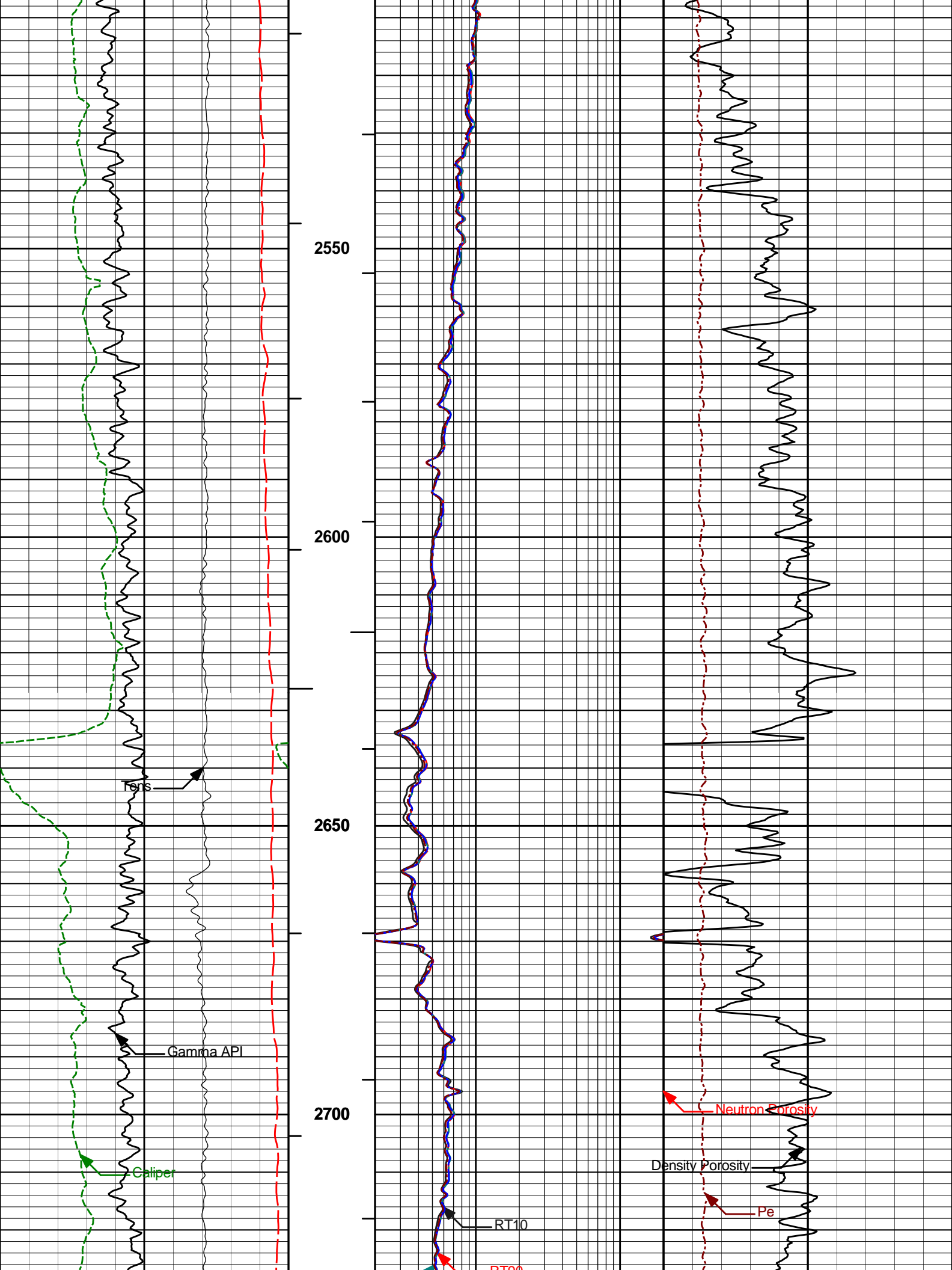


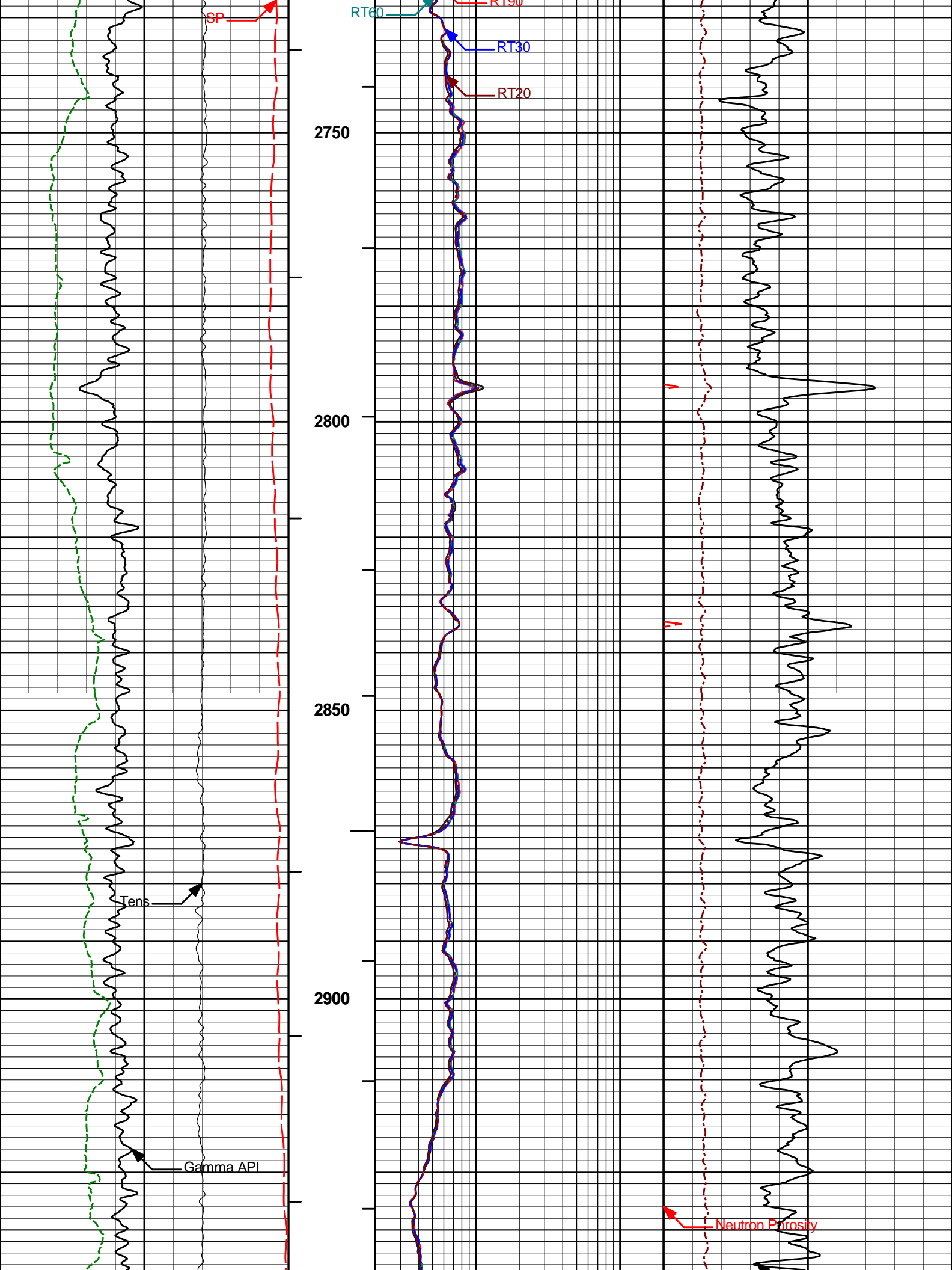


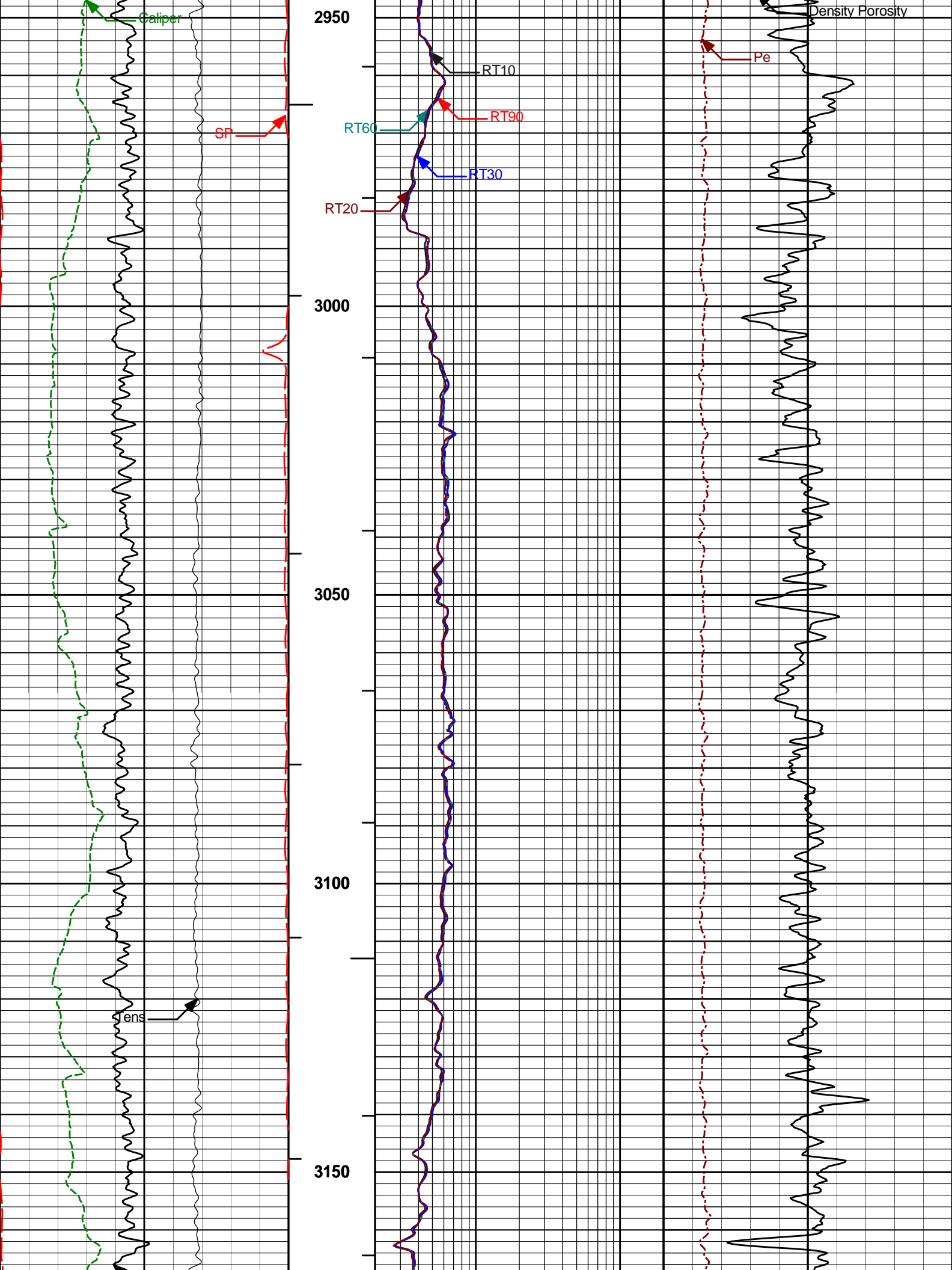


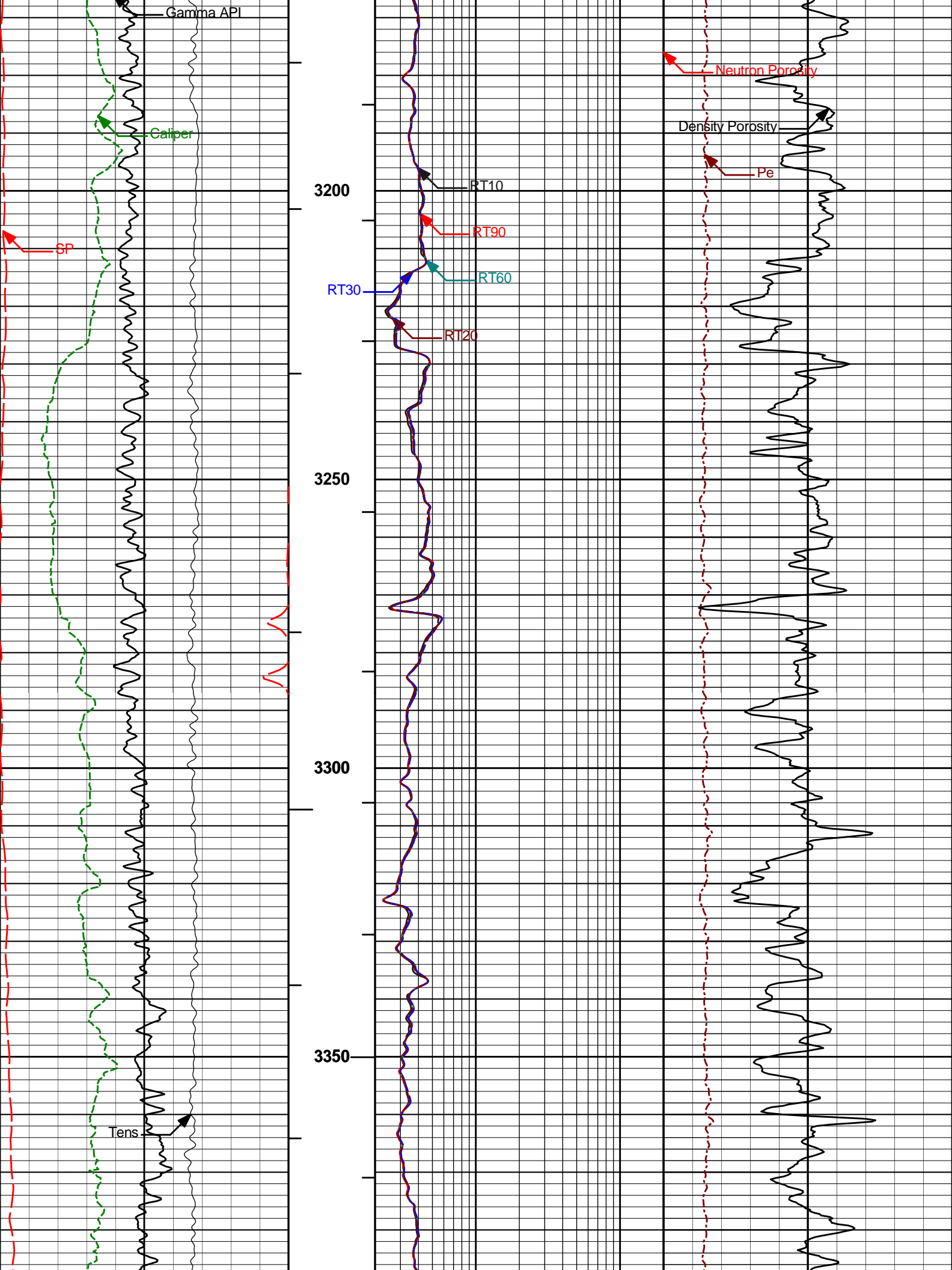


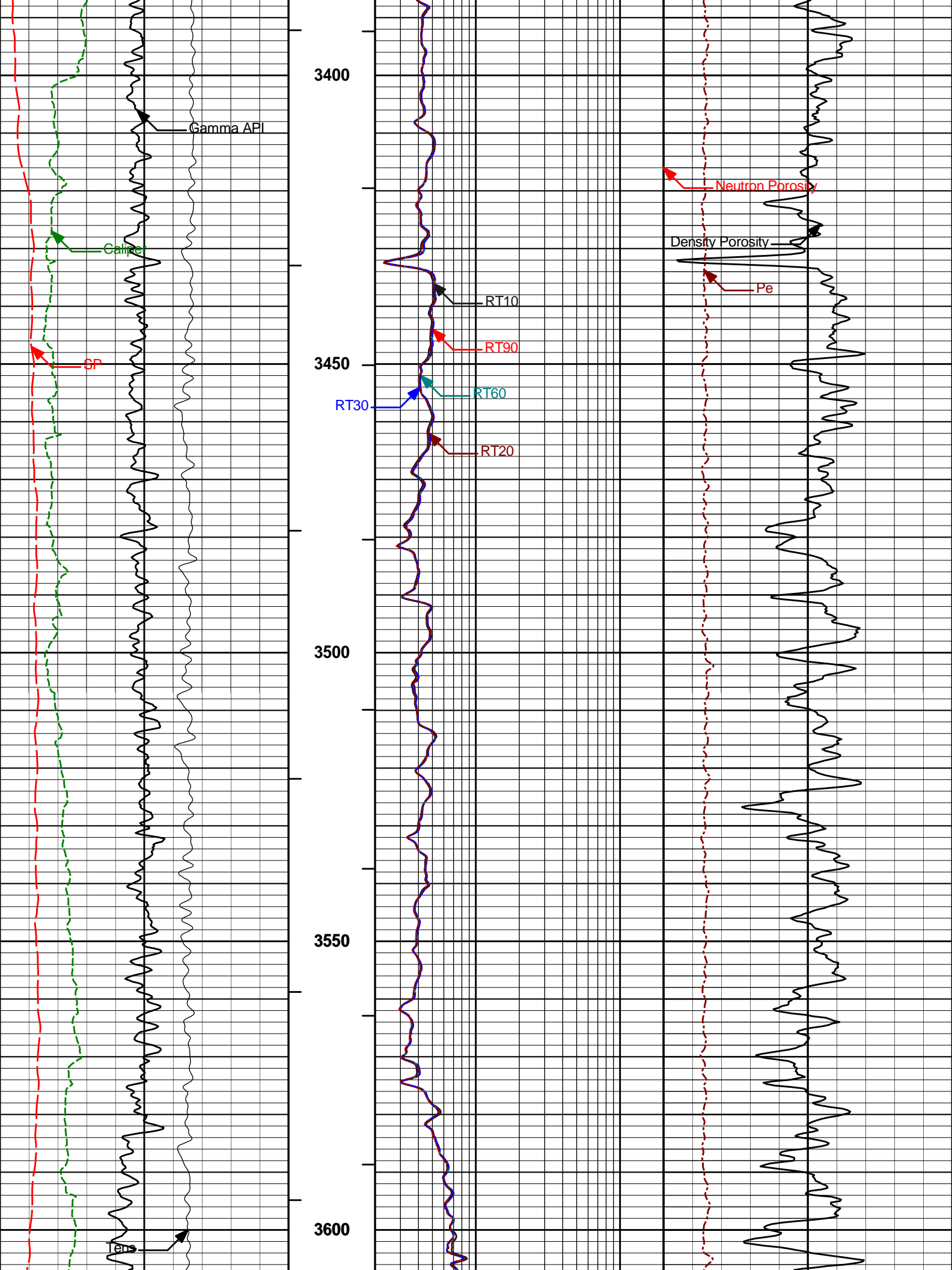


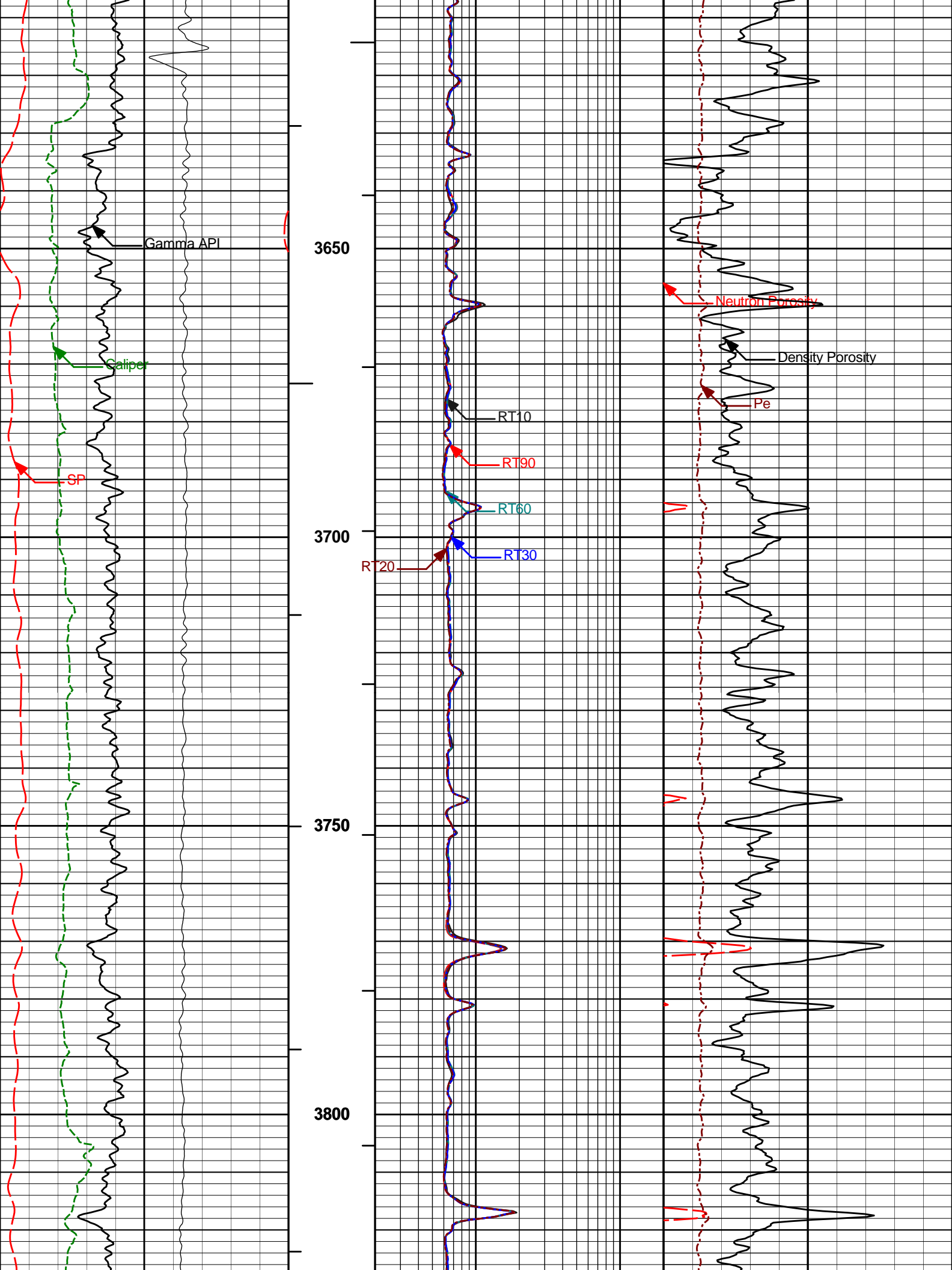


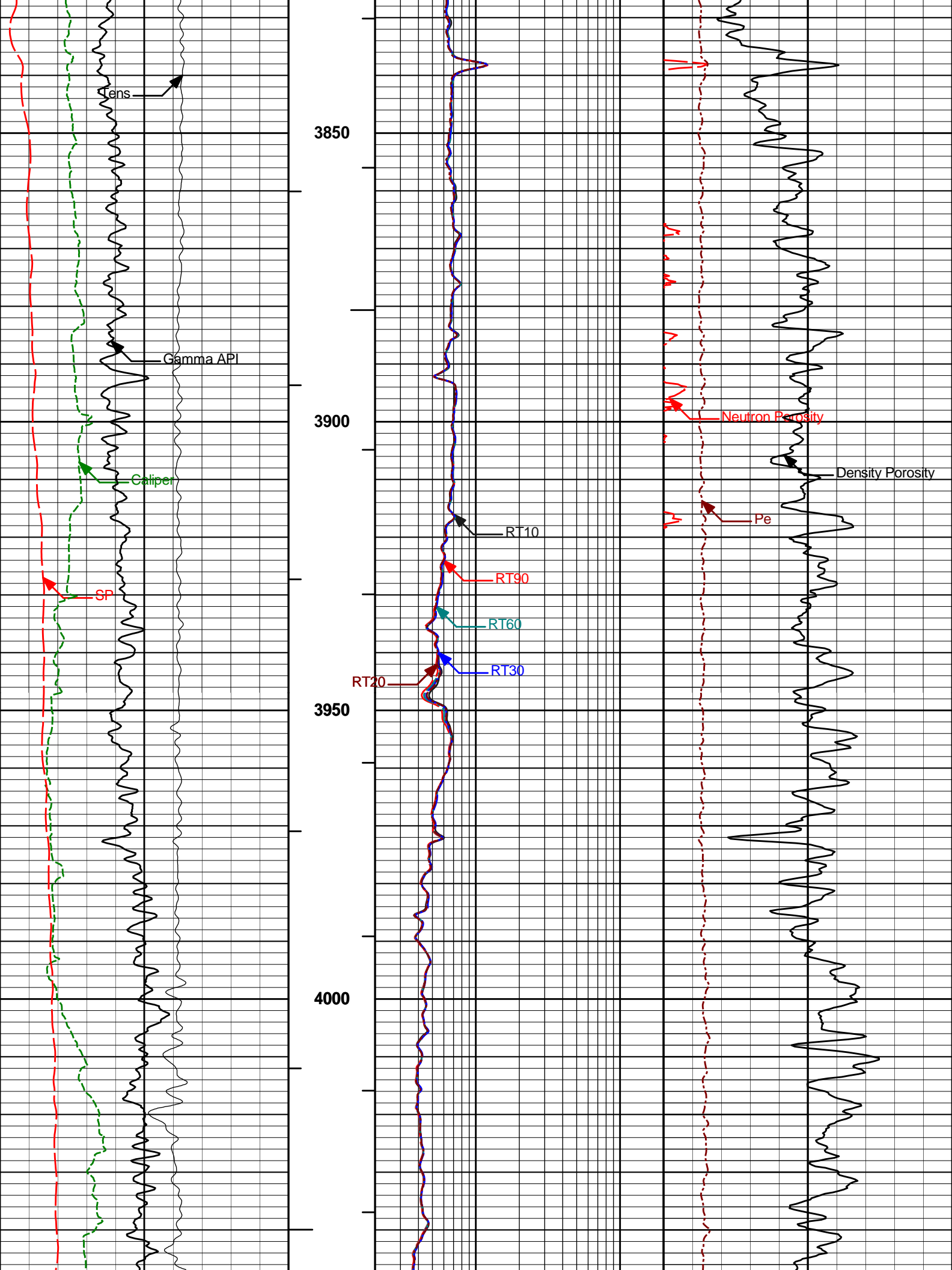


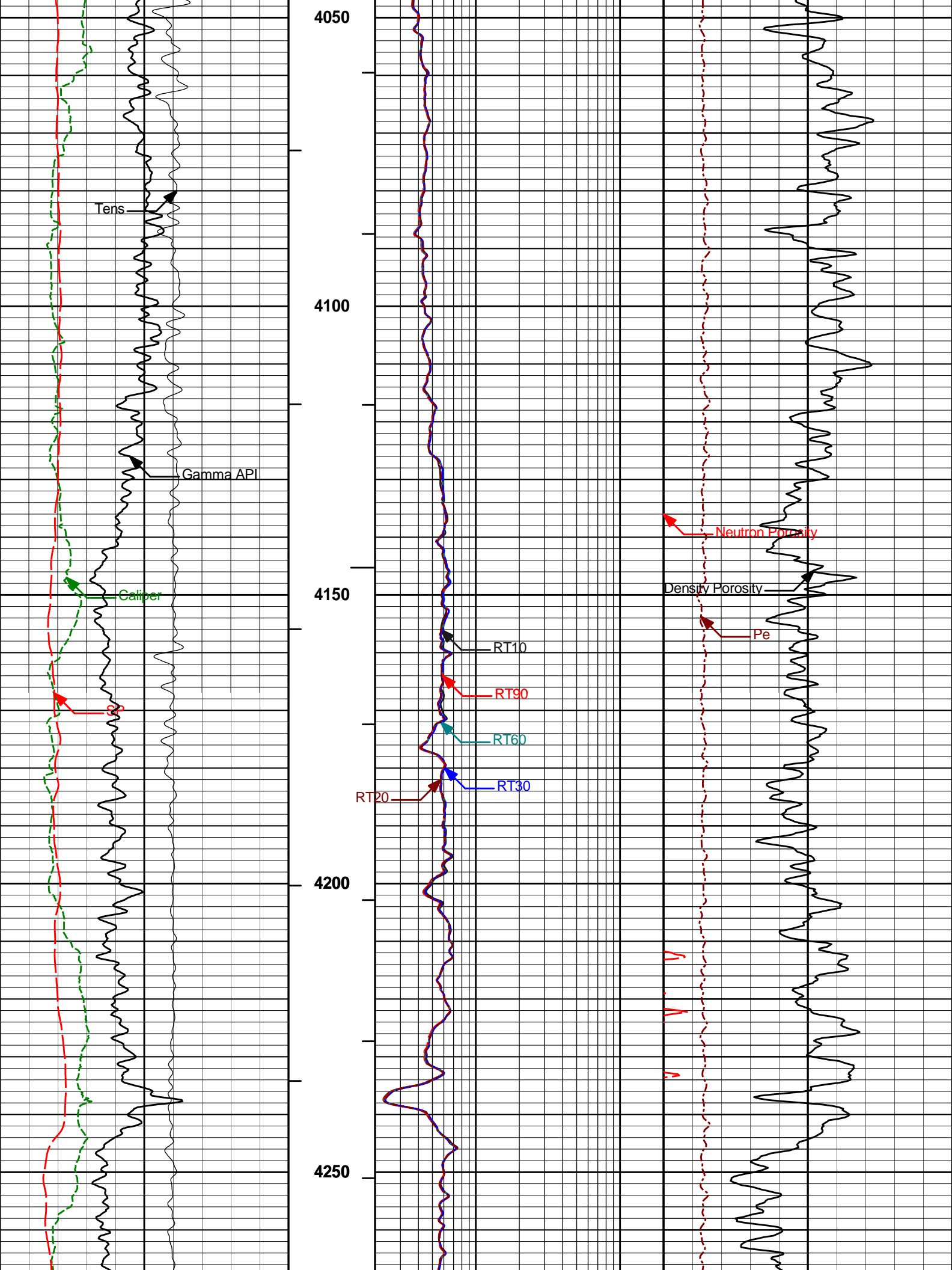


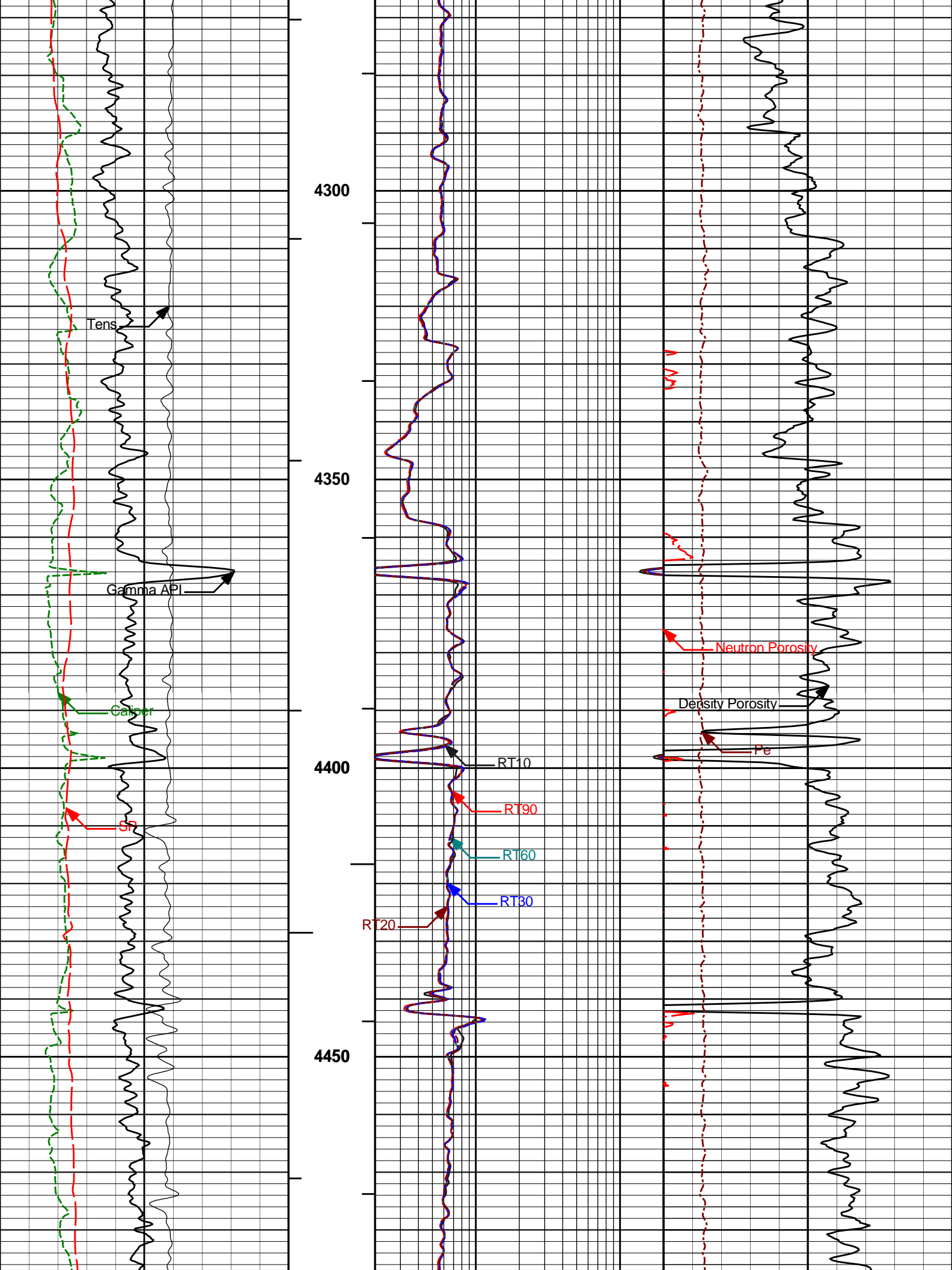


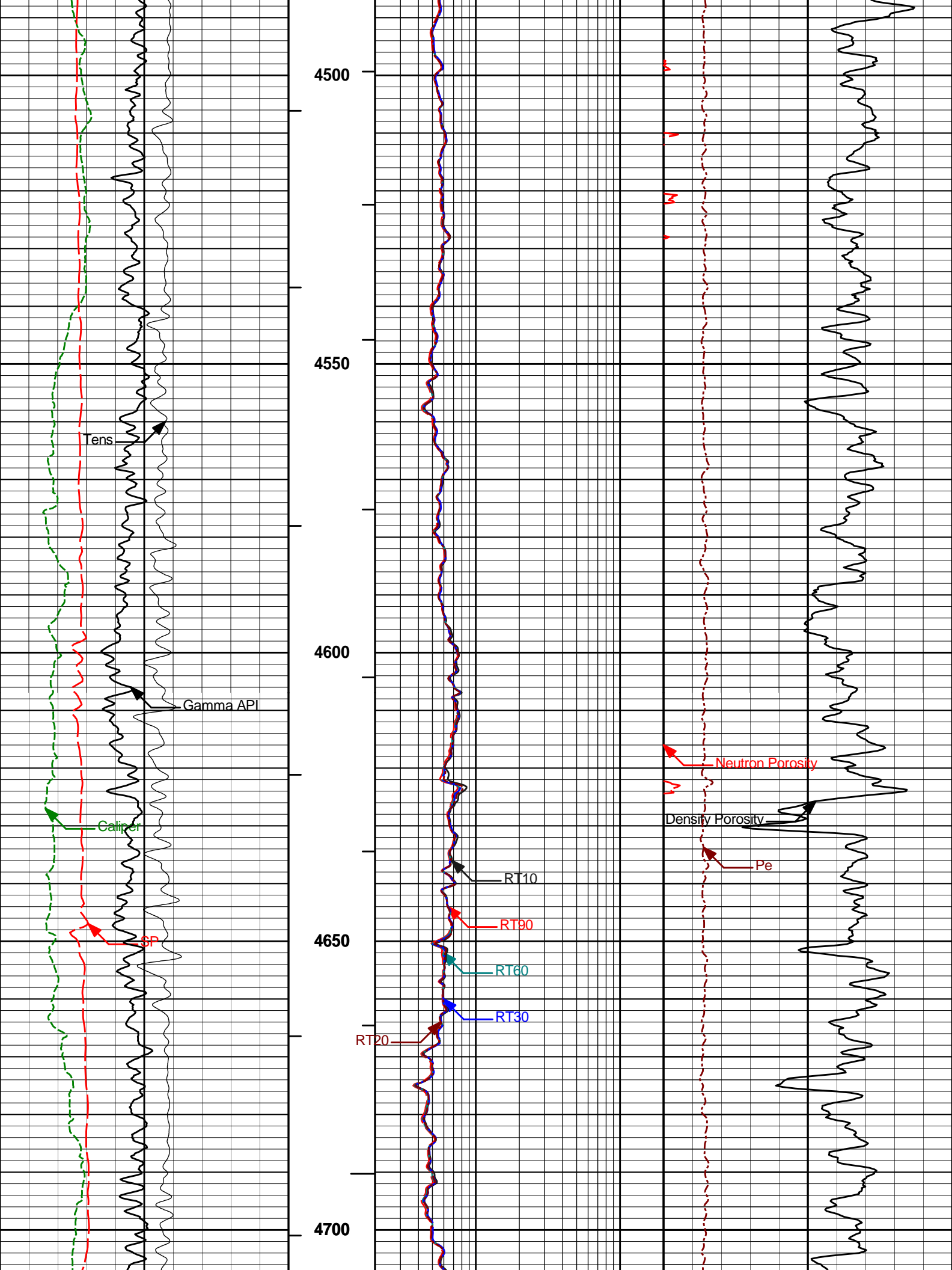


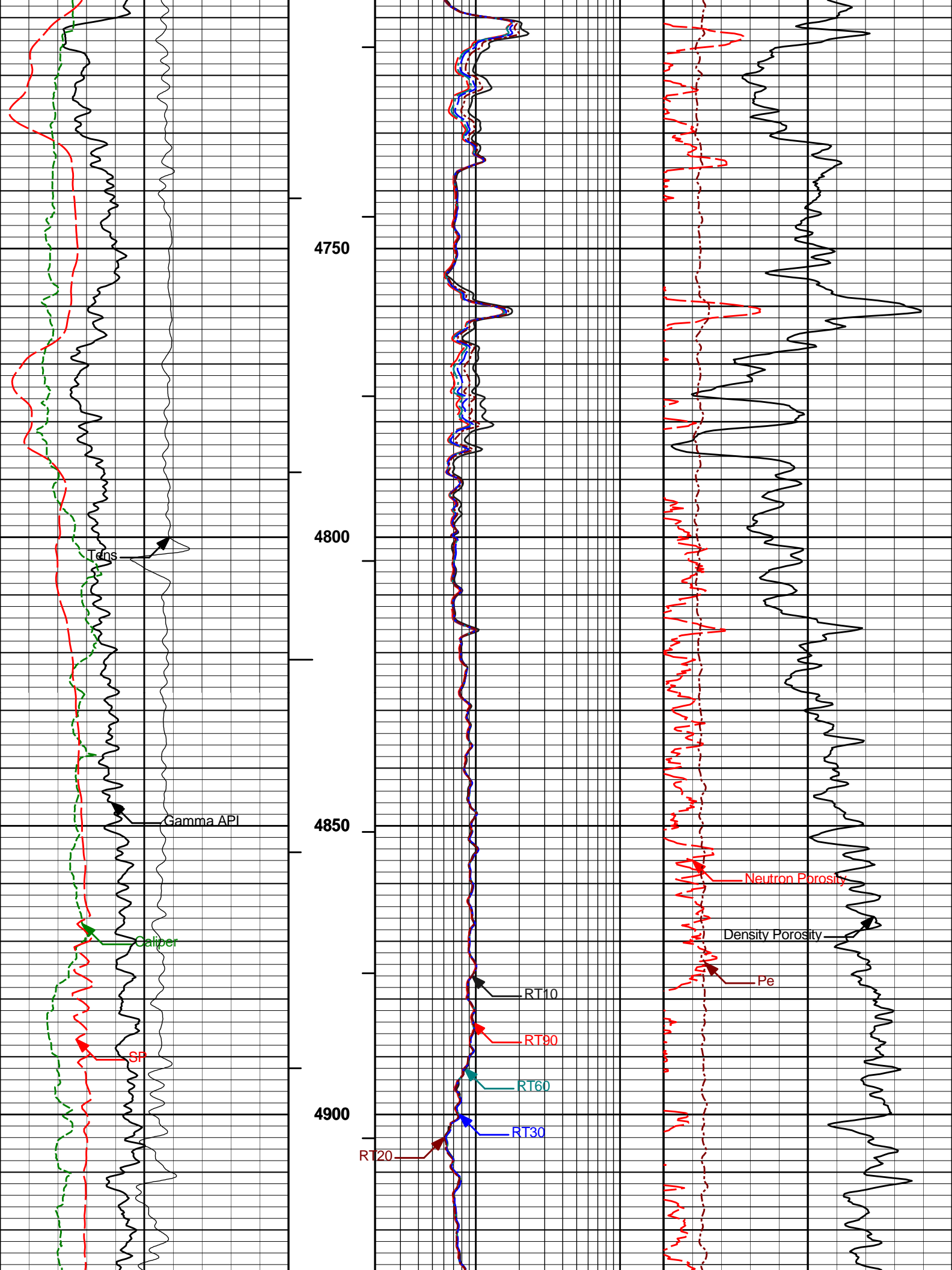


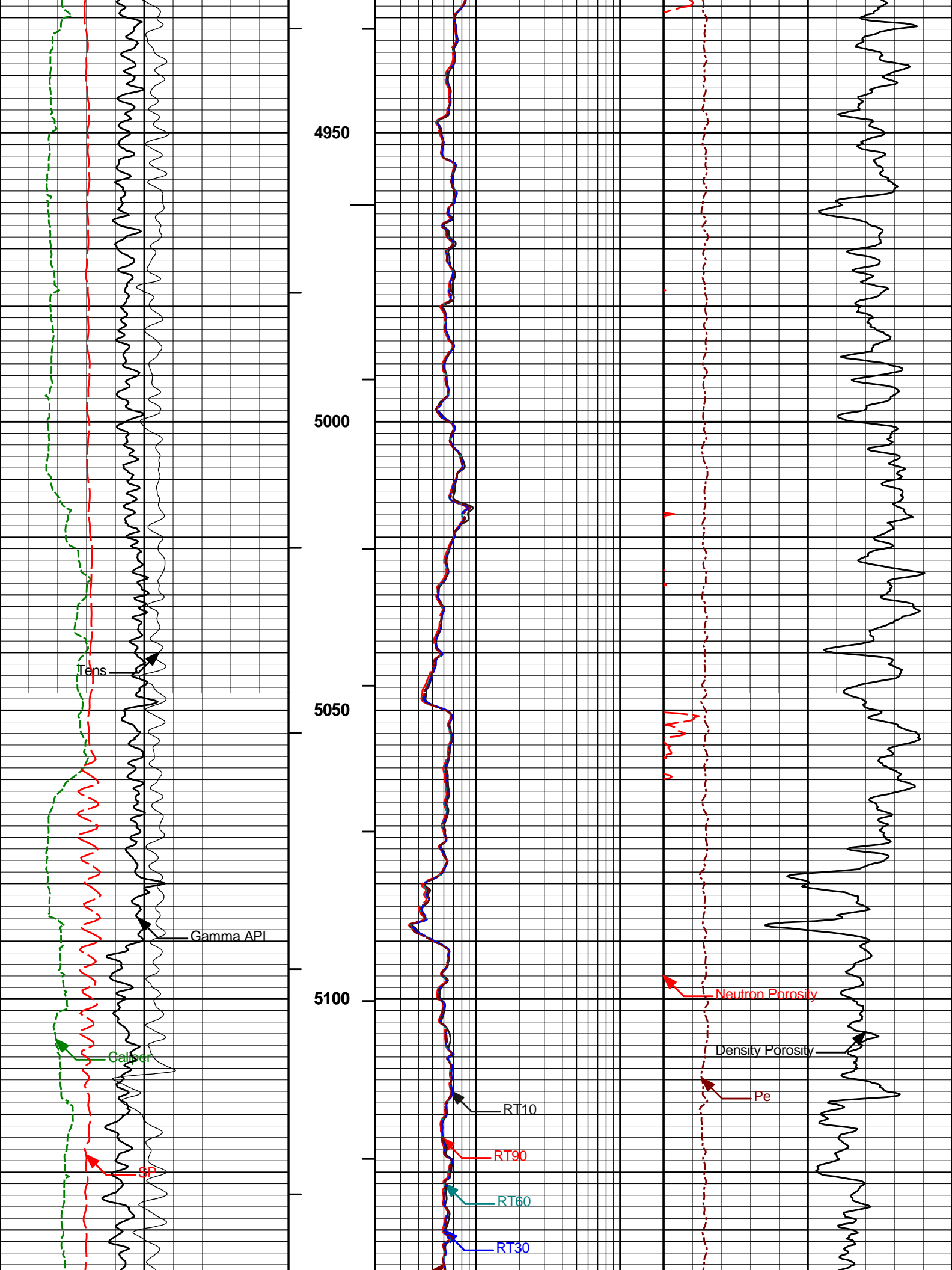


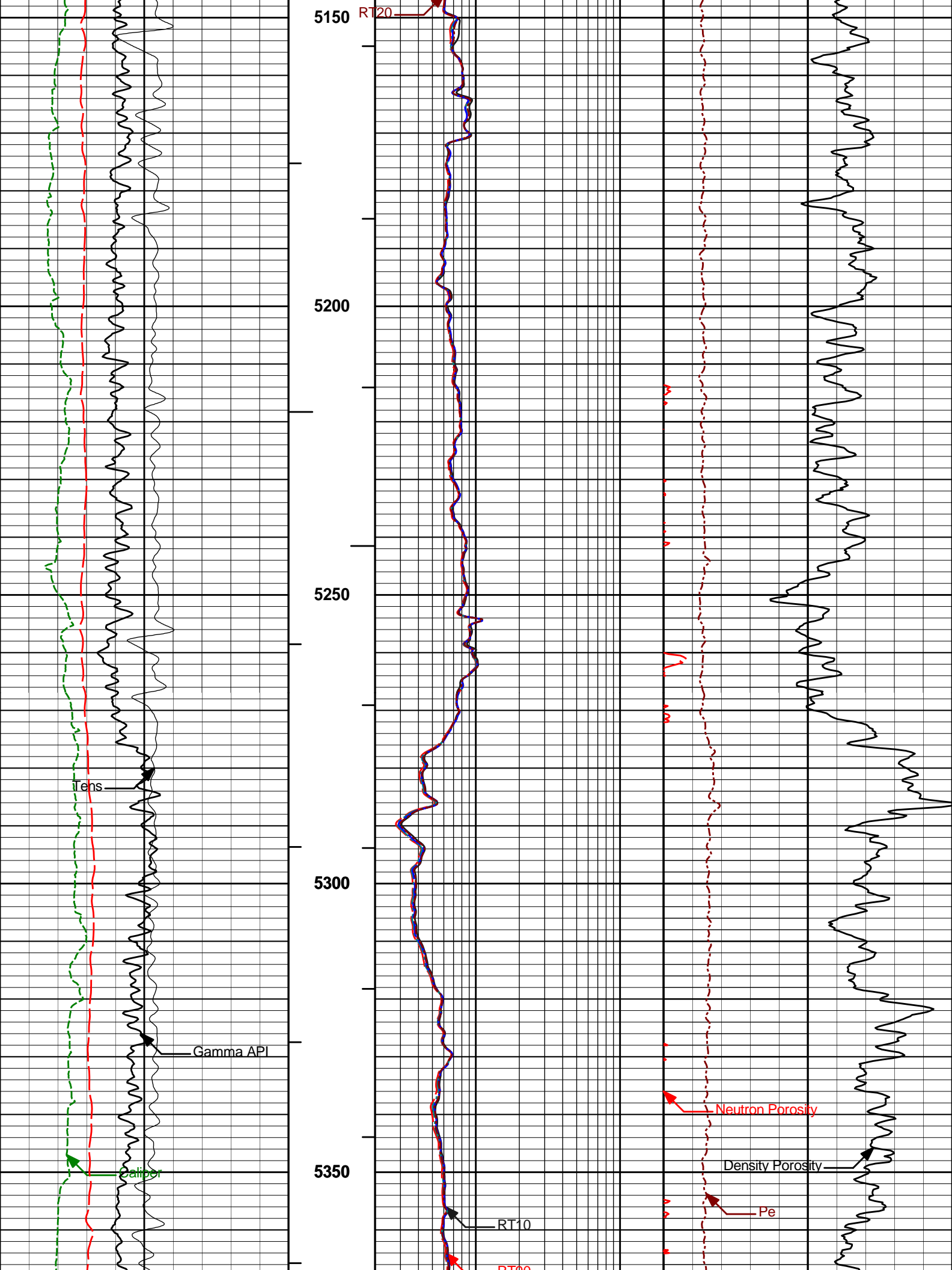


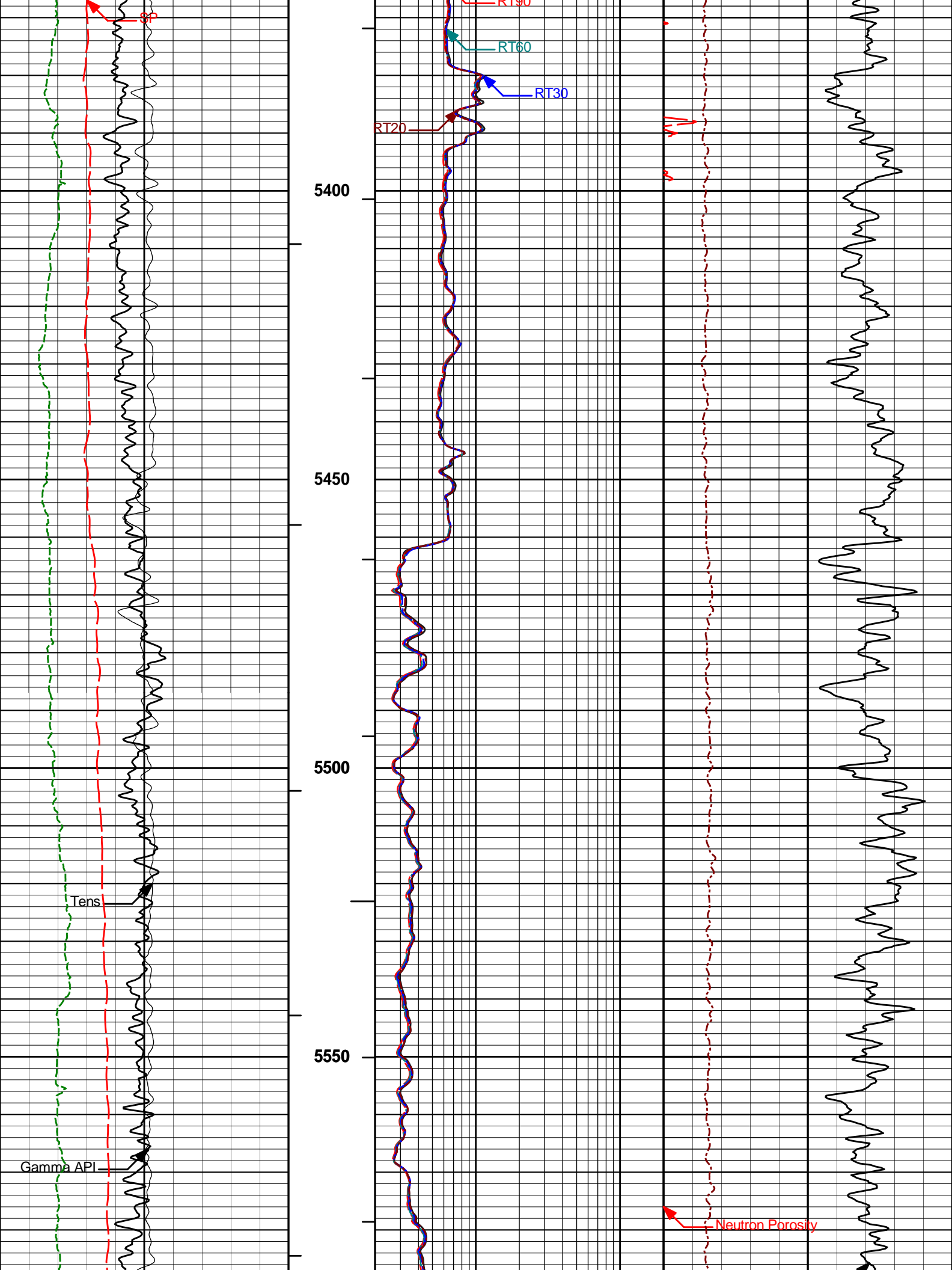


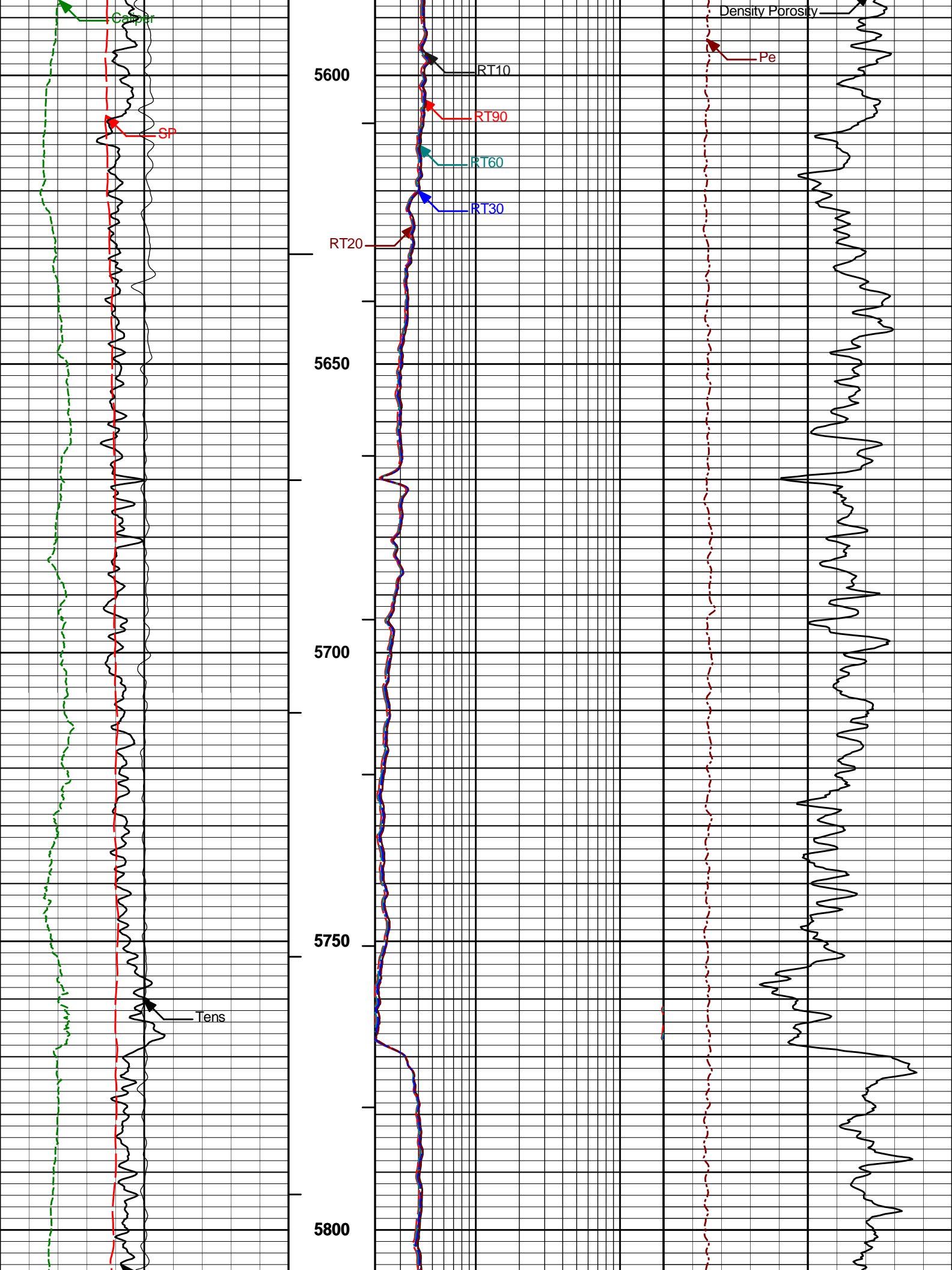


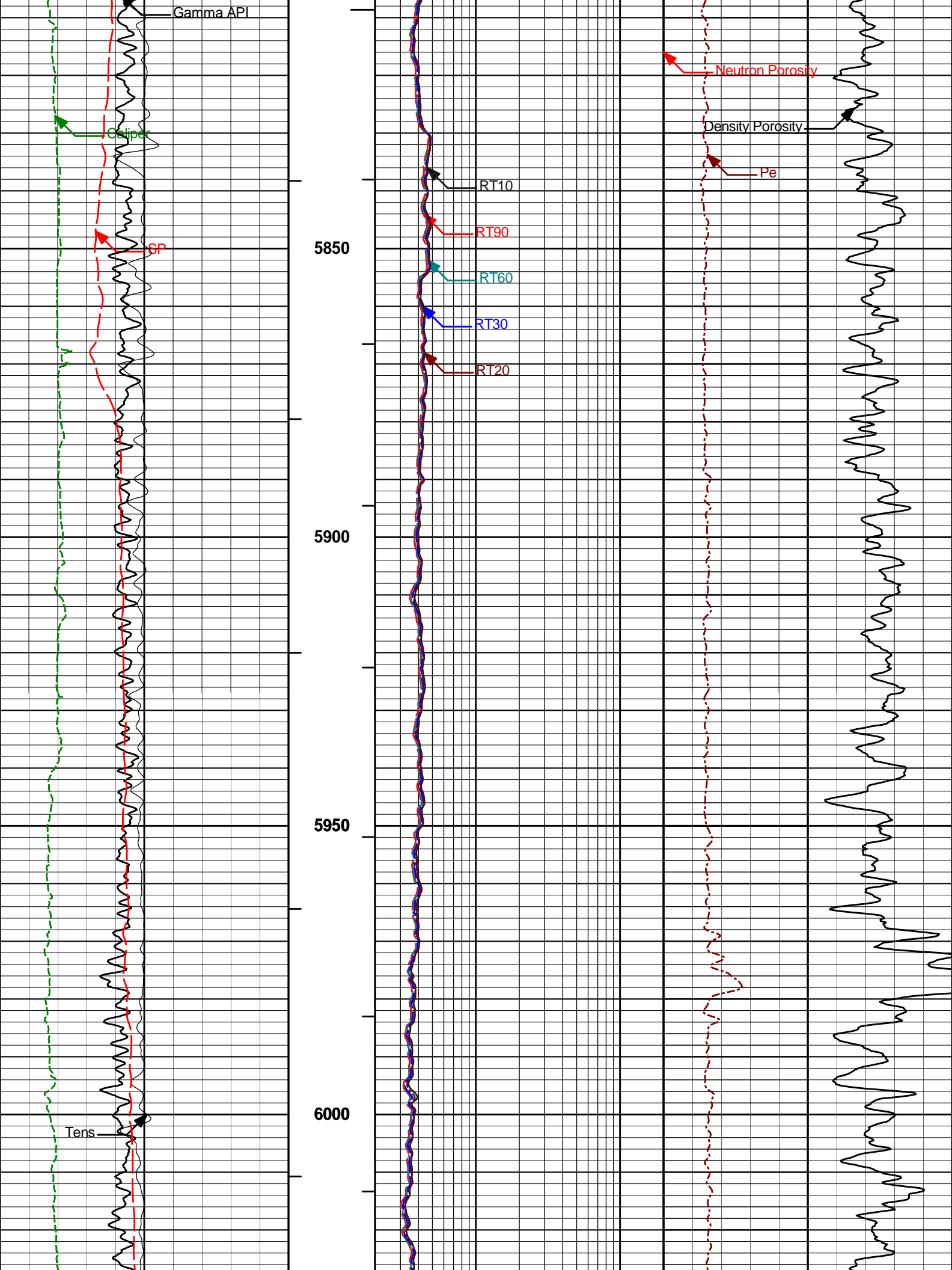


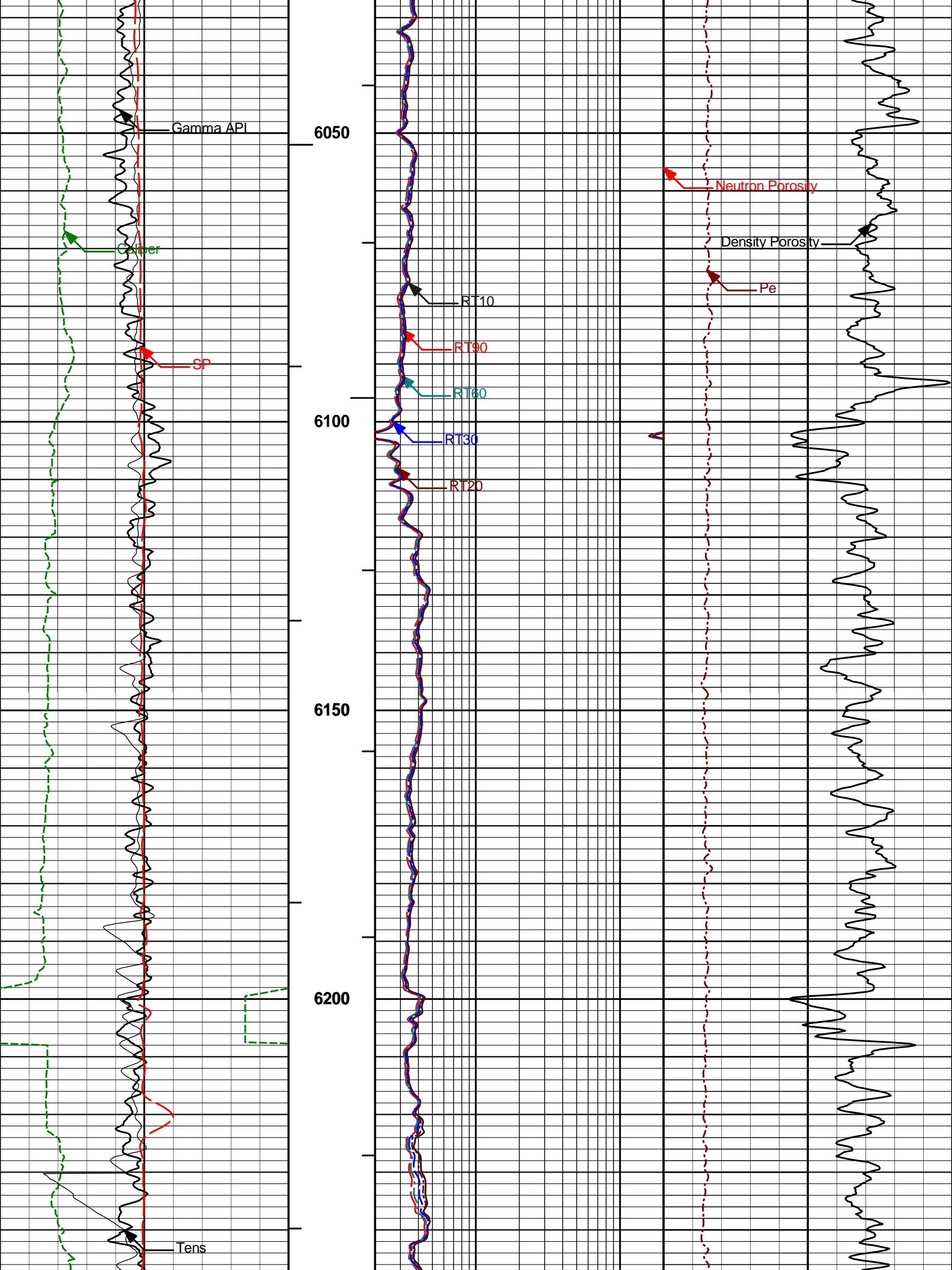


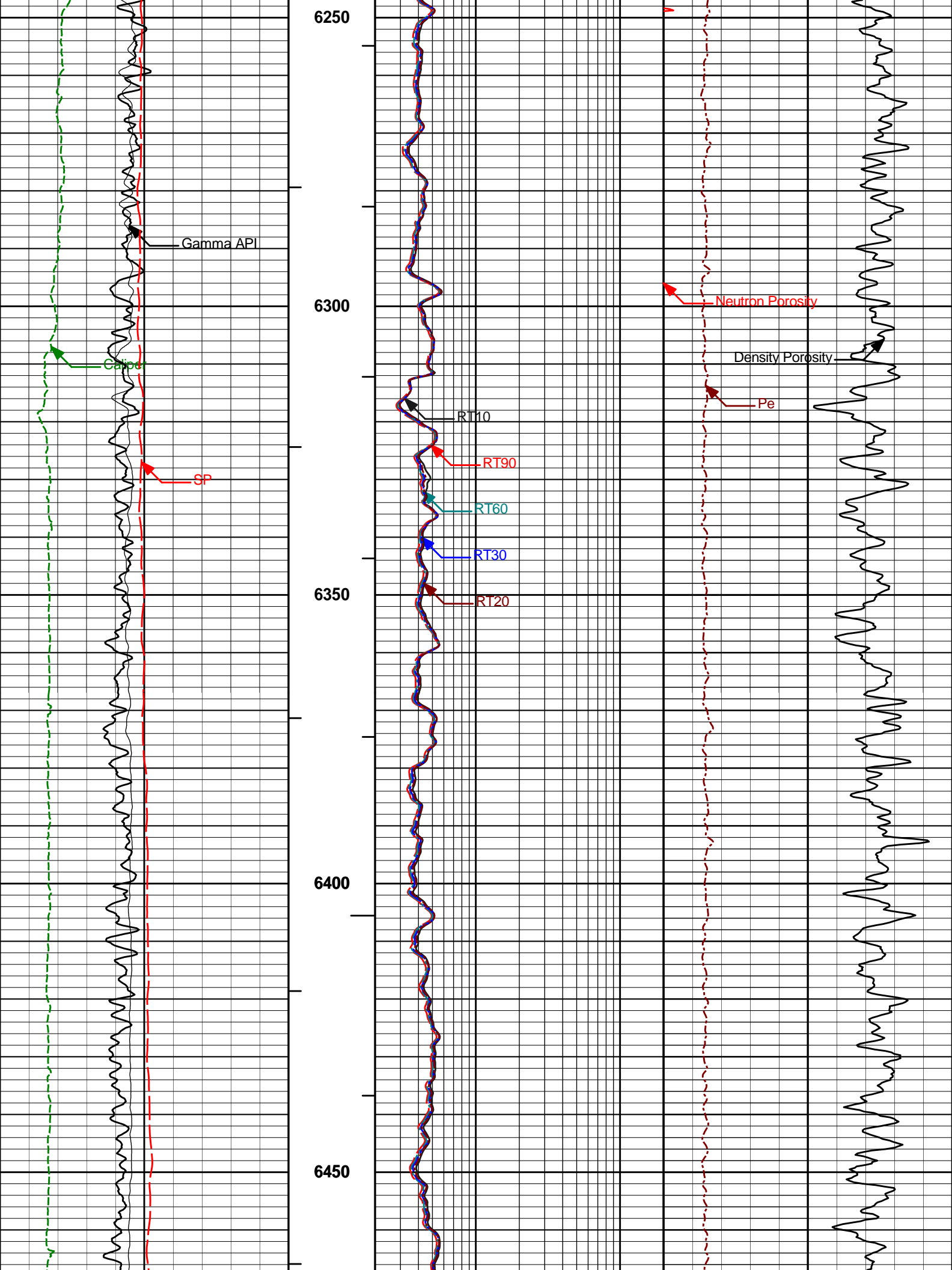


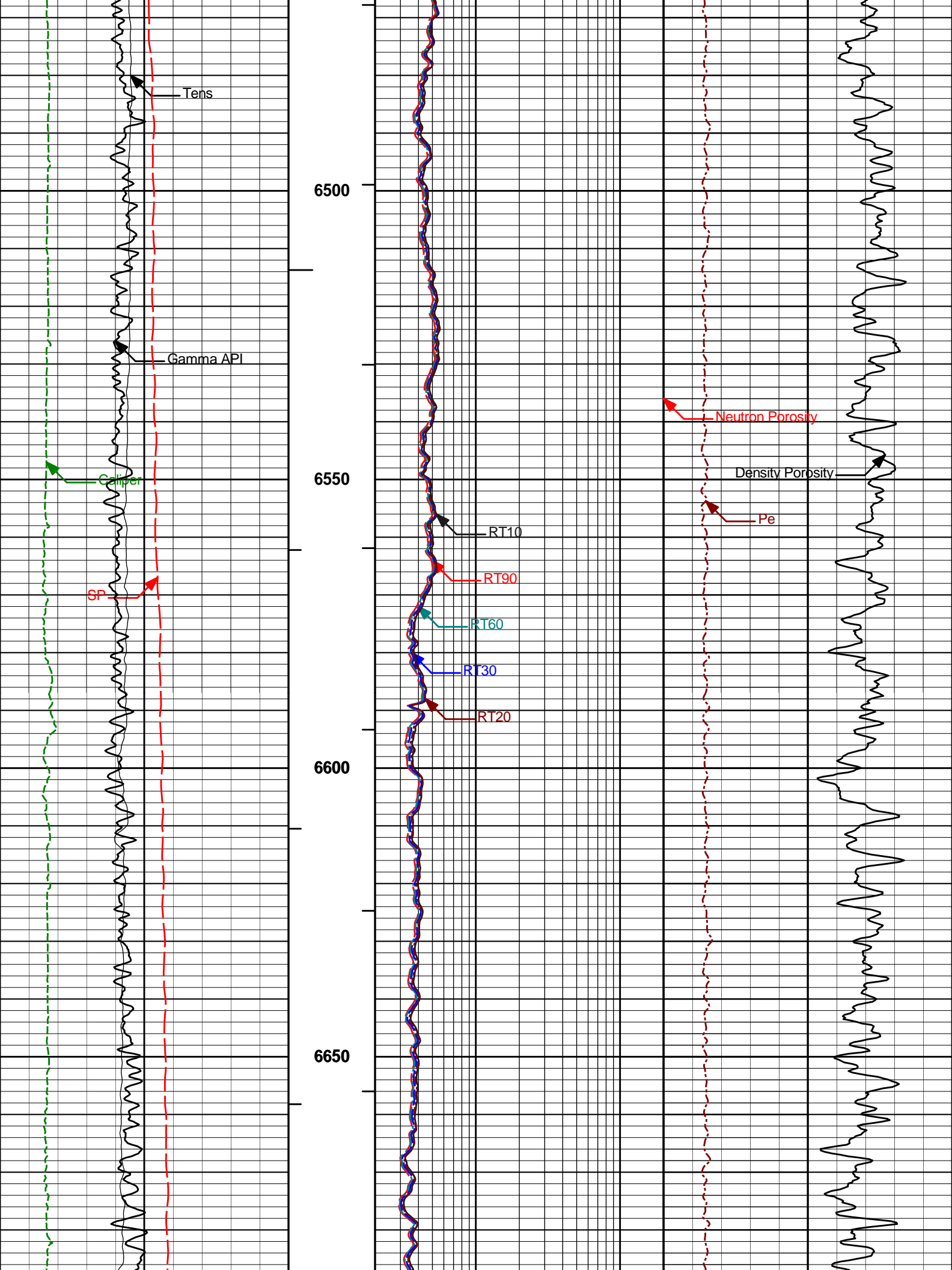


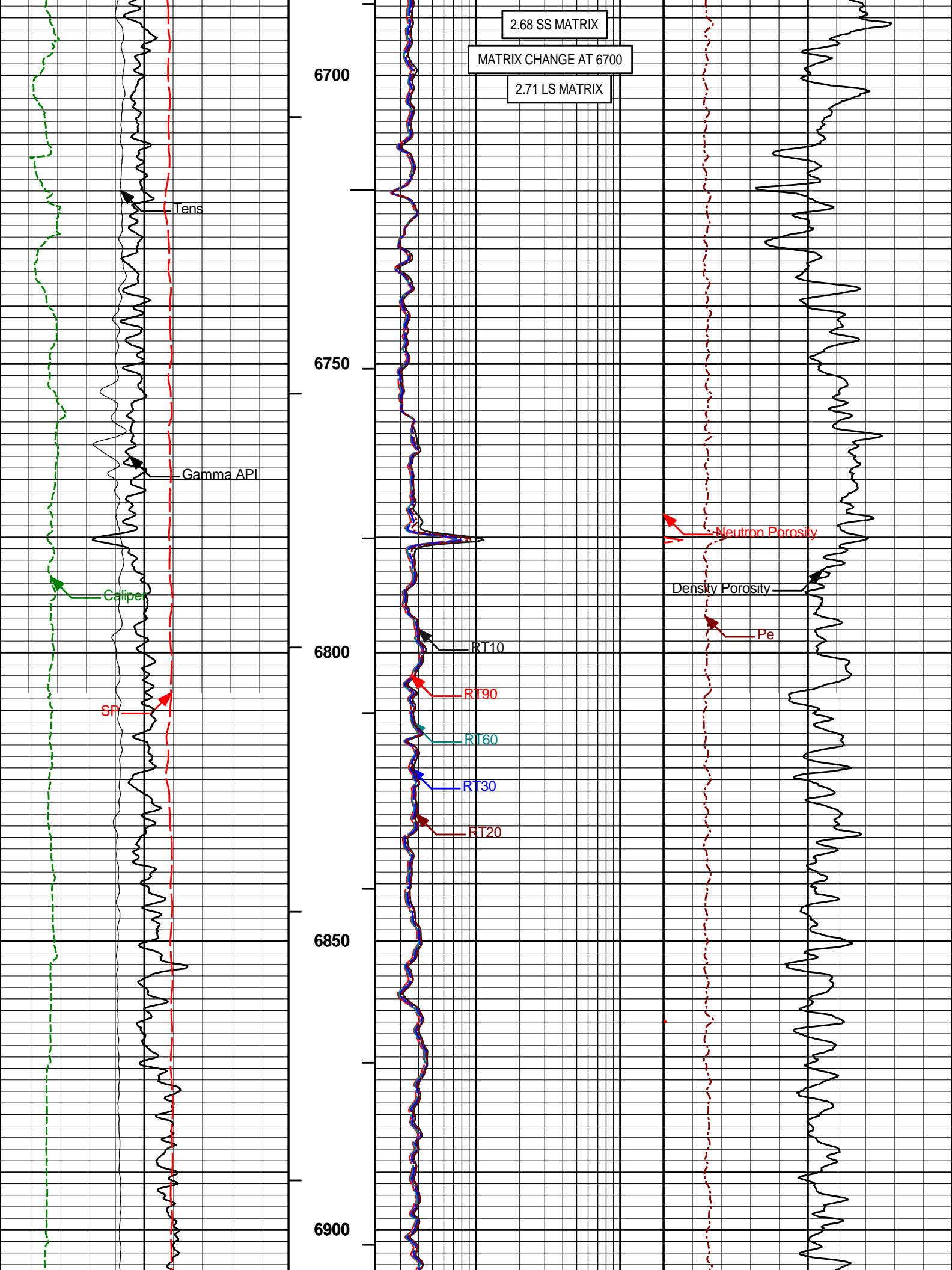


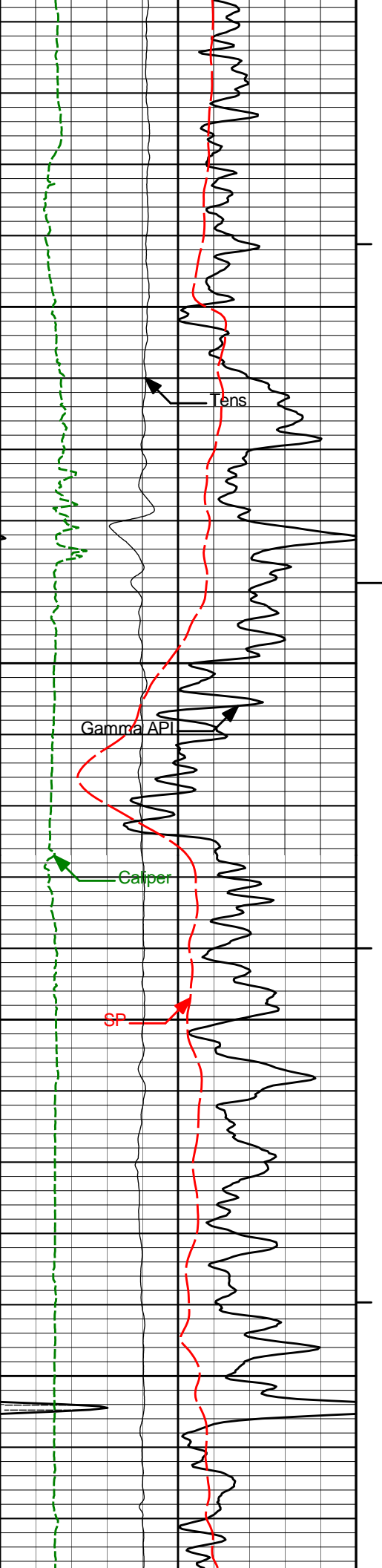










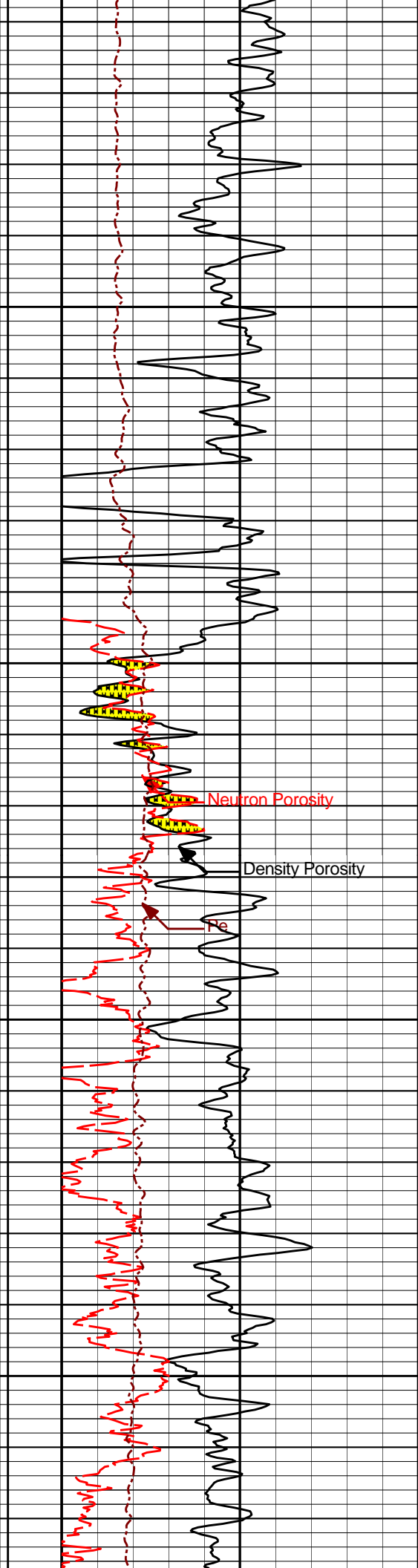
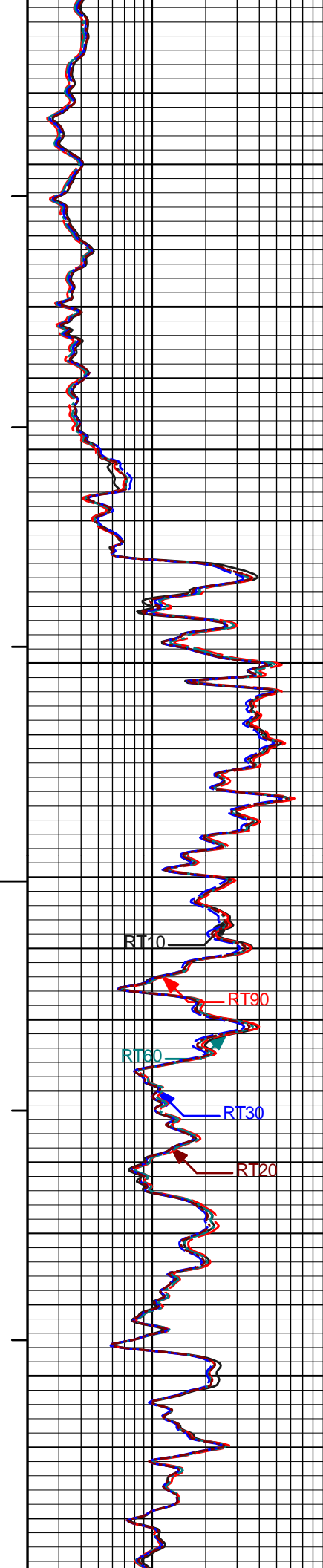


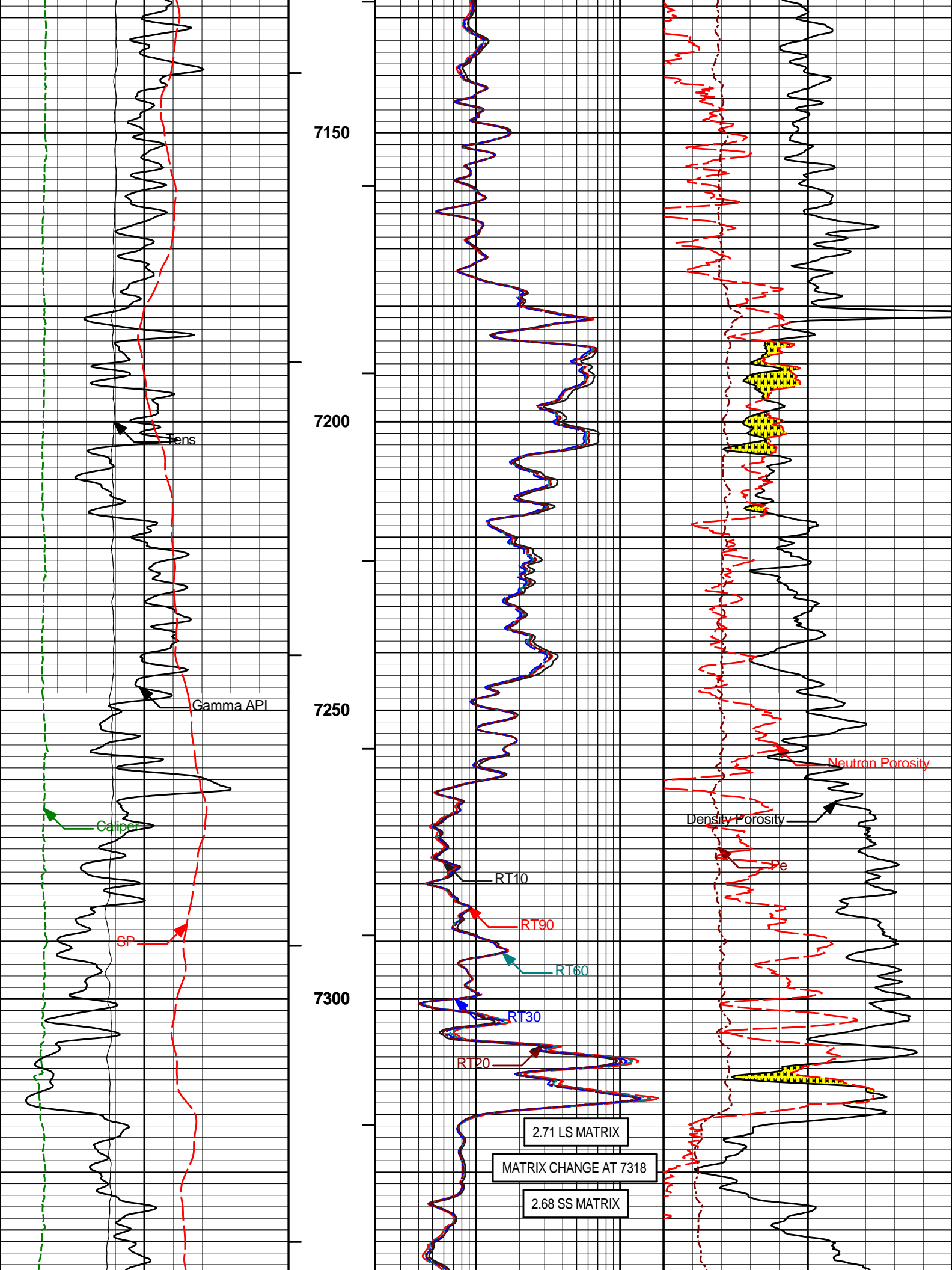
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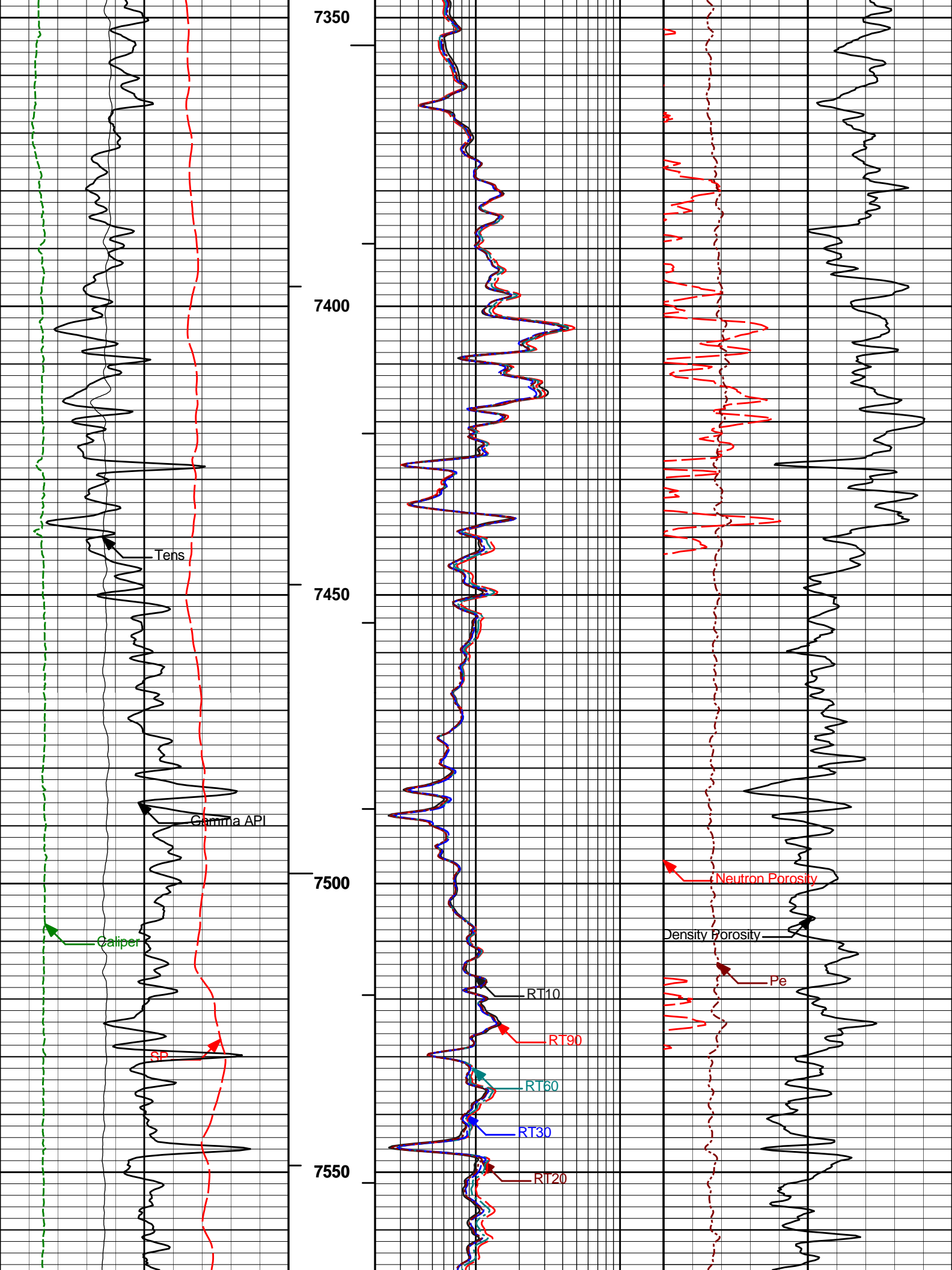
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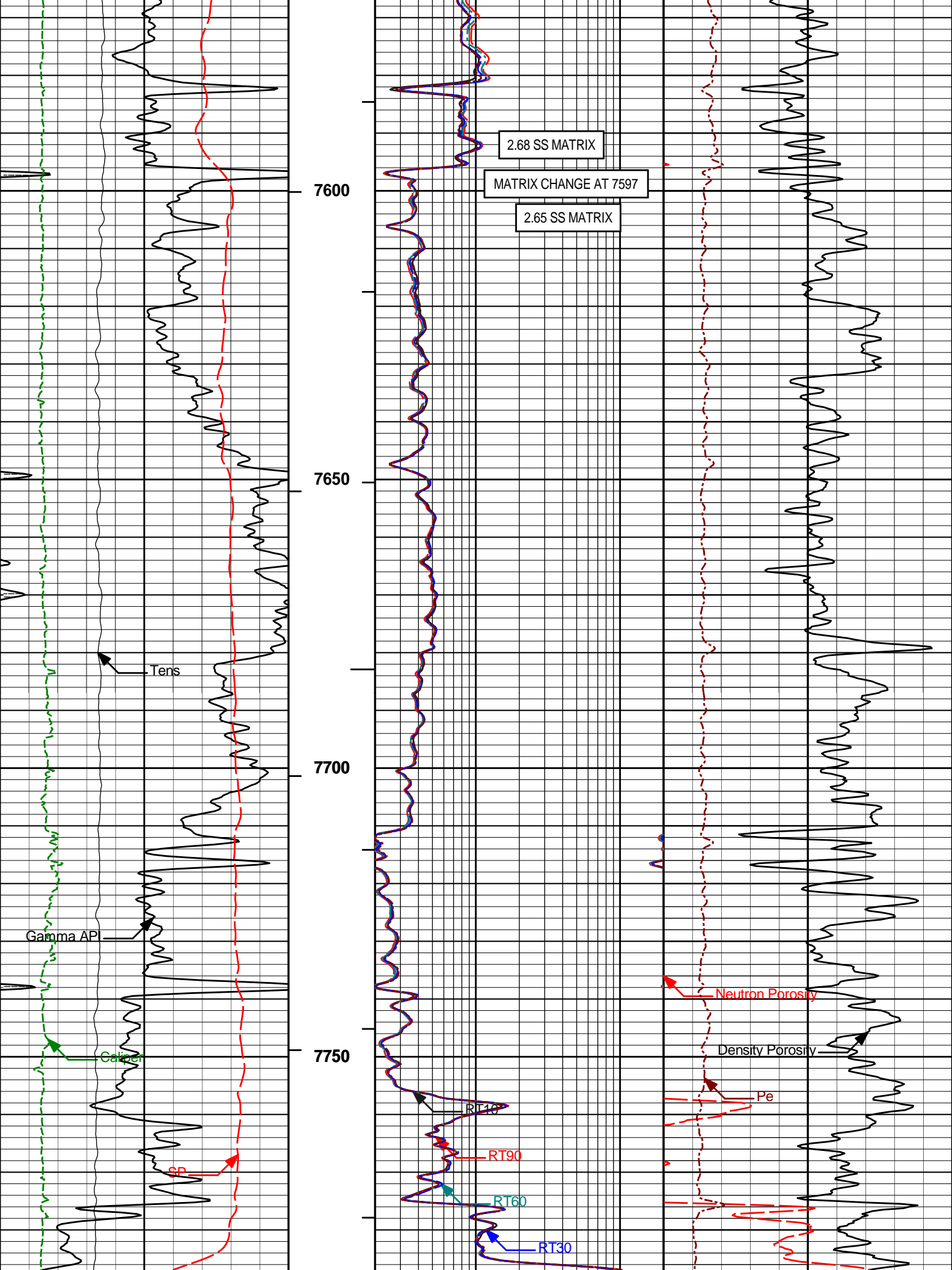
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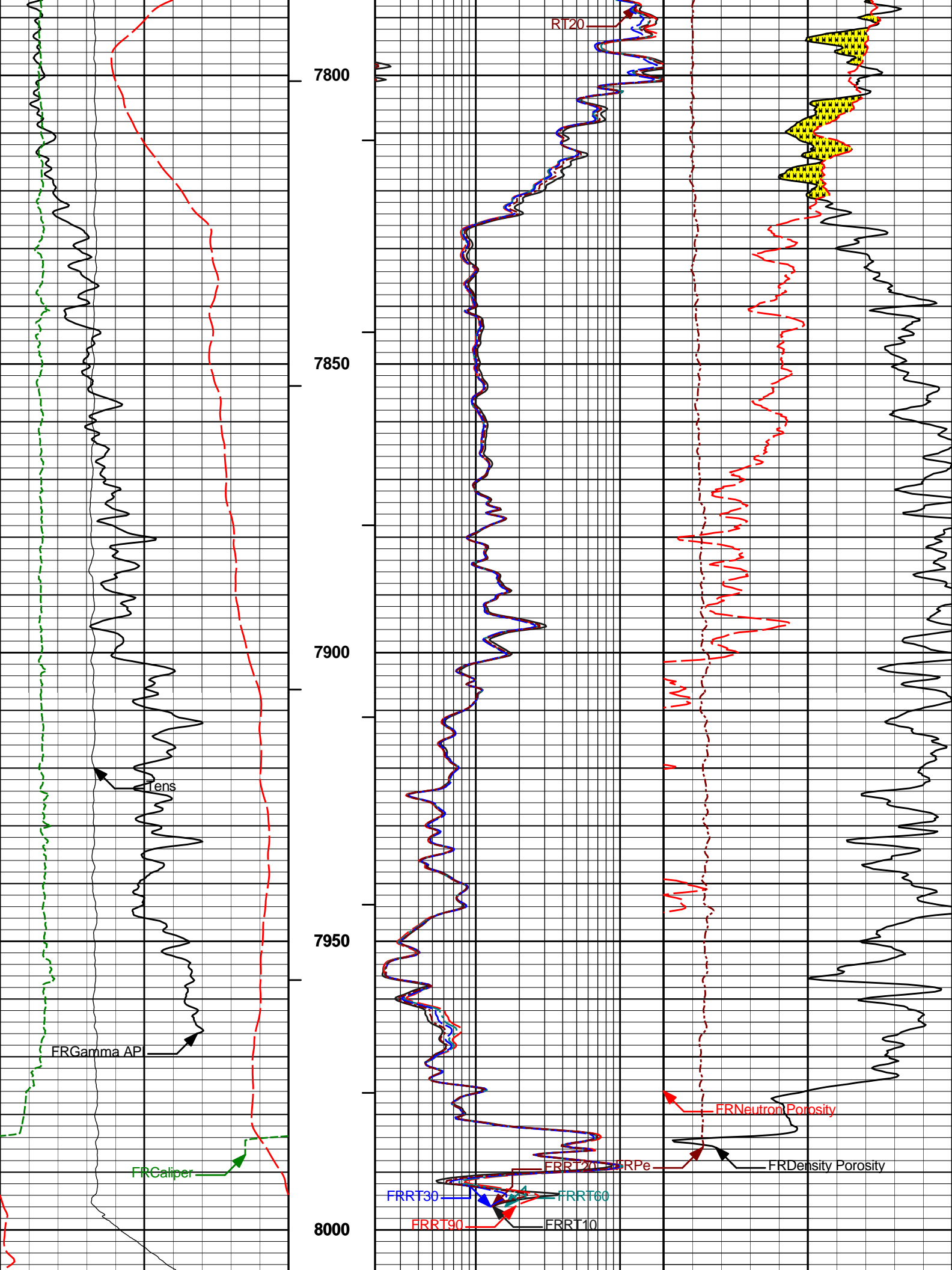
7100











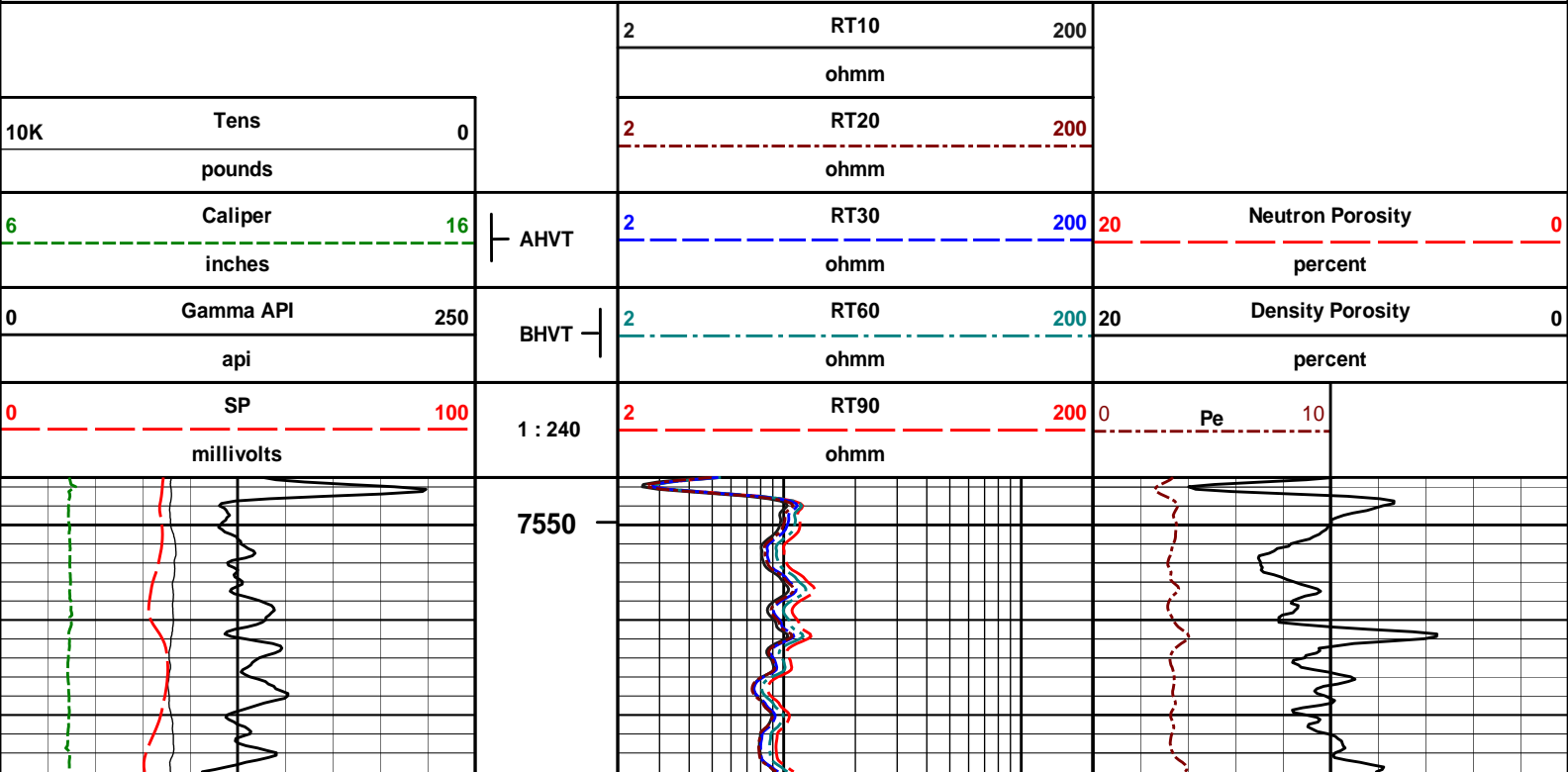
0	SP	100	1 : 240	2	RT90	200	0	Pe	10
	millivolts				ohmm				
0	Gamma API	250	BHVT	2	RT60	200	20	Density Porosity	0
	api				ohmm			percent	
6	Caliper	16	AHVT	2	RT30	200	20	Neutron Porosity	0
	inches				ohmm			percent	
10K	Tens	0		2	RT20	200			
	pounds				ohmm				
				2	RT10	200			
					ohmm				

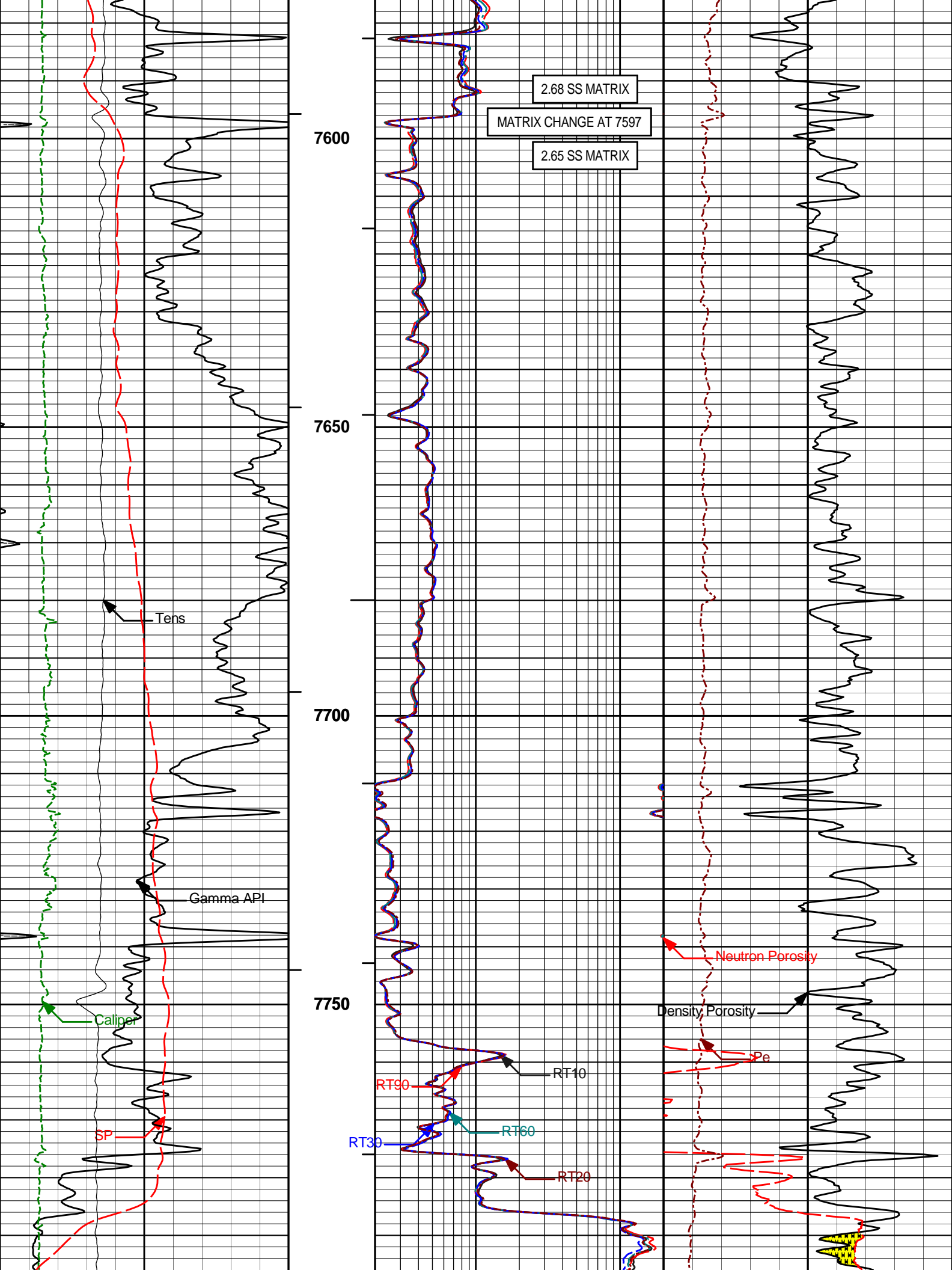
HALLIBURTON	Plot Time: 23-Feb-12 02:41:42 Plot Range: 545 ft to 8009.67 ft Data: HILFER_13_8D\Well Based\MAIN* Plot File: \COMP\MAIN
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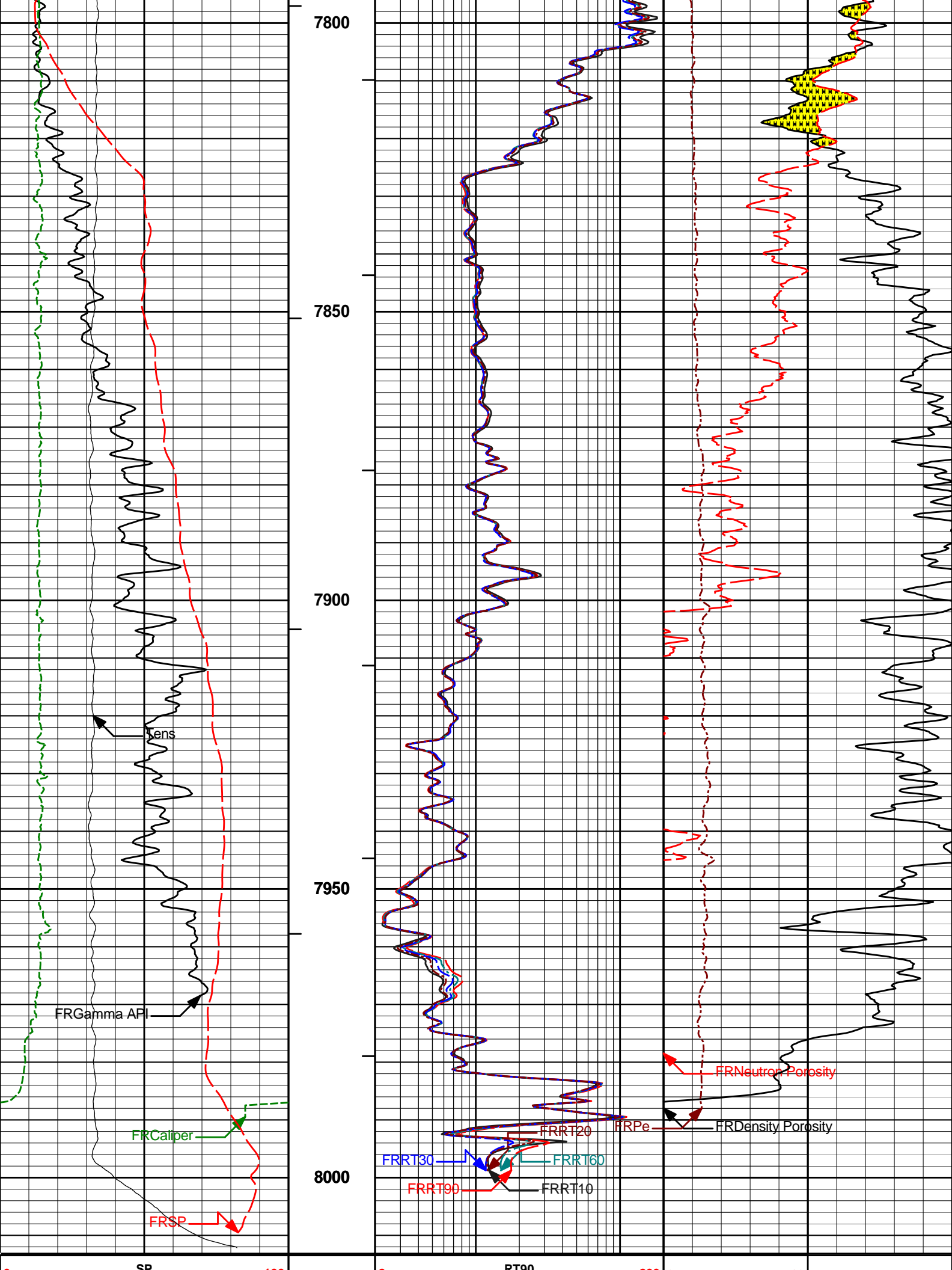
MAIN PASS 5" = 100'

HALLIBURTON	Plot Time: 23-Feb-12 02:41:43 Plot Range: 7545 ft to 8013.17 ft Data: HILFER_13_8D\Well Based\REPEAT* Plot File: \COMP\REPEAT
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REPEAT SECTION 5" = 100'







SR		100	1 : 240		2		RT50		200	0		Pe		10	
millivolts							ohmm								
0	Gamma API		250	BHVT		2		RT60		200	20		Density Porosity		0
api								ohmm					percent		
6	Caliper		16		AHVT	2		RT30		200	20		Neutron Porosity		0
inches								ohmm					percent		
10K	Tens		0			2		RT20		200					
pounds								ohmm							
						2		RT10		200					
								ohmm							



Plot Time: 23-Feb-12 02:41:44
 Plot Range: 7545 ft to 8013.17 ft
 Data: HILFER_13_8D\Well Based\REPEAT\
 Plot File: \COMP\REPEAT

REPEAT SECTION 5" = 100'



CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11259758
 Reference Calibration Date: 15-Feb-12 11:37:01

Engineer: C. BLUE
 Calibration Date: 22-Feb-12 17:42:04

Software Version: WL INSITE R3.4.4 (Build 2)
 Calibration Version: 1

Calibrator Source S/N: TB 290
 Calibrator API Reference:230.00 api
 Equivalent Calibrator API Reference:234.0 api

Measurement	Measured	Calibrated	Units
Background	67.9	71.9	api
Background + Calibrator	288.9	306.0	api
Calibrator	221.0	234.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11259758
 Reference Calibration Date: 22-Feb-12 17:42:04

Engineer: C. BLUE
 Calibration Date: 22-Feb-12 17:44:21

Software Version: WL INSITE R3.4.4 (Build 2)
 Calibration Version: 1

Calibrator Source S/N: TB 290
 Calibrator API Reference:230.00 api
 Equivalent Calibrator API Reference:234.0 api

Field Verification	Shop	Field	Units
Background	71.9	72.6	api
Background + Calibrator	306.0	305.3	api
Calibrator	234.0	232.7	api

Shop	Field	Difference	Tolerance
234.0	232.7	1.3	+/- 9.00

ACCELEROMETER SHOP CALIBRATION

Tool Name: GTET - 11259758

Reference Calibration Date: 21-Jul-11 12:28:39

Engineer: C. BLUE

Calibration Date: 04-Oct-11 16:10:06

Software Version: WL INSITE R3.4.2 (Build 2)

Calibration Version: 1

Horizontal-1 Telemetry	Horizontal-2 Telemetry	Vertical Telemetry	Units	
-204.64	-107.64	-16291.27	cnts	
	Coefficient	Coefficient Value	Tolerance	
	Gain	-0.000062	----	
	Offset	-0.010	----	
	Noise	0.0004	0.0000 - 0.0030	
Orientation	Measured	Tolerance	Calibrated	Tolerance
Horizontal	0.00	-0.10 - 0.10	0.00	-0.10 - 0.10
Vertical	1.00	0.90 - 1.10	1.00	0.90 - 1.10

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 10935690

Reference Calibration Date: 18-Jan-12 09:03:07

Engineer: C. BLUE

Calibration Date: 18-Jan-12 09:17:16

Software Version: WL INSITE R3.4.4 (Build 2)

Calibration Version: 1

Logging Source S/N: DSN-430

Tank Serial Number: 11068236

Reference value assigned to Tank: 53.720

Snow Block S/N: 100133139C

Calibration Tank Water Temperature: 60 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	1.042	1.042	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)				
Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decP):	0.2224	0.2223	0.0001	+/- 0.0020
Calibrated Ratio:	10.11	10.11	0.002	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decP):	0.0837	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 10935690

Reference Calibration Date: 18-Jan-12 09:17:16

Engineer: C. BLUE

Calibration Date: 22-Feb-12 17:49:45

Software Version: WL INSITE R3.4.4 (Build 2)

Calibration Version: 1

Logging Source S/N: DSN-430

Snow Block S/N: 100133139C

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0837	0.0769	-0.0068	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name: SDLT - 11812177

Reference Calibration Date: 09-Feb-12 15:19:39

Engineer: C. BLUE

Calibration Date: 09-Feb-12 15:25:01

Software Version: WL INSITE R3.4.4 (Build 2)

Calibration Version: 1

CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-3311.60	-3242.70	-7000.00 - -1000.00
Pad Gain	0.0003953	0.0003900	0.000200 - 0.000600
Arm Offset	-4427.63	-4499.94	-5000.00 - 3000.00
Arm Gain	0.0005568	0.0005615	0.000300 - 0.000700
Arm Power	-0.000004810	-0.000005184	-0.000010 - 0.000010

The ring diameter is computed from: $\text{DIAMETER} = \text{PAD EXTENSION} + \text{ARM EXTENSION} + \text{TOOL DIAMETER}$

Tool Diameter: 4.50 in

CALIBRATION RINGS

Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value
PAD EXTENSION:				
Small Ring (in)	2.00	2.00	0.00	+/- 0.20
Medium Ring (in)	3.77	3.75	-0.02	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.50	6.50	0.00	+/- 0.20
Medium Ring (in)	8.24	8.25	0.01	+/- 0.20
Large Ring (in)	15.01	15.00	-0.01	+/- 0.20

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:	Passed
Ring-Measurement Check:	Passed

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:	Passed
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SDLT CALIPER FIELD CALIBRATION

Tool Name: SDLT - 11812177

Reference Calibration Date: 09-Feb-12 15:25:01

Engineer: C. BLUE

Calibration Date: 22-Feb-12 17:38:34

Software Version: WL INSITE R3.4.4 (Build 2)

Calibration Version: 1

MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.85	0.10	+/- 0.10
Ring Diameter	8.25	8.14	-0.11	+/- 0.15

<div>PASS/FAIL SUMMARY</div> <div><div>Pad Extension Check:</div><div>Passed</div></div> <div><div>Diameter Check:</div><div>Passed</div></div>									
<div>ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION</div> <div><div>Tool Name:ACRt Sonde - E5787-S5797</div><div>Reference Calibration Date:28-Jul-11 17:33:20</div></div> <div><div>Engineer:C. BLUE</div><div>Calibration Date:17-Feb-12 03:46:27</div></div> <div><div>Software Version:WL INSITE R3.4.4 (Build 2)</div><div>Calibration Version:1</div></div>									
TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.0074	1.05	0.95	1.0078	1.05	0.95	1.0038	1.05
A2 (50")	0.95	1.0089	1.05	0.95	1.0116	1.05	0.95	1.0121	1.05
A3 (29")	0.95	1.0002	1.05	0.95	1.0009	1.05	0.95	1.0000	1.05
A4 (17")	0.95	0.9907	1.05	0.95	0.9889	1.05	0.95	0.9911	1.05
A5 (10")	N/A	N/A	N/A	0.95	0.9880	1.05	0.95	0.9887	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9726	1.05	0.95	0.9728	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	-2.992	2	-6	-4.284	-2	-8	-5.526	-2
A2 (50")	-7	-1.100	-1	-6	-3.385	-2	-7	-4.538	-2
A3 (29")	-27	-15.583	-9	-9	-4.174	-3	-7	-3.135	-1
A4 (17")	-180	-117.008	-60	-45	-35.477	-15	-39	-27.073	-13
A5 (10")	N/A	N/A	N/A	-150	-90.891	-50	-80	-47.397	-10
A6 (6")	N/A	N/A	N/A	175	297.724	525	90	151.286	270
TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION				
Signal	Lower	R	Upper		Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)	
12K	0.6	0.7906	1.3		Mud Cell	0.95	1.006	1.05	
36K	1.0	1.8311	2.0						
72K	1.0	1.0474	2.0						
<div>SPECTRAL DENSITY SHOP CALIBRATION</div> <div><div>Tool Name:SDLT Pad - M177P867</div><div>Reference Calibration Date:28-Jan-12 14:50:27</div></div> <div><div>Engineer:C. BLUE</div><div>Calibration Date:28-Jan-12 15:09:26</div></div> <div><div>Software Version:WL INSITE R3.4.4 (Build 2)</div><div>Calibration Version:1</div></div>									
<div>Logging Source S/N: 5256 GW</div> <div>Aluminum Block S/N: 63066</div> <div>Magnesium Block S/N: BRIGHTON</div> <div>Density: 2.602g/cc</div> <div>Density: 1.691g/cc</div> <div>Pe: 3.100</div> <div>Pe: 2.650</div>									
DENSITY CALIBRATION SUMMARY									
	Measurement	Previous Value	New Value	Control Limit					
	Near Bar Gain	1.0402	1.0477	0.90 - 1.10					
	Near Dens Gain	1.0092	1.0177	0.90 - 1.10					
	Near Peak Gain	0.9921	1.0001	0.90 - 1.10					
	Near Lith Gain	0.9399	0.9240	0.90 - 1.10					
	Far Bar Gain	1.0079	1.0080	0.90 - 1.10					
	Far Dens Gain	0.9954	0.9949	0.90 - 1.10					

Far Peak Gain	0.9921	0.9884	0.90 - 1.10
Far Lith Gain	0.9752	0.9712	0.90 - 1.10
Near Bar Offset	-0.3495	-0.4192	NONE
Near Dens Offset	-0.0493	-0.1264	NONE
Near Peak Offset	0.1060	0.0380	NONE
Near Lith Offset	0.5395	0.6741	NONE
Far Bar Offset	-0.0784	-0.0775	NONE
Far Dens Offset	0.0388	0.0436	NONE
Far Peak Offset	0.0601	0.0912	NONE
Far Lith Offset	0.2159	0.2458	NONE
Near Bar Background	859.86	858.25	700 - 1450
Near Dens Background	286.57	283.97	230 - 480
Near Peak Background	124.61	124.98	100 - 210
Near Lith Background	152.19	153.23	125 - 260
Far Bar Background	670.31	673.14	450 - 900
Far Dens Background	263.57	263.43	175 - 345
Far Peak Background	103.88	104.40	70 - 140
Far Lith Background	106.80	107.68	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.691	1.691	0.000	+/- 0.015
Pe	2.582	2.596	0.014	+/- 0.150
ALUMINUM				
Density (g/cc)	2.604	2.602	-0.002	+/- 0.01500
Pe	3.071	3.056	-0.015	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0001	+/- 0.0110	0.0008	+/- 0.0140
Magnesium Block	0.0001	+/- 0.0110	-0.0006	+/- 0.0140
Aluminum Block	-0.0003	+/- 0.0110	-0.0002	+/- 0.0140
Resolution	8.63	6.00 - 11.50	8.87	6.00 - 11.50
Internal Verifier(B+D+P+L)	1420	1200 - 2700	1149	800 - 1700

PASS/FAIL SUMMARY	
Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

SPECTRAL DENSITY FIELD CHECK

Tool Name: SDLT Pad - M177P867

Reference Calibration Date: 28-Jan-12 15:09:26



Engineer:	C. BLUE	Calibration Date:	22-Feb-12 17:36:56	
Software Version:	WL INSITE R3.4.4 (Build 2)	Calibration Version:	1	

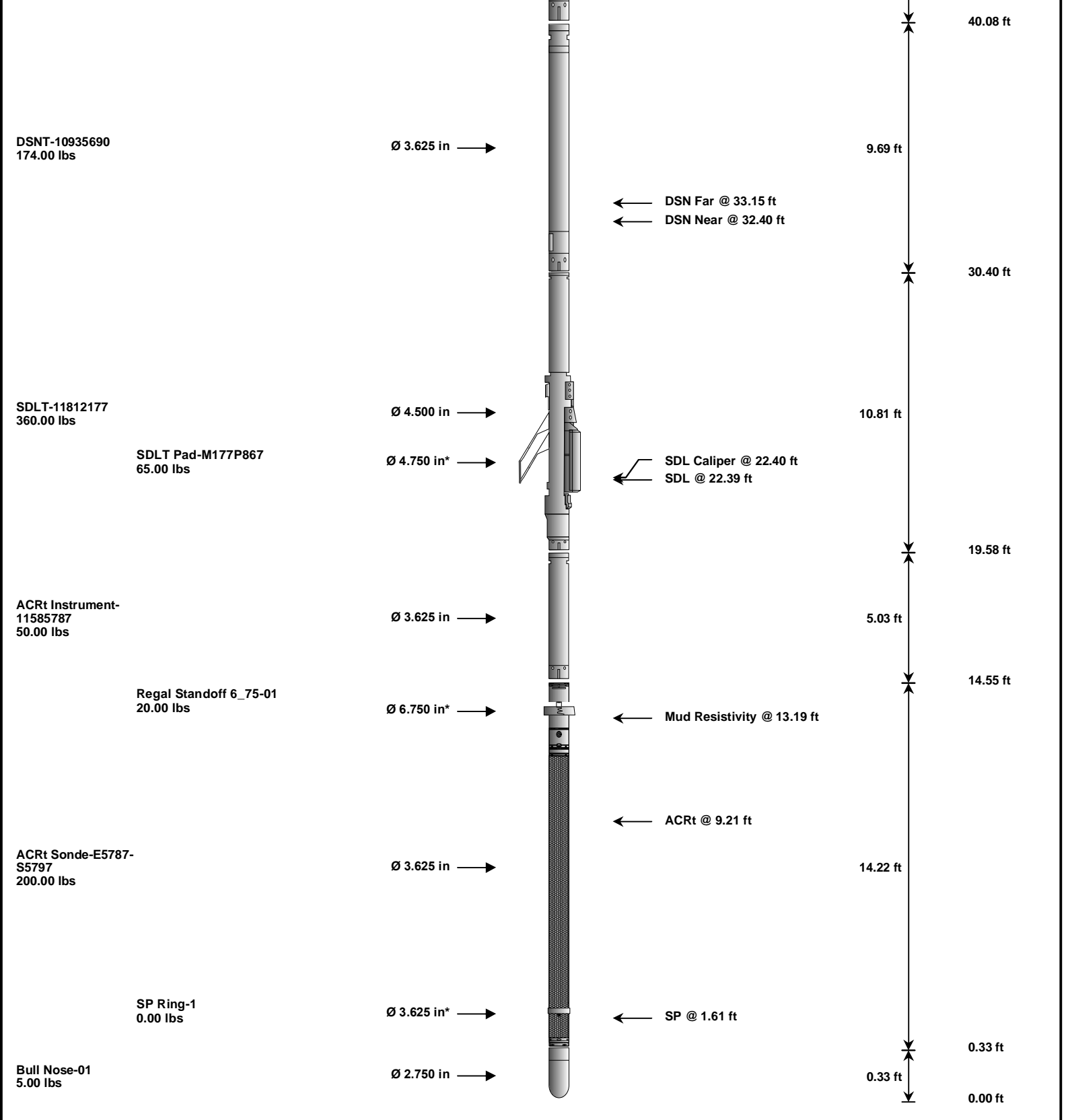
Pad Temperature: 61.1 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1420.431	1423.668	3.237	15.213
Far (B+D+P+L) cps	1148.642	1149.008	0.366	17.781
Near Resolution	8.63	8.60	-0.030	0.50
Far Resolution	8.87	9.06	0.190	1.00

PASS/FAIL SUMMARY	
Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11259758						
Gamma Ray Calibrator	234.0	232.7	-----	1.3	+/- 9.00	api
DSNT-10935690						
Snow-Block Porosity	0.0837	0.0769	-----	0.0068	+/- 0.0150	decp
SDLT-11812177						
Pad Extension	3.75	3.85	-----	-0.10	+/-0.10	in
Ring Diameter	8.25	8.14	-----	0.110	+/-0.15	in
ACRt Sonde-E5787-S5797						
Mud Cell	1.006	-----	-----	0.000	-----	ohm-m
SDLT Pad-M177P867						
Near(B+D+P+L)	1420.431	1423.668	-----	-3.237	+/-15.213	cps
Far(B+D+P+L)	1148.642	1149.008	-----	-0.366	+/-17.781	cps
Data: HILFER_13_8D\0001 TEST\IDLE					Date: 22-Feb-12 23:46:50	

<div>HALLIBURTON</div> <div>TOOL STRING DIAGRAM REPORT</div>						
Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
RWCH-11078326 135.00 lbs		Ø 3.625 in →		Load Cell @ 51.17 ft	6.25 ft	54.85 ft
				BH Temperature @ 50.60 ft		
GTET-11259758 165.00 lbs		Ø 3.625 in →		GammaRay @ 42.54 ft	8.52 ft	48.60 ft



Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)	
RWCH	Releasable Wireline Cable Head		11078326	135.00	6.25	48.60	300.00	
GTET	Gamma Telemetry Tool		11259758	165.00	8.52	40.08	60.00	
DSNT	Dual Spaced Neutron		10935690	174.00	9.69	30.40	60.00	
SDLT	Spectral Density Tool		11812177	360.00	10.81	19.58	60.00	
SDLP	Density Insite Pad		M177P867	65.00	2.55	*	21.79	60.00
ACRt	Array Compensated True Resistivity Instrument Section		11585787	50.00	5.03		14.55	300.00
ACRt	Array Compensated True Resistivity		E5787-S5797	200.00	14.22		0.33	300.00
SP	SP Ring		1	0.00	0.25	*	1.61	300.00
RSOF	Regal Standoff 6.75in		01	20.00	0.52	*	13.23	300.00
BLNS	Bull Nose		01	5.00	0.33		0.00	300.00
Total				1 174.00	54.85			

COMPANY	SYNERGY RESOURCES CORPORATION		
WELL	HILFER 13-8D		
FIELD	WATTENBERG		
COUNTY	WELD	STATE	CO
HALLIBURTON		SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY	