

ARRAY COMPENSATED
TRUE RESISTIVITY
SPECTRAL DENSITY
DUAL SPACED NEUTRON

Fold here

Service Ticket No.: 900194119						API Serial No.: 05123364100000						PGM Version: WL INSITE R3.8.4 (Build 5)											
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		ECC		N/A			
Rmc @ Meas. Temp.				@				@						11302817									
Source Rmf		Rmc												11294353									
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.		11812883		Serial No.								Serial No.		11795867		Serial No.		11812167					
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.		GTET		Spacing								Log Type		GAM-GAM		Log Type		NEU-NEU					
Type		SCINT										Source Type		Cs-137		Source Type		Am241Be					
Length		8"		LSA [Y/N]								Serial No.		5471GW		Serial No.		DSN434					
Distance to Source		10'		FWDA [Y/N]								Strength		1.78 Ci		Strength		15 Ci					

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	7818	REC	0	200				20	0	2.68	20	0	SAND
ONE	7818	7400	REC	0	200				20	0	2.71	20	0	LIME
ONE	7400	3150	REC	0	200				20	0	2.68	20	0	SAND
ONE	3150	CSG	REC	0	200									
DIRECTIONAL INFORMATION														
Maximum Deviation			27.70 deg		@		2954.00 ft			KOP			@	
Remarks: RWCH-GTET-DSNT-SDLT-ACRt RUN IN COMBINATION.														
ANNULAR HOLE VOLUME CALCULATED USING 4.5-INCH PRODUCTION CASING.														
TENSION PULLS, WASHOUTS AND BOREHOLE RUGOSITY AFFECT LOG RESPONSE.														
TOOL STRING RUN IN SLICK CONFIGURATION AT CLIENT'S REQUEST.														
YOUR CREW TODAY: M. BURNETT, A. AXE														
RIG: ENSIGN 7														
THANK YOU FOR USING HALLIBURTON LOGGING 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														

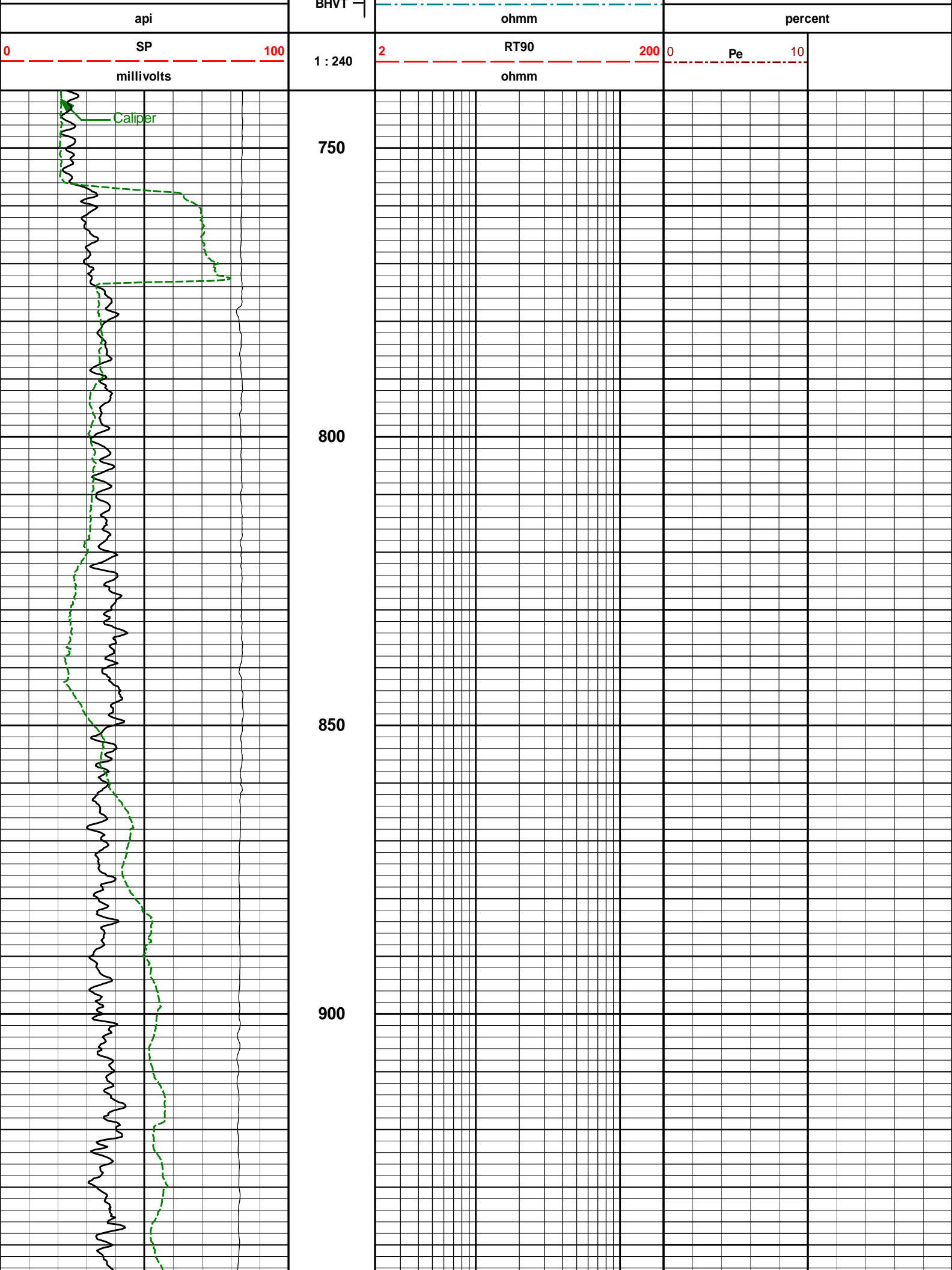


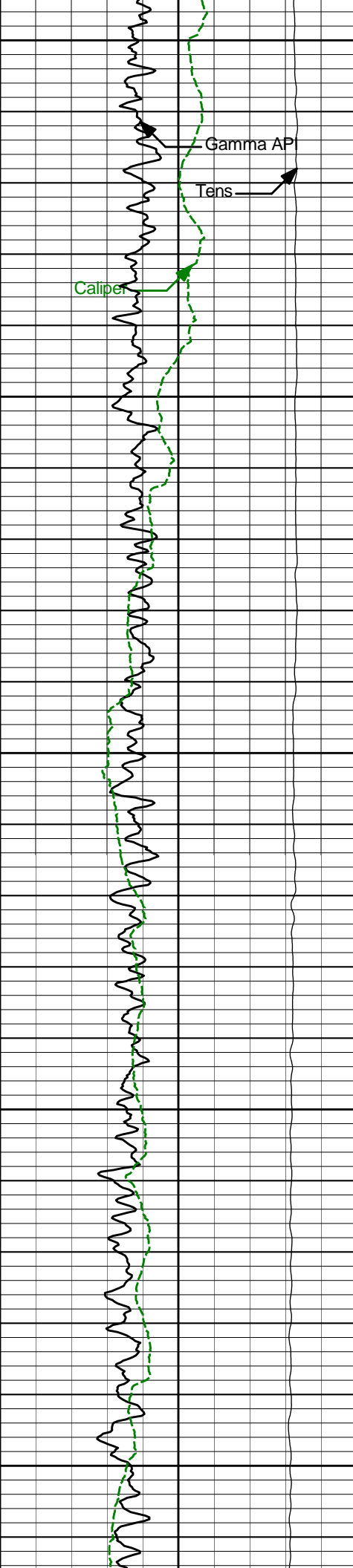
PARAMETERS REPORT

Depth (ft))	Tool Name	Mnemonic	Description	Value	Units
TOP					
7400.00	DSNT	NLIT	Neutron Lithology	Sandstone	
	SDLT Pad	DMA	Formation Density Matrix	2.680	g/cc
7818.00	DSNT	NLIT	Neutron Lithology	Limestone	
	SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
	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	9.600	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	850.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	1.450	ohmm
	SHARED	TRM	Temperature of Mud	41.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	35.0	degF
	SHARED	TD	Total Well Depth	7964.00	ft
	SHARED	BHT	Bottom Hole Temperature	194.0	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	
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	Sandstone	
DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTP	Temperature Correction Type	None	
DSNT	DPRS	DSN Pressure Correction Type	None	
DSNT	SHCO	View More Correction Options	No	
DSNT	UTVD	Use TVD for Gradient Corrections?	No	
DSNT	LHWT	Logging Horizontal Water Tank?	No	
SDLT	CLOK	Process Caliper Outputs?	Yes	
SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	No	
SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.680	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	0.25	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Up	
ACRt Sonde	TPOS	Tool Position	Eccentered	
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: HIRSCH_14-24\0002 TRIPLE_RED_SLICK\003.01 04-Feb-13 08:46 Up				Date: 04-Feb-13 08:49:07

<div>HALLIBURTON</div>					Plot Time: 04-Feb-13 09:58:45 Plot Range: 740 ft to 7975.17 ft Data: HIRSCH_14-24\Well Based** Plot File: \\COMP\MAIN							
MAIN PASS 5" = 100'												
<div>10K</div> <div>Tens</div> <div>0</div>			<div>2</div> <div>RT10</div> <div>200</div>									
<div>pounds</div>			<div>2</div> <div>RT20</div> <div>200</div>									
			<div>ohmm</div>									
<div>6</div> <div>Caliper</div> <div>16</div>			<div>2</div> <div>RT30</div> <div>200</div>			<div>20</div> <div>Neutron Porosity</div> <div>0</div>						
<div>inches</div>			<div>ohmm</div>			<div>percent</div>						
<div>0</div> <div>Gamma API</div> <div>250</div>			<div>2</div> <div>RT60</div> <div>200</div>			<div>20</div> <div>Density Porosity</div> <div>0</div>						





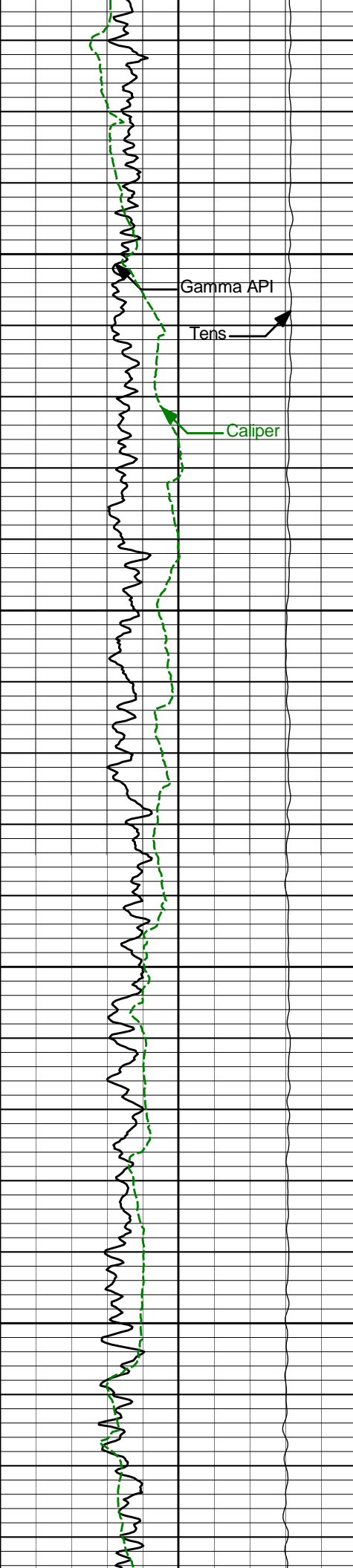
950

1000

1050

1100

1150



1200

Gamma API

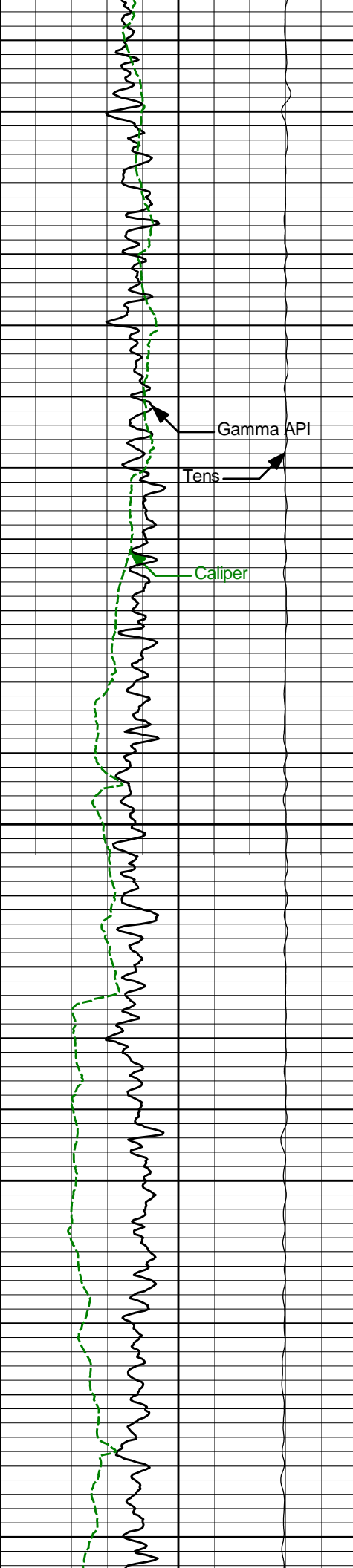
Tens

Caliper

1250

1300

1350



1400

Gamma API

Tens

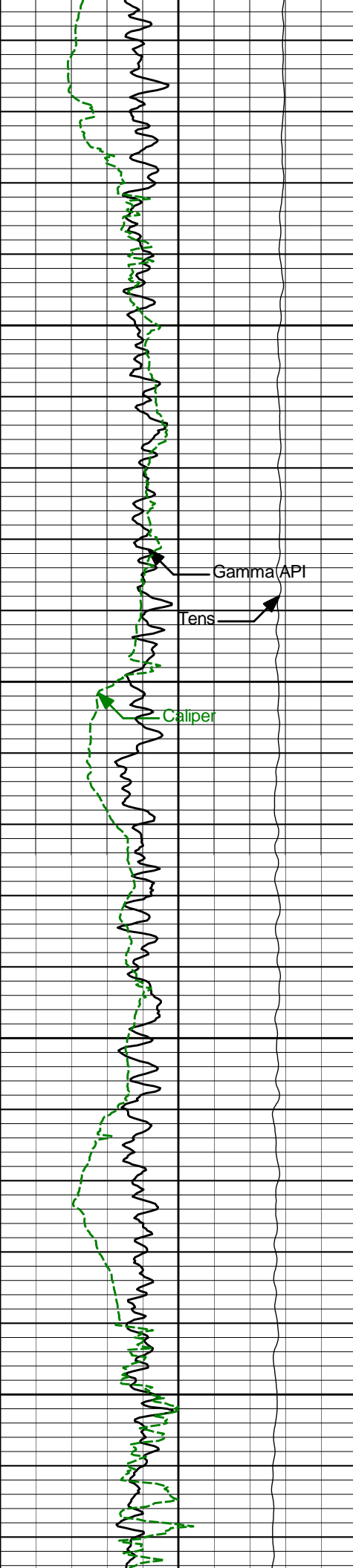
Caliper

1450

1500

1550

1600



1650

Gamma API

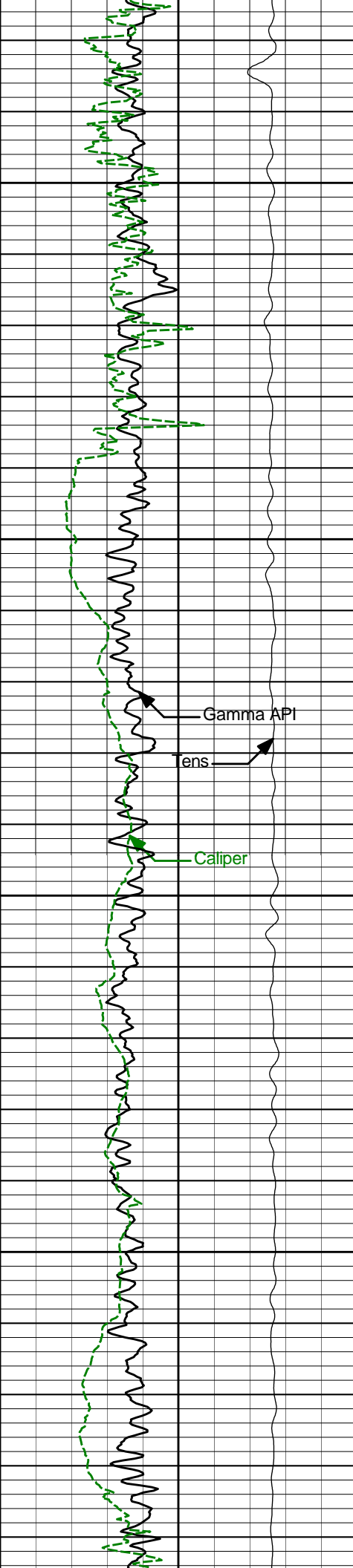
Tens

1700

Caliper

1750

1800

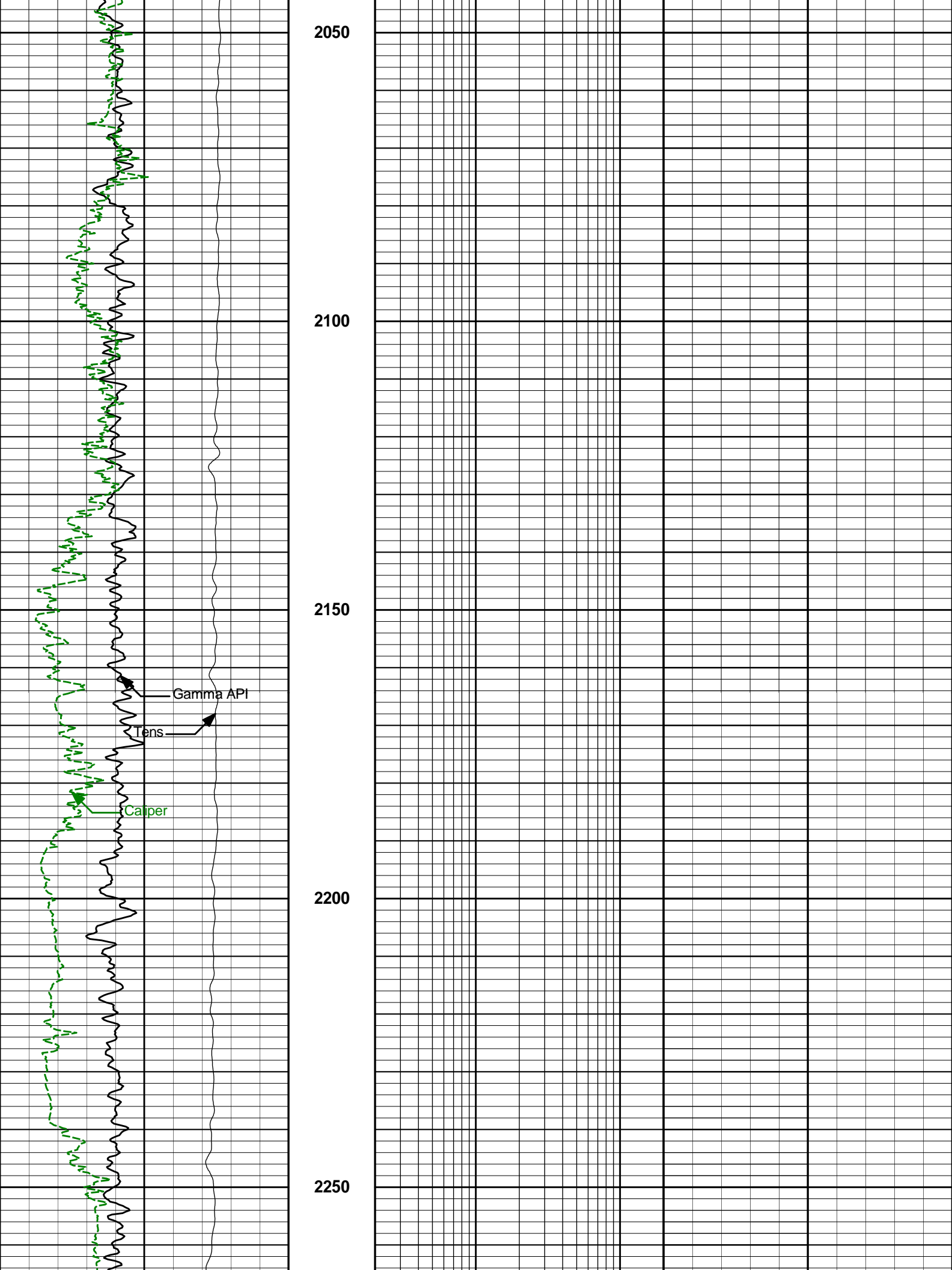


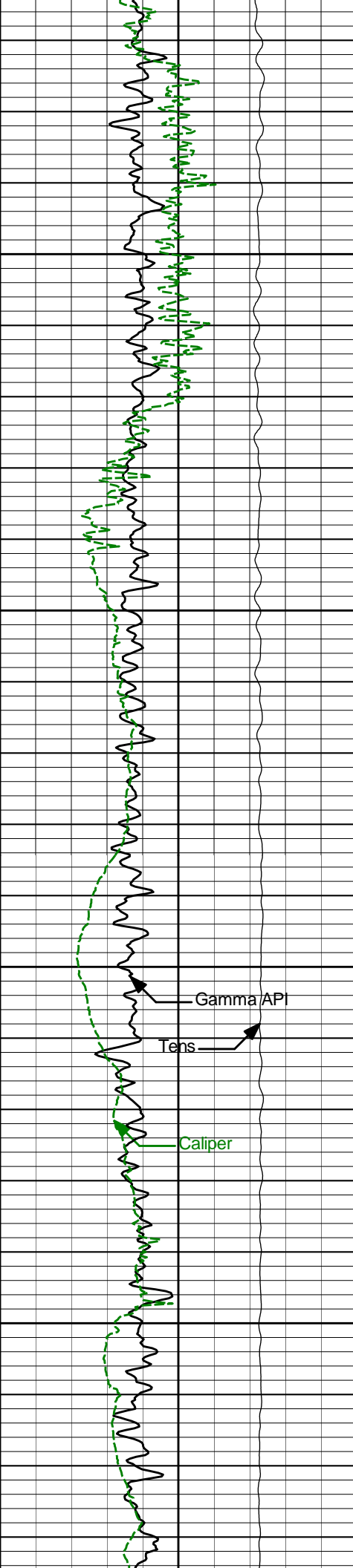
1850

1900

1950

2000





2300

2350

2400

2450

Gamma API

Tens

Caliper



2500

2550

2600

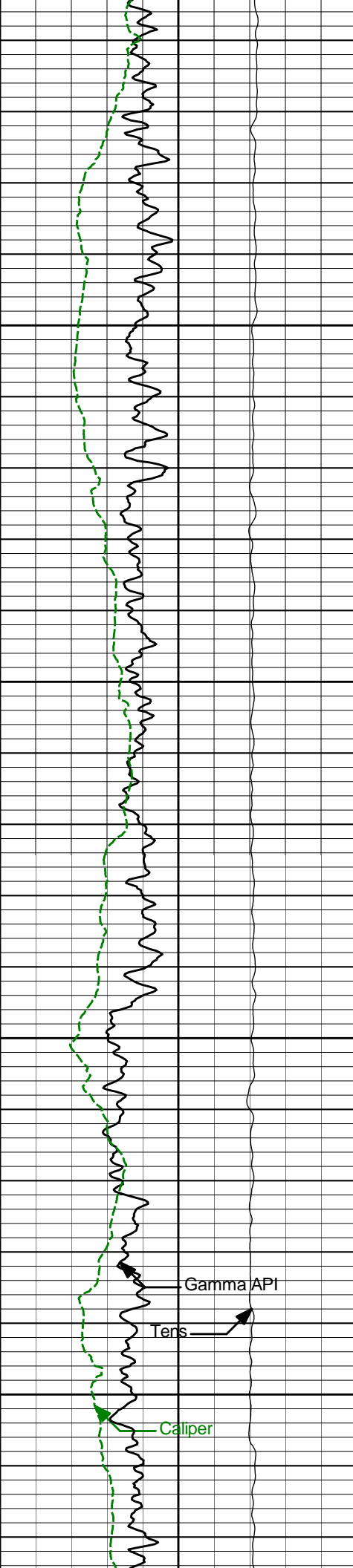
2650

2700

Gamma API

Density

Caliper



2750

2800

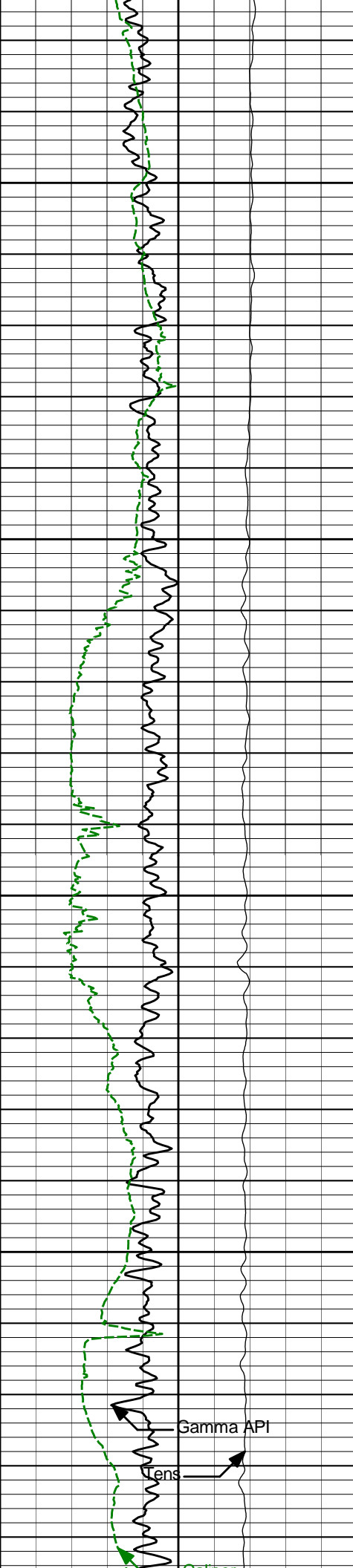
2850

Gamma API

Tens

Caliper

2900



2950

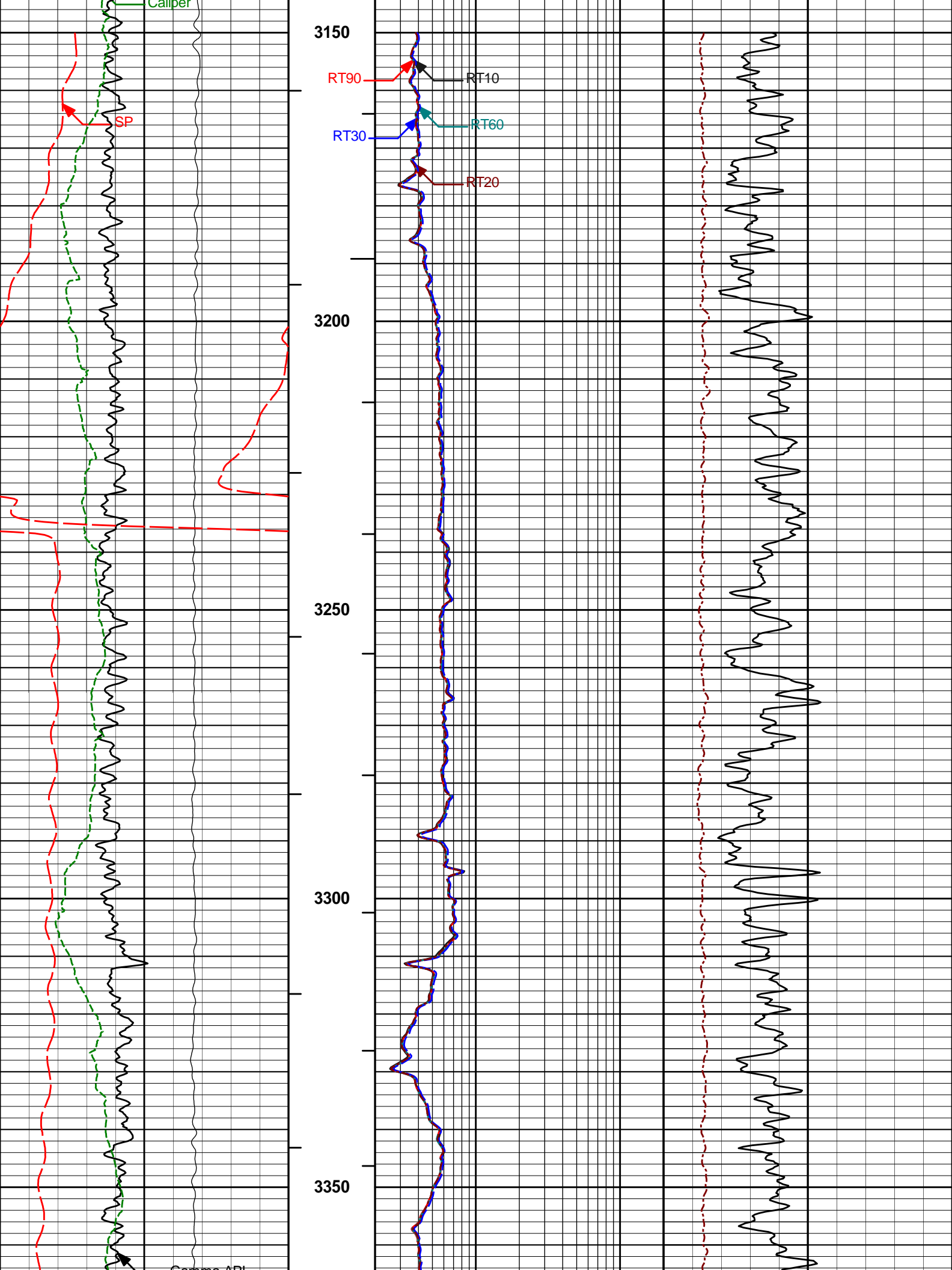
3000

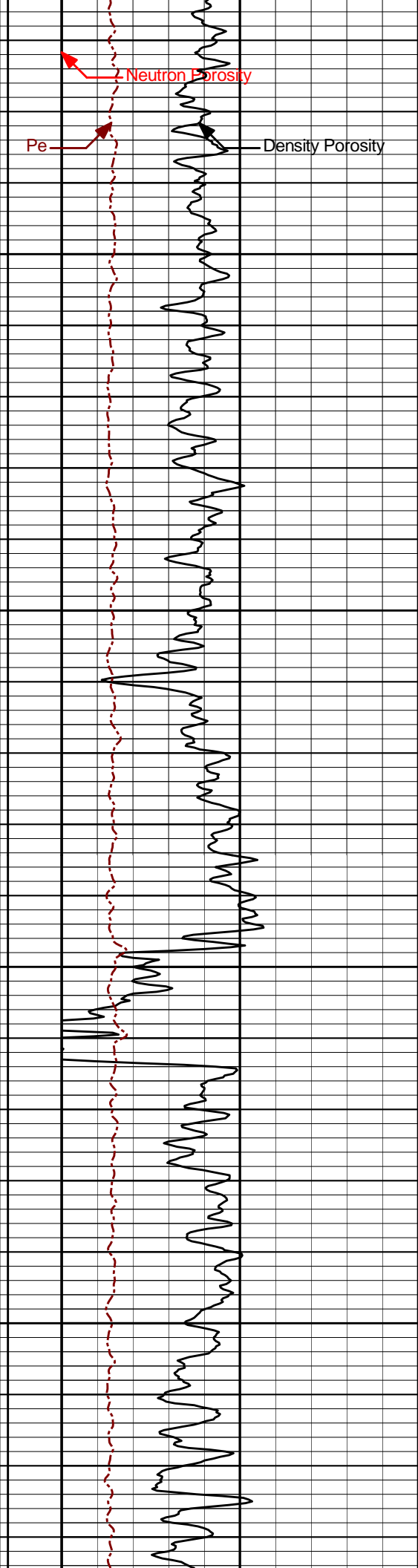
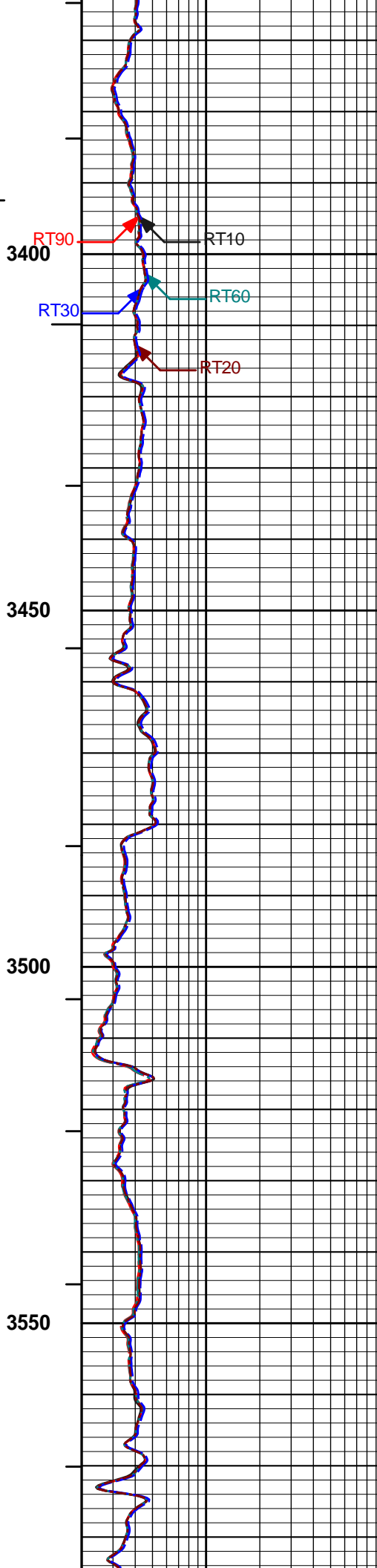
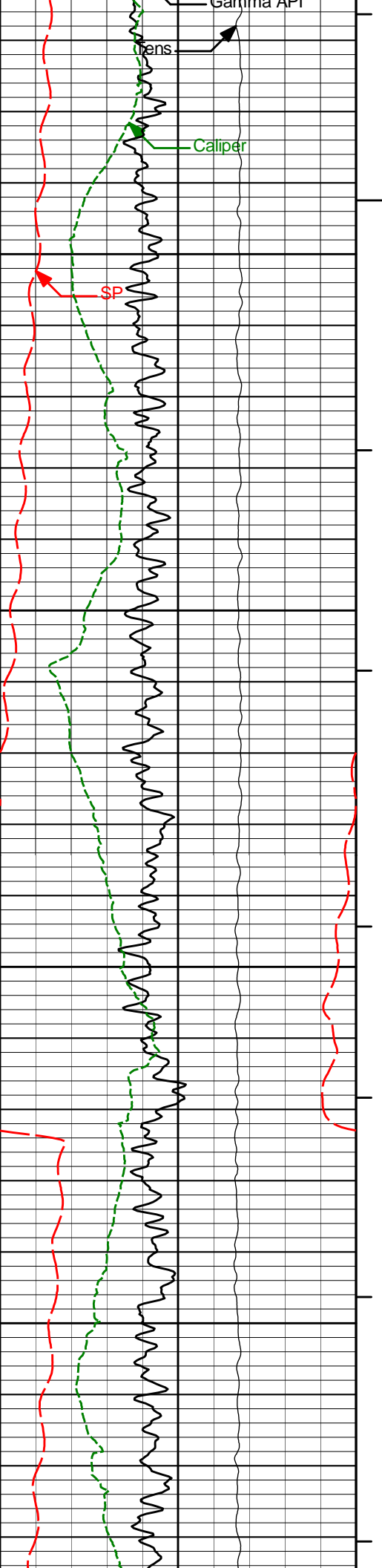
3050

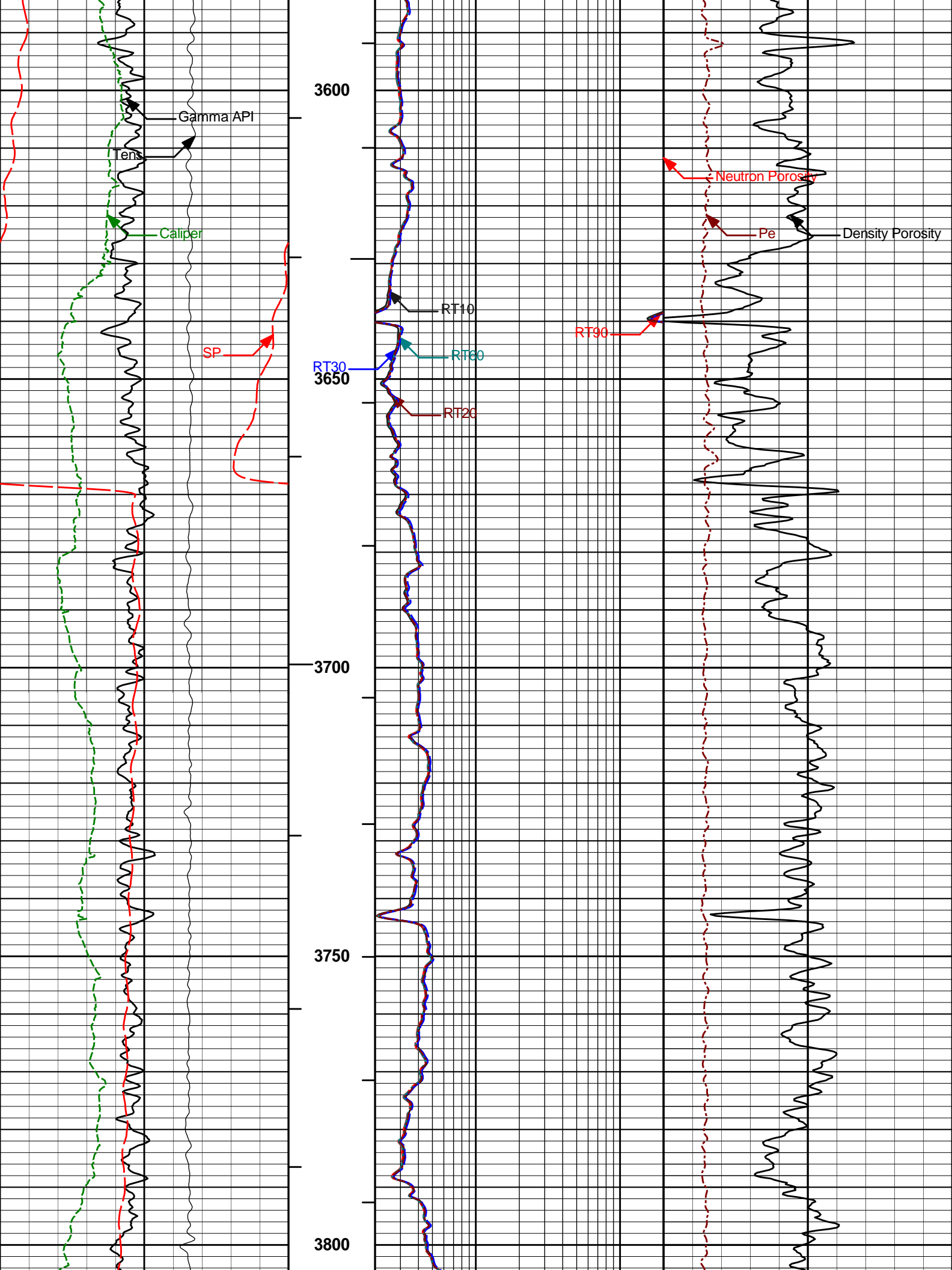
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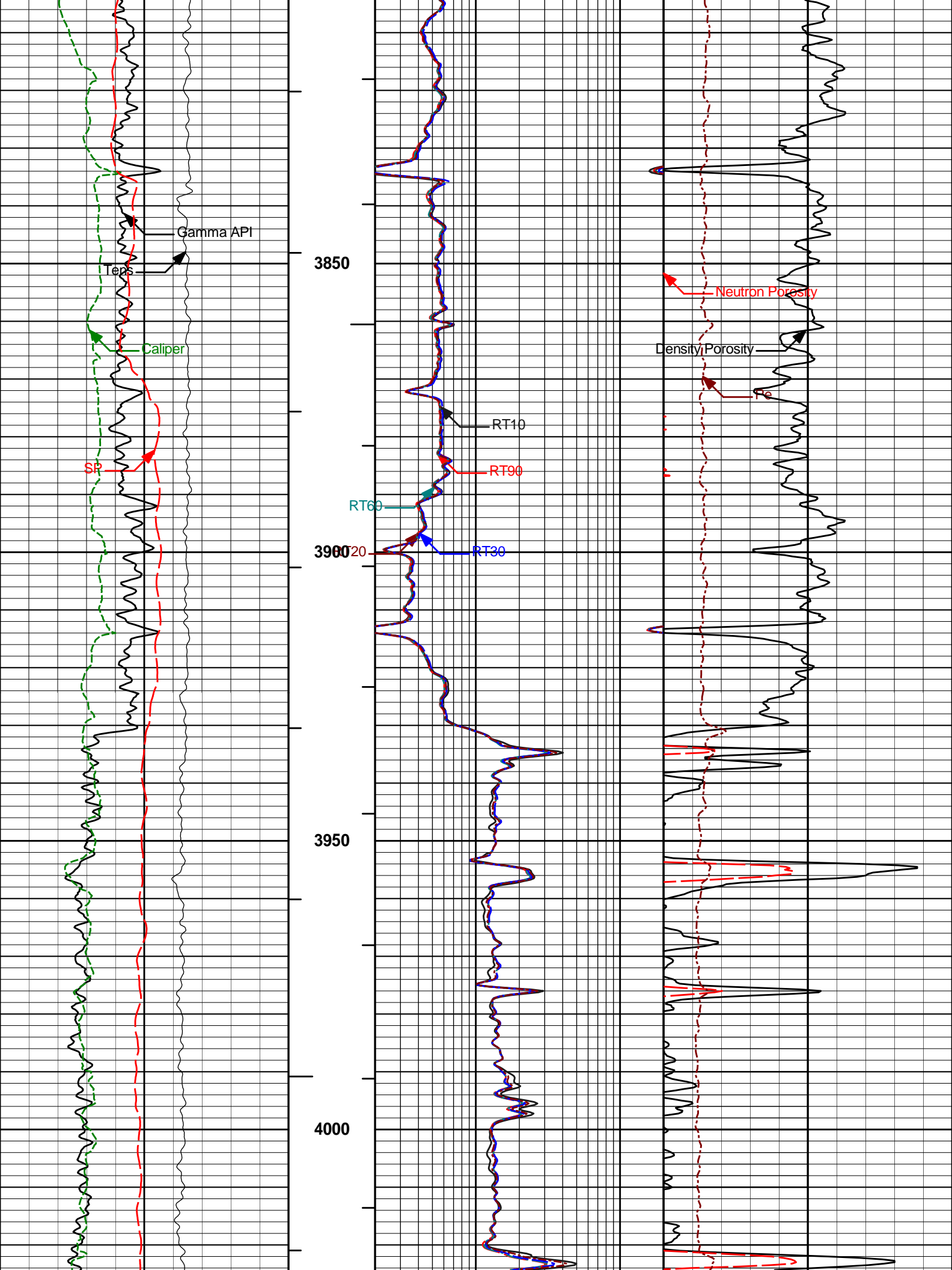
Gamma API

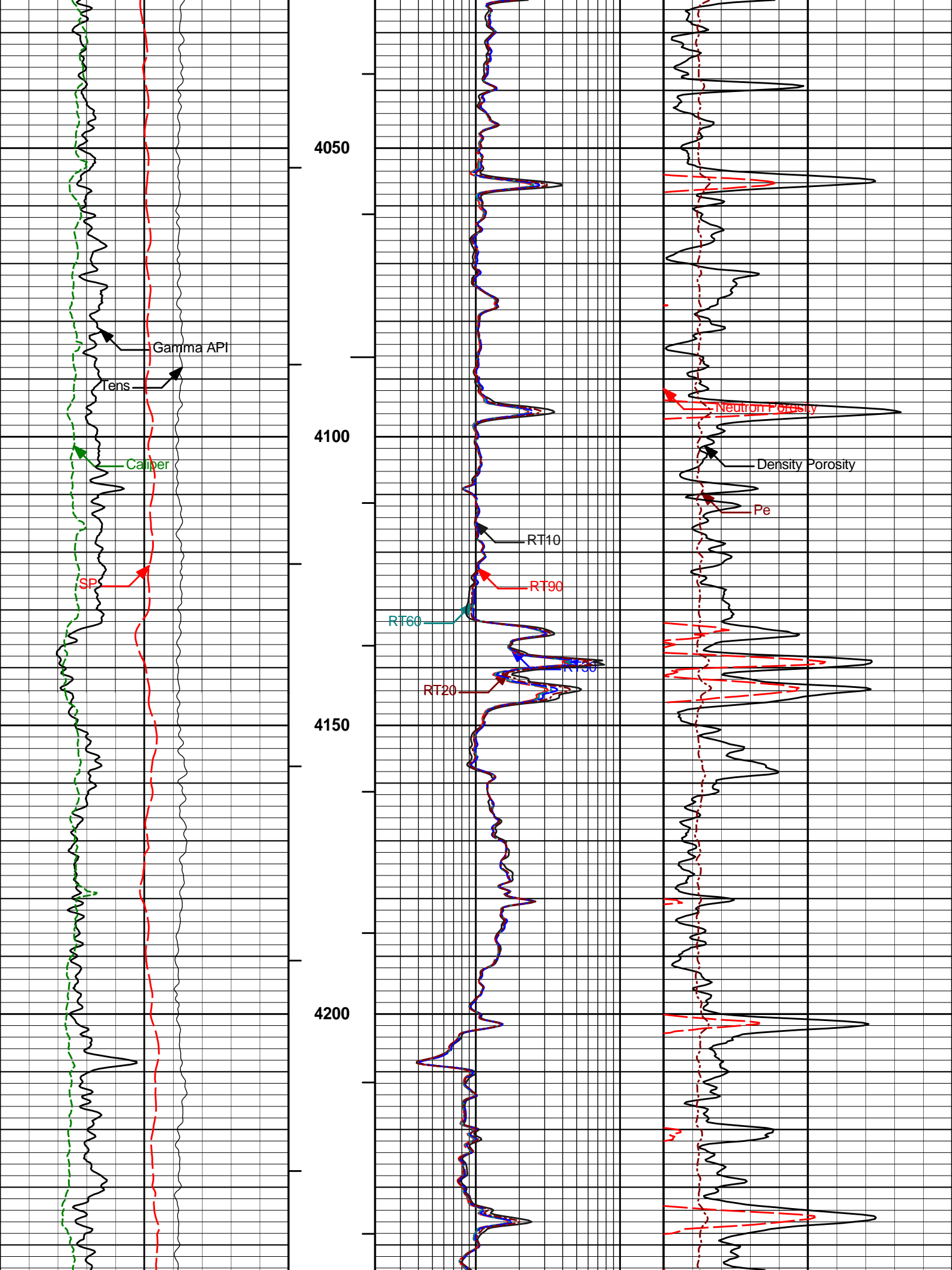
Tens

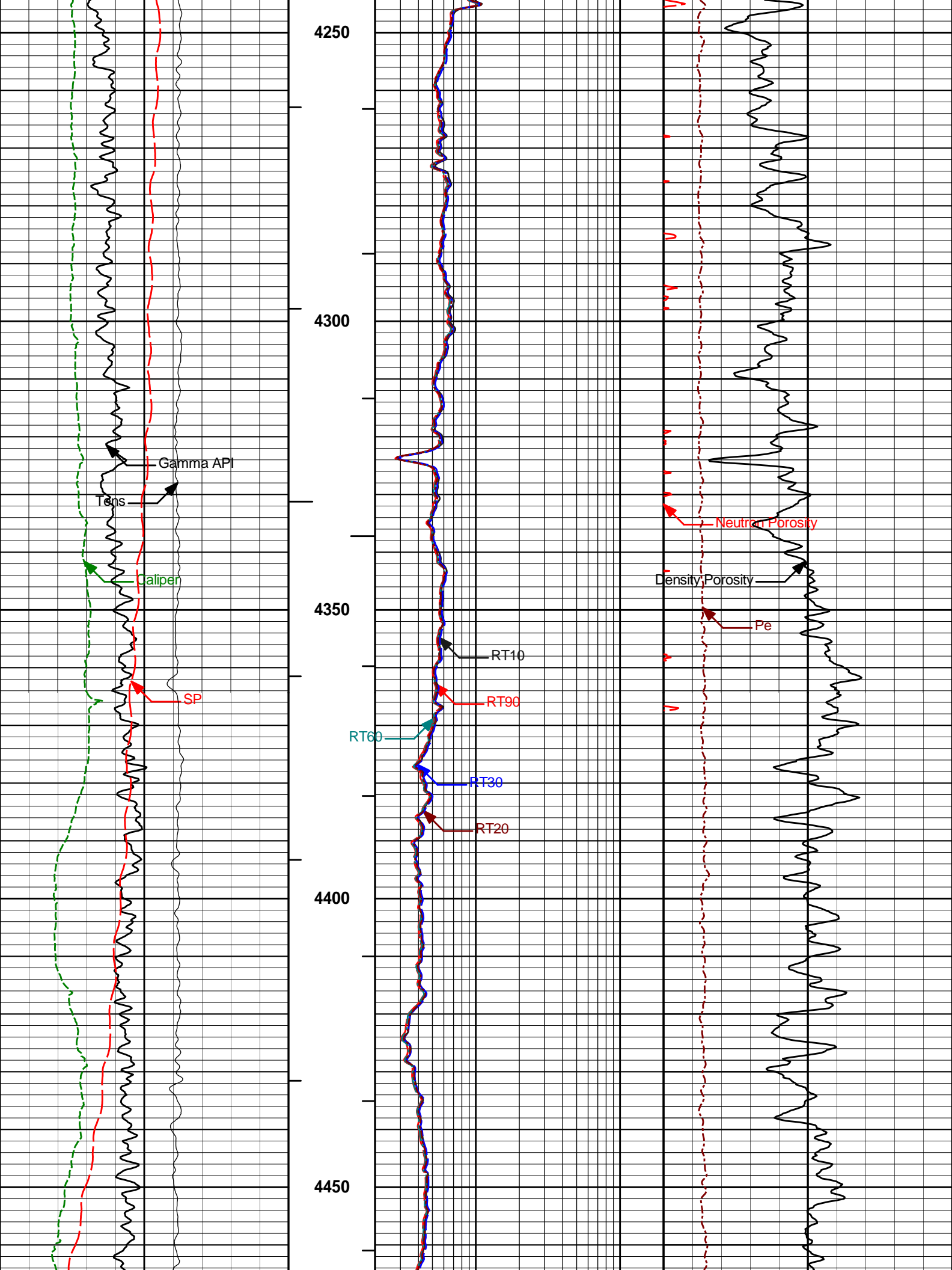


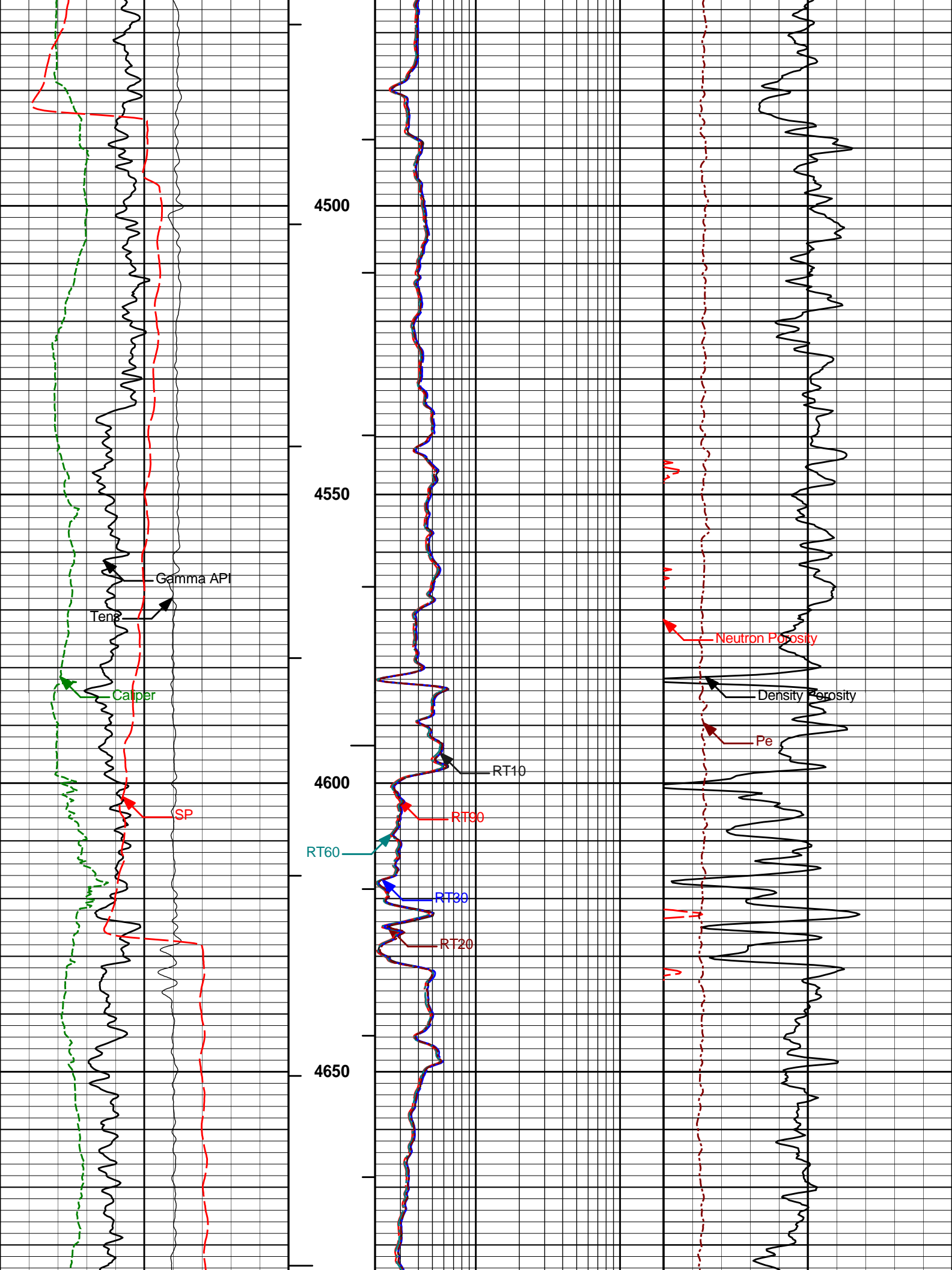


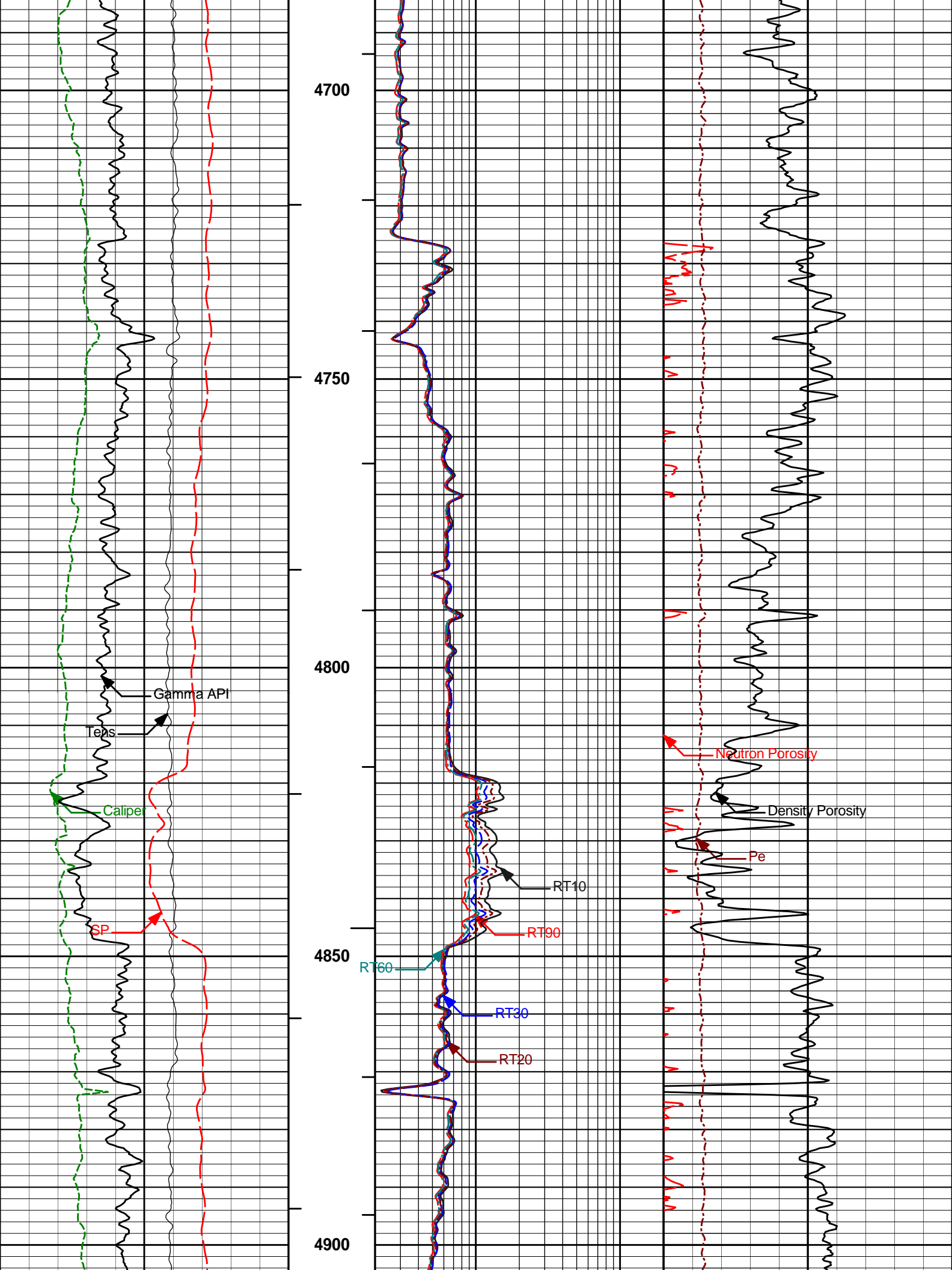


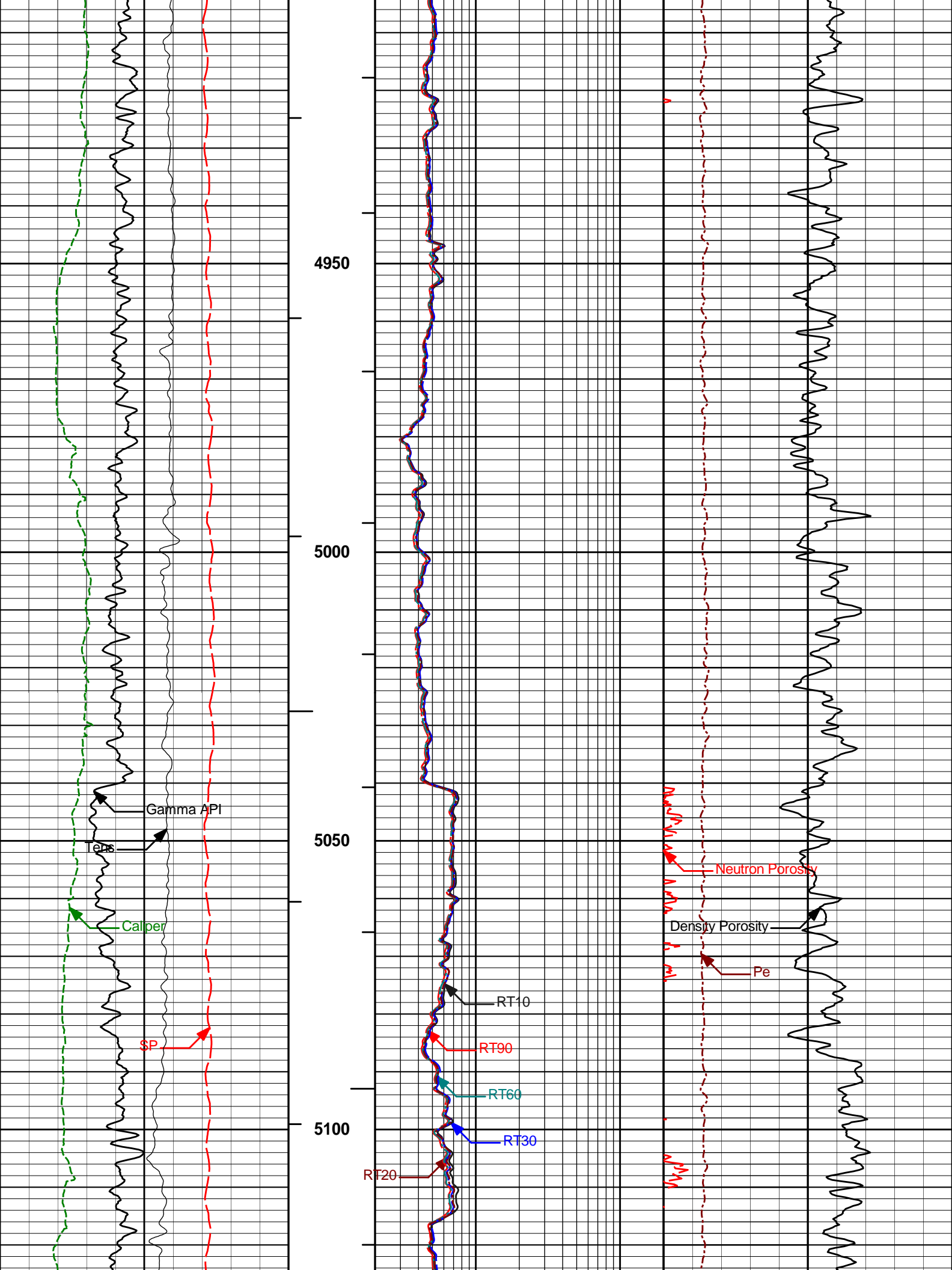


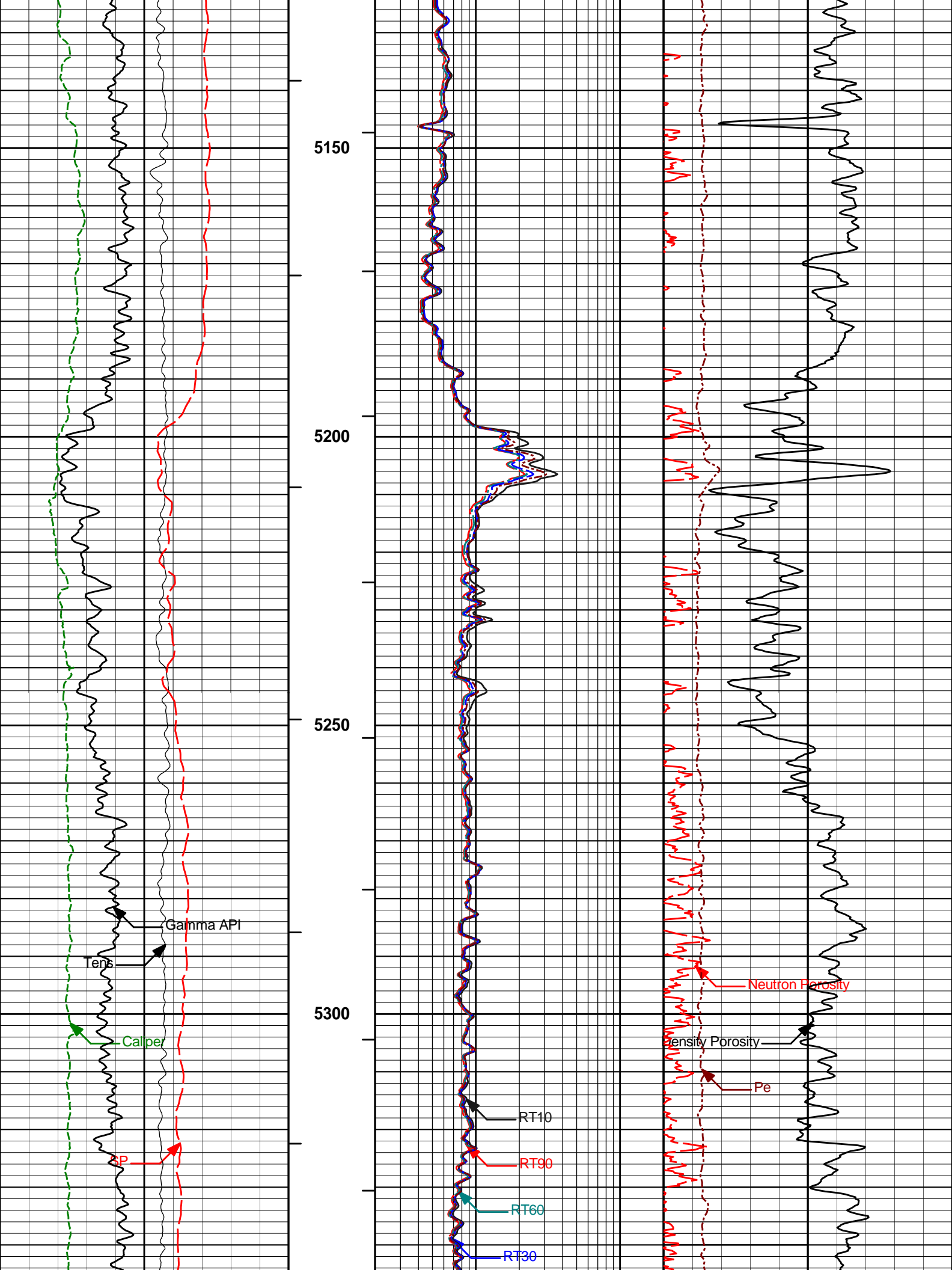


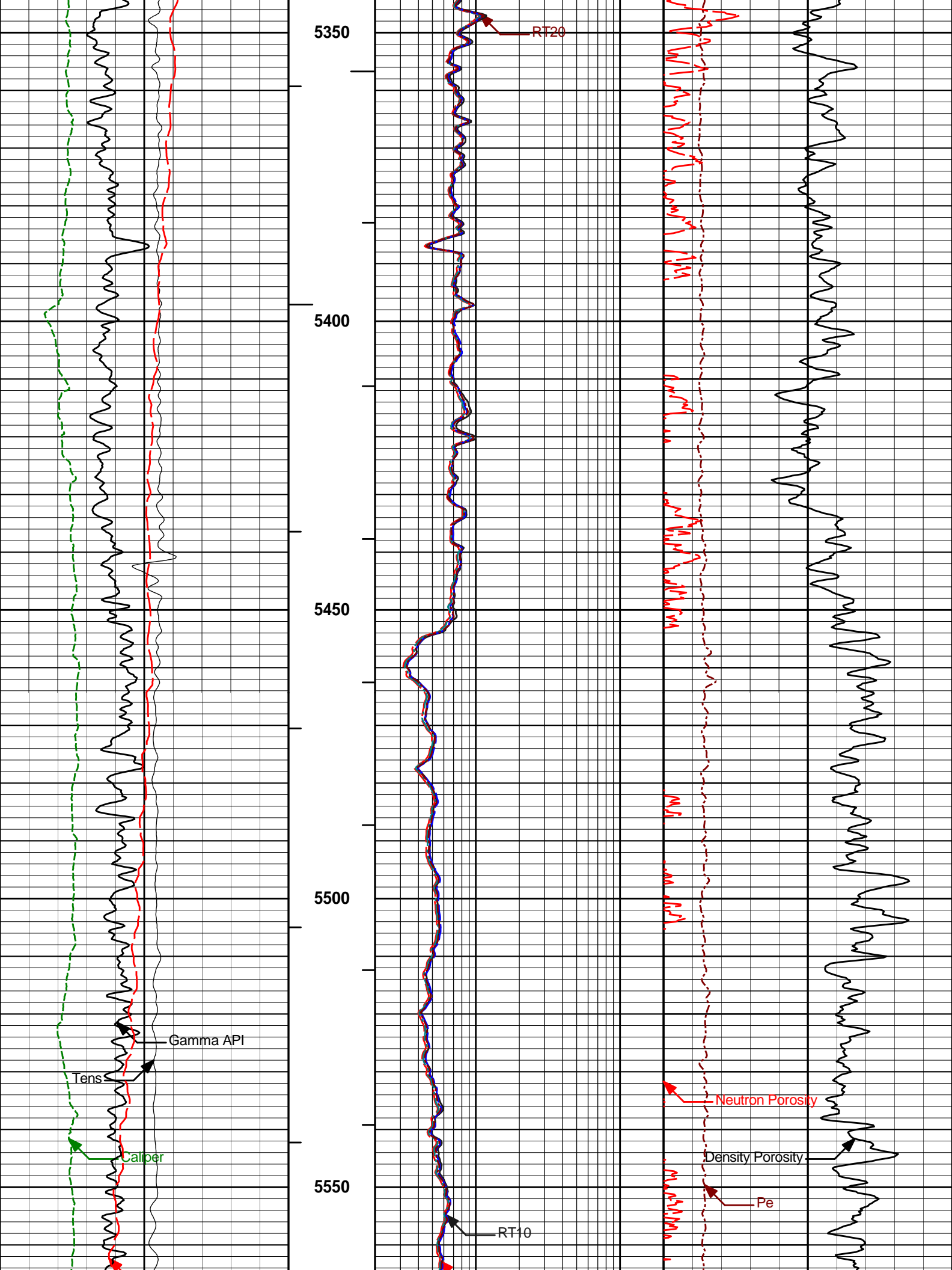


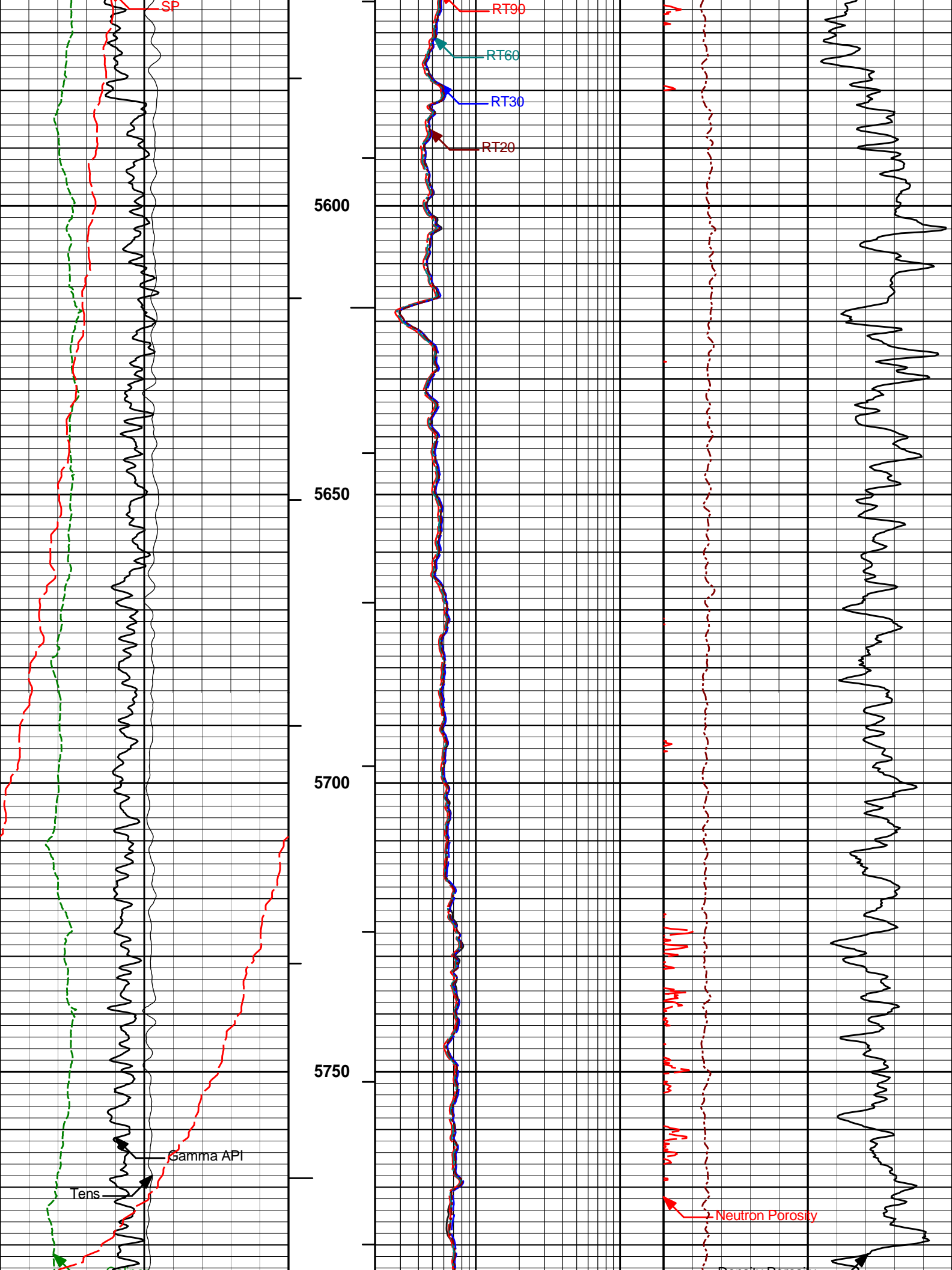


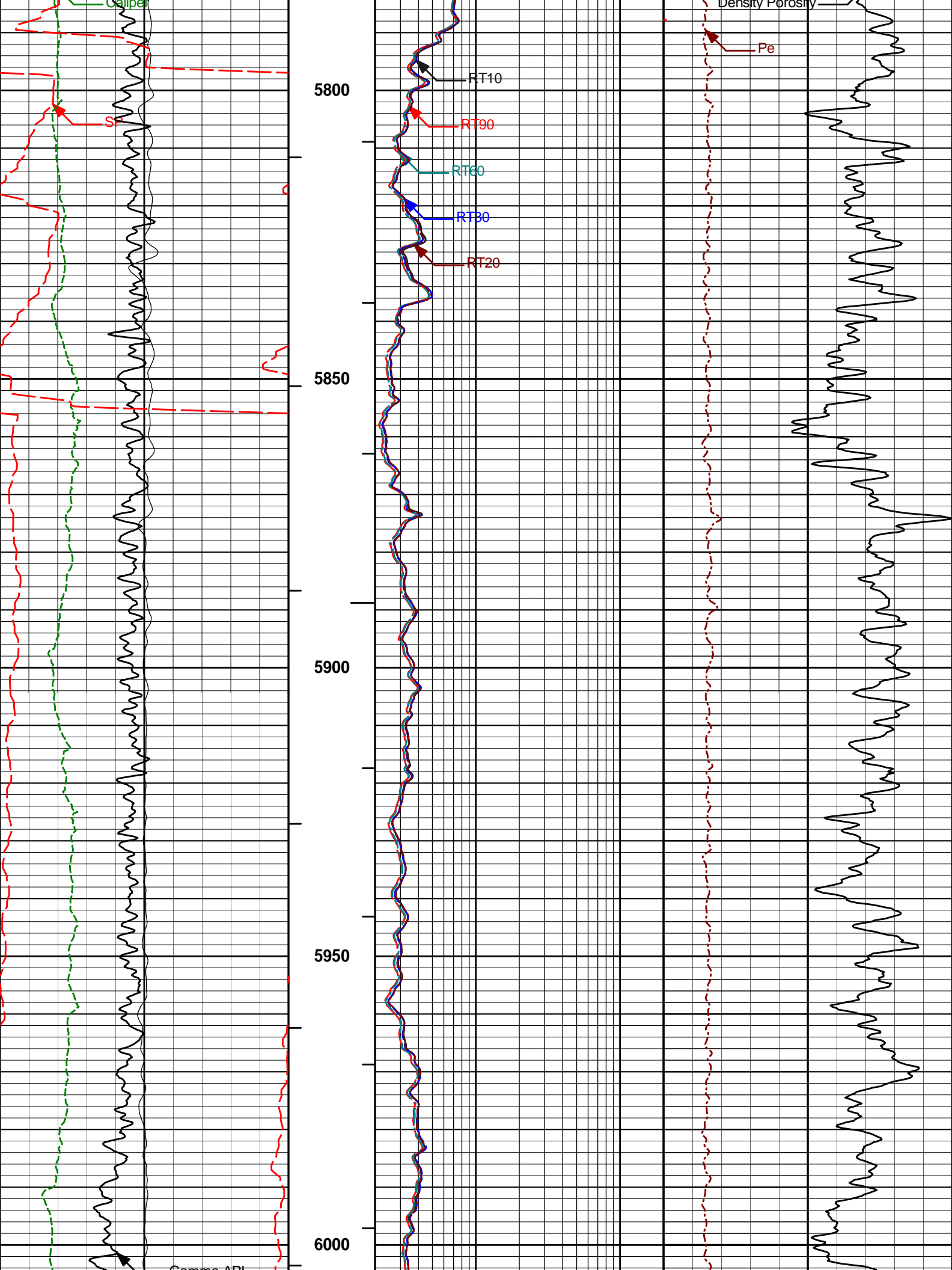


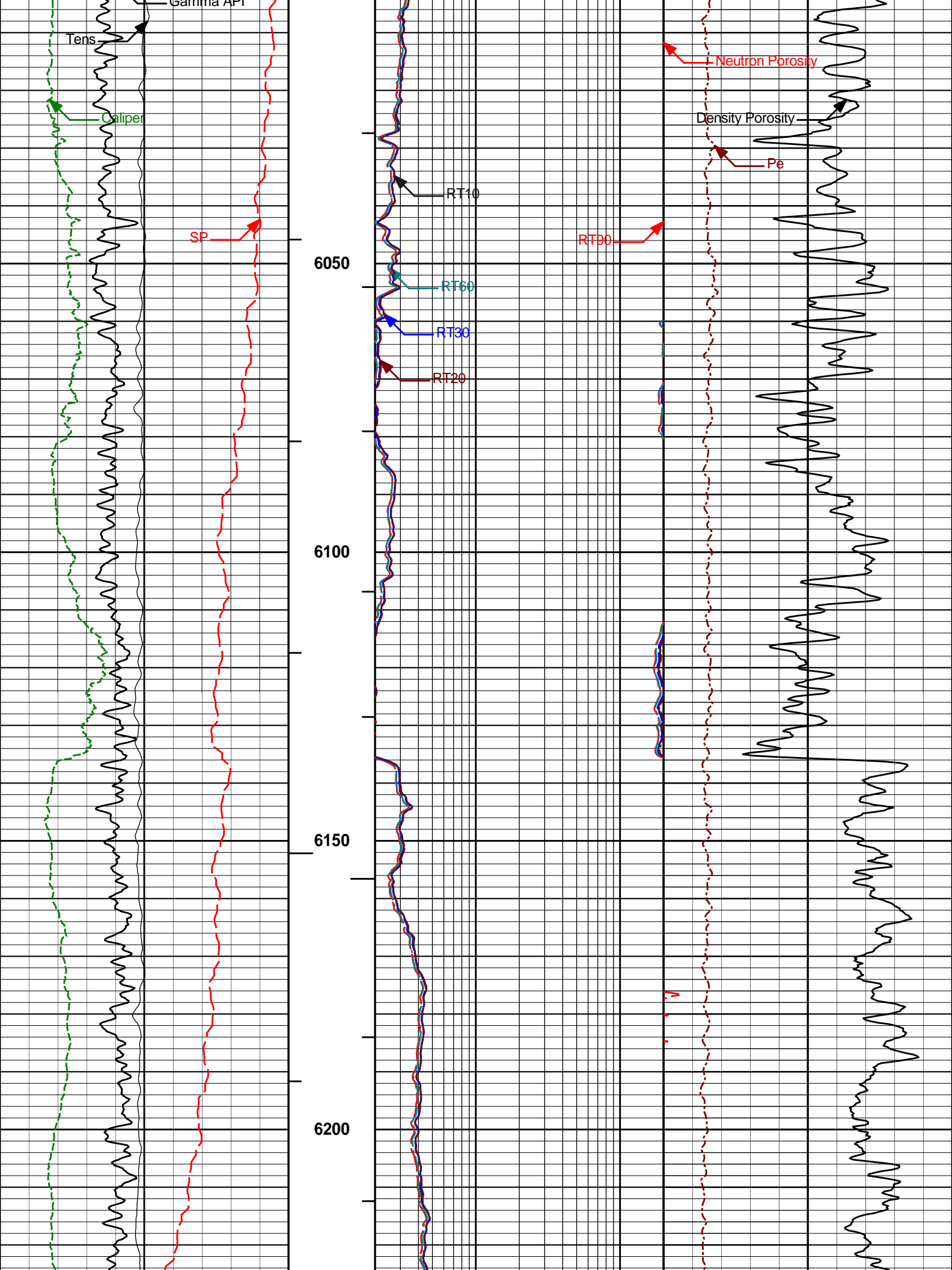


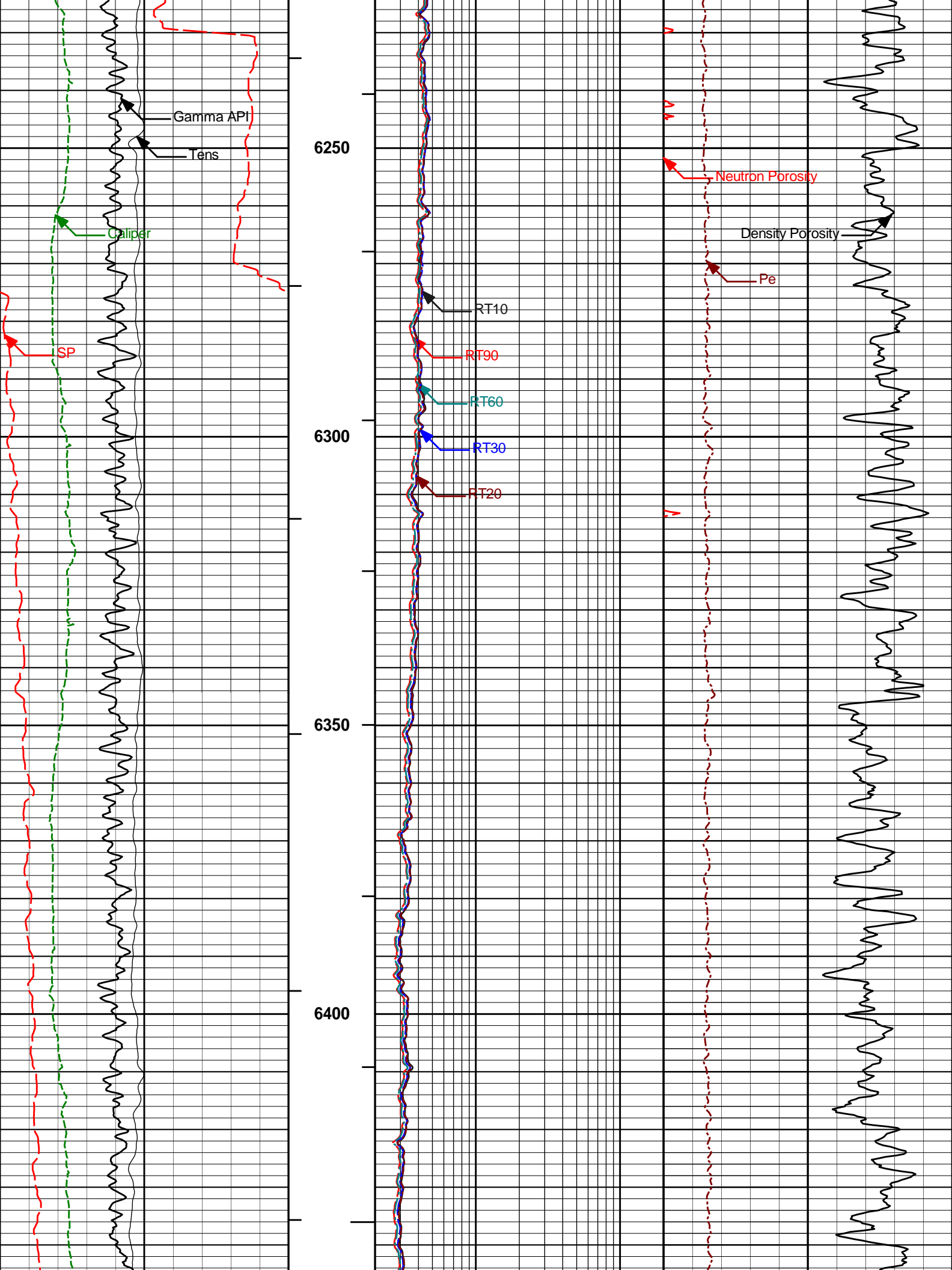


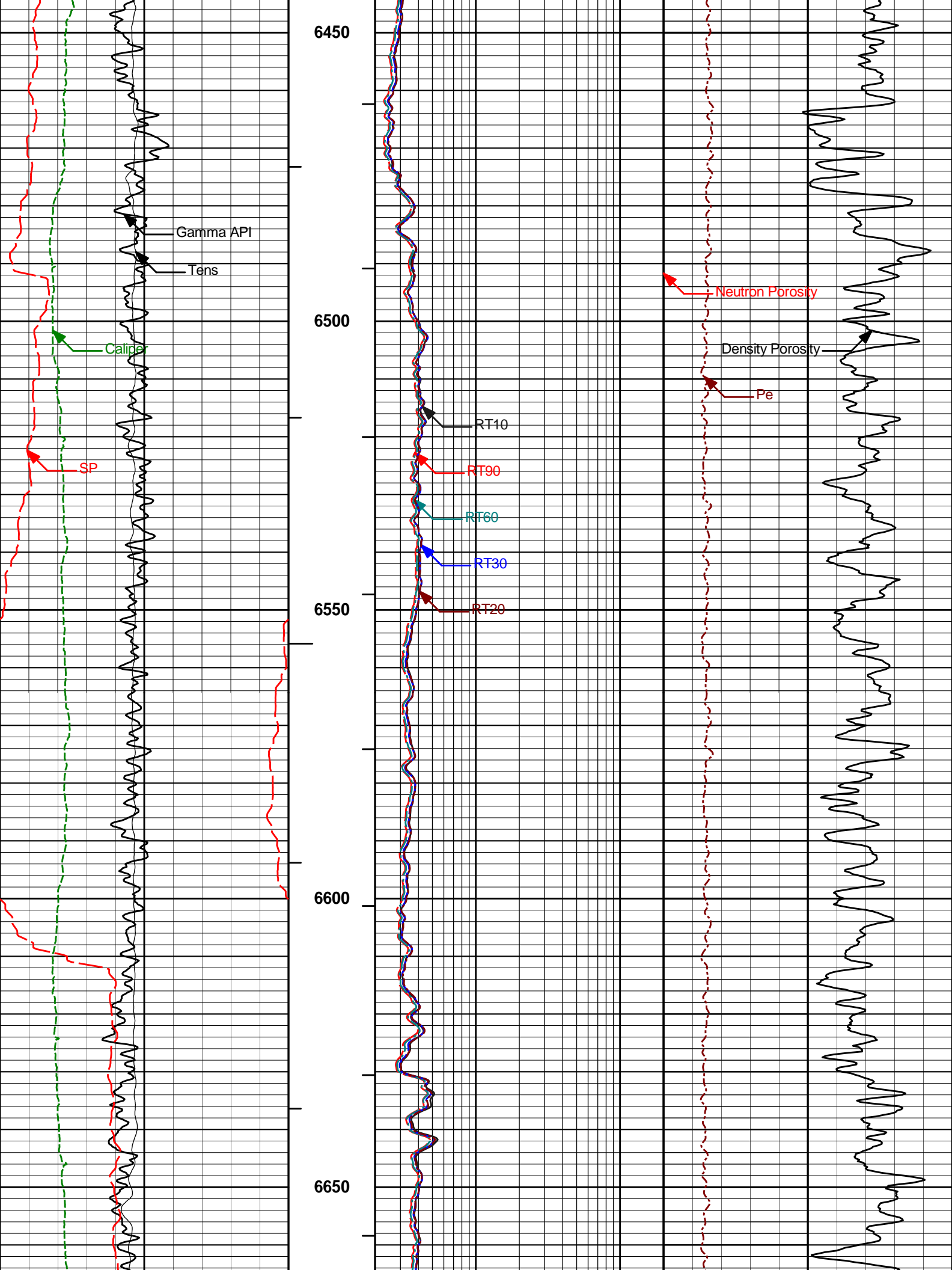


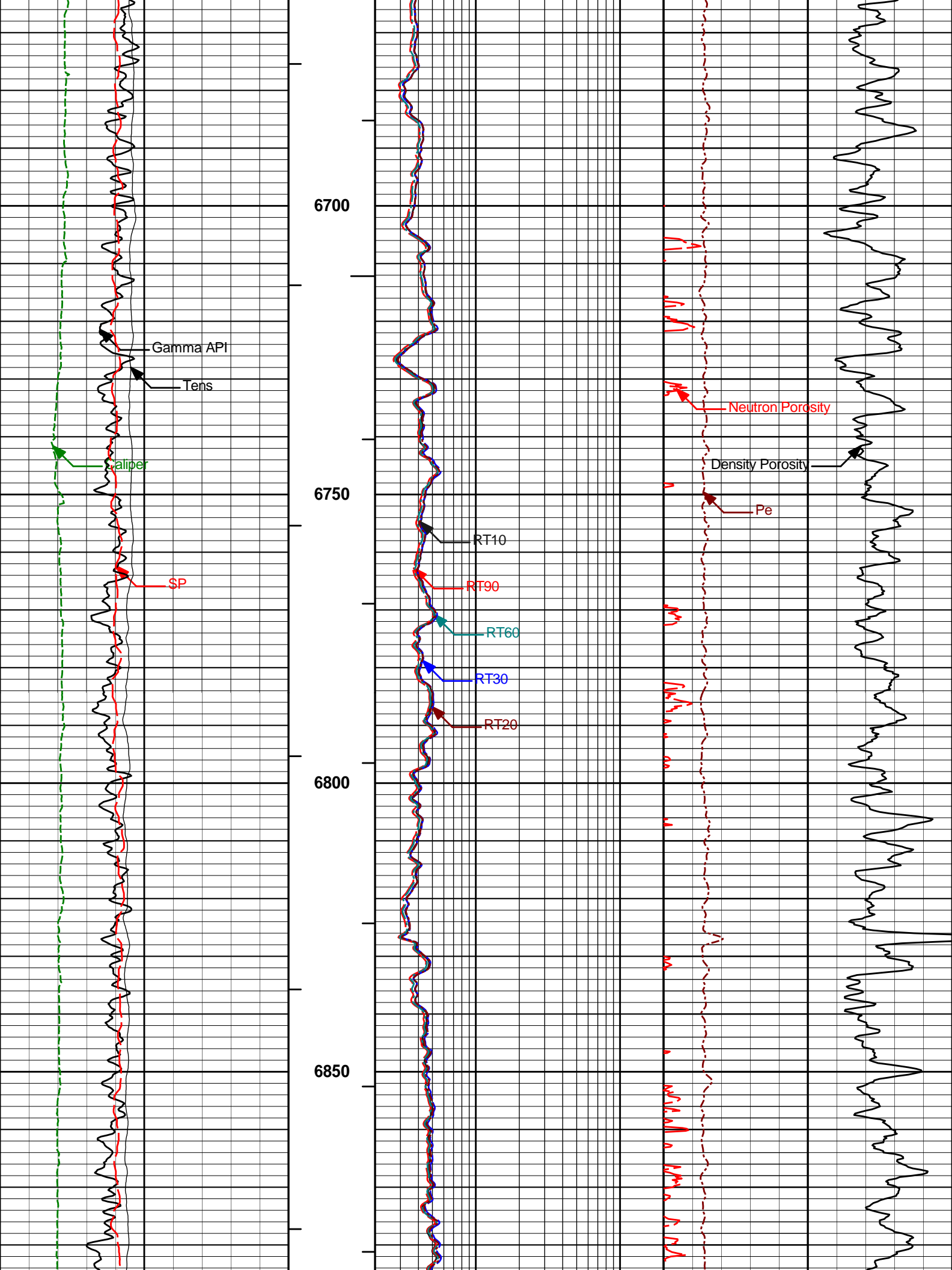


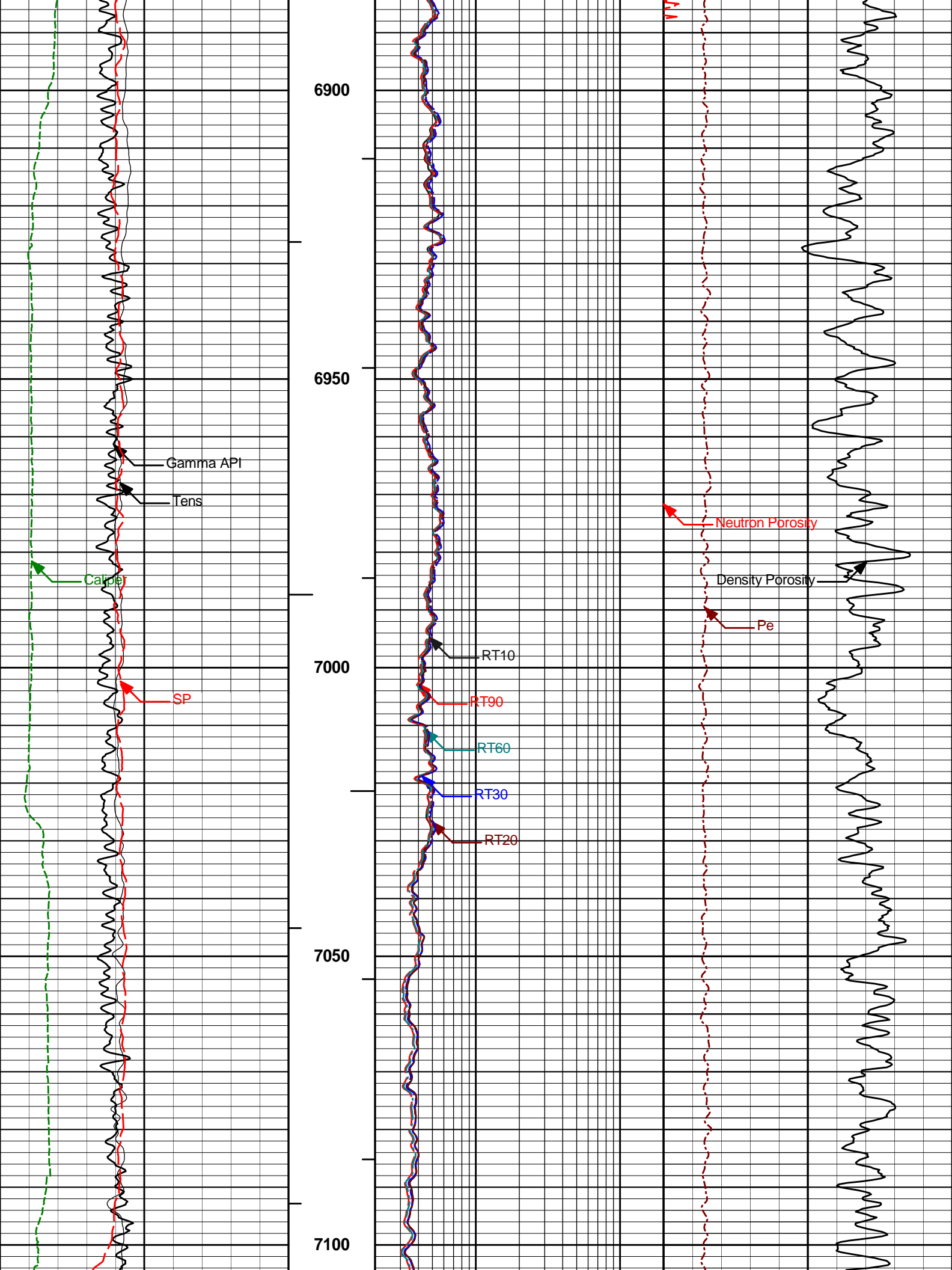


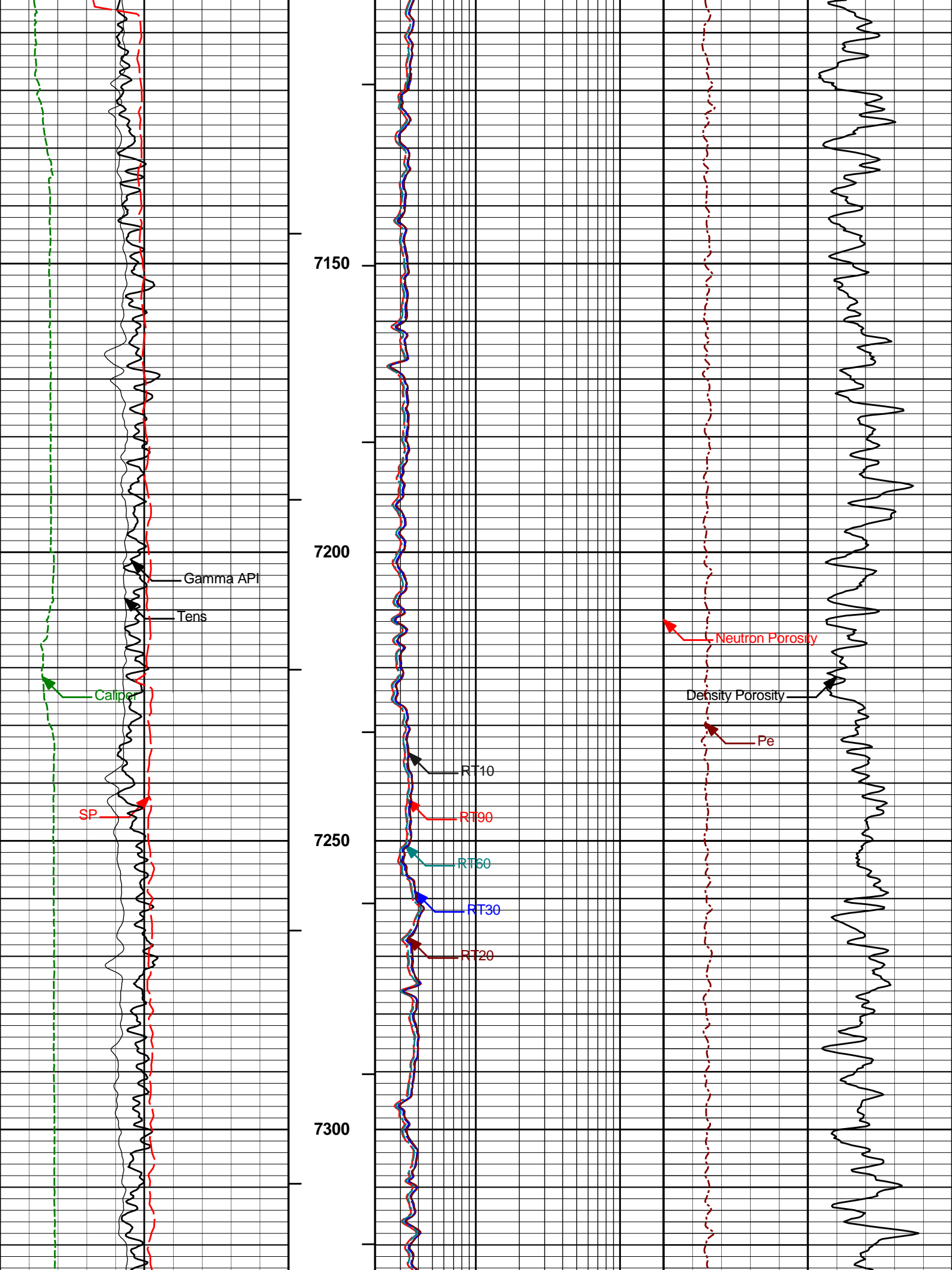


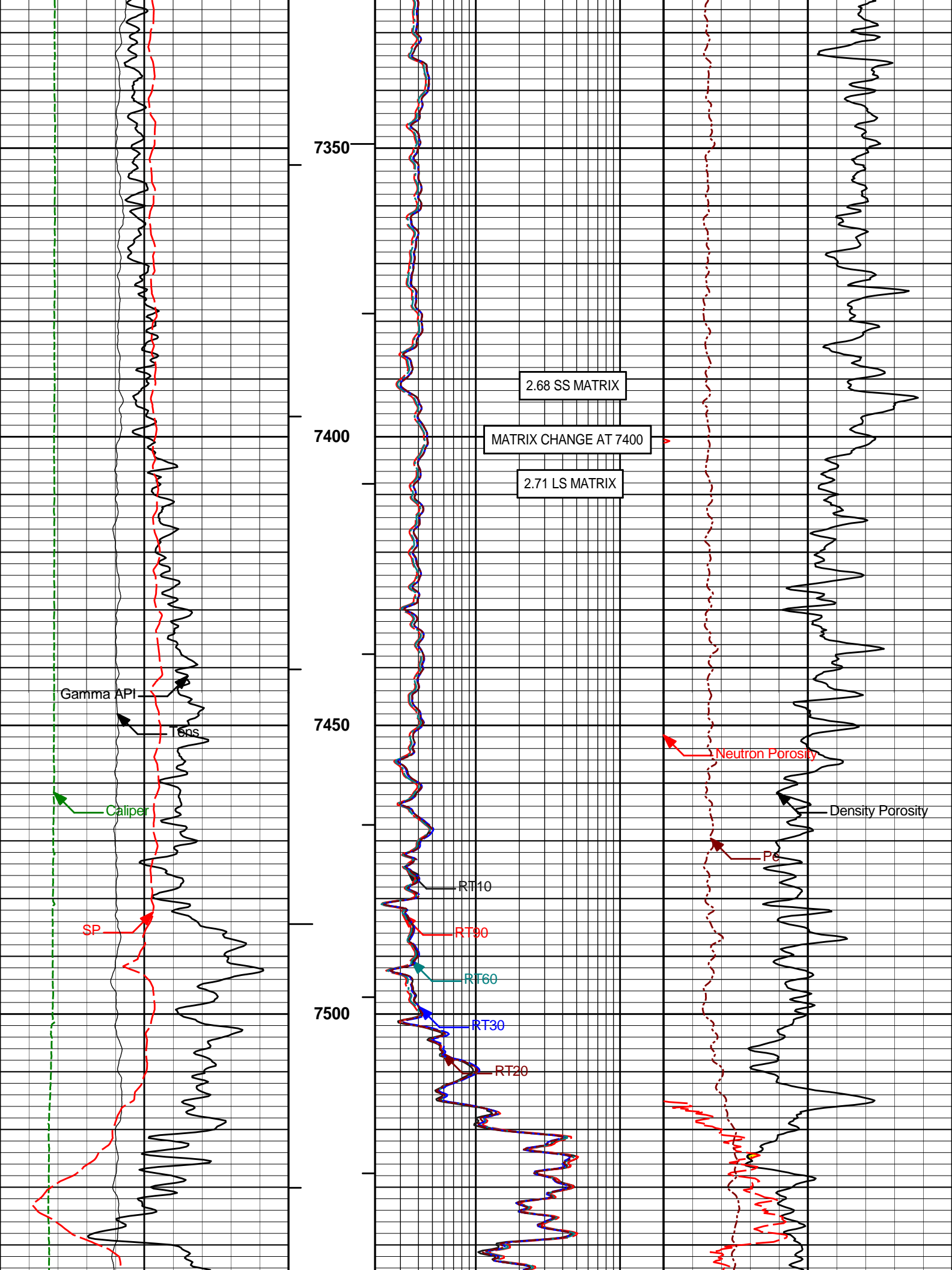


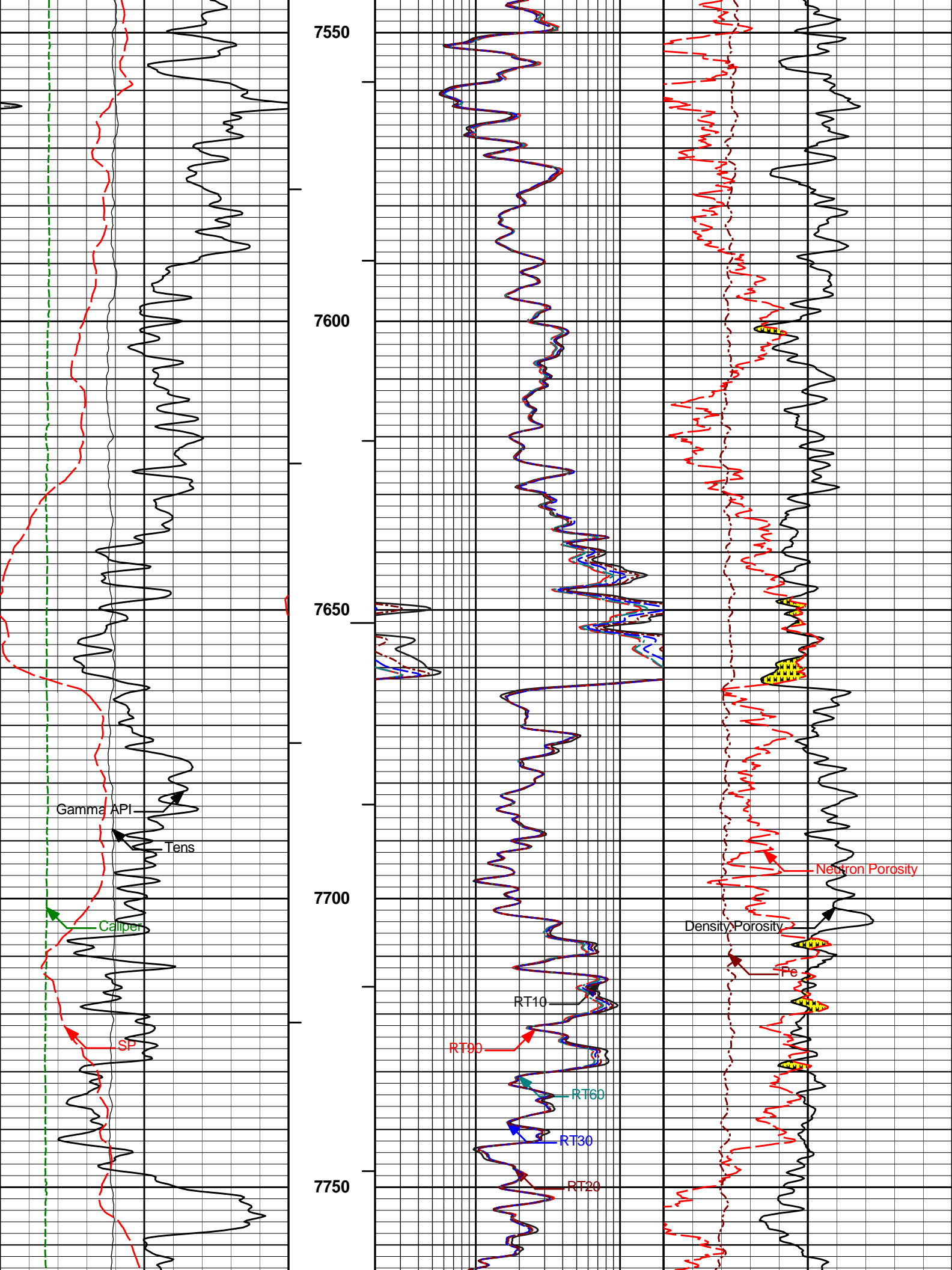


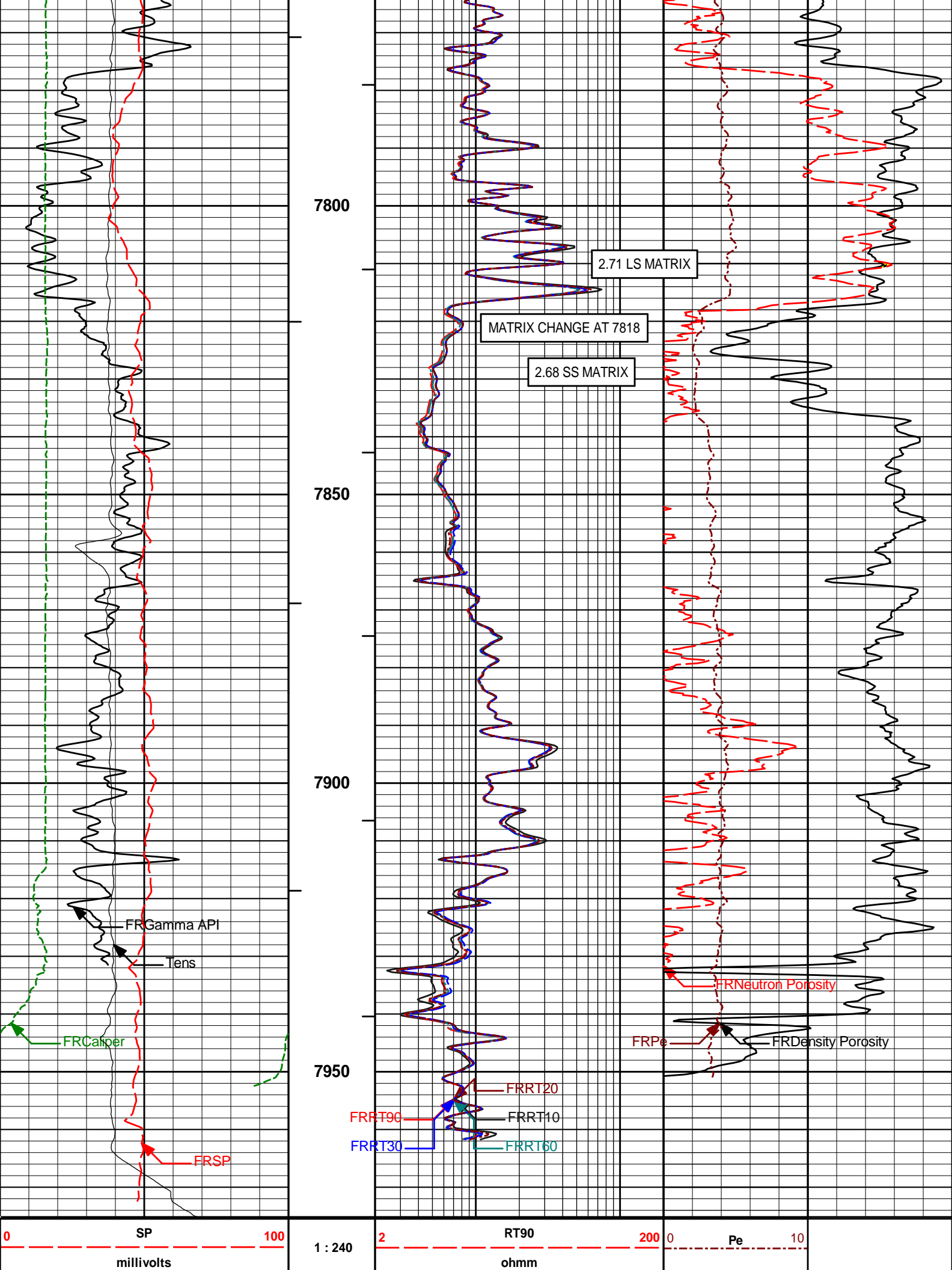












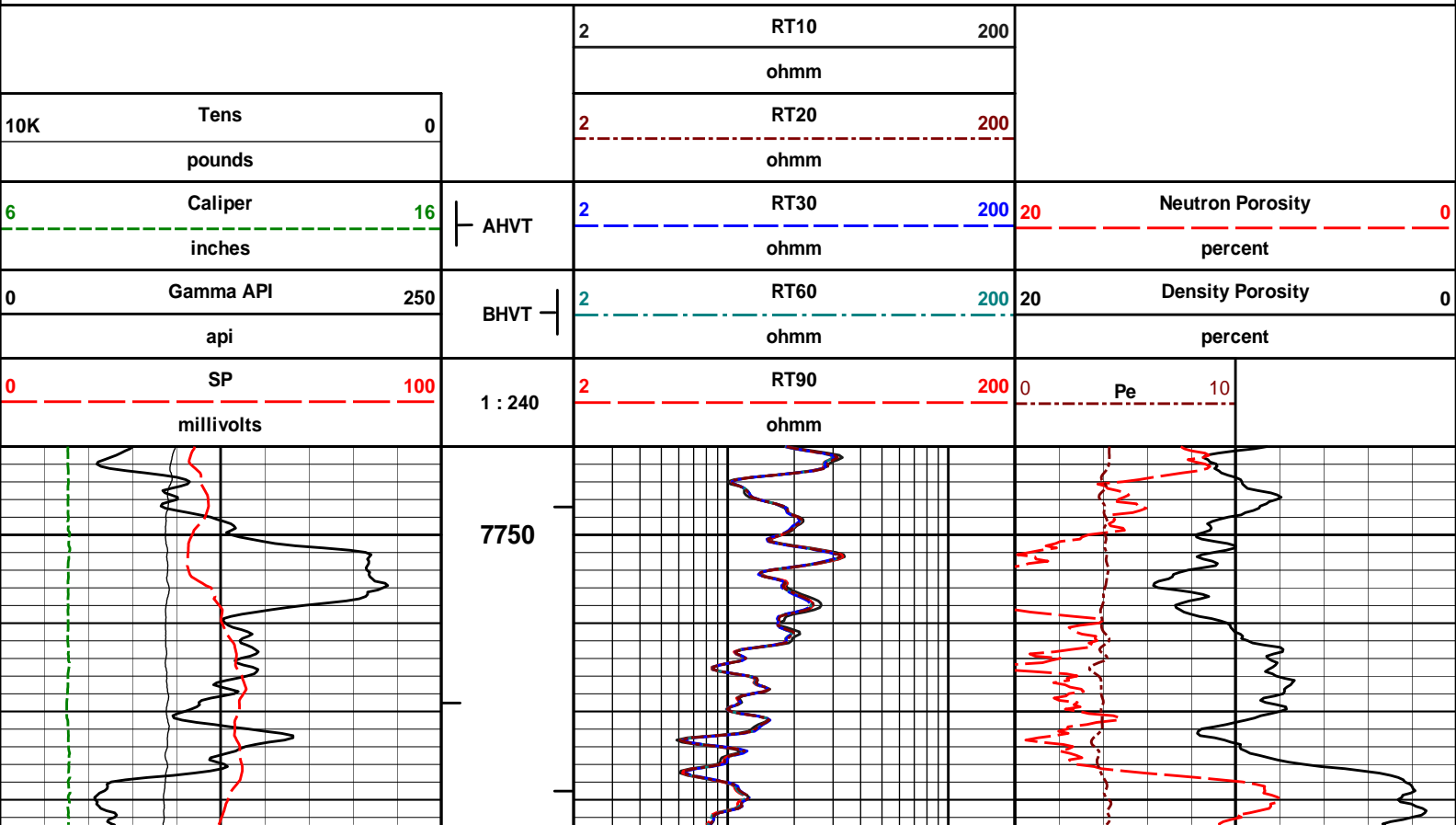
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	api				ohmm			percent	
6	Caliper	16	AHVT	2	RT30	200	20	Neutron Porosity	0
	inches				ohmm			percent	
10K	Tens	0		2	RT20	200			
	pounds				ohmm				
				2	RT10	200			
					ohmm				

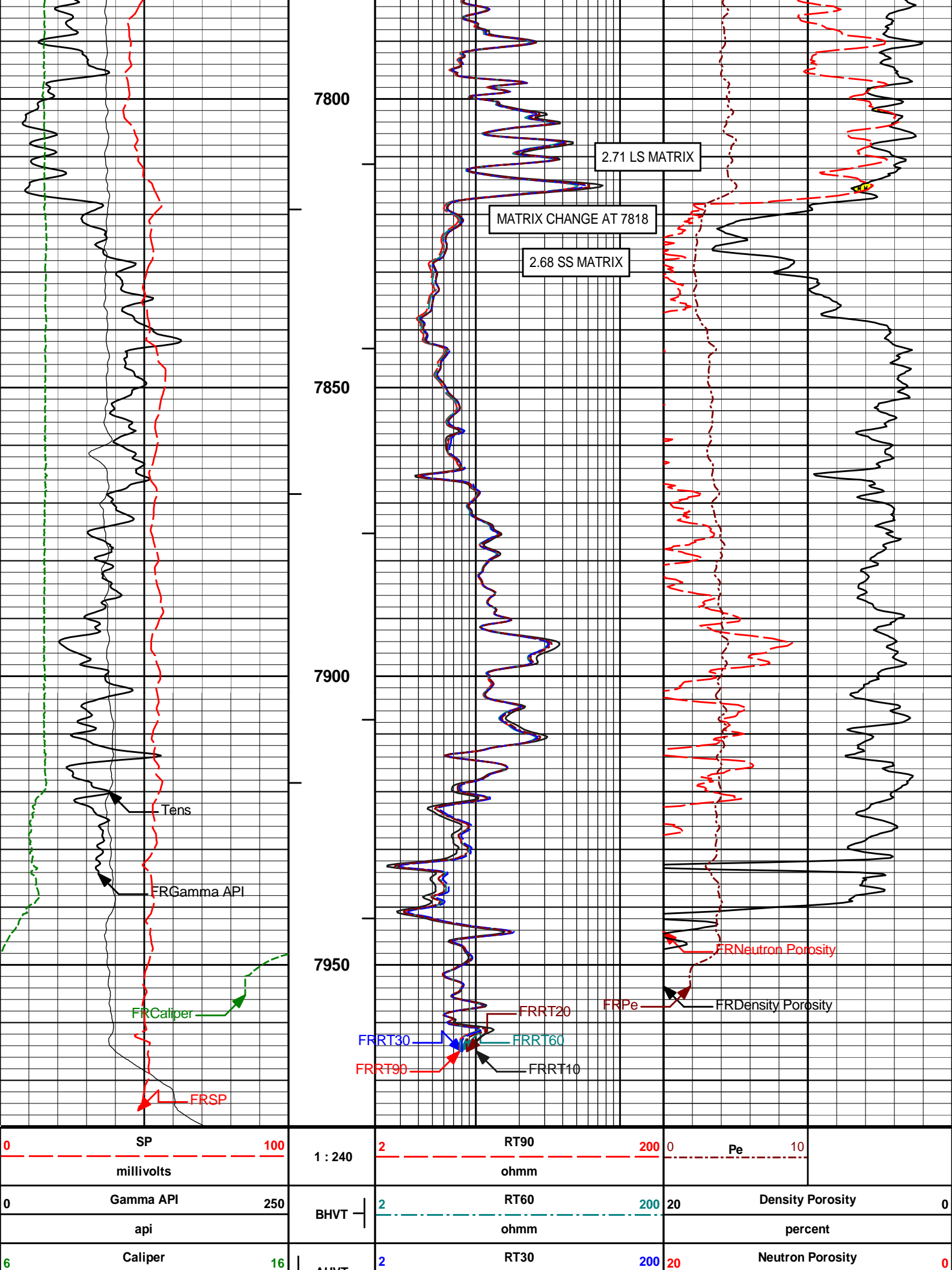
HALLIBURTON		Plot Time: 04-Feb-13 09:58:55 Plot Range: 740 ft to 7975.17 ft Data: HIRSCH_14-24\Well Based*\ Plot File: \COMP\MAIN							
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MAIN PASS 5" = 100'									
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HALLIBURTON		Plot Time: 04-Feb-13 09:58:55 Plot Range: 7740 ft to 7977.92 ft Data: HIRSCH_14-24\Well Based\REPEAT\ Plot File: \COMP\REPEAT							
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REPEAT PASS 5" = 100'									
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	inches		ohmm	percent
10K	Tens	0	2 RT20 200	
	pounds		ohmm	
			2 RT10 200	
			ohmm	

HALLIBURTON

Plot Time: 04-Feb-13 09:58:57
 Plot Range: 7740 ft to 7977.92 ft
 Data: HIRSCH_14-24\Well Based\REPEAT*
 Plot File: \\COMP\REPEAT

REPEAT PASS 5" = 100'

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11812883
 Engineer: J. PINKETT
 Software Version: WL INSITE R3.8.0 (Build 2)

Reference Calibration Date: 18-Dec-12 10:42:41
 Calibration Date: 18-Jan-13 10:21:33
 Calibration Version: 1

Calibrator Source S/N: TB-289

Calibrator API Reference:243.00 api

Equivalent Calibrator API Reference:247.3 api

Measurement	Measured	Calibrated	Units
Background	68.4	67.4	api
Background + Calibrator	319.3	314.7	api
Calibrator	250.9	247.3	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11812883
 Engineer: R. TWEETEN
 Software Version: WL INSITE R3.8.4 (Build 5)

Reference Calibration Date: 18-Jan-13 10:21:33
 Calibration Date: 04-Feb-13 02:45:31
 Calibration Version: 1

Calibrator Source S/N: TB-289

Calibrator API Reference:243.00 api

Equivalent Calibrator API Reference:247.3 api

Field Verification	Shop	Field	Units
Background	67.4	70.4	api
Background + Calibrator	314.7	318.0	api
Calibrator	247.3	247.6	api

Shop	Field	Difference	Tolerance
247.3	247.6	-0.3	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 11812167
 Engineer: J. PINKETT
 Software Version: WL INSITE R3.8.0 (Build 2)

Reference Calibration Date: 18-Dec-12 11:37:16
 Calibration Date: 18-Jan-13 10:41:49
 Calibration Version: 1

Logging Source S/N: DSN434
Tank Serial Number: 11068236
Reference value assigned to Tank: 53.720
Snow Block S/N: BRIGHTON
Calibration Tank Water Temperature: 45 degF
Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	1.000	1.003	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):	0.2215	0.2223	0.0009	+/- 0.0020
Calibrated Ratio:	10.08	10.11	0.029	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decP):	0.0765	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 - 11812167	Reference Calibration Date:	18-Jan-13 10:41:49
Engineer:	R. TWEETEN	Calibration Date:	04-Feb-13 02:54:53
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Logging Source S/N: DSN434
Snow Block S/N: BRIGHTON

NEUTRON FIELD-CHECK SUMMARY				
	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decP):	0.0765	0.0763	-0.0002	+/- 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:	18-Jan-13 11:45:13
Engineer:	J. PINKETT	Calibration Date:	18-Jan-13 11:52:21
Software Version:	WL INSITE R3.8.0 (Build 2)	Calibration Version:	1
Host Tool Name:	DSNT - 11812167		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-4097.27	-3484.97	-7000.00 - -1000.00
Pad Gain	0.0004140	0.0003828	0.000200 - 0.000600

Pad Gain	0.0004149	0.0003838	0.000200 - 0.000800
Arm Offset	-4358.75	-4517.64	-5000.00 - 3000.00
Arm Gain	0.0006161	0.0005692	0.000300 - 0.000700
Arm Power	-0.000008136	-0.000005493	-0.000010000 - 0.000010000

The ring diameter is computed from: DIAMETER = PAD EXTENSION + ARM EXTENSION + 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)	1.91	2.00	0.09	+/- 0.20
Medium Ring (in)	3.80	3.75	-0.05	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.49	6.50	0.01	+/- 0.20
Medium Ring (in)	8.32	8.25	-0.07	+/- 0.20
Large Ring (in)	15.00	15.00	0.00	+/- 0.20

PASS/FAIL SUMMARY	
Calibration-Coefficients Range Check:	Passed
Ring-Measurement Check:	Passed
PASS/FAIL SUMMARY	
Calibration-Coefficients Range Check:	Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name:	SDLT - 11812177	Reference Calibration Date:	18-Jan-13 11:52:21
Engineer:	R. TWEETEN	Calibration Date:	04-Feb-13 03:01:41
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

MEASURED CALIPER VALUES				
Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.84	0.09	+/- 0.10
Ring Diameter	8.25	8.10	-0.15	+/- 0.15

PASS/FAIL SUMMARY	
Pad Extension Check:	Passed
Diameter Check:	Passed

SPECTRAL DENSITY SHOP CALIBRATION

Tool Name:	SDLT Pad - 11795867	Reference Calibration Date:	18-Dec-12 12:13:29
Engineer:	J. PINKETT	Calibration Date:	18-Jan-13 11:22:54
Software Version:	WL INSITE R3.8.0 (Build 2)	Calibration Version:	1

Logging Source S/N: 5471GW

Aluminum Block S/N: 63066

Density: 2.602g/cc

Pe: 3.100

Magnesium Block S/N: 12345

Density: 1.690g/cc

Pe: 2.650

DENSITY CALIBRATION SUMMARY			
Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0620	1.0586	0.90 - 1.10
Near Dens Gain	1.0305	1.0267	0.90 - 1.10
Near Peak Gain	1.0180	1.0316	0.90 - 1.10
Near Lith Gain	0.9795	0.9892	0.90 - 1.10
Far Bar Gain	1.0107	1.0064	0.90 - 1.10
Far Dens Gain	0.9979	0.9997	0.90 - 1.10

Far Peak Gain	0.9947	0.9957	0.90 - 1.10
Far Lith Gain	0.9805	0.9894	0.90 - 1.10
Near Bar Offset	-0.6417	-0.5982	NONE
Near Dens Offset	-0.3278	-0.2795	NONE
Near Peak Offset	-0.2016	-0.3002	NONE
Near Lith Offset	0.1179	0.0613	NONE
Far Bar Offset	-0.1866	-0.1445	NONE
Far Dens Offset	-0.0588	-0.0687	NONE
Far Peak Offset	-0.0397	-0.0348	NONE
Far Lith Offset	0.0875	0.0369	NONE
Near Bar Background	843.26	839.48	700 - 1450
Near Dens Background	279.28	278.87	230 - 480
Near Peak Background	121.77	122.22	100 - 210
Near Lith Background	148.82	147.43	125 - 260
Far Bar Background	658.87	656.72	450 - 900
Far Dens Background	258.52	257.67	175 - 345
Far Peak Background	101.95	101.18	70 - 140
Far Lith Background	104.91	105.28	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.682	1.690	0.008	+/- 0.015
Pe	2.705	2.592	-0.113	+/- 0.150
ALUMINUM				
Density (g/cc)	2.592	2.602	0.010	+/- 0.01500
Pe	3.130	3.050	-0.080	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0017	+/- 0.0110	-0.0006	+/- 0.0140
Magnesium Block	-0.0008	+/- 0.0110	-0.0004	+/- 0.0140
Aluminum Block	-0.0011	+/- 0.0110	-0.0000	+/- 0.0140
Resolution	8.82	6.00 - 11.50	9.07	6.00 - 11.50
Internal Verifier(B+D+P+L)	1388	1200 - 2700	1121	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

Engineer:	R. TWEETEN	Calibration Date:	04-Feb-13 02:41:01
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Pad Temperature: 73.4 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1387.990	1391.829	3.839	15.050
Far (B+D+P+L) cps	1120.850	1122.459	1.609	17.626
Near Resolution	8.82	8.79	-0.030	0.50
Far Resolution	9.07	8.97	-0.100	1.00

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

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION			
Tool Name:	ACRt Sonde - 11294353	Reference Calibration Date:	23-Oct-12 16:37:36
Engineer:	J SCHMIDT	Calibration Date:	29-Nov-12 15:10:41
Software Version:	WL INSITE R3.4.4 (Build 2)	Calibration Version:	1
Host Tool Name:	ACRt Instrument - 11302817		

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	1.01	1.05
A2 (50")	0.95	1.06	1.05	0.95	1.06	1.05	0.95	1.06	1.05
A3 (29")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A4 (17")	0.95	1.03	1.05	0.95	1.03	1.05	0.95	1.03	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.01	1.05	0.95	1.01	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.99	1.05	0.95	0.99	1.05

TYPICAL SONDE OFFSET RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-0.56	2	-6	-4.45	-2	-8	-5.07	-2
A2 (50")	-7	-1.23	0	-7	-2.91	0	-7	-4.99	0
A3 (29")	-27	-12.69	-9	-9	-3.43	-3	-7	-3.70	-1
A4 (17")	-180	-91.43	-60	-45	-29.14	-15	-39	-25.11	-13
A5 (10")	N/A	N/A	N/A	-150	-99.10	-50	-80	-47.75	-10
A6 (6")	N/A	N/A	N/A	175	346.17	525	90	174.99	270

TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION			
Signal	Lower	R	Upper		Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
12K		0.6	0.89	1.3	Mud Cell	0.95	1.00	1.05
36K		1.0	1.84	2.0				
72K		1.0	1.14	2.0				

PASS/FAIL SUMMARY	
GAIN RANGE CHK	FAIL
SONDE OFFSET RANGE CHK	PASS
Tx CURRENT GAIN	PASS

TOOL OUT OF TOLERANCE

CALIBRATION SUMMARY

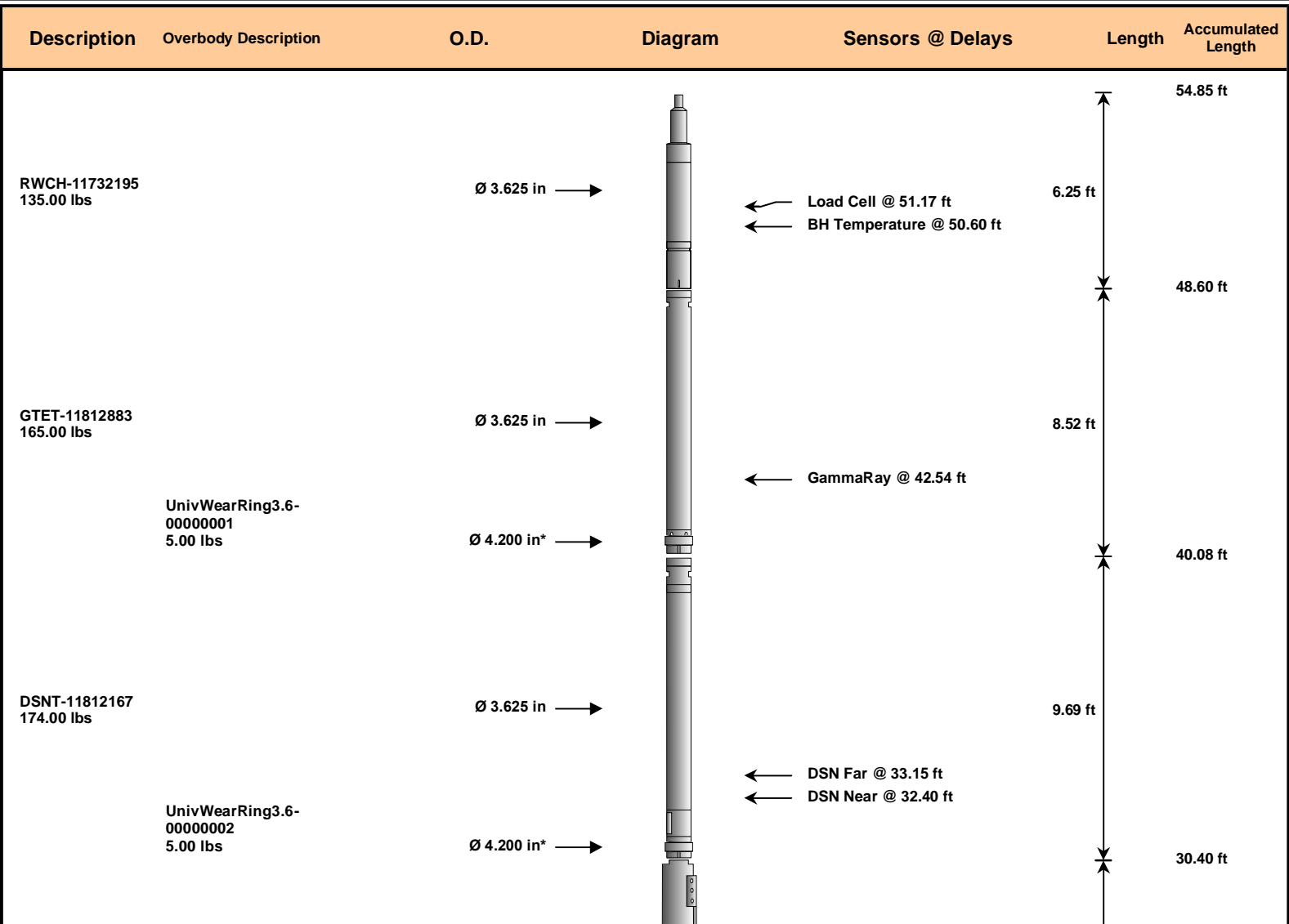
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11812883						
Gamma Ray Calibrator	247.3	247.6	-----	-0.3	+/- 9.00	api
DSNT-11812167						
Snow-Block Porosity	0.0765	0.0763	-----	0.0002	+/- 0.0150	decp
SDLT-11812177						
Pad Extension	3.75	3.84	-----	-0.09	+/-0.10	in
Ring Diameter	8.25	8.10	-----	0.15	+/-0.15	in
SDLT Pad-11795867						
Near(B+D+P+L)	1387.990	1391.829	-----	-3.839	+/-15.050	cps
Far(B+D+P+L)	1120.850	1122.459	-----	-1.609	+/-17.626	cps
ACRt Sonde-11294353						
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m

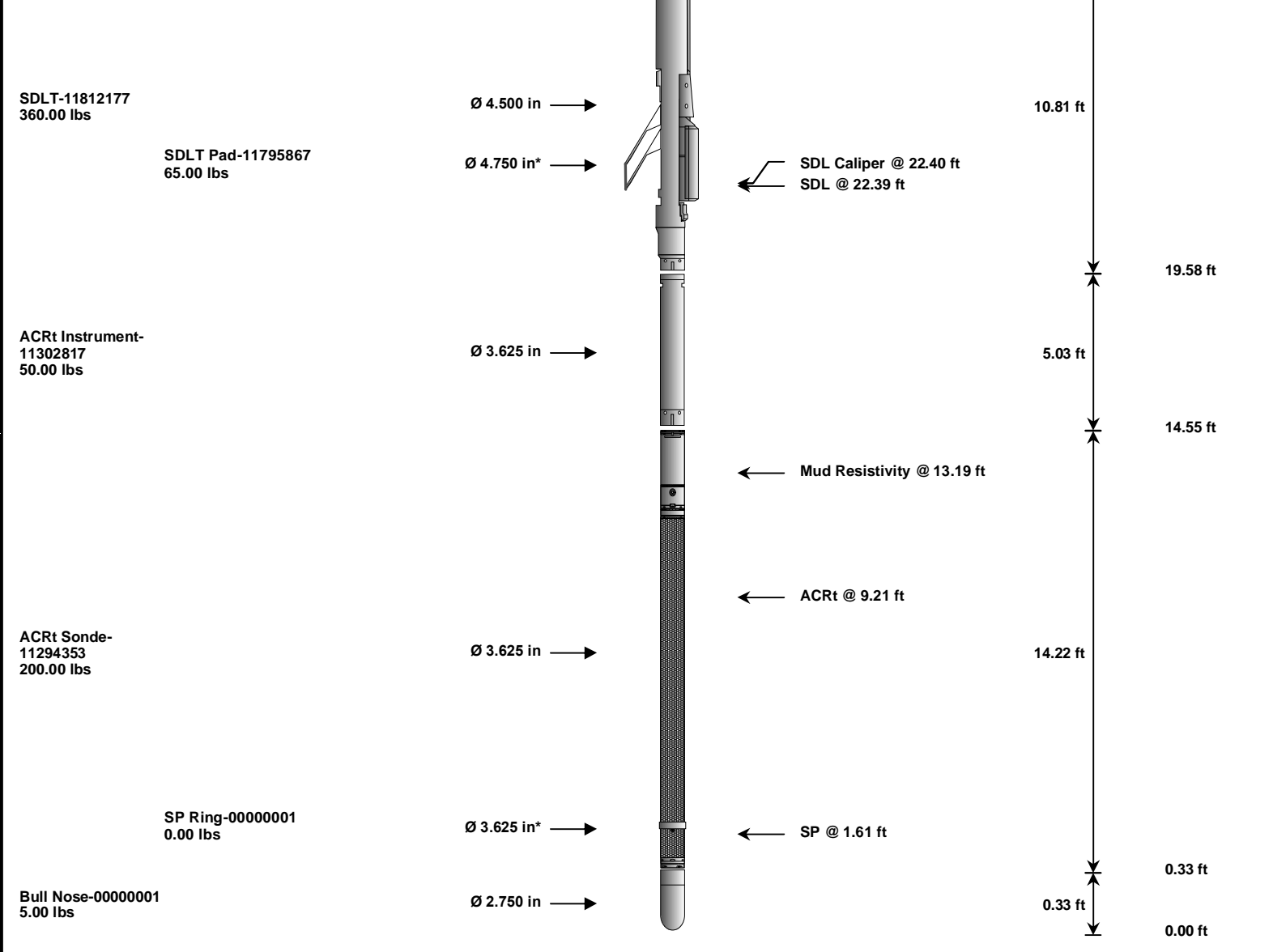
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Date: 04-Feb-13 07:15:14

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TOOL STRING DIAGRAM REPORT





Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max. Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	11732195	135.00	6.25	48.60	300.00
GTET	Gamma Telemetry Tool	11812883	165.00	8.52	40.08	60.00
UWR3P6	Universal Wear Ring 3 5-8 inch	00000001	5.00	0.35	*	40.39
DSNT	Dual Spaced Neutron	11812167	174.00	9.69	30.40	60.00
UWR3P6	Universal Wear Ring 3 5-8 inch	00000002	5.00	0.35	*	30.64
SDLT	Spectral Density Tool	11812177	360.00	10.81	19.58	60.00
SDLP	Density Insite Pad	11795867	65.00	2.55	*	21.79
ACRt	Array Compensated True Resistivity Instrument Section	11302817	50.00	5.03	14.55	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11294353	200.00	14.22	0.33	300.00
SP	SP Ring	00000001	0.00	0.25	*	1.61
BLNS	Bull Nose	00000001	5.00	0.33	0.00	300.00
Total			1,164.00	54.85		

* Not included in Total Length and Length Accumulation.

Data: HIRSCH_14-24\0001 TRIPLE_RED_SLICK\IDLE Date: 04-Feb-13 07:14:07

COMPANY	BAYSWATER EXPLORATION AND PRODUCTION LLC		
WELL	HIRSCH 14-24		
FIELD	WATTENBERG		
COUNTY	WELD	STATE	CO

HALLIBURTON

ARRAY COMPENSATED
TRUE RESISTIVITY
SPECTRAL DENSITY
DUAL SPACED NEUTRON