HALLIBURTON

ARRAY COMPENSATED TRUE RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON

COMPANY	BAYSWATER EXPLORATION AND PRODUCTION
WELL	BOOTH 30-23
FIELD	WATTENBERG
COUNTY	WELD
STATE	CO

COMPANY **BAYSWATER EXPLORATION AND PRODUCTION**

WELL **BOOTH 30-23**

FIELD **WATTENBERG**

COUNTY **WELD** STATE **CO**

API No. 05123359270000

Location SURFACE LOCATION: 416' FNL & 2345' FWL NENW
BOTTOM LOCATION: 112' FNL & 87' FWL NWNW
LATITUDE: 40.565189°
LONGITUDE: -104.631288°

Other Services:
RWCH

Sect. 23 Twp. 7N Rge. 65W

Permanent Datum	GL	Elev. 4897.0 ft	Elev.: K.B. 4913.0 ft
Log measured from	KB	16.0 ft above perm. Datum	D.F. 4912.0 ft
Drilling measured from	KB		G.L. 4897.0 ft

Date	10-Nov-12		
Run No.	ONE		
Depth - Driller	7910.00 ft		
Depth - Logger	7910.0 ft		
Bottom - Logged Interval	7908 ft		
Top - Logged Interval	CASING		
Casing - Driller	8.625 in @ 670.0 ft	@	@
Casing - Logger	668.0 ft		
Bit Size	7.875 in	@	@
Type Fluid in Hole	WATER BASED MUD		
Density / Viscosity	9.5 ppg / 44.00 s/qt		
PH / Fluid Loss	8.00 pH / 11.0 cptm		
Source of Sample	MUD CELL		
Rm @ Meas. Temperature	1.370 ohmm @ 57.70 degF	@	@
Rmf @ Meas. Temperature	0.92 ohmm @ 75.00 degF	@	@
Rmc @ Meas. Temperature	0.972 ohmm @ 75.00 degF	@	@
Source Rmf / Rmc	CHART / CHART		
Rm @ BHT	0.45 ohmm @ 190.0 degF	@	@
Time Since Circulation	8.5 hr		
Time on Bottom	10-Nov-12 21:19		
Max. Rec. Temperature	190.0 degF @ 7910.0 ft	@	@
Equipment / Location	11454566 / BRIGHTON		
Recorded By	C.CRADDOCK	R. TWEETEN	
Witnessed By	D. PATTON	M. BROWN	

Fold here

Service Ticket No.: 9958959 API Serial No.: 05123359270000 PGM Version: WL INSITE R3.6.2 (Build 7)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE					
Date	Sample No.				
Depth-Driller					
Type Fluid in Hole					
Density	Viscosity				
Ph	Fluid Loss				
Source of Sample					
Rm @ Meas. Temp		@		@	
Rmf @ Meas. Temp.		@		@	
Rmc @ Meas. Temp.		@		@	
Source Rmf	Rmc				
Rm @ BHT		@		@	
Rmf @ BHT		@		@	
Rmc @ BHT		@		@	

RESISTIVITY SCALE CHANGES			
Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA				
Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
ONE	ACRT	N/A	FREE	N/A
	11302817			
	11294353			

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11812883	Serial No.		Serial No.	11045470	Serial No.	11301132
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.	DSN434	Serial No.	5471GW
Distance to Source	10'	FWDA [Y/N]		Strength	1.78 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	7910	7750	REC	0	200				20	0	2.68	20	0	SAND
ONE	7750	7500	REC	0	200				20	0	2.71	20	0	LIME
ONE	7500	CSG	REC	0	200				20	0	2.68	20	0	SAND

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks: RWCH-GTET-DSNT-SDLT-ACRT RUN IN COMBINATION.

ANNULAR HOLE VOLUME CALCULATED FOR 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: M. BURNETT, A. KAMPA, I. KHALID RIG: ENSIGN 7

THANK YOU FOR USING HALLIBURTON LOGGING SERVICES - BRIGHTON, CO - (303) 825-4346

HALLIBURTON

PARAMETERS REPORT

Depth ((ft))	Tool Name	Mnemonic	Description	Value	Units
TOP					
	DSNT	NLIT	Neutron Lithology	Sandstone	
	SDLT Pad	DMA	Formation Density Matrix	2.680	g/cc
7500.00					
	DSNT	NLIT	Neutron Lithology	Limestone	
	SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
7750.00					
	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	9.500	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	700.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	1.370	ohmm
	SHARED	TRM	Temperature of Mud	57.7	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	25.0	degF
	SHARED	TD	Total Well Depth	7910.00	ft
	SHARED	BHT	Bottom Hole Temperature	190.0	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 Upr	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

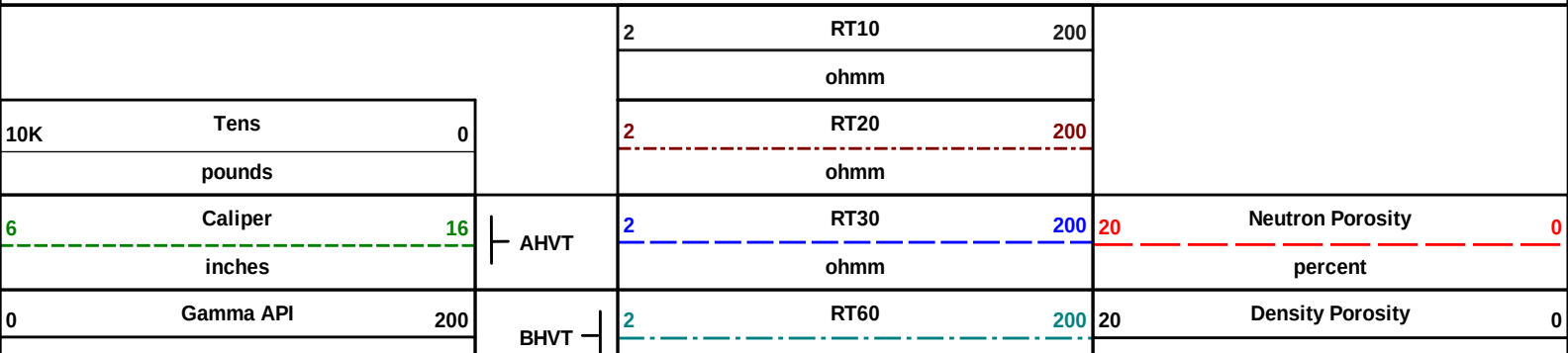
BOTTOM

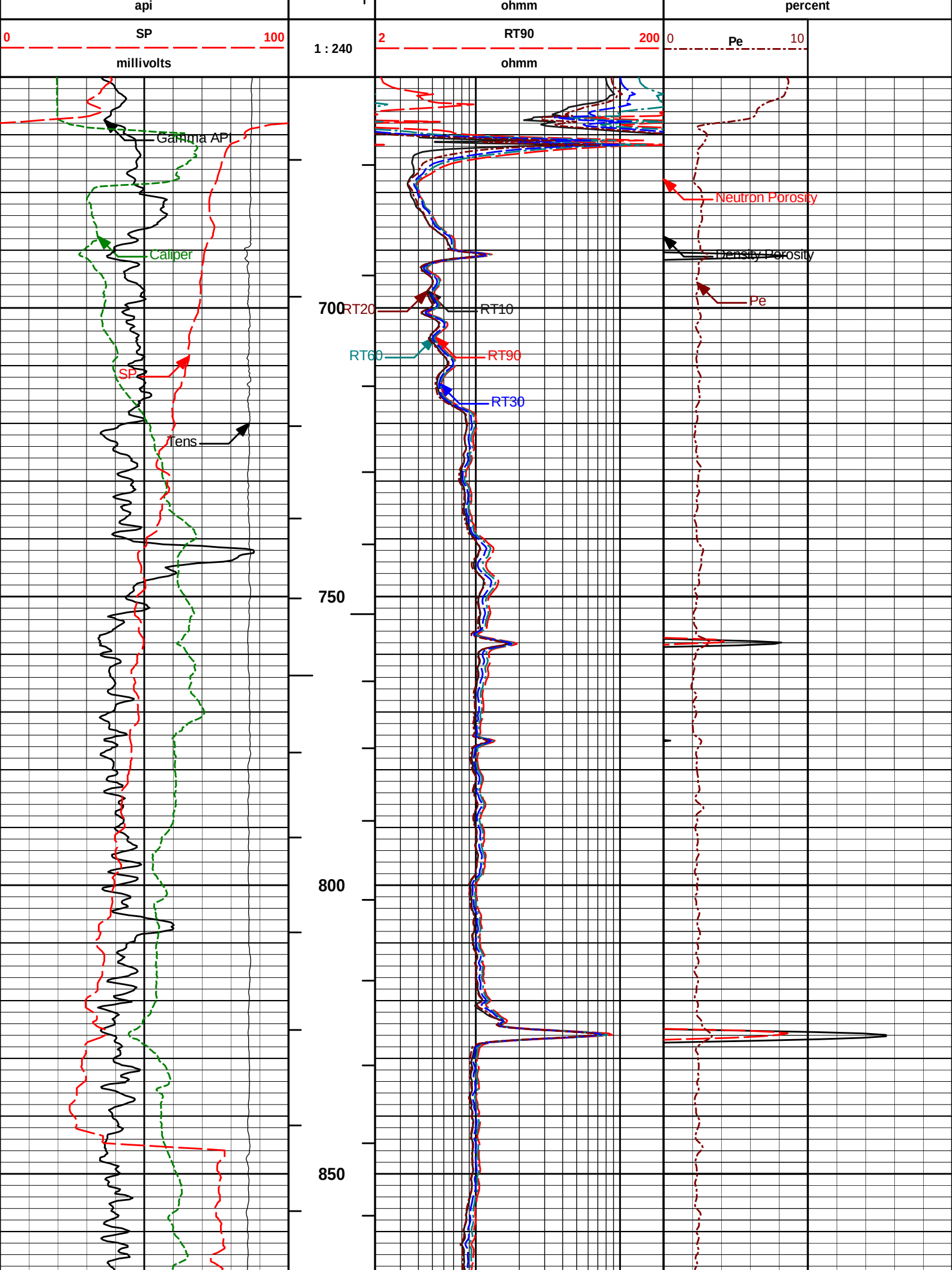
Data: BOOTH_30-23\0001 BAYSWATER\003.01 10-Nov-12 21:39 Up **Date: 10-Nov-12 21:41:03**

HALLIBURTON

Plot Time: 10-Nov-12 23:11:11
Plot Range: 660 ft to 7922.17 ft
Data: BOOTH_30-23\Well Based\MAIN*
Plot File: \\COMP\TD-NIO

MAIN PASS 5" = 100'

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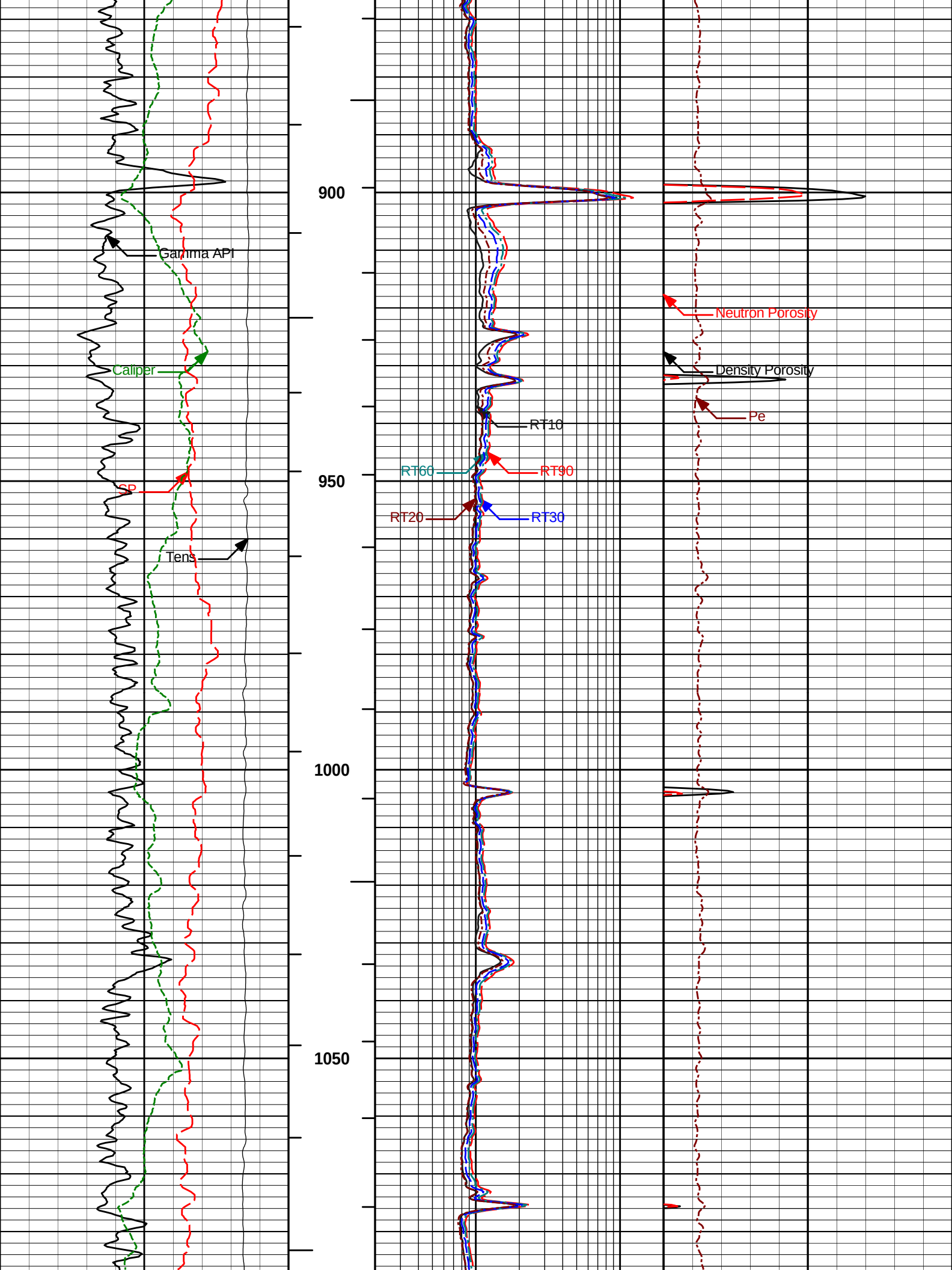
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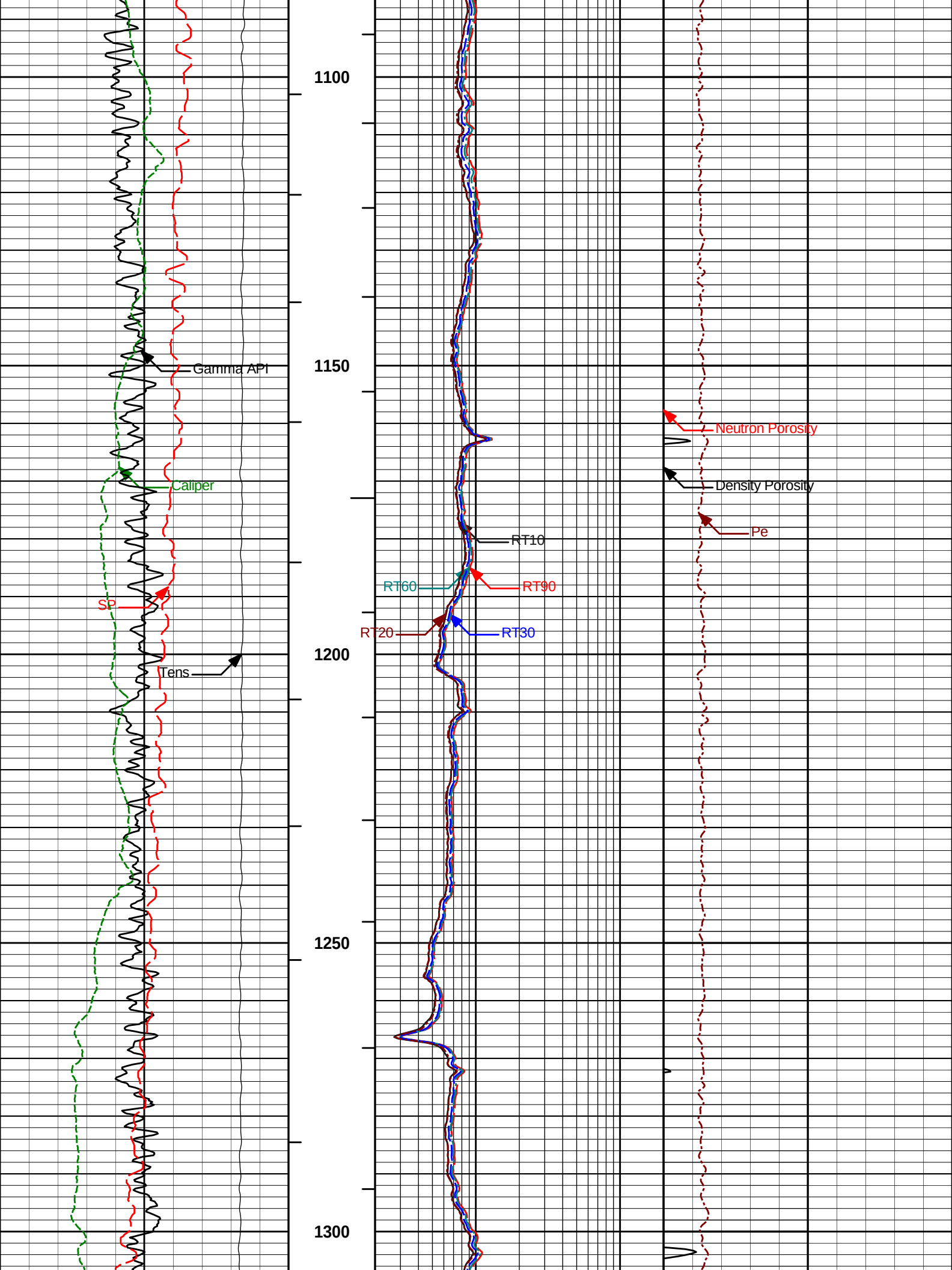
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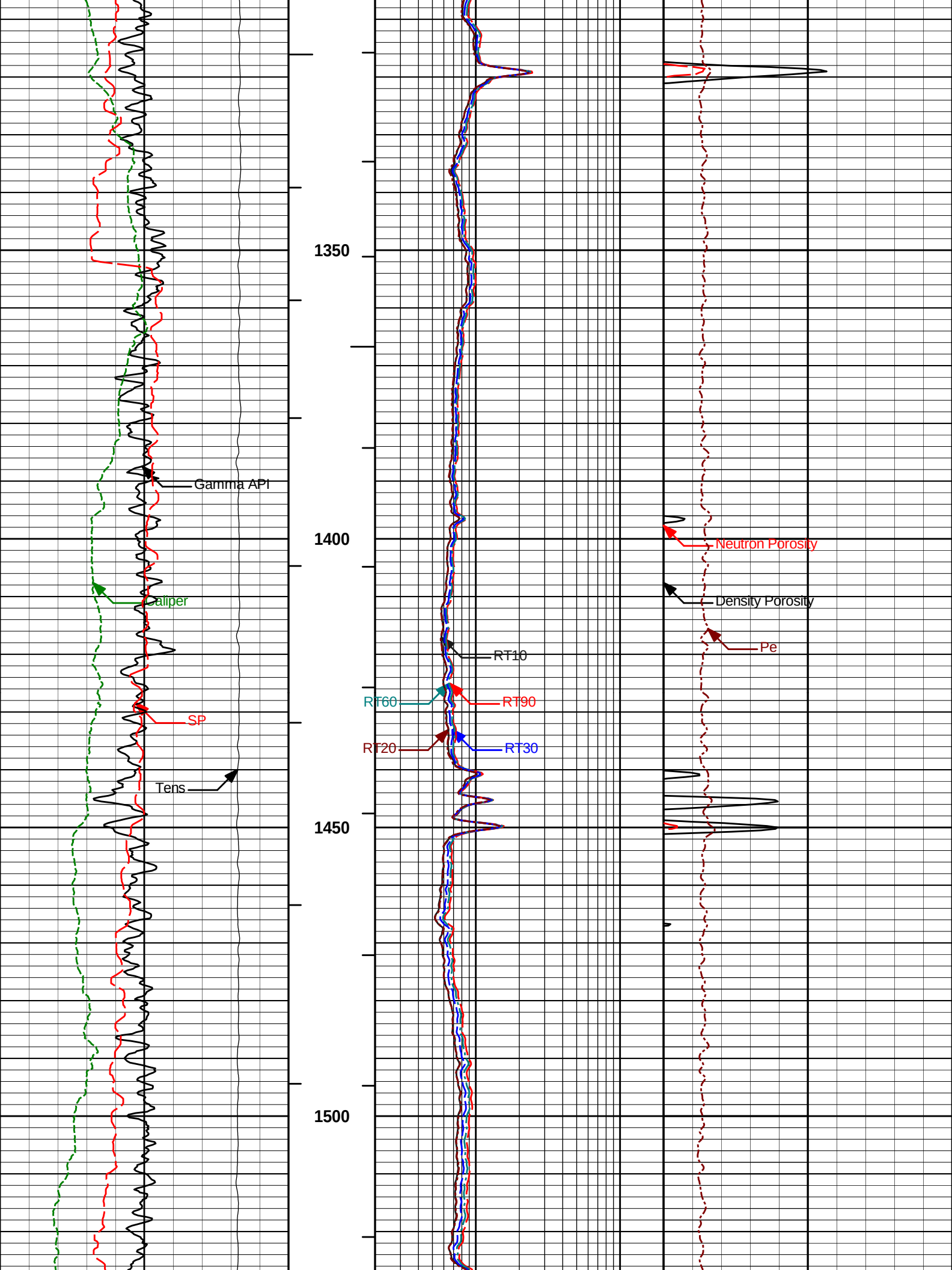
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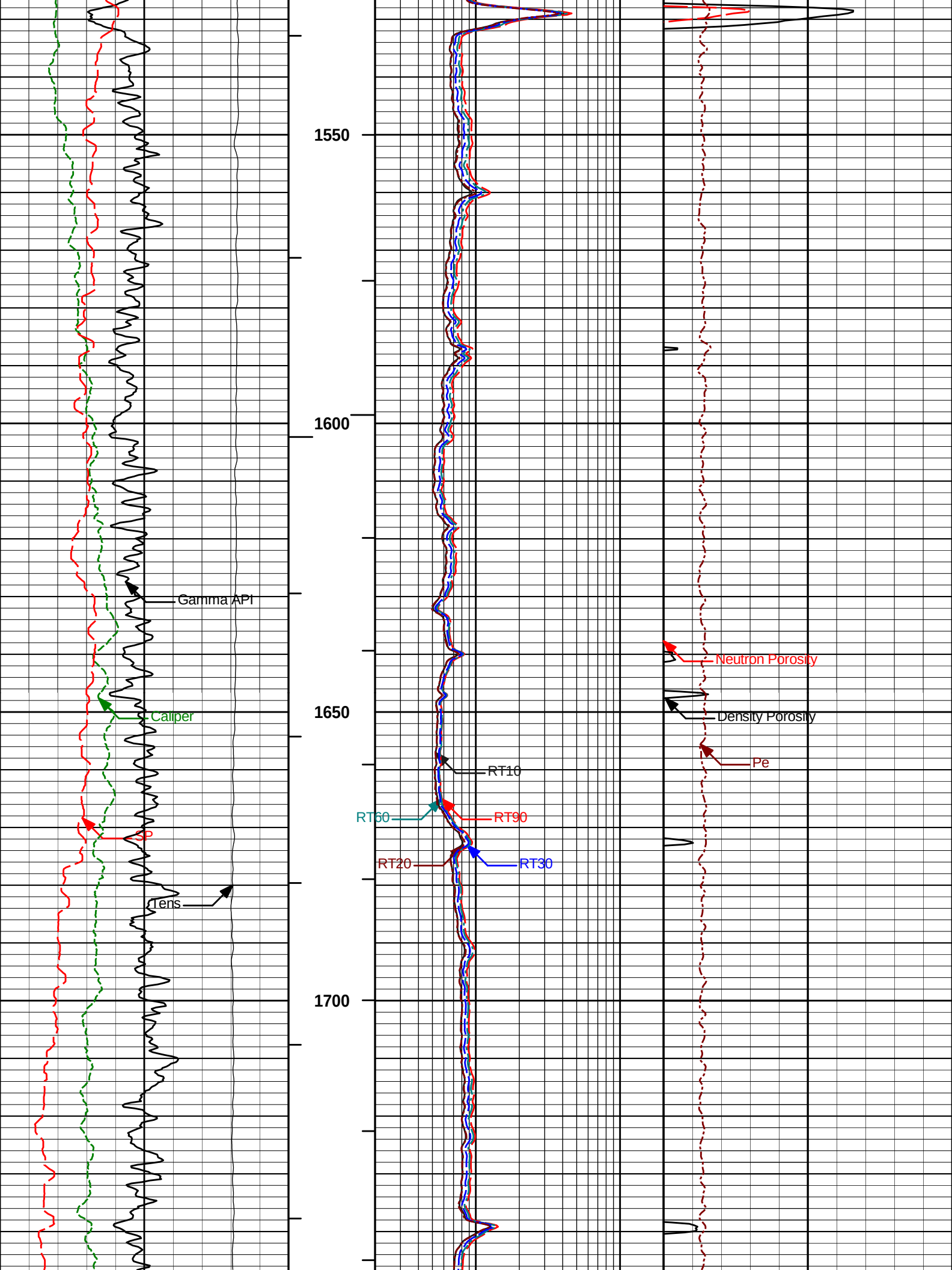
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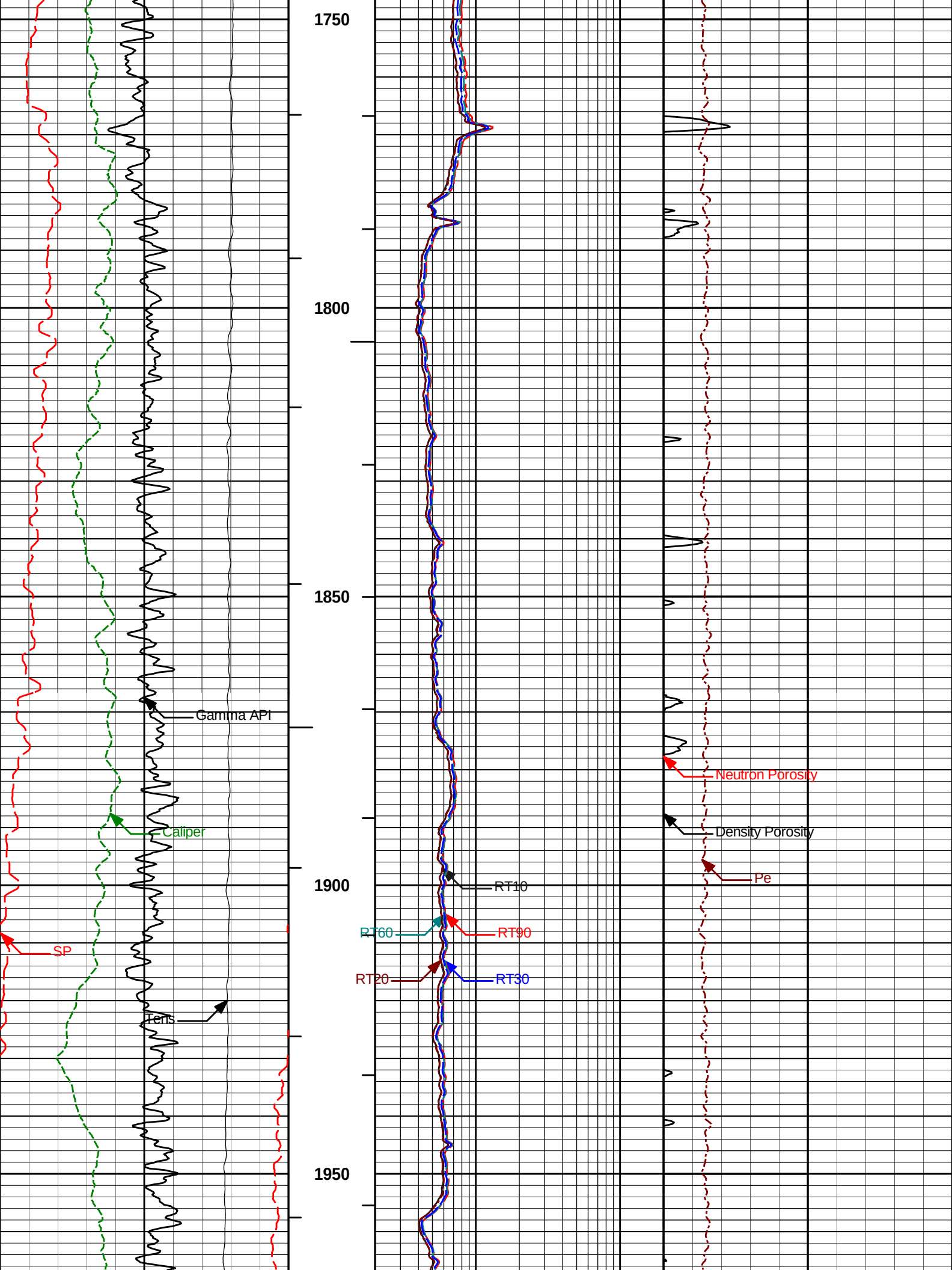
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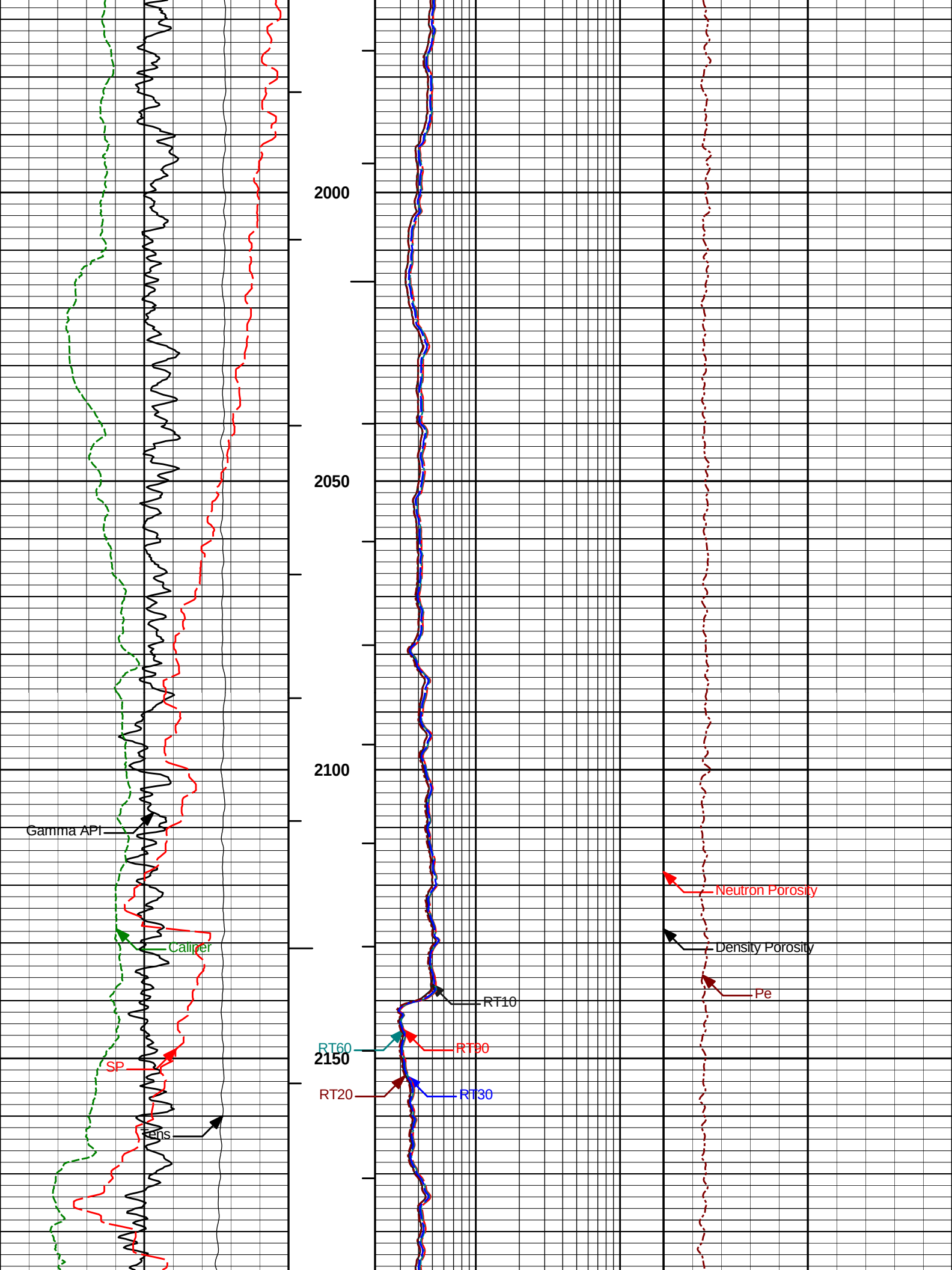
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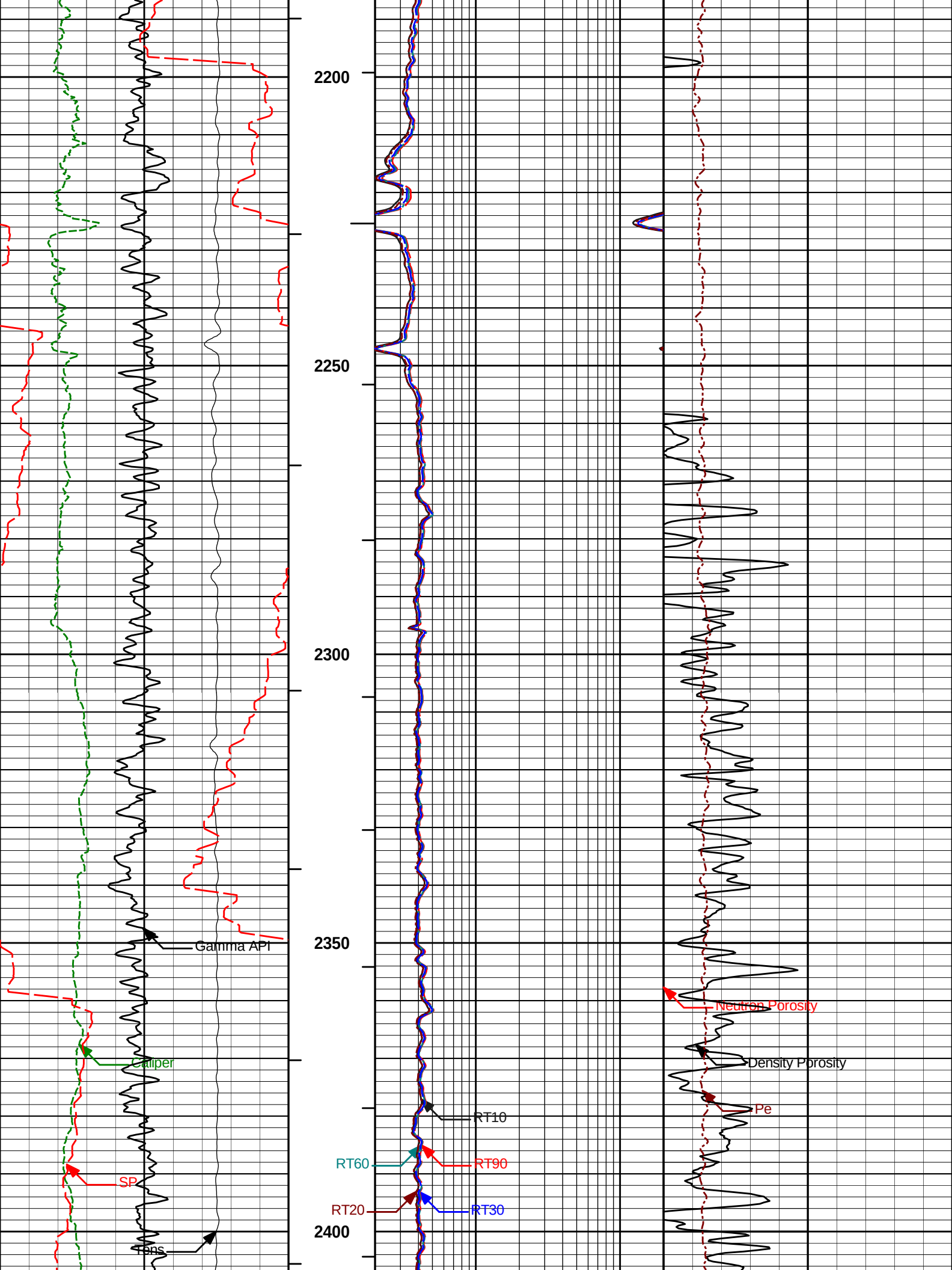
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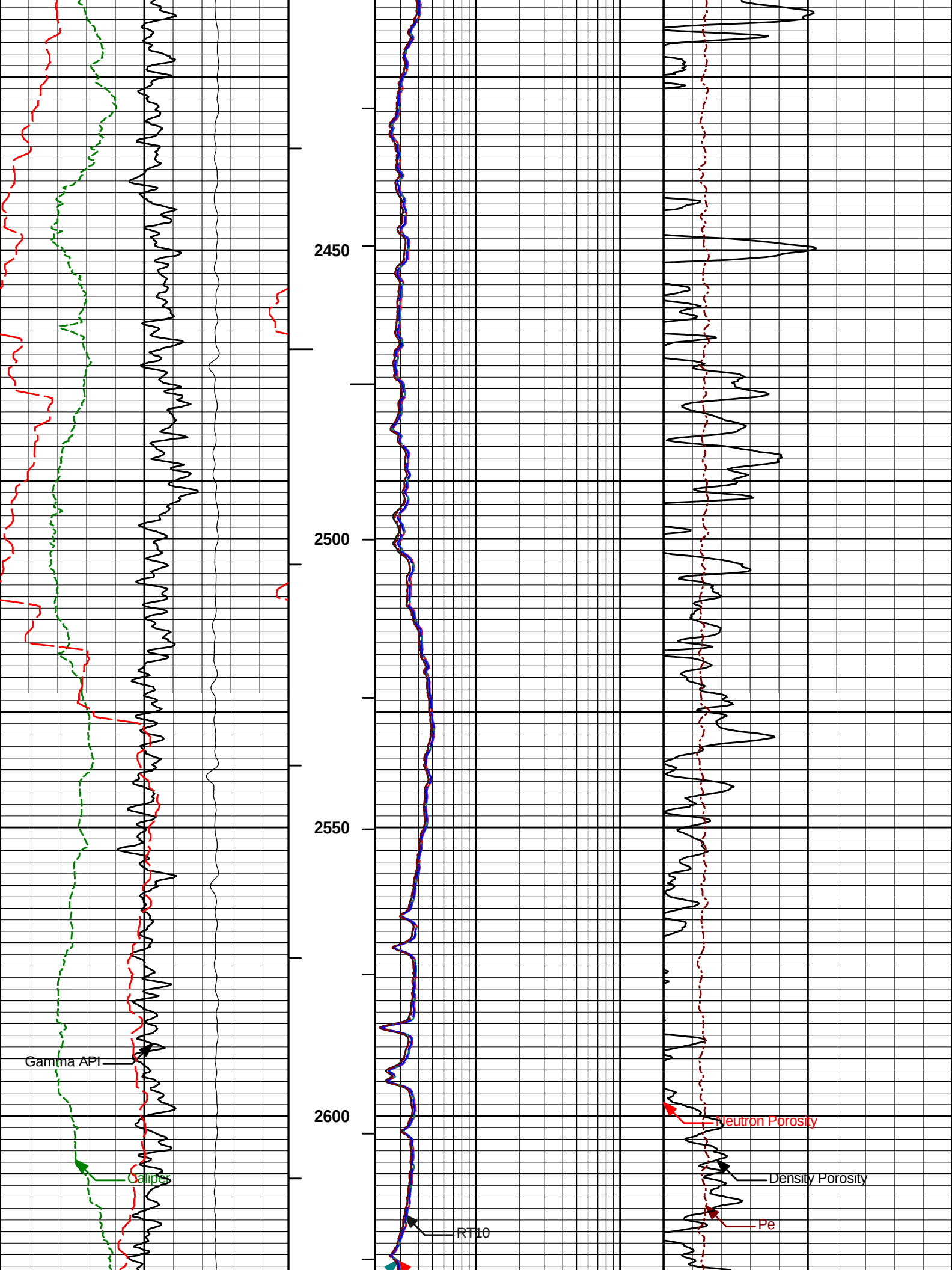
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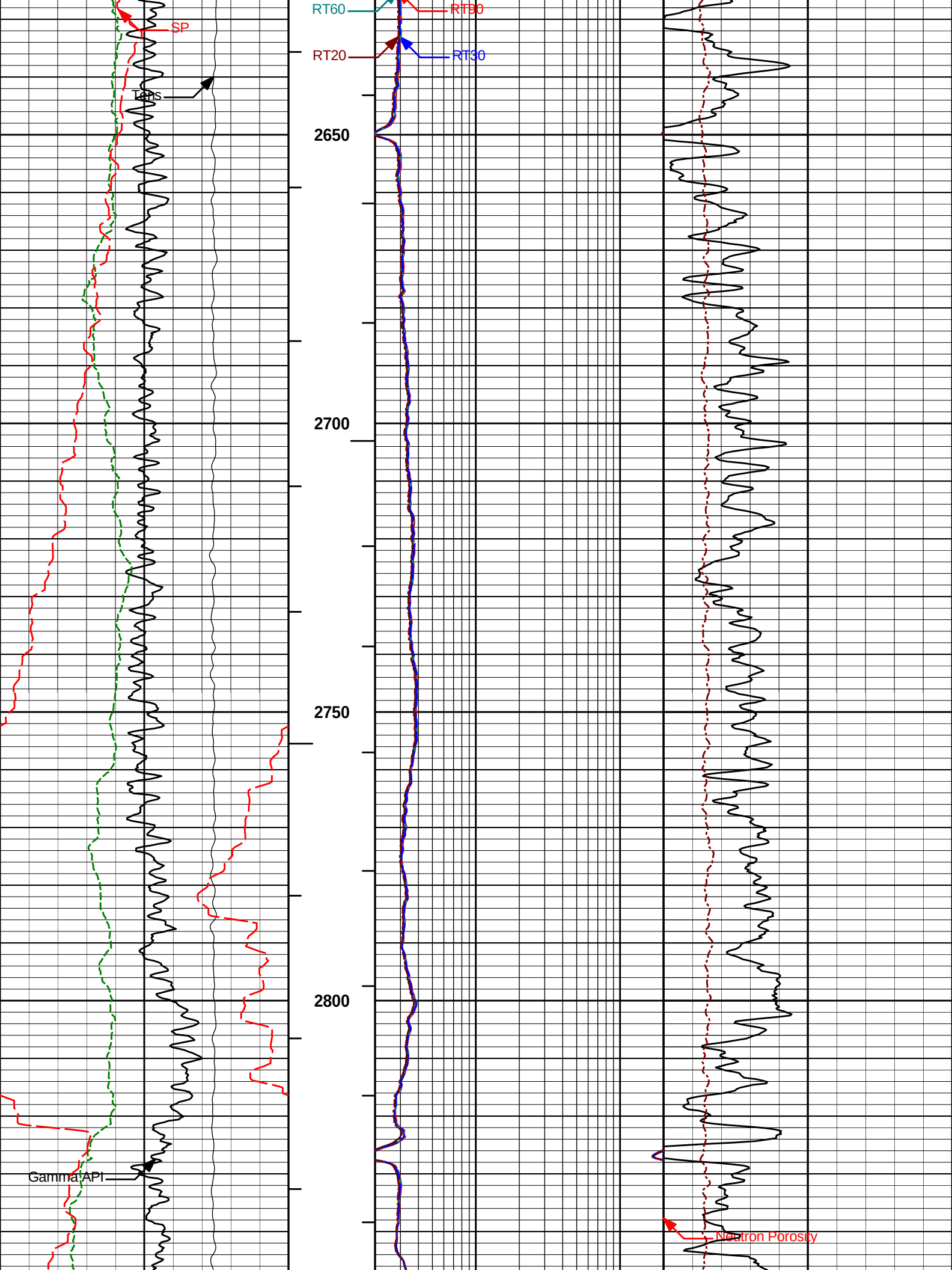
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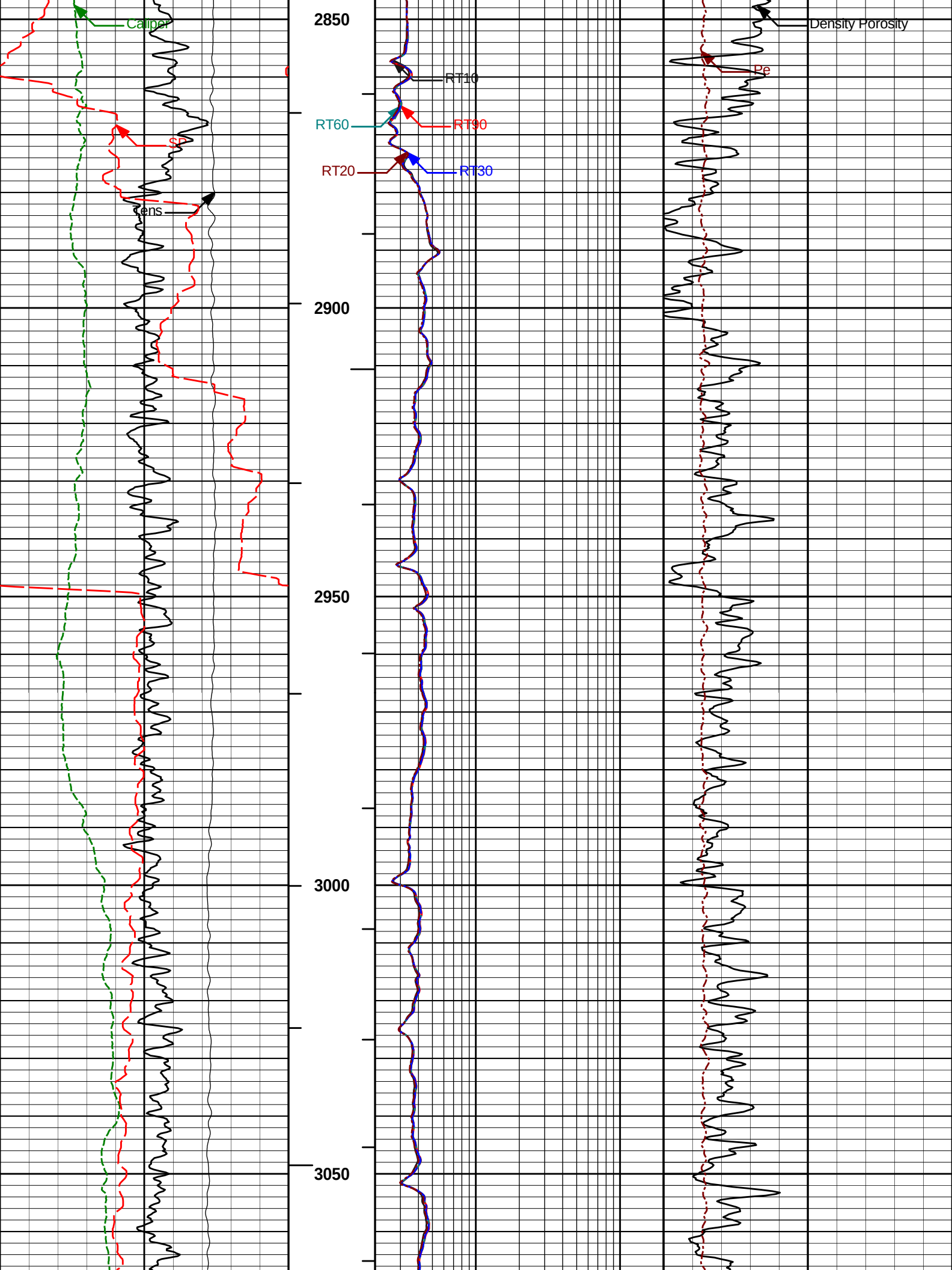
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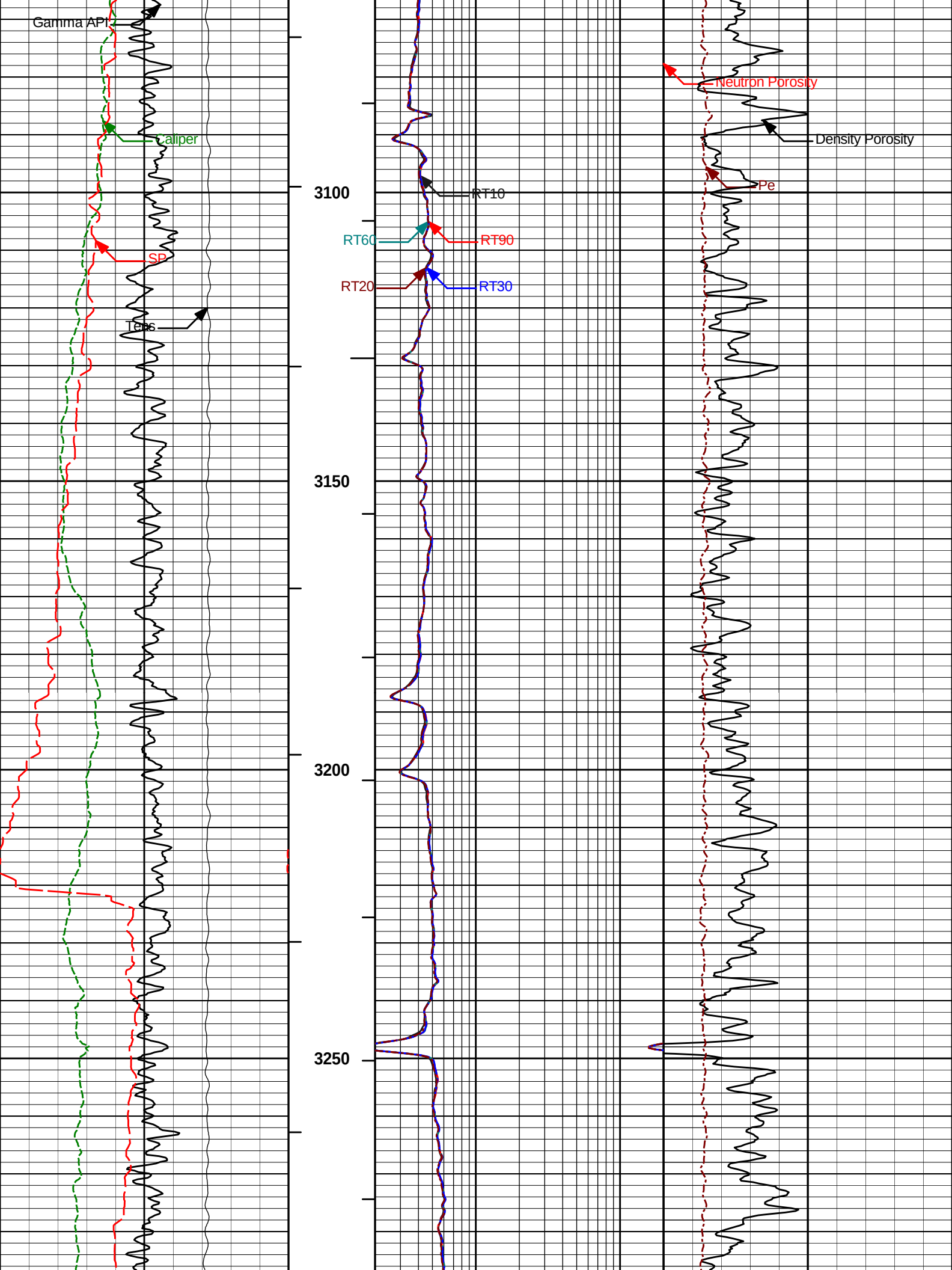
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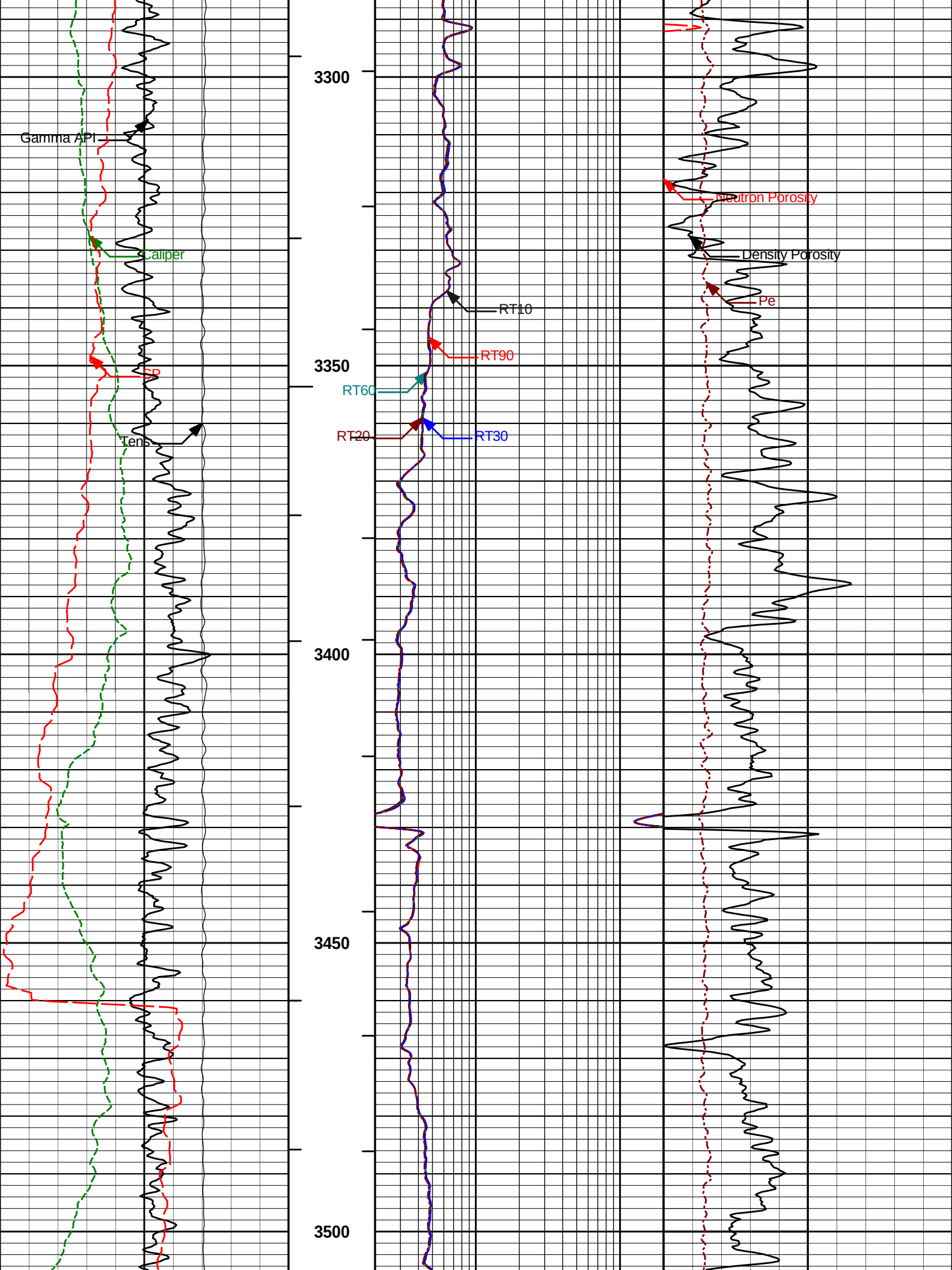
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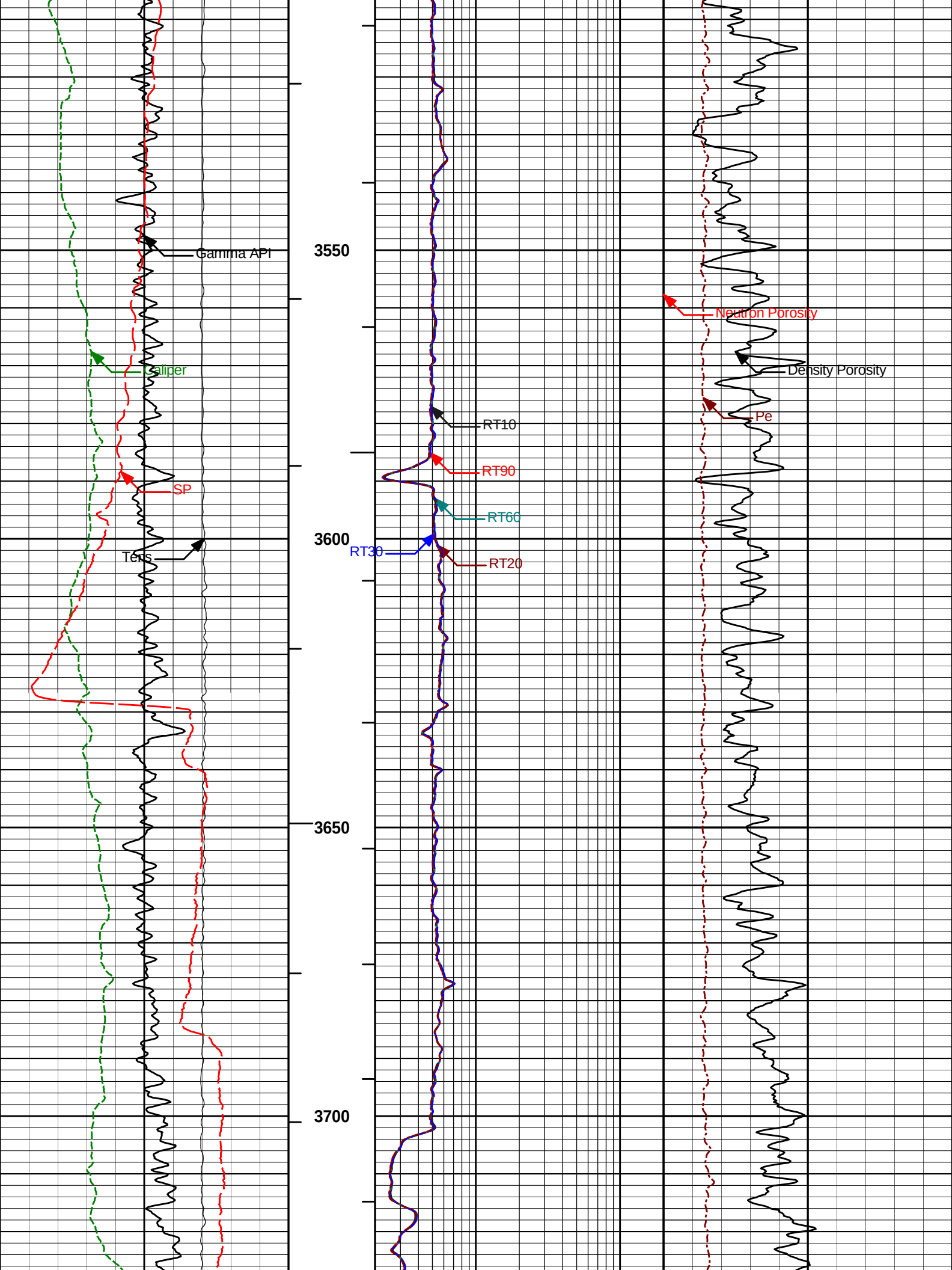
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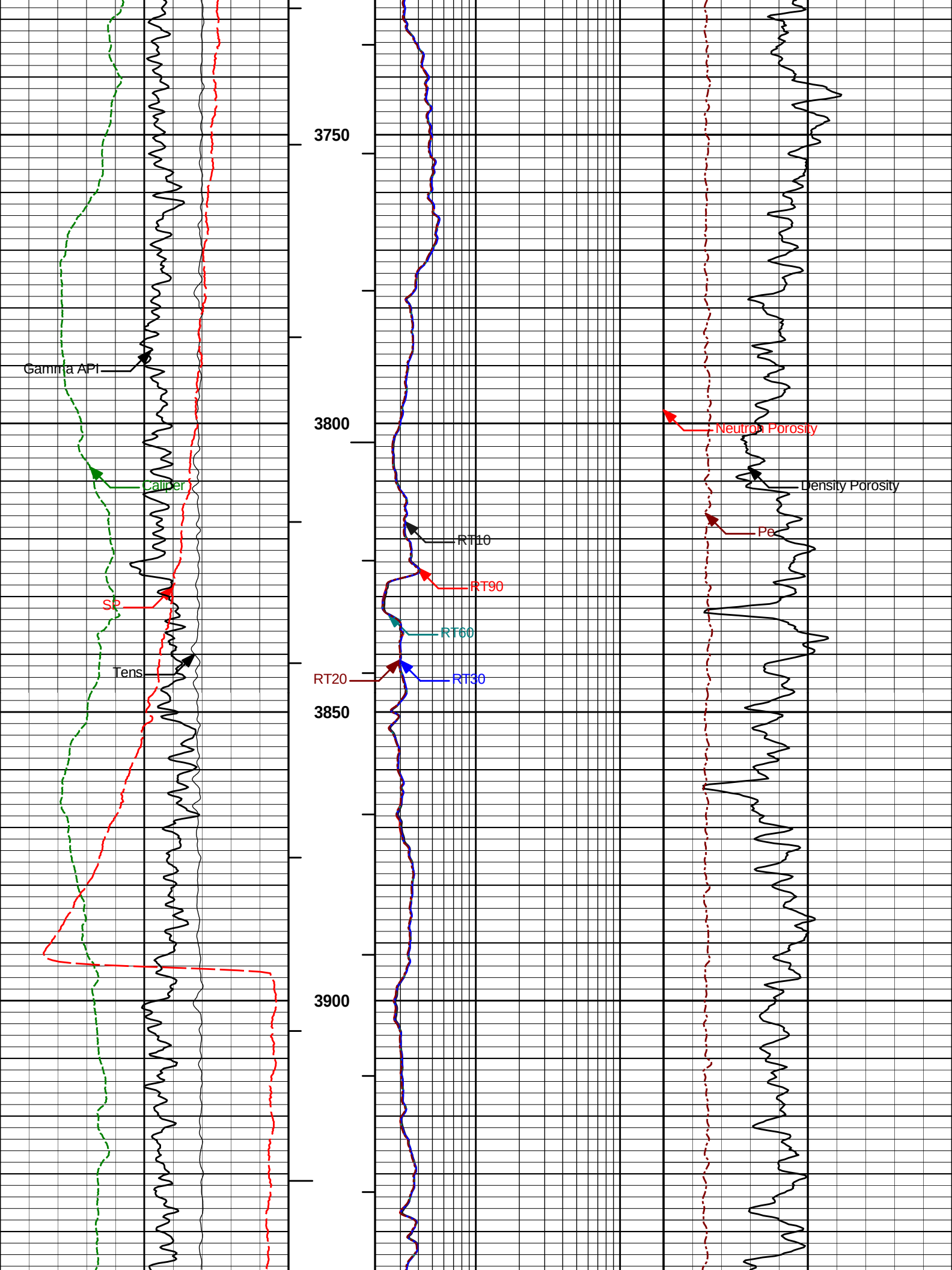
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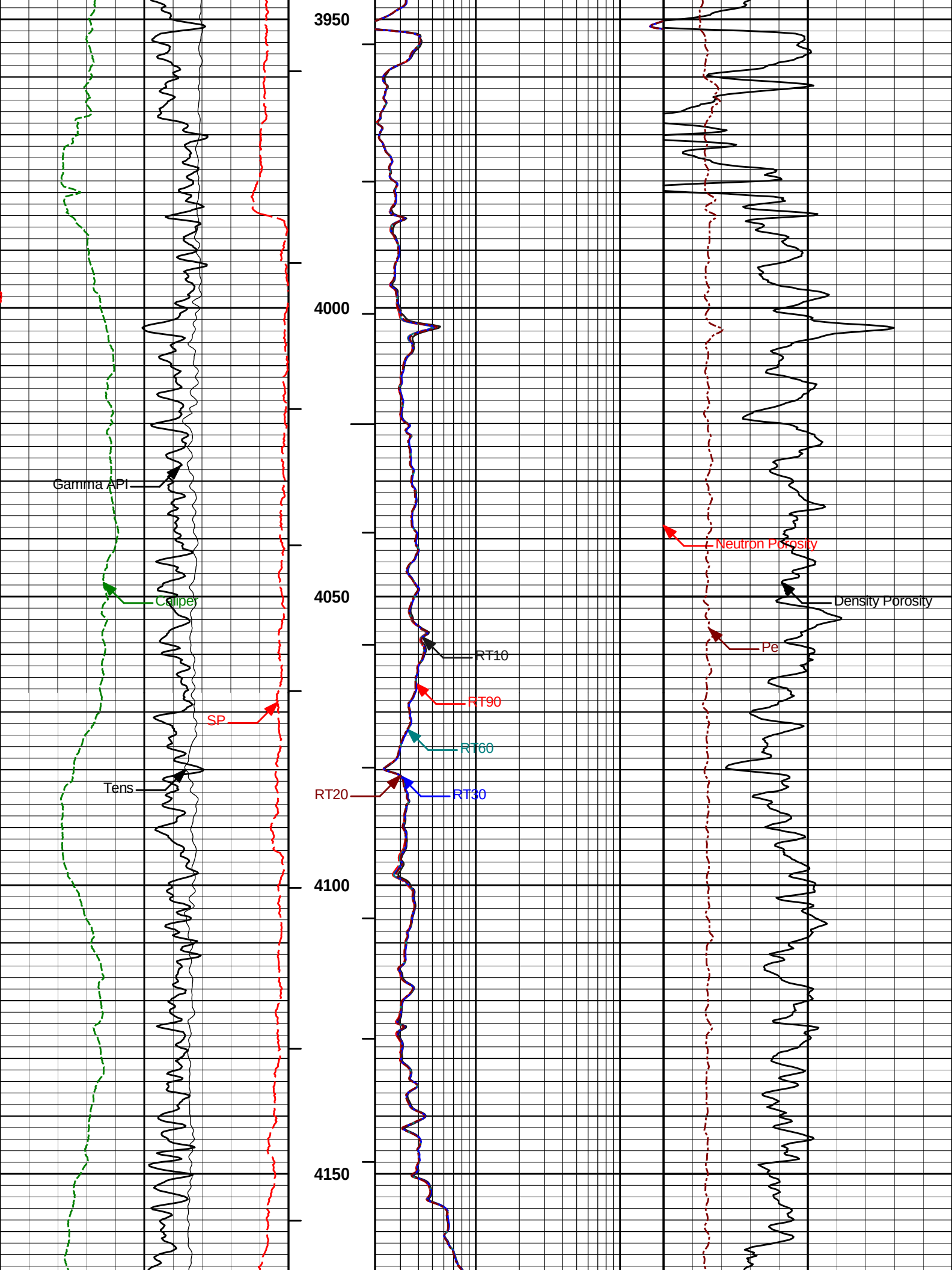
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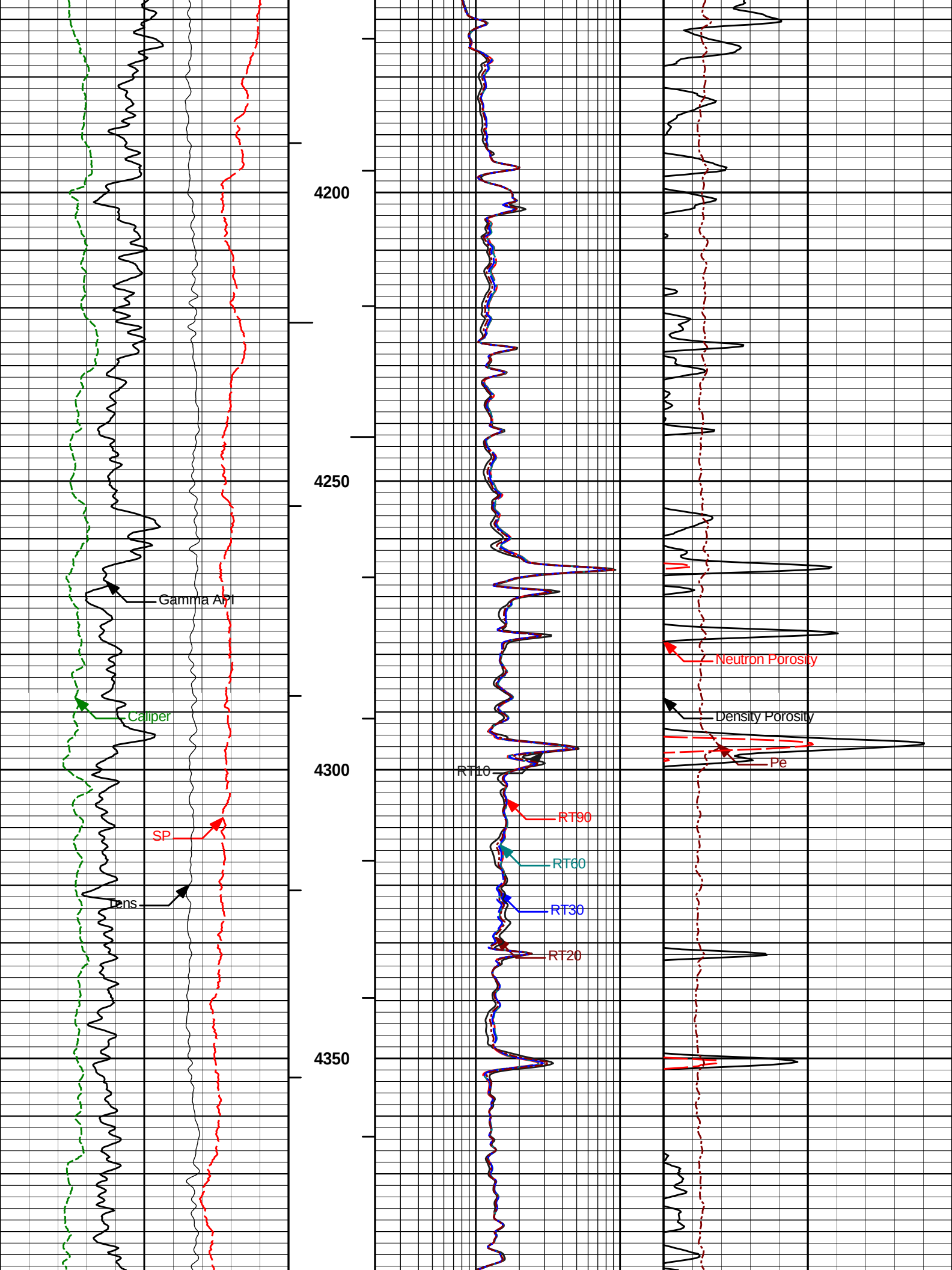
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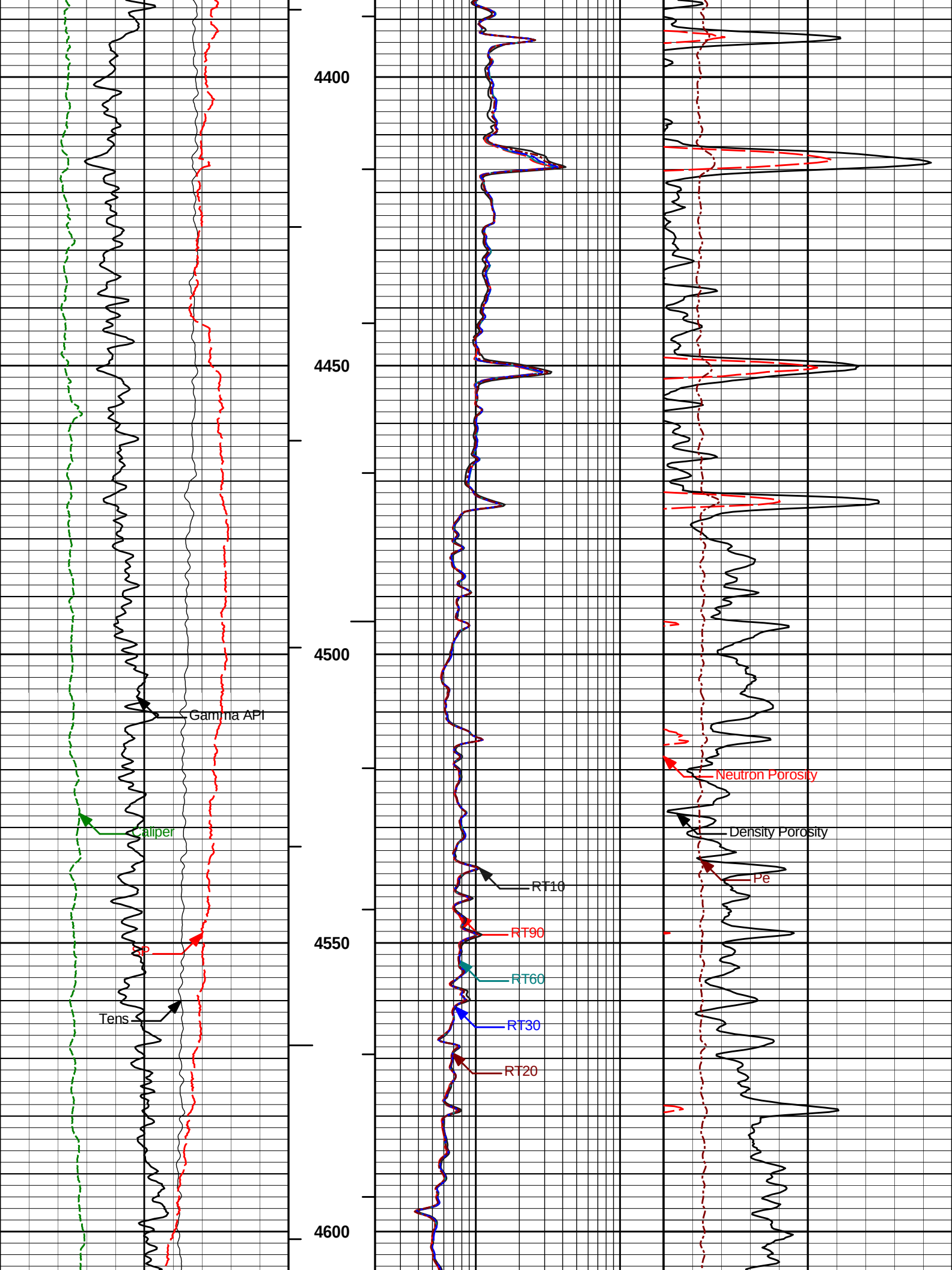
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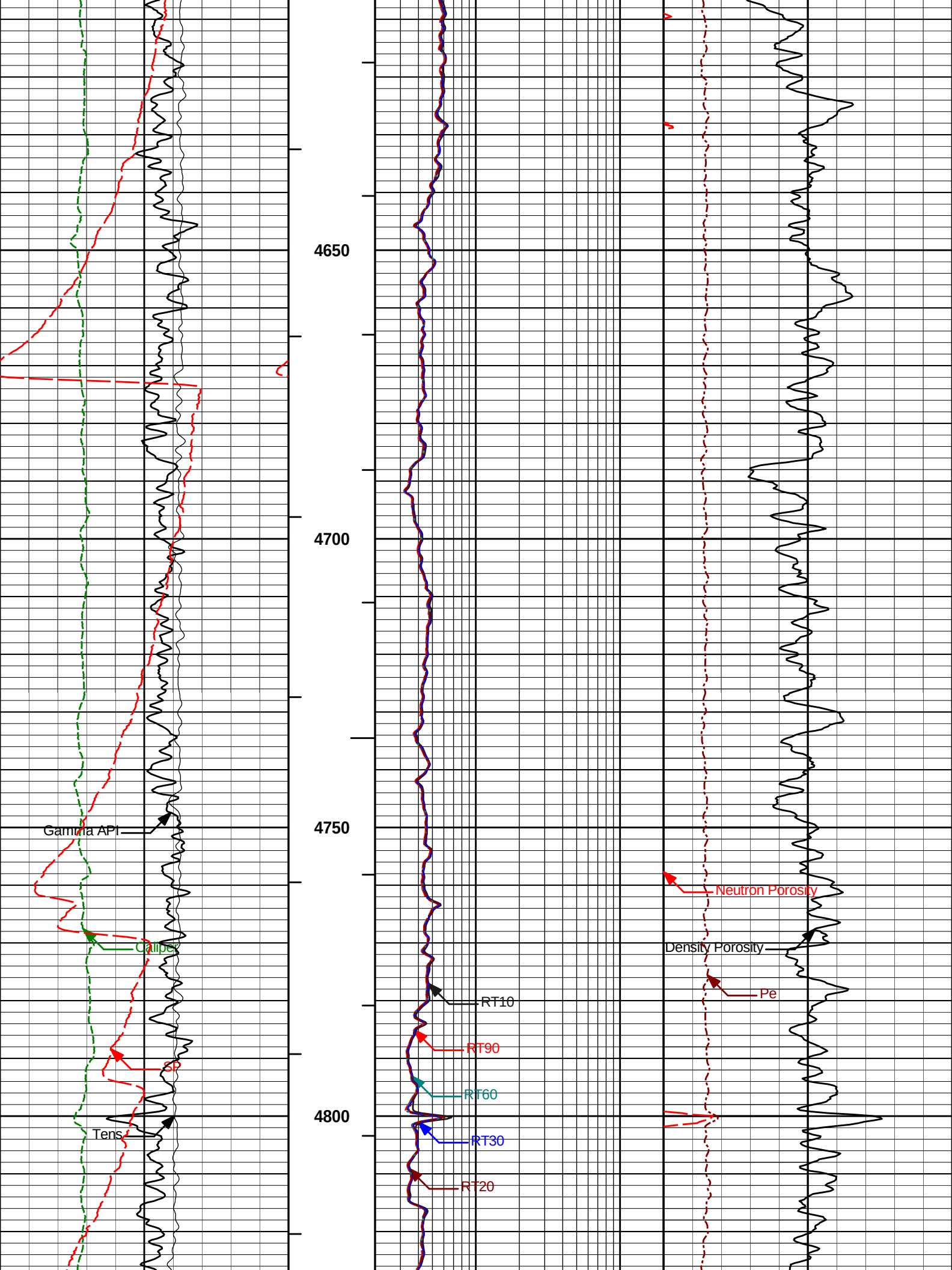
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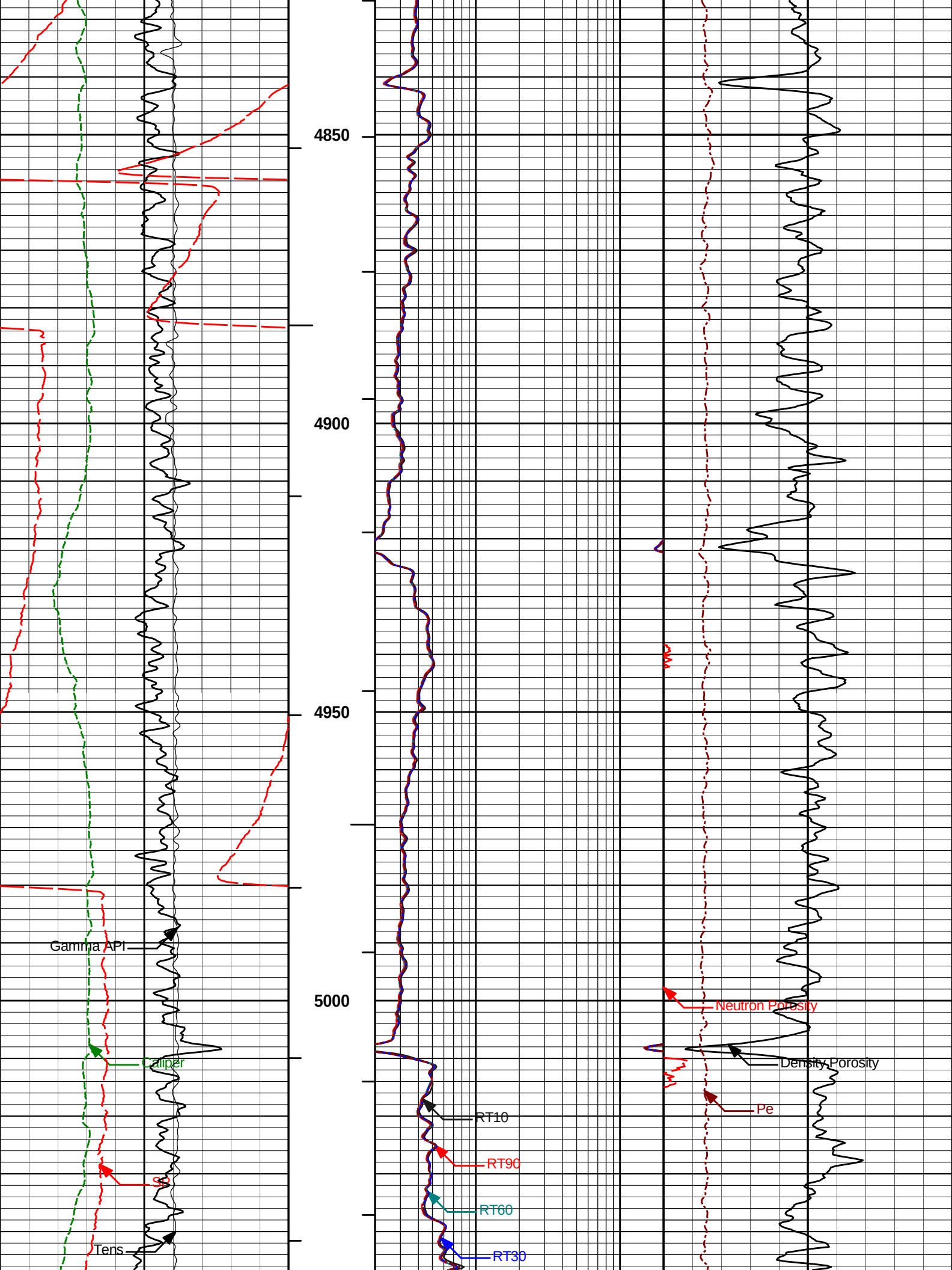
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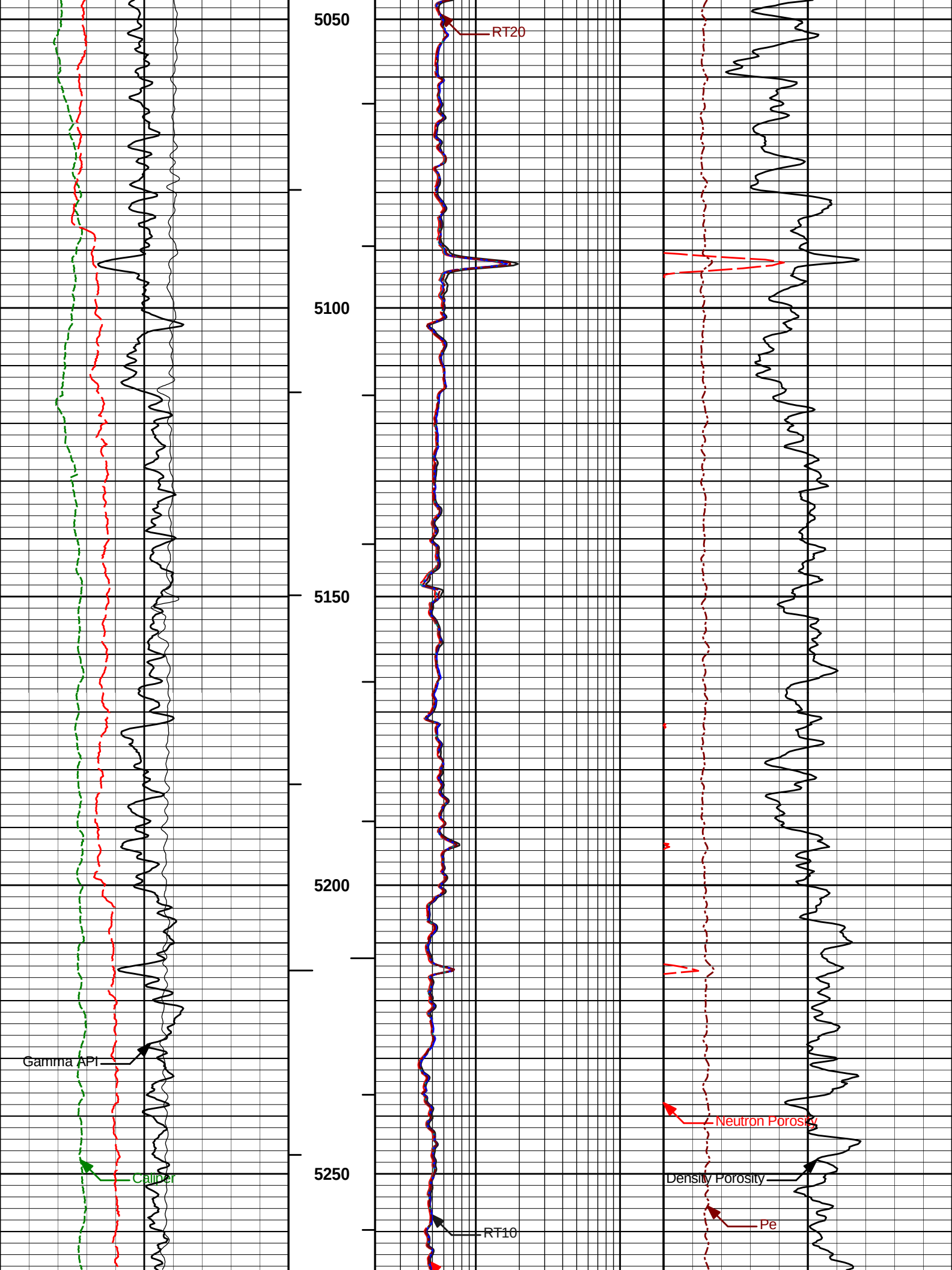
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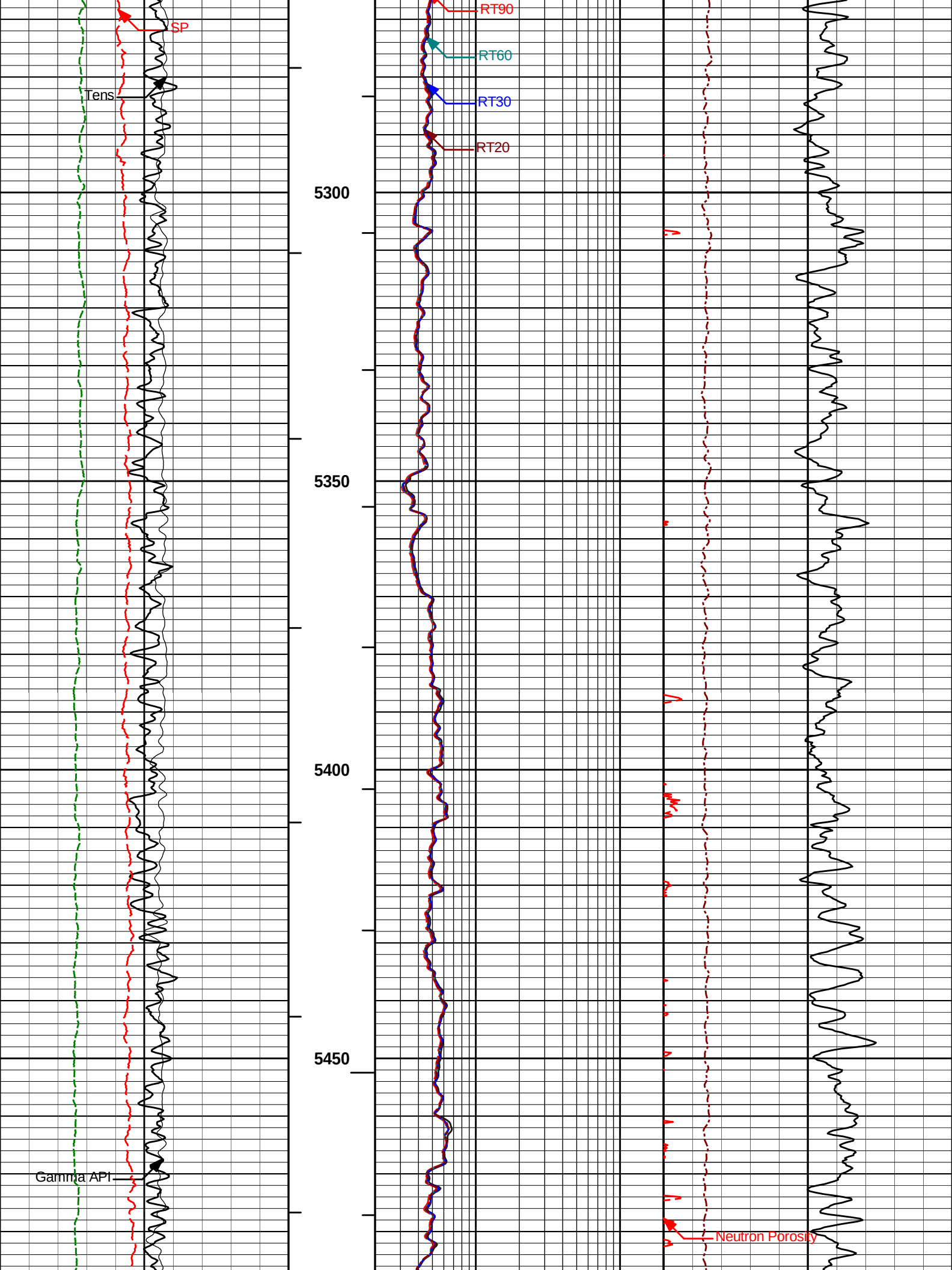
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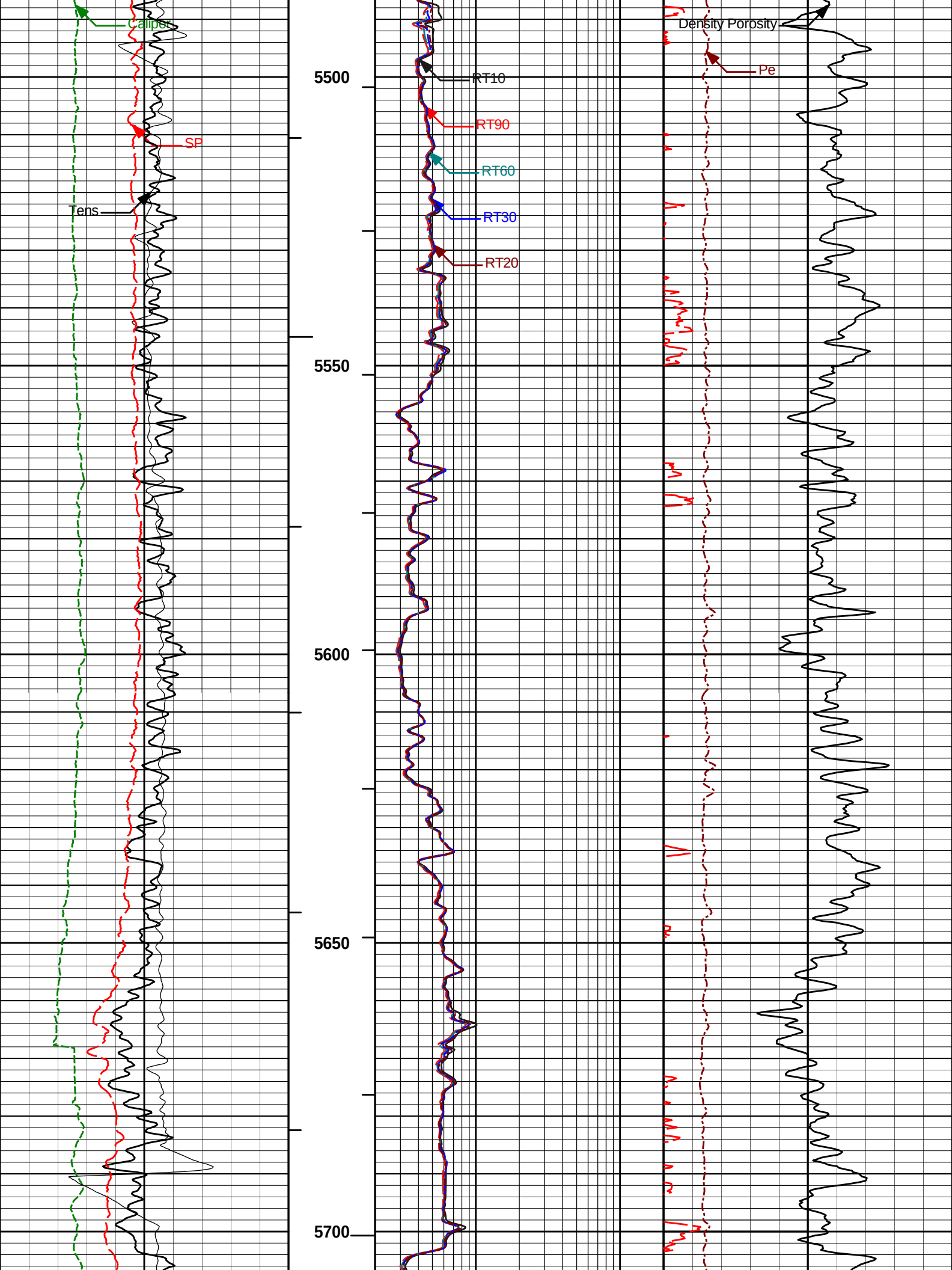
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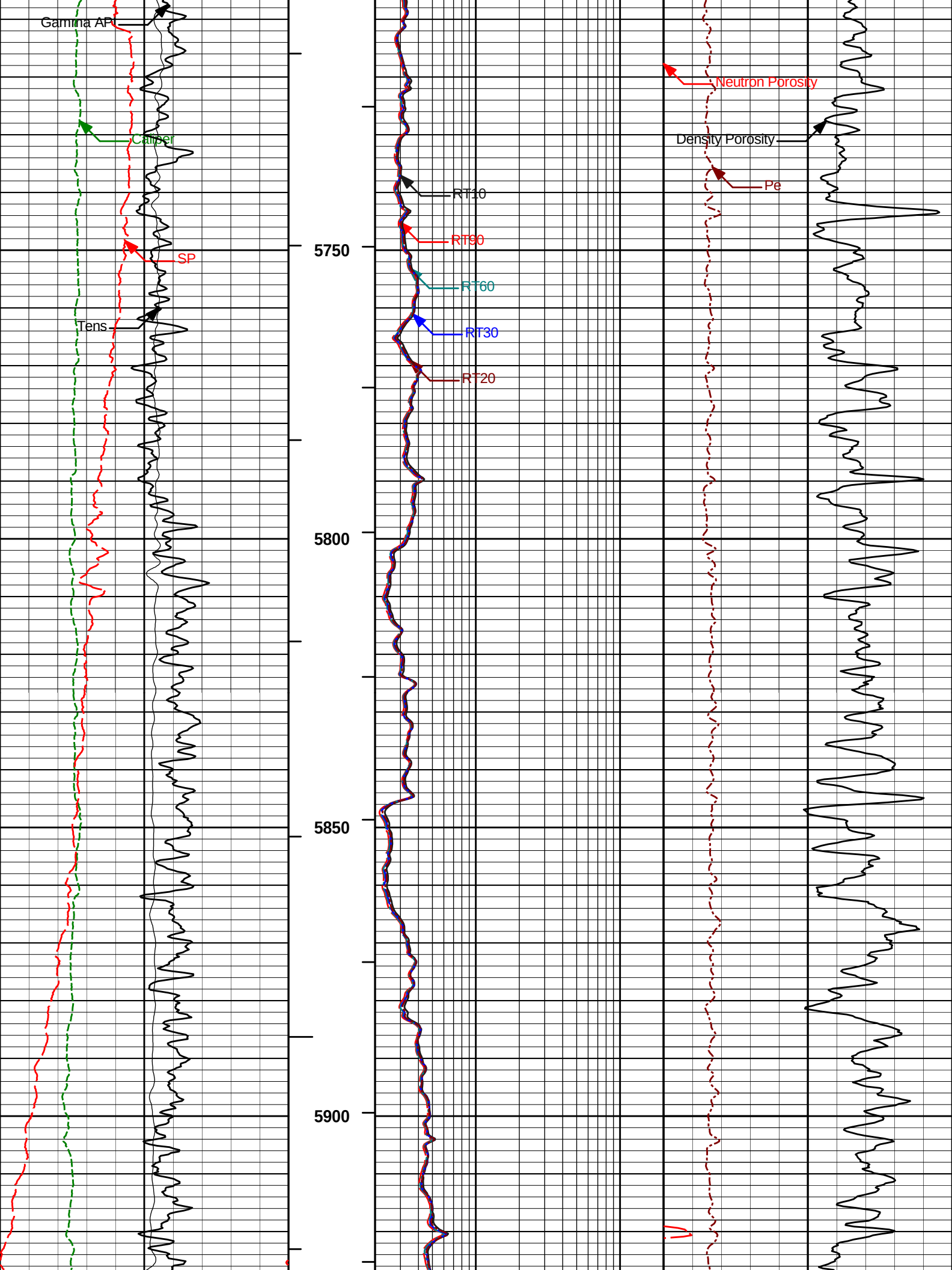
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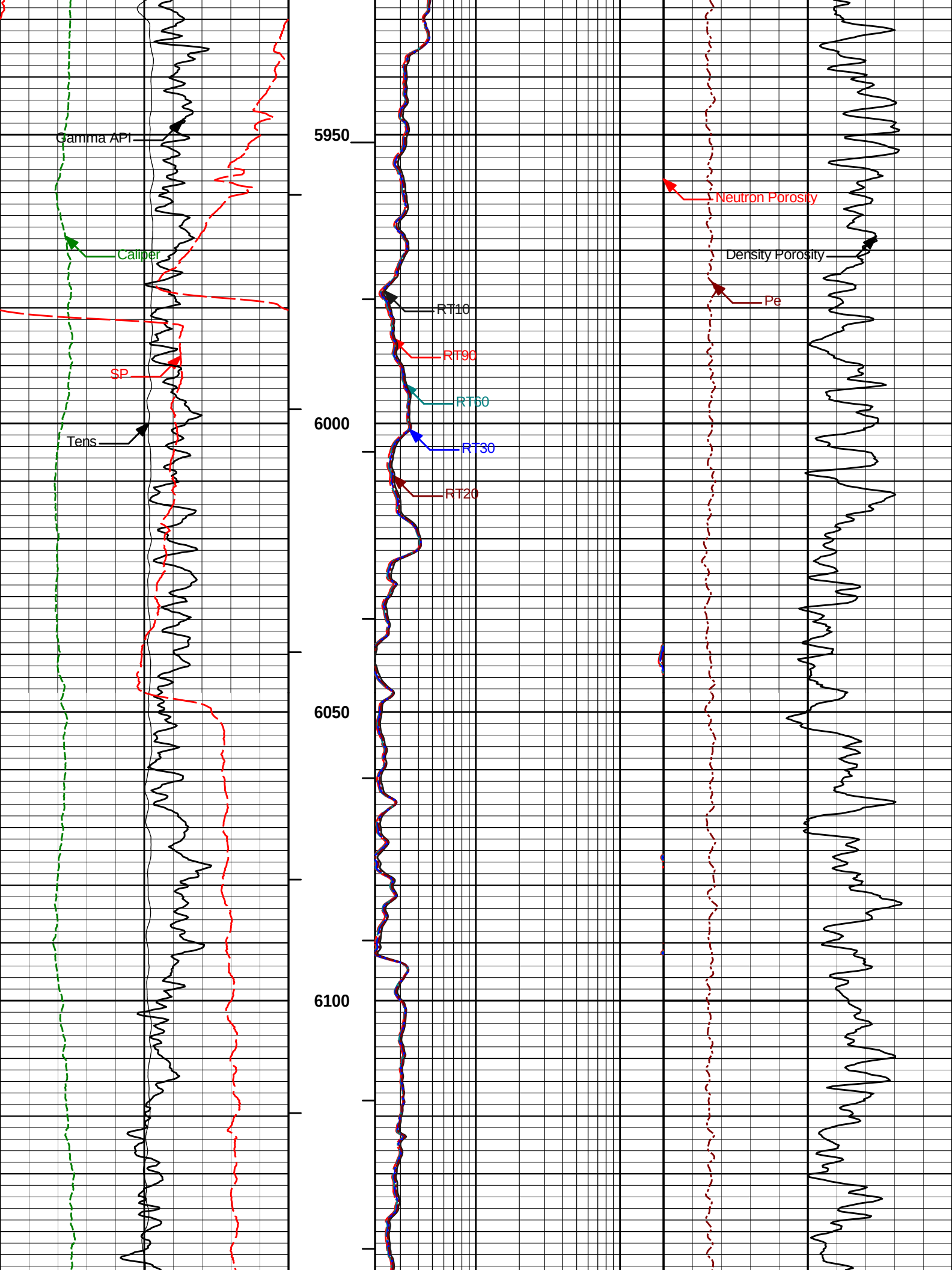
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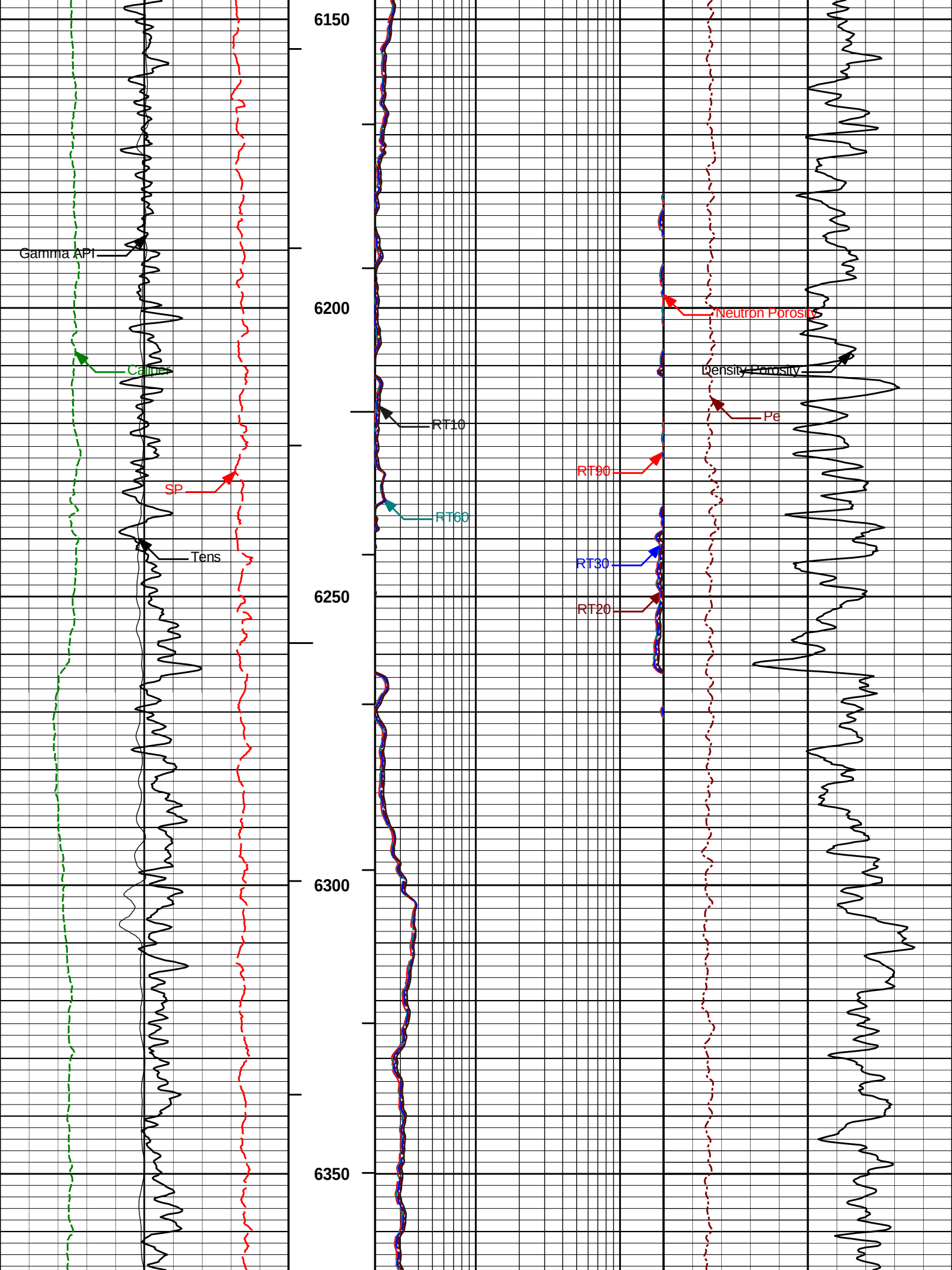
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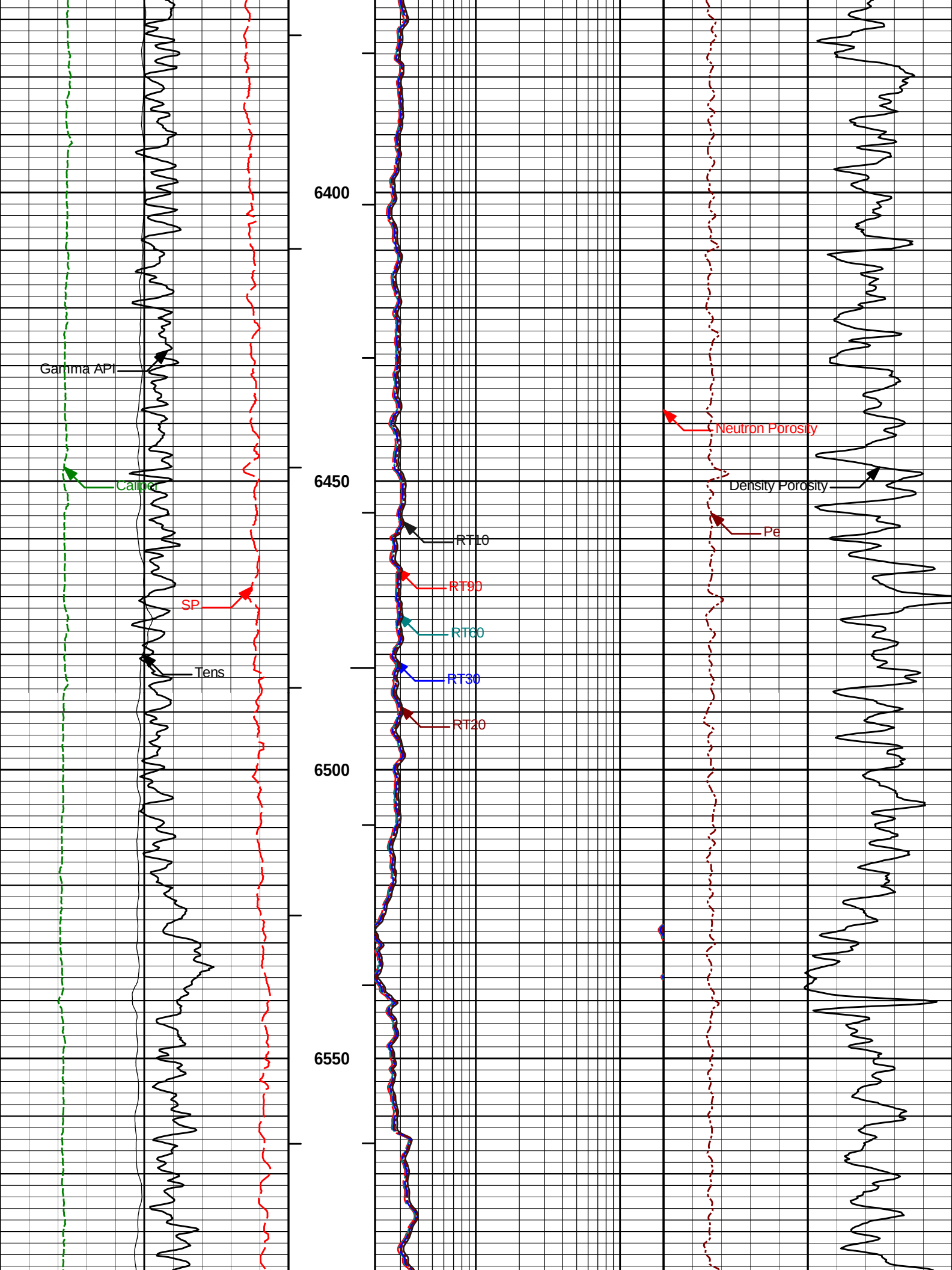
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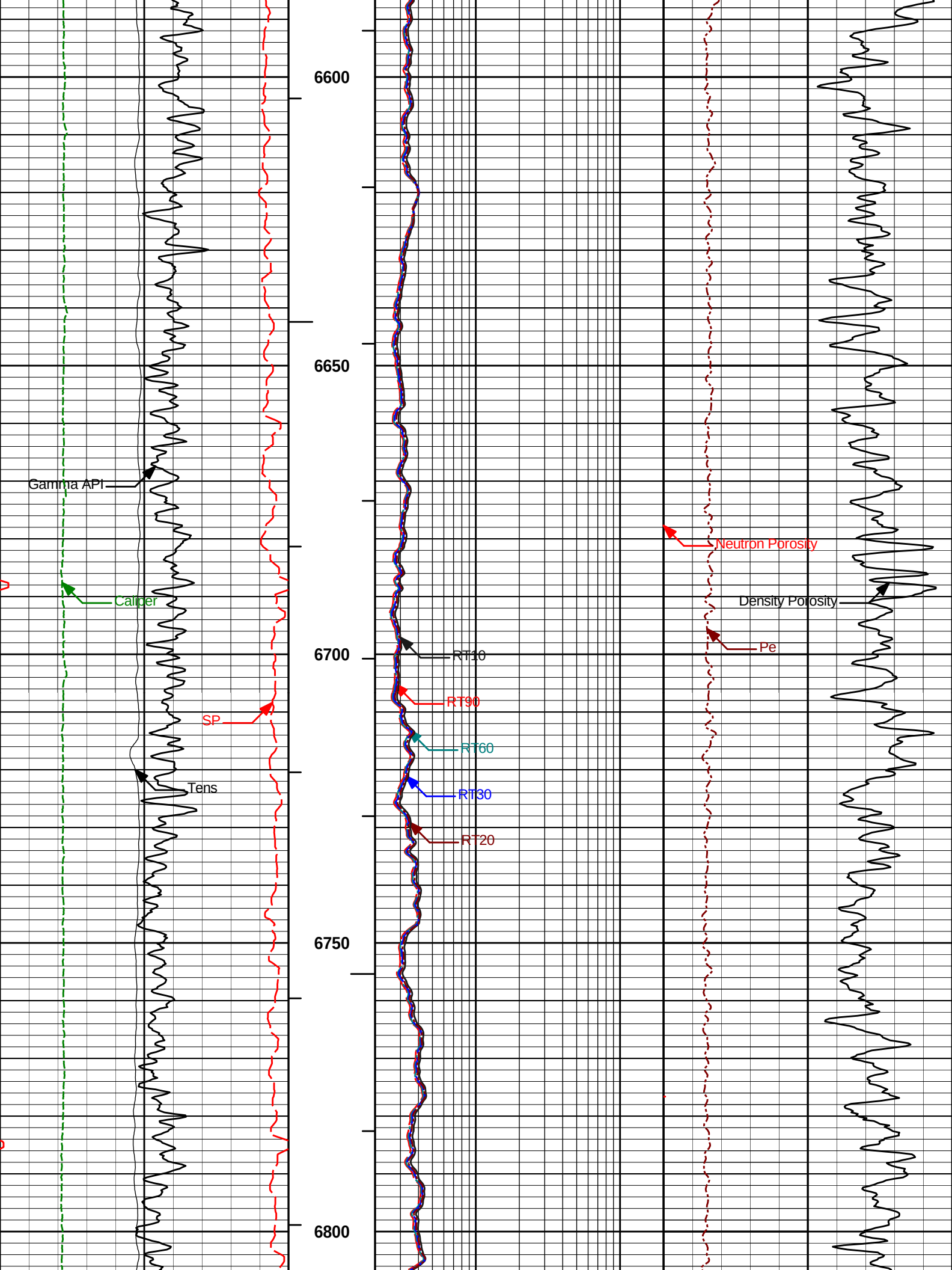
SP
Tens
RT10
RT90
RT60
RT30
RT20
Neutron Porosity
Density Porosity
Pe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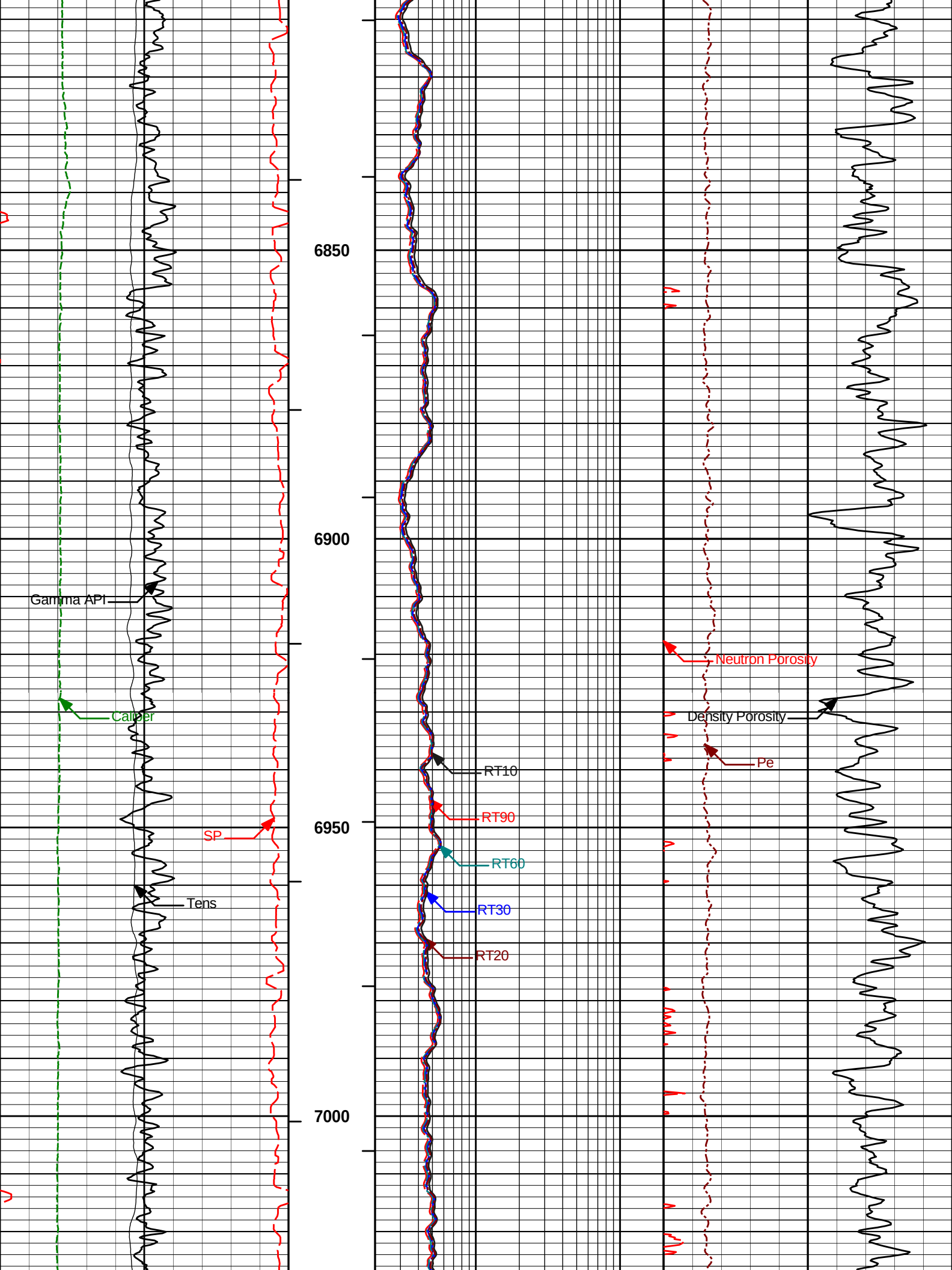
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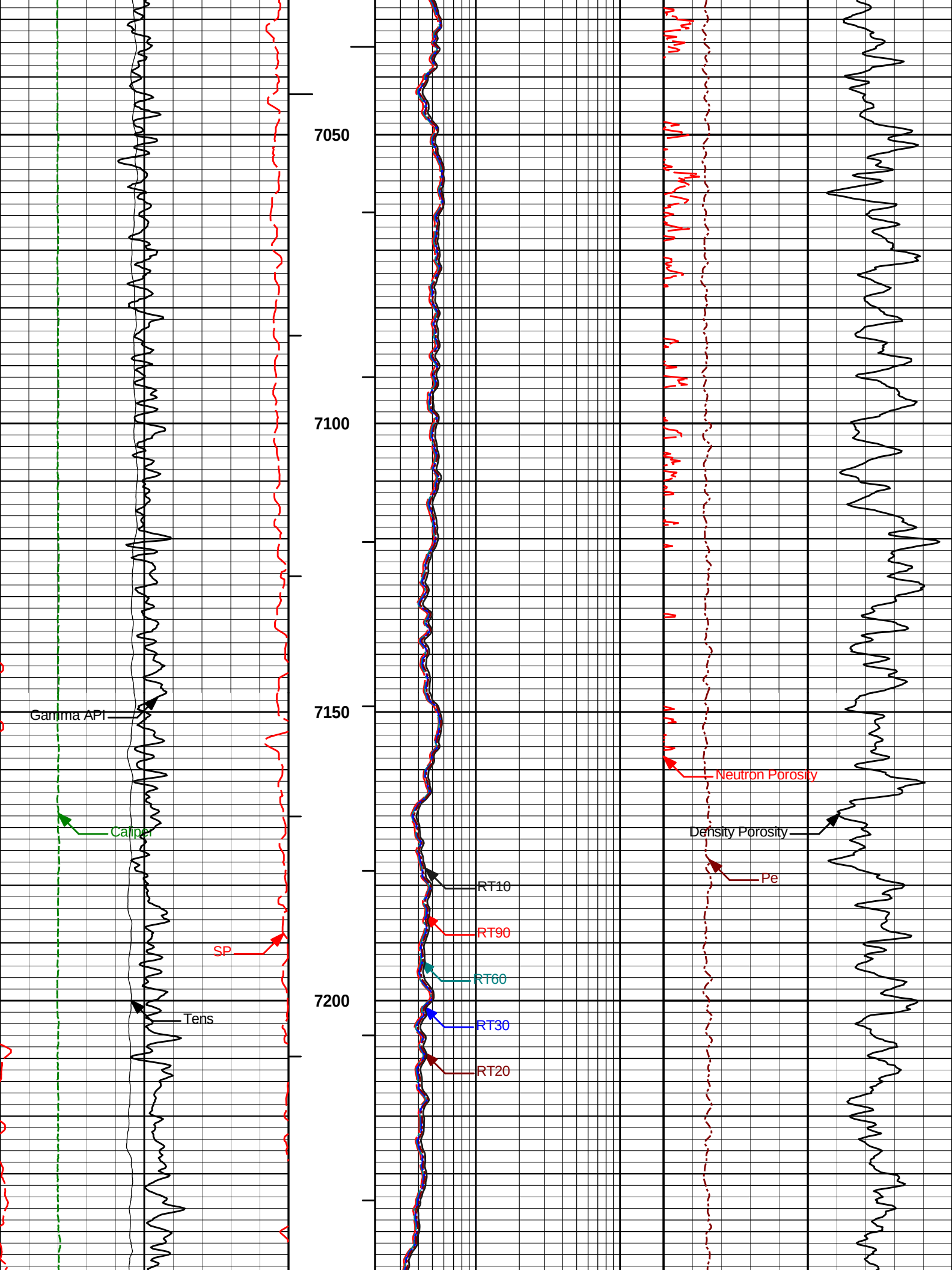
Density Porosity
Pe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Caliper
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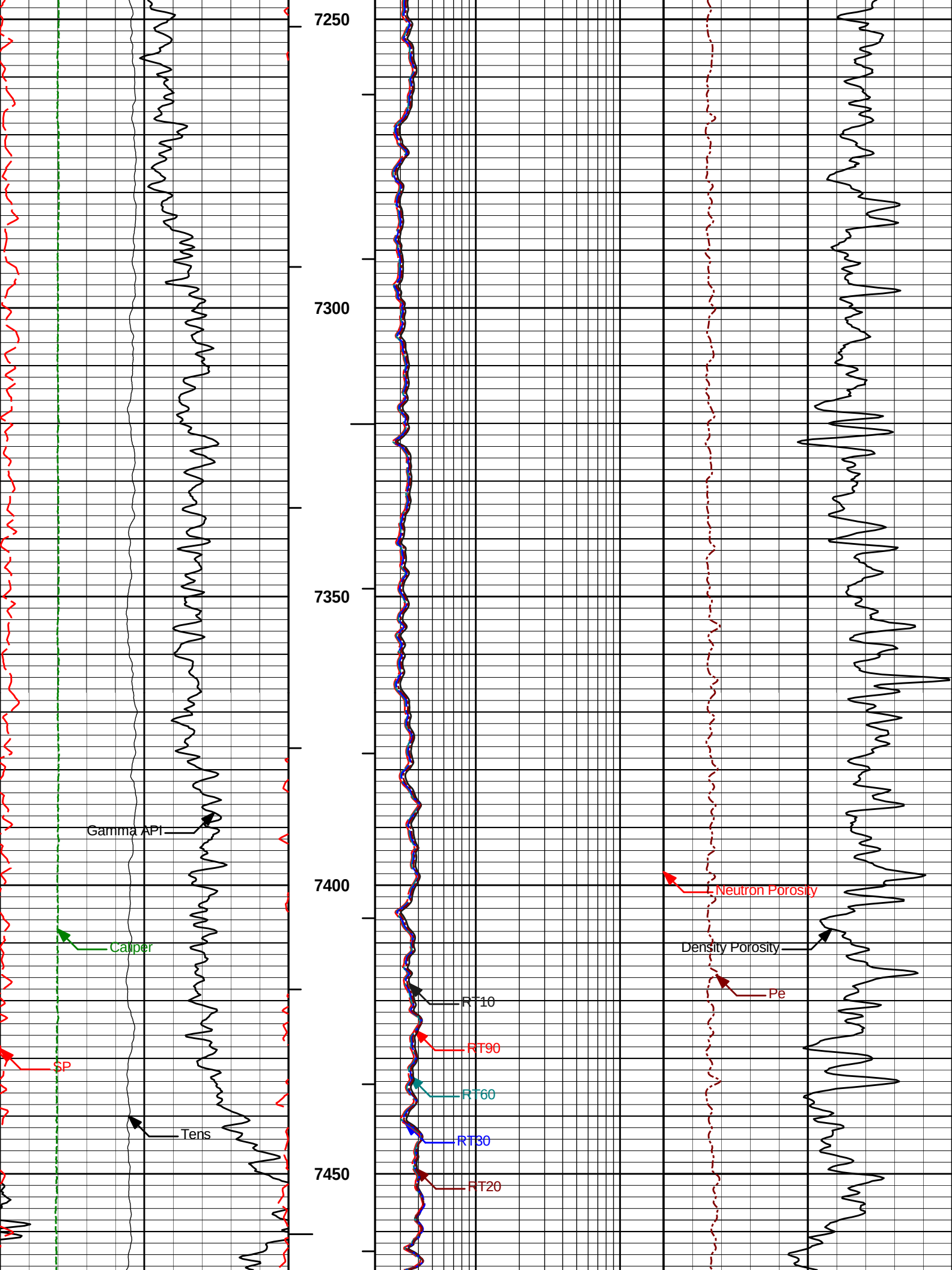
Density Porosity
Pe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Tens
RT10
RT90
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RT30
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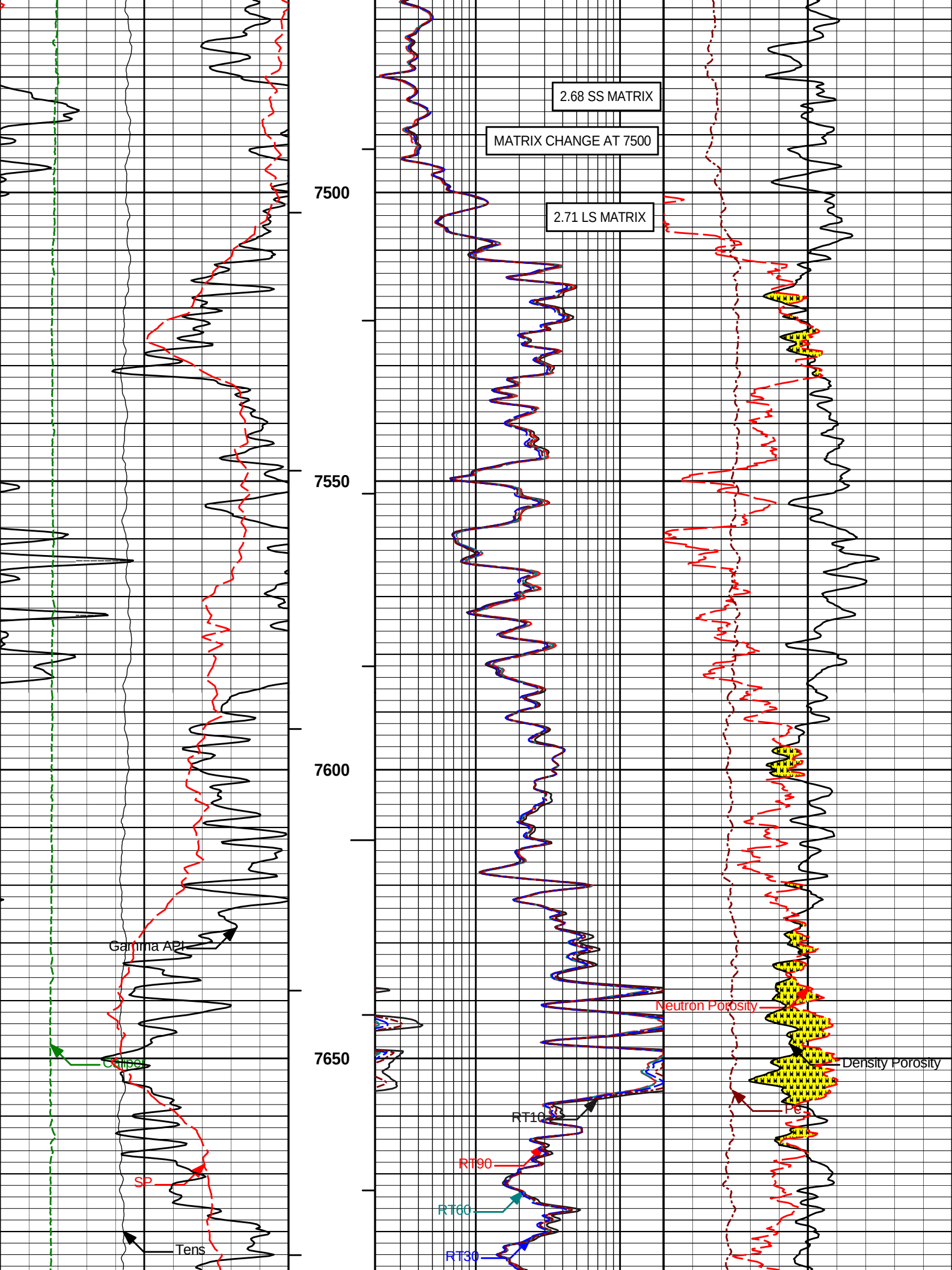
Density Porosity
Pe


2.68 SS MATRIX
MATRIX CHANGE AT 7500
2.71 LS MATRIX
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7550
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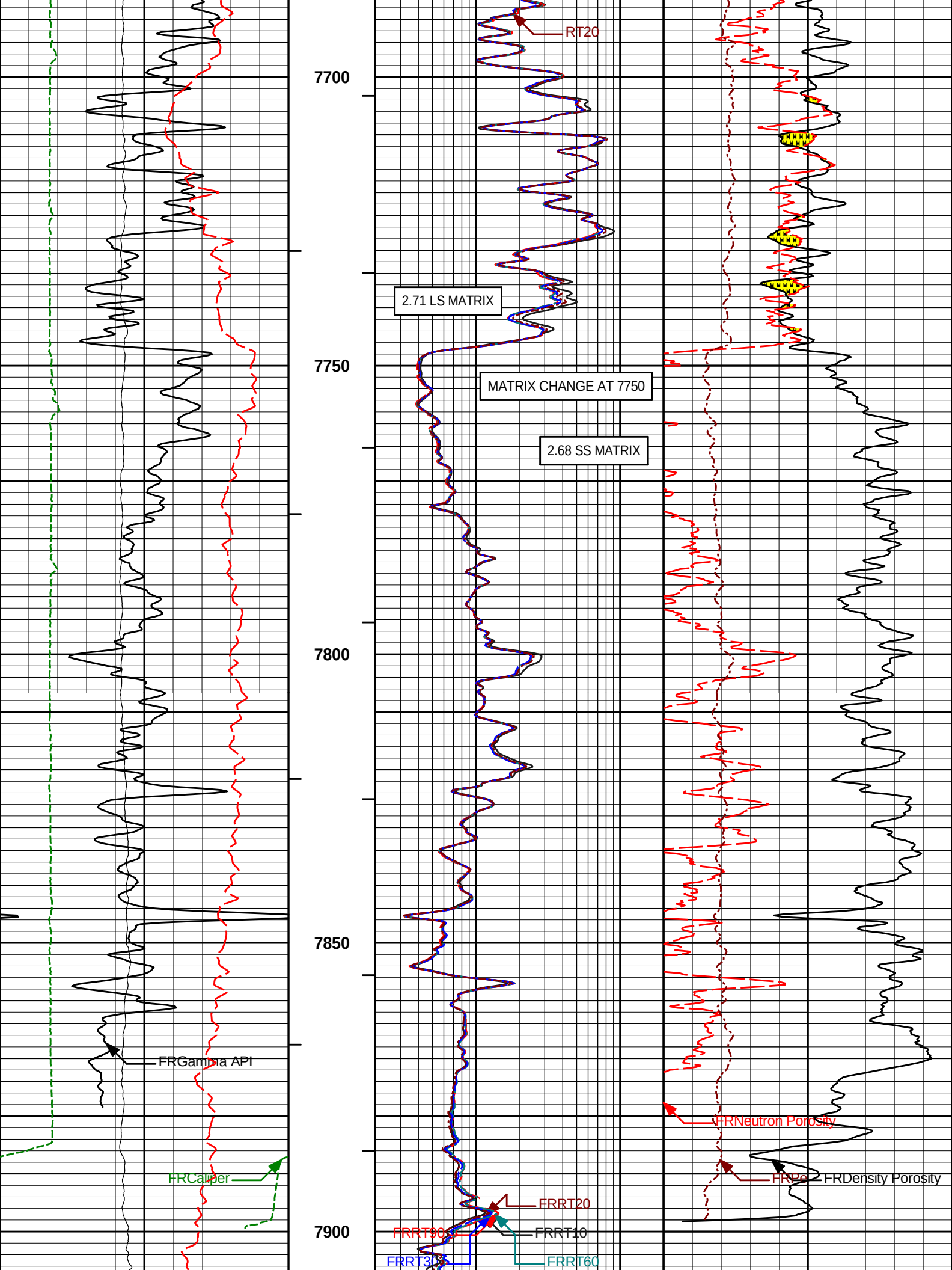
Gamma API
Caliper
SP
Tens
Neutron Porosity
Density Porosity
Pe
RT10
RT90
RT60
RT30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7700
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7800
7850
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FRNeutron Porosity
FRDensity Porosity
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7900
FRRT10
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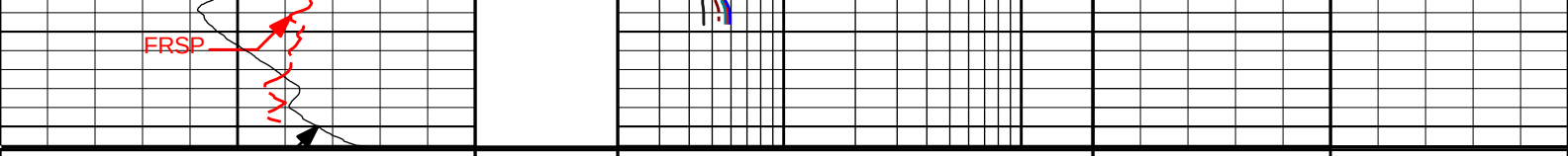


0 SP 100	millivolts	1 : 240	2 RT90 200	ohmm	0 Pe 10
0 Gamma API 200	api	BHVT	2 RT60 200	ohmm	20 Density Porosity 0 percent
6 Caliper 16	inches	AHVT	2 RT30 200	ohmm	20 Neutron Porosity 0 percent
10K Tens 0	pounds		2 RT20 200	ohmm	
			2 RT10 200	ohmm	

HALLIBURTON

Plot Time: 10-Nov-12 23:11:36
Plot Range: 660 ft to 7922.17 ft
Data: BOOTH_30-23\Well Based\MAIN*
Plot File: \\COMP\TD-NIO

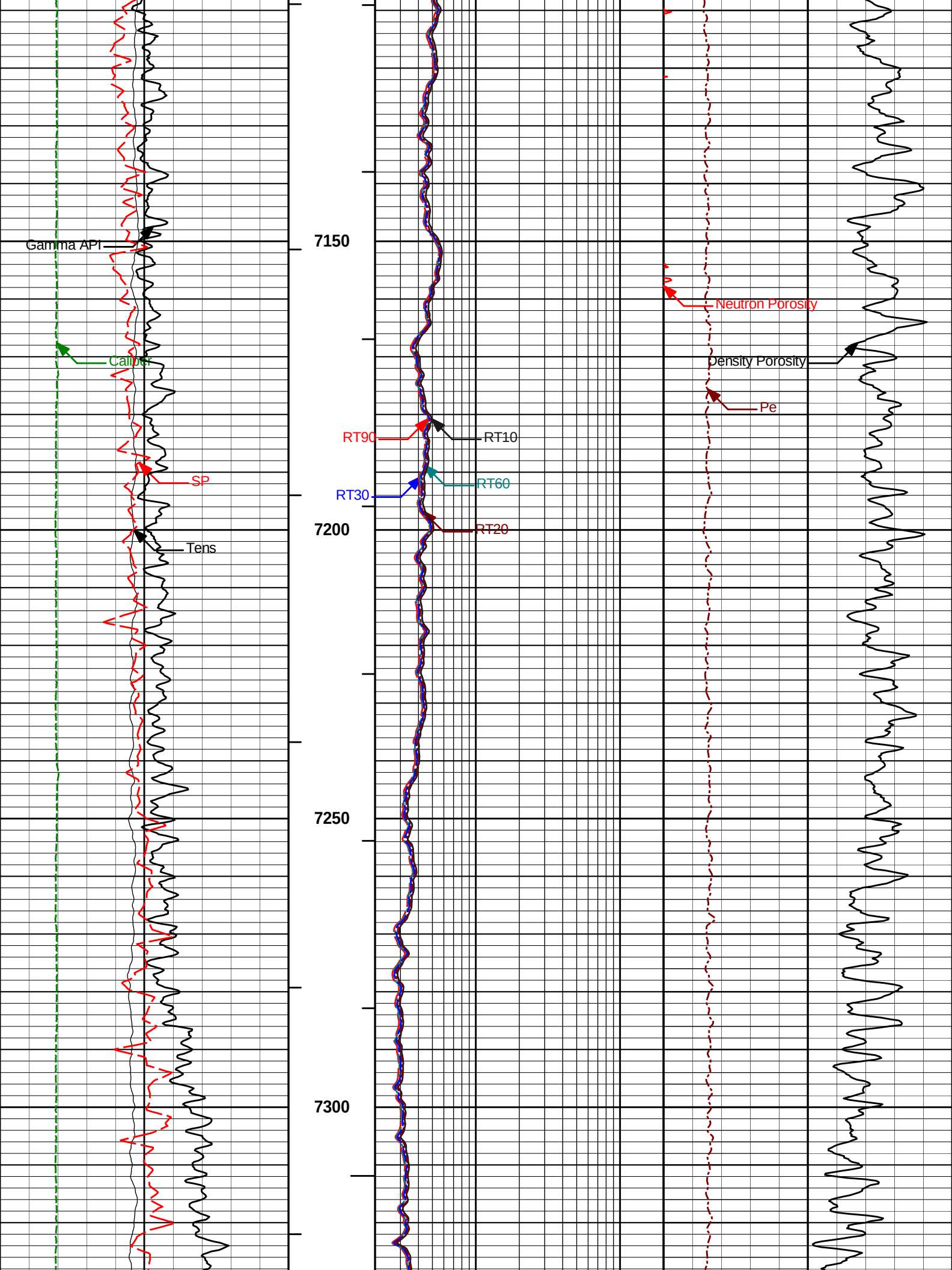
MAIN PASS 5" = 100'

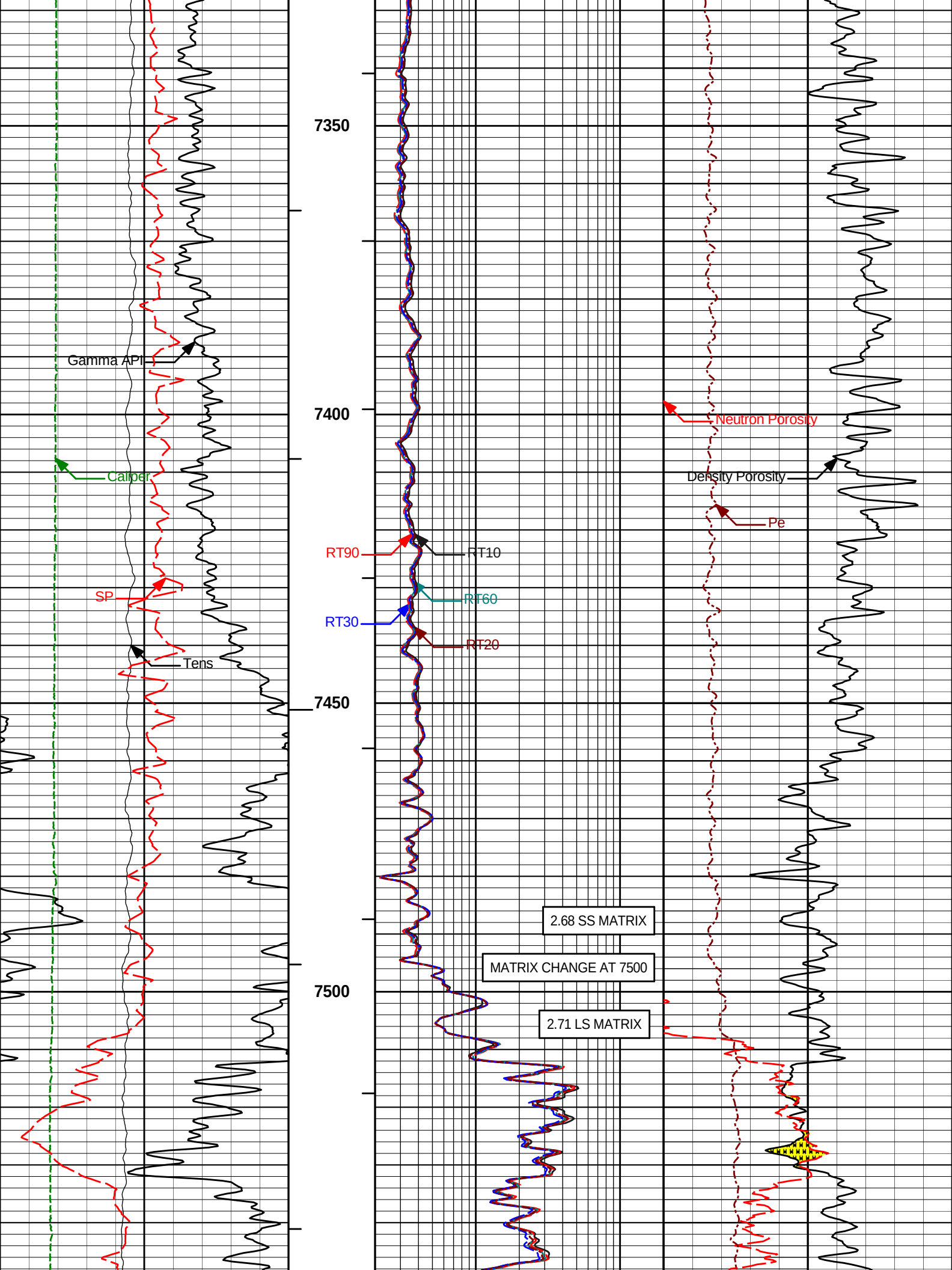
HALLIBURTON

Plot Time: 10-Nov-12 23:11:37
Plot Range: 7090 ft to 7924 ft
Data: {ActiveWell}\Well Based\REPEAT*
Plot File: \\COMP\REPEAT

REPEAT PASS 5" = 100'

			2 RT10 200	ohmm	
10K Tens 0	pounds		2 RT20 200	ohmm	
6 Caliper 16	inches	AHVT	2 RT30 200	ohmm	20 Neutron Porosity 0 percent
0 Gamma API 200	api	BHVT	2 RT60 200	ohmm	20 Density Porosity 0 percent
0 SP 100	millivolts	1 : 240	2 RT90 200	ohmm	0 Pe 10
		7100			


Gamma API
Caliper
SP
Tens
7150
7200
7250
7300
RT90
RT10
RT60
RT30
RT20
Neutron Porosity
Density Porosity
Pe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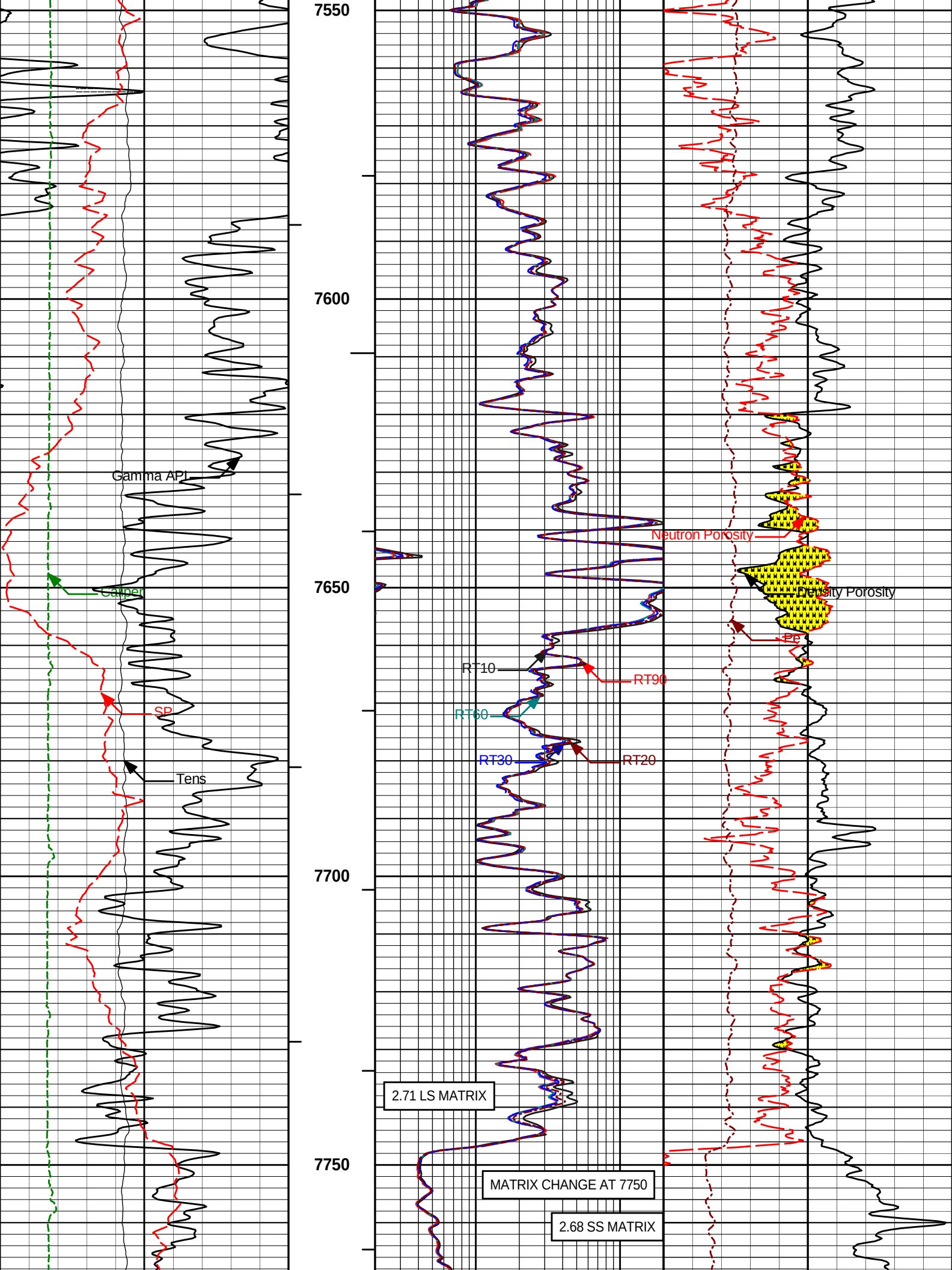
7400
7450
7500
Gamma API
Caliper
SP
Tens
RT90
RT10
RT60
RT30
RT20
Neutron Porosity
Density Porosity
Pe
2.68 SS MATRIX
MATRIX CHANGE AT 7500
2.71 LS MATRIX


7550
7600
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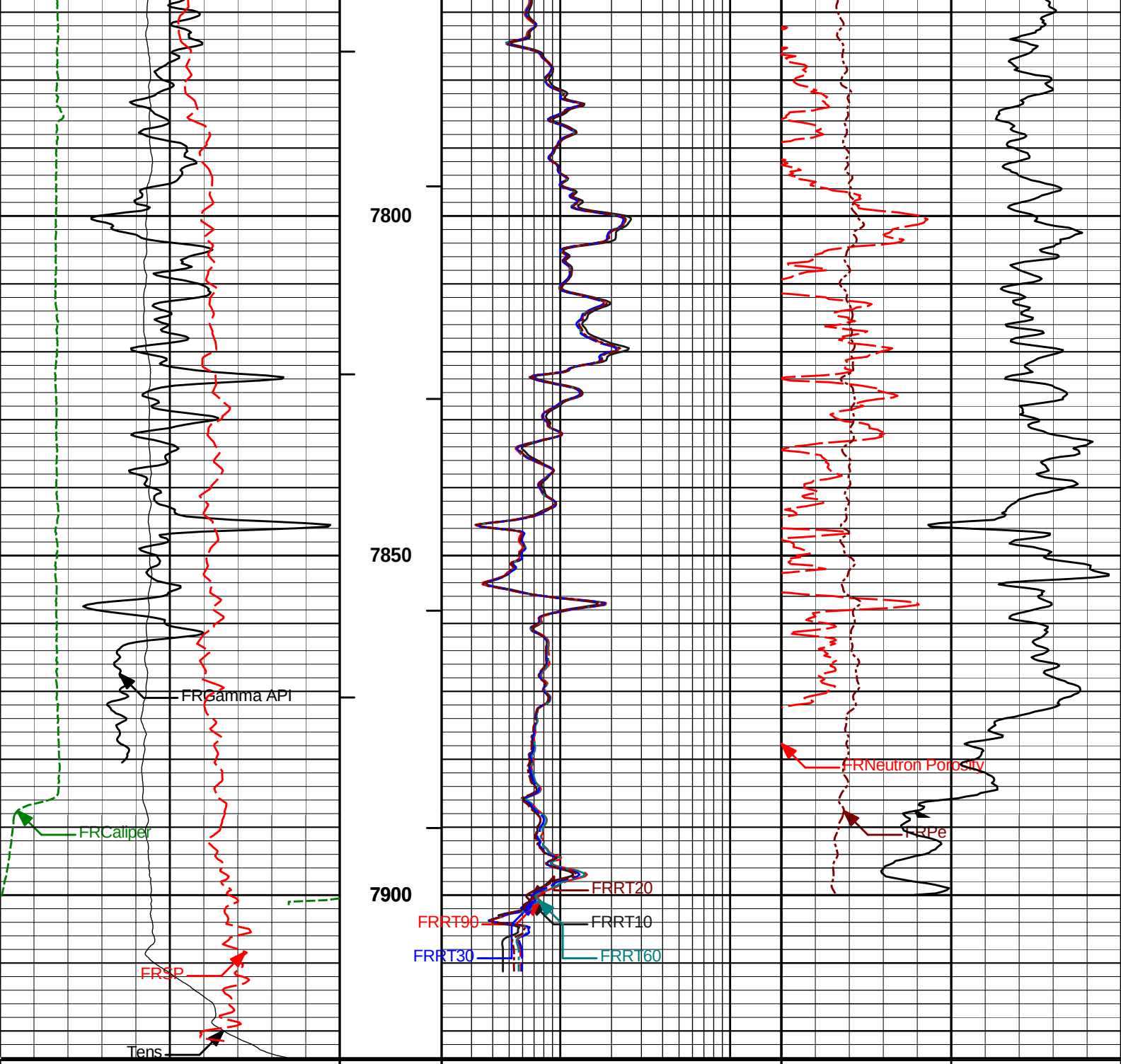
Gamma API
Caliper
SP
Tens
Neutron Porosity
Density Porosity
Pe
RT10
RT90
RT60
RT30
RT20
2.71 LS MATRIX
MATRIX CHANGE AT 7750
2.68 SS MATRIX



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

0 Pe 10	
20 Density Porosity 0	
percent	
20 Neutron Porosity 0	
percent	

HALLIBURTON

Plot Time: 10-Nov-12 23:11:40
Plot Range: 7090 ft to 7924 ft
Data: {ActiveWell}\Well Based\REPEAT*
Plot File: \\COMP\REPEAT

REPEAT PASS 5" = 100'

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	**GTET - 11812883**	**Reference Calibration Date:**	**26-Sep-12 06:39:34**
Engineer:	**R. TWEETEN**	**Calibration Date:**	**31-Oct-12 08:34:43**
Software Version:	**WL INSITE R3.6.2 (Build 7)**	**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	165.2	168.9	api
Background + Calibrator	406.9	416.2	api
Calibrator	241.8	247.3	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11812883**	**Reference Calibration Date:**	**31-Oct-12 08:34:43**
Engineer:	**R. TWEETEN**	**Calibration Date:**	**10-Nov-12 15:12:42**
Software Version:	**WL INSITE R3.6.2 (Build 7)**	**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	168.9	80.7	api
Background + Calibrator	416.2	335.3	api
Calibrator	247.3	254.6	api

Shop	Field	Difference	Tolerance
247.3	254.6	-7.3	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	**DSNT - 11301132**	**Reference Calibration Date:**	**01-Oct-12 13:31:51**
Engineer:	**C. CRADDOCK**	**Calibration Date:**	**05-Nov-12 11:09:10**
Software Version:	**WL INSITE R3.4.4 (Build 2)**	**Calibration Version:**	**1**

Logging Source S/N: DSN434
Tank Serial Number: 11068236
Reference value assigned to Tank: 53.720
Snow Block S/N: 11454566
Calibration Tank Water Temperature: 75 degF
Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	**Prev. Value**	**New Value**	**Control Limit On New Value**

Gain:	1.002	1.005	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	0.2224	0.0009	+/- 0.0020
Calibrated Ratio:	10.08	10.11	0.030	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0838	0.02000 - 0.09000

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

DENSITY CALIPER SHOP CALIBRATION

Tool Name:	**SDLT - 11107335**	**Reference Calibration Date:**	**01-Oct-12 15:00:09**
Engineer:	**C. CRADDOCK**	**Calibration Date:**	**05-Nov-12 12:26:44**
Software Version:	**WL INSITE R3.4.4 (Build 2)**	**Calibration Version:**	**1**
Host Tool Name:	**-**		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-2996.44	-3194.12	-7000.00 - -1000.00
Pad Gain	0.0003810	0.0003810	0.000200 - 0.000600
Arm Offset	-2152.91	-2359.26	-5000.00 - 3000.00
Arm Gain	0.0005207	0.0005450	0.000300 - 0.000700
Arm Power	-0.000006136	-0.000007297	-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)	2.08	2.00	-0.08	+/- 0.20
Medium Ring (in)	3.83	3.75	-0.08	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.60	6.50	-0.10	+/- 0.20
Medium Ring (in)	8.29	8.25	-0.04	+/- 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

SPECTRAL DENSITY SHOP CALIBRATION

Tool Name:	**SDLT Pad - 11045470**	**Reference Calibration Date:**	**01-Oct-12 14:12:38**
Engineer:	**C. CRADDOCK**	**Calibration Date:**	**05-Nov-12 12:00:57**

Software Version: WL INSITE R3.4.4 (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: N/A Density: 1.691g/cc Pe: 2.650

DENSITY CALIBRATION SUMMARY

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0899	1.0743	0.90 - 1.10
Near Dens Gain	1.0379	1.0307	0.90 - 1.10
Near Peak Gain	1.0454	1.0181	0.90 - 1.10
Near Lith Gain	0.9947	0.9685	0.90 - 1.10
Far Bar Gain	1.0123	1.0107	0.90 - 1.10
Far Dens Gain	1.0001	0.9984	0.90 - 1.10
Far Peak Gain	0.9926	0.9921	0.90 - 1.10
Far Lith Gain	0.9723	0.9723	0.90 - 1.10
Near Bar Offset	-0.9189	-0.7619	NONE
Near Dens Offset	-0.3884	-0.3125	NONE
Near Peak Offset	-0.4337	-0.1860	NONE
Near Lith Offset	-0.0206	0.2248	NONE
Far Bar Offset	-0.2122	-0.1906	NONE
Far Dens Offset	-0.1102	-0.0893	NONE
Far Peak Offset	-0.0557	-0.0477	NONE
Far Lith Offset	0.0847	0.0905	NONE
Near Bar Background	1032.89	1028.88	700 - 1450
Near Dens Background	339.18	338.51	230 - 480
Near Peak Background	149.28	148.00	100 - 210
Near Lith Background	180.98	179.37	125 - 260
Far Bar Background	536.94	537.75	450 - 900
Far Dens Background	210.82	209.53	175 - 345
Far Peak Background	81.96	81.84	70 - 140
Far Lith Background	86.09	85.09	75 - 145

CALIBRATION BLOCK SUMMARY

Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.684	1.691	0.007	+/- 0.015
Pe	2.679	2.600	-0.079	+/- 0.150
ALUMINUM				
Density (g/cc)	2.590	2.602	0.012	+/- 0.01500
Pe	3.140	3.059	-0.081	+/- 0.150

TOOL SUMMARY

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0002	+/- 0.0110	-0.0016	+/- 0.0140
Magnesium Block	-0.0004	+/- 0.0110	0.0001	+/- 0.0140
Aluminum Block	-0.0007	+/- 0.0110	-0.0001	+/- 0.0140
Resolution	9.10	6.00 - 11.50	9.69	6.00 - 11.50
Internal Verifier(B+D+P+L)	1695	1200 - 2700	914	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

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name:	**ACRt Sonde - 11294353**	**Reference Calibration Date:**	**23-Oct-12 16:25:34**
Engineer:	**J. PINKETT**	**Calibration Date:**	**23-Oct-12 16:37:36**
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	1.02	1.05	0.95	1.02	1.05	0.95	1.01	1.05
A2 (50")	0.95	1.02	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A3 (29")	0.95	1.02	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A4 (17")	0.95	1.04	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	1.00	1.05
A6 (6")	N/A	N/A	N/A	0.95	1.04	1.05	0.95	1.03	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	-0.31	2	-6	-4.52	-2	-8	-5.14	-2
A2 (50")	-7	-0.34	0	-7	-2.77	0	-7	-4.81	0
A3 (29")	-27	-12.70	-9	-9	-3.51	-3	-7	-3.61	-1
A4 (17")	-180	-92.88	-60	-45	-28.87	-15	-39	-24.56	-13
A5 (10")	N/A	N/A	N/A	-150	-98.92	-50	-80	-47.35	-10
A6 (6")	N/A	N/A	N/A	175	358.61	525	90	181.23	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.92	1.3
36K	1.0	1.83	2.0
72K	1.0	1.16	2.0

R-MUD VERIFICATION

Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	1.00	1.05

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

TOOL OK TO LOG

CALIBRATION SUMMARY

CALIBRATION SUMMARY

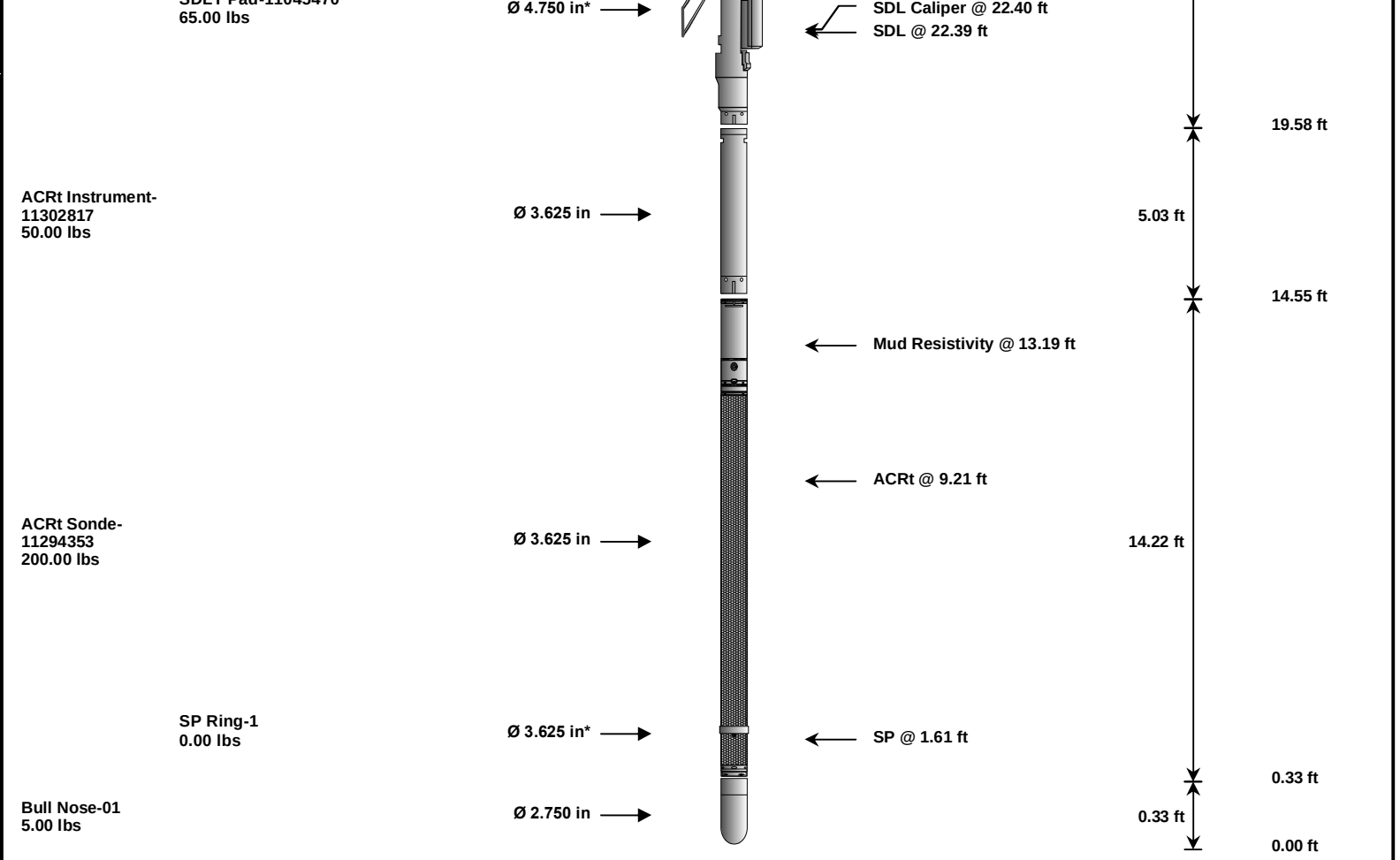
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11812883						
Gamma Ray Calibrator	247.3	254.6	----------	-7.3	+/- 9.00	api
DSNT-11301132						
Snow-Block Porosity	0.0838	----------	----------	0.0000	+/- -.--	decp
SDLT-11107335						
Pad Extension	3.75	----------	----------	0.00	+/-0.20	in
Ring Diameter	8.25	----------	----------	0.00	+/-0.20	in
SDLT Pad-11045470						
Near(B+D+P+L)	1694.760	----------	----------	0.000	+/-14.445	cps
Far(B+D+P+L)	914.202	----------	----------	0.000	+/-14.875	cps
ACRt Sonde-11294353						
Mud Cell	1.00	----------	----------	0.00	----------	ohm-m

Data: BOOTH_30-23\0002 BAYSWATER\IDLE **Date: 10-Nov-12 22:54:43**

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						54.85 ft
RWCH-B097 135.00 lbs		Ø 3.625 in		Load Cell @ 51.17 ft BH Temperature @ 50.60 ft	6.25 ft	
						48.60 ft
GTET-11812883 165.00 lbs		Ø 3.625 in		GammaRay @ 42.54 ft	8.52 ft	
						40.08 ft
DSNT-11301132 174.00 lbs		Ø 3.625 in		DSN Far @ 33.15 ft DSN Near @ 32.40 ft	9.69 ft	
						30.40 ft
SDLT-11107335 360.00 lbs		Ø 4.500 in			10.81 ft	
	SDLT Pad-11045470					



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	B097	135.00	6.25		48.60	300.00
GTET	Gamma Telemetry Tool	11812883	165.00	8.52		40.08	60.00
DSNT	Dual Spaced Neutron	11301132	174.00	9.69		30.40	60.00
SDLT	Spectral Density Tool	11107335	360.00	10.81		19.58	60.00
SDLP	Density Insite Pad	11045470	65.00	2.55	*	21.79	60.00
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	1	0.00	0.25	*	1.61	300.00
BLNS	Bull Nose	01	5.00	0.33		0.00	300.00
Total			**1,154.00**	**54.85**			

* Not included in Total Length and Length Accumulation.

Data: BOOTH_30-23\0001 BAYSWATER\IDLE **Date: 10-Nov-12 20:45:46**

COMPANY	**BAYSWATER EXPLORATION AND PRODUCTION**
WELL	**BOOTH 30-23**
FIELD	**WATTENBERG**
COUNTY	**WELD** STATE **CO**

HALLIBURTON

ARRAY COMPENSATED TRUE RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON