

HALLIBURTON

ARRAY COMPENSATED
TRUE RESISTIVITY
SPECTRAL DENSITY
DUAL SPACED NEUTRON

COMPANY		LARAMIE ENERGY II, LLC			
WELL		LARAMIE 19-09D			
FIELD		RULISON			
COUNTY		GARFIELD			
STATE		CO			
Permanent Datum Log measured from Drilling measured from	GL KB KB	Sect. 20	Twp. 6S	Rge. 93W	Elev. 5655.0 ft D.F. G.L. 5676.0 ft 5675.0 ft 5655.0 ft
Date	02-Jan-10				
Run No.	ONE				
Depth - Driller	8765.00 ft				
Depth - Logger	8760.0 ft				
Bottom - Logged Interval	8756.0 ft				
Top - Logged Interval	1022.0 ft				
Casing - Driller	8.625 in @ 1022.0 ft				
Casing - Logger	1022.0 ft				
Bit Size	7.875 in				
Type Fluid in Hole	LSMD				
Density	10.8 ppg				
Viscosity	66.00 s/qt				
PH	9.80 pH				
Fluid Loss	5.6 cpm				
Source of Sample	MUD TANK				
Rm @ Meas. Temperature	1.74 ohmm @ 54.60 degF				
Rmf @ Meas. Temperature	1.52 ohmm @ 61.50 degF				
Rmc @ Meas. Temperature	2.60 ohmm @ 63.20 degF				
Source Rmf	MEAS. Rmc MEAS.				
Rm @ BHT	0.49 ohmm @ 210.0 degF				
Time Since Circulation	17.0 hr				
Time on Bottom	02-Jan-10 11:38				
Max. Rec. Temperature	210.0 degF @ 8760.0 ft				
Equipment	11014853 G.J., CO				
Recorded By	K. WOOD				
Witnessed By	C. CLAUSEN				

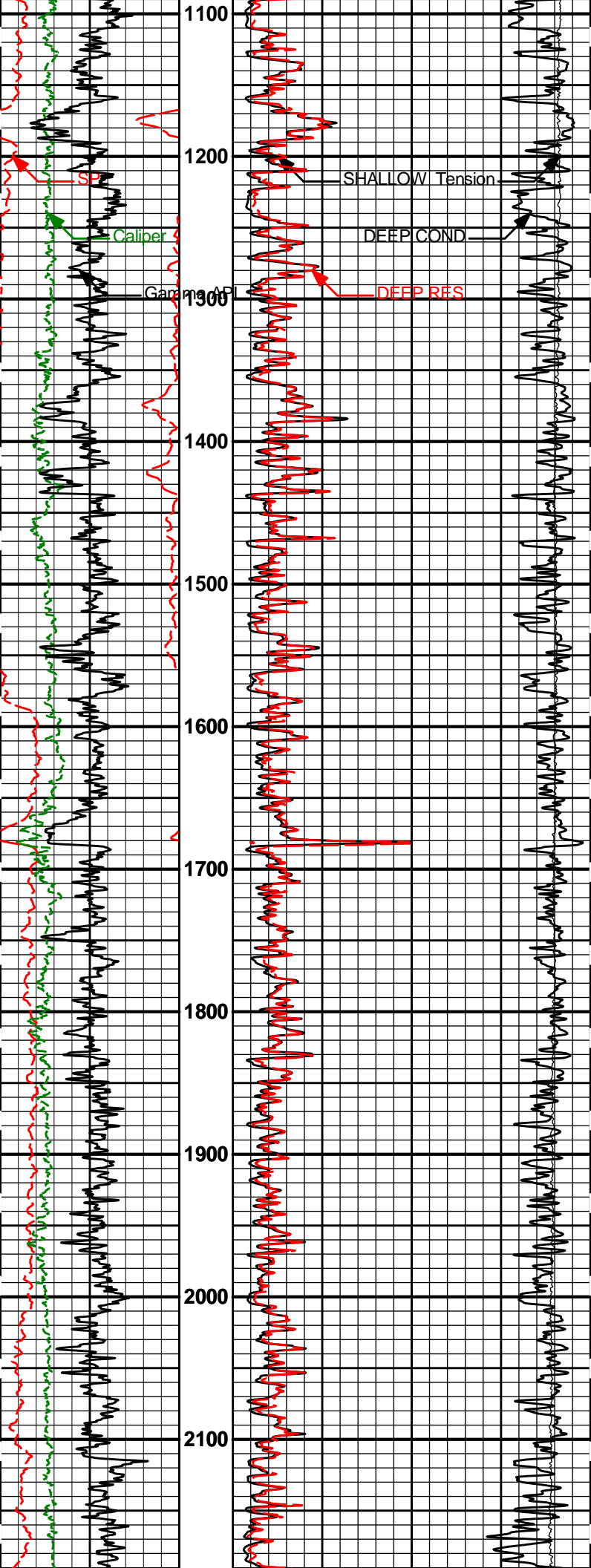
COMPANY	LARAMIE ENERGY II, LLC
WELL	LARAMIE 19-09D
FIELD	RULISON
COUNTY	GARFIELD
STATE	CO
API No.	05045155600000
Location	SURFACE HOLE: 2287' FSL & 157' FML BOTTOM HOLE: 1488' FSL & 657' FEL
Other Services:	ACRT/SDLT/DSNT

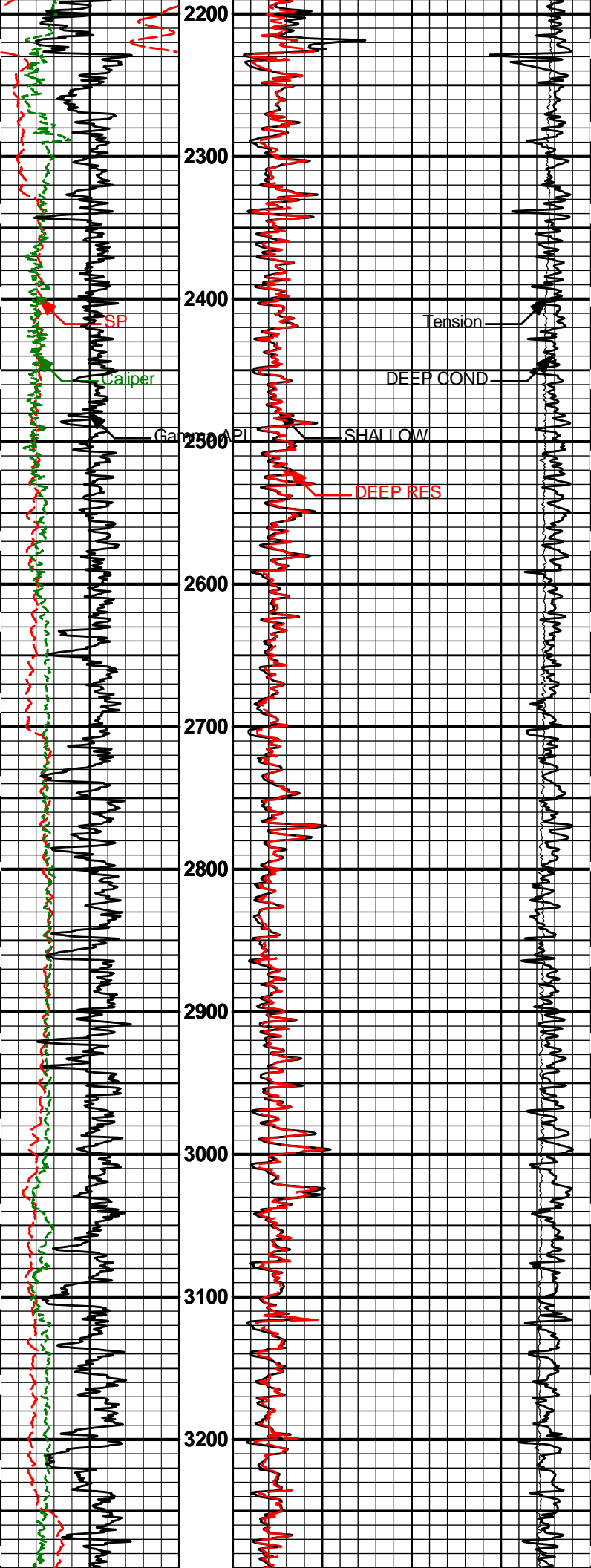
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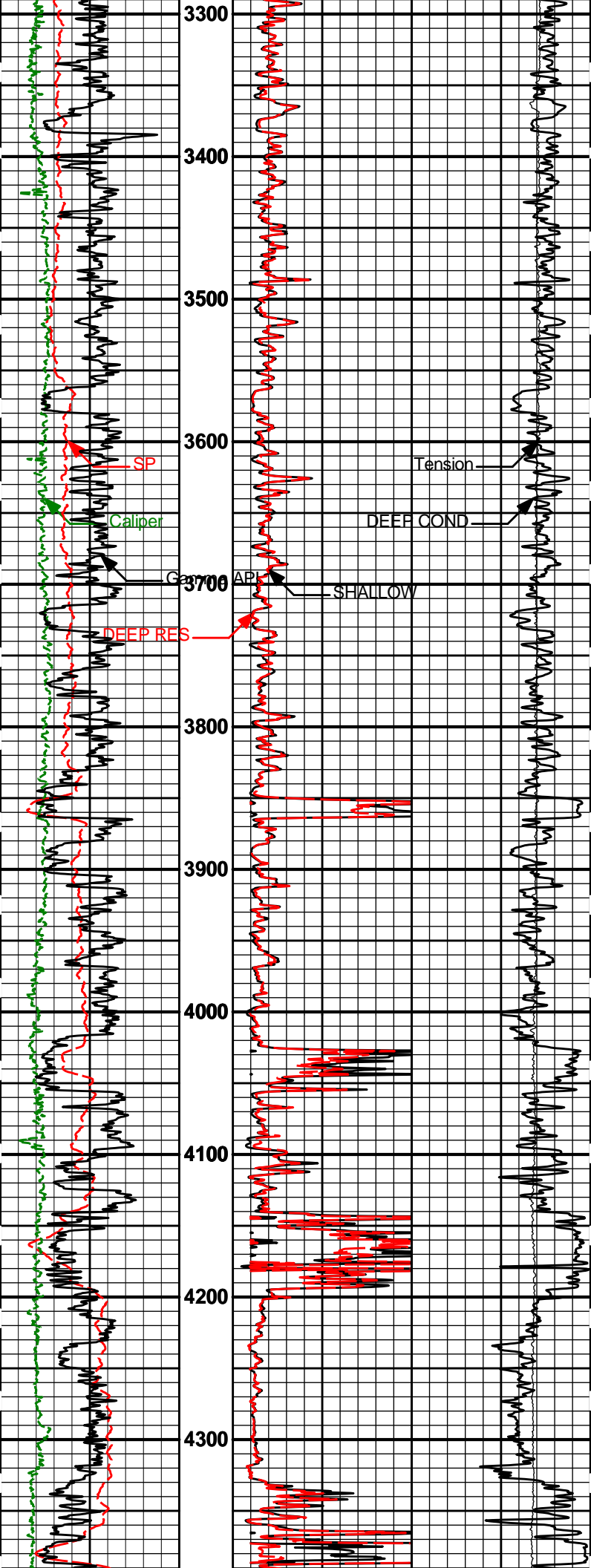
Service Ticket No.: 7094090		API Serial No.: 0504515560000		PGM Version: WL INSITE R2.4 (Build 20)					
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES					
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole		
Depth-Driller									
Type Fluid in Hole									
Density	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-90194258	N/A	1.5" S.O.	N/A	
Rmc @ Meas. Temp.	@	@			-E7486				
Source Rmf	Rmc	CALC.	CALC.						
Rm @ BHT	0.49 ohmm @ 210.0 degF	@							
Rmf @ BHT	0.48 ohmm @ 210.0 degF	@							
Rmc @ BHT	0.84 ohmm @ 210.0 degF	@							
EQUIPMENT DATA									
GAMMA			ACOUSTIC		DENSITY		NEUTRON		
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE		
Serial No.	11005602	Serial No.		Serial No.	10951314	Serial No.		10993888	
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	GAMMA-GAMMA	Log Type		THERMAL	
Type	SCINT.			Source Type	Cs137	Source Type		Am241Be	
Length	8"	LSA [Y/N]		Serial No.	20785B	Serial No.		DSN-388	
Distance to Source	10'	FWDA [Y/N]		Strength	1.5 Ci	Strength		15.0 Ci	
LOGGING DATA									
GENERAL		GAMMA		ACOUSTIC		DENSITY		NEUTRON	

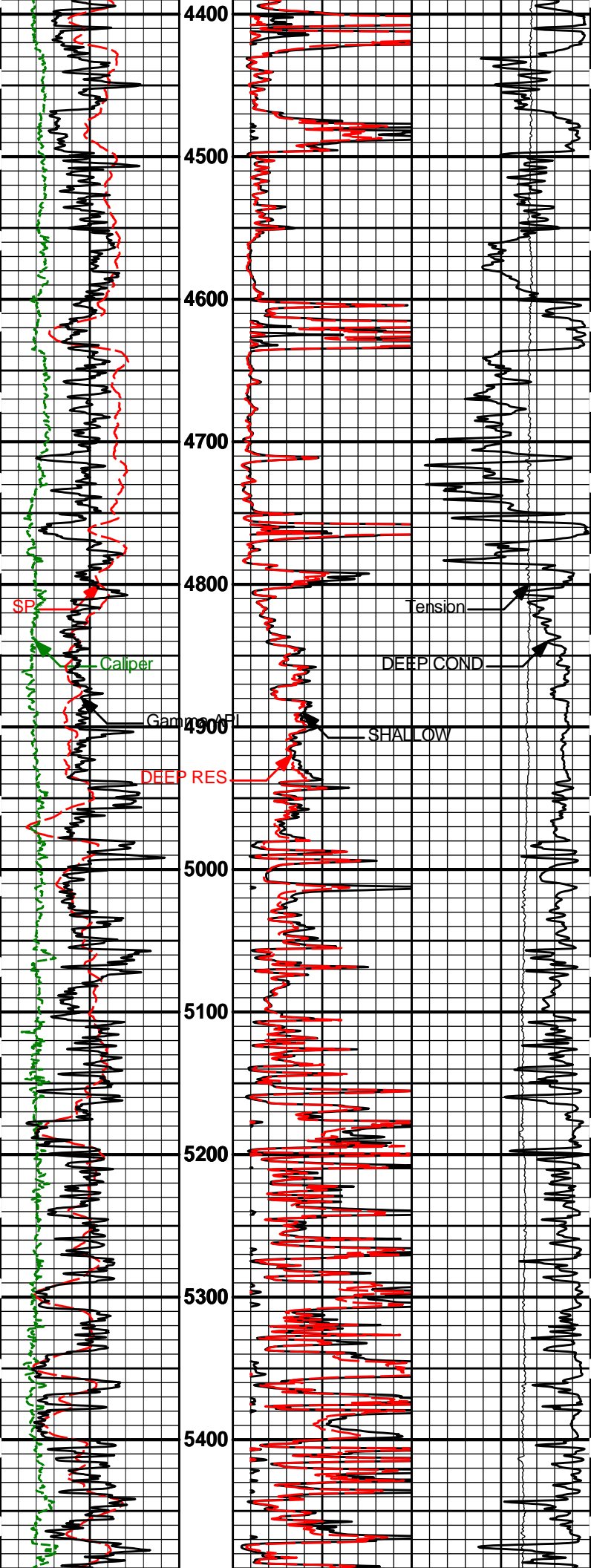
Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDWT	Borehole Fluid Weight	10.800	ppg
	SHARED	RMUD	Mud Resistivity	1.740	ohmm
	SHARED	TRM	Temperature of Mud	54.6	degF
	SHARED	OBM	Oil Based Mud System?	No	
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	8760.00	ft
	SHARED	BHT	Bottom Hole Temperature	210.0	degF
	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
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in

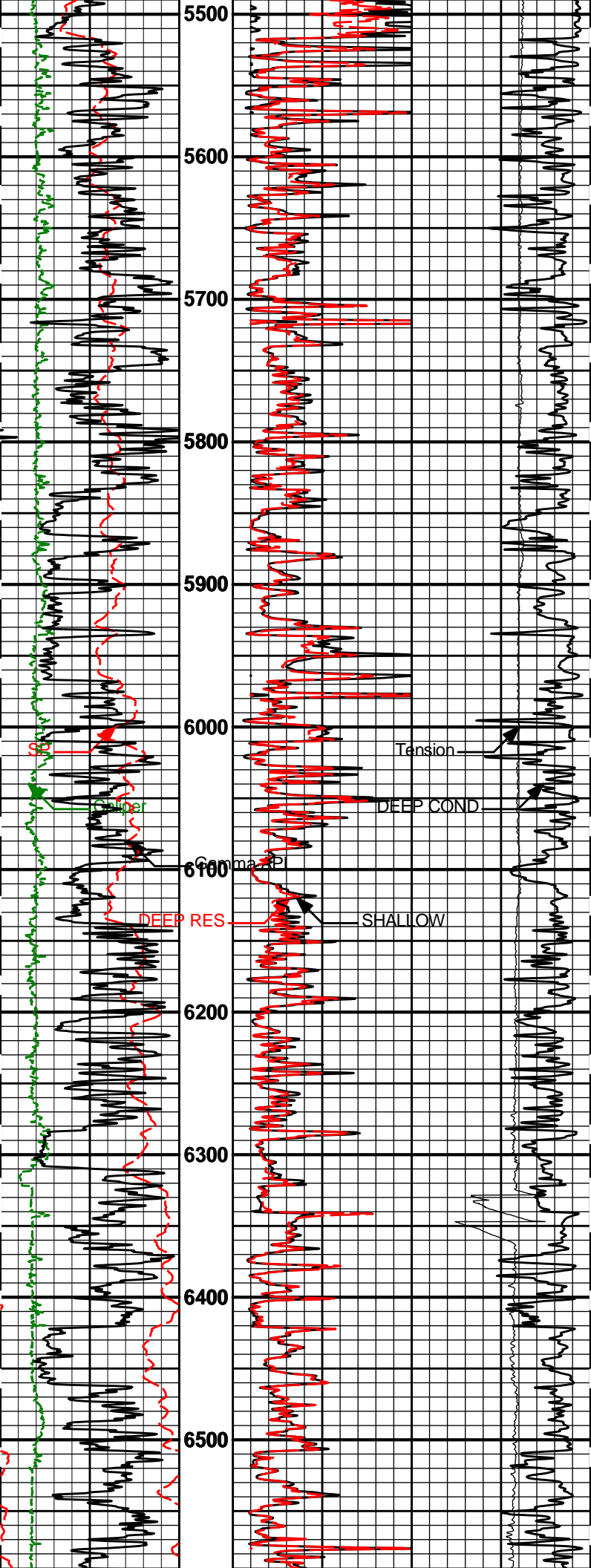
GTET	GEOK	Process Gamma Ray EVR?	No	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	No	
DSNT	NLIT	Neutron Lithology	Sandstone	
DSNT	DSNO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTP	Temperature Correction Type	None	
DSNT	DPRS	DSN Pressure Correction Type	None	
DSNT	SHCO	View More Correction Options	No	
DSNT	UTVD	Use TVD for Gradient Corrections?	No	
DSNT		Logging Horizontal Water Tank?	No	
SDLT	DNOK	Process Density?	Yes	
SDLT	DNOK	Process Density EVR?	No	
SDLT	AD	Is Hole Air Drilled?	No	
SDLT	CB	Use Calibration Blocks?	No	
SDLT	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT	DTWN	Disable temperature warning	No	
SDLT	MDTP	Weighted Mud Correction Type?	Barite	
SDLT	DMA	Formation Density Matrix	2.680	g/cc
SDLT	DFL	Formation Density Fluid	1.000	g/cc
SDLT	CLOK	Process Caliper Outputs?	Yes	
SDLT	MLOK	Process MicroLog Outputs?	Yes	
ACRt	RTOK	Process ACRt?	Yes	
ACRt	MNSO	Minimum Tool Standoff	1.50	in
ACRt	TCS1	Temperature Correction Source	FP Lwr & FP Up	
ACRt	TPOS	Tool Position	Eccentered	
ACRt	RMOP	Rmud Source	Mud Cell	
ACRt	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt	RMIN	Maximum Resistivity for MAP	200.00	ohmm
BOTTOM				
Data: LARAMIE_19_09D\0001 IQ-TRIPLE-STRING1\IDLE				
Date: 02-Jan-10 12:22:35				

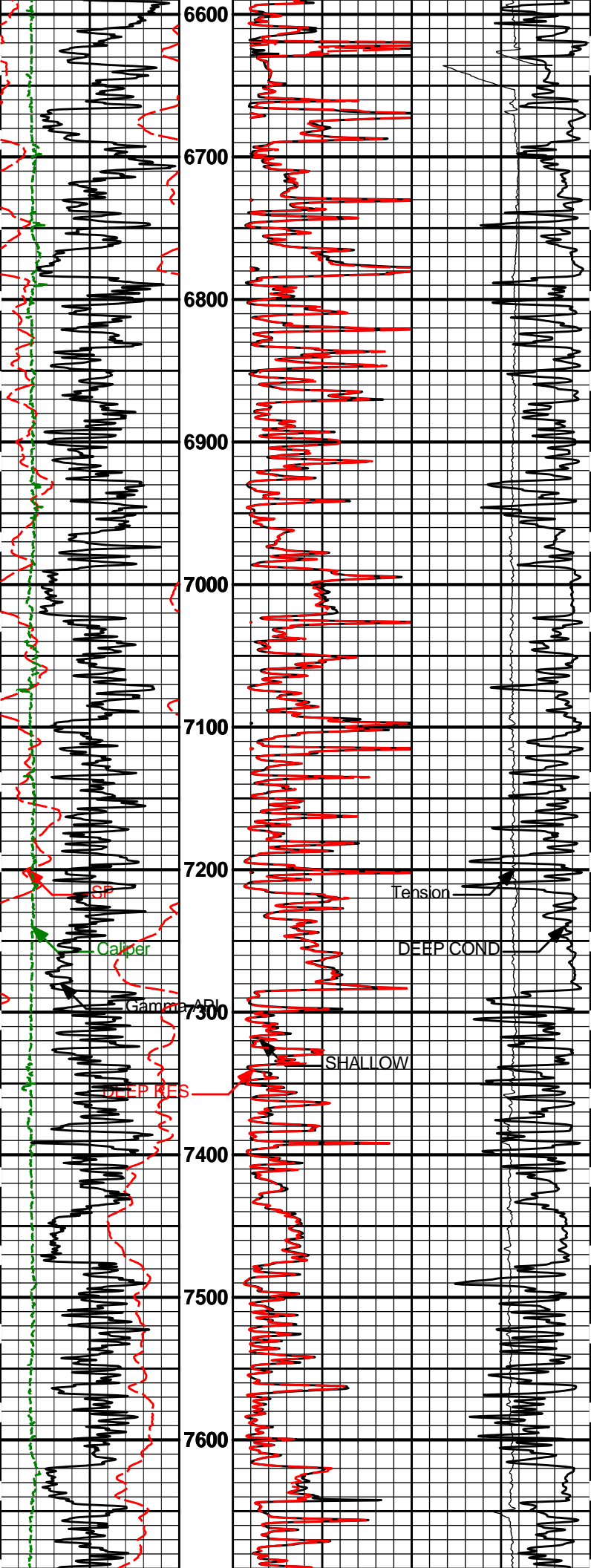


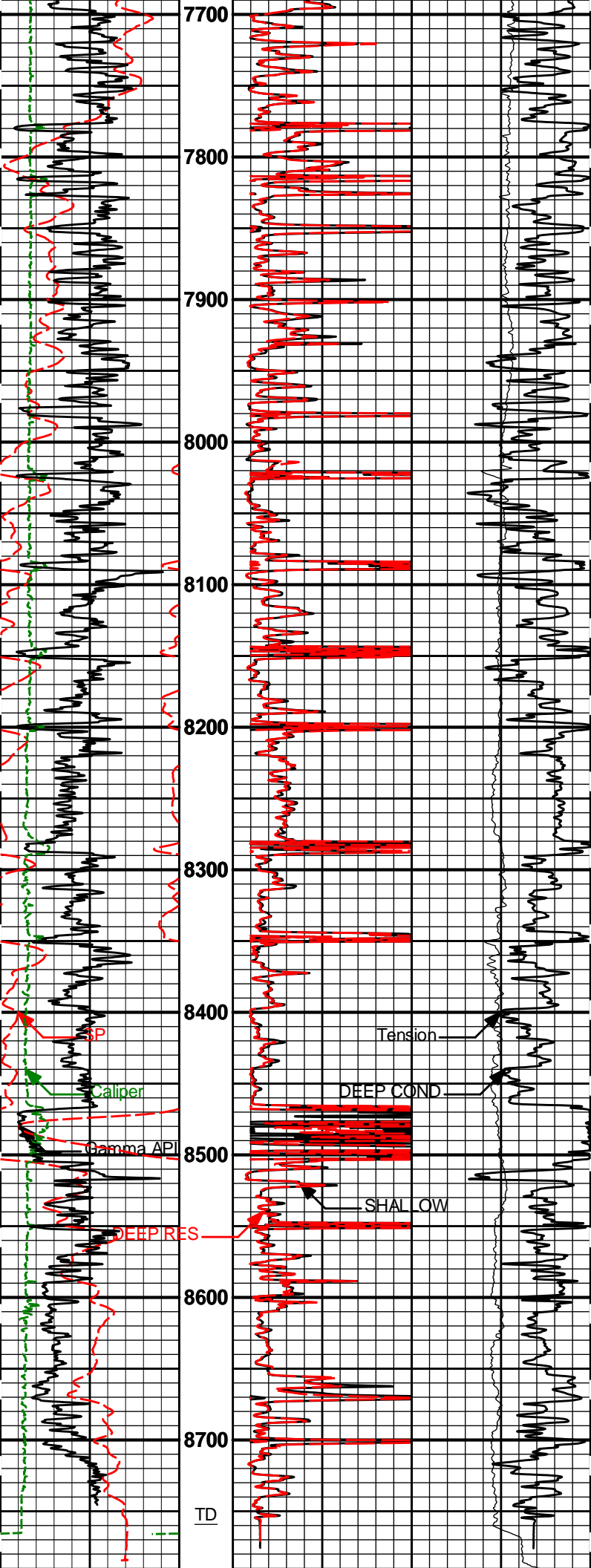






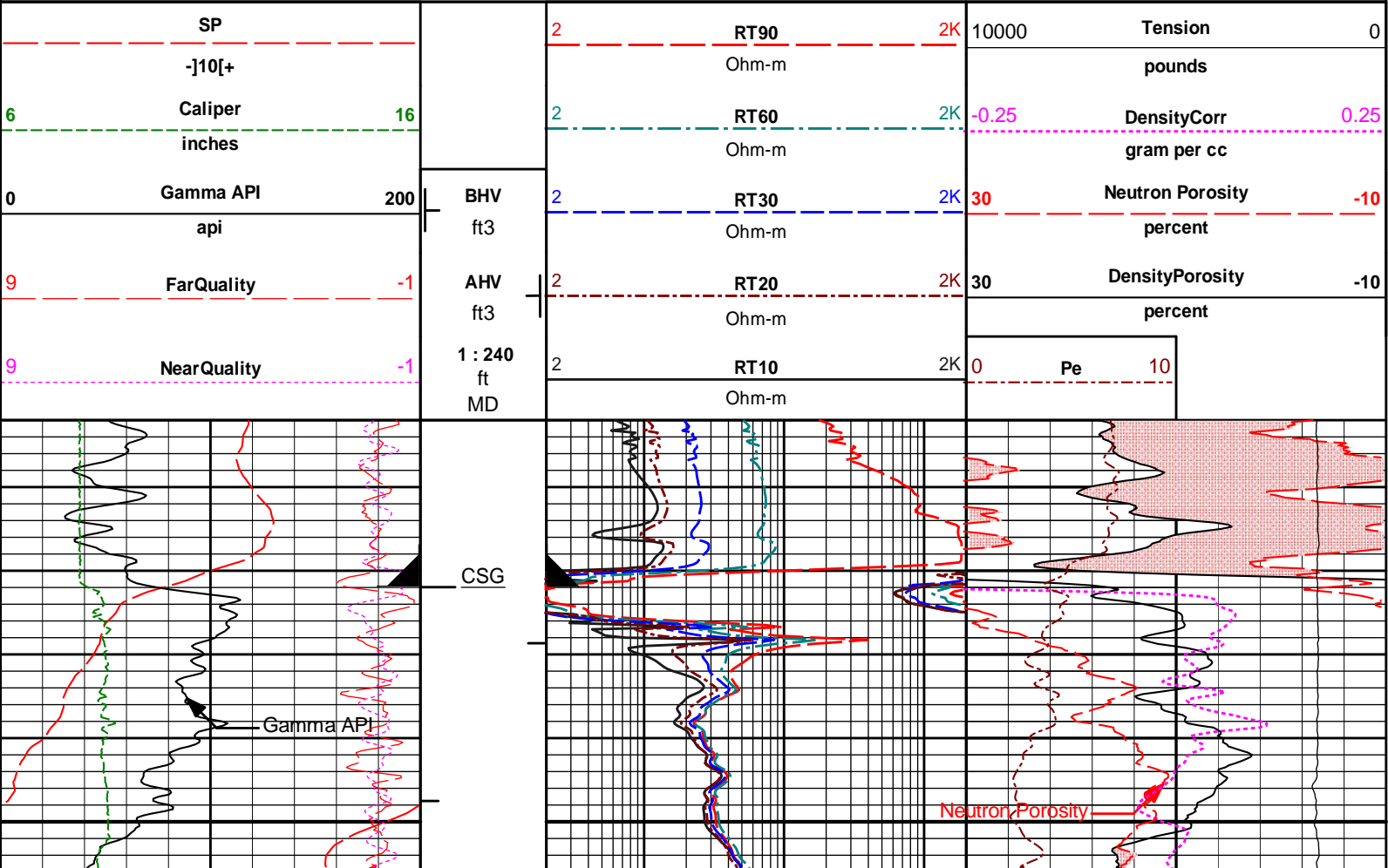


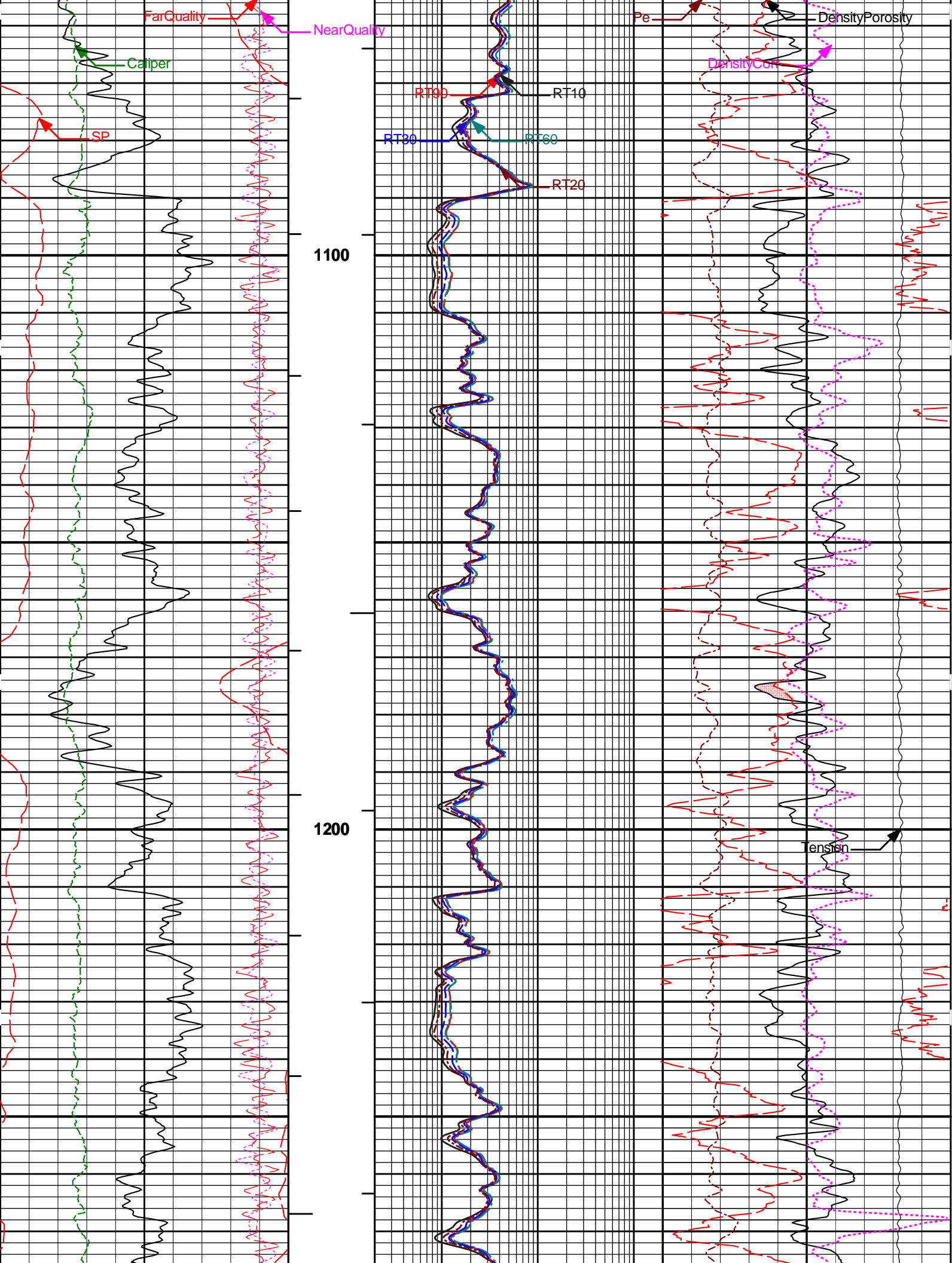


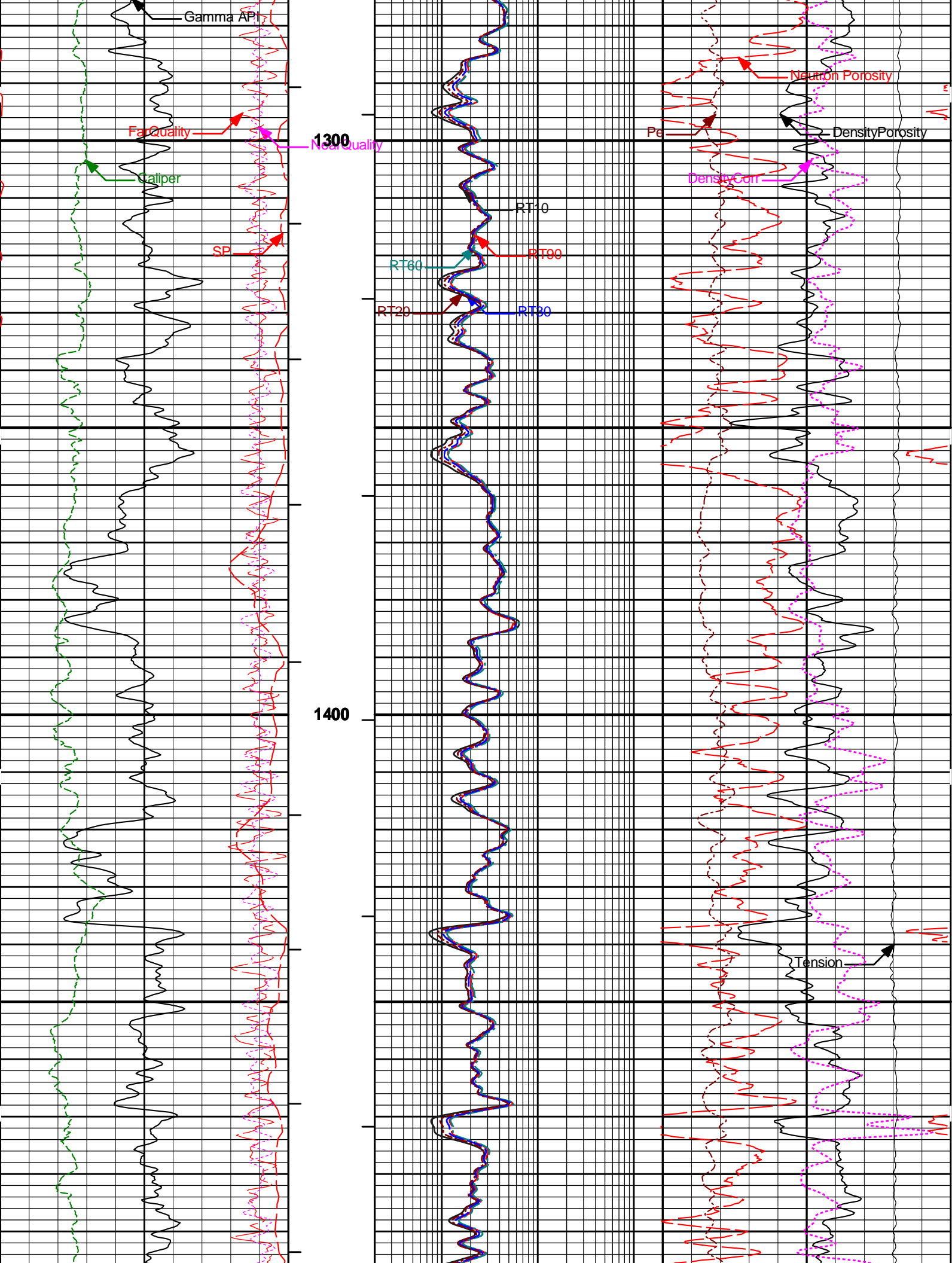


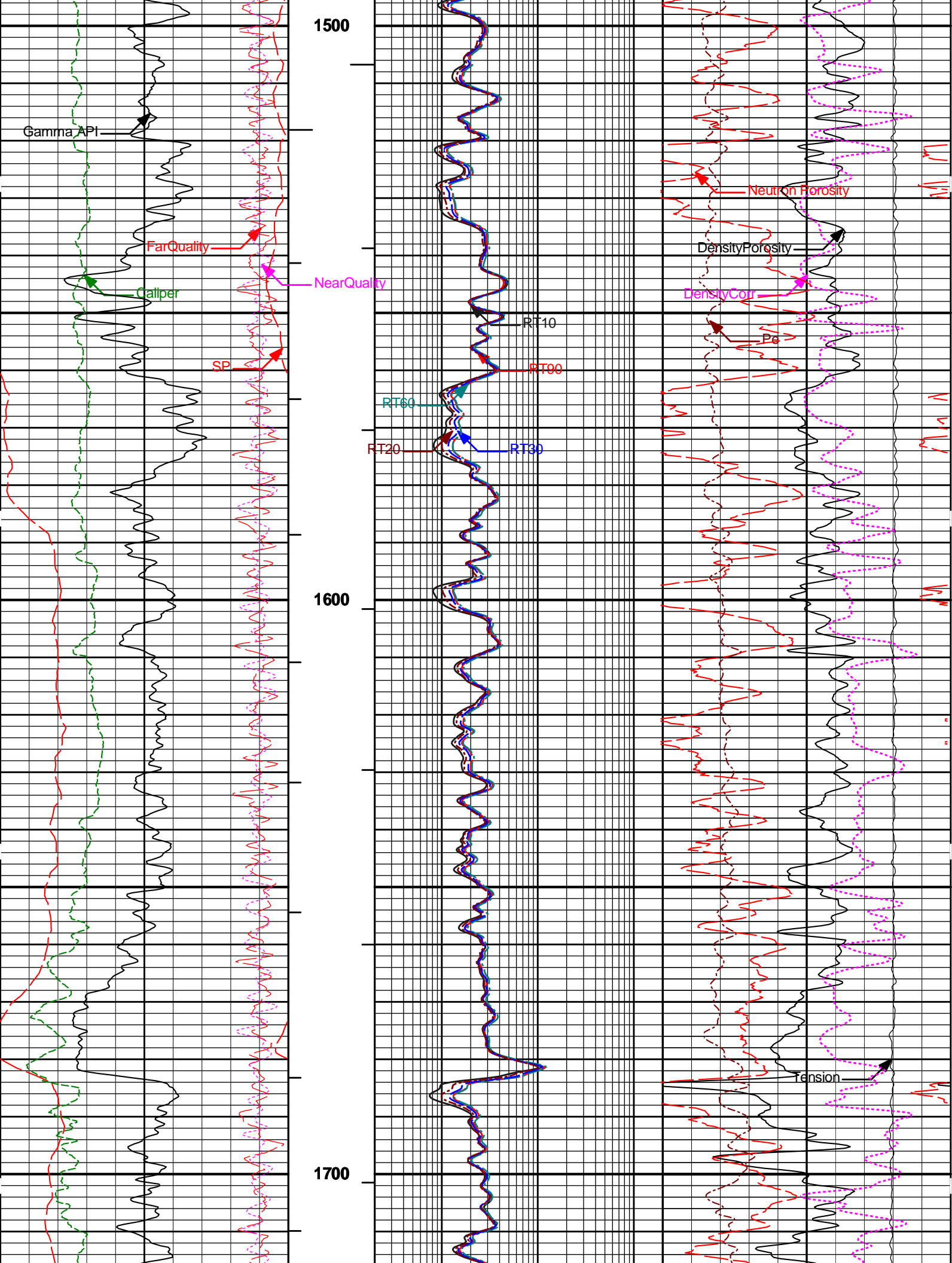
MAIN PASS 1" = 100' (HALF SCALE)

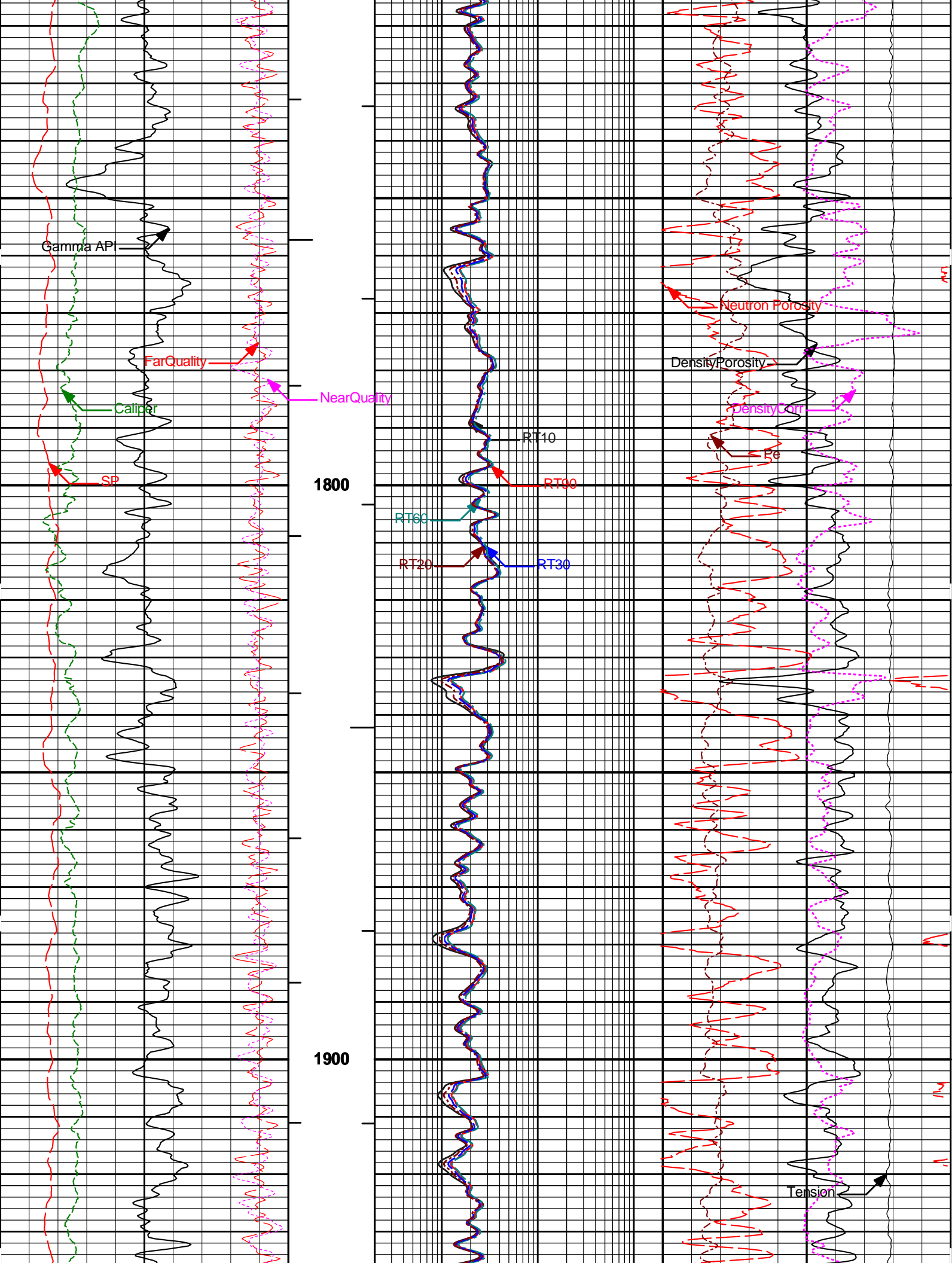
MAIN PASS

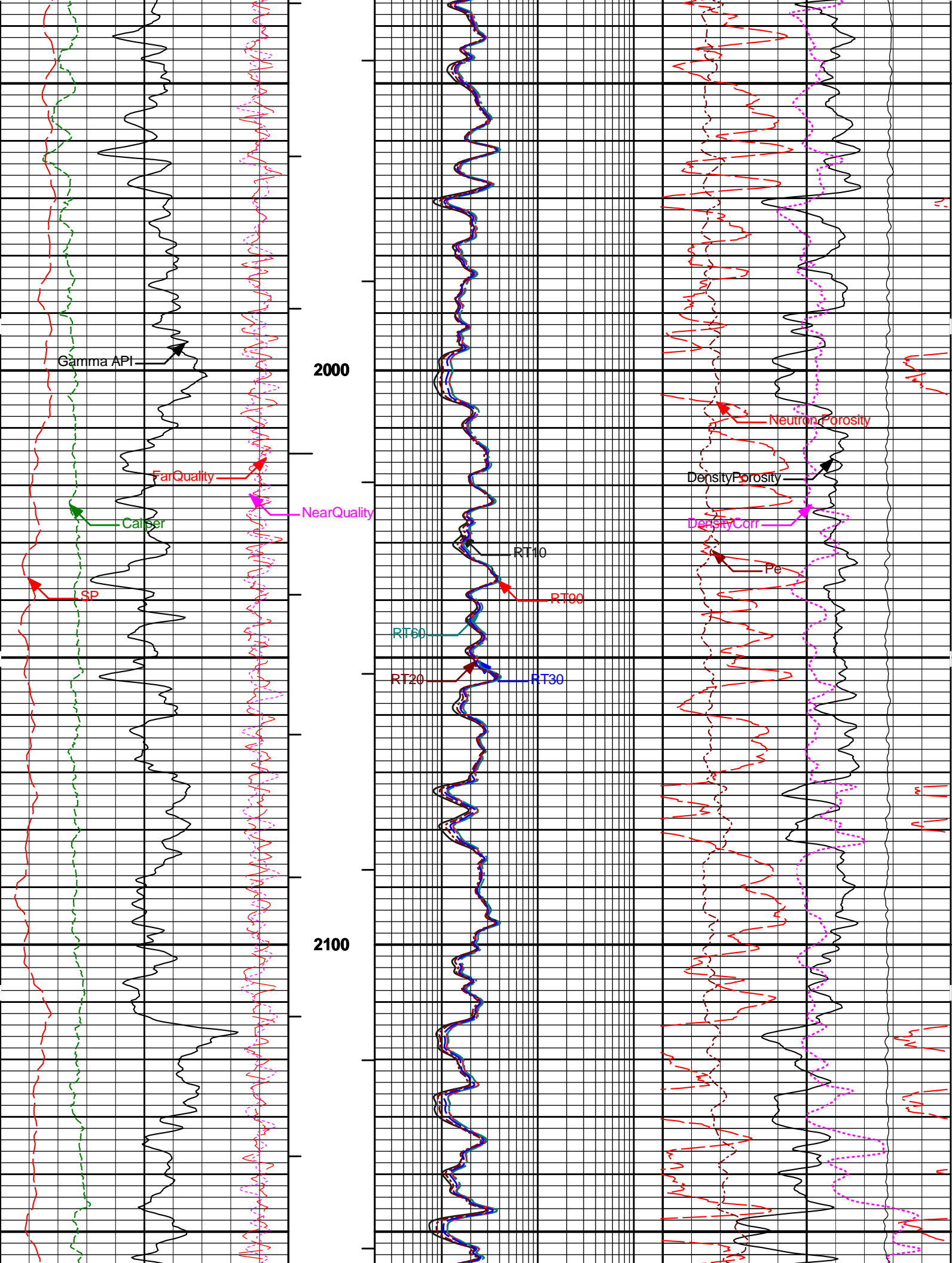


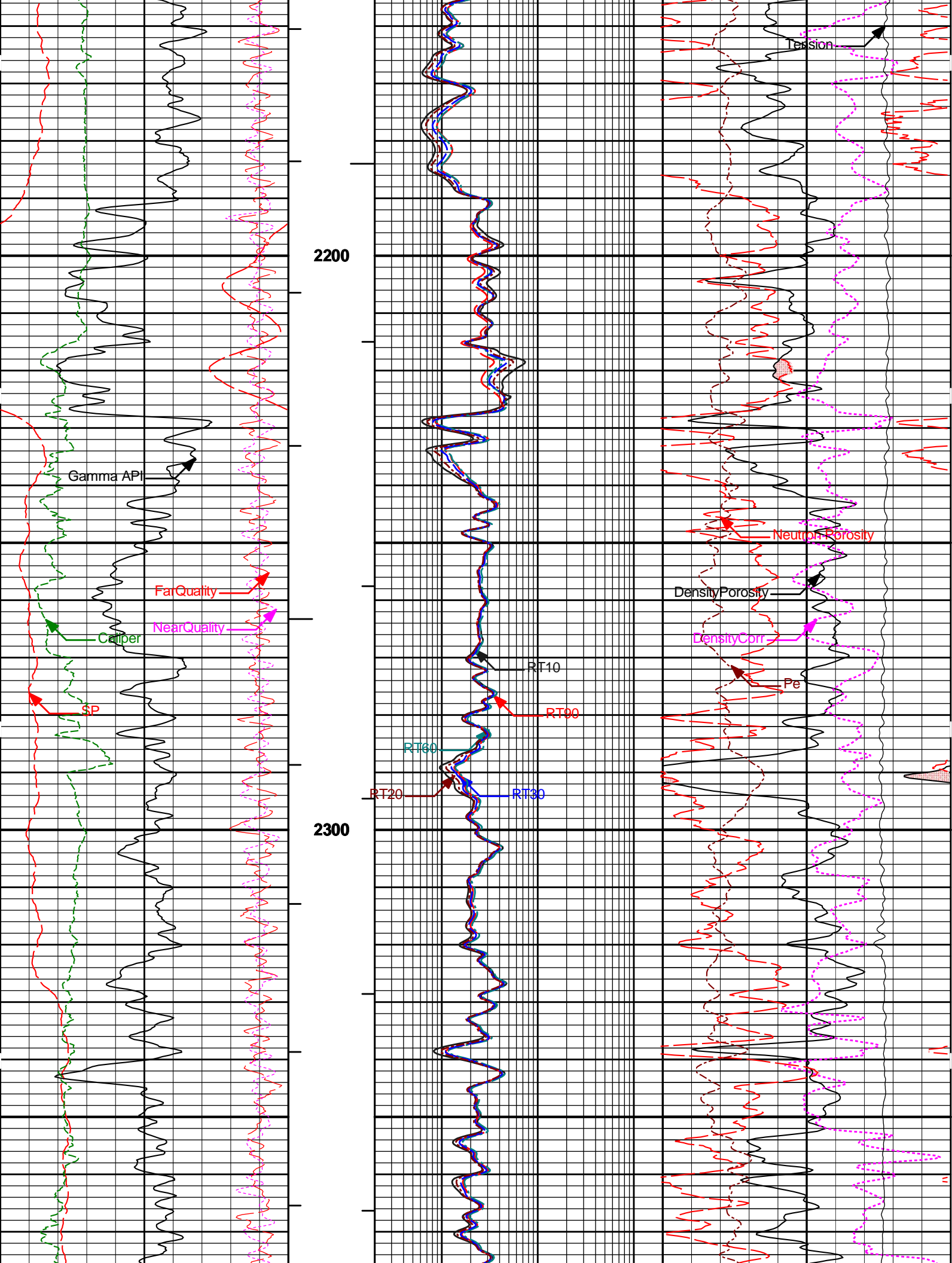


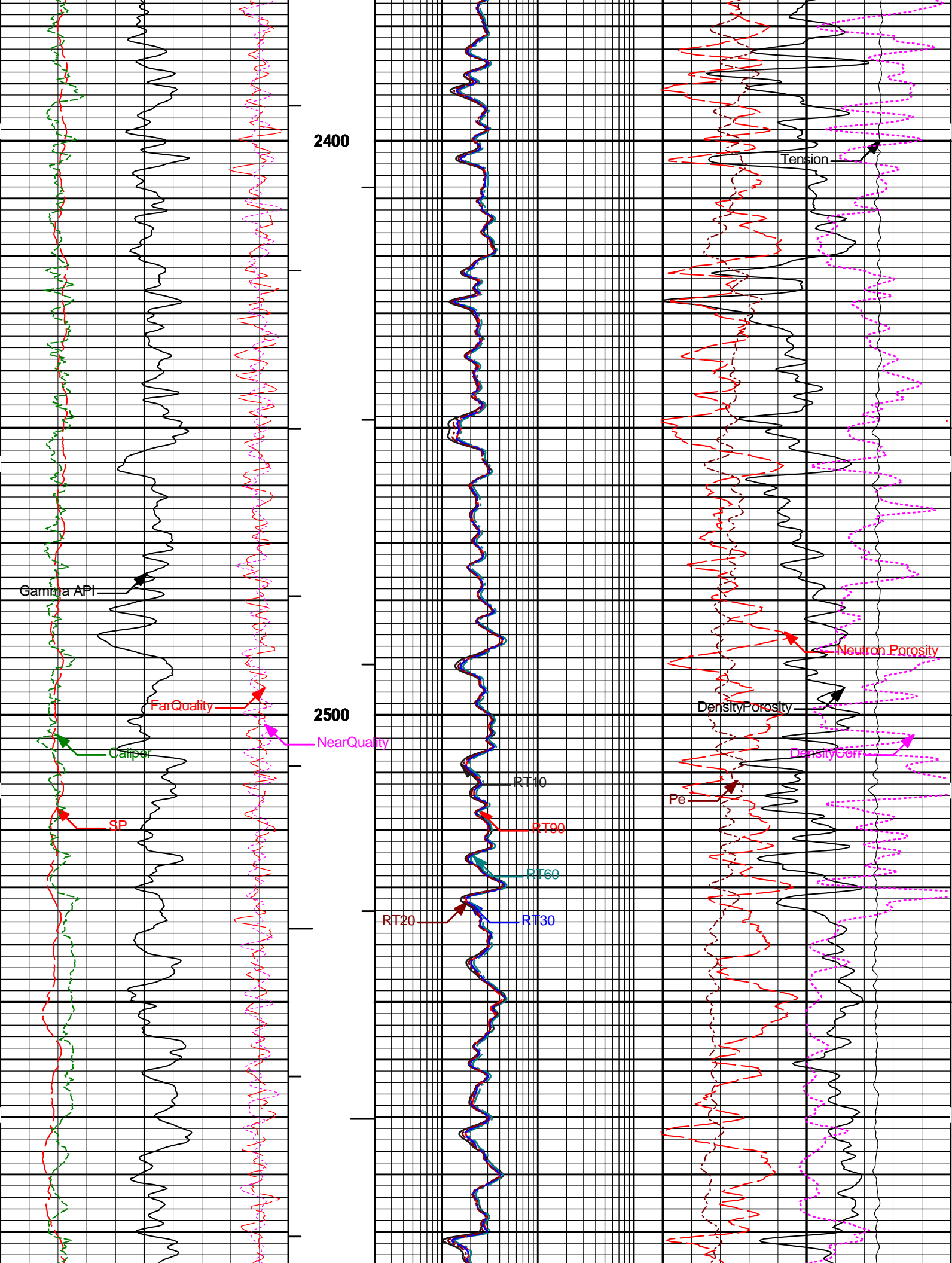


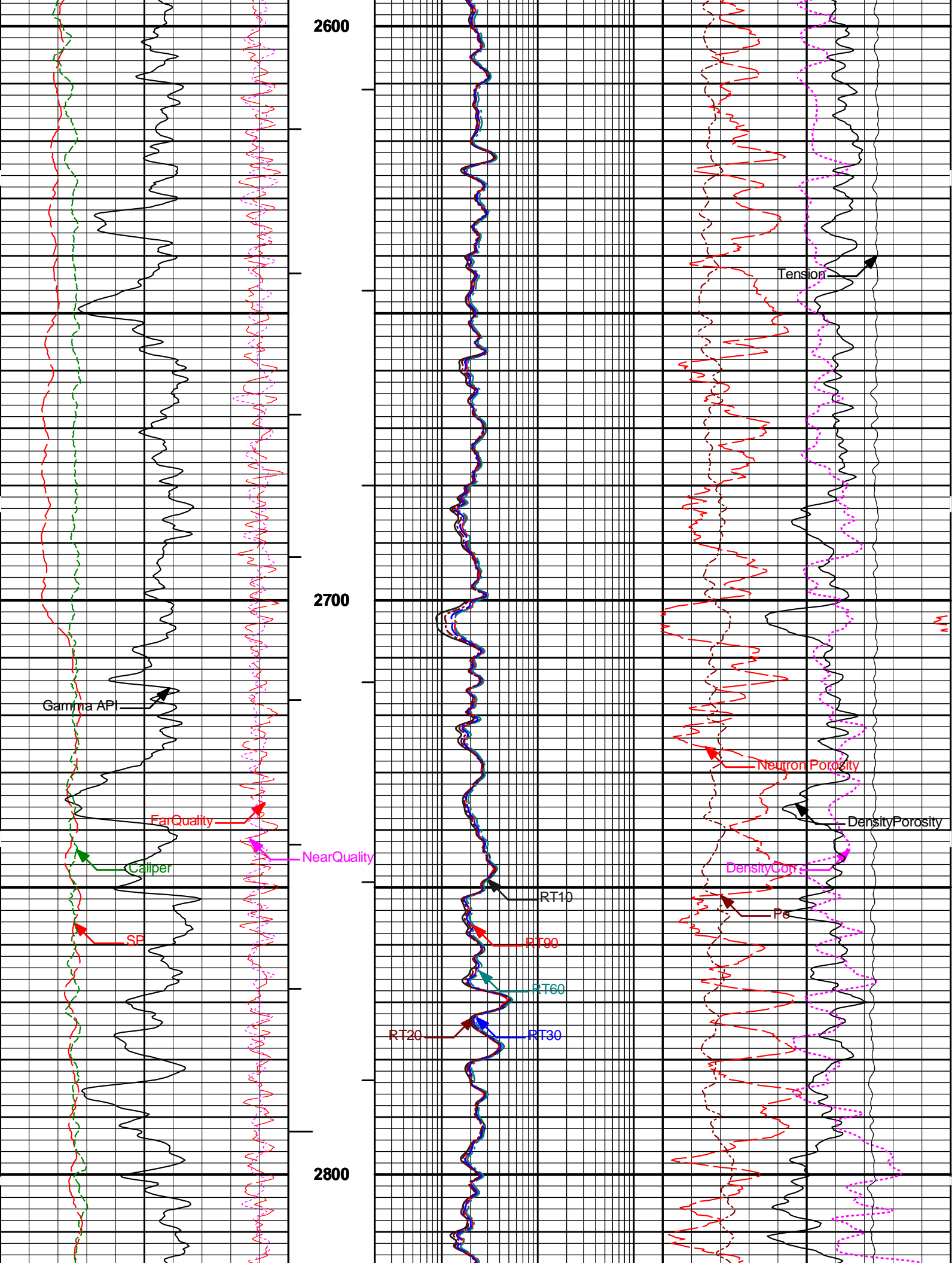


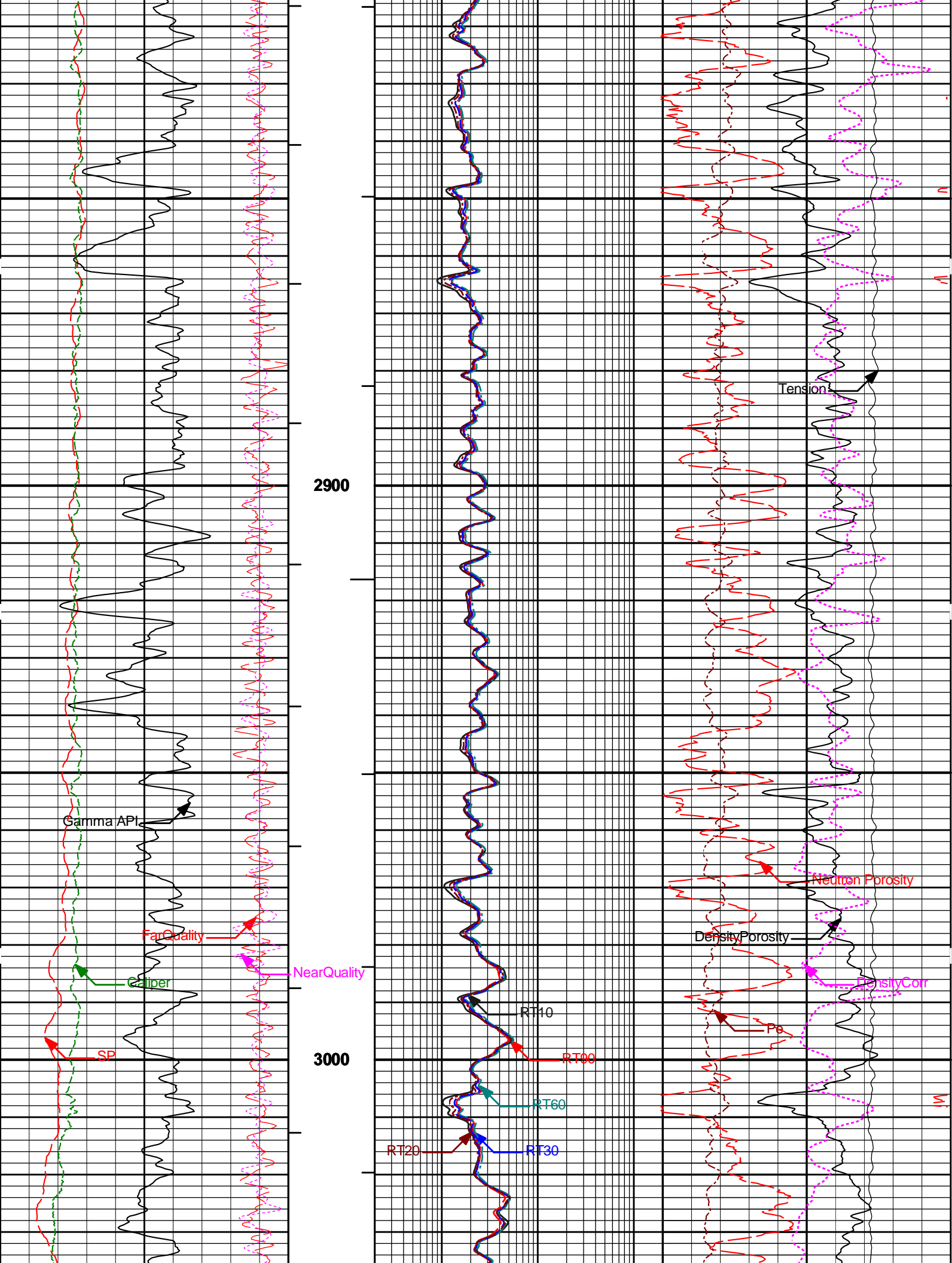


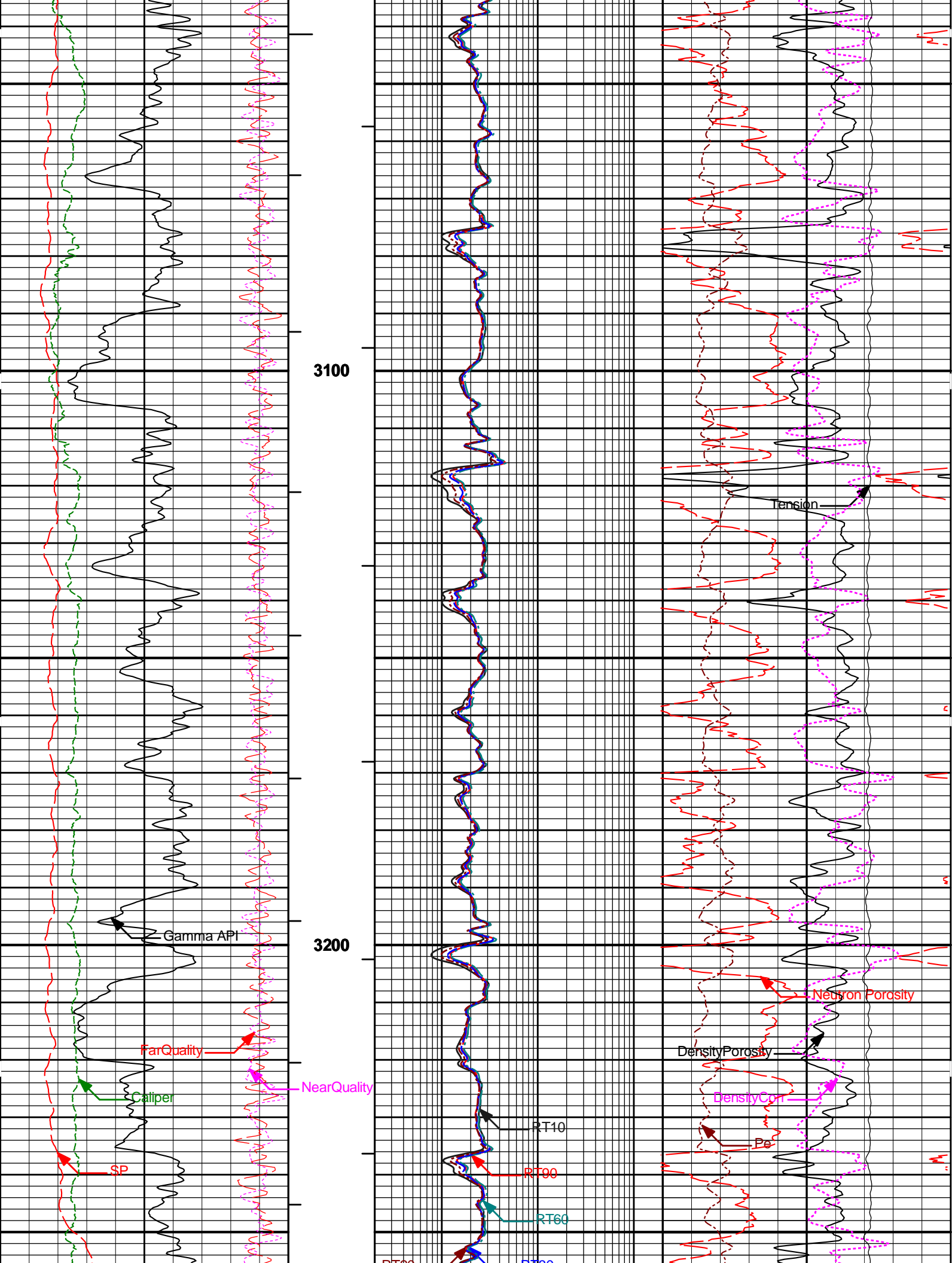


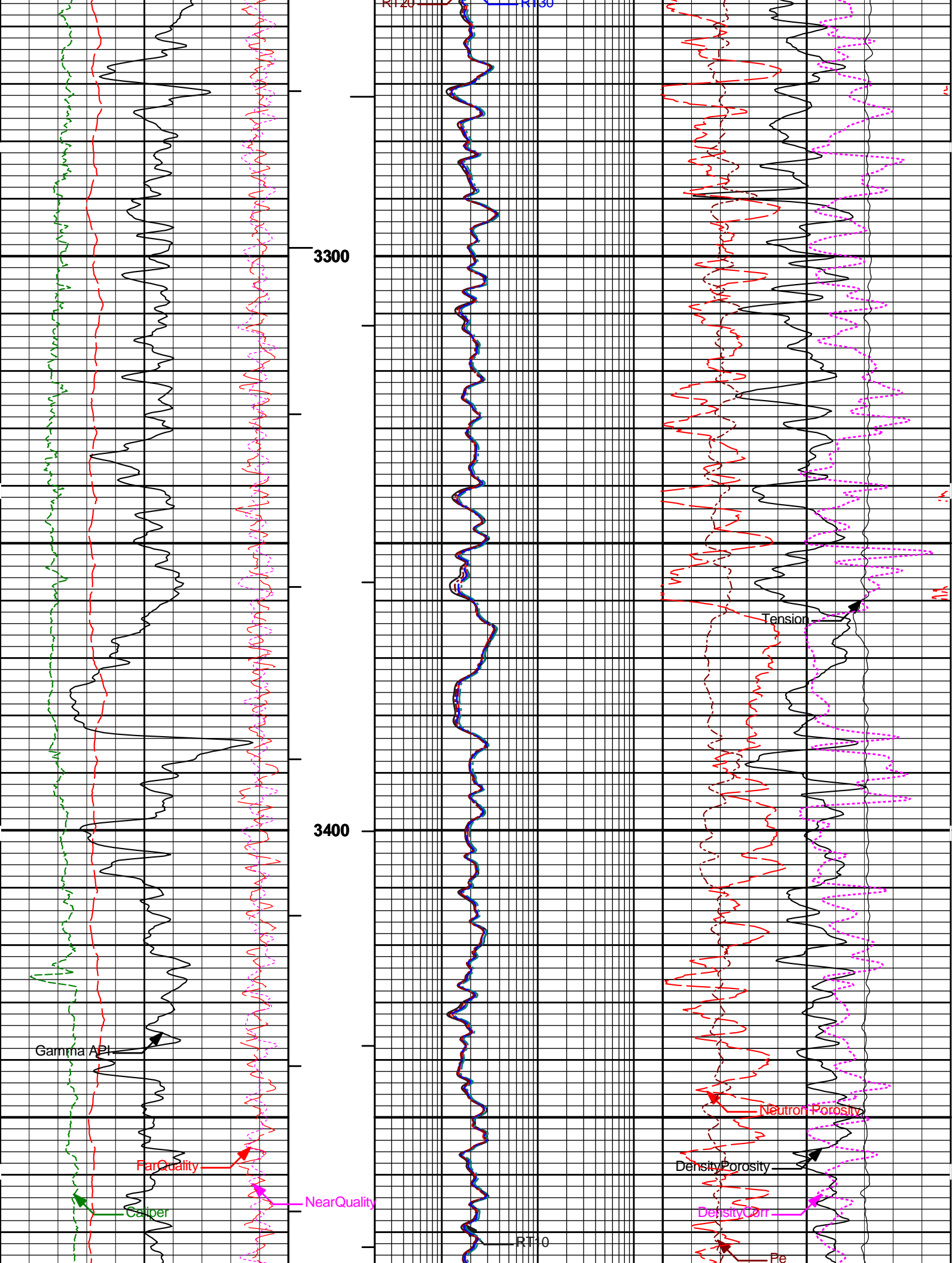


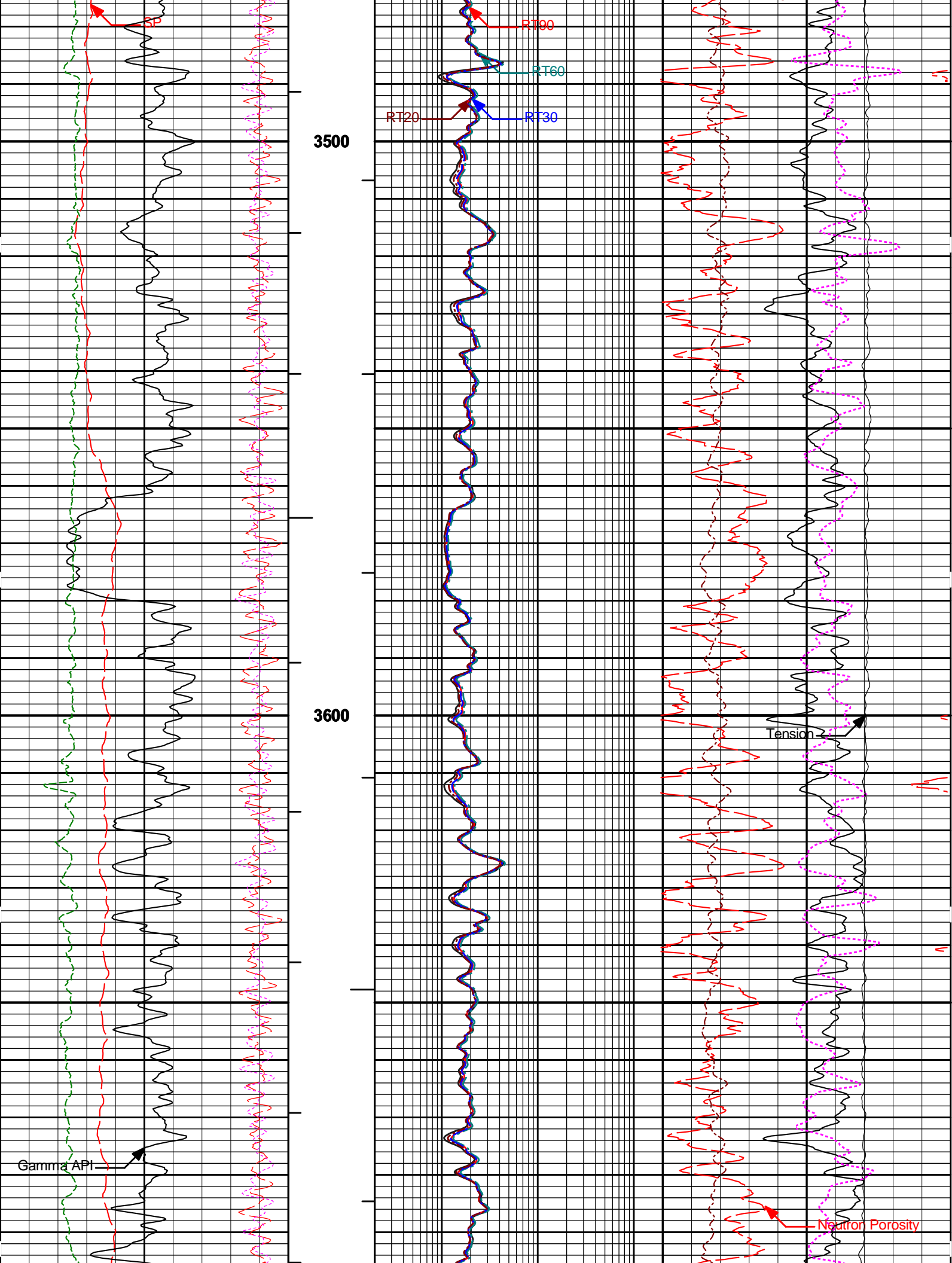


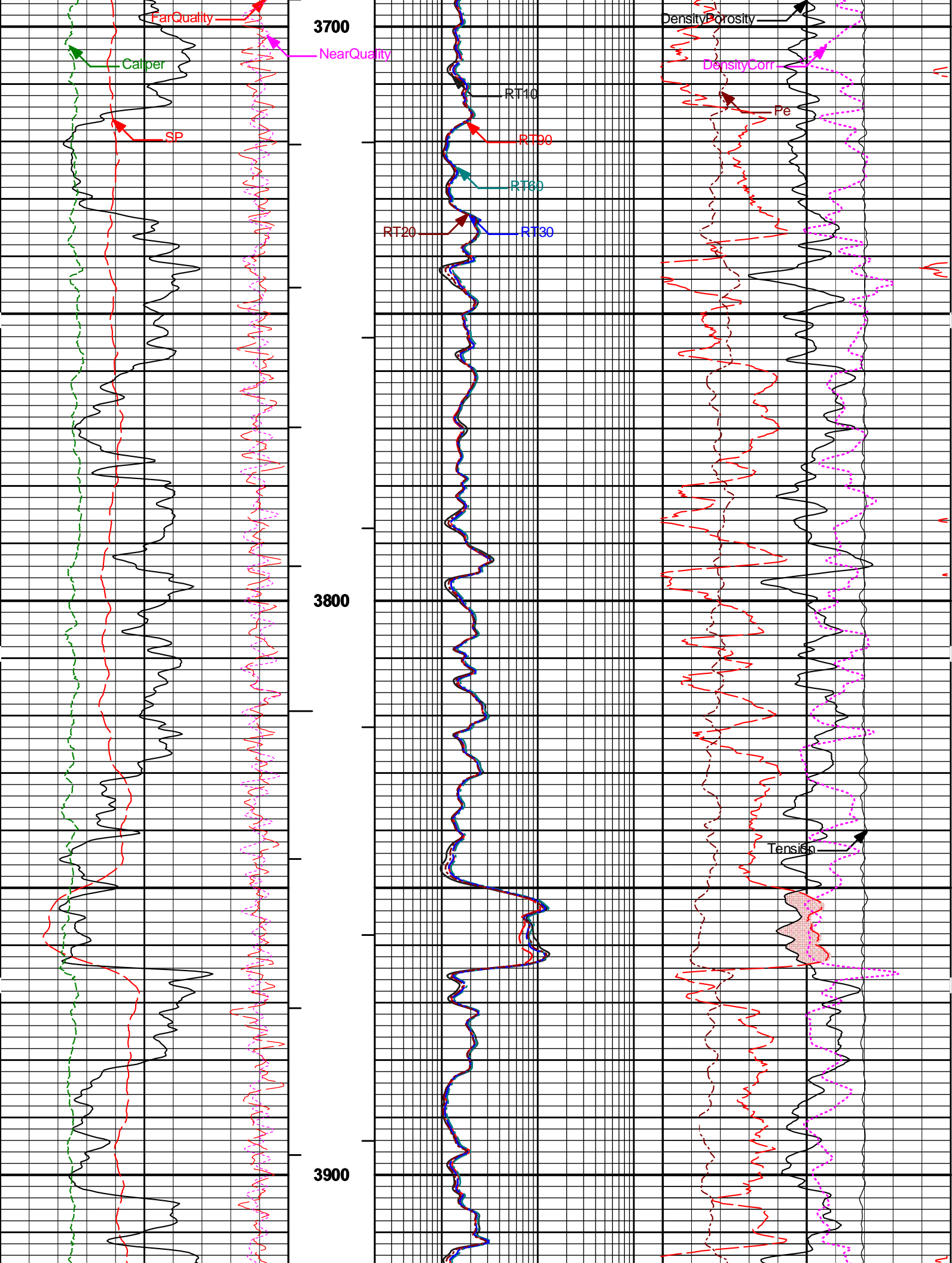


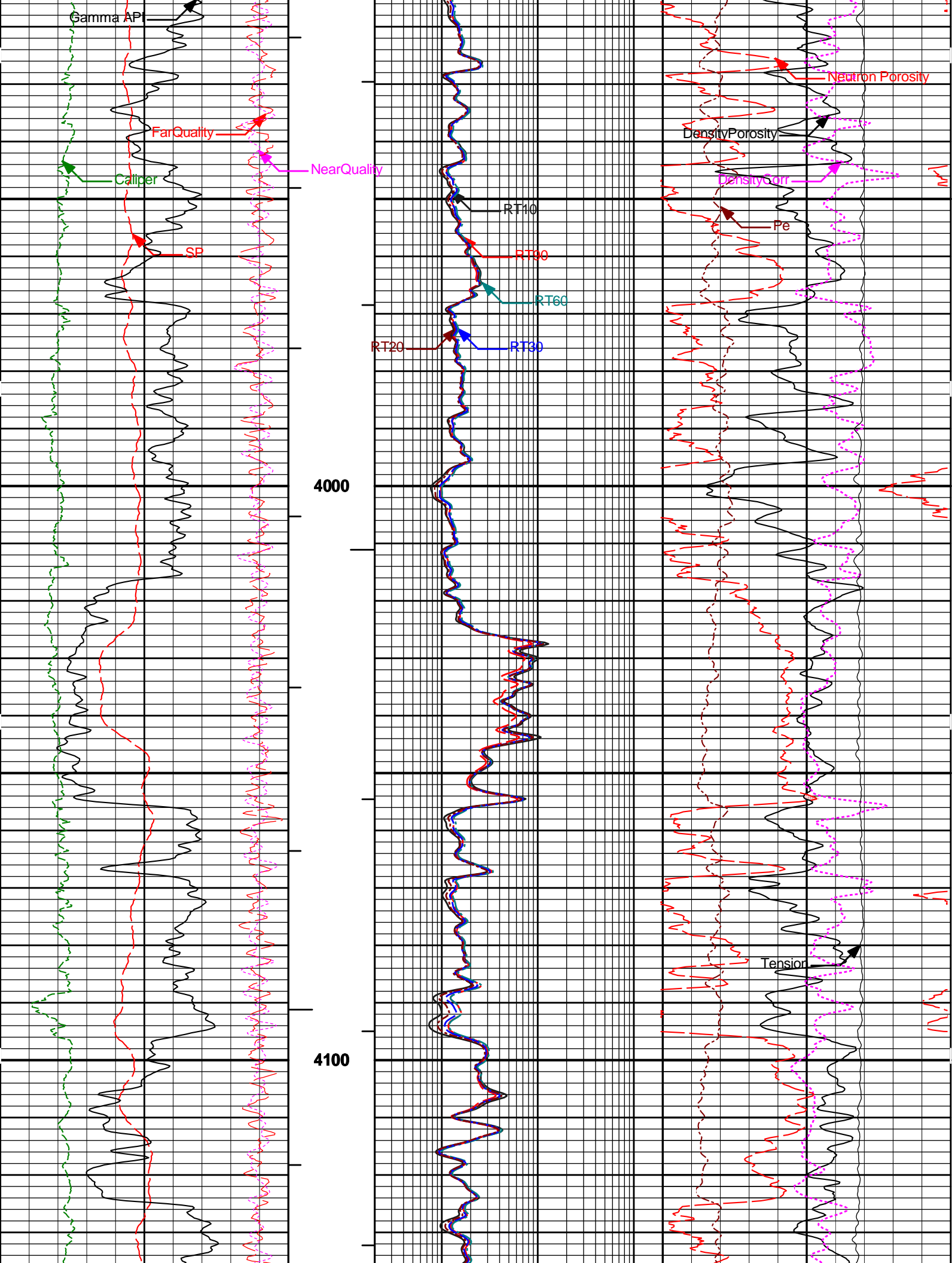


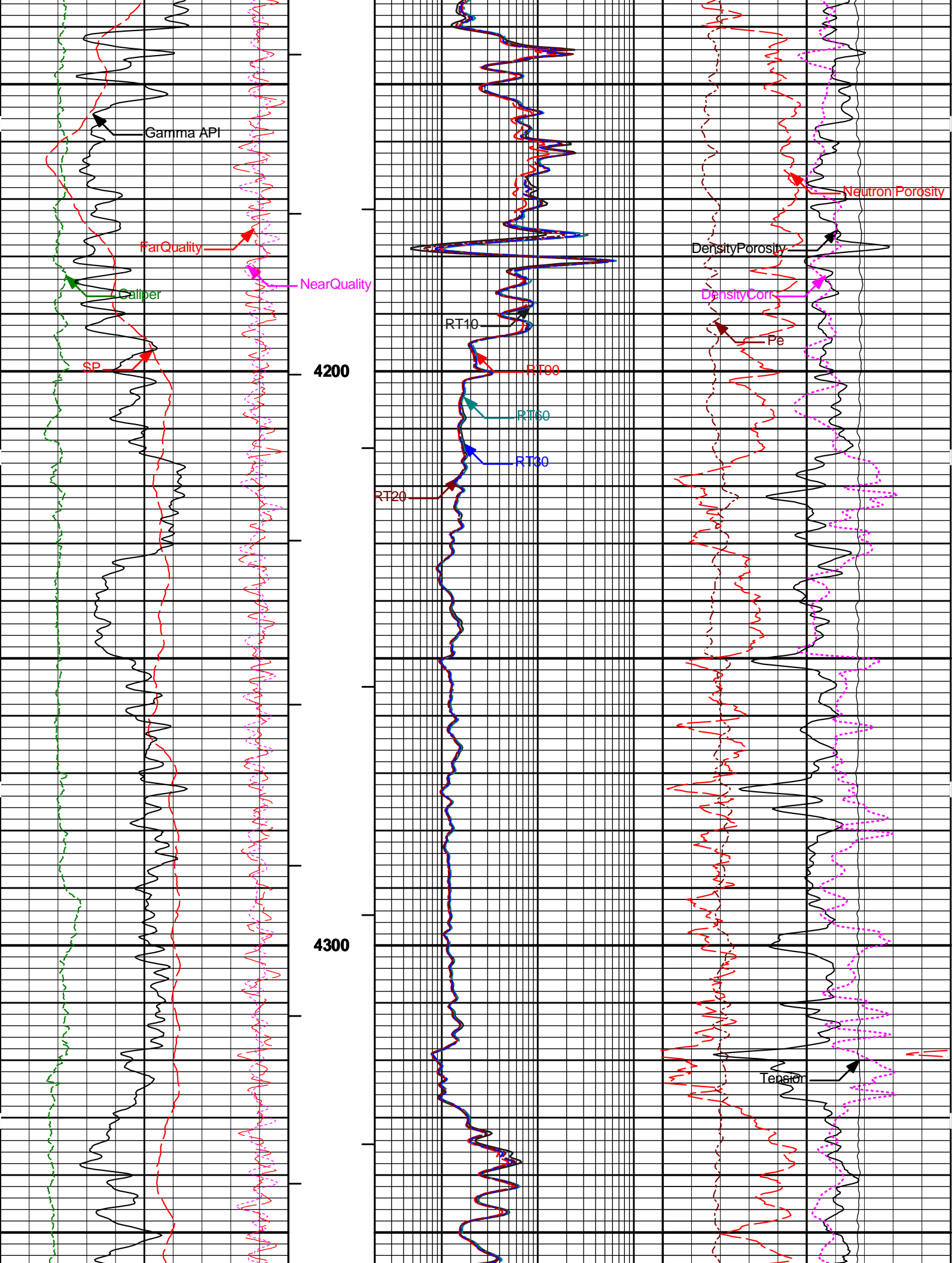


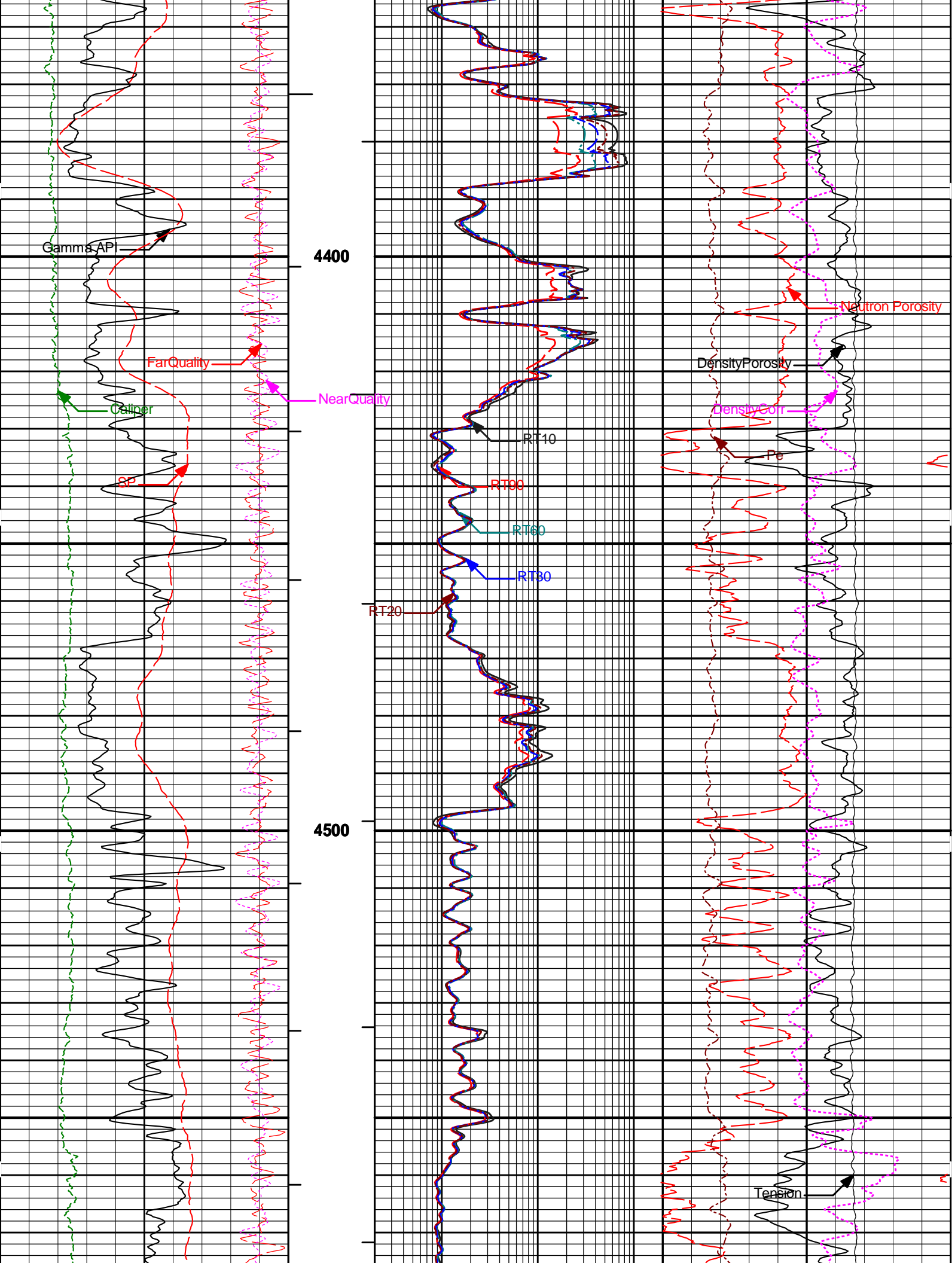


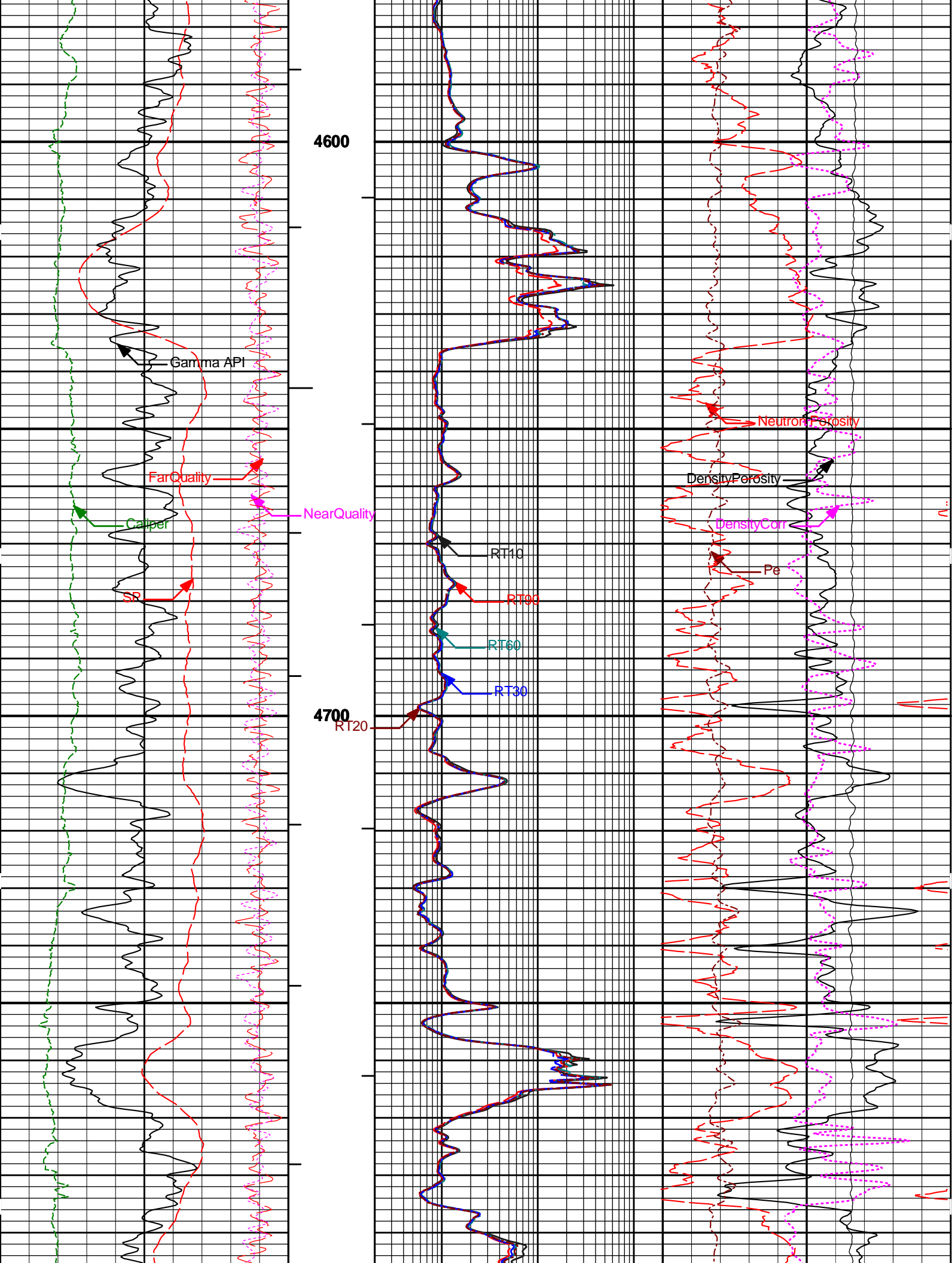


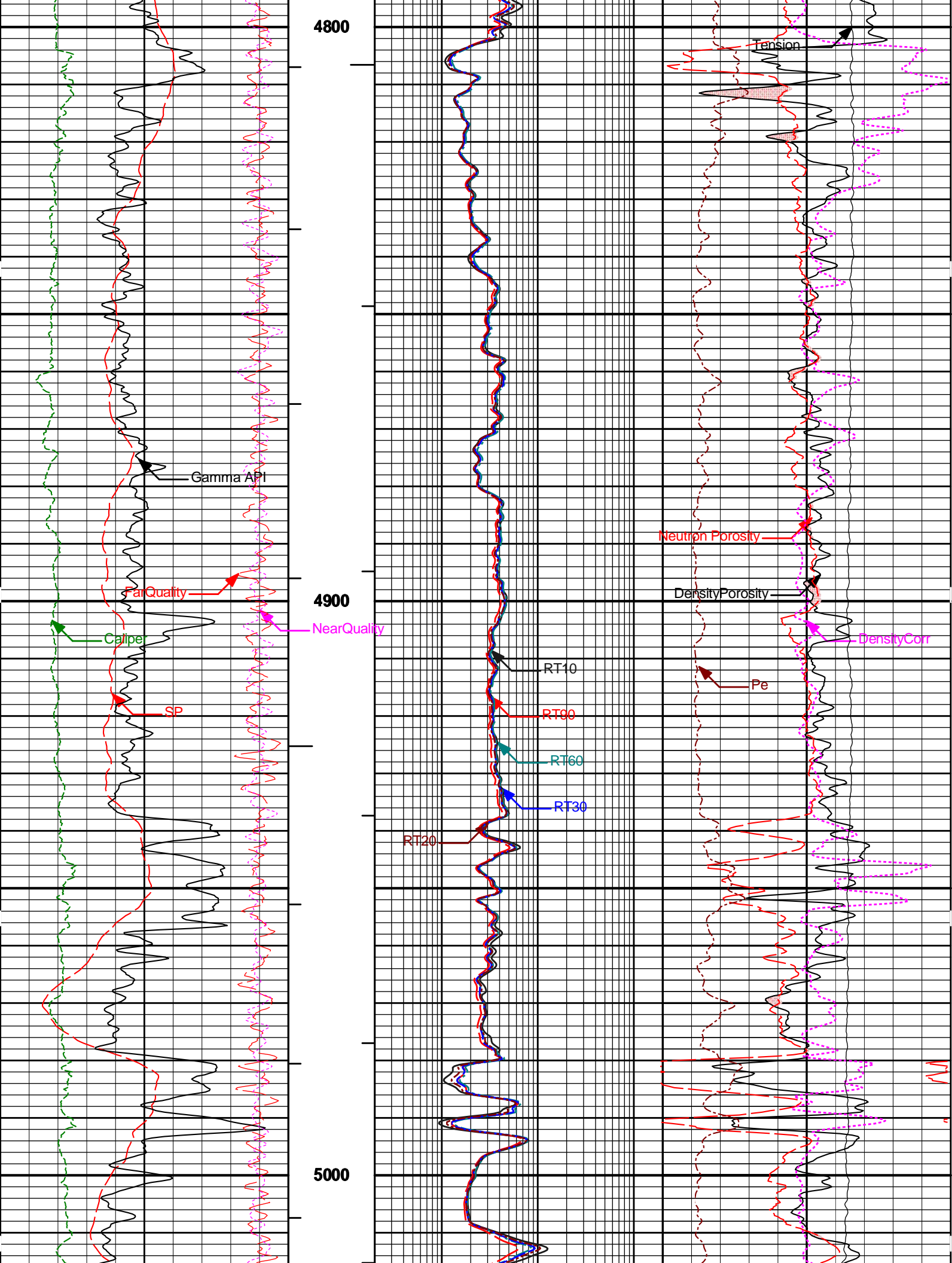


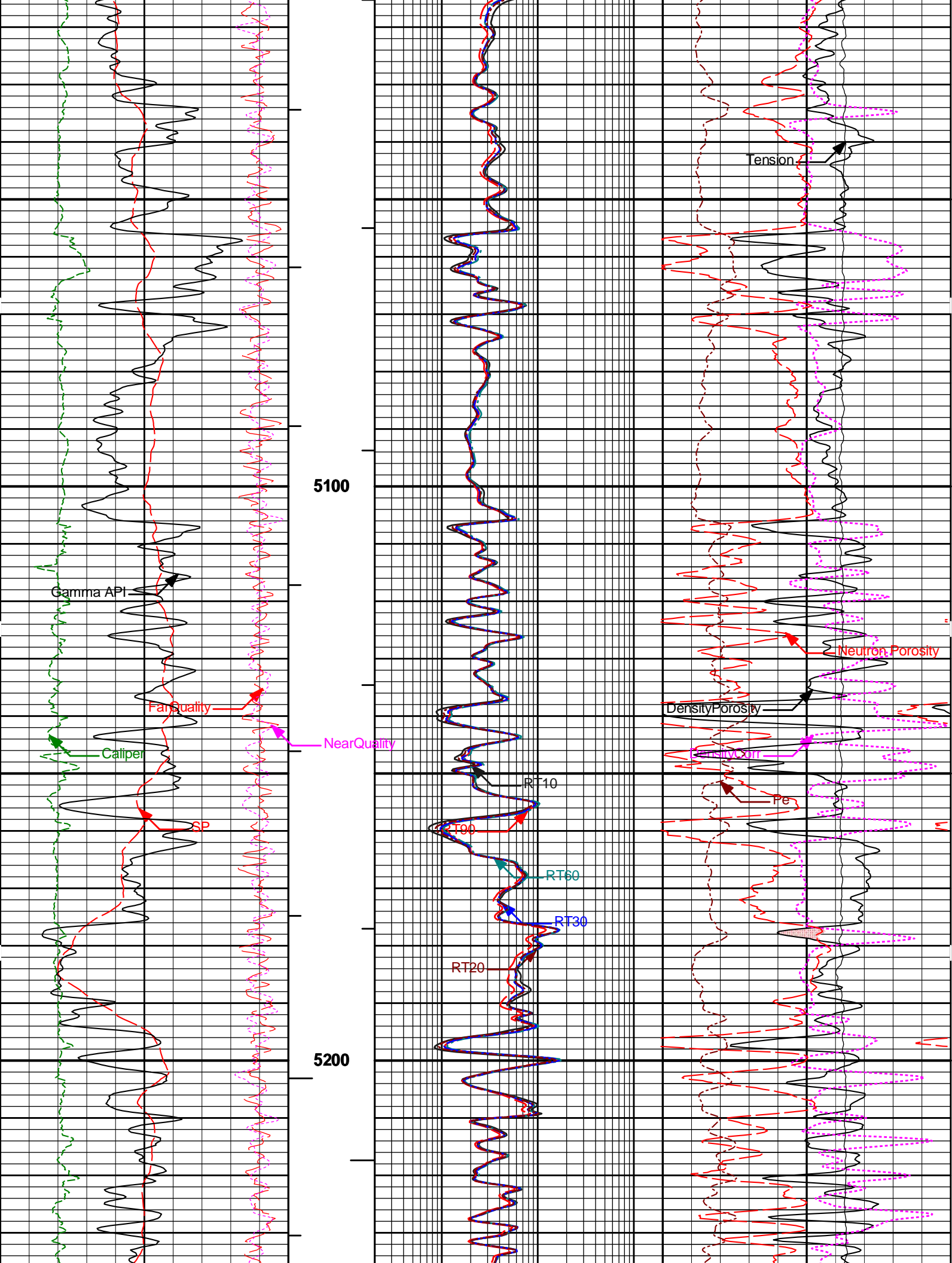


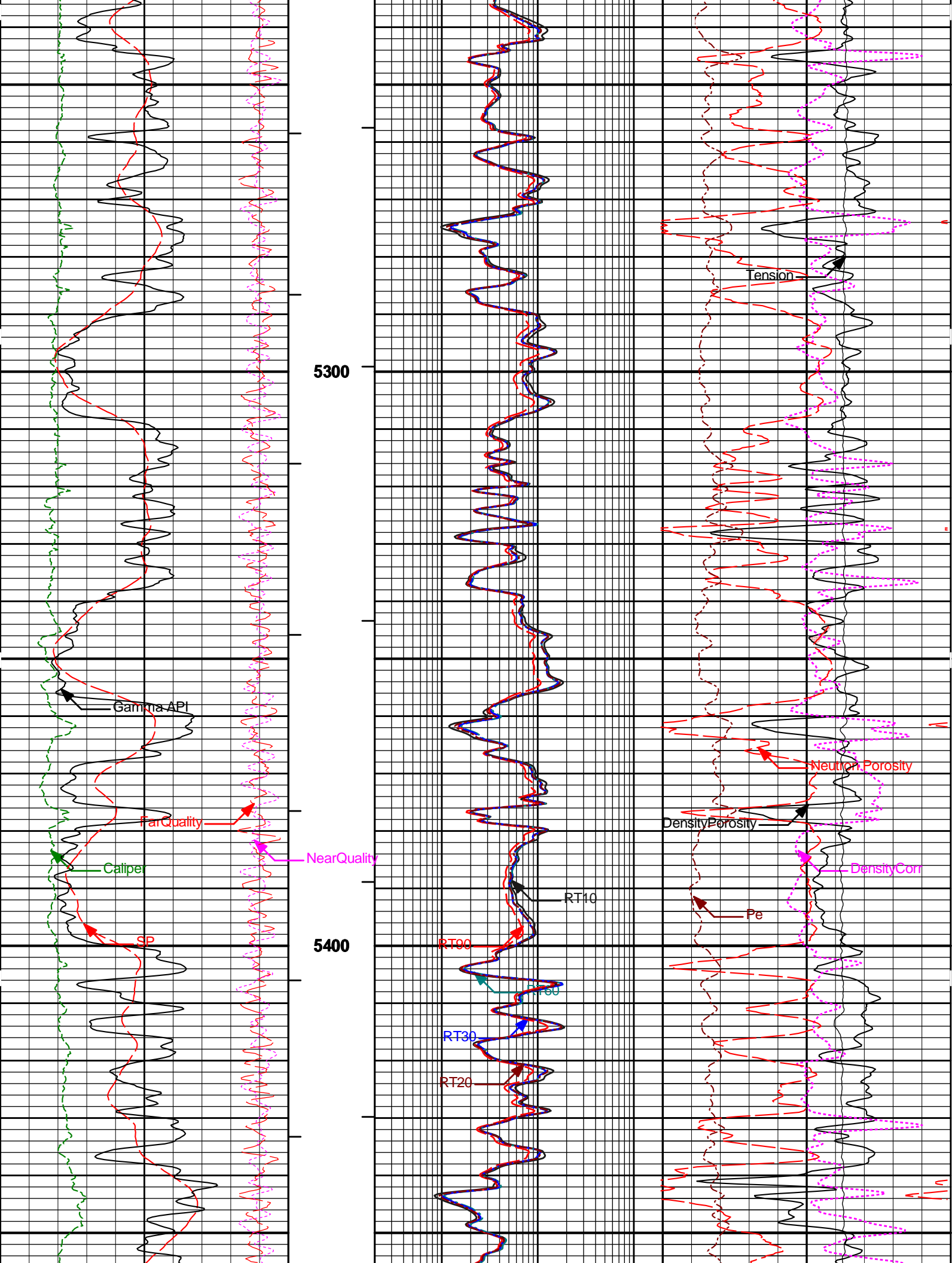


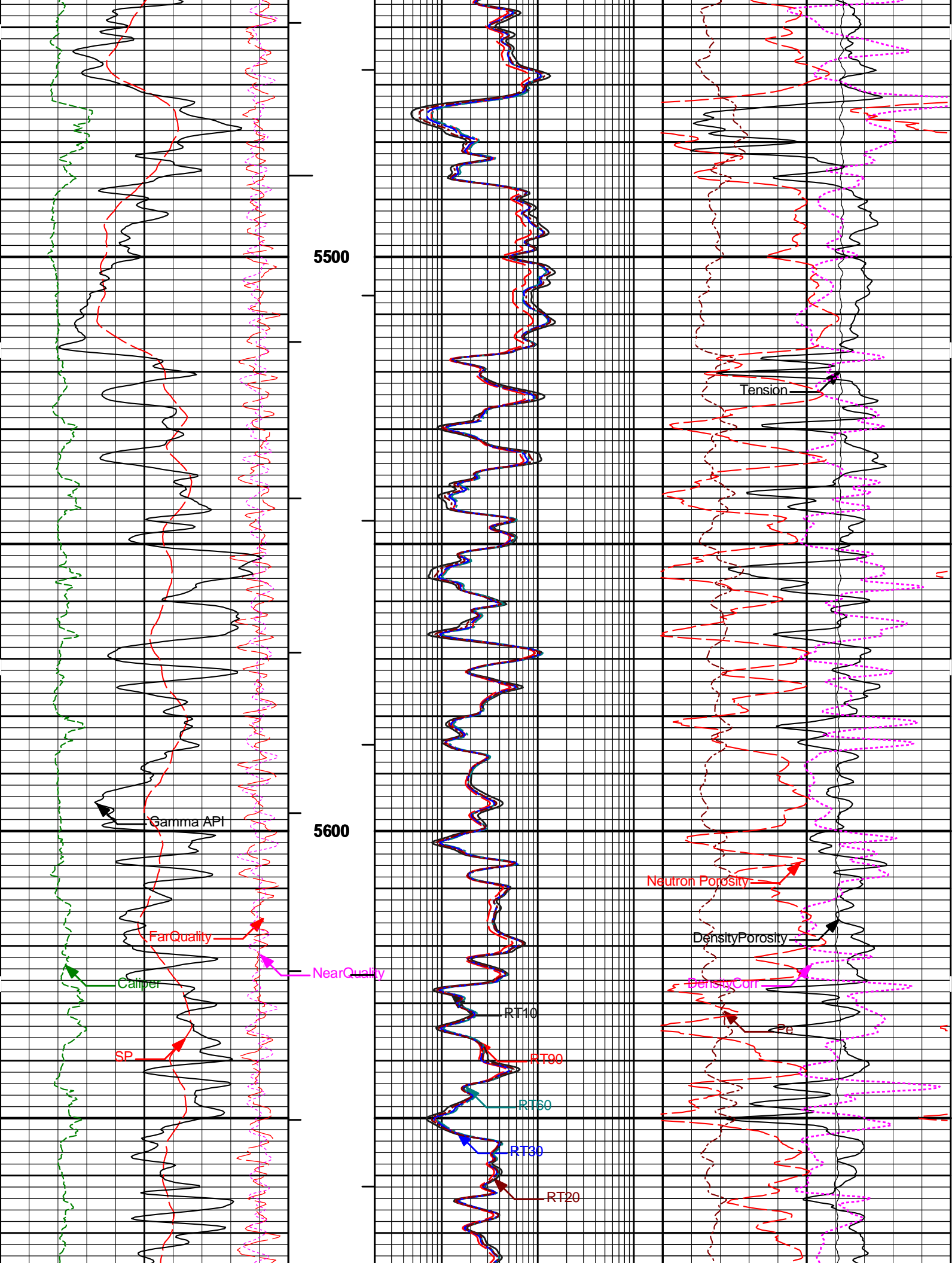


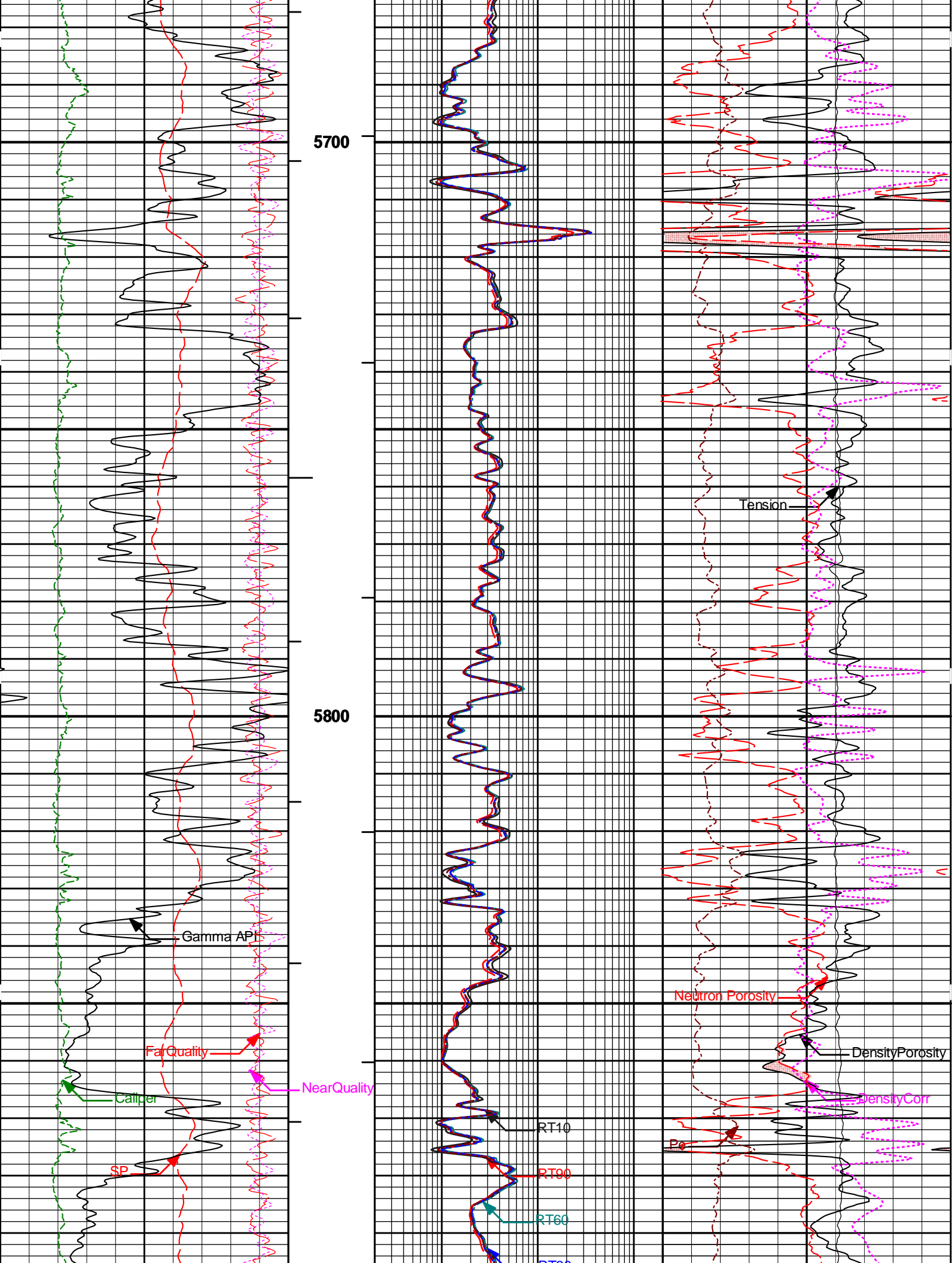


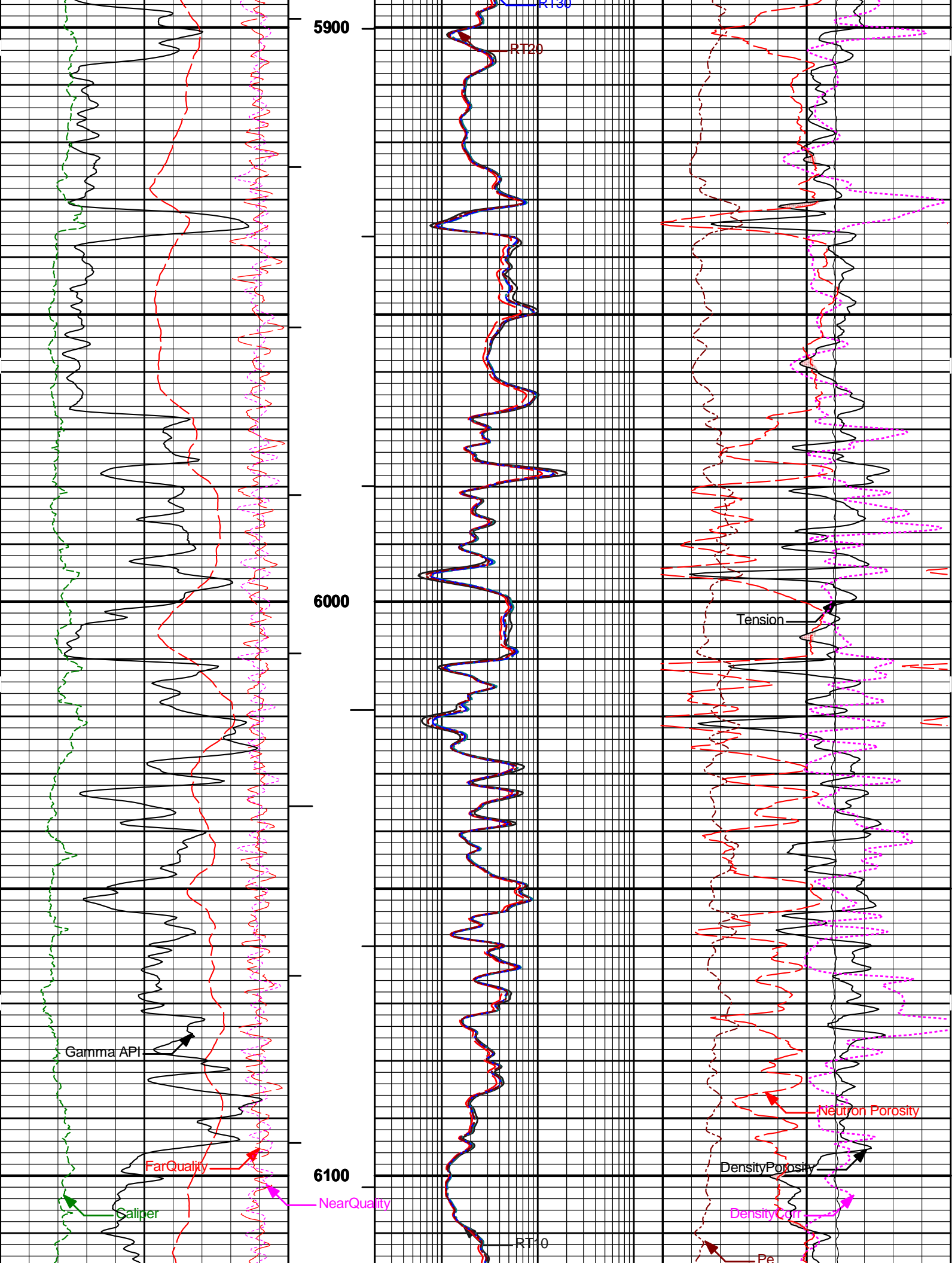


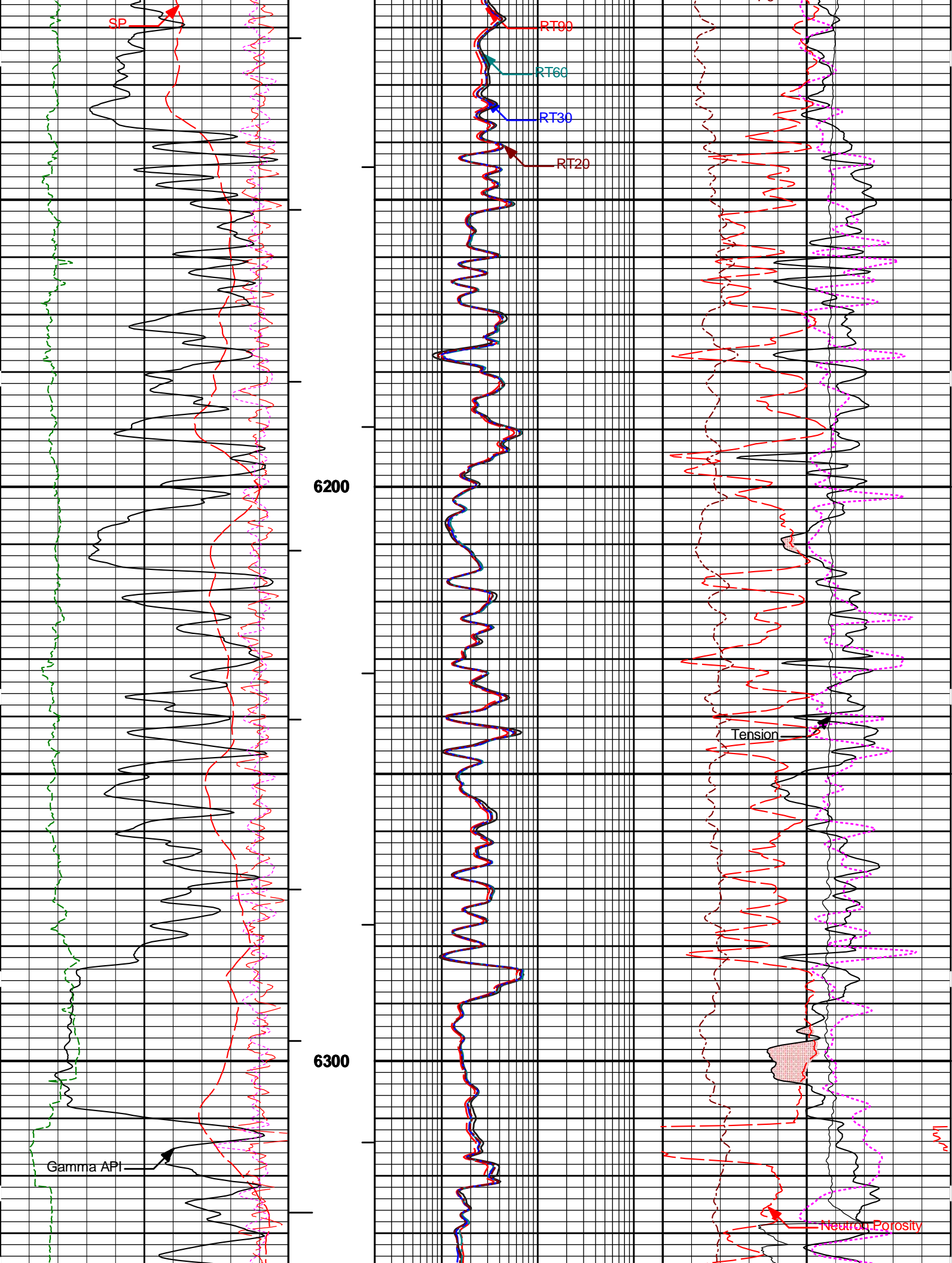


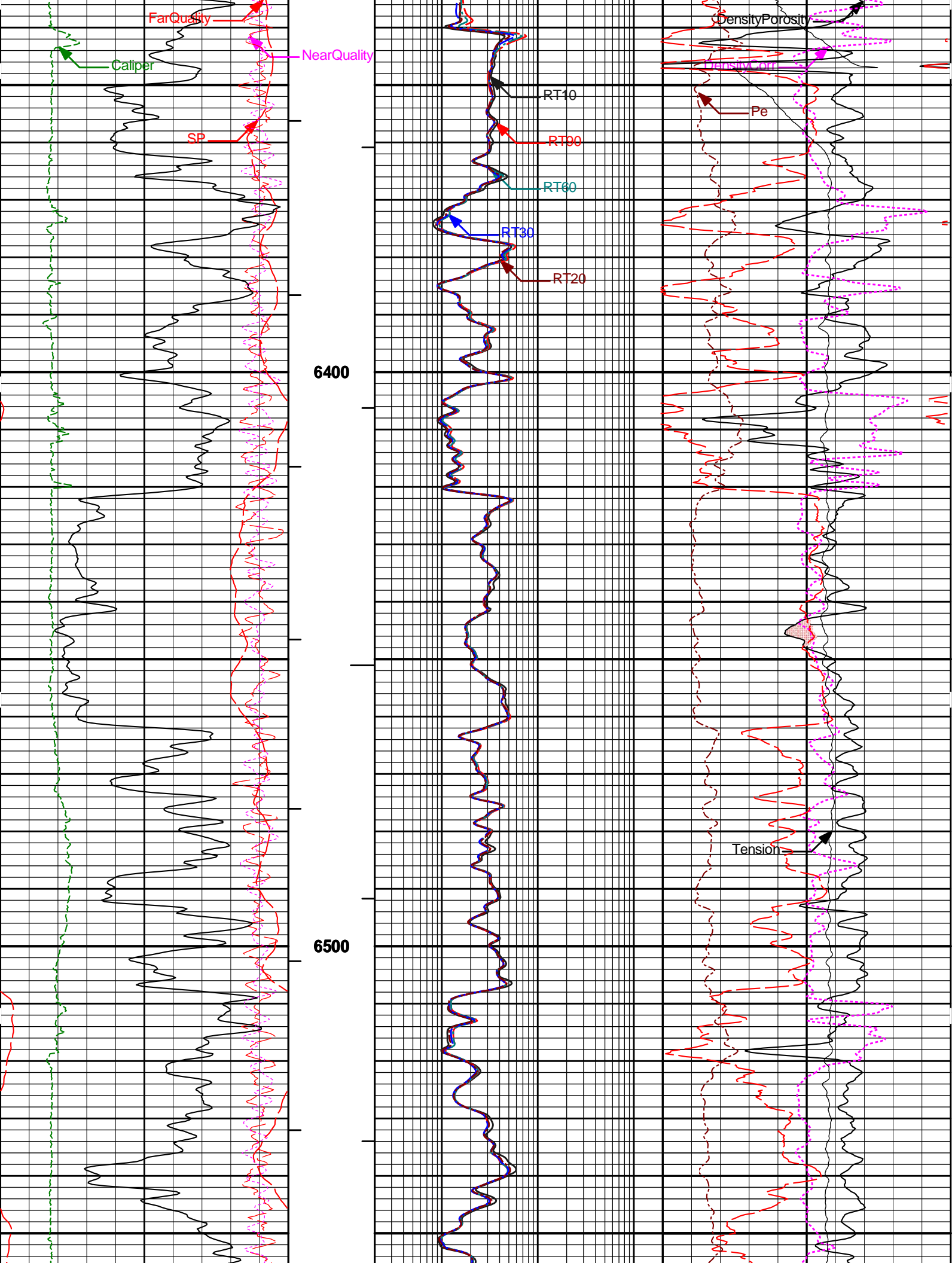


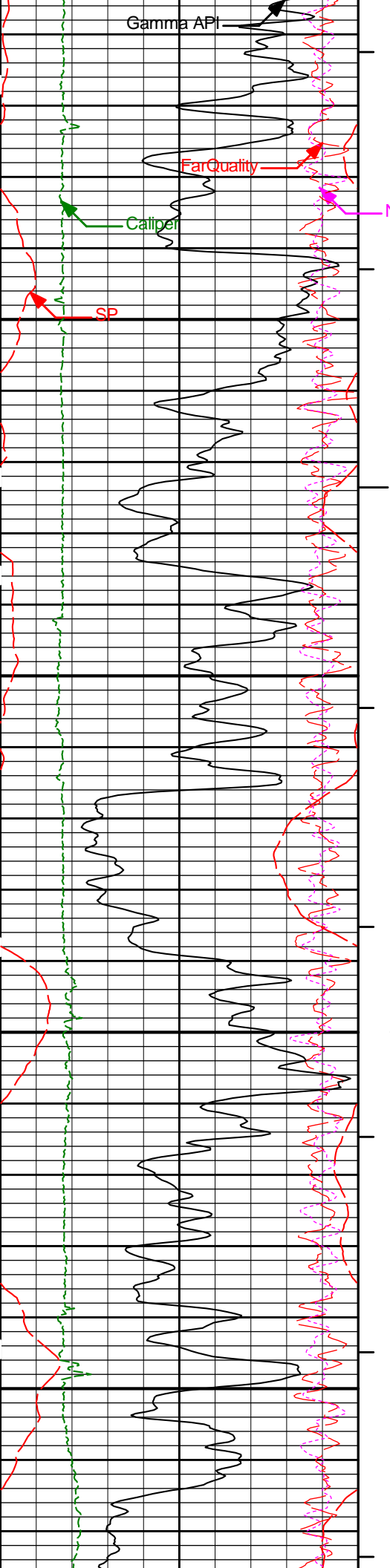






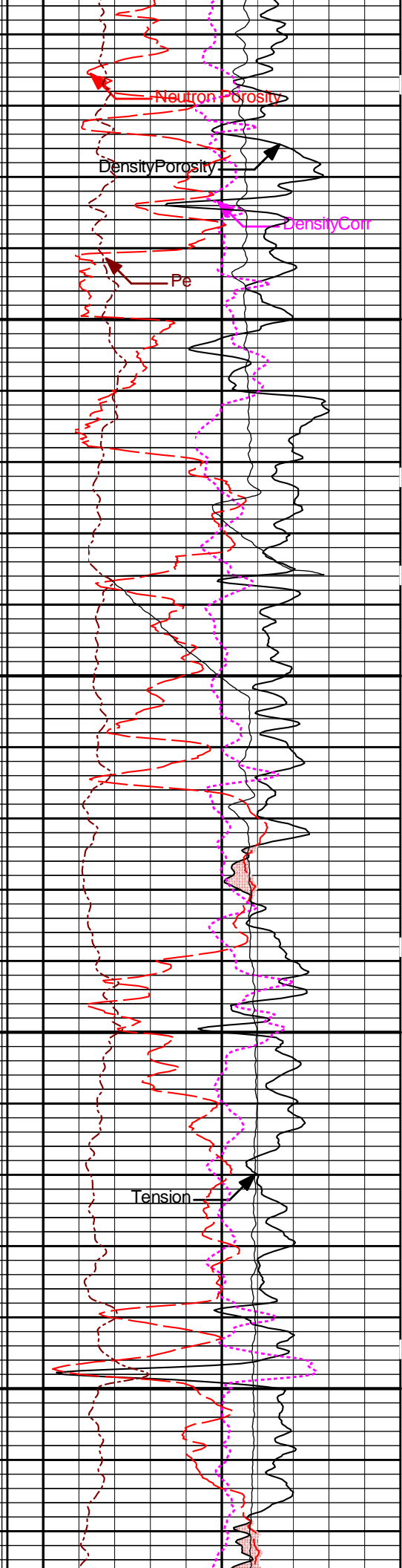
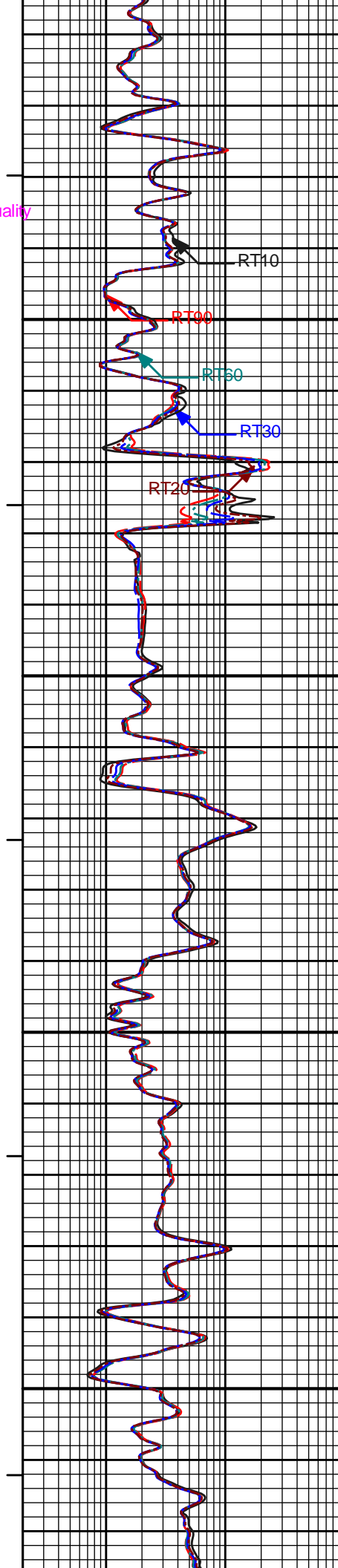


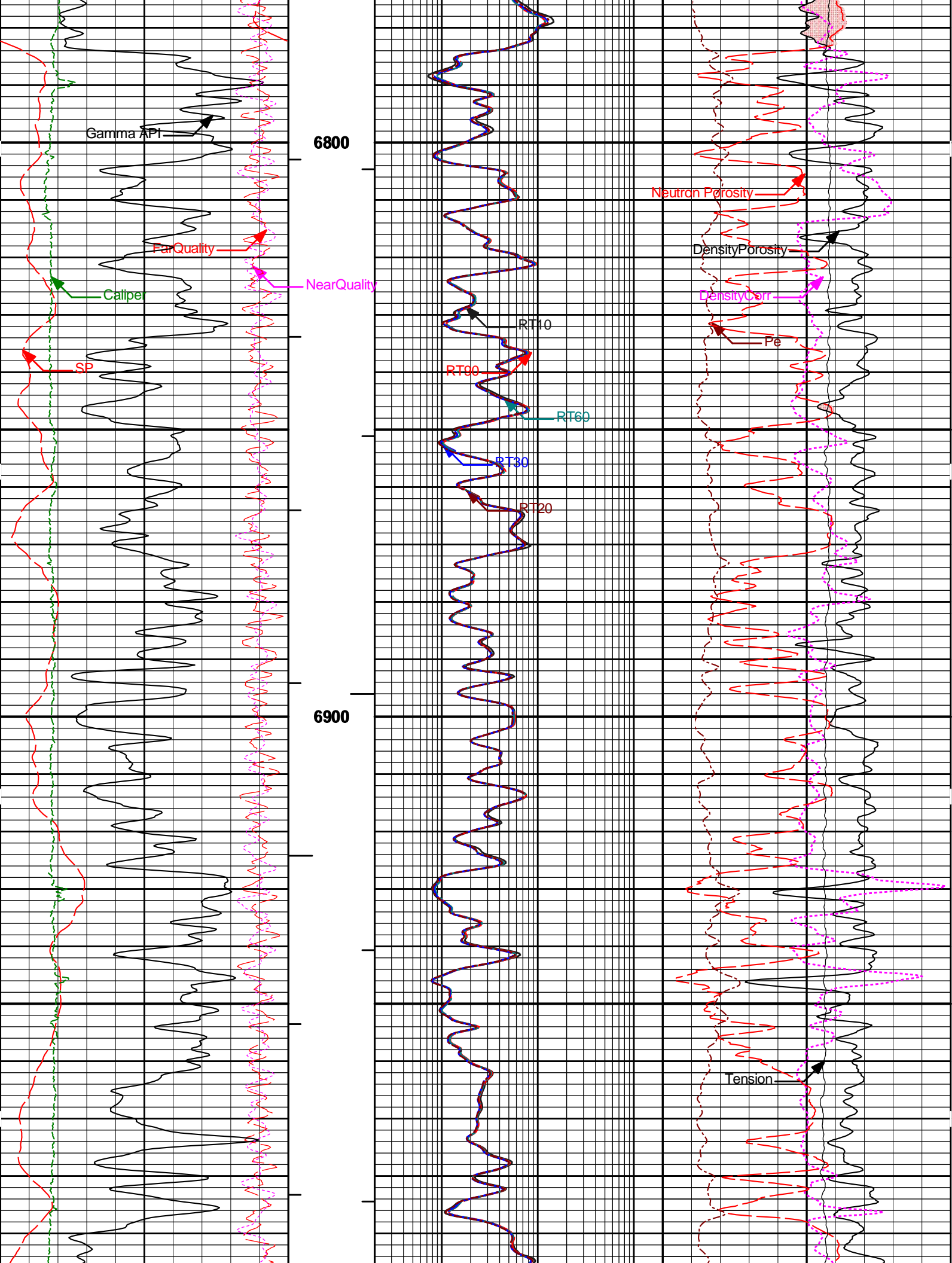


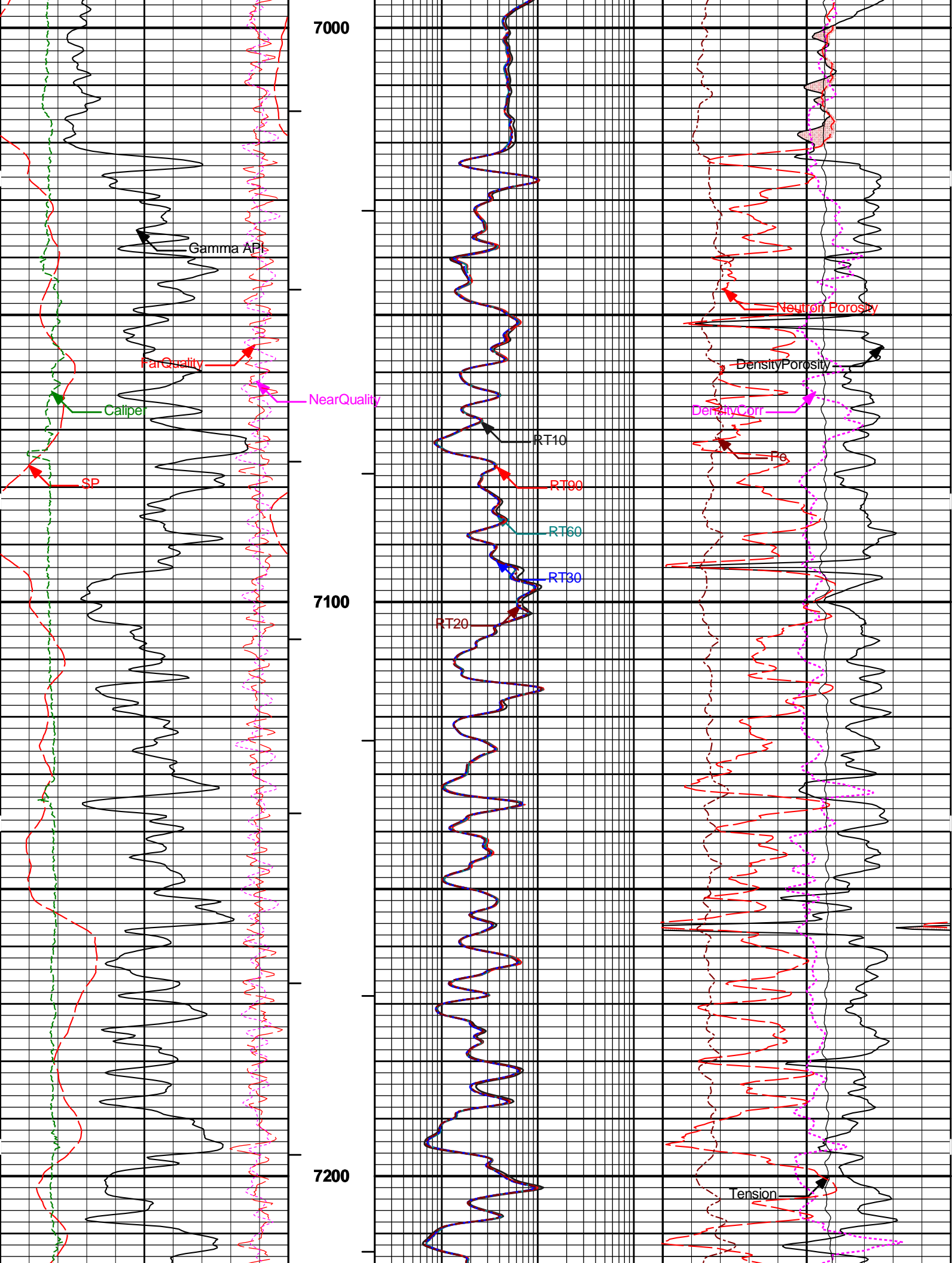


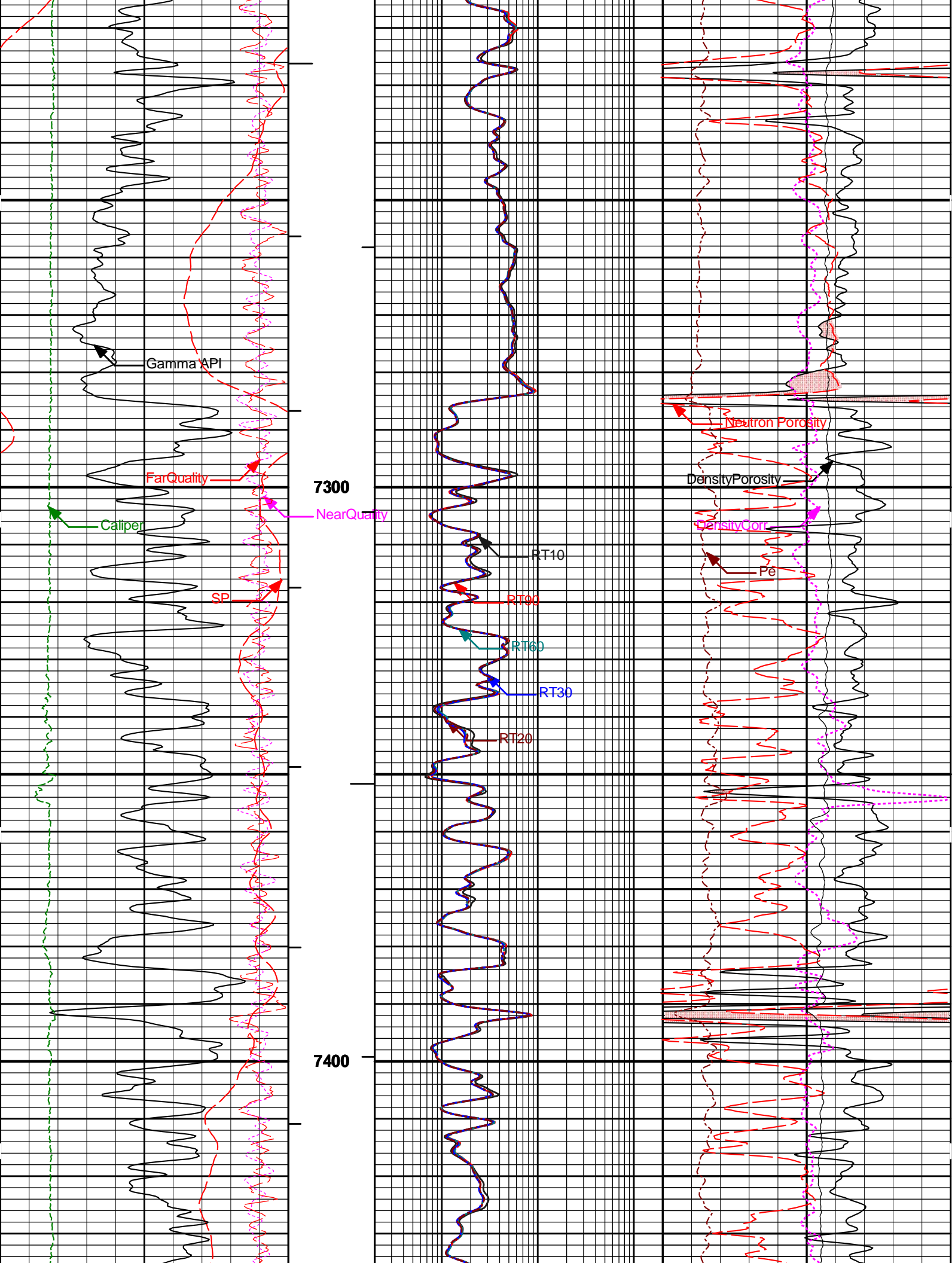
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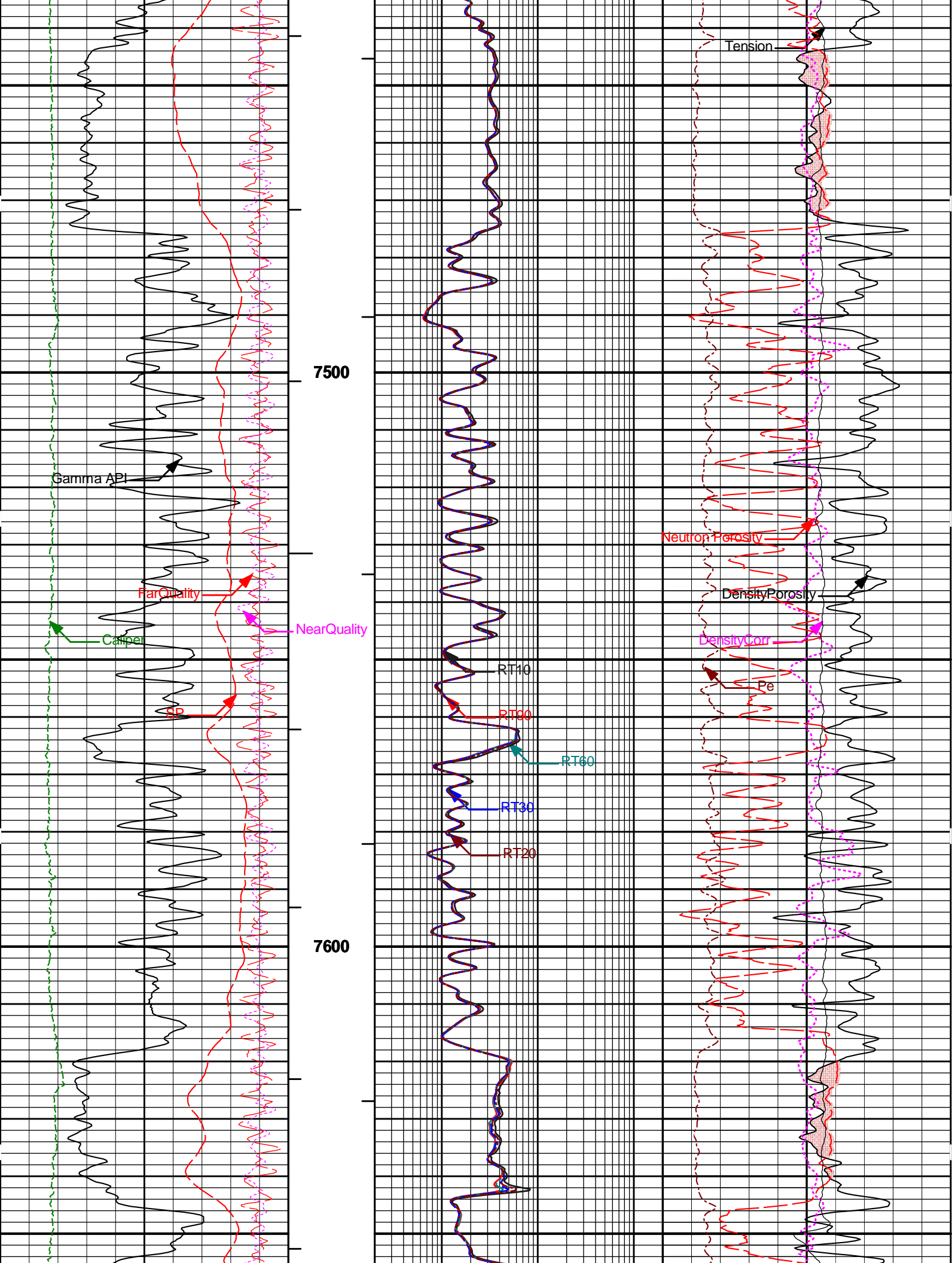
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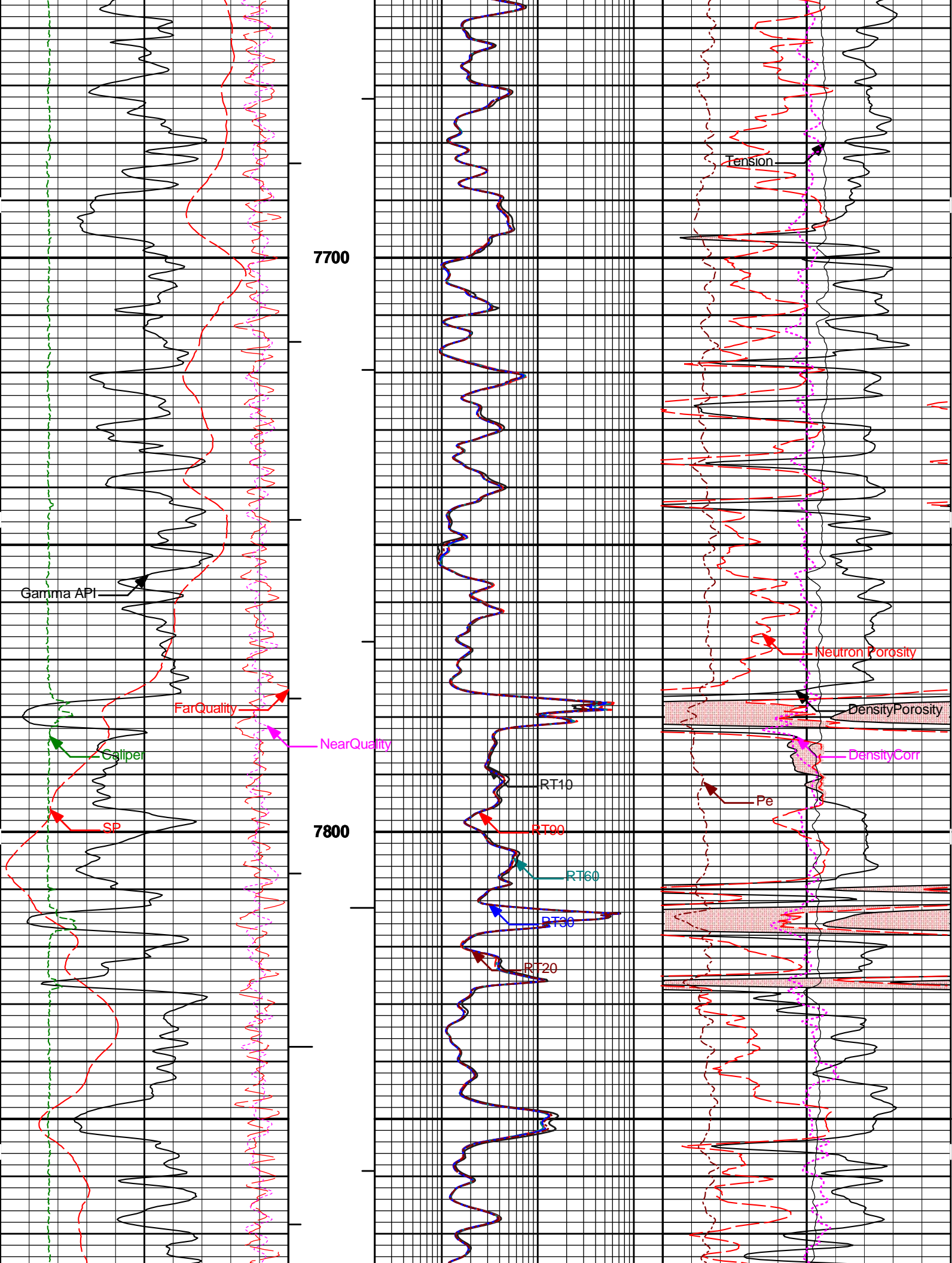


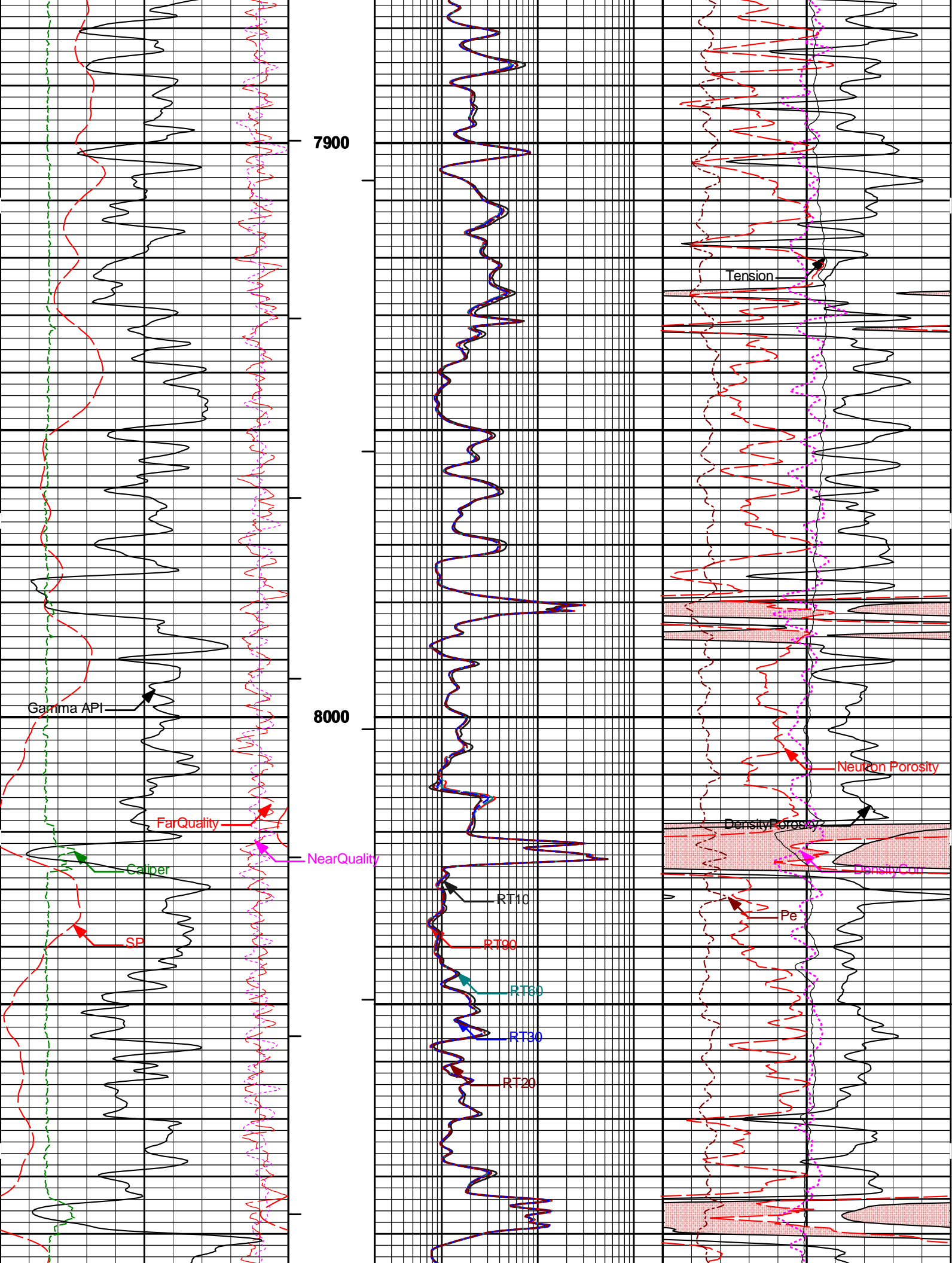


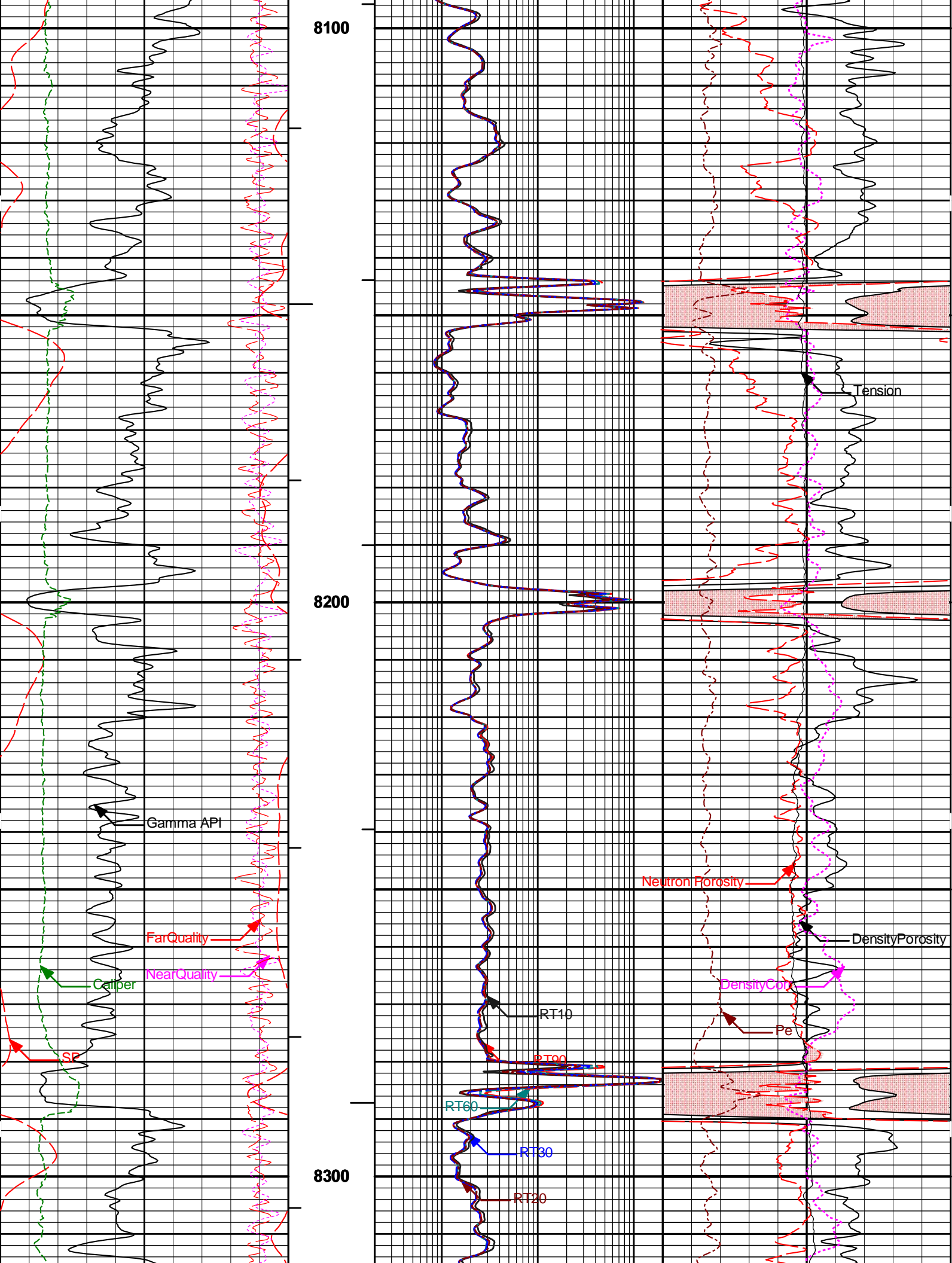


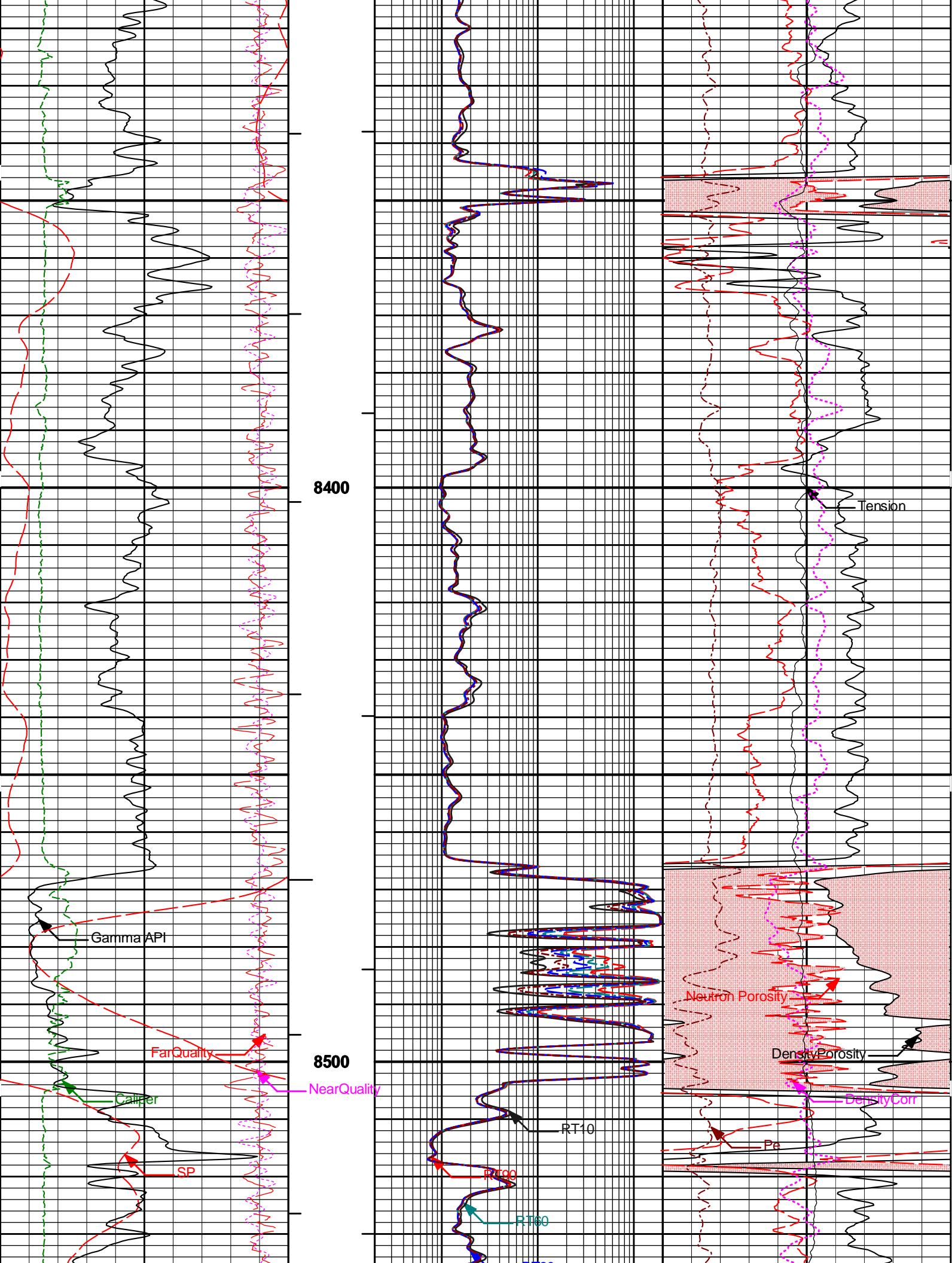


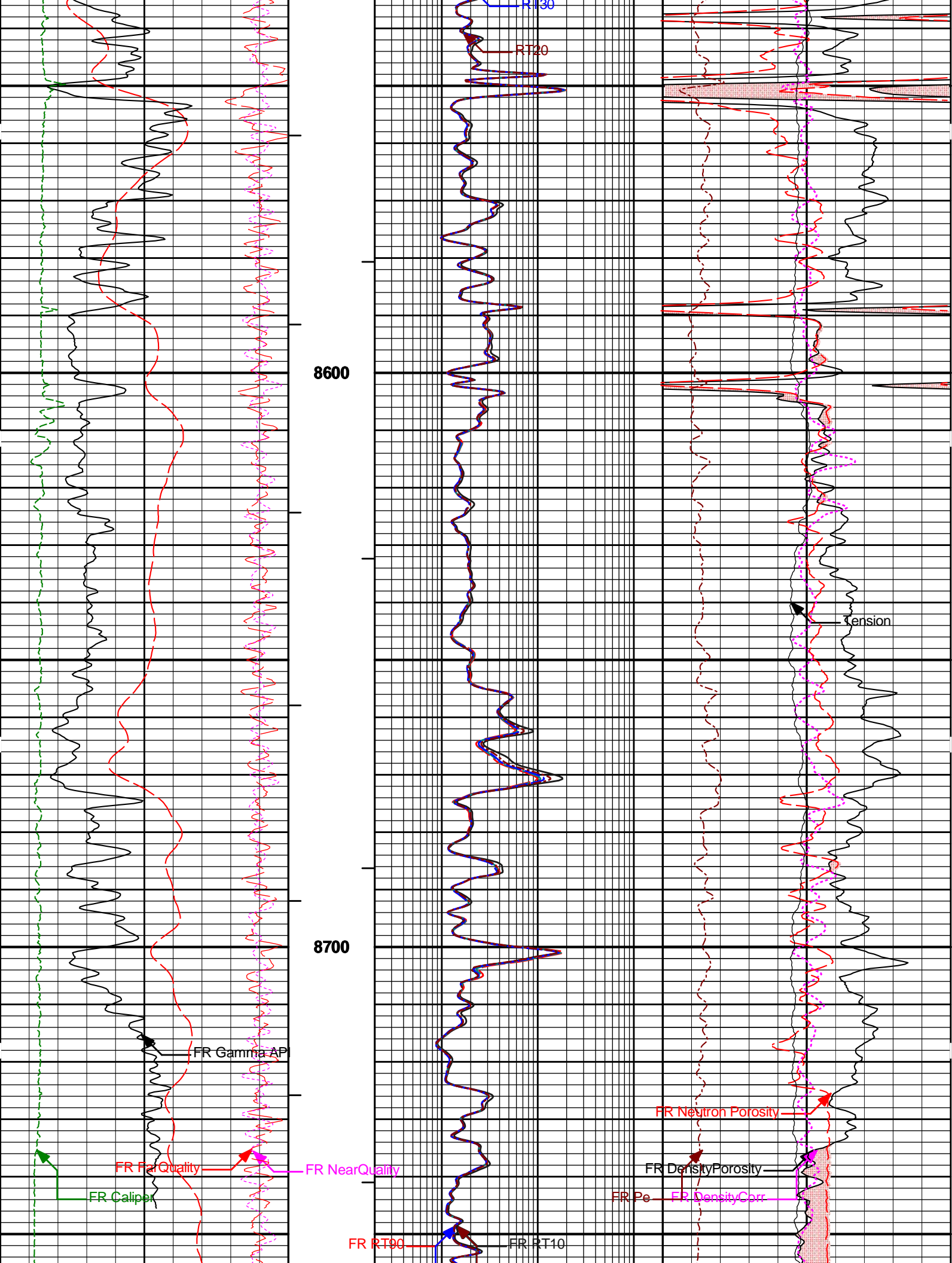


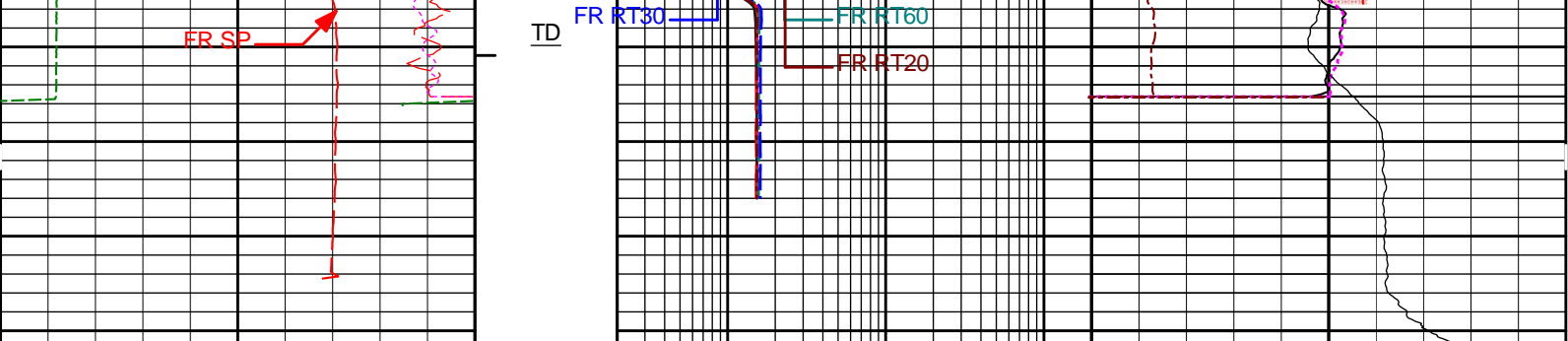












9	NearQuality	-1	1 : 240 ft MD	2	RT10	2K	0	Pe	10	
					Ohm-m					
9	FarQuality	-1	AHV ft3	2	RT20	2K	30	DensityPorosity		-10
					Ohm-m			percent		
0	Gamma API	200	BHV ft3	2	RT30	2K	30	Neutron Porosity		-10
	api				Ohm-m			percent		
6	Caliper	16		2	RT60	2K	-0.25	DensityCorr		0.25
	inches				Ohm-m			gram per cc		
	SP			2	RT90	2K	10000	Tension		0
	-]10[+				Ohm-m			pounds		

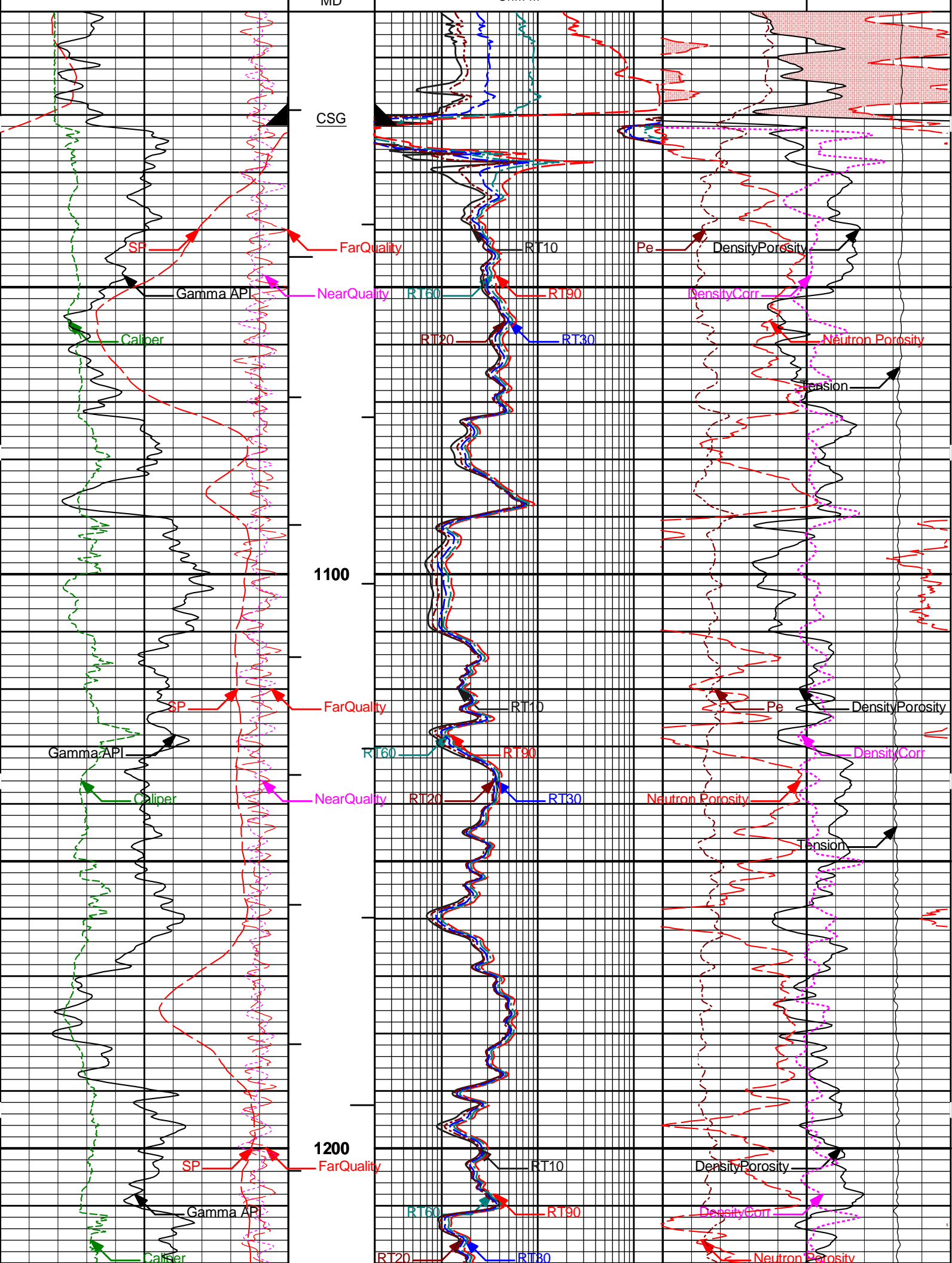
HALLIBURTON Plot Time: 02-Jan-10 14:59:02
Plot Range: 1002 ft to 8791.25 ft
Data: LARAMIE_19_09D\Well Based\MAIN PASS\
Plot File: \\TRIPLE\IQ_COMPOSITE_5IN

MAIN PASS 5" = 100'

HALLIBURTON Plot Time: 02-Jan-10 14:59:02
Plot Range: 1002 ft to 1222 ft
Data: LARAMIE_19_09D\Well Based\REPEAT\
Plot File: \\TRIPLE\REPEAT

REPEAT PASS 5" = 100'

	SP		2	RT90	2K	10000	Tension		0
	-]10[+			Ohm-m			pounds		
6	Caliper	16	2	RT60	2K	-0.25	DensityCorr		0.25
	inches			Ohm-m			gram per cc		
0	Gamma API	200	2	RT30	2K	30	Neutron Porosity		-10
	api			Ohm-m			percent		
9	FarQuality	-1	2	RT20	2K	30	DensityPorosity		-10
				Ohm-m			percent		
9	NearQuality	-1	2	RT10	2K	0	Pe	10	
				Ohm-m					



9	NearQuality	-1	1 : 240 ft MD	2	RT10	2K	0	Pe	10	
9	FarQuality	-1	AHV ft3	2	RT20	2K	30	DensityPorosity		-10
0	Gamma API	200	BHV ft3	2	RT30	2K	30	Neutron Porosity		-10
	api				Ohm-m			percent		
6	Caliper	16		2	RT60	2K	-0.25	DensityCorr		0.25
	inches				Ohm-m			gram per cc		
	SP			2	RT90	2K	10000	Tension		0
	-J10[+				Ohm-m			pounds		

HALLIBURTON

Plot Time: 02-Jan-10 14:59:03
Plot Range: 1002 ft to 1222 ft
Data: LARAMIE_19_09D\Well Based\REPEAT\
Plot File: \\TRIPLE\REPEAT

REPEAT PASS 5" = 100'

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	GTET - 11005602	Reference Calibration Date:	03-Dec-09 08:35:05
Engineer:	J. GILBERT	Calibration Date:	30-Dec-09 12:59:04
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Calibrator Source S/N: 110
Calibrator API Reference:239.00 api

Measurement	Measured	Calibrated	Units
Background	54.1	56.7	api
Background + Calibrator	282.3	295.7	api
Calibrator	241.6	239.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	GTET - 11005602	Reference Calibration Date:	30-Dec-09 12:59:04
Engineer:	K. WOOD	Calibration Date:	02-Jan-10 00:18:38
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Calibrator Source S/N: 110
Calibrator API Reference:239.00 api

Field Verification	Shop	Field	Units
Background	56.7	53.3	api
Background + Calibrator	295.7	293.1	api
Calibrator	239.0	239.8	api

Shop	Field	Difference	Tolerance
239.0	239.8	-0.8	+/- 9.00

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

NATURAL GAMMA RAY TOOL POST CALIBRATION

Tool Name:	GTET - 11005602	Reference Calibration Date:	02-Jan-10 00:18:38
Engineer:	K. WOOD	Calibration Date:	02-Jan-10 14:49:04
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Calibrator Source S/N: 110
 Calibrator API Reference:239.00 api

Post Verification	Field	Post	Units
Background	53.3	45.6	api
Background + Calibrator	293.1	289.9	api
Calibrator	239.8	244.3	api

Shop	Field	Post	Difference	Tolerance
239.0	239.8	244.3	-4.5	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	DSNT - 10993888	Reference Calibration Date:	03-Dec-09 14:27:25
Engineer:	J. GILBERT	Calibration Date:	30-Dec-09 12:53:11
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Logging Source S/N: DSN-388
 Tank Serial Number: GJ WATER TANK
 Reference value assigned to Tank: 52.750
 Snow Block S/N: GJ-110
 Calibration Tank Water Temperature: 70 degF
 Min. Tool Housing Outside Diameter: 3.590 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.964	0.966	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):	0.2162	0.2169	0.0008	+/- 0.0020
Calibrated Ratio:	9.90	9.93	0.026	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0758	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 - 10993888	Reference Calibration Date:	30-Dec-09 12:53:11
Engineer:	K. WOOD	Calibration Date:	02-Jan-10 00:29:50
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Logging Source S/N: DSN-388
 Snow Block S/N: GJ-110

NEUTRON FIELD-CHECK SUMMARY

NEUTRON FIELD CHECK SUMMARY				
	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0758	0.0646	-0.0112	+/- 0.0150
PASS/FAIL SUMMARY				
Block Change Check:			Passed	
Snow Block Stat Check:			Passed	
Temperature Check:			Passed	

DUAL SPACED NEUTRON POST CALIBRATION				
Tool Name:	DSNT - 10993888		Reference Calibration Date:	02-Jan-10 00:29:50
Engineer:	K. WOOD		Calibration Date:	02-Jan-10 14:55:26
Software Version:	WL INSITE R2.4 (Build 20)		Calibration Version:	1

Logging Source S/N: DSN-388
Snow Block S/N: GJ-110

NEUTRON POST-CHECK SUMMARY				
	Field Value	Post Value	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0646	0.0652	0.0006	+/- 0.0150
PASS/FAIL SUMMARY				
Block Change Check:			Passed	
Snow Block Stat Check:			Passed	
Temperature Check:			Passed	

SPECTRAL DENSITY SHOP CALIBRATION				
Tool Name:	SDLT - 10951314		Reference Calibration Date:	03-Dec-09 15:09:05
Engineer:	J. GILBERT		Calibration Date:	31-Dec-09 11:39:44
Software Version:	WL INSITE R2.4 (Build 20)		Calibration Version:	1

Logging Source S/N: 20785B
Aluminum Block S/N: 63094
Magnesium Block S/N: 63387

Density: 2.610g/cc
Density: 1.685g/cc

DENSITY CALIBRATION SUMMARY			
Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0852	1.0853	0.90 - 1.10
Near Dens Gain	1.0349	1.0265	0.90 - 1.10
Near Peak Gain	1.0034	0.9947	0.90 - 1.10
Near Lith Gain	0.9329	0.9392	0.90 - 1.10
Far Bar Gain	1.0176	1.0184	0.90 - 1.10
Far Dens Gain	1.0050	1.0048	0.90 - 1.10
Far Peak Gain	0.9949	0.9937	0.90 - 1.10
Far Lith Gain	0.9672	0.9653	0.90 - 1.10
Near Bar Offset	-0.6738	-0.6681	NONE
Near Dens Offset	-0.1900	-0.1081	NONE
Near Peak Offset	0.1101	0.1889	NONE
Near Lith Offset	0.6798	0.6301	NONE
Far Bar Offset	-0.1631	-0.1657	NONE
Far Dens Offset	-0.0474	-0.0410	NONE
Far Peak Offset	0.0114	0.0217	NONE
Far Lith Offset	0.1884	0.2028	NONE
Near Bar Density	0.9945	0.9943	0.90 - 1.10

Near Bar Background	972.15	969.88	700 - 1450
Near Dens Background	318.28	318.49	230 - 480
Near Peak Background	138.48	137.21	100 - 210
Near Lith Background	169.94	168.93	125 - 260
Far Bar Background	589.91	587.39	450 - 900
Far Dens Background	226.69	225.01	175 - 345
Far Peak Background	90.07	88.65	70 - 140
Far Lith Background	94.07	93.40	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.682	1.685	0.003	+/- 0.015
Pe	2.589	2.594	0.005	+/- 0.150
ALUMINUM				
Density (g/cc)	2.604	2.610	0.006	+/- 0.01500
Pe	3.078	3.100	0.022	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0027	+/- 0.0110	-0.0009	+/- 0.0140
Magnesium Block	-0.0007	+/- 0.0110	-0.0030	+/- 0.0140
Aluminum Block	-0.0007	+/- 0.0110	0.0004	+/- 0.0140
Resolution	9.41	6.00 - 11.50	9.50	6.00 - 11.50
Internal Verifier(B+D+P+L)	1595	1200 - 2700	994	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 - 10951314	Reference Calibration Date:	31-Dec-09 11:39:44
Engineer:	K. WOOD	Calibration Date:	02-Jan-10 00:22:38
Software Version:	WL INSITE R2.4 (Build 20)	Calibration Version:	1

Aluminum Block S/N: 63094

Density: 2.610g/cc

Magnesium Block S/N: 63387

Density: 1.685g/cc

Pad Temperature: 64.7 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1594.506	1596.109	1.603	16.059
Far (B+D+P+L) cps	994.437	998.758	4.321	16.892
Near Resolution	9.41	9.48	0.070	0.50
Far Resolution	9.50	9.60	0.100	1.00

Far Resolution		9.50	9.60	0.100	1.00
PASS/FAIL SUMMARY					
Bkg Quality Check:		Passed			
Bkg Resolution Check:		Passed			
Bkg Verification Check:		Passed			
SPECTRAL DENSITY POST CHECK					
Tool Name:	SDLT - 10951314			Reference Calibration Date:	02-Jan-10 00:22:38
Engineer:	K. WOOD			Calibration Date:	02-Jan-10 14:49:02
Software Version:	WL INSITE R2.4 (Build 20)			Calibration Version:	1
Aluminum Block S/N: 63094		Density: 2.610g/cc			
Magnesium Block S/N: 63387		Density: 1.685g/cc			
Pad Temperature: 69.1 degF					
DENSITY POST CALIBRATION SUMMARY					
Measurement	Field	Post	Change	Control Limit +/-	
Near (B+D+P+L) cps	1596.109	1594.790	-1.319	16.059	
Far (B+D+P+L) cps	998.758	993.829	-4.929	16.892	
Near Resolution	9.48	9.57	0.090	0.50	
Far Resolution	9.60	9.81	0.210	1.00	
PASS/FAIL SUMMARY					
Bkg Quality Check:		Passed			
Bkg Resolution Check:		Passed			
Bkg Verification Check:		Passed			
DENSITY CALIPER SHOP CALIBRATION					
Tool Name:	SDLT - 10951314			Reference Calibration Date:	31-Dec-09 12:59:34
Engineer:	J. GILBERT			Calibration Date:	31-Dec-09 13:04:53
Software Version:	WL INSITE R2.4 (Build 20)			Calibration Version:	1
CALIBRATION COEFFICIENTS					
Measurement	Previous Value	New Value	Control Limit On New Value		
Pad Offset	-1063.71	-1056.51	-7000.00 - -1000.00		
Pad Gain	0.0003743	0.0003738	0.000200 - 0.000600		
Arm Offset	-1671.26	-1738.79	-5000.00 - 3000.00		
Arm Gain	0.0005330	0.0005364	0.000300 - 0.000700		
Arm Power	-0.000004117	-0.000004404	-0.000010 - 0.000010		
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)	2.00	2.00	0.00	+/- 0.20	
Medium Ring (in)	3.75	3.75	0.00	+/- 0.20	
RING DIAMETER:					
Small Ring (in)	6.52	6.50	-0.02	+/- 0.20	
Medium Ring (in)	8.27	8.25	-0.02	+/- 0.20	
Large Ring (in)	15.03	15.00	-0.03	+/- 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 - 10951314			Reference Calibration Date:		31-Dec-09 13:04:53		
Engineer:		K. WOOD			Calibration Date:		02-Jan-10 00:25:45		
Software Version:		WL INSITE R2.4 (Build 20)			Calibration Version:		1		
MEASURED CALIPER VALUES									
Measurement		Shop		Field		Change		Control Limit On New Value	
Pad Extension		3.75		3.82		0.07		+/- 0.10	
Ring Diameter		8.25		8.13		-0.12		+/- 0.15	
PASS/FAIL SUMMARY									
Pad Extension Check:				Passed					
Diameter Check:				Passed					
SDLT CALIPER POST CALIBRATION									
Tool Name:		SDLT - 10951314			Reference Calibration Date:		02-Jan-10 00:25:45		
Engineer:		K. WOOD			Calibration Date:		02-Jan-10 14:52:11		
Software Version:		WL INSITE R2.4 (Build 20)			Calibration Version:		1		
MEASURED CALIPER VALUES									
Measurement		Field		Post		Change		Control Limit On New Value	
Pad Extension		3.82		3.85		0.03		+/- 0.10	
Ring Diameter		8.13		8.18		0.05		+/- 0.15	
PASS/FAIL SUMMARY									
Pad Extension Check:				Passed					
Diameter Check:				Passed					
ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION									
Tool Name:		ACRt - 90194258-E7486-			Reference Calibration Date:		22-Dec-09 18:33:07		
Engineer:		K. WOOD			Calibration Date:		22-Dec-09 18:48:28		
Software Version:		WL INSITE R2.4 (Build 20)			Calibration Version:		1		
TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	0.9954	1.05	0.95	0.9980	1.05	0.95	0.9953	1.05
A2 (50")	0.95	0.9951	1.05	0.95	0.9978	1.05	0.95	0.9965	1.05
A3 (29")	0.95	0.9931	1.05	0.95	0.9953	1.05	0.95	0.9914	1.05
A4 (17")	0.95	0.9865	1.05	0.95	0.9875	1.05	0.95	0.9847	1.05
A5 (10")	N/A	N/A	N/A	0.95	0.9741	1.05	0.95	0.9704	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9864	1.05	0.95	0.9821	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	-0.207	2	-6	-3.626	-2	-8	-4.540	-2
A2 (50")	-7	-2.109	-2	-6	-3.617	-2	-7	-4.197	-2

A3 (29")	-27	-10.939	-9	-9	-3.183	-3	-7	-2.568	-1
A4 (17")	-180	-103.134	-60	-45	-32.536	-15	-39	-25.720	-13
A5 (10")	N/A	N/A	N/A	-150	-65.994	-50	-80	-33.919	-10
A6 (6")	N/A	N/A	N/A	175	266.556	525	90	139.456	270

TRANSMITTER CURRENT GAIN					R-MUD VERIFICATION			
Signal	Lower	R	Upper		Signal	Lower (ohm-m)	Measured (ohmm)	Upper (ohm-m)
12K	0.6	0.8214	1.3		Mud Cell	0.95	1.004	1.05
36K	1.0	1.7966	2.0					
72K	1.0	1.0639	2.0					

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11005602						
Gamma Ray Calibrator	239.0	239.8	244.3	-4.5	+/- 9.00	api
DSNT-10993888						
Snow-Block Porosity	0.0758	0.0646	0.0652	-0.0006	+/- 0.0150	decp
SDLT-10951314						
Near(B+D+P+L)	1594.506	1596.109	1594.790	1.319	+/-16.059	cps
Far(B+D+P+L)	994.437	998.758	993.829	4.929	+/-16.892	cps
Pad Extension	3.75	3.82	3.85	-0.03	+/-0.10	in
Ring Diameter	8.25	8.13	8.18	-0.050	+/-0.15	in
ACRt-90194258-E7486-						
Mud Cell	1.004	-----	-----	0.000	-----	ohmm

Data: LARAMIE_19_09D\0001 IQ-TRIPLE-STRING1\VDLE	Date: 02-Jan-10 14:55:55
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HALLIBURTON

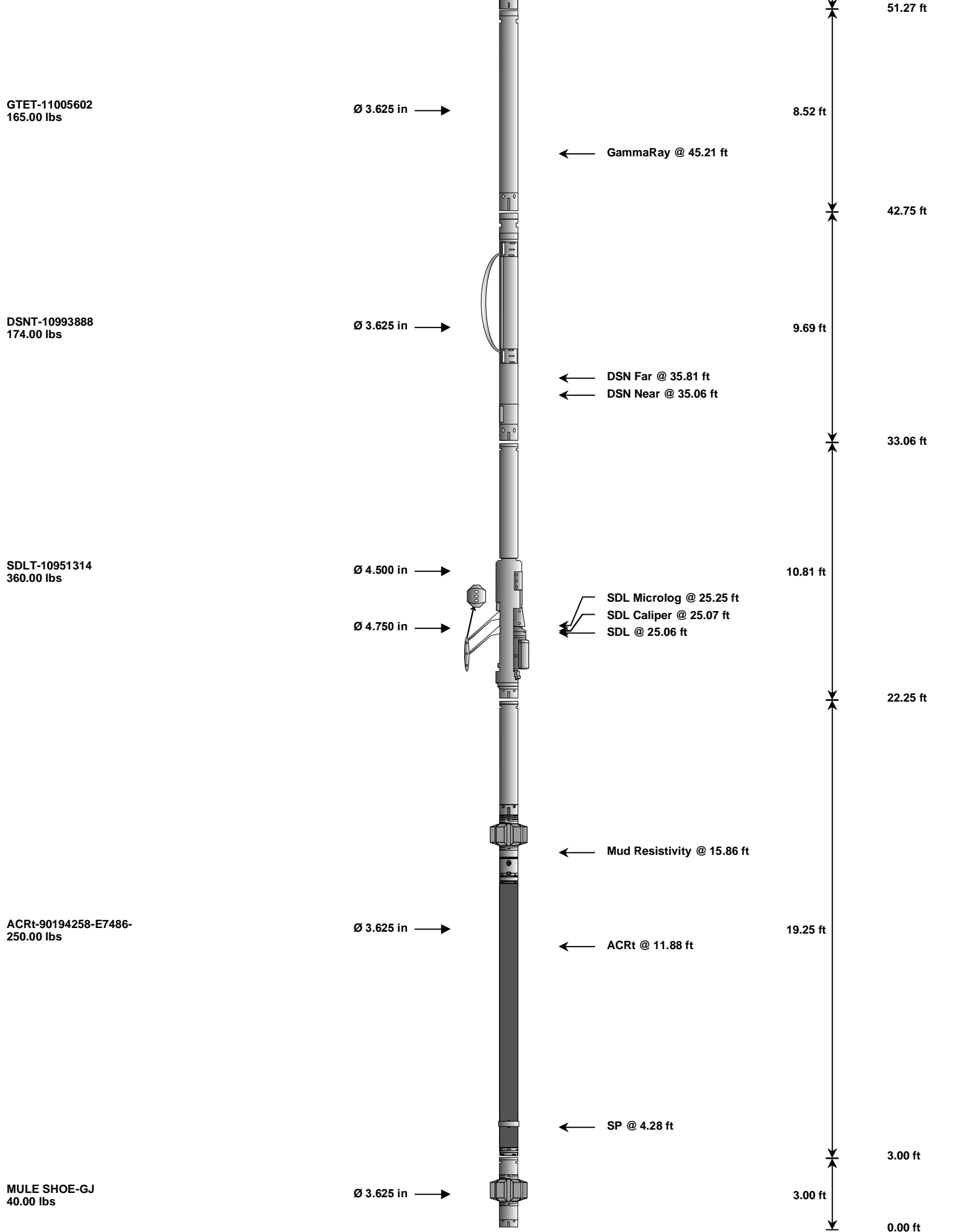
CUSTOMER EVENT LOG

Event Type	Time & Date	Depth (ft)	Event Description
	02-Jan-10 10:49:21	1513.00	Logging 001 02-Jan-10 10:49 Up @1513.0f
	02-Jan-10 11:00:59	874.51	Halting 001 02-Jan-10 10:49 Up @1513.0f
	02-Jan-10 11:01:10	816.50	Logging 002 02-Jan-10 11:01 Dn @816.5f
	02-Jan-10 11:37:48	8782.84	Halting 002 02-Jan-10 11:01 Dn @816.5f
	02-Jan-10 11:38:00	8791.25	Logging 003 02-Jan-10 11:37 Up @8791.3f
	02-Jan-10 14:01:18	865.51	Halting 003 02-Jan-10 11:37 Up @8791.3f
Data: LARAMIE_19_09D\0001 IQ-TRIPLE-STRING1\HW11256			Date: 02-Jan-10 14:09:47

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
RWCH-C11013846 135.00 lbs	Ø 3.625 in →		← Load Cell @ 53.84 ft ← BH Temperature @ 53.27 ft	6.25 ft	57.52 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	C11013846	135.00	6.25	51.27	300.00

GTET	Natural Gamma Ray Tool	11005602	165.00	8.52	42.75	60.00
DSNT	Dual Spaced Neutron	10993888	174.00	9.69	33.06	60.00
DCNT	DSN Decentralizer	10917119	50.00	5.13	*	36.39 300.00
SDLT	Spectral Density Tool	10951314	360.00	10.81	22.25	60.00
ACRt	Array Compensated True Resistivity	90194258-E7486-	250.00	19.25	3.00	300.00
SP	SP Ring	PROTO1	0.00	0.25	*	4.28 300.00
HFCS	Hostile Full Wave Sonic Caged Metal and Rubber Standoff	01	7.94	1.33	*	15.92 300.00
MUSH	MULE SHOE	GJ	40.00	3.00	0.00	100.00
HFCS	Hostile Full Wave Sonic Caged Metal and Rubber Standoff	02	7.94	1.33	*	0.95 300.00

Total		1,189.88	57.52
		* Not included in Total Length and Length Accumulation.	
Data: LARAMIE_19_09D\0001 IQ-TRIPLE-STRING1\003 02-Jan-10 11:37 Up @8791.3f		Date: 02-Jan-10 12:22:07	

COMPANY	LARAMIE ENERGY II, LLC		
WELL	LARAMIE 19-09D		
FIELD	RULISON		
COUNTY	GARFIELD	STATE	CO
HALLIBURTON		ARRAY COMPENSATED TRUE RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON	