HALLIBURTON

SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY

COMPANY	BILL BARRETT CORPORATION
WELL	JOLLEY 42D-20-691
FIELD	JOLLEY
COUNTY	GARFIELD
STATE	CO

COMPANY	BILL BARRETT CORPORATION		
WELL	JOLLEY 42D-20-691		
FIELD	JOLLEY		
COUNTY	GARFIELD	STATE	CO
API No.	05045196750000	Other Services:	RWCH
Location	SHL: 2602' FNL & 1740' FEL (SWNE) BHL: 1474' FNL & 664' FEL (SENE) LAT: 39.513399 LONG: -107.574911		
Sect. 20	Twp. 6 S	Rge. 91 W	
Permanent Datum	GL	Elev. 5530.0 ft	Elev.: K.B. 5553.0 ft
Log measured from	KB	23.0 ft above perm. Datum	D.F. 5553.0 ft
Drilling measured from	KB		G.L. 5530.0 ft

Date	22-Jul-11					
Run No.	ONE					
Depth - Driller	7987.00 ft					
Depth - Logger	7982.0 ft					
Bottom - Logged Interval	7980.0 ft					
Top - Logged Interval	CASING					
Casing - Driller	9.625 in	@ 859.0 ft		@		@
Casing - Logger	857.0 ft					
Bit Size	7.875 in			@		@
Type Fluid in Hole	WBM					
Density / Viscosity	10.4 ppg	53.00 s/qt				
PH / Fluid Loss	9.70 pH	8.8 cptm				
Source of Sample	MUD TANK					
Rm @ Meas. Temperature	1.820 ohmm	@ 78.20 degF		@		@
Rmf @ Meas. Temperature	1.67 ohmm	@ 75.00 degF		@		@
Rmc @ Meas. Temperature	1.594 ohmm	@ 75.00 degF		@		@
Source Rmf / Rmc	CHART	CHART				
Rm @ BHT	0.89 ohmm	@ 167.0 degF		@		@
Time Since Circulation	5.0 hr					
Time on Bottom	22-Jul-11 13:20					
Max. Rec. Temperature	167.0 degF	@ 7982.0 ft		@		@
Equipment / Location	11014853	G.J., CO				
Recorded By	J. KRONABLE					
Witnessed By	CURTIS CROWTON					

Fold here

Service Ticket No.: N/A API Serial No.: 05045196750000 PGM Version: WL INSITE R3.2.1 (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-9019425E	N/A	1.5" S.O.	N/A
	E7486			

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11001661	Serial No.		Serial No.	10951300	Serial No.	10993887
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.	102 A	Spacing		Log Type	GAMMA/GAMMA	Log Type	THERM/THERM
Type	SCINT			Source Type	Cs-137	Source Type	Am241Be
Length	8"	LSA [Y/N]		Serial No.	5153 GW	Serial No.	DSN-388
Distance to Source	11'	FWDA [Y/N]		Strength	1.5"	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	CSG	REC	0	159				30%	-10%	2.68	30%	-10%	SAND

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks:

RWCH-GTET-DSNT-SDLT-ACRT RAN IN COMBINATION

ANNULAR HOLE VOLUME CALCULATED FOR 4.5" PRODUCTION CASING

TENSION PULLS MAY AFFECT TOOL RESPONSE

YOUR CREW TODAY: T. CHANEY , M. BRANDEL , J. WILKERSON RIG: NABORS M-37

THANKYOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, GRAND JUNCTION, CO (970) 523-3600

HALLIBURTON

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	8.750	in
4987.00					
	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	10.400	ppg
	SHARED	WAGT	Weighting Agent	Barite	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	7987.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa /				

CrossPlot	FCHO	Select Source of F	Automatic	
Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GRSO	Gamma Tool Standoff	0.250	in
GTET	GEOK	Process Gamma Ray EVR?	No	
GTET	TPOS	Tool Position	Centered	
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	DNOK	Process Density?	Yes	
SDLT	DNOK	Process Density EVR?	No	
SDLT	CB	Logging Calibration Blocks?	No	
SDLT	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT	DTWN	Disable temperature warning	No	
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 Upr	
ACRt	TPOS	Tool Position	Free Hanging	
ACRt	RMOP	Rmud Source	Mud Cell	
ACRt	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt	THQY	Threshold Quality	0.50	

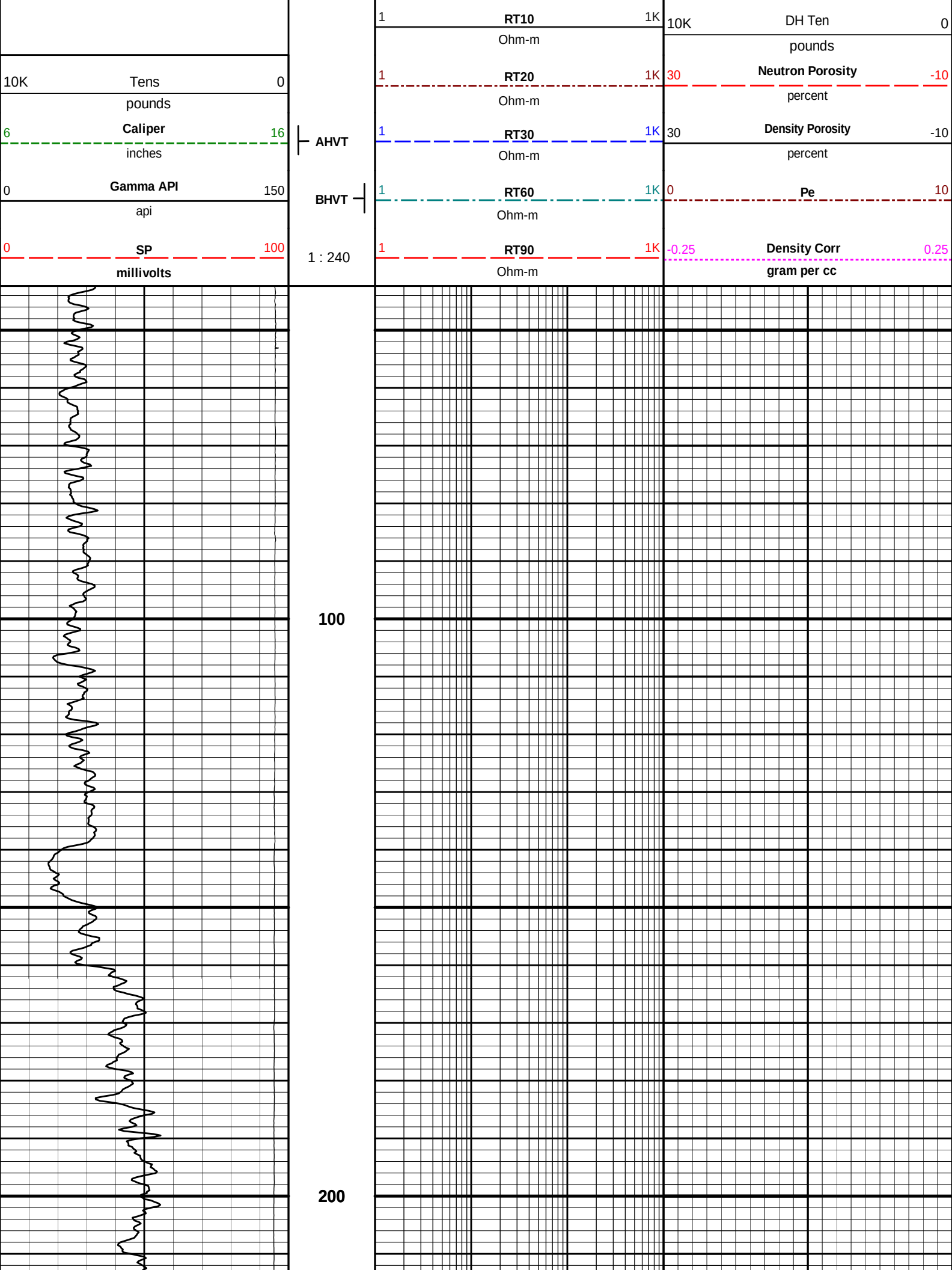
BOTTOM

Data: BBJOLL42D20_691\0001 TRIPLE\IDLE **Date: 22-Jul-11 13:44:33**

HALLIBURTON

Plot Time: 22-Jul-11 15:43:36
Plot Range: 42.33 ft to 7995.67 ft
Data: BBJOLL42D20_691\Well Based**
Plot File: \\COMP\BBC_9MC_COMP

MAIN PASS 5" = 100'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Tens
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Caliper
16
inches
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Gamma API
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api
0
SP
100
millivolts
AHVT
BHVT
1 : 240
1
RT10
1K
Ohm-m
1
RT20
1K
Ohm-m
1
RT30
1K
Ohm-m
1
RT60
1K
Ohm-m
1
RT90
1K
Ohm-m
10K
DH Ten
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pounds
30
Neutron Porosity
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percent
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percent
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Pe
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Density Corr
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gram per cc
100
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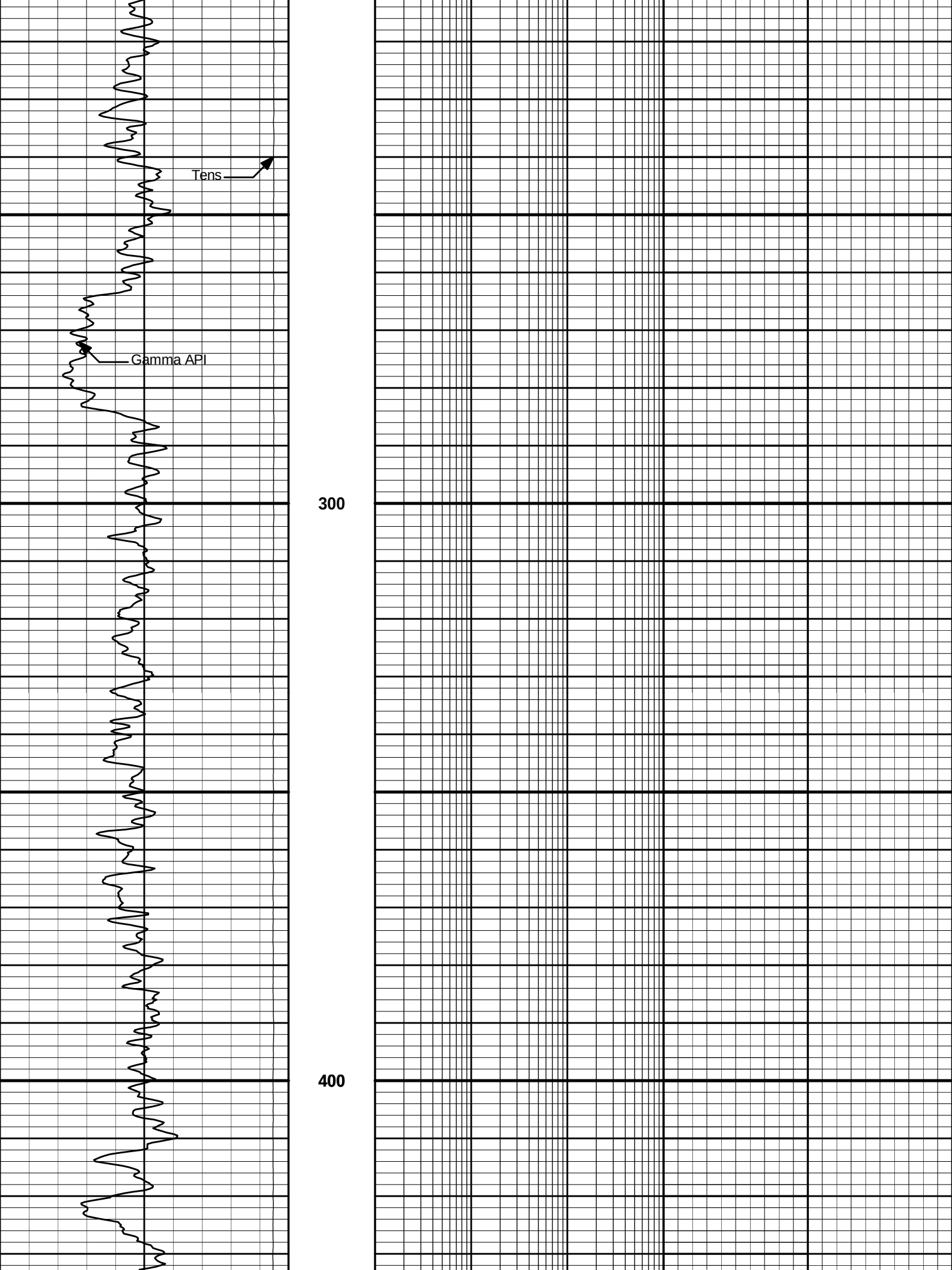
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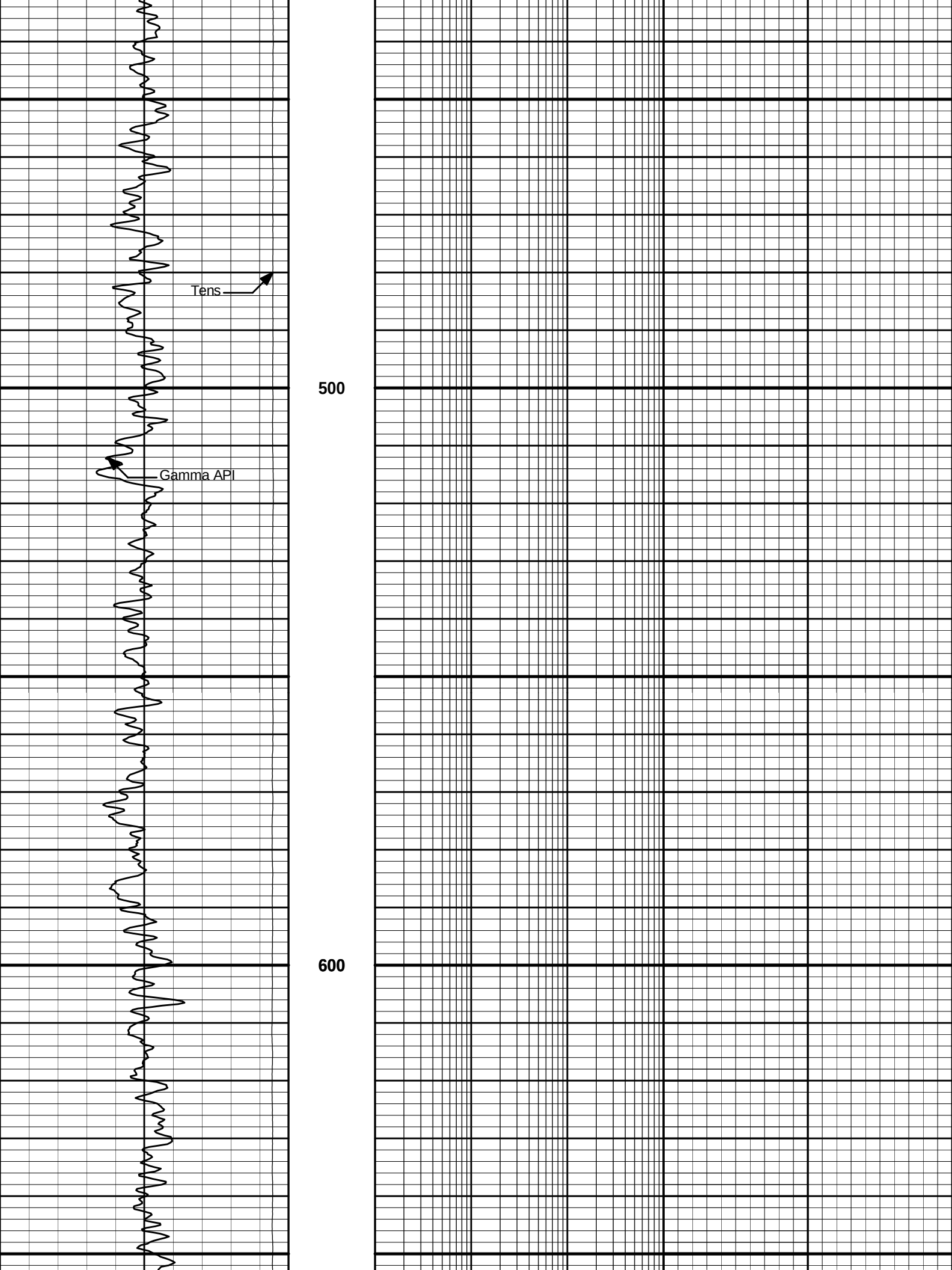
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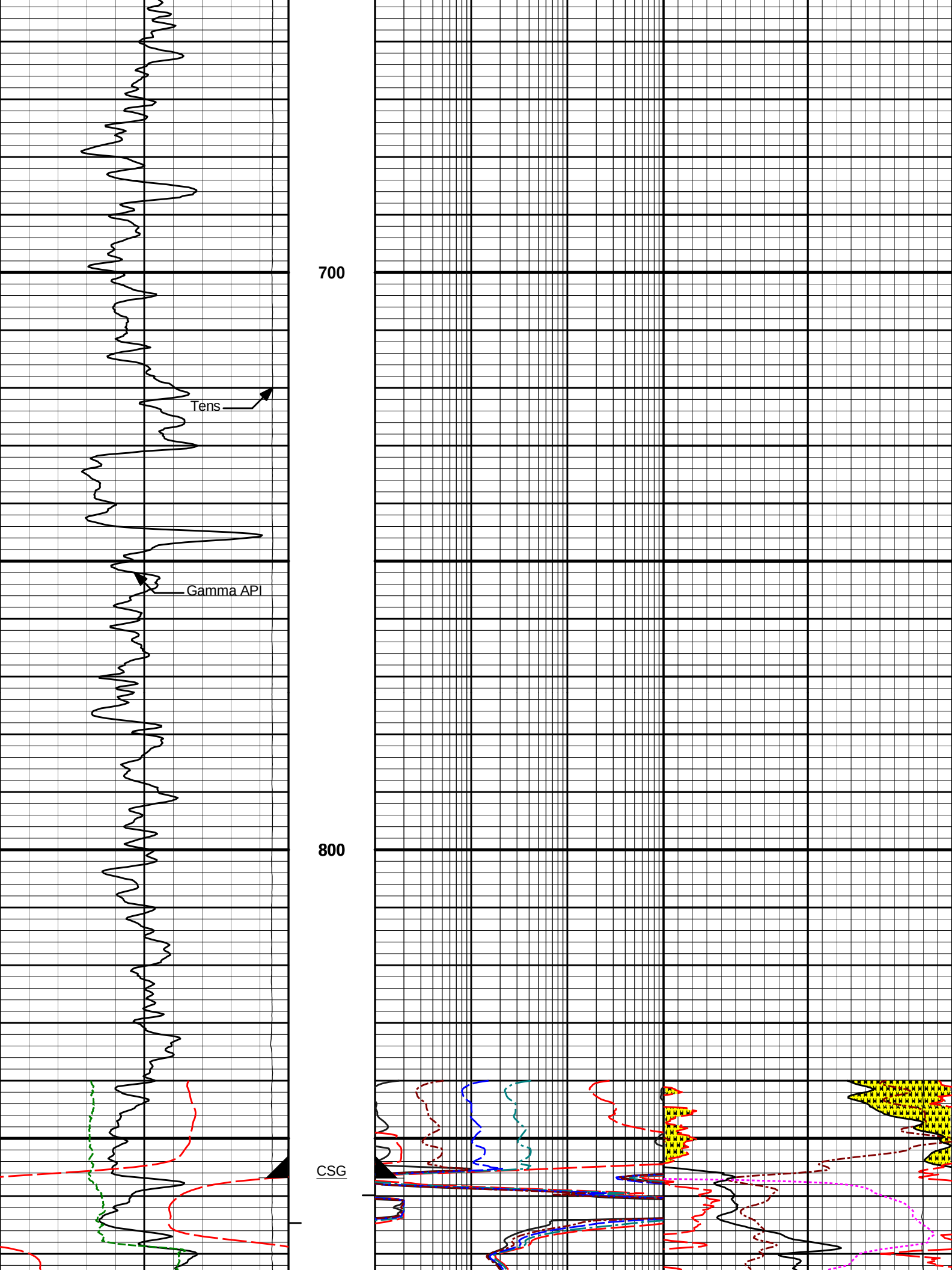
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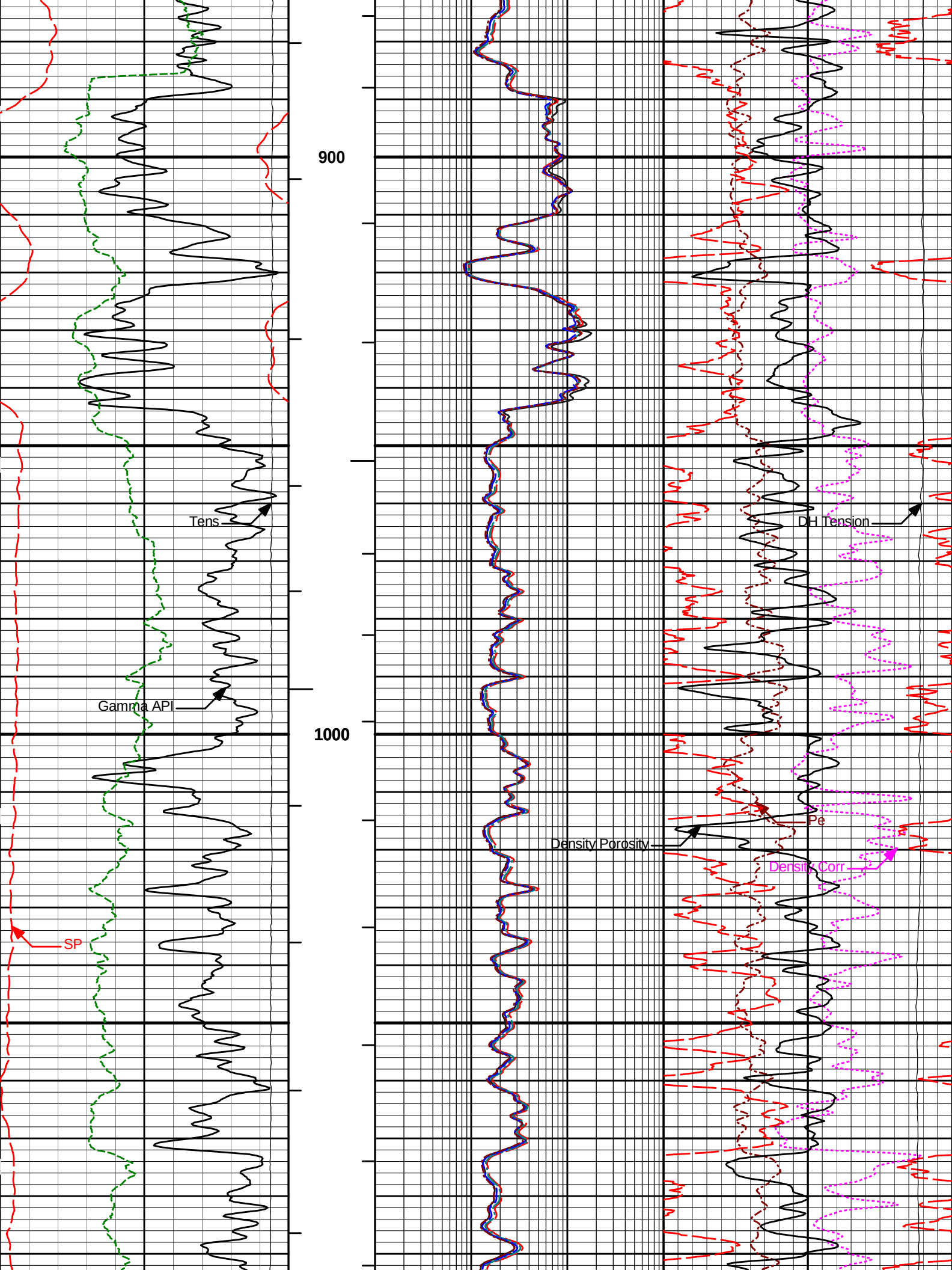
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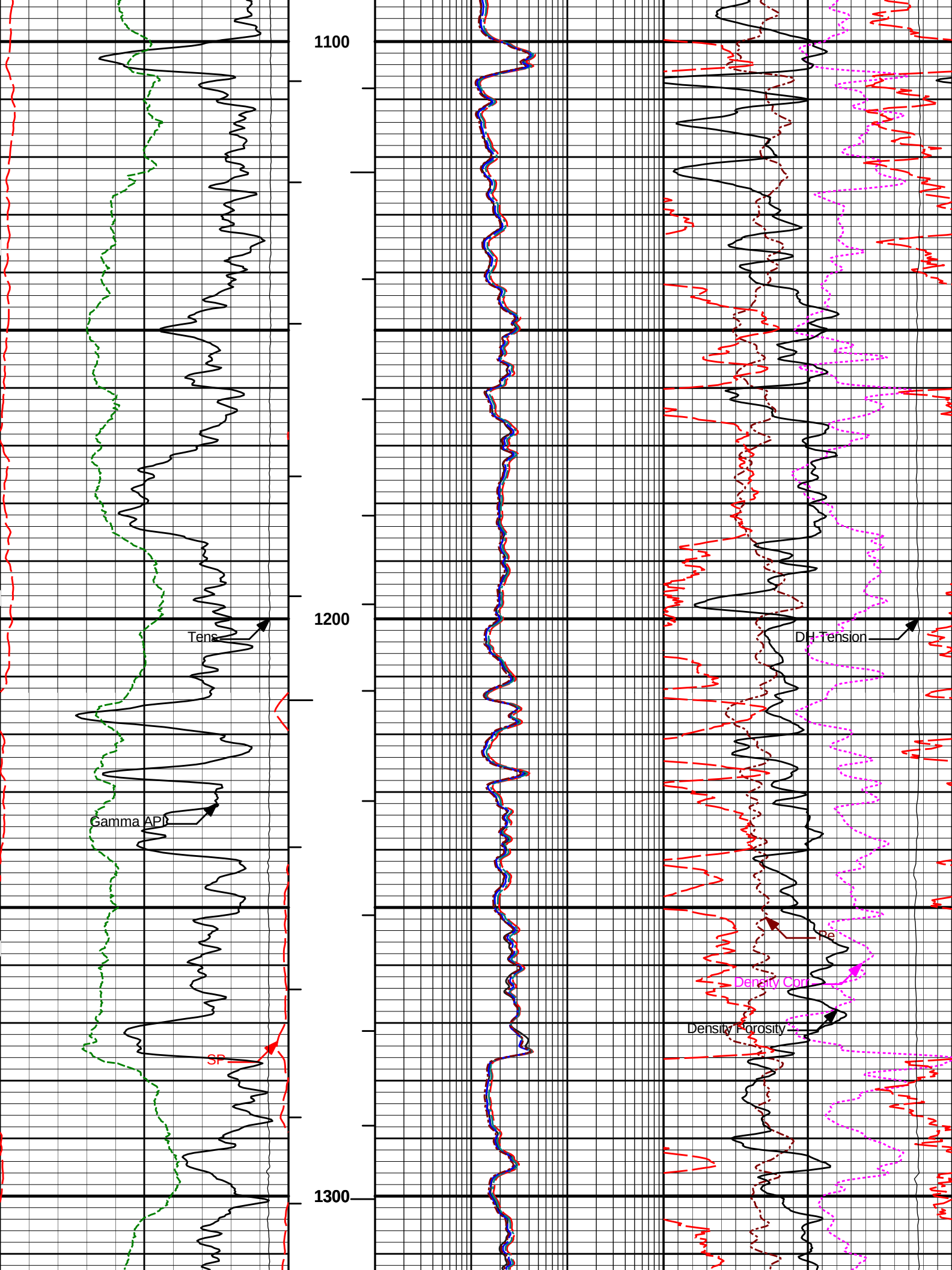
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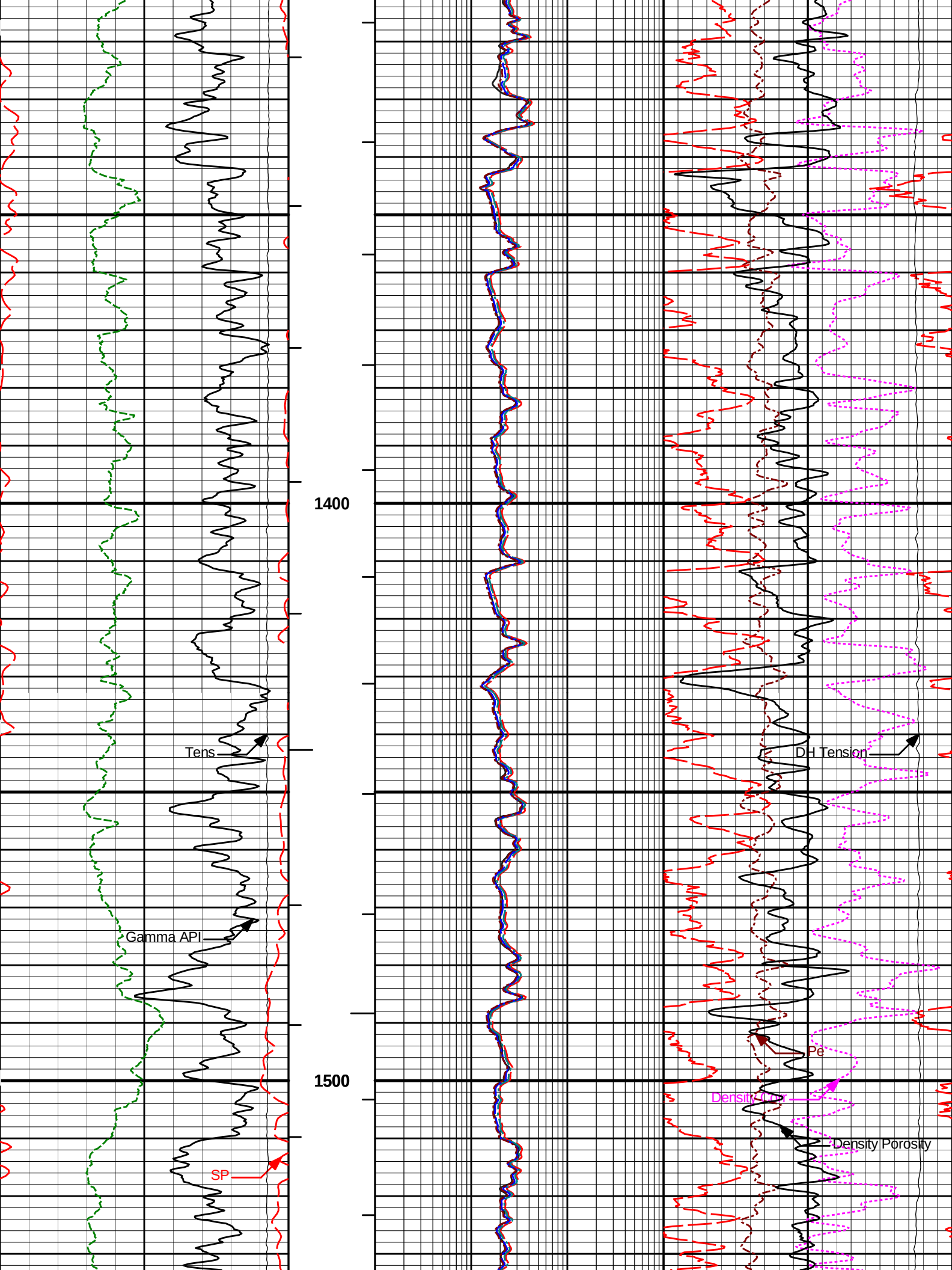
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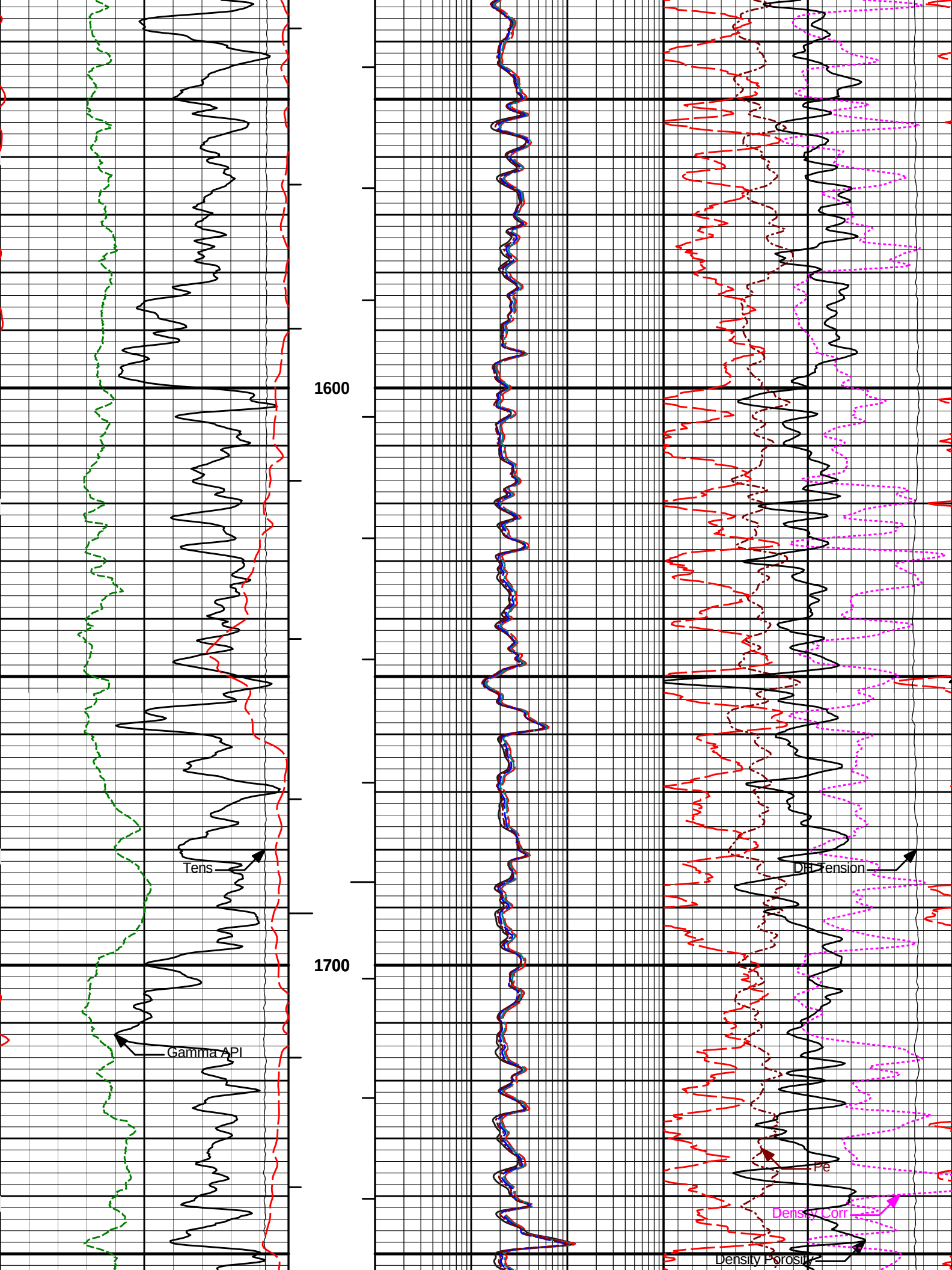
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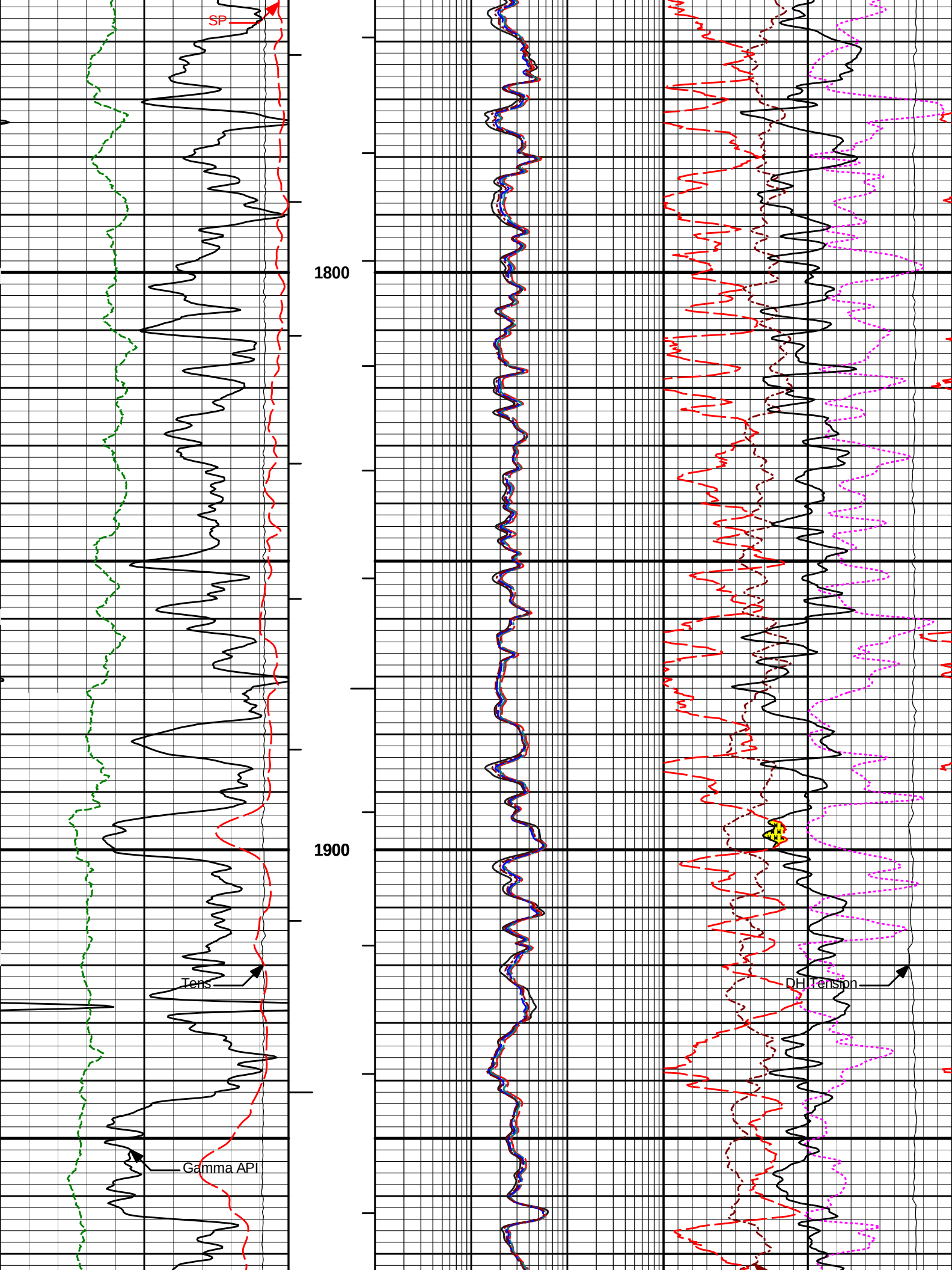
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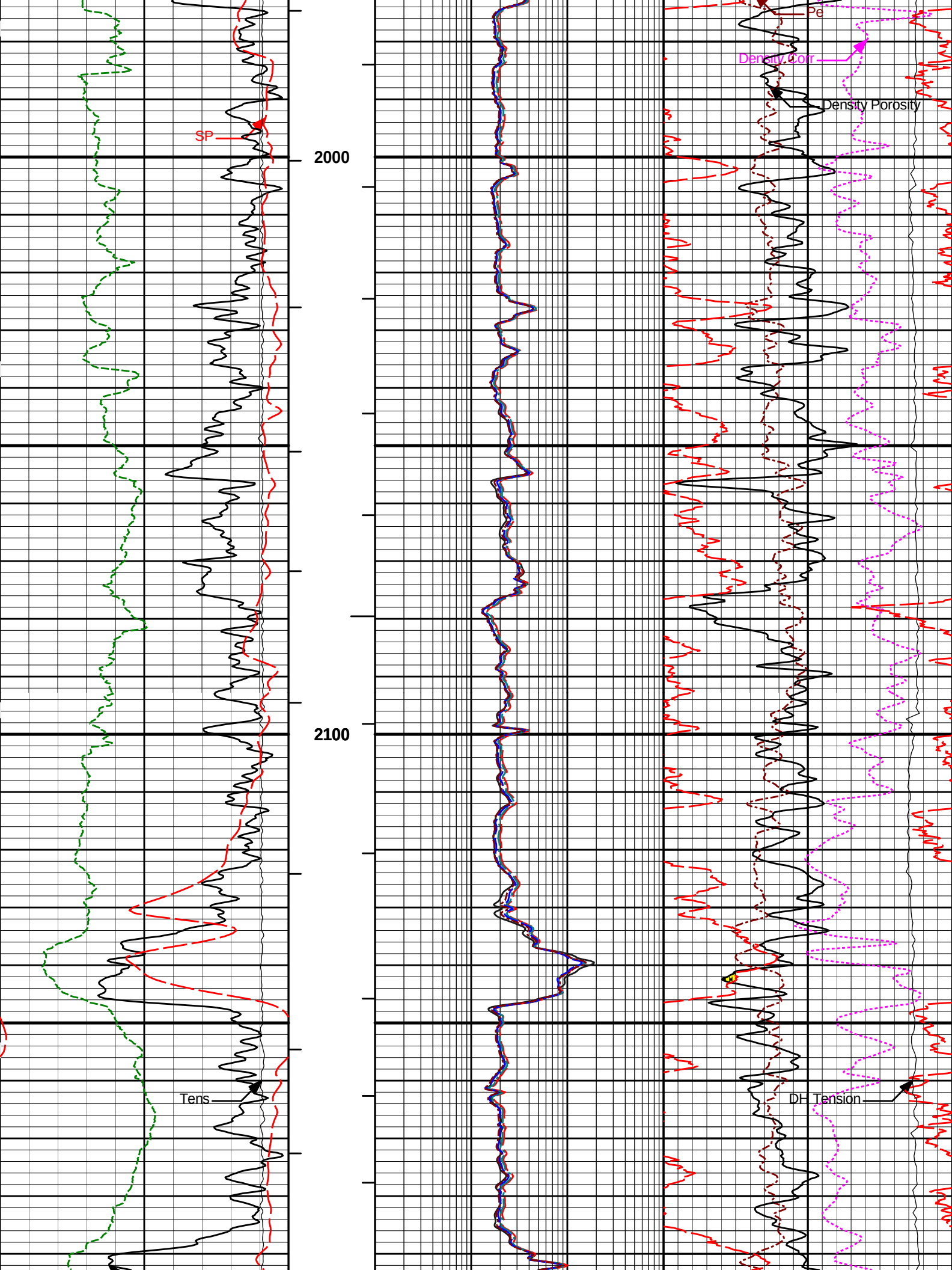
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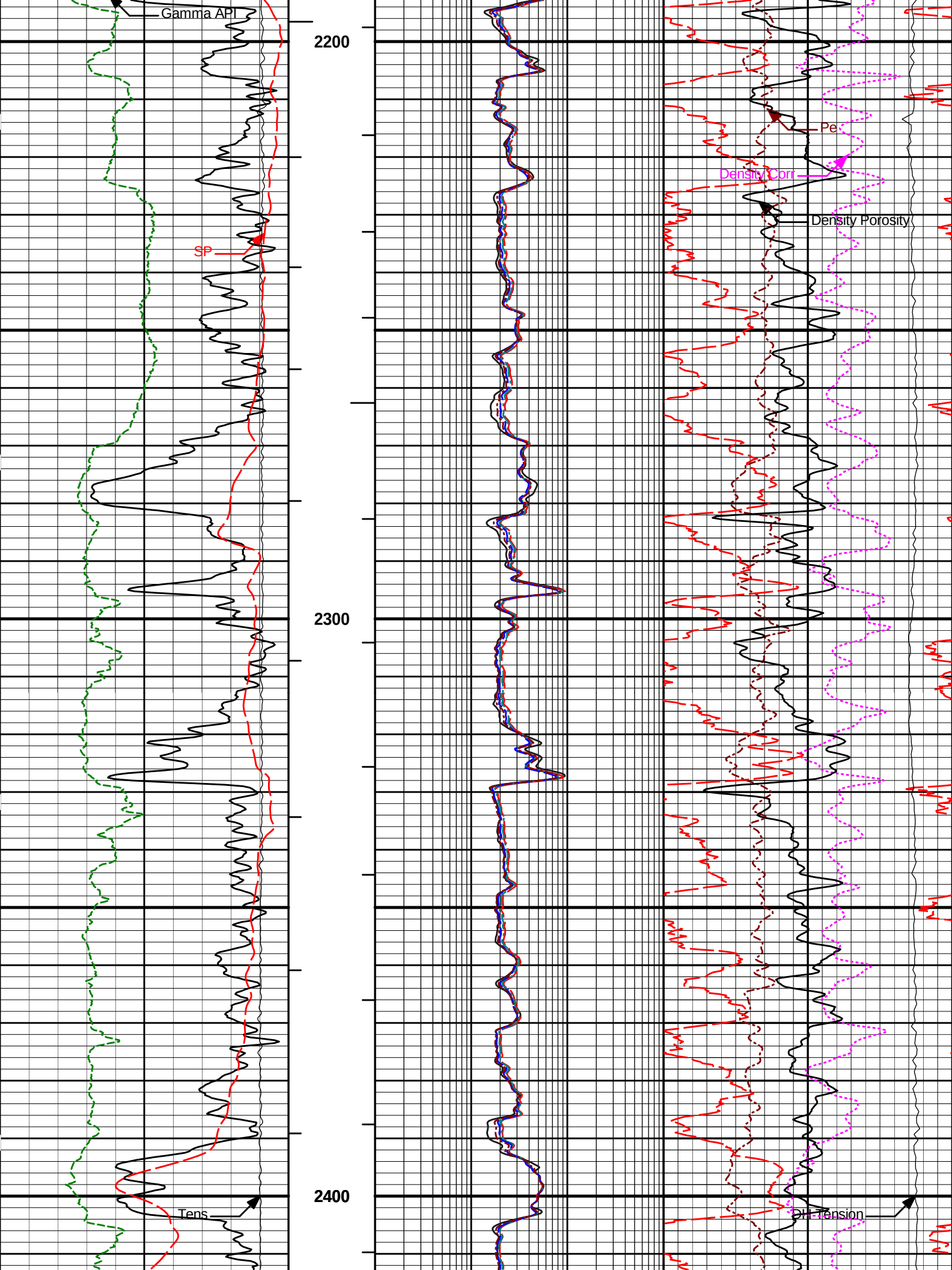
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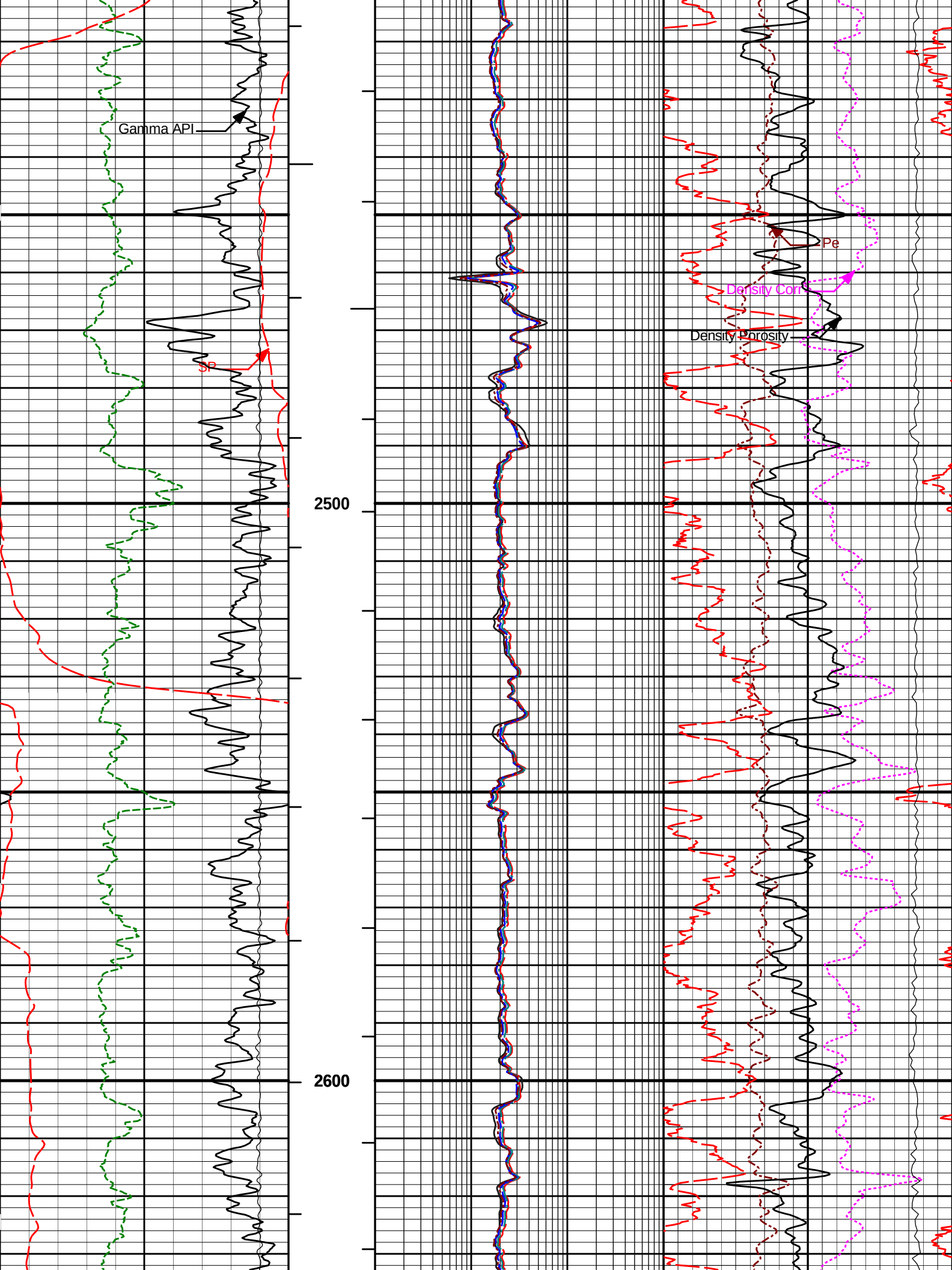
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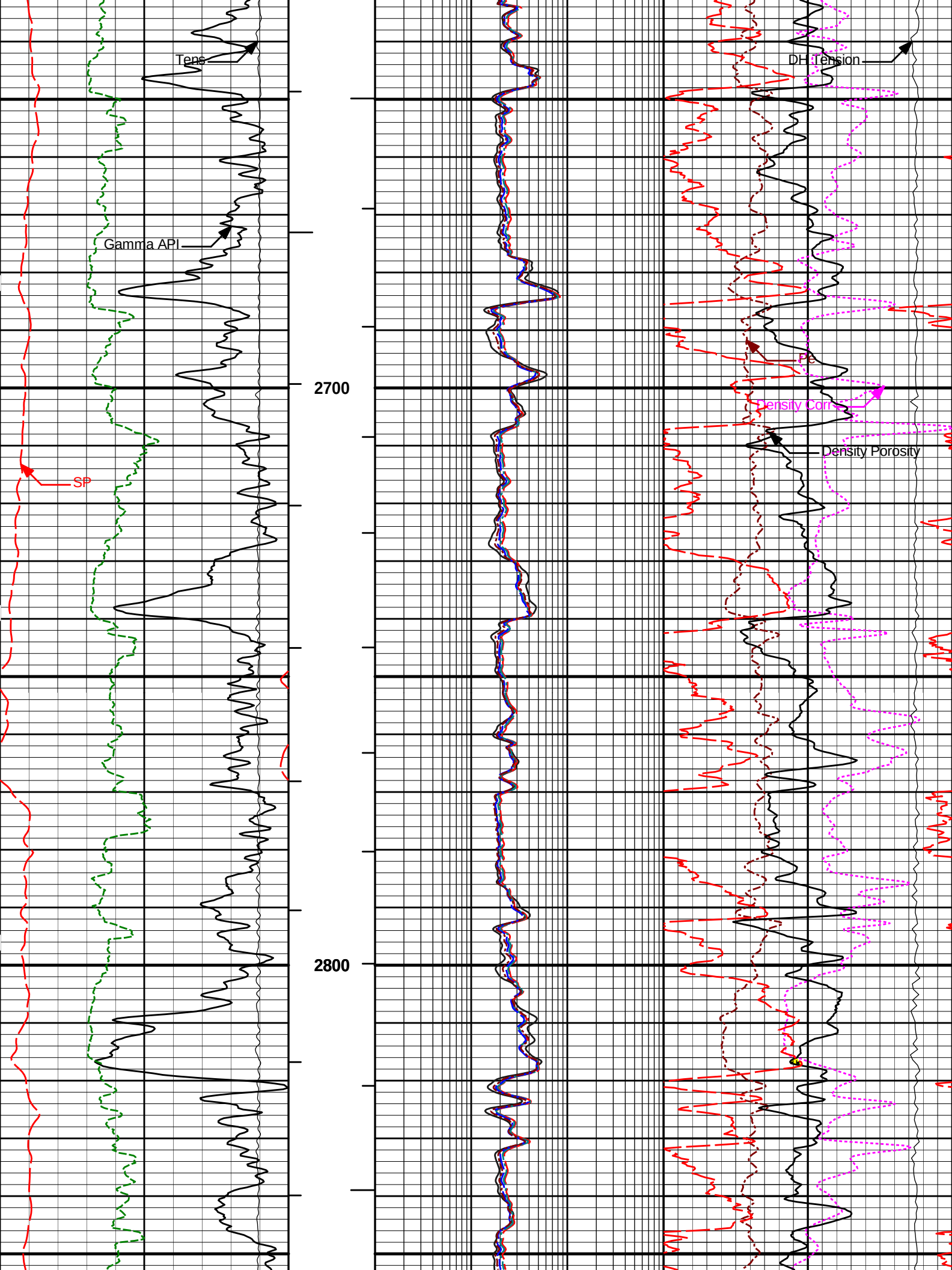
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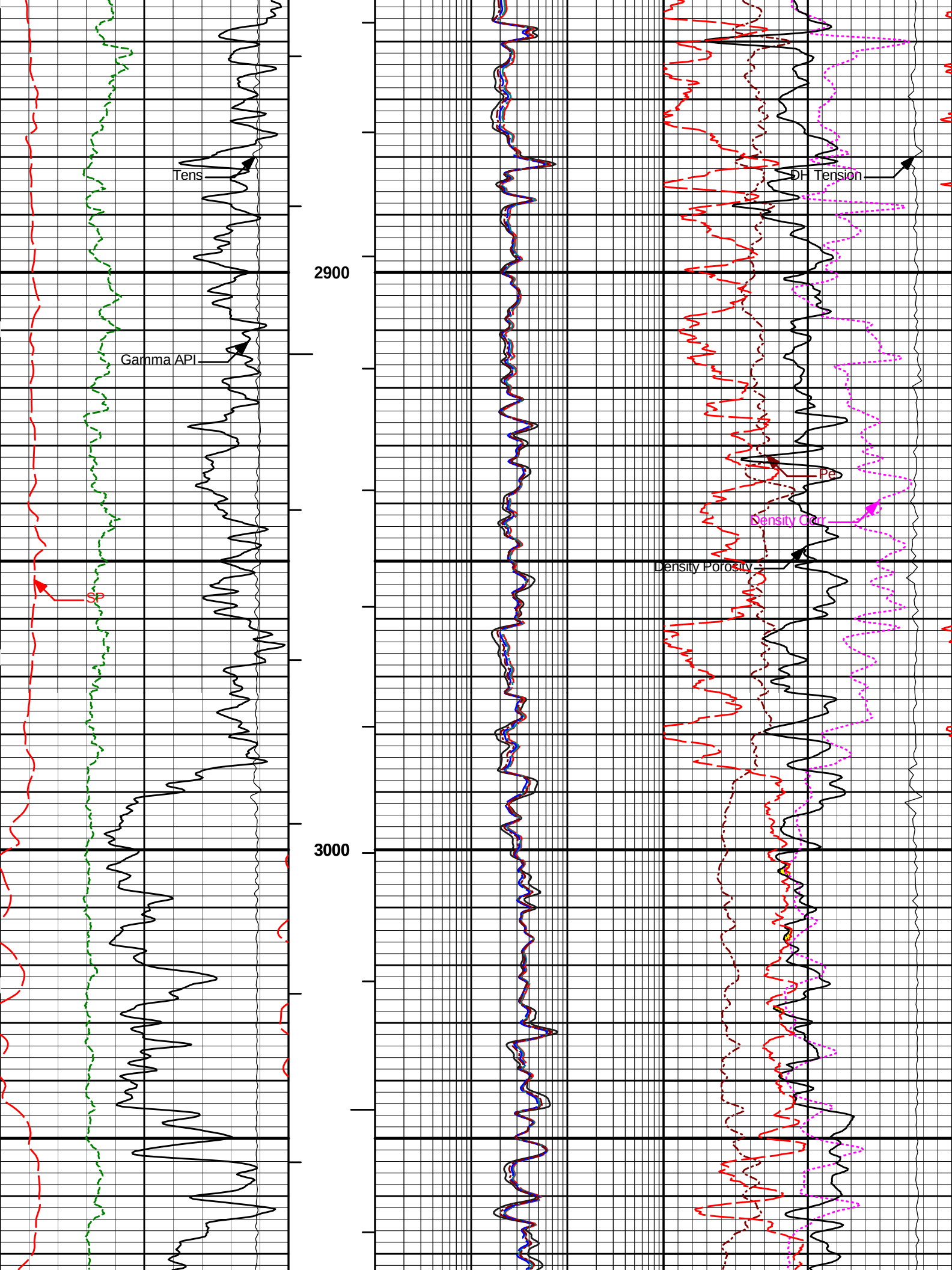
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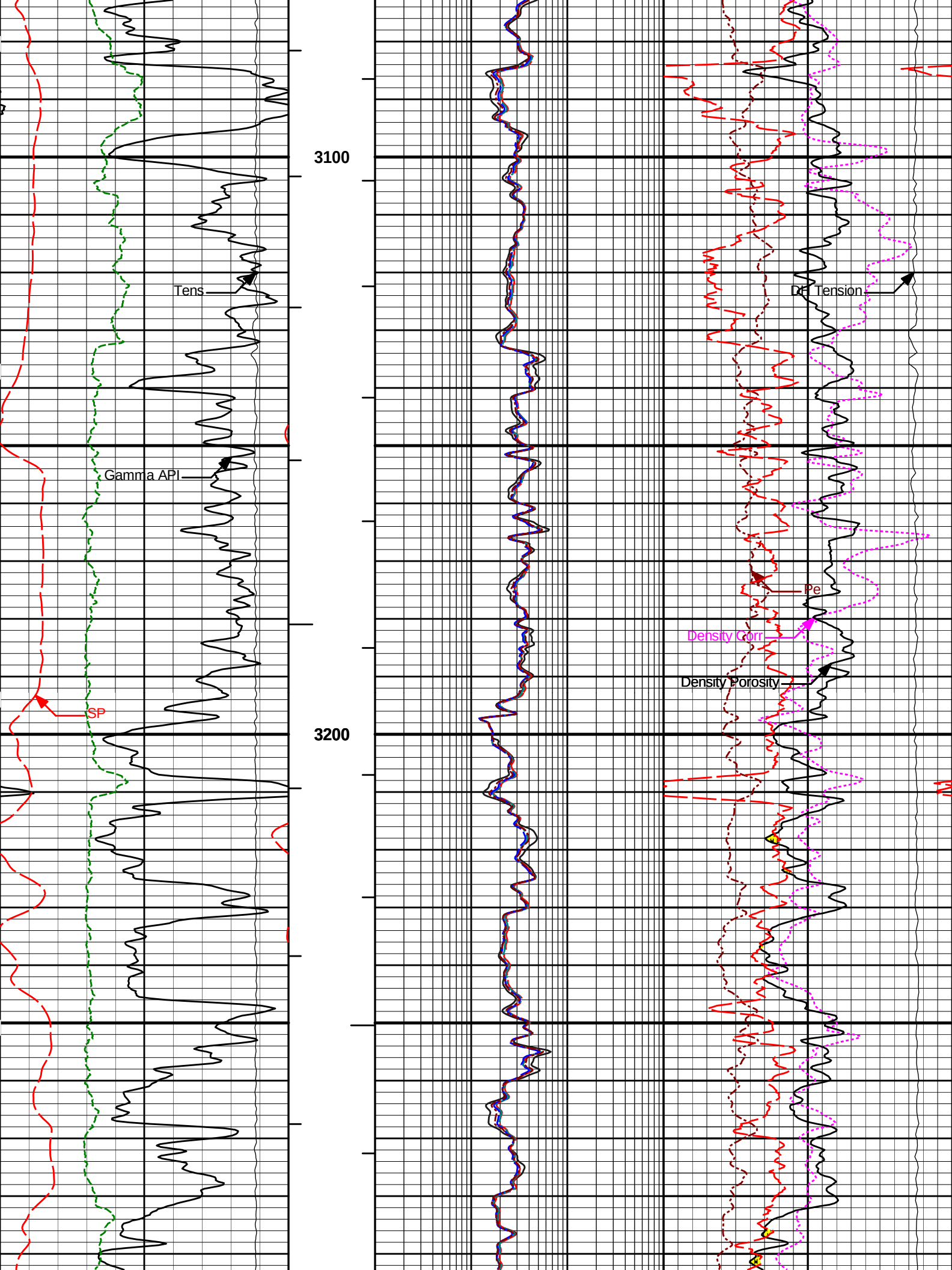
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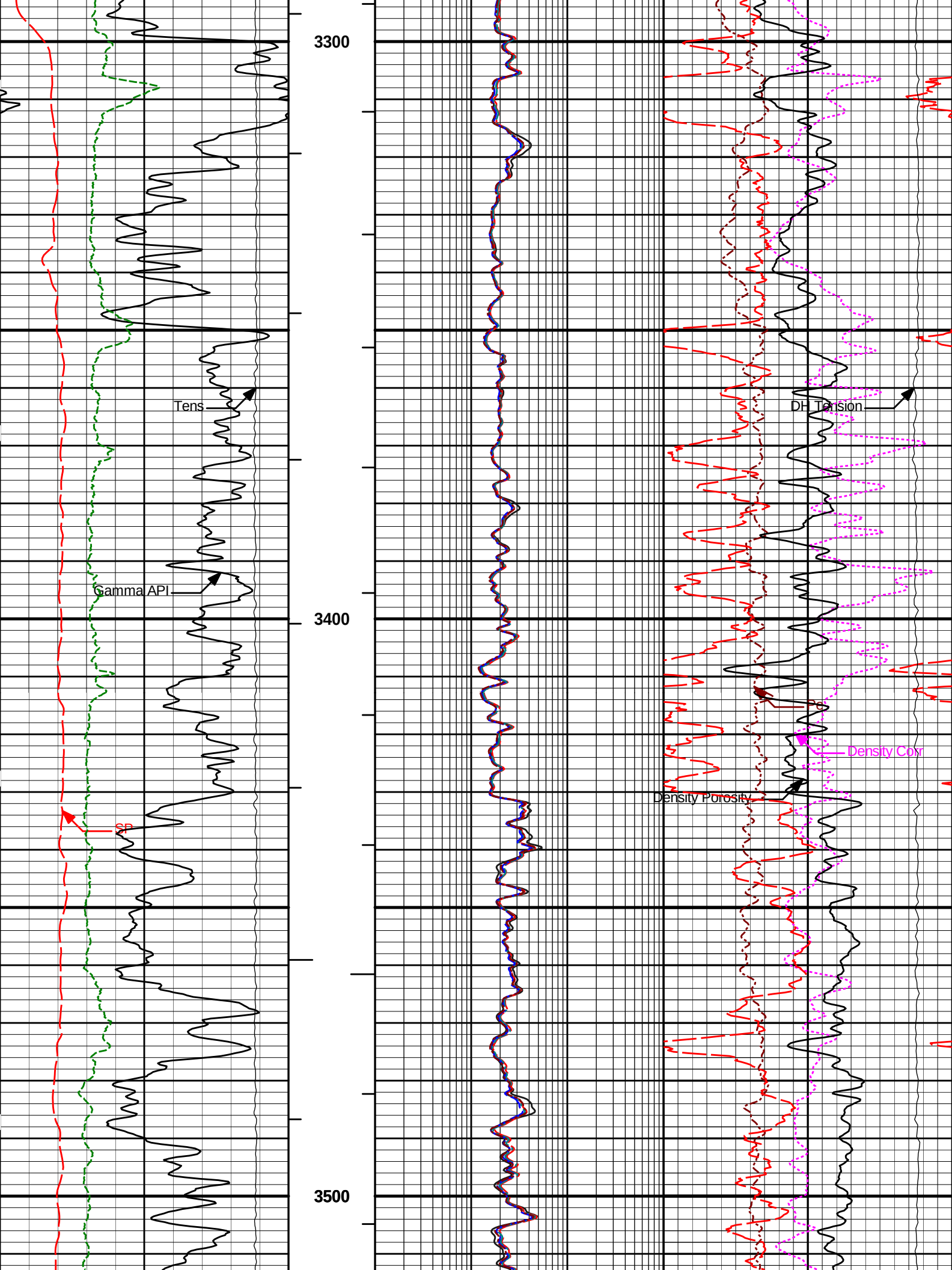
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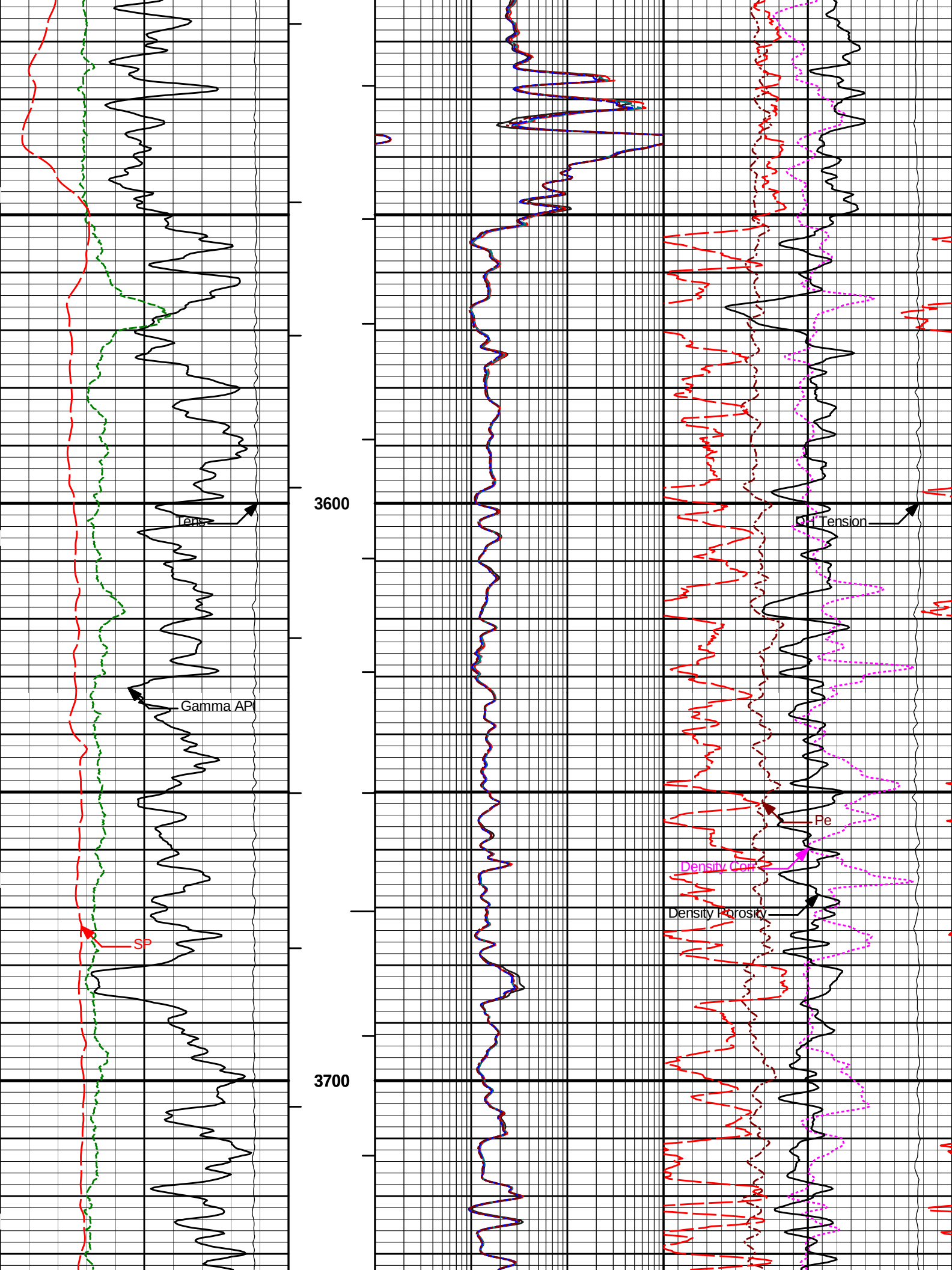
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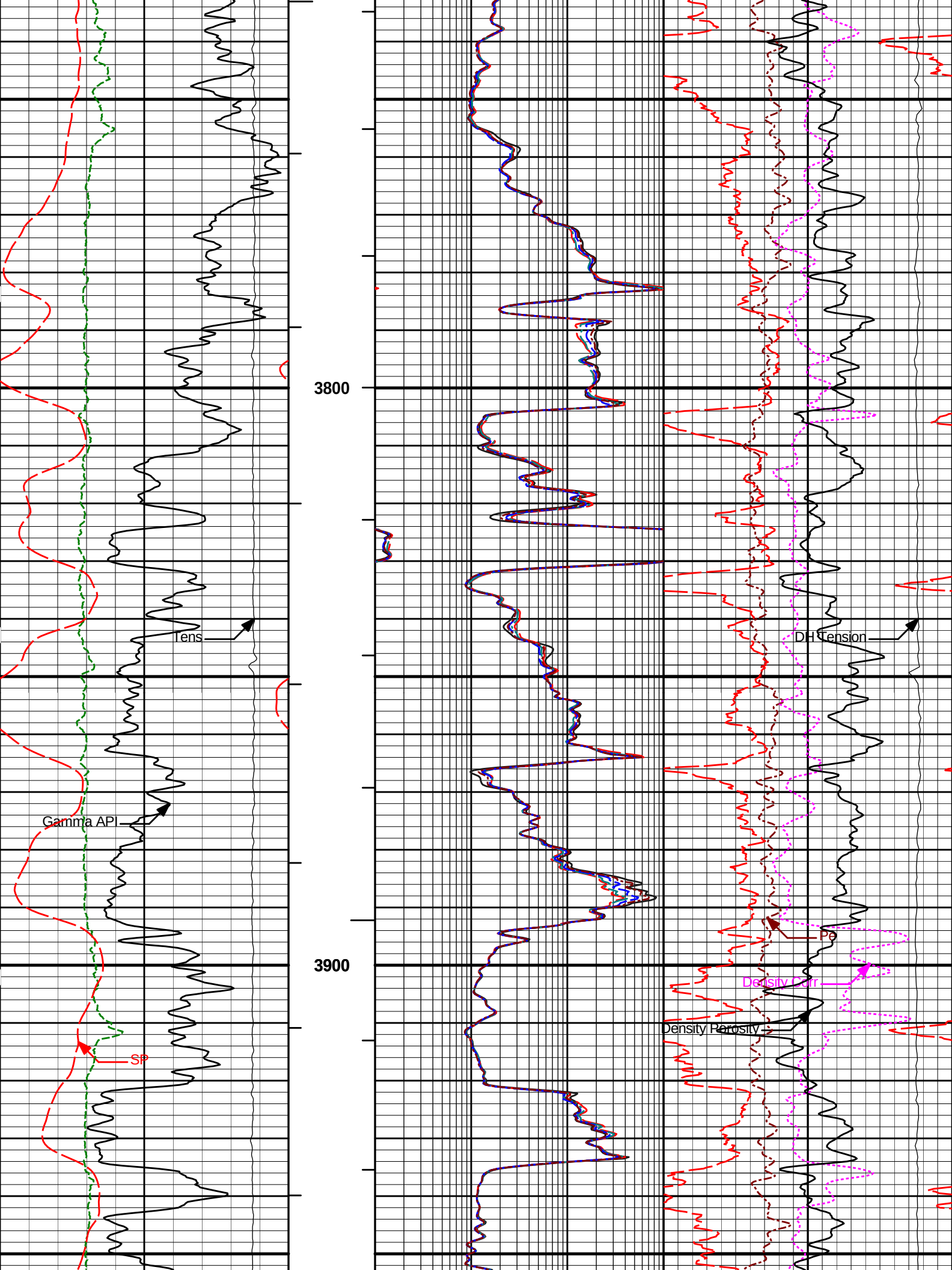
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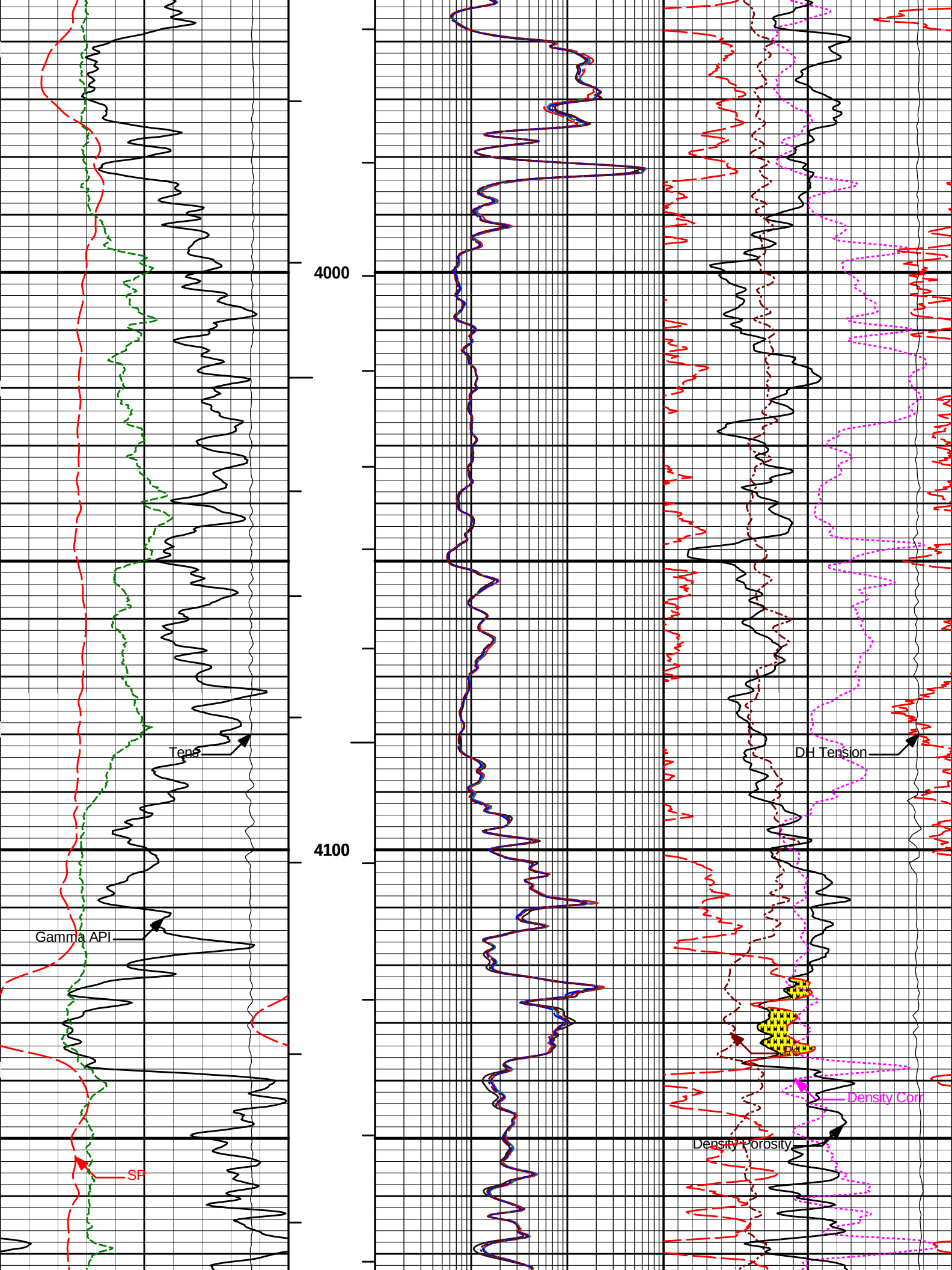
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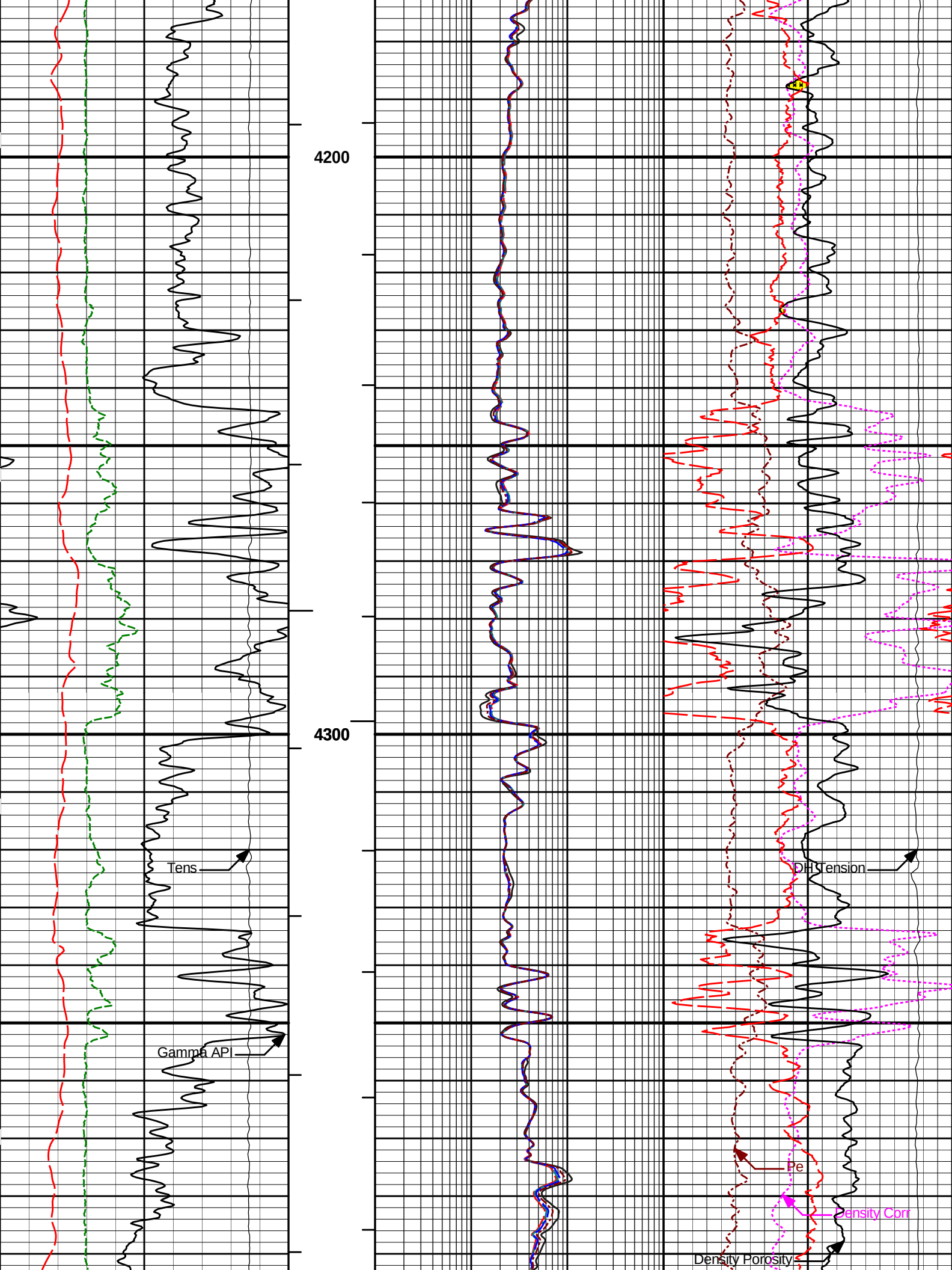
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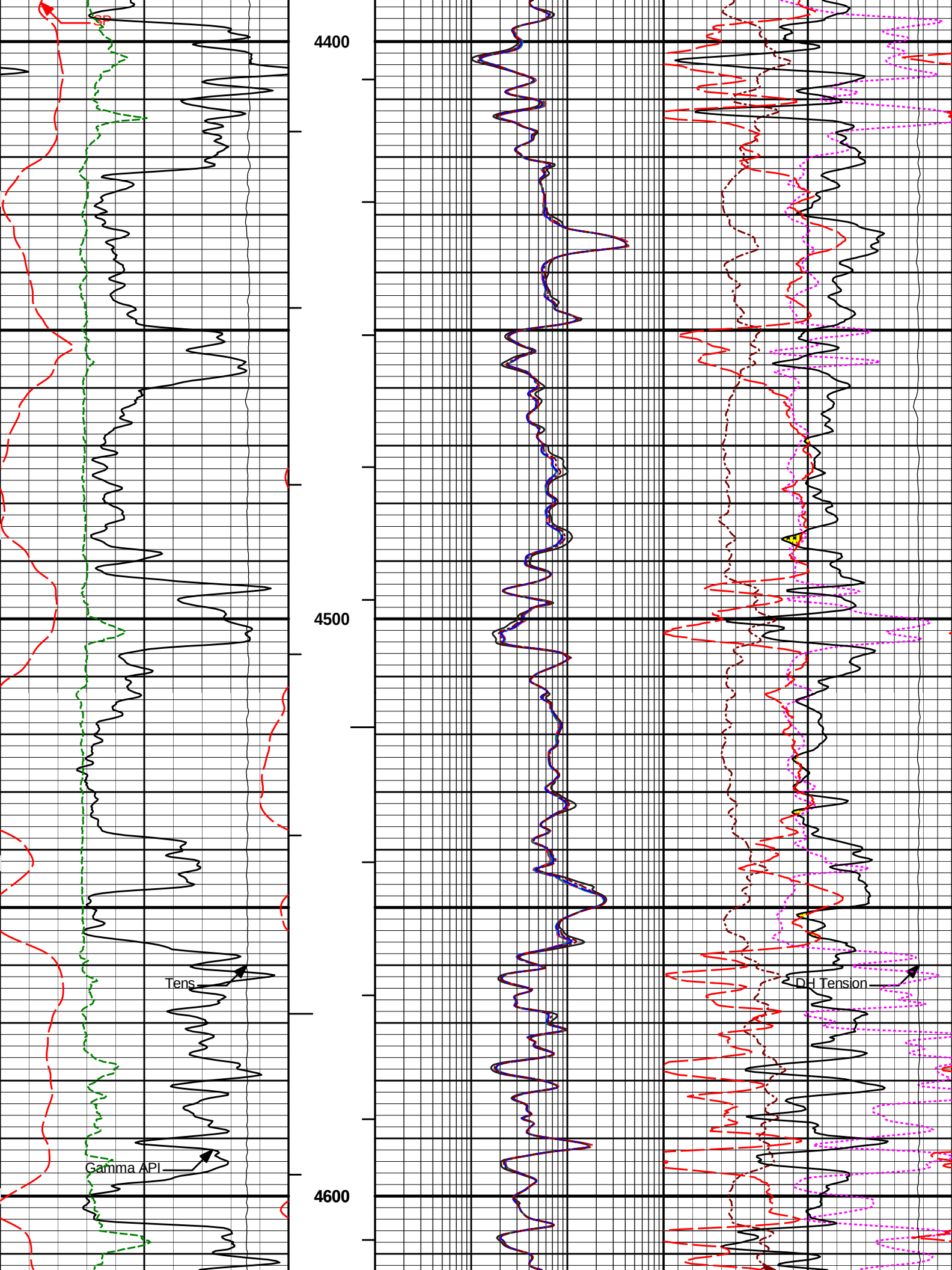
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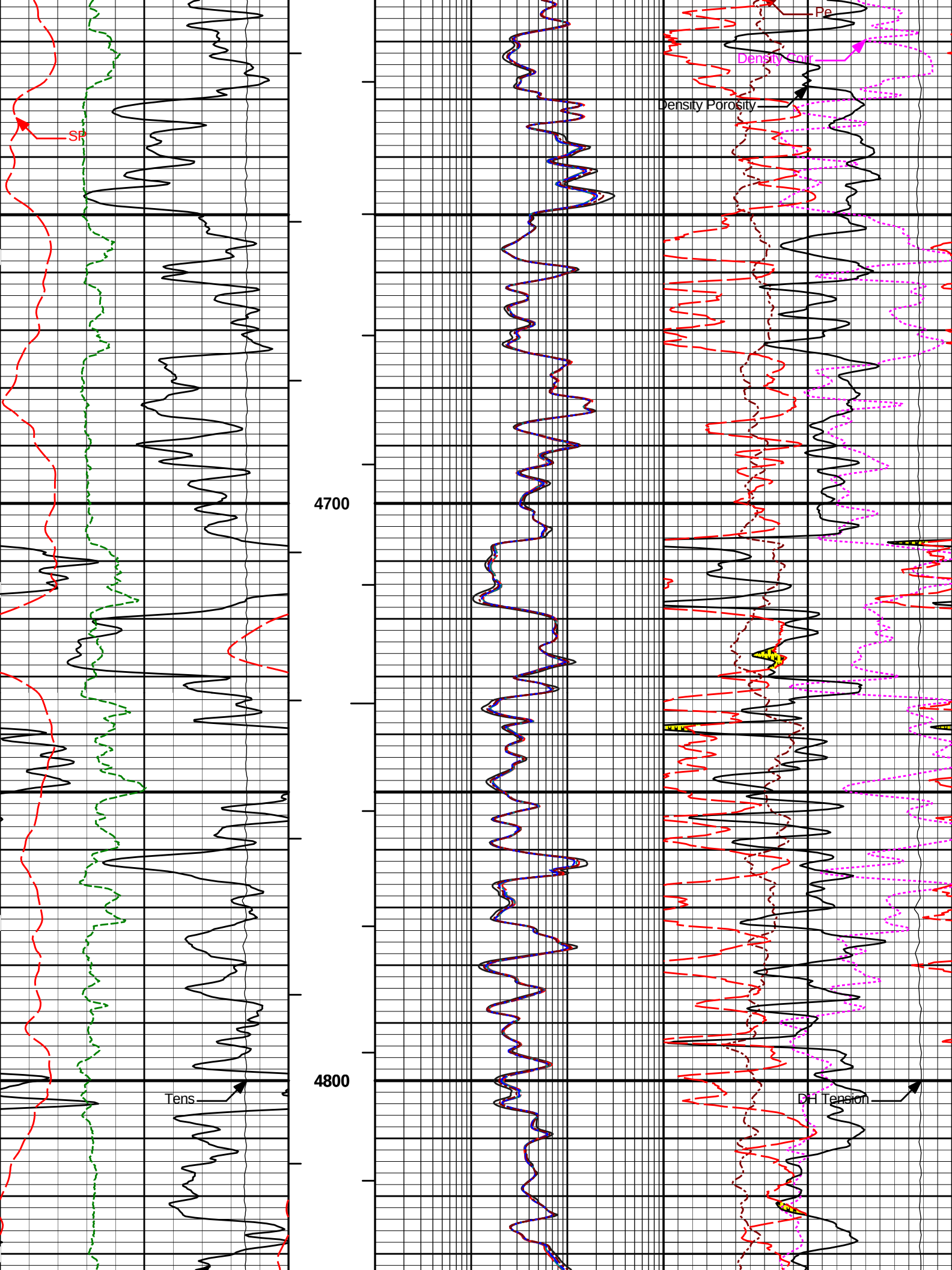
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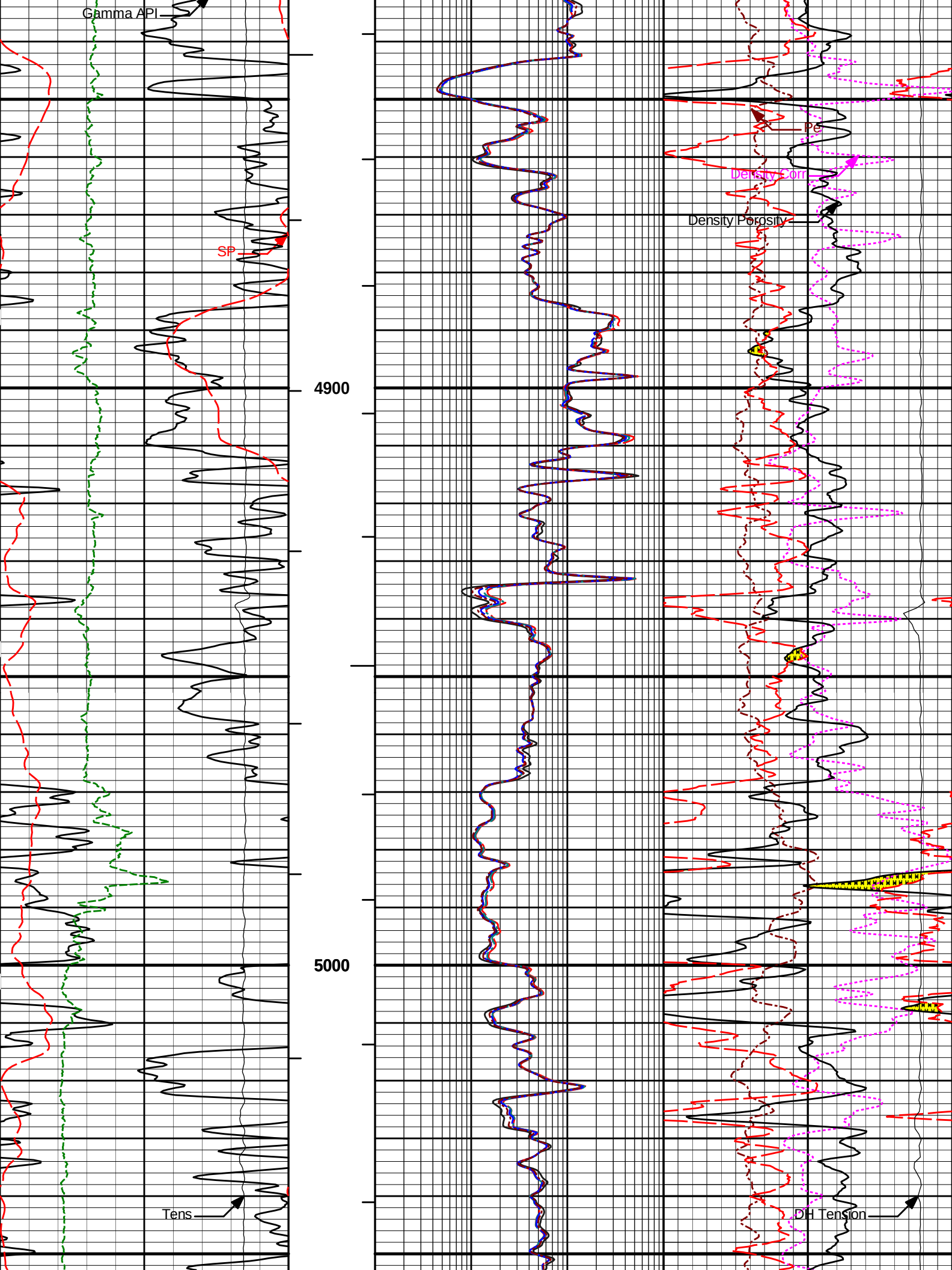
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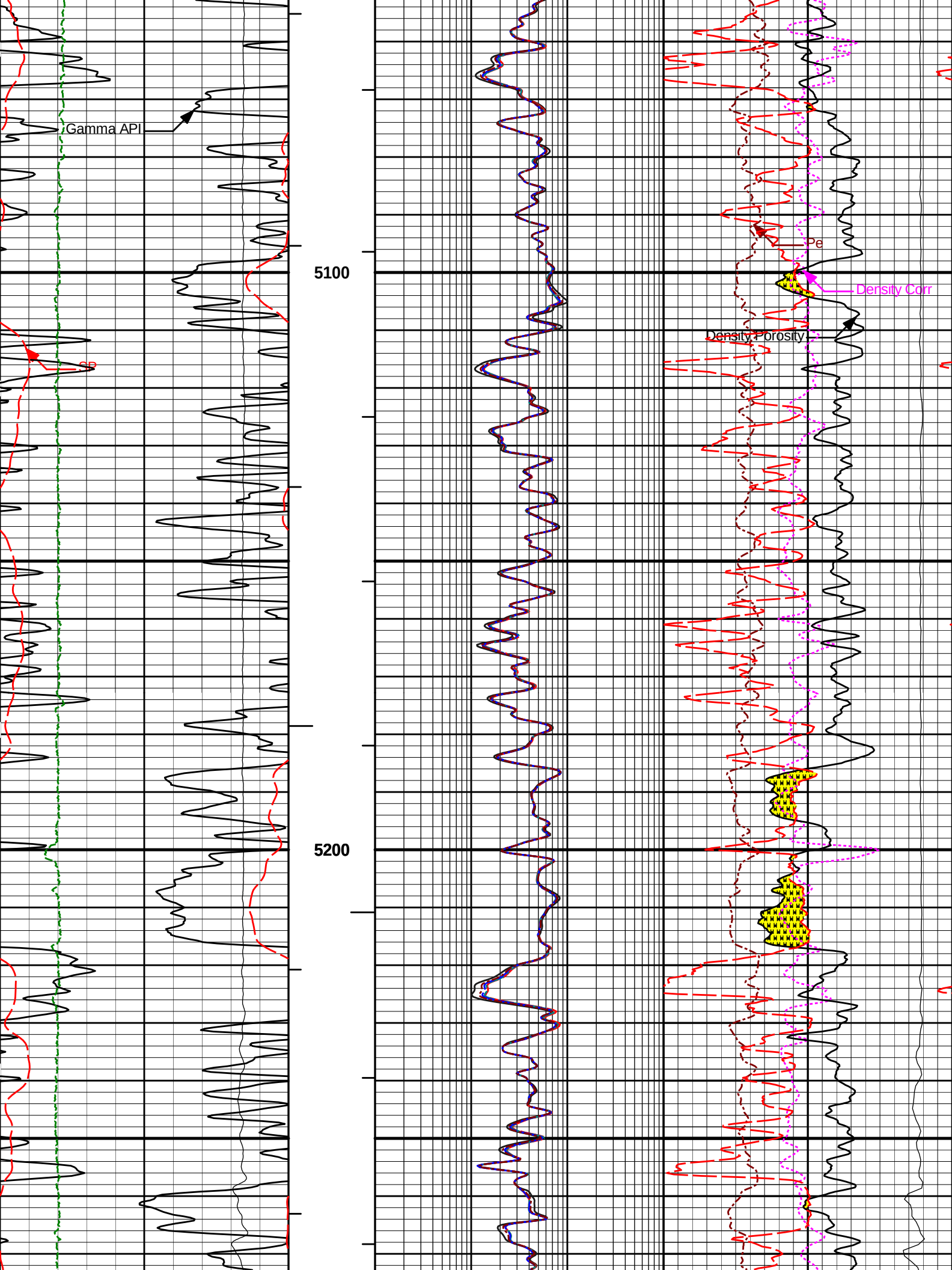
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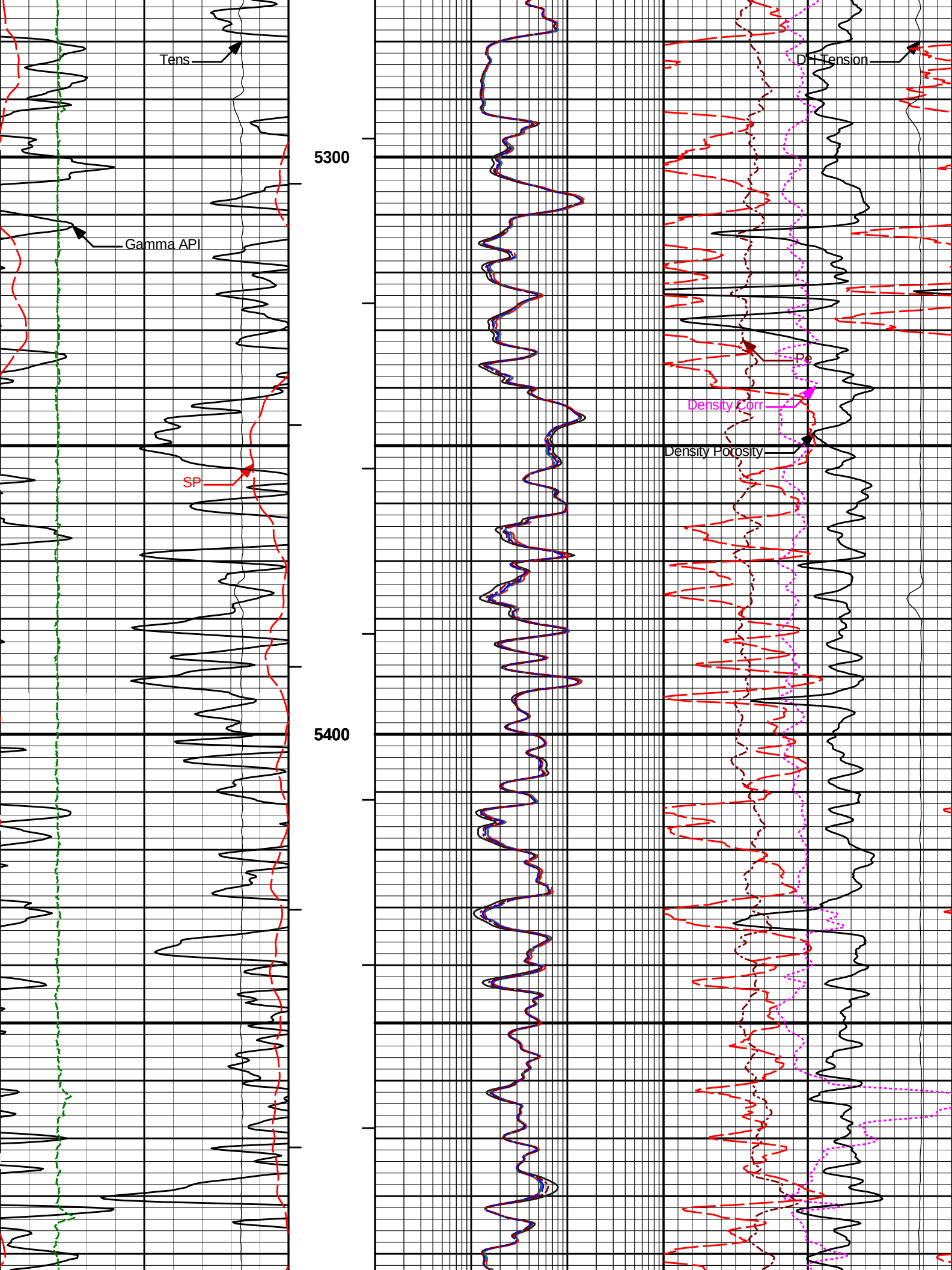
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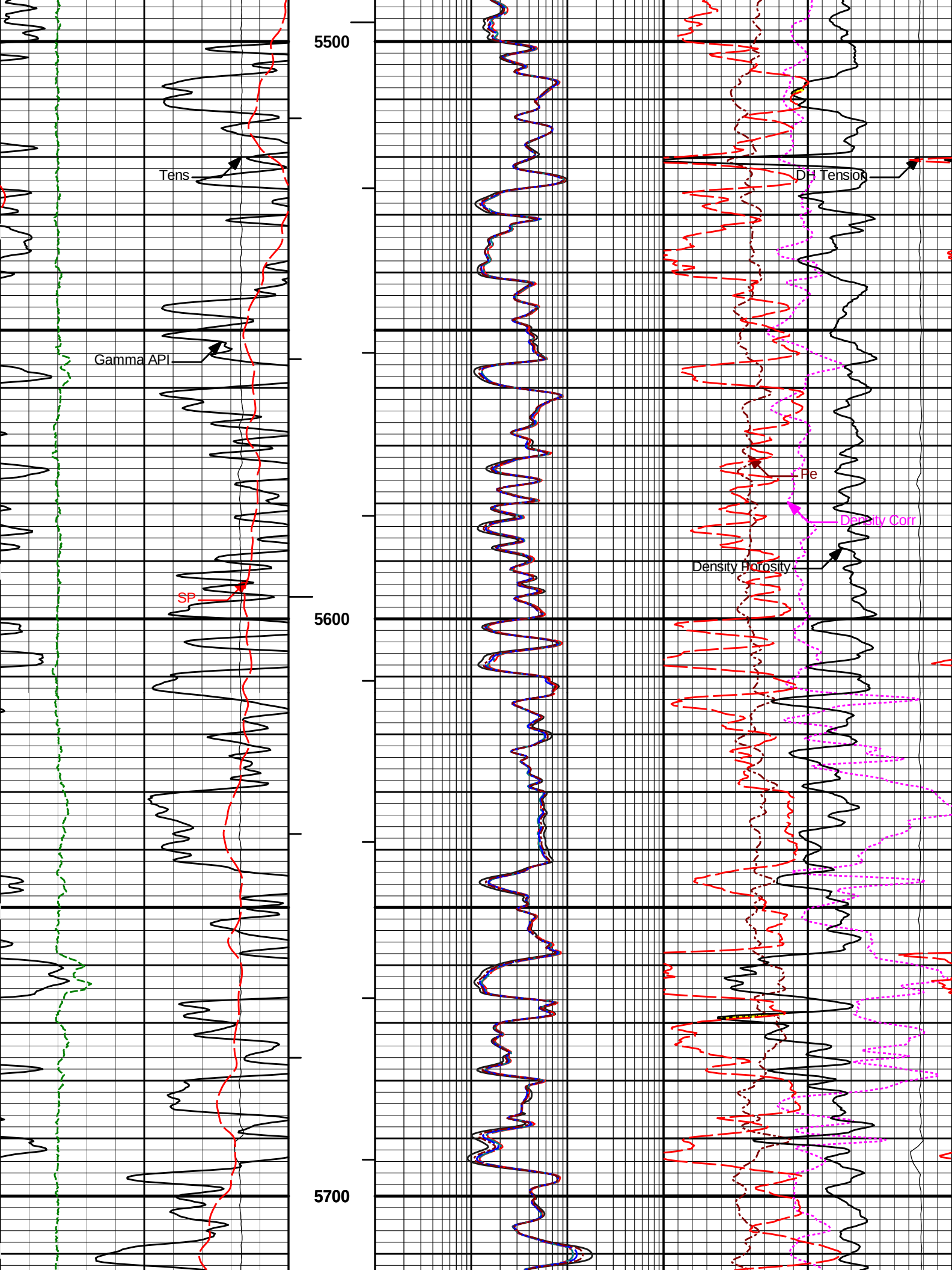
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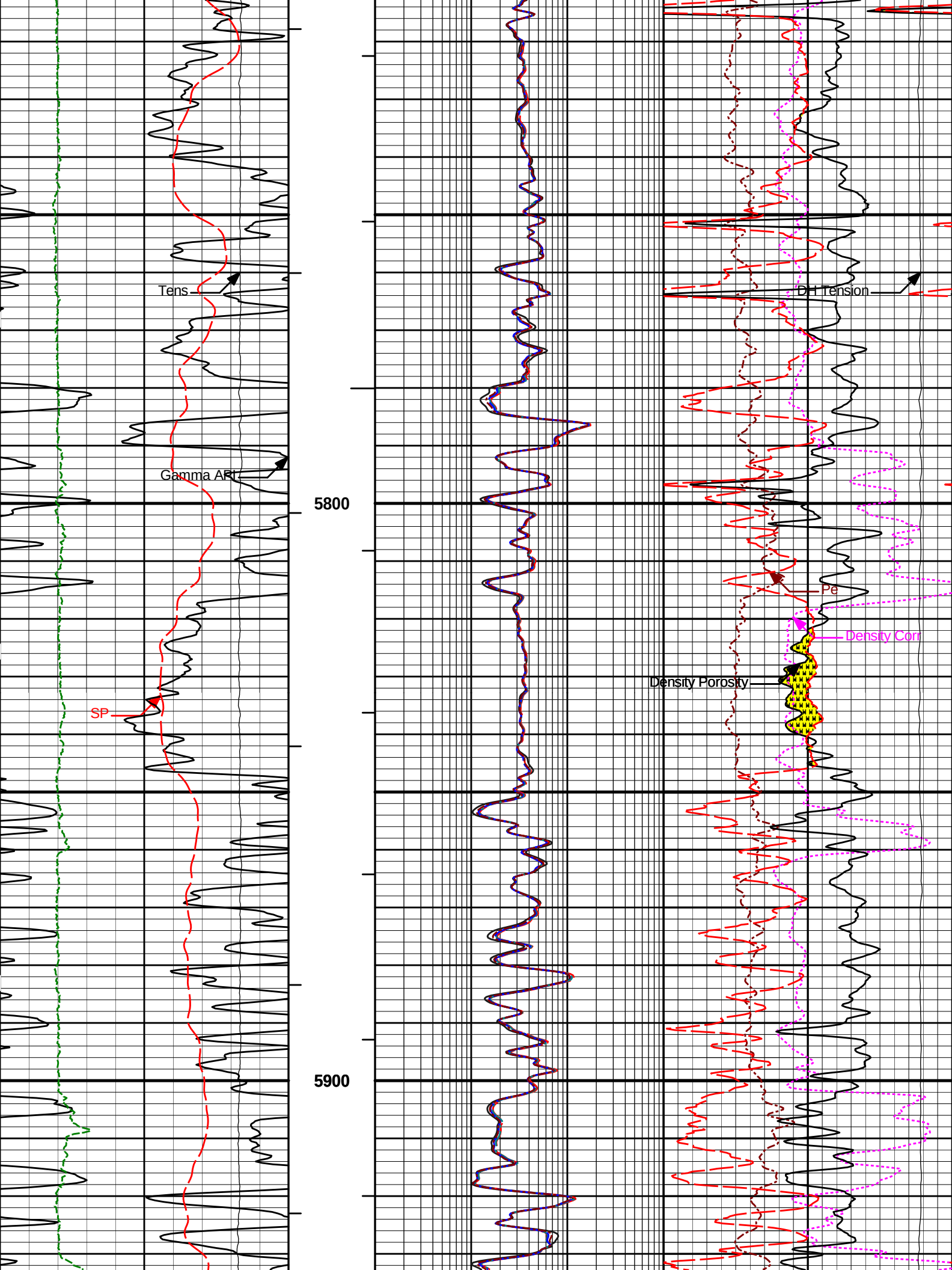
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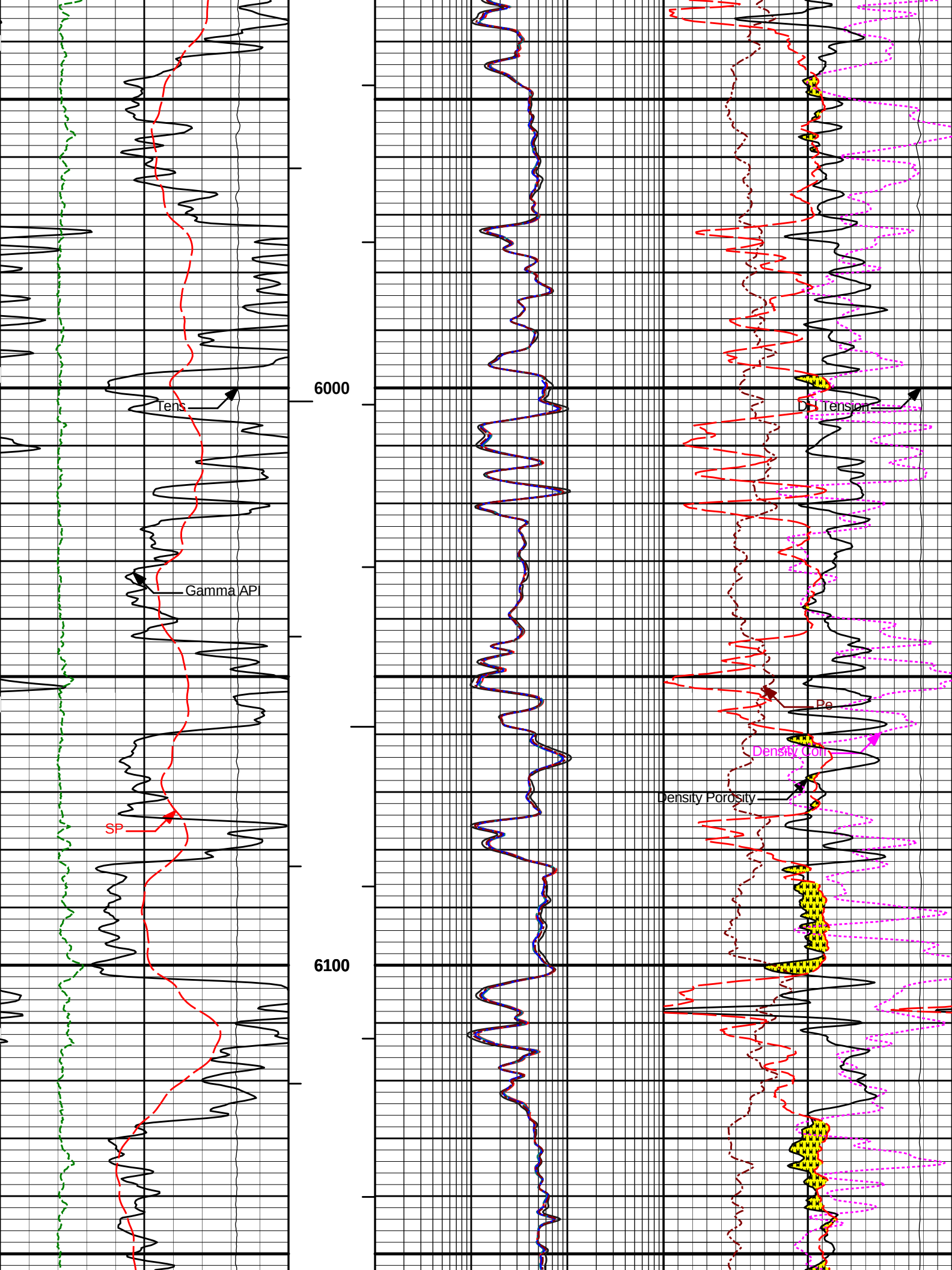
Pe
Density Corr
Density Porosity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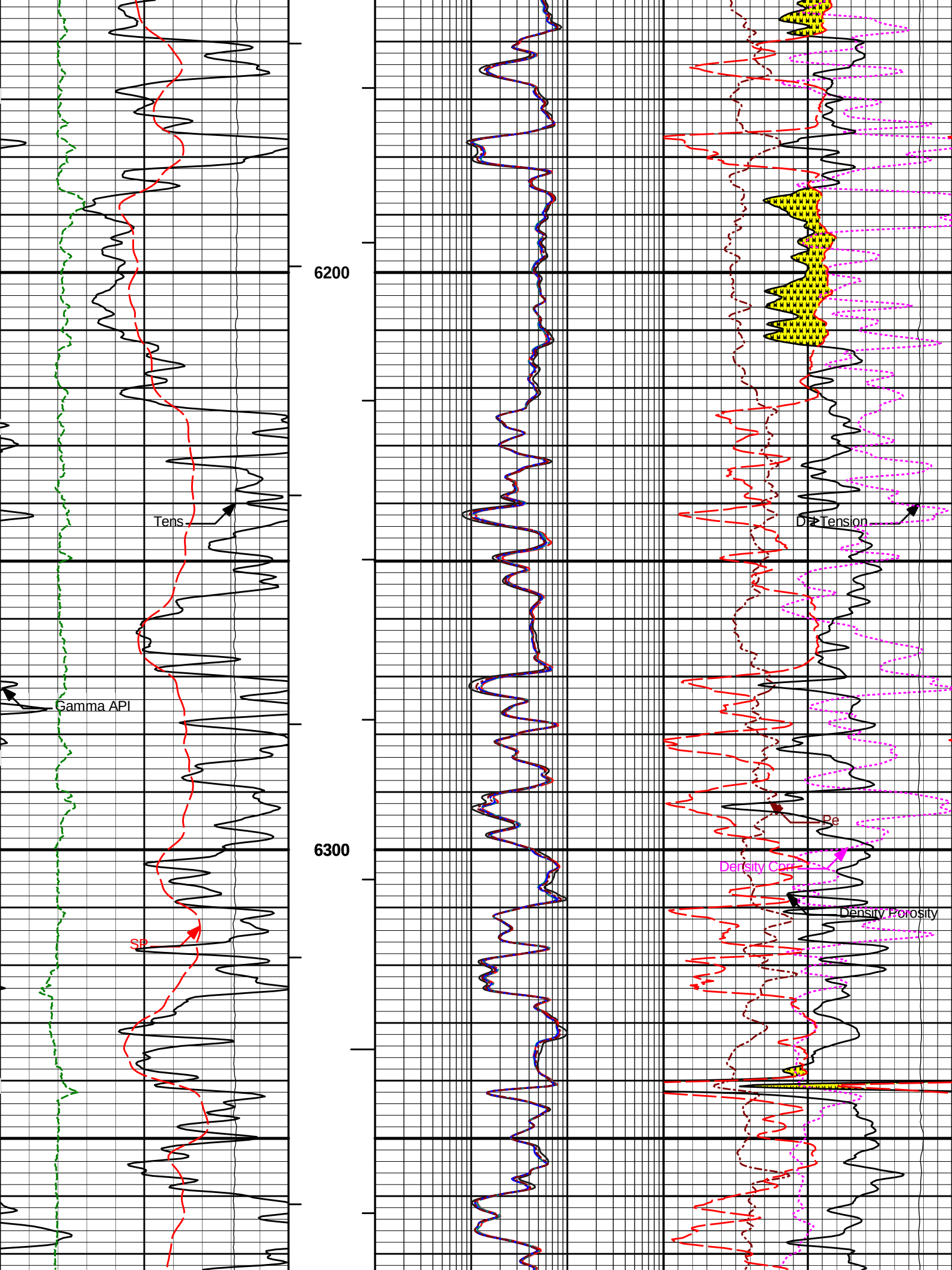
Density Porosity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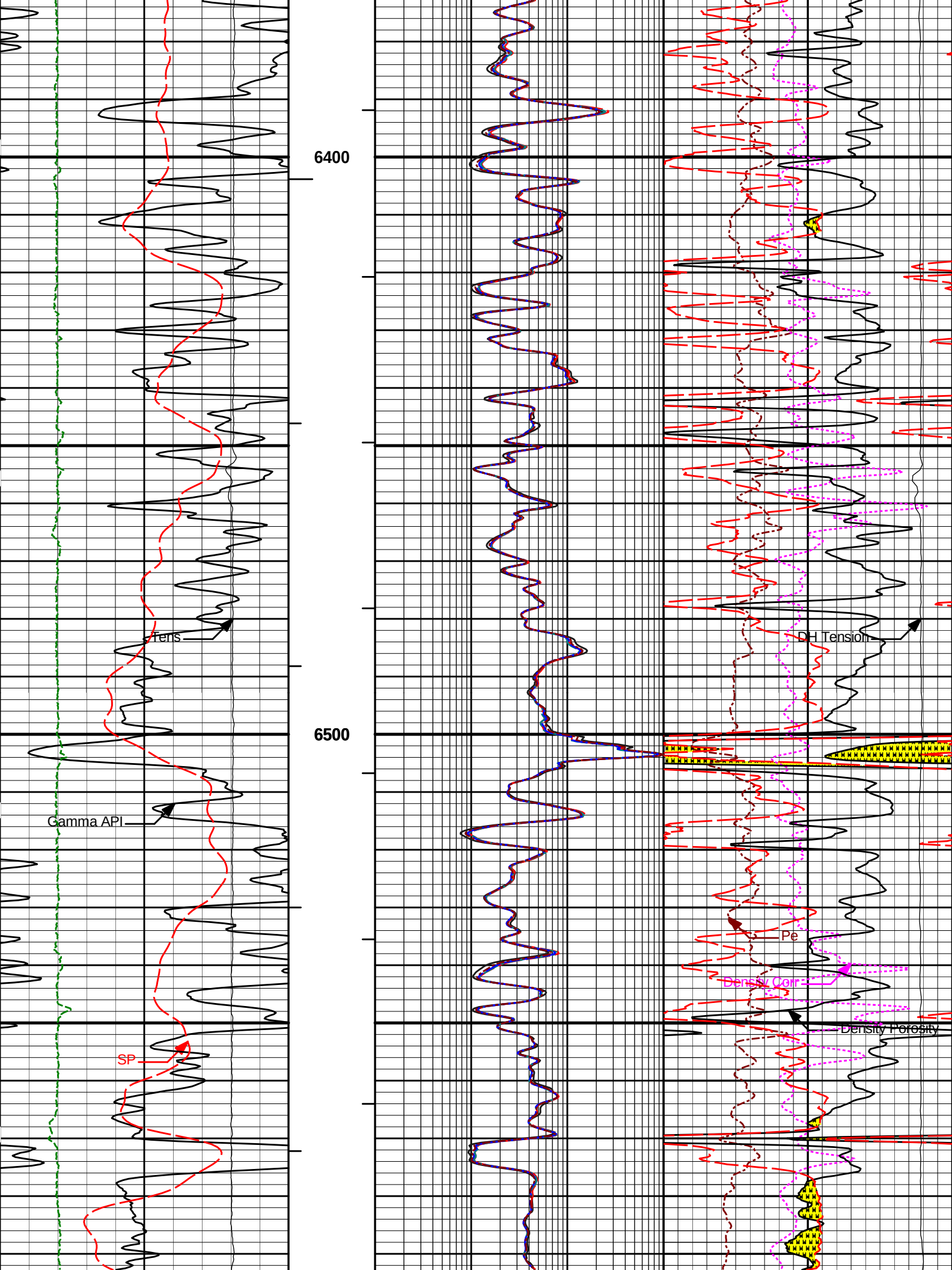
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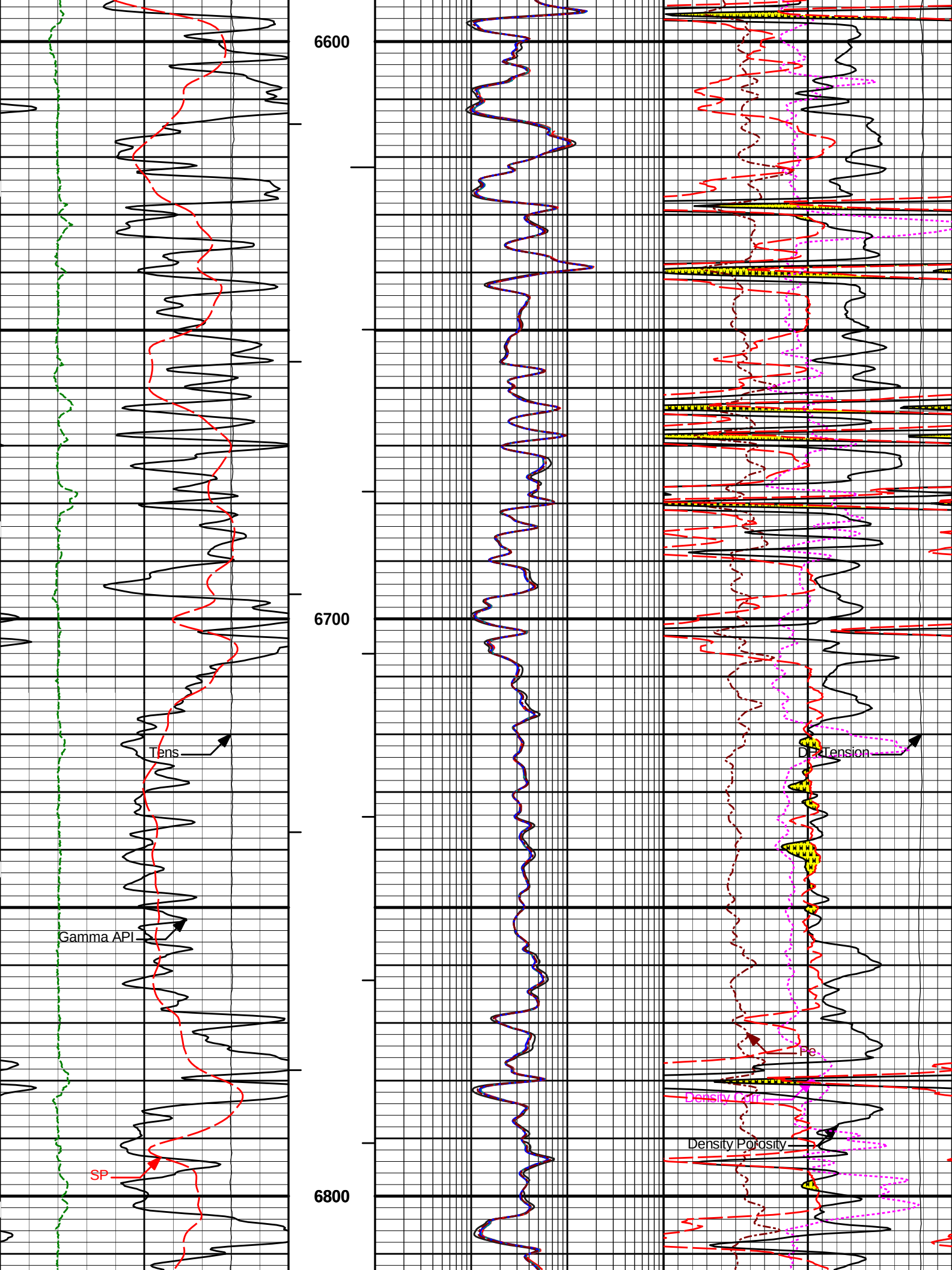
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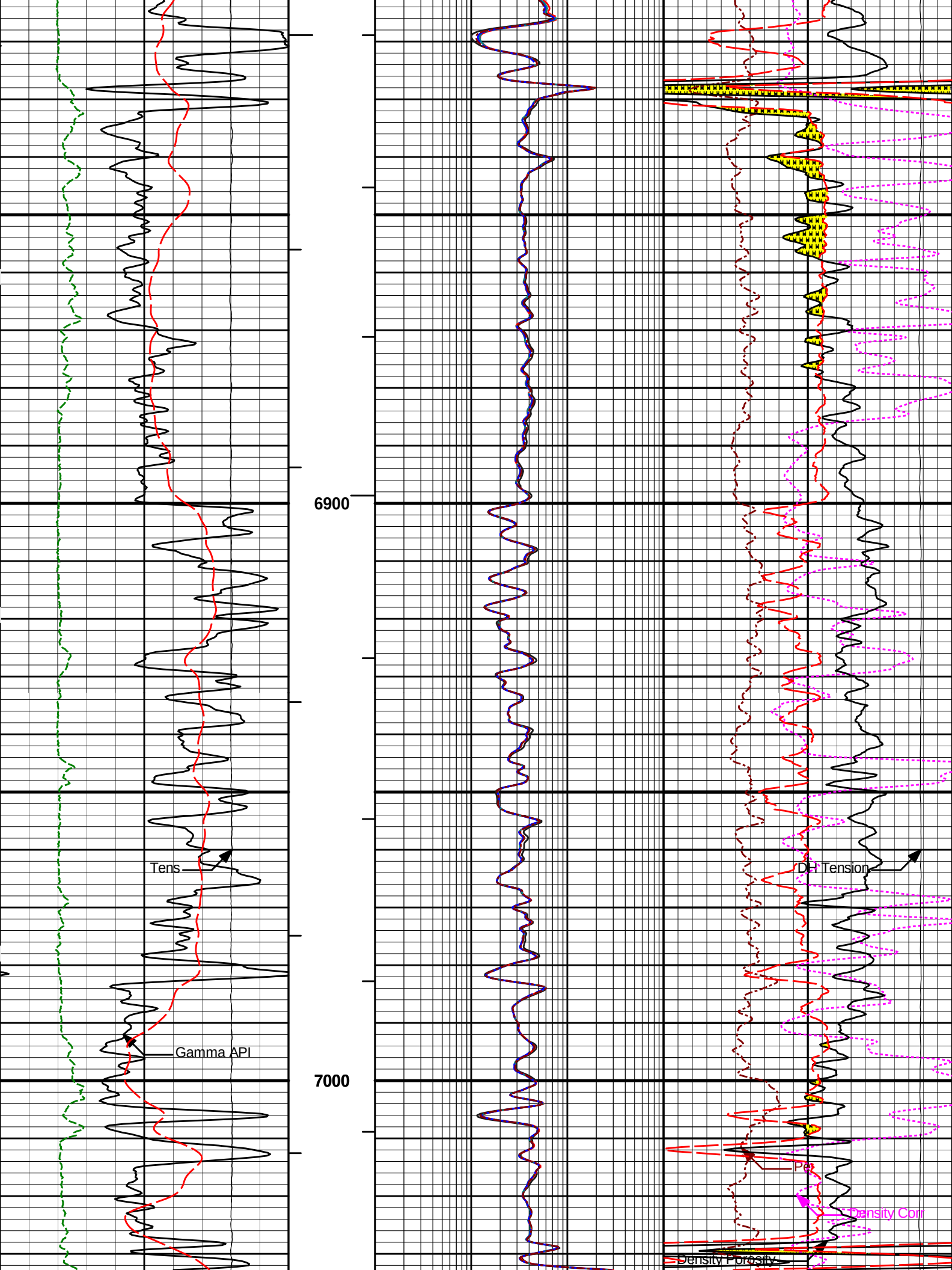
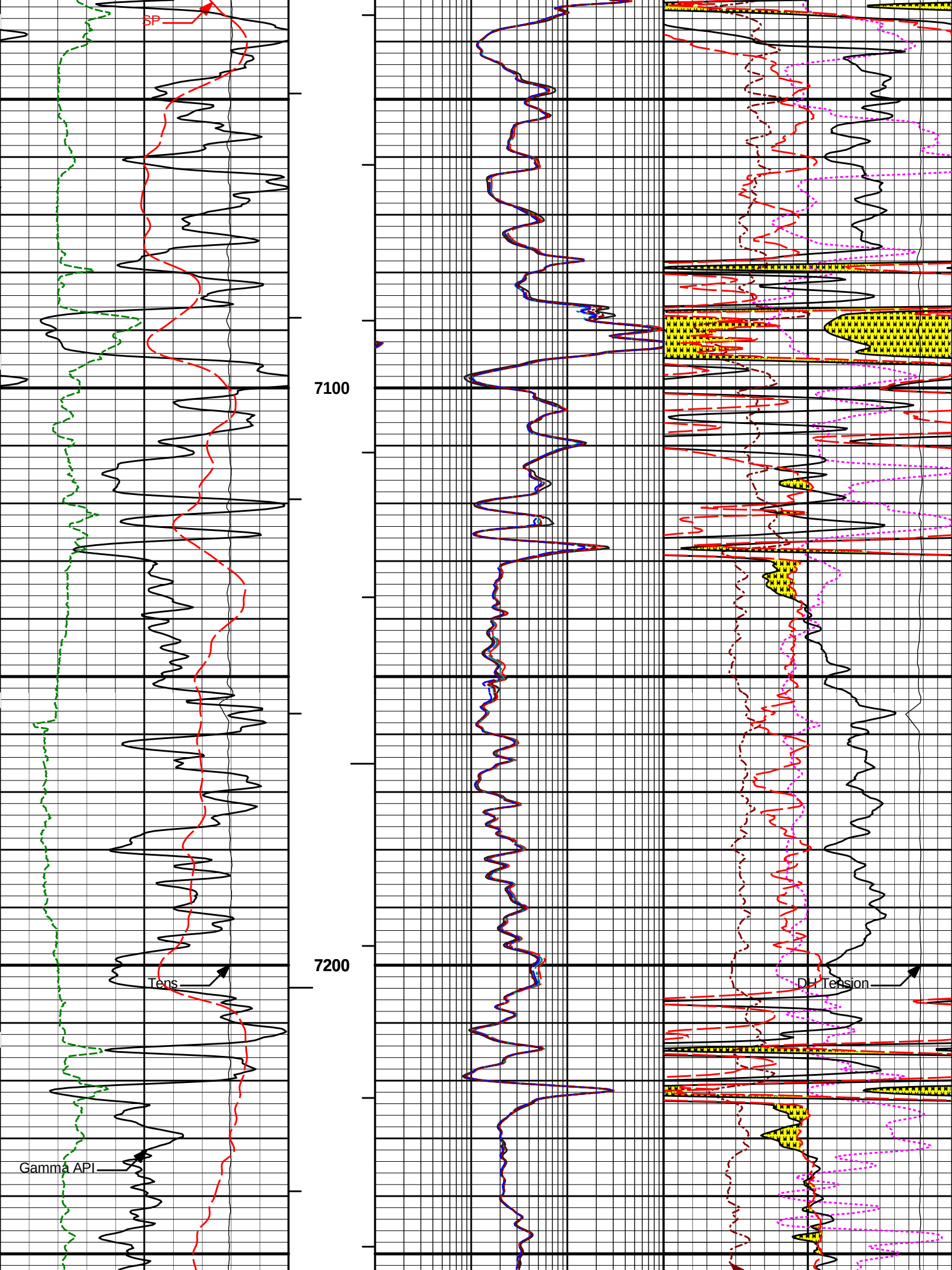
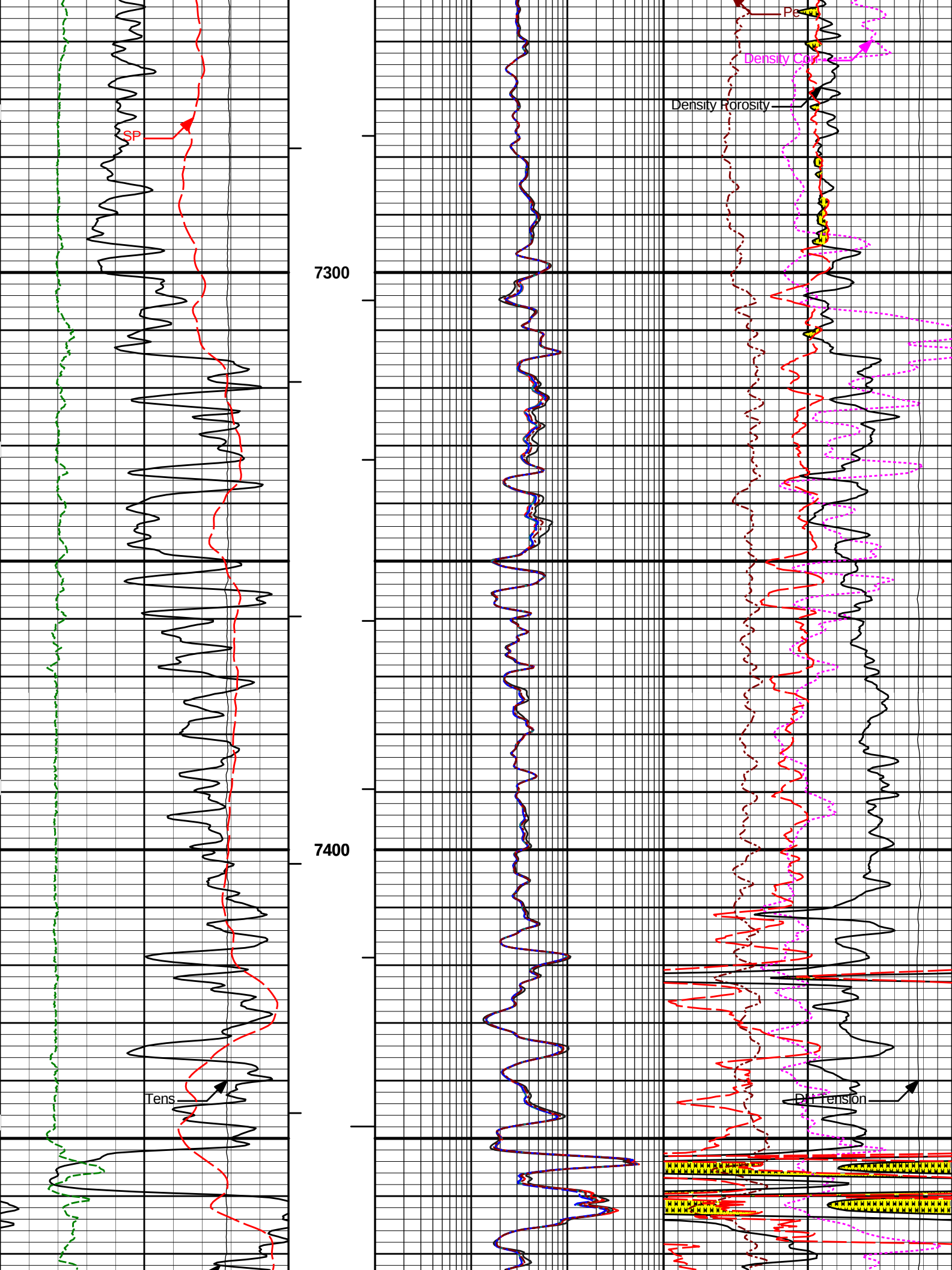
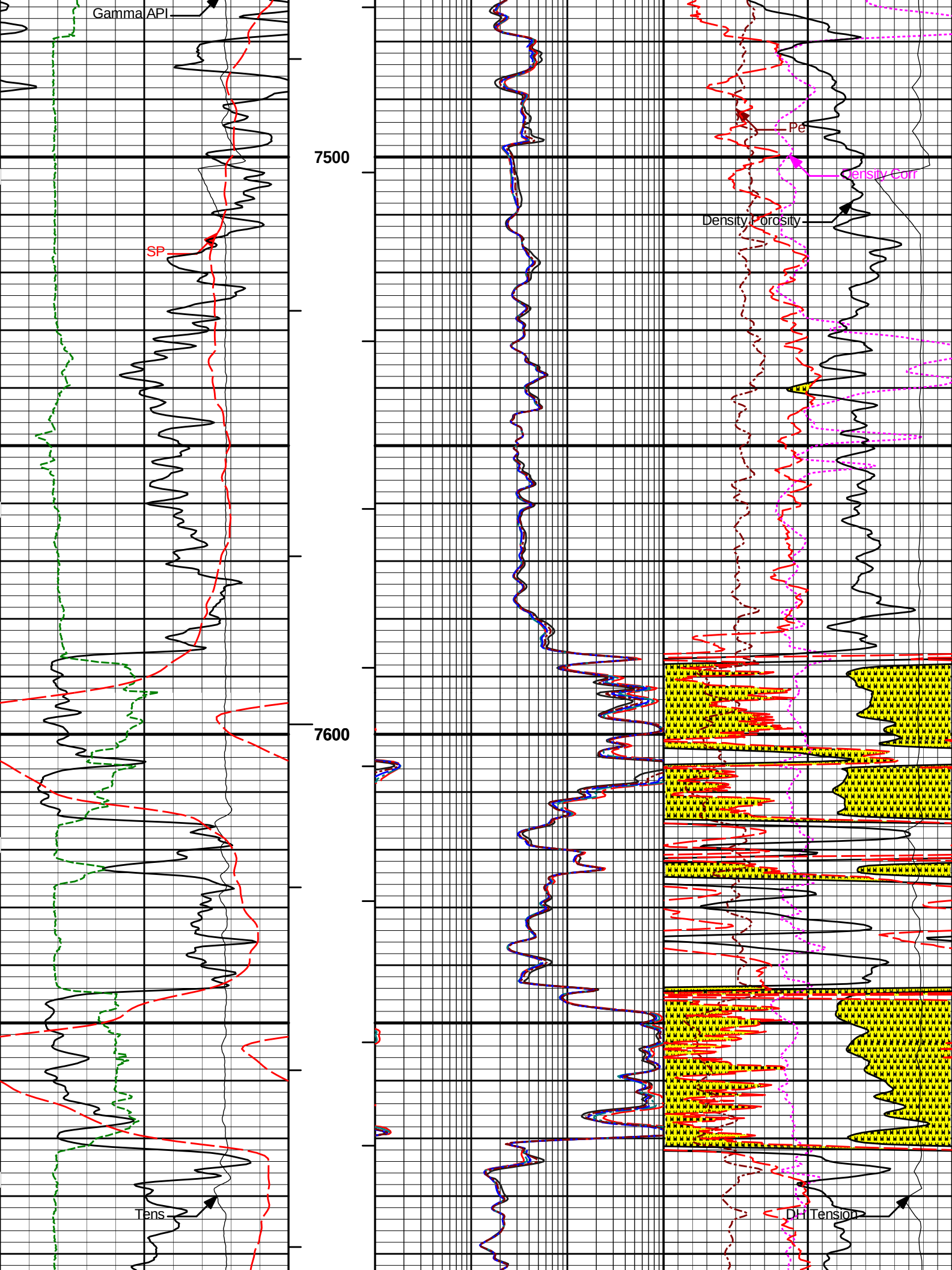
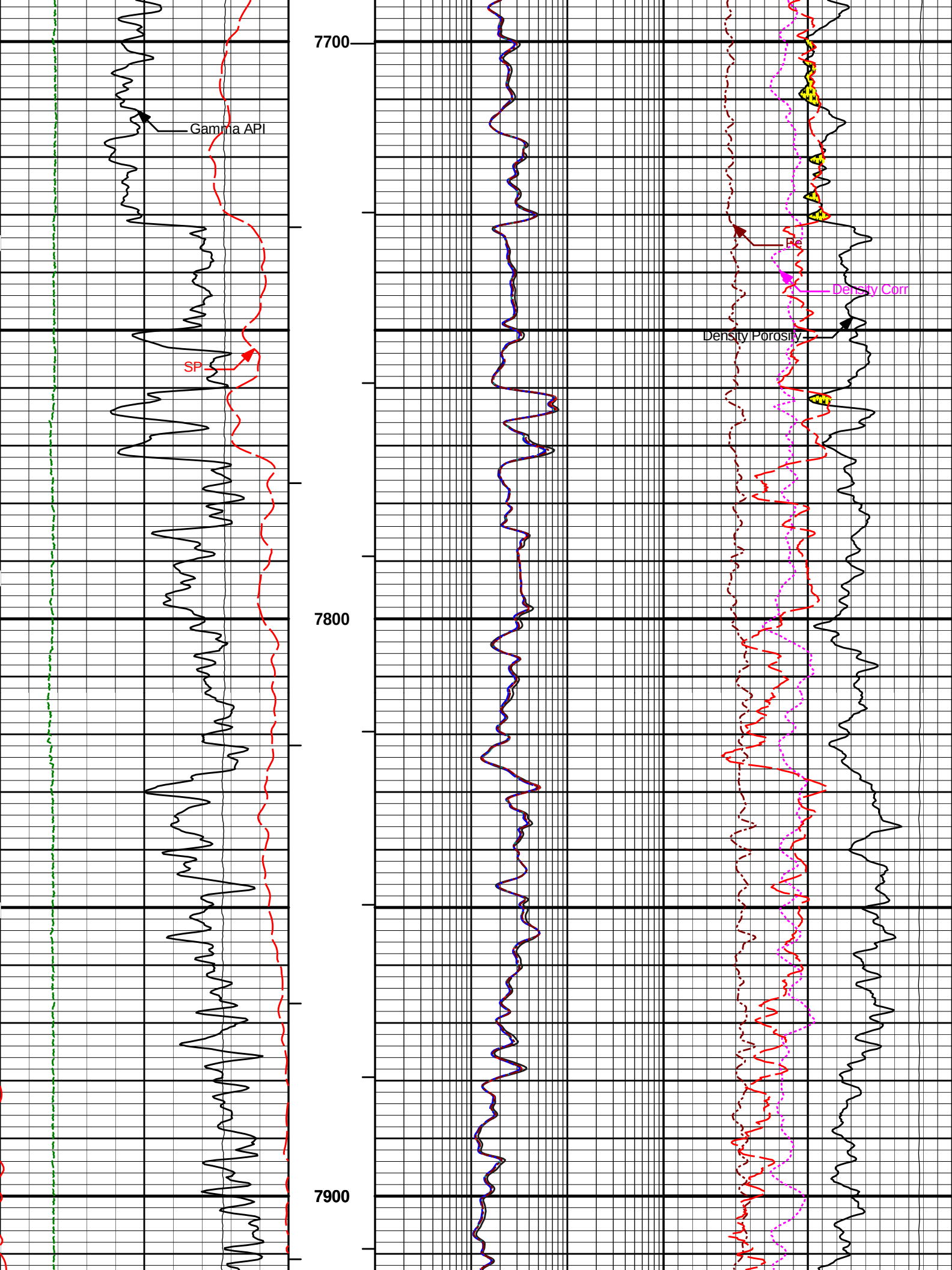
Density Porosity
SP

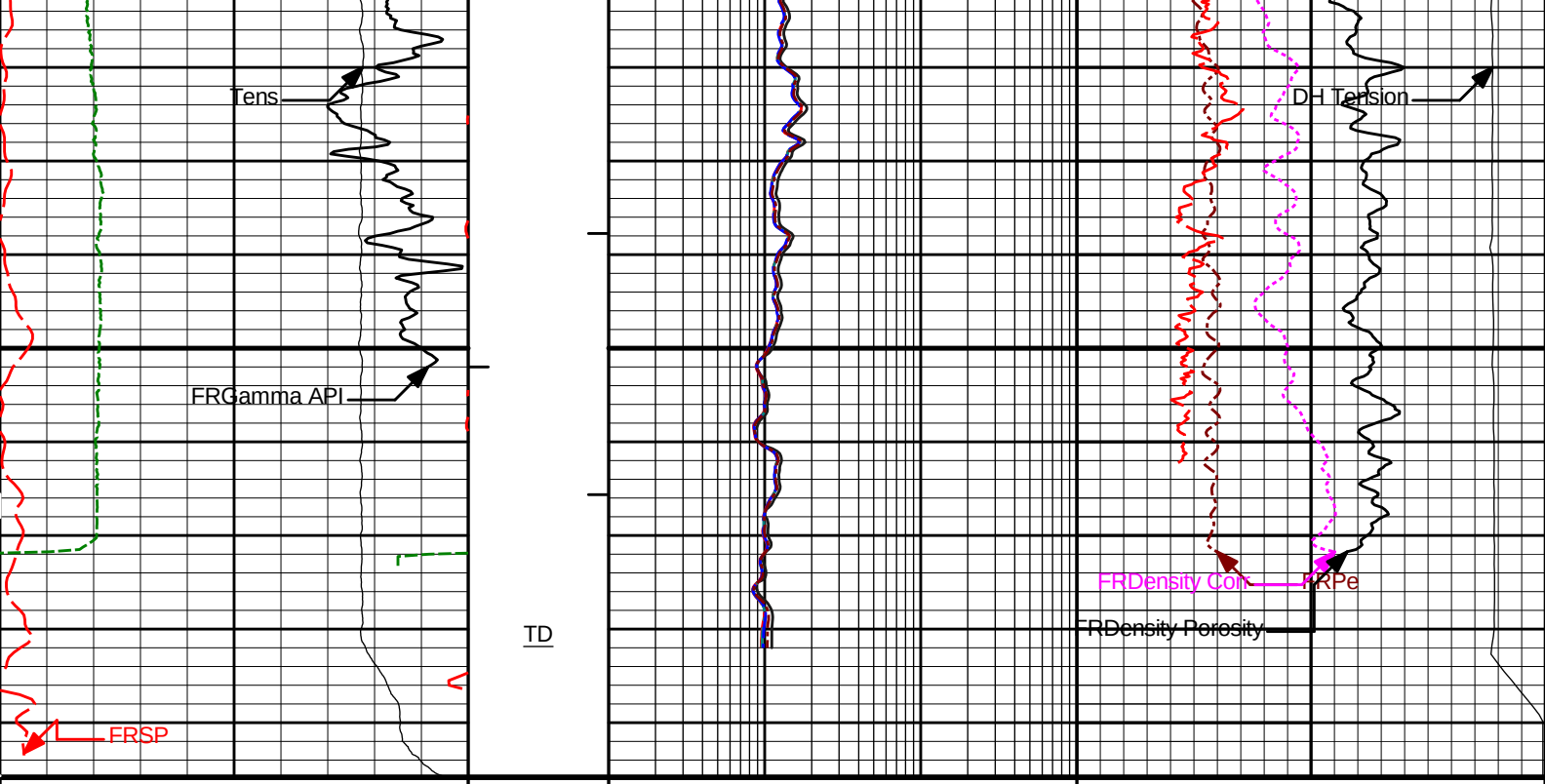

6900
7000
Tens
Gamma API
DH Tension
Pe
Density Corr
Density Porosity


SP
7100
7200
Tens
DH Tension
Gamma API


Pe
Density Cor
Density Porosity
SP
7300
7400
Tens
DH Tension


Gamma API
SP
Tens
7500
7600
Pe
Density Corr
Density Porosity
DH Tension


7700
7800
7900
Gamma API
SP
Pe
Density Corr
Density Porosity



0	SP	100	1 : 240	1	RT90	1K	-0.25	Density Corr	0.25
	millivolts				Ohm-m			gram per cc	
0	Gamma API	150	BHVT	1	RT60	1K	0	Pe	10
	api				Ohm-m				
6	Caliper	16	AHVT	1	RT30	1K	30	Density Porosity	-10
	inches				Ohm-m			percent	
10K	Tens	0		1	RT20	1K	30	Neutron Porosity	-10
	pounds				Ohm-m			percent	
				1	RT10	1K	10K	DH Ten	0
					Ohm-m			pounds	

HALLIBURTON

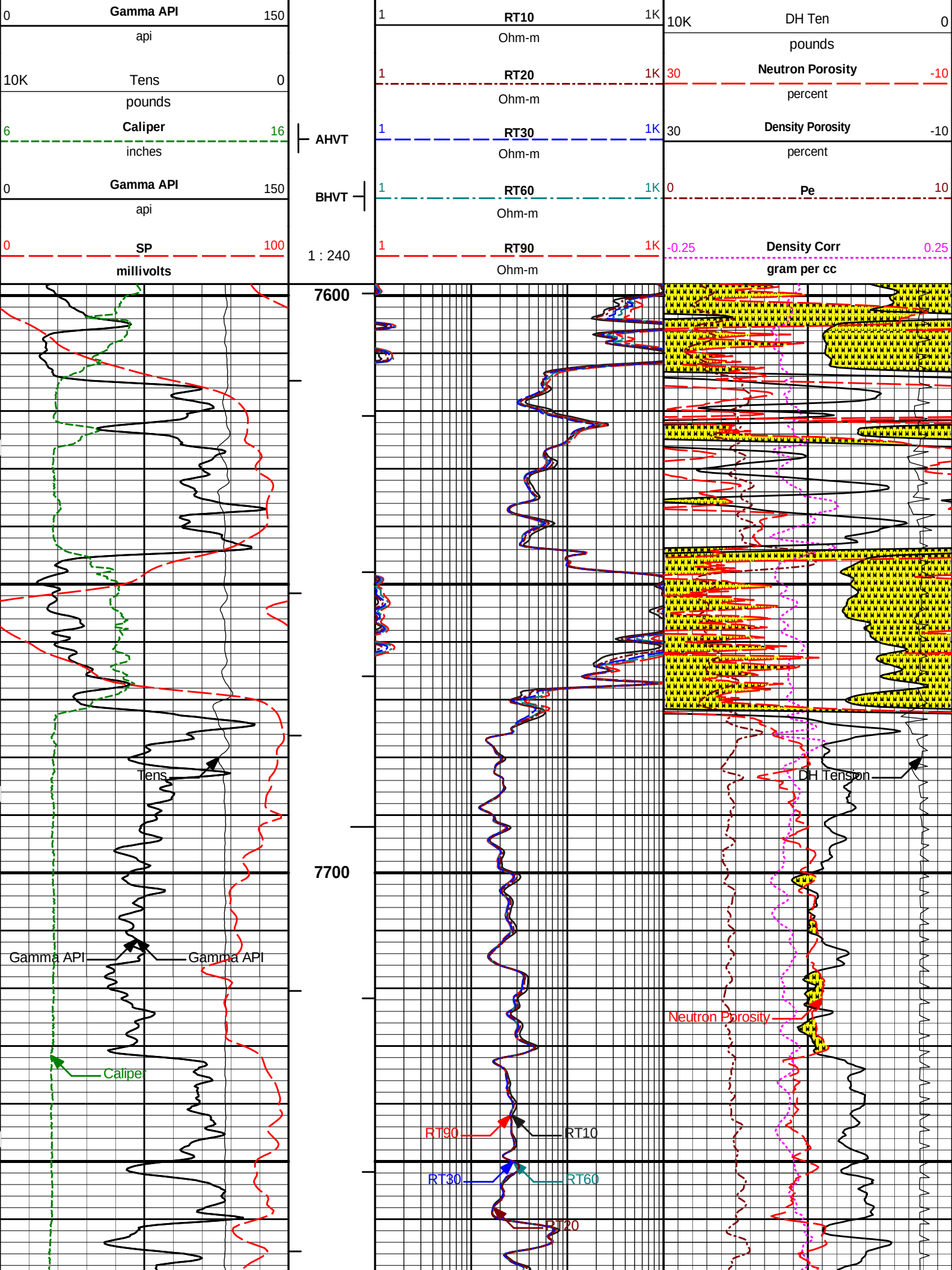
Plot Time: 22-Jul-11 15:44:00
Plot Range: 42.33 ft to 7995.67 ft
Data: BBJOLL42D20_691\Well Based**
Plot File: \\COMP\BBC_9MC_COMP

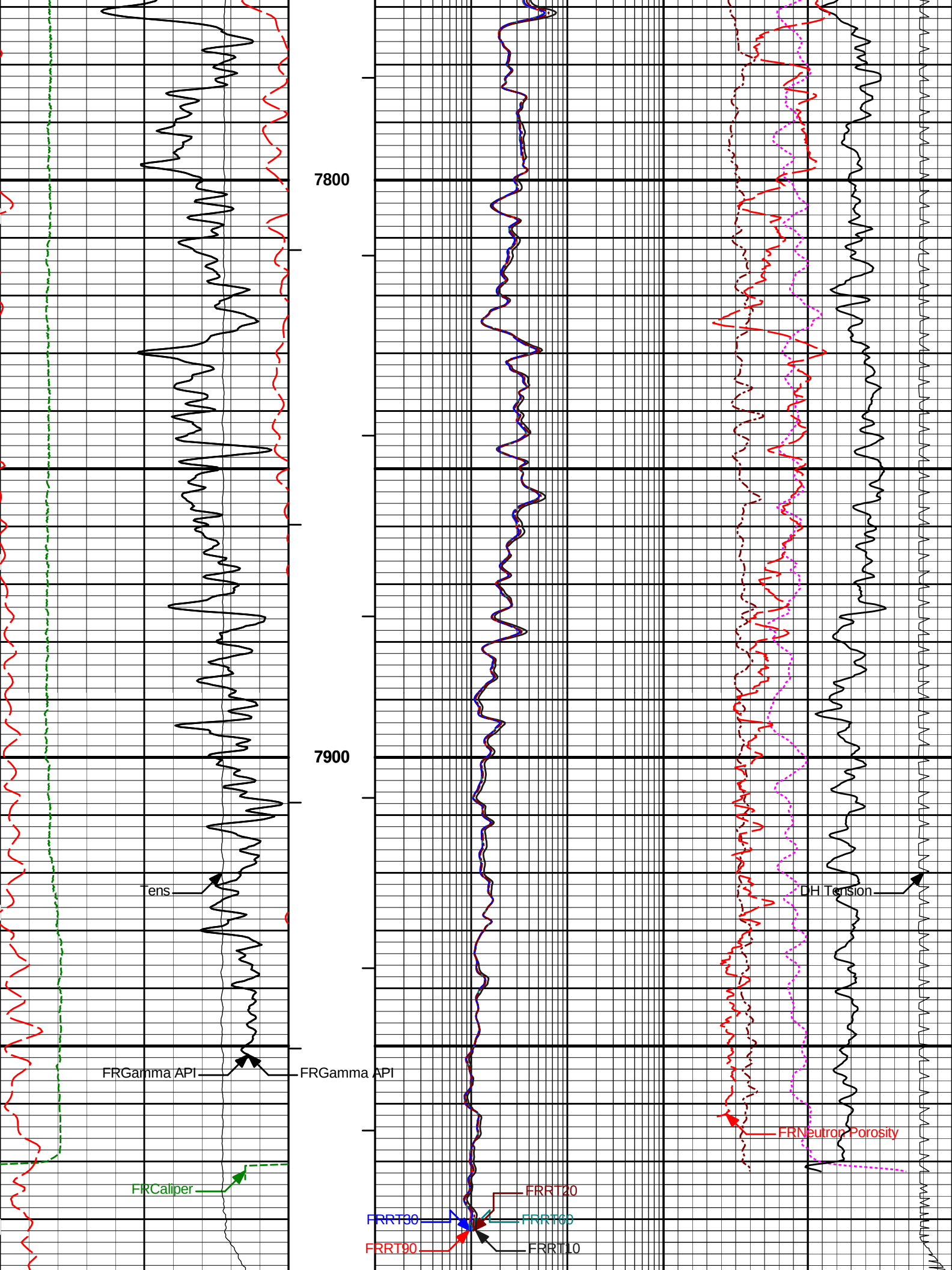
MAIN PASS 5" = 100'

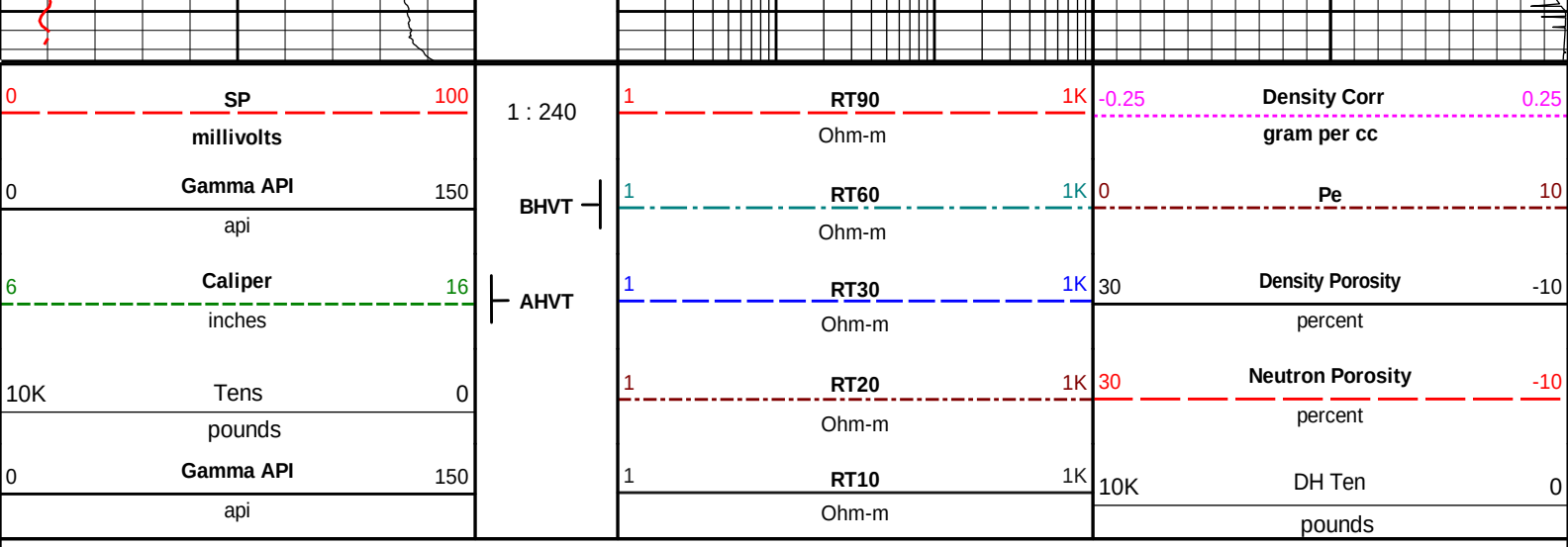
HALLIBURTON

Plot Time: 22-Jul-11 15:44:00
Plot Range: 7598 ft to 7995.25 ft
Data: BBJOLL42D20_691\Well Based\REPEAT*
Plot File: \\COMP\BBC_9MC_COMP

REPEAT SECTION 5" = 100'


0
Gamma API
150
api
10K
Tens
0
pounds
6
Caliper
16
inches
0
Gamma API
150
api
0
SP
100
millivolts
1 : 240
AHVT
BHVT
1
RT10
1K
Ohm-m
1
RT20
1K
Ohm-m
1
RT30
1K
Ohm-m
1
RT60
1K
Ohm-m
1
RT90
1K
Ohm-m
10K
DH Ten
0
pounds
30
Neutron Porosity
-10
percent
30
Density Porosity
-10
percent
0
Pe
10
-0.25
Density Corr
0.25
gram per cc
7600
7700
Tens
DH Tension
Gamma API
Gamma API
Caliper
Neutron Porosity
RT90
RT10
RT30
RT60
RT20


7800
7900
Tens
DH Tension
FRGamma API
FRGamma API
FRNeutron Porosity
FRCaliper
FRRT20
FRRT30
FRRT60
FRRT90
FRRT10



HALLIBURTON

Plot Time: 22-Jul-11 15:44:04
Plot Range: 7598 ft to 7995.25 ft
Data: BBJOLL42D20_691\Well Based\REPEAT*
Plot File: \\COMP\BBC_9MC_COMP

REPEAT SECTION 5" = 100'

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	**GTET - 11004661**	**Reference Calibration Date:**	**26-May-11 06:12:39**
Engineer:	**J. KRONABLE**	**Calibration Date:**	**15-Jul-11 09:44:38**
Software Version:	**WL INSITE R3.2.1 (Build 7)**	**Calibration Version:**	**1**

Calibrator Source S/N: 110
Calibrator API Reference:239.00 api
Equivalent Calibrator API Reference:243.2 api

Measurement	Measured	Calibrated	Units
Background	41.4	42.0	api
Background + Calibrator	281.1	285.2	api
Calibrator	243.8	243.2	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11004661**	**Reference Calibration Date:**	**15-Jul-11 09:44:38**
Engineer:	**J. KRONABLE**	**Calibration Date:**	**22-Jul-11 08:30:51**
Software Version:	**WL INSITE R3.2.1 (Build 7)**	**Calibration Version:**	**1**

Calibrator Source S/N: 110
Calibrator API Reference:239.00 api
Equivalent Calibrator API Reference:243.2 api

Field Verification	Shop	Field	Units
Background	42.0	50.7	api
Background + Calibrator	285.2	297.4	api
Calibrator	243.2	246.7	api

Shop	Field	Difference	Tolerance
243.2	246.7	-3.5	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 10993888 **Reference Calibration Date:** 16-Jul-11 12:00:50

Engineer: J. KRONABLE **Calibration Date:** 16-Jul-11 12:15:09

Software Version: WL INSITE R3.2.1 (Build 7) **Calibration Version:** 1

Logging Source S/N: DSN-388

Tank Serial Number: GJWATERTANK

Reference value assigned to Tank: 52.750

Snow Block S/N: GJ

Calibration Tank Water Temperature: 71 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS

Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.976	0.980	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):	0.2157	0.2169	0.0012	+/- 0.0020
Calibrated Ratio:	9.89	9.93	0.040	+/- 0.050

VERIFIER

Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0773	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:** 16-Jul-11 12:15:09

Engineer: J. KRONABLE **Calibration Date:** 22-Jul-11 09:00:19

Software Version: WL INSITE R3.2.1 (Build 7) **Calibration Version:** 1

Logging Source S/N: DSN-388

Snow Block S/N: GJ

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0773	0.0783	0.0010	+/- 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:** 13-Jul-11 23:48:08

Engineer: J. KRONABLE **Calibration Date:** 14-Jul-11 00:13:41

Logging Source S/N: 5153GW
Aluminum Block S/N: 63094 Density: 2.610g/cc Pe: 3.100
Magnesium Block S/N: 63387 Density: 1.685g/cc Pe: 2.594

DENSITY CALIBRATION SUMMARY

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0427	1.0596	0.90 - 1.10
Near Dens Gain	1.0035	1.0168	0.90 - 1.10
Near Peak Gain	0.9679	0.9873	0.90 - 1.10
Near Lith Gain	0.9217	0.9303	0.90 - 1.10
Far Bar Gain	1.0089	1.0121	0.90 - 1.10
Far Dens Gain	0.9978	0.9999	0.90 - 1.10
Far Peak Gain	0.9880	0.9862	0.90 - 1.10
Far Lith Gain	0.9626	0.9629	0.90 - 1.10
Near Bar Offset	-0.2761	-0.4345	NONE
Near Dens Offset	0.0867	-0.0332	NONE
Near Peak Offset	0.3896	0.2252	NONE
Near Lith Offset	0.7509	0.6780	NONE
Far Bar Offset	-0.0079	-0.0382	NONE
Far Dens Offset	0.0753	0.0573	NONE
Far Peak Offset	0.1416	0.1570	NONE
Far Lith Offset	0.3058	0.3007	NONE
Near Bar Background	938.66	937.58	700 - 1450
Near Dens Background	312.95	312.57	230 - 480
Near Peak Background	136.25	134.88	100 - 210
Near Lith Background	168.10	168.06	125 - 260
Far Bar Background	567.27	567.87	450 - 900
Far Dens Background	219.03	220.19	175 - 345
Far Peak Background	85.47	87.57	70 - 140
Far Lith Background	90.70	89.70	75 - 145

CALIBRATION BLOCK SUMMARY

Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.685	1.685	0.000	+/- 0.015
Pe	2.561	2.557	-0.004	+/- 0.150
ALUMINUM				
Density (g/cc)	2.610	2.610	0.000	+/- 0.01500
Pe	3.077	3.066	-0.011	+/- 0.150

TOOL SUMMARY

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0012	+/- 0.0110	0.0015	+/- 0.0140
Magnesium Block	-0.0007	+/- 0.0110	-0.0005	+/- 0.0140
Aluminum Block	-0.0003	+/- 0.0110	-0.0004	+/- 0.0140
Resolution	9.50	6.00 - 11.50	9.49	6.00 - 11.50

Internal Verifier(B+D+P+L)	1553	1200 - 2700	965	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:**	**14-Jul-11 00:12:41**
Engineer:	**J. KRONABLE**	**Calibration Date:**	**22-Jul-11 08:56:49**
Software Version:	**WL INSITE R3.2.1 (Build 7)**	**Calibration Version:**	**1**

Pad Temperature: 73.4 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	**Shop**	**Field**	**Change**	**Control Limit +/-**
Near (B+D+P+L) cps	1553.090	1553.768	0.678	15.862
Far (B+D+P+L) cps	965.332	959.801	-5.531	16.717
Near Resolution	9.50	9.56	0.060	0.50
Far Resolution	9.49	9.56	0.070	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:**	**03-Jun-11 09:12:57**
Engineer:	**W. MATSON**	**Calibration Date:**	**16-Jul-11 09:37:21**
Software Version:	**WL INSITE R3.2.1 (Build 7)**	**Calibration Version:**	**1**

CALIBRATION COEFFICIENTS			
Measurement	**Previous Value**	**New Value**	**Control Limit On New Value**
Pad Offset	-1290.48	-1475.34	-7000.00 - -1000.00
Pad Gain	0.0003801	0.0003752	0.000200 - 0.000600
Arm Offset	-1327.38	-1505.54	-5000.00 - 3000.00
Arm Gain	0.0005221	0.0005269	0.000300 - 0.000700
Arm Power	-0.000005263	-0.000005579	-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)	2.10	2.00	-0.10	+/- 0.20
Medium Ring (in)	3.87	3.75	-0.12	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.64	6.50	-0.14	+/- 0.20
Medium Ring (in)	8.38	8.25	-0.13	+/- 0.20

Large Ring (in)	15.13	15.00	-0.13	+/- 0.20

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

PASS/FAIL SUMMARY	
Calibration-Coefficients Range Check:	Passed

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name:	**ACRt - 90194258-E7486-**	**Reference Calibration Date:**	**20-Apr-11 09:31:46**
Engineer:	**J. KRONABLE**	**Calibration Date:**	**12-May-11 08:39:50**
Software Version:	**WL INSITE R3.2.1 (Build 7)**	**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	0.9959	1.05	0.95	0.9974	1.05	0.95	0.9947	1.05
A2 (50")	0.95	1.0051	1.05	0.95	1.0065	1.05	0.95	1.0042	1.05
A3 (29")	0.95	0.9964	1.05	0.95	0.9972	1.05	0.95	0.9935	1.05
A4 (17")	0.95	0.9895	1.05	0.95	0.9890	1.05	0.95	0.9864	1.05
A5 (10")	N/A	N/A	N/A	0.95	0.9832	1.05	0.95	0.9793	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9883	1.05	0.95	0.9843	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	-0.557	2	-6	-4.039	-2	-8	-5.184	-2
A2 (50")	-7	-2.016	-1	-6	-3.873	-2	-7	-4.681	-2
A3 (29")	-27	-10.979	-9	-9	-3.410	-3	-7	-2.863	-1
A4 (17")	-180	-101.126	-60	-45	-31.893	-15	-39	-25.562	-13
A5 (10")	N/A	N/A	N/A	-150	-66.665	-50	-80	-34.234	-10
A6 (6")	N/A	N/A	N/A	175	271.250	525	90	141.580	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.8496	1.3
36K	1.0	1.8032	2.0
72K	1.0	1.0954	2.0

R-MUD VERIFICATION

Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	1.004	1.05

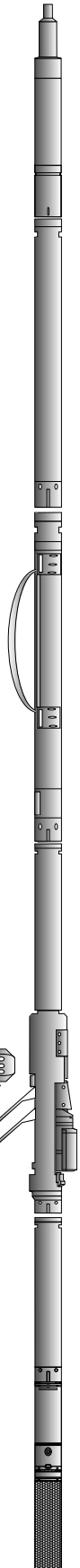
CALIBRATION SUMMARY

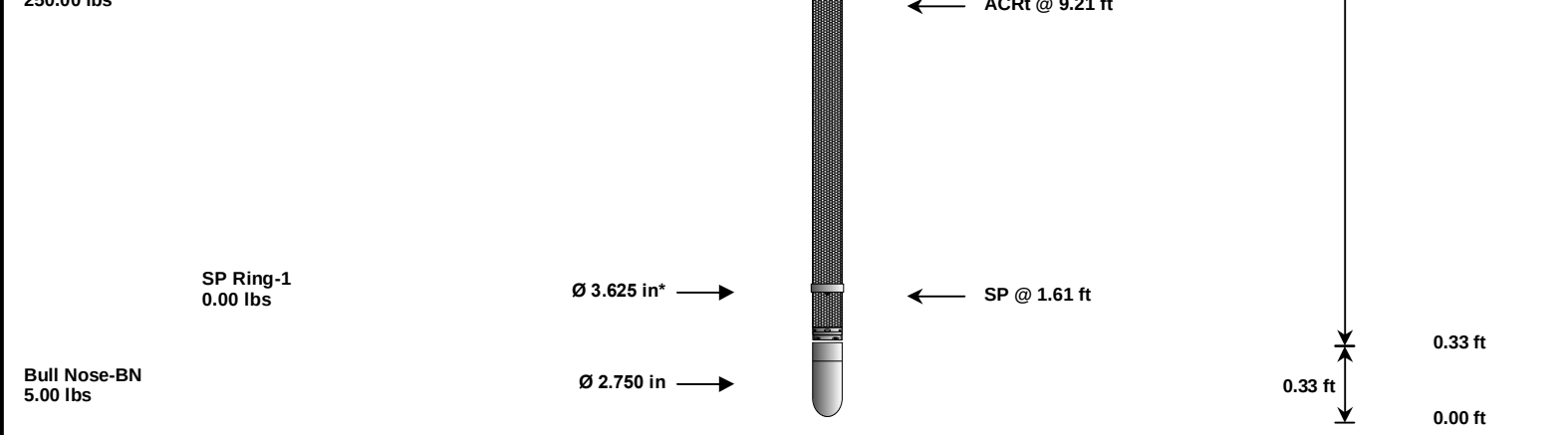
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11004661						
Gamma Ray Calibrator	243.2	246.7	----------	-3.5	+/- 9.00	api
DSNT-10993888						
Snow-Block Porosity	0.0773	0.0783	----------	-0.0010	+/- 0.0150	decp
SDLT-10951314						
Near(B+D+P+L)	1553.090	1553.768	----------	-0.678	+/-15.862	cps
Far(B+D+P+L)	965.332	959.801	----------	5.531	+/-16.717	cps
Pad Extension	3.75	----------	----------	0.00	+/-0.20	in
Ring Diameter	8.25	----------	----------	0.00	+/-0.20	in
ACRt-90194258-E7486-						
Mud Cell	1.004			0.000		ohm-m

Mud Cell	1.004	----------	----------	0.000	----------	ohm-m

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						54.85 ft
RWCH-A032 135.00 lbs		Ø 3.625 in		Load Cell @ 51.17 ft BH Temperature @ 50.60 ft	6.25 ft	
						48.60 ft
GTET-11004661 165.00 lbs		Ø 3.625 in		GammaRay @ 42.54 ft	8.52 ft	
						40.08 ft
DSNT-10993888 174.00 lbs	DSN Decentralizer- 10839203 6.60 lbs	Ø 3.625 in* Ø 3.625 in		DSN Far @ 33.15 ft DSN Near @ 32.40 ft	9.69 ft	
						30.40 ft
SDLT-10951314 360.00 lbs		Ø 4.500 in Ø 4.750 in		SDL Microlog @ 22.58 ft SDL Caliper @ 22.40 ft SDL @ 22.39 ft	10.81 ft	
						19.58 ft
				Mud Resistivity @ 13.19 ft		
ACRt-90194258- E7486- 250.00 lbs		Ø 3.625 in		ACRt @ 9.81 ft	19.25 ft	



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	A032	135.00	6.25		48.60	300.00
GTET	Gamma Telemetry Tool	11004661	165.00	8.52		40.08	60.00
DSNT	Dual Spaced Neutron	10993888	174.00	9.69		30.40	60.00
DCNT	DSN Decentralizer	10839203	6.60	5.13	*	33.73	300.00
SDLT	Spectral Density Tool	10951314	360.00	10.81		19.58	60.00
ACRt	Array Compensated True Resistivity	90194258-E7486-	250.00	19.25		0.33	300.00
SP	SP Ring	1	0.00	0.25	*	1.61	300.00
BLNS	Bull Nose	BN	5.00	0.33		0.00	300.00
Total			**1,095.60**	**54.85**			

* Not included in Total Length and Length Accumulation.

Data: BBJOLL42D20_691\0001 TRIPLE\IDLE **Date: 22-Jul-11 12:33:54**

COMPANY	**BILL BARRETT CORPORATION**		
WELL	**JOLLEY 42D-20-691**		
FIELD	**JOLLEY**		
COUNTY	**GARFIELD**	STATE	**CO**

HALLIBURTON

SPECTRAL DENSITY
DUAL SPACED NEUTRON
ARRAY COMPENSATED
TRUE RESISTIVITY