

**HALLIBURTON**


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

COMPANY				GREAT BEAR PETROLEUM			
WELL				ALCOR #1			
FIELD				WILDCAT			
COUNTY				NORTH SLOPE			
STATE				ALASKA			
Permanent Datum		GL		Sect. 5		Twp. 7N	
Log measured from		DF		Location		SURFACE: 2452' FSL & 652' FEL	
Drilling measured from		DF		Other Services:		WSTT CSNG	
Date	10-Jul-12	Elev. 178.00 ft		Elev.: K.B.		187.00 ft	
Run No.	ONE	D.F.		D.F.		186.00 ft	
Depth - Driller	8320.00 ft	G.L.		21.00 ft. above perm. Datum		163.70 ft	
Depth - Logger	8319.00 ft						
Bottom - Logged Interval	8310.0 ft						
Top - Logged Interval	CASING						
Casing - Driller	9.625 in	@ 2491.00 ft		@		@	
Casing - Logger	2491.00 ft						
Bit Size	8.500 in	@				@	
Type Fluid in Hole		ENVIRONMUL					
Density	F. Viscosity	9.5 ppq	85.00 spqt				
Alkalinity	P. Viscosity		38.0 cP				
HTHP @ Meas. Temperature	2.4 mpqm	@ 200.00 degF	@			@	
Solids	Wgt. Material		BARITE				
Oil	Water Ratio	80	20				
Water Phase Salinity		234.00 ppm Cl-					
Oil Type	Brine Type						
Electrical Stability		720 V					
Time Since Circulation		12.0 hr					
Time on Bottom		10-Jul-12 12:28					
Max. Rec. Temperature	180.0 degF	@ 8319.0 ft	@			@	
Equipment	Location	11640435	PRUDHOE BA				
Recorded By	C. GULLETT						
Witnessed By	P. STILES						

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Service Ticket No.: N/A						API Serial No.: 50029200260000						PGM Version: WL INSITE R3.6.0 (Build 3)															
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		F. Viscosity																									
Alkalinity		P. Viscosity																									
HTHP @ Meas. Temp.				@				@				RESISTIVITY EQUIPMENT DATA															
Solids		Wgt. Mat.										Run No.		Tool Type & No.		Pad Type		Tool Pos.		Other							
Oil		Water Ratio										ONE		ACRt-		N/A		1.5" STANDOFF		N/A							
Water Phase Salinity														E7818-S1994													
Oil Type		Water Type																									
Electrical Stability																											
EQUIPMENT DATA																											
GAMMA						ACOUSTIC						DENSITY						NEUTRON									
Run No.		ONE				Run No.		ONE				Run No.		ONE				Run No.		ONE							
Serial No.		10995697				Serial No.		126				Serial No.		10951320				Serial No.		11059108							
Model No.		GTET				Model No.		WSTT				Model No.		SDLT				Model No.		DSNT							
Diameter		3.625"				No. of Cent.		2				Diameter		4.5"				Diameter		3.625"							
Detector Model No.		102-T				Spacing		0.5'				Log Type		GAMMA-GAMMA				Log Type		THERMAL							
Type		SCINT.										Source Type		Cs137				Source Type		Am241Be							
Length		8"				LSA [Y/N]		Y				Serial No.		5176 GW				Serial No.		21484B							
Distance to Source		17'				FWDA [Y/N ]		Y				Strength		1.5 Ci				Strength		15 Ci							

GENERAL				GAMMA		ACOUSTIC		DENSITY		NEUTRON				
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	T.D.	CSG.	REC.	0	200	30	190	55.5 usec	45	-15	2.65 g/cc	45	-15	SAND
ONE	T.D.	SURF.	REC.	0	200									
DIRECTIONAL INFORMATION														
Maximum Deviation @									KOP @					
Remarks:														
RWCH-SWIVEL-GTET-WSST-OMRI WERE RAN IN COMBINATION.														
ANNULAR VOLUME CALCULATED FOR 7" CASING.														
TOOL STRING AND LOG PRESENTATION PER CUSTOMER REQUEST.														
LATITUDE: 69° 59' 22.812" N														
LONGITUDE: 148° 40' 54.588" W														
YOUR CREW TODAY: D. CLEARY AND J. CUNNINGHAM.									RIG: NABORS #105.					
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES - PRUDHOE BAY, AK.														
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.														
HALLIBURTON														



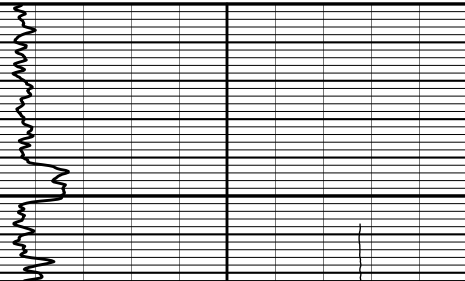
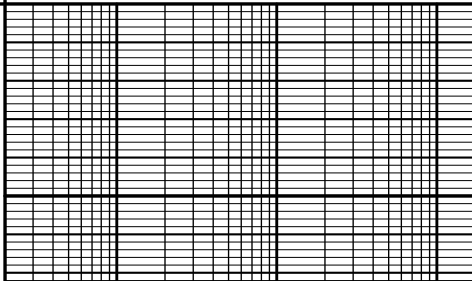
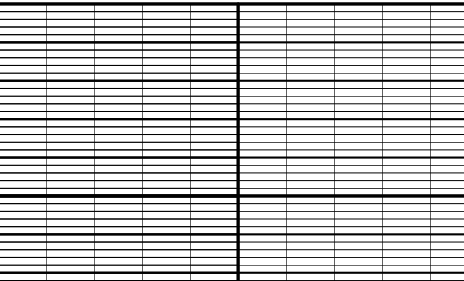
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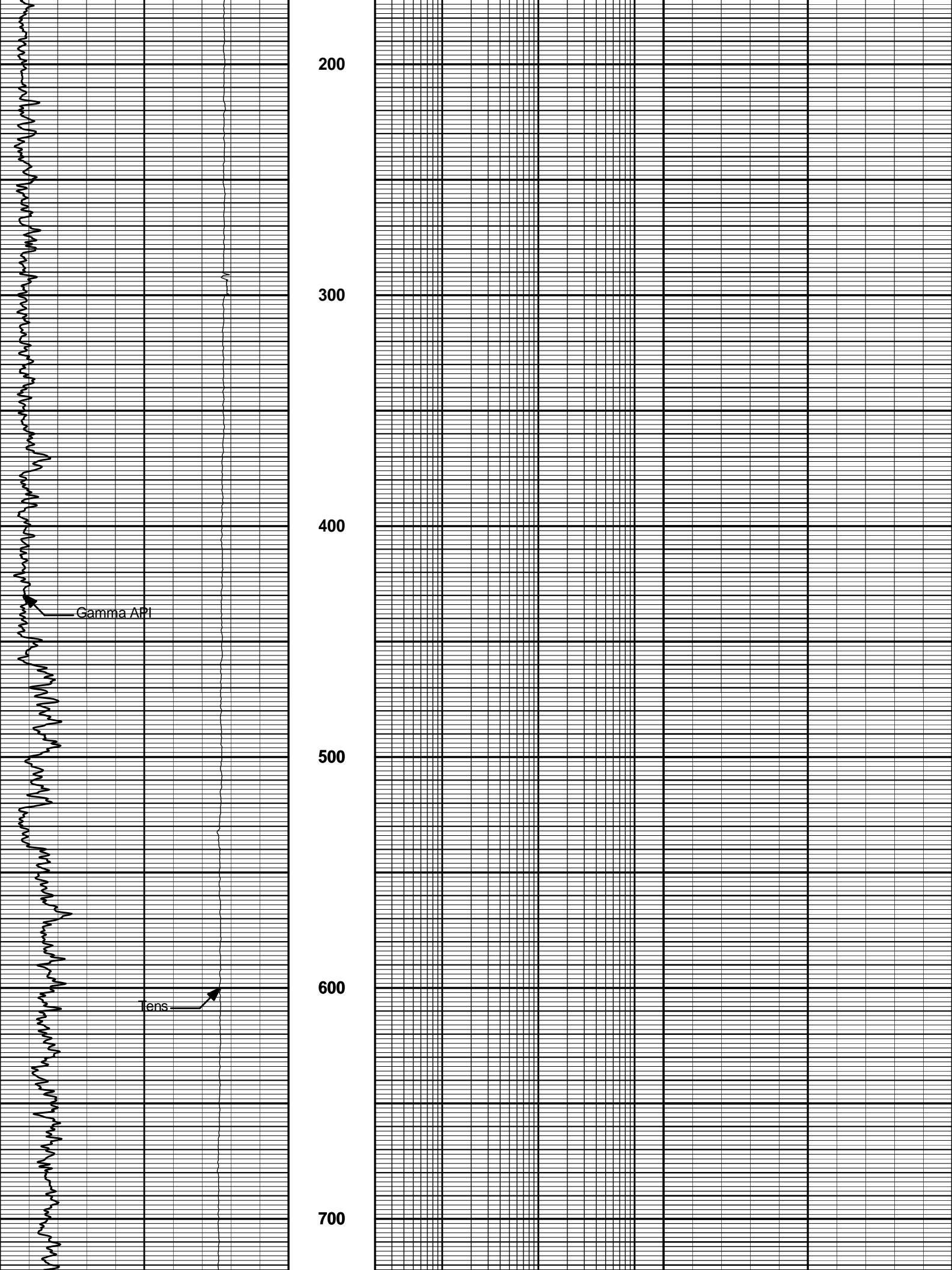
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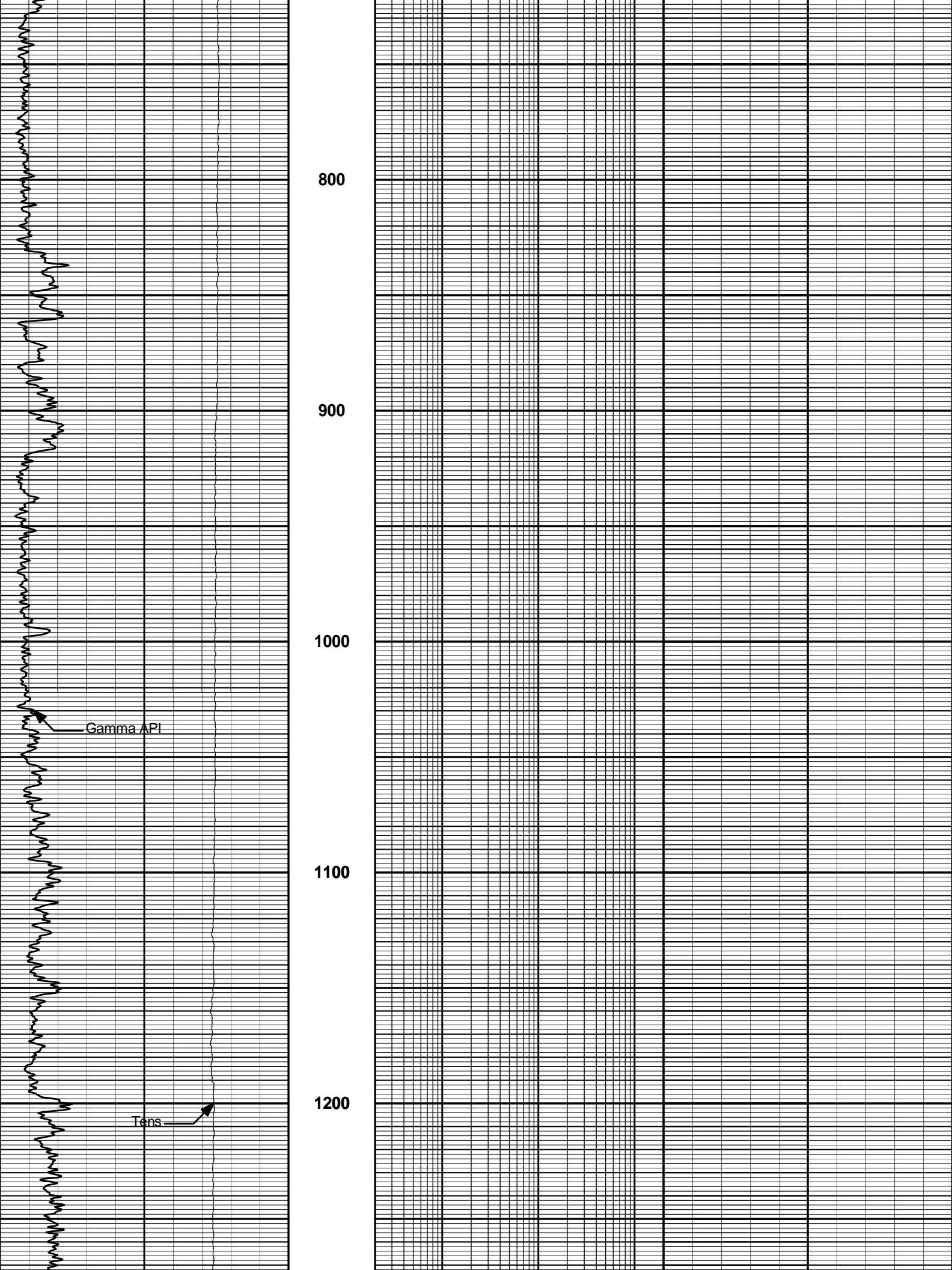
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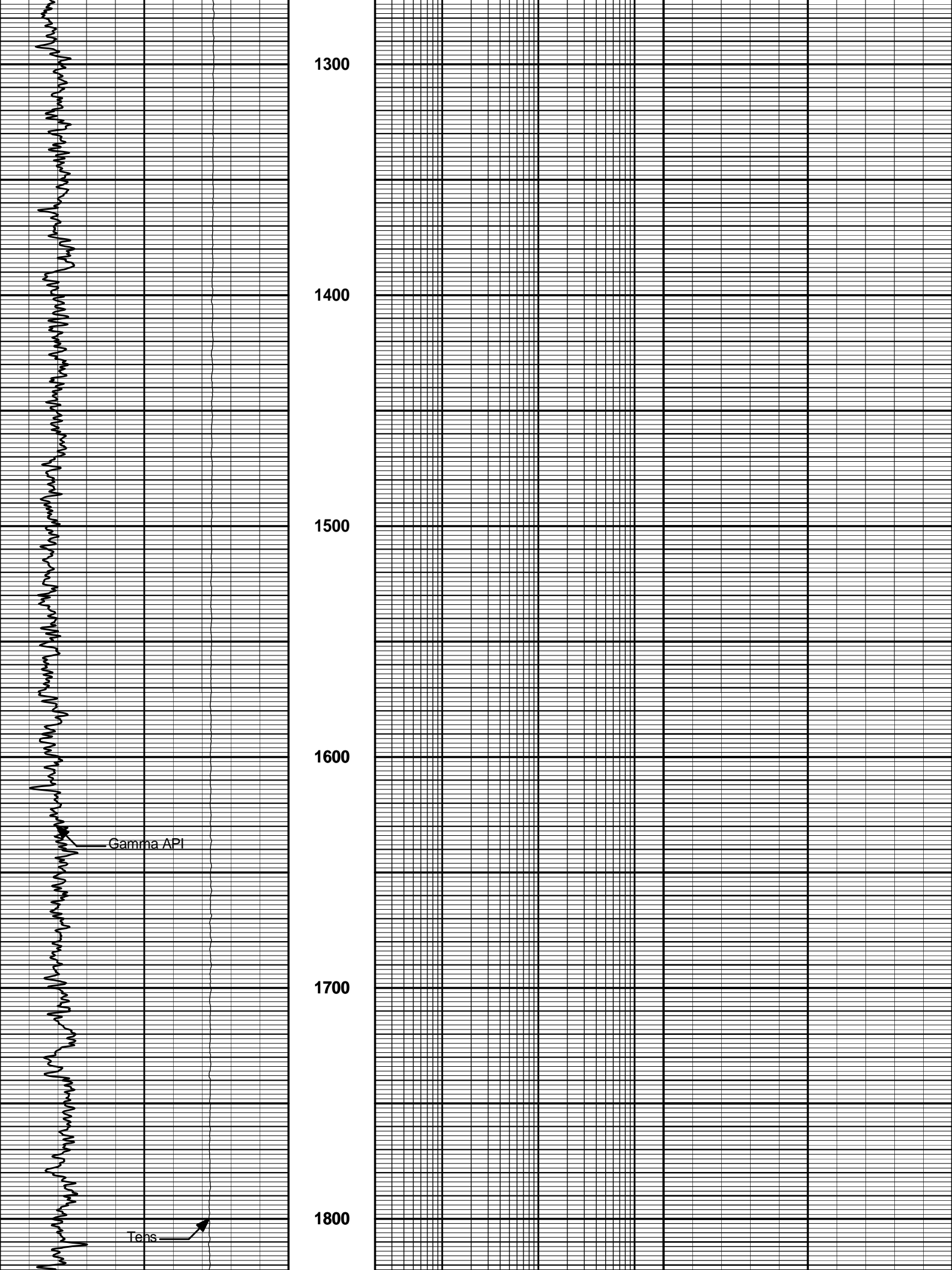
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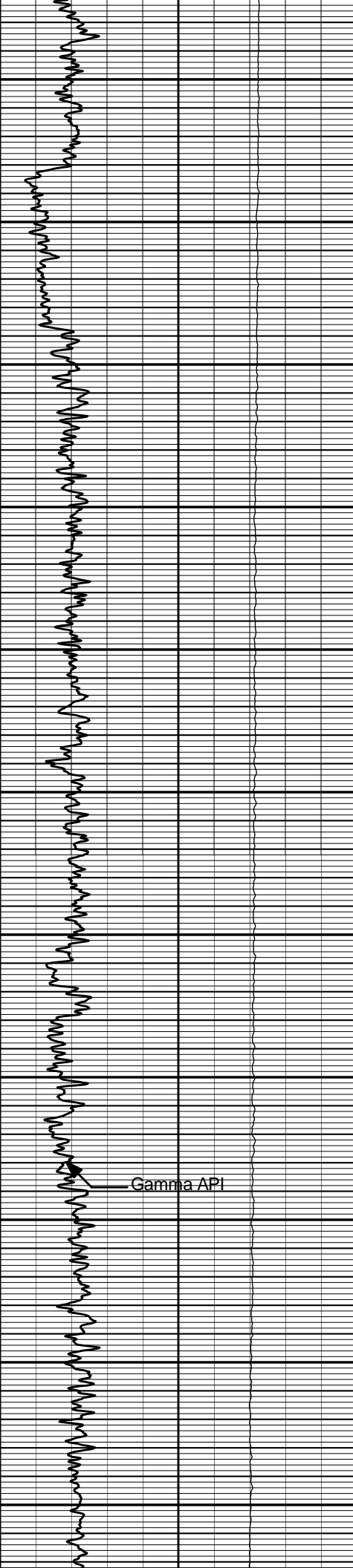
MAIN PASS 2" = 100'

			0.2		RT10		200													
			Ohm-m																	
			0.2		RT20		200		45		Neutron Porosity		-15							
			Ohm-m								percent									
10K			Tens		0				0.2		RT30		200		45		Density Porosity		-15	
			pounds								Ohm-m						percent			
6			Caliper		16				0.2		RT60		200		0		Pe		10	
			inches						Ohm-m											
0			Gamma API		200		1 : 600		0.2		RT90		200		-0.25		DensityCorr		0.25	
			api						Ohm-m								gram per cc			
							100													









1900

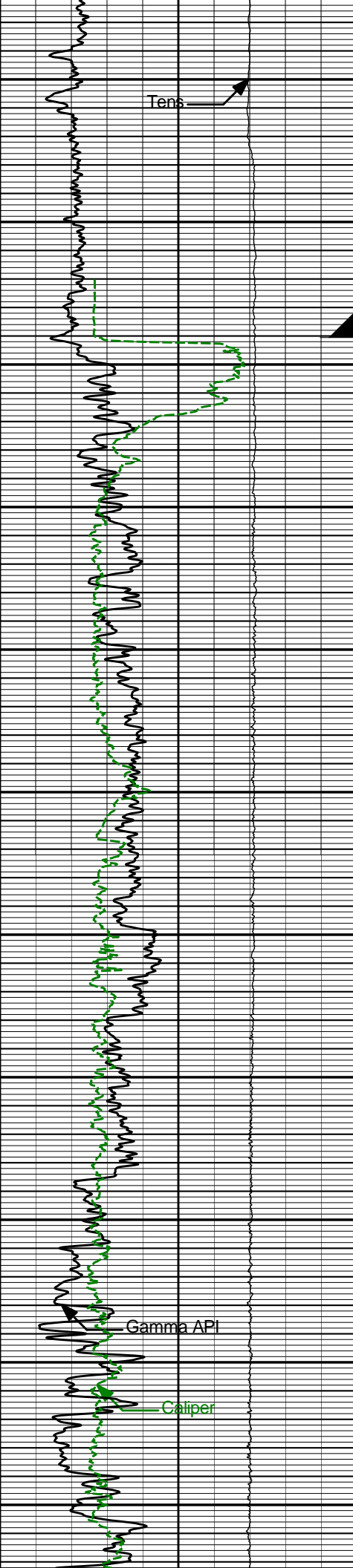
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2200

2300

Gamma API



2400

CSG

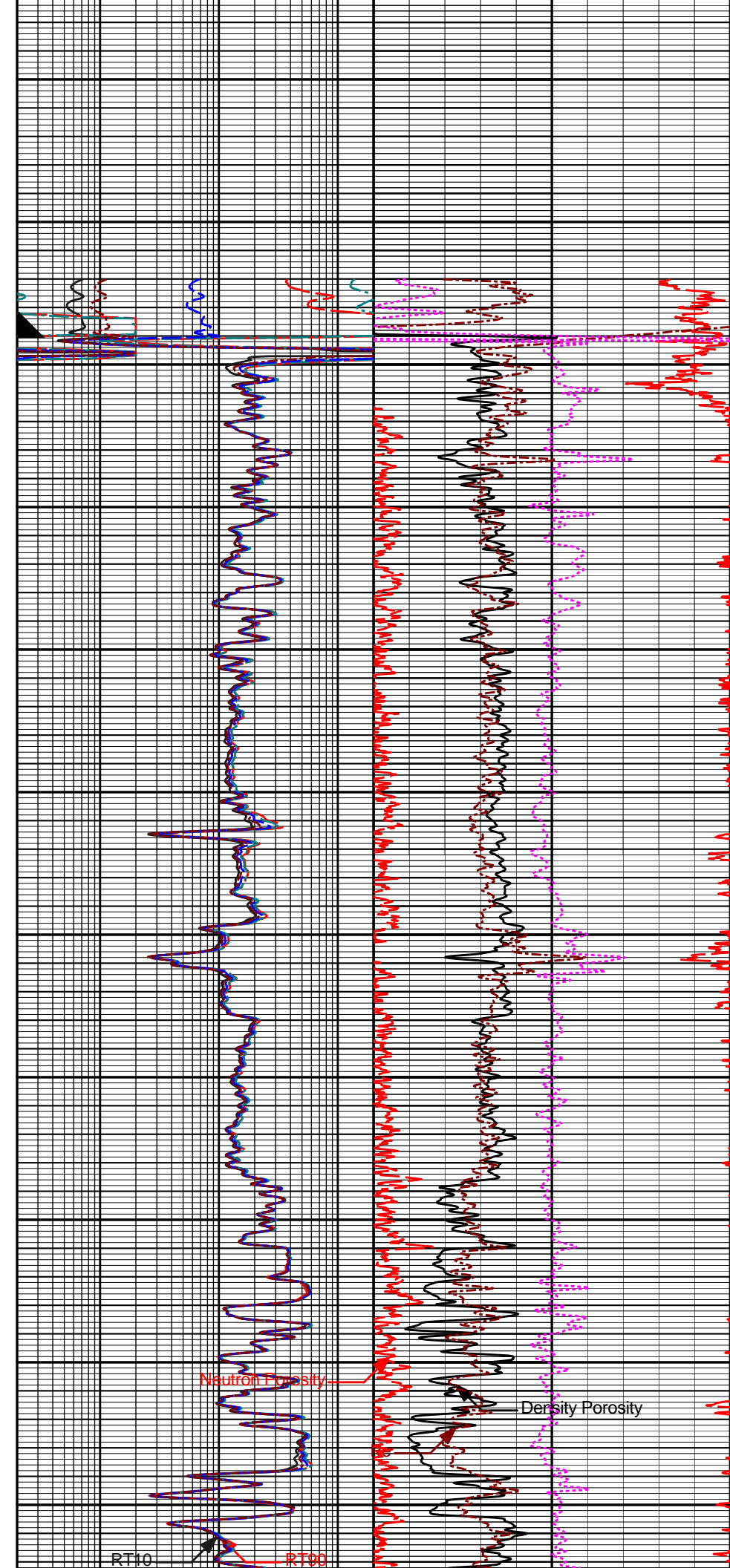
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2600

2700

2800

2900

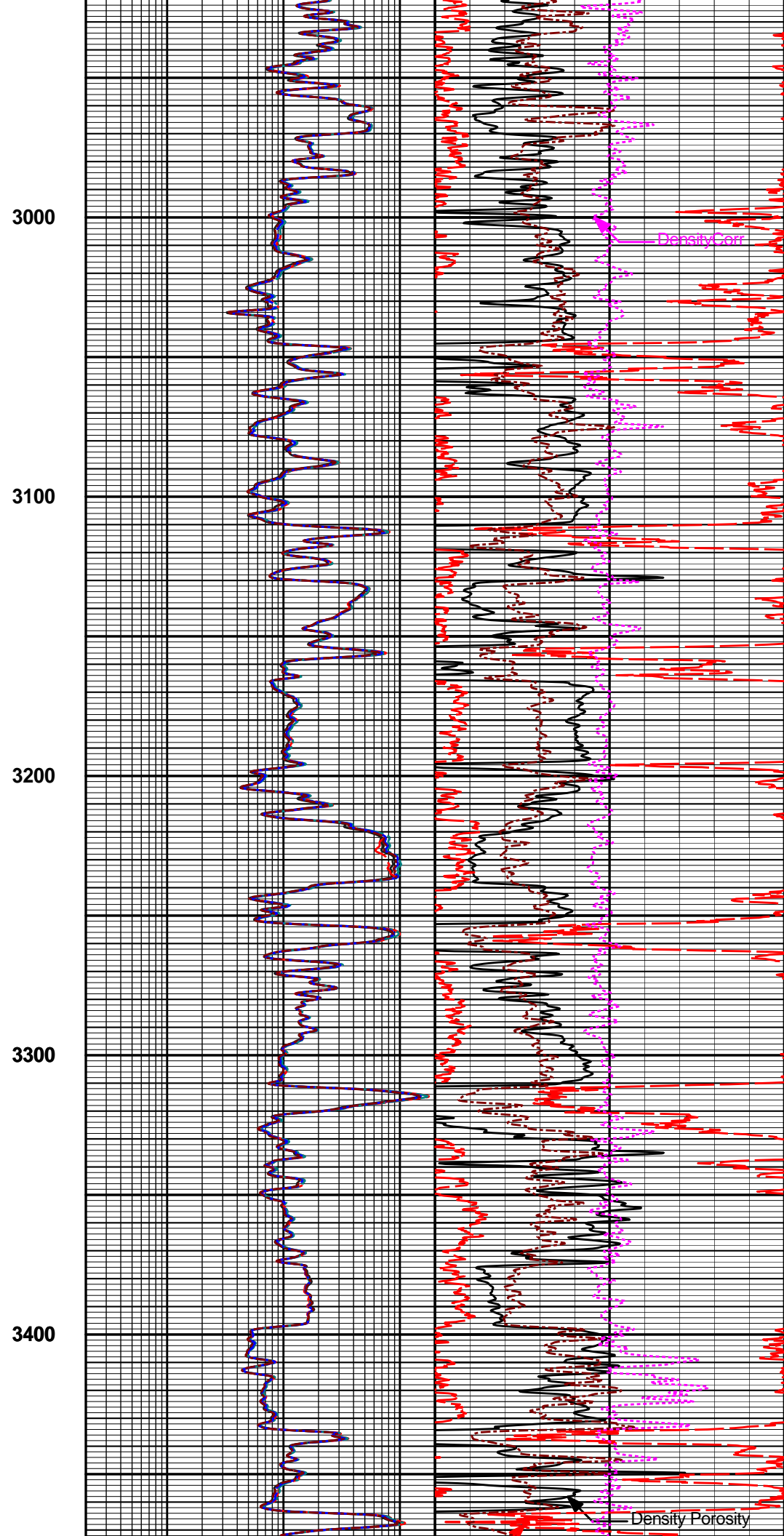
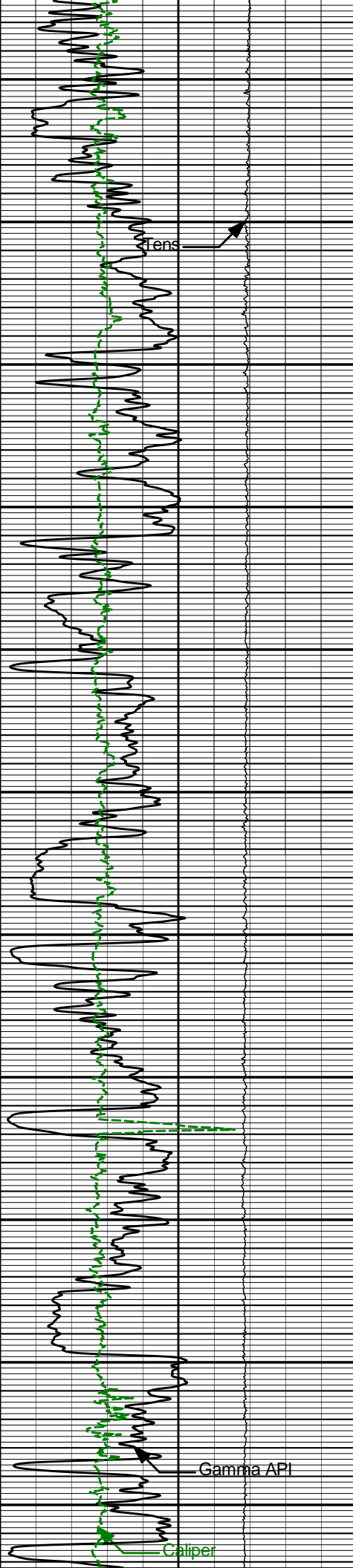


Neutron Porosity

Density Porosity

RT10

RT00



**3000**

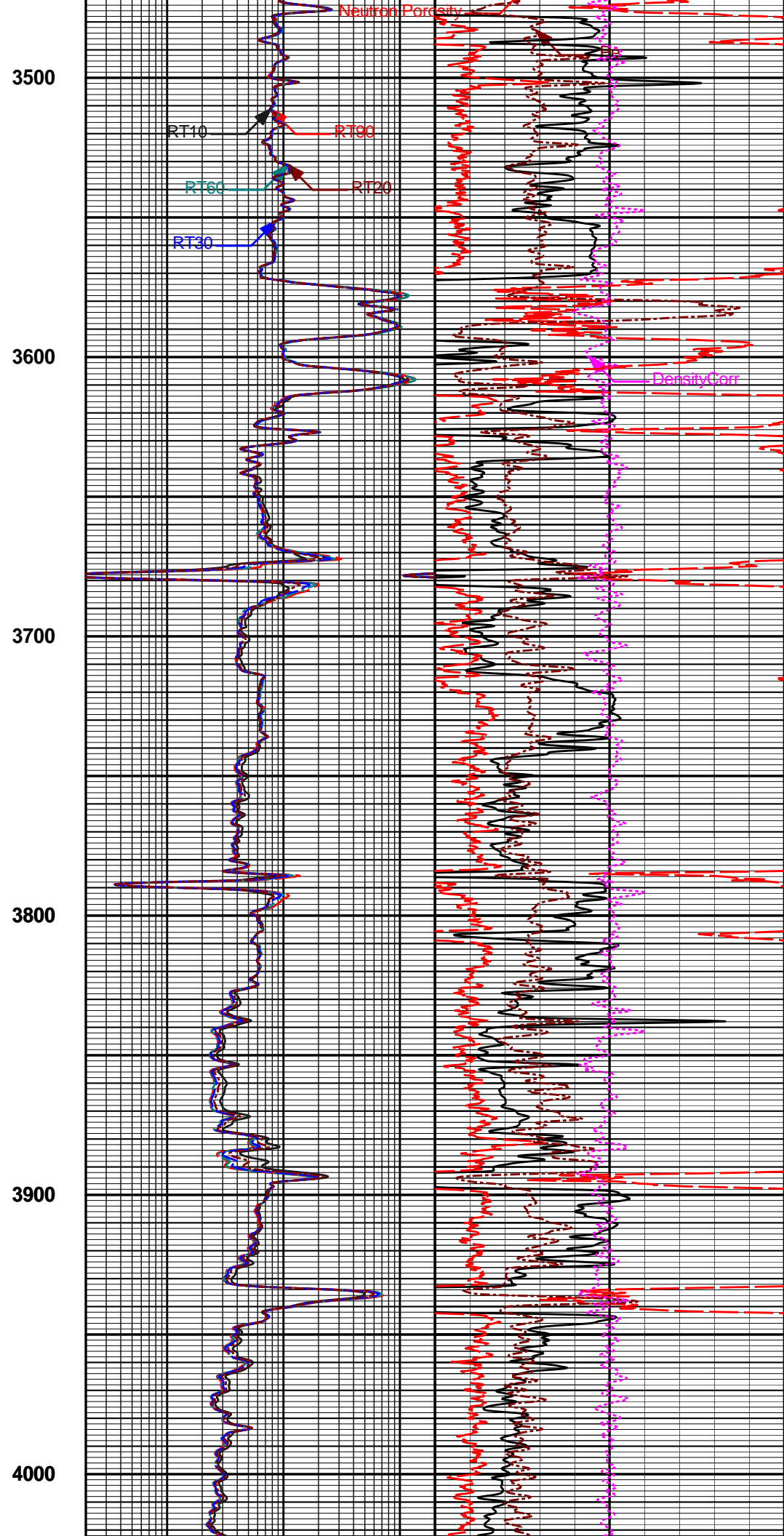
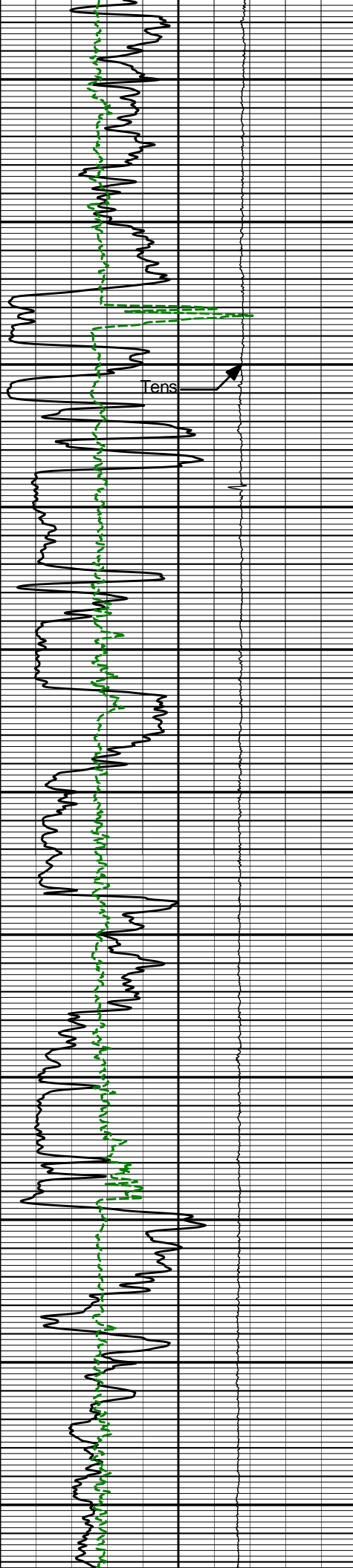
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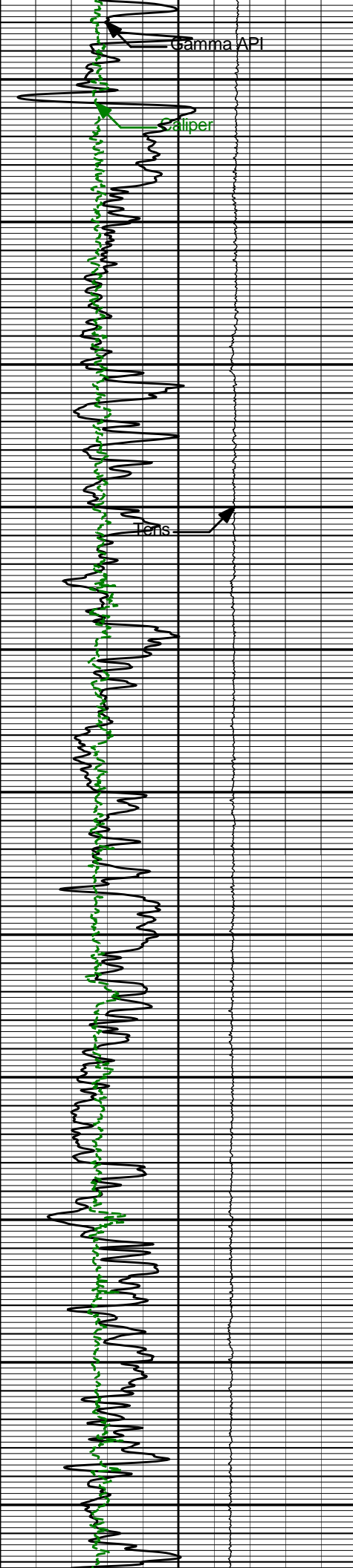
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**3300**

**3400**







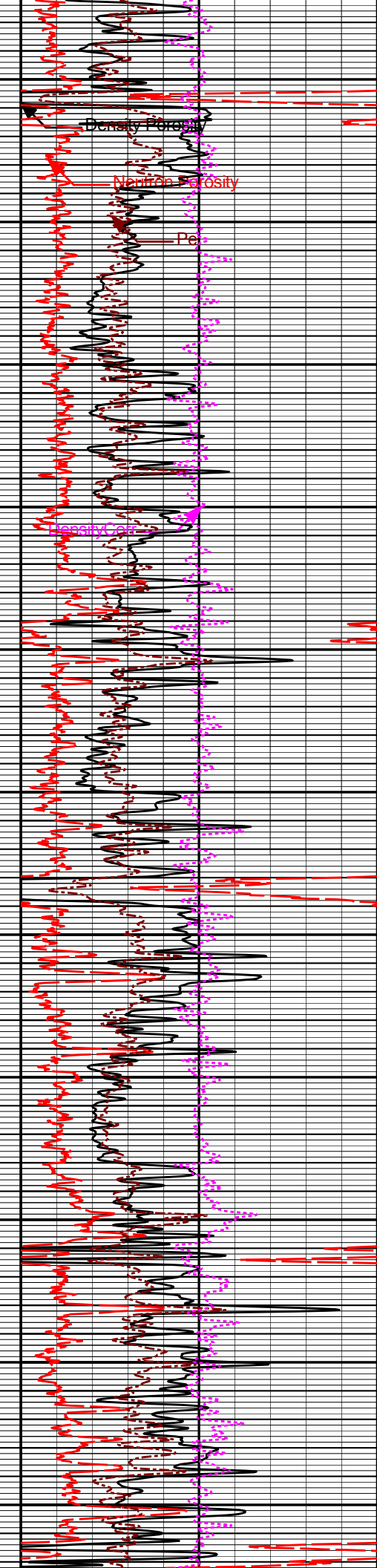
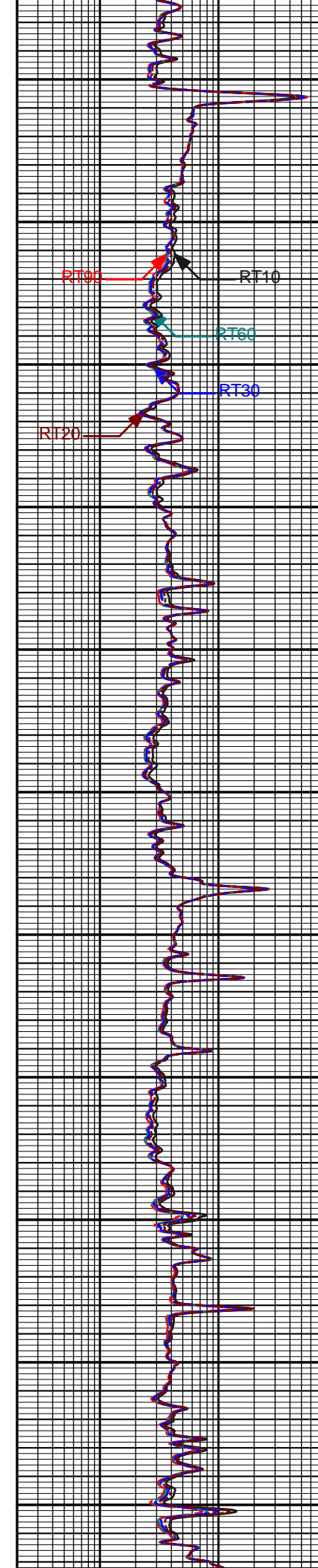
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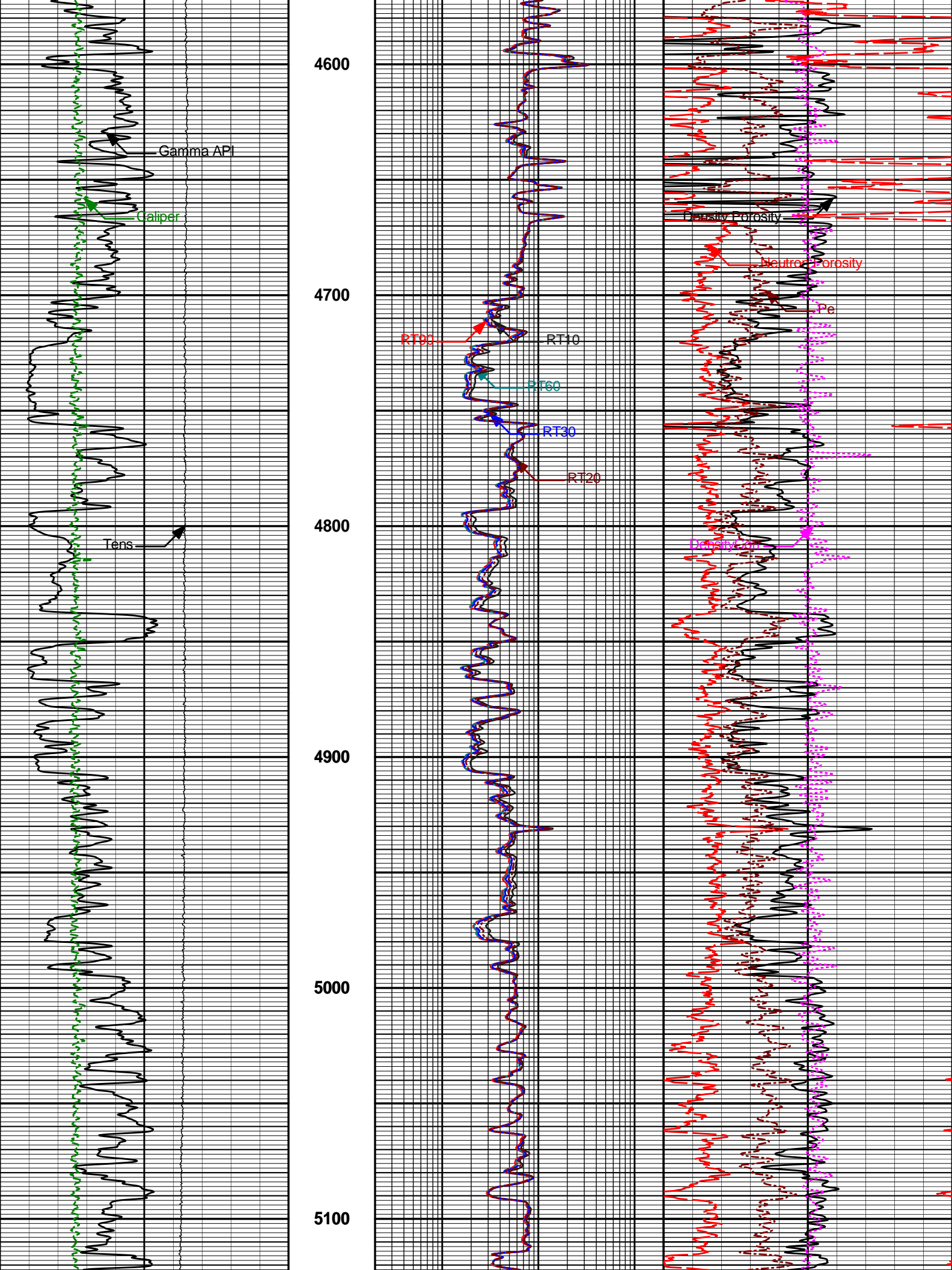
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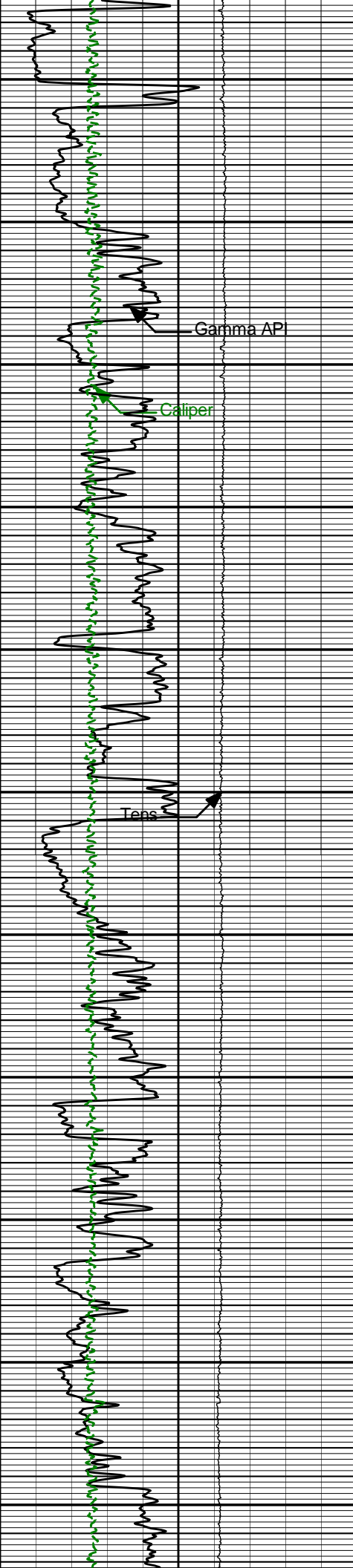
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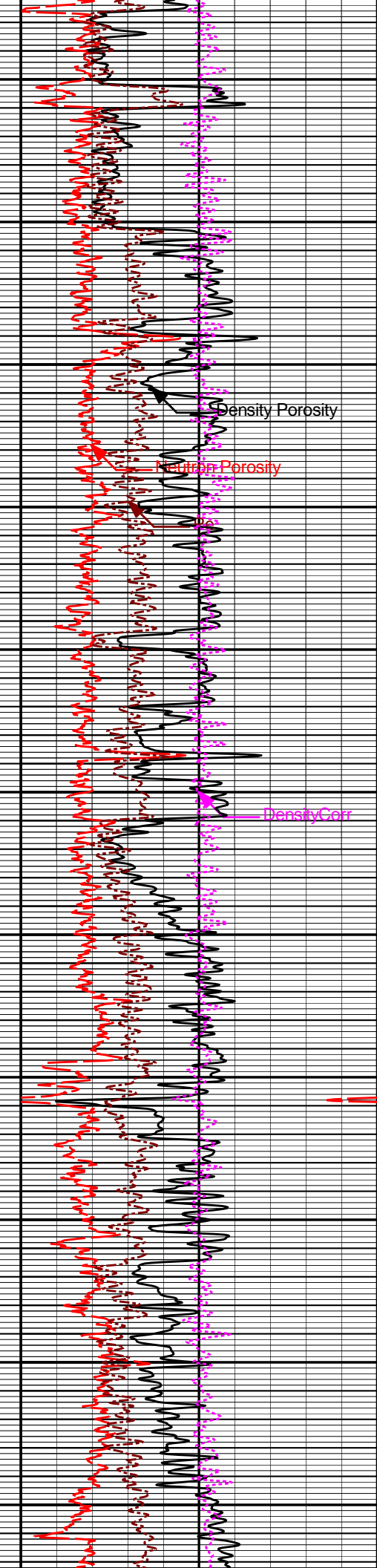
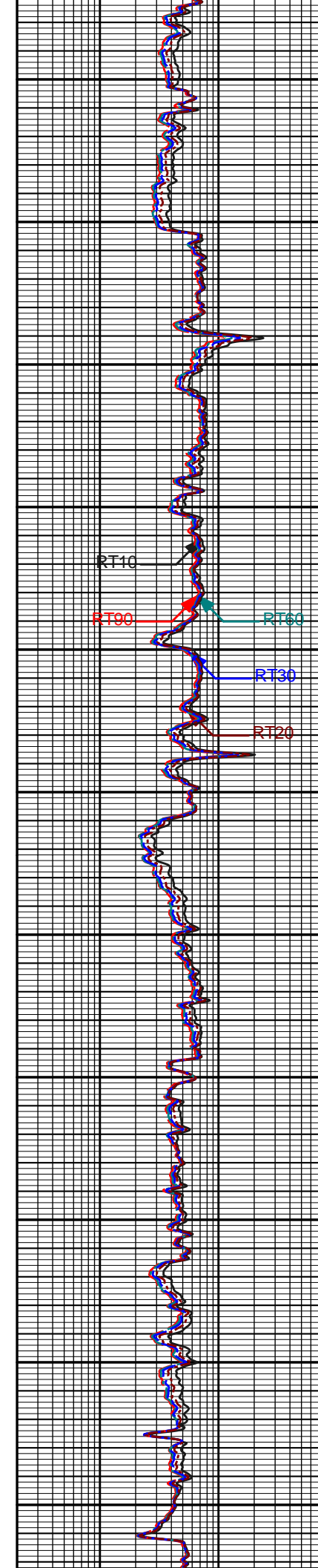
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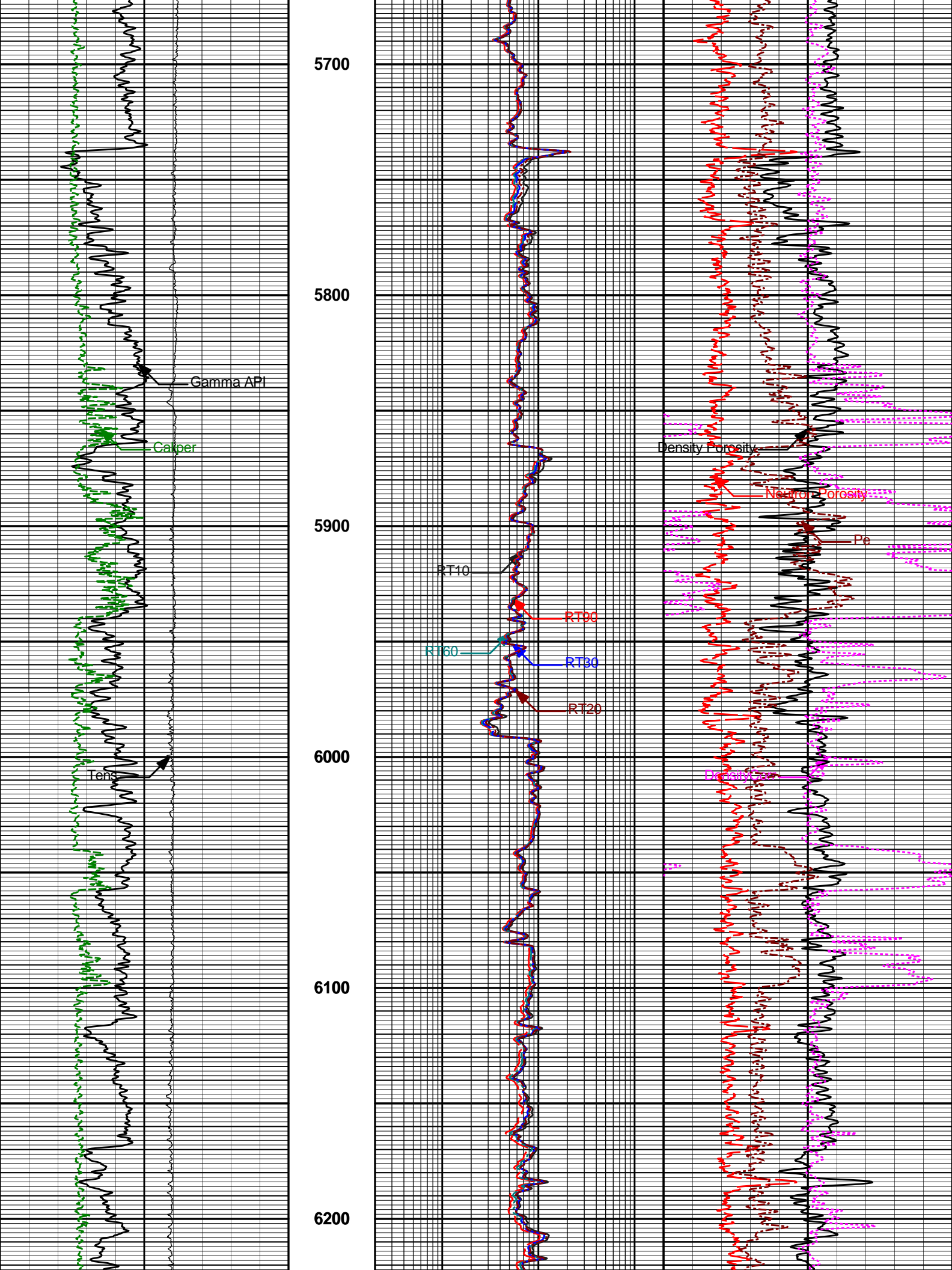
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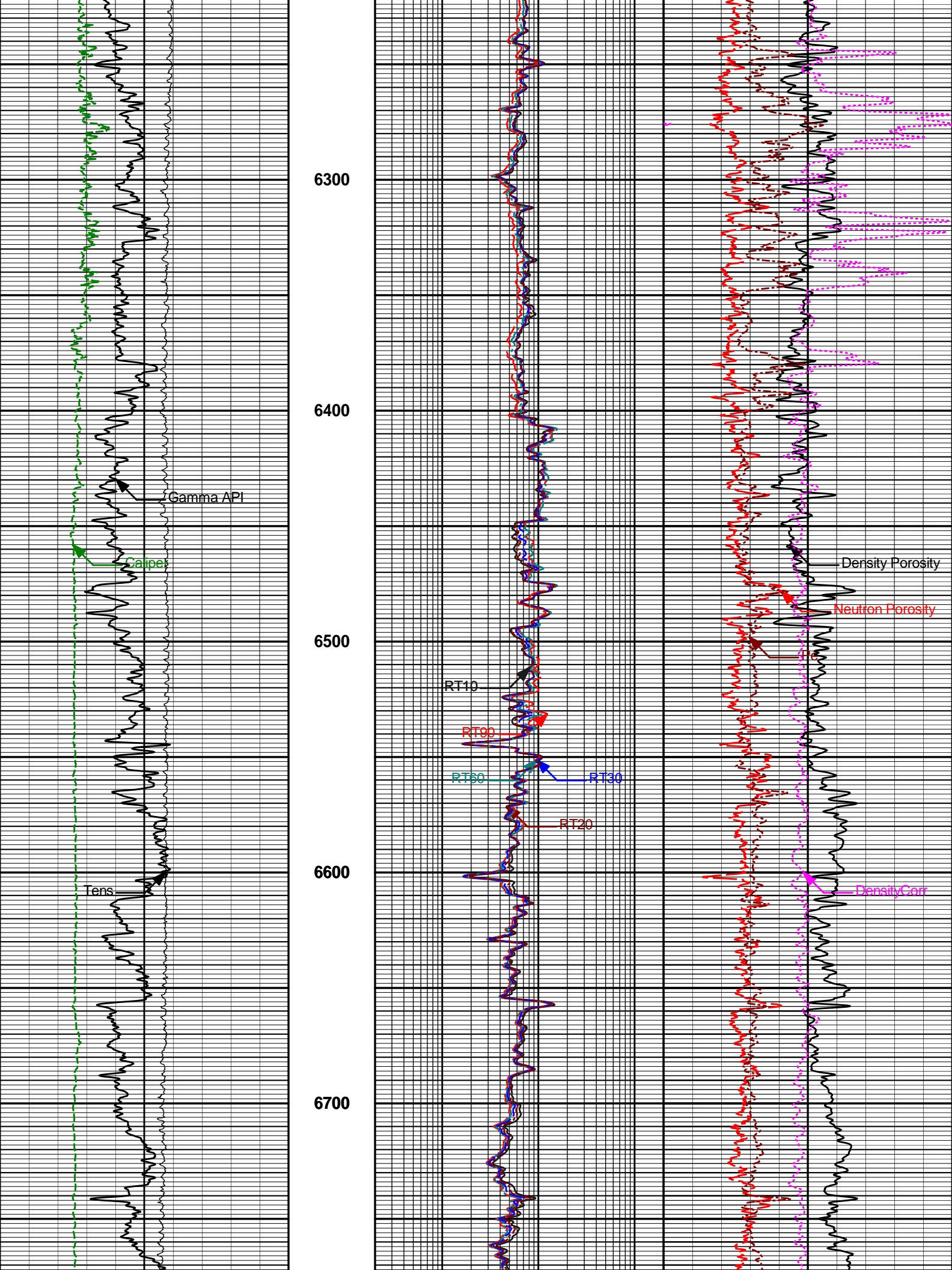
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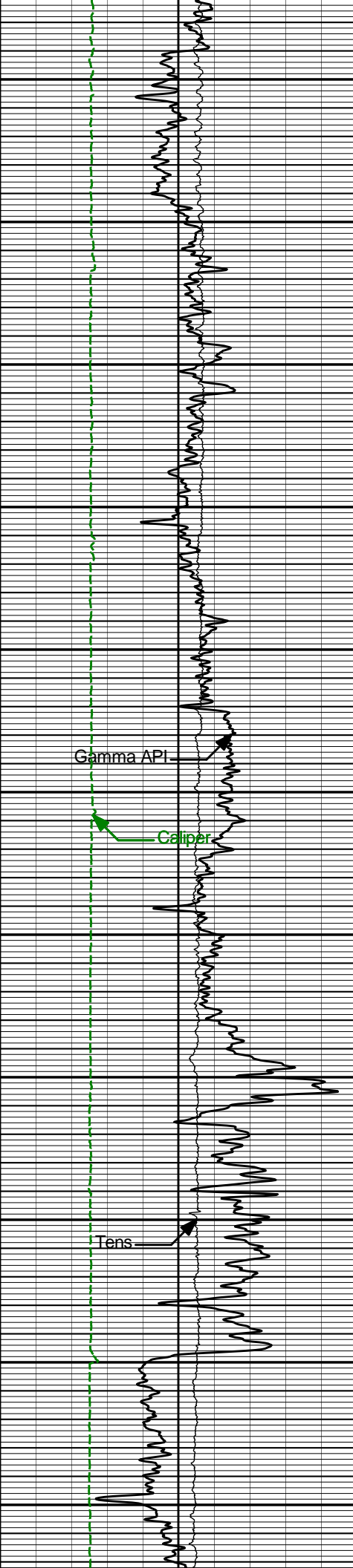
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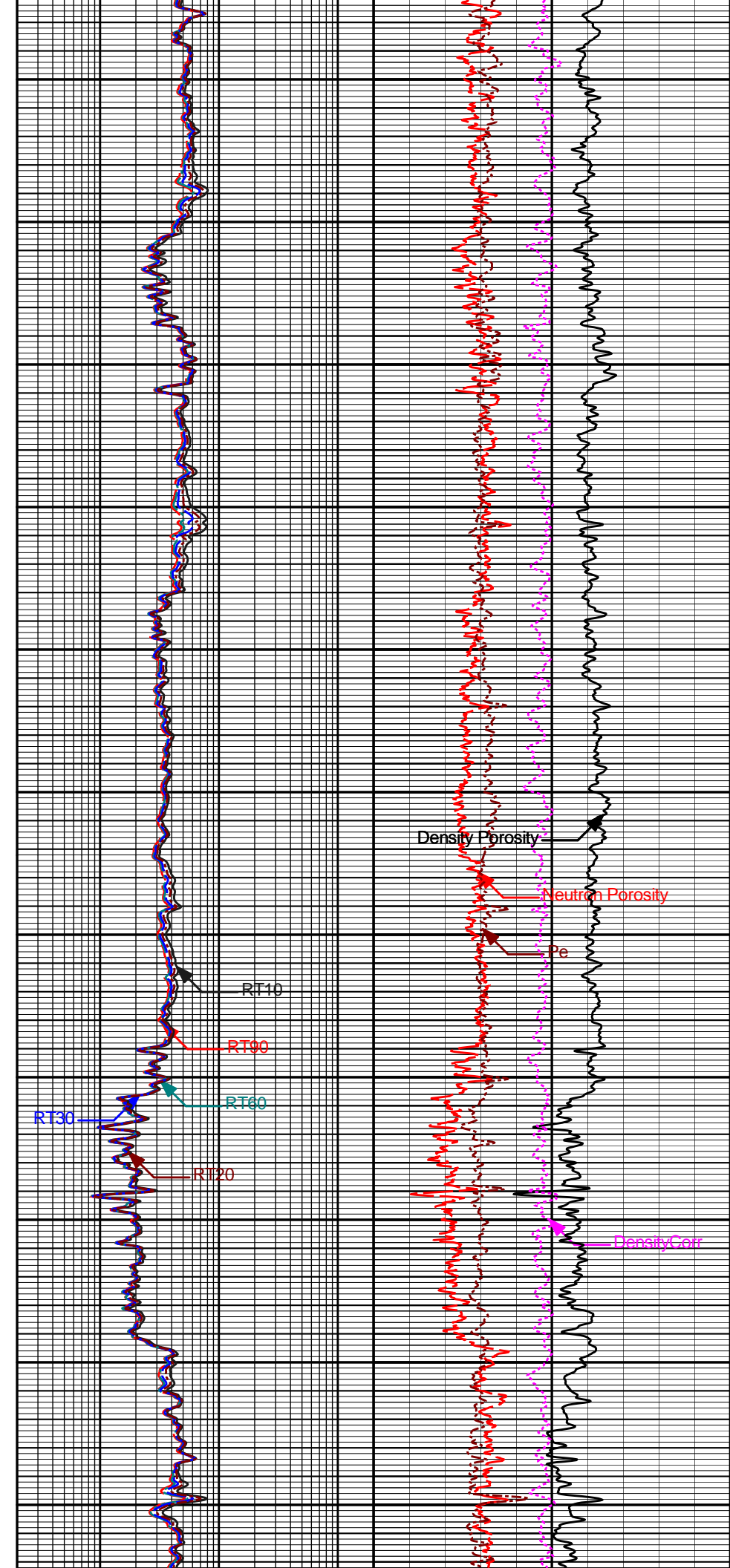
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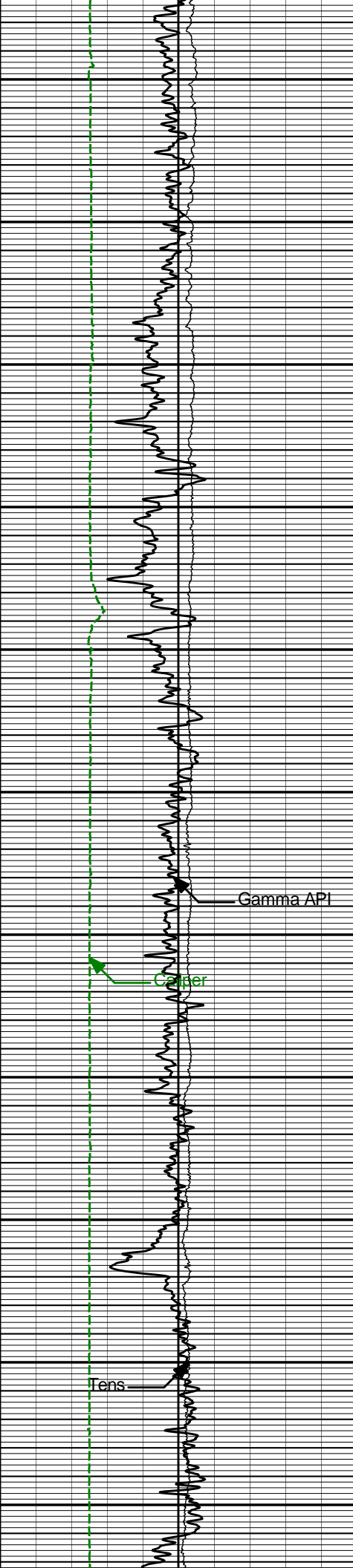
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7100

7200

7300





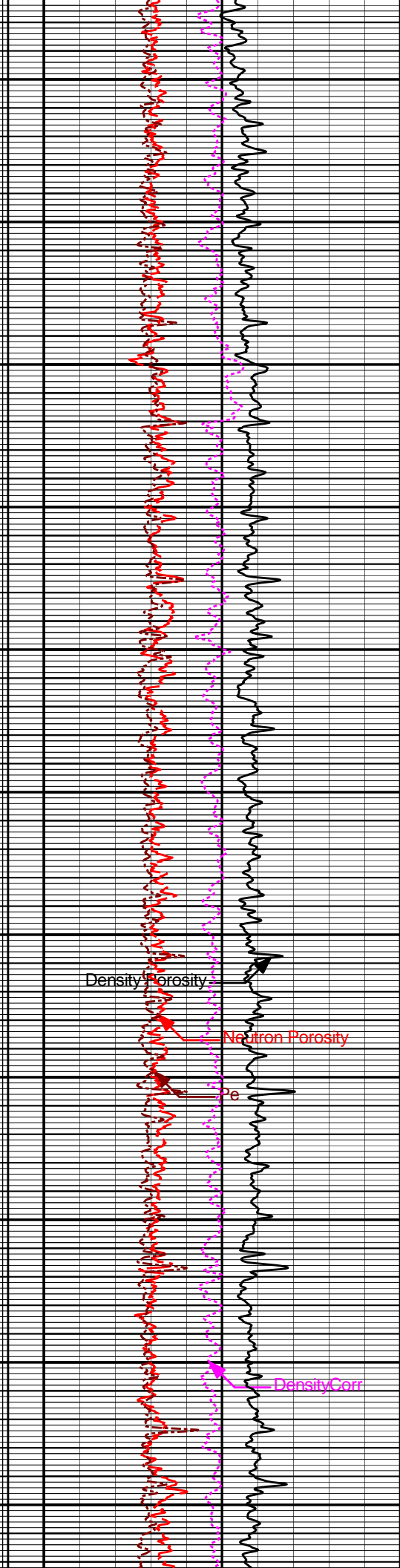
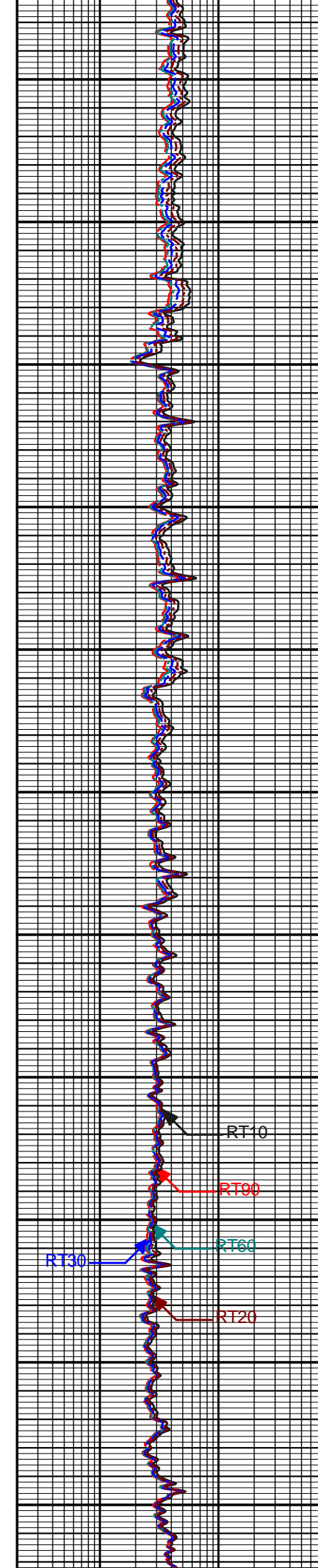
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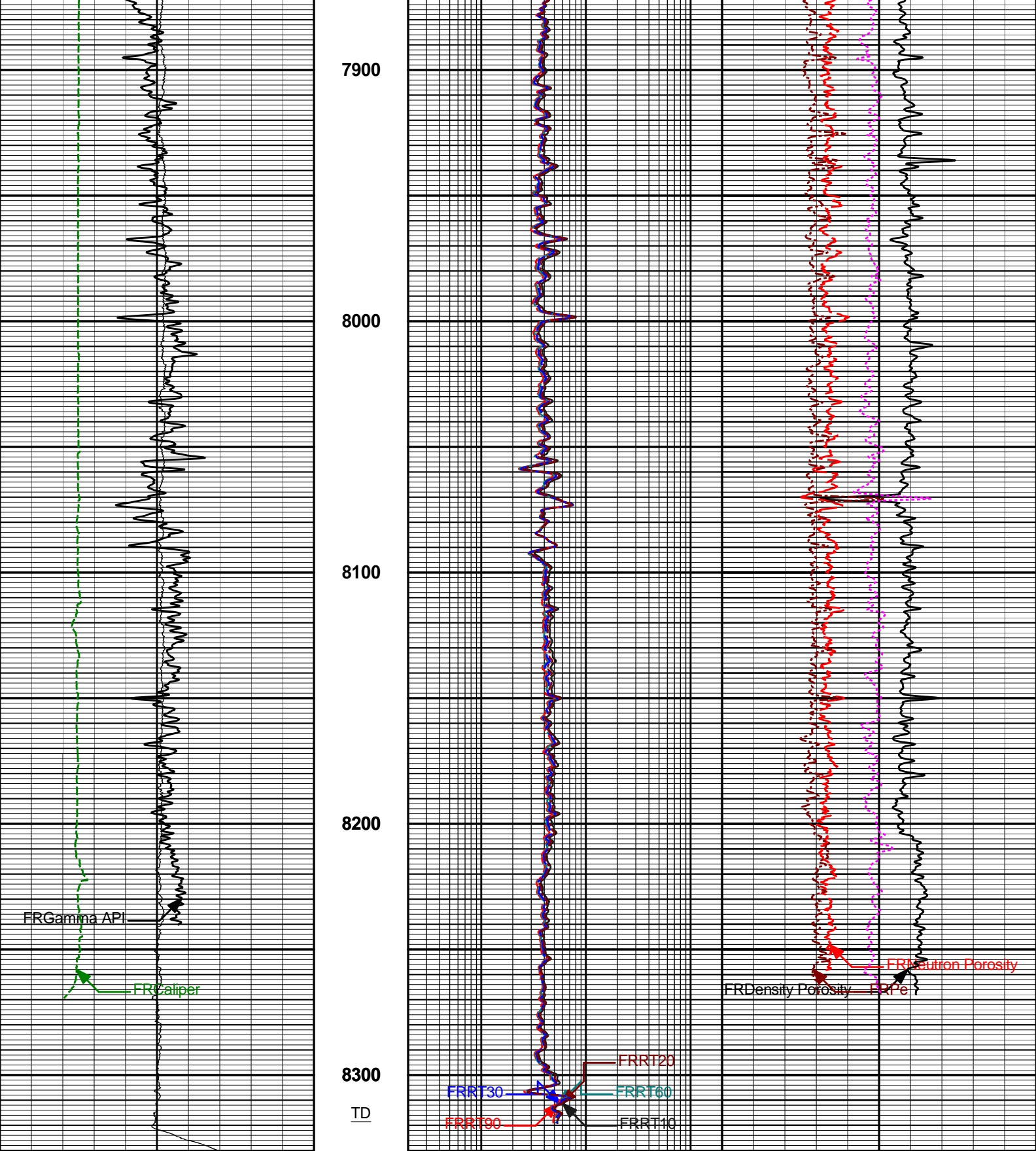
7600

7700

7800







0	Gamma API	200	1 : 600	0.2	RT90	200	-0.25	DensityCorr	0.25
	api				Ohm-m			gram per cc	
6	Caliper	16		0.2	RT60	200	0	Pe	10
	inches				Ohm-m				
10K	Tens	0		0.2	RT30	200	45	Density Porosity	-15
	pounds				Ohm-m			percent	
				0.2	RT20	200	45	Neutron Porosity	-15

		Ohm-m		percent
	0.2	RT10	200	
		Ohm-m		
<div>HALLIBURTON</div> <div>Plot Time: 26-Jul-12 13:06:00 Plot Range: 100 ft to 8330.75 ft Data: {ActiveWell}\Well Based\*\* Plot File: \\COMP_2INIQ_COMP_5IN_RM</div>				
MAIN PASS 2" = 100'				
<div>COMPANYGREAT BEAR PETROLEUM</div> <div>WELLALCOR #1</div> <div>FIELDWILDCAT</div> <div>COUNTYNORTH SLOPESTATEALASKA</div>				
<div>HALLIBURTON</div>		<div>DUAL SPACED NEUTRON SPECTRAL DENSITY ARRAY COMPENSATED TRUE RESISTIVITY</div>		