

Schlumberger

Company: **Whiting Oil and Gas Corporation**

Well: **Wildhorse 16-13L**

Field: **Wildcat**

County: **Weld**

State: **Colorado**

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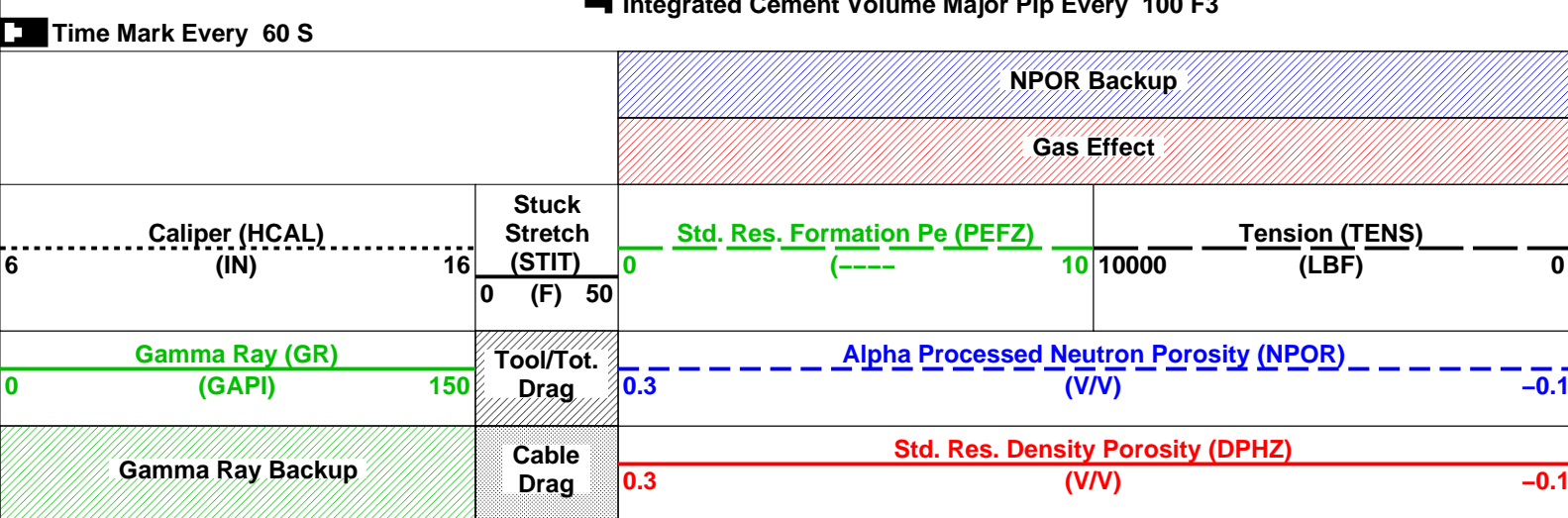
State: **Colorado**

[illegible]

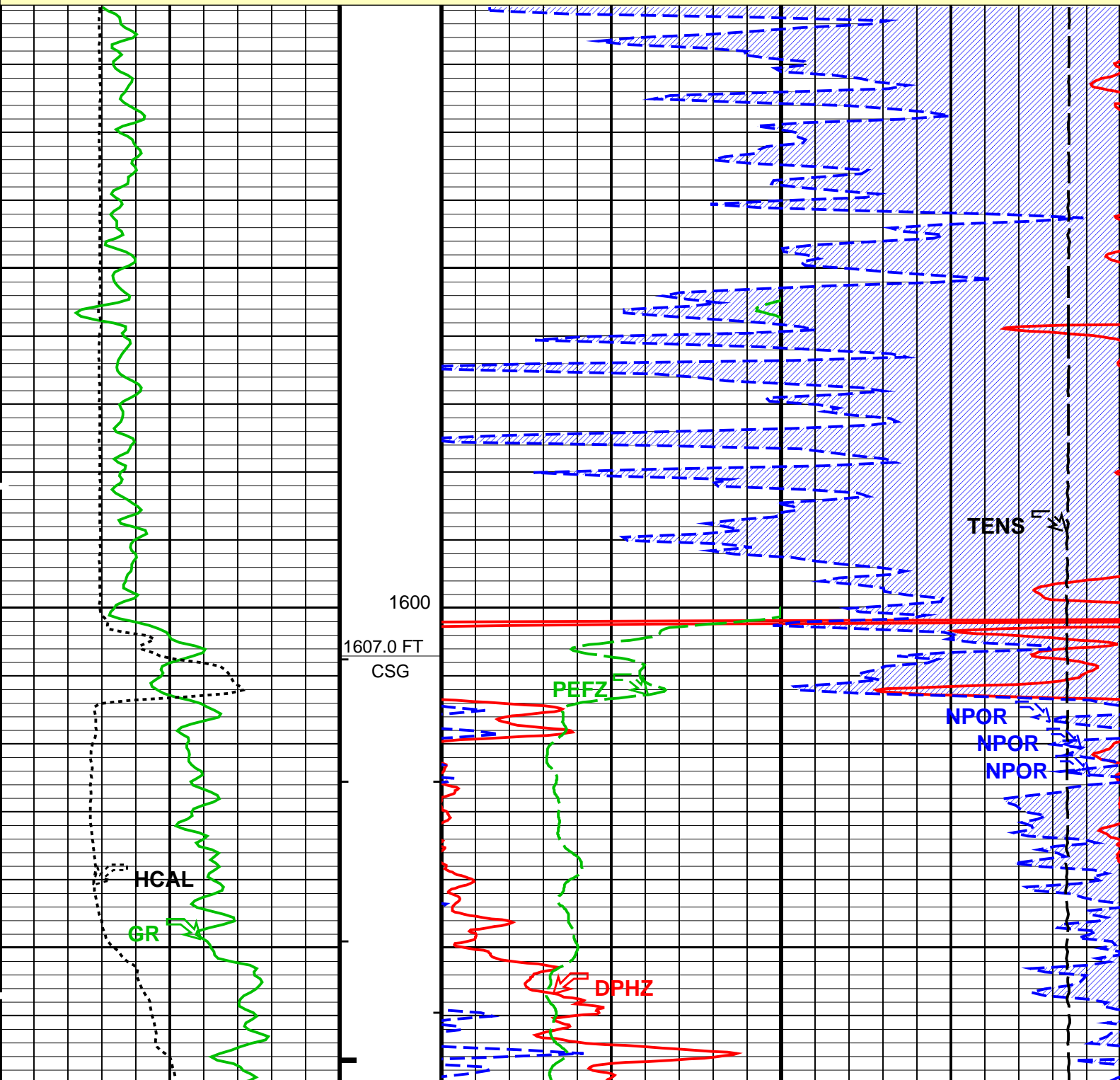
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth		@		
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density		Viscosity		
Fluid Loss		PH		
Source Of Sample				
RM @ Measured Temperature		@		
RMF @ Measured Temperature		@		
RMC @ Measured Temperature		@		
Source RMF		RMC		
RM @ MRT		RMF @ MRT	@	@
Maximum Recorded Temperatures				
Circulation Stopped		Time		
Logger On Bottom		Time		
Unit Number		Location		
Recorded By				
Witnessed By				

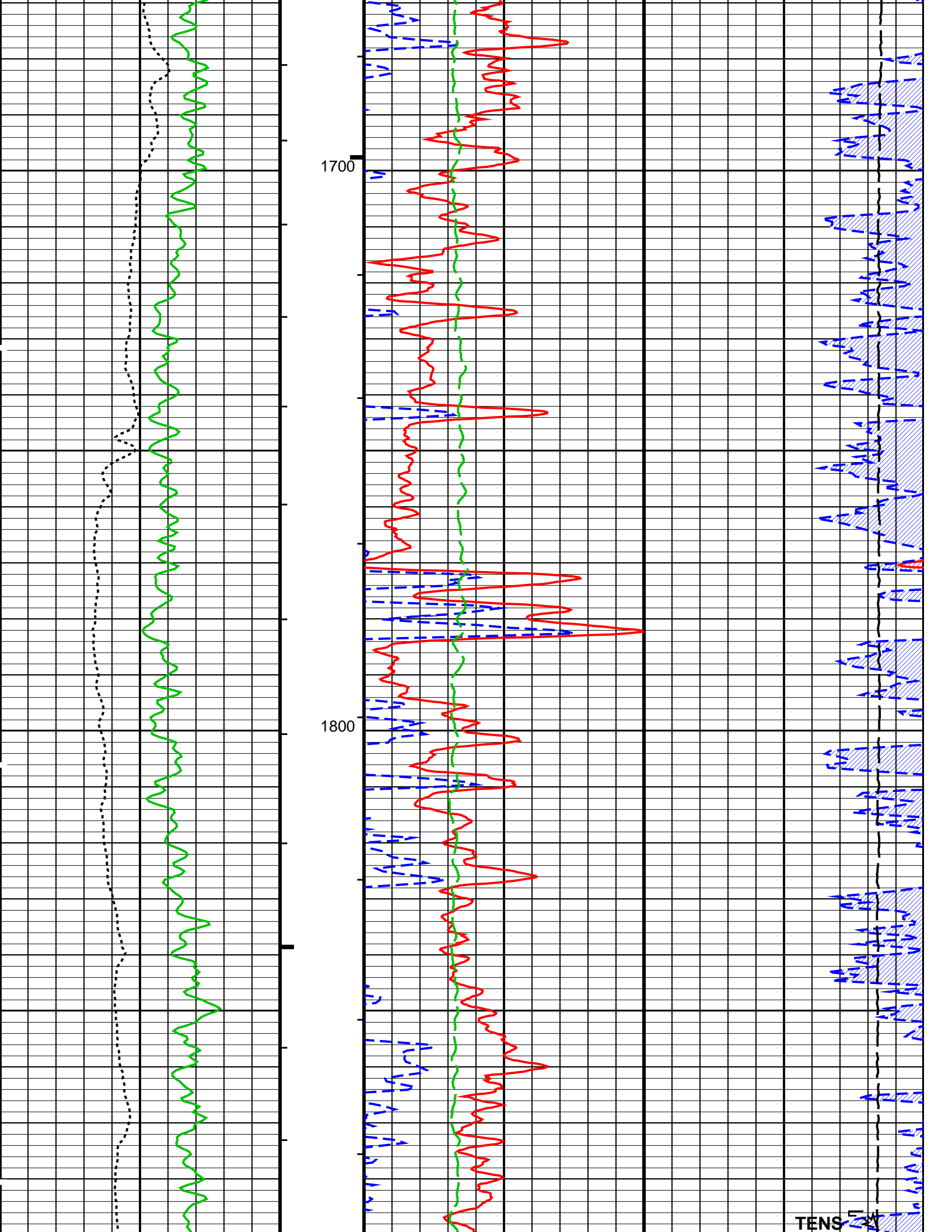
Rig: Cade 21					
Crew: Alonzo Carrera, David Marquez					
RUN 1			RUN 2		
SERVICE ORDER #:		CCN1-00014	SERVICE ORDER #:		
PROGRAM VERSION:		19C2-270	PROGRAM VERSION:		
FLUID LEVEL:		200 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM (DTS)-A					
GSR-U/Y NCT-B CNB-AB NCS-VB					
DOWNHOLE EQUIPMENT					

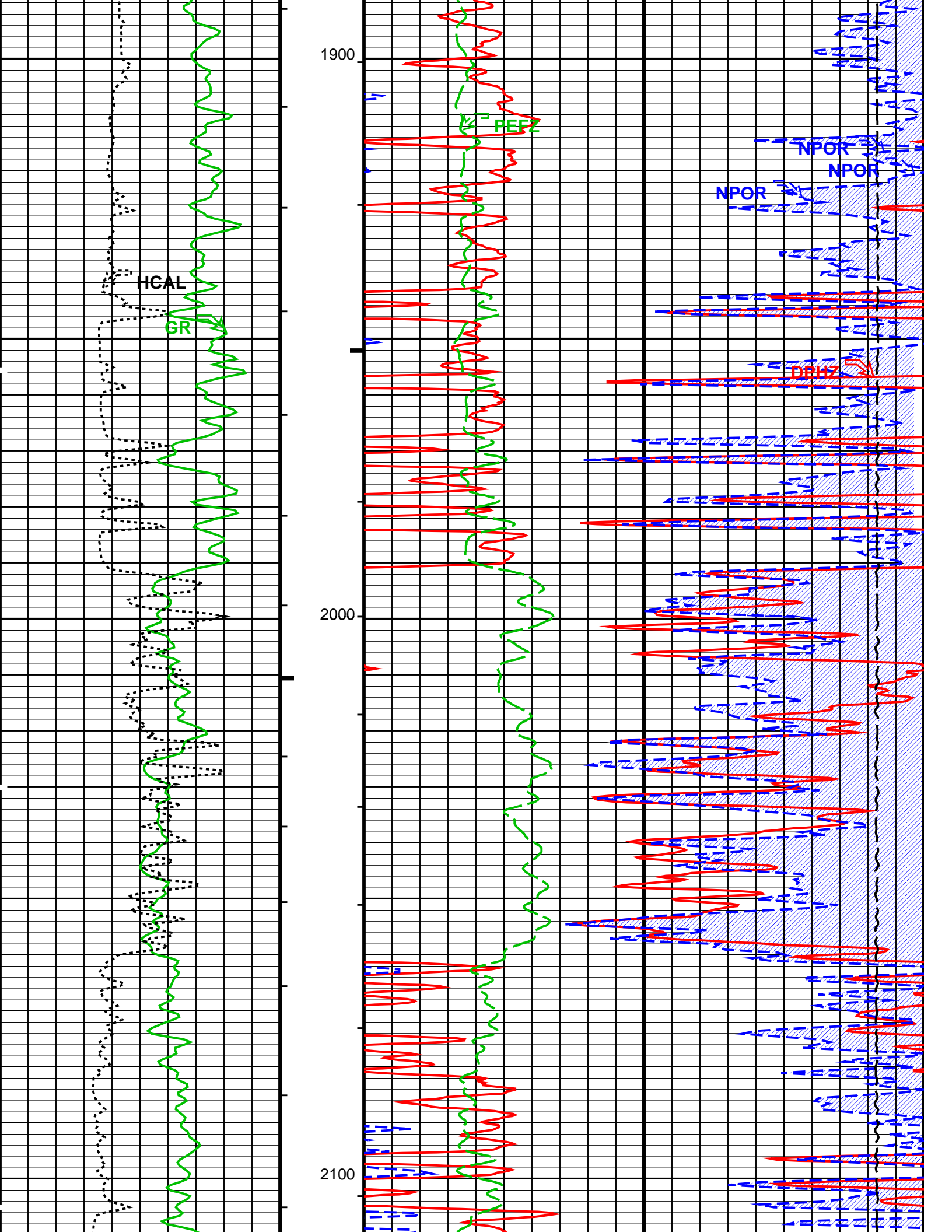
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

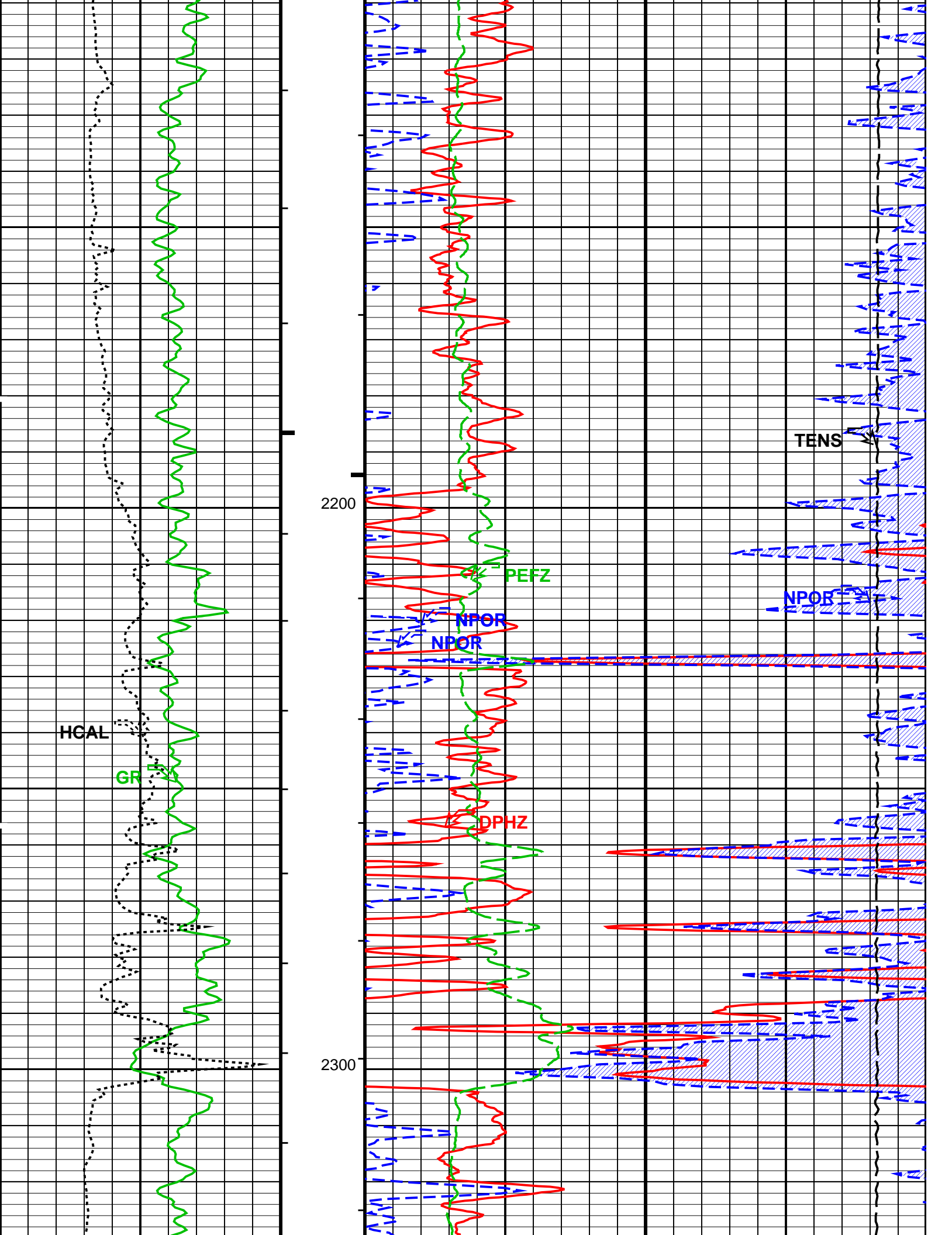


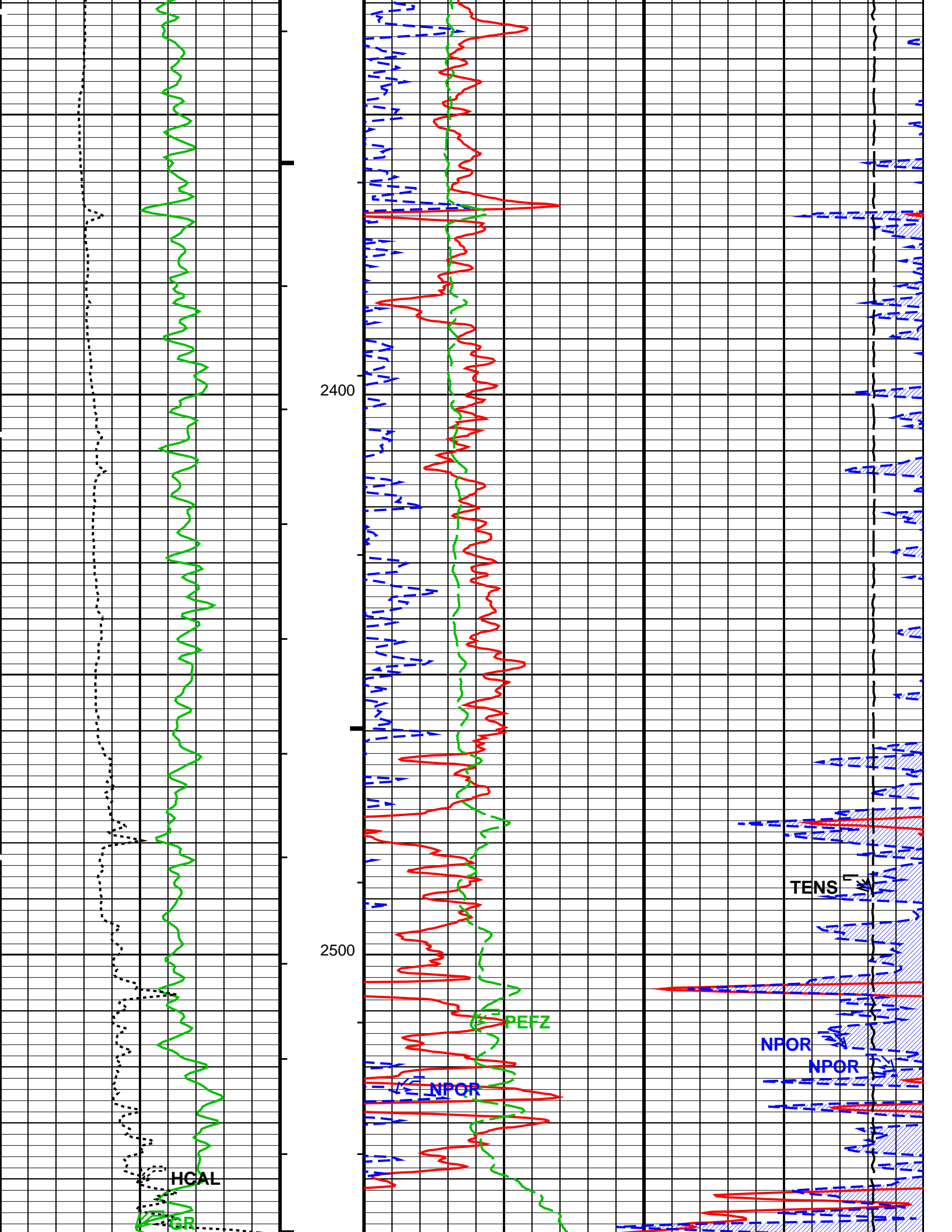
MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***

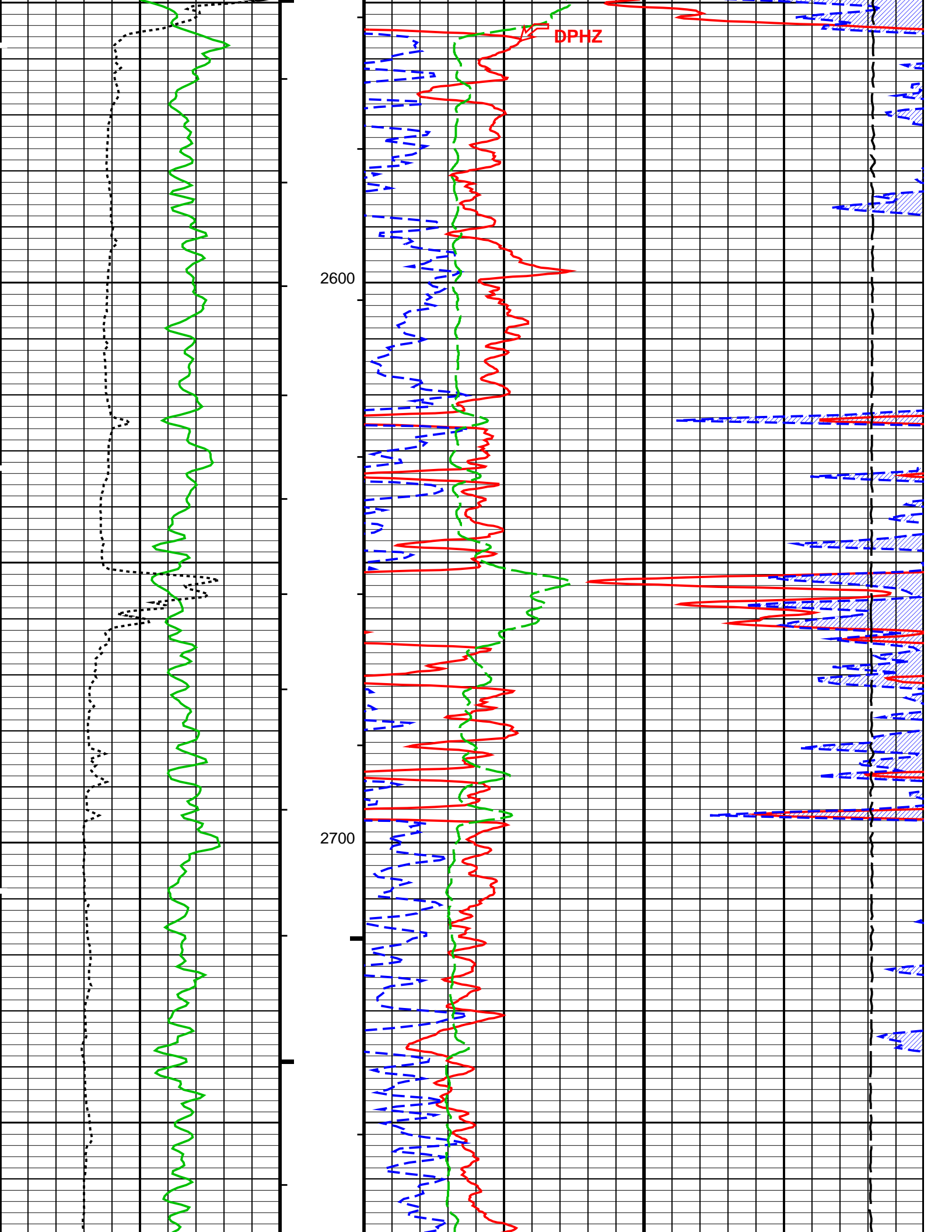


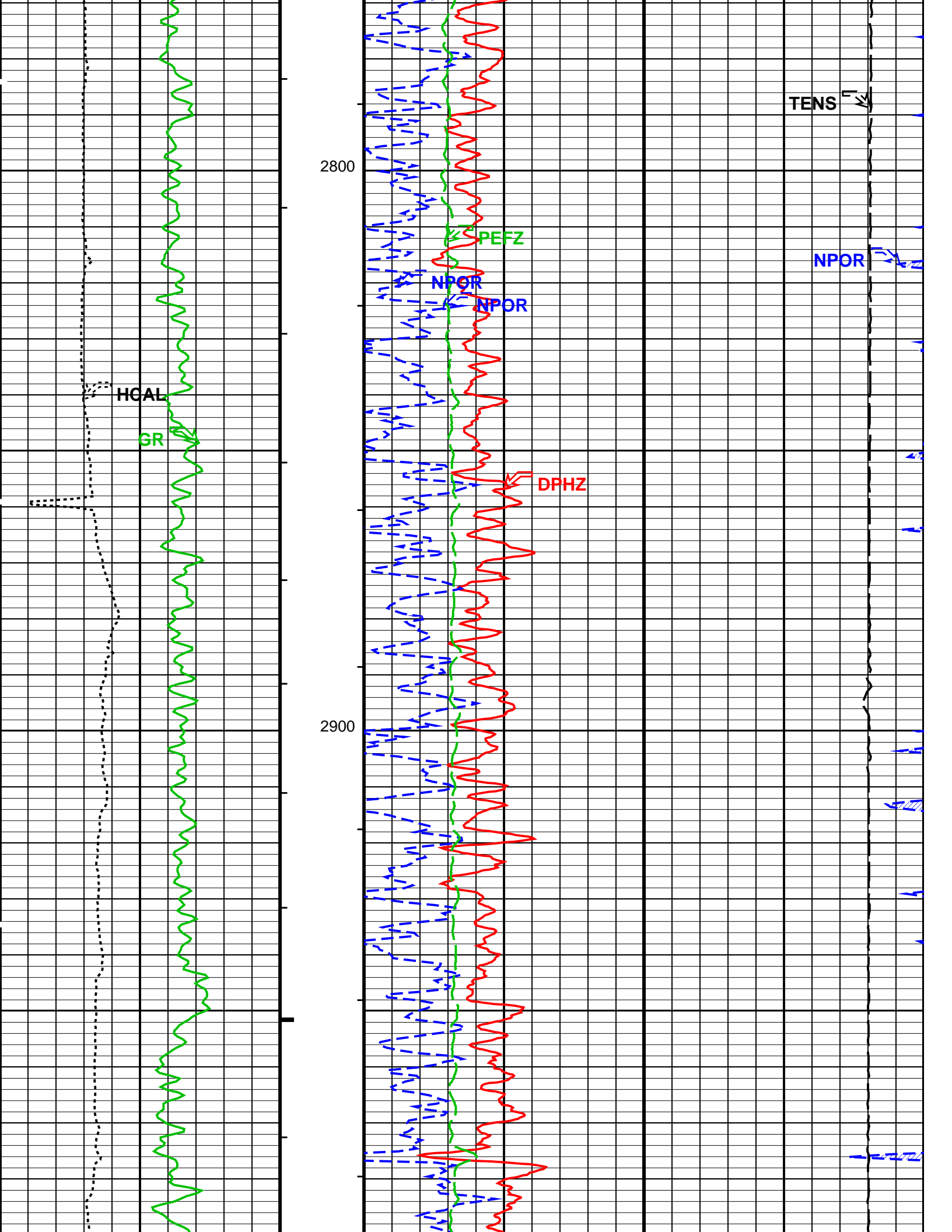


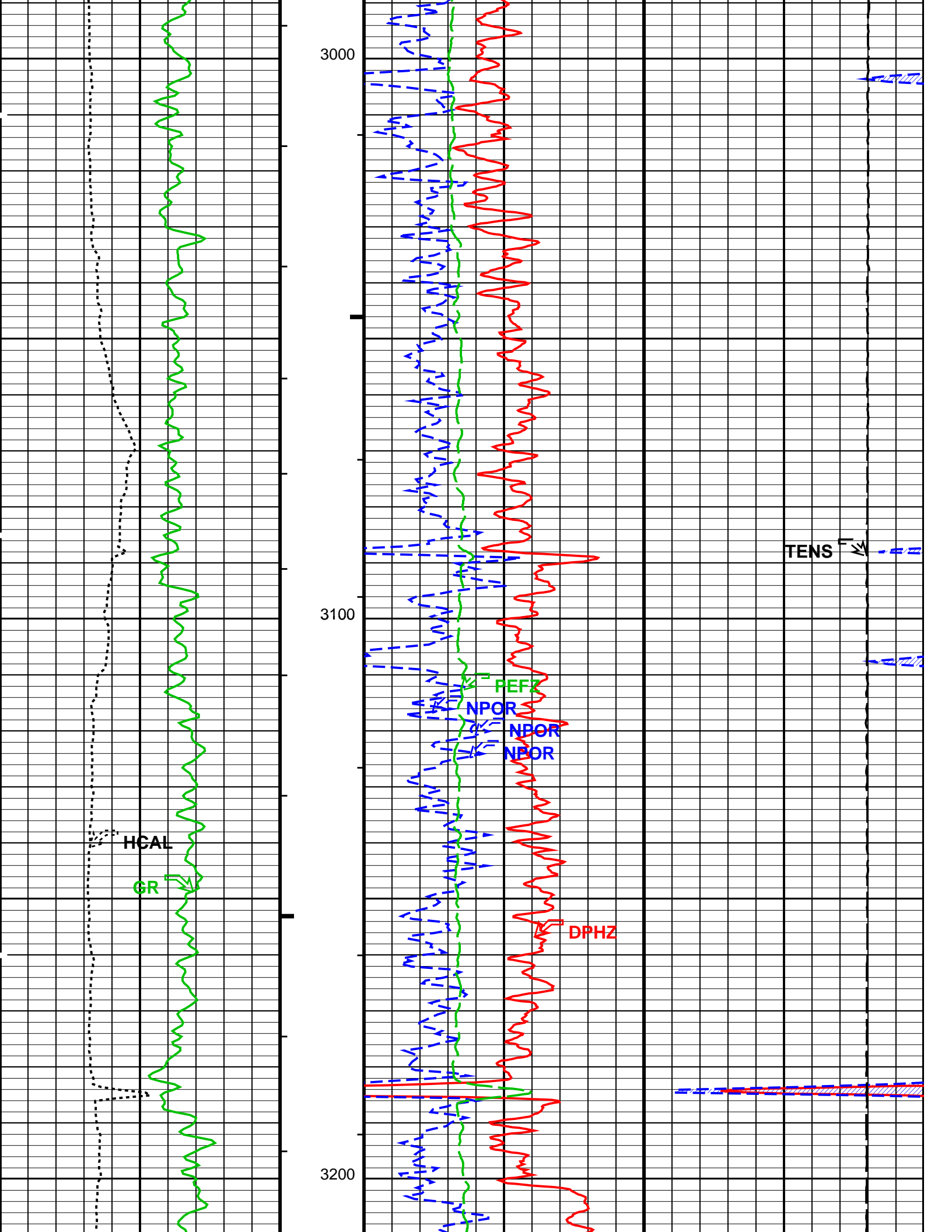


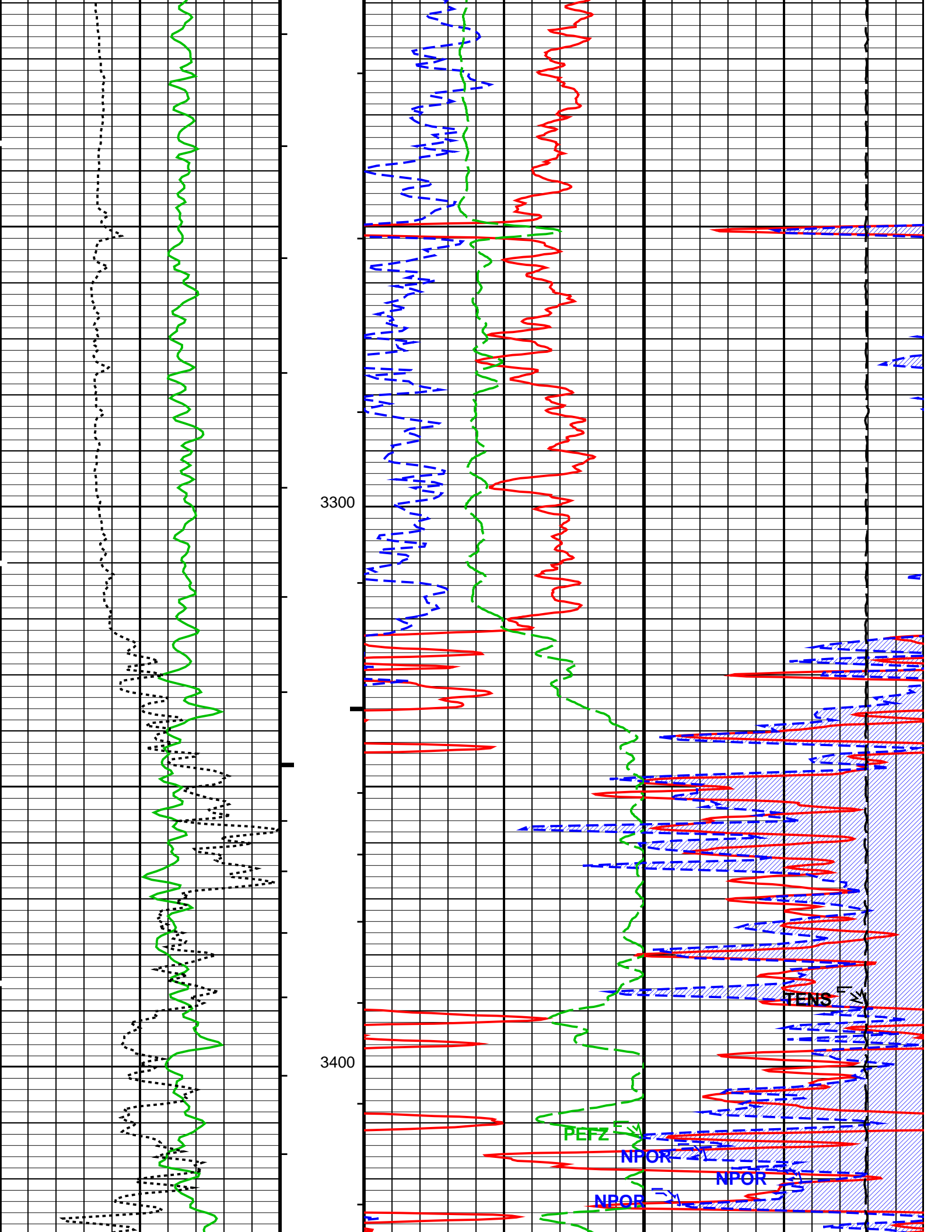


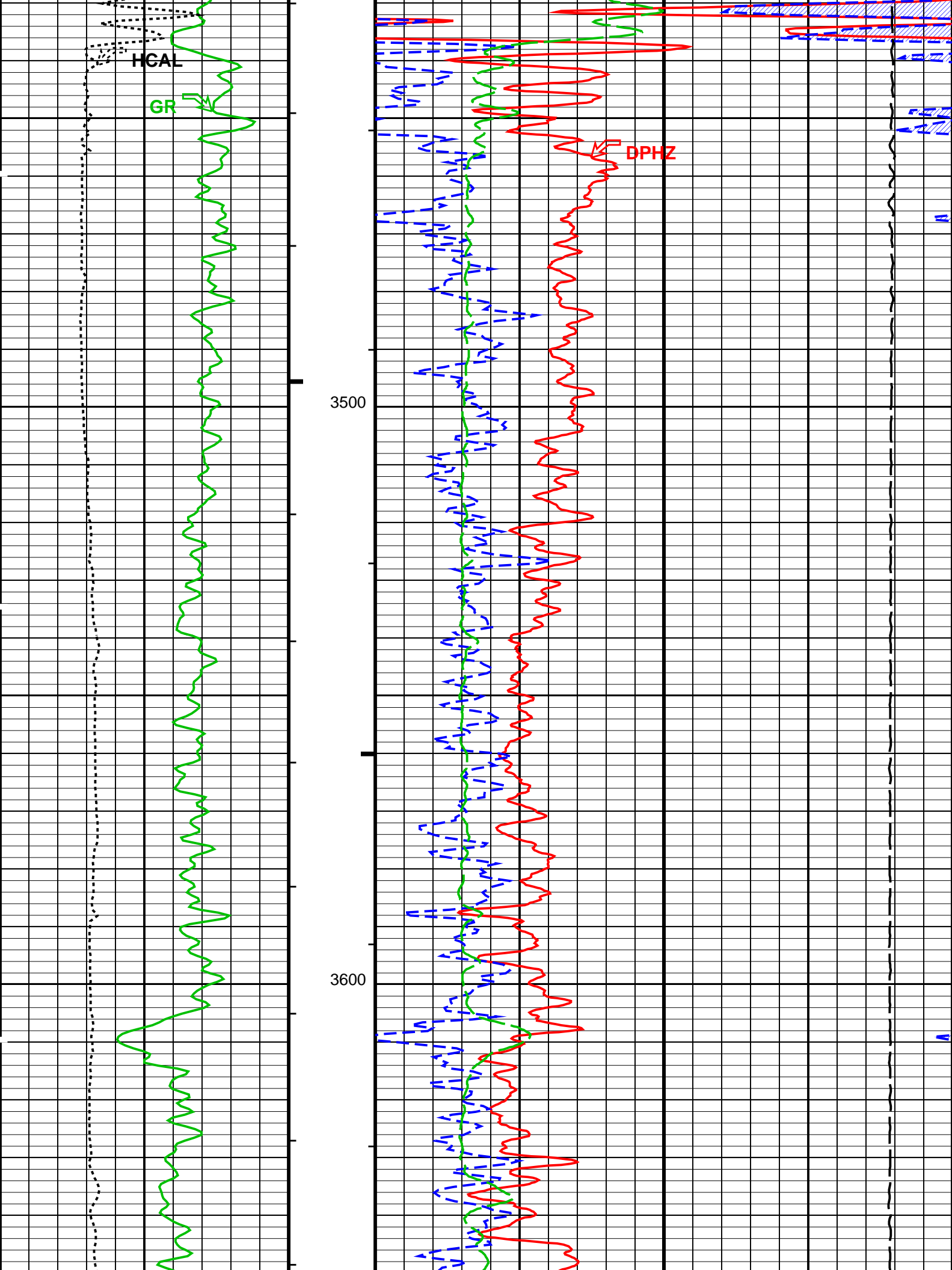


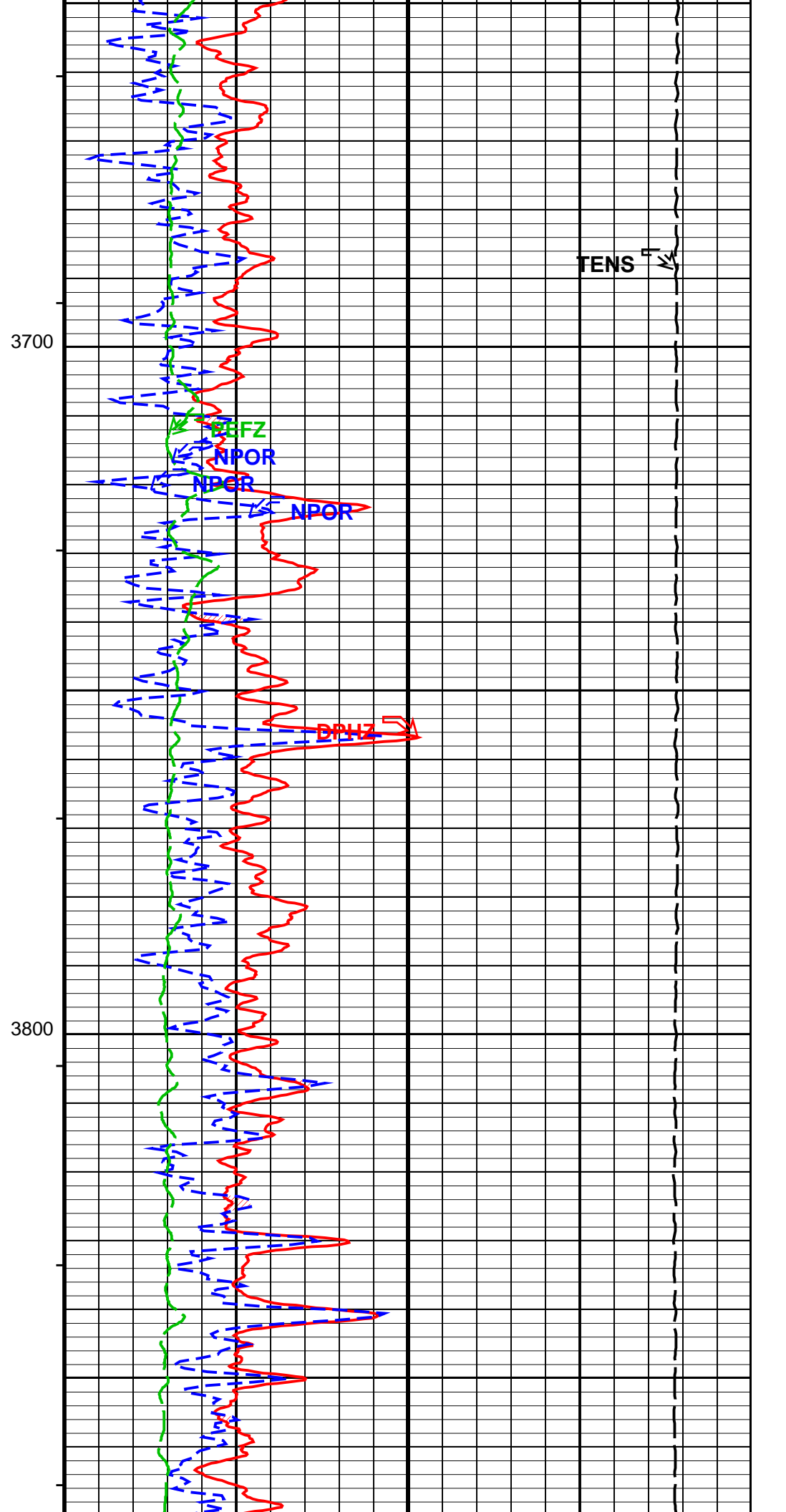
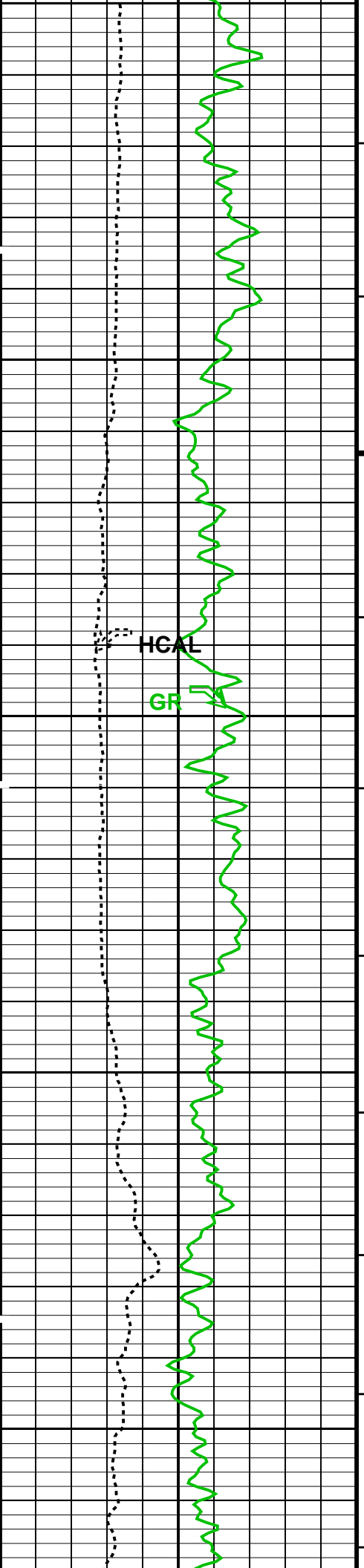


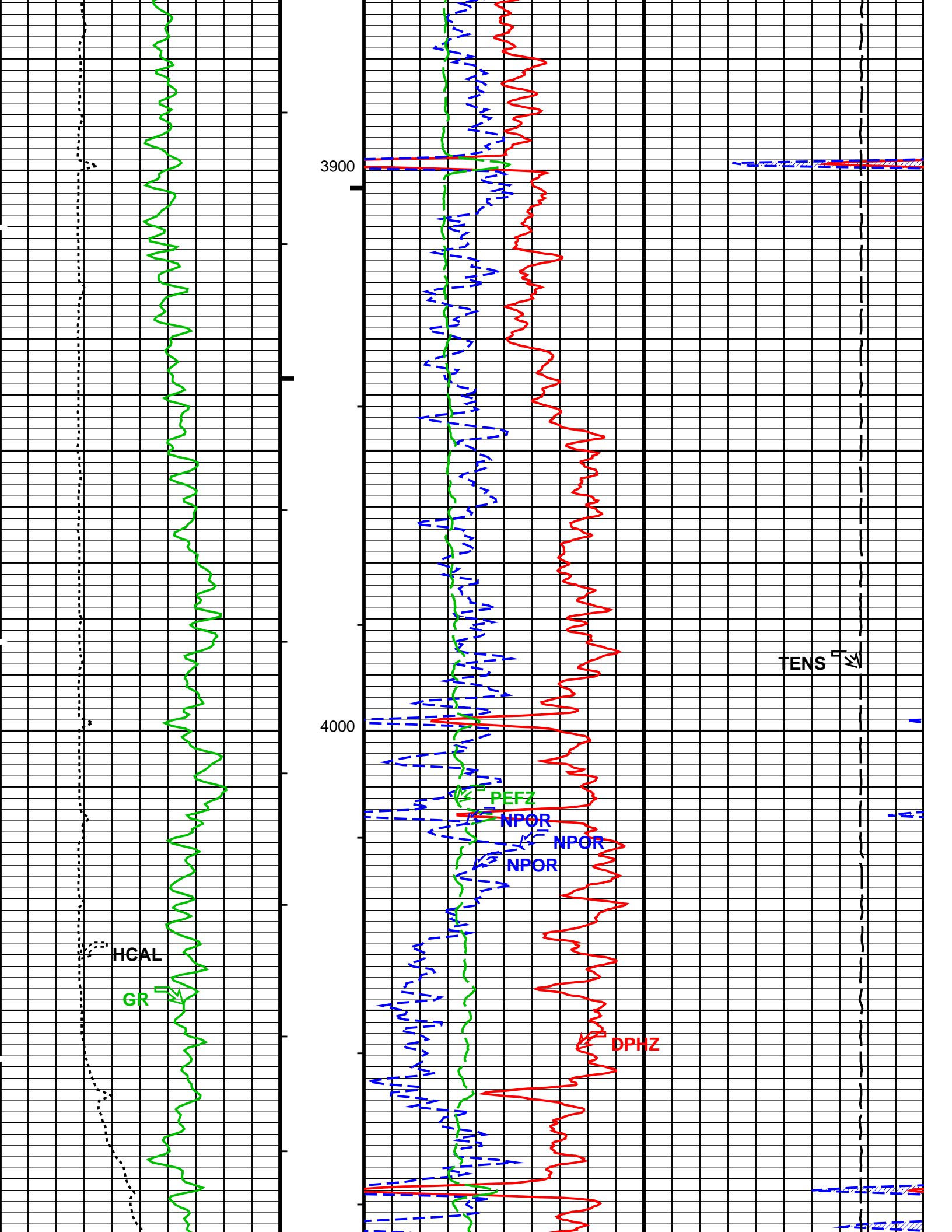


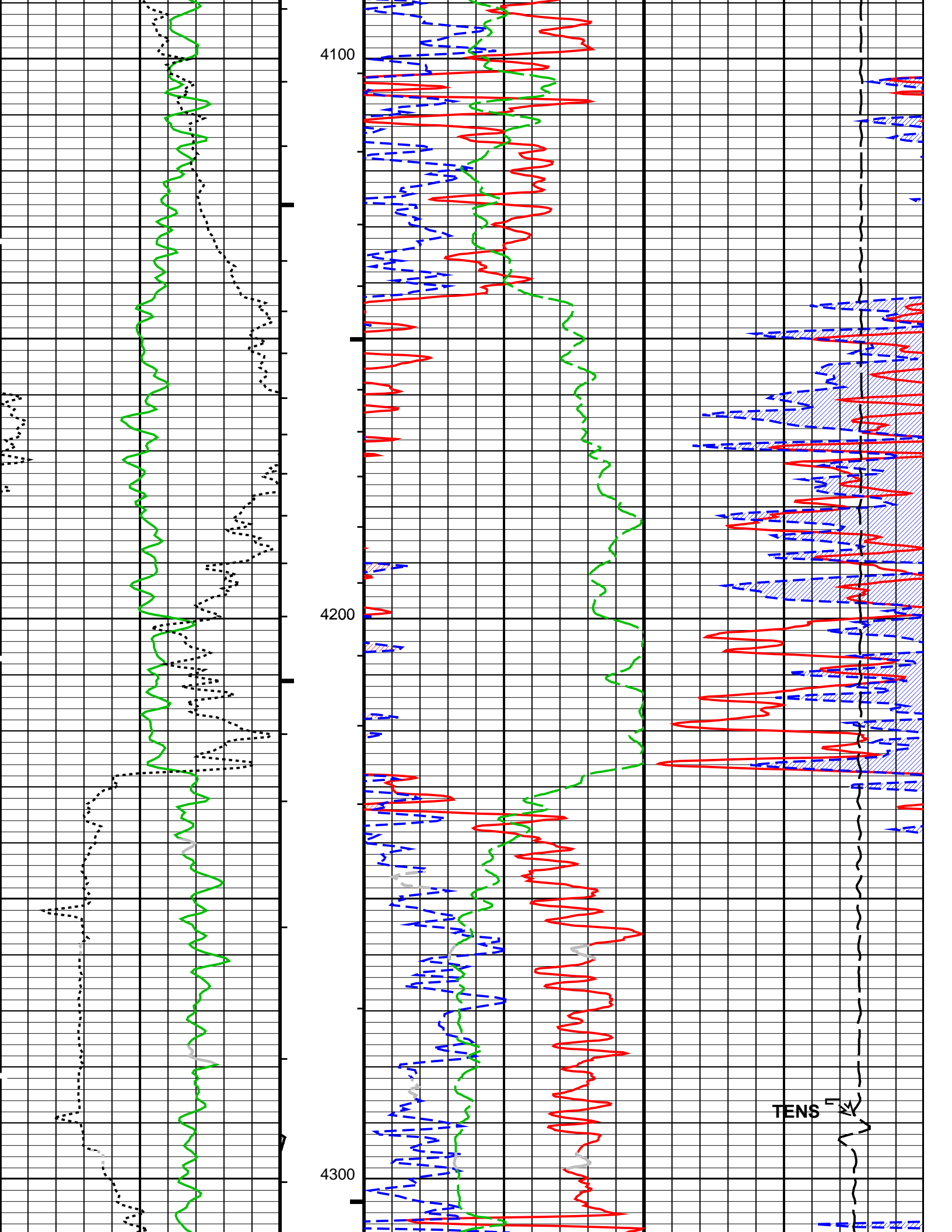


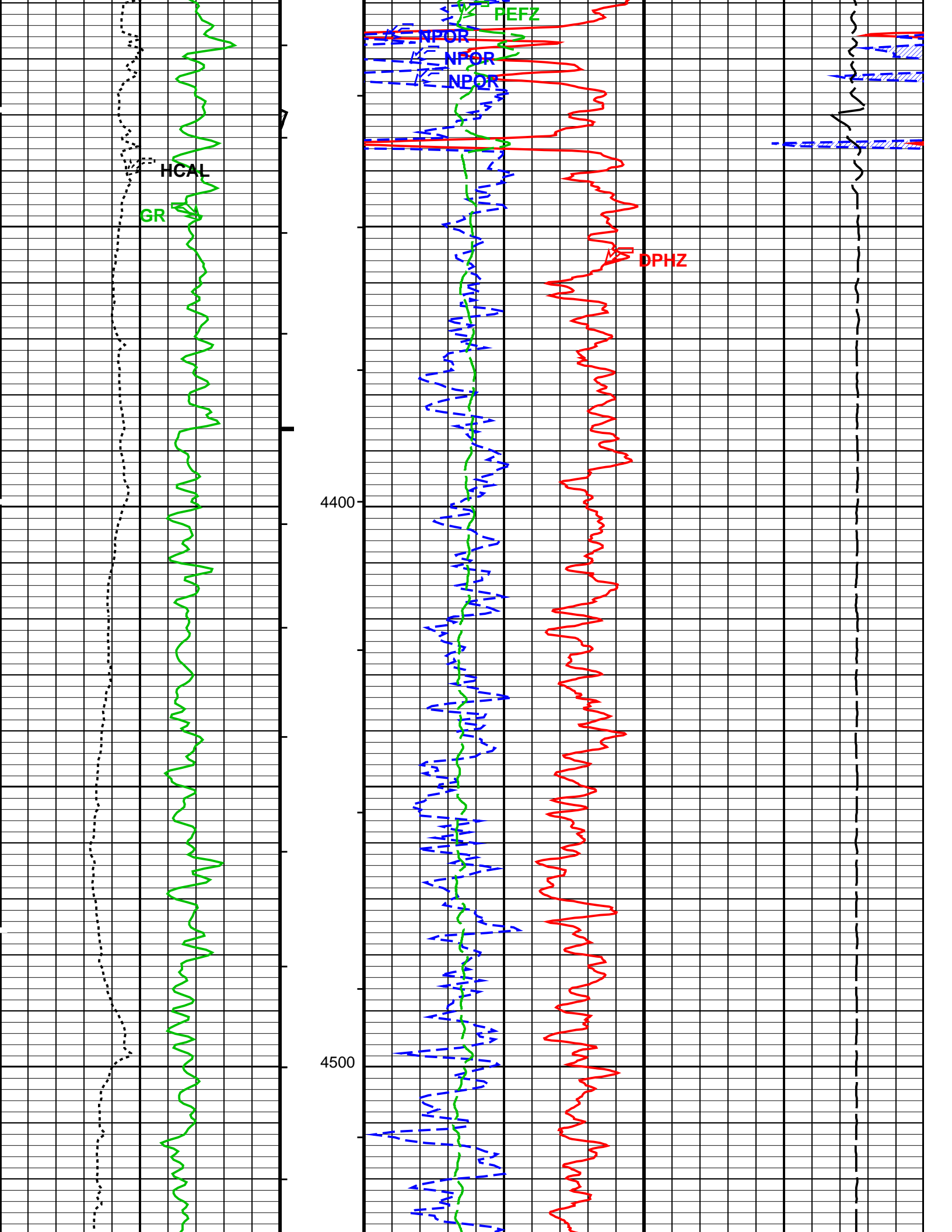


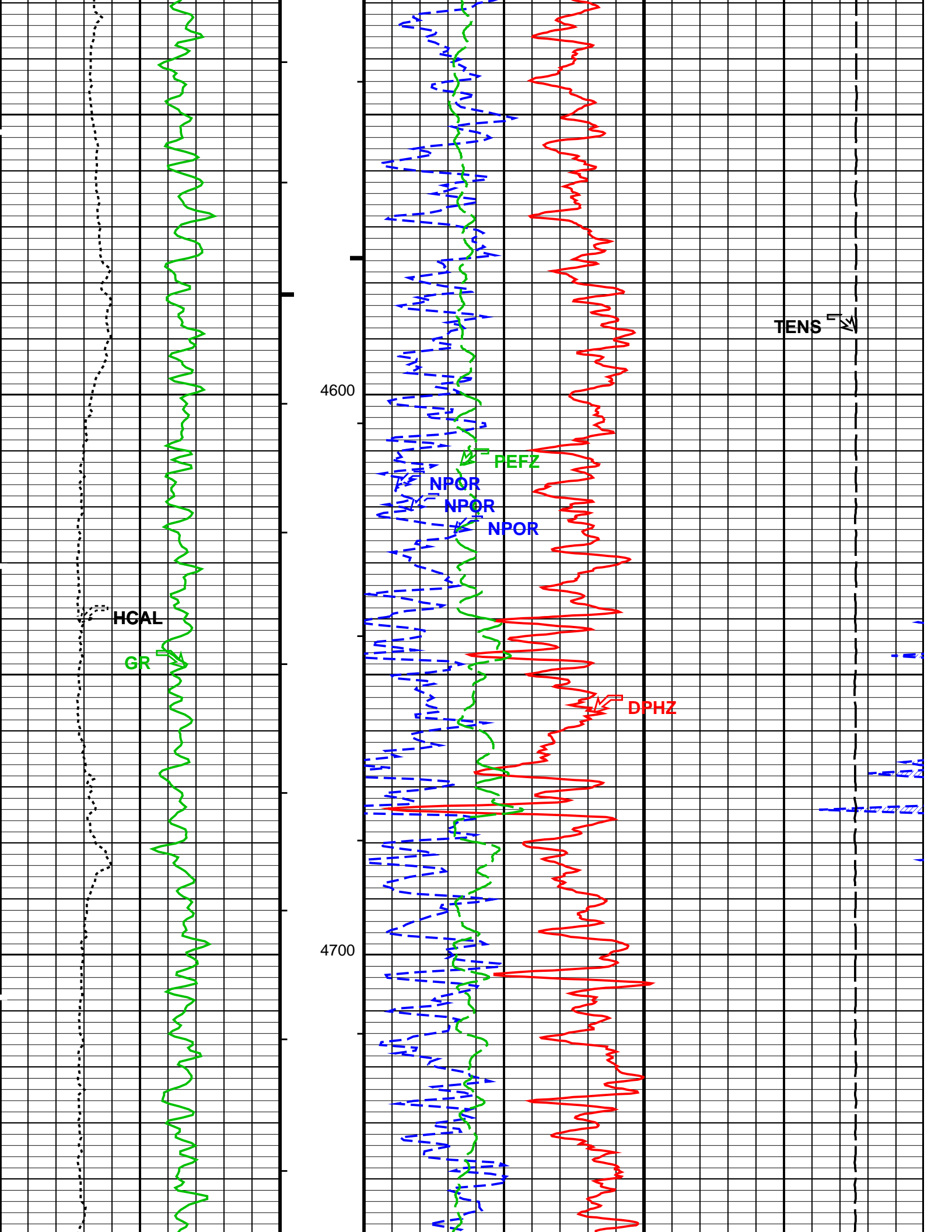


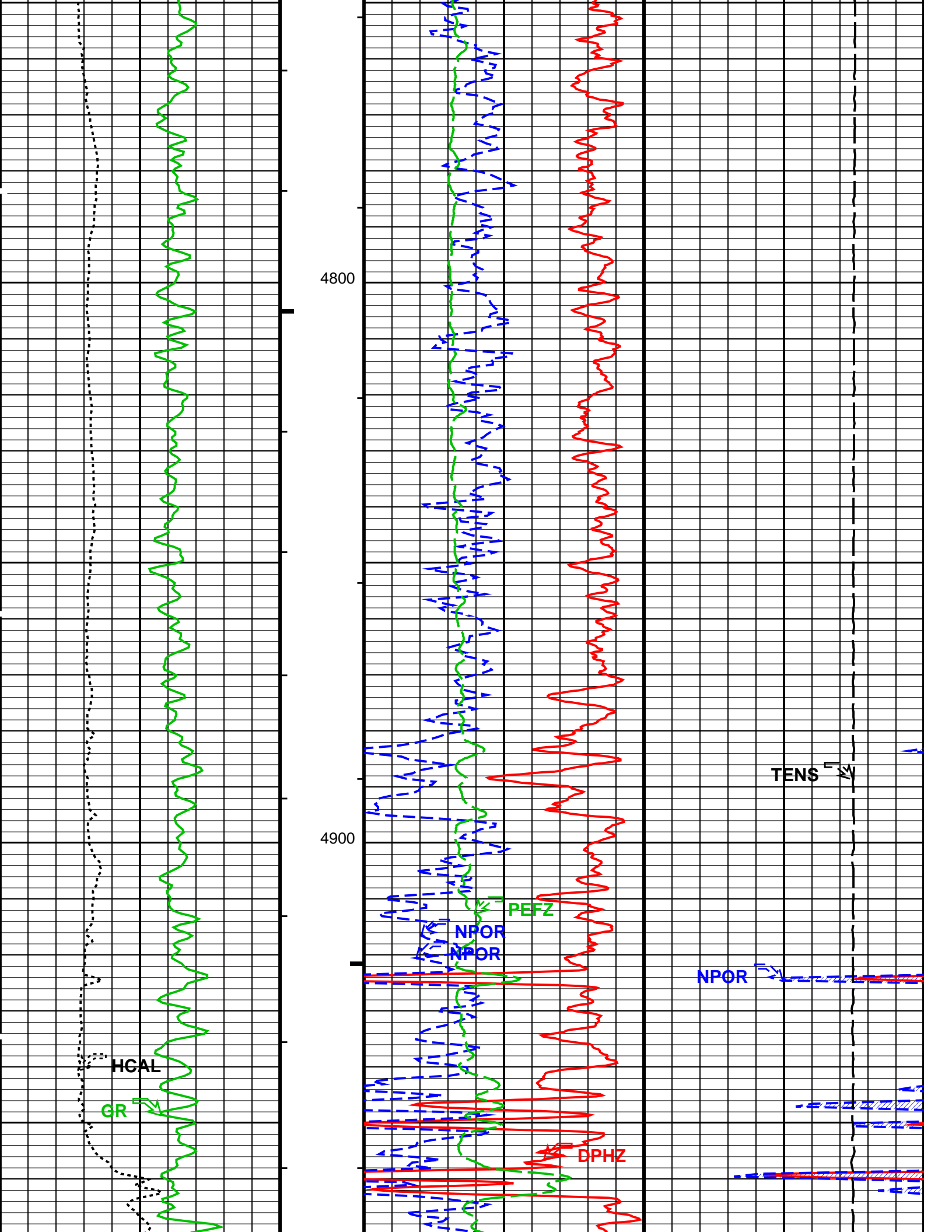


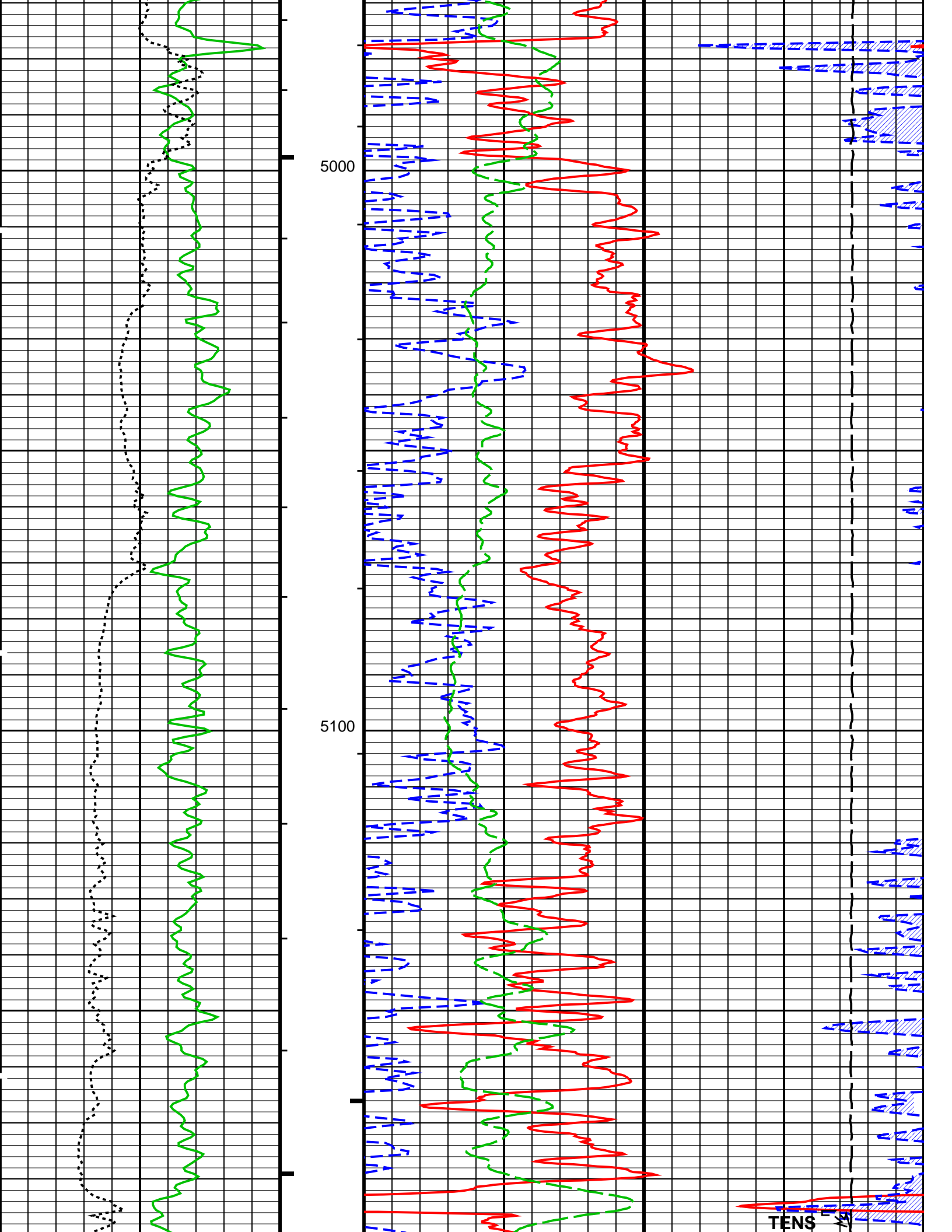


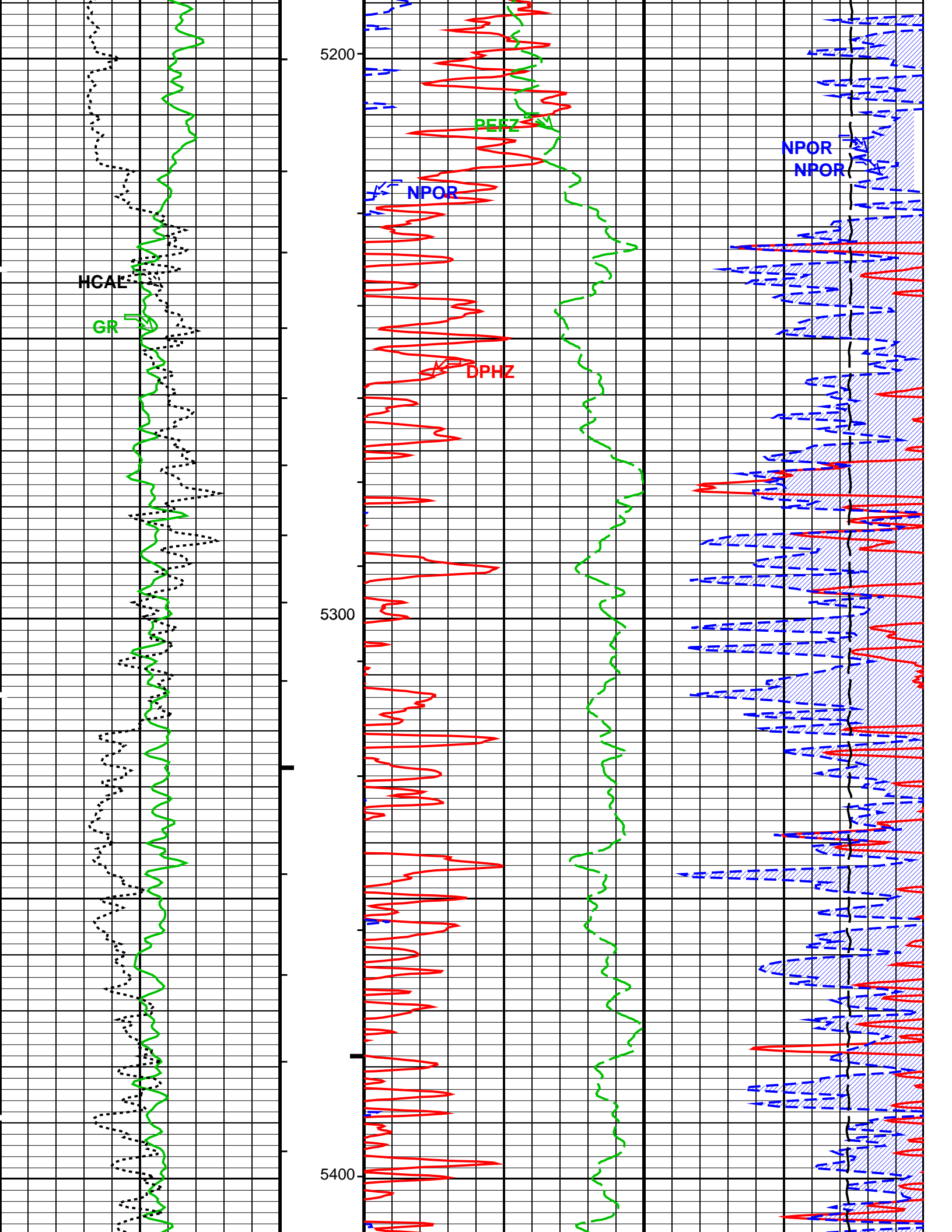


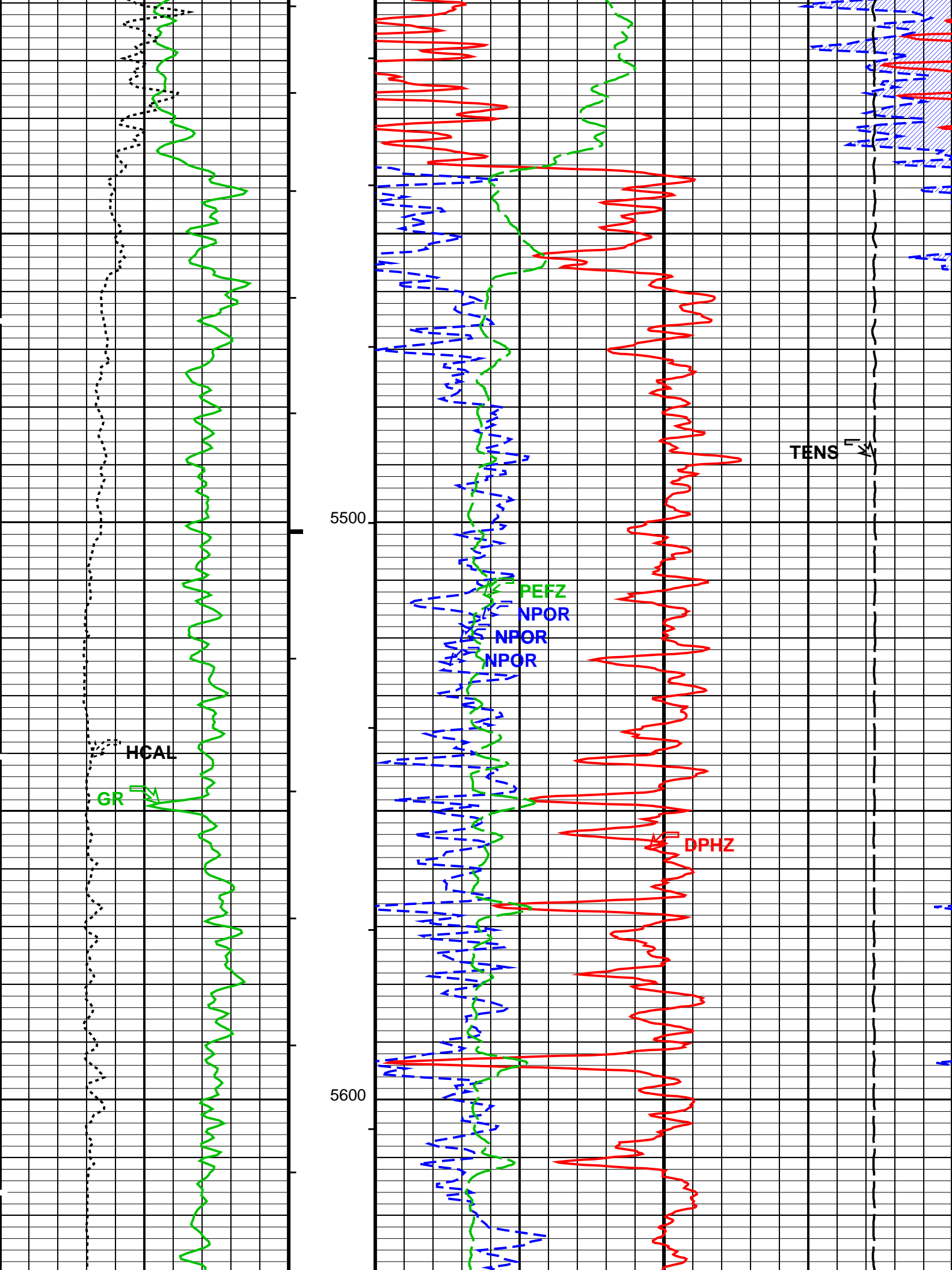


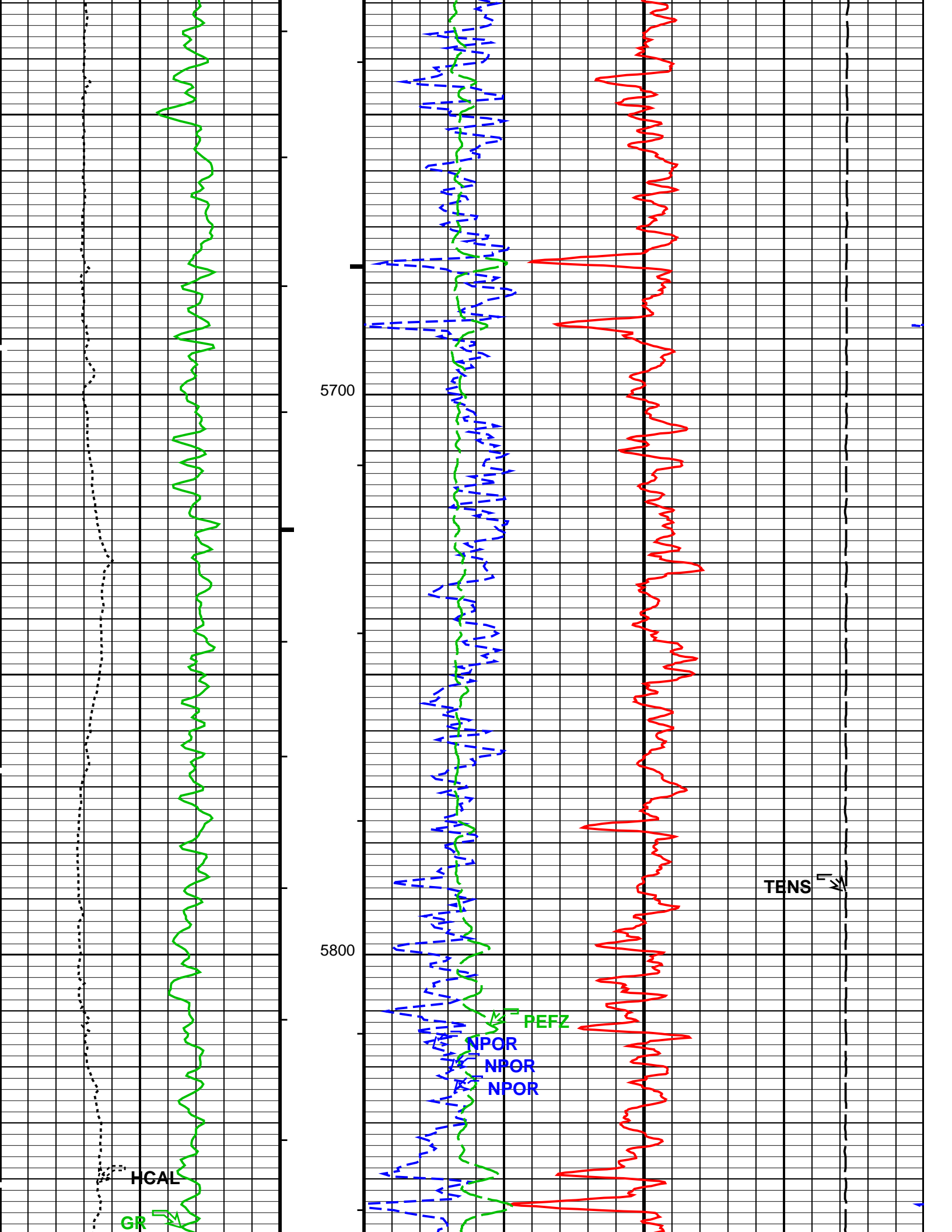


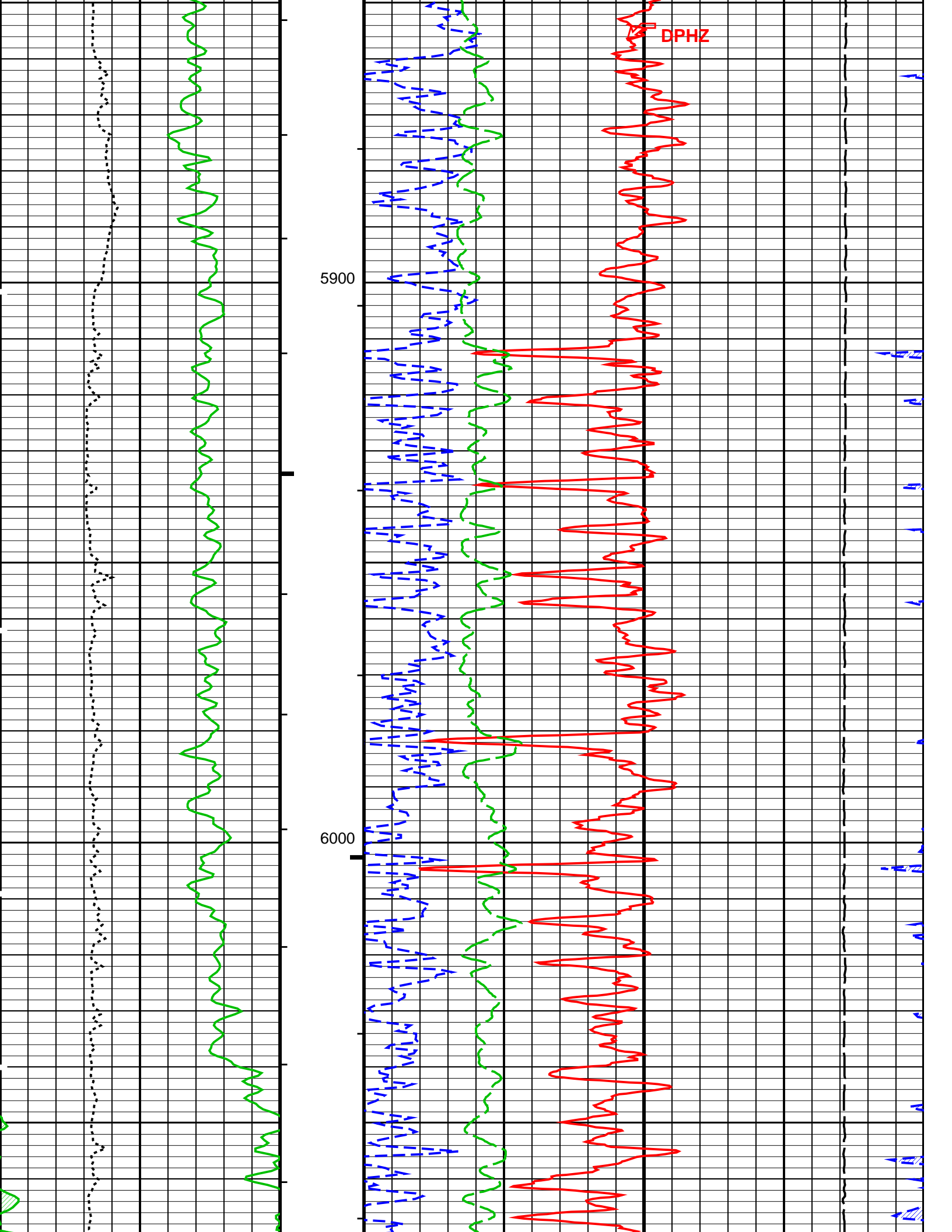


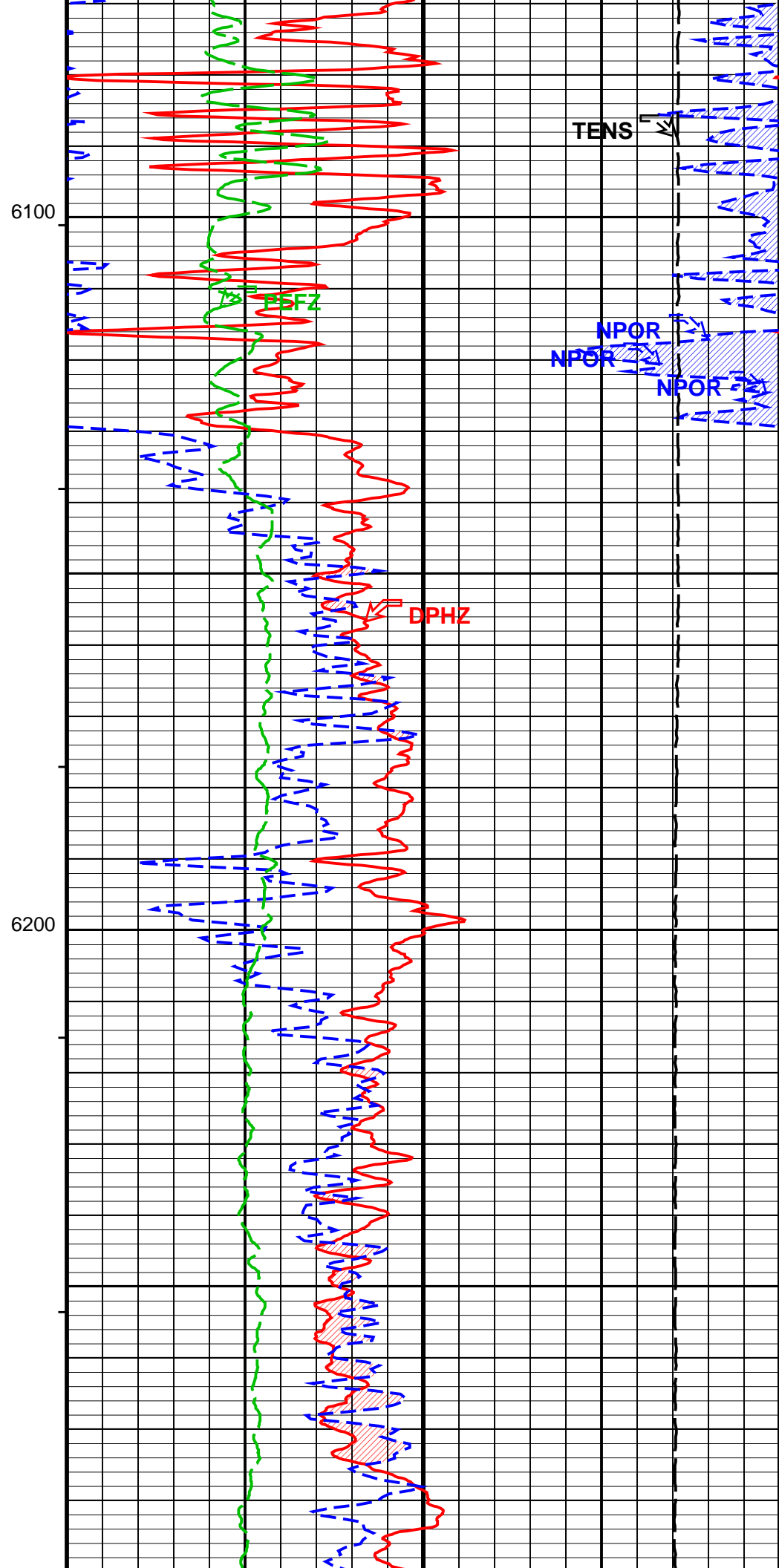
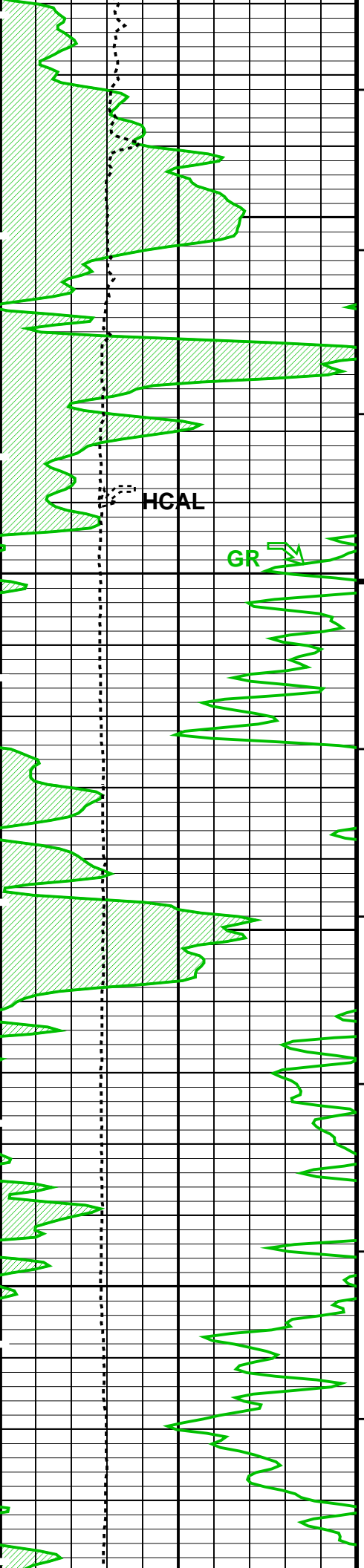


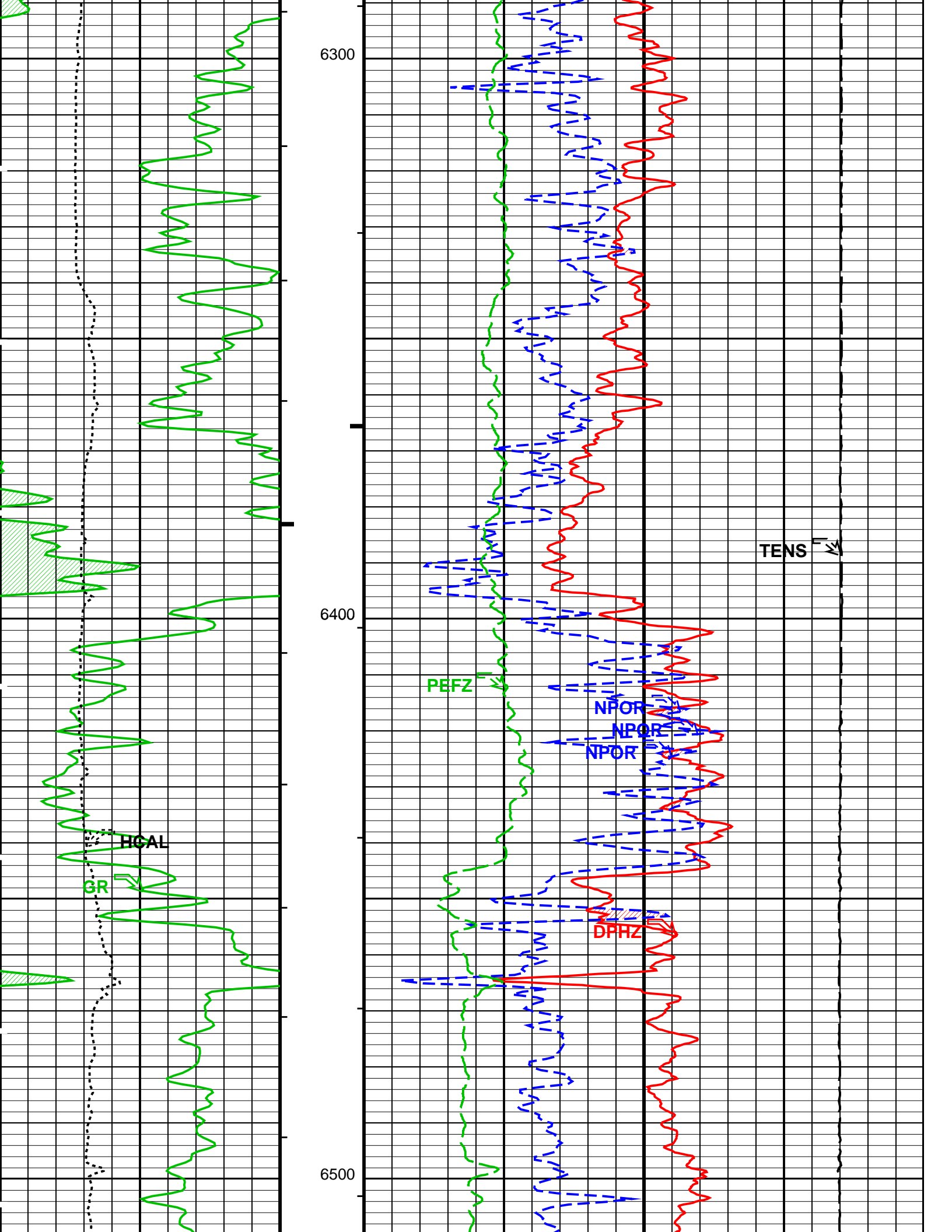


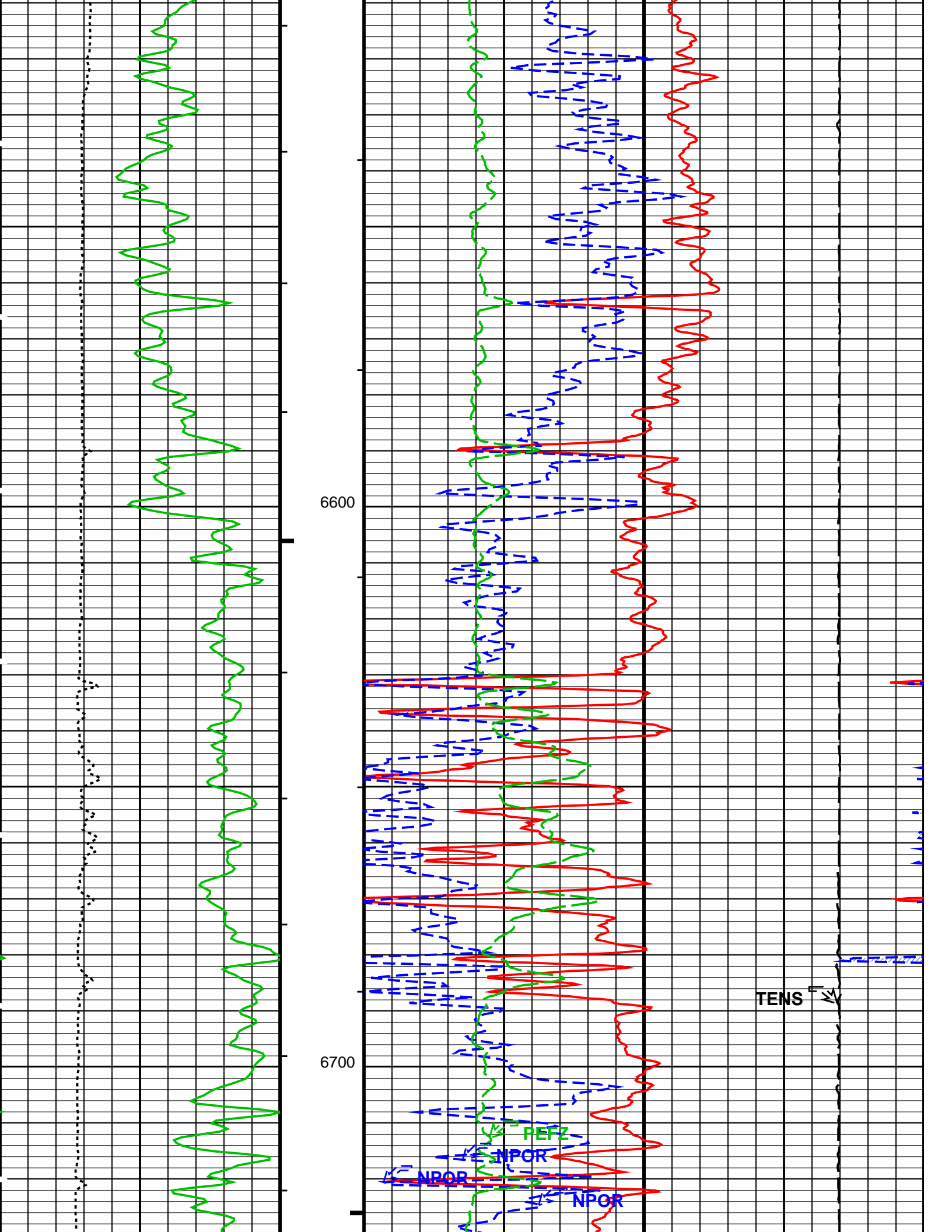


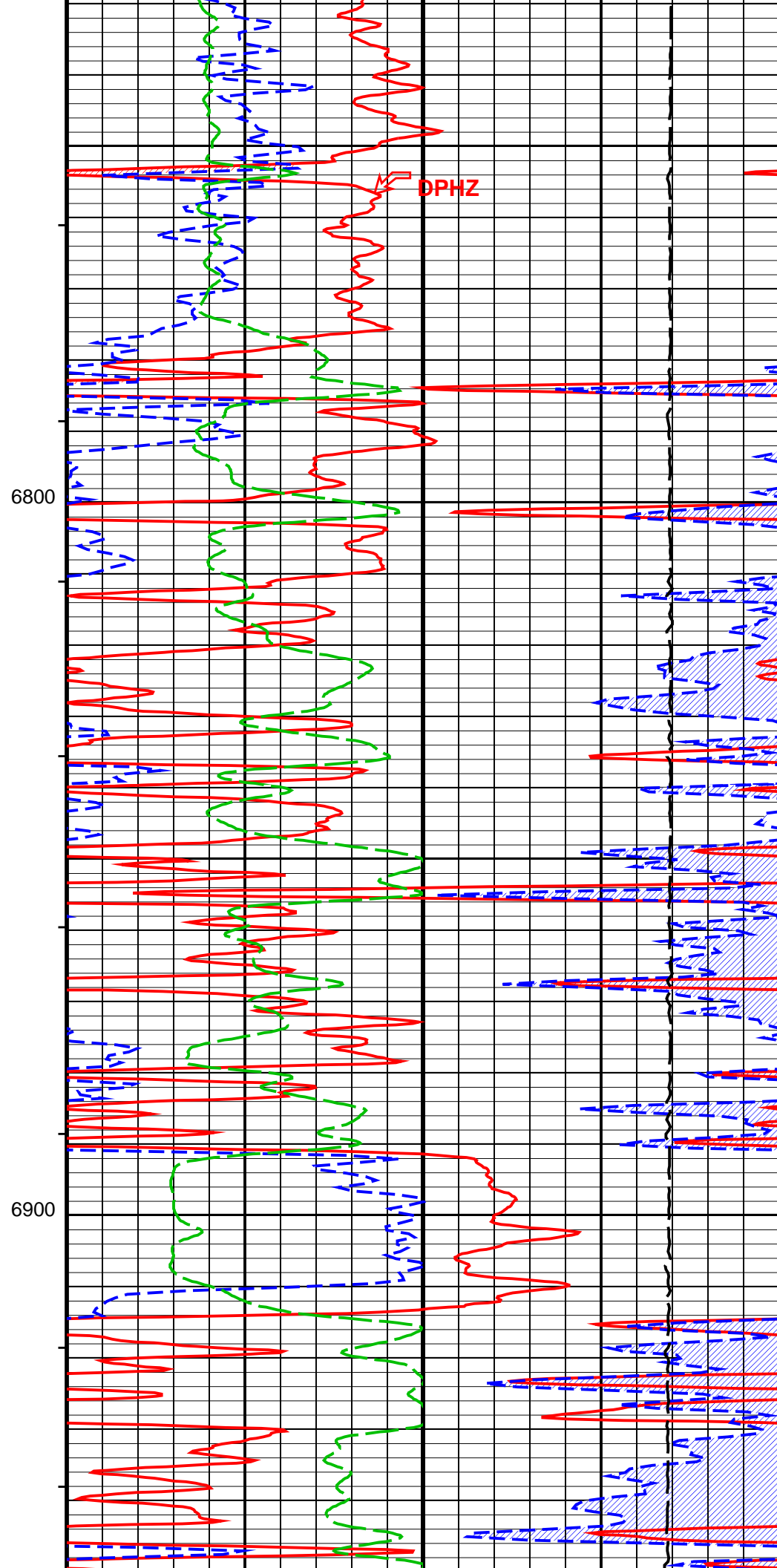
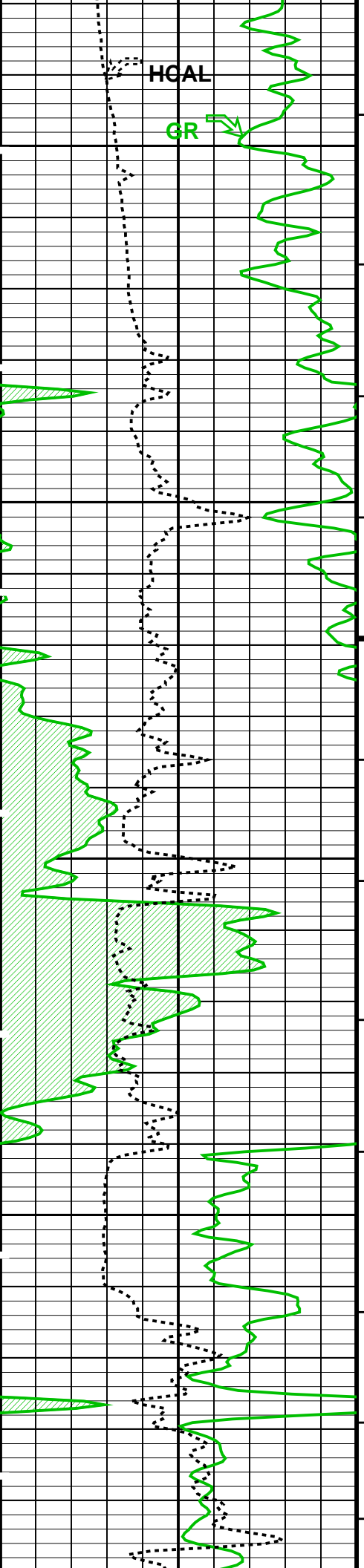


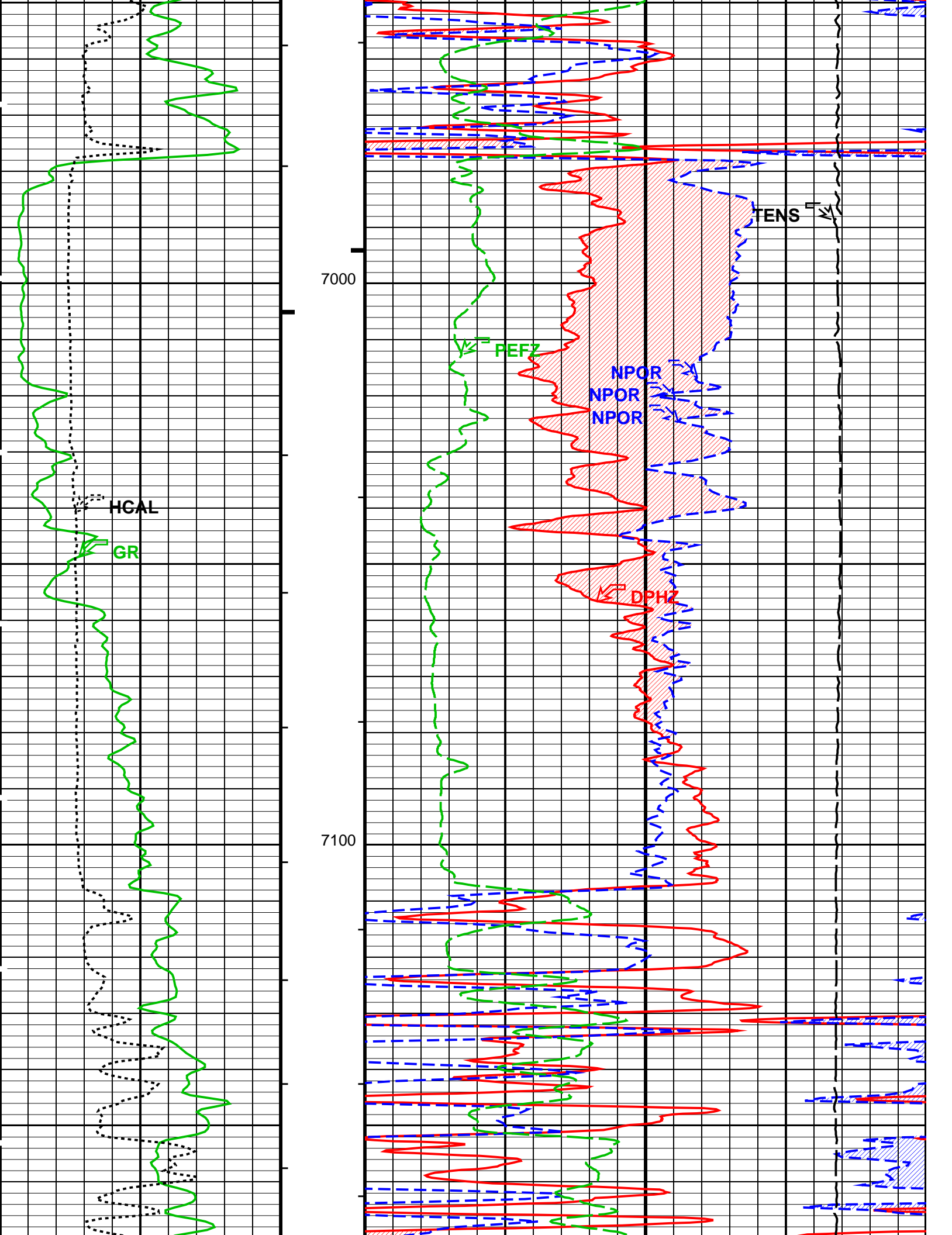


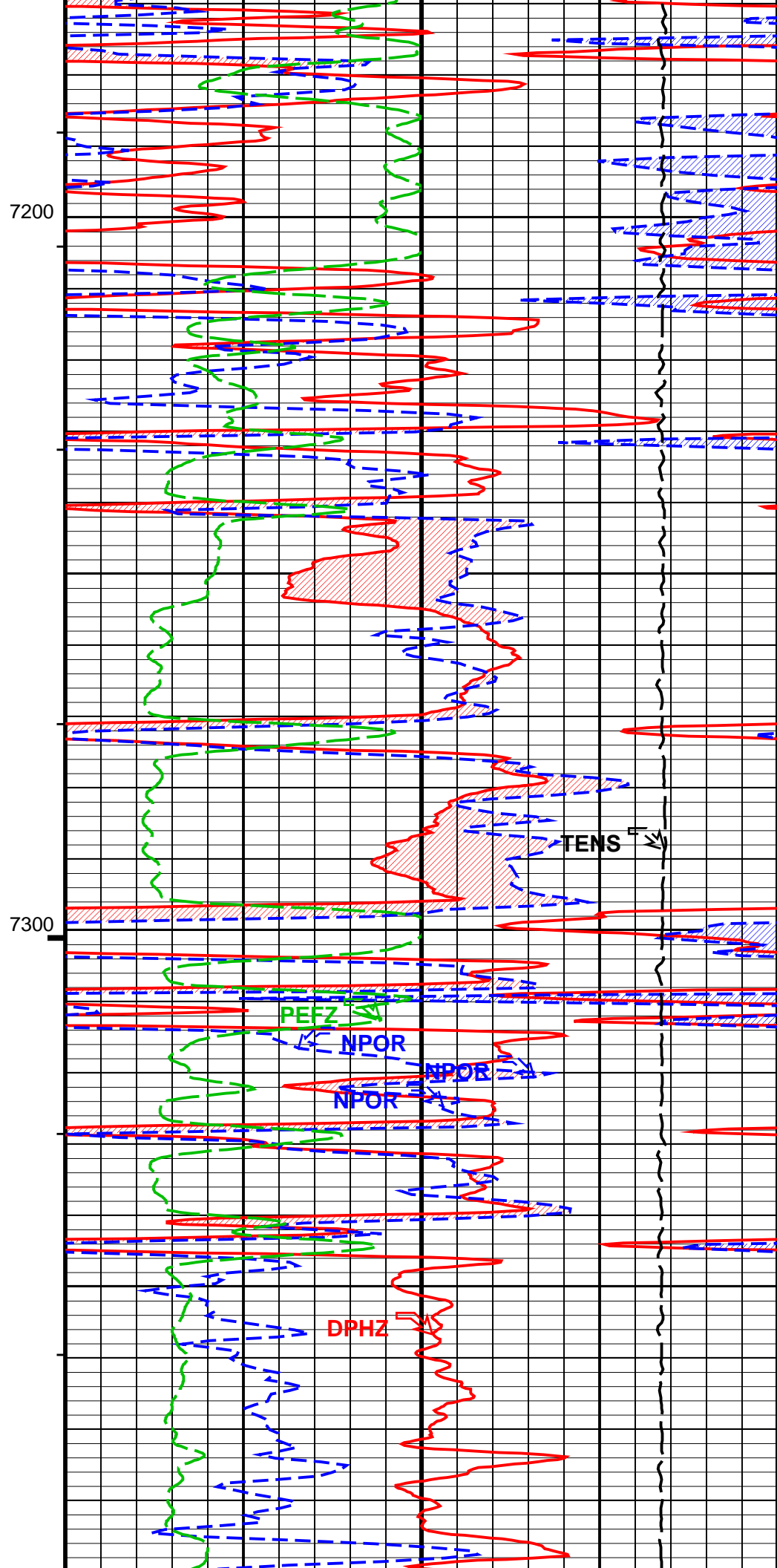
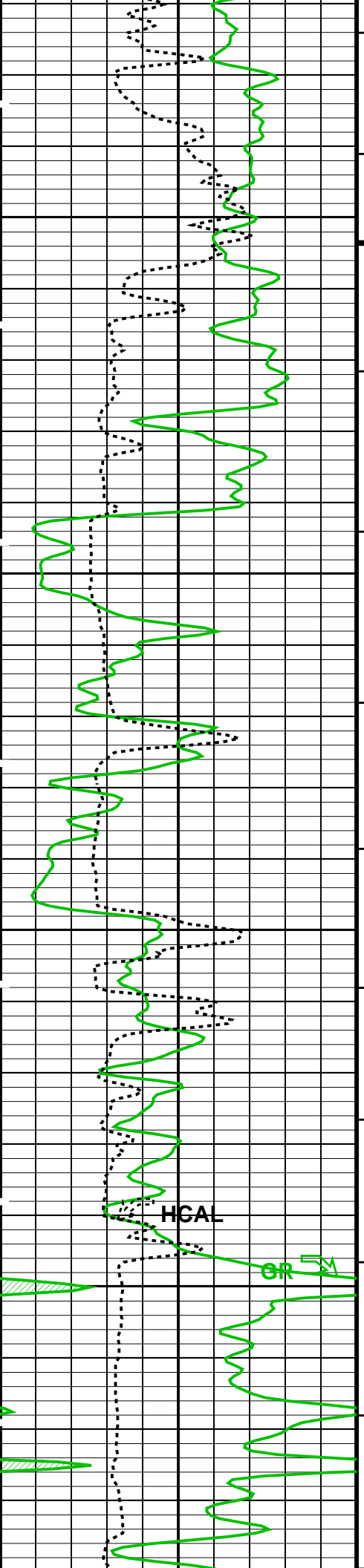


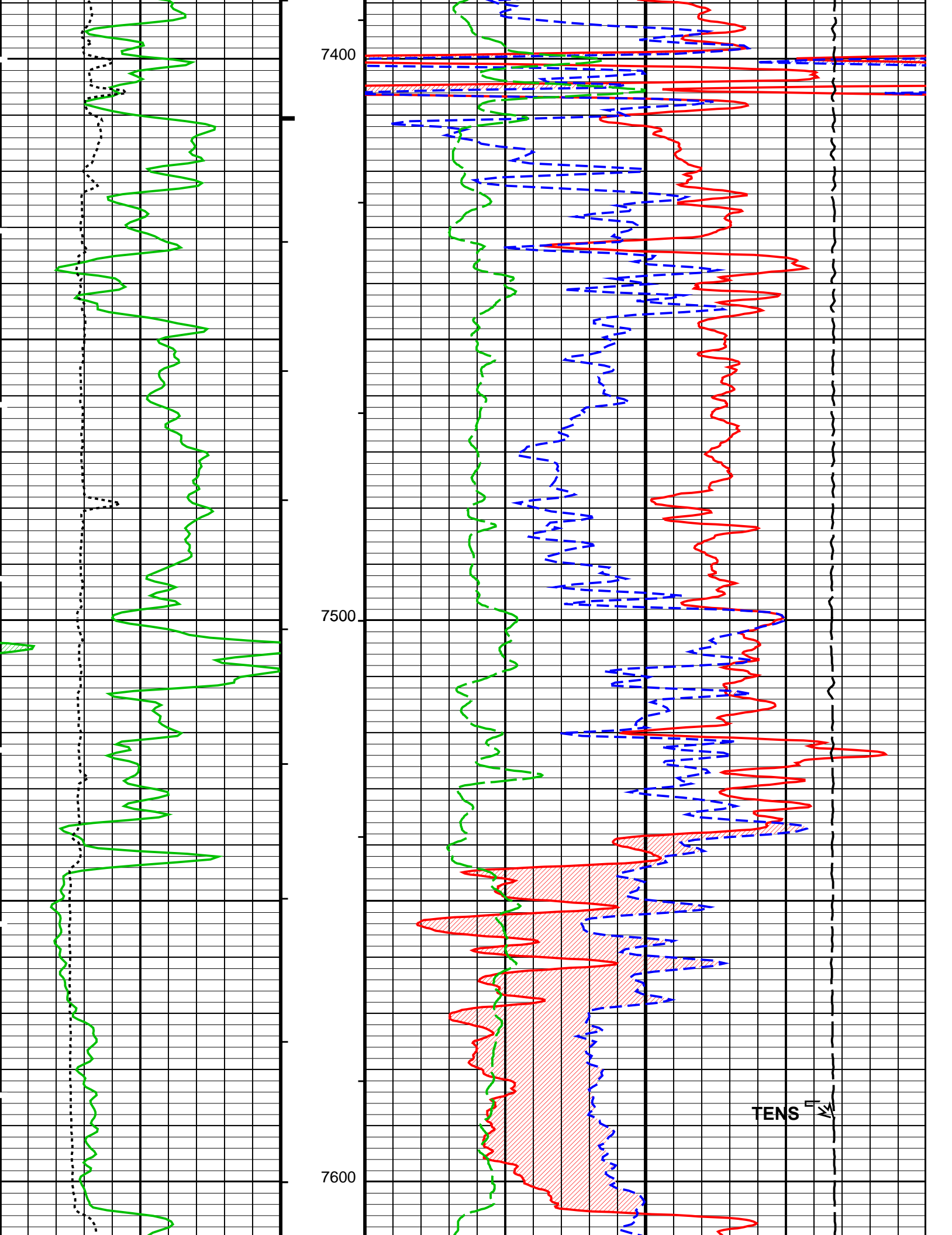


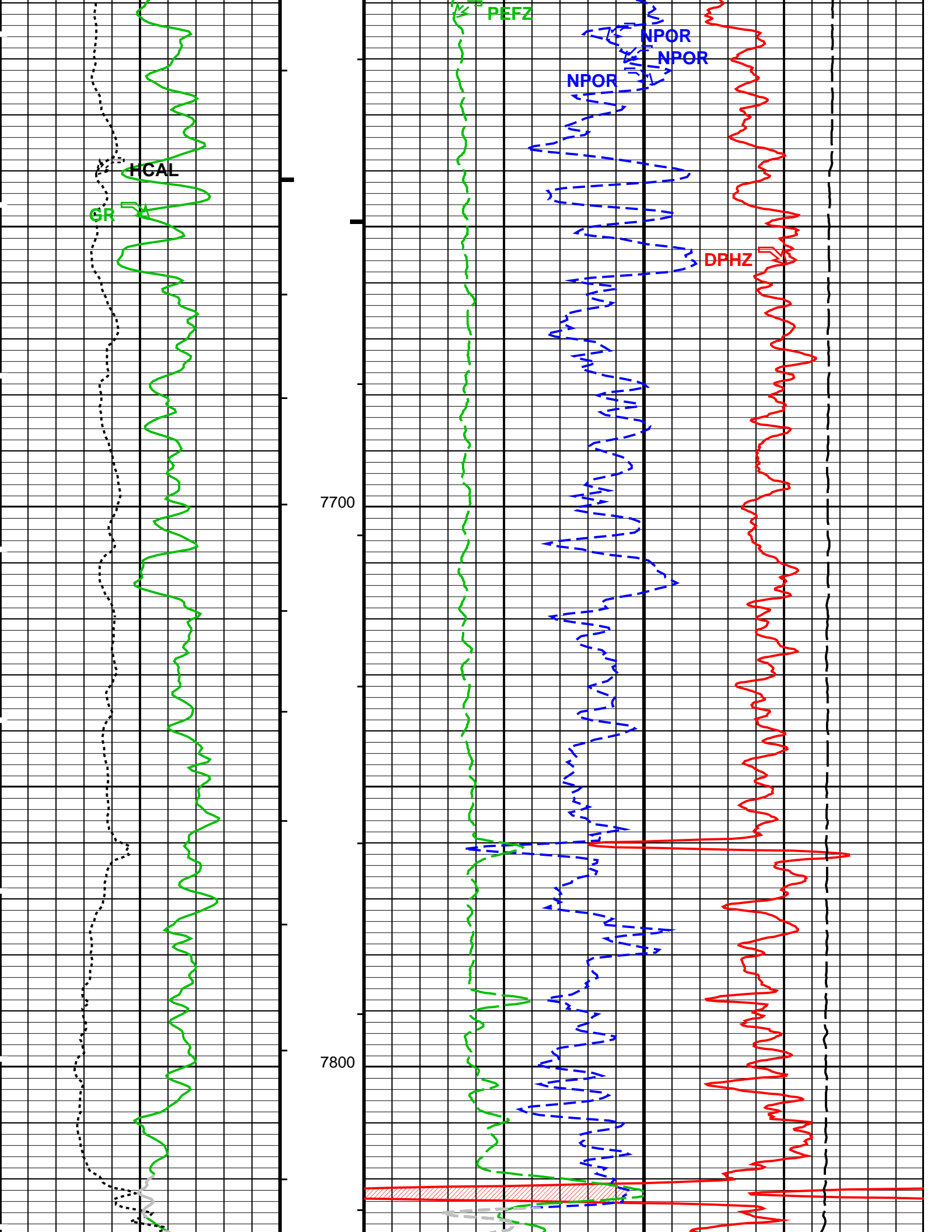


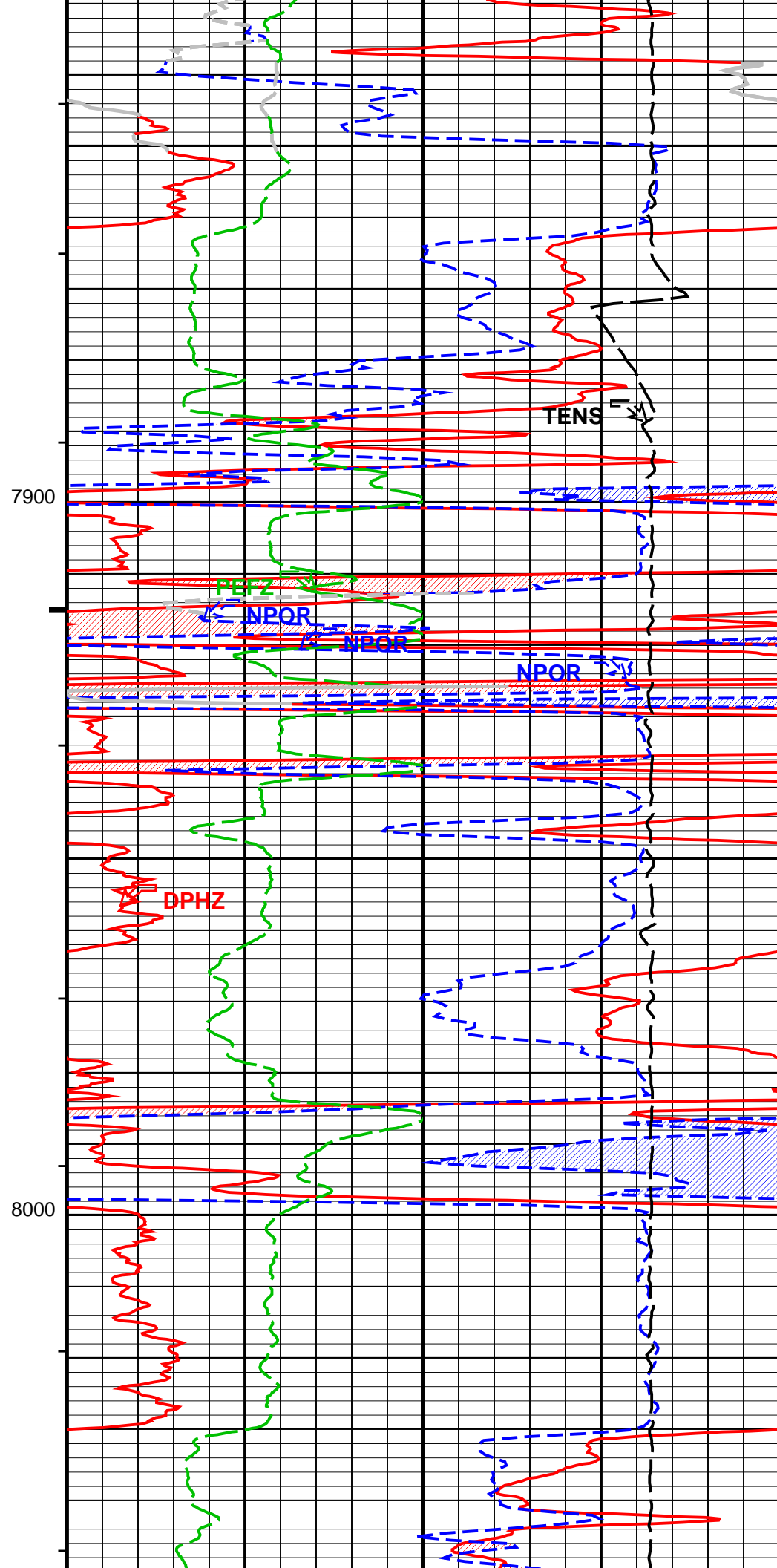
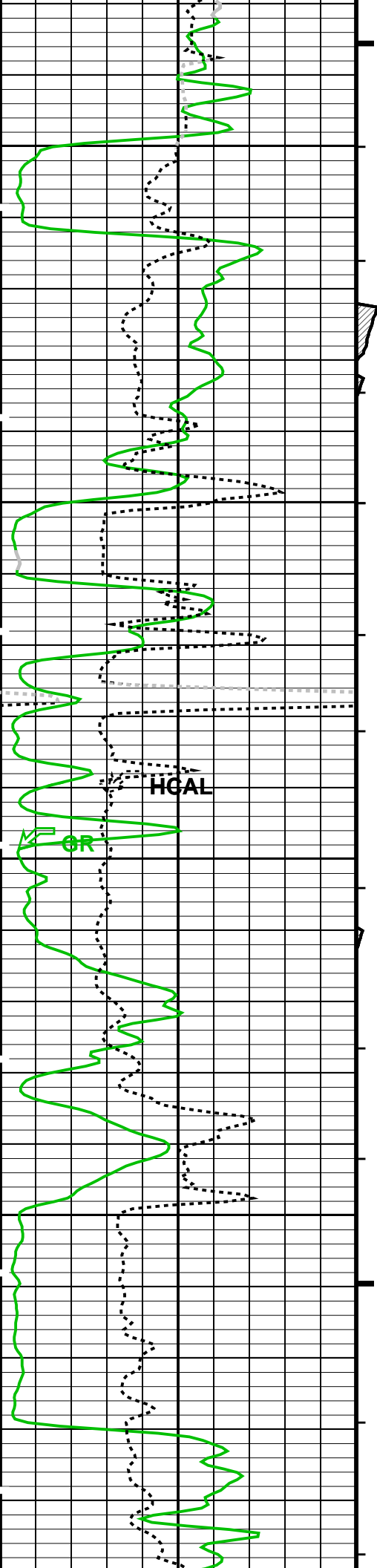


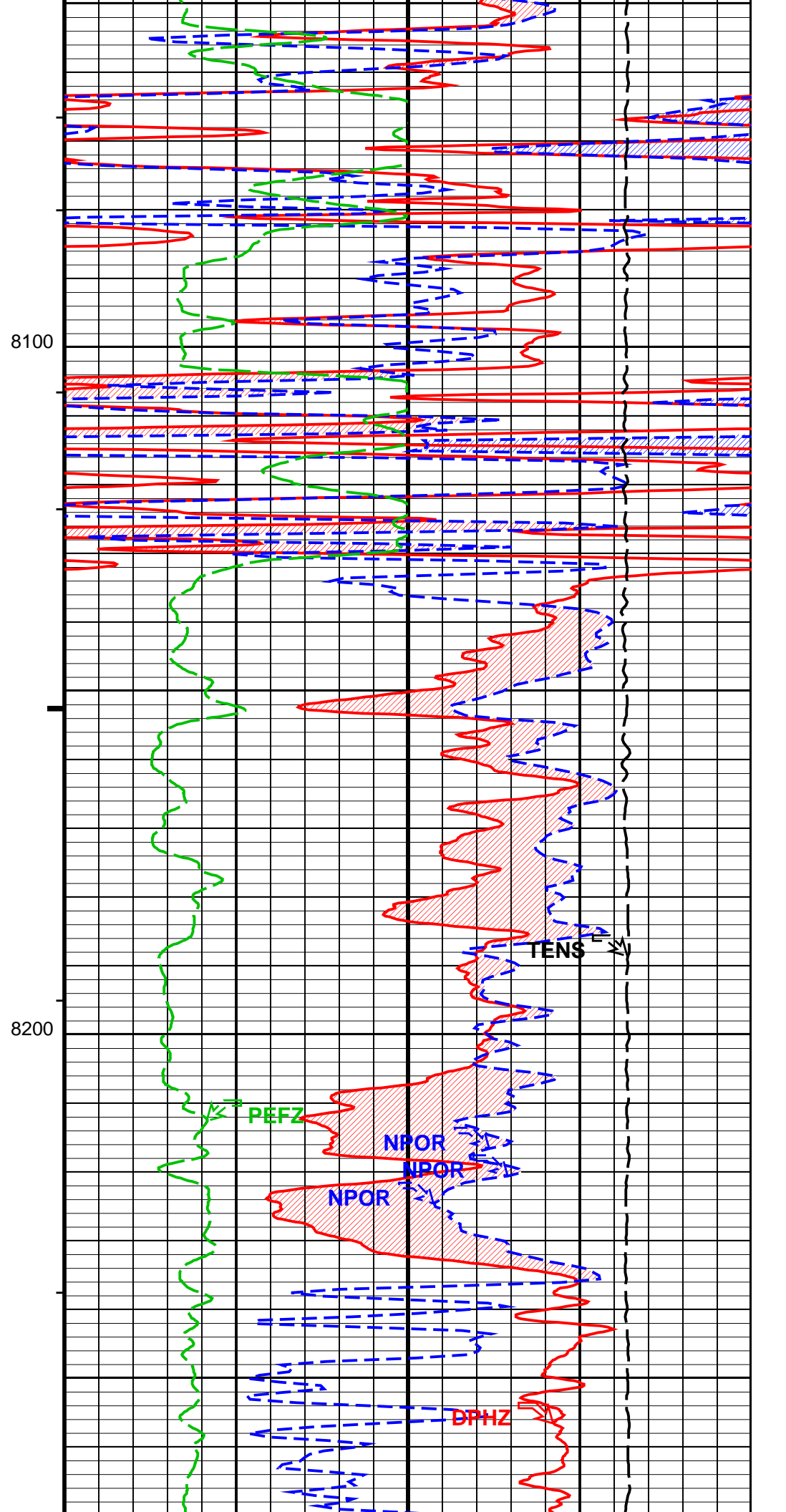
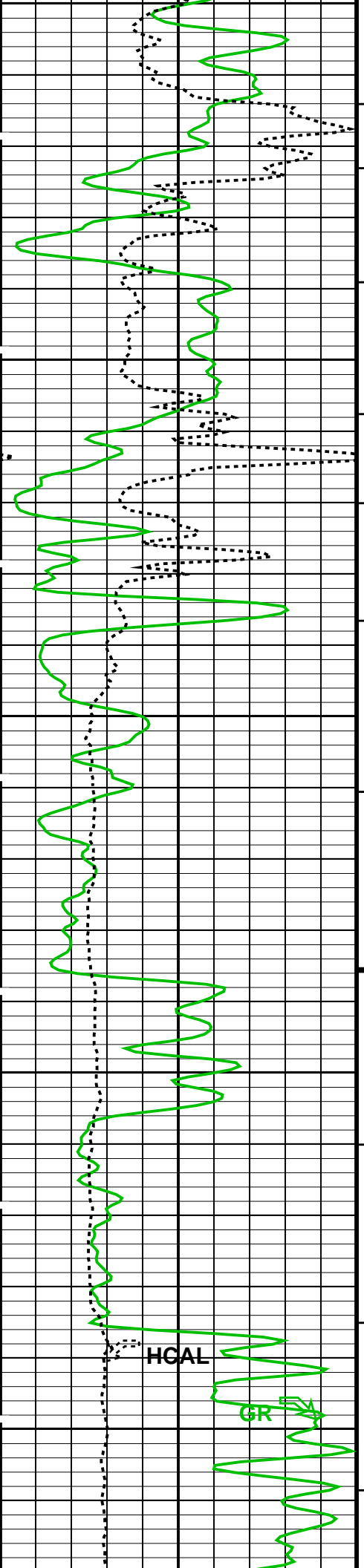


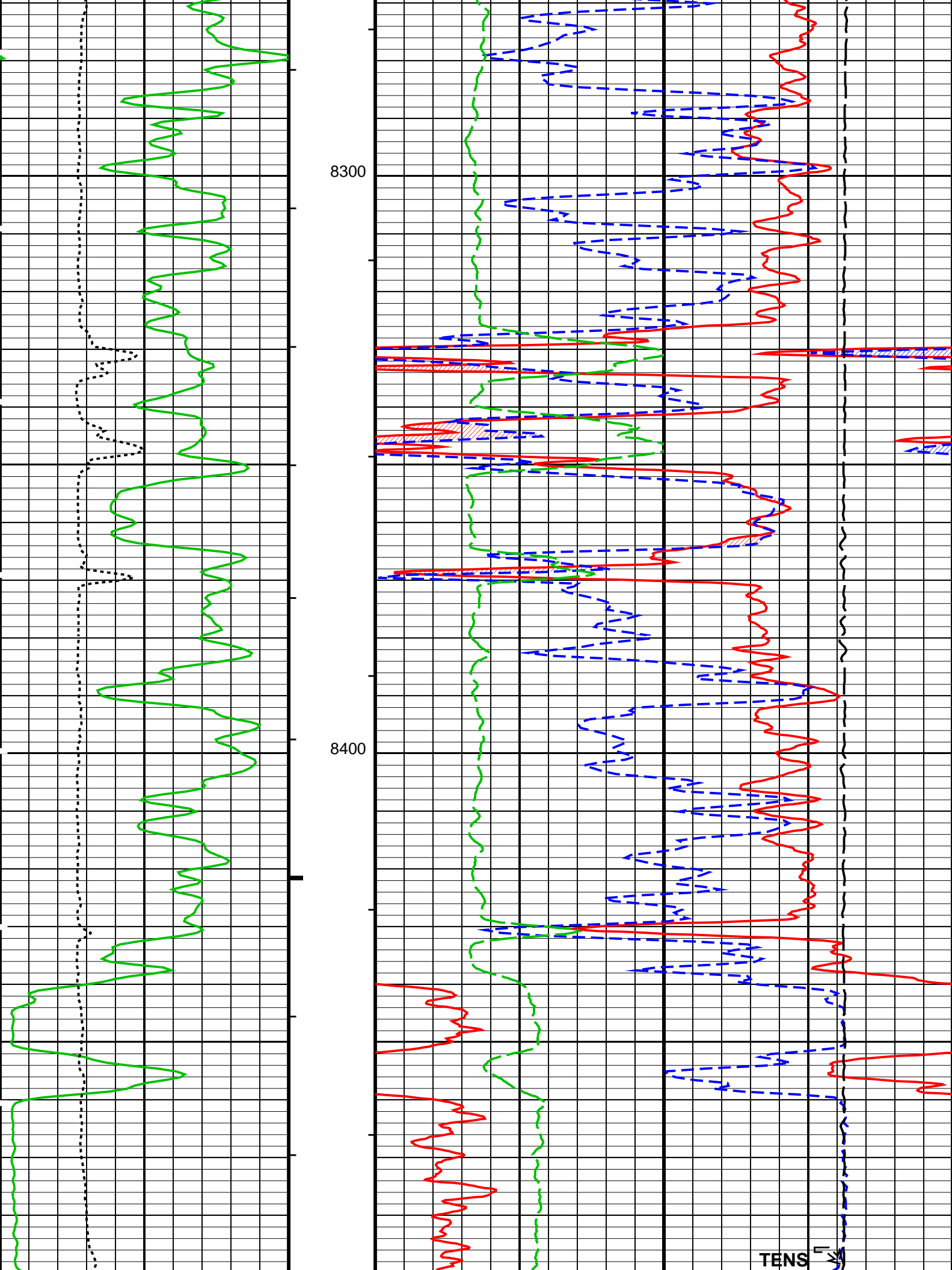


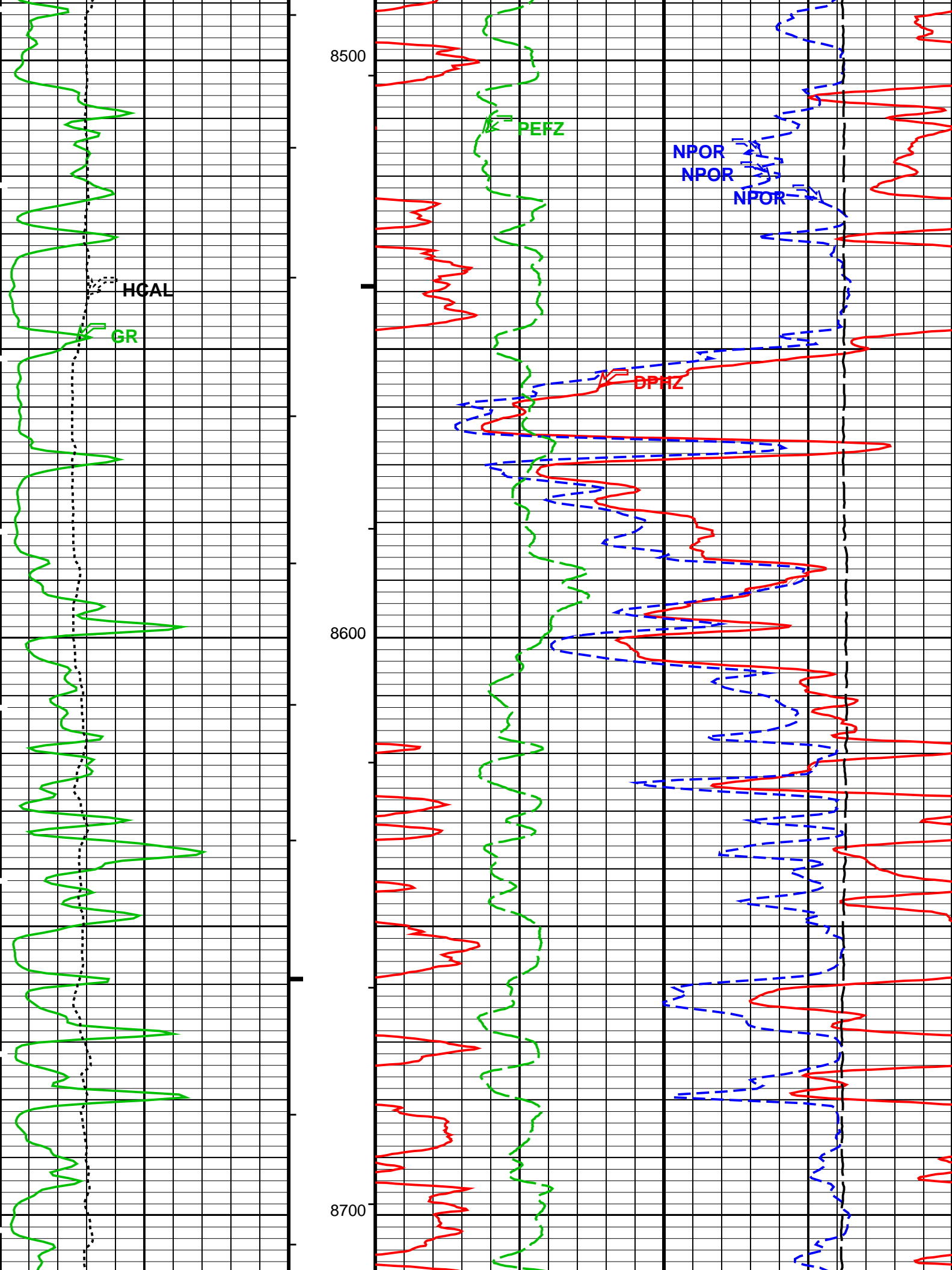


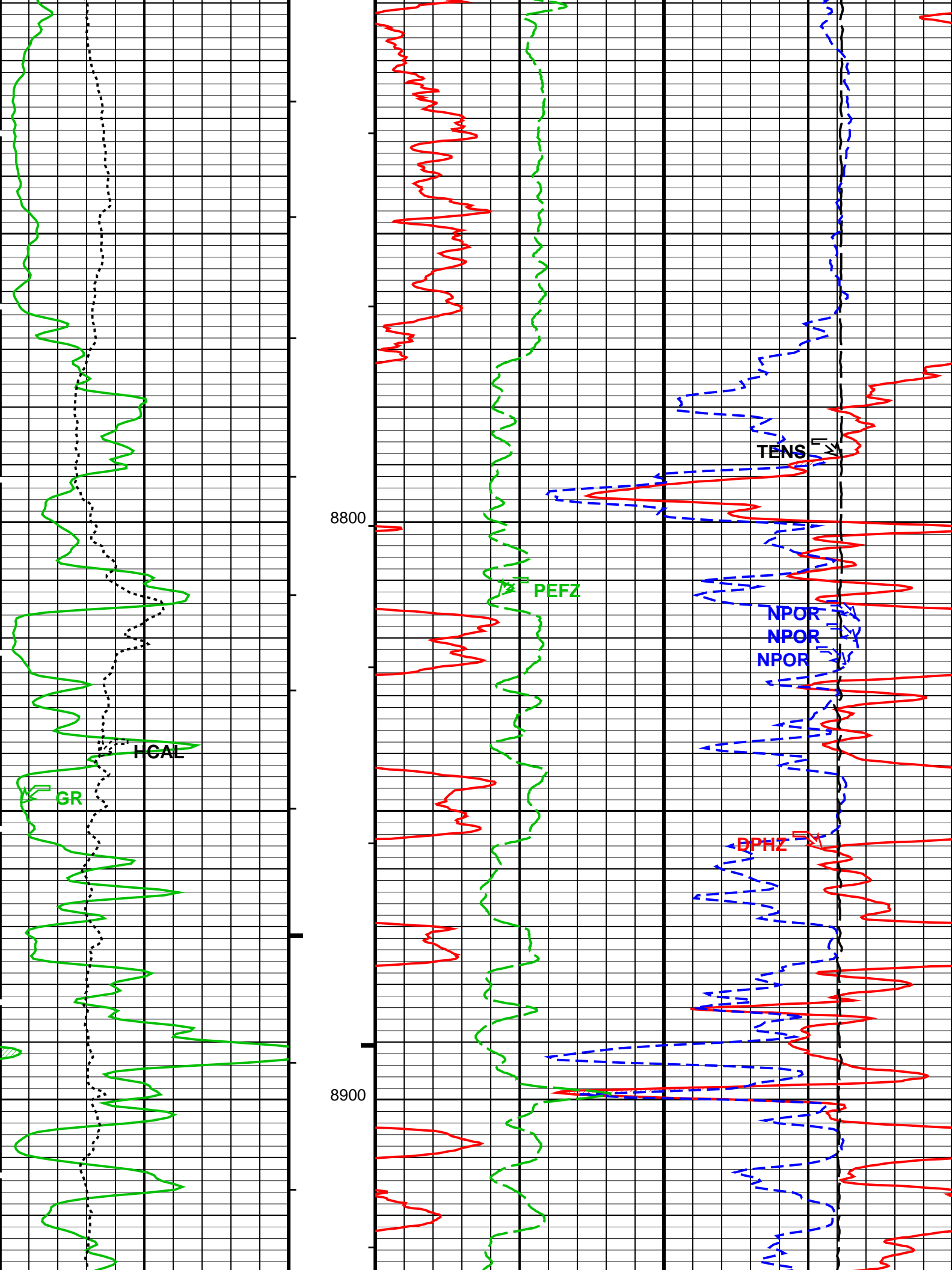


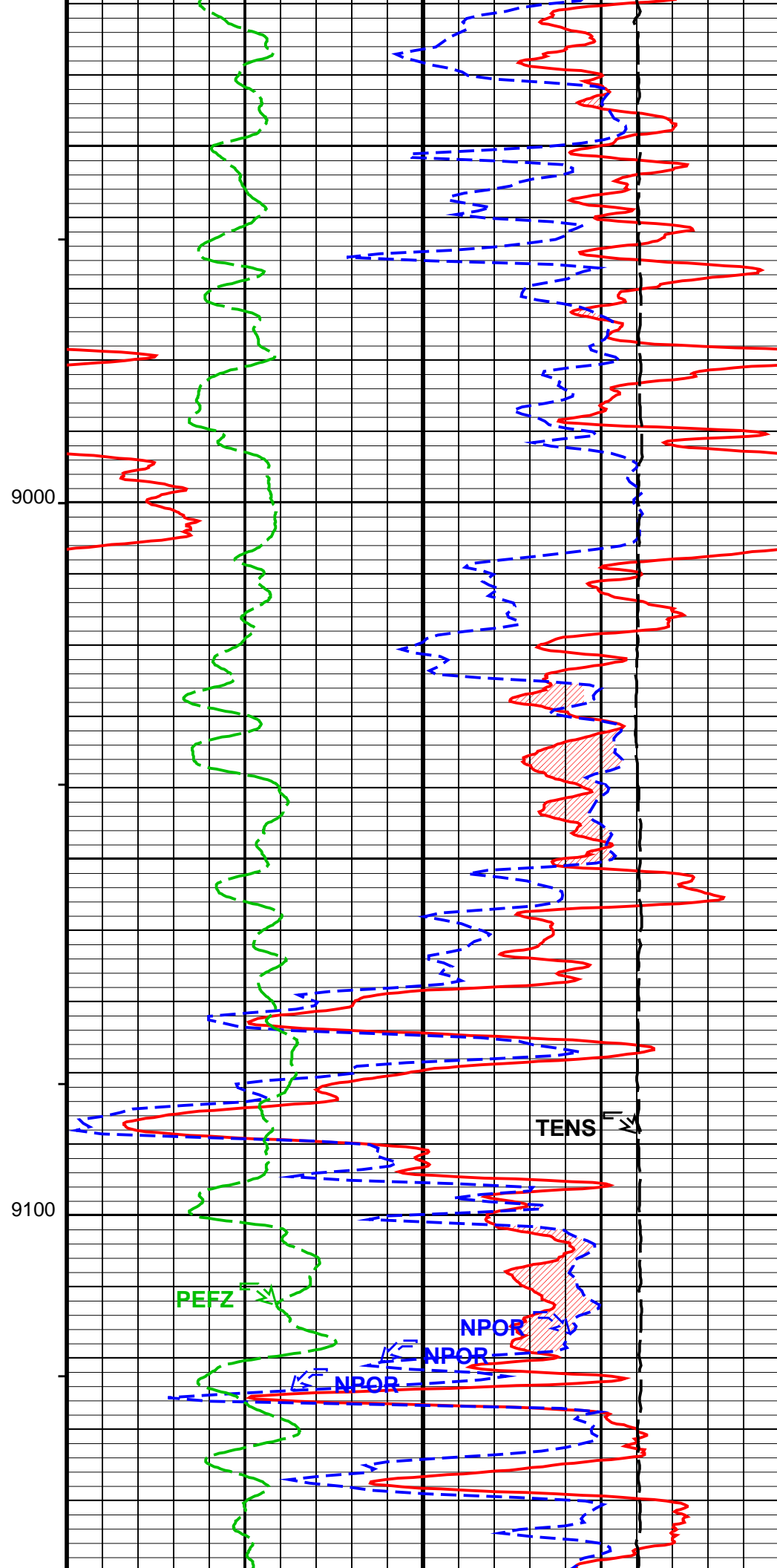
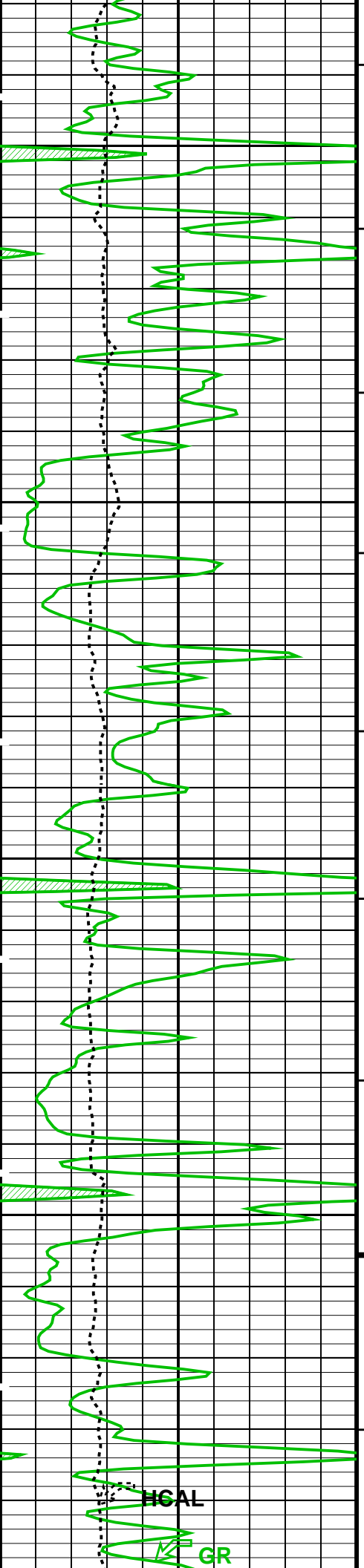


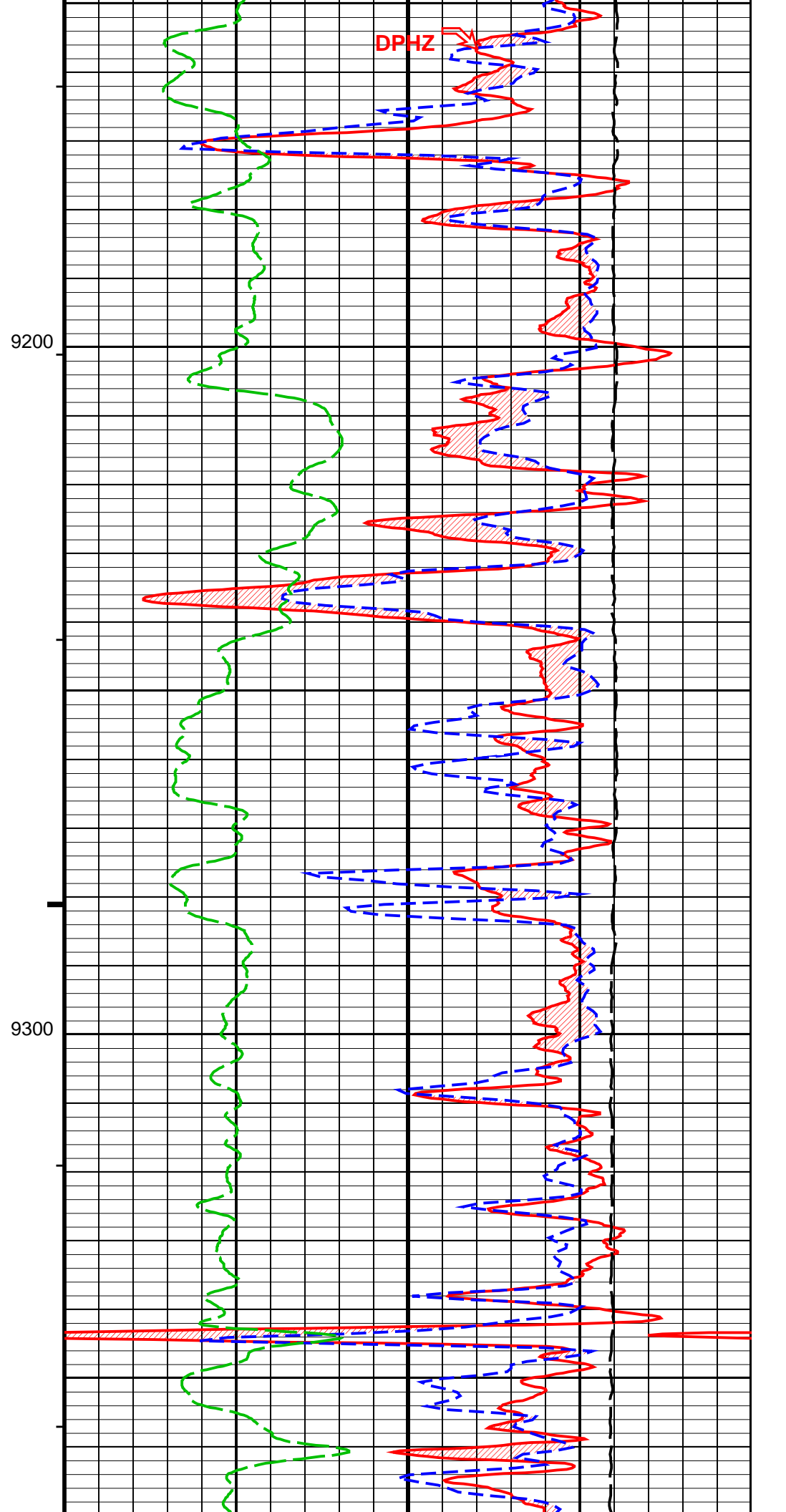
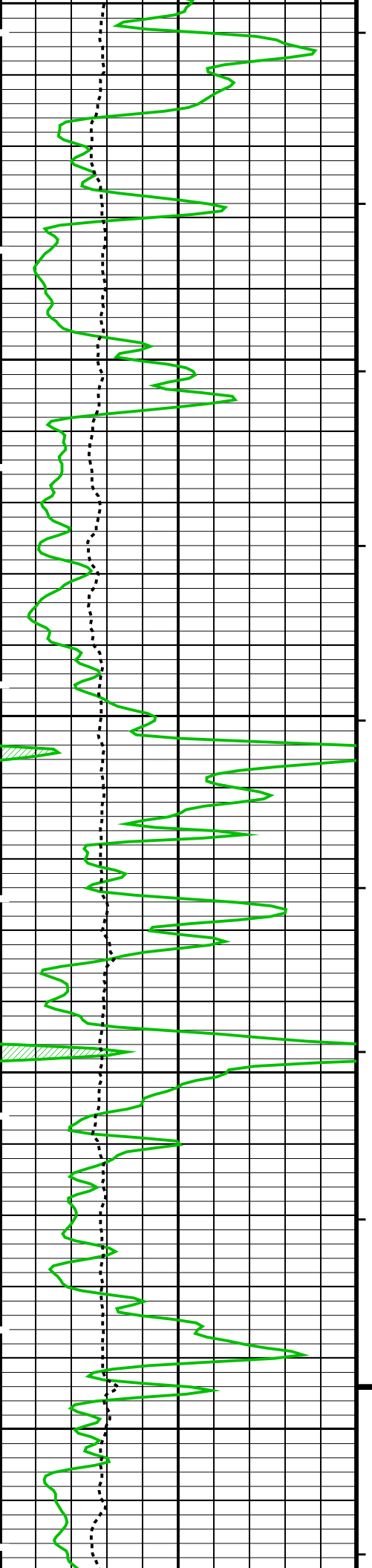


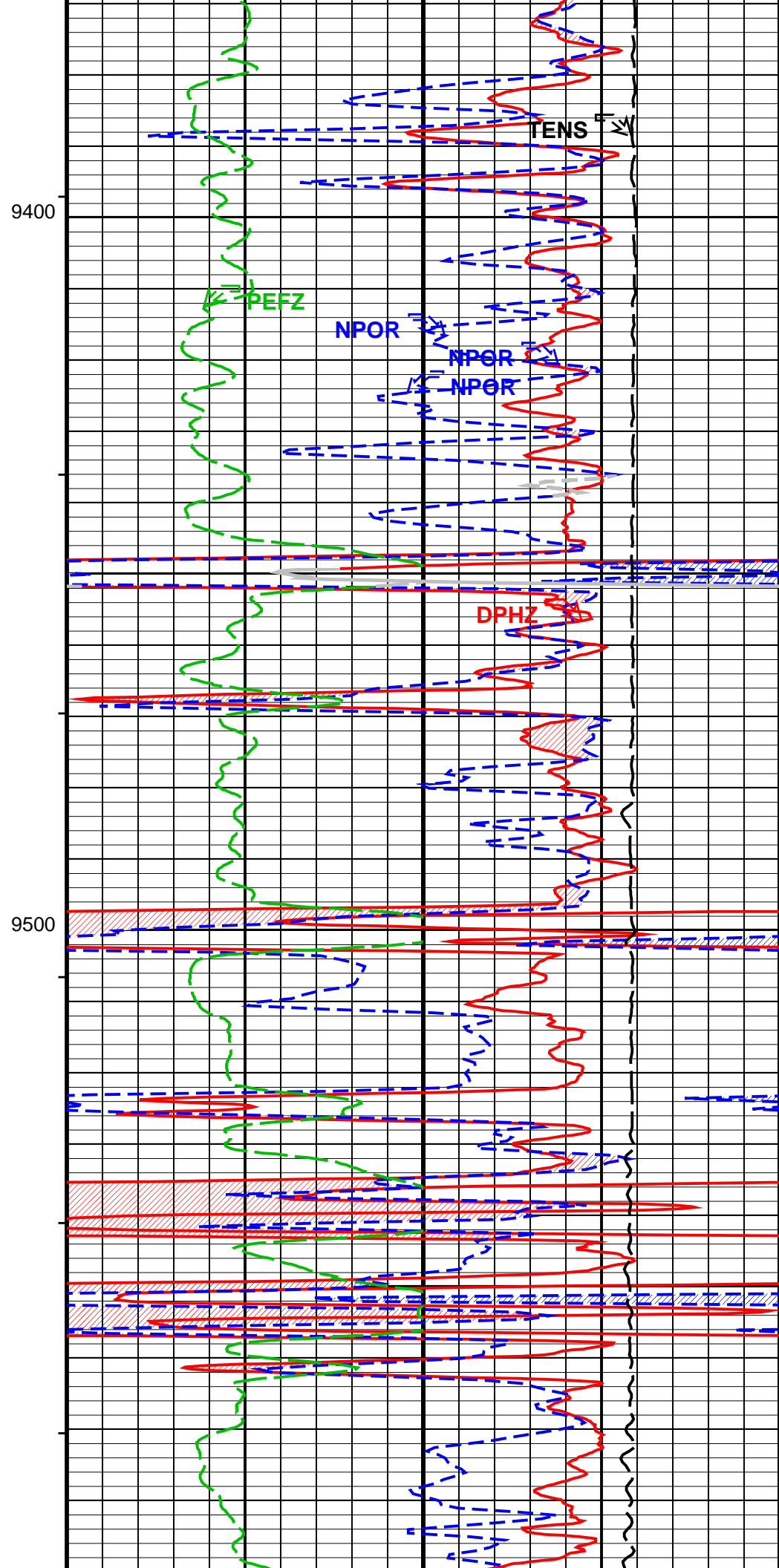
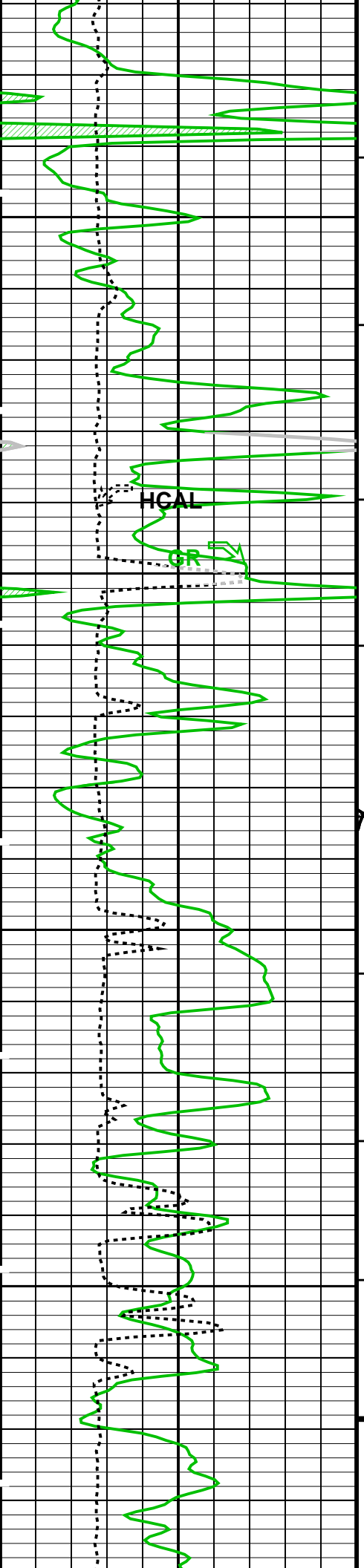


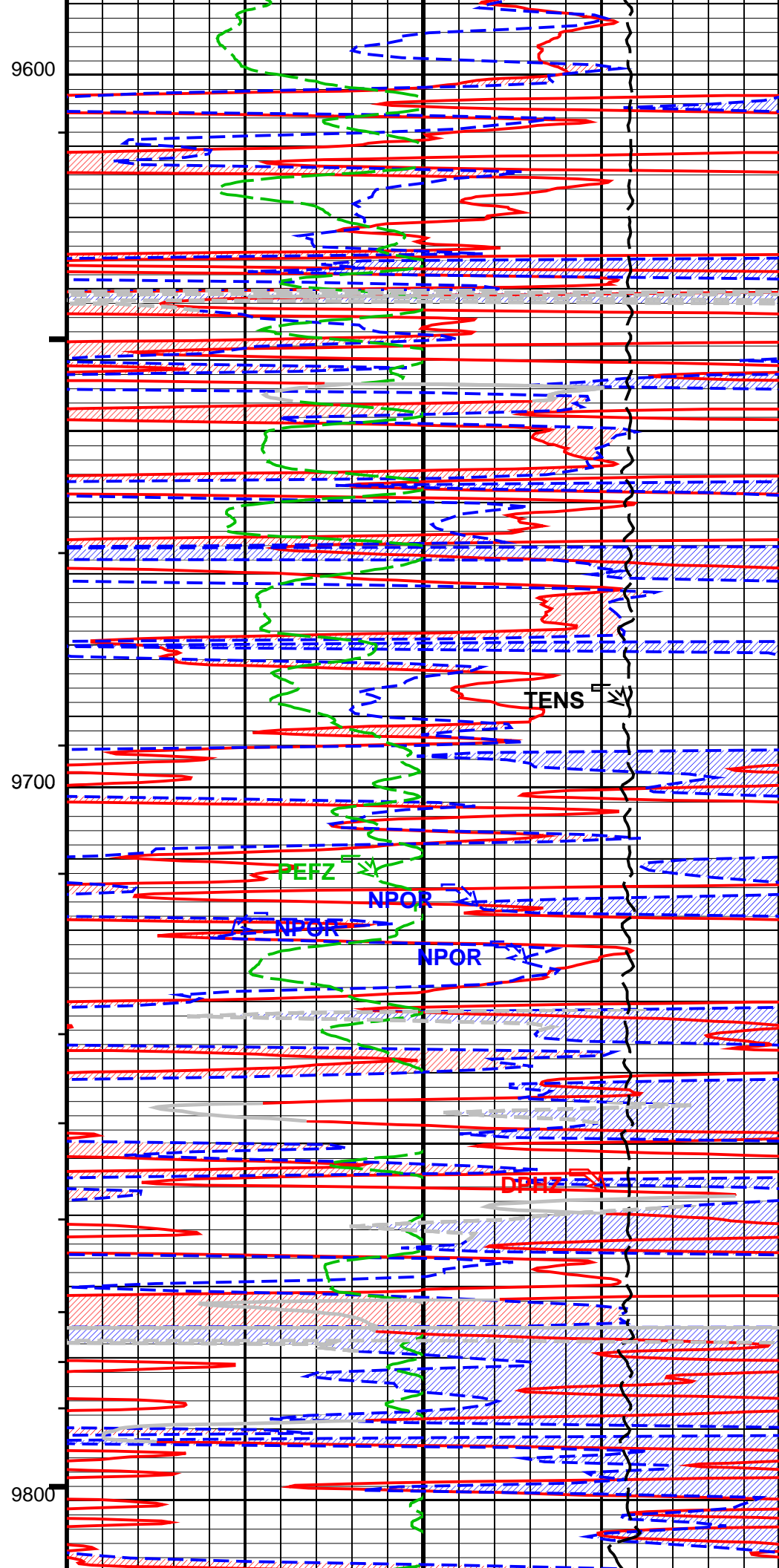
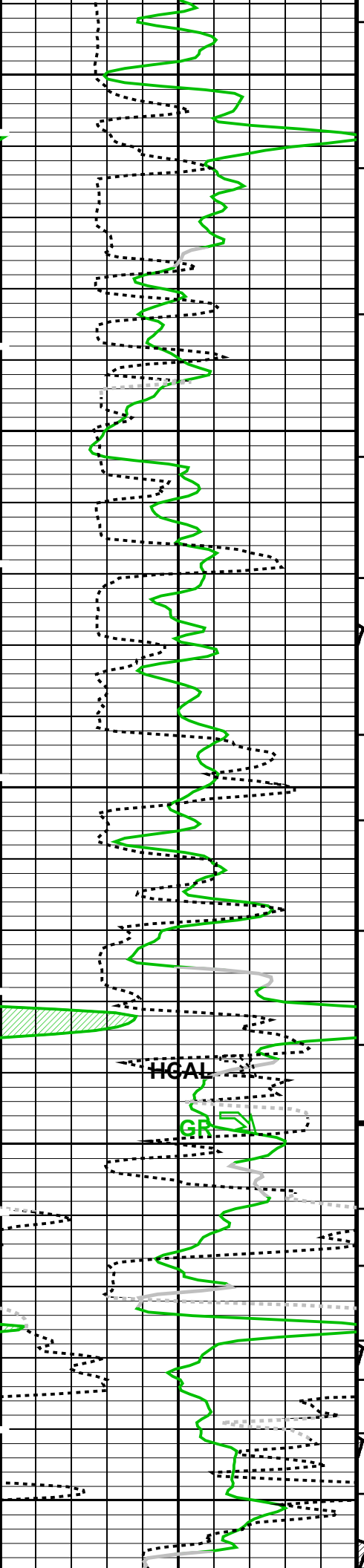


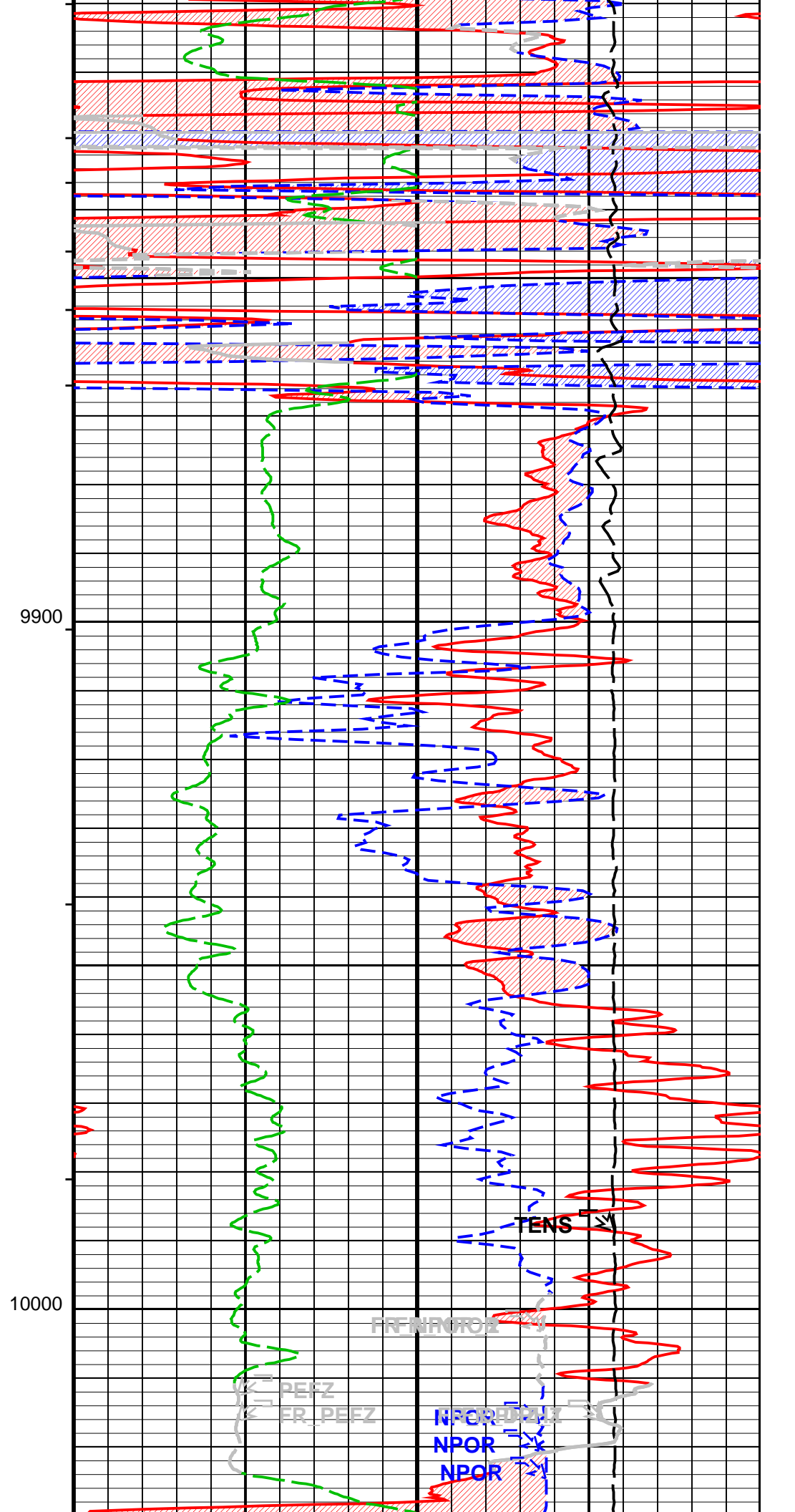
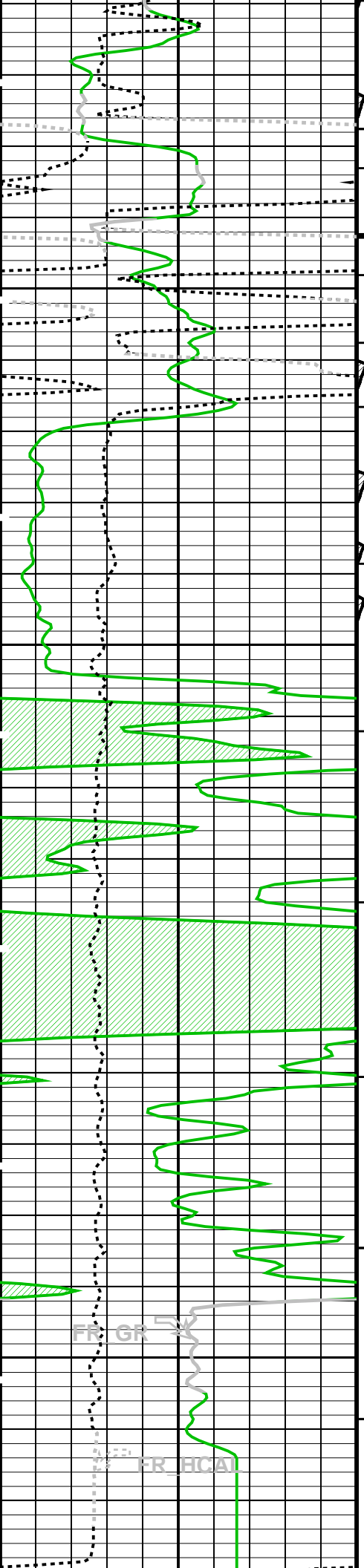


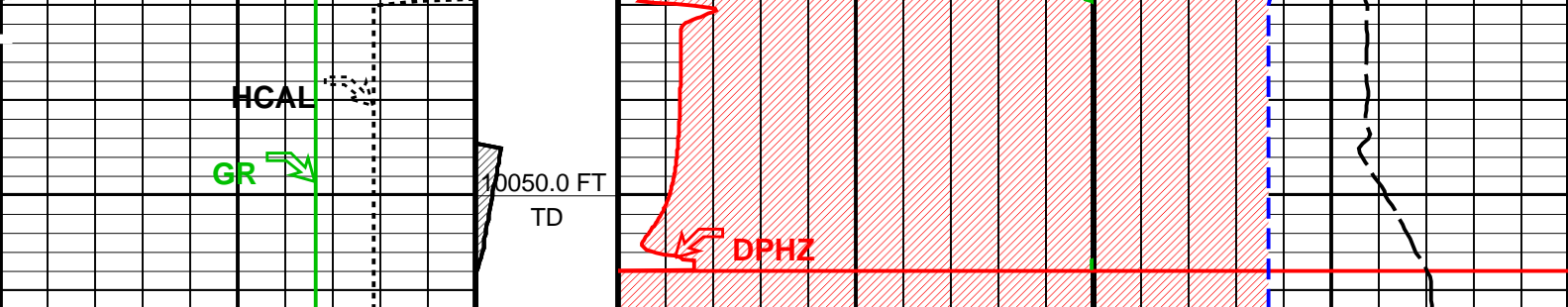












MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***

Gamma Ray Backup		Cable Drag	Std. Res. Density Porosity (DPHZ)	
			0.3	-0.1
Gamma Ray (GR)		Tool/Tot. Drag	Alpha Processed Neutron Porosity (NPOR)	
(GAPI)			0.3	-0.1
Caliper (HCAL)		Stuck Stretch (STIT)	Std. Res. Formation Pe (PEFZ)	
(IN)			0	10
		(F) 50	Tension (TENS)	
			(LBF)	
			Gas Effect	
			NPOR Backup	

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
ZAIT-EB: 3-D Array Induction Tool – ZAIT-E			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
TRI1DV	3D 1D Code Version Number	315	
TRIBHV	Array Induction Borehole Correction Code Version Number	168	
TRIRT	3D Rotation Selector	NorTH	
HILTH-FTB: High resolution Integrated Logging Tool–DTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FSAL	Formation Salinity	–50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal–like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.71	G/C3
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF

SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
FCD	Future Casing (Outer) Diameter	5.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation – Real Time			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	10060.00	FT
TDL	Total Depth – Logger	10050.00	FT
System and Miscellaneous			
BS	Bit Size	8.750	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	9.625	IN
CWEI	Casing Weight	36.00	LB/F
DFD	Drilling Fluid Density	9.10	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	130.00	DEGF
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.9200	OHMM
TD	Total Depth	10050	FT

Format: PORO Vertical Scale: 5" per 100' Graphics File Created: 02-Jul-2013 23:19

OP System Version: 19C2-270

ZAIT-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
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Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19

Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
DEFAULT	AIT_IS_TLD_MCFL_CNL_023PUP	FN:23	PRODUCER	02-Jul-2013 23:18	10069.5 FT	9742.5 FT

Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19

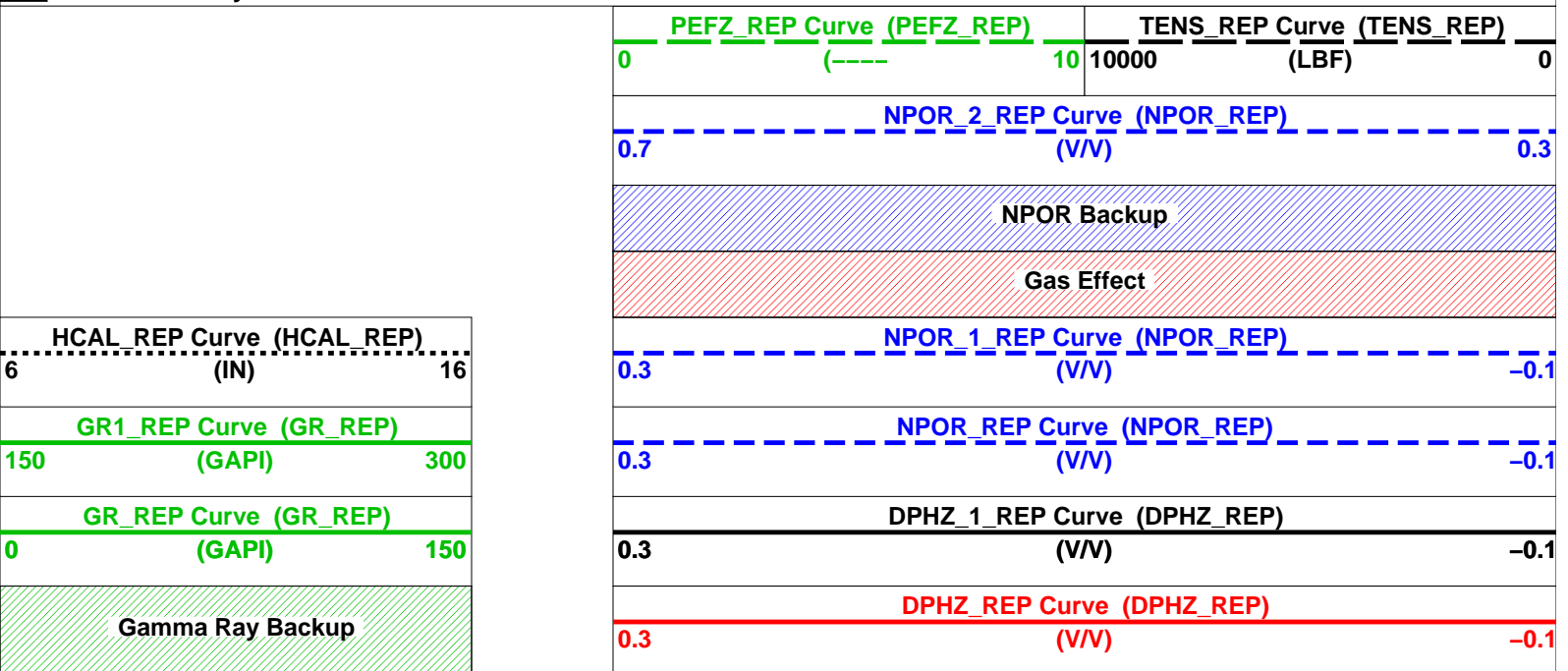
OP System Version: 19C2-270

ZAIT-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

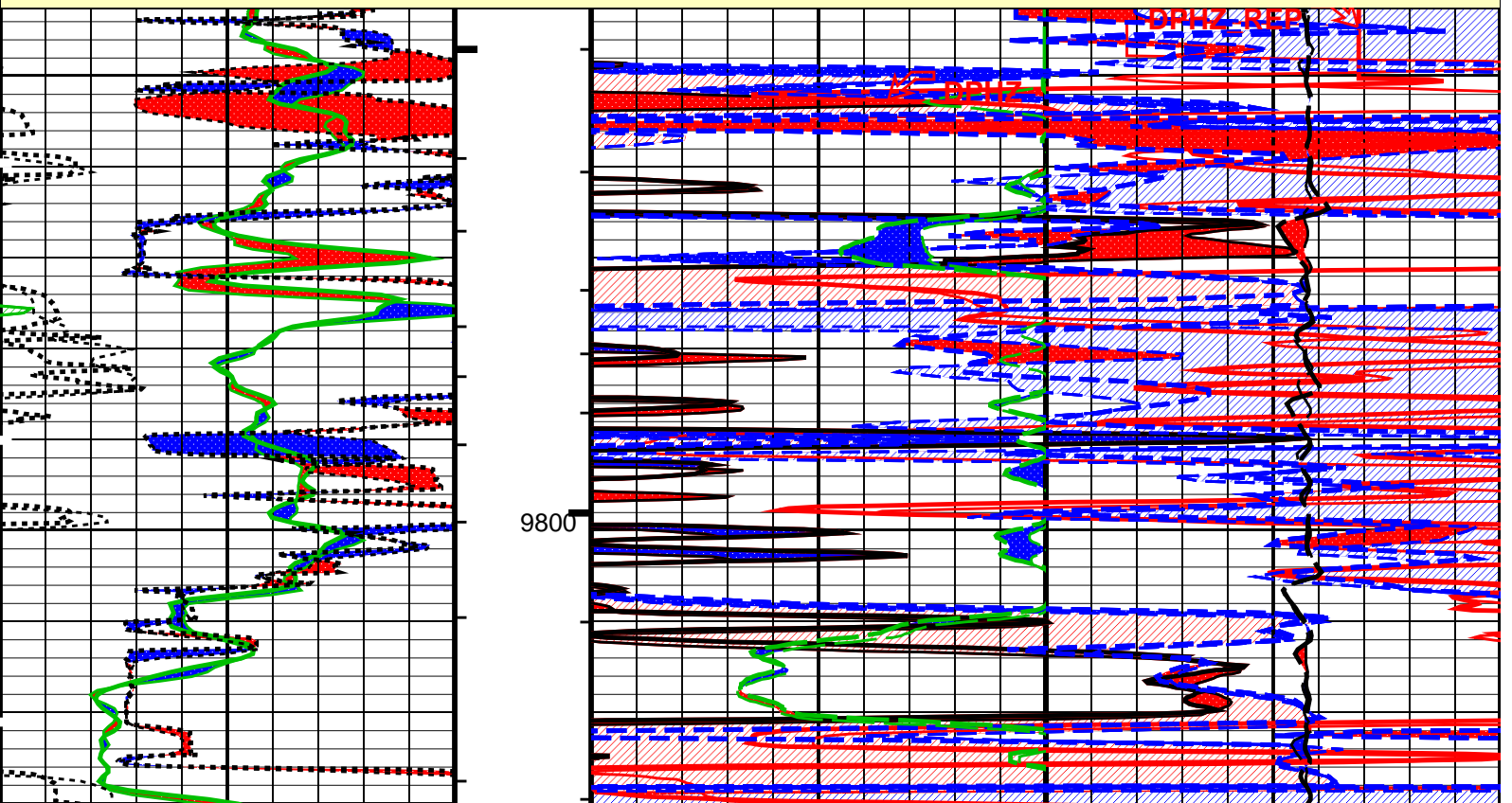
PIP SUMMARY

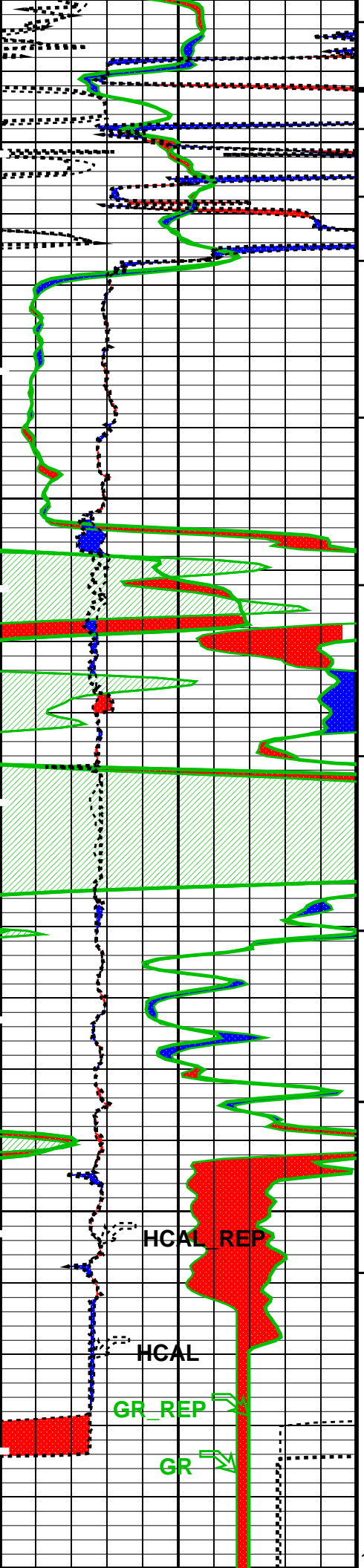
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S



MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***

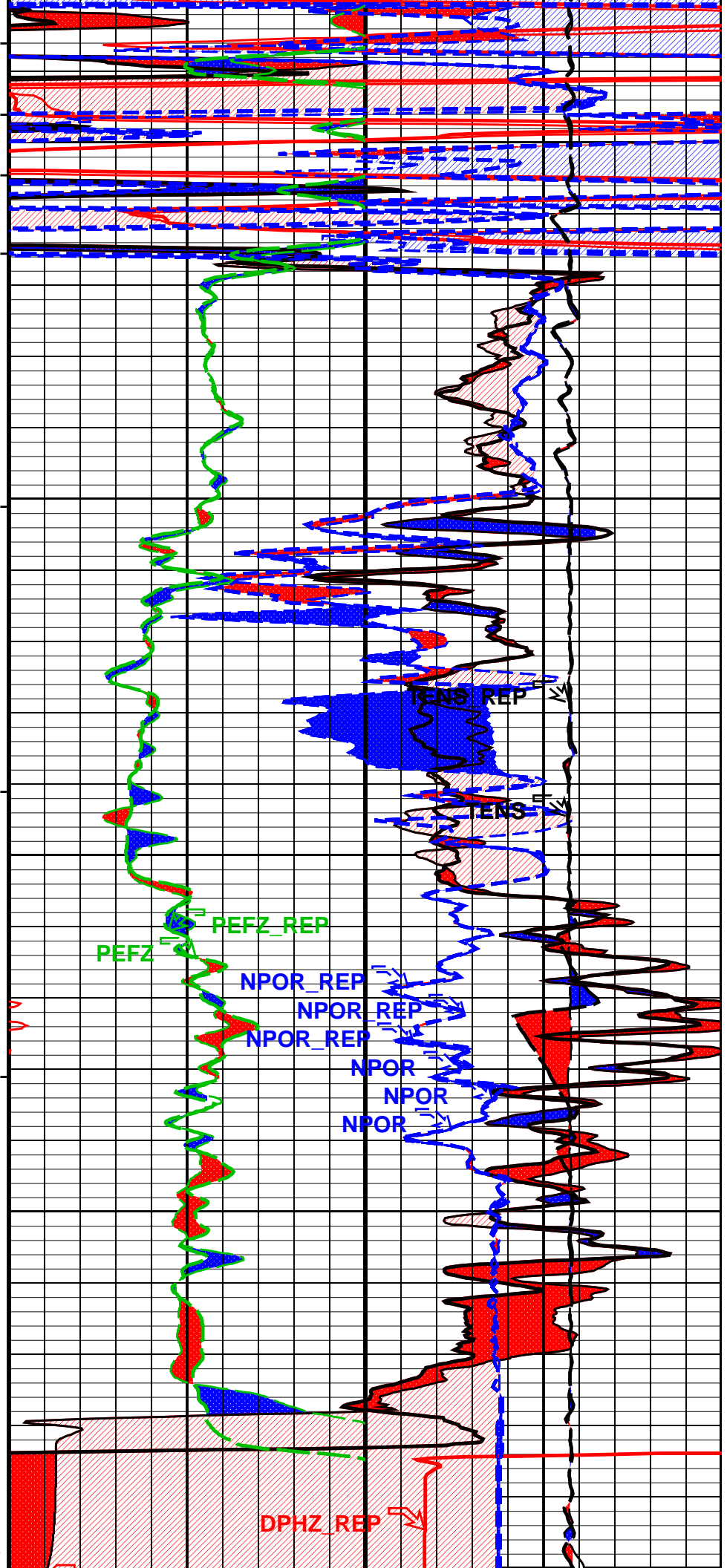




9900

10000

10050.0 FT





DLIS Name	Description	Value	
ZAIT-EB: 3-D Array Induction Tool – ZAIT-E			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
TRI1DV	3D 1D Code Version Number	315	
TRIBHV	Array Induction Borehole Correction Code Version Number	168	
TRI RT	3D Rotation Selector	North	
HILTH-FTB: High resolution Integrated Logging Tool-DTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal-like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.71	G/C3
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF

SHT	Surface Hole Temperature	0.00	DEG
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	FT
TIMD	Along-hole depth of Tie-in Point	0	FT
TIVD	TVD of Tie-in Point	0	FT
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
FCD	Future Casing (Outer) Diameter	5.5	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation - Real Time			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
TDL	Total Depth - Logger	10050.00	FT
System and Miscellaneous			
BS	Bit Size	8.750	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	9.625	IN
CWEI	Casing Weight	36.00	LB/F
DFD	Drilling Fluid Density	9.10	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	130.00	DEGF
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.9200	OHMM
TD	Total Depth	10050	FT

Format: PORO_REP Vertical Scale: 5" per 100' Graphics File Created: 02-Jul-2013 23:19

OP System Version: 19C2-270

ZAIT-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
DEFAULT	AIT_IS_TLD_MCFL_CNL_023PUP	FN:23	PRODUCER	02-Jul-2013 23:18	10069.5 FT	9742.5 FT

Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19

Schlumberger

MAIN DENSITY 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
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Output DLIS Files

OP System Version: 19C2-270

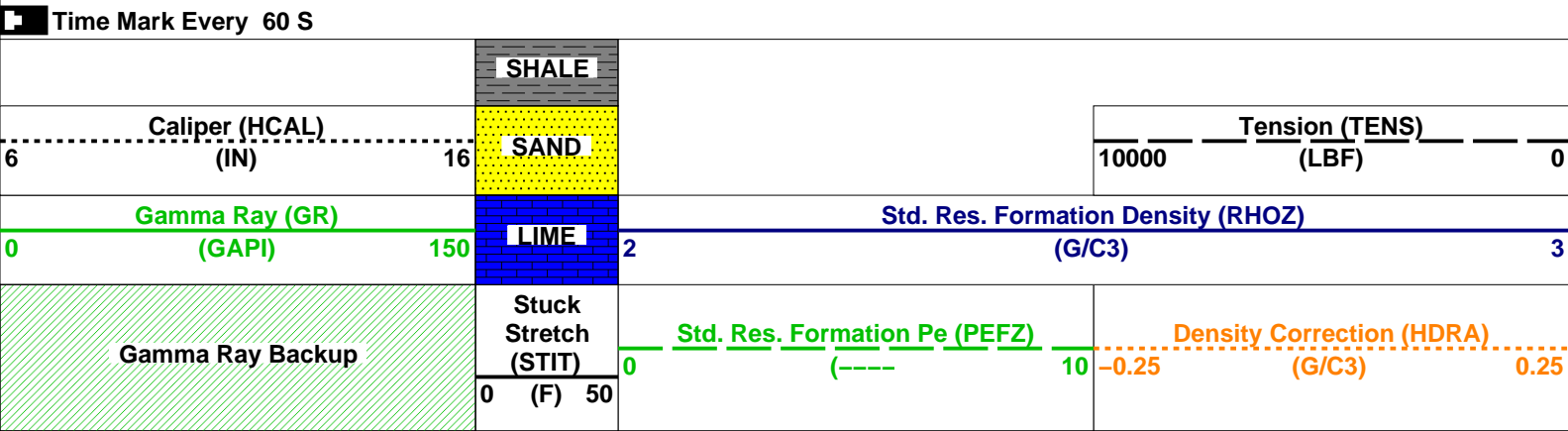
ZAIT-EB
HILTH-FTB

19C2-270
19C2-270

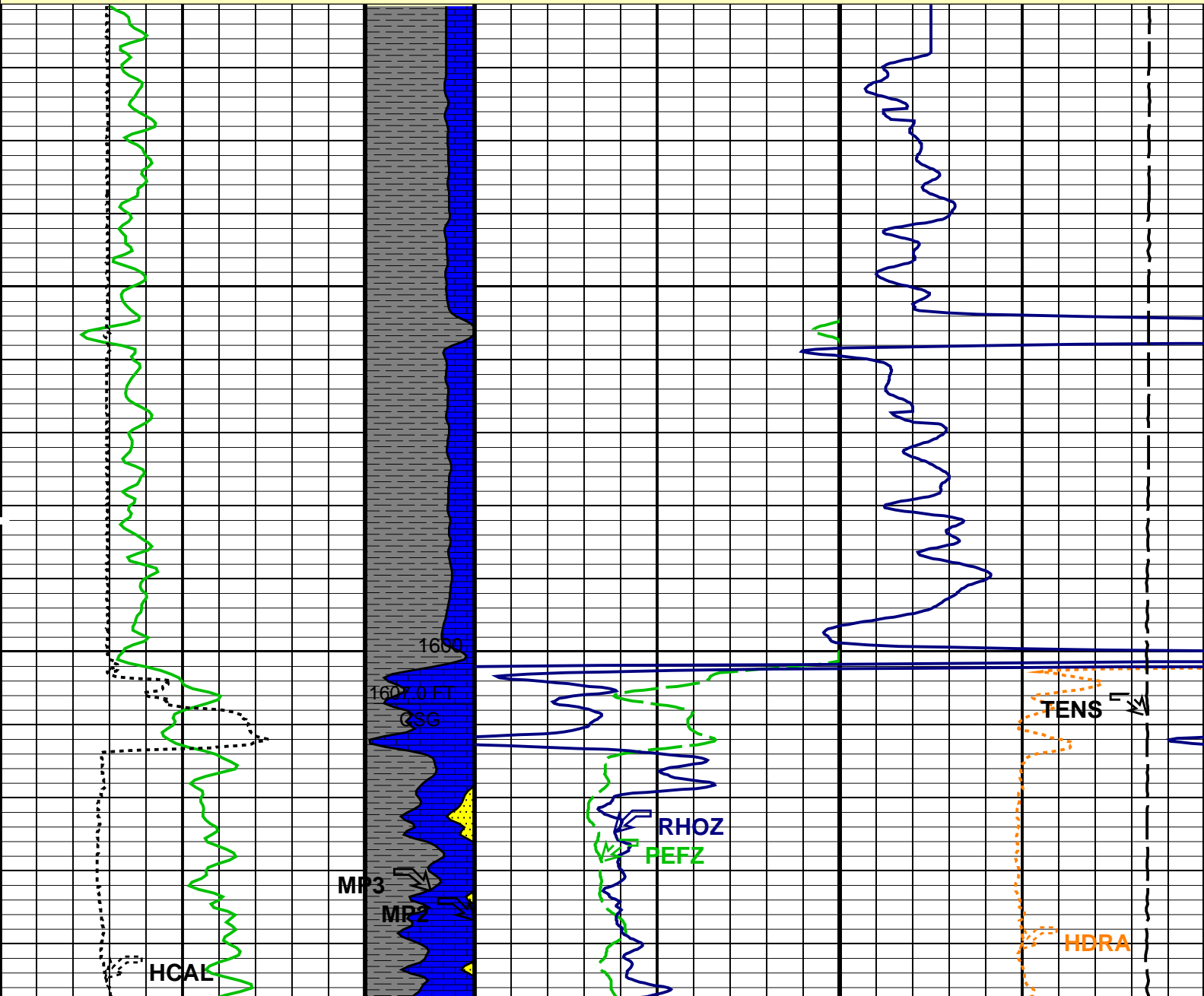
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DTC-H

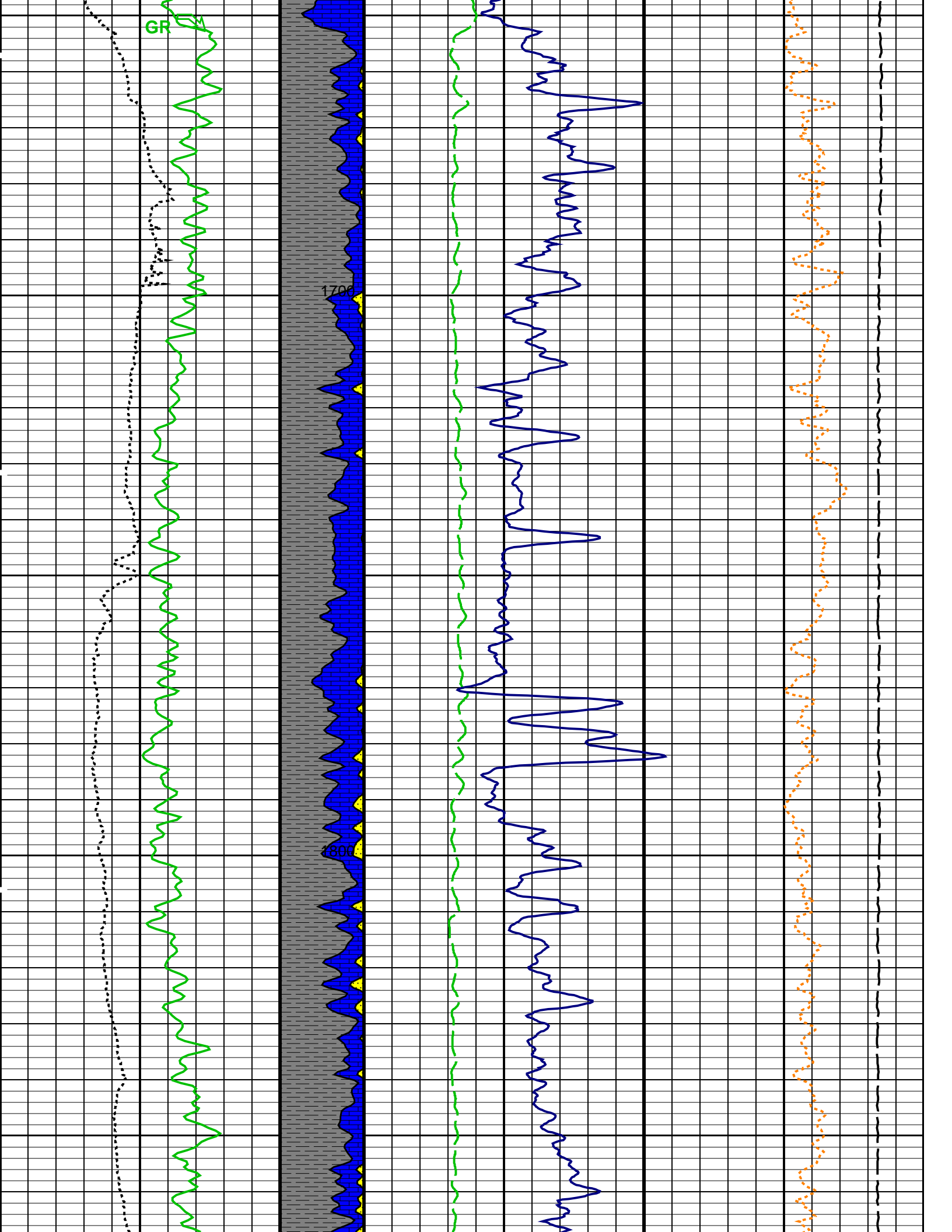
19C2-270
19C2-270

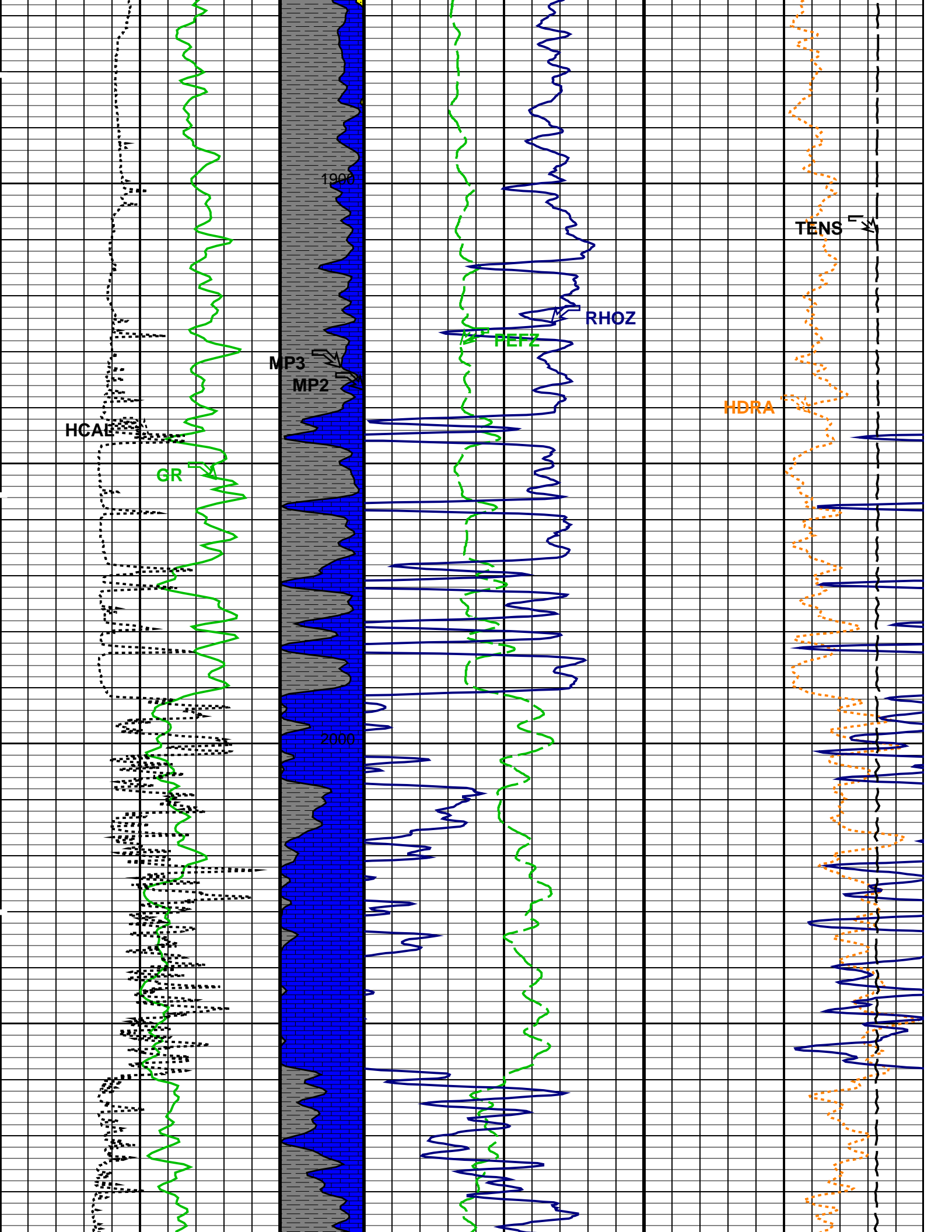
PIP SUMMARY

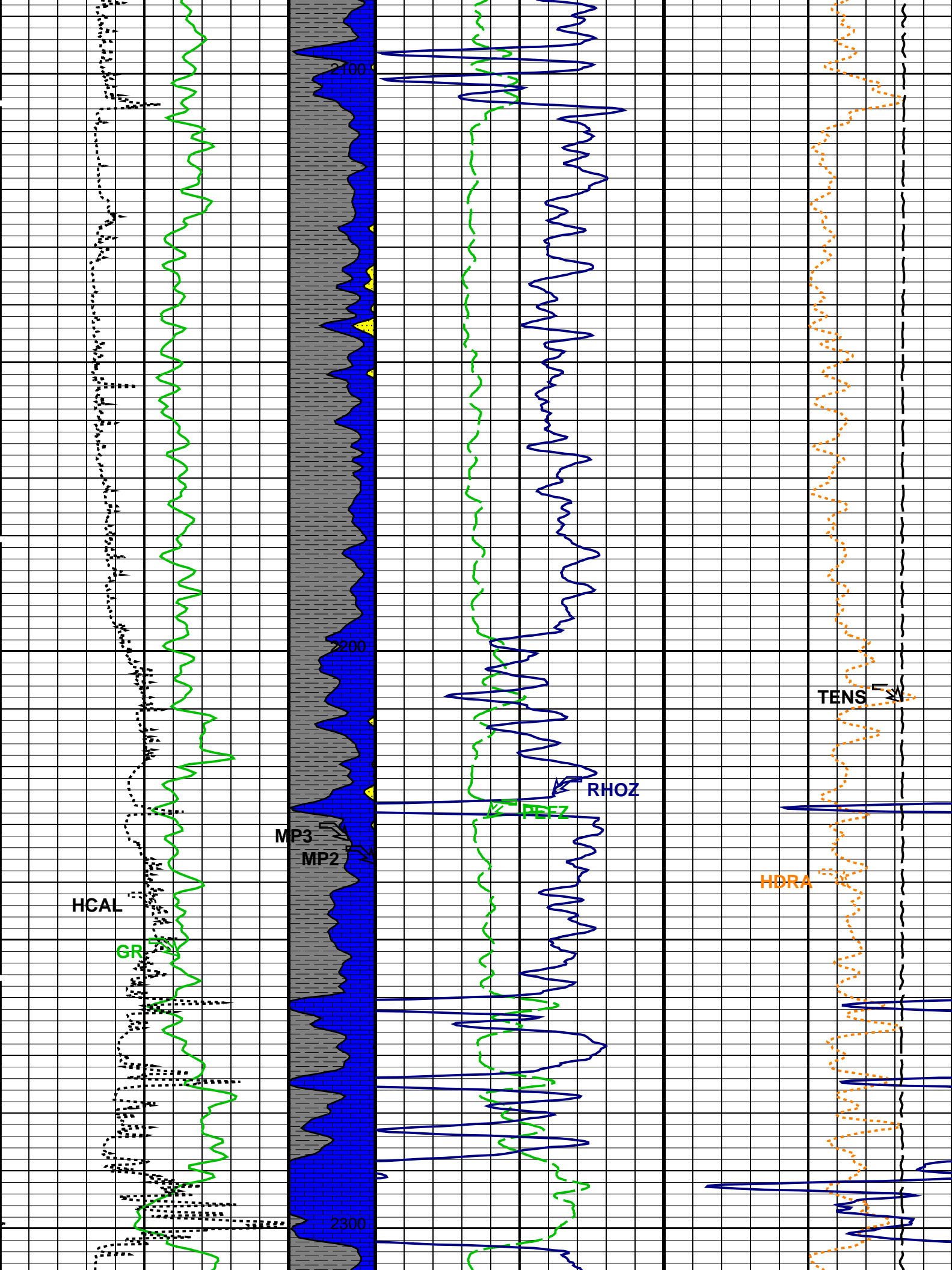


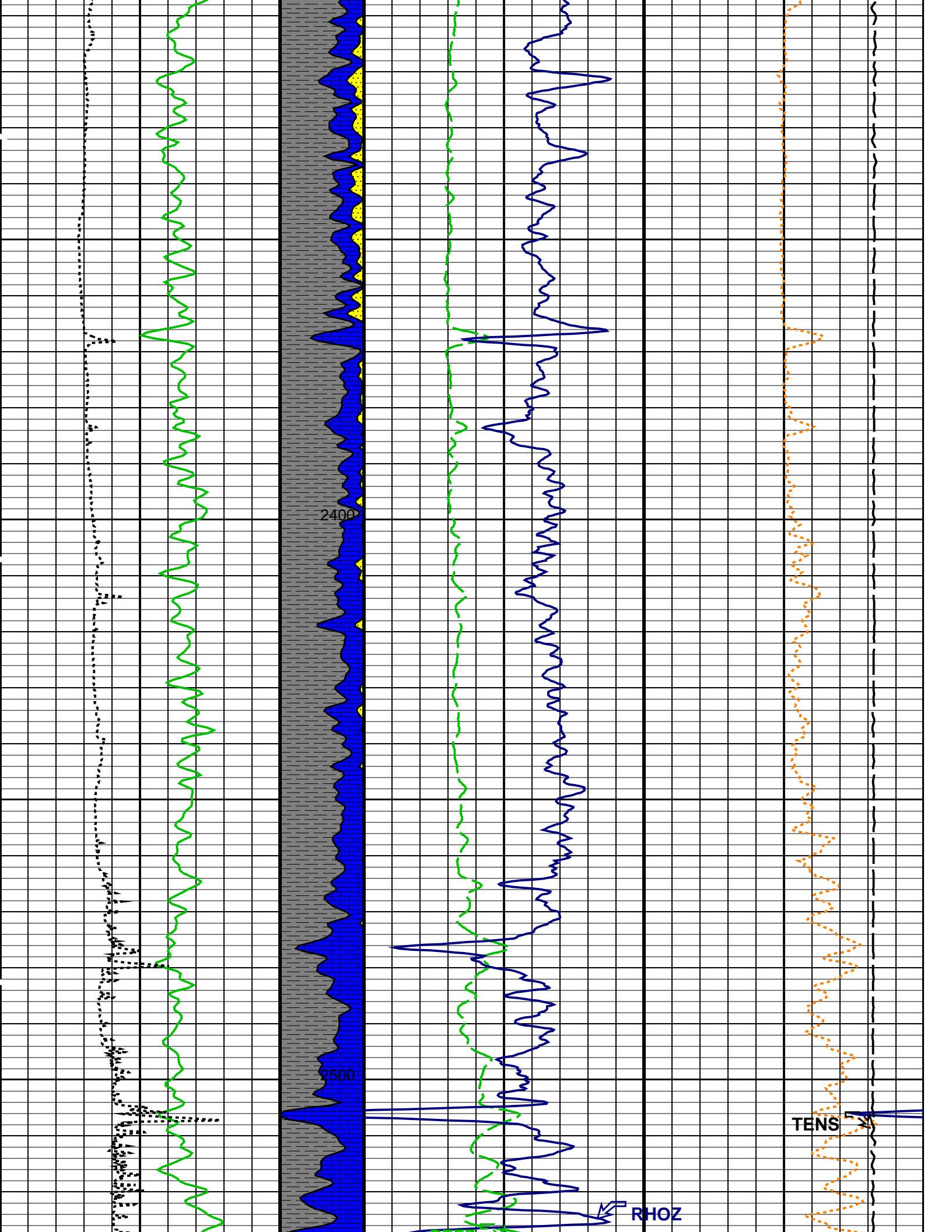
MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

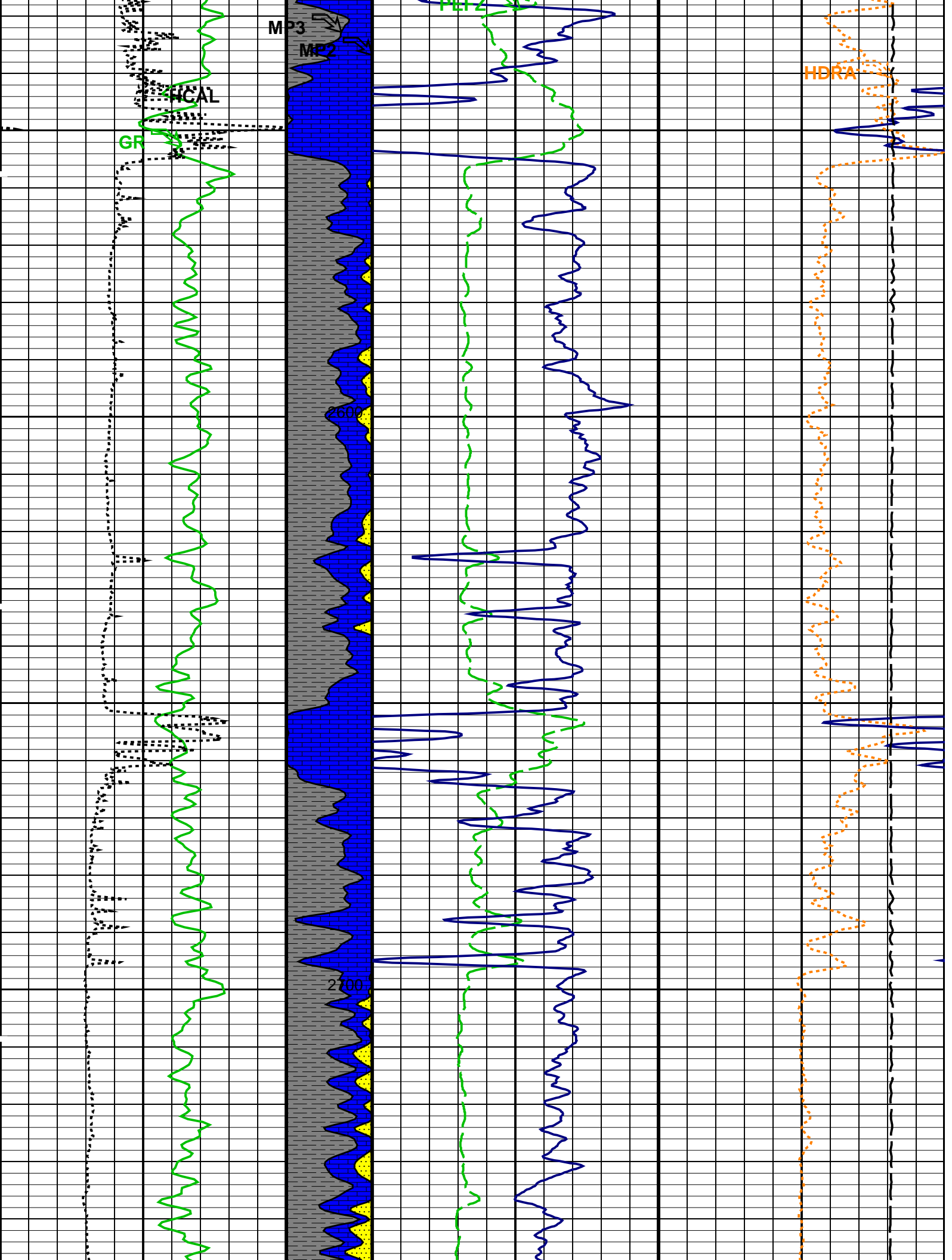


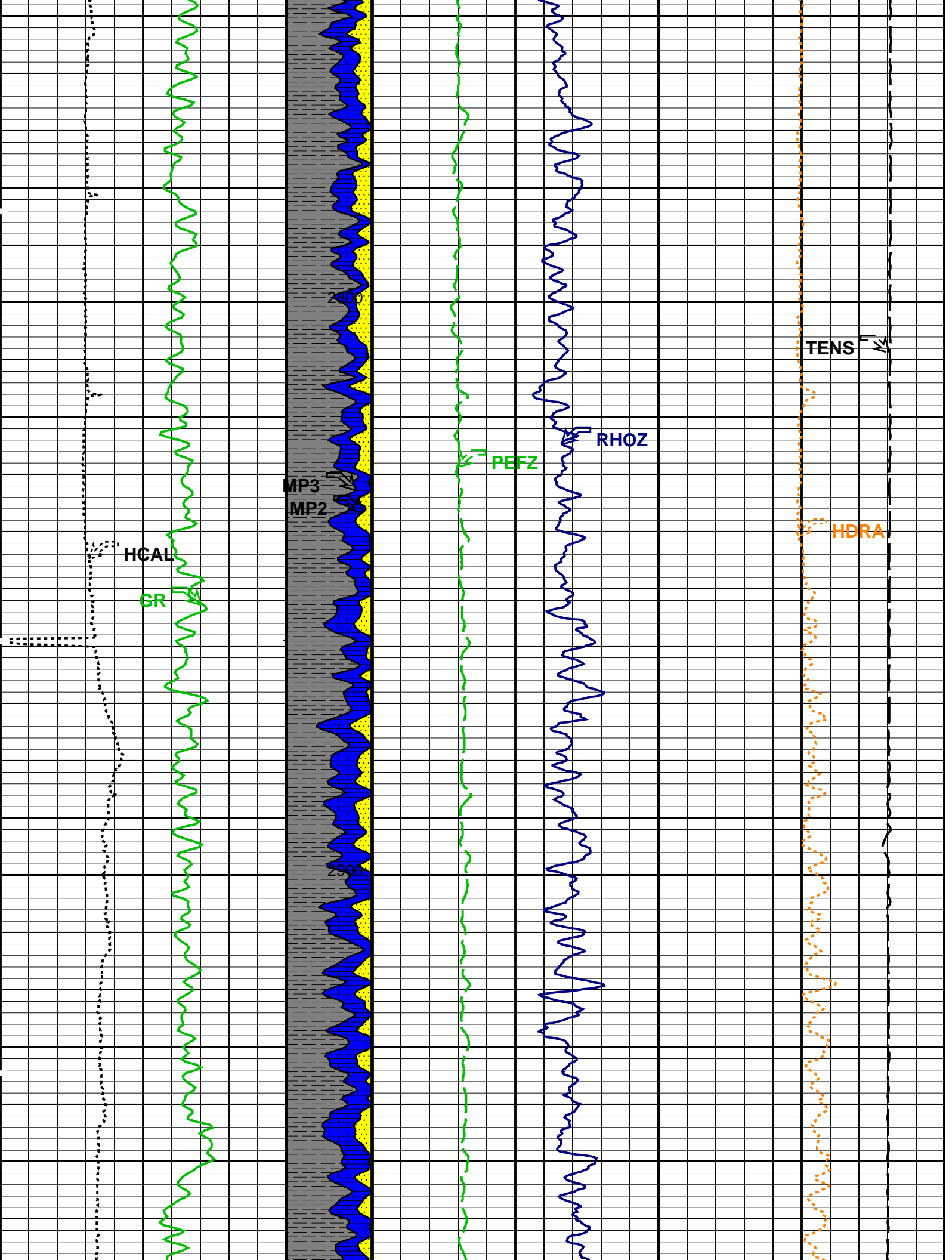


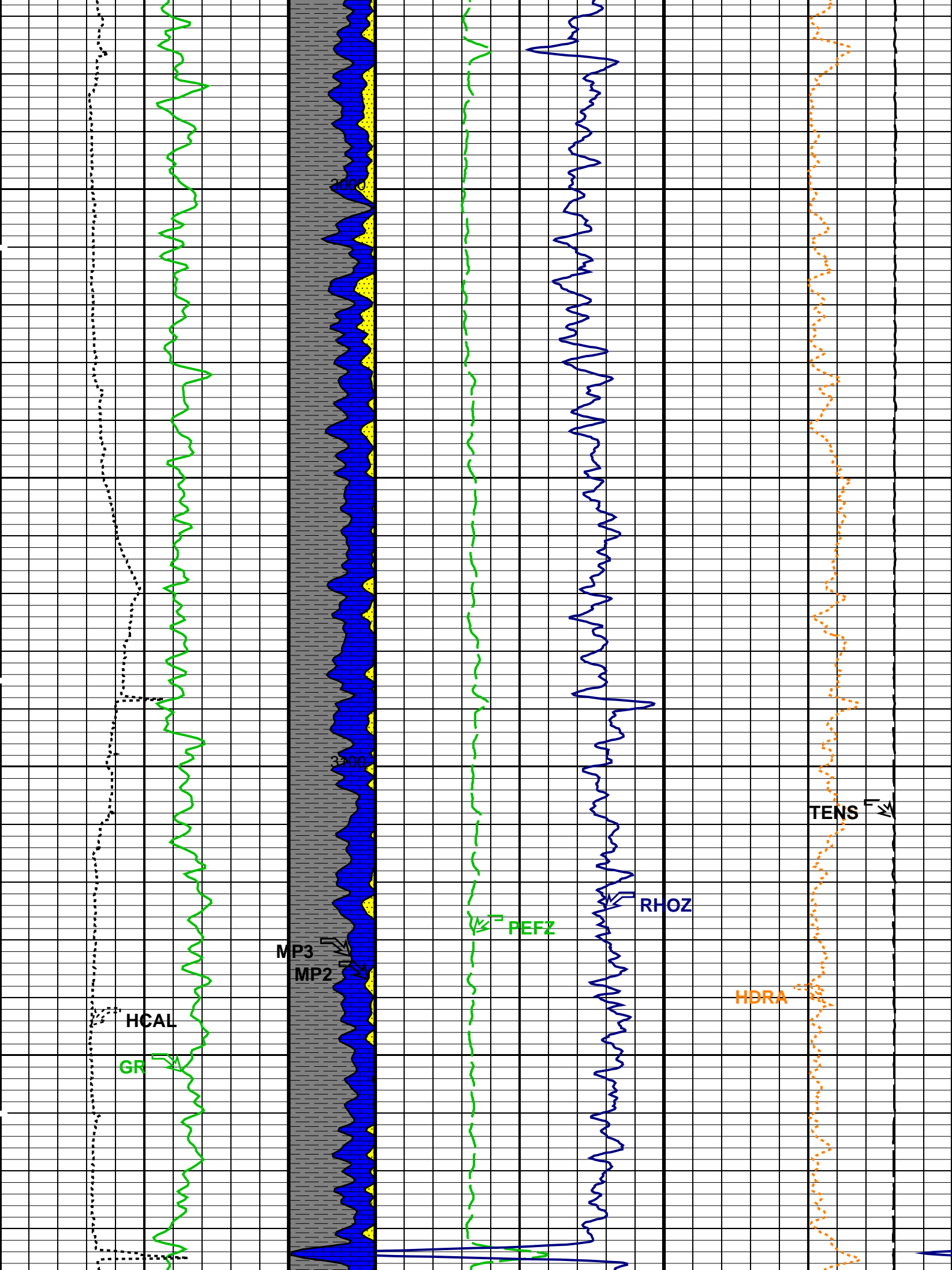


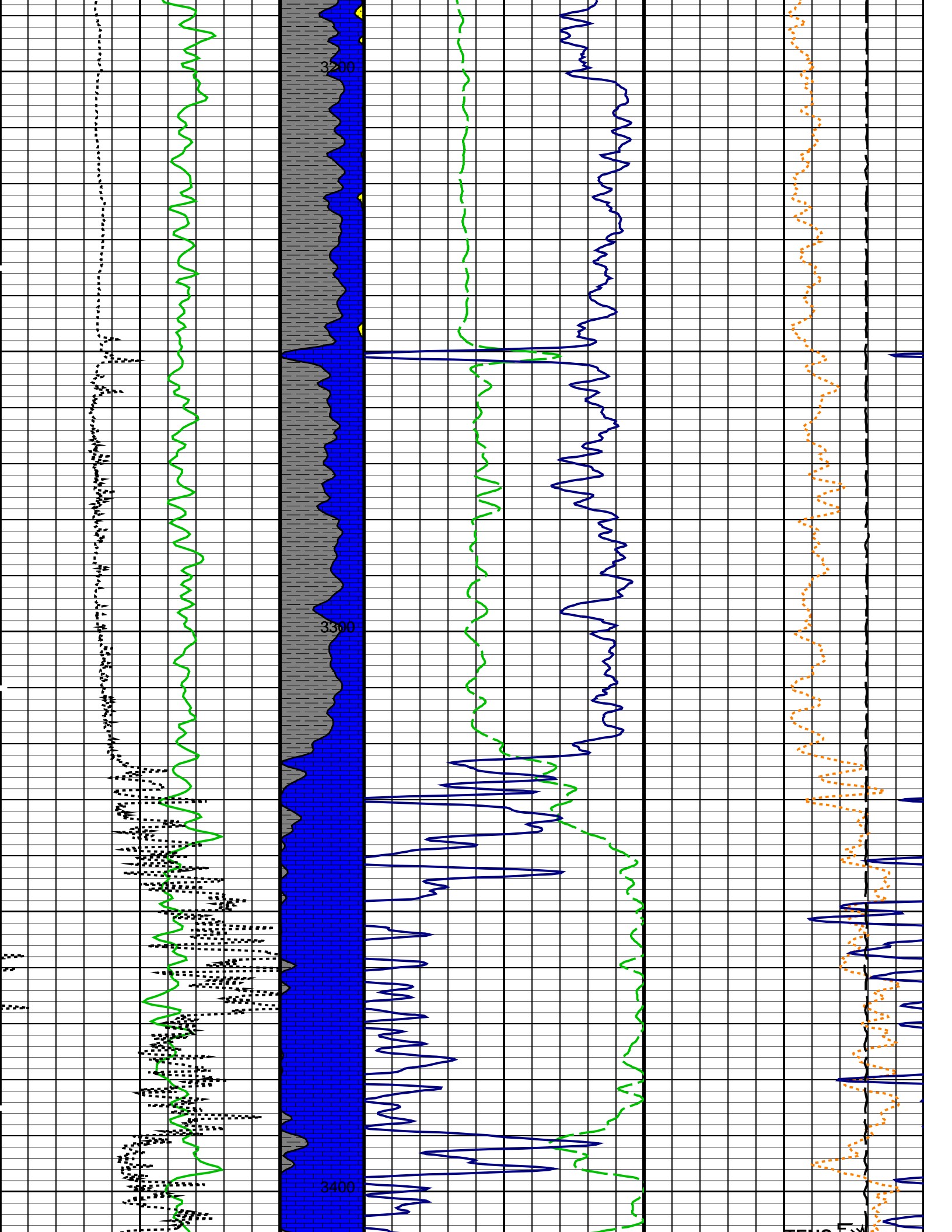


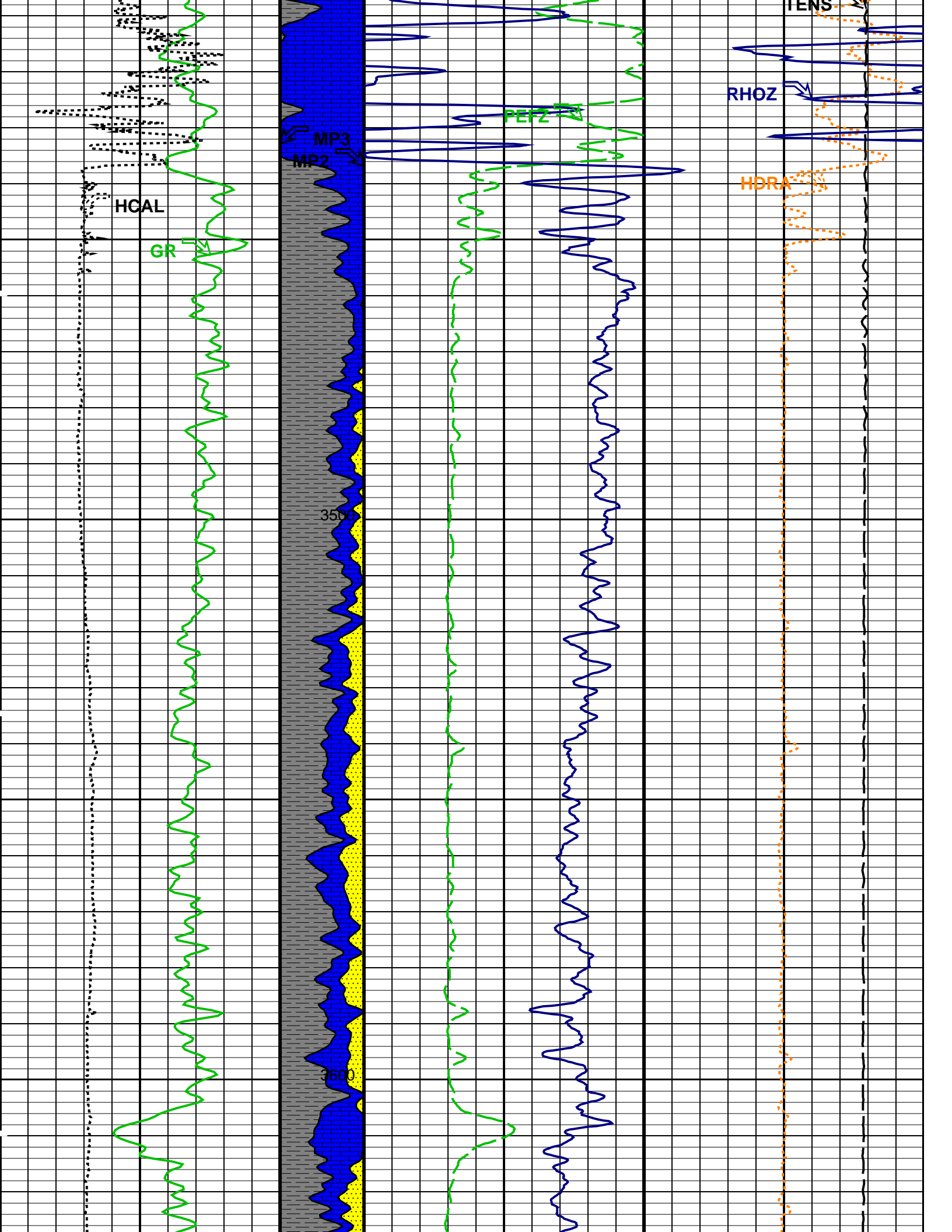


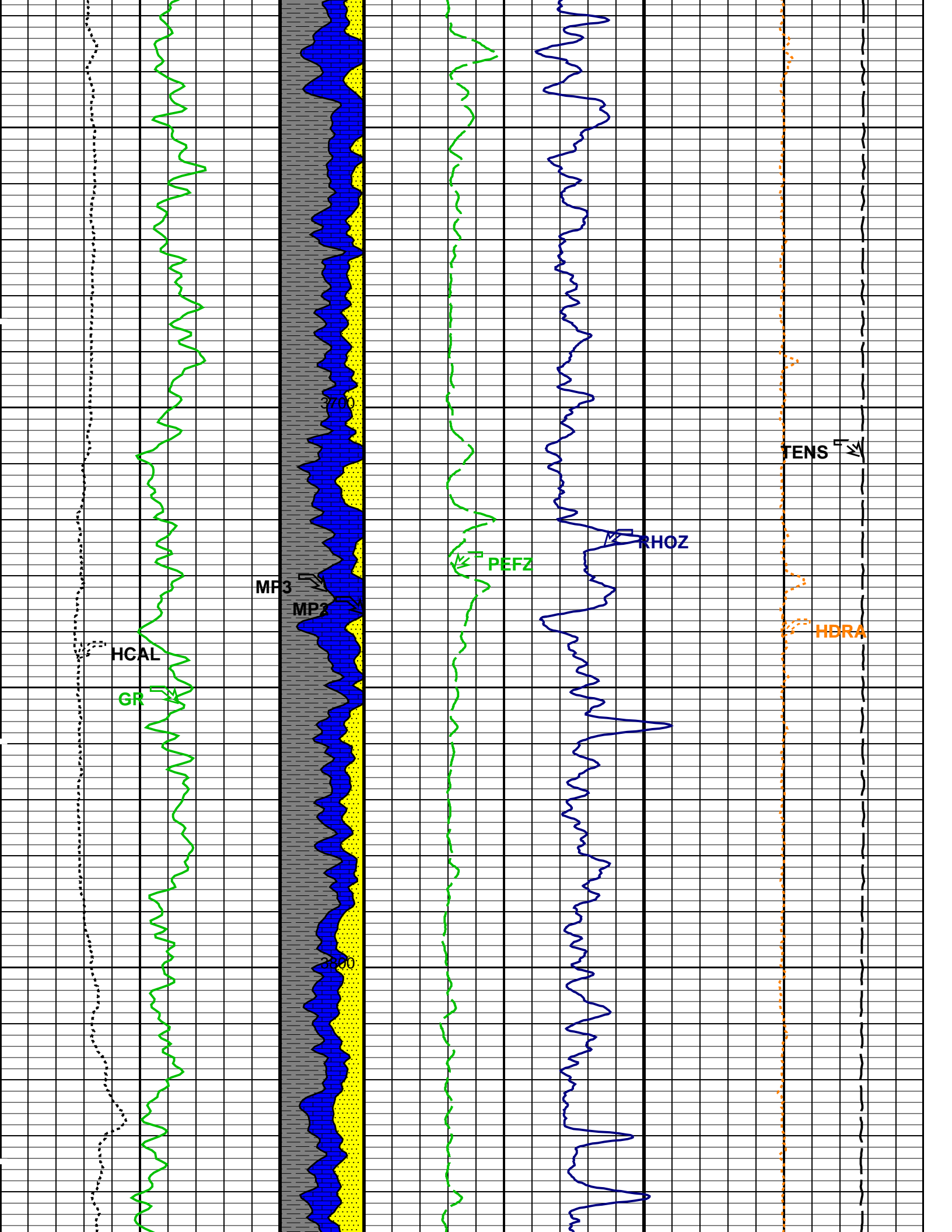


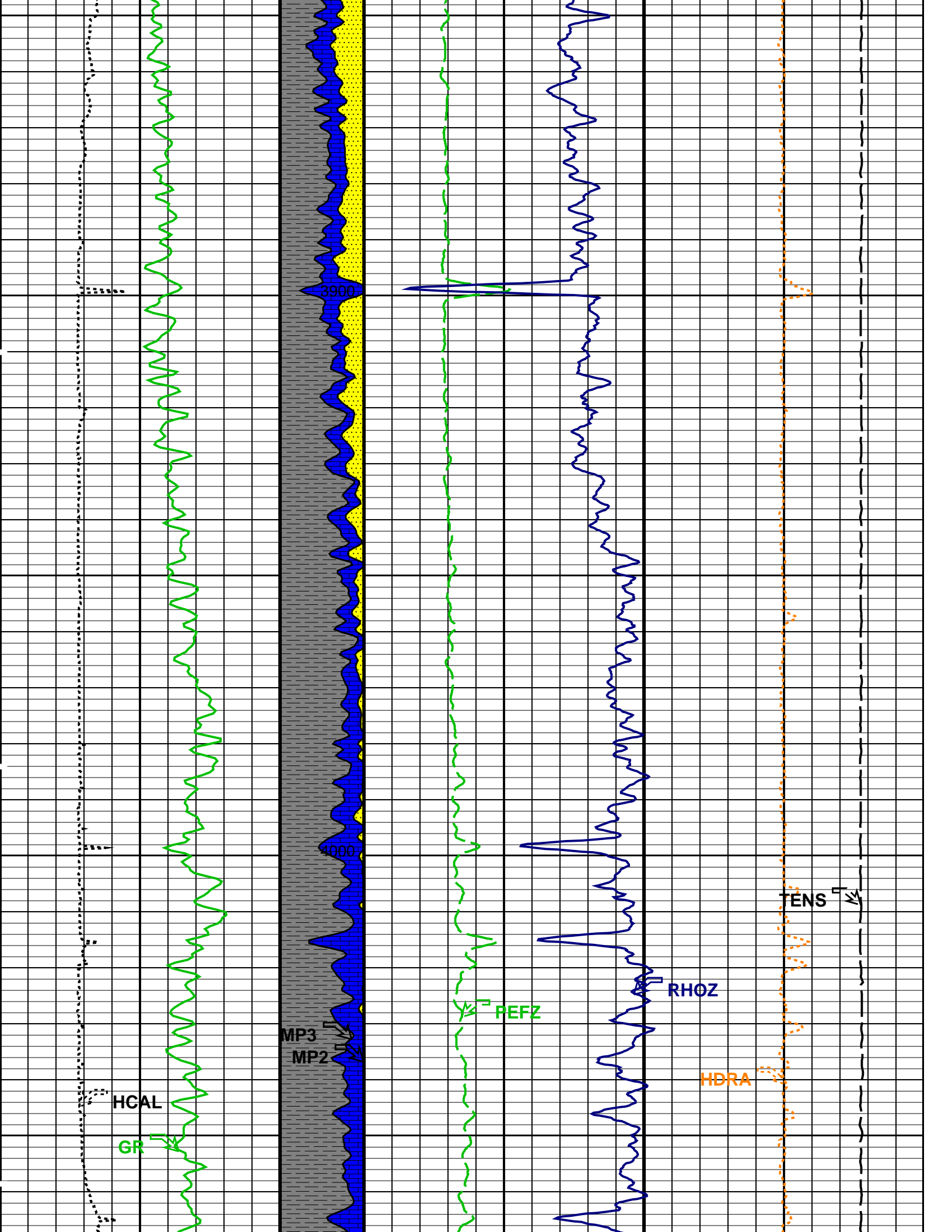


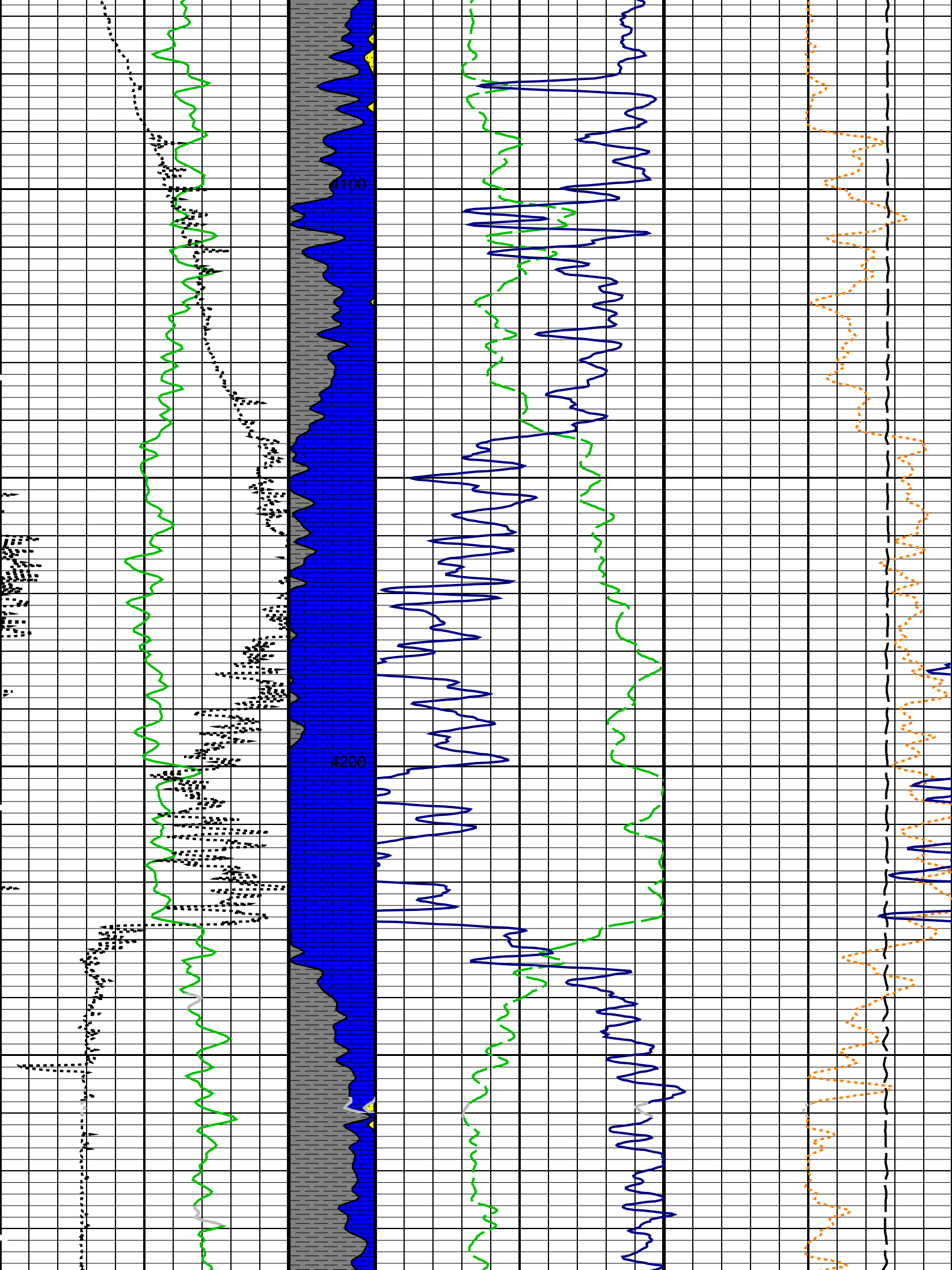


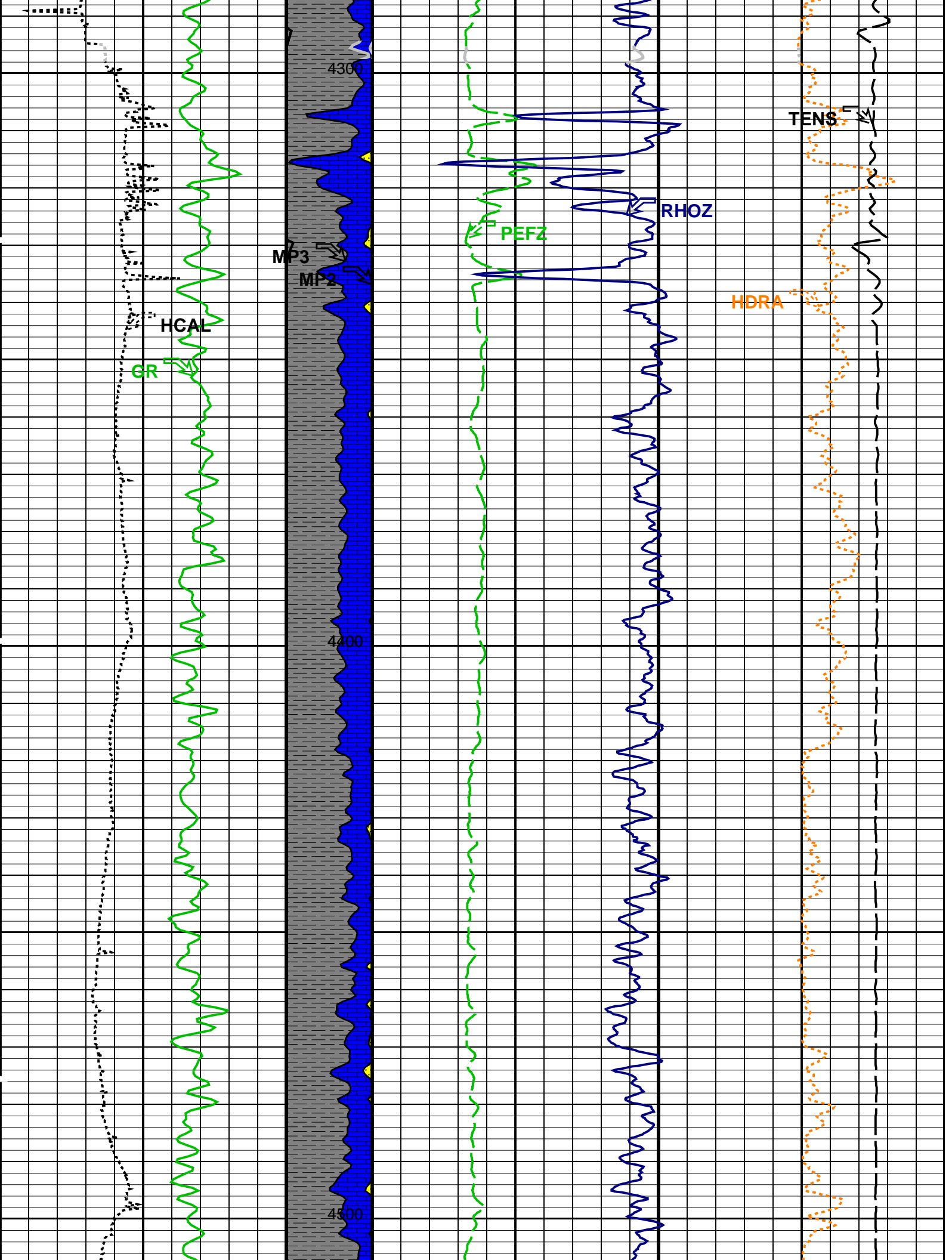


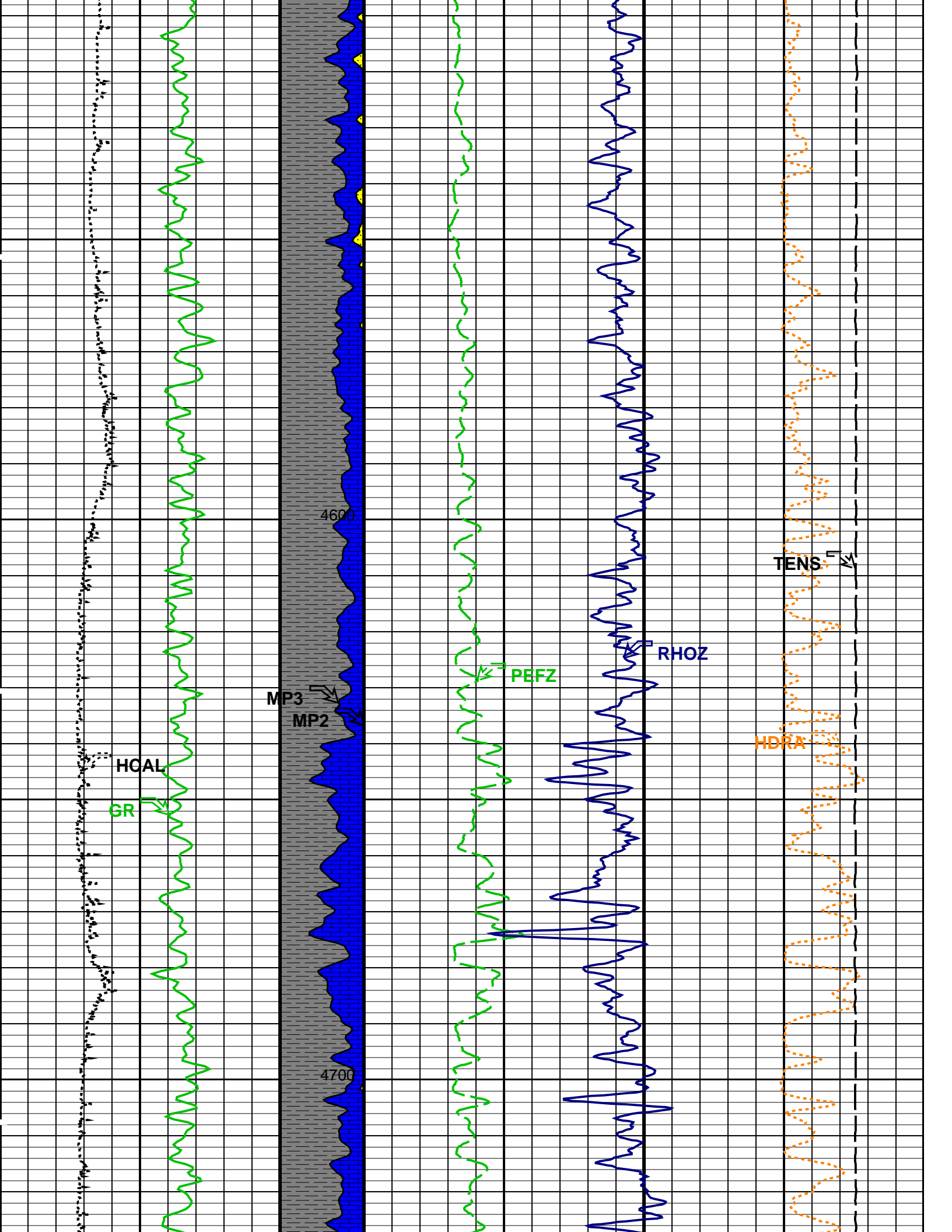


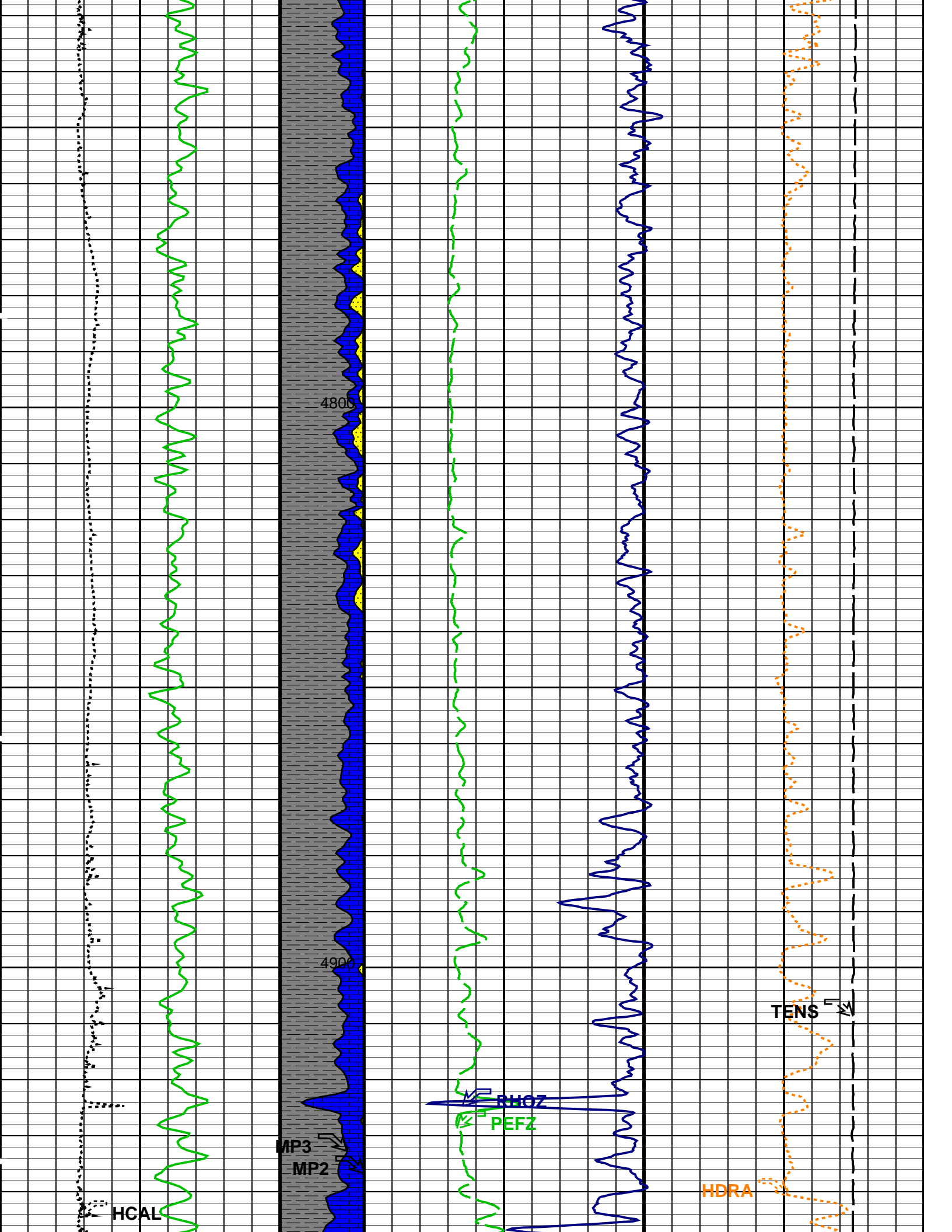


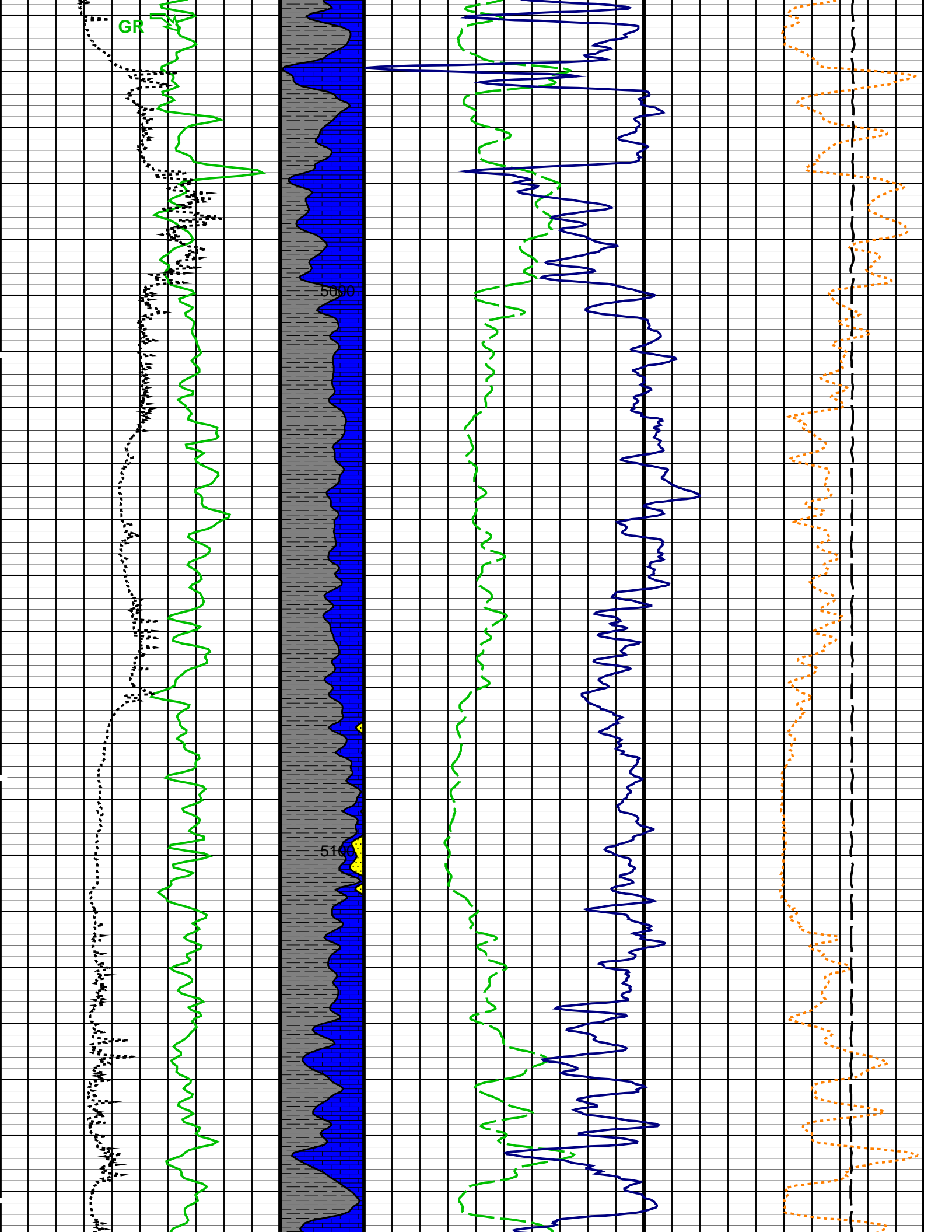


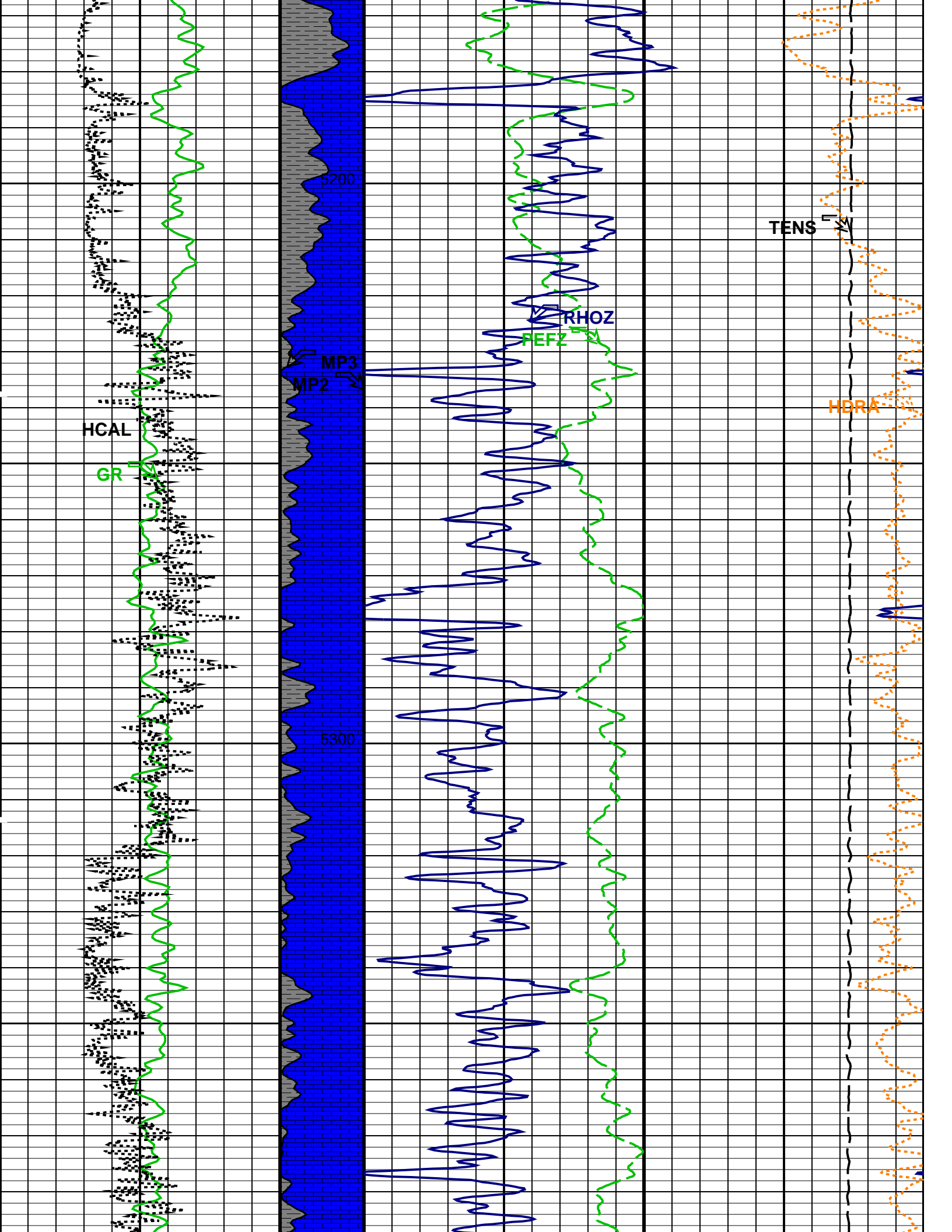


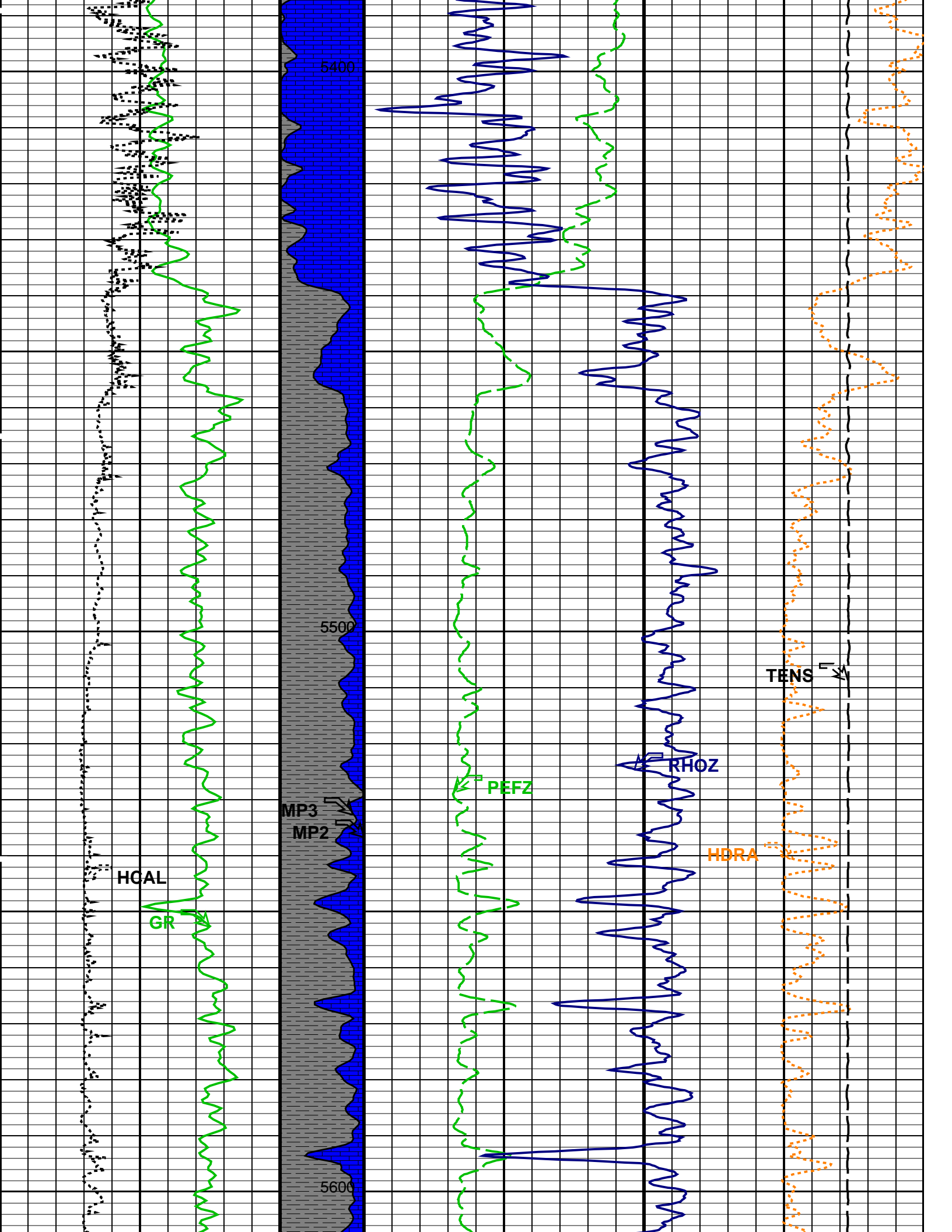


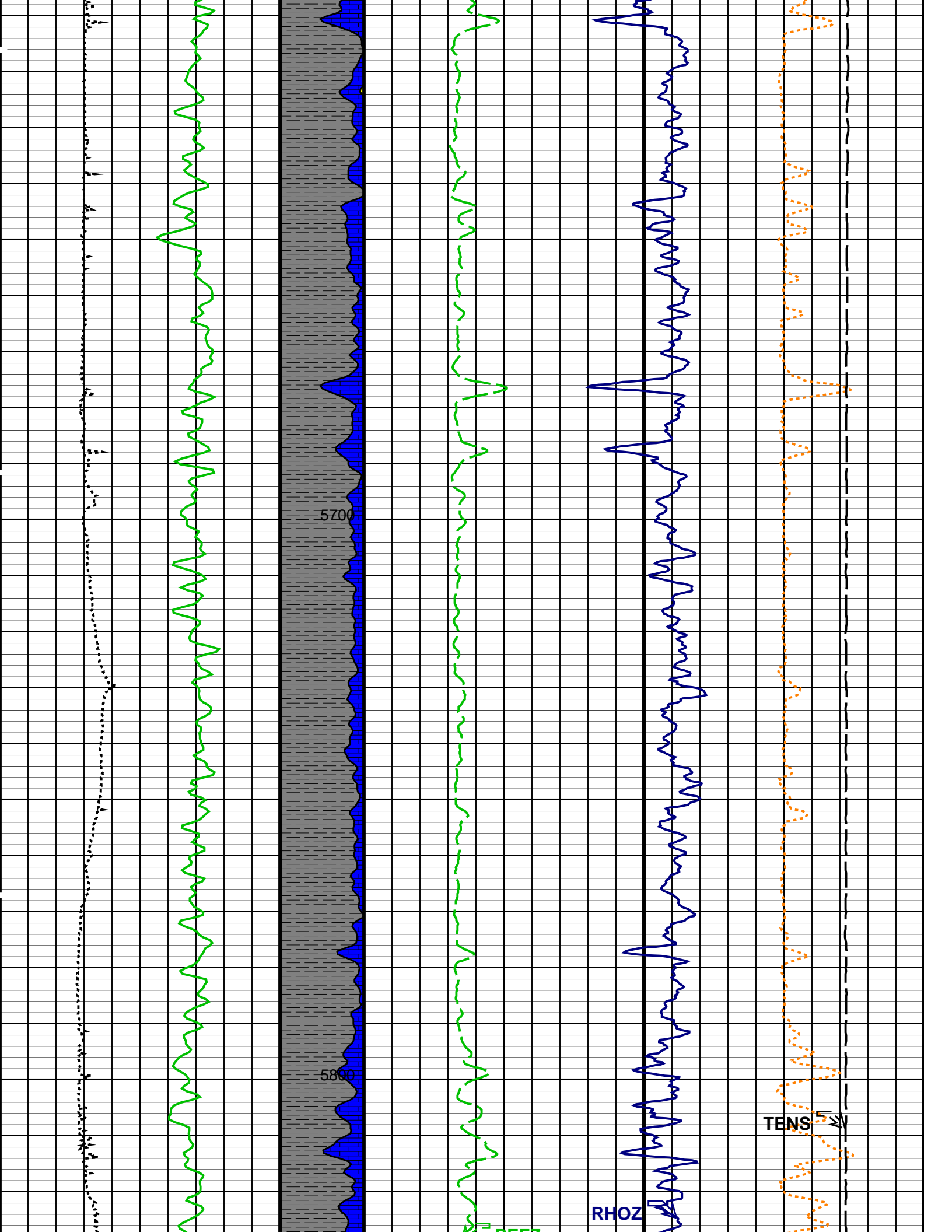


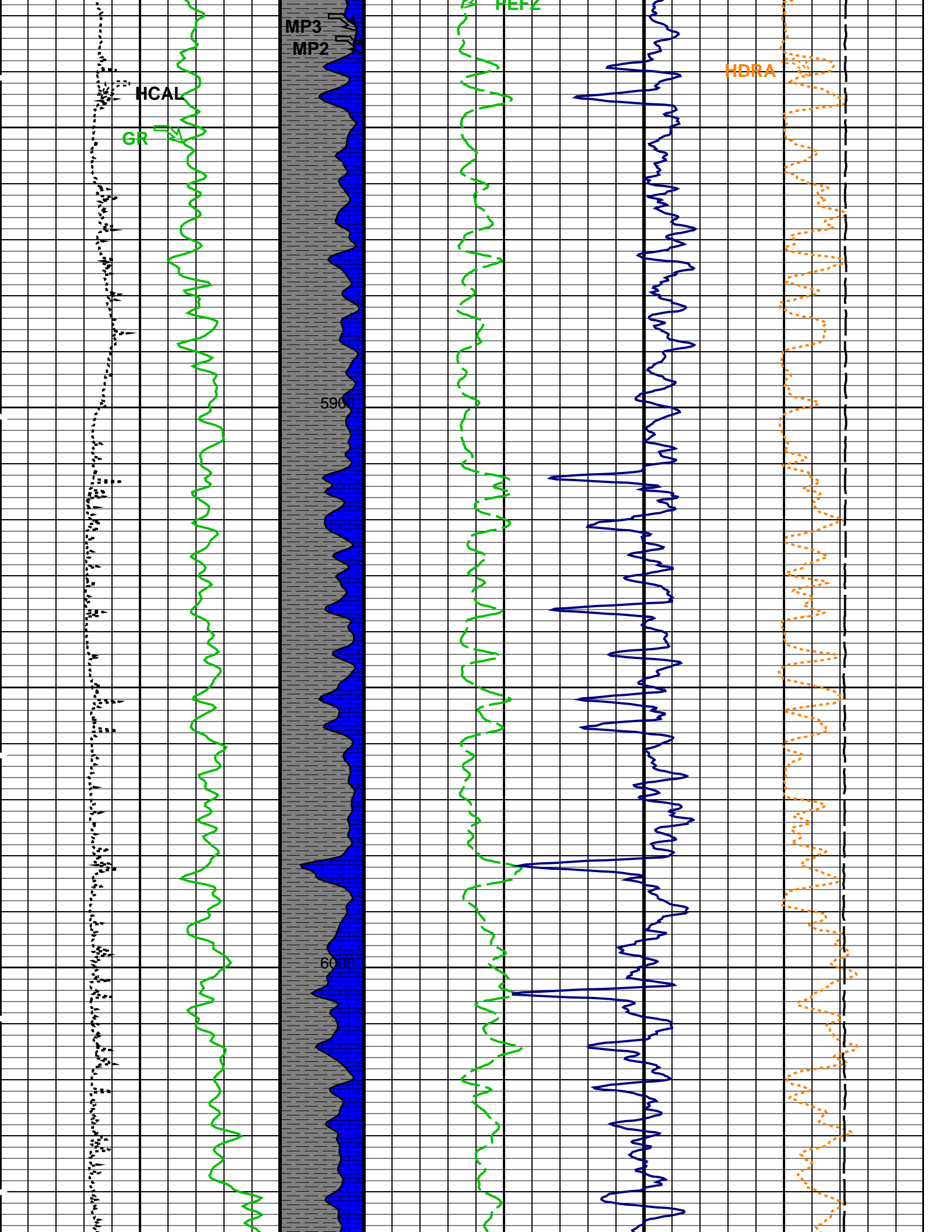


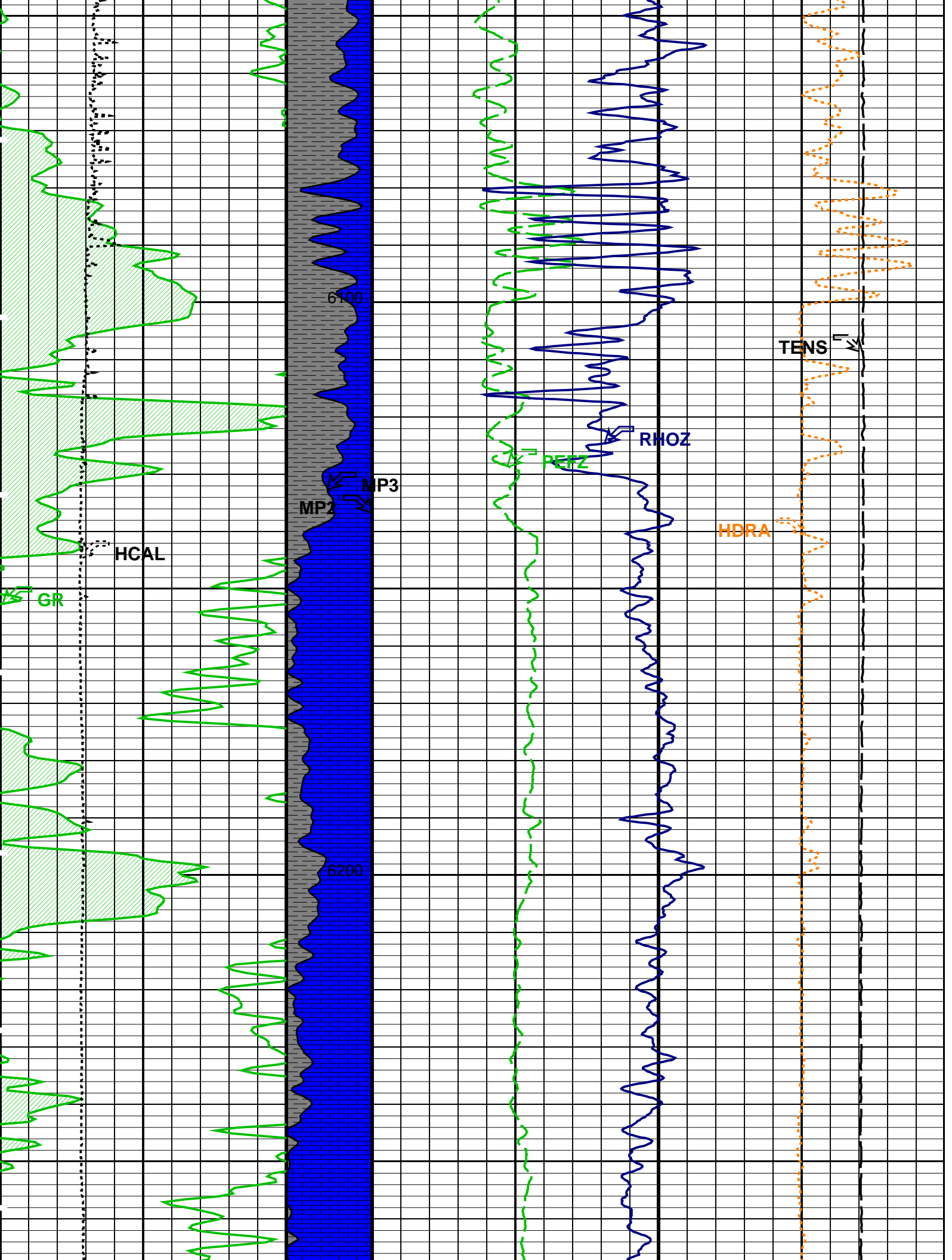


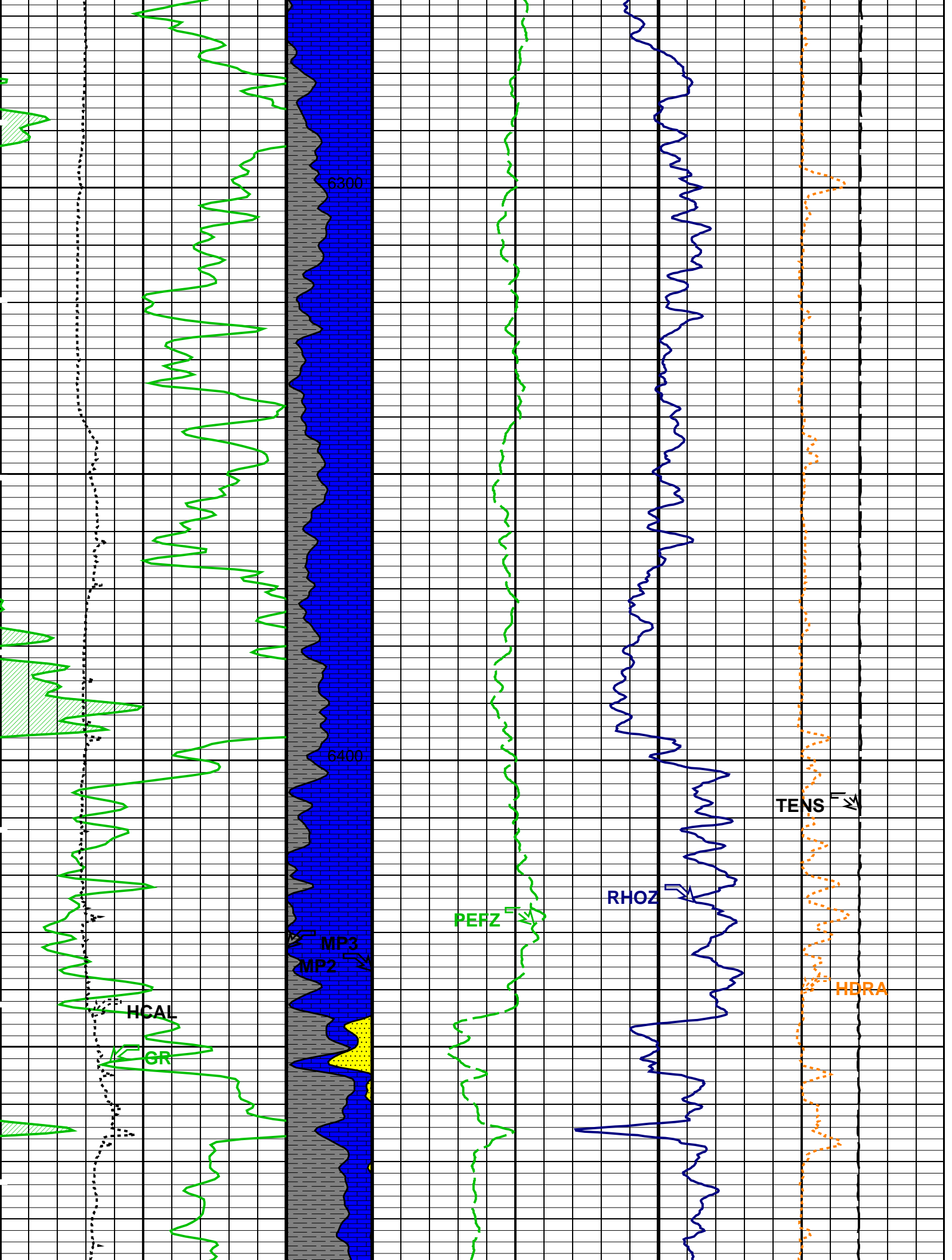


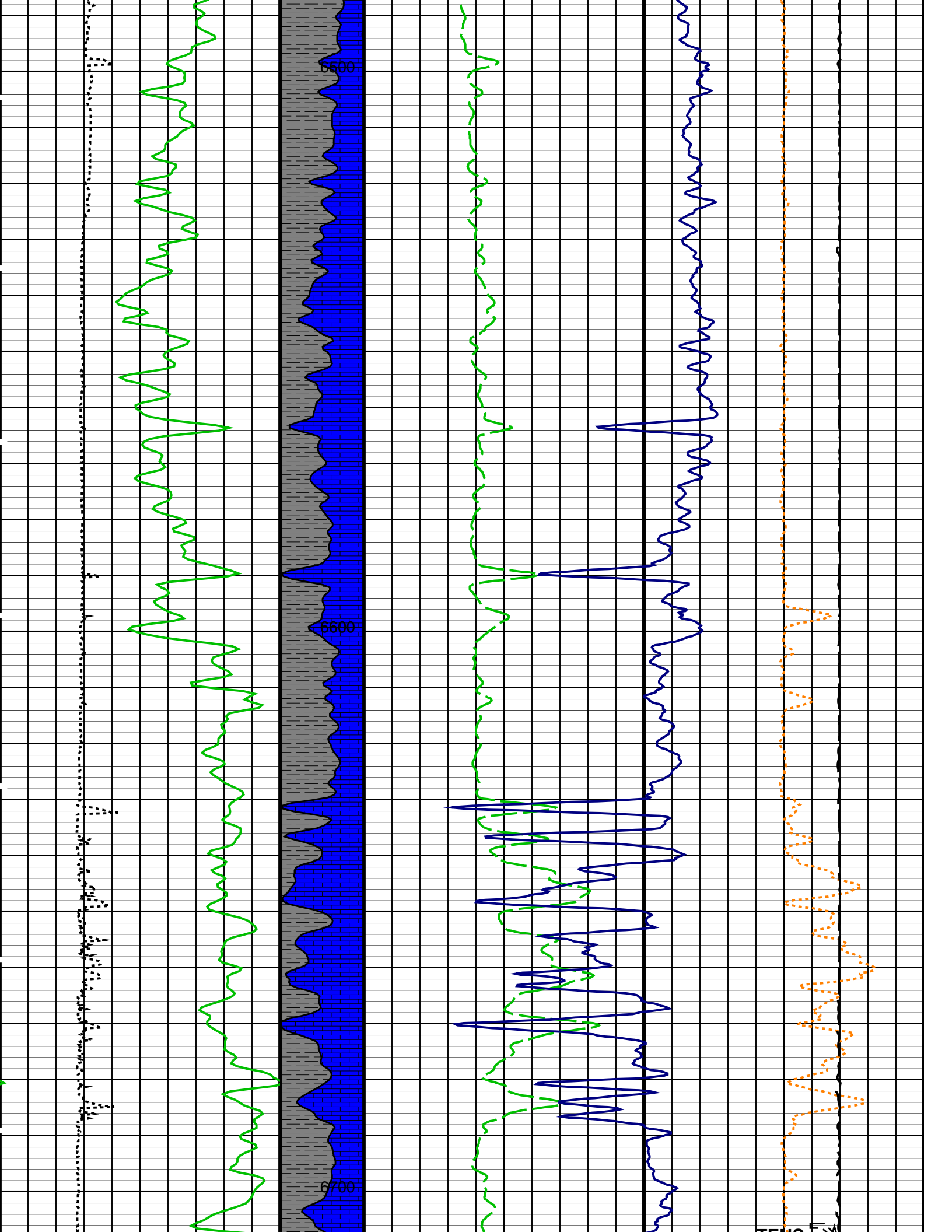


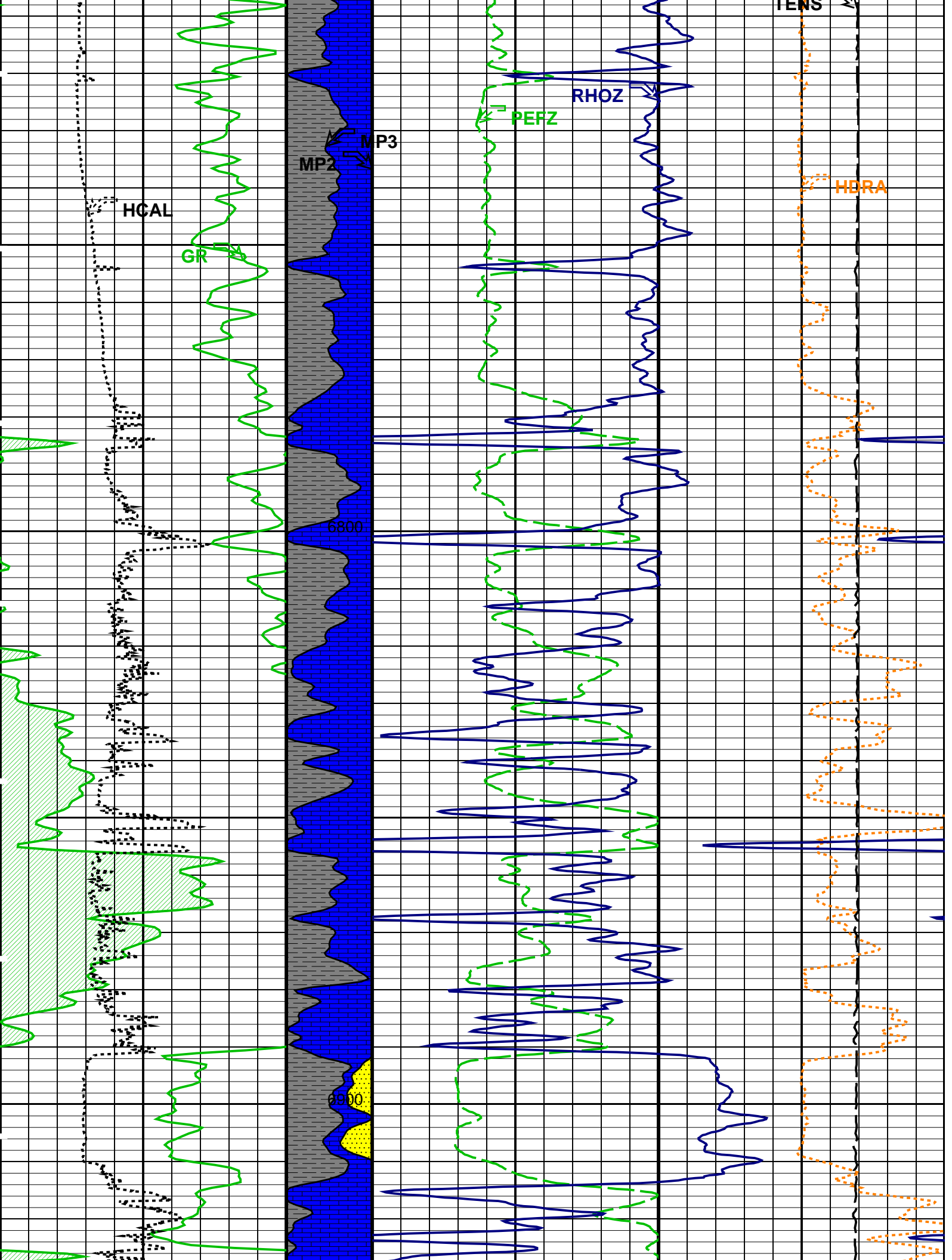


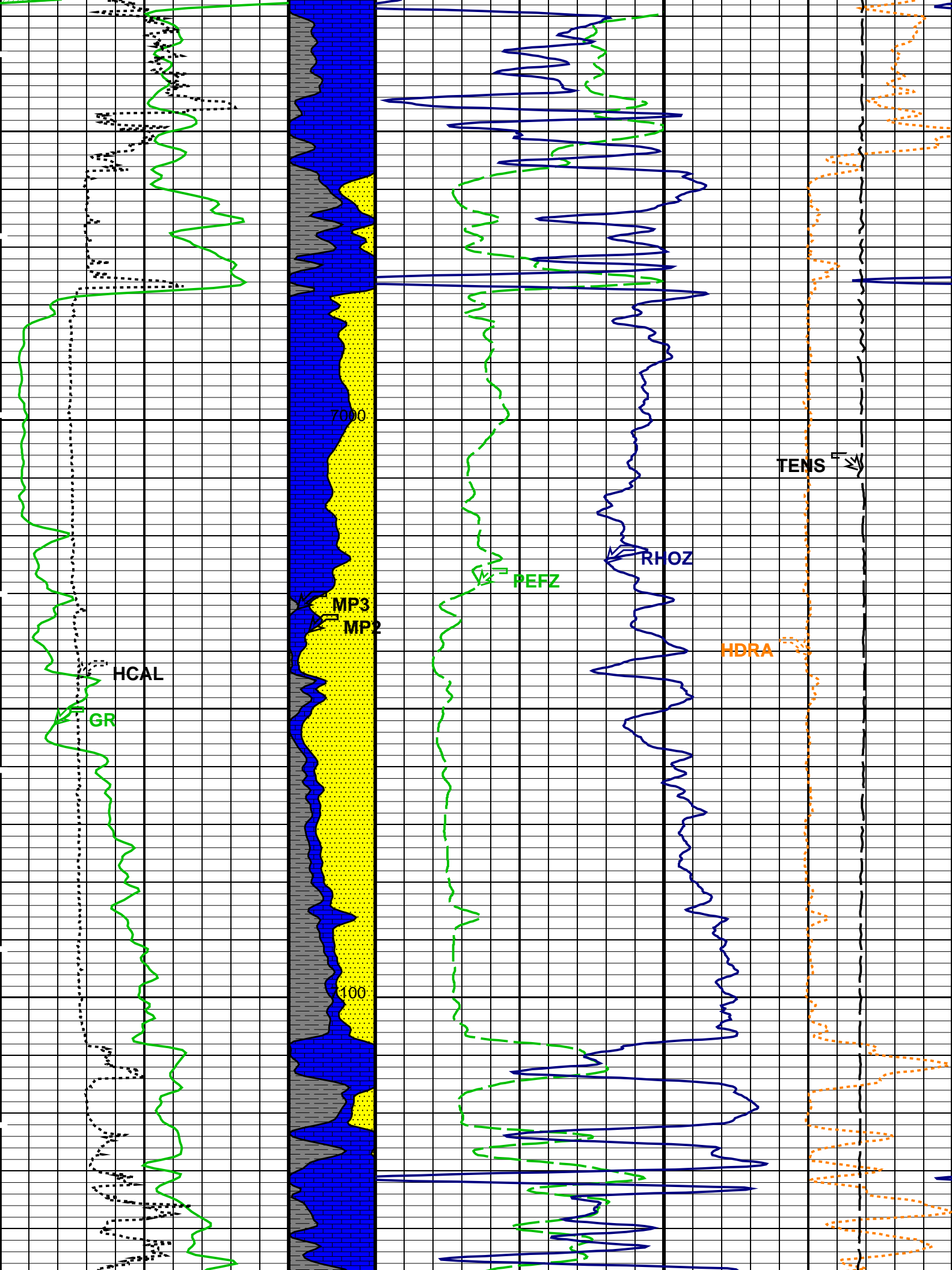


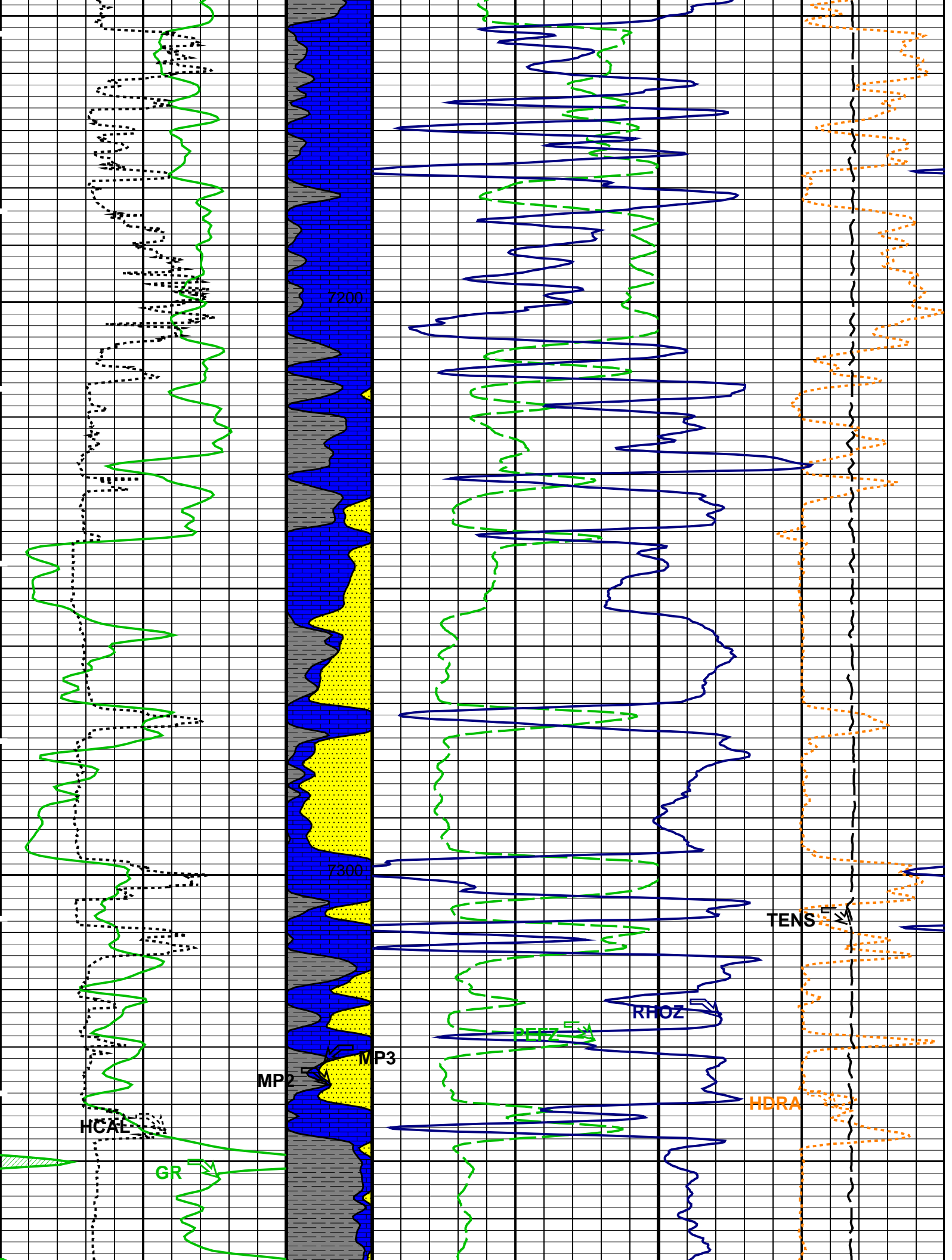


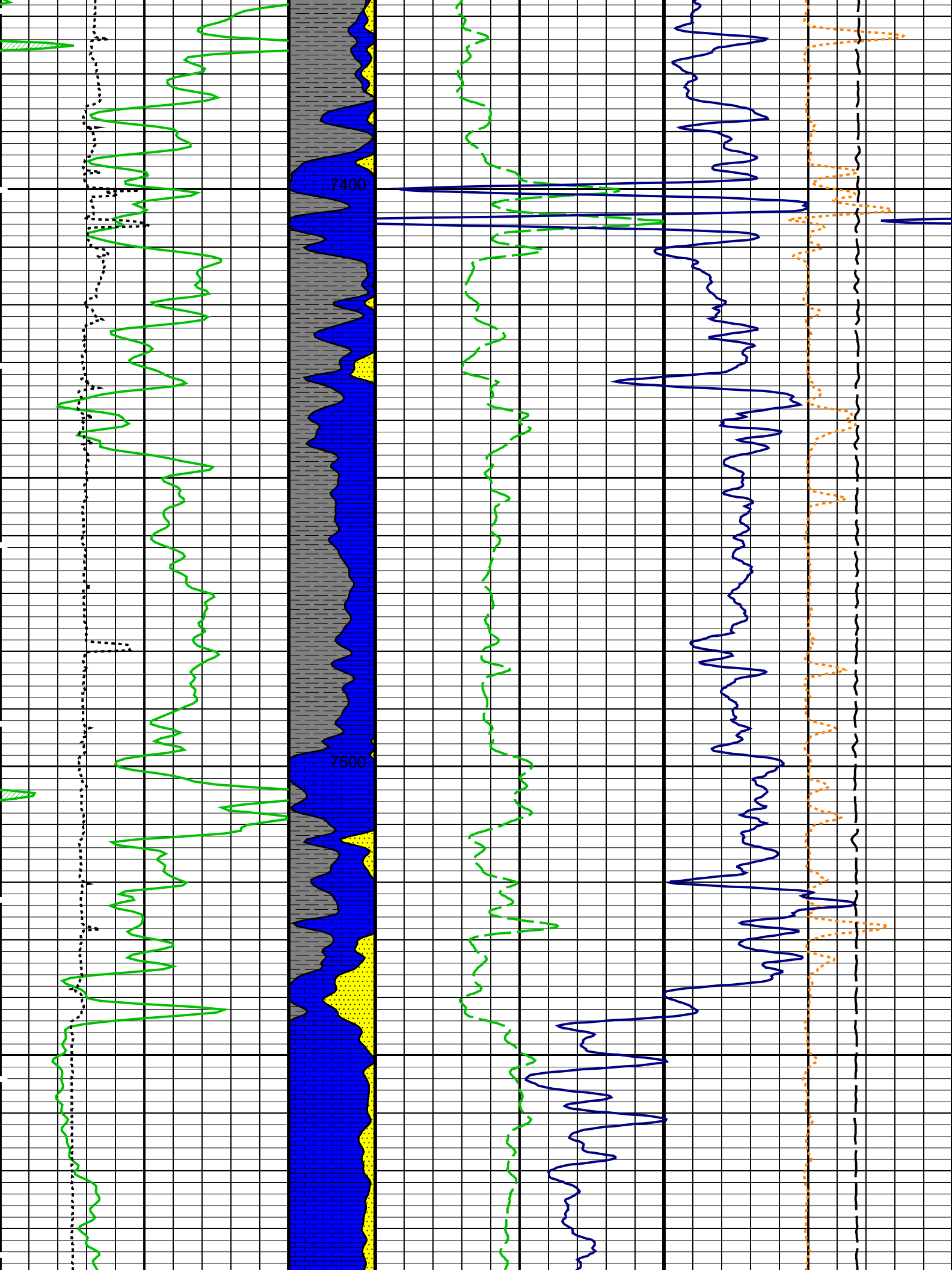


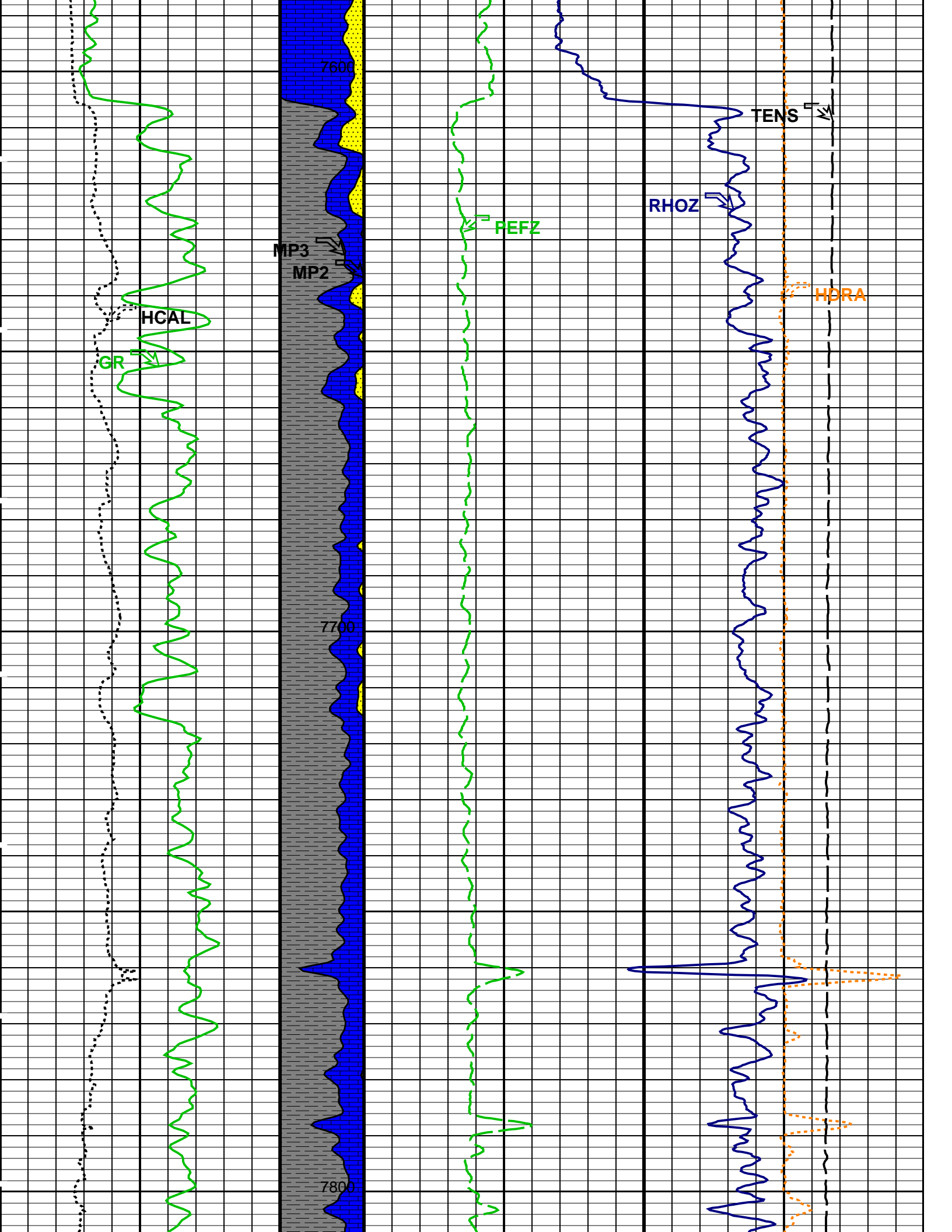


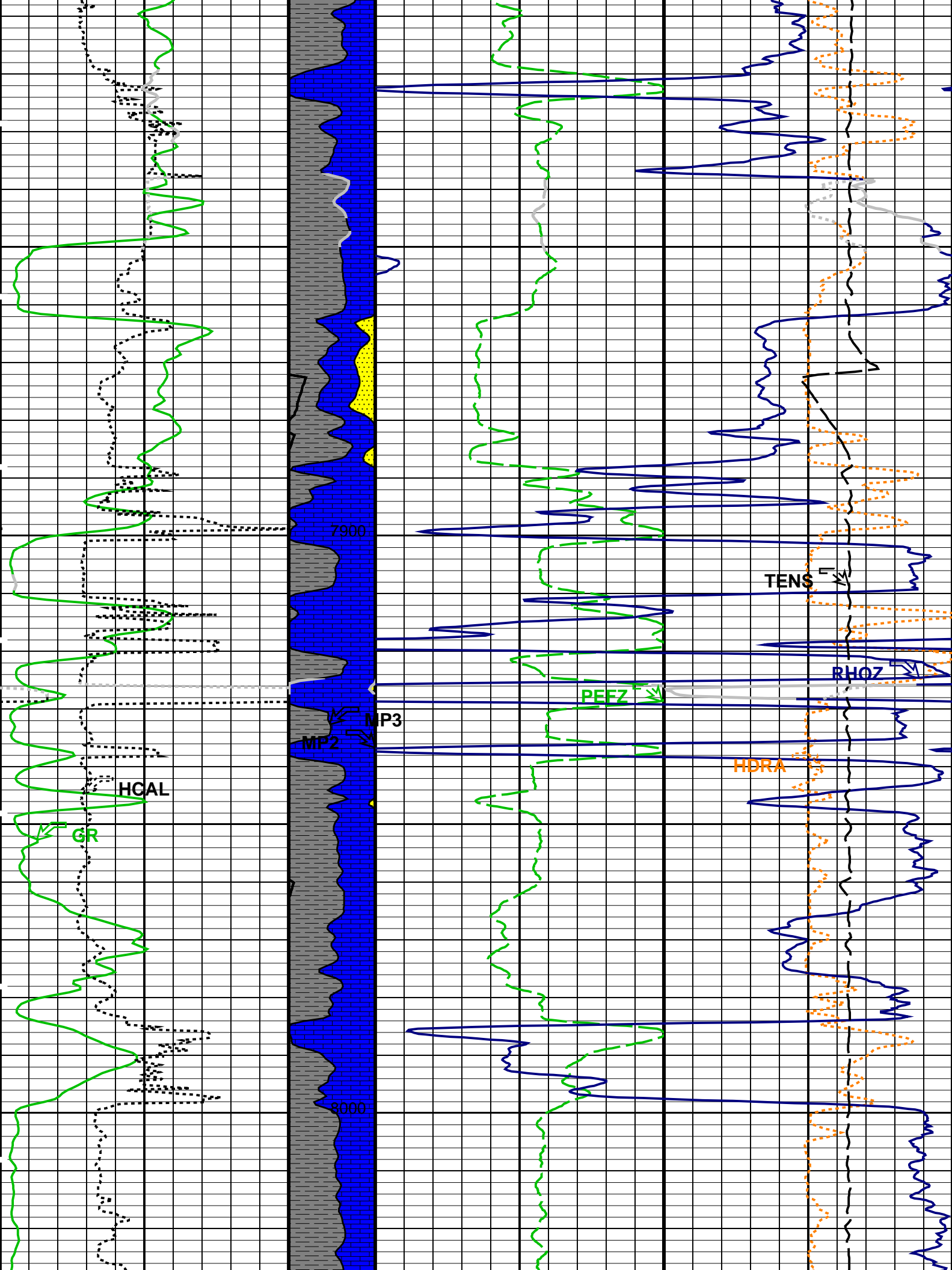


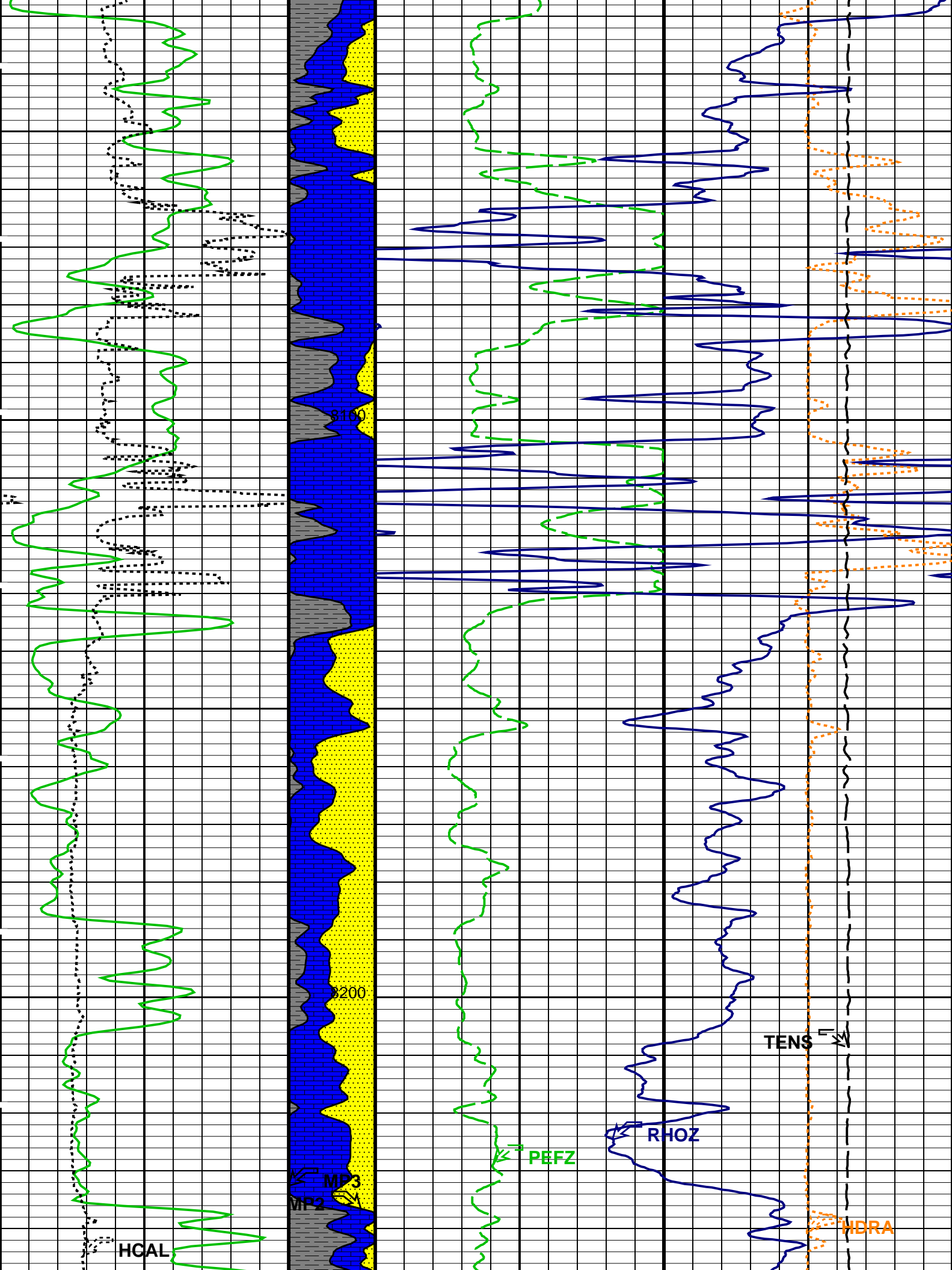


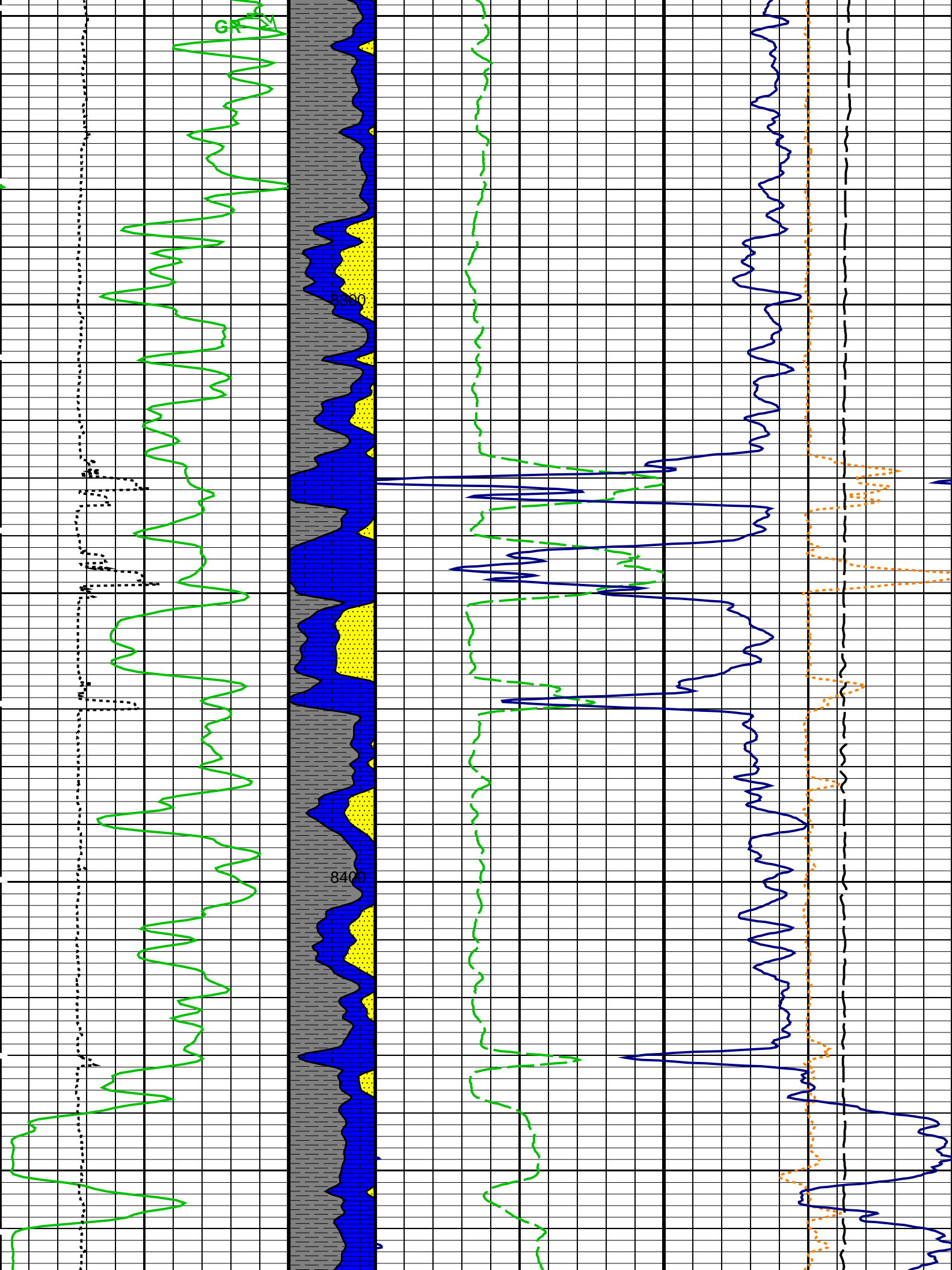


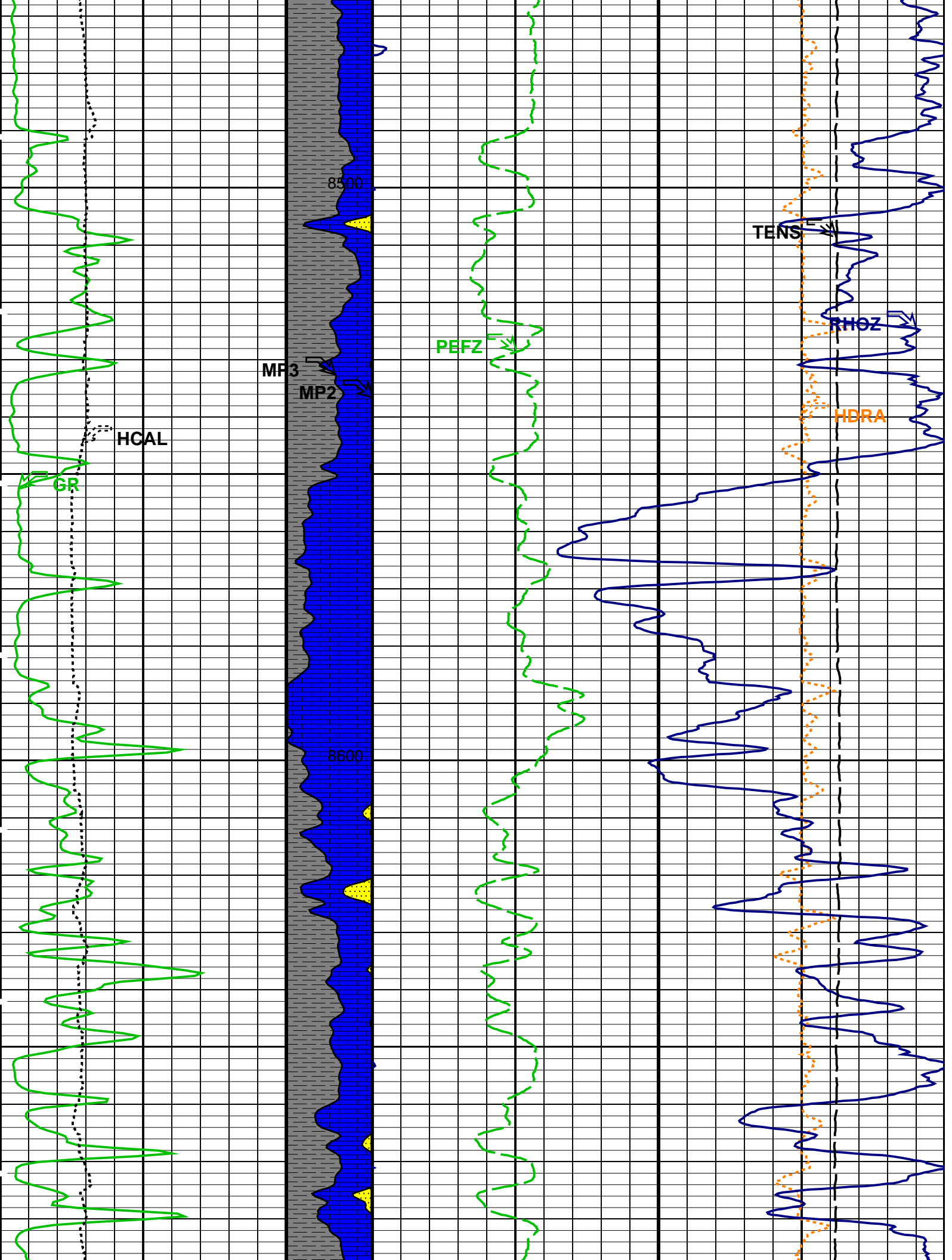


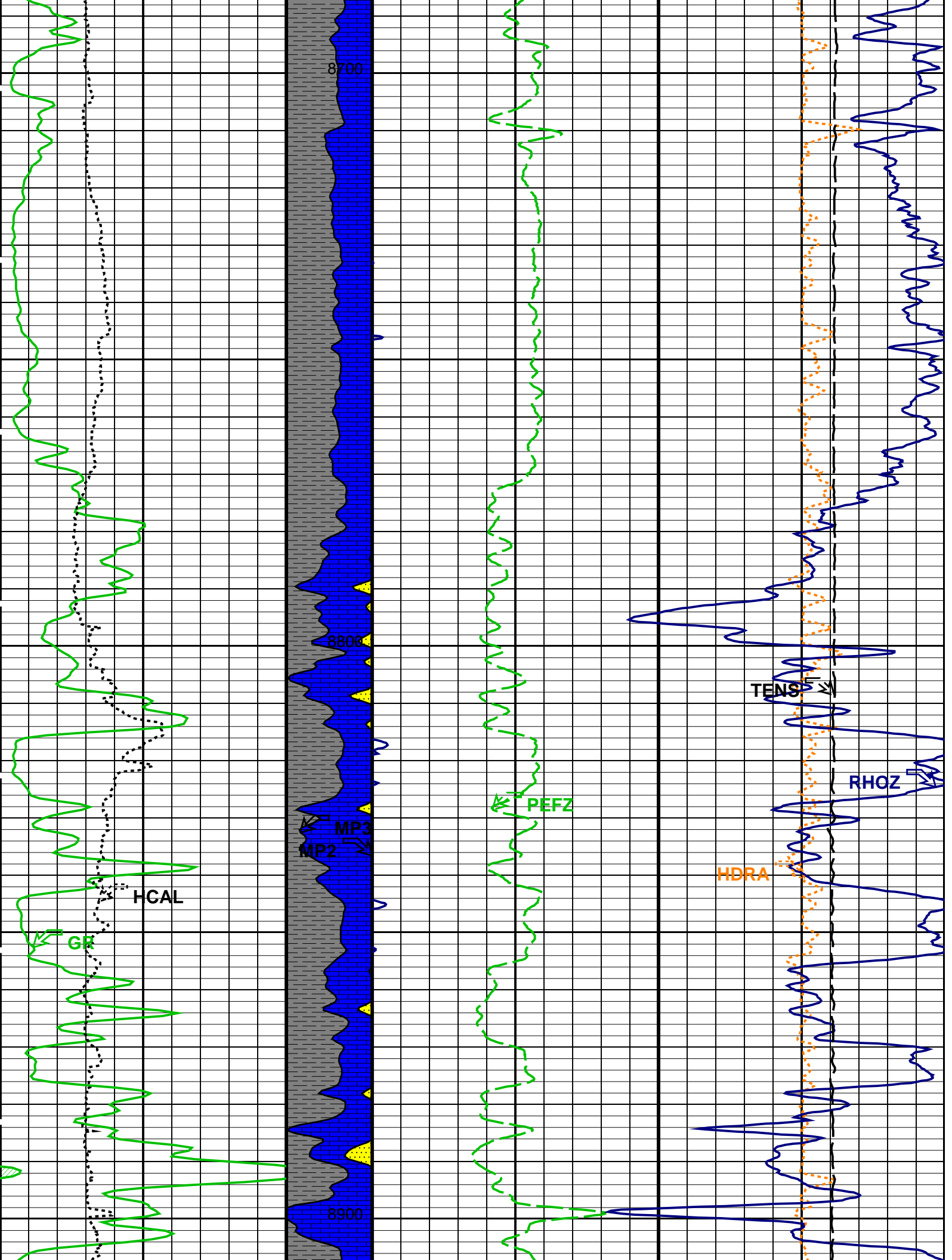


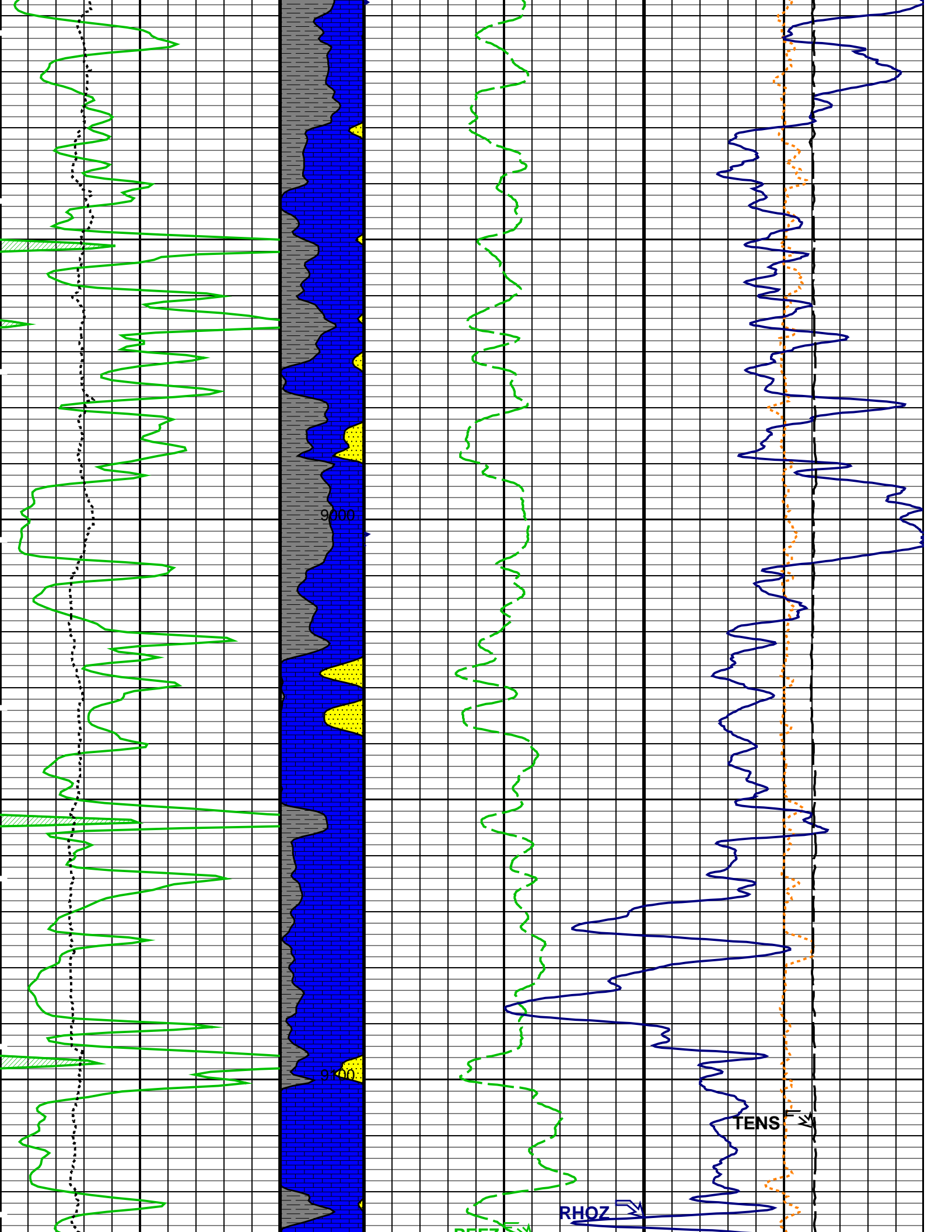


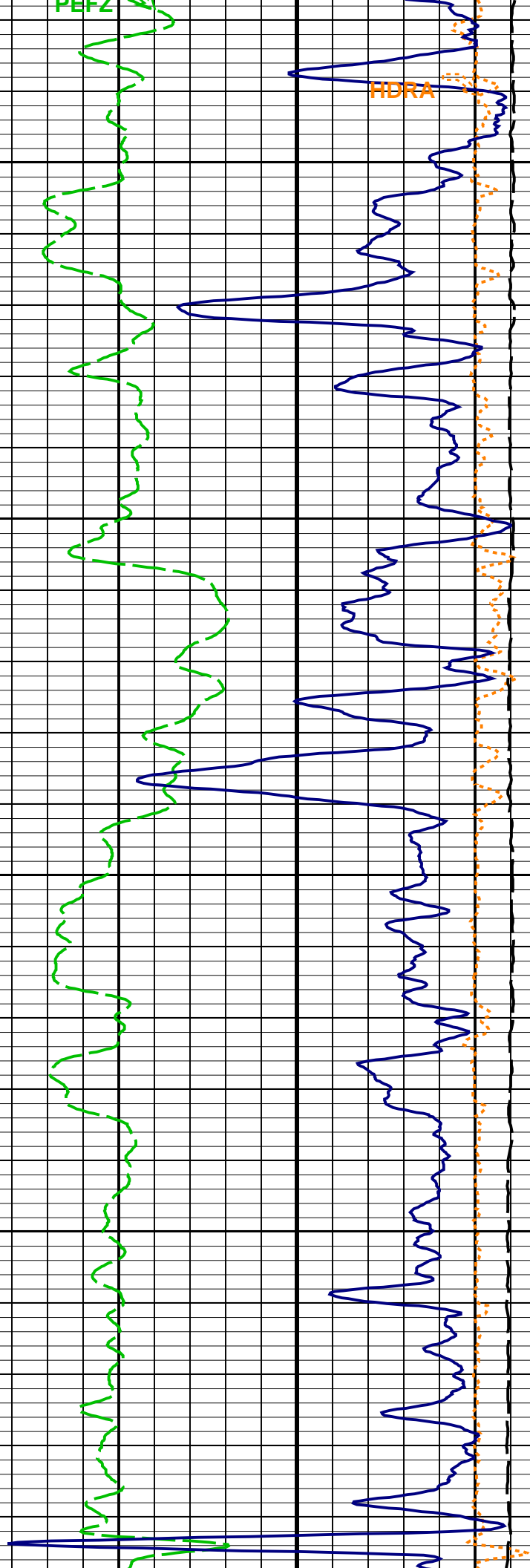
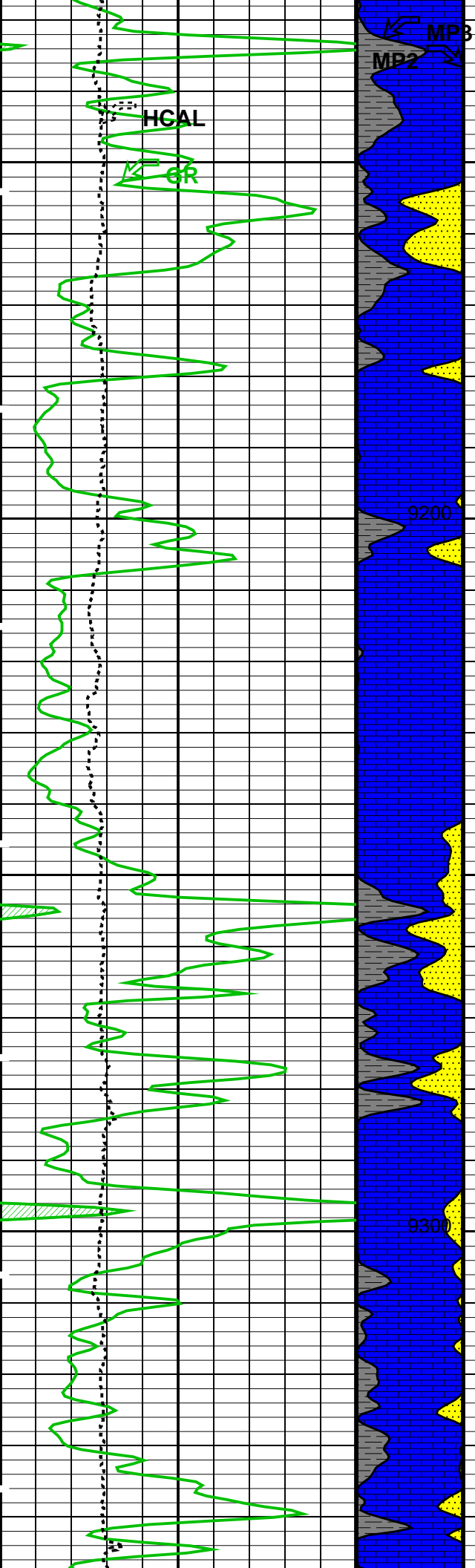


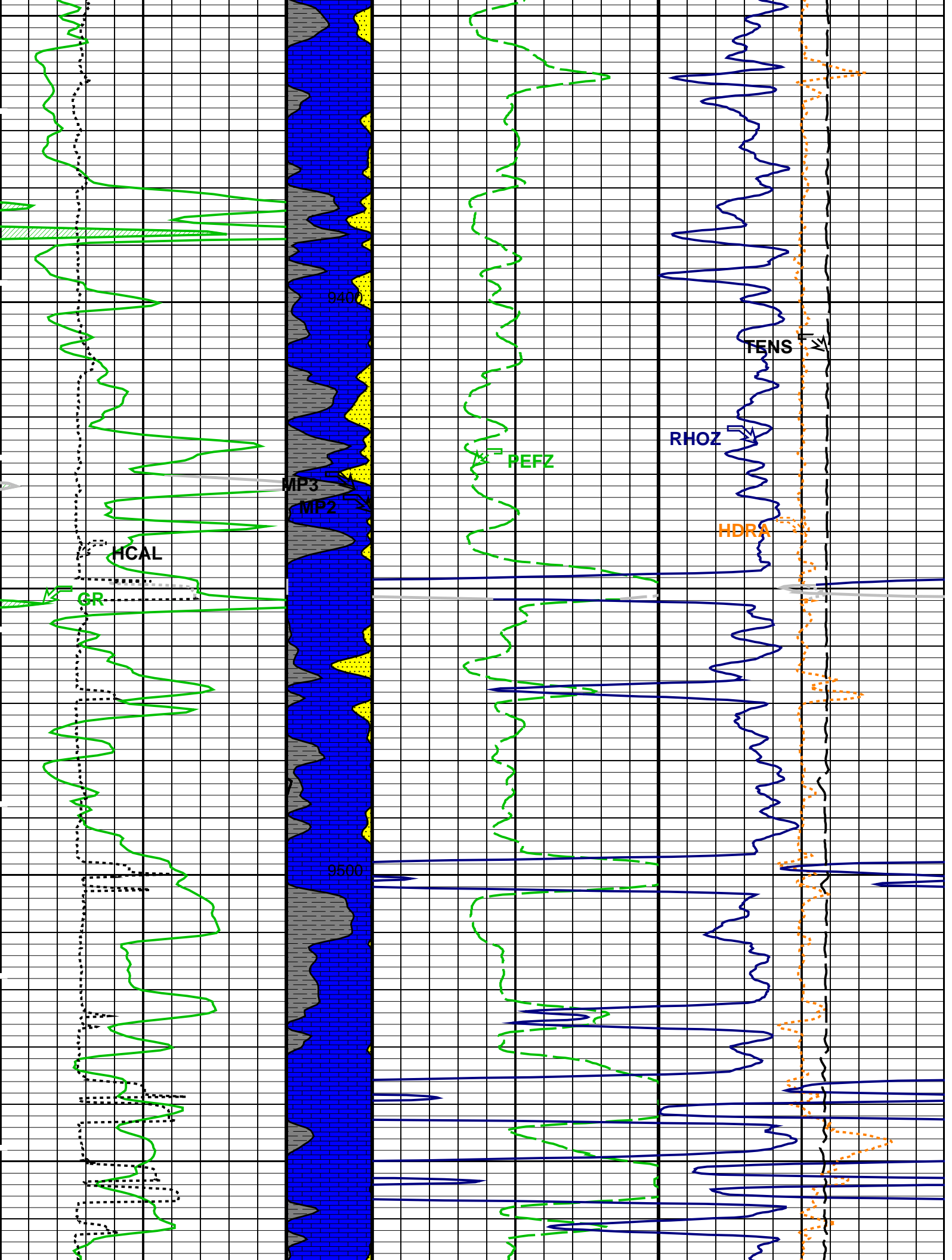


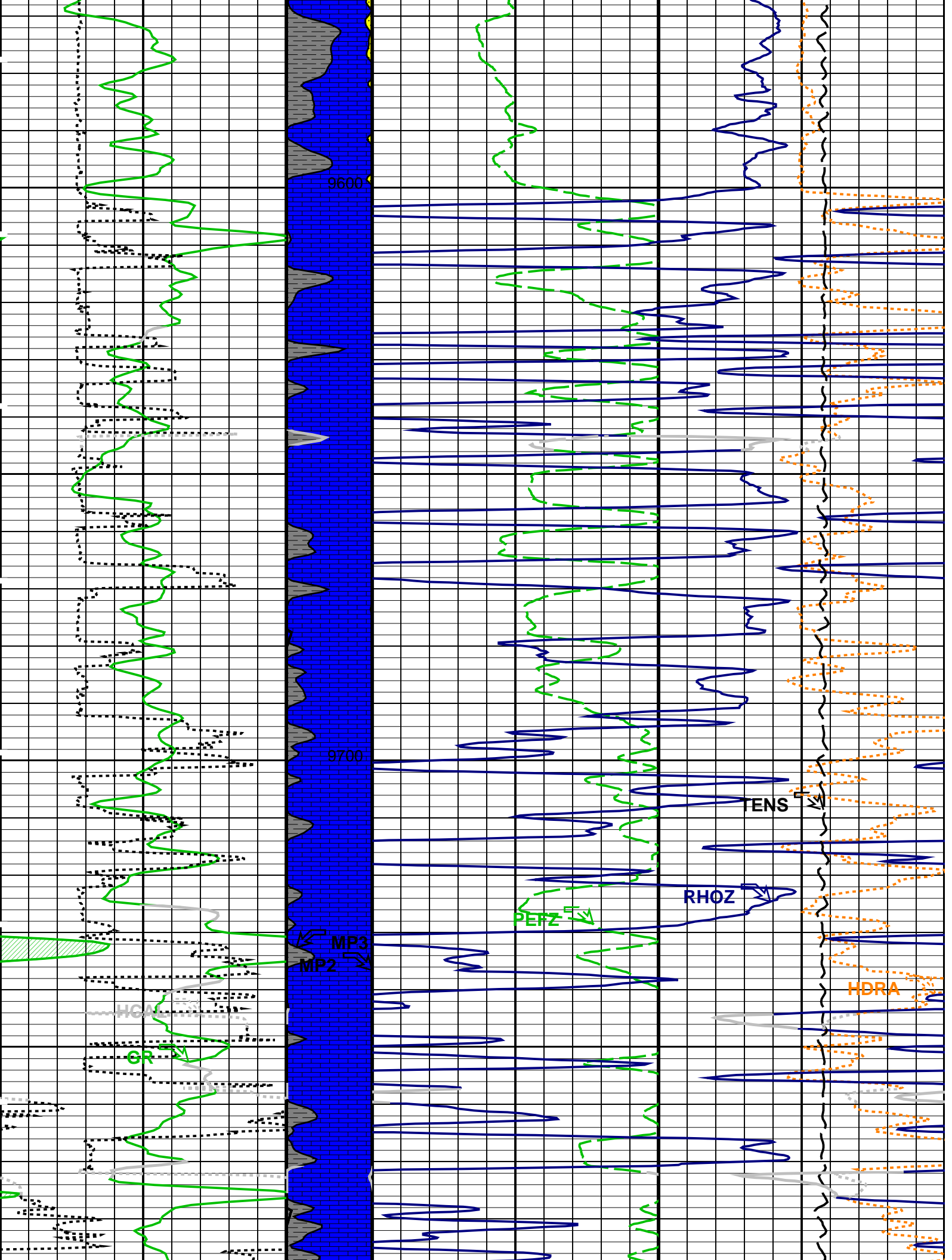


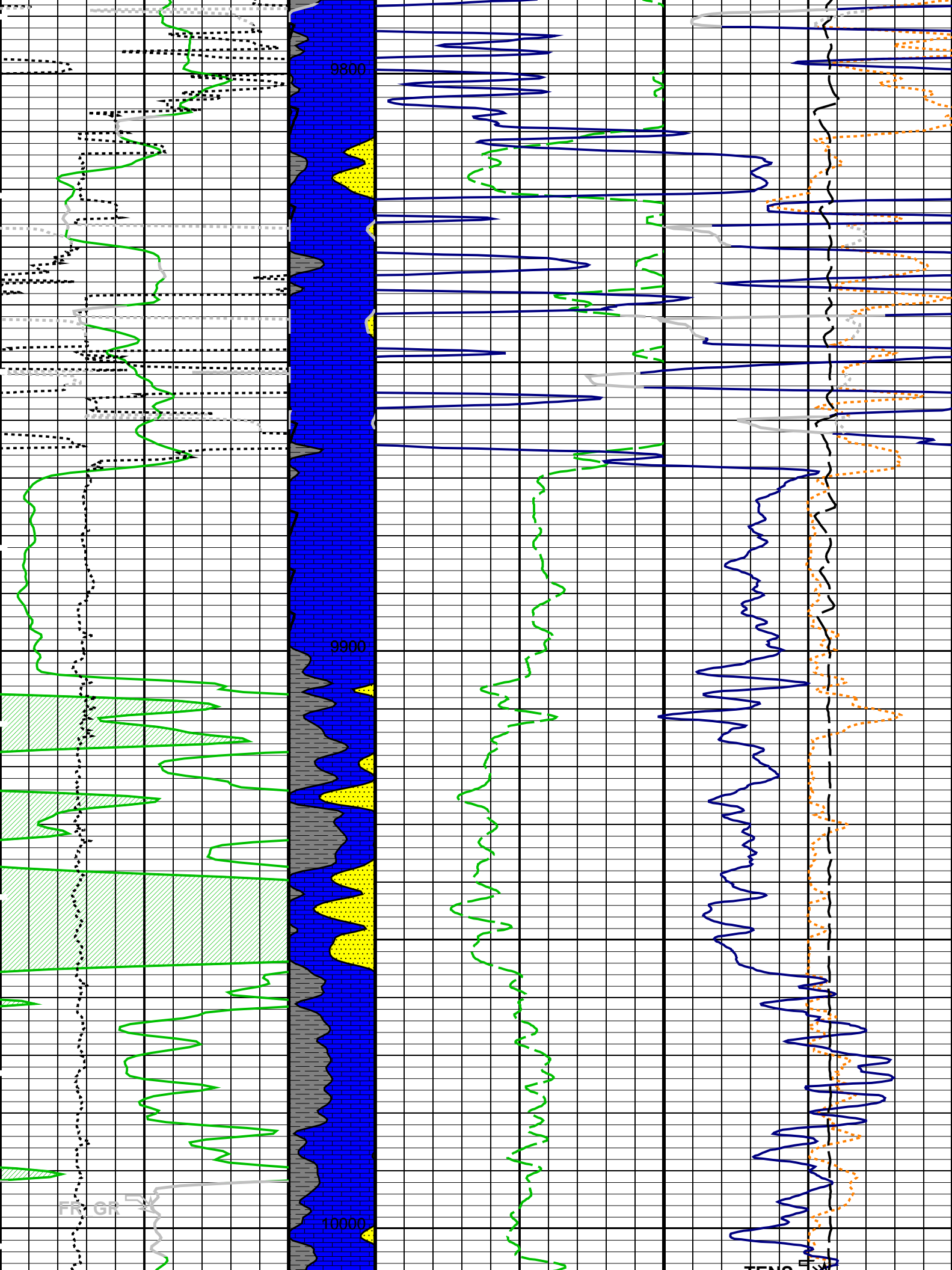


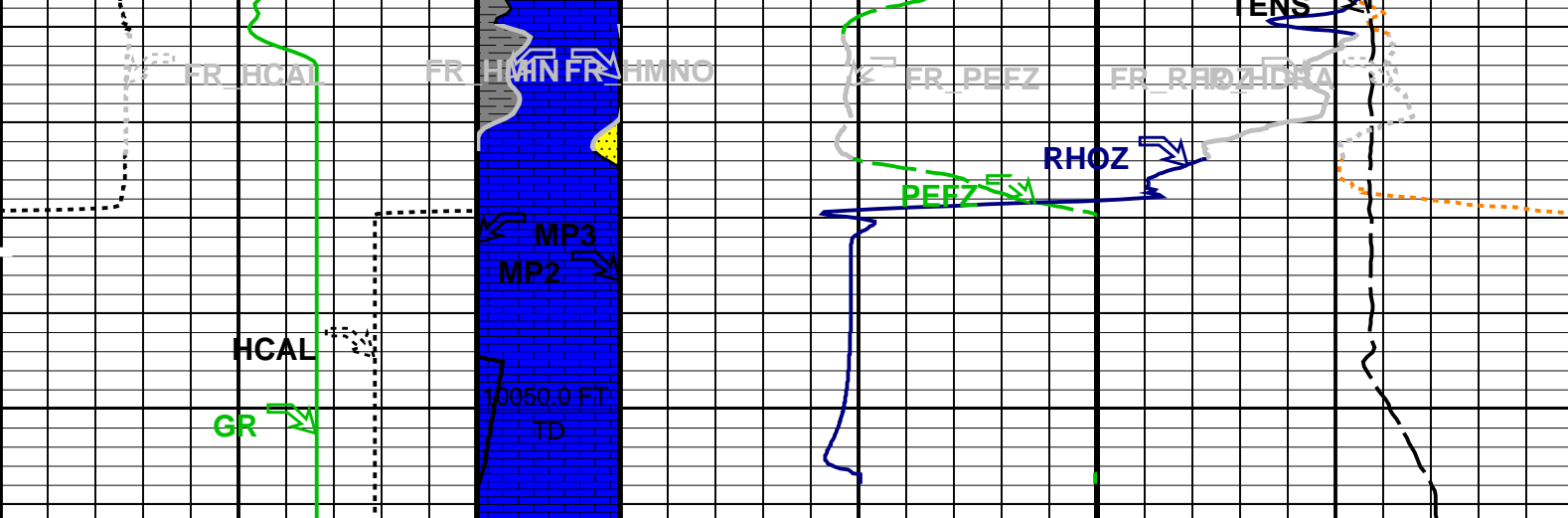












MAIN PASS: *** PLATFORM EXPRESS – LITHOLOGY DENSITY ***

Gamma Ray Backup	Stuck Stretch (STIT)	0	Std. Res. Formation Pe (PEFZ)	10	Density Correction (HDRA)	0.25
	(F) 50		(-----)		(G/C3)	
Gamma Ray (GR)	LIME	2	Std. Res. Formation Density (RHOZ)	3		
(GAPI) 150			(G/C3)			
Caliper (HCAL)	SAND				Tension (TENS)	
(IN) 16					(LBF)	0
	SHALE					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
ZAIT-EB: 3-D Array Induction Tool – ZAIT-E		
BHT	Bottom Hole Temperature (used in calculations)	225 DEGF
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GGRD	Geothermal Gradient	0.01 DF/F
GTSE	Generalized Temperature Selection	HSTS_HTEM
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
SHT	Surface Hole Temperature	68 DEGF
TRI1DV	3D 1D Code Version Number	315
TRIBHV	Array Induction Borehole Correction Code Version Number	168
TRIRT	3D Rotation Selector	NorTH
HILTH-FTB: High resolution Integrated Logging Tool-DTS		
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHT	Bottom Hole Temperature (used in calculations)	225 DEGF
DHC	Density Hole Correction	BS
FD	Fluid Density	1 G/C3
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCLF	Germany Coal-like Formation Option	NO
GGRD	Geothermal Gradient	0.01 DF/F
GTSE	Generalized Temperature Selection	HSTS_HTEM
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	StdRes
NSAR	HRDD Depth Sampling Rate	1 IN
SHT	Surface Hole Temperature	68 DEGF
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 FT
TIMD	Along-hole depth of Tie-in Point	0 FT
TIVD	TVD of Tie-in Point	0 FT
FEQL: Formation Evaluation Quick Look		
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	225 DEGF

GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation – Real Time			
BDPS	Bulk Density Processing Selector	Standard	
BHT	Bottom Hole Temperature (used in calculations)	225	DEGF
CLIM	Caliper Limit for Bad Hole	999	IN
CNPS	Corrected Neutron Porosity Selector	NPHI	
DRUL	DRHO Upper Limit	999	G/C3
FCAL	Caliper Presence Flag	PRESENT	
FCGR	CGR Presence Flag	PRESENT	
FEXP	Form Factor Exponent	2	
FLDT	Bulk Density Presence Flag	PRESENT	
FNUM	Form Factor Numerator	1	
FSON	Sonic Presence Flag	ABSENT	
GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PMAX	PHI Maximum	0.5	CFCF
POUT	Porosity Output Lithology	LIMESTONE	
RG21	RHO Grain (2–Mineral Model, Min–1)	2.71	G/C3
RG22	RHO Grain (2–Mineral Model, Min–2)	2.644	G/C3
RG23	RHO Grain (2–Mineral Model, Min–3)	2.877	G/C3
RG31	RHO Grain (3–Mineral Model, Min–1)	2.71	G/C3
RG32	RHO Grain (3–Mineral Model, Min–2)	2.644	G/C3
RG33	RHO Grain (3–Mineral Model, Min–3)	2.877	G/C3
RTLFL	RT Limit Flag	NO_LIMIT	
RWF	Resistivity of Free Water	0.02	OHMM
SHT	Surface Hole Temperature	68	DEGF
UF	U Fluid	0.398	
UM21	U Matrix (2–Mineral Model, Min–1)	13.77	
UM22	U Matrix (2–Mineral Model, Min–2)	4.779	
UM23	U Matrix (2–Mineral Model, Min–3)	8.997	
UM31	U Matrix (3–Mineral Model, Min–1)	13.77	
UM32	U Matrix (3–Mineral Model, Min–2)	4.779	
UM33	U Matrix (3–Mineral Model, Min–3)	8.997	
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	10060.00	FT
TDL	Total Depth – Logger	10050.00	FT
RWA: Apparent Water Resistivity			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
System and Miscellaneous			
BS	Bit Size	8.750	IN
DFD	Drilling Fluid Density	9.10	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.9200	OHMM
TD	Total Depth	10050	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF

Format: DENS Vertical Scale: 5" per 100' Graphics File Created: 02-Jul-2013 23:19

OP System Version: 19C2-270

ZAIT-EB	19C2-270	GPIT-F	19C2-270
HILTH-FTB	19C2-270	DTC-H	19C2-270

Input DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_012LUP	FN:11	PRODUCER	02-Jul-2013 19:58	10062.0 FT	1511.0 FT
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Output DLIS Files

DEFAULT	AIT_IS_TLD_MCFL_CNL_024PUP	FN:25	PRODUCER	02-Jul-2013 23:19
CUSTOMER	AIT_IS_TLD_MCFL_CNL_024PUC	FN:26	CUSTOMER	02-Jul-2013 23:19

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
3-D Array Induction Tool – ZAIT–EB Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 17-Jul-2012 17:34 Before: 2-Jul-2013 10:17							
Thru Cal Magnitude – 0	0	1.484	1.490	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 1	0	1.499	1.502	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 2	0	1.453	1.453	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 3	0	3.417	3.433	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 4	0	3.451	3.461	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 5	0	3.345	3.349	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 6	0	2.740	2.753	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 7	0	2.768	2.776	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 8	0	2.683	2.685	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 9	0	1.903	1.907	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 10	0	1.904	1.919	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 11	0	1.886	1.899	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 12	0	3.577	3.593	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 13	0	3.612	3.623	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 14	0	3.501	3.504	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 15	0	3.051	3.057	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 16	0	3.052	3.077	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 17	0	3.024	3.045	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 18	0	0.9467	0.9512	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 19	0	0.9554	0.9584	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 20	0	0.9259	0.9270	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 21	0	4.055	4.063	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 22	0	4.056	4.090	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 23	0	4.019	4.047	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 24	0	1.375	1.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 25	0	1.388	1.393	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 26	0	1.345	1.348	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 27	0	4.055	4.063	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 28	0	4.056	4.090	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 29	0	4.019	4.047	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 30	0	1.375	1.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 31	0	1.388	1.393	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 32	0	1.345	1.348	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 33	0	1.176	1.178	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 34	0	1.175	1.185	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 35	0	1.164	1.172	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 36	0	1.631	1.638	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 37	0	1.646	1.651	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 38	0	1.595	1.597	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 39	0	1.412	1.415	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 40	0	1.411	1.423	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 41	0	1.398	1.408	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 42	0	2.353	2.365	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 43	0	2.375	2.383	N/A	N/A	N/A	MM/M
Thru Cal Magnitude – 44	0	2.302	2.305	N/A	N/A	N/A	MM/M
Thru Cal Phase – 0	0	11.77	14.70	N/A	N/A	N/A	DEG
Thru Cal Phase – 1	0	10.92	13.01	N/A	N/A	N/A	DEG
Thru Cal Phase – 2	0	0.9479	3.005	N/A	N/A	N/A	DEG
Thru Cal Phase – 3	0	7.740	10.47	N/A	N/A	N/A	DEG
Thru Cal Phase – 4	0	6.902	8.792	N/A	N/A	N/A	DEG
Thru Cal Phase – 5	0	-3.072	-1.214	N/A	N/A	N/A	DEG
Thru Cal Phase – 6	0	12.23	15.26	N/A	N/A	N/A	DEG
Thru Cal Phase – 7	0	11.38	13.58	N/A	N/A	N/A	DEG
Thru Cal Phase – 8	0	1.382	3.547	N/A	N/A	N/A	DEG
Thru Cal Phase – 9	0	4.955	5.868	N/A	N/A	N/A	DEG
Thru Cal Phase – 10	0	3.432	4.653	N/A	N/A	N/A	DEG
Thru Cal Phase – 11	0	1.881	3.333	N/A	N/A	N/A	DEG
Thru Cal Phase – 12	0	11.80	14.70	N/A	N/A	N/A	DEG
Thru Cal Phase – 13	0	10.94	13.05	N/A	N/A	N/A	DEG
Thru Cal Phase – 14	0	0.9918	3.047	N/A	N/A	N/A	DEG
Thru Cal Phase – 15	0	4.963	5.865	N/A	N/A	N/A	DEG
Thru Cal Phase – 16	0	3.453	4.664	N/A	N/A	N/A	DEG
Thru Cal Phase – 17	0	1.901	3.343	N/A	N/A	N/A	DEG
Thru Cal Phase – 18	0	11.73	14.68	N/A	N/A	N/A	DEG
Thru Cal Phase – 19	0	10.89	13.02	N/A	N/A	N/A	DEG

Thru Cal Phase – 19	0	10.89	13.02	N/A	N/A	N/A	DEG
Thru Cal Phase – 20	0	0.9383	3.020	N/A	N/A	N/A	DEG
Thru Cal Phase – 21	0	2.954	3.793	N/A	N/A	N/A	DEG
Thru Cal Phase – 22	0	1.440	2.586	N/A	N/A	N/A	DEG
Thru Cal Phase – 23	0	-0.1098	1.269	N/A	N/A	N/A	DEG
Thru Cal Phase – 24	0	7.739	10.44	N/A	N/A	N/A	DEG
Thru Cal Phase – 25	0	6.899	8.807	N/A	N/A	N/A	DEG
Thru Cal Phase – 26	0	-3.054	-1.203	N/A	N/A	N/A	DEG
Thru Cal Phase – 27	0	2.946	3.780	N/A	N/A	N/A	DEG
Thru Cal Phase – 28	0	1.436	2.579	N/A	N/A	N/A	DEG
Thru Cal Phase – 29	0	-0.1156	1.258	N/A	N/A	N/A	DEG
Thru Cal Phase – 30	0	7.731	10.46	N/A	N/A	N/A	DEG
Thru Cal Phase – 31	0	6.901	8.806	N/A	N/A	N/A	DEG
Thru Cal Phase – 32	0	-3.060	-1.205	N/A	N/A	N/A	DEG
Thru Cal Phase – 33	0	5.438	6.434	N/A	N/A	N/A	DEG
Thru Cal Phase – 34	0	3.941	5.236	N/A	N/A	N/A	DEG
Thru Cal Phase – 35	0	2.370	3.907	N/A	N/A	N/A	DEG
Thru Cal Phase – 36	0	12.25	15.25	N/A	N/A	N/A	DEG
Thru Cal Phase – 37	0	11.41	13.62	N/A	N/A	N/A	DEG
Thru Cal Phase – 38	0	1.459	3.614	N/A	N/A	N/A	DEG
Thru Cal Phase – 39	0	5.416	6.412	N/A	N/A	N/A	DEG
Thru Cal Phase – 40	0	3.920	5.223	N/A	N/A	N/A	DEG
Thru Cal Phase – 41	0	2.363	3.896	N/A	N/A	N/A	DEG
Thru Cal Phase – 42	0	12.20	15.25	N/A	N/A	N/A	DEG
Thru Cal Phase – 43	0	11.37	13.60	N/A	N/A	N/A	DEG
Thru Cal Phase – 44	0	1.404	3.579	N/A	N/A	N/A	DEG

3-D Array Induction Tool – ZAIT–EB Wellsite Calibration – Electronics Calibration Check – Auxilliary

Master: 17-Jul-2012 17:34 Before: 2-Jul-2013 10:17

Array Induction SPA Plus	0.8360	0.8425	0.8425	N/A	N/A	N/A	V
Array Induction SPA Zero	0	-0.0008885	-0.0008893	N/A	N/A	N/A	V
Array Induction Temperature PI	0.9798	0.9891	0.9893	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.001770	-0.001760	N/A	N/A	N/A	V
Array Induction CalSig Plus	5.000	5.013	5.013	N/A	N/A	N/A	V
Array Induction CalSig Zero	0	-0.01264	-0.01272	N/A	N/A	N/A	V
Array Induction Volt Plus	5.000	5.013	5.013	N/A	N/A	N/A	V
Array Induction Volt Zero	0	-0.01264	-0.01272	N/A	N/A	N/A	V

3-D Array Induction Tool – ZAIT–EB Wellsite Calibration – Field Check Sonde Error

Master: 17-Jul-2012 17:34

R Sonde Error Check – 0	0	0.8768	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 1	0	-8.460	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 2	0	-0.2346	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 3	0	0.1586	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 4	0	-2.006	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 5	0	-0.1444	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 6	0	0.09356	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 7	0	-0.7344	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 8	0	0.02038	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 9	0	-0.2112	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 10	0	0.06952	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 11	0	0.1413	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 12	0	-0.1485	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 13	0	-0.2748	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 14	0	-1.459	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 15	0	0.1561	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 16	0	0.3288	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 17	0	0.01729	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 18	0	0.009476	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 19	0	0.07878	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 20	0	-0.05011	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 21	0	-0.00004578	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 22	0	-0.01636	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 23	0	-0.4070	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 24	0	-0.06665	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 25	0	0.009807	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 26	0	-0.0003009	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 27	0	0.2296	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 28	0	0.1653	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 29	0	0.1038	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 30	0	-0.03671	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 31	0	0.2608	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 32	0	-0.8507	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 33	0	-0.3072	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 34	0	0.1051	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 35	0	0.06393	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 36	0	0.06533	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 37	0	0.07103	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 38	0	-0.06642	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 39	0	0.06441	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 40	0	-0.1331	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 41	0	-0.1926	N/A	N/A	N/A	N/A	MM/M

R Sonde Error Check – 42	0	-0.08327	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 43	0	-0.03356	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 44	0	0.01292	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 45	0	0.1815	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 46	0	-0.03699	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 47	0	0.3481	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 48	0	0.02344	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 49	0	-0.2052	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 50	0	-0.3714	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 51	0	0.04171	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 52	0	-0.02857	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 53	0	-0.008003	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 54	0	-0.04964	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 55	0	0.001317	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 56	0	0.004580	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 57	0	-0.007983	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 58	0	-0.03270	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 59	0	-0.007650	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 60	0	-0.02358	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 61	0	-0.003514	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 62	0	0.02410	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 63	0	0.06746	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 64	0	0.01019	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 65	0	-0.2117	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 66	0	0.05021	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 67	0	-0.4624	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 68	0	-0.1547	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 69	0	-0.1594	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 70	0	0.1116	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 71	0	-0.03944	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 72	0	0.04089	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 73	0	-0.01481	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 74	0	-0.0006365	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 75	0	0.01118	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 76	0	-0.004654	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 77	0	-0.1062	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 78	0	-0.01381	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 79	0	-0.1139	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 80	0	0.02617	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 81	0	0.2853	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 82	0	0.1240	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 83	0	0.1245	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 84	0	0.05487	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 85	0	-0.07480	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 86	0	-0.4918	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 87	0	0.2648	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 88	0	-0.06360	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 89	0	-0.06884	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 90	0	0.03490	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 91	0	-0.01005	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 92	0	0.05603	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 93	0	-0.03578	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 94	0	0.07159	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 95	0	-0.2276	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 96	0	-0.03868	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 97	0	-0.01046	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 98	0	-0.001964	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 99	0	-0.01048	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 100	0	0.3691	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 101	0	0.2172	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 102	0	0.1826	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 103	0	0.5148	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 104	0	0.2807	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 105	0	0.04119	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 106	0	-0.1157	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 107	0	0.3458	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 108	0	0.04482	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 109	0	-0.01942	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 110	0	-0.03776	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 111	0	-0.01619	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 112	0	-0.01419	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 113	0	0.04691	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 114	0	-0.03978	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 115	0	-0.07626	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Check – 116	0	-0.001239	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 0	0	3.648	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 1	0	-0.9678	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 2	0	-0.1396	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 3	0	-0.5683	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 4	0	0.2455	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 5	0	0.1829	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 6	0	-0.06827	N/A	N/A	N/A	N/A	MM/M

X Sonde Error Check – 6	0	-0.06827	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 7	0	-0.05511	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 8	0	0.01085	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 9	0	-0.4440	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 10	0	0.1240	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 11	0	1.072	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 12	0	-0.3848	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 13	0	-0.3294	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 14	0	-0.05670	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 15	0	1.247	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 16	0	-2.885	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 17	0	0.01416	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 18	0	-0.3017	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 19	0	-0.06738	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 20	0	0.3876	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 21	0	-0.2283	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 22	0	-0.1021	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 23	0	-0.1892	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 24	0	0.7020	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 25	0	-1.372	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 26	0	-0.04074	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 27	0	0.1987	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 28	0	0.2310	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 29	0	0.6383	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 30	0	-0.1242	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 31	0	-7.783	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 32	0	0.7845	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 33	0	3.155	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 34	0	-0.6987	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 35	0	-0.09846	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 36	0	0.1699	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 37	0	0.09726	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 38	0	0.3790	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 39	0	-0.1294	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 40	0	0.06270	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 41	0	0.2822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 42	0	1.536	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 43	0	-0.3995	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 44	0	-0.07822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 45	0	0.6924	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 46	0	0.4965	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 47	0	-0.1383	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 48	0	-0.1485	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 49	0	0.8258	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 50	0	0.3601	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 51	0	0.8813	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 52	0	-0.5822	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 53	0	-0.2641	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 54	0	0.1011	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 55	0	0.02788	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 56	0	-0.006073	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 57	0	-0.09327	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 58	0	0.06207	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 59	0	0.2796	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 60	0	0.4424	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 61	0	-0.2170	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 62	0	-0.06397	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 63	0	-0.01039	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 64	0	-0.1392	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 65	0	-0.2752	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 66	0	-0.05826	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 67	0	-0.04993	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 68	0	0.7906	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 69	0	1.136	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 70	0	0.3809	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 71	0	-0.02920	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 72	0	0.1115	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 73	0	0.02747	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 74	0	-0.2118	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 75	0	-0.07761	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 76	0	-0.01807	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 77	0	0.3138	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 78	0	0.5158	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 79	0	0.1849	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 80	0	0.009218	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 81	0	-0.009415	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 82	0	0.02902	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 83	0	0.1291	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 84	0	0.06401	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 85	0	0.7413	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 86	0	0.07848	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 87	0	3.524	N/A	N/A	N/A	N/A	MM/M

X Sonde Error Check – 88	0	0.4426	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 89	0	0.1112	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 90	0	-0.05607	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 91	0	-0.02539	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 92	0	-0.1392	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 93	0	-0.005074	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 94	0	-0.1803	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 95	0	0.1059	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 96	0	-0.1494	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 97	0	0.07344	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 98	0	-0.02630	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 99	0	-0.2696	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 100	0	0.2863	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 101	0	-0.4351	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 102	0	-0.2593	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 103	0	-0.1073	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 104	0	0.1513	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 105	0	0.2367	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 106	0	0.2122	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 107	0	-0.2288	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 108	0	-0.02660	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 109	0	-0.03287	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 110	0	-0.1143	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 111	0	-0.02131	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 112	0	0.1427	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 113	0	0.1387	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 114	0	0.08228	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 115	0	0.1218	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Check – 116	0	0.01759	N/A	N/A	N/A	N/A	MM/M

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Stab Measurement Summary

Before: 2–Jul–2013 10:18

BS Window Ratio	0.7389	N/A	0.7373	N/A	N/A	N/A	
BS Window Sum	25840	N/A	25940	N/A	N/A	N/A	CPS
SS Window Ratio	0.4833	N/A	0.4838	N/A	N/A	N/A	
SS Window Sum	11530	N/A	11500	N/A	N/A	N/A	CPS
LS Window Ratio	0.3002	N/A	0.3017	N/A	N/A	N/A	
LS Window Sum	1345	N/A	1342	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Photo–multiplier High Voltages Calibrations

Before: 2–Jul–2013 10:18

BS PM High Voltage (Command)	1315	N/A	1312	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1905	N/A	1907	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1302	N/A	1308	N/A	N/A	N/A	V

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Crystal Quality Resolutions Calibration

Before: 2–Jul–2013 10:18

BS Crystal Resolution	11.93	N/A	11.92	N/A	N/A	N/A	%
SS Crystal Resolution	10.34	N/A	10.35	N/A	N/A	N/A	%
LS Crystal Resolution	8.558	N/A	8.539	N/A	N/A	N/A	%

High resolution Integrated Logging Tool–DTS Wellsite Calibration – MCFL Calibration

Before: 2–Jul–2013 10:11

Raw B0 Resistivity	3875	N/A	3854	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3789	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3809	N/A	N/A	N/A	OHMM

High resolution Integrated Logging Tool–DTS Wellsite Calibration – HILT Caliper Calibration

Before: 2–Jul–2013 10:05

HILT Caliper Zero Measurement	8.000	N/A	8.314	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.49	N/A	N/A	N/A	IN

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration

Before: 2–Jul–2013 10:05

Gamma Ray Background	30.00	N/A	90.48	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	165.0	N/A	169.8	N/A	N/A	15.00	GAPI

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement

Master: 17–May–2013 14:28 Before: 2–Jul–2013 10:06

CNTC Background	27.37	27.37	27.45	N/A	N/A	4.106	CPS
CFTC Background	27.33	27.33	27.94	N/A	N/A	4.100	CPS

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement

Master: 17–May–2013 14:28

Thermal Near Corr. (Tank)	5800	5686	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2326	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.445	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration

Before: 2–Jul–2013 18:57

Z–Axis Acceleration	32.19	N/A	32.09	N/A	N/A	N/A	F/S2
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The GLS–VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT–B Water Temperature 120.0 DEGF.
Thermal Housing Size 3.373 IN.
NSR–F serial number 2554

























































3–D Array Induction Tool – ZAIT–EB / Equipment Identification

Primary Equipment:
Rm/SP Bottom Nose
3–D Array Induction Sonde

AHRM – A
AXIS – A

















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Auxiliary Equipment:

3–D Array Induction Tool – ZAIT–EB Wellsite Calibration								
Electronics Calibration Check – Thru Cal Mag. & Phase								
Idx	Phase	Value	Thru Cal Magnitude MM/M	Nominal	Value	Thru Cal Phase DEG	Nominal	
0	Master	1.484		1.456	11.77		0	
	Before	1.490			14.70			
1	Master	1.499		1.456	10.92		0	
	Before	1.502			13.01			
2	Master	1.453		1.456	0.9479		0	
	Before	1.453			3.005			
3	Master	3.417		3.352	7.740		0	
	Before	3.433			10.47			
4	Master	3.451		3.352	6.902		0	
	Before	3.461			8.792			
5	Master	3.345		3.352	–3.072		0	
	Before	3.349			–1.214			
6	Master	2.740		2.680	12.23		0	
	Before	2.753			15.26			
7	Master	2.768		2.680	11.38		0	
	Before	2.776			13.58			
8	Master	2.683		2.680	1.382		0	
	Before	2.685			3.547			
9	Master	1.903		1.956	4.955		0	
	Before	1.907			5.868			
10	Master	1.904		1.956	3.432		0	
	Before	1.919			4.653			
11	Master	1.886		1.956	1.881		0	
	Before	1.899			3.333			
12	Master	3.577		3.537	11.80		0	
	Before	3.593			14.70			
13	Master	3.612		3.537	10.94		0	
	Before	3.623			13.05			

14	Master	3.501			3.537	0.9918		
	Before	3.504				3.047		0
15	Master	3.051			3.100	4.963		0
	Before	3.057				5.865		
16	Master	3.052			3.100	3.453		0
	Before	3.077				4.664		
17	Master	3.024			3.100	1.901		0
	Before	3.045				3.343		
18	Master	0.9467			0.9359	11.73		0
	Before	0.9512				14.68		
19	Master	0.9554			0.9359	10.89		0
	Before	0.9584				13.02		
20	Master	0.9259			0.9359	0.9383		0
	Before	0.9270				3.020		
21	Master	4.055			4.081	2.954		0
	Before	4.063				3.793		
22	Master	4.056			4.081	1.440		0
	Before	4.090				2.586		
23	Master	4.019			4.081	−0.1098		0
	Before	4.047				1.269		
24	Master	1.375			1.362	7.739		0
	Before	1.383				10.44		
25	Master	1.388			1.362	6.899		0
	Before	1.393				8.807		
26	Master	1.345			1.362	−3.054		0
	Before	1.348				−1.203		
27	Master	4.055			4.081	2.946		0
	Before	4.063				3.780		
28	Master	4.056			4.081	1.436		0
	Before	4.090				2.579		
29	Master	4.019			4.081	−0.1156		0
	Before	4.047				1.258		
30	Master	1.375			1.362	7.731		0
	Before	1.383				10.46		
31	Master	1.388			1.362	6.901		0
	Before	1.393				8.806		
32	Master	1.345			1.362	−3.060		0
	Before	1.348				−1.205		
33	Master	1.176			1.220	5.438		0
	Before	1.178				6.434		
34	Master	1.175			1.220	3.941		0
	Before	1.185				5.236		
35	Master	1.164			1.220	2.370		0
	Before	1.172				3.907		

36	Master	1.631			1.635	12.25		0
	Before	1.638				15.25		
37	Master	1.646			1.635	11.41		0
	Before	1.651				13.62		
38	Master	1.595			1.635	1.459		0
	Before	1.597				3.614		
39	Master	1.412			1.464	5.416		0
	Before	1.415				6.412		
40	Master	1.411			1.464	3.920		0
	Before	1.423				5.223		
41	Master	1.398			1.464	2.363		0
	Before	1.408				3.896		
42	Master	2.353			2.353	12.20		0
	Before	2.365				15.25		
43	Master	2.375			2.353	11.37		0
	Before	2.383				13.60		
44	Master	2.302			2.353	1.404		0
	Before	2.305				3.579		
			50.00 % (Minimum)	150.0 % (Maximum)		Nom -85.00 (Minimum)	Nom + 85.00 (Maximum)	
Master: 17-Jul-2012 17:34 Before: 2-Jul-2013 10:17								

3-D Array Induction Tool – ZAIT–EB Wellsite Calibration											
Electronics Calibration Check – Auxilliary											
Phase	Array Induction SPA Plus V		Value	Phase	Array Induction SPA Zero V		Value				
Master			0.8425	Master			-0.0008885				
Before			0.8425	Before			-0.0008893				
0.7570 (Minimum)			0.8360 (Nominal)	0.9150 (Maximum)			-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)		
Phase	Array Induction Temperature Plus V		Value	Phase	Array Induction Temperature Zero V		Value				
Master			0.9891	Master			-0.001770				
Before			0.9893	Before			-0.001760				
0.8800 (Minimum)			0.9798 (Nominal)	1.076 (Maximum)			-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)		
Phase	Array Induction CalSig Plus V		Value	Phase	Array Induction CalSig Zero V		Value				
Master			5.013	Master			-0.01264				
Before			5.013	Before			-0.01272				
4.500 (Minimum)			5.000 (Nominal)	5.500 (Maximum)			-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)		
Phase	Array Induction Volt Plus V		Value	Phase	Array Induction Volt Zero V		Value				
Master			5.013	Master			-0.01264				
Before			5.013	Before			-0.01272				
4.500 (Minimum)			5.000 (Nominal)	5.500 (Maximum)			-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)		
Master: 17-Jul-2012 17:34						Before: 2-Jul-2013 10:17					













































3-D Array Induction Tool – ZAIT–EB Wellsite Calibration								
Field Check Sonde Error								
Idx	Value	R Sonde Error Check MM/M			Value	X Sonde Error Check MM/M		
0	0.8768				3.648			
		-1422 (Minimum)	0 (Nominal)	1422 (Maximum)		-33900 (Minimum)	0 (Nominal)	33900 (Maximum)
1	-8.460				-0.9678			
		-1422 (Minimum)	0 (Nominal)	1422 (Maximum)		-33900 (Minimum)	0 (Nominal)	33900 (Maximum)
								

2	−0.2346	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1396	<div><div></div></div>	<div><div></div></div>
	−58.96 (Minimum)	0 (Nominal)	58.96 (Maximum)	−512.8 (Minimum)	0 (Nominal)	512.8 (Maximum)	
3	0.1586	<div><div></div></div>	<div><div></div></div>	−0.5683	<div><div></div></div>	<div><div></div></div>	
	−278.1 (Minimum)	0 (Nominal)	278.1 (Maximum)	−14230 (Minimum)	0 (Nominal)	14230 (Maximum)	
4	−2.006	<div><div></div></div>	<div><div></div></div>	0.2455	<div><div></div></div>	<div><div></div></div>	
	−278.1 (Minimum)	0 (Nominal)	278.1 (Maximum)	−14230 (Minimum)	0 (Nominal)	14230 (Maximum)	
5	−0.1444	<div><div></div></div>	<div><div></div></div>	0.1829	<div><div></div></div>	<div><div></div></div>	
	−22.33 (Minimum)	0 (Nominal)	22.33 (Maximum)	−215.0 (Minimum)	0 (Nominal)	215.0 (Maximum)	
6	0.09356	<div><div></div></div>	<div><div></div></div>	−0.06827	<div><div></div></div>	<div><div></div></div>	
	−93.73 (Minimum)	0 (Nominal)	93.73 (Maximum)	−5616 (Minimum)	0 (Nominal)	5616 (Maximum)	
7	−0.7344	<div><div></div></div>	<div><div></div></div>	−0.05511	<div><div></div></div>	<div><div></div></div>	
	−93.73 (Minimum)	0 (Nominal)	93.73 (Maximum)	−5616 (Minimum)	0 (Nominal)	5616 (Maximum)	
8	0.02038	<div><div></div></div>	<div><div></div></div>	0.01085	<div><div></div></div>	<div><div></div></div>	
	−12.70 (Minimum)	0 (Nominal)	12.70 (Maximum)	−58.98 (Minimum)	0 (Nominal)	58.98 (Maximum)	
9	−0.2112	<div><div></div></div>	<div><div></div></div>	−0.4440	<div><div></div></div>	<div><div></div></div>	
	−38.43 (Minimum)	0 (Nominal)	38.43 (Maximum)	−525.3 (Minimum)	0 (Nominal)	525.3 (Maximum)	
10	0.06952	<div><div></div></div>	<div><div></div></div>	0.1240	<div><div></div></div>	<div><div></div></div>	
	−322.0 (Minimum)	0 (Nominal)	322.0 (Maximum)	−10300 (Minimum)	0 (Nominal)	10300 (Maximum)	
11	0.1413	<div><div></div></div>	<div><div></div></div>	1.072	<div><div></div></div>	<div><div></div></div>	
	−183.7 (Minimum)	0 (Nominal)	183.7 (Maximum)	−7941 (Minimum)	0 (Nominal)	7941 (Maximum)	
12	−0.1485	<div><div></div></div>	<div><div></div></div>	−0.3848	<div><div></div></div>	<div><div></div></div>	
	−322.0 (Minimum)	0 (Nominal)	322.0 (Maximum)	−10300 (Minimum)	0 (Nominal)	10300 (Maximum)	
13	−0.2748	<div><div></div></div>	<div><div></div></div>	−0.3294	<div><div></div></div>	<div><div></div></div>	
	−38.43 (Minimum)	0 (Nominal)	38.43 (Maximum)	−525.3 (Minimum)	0 (Nominal)	525.3 (Maximum)	
14	−1.459	<div><div></div></div>	<div><div></div></div>	−0.05670	<div><div></div></div>	<div><div></div></div>	
	−183.7 (Minimum)	0 (Nominal)	183.7 (Maximum)	−7941 (Minimum)	0 (Nominal)	7941 (Maximum)	
15	0.1561	<div><div></div></div>	<div><div></div></div>	1.247	<div><div></div></div>	<div><div></div></div>	
	−131.2 (Minimum)	0 (Nominal)	131.2 (Maximum)	−10320 (Minimum)	0 (Nominal)	10320 (Maximum)	
16	0.3288	<div><div></div></div>	<div><div></div></div>	−2.885	<div><div></div></div>	<div><div></div></div>	
	−131.2 (Minimum)	0 (Nominal)	131.2 (Maximum)	−10320 (Minimum)	0 (Nominal)	10320 (Maximum)	
17	0.01729	<div><div></div></div>	<div><div></div></div>	0.01416	<div><div></div></div>	<div><div></div></div>	
	−10.52 (Minimum)	0 (Nominal)	10.52 (Maximum)	−106.6 (Minimum)	0 (Nominal)	106.6 (Maximum)	
18	0.009476	<div><div></div></div>	<div><div></div></div>	−0.3017	<div><div></div></div>	<div><div></div></div>	
	−38.65 (Minimum)	0 (Nominal)	38.65 (Maximum)	−259.4 (Minimum)	0 (Nominal)	259.4 (Maximum)	
19	0.07878	<div><div></div></div>	<div><div></div></div>	−0.06738	<div><div></div></div>	<div><div></div></div>	
	−120.8 (Minimum)	0 (Nominal)	120.8 (Maximum)	−5071 (Minimum)	0 (Nominal)	5071 (Maximum)	
20	−0.05011	<div><div></div></div>	<div><div></div></div>	0.3876	<div><div></div></div>	<div><div></div></div>	
	−56.45 (Minimum)	0 (Nominal)	56.45 (Maximum)	−3970 (Minimum)	0 (Nominal)	3970 (Maximum)	
21	−4.578E−00	<div><div></div></div>	<div><div></div></div>	−0.2283	<div><div></div></div>	<div><div></div></div>	
	−120.8 (Minimum)	0 (Nominal)	120.8 (Maximum)	−5071 (Minimum)	0 (Nominal)	5071 (Maximum)	
22	−0.01636	<div><div></div></div>	<div><div></div></div>	−0.1021	<div><div></div></div>	<div><div></div></div>	
	−38.65 (Minimum)	0 (Nominal)	38.65 (Maximum)	−259.4 (Minimum)	0 (Nominal)	259.4 (Maximum)	
23	−0.4070	<div><div></div></div>	<div><div></div></div>	−0.1892	<div><div></div></div>	<div><div></div></div>	
	−56.45 (Minimum)	0 (Nominal)	56.45 (Maximum)	−3970 (Minimum)	0 (Nominal)	3970 (Maximum)	

24	−0.06665	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.7020	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−71.00 (Minimum)	0 (Nominal)	71.00 (Maximum)		−5119 (Minimum)	0 (Nominal)	5119 (Maximum)	
25	0.009807	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−1.372	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−71.00 (Minimum)	0 (Nominal)	71.00 (Maximum)		−5119 (Minimum)	0 (Nominal)	5119 (Maximum)	
26	−0.0003009	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.04074	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−4.790 (Minimum)	0 (Nominal)	4.790 (Maximum)		−55.66 (Minimum)	0 (Nominal)	55.66 (Maximum)	
27	0.2296	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.1987	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		−352.9 (Minimum)	0 (Nominal)	352.9 (Maximum)	
28	0.1653	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.2310	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−159.9 (Minimum)	0 (Nominal)	159.9 (Maximum)		−6825 (Minimum)	0 (Nominal)	6825 (Maximum)	
29	0.1038	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.6383	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−69.24 (Minimum)	0 (Nominal)	69.24 (Maximum)		−2661 (Minimum)	0 (Nominal)	2661 (Maximum)	
30	−0.03671	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1242	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−159.9 (Minimum)	0 (Nominal)	159.9 (Maximum)		−6825 (Minimum)	0 (Nominal)	6825 (Maximum)	
31	0.2608	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−7.783	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		−352.9 (Minimum)	0 (Nominal)	352.9 (Maximum)	
32	−0.8507	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.7845	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−69.24 (Minimum)	0 (Nominal)	69.24 (Maximum)		−2661 (Minimum)	0 (Nominal)	2661 (Maximum)	
33	−0.3072	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	3.155	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−58.94 (Minimum)	0 (Nominal)	58.94 (Maximum)		−2491 (Minimum)	0 (Nominal)	2491 (Maximum)	
34	0.1051	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.6987	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−58.94 (Minimum)	0 (Nominal)	58.94 (Maximum)		−2491 (Minimum)	0 (Nominal)	2491 (Maximum)	
35	0.06393	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.09846	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−8.280 (Minimum)	0 (Nominal)	8.280 (Maximum)		−9138 (Minimum)	0 (Nominal)	9138 (Maximum)	
36	0.06533	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.1699	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		−175.1 (Minimum)	0 (Nominal)	175.1 (Maximum)	
37	0.07103	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.09726	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−50.66 (Minimum)	0 (Nominal)	50.66 (Maximum)		−3387 (Minimum)	0 (Nominal)	3387 (Maximum)	
38	−0.06642	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.3790	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−22.87 (Minimum)	0 (Nominal)	22.87 (Maximum)		−1332 (Minimum)	0 (Nominal)	1332 (Maximum)	
39	0.06441	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1294	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−50.66 (Minimum)	0 (Nominal)	50.66 (Maximum)		−3387 (Minimum)	0 (Nominal)	3387 (Maximum)	
40	−0.1331	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.06270	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)		−175.1 (Minimum)	0 (Nominal)	175.1 (Maximum)	
41	−0.1926	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.2822	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−22.87 (Minimum)	0 (Nominal)	22.87 (Maximum)		−1332 (Minimum)	0 (Nominal)	1332 (Maximum)	
42	−0.08327	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	1.536	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−46.71 (Minimum)	0 (Nominal)	46.71 (Maximum)		−1250 (Minimum)	0 (Nominal)	1250 (Maximum)	
43	−0.03356	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.3995	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−46.71 (Minimum)	0 (Nominal)	46.71 (Maximum)		−1250 (Minimum)	0 (Nominal)	1250 (Maximum)	
44	0.01292	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.07822	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−3.760 (Minimum)	0 (Nominal)	3.760 (Maximum)		−25.88 (Minimum)	0 (Nominal)	25.88 (Maximum)	
45	0.1815	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.6924	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
	−17.30 (Minimum)	0 (Nominal)	17.30 (Maximum)		−176.4 (Minimum)	0 (Nominal)	176.4 (Maximum)	

46	−0.03699	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.4965	<div><div></div></div>	<div><div></div></div>
	−124.2 (Minimum)	0 (Nominal)	124.2 (Maximum)		−4734 (Minimum)	0 (Nominal)	4734 (Maximum)
47	0.3481	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1383	<div><div></div></div>	<div><div></div></div>
	−40.71 (Minimum)	0 (Nominal)	40.71 (Maximum)		−1318 (Minimum)	0 (Nominal)	1318 (Maximum)
48	0.02344	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1485	<div><div></div></div>	<div><div></div></div>
	−124.2 (Minimum)	0 (Nominal)	124.2 (Maximum)		−4734 (Minimum)	0 (Nominal)	4734 (Maximum)
49	−0.2052	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.8258	<div><div></div></div>	<div><div></div></div>
	−17.30 (Minimum)	0 (Nominal)	17.30 (Maximum)		−176.4 (Minimum)	0 (Nominal)	176.4 (Maximum)
50	−0.3714	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.3601	<div><div></div></div>	<div><div></div></div>
	−40.71 (Minimum)	0 (Nominal)	40.71 (Maximum)		−1318 (Minimum)	0 (Nominal)	1318 (Maximum)
51	0.04171	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.8813	<div><div></div></div>	<div><div></div></div>
	−21.65 (Minimum)	0 (Nominal)	21.65 (Maximum)		−1487 (Minimum)	0 (Nominal)	1487 (Maximum)
52	−0.02857	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.5822	<div><div></div></div>	<div><div></div></div>
	−21.65 (Minimum)	0 (Nominal)	21.65 (Maximum)		−1487 (Minimum)	0 (Nominal)	1487 (Maximum)
53	−0.008003	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.2641	<div><div></div></div>	<div><div></div></div>
	−6.870 (Minimum)	0 (Nominal)	6.870 (Maximum)		−22.76 (Minimum)	0 (Nominal)	22.76 (Maximum)
54	−0.04964	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.1011	<div><div></div></div>	<div><div></div></div>
	−14.16 (Minimum)	0 (Nominal)	14.16 (Maximum)		−88.85 (Minimum)	0 (Nominal)	88.85 (Maximum)
55	0.001317	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.02788	<div><div></div></div>	<div><div></div></div>
	−19.50 (Minimum)	0 (Nominal)	19.50 (Maximum)		−2368 (Minimum)	0 (Nominal)	2368 (Maximum)
56	0.004580	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.006073	<div><div></div></div>	<div><div></div></div>
	−17.07 (Minimum)	0 (Nominal)	17.07 (Maximum)		−662.0 (Minimum)	0 (Nominal)	662.0 (Maximum)
57	−0.007983	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.09327	<div><div></div></div>	<div><div></div></div>
	−19.50 (Minimum)	0 (Nominal)	19.50 (Maximum)		−2368 (Minimum)	0 (Nominal)	2368 (Maximum)
58	−0.03270	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.06207	<div><div></div></div>	<div><div></div></div>
	−14.16 (Minimum)	0 (Nominal)	14.16 (Maximum)		−88.85 (Minimum)	0 (Nominal)	88.85 (Maximum)
59	−0.007650	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.2796	<div><div></div></div>	<div><div></div></div>
	−17.07 (Minimum)	0 (Nominal)	17.07 (Maximum)		−662.0 (Minimum)	0 (Nominal)	662.0 (Maximum)
60	−0.02358	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	0.4424	<div><div></div></div>	<div><div></div></div>
	−11.09 (Minimum)	0 (Nominal)	11.09 (Maximum)		−742.3 (Minimum)	0 (Nominal)	742.3 (Maximum)
61	−0.003514	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.2170	<div><div></div></div>	<div><div></div></div>
	−11.09 (Minimum)	0 (Nominal)	11.09 (Maximum)		−742.3 (Minimum)	0 (Nominal)	742.3 (Maximum)
62	0.02410	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.06397	<div><div></div></div>	<div><div></div></div>
	−3.800 (Minimum)	0 (Nominal)	3.800 (Maximum)		−13.37 (Minimum)	0 (Nominal)	13.37 (Maximum)
63	0.06746	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.01039	<div><div></div></div>	<div><div></div></div>
	−12.07 (Minimum)	0 (Nominal)	12.07 (Maximum)		−90.68 (Minimum)	0 (Nominal)	90.68 (Maximum)
64	0.01019	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.1392	<div><div></div></div>	<div><div></div></div>
	−43.67 (Minimum)	0 (Nominal)	43.67 (Maximum)		−1646 (Minimum)	0 (Nominal)	1646 (Maximum)
65	−0.2117	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.2752	<div><div></div></div>	<div><div></div></div>
	−24.50 (Minimum)	0 (Nominal)	24.50 (Maximum)		−477.7 (Minimum)	0 (Nominal)	477.7 (Maximum)
66	0.05021	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.05826	<div><div></div></div>	<div><div></div></div>
	−43.67 (Minimum)	0 (Nominal)	43.67 (Maximum)		−1646 (Minimum)	0 (Nominal)	1646 (Maximum)
67	−0.4624	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	−0.04993	<div><div></div></div>	<div><div></div></div>
	−12.07 (Minimum)	0 (Nominal)	12.07 (Maximum)		−90.68 (Minimum)	0 (Nominal)	90.68 (Maximum)
		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		<div><div></div></div>	<div><div></div></div>

68	−0.1547	<div><div></div></div>			0.7906	<div><div></div></div>		
	−24.50 (Minimum)	0 (Nominal)	24.50 (Maximum)		−477.7 (Minimum)	0 (Nominal)	477.7 (Maximum)	
69	−0.1594	<div><div></div></div>			1.136	<div><div></div></div>		
	−12.43 (Minimum)	0 (Nominal)	12.43 (Maximum)		−622.5 (Minimum)	0 (Nominal)	622.5 (Maximum)	
70	0.1116	<div><div></div></div>			0.3809	<div><div></div></div>		
	−12.43 (Minimum)	0 (Nominal)	12.43 (Maximum)		−622.5 (Minimum)	0 (Nominal)	622.5 (Maximum)	
71	−0.03944	<div><div></div></div>			−0.02920	<div><div></div></div>		
	−3.560 (Minimum)	0 (Nominal)	3.560 (Maximum)		−10.29 (Minimum)	0 (Nominal)	10.29 (Maximum)	
72	0.04089	<div><div></div></div>			0.1115	<div><div></div></div>		
	−8.900 (Minimum)	0 (Nominal)	8.900 (Maximum)		−50.09 (Minimum)	0 (Nominal)	50.09 (Maximum)	
73	−0.01481	<div><div></div></div>			0.02747	<div><div></div></div>		
	−8.150 (Minimum)	0 (Nominal)	8.150 (Maximum)		−815.4 (Minimum)	0 (Nominal)	815.4 (Maximum)	
74	−0.0006365	<div><div></div></div>			−0.2118	<div><div></div></div>		
	−12.27 (Minimum)	0 (Nominal)	12.27 (Maximum)		−242.1 (Minimum)	0 (Nominal)	242.1 (Maximum)	
75	0.01118	<div><div></div></div>			−0.07761	<div><div></div></div>		
	−8.150 (Minimum)	0 (Nominal)	8.150 (Maximum)		−815.4 (Minimum)	0 (Nominal)	815.4 (Maximum)	
76	−0.004654	<div><div></div></div>			−0.01807	<div><div></div></div>		
	−8.900 (Minimum)	0 (Nominal)	8.900 (Maximum)		−50.09 (Minimum)	0 (Nominal)	50.09 (Maximum)	
77	−0.1062	<div><div></div></div>			0.3138	<div><div></div></div>		
	−12.27 (Minimum)	0 (Nominal)	12.27 (Maximum)		−242.1 (Minimum)	0 (Nominal)	242.1 (Maximum)	
78	−0.01381	<div><div></div></div>			0.5158	<div><div></div></div>		
	−6.910 (Minimum)	0 (Nominal)	6.910 (Maximum)		−309.5 (Minimum)	0 (Nominal)	309.5 (Maximum)	
79	−0.1139	<div><div></div></div>			0.1849	<div><div></div></div>		
	−6.910 (Minimum)	0 (Nominal)	6.910 (Maximum)		−309.5 (Minimum)	0 (Nominal)	309.5 (Maximum)	
80	0.02617	<div><div></div></div>			0.009218	<div><div></div></div>		
	−2.270 (Minimum)	0 (Nominal)	2.270 (Maximum)		−5.950 (Minimum)	0 (Nominal)	5.950 (Maximum)	
81	0.2853	<div><div></div></div>			−0.009415	<div><div></div></div>		
	−14.82 (Minimum)	0 (Nominal)	14.82 (Maximum)		−41.94 (Minimum)	0 (Nominal)	41.94 (Maximum)	
82	0.1240	<div><div></div></div>			0.02902	<div><div></div></div>		
	−26.75 (Minimum)	0 (Nominal)	26.75 (Maximum)		−1114 (Minimum)	0 (Nominal)	1114 (Maximum)	
83	0.1245	<div><div></div></div>			0.1291	<div><div></div></div>		
	−22.91 (Minimum)	0 (Nominal)	22.91 (Maximum)		−425.6 (Minimum)	0 (Nominal)	425.6 (Maximum)	
84	0.05487	<div><div></div></div>			0.06401	<div><div></div></div>		
	−26.75 (Minimum)	0 (Nominal)	26.75 (Maximum)		−1114 (Minimum)	0 (Nominal)	1114 (Maximum)	
85	−0.07480	<div><div></div></div>			0.7413	<div><div></div></div>		
	−14.82 (Minimum)	0 (Nominal)	14.82 (Maximum)		−41.94 (Minimum)	0 (Nominal)	41.94 (Maximum)	
86	−0.4918	<div><div></div></div>			0.07848	<div><div></div></div>		
	−22.91 (Minimum)	0 (Nominal)	22.91 (Maximum)		−425.6 (Minimum)	0 (Nominal)	425.6 (Maximum)	
87	0.2648	<div><div></div></div>			3.524	<div><div></div></div>		
	−17.62 (Minimum)	0 (Nominal)	17.62 (Maximum)		−619.3 (Minimum)	0 (Nominal)	619.3 (Maximum)	
88	−0.06360	<div><div></div></div>			0.4426	<div><div></div></div>		
	−17.62 (Minimum)	0 (Nominal)	17.62 (Maximum)		−619.3 (Minimum)	0 (Nominal)	619.3 (Maximum)	
89	−0.06884	<div><div></div></div>			0.1112	<div><div></div></div>		
	−3.910 (Minimum)	0 (Nominal)	3.910 (Maximum)		−9.470 (Minimum)	0 (Nominal)	9.470 (Maximum)	

90	0.03490				-0.05607			
	-11.24 (Minimum)	0 (Nominal)	11.24 (Maximum)		-18.45 (Minimum)	0 (Nominal)	18.45 (Maximum)	
91	-0.01005				-0.02539			
	-6.130 (Minimum)	0 (Nominal)	6.130 (Maximum)		-563.2 (Minimum)	0 (Nominal)	563.2 (Maximum)	
92	0.05603				-0.1392			
	-13.75 (Minimum)	0 (Nominal)	13.75 (Maximum)		-215.6 (Minimum)	0 (Nominal)	215.6 (Maximum)	
93	-0.03578				-0.005074			
	-6.130 (Minimum)	0 (Nominal)	6.130 (Maximum)		-563.2 (Minimum)	0 (Nominal)	563.2 (Maximum)	
94	0.07159				-0.1803			
	-11.24 (Minimum)	0 (Nominal)	11.24 (Maximum)		-18.45 (Minimum)	0 (Nominal)	18.45 (Maximum)	
95	-0.2276				0.1059			
	-13.75 (Minimum)	0 (Nominal)	13.75 (Maximum)		-215.6 (Minimum)	0 (Nominal)	215.6 (Maximum)	
96	-0.03868				-0.1494			
	-9.770 (Minimum)	0 (Nominal)	9.770 (Maximum)		-316.9 (Minimum)	0 (Nominal)	316.9 (Maximum)	
97	-0.01046				0.07344			
	-9.770 (Minimum)	0 (Nominal)	9.770 (Maximum)		-316.9 (Minimum)	0 (Nominal)	316.9 (Maximum)	
98	-0.001964				-0.02630			
	-2.110 (Minimum)	0 (Nominal)	2.110 (Maximum)		-7.370 (Minimum)	0 (Nominal)	7.370 (Maximum)	
99	-0.01048				-0.2696			
	-15.93 (Minimum)	0 (Nominal)	15.93 (Maximum)		-35.54 (Minimum)	0 (Nominal)	35.54 (Maximum)	
100	0.3691				0.2863			
	-22.00 (Minimum)	0 (Nominal)	22.00 (Maximum)		-562.7 (Minimum)	0 (Nominal)	562.7 (Maximum)	
101	0.2172				-0.4351			
	-29.21 (Minimum)	0 (Nominal)	29.21 (Maximum)		-209.9 (Minimum)	0 (Nominal)	209.9 (Maximum)	
102	0.1826				-0.2593			
	-22.00 (Minimum)	0 (Nominal)	22.00 (Maximum)		-562.7 (Minimum)	0 (Nominal)	562.7 (Maximum)	
103	0.5148				-0.1073			
	-15.93 (Minimum)	0 (Nominal)	15.93 (Maximum)		-35.54 (Minimum)	0 (Nominal)	35.54 (Maximum)	
104	0.2807				0.1513			
	-29.21 (Minimum)	0 (Nominal)	29.21 (Maximum)		-209.9 (Minimum)	0 (Nominal)	209.9 (Maximum)	
105	0.04119				0.2367			
	-23.81 (Minimum)	0 (Nominal)	23.81 (Maximum)		-232.8 (Minimum)	0 (Nominal)	232.8 (Maximum)	
106	-0.1157				0.2122			
	-23.81 (Minimum)	0 (Nominal)	23.81 (Maximum)		-232.8 (Minimum)	0 (Nominal)	232.8 (Maximum)	
107	0.3458				-0.2288			
	-10.69 (Minimum)	0 (Nominal)	10.69 (Maximum)		-19.32 (Minimum)	0 (Nominal)	19.32 (Maximum)	
108	0.04482				-0.02660			
	-9.300 (Minimum)	0 (Nominal)	9.300 (Maximum)		-21.95 (Minimum)	0 (Nominal)	21.95 (Maximum)	
109	-0.01942				-0.03287			
	-8.990 (Minimum)	0 (Nominal)	8.990 (Maximum)		-293.9 (Minimum)	0 (Nominal)	293.9 (Maximum)	
110	-0.03776				-0.1143			
	-16.85 (Minimum)	0 (Nominal)	16.85 (Maximum)		-94.98 (Minimum)	0 (Nominal)	94.98 (Maximum)	
111	-0.01619				-0.02131			
	-8.990 (Minimum)	0 (Nominal)	8.990 (Maximum)		-293.9 (Minimum)	0 (Nominal)	293.9 (Maximum)	

112	-0.01419		0.1427			
	-9.300 (Minimum)	0 (Nominal)	9.300 (Maximum)	-21.95 (Minimum)	0 (Nominal)	21.95 (Maximum)
113	0.04691		0.1387			
	-16.85 (Minimum)	0 (Nominal)	16.85 (Maximum)	-94.98 (Minimum)	0 (Nominal)	94.98 (Maximum)
114	-0.03978		0.08228			
	-14.21 (Minimum)	0 (Nominal)	14.21 (Maximum)	-112.1 (Minimum)	0 (Nominal)	112.1 (Maximum)
115	-0.07626		0.1218			
	-14.21 (Minimum)	0 (Nominal)	14.21 (Maximum)	-112.1 (Minimum)	0 (Nominal)	112.1 (Maximum)
116	-0.001239		0.01759			
	-1.760 (Minimum)	0 (Nominal)	1.760 (Maximum)	-10.88 (Minimum)	0 (Nominal)	10.88 (Maximum)
Master: 17-Jul-2012 17:34						

General Purpose Inclinometer / Equipment Identification

Primary Equipment:
GPIT Cartridge – F

GPIC – F

Auxiliary Equipment:
GPIT Housing – F

GPIH – B

High resolution Integrated Logging Tool–DTS / Equipment Identification

Primary Equipment:

HILT high–Resolution Mechanical Sonde
HILT Rxo Gamma–ray Device
HILT Micro Cylindrically Focused Log Dev
GR Logging Source
HILT High Res. Control Cartridge
HILT Gamma–Ray Neutron Sonde–DTS
HGNS Gamma–Ray Device
HGNS Neutron Detector with Alpha Source

HRMS – H
HRGD – H
MCFL – H
GLS – VJ
HRCC – H
HGNS – H
HGR –
HCNT – H

5240

Auxiliary Equipment:

Neutron Calibration Tank
Gamma Source Radioactive
HGNS Housing

NCT – B
GSR – U/Y
HGNH –

High resolution Integrated Logging Tool–DTS Wellsite Calibration




Stab Measurement Summary

Phase	BS Window Ratio		Value	Phase	SS Window Ratio		Value	Phase	LS Window Ratio		Value
Before			0.7373	Before			0.4838	Before			0.3017
	0.7020 (Minimum)	0.7389 (Nominal)	0.7759 (Maximum)		0.4591 (Minimum)	0.4833 (Nominal)	0.5074 (Maximum)		0.2852 (Minimum)	0.3002 (Nominal)	0.3152 (Maximum)
Phase	BS Window Sum CPS		Value	Phase	SS Window Sum CPS		Value	Phase	LS Window Sum CPS		Value
Before			25940	Before			11500	Before			1342
	24550 (Minimum)	25840 (Nominal)	27130 (Maximum)		10950 (Minimum)	11530 (Nominal)	12110 (Maximum)		1277 (Minimum)	1345 (Nominal)	1412 (Maximum)

Before: 2-Jul-2013 10:18

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Photo–multiplier High Voltages Calibrations




Phase	BS PM High Voltage (Command) V			Value	Phase	SS PM High Voltage (Command) V			Value	Phase	LS PM High Voltage (Command) V			Value
Before				1312	Before				1907	Before				1308
	1215 (Minimum)	1315 (Nominal)	1415 (Maximum)			1805 (Minimum)	1905 (Nominal)	2005 (Maximum)			1202 (Minimum)	1302 (Nominal)	1402 (Maximum)	




Before: 2-Jul-2013 10:18



High resolution Integrated Logging Tool–DTS Wellsite Calibration

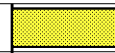

Crystal Quality Resolutions Calibration





Phase	BS Crystal Resolution %	Value	Phase	SS Crystal Resolution %	Value	Phase	LS Crystal Resolution %	Value
Before		11.02	Before		10.35	Before		8.520



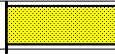
Before		11.93	Before		10.35	Before		8.339
10.93 (Minimum)	11.93 (Nominal)	12.93 (Maximum)	9.339 (Minimum)	10.34 (Nominal)	11.34 (Maximum)	7.558 (Minimum)	8.558 (Nominal)	9.558 (Maximum)
Before: 2-Jul-2013 10:18								

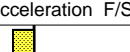
High resolution Integrated Logging Tool-DTS Wellsite Calibration														
MCFL Calibration														
Phase	Raw B0 Resistivity OHMM			Value	Phase	Raw B1 Resistivity OHMM			Value	Phase	Raw B2 Resistivity OHMM			Value
Before				3854	Before				3789	Before				3809
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)			
Before: 2-Jul-2013 10:11														

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
HILT Caliper Calibration							
Phase	HILT Caliper Zero Measurement IN		Value	Phase	HILT Caliper Plus Measurement IN		Value
Before			8.314	Before			12.49
	6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)		9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)
Before: 2-Jul-2013 10:05							

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Detector Calibration							
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig – Bkgd) GAPI		Value
Before			90.48	Before			169.8
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		157.1 (Minimum)	165.0 (Nominal)	206.3 (Maximum)
Before: 2–Jul–2013 10:05							

High resolution Integrated Logging Tool–DTS Wellsite Calibration									
Zero Measurement									
Phase	CNTC Background CPS			Value	Phase	CFTC Background CPS			Value
Master				27.37	Master				27.33
Before				27.45	Before				27.94
5.000		27.37		40.00	5.000		27.33		40.00
(Minimum)		(Nominal)		(Maximum)	(Minimum)		(Nominal)		(Maximum)
Master: 17–May–2013 14:28					Before: 2–Jul–2013 10:06				

High resolution Integrated Logging Tool-DTS Wellsite Calibration														
Ratio Measurement														
Phase	Thermal Near Corr. (Tank) CPS			Value	Phase	Thermal Far Corr. (Tank) CPS			Value	Phase	CNTC/CFTC (Tank)			Value
Master				5686	Master				2326	Master				2.445
	4700 (Minimum)	5800 (Nominal)	6900 (Maximum)		1900 (Minimum)	2400 (Nominal)	2900 (Maximum)			2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)		
Master: 17-May-2013 14:28														

High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration F/S2	Value
Before		32.09
	31.53 (Minimum)	32.19 (Nominal)
		32.84 (Maximum)
Before: 2-Jul-2013 18:57		

DTS Telemetry Tool / Equipment Identification

Primary Equipment:

DTC-H Auxiliary Cartridge
DTC-H Telemetry Cartridge

DTCH - A
DTCH - A

Auxiliary Equipment:

DTCH Telemetry Cartridge Housing

ECH - KC

Company: Whiting Oil and Gas Corporation

Schlumberger

Well: Wildhorse 16-13L

Field: Wildcat

County: Weld

State: Colorado

Platform Express

Compensated Neutron

Litho Density