

Schlumberger

Company: Vecta Oil & Gas Ltd

Well: Cottonwood Grazing 3-22

Field: Wildcat

County: Lincoln State: Colorado

Well: Cottonwood Grazing 3-22

County: **Lincoln**

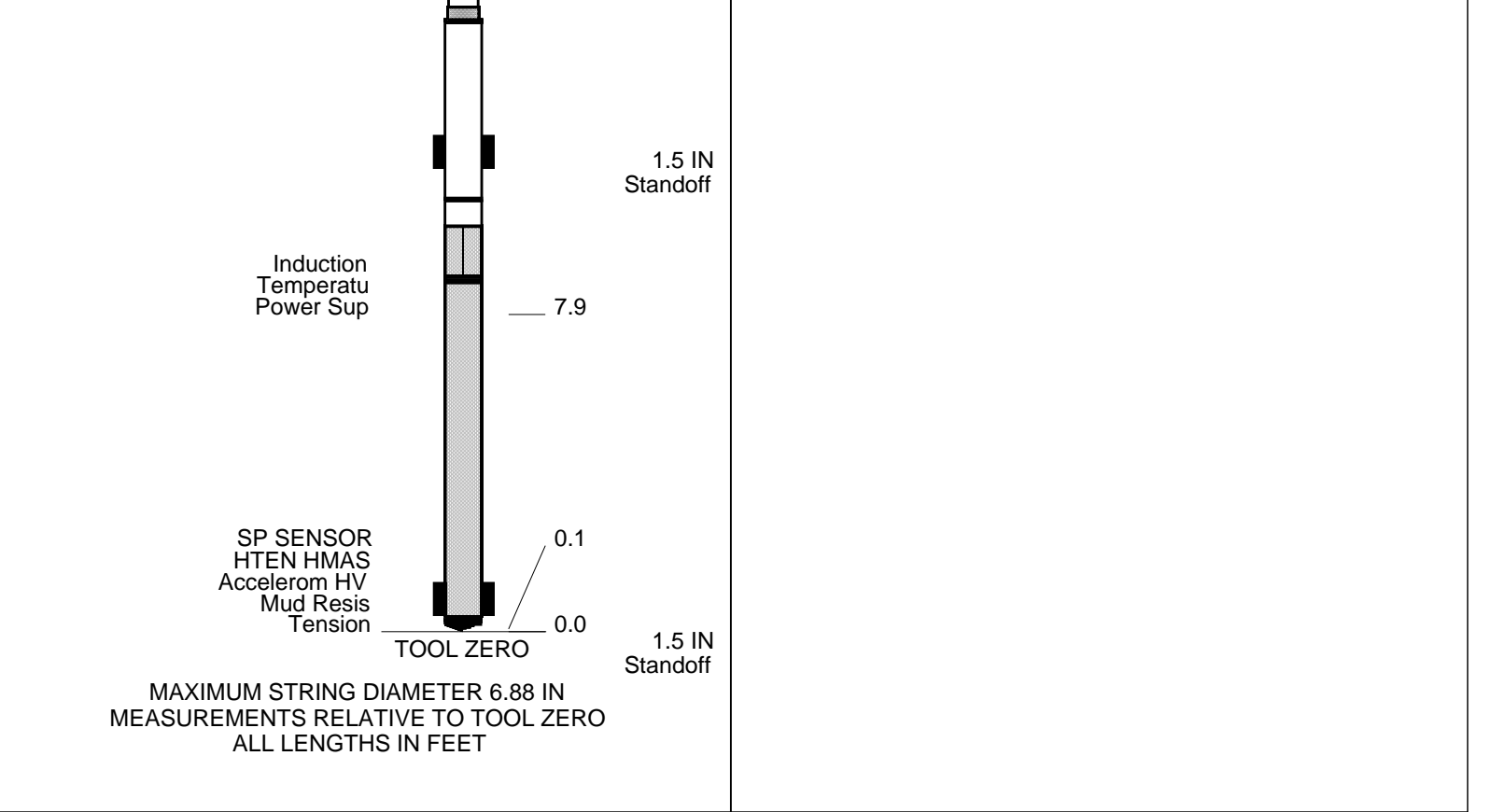
Platform Express Compensated Neutron Litho Density

API Serial No. 05-073-06444-0000	Section 22	Township 12S	Range 52W
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[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					

OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in the hole.	
Toolstring run as per tool sketch.	
Matrix: Limestone (2.71 g/cc)	



Production String	(in)		(ft)	Well Schematic	(ft)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	9.625		Casing String
					420.0	9.625		Casing Shoe
					420.0	7.875		Borehole Segment

PIP SUMMARY

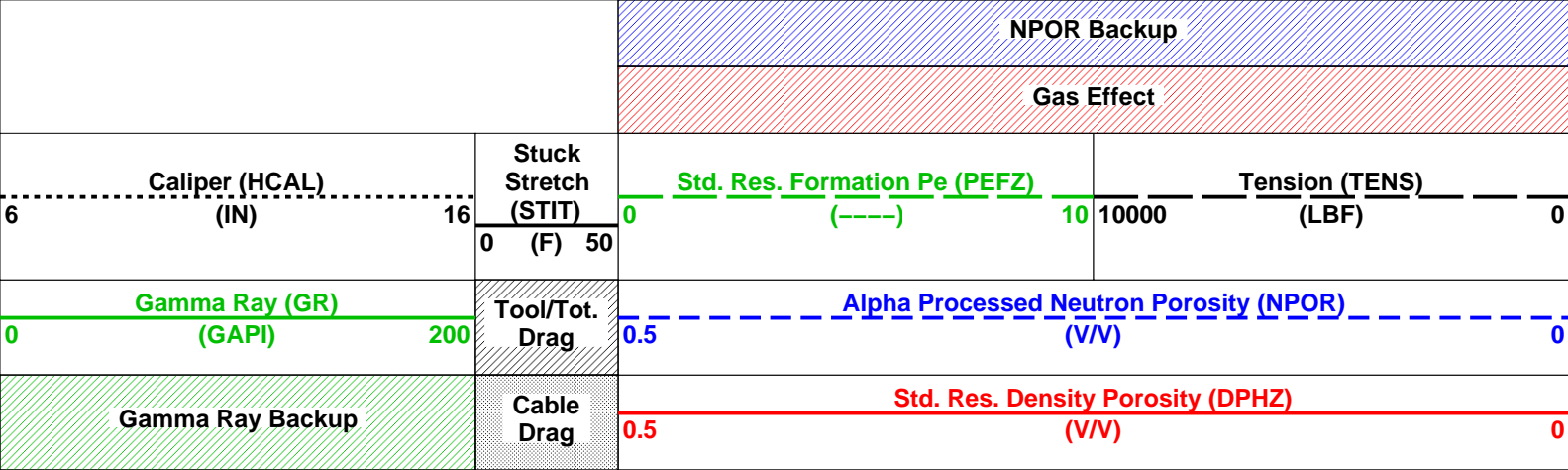
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└ Integrated Hole Volume Major Pip Every 100 F3

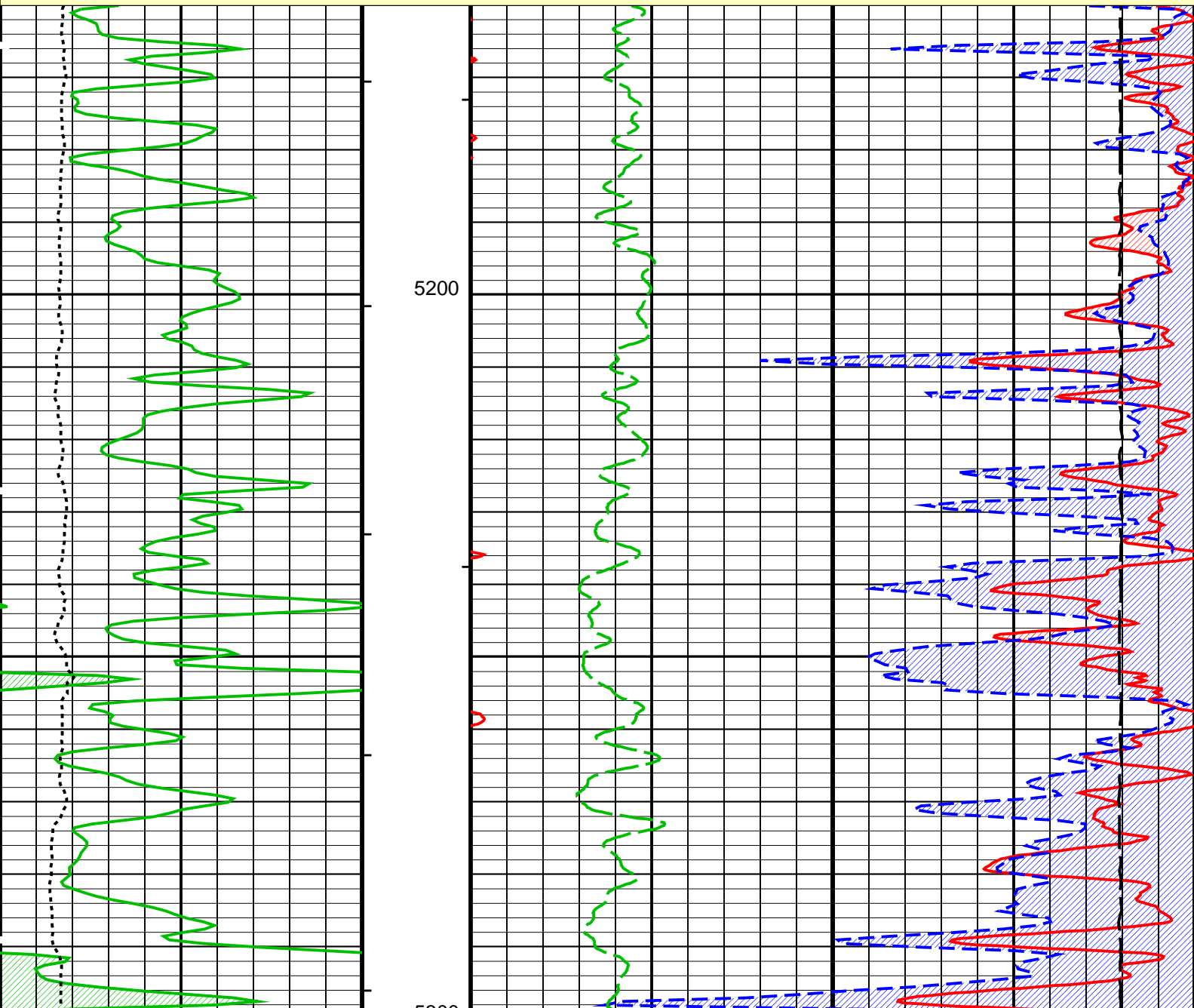
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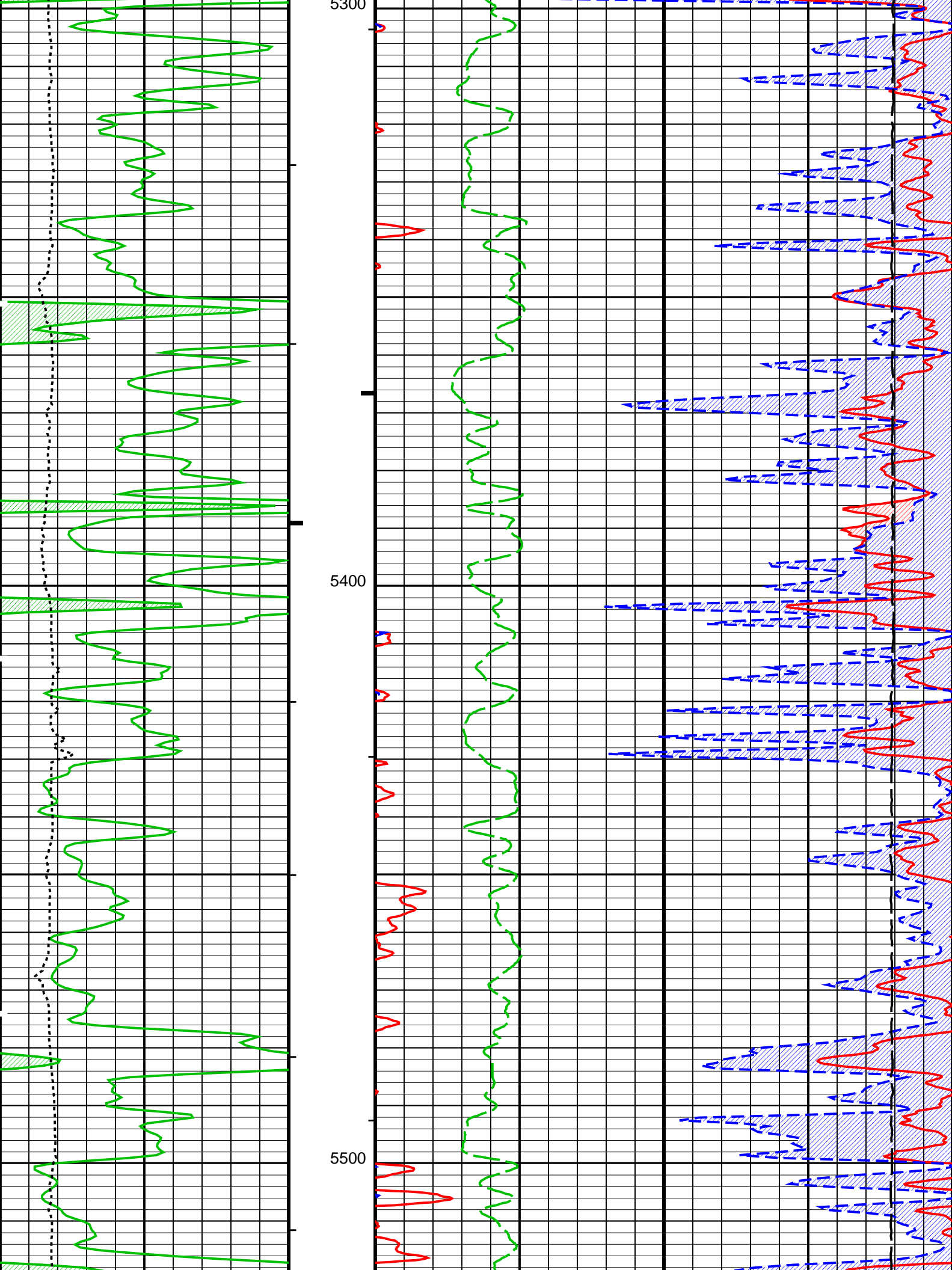
└ Integrated Cement Volume Major Pip Every 100 F3

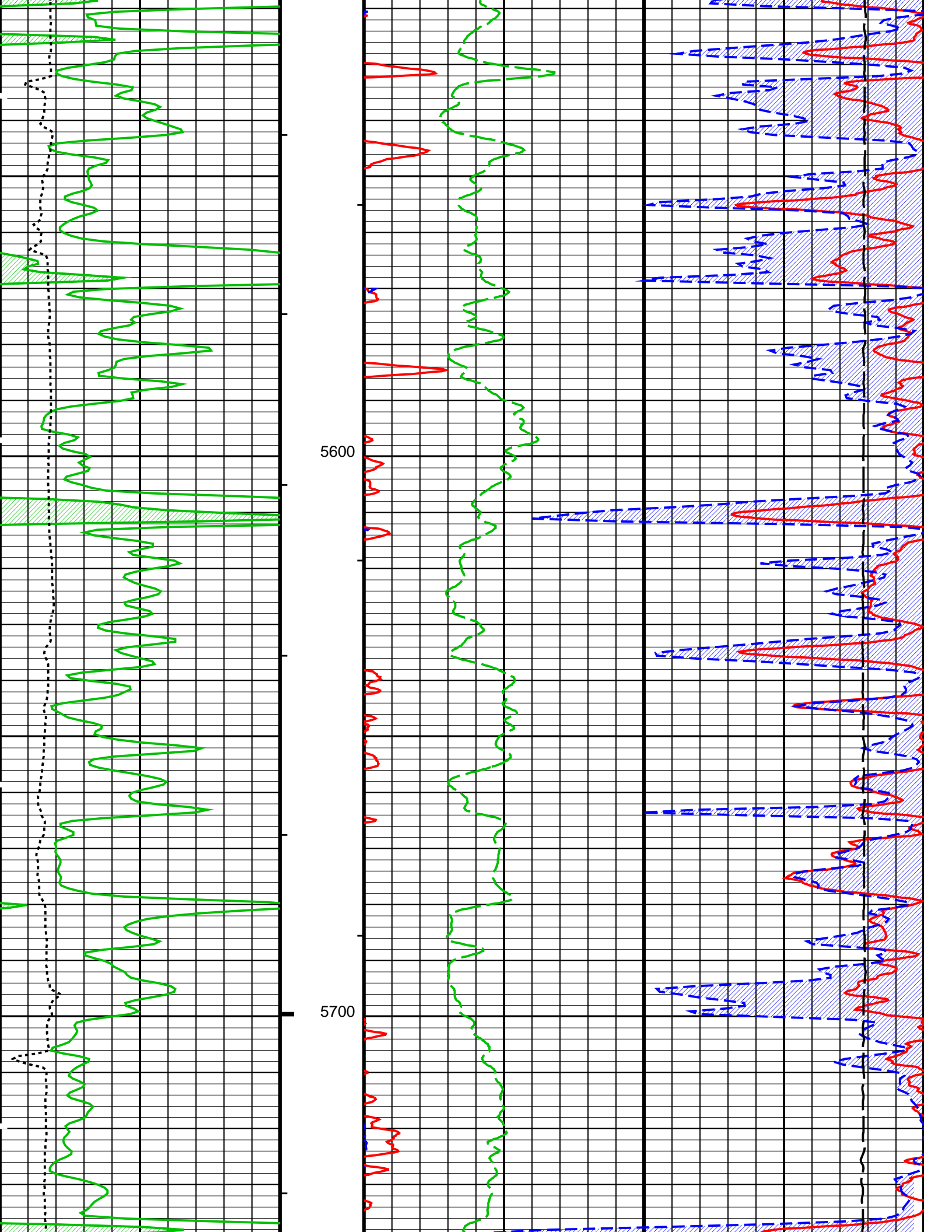
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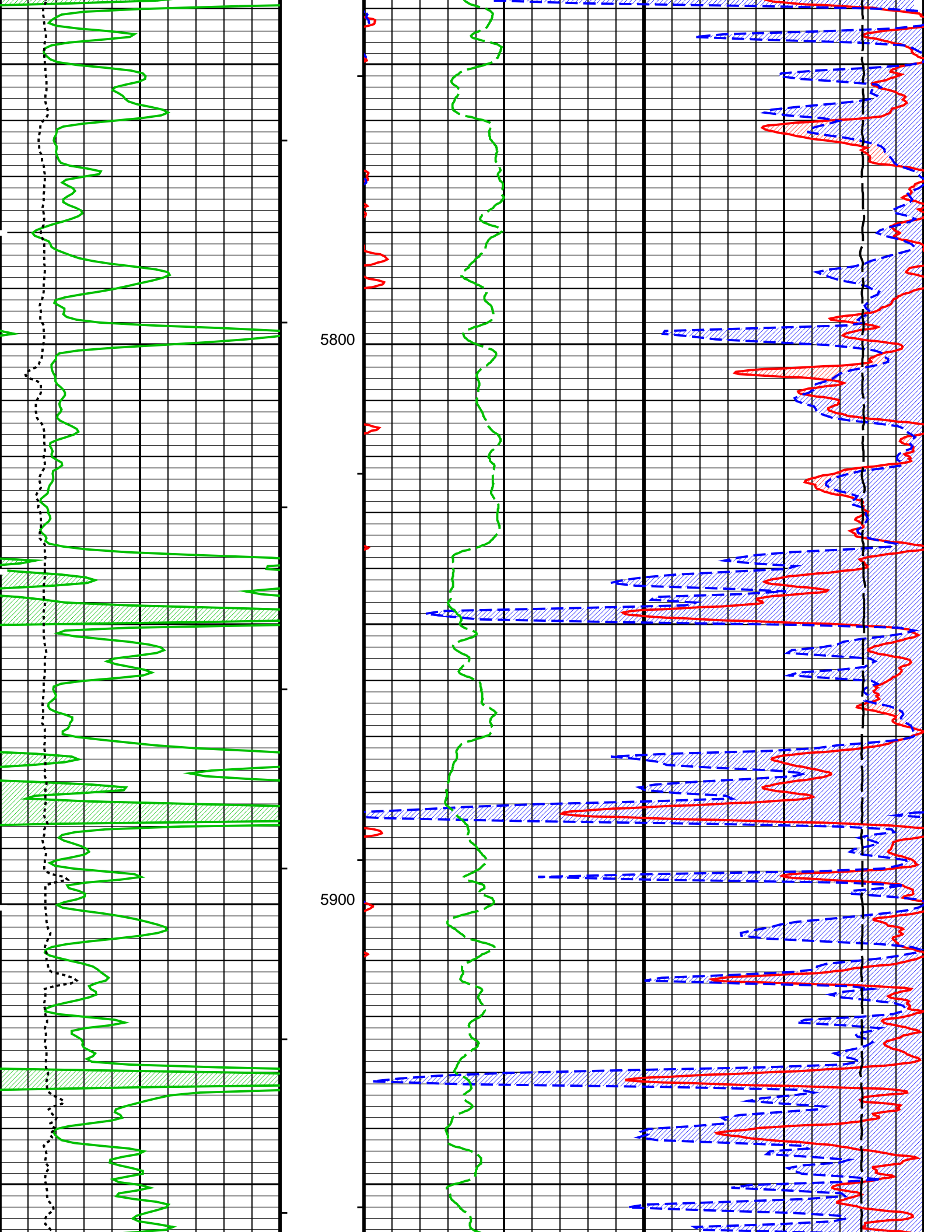


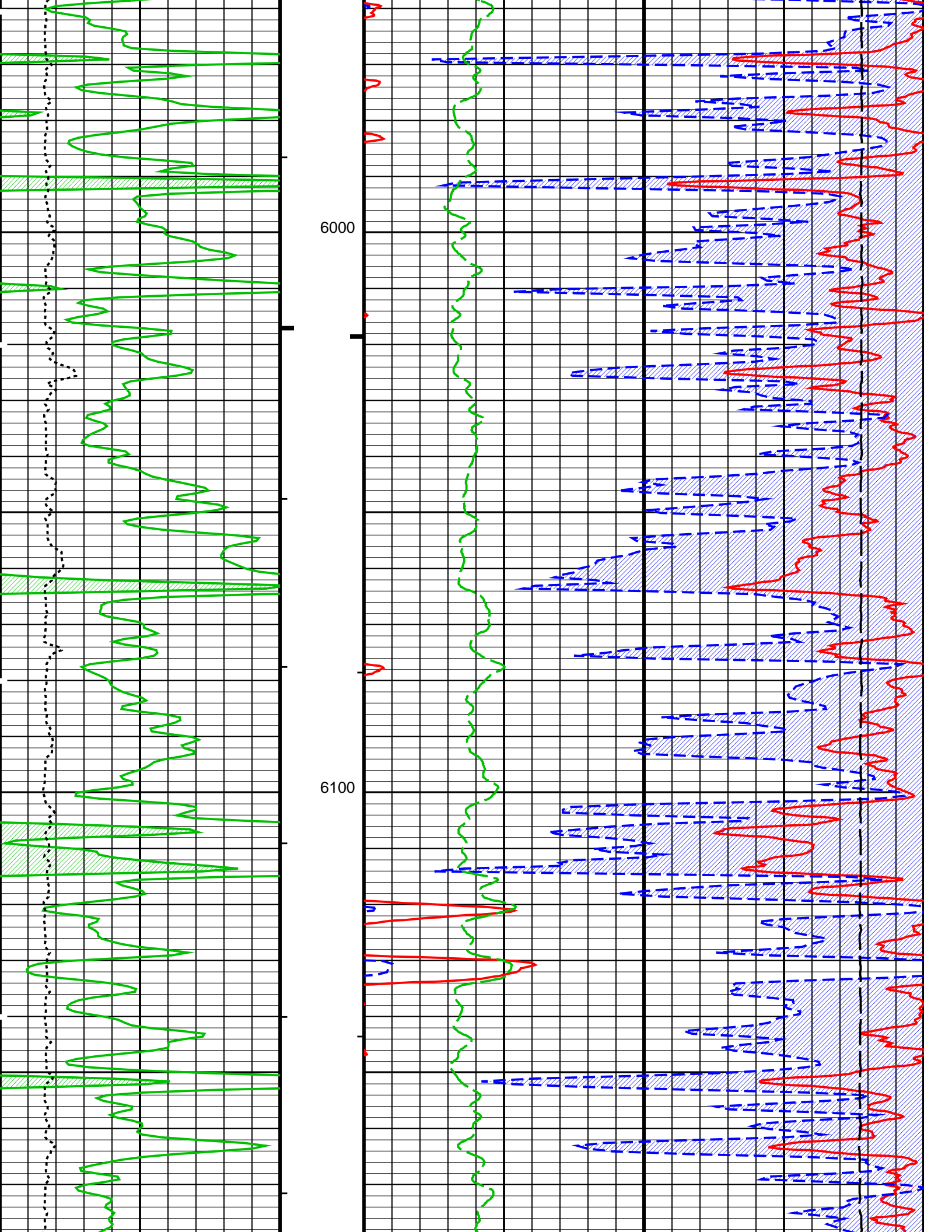
MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***

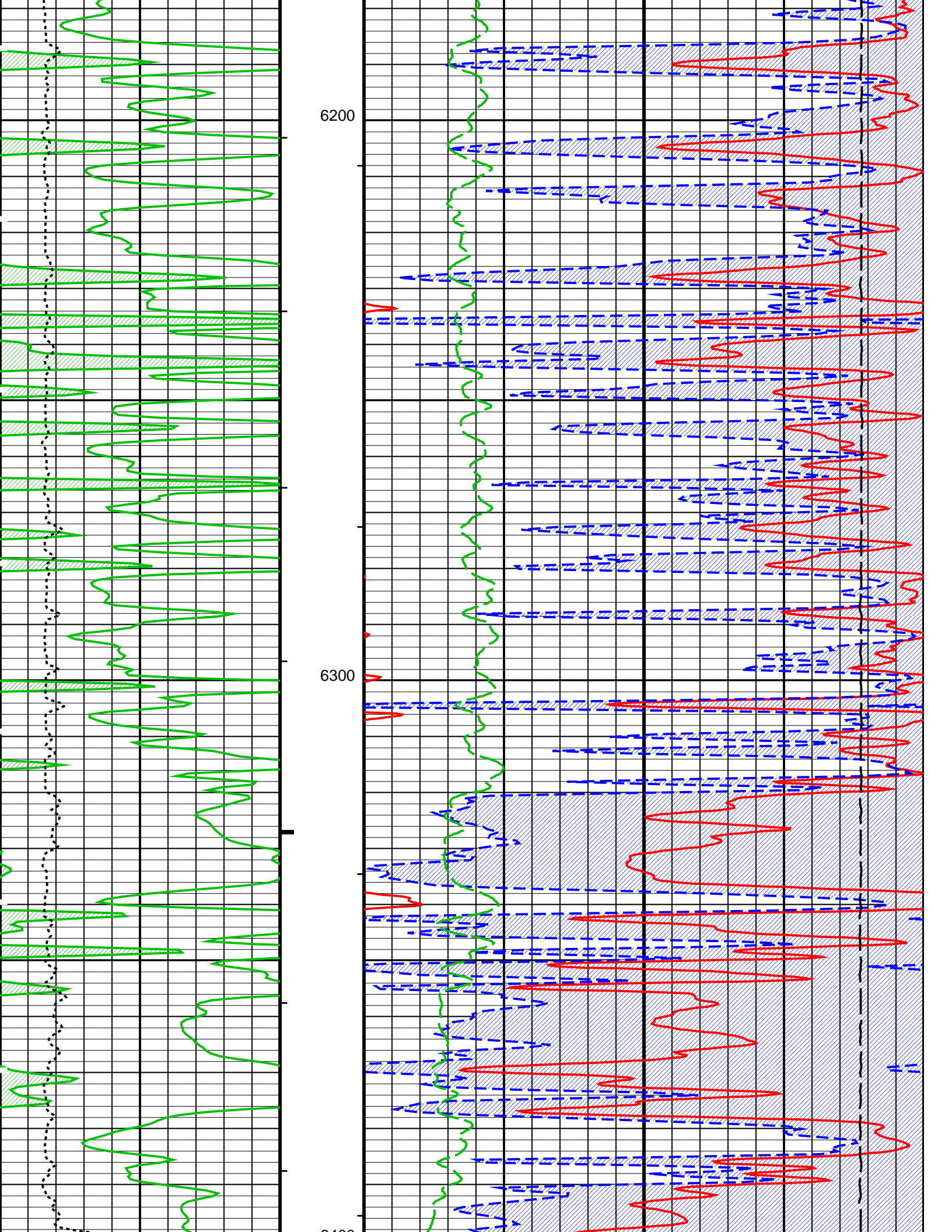


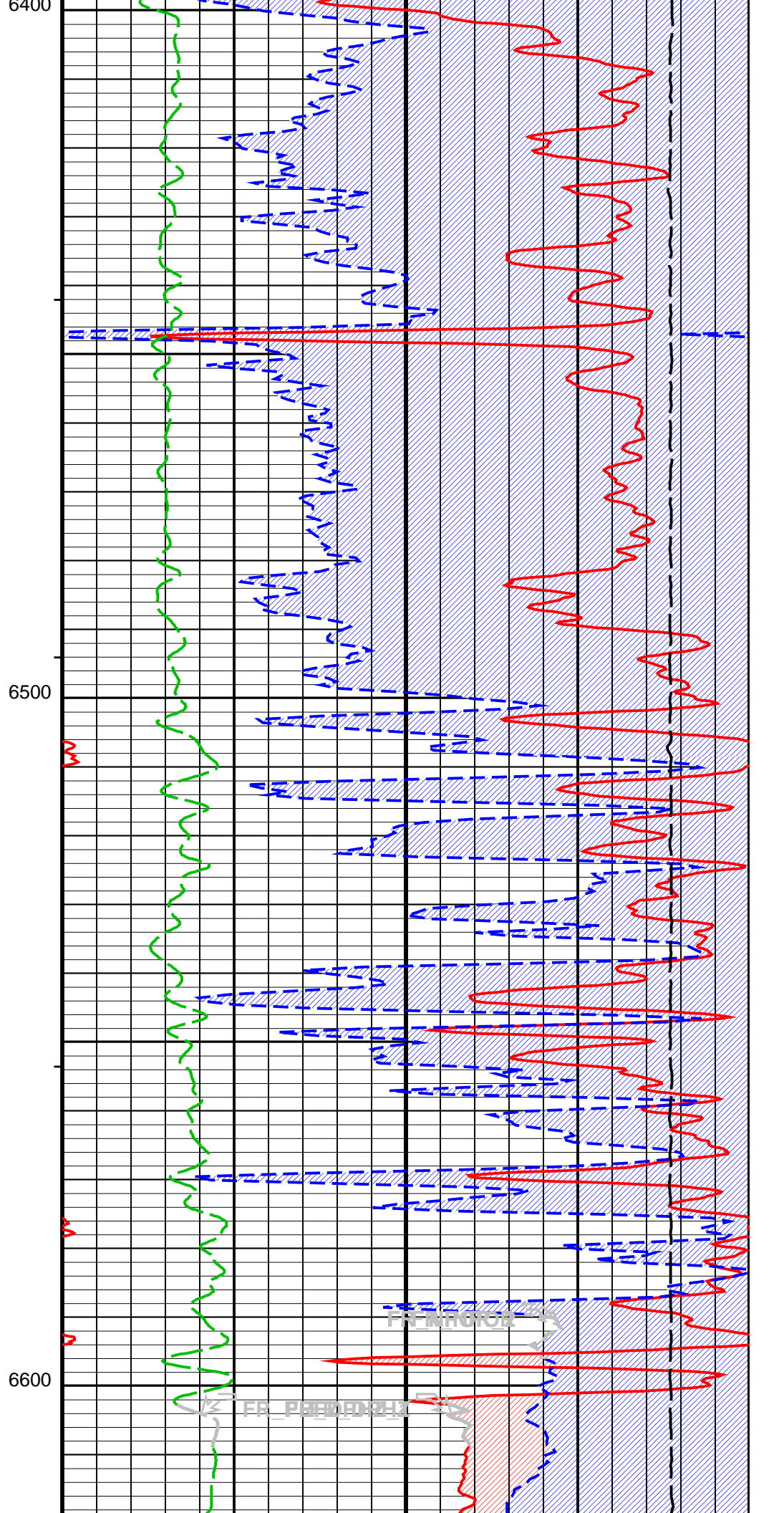
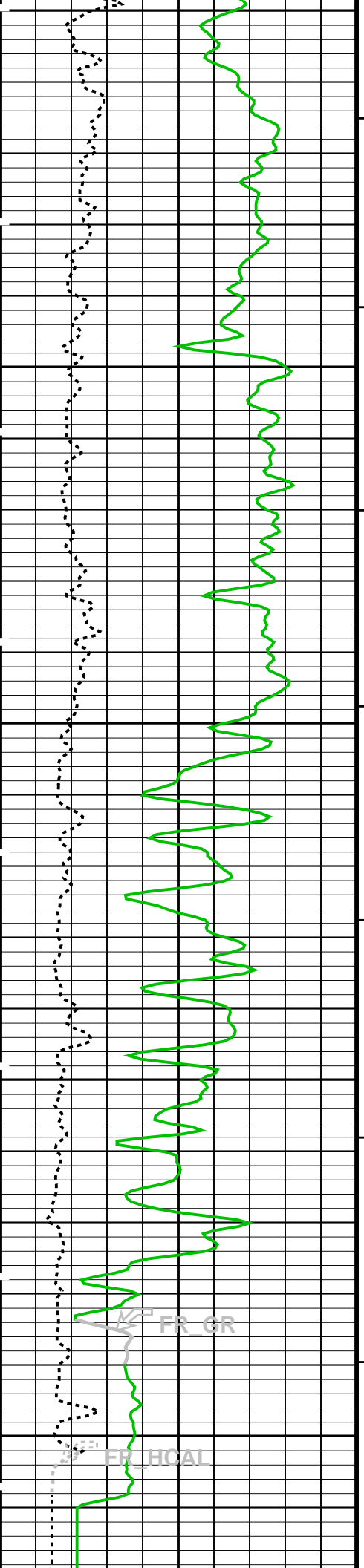


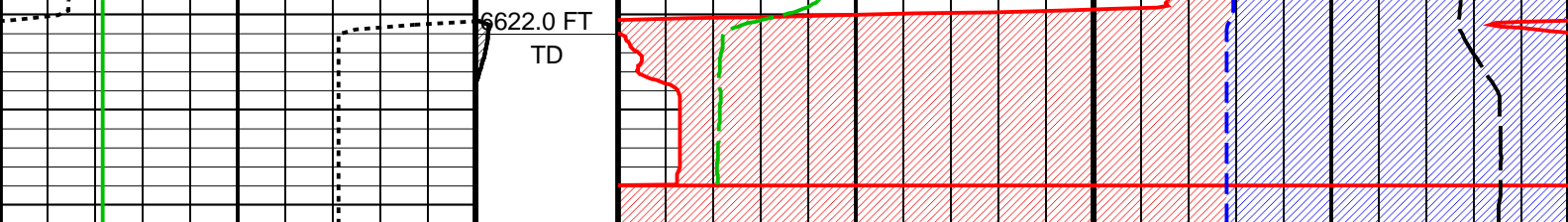












MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***

Gamma Ray Backup	Cable Drag	Std. Res. Density Porosity (DPHZ) (V/V)		0.5	0
Gamma Ray (GR) (GAPI)	Tool/Tot. Drag	Alpha Processed Neutron Porosity (NPOR) (V/V)		0.5	0
Caliper (HCAL) (IN)	Stuck Stretch (STIT)	Std. Res. Formation Pe (PEFZ) (-----)	Tension (TENS) (LBF)	0	10
6	16	0	10000	0	0
	0 (F) 50				
		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

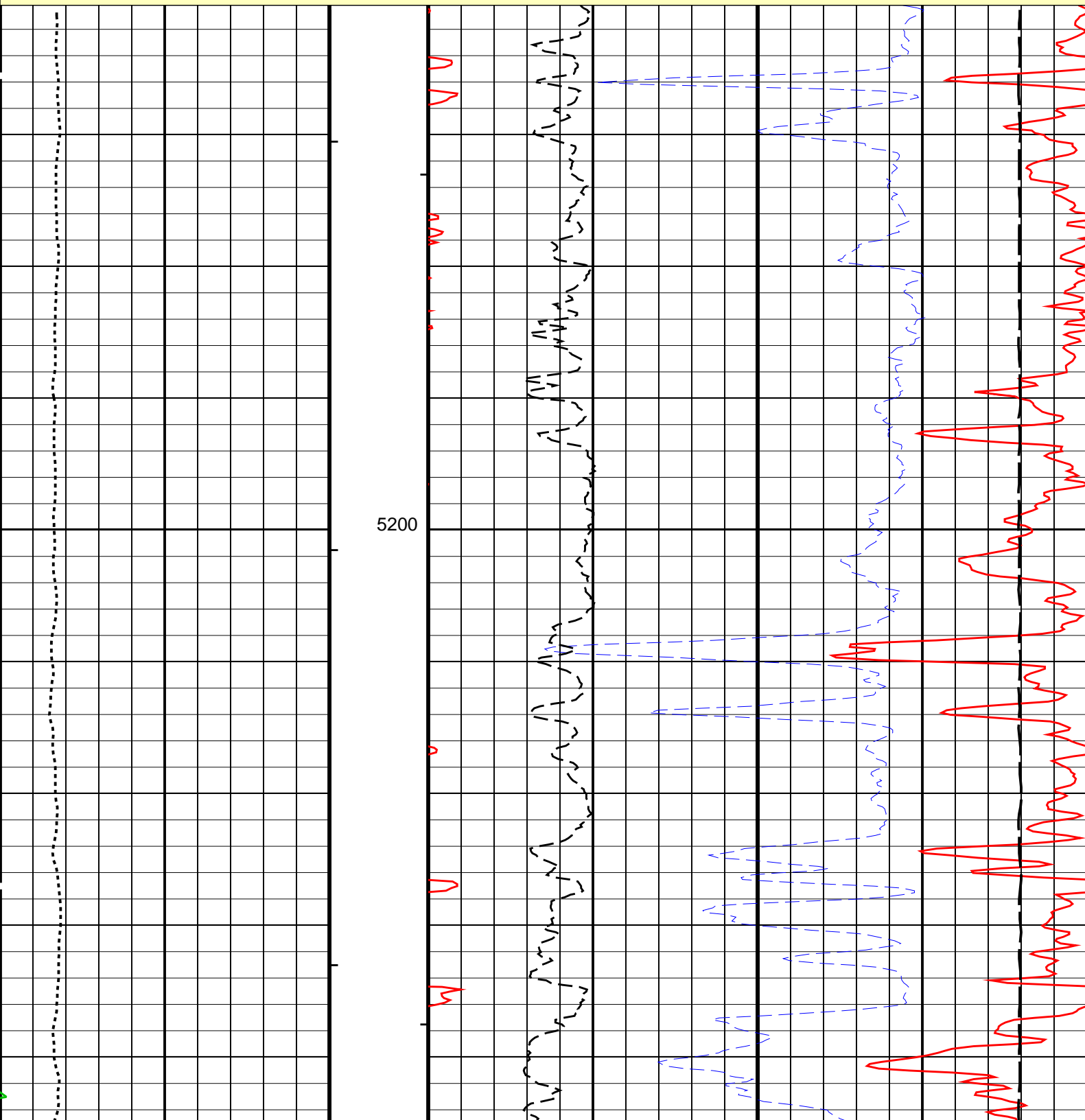
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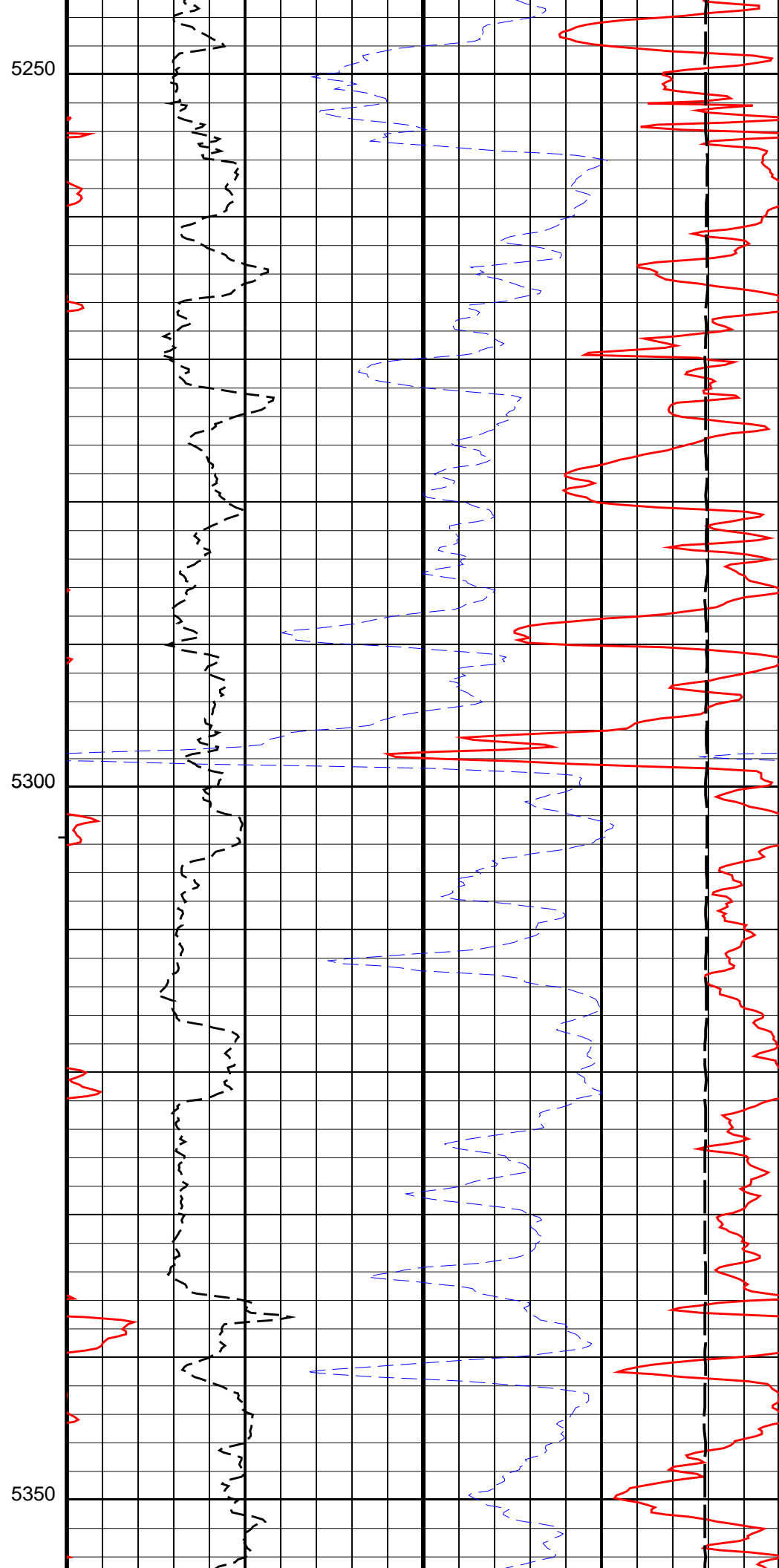
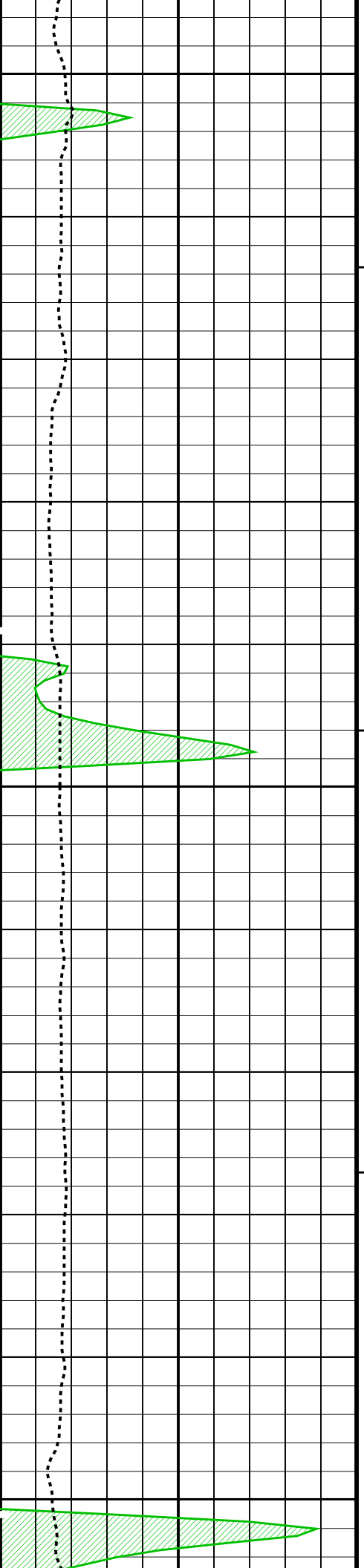
DLIS Name	Description	Value	
HILTB–CTS: High resolution Integrated Logging Tool–CTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	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	HiRes	
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	
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	6623.00	FT
TDL	Total Depth – Logger	6622.00	FT
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

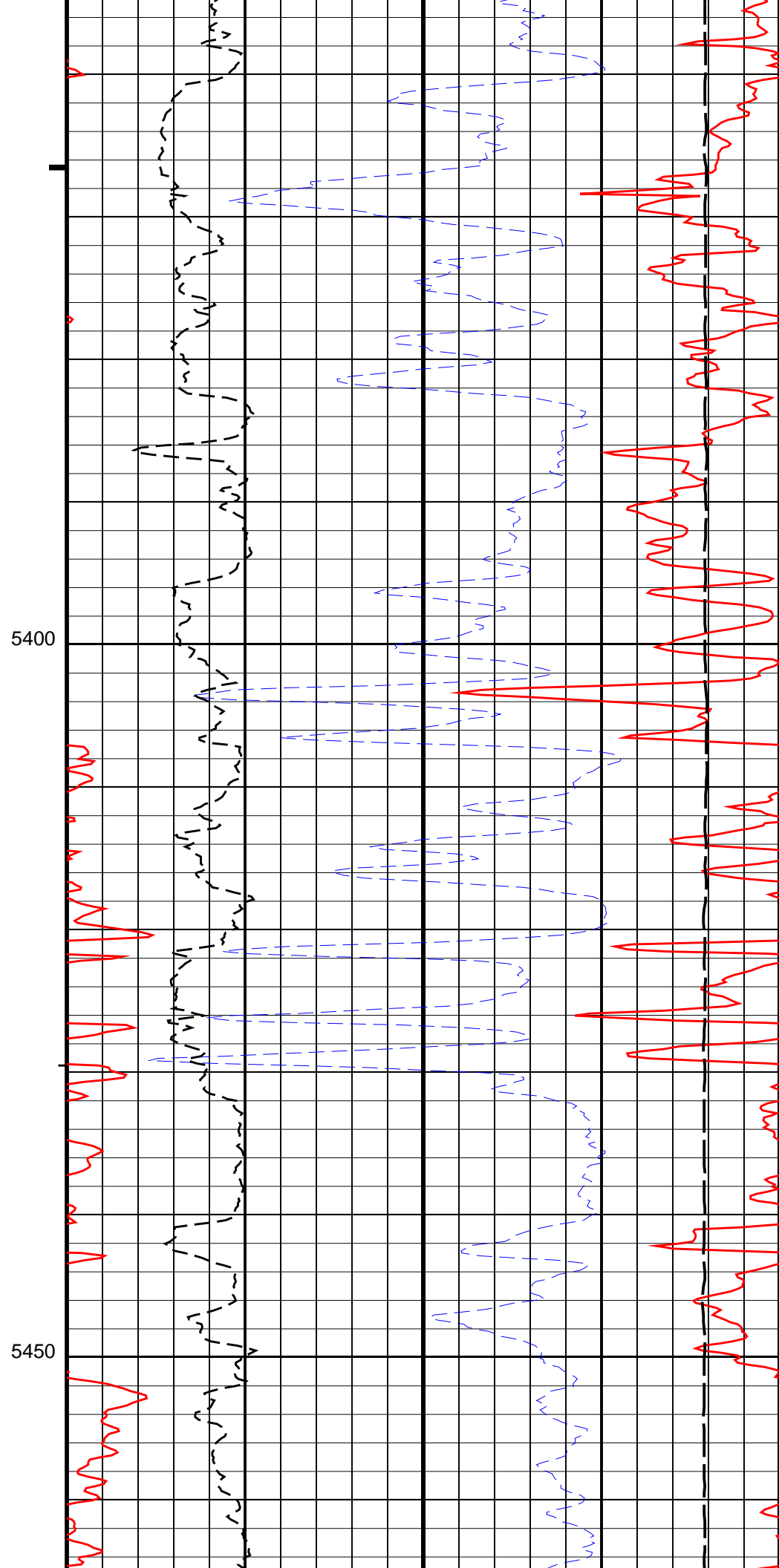
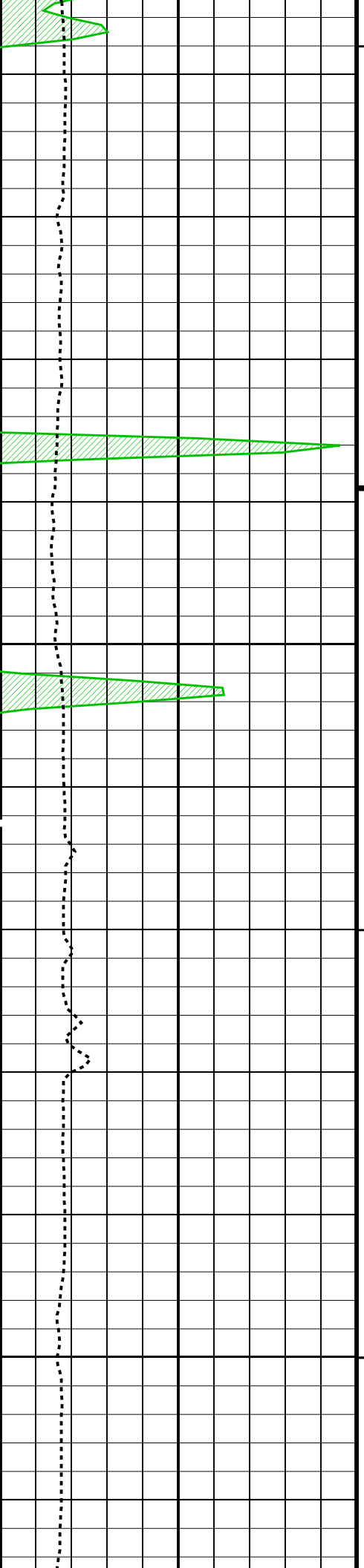
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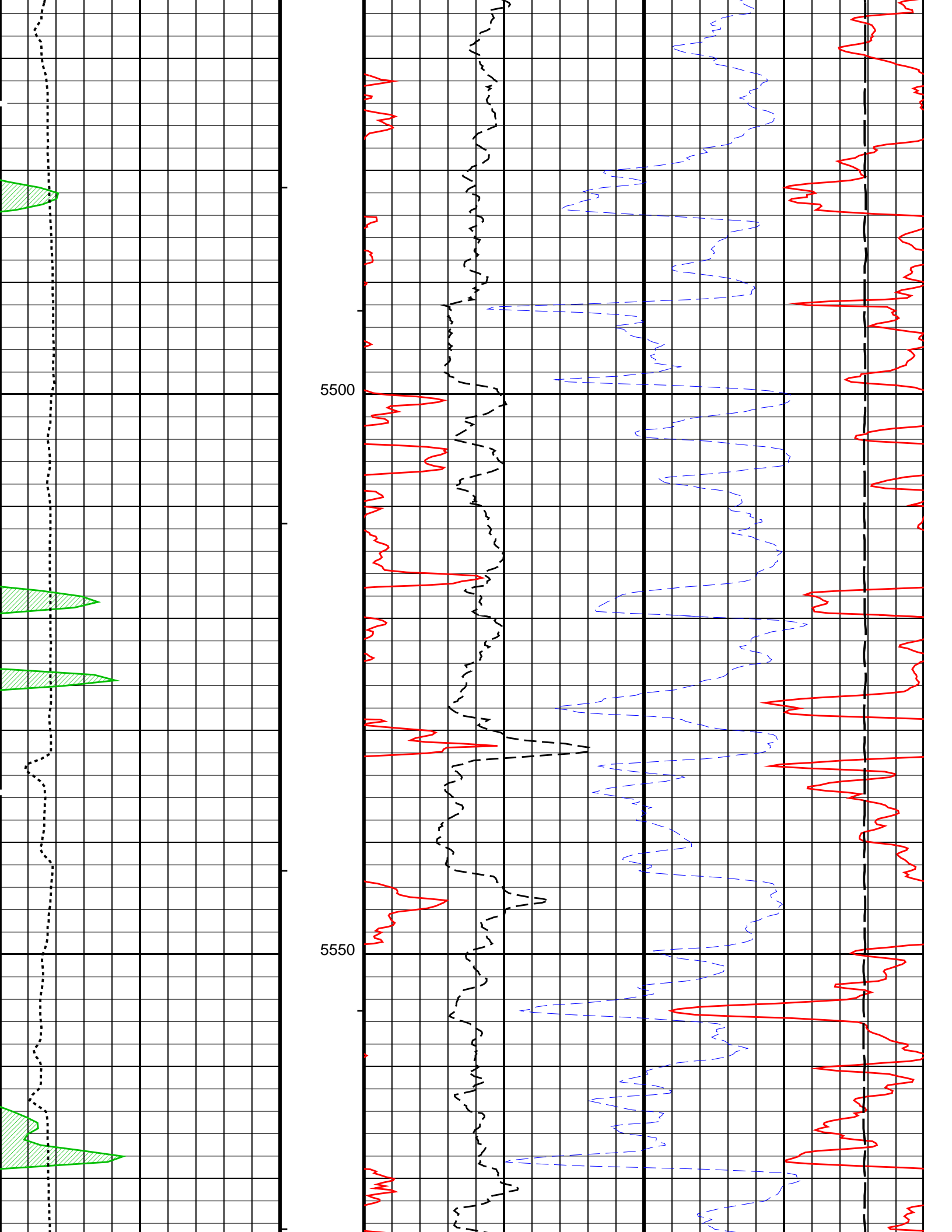


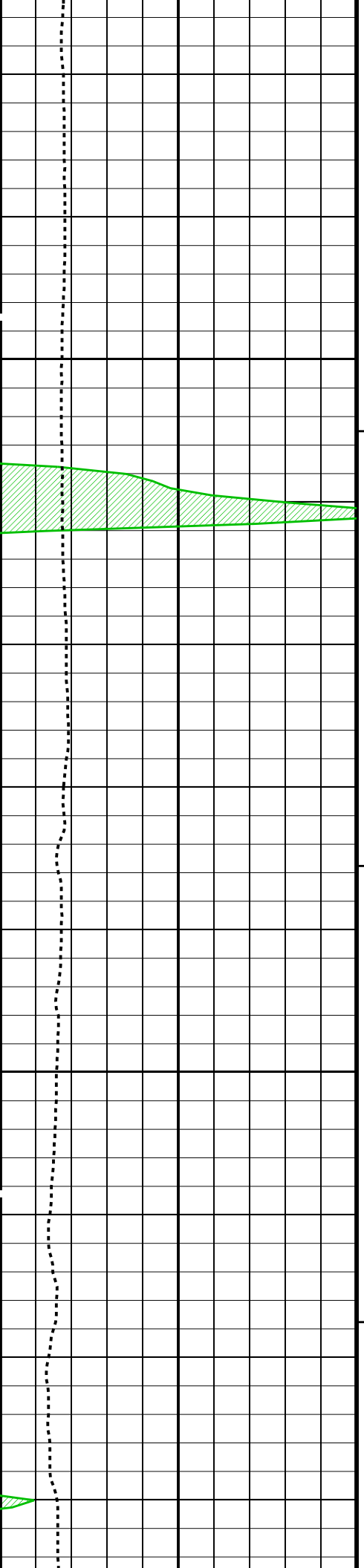
MAIN PASS: * PLATFORM EXPRESS – NUCLEAR POROSITY *****





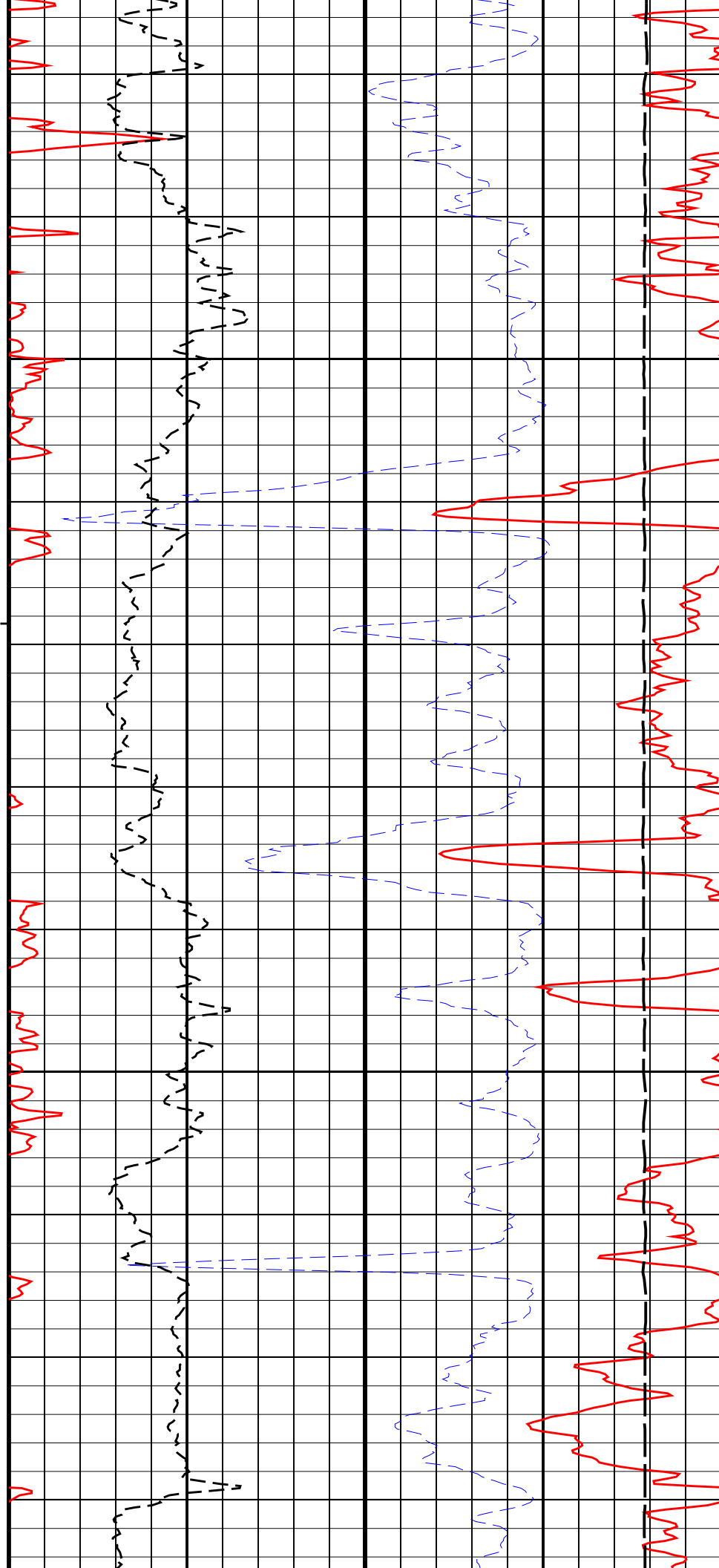


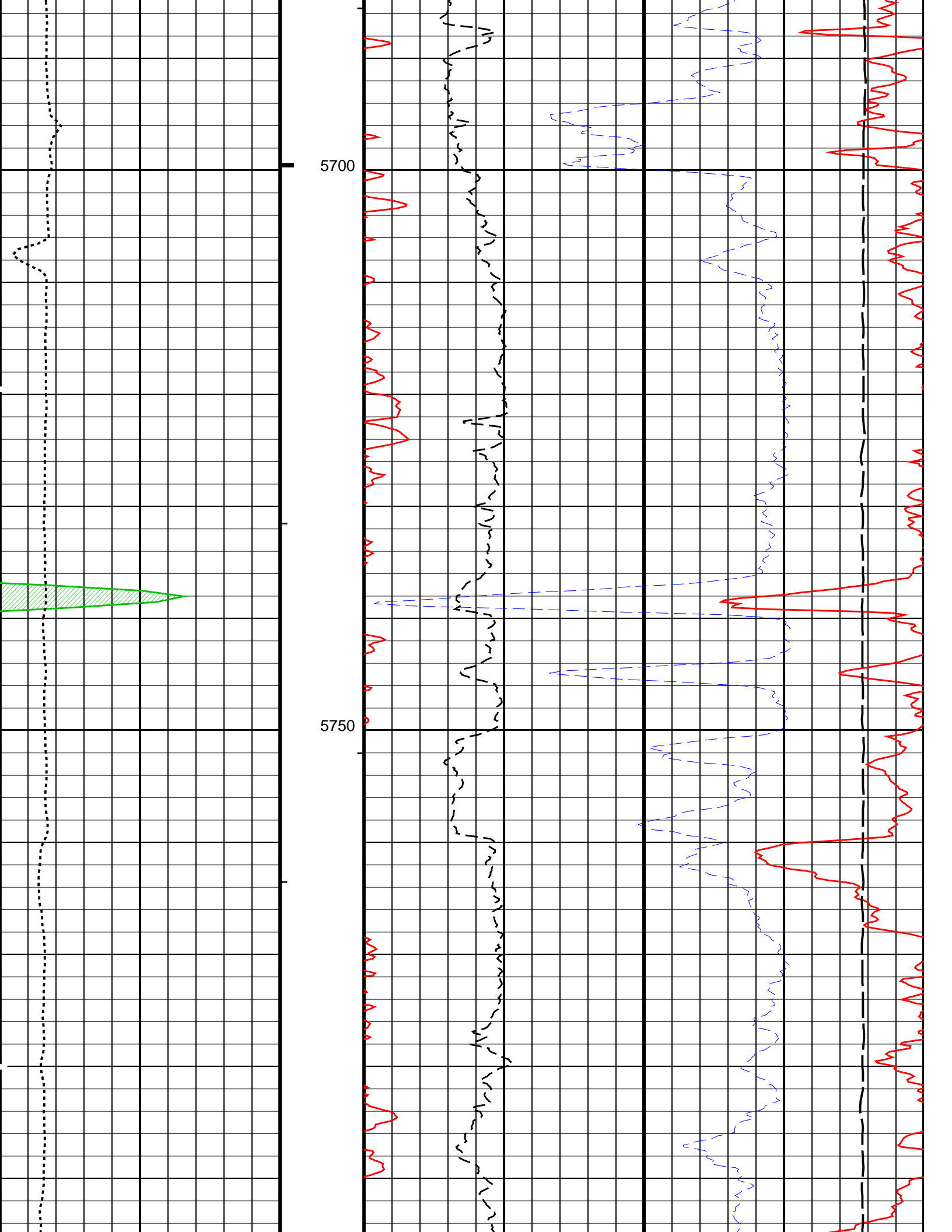


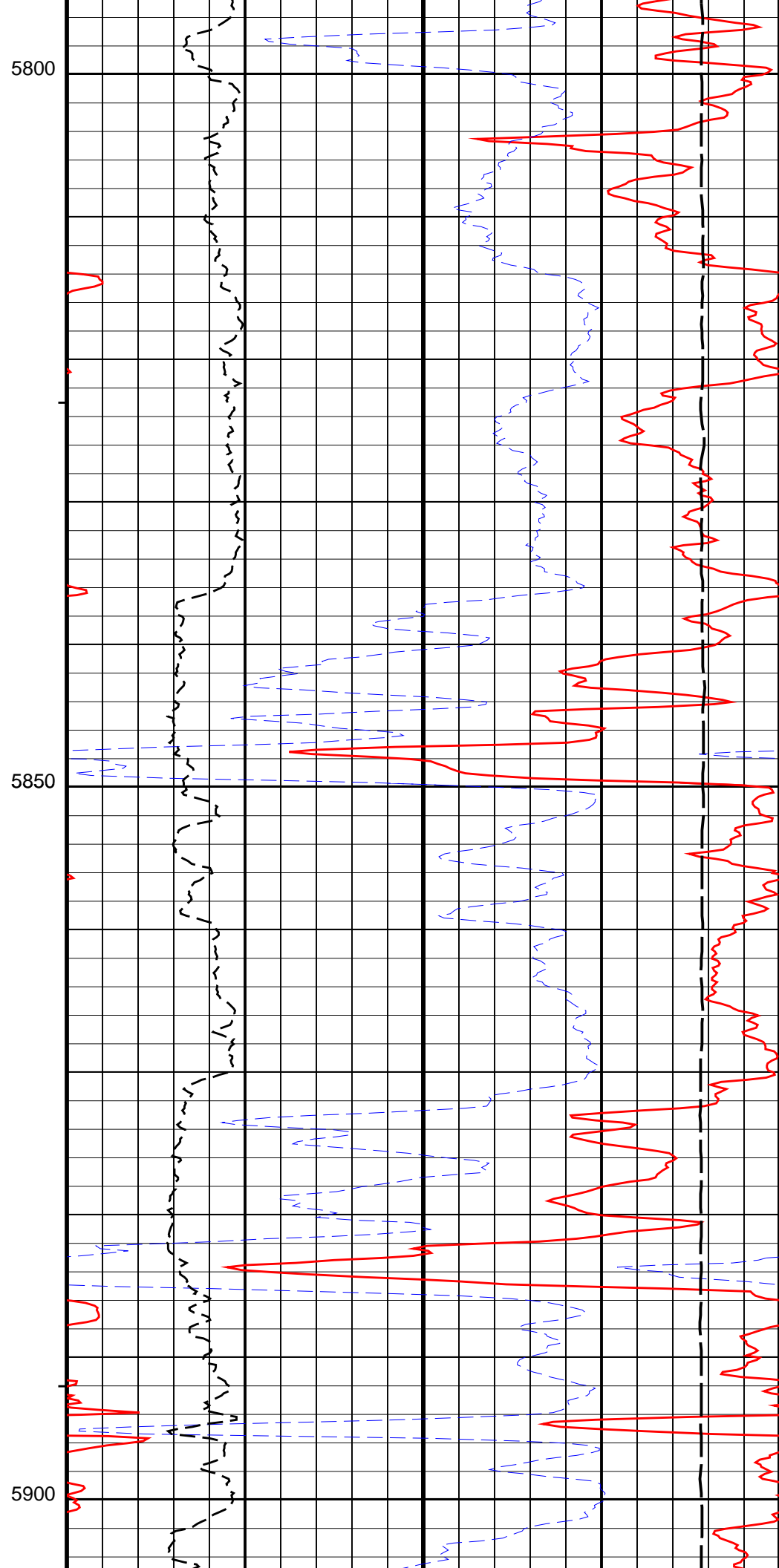
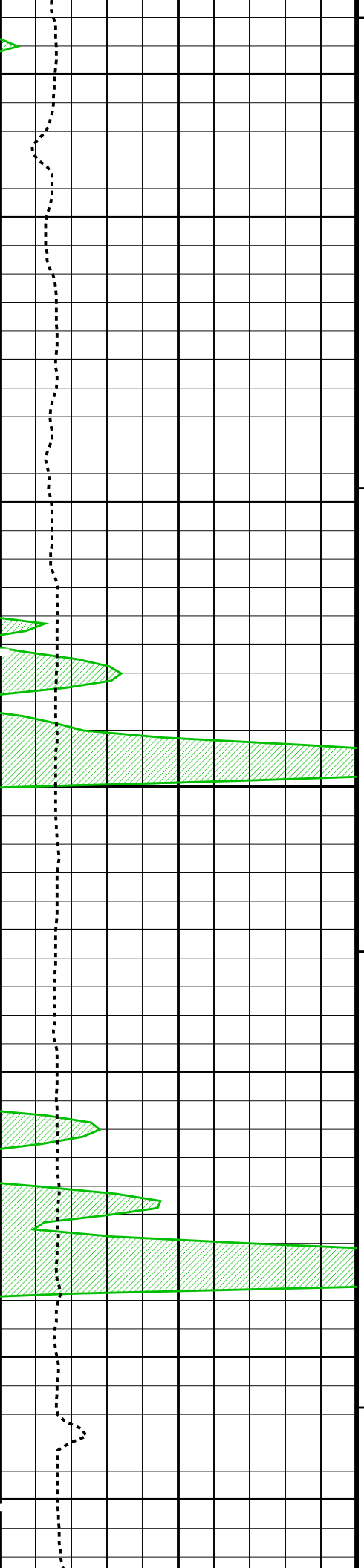


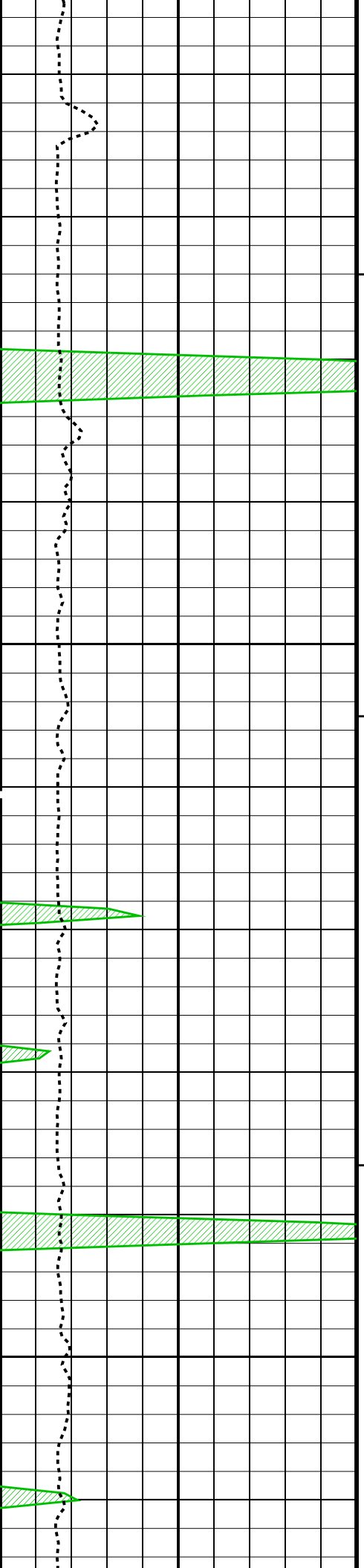
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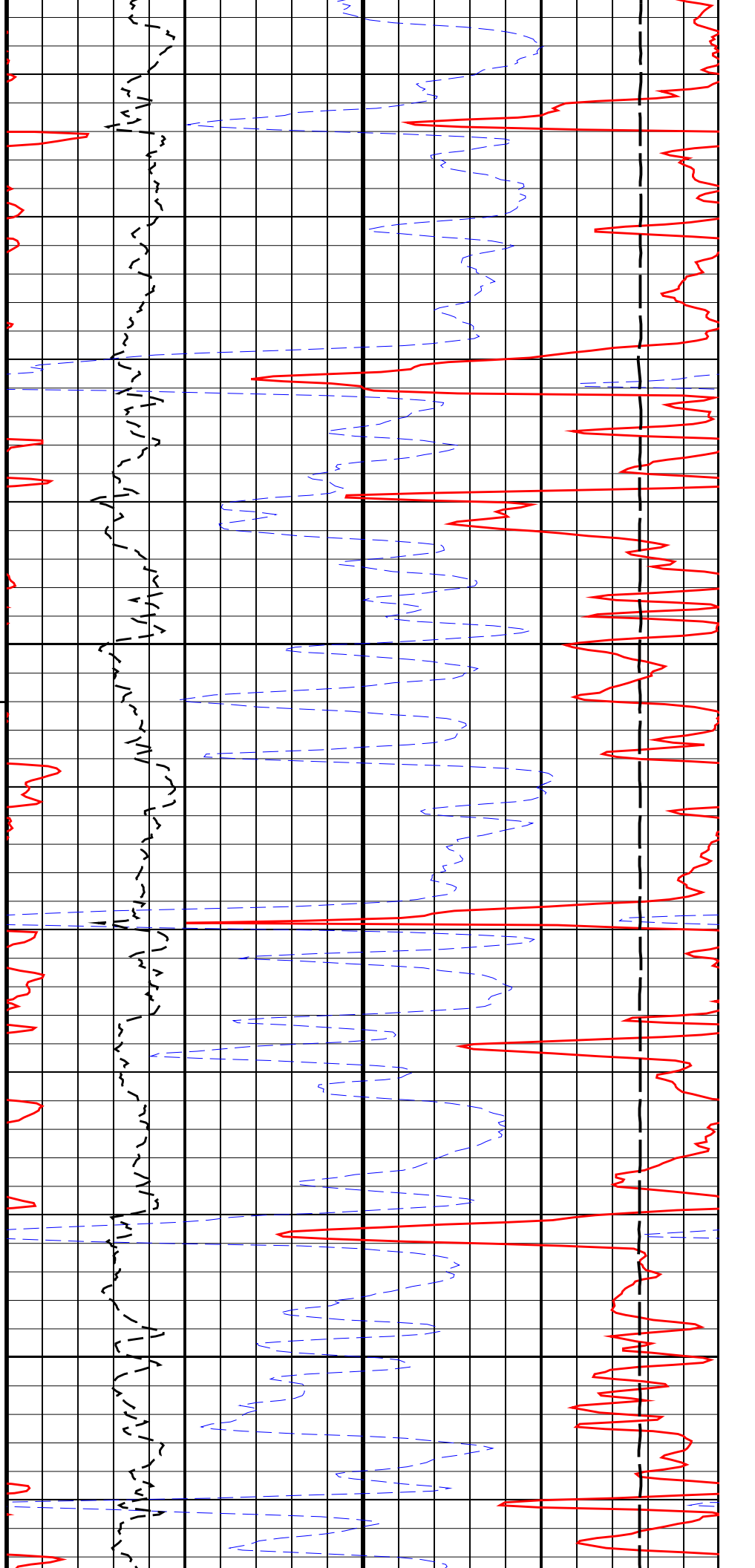


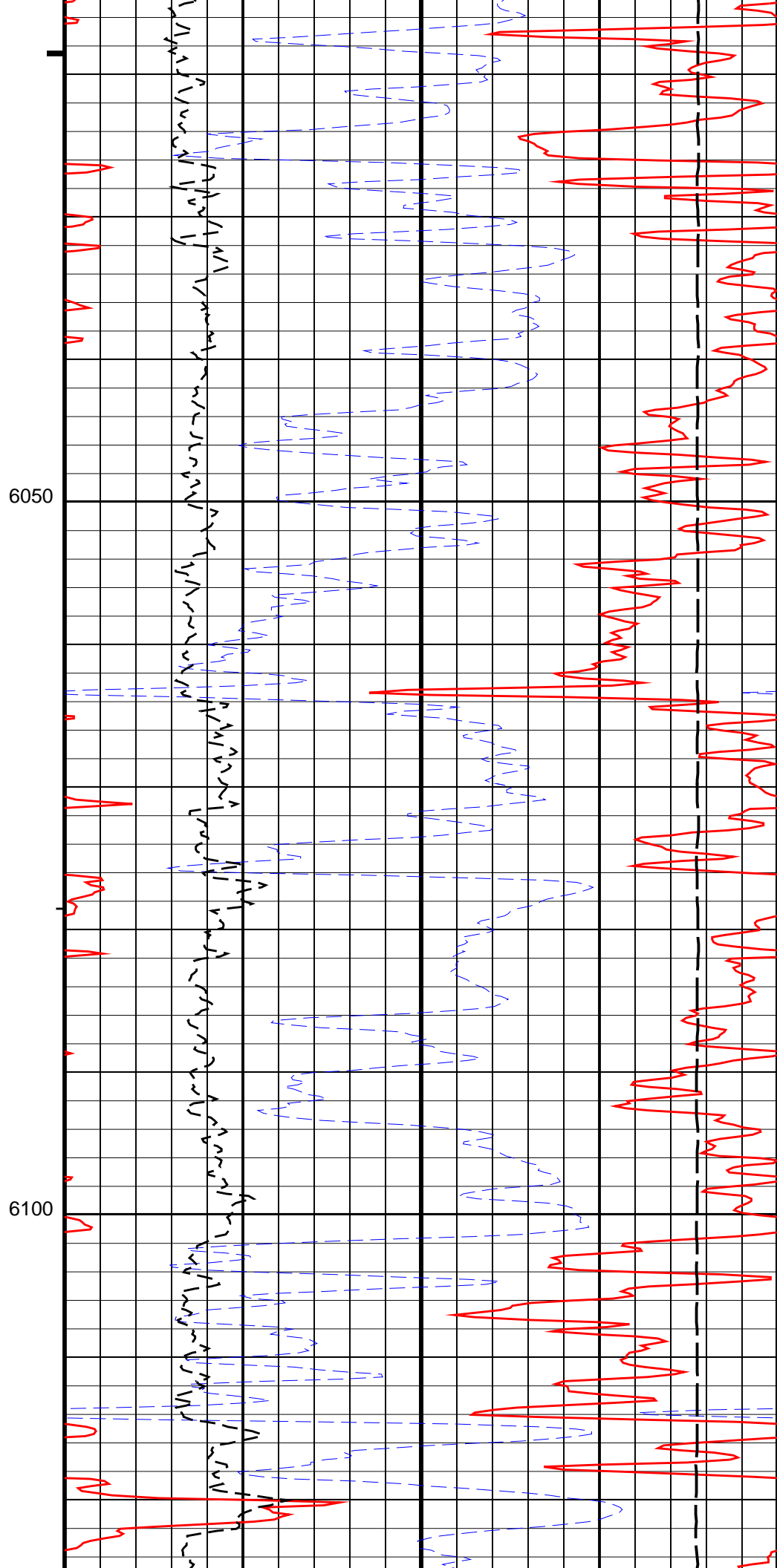
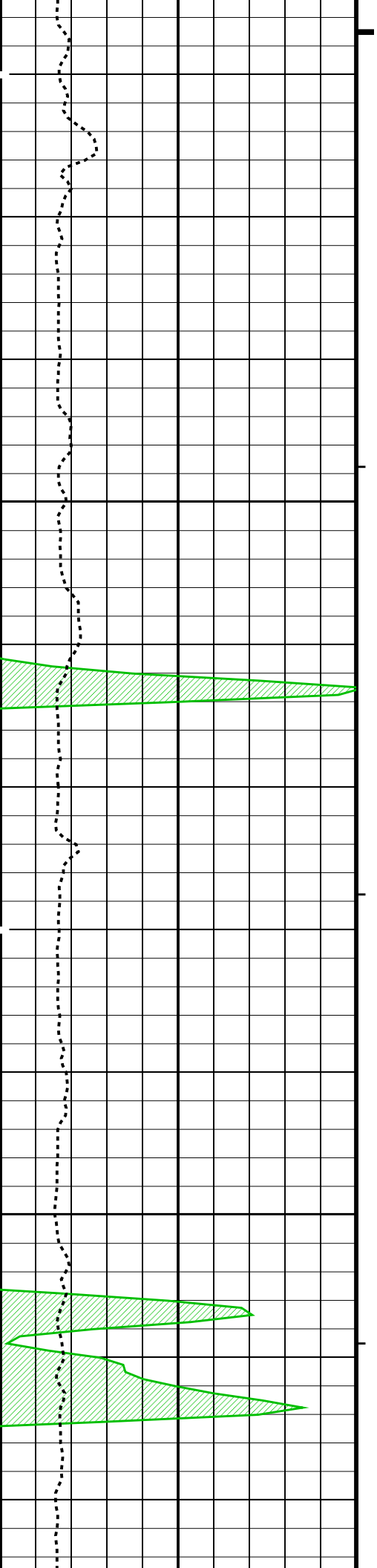


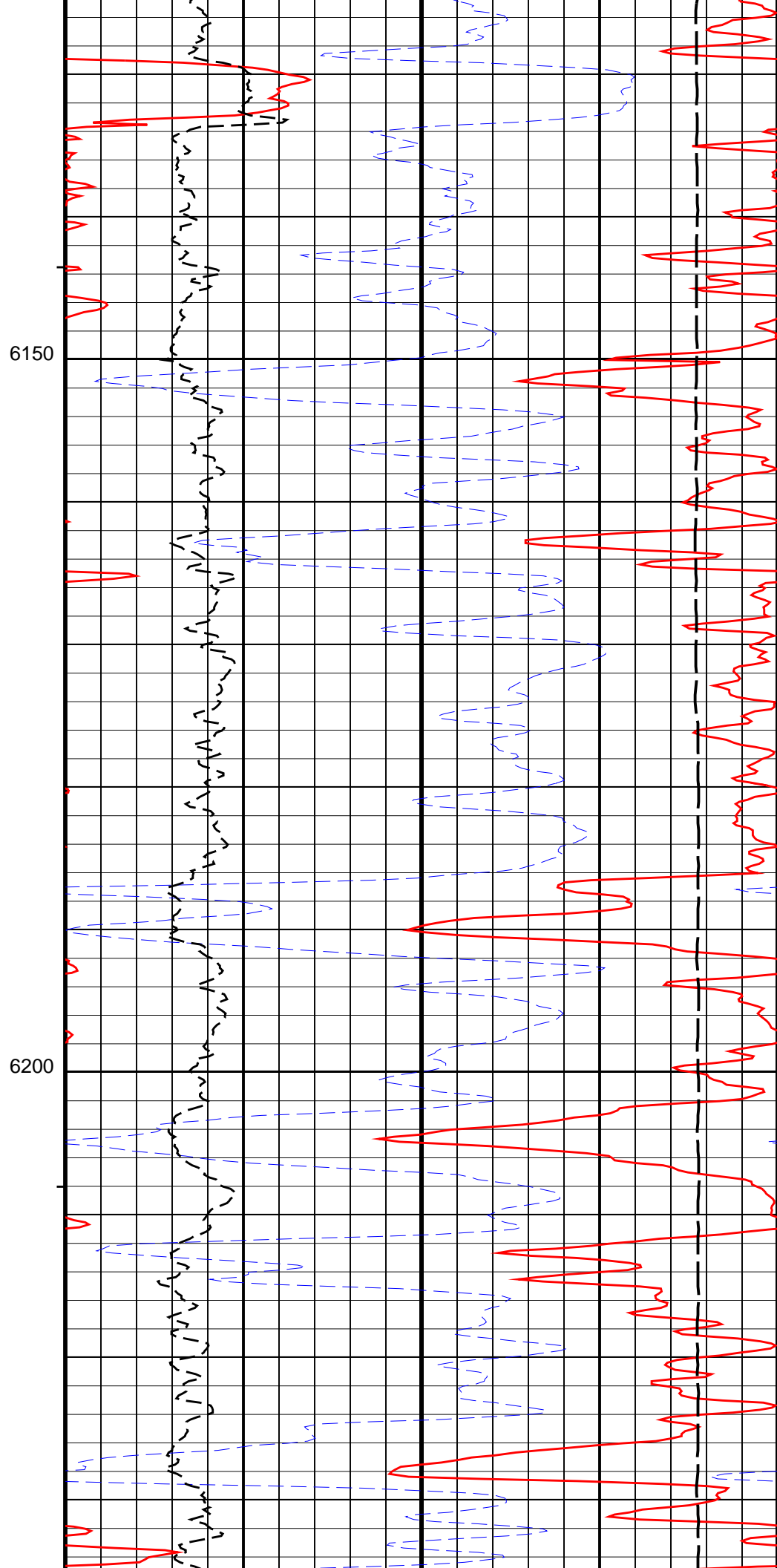
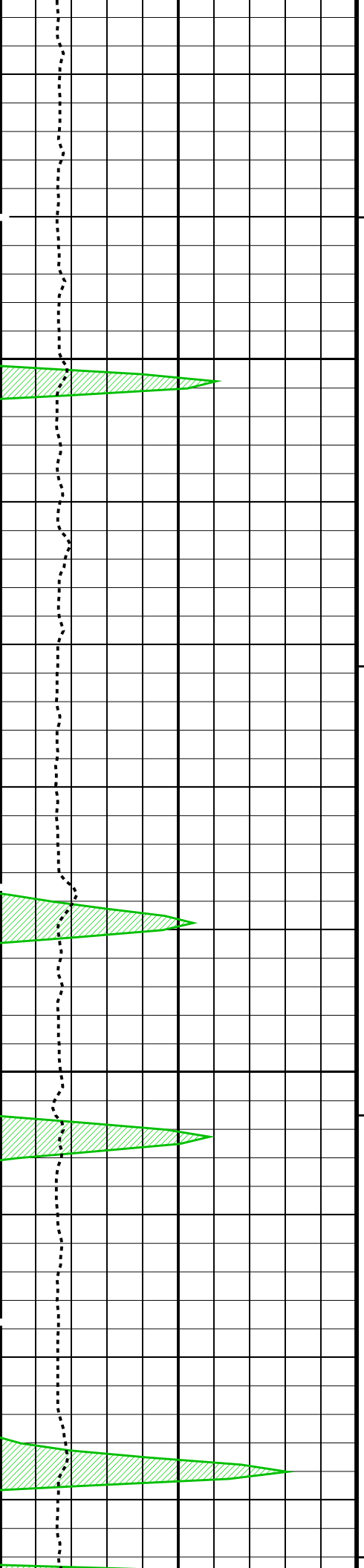


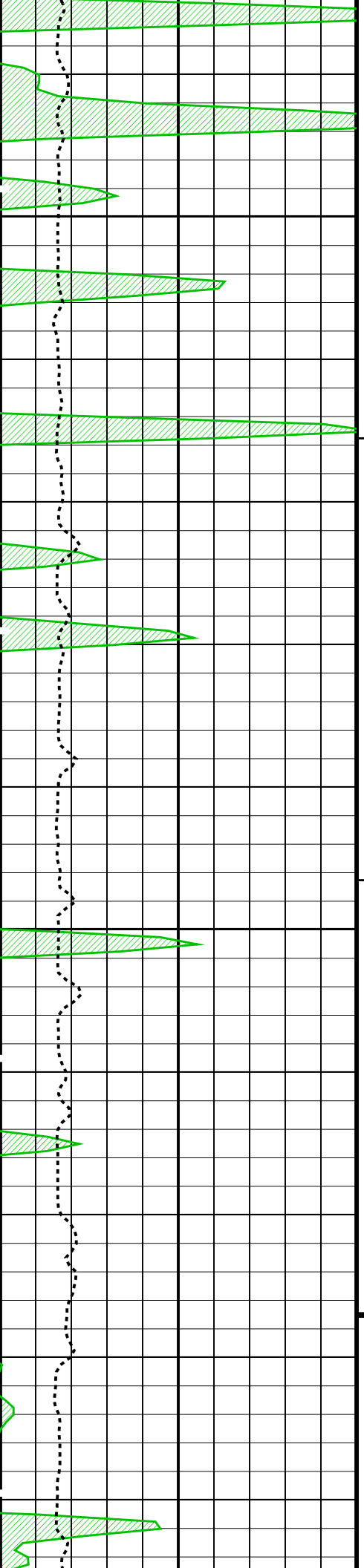
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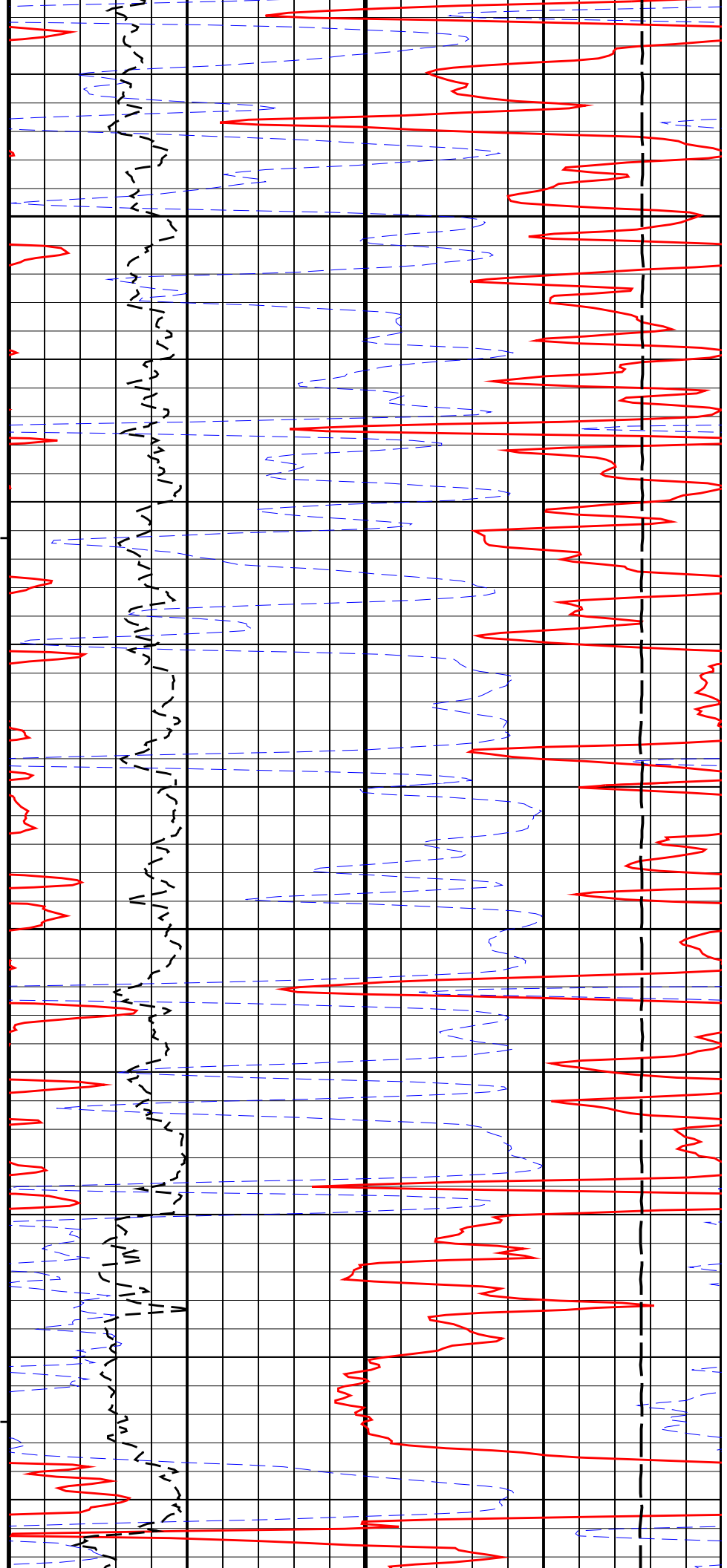


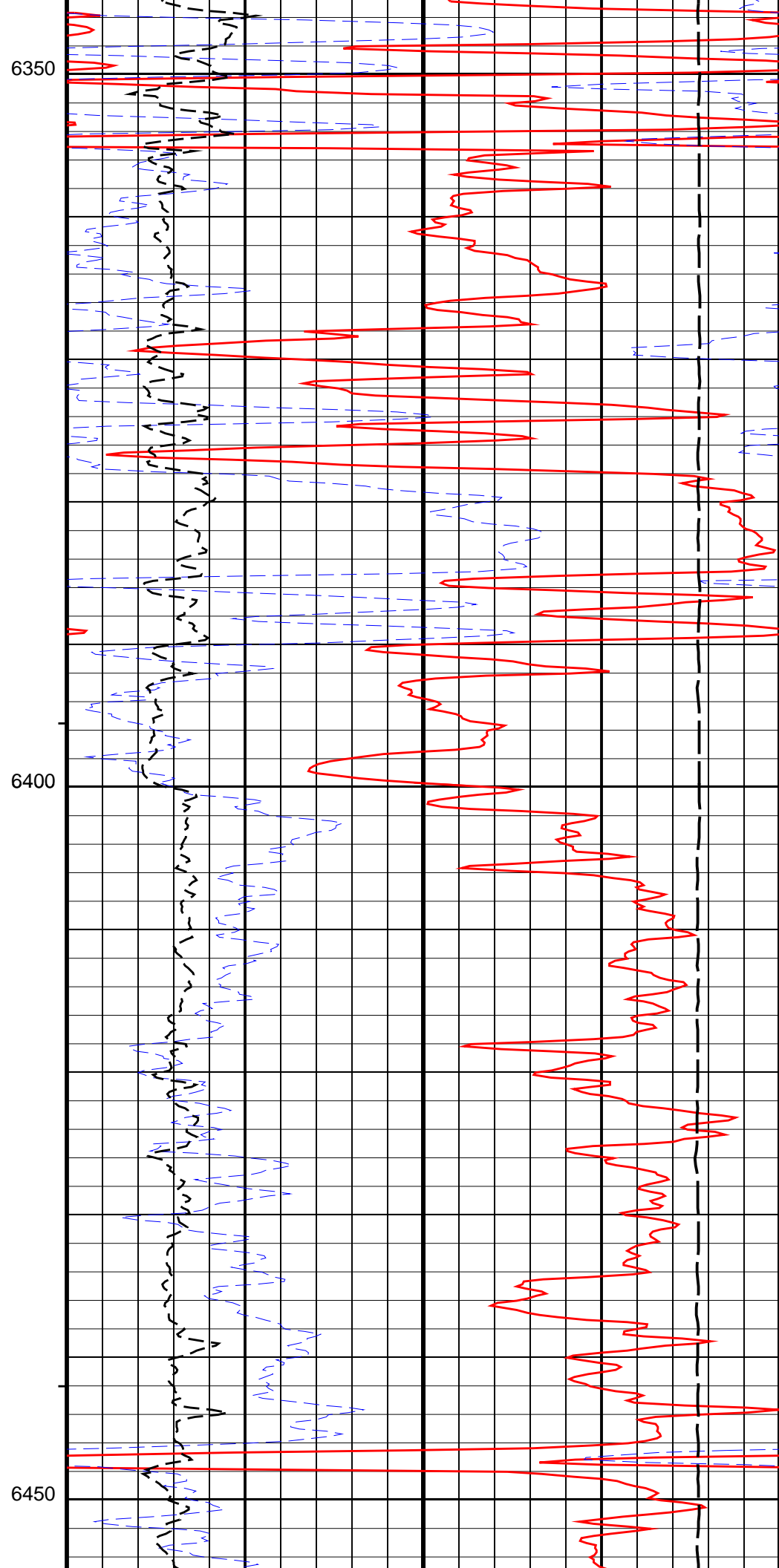
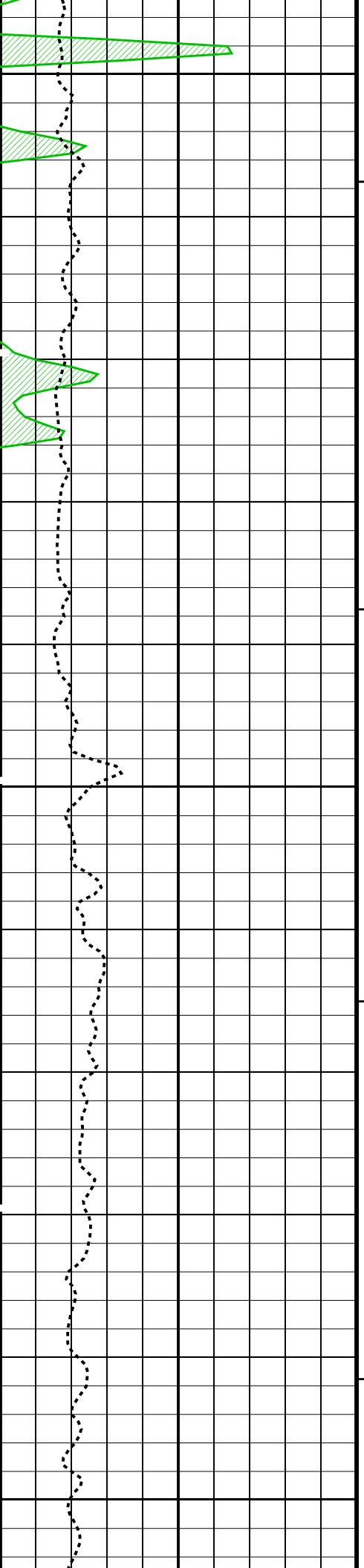


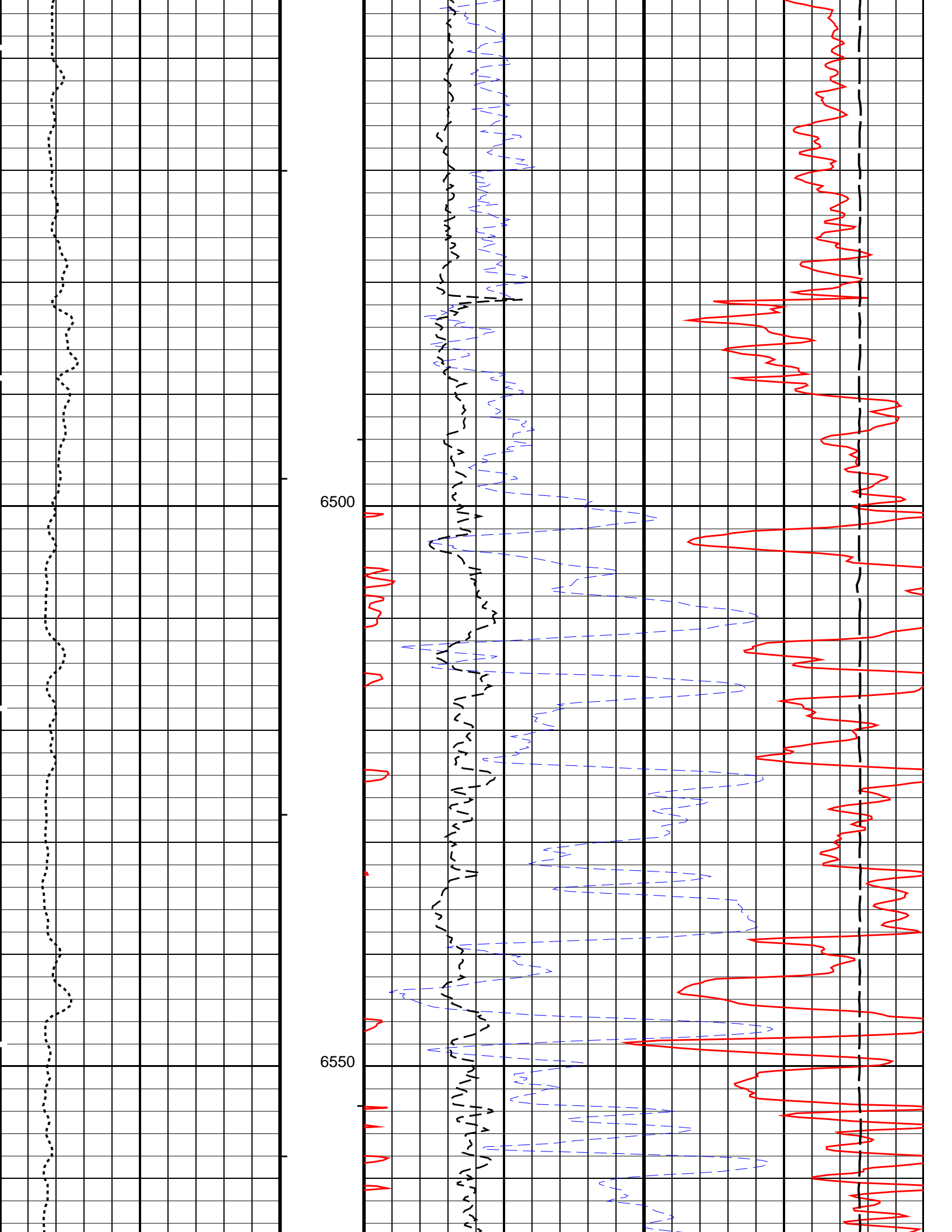


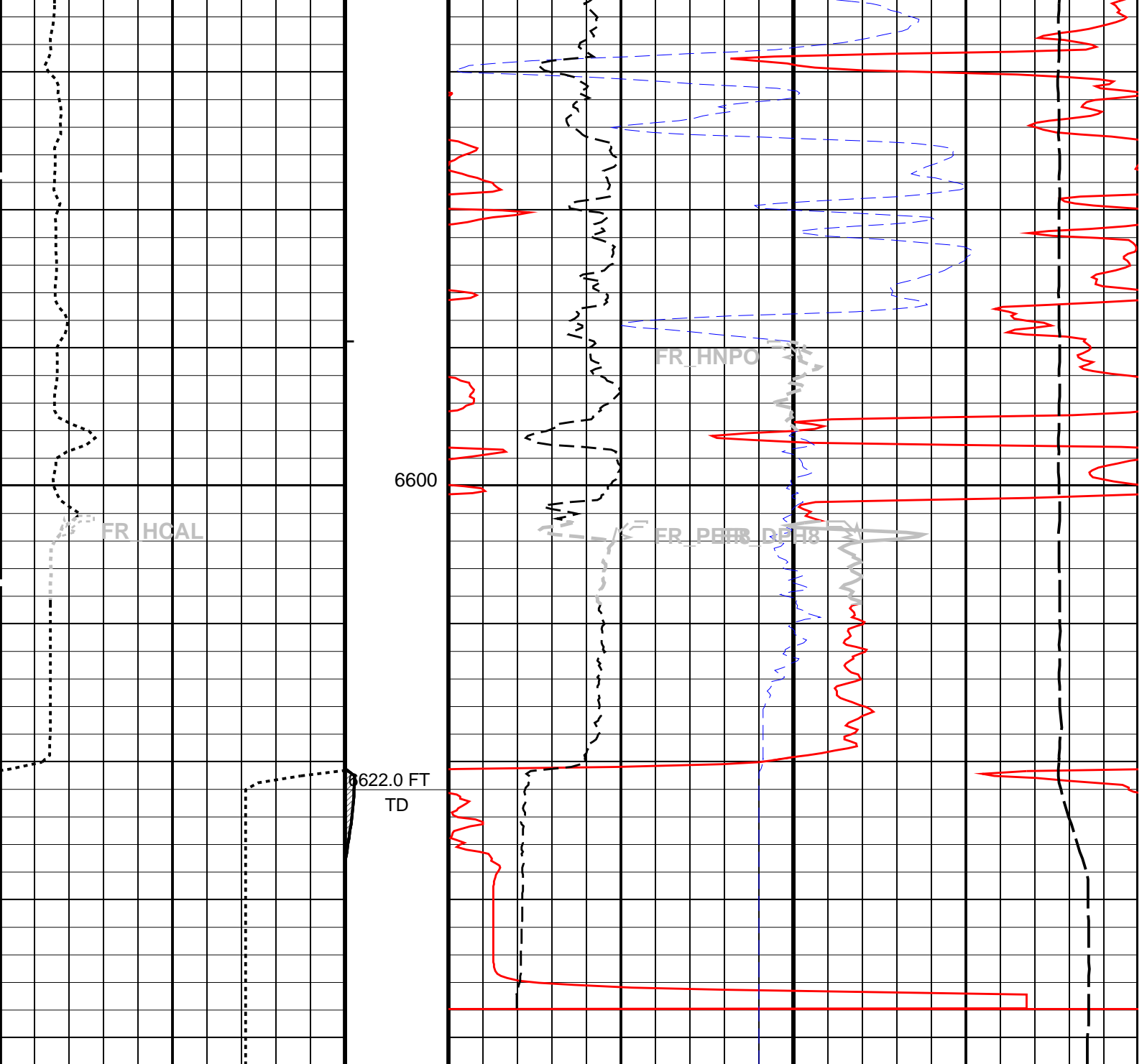
6250

6300









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

Gamma Ray Backup	Cable Drag	H. Res. Density Porosity (DPH8)	
		0.5	(V/V) 0
Caliper (HCAL) (IN)	Tool/Tot. Drag	HiRes NPOR (HNPO)	
6	16	0.45	(V/V) -0.15
	Stuck Stretch (STIT)	H. Res. Formation Pe (PEF8)	
		0	(----) 10 10000
	0 (F) 50	Tension (TENS)	
		(LBF) 0	

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		
HILTB-CTS: High resolution Integrated Logging Tool-CTS				
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	HiRes		
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		
STI: Stuck Tool Indicator				
LBFR	Trigger for MAXIS First Reading Label	TDL		
STKT	STI Stuck Threshold	2.5	FT	
TDD	Total Depth – Driller	6623.00	FT	
TDL	Total Depth – Logger	6622.00	FT	
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	
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	
System and Miscellaneous				
BS	Bit Size	7.875	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	9.20	LB/G	
DO	Depth Offset for Playback	0.0	FT	
DORL	Depth Offset for Repeat Analysis	0.0	FT	
MST	Mud Sample Temperature	131.36	DEGF	
PP	Playback Processing	NORMAL		
RMFS	Resistivity of Mud Filtrate Sample	1.3425	OHMM	
TD	Total Depth	6622	FT	

Format: PORO_HIRES Vertical Scale: 10" per 100' Graphics File Created: 03-Apr-2011 05:00

OP System Version: 18C0-147

HILTB-CTS 18C0-147

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 03-Apr-2011 03:18 6642.0 FT 348.5 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_025PUP FN:24 PRODUCER 03-Apr-2011 05:00

Input DLIS Files

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DEFAULT	AIT_TLD_MCFL_CNL_006PUP	FN:5	PRODUCER	03-Apr-2011 03:16	6640.5 FT	6036.5 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:24	PRODUCER	03-Apr-2011 05:00
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OP System Version: 18C0-147

HILTB-CTS	18C0-147
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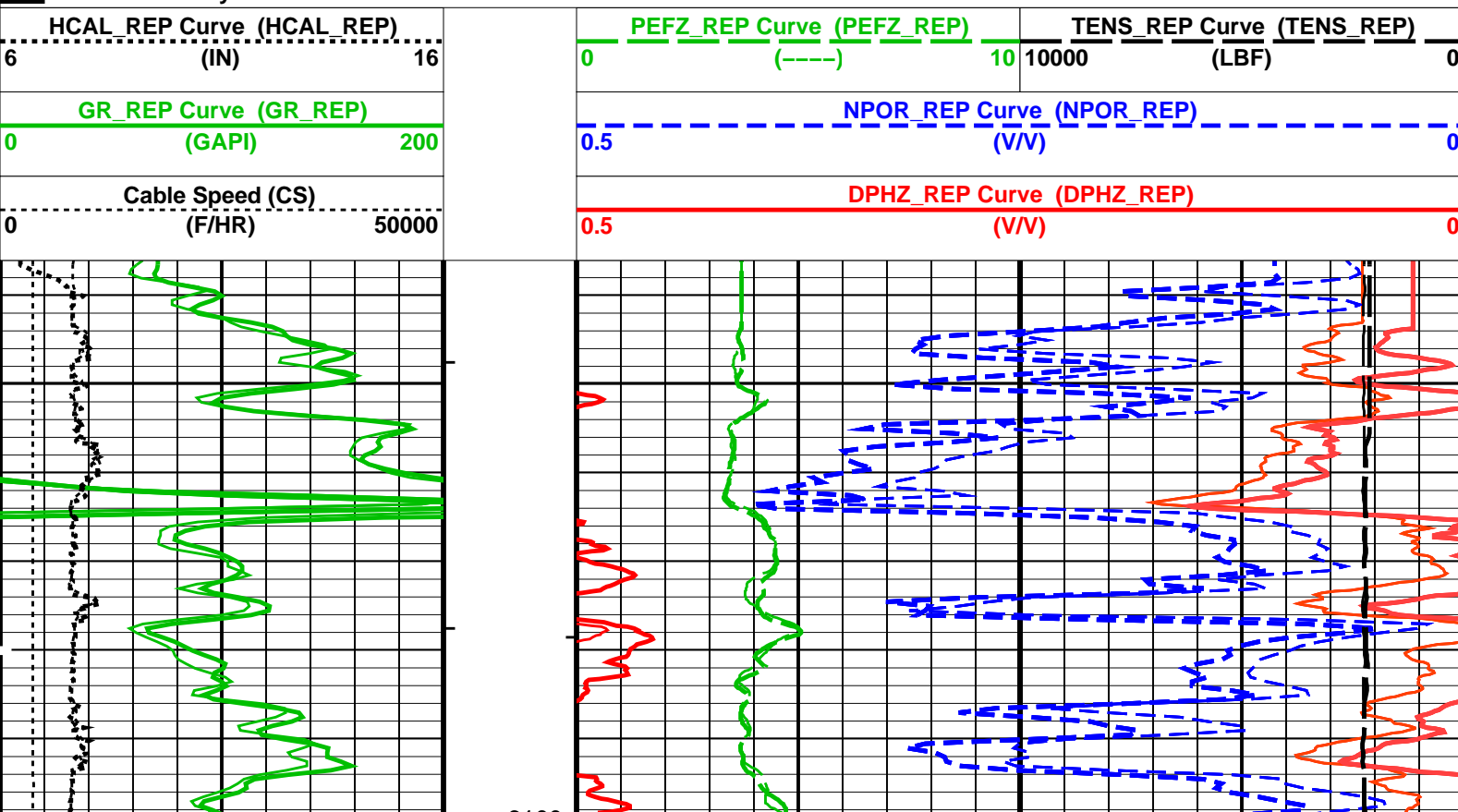
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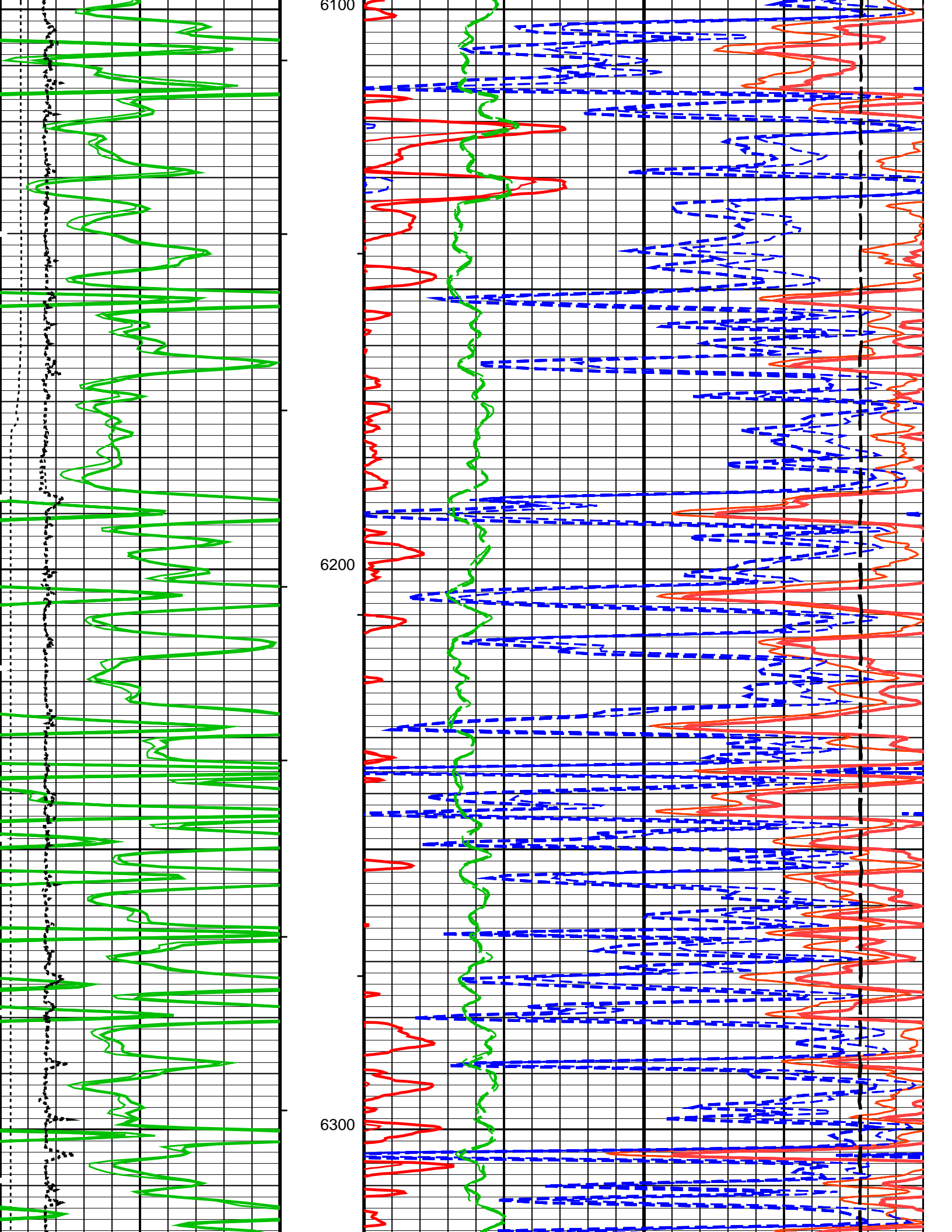
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MDEN	2.71 G/C3	2.71 G/C3	6642.0 05:00:07

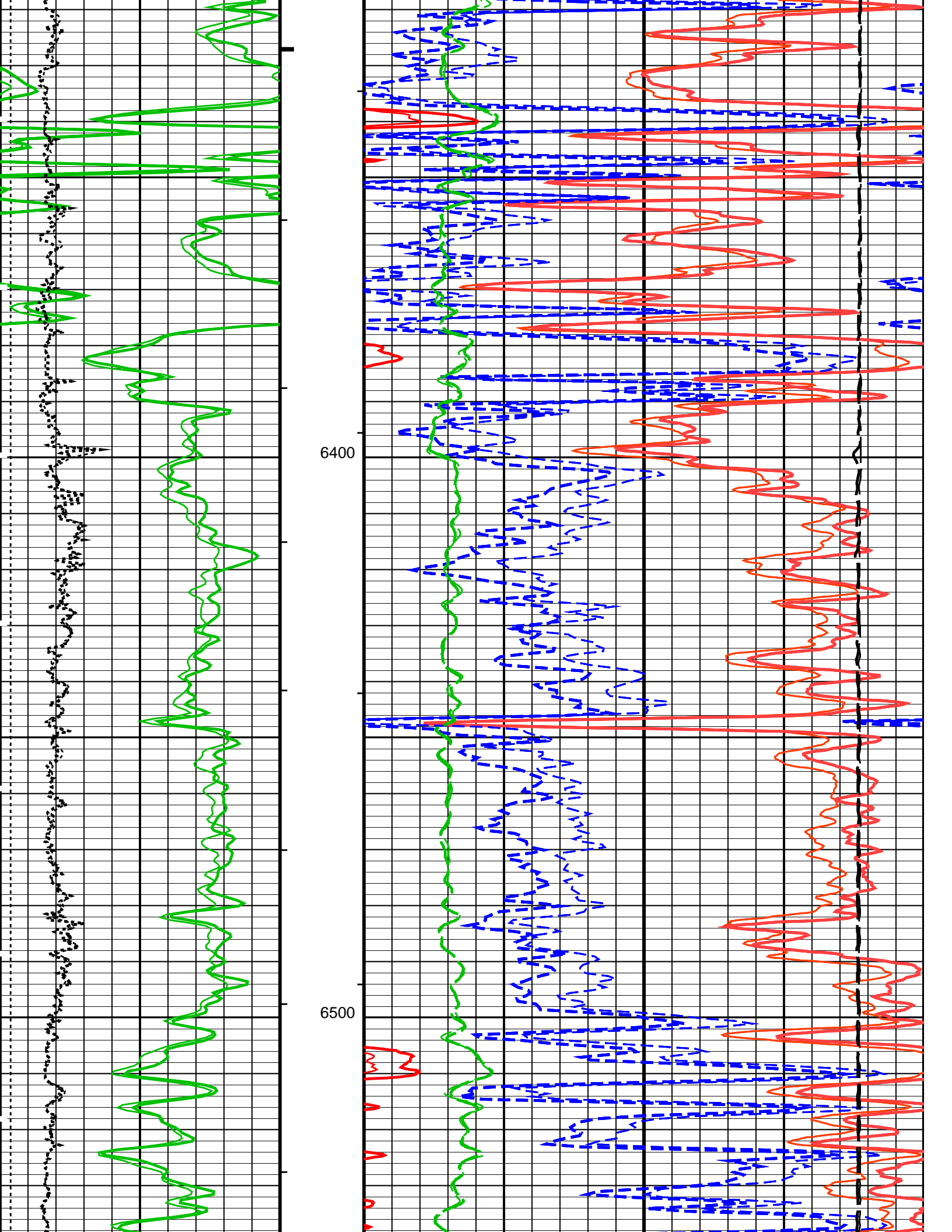
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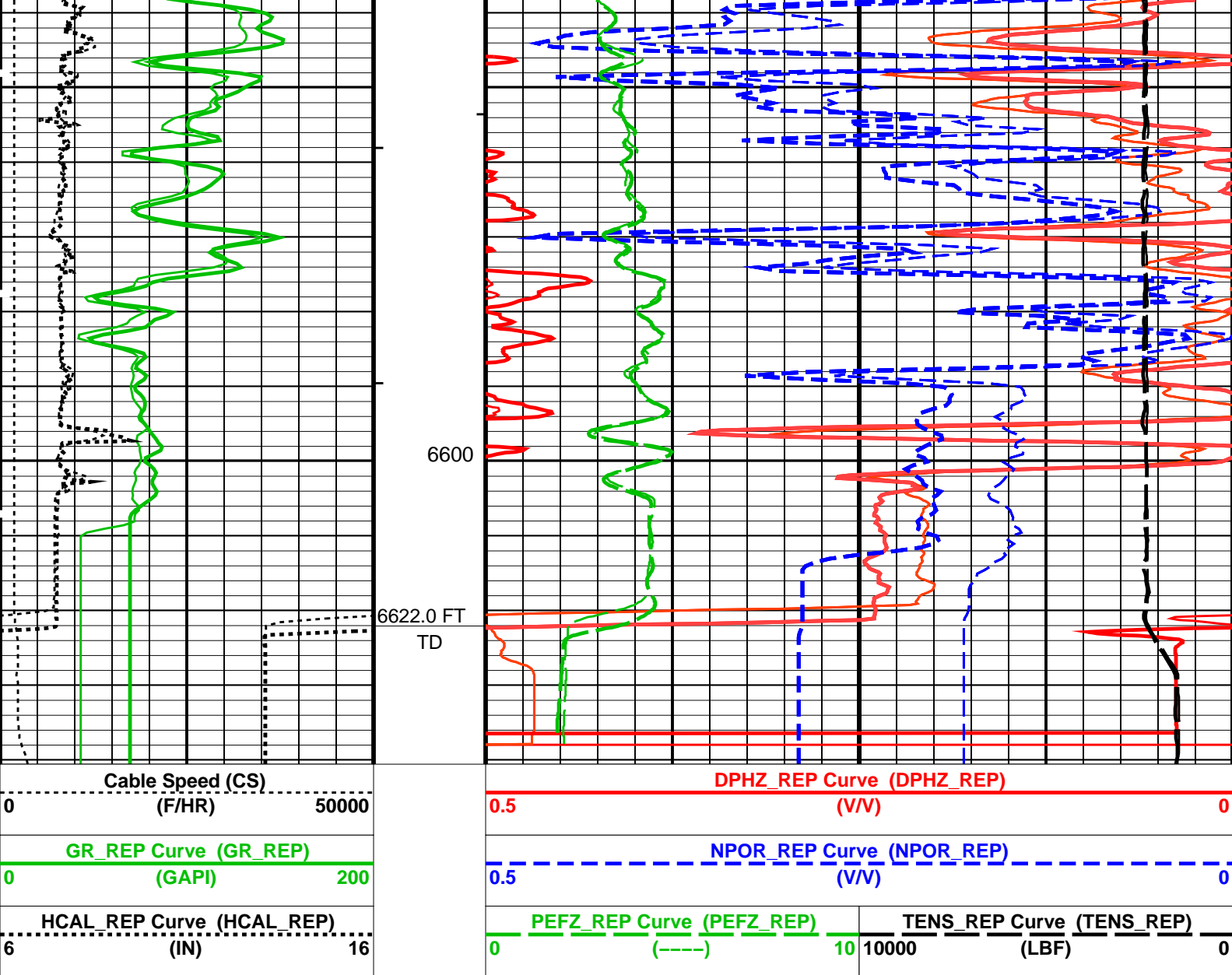
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S









Parameters

DLIS Name

Description

Value

HILTB-CTS: High resolution Integrated Logging Tool-CTS

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	HiRes	
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	
STI: Stuck Tool Indicator			
TDL	Total Depth – Logger	6622.00	FT
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
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
System and Miscellaneous			
BS	Bit Size	7.875	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	9.20	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
MST	Mud Sample Temperature	131.36	DEGF
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	1.3425	OHMM
TD	Total Depth	6622	FT

Format: PORO_REP Vertical Scale: 5" per 100' Graphics File Created: 03-Apr-2011 05:00

OP System Version: 18C0-147

HILTB-CTS 18C0-147

Input DLIS Files

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DEFAULT	AIT_TLD_MCFL_CNL_006PUP	FN:5	PRODUCER	03-Apr-2011 03:16	6640.5 FT	6036.5 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:24	PRODUCER	03-Apr-2011 05:00
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Schlumberger

MAIN DENSITY LOG 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	03-Apr-2011 03:18	6642.0 FT	348.5 FT
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Output DLIS Files

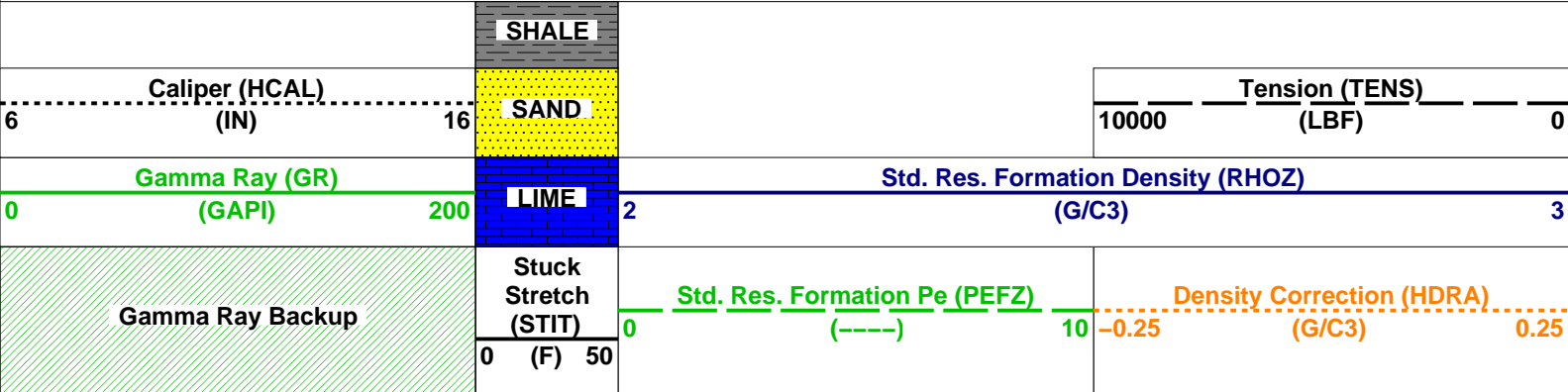
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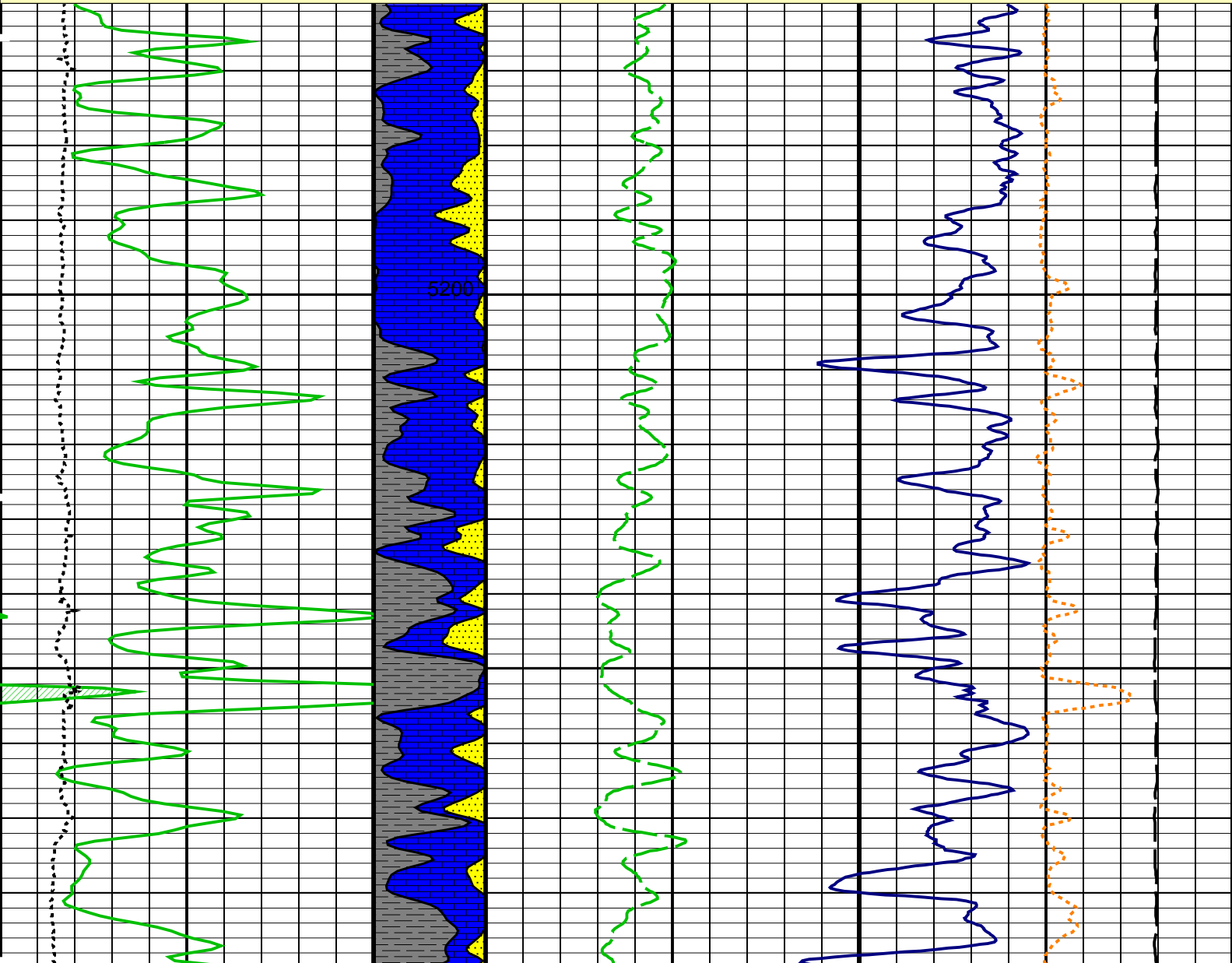
DLIS Name	New Value	Previous Value	Depth & Time
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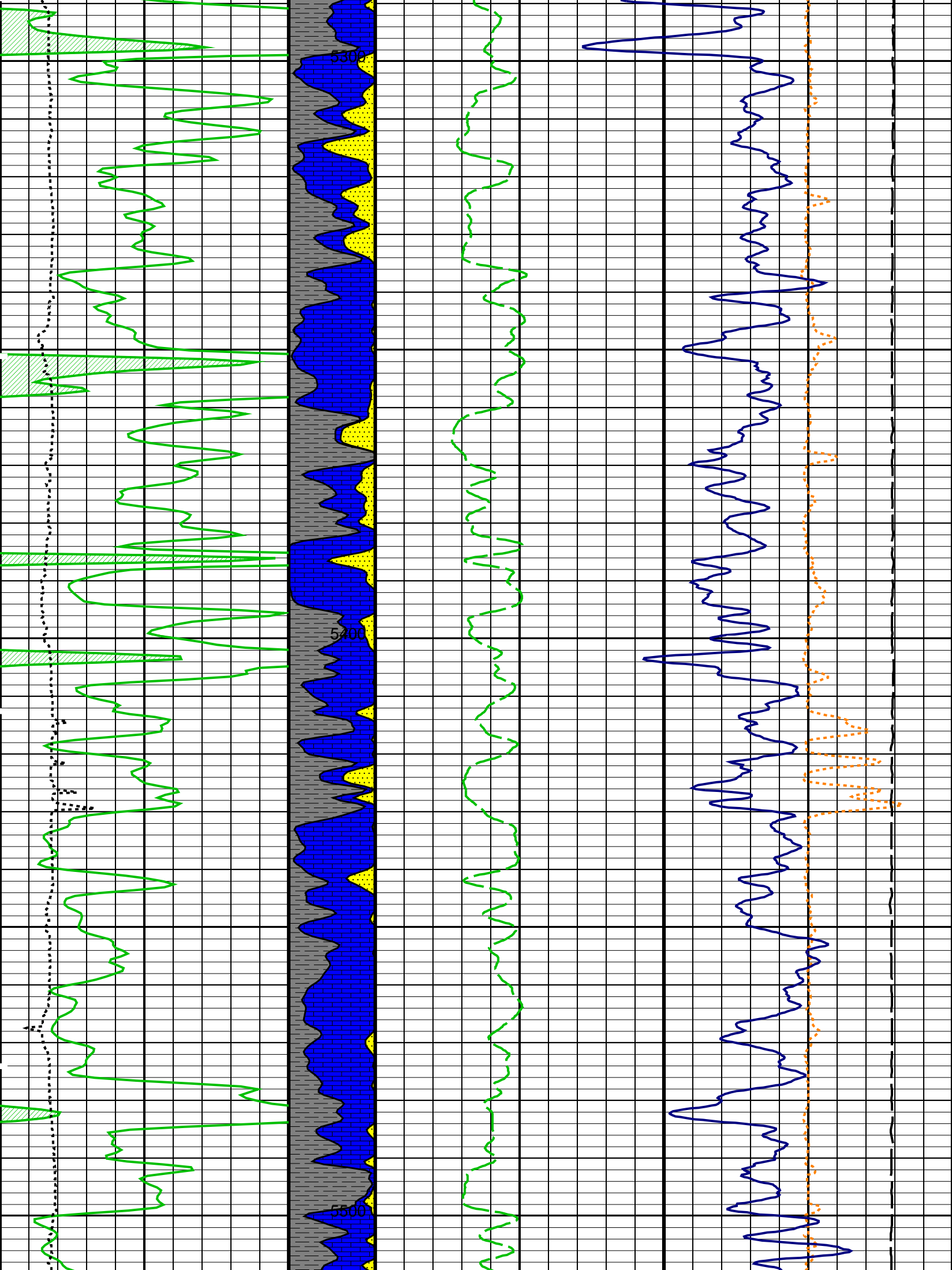
PIP SUMMARY

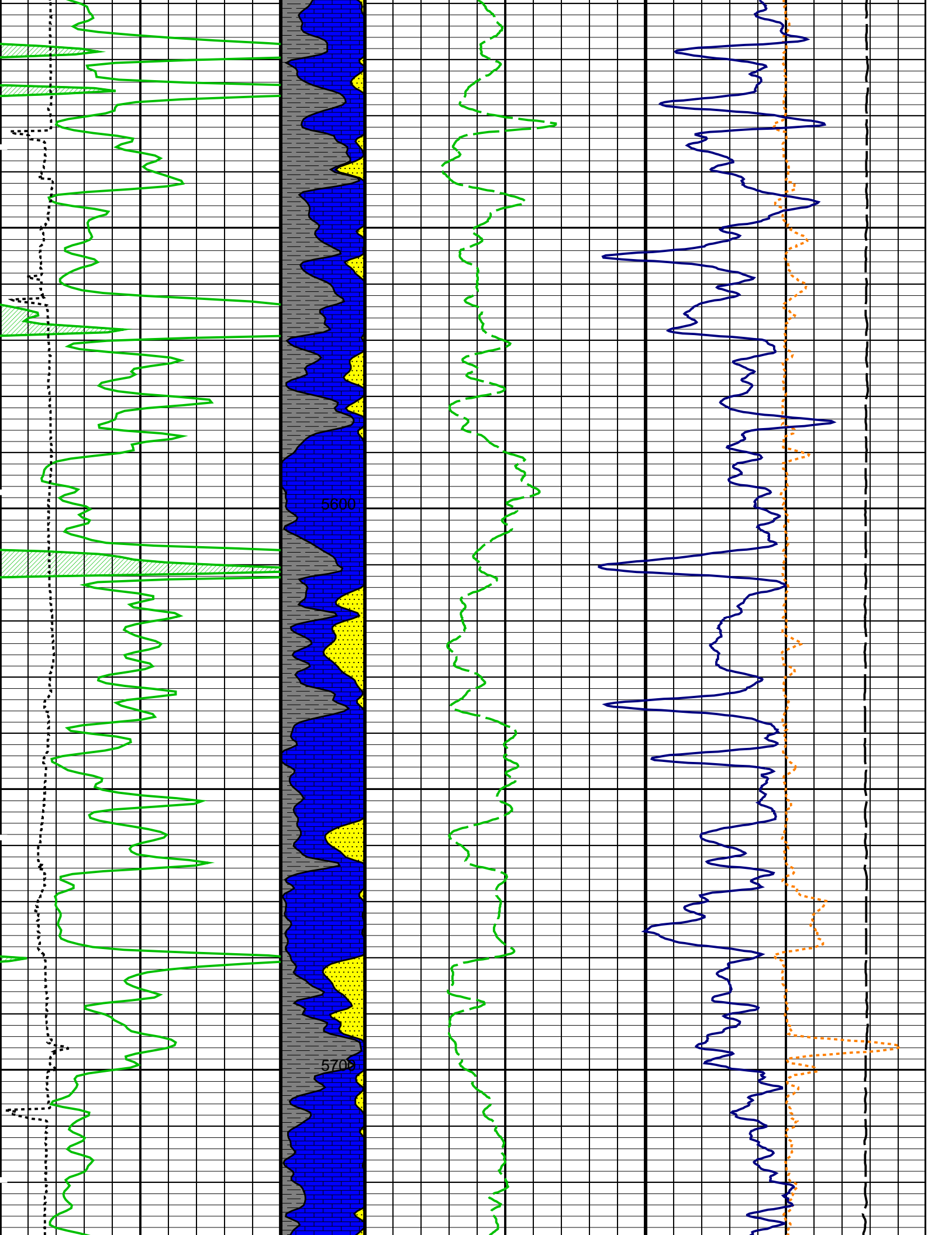
Time Mark Every 60 S

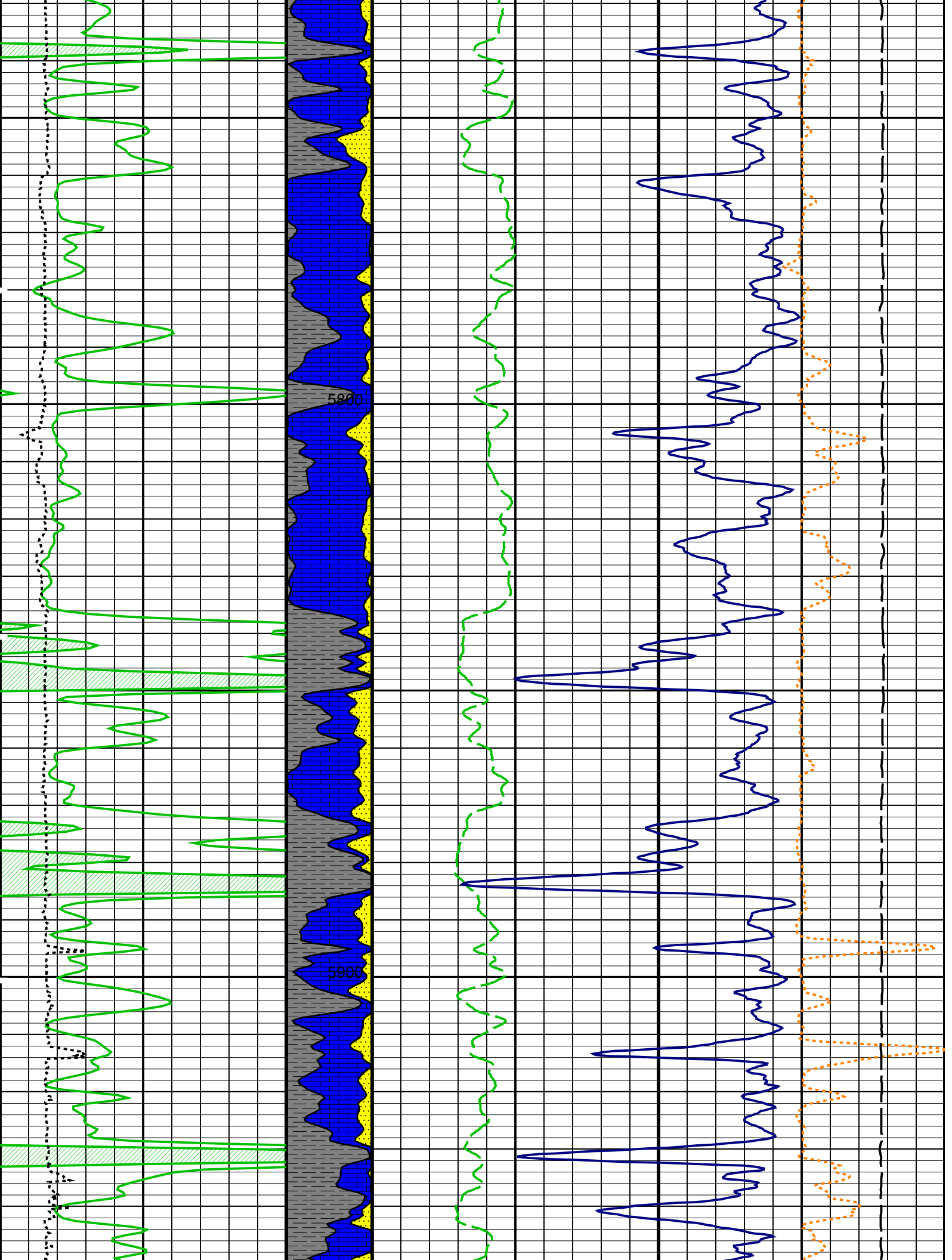


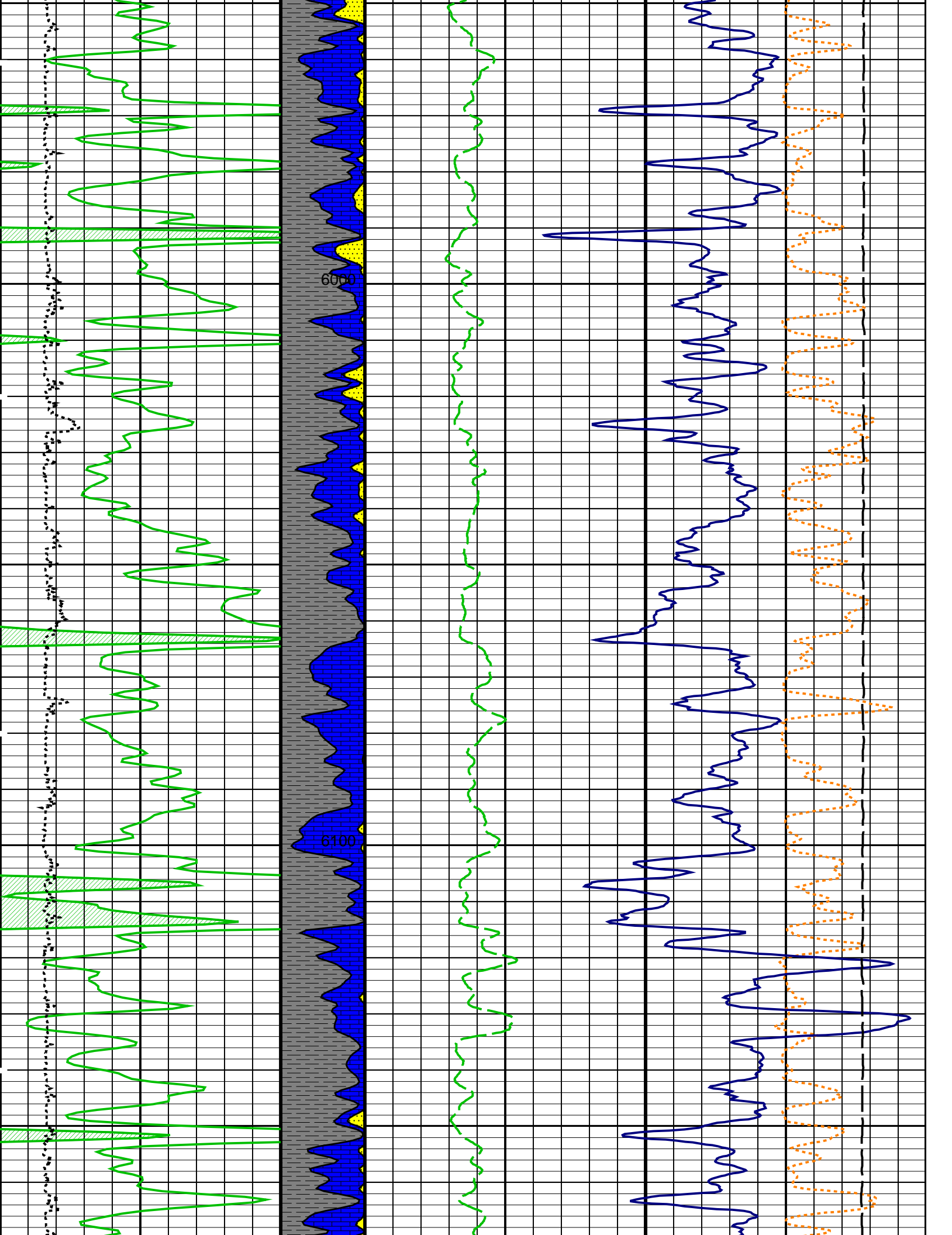
MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

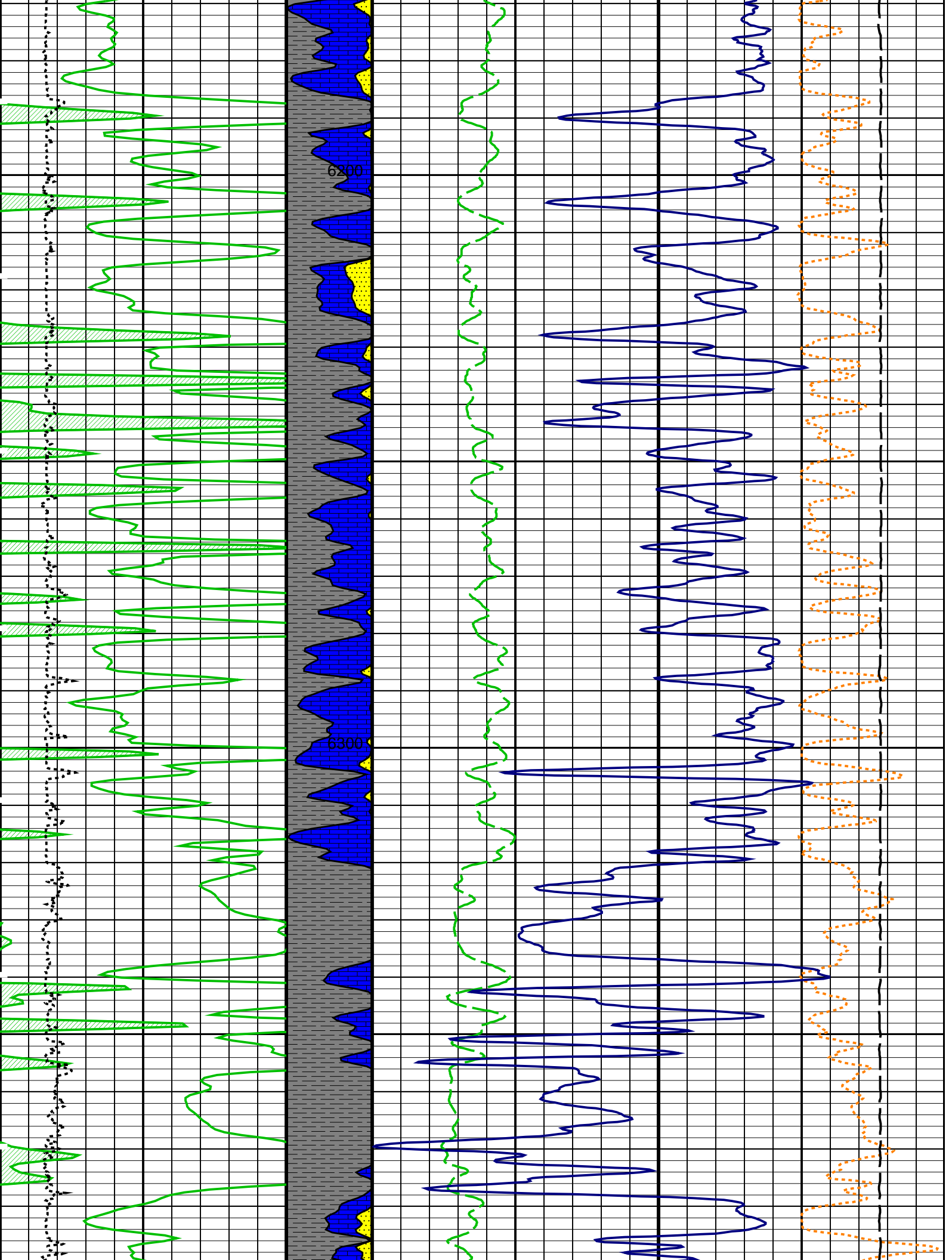


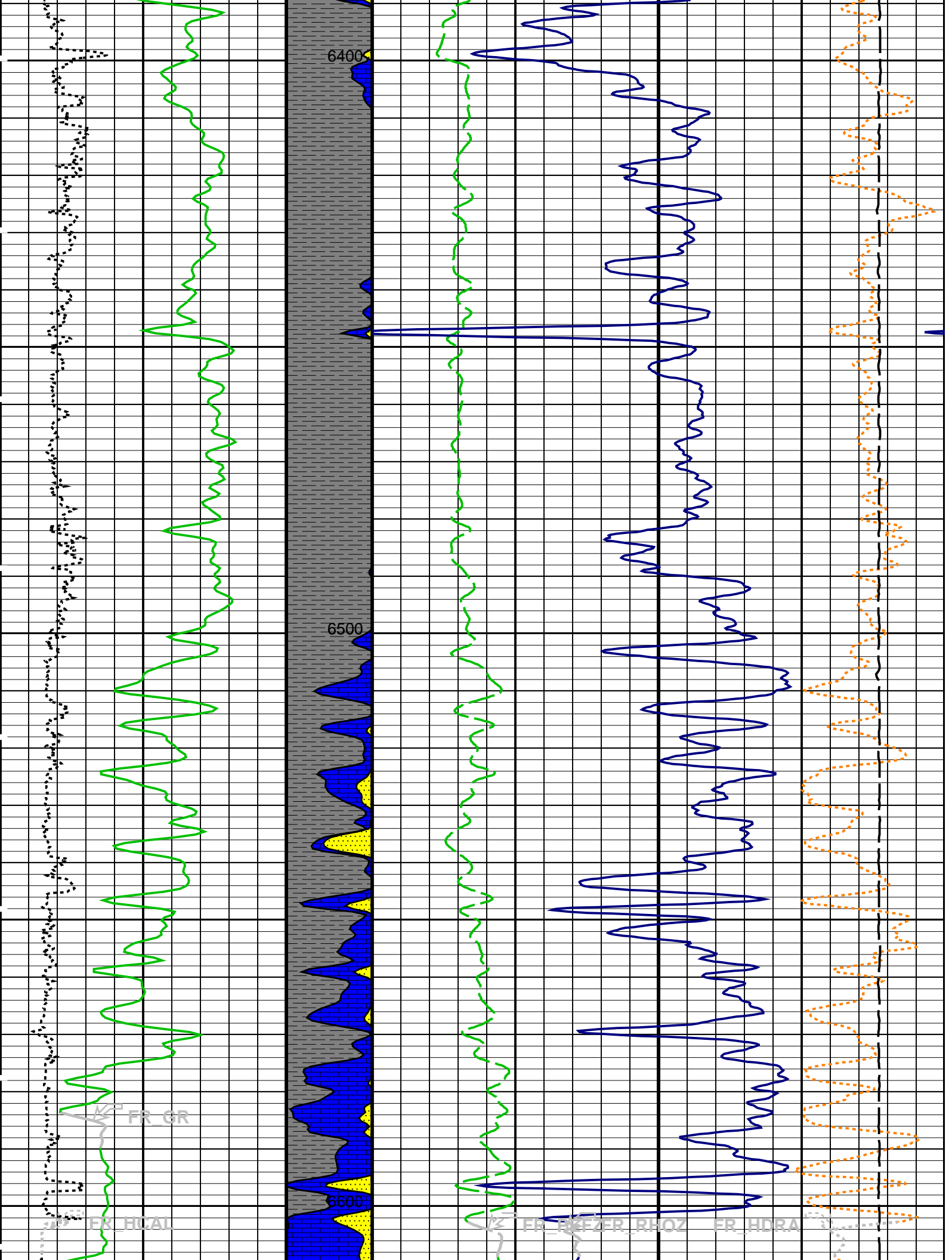


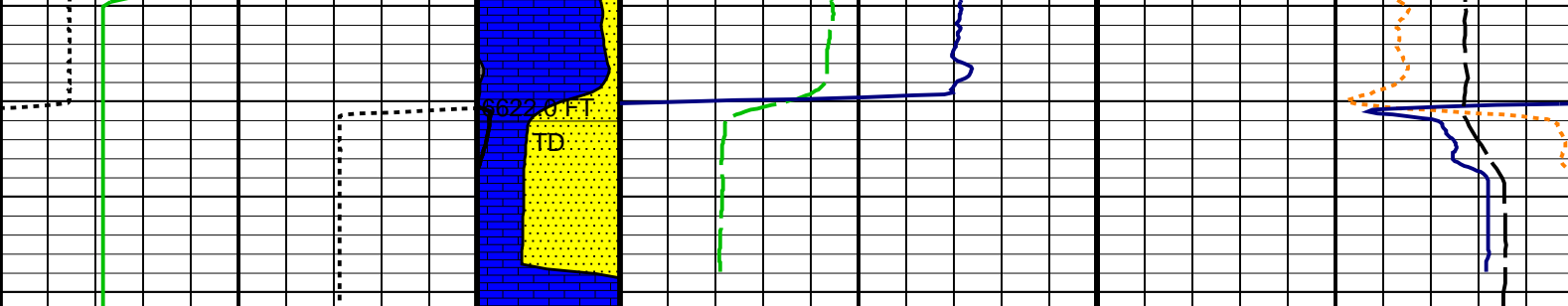




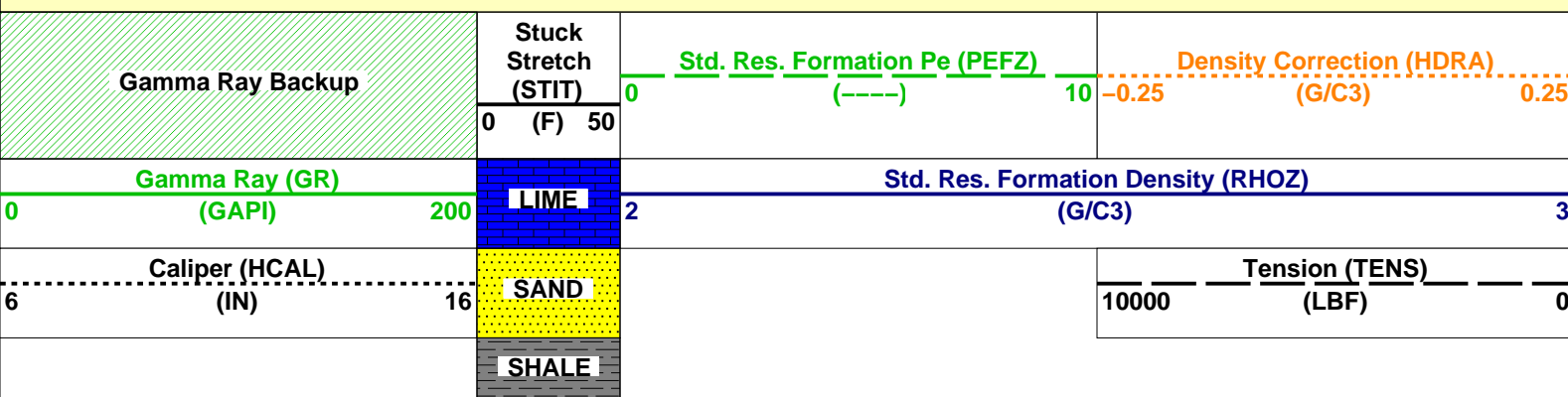








MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HILTB-CTS: High resolution Integrated Logging Tool-CTS			
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHT	Bottom Hole Temperature (used in calculations)	159.6	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	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
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	6623.00	FT
TDL	Total Depth – Logger	6622.00	FT
PERT: Preliminary Evaluation – Real Time			
BDPS	Bulk Density Processing Selector	Standard	
BHT	Bottom Hole Temperature (used in calculations)	159.6	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
RTLE	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	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	159.6	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
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	1.3425	OHMM
TD	Total Depth	6622	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF
Format: DENS		Vertical Scale: 5" per 100'	
		Graphics File Created: 03-Apr-2011 05:00	

OP System Version: 18C0-147

HILTB-CTS 18C0-147

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	03-Apr-2011 03:18	6642.0 FT	348.5 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:24	PRODUCER	03-Apr-2011 05:00
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Schlumberger

10" High Resolution Density

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007LUP	FN:6	PRODUCER	03-Apr-2011 03:18	6642.0 FT	348.5 FT
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:24	PRODUCER	03-Apr-2011 05:00
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OP System Version: 18C0-147

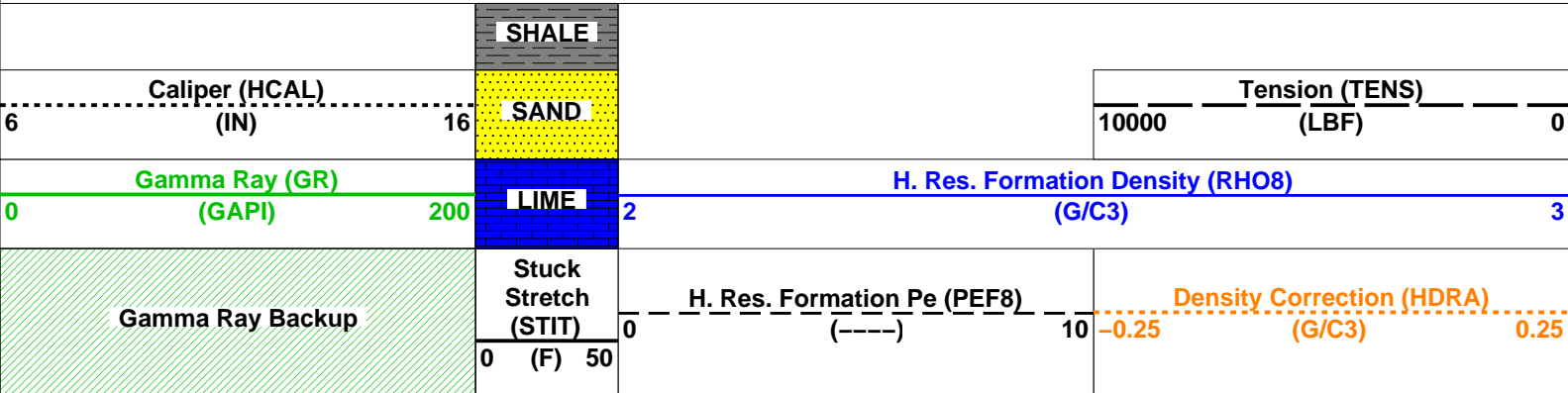
HILTB-CTS 18C0-147

Changed Parameter Summary

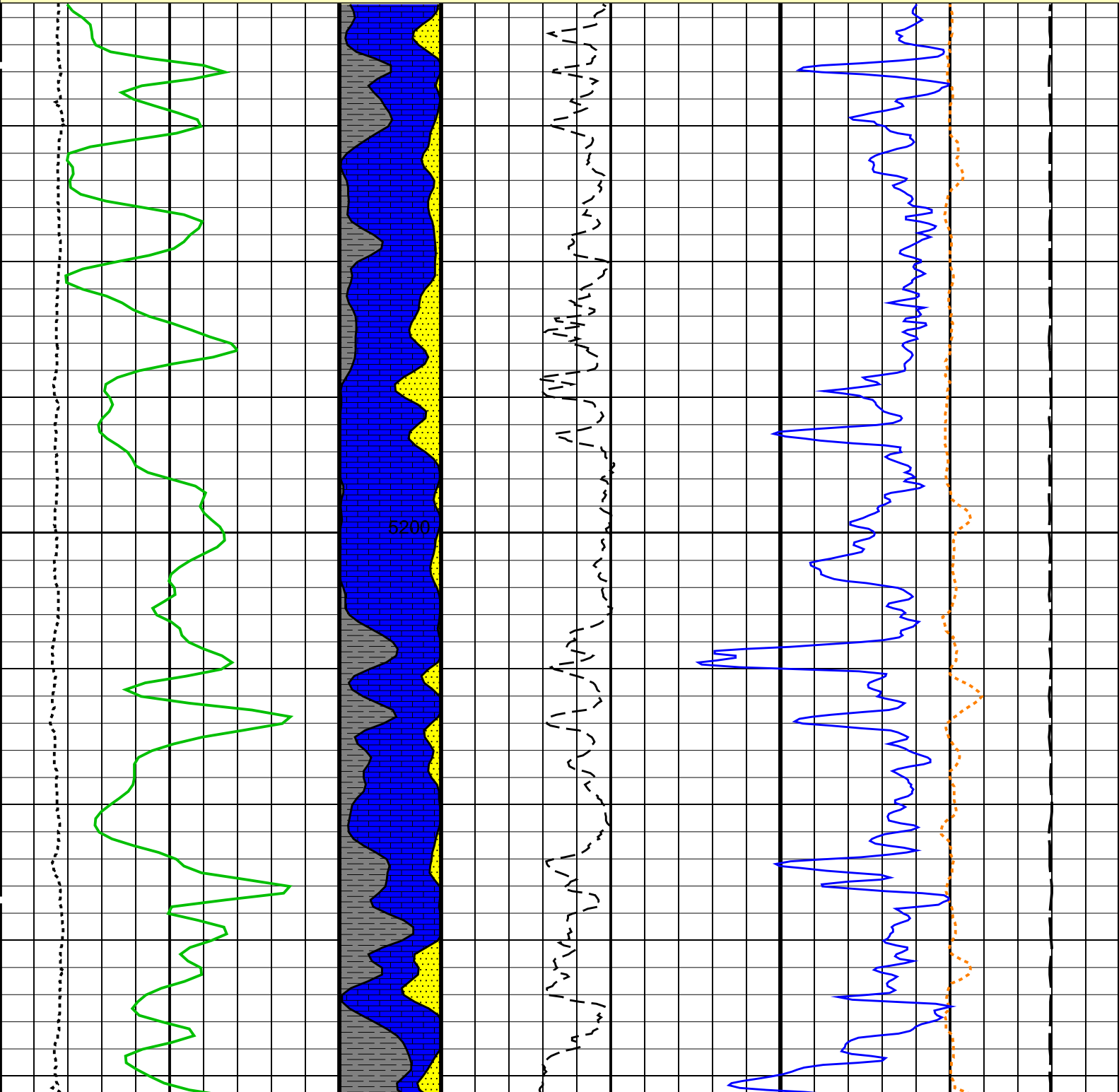
DLIS Name	New Value	Previous Value	Depth & Time
MATR	LIMESTONE	LIMESTONE	6642.0 05:00:07

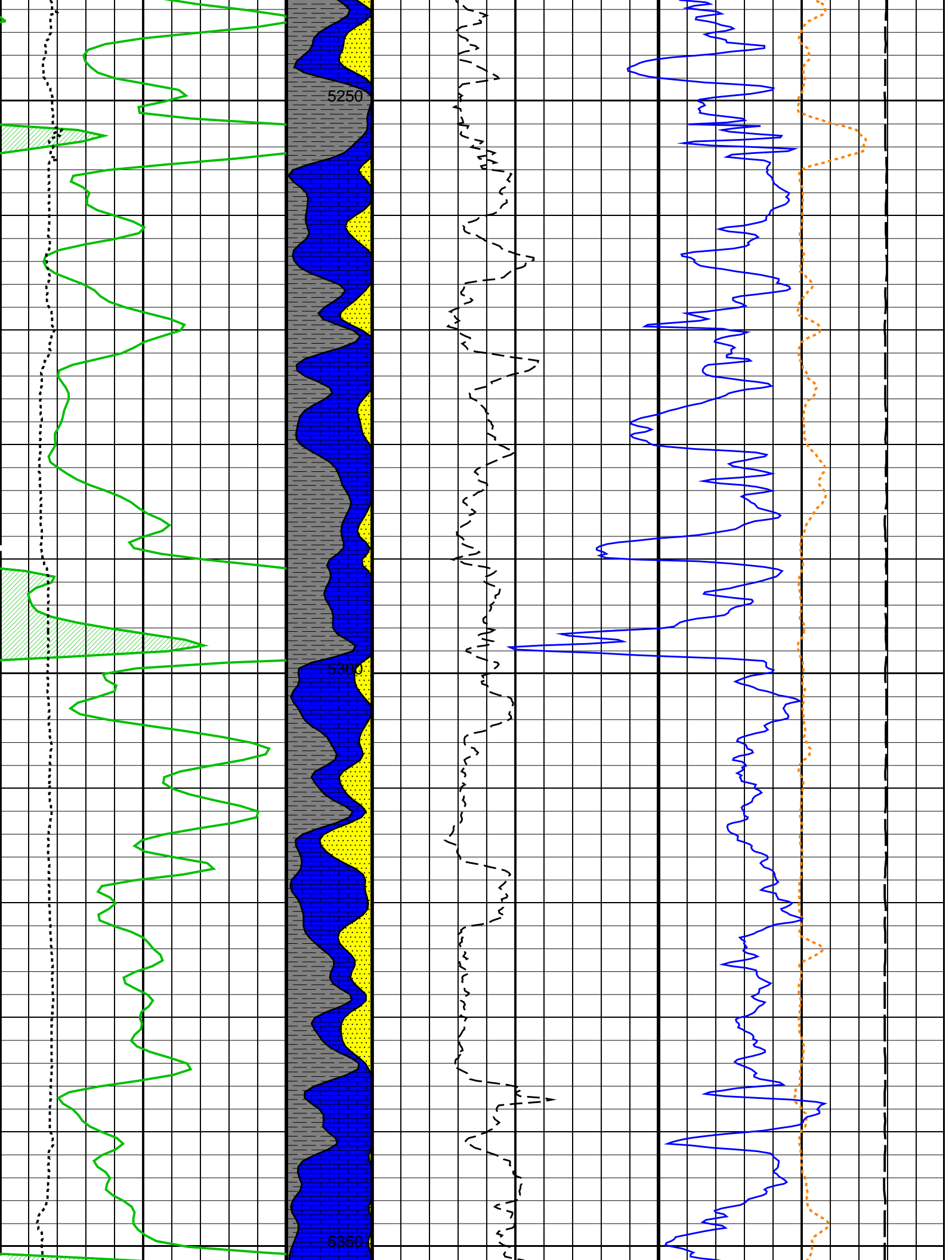
PIP SUMMARY

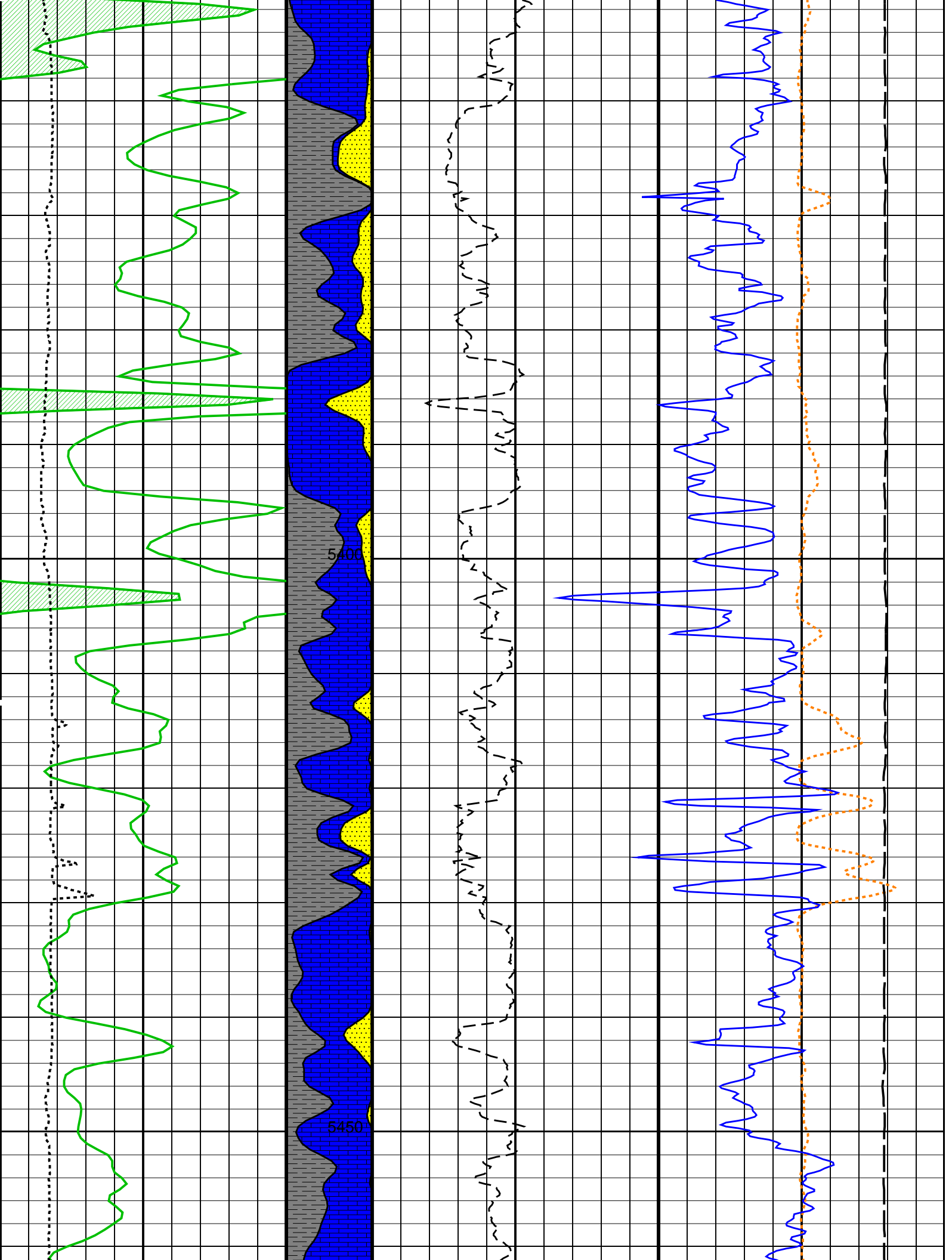
Time Mark Every 60 S

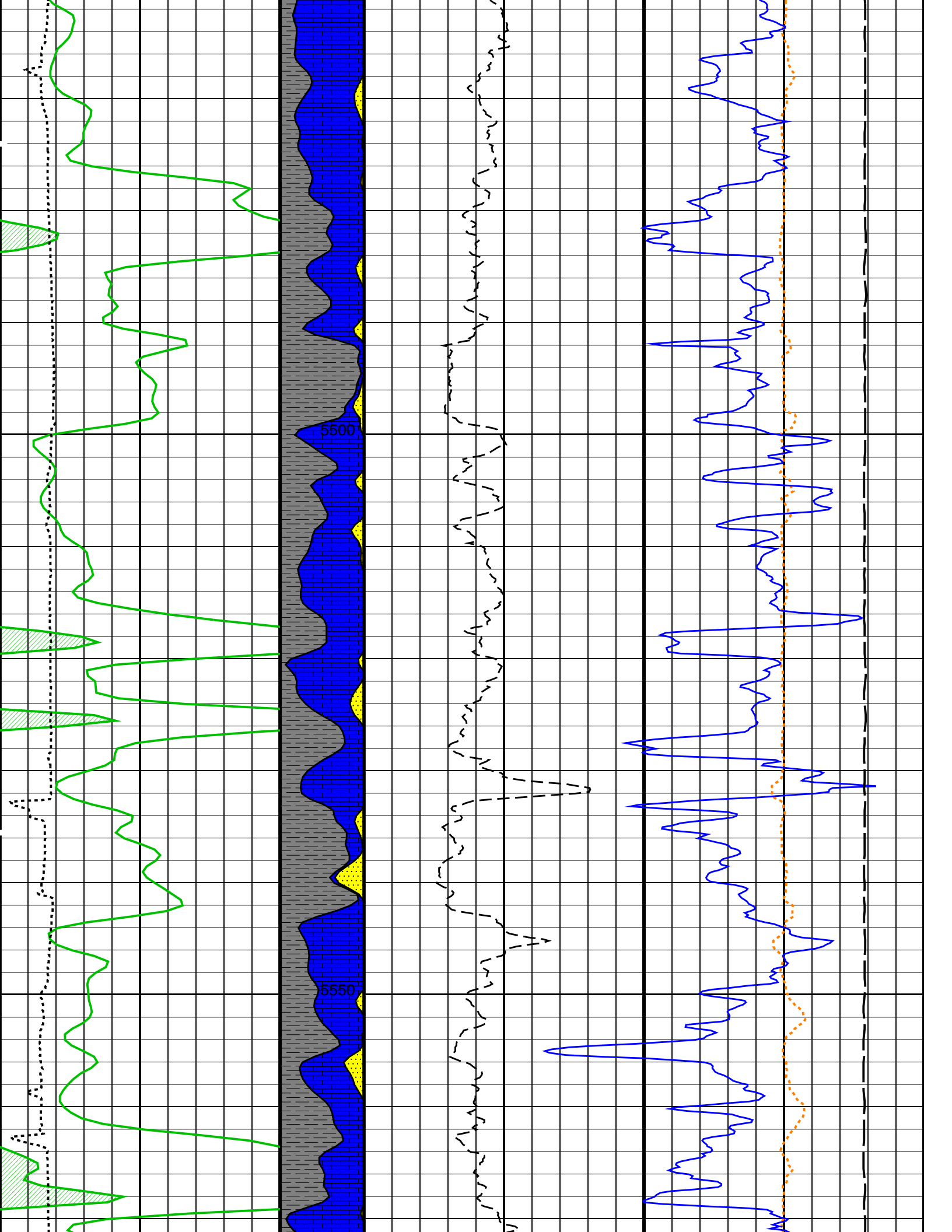


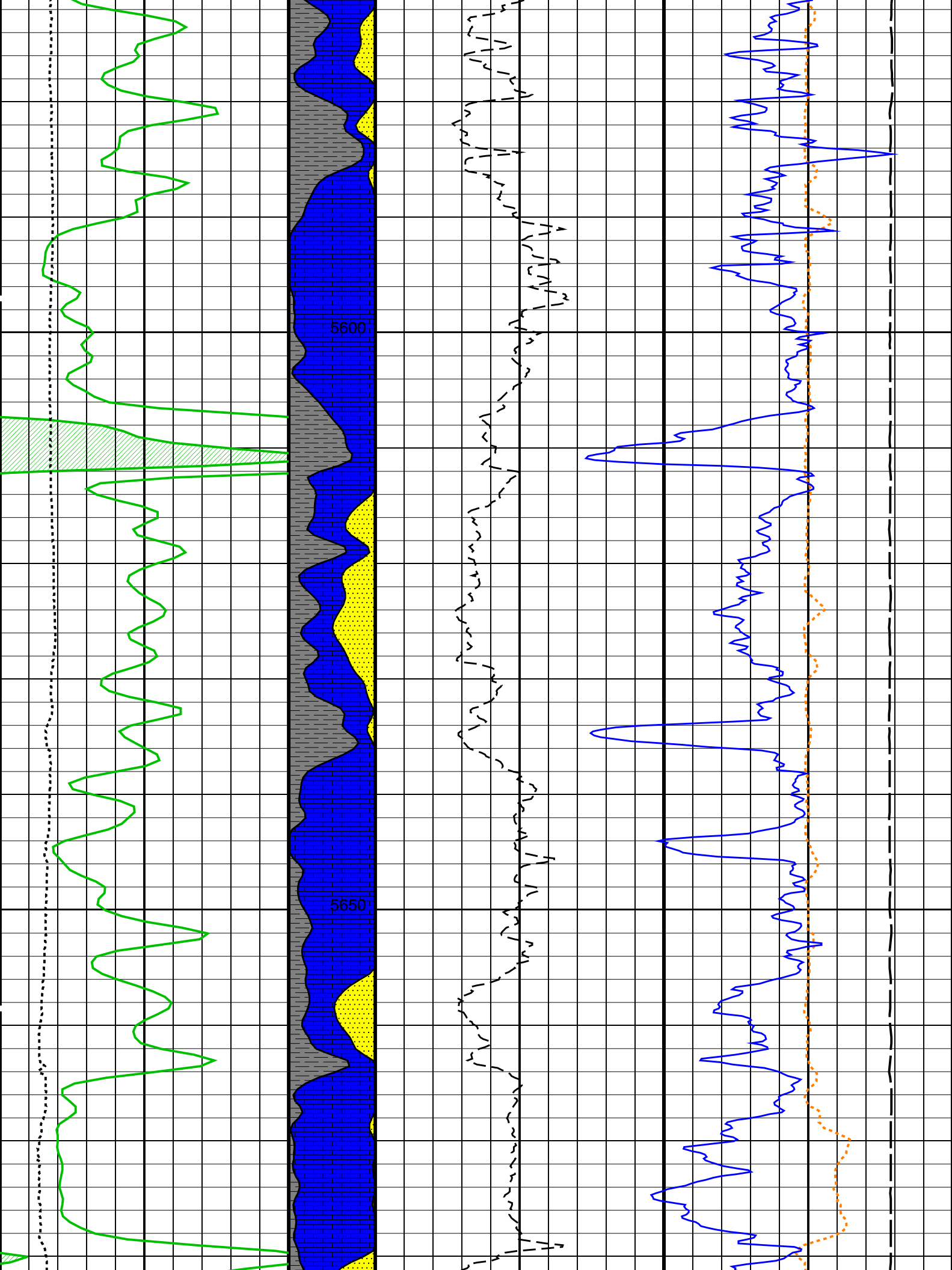
MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

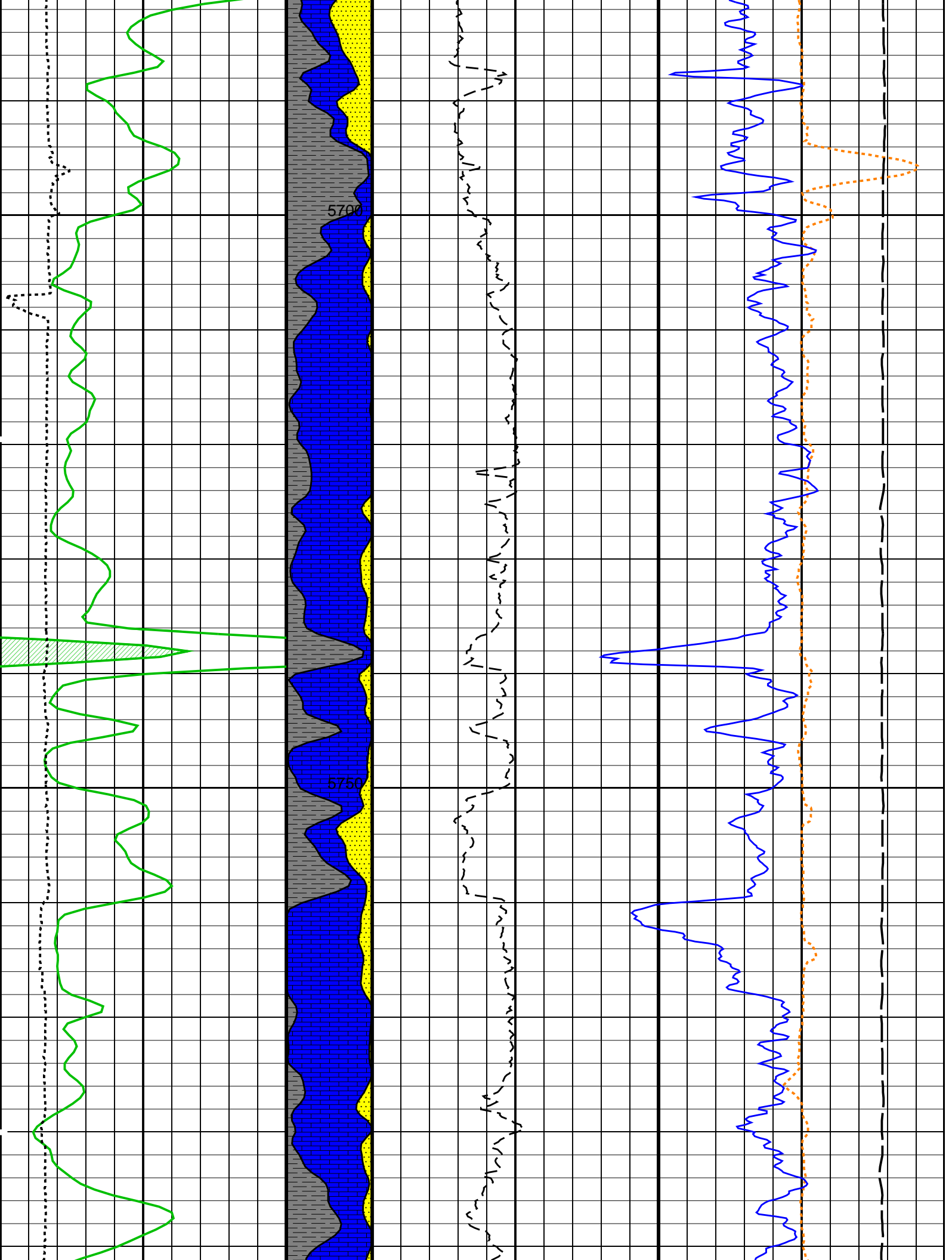


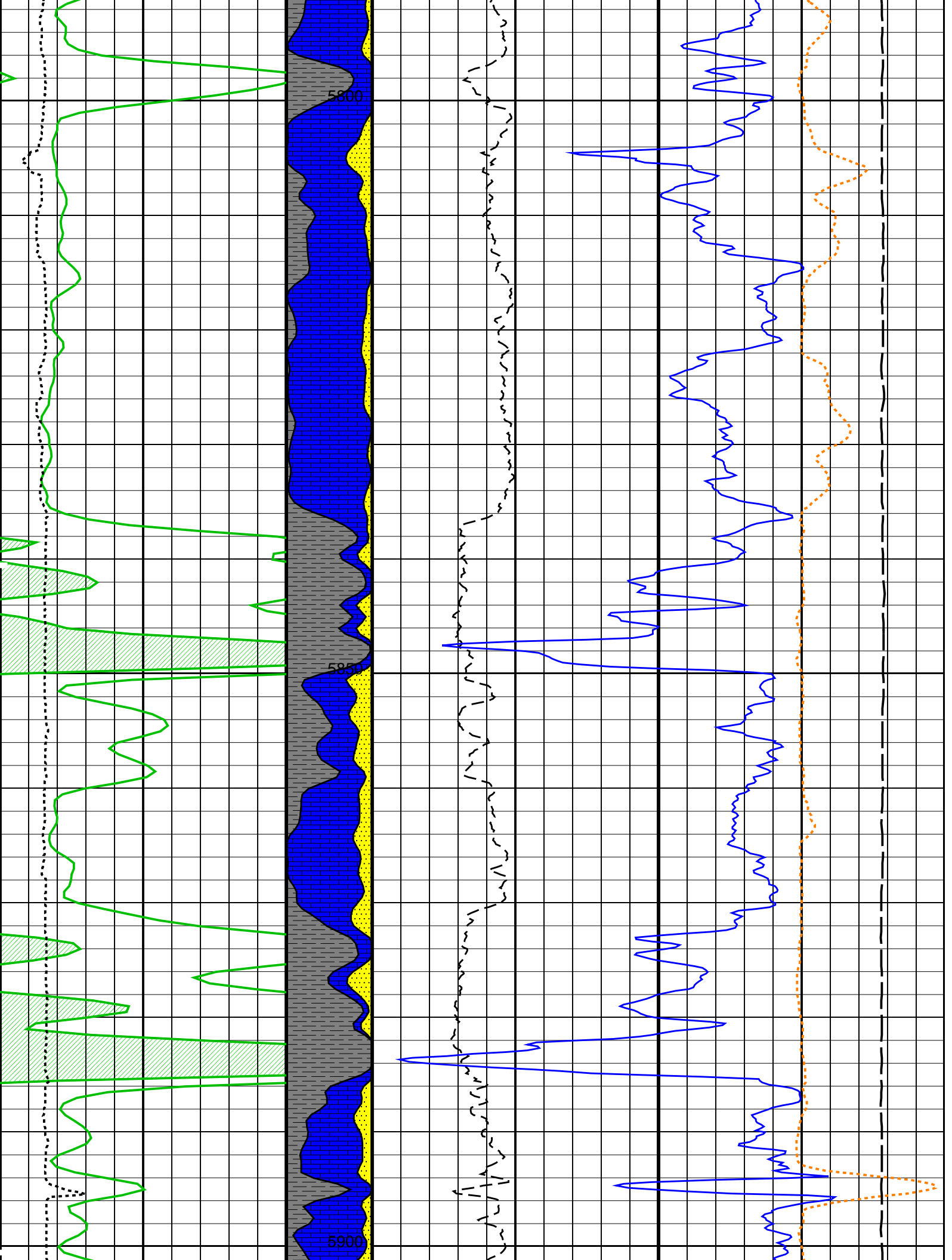


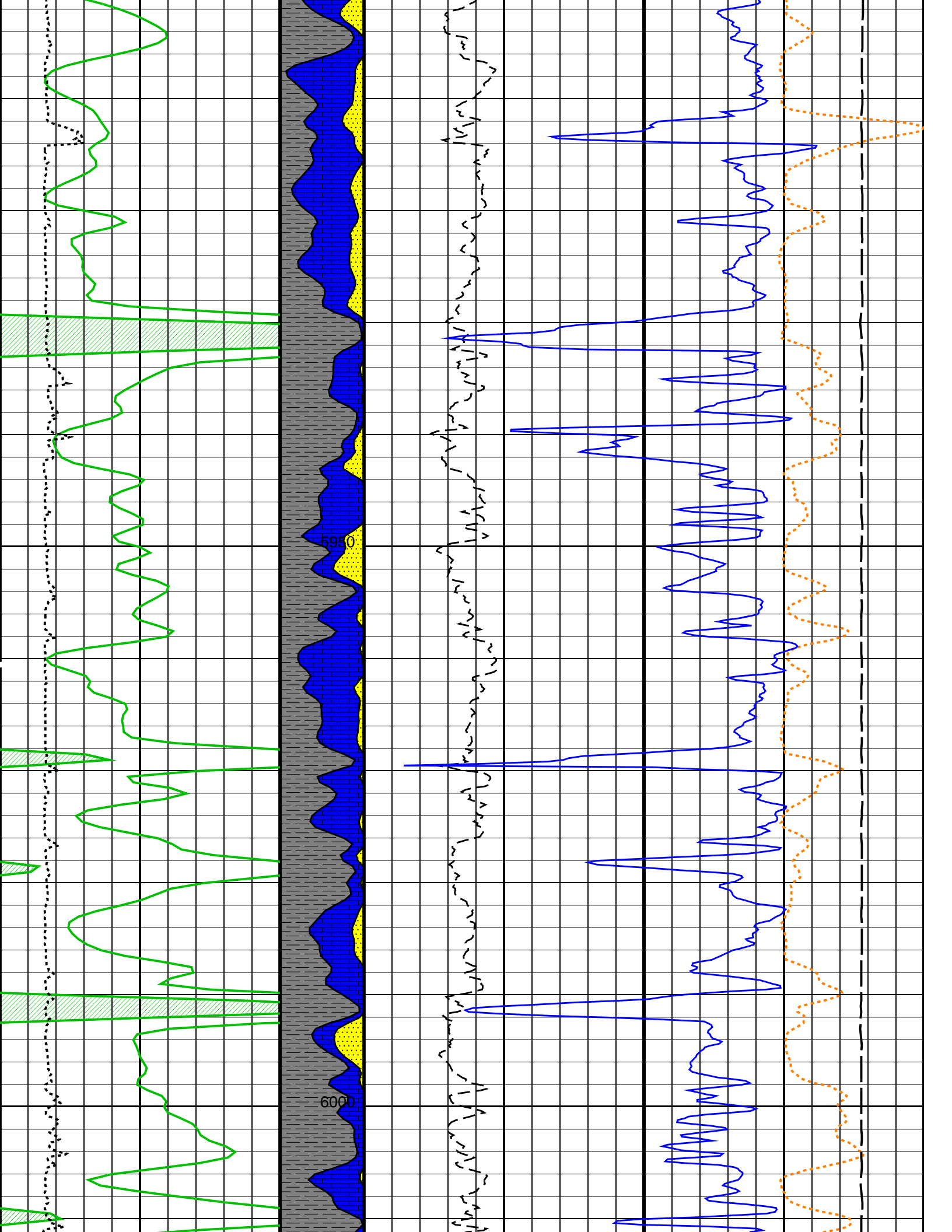


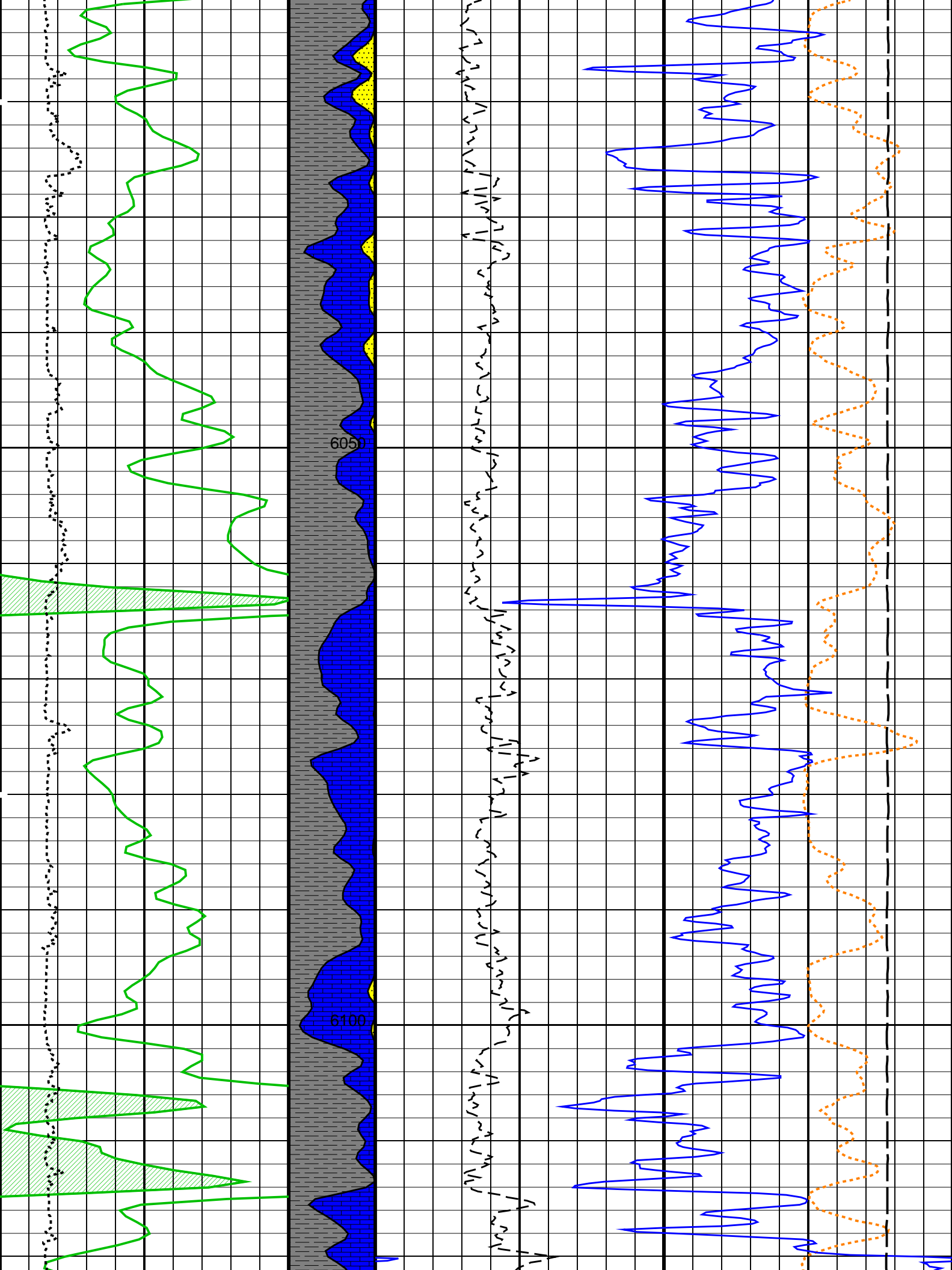


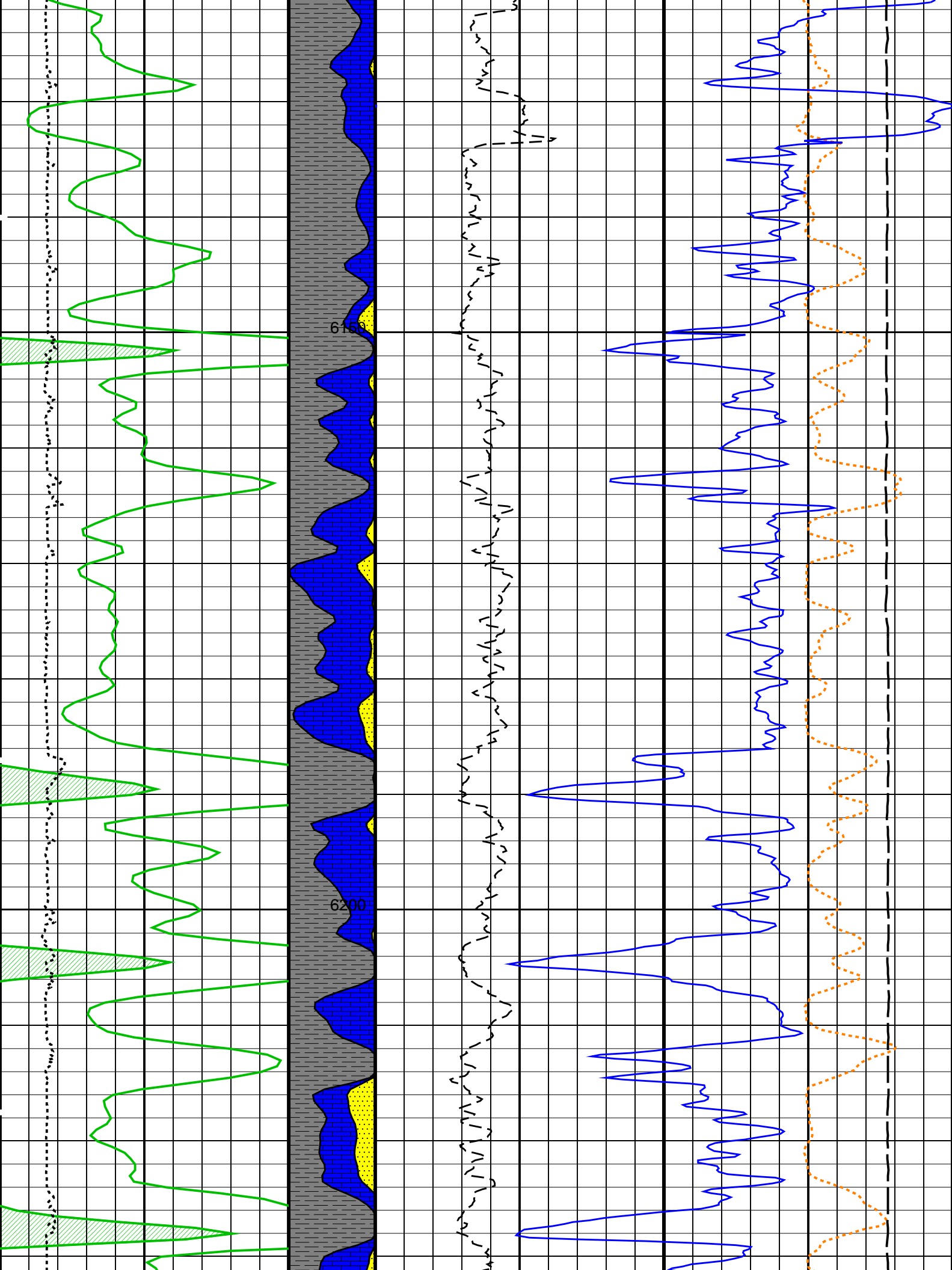


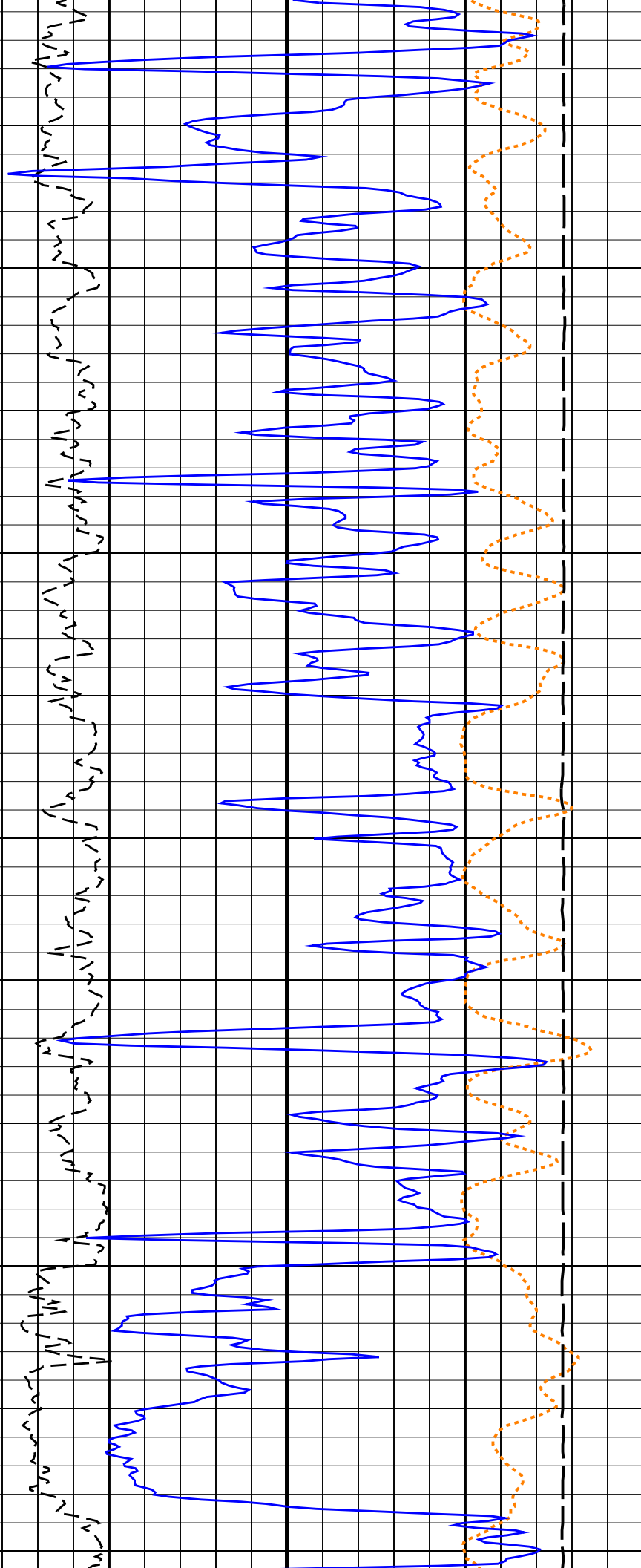
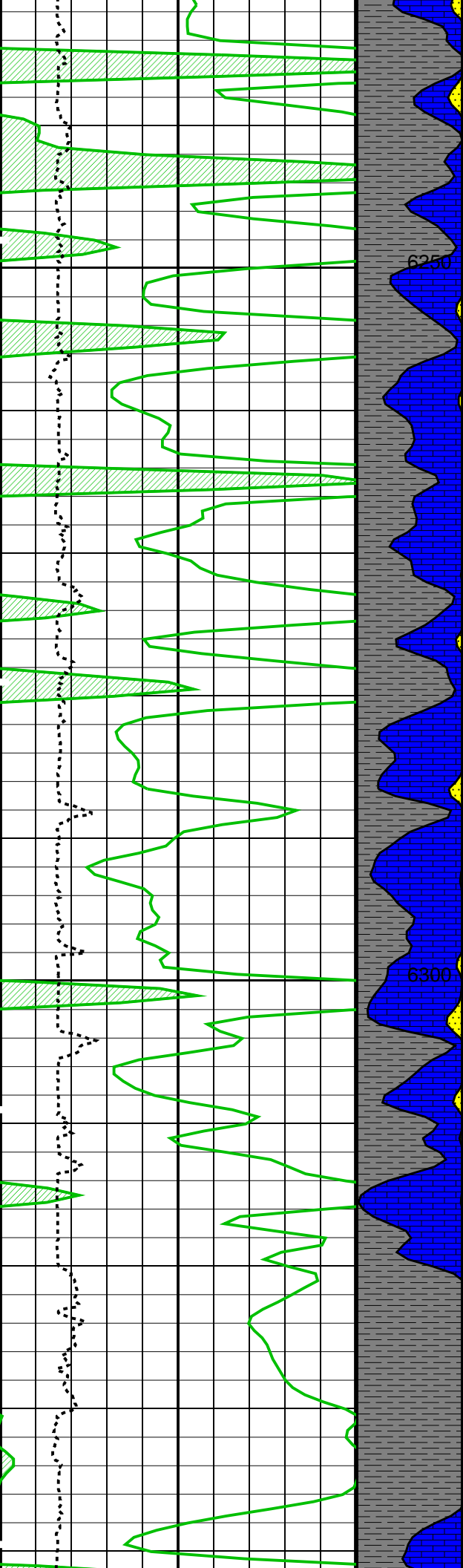


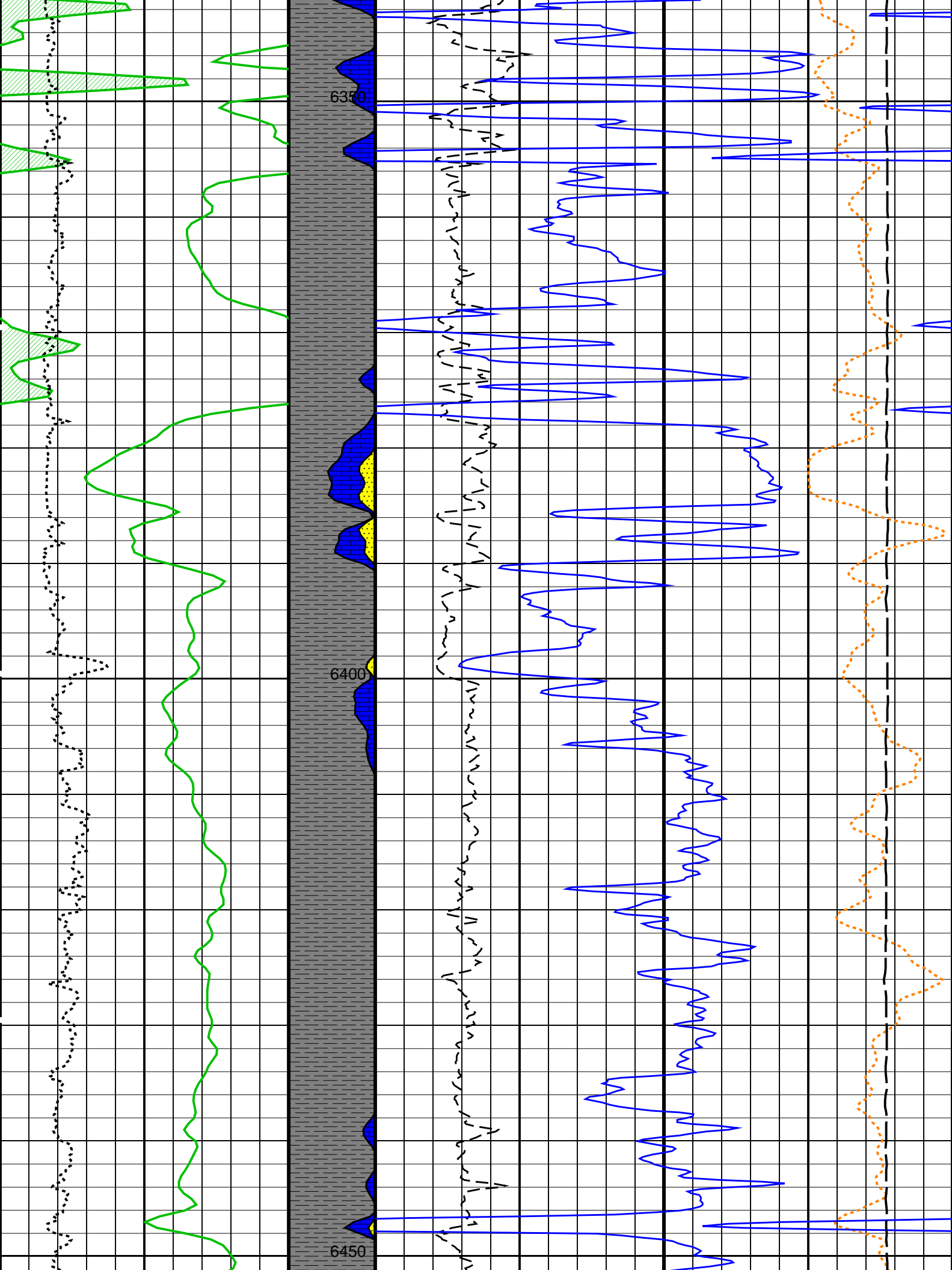


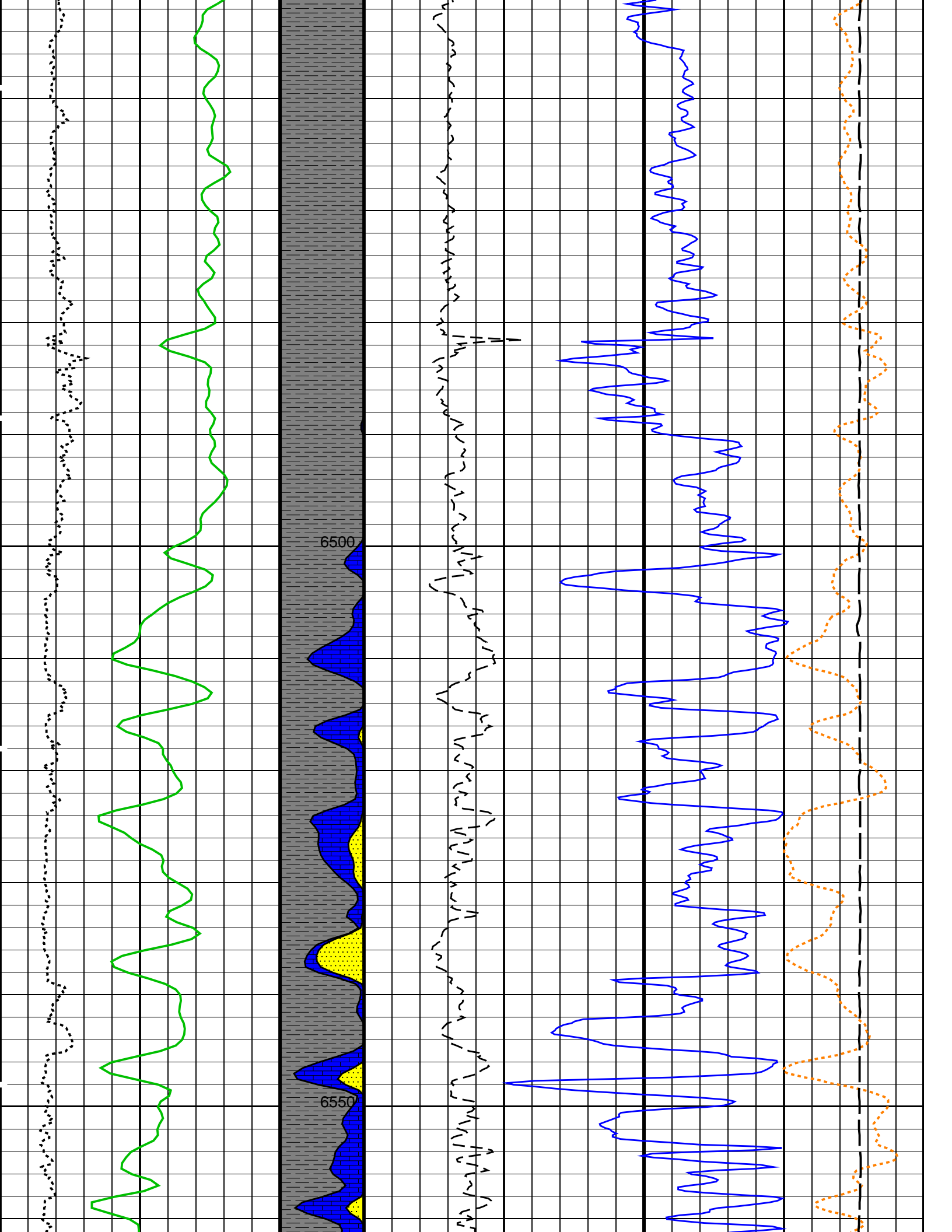


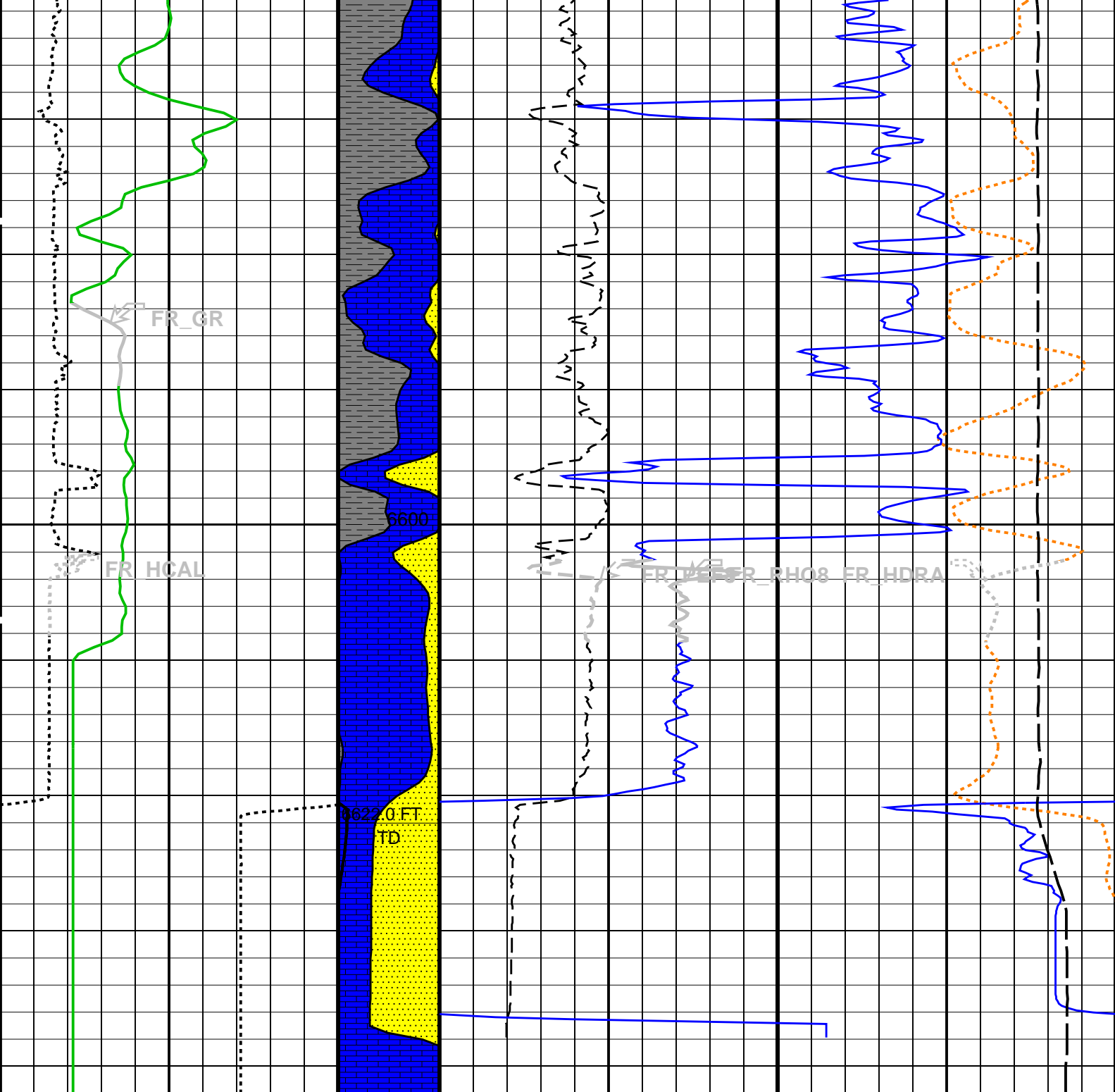












MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

Gamma Ray Backup	Stuck Stretch (STIT)	H. Res. Formation Pe (PEF8) (-----)	Density Correction (HDRA) (G/C3)
	(F) 50		
Gamma Ray (GR) (GAPI)	LIME	H. Res. Formation Density (RHO8) (G/C3)	Tension (TENS) (LBF)
Caliper (HCAL) (IN)	SAND		
	SHALE		

PIP SUMMARY

Parameters

DLIS Name	Description	Value	
HILTB-CTS: High resolution Integrated Logging Tool-CTS			
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHT	Bottom Hole Temperature (used in calculations)	159.6	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	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
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	6623.00	FT
TDL	Total Depth – Logger	6622.00	FT
PERT: Preliminary Evaluation – Real Time			
BDPS	Bulk Density Processing Selector	Standard	
BHT	Bottom Hole Temperature (used in calculations)	159.6	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
RTLF	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	
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UM32	U Matrix (3-Mineral Model, Min-2)	4.779	
UM33	U Matrix (3-Mineral Model, Min-3)	8.997	
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	159.6	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
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
System and Miscellaneous			
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.20	LB/G
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	1.3425	OHMM
TD	Total Depth	6622	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF

Format: DENS_HIRES

Vertical Scale: 10" per 100'

Graphics File Created: 03-Apr-2011 05:00

OP System Version: 18C0-147

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 03-Apr-2011 03:18 6642.0 FT 348.5 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_025PUP FN:24 PRODUCER 03-Apr-2011 05:00

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BEFORE CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-CTS Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 19-Jan-2011 13:04 Before: 2-Apr-2011 20:19							
Thru Cal Magnitude – 0	0	0.6296	0.6289	N/A	N/A	N/A	V
Thru Cal Magnitude – 1	0	1.290	1.289	N/A	N/A	N/A	V
Thru Cal Magnitude – 2	0	0.6393	0.6391	N/A	N/A	N/A	V
Thru Cal Magnitude – 3	0	0.7227	0.7221	N/A	N/A	N/A	V
Thru Cal Magnitude – 4	0	1.359	1.358	N/A	N/A	N/A	V
Thru Cal Magnitude – 5	0	1.973	1.970	N/A	N/A	N/A	V
Thru Cal Magnitude – 6	0	1.972	1.970	N/A	N/A	N/A	V
Thru Cal Magnitude – 7	0	1.411	1.408	N/A	N/A	N/A	V
Phase – 0	0	51.97	51.63	N/A	N/A	N/A	DEG
Phase – 1	0	50.95	50.60	N/A	N/A	N/A	DEG
Phase – 2	0	47.20	46.83	N/A	N/A	N/A	DEG
Phase – 3	0	46.41	46.04	N/A	N/A	N/A	DEG
Phase – 4	0	40.06	39.65	N/A	N/A	N/A	DEG
Phase – 5	0	38.17	37.74	N/A	N/A	N/A	DEG
Phase – 6	0	38.16	37.73	N/A	N/A	N/A	DEG
Phase – 7	0	34.45	33.82	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool-CTS Wellsite Calibration – Electronics Calibration Check – Auxilliary							
Master: 19-Jan-2011 13:04 Before: 2-Apr-2011 20:19							
Array Induction SPA Plus	990.5	993.8	993.4	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	-0.05445	-0.04840	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9219	0.9216	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.00005082	-0.00004719	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-CTS Wellsite Calibration – Test Loop Gain Correction							
Master: 19-Jan-2011 13:04							
Test Loop Gain Magnitude – 0	0	1.008	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 1	0	1.010	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 2	0	1.010	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 3	0	1.010	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 4	0	0.9926	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 5	0	0.9849	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 6	0	0.9857	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude – 7	0	0.9991	N/A	N/A	N/A	N/A	V
Phase – 0	0	-0.6562	N/A	N/A	N/A	N/A	DEG
Phase – 1	0	0.9957	N/A	N/A	N/A	N/A	DEG
Phase – 2	0	-0.03108	N/A	N/A	N/A	N/A	DEG
Phase – 3	0	-0.01144	N/A	N/A	N/A	N/A	DEG
Phase – 4	0	-0.2043	N/A	N/A	N/A	N/A	DEG
Phase – 5	0	-0.1739	N/A	N/A	N/A	N/A	DEG
Phase – 6	0	1.290	N/A	N/A	N/A	N/A	DEG
Phase – 7	0	-0.1598	N/A	N/A	N/A	N/A	DEG

High resolution Integrated Logging Tool-CTS Wellsite Calibration – Sonde Error Correction

Master: 19-Jan-2011 13:04

Sonde Error Correction	0	0	03.40	N/A	N/A	N/A	N/A	MM/M
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R Sonde Error Correction – 0	0	-93.49	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 1	0	167.9	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 2	0	115.7	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 3	0	59.53	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 4	0	27.36	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 5	0	14.17	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 6	0	10.80	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 7	0	-1.341	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 0	0	-229.8	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 1	0	8.961	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 2	0	-193.6	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 3	0	-81.11	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 4	0	-13.84	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 5	0	-14.82	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 6	0	-5.303	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 7	0	2.499	N/A	N/A	N/A	N/A	MM/M
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Mud Gain Correction							
Master: 19–Jan–2011 13:04							
Coarse – Mag, Real, Imag – 0	0	0.8308	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 1	0	0.8308	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 2	0	0.8308	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 0	0	0.8306	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 1	0	0.8306	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 2	0	0.8306	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Stab Measurement Summary							
Before: 2–Apr–2011 20:15							
BS Window Ratio	0.7424	N/A	0.7438	N/A	N/A	N/A	
BS Window Sum	10030	N/A	10020	N/A	N/A	N/A	CPS
SS Window Ratio	0.4767	N/A	0.4782	N/A	N/A	N/A	
SS Window Sum	10210	N/A	10200	N/A	N/A	N/A	CPS
LS Window Ratio	0.2975	N/A	0.2939	N/A	N/A	N/A	
LS Window Sum	1105	N/A	1099	N/A	N/A	N/A	CPS
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Photo–multiplier High Voltages Calibrations							
Before: 2–Apr–2011 20:15							
BS PM High Voltage (Command)	1511	N/A	1534	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1653	N/A	1652	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1551	N/A	1566	N/A	N/A	N/A	V
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Crystal Quality Resolutions Calibration							
Before: 2–Apr–2011 20:15							
BS Crystal Resolution	11.52	N/A	11.56	N/A	N/A	N/A	%
SS Crystal Resolution	10.46	N/A	10.48	N/A	N/A	N/A	%
LS Crystal Resolution	9.578	N/A	9.263	N/A	N/A	N/A	%
High resolution Integrated Logging Tool–CTS Wellsite Calibration – MCFL Calibration							
Before: 2–Apr–2011 20:18							
Raw B0 Resistivity	3875	N/A	3834	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3792	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3797	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool–CTS Wellsite Calibration – HILT Caliper Calibration							
Before: 2–Apr–2011 20:12							
HILT Caliper Zero Measurement	8.000	N/A	8.124	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.25	N/A	N/A	N/A	IN
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Detector Calibration							
Before: 2–Apr–2011 20:17							
Gamma Ray Background	30.00	N/A	72.34	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	165.0	N/A	166.5	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Zero Measurement							
Master: 31–Jan–2011 13:40 Before: 2–Apr–2011 20:13							
CNTC Background	25.85	25.85	26.70	N/A	N/A	3.878	CPS
CFTC Background	27.22	27.22	26.65	N/A	N/A	4.083	CPS
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Ratio Measurement							
Master: 31–Jan–2011 13:40							
Thermal Near Corr. (Tank)	5800	5290	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2218	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.385	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–CTS Wellsite Calibration – Accelerometer Calibration							
Before: 3–Apr–2011 2:31							
Z–Axis Acceleration	32.19	N/A	32.24	N/A	N/A	N/A	F/S2

The GLS-VJ source activity is acceptable.

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

































NCT-B Water Temperature 42.0 DEGF.
Thermal Housing Size 3.369 IN.
NSR-F serial number 5168









High resolution Integrated Logging Tool-CTS / Equipment Identification

















Primary Equipment:

Array Induction Tool – H	AIT – H	
Rm/SP Bottom Nose	AHRM – A	
Array Induction Sonde	AHIS – BA	216
HILT high-Resolution Mechanical Sonde	HRMS – B	
HILT Rxo Gamma-ray Device	HRGD – B	
HILT Micro Cylindrically Focused Log Dev	MCFL –	
GR Logging Source	GLS – VJ	5363
HILT High Res. Control Cartridge	HRCC – B	

















Auxiliary Equipment:

High resolution Integrated Logging Tool-CTS Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6296		0.6050	51.97		71.00
	Before	0.6289			51.63		
1	Master	1.290		1.270	50.95		70.00
	Before	1.289			50.60		
2	Master	0.6393		0.6230	47.20		66.00
	Before	0.6391			46.83		
3	Master	0.7227		0.7040	46.41		65.00
	Before	0.7221			46.04		
4	Master	1.359		1.337	40.06		59.00
	Before	1.358			39.65		
5	Master	1.973		1.955	38.17		57.00
	Before	1.970			37.74		
6	Master	1.972		1.955	38.16		57.00
	Before	1.970			37.73		
7	Master	1.411		1.415	34.45		53.00
	Before	1.408			33.82		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)
Master: 19-Jan-2011 13:04				Before: 2-Apr-2011 20:19			



High resolution Integrated Logging Tool-CTS Wellsite Calibration					
Electronics Calibration Check – Auxilliary					
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value
Master		993.8	Master		-0.05445
Before		993.4	Before		-0.04840
941.0 (Minimum)		990.5 (Nominal)	-50.00 (Minimum)		50.00 (Maximum)
Phase Array Induction Temperature Plus V		Value	Phase Array Induction Temperature Zero V		Value
Master		0.9219	Master		-5.082E-00
Before		0.9216	Before		-4.719E-00
0.8700 (Minimum)		0.9150 (Nominal)	-0.05000 (Minimum)		0.05000 (Maximum)





High resolution Integrated Logging Tool-CTS Wellsite Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG
0	1.008				-0.6562	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
1	1.010				0.9957	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
2	1.010				-0.03108	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
3	1.010				-0.01144	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
4	0.9926				-0.2043	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
5	0.9849				-0.1739	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
6	0.9857				1.290	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)
7	0.9991				-0.1598	
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal) 3.000 (Maximum)

Master: 19-Jan-2011 13:04

High resolution Integrated Logging Tool-CTS Wellsite Calibration						
Sonde Error Correction						
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M
0	-93.49				-229.8	
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)	-2250 (Minimum)	0 (Nominal) 2250 (Maximum)
1	167.9				8.961	
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)	-625.0 (Minimum)	0 (Nominal) 625.0 (Maximum)
2	115.7				-193.6	
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum)	0 (Nominal) 350.0 (Maximum)
3	59.53				-81.11	
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum)	0 (Nominal) 250.0 (Maximum)
4	27.36				-13.84	
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum)	0 (Nominal) 63.00 (Maximum)
5	14.17				-14.82	
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum)	0 (Nominal) 50.00 (Maximum)
6	10.80				-5.303	
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum)	0 (Nominal) 30.00 (Maximum)
7	-1.341				2.499	
		-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)	0 (Nominal) 30.00 (Maximum)







Master: 19-Jan-2011 13:04

High resolution Integrated Logging Tool-CTS Wellsite Calibration						
Mud Gain Correction						
Idx	Value	Coarse - Mag, Real, Imag			Value	Fine - Mag, Real, Imag
0	0.8308				0.8306	
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal) 1.200 (Maximum)




1	0.8308		0.8306			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	0.8308		0.8306			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 19-Jan-2011 13:04




Master: 19-Jan-2011 13:04

High resolution Integrated Logging Tool-CTS Wellsite Calibration														
Stab Measurement Summary														
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value	Phase	LS Window Ratio			Value
Before				0.7438	Before				0.4782	Before				0.2939
	0.7053 (Minimum)	0.7424 (Nominal)	0.7795 (Maximum)		0.4529 (Minimum)	0.4767 (Nominal)	0.5006 (Maximum)			0.2827 (Minimum)	0.2975 (Nominal)	0.3124 (Maximum)		
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value	Phase	LS Window Sum CPS			Value
Before				10020	Before				10200	Before				1099
	9526 (Minimum)	10030 (Nominal)	10530 (Maximum)		9696 (Minimum)	10210 (Nominal)	10720 (Maximum)			1050 (Minimum)	1105 (Nominal)	1161 (Maximum)		
Before: 2-Apr-2011 20:15														

Before: 2-Apr-2011 20:15

High resolution Integrated Logging Tool—CTS 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				1534	Before				1652	Before				1566
	1411 (Minimum)	1511 (Nominal)	1611 (Maximum)		1553 (Minimum)	1653 (Nominal)	1753 (Maximum)			1451 (Minimum)	1551 (Nominal)	1651 (Maximum)		
Before: 2-Apr-2011 20:15														



Before: 2-Apr-2011 20:15

High resolution Integrated Logging Tool-CTS Wellsite Calibration											
Crystal Quality Resolutions Calibration											
Phase	BS Crystal Resolution %		Value	Phase	SS Crystal Resolution %		Value	Phase	LS Crystal Resolution %		Value
Before			11.56	Before			10.48	Before			9.263
	10.52 (Minimum)	11.52 (Nominal)	12.52 (Maximum)		9.462 (Minimum)	10.46 (Nominal)	11.46 (Maximum)		8.578 (Minimum)	9.578 (Nominal)	10.58 (Maximum)
Before: 2-Apr-2011 20:15											



Before: 2-Apr-2011 20:15

High resolution Integrated Logging Tool–CTS Wellsite Calibration														
MCFL Calibration														
Phase	Raw B0 Resistivity OHMM			Value	Phase	Raw B1 Resistivity OHMM			Value	Phase	Raw B2 Resistivity OHMM			Value
Before	<div><div></div></div>			3834	Before	<div><div></div></div>			3792	Before	<div><div></div></div>			3797
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)			3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		
Before: 2–Apr–2011 20:18														





Before: 2-Apr-2011 20:18

High resolution Integrated Logging Tool-CTS Wellsite Calibration									
HILT Caliper Calibration									
Phase	HILT Caliper Zero Measurement IN		Value	Phase	HILT Caliper Plus Measurement IN		Value		
Before			8.124	Before			12.25		
	6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)		9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)		

Before: 2-Apr-2011 20:12

High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Detector Calibration									
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig - Bkgd) GAPI		Value		
Before			72.34	Before			166.5		
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		157.1 (Minimum)	165.0 (Nominal)	206.3 (Maximum)		

Before: 2-Apr-2011 20:17

High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Zero Measurement									
Phase	CNTC Background CPS		Value	Phase	CFTC Background CPS		Value		
Master			25.85	Master			27.22		
Before			26.70	Before			26.65		

Before		25.85 (Nominal)	40.00 (Maximum)	Before		27.22 (Nominal)	40.00 (Maximum)
5.000 (Minimum)			20.70	5.000 (Minimum)			20.00
Master: 31-Jan-2011 13:40				Before: 2-Apr-2011 20:13			

High resolution Integrated Logging Tool–CTS Wellsite Calibration														
Ratio Measurement														
Phase	Thermal Near Corr. (Tank) CPS			Value	Phase	Thermal Far Corr. (Tank) CPS			Value	Phase	CNTC/CFTC (Tank)			Value
Master	<div><div></div></div>			5290	Master	<div><div></div></div>			2218	Master	<div><div></div></div>			2.385
	4700 (Minimum)	5800 (Nominal)	6900 (Maximum)			1900 (Minimum)	2400 (Nominal)	2900 (Maximum)			2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)	
Master: 31–Jan–2011 13:40														

High resolution Integrated Logging Tool-CTS Wellsite Calibration			
Accelerometer Calibration			
Phase	Z-Axis Acceleration F/S2		Value
Before			32.24
	31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)
Before: 3-Apr-2011 2:31			

Company: **Vecta Oil & Gas Ltd**

Schlumberger

Well: **Cottonwood Grazing 3-22**

Field: **Wildcat**

County: **Lincoln**

State: **Colorado**

Platform Express
Compensated Neutron
Litho Density