

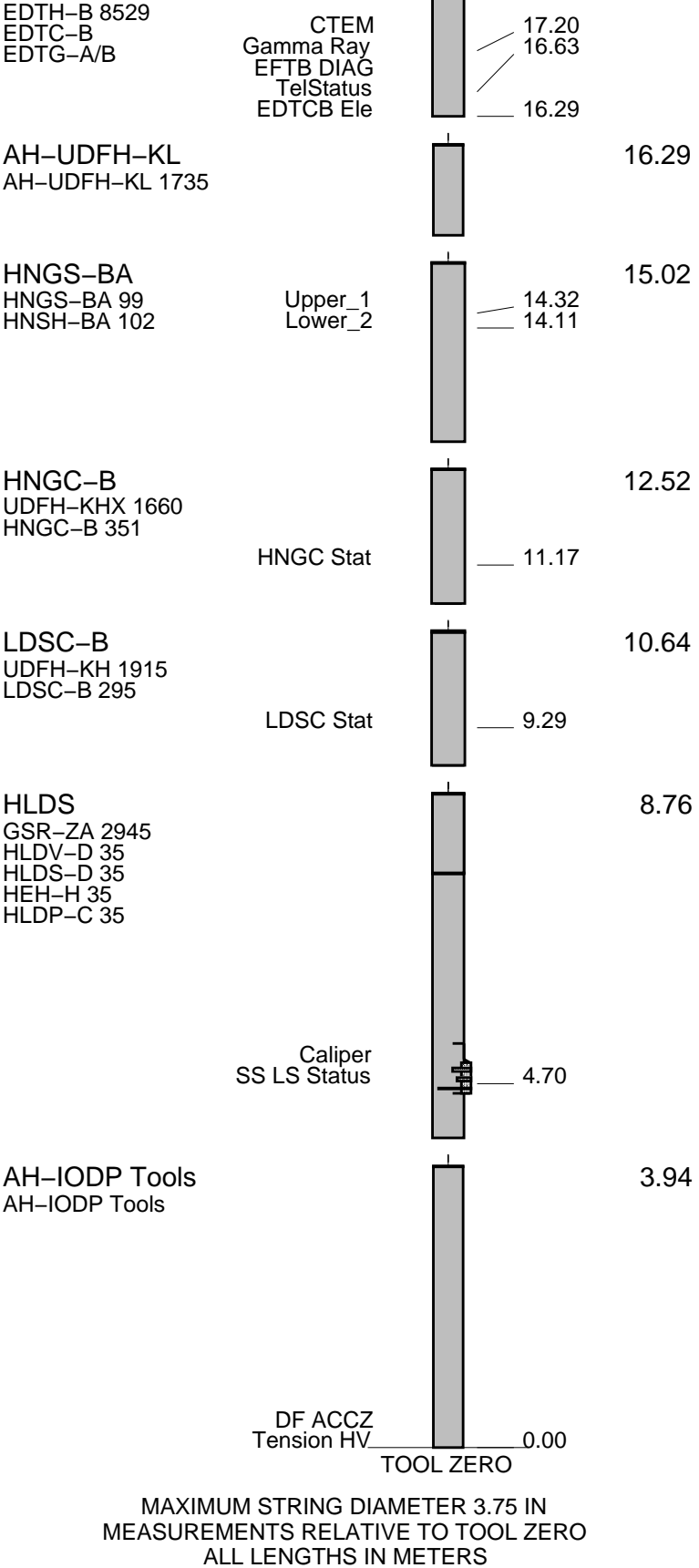
Well: **Expedition 399, Site U1601C**
Field: **Building Blocks of Life, Atlantis Massif**
Rig: **JOIDES Resolution** Country: **Portugal**

Rig:	JOIDES Resolution				
Field:	Building Blocks of Life, Atlantis M				
Location:	Latitude: N 30° 7.9417'				
Well:	Expedition 399, Site U1601C				
Company:	International Ocean Discovery Pr				
		Natural Gamma (HNGS)			
		Litho Density (HLDS)			
		LOCATION	Latitude: N 30° 7.9417'		Elev.: K.B. 0.00 m G.L. -861.00 m D.F. 0.00 m
			Longitude: W 42° 7.2072'		
			Permanent Datum: Sea Floor		Elev.: -861.00 m
		Log Measured From: Rig Floor		861.00 m above Perm. Datum	
		Drilling Measured From: Rig Floor			
		Ocean: North Atlantic		Max. Well Deviation 0 deg	
		Longitude W 42.12012*		Latitude N 30.13236*	

Logging Date		26-May-2023			
Run Number		1			
Depth Driller		2043.2 m			
Schlumberger Depth		1938 m			
Bottom Log Interval		1936 m			
Top Log Interval		855 m			
Casing Driller Size @ Depth		0.000 in @ 2050 m		@	
Casing Schlumberger		1 m			
Bit Size		9.875 in			
Type Fluid In Hole		Seawater			
MUD	Density	Viscosity	9 lbm/gal		
	Fluid Loss	PH		8.07	
	Source Of Sample		Mudpit		
	RM @ Measured Temperature		0.220 ohm.m @ 23 degC		@
	RMF @ Measured Temperature				@
RMC @ Measured Temperature				@	@
Source RMF	RMC	N/A	N/A		
RM @ MRT	RMF @ MRT	0.455 @ 0	@ 0	@	@
Maximum Recorded Temperatures		0 degC			
Circulation Stopped		Time	25-May-2023	18:00	
Logger On Bottom		Time	26-May-2023	11:00	
Unit Number	Location	627314 Larose, LA			
Recorded By		K. Garrett			
Witnessed By		B. Rhinehart			

[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			
MUD	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			



Schlumberger

Downlog

MAXIS Field Log

Company: International Ocean Discovery ProgramWell: Expedition 399, Site U1601C

Input DLIS Files					
DEFAULT	Flip_LDL_NGS_048LUP	PRODUCER	26-May-2023 12:20	1935.5 M	763.5 M

Output DLIS Files					
DEFAULT	LDL_NGS_106PUP	FN:101 PRODUCER	30-May-2023 13:25	1935.5 M	763.5 M

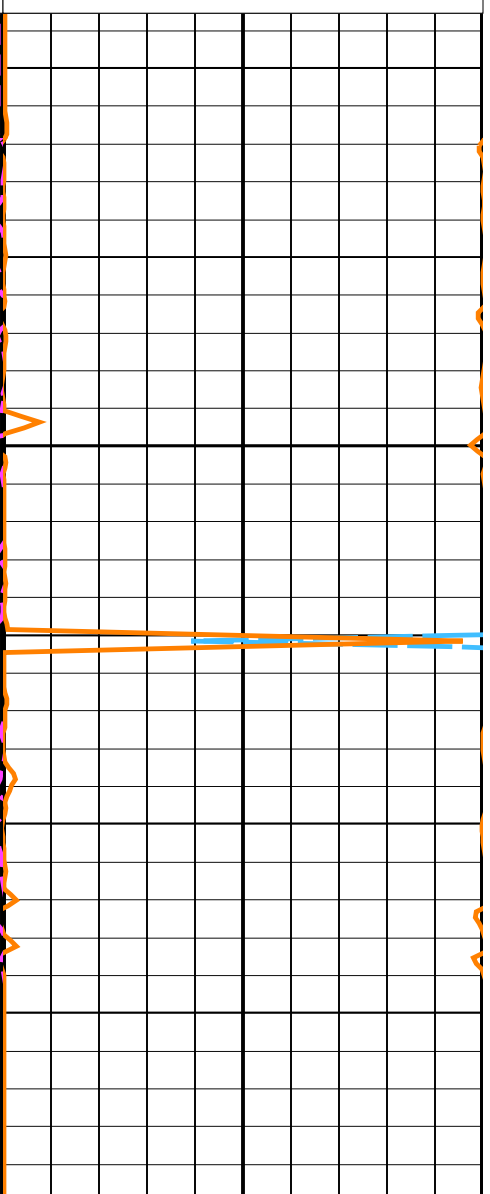
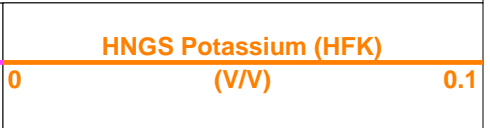
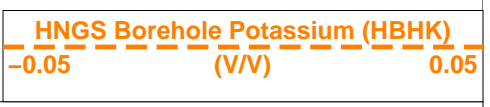
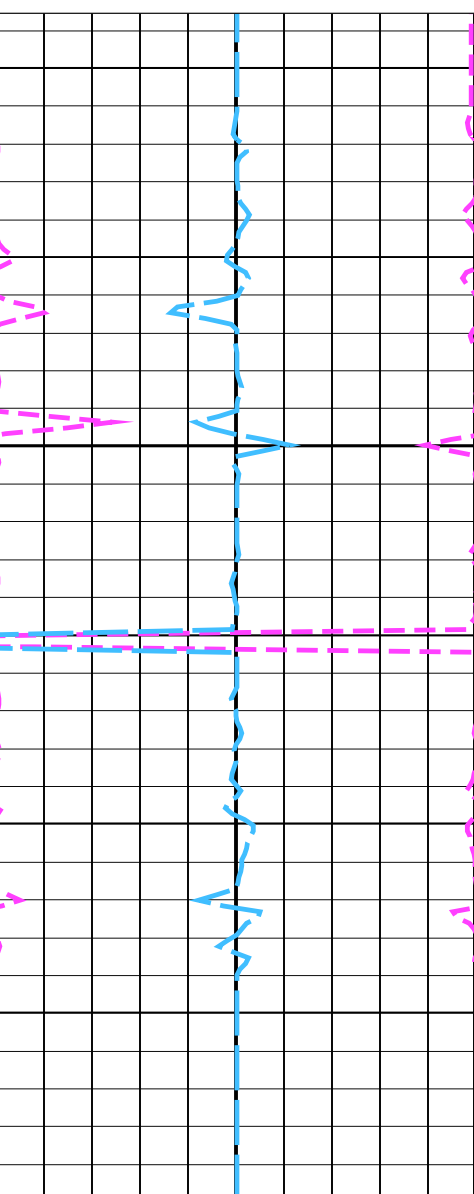
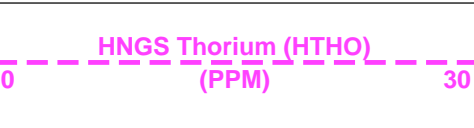
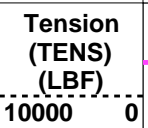
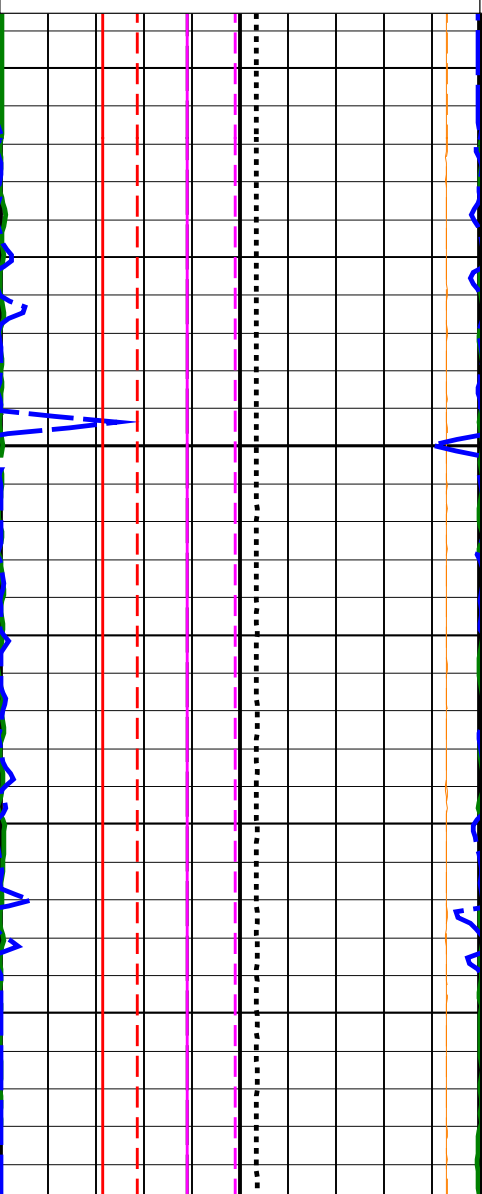
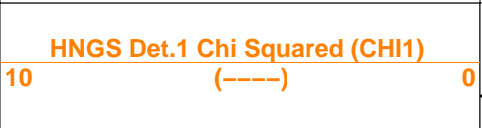
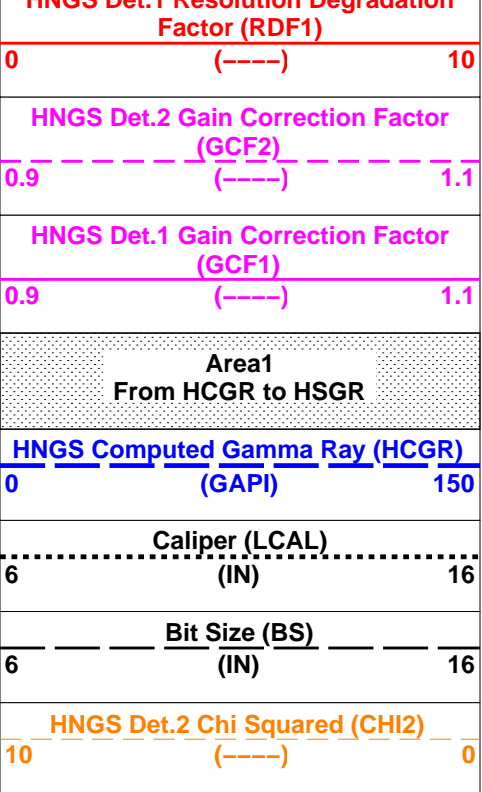
OP System Version: 19C0-187					
HLDS	19C0-187	LDSC-B	19C0-187		
HNGC-B	19C0-187	HNGS-BA	19C0-187		
EDTC-B	19C0-187				

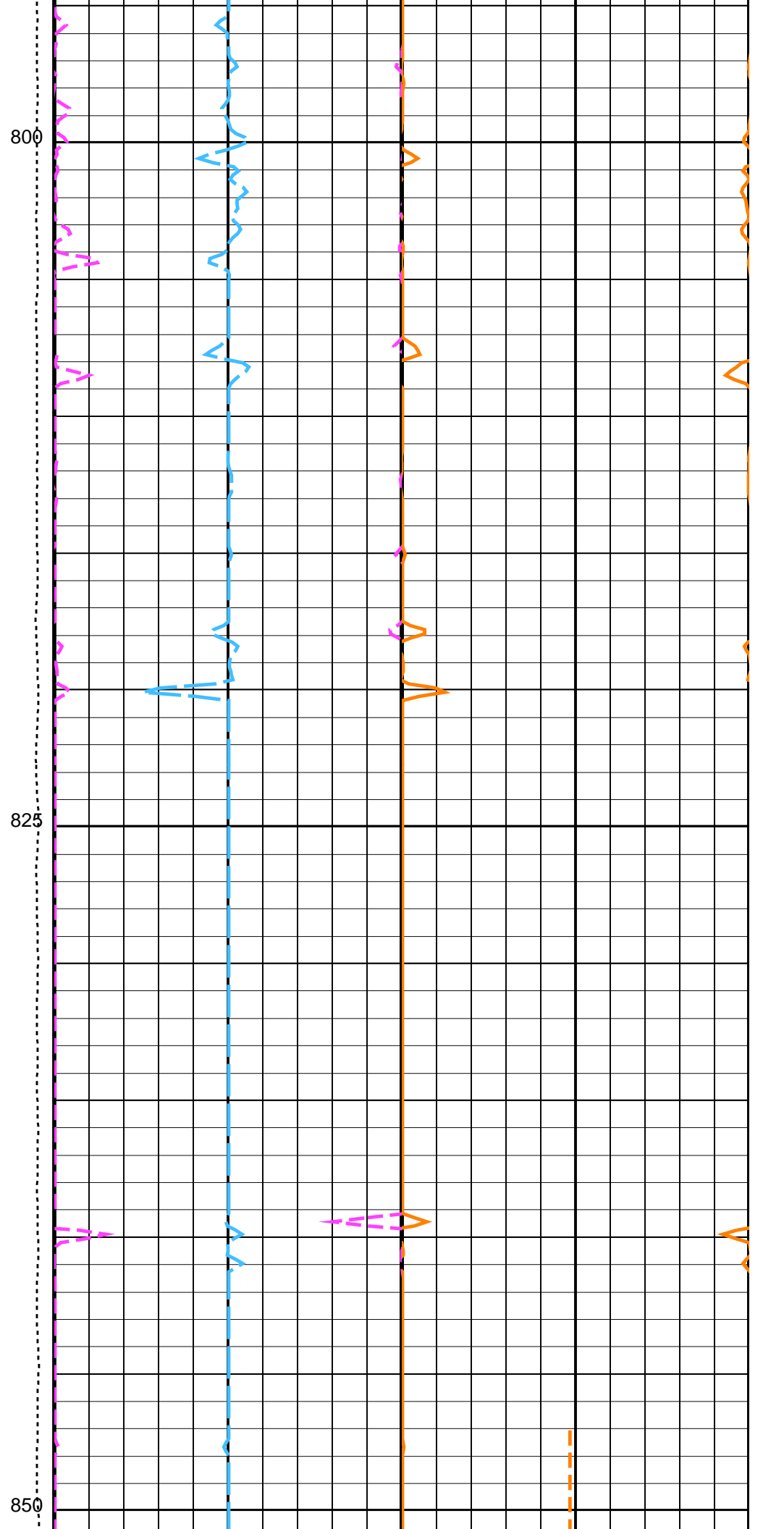
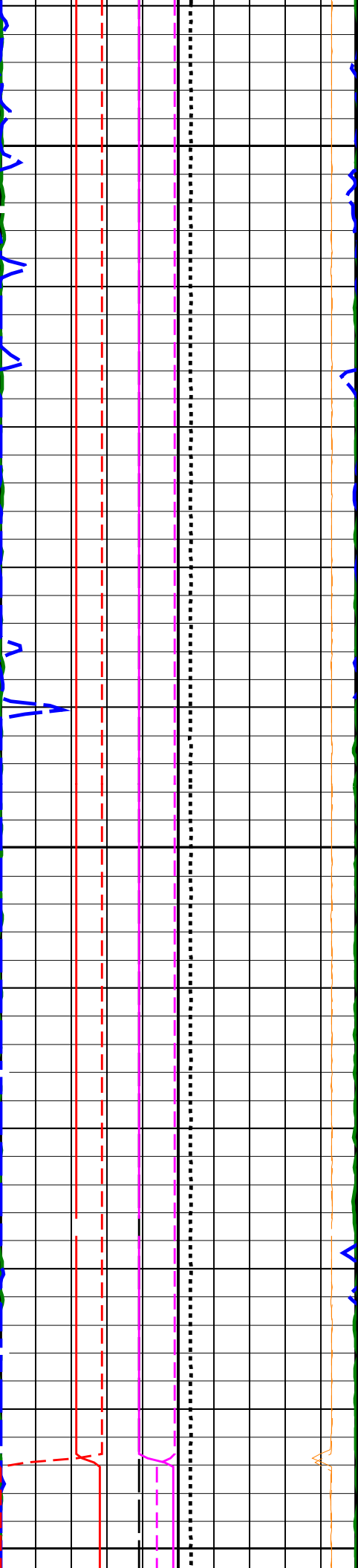
PIP SUMMARY					
<div><div></div>Time Mark Every 60 S</div>					

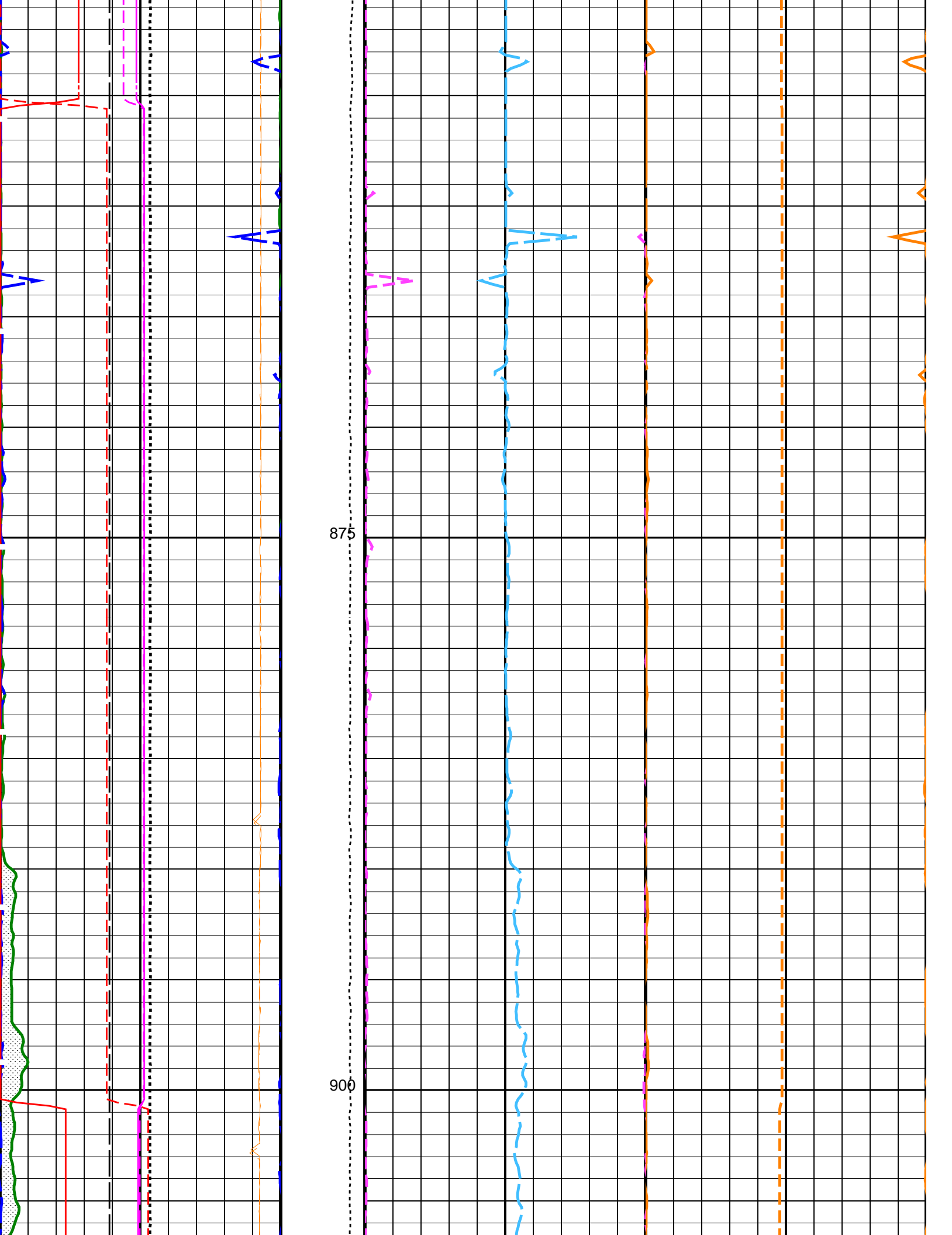
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	150

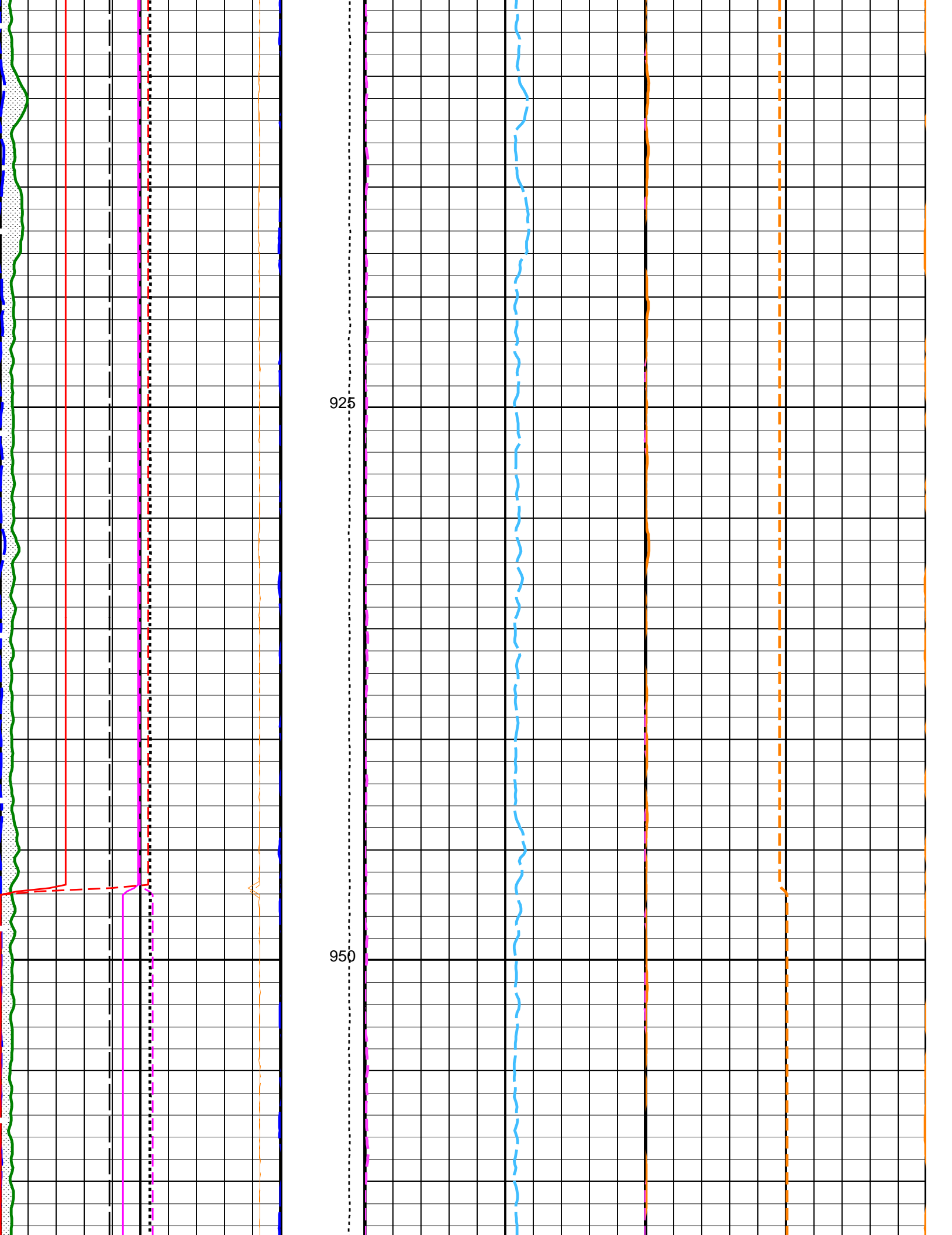
HNGS Det.2 Resolution Degradation Factor (RDF2)		
0	(-----)	10

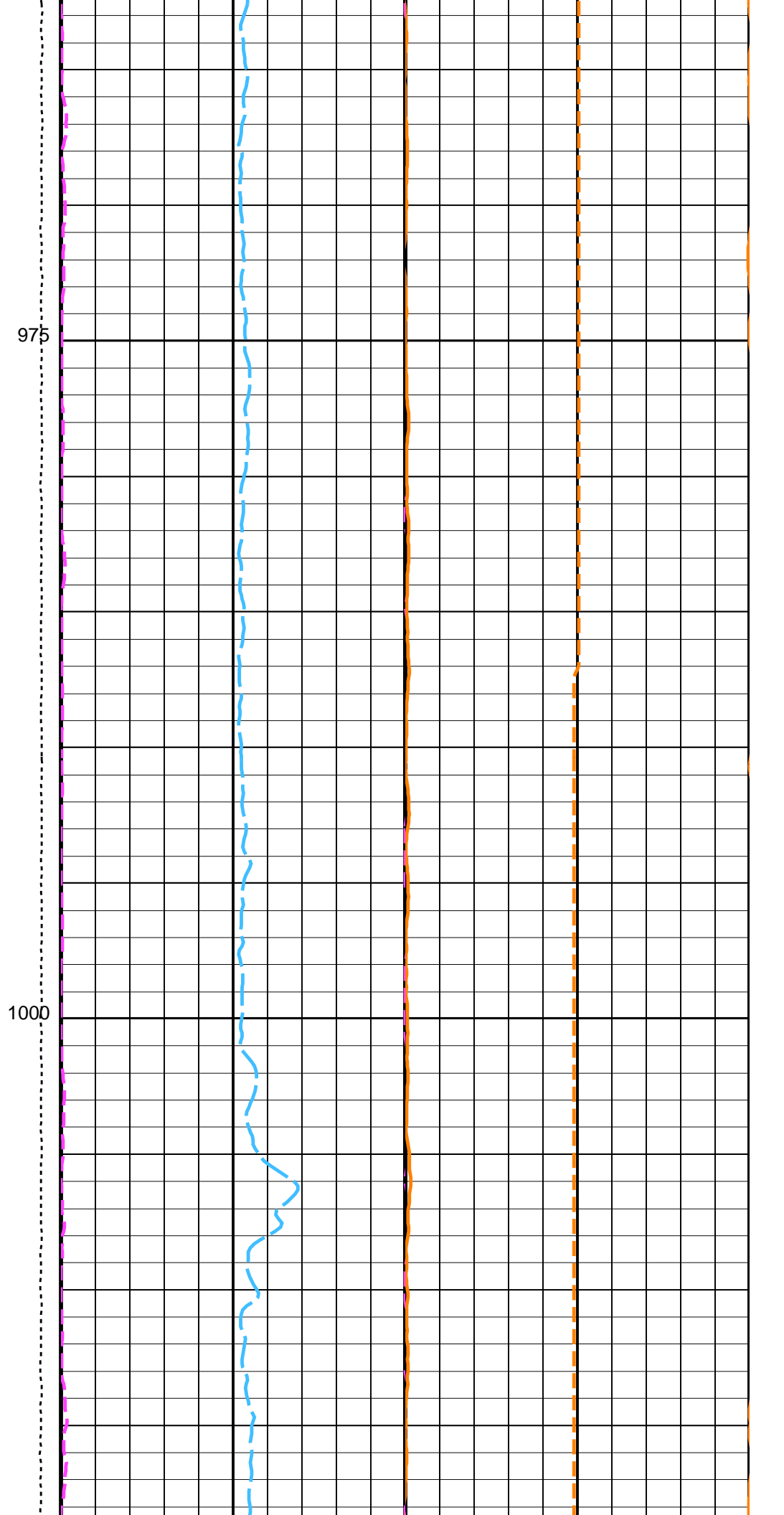
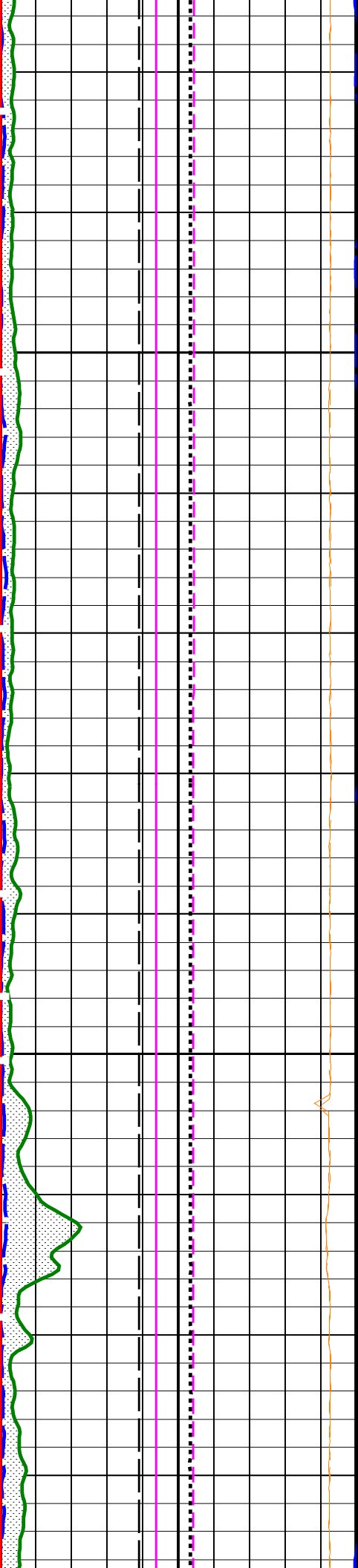
HNGS Det.1 Resolution Degradation		
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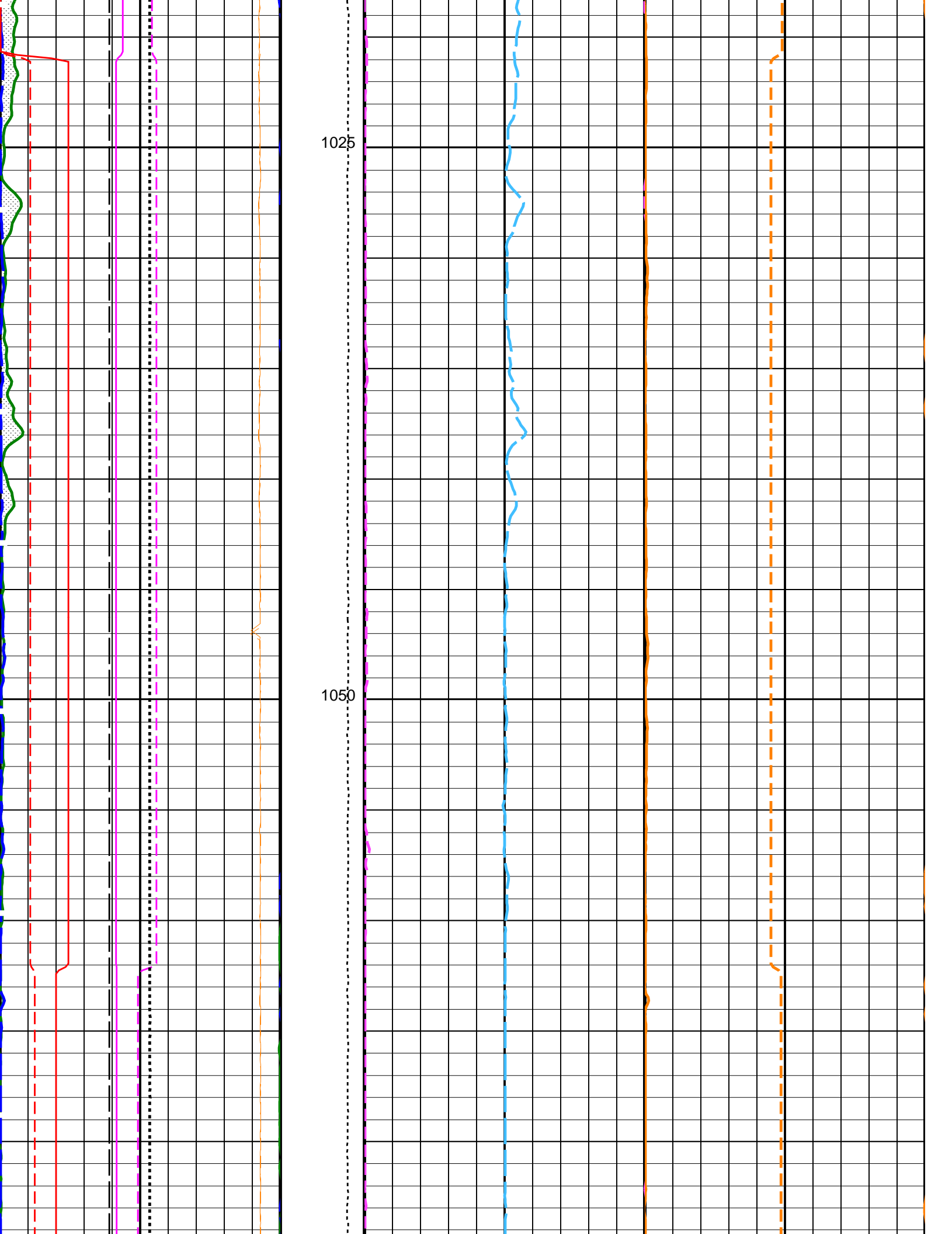


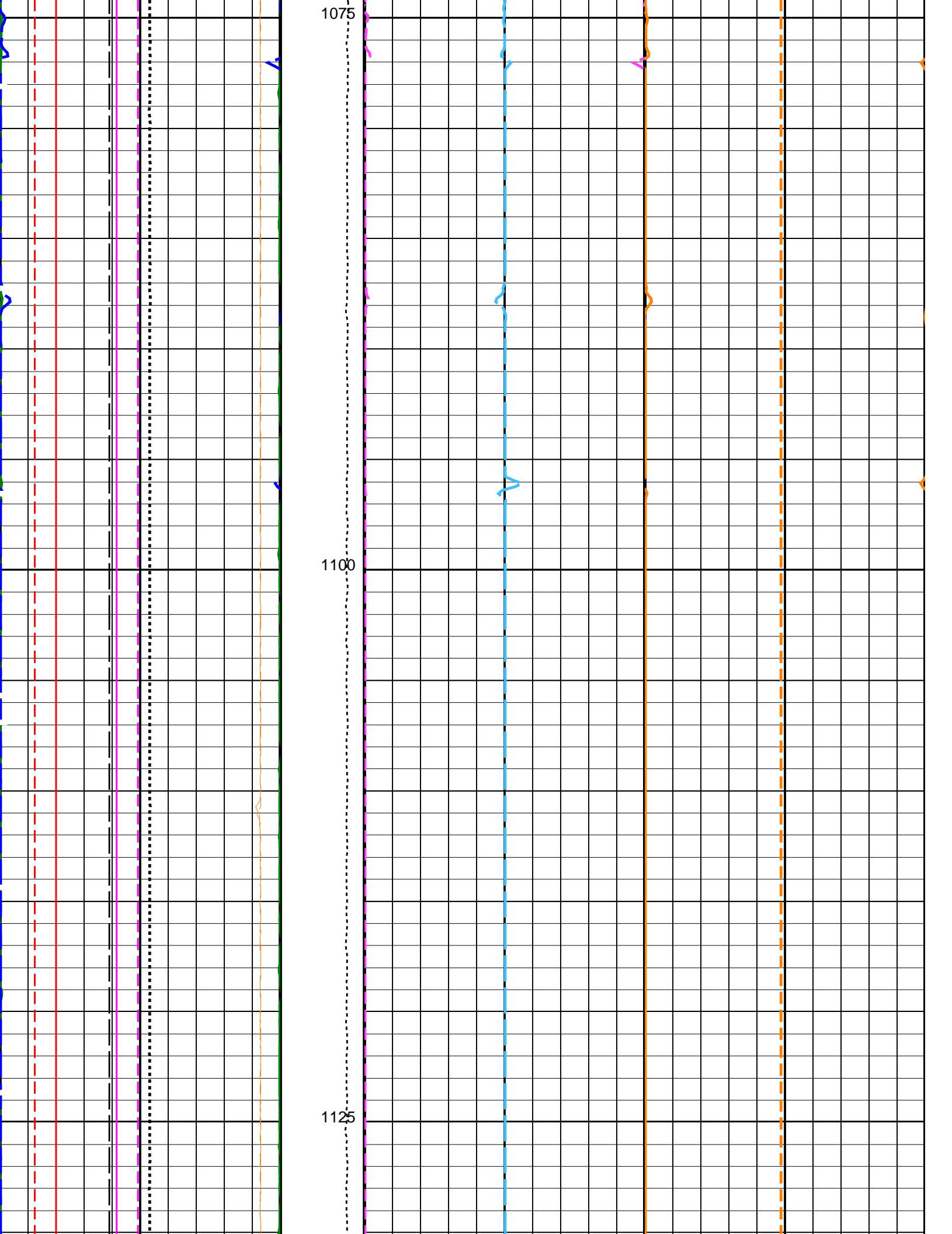


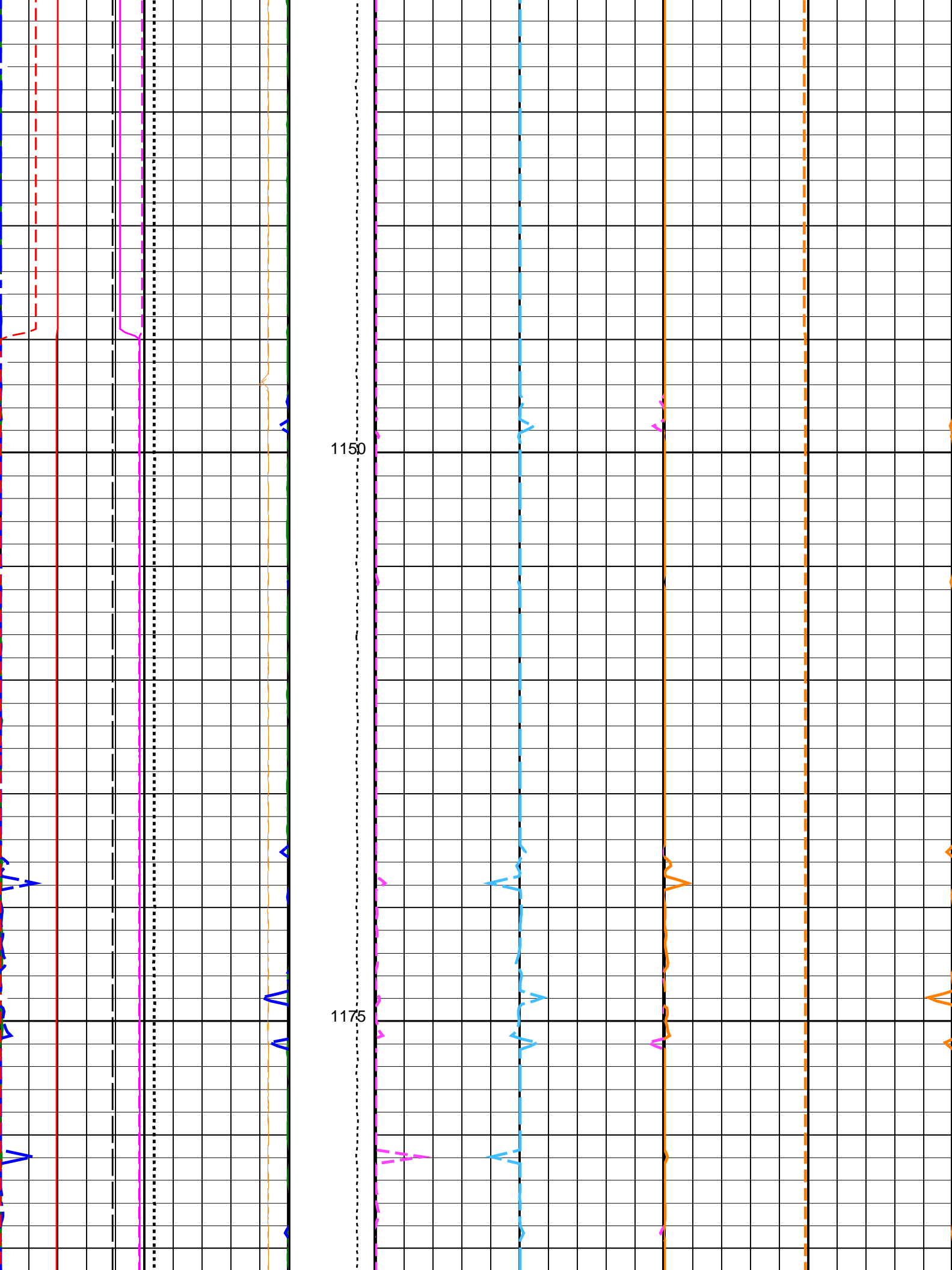


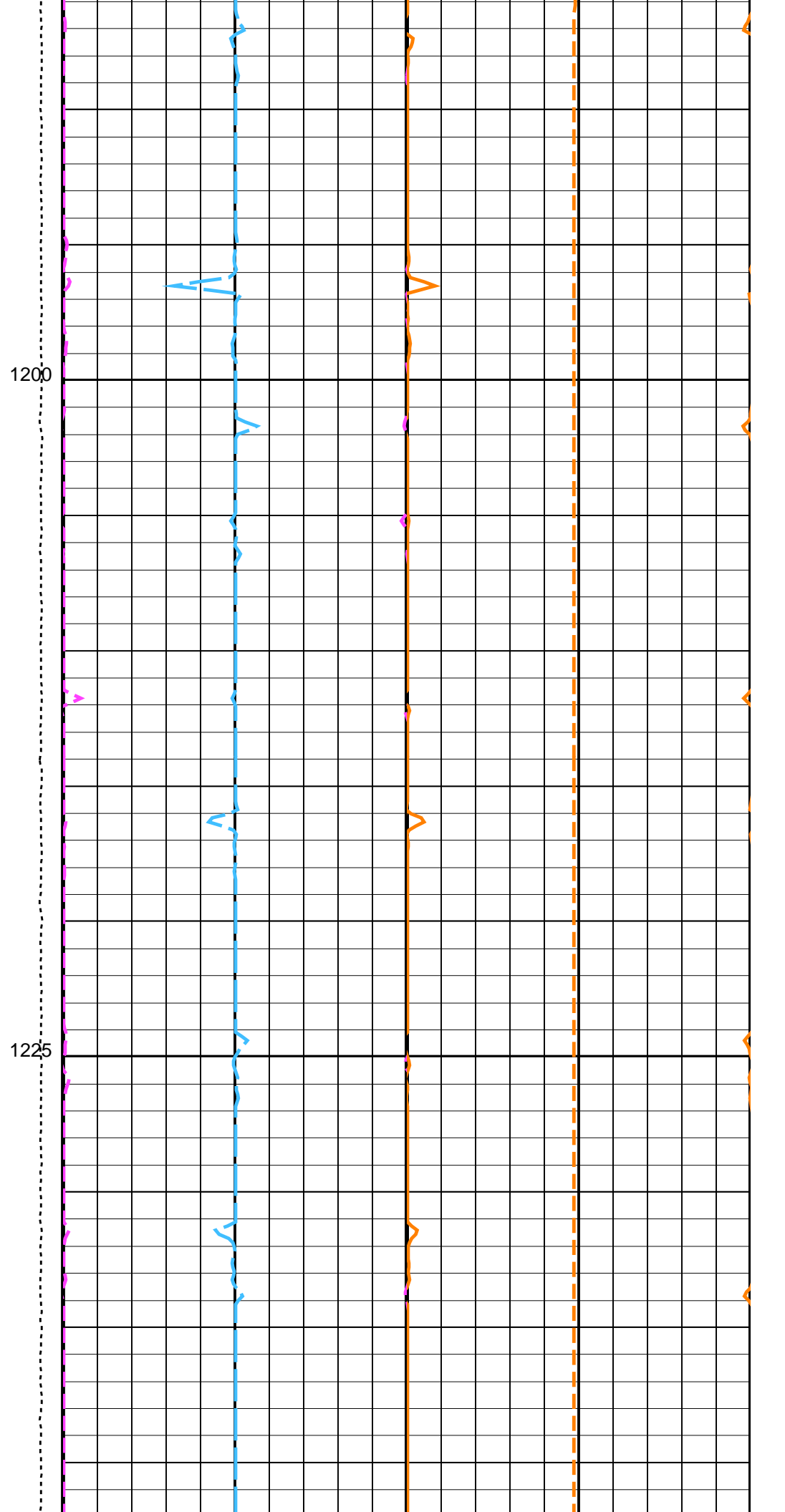
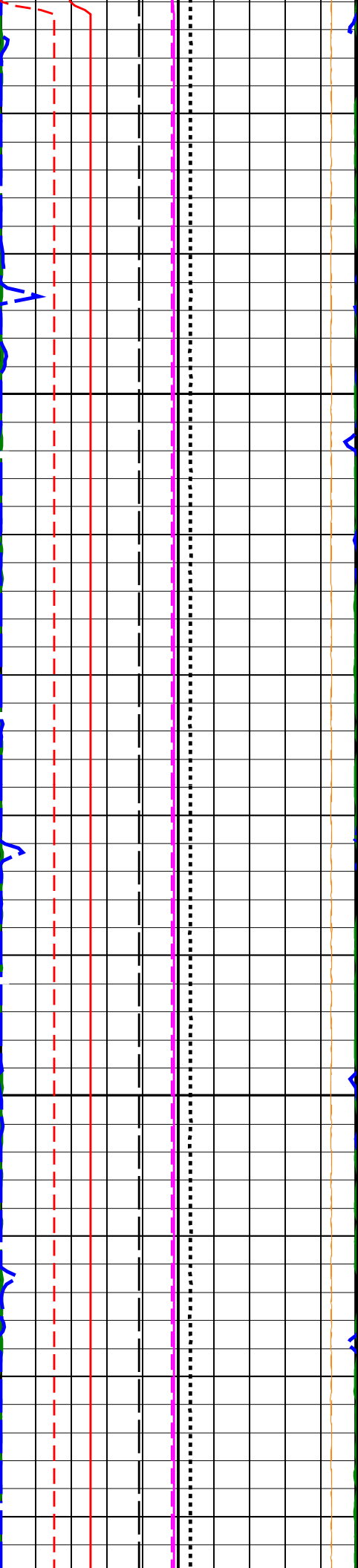


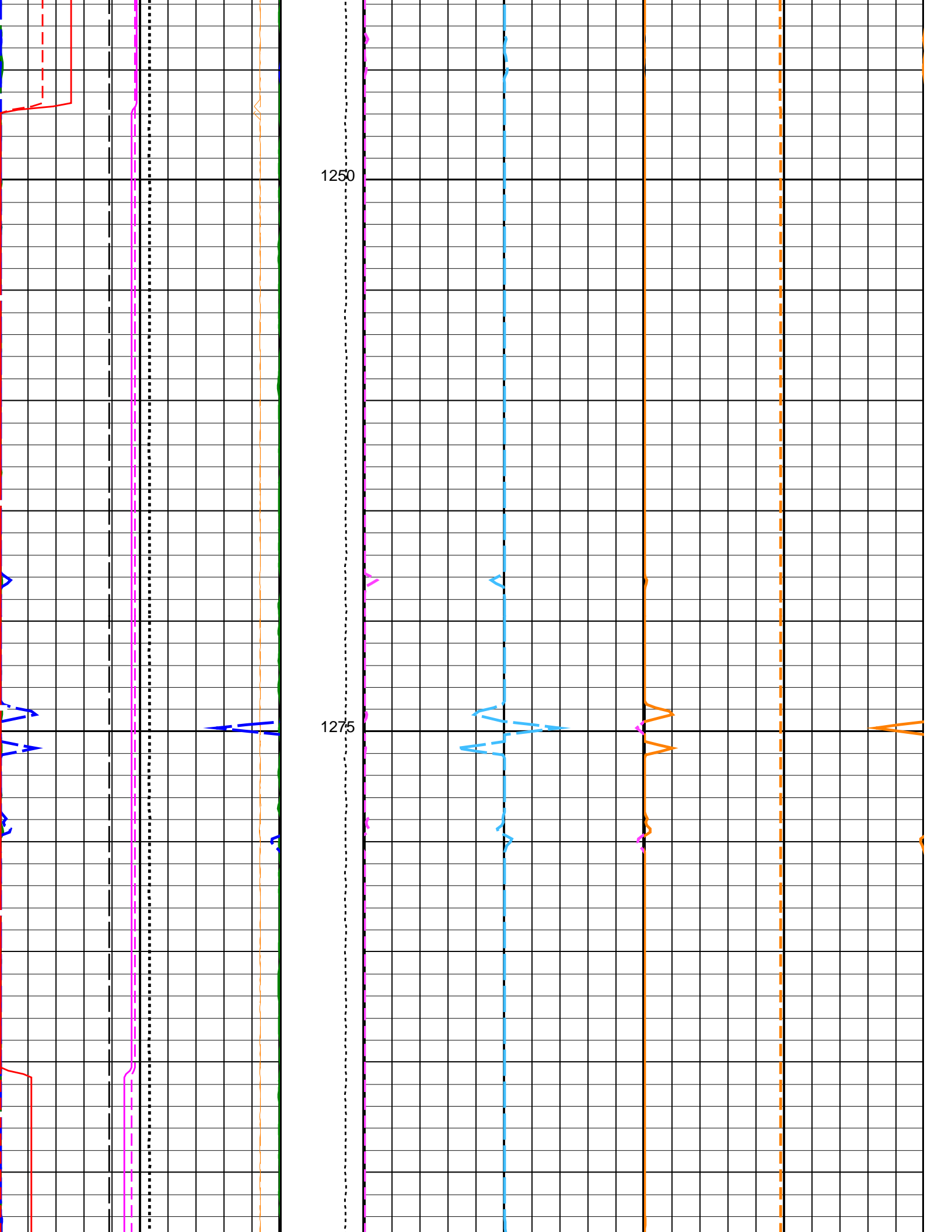


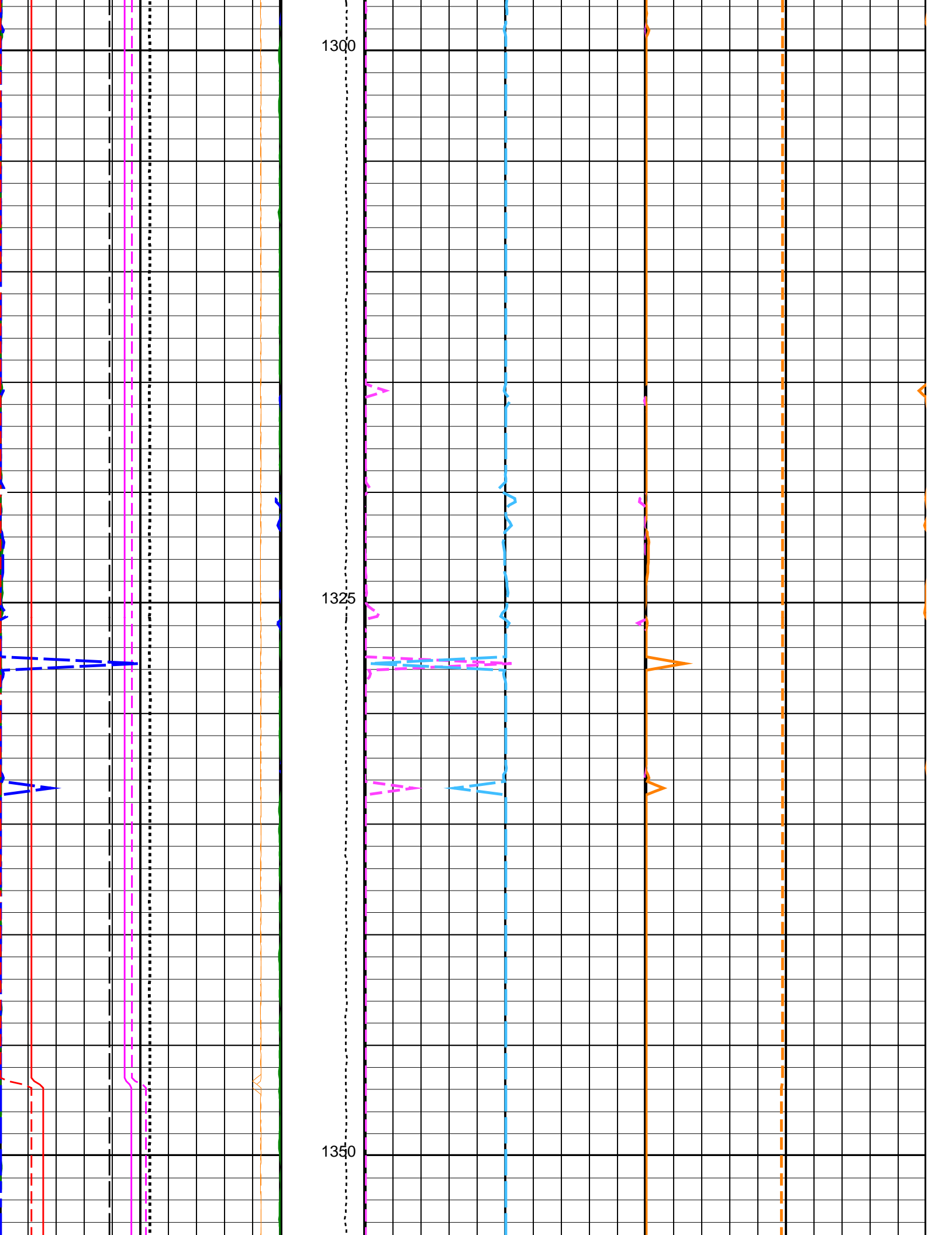


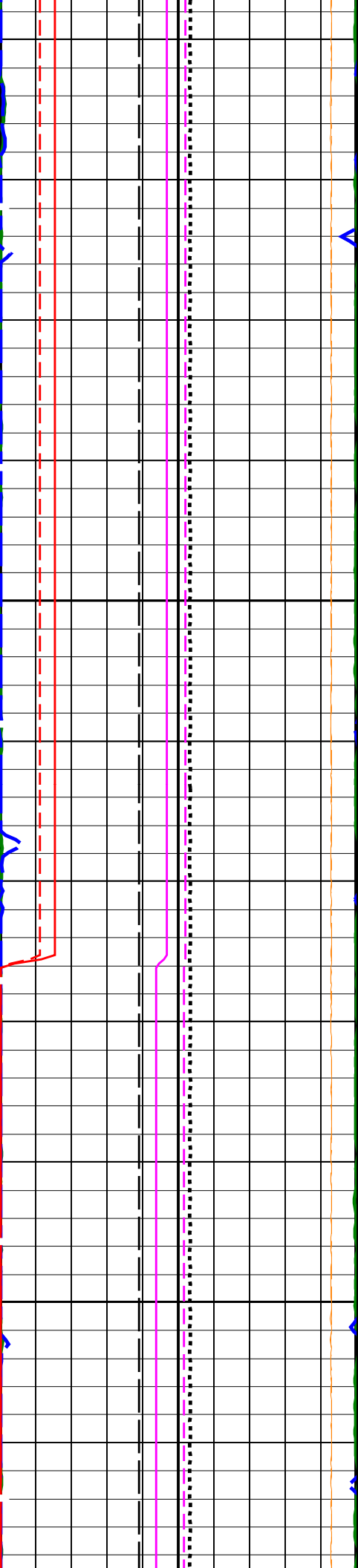






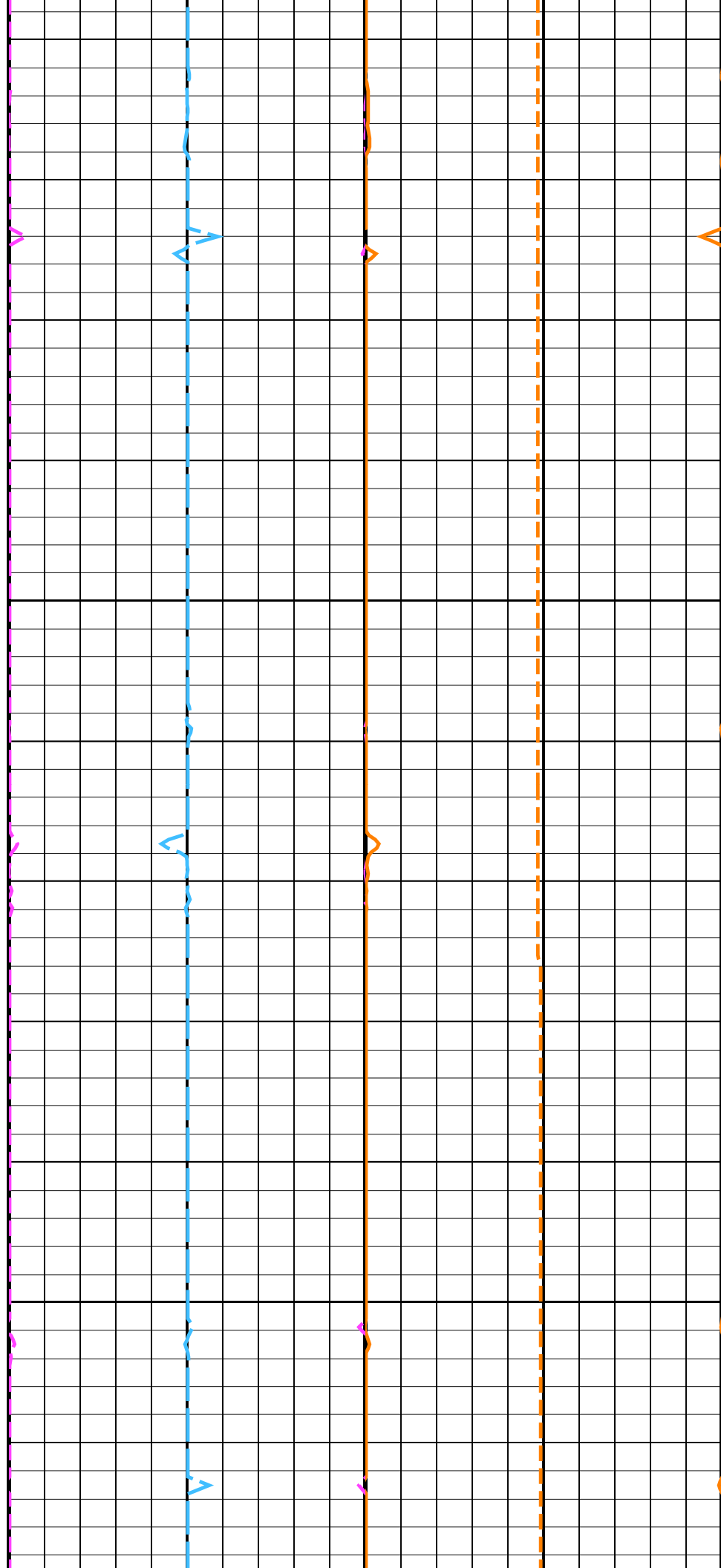


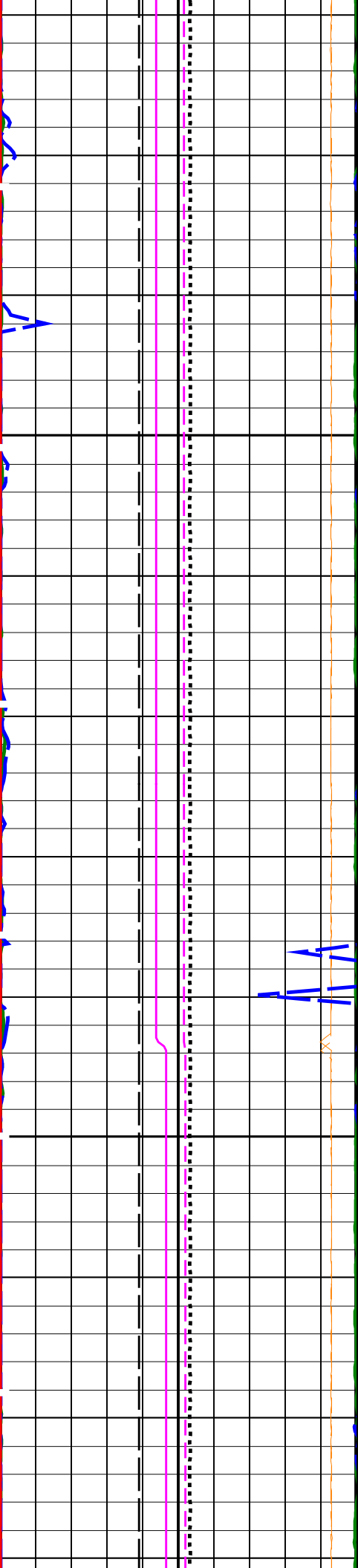




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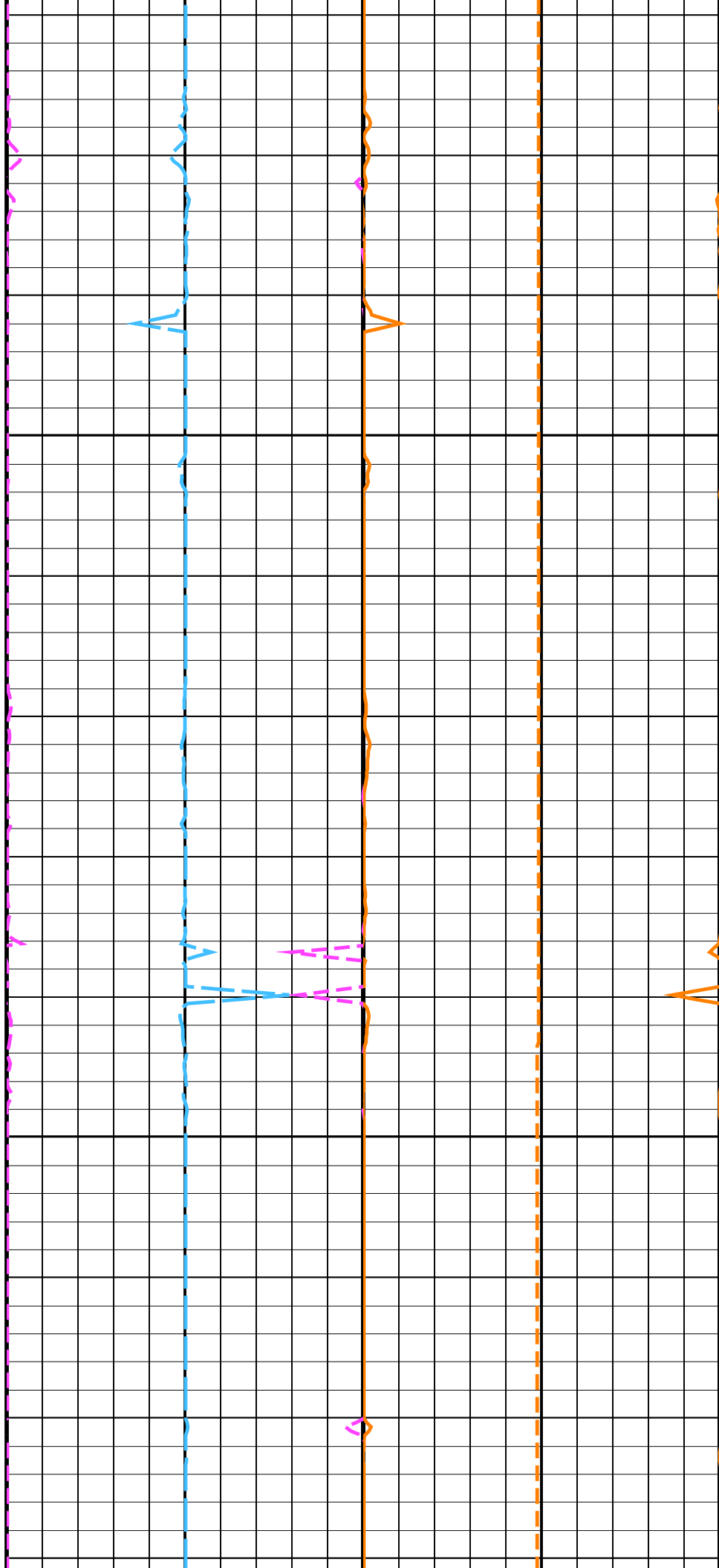
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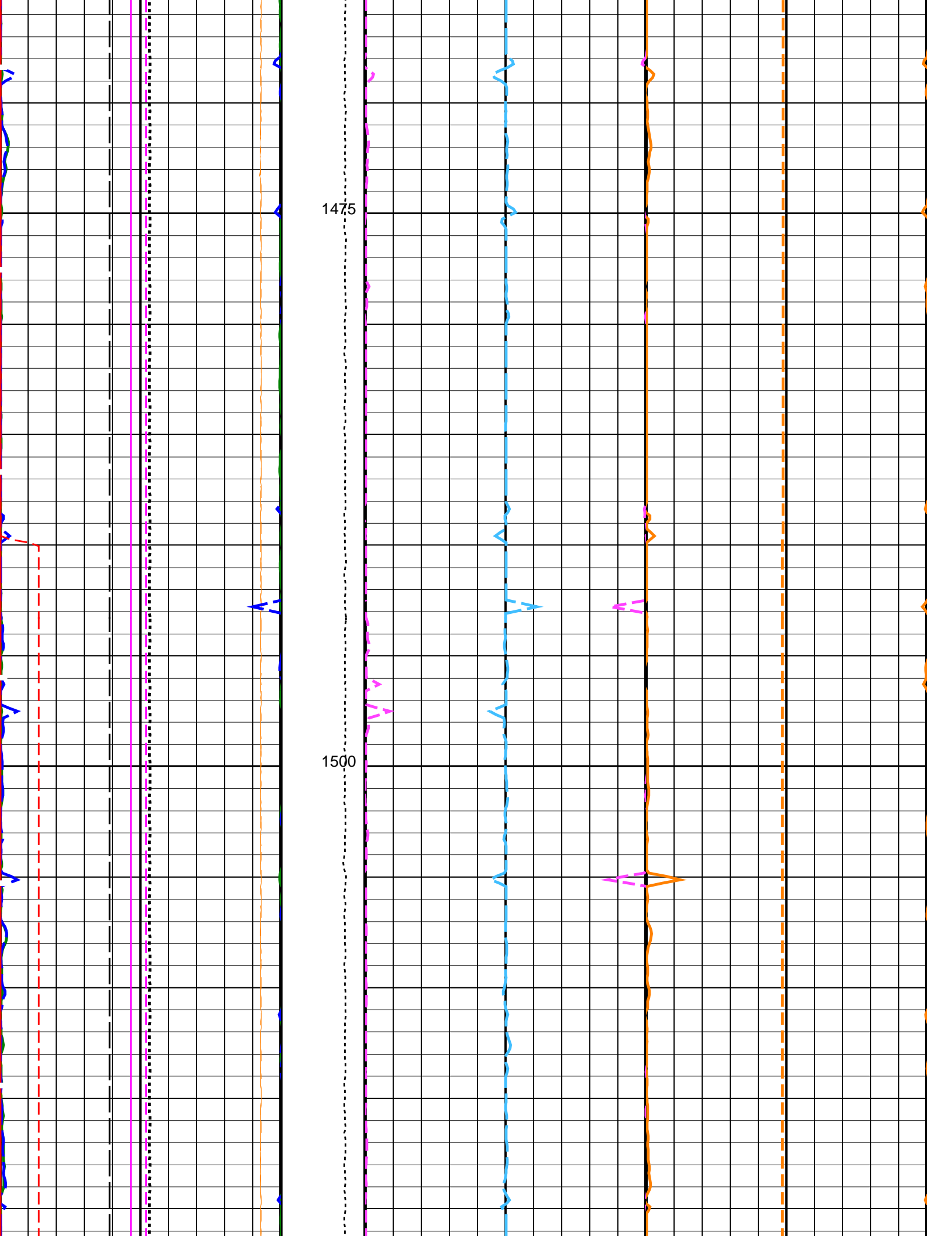


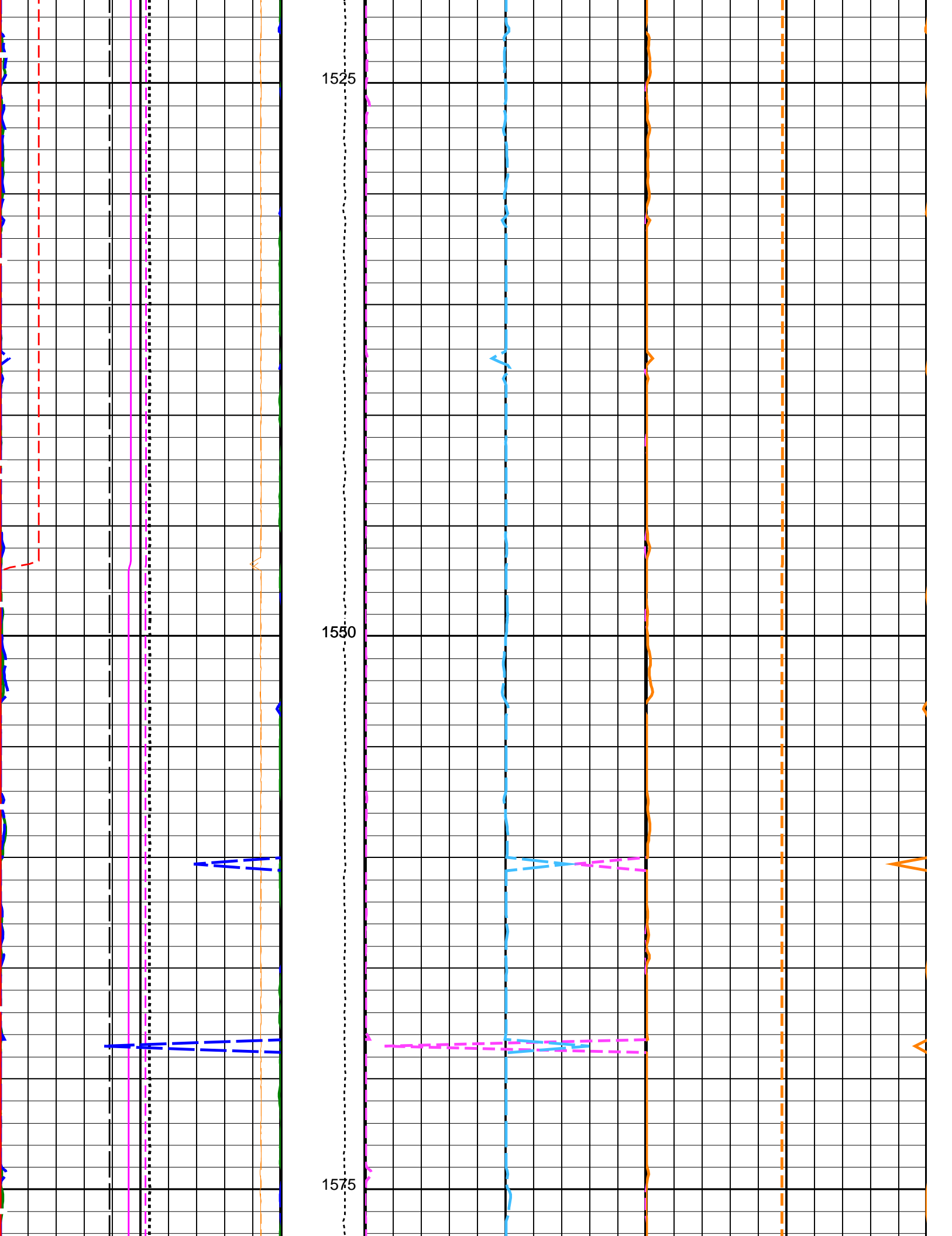


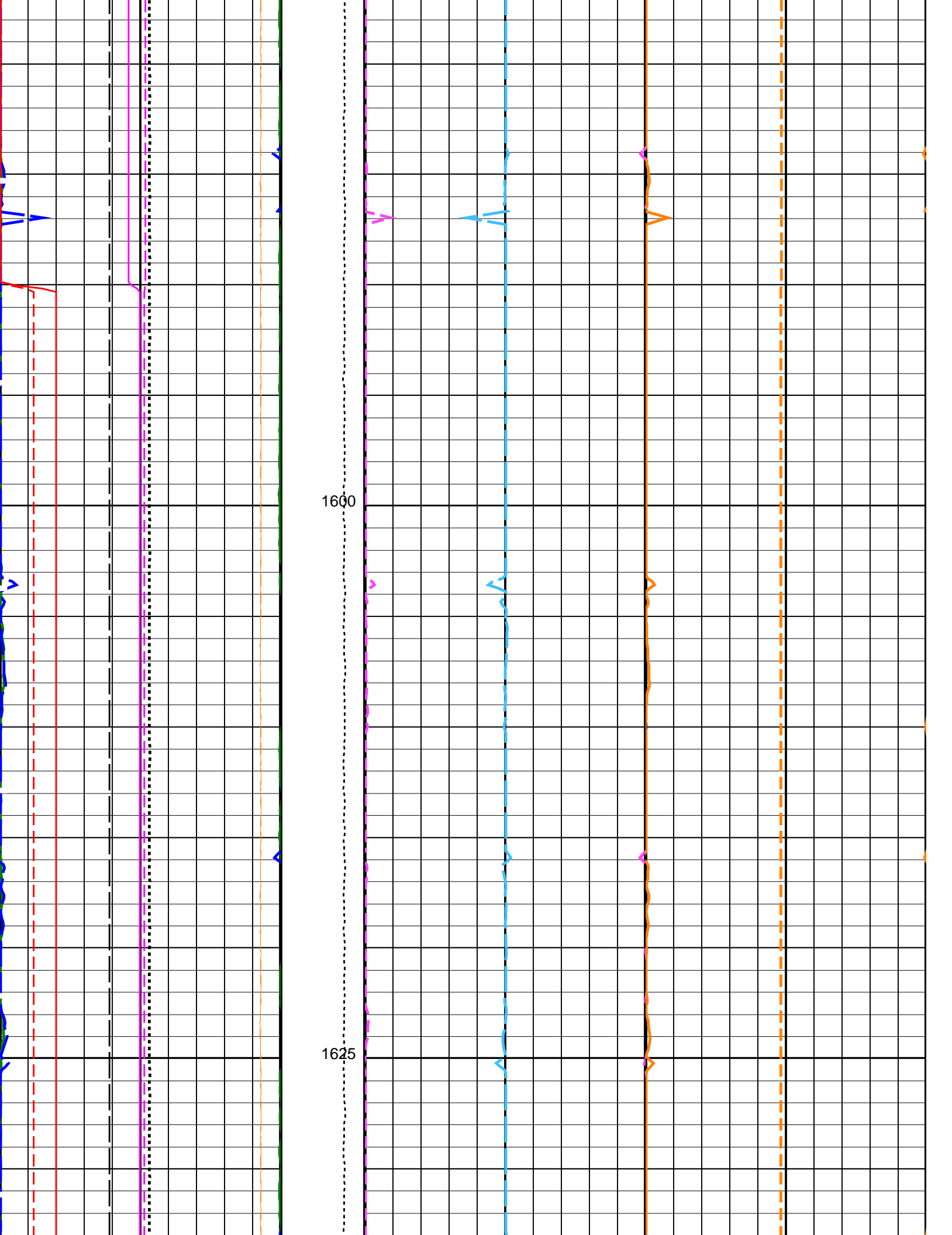
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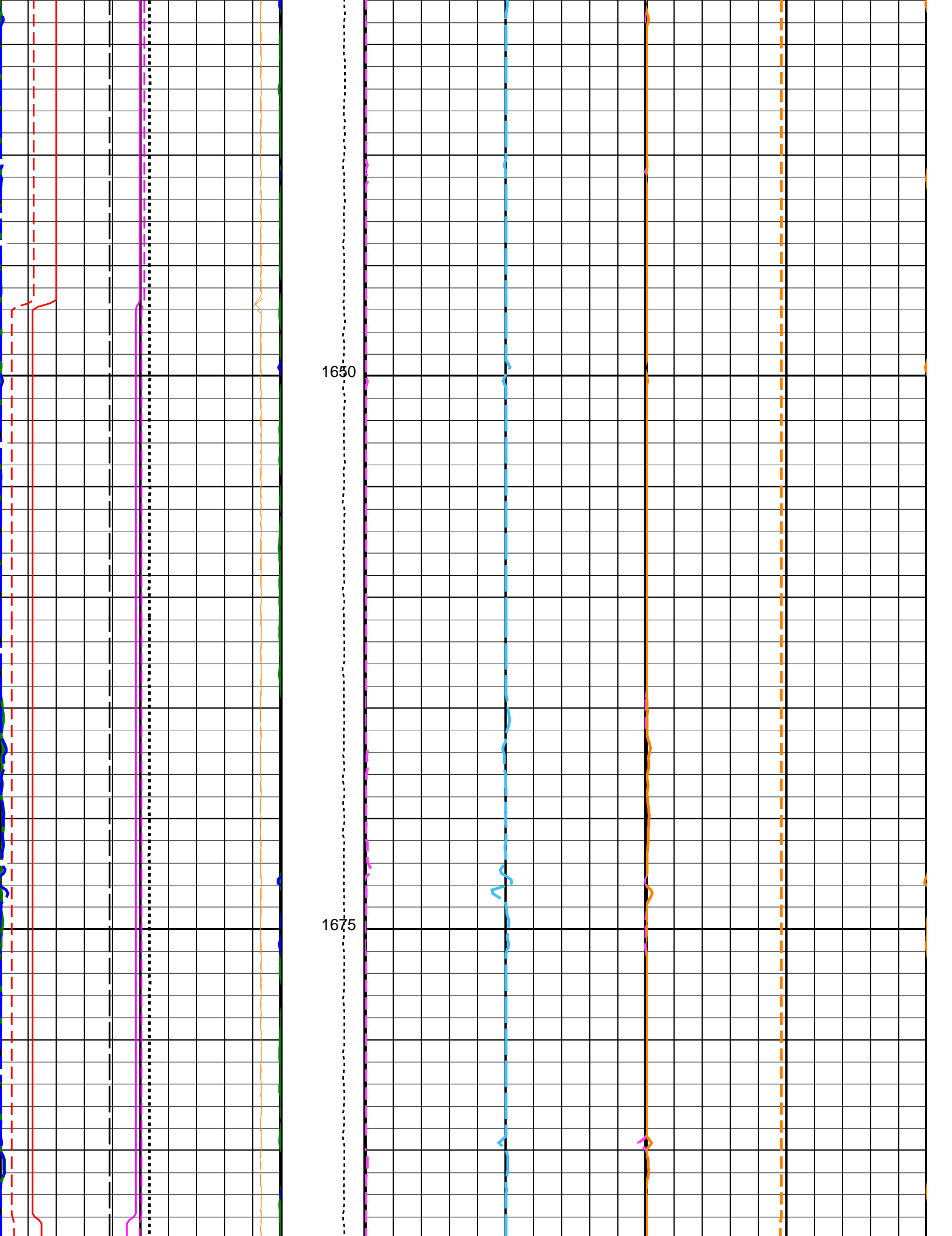
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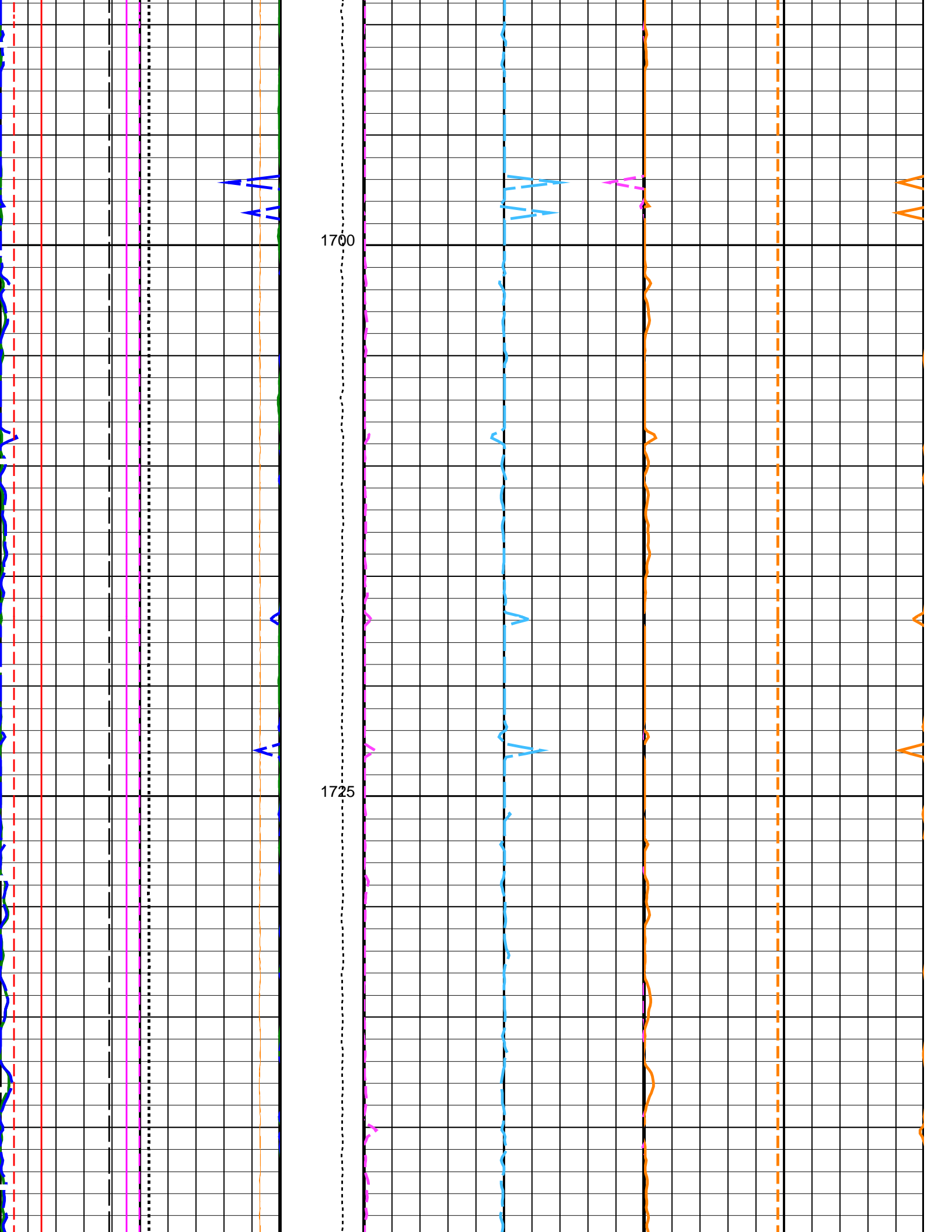


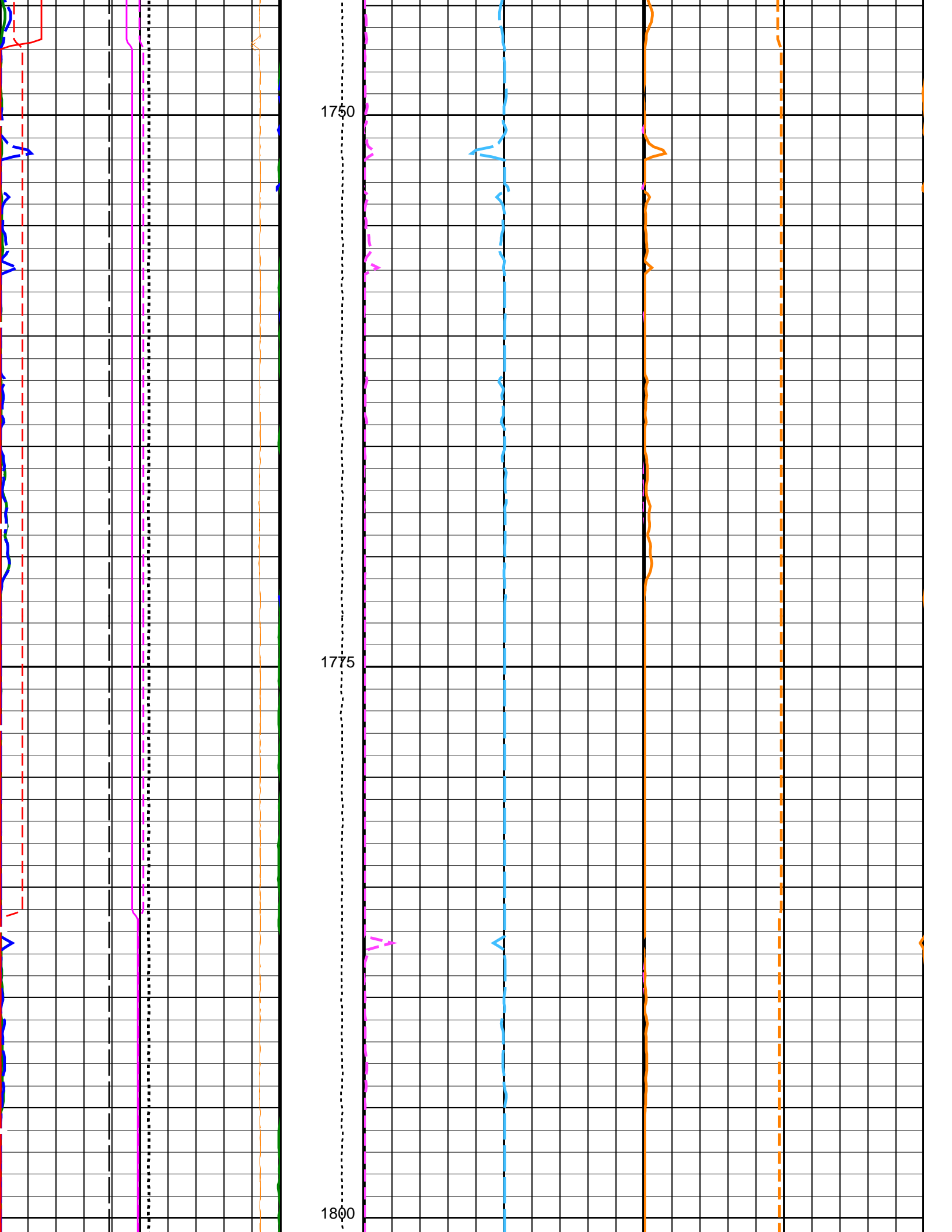


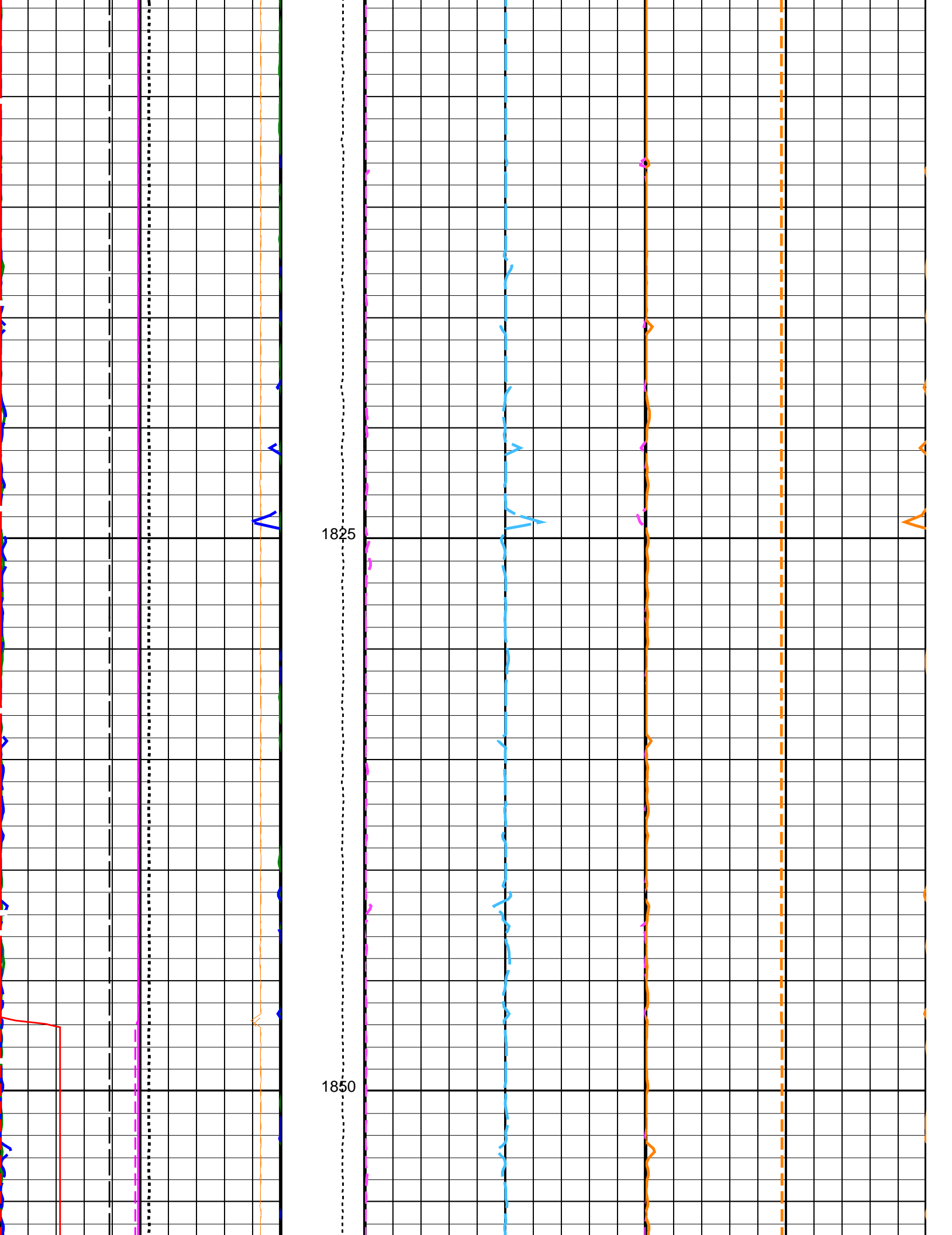


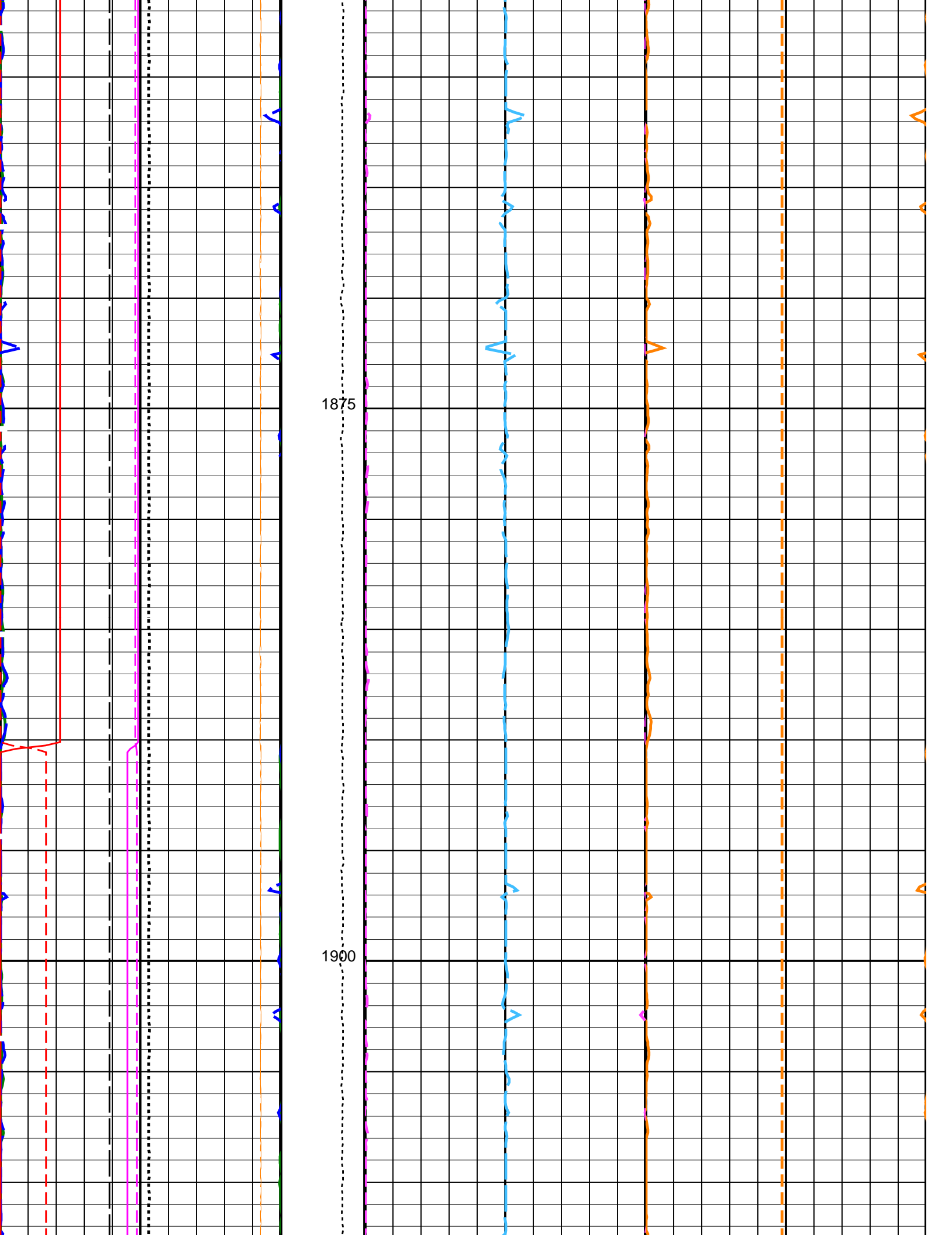


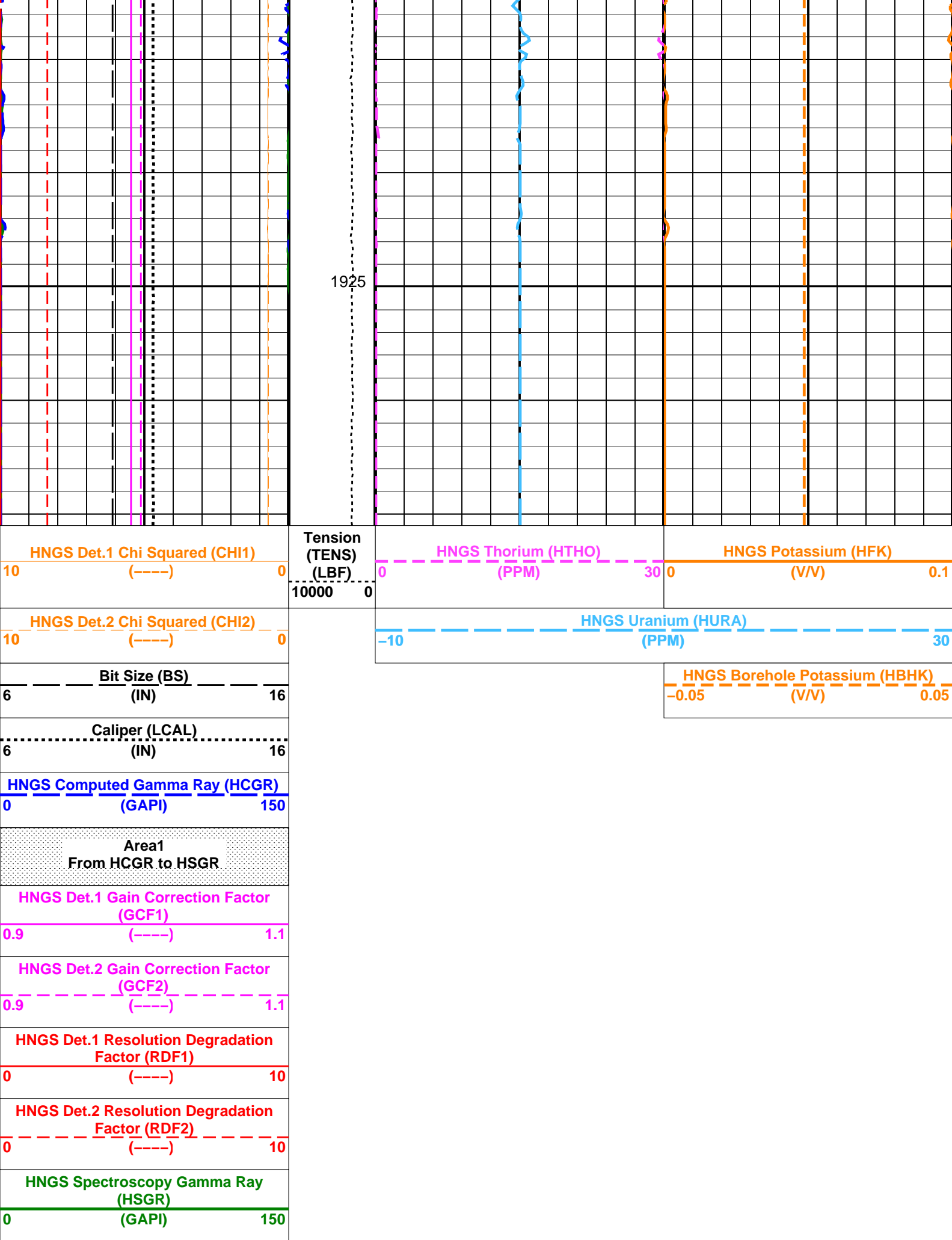












Parameters

DLIS Name	Description	Value	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	9.00	LB/G
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200

Graphics File Created: 30-May-2023 13:25

OP System Version: 19C0-187

HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	19C0-187		

Input DLIS Files

DEFAULT	Flip_LDL_NGS_048LUP	PRODUCER	26-May-2023 12:20	1935.5 M	763.5 M
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Output DLIS Files

DEFAULT	LDL_NGS_106PUP	FN:101	PRODUCER	30-May-2023 13:25	
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Company: International Ocean Discovery Program

Well: Expedition 399, Site U1601C

Input DLIS Files

DEFAULT	Flip_LDL_NGS_048LUP	PRODUCER	26-May-2023 12:20	1935.5 M	763.5 M
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Output DLIS Files

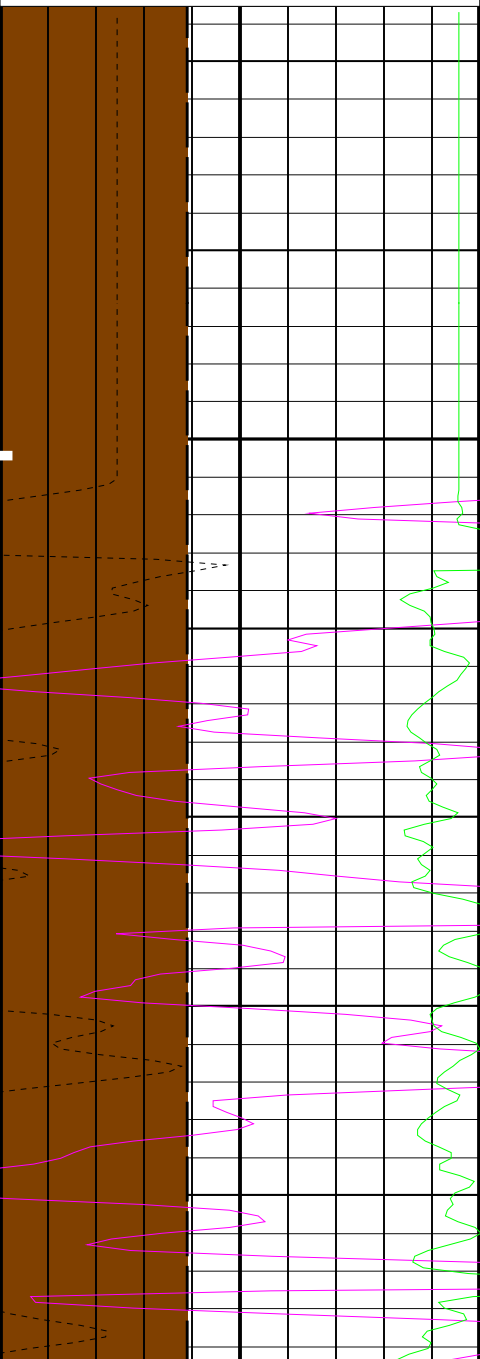
DEFAULT	LDL_NGS_106PUP	FN:101	PRODUCER	30-May-2023 13:25	1935.5 M	763.5 M
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OP System Version: 19C0-187

HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	19C0-187		

PIP SUMMARY

HLDS Long Spaced Quality Indicator (LQLS)		
-0.25	(-----)	0.25
HLDS Short Spacing Quality Indicator (LQSS)		
-0.25	(-----)	0.25
Washout From BS to HLDS_CALIPER		
Mudcake From HLDS_CALIPER to BS		
HLDS Caliper (LCAL)		
6	(IN)	16
Bit Size (BS)		
6	(IN)	16
HLDS Bulk Density Correction (DRH)		
-0.25	(G/C3)	0.25

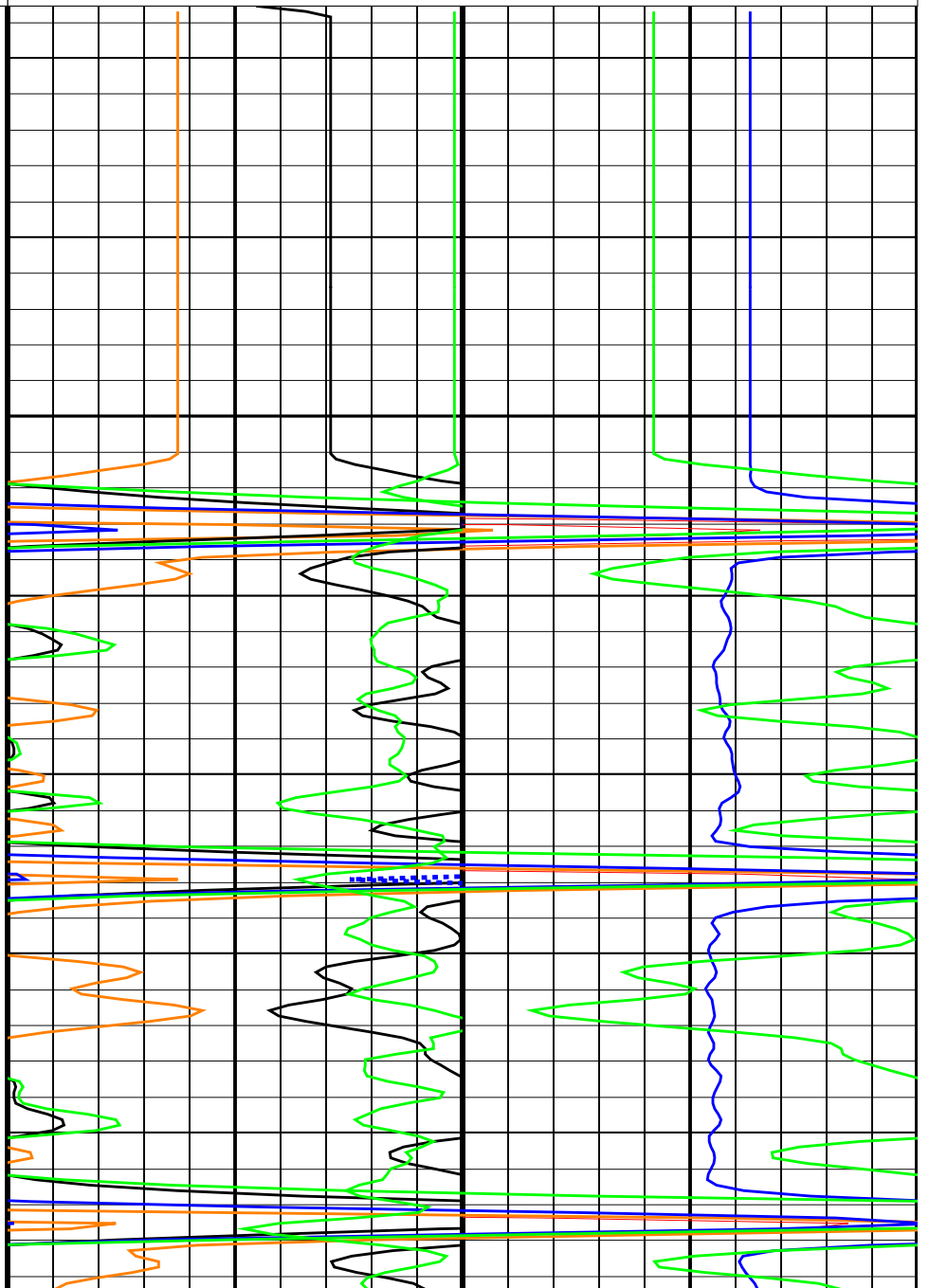


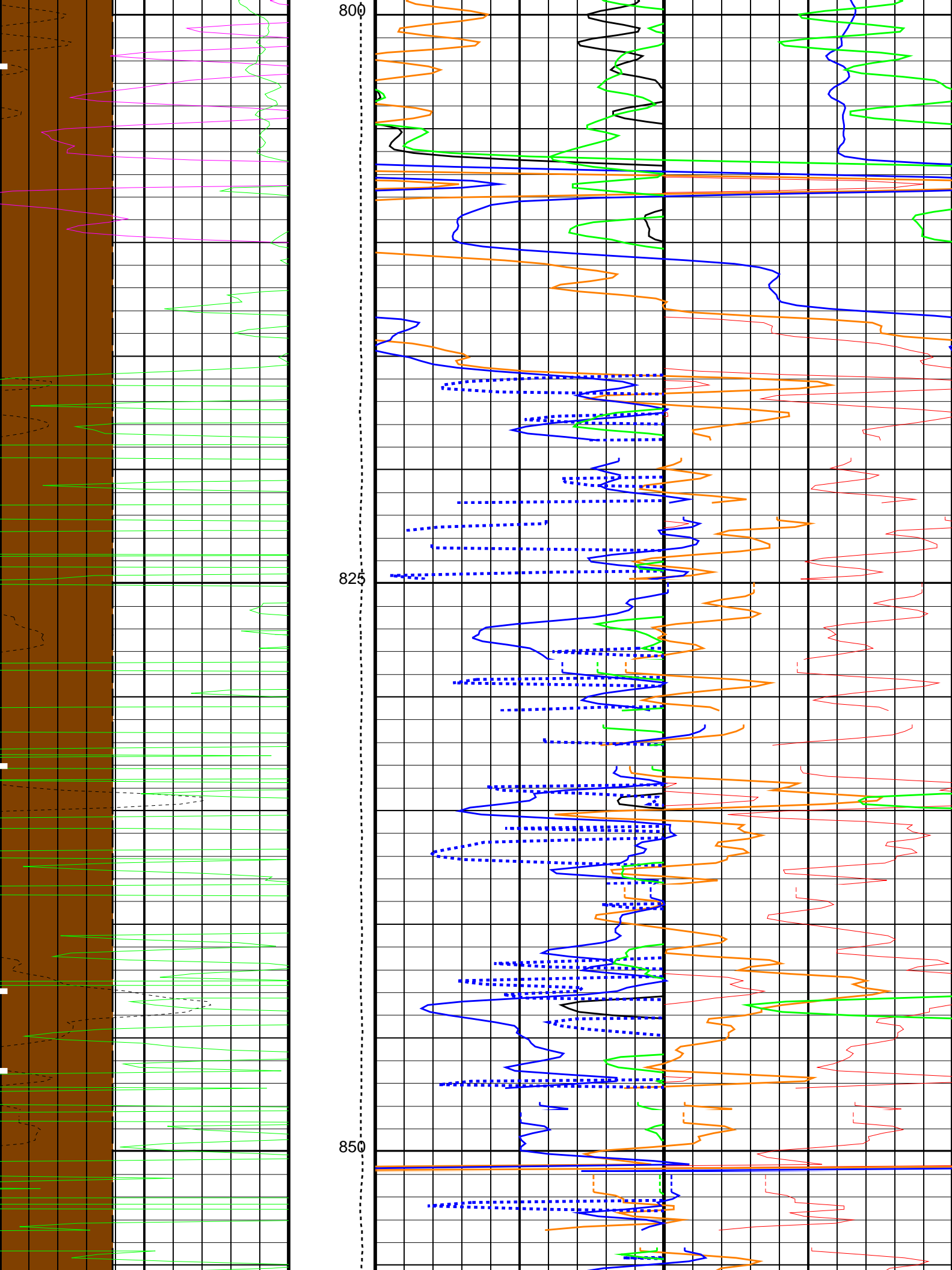
Tension
(TENS)
(LBF)

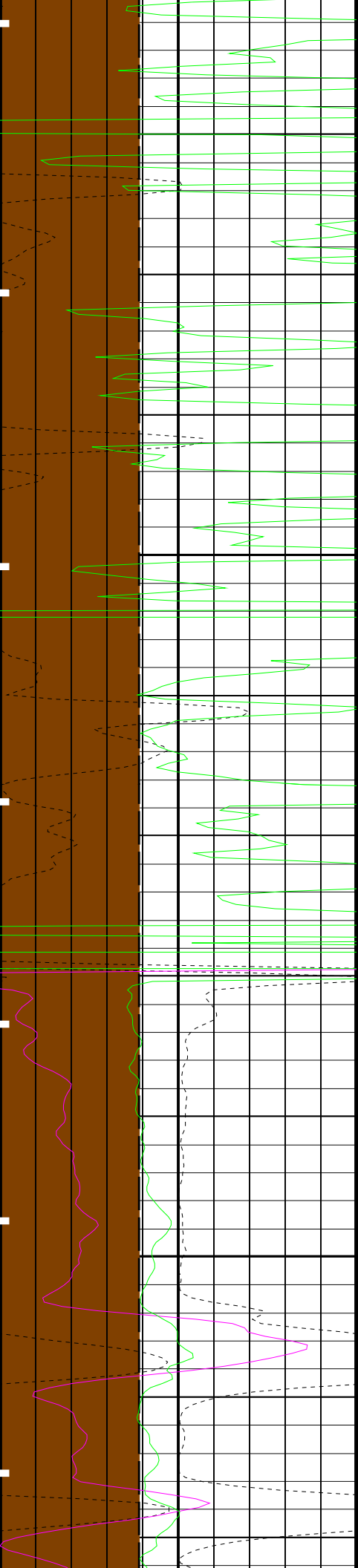
10000 0

775

HLDS Short Spaced Bulk Density (RHS)		
2	(G/C3)	3
HLDS Long Spaced Photoelectric Effect (PEFL)		
0	(----)	
HLDS Short Spaced Photoelectric Effect (PEFS)		
0	(-----)	
HLDS Long Spaced Bulk Density (RHL)		
2	(G/C3)	3
HLDS SS2 Density (RHS3)		HLDS Density Porosity (DPO)
2	(G/C3)	3 30 (PU) 0
HLDS Bulk Density (RHOM)		
2	(G/C3)	3

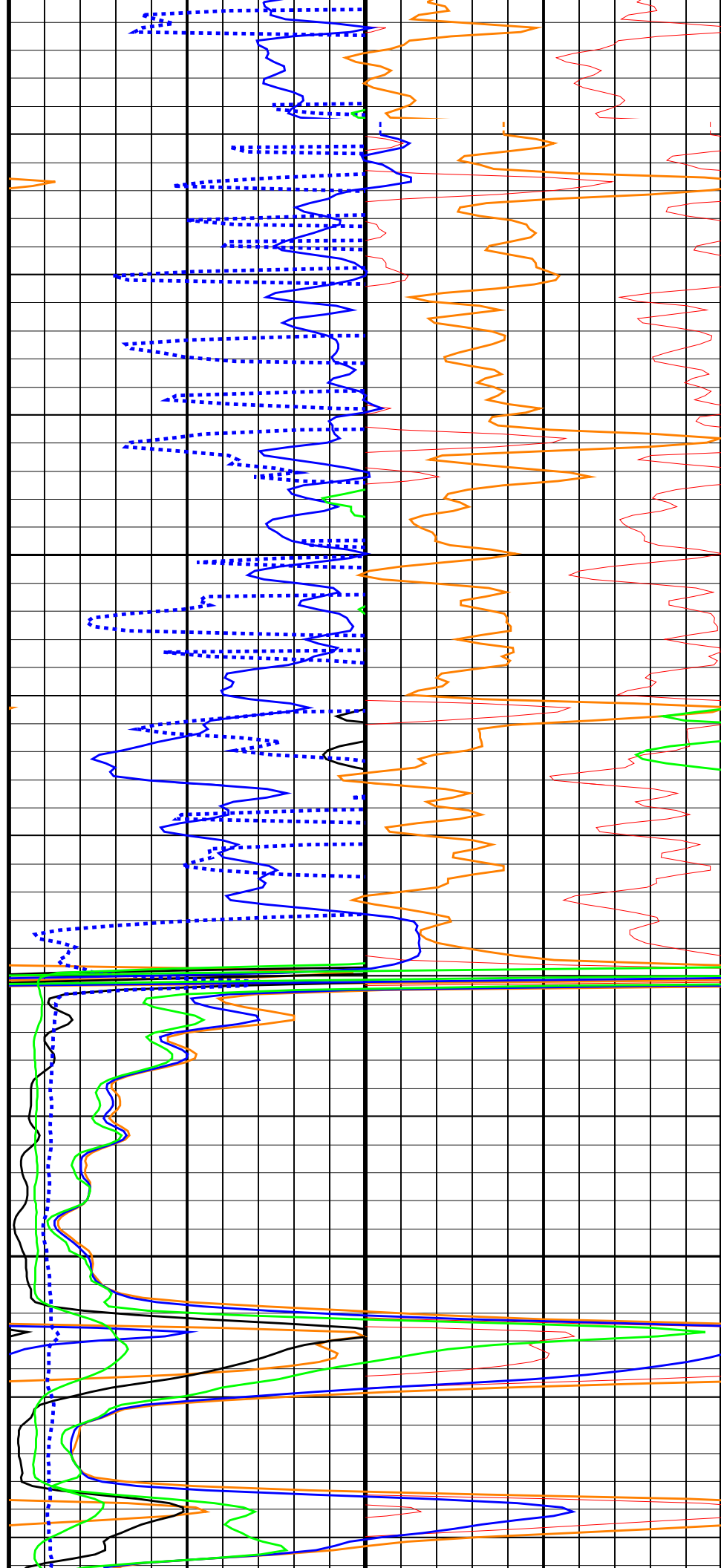


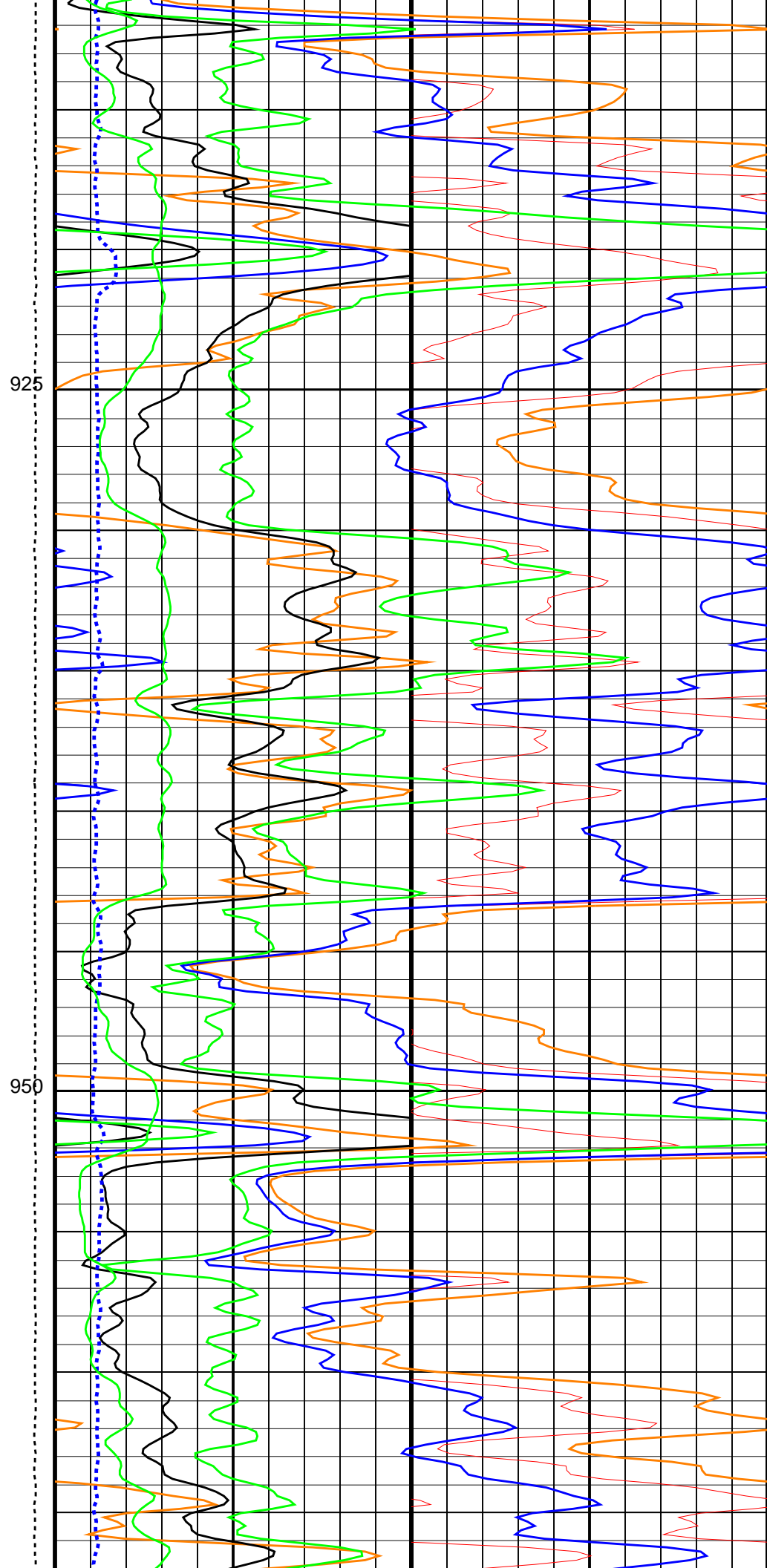
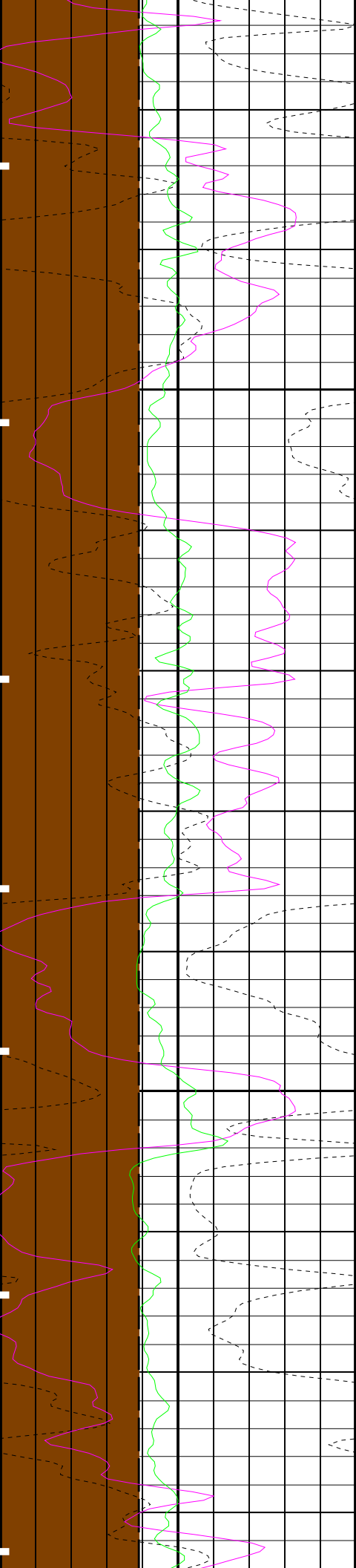


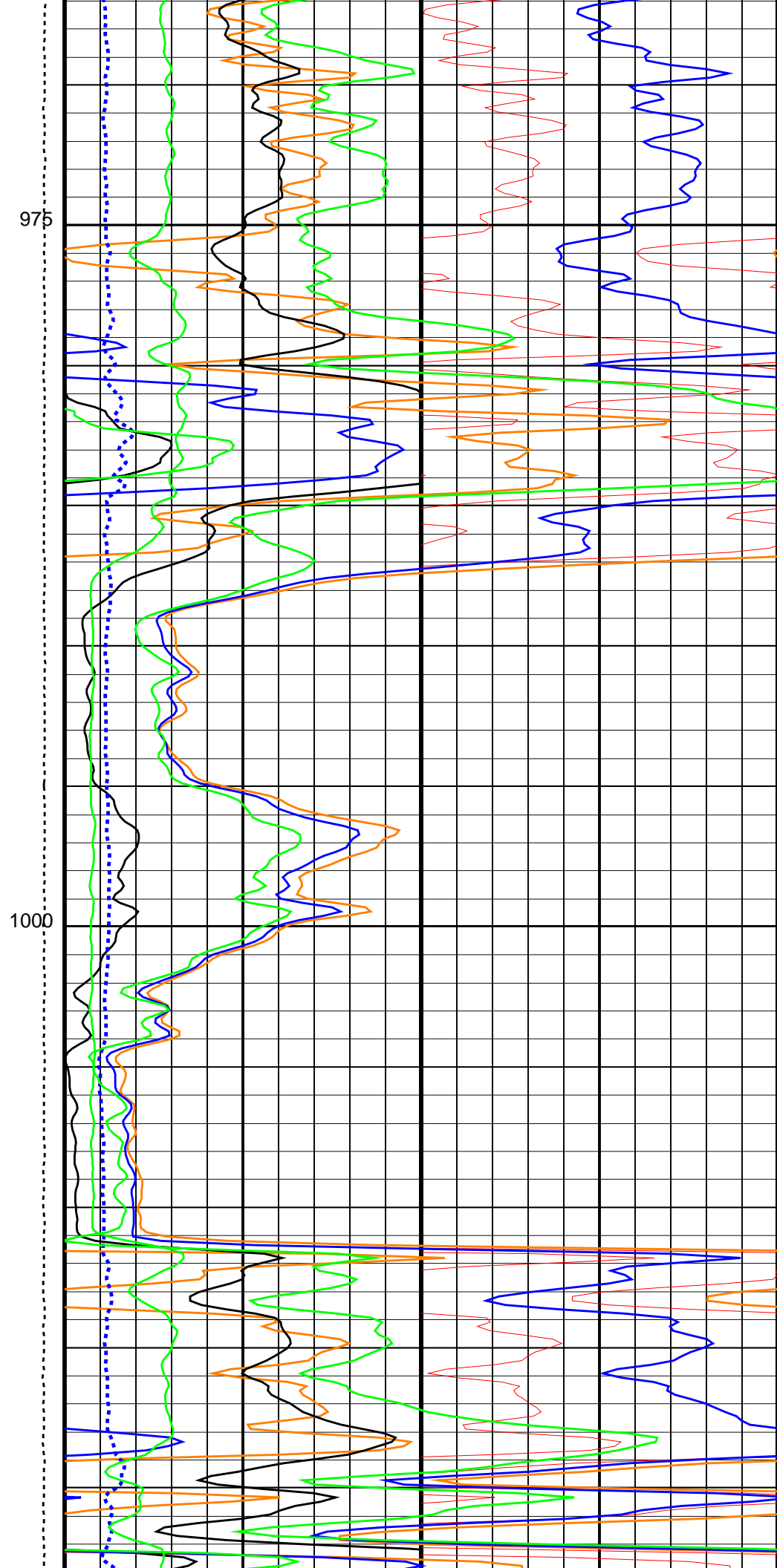
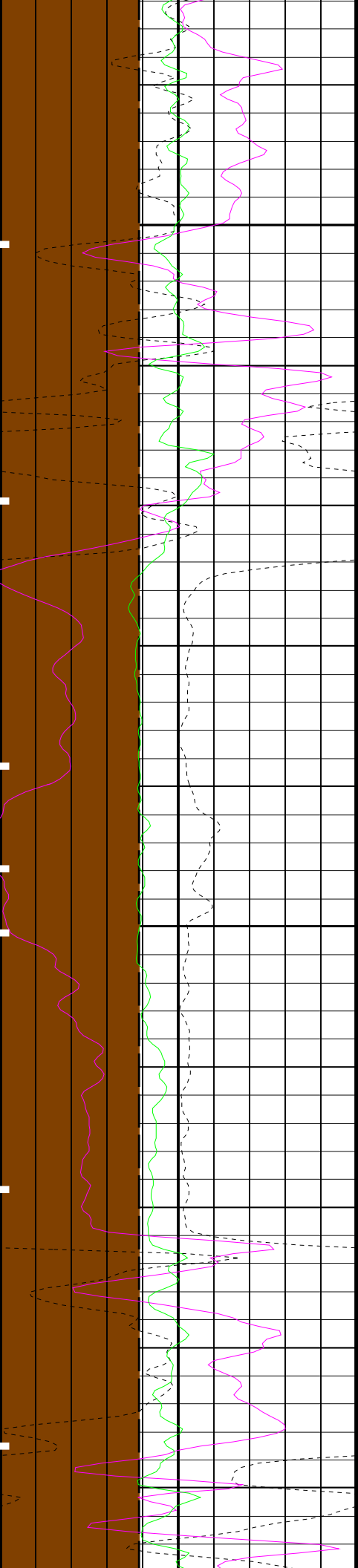


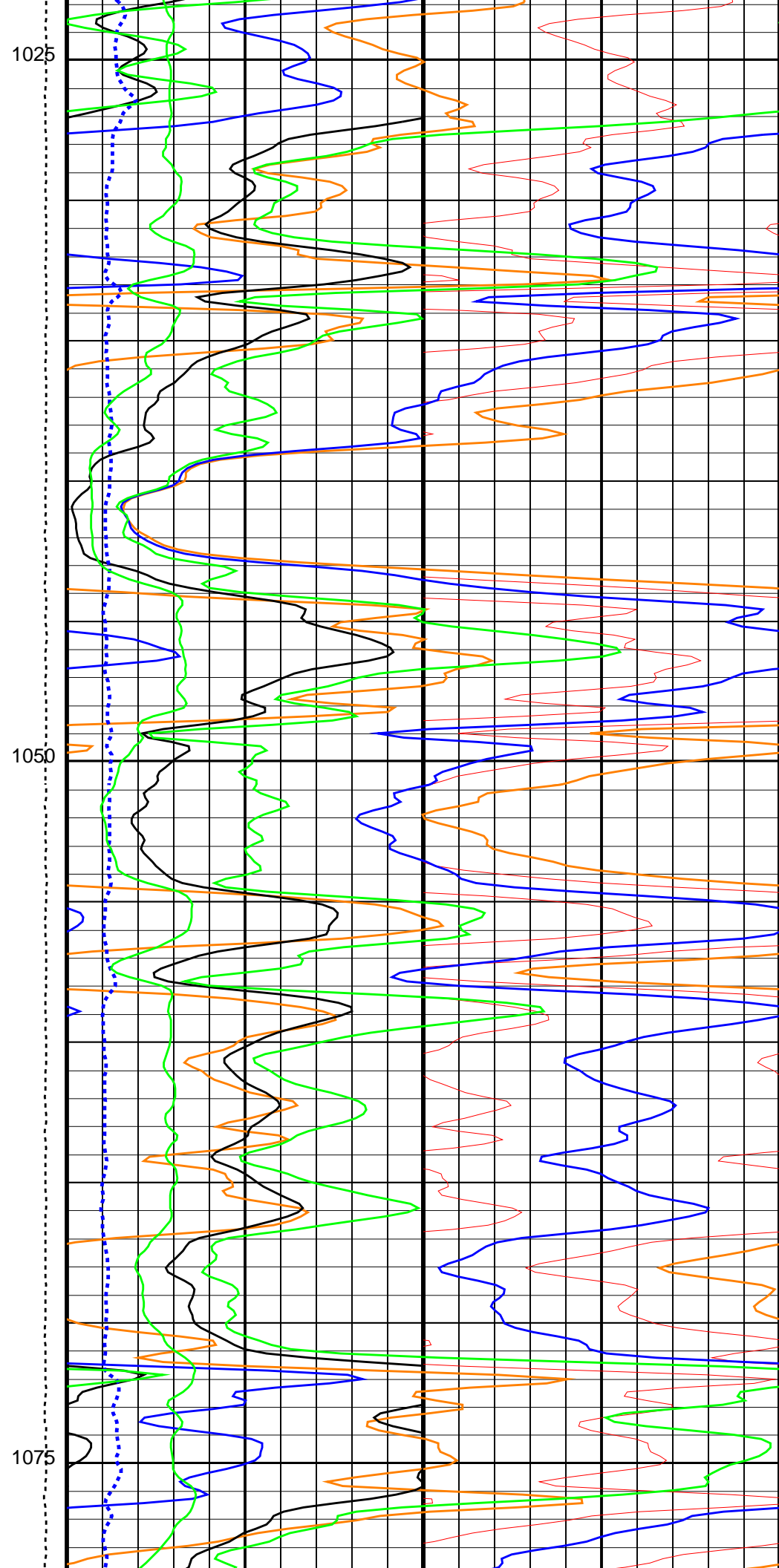
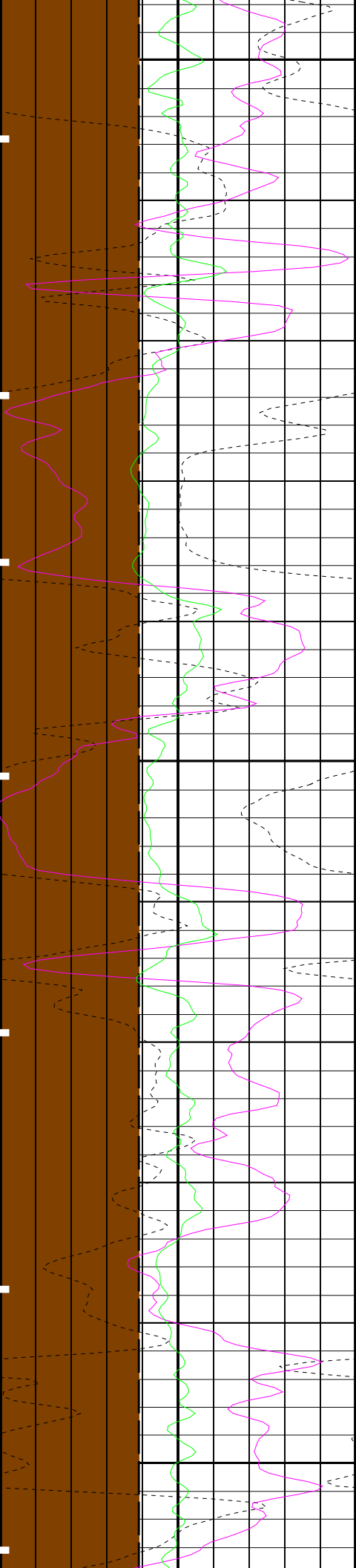
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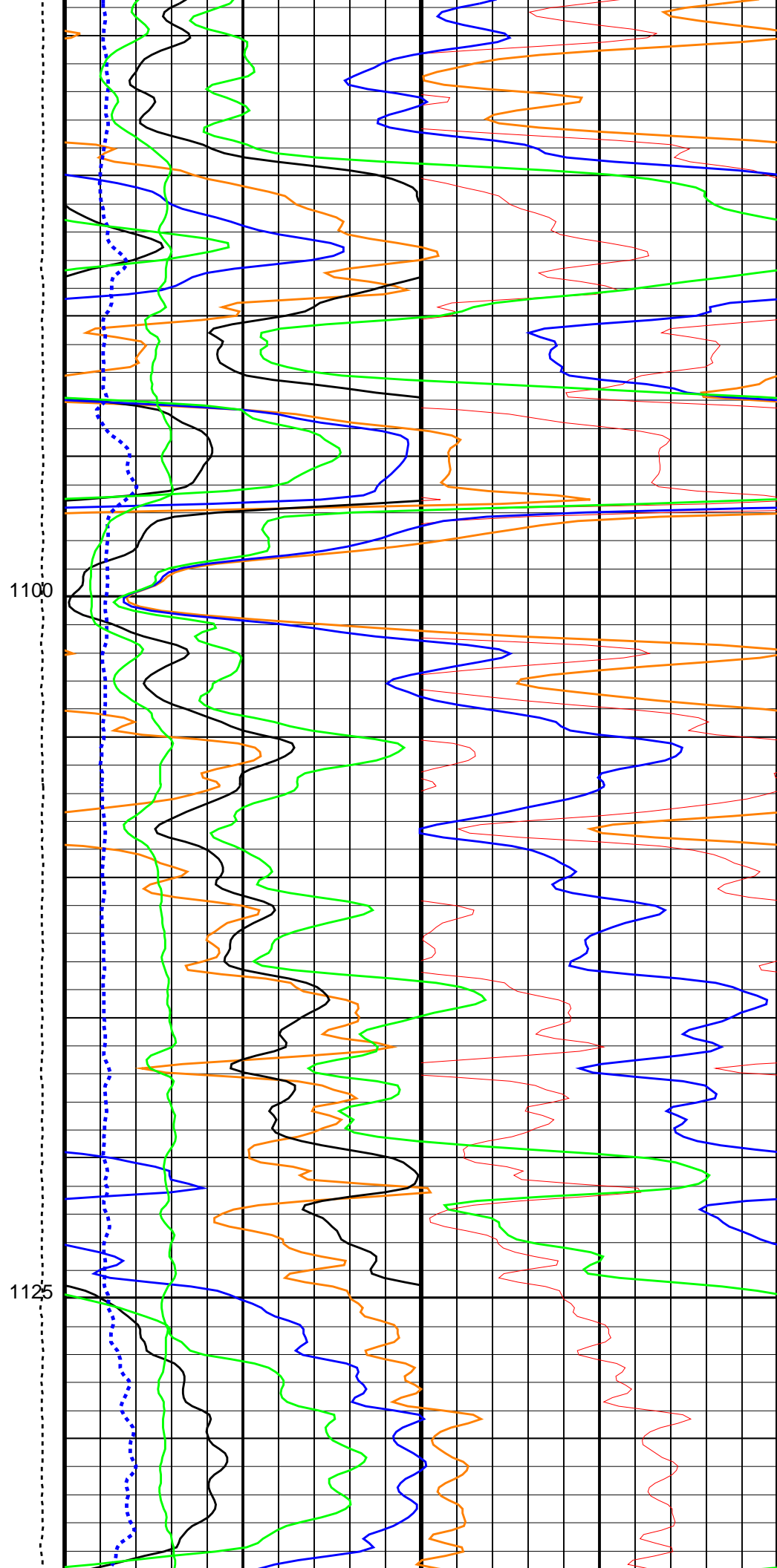
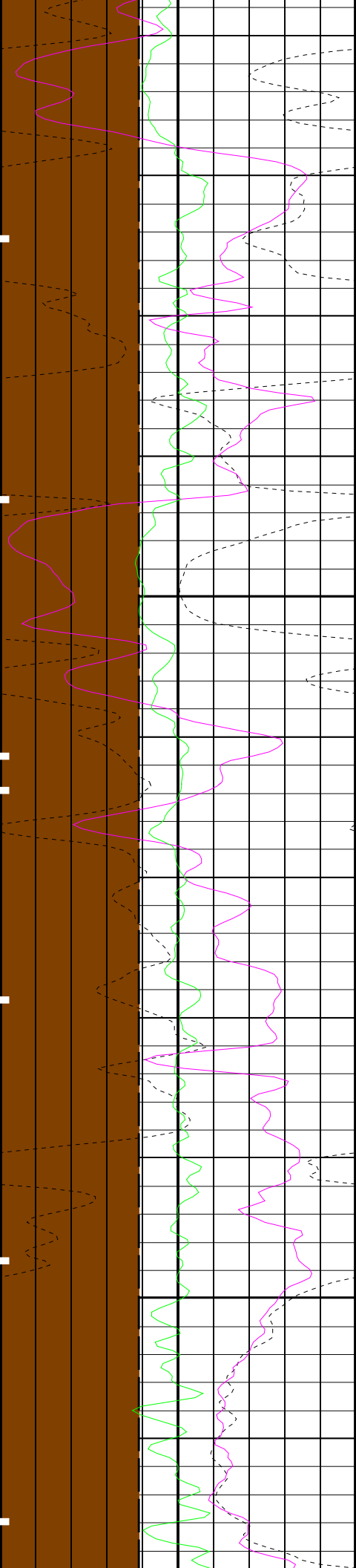
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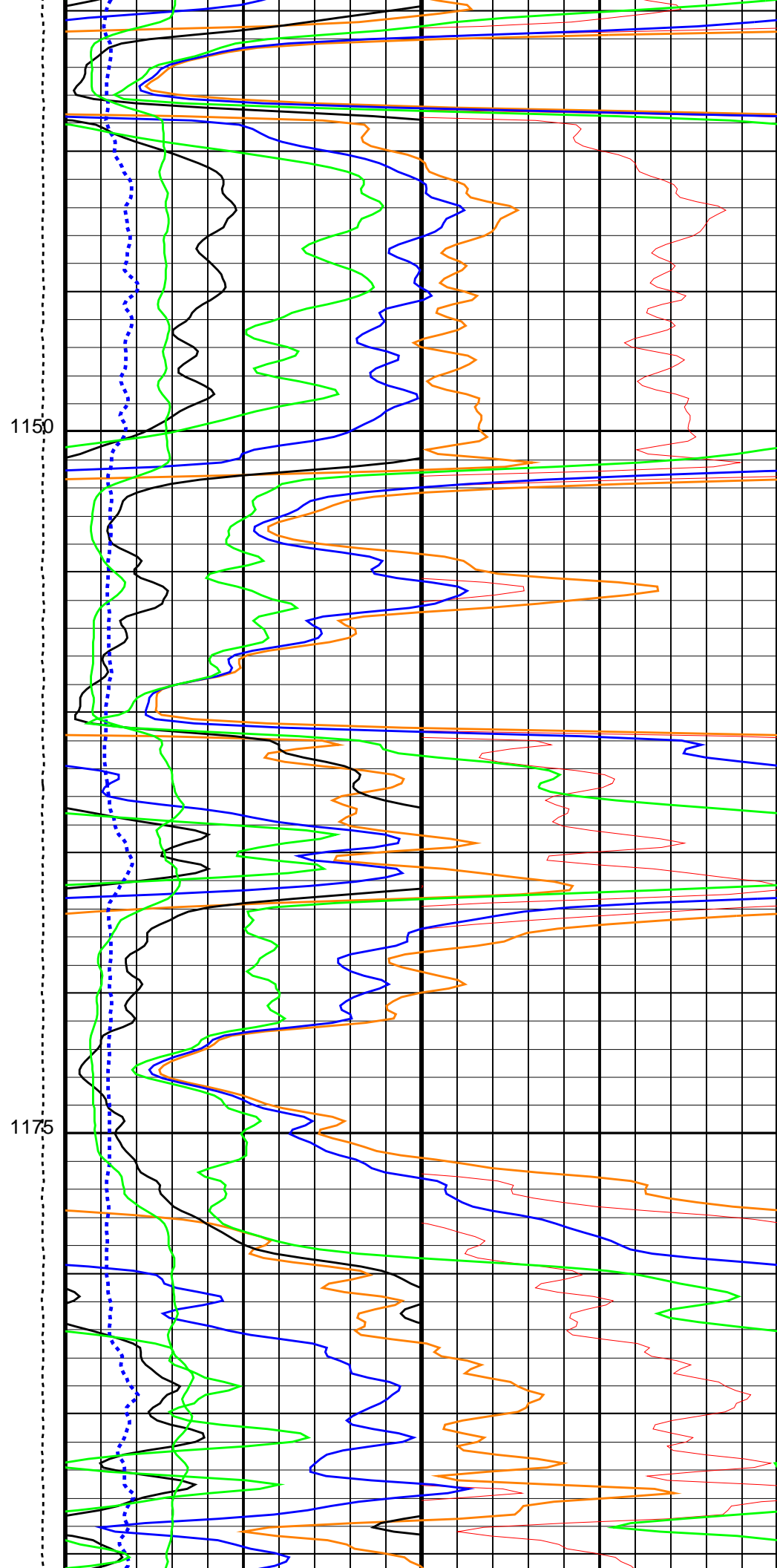
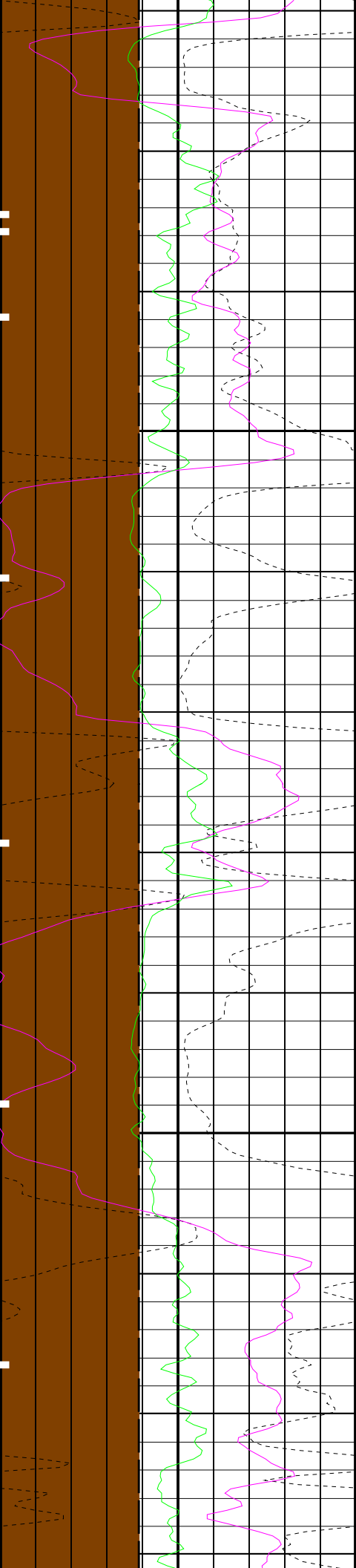


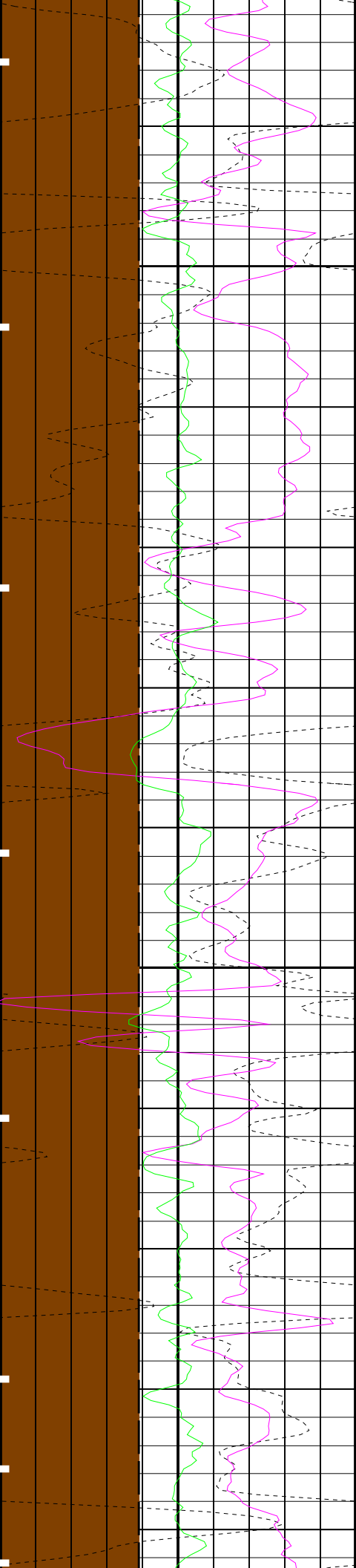






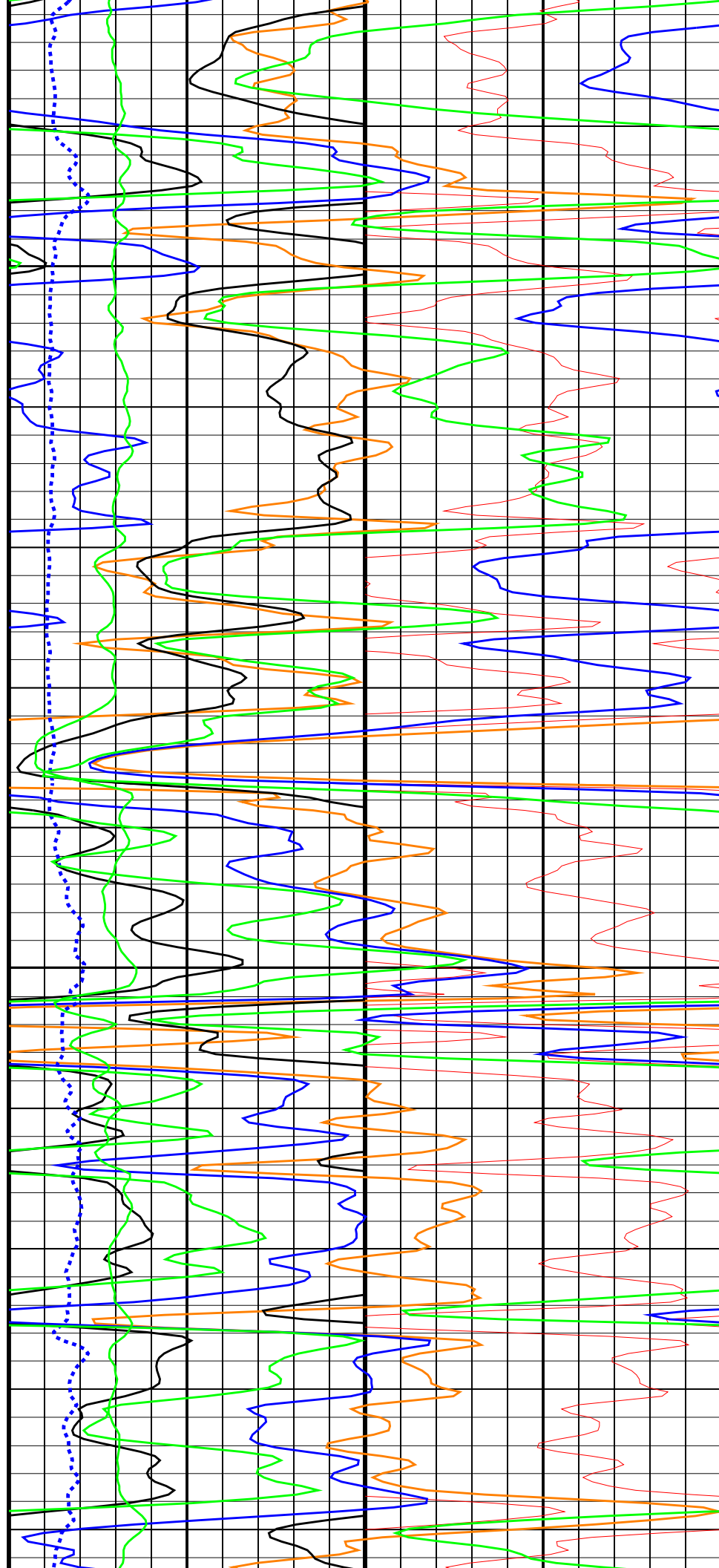


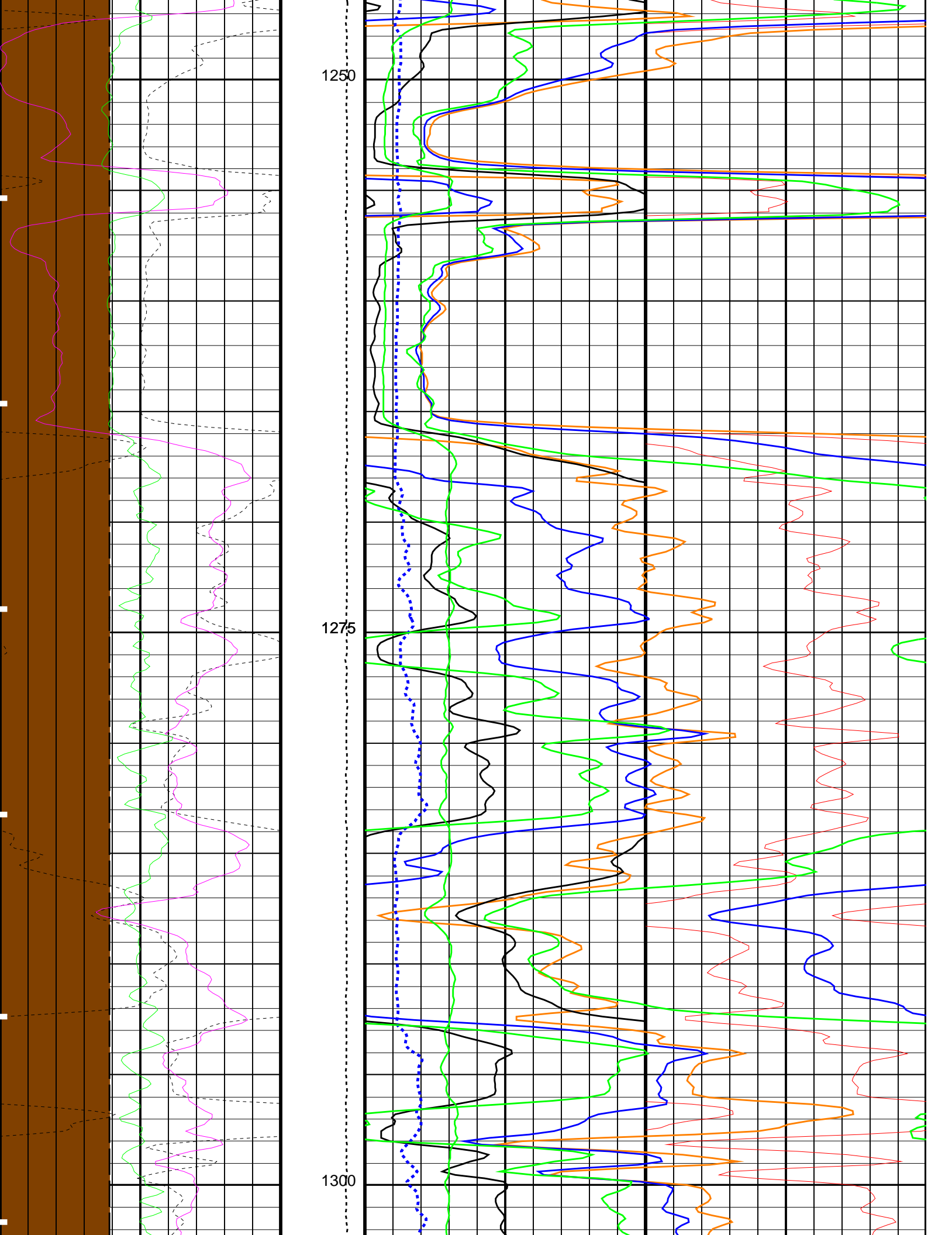


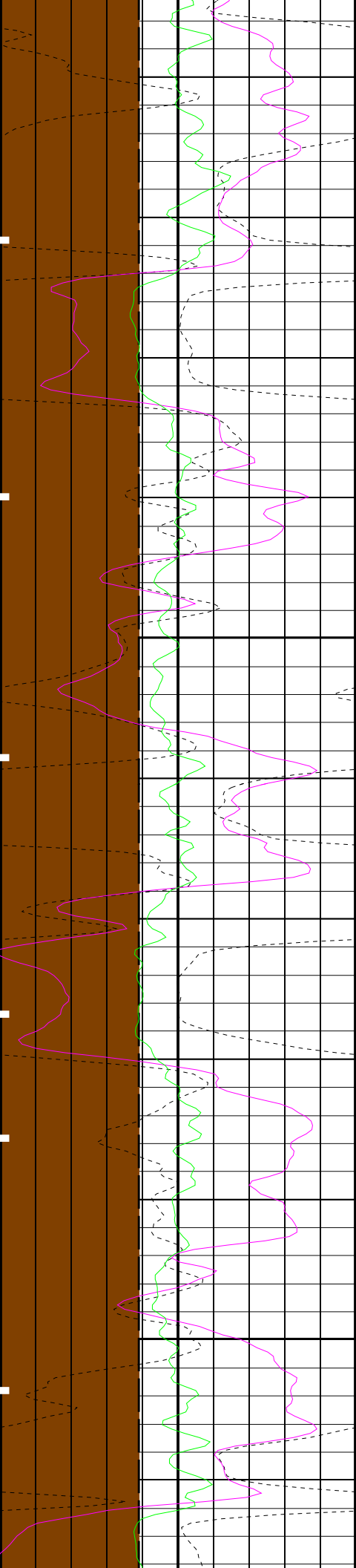


1200

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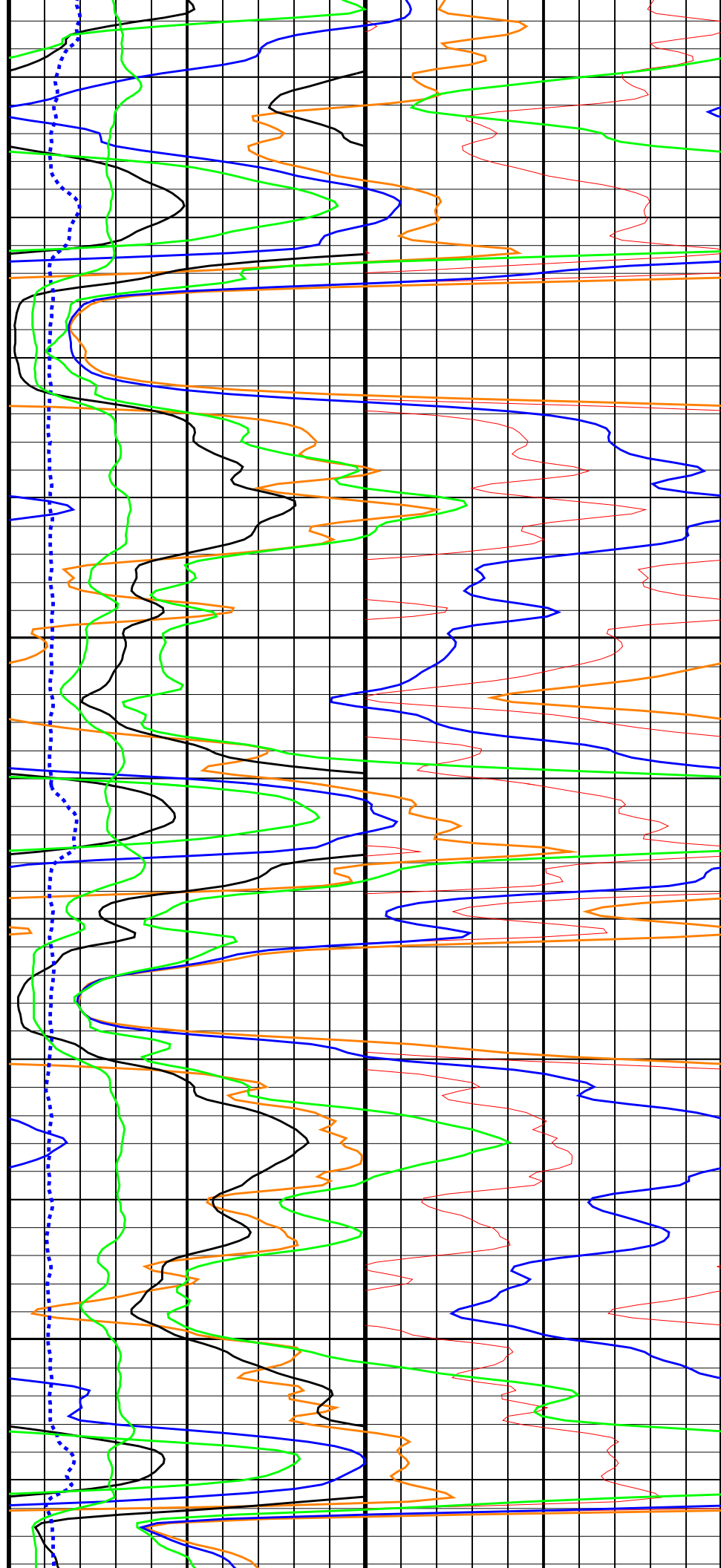


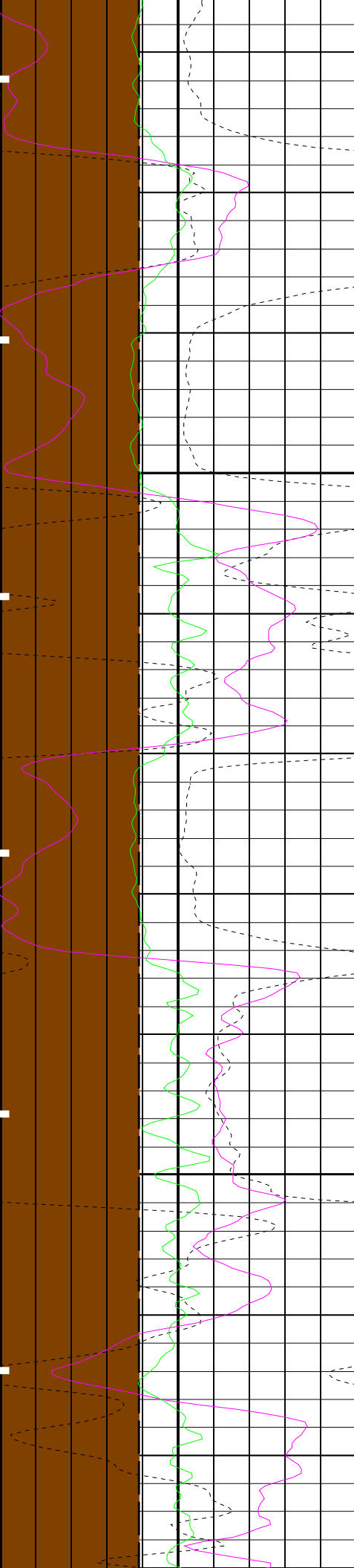




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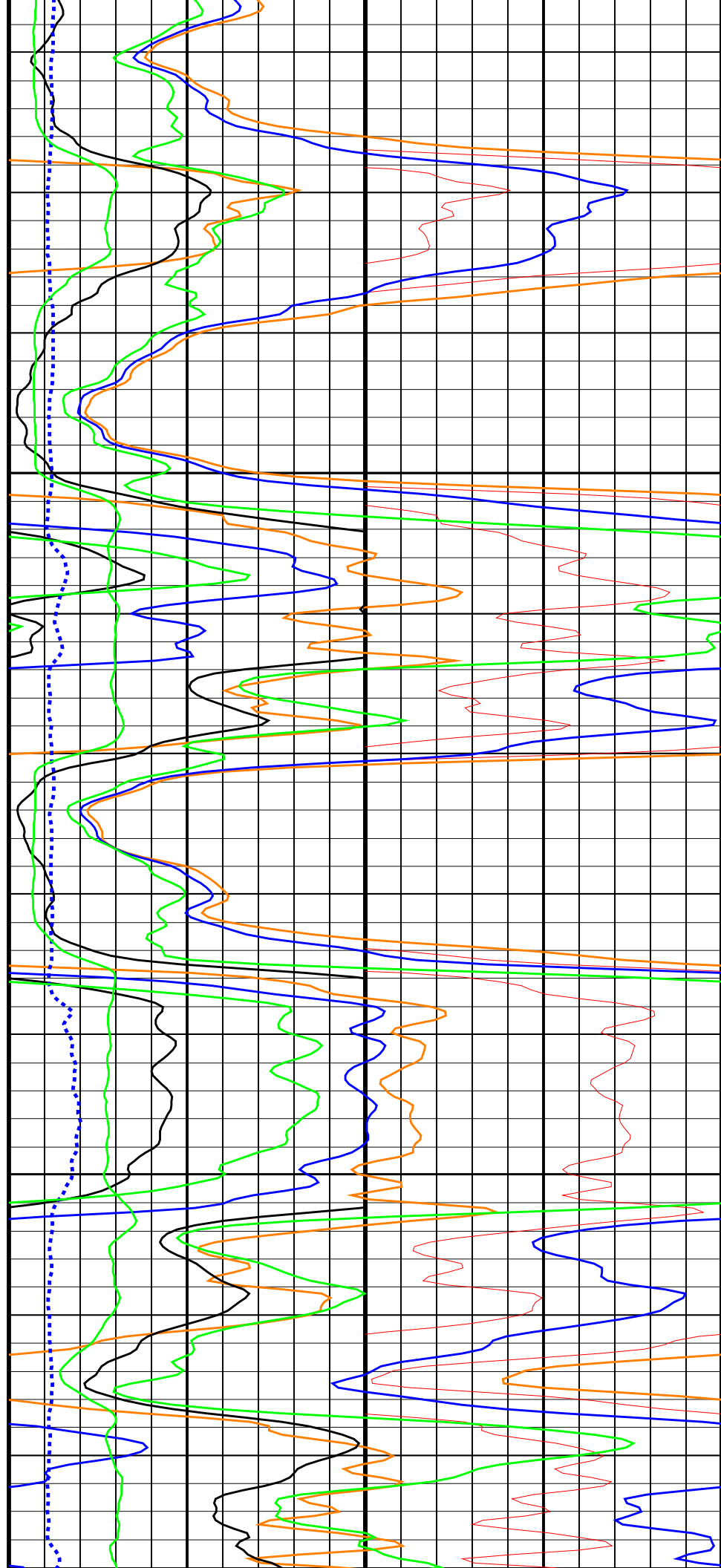
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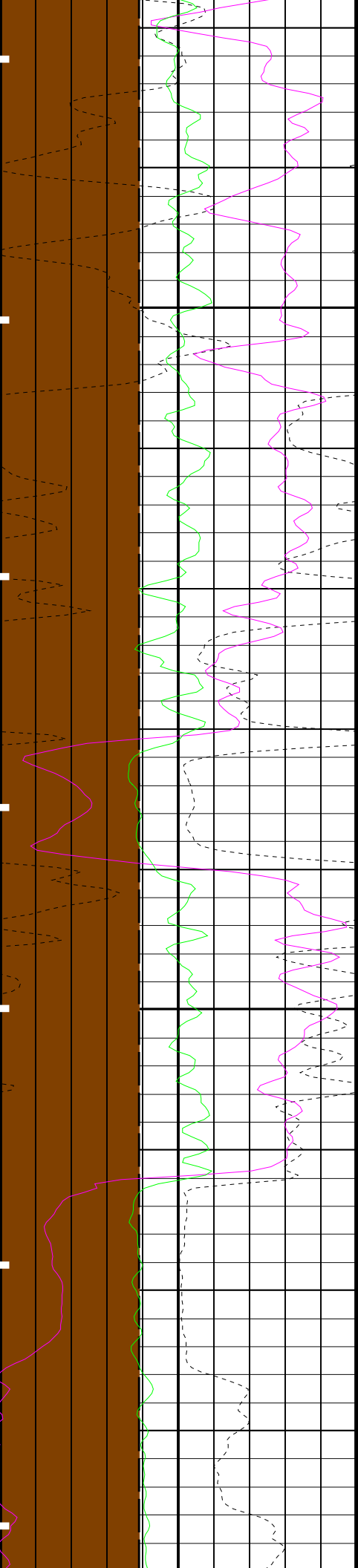




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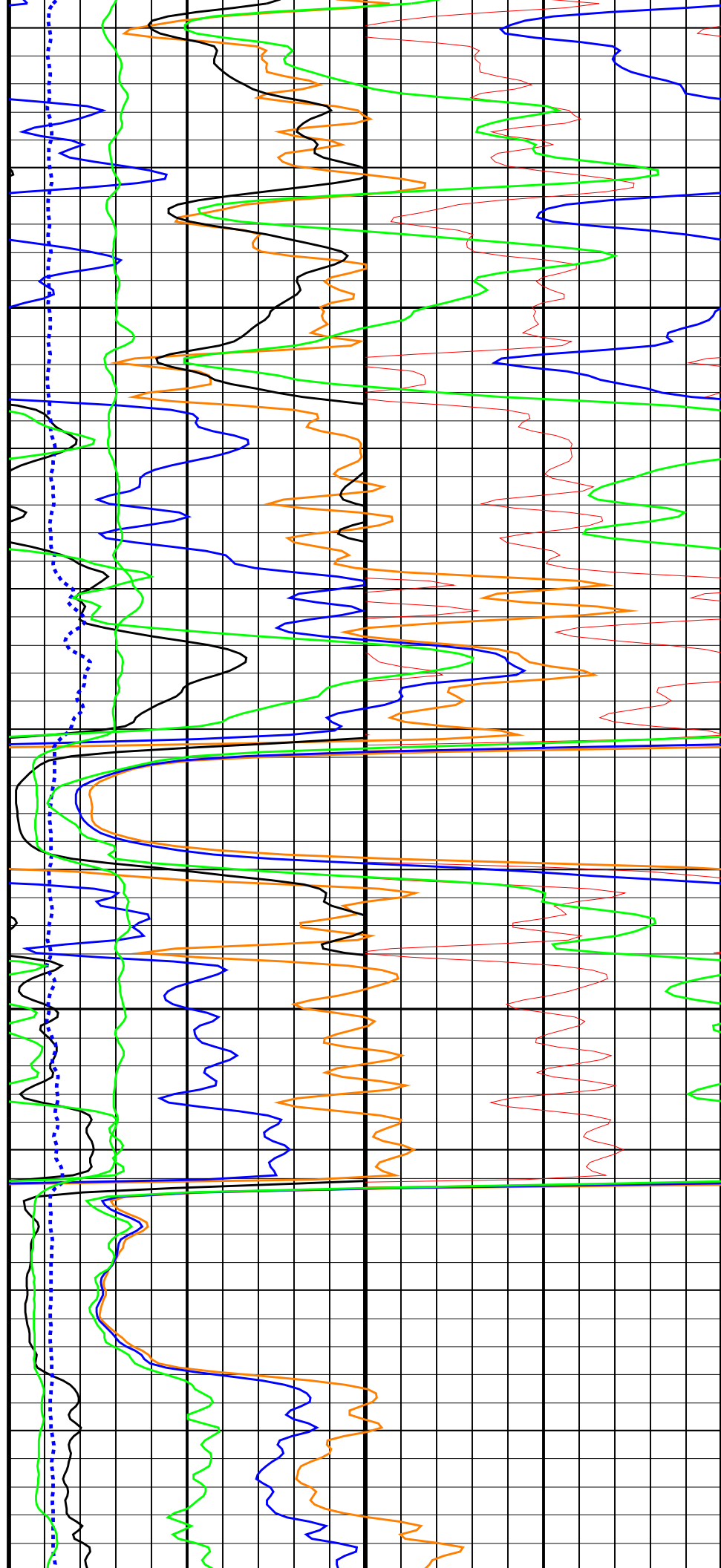
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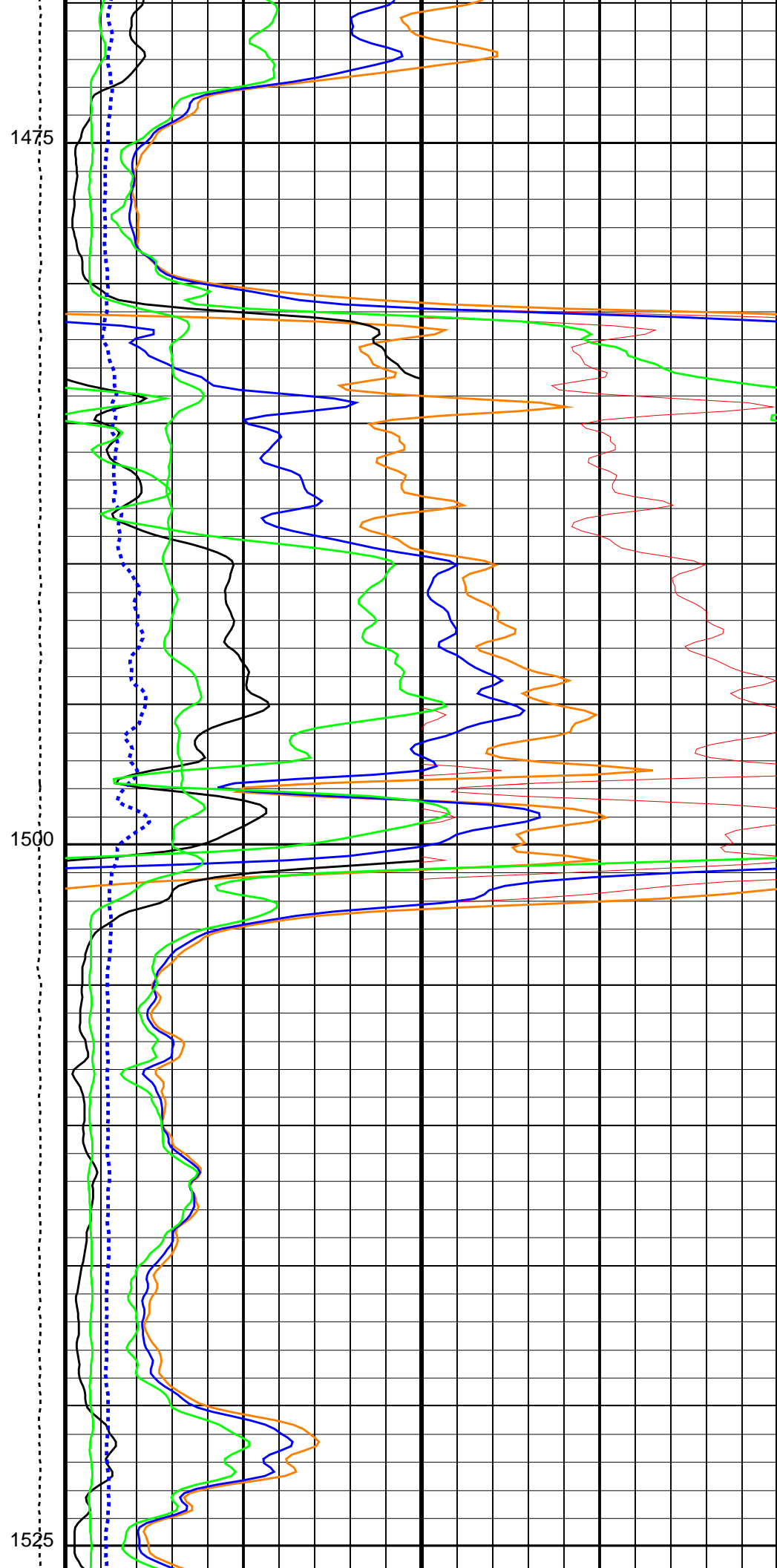
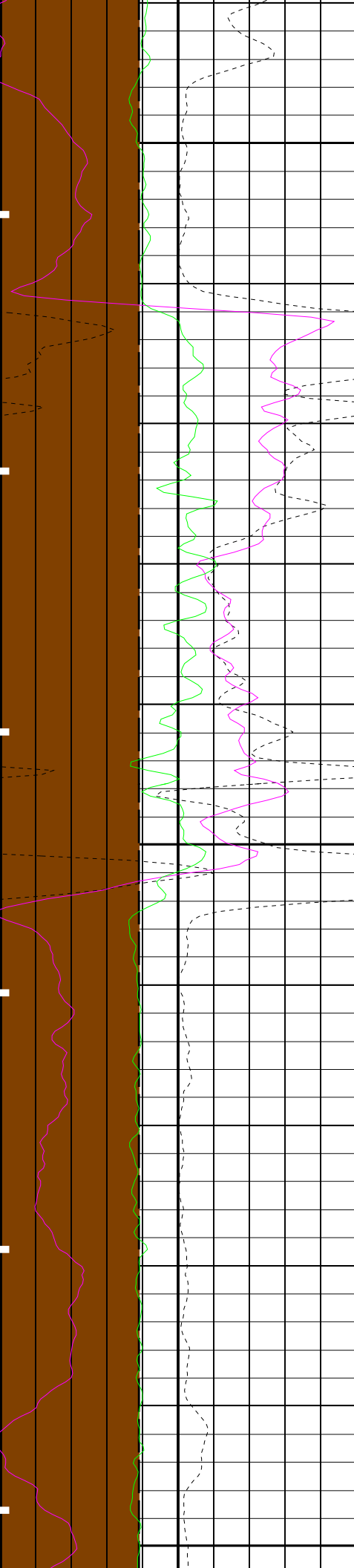


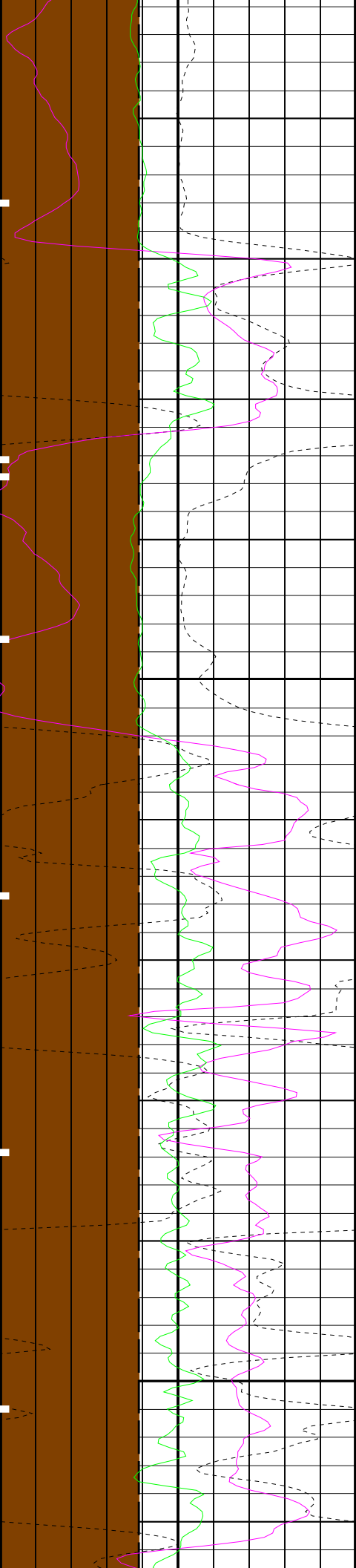


1425

1450

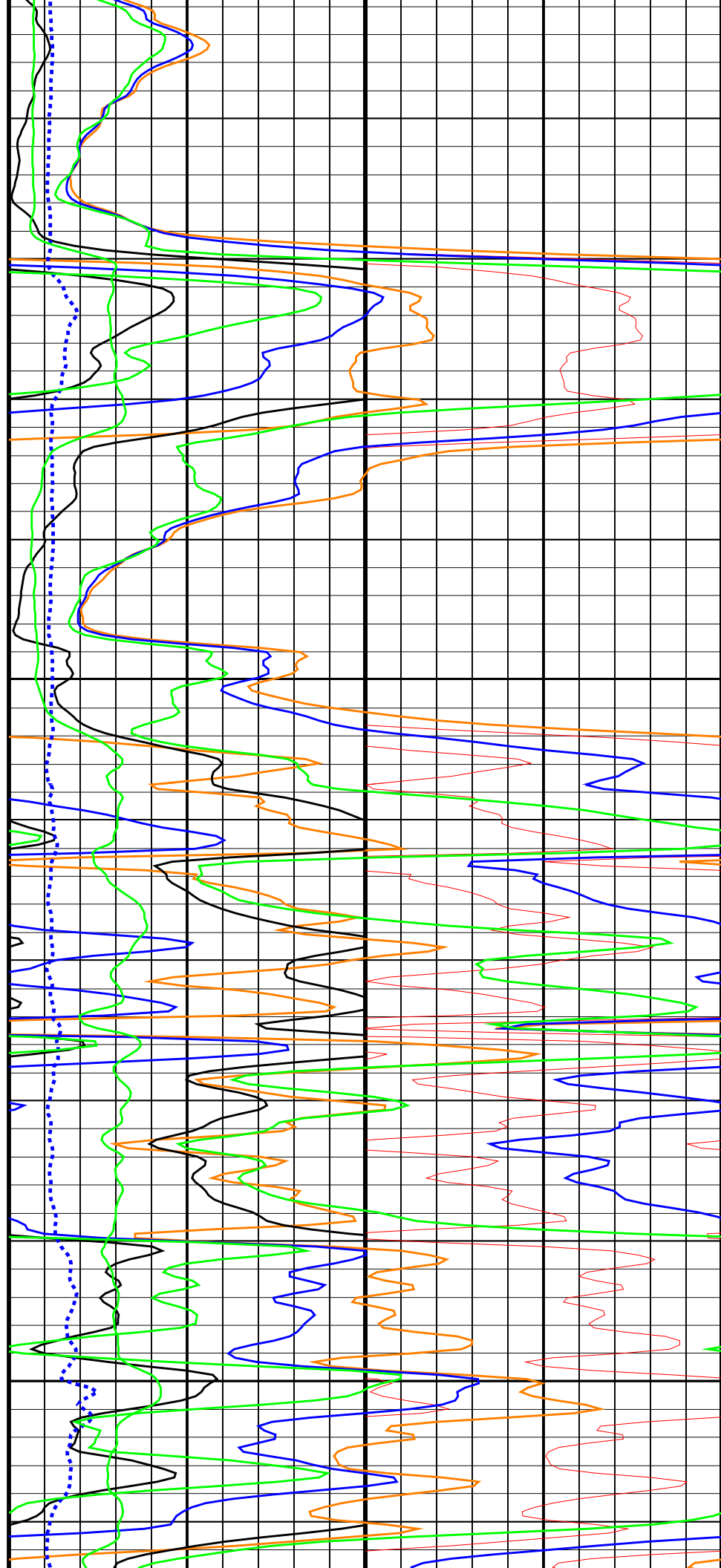


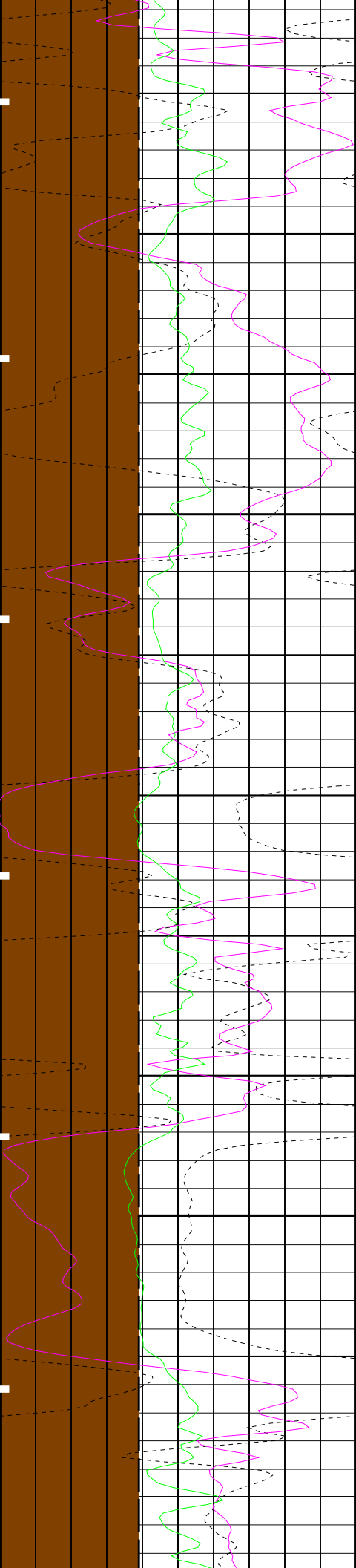




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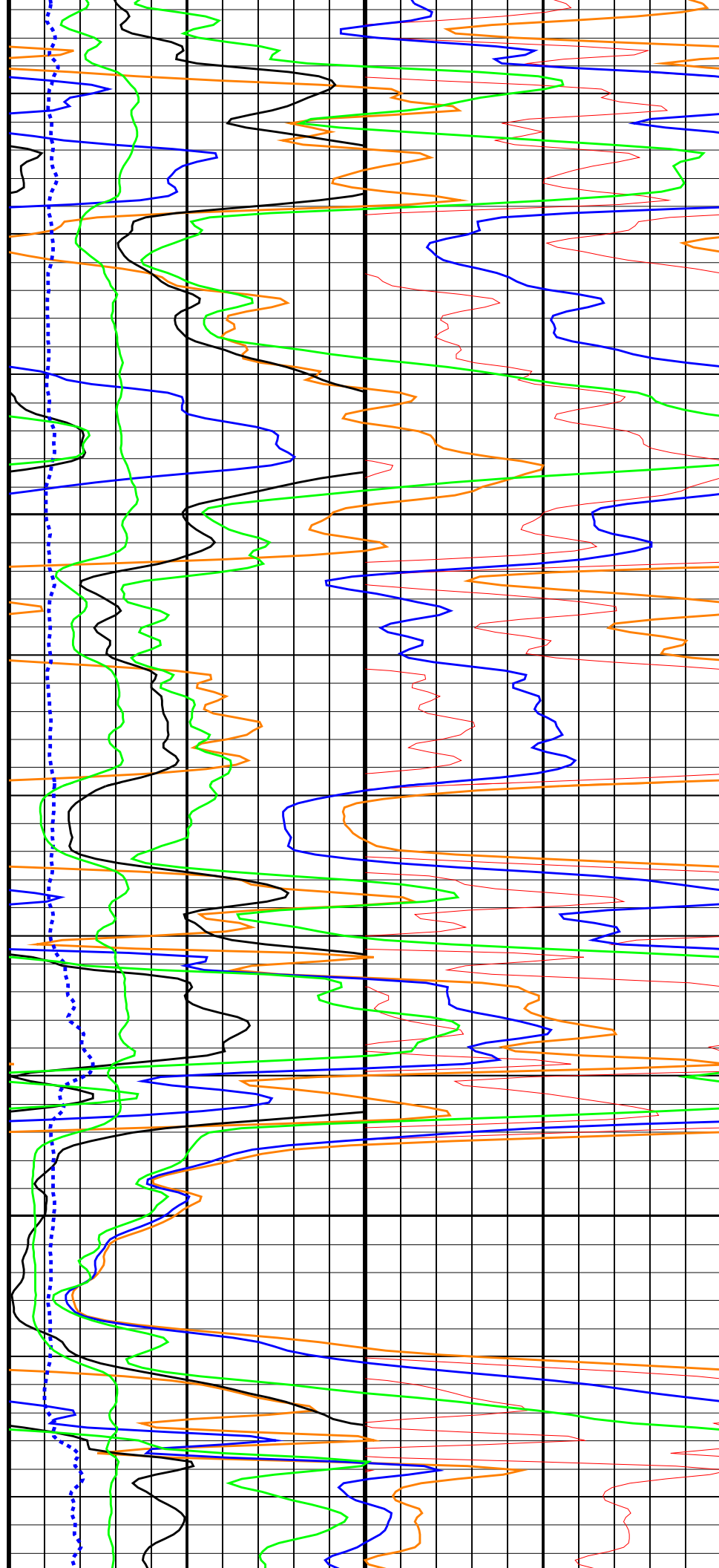
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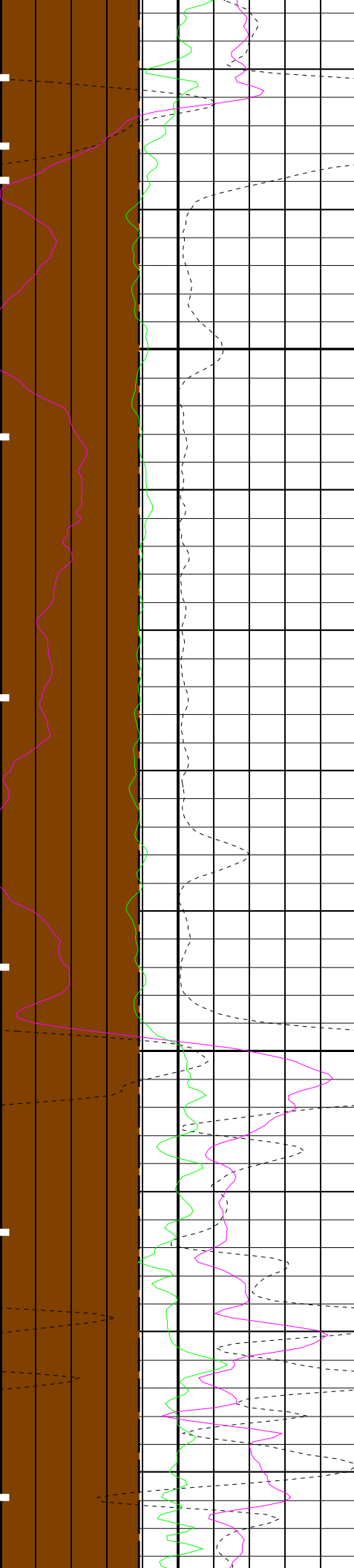




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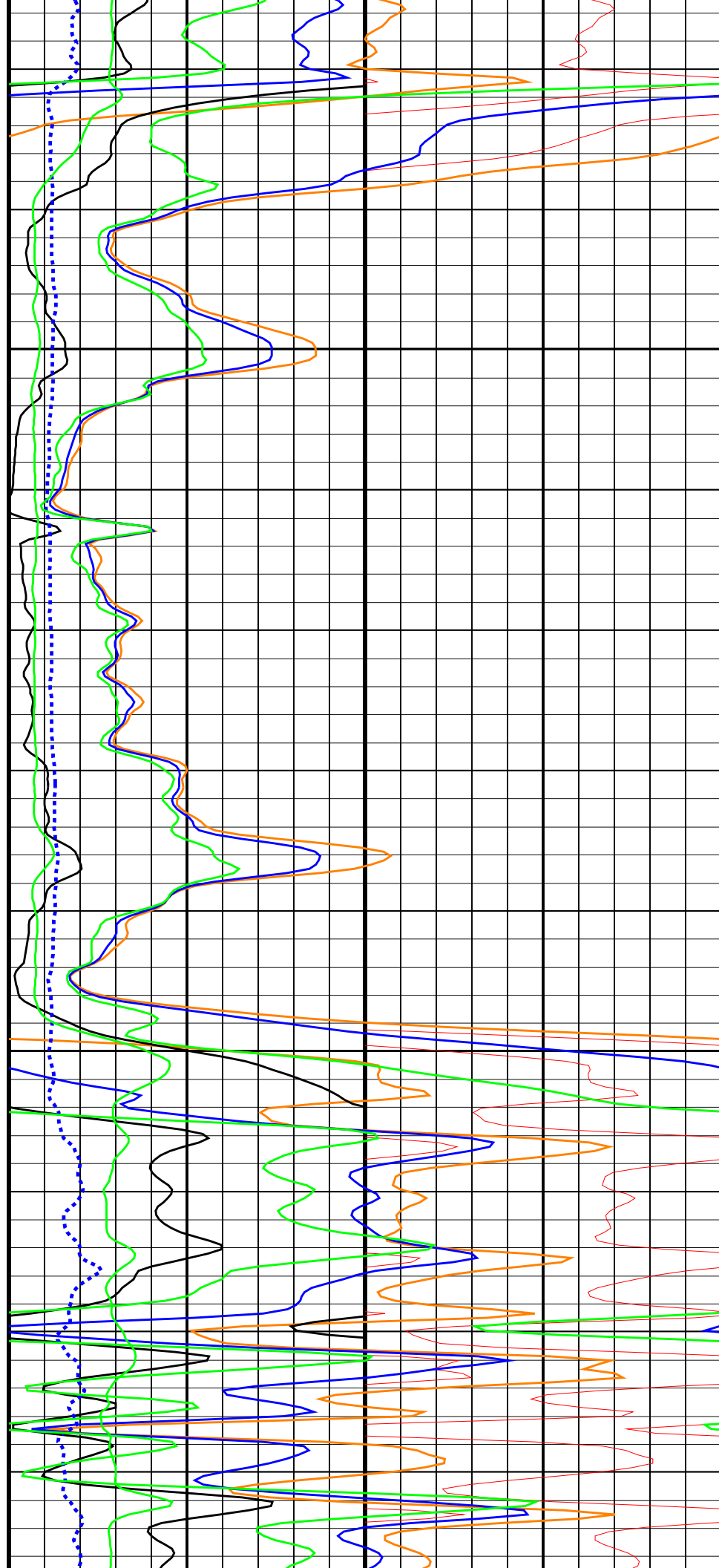
1625

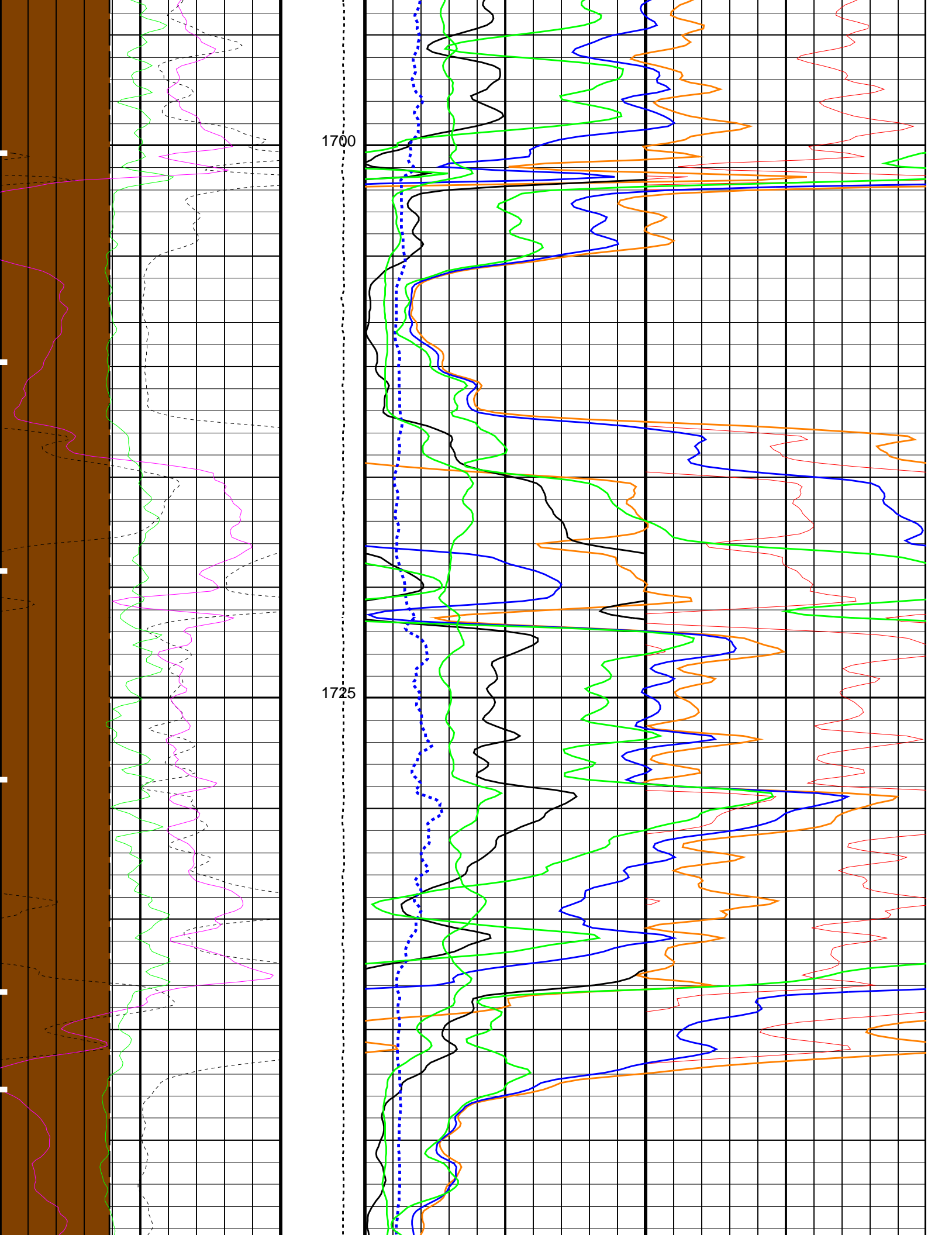


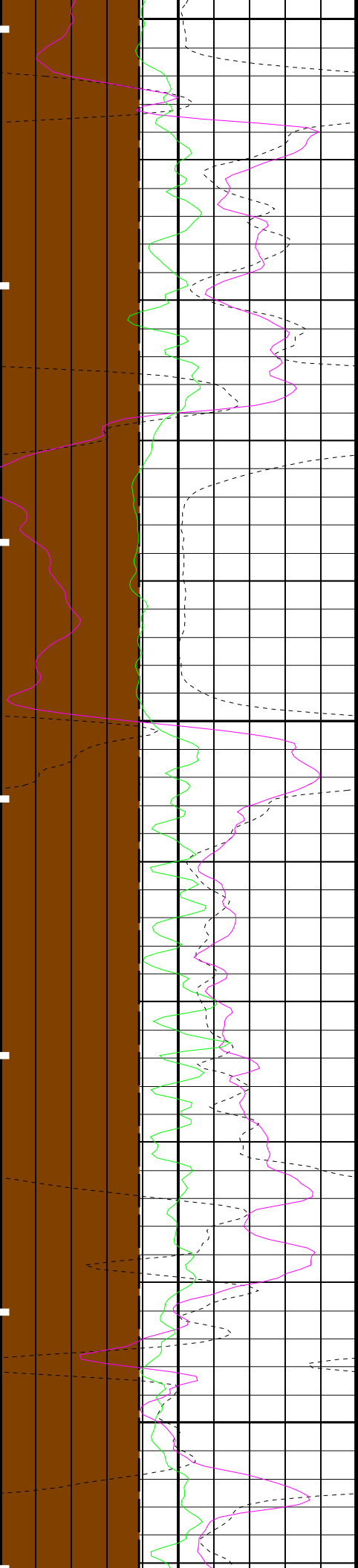


1650

1675



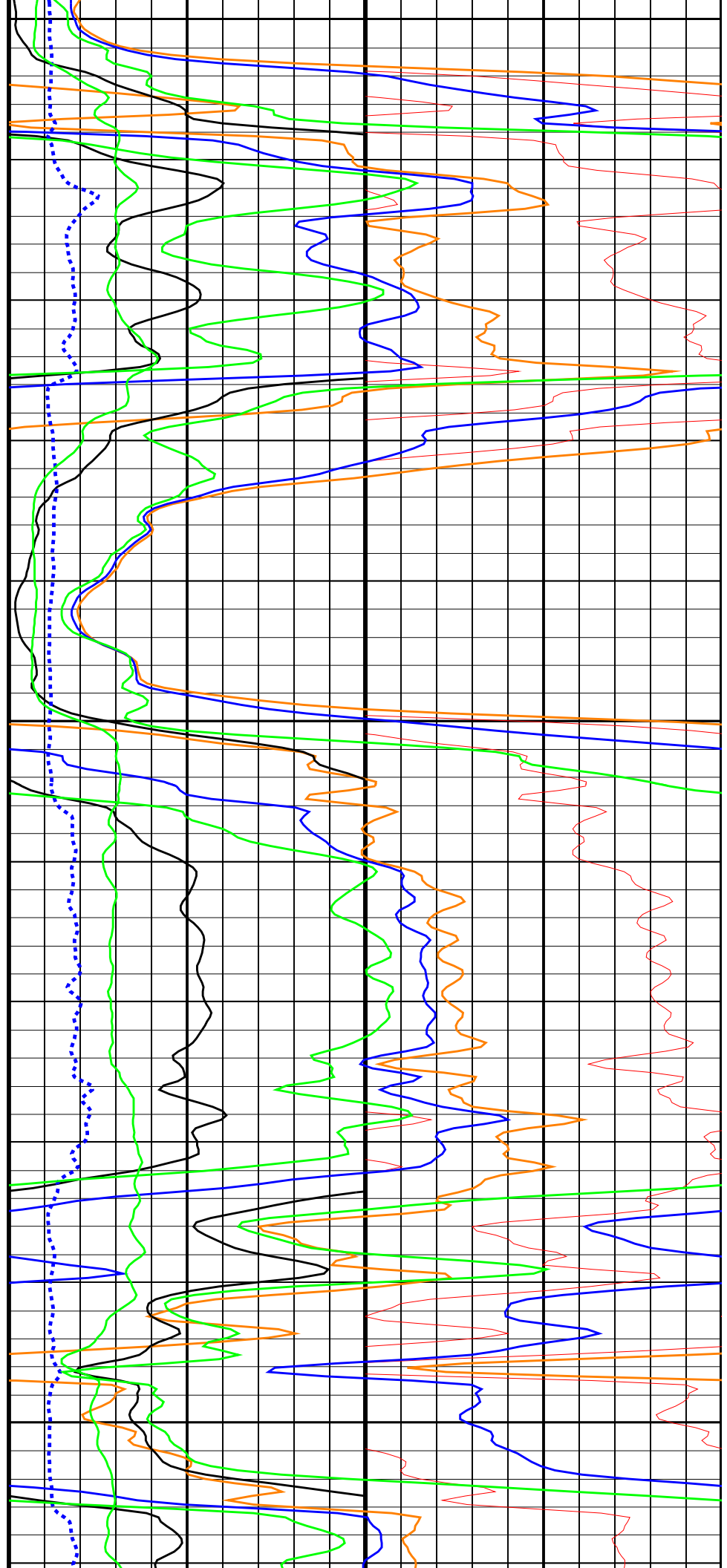


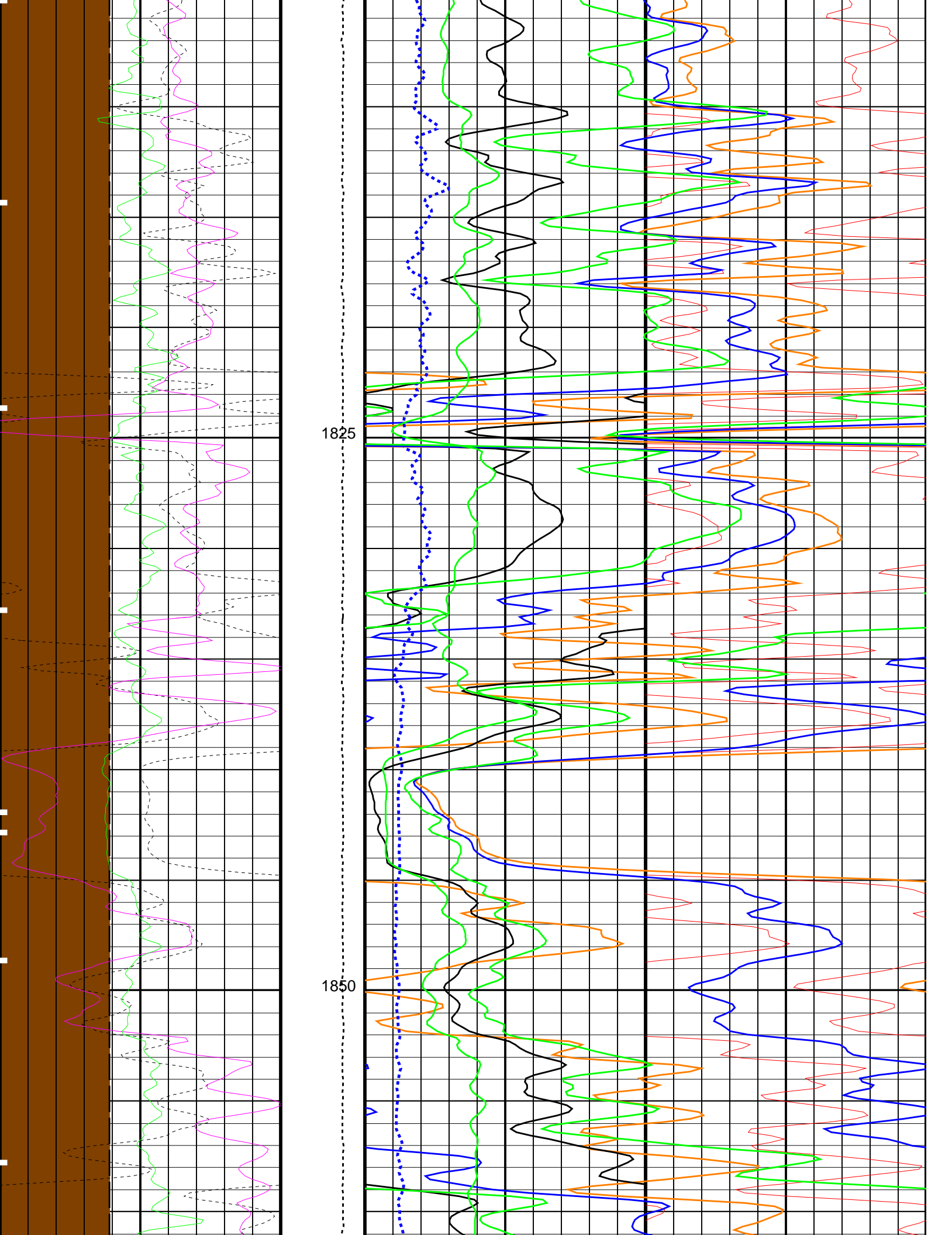


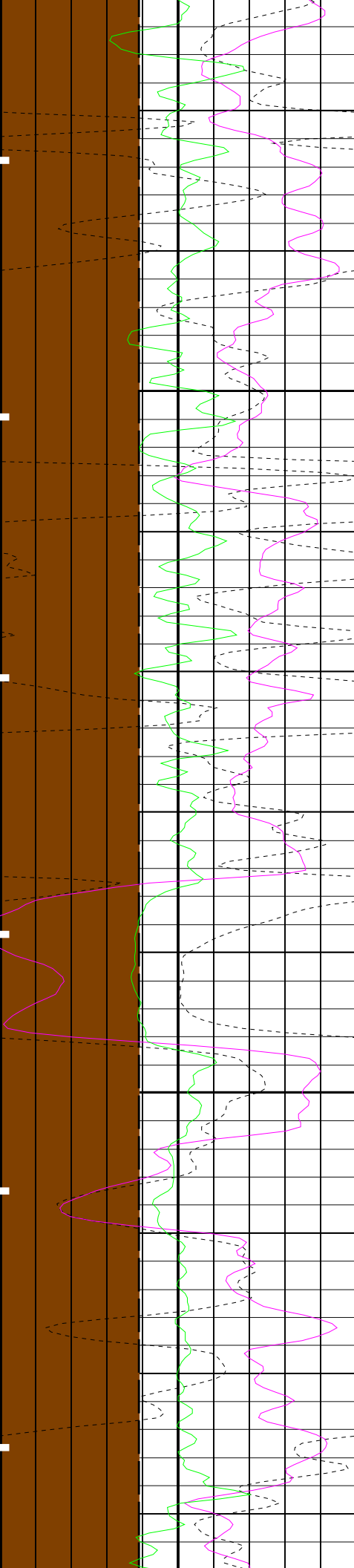
1750

1775

1800

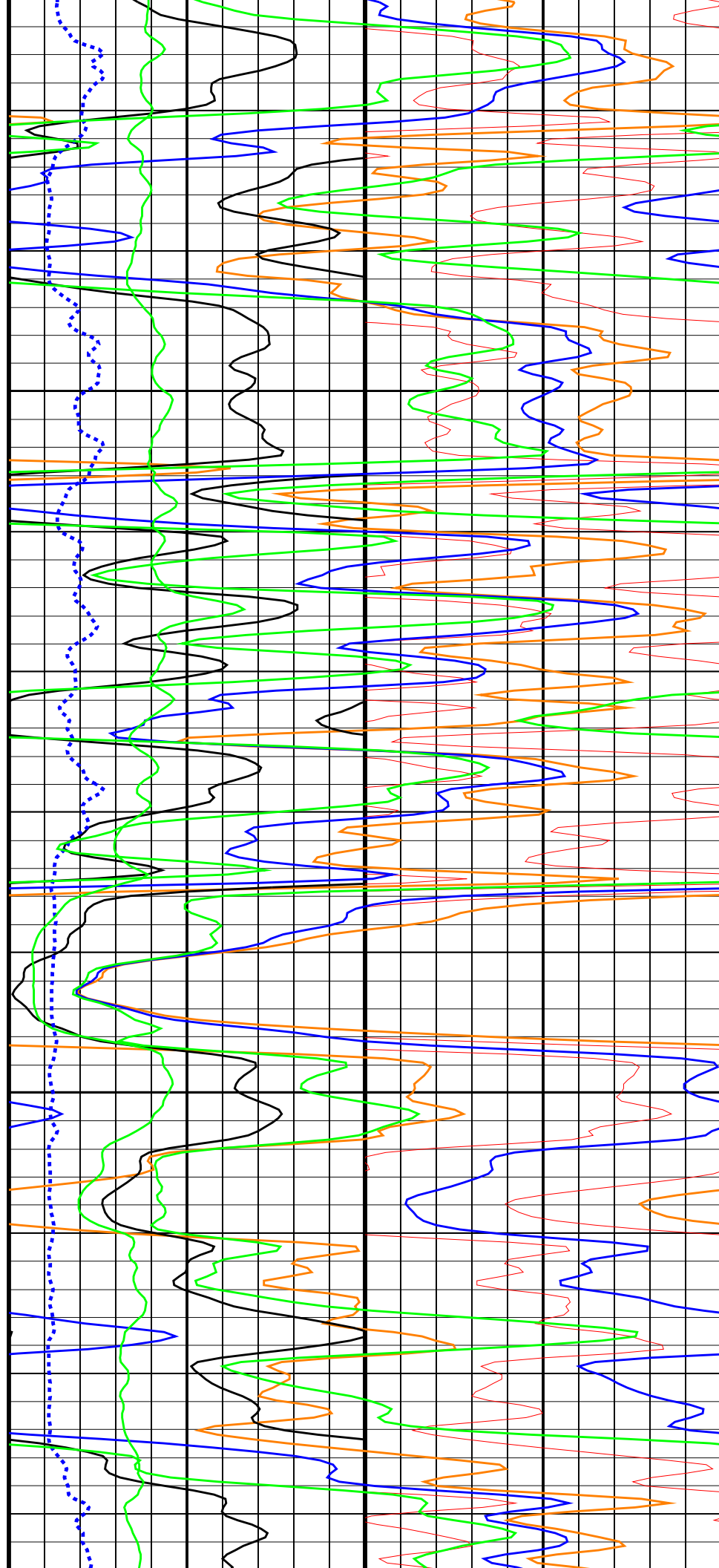


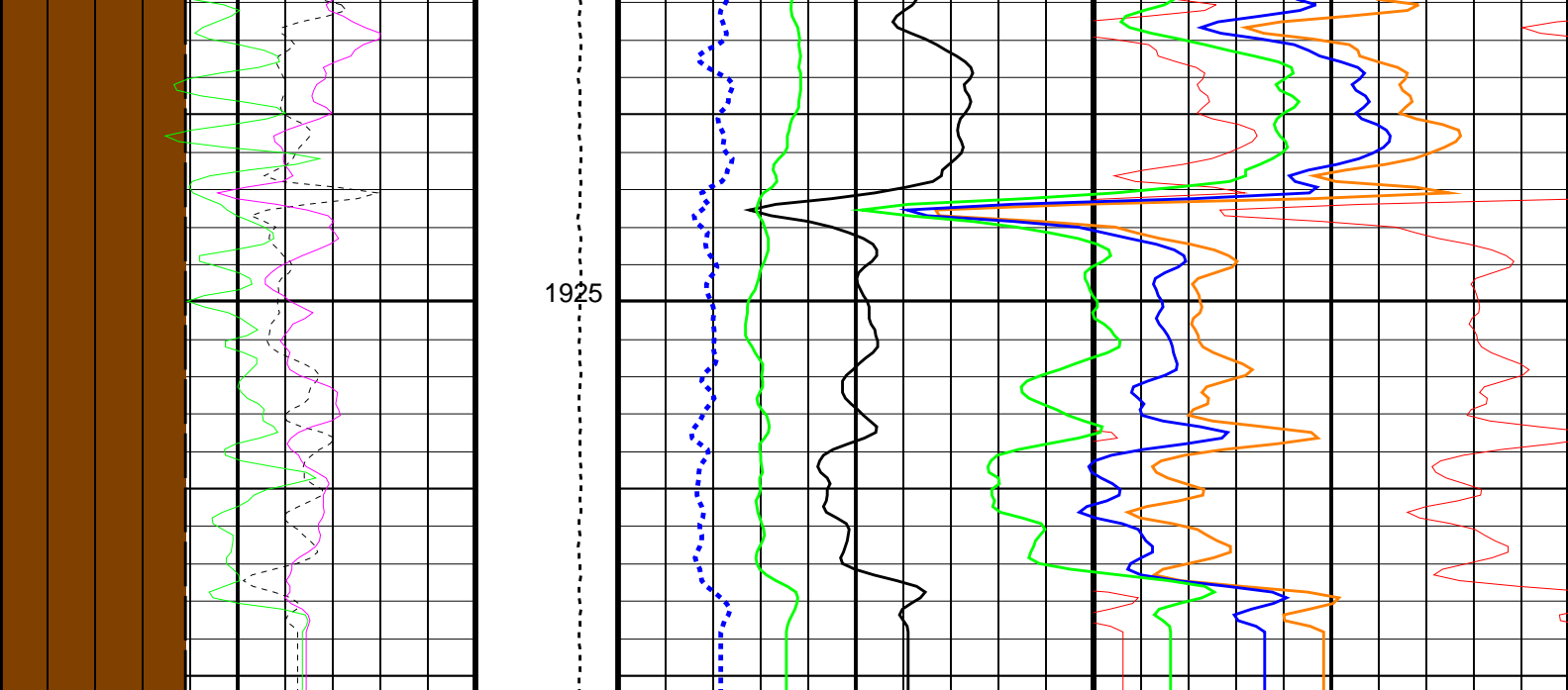




1875

1900





HLDS Bulk Density Correction (DRH) -0.25 (G/C3) 0.25			Tension (TENS) (LBF) 10000 0	HLDS Bulk Density (RHOM) 2 (G/C3) 3		
Bit Size (BS) 6 (IN) 16				HLDS SS2 Density (RHS3) 2 (G/C3) 3		HLDS Density Porosity (DPO) 30 (PU) 0
HLDS Caliper (LCAL) 6 (IN) 16				HLDS Long Spaced Bulk Density (RHL) 2 (G/C3) 3		
Mudcake From HLDS_CALIPER to BS				HLDS Short Spaced Photoelectric Effect (PEFS) 0 (----) 10		
				HLDS Long Spaced Photoelectric Effect (PEFL) 0 (----) 10		
HLDS Short Spacing Quality Indicator (LQSS) -0.25 (----) 0.25				HLDS Short Spaced Bulk Density (RHS) 2 (G/C3) 3		
HLDS Long Spacing Quality Indicator (LQLS) -0.25 (----) 0.25						

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name		Description	Value	
HLDS: Hostile Litho-Density Sonde				
DHC		Density Hole Correction	CALIPER	
DPPM		Density Porosity Processing Mode	HIRS	
FD		Fluid Density	1	G/C3
LATC		HLDS Activation Correction	OFF	
MDEN		Matrix Density	2.71	G/C3
EDTC-B: Enhanced DTS Cartridge				
DPPM		Density Porosity Processing Mode	HIRS	
System and Miscellaneous				
BS		Bit Size	9.875	IN
DFD		Drilling Fluid Density	9.00	LB/G
DO		Depth Offset for Playback	0.0	M
PP		Playback Processing	NORMAL	

HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	19C0-187		

Input DLIS Files					
DEFAULT	Flip_LDL_NGS_048LUP	PRODUCER	26-May-2023 12:20	1935.5 M	763.5 M
Output DLIS Files					
DEFAULT	LDL_NGS_106PUP	FN:101	PRODUCER	30-May-2023 13:25	

Schlumberger

First Up Pass

MAXIS Field Log

Company: International Ocean Discovery Program				Well: Expedition 399, Site U1601C			
Input DLIS Files							
DEFAULT	LDL_NGS_044LUP	FN:43	PRODUCER	26-May-2023 11:22	1936.2 M	854.9 M	
Output DLIS Files							
DEFAULT	LDL_NGS_105PUP	FN:100	PRODUCER	30-May-2023 13:20	1936.2 M	855.0 M	
OP System Version: 19C0-187							
HLDS	19C0-187		LDSC-B	19C0-187			
HNGC-B	19C0-187		HNGS-BA	19C0-187			
EDTC-B	19C0-187						

PIP SUMMARY

Time Mark Every 60 S		
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	150
HNGS Det.2 Resolution Degradation Factor (RDF2)		
0	(-----)	10
HNGS Det.1 Resolution Degradation Factor (RDF1)		
0	(-----)	10
HNGS Det.2 Gain Correction Factor (GCF2)		
0.9	(-----)	1.1
HNGS Det.1 Gain Correction Factor (GCF1)		
0.9	(-----)	1.1
Area1 From HCGR to HSGR		

HNGS Computed Gamma Ray (HCGR)

0 (GAPI) 150

Caliper (LCAL)
6 (IN) 16

Bit Size (BS)
6 (IN) 16

HNGS Det.2 Chi Squared (CHI2)
10 (----) 0

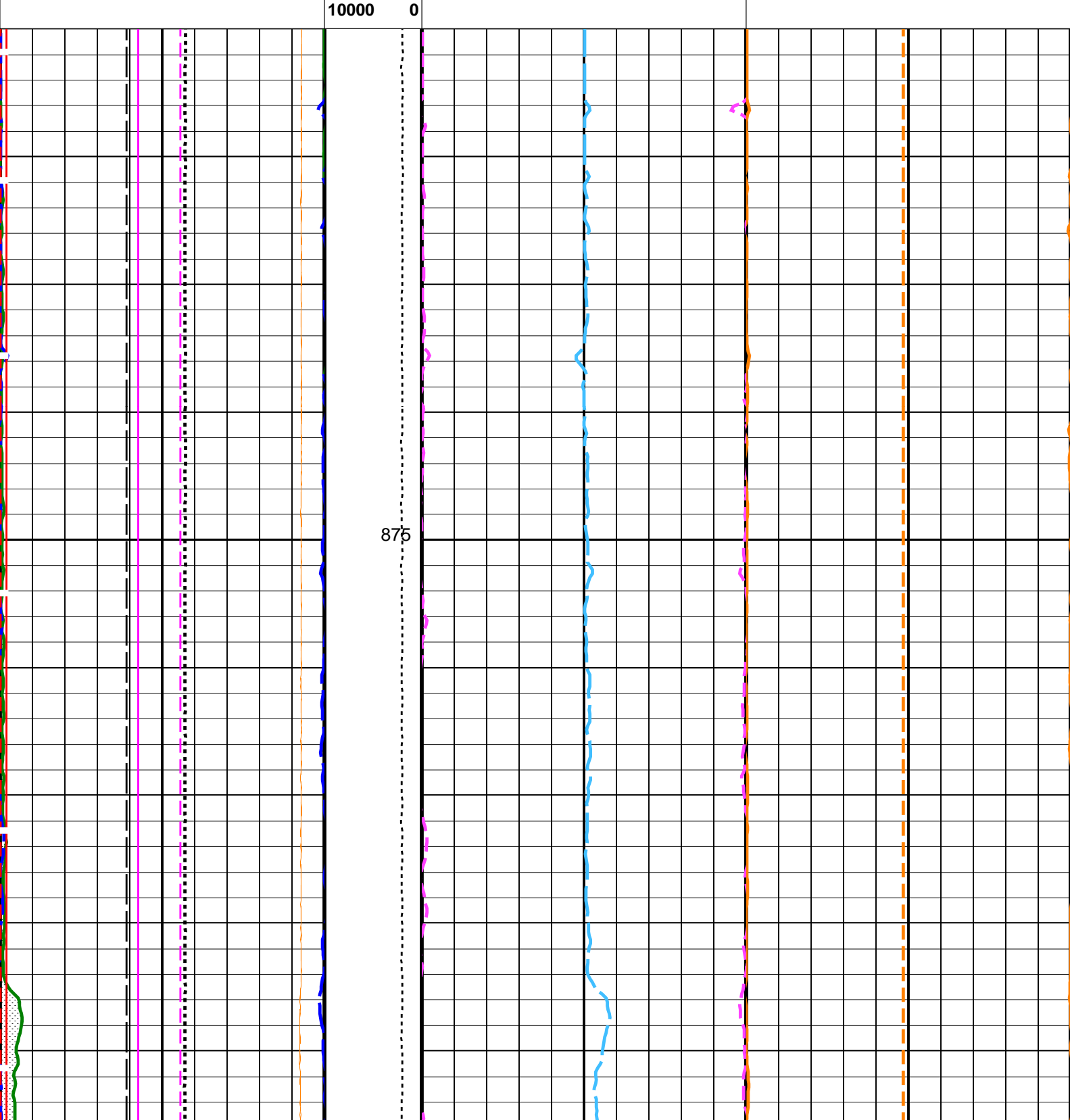
HNGS Det.1 Chi Squared (CHI1)
10 (----) 0

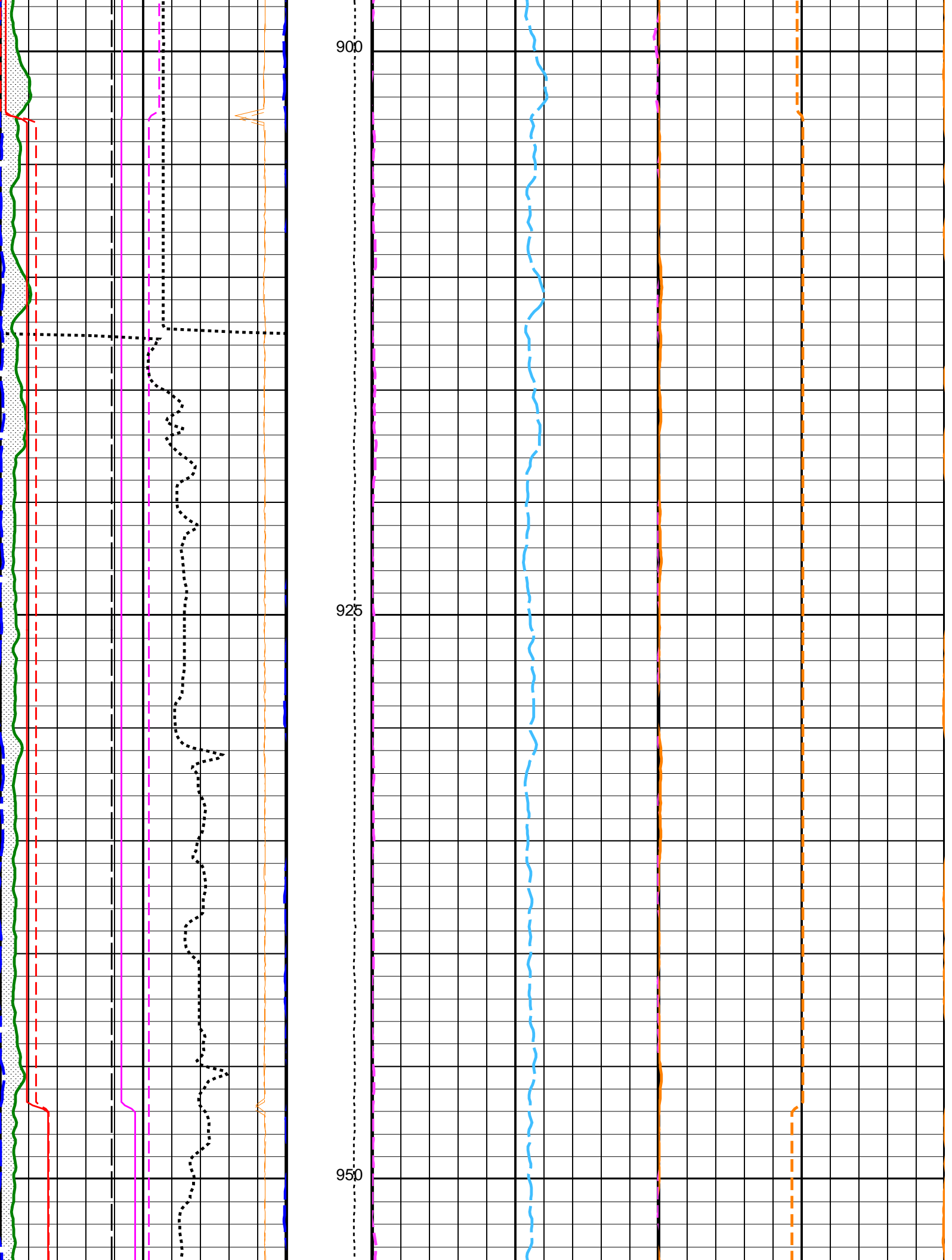
HNGS Borehole Potassium (HBHK)
-0.05 (V/V) 0.05

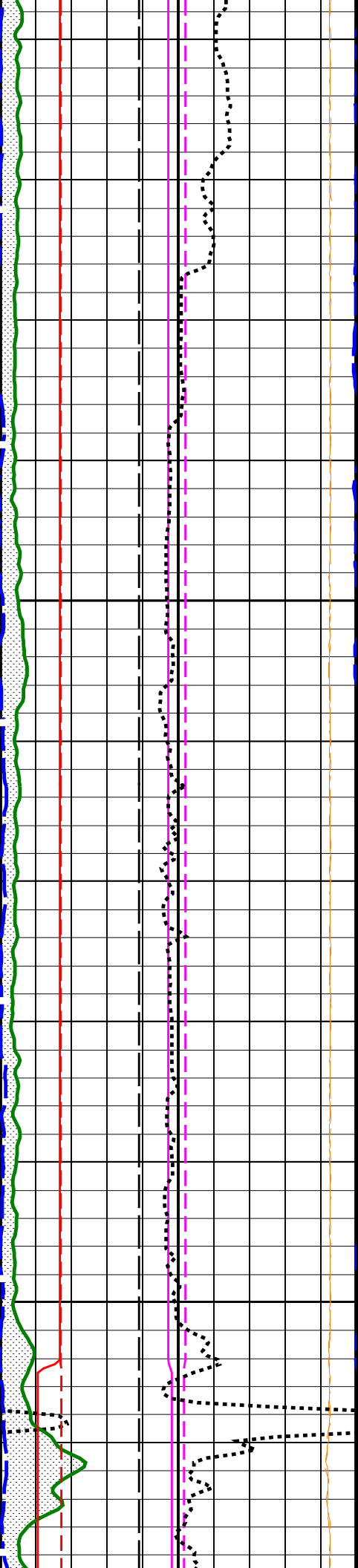
HNGS Uranium (HURA)
-10 (PPM) 30

HNGS Thorium (HTHO) (PPM) 0 30
HNGS Potassium (HFK) (V/V) 0 0.1

Tension
(TENS)
(LBF)
10000 0

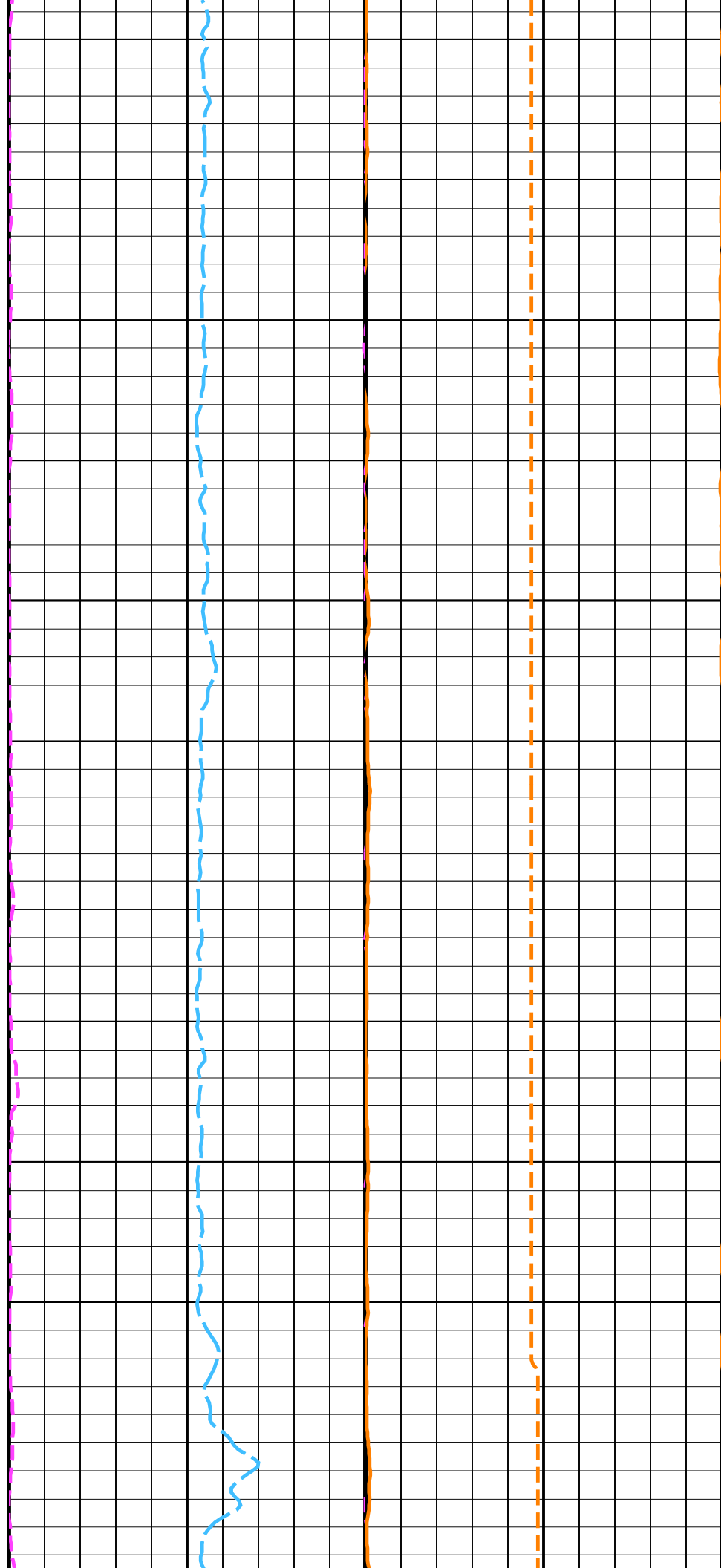


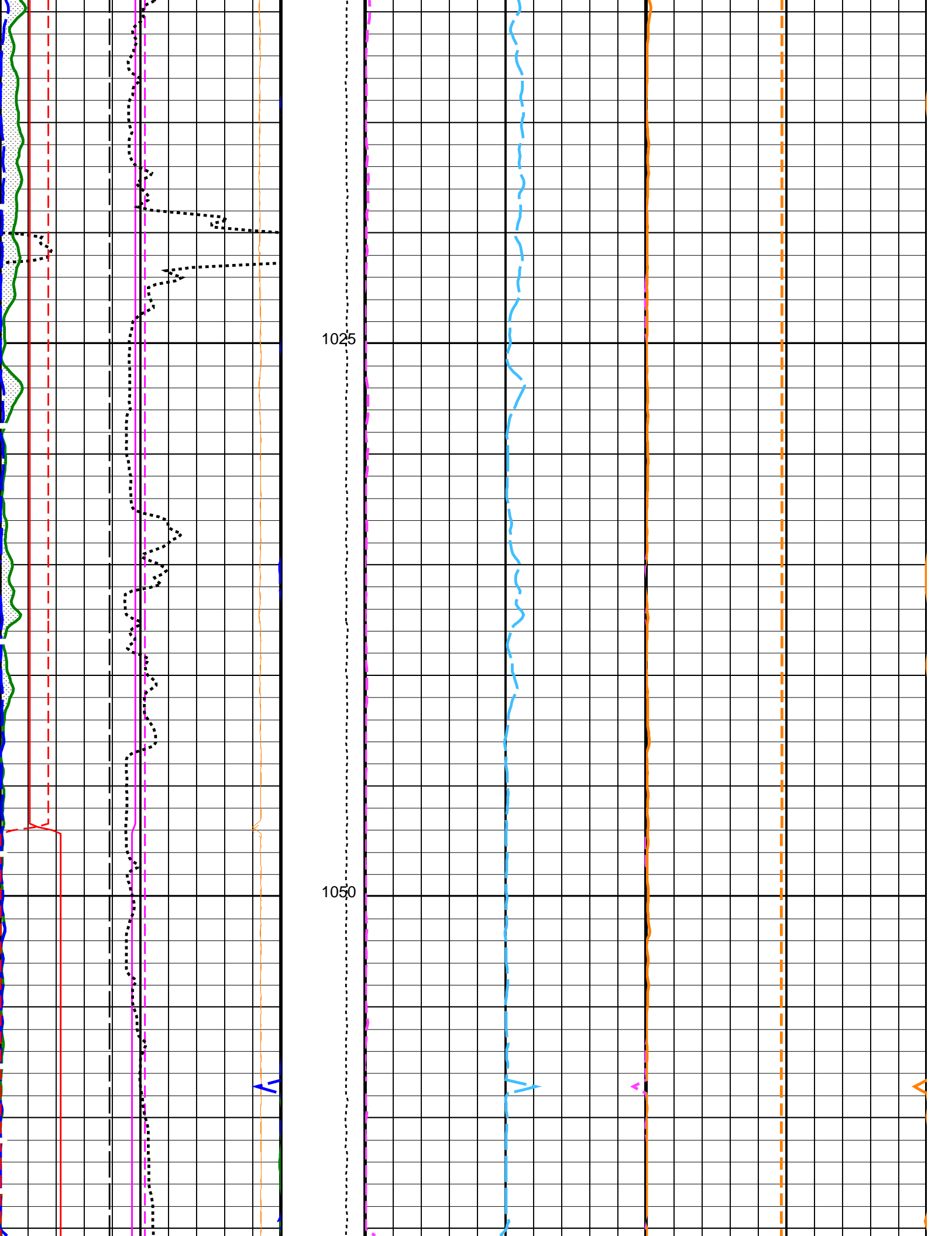


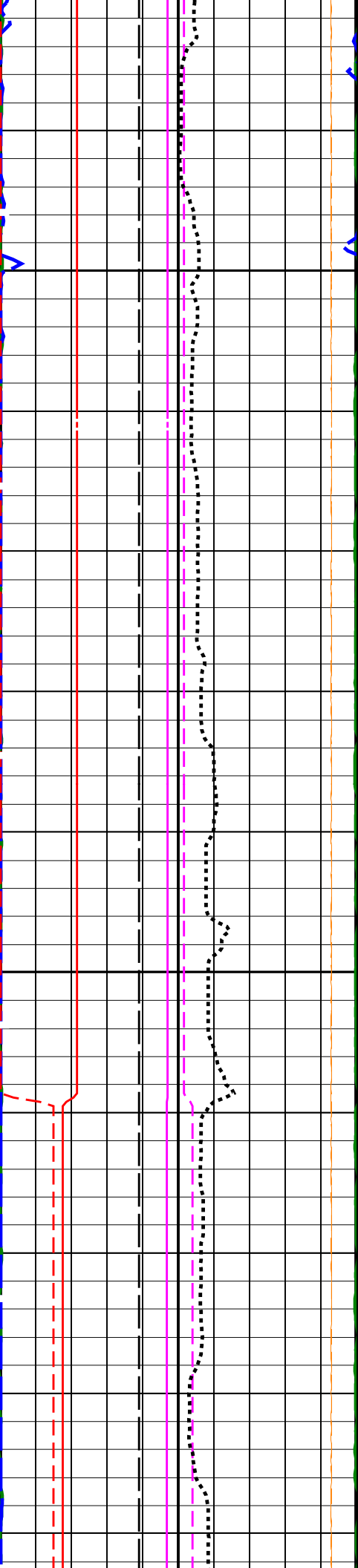


975

1000

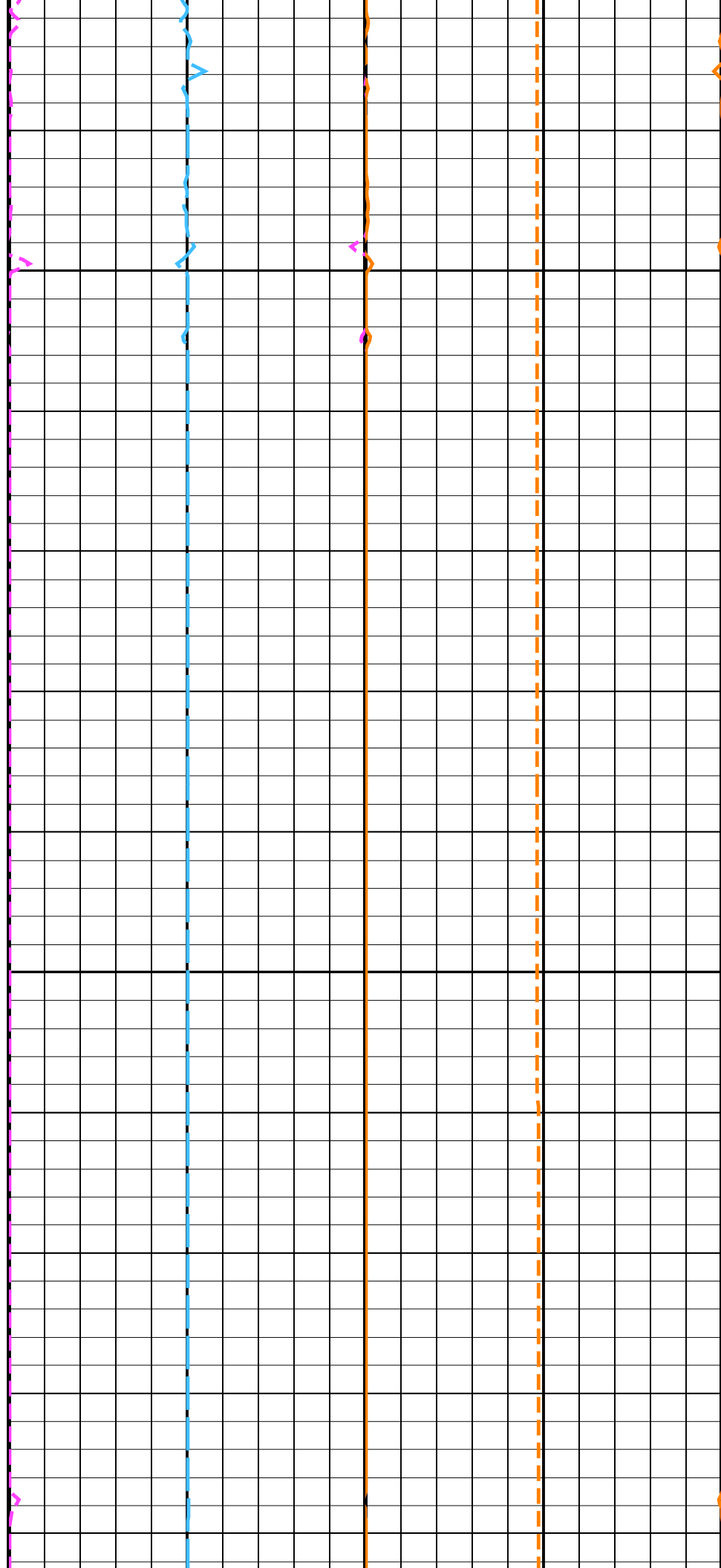


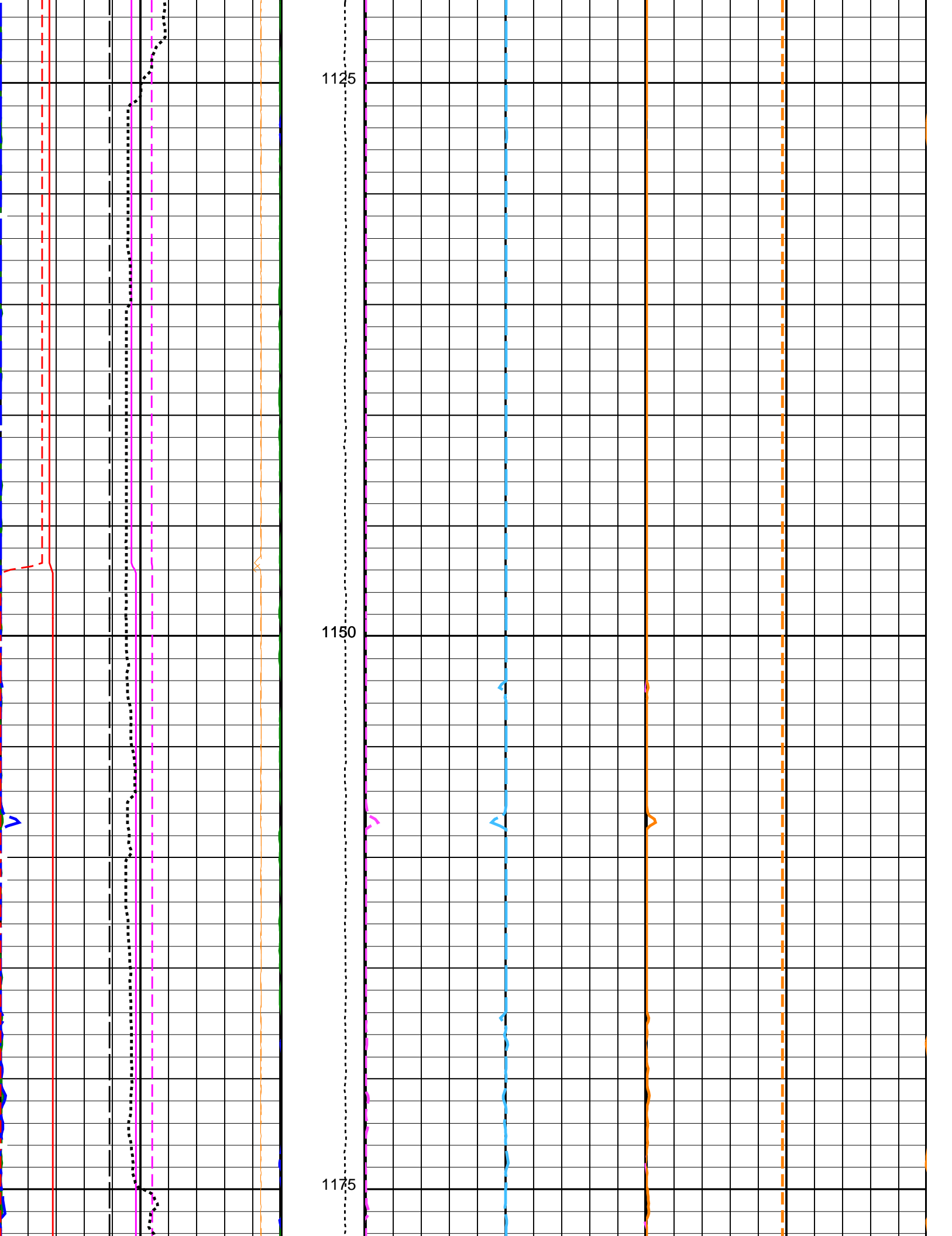


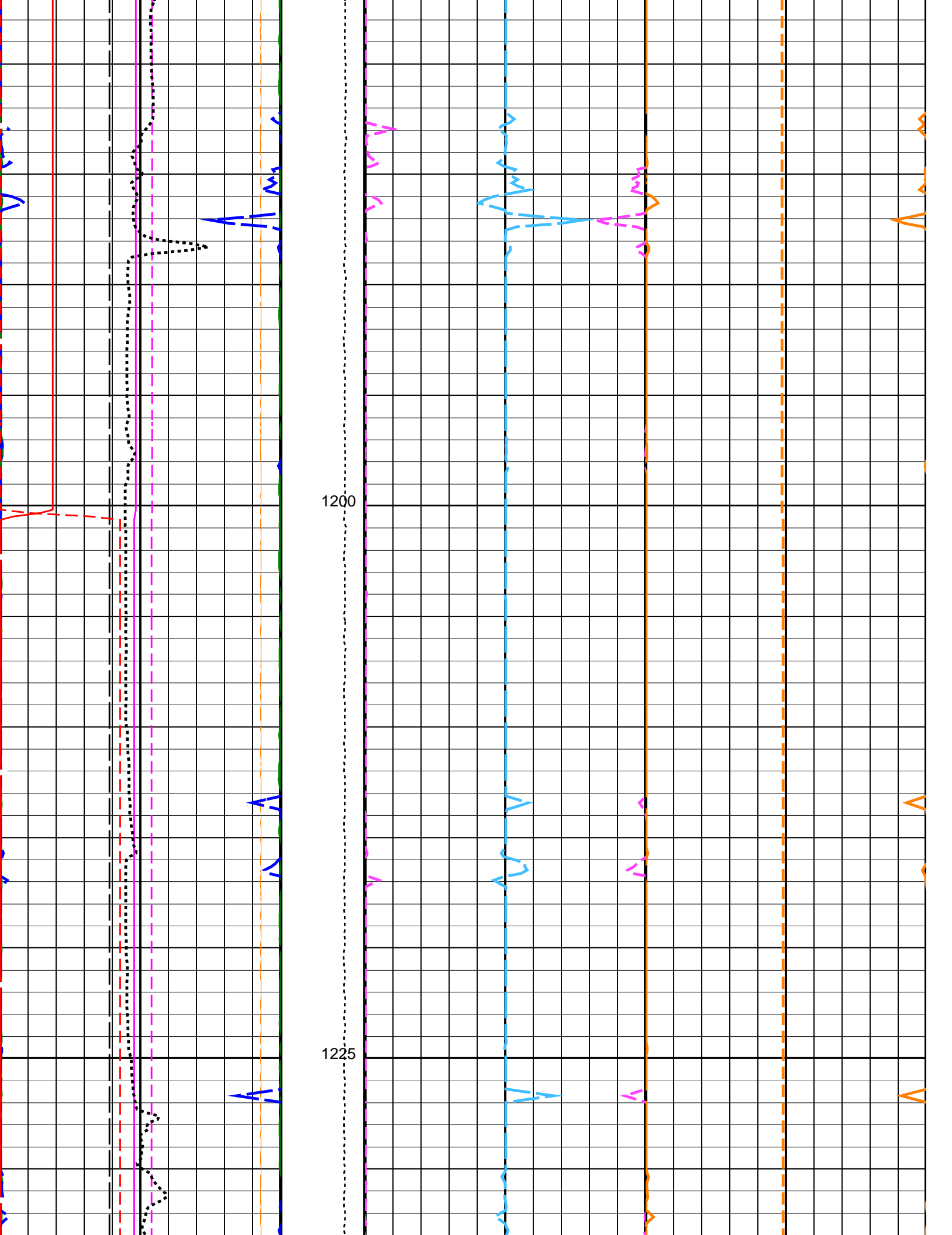


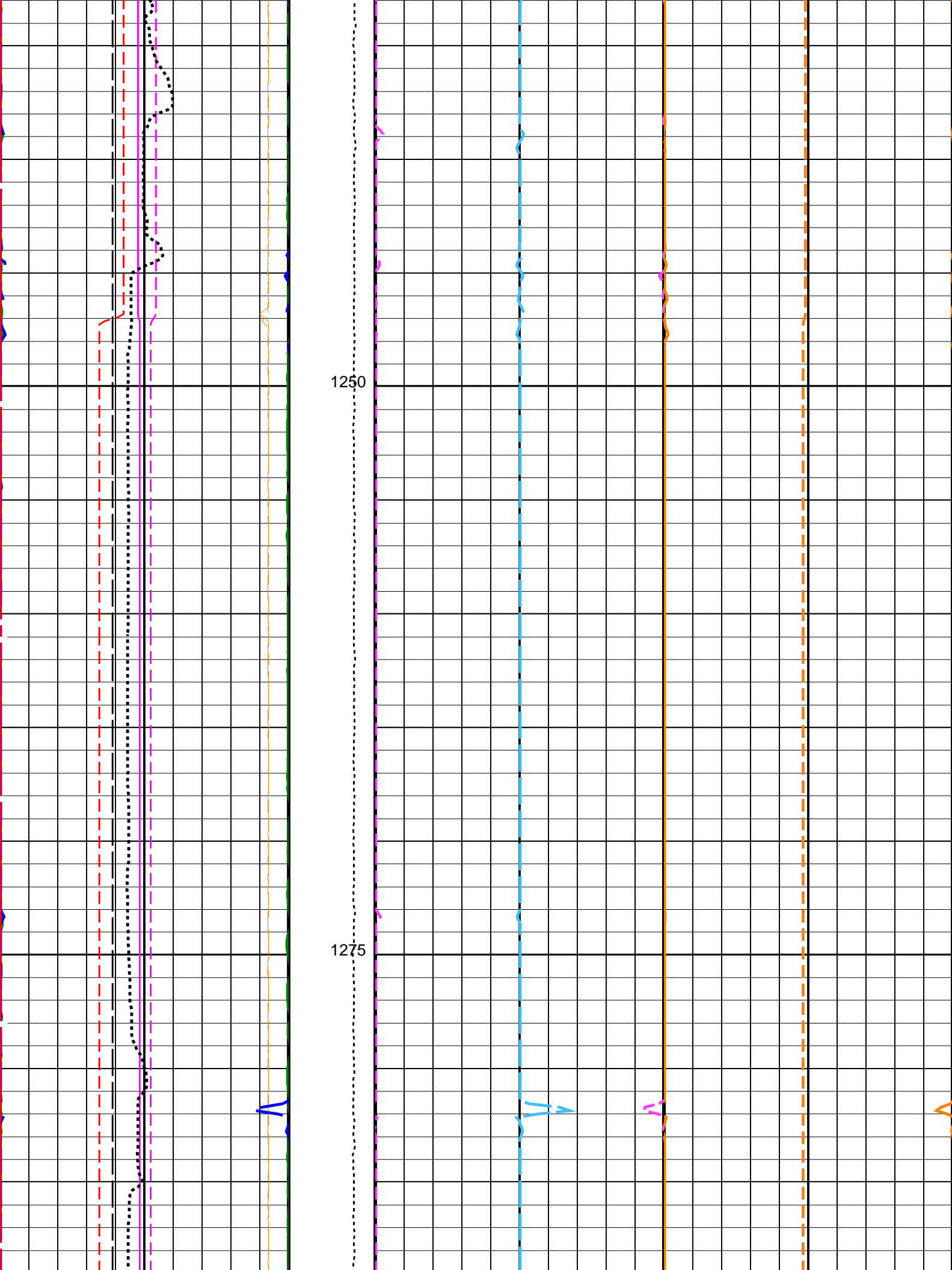
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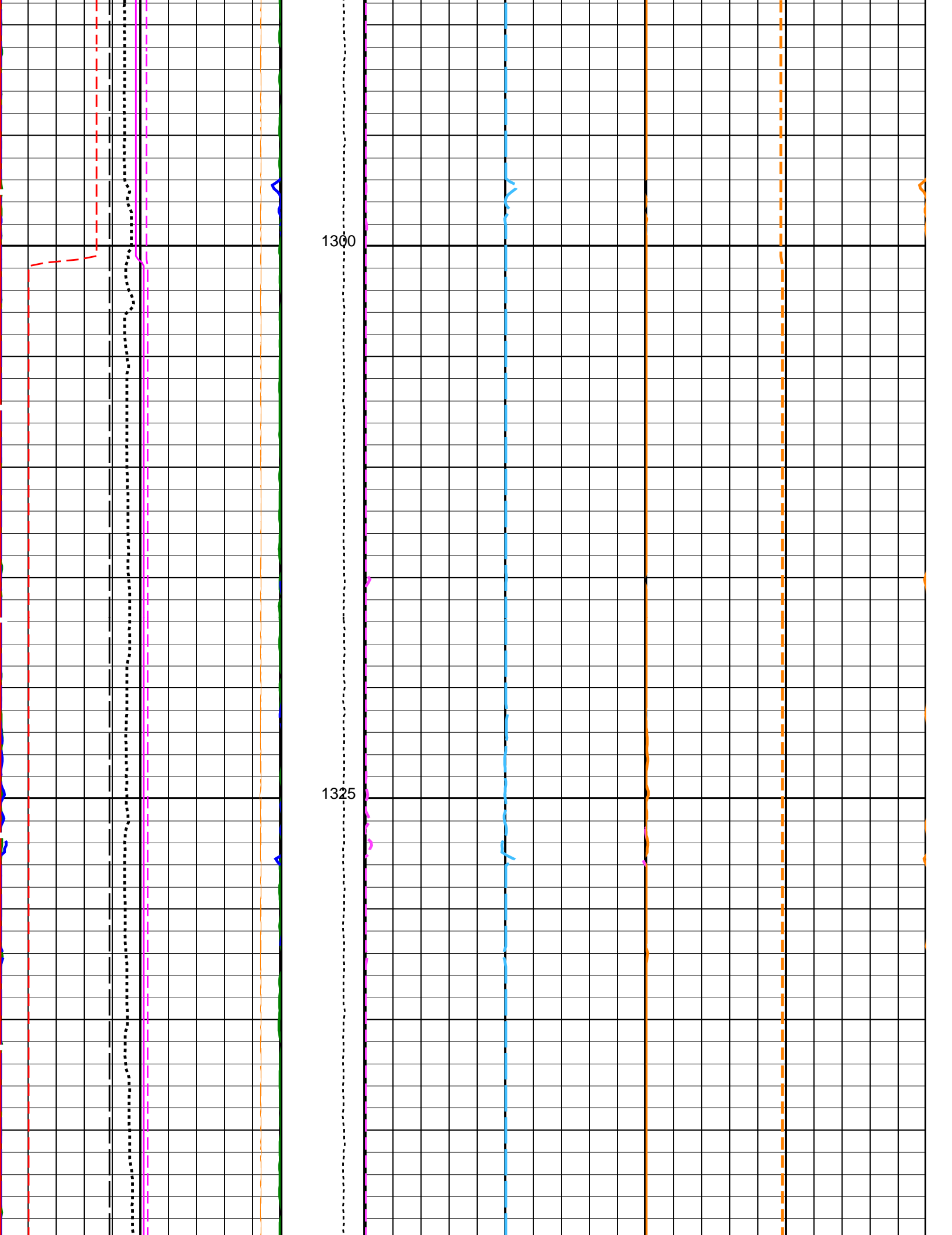
1100

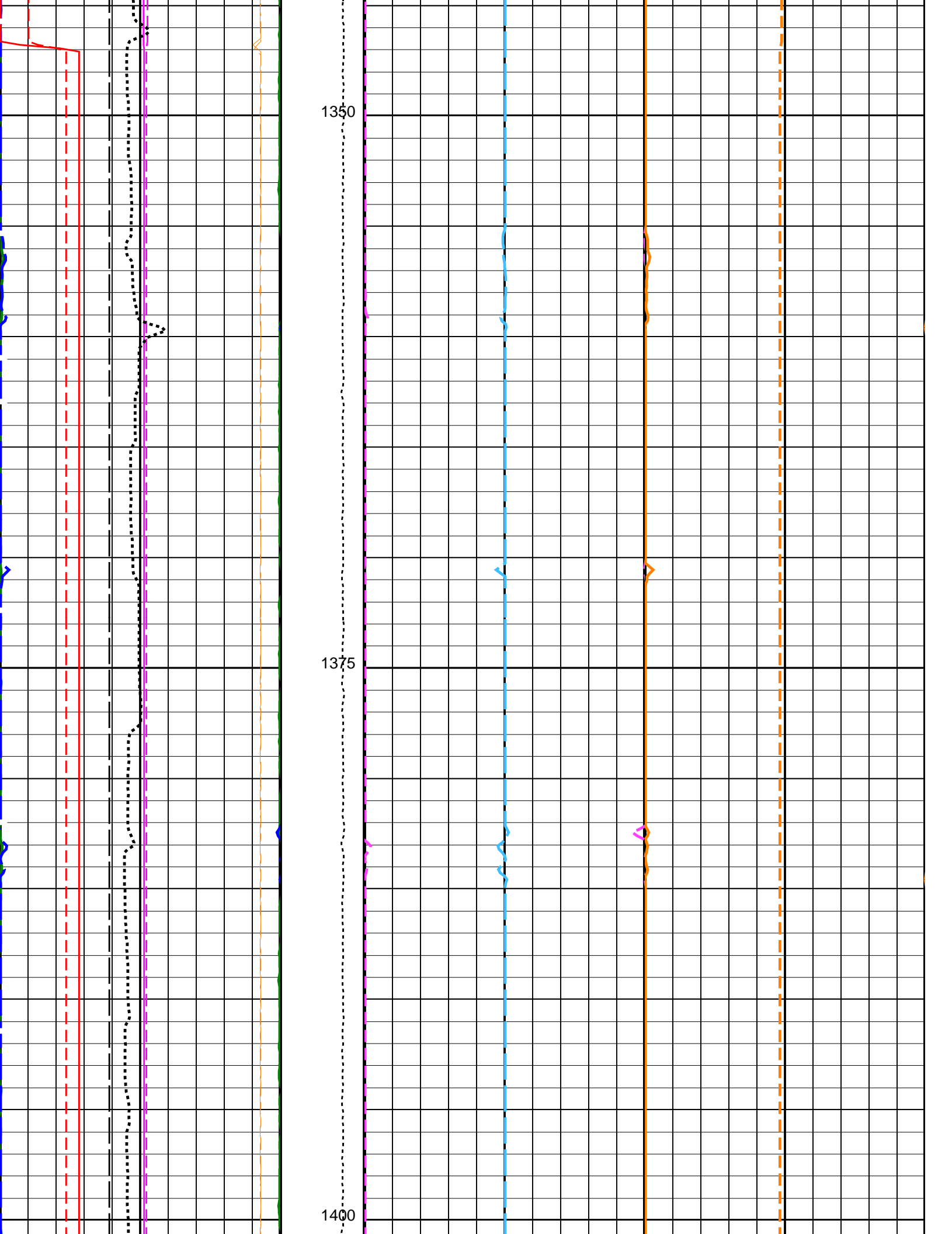


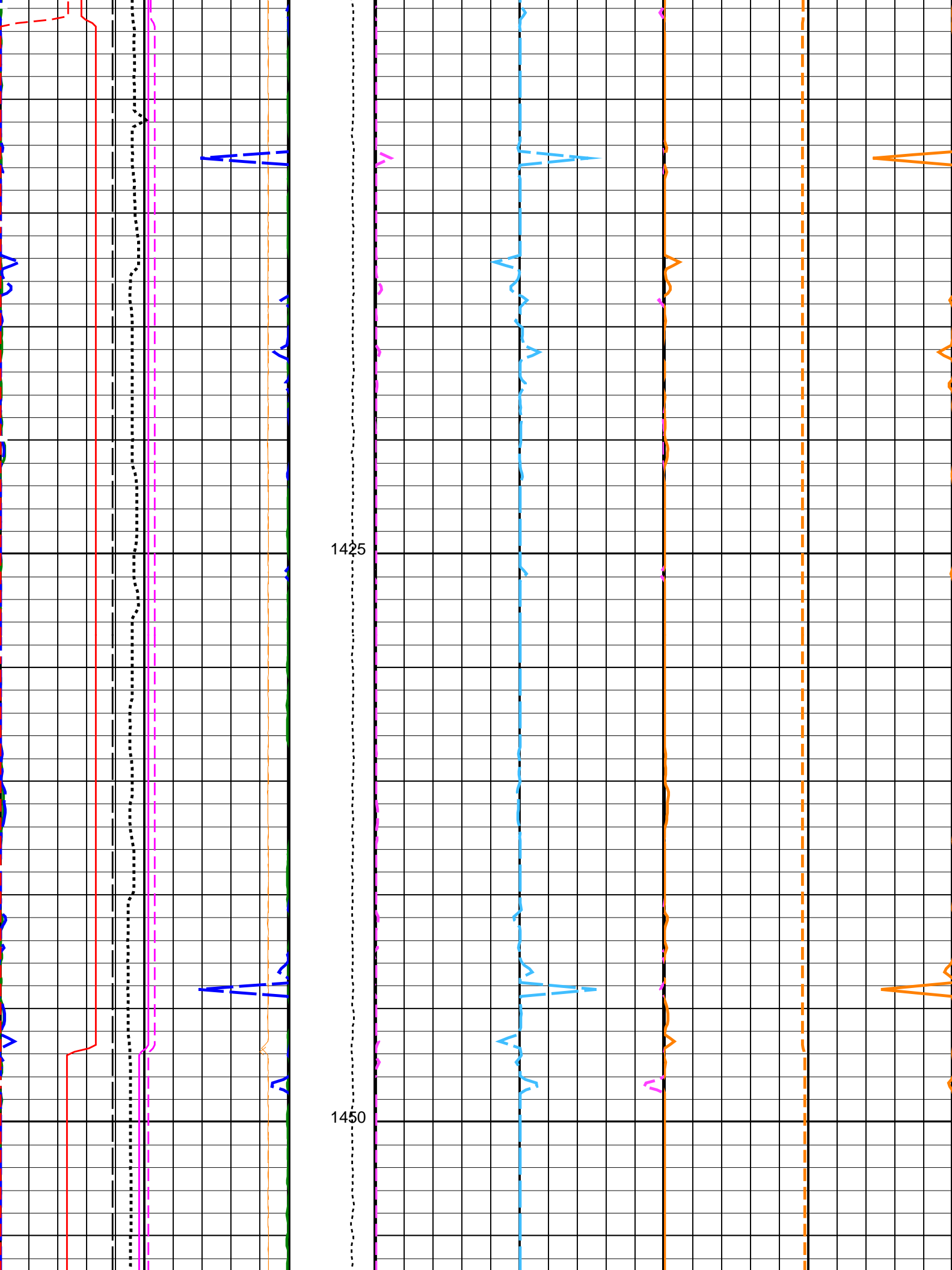


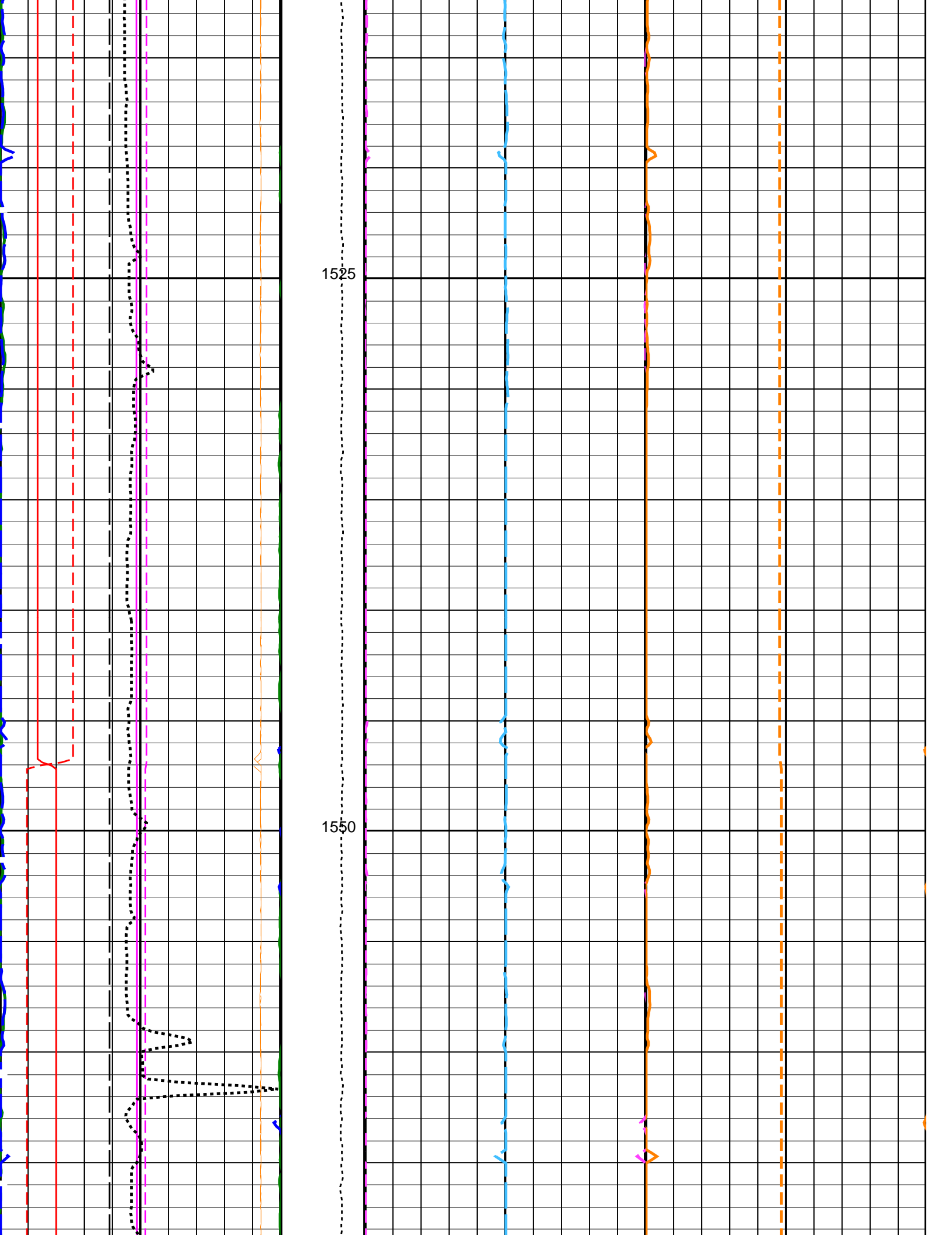


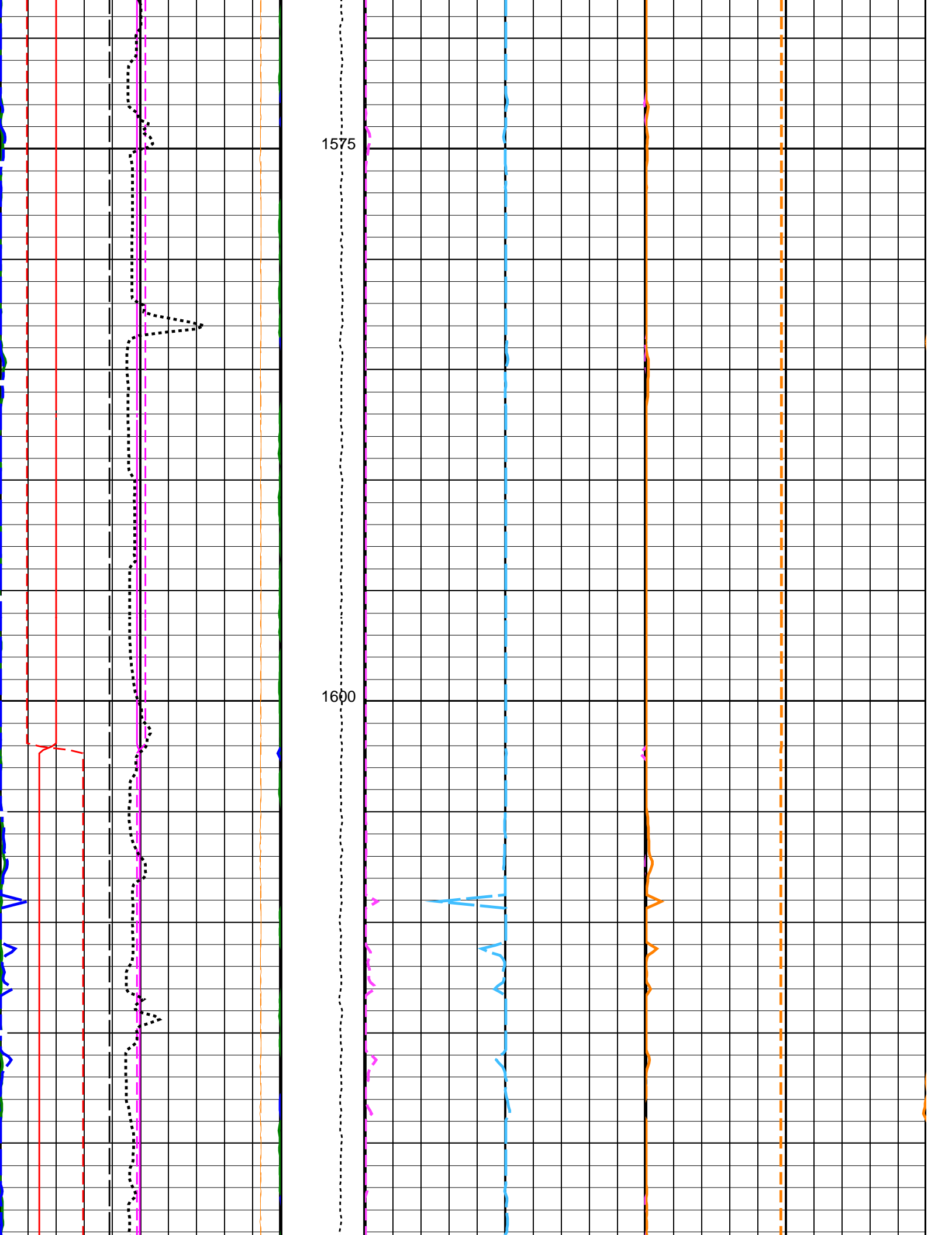


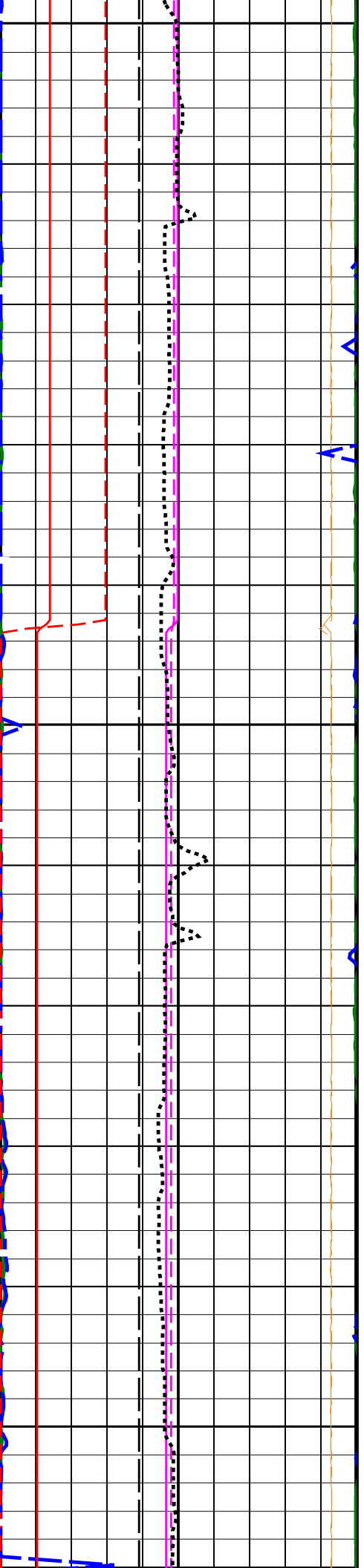








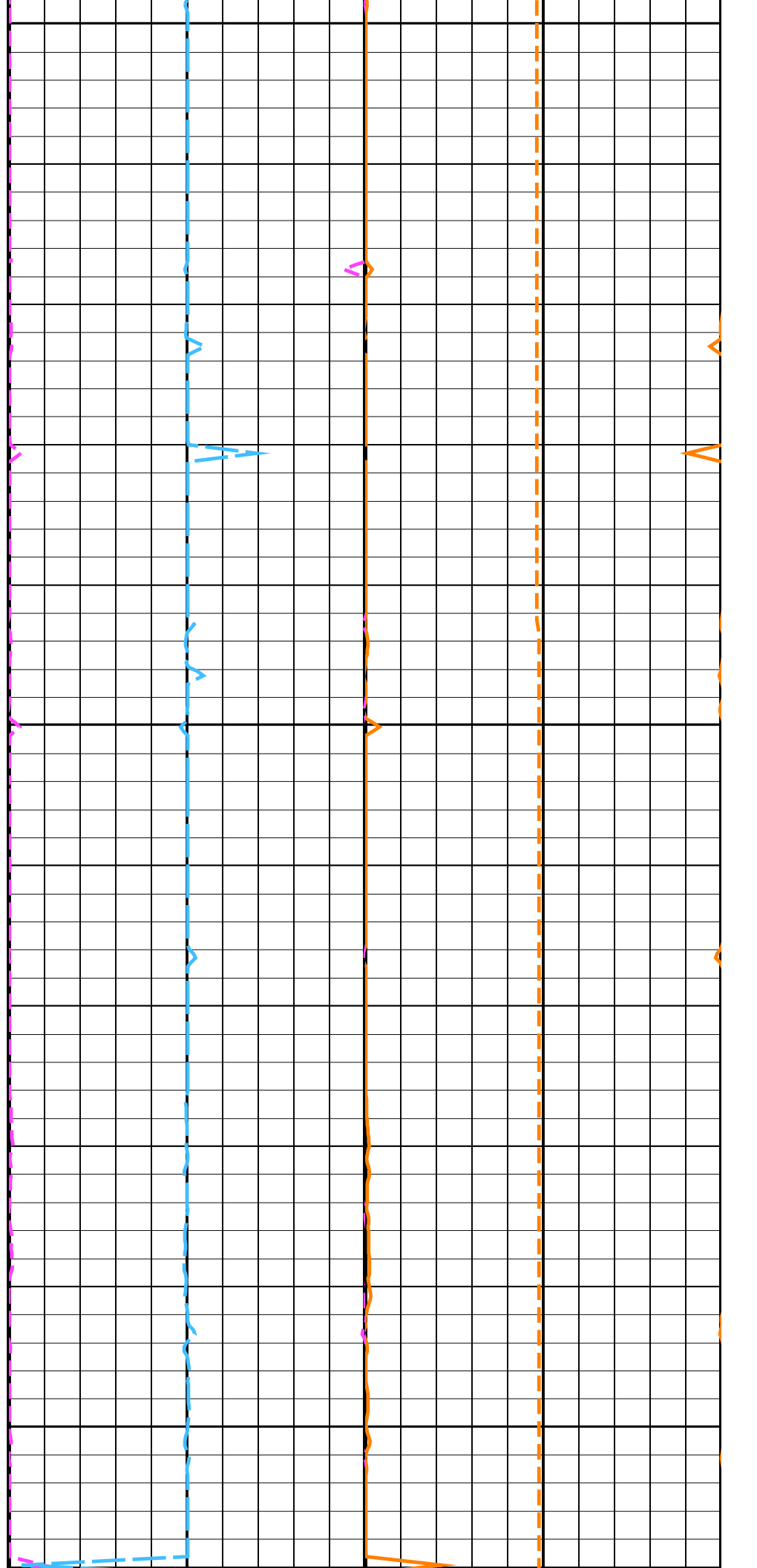


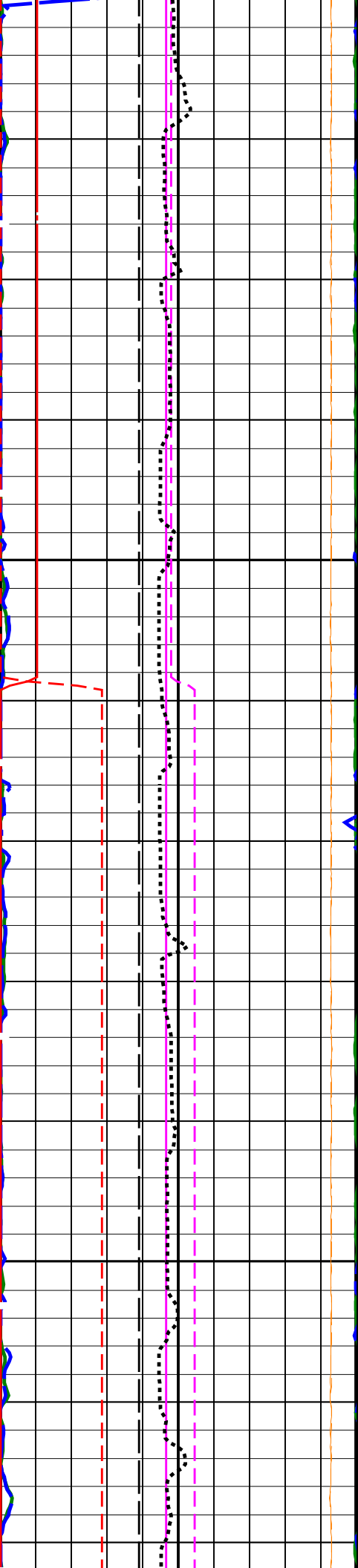


1625

1650

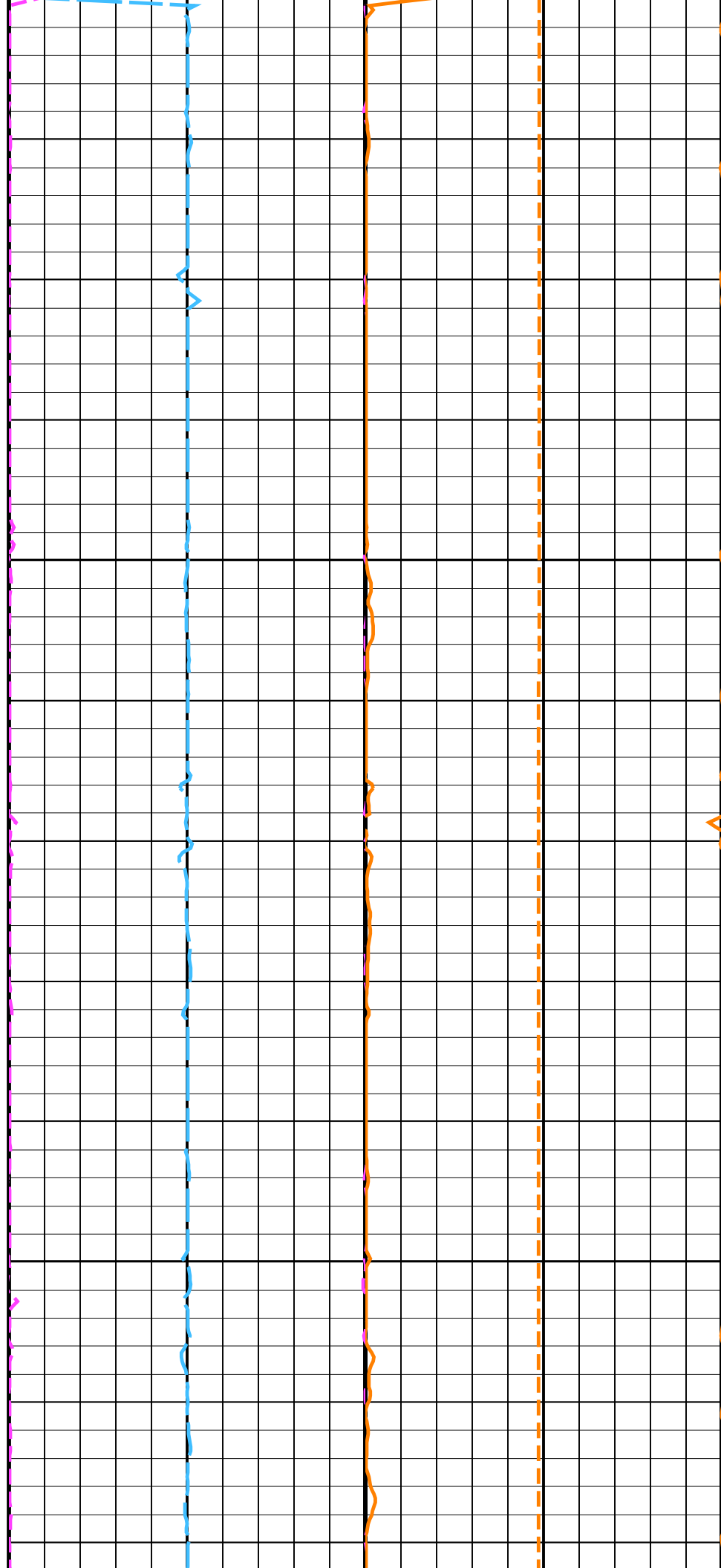
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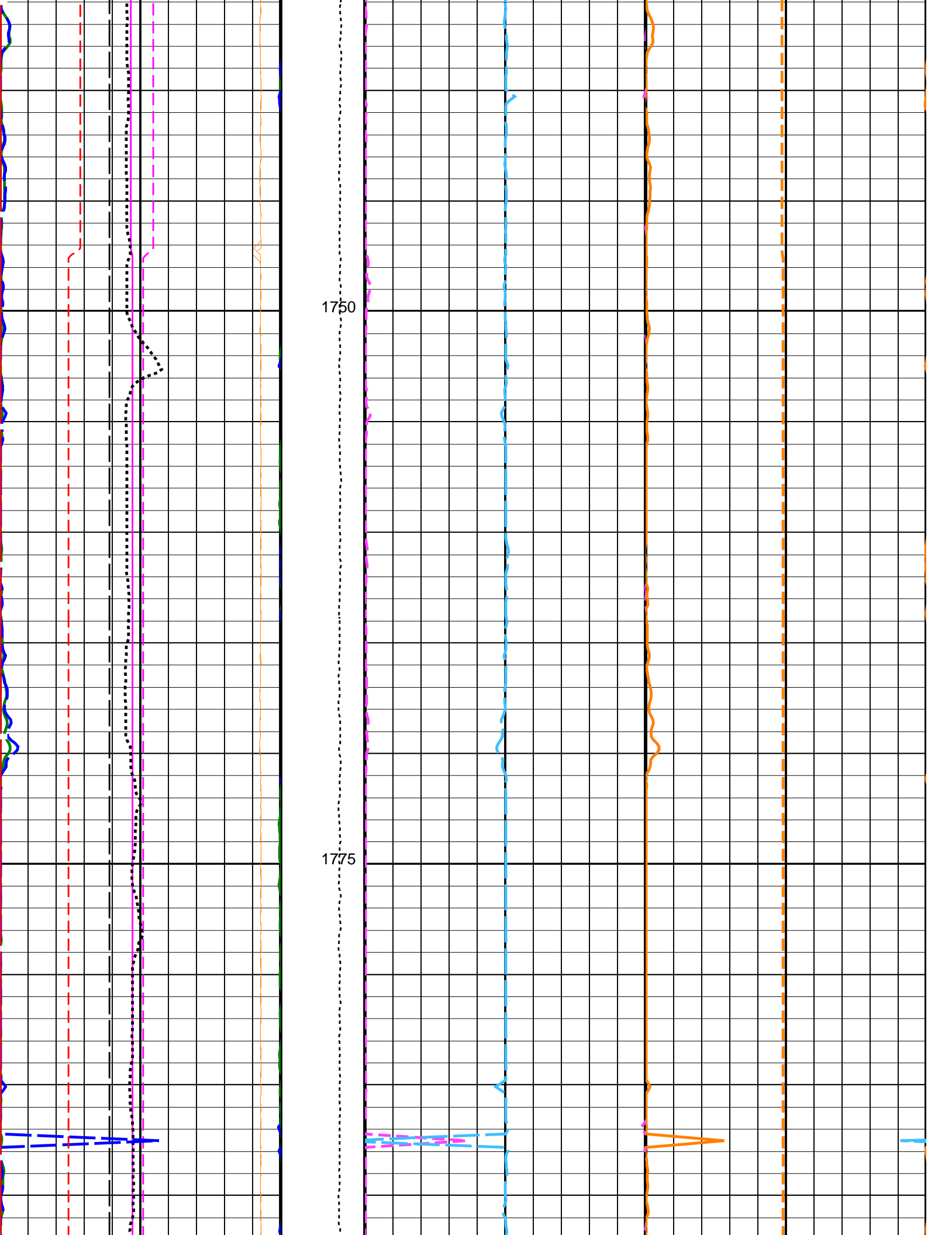


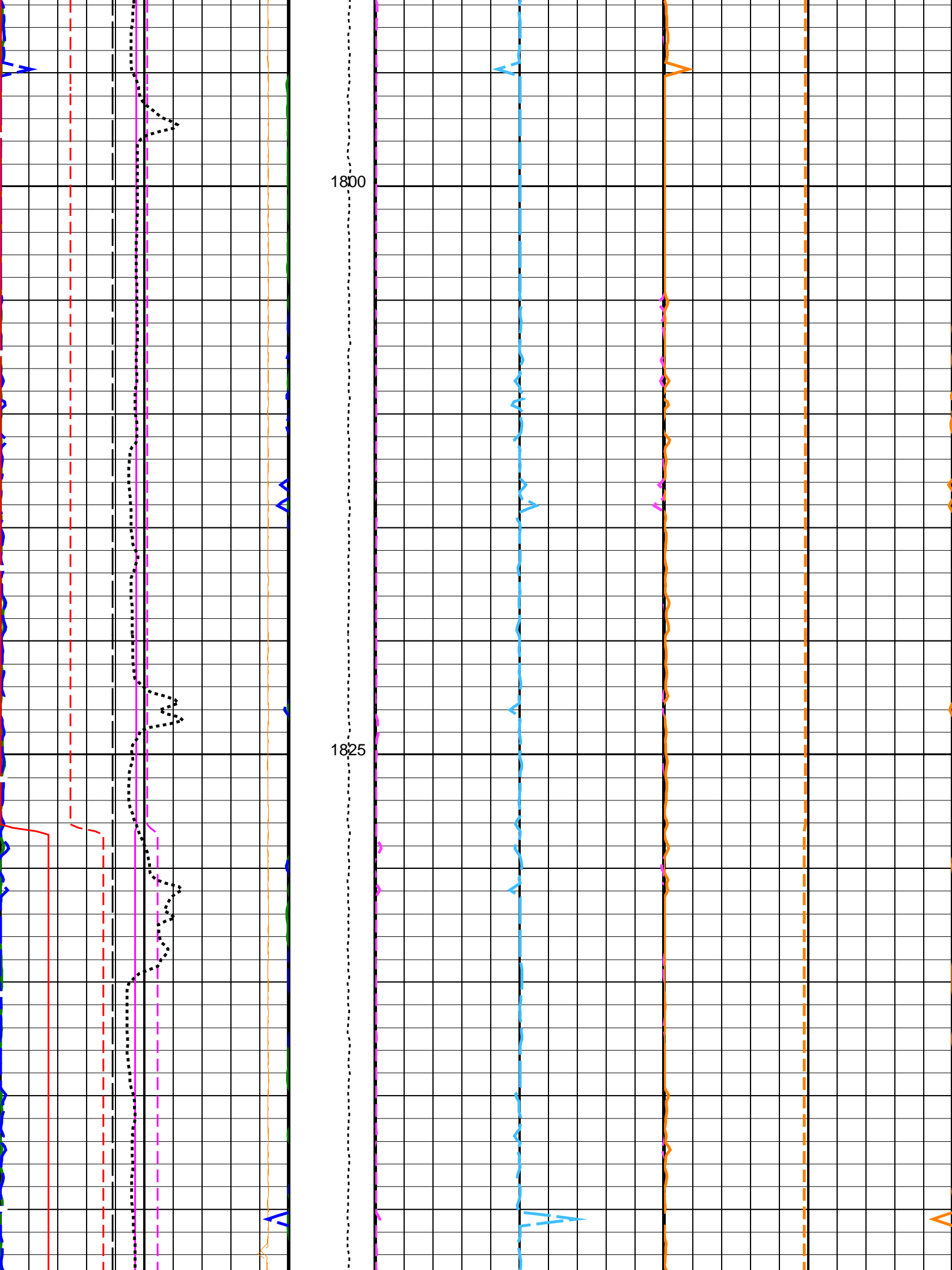


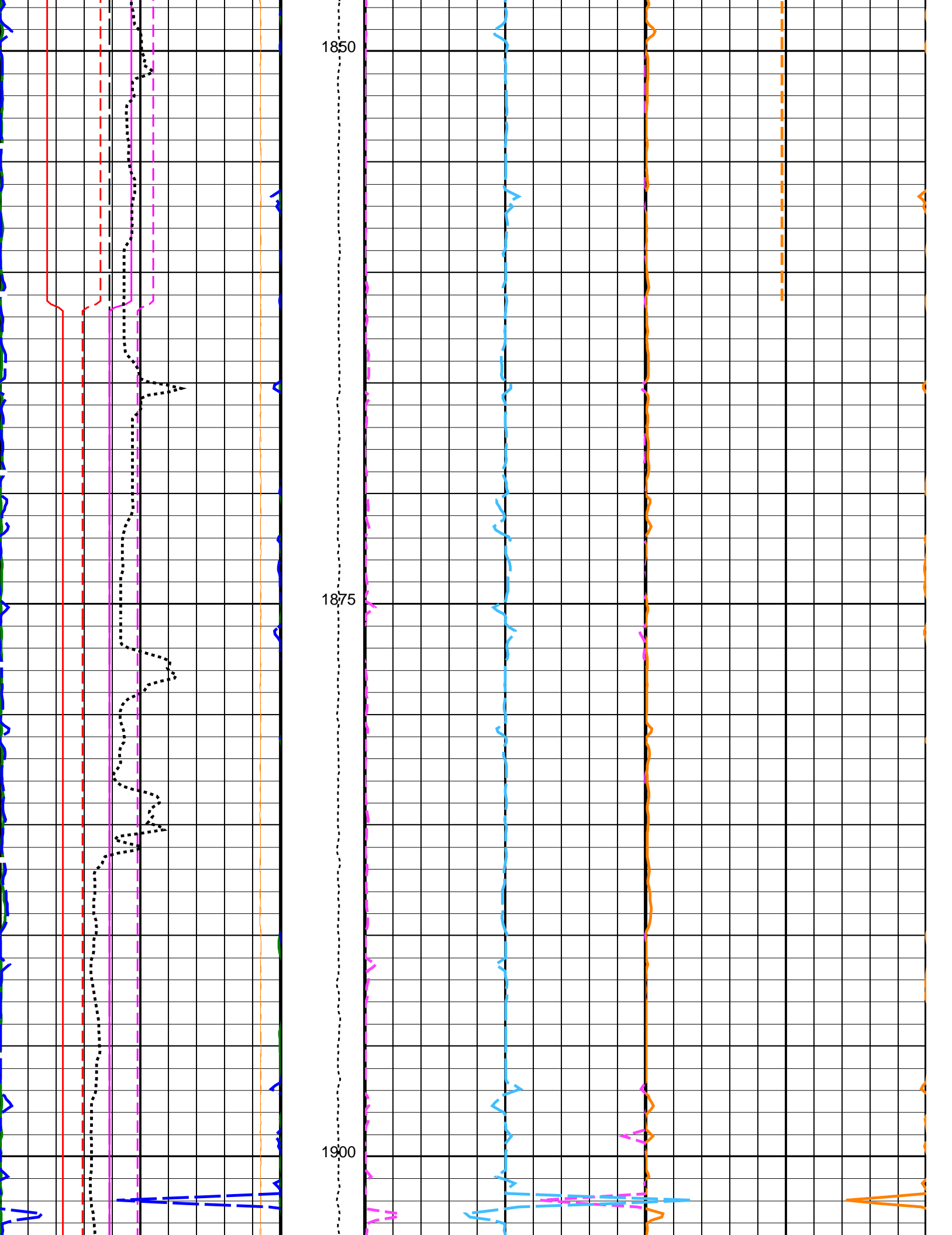
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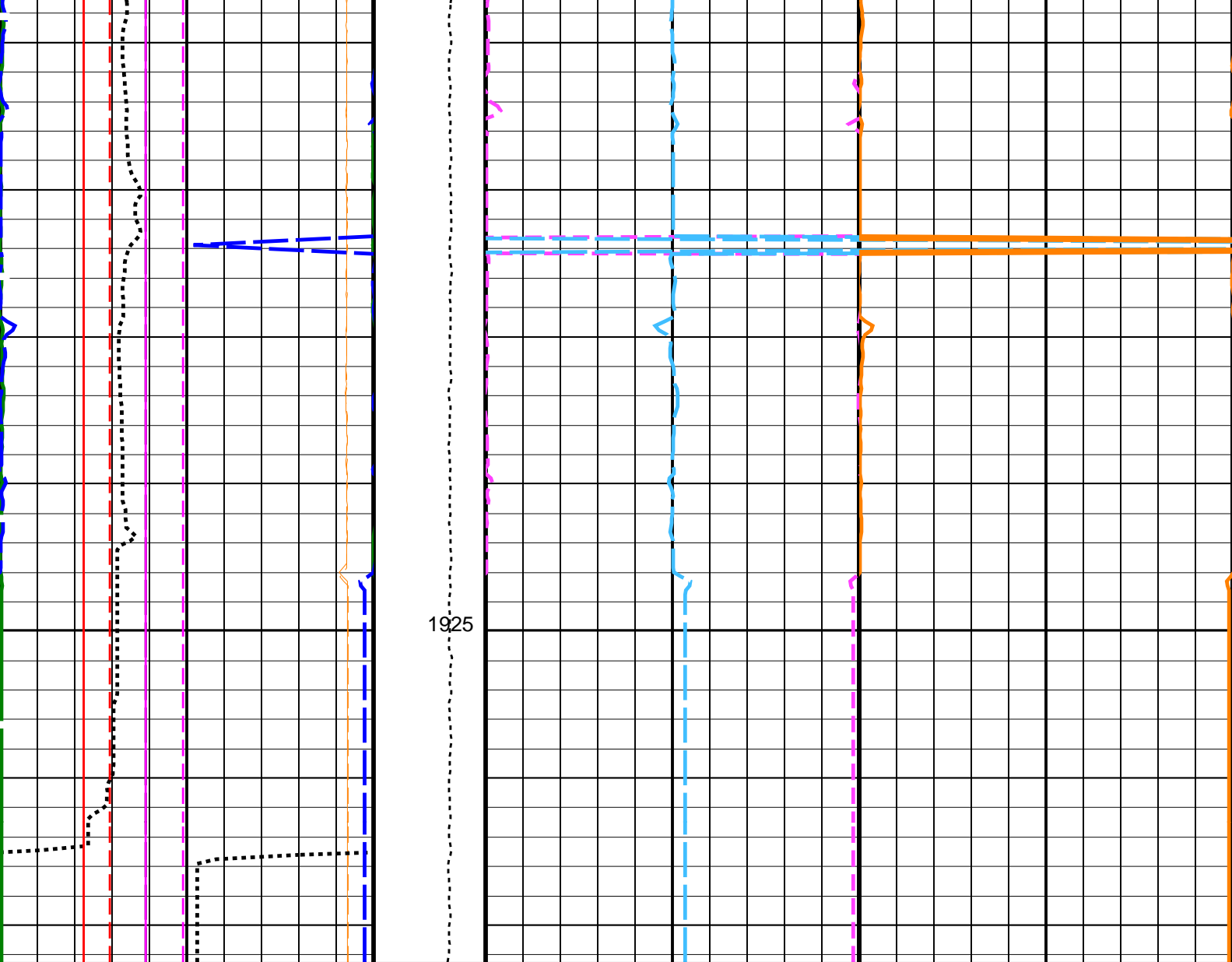
1725











<div>HNGS Det.1 Chi Squared (CHI1) (-----) 100000</div>	<div>Tension (TENS) (LBF) 1000000</div>	<div>HNGS Thorium (HTHO) (PPM) 030</div>	<div>HNGS Potassium (HFK) (V/V) 00.1</div>
<div>HNGS Det.2 Chi Squared (CHI2) (-----) 100</div>		<div>HNGS Uranium (HURA) (PPM) -1030</div>	
<div>Bit Size (BS) (IN) 616</div>			<div>HNGS Borehole Potassium (HBHK) (V/V) -0.050.05</div>
<div>Caliper (LCAL) (IN) 616</div>			
<div>HNGS Computed Gamma Ray (HCGR) (GAPI) 0150</div>			
<div>Area1 From HCGR to HSGR</div>			
<div>HNGS Det.1 Gain Correction Factor (GCF1) (-----) 0.91.1</div>			
<div>HNGS Det.2 Gain Correction Factor (GCF2) (-----) 0.91.1</div>			
<div>HNGS Det.1 Resolution Degradation (RDEG) (-----) 0.00.01</div>			

Input DLIS Files						
DEFAULT	LDL_NGS_044LUP	FN:43	PRODUCER	26-May-2023 11:22	1936.2 M	854.9 M
Output DLIS Files						

OP System Version: 19C0-187

HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	19C0-187		

PIP SUMMARY

Time Mark Every 60 S

HLDS Long Spacing Quality Indicator (LQLS)

-0.25 (----) 0.25

HLDS Short Spacing Quality Indicator (LQSS)

-0.25 (----) 0.25

Washout From BS to HLDS_CALIPER

Mudcake From HLDS_CALIPER to BS

HLDS Caliper (LCAL)

6 (IN) 16

Bit Size (BS)

6 (IN) 16

HLDS Bulk Density Correction (DRH)

-0.25 (G/C3) 0.25

HLDS Short Spaced Bulk Density (RHS)

2 (G/C3) 3

HLDS Long Spaced Photoelectric Effect (PEFL)

0 (----) 10

HLDS Short Spaced Photoelectric Effect (PEFS)

0 (----) 10

HLDS Long Spaced Bulk Density (RHL)

2 (G/C3) 3

HLDS SS2 Density (RHS3)

2 (G/C3) 3

HLDS Density Porosity (DPO)

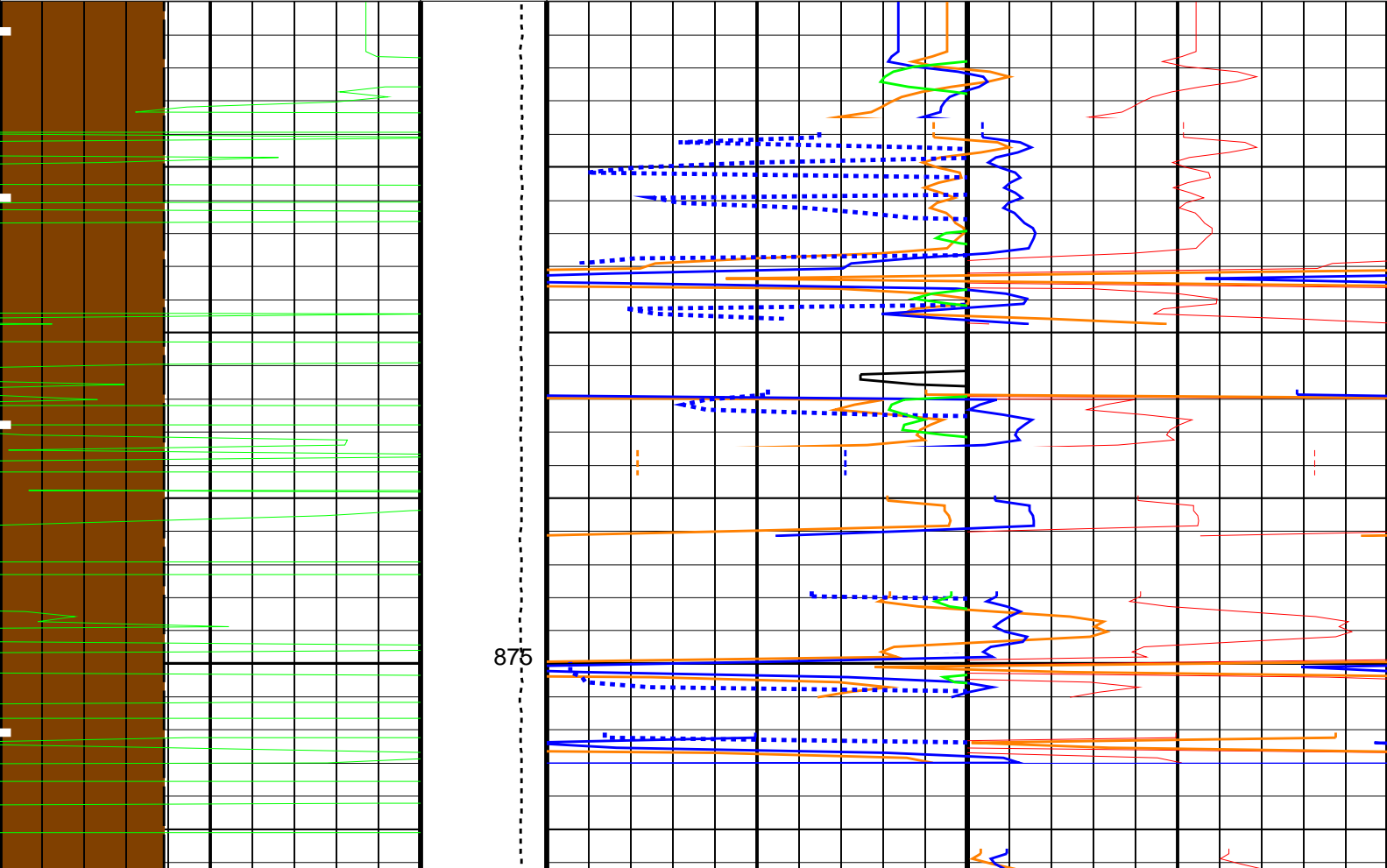
30 (PU) 0

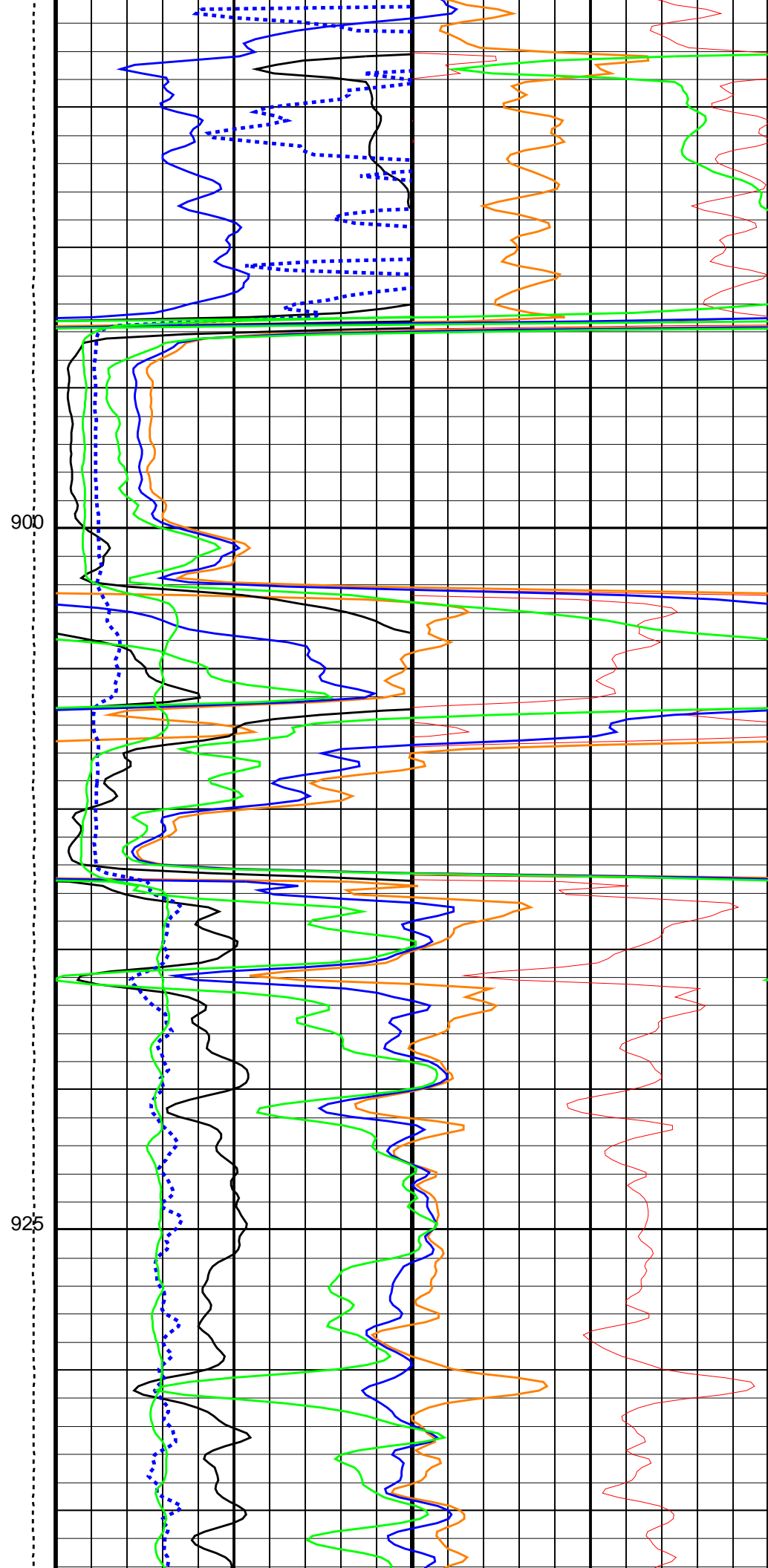
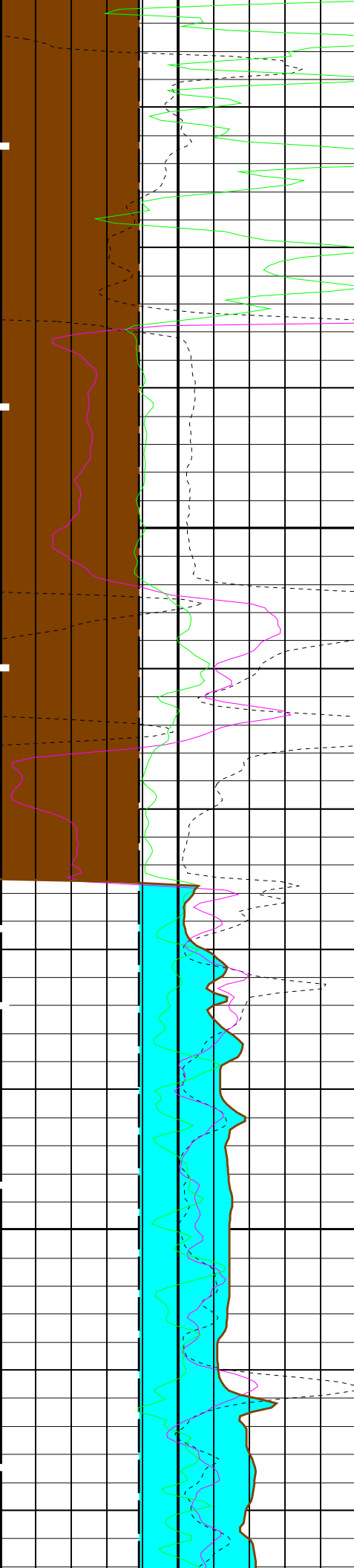
HLDS Bulk Density (RHOM)

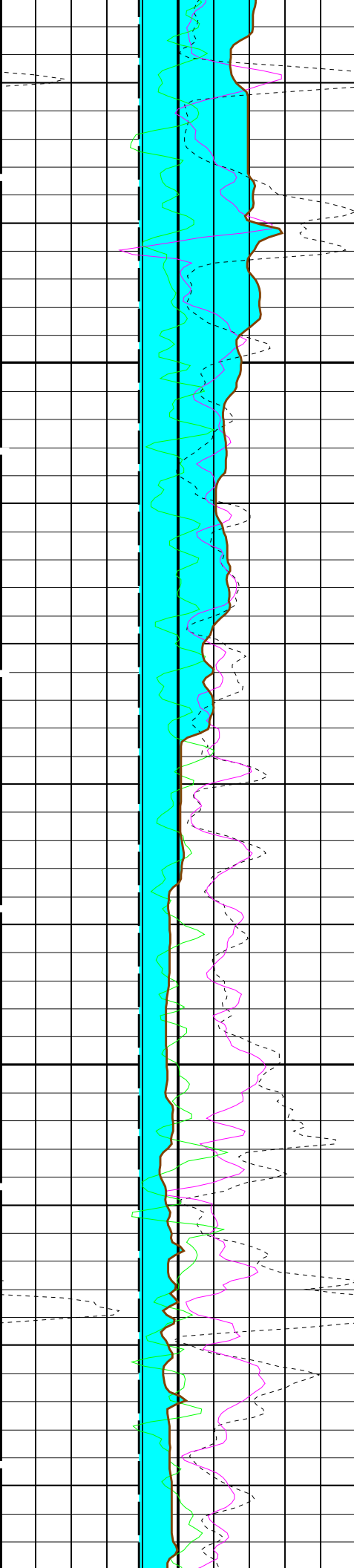
2 (G/C3) 3

Tension (TENS) (LBF)

10000 0

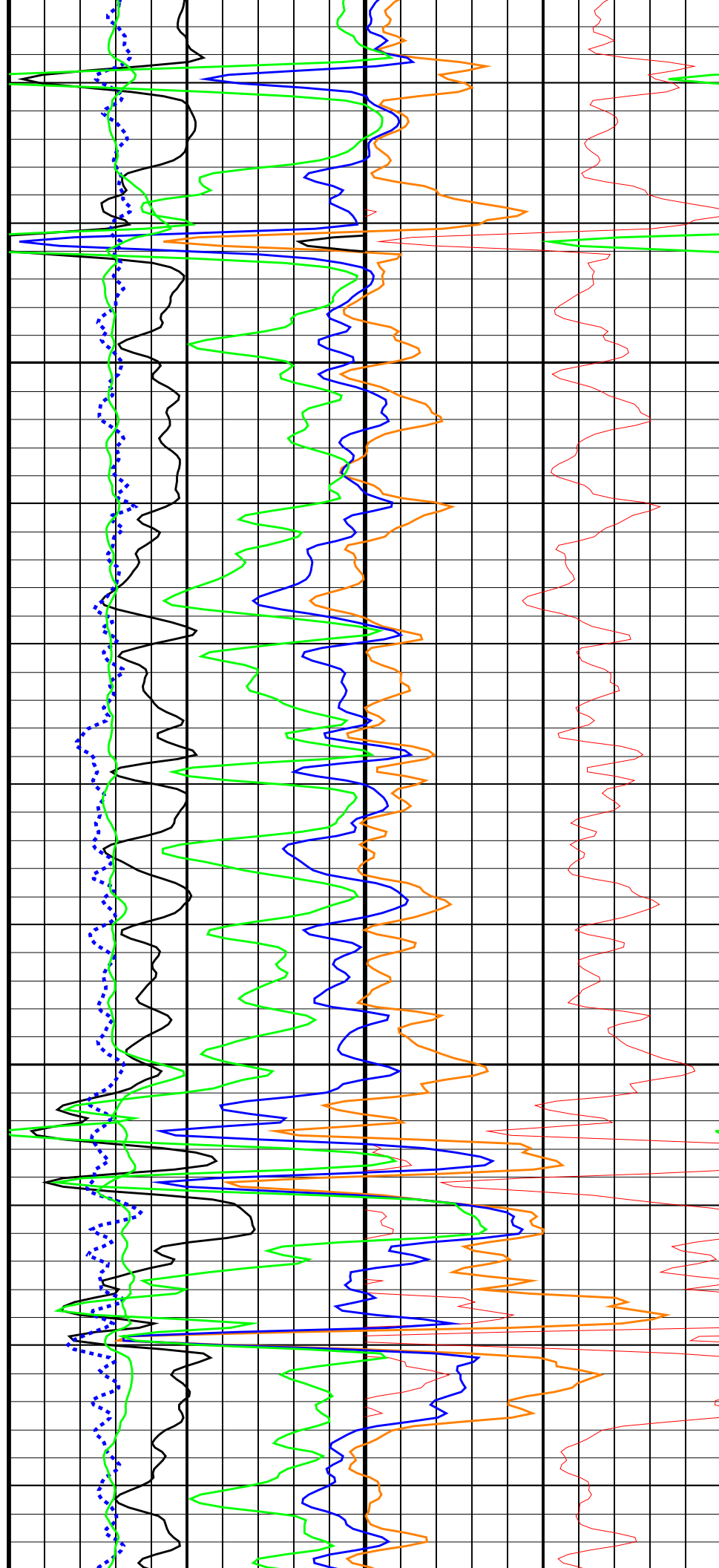


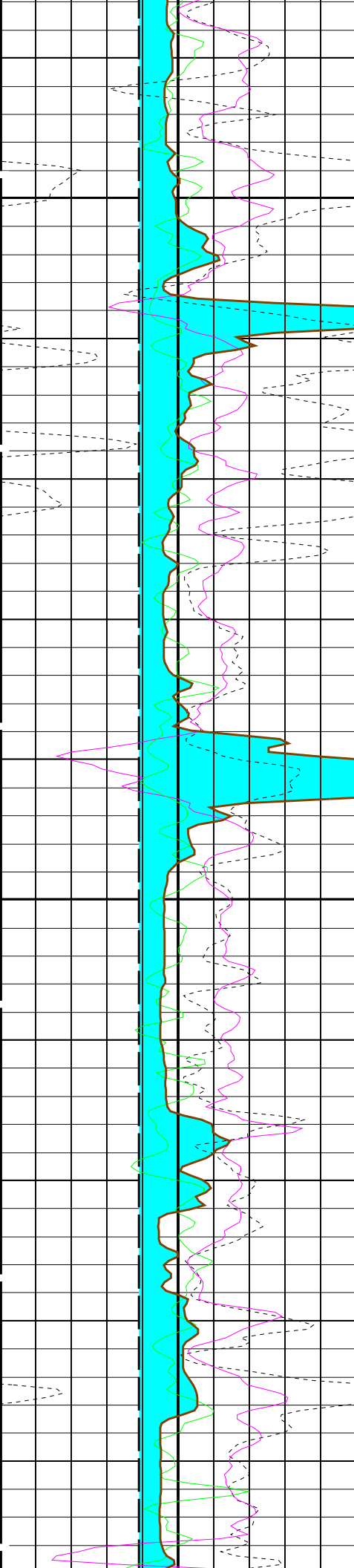




950

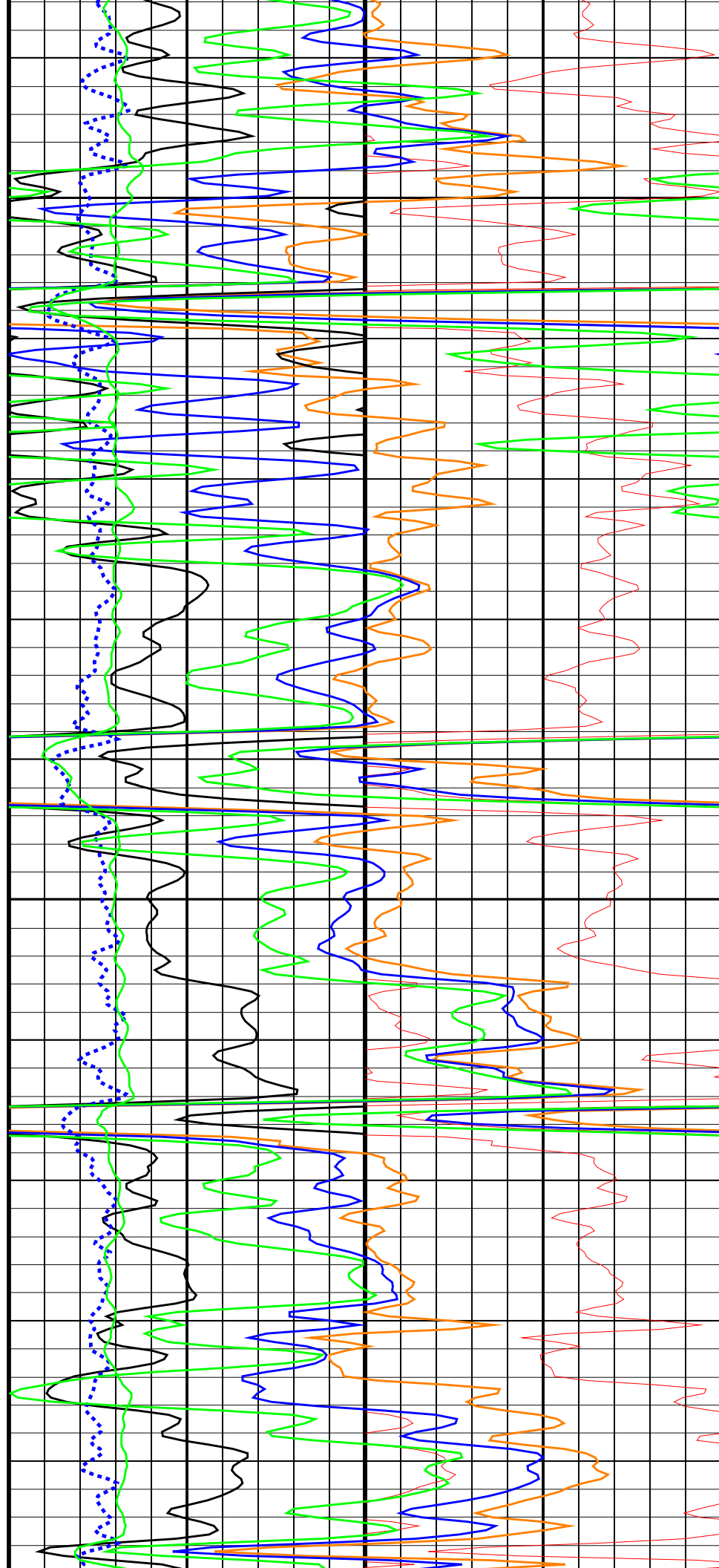
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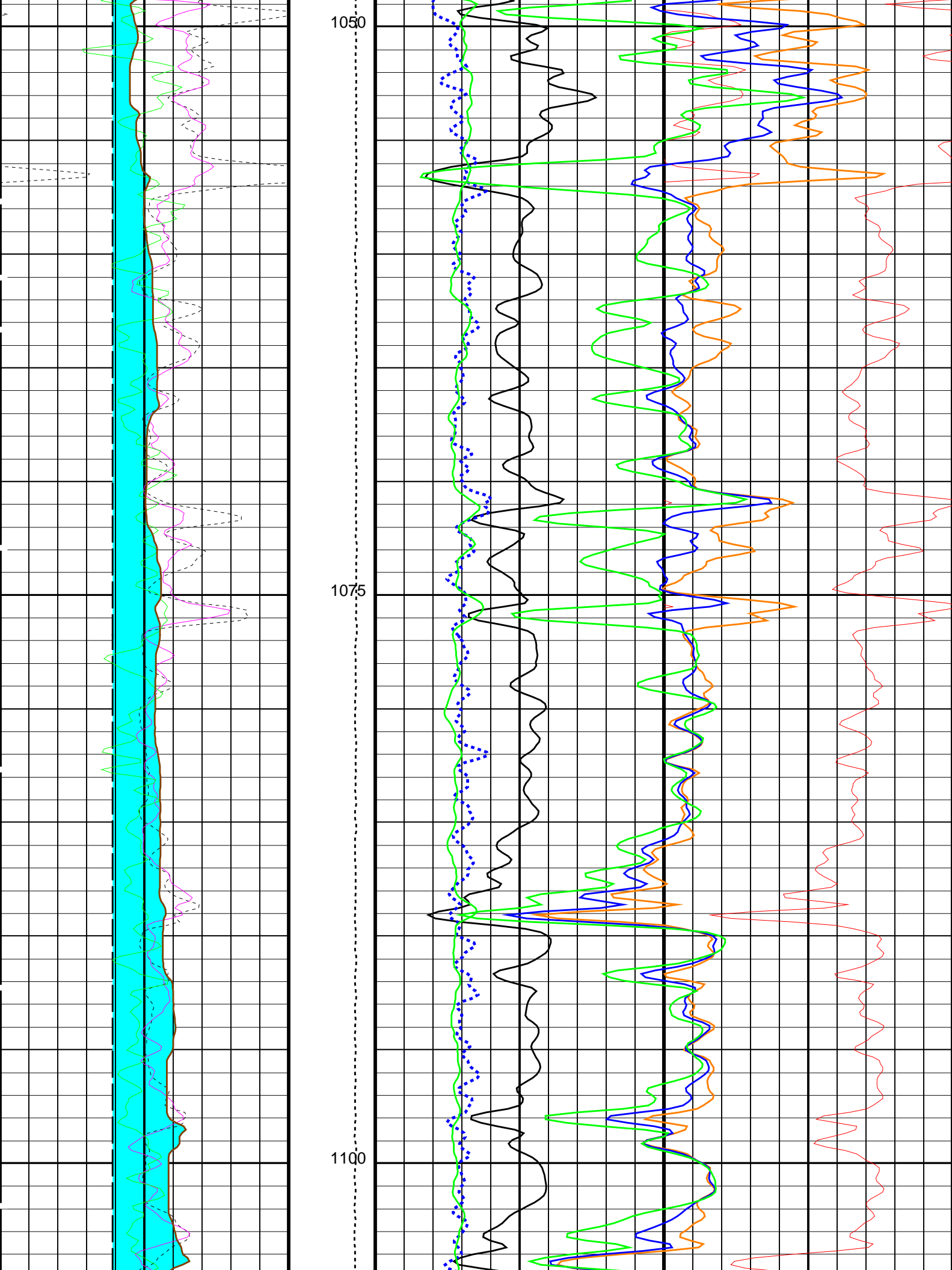


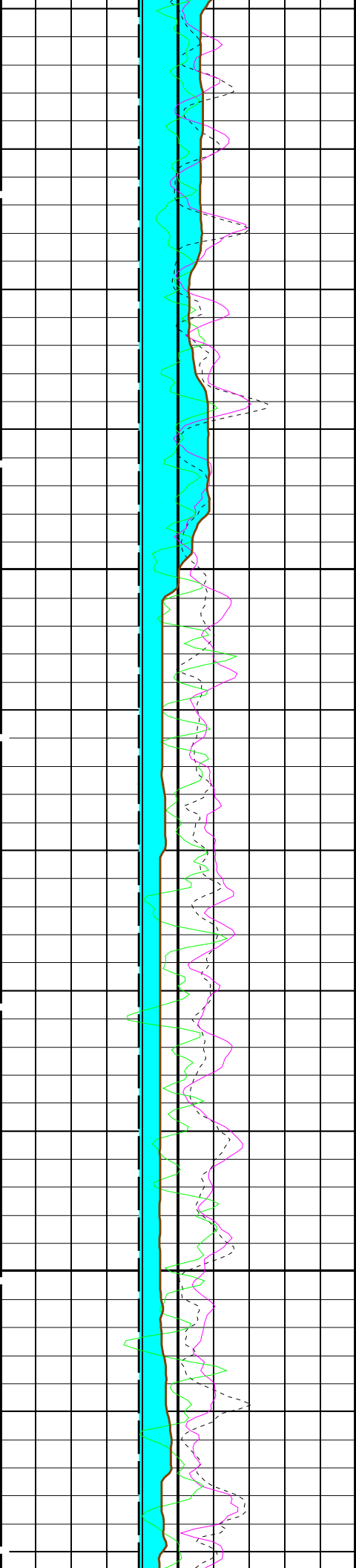


1000

1025

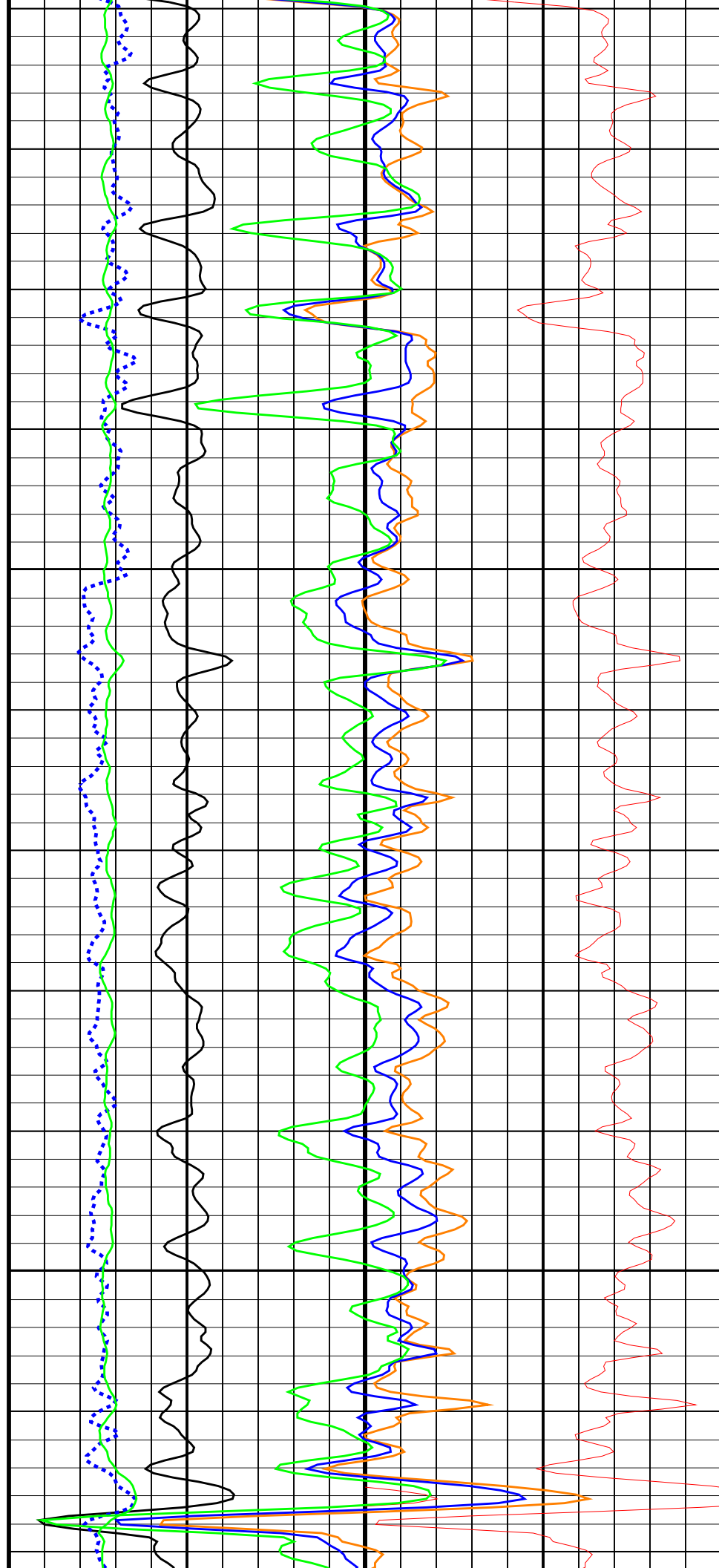


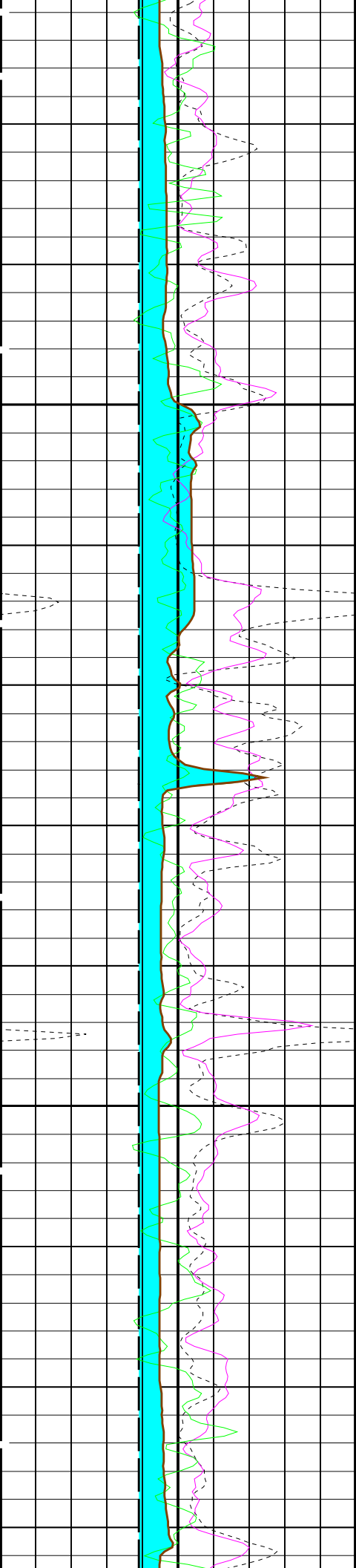




1125

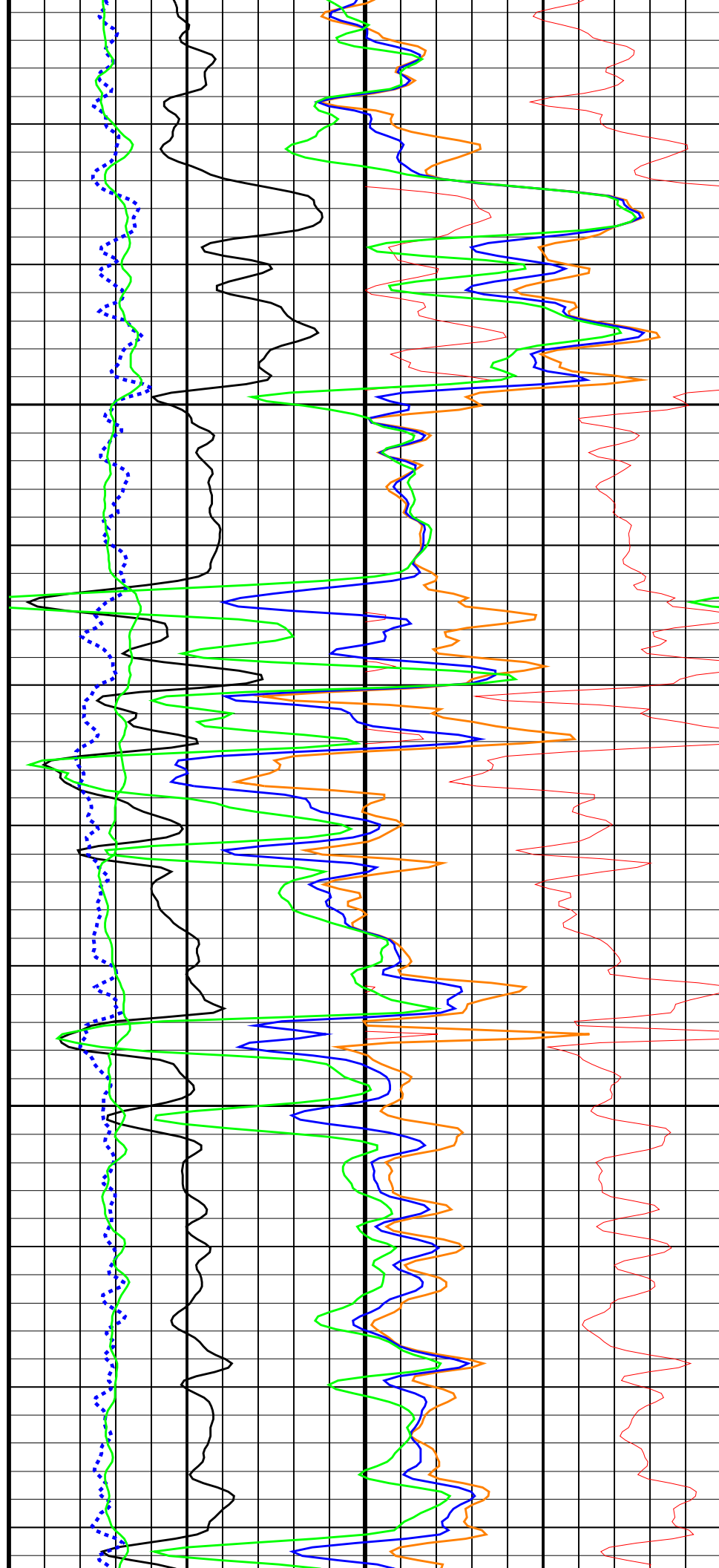
1150

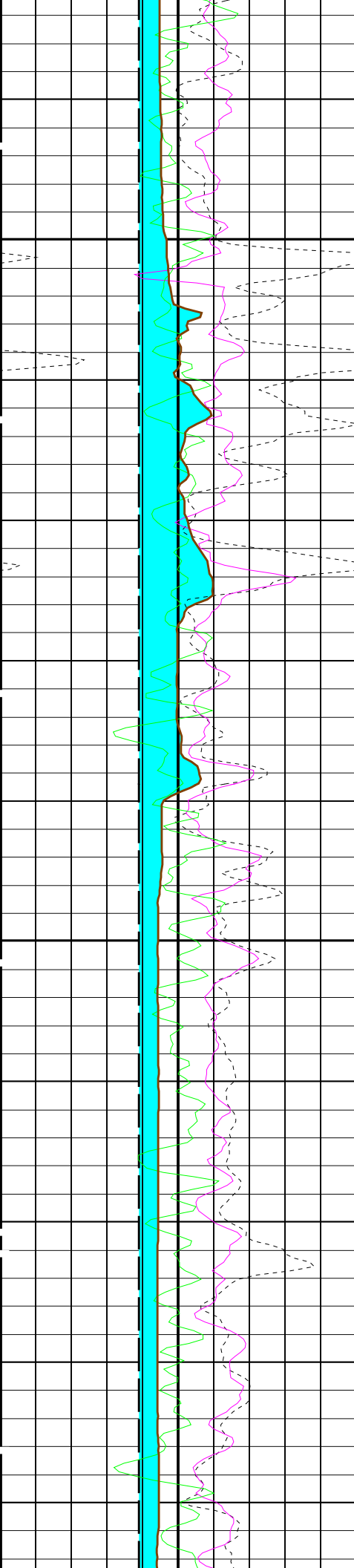




1175

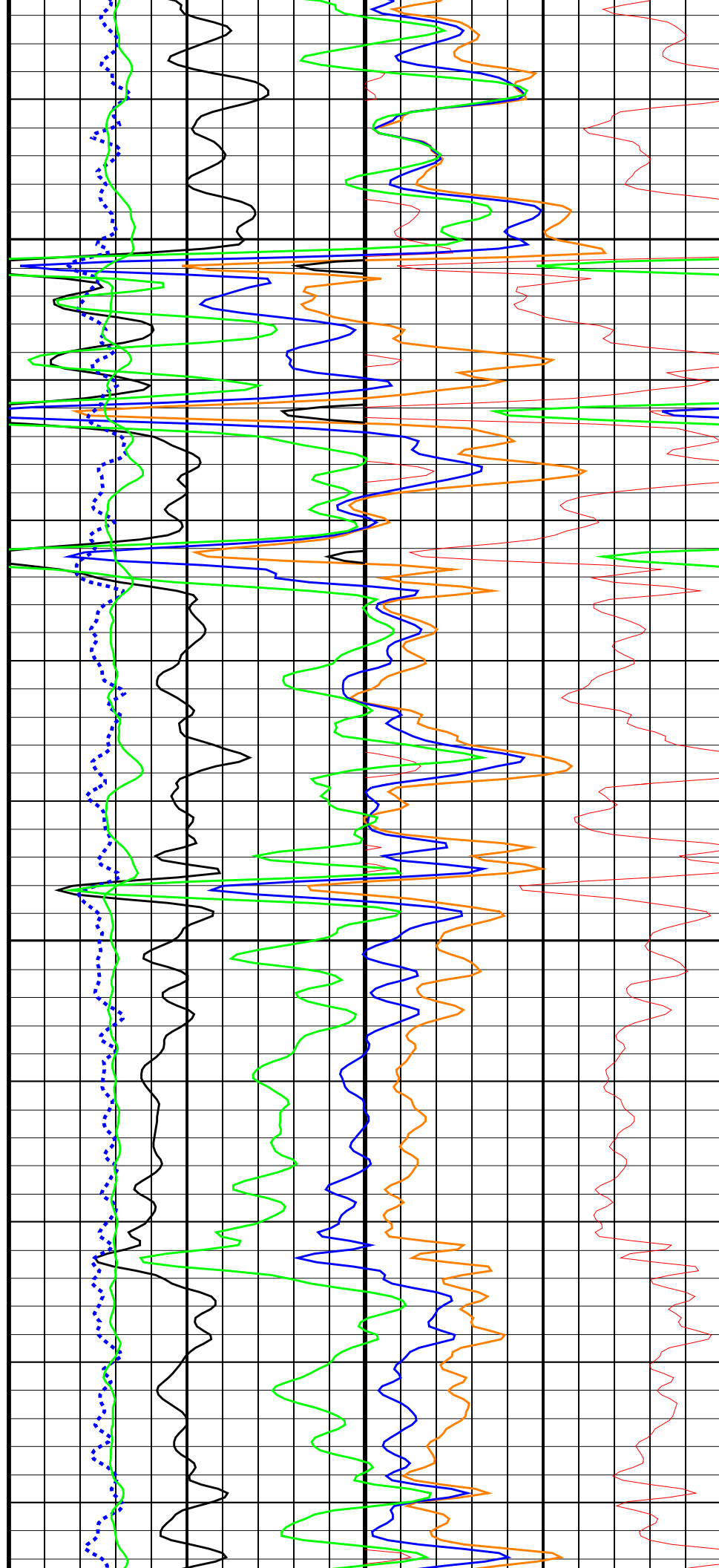
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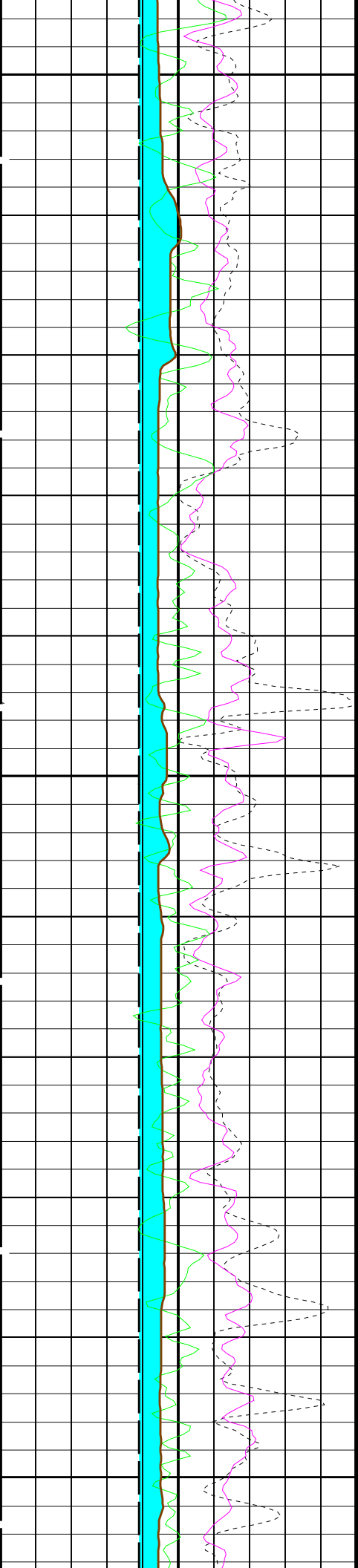




1225

1250

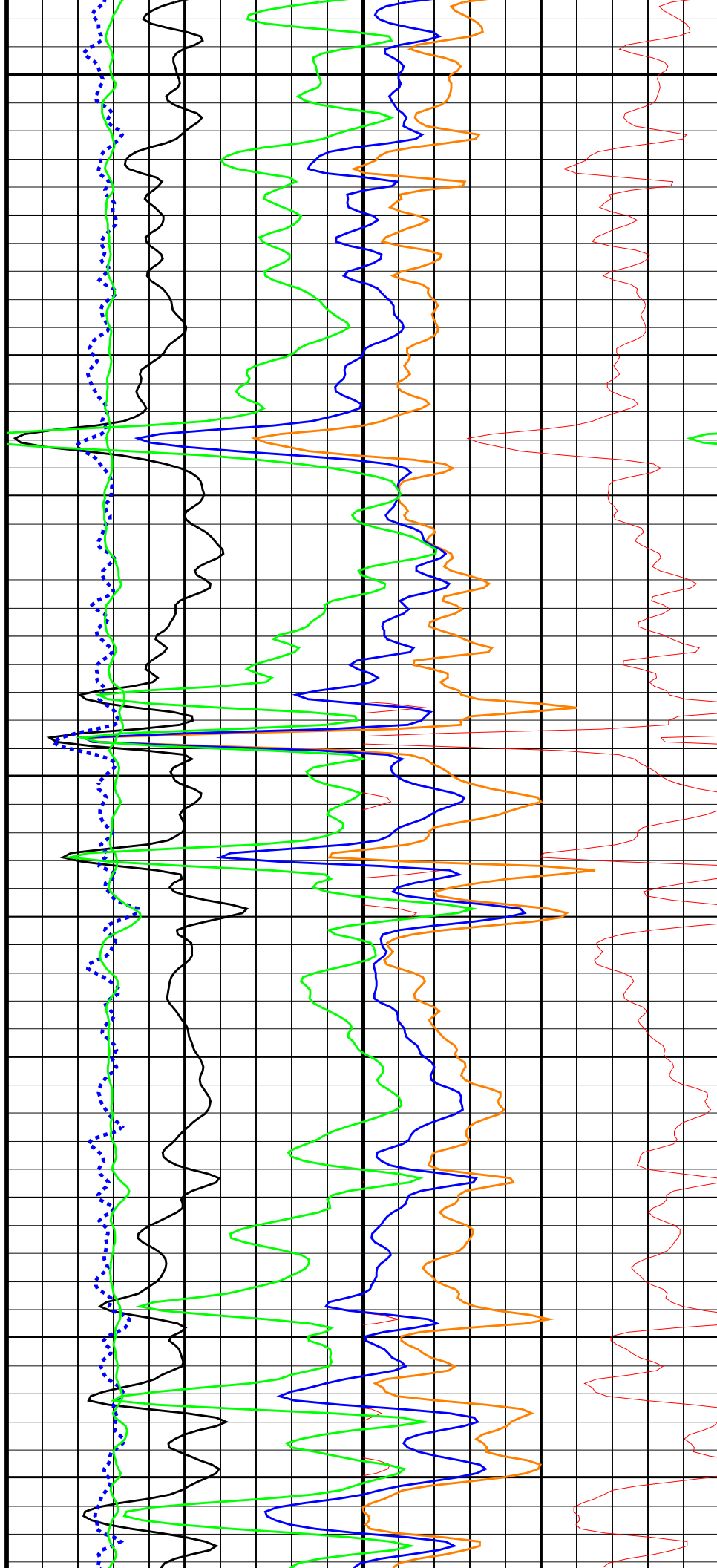


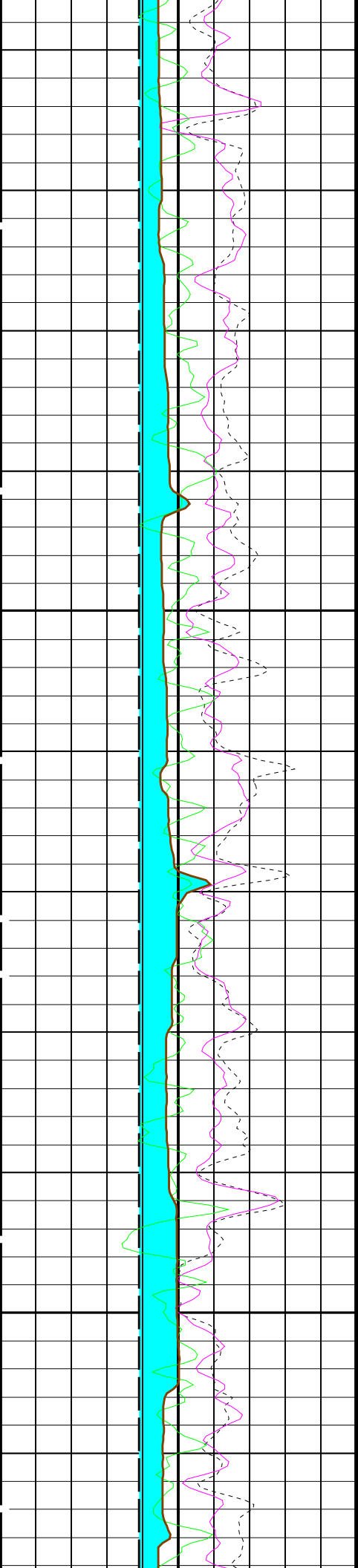


1275

1300

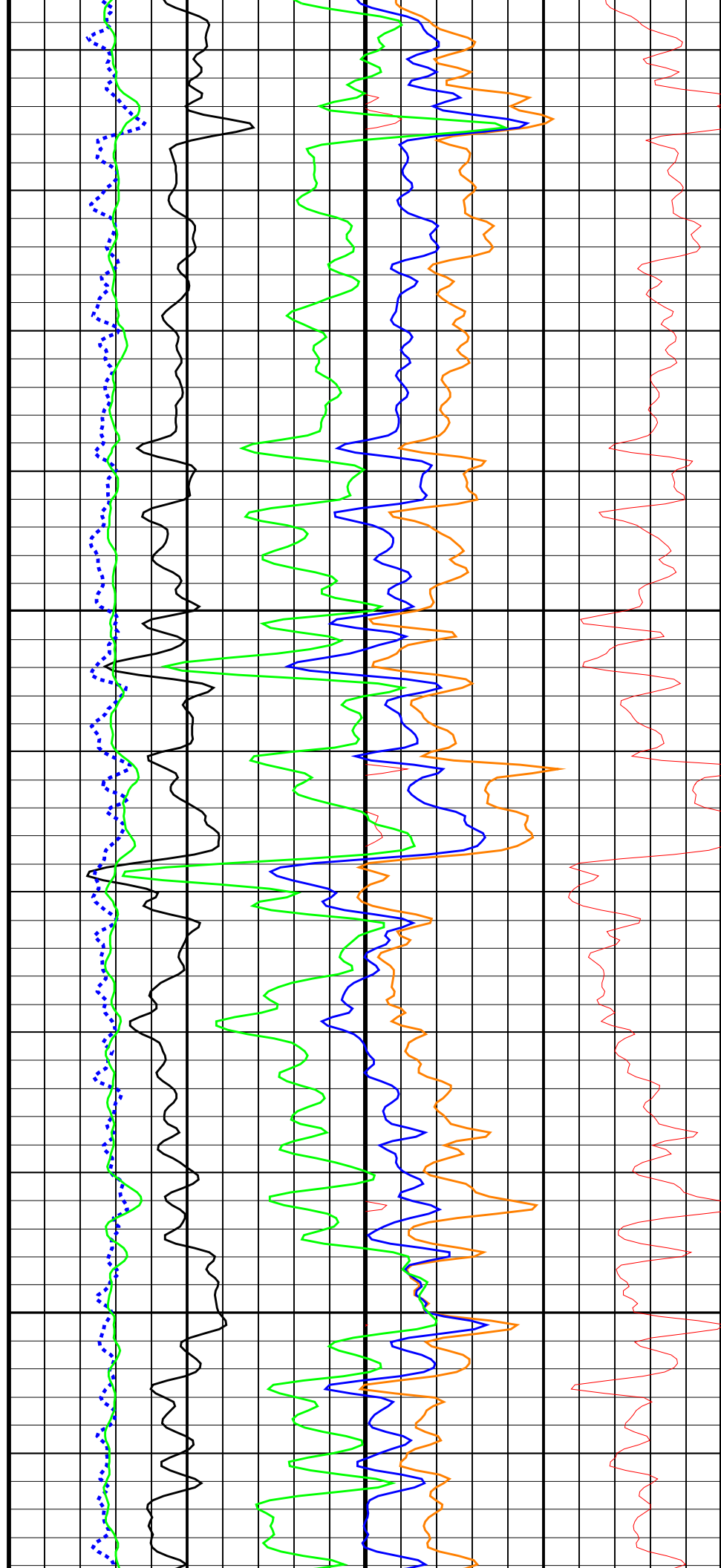
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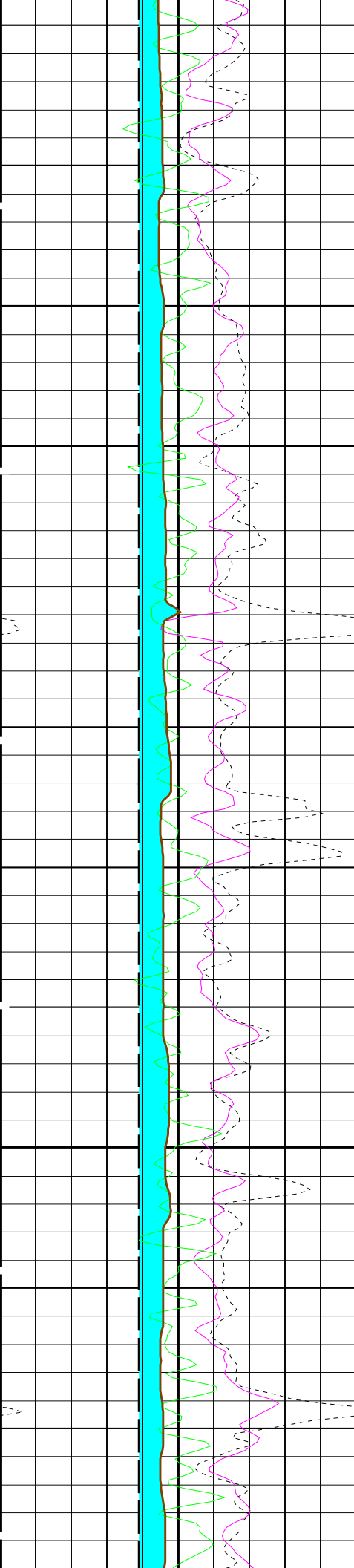




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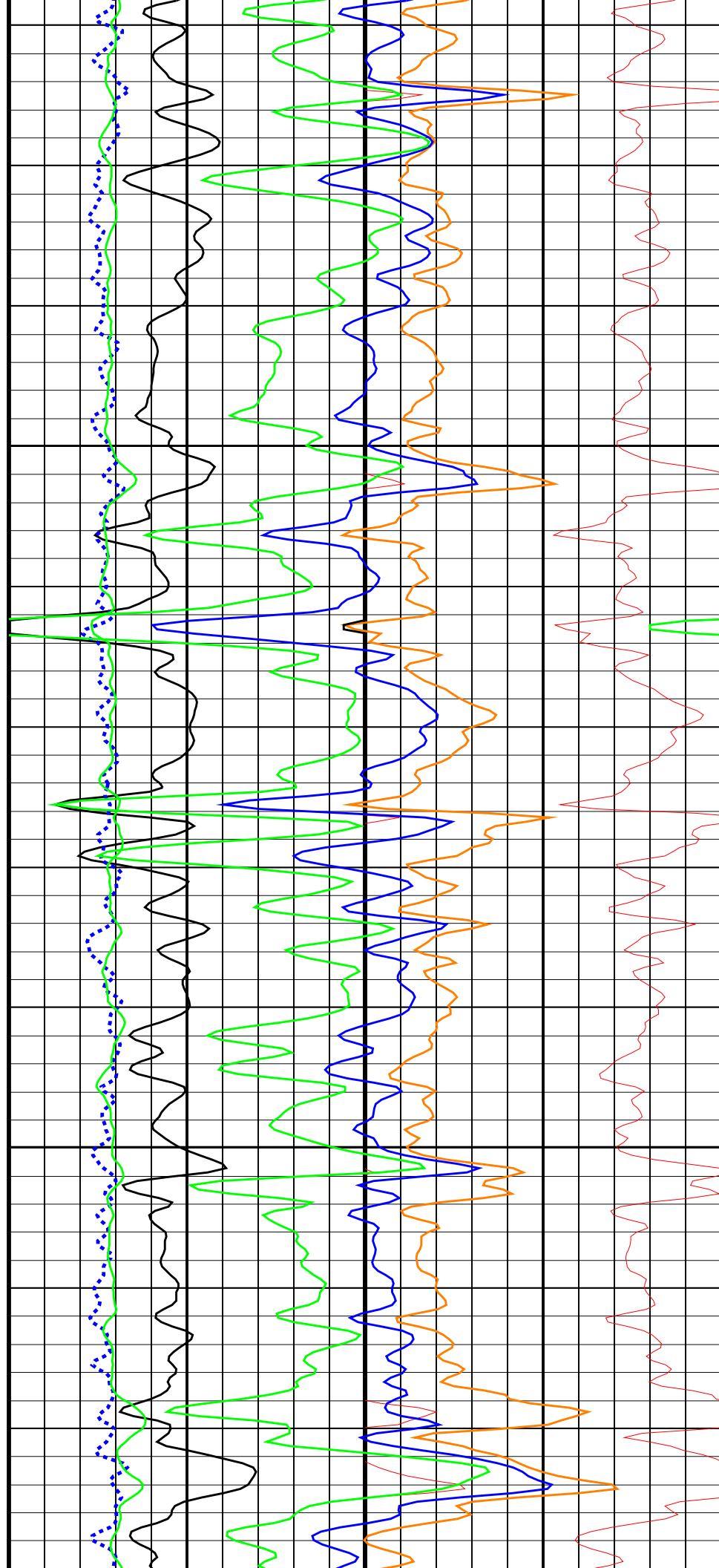
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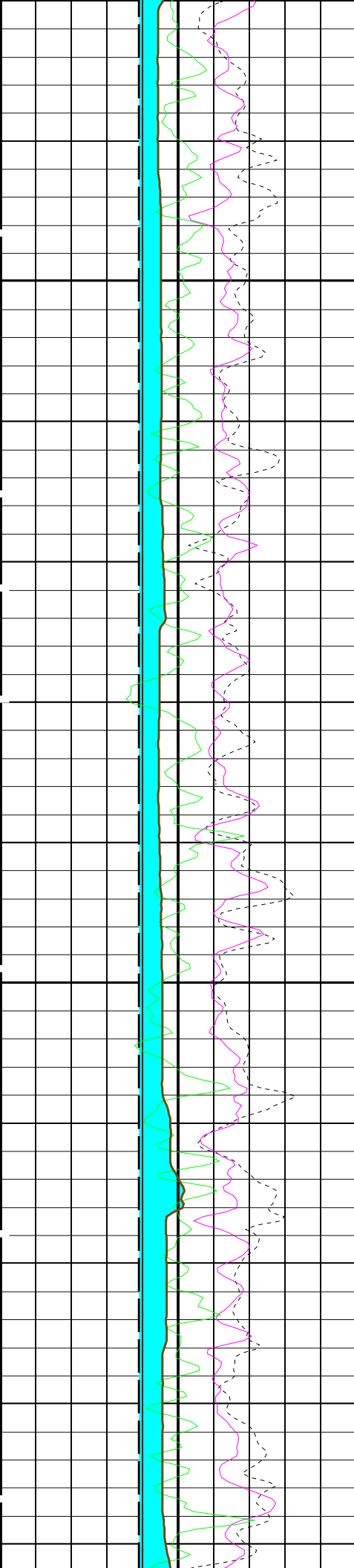




1400

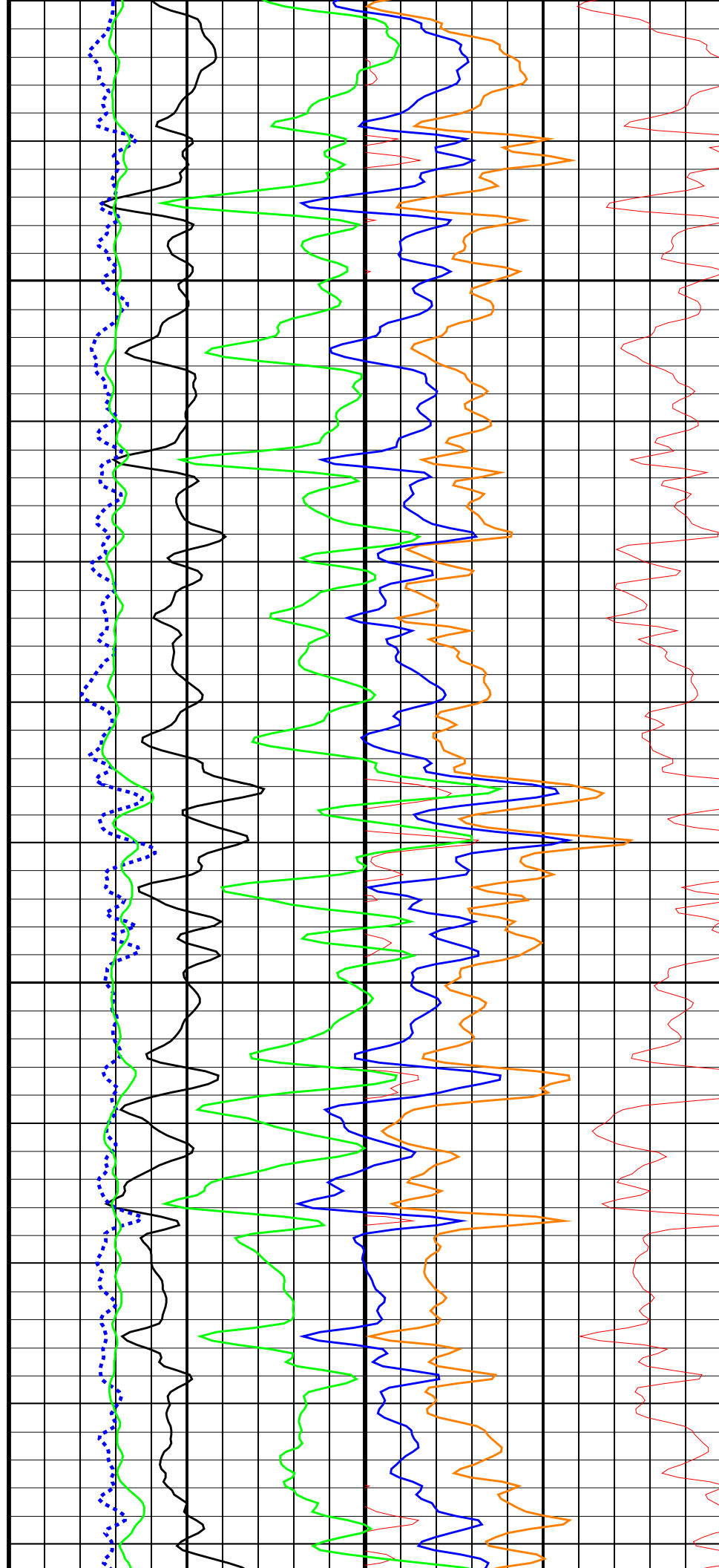
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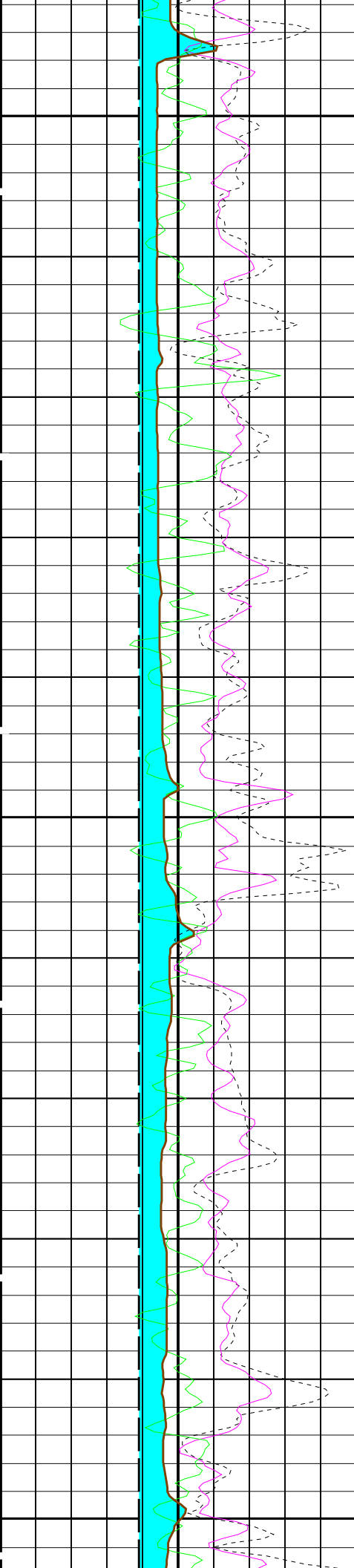




1450

1475

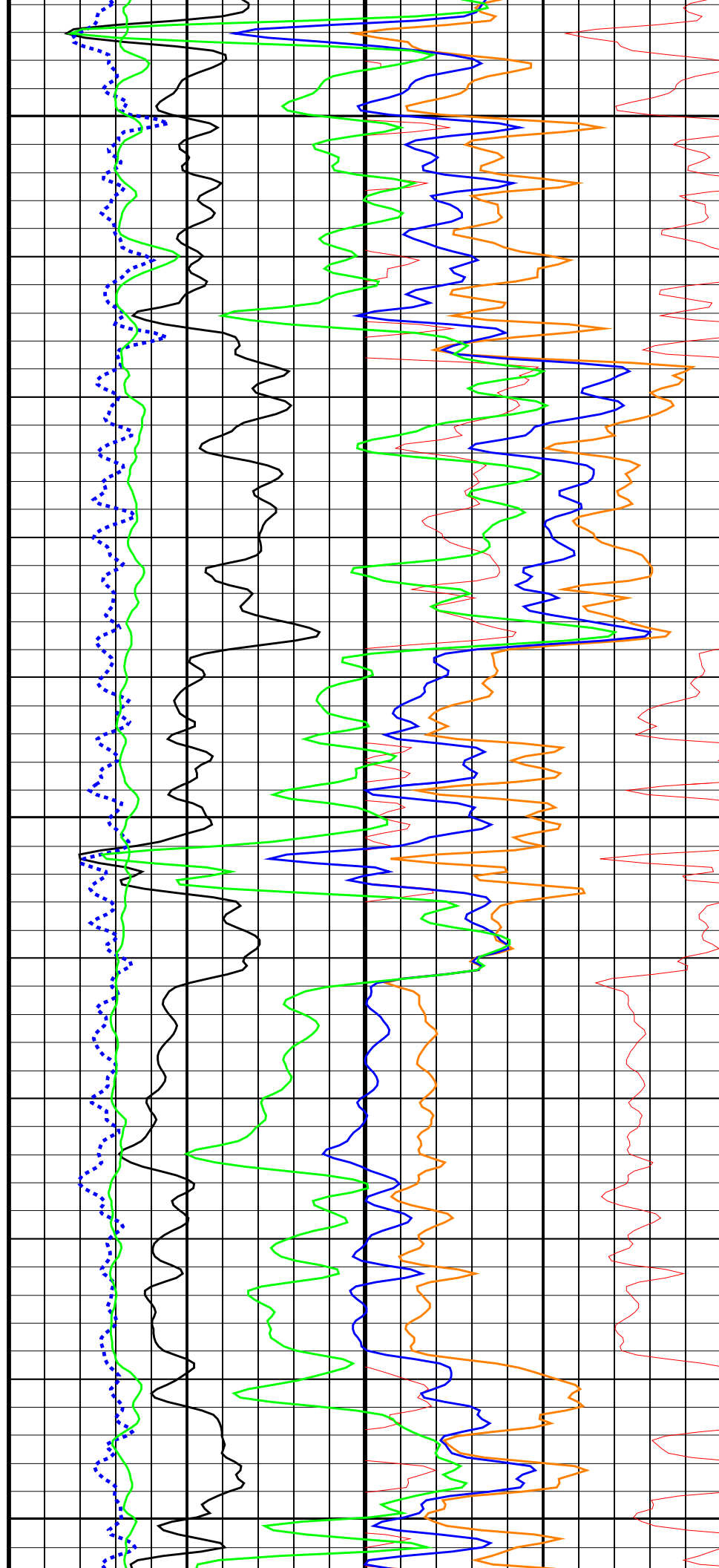


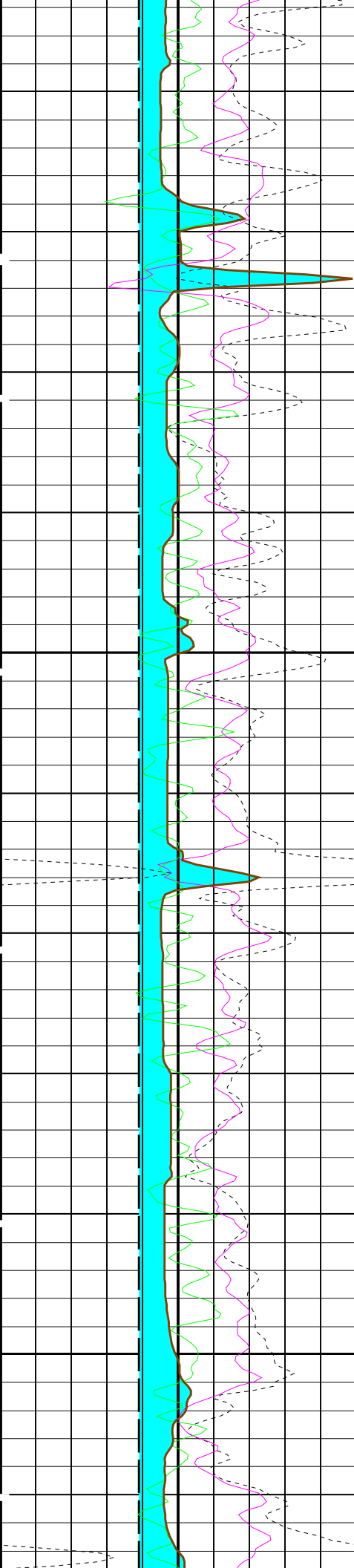


1500

1525

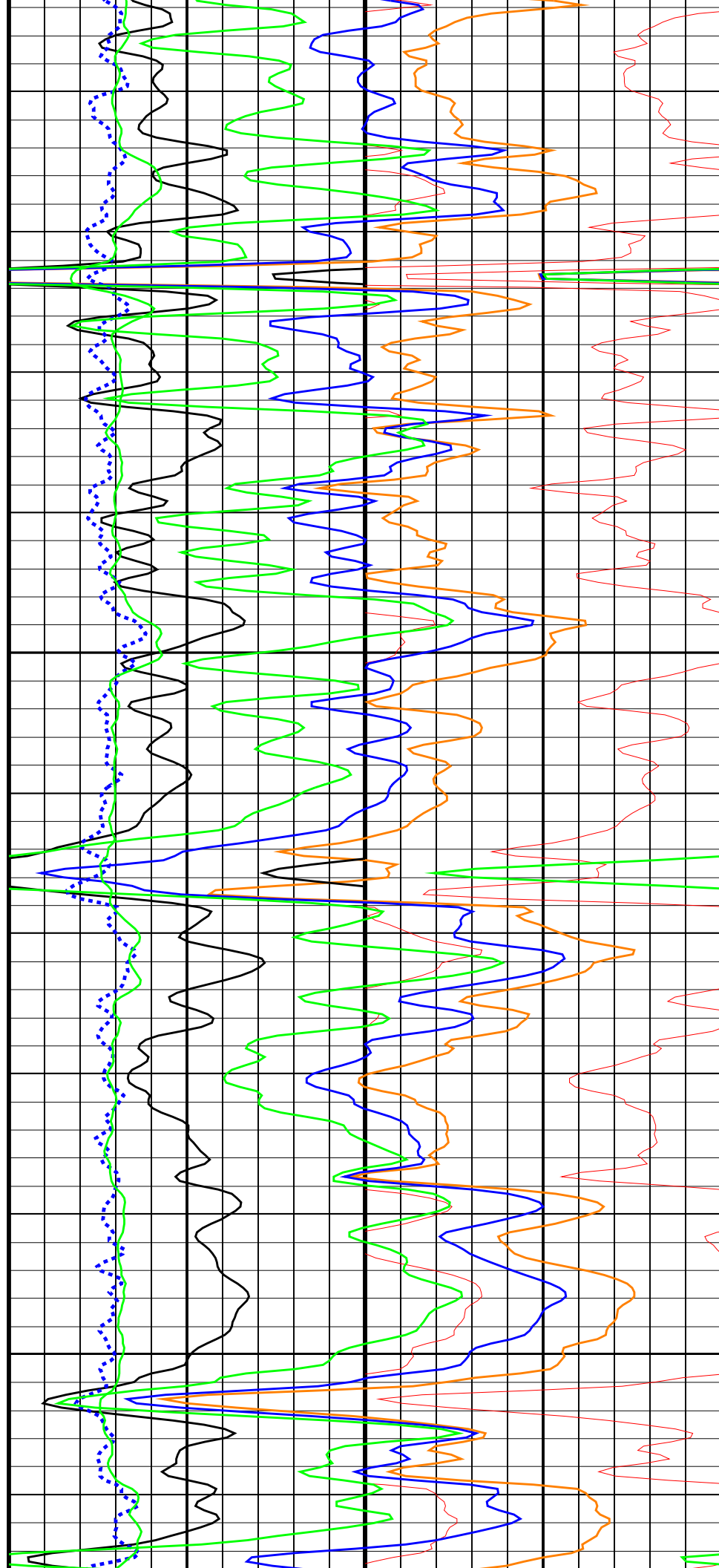
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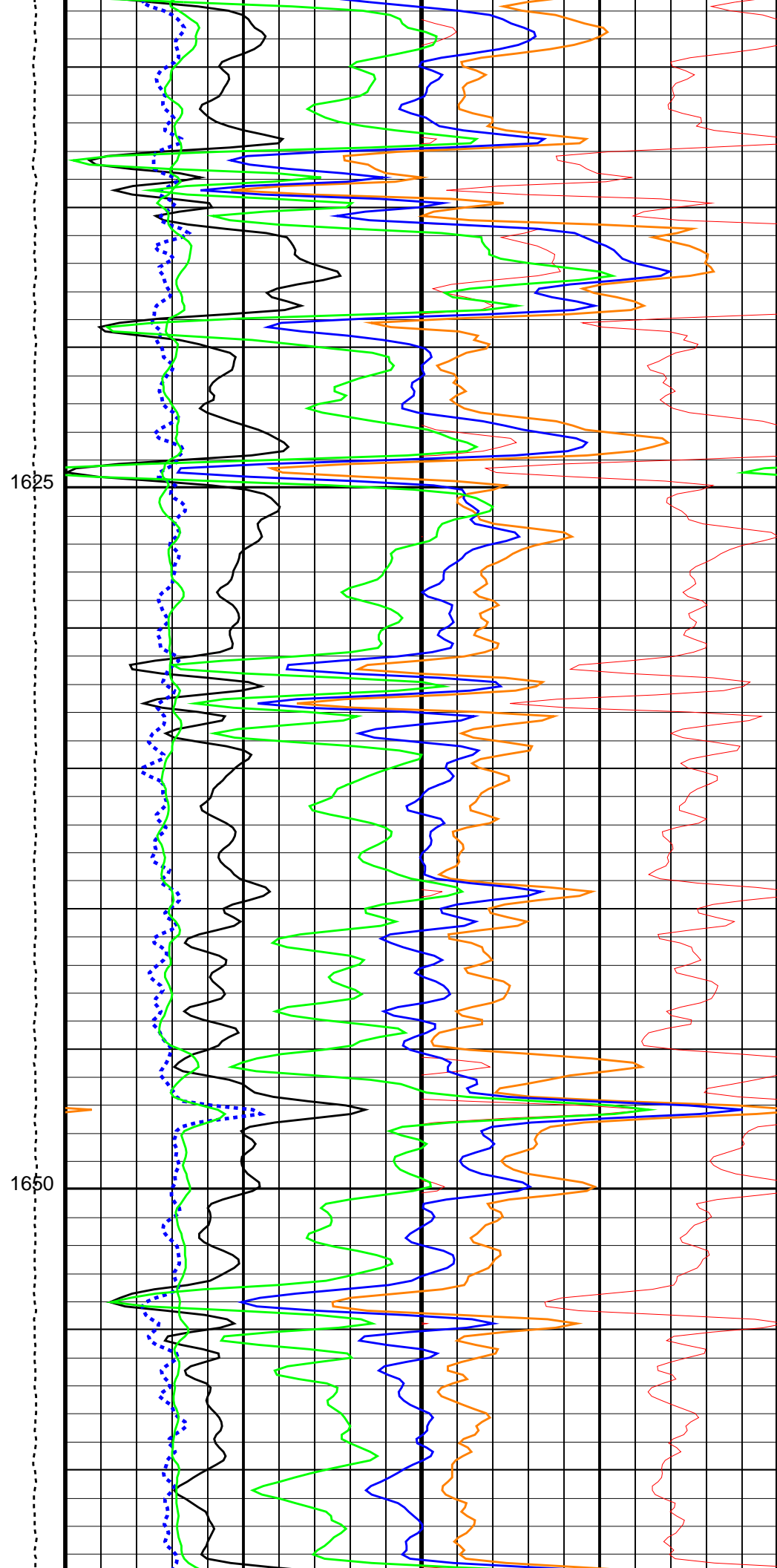
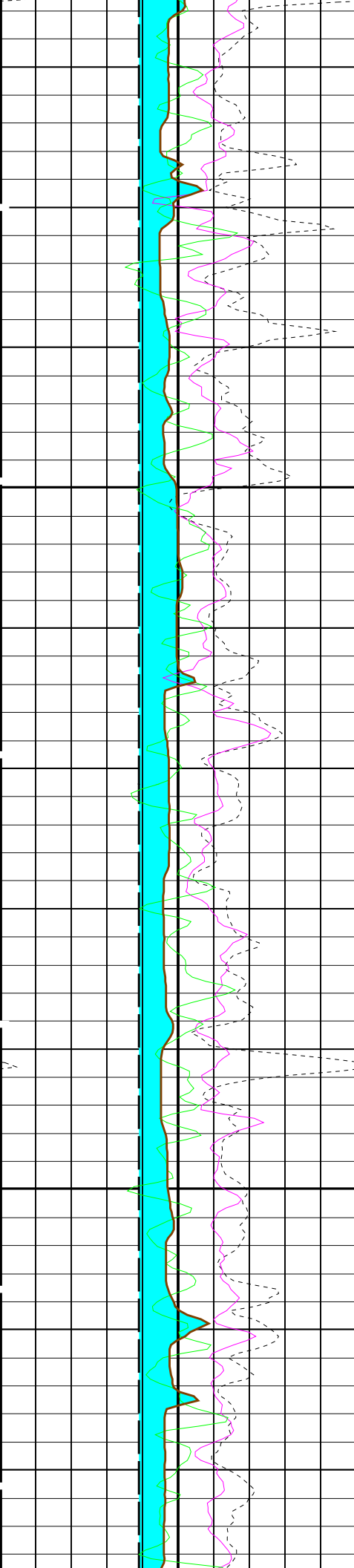


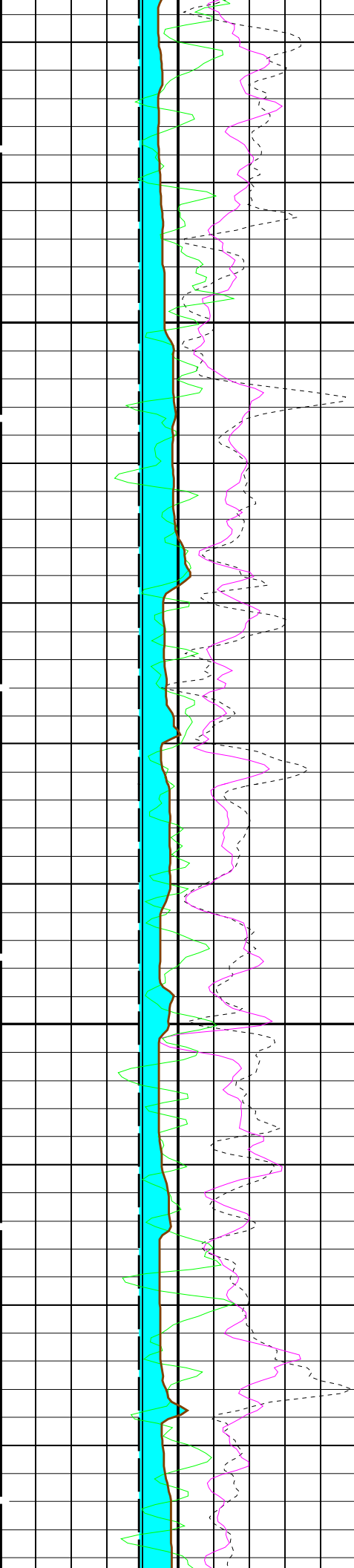


1575

1600

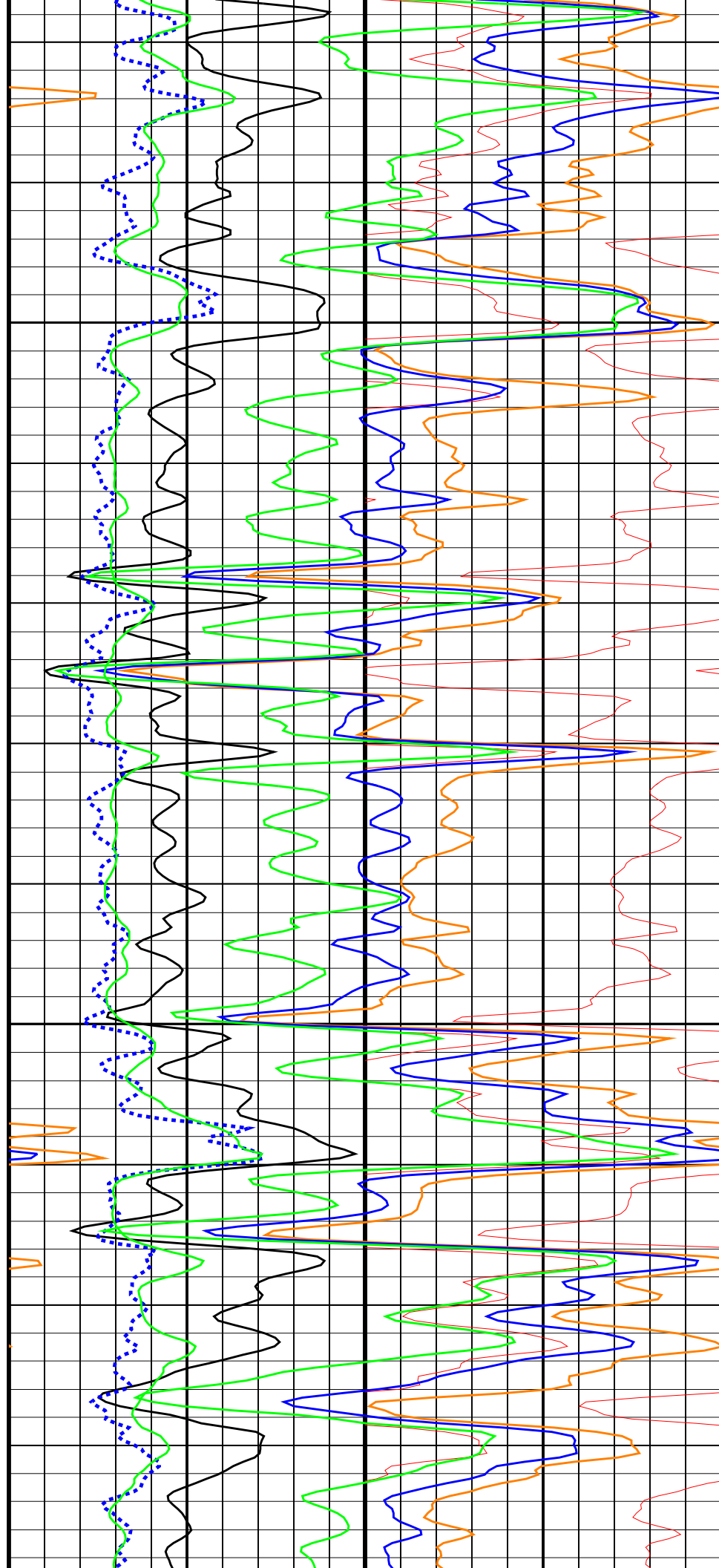


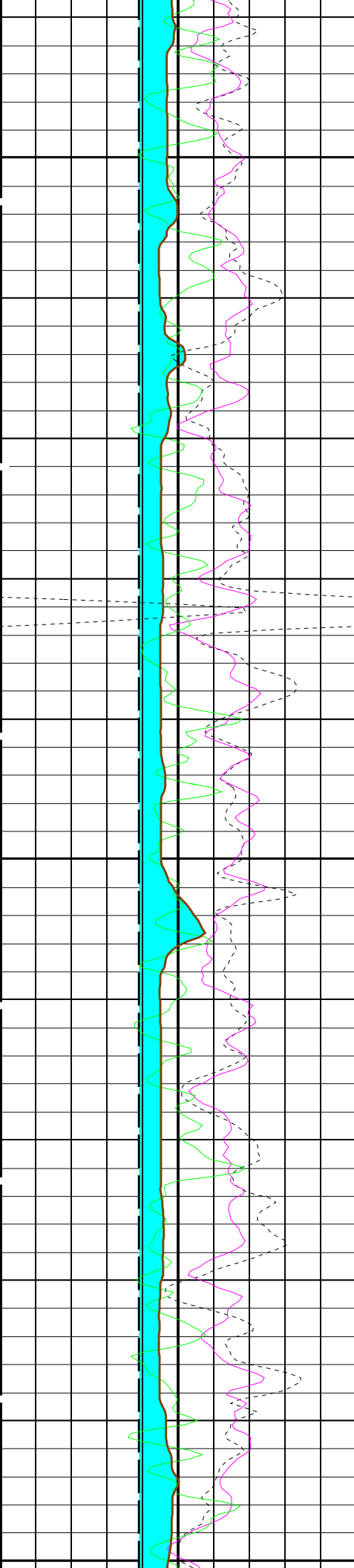




1675

1700

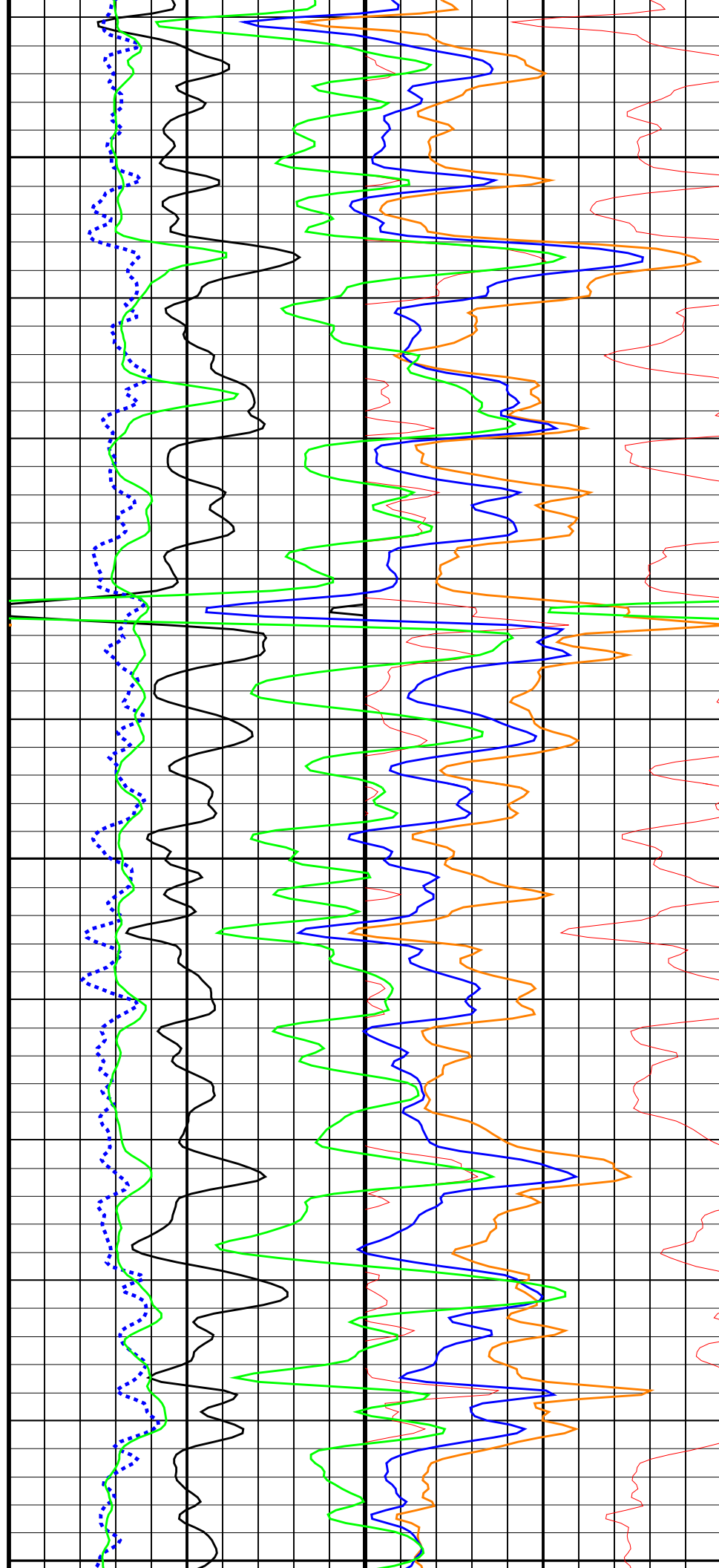


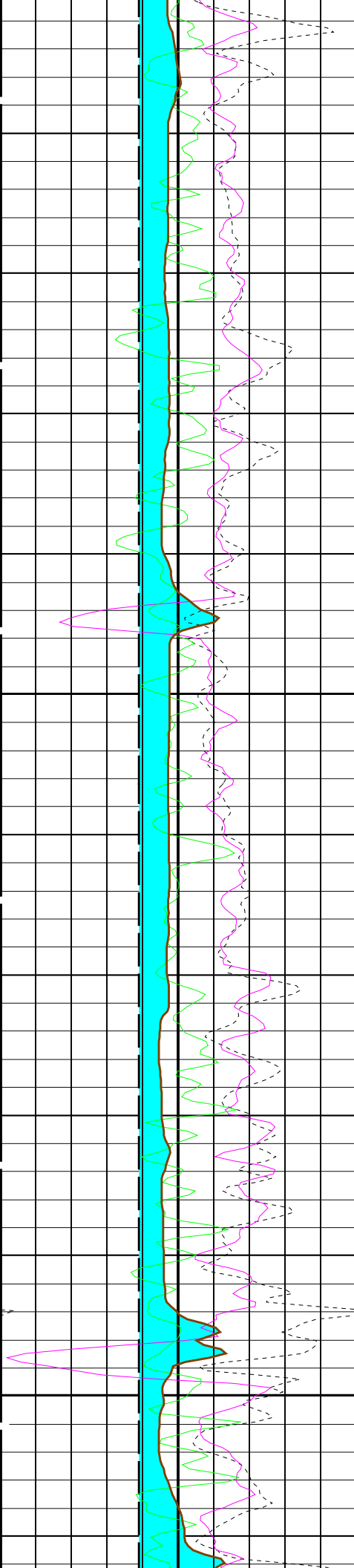


1725

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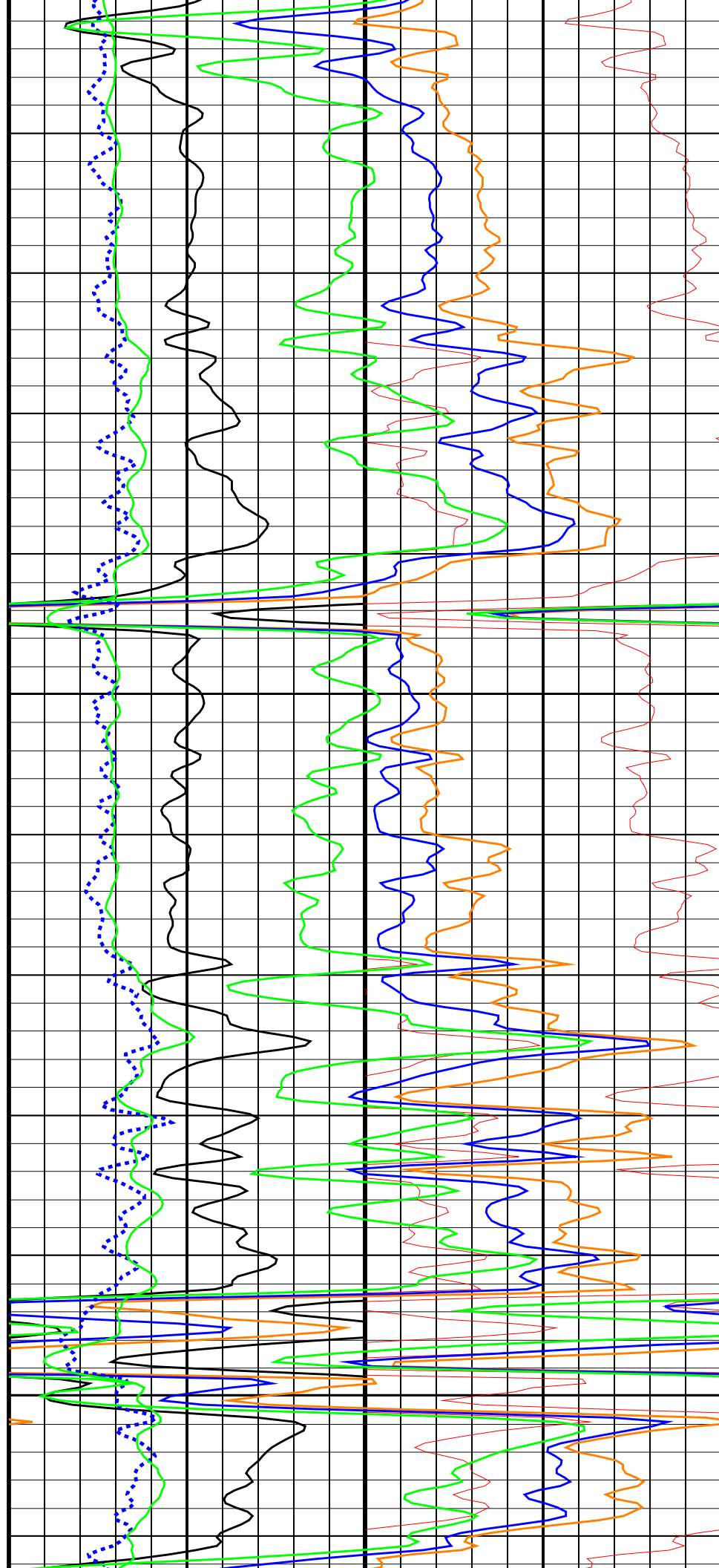
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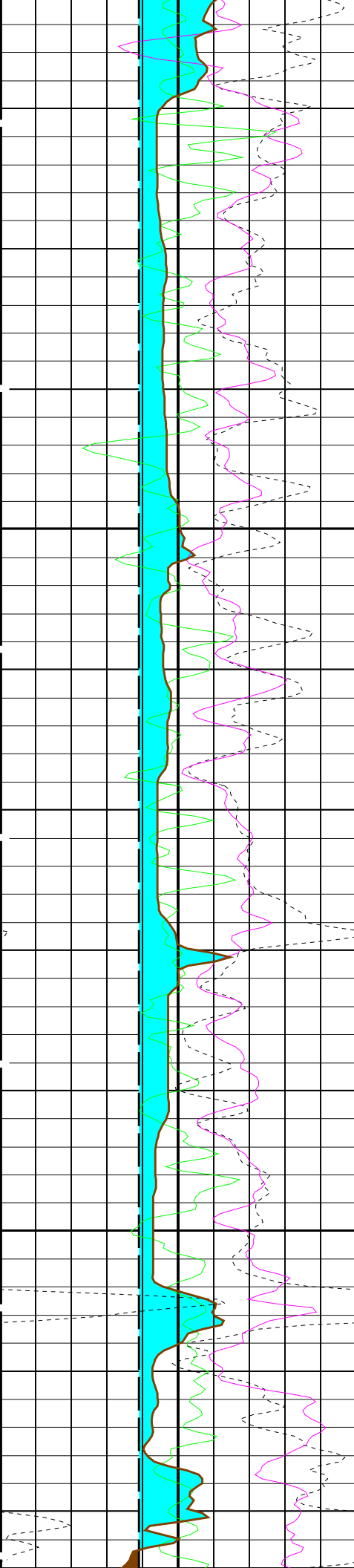




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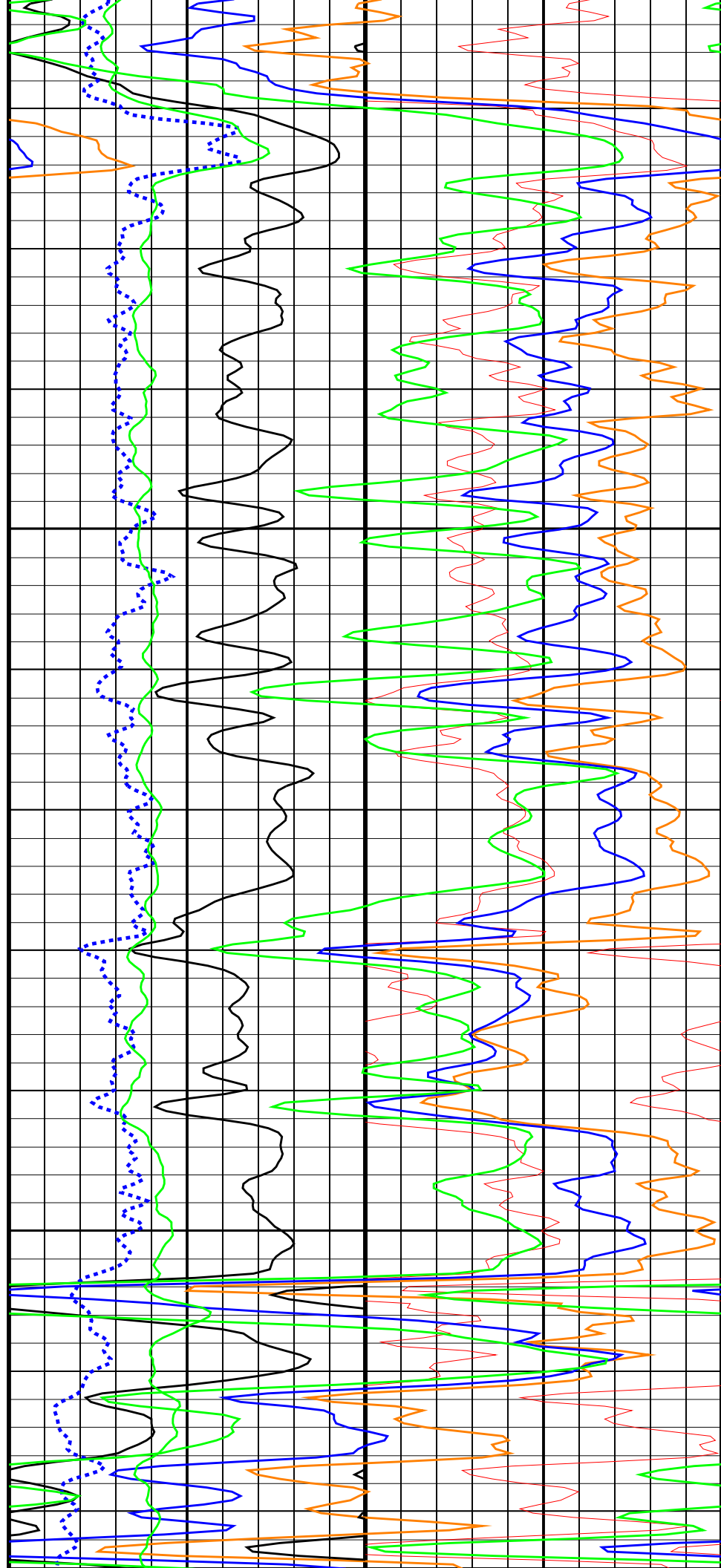
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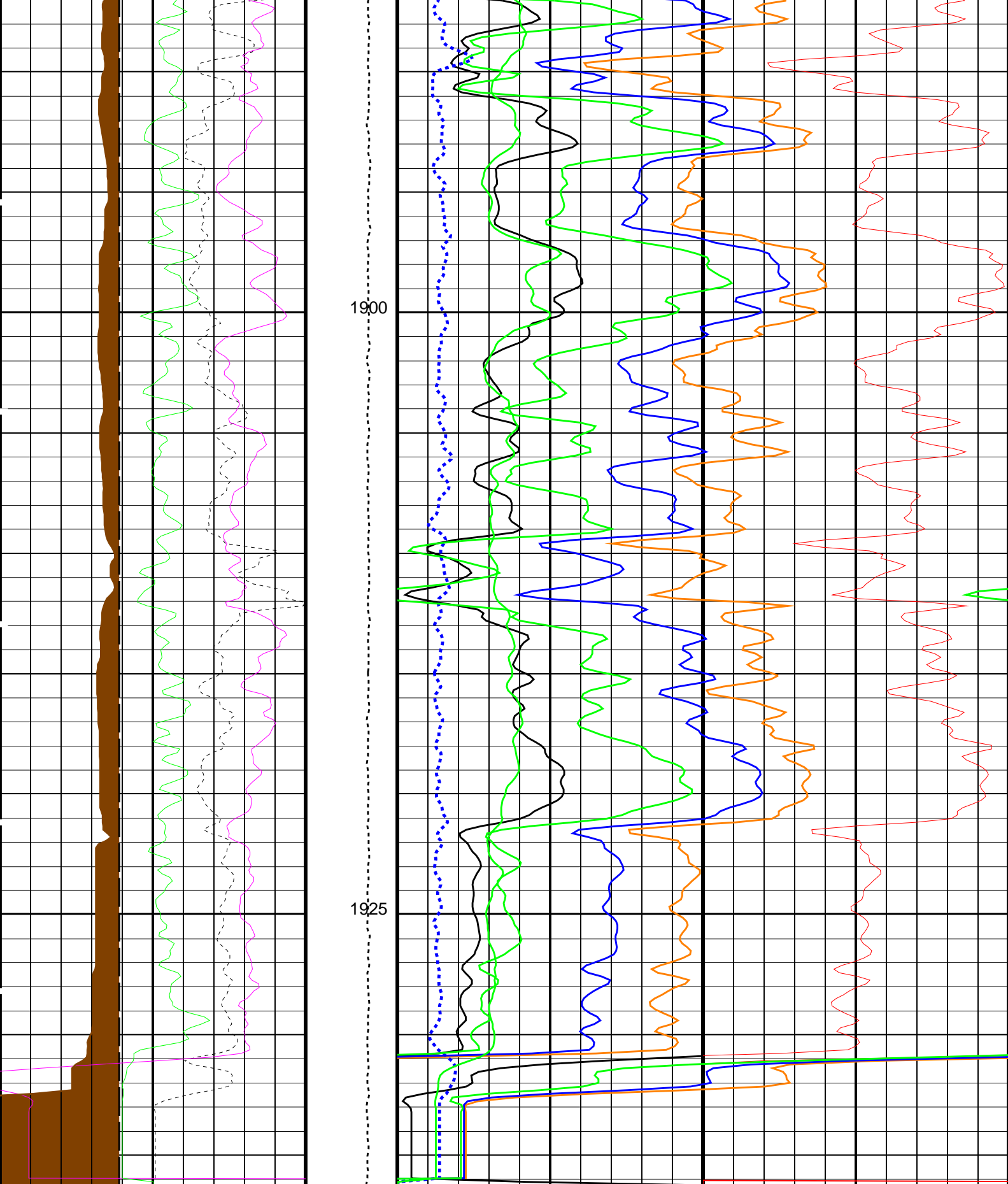




1850

1875





HLDS Bulk Density Correction (DRH) (G/C3)		Tension (TENS) (LBF)		HLDS Bulk Density (RHOM) (G/C3)	
-0.25	0.25	10000	0	2	3
Bit Size (BS) (IN)		HLDS SS2 Density (RHS3) (G/C3)		HLDS Density Porosity (DPO) (PU)	
6	16	2	3	30	0
HLDS Caliper (L CAL)		HLDS Long Spaced Bulk Density (RHI)			

6	HLDS Caliper (EQAL) (IN)	16	2	HLDS Long Spaced Bulk Density (RHS) (G/C3)	3
	Mudcake From HLDS_CALIPER to BS			HLDS Short Spaced Photoelectric Effect (PEFS)	
			0	(----)	10
	Washout From BS to HLDS_CALIPER			HLDS Long Spaced Photoelectric Effect (PEFL)	
			0	(----)	10
	HLDS Short Spacing Quality Indicator (LQSS)			HLDS Short Spaced Bulk Density (RHS)	
	-0.25	(----)	0.25	2	(G/C3) 3
	HLDS Long Spacing Quality Indicator (LQLS)				
	-0.25	(----)	0.25		

PIP SUMMARY					
Time Mark Every 60 S					

Parameters					
DLIS Name	Description			Value	
	HLDS: Hostile Litho-Density Sonde				
DHC	Density Hole Correction			CALIPER	
DPPM	Density Porosity Processing Mode			HIRS	
FD	Fluid Density			1	G/C3
LATC	HLDS Activation Correction			OFF	
MDEN	Matrix Density			2.71	G/C3
	EDTC-B: Enhanced DTS Cartridge				
DPPM	Density Porosity Processing Mode			HIRS	
	System and Miscellaneous				
BS	Bit Size			9.875	IN
DFD	Drilling Fluid Density			9.00	LB/G
DO	Depth Offset for Playback			0.0	M
PP	Playback Processing			NORMAL	

Format: HLDS	DensityPE	Vertical Scale: 1:200	Graphics File Created: 30-May-2023 13:20		
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OP System Version: 19C0-187			
HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	19C0-187		

Input DLIS Files					
DEFAULT	LDL_NGS_044LUP	FN:43	PRODUCER	26-May-2023 11:22	1936.2 M 854.9 M
Output DLIS Files					
DEFAULT	LDL_NGS_105PUP	FN:100	PRODUCER	30-May-2023 13:20	

Schlumberger

Callibrations

MAXIS Field Log

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Litho–Density Sonde Wellsite Calibration – Background Measurement							
Master: 17–Apr–2023 12:47							
SS Cs Resolution Bkg	9.000	8.117	N/A	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	7.703	N/A	N/A	N/A	1.800	%
LSW1 Background	100.0	56.06	N/A	N/A	N/A	3.000	CPS
LSW2 Background	100.0	52.18	N/A	N/A	N/A	3.000	CPS
LSW3 Background	200.0	113.2	N/A	N/A	N/A	6.000	CPS
LSW4 Background	250.0	140.7	N/A	N/A	N/A	7.500	CPS
LSW5 Background	600.0	323.9	N/A	N/A	N/A	18.00	CPS
SSW1 Background	100.0	62.70	N/A	N/A	N/A	3.000	CPS
SSW2 Background	200.0	113.3	N/A	N/A	N/A	6.000	CPS
SSW3 Background	500.0	305.6	N/A	N/A	N/A	15.00	CPS
SSW4 Background	270.0	160.0	N/A	N/A	N/A	8.100	CPS
SSW5 Background	200.0	116.0	N/A	N/A	N/A	6.000	CPS
Hostile Litho–Density Sonde Wellsite Calibration – Aluminum Measurement							
Master: 17–Apr–2023 13:31							
LSW1 Aluminum	600.0	387.6	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	581.0	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	716.1	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	368.4	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	339.2	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	1927	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	5293	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	7493	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3144	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	382.9	N/A	N/A	N/A	N/A	CPS
Hostile Litho–Density Sonde Wellsite Calibration – Lithology Measurement							
Master: 17–Apr–2023 13:24							
LSW1 Iron	400.0	270.0	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	475.4	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	645.5	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	340.5	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	315.7	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1447	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	4494	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	6946	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	2923	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	346.5	N/A	N/A	N/A	N/A	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 18–Apr–2023 21:32							
Na 511 Peak Loc	40.00	38.77	N/A	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.72	N/A	N/A	N/A	2.000	%
High Voltage	1150	1244	N/A	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	138.9	N/A	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.548	N/A	N/A	N/A	2.000	%
Temperature	15.50	25.51	N/A	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	47.77	N/A	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 18–Apr–2023 21:32							
Na 511 Peak Loc	40.00	40.77	N/A	N/A	N/A	1.000	
Na 511 Peak Res	15.50	15.42	N/A	N/A	N/A	2.000	%
High Voltage	1150	1160	N/A	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	144.4	N/A	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.555	N/A	N/A	N/A	2.000	%
Temperature	15.50	26.63	N/A	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	48.78	N/A	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 18–Apr–2023 21:32							
Coincidence Count Rate Ratio	1.000	0.9755	N/A	N/A	N/A	0.05000	

Hostile Litho–Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde
Hostile Litho Density High Voltage
Gamma Source Radioactive

HLDS – D 35
HLDV – D 35
GSR – ZA 2945

Auxiliary Equipment:

Hostile Litho Density Pad
Hostile Litho Density High Voltage Pad

HLDP – C 35
HLEH – H 25

Hostile Litho-Density Sonde Wellsite Calibration											
Background Measurement											
Phase	SS Cs Resolution Bkg %		Value	Phase	LS Cs Resolution Bkg %		Value	Phase	LSW1 Background CPS		Value
Master	<div><div></div></div>		8.117	Master	<div><div></div></div>		7.703	Master	<div><div></div></div>		56.06
7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)				7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)				55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			
Phase	LSW2 Background CPS		Value	Phase	LSW3 Background CPS		Value	Phase	LSW4 Background CPS		Value
Master	<div><div></div></div>		52.18	Master	<div><div></div></div>		113.2	Master	<div><div></div></div>		140.7
50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)				110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)				140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			
Phase	LSW5 Background CPS		Value	Phase	SSW1 Background CPS		Value	Phase	SSW2 Background CPS		Value
Master	<div><div>EXCEEDS LIMIT</div></div>		323.9	Master	<div><div></div></div>		62.70	Master	<div><div></div></div>		113.3
330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)				55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)				100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)			
Phase	SSW3 Background CPS		Value	Phase	SSW4 Background CPS		Value	Phase	SSW5 Background CPS		Value
Master	<div><div></div></div>		305.6	Master	<div><div></div></div>		160.0	Master	<div><div></div></div>		116.0
280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)				150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)				110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)			
Master: 17-Apr-2023 12:47											

Litho-Density Spectroscopy Cartridge – B / Equipment Identification		
Primary Equipment: LDSC Cartridge	LDSC – B	295
Auxiliary Equipment: UDFH Housing	UDFH – KH	1915

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification			
Primary Equipment:			
HNGC Cartridge		HNGC – B	351
Auxiliary Equipment:			
UDFH Housing		UDFH – KHX	1660


Hostile Natural Gamma Ray Sonde / Equipment Identification			
Primary Equipment:			
HNGS Sonde	HNGS – BA	99	
Auxiliary Equipment:			
HNGS Sonde Housing	HNSH – BA	102	
Gamma Source Radioactive	GSR – U	135	

Hostile Natural Gamma Ray Sonde Wellsite Calibration																	
Detector 1 Check																	
Phase	Na 511 Peak Loc			Value	Phase	Na 511 Peak Res %			Value	Phase	High Voltage V			Value			
Master	<div><div></div></div>			38.77	Master	<div><div></div></div>			16.72	Master	<div><div></div></div>			1244			
37.50 (Minimum)				40.00 (Nominal)	43.50 (Maximum)	12.00 (Minimum)				15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)				1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc			Value	Phase	Na 1785 Peak Res %			Value	Phase	Temperature DEGC			Value			
Master	<div><div></div></div>			138.9	Master	<div><div></div></div>			9.548	Master	<div><div></div></div>			25.51			
135.0 (Minimum)				142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)				8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)				15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS			Value													
Master	<div><div></div></div>			47.77													
10.00 (Minimum)				45.00 (Nominal)									100.0 (Maximum)				

Hostile Natural Gamma Ray Sonde Wellsite Calibration														
Detector 2 Check														
Phase	Na 511 Peak Loc			Value	Phase	Na 511 Peak Res %			Value	Phase	High Voltage V			Value
Master	<div><div></div></div>			40.77	Master	<div><div></div></div>			15.42	Master	<div><div></div></div>			1160
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)		12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)			900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)		
Phase	Na 1785 Peak Loc			Value	Phase	Na 1785 Peak Res %			Value	Phase	Temperature DEGC			Value
Master	<div><div></div></div>			144.4	Master	<div><div></div></div>			8.555	Master	<div><div></div></div>			26.63
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)		7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)			-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)		
Phase	Na Count Rate CPS			Value										
Master	<div><div></div></div>			48.78										
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)											
Master: 18-Apr-2023 21:32														

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master	<div><div></div></div>	0.9755
	<div><div>0.9500 (Minimum)</div><div>1.000 (Nominal)</div><div>1.050 (Maximum)</div></div>	
Master: 18-Apr-2023 21:32		

Enhanced DTS Cartridge / Equipment Identification		
Primary Equipment:		
EDTC Gamma Ray Detector	EDTG – A/B	
Enhanced DTS Cartridge	EDTC – B	
Auxiliary Equipment:		
EDTC Housing	EDTH – B	8529

Company:	International Ocean Discovery Program	
Well:	Expedition 399, Site U1601C	
Field:	Building Blocks of Life, Atlantis Massif	
Rig:	JOIDES Resolution	
Country:	Portugal	
Natural Gamma (HNGS) Litho Density (HLDS)		