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**OTHER SERVICES1**

OS1: FMI-PPC  
 OS2: PEX-AIT  
 OS3:  
 OS4:  
 OS5:

**OTHER SERVICES2**

OS1:  
 OS2:  
 OS3:  
 OS4:  
 OS5:

**REMARKS: RUN NUMBER 1**

Tool String ran as per tool sketch.  
 Second run due to brigging out at 8400 on the first run  
 Mud resistivity calculated from mud pit.  
 Correlated to Baker Hughes MWD log  
 Logged at 1700 ft/hr for the FMI image  
 Maximum temperature from Gtem generalized borehole temperature

**REMARKS: RUN NUMBER 2**

Depth offset= 8 feet versus MWD Log

Rig: Xtreme 8  
 Crew: Tim Ludgate, Ian Derry, Kit Carlson

**RUN 1**


SERVICE ORDER #: BFCL-00181  
 PROGRAM VERSION: 18C0-147  
 FLUID LEVEL: 10 ft

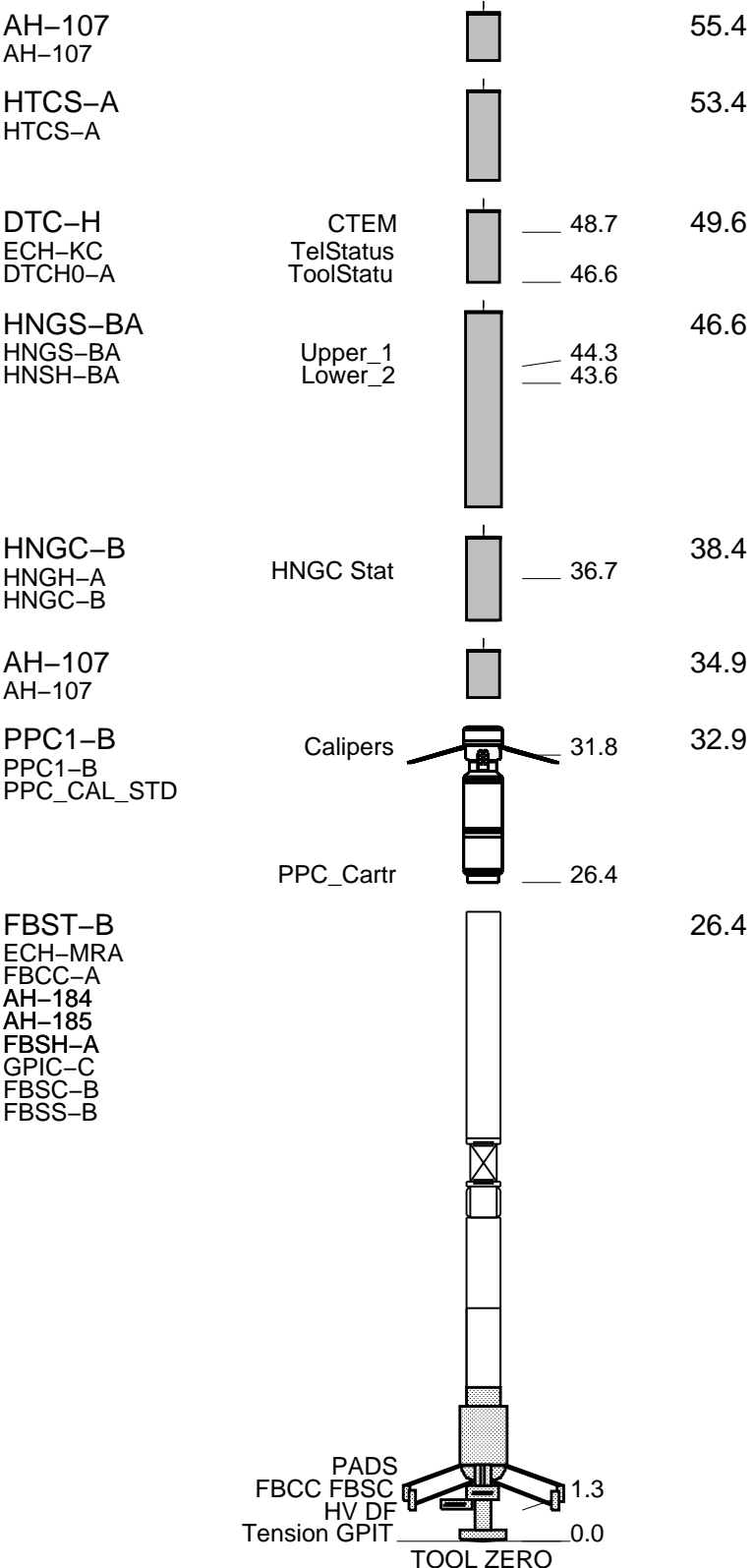
**RUN 2**

SERVICE ORDER #:  
 PROGRAM VERSION:  
 FLUID LEVEL:

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

<b>RUN 1</b>	<b>RUN 2</b>
<b>SURFACE EQUIPMENT</b>	<p>GSR-U WITM (DTS)-A</p>
<b>DOWNHOLE EQUIPMENT</b>	
<p>DWCH-C 63.4                  DWCH-C</p> <div style="text-align: center;">  </div>	



MAXIMUM STRING DIAMETER 5.00 IN  
 MEASUREMENTS RELATIVE TO TOOL ZERO  
 ALL LENGTHS IN FEET

Company: Kerr-McGee Oil & Gas Onshore LP

Well: Cannon 36C-11HZ

### Input DLIS Files

DEFAULT FMI\_CAL\_NGS\_007LUP FN:6 PRODUCER 01-Feb-2012 08:58 11992.5 FT 7649.5 FT

### Output DLIS Files

DEFAULT FMI\_CAL\_NGS\_009PUP FN:8 PRODUCER 01-Feb-2012 13:06 12000.0 FT 7657.5 FT

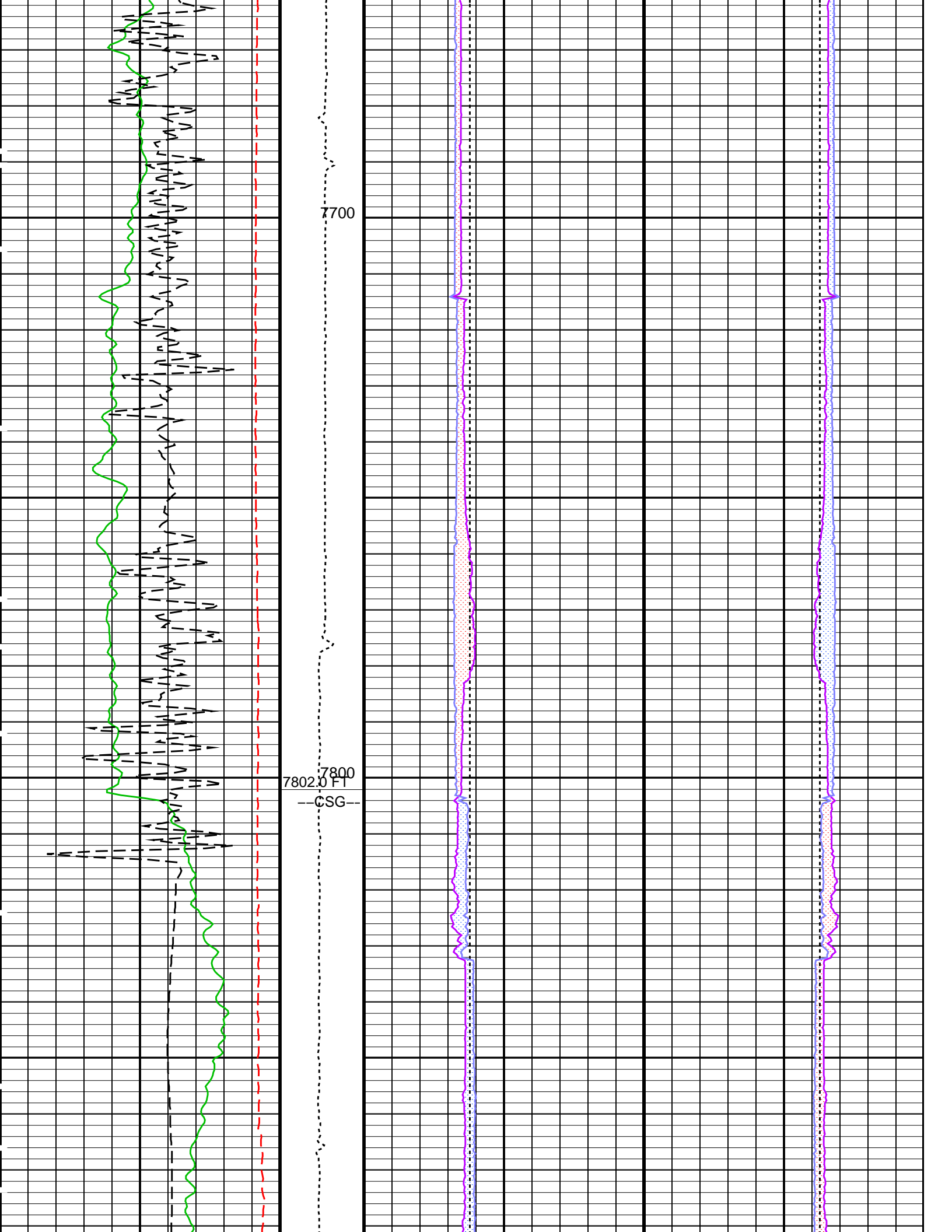
### OP System Version: 18C0-147

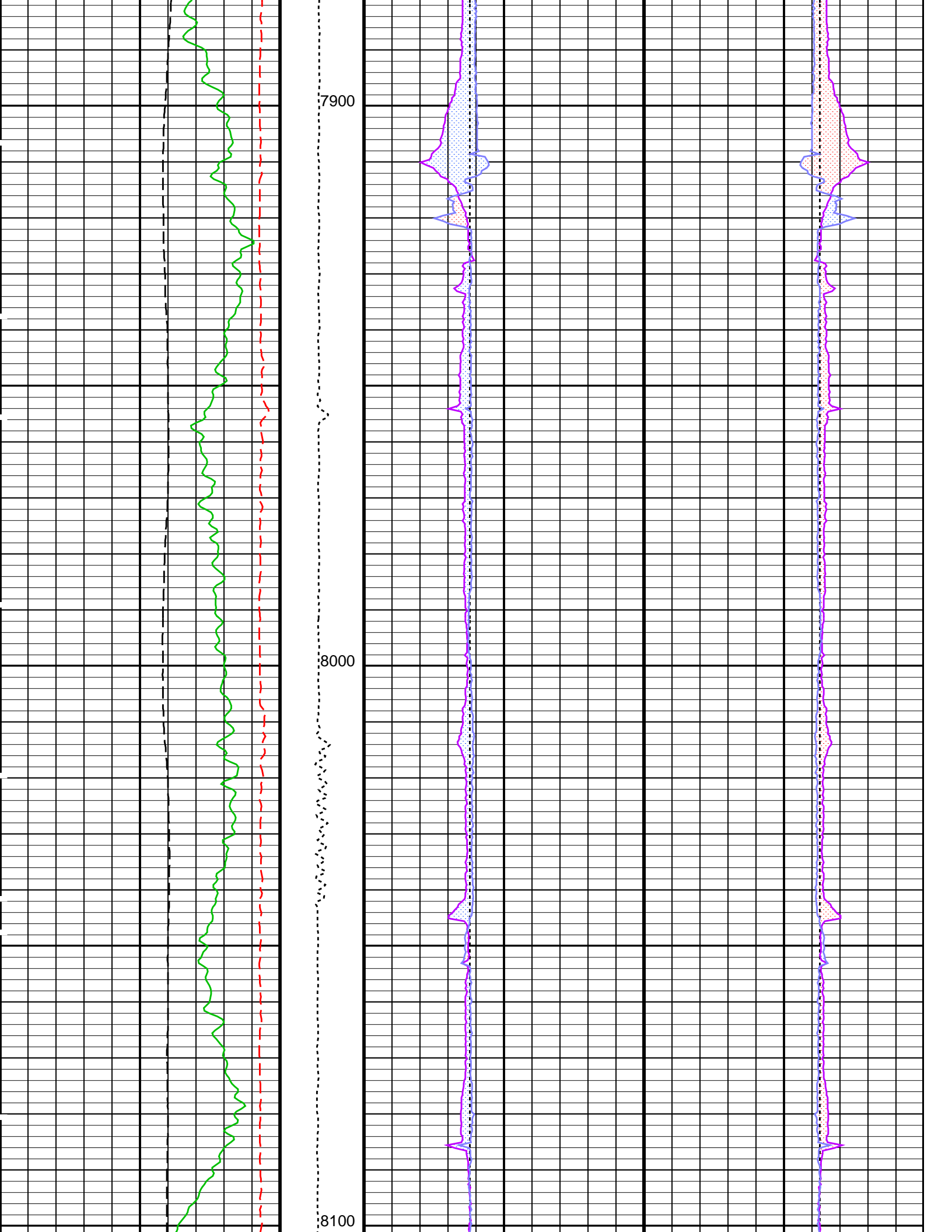
FBST-B	18C0-147	PPC1-B	18C0-147
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

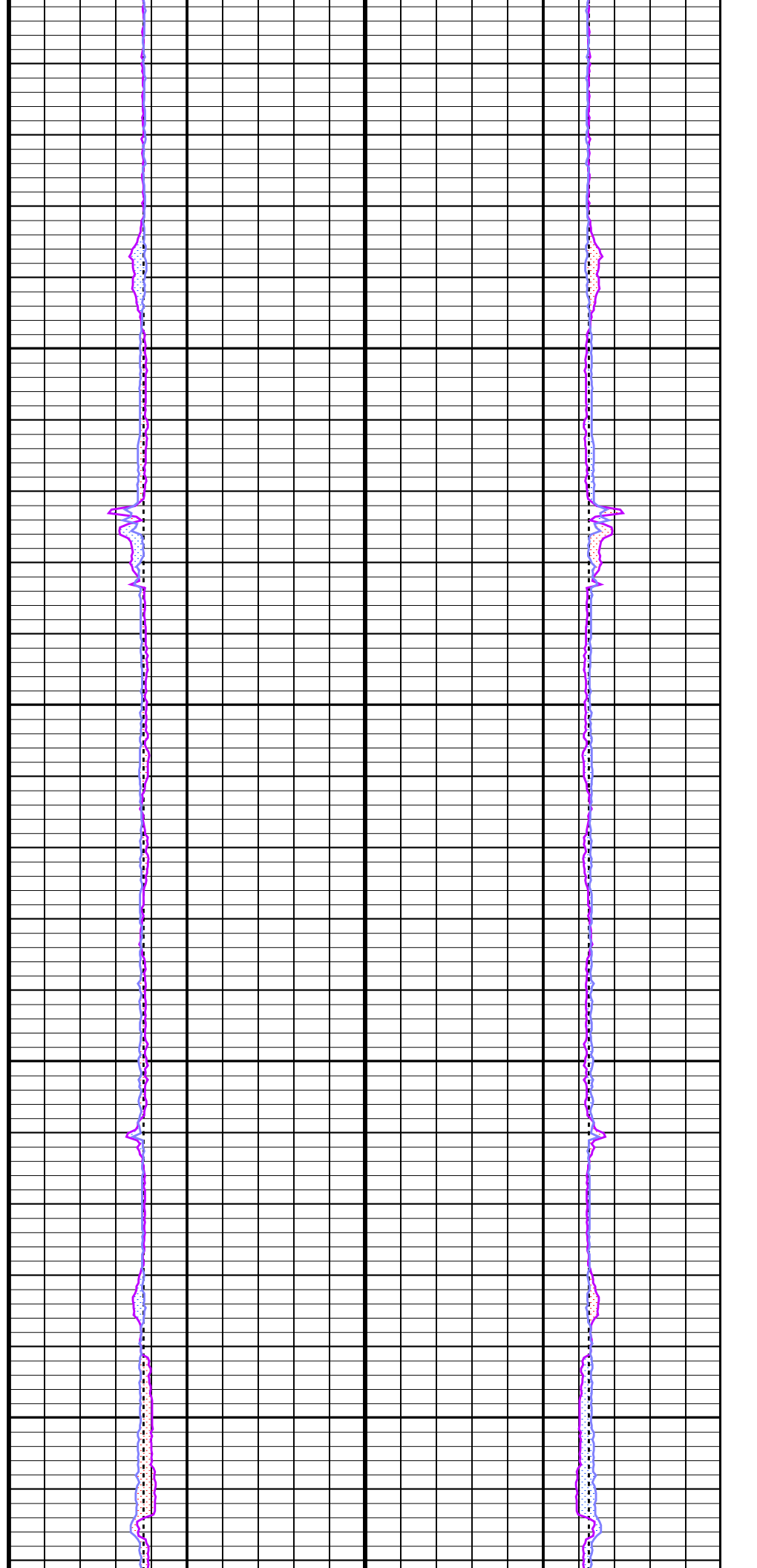
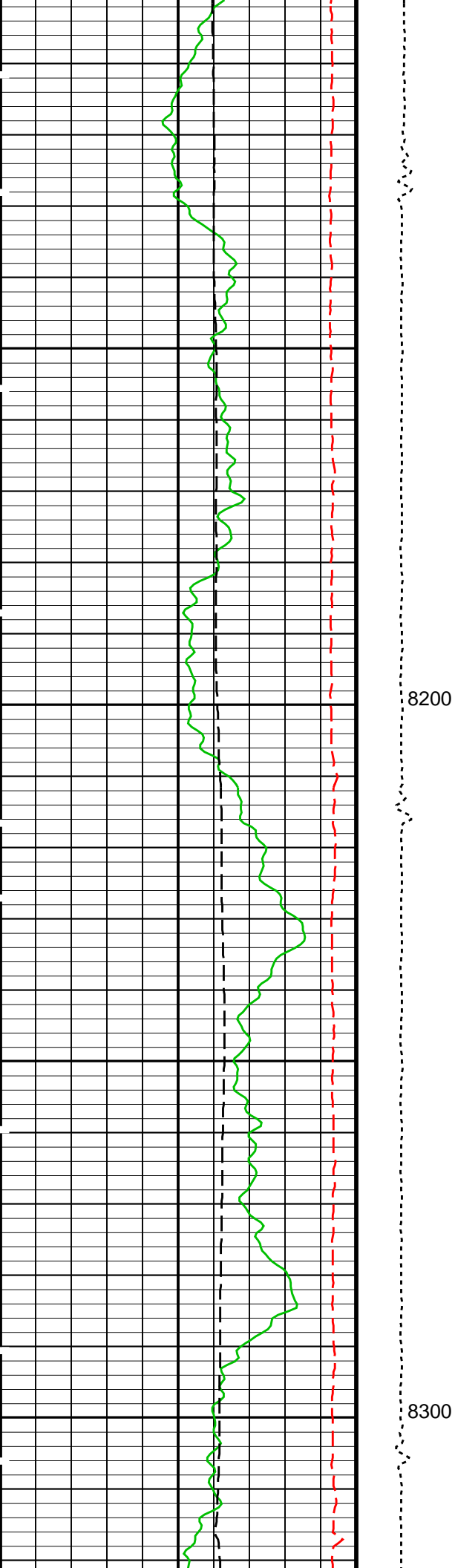
### PIP SUMMARY

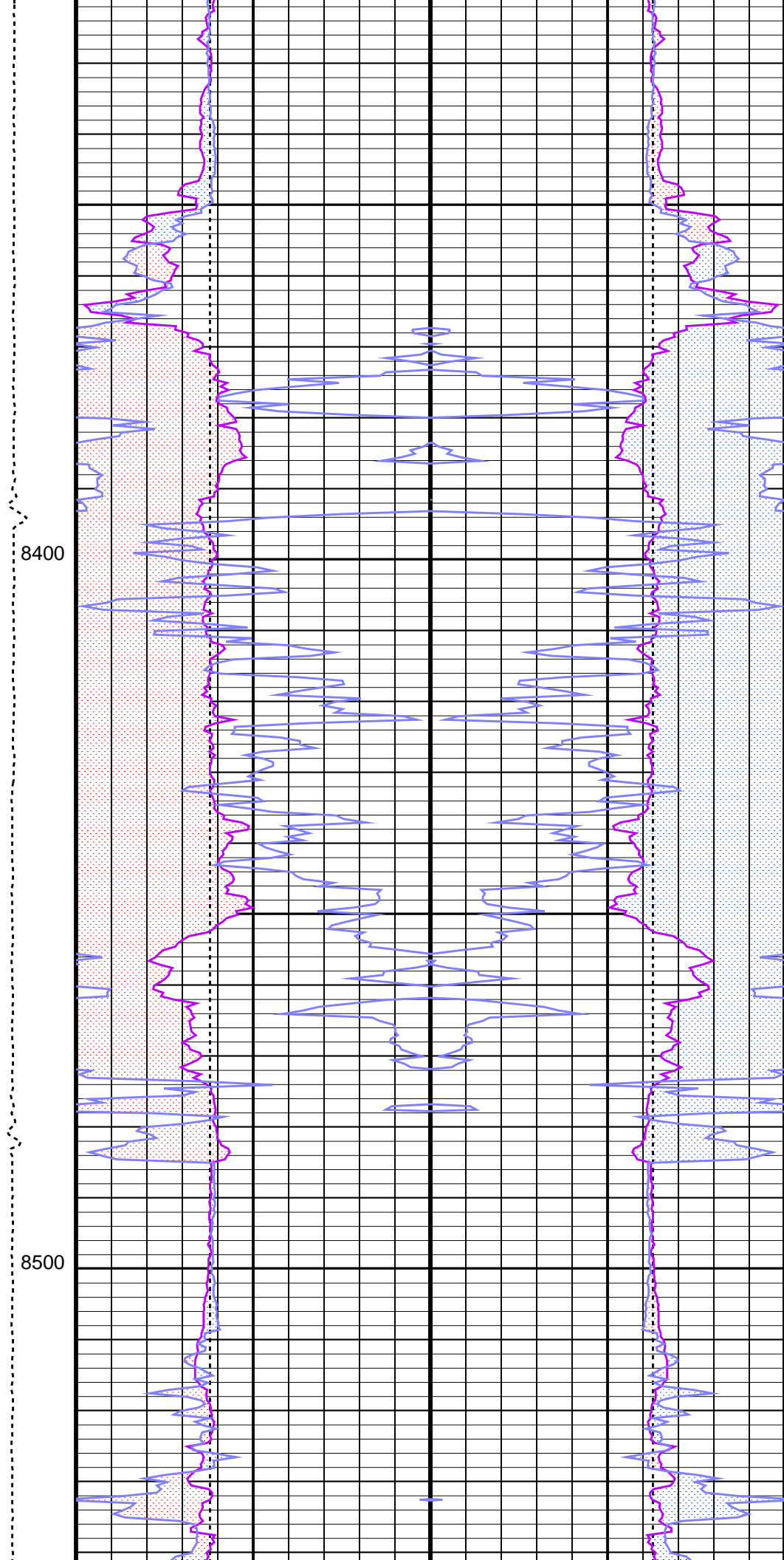
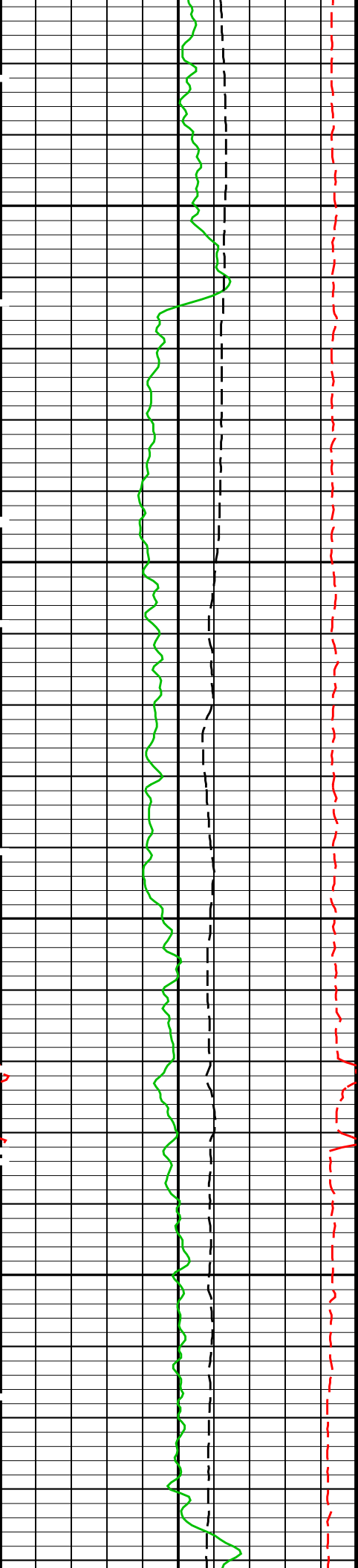
Time Mark Every 60 S

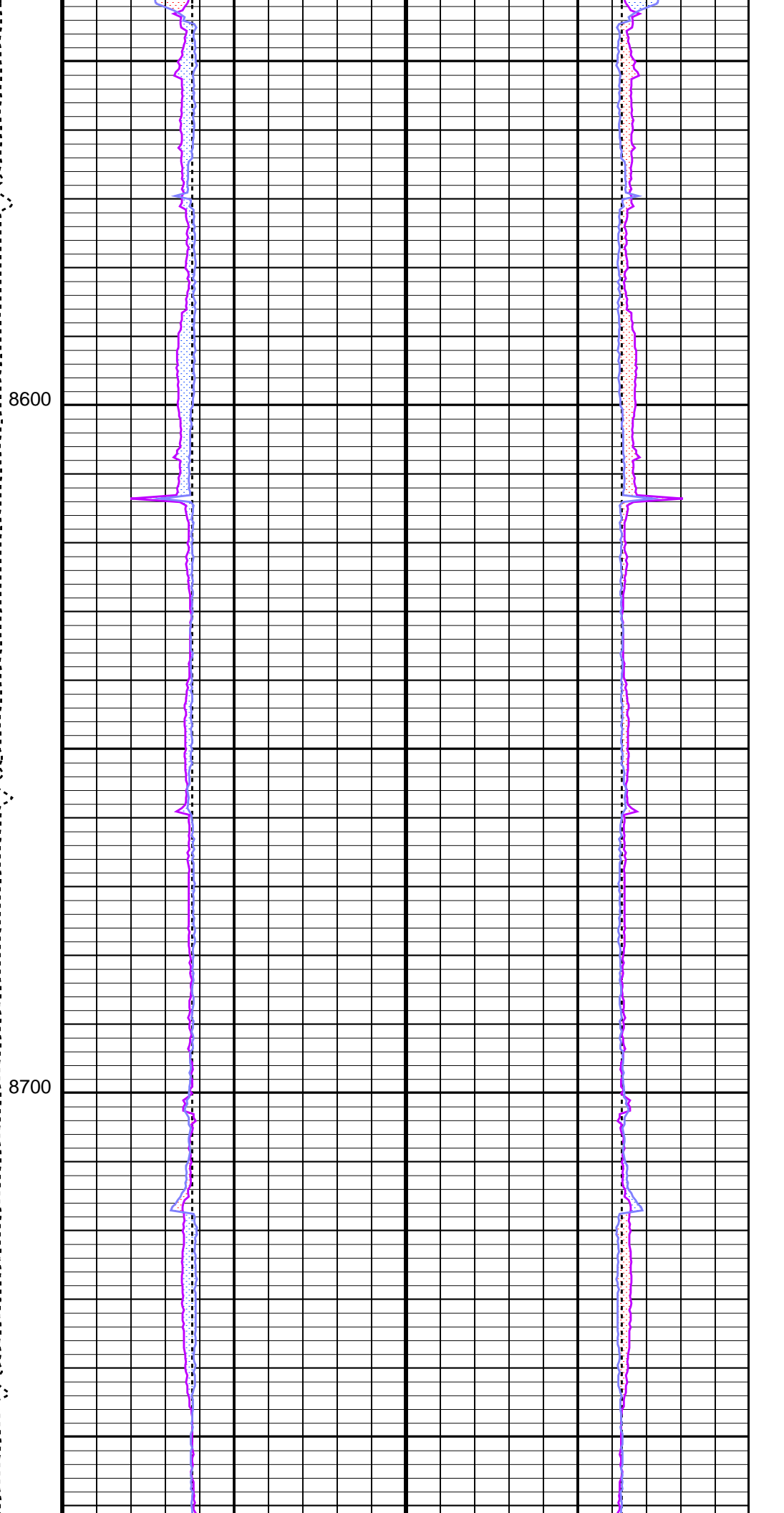
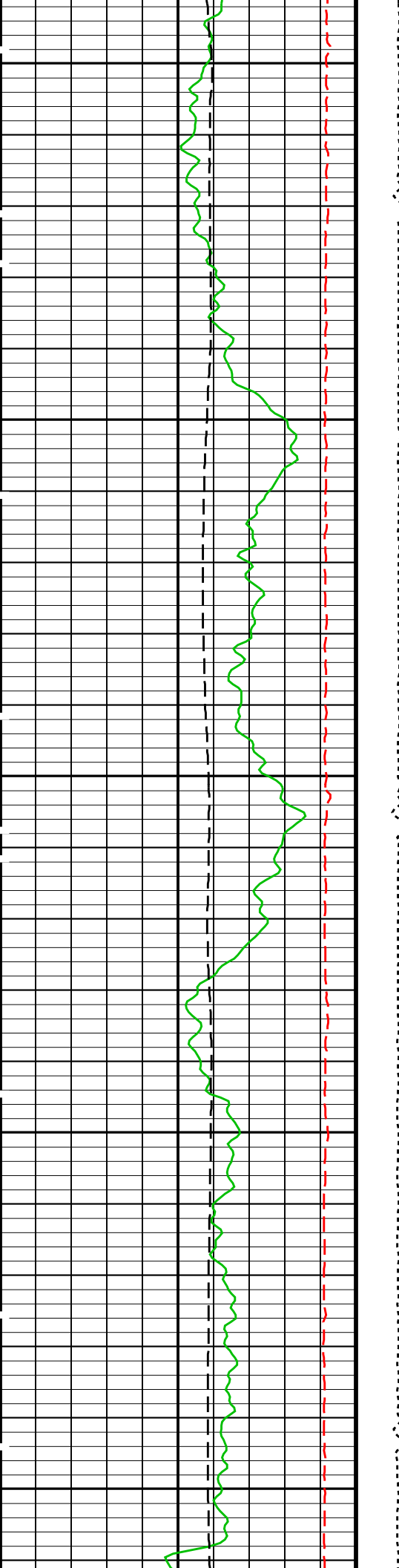
		PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)	OVALITY
		8 (IN) 3	From EHD2_PPC1_1 to EHD1_PPC1_1
		PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)	OVALITY
		8 (IN) 3	From EHD1_PPC1_1 to EHD2_PPC1_1
Relative Bearing (RB_FBST) -40 (DEG) 360		OVALITY	PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)
		From EHD2_PPC1 to EHD1_PPC1	3 (IN) 8
Gamma Ray (HSGR) 0 (GAPI) 150		OVALITY	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)
		From EHD1_PPC1 to EHD2_PPC1	3 (IN) 8
Calibrated Downhole Force (CDF) 1000 (LBF) 11000		Bit Size (BS)	Bit Size (BS)
Tension (TENS) (LBF) 5000 0		8 (IN) 3	3 (IN) 8

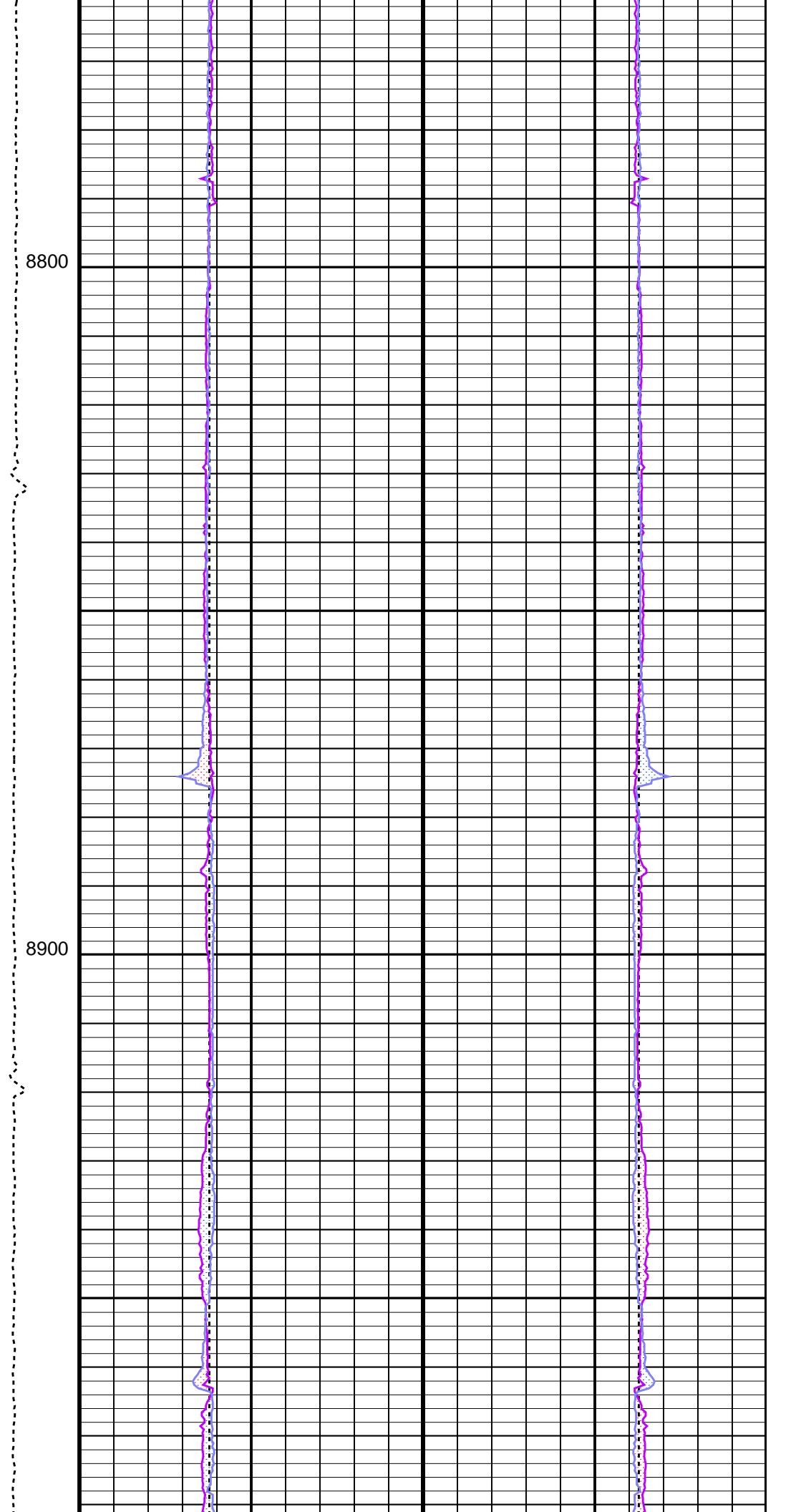
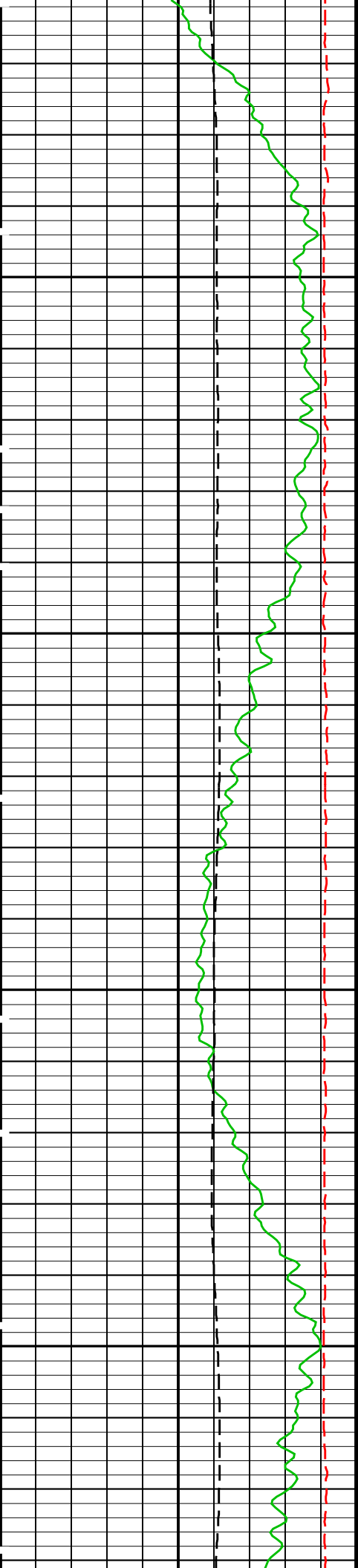


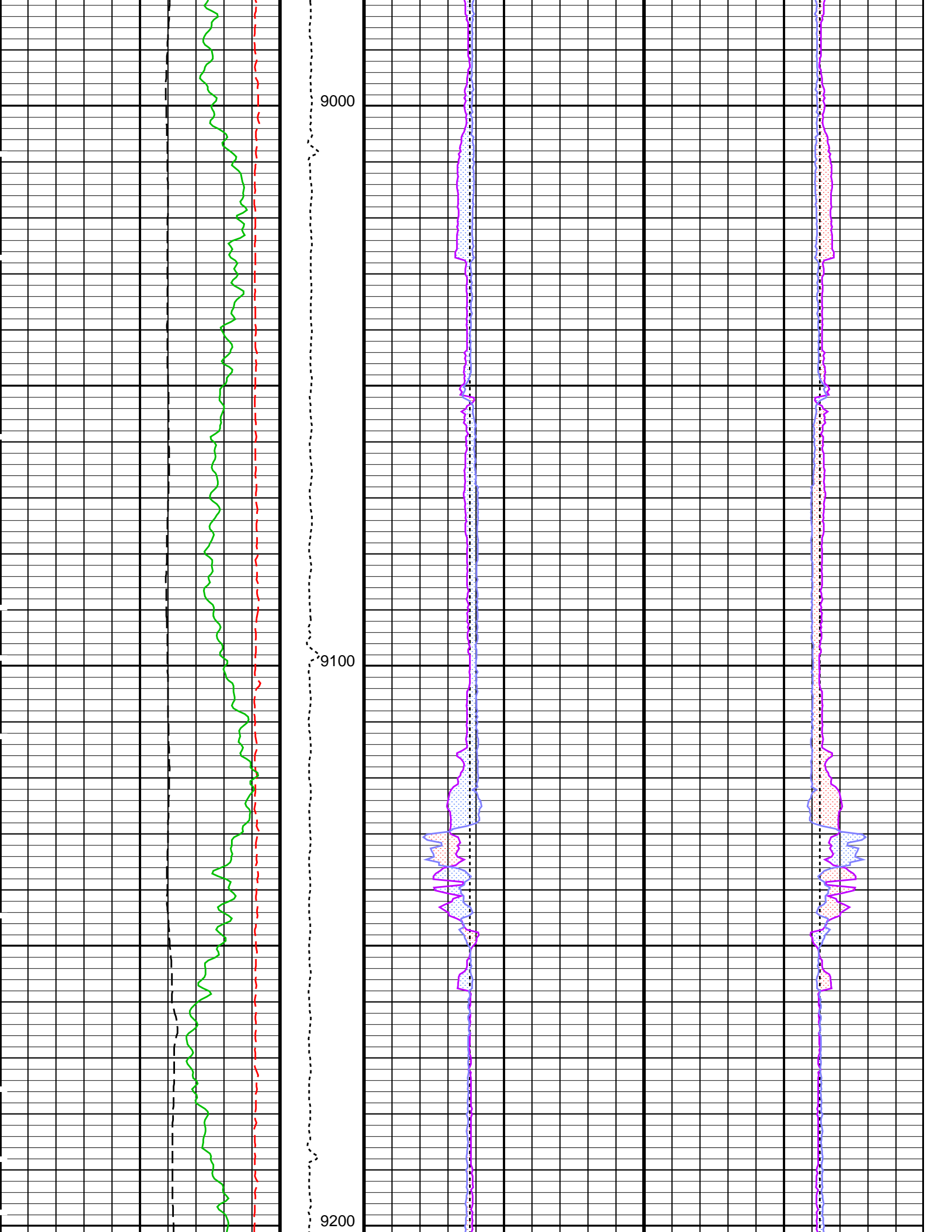


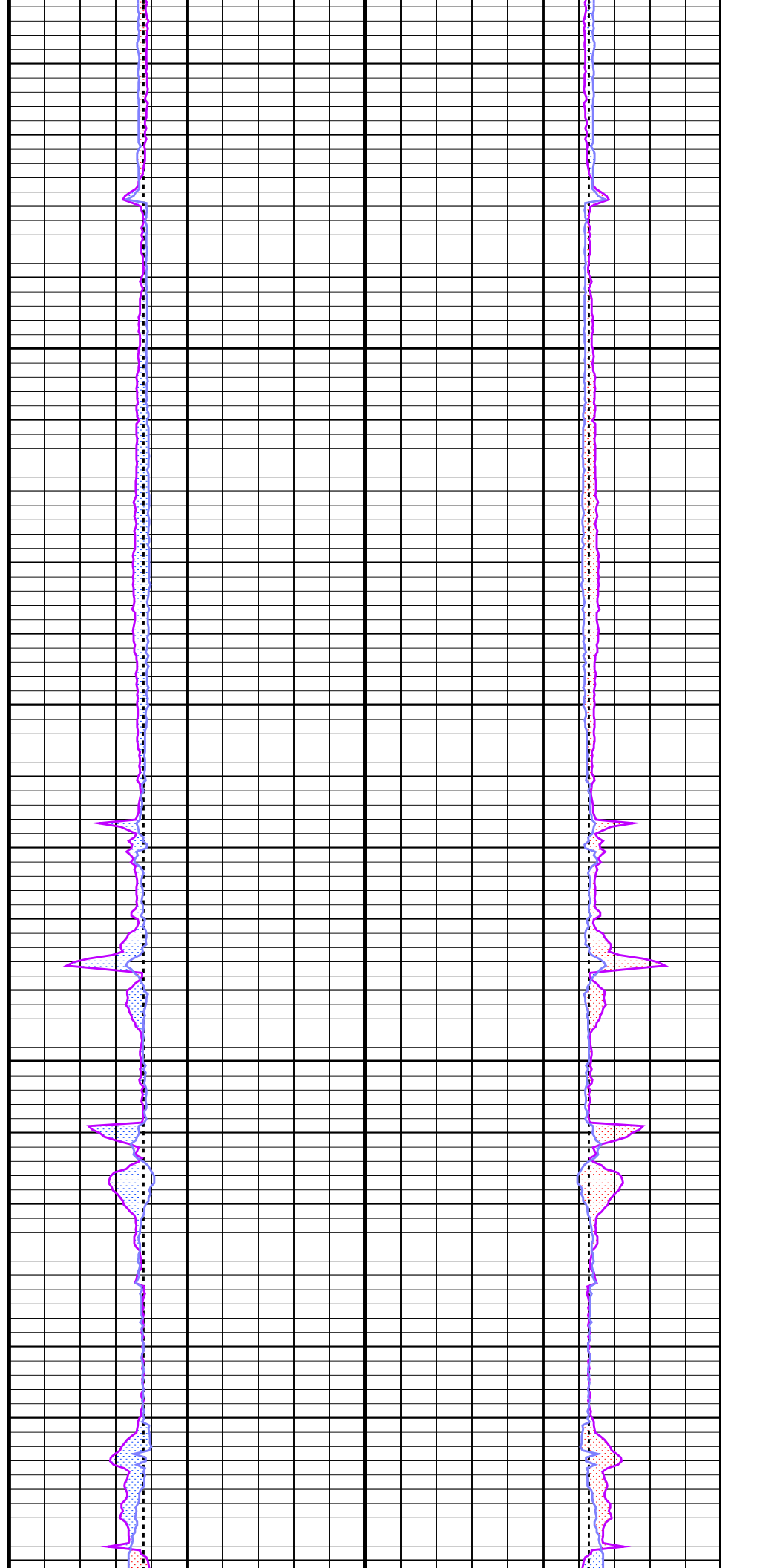
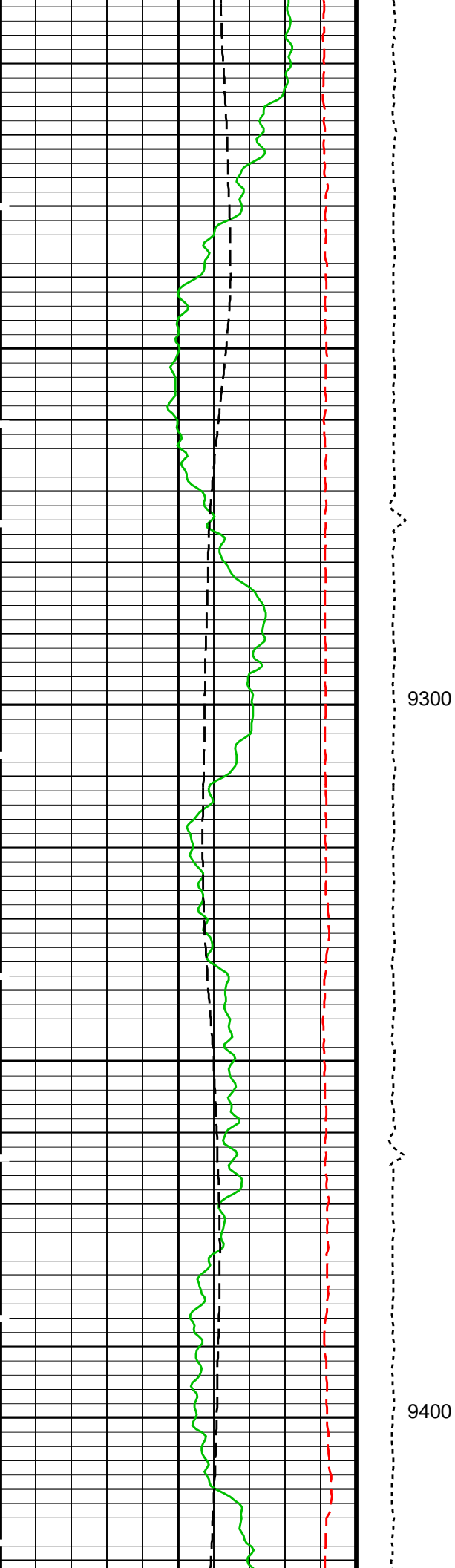


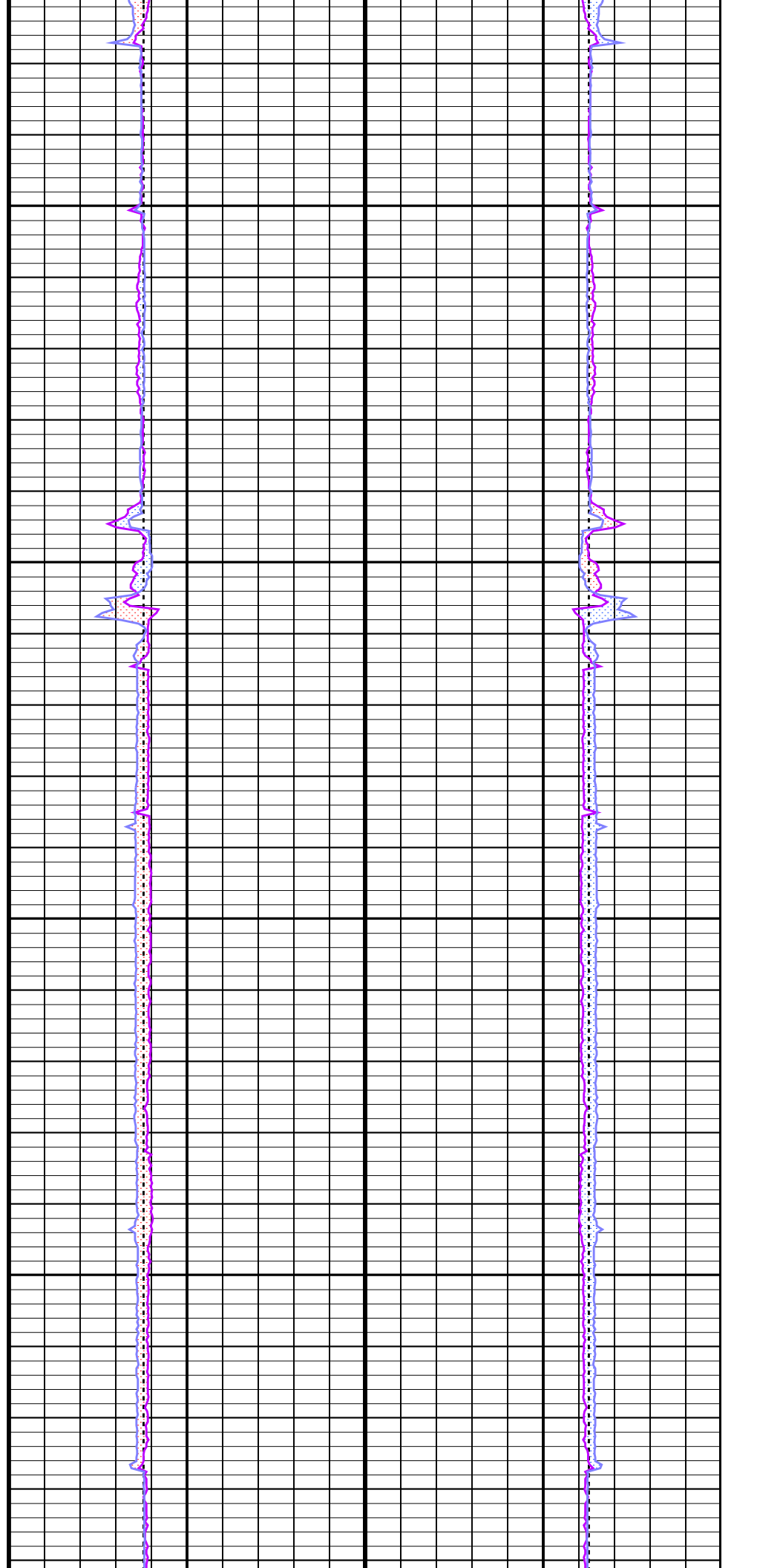
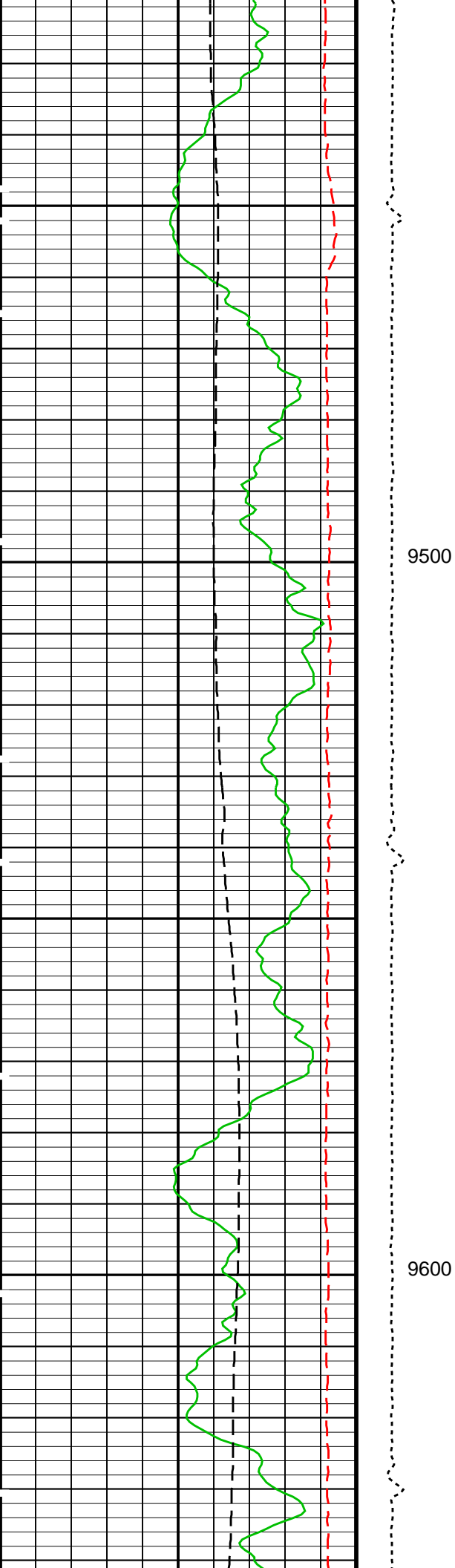


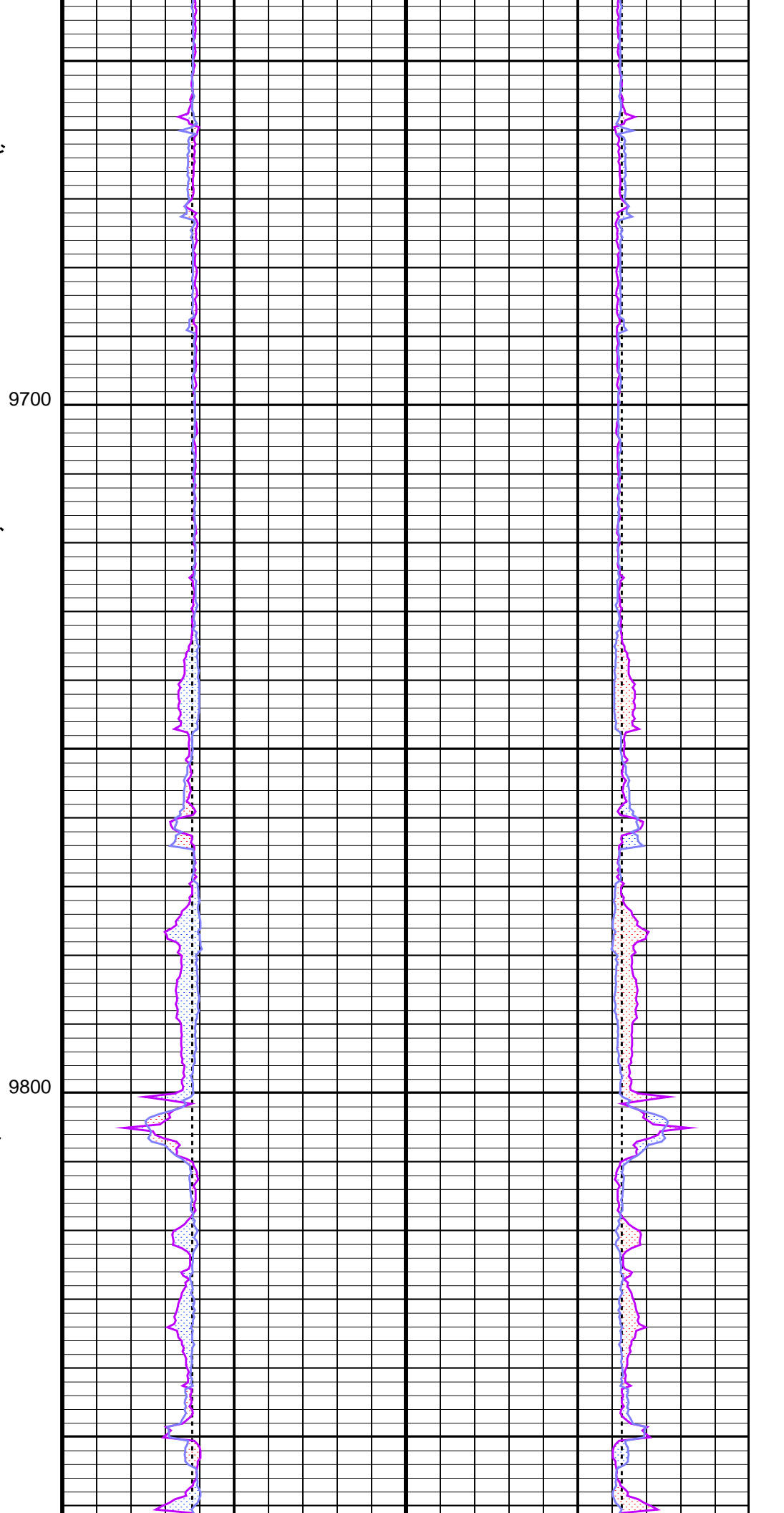
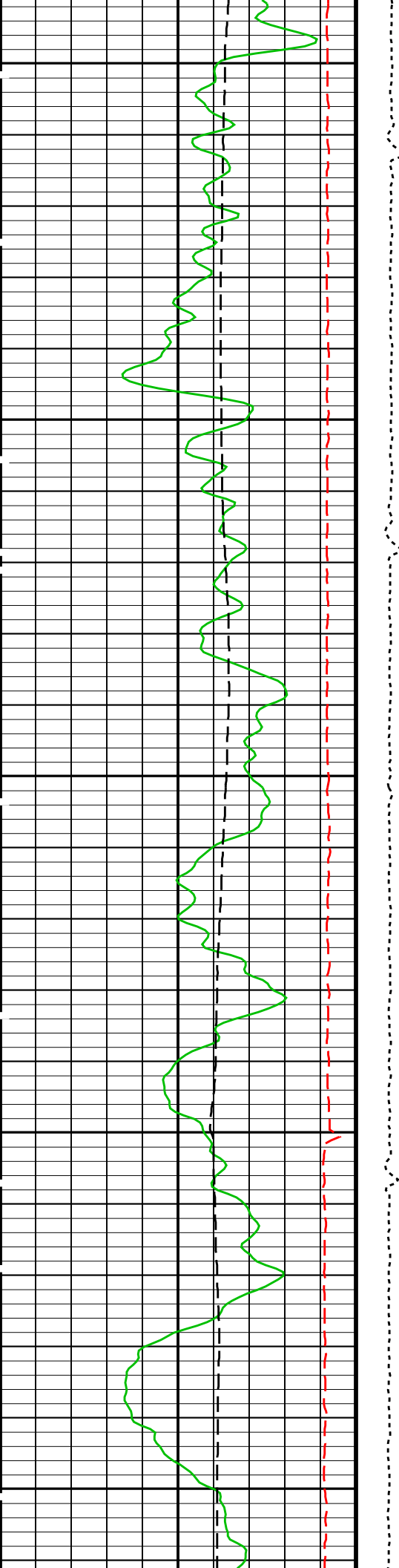


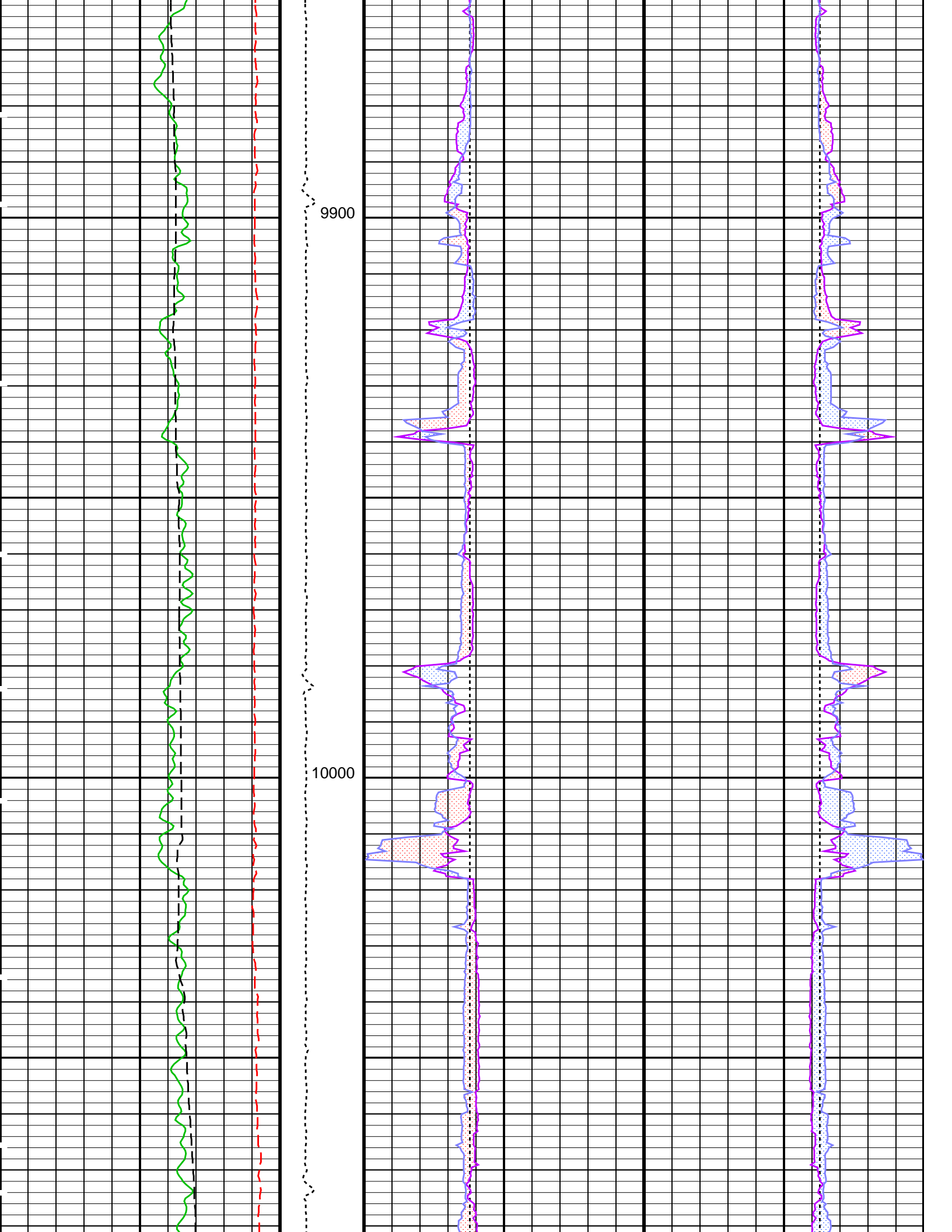


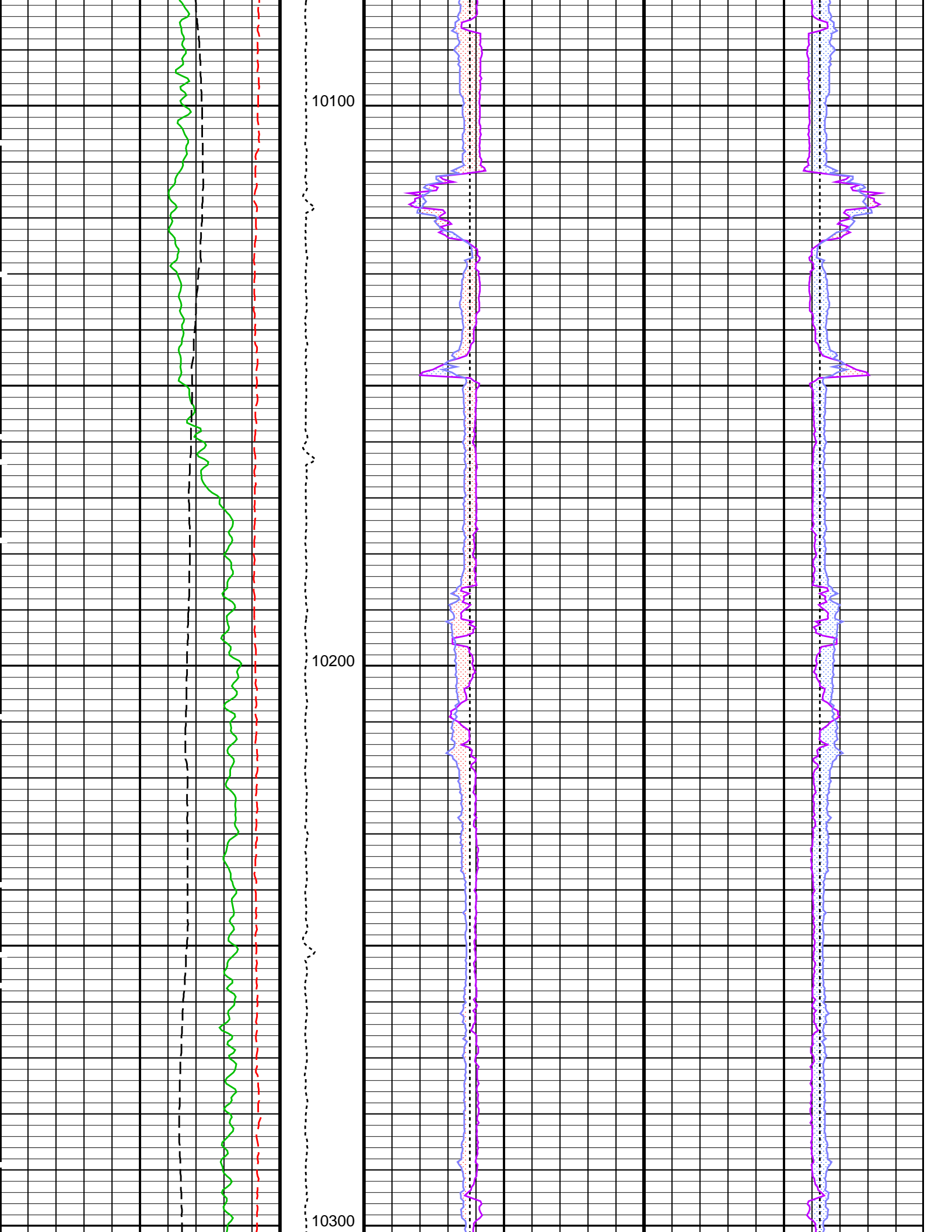


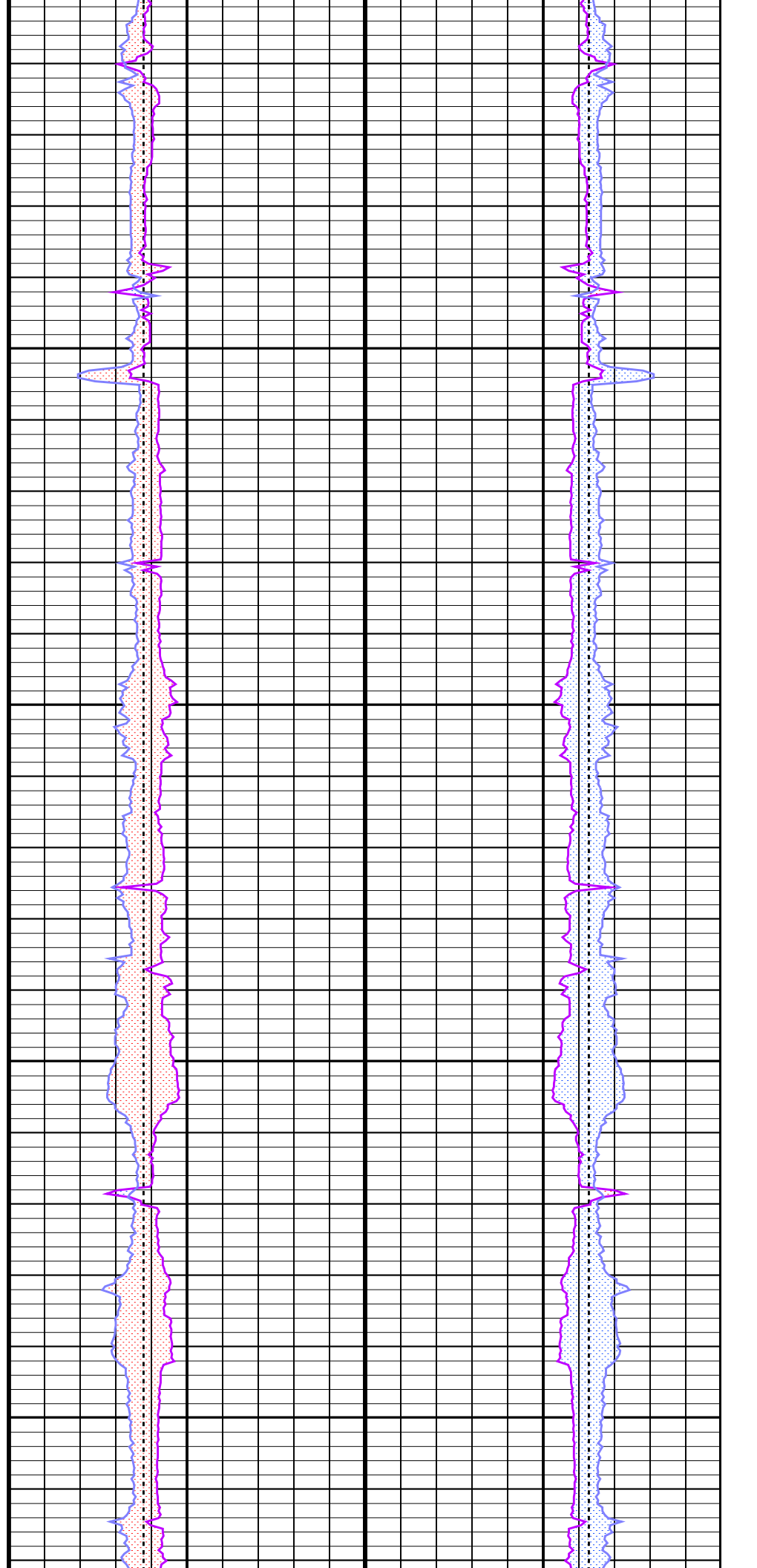
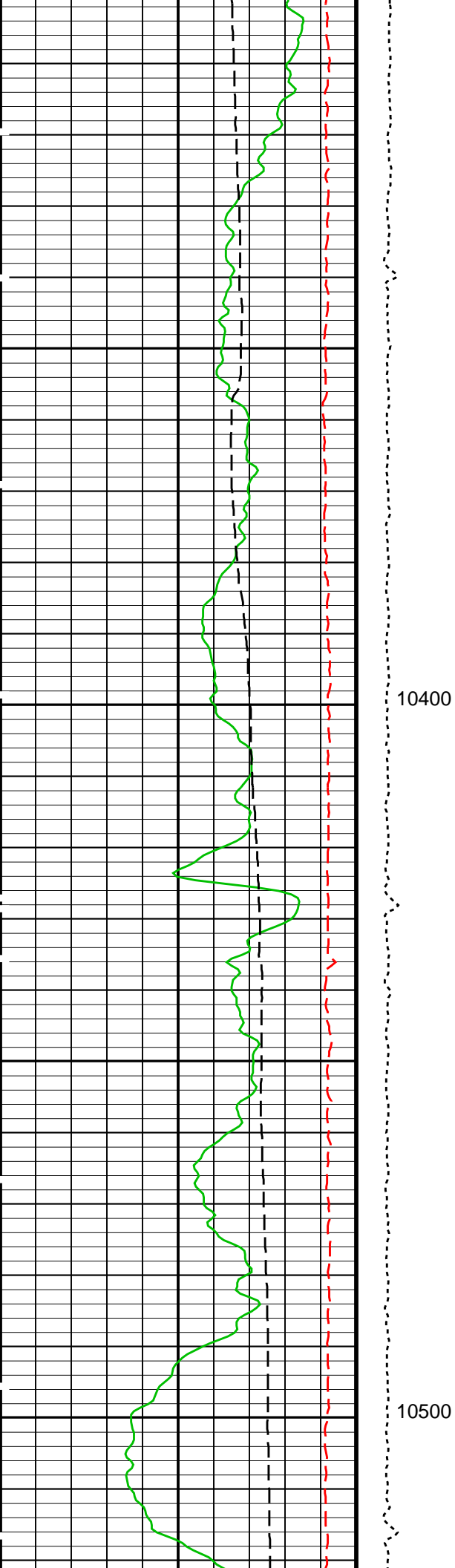


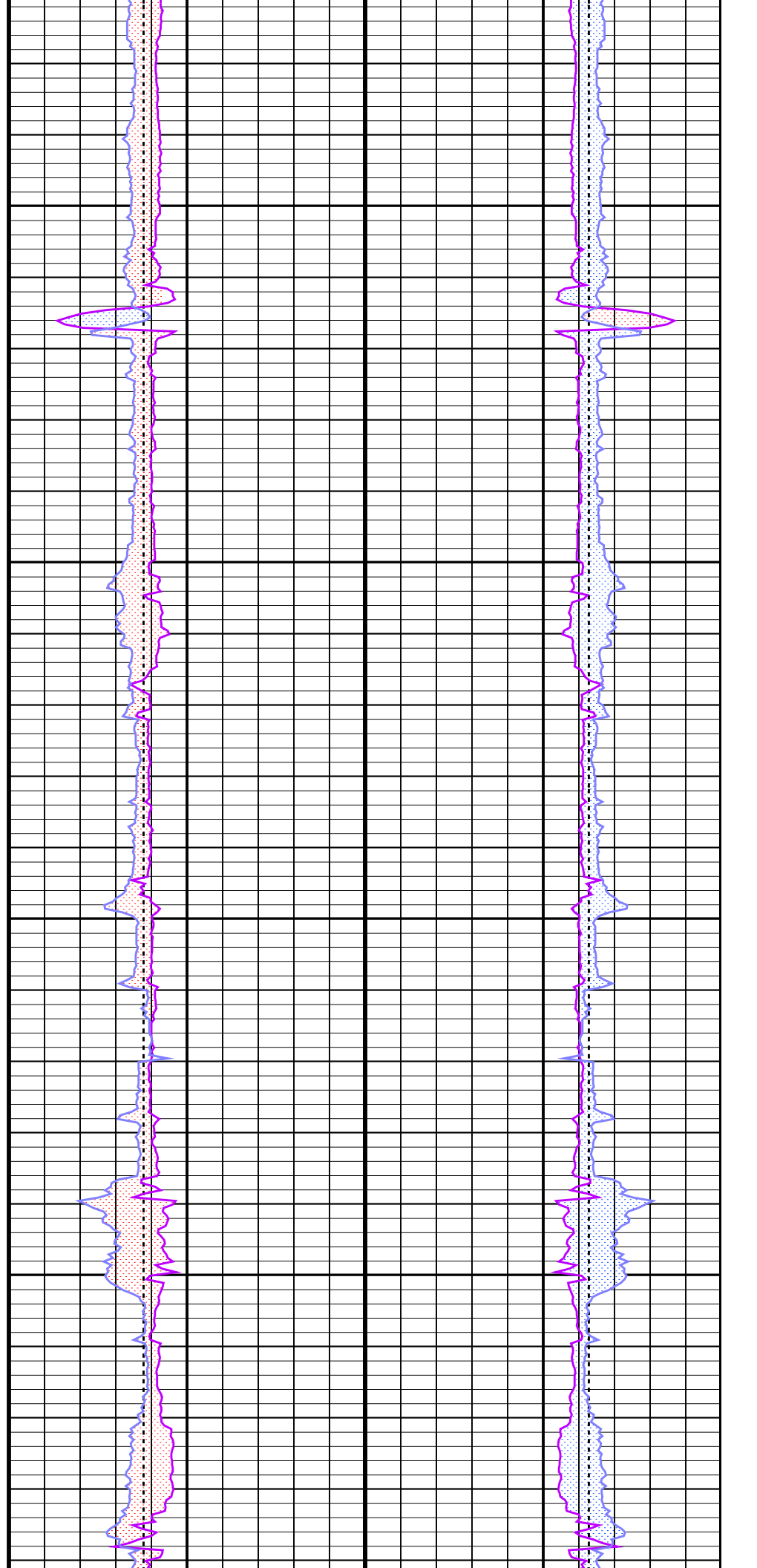
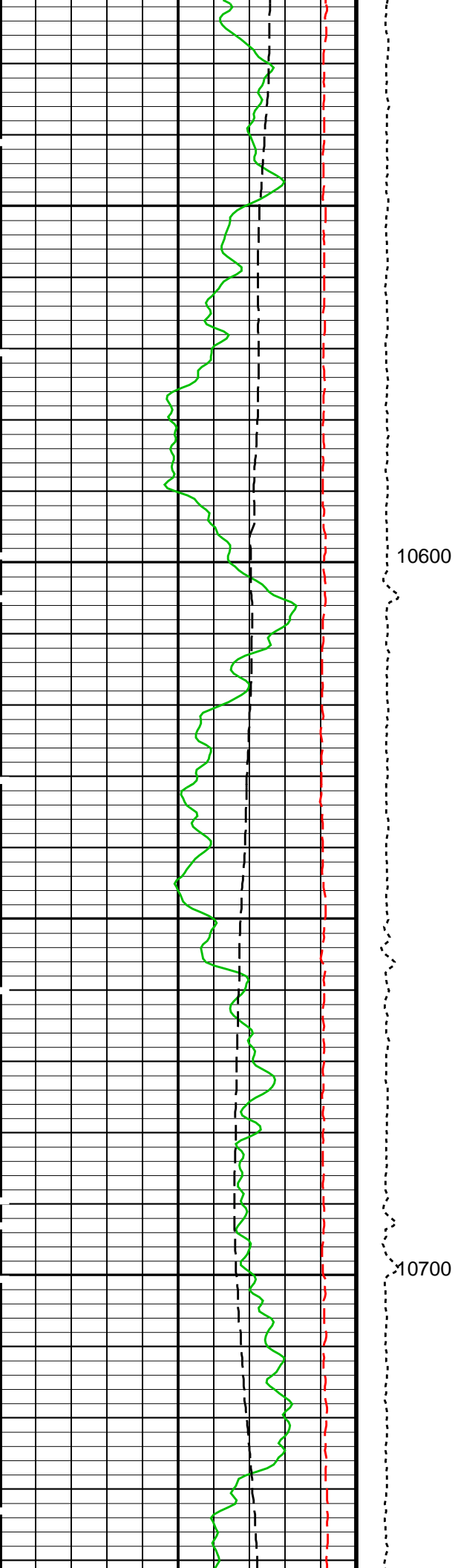


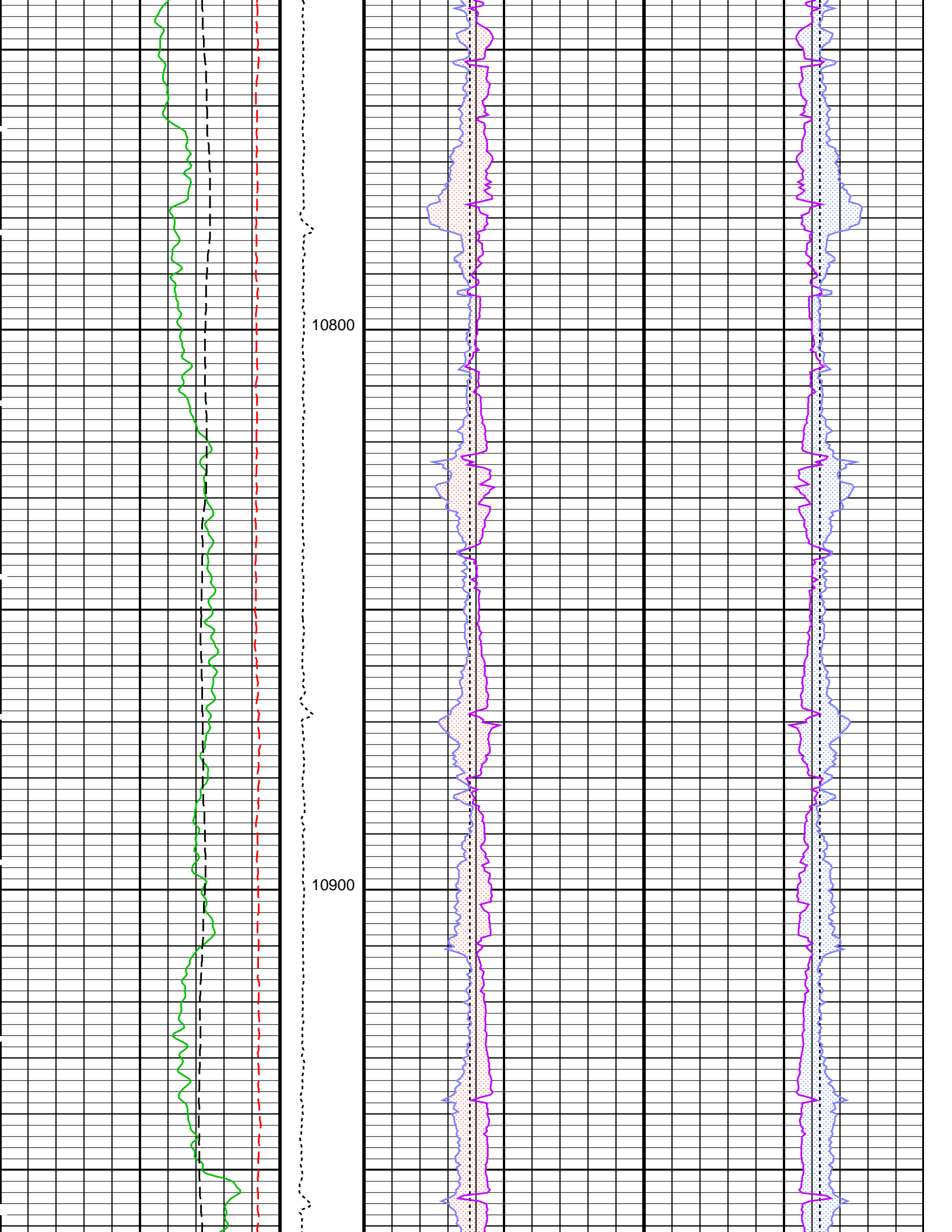


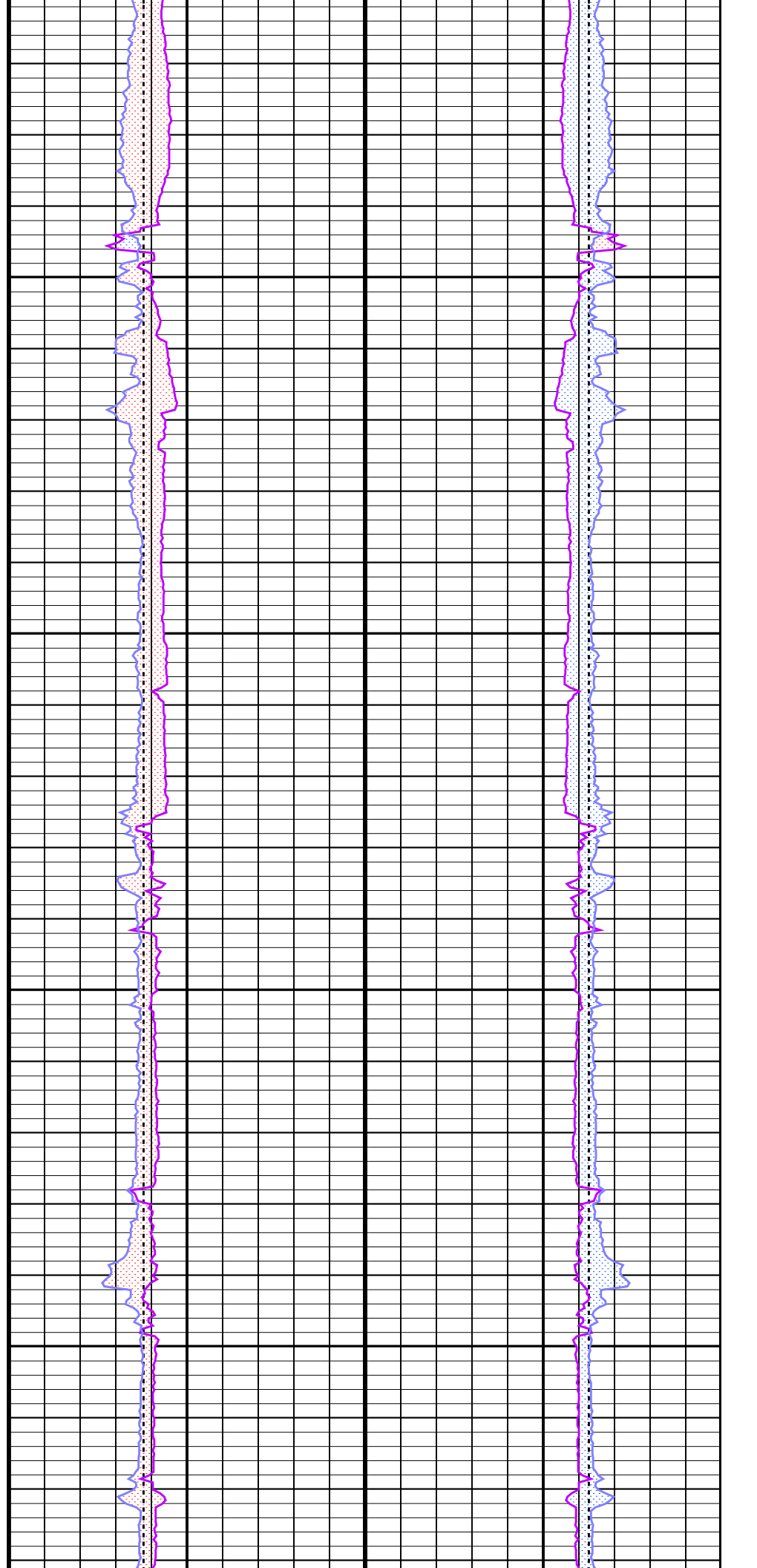
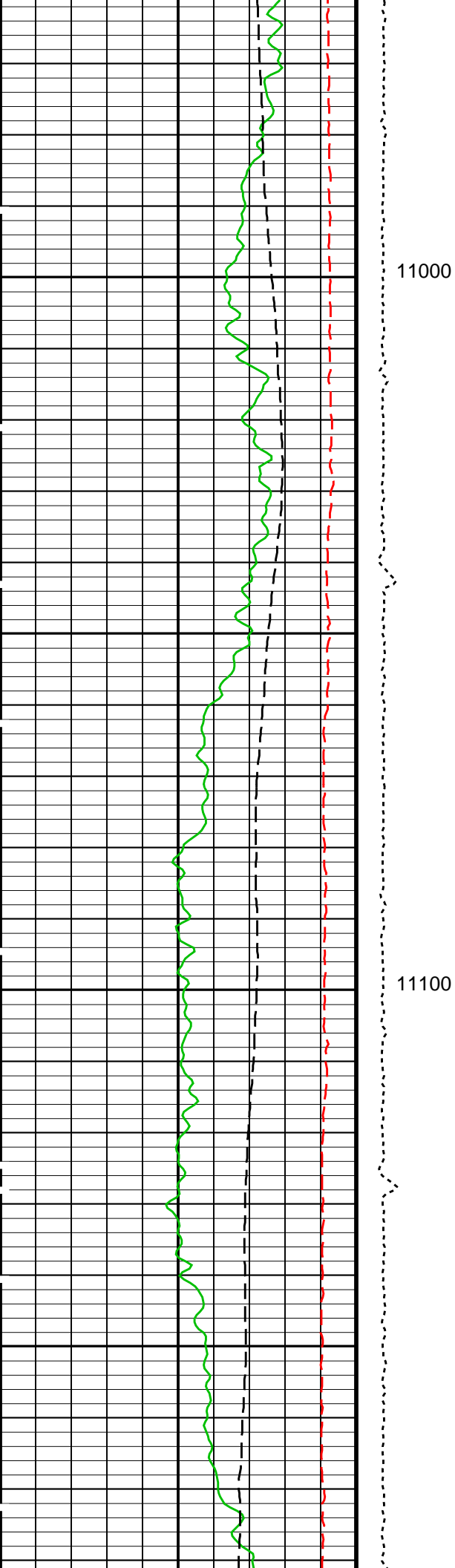


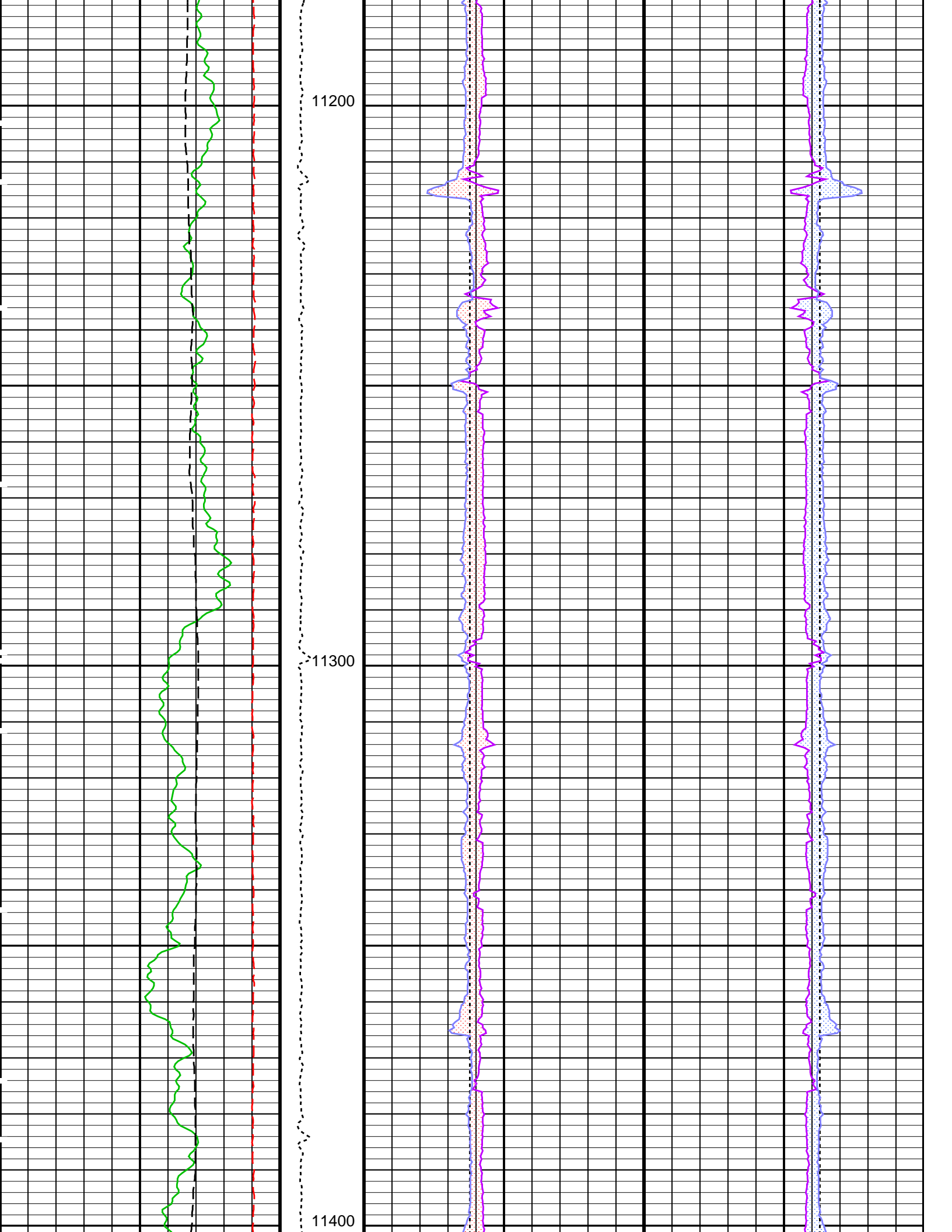


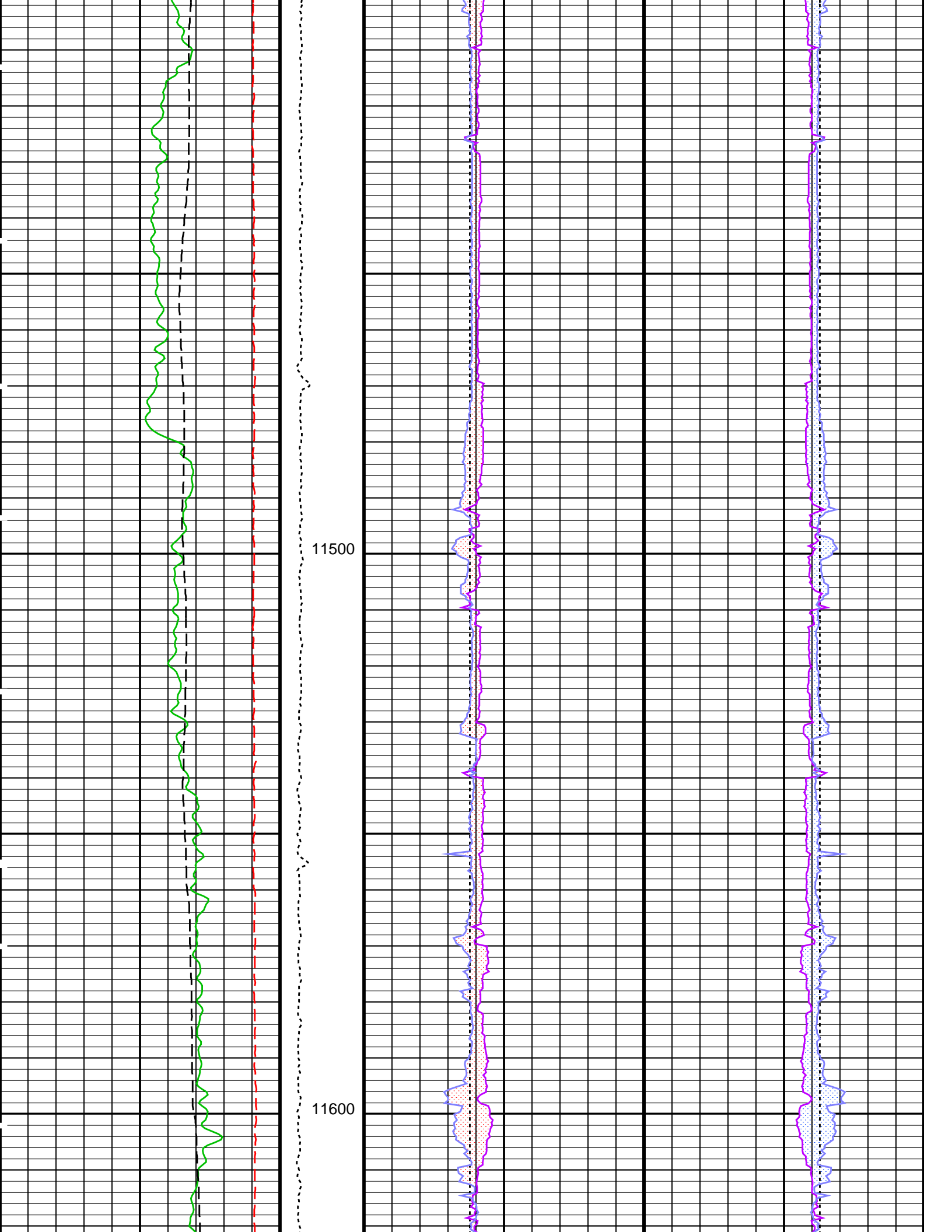


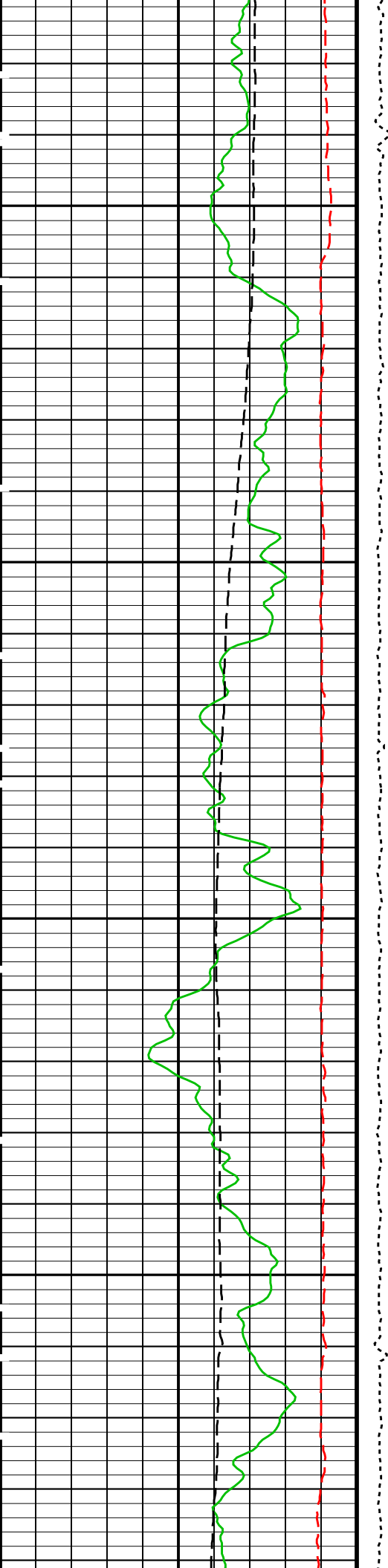






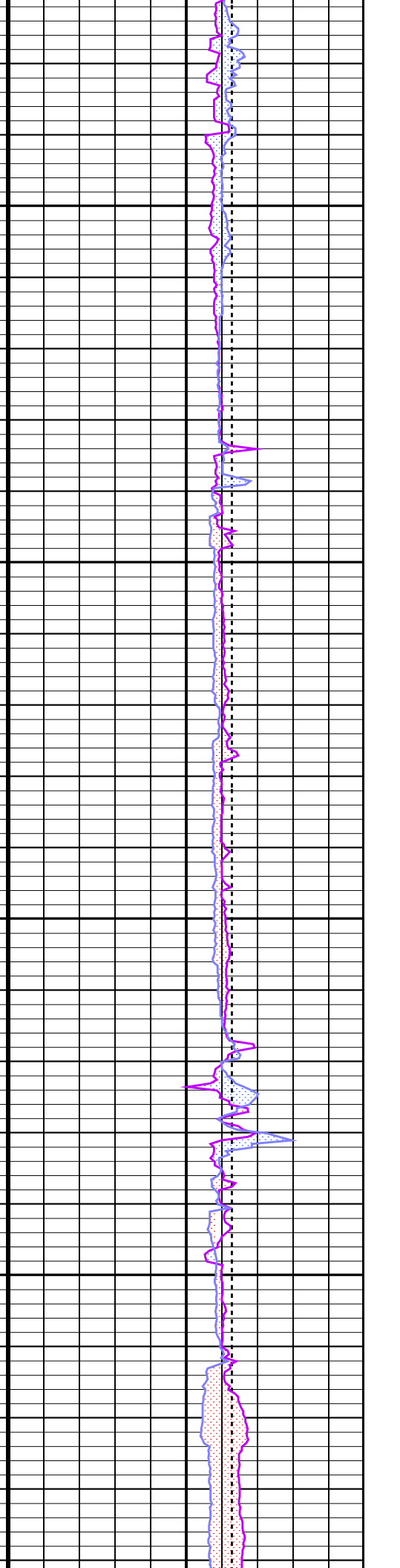
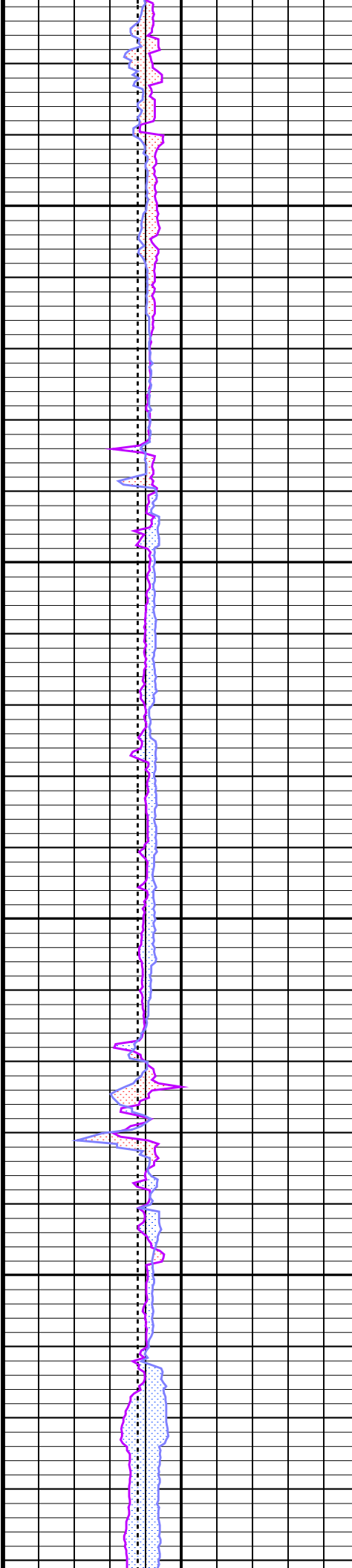


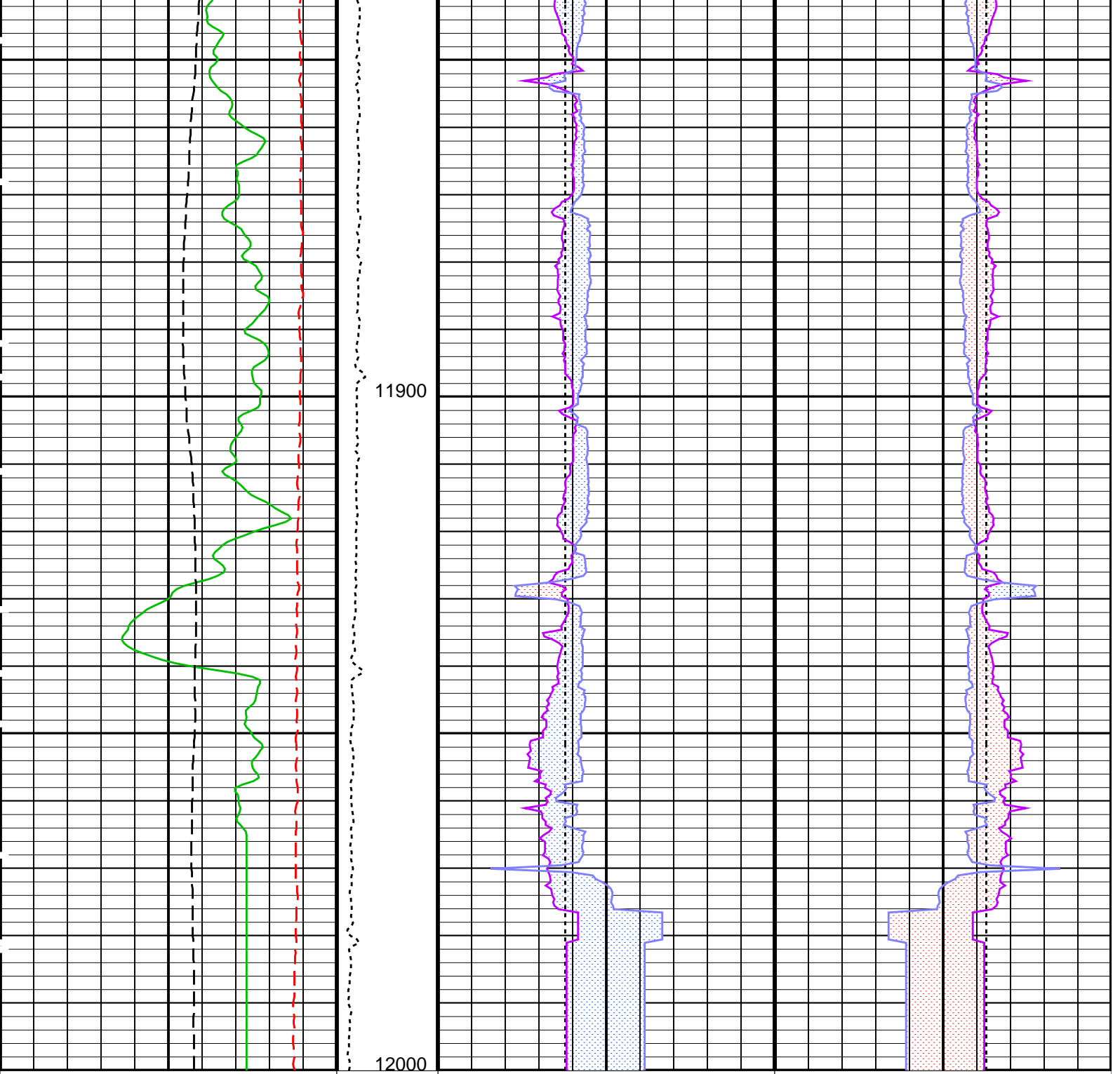




11700

11800





<p><b>Calibrated Downhole Force (CDF)</b> (LBF)</p> <p>1000                      11000</p>	<p><b>Tension (TENS)</b> (LBF)</p> <p>5000      0</p>	<p><b>Bit Size (BS)</b> (IN)</p> <p>8                      3</p>	<p><b>Bit Size (BS)</b> (IN)</p> <p>3                      8</p>
<p><b>Gamma Ray (HSGR)</b> (GAPI)</p> <p>0                      150</p>	<p><b>OVALITY</b> From EHD1_PPC1 to EHD2_PPC1</p>		<p><b>PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)</b> (IN)</p> <p>3                      8</p>
<p><b>Relative Bearing (RB_FBST)</b> (DEG)</p> <p>-40                      360</p>	<p><b>OVALITY</b> From EHD2_PPC1 to EHD1_PPC1</p>		<p><b>PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)</b> (IN)</p> <p>3                      8</p>
<p><b>PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)</b> (IN)</p> <p>8                      3</p>		<p><b>OVALITY</b> From EHD1_PPC1_1 to EHD2_PPC1_1</p>	
<p><b>PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)</b> (IN)</p> <p>8                      3</p>		<p><b>OVALITY</b> From EHD2_PPC1_1 to EHD1_PPC1_1</p>	

**Parameters**

DLIS Name	Description	Value
	PPC1-B: Powered Positioning Device/Caliper 1	
	PPC1 Caliper Type	CAL_STD
CLBD_PPC	PPC Calibration data selection	ROM
	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	-0.011388
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	-999.25 CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25 CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPOS	Tool Position	ECCE
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.98141
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.988575
	System and Miscellaneous	
BS	Bit Size	6.125 IN
DFD	Drilling Fluid Density	10.20 LB/G
DO	Depth Offset for Playback	8.0 FT
PP	Playback Processing	NORMAL

Format: PPC\_Caliper\_Herbs Vertical Scale: 5" per 100' Graphics File Created: 01-Feb-2012 13:06

**OP System Version: 18C0-147**

FBST-B	18C0-147	PPC1-B	18C0-147
HNGC-B	HFE-4001-OP18-NUCL	HNGS-BA	HFE-4001-OP18-NUCL
DTC-H	18C0-147		

**Input DLIS Files**

DEFAULT	FMI_CAL_NGS_007LUP	FN:6	PRODUCER	01-Feb-2012 08:58	11992.5 FT	7649.5 FT
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**Output DLIS Files**

DEFAULT	FMI_CAL_NGS_009PUP	FN:8	PRODUCER	01-Feb-2012 13:06
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Company: **Kerr-McGee Oil & Gas Onshore LP**

**Schlumberger**

Well: **Cannon 36C-11HZ**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

PPC-Caliper Log