



# RADIAL ANALYSIS BOND LOG

**Baker Atlas**

File No: **CH066144** Company: **WPX ENERGY**  
 Well: **HOEPLI RMF 24-36**  
 Field: **RULISON**  
 County: **GARFIELD** State: **COLORADO**  
 API No: **05045214760000**

Location: **SHL: 2630' FWL, 2616' FWL (SEW)  
 RWF: 33-36 PAD BHL: 909' FSL, 2244' FWL (SEW)**  
 Other Services: **RPW**  
 SEC **36** TWP **65** RGE **94W**

Permanent Datum: **GL** Elevation: **6528 ft**  
 Log Measured From: **KB** 26 ft Above P. D.  
 Drill Measured From: **KELLY BUSHING**  
 Elevations: **KB 6554 ft, DF, GL 6528 ft**

Date	24/JAN/15
Run	ONE
Service Order	6255534
Depth Driller	8950 ft
Depth Logger	8913 ft
Bottom Logged Interval	8903 ft
Top Logged Interval	26 ft
Time Started	0700
Time Finished	1200
Operator Rig Time	5 HRS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	98 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	233 degF
Reference Log	NONE
Reference Log Date	NA
Equipment No.	4271
Location	FLOYD RENEAU GRAND JCT
Recorded By	BOB CADY

- FOLD HERE

In making interpretations of logs, our employees will give the customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Bit Size	From	To
13.5 In	26 ft	1133 ft
7.875 In	1123 ft	8950 ft

Size	Weight	Grade	From	To
9.825 In			26 ft	1133 ft
4.5 In	11.6 lbm/ft	I-80	26 ft	8950 ft

**Remarks**

All data on this log is shifted using the CCL curve to put the wellhead (top CCL mark) on depth with ground level elevation at the client's request.

The amount of linear shift is 4.5 feet.

Logged with zero PSI at wellhead.

BHT = 233°F

SJ = 5546'-5567'

## Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	1355XA	10580209	CENT

# *PRIMARY PRESENTATION*

## *0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	28.718	8929.500
RAL	Amp Gate Start Near	195.000	usec	28.718	8929.500
RAL	Amp Gate Start Radial	195.000	usec	28.718	8929.500
RAL	Amp Gate Width Far	25.000	usec	28.718	8929.500
RAL	Amp Gate Width Near	25.000	usec	28.718	8929.500
RAL	Amp Gate Width Radial	25.000	usec	28.718	8929.500
RAL	casing od	4.500	inches	28.718	8929.500
RAL	casing wt	11.600	lbm/ft	28.718	8929.500
RAL	FB Start Far	291.900	usec	28.718	8929.500
RAL	FB Start Near	180.000	usec	28.718	8929.500
RAL	FB Start Radial	180.000	usec	28.718	8929.500
RAL	FB Thresh Far	10.000	mv	28.718	8929.500
RAL	FB Thresh Near	4.000	mv	28.718	8929.500
RAL	FB Thresh Radial	4.000	mv	28.718	8929.500
RAL	Fluid Travel Time	200.000	usec/ft	28.718	8929.500

### DEPTH OFFSETS

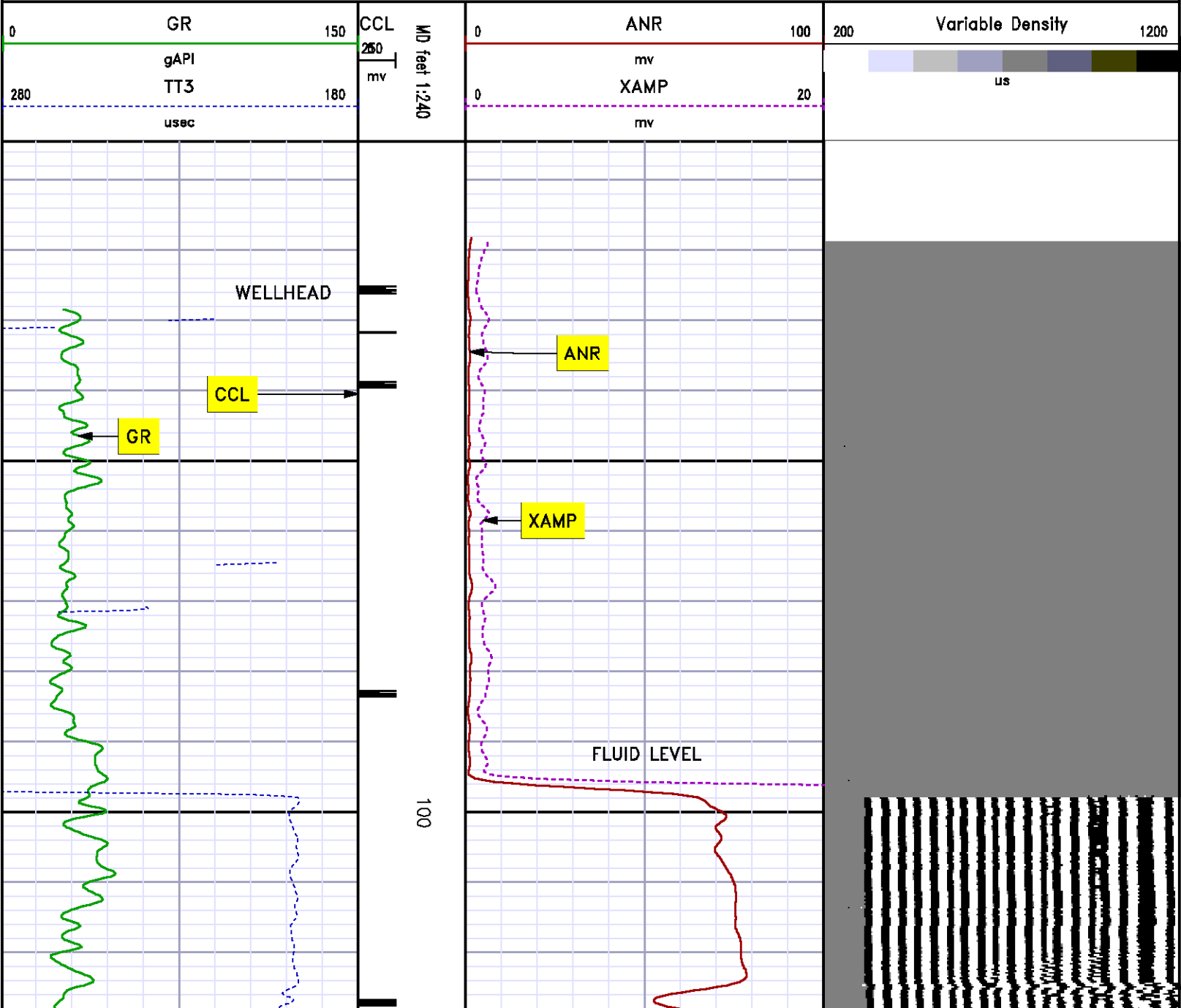
(for Acquired Curves)

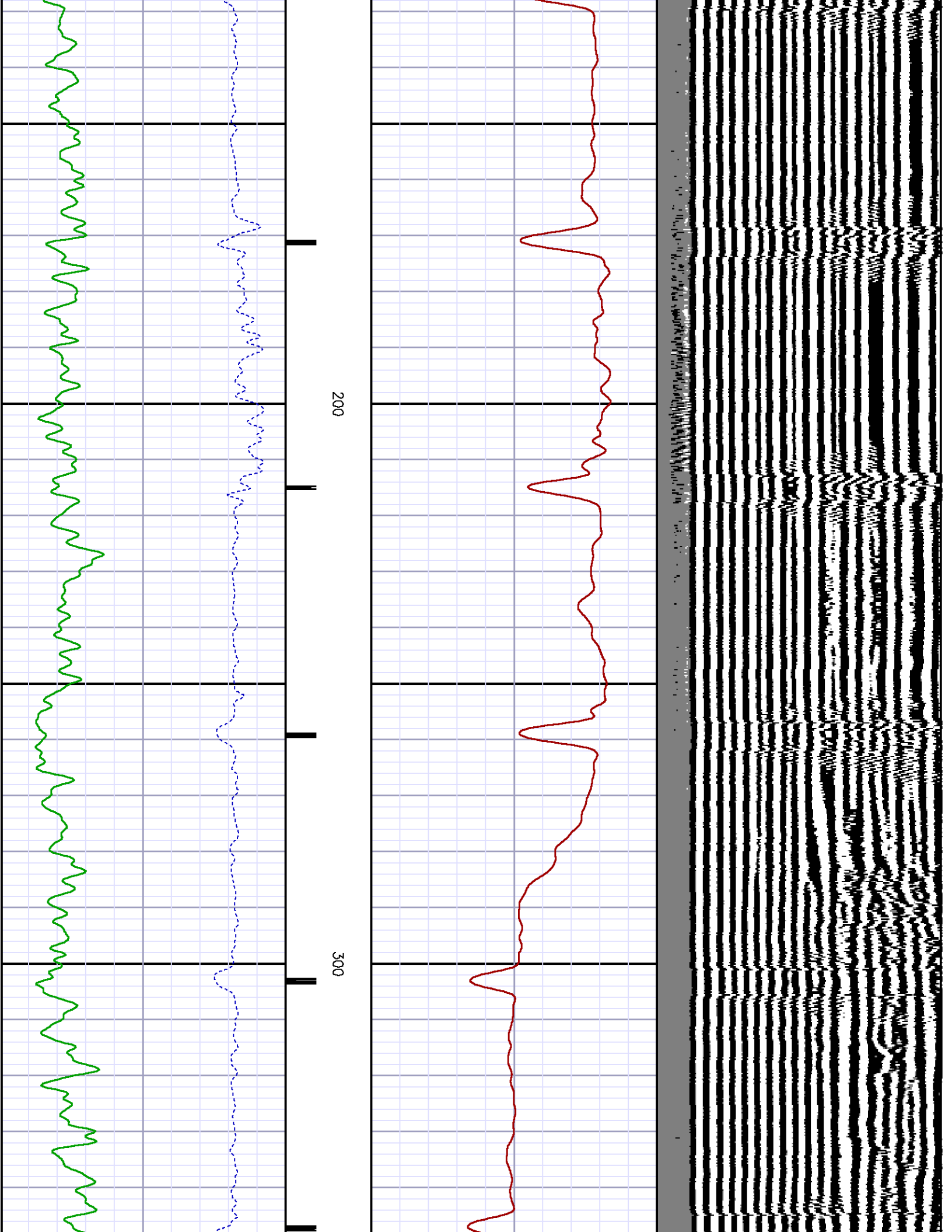
SERIES	DEPTH OFFSET	ACQUIRED CURVES
1426XA	14.000	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

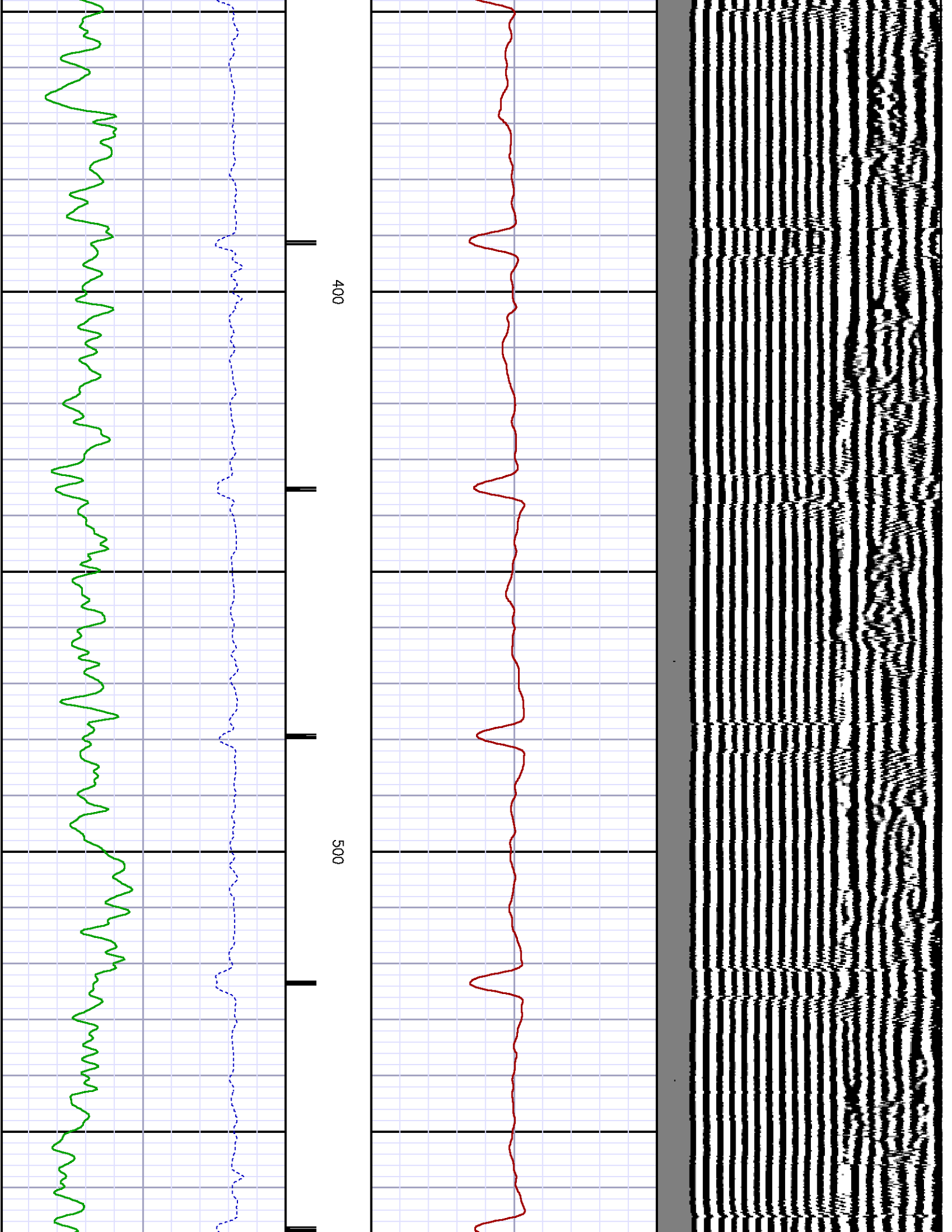
1426XA -11.000  
 1355XA -5.620  
 1355XA -1.500  
 1355XA 0.000

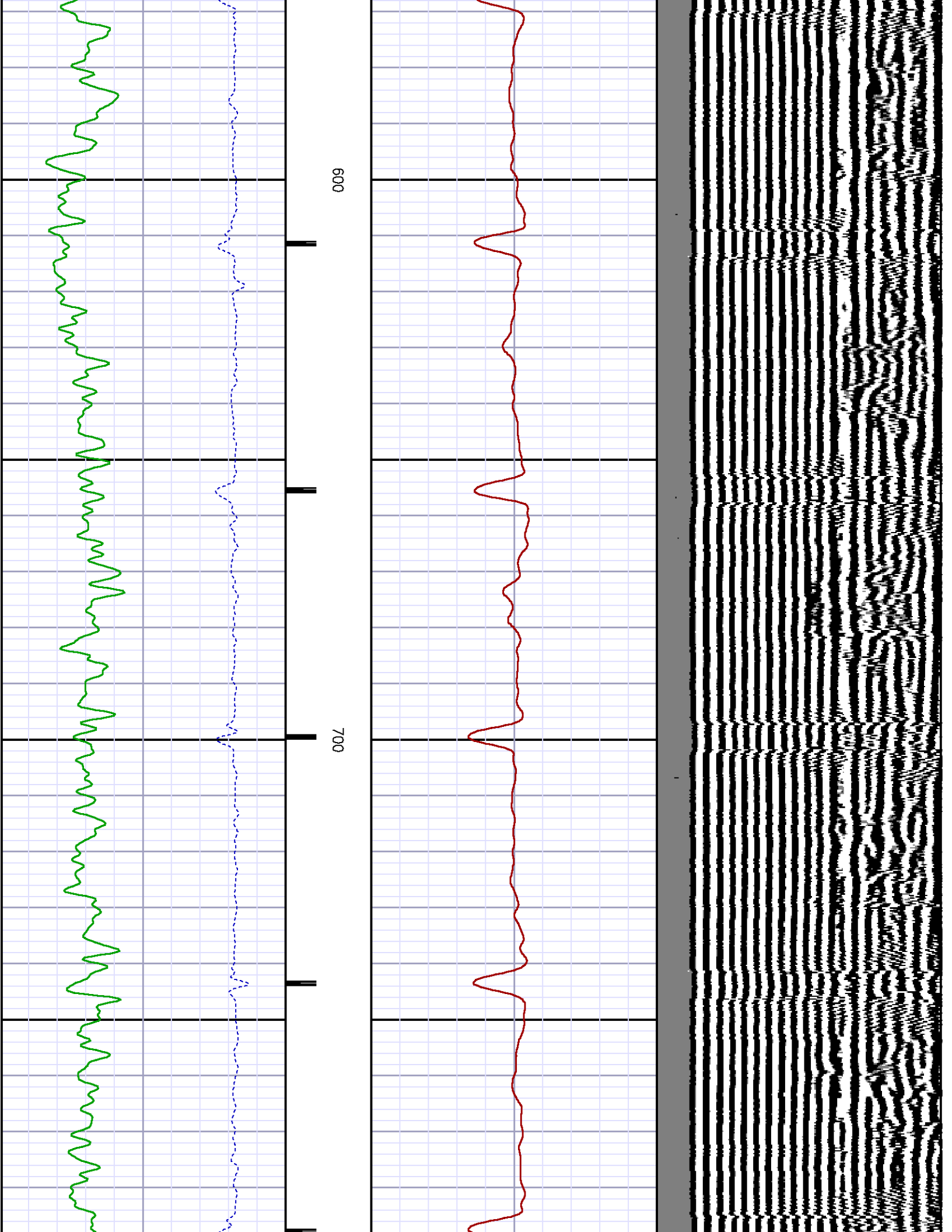
ACAL ANR AR1 AR2 AR3 AR4  
 AR5 AR6 AR7 AR8 CHV FPR2  
 FPR3 FPR5 TT3 TTR1 TTR2 TTR3  
 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP  
 AFAR SIG TT5  
 CCL  
 GR  
 TEMP

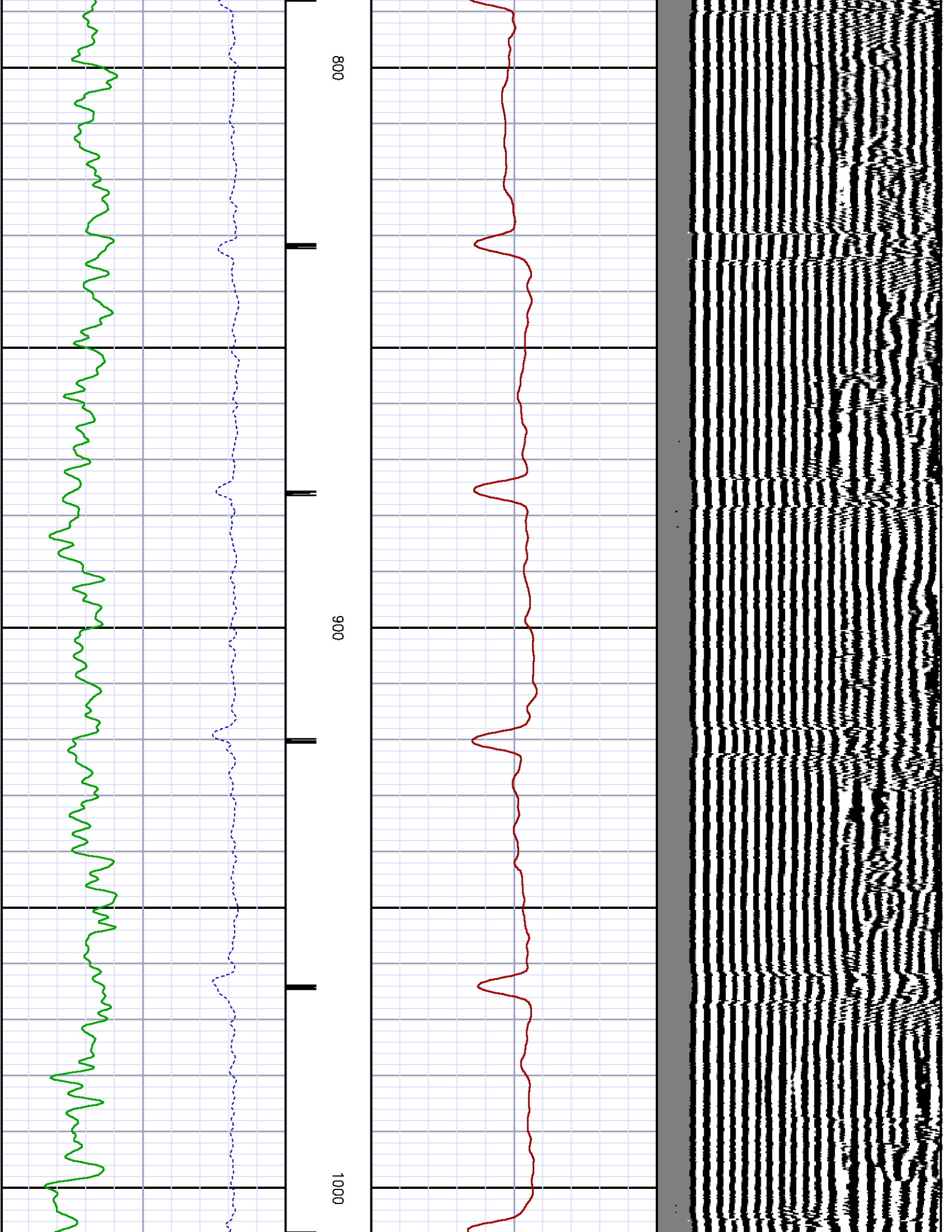
Created by : RAL, v4.8.008  
 Plotted by : PlotMgr, v5.4.504  
 Company : WPX ENERGY  
 Well : HOEPPLI RWF 24-36  
 File Name : d:\welldata\wpx energy\rwf 24-36\ral24\main .xtf  
 Mode : PlotMgr 5.4.504  
 Interval : 4.50 - 8919.00 feet UP  
 Created : 1/24/2013 12:02:12 PM

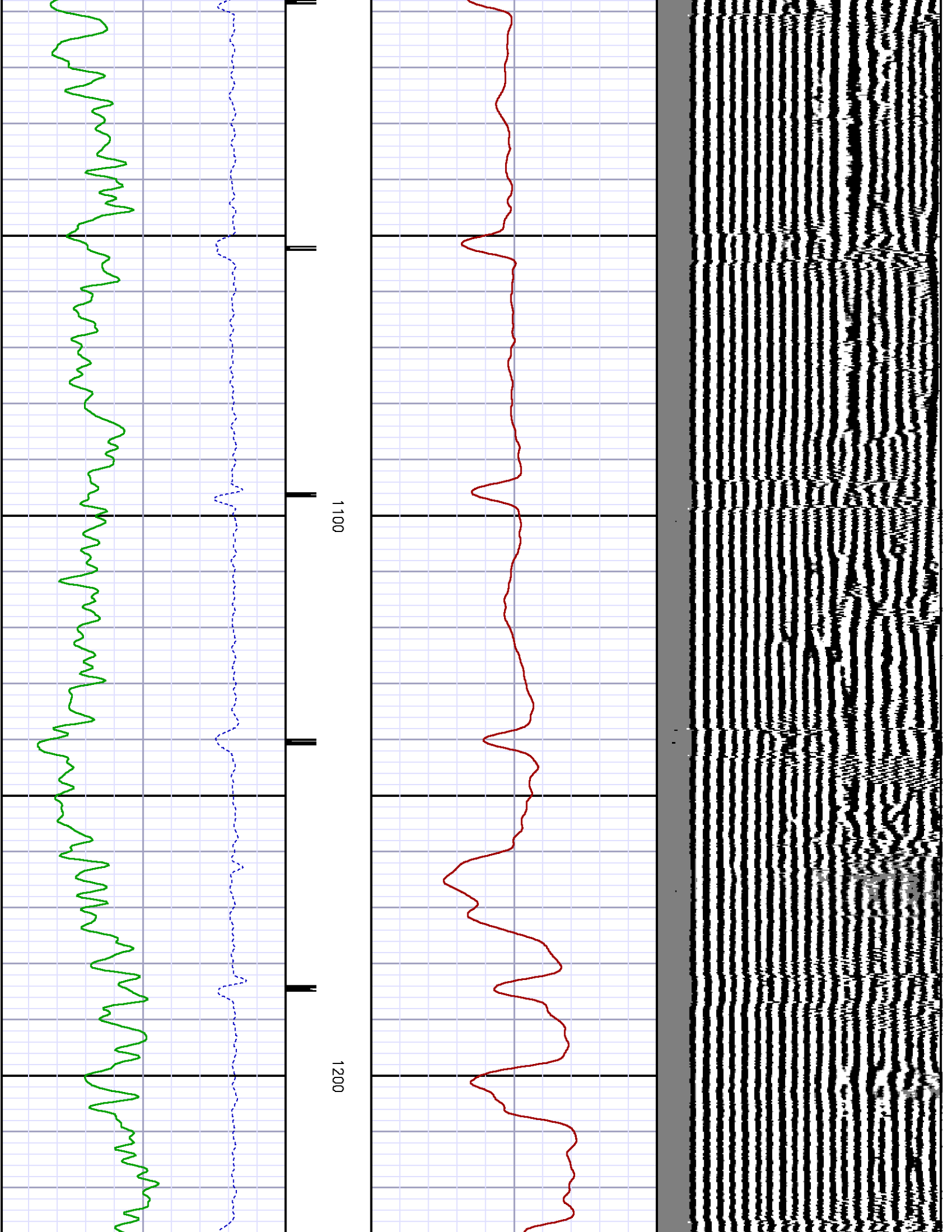


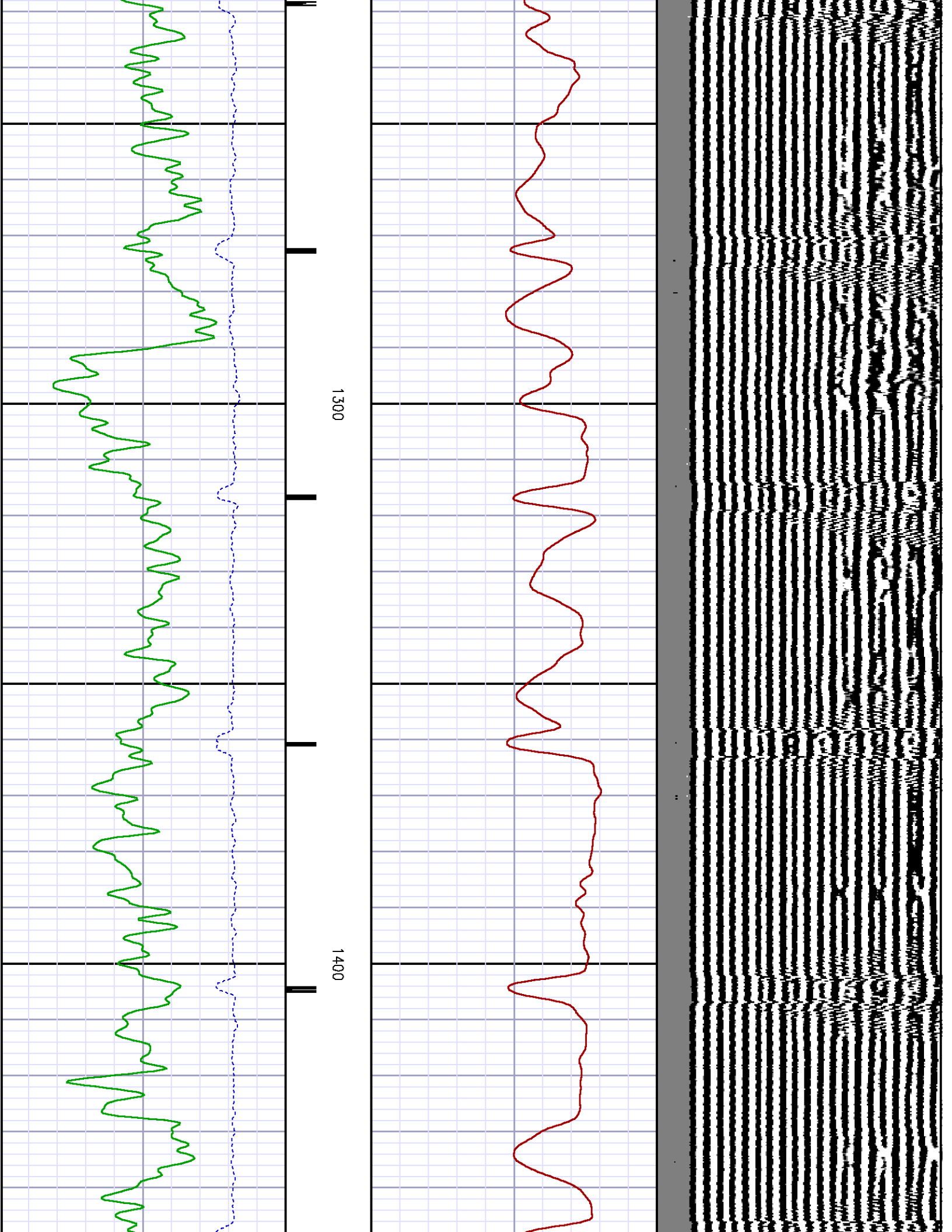


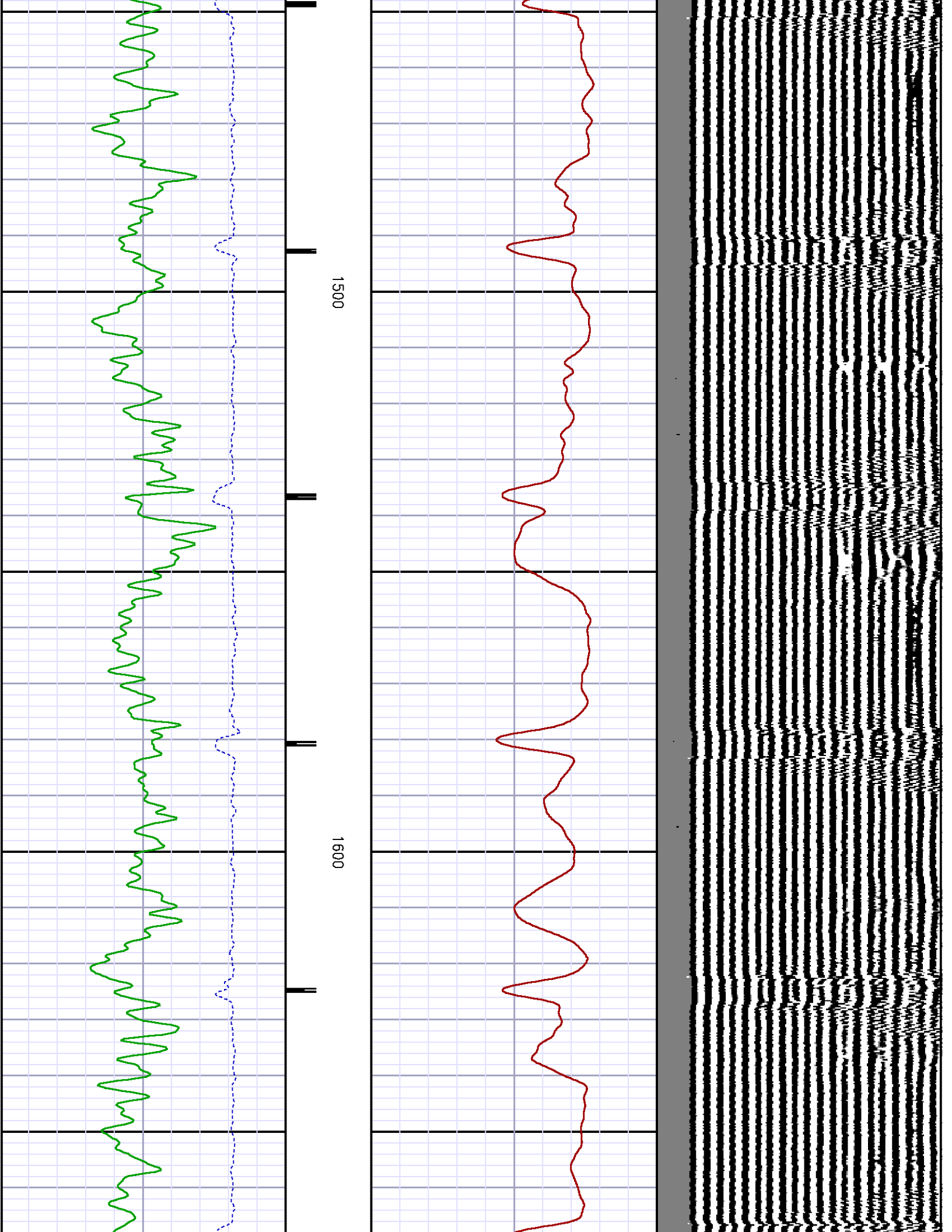


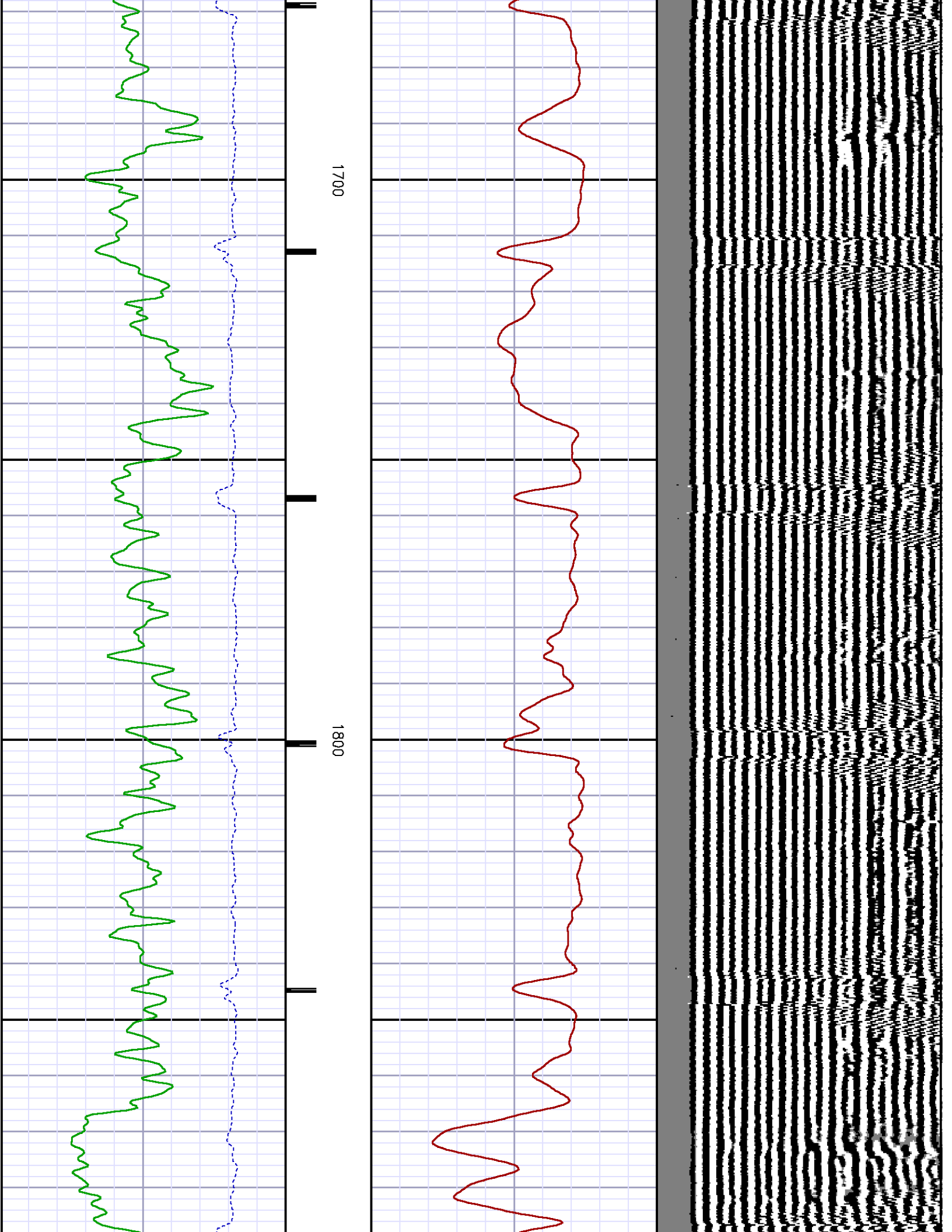


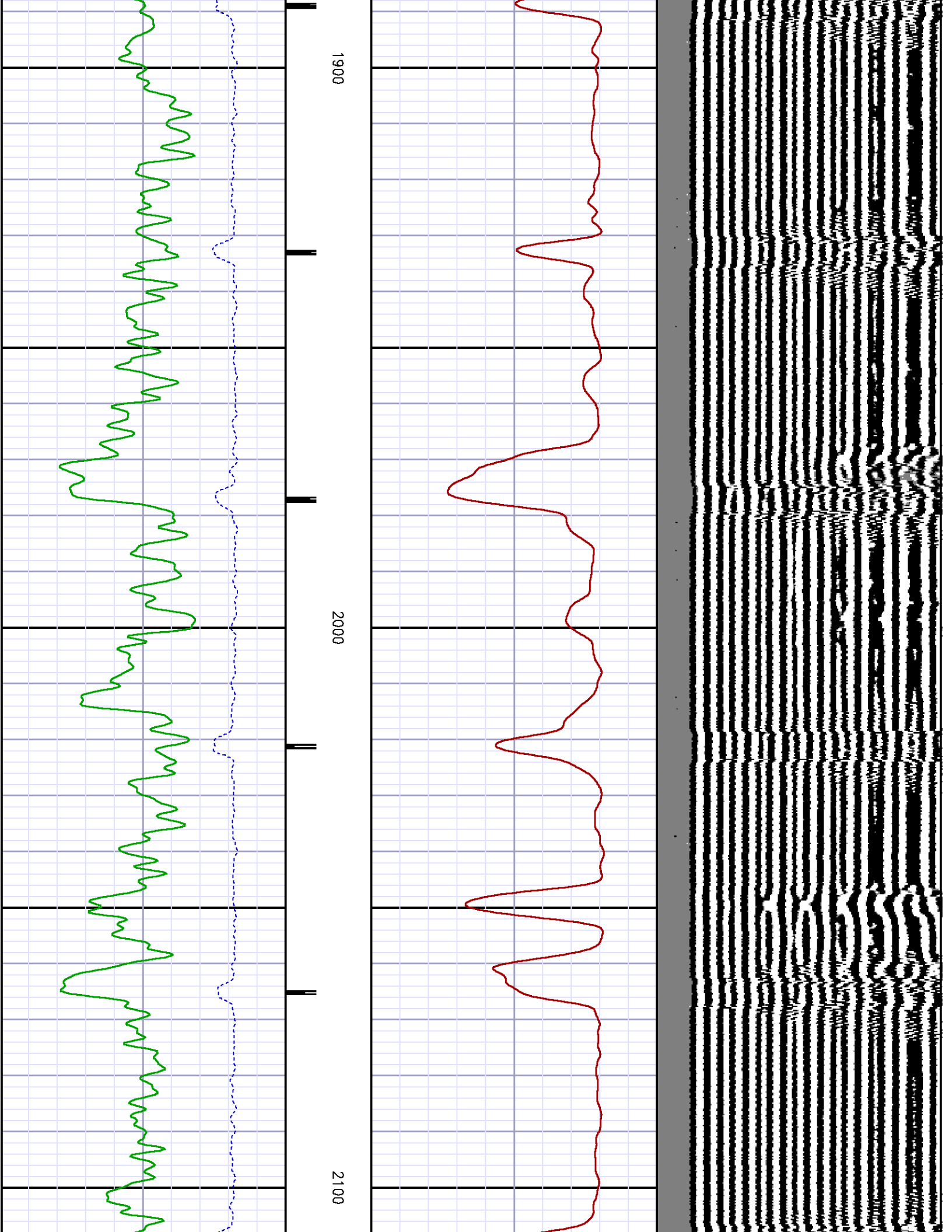


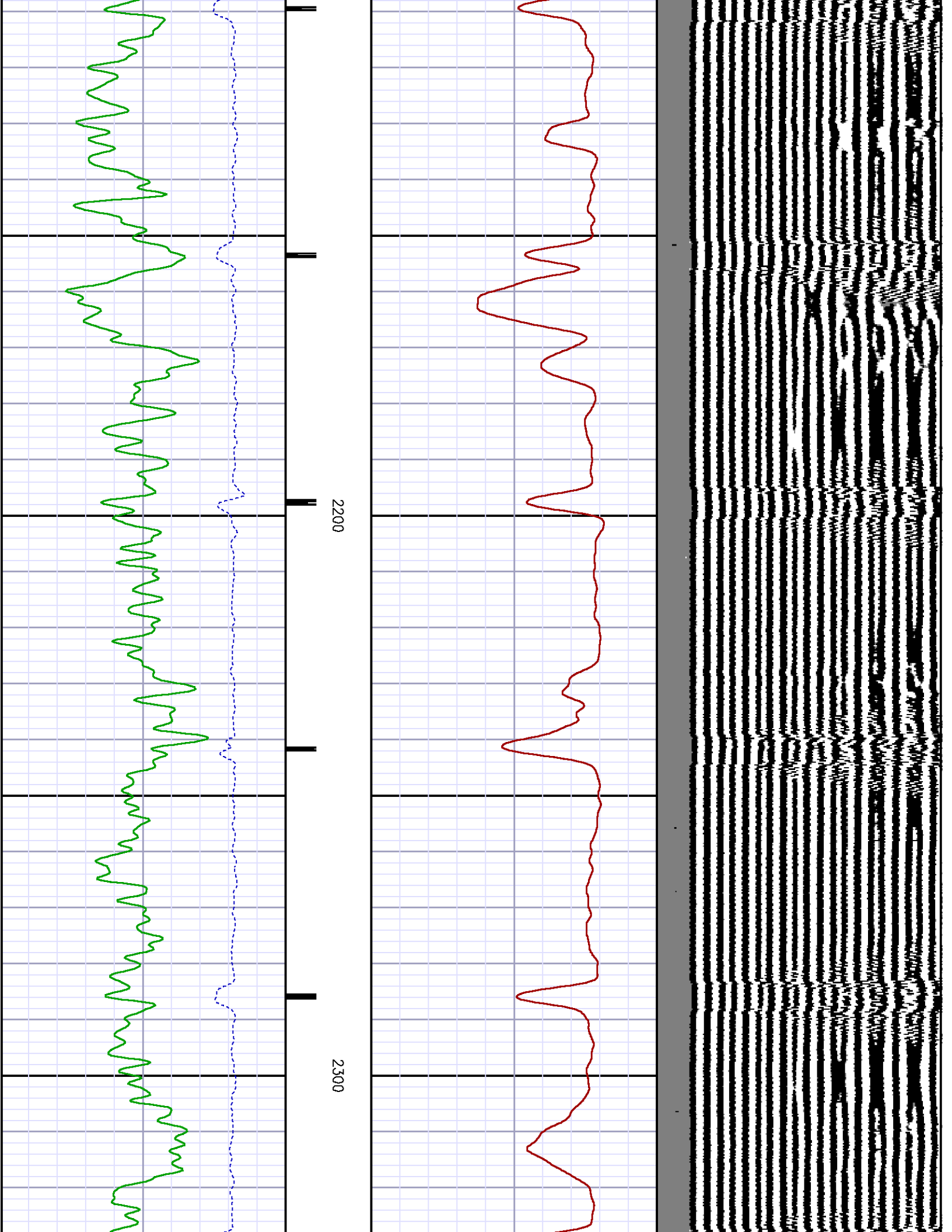


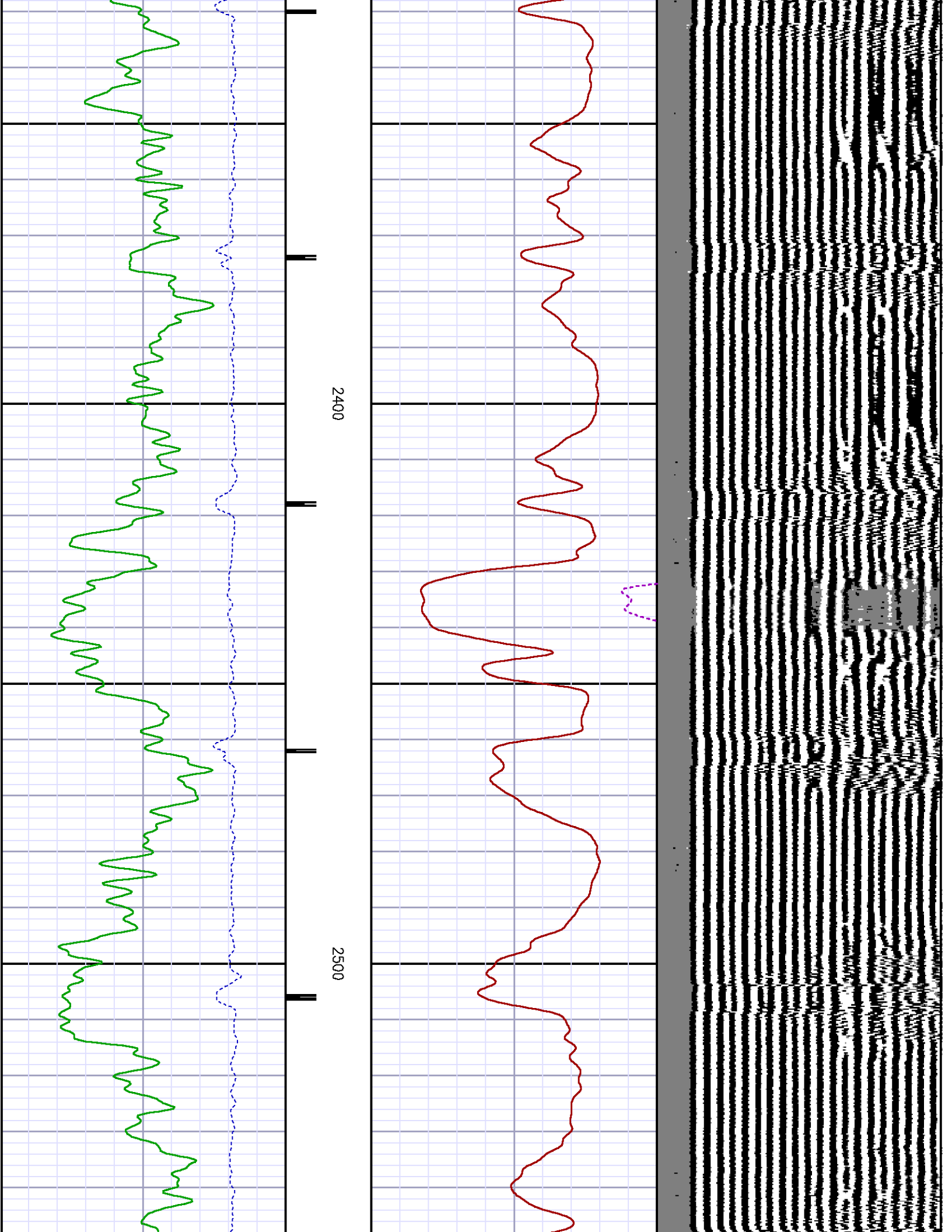


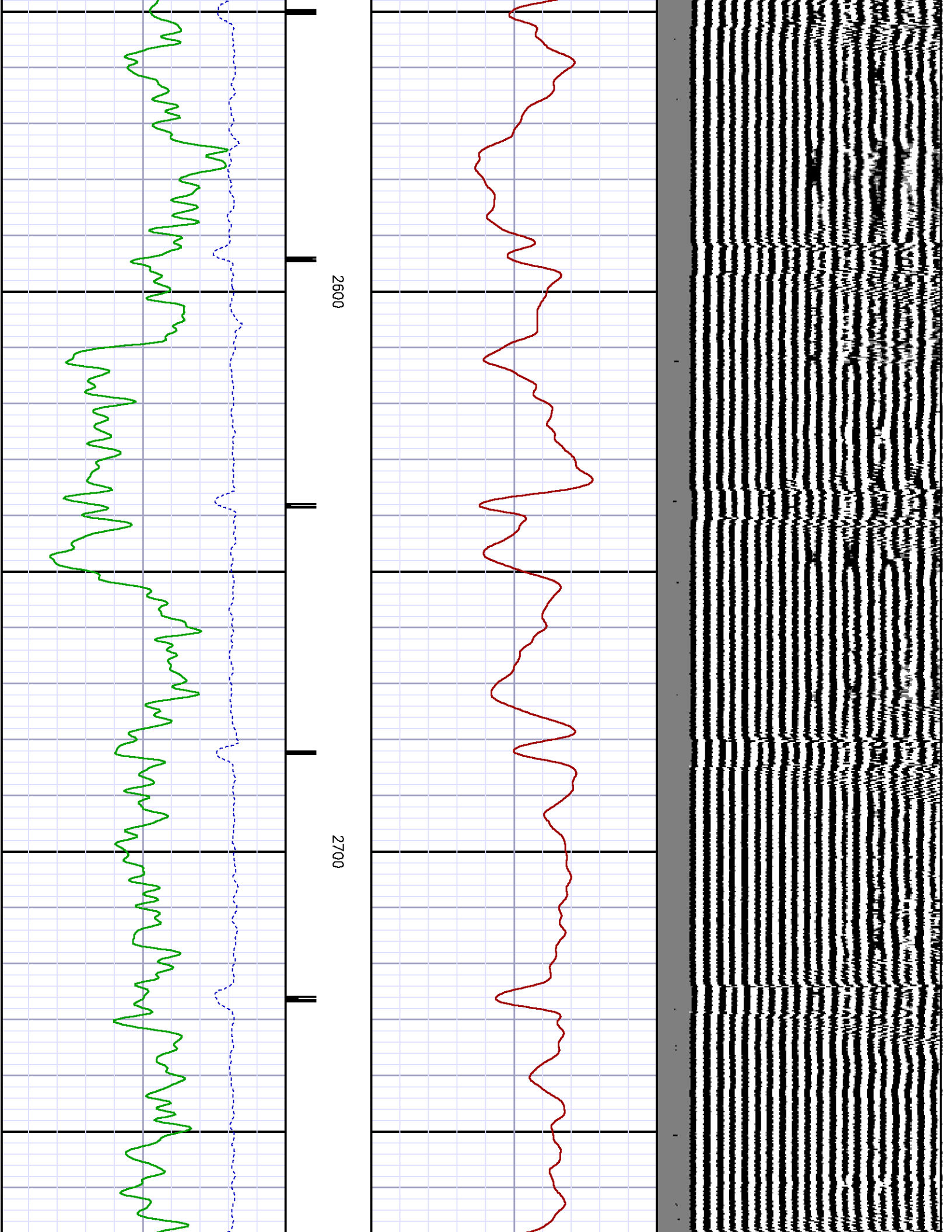


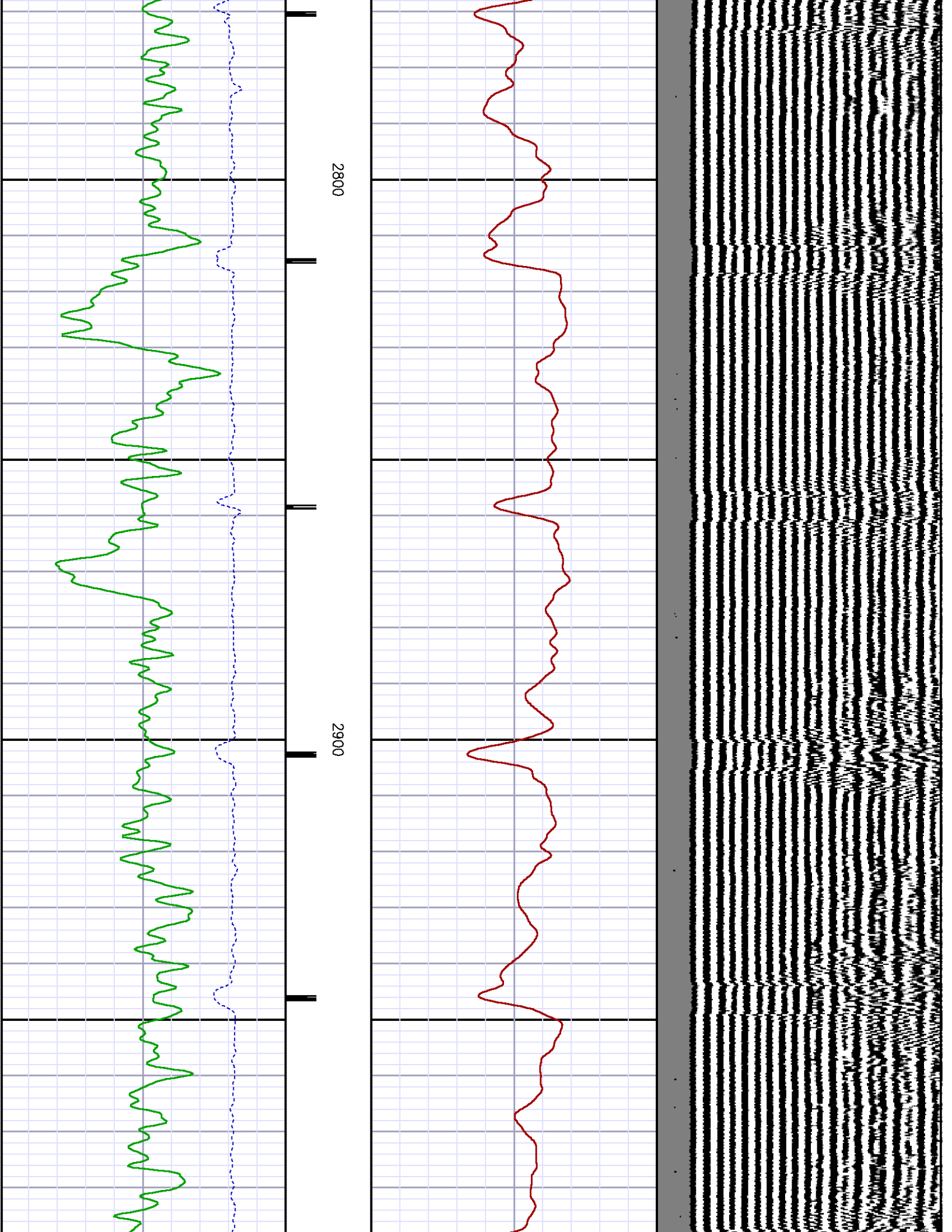


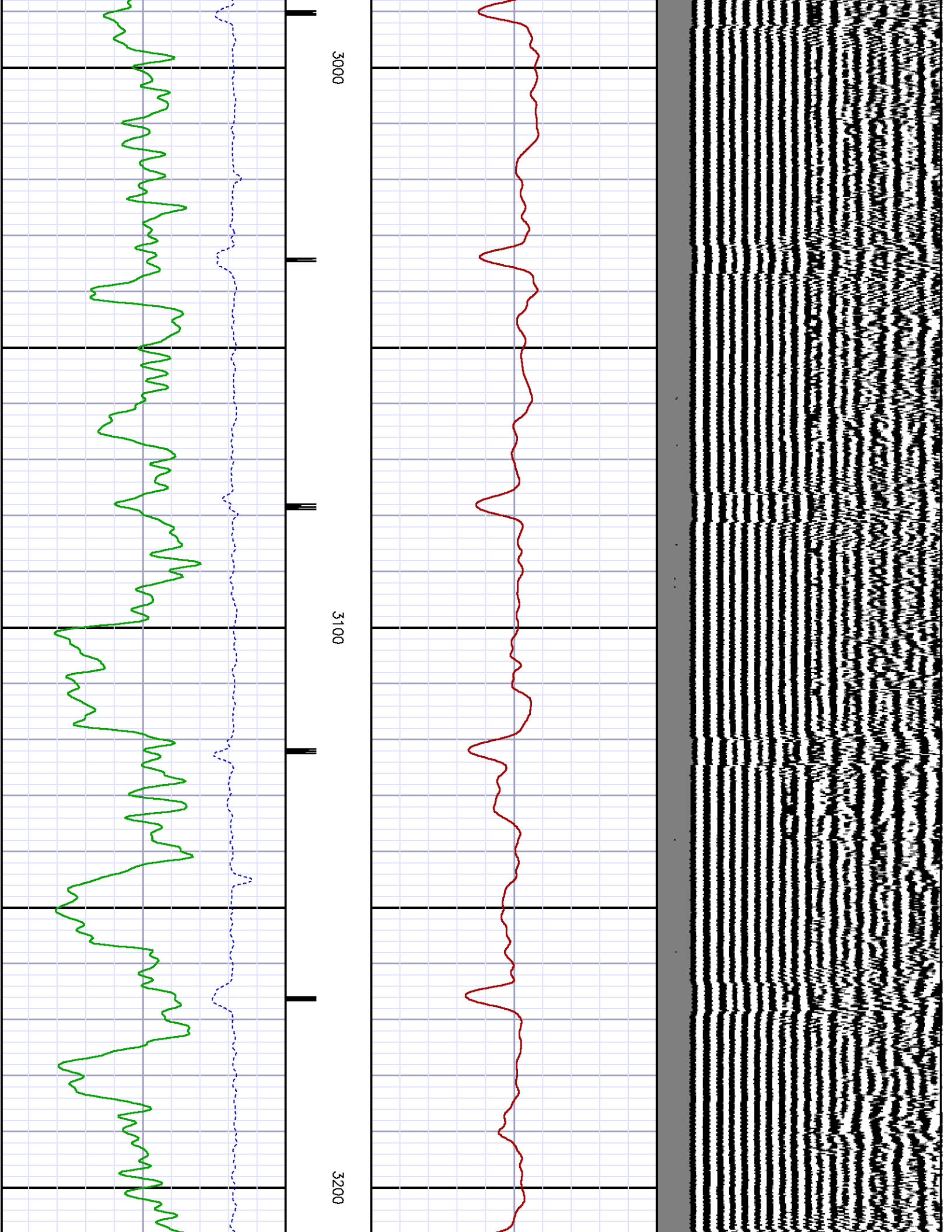


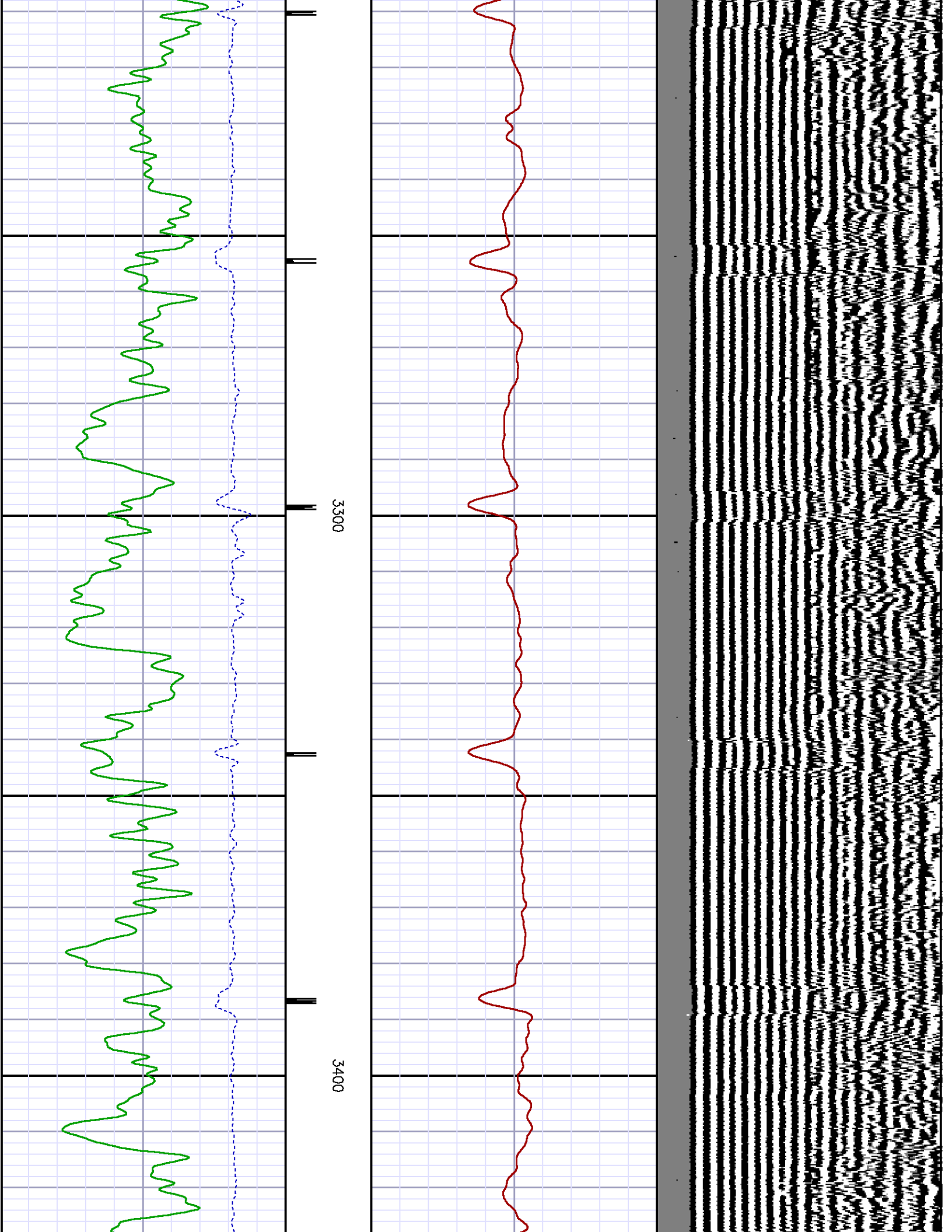


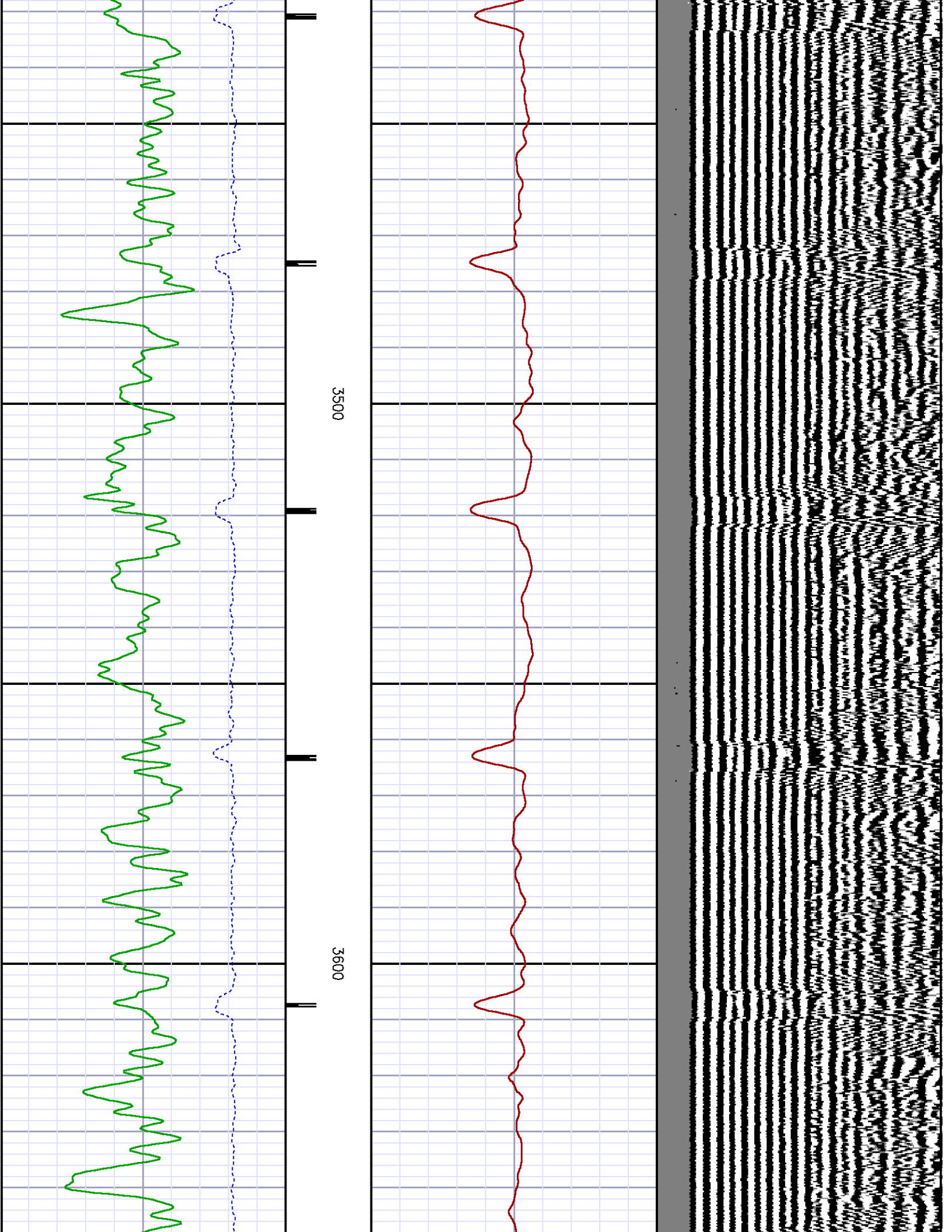


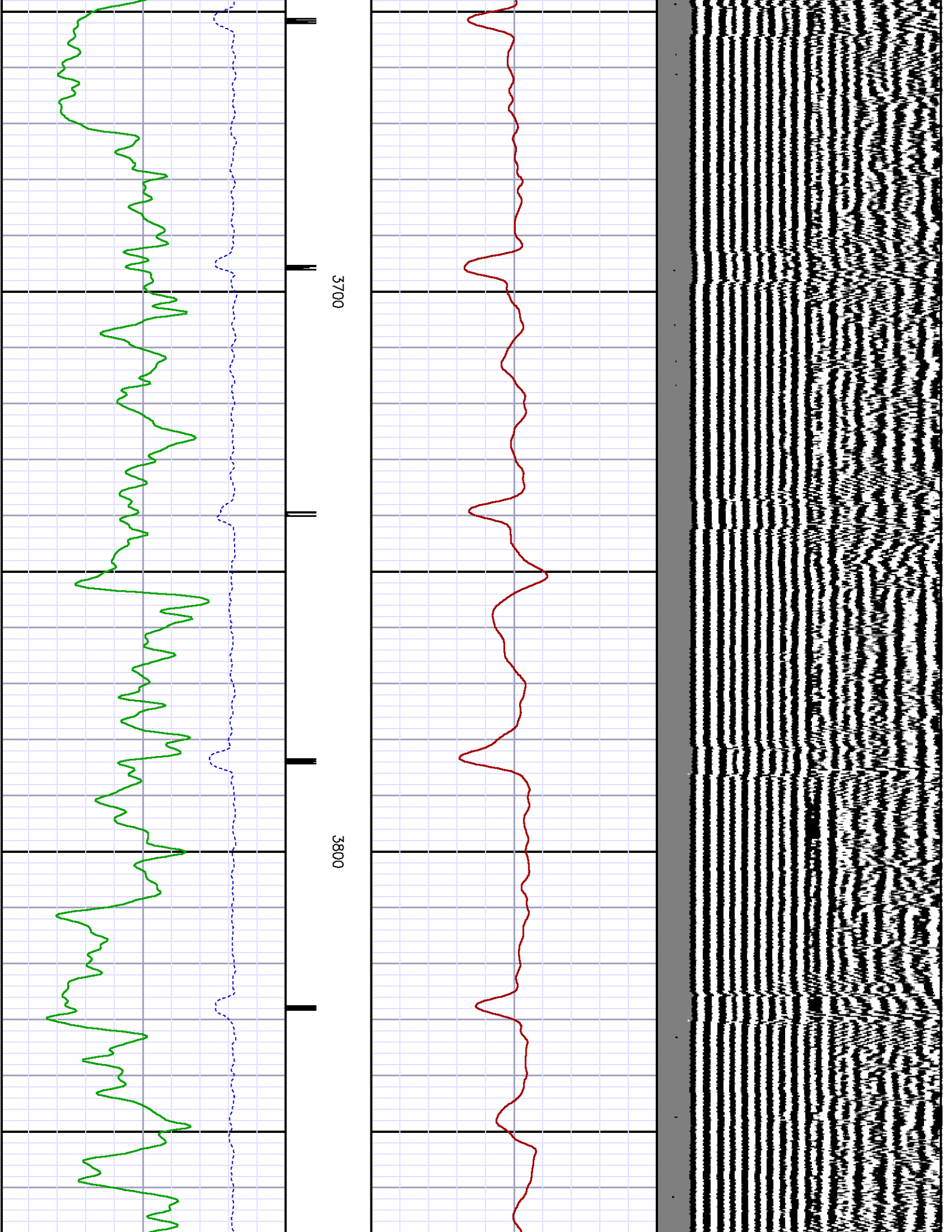


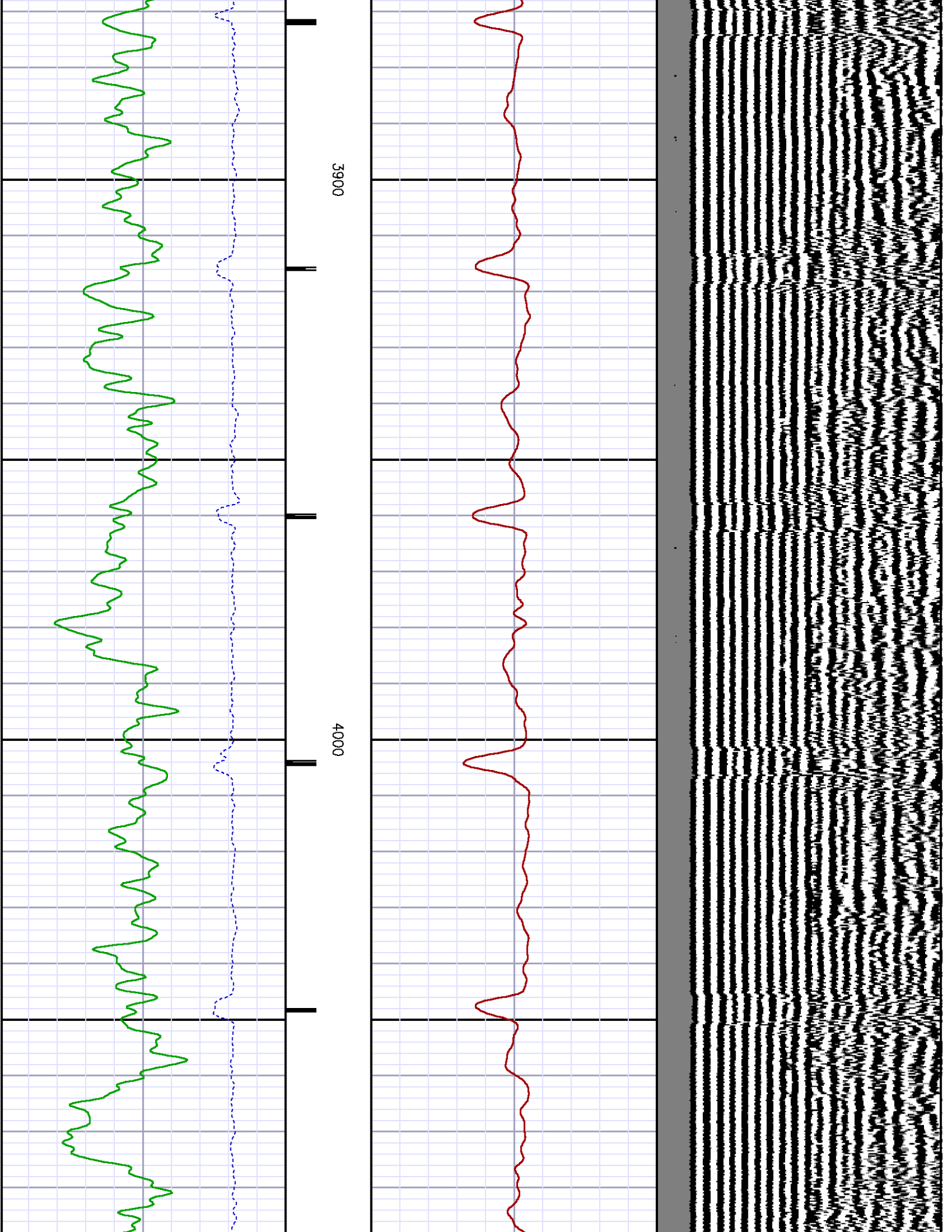


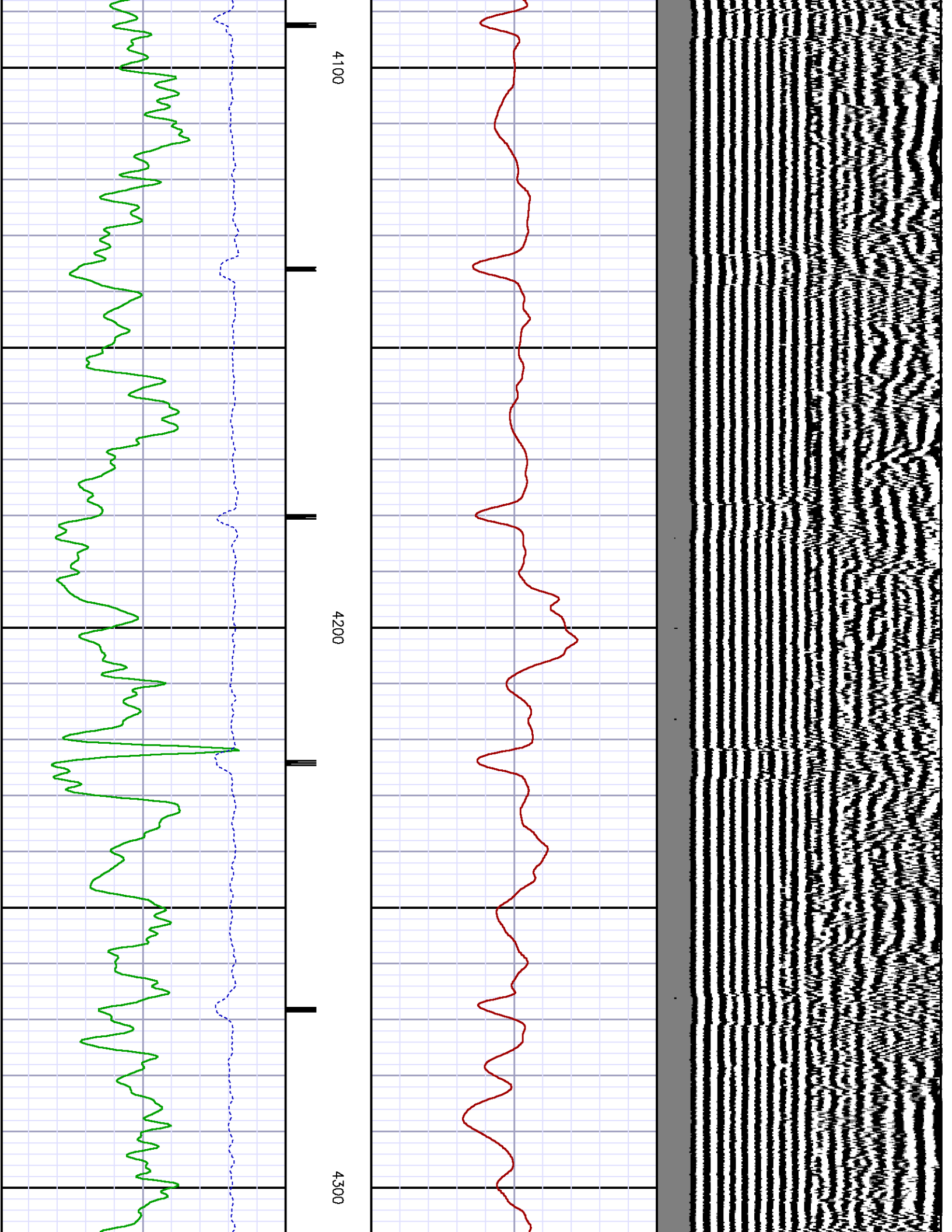


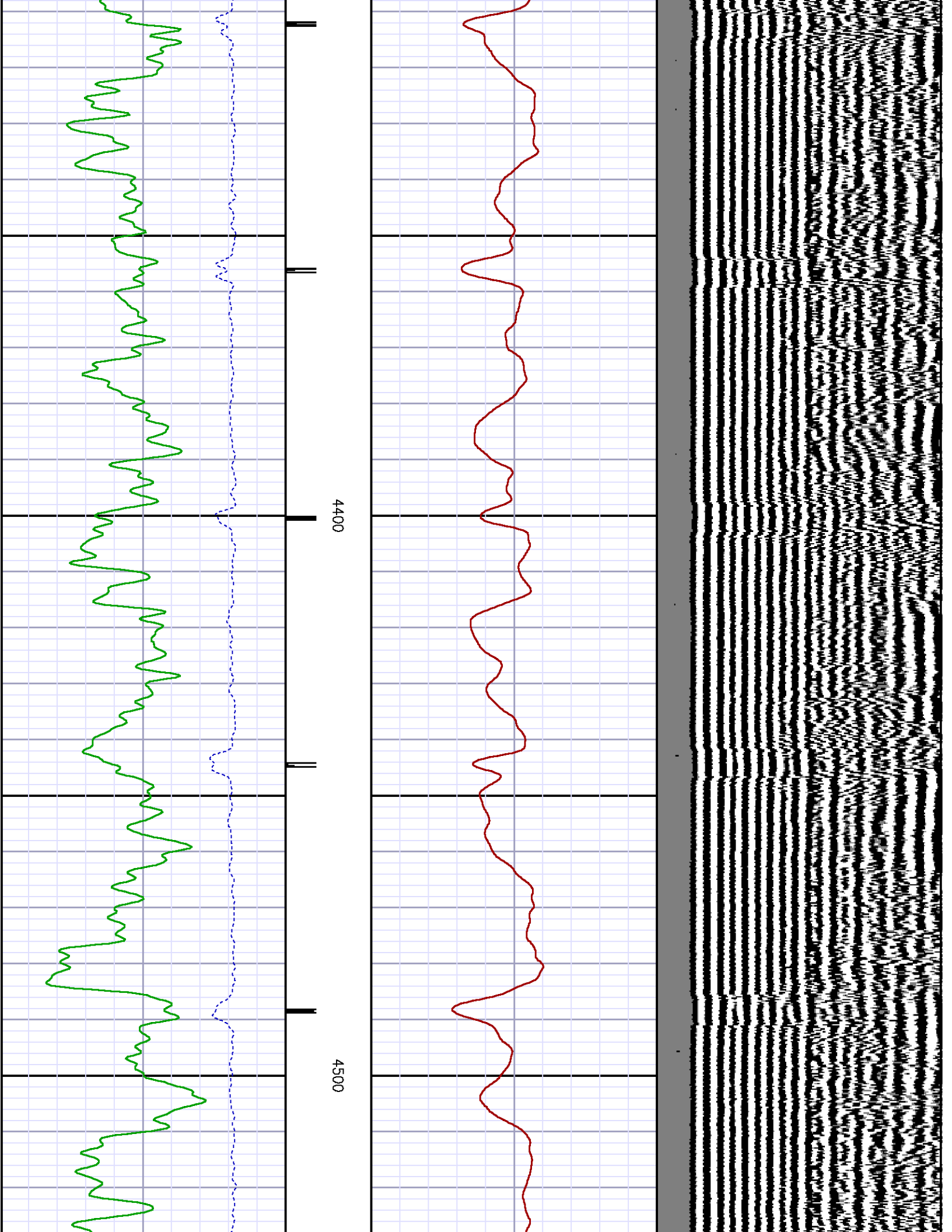


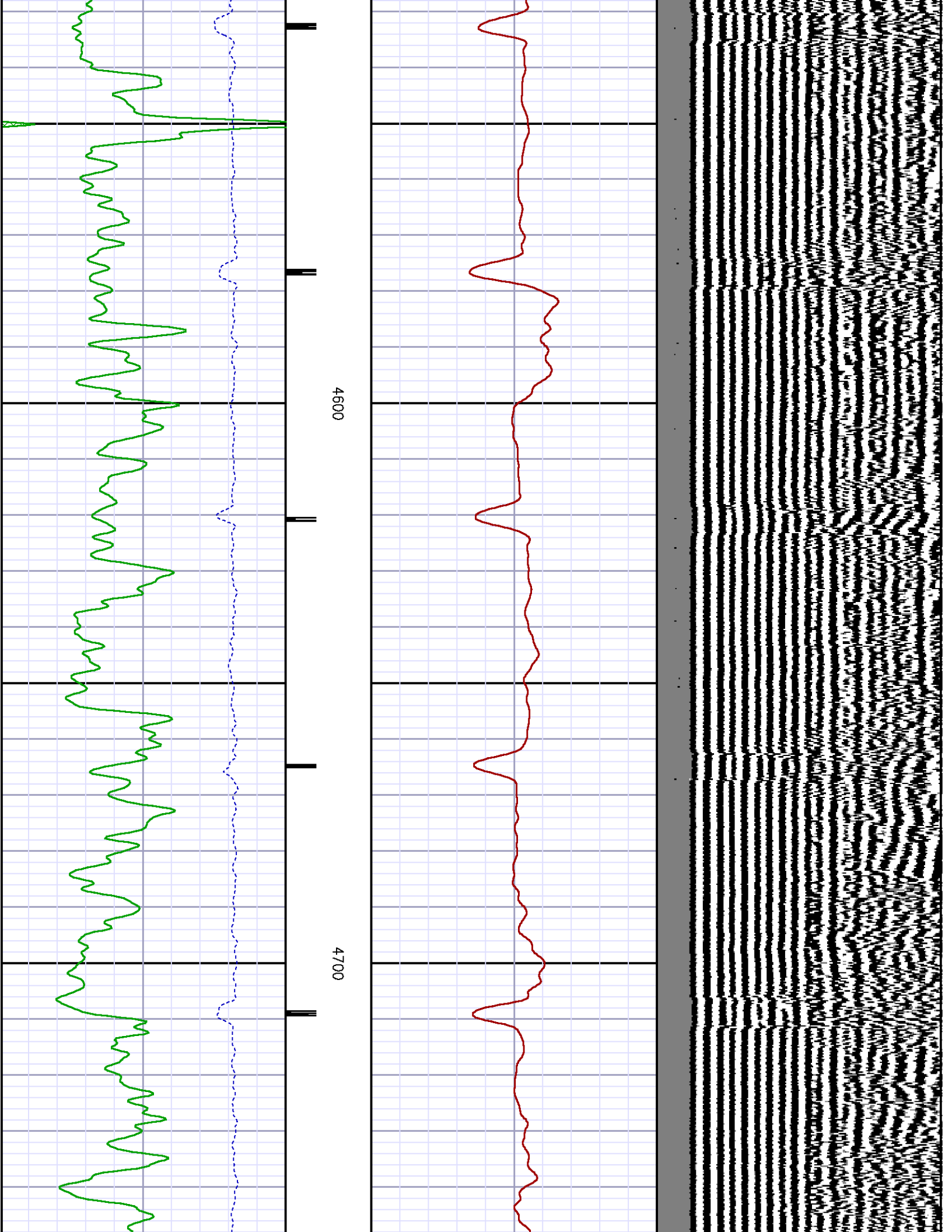


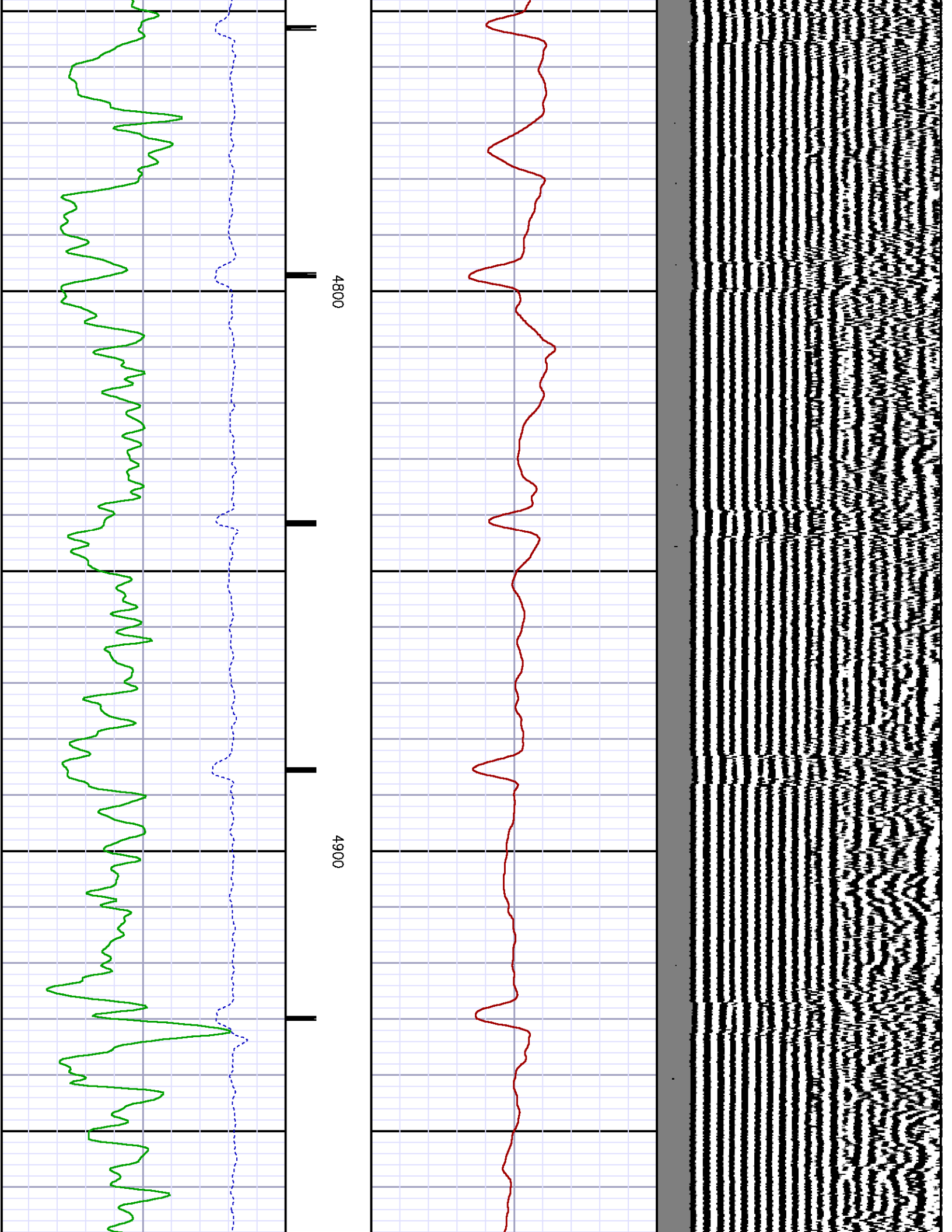


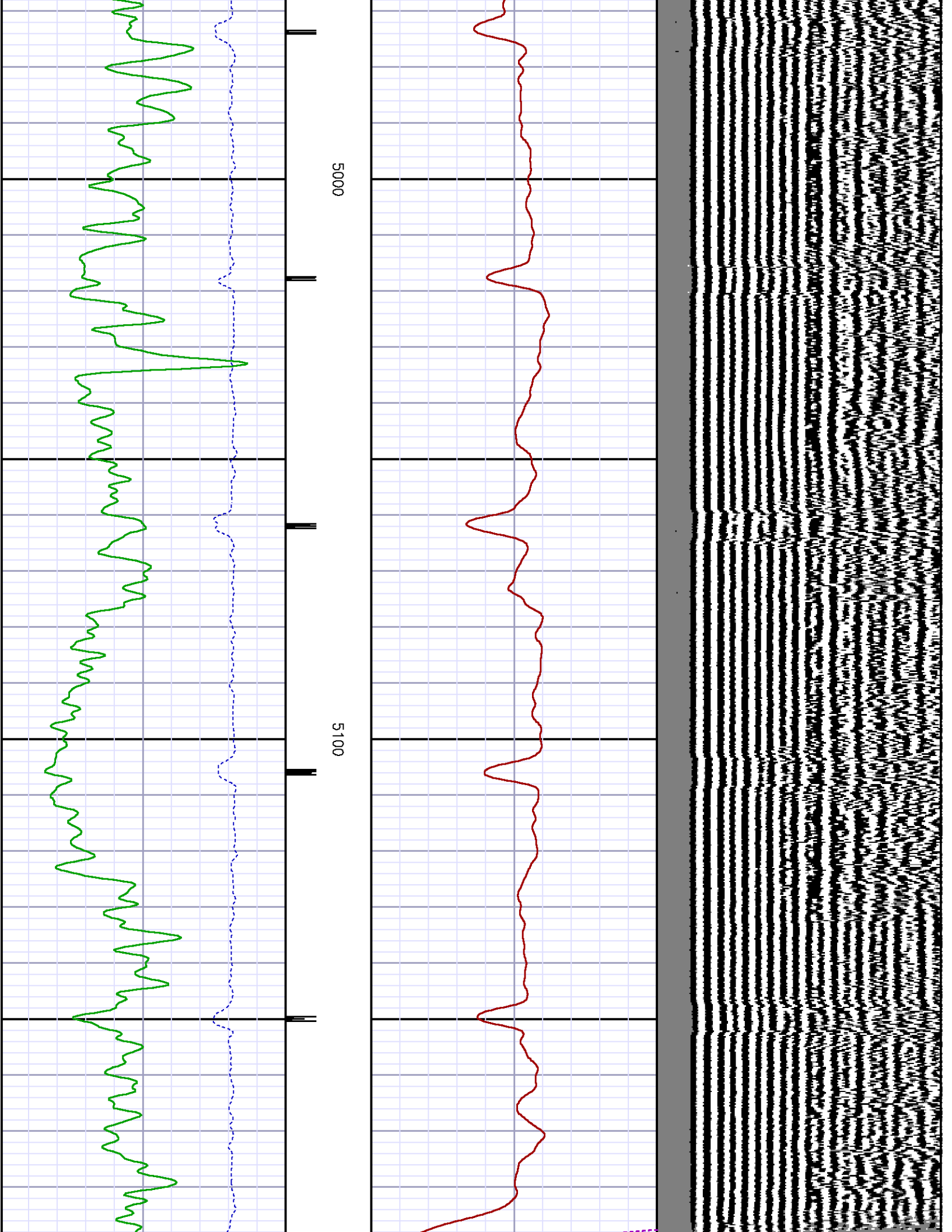


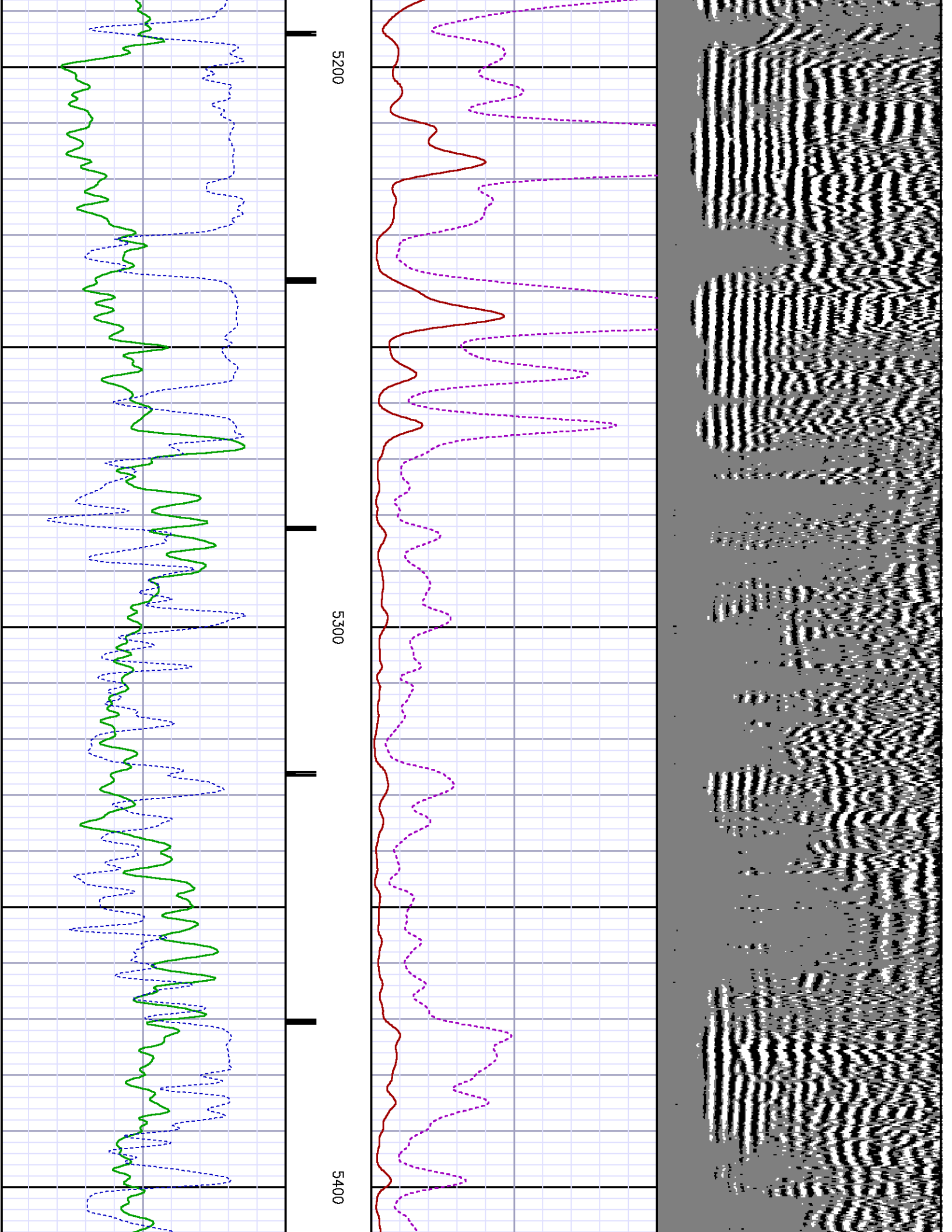


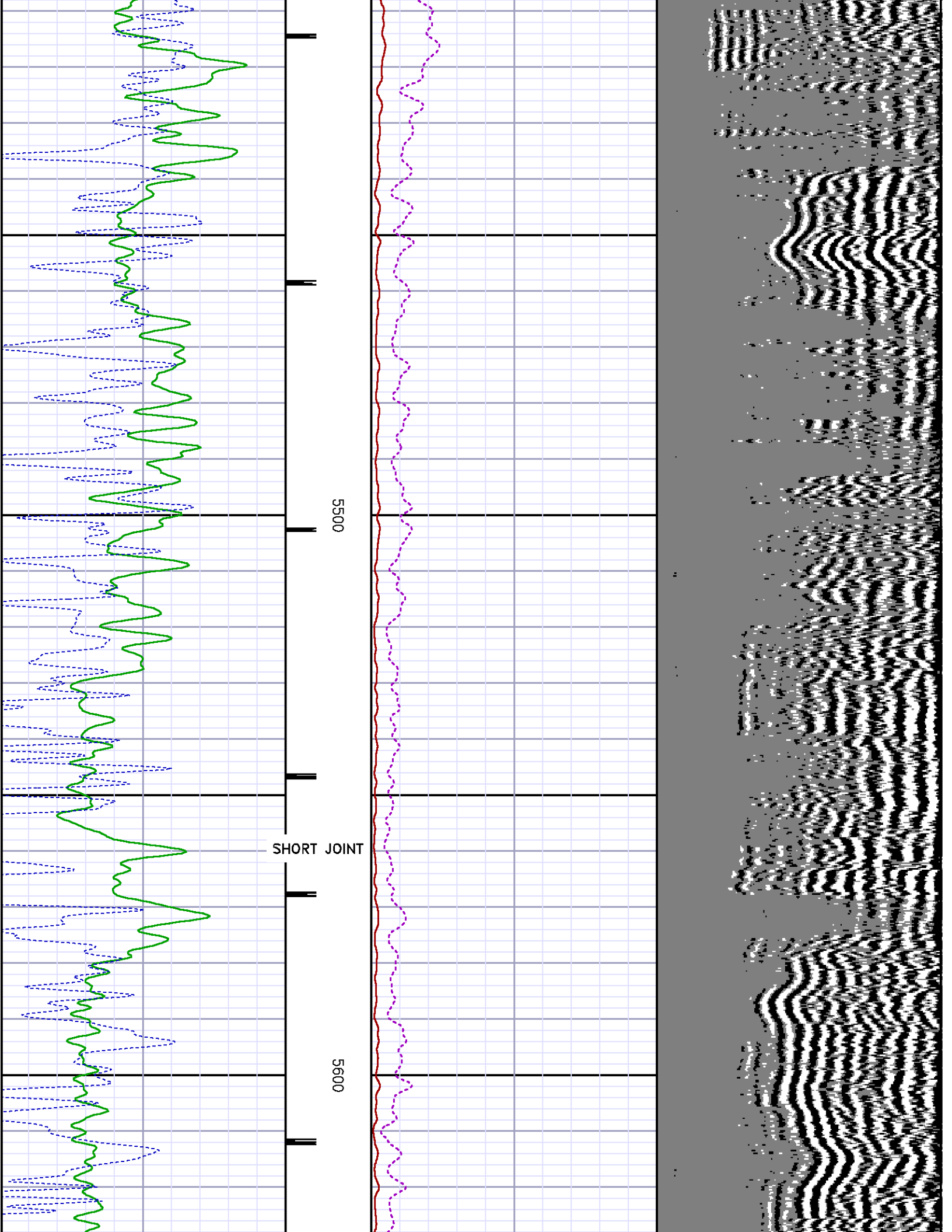


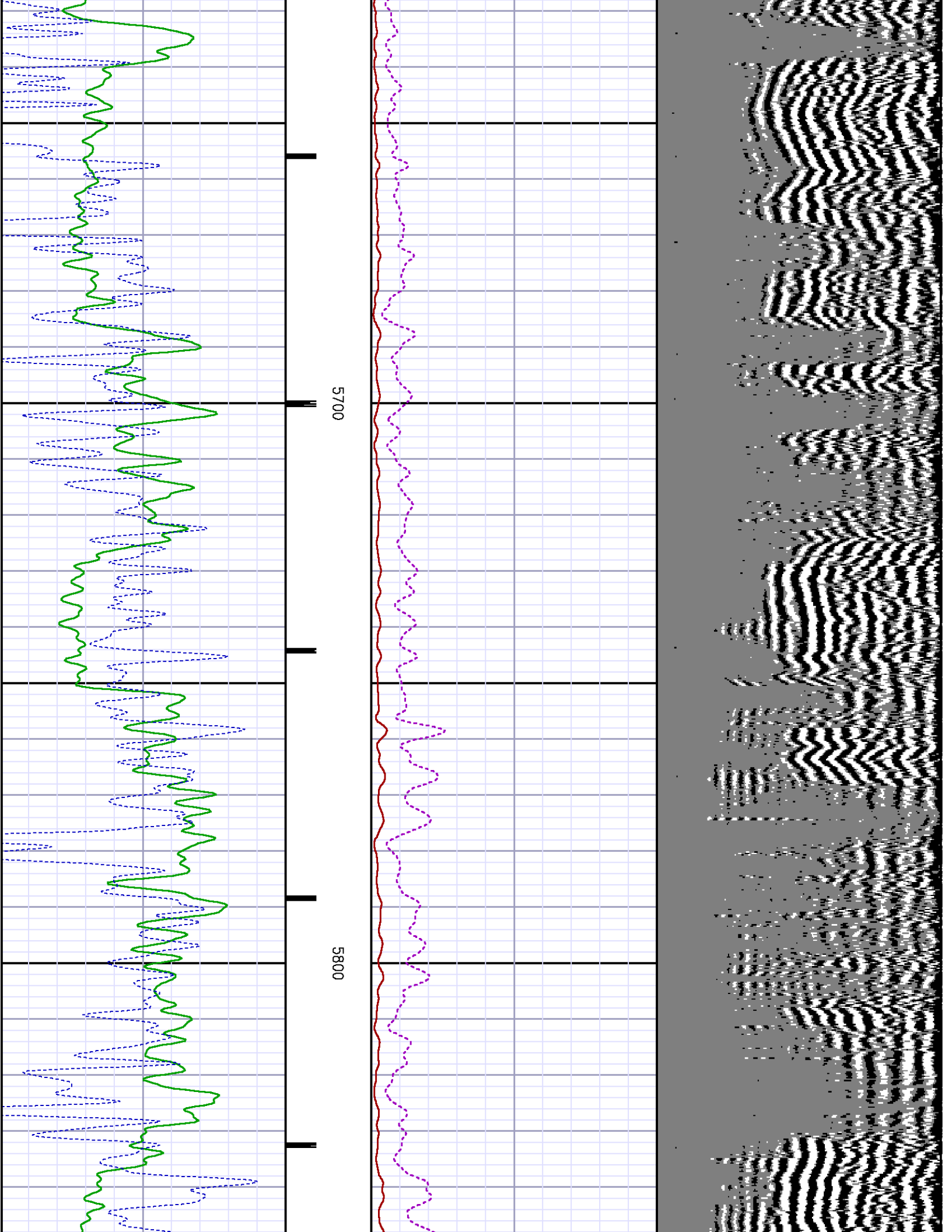


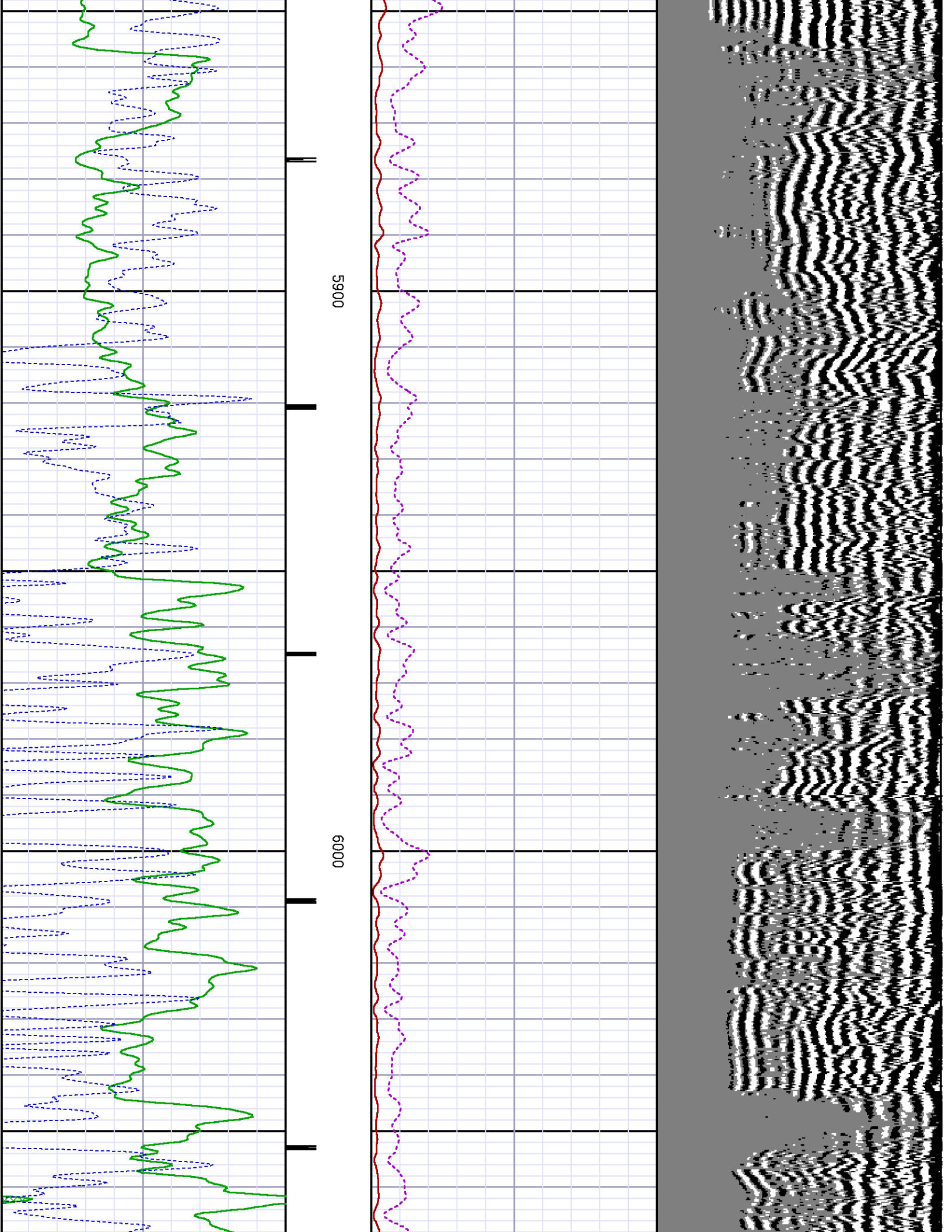


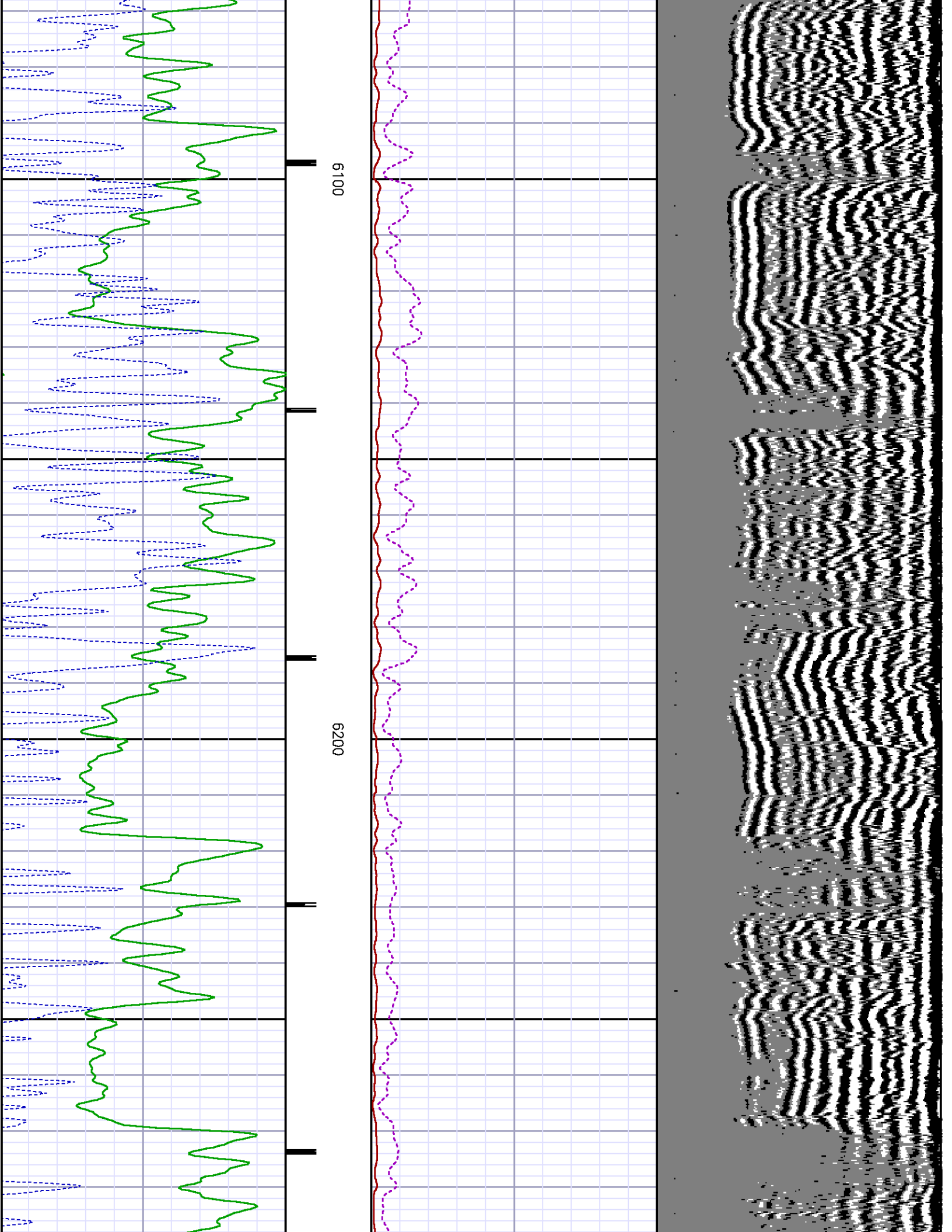


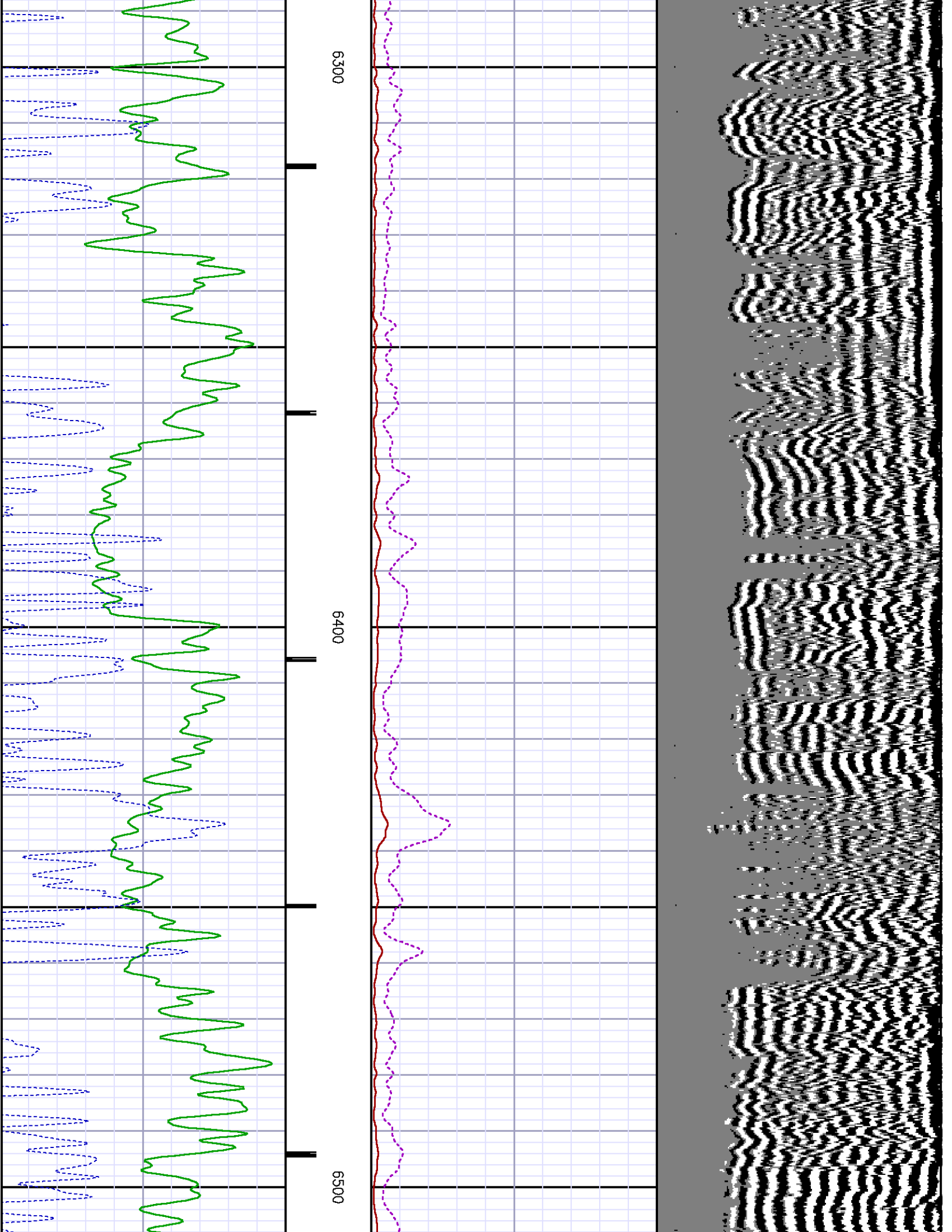


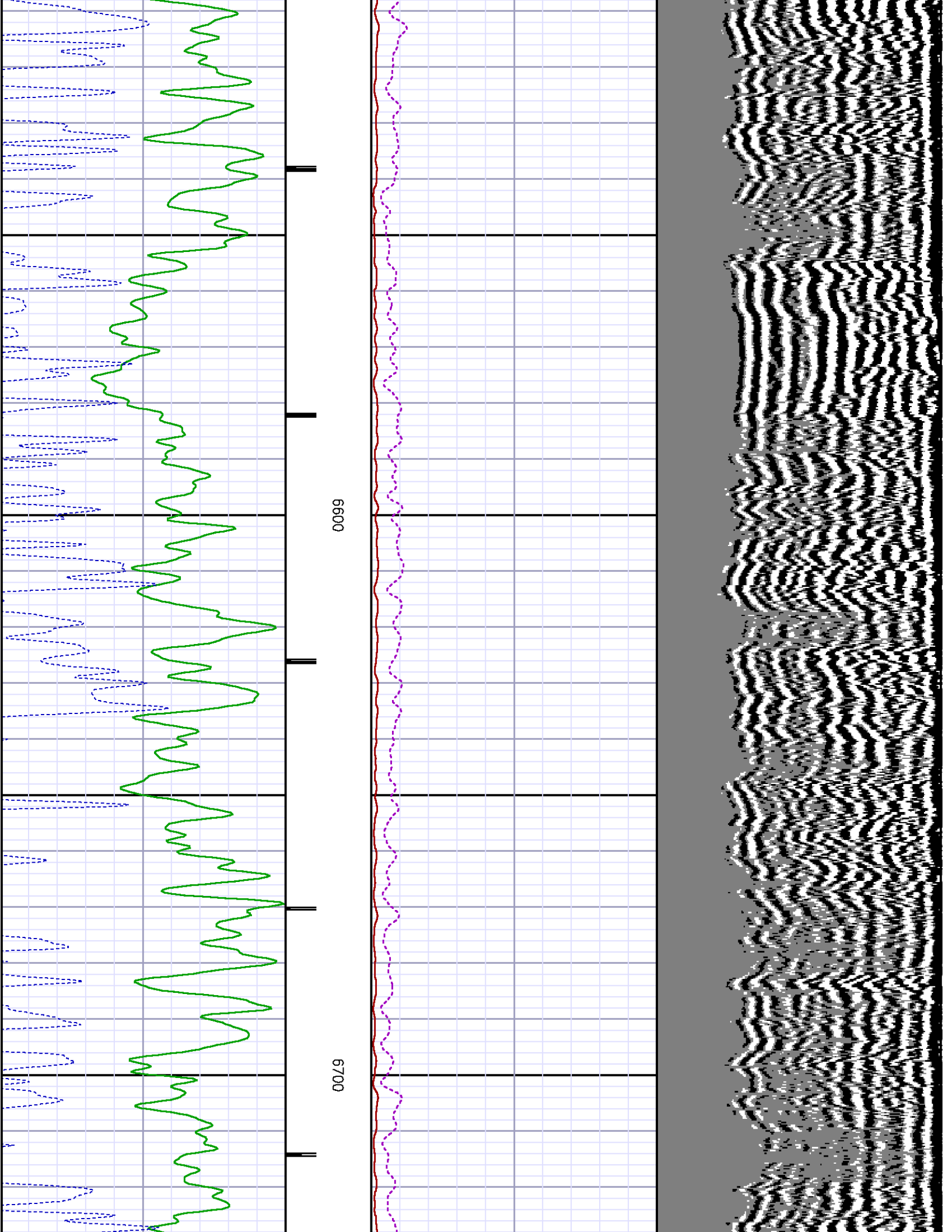


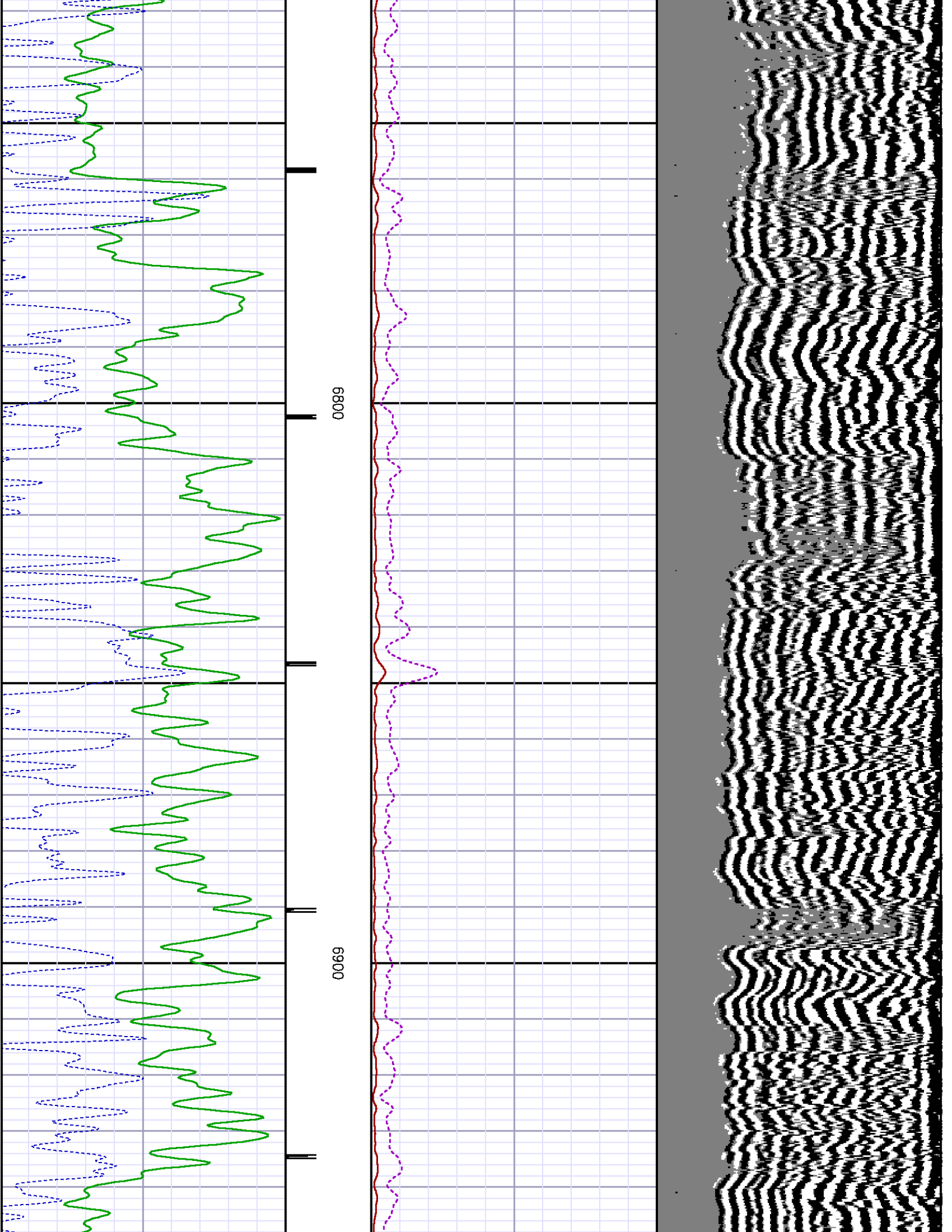


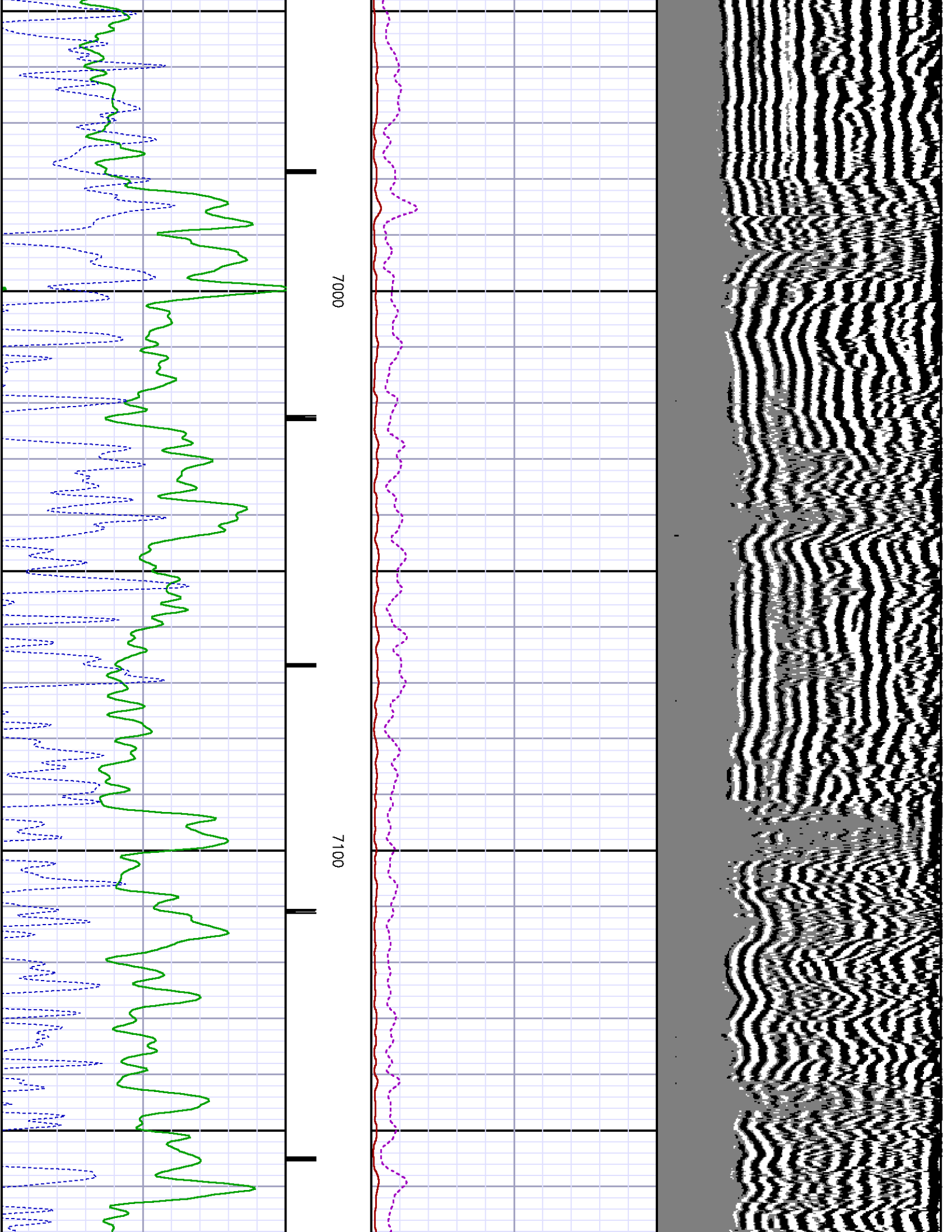


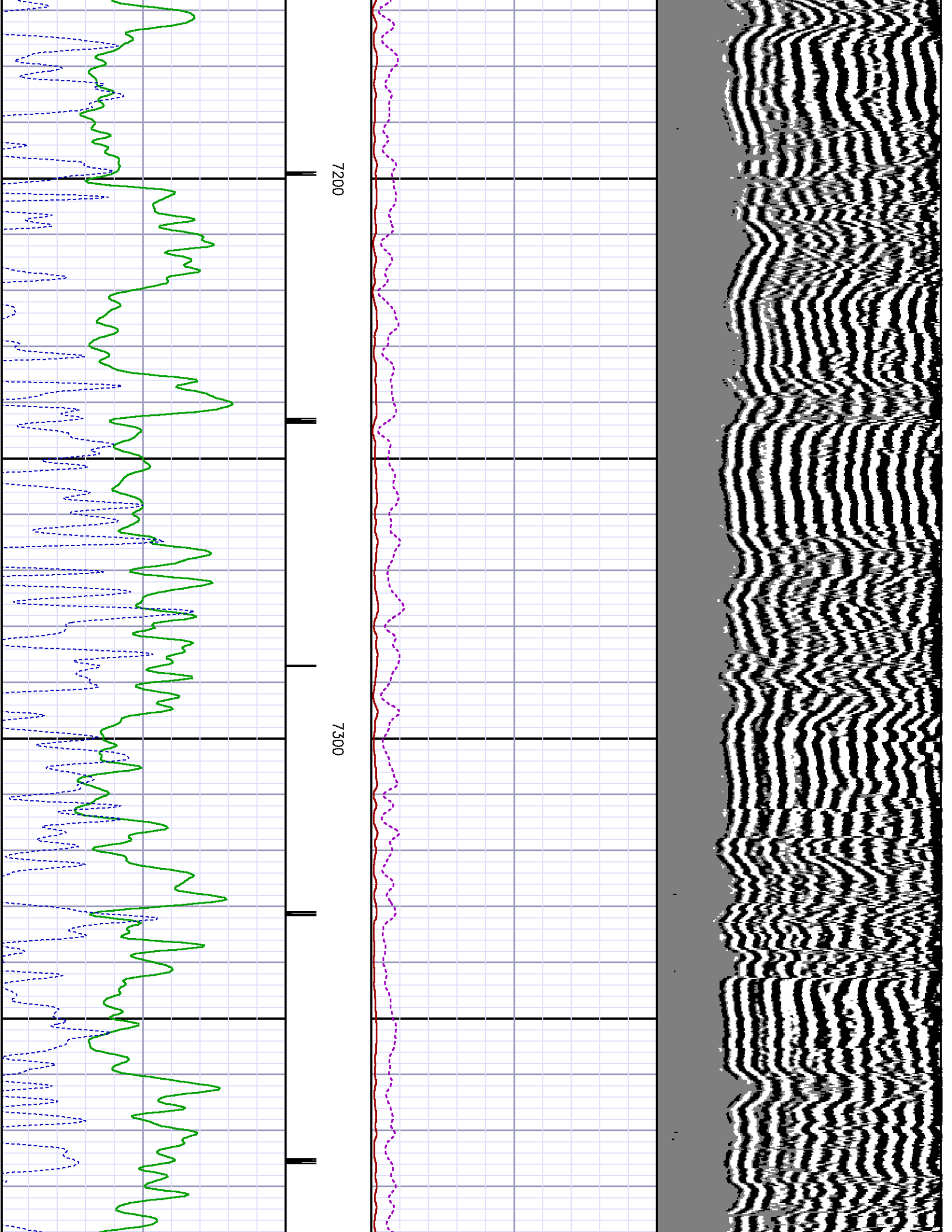


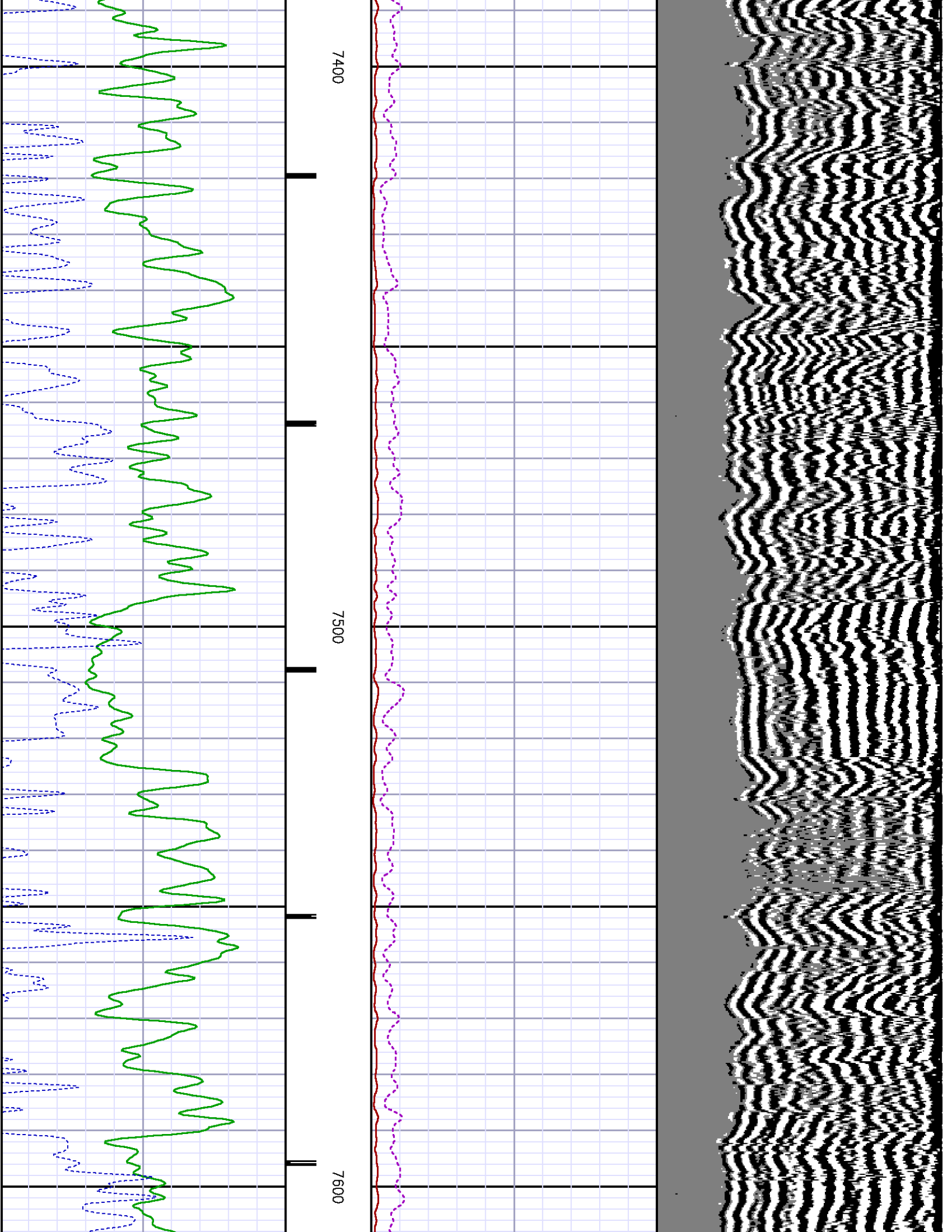


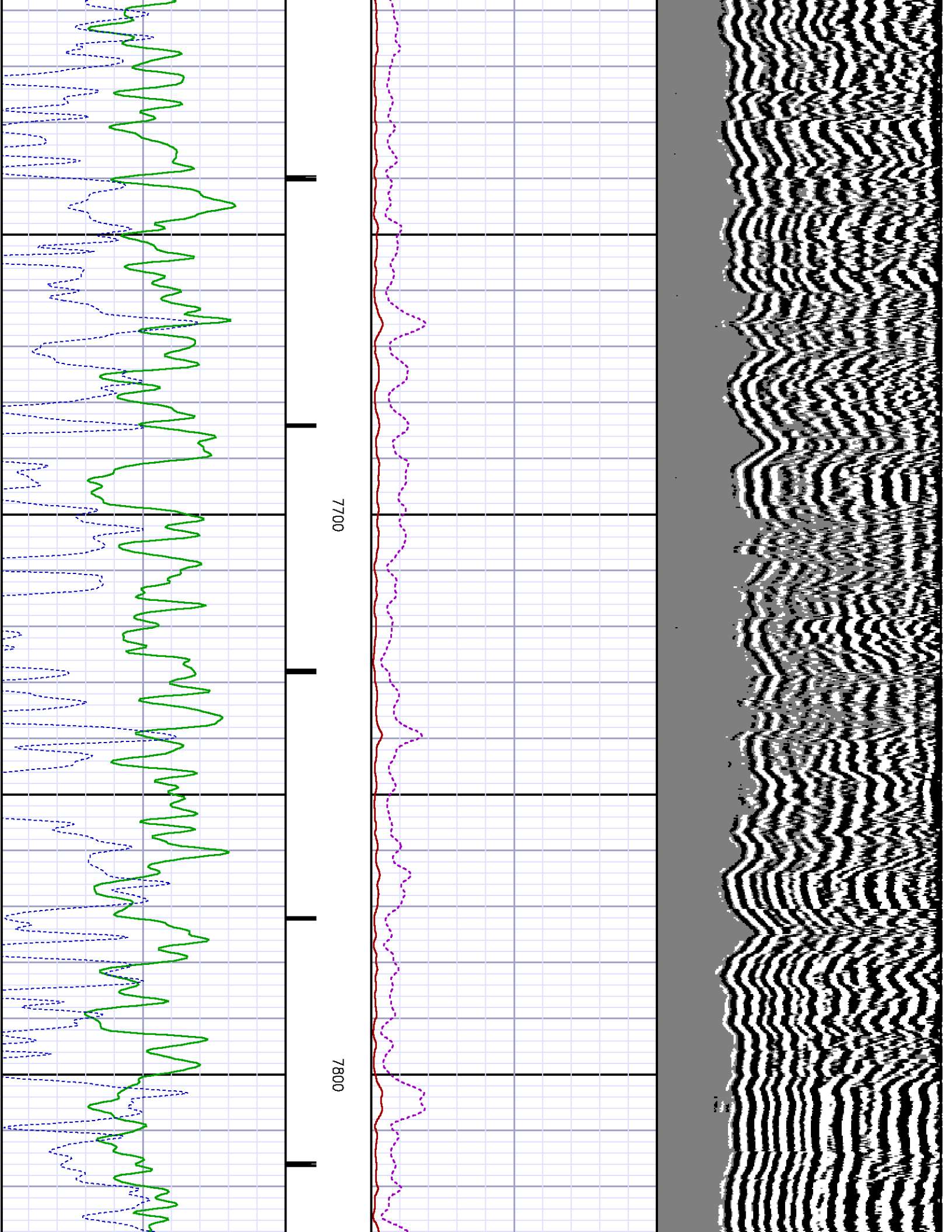


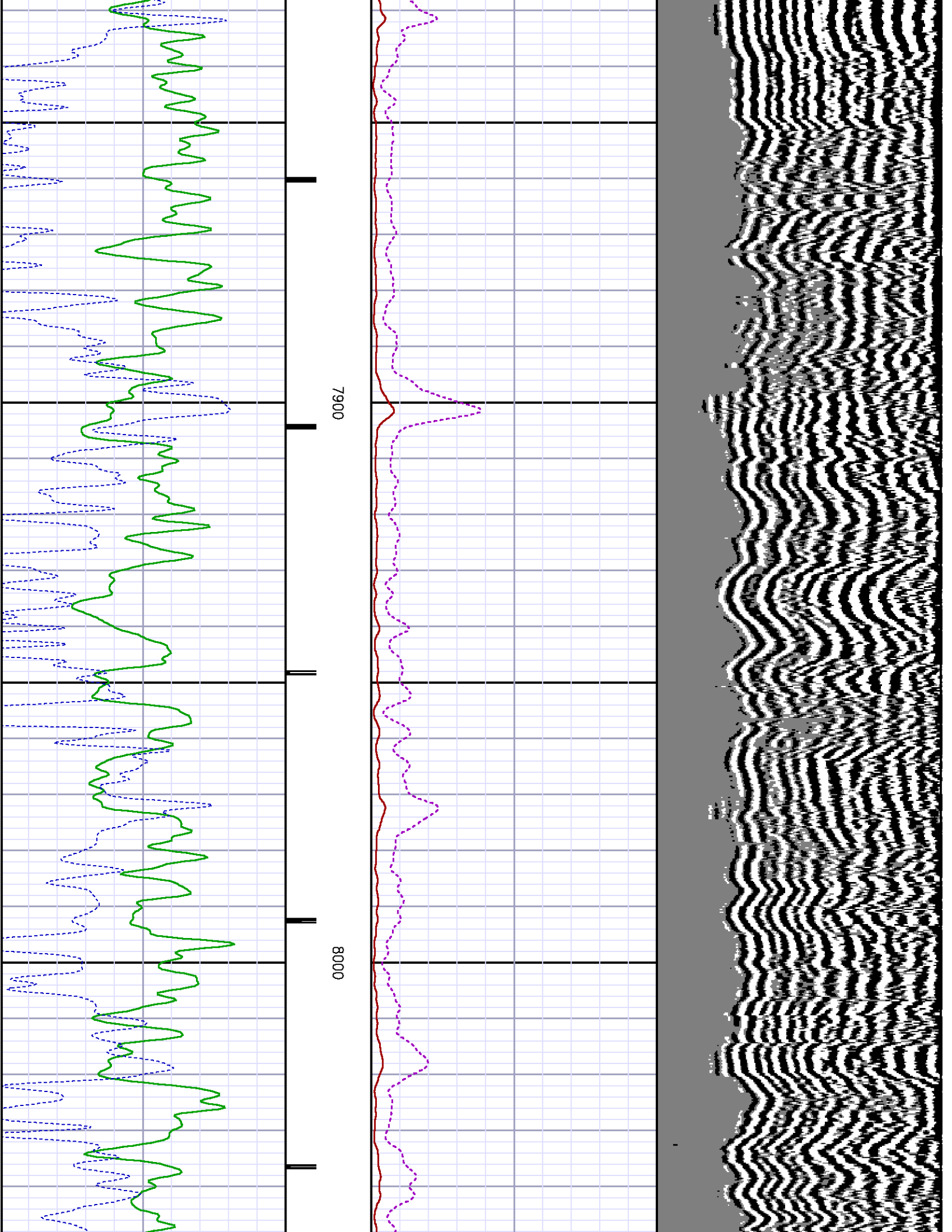


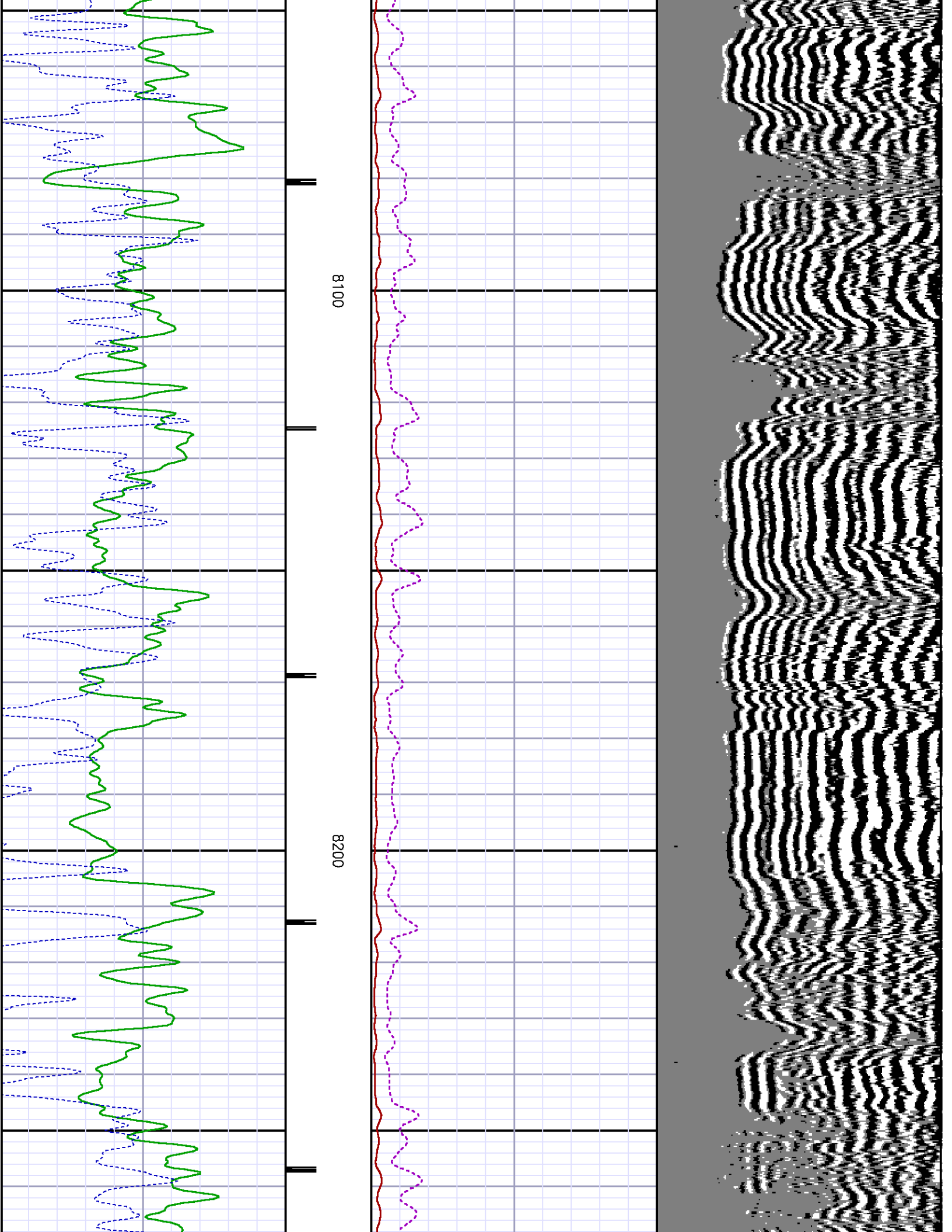


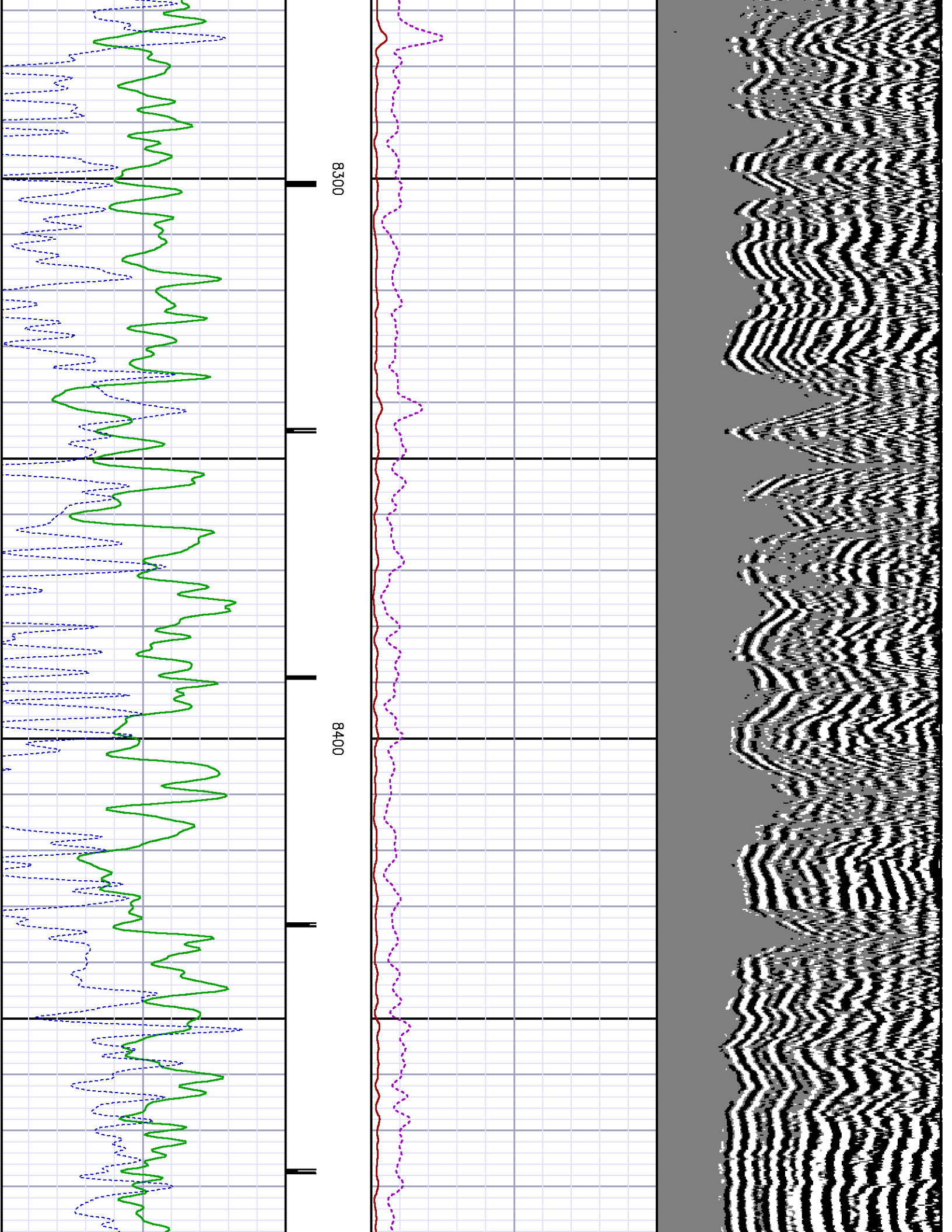


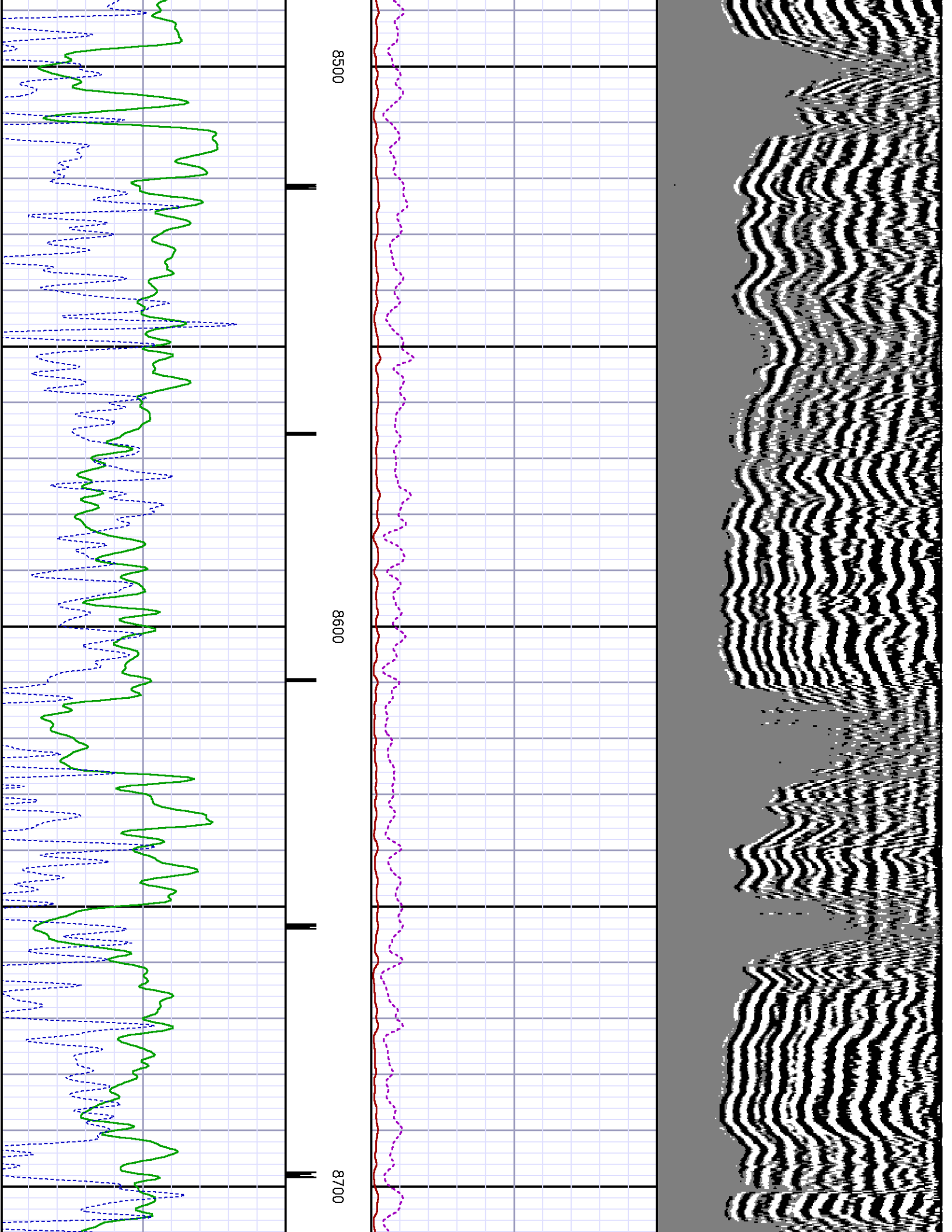


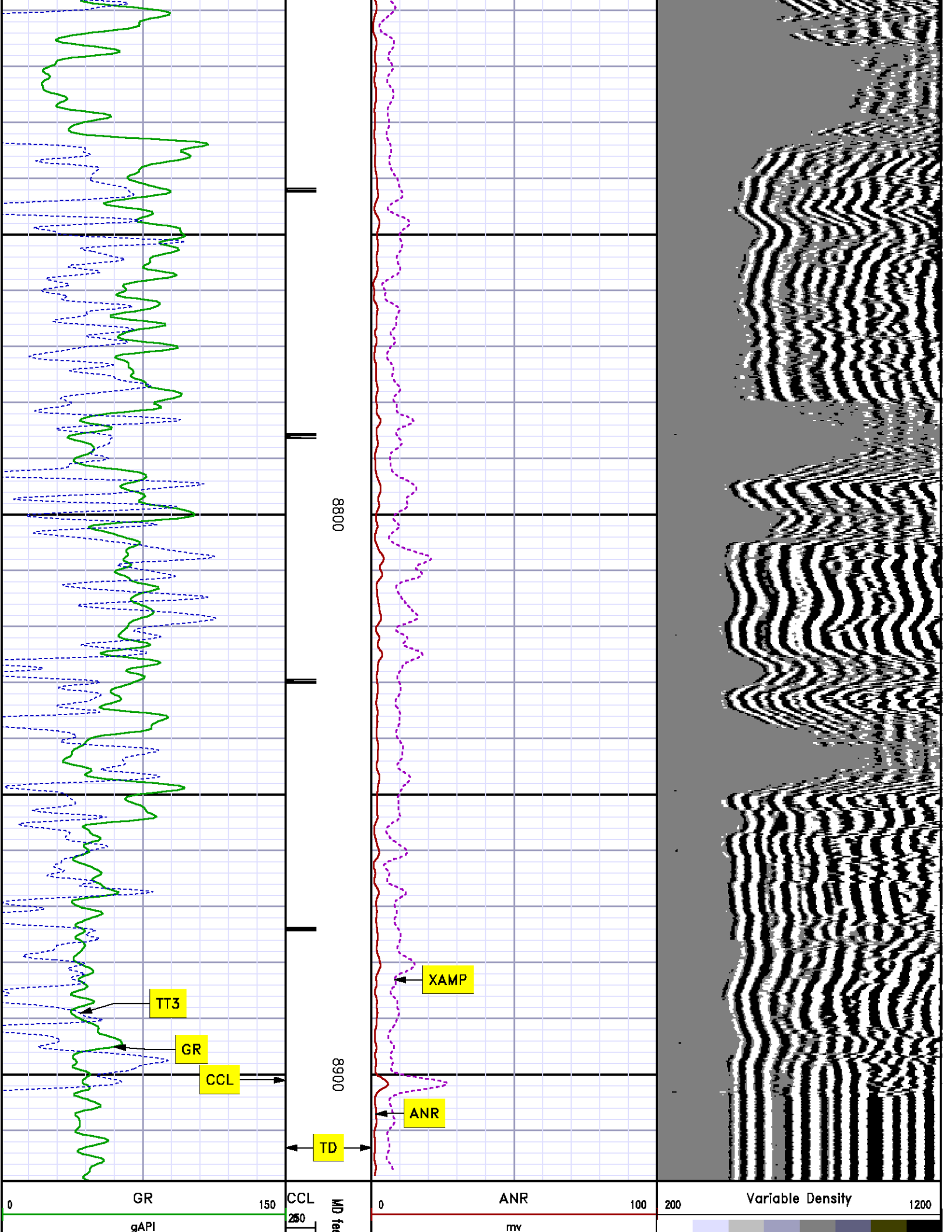












8800

8900

TT3

GR

CCL

TD

XAMP

ANR

GR

150

CCL

MD

250

ANR

100

200

Variable Density

1200

gAPI

mv

280	TT3	180	mv	0	XAMP	20	us
	usec		1:240		mv		

## *SECONDARY PRESENTATION*

### *0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	28.718	8929.500
RAL	Amp Gate Start Near	195.000	usec	28.718	8929.500
RAL	Amp Gate Start Radial	195.000	usec	28.718	8929.500
RAL	Amp Gate Width Far	25.000	usec	28.718	8929.500
RAL	Amp Gate Width Near	25.000	usec	28.718	8929.500
RAL	Amp Gate Width Radial	25.000	usec	28.718	8929.500
RAL	casing od	4.500	inches	28.718	8929.500
RAL	casing wt	11.600	lbm/ft	28.718	8929.500
RAL	FB Start Far	291.900	usec	28.718	8929.500
RAL	FB Start Near	180.000	usec	28.718	8929.500
RAL	FB Start Radial	180.000	usec	28.718	8929.500
RAL	FB Thresh Far	10.000	mv	28.718	8929.500
RAL	FB Thresh Near	4.000	mv	28.718	8929.500
RAL	FB Thresh Radial	4.000	mv	28.718	8929.500
RAL	Fluid Travel Time	200.000	usec/ft	28.718	8929.500

### DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4		
		AR5	AR6	AR7	AR8	CHV	FPR2		
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3		
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP		
1426XA	-10.040	AFAR	SIG	TT5					
1355XA	-5.620	CCL							
1355XA	-1.500	GR							
1355XA	0.000	TEMP							

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

Well : HOEPPLI RWF 24-36

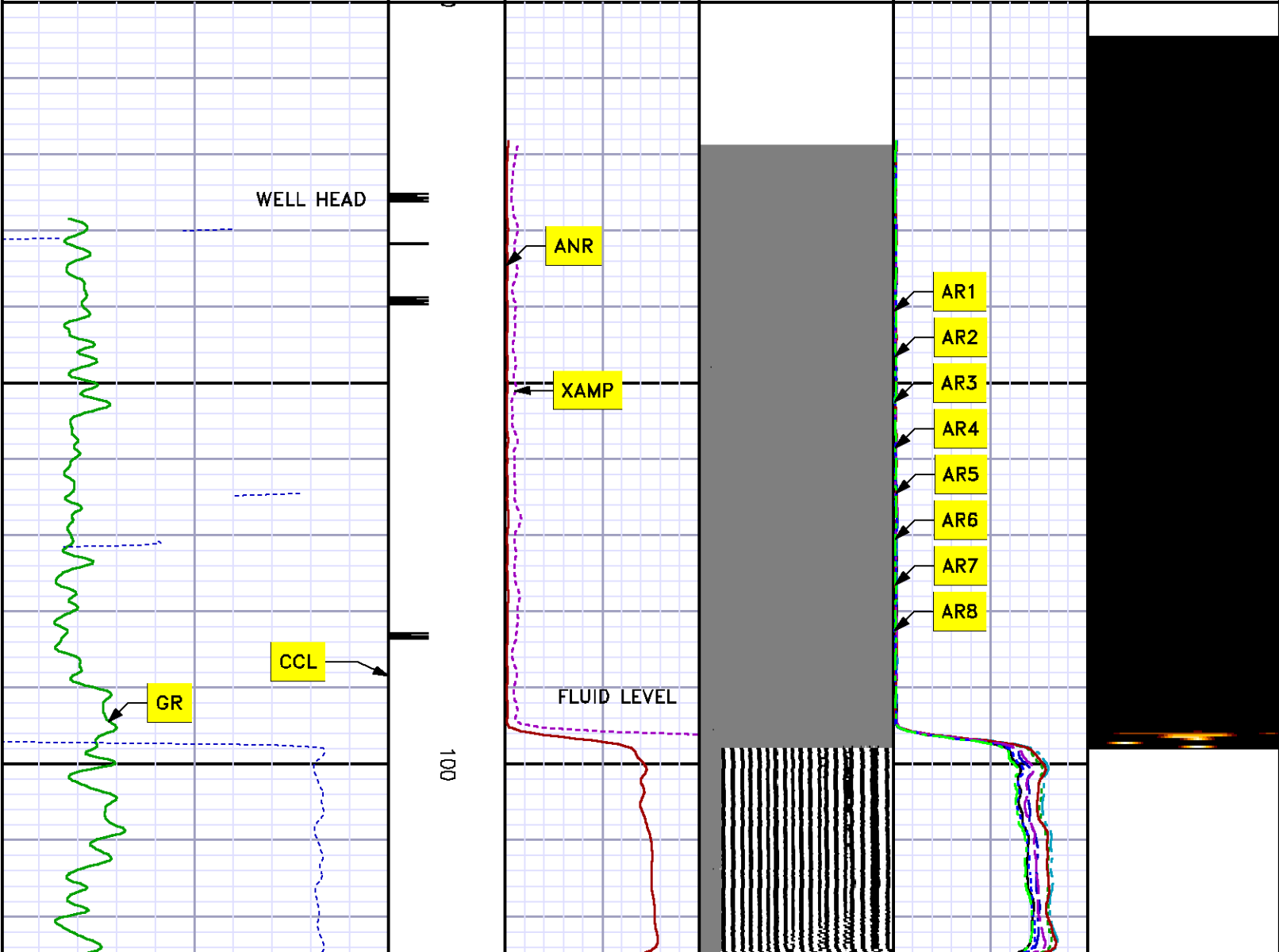
File Name : d:\welldata\wpx energy\rwf 24-36\ral24\main .xtf

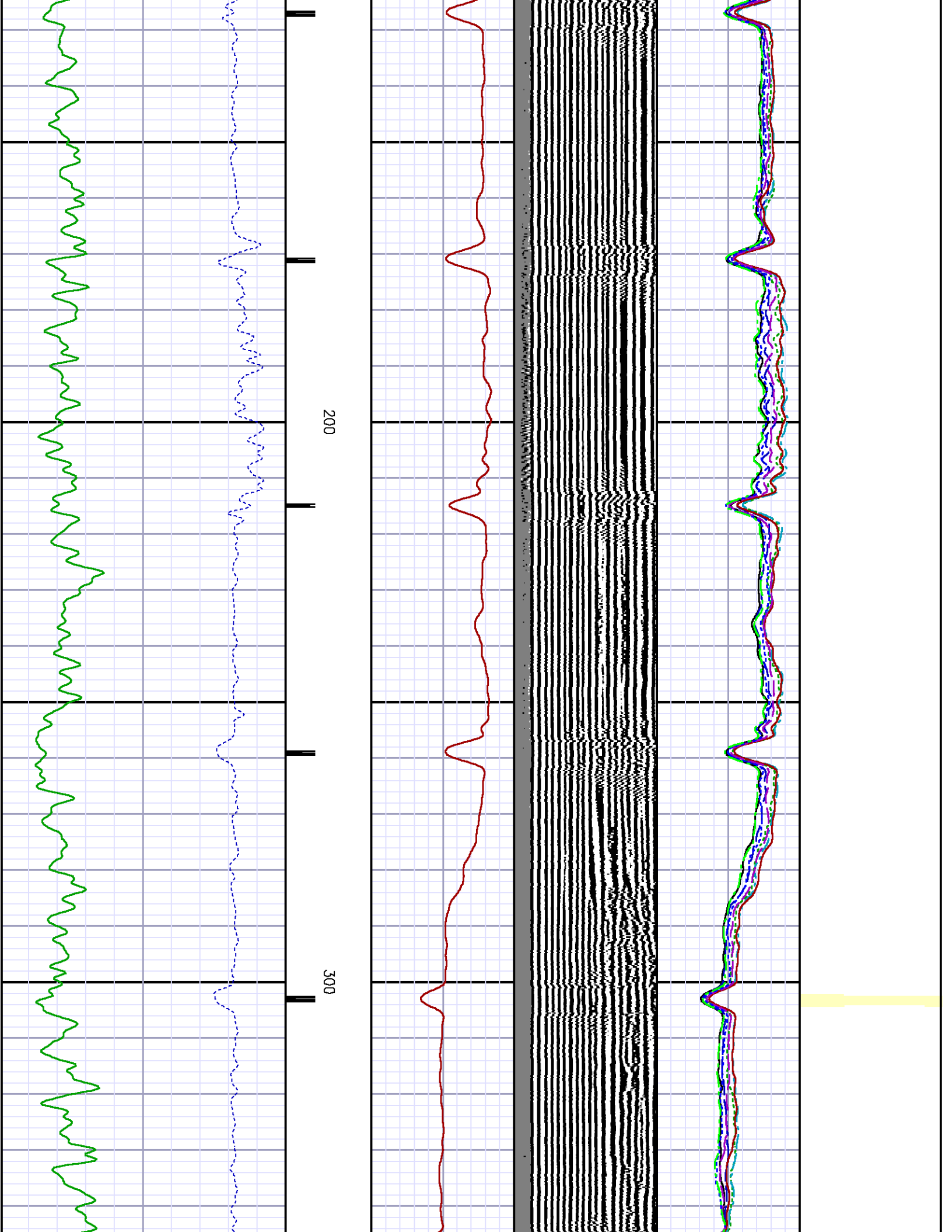
Mode : PlotMgr 5.4.504

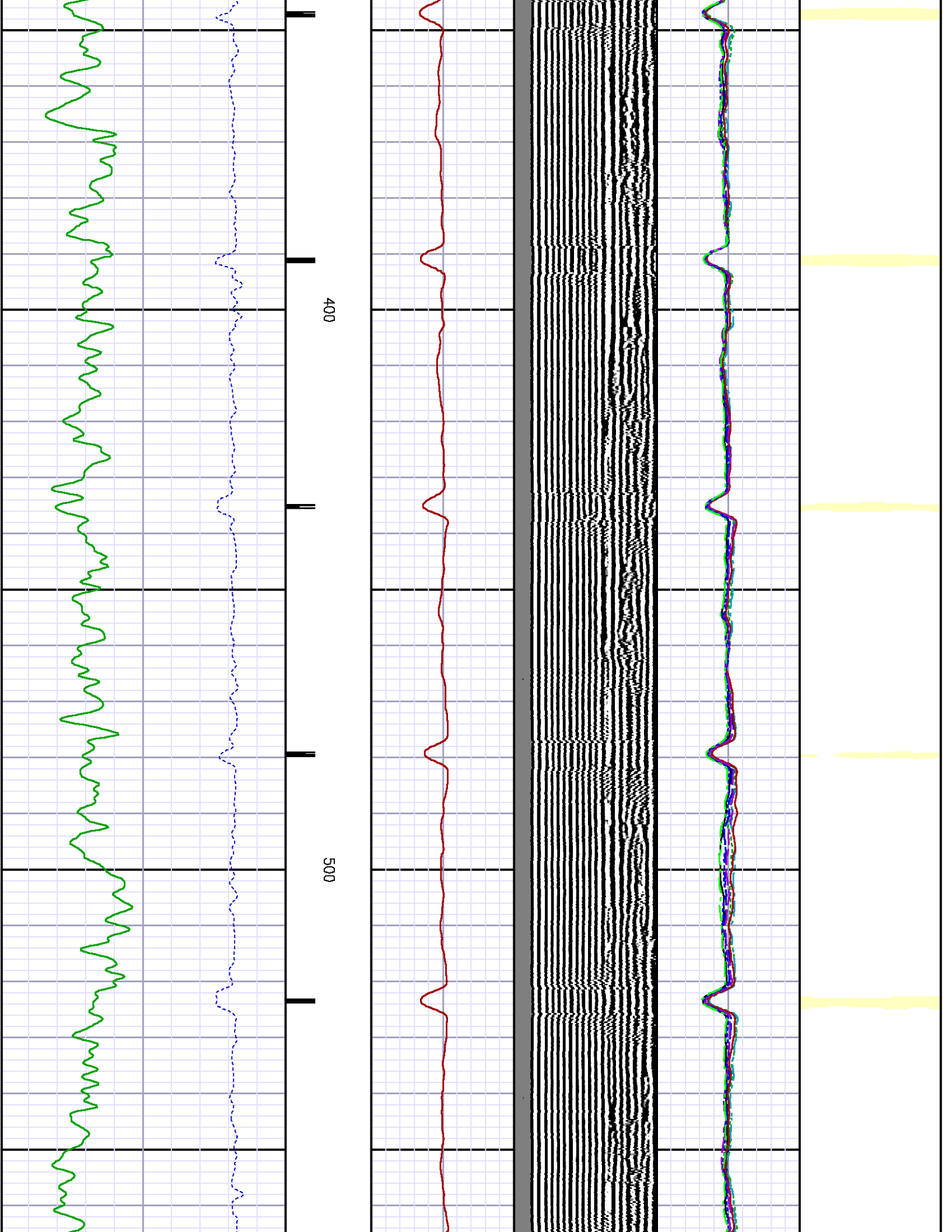
Interval : 0.00 - 8919.00 feet UP

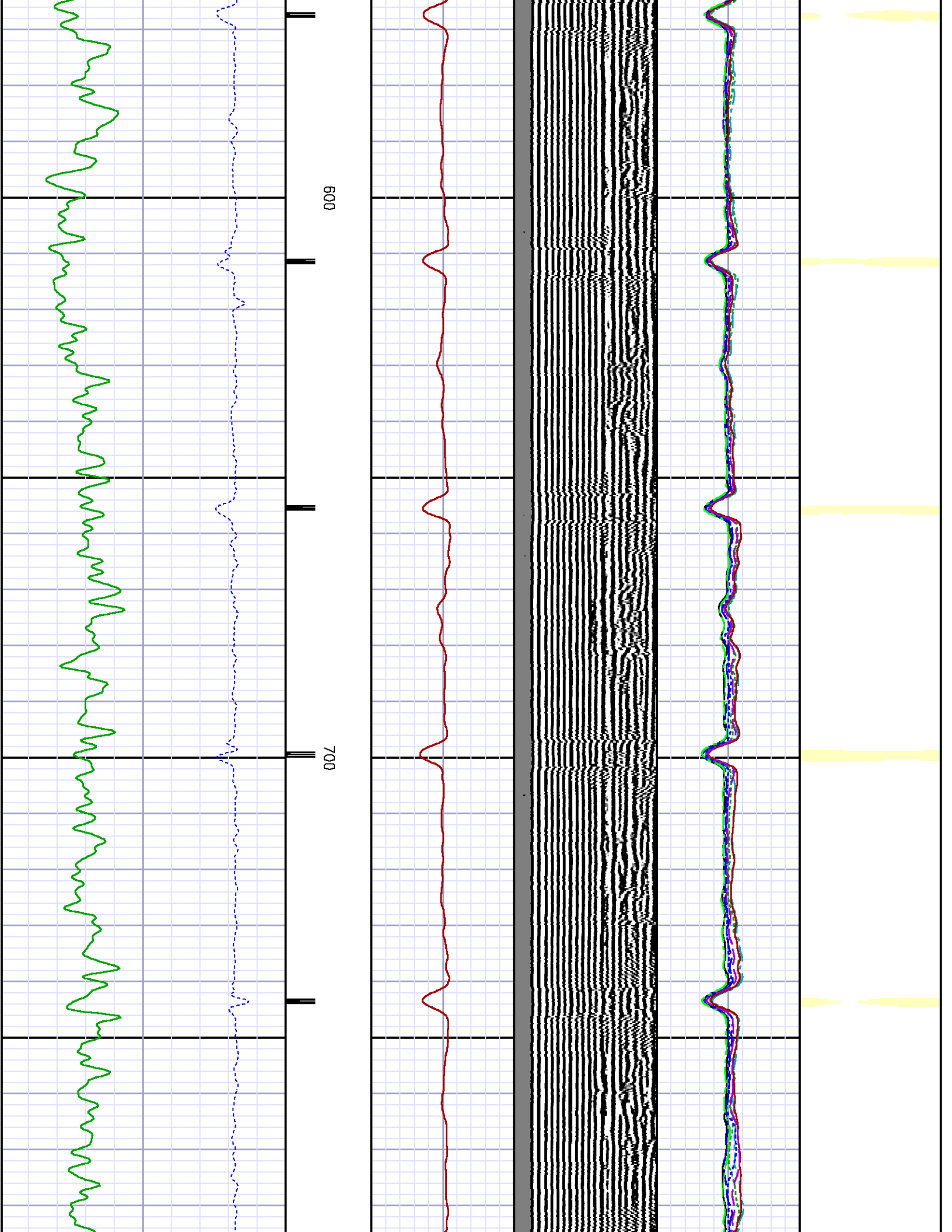
Created : 1/24/2013 12:02:12 PM

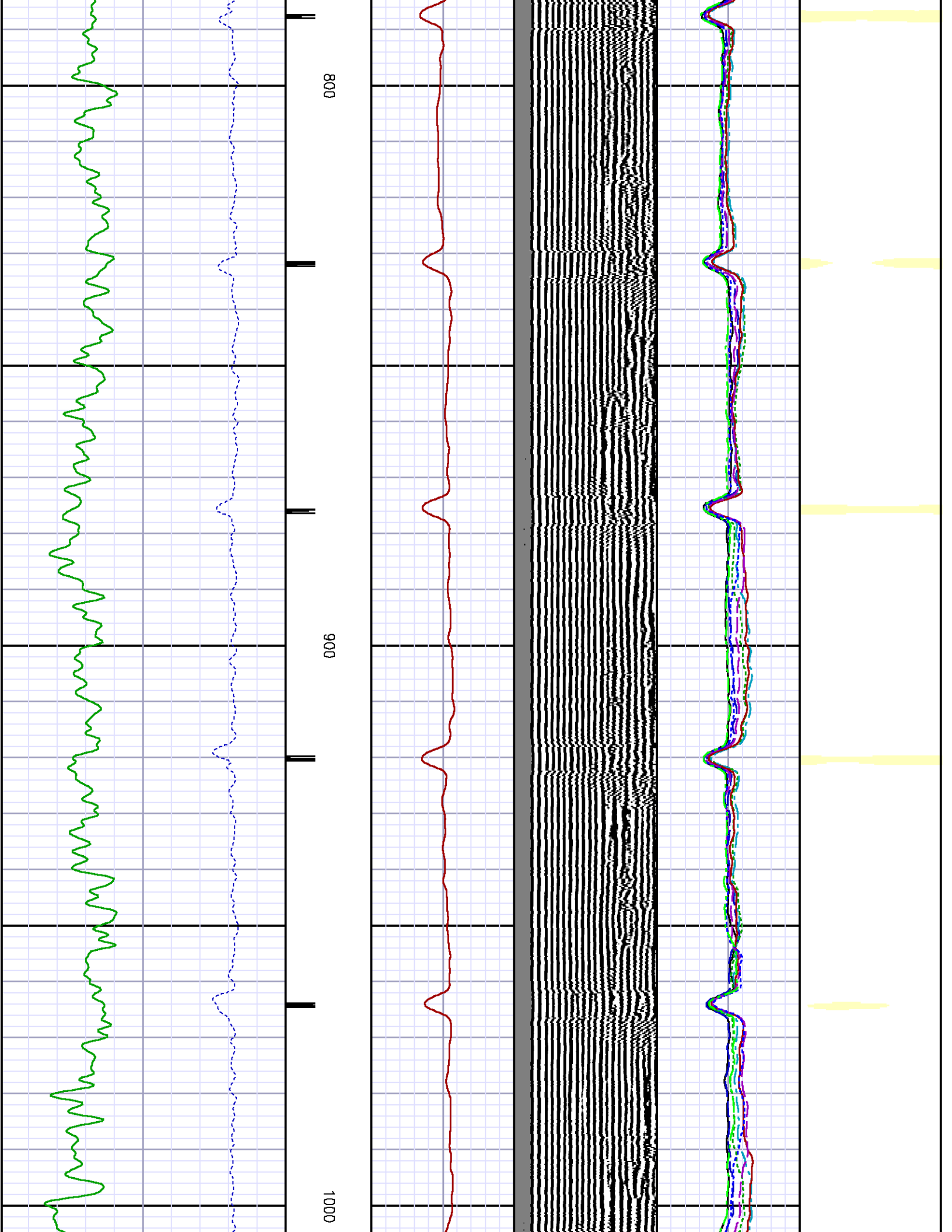
0	GR	150	CCL	MD feet 1:240	0	ANR	100	Variable Density	0	AR1	100	0	PBMAP	360
	gAPI		280			mv		200		AR2	100	80		20
280	TT3	180	mv		0	XAMP	20	us		AR3	100			
	usec					mv				AR4	100			
										AR5	100			
										AR6	100			
										AR7	100			
										AR8	100			

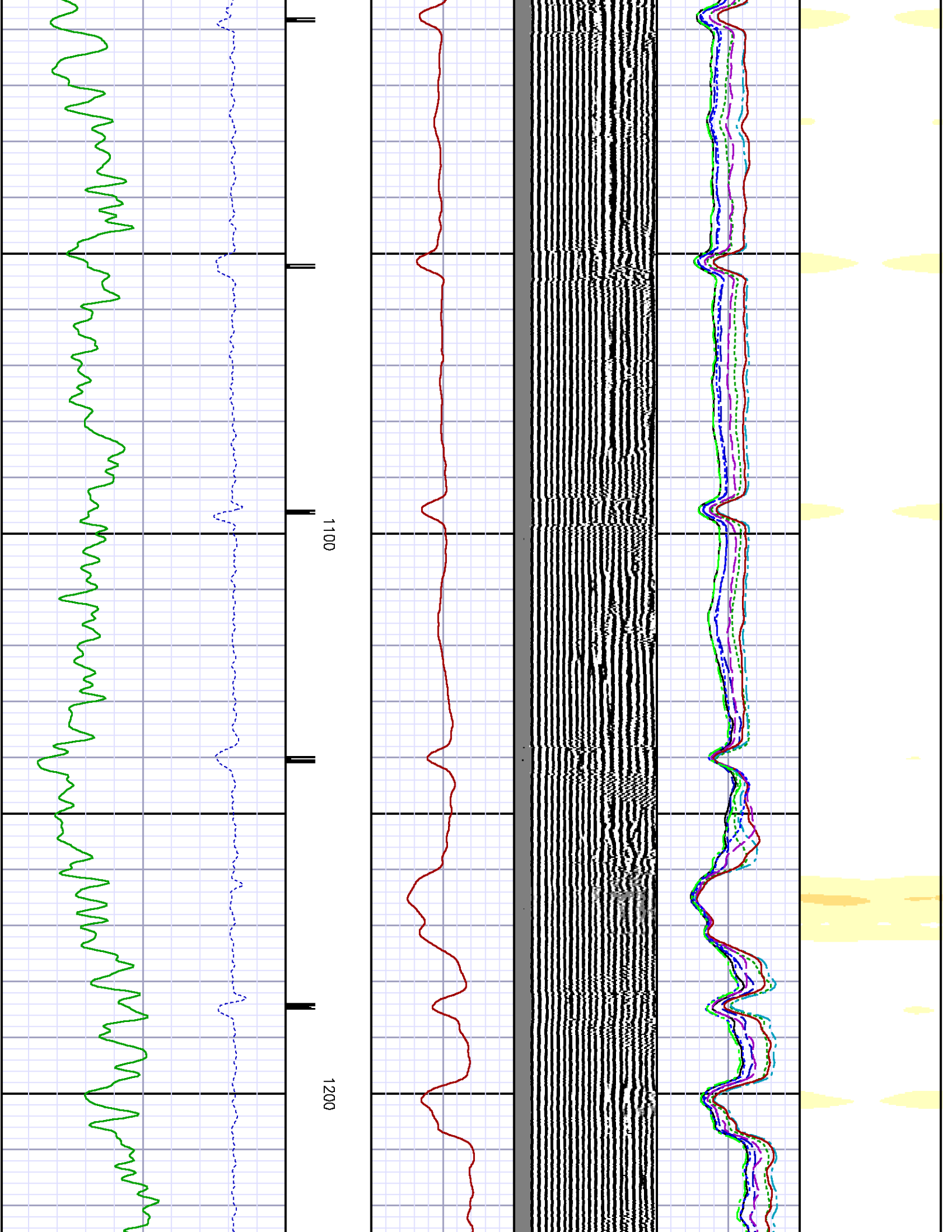


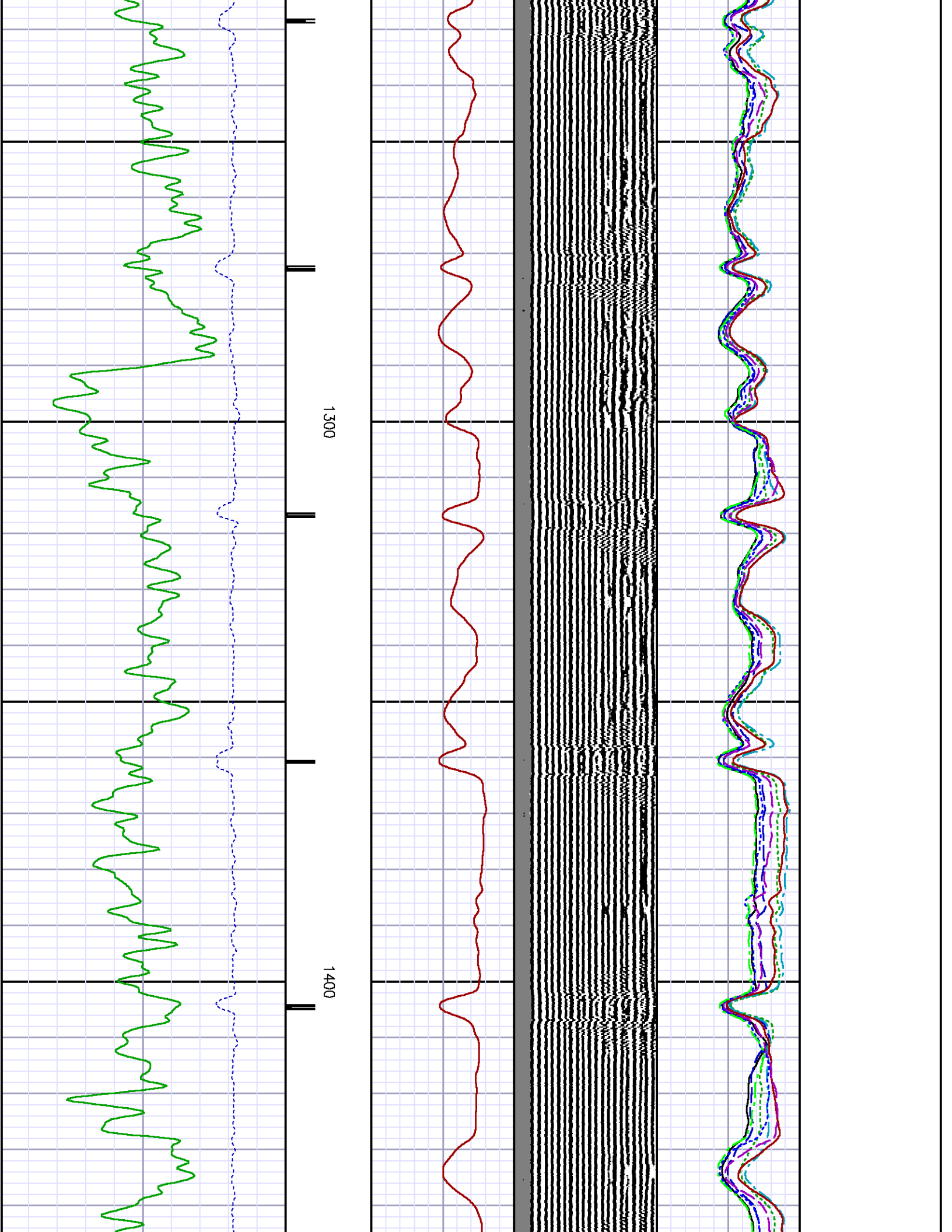


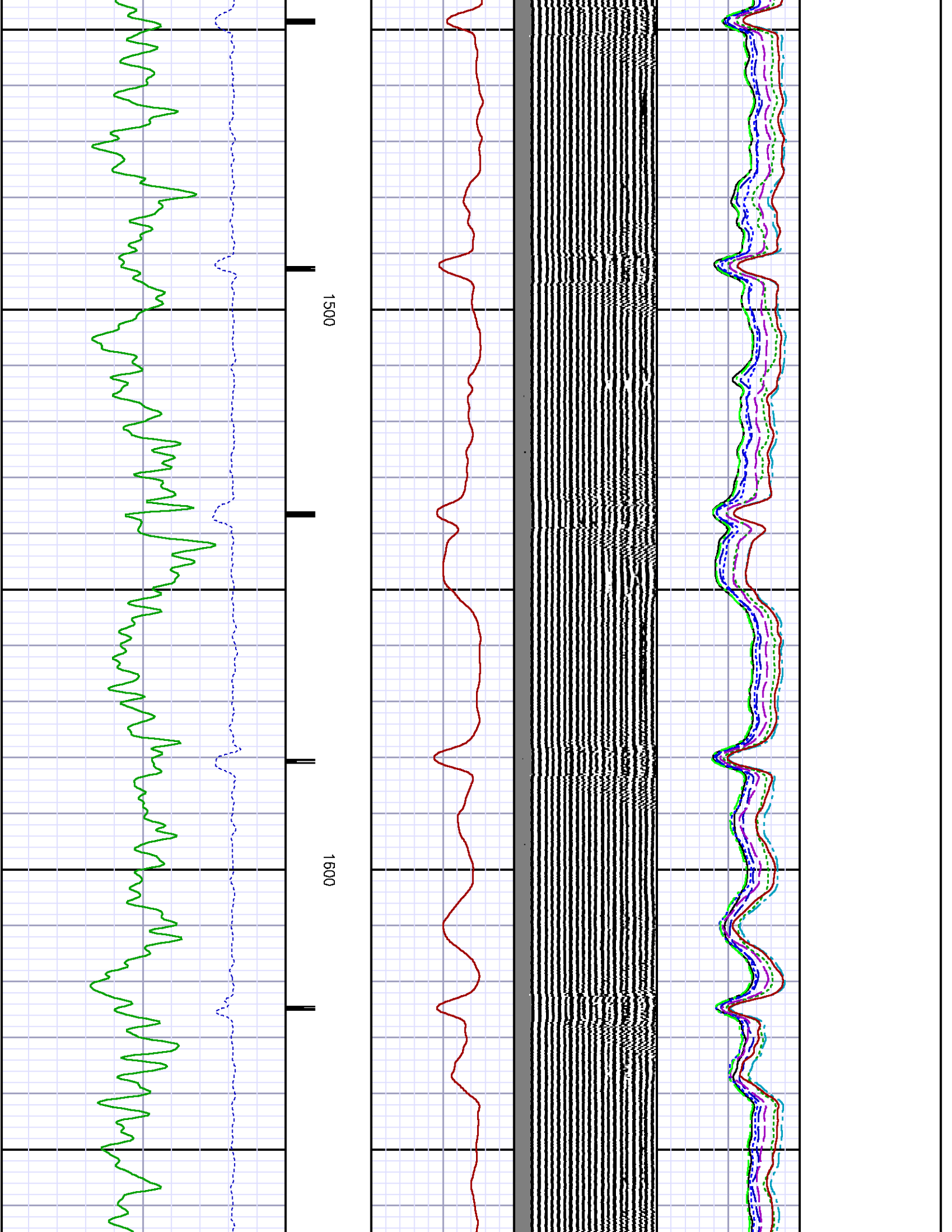


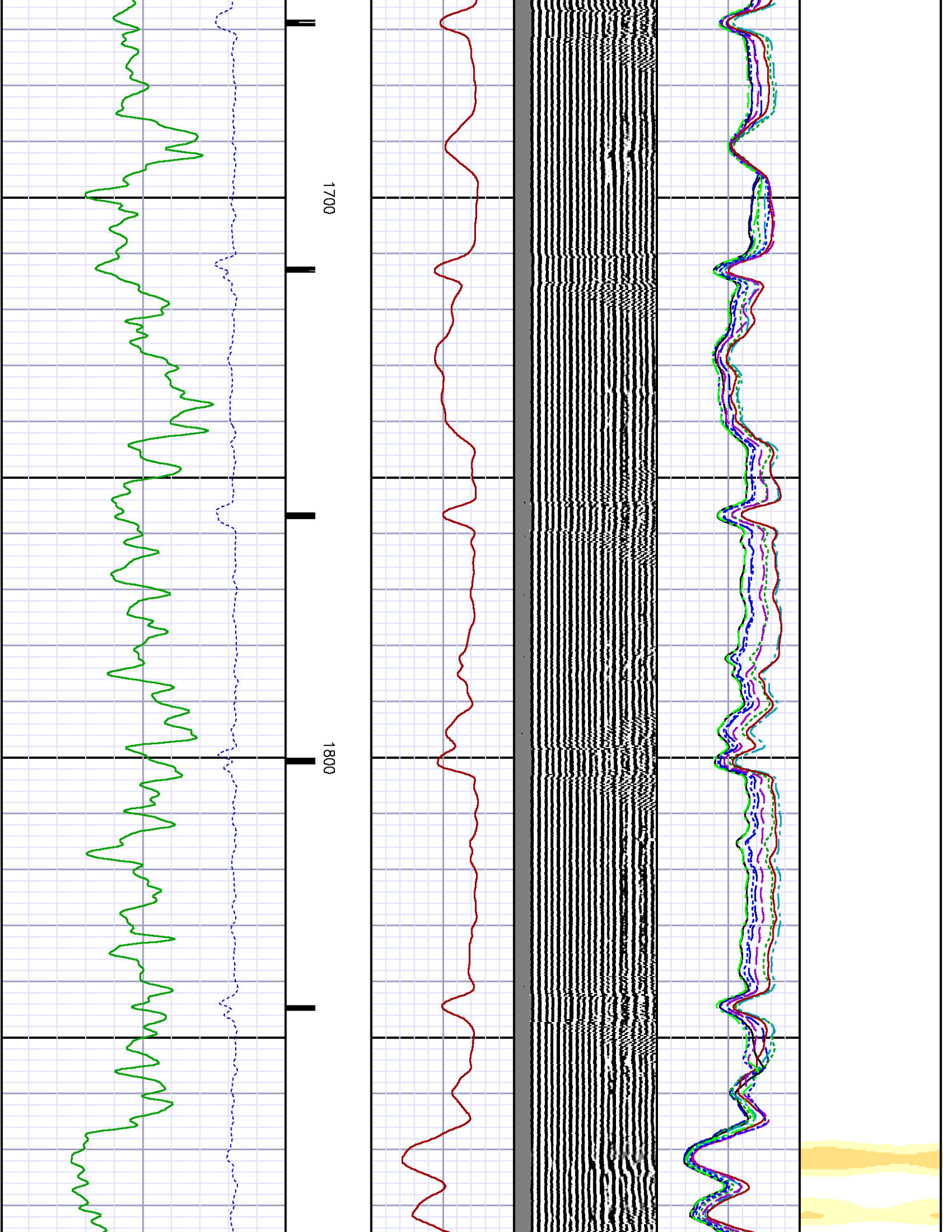


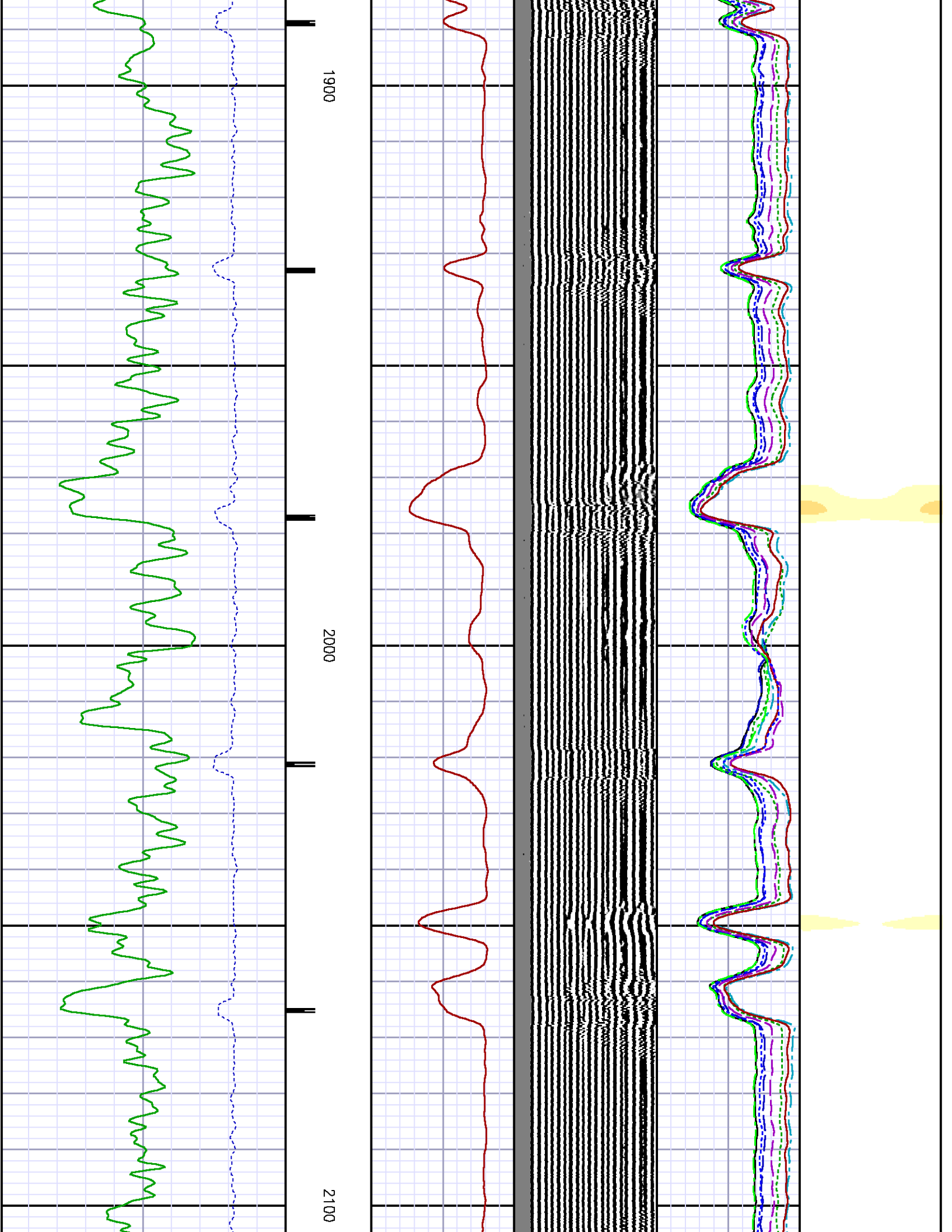


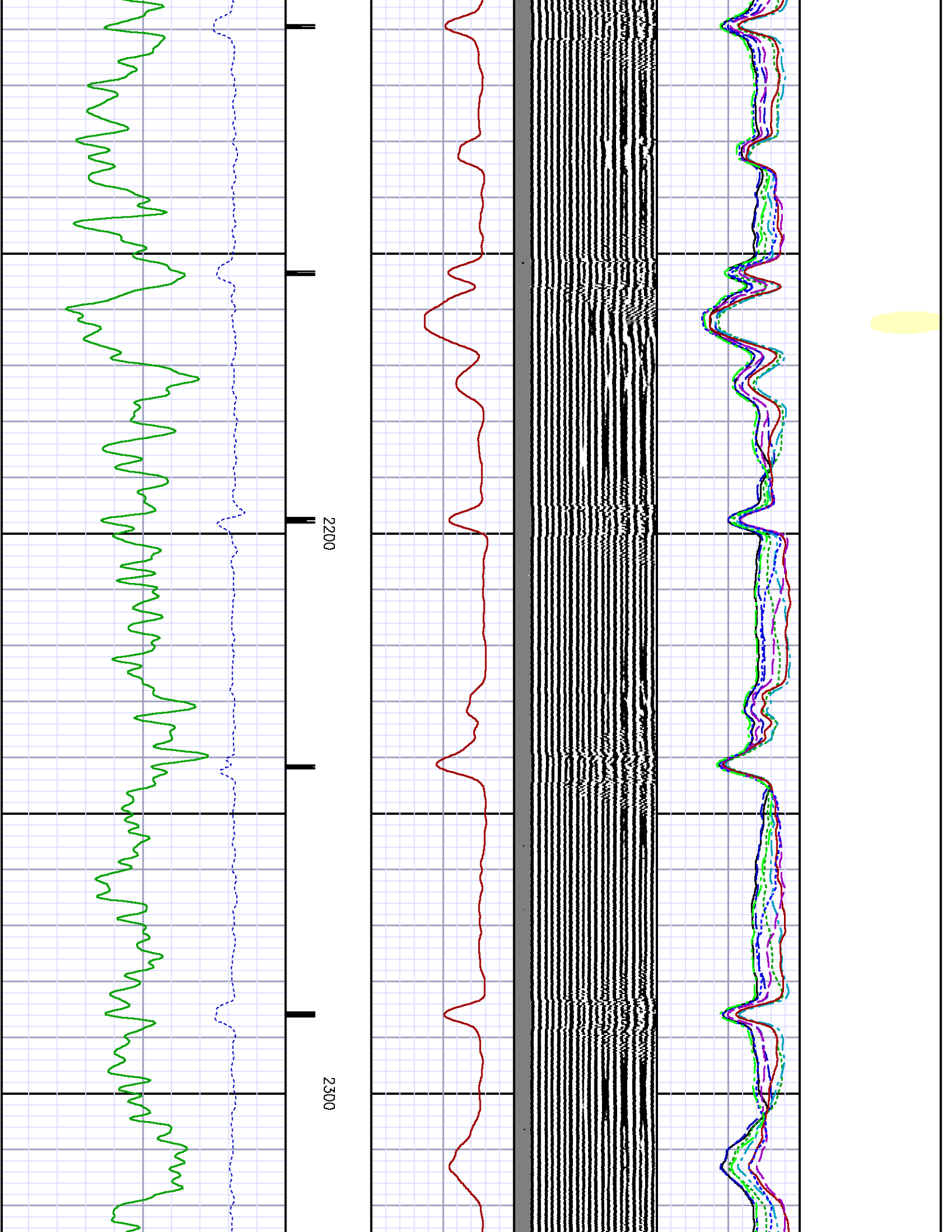


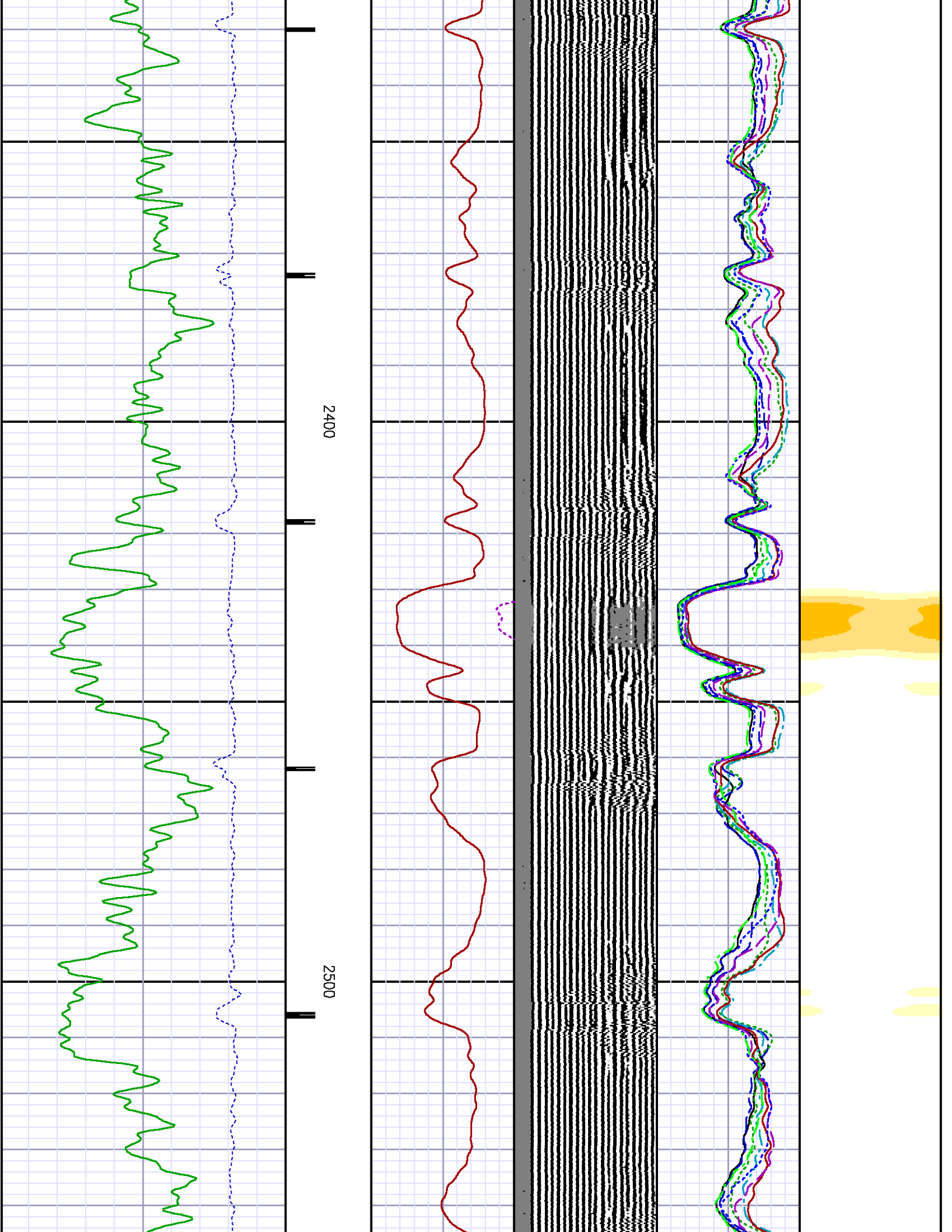


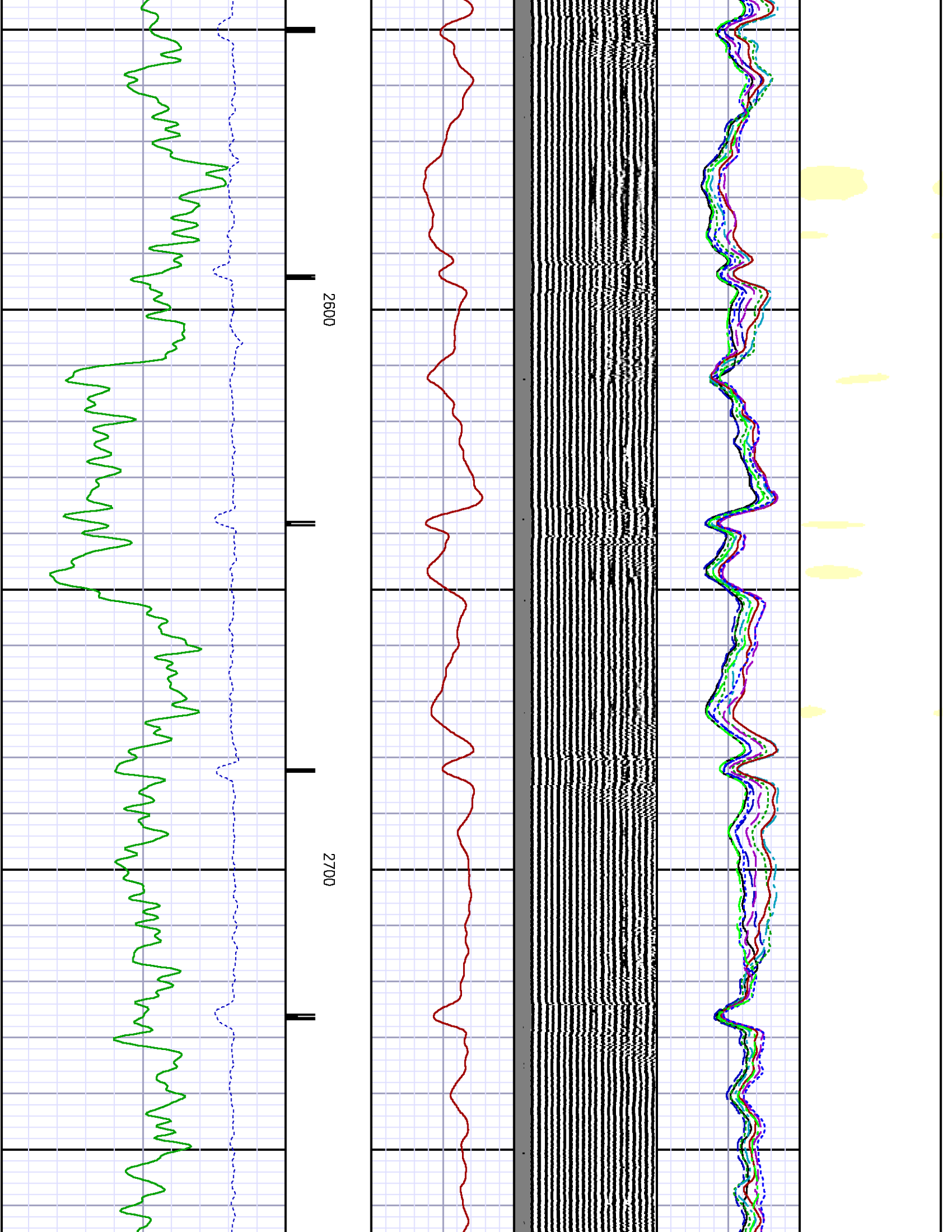


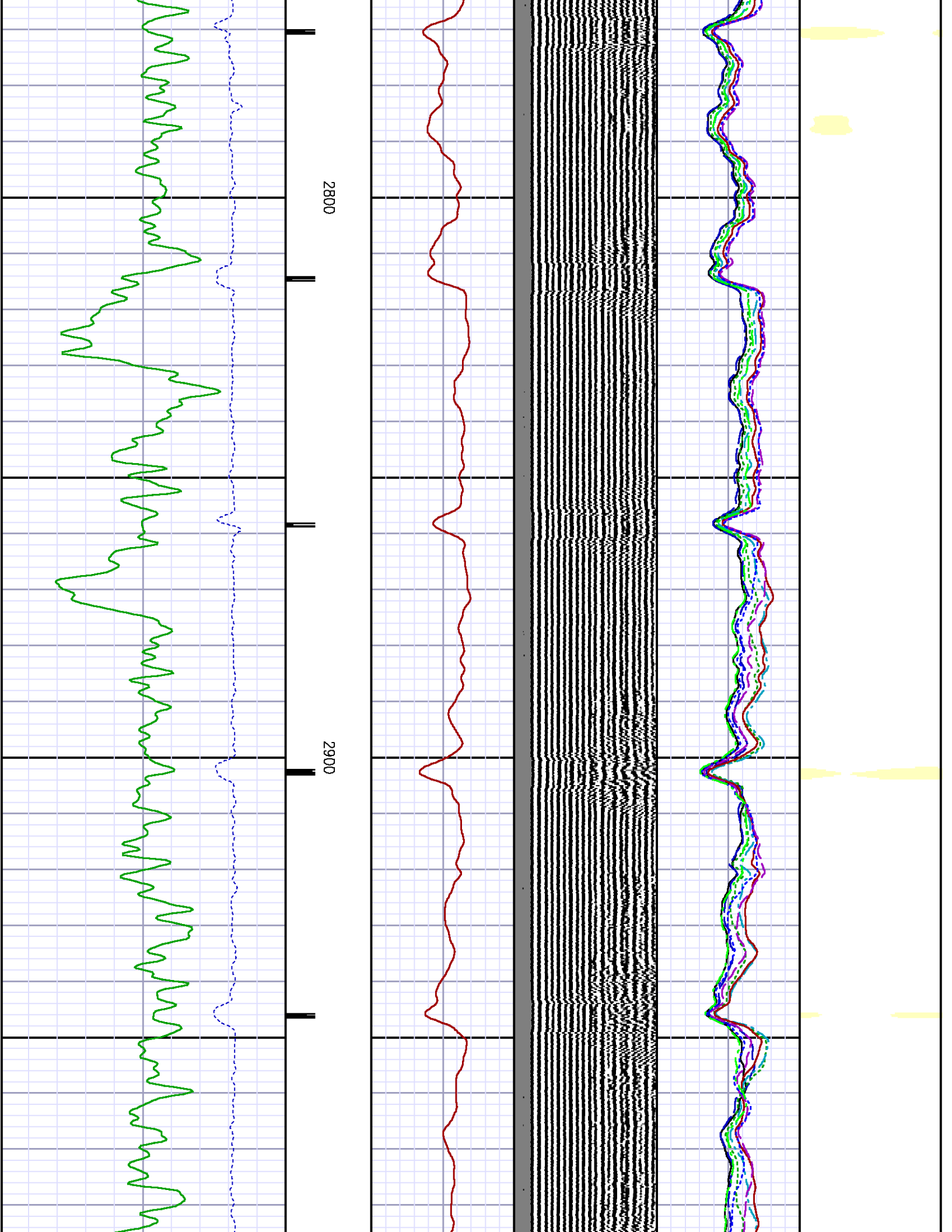


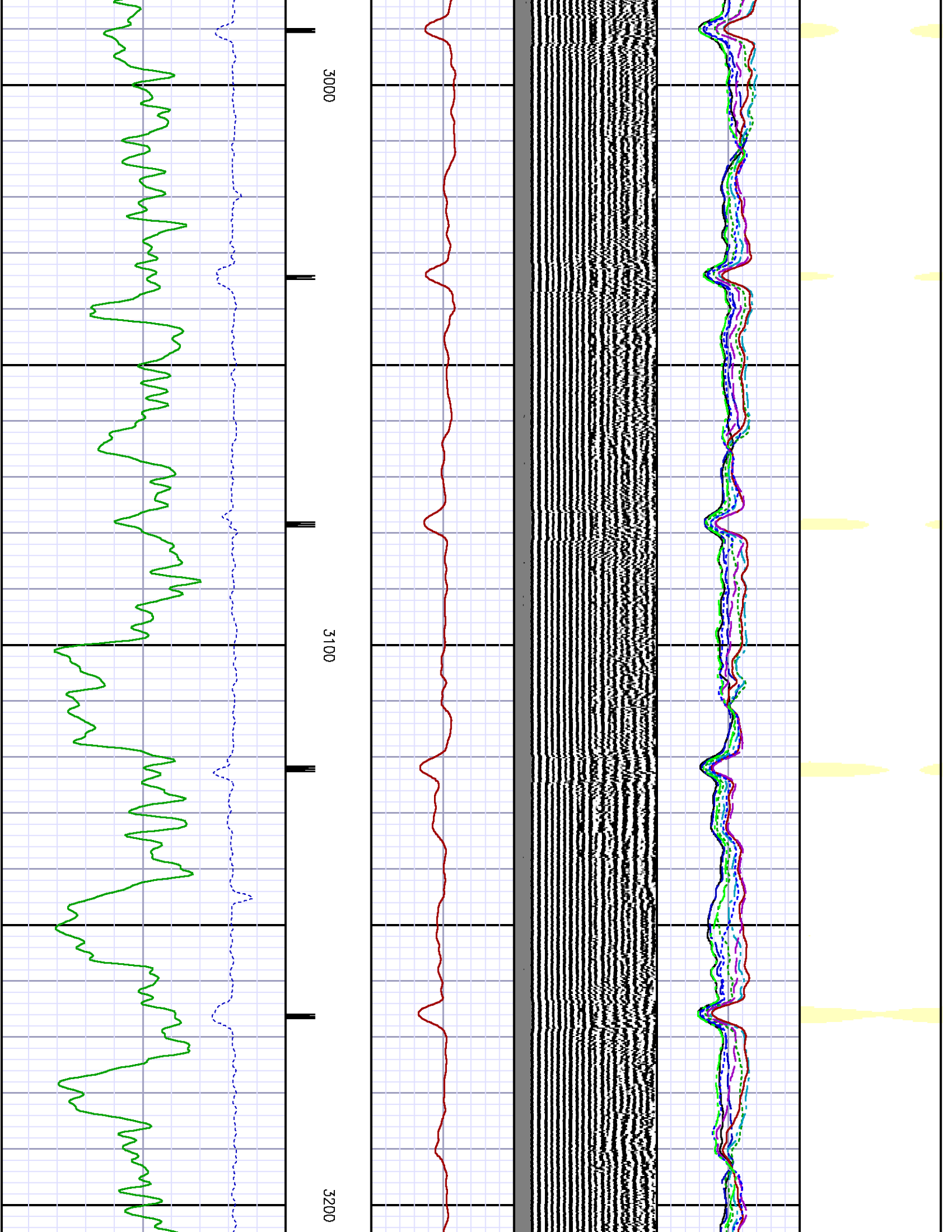


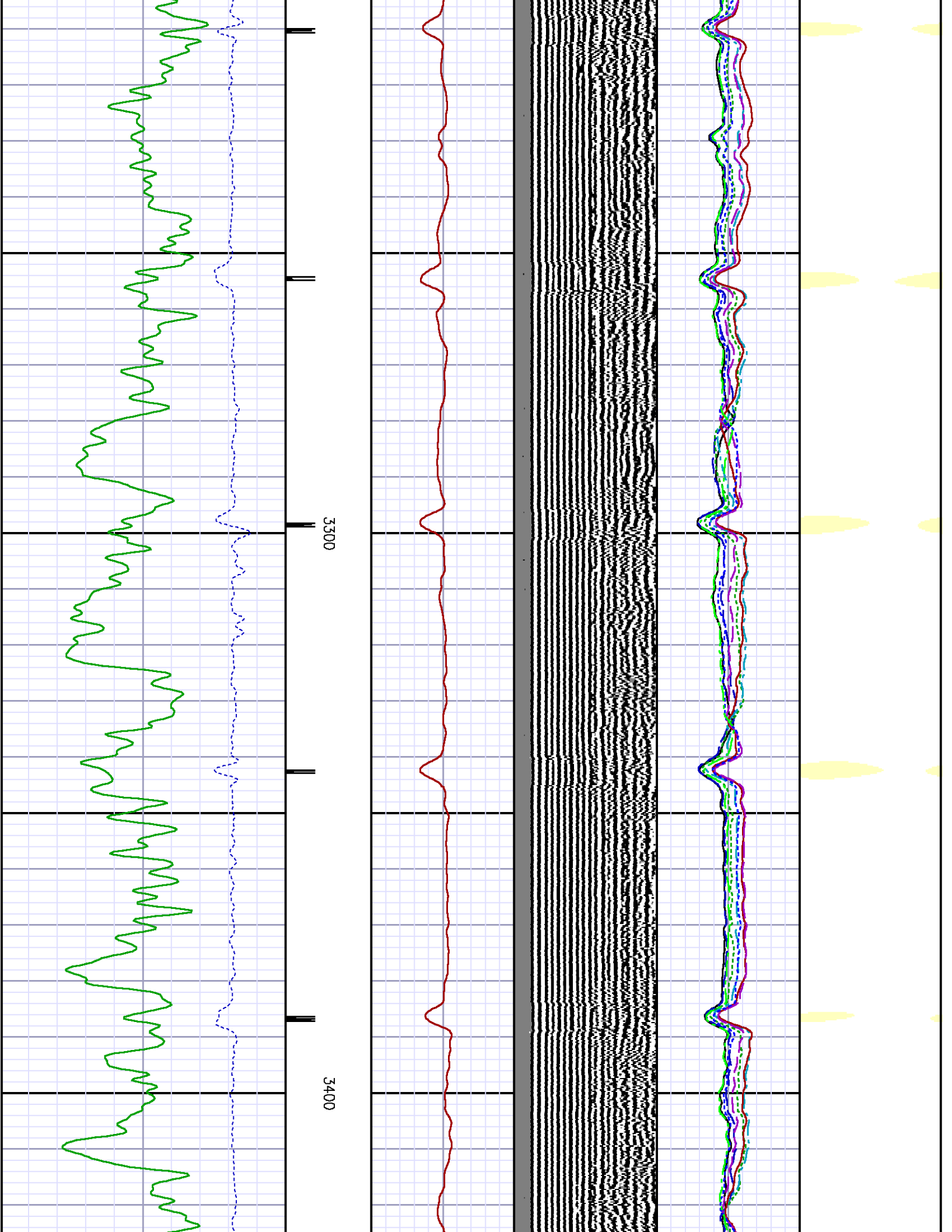


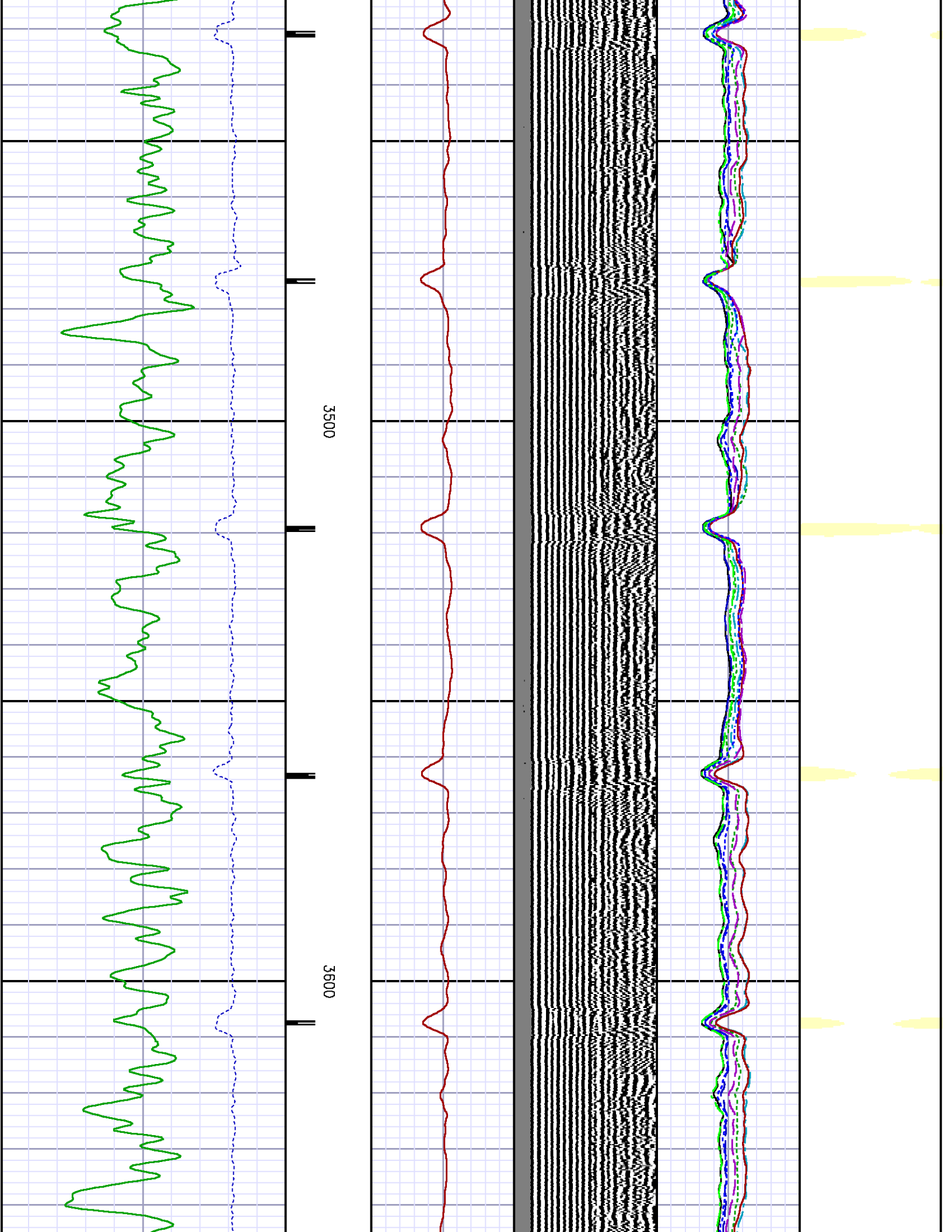


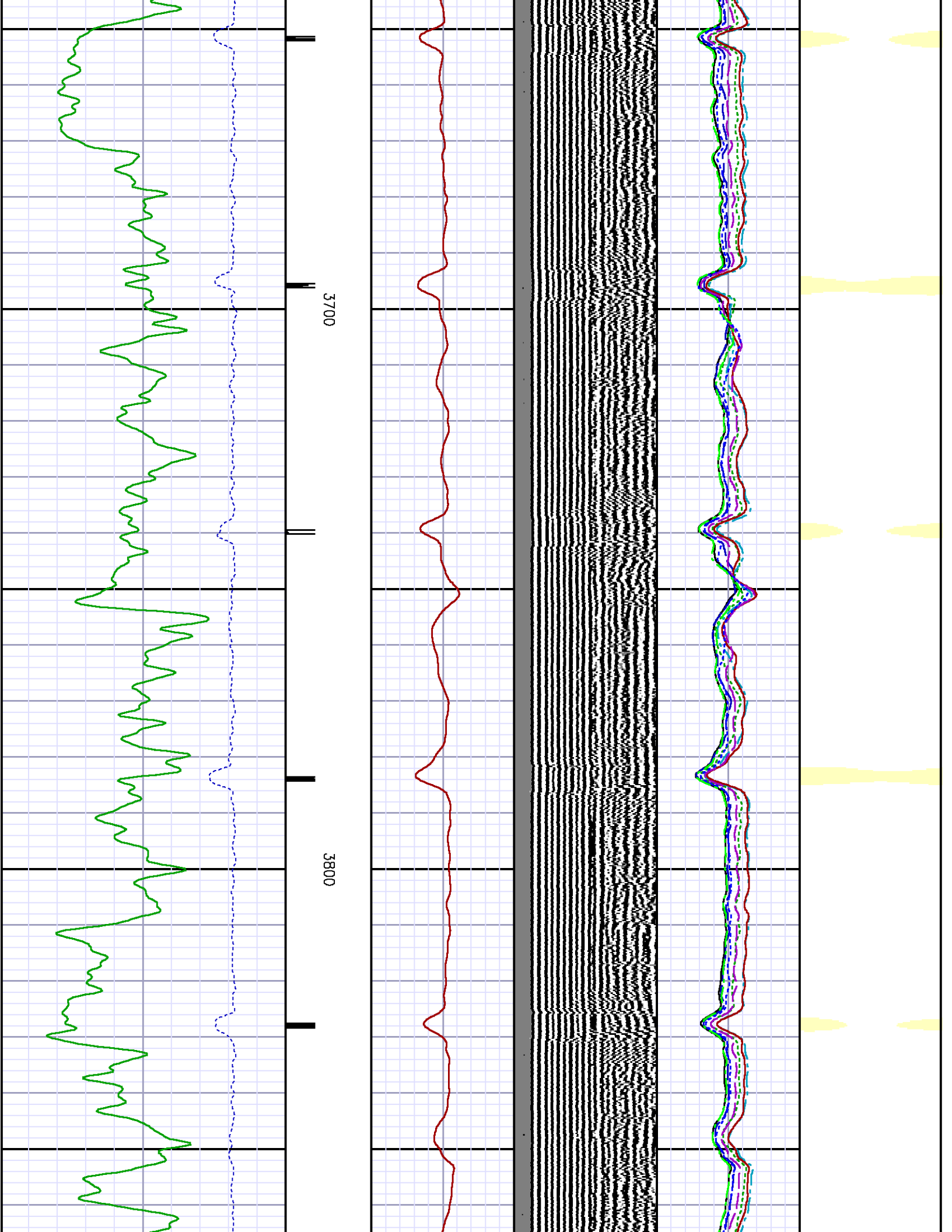


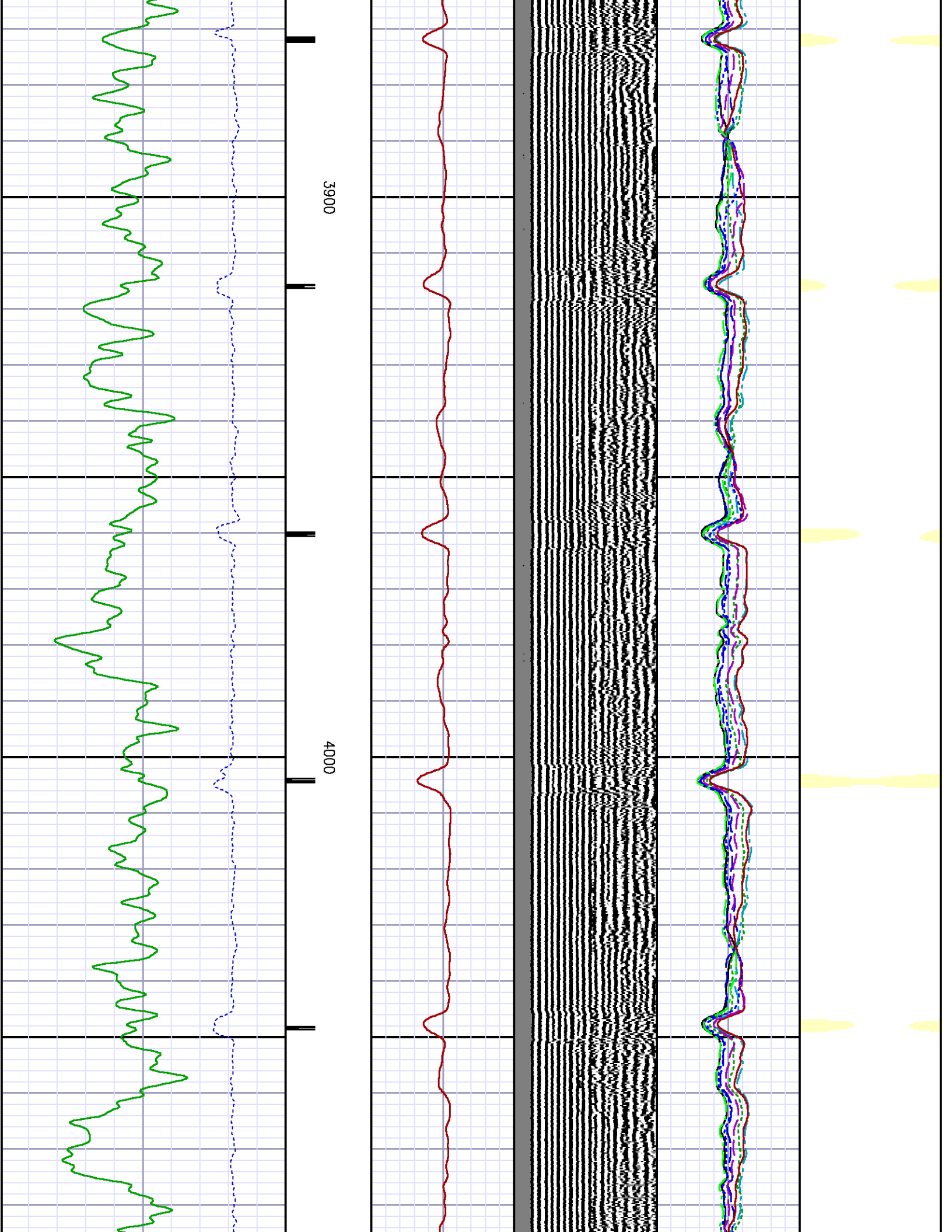


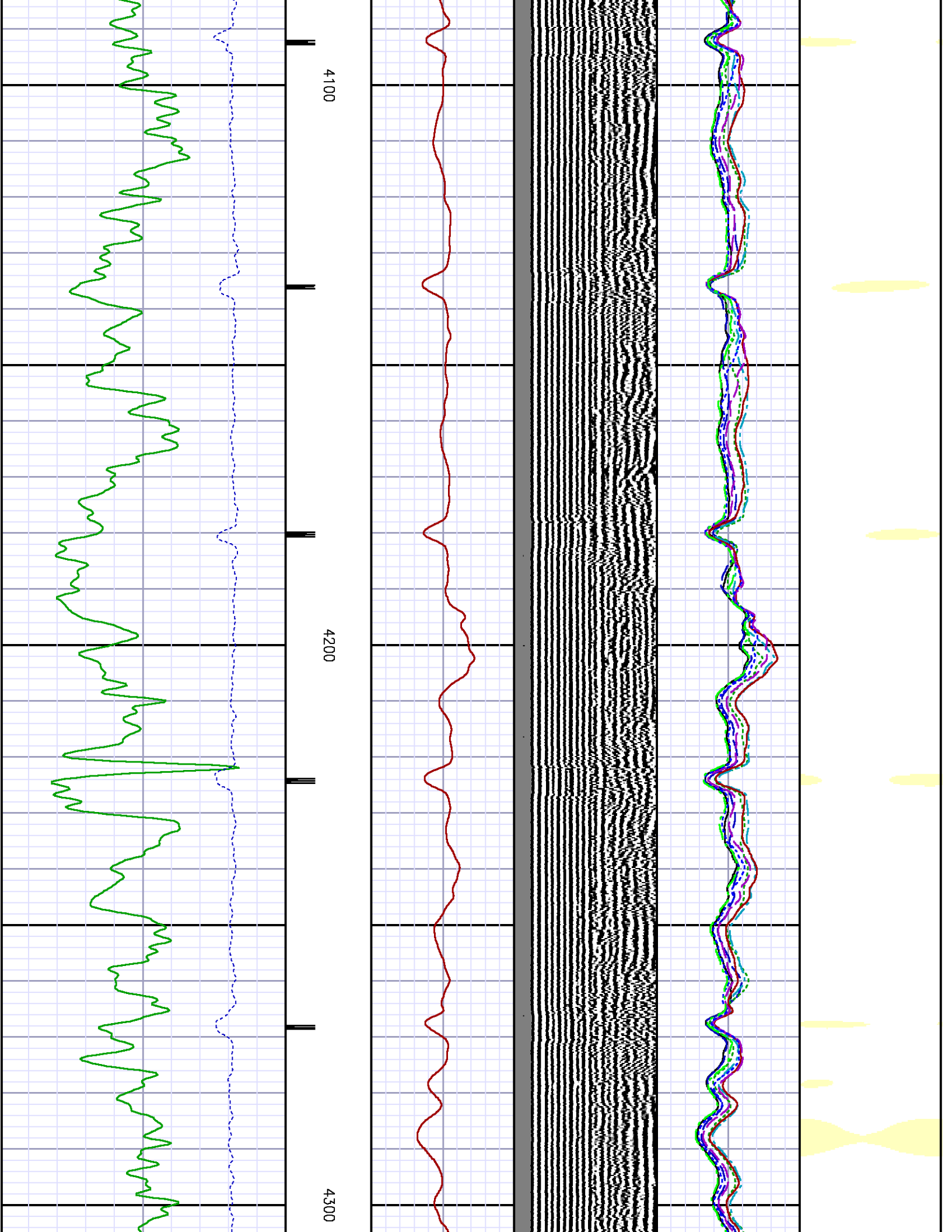


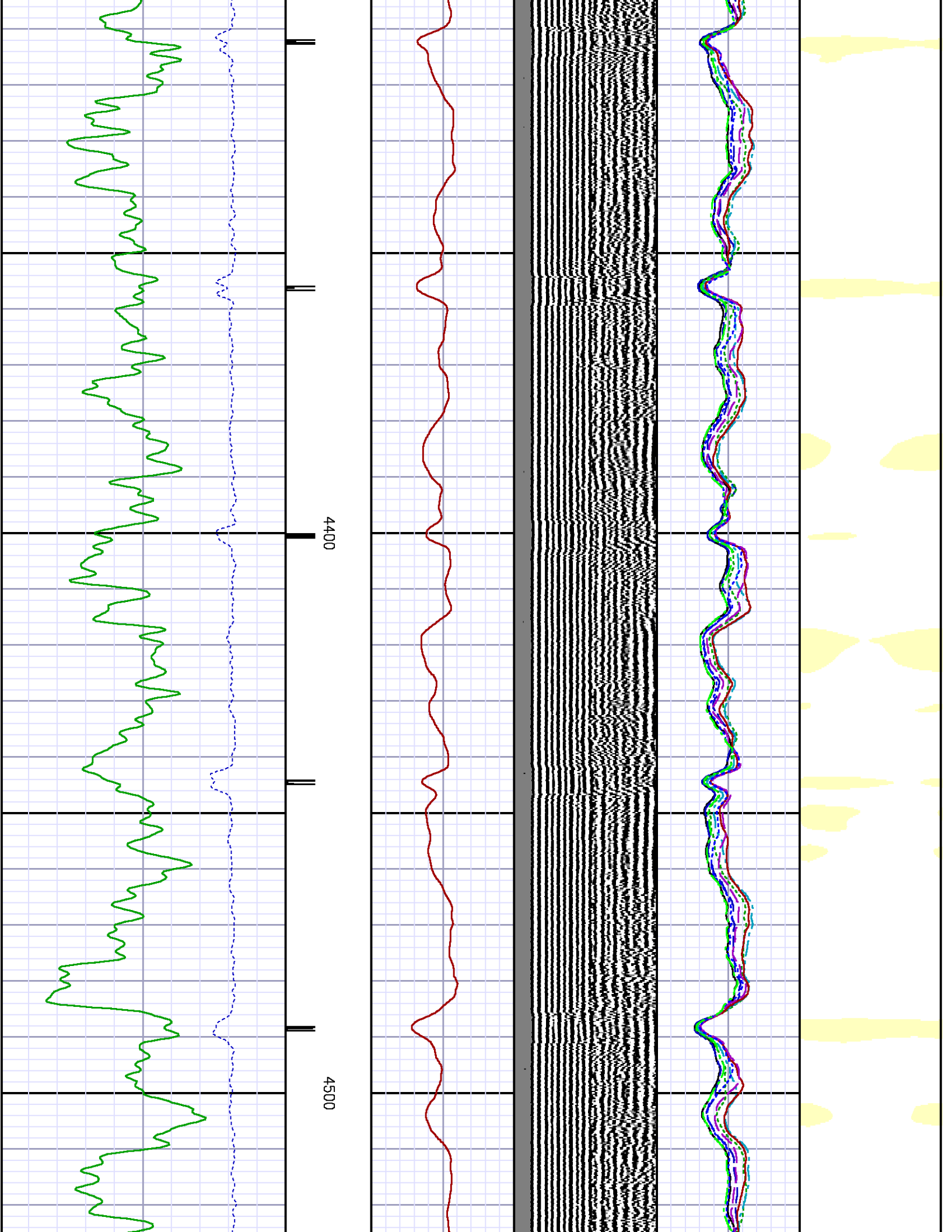


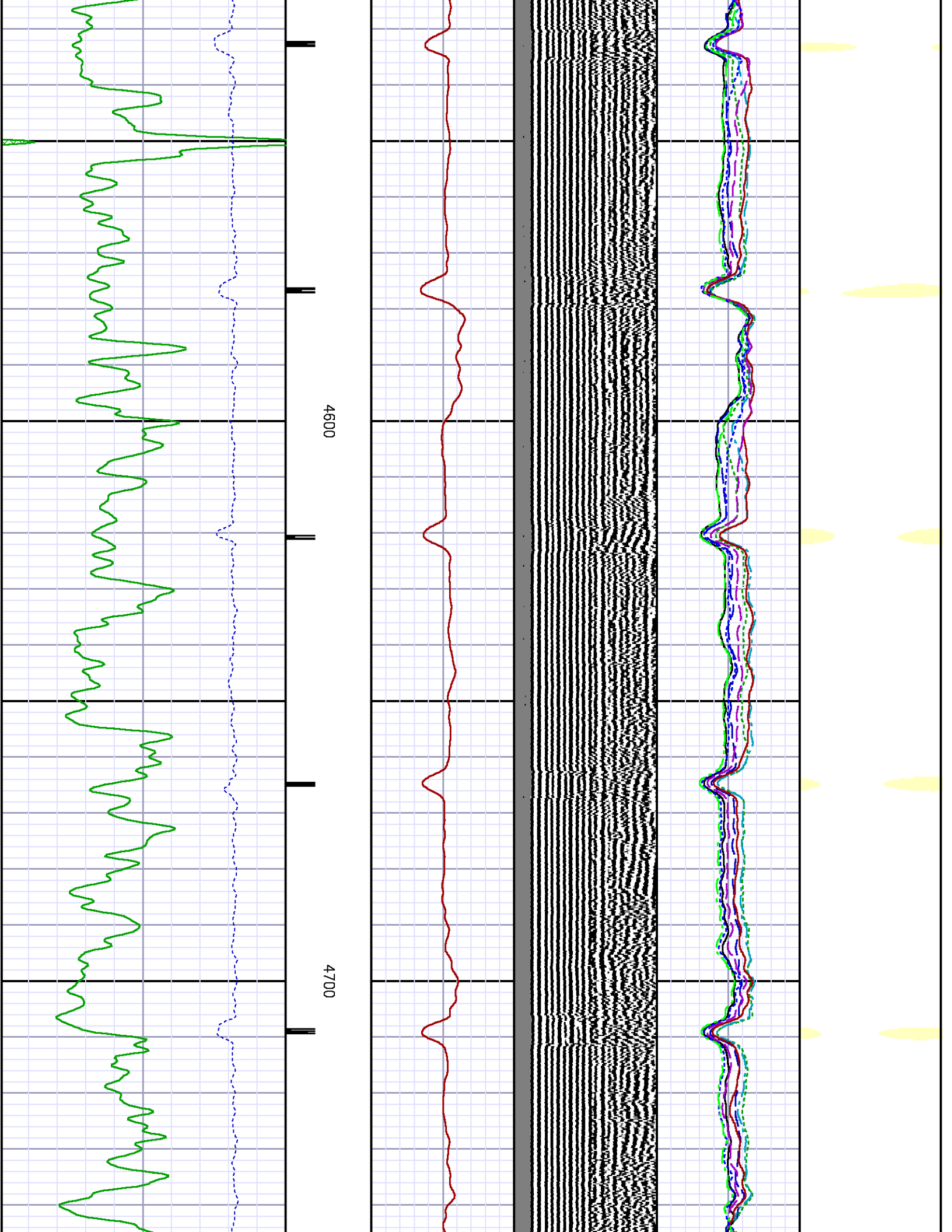


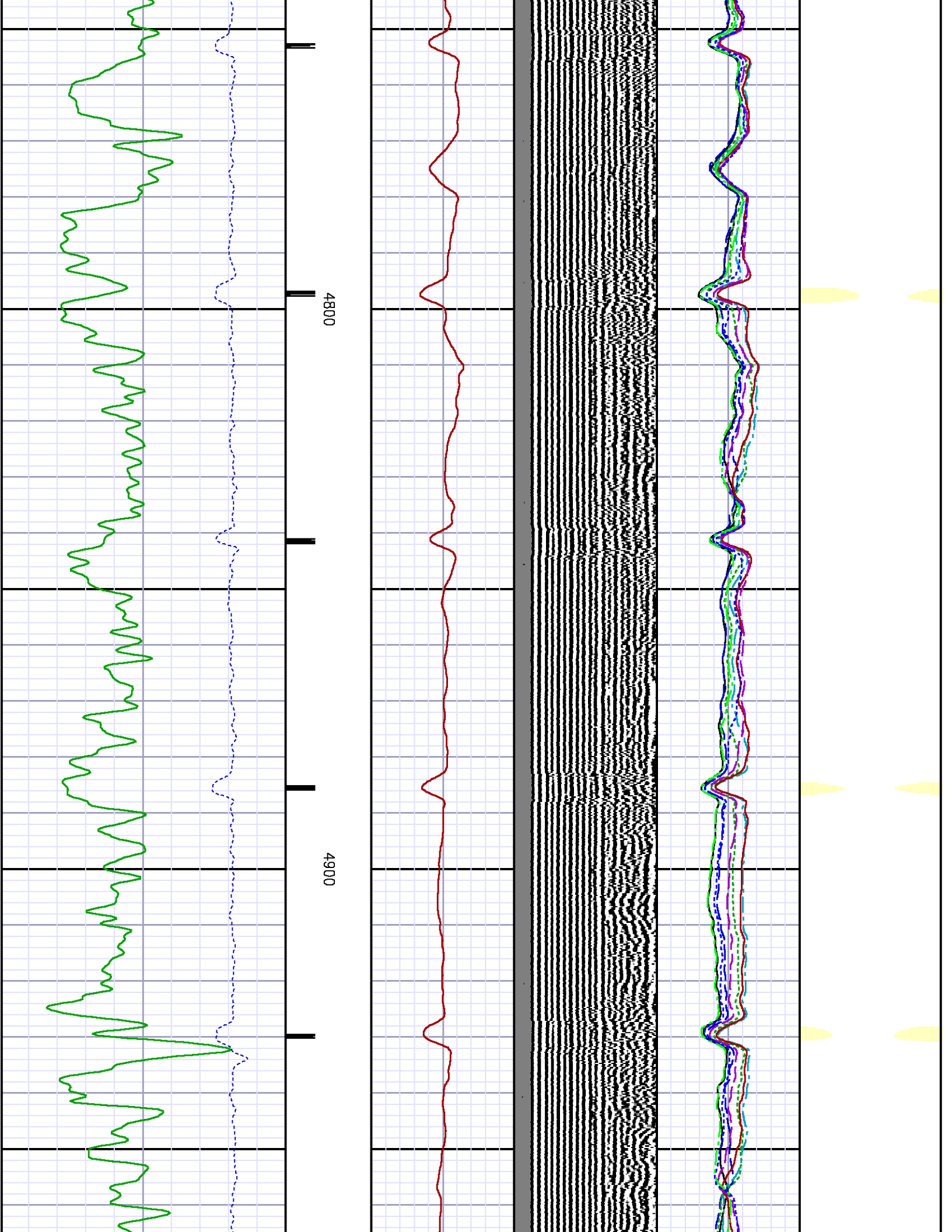


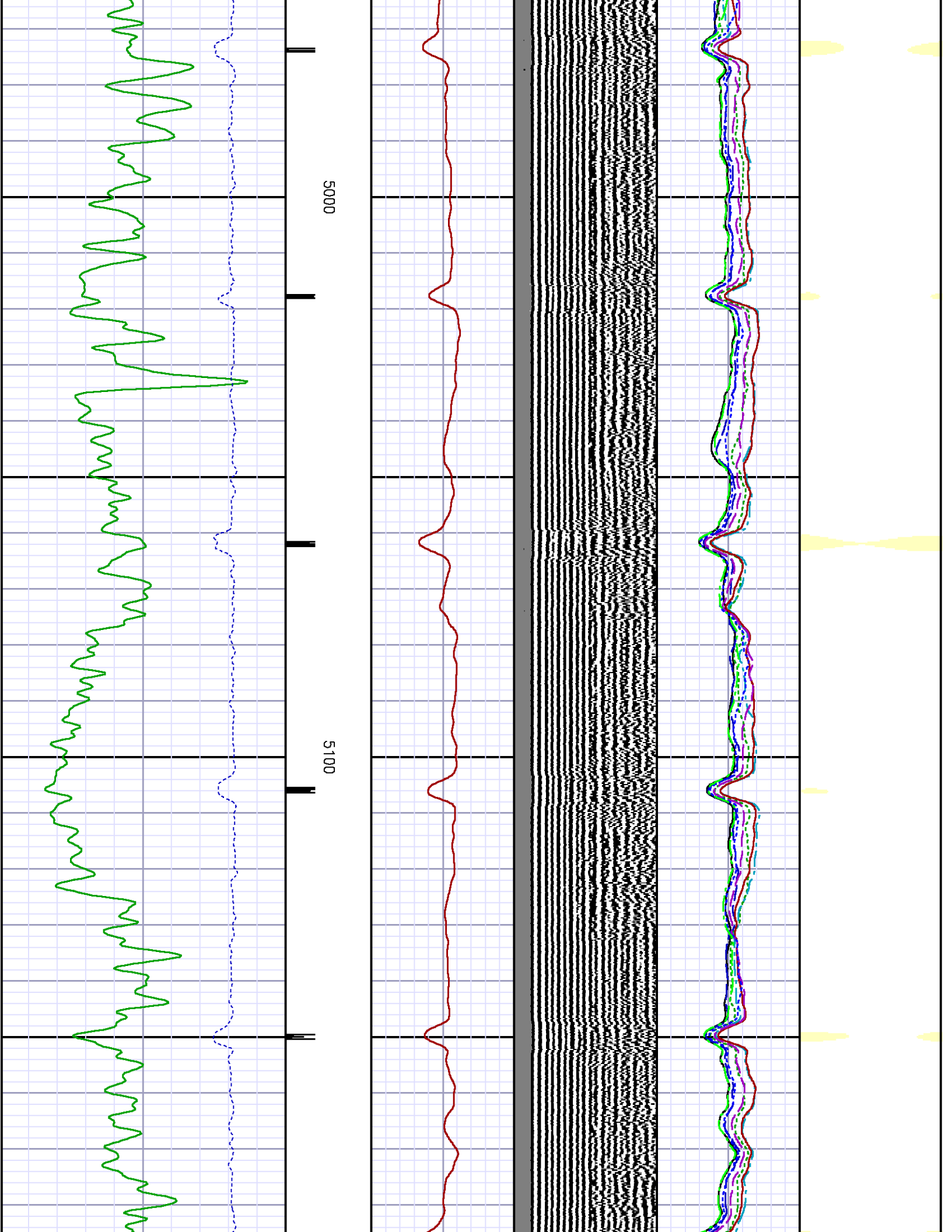


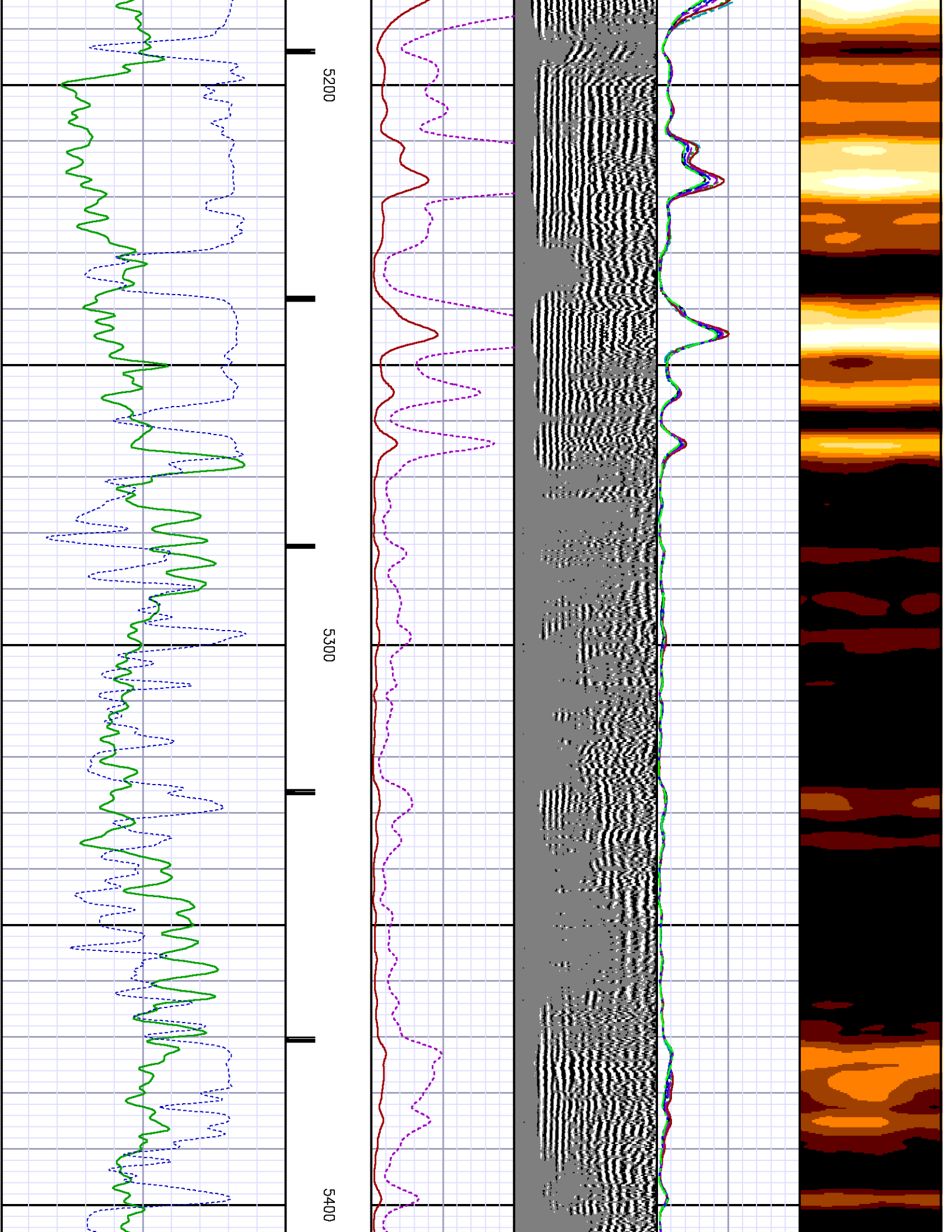


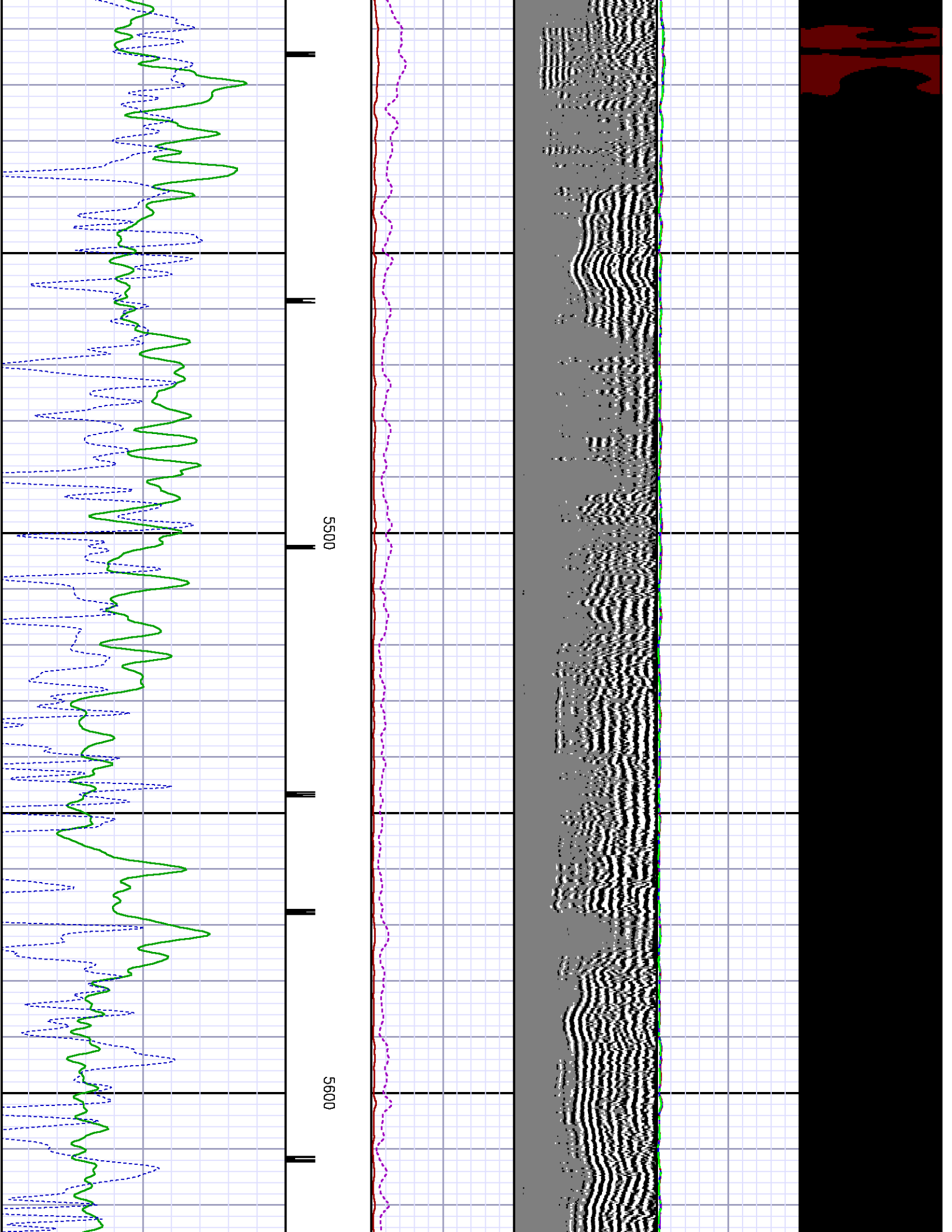


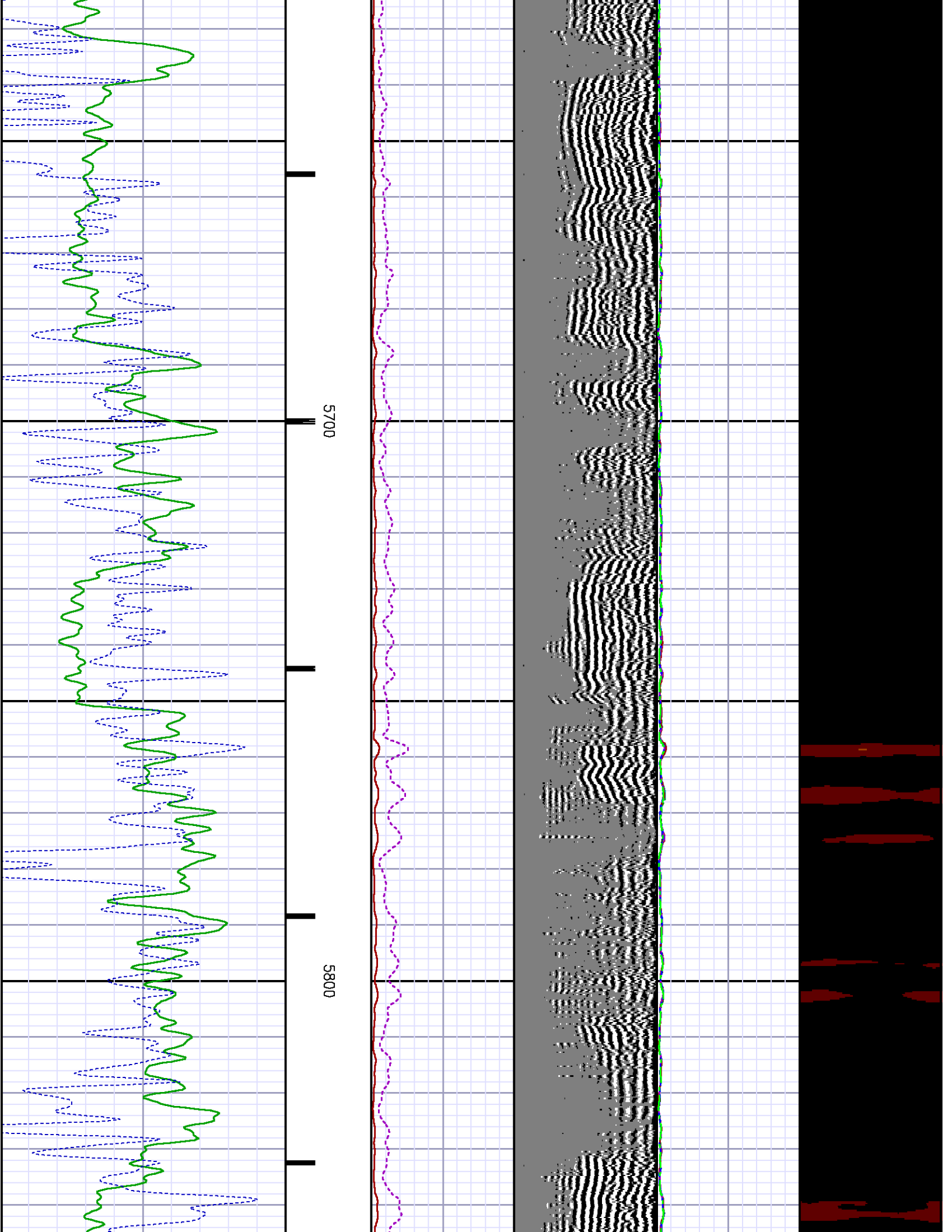


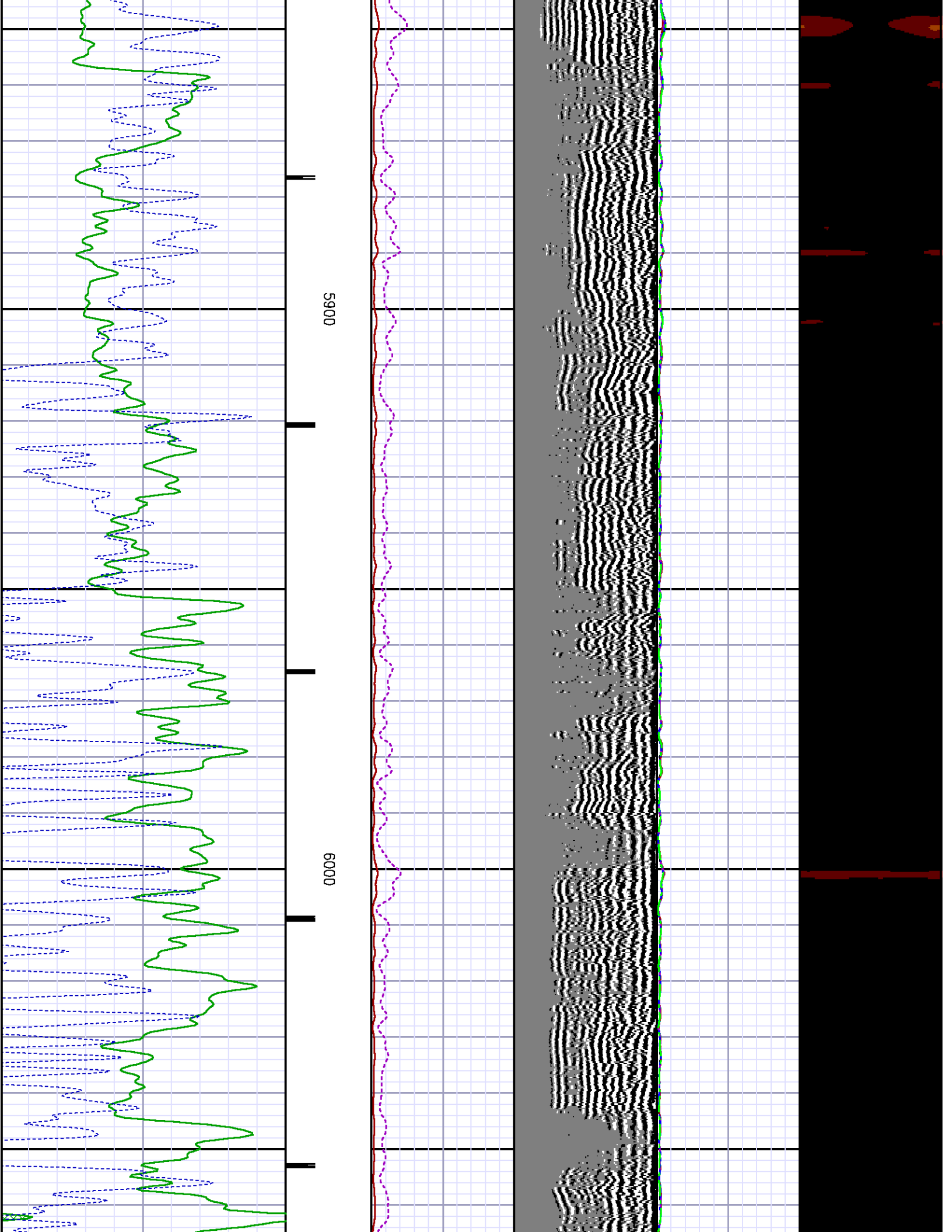


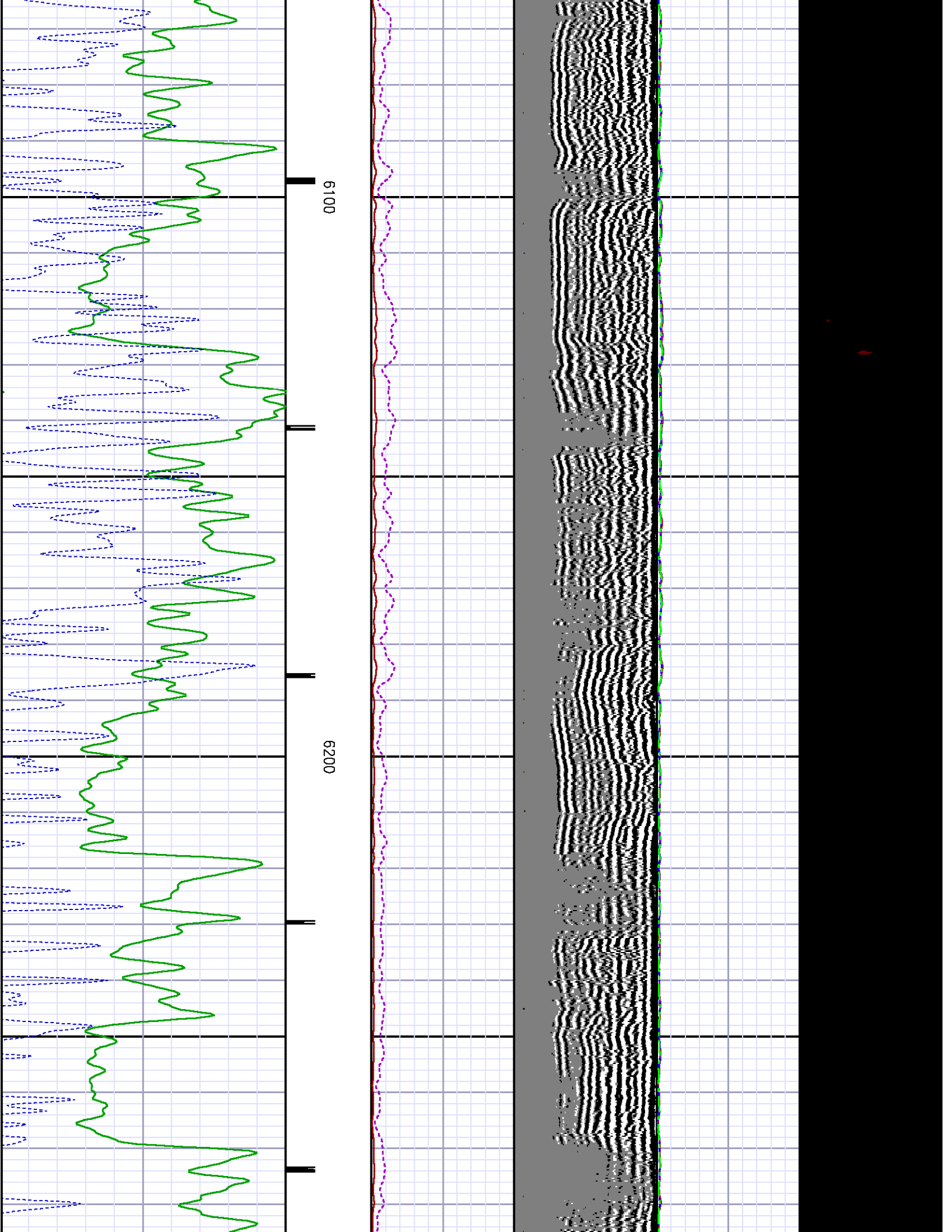


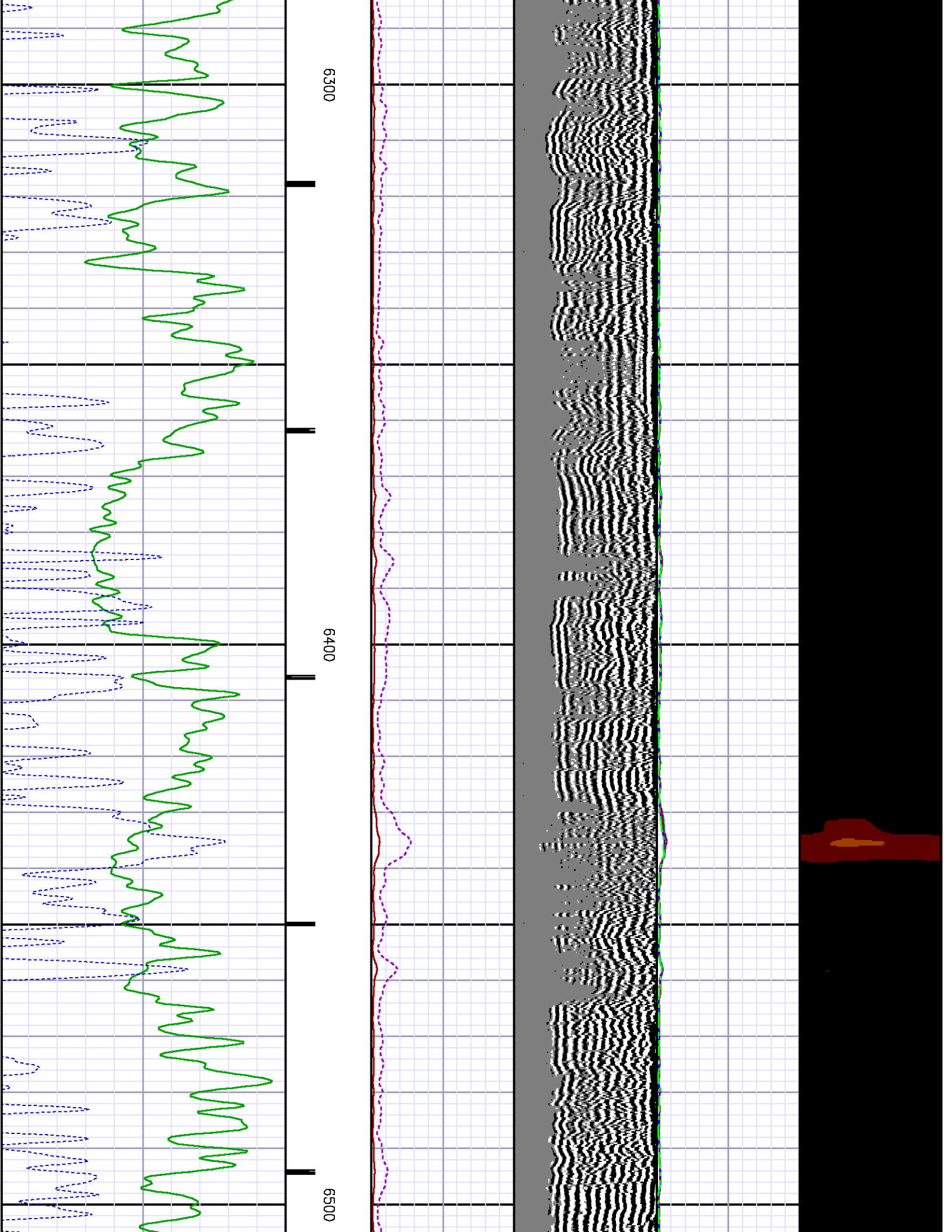


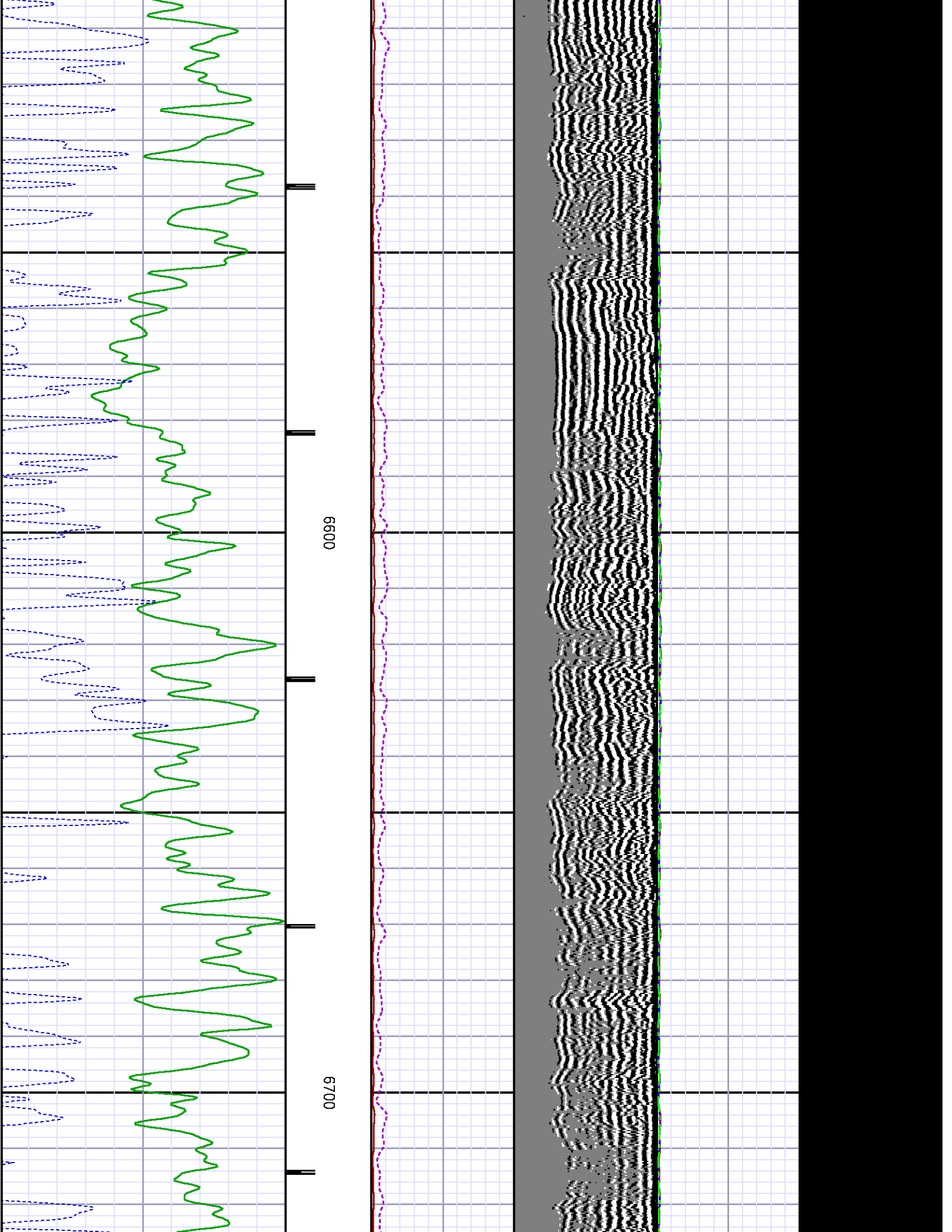


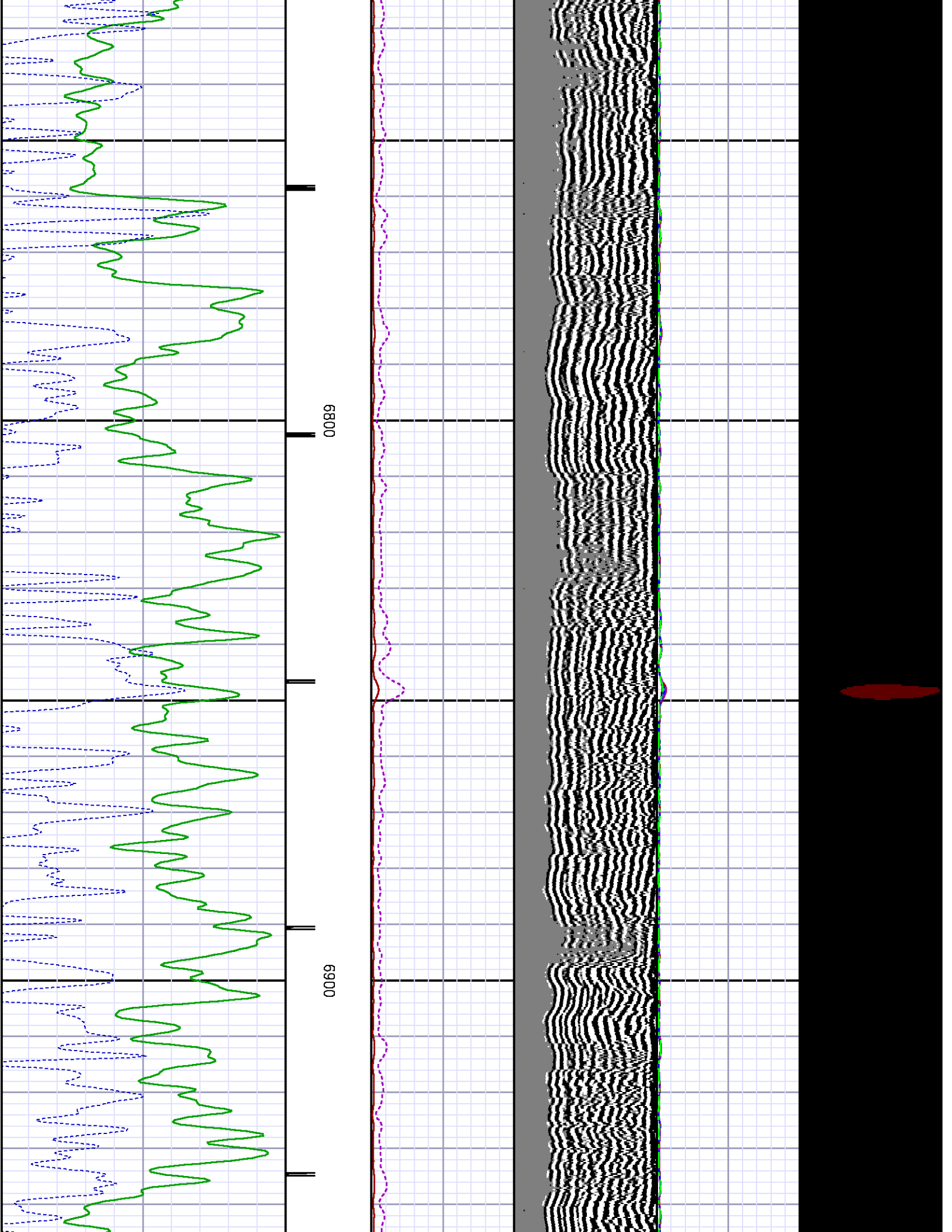


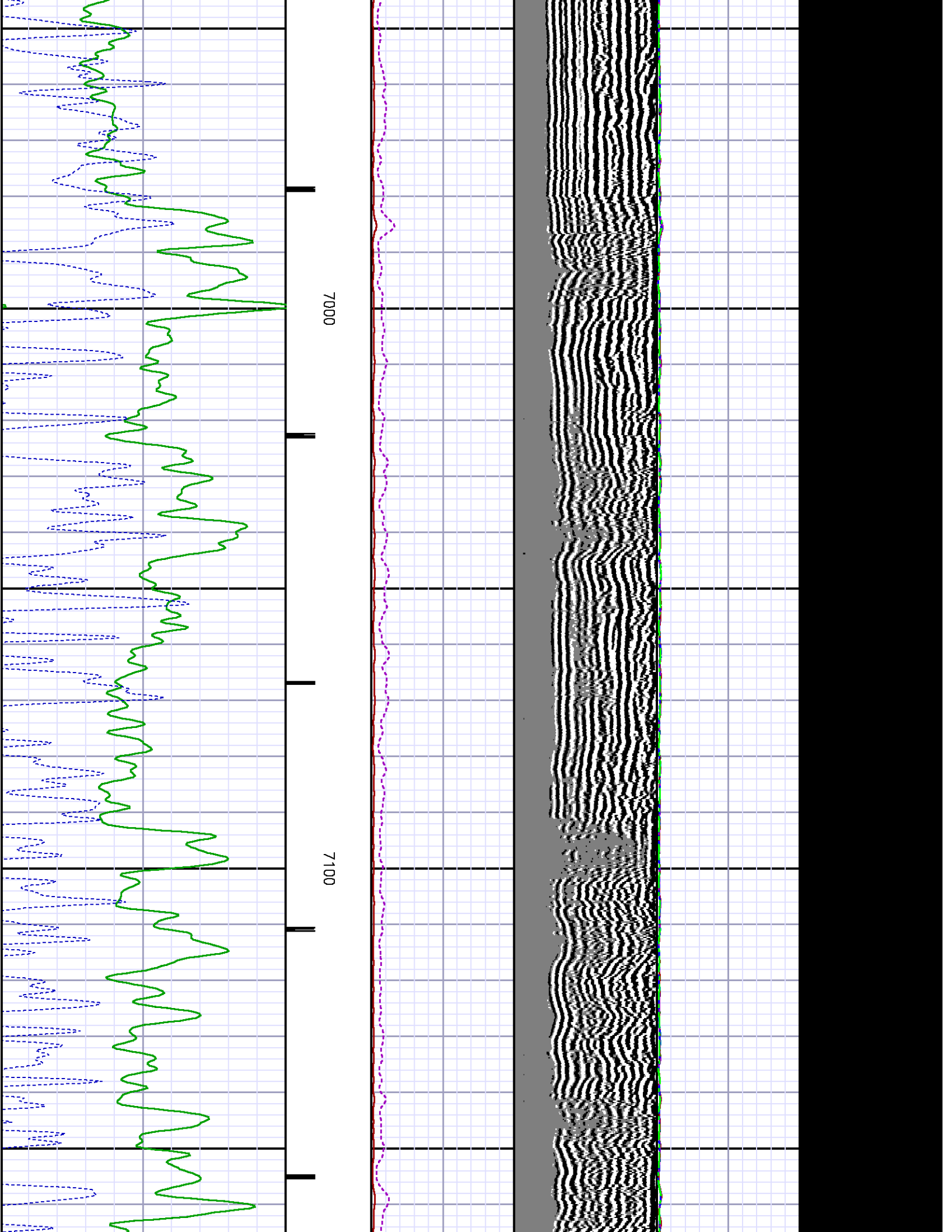


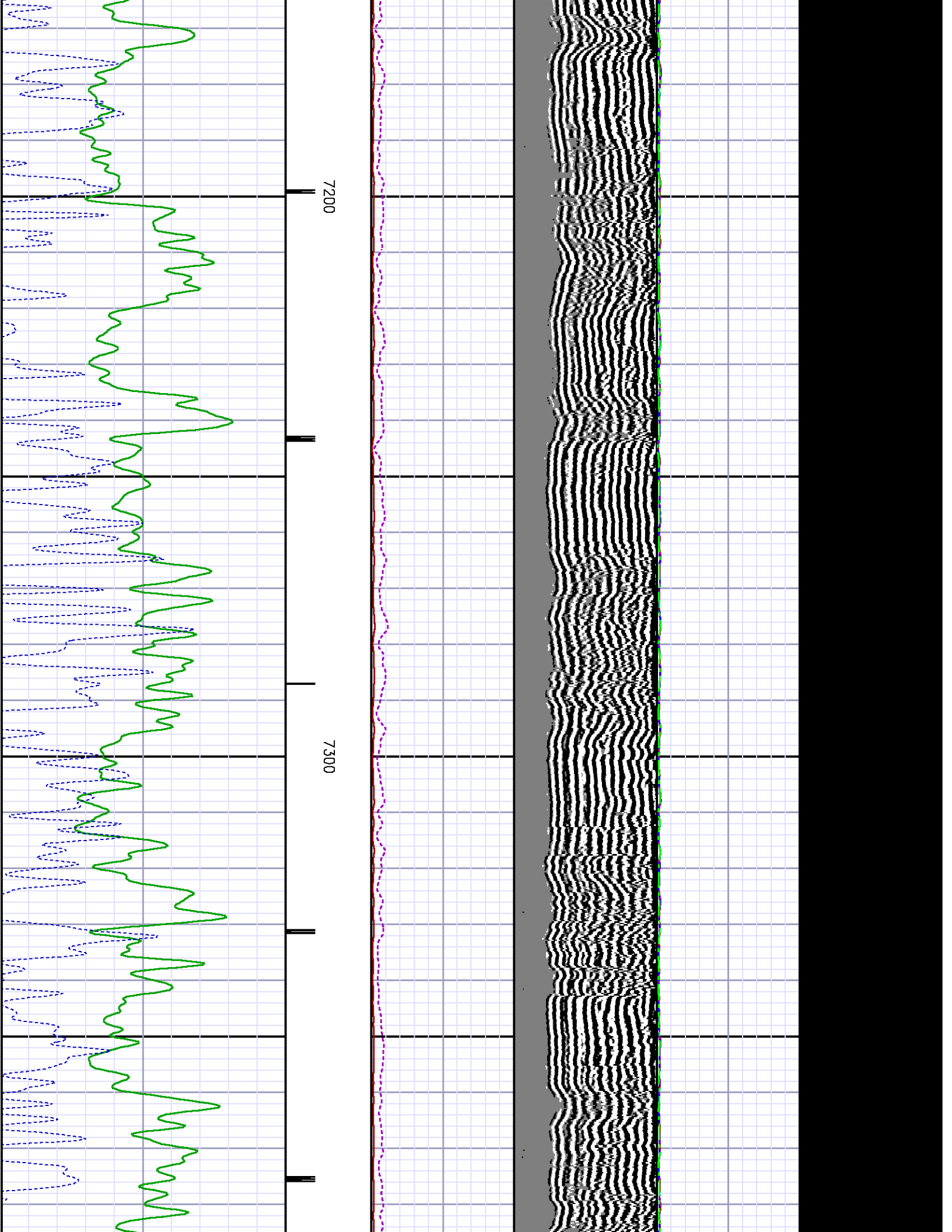


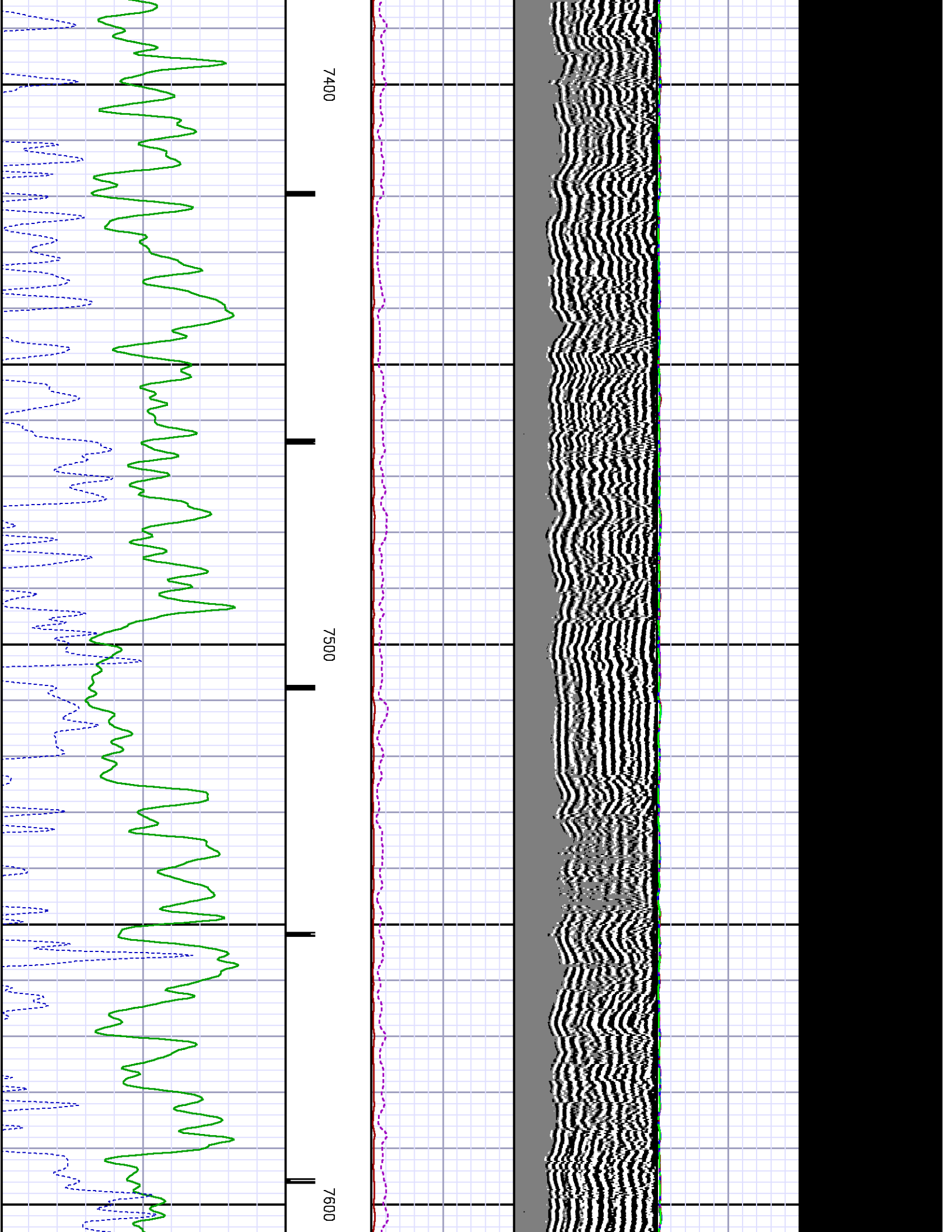


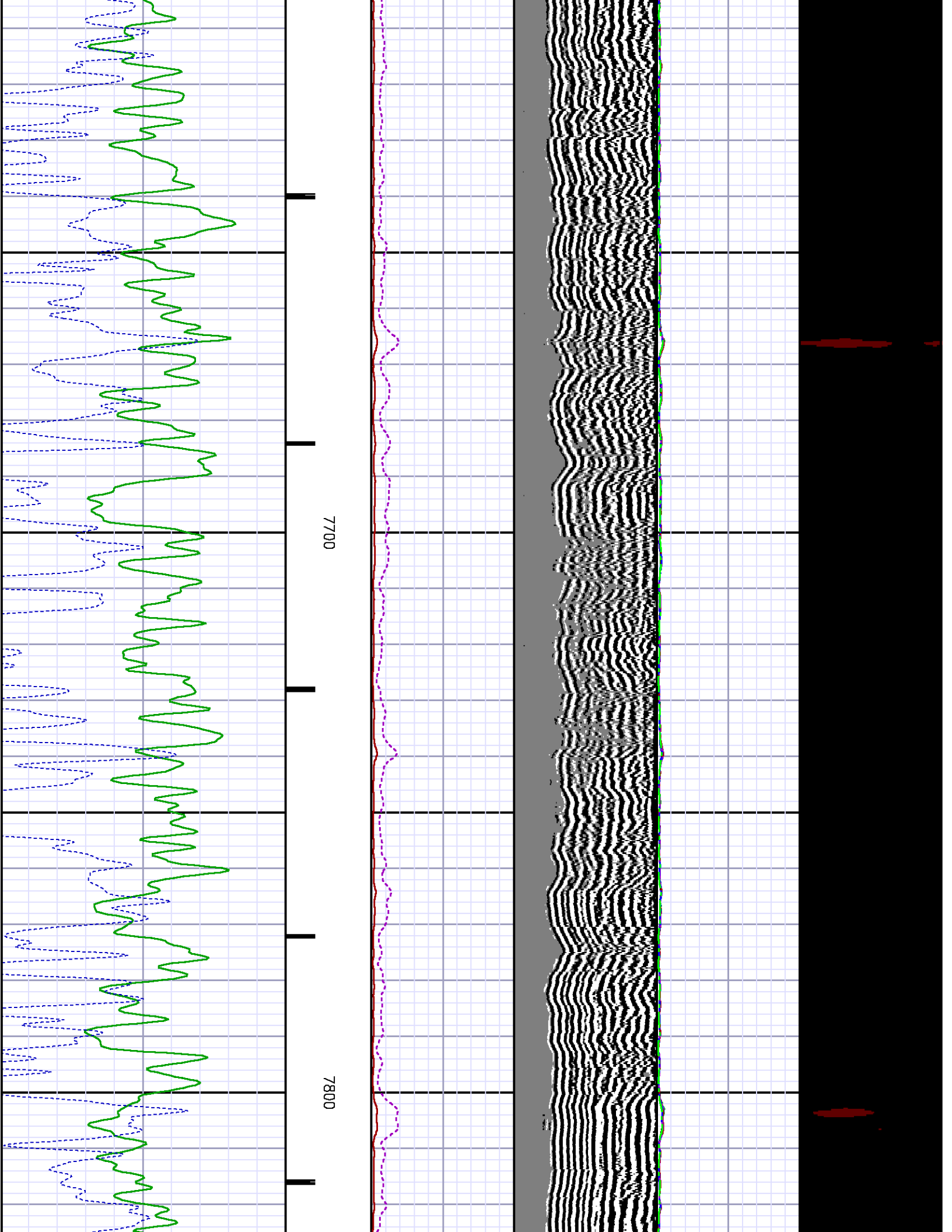


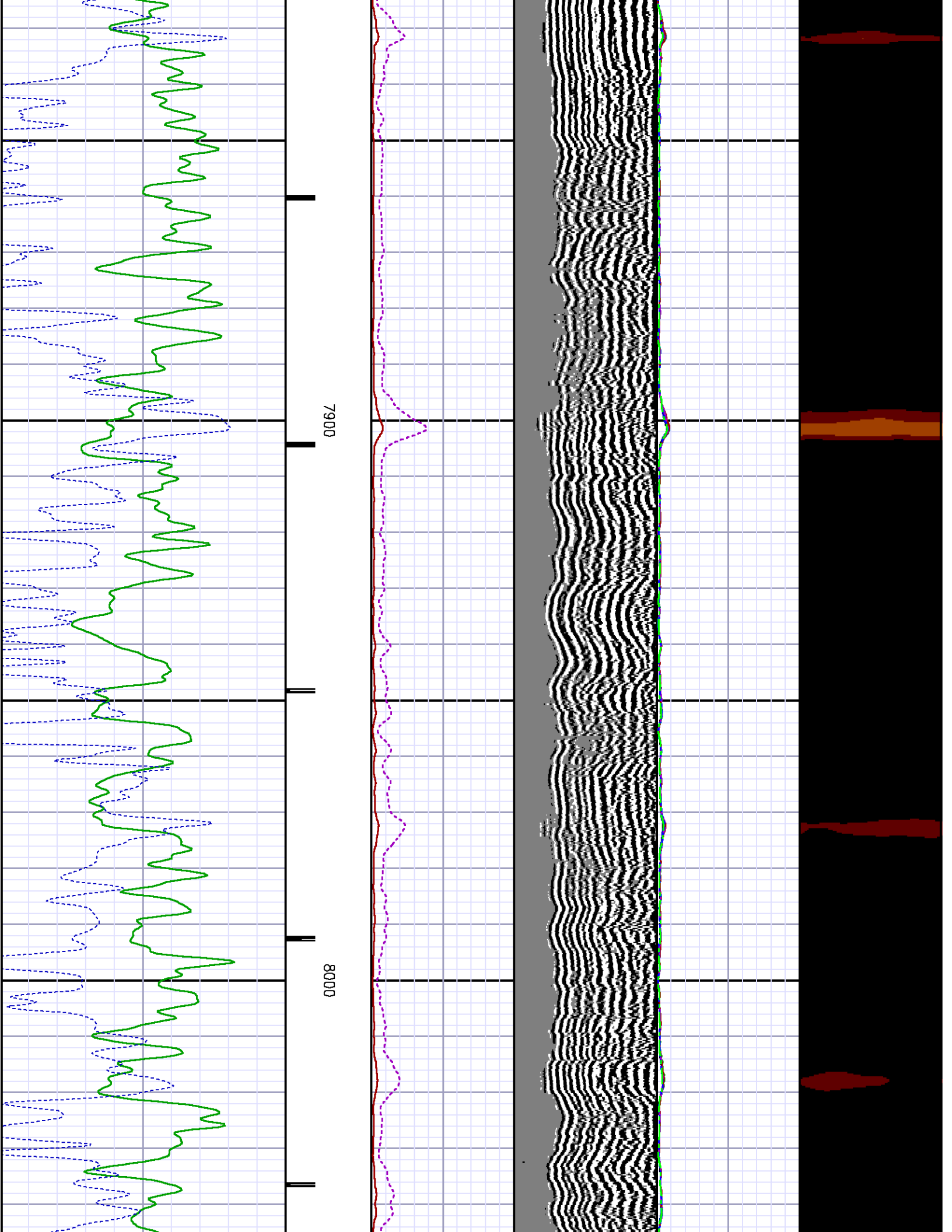


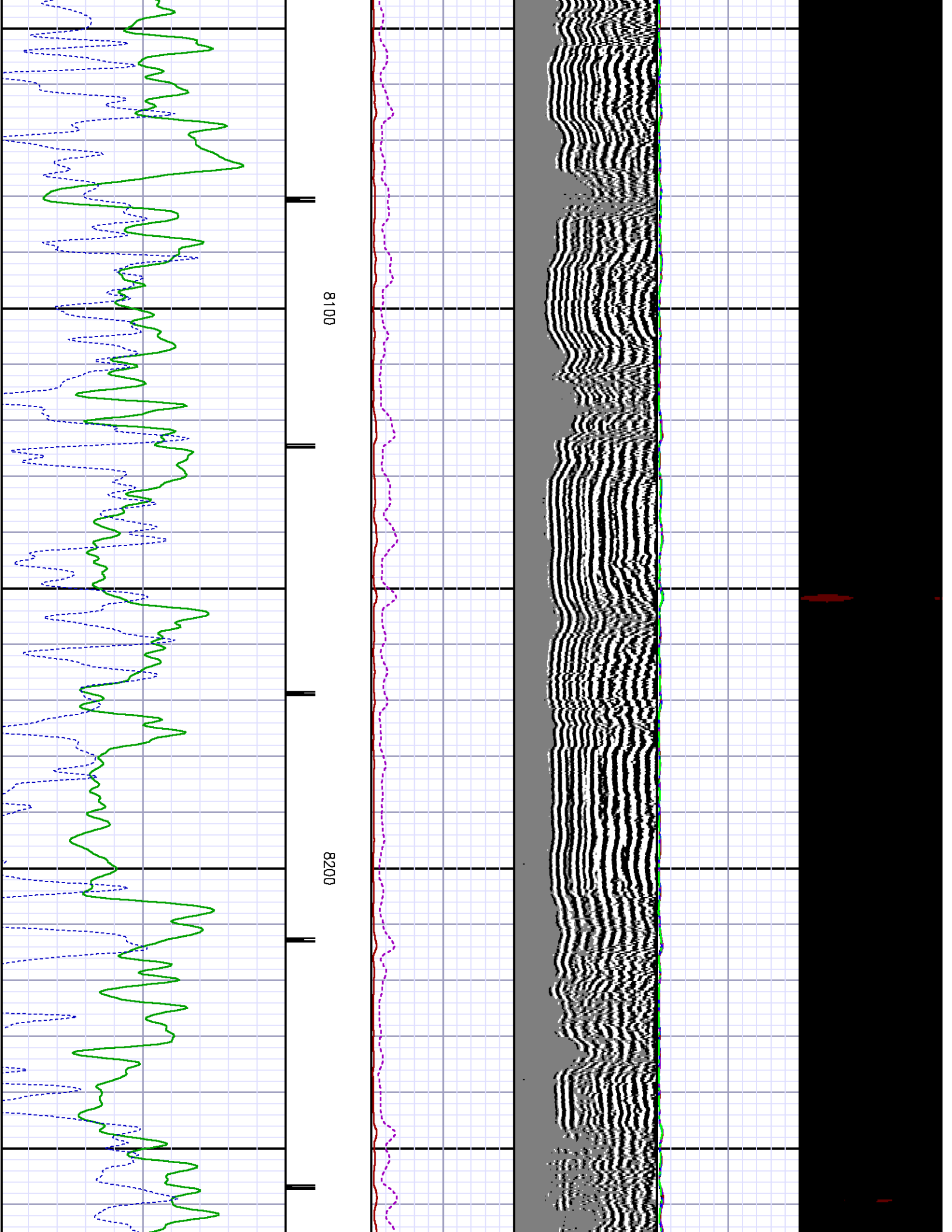


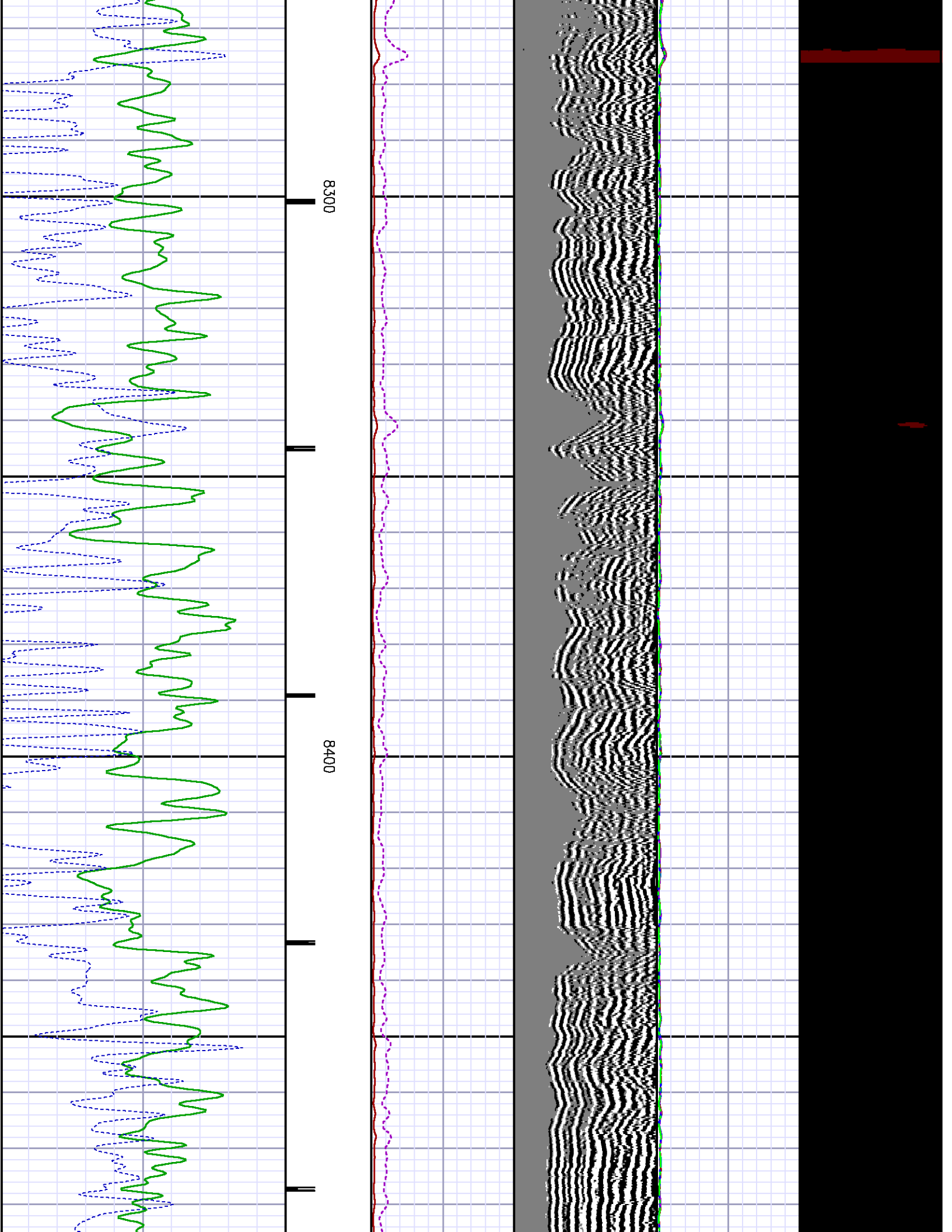


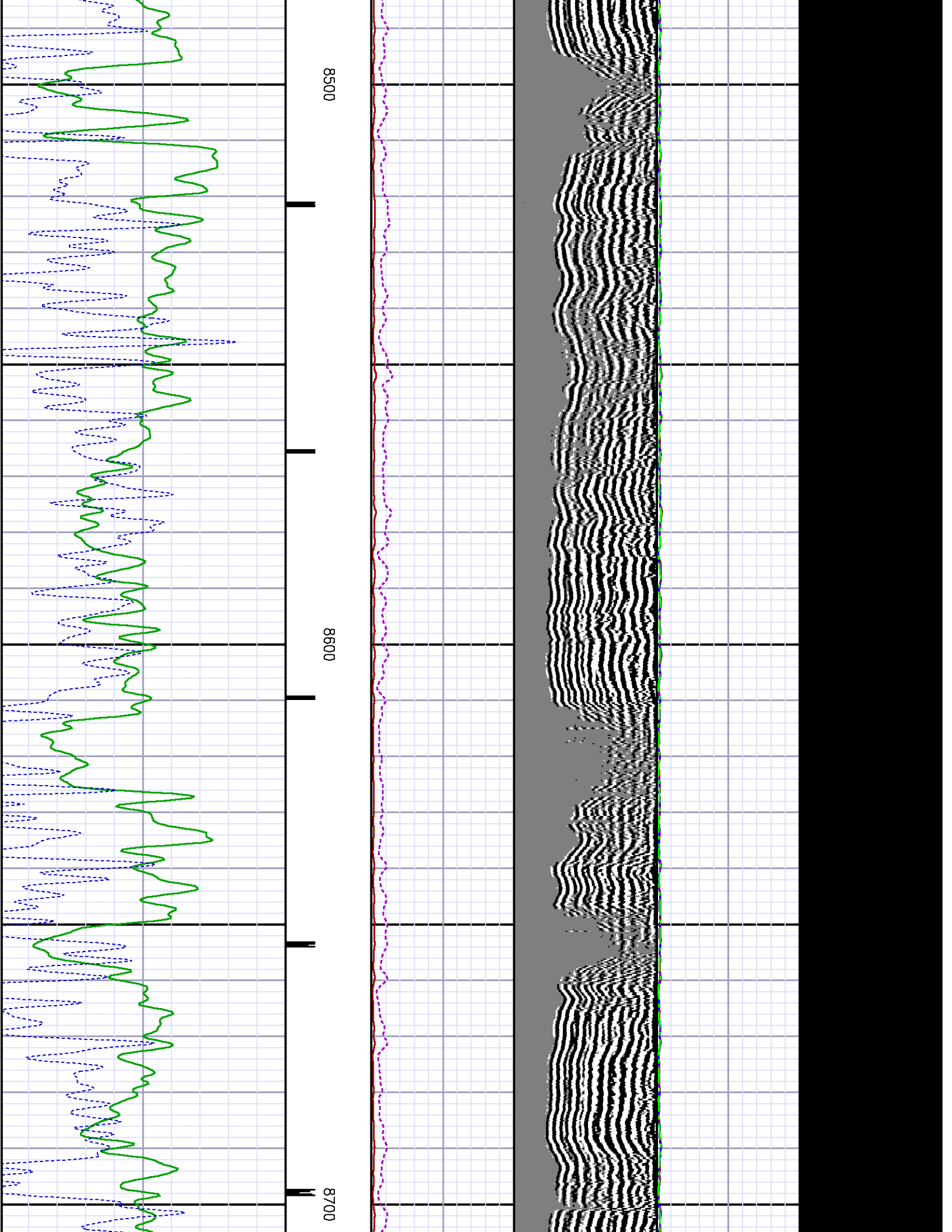


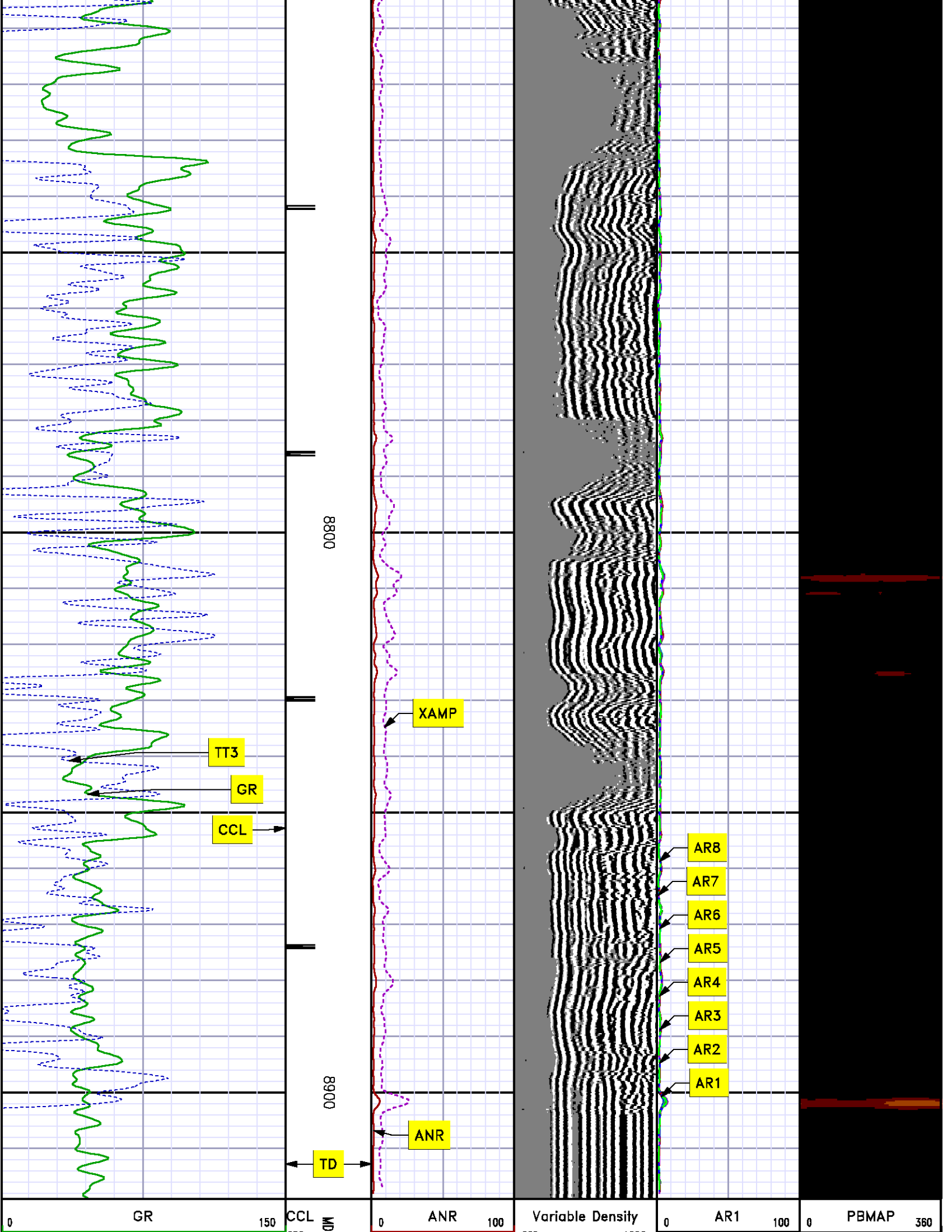


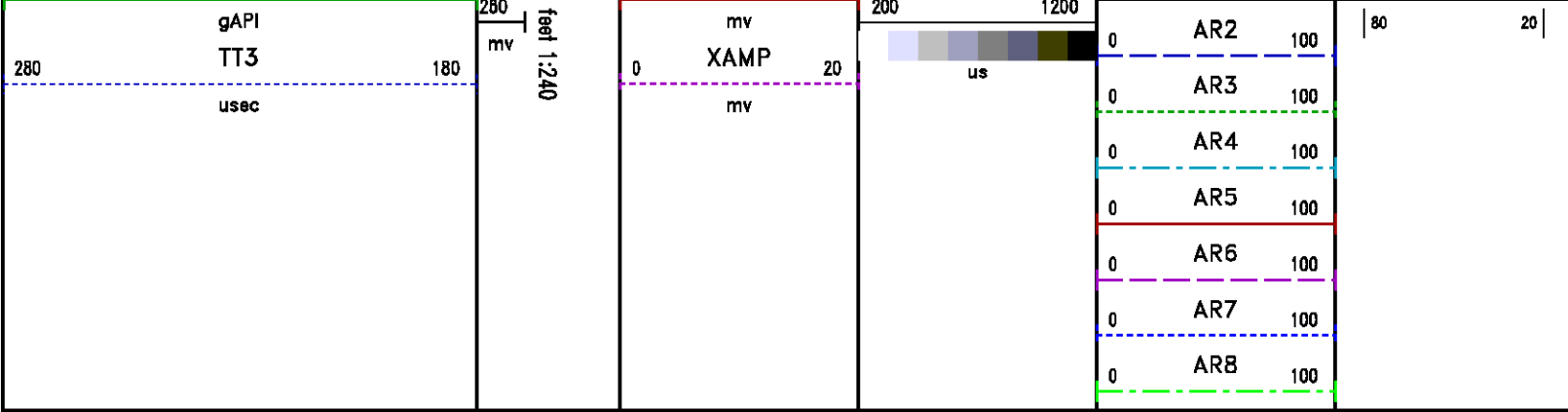












***REPEAT SECTION  
0 PSI***

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	u sec	8603.960	8926.960
RAL	Amp Gate Start Near	195.000	u sec	8603.960	8926.960
RAL	Amp Gate Start Radial	195.000	u sec	8603.960	8926.960
RAL	Amp Gate Width Far	25.000	u sec	8603.960	8926.960
RAL	Amp Gate Width Near	25.000	u sec	8603.960	8926.960
RAL	Amp Gate Width Radial	25.000	u sec	8603.960	8926.960
RAL	casing od	4.500	inches	8603.960	8926.960
RAL	casing wt	11.600	lbm/ft	8603.960	8926.960
RAL	FB Start Far	291.900	u sec	8603.960	8926.960
RAL	FB Start Near	180.000	u sec	8603.960	8926.960
RAL	FB Start Radial	180.000	u sec	8603.960	8926.960
RAL	FB Thresh Far	10.000	mv	8603.960	8926.960
RAL	FB Thresh Near	4.000	mv	8603.960	8926.960
RAL	FB Thresh Radial	4.000	mv	8603.960	8926.960
RAL	Fluid Travel Time	200.000	u sec/ft	8603.960	8926.960

**DEPTH OFFSETS**  
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES
--------	--------------	-----------------

1426XA -11.000

ACAL

ANR

AR1

AR2

AR3

AR4

AR5

AR6

AR7

AR8

CHV

FPR2

FPR3

FPR5

TT3

TTR1

TTR2

TTR3

TTR4

TTR5

TTR6

TTR7

TTR8

XAMP

1426XA -10.040

AFAR

SIG

TT5

1355XA -5.620

CCL

1355XA -1.500

GR

1355XA 0.000

TEMP

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

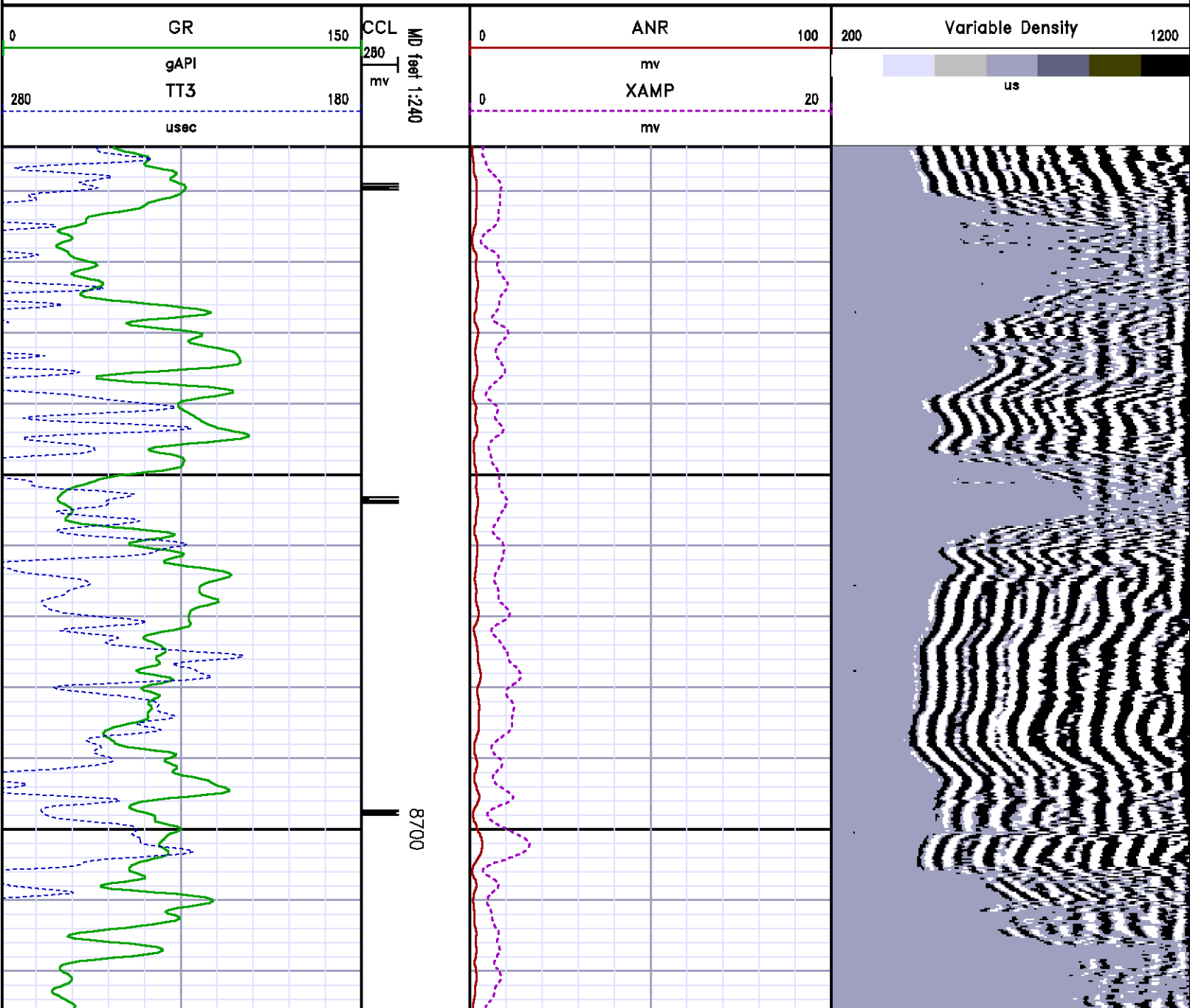
Well : HOEPPLI RWF 24-36

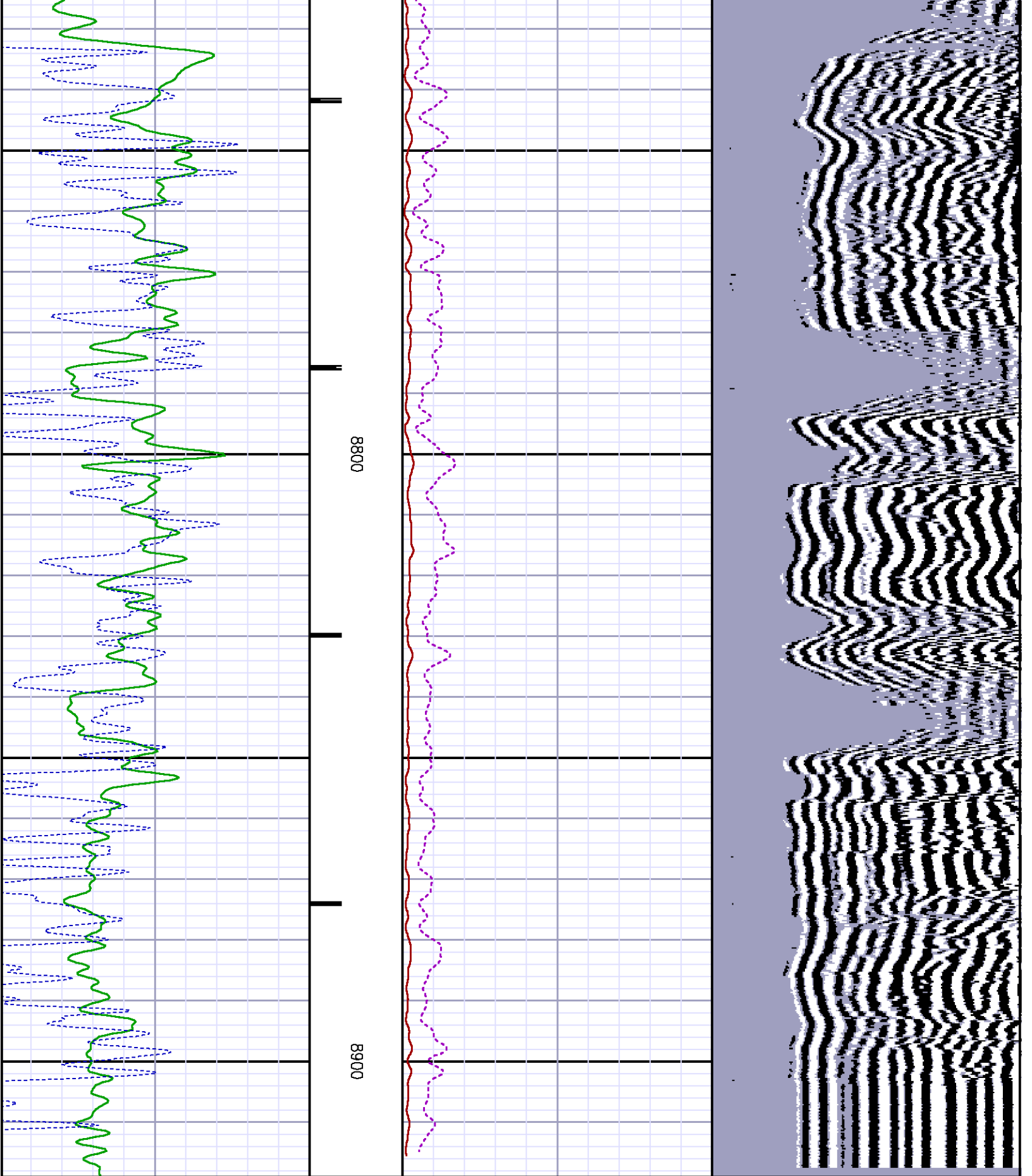
File Name : d:\welldata\wpx energy\rwf 24-36\ral24\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 8603.71 - 8919.00 feet UP

Created : 1/24/2013 12:13:42 PM





0	GR	150
	gAPI	
280	TT3	180
	usec	

CCL  
 MD feet 1:240  
 280  
 mv

0	ANR	100
	mv	
0	XAMP	20
	mv	

200	Variable Density	1200
	us	

# CALIBRATION SUMMARY

## RALSHP

Shop Calibration: C:\case\calver\RALSHP\452J21\_shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jan 21 10:21:59 2013      TOOL SERIES: 1426XA      ASSET: 452      SEQ: J21

Tool Delay [usec]       Tank OD  In      Tank Wt  lbm/ft      Tank ID  In

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="0.135"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>
3 Ft. Receiver	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.016"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>
5 Ft. Receiver	<input type="text" value="324"/>	<input type="text" value="321"/>	<input type="text" value="30"/>	<input type="text" value="229"/>	<input type="text" value="25"/>	<input type="text" value="0.389"/>	<input type="text" value="150.00"/>	<input type="text" value="0.30"/>
Radial #1	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.222"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>
Radial #2	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.264"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>
Radial #3	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.358"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>
Radial #4	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="0.102"/>	<input type="text" value="100.00"/>	<input type="text" value="0.27"/>
Radial #5	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.156"/>	<input type="text" value="100.00"/>	<input type="text" value="0.27"/>
Radial #6	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.454"/>	<input type="text" value="100.00"/>	<input type="text" value="0.27"/>
Radial #7	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.055"/>	<input type="text" value="100.00"/>	<input type="text" value="0.27"/>
Radial #8	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="149"/>	<input type="text" value="25"/>	<input type="text" value="-0.092"/>	<input type="text" value="100.00"/>	<input type="text" value="0.28"/>

## RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\452J21 fld.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jan 21 10:24:09 2013      TOOL SERIES: 1426XA      ASSET: 452      SEQ: J21

Tool Delay [usec]       Casing OD  In      Casing Wt  lbm/ft      Casing ID  In

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="0.052"/>	<input type="text" value="0.000"/>	<input type="text" value="1.00"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.812"/>			
5 Ft. Receiver	<input type="text" value="305"/>	<input type="text" value="25"/>	<input type="text" value="4.233"/>			
Radial #1	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.403"/>			
Radial #2	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.712"/>			

Radial #3	195	25	1.795
Radial #4	195	25	1.363
Radial #5	195	25	1.286
Radial #6	195	25	1.519
Radial #7	195	25	1.554
Radial #8	195	25	1.297

## RALSHP #2

Shop Calibration: C:\case\calver\RALSHP\496J24 shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jan 24 11:59:40 2013      TOOL SERIES: 1426XA      ASSET: 496      SEQ: J24

Tool Delay [usec]       Tank OD  in      Tank Wt  lbm/ft      Tank ID  in

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	217	216	30	166	25	-0.055	100.00	0.26
3 Ft. Receiver	217	216	30	180	16	1.447	100.00	0.26
5 Ft. Receiver	326	321	30	176	25	0.080	150.00	0.28
Radial #1	217	216	30	180	21	4.626	100.00	0.27
Radial #2	216	216	30	180	21	3.810	100.00	0.27
Radial #3	215	216	30	180	21	2.587	100.00	0.26
Radial #4	215	216	30	180	21	-0.802	100.00	0.24
Radial #5	216	216	30	180	21	-0.434	100.00	0.24
Radial #6	217	216	30	180	21	-1.041	100.00	0.25
Radial #7	217	216	30	180	21	-0.886	100.00	0.25
Radial #8	218	216	30	180	21	0.943	100.00	0.26

## RALFLD #2

Wellsite Calibration: C:\case\calver\RALFLD\496J24 fld.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jan 24 12:01:50 2013      TOOL SERIES: 1426XA      ASSET: 496      SEQ: J24

Tool Delay [usec]       Casing OD  in      Casing Wt  lbm/ft      Casing ID  in

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.075	0.000	1.00	100.000
3 Ft. Receiver	195	25	-0.623			
5 Ft. Receiver	305	25	-1.557			
Radial #1	195	25	-0.690			
Radial #2	195	25	-0.728			

Radial #2	195	25	-0.723
Radial #3	195	25	-0.840
Radial #4	195	25	-0.911
Radial #5	195	25	-1.053
Radial #6	195	25	-0.972
Radial #7	195	25	-0.761
Radial #8	195	25	-0.719

# GAMMA RAY

Calibration File: C:\case\calver\GR\209J3.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jan 03 11:37:16 2013      TOOL SERIES: 1355XA      ASSET: 209      SEQ: J3

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	140.09	569.47	0.431	60.36	245.36	185.00

Verification File: C:\case\calver\GR\209J3.VP

### PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Jan 03 11:39:20 2013      TOOL SERIES: 1355XA      ASSET: 209      SEQ: J3

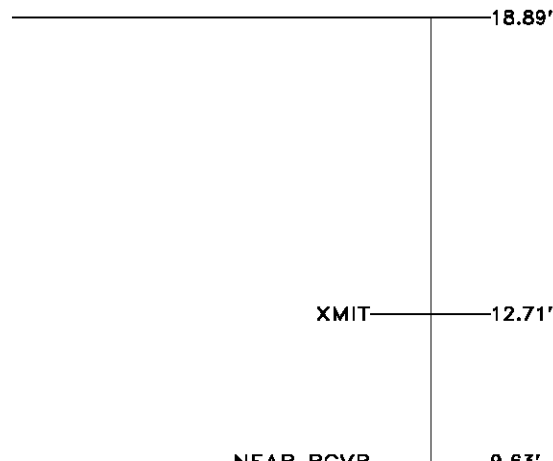
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	132.67	573.24	0.431	57.16	246.99	189.83

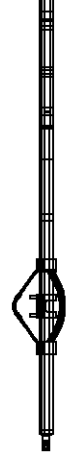
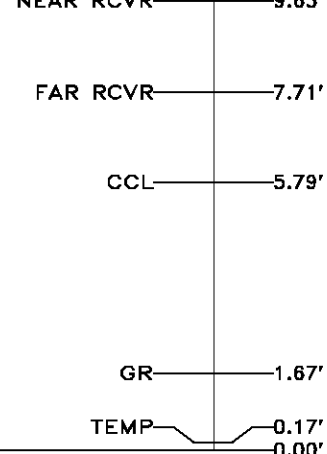
# TOOL DIAGRAM

OTA SHORT CABLE HEAD

### PROBE 2 3/4 DUAL RECEIVER RADII


Series 1426XA  
Mnemonic PROB  
Diameter 2.75"  
Length 11.17'  
Measure Point 0.75' FAR RCVR  
Measure Point 2.67' NEAR RCVR  
Measure Point 5.75' XMIT  
Temp Rating 350.00 °F  
Press Rating 18000.00 PSI





RAL GR/TEMP/CCL/CHV DETECTOR	
Series	1355XA
Mnemonic	RAL
Diameter	2.75"
Weight	85.00 lb
Length	6.96'
Measure Point	0.17' TEMP
Measure Point	1.67' GR
Measure Point	5.79' CCL
Temp Rating	400.00 °F
Press Rating	20000.00 PSI

Total Length: 18.89'  
 Total Weight: Not Available  
 Max Diameter: 0' 2.75"

 <b>Baker Atlas</b>	<b>Company</b> WPX ENERGY <b>Well</b> HOEPPLI RWF 24-36 <b>Field</b> RULISON <b>County</b> GARFIELD <b>State</b> COLORADO	<b>File No:</b> CH066144 <b>API No:</b> 05045214760000
	<b>Location</b> SHL: 2630' FNL, 2616' FWL (SEMW) BHL: 909' FSL, 2244' FWL (SESW) SEC 36 TWP 6S RGE 94W	<b>Elevations</b> KB 6554 ft DF GL 6528 ft

CASE