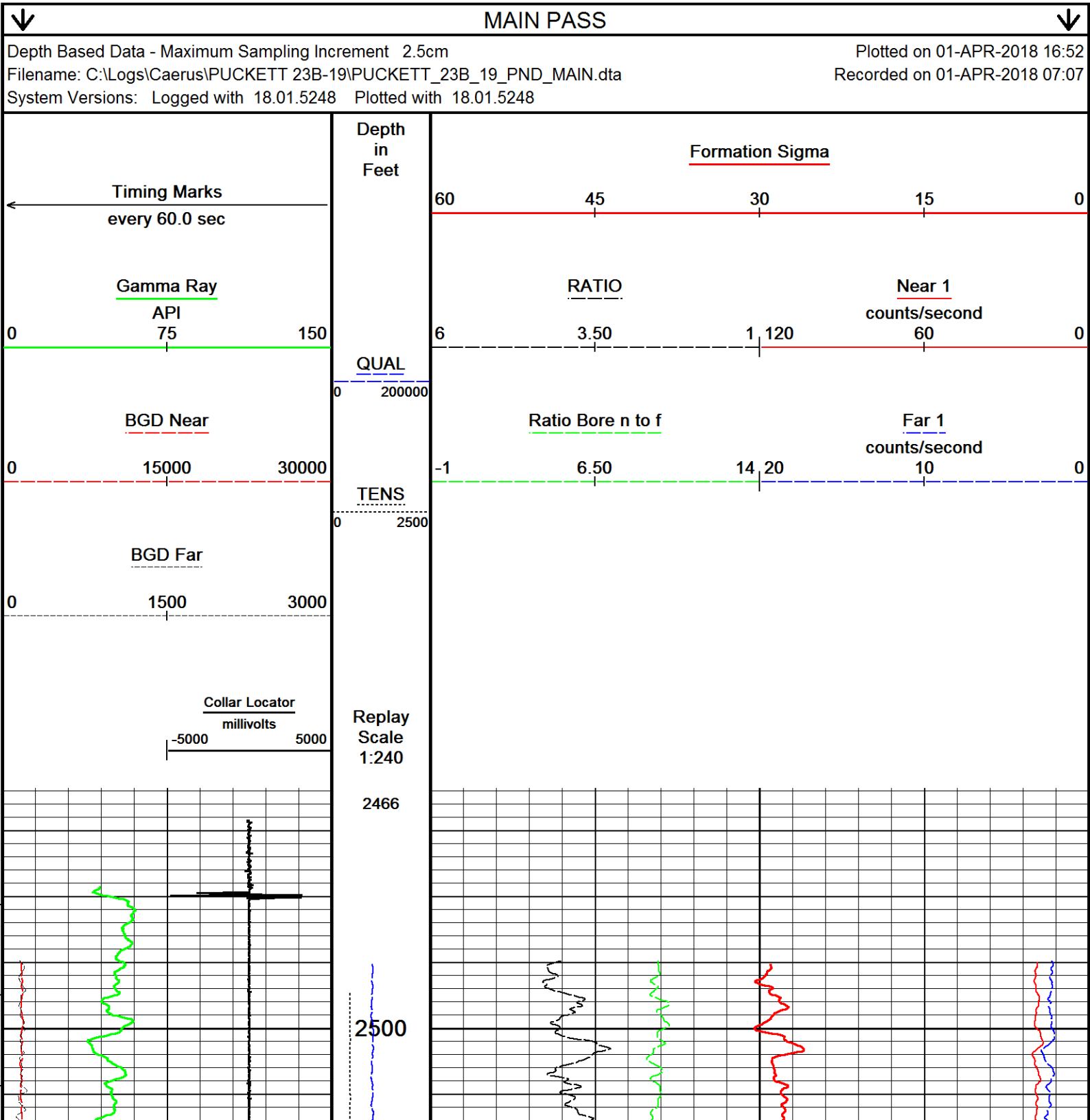
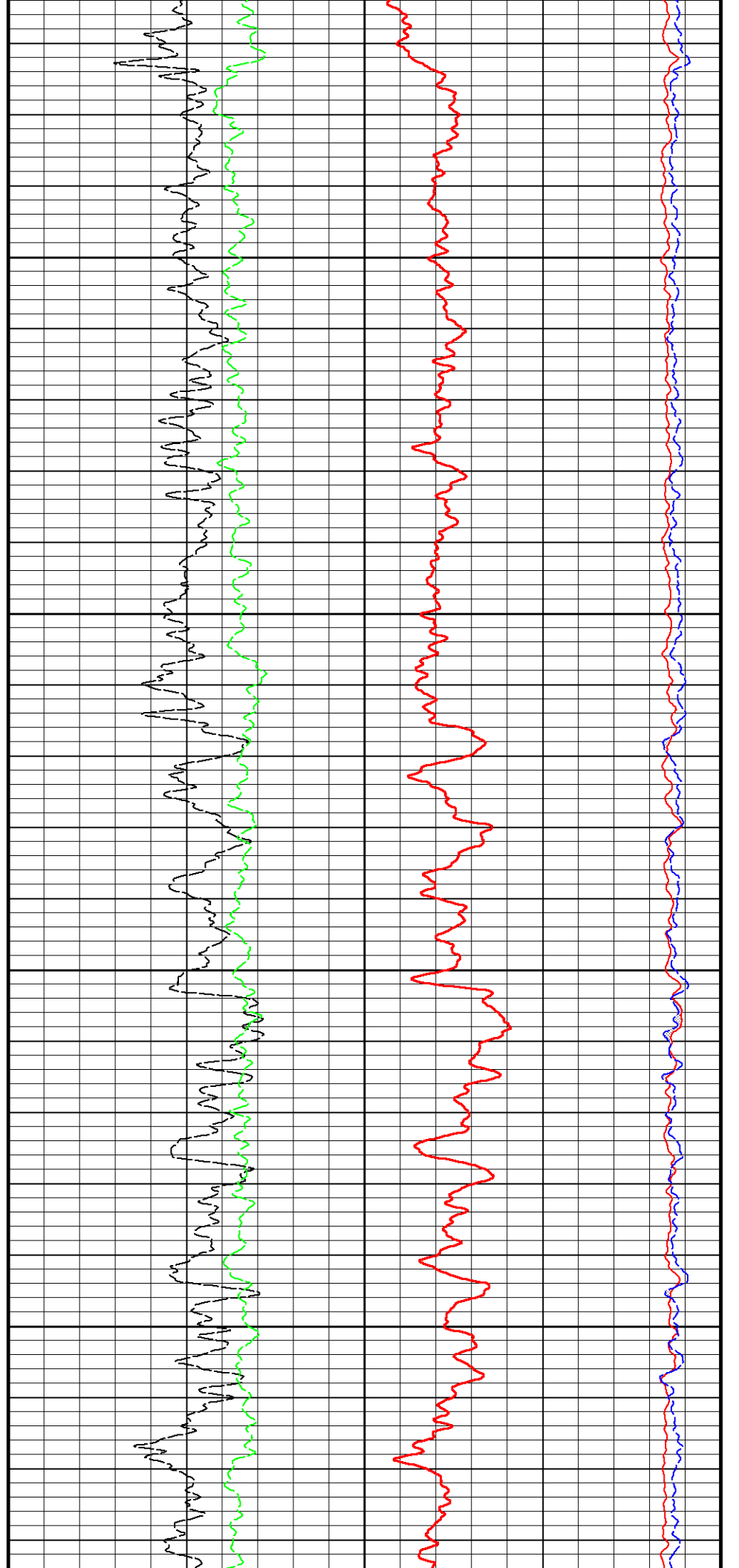
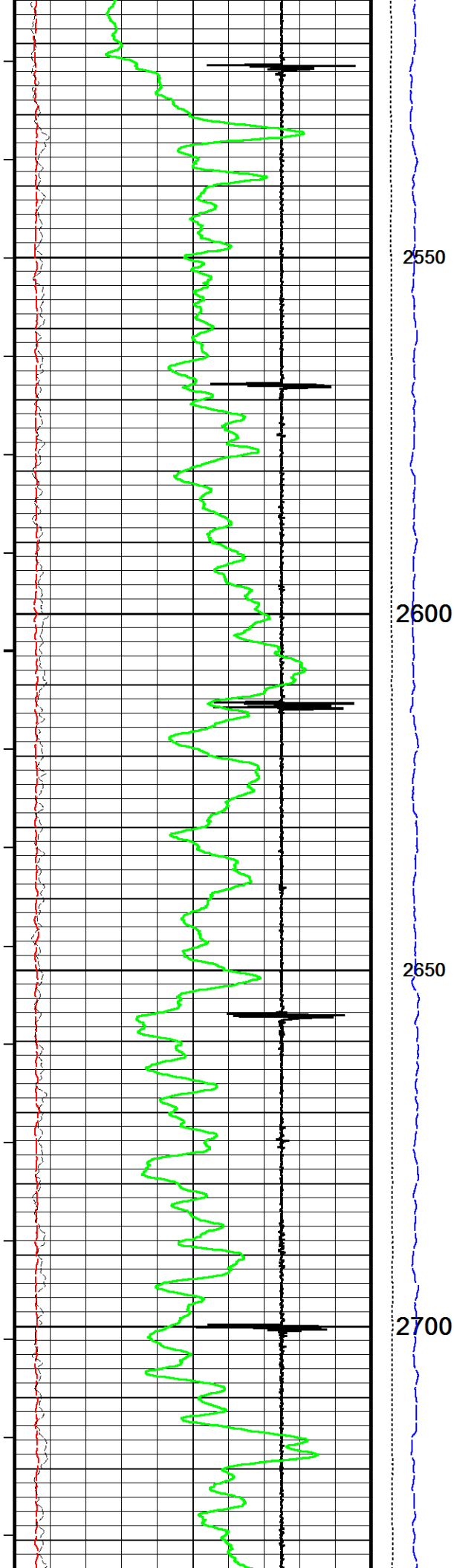
				PULSED NEUTRON LOG			
COMPANY WELL FIELD PROVINCE/COUNTY COUNTRY/STATE LOCATION				CAERUS OIL & GAS PUCKETT 23B-19 GRAND VALLEY GARFIELD USA / COLORADO			
SEC 19	TWP 6S	RGE 97W	Other Services CBL				
Latitude Longitude API Number			Permanent Datum GROUND LEVEL, Elevation 8151 feet Log Measured From KB, 30.00 feet above Permanent Datum Drilling Measured From KB				
Permanent Datum GROUND LEVEL, Elevation 8151 feet							
Log Measured From KB, 30.00 feet above Permanent Datum							
Drilling Measured From KB							
Elevations: KB DF GL							
Date			01-APR-2018		PERFORATION RECORD		
Run Number	ONE	Shot		Number	Depth From	Depth To	
Service Order	5133-209607914	Density		of Shots	feet	feet	
Type Log	Type Log						
Depth Driller	10121.00	feet					
Depth Logger	10050.00	feet					
Top Log Interval	2500.00	feet					
Bottom Log Interval	10050.00	feet					
Hole Fluid Type	WATER						
Hole Fluid Level							
Restriction ID	3.875	inches	Gun Type				
Max Recorded Temp			Gun Size				
Well Head Pressure	0.00	psi	CASING / TUBING RECORD				
Well Head Equipment	N/A		Size	Weight	Depth From	Depth To	
Time Well Ready	ROA		inches	pounds/ft	feet	feet	
Time Logger Bottom	0700		9.625	36.00	0.00	2432.00	
Unit	14115		4.500	11.60	0.00	10104.00	
Equipment Name	WSS-E						
Base	CASPER						
Recorded By	P. MAZUR / A. LITTLE						
Witnessed By	R. TOMPKINS						

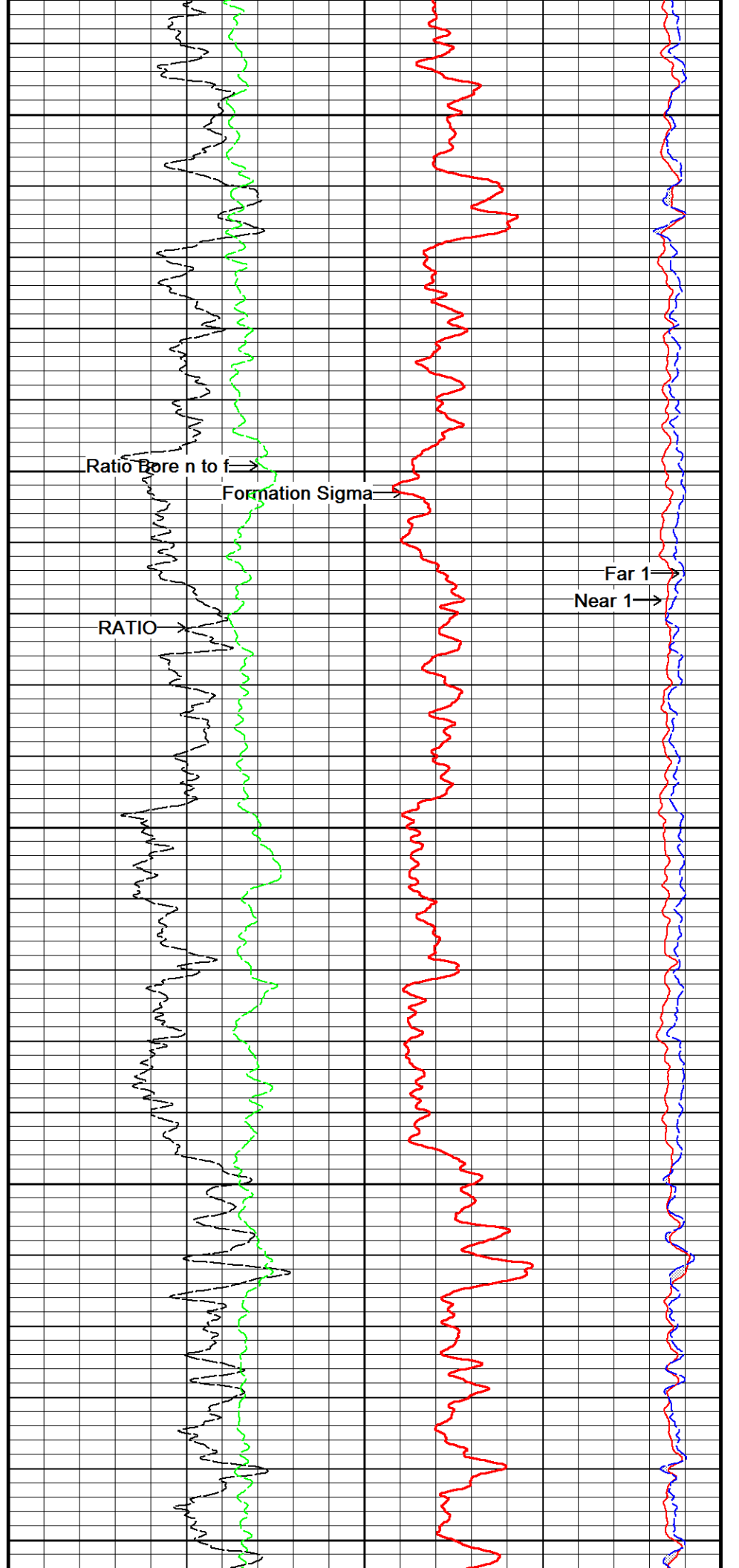
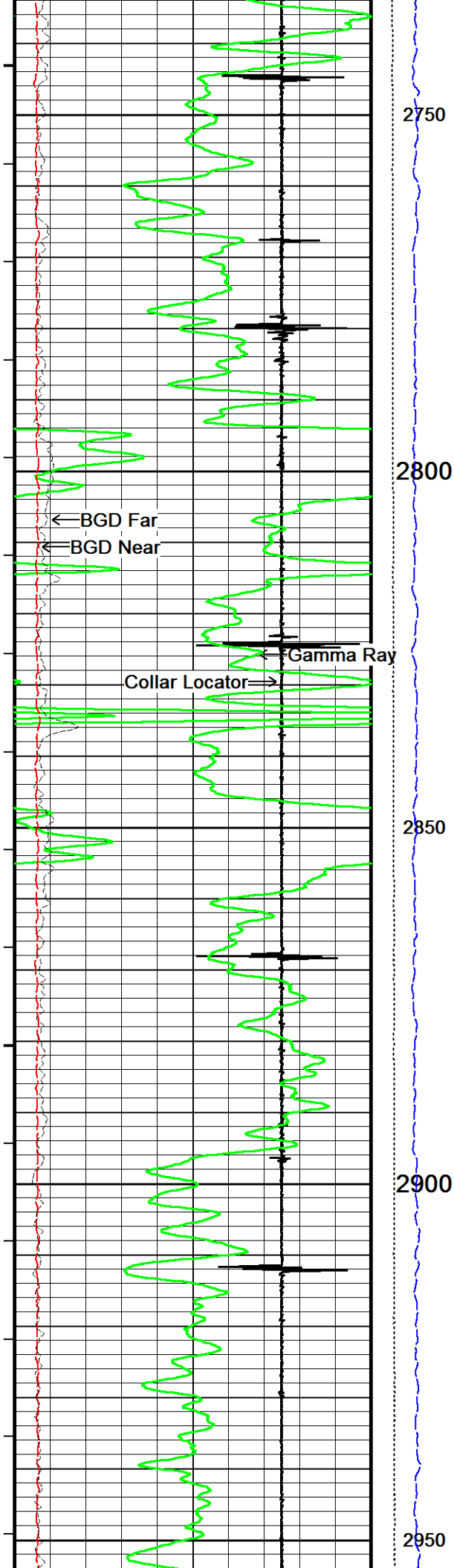
BOREHOLE RECORD						Last Edited: 30-MAR-2018 08:30
Bit Size inches		Depth From feet		Depth To feet		
14.750		0.00		2522.00		
8.750		2522.00		7582.00		
7.825		7582.00		10121.00		
CASING / TUBING RECORD						
Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	J-55		9.625	0.00	2432.00	36.00
PRODUCTION	P-110		4.500	0.00	10104.00	11.60

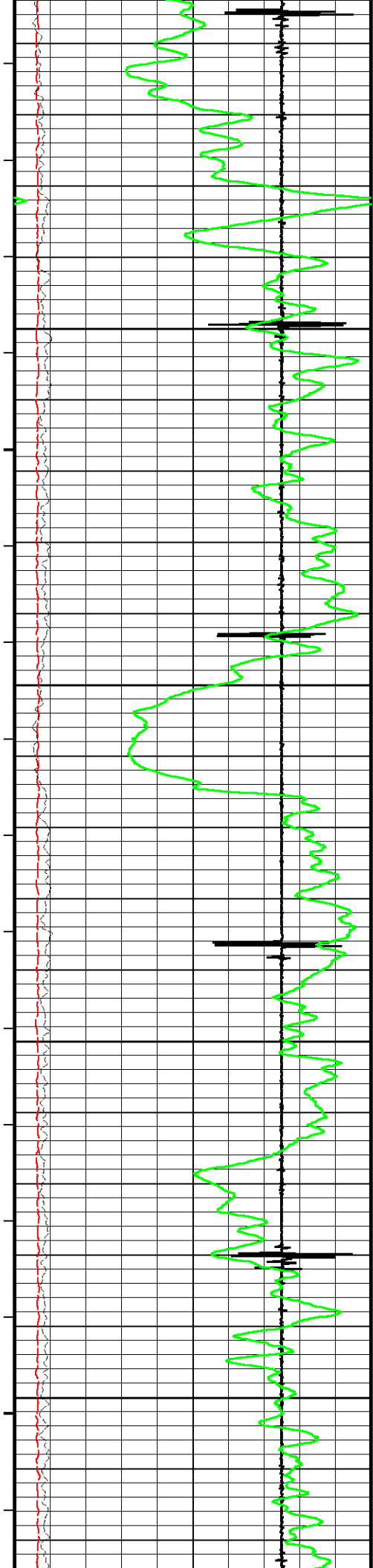
REMARKS
SOFTWARE VERSION 18.01.5248 - COMMERCIAL VERSION
ALL DEPTH CONTROL PROCEDURES FOR SUBSEQUENT RUN IN HOLE WERE FOLLOWED. LOG WAS RUN FROM 30' K.B.
SHORT JOINT LOCATED AT 6574' - 6584'
SURFACE SYSTEM USED: WCM-D 160
TOOLS RUN: CCPC, PNEE, PDTS, PGNS WERE RAN IN COMBINATION
GAMMA RAY COUNTS ON SUBSEQUENT PASSES ARE AFFECTED BY RESIDUAL NEUTRON ACTIVATION CAUSED BY THE PREVIOUS PASS
CREW: PAUL MAZUR, MANNY MENDEZ, JEREMY STEWART

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

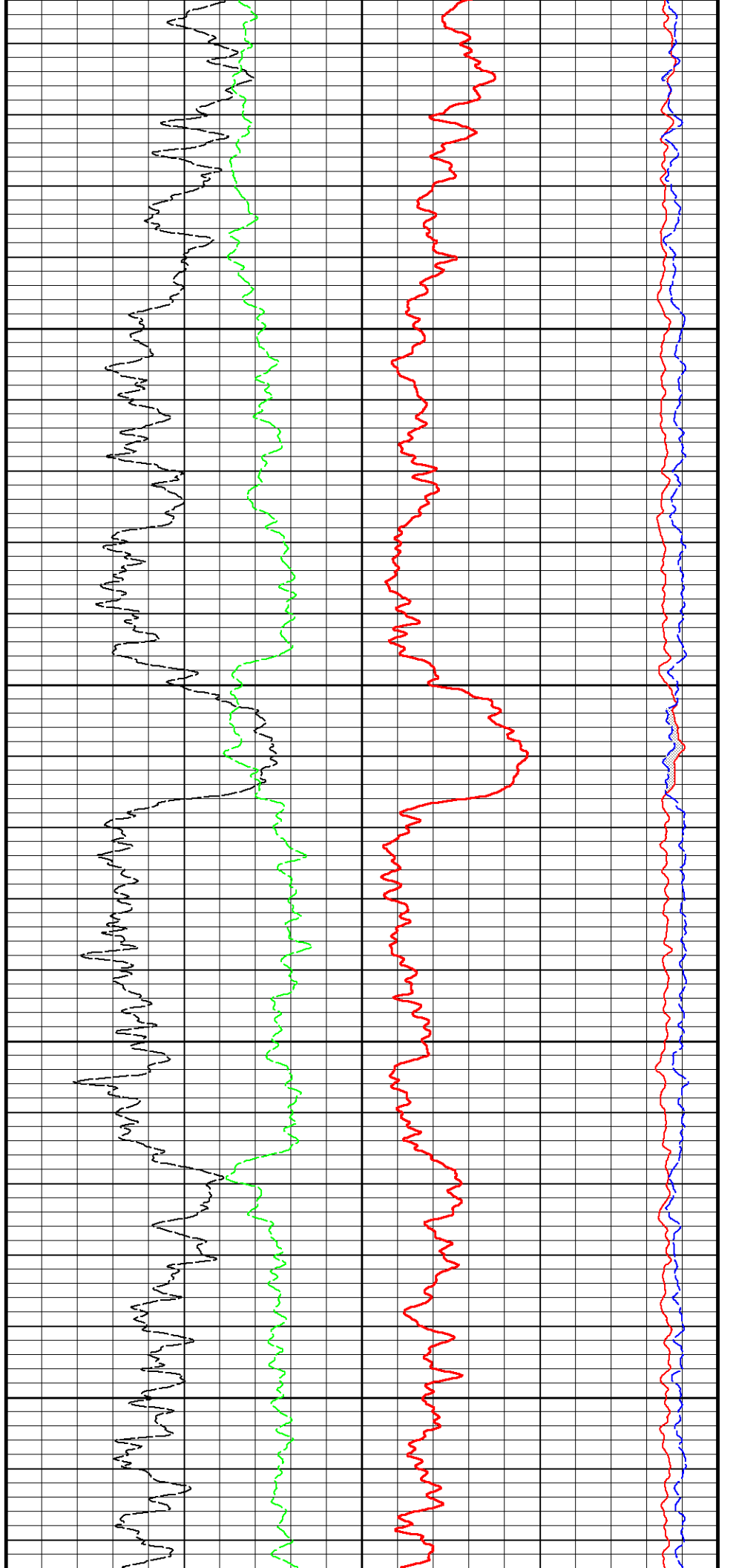


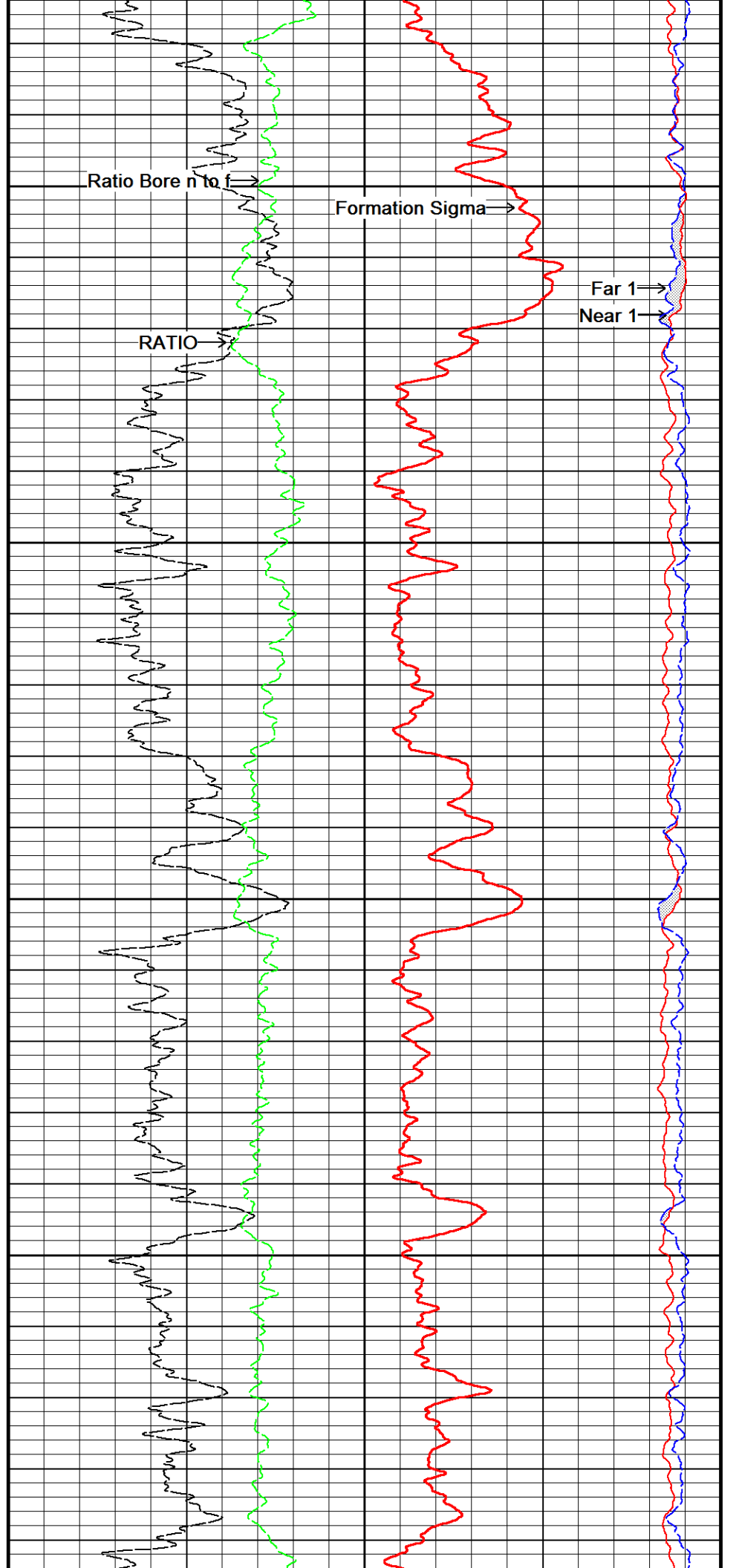
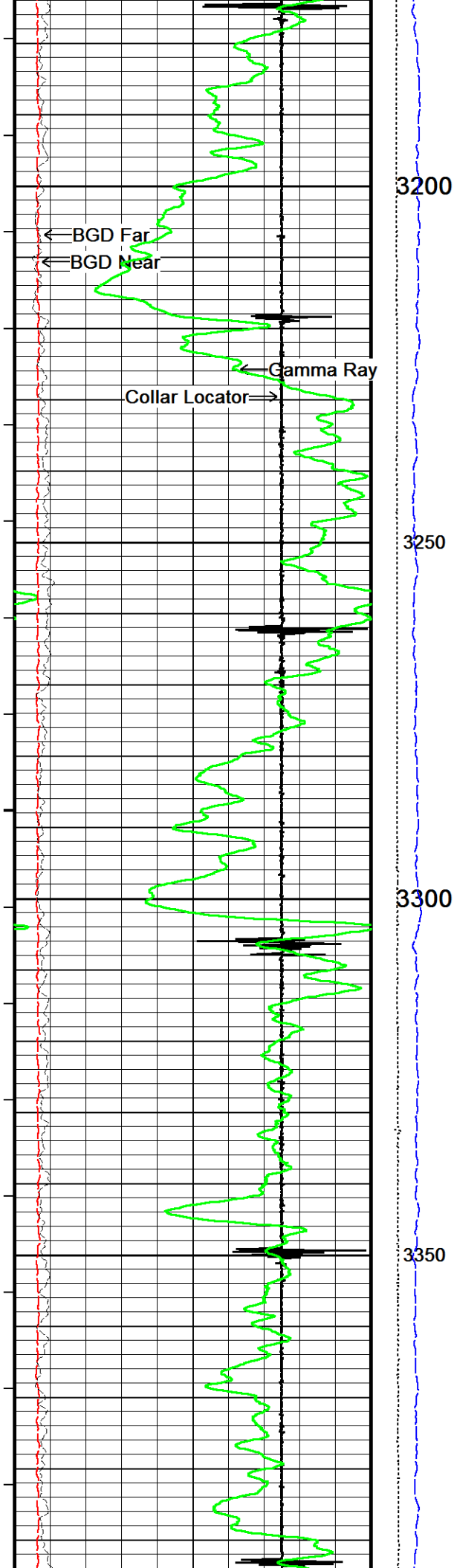


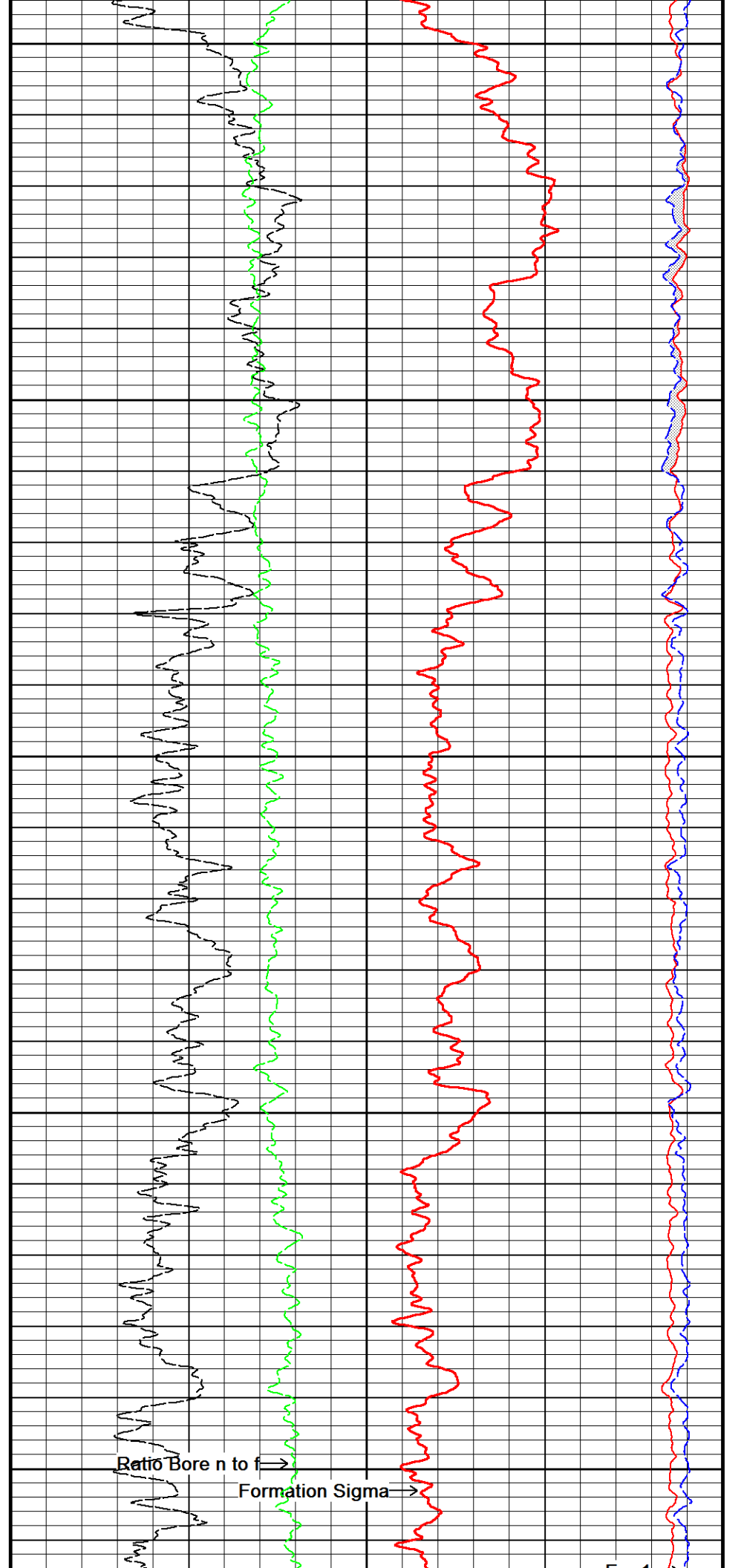
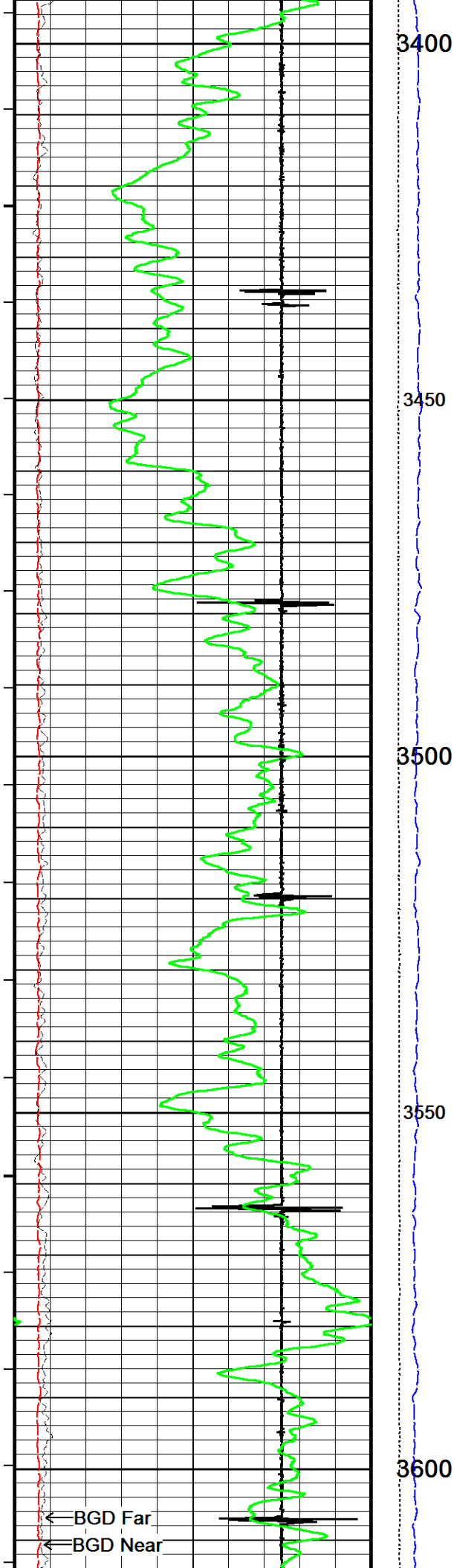




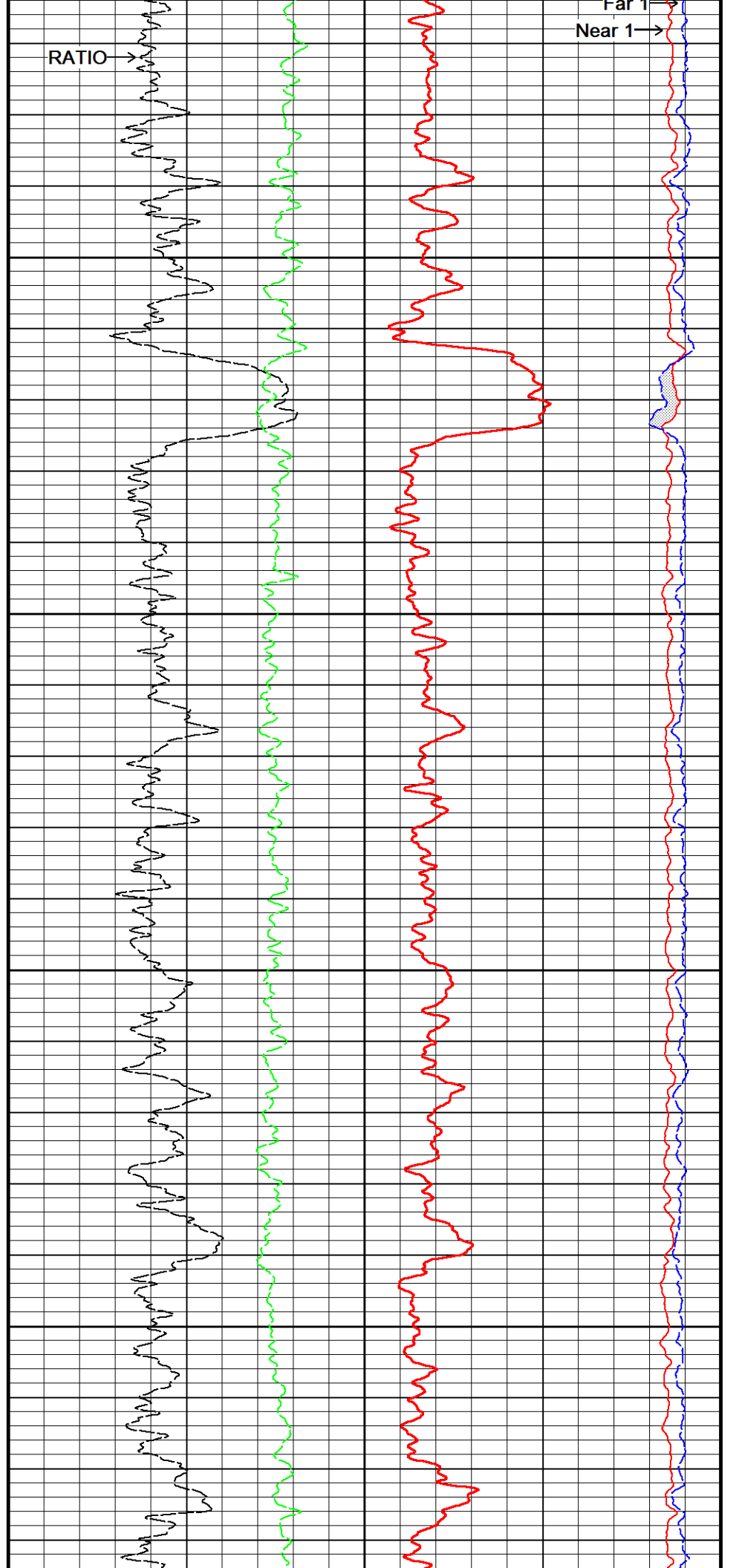
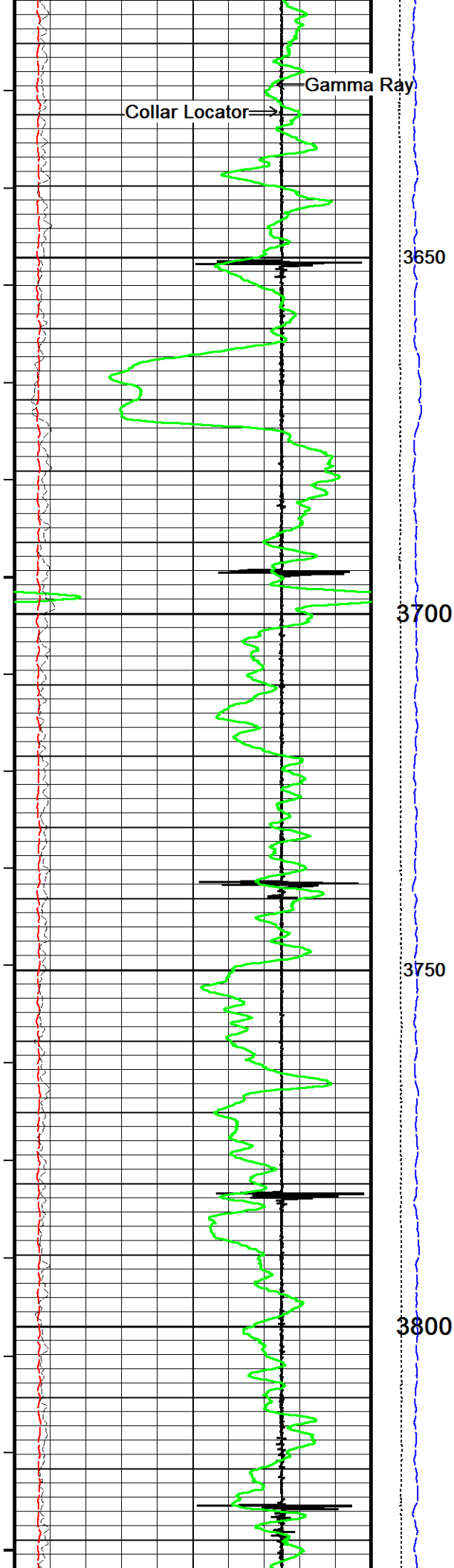
3000 3050 3100 3150



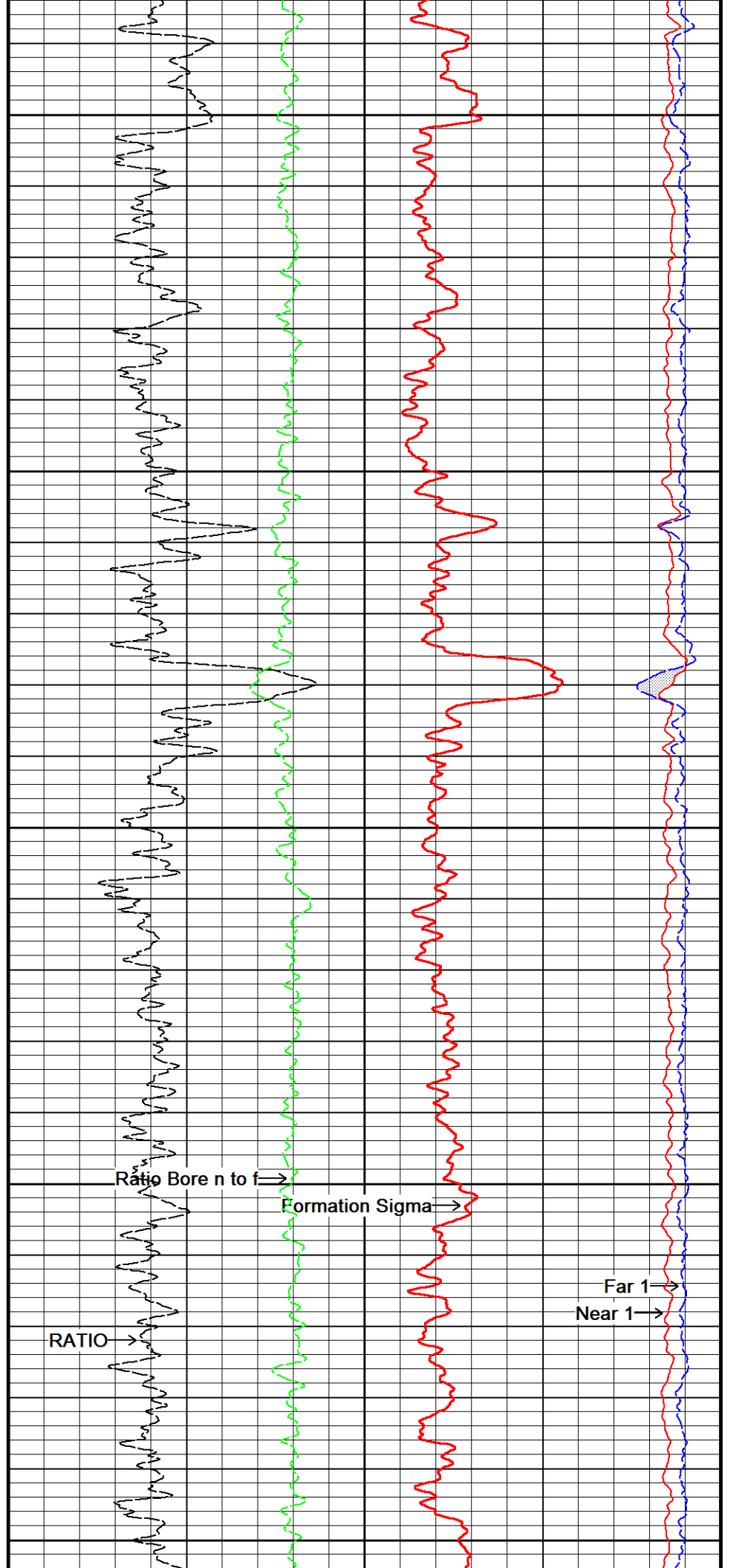
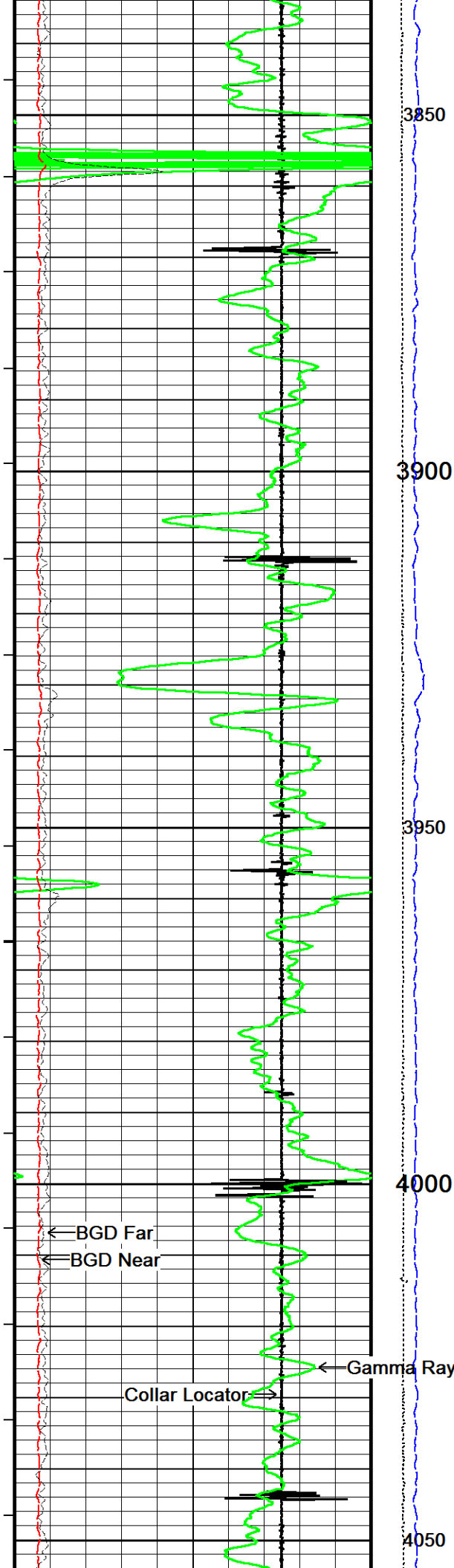


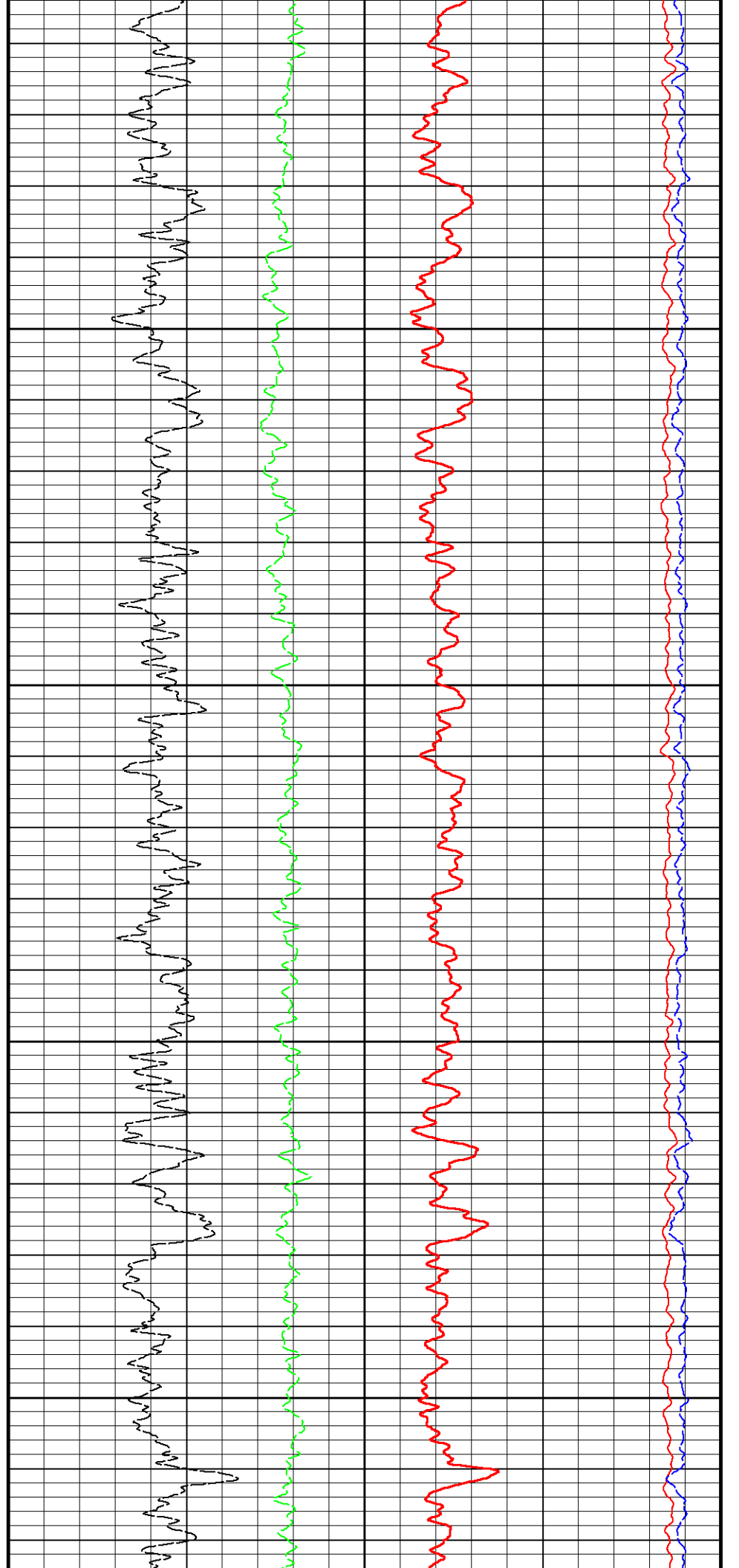
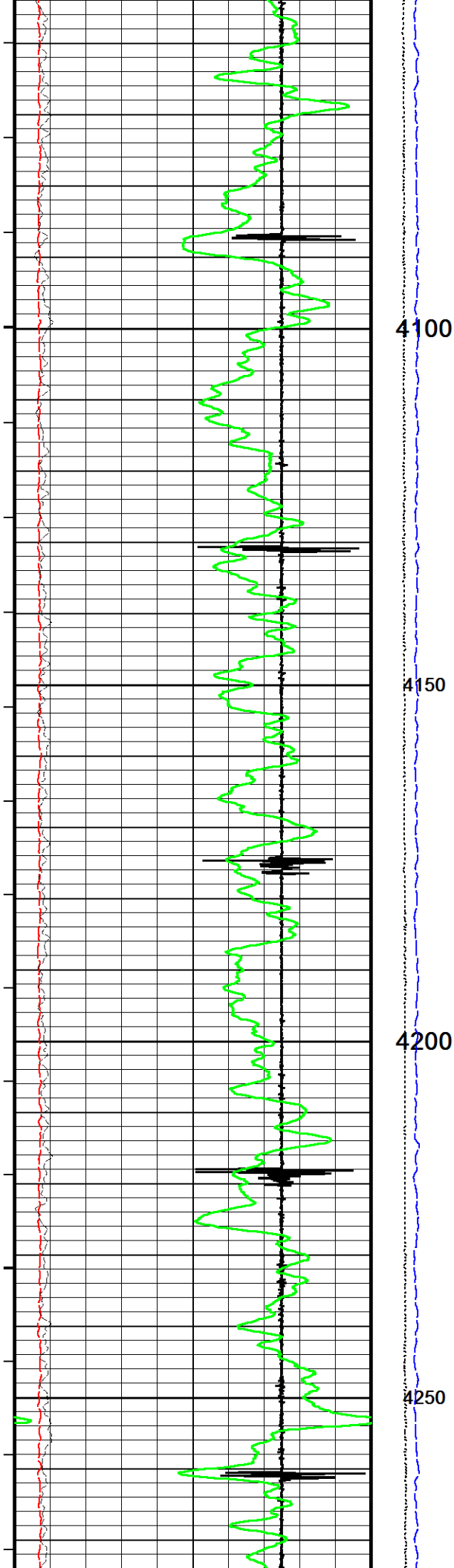


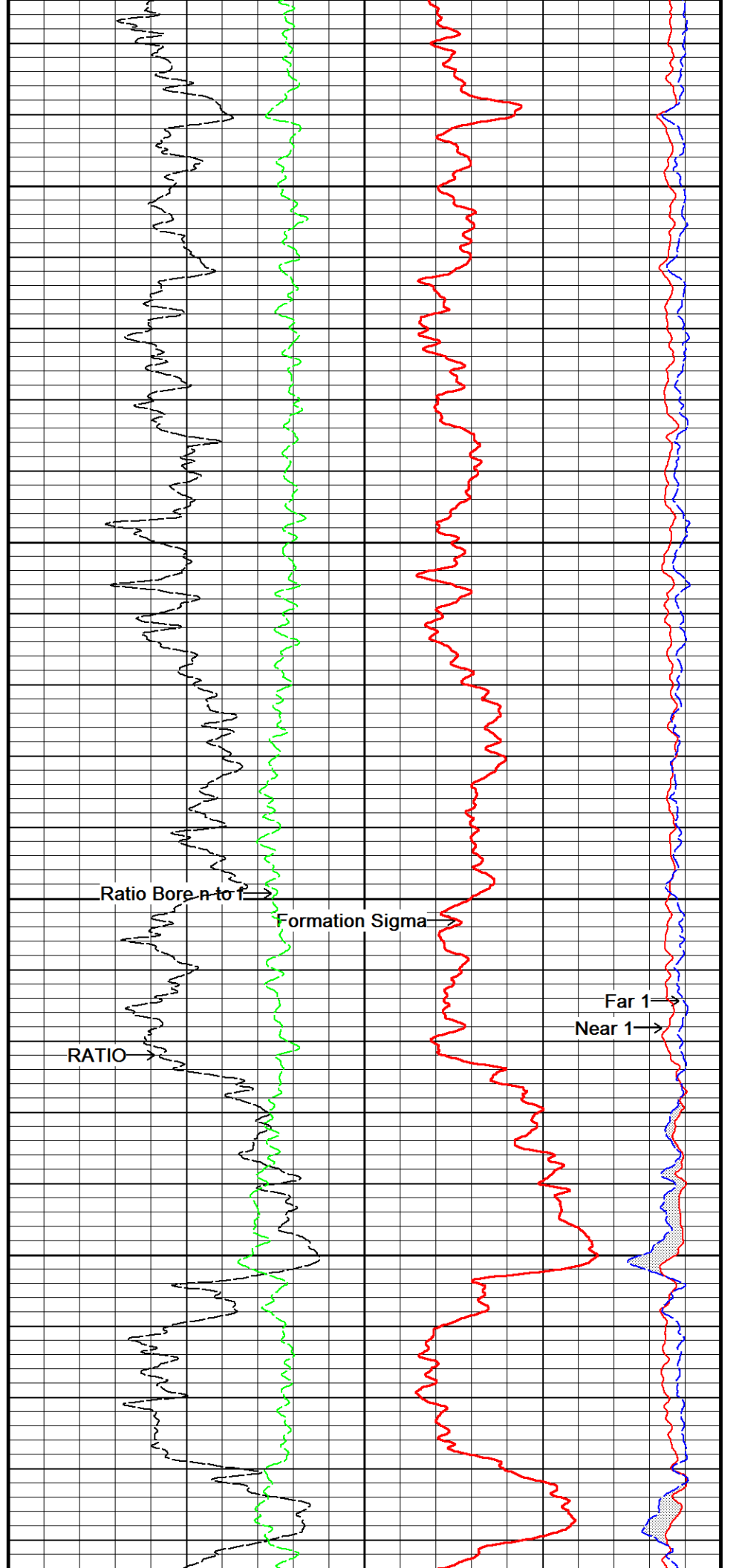
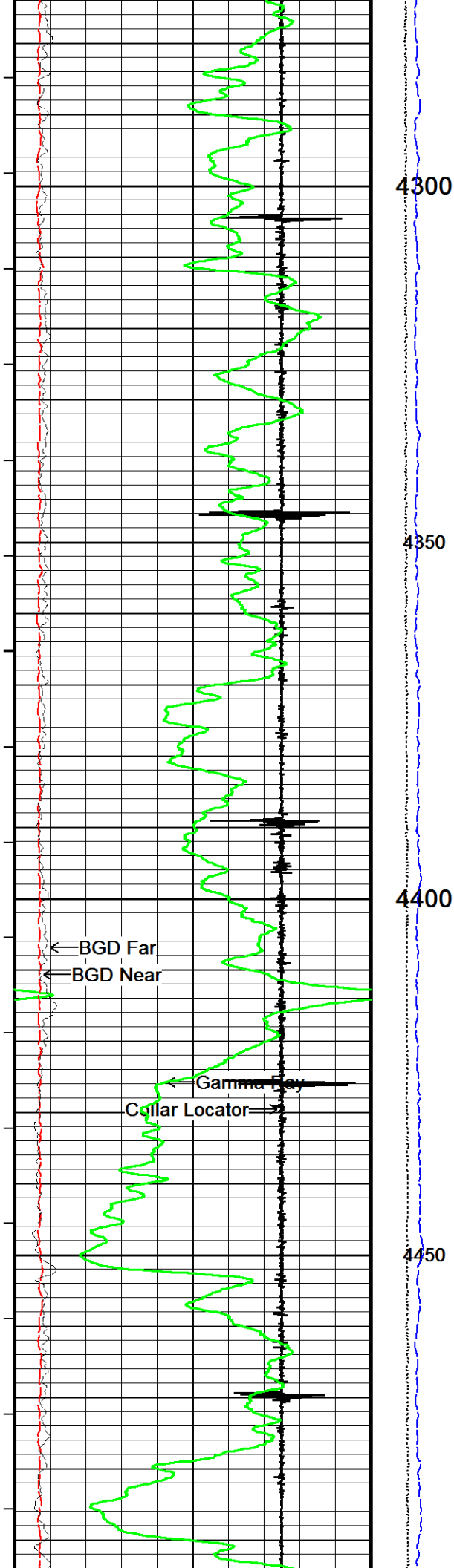


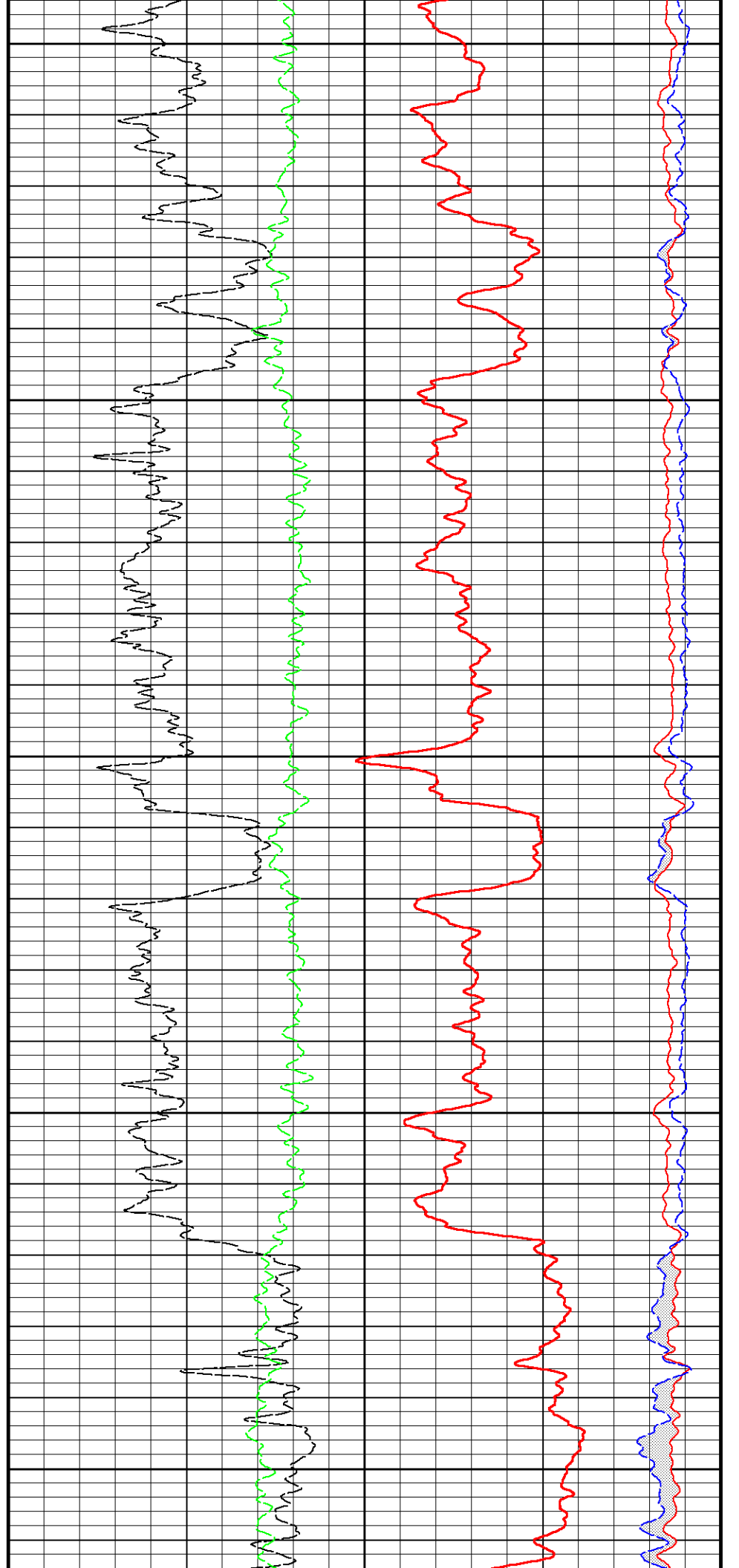
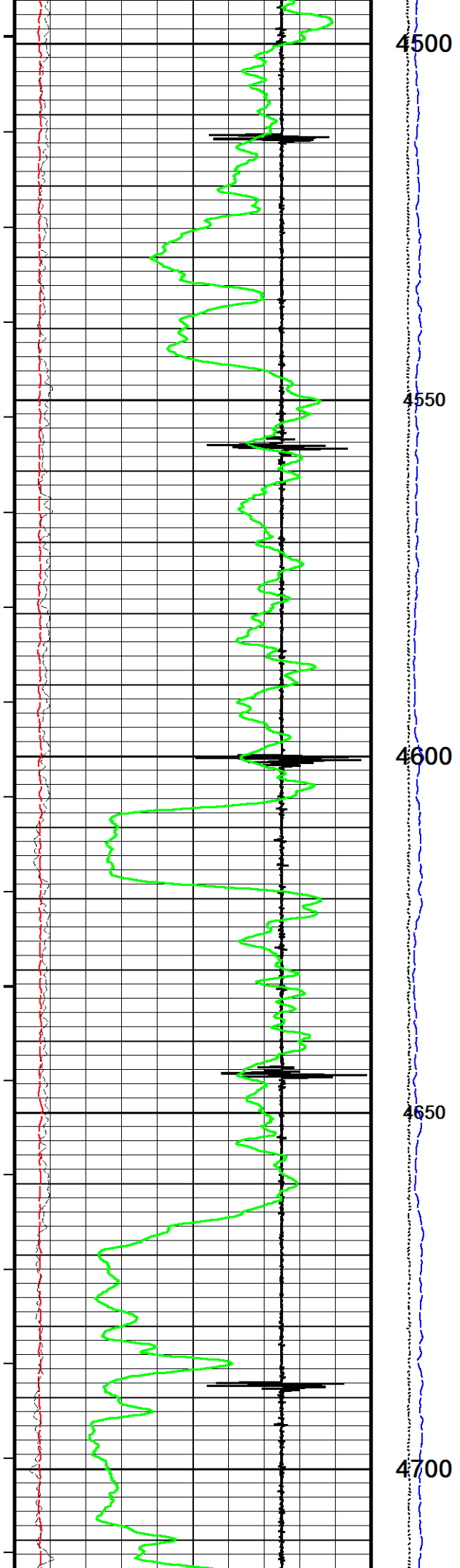


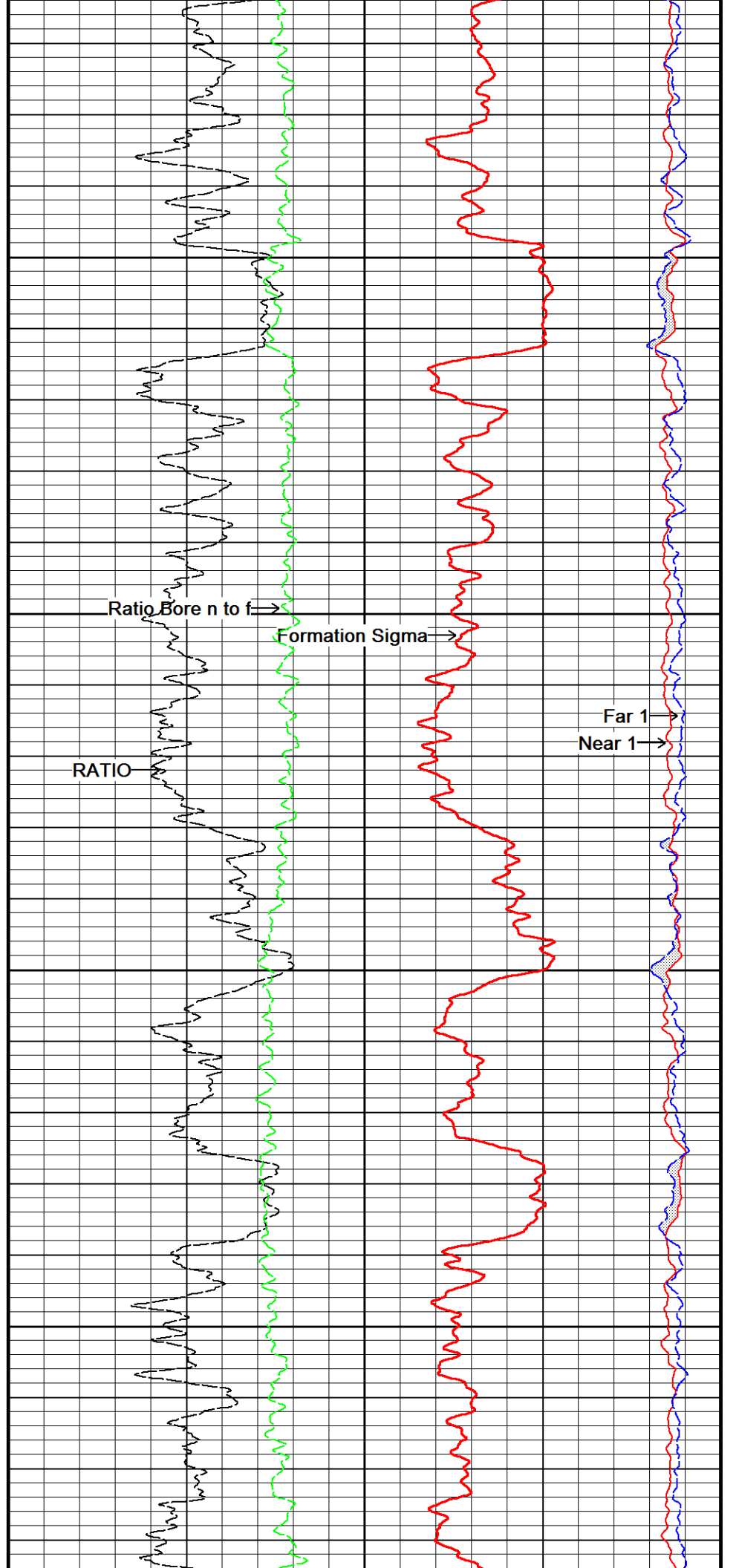
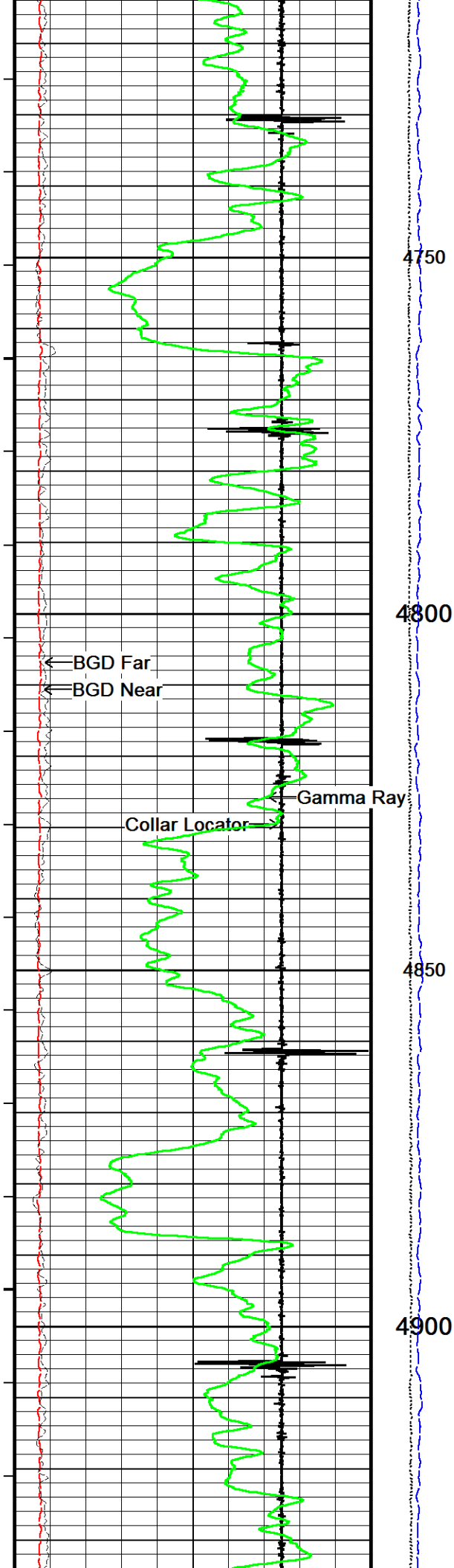


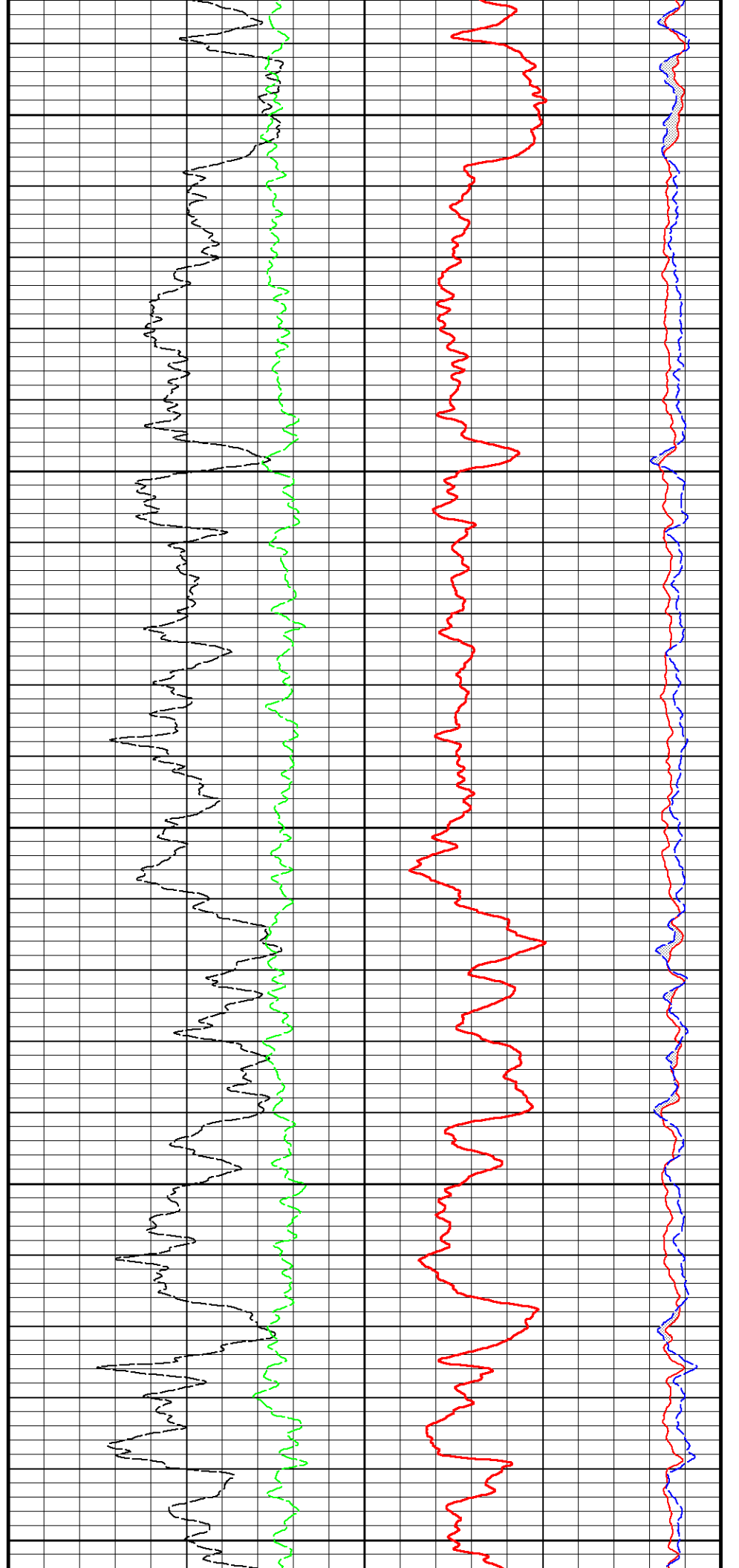
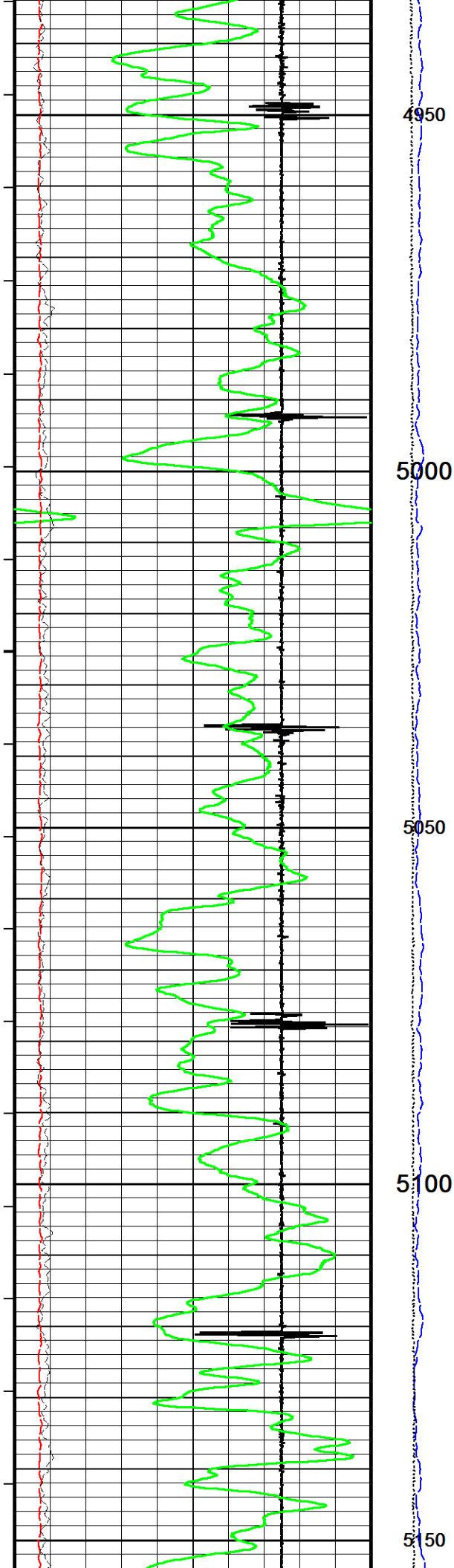


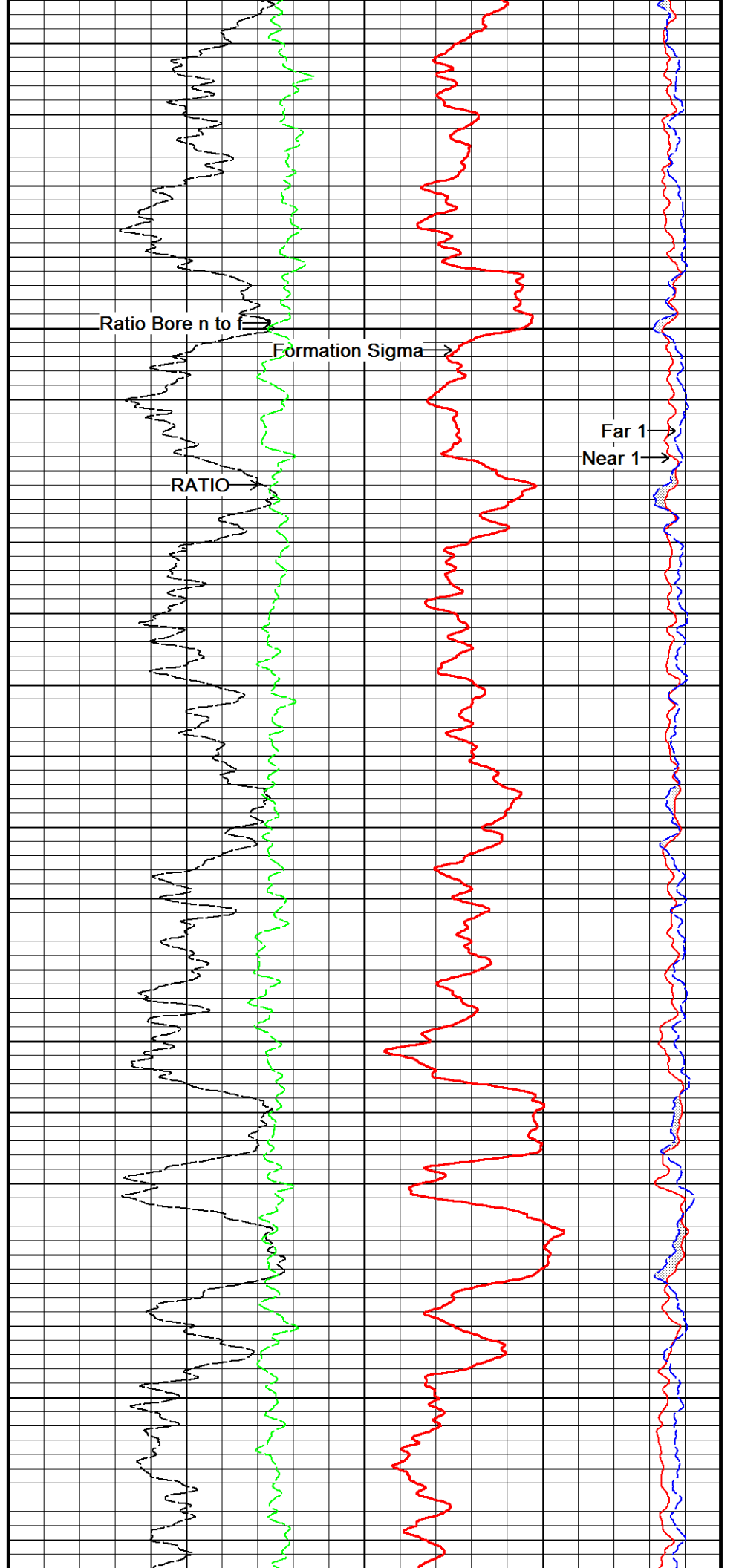
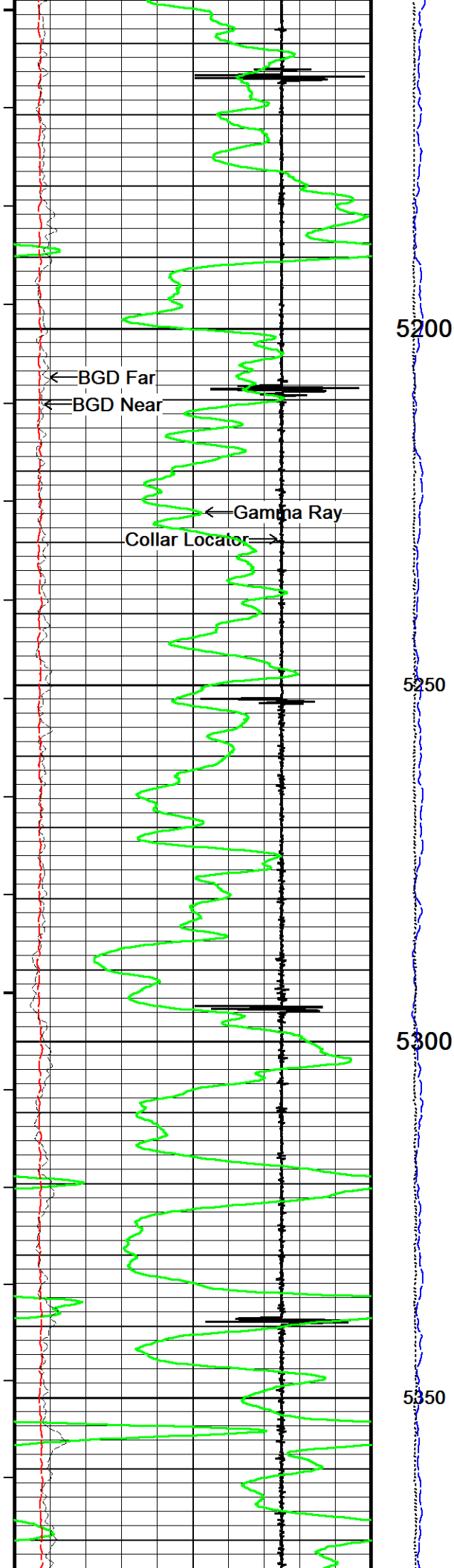




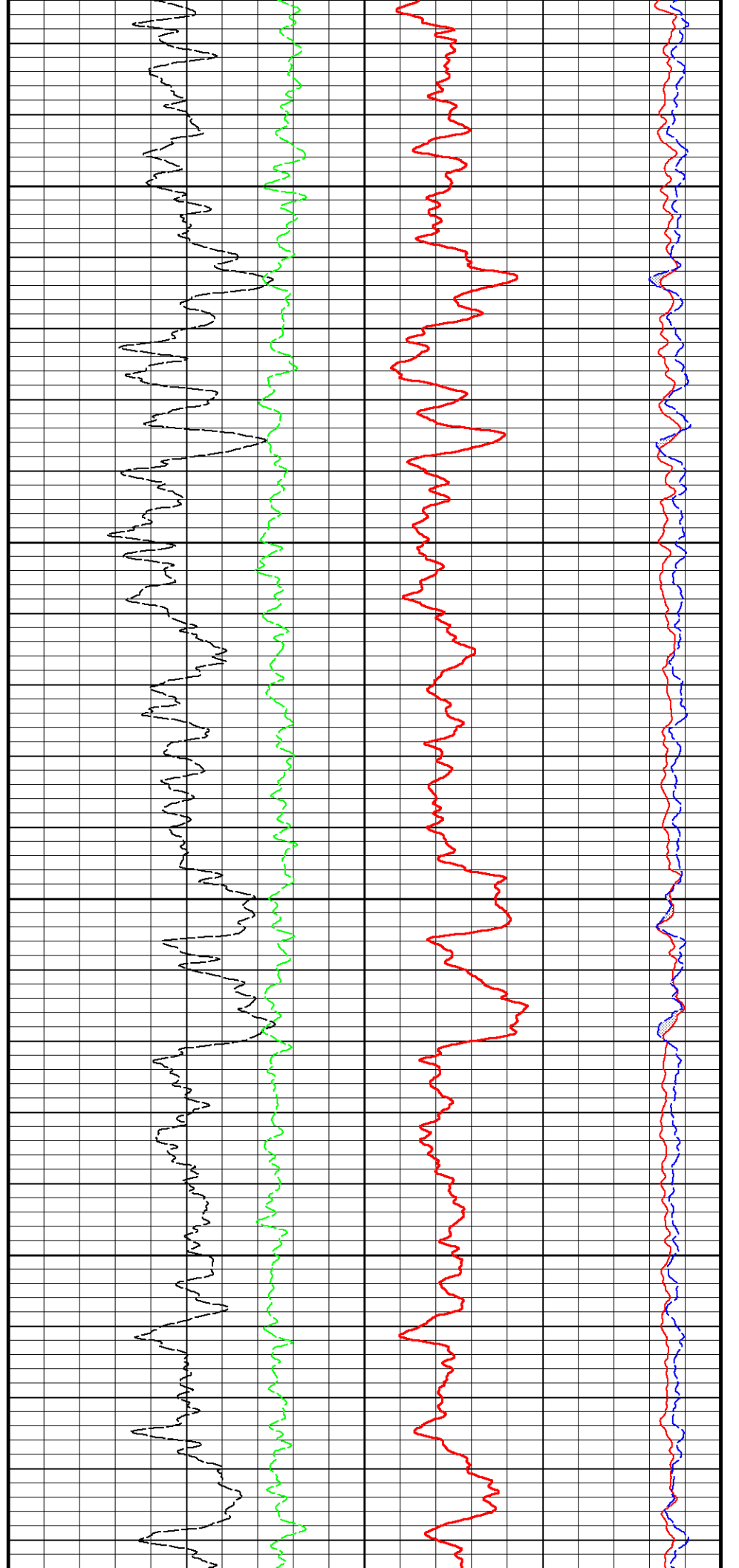
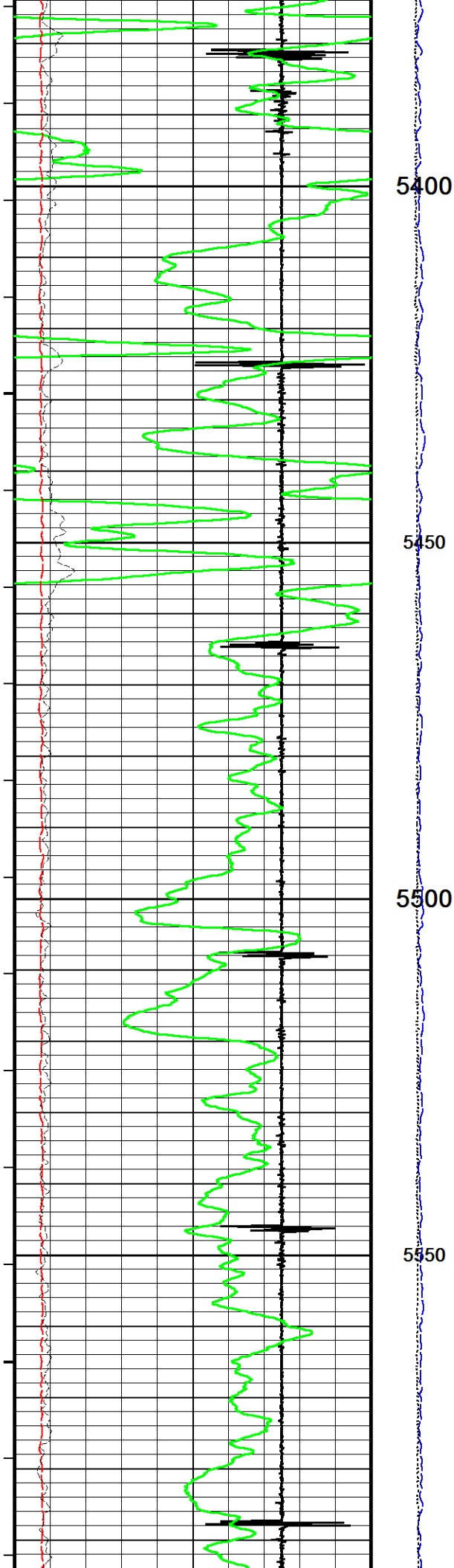


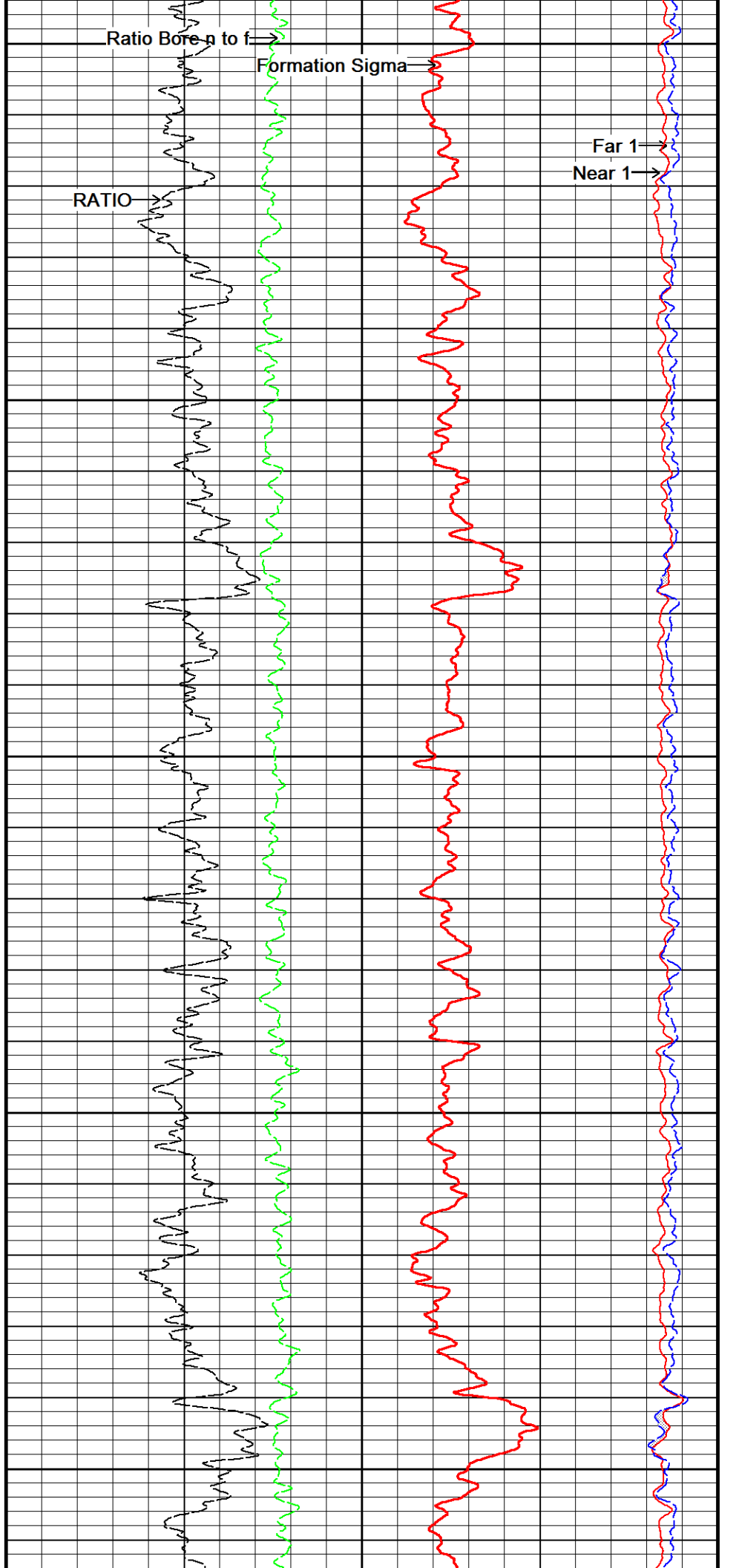
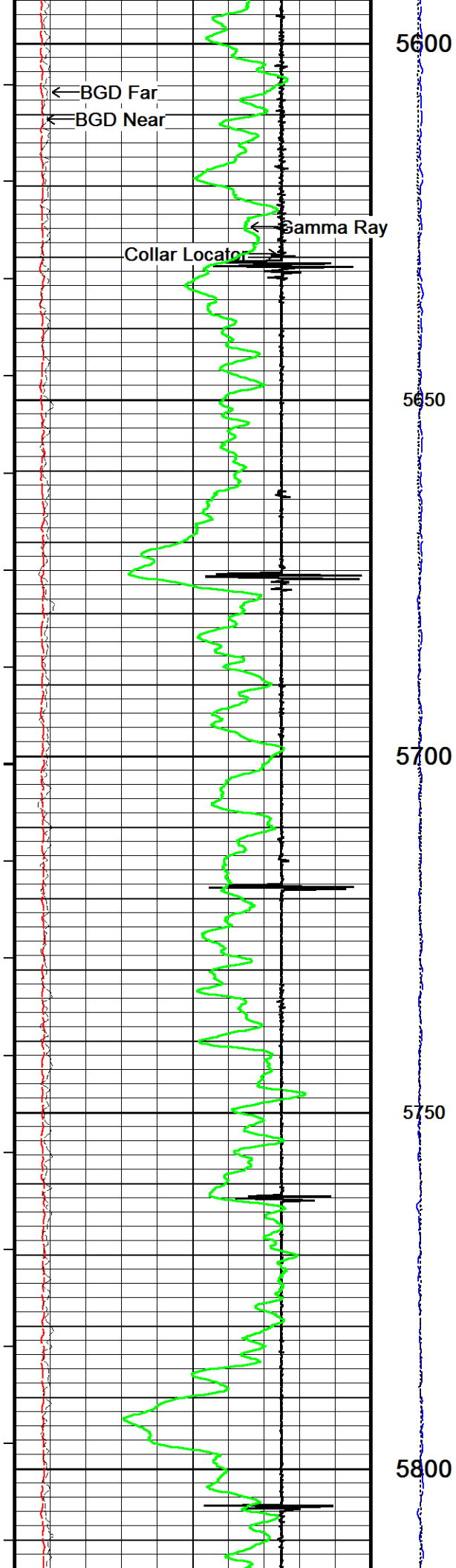


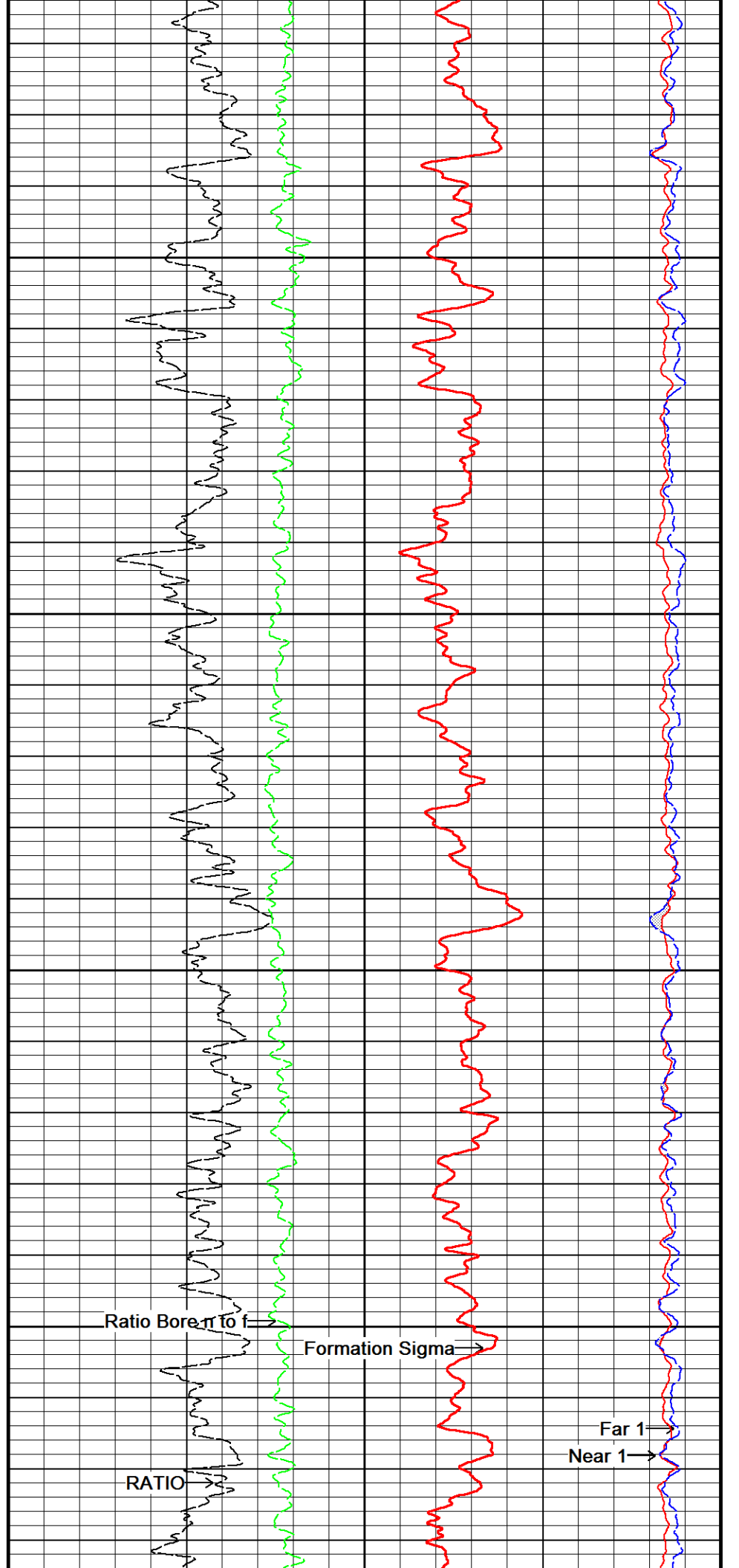
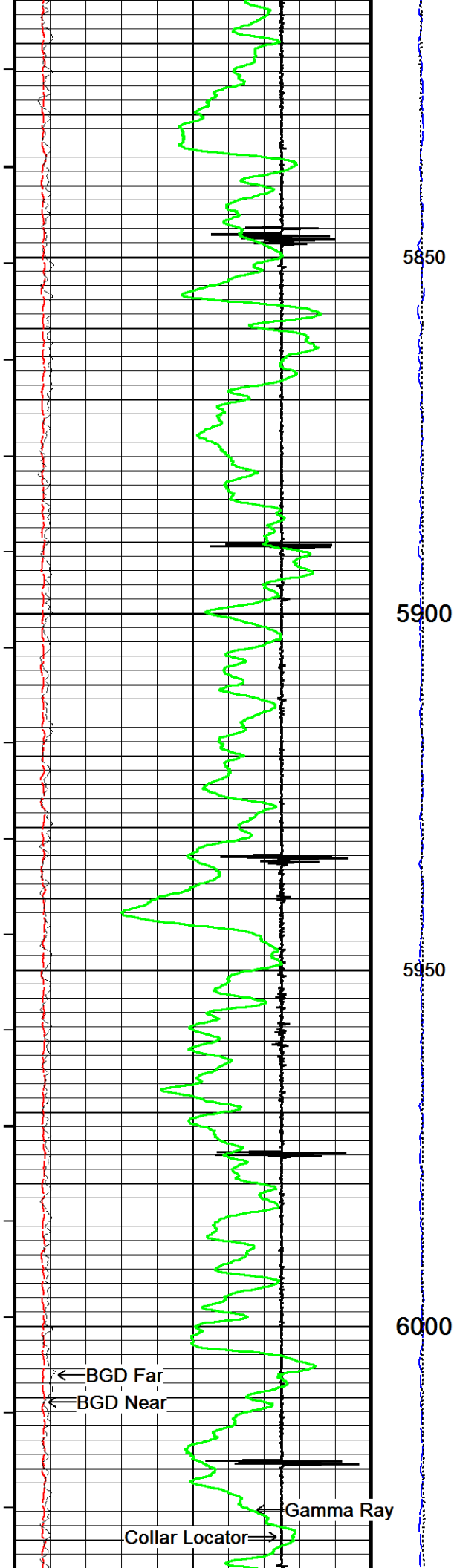


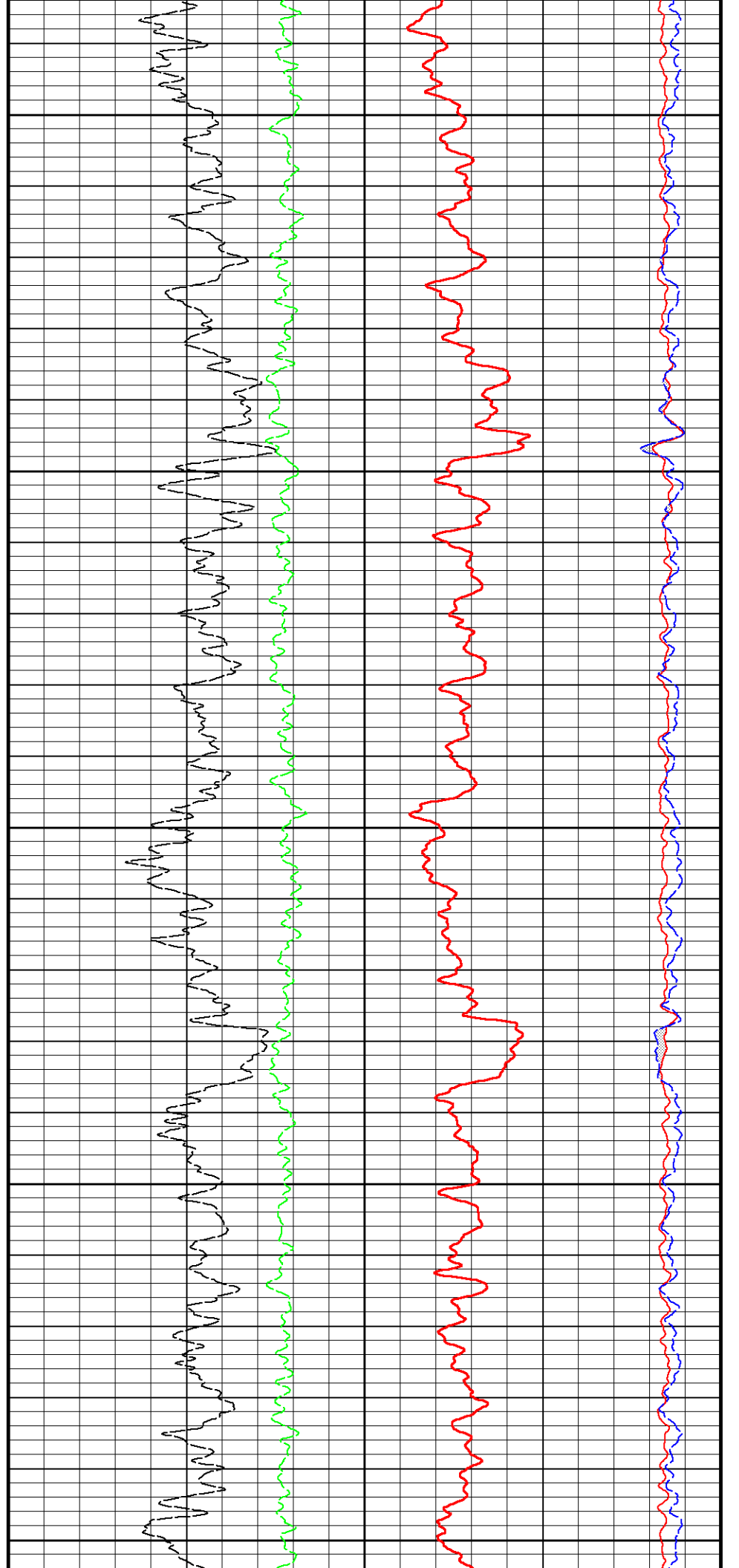
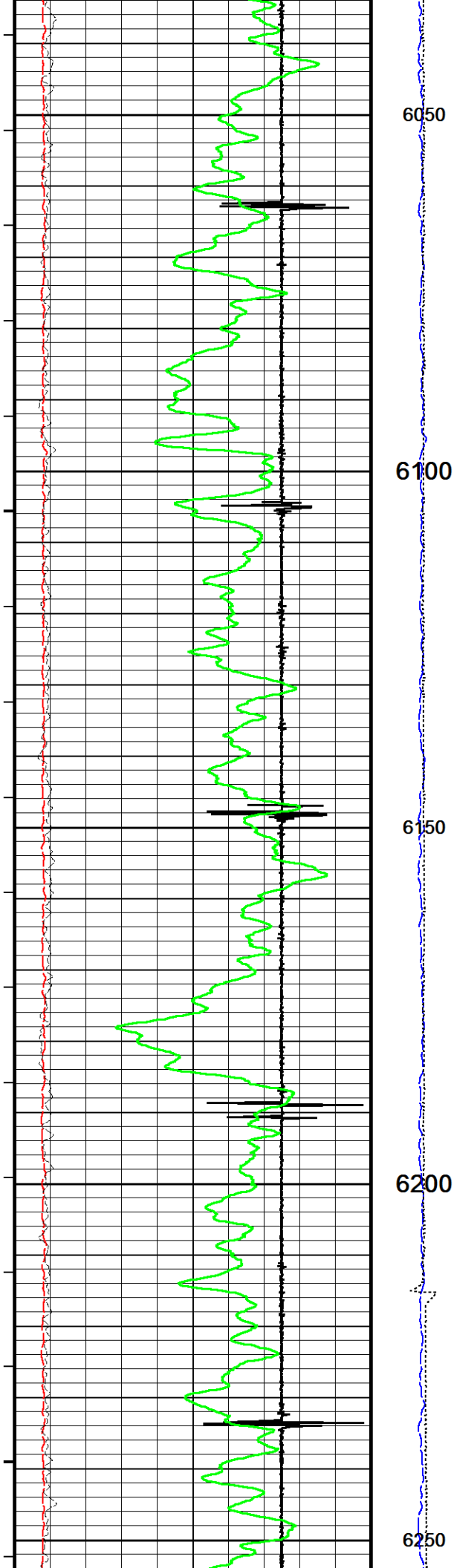


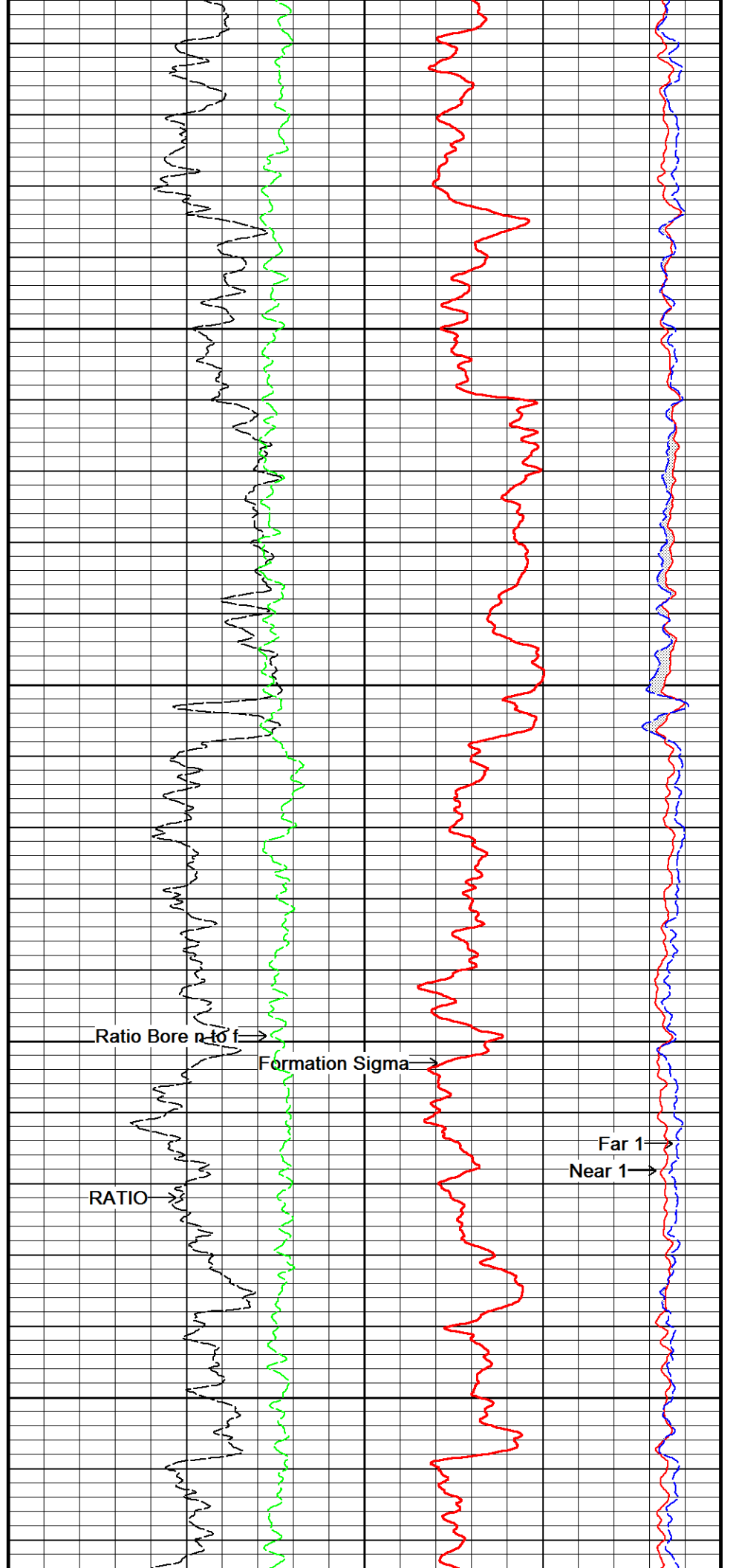
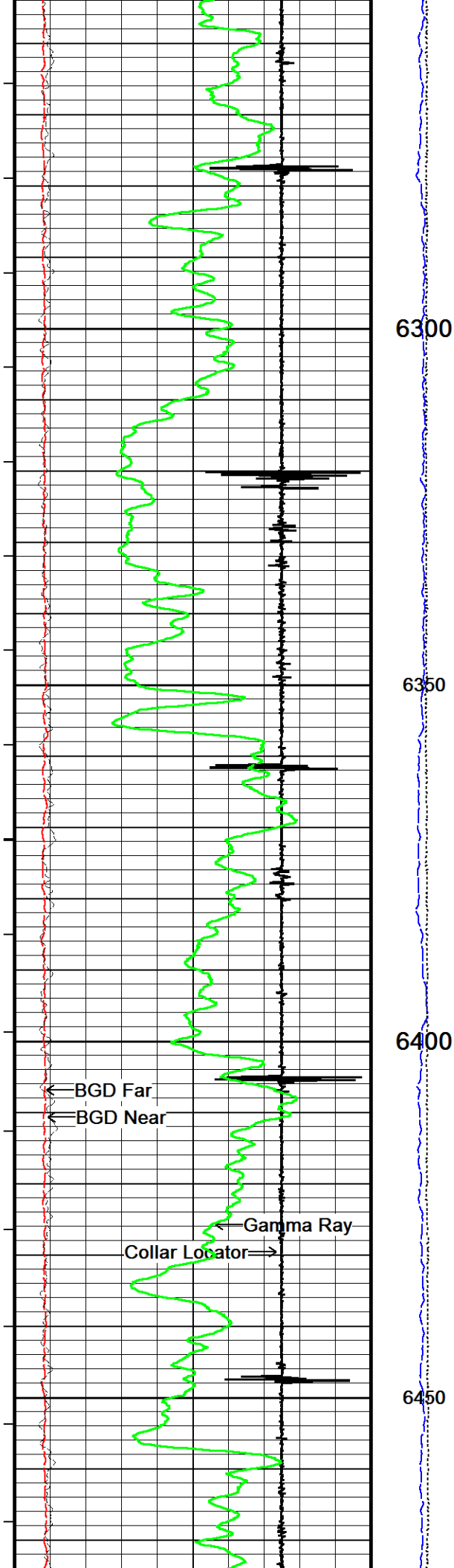


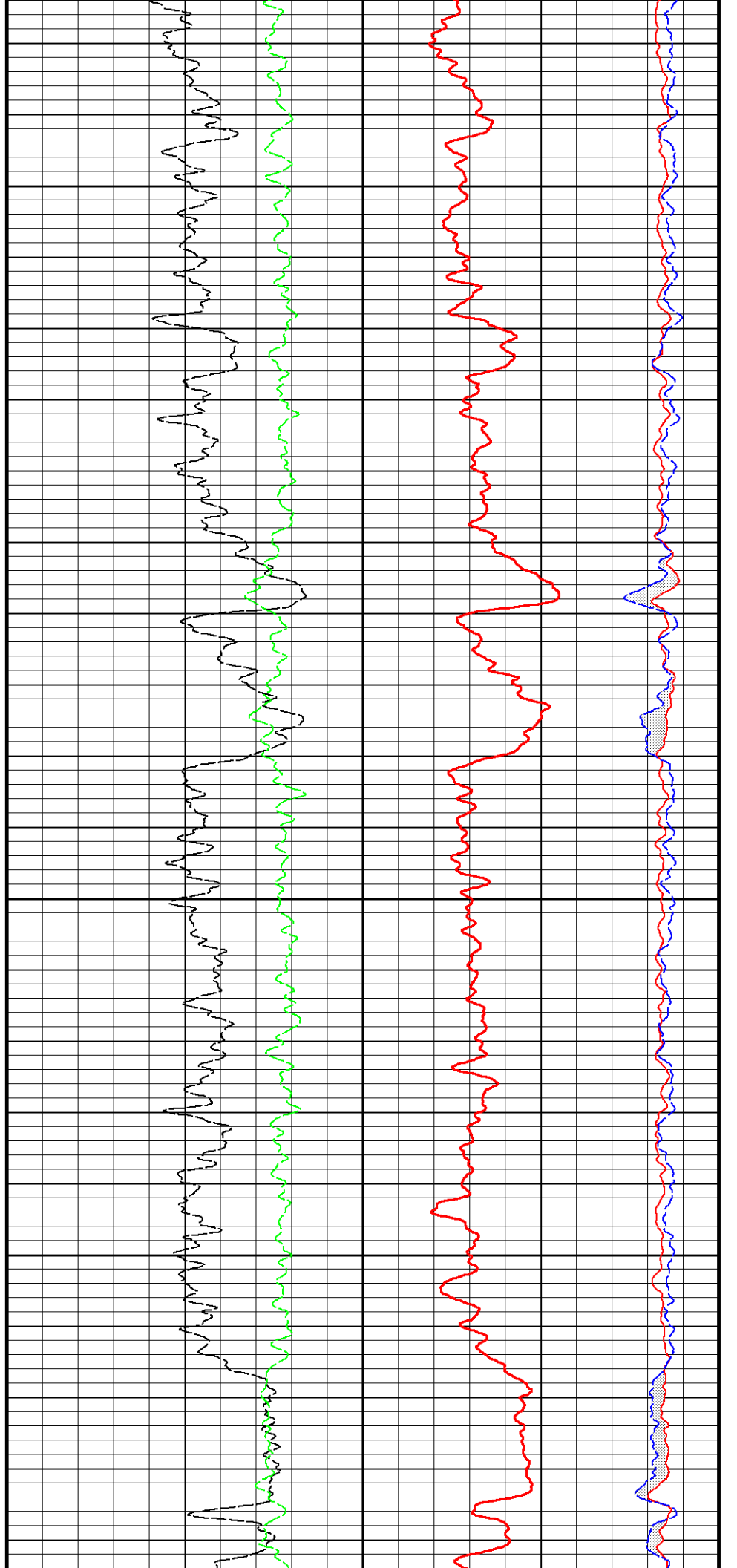
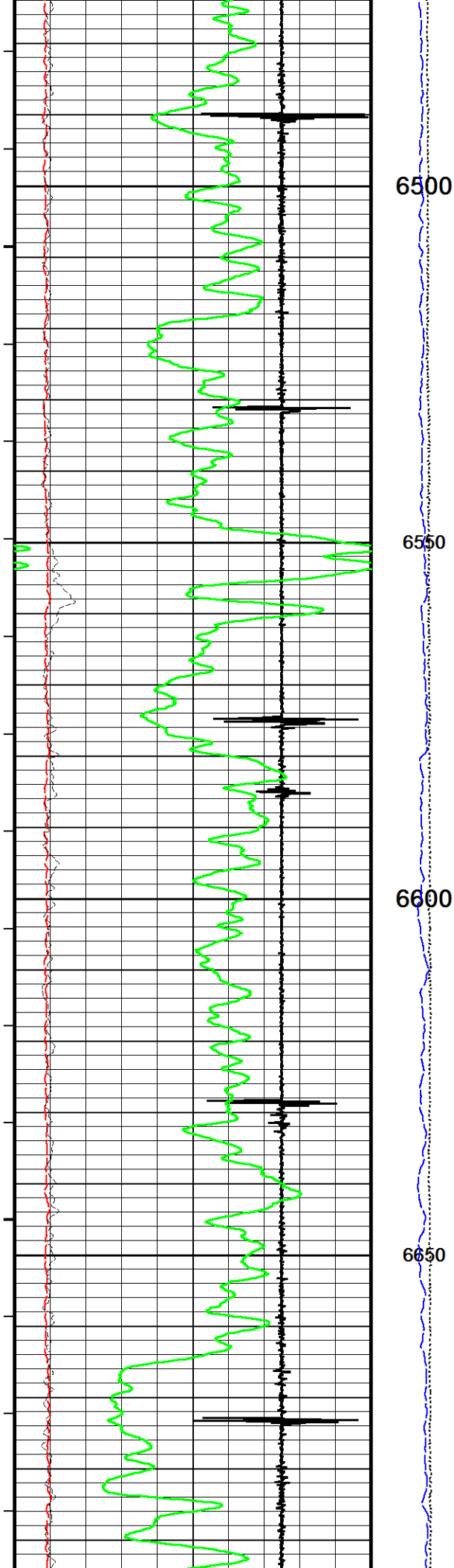


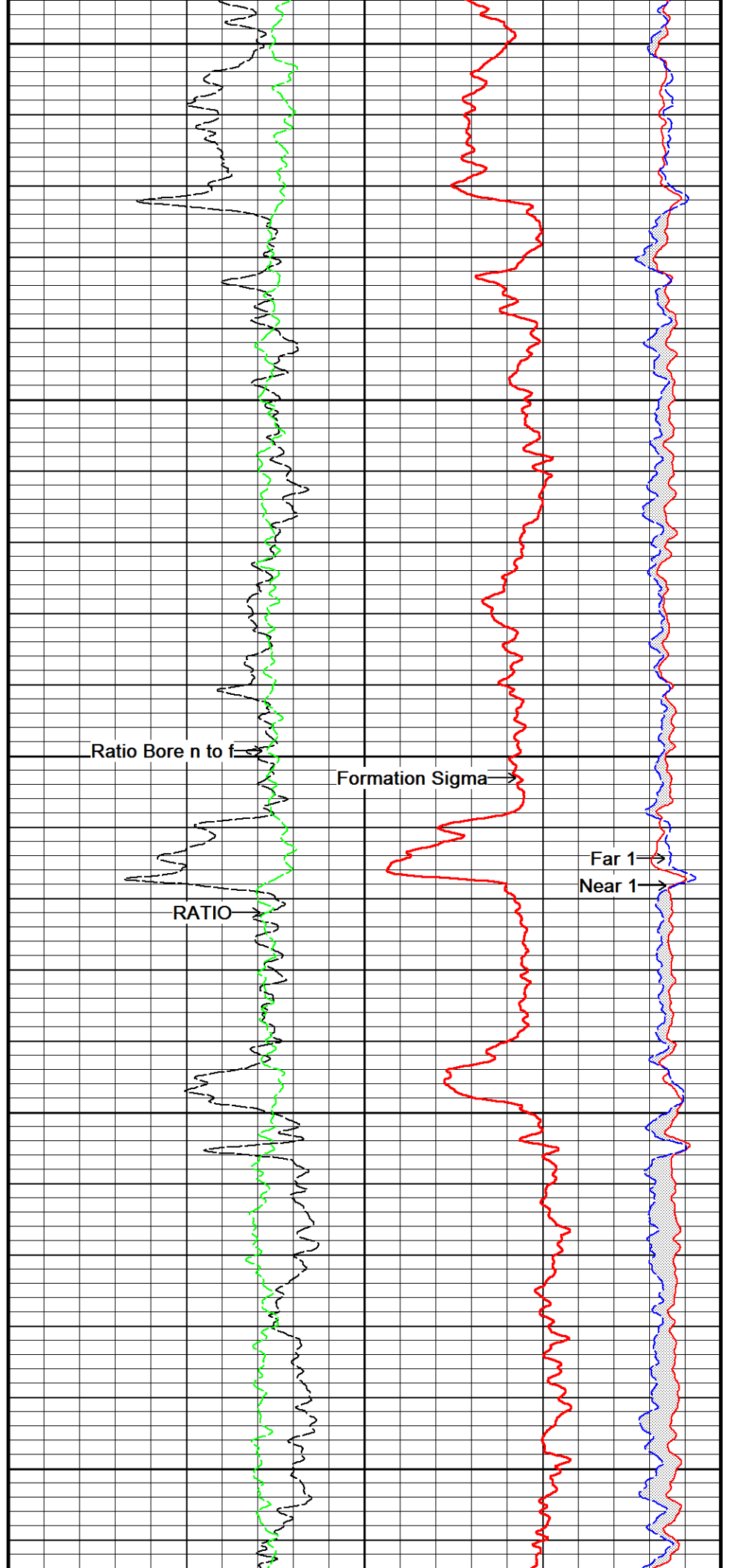
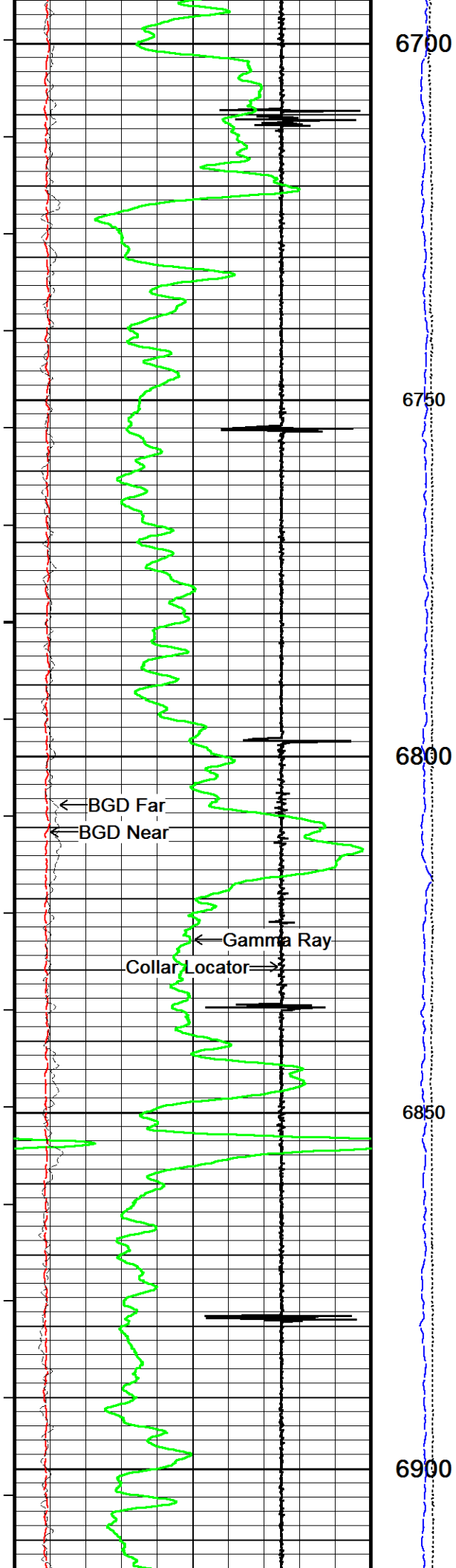




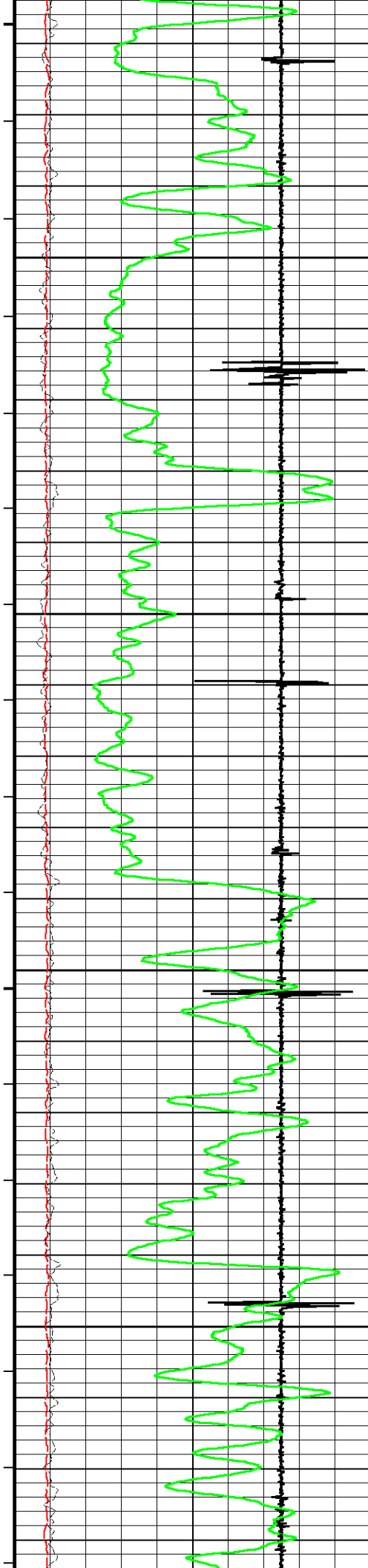










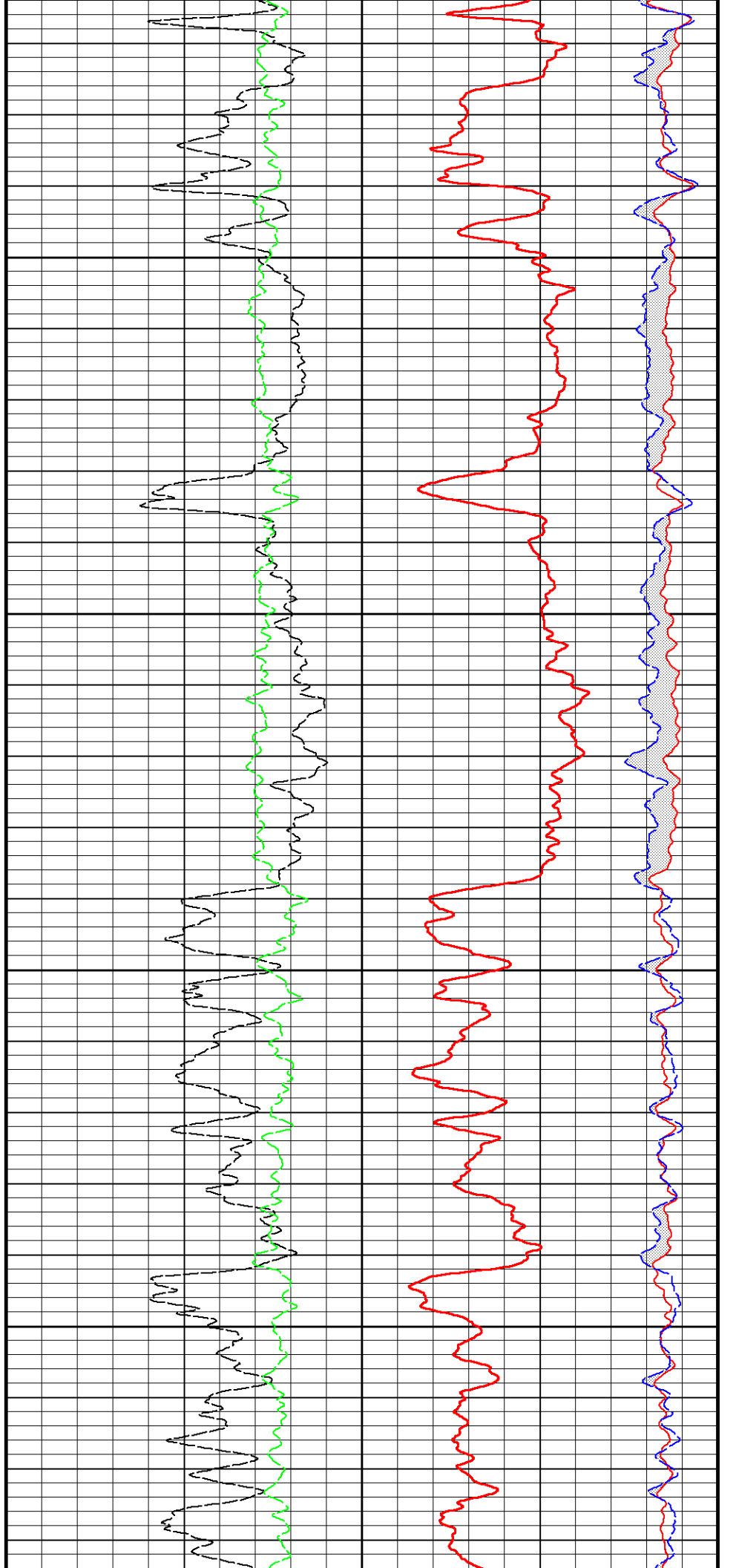


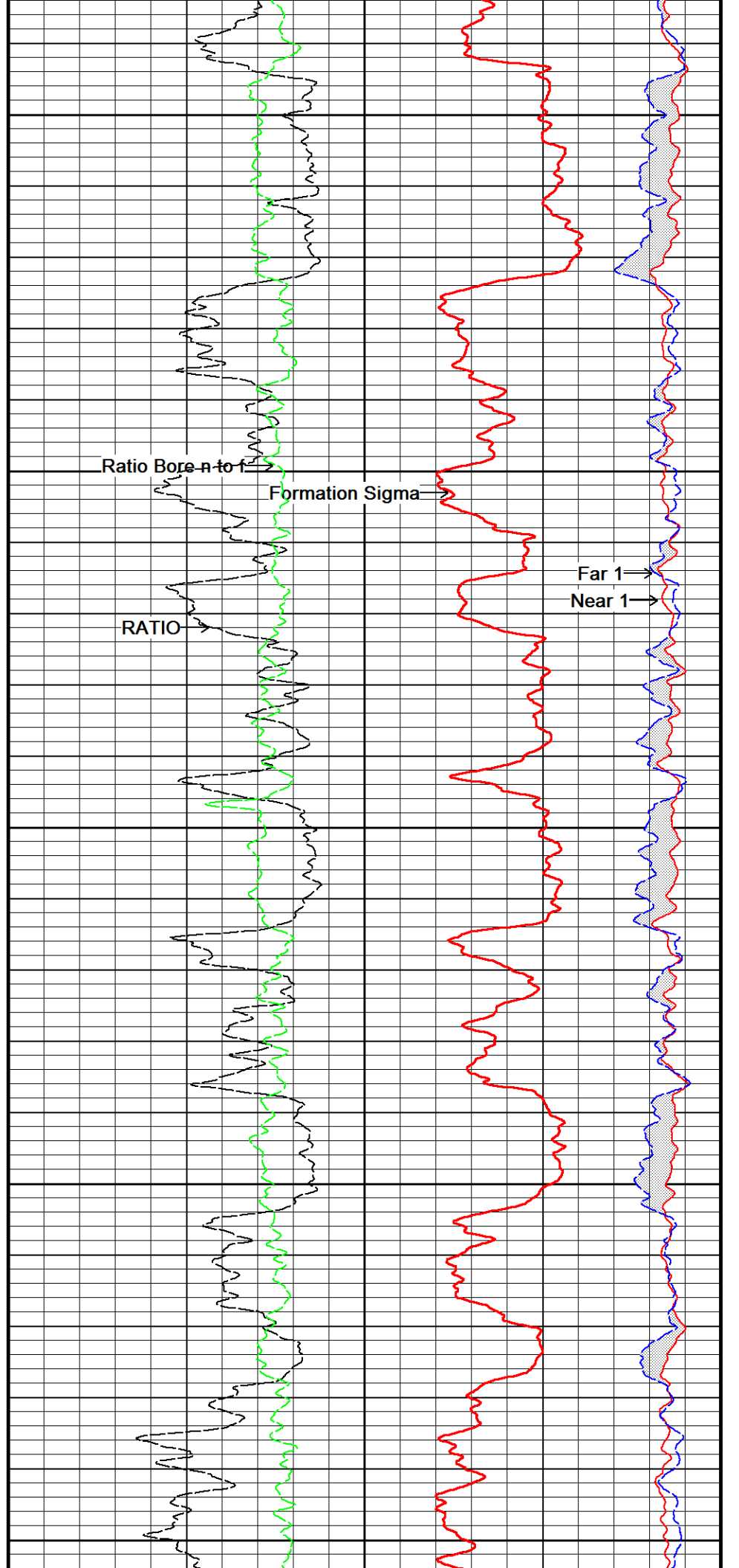
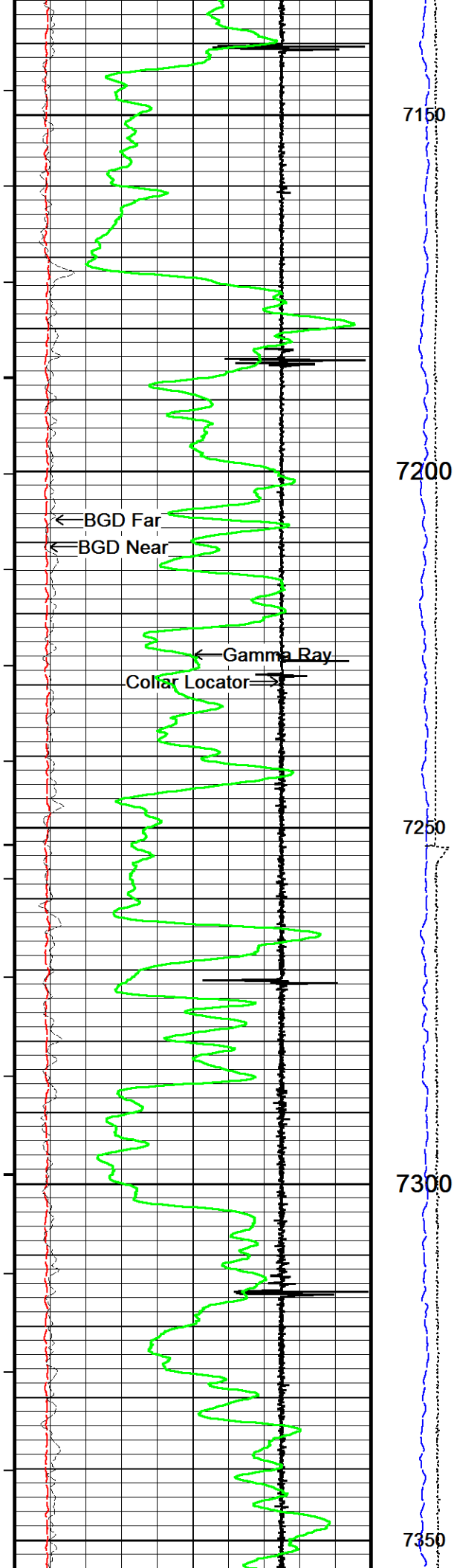
6950

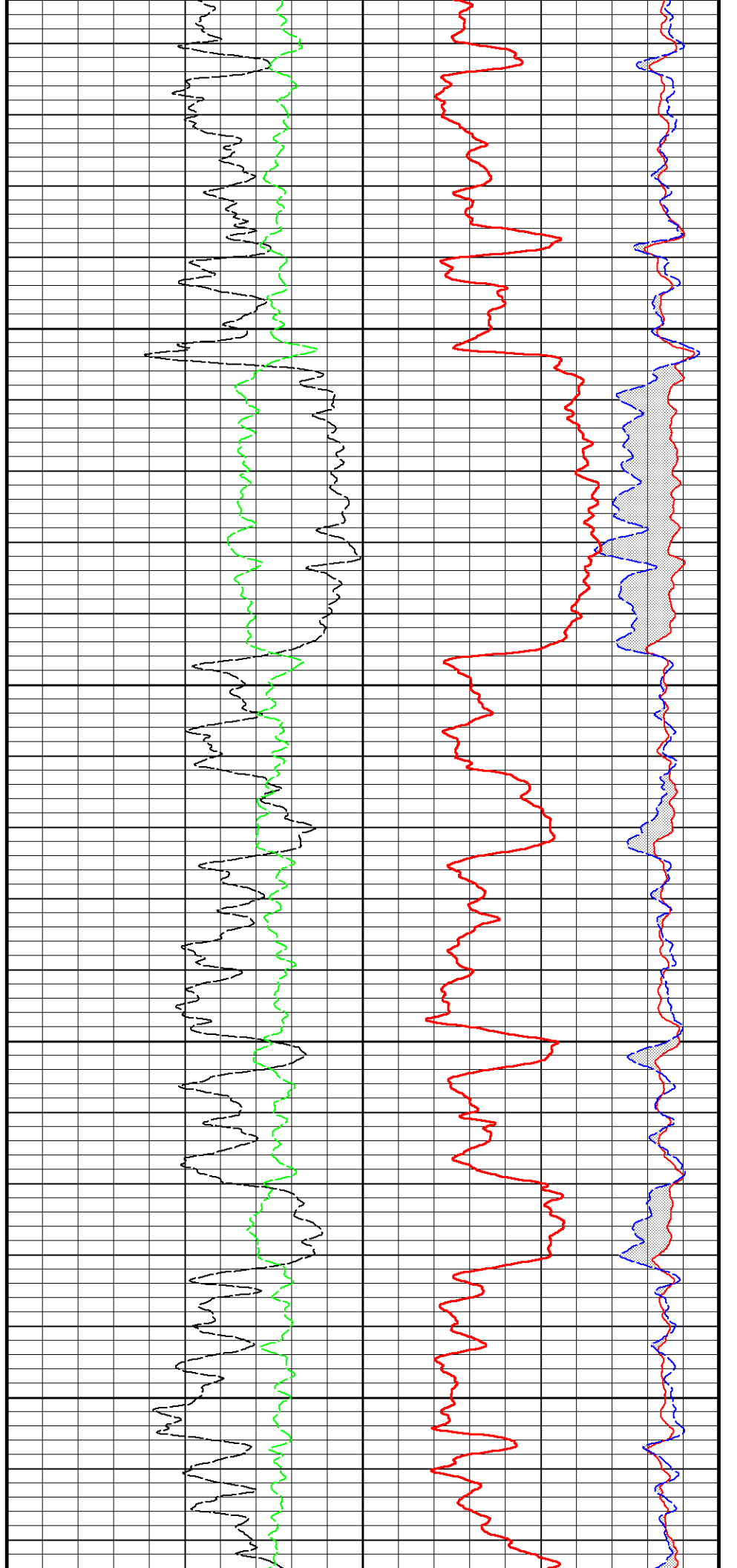
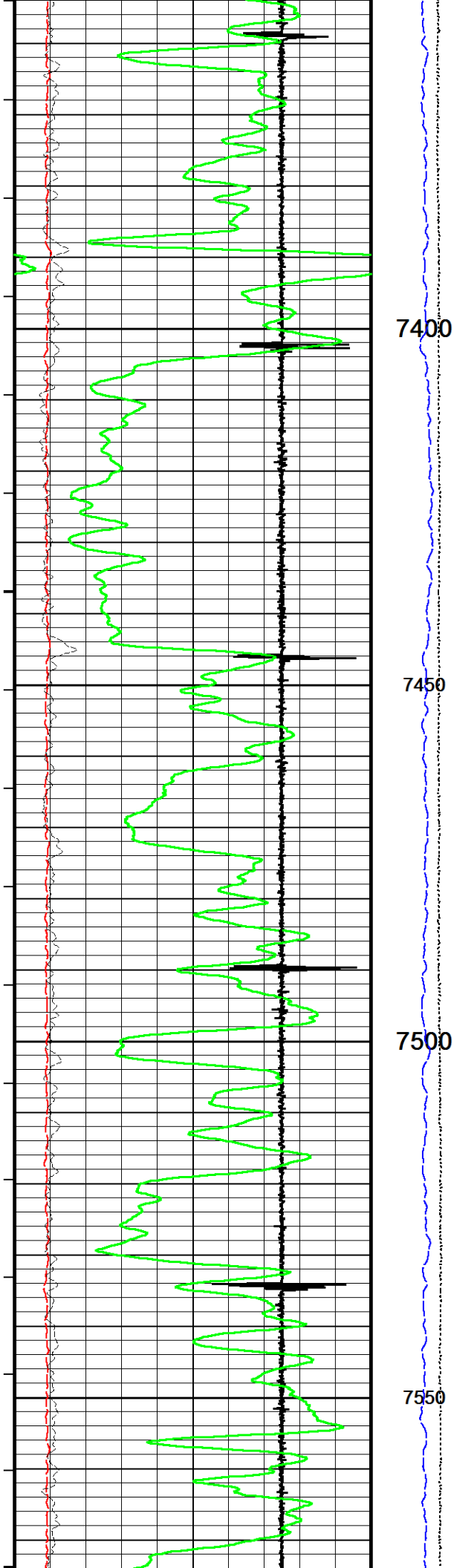
7000

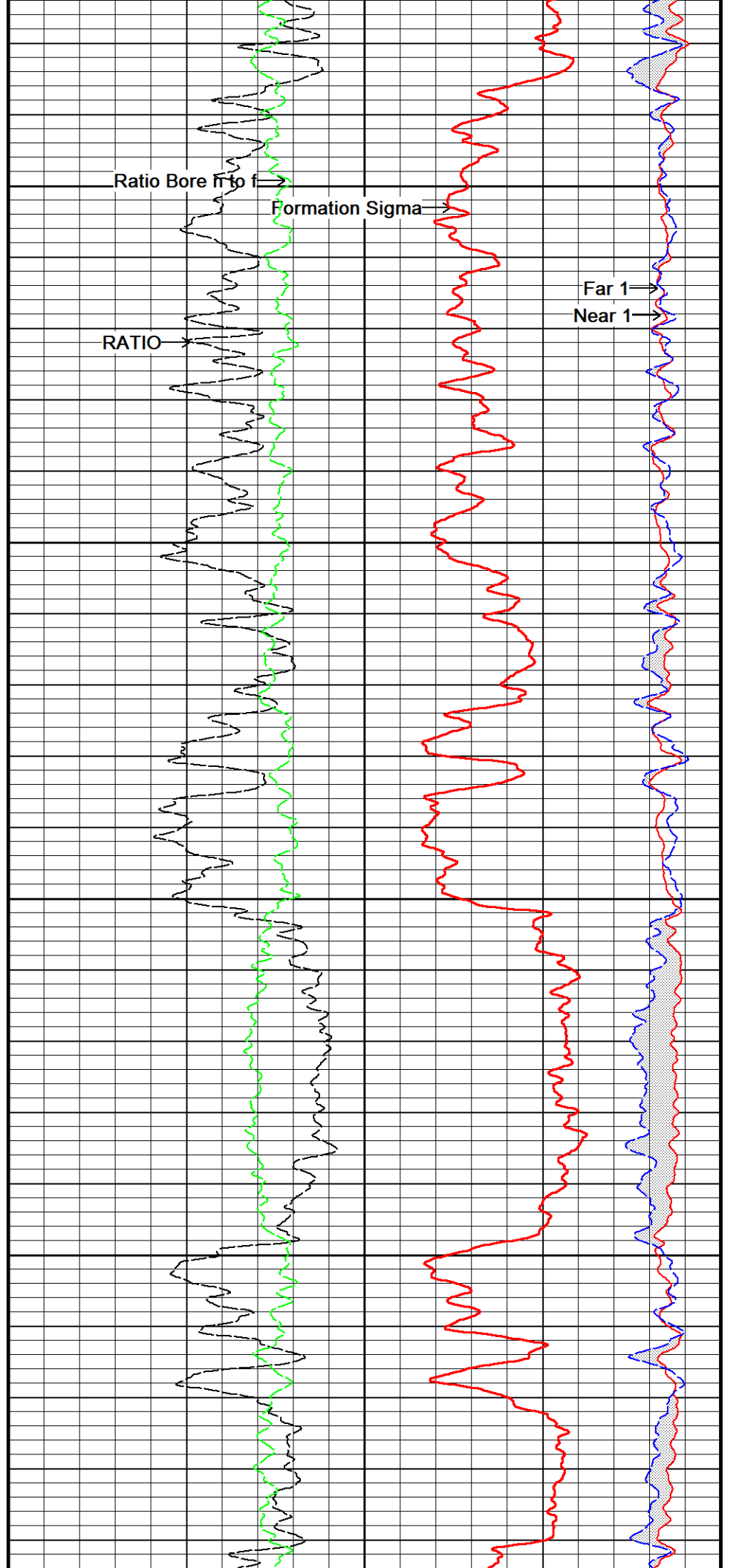
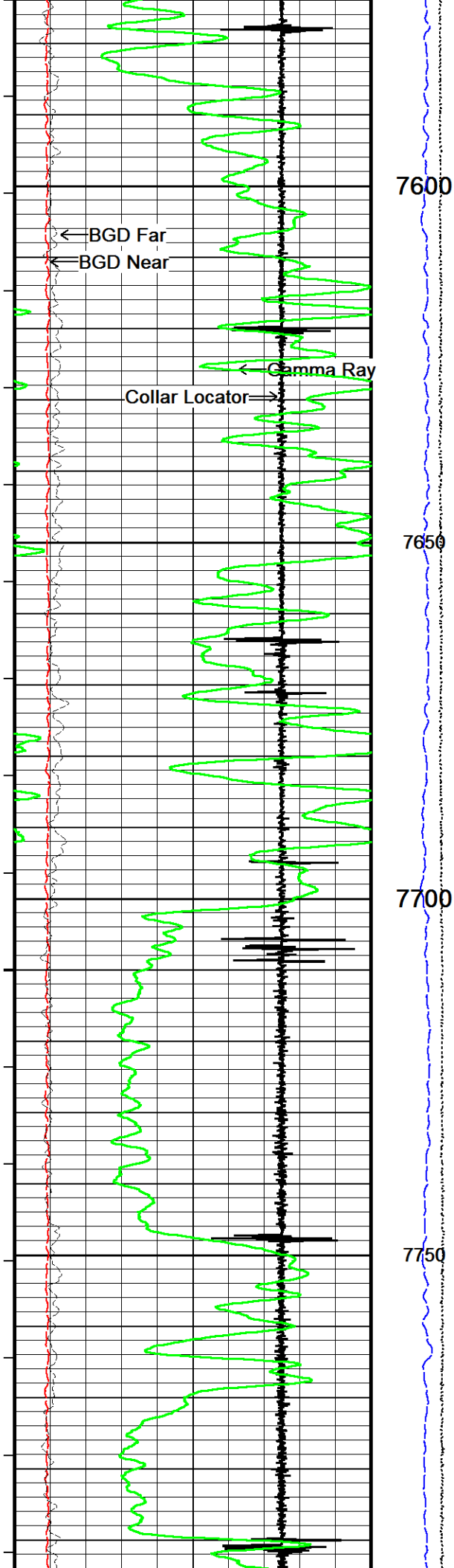
7050

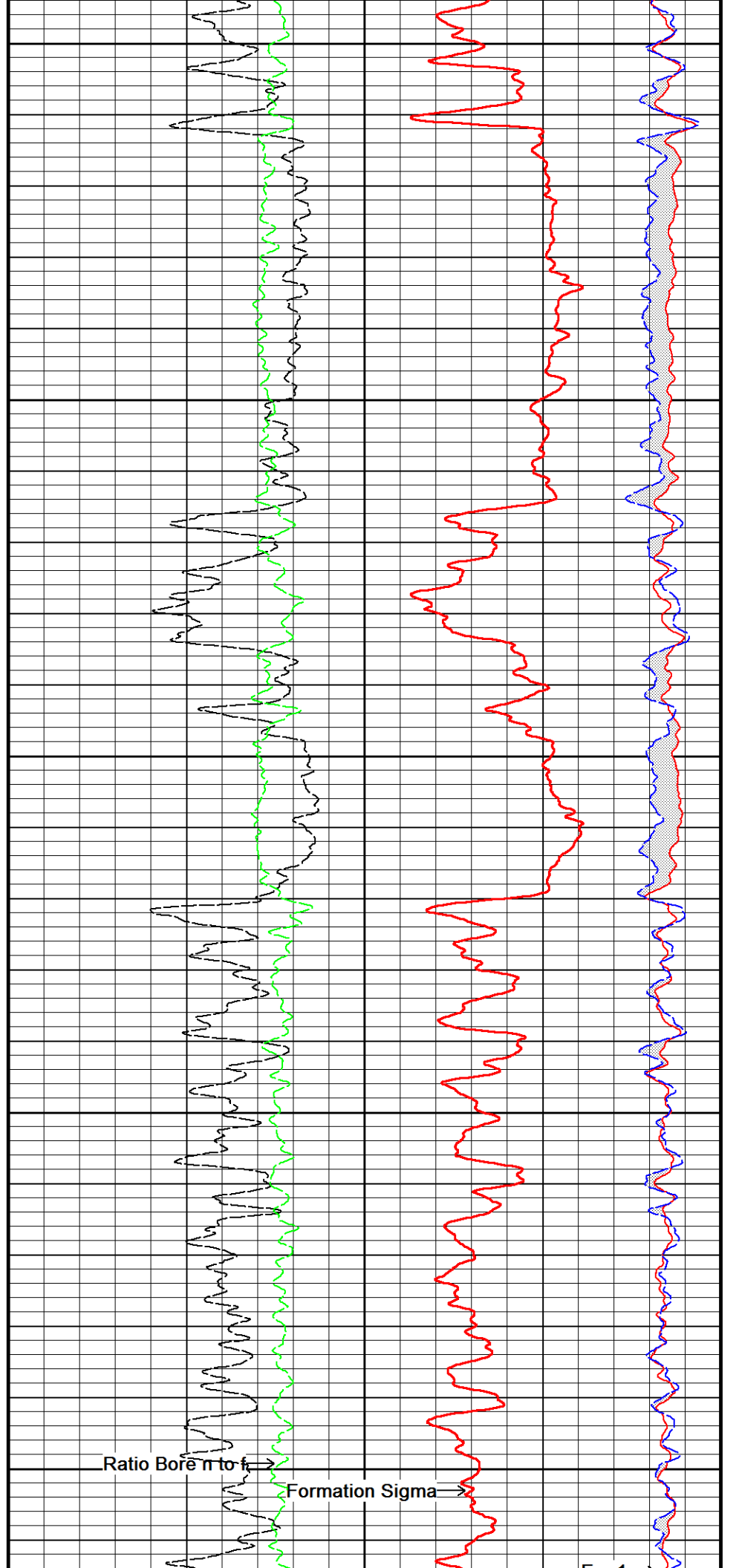
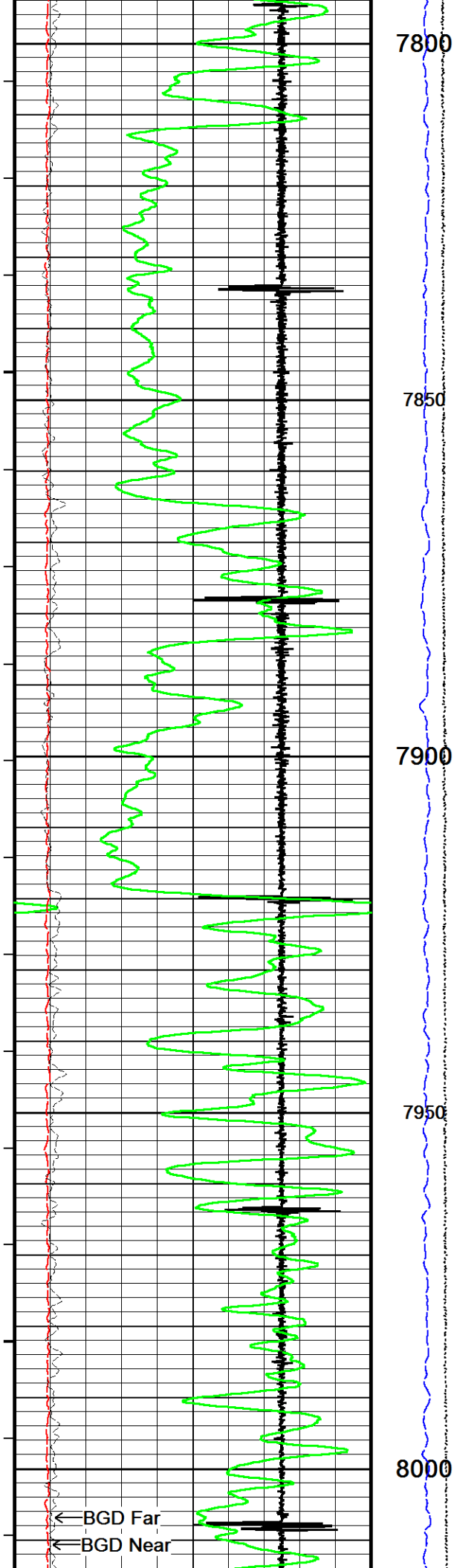
7100

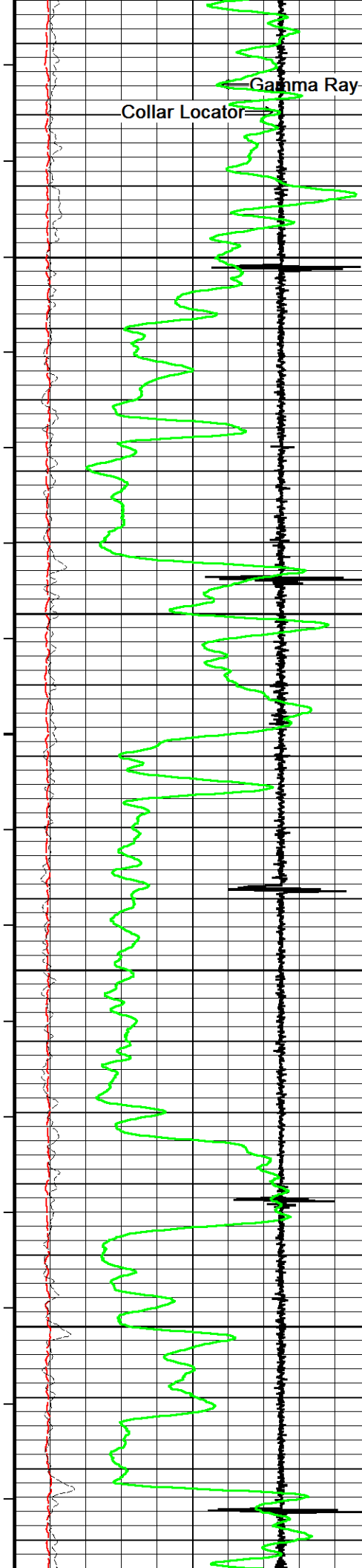




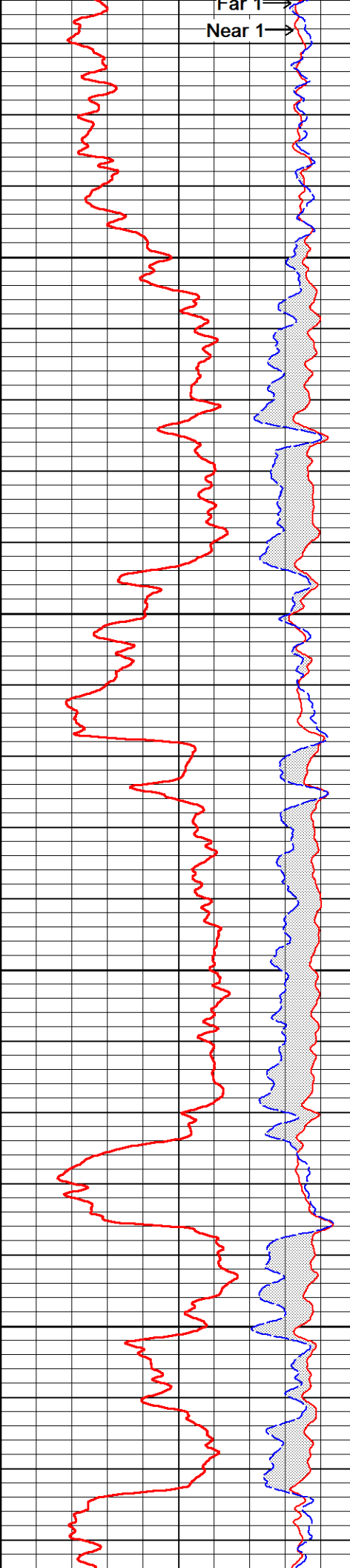
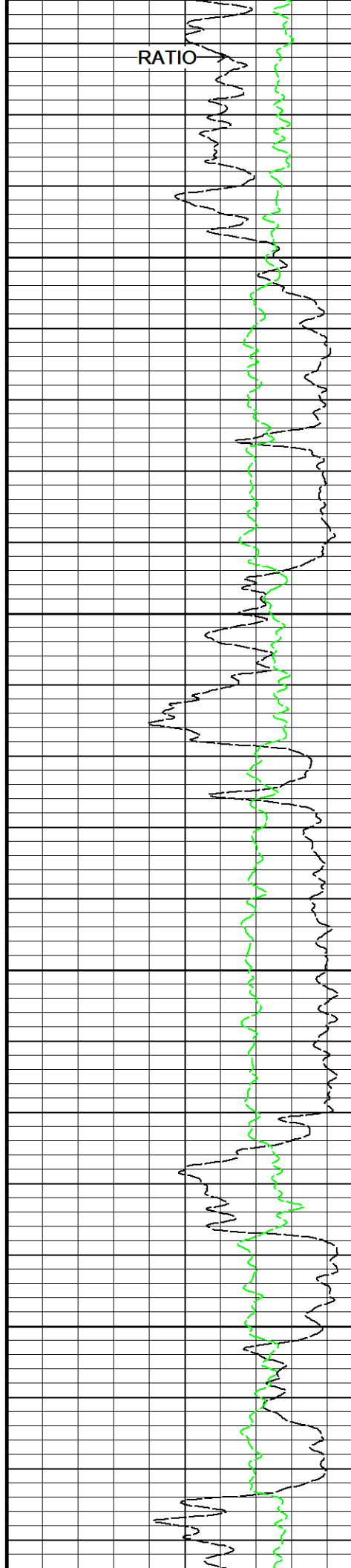




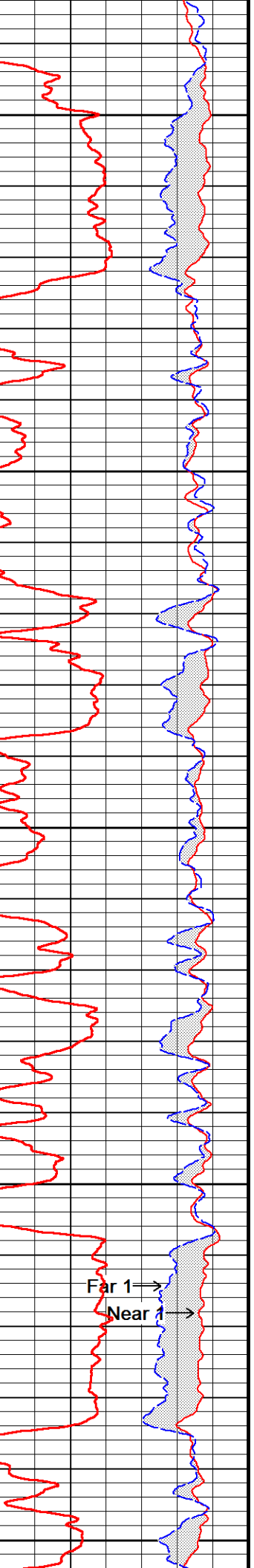
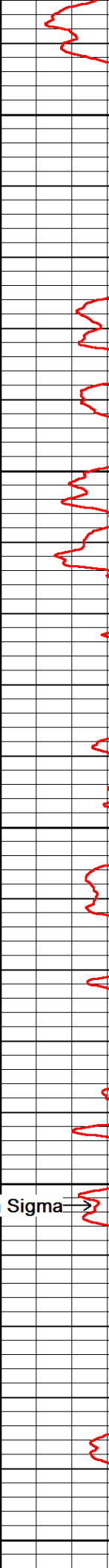
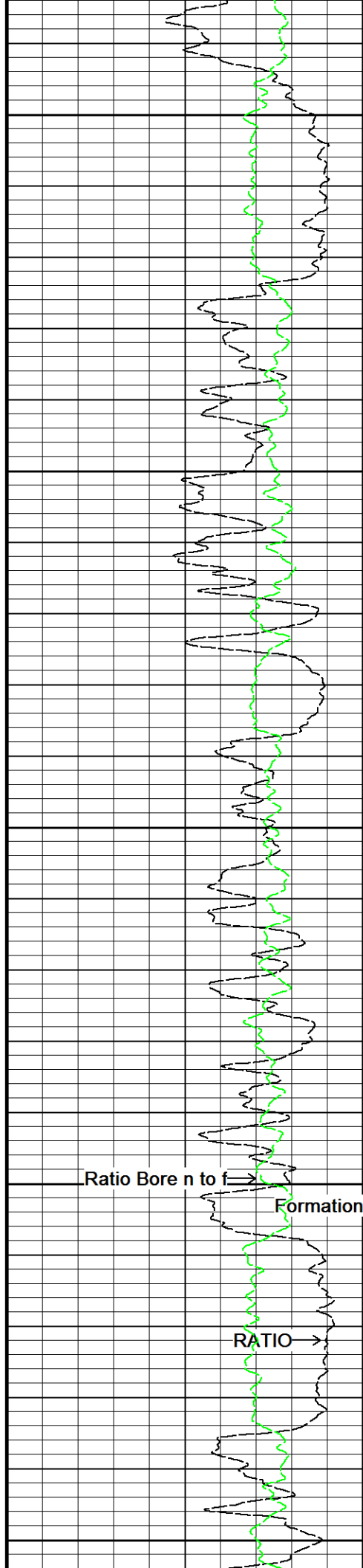
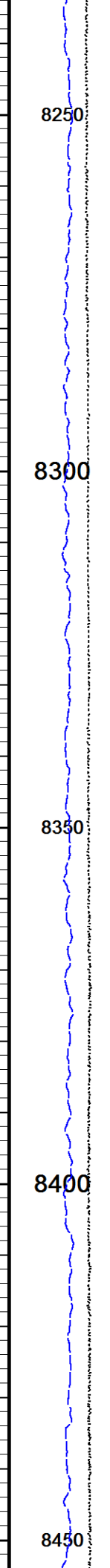
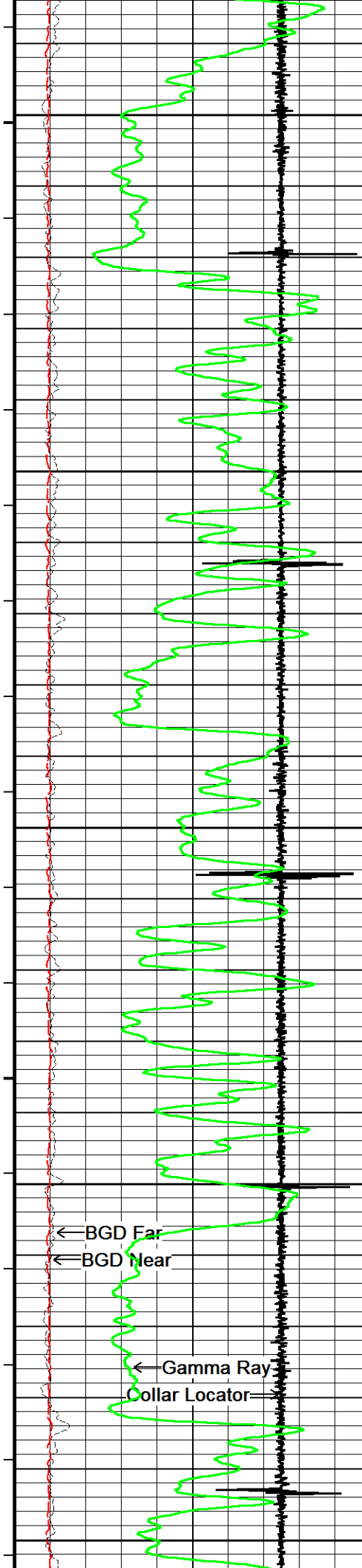




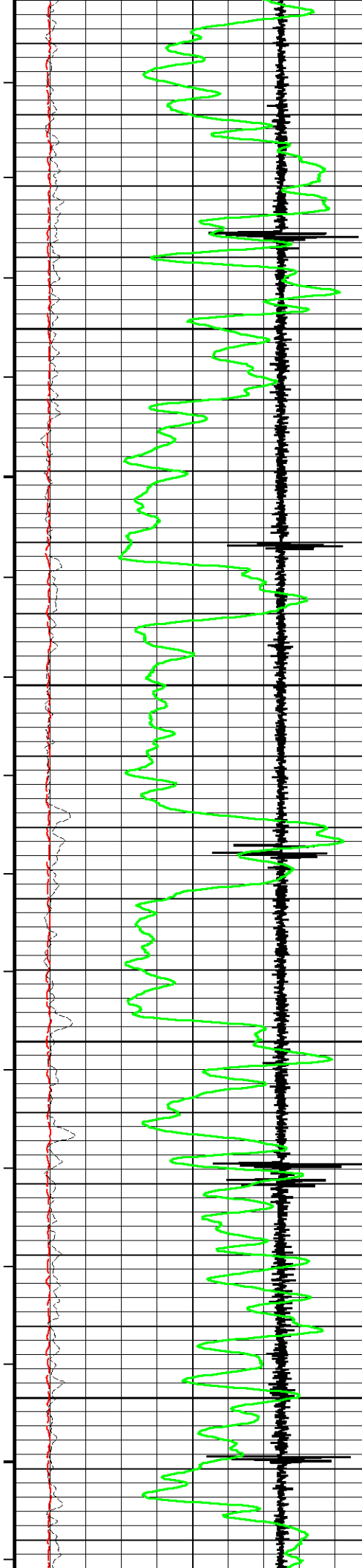
8050  
8100  
8150  
8200



Far 1  
Near 1





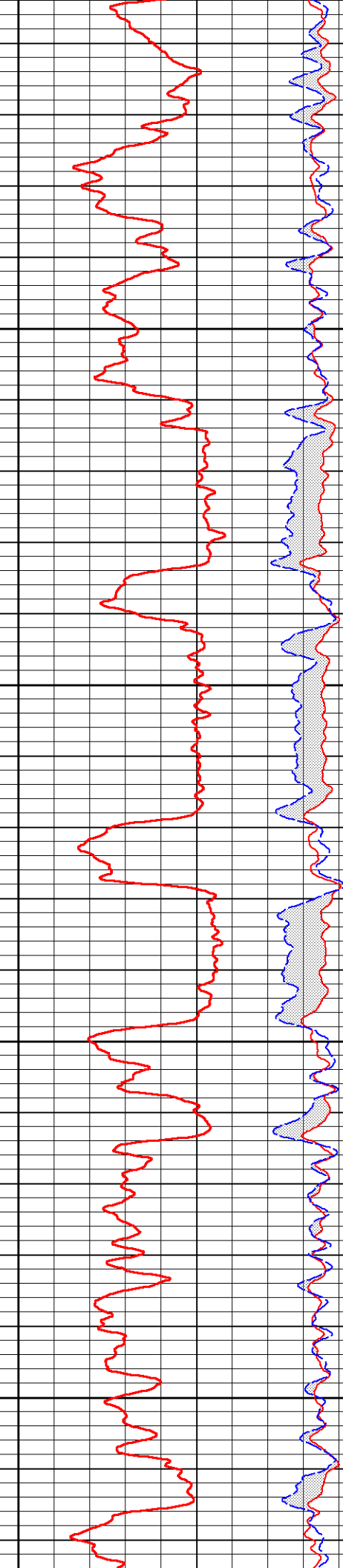
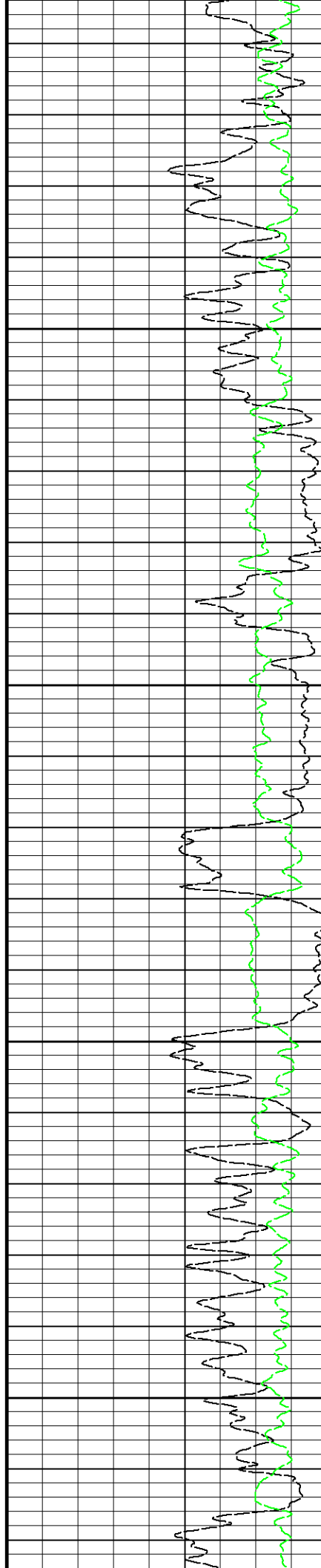


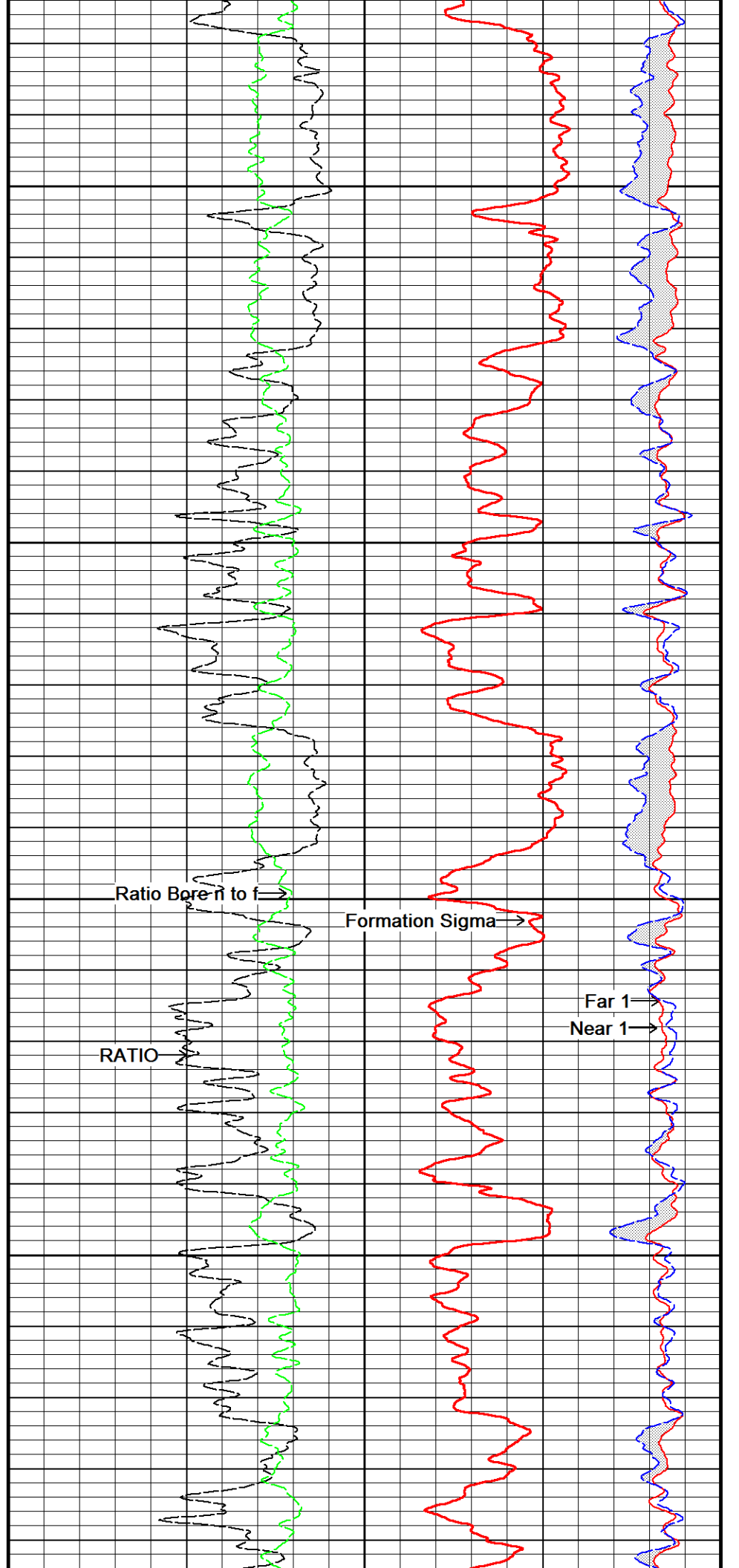
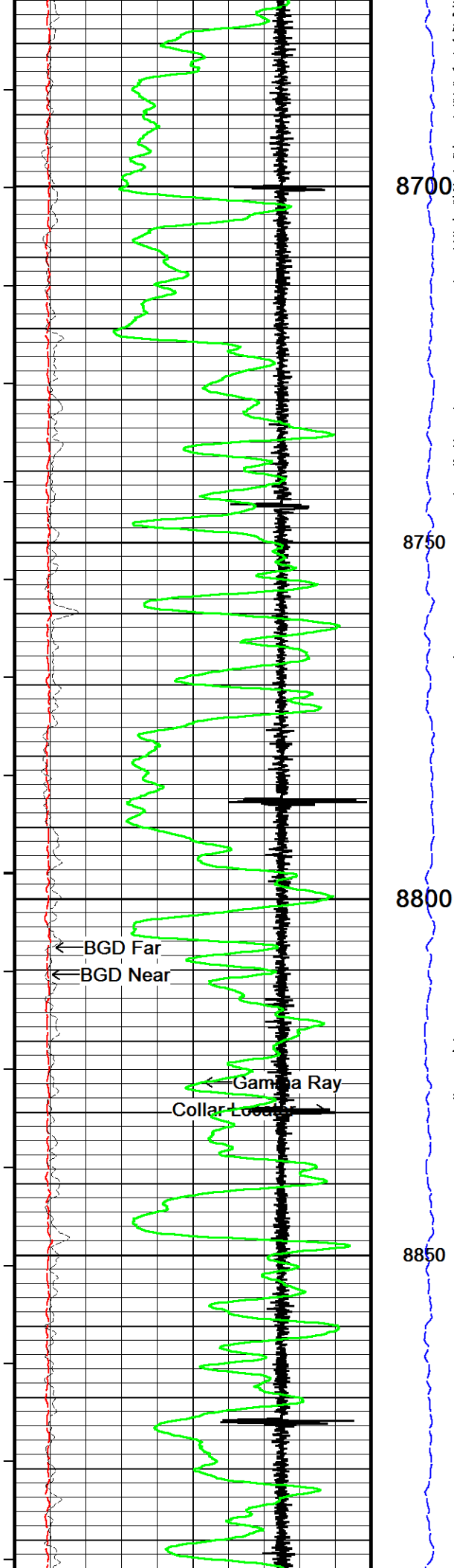
8500

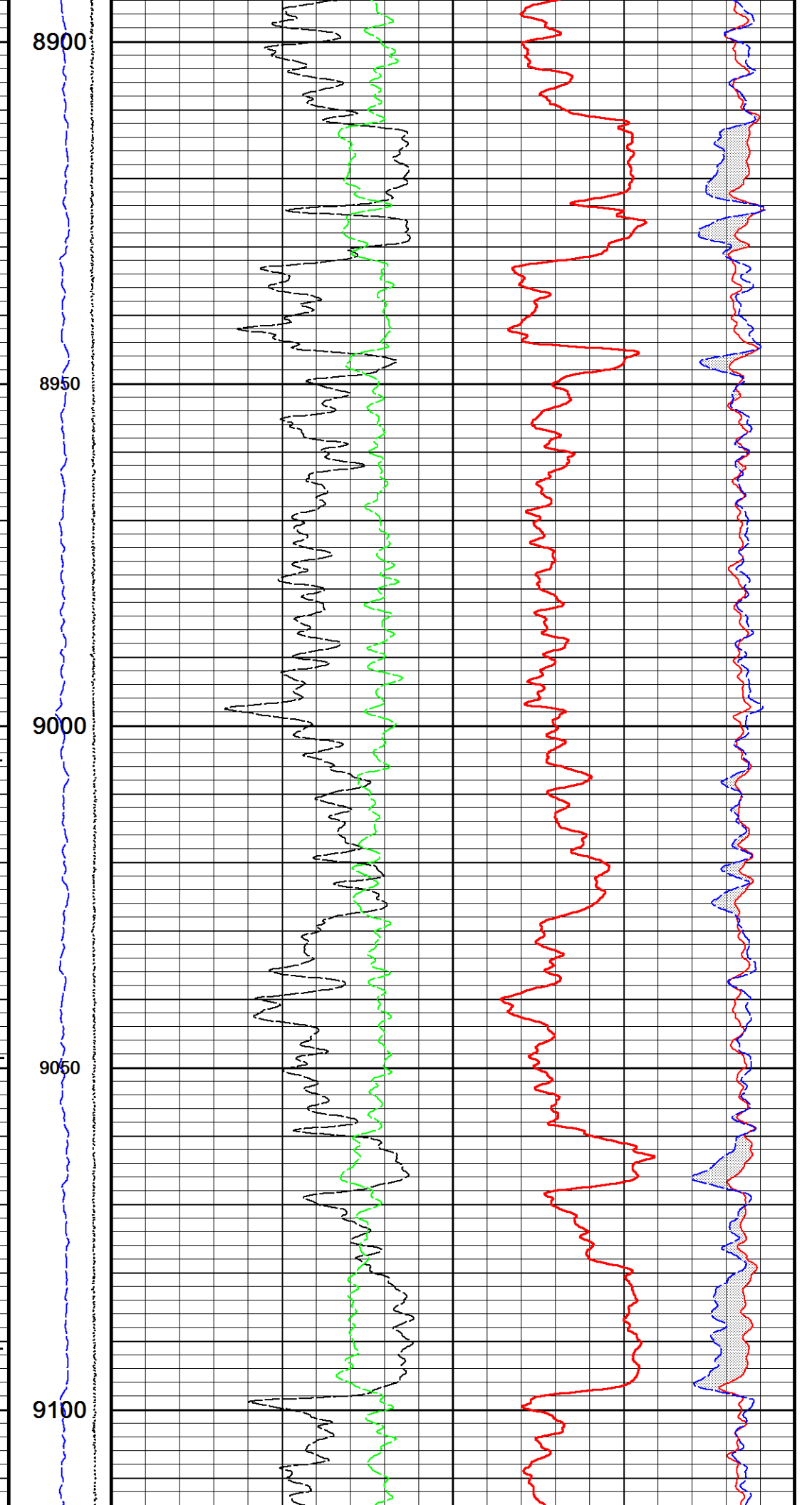
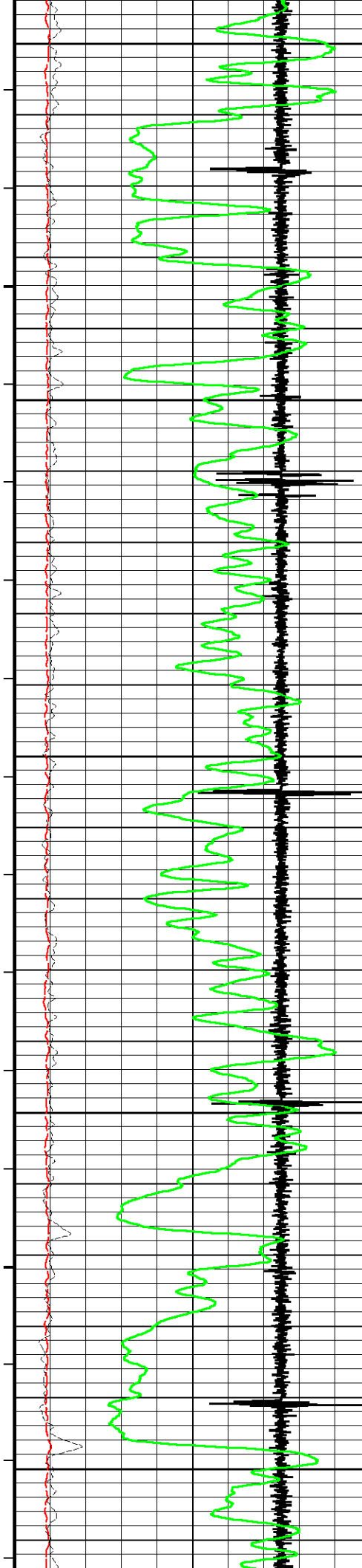
8550

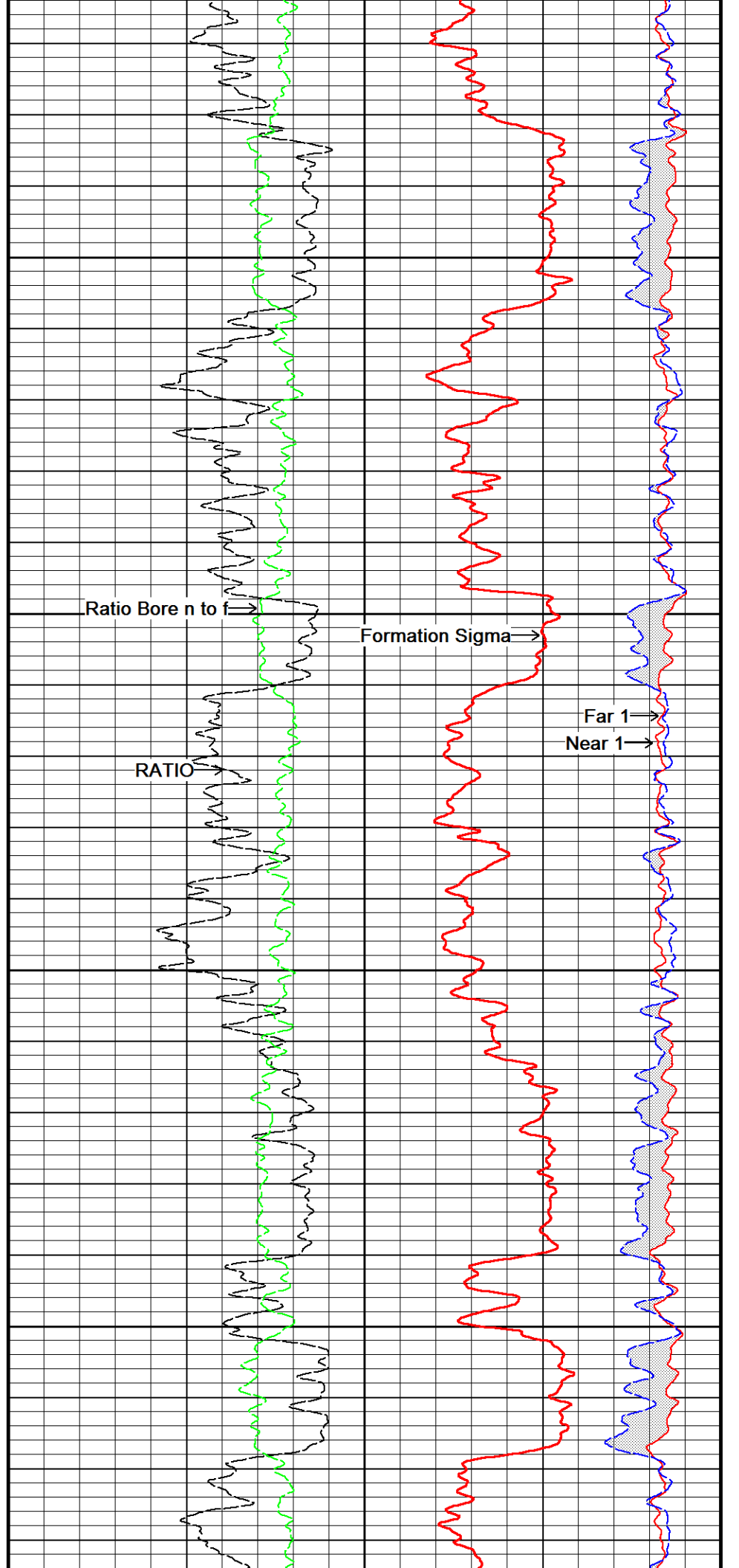
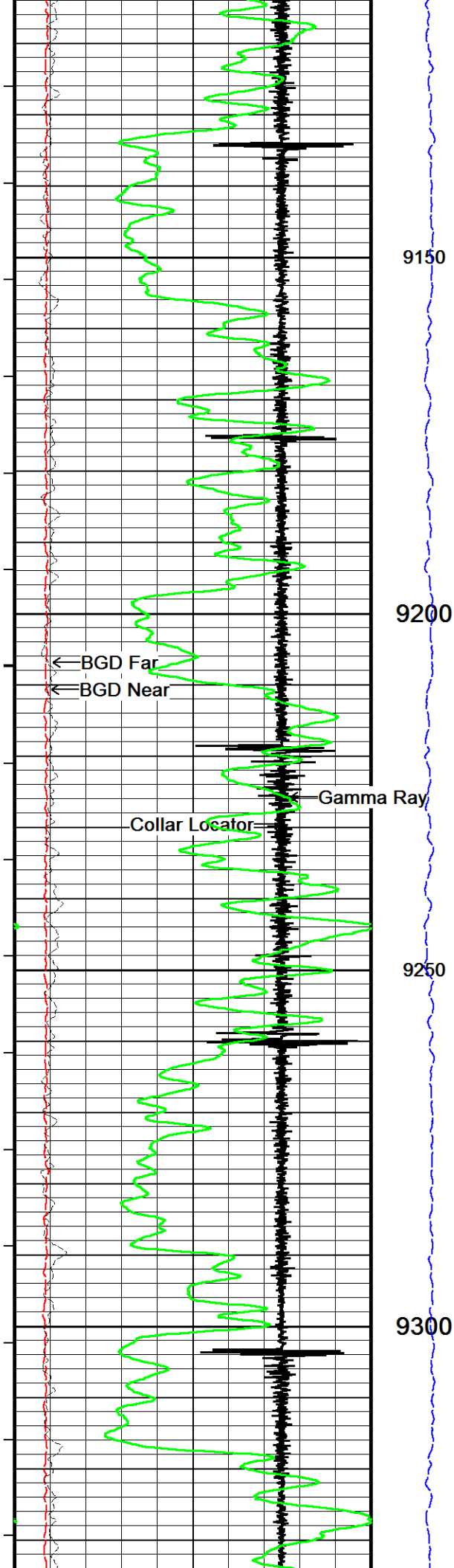
8600

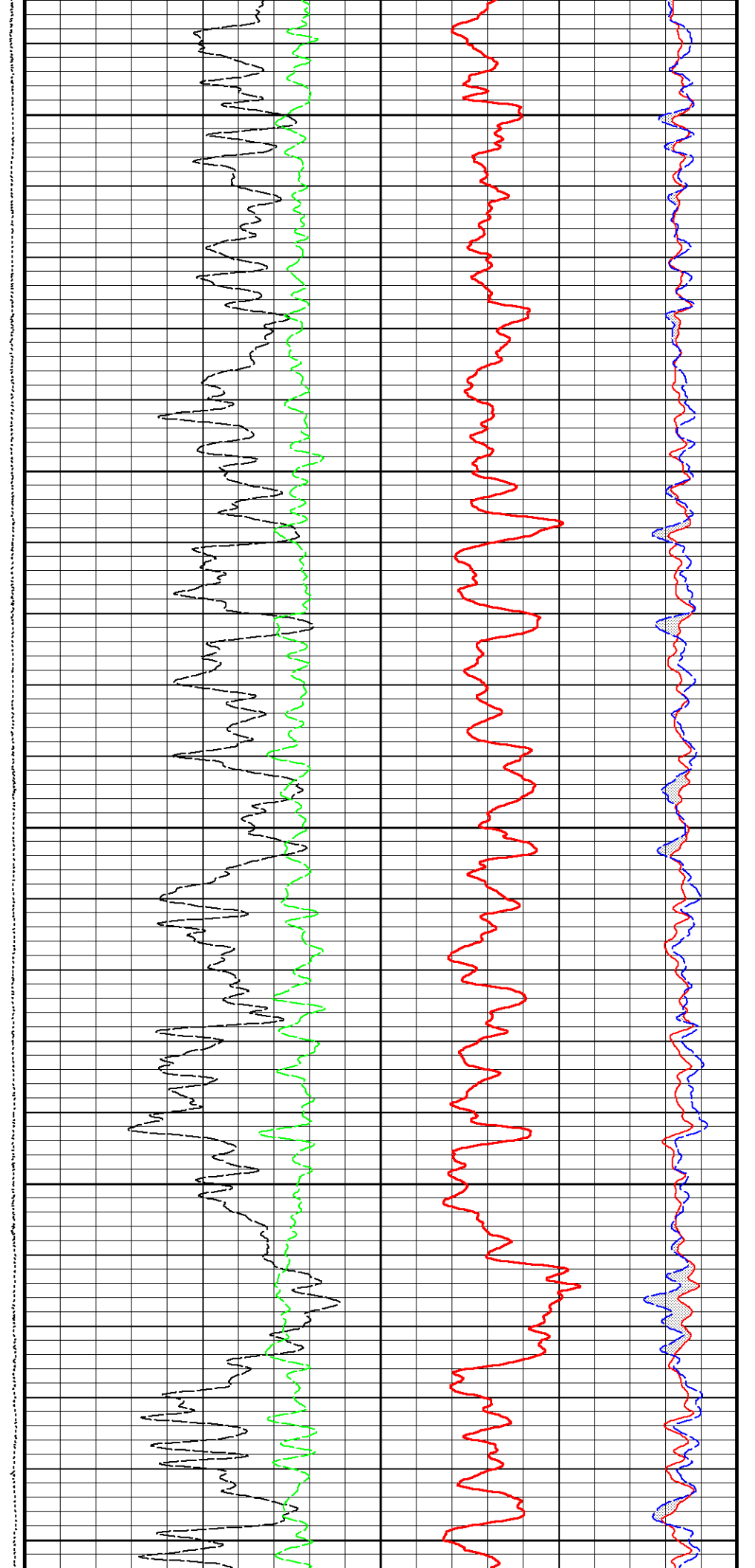
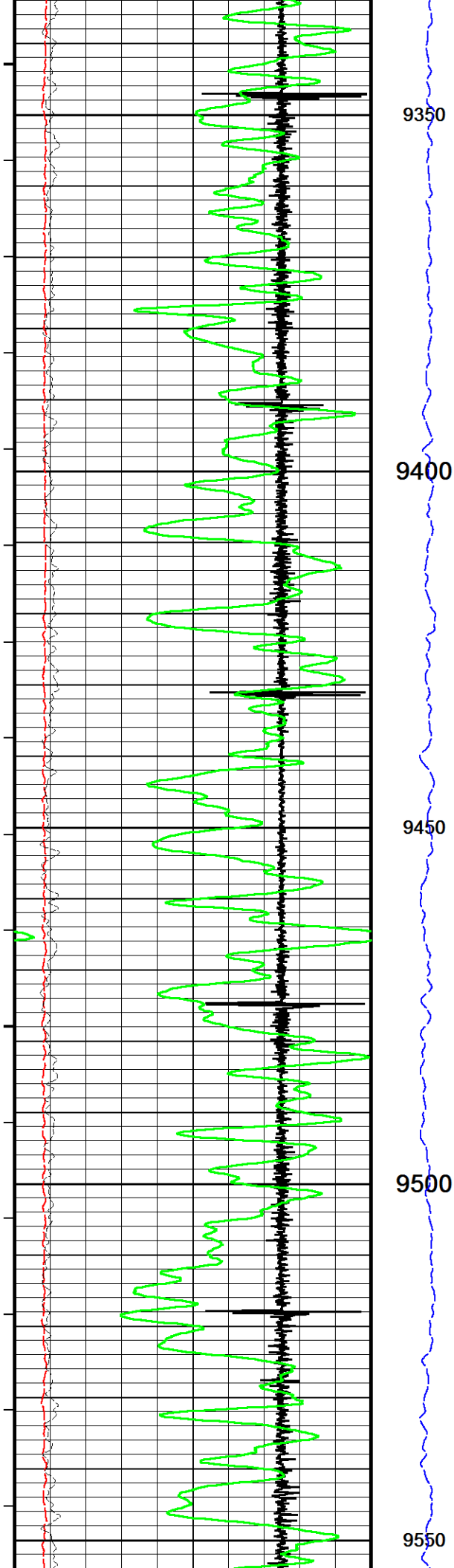
8650

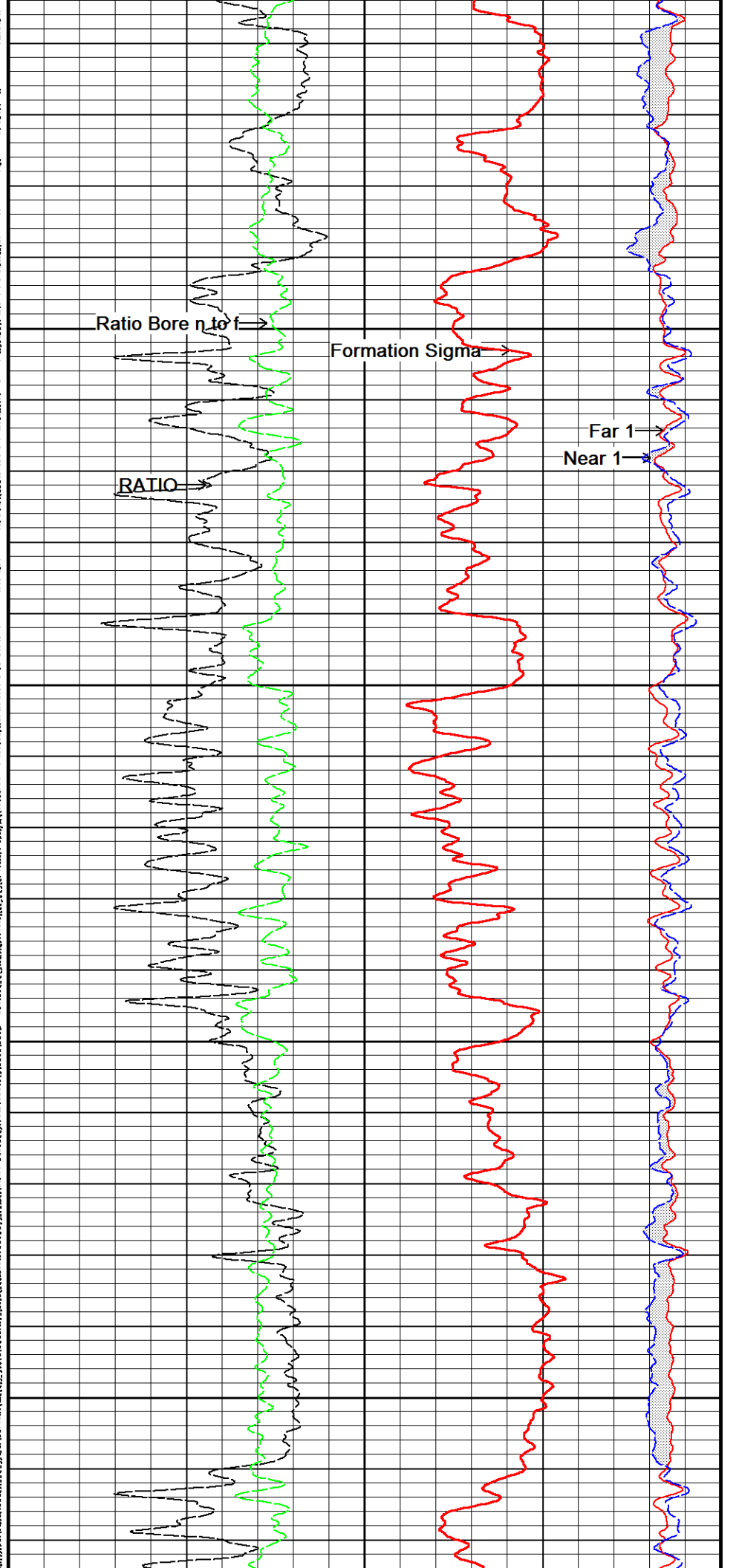
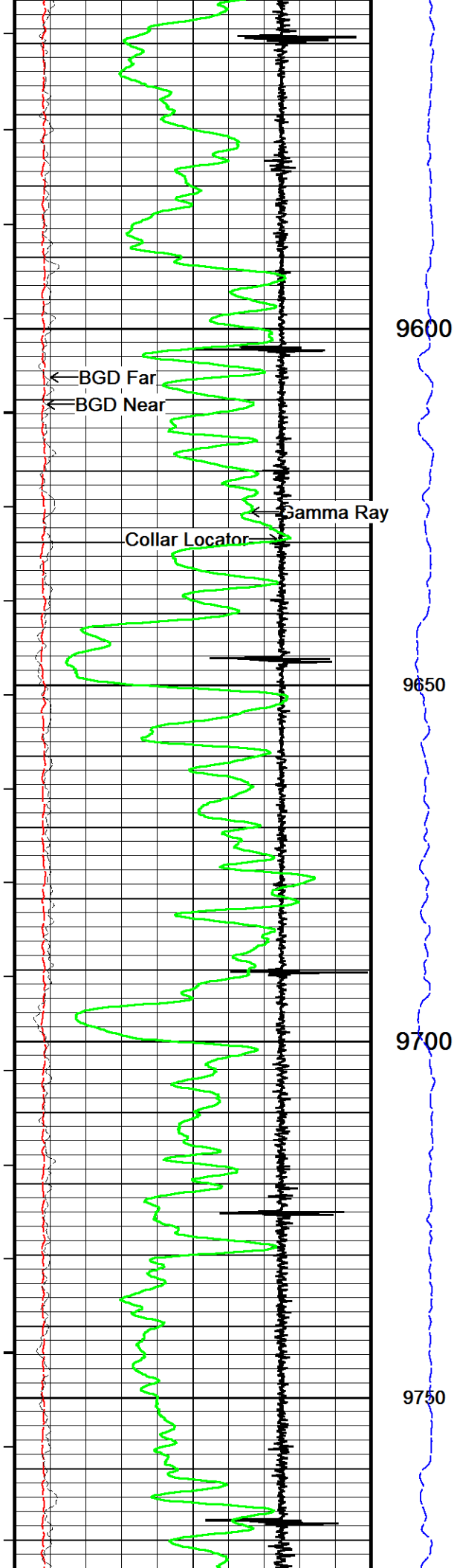


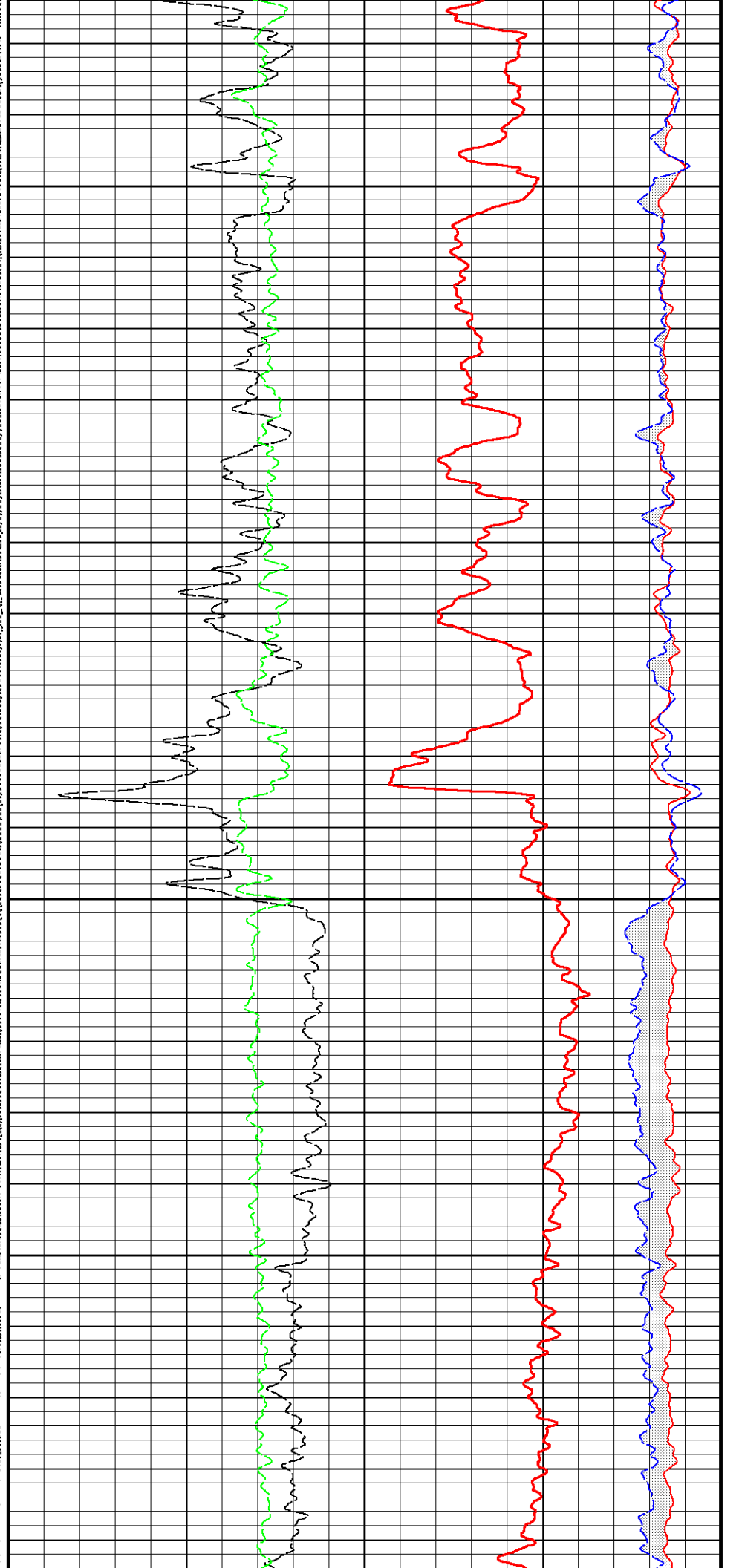
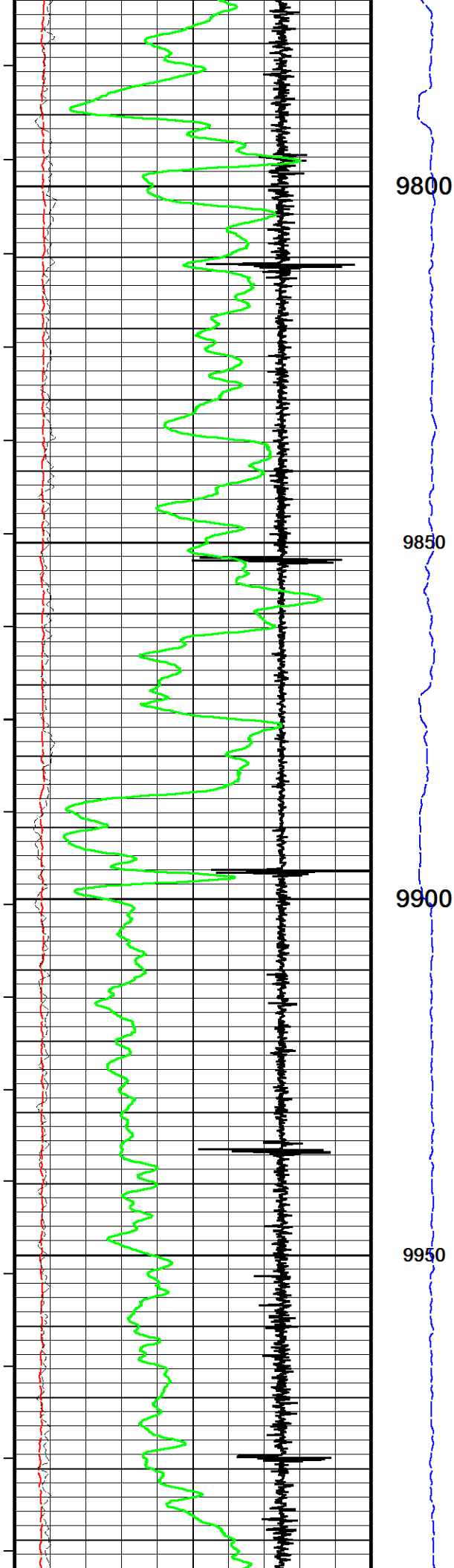




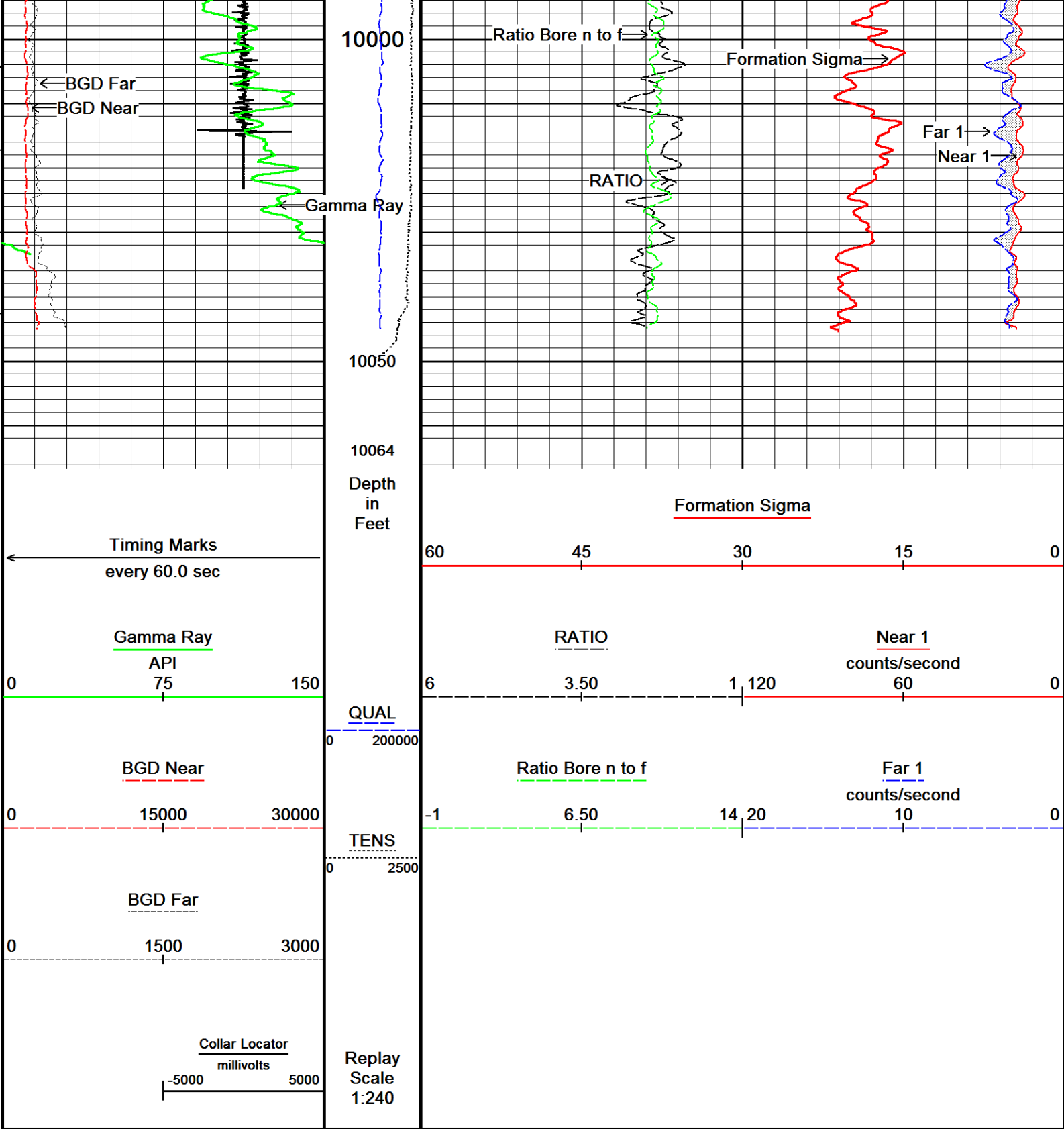












Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\Logs\Caerus\PUCKETT 23B-19\PUCKETT\_23B\_19\_PND\_MAIN.dta  
System Versions: Logged with 18.01.5248 Plotted with 18.01.5248

Plotted on 01-APR-2018 16:52  
Recorded on 01-APR-2018 07:07

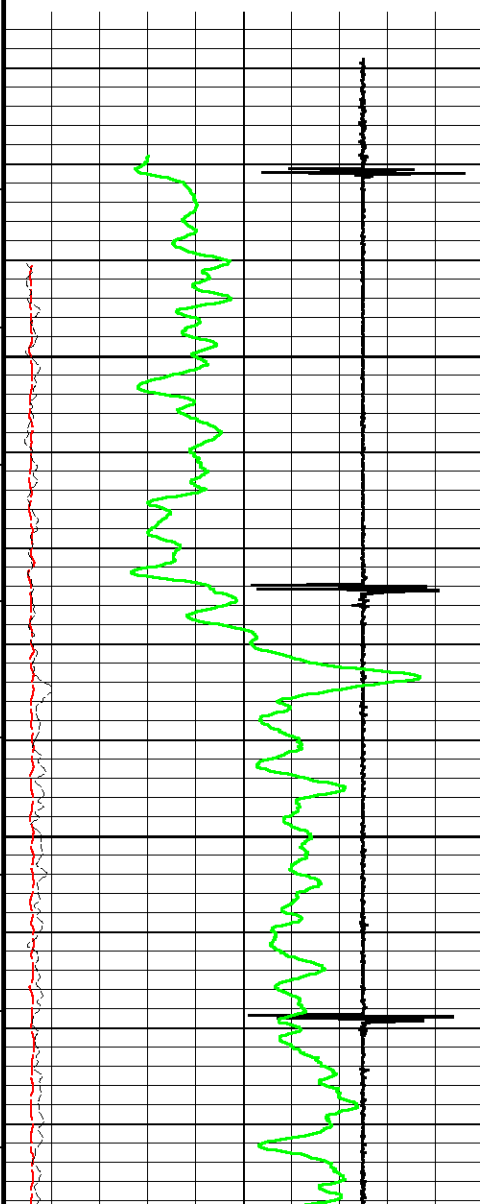
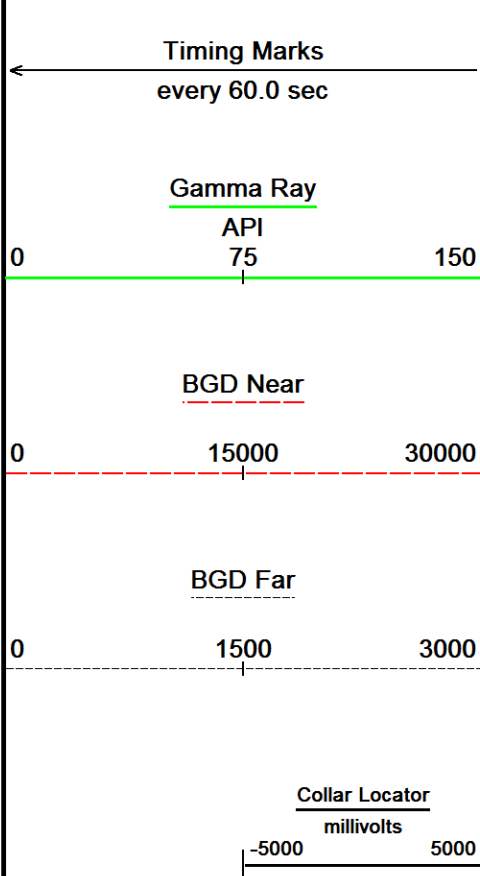
↑ MAIN PASS ↑

↓ REPEAT PASS ↓

Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\Logs\Caerus\PUCKETT 23B-19\PUCKETT\_23B\_19\_PND\_REPEAT.dta  
System Versions: Logged with 18.01.5248 Plotted with 18.01.5248

Plotted on 01-APR-2018 16:52  
Recorded on 01-APR-2018 16:32

	Depth in	Formation Sigma
--	----------	-----------------

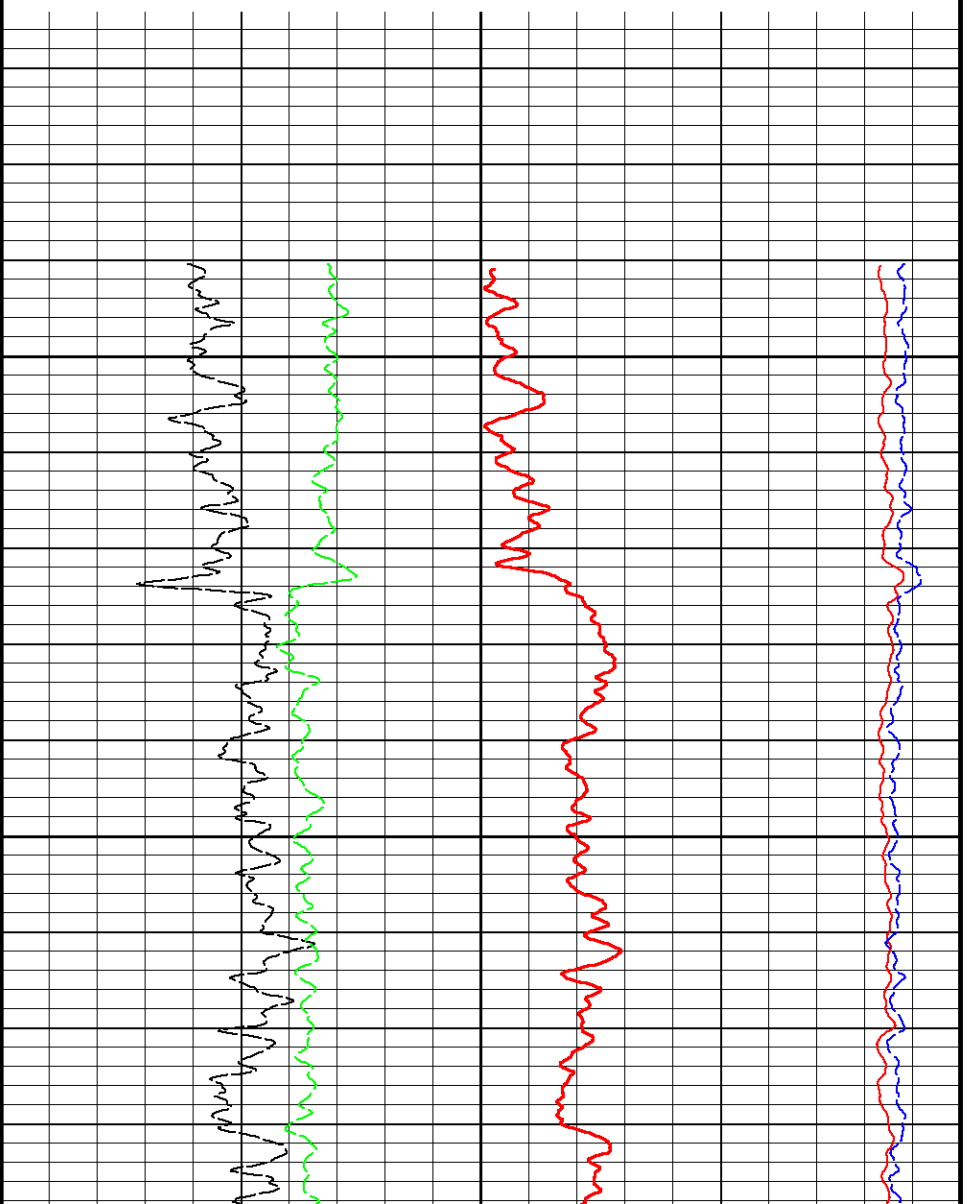
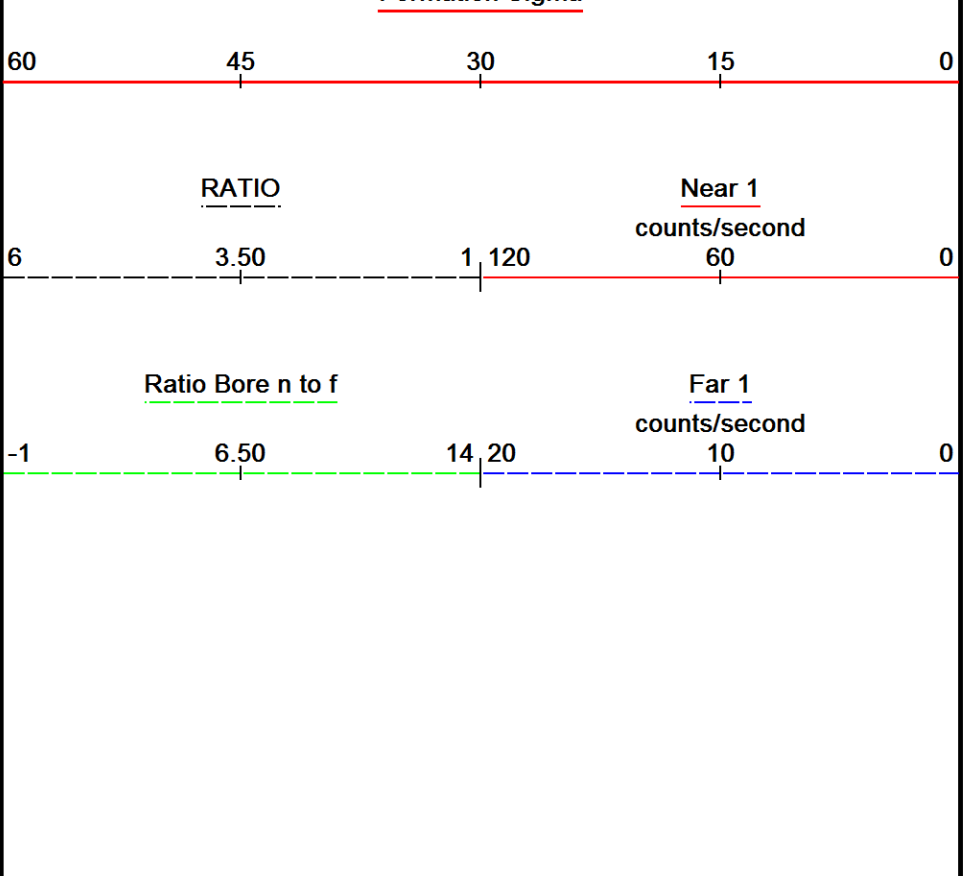
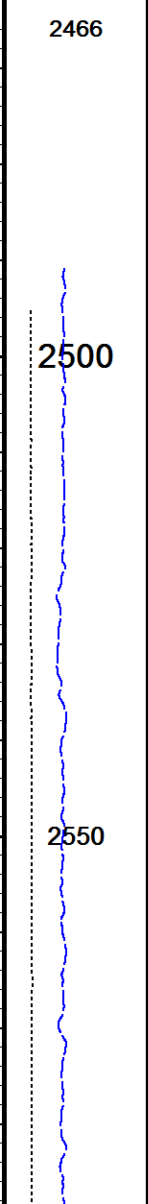


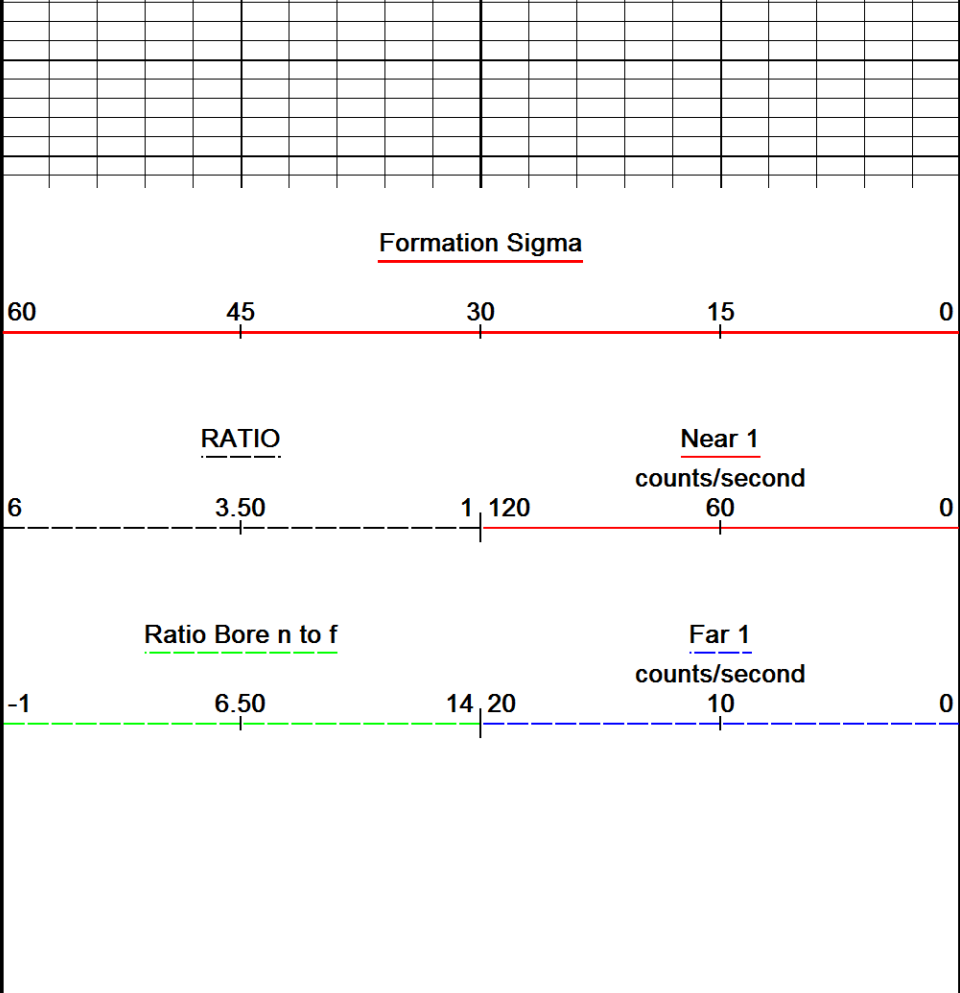
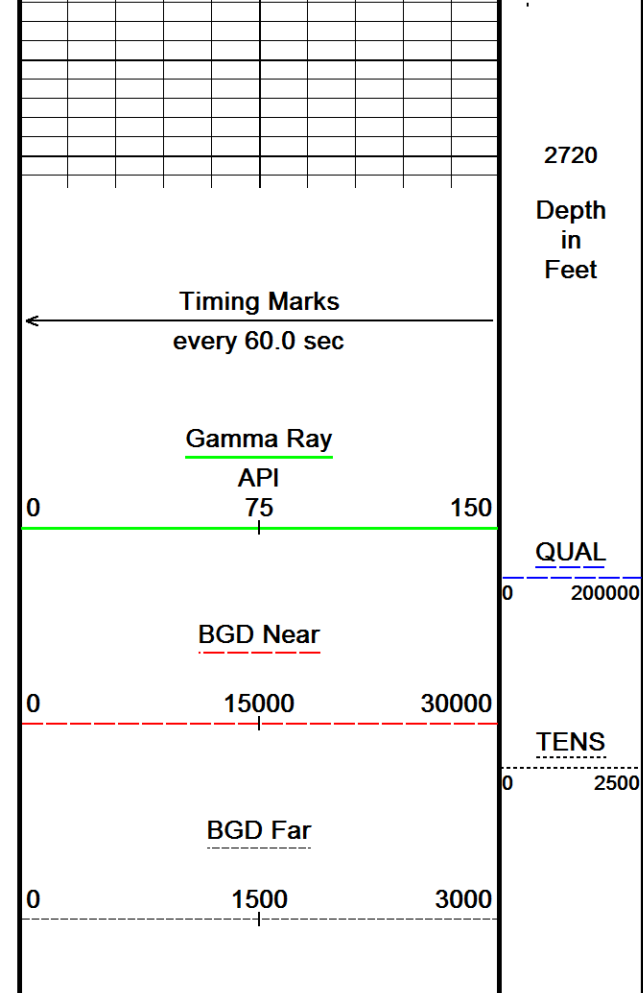
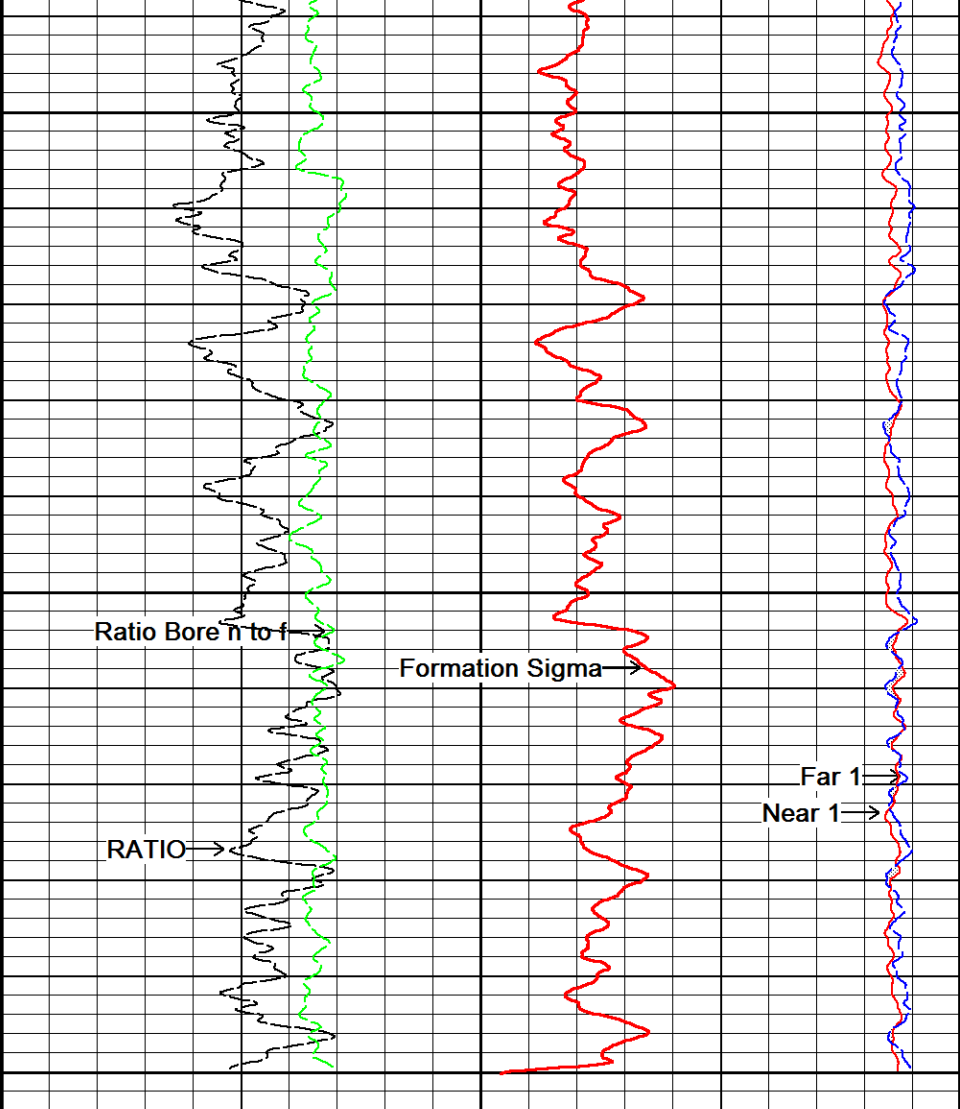
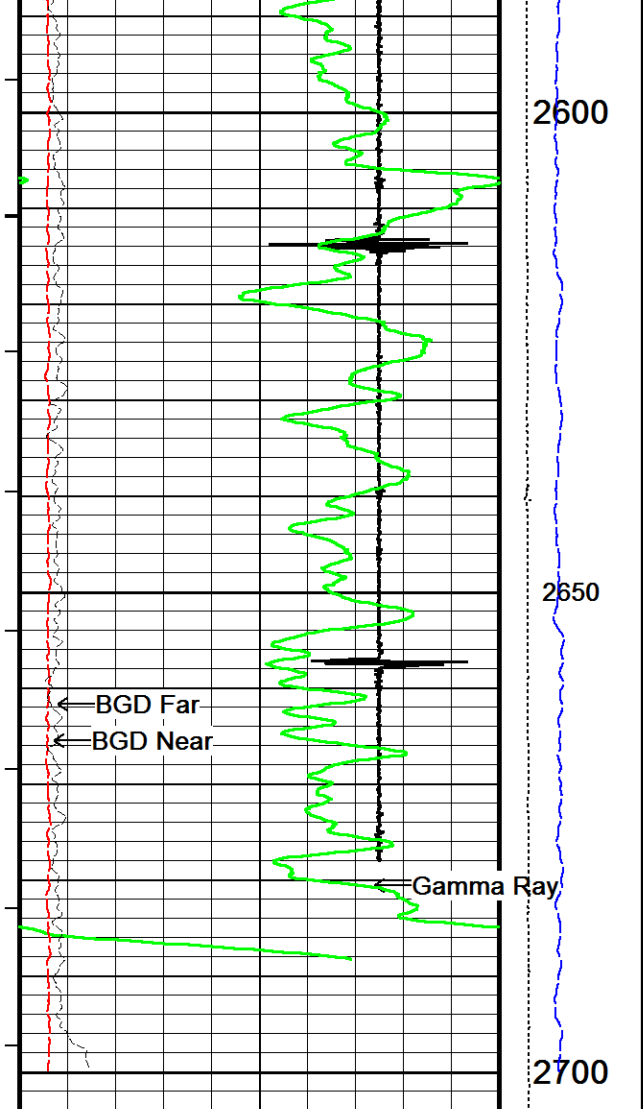
Feet

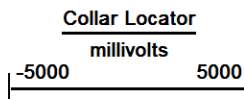
QUAL

TENS

Replay  
Scale  
1:240







Replay  
Scale  
1:240

Depth Based Data - Maximum Sampling Increment 2.5cm  
Filename: C:\Logs\Caerus\PUCKETT 23B-19\PUCKETT\_23B\_19\_PND\_REPEAT.dta  
System Versions: Logged with 18.01.5248 Plotted with 18.01.5248

Plotted on 01-APR-2018 16:52  
Recorded on 01-APR-2018 16:32

↑

REPEAT PASS

↑

DOWNHOLE EQUIPMENT

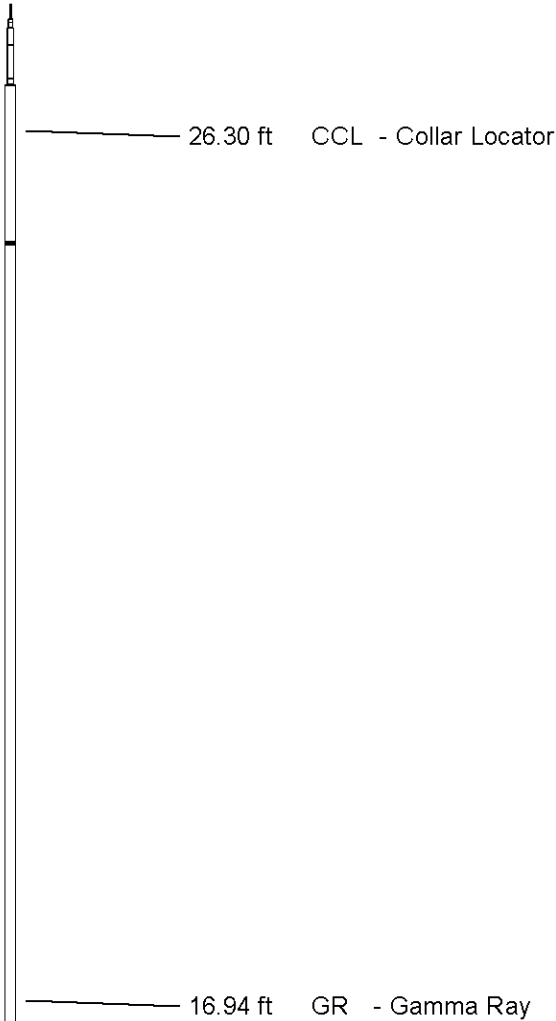
C:\Logs\Caerus\PUCKETT 23B-19\PUCKETT\_23B\_19\_PND\_MAIN.dta

Mono-Cablehead  
MCH-AA 0 LG: 1.03 ft WT: 2.2 lb OD: 1.457 in

PND CCL (1.63")  
CCP-CA 118 LG: 2.07 ft WT: 0.0 lb OD: 1.693 in

PND Processor V9.4(1.69")  
PNE-EA 101 LG: 10.94 ft WT: 39.7 lb OD: 1.693 in

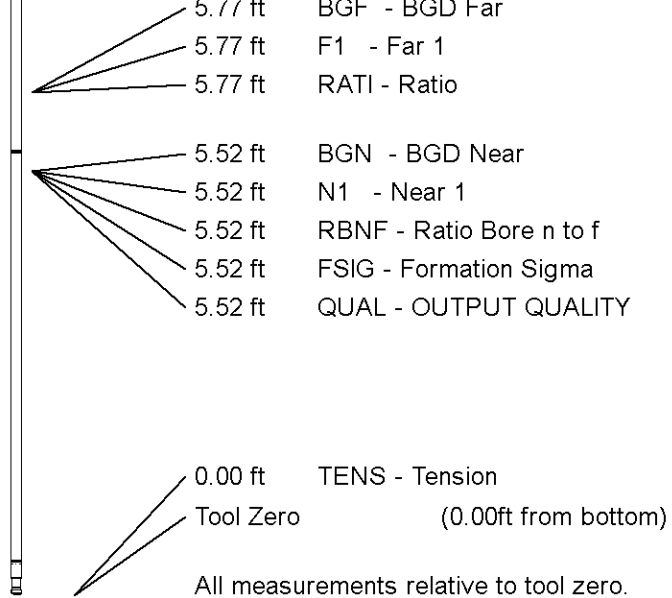
PND Det. Assy V9.4 1.69"  
PDT-SA 111 LG: 8.60 ft WT: 33.1 lb OD: 1.693 in



Gen. Assy, High Reliability, V10, 1.69"  
PGN-SA 135 LG: 5.33 ft WT: 13.2 lb OD: 1.693 in

PND Impact Sub(GO Pin Thread) for PGN-S  
PIS-S 0 LG: 0.43 ft WT: 2.2 lb OD: 1.693 in

Total Length: 28.40 ft Weight: 90.4 lb



## SHOP AND FIELD CALIBRATIONS

C:\Logs\Caerus\PUCKETT 23B-19\PUCKETT\_23B\_19\_PND\_MAIN.dta

COMPANY CAERUS OIL & GAS  
WELL PUCKETT 23B-19  
FIELD GRAND VALLEY  
PROVINCE/COUNTY GARFIELD  
COUNTRY/STATE USA / COLORADO

Elevation Kelly Bushing	8181	feet	Bottom Log Interval	10050.00	feet
Elevation Drill Floor	8181	feet	Depth Driller	10121.00	feet
Elevation Ground Level	8151	feet	Depth Logger	10050.00	feet



**Weatherford®**

PULSED NEUTRON LOG