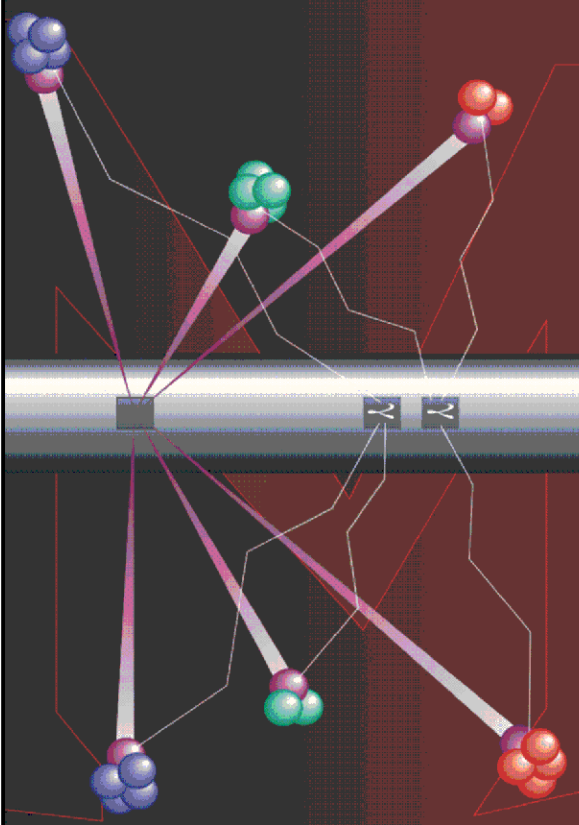


# Pulsed Neutron Formation Evaluation



## RESERVOIR PERFORMANCE MONITOR NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 19-12E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION: SEE REMARKS

SEC 19 TWP 9S RGE 93W

ELEVATIONS: KB 7449 FT DF 7448 FT GL 7425 FT

DATE 6-SEP-2017 ECC 28223.01

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.

### COMPUTATION PARAMETERS

COMPUTATION	LOGS USED: <u>RPM-C</u>		PROGRAM: <u>NEO</u>
	CENTER: <u>HOUSTON</u>	LOG ANALYST: <u>KIMBERLY ELLSWORTH</u>	DATE: <u>6-SEP-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S. YASSA</u>	DATE: <u>30-AUG-2017</u>
FROM	TO		
<u>2535 FT</u>	<u>8213 FT</u>		

### REMARKS

LOCATION: SHL: LAT: 39.255232N, LONG: 107.806537W  
BHL: LAT: 39.262132N, LONG: 107.806985W

ANY ERRORS IN THE TRAINING WELL OPENHOLE DATA CAN PERPETUATE THROUGH AS AN ERROR IN THE EMULATED RESULTS.

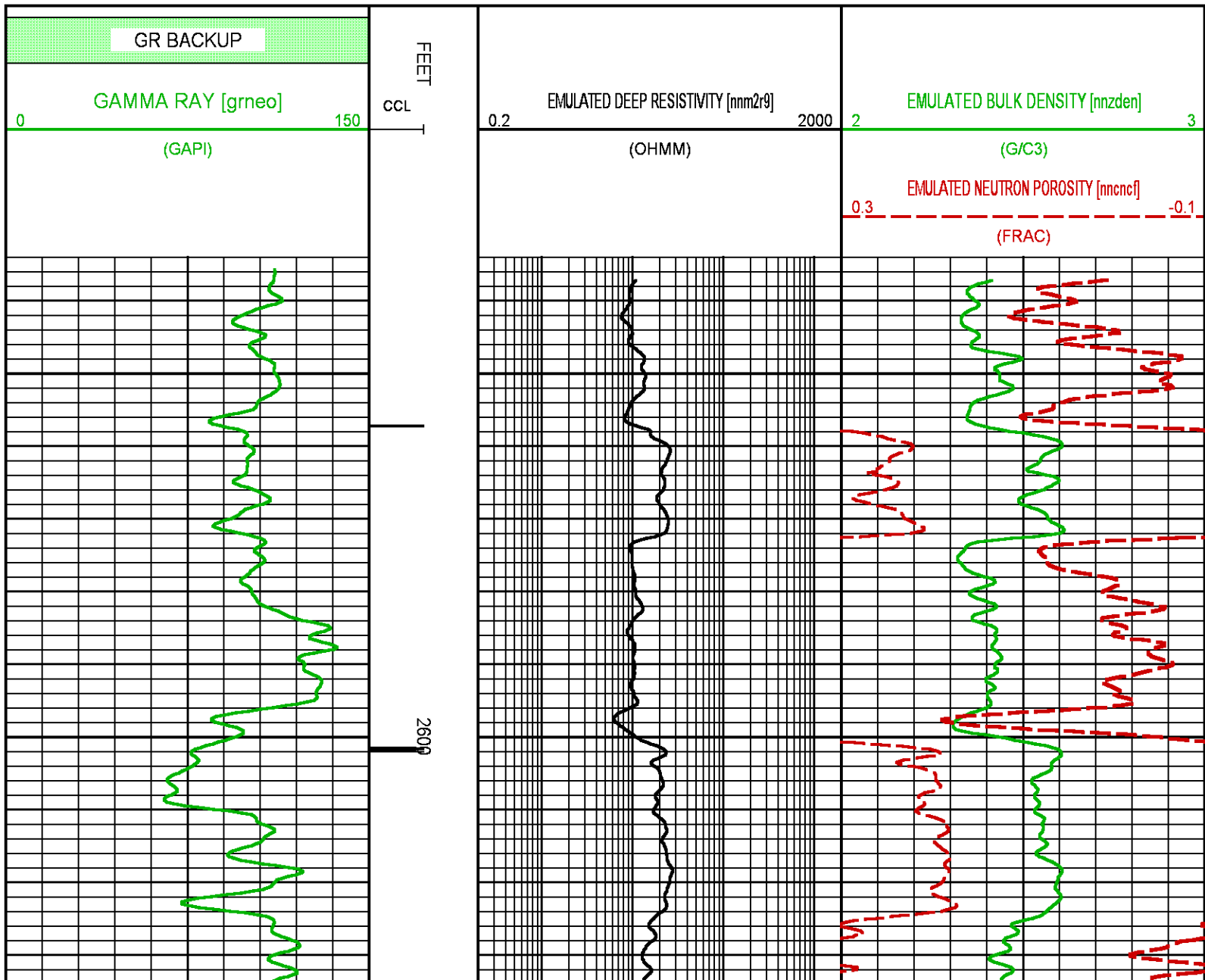
BOND LOG IS DEPTH REFERENCE LOG

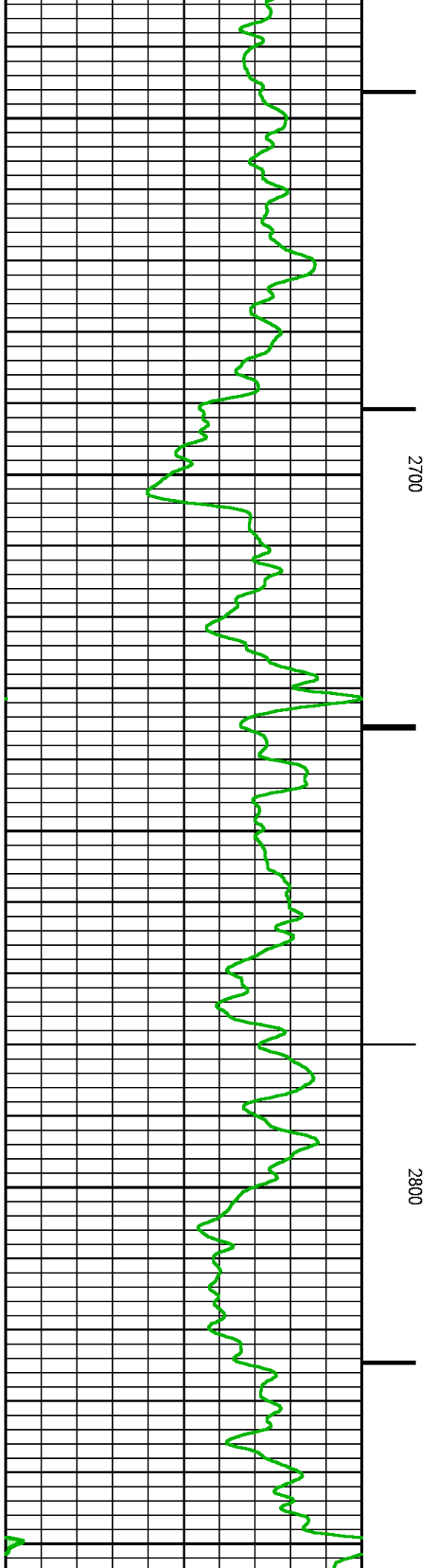
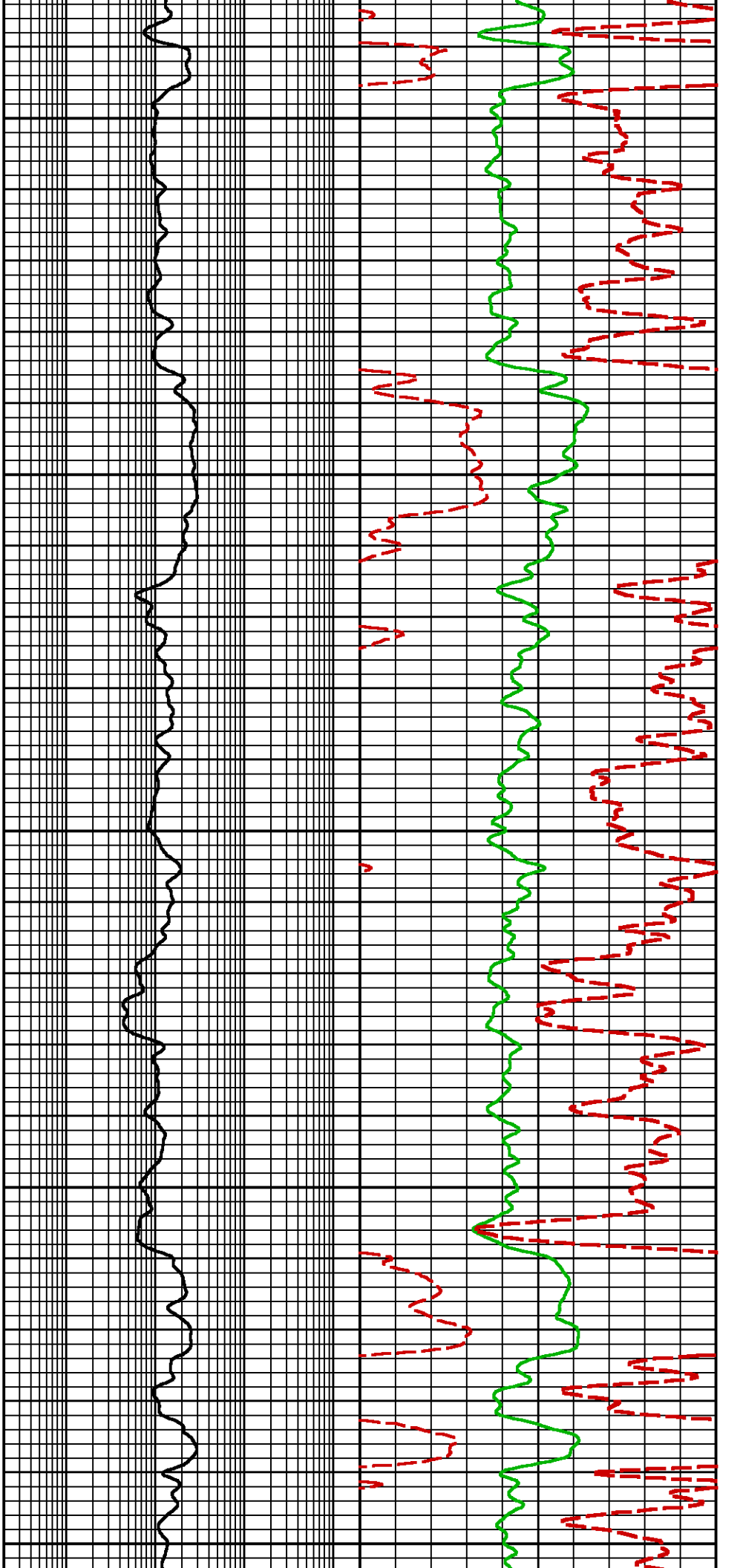
EMULATED DENSITY CORRESPONDING TO 2243'-3100' ON TRAINING WELL IS AFFECTED BY SEVERELY DAMAGED BOREHOLE

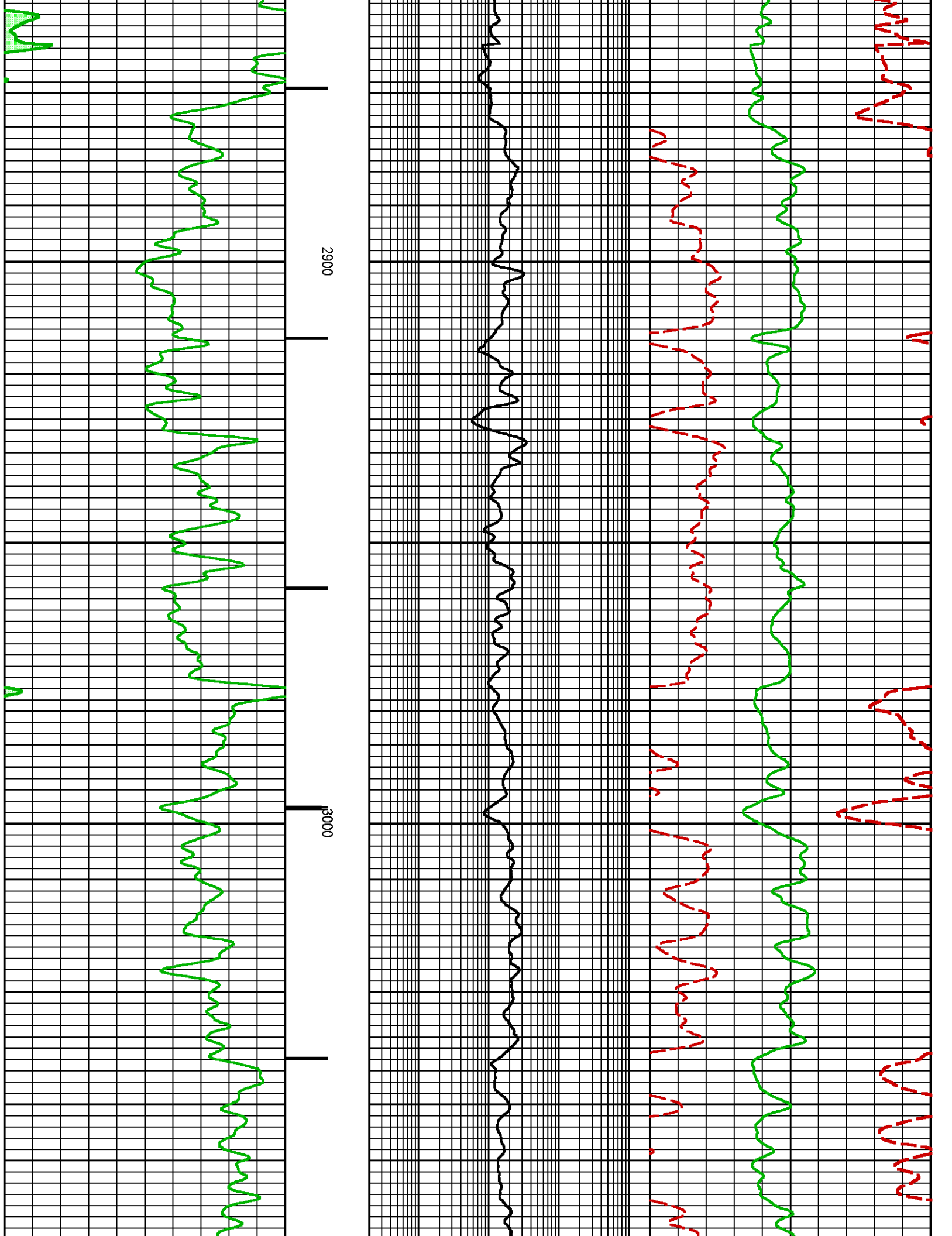
GEOLOGIST: K. ELLSWORTH

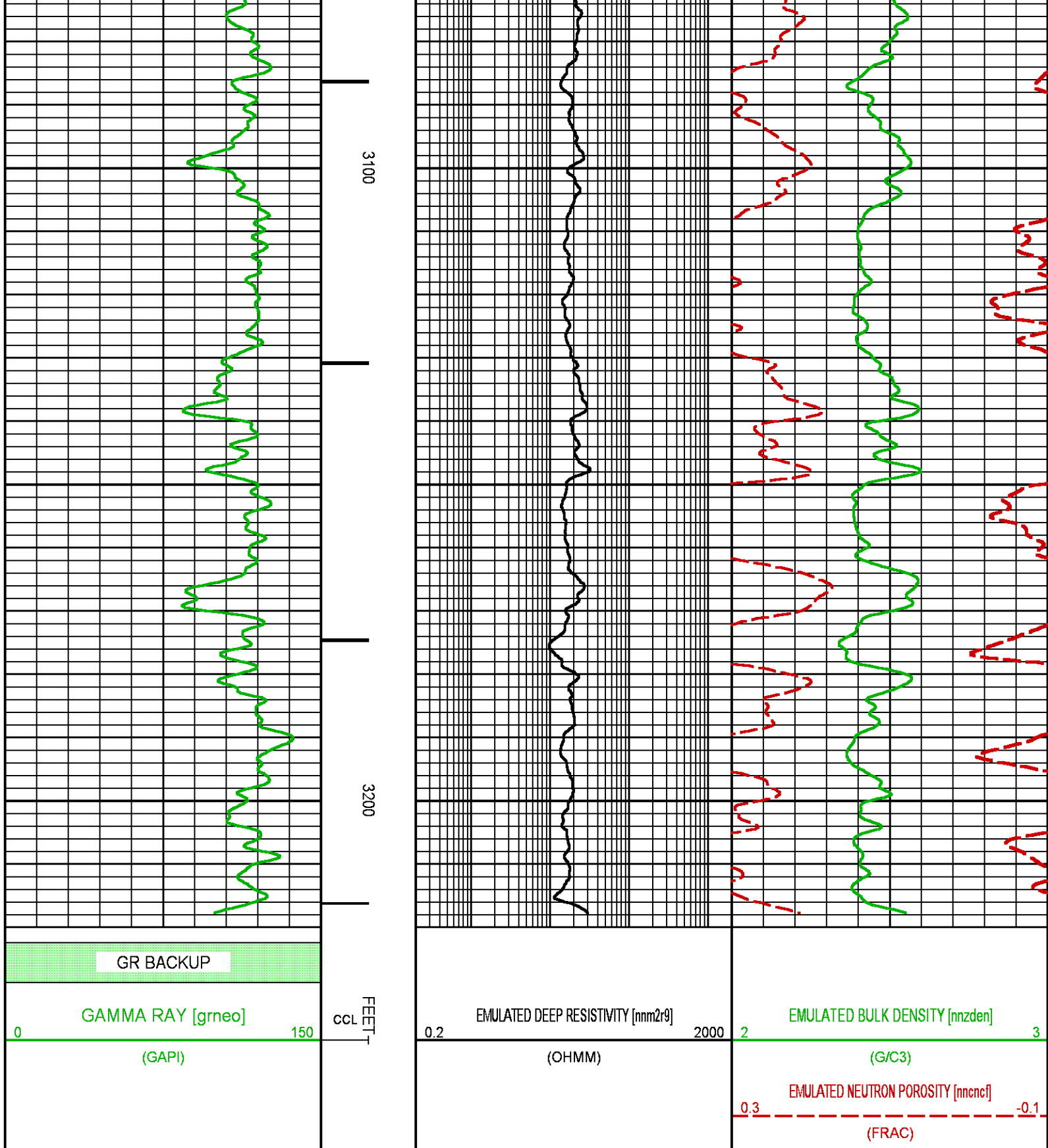
## NEO RESULTS FOR BRUTON 19-12E (G-SAND)

Project : NA  
User : ellskima  
Presentation : BHI3BKZH12:C:\Ape\_Projects\laramie\_bruton\_19\_12e\NEO PRESENTATION\_LARAMIE\_G-Sand.pdf [5"/100' Scale]  
Plot Interval : 2535.75 - 3220 Feet  
Data File 1 : F1 : BHI3BKZH12:C:\Ape\_Projects\laramie\_bruton\_19\_12e\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY  
Well : BRUTON 19-12E  
Field : VEGA  
File Interval : 2535.75 - 8212.75 Feet  
OCT : NA



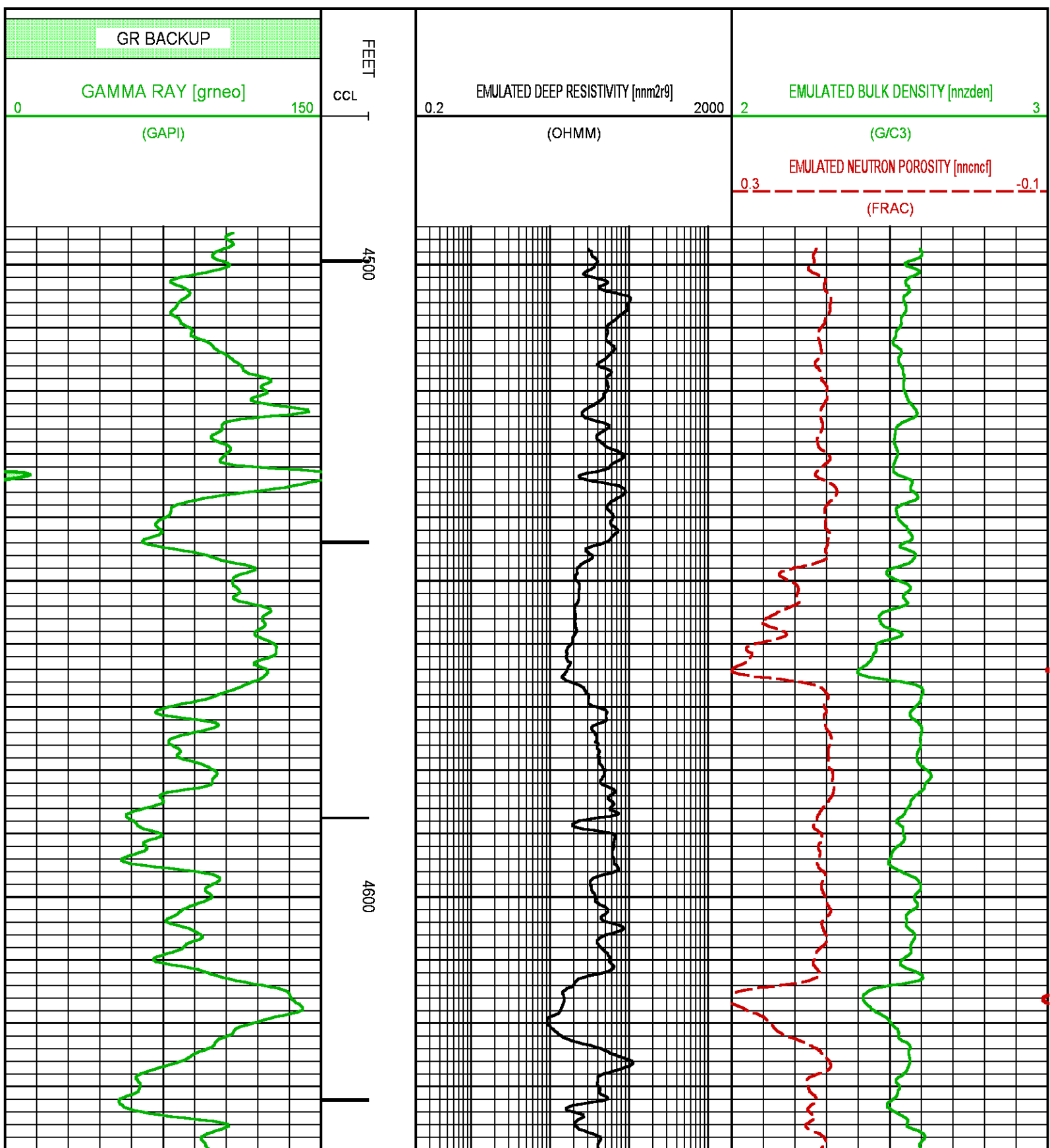


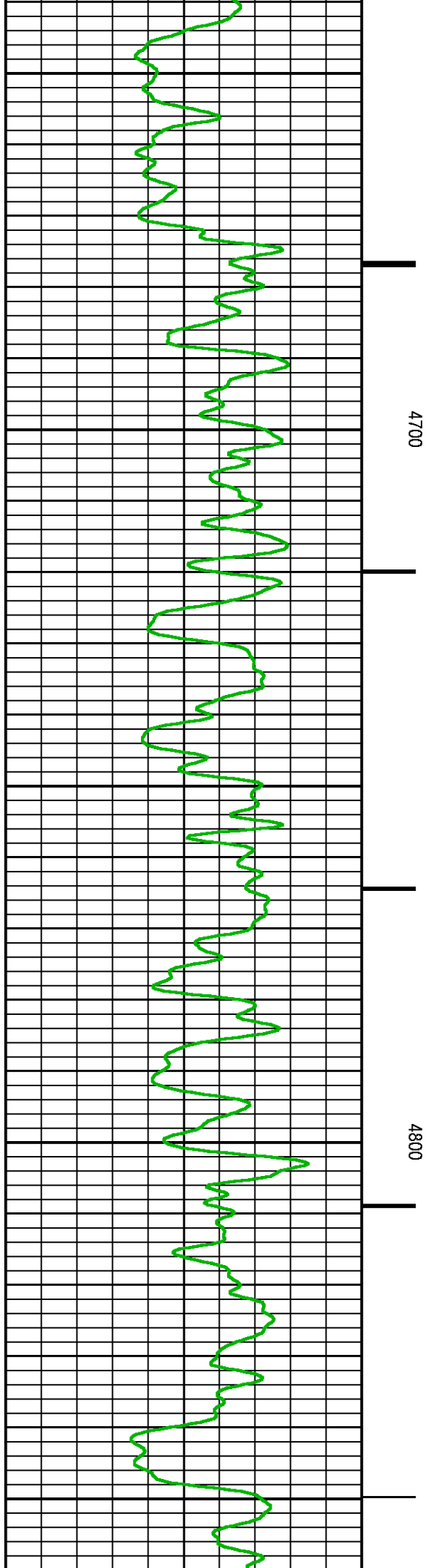
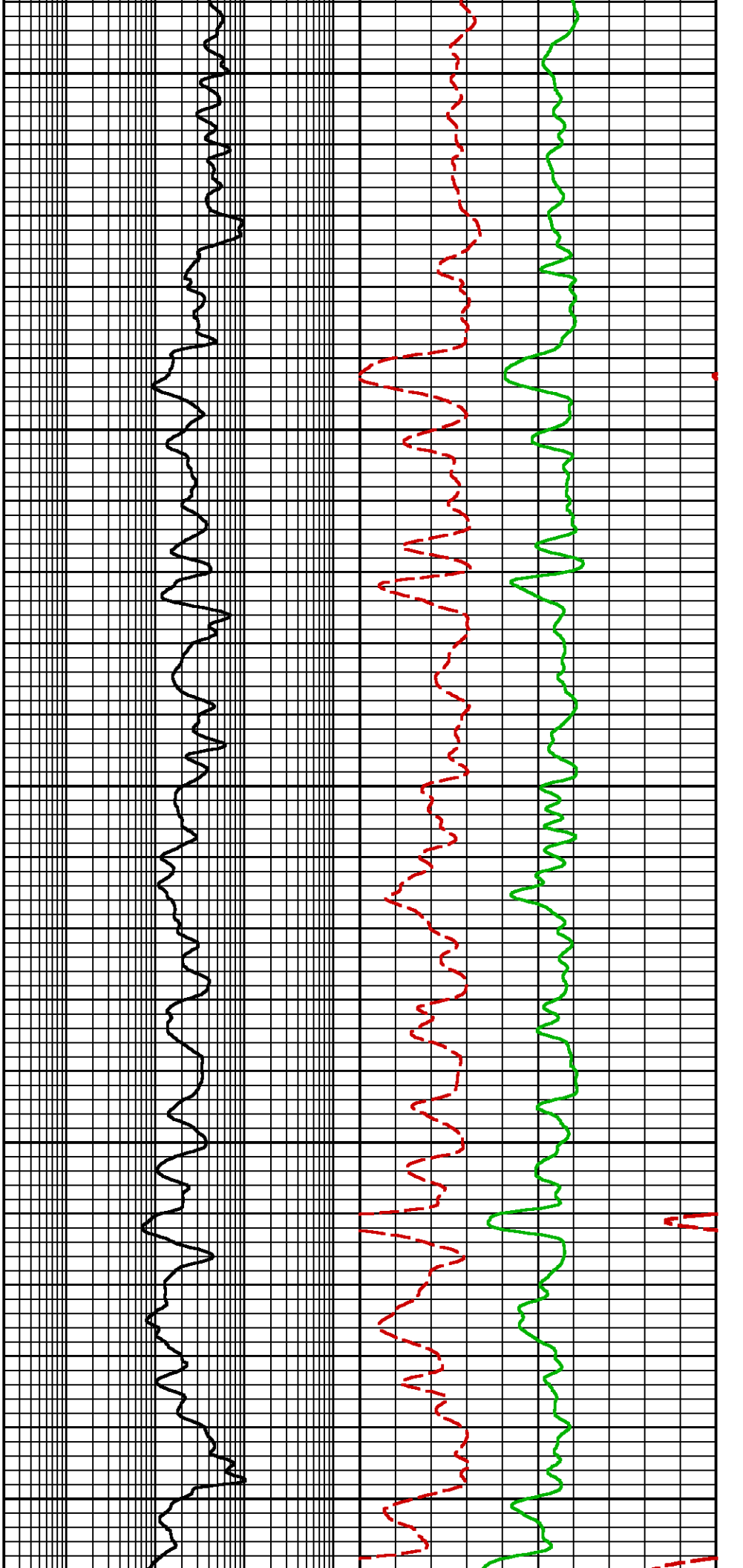


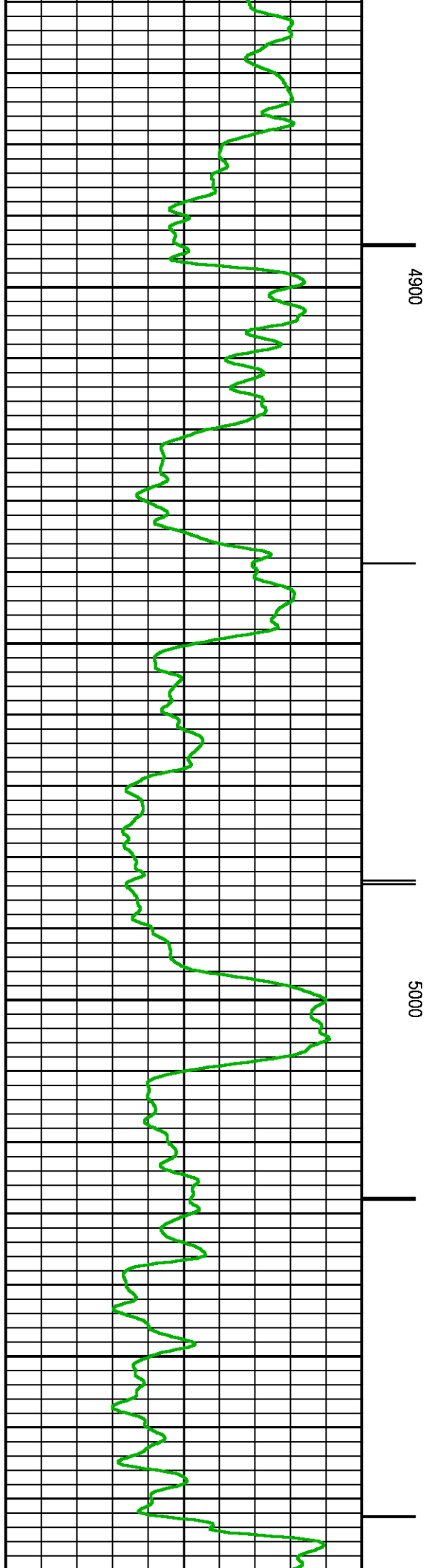
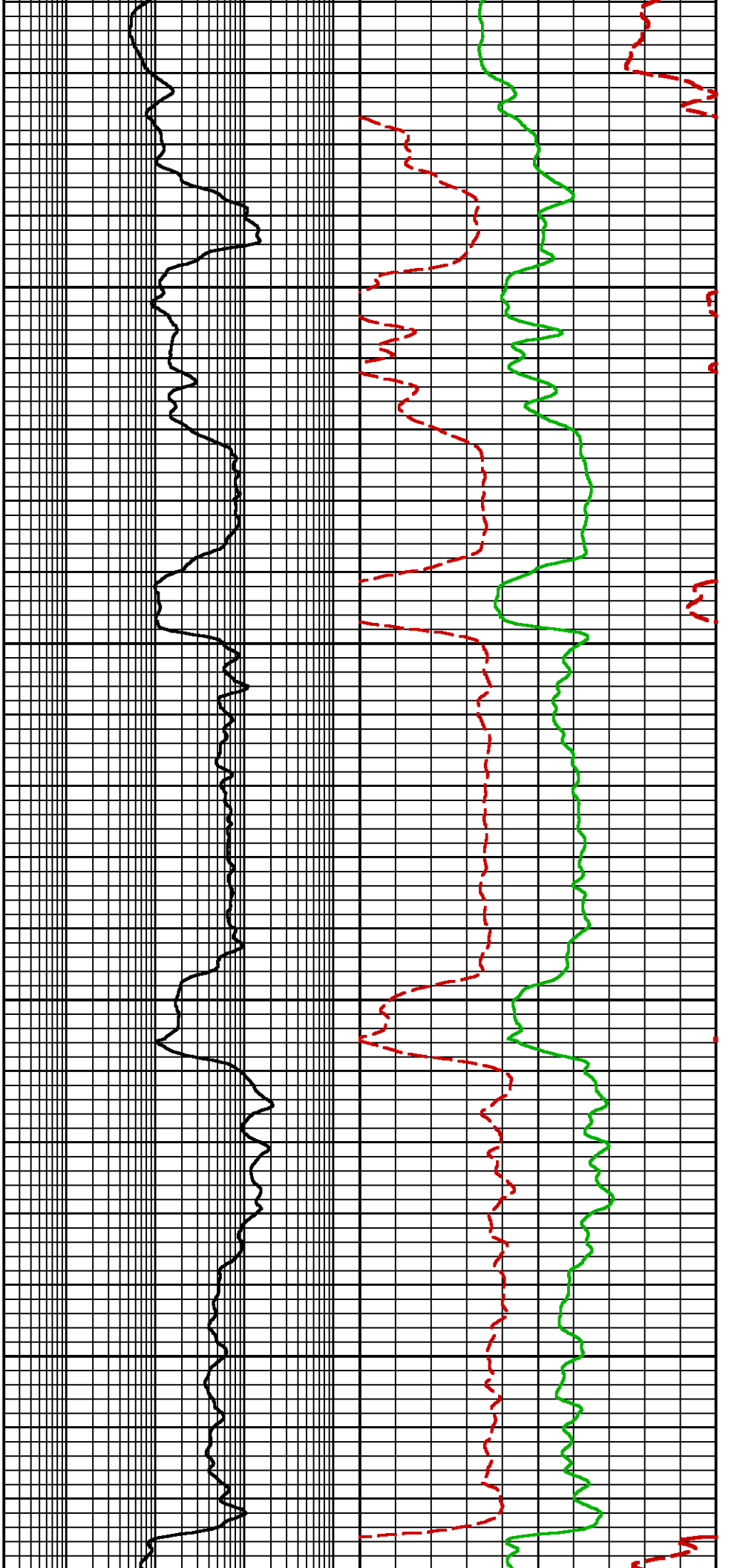


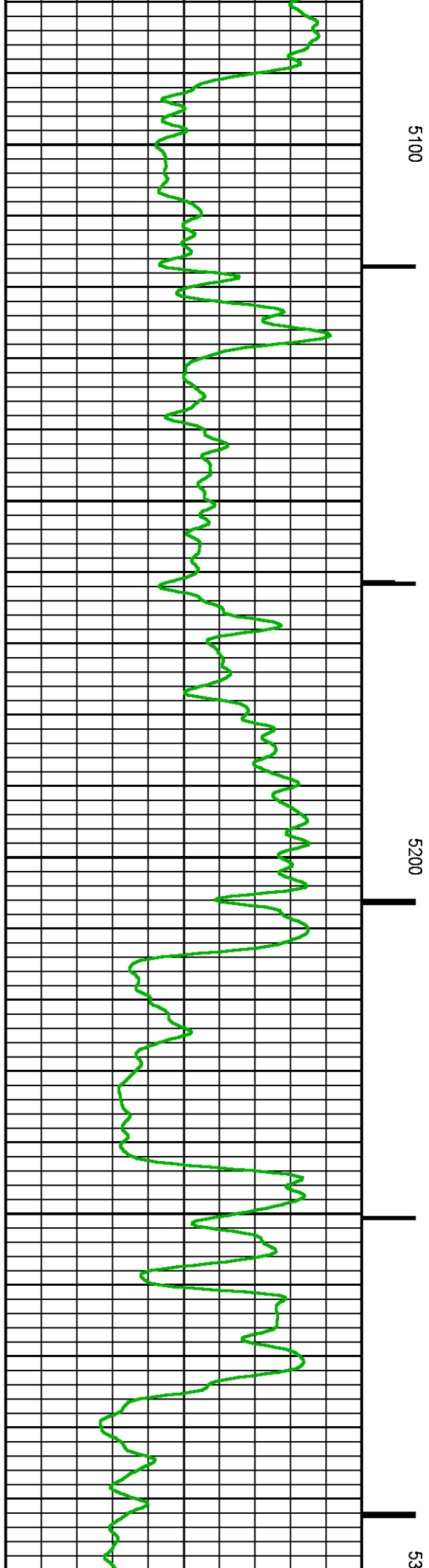
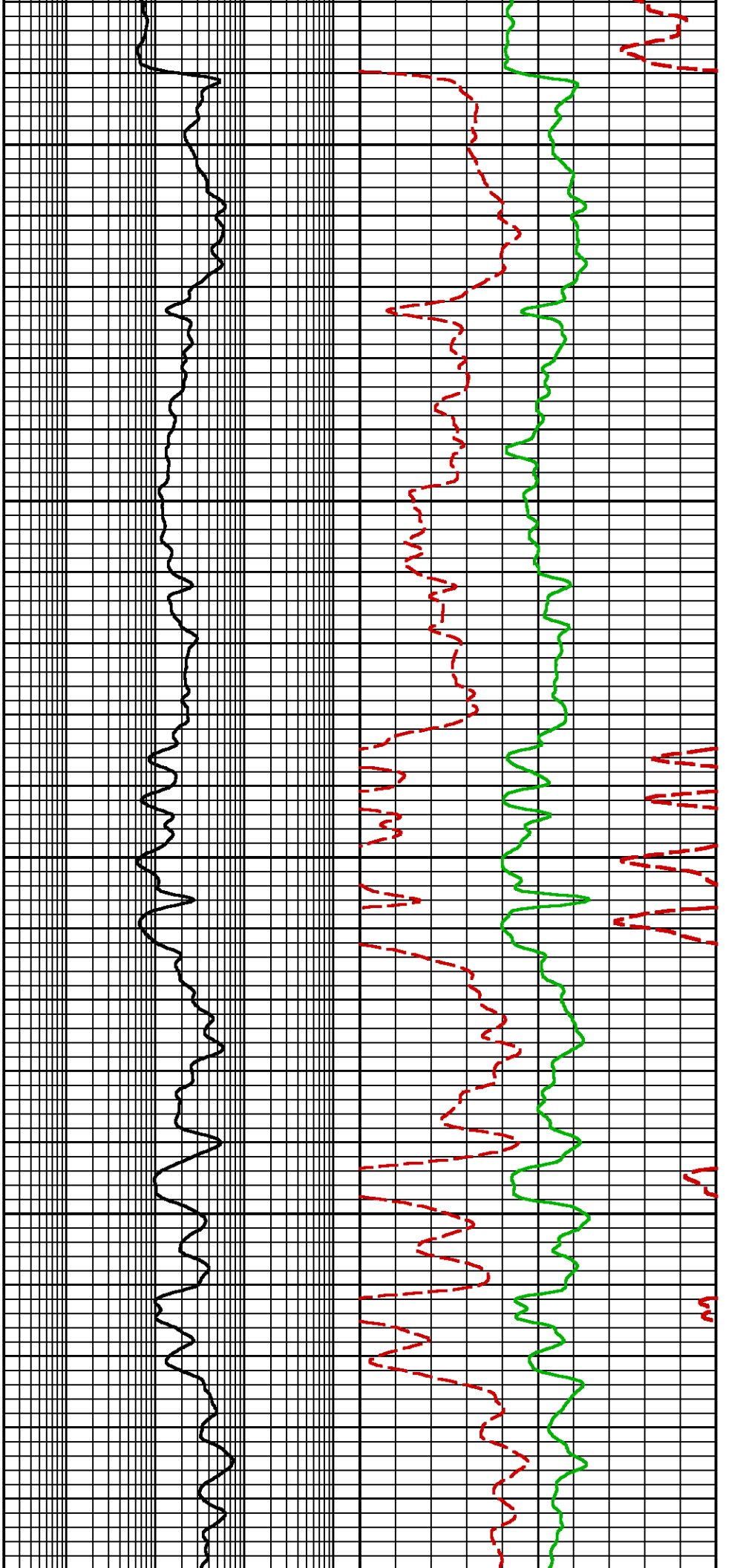
NEO RESULTS FOR BRUTON 19-12E (MAIN)

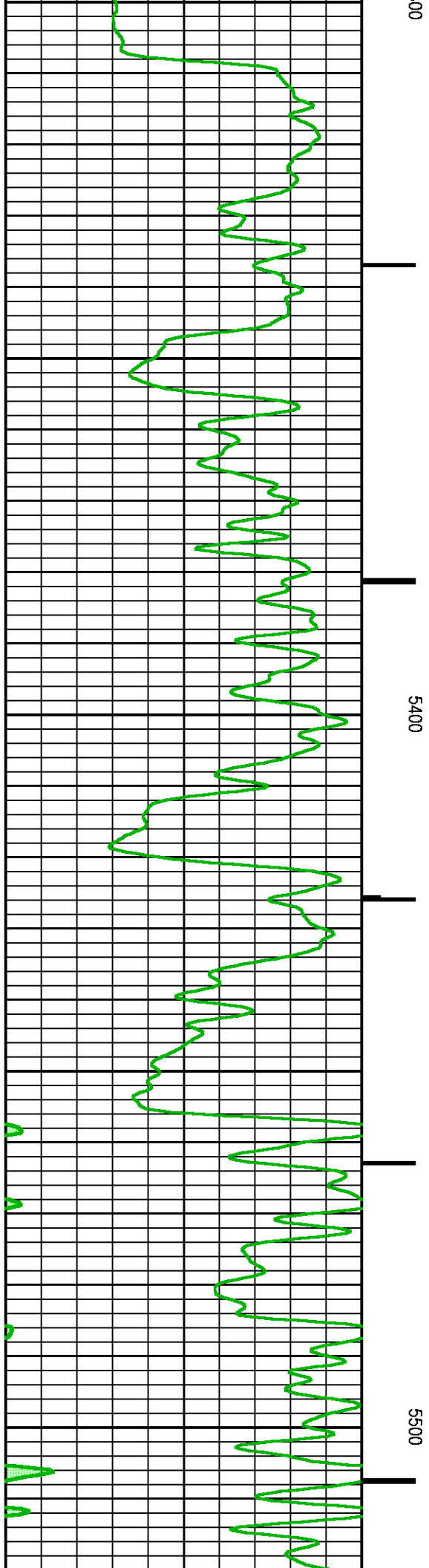
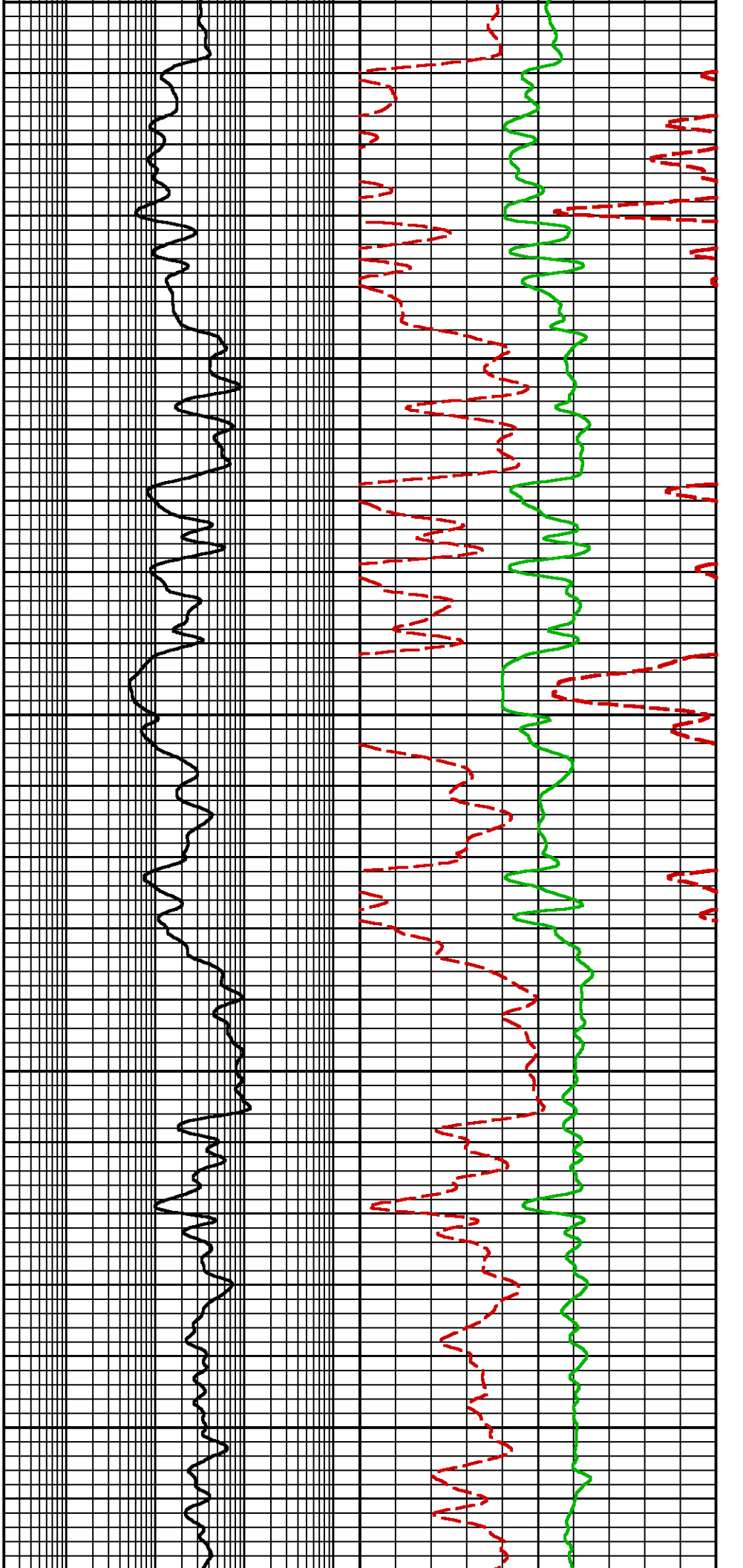
Project : NA  
User : ellskima  
Presentation : BHI3BKZH12:C:\Ape\_Projects\laramie\_bruton\_19\_12e\NEO\_PRESENTATION\_LARAMIE\_MAIN.pdf [5"/100" Scale]  
Plot Interval : 4495 - 8212.75 Feet  
  
Data File 1 : F1 : BHI3BKZH12:C:\Ape\_Projects\laramie\_bruton\_19\_12e\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY  
Well : BRUTON 19-12E  
Field : VEGA  
File Interval : 2535.75 - 8212.75 Feet  
OCT : NA

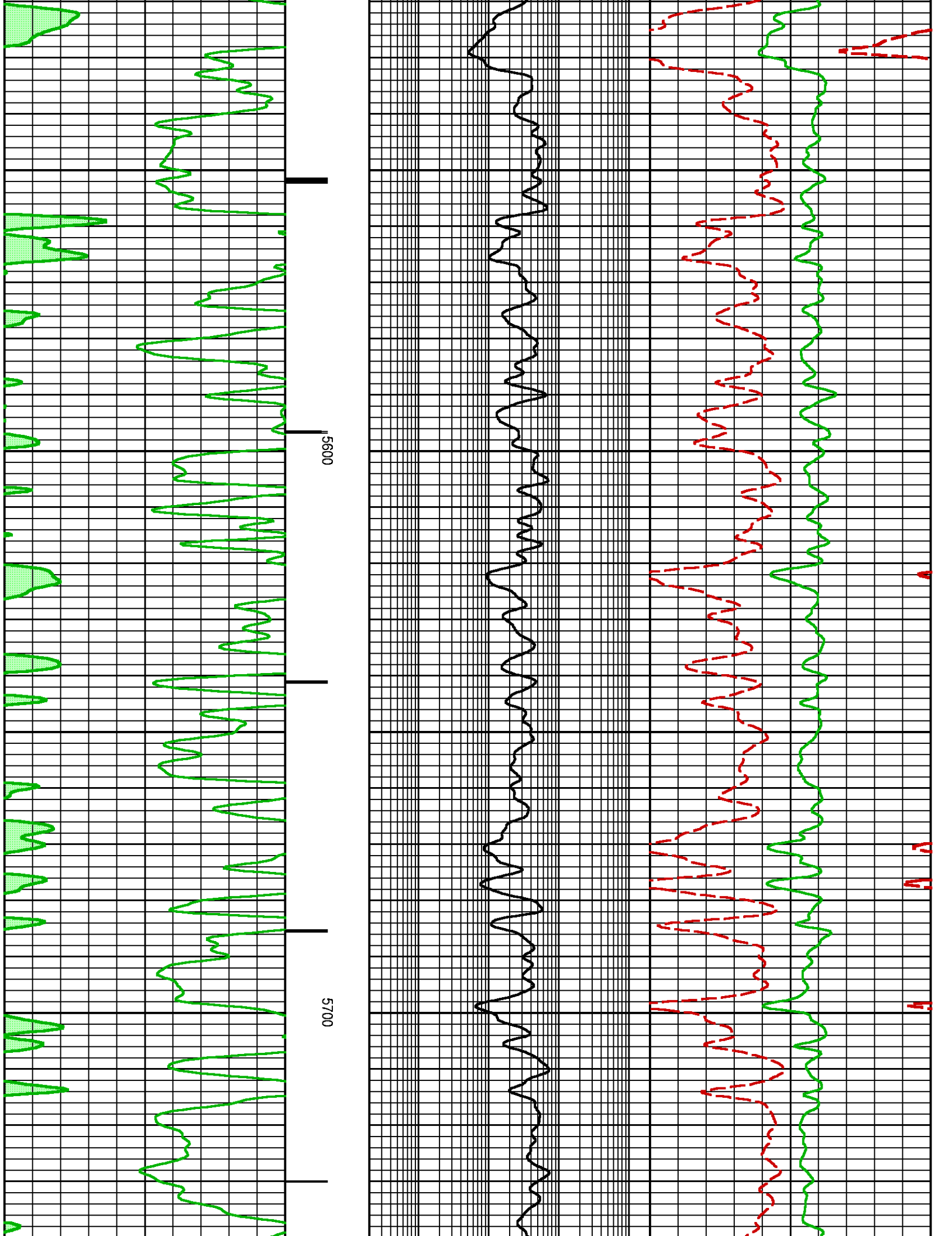


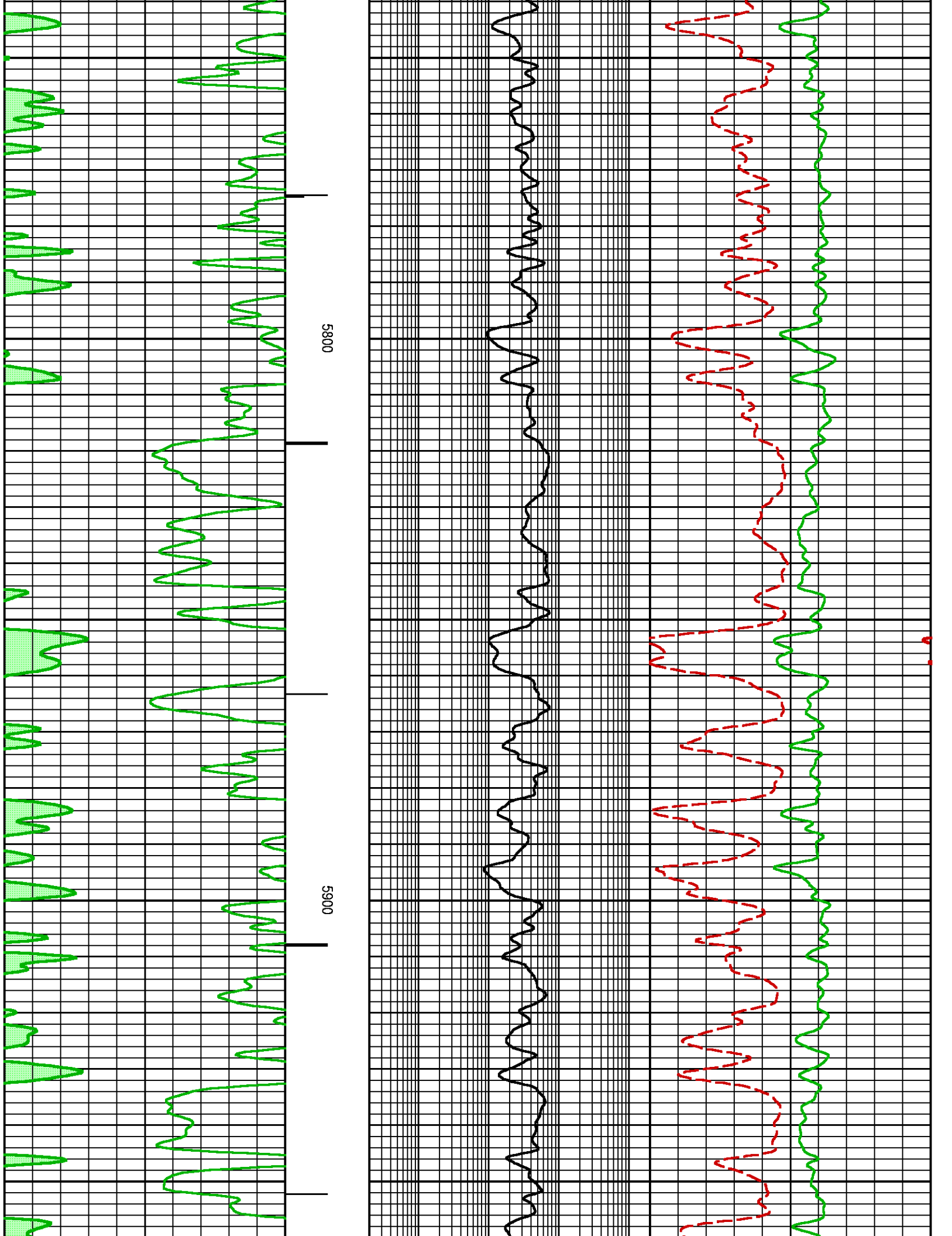


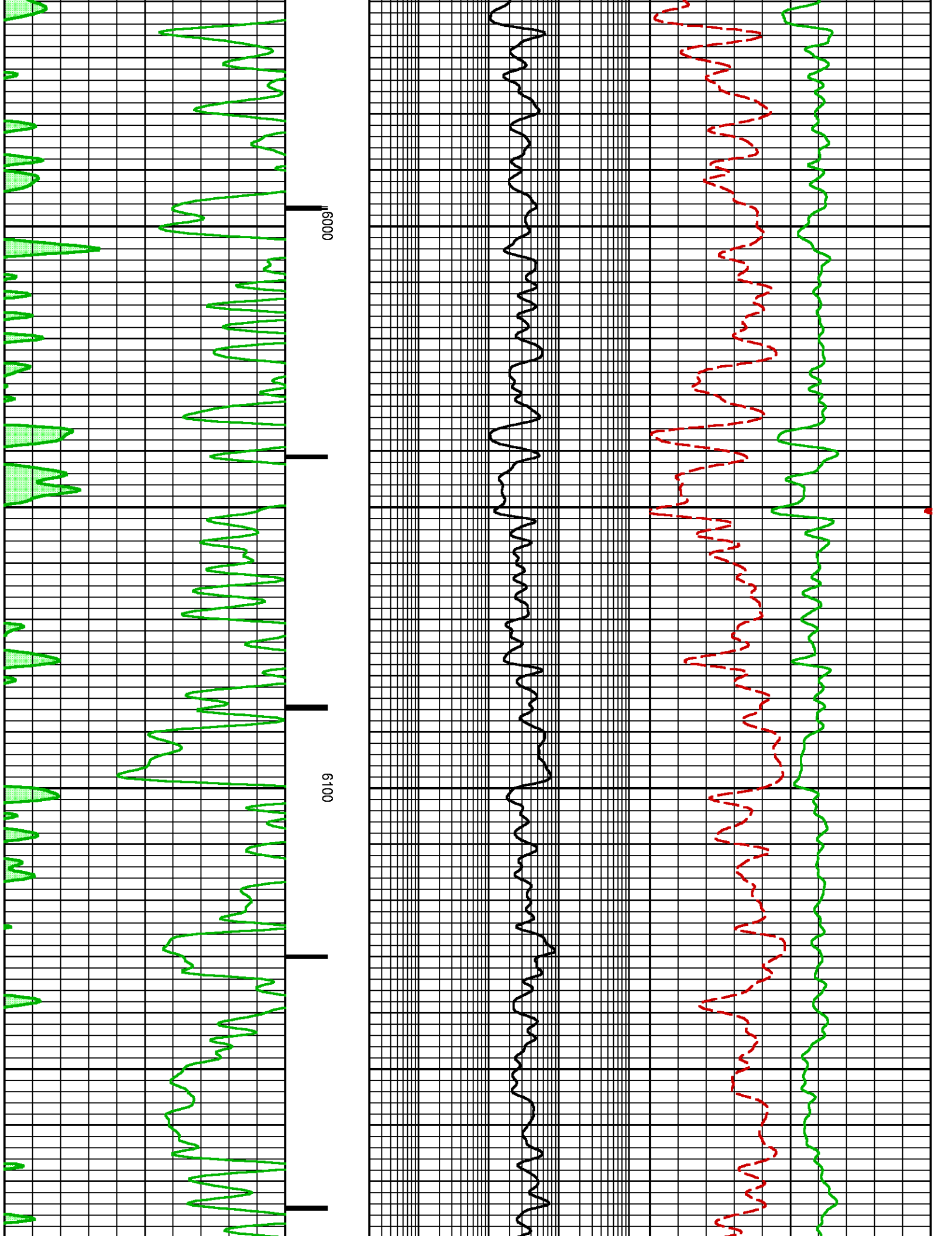


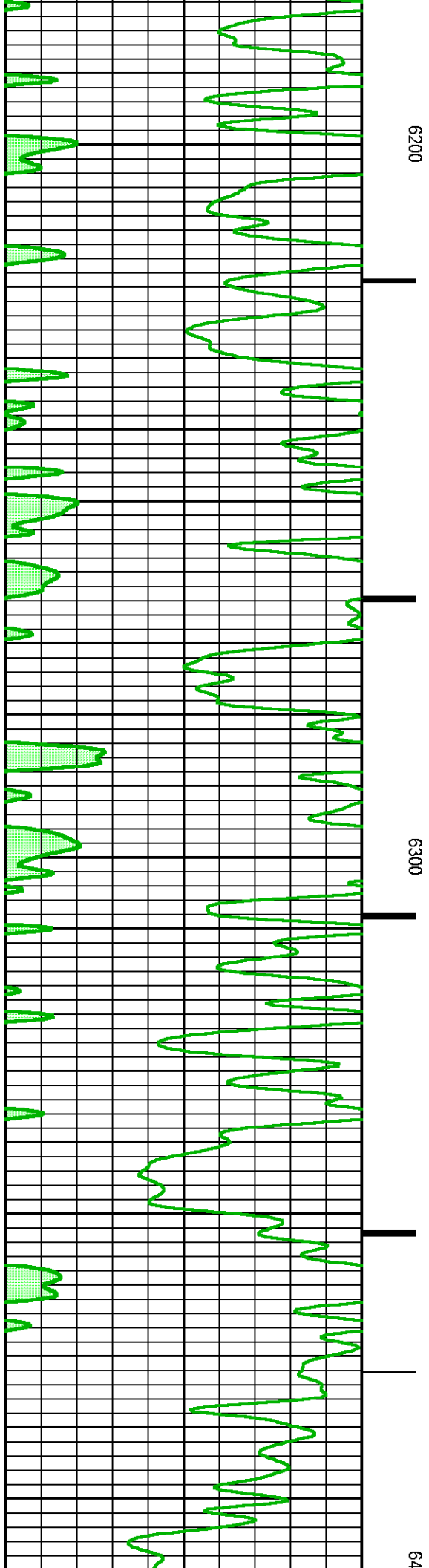
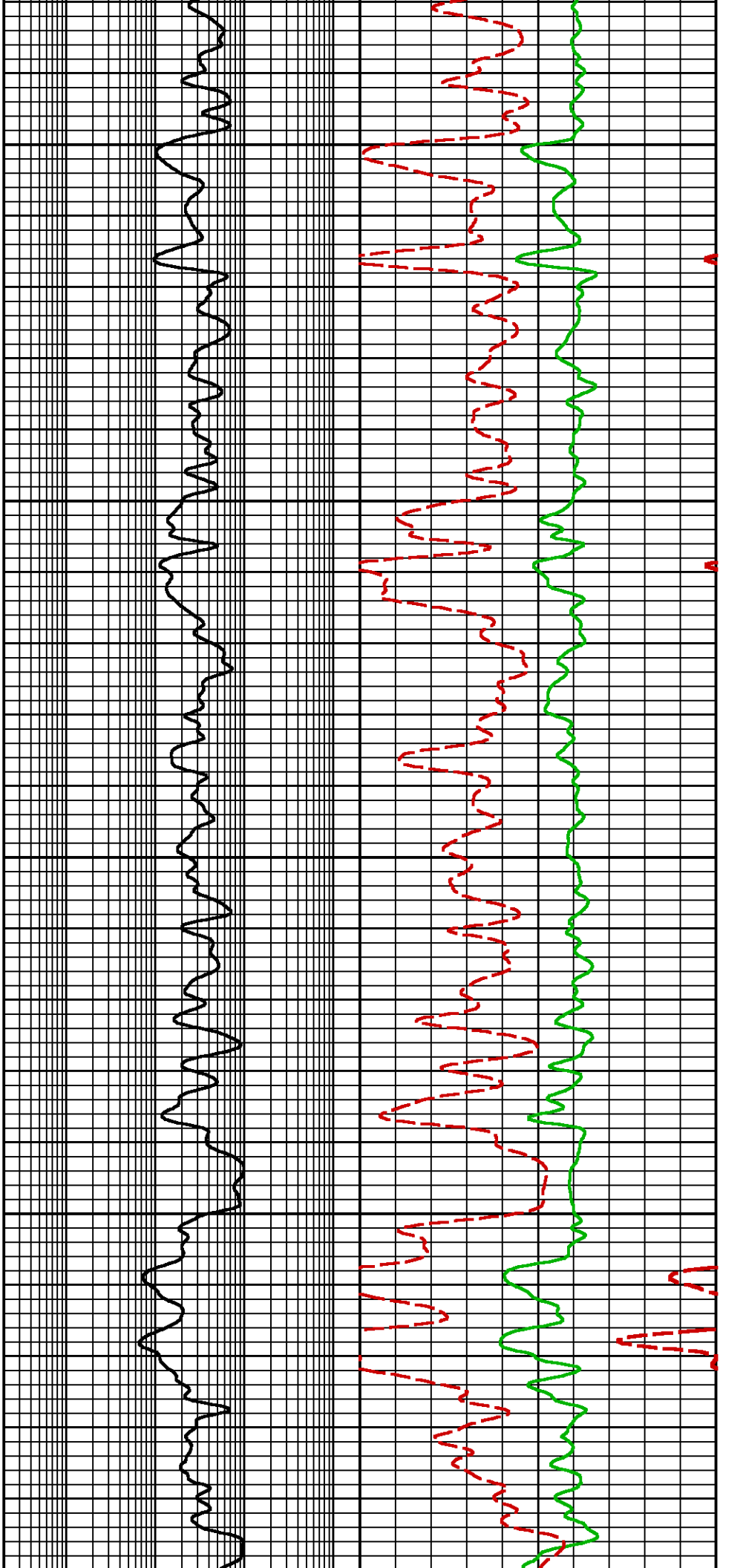


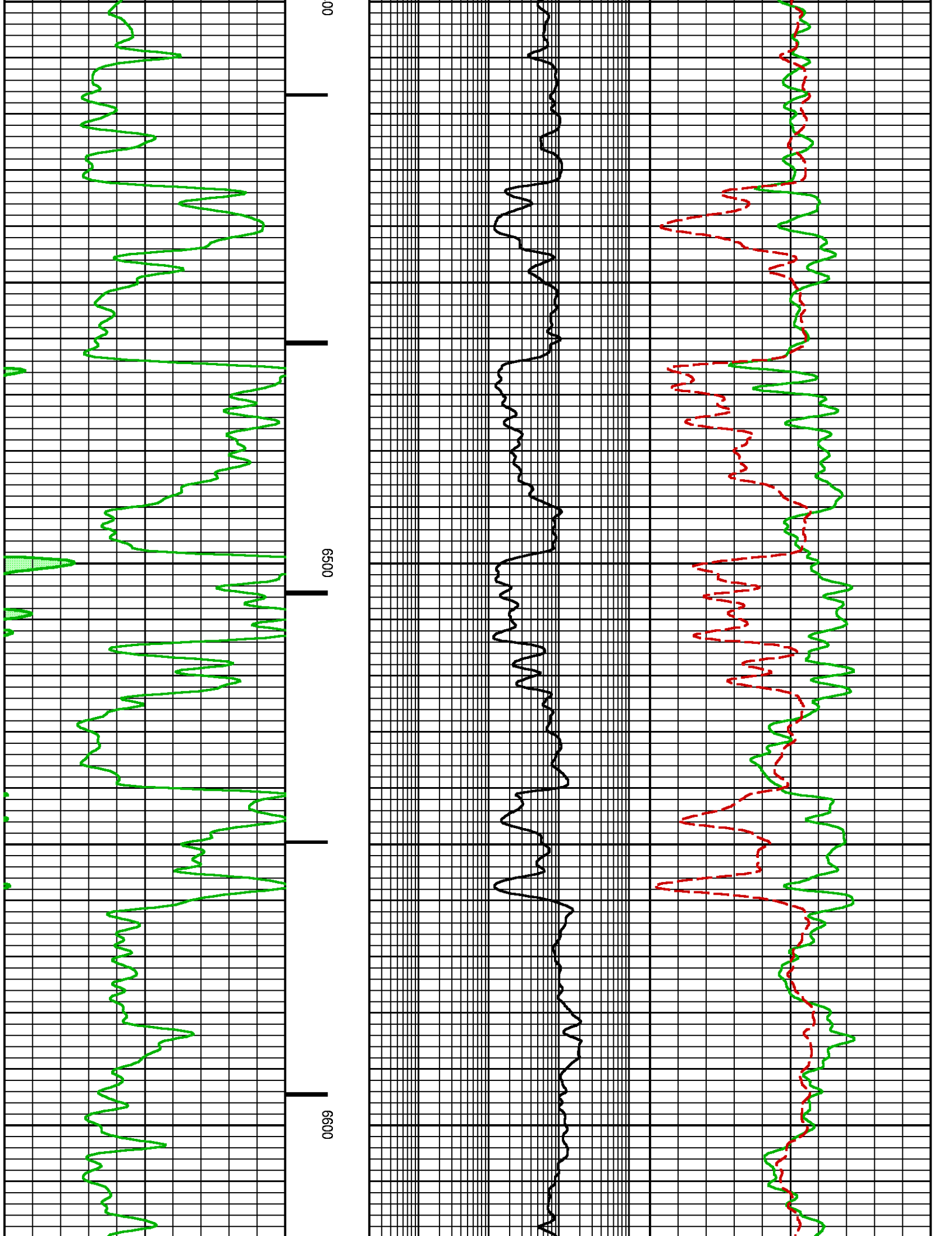


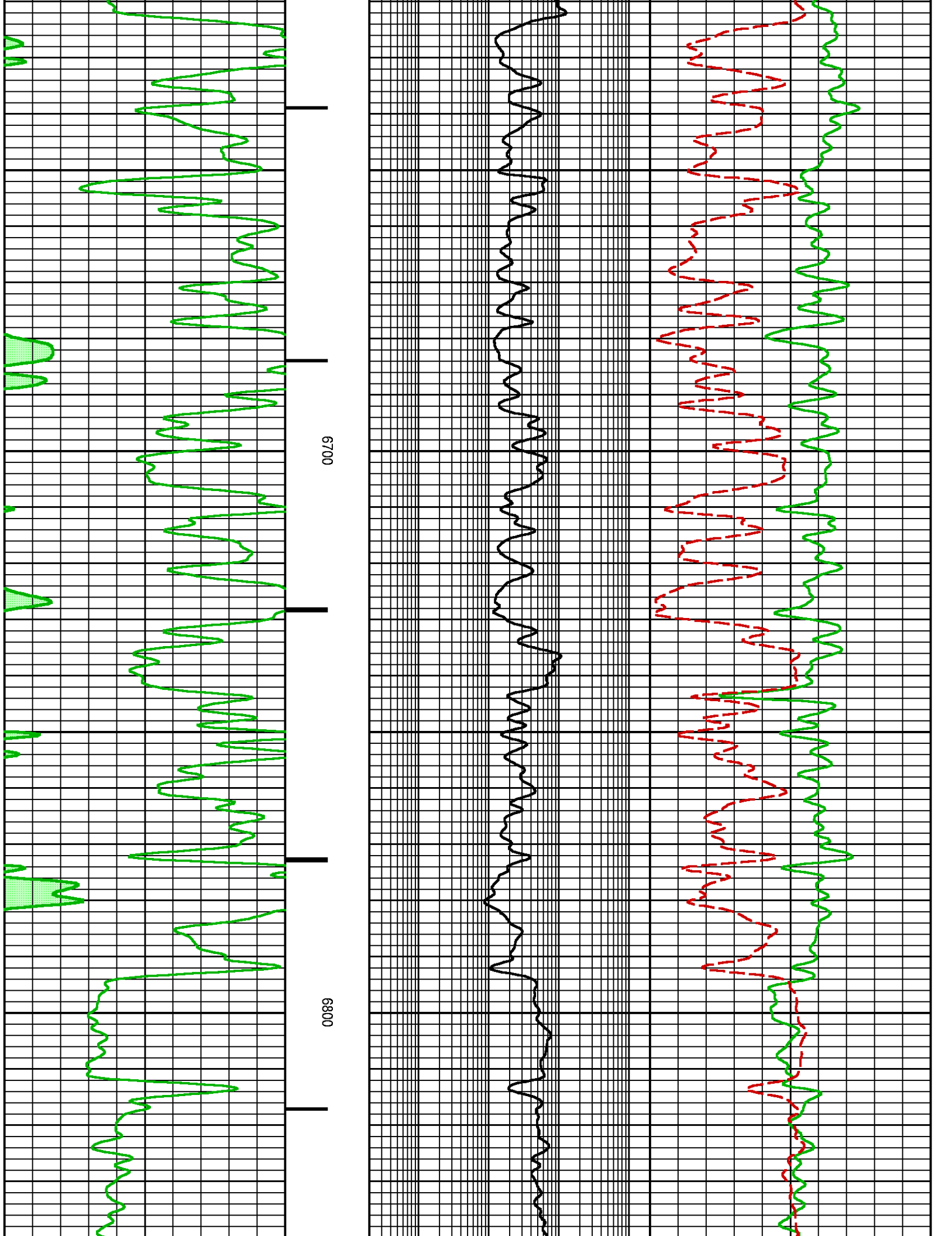


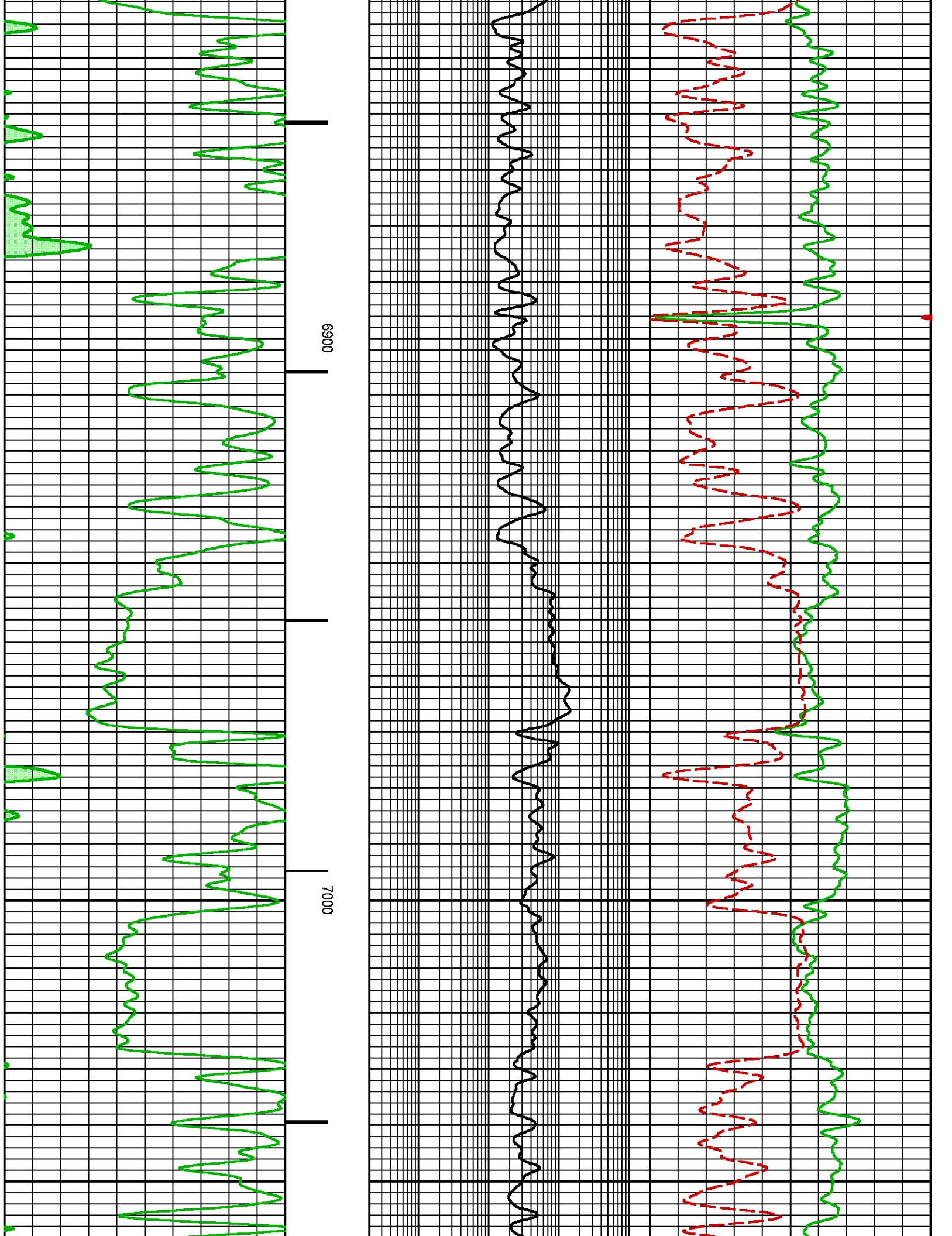


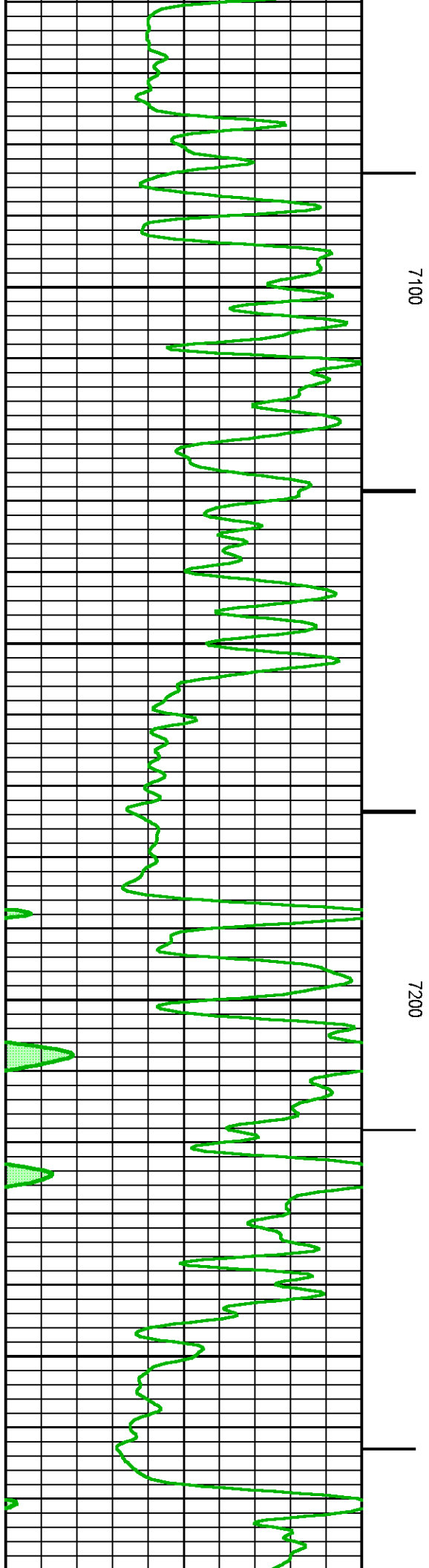
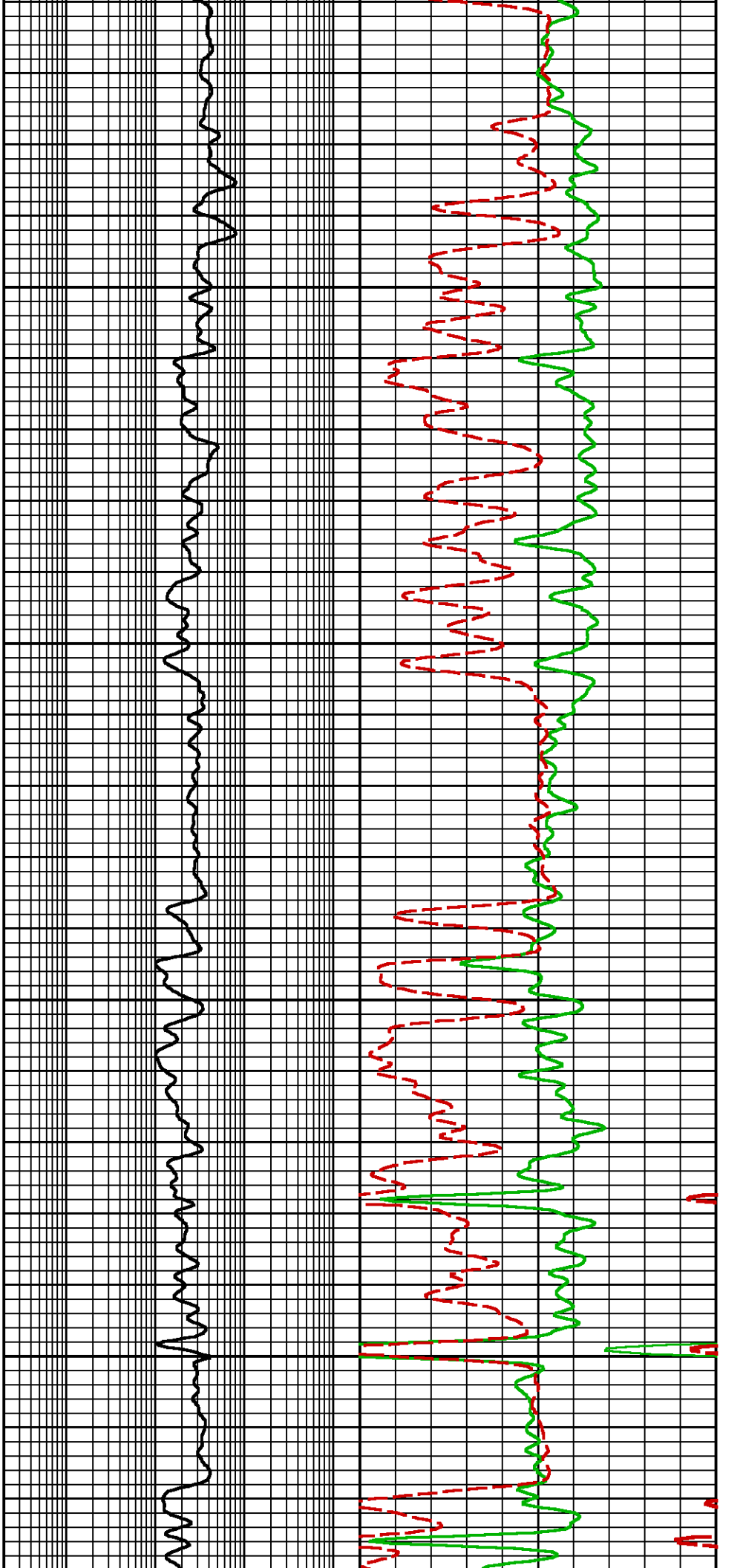


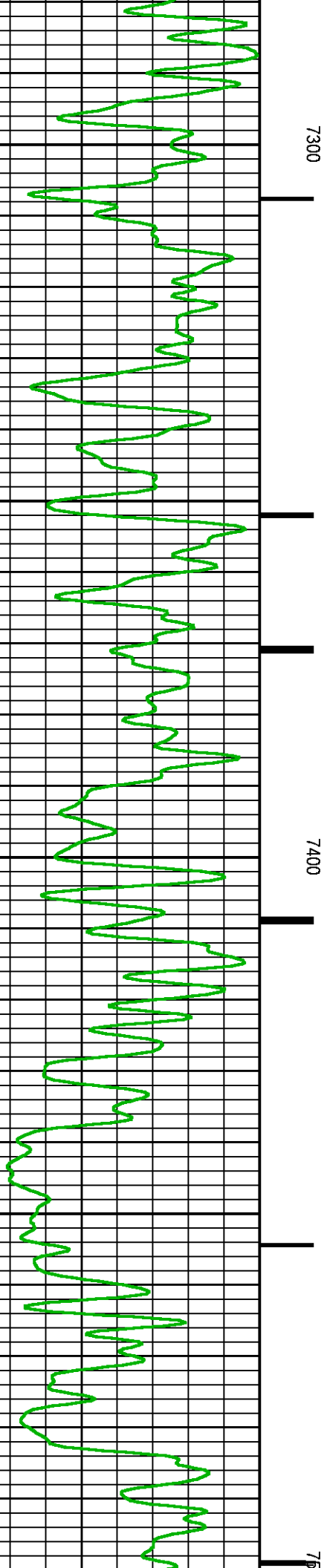
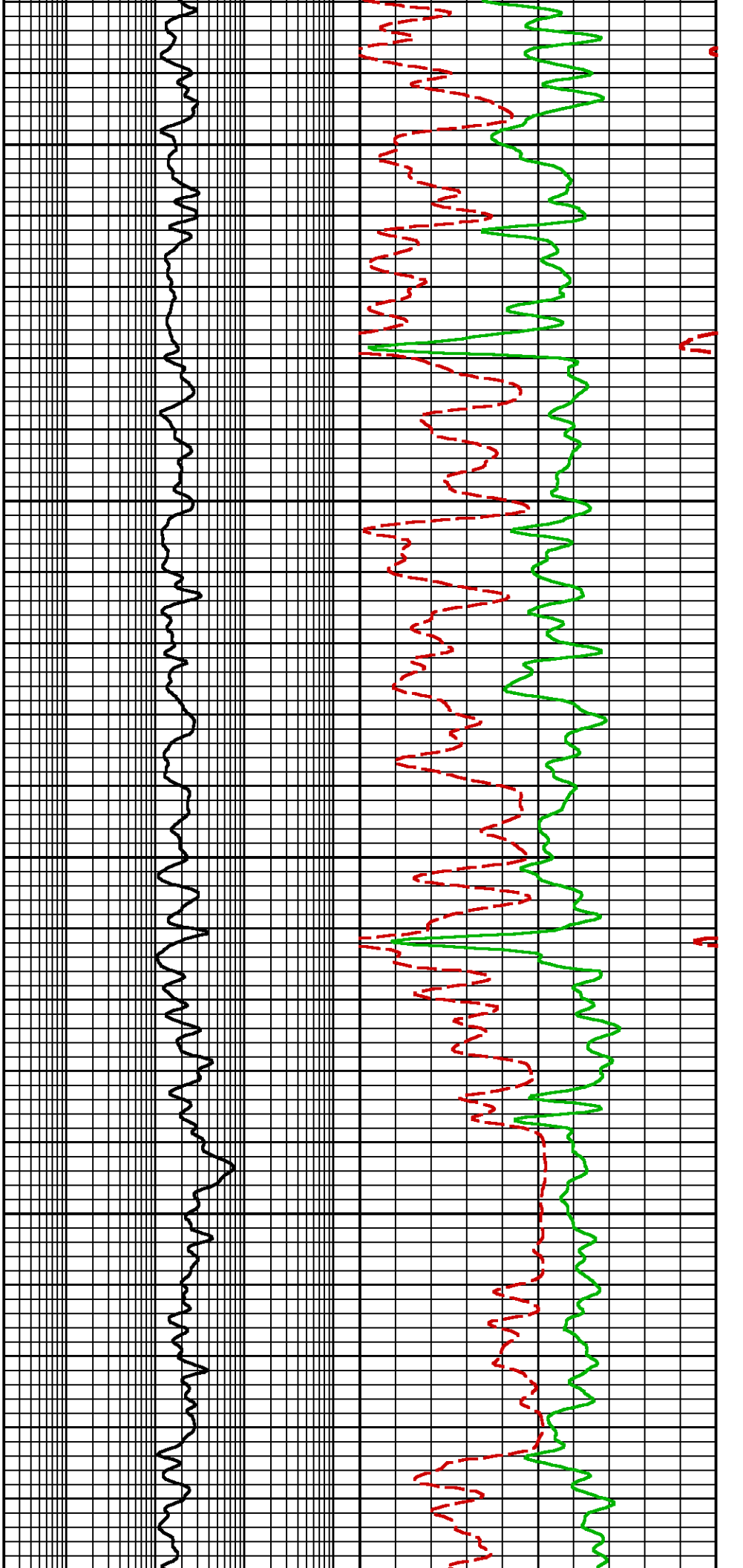


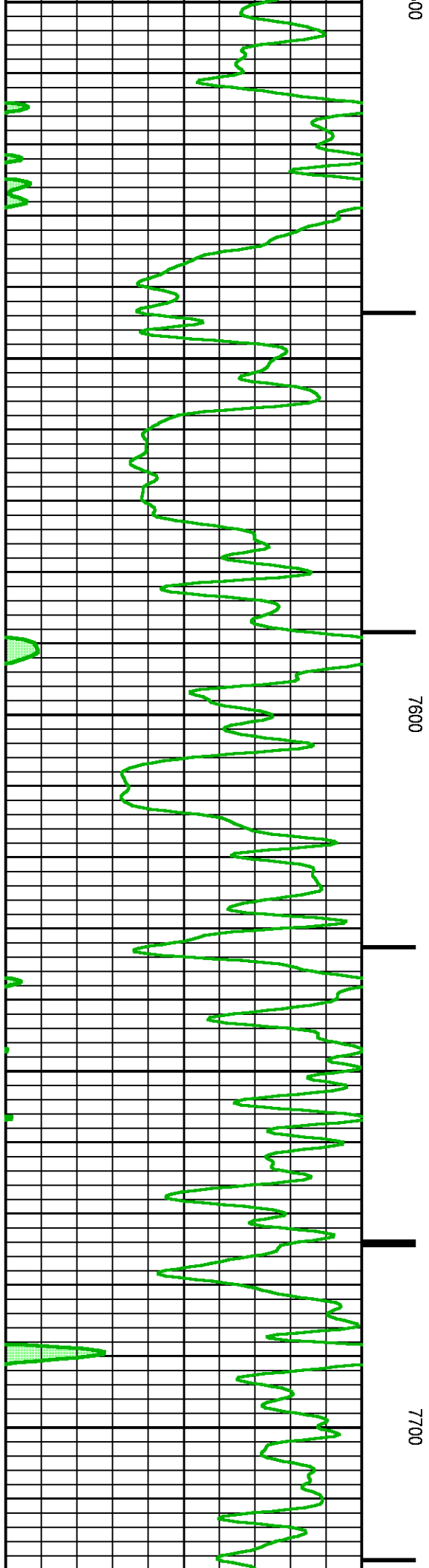
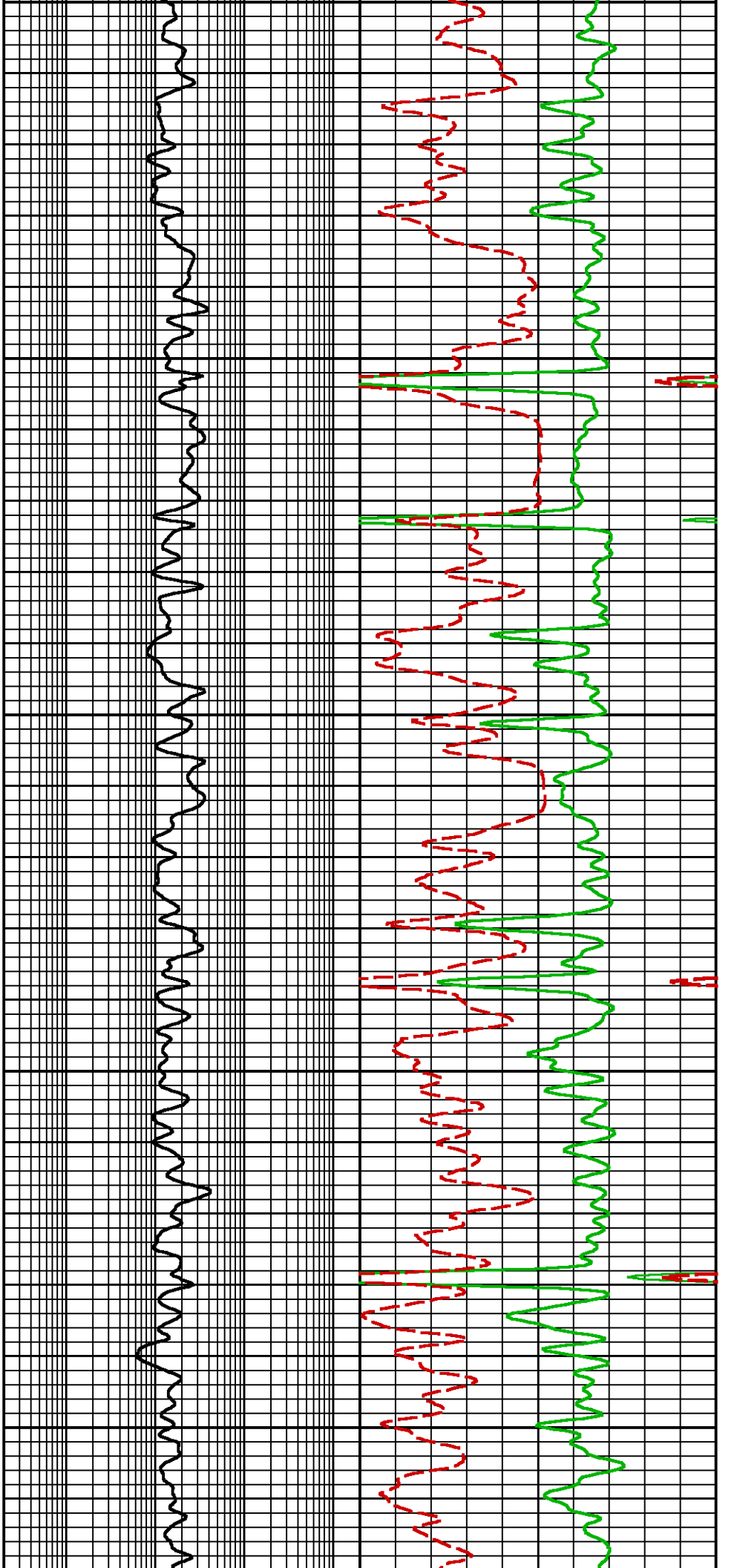


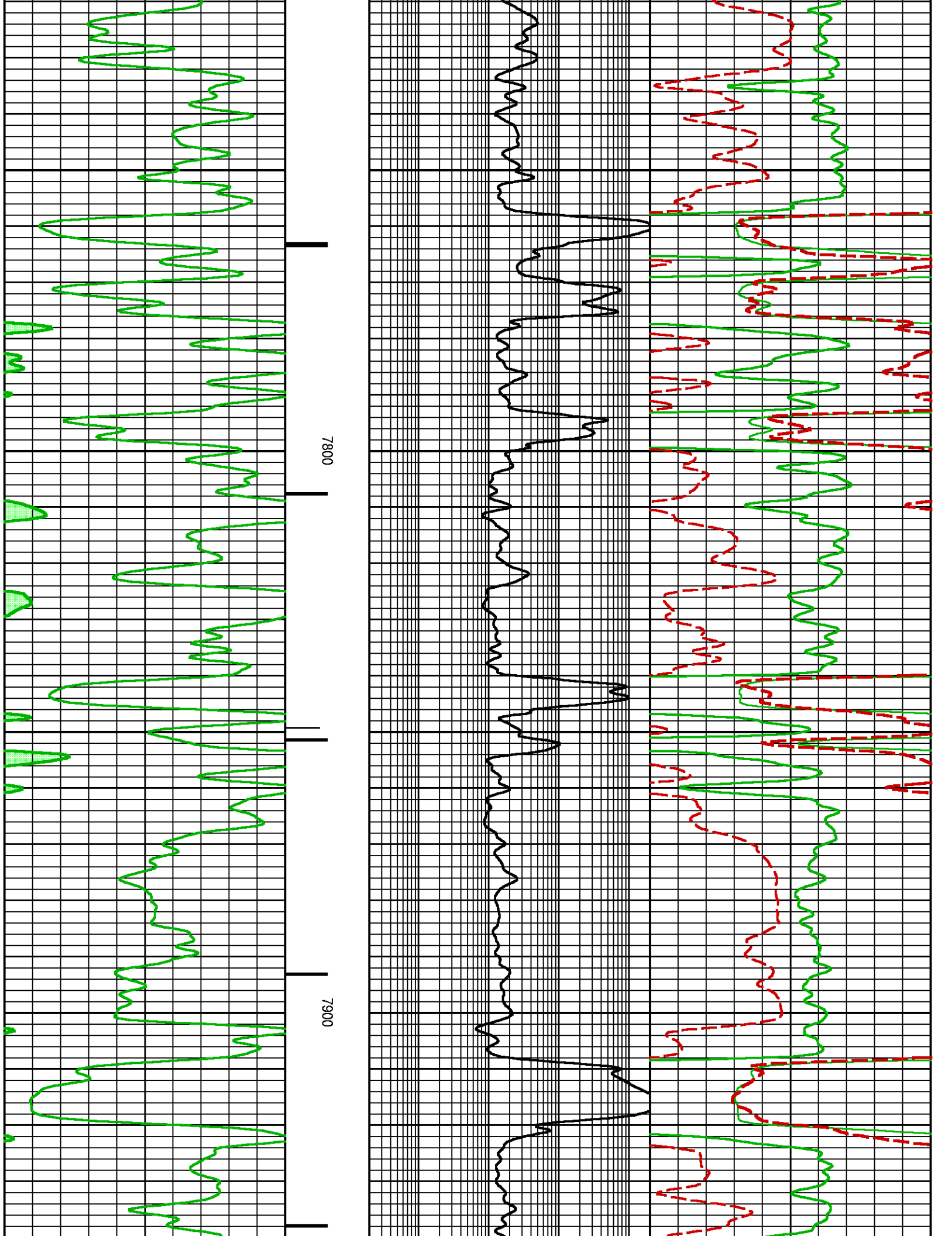


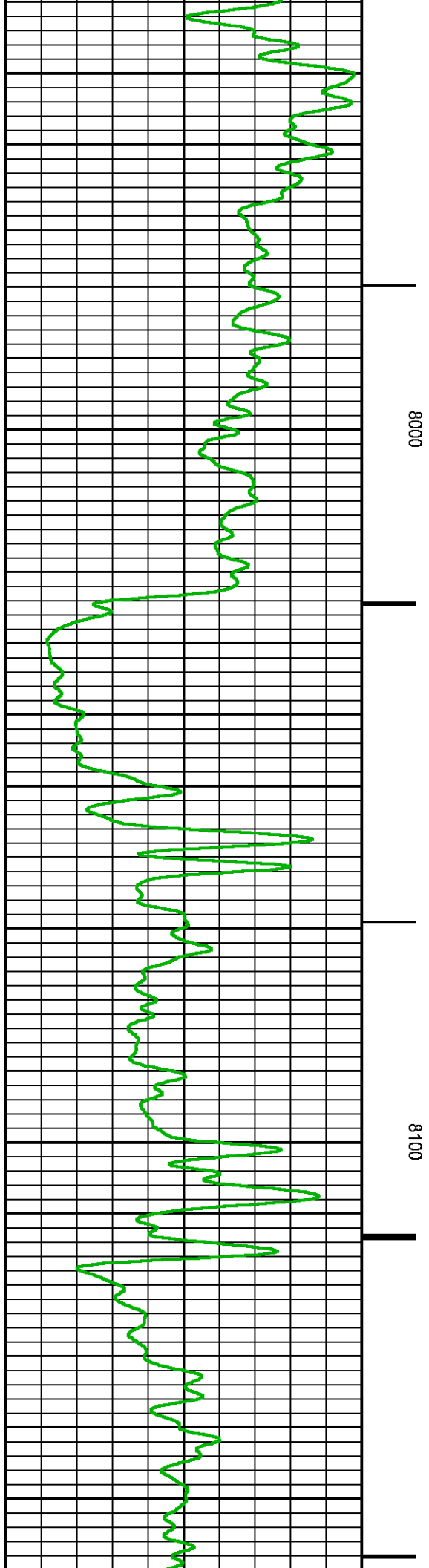
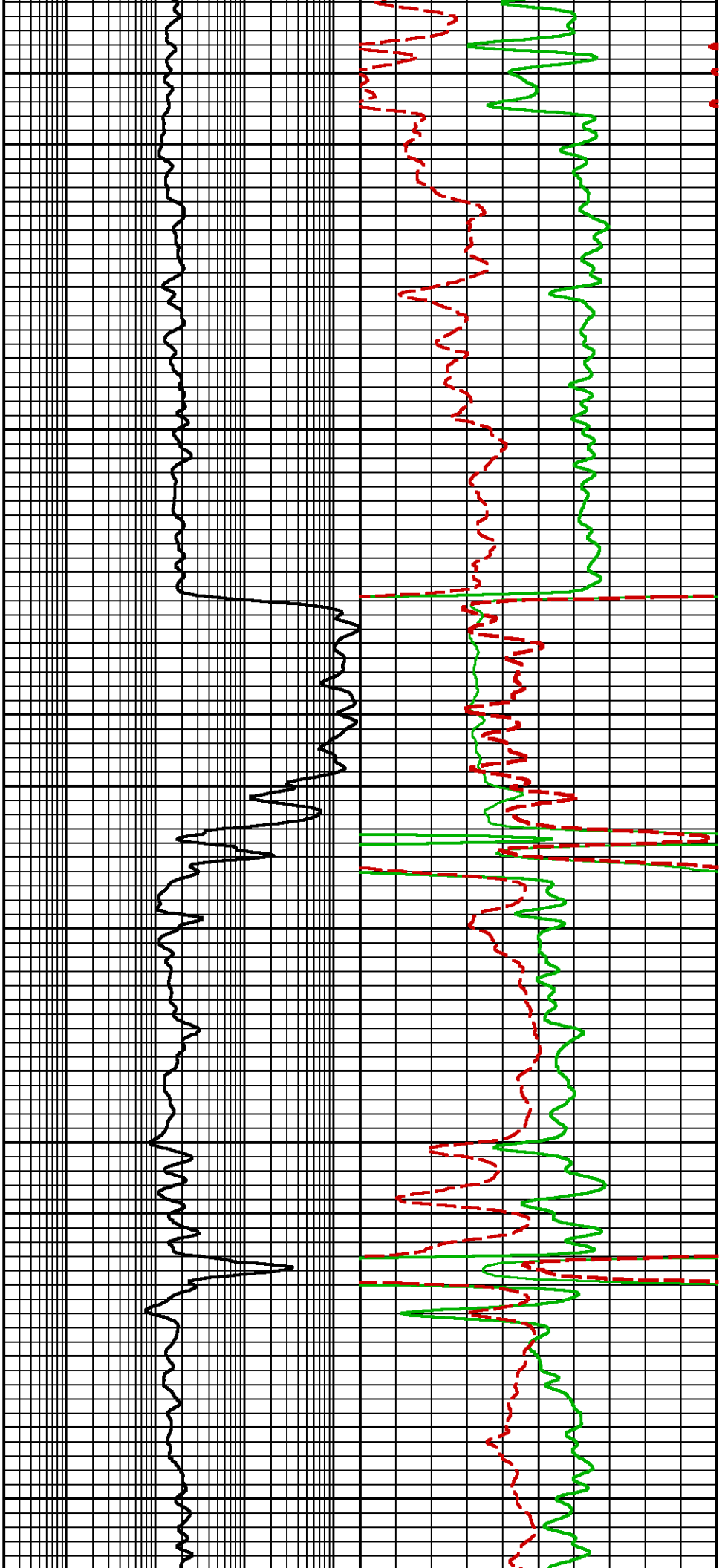


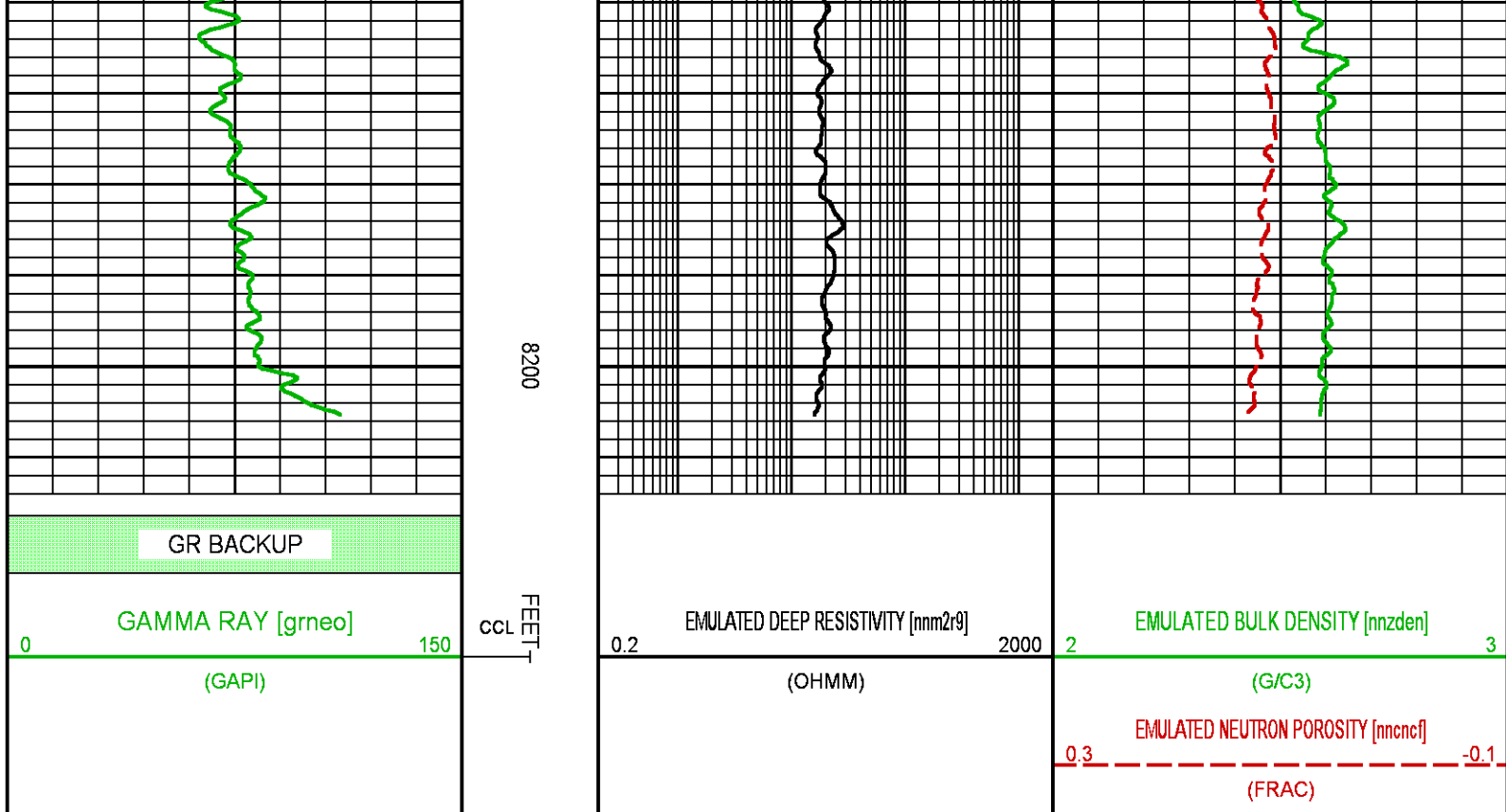














 	<b>COMPANY</b> <u>LARAMIE ENERGY</u> <b>WELL</b> <u>BRUTON 19-12E</u> <b>FIELD</b> <u>VEGA</u> <b>COUNTY</b> <u>MESA</u> <b>STATE</b> <u>COLORADO</u>	<b>FILE NO:</b> _____ <b>API NO:</b> <u>05-077-10365-0000</u>	
	<b>LOCATION:</b> <u>SEE REMARKS</u>	<b>ELEVATIONS:</b> KB 7449 FT DF 7448 FT GL 7425 FT	
	SEC <u>19</u> TWP <u>9S</u> RGE <u>93W</u>	DATE <u>6-SEP-2017</u>	