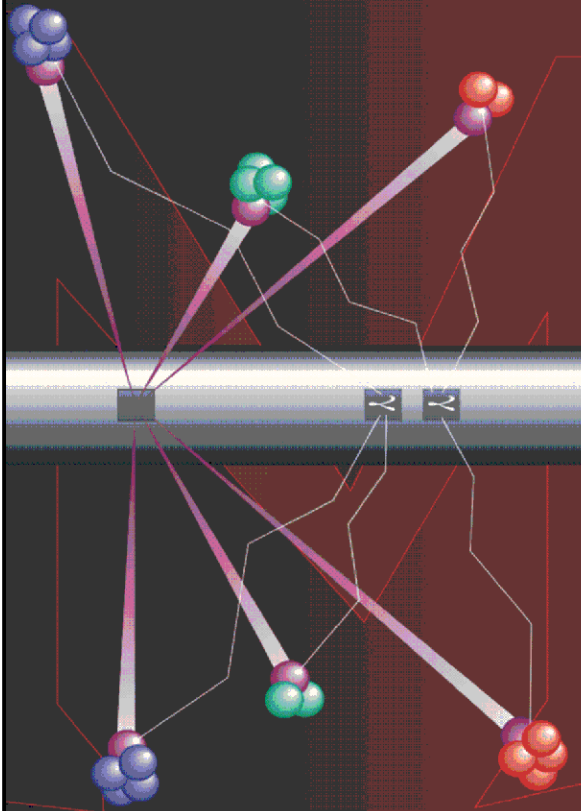


# Pulsed Neutron Formation Evaluation



## NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 19-01W

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 19 TWP 9S RGE 93W

ELEVATIONS:

KB 7286.0 FT DF GL 7262 FT

DATE 29-AUG-2017 ECC 29125-01

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>CALGARY GEOSCIENCE</u>	LOG ANALYST: <u>A. KOTOV</u>	DATE: <u>26-OCT-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US127294</u>	DATE: <u>29-AUG-2017</u>

FROM	TO								
<u>2496 FT</u>	<u>8025 FT</u>								

### REMARKS

LOCATION:  
SHL: LAT:39.262997N;LONG:107.815047W  
BHL: LAT:39.269311N;LONG:107.816113W

TRAINING WELL: BRUTON 19-07W

EXTREMELY POOR BOREHOLE CONDITIONS ABOVE G-SAND ON THE TRAINING WELL PROBABLY AFFECTED QUALITY OF EMULATION ON CORRESPONDING INTERVAL OF THIS WELL.

ANY ERRORS IN THE TRAINING WELL OPEN HOLE DATA CAN PERPETUATE THROUGH AS AN

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

BOND LOG IS DEPTH REFERENCE LOG

ANALYST: ALEXANDR KOTOV

## NEO RESULTS FOR BRUTON 19-01W (G-SAND)

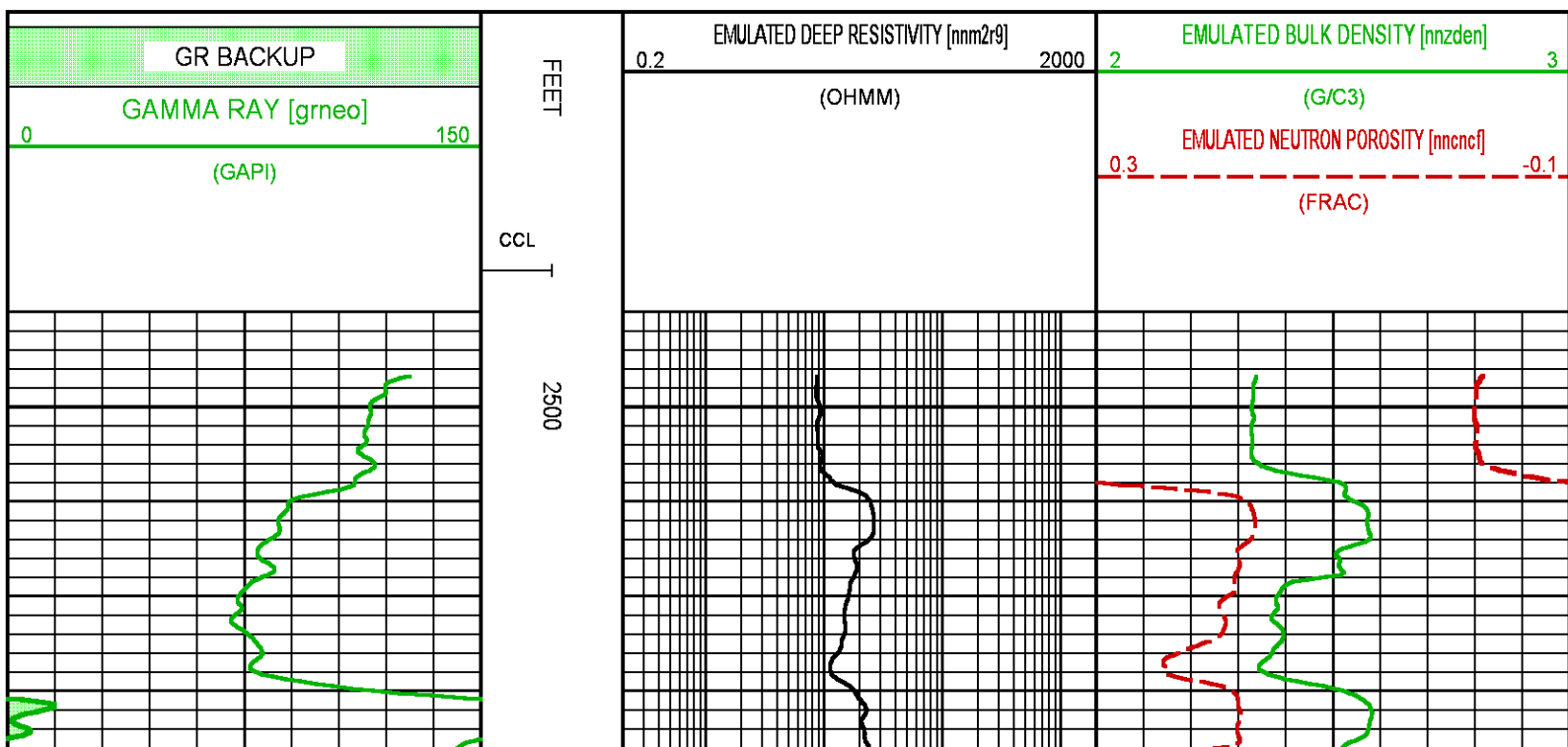
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

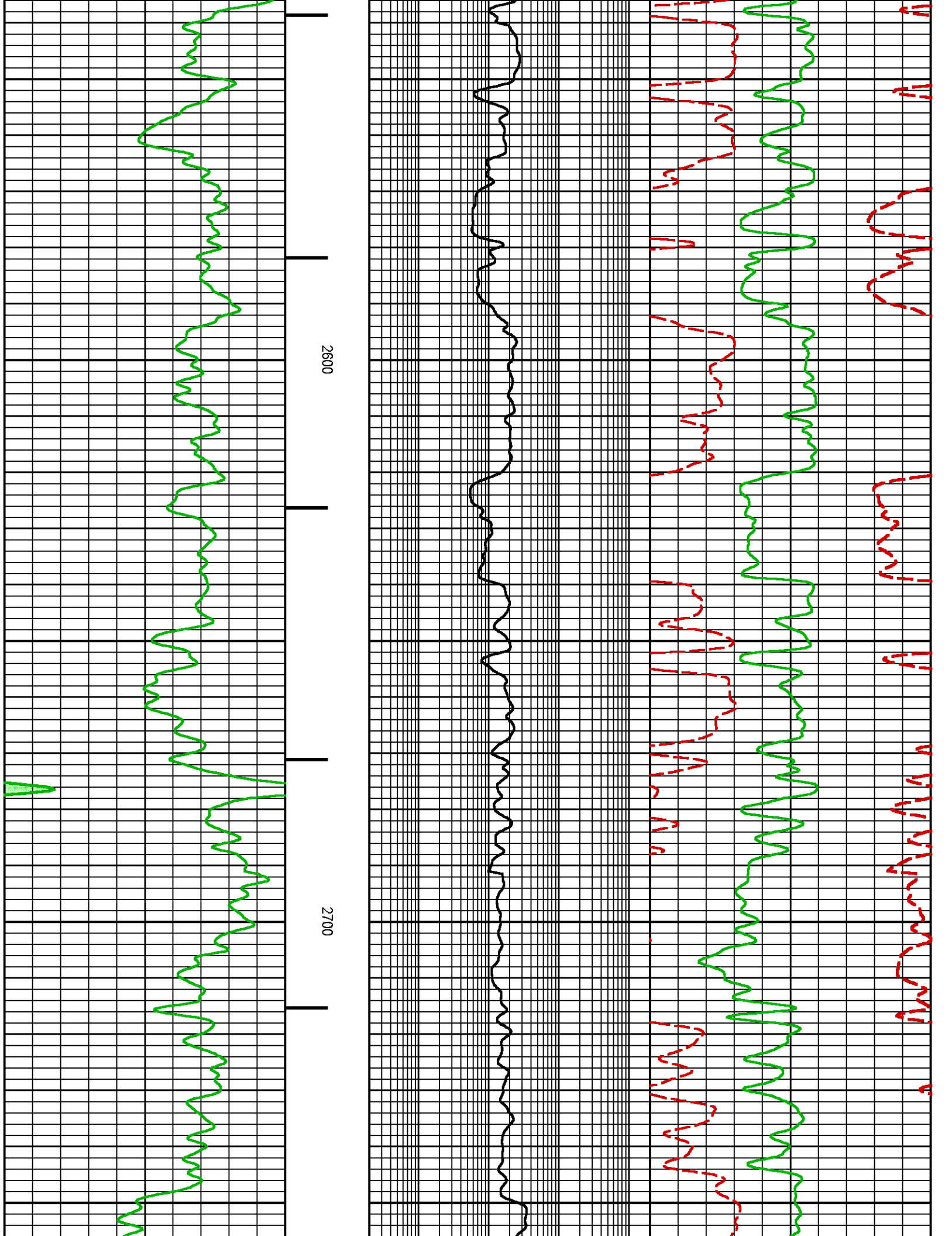
Plotted: Thu Oct 26 12:14:08 2017

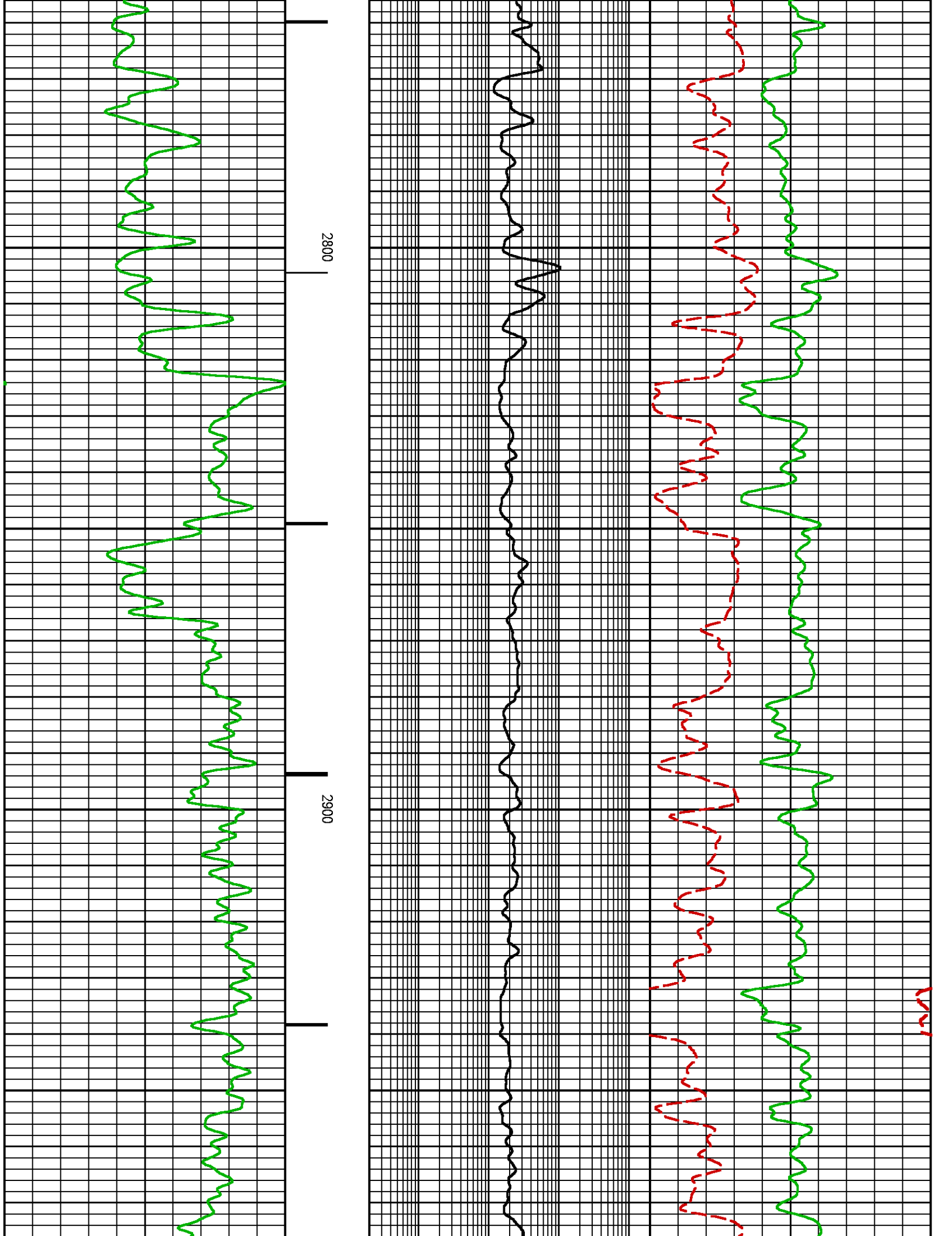
### CURVE MEASURE POINT OFFSET

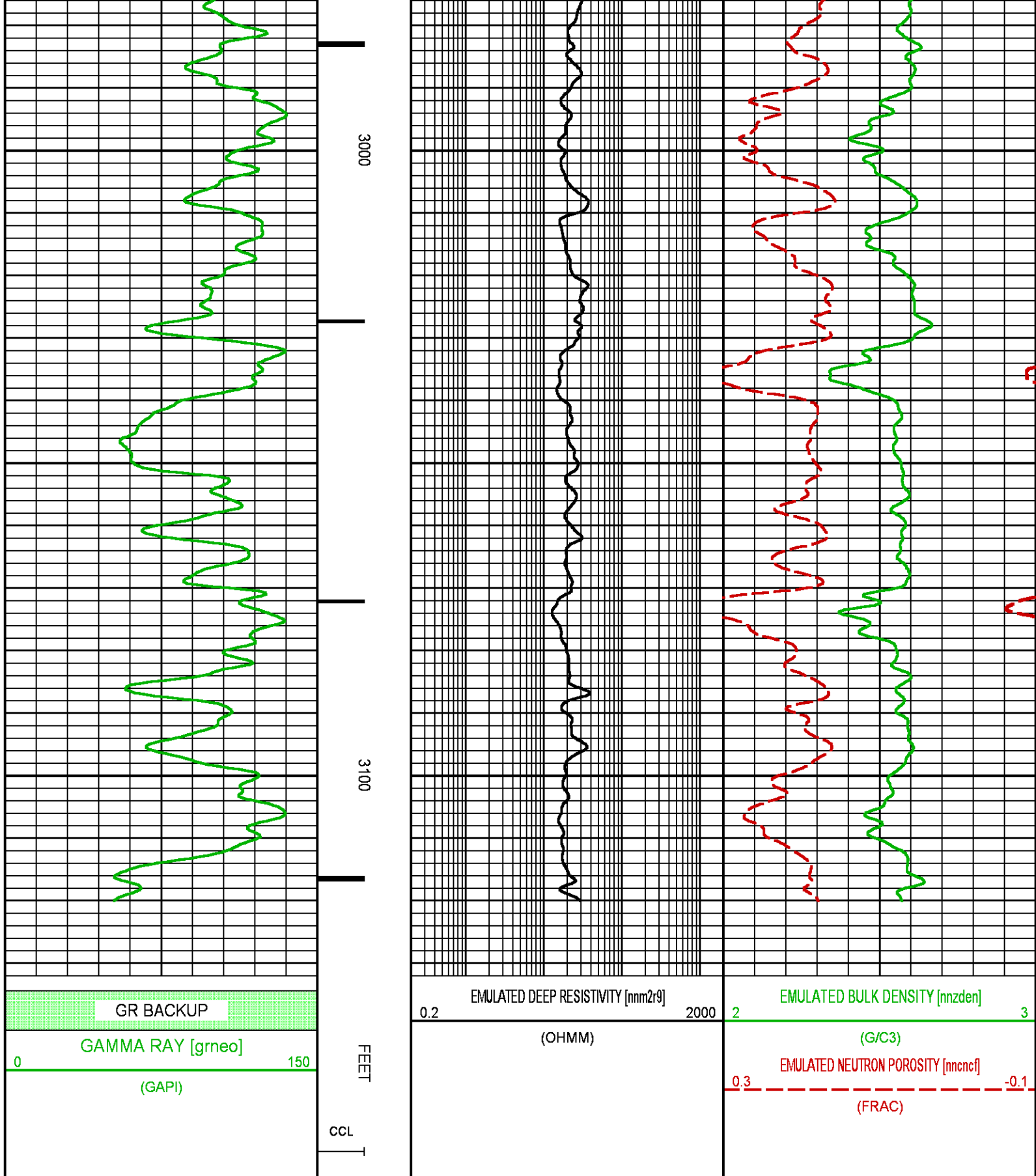
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNC	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

Project : NA  
User : kotoale  
Presentation : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_19\_01W\_NEO\NEO\_PRESENTATION\_LARAMIE\_G-Sand.pdf [5"/100' Scale]  
Plot Interval : 2490 - 3132 Feet  
Data File 1 : F1 : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_19\_01W\_NEO\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY  
Well : BRUTON 19-01W  
Field : VEGA  
File Interval : 2496.75 - 8025.75 Feet  
OCT : NA









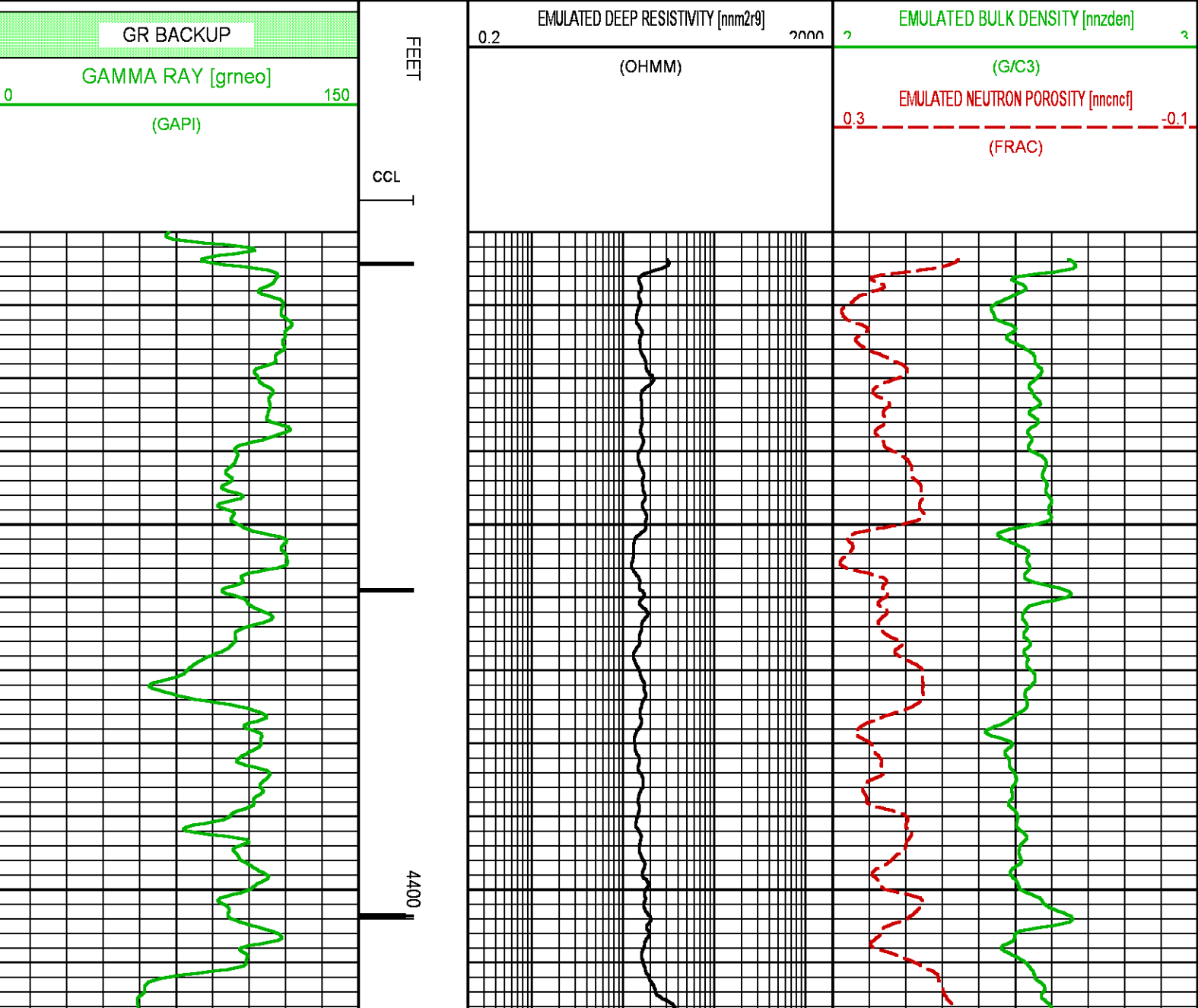
NEO RESULTS FOR BRUTON 19-01W (MAIN)

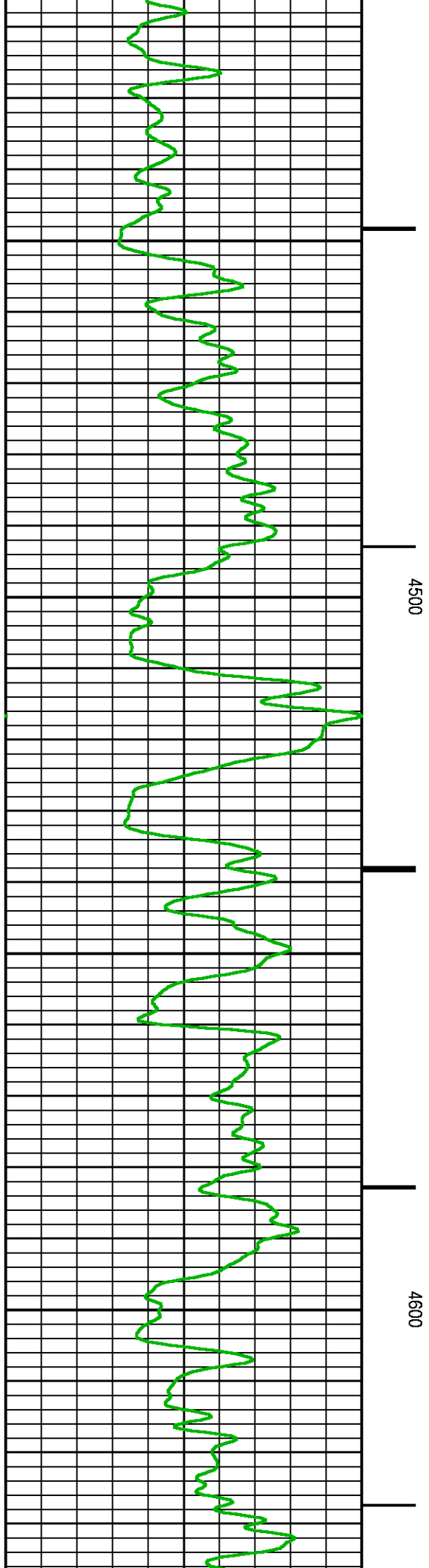
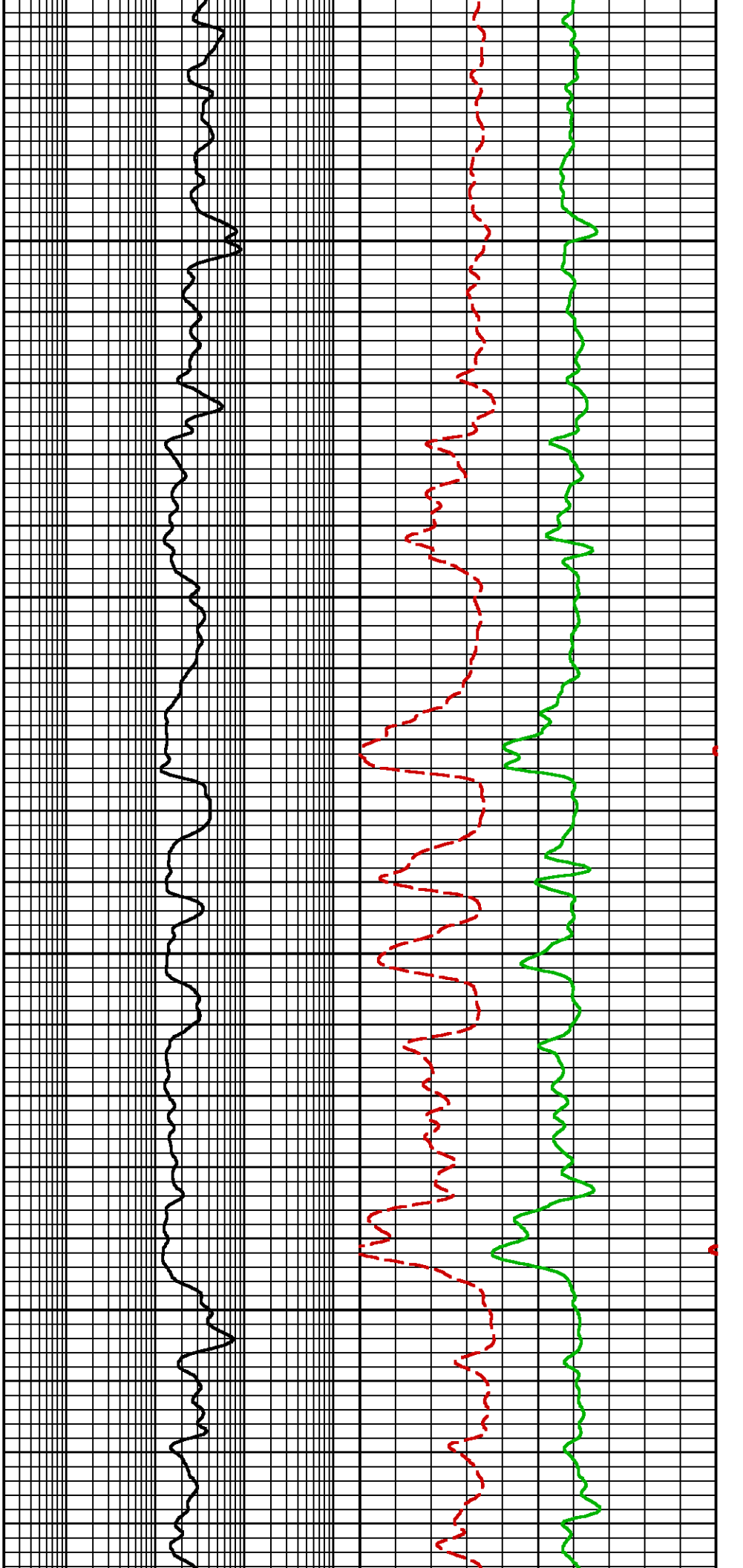
Plotted: Thu Oct 26 12:14:12 2017

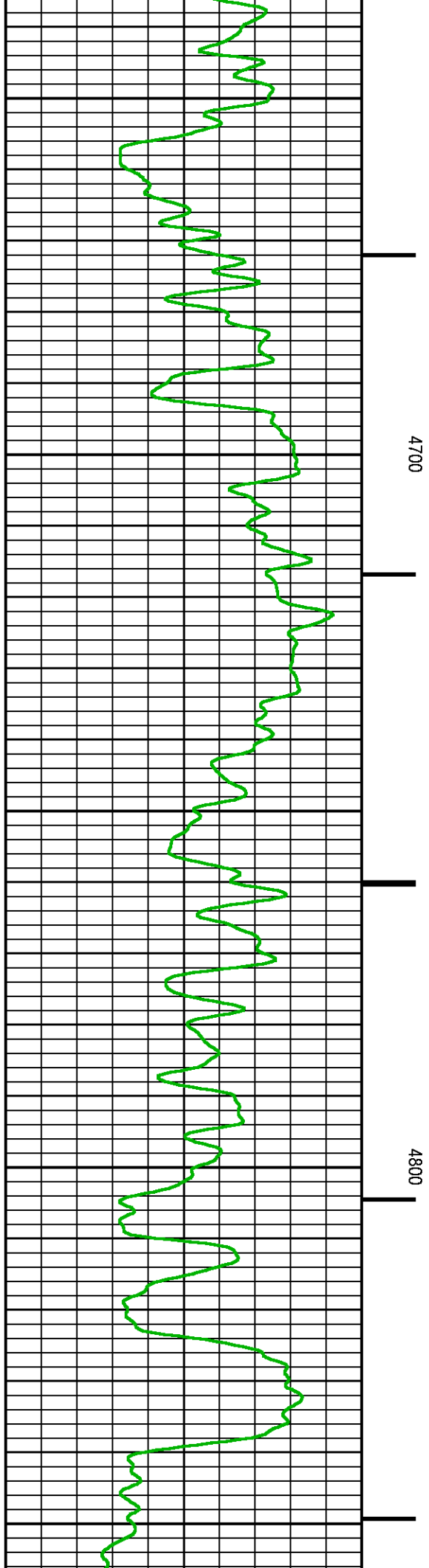
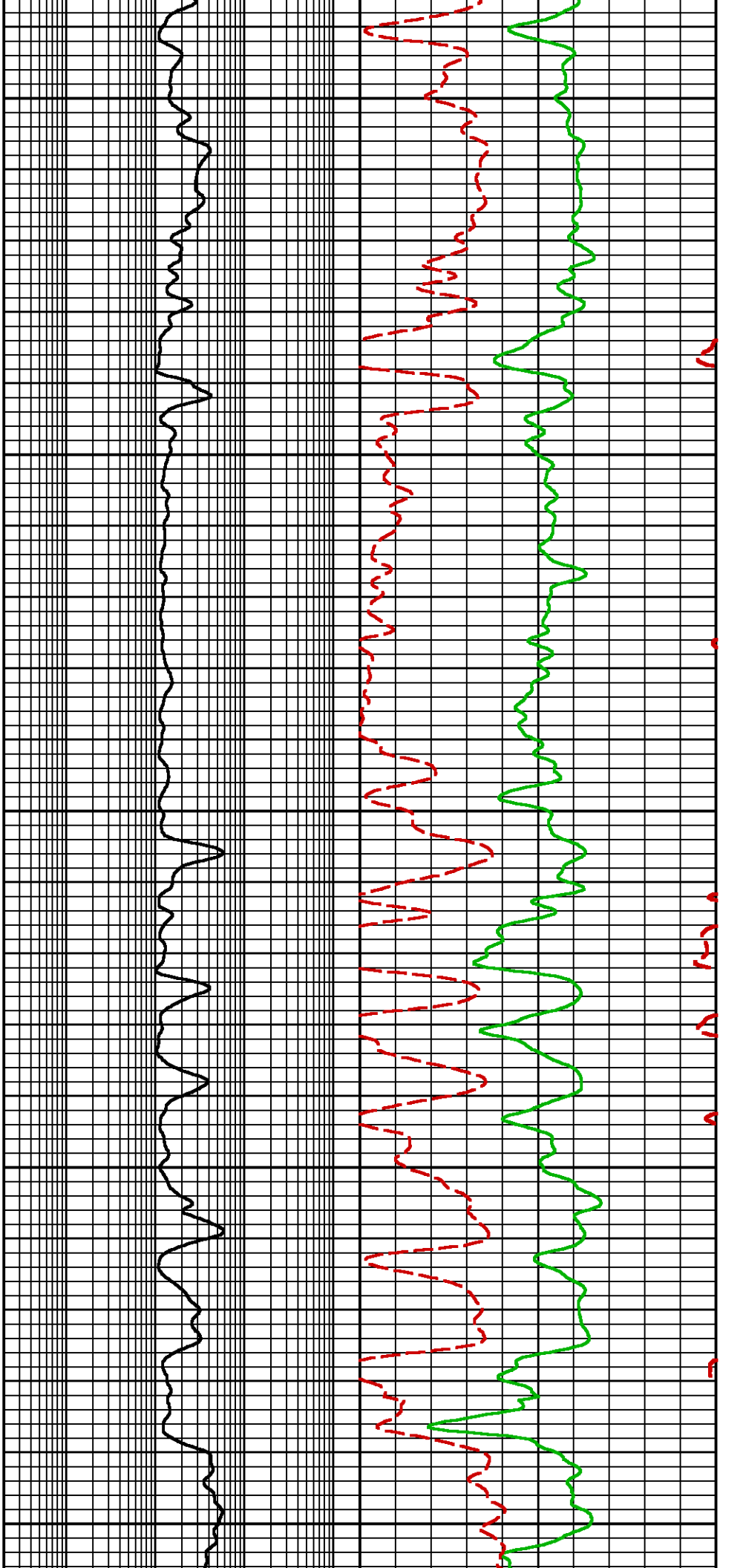
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

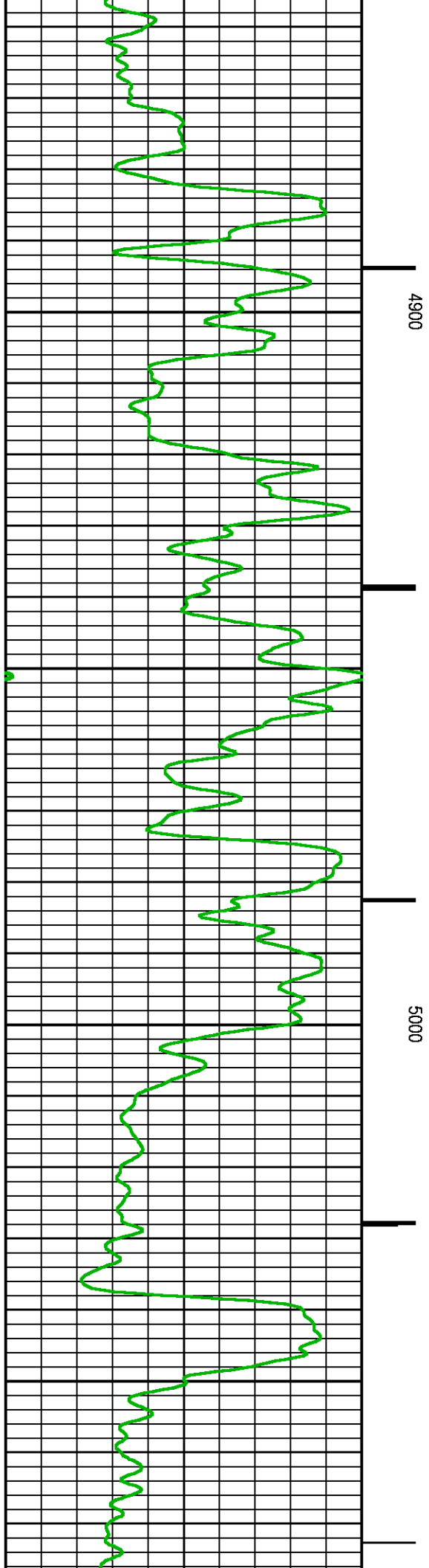
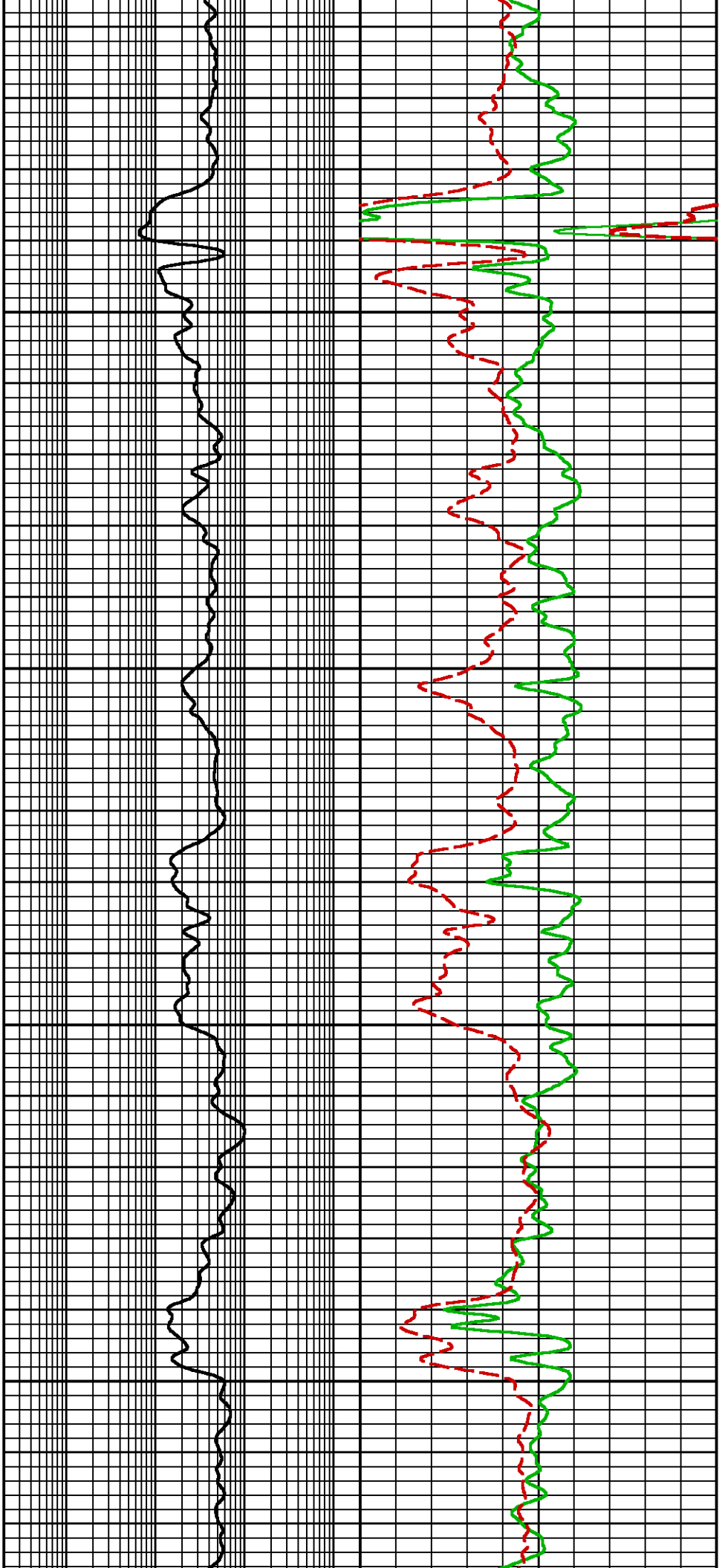
Project : NA  
User : kotoale  
Presentation : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_19\_01W\_NEO\NEO\_PRESENTATION\_LARAMIE\_MAIN.pdf [5"=100' Scale]  
Plot Interval : 4310 - 8025.75 Feet  
  
Data File 1 : F1 : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_19\_01W\_NEO\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY  
Well : BRUTON 19-01W  
Field : VEGA  
File Interval : 2496.75 - 8025.75 Feet  
OCT : NA

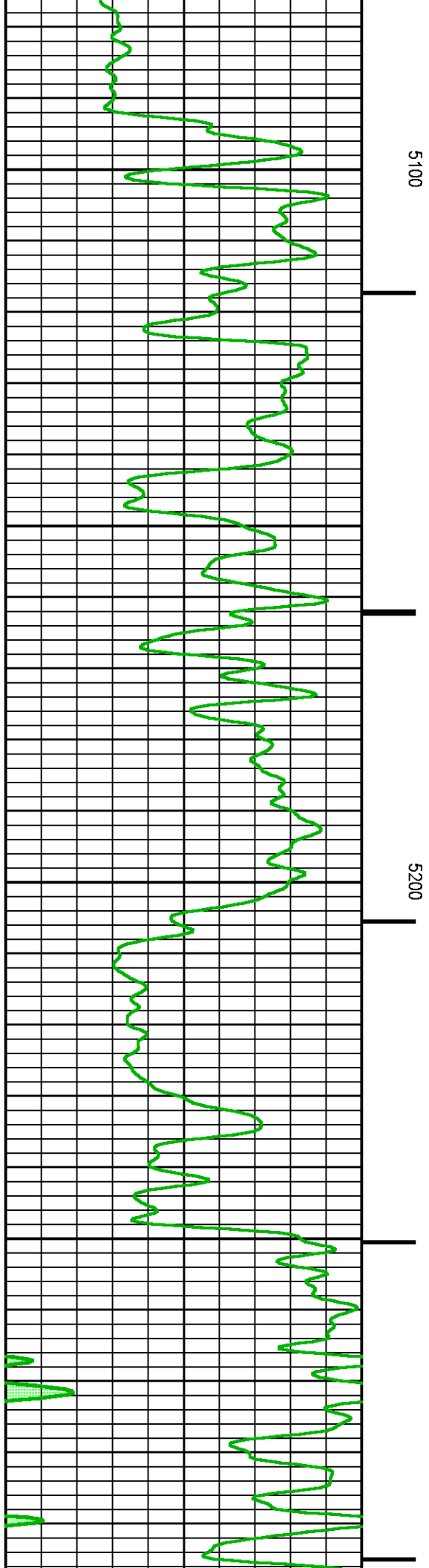
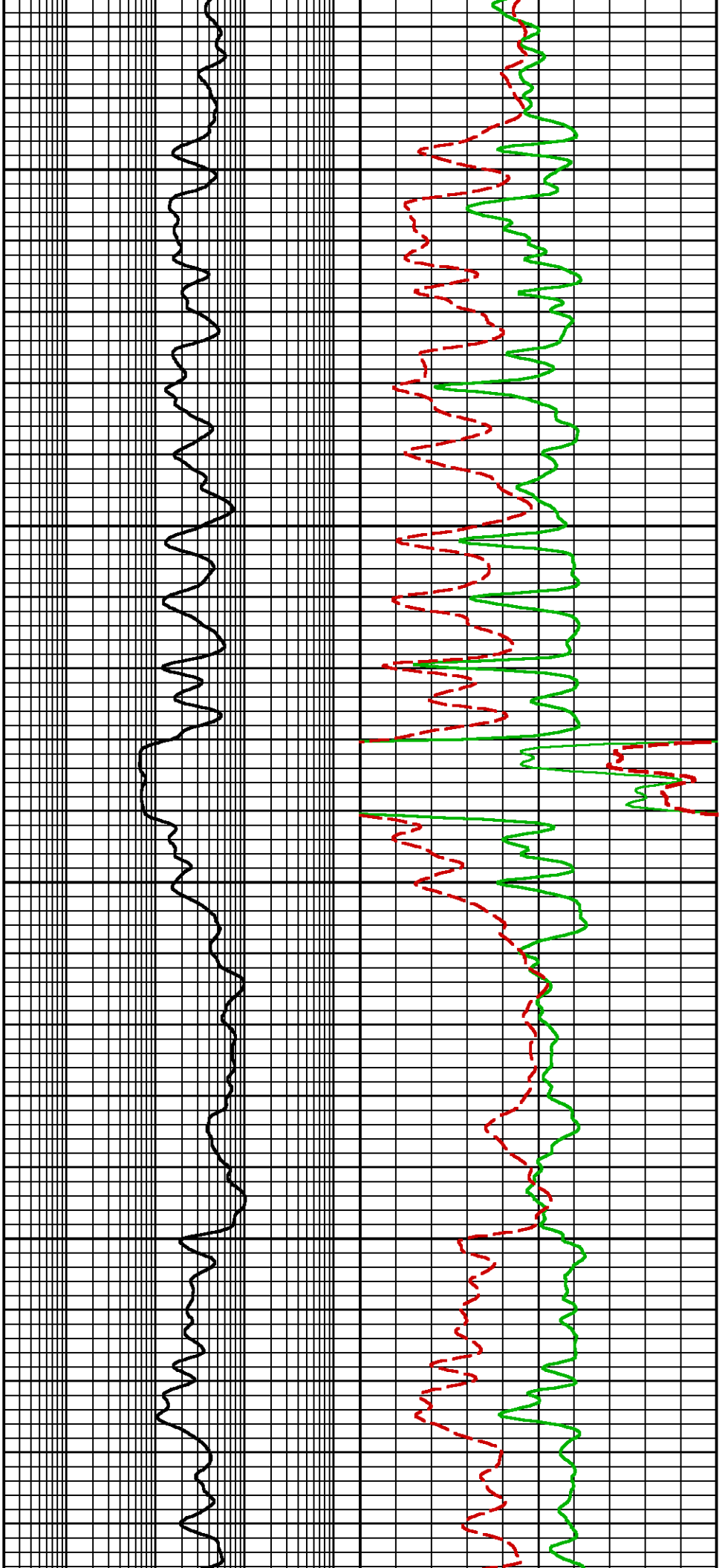


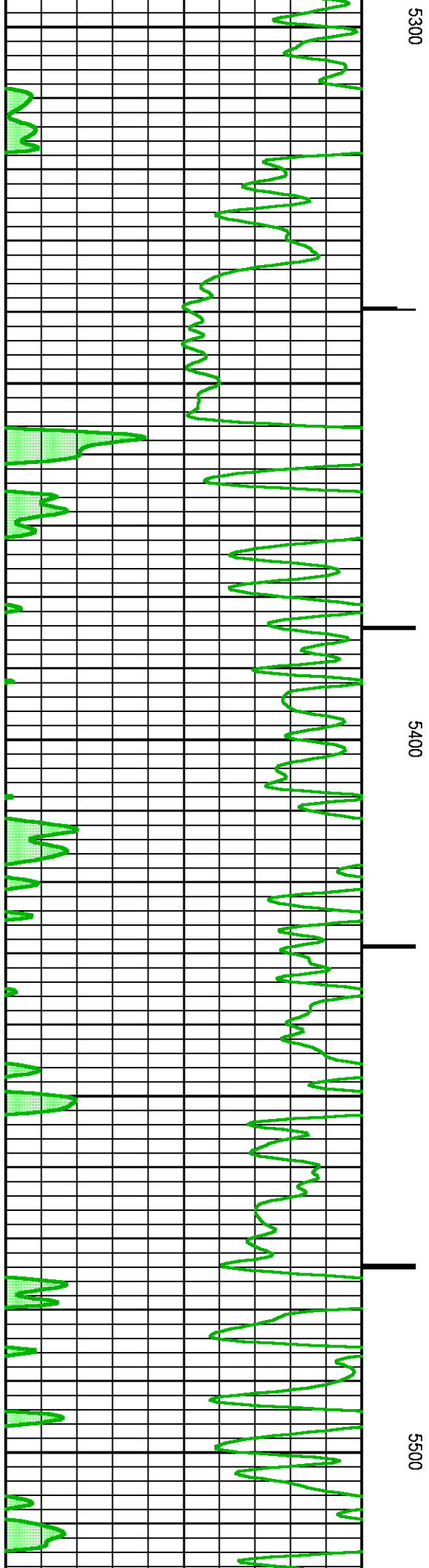
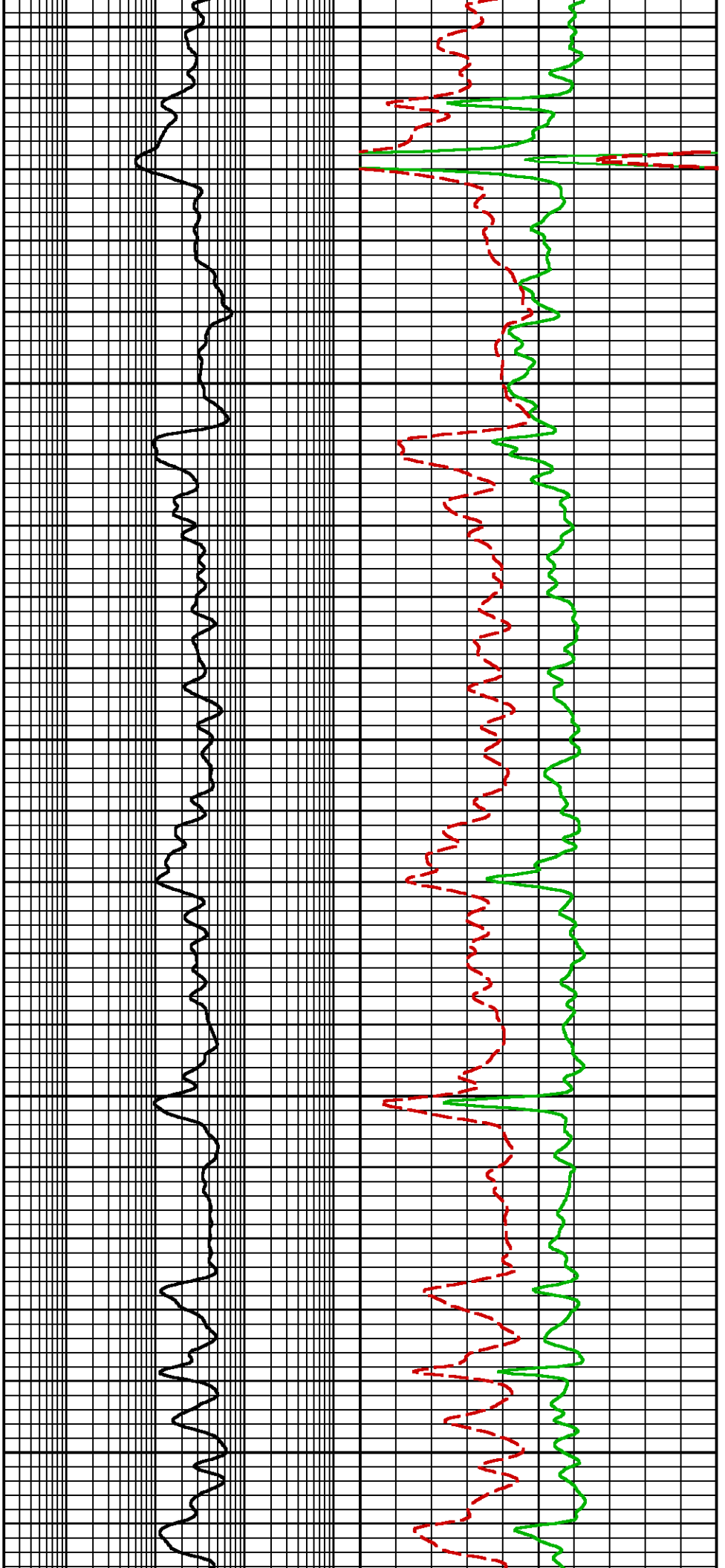


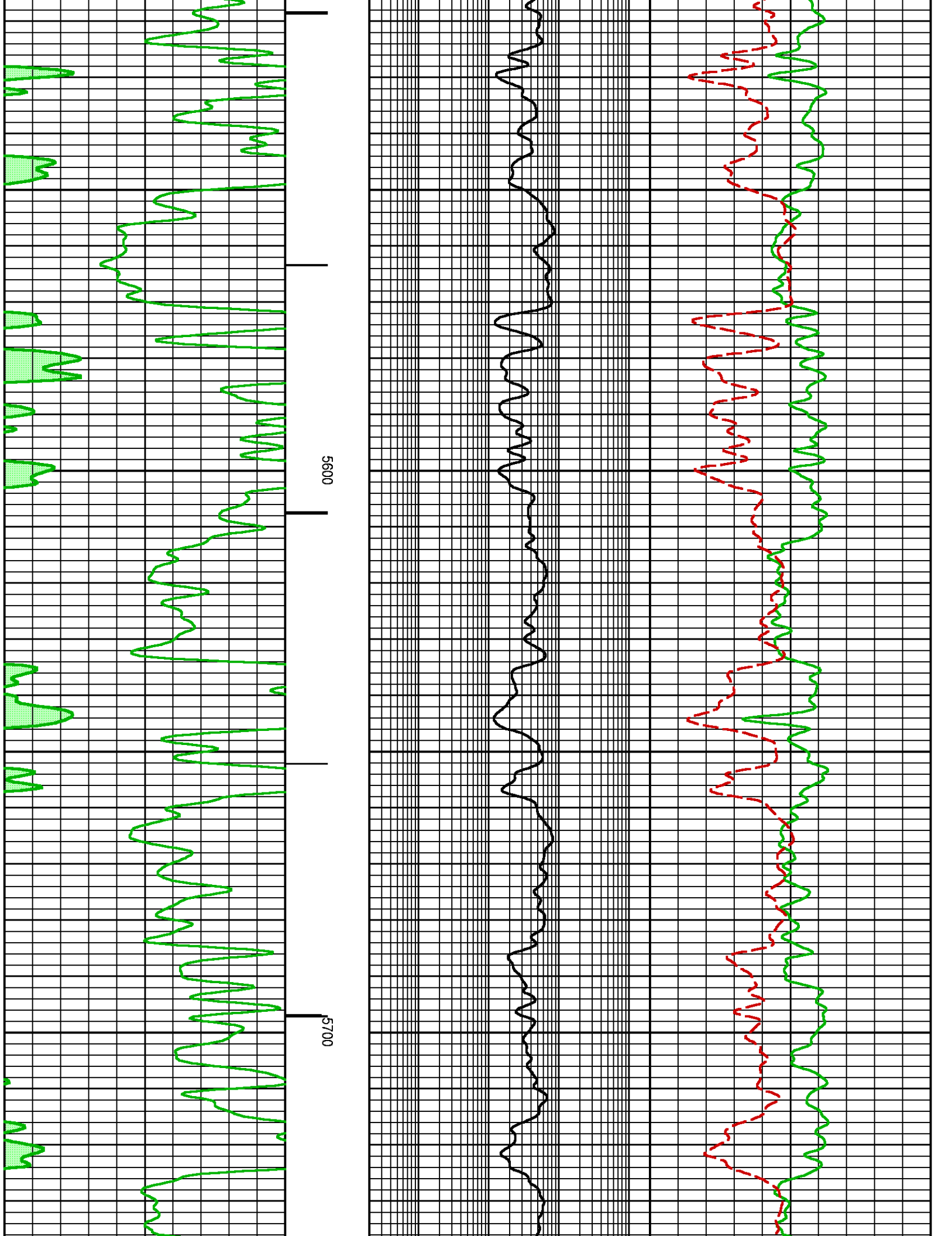


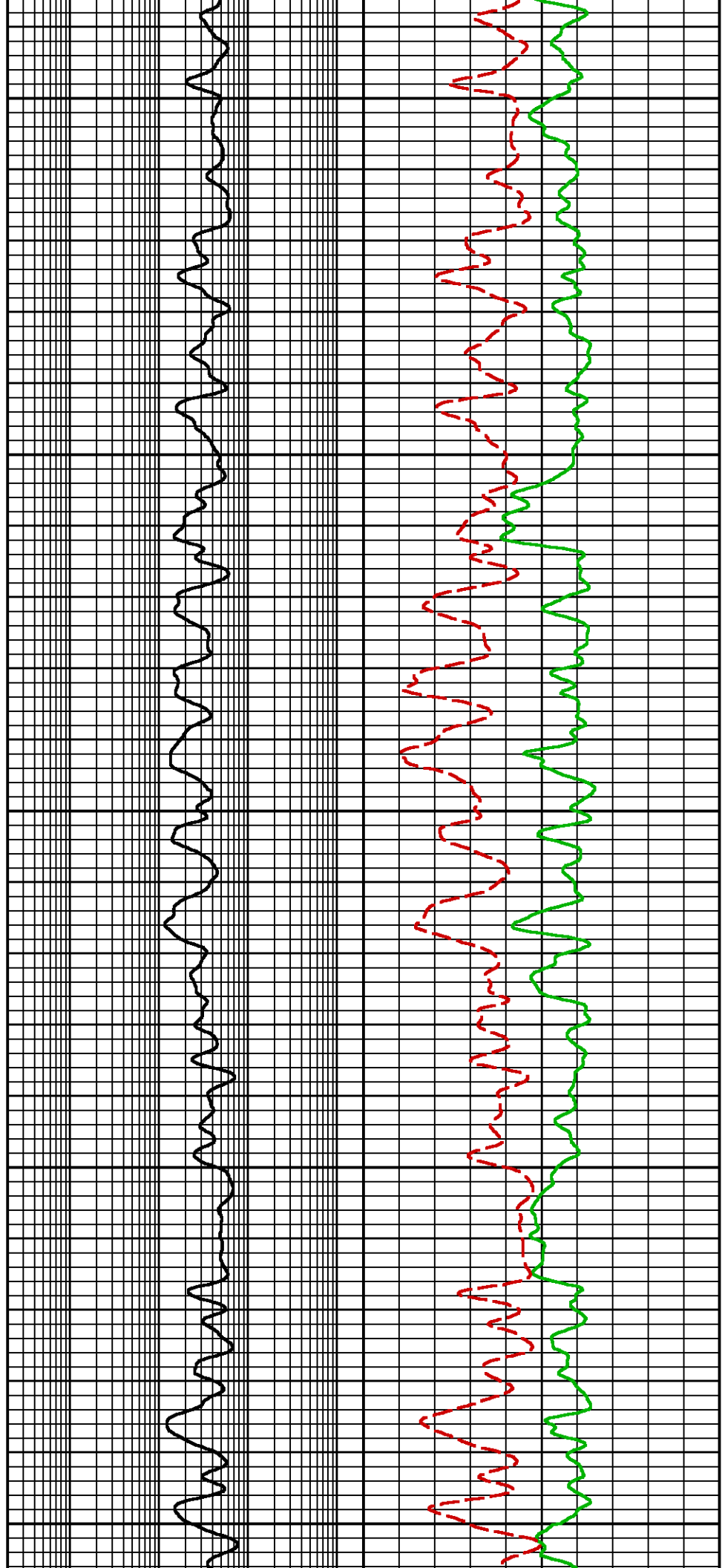
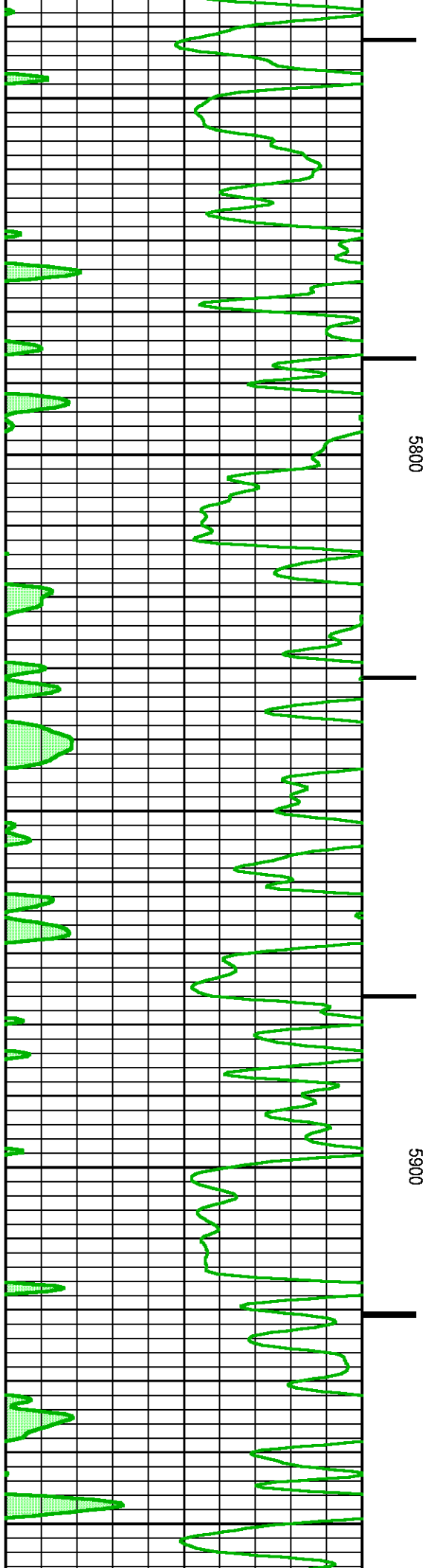


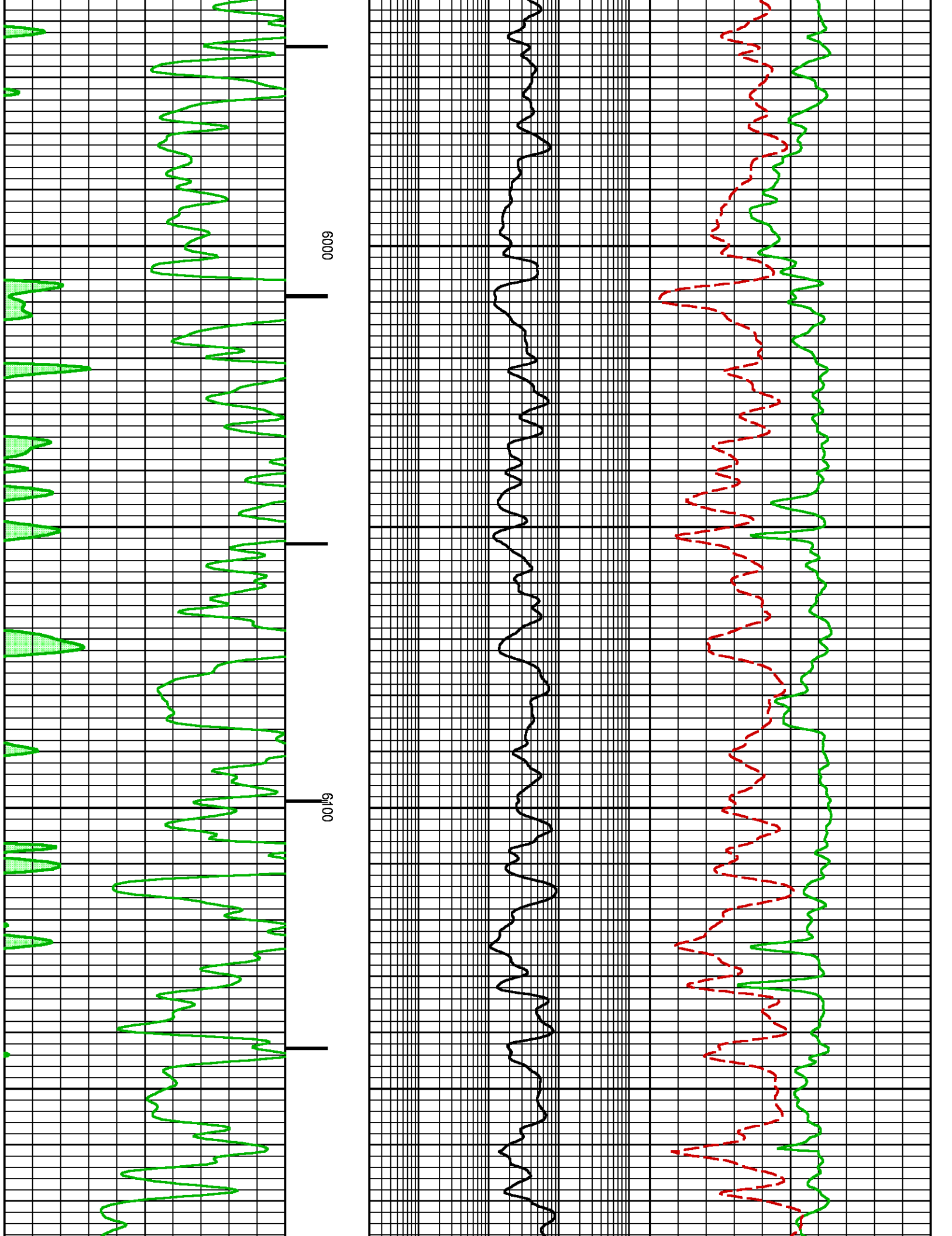


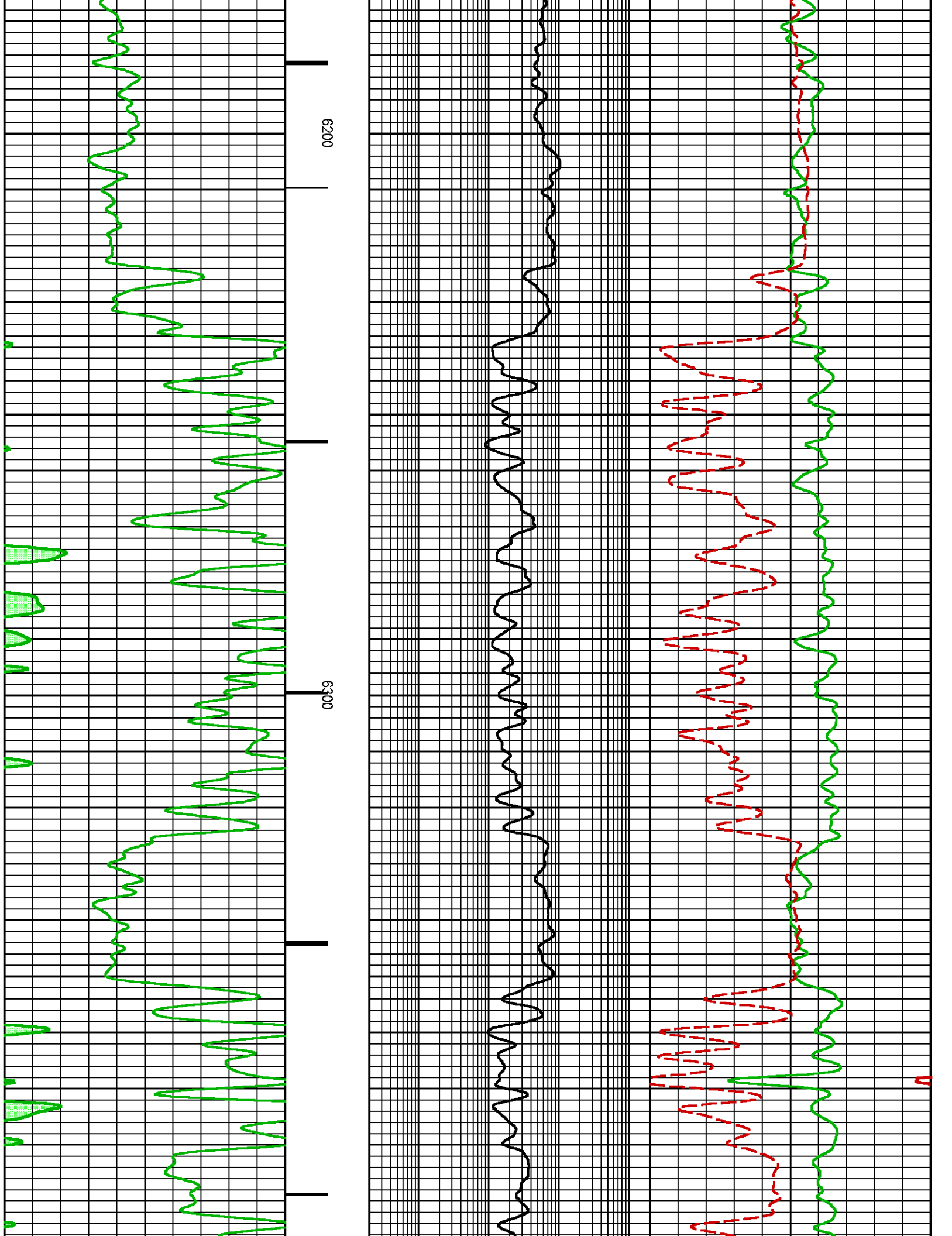


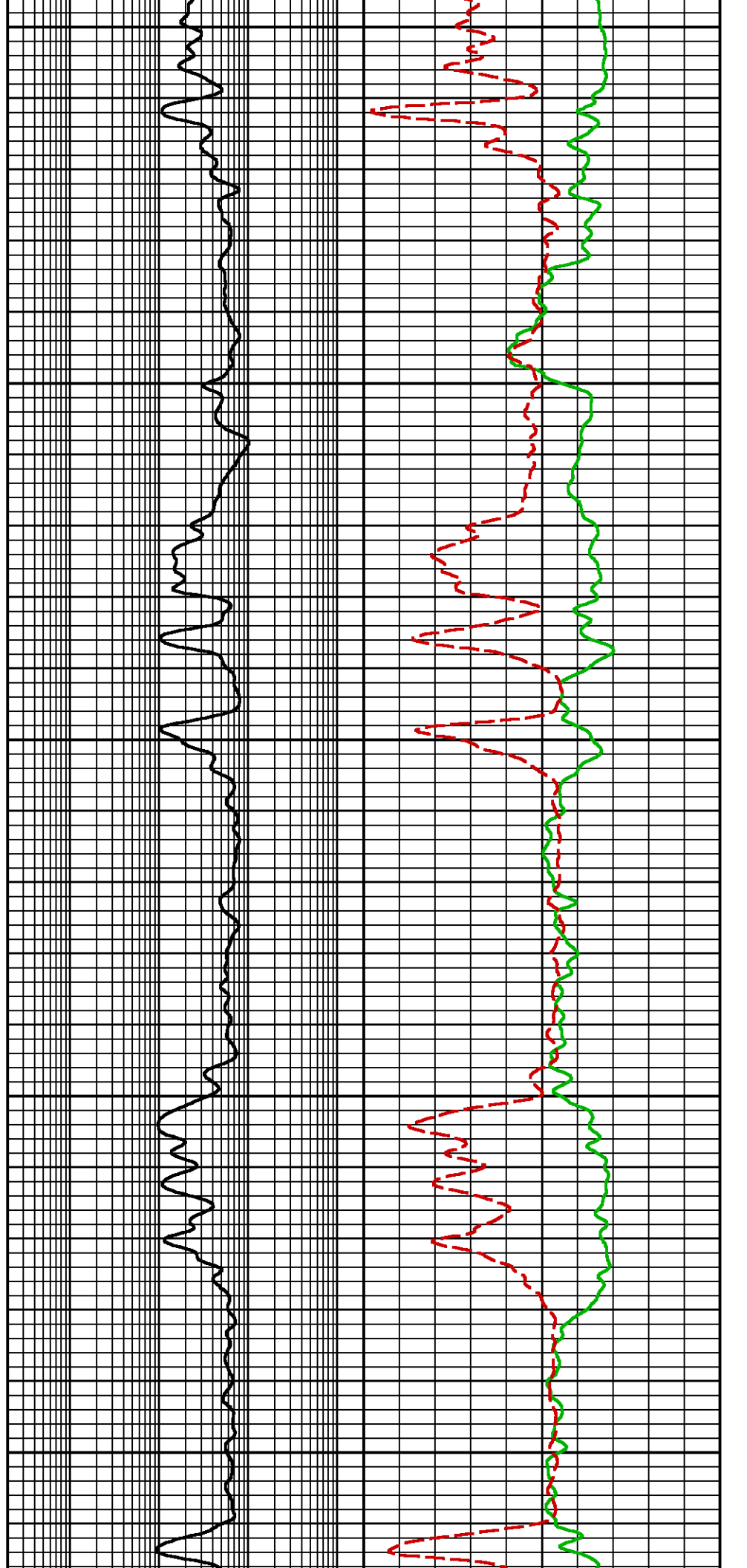
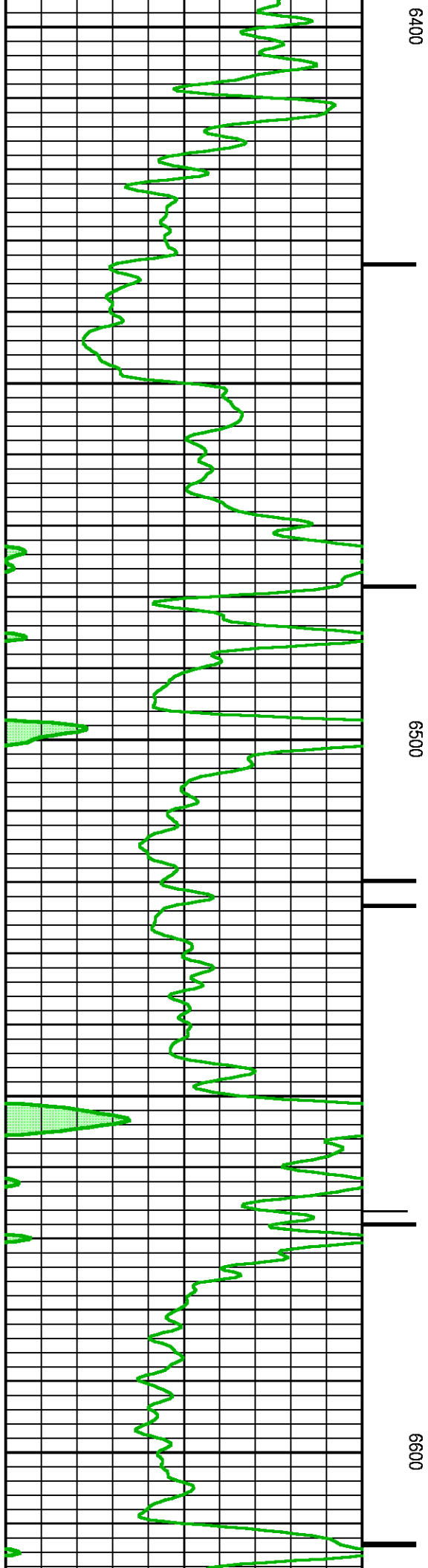




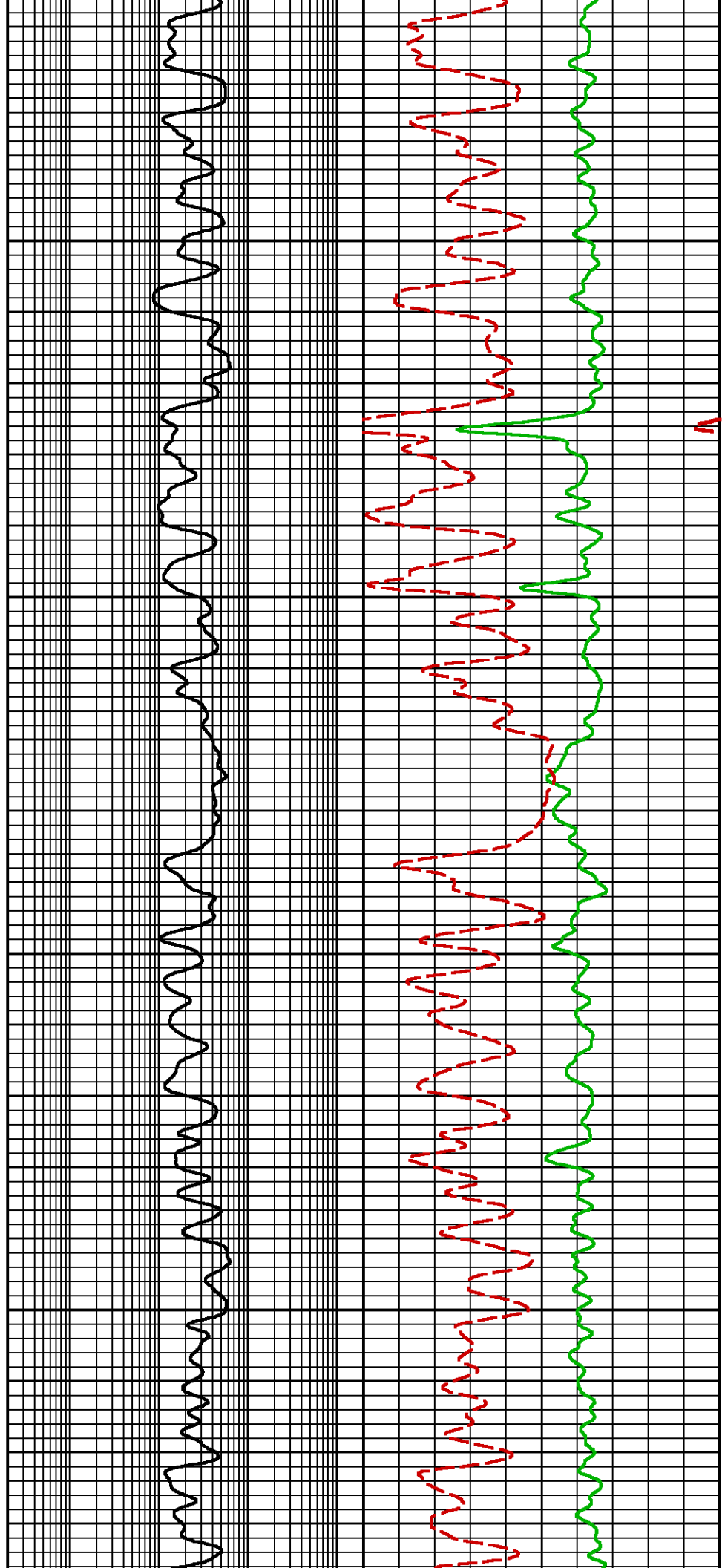
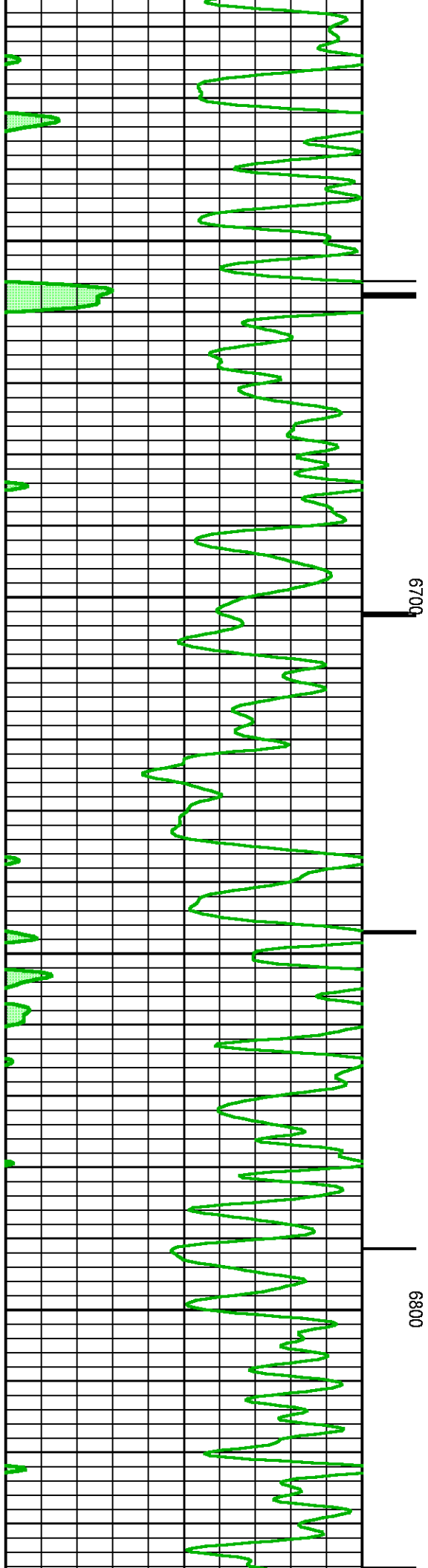


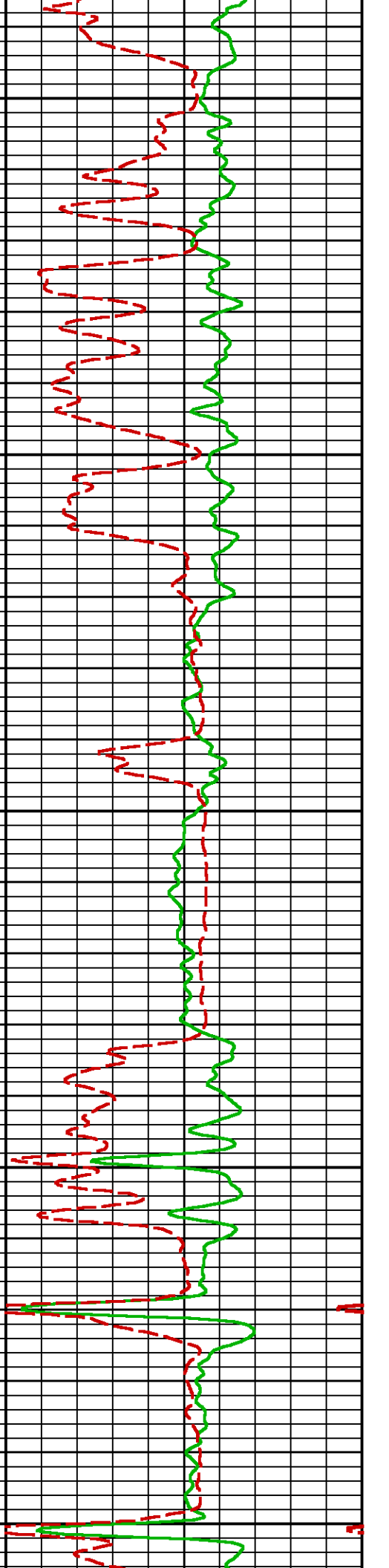
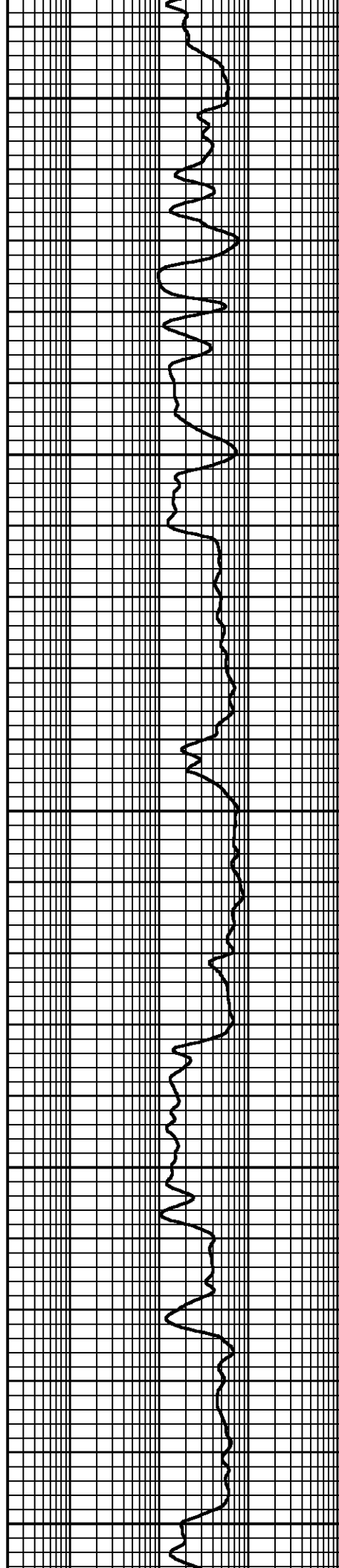
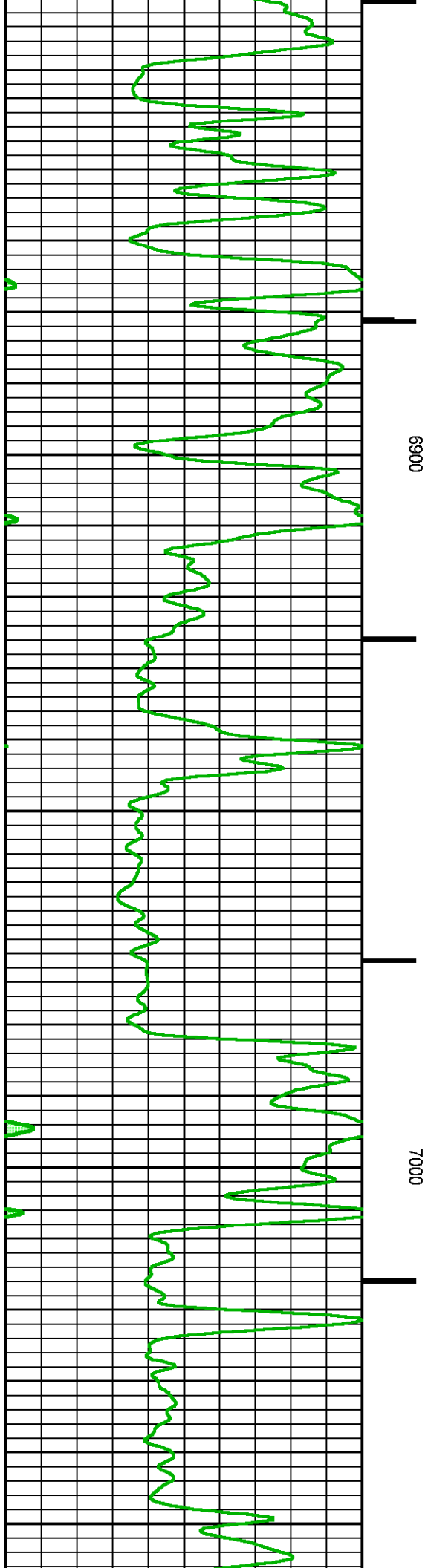


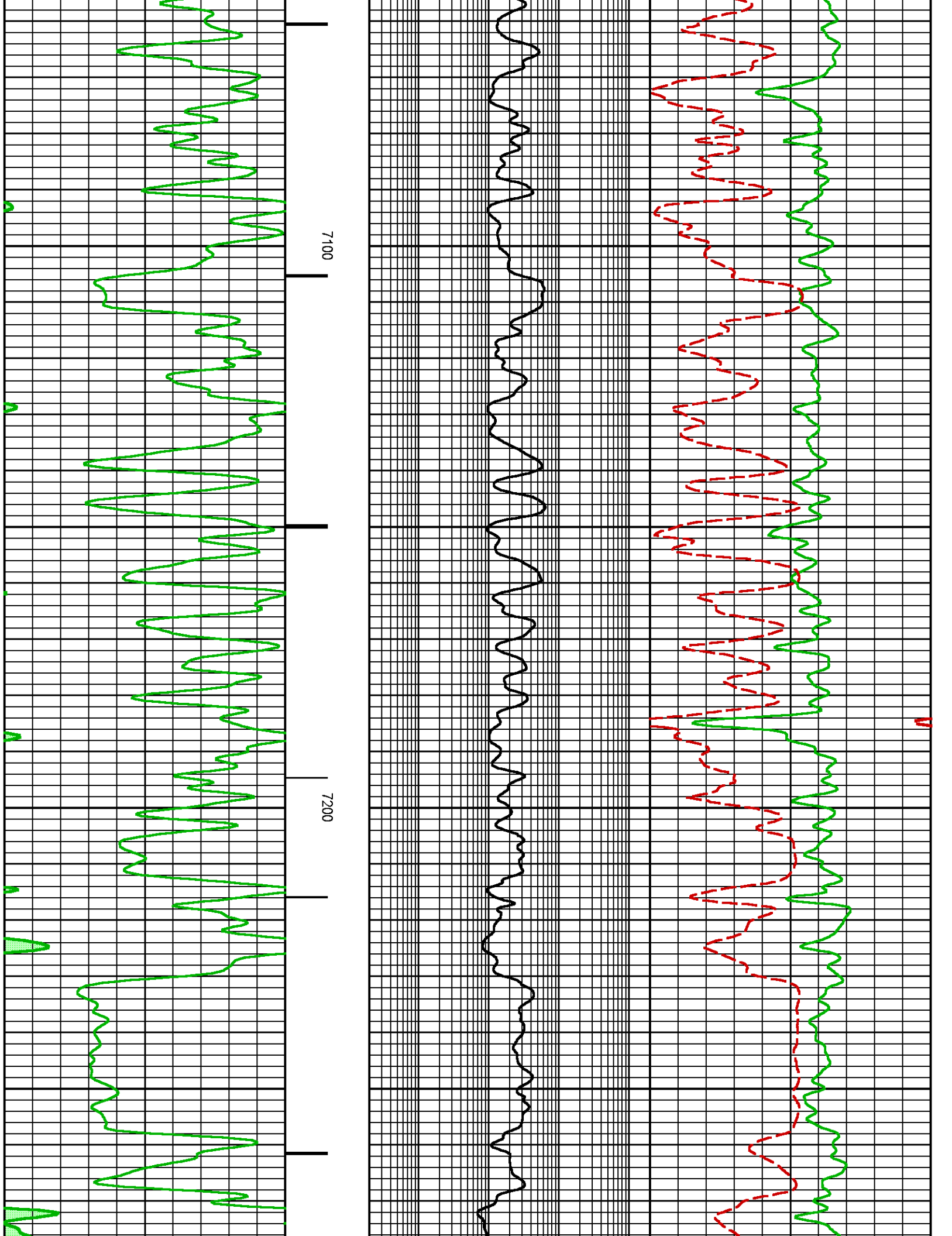


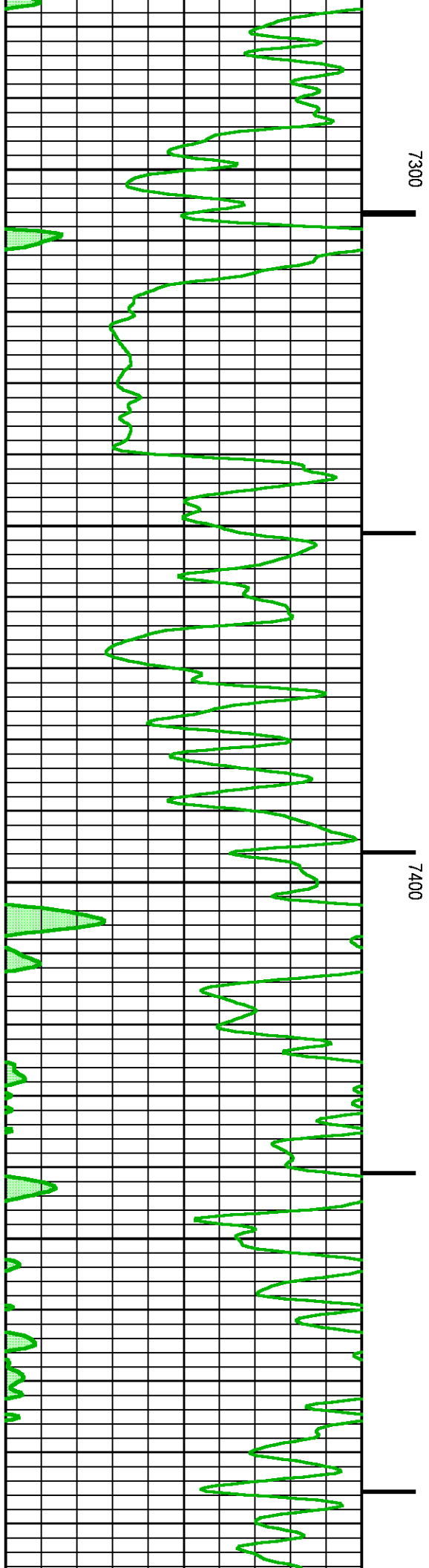
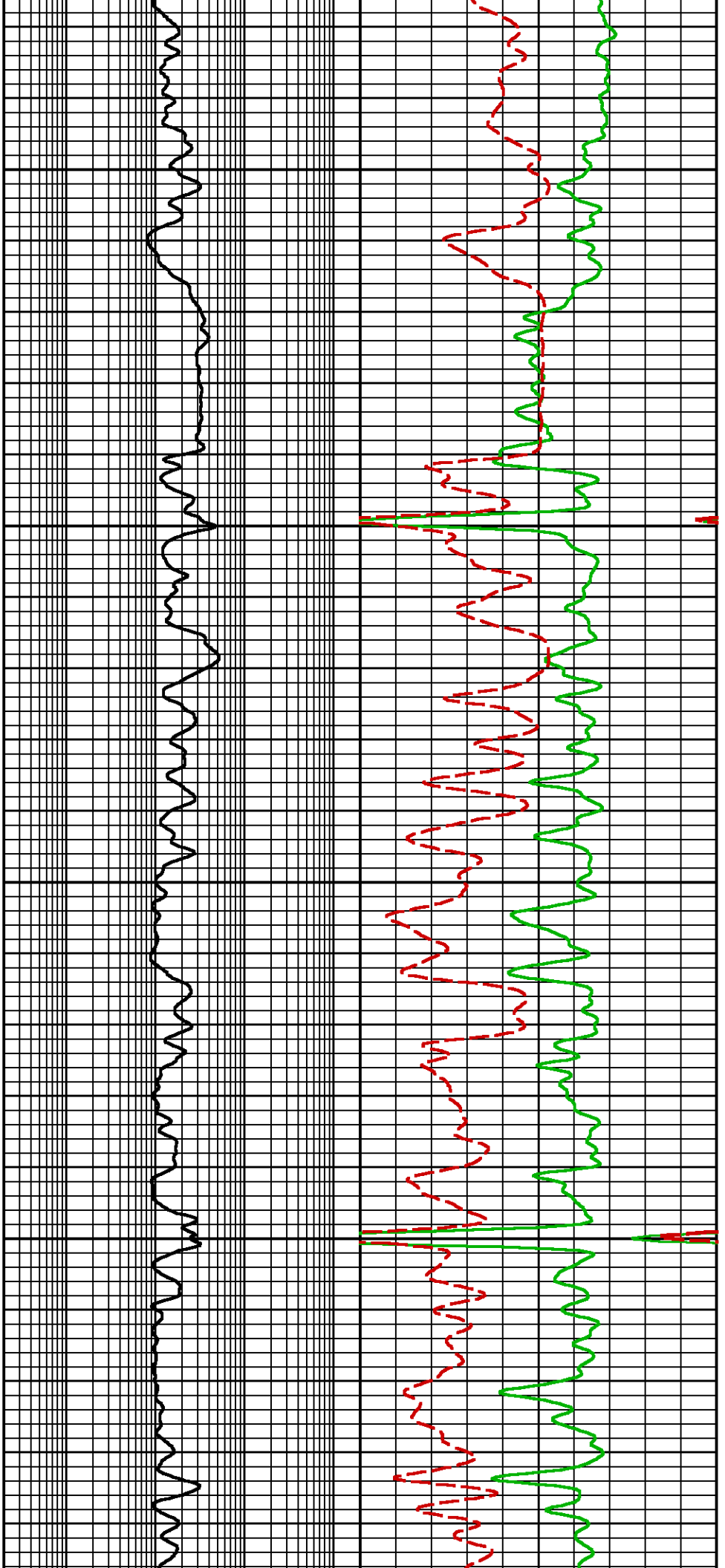


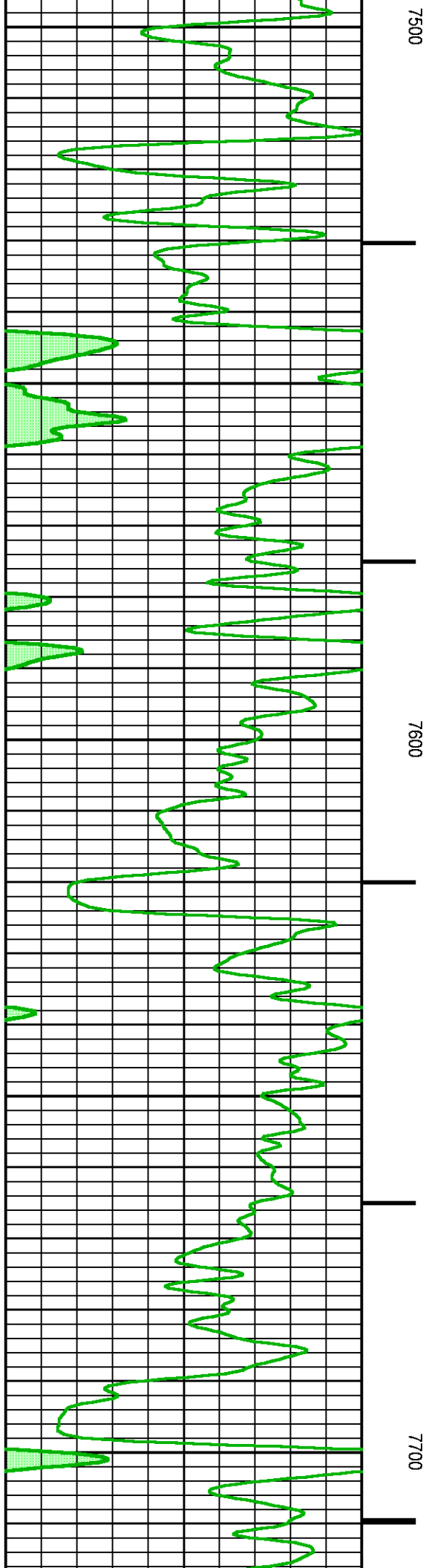
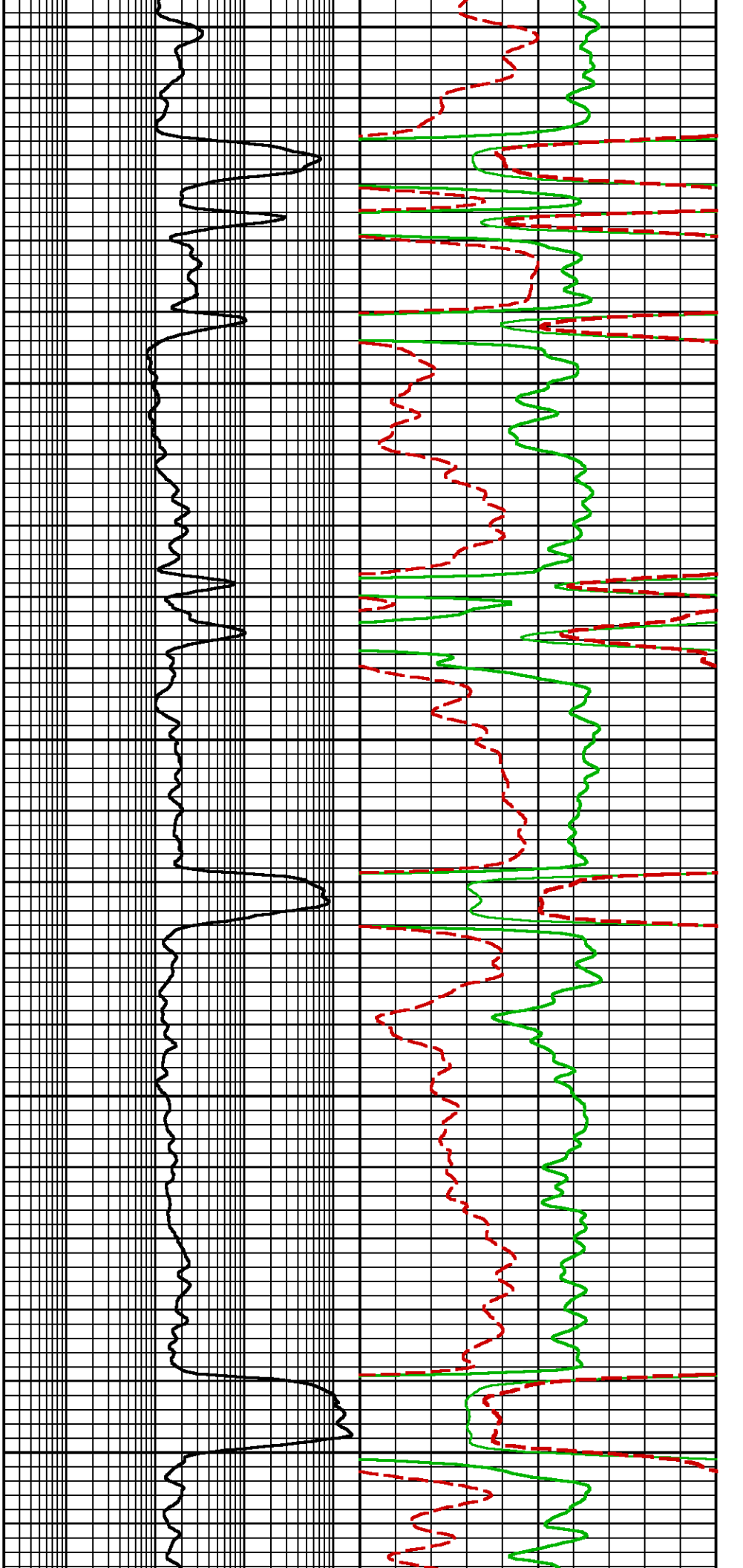


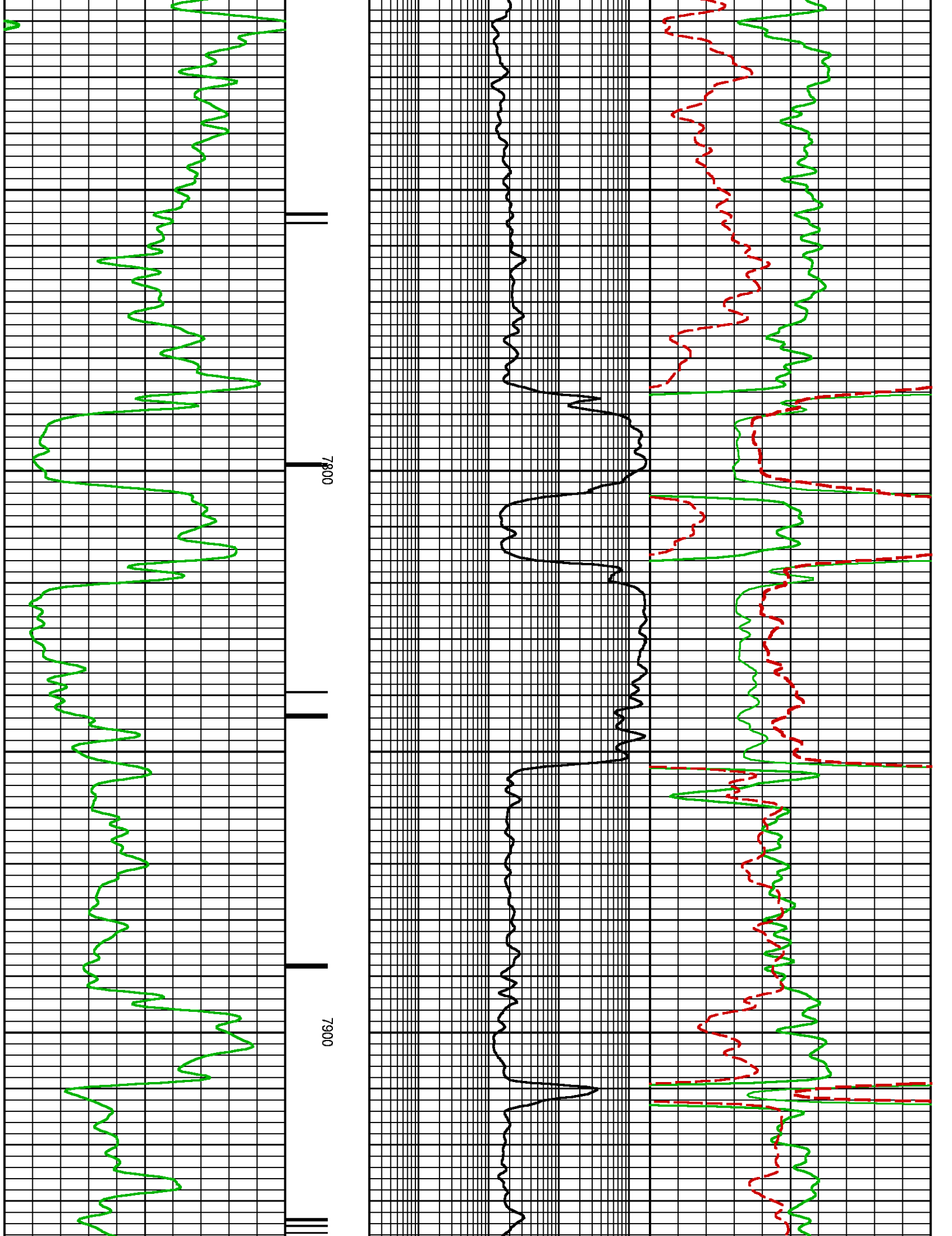


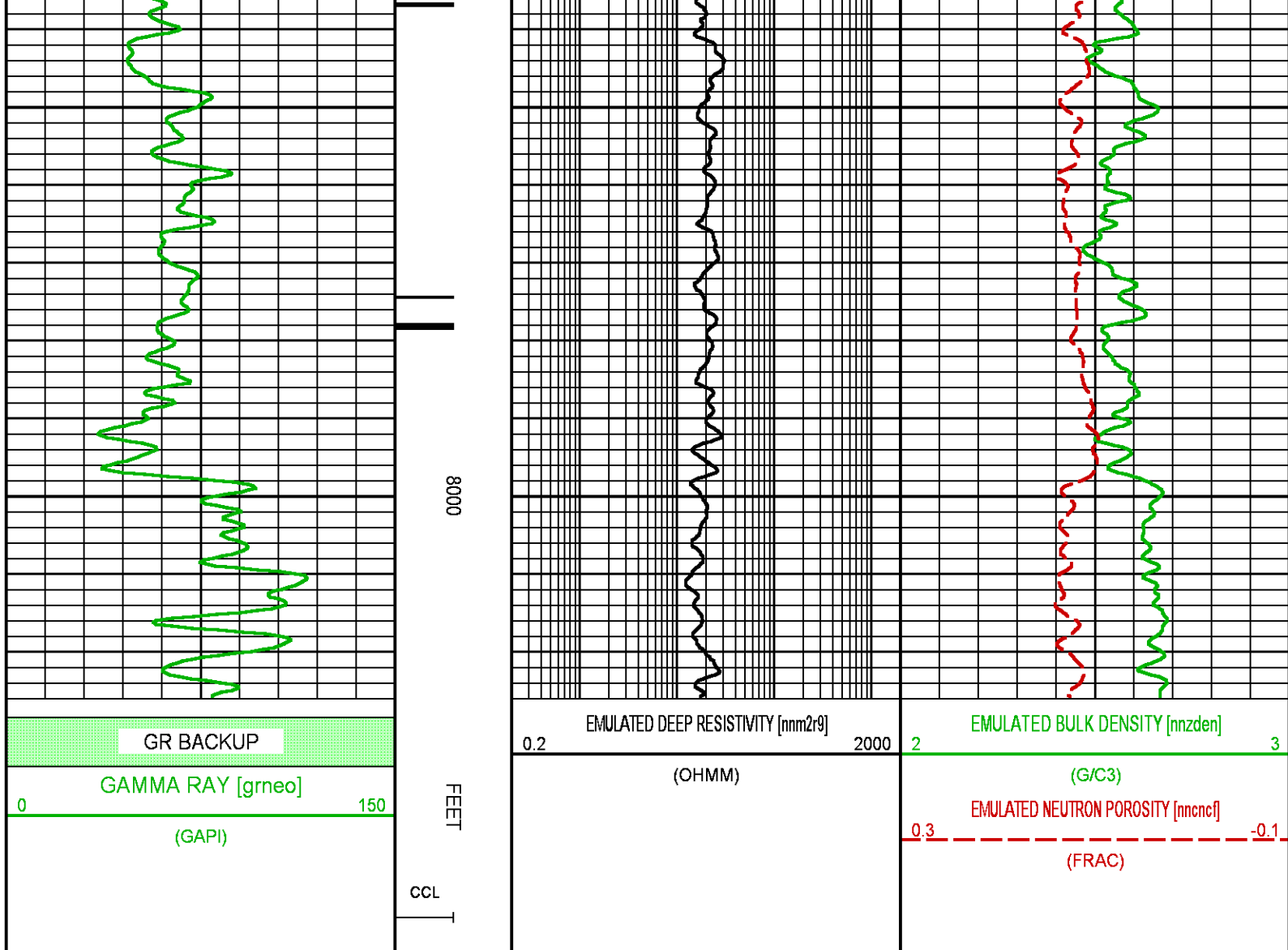



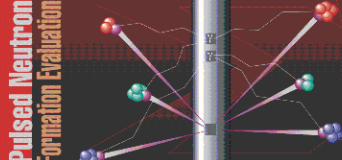










 	<b>COMPANY</b> <u>LARAMIE ENERGY</u> <b>WELL</b> <u>BRUTON 19-01W</u> <b>FIELD</b> <u>VEGA</u> <b>COUNTY</b> <u>MESA</u> <b>STATE</b> <u>COLORADO</u>	<b>FILE NO:</b> <u>29125-01</u> <b>API NO:</b> <u>05077104290000</u>	
	<b>LOCATION:</b> <u>SEE REMARKS SECTION</u>	<b>ELEVATIONS:</b> KB <u>7286.0 FT</u> DF GL <u>7262 FT</u>	
	<b>SEC</b> <u>19</u> <b>TWP</b> <u>9S</u> <b>RGE</b> <u>93W</u>	<b>DATE</b> <u>29-AUG-2017</u>	