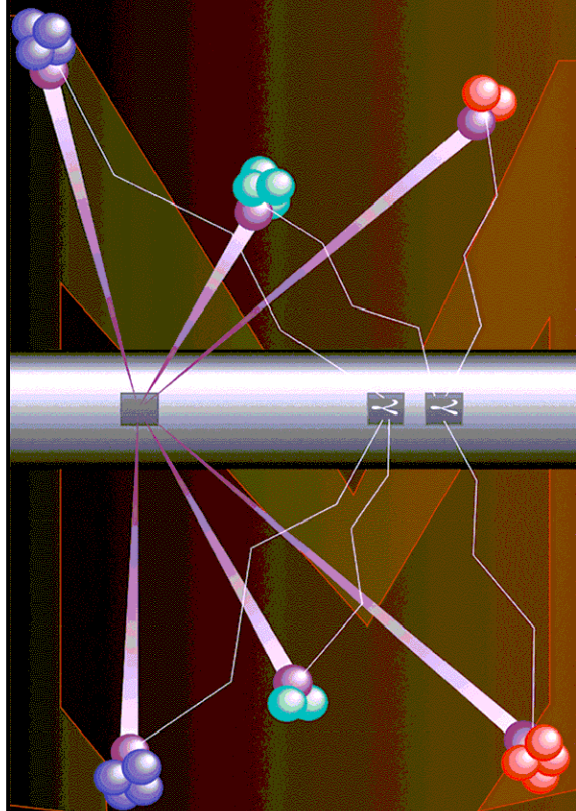


Pulsed Neutron Formation Evaluation



**BAKER
HUGHES**
a GE company



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON FEDERAL 30-19W

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 30 TWP 9S RGE 93W

ELEVATIONS:

KB 7673.0 FT DF 30 FT GL 7643.0 FT

DATE 01-APR-2018 ECC CALGARY GEOSCIENCE

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>16-APR-2018</u>
FIELD DATA	LOCATION: <u>GRAND JCT.</u>	ENGINEER: <u>M.BAUKA/US133068</u>	DATE: <u>01-APR-2018</u>
FROM	TO		
<u>2640 FT</u>	<u>8272 FT</u>		

REMARKS

*****TRAINING WELL*****

LOCATION:
SHL: 2622' FSL & 1858' FEL
SHL: 658' FSL & 1306' FWL

TRAINING WELL: BRUTON 30-14E

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

NEO RESULTS FOR BRUTON FEDERAL 30-19W (G-SAND)

ECLIPS ECPLLOT from ECLIPS 7.0 WFM 6.0.7905.1 Wed 08/23/2017 09:02:35.01

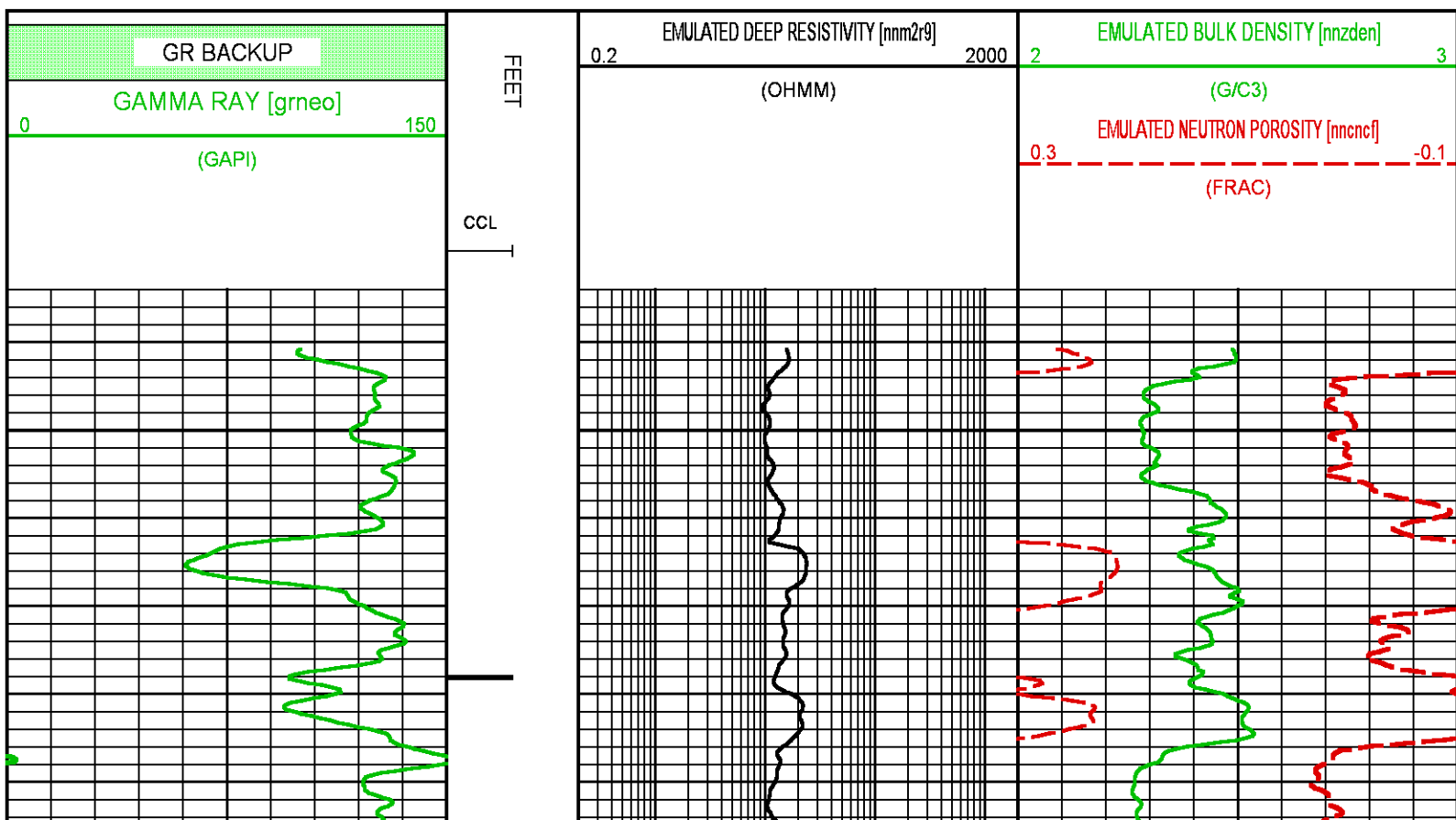
Plotted: Mon Apr 16 13:21:27 2018

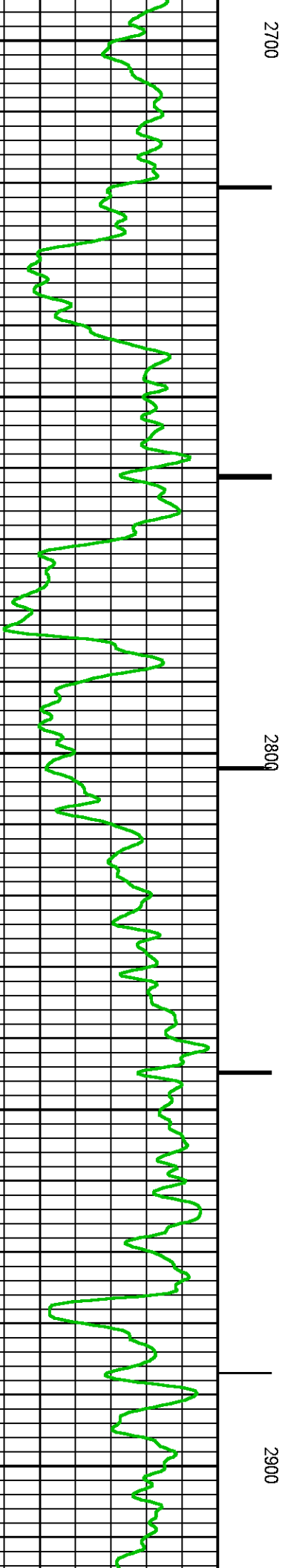
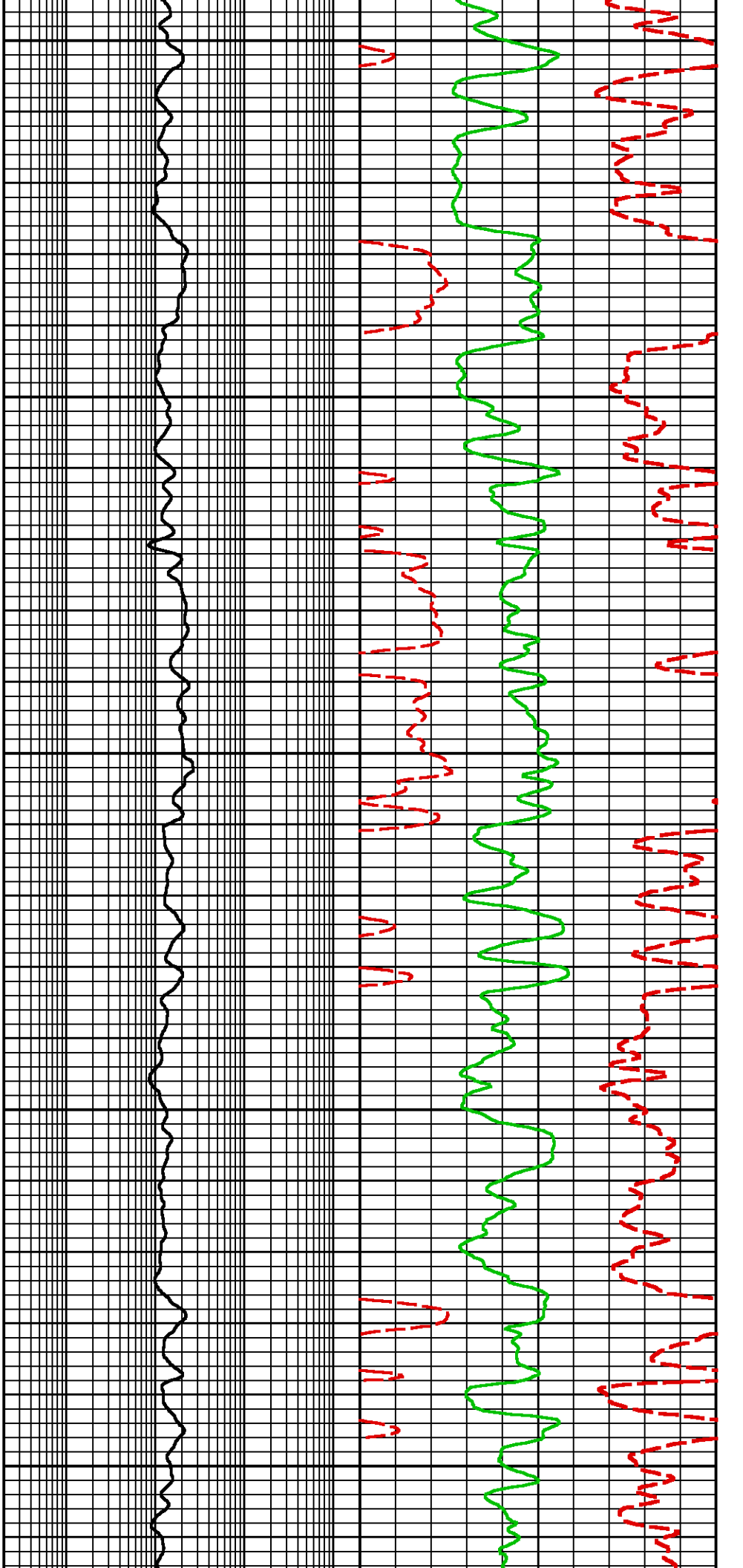
CURVE MEASURE POINT OFFSET

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_Bruton_30_19W_NEO\
 NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100" Scale]
Plot Interval : 2635 - 3324 Feet

Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\Laramie_Bruton_30_19W_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY LLC
Well : BRUTON FEDERAL 30-19W
Field : VEGA
File Interval : 2640.75 - 8272.75 Feet
OCT : NA

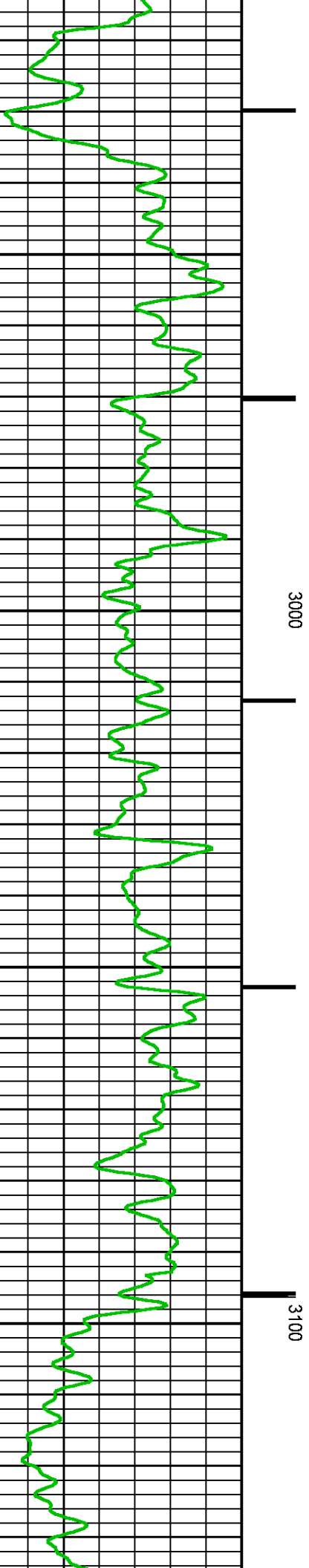
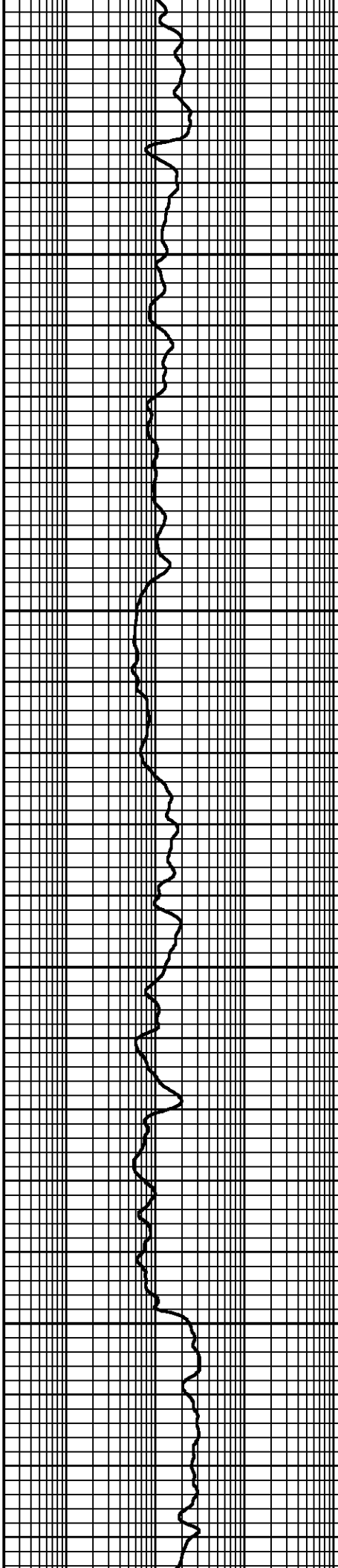
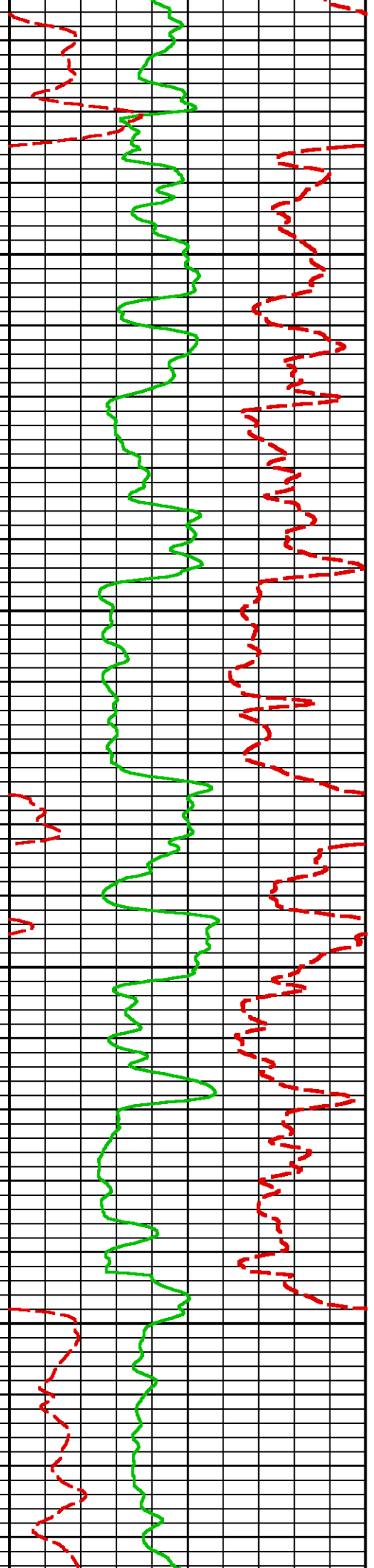


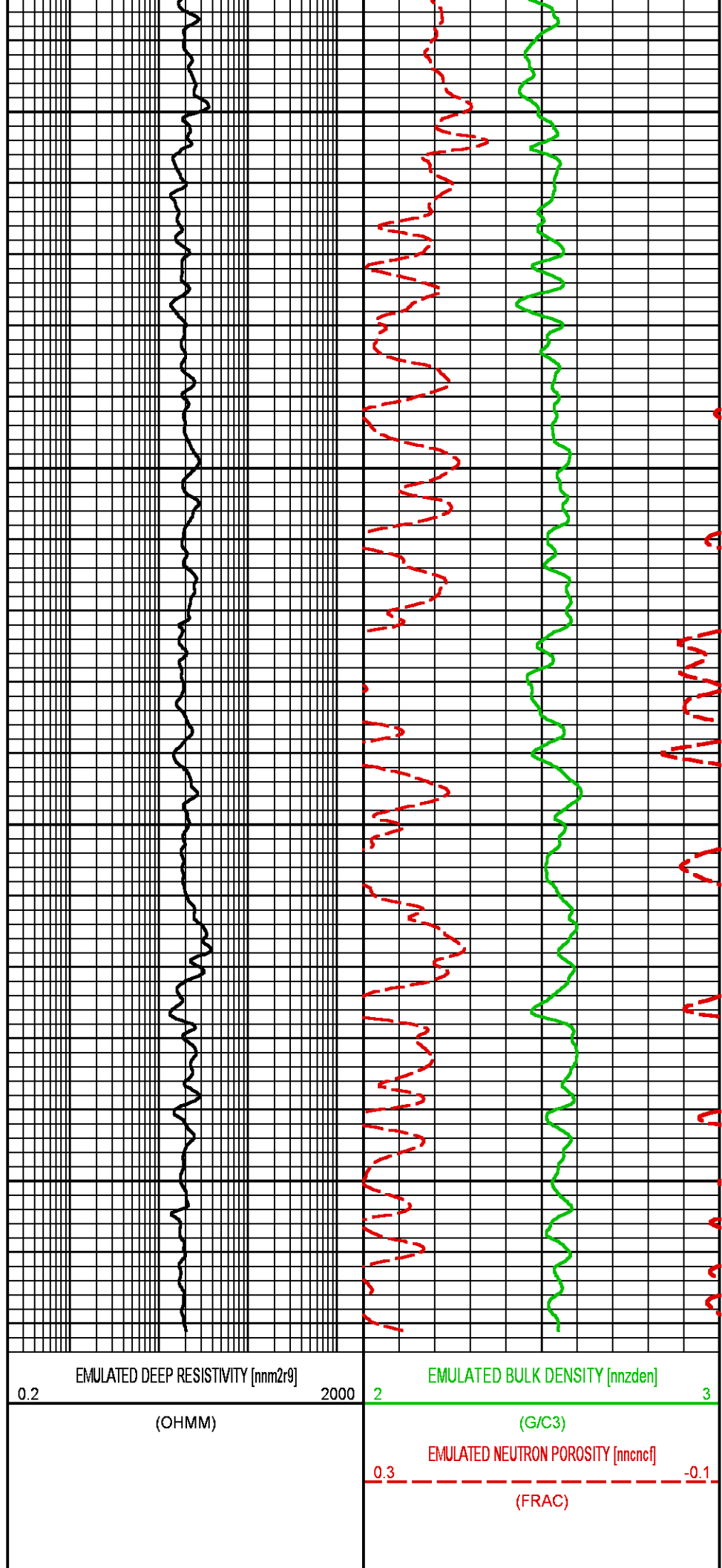
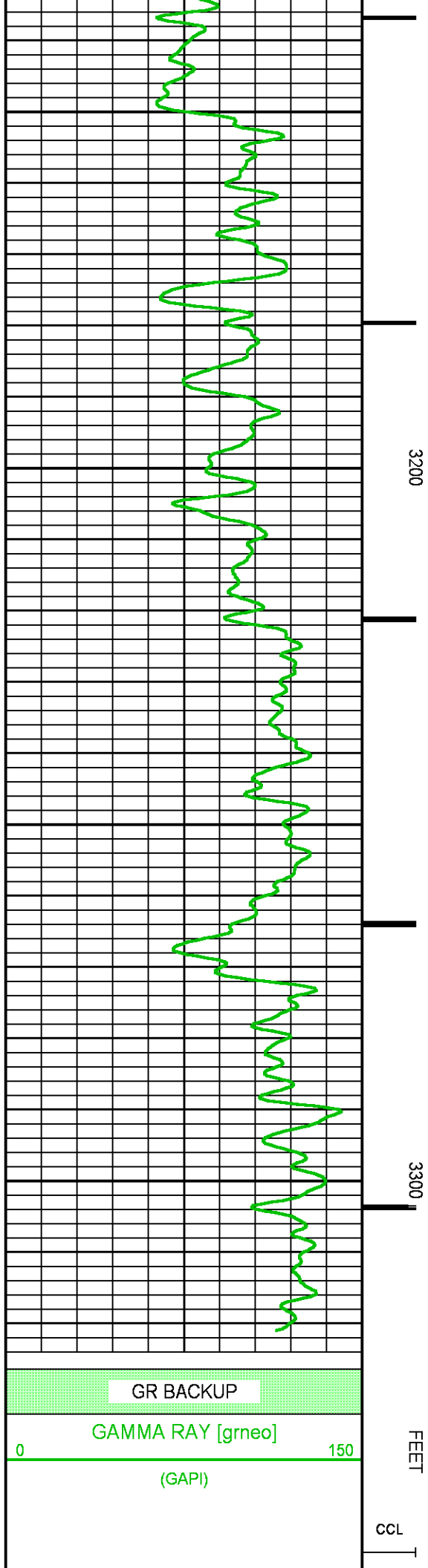


2700

2800

2900





NEO RESULTS FOR BRUTON FEDERAL 30-19W (MAIN)

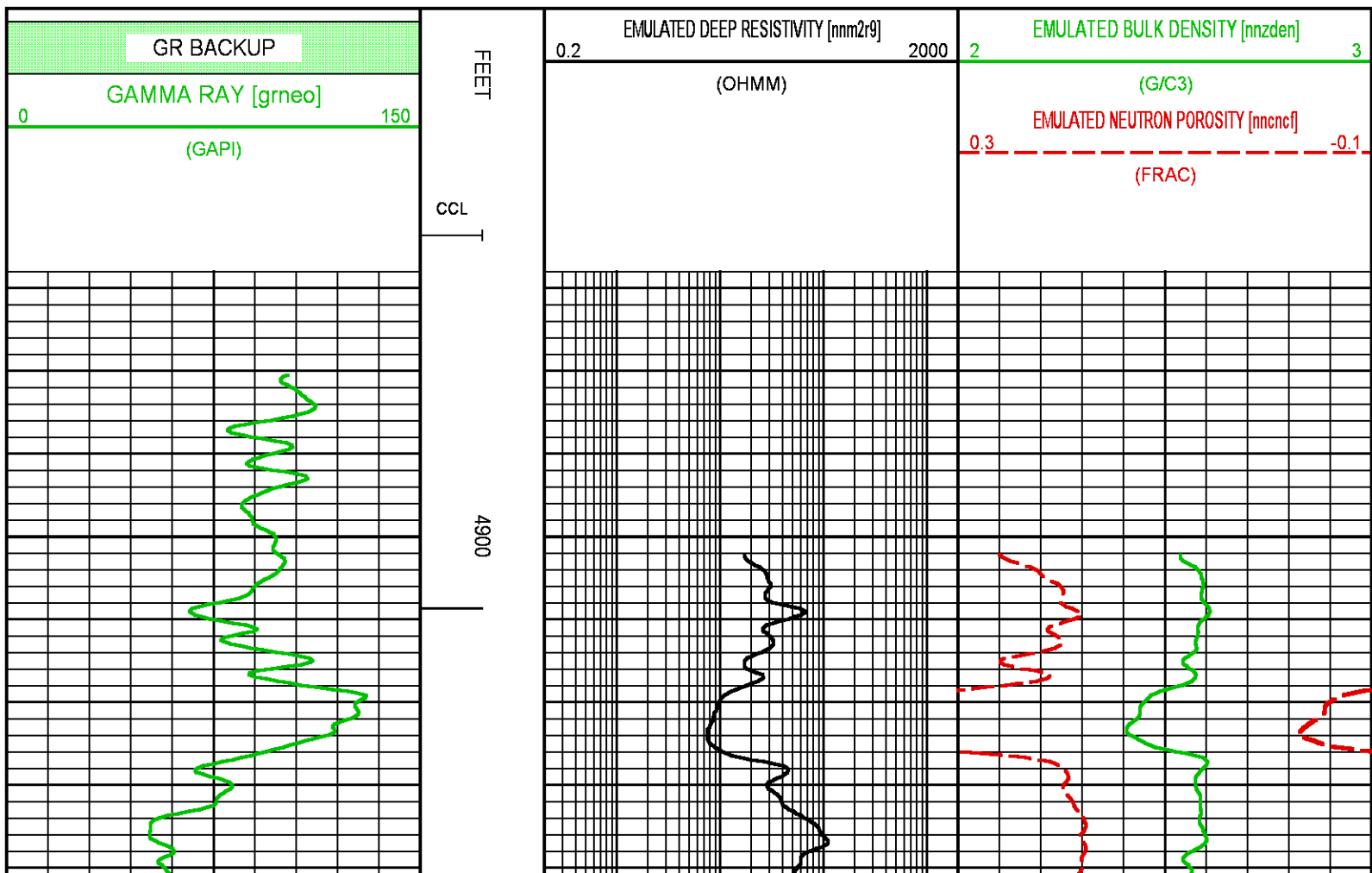
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 6.0.7905.1 Wed 08/23/2017 09:02:35.01

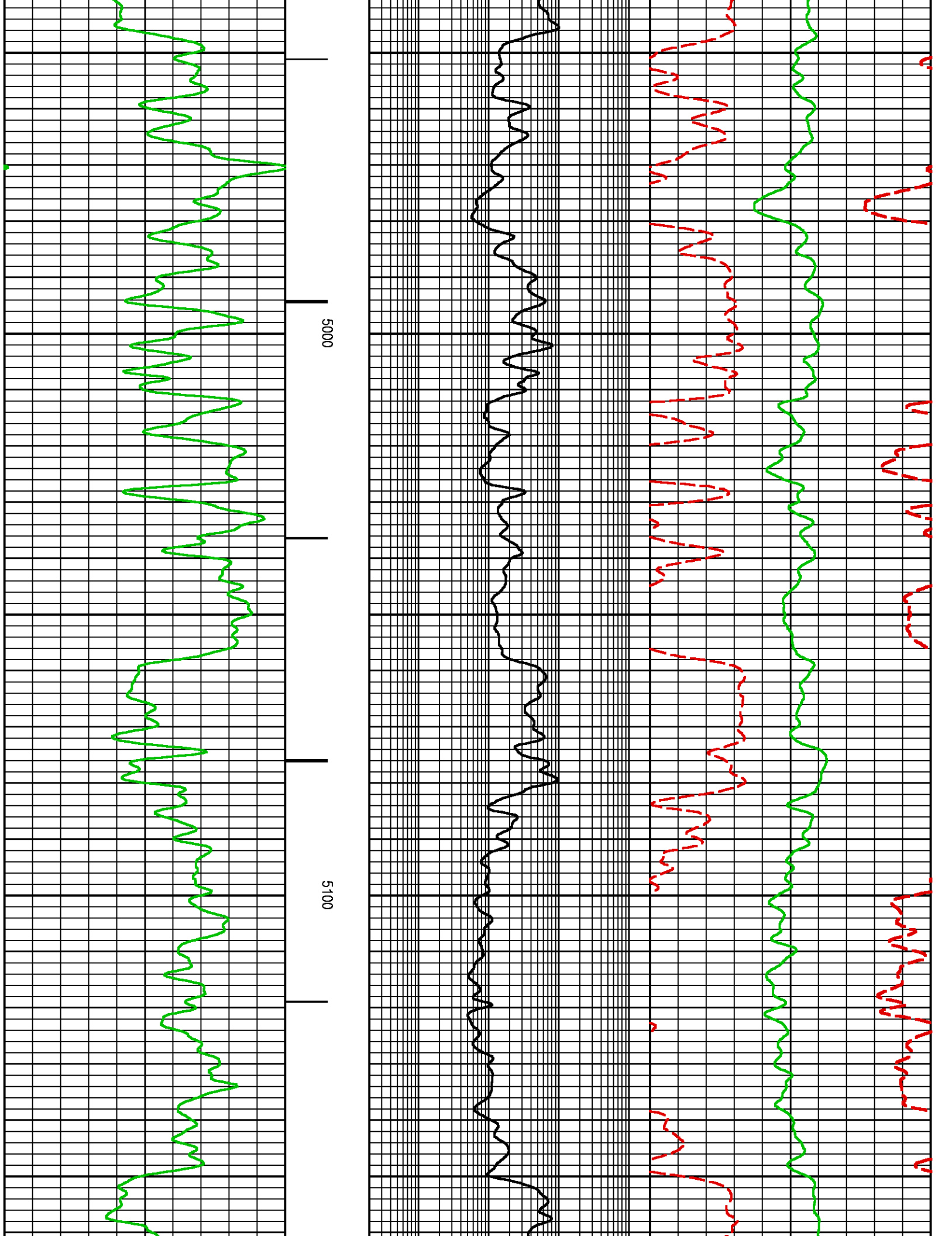
Plotted: Mon Apr 16 13:33:34 2018

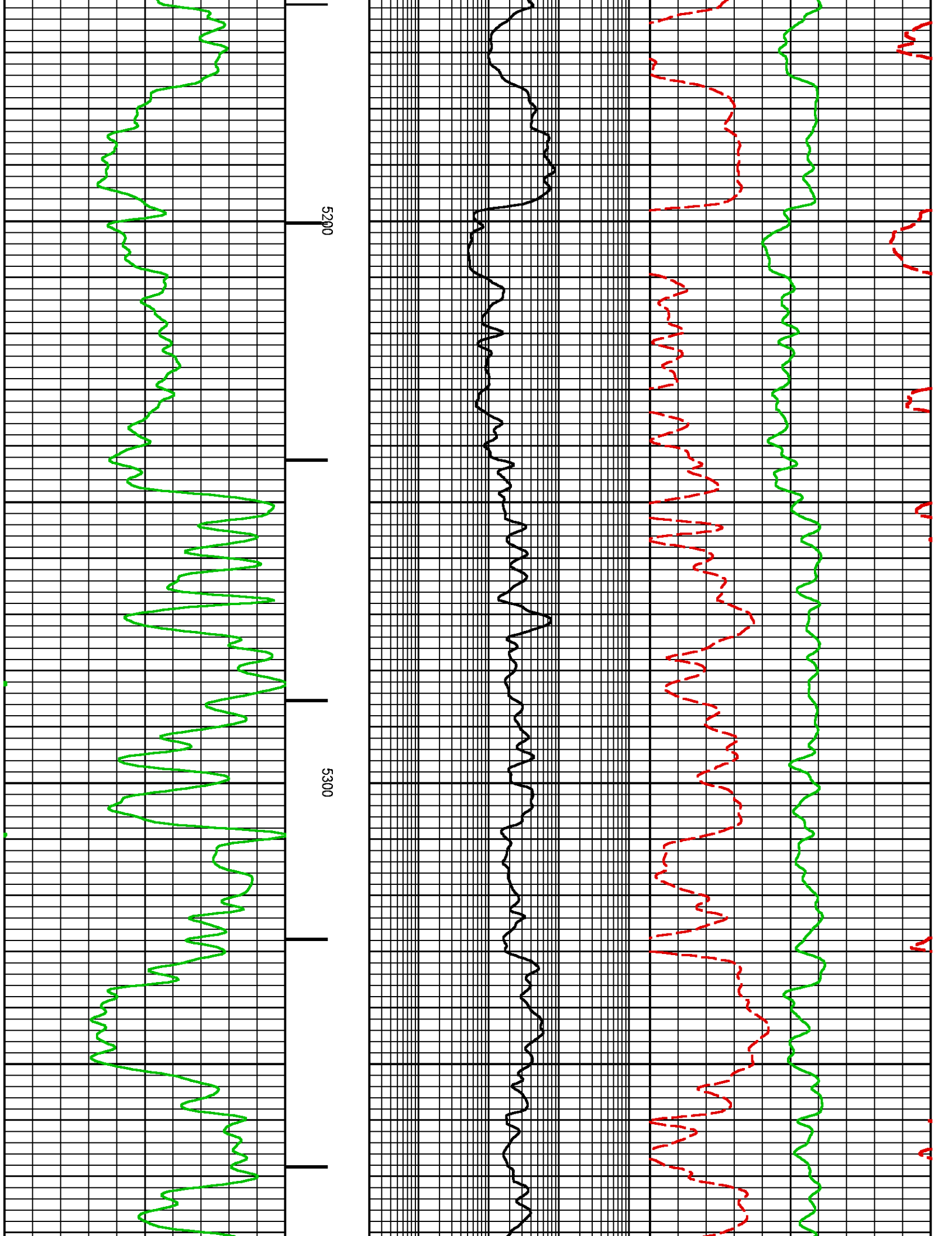
CURVE MEASURE POINT OFFSET

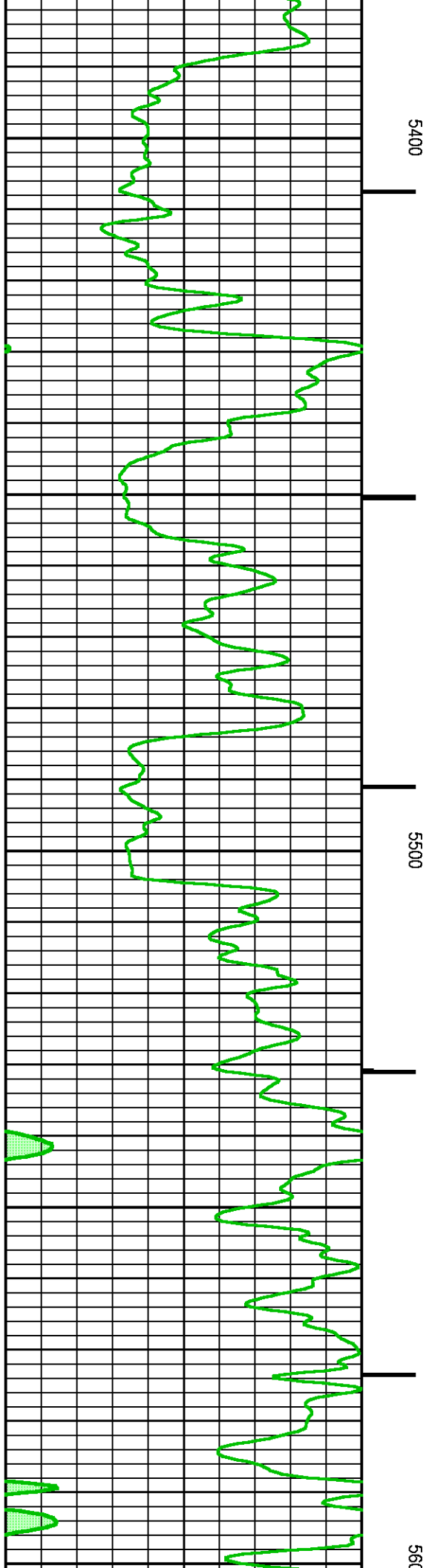
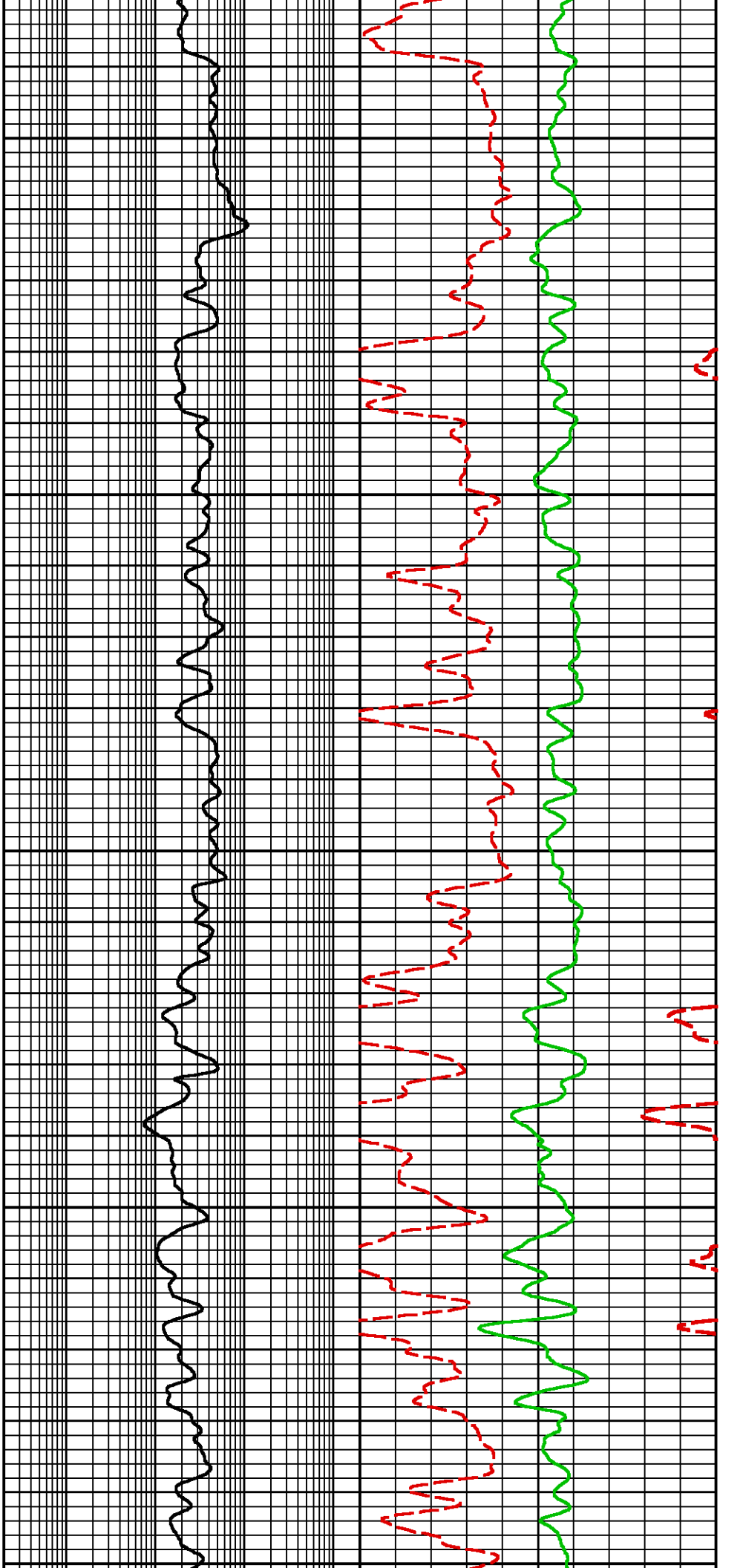
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

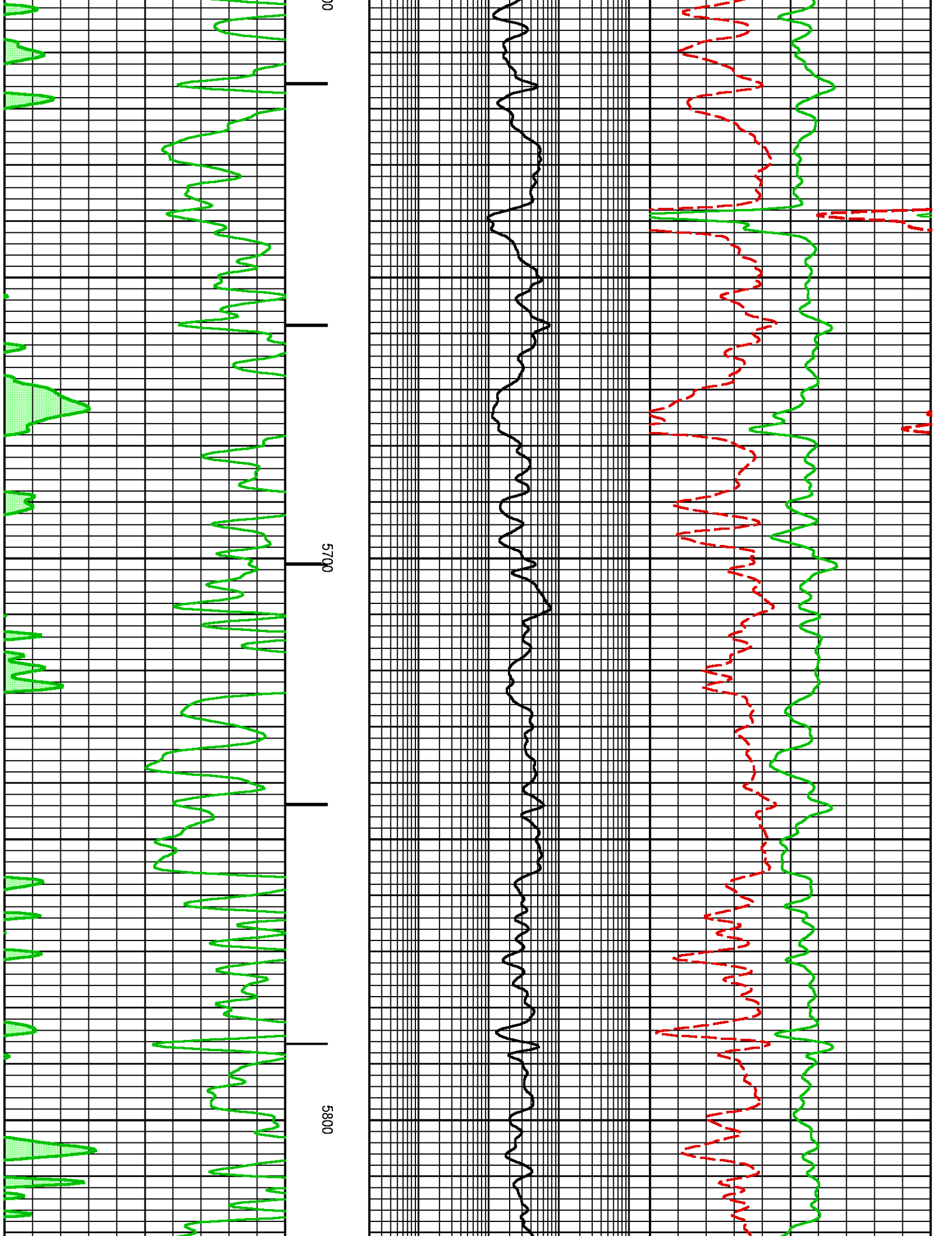
Project : NA
User : kotoale
Presentation : BHI1F65XZ1:d:\Ape_Projects\Laramie Bruton 30 19W NEO\NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100' Scale]
Plot Interval : 4869 - 8280 Feet
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\Laramie Bruton 30 19W_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY LLC
Well : BRUTON FEDERAL 30-19W
Field : VEGA
File Interval : 2640.75 - 8272.75 Feet
OCT : NA

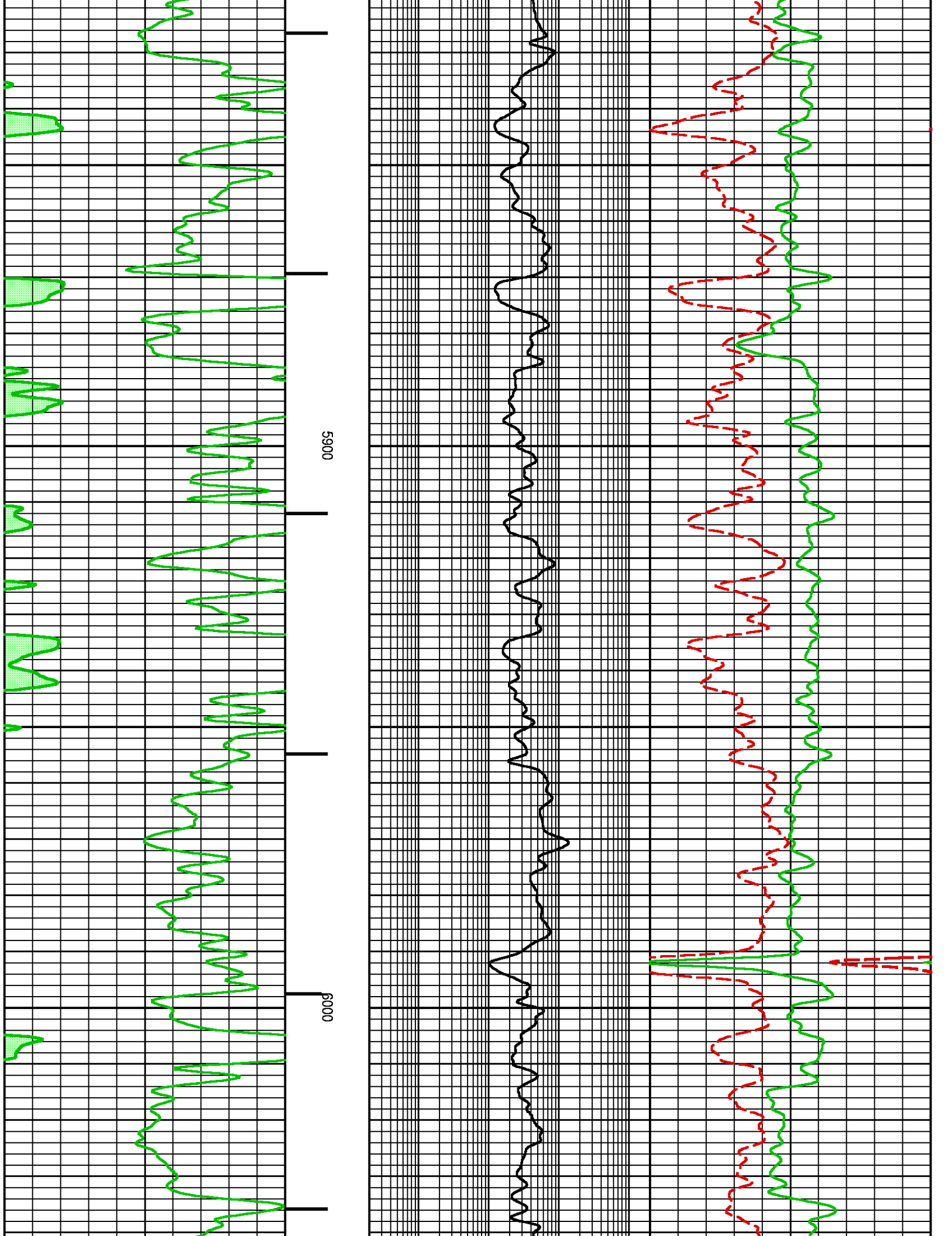


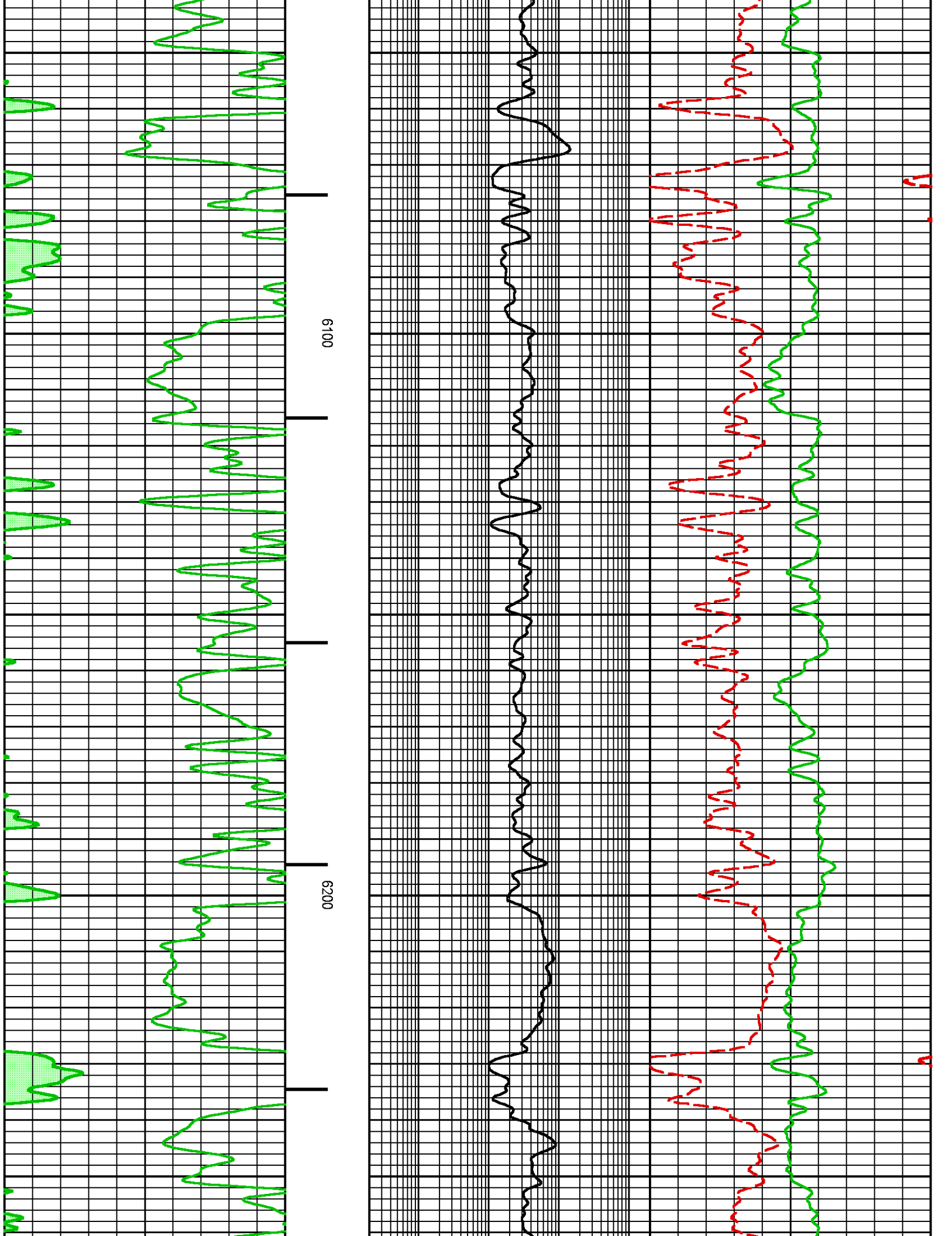


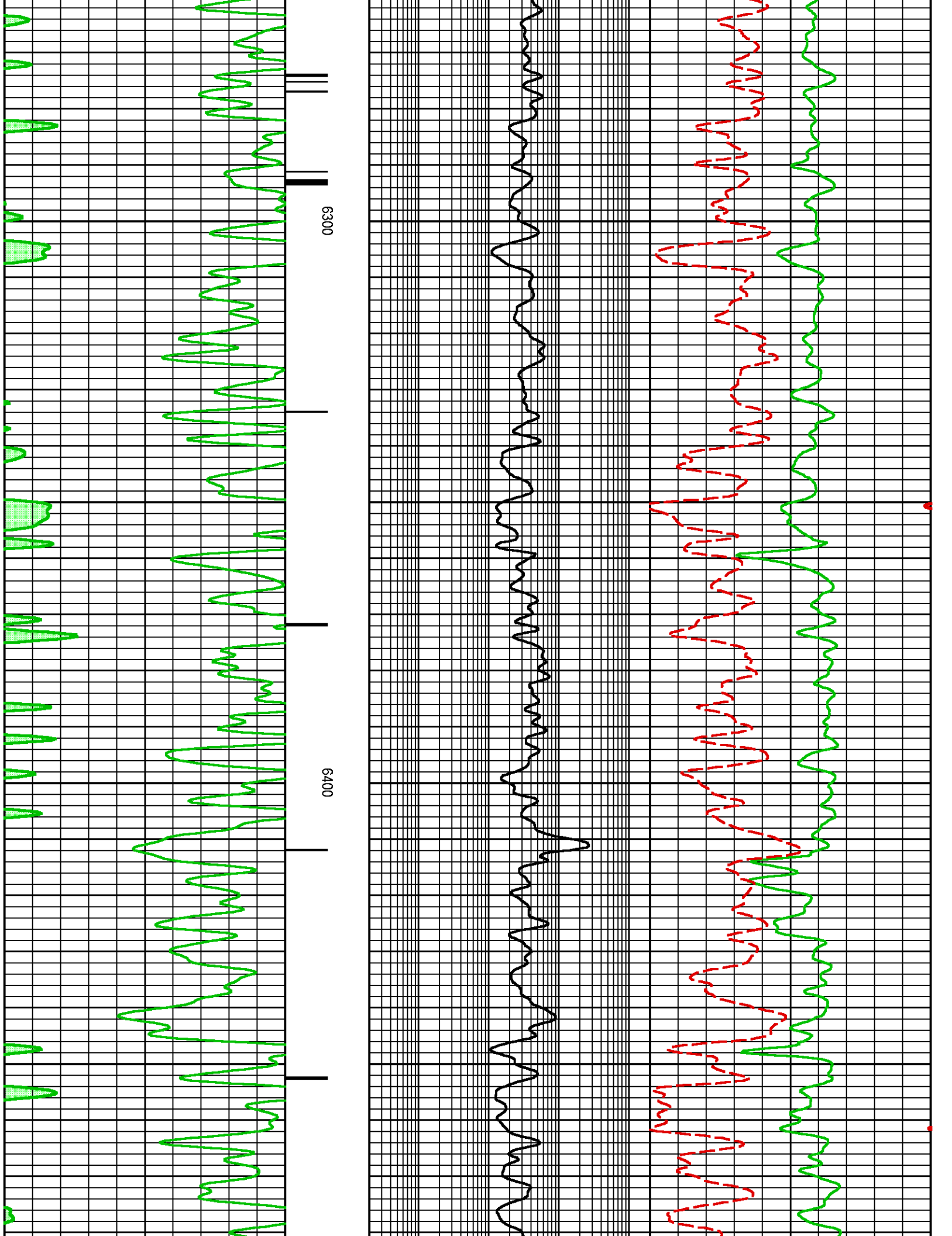


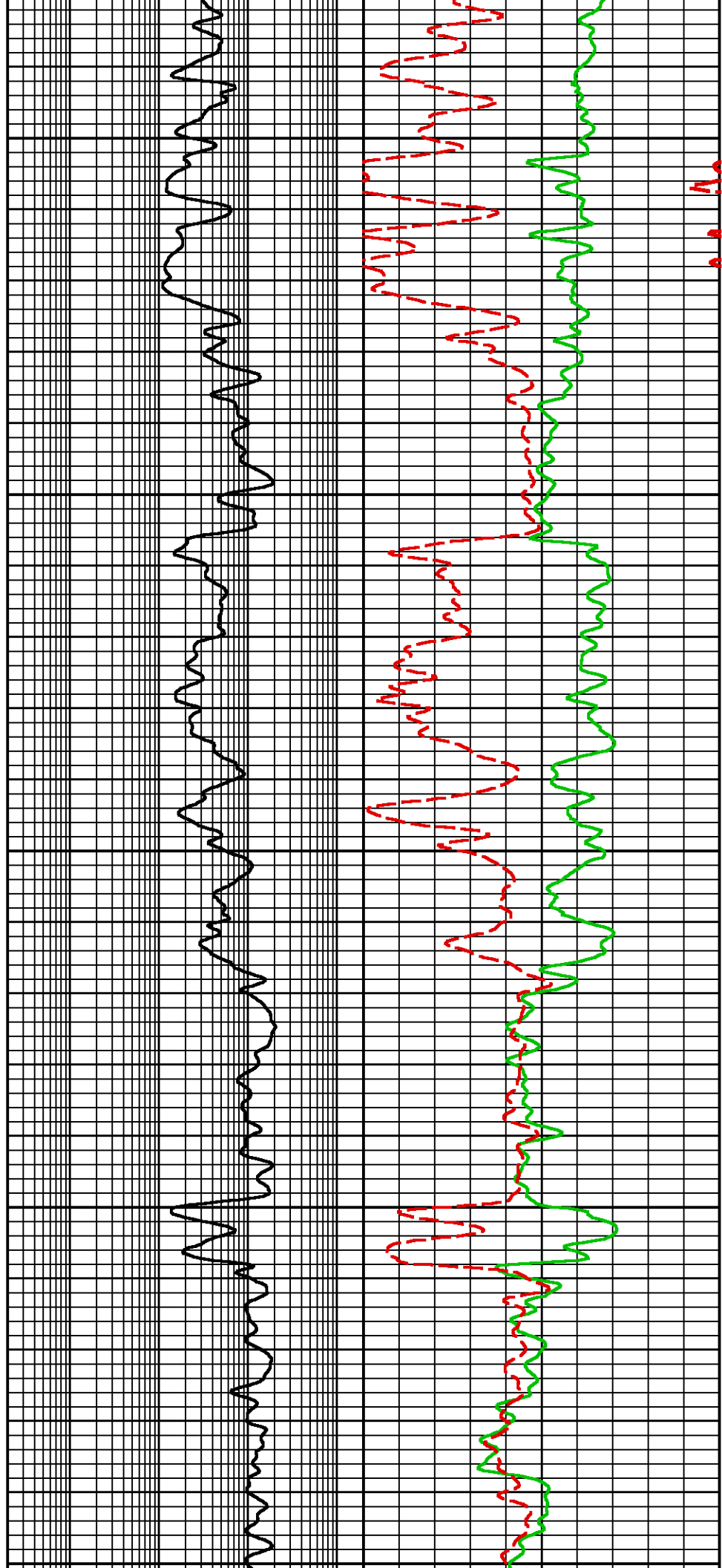
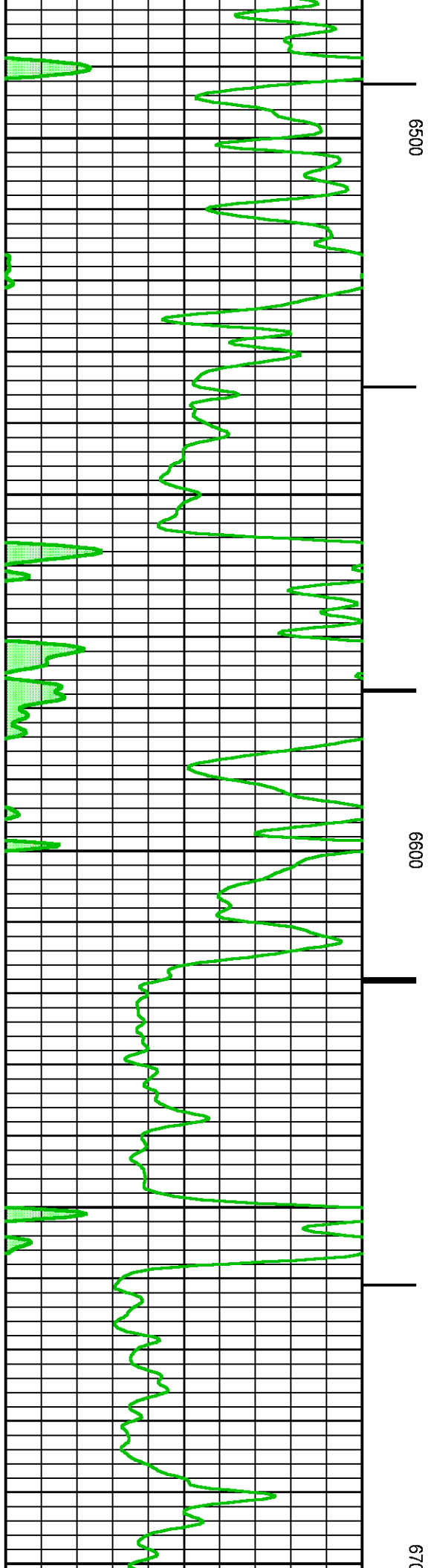


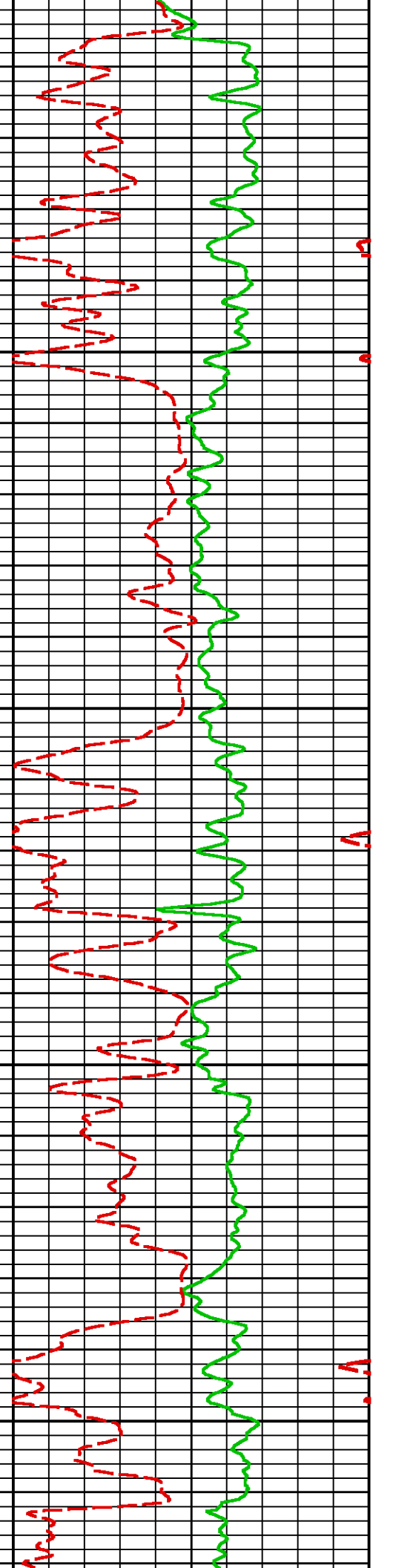
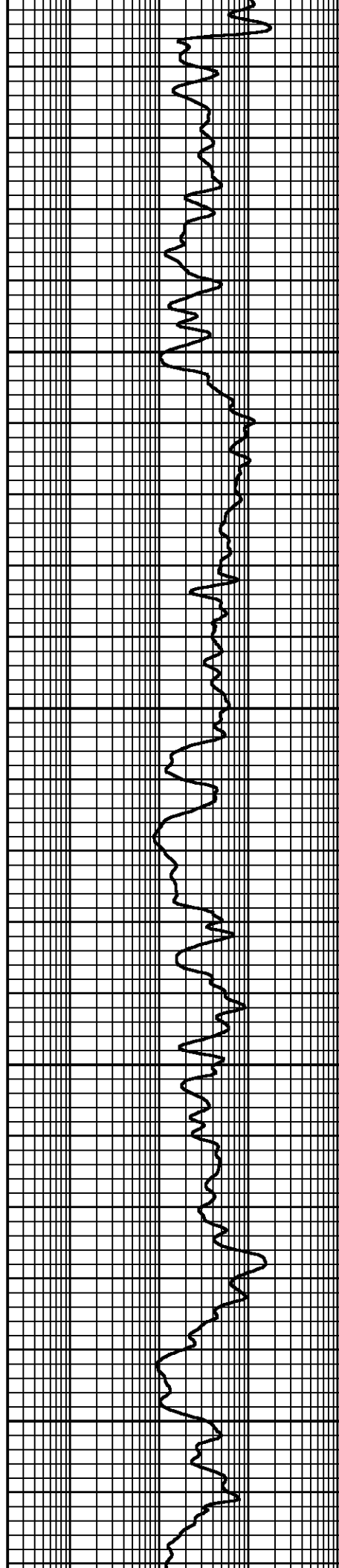
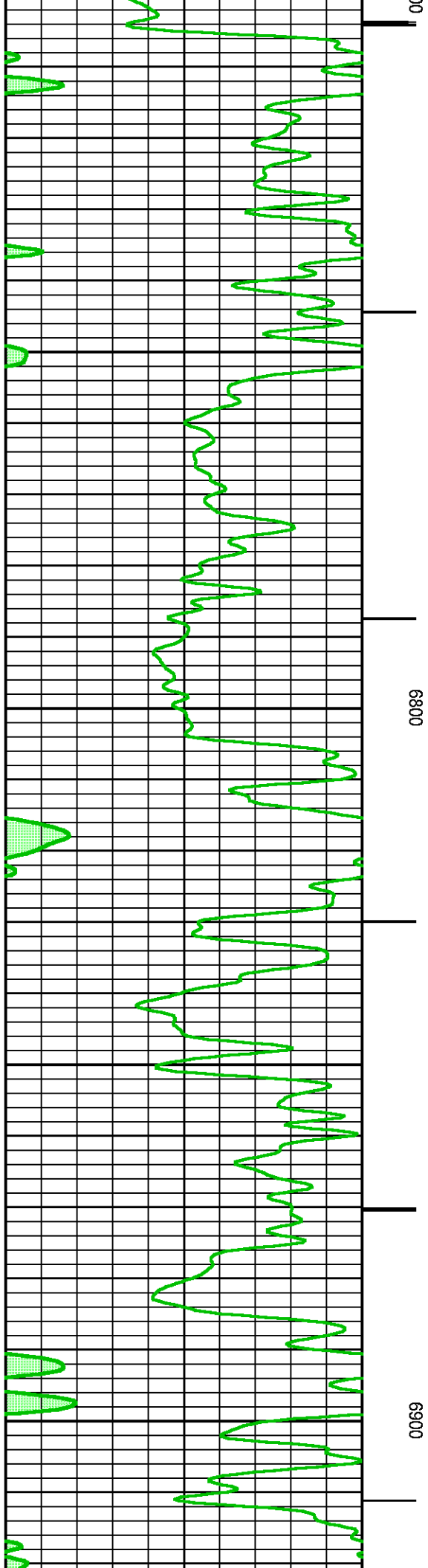


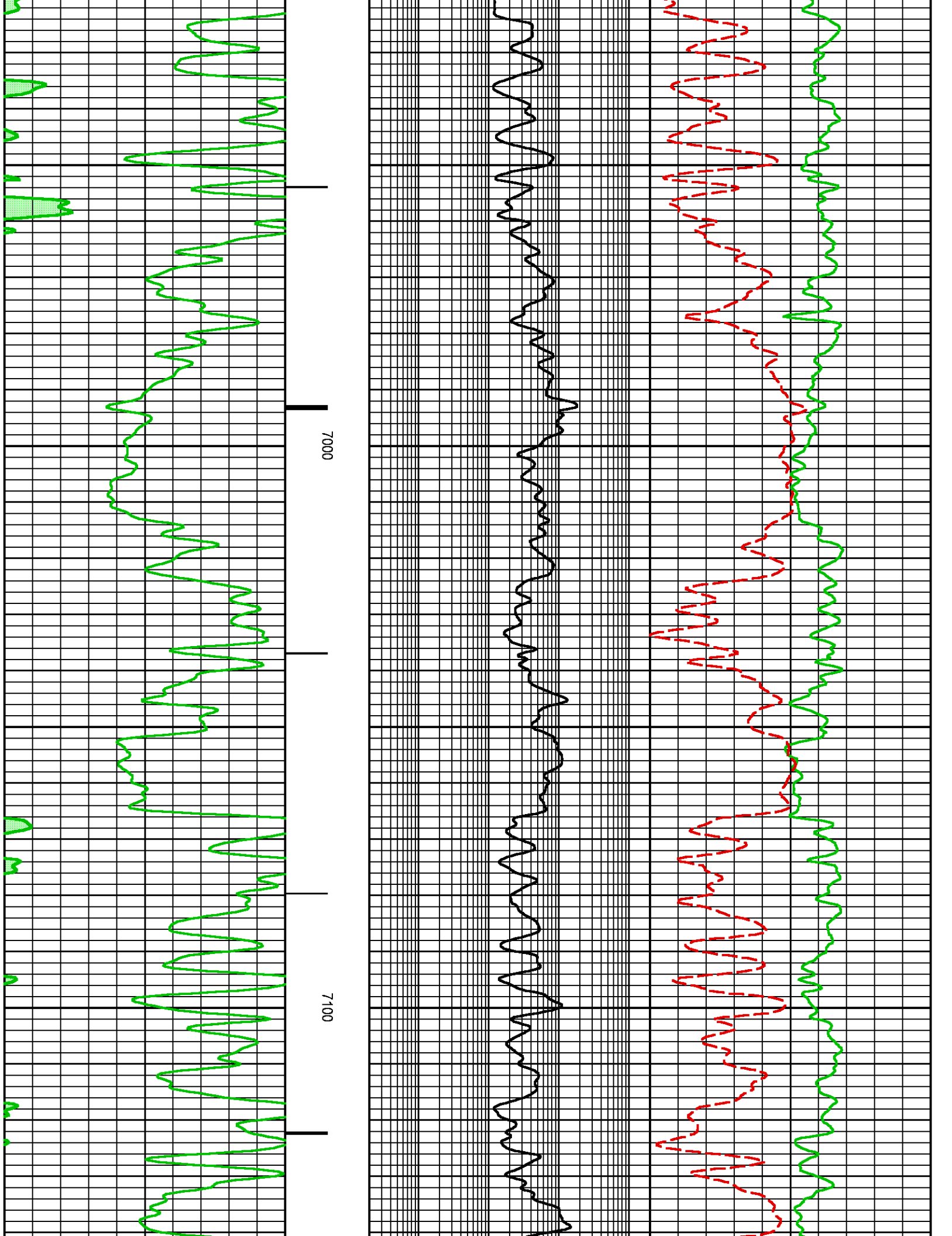


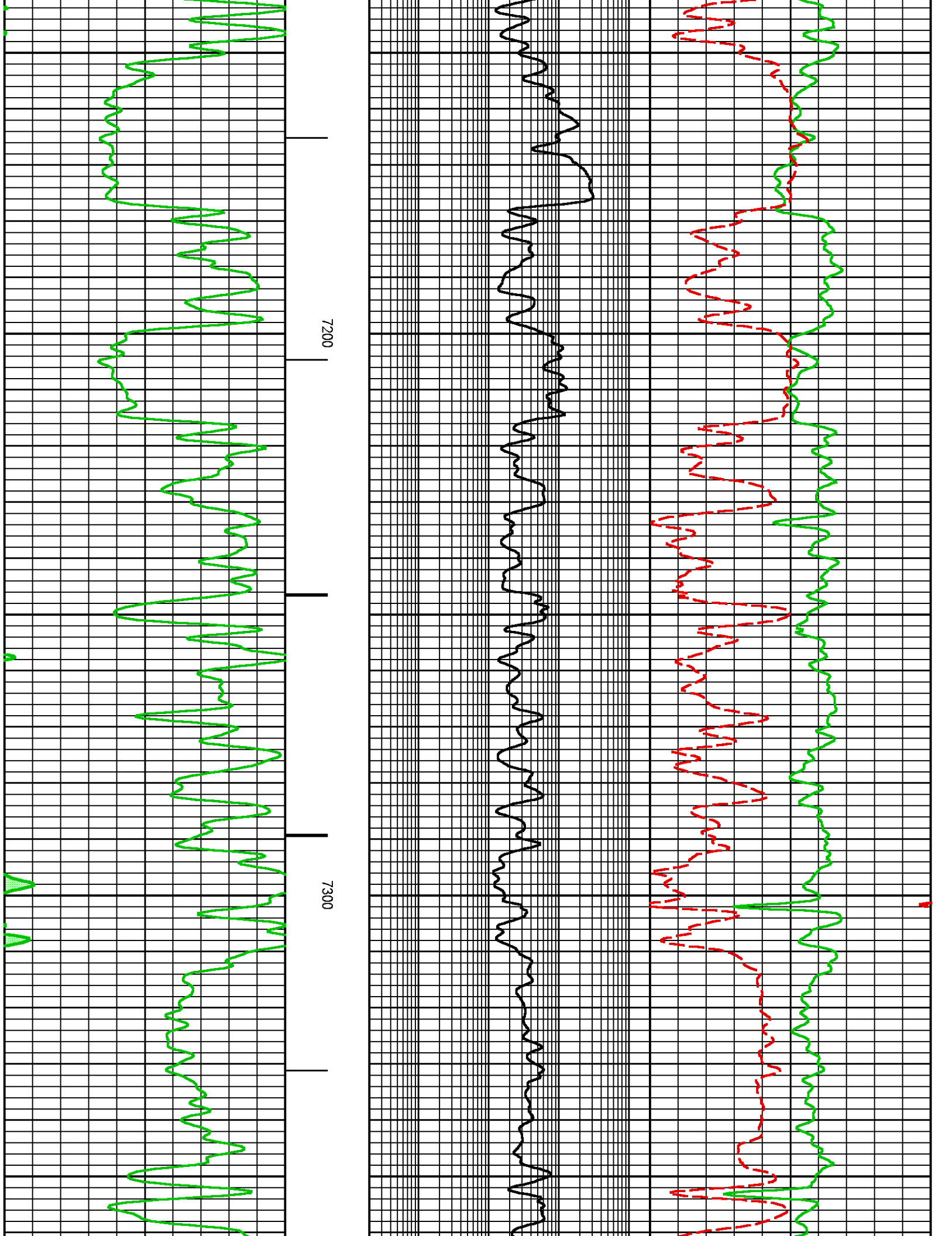


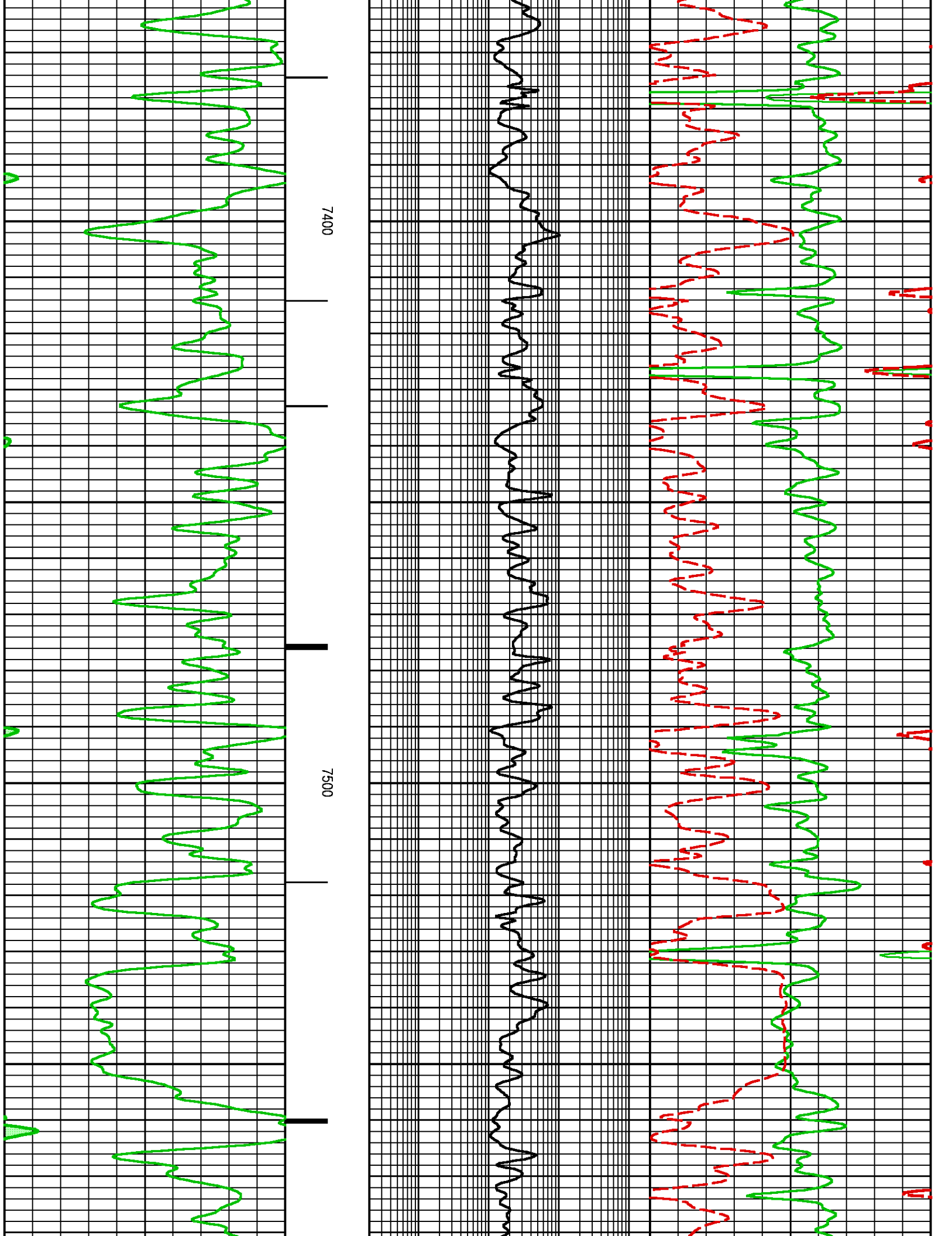


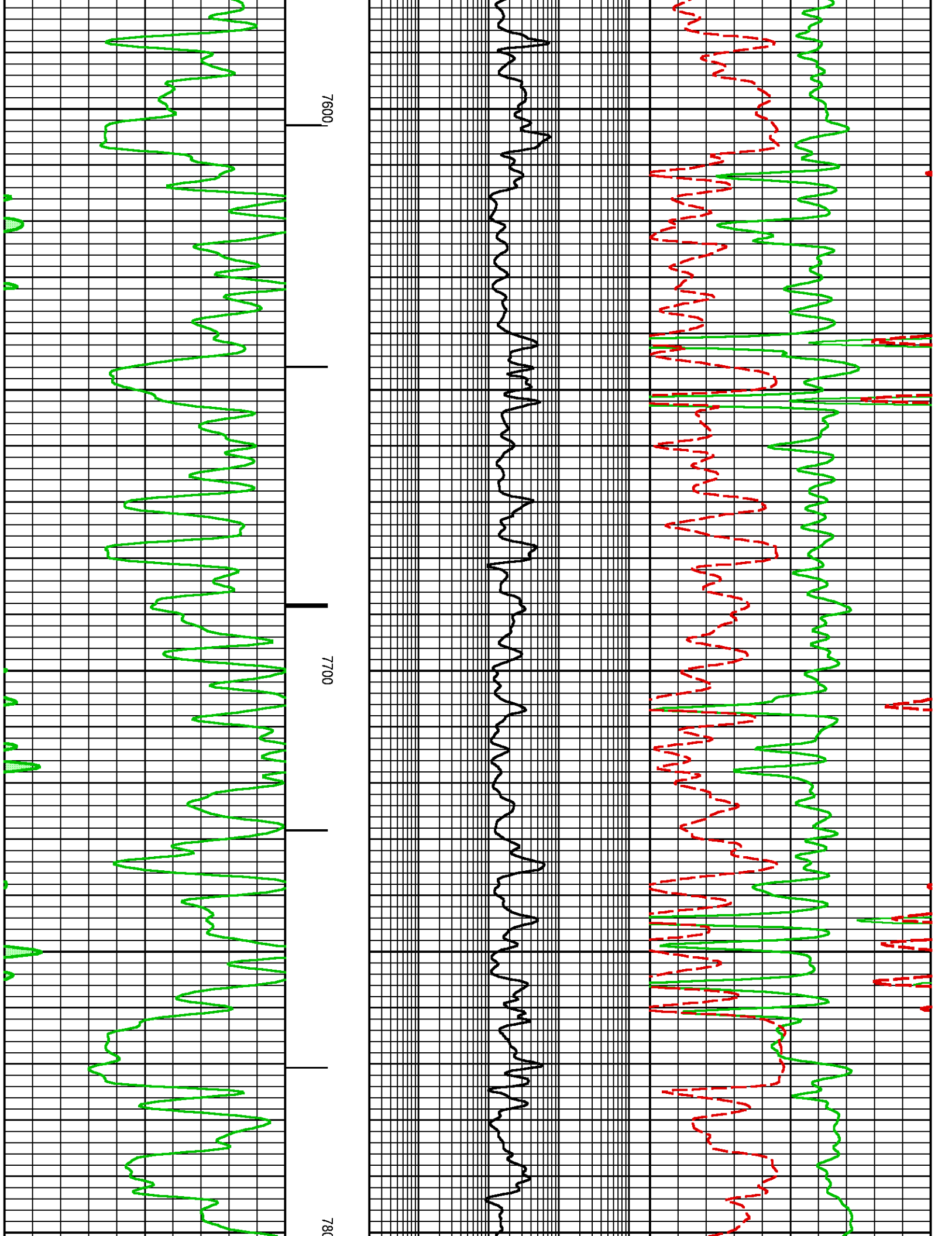


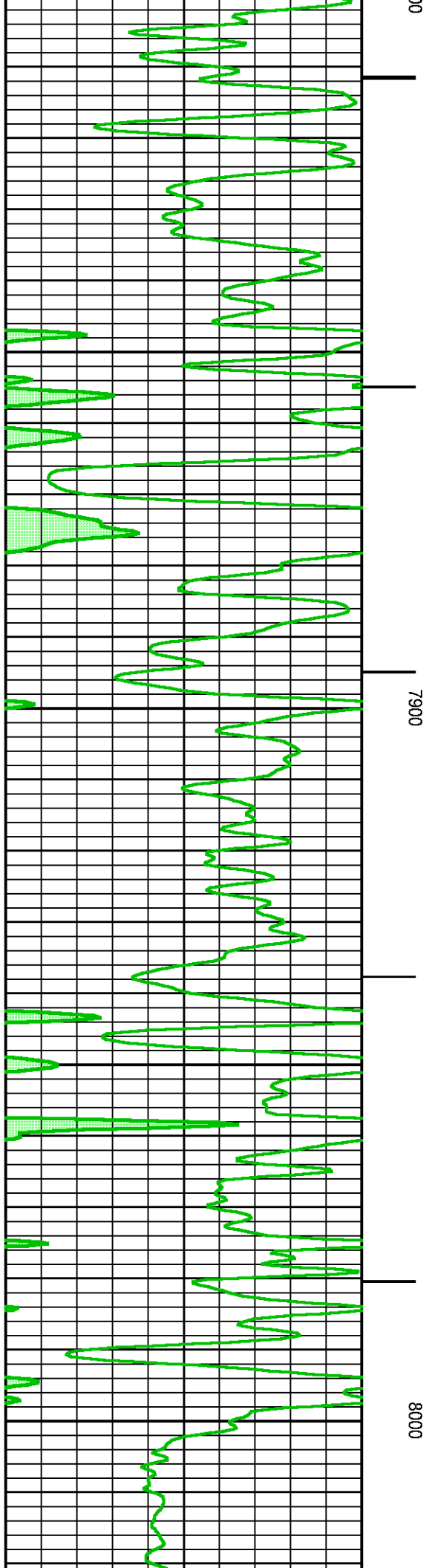
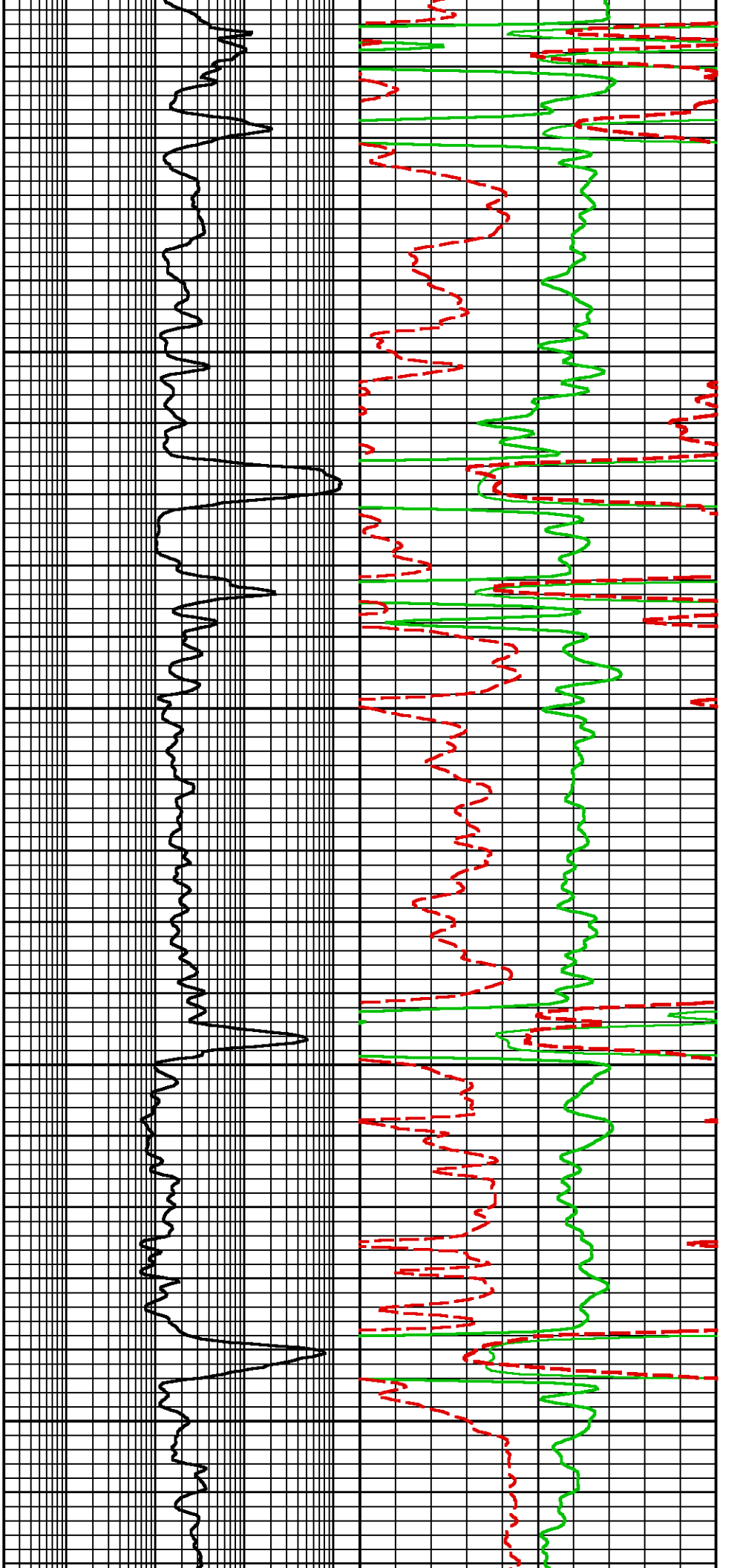


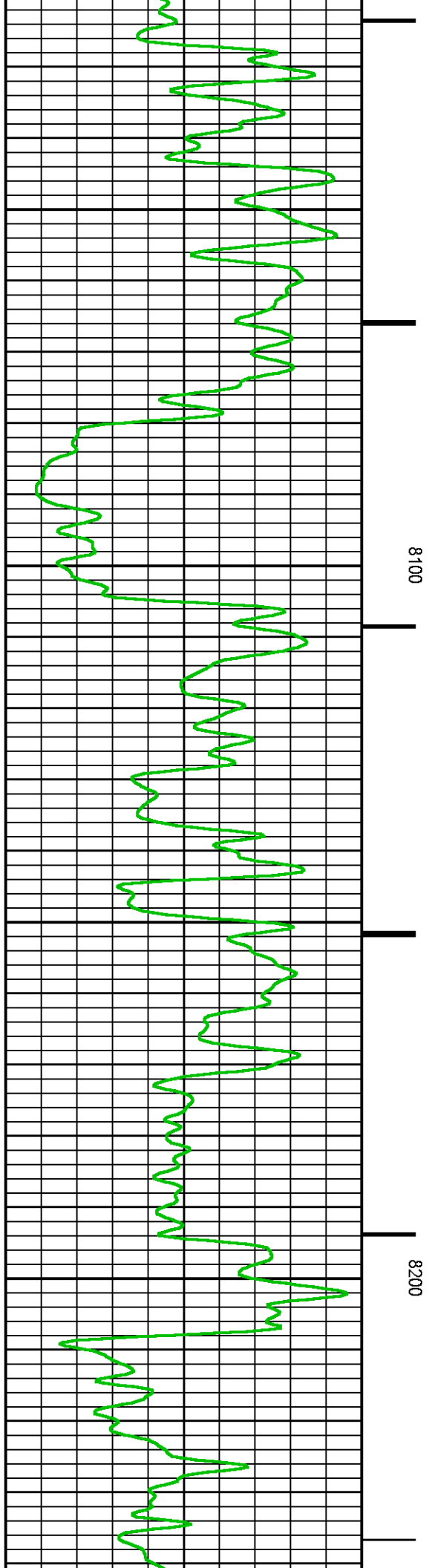
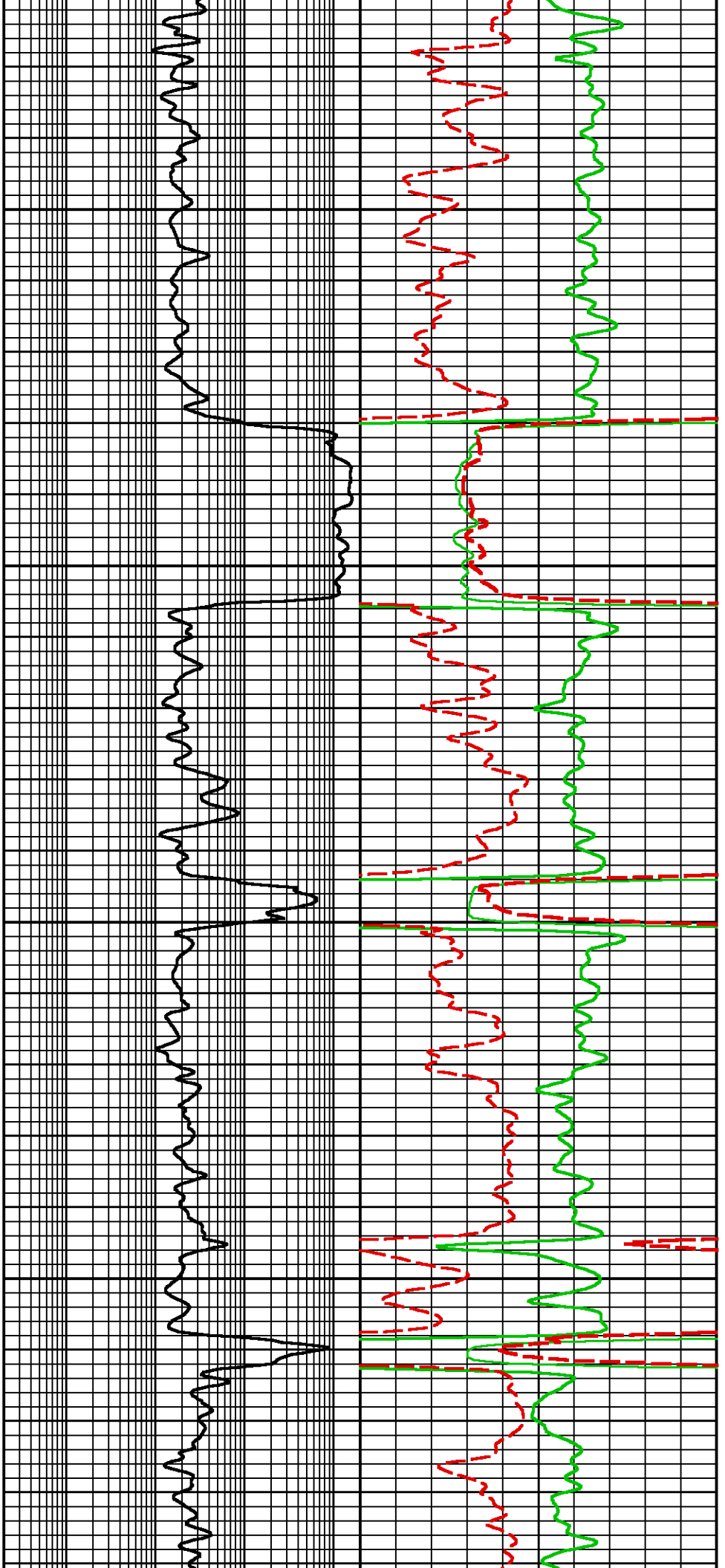


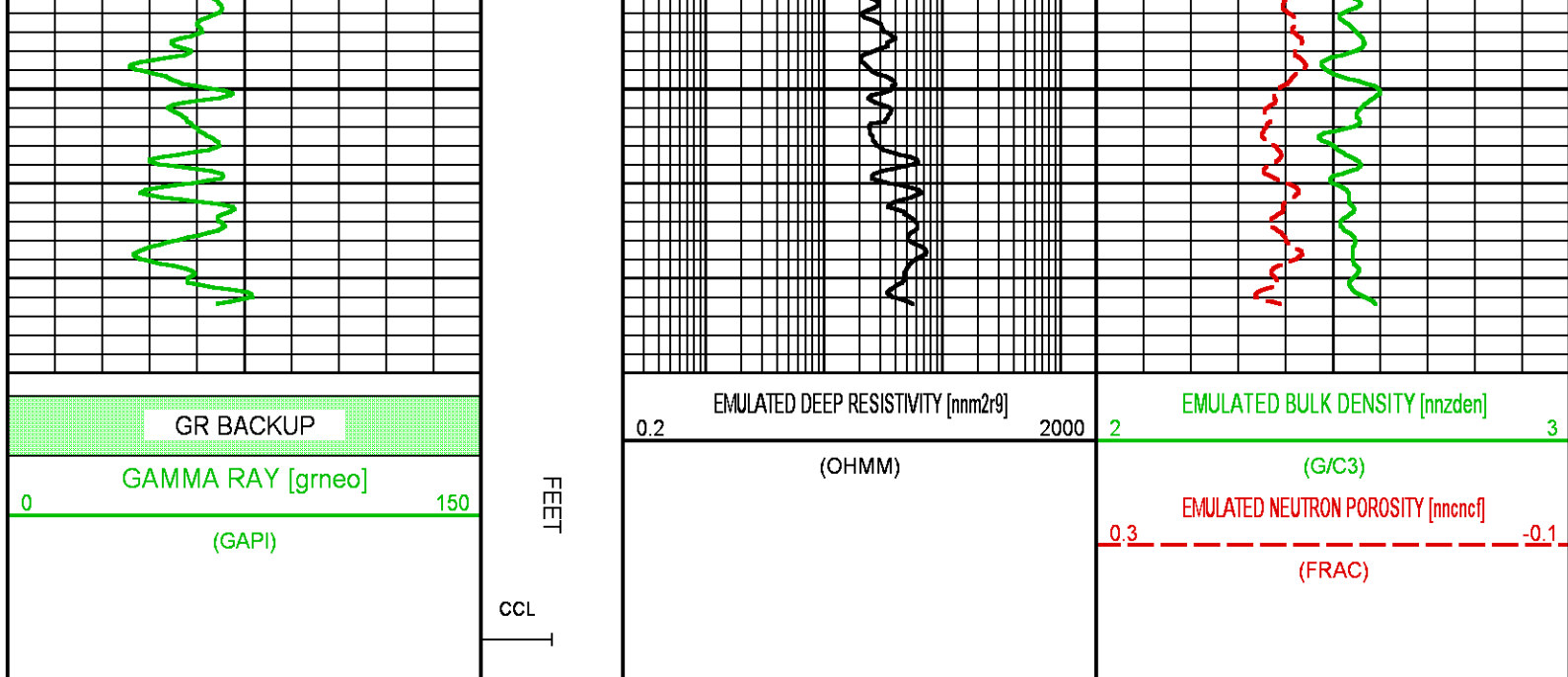



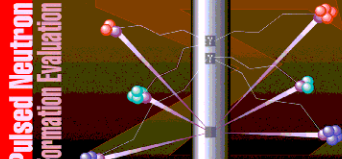










 	COMPANY <u>LARAMIE ENERGY</u> WELL <u>BRUTON FEDERAL 30-19W</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>COLORADO</u>	FILE NO: _____ API NO: <u>05077104690000</u>	
	LOCATION: <u>SEE REMARKS SECTION</u>	ELEVATIONS: KB <u>7673.0 FT</u> DF <u>30 FT</u> GL <u>7643.0 FT</u>	
	SEC <u>30</u> TWP <u>9S</u> RGE <u>93W</u>	DATE <u>01-APR-2018</u>	