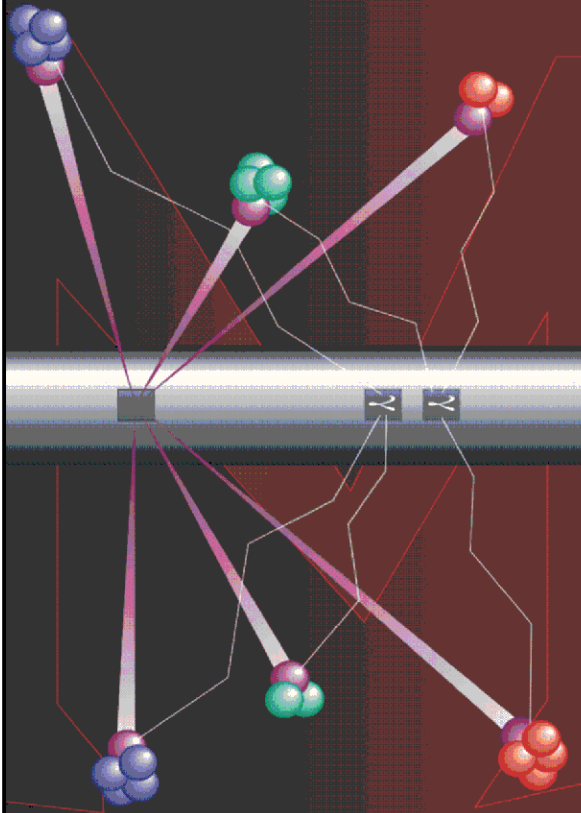


Pulsed Neutron Formation Evaluation



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 19-14E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 19 TWP 9S RGE 93W

ELEVATIONS:

KB 7449.0 FT DF 7448.0 FT GL 7425.0 FT

DATE 22-AUG-2017 ECC 28080-01

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>24-AUG-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US126725</u>	DATE: <u>22-AUG-2017</u>

FROM	TO								
<u>2497 FT</u>	<u>8007 FT</u>								

REMARKS

LOCATION:
SHL: LAT:39.255232N;LONG:107.806537W
BHL: LAT:39.260779N;LONG:107.806983W

TRAINING WELL: BRUTON 19-19E

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

BONG LOG IS DEPTH REFERENCE LOG

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

ANALYST: ALEXANDR KOTOV

NEO RESULTS FOR BRUTON 19-14E (G-SAND)

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

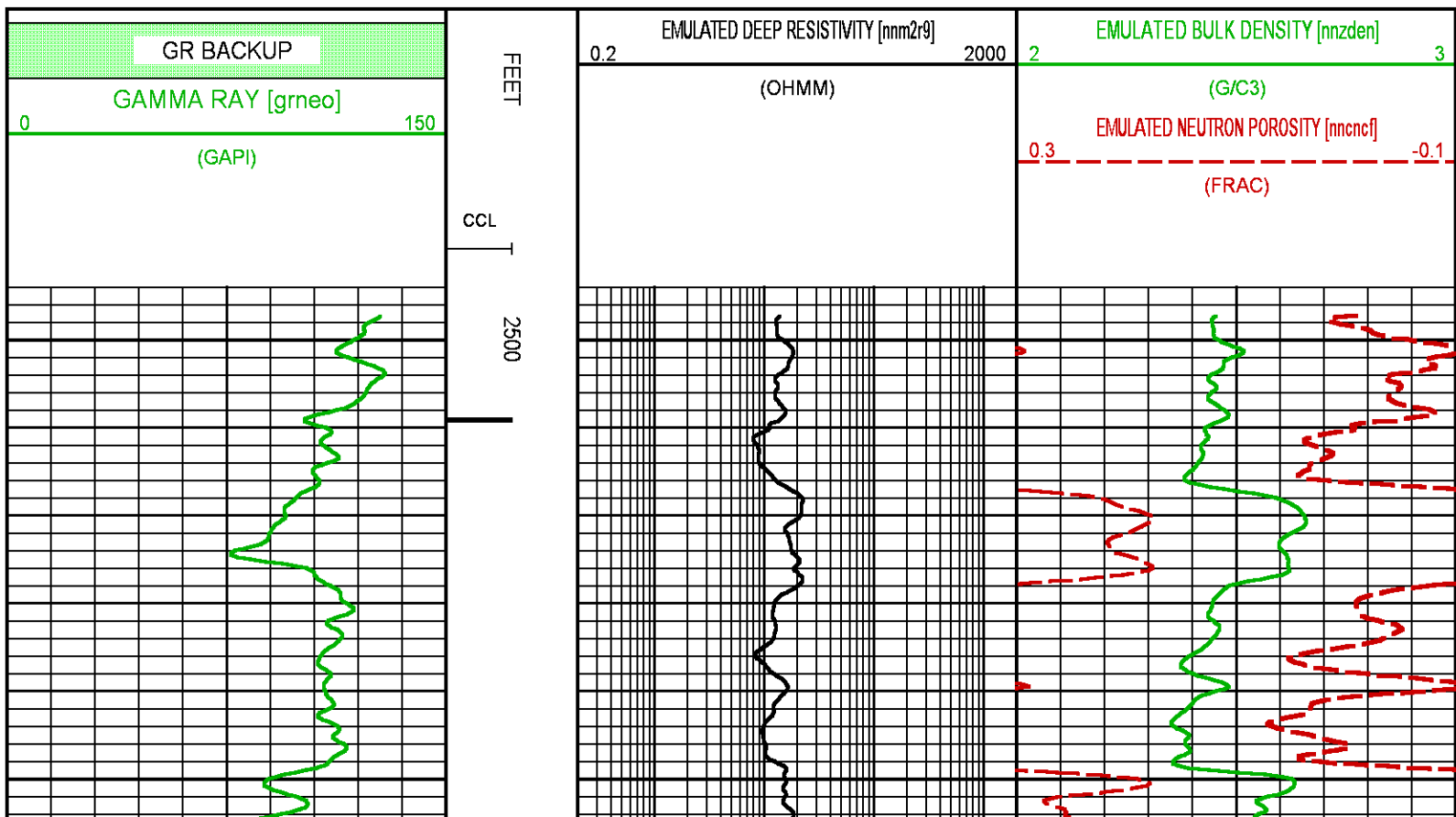
Plotted: Thu Aug 24 11:18:41 2017

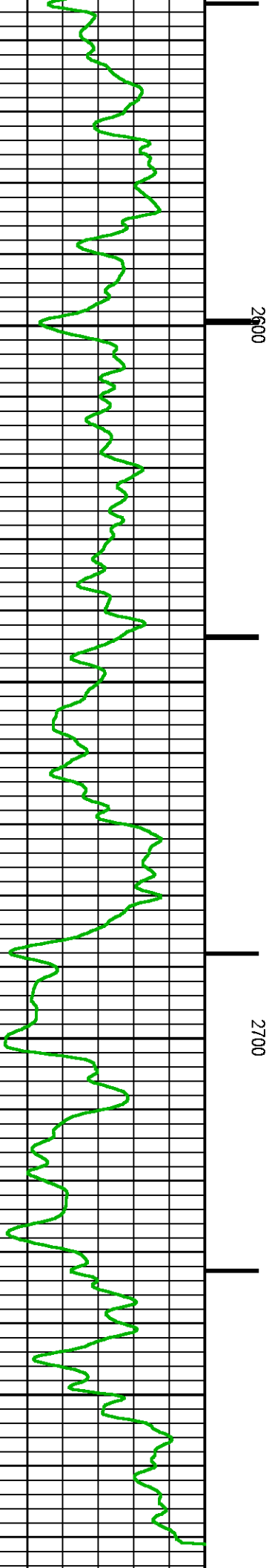
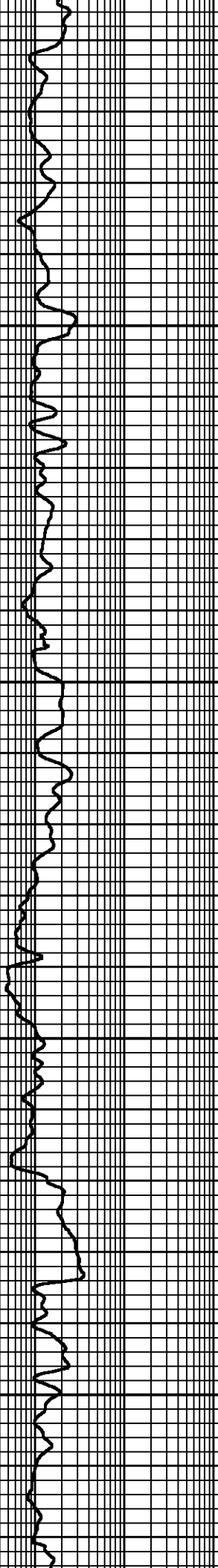
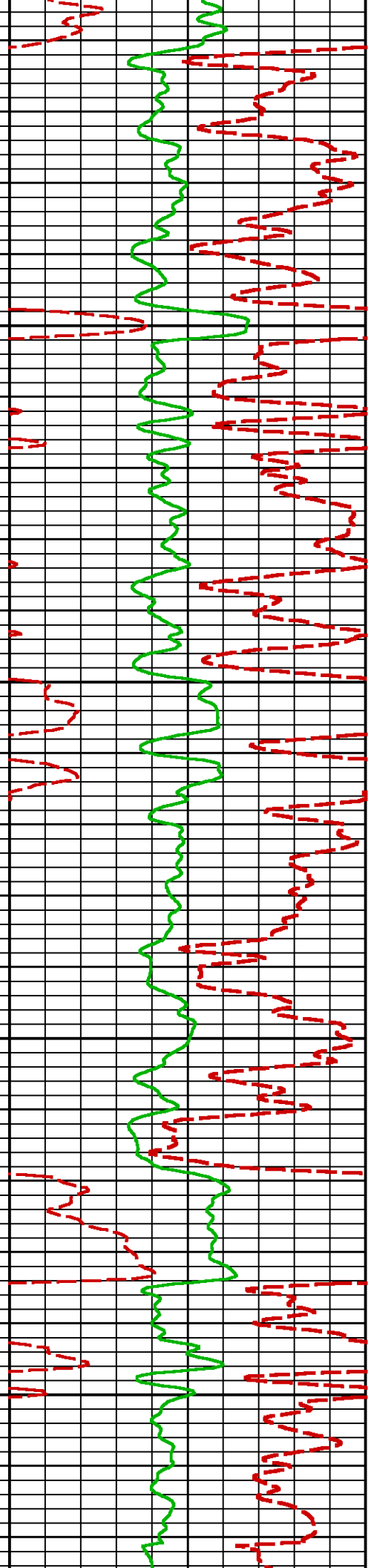
CURVE MEASURE POINT OFFSET

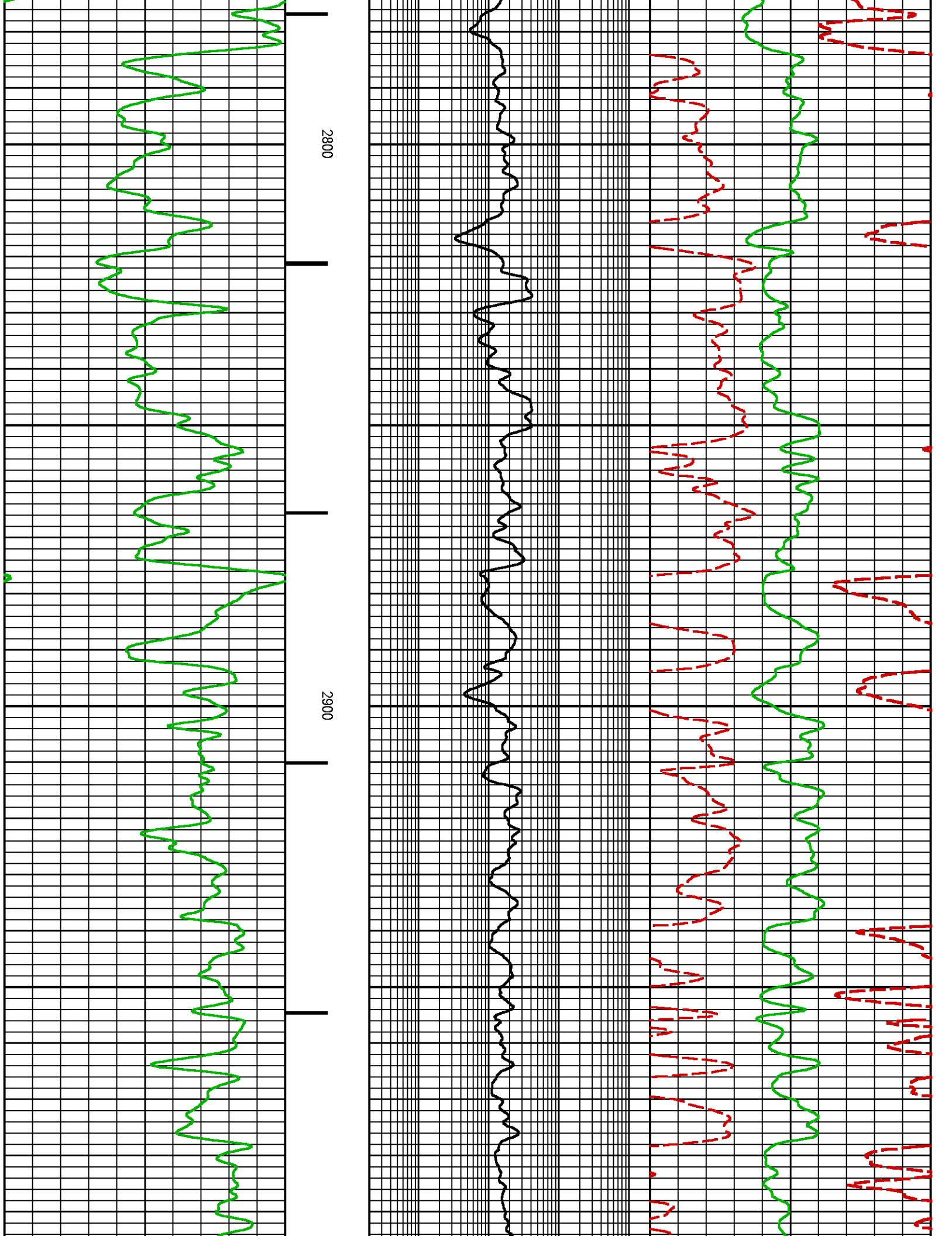
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNC	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

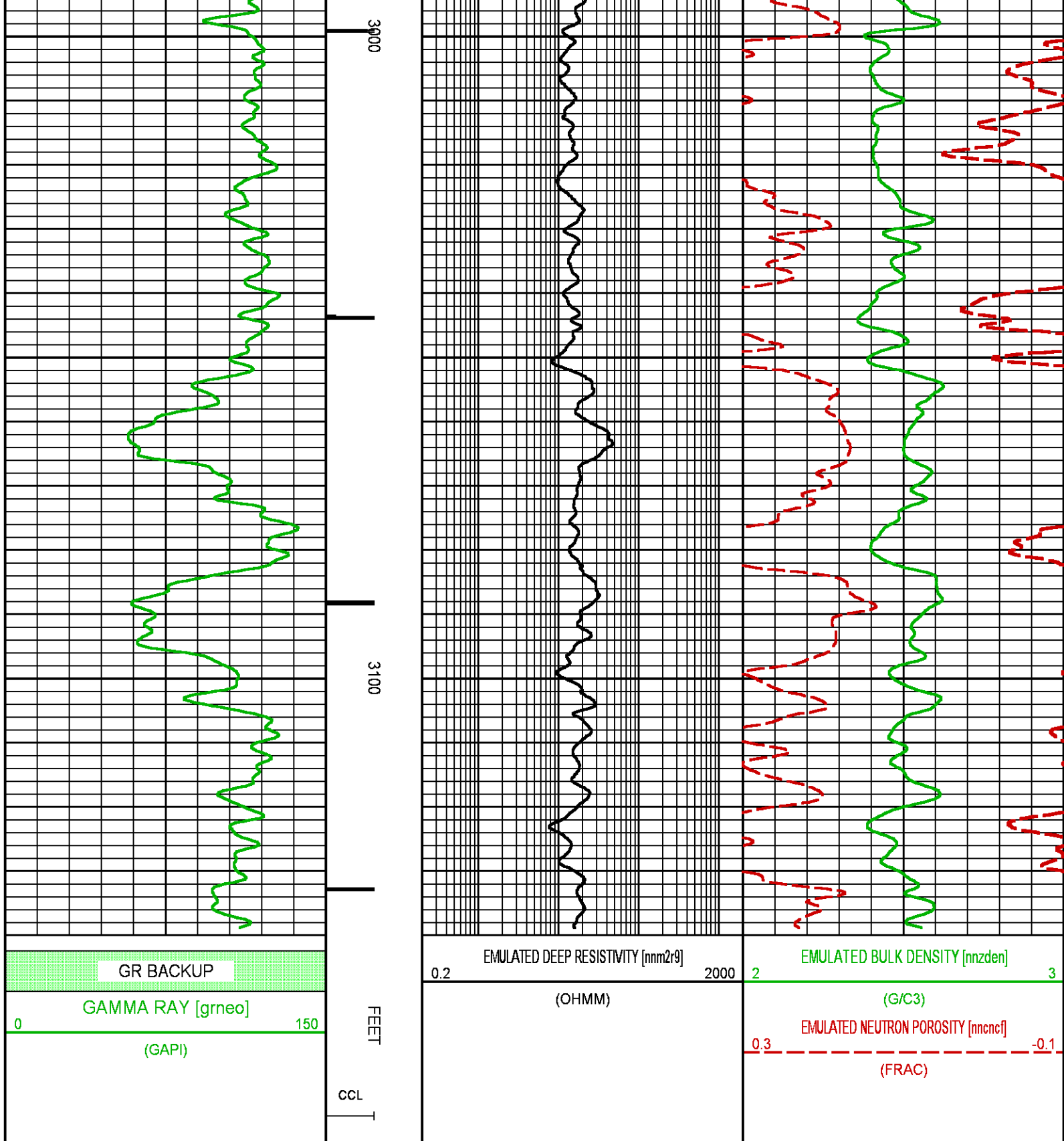
Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_BRUTON_19_14E_NEO\NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2495 - 3140 Feet

Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_BRUTON_19_14E_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON 19-14E
Field : VEGA
File Interval : 2497.25 - 8007.25 Feet
OCT : NA









NEO RESULTS FOR BRUTON 19-14E (MAIN)

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_19_14E_NEO\NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100" Scale]

Plot Interval : 4320 - 8007.25 Feet

Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_BRUTON_19_14E_NEO\Merged_Set_Final.xtf

Created On : N/A

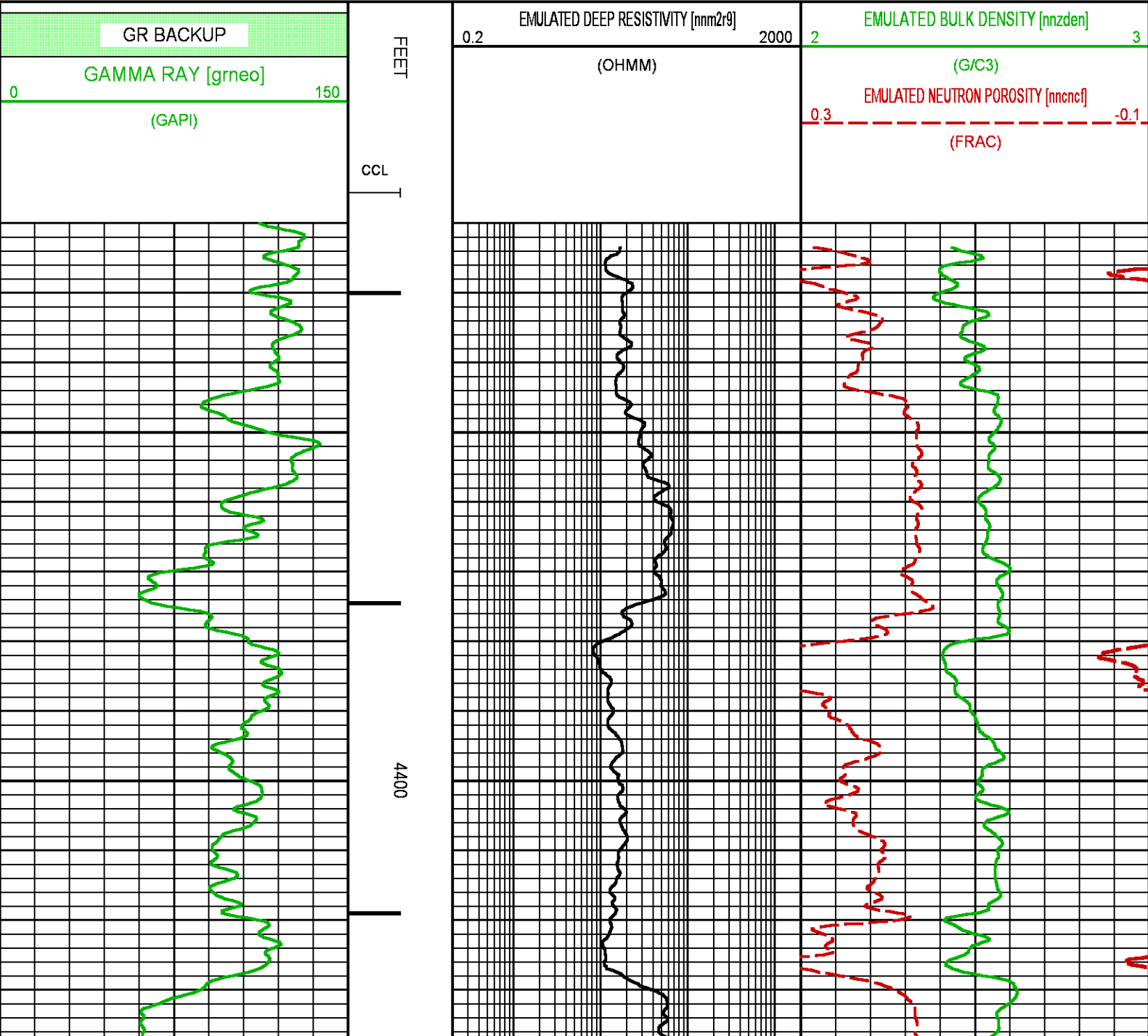
Company : LARAMIE ENERGY

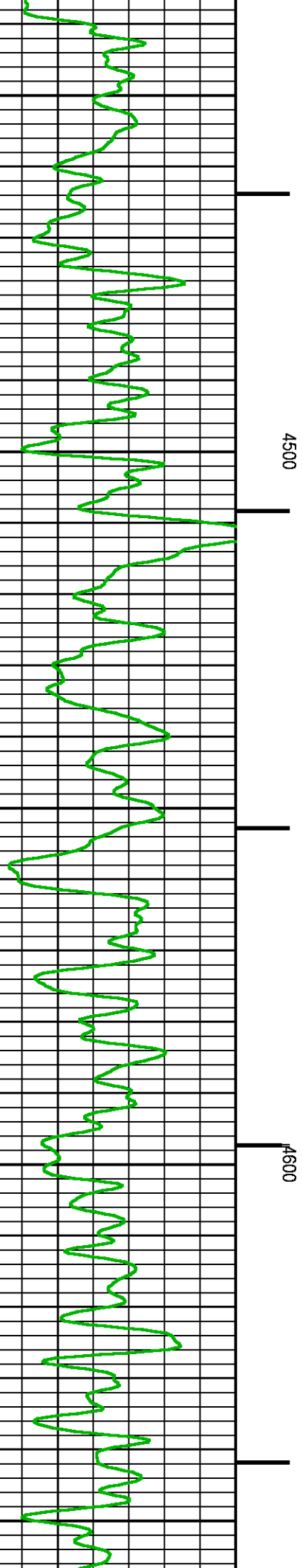
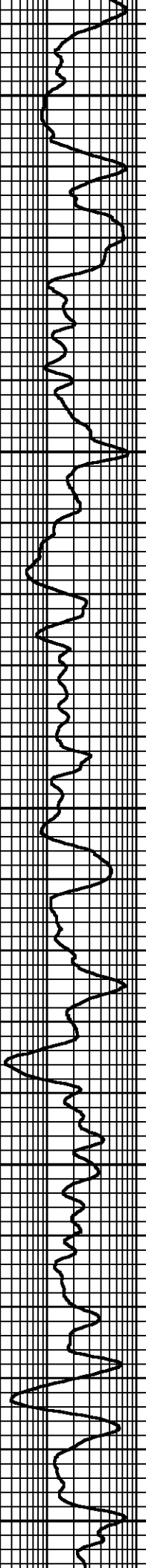
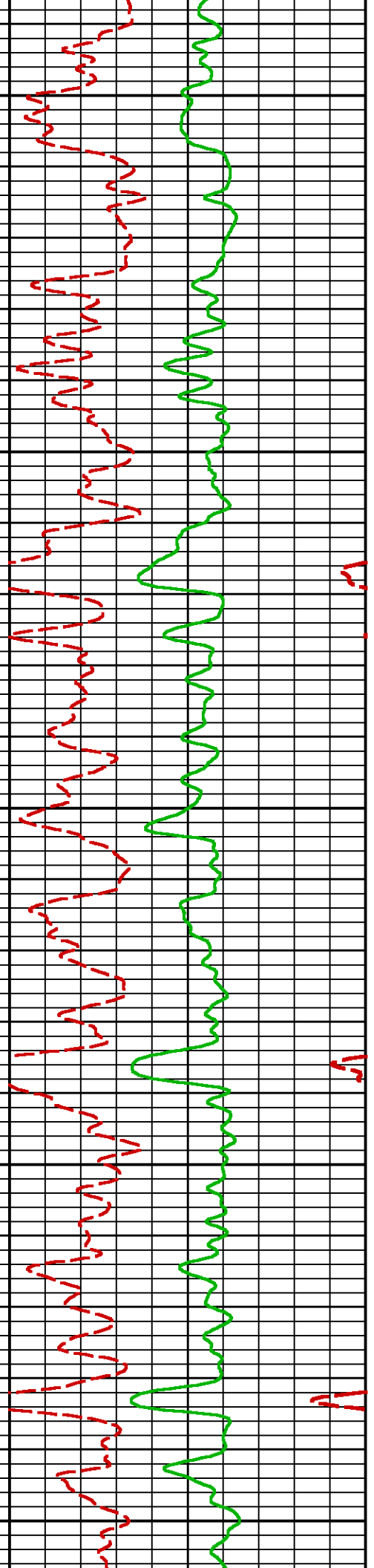
Well : BRUTON 19-14E

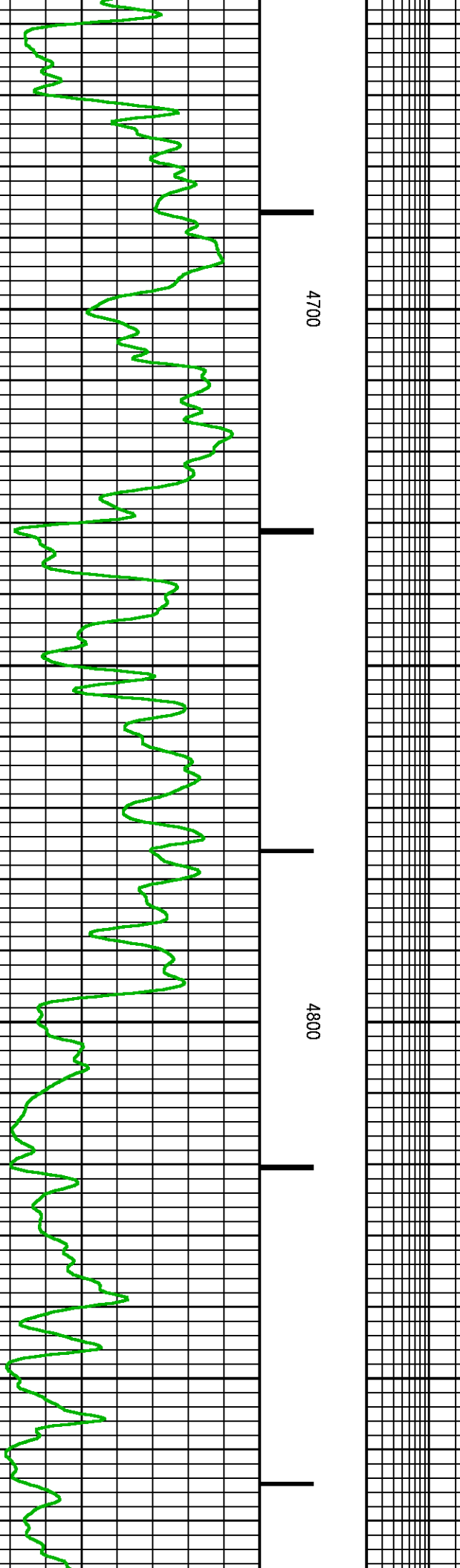
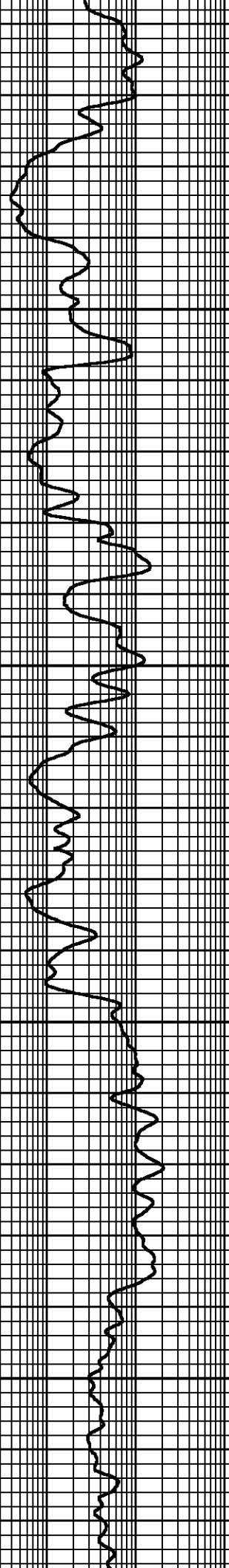
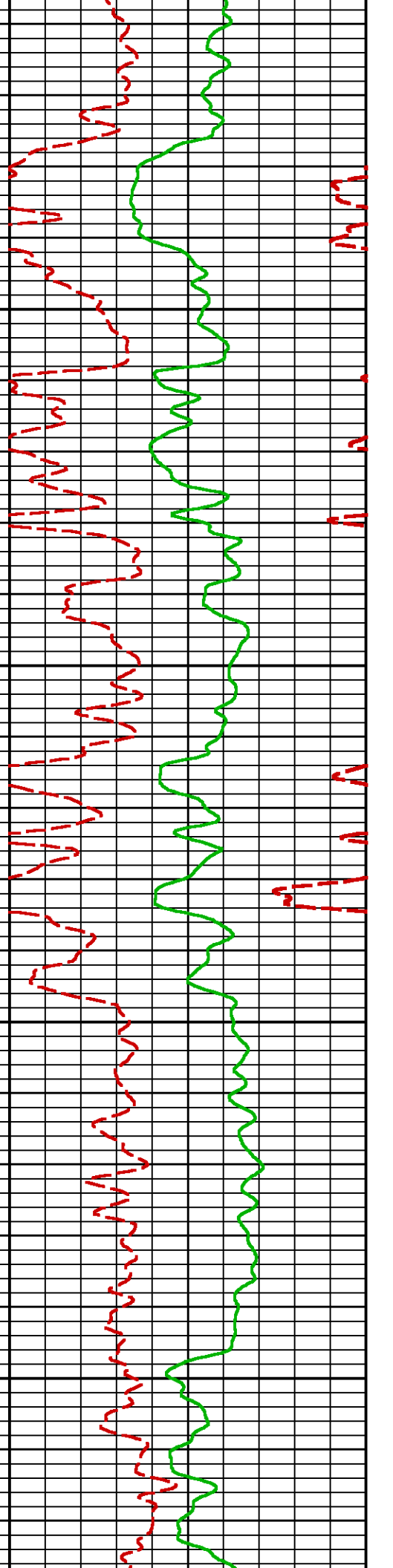
Field : VEGA

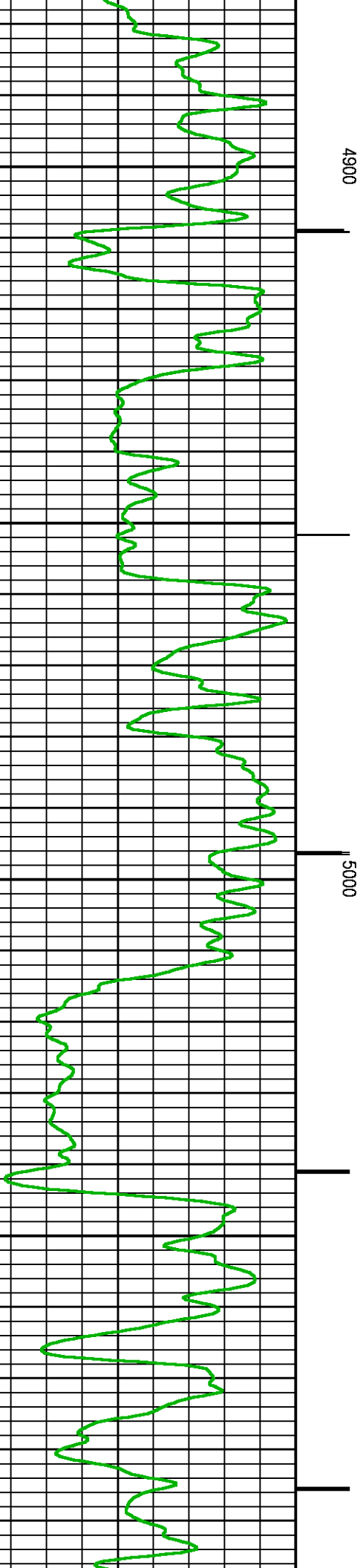
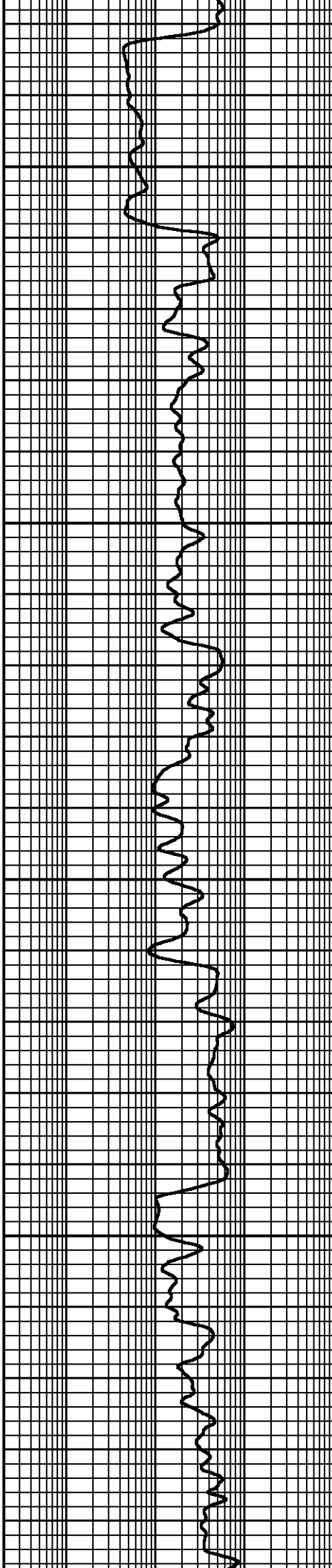
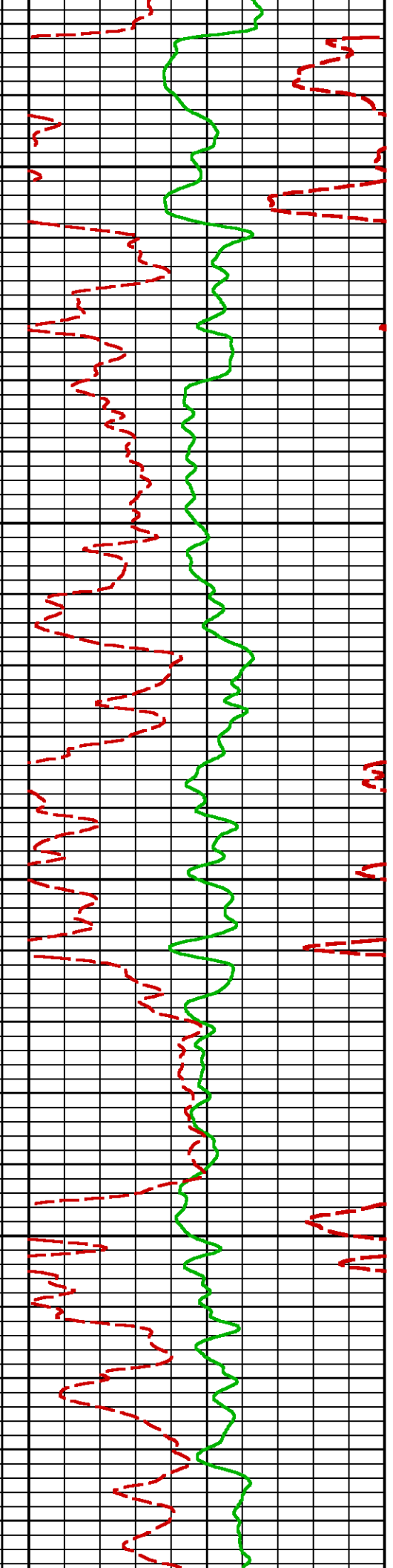
File Interval : 2497.25 - 8007.25 Feet

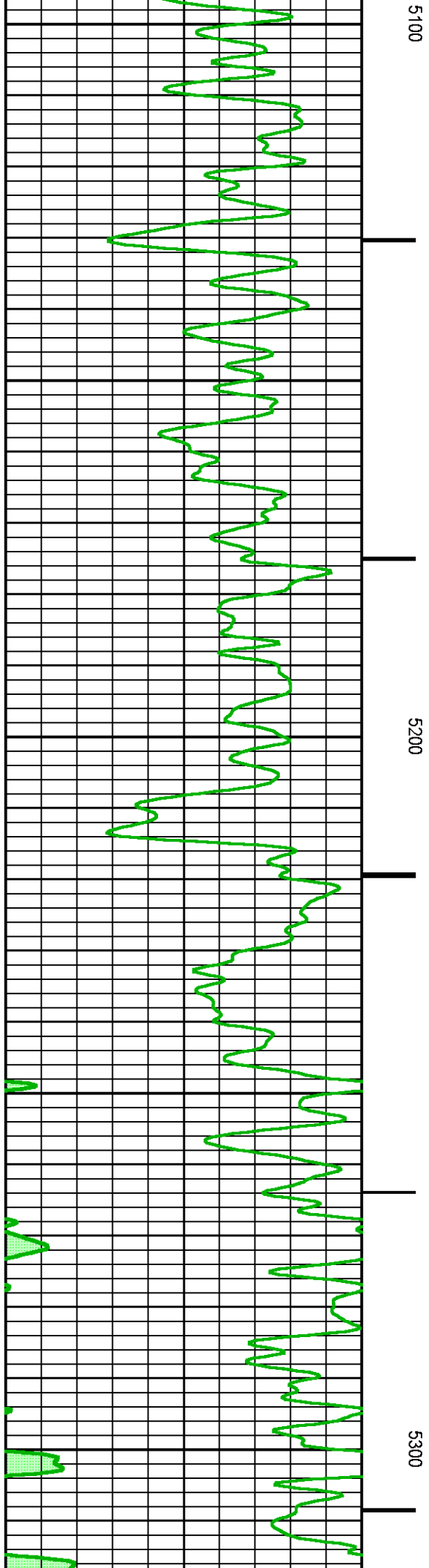
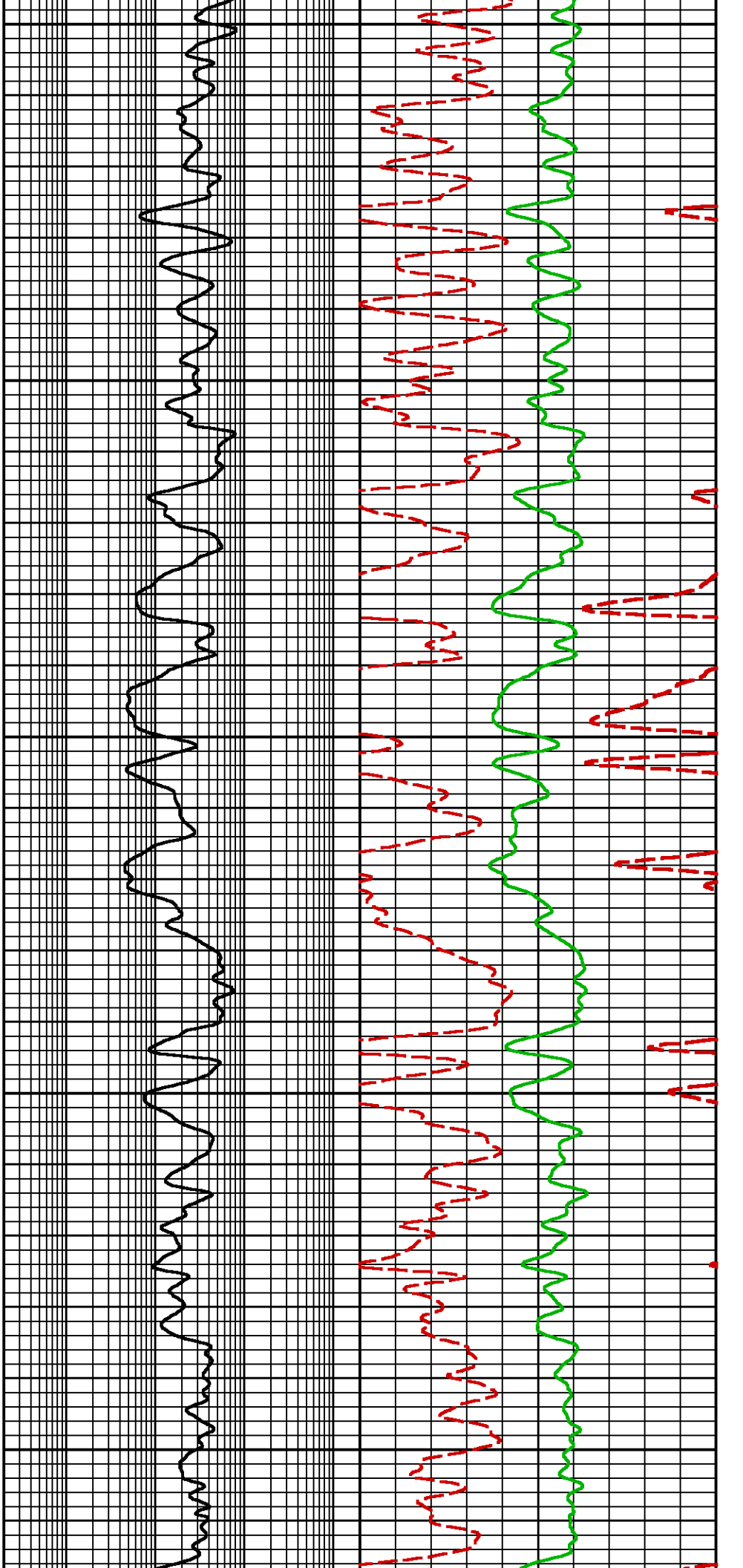
OCT : NA

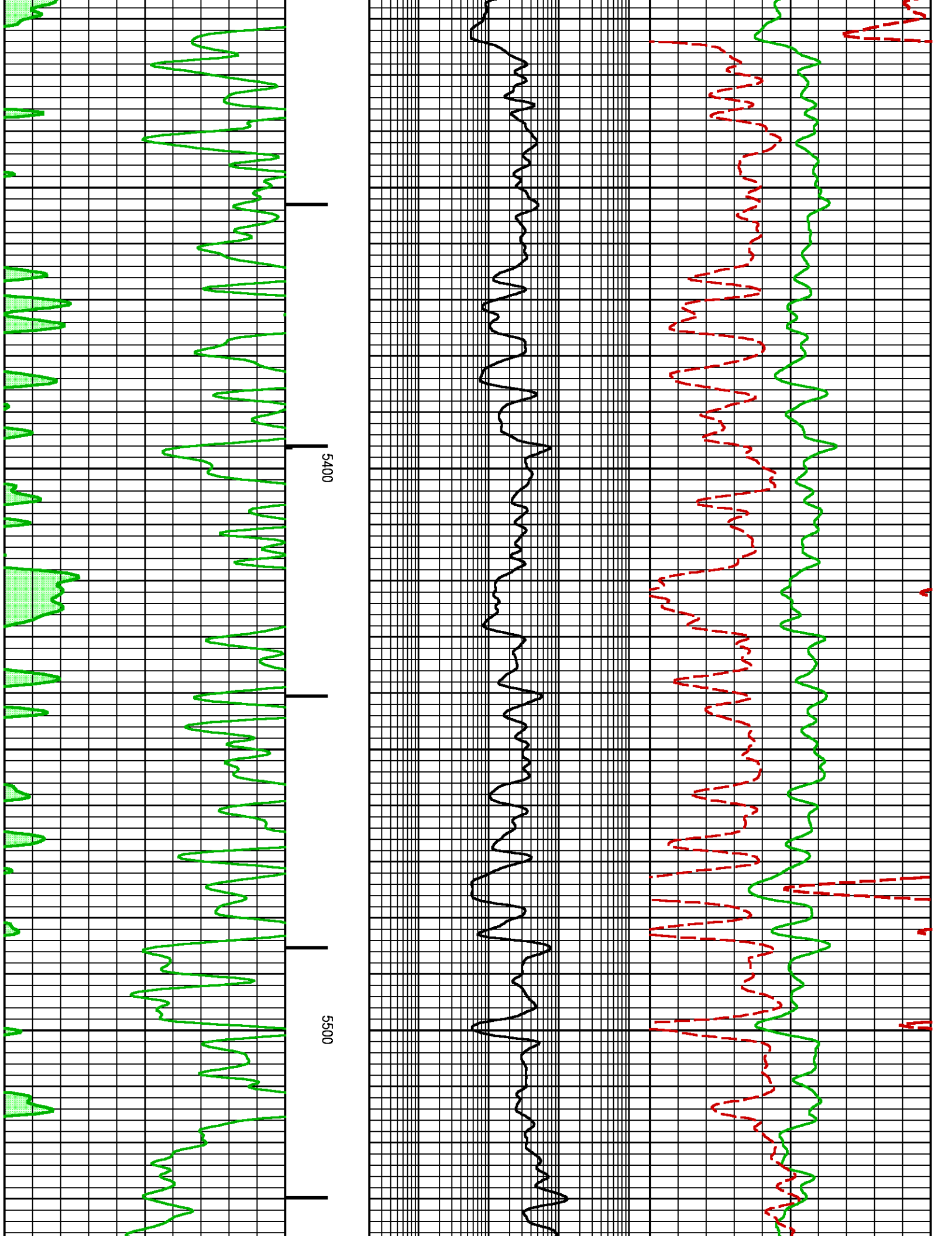


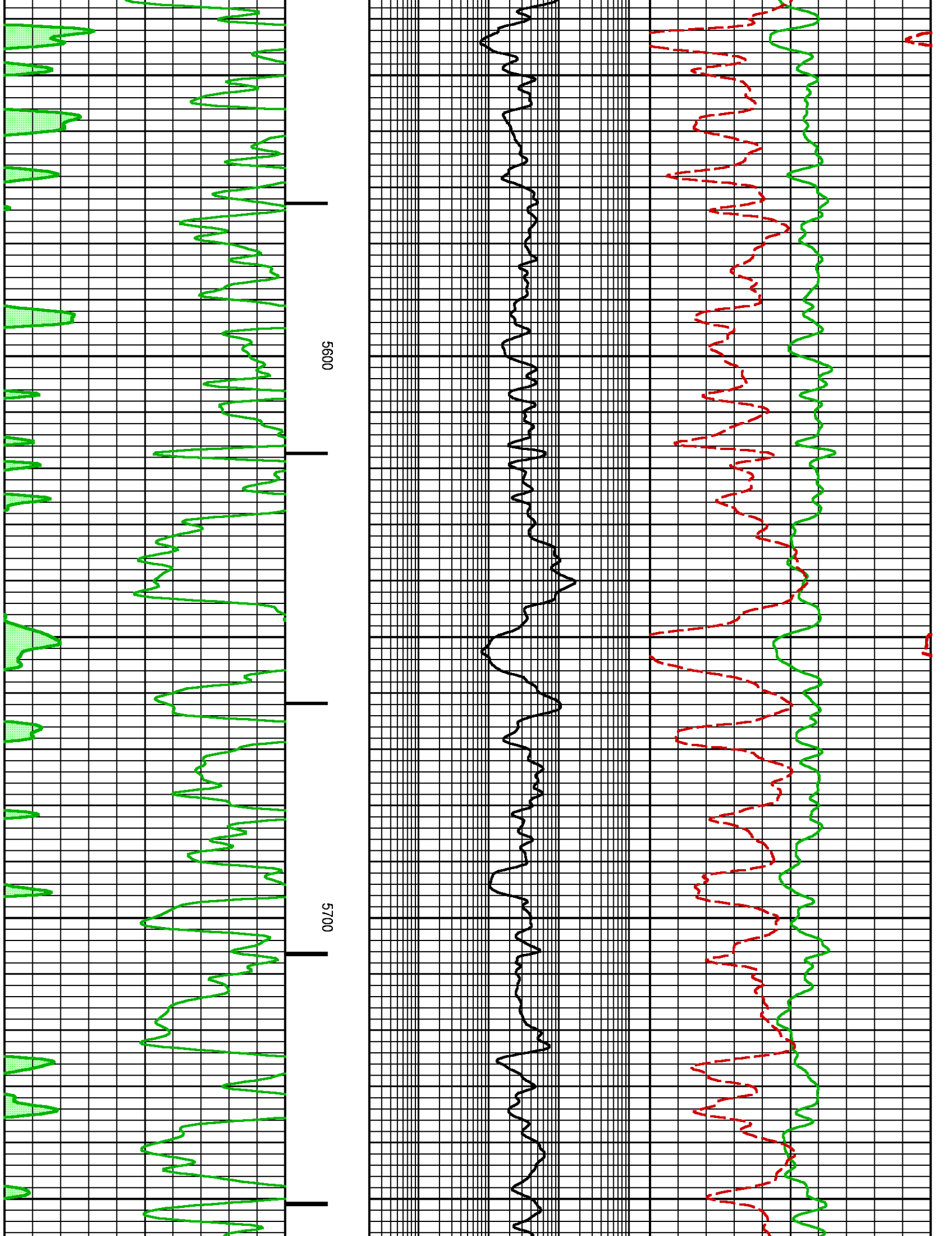


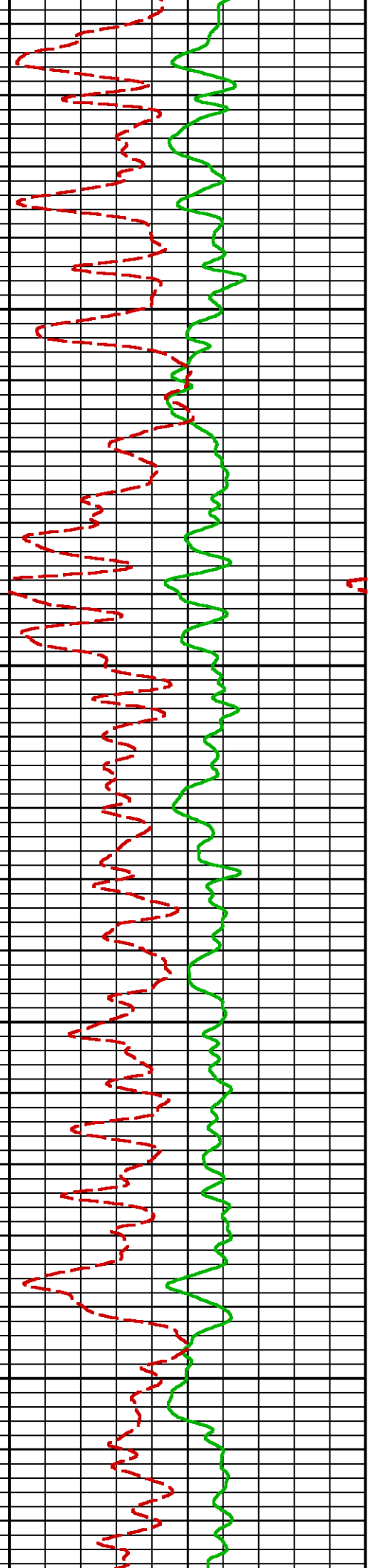
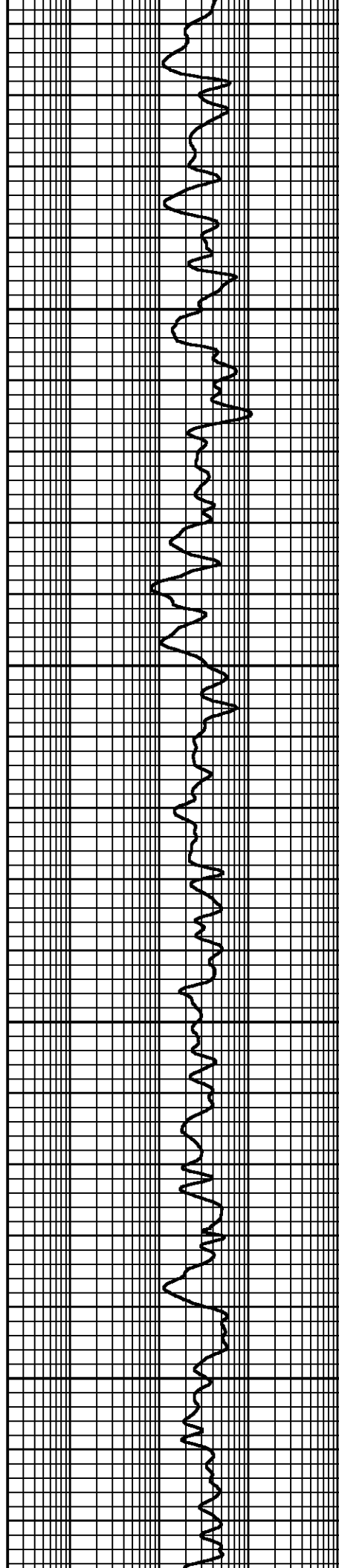
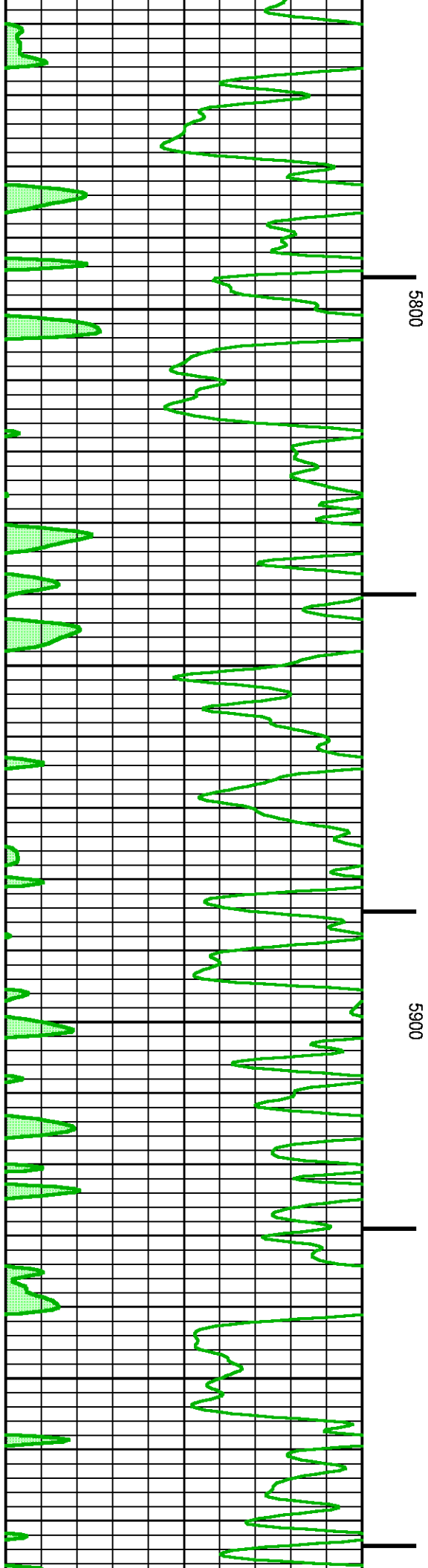


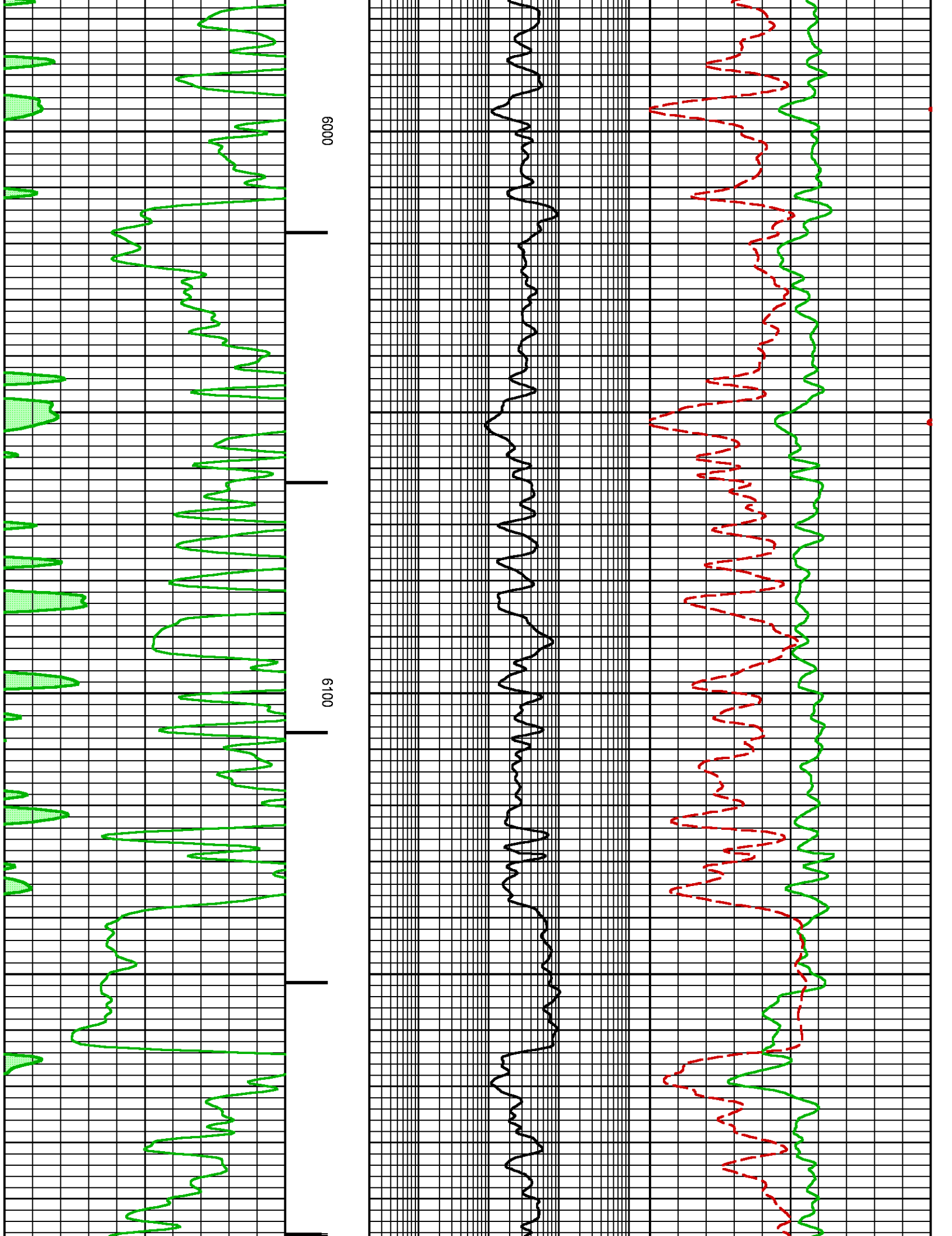


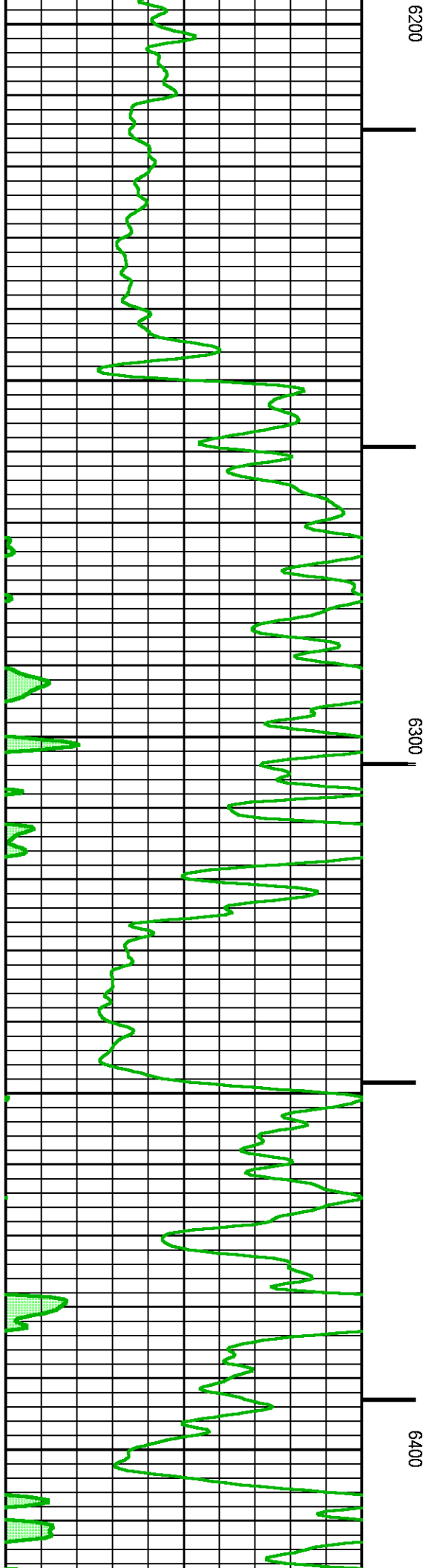
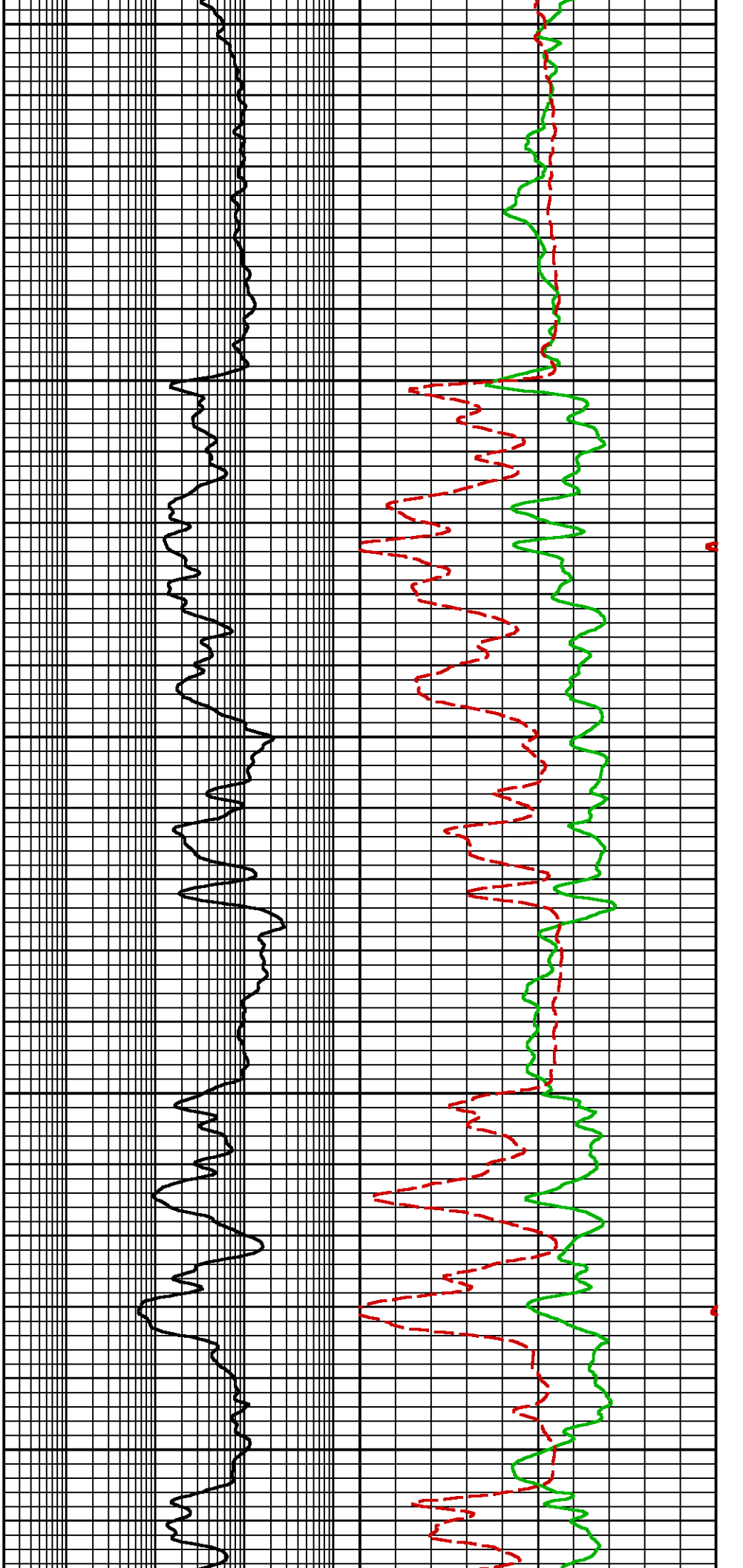


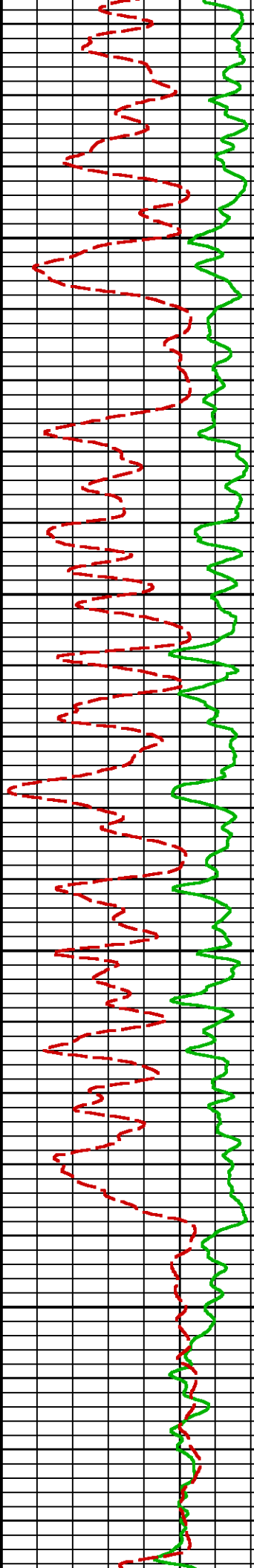
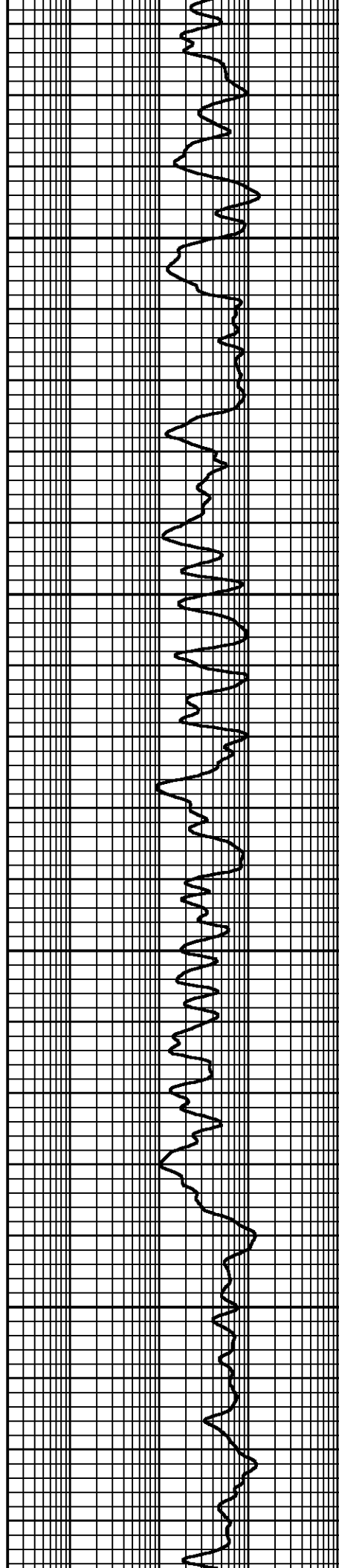
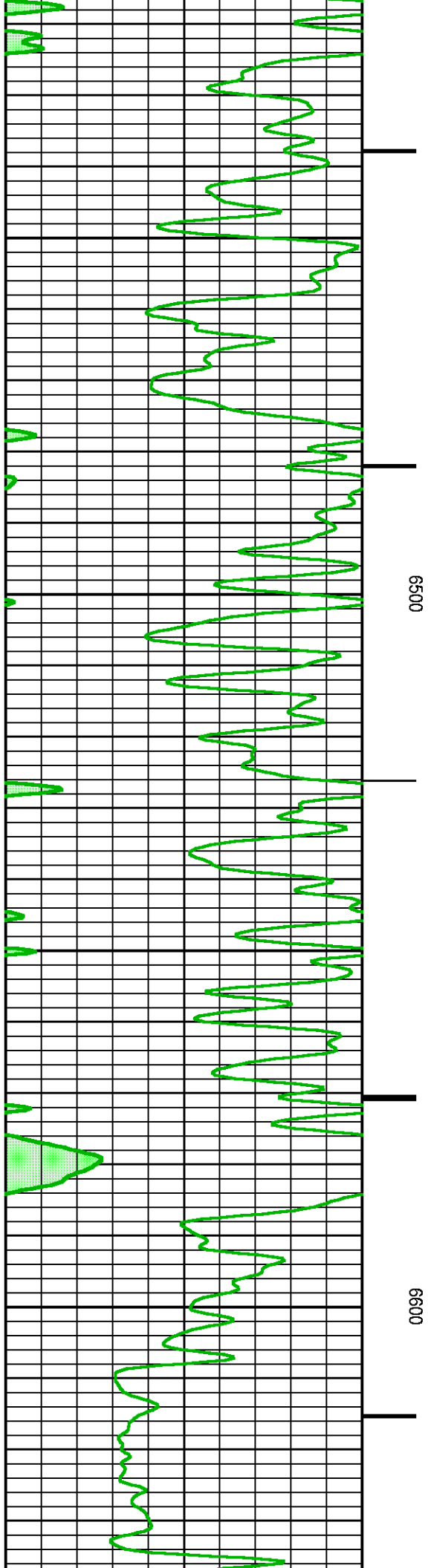


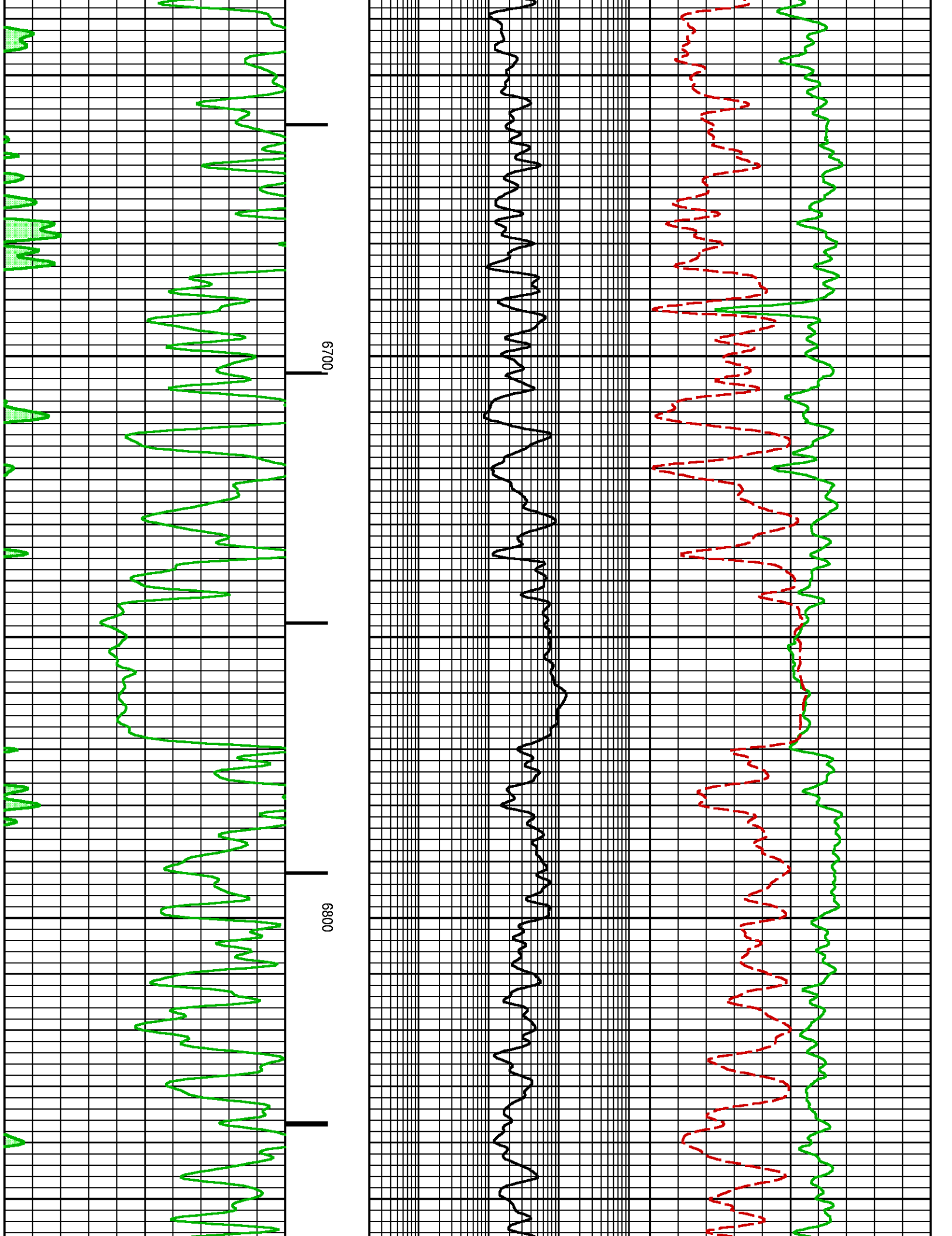


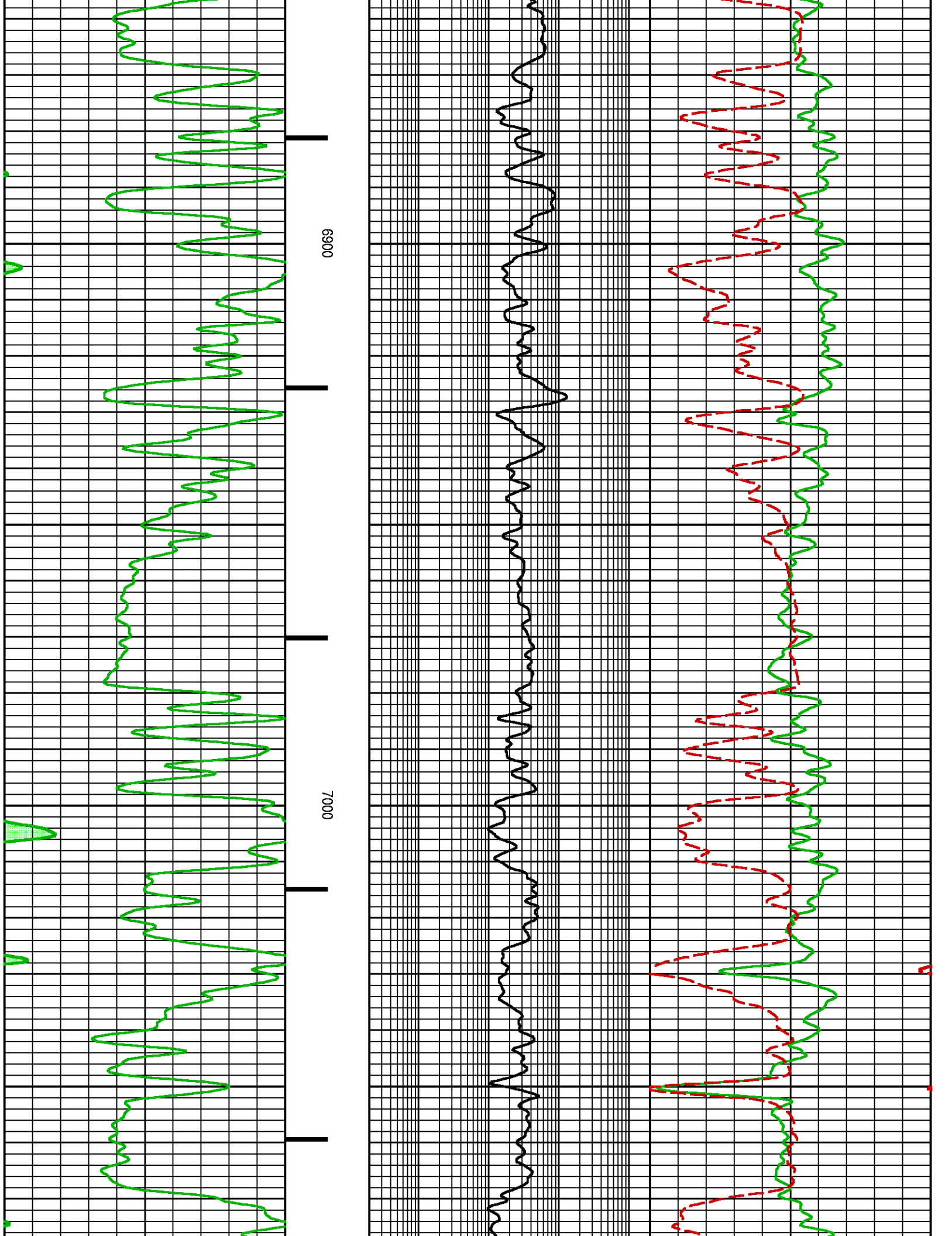


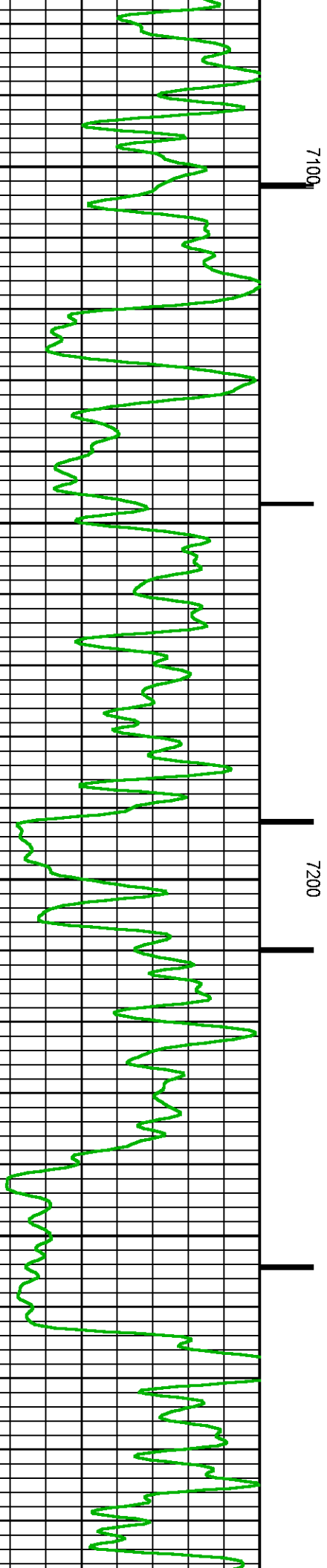
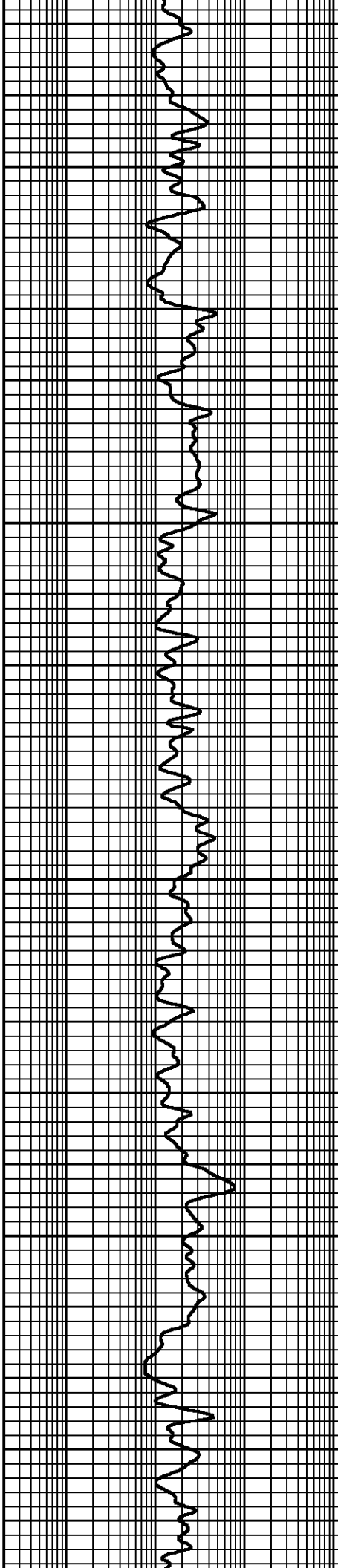
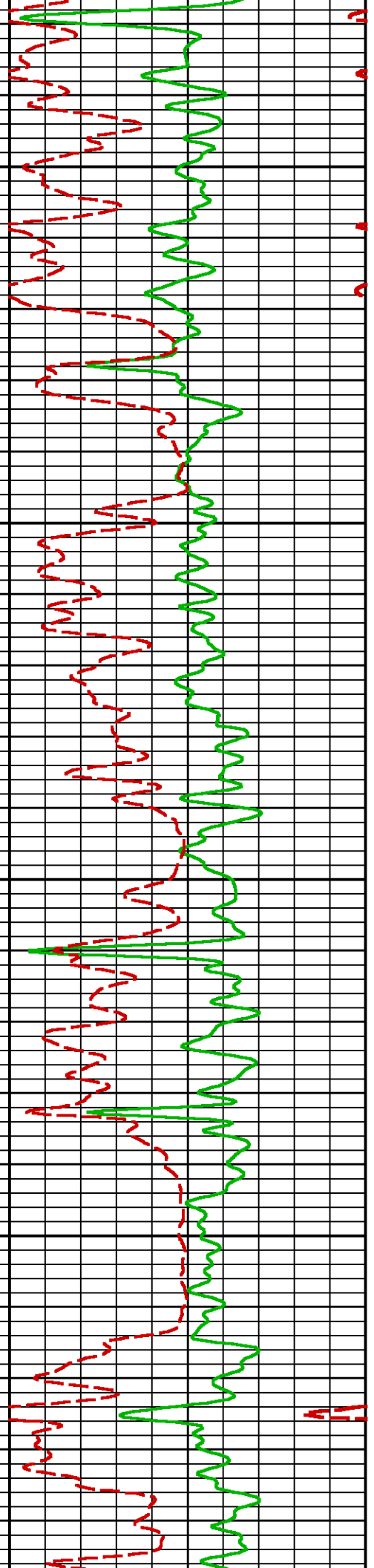


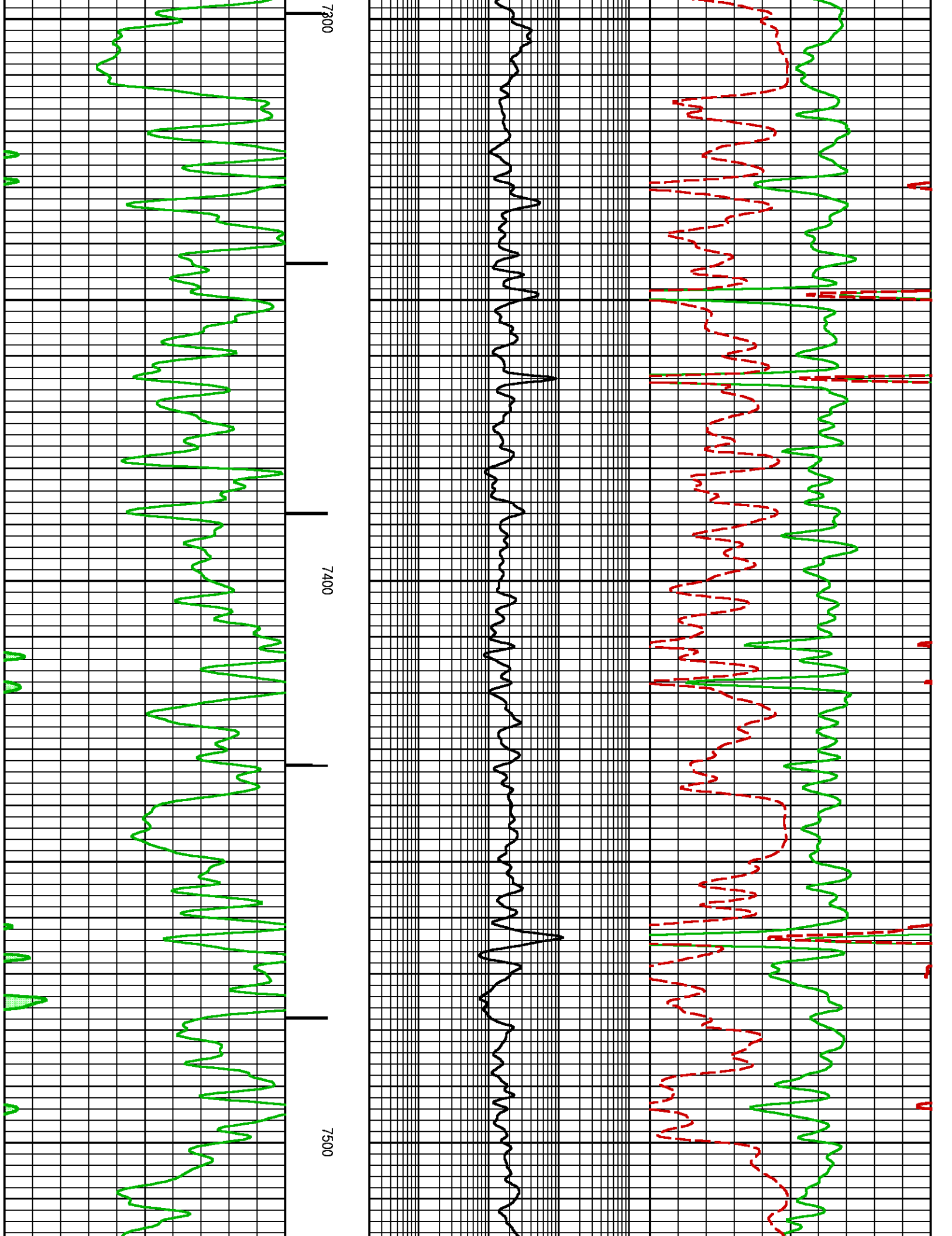


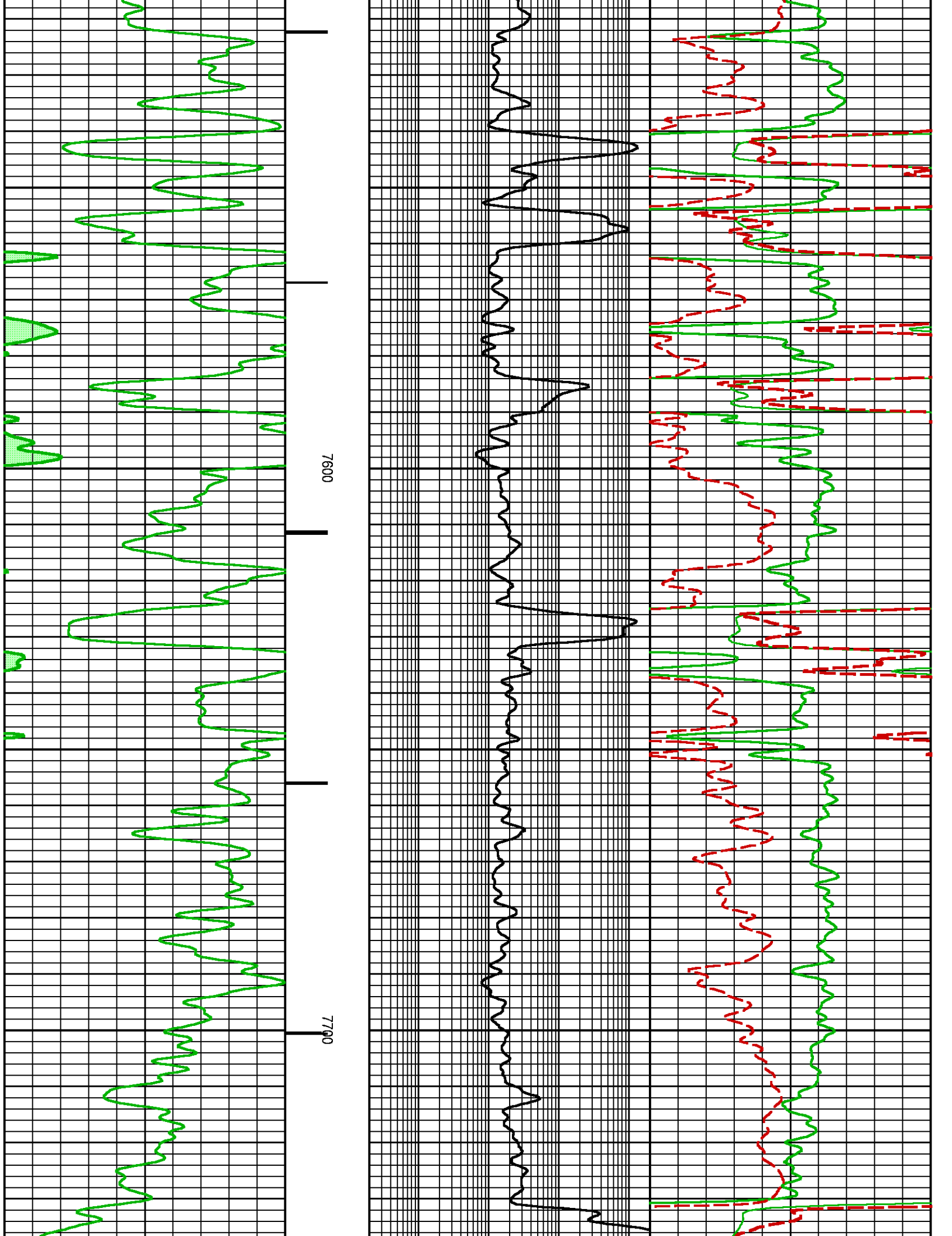


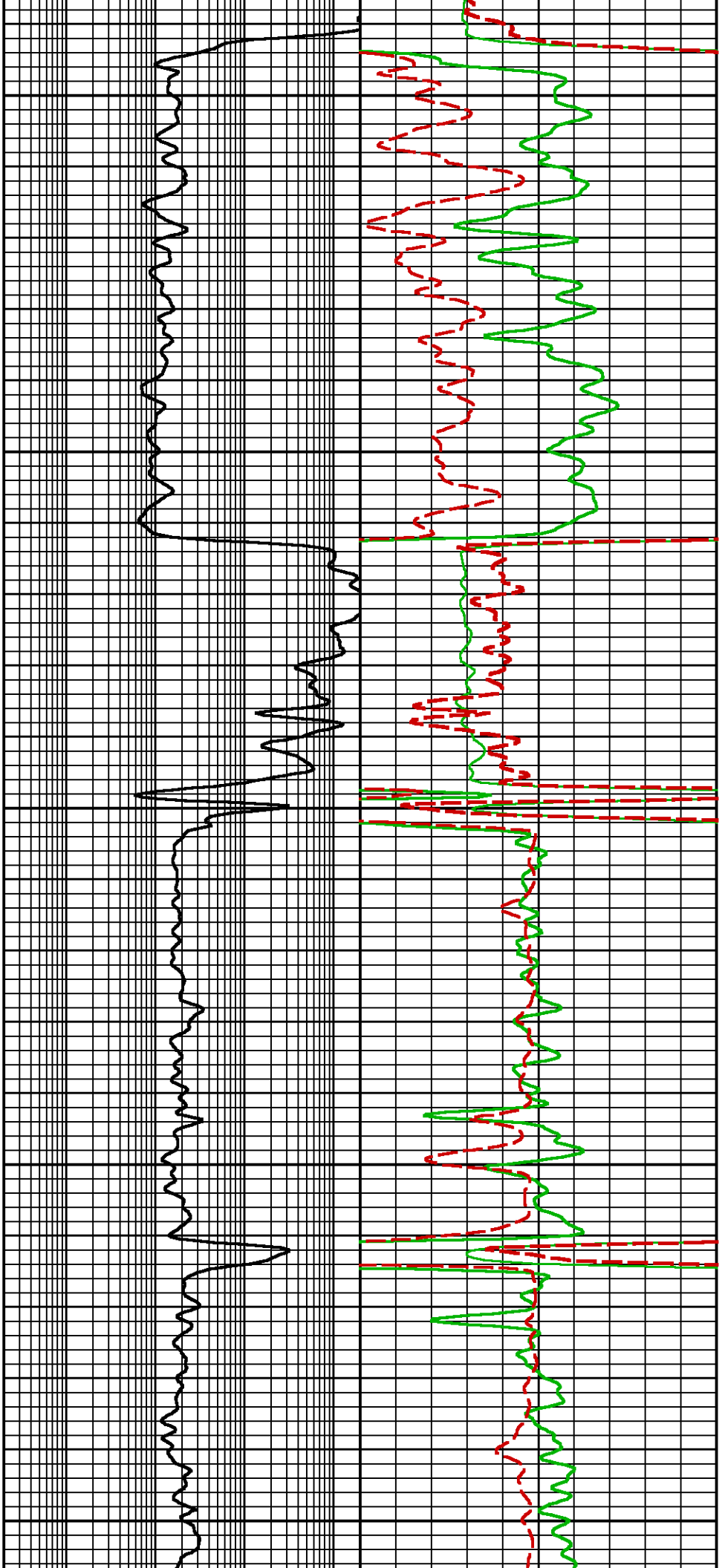






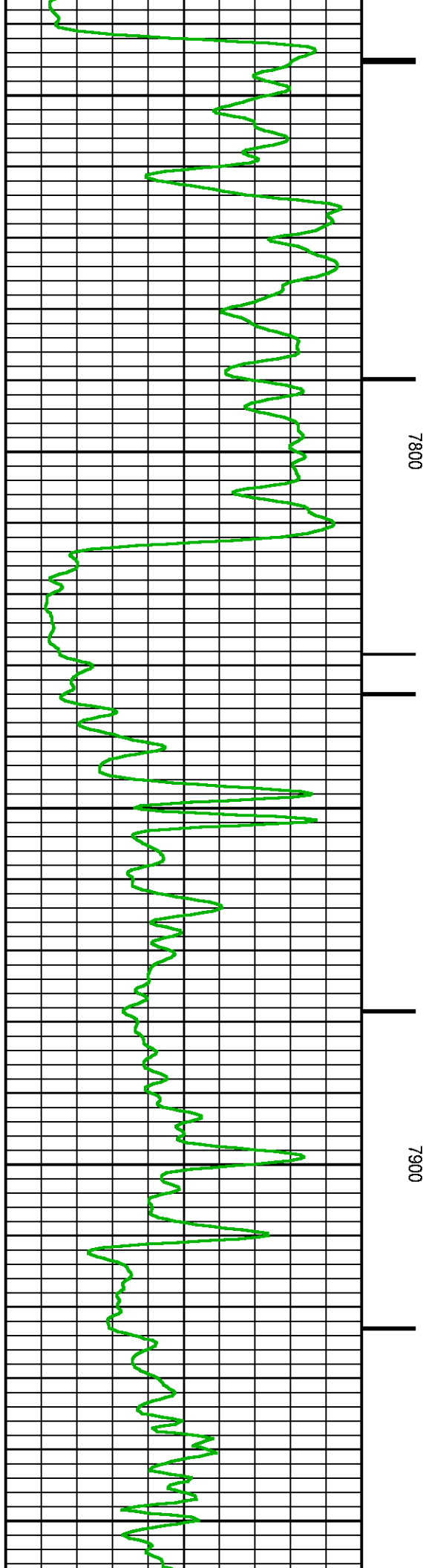


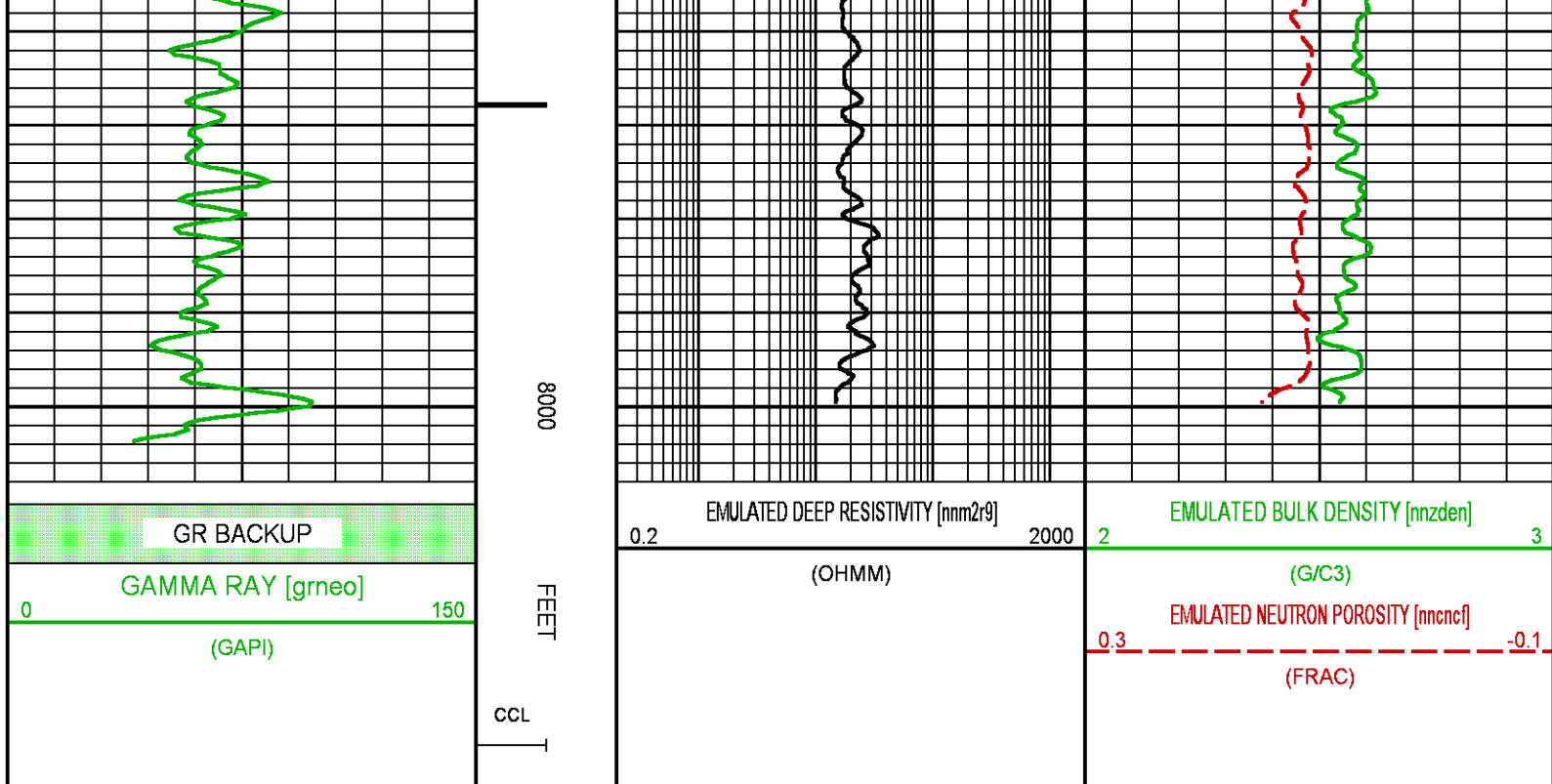



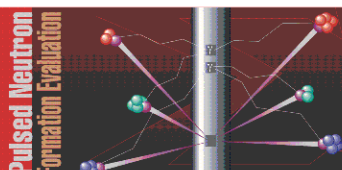


7800

7900





 	COMPANY <u>LARAMIE ENERGY</u> WELL <u>BRUTON 19-14E</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>COLORADO</u>		FILE NO: <u>28080-01</u> API NO: <u>05077103770000</u>
	LOCATION: <u>SEE REMARKS SECTION</u>		ELEVATIONS: KB 7449.0 FT DF 7448.0 FT GL 7425.0 FT
	SEC <u>19</u> TWP <u>9S</u> RGE <u>93W</u>		
		DATE <u>22-AUG-2017</u>	