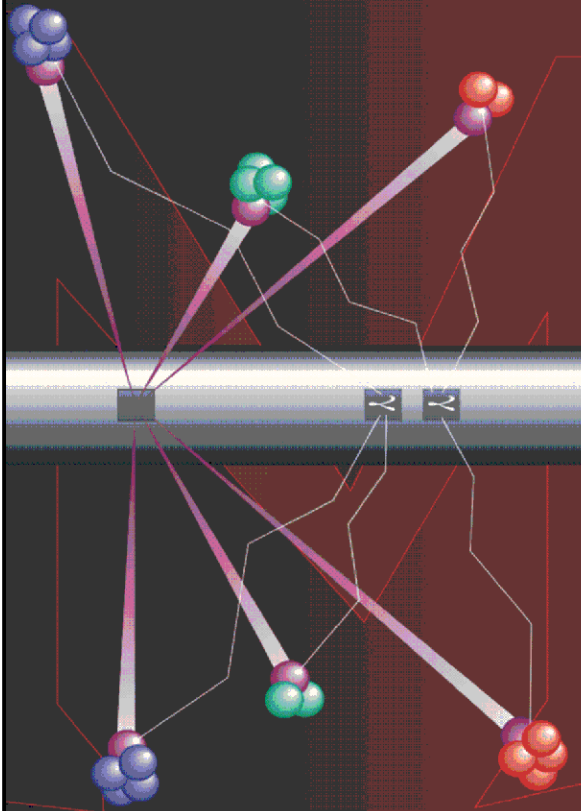


# Pulsed Neutron Formation Evaluation



## NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 30-02E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 30 TWP 9S RGE 93W

ELEVATIONS:

KB 7449.0 FT DF 7448.0 FT GL 7425.0 FT

DATE 06-JUL-2017 ECC 27786-01

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>06-JUL-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US109818</u>	DATE: <u>03-AUG-2017</u>

FROM	TO								
<u>2268 FT</u>	<u>7499 FT</u>								

### REMARKS

LOCATION:  
SHL: LAT:39.255232N, LONG:107.806537W  
BHL: LAT:39.254394N, LONG:107.806907W

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 30-02E (G-SAND)

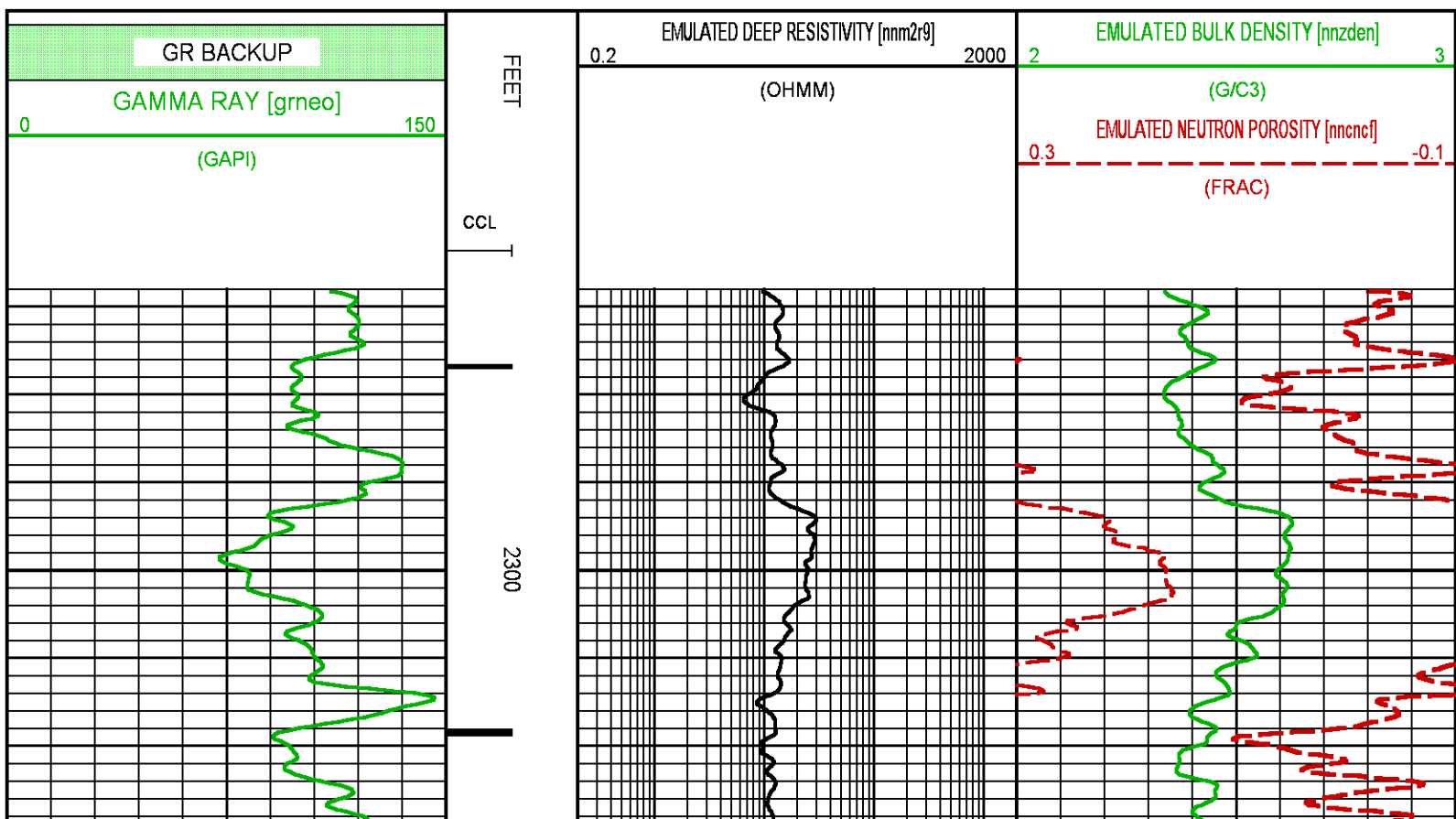
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

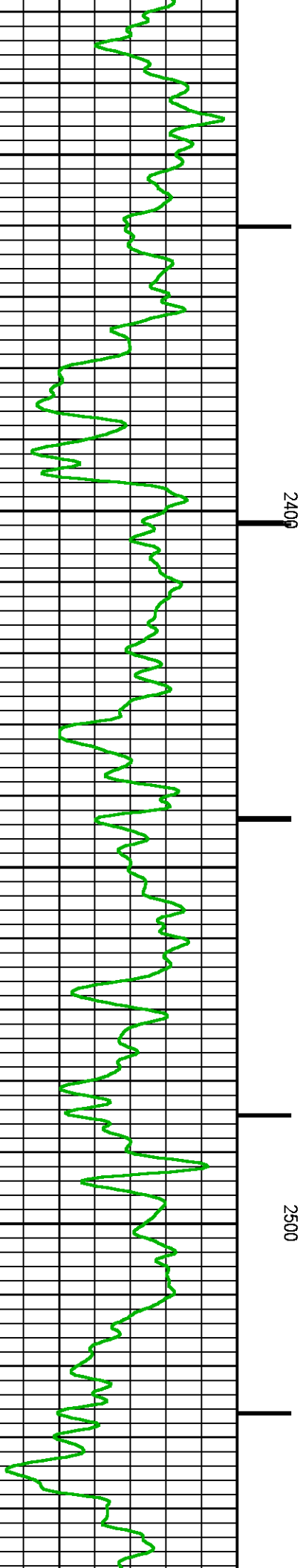
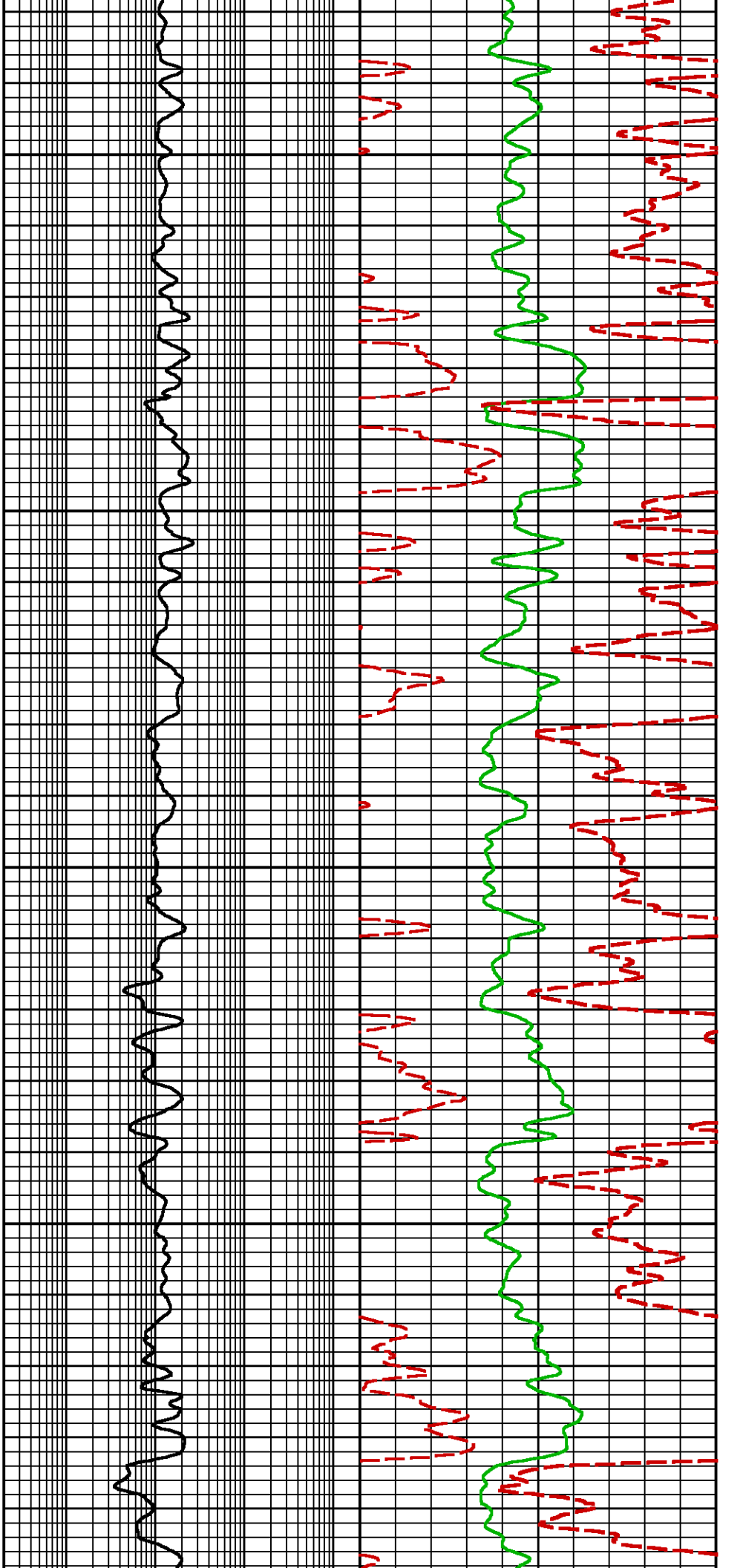
Plotted: Thu Aug 03 09:16:37 2017

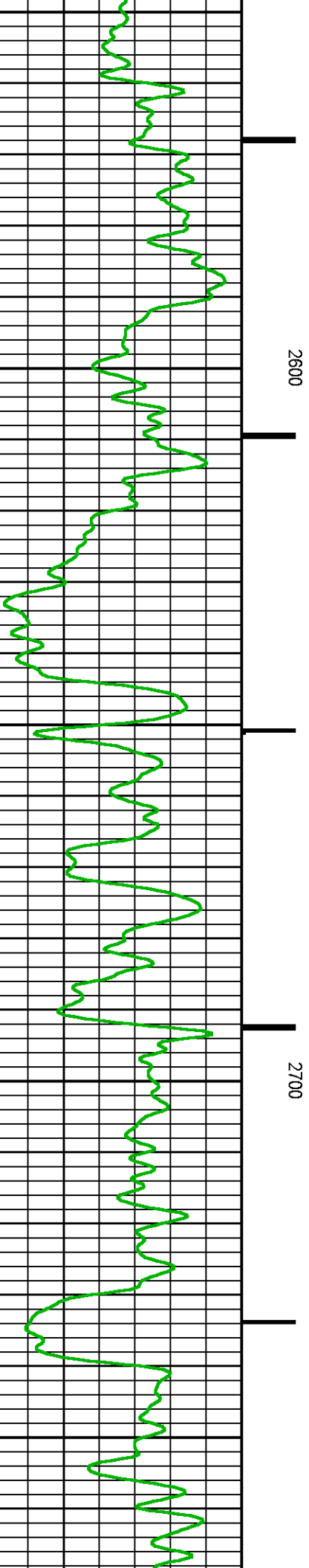
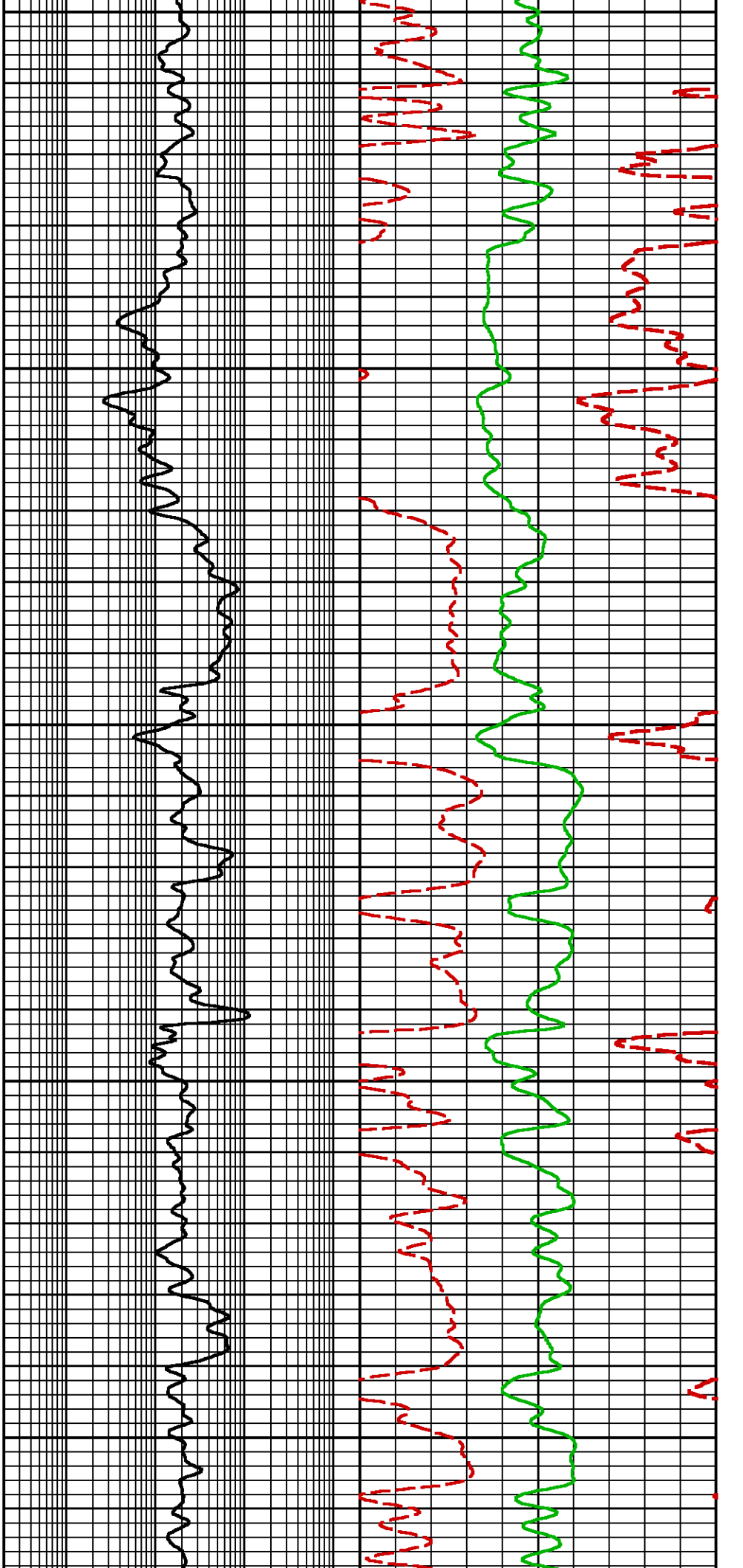
### CURVE MEASURE POINT OFFSET

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\_30\_02E\_NEO\NEO\_PRESENTATION\_LARAMIE\_G-Sand.pdf [5"/100' Scale]  
Plot Interval : 2268.25 - 2883 Feet  
  
Data File 1 : F1 : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_BRUTON\_30\_02E\_NEO\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY  
Well : BRUTON 30-02E  
Field : VEGA  
File Interval : 2268.25 - 7499.25 Feet  
OCT : NA

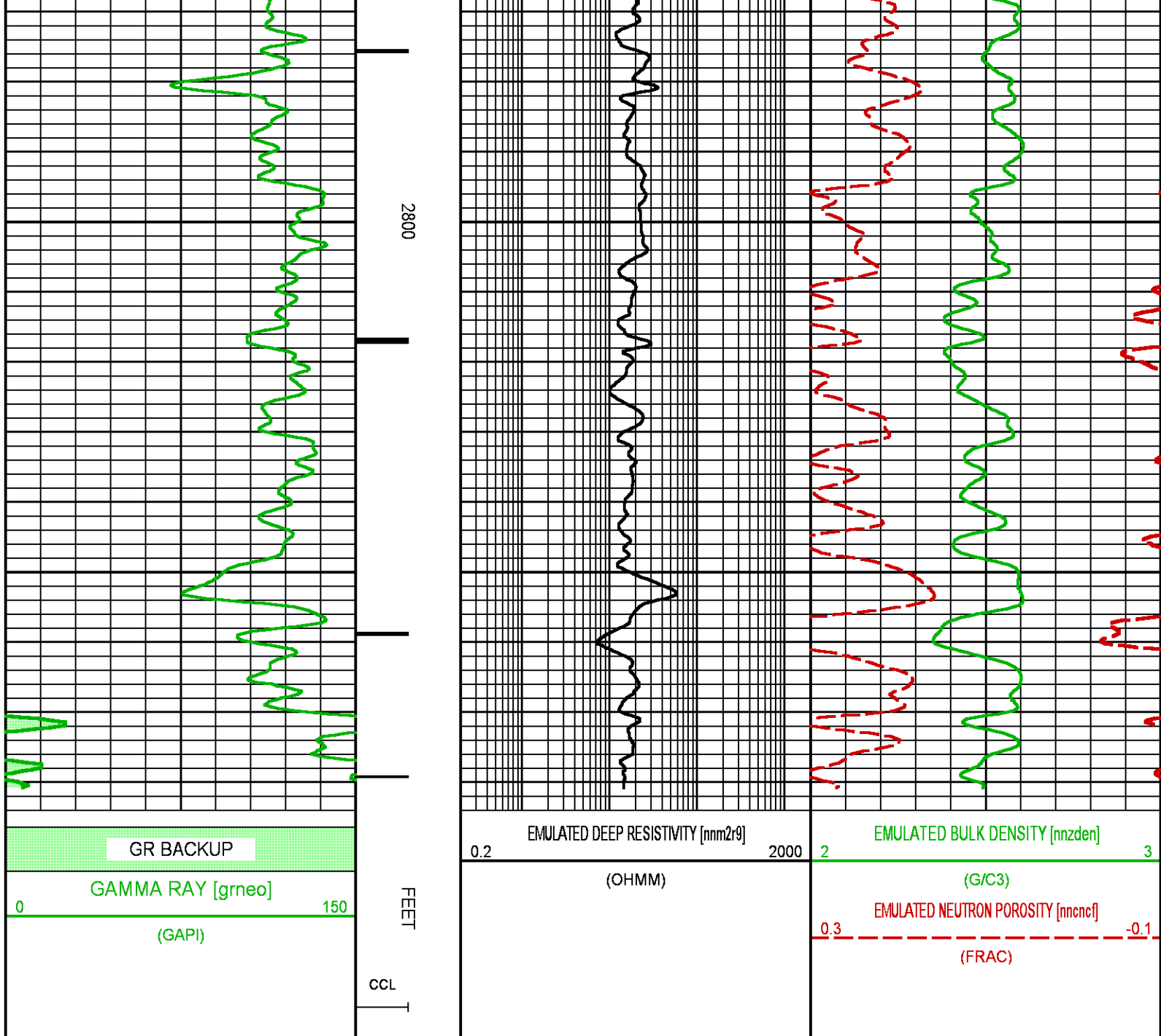






2600

2700



## NEO RESULTS FOR BRUTON 30-02E (MAIN)

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

Plotted: Thu Aug 03 09:18:24 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 30\_02E\_NEO\NEO\_PRESENTATION\_LARAMIE\_MAIN.pdf [5"/100" Scale]

Plot Interval : 4013 - 7499.25 Feet

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Created On : N/A

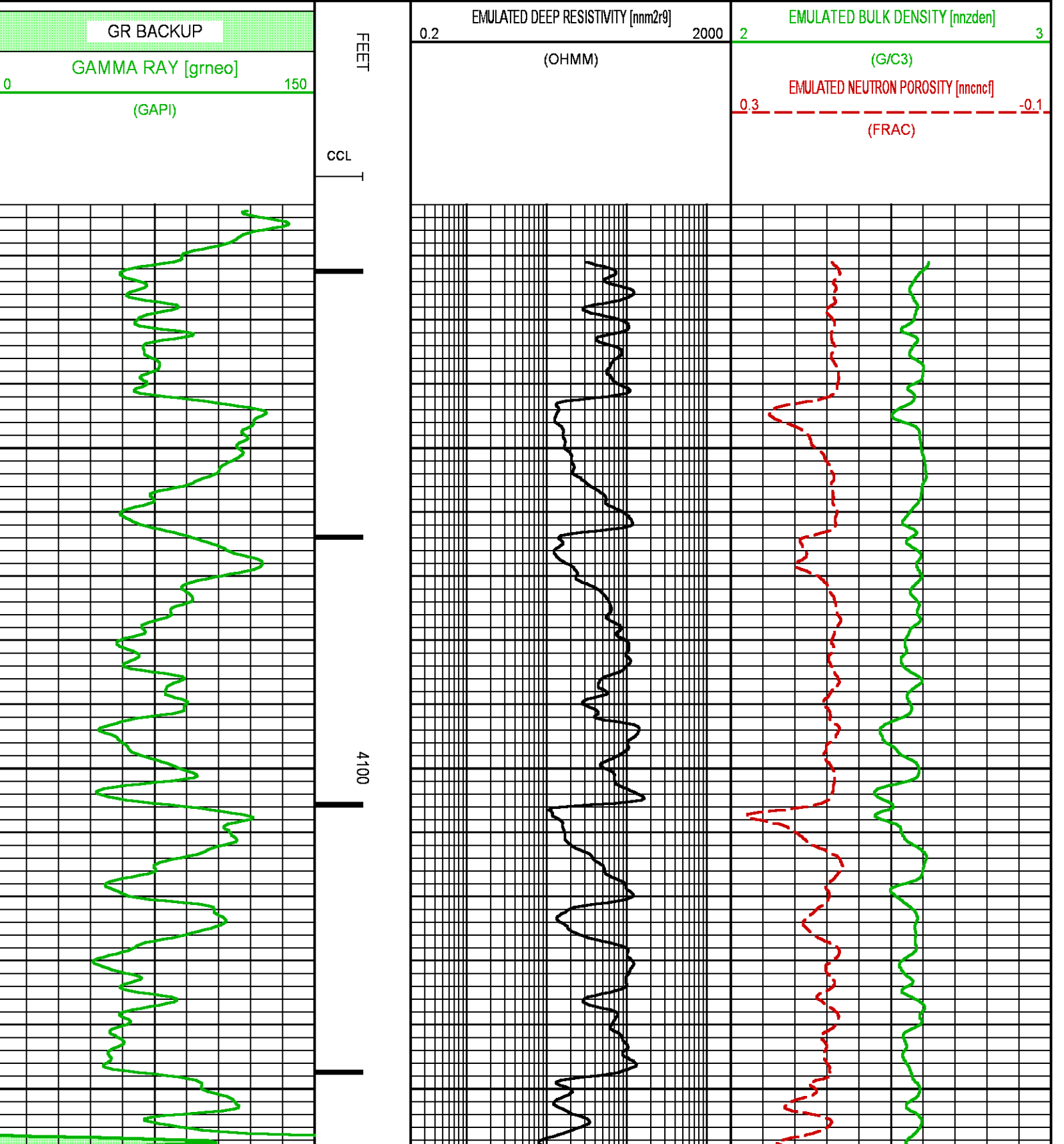
Company : LARAMIE ENERGY

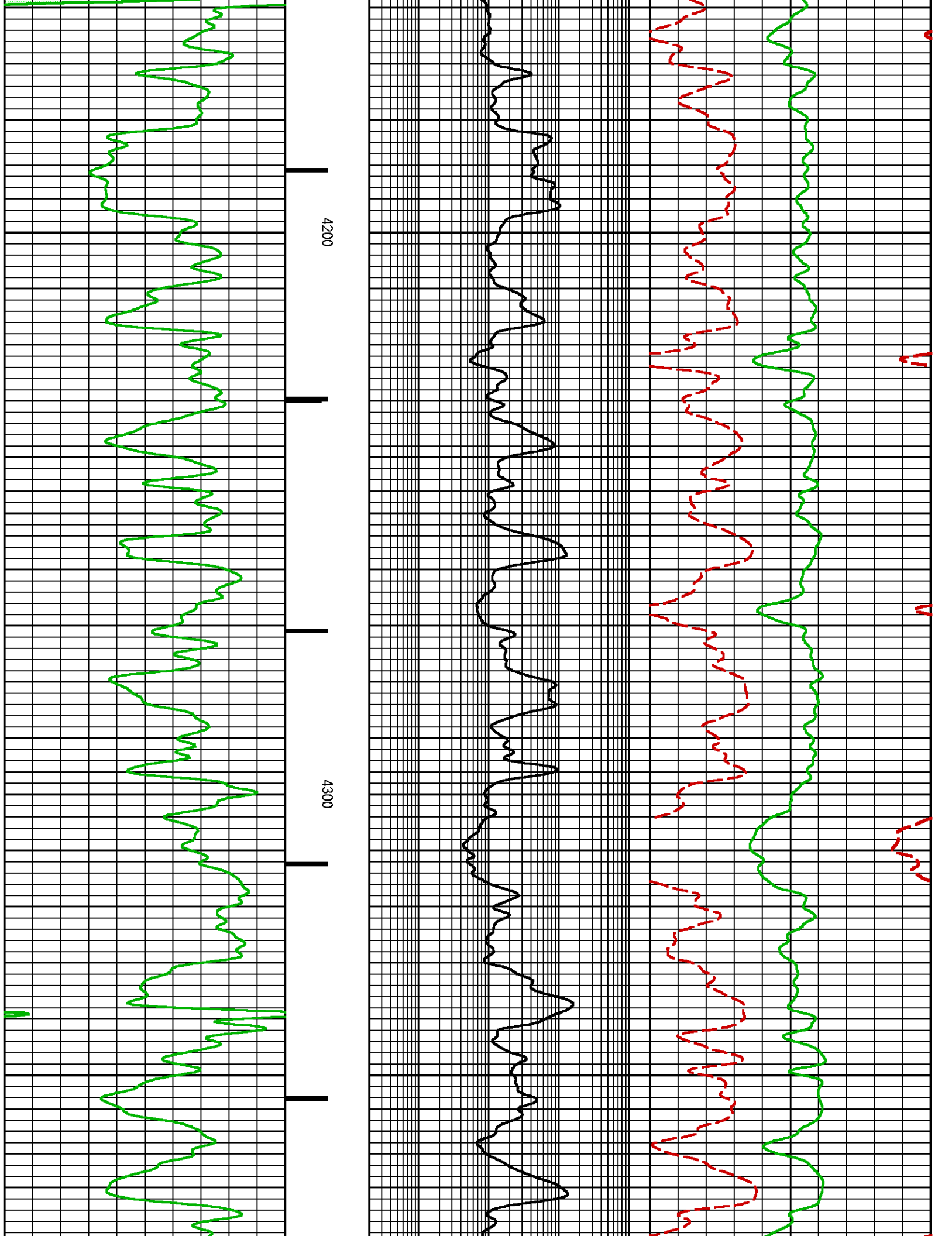
Well : BRUTON 30-02E

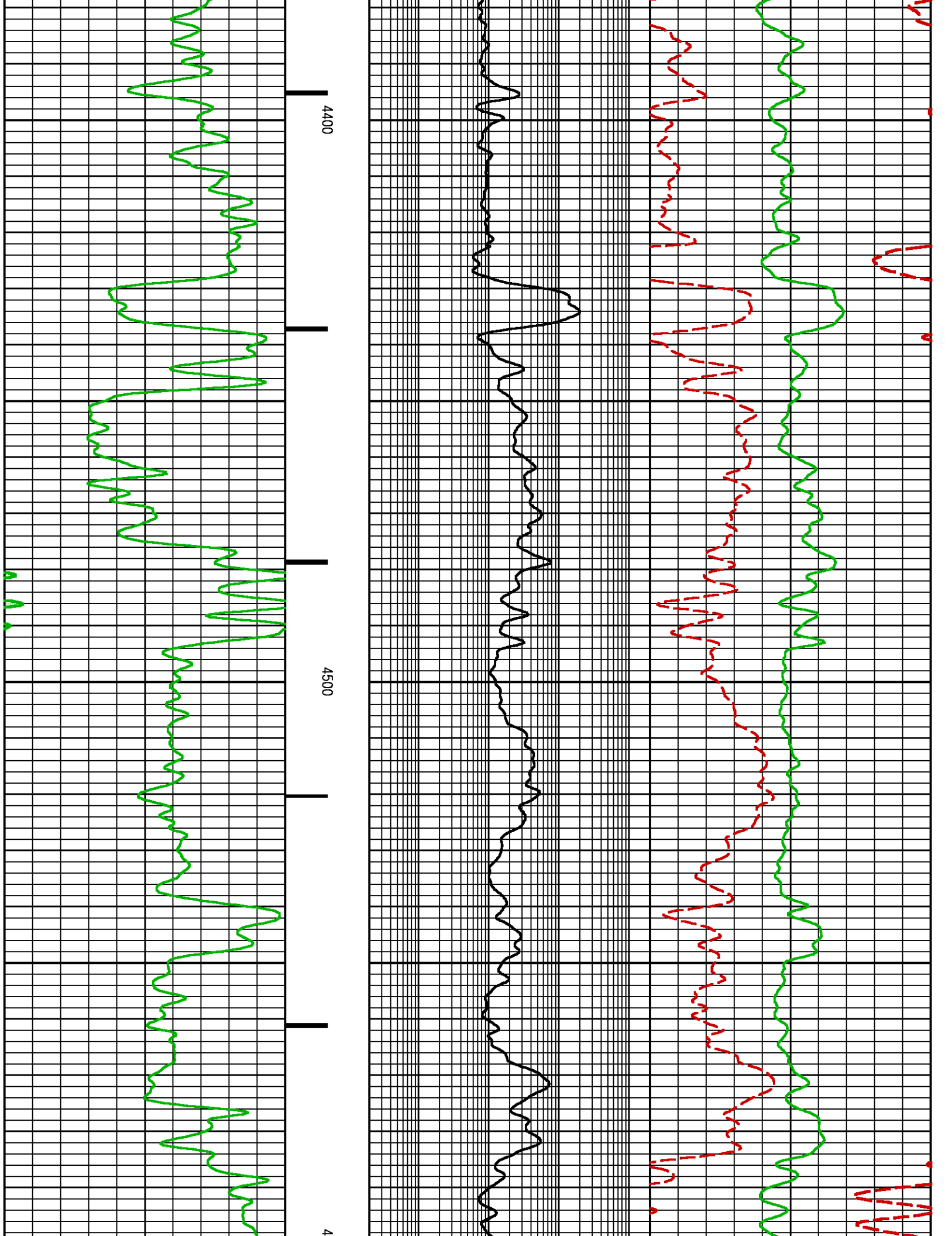
Field : VEGA

File Interval : 2268.25 - 7499.25 Feet

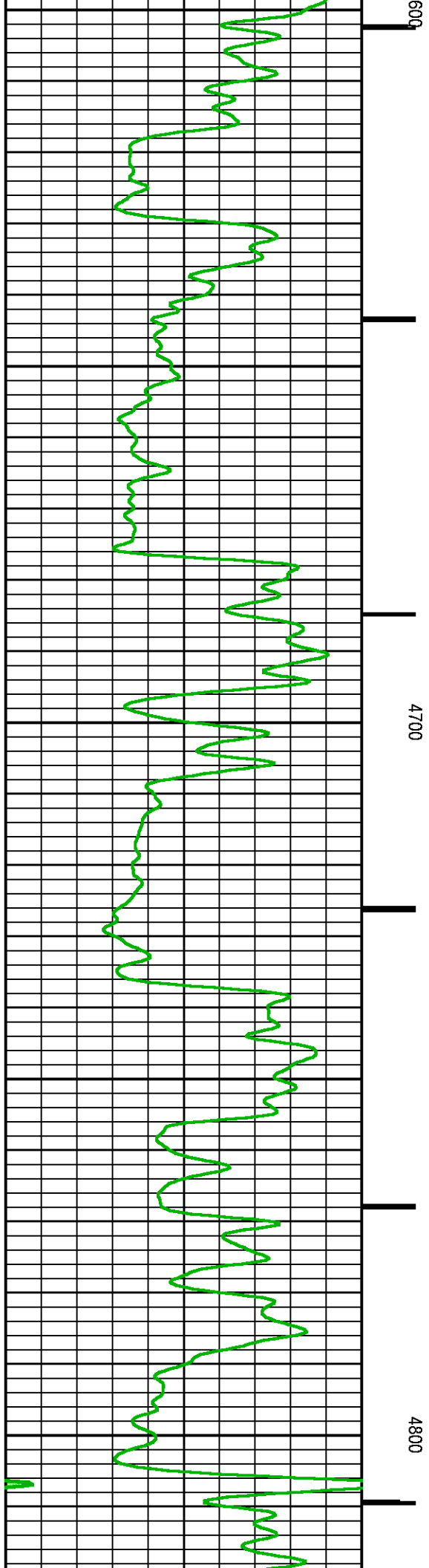
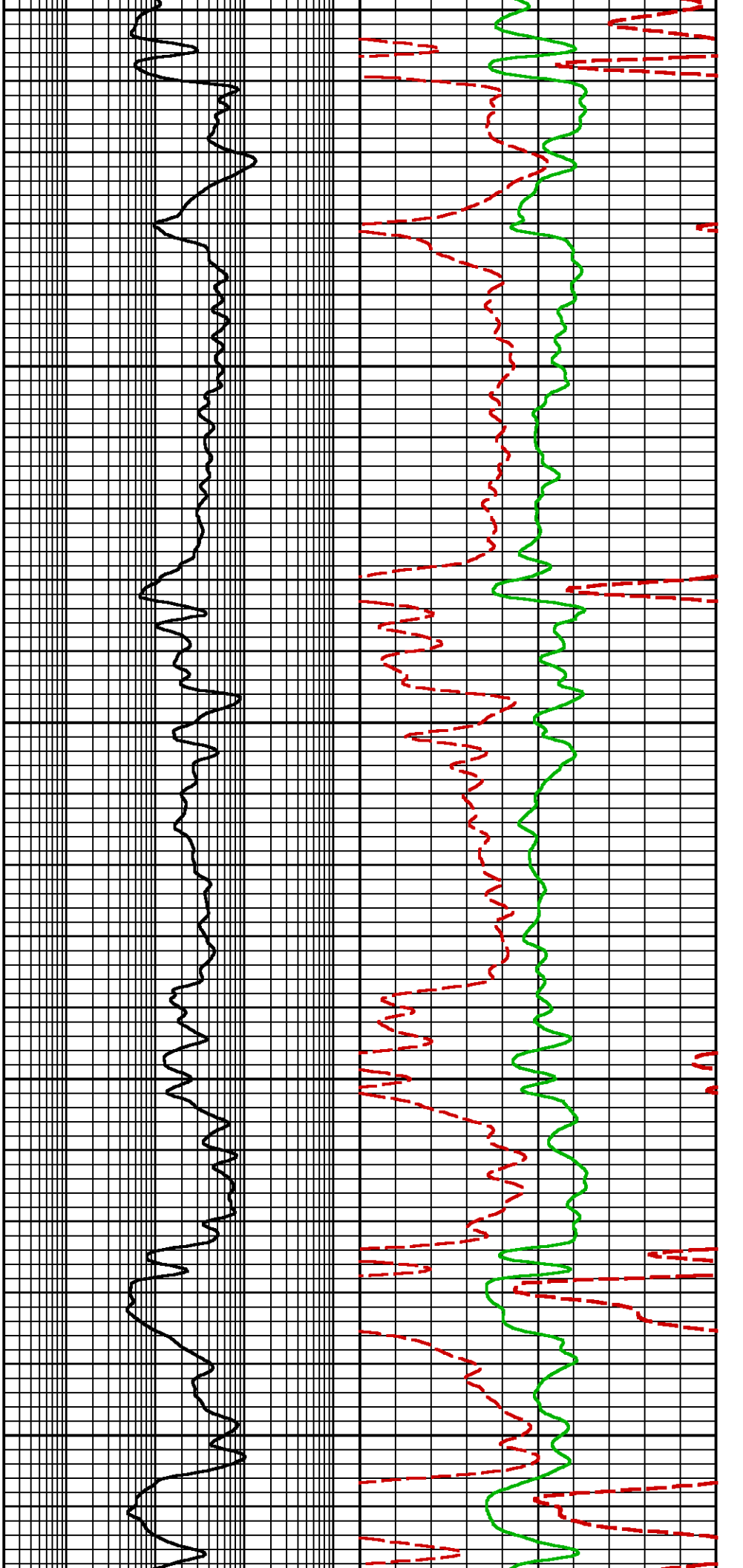
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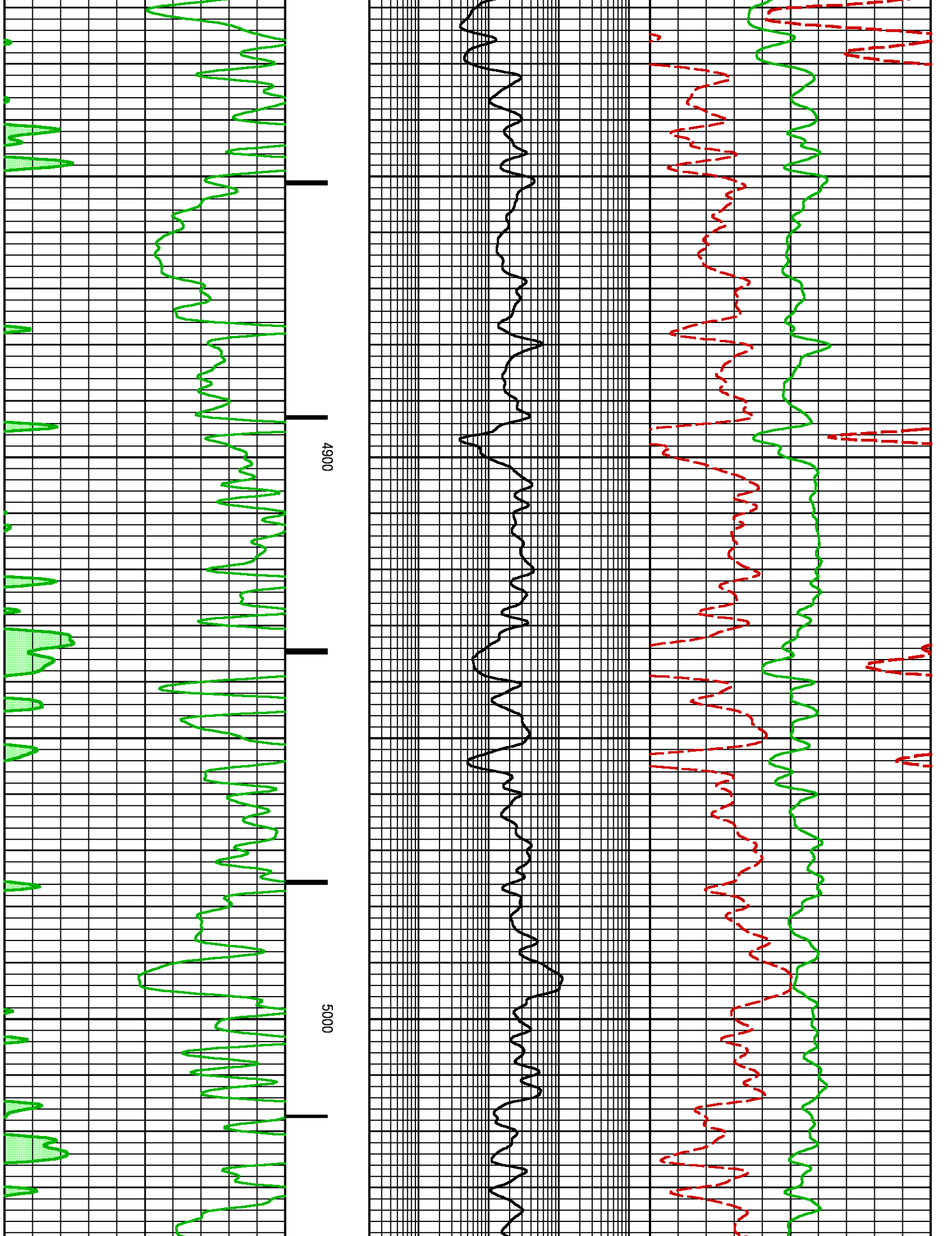


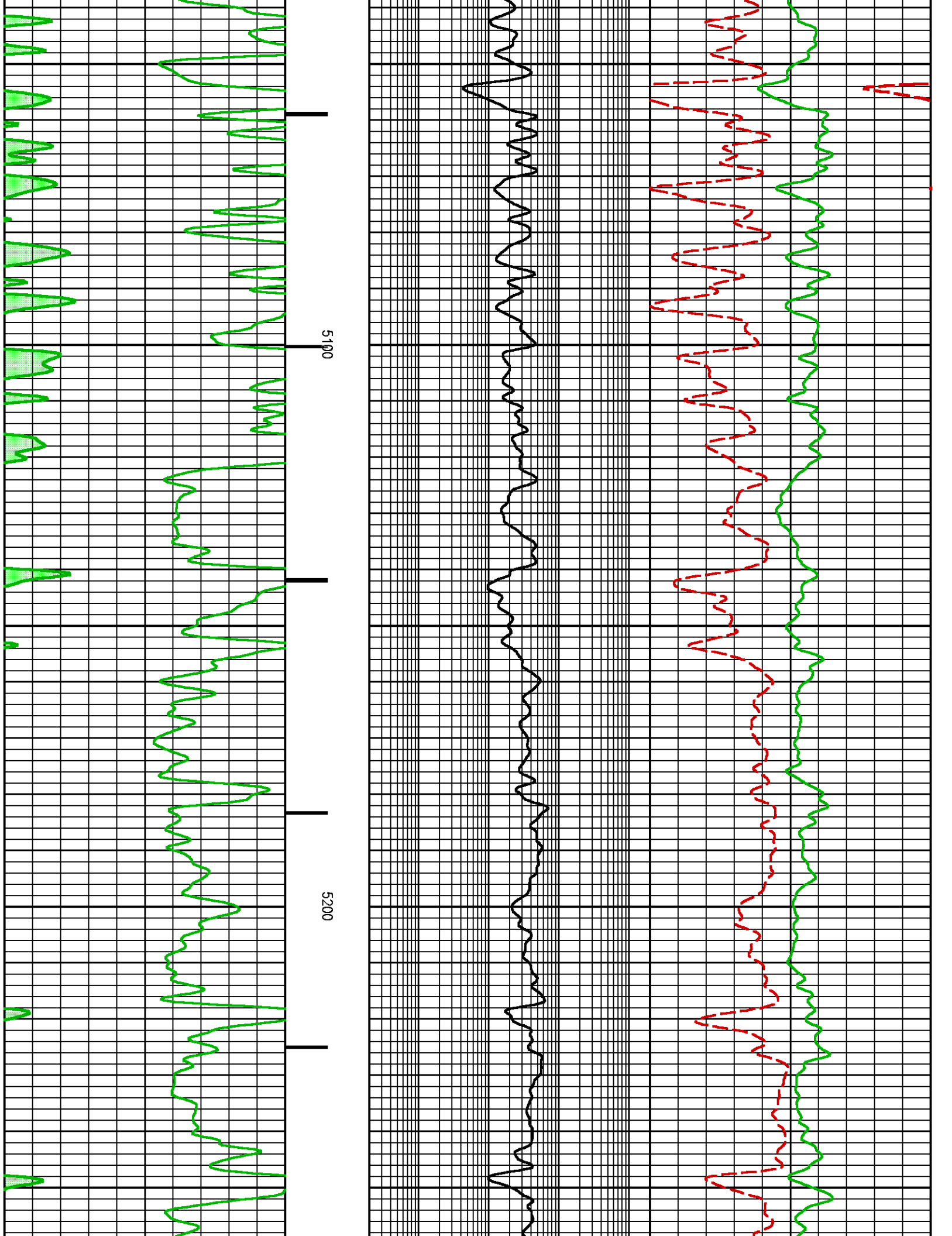


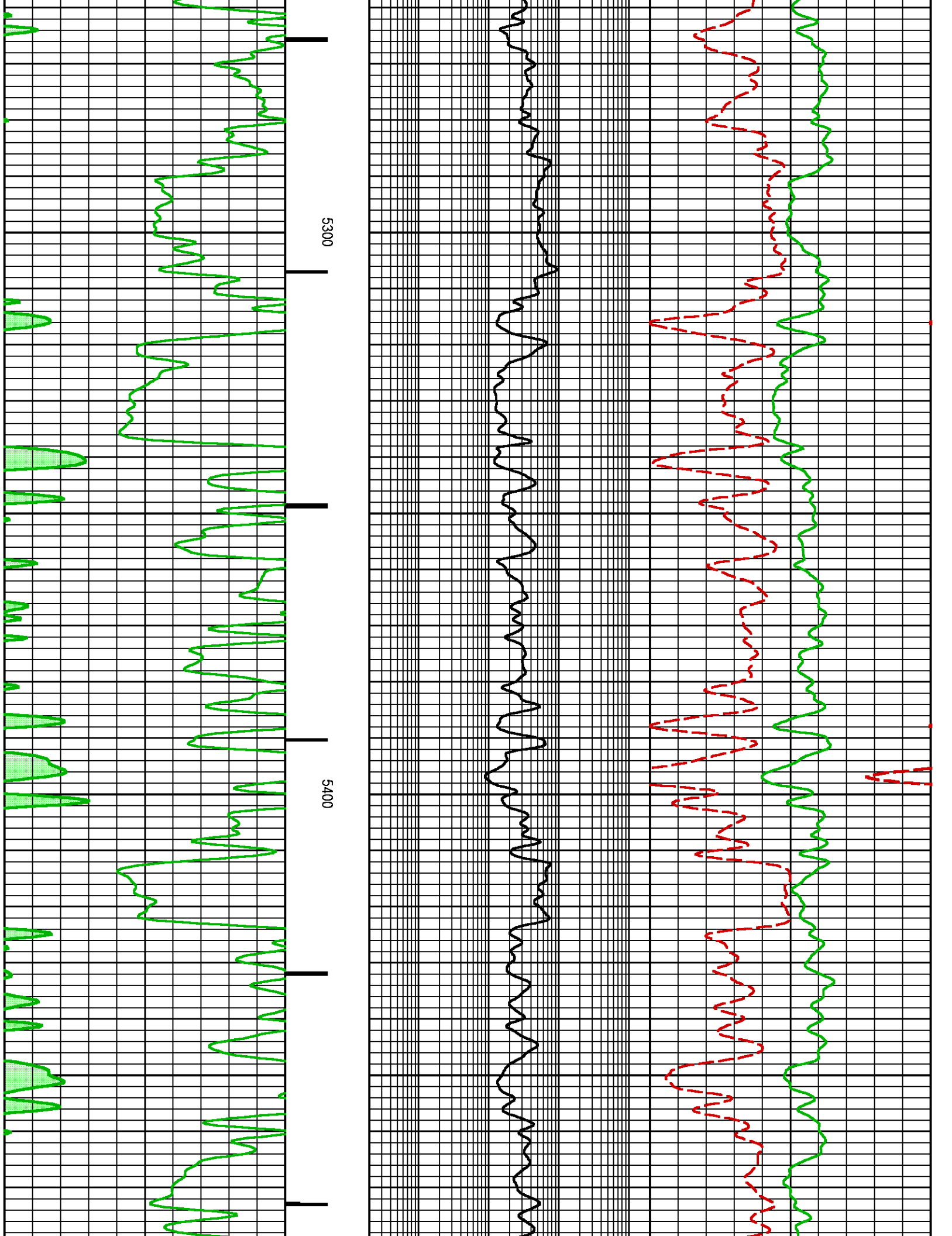


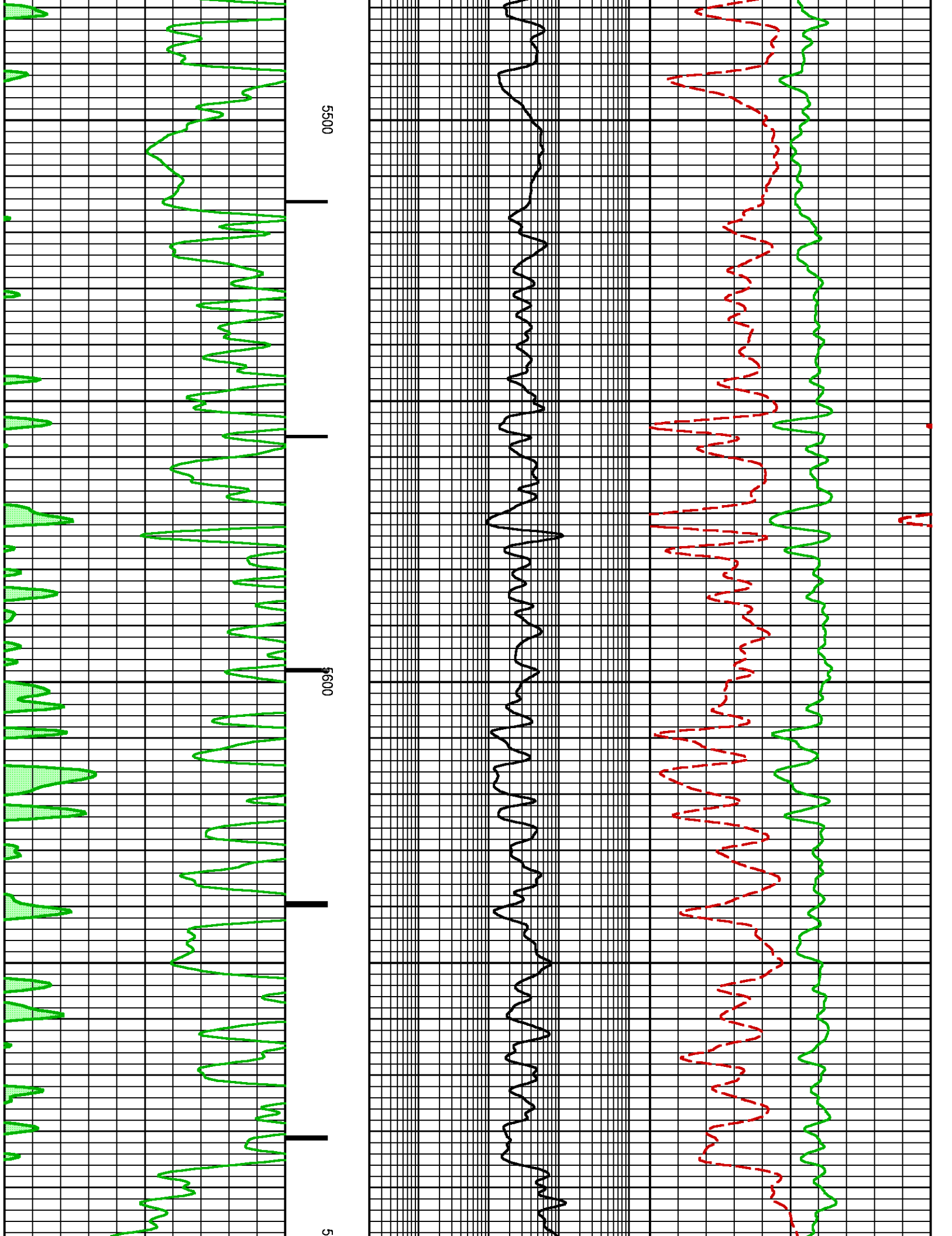


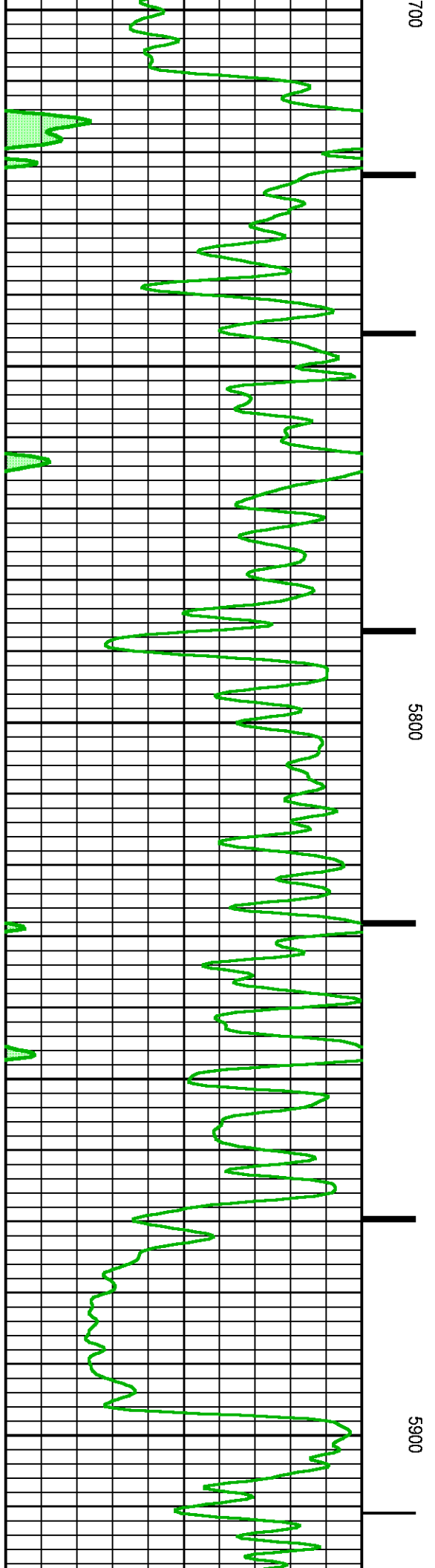
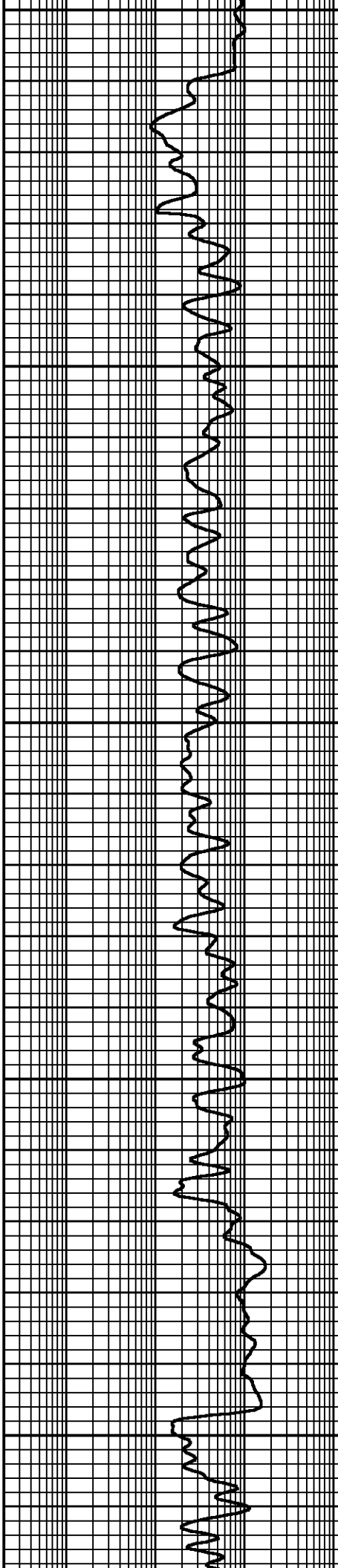
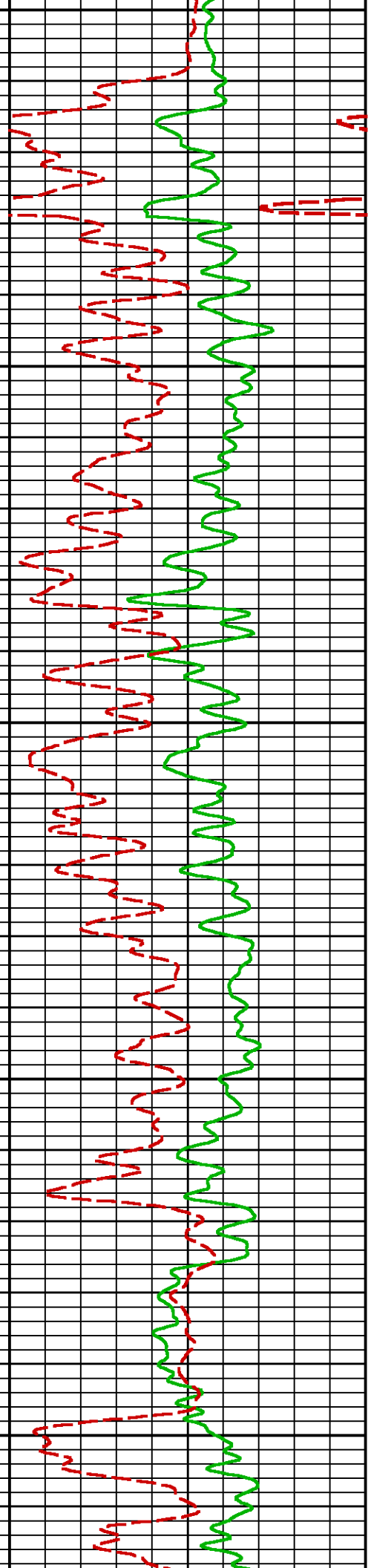


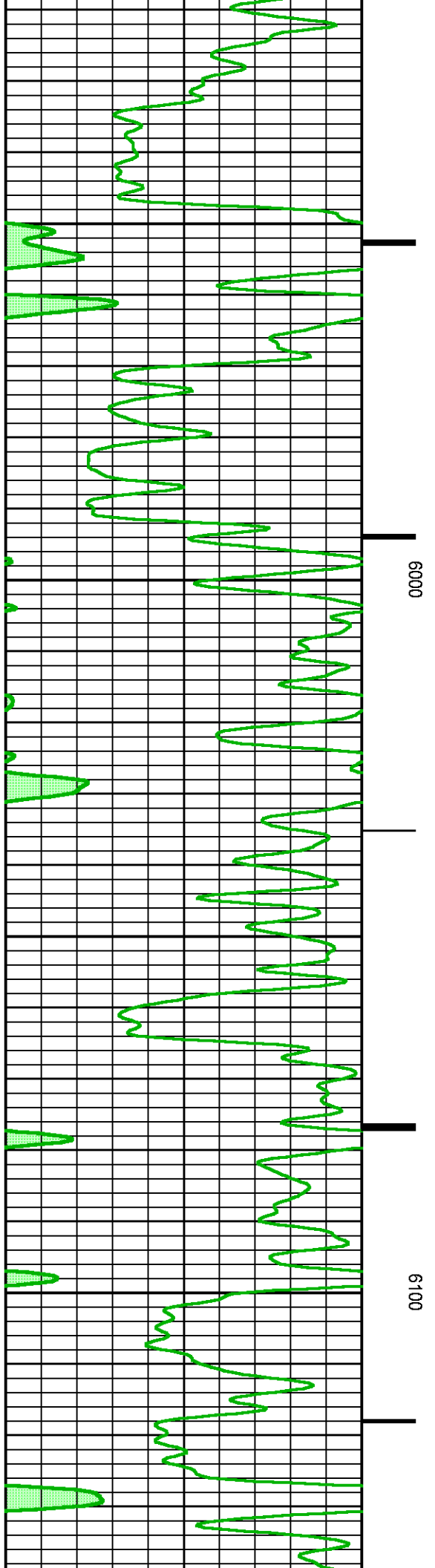
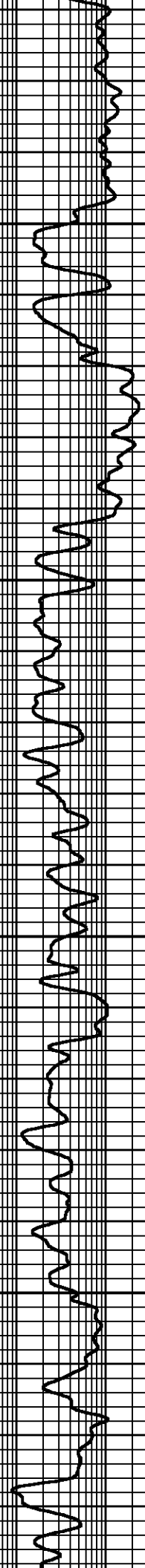
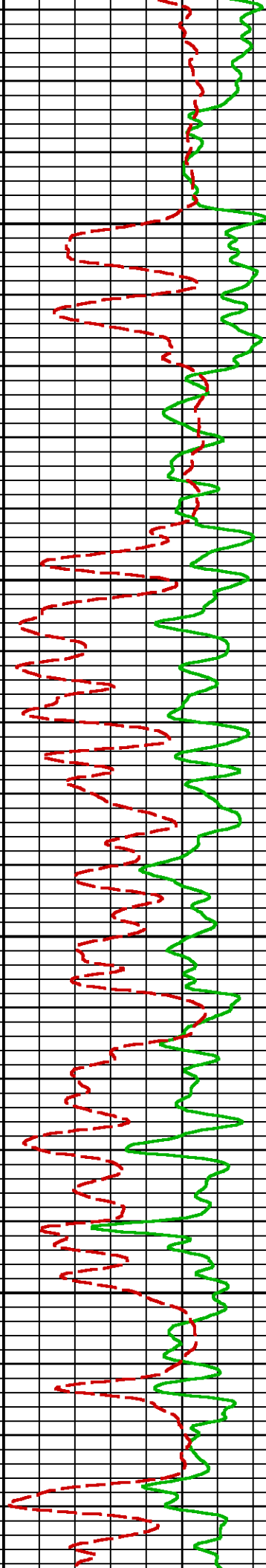


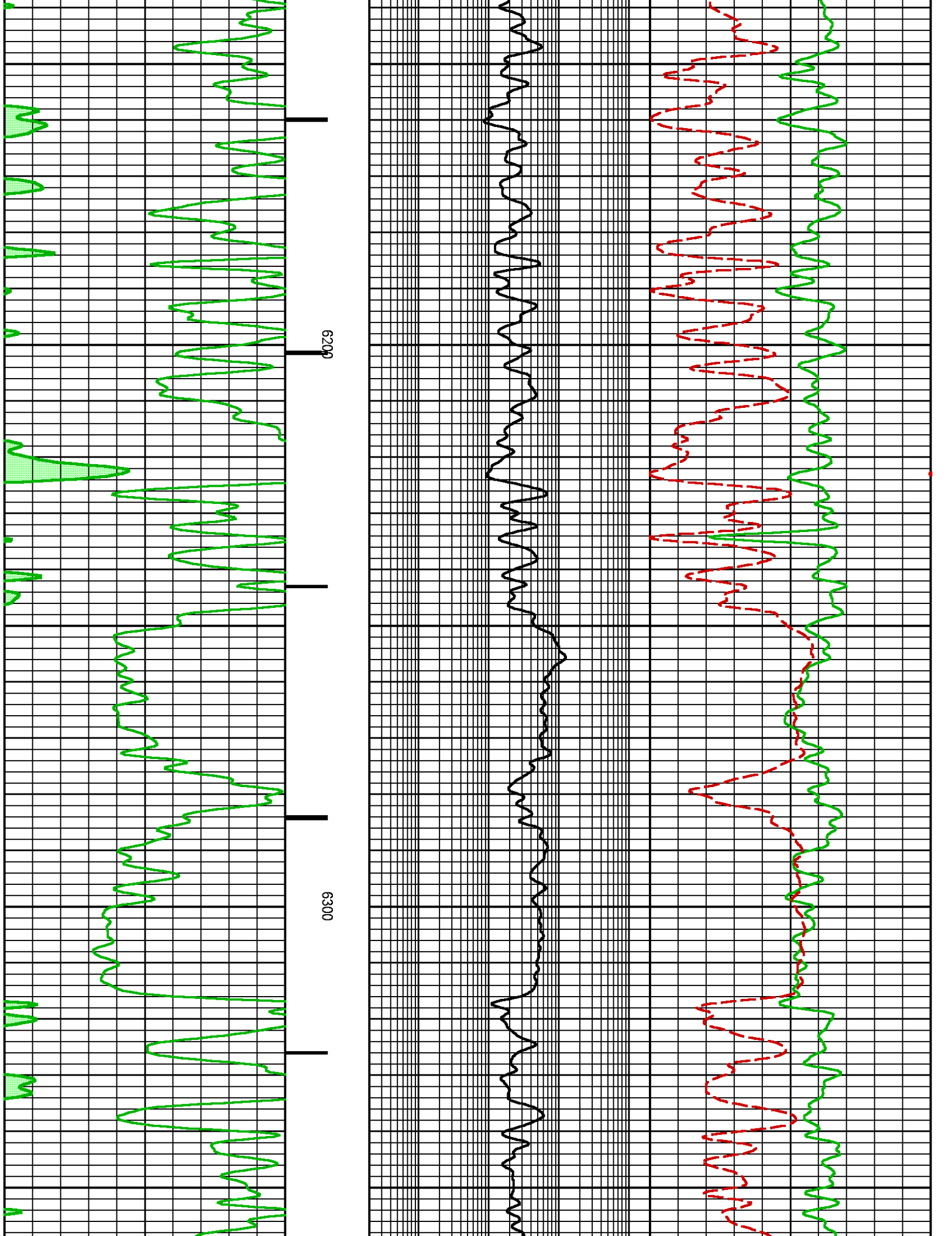




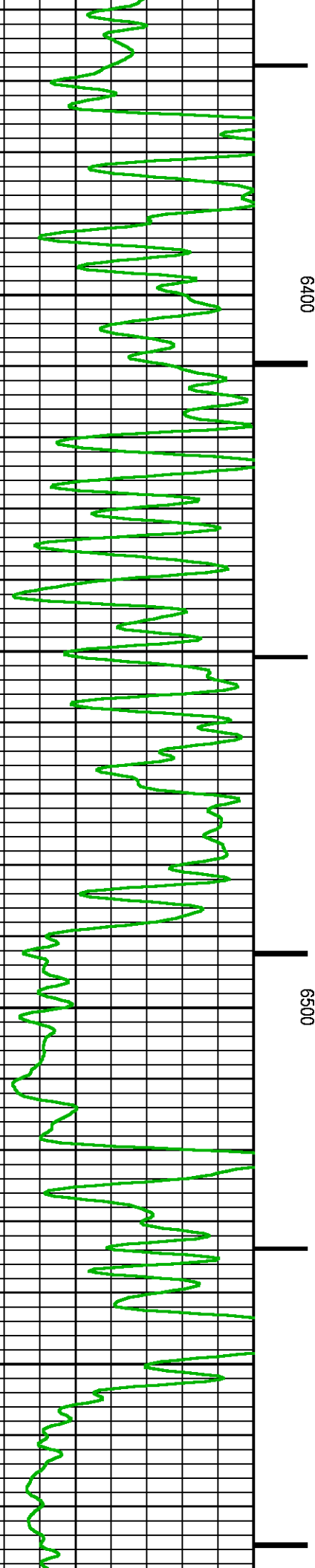
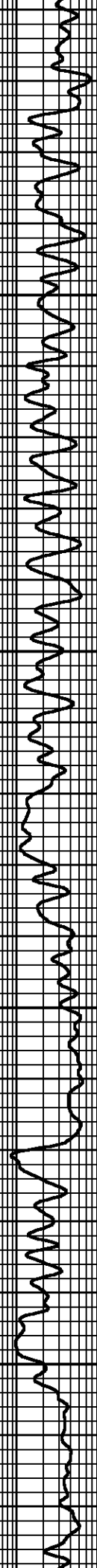
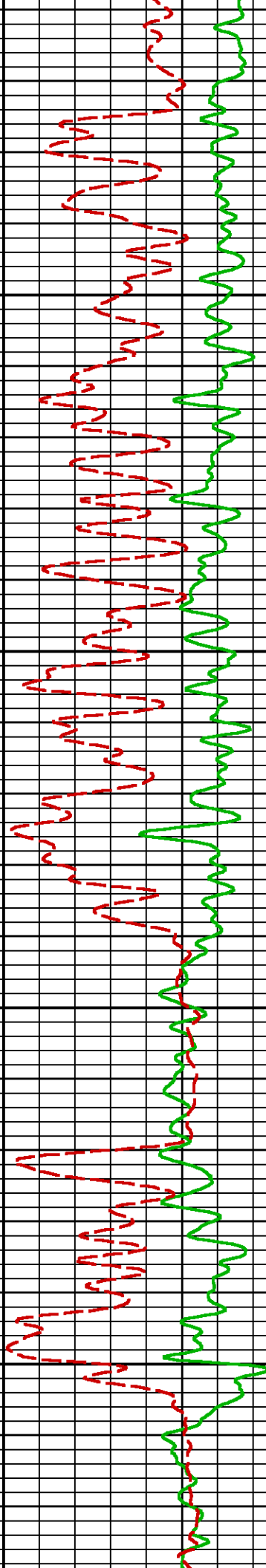


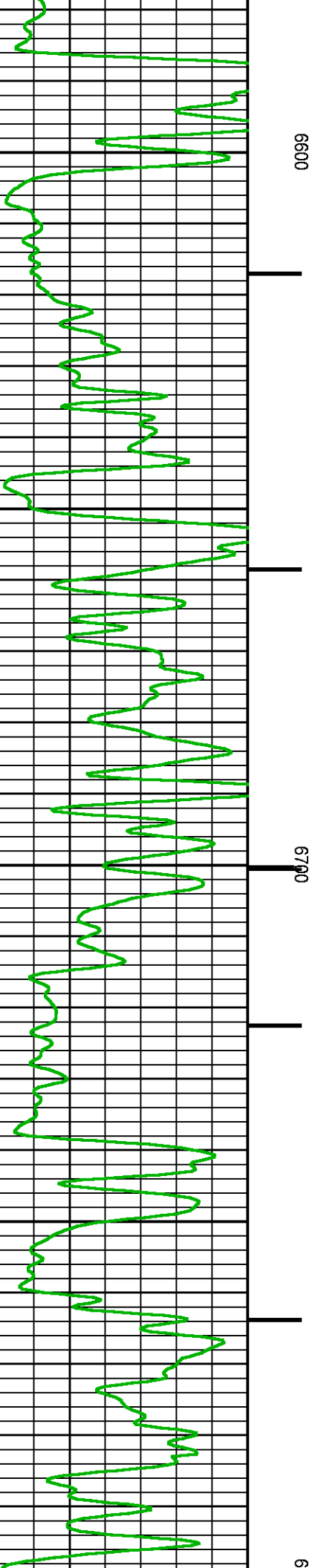
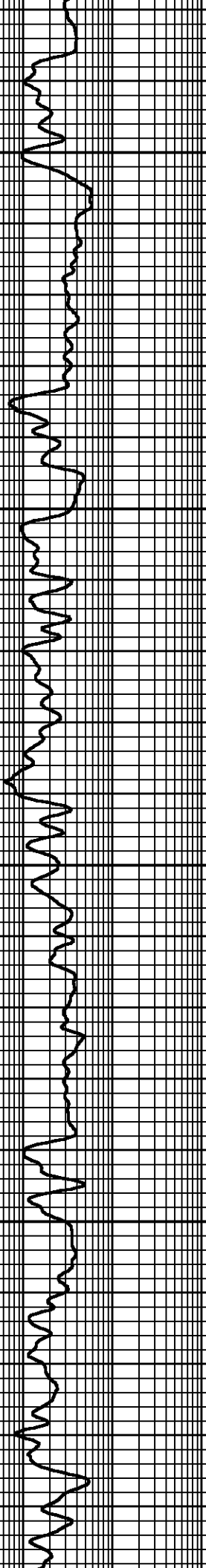
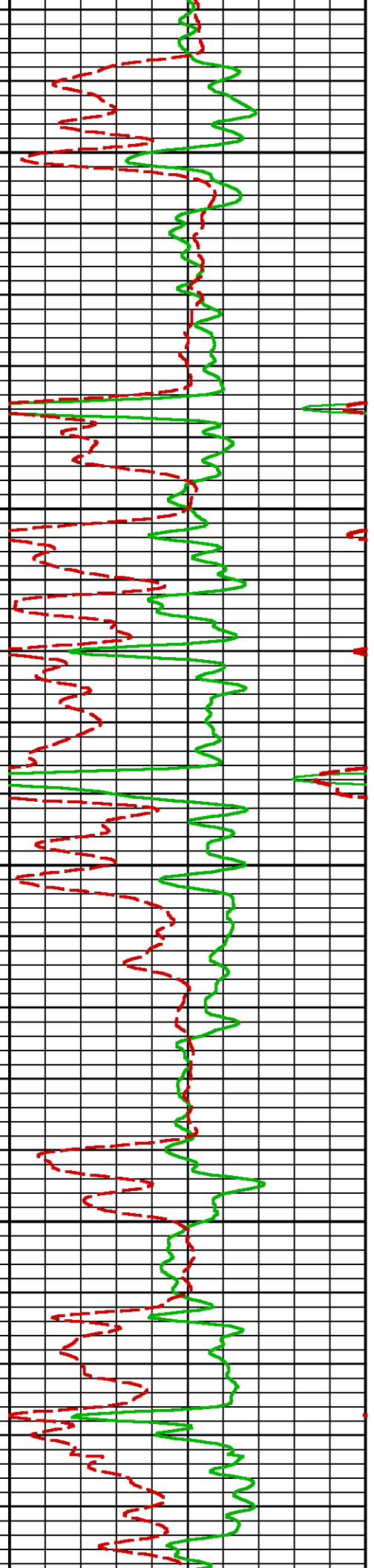


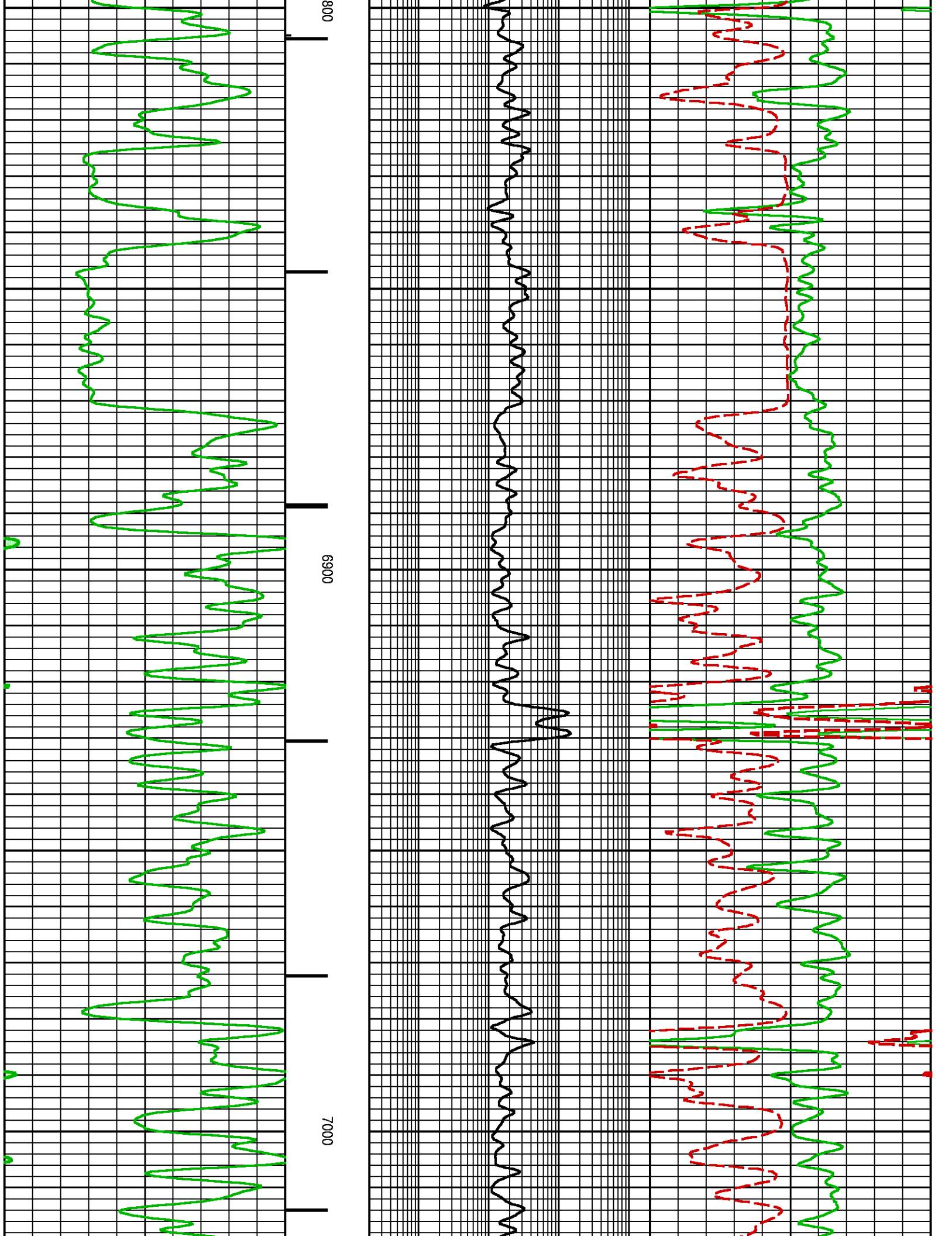


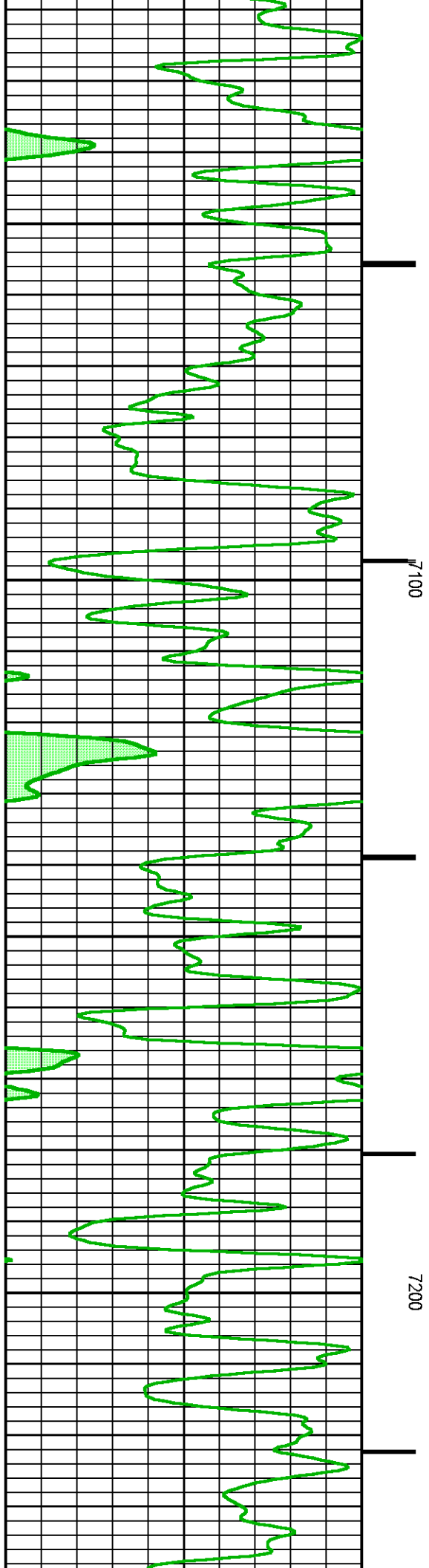
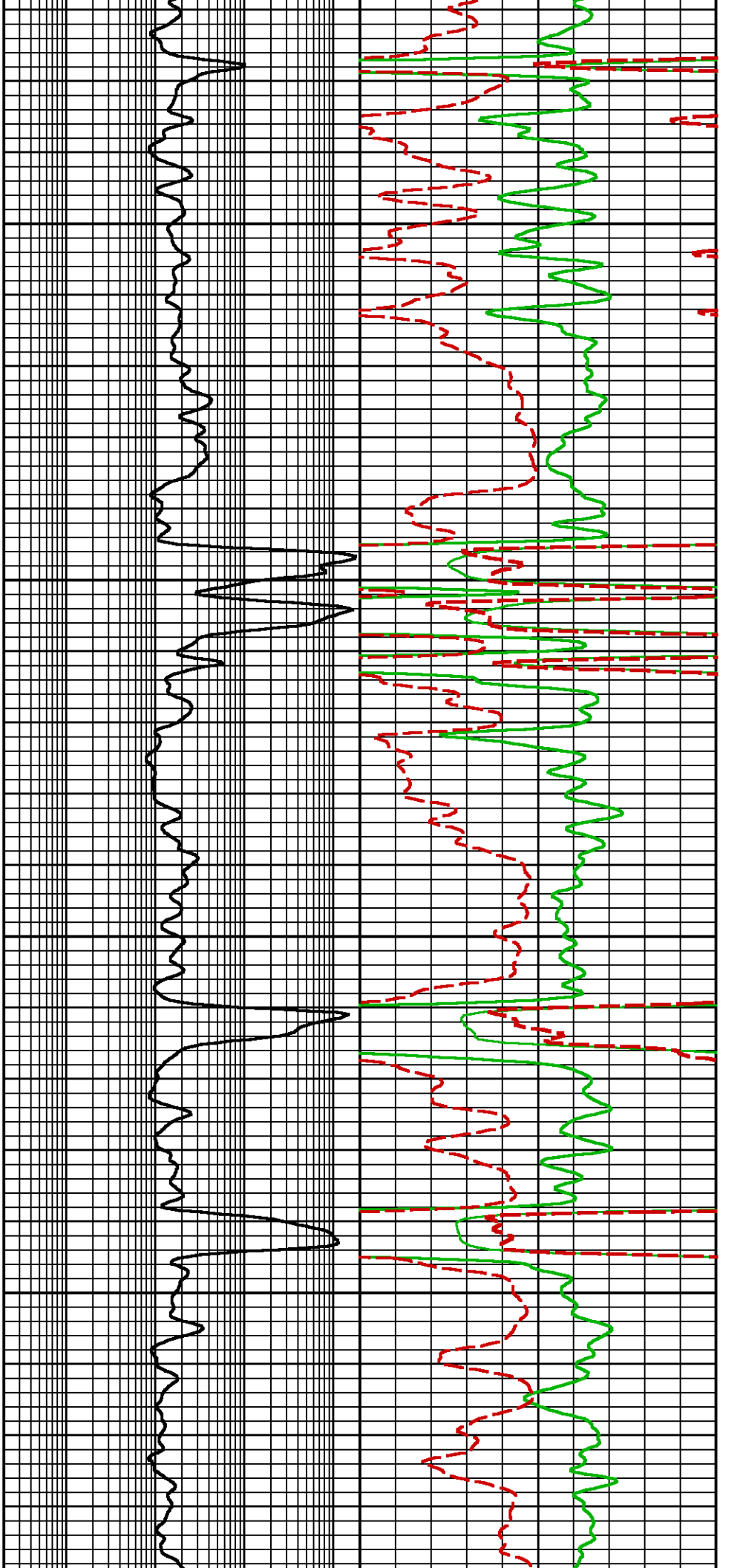


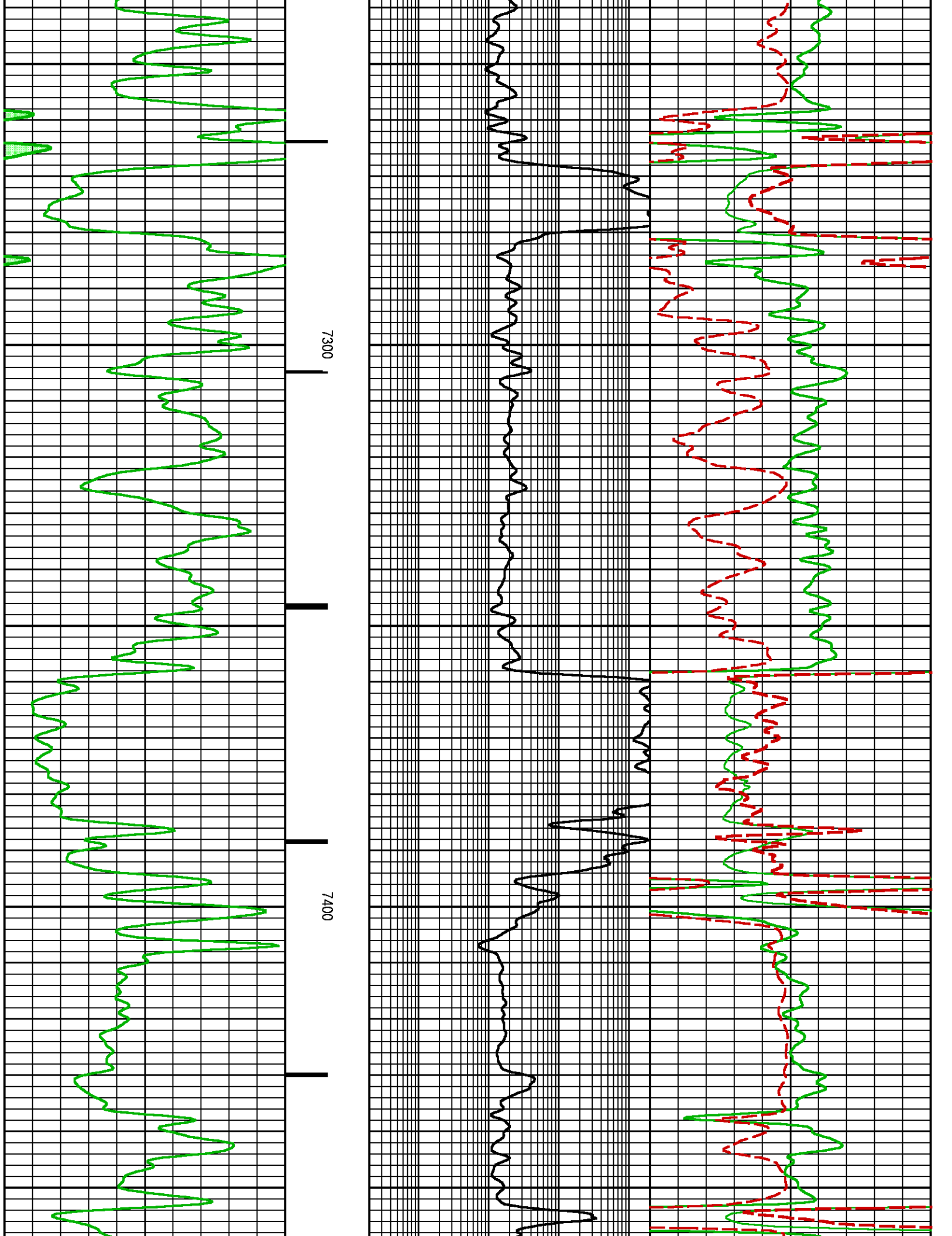


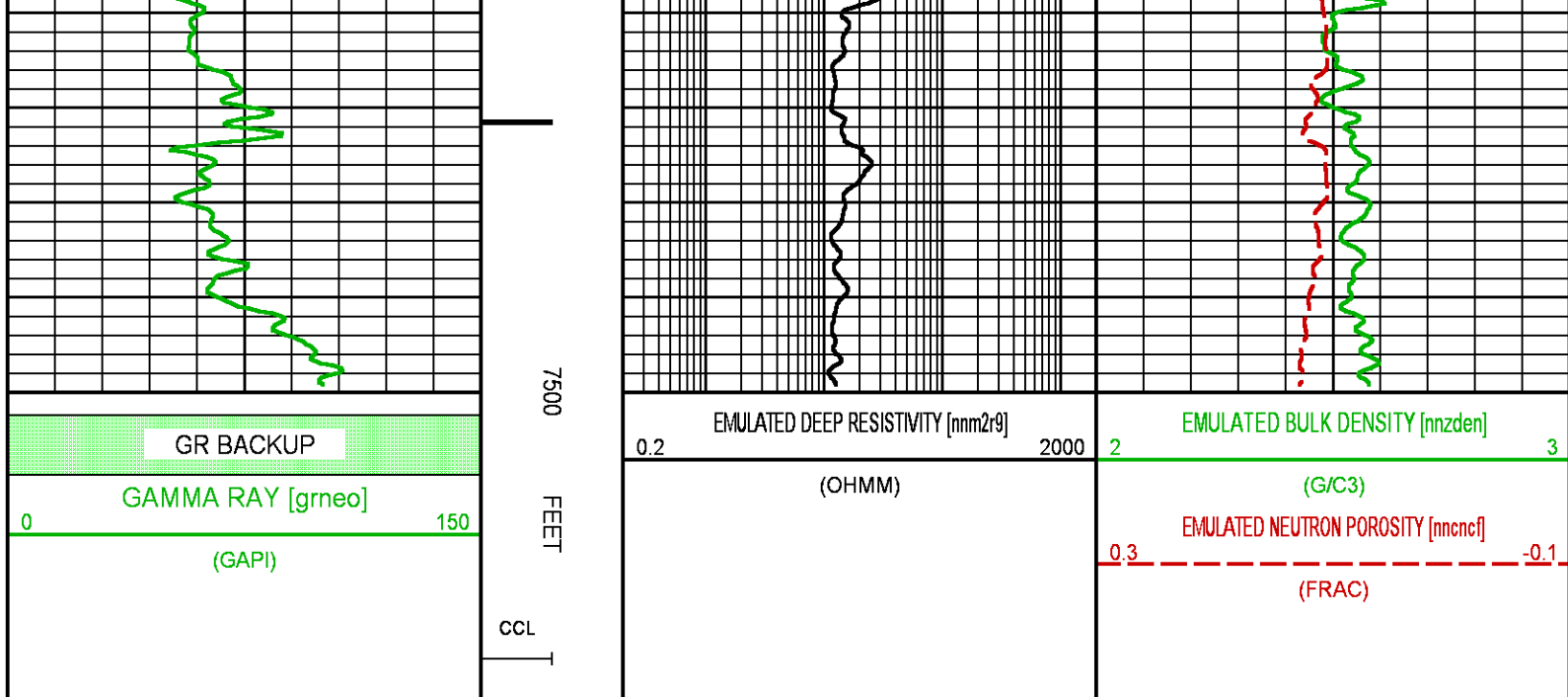



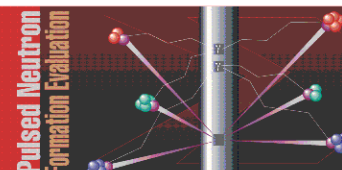










 	<b>COMPANY</b> <u>LARAMIE ENERGY</u> <b>WELL</b> <u>BRUTON 30-02E</u> <b>FIELD</b> <u>VEGA</u> <b>COUNTY</b> <u>MESA</u> <b>STATE</b> <u>COLORADO</u>	<b>FILE NO:</b> <u>27786-01</u> <b>API NO:</b> <u>05077103700000</u>
	<b>LOCATION:</b> <u>SEE REMARKS SECTION</u> <b>SEC</b> <u>30</u> <b>TWP</b> <u>9S</u> <b>RGE</b> <u>93W</u>	<b>ELEVATIONS:</b> <b>KB</b> <u>7449.0 FT</u> <b>DF</b> <u>7448.0 FT</u> <b>GL</b> <u>7425.0 FT</u> <b>DATE</b> <u>06-JUL-2017</u>