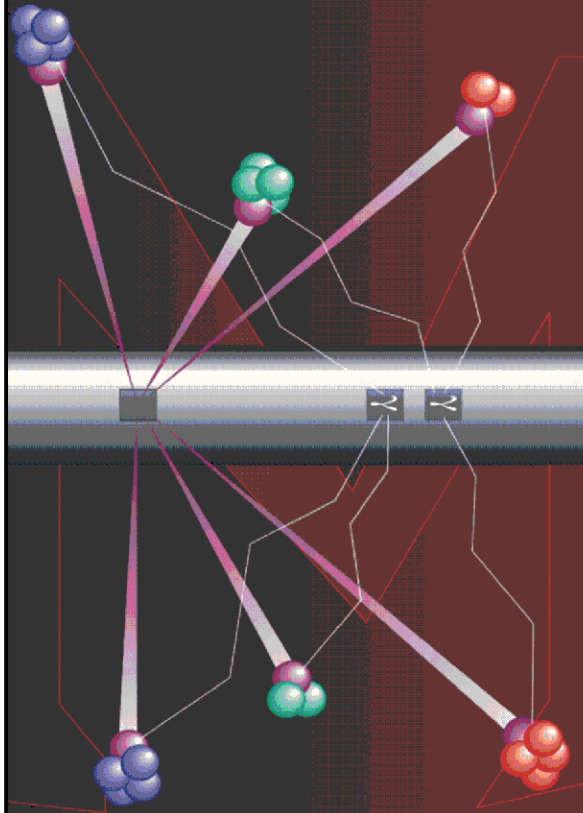


# Pulsed Neutron Formation Evaluation



## NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL GUNDERSON 20-09W

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 20 TWP 9S RGE 93W

ELEVATIONS:

KB 7176.0 FT DF 7175.0 FT GL 7146.0 FT

DATE 23-AUG-2017 ECC 28341-01

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-SEP-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US126645</u>	DATE: <u>23-AUG-2017</u>
FROM	TO		
<u>2113 FT</u>	<u>7518 FT</u>		

### REMARKS

LOCATION:  
SHL: LAT:39.266700N;LONG:107.795317W  
BHL: LAT:39.263788N;LONG:107.797721W

TRAINING WELL: GUNDERSON 20-04W

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

ANALYST: ALEXANDR KOTOV

# NEO RESULTS FOR GUNDERSON 20-09W (G-SAND)

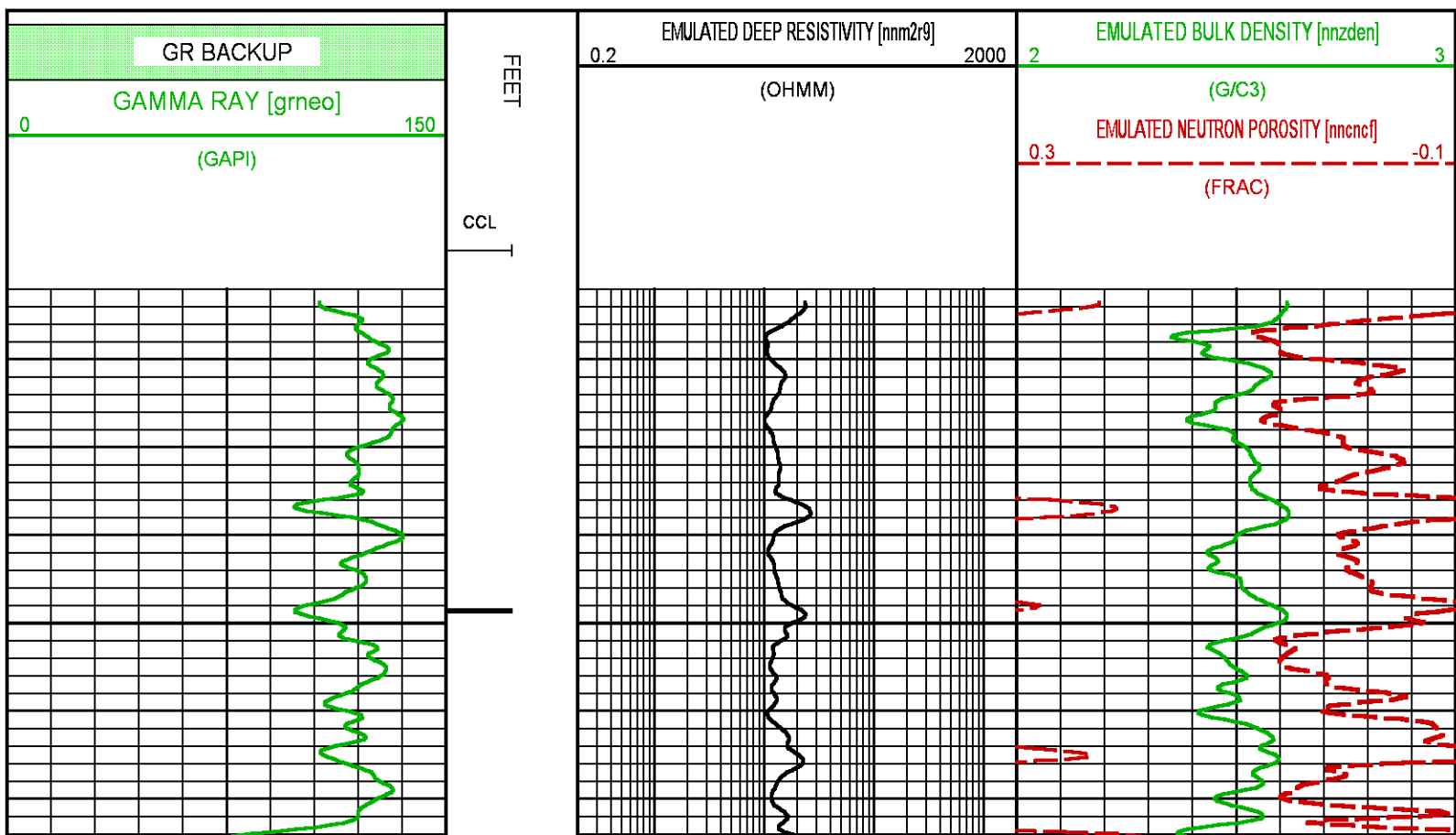
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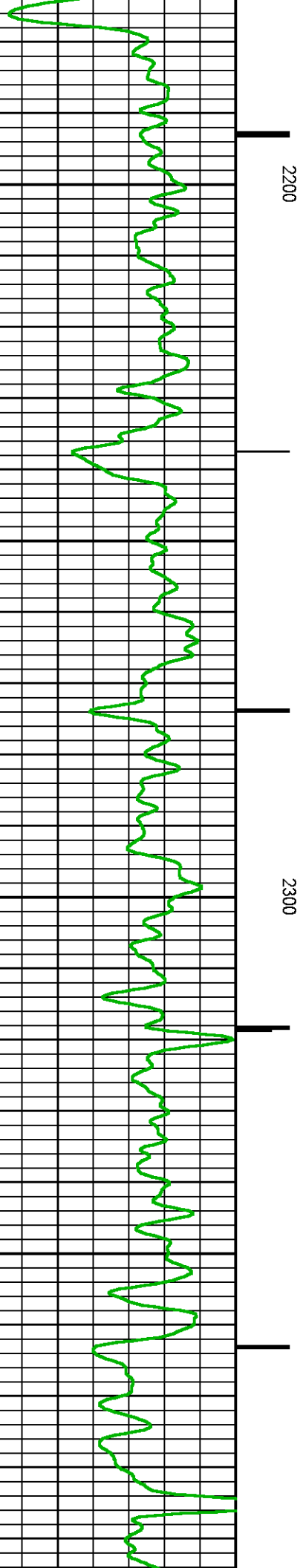
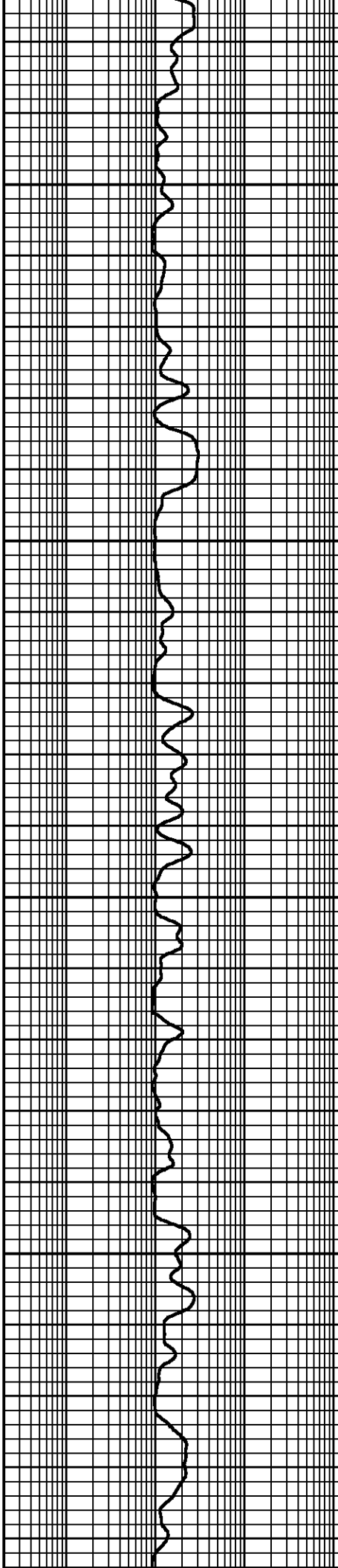
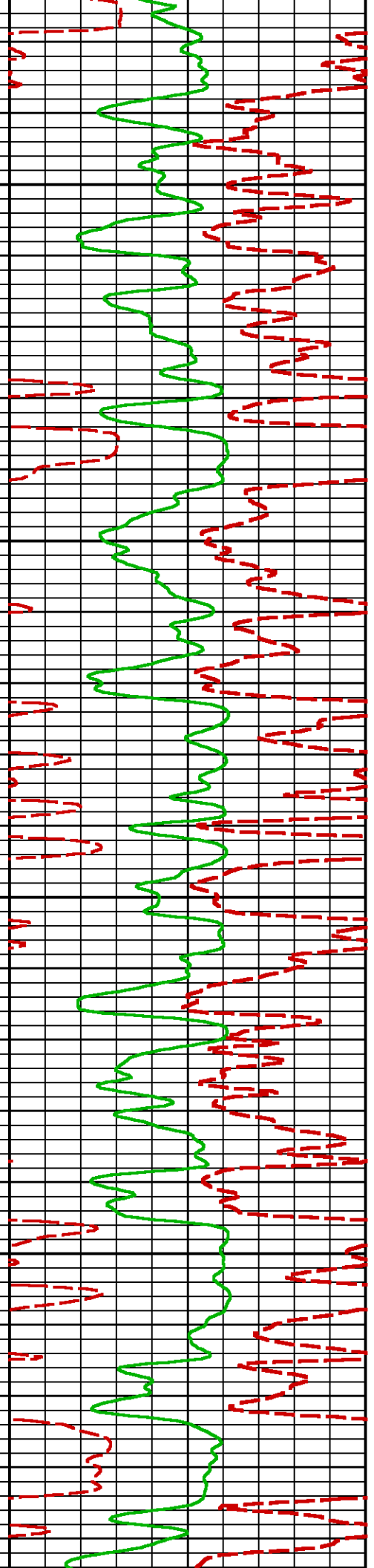
Plotted: Wed Sep 06 11:19:29 2017

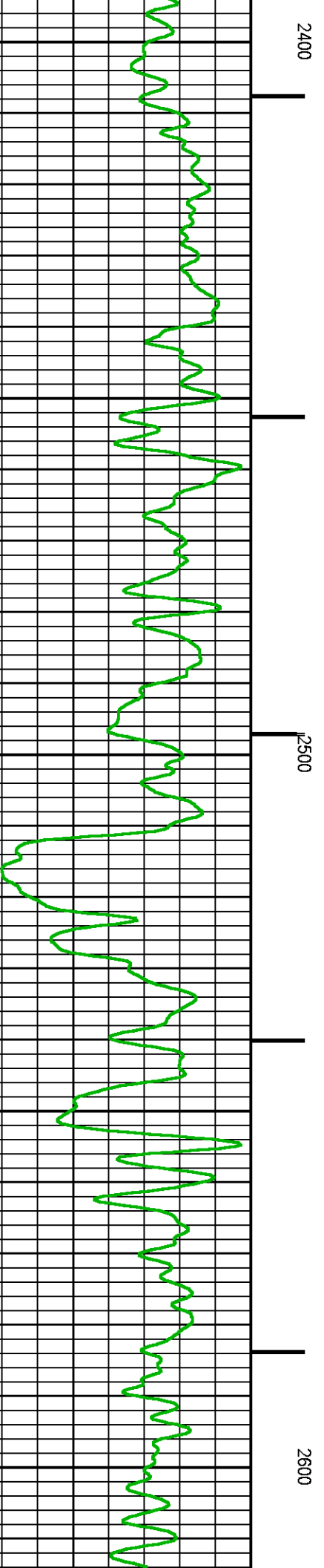
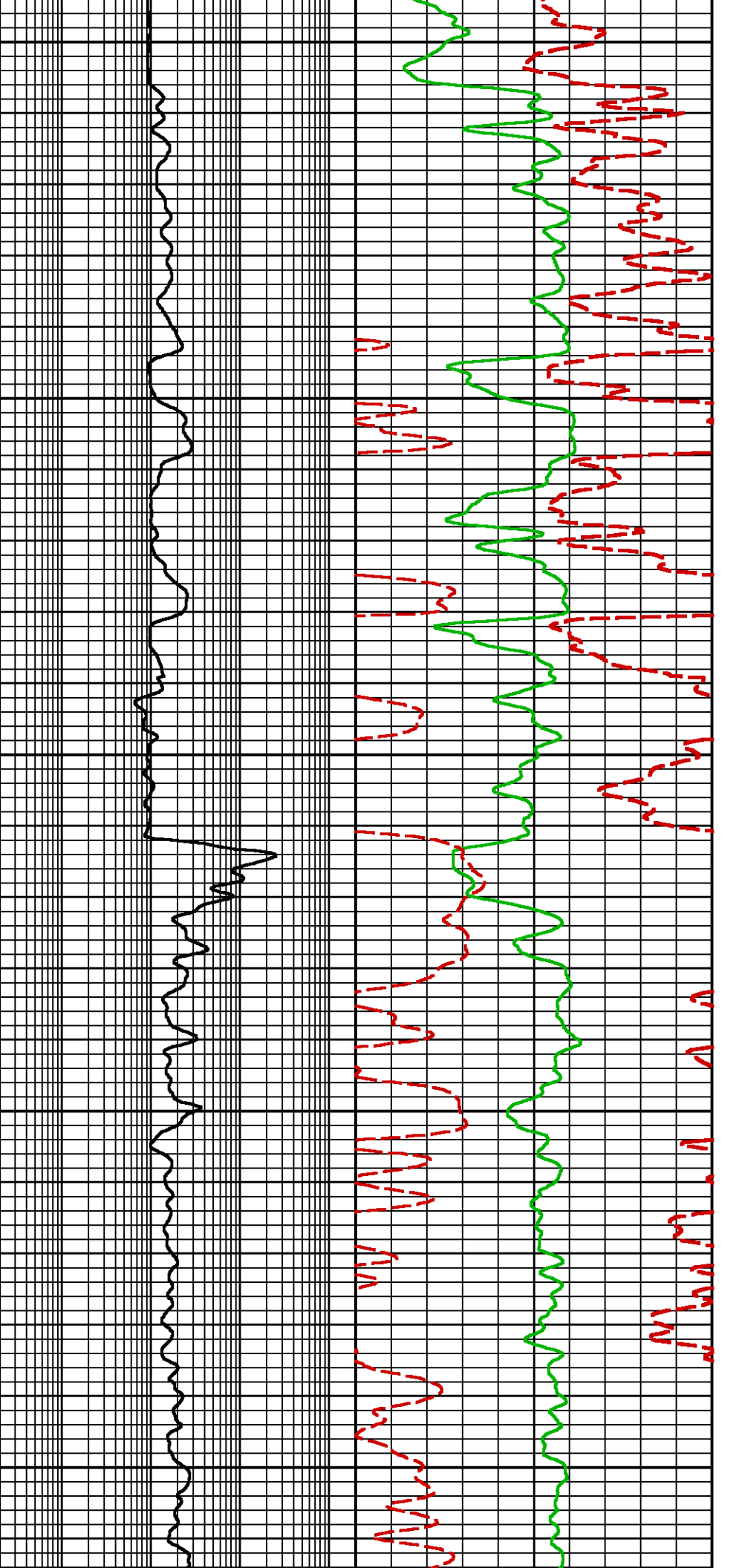
## CURVE MEASURE POINT OFFSET

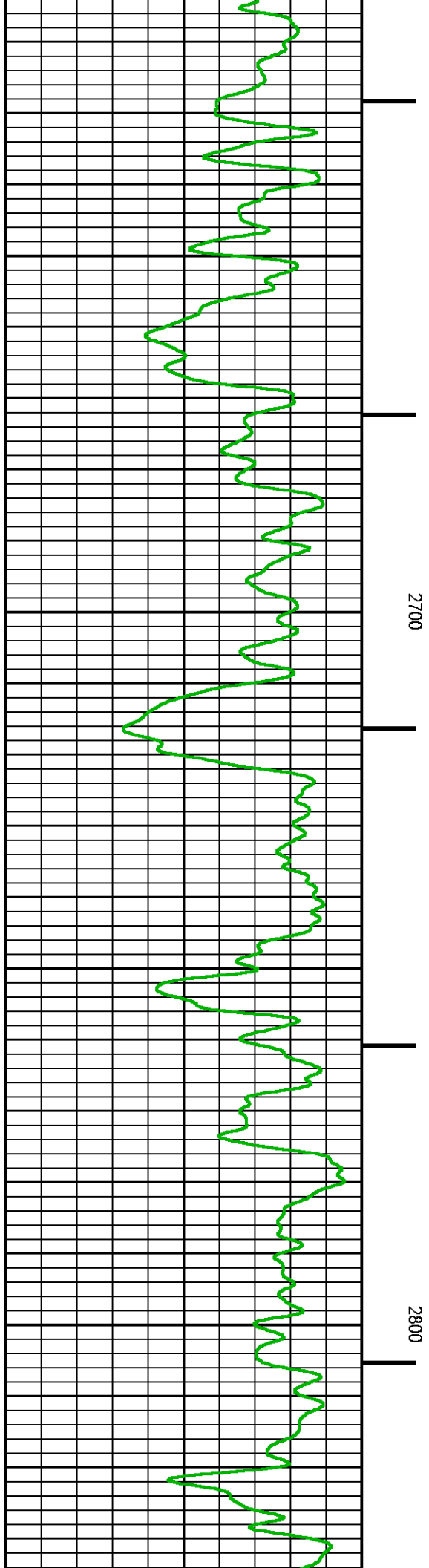
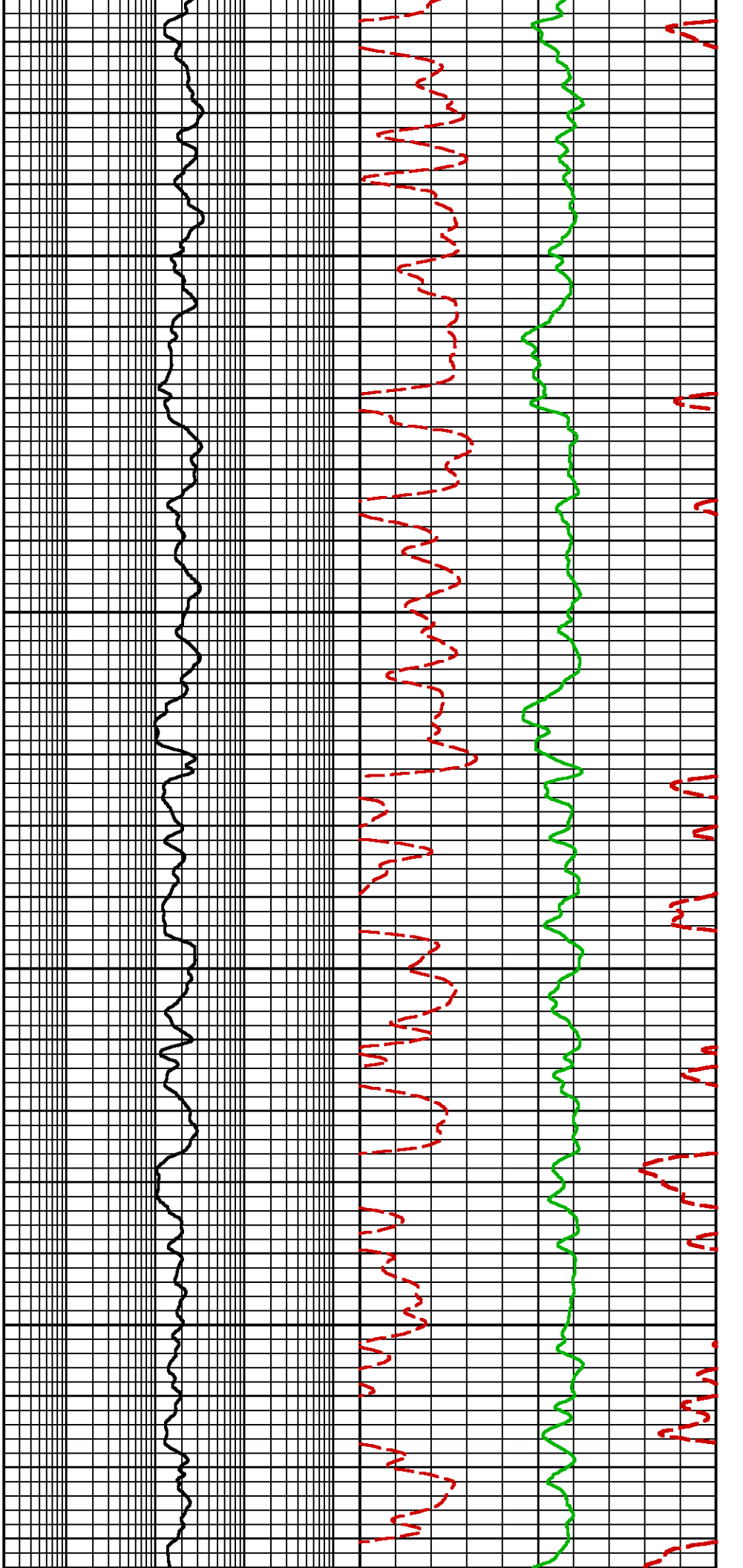
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

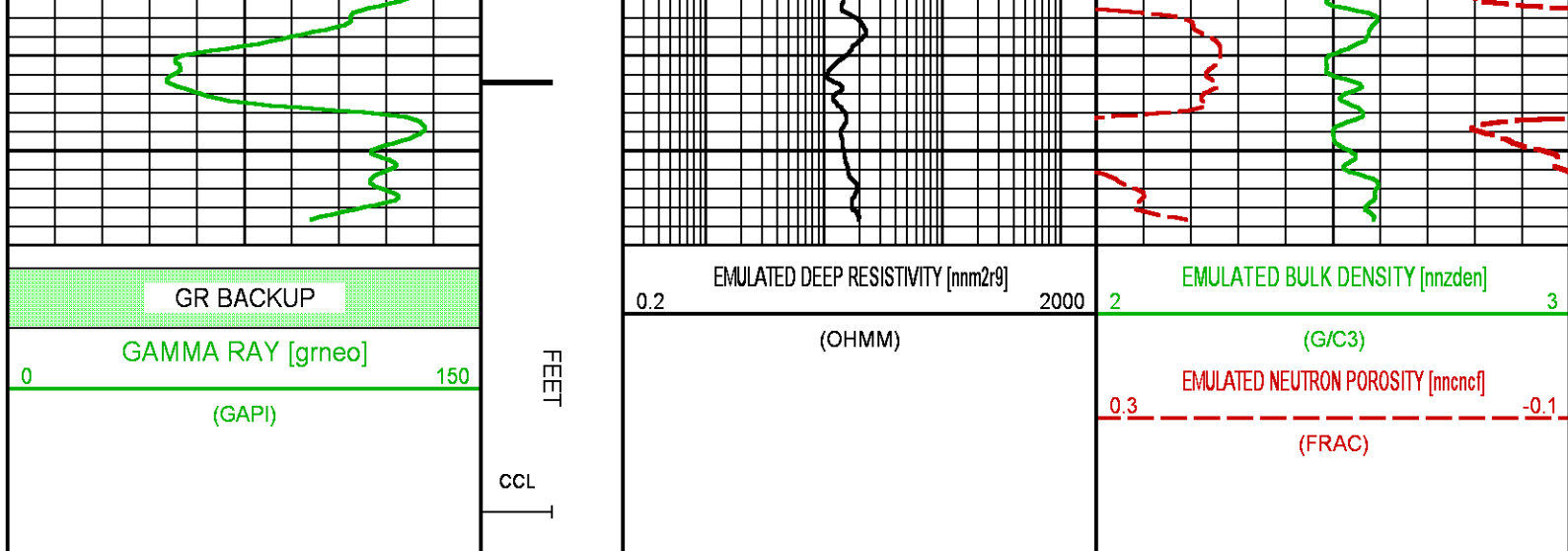
Project : NA  
 User : kotoale  
 Presentation : BHI1F65XZ1:D:\Ape\_Projects\GUNDERSON\_20\_09W\_NEO\NEO\_PRESENTATION\_LARAMIE\_G-Sand.pdf [5"/100' Scale]  
 Plot Interval : 2113.5 - 2860 Feet  
 Data File 1 : F1 : BHI1F65XZ1:D:\Ape\_Projects\GUNDERSON\_20\_09W\_NEO\Merged\_Set\_Final.xtf  
 Created On : N/A  
 Company : LARAMIE ENERGY  
 Well : GUNDERSON 20-09W  
 Field : VEGA  
 File Interval : 2113.5 - 7518.5 Feet  
 OCT : NA











## NEO RESULTS FOR GUNDERSON 20-09W (MAIN)

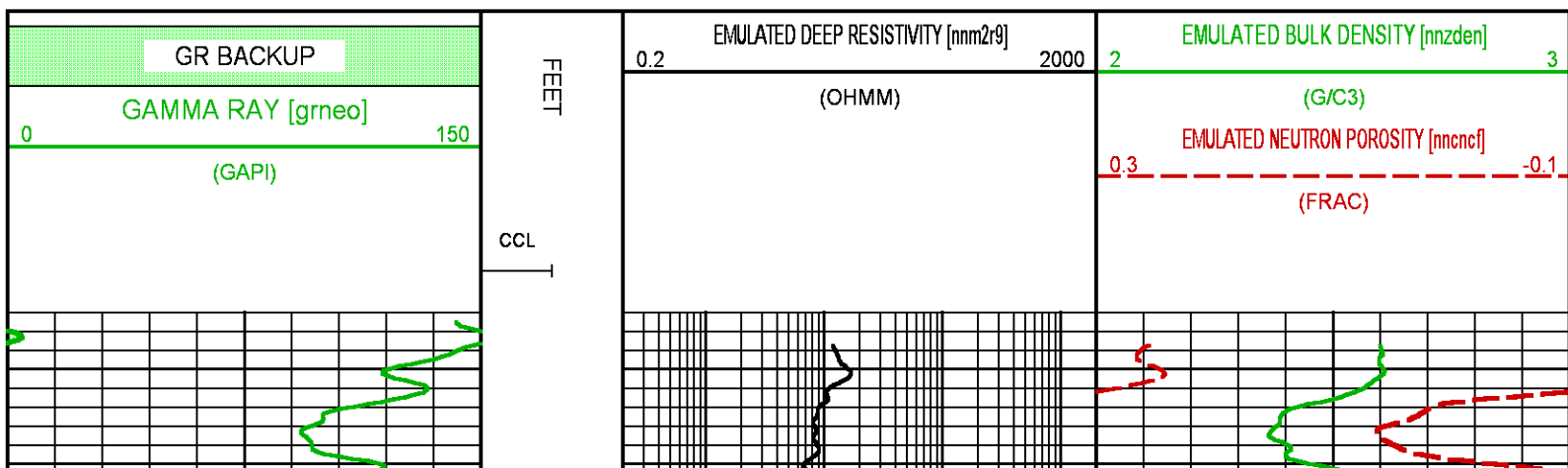
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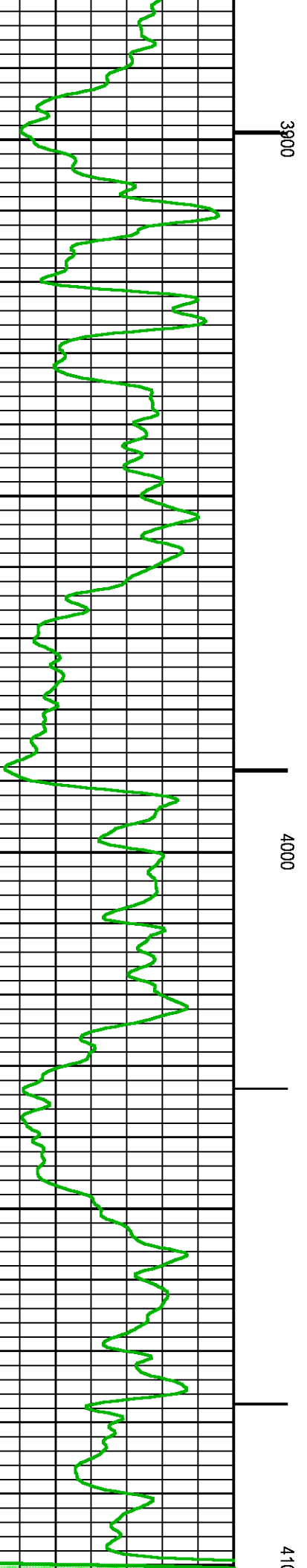
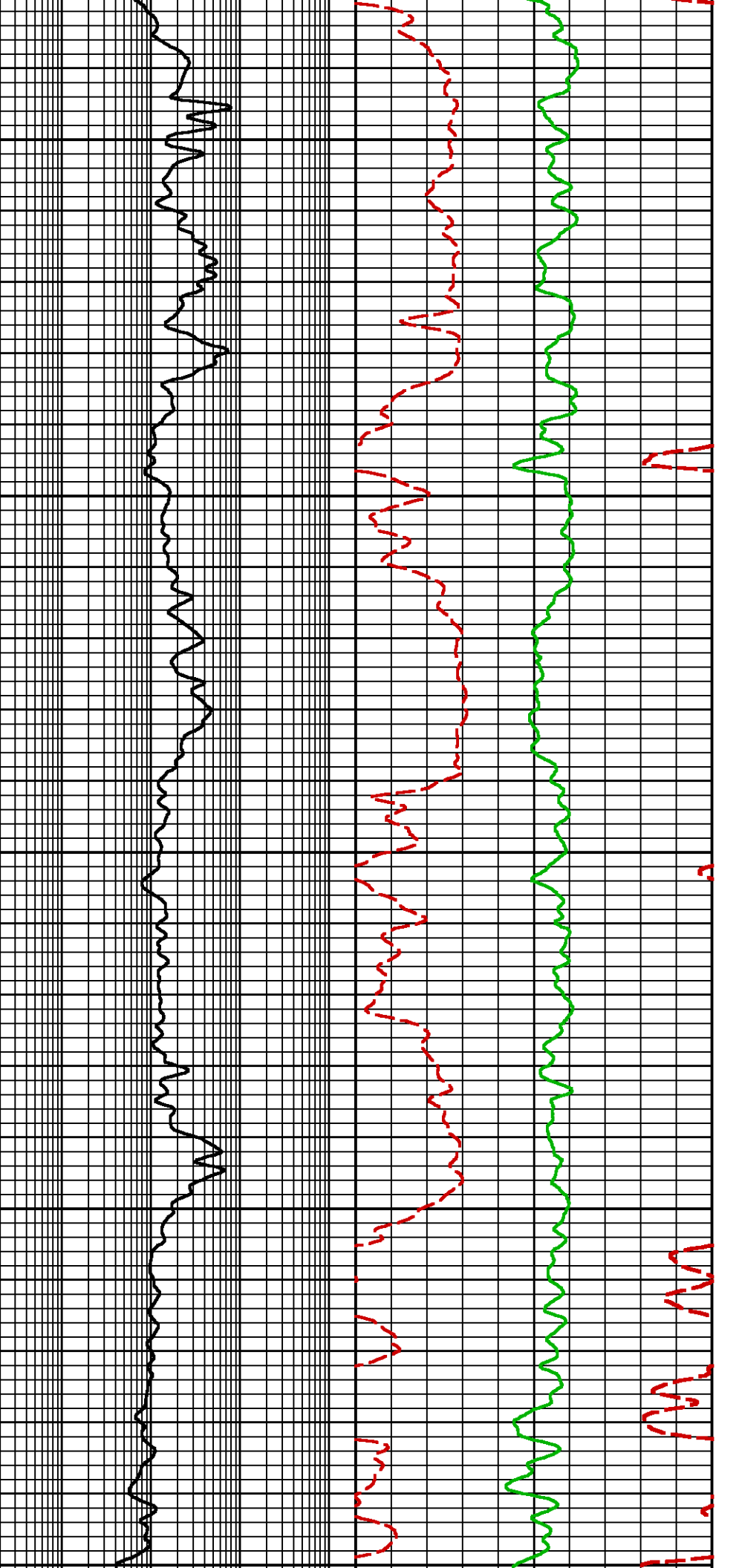
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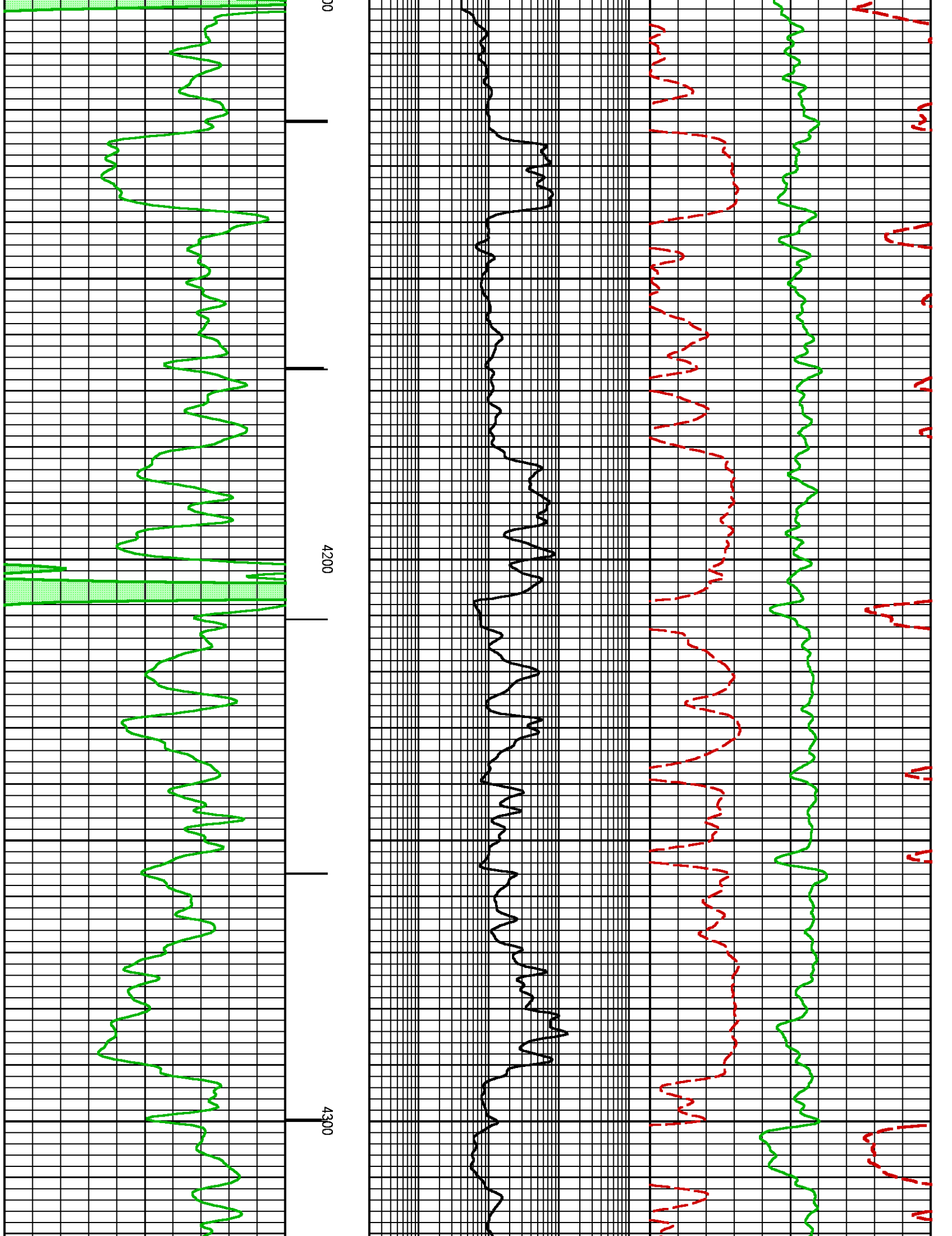
### CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
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GRNEO	0.00	NNM2R9	0.00				

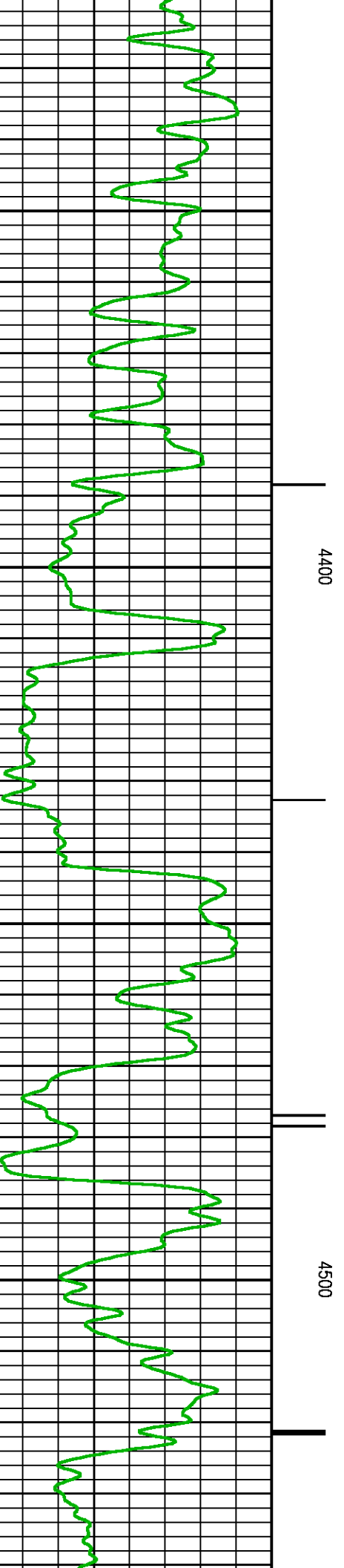
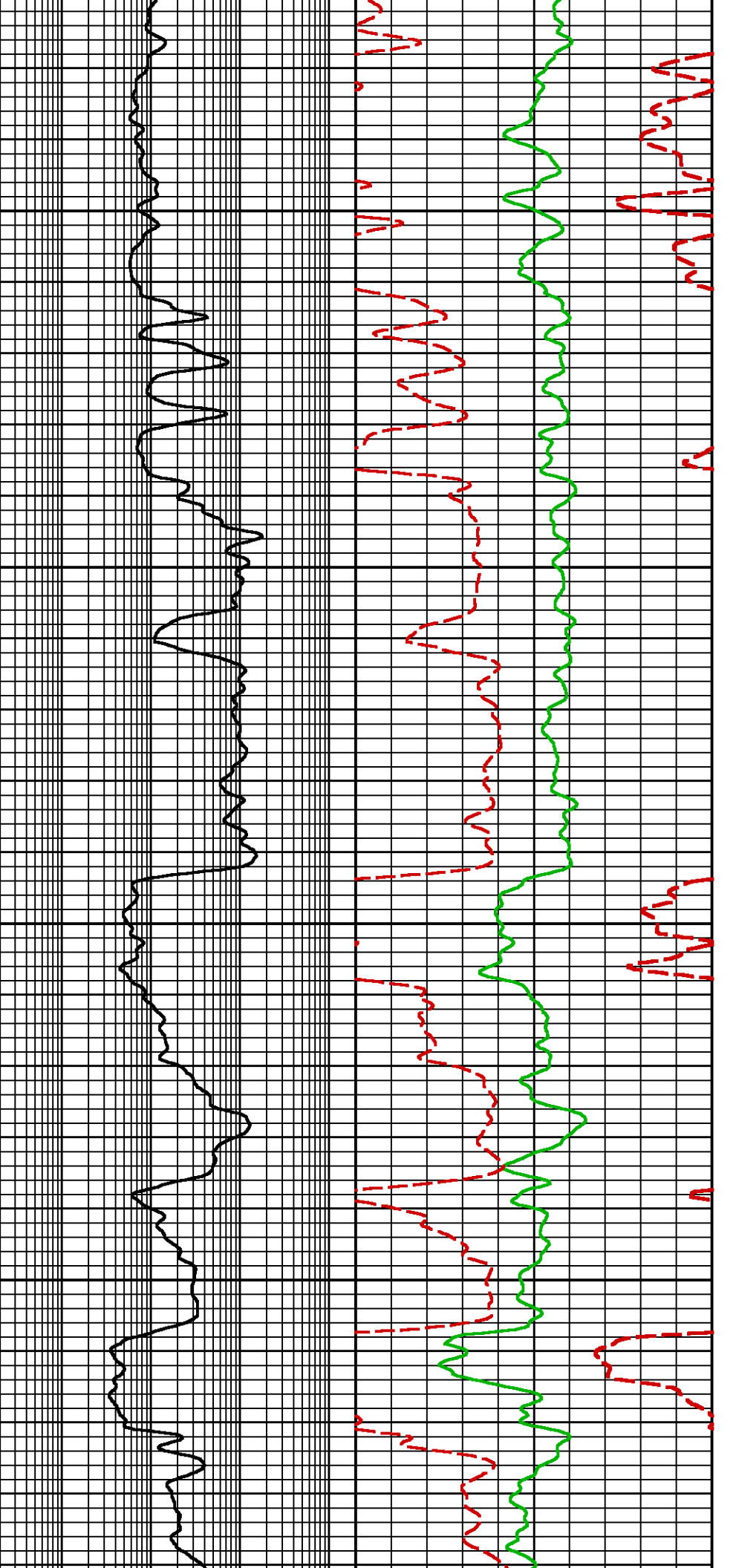
**Project** : NA  
**User** : kotoale  
**Presentation** : BHI1F65XZ1:D:\Ape\_Projects\GUNDERSON\_20\_09W\_NEO\NEO\_PRESENTATION\_LARAMIE\_MAIN.pdf [5"/100" Scale]  
**Plot Interval** : 3865 - 7518.5 Feet  
**Data File 1** : F1 : BHI1F65XZ1:D:\Ape\_Projects\GUNDERSON\_20\_09W\_NEO\Merged\_Set\_Final.xtf  
**Created On** : N/A  
**Company** : LARAMIE ENERGY  
**Well** : GUNDERSON 20-09W  
**Field** : VEGA  
**File Interval** : 2113.5 - 7518.5 Feet  
**OCT** : NA

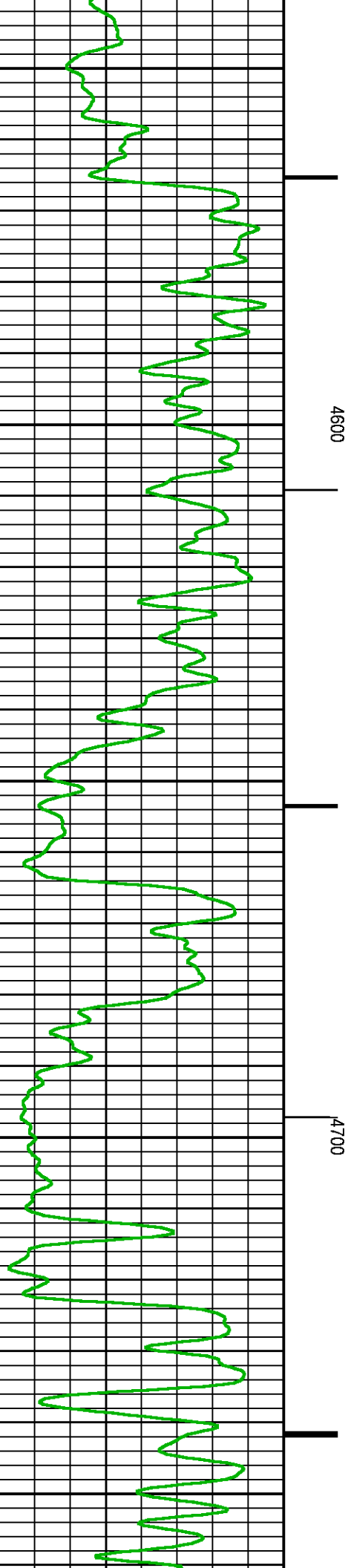
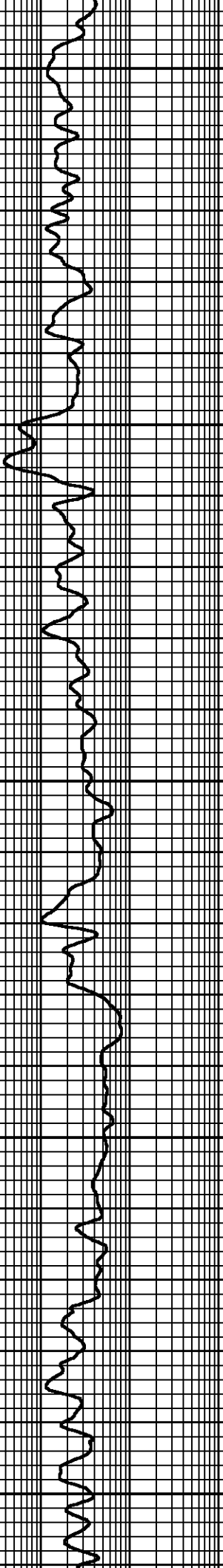
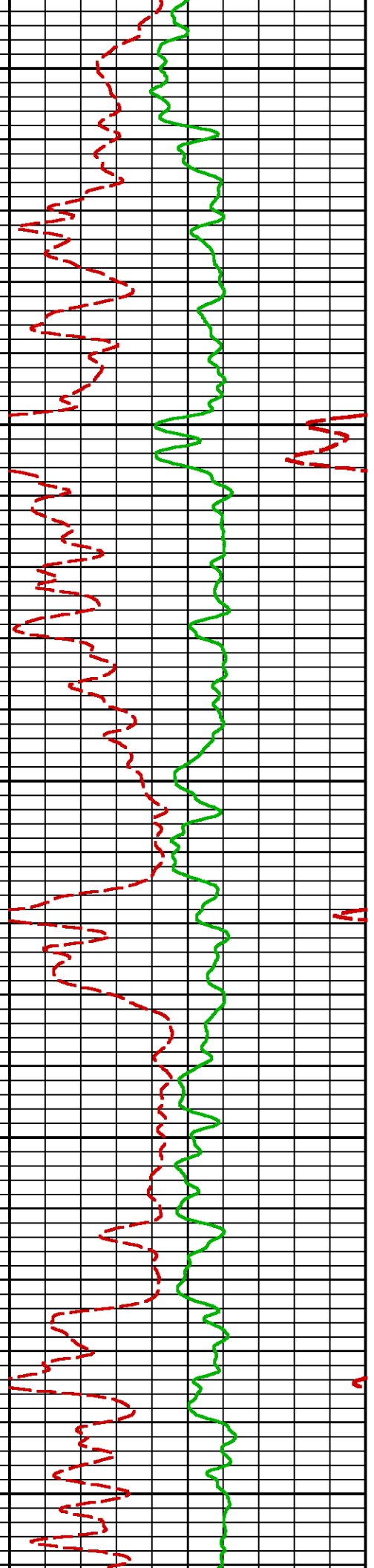


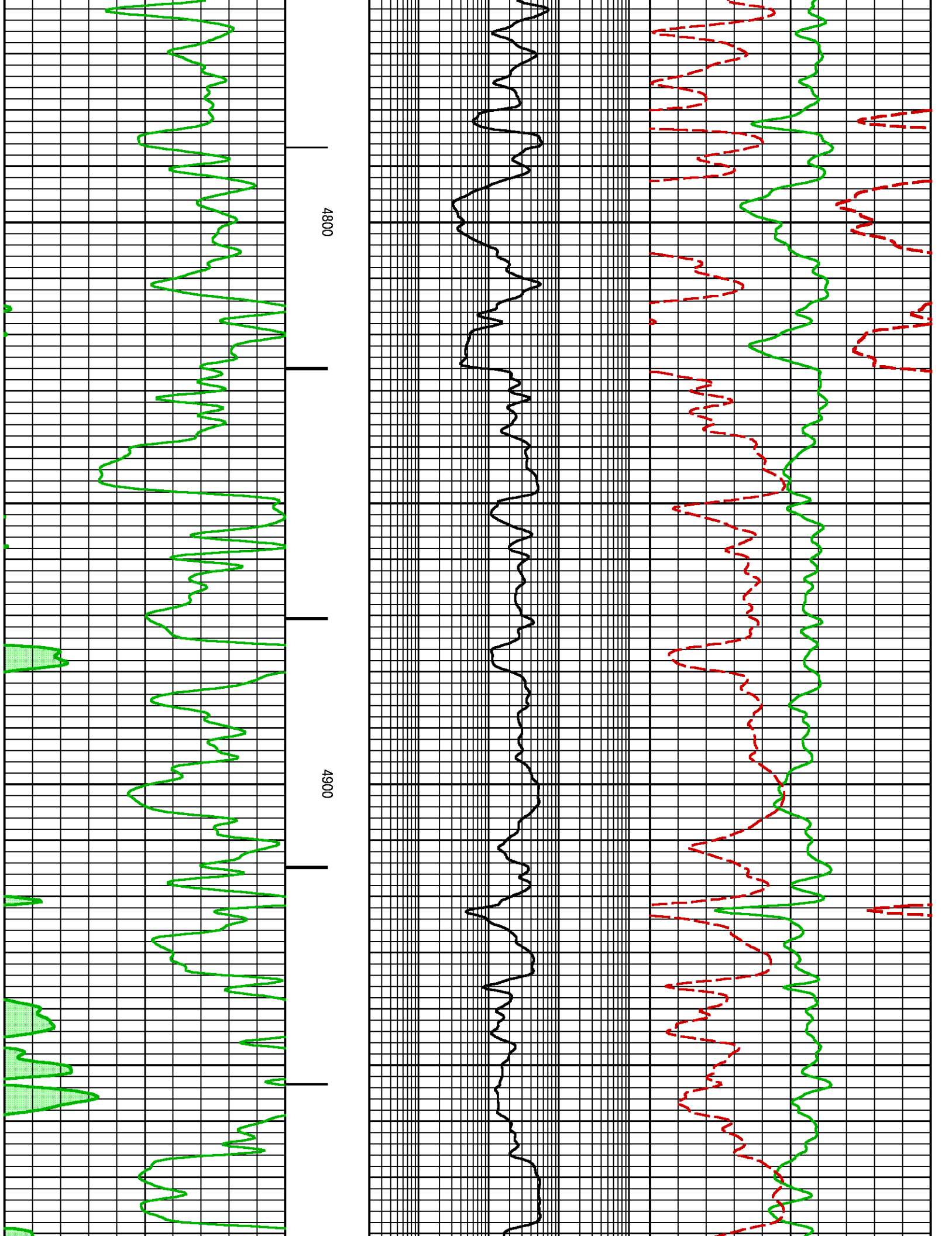


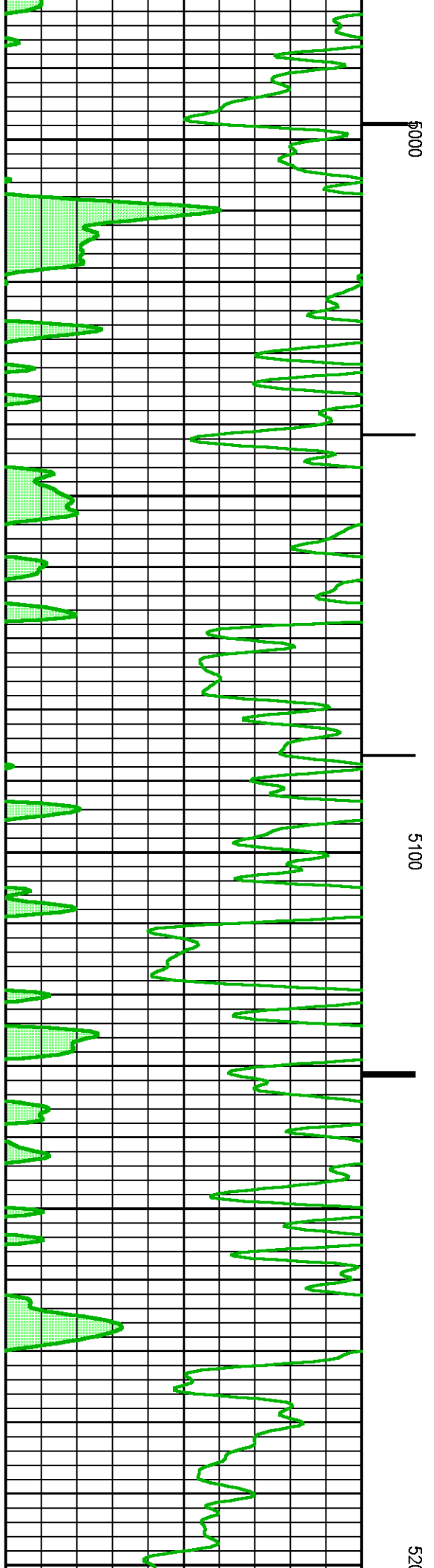
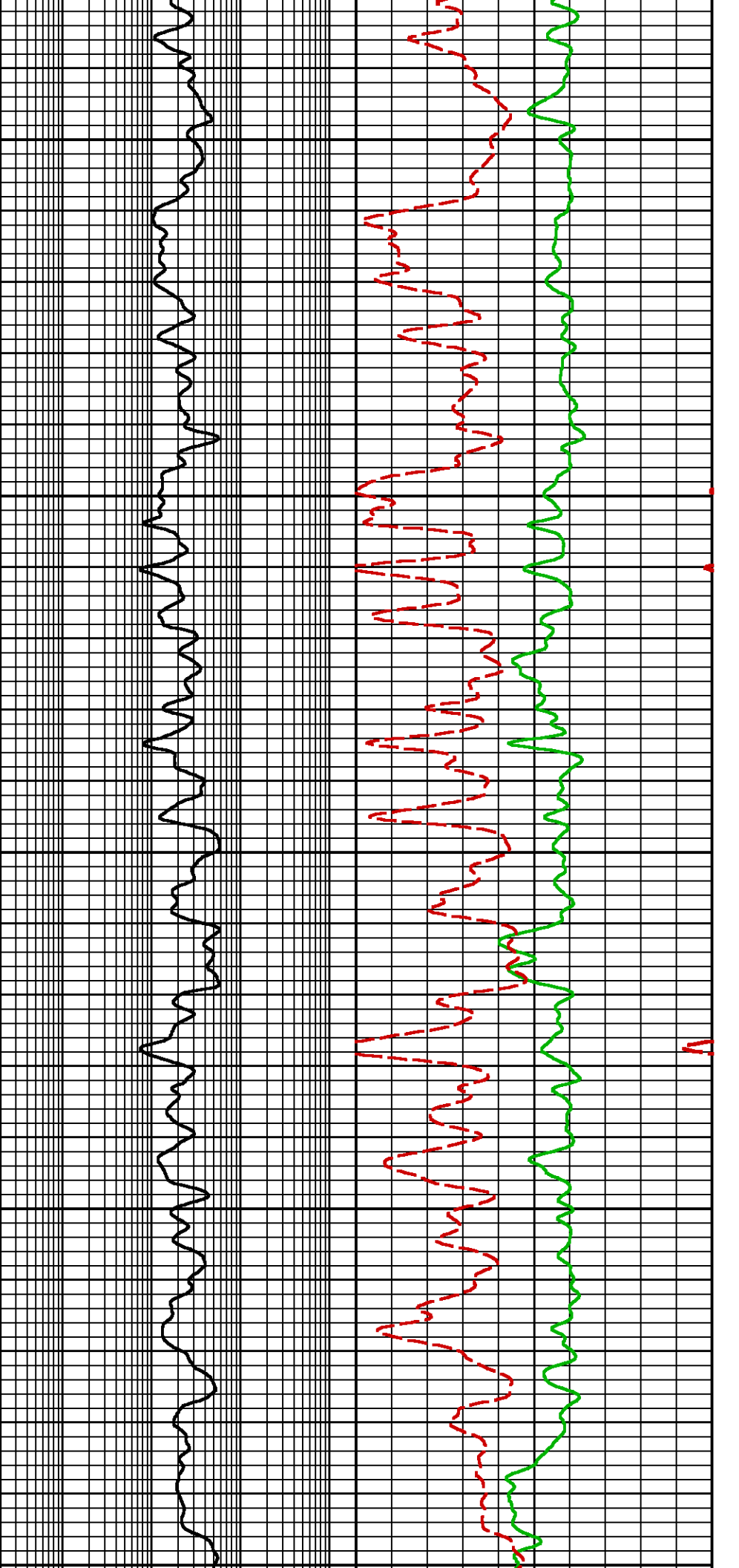


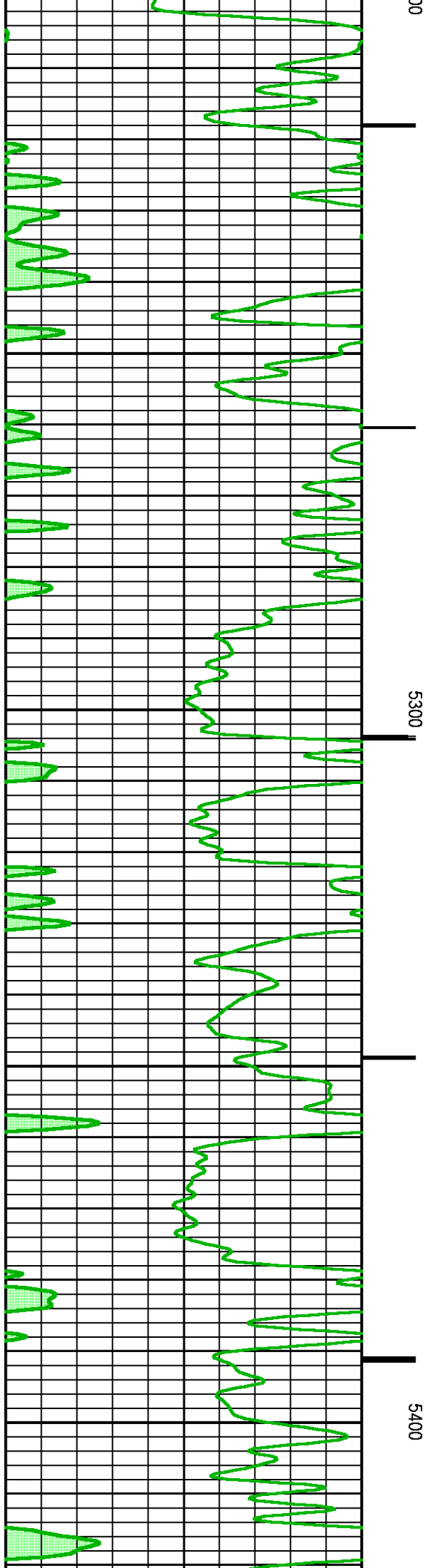
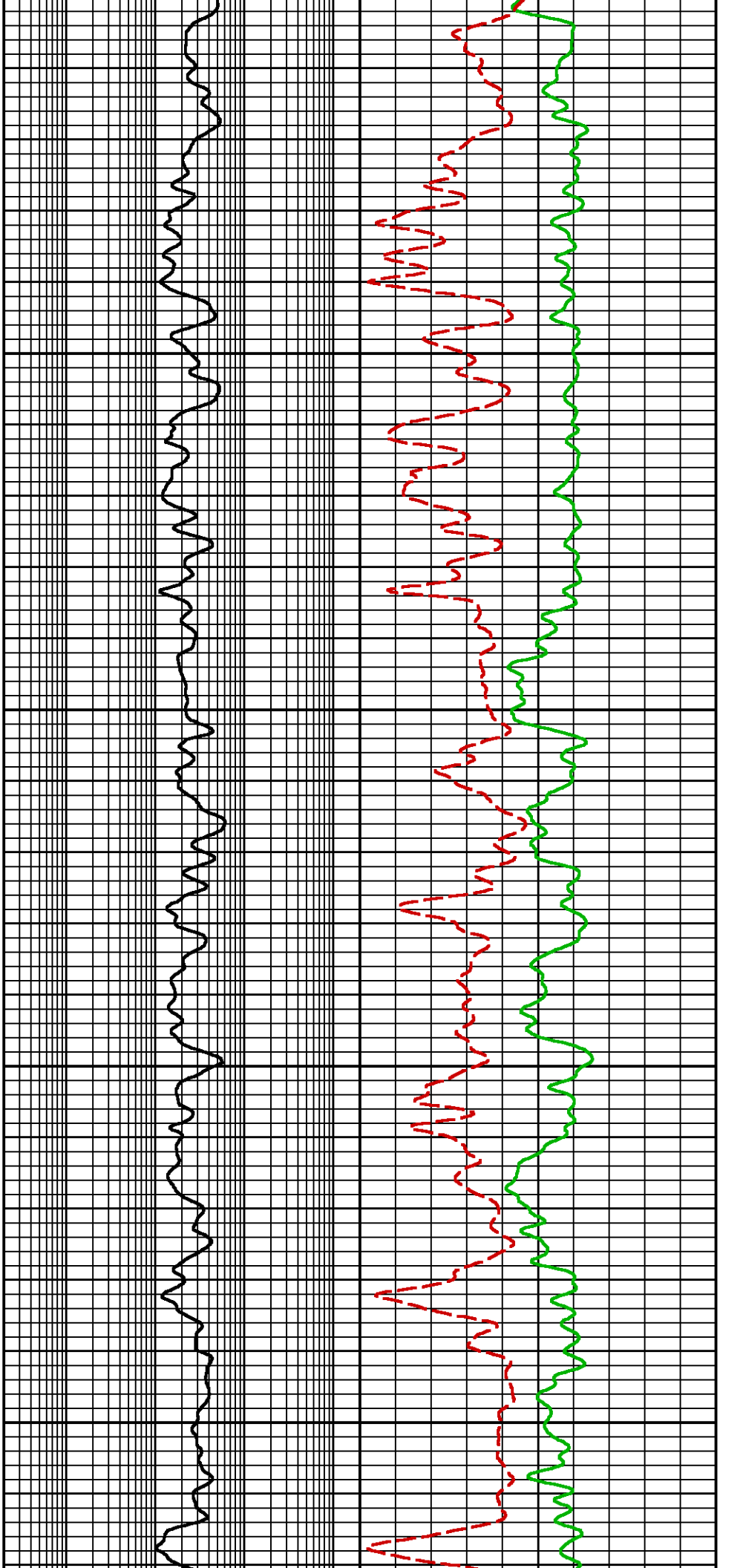


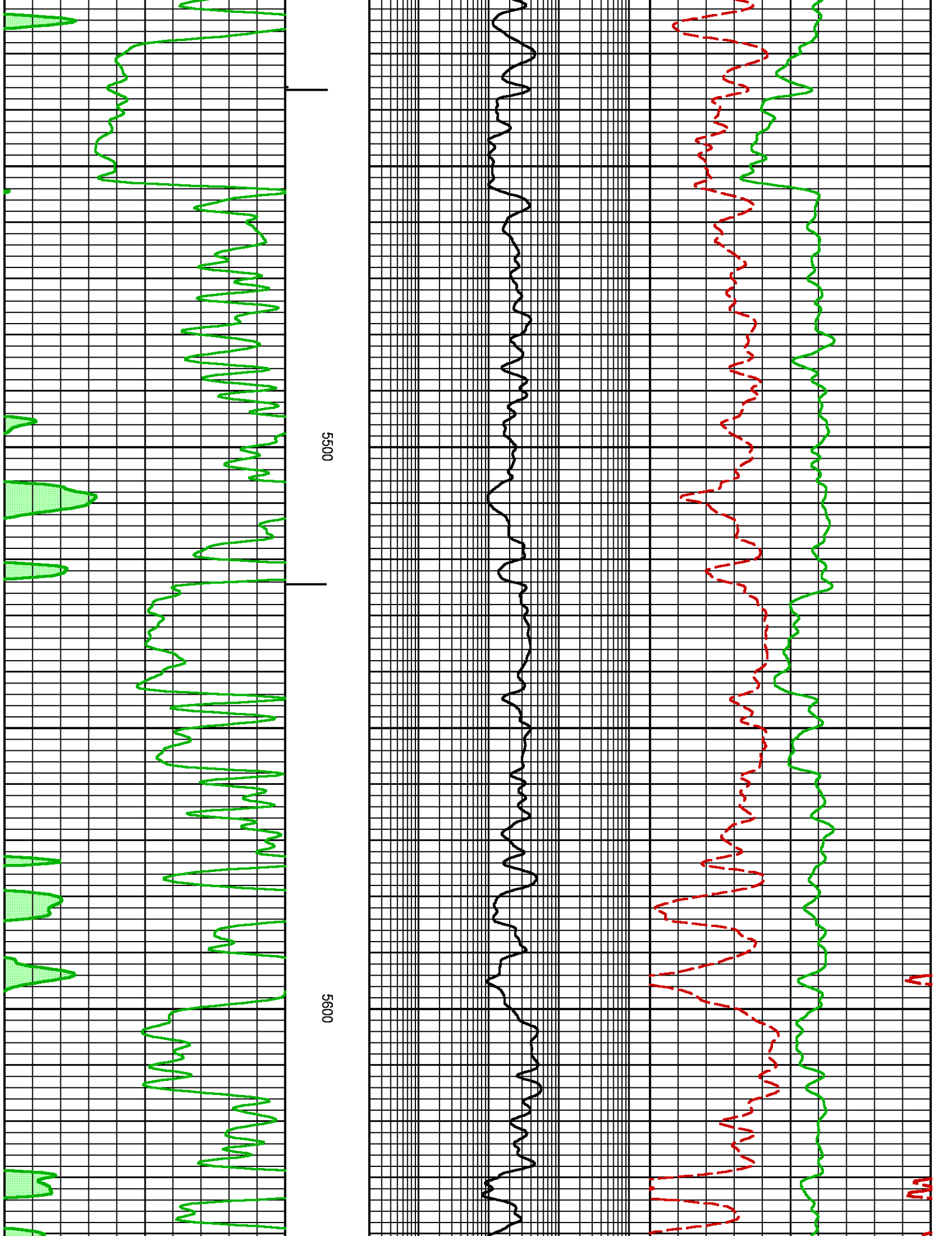


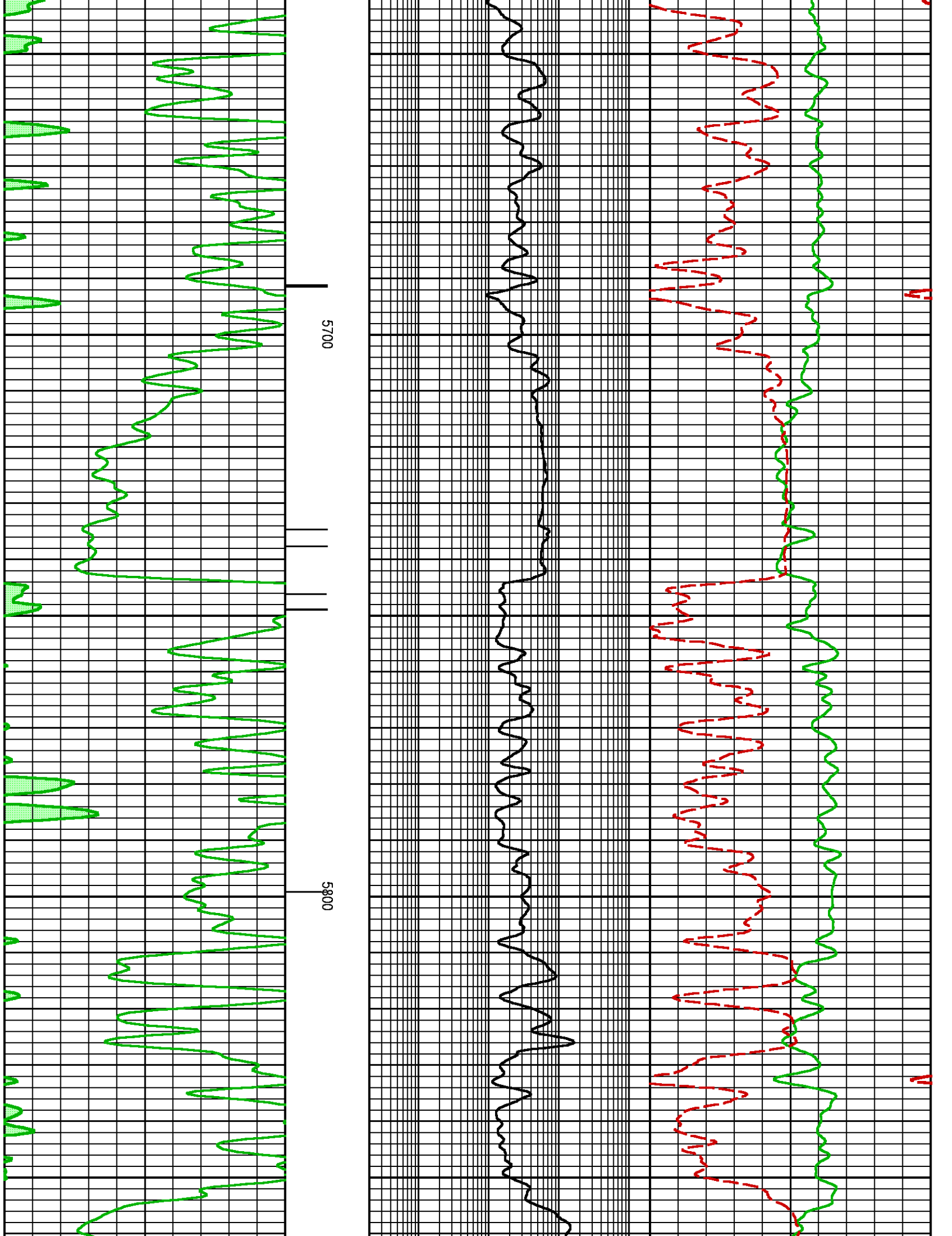


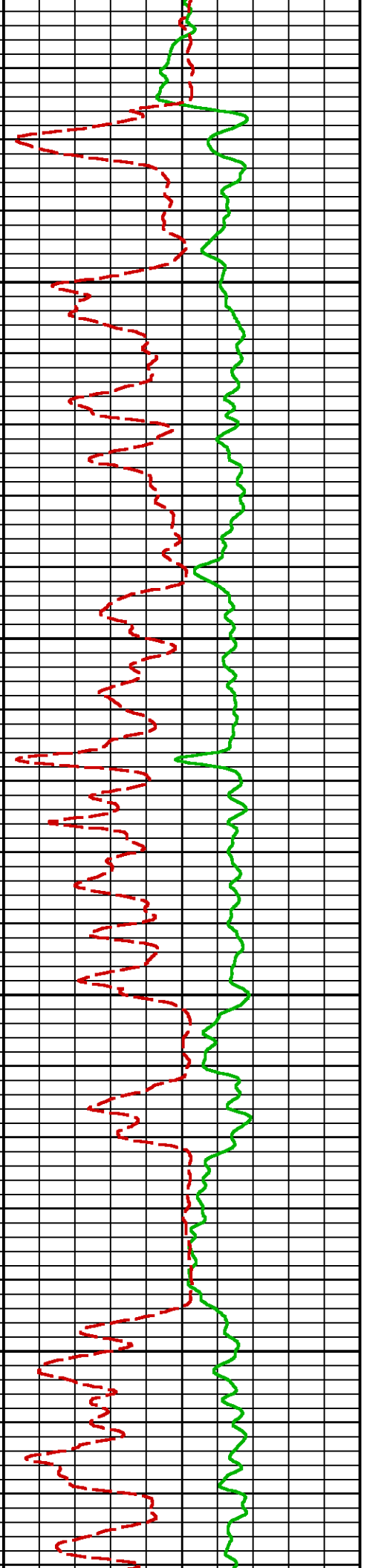
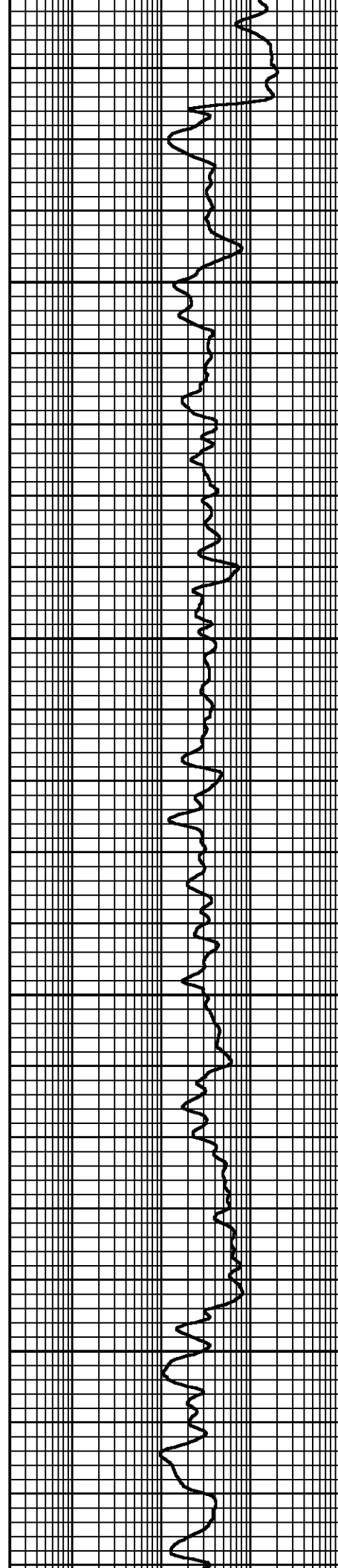
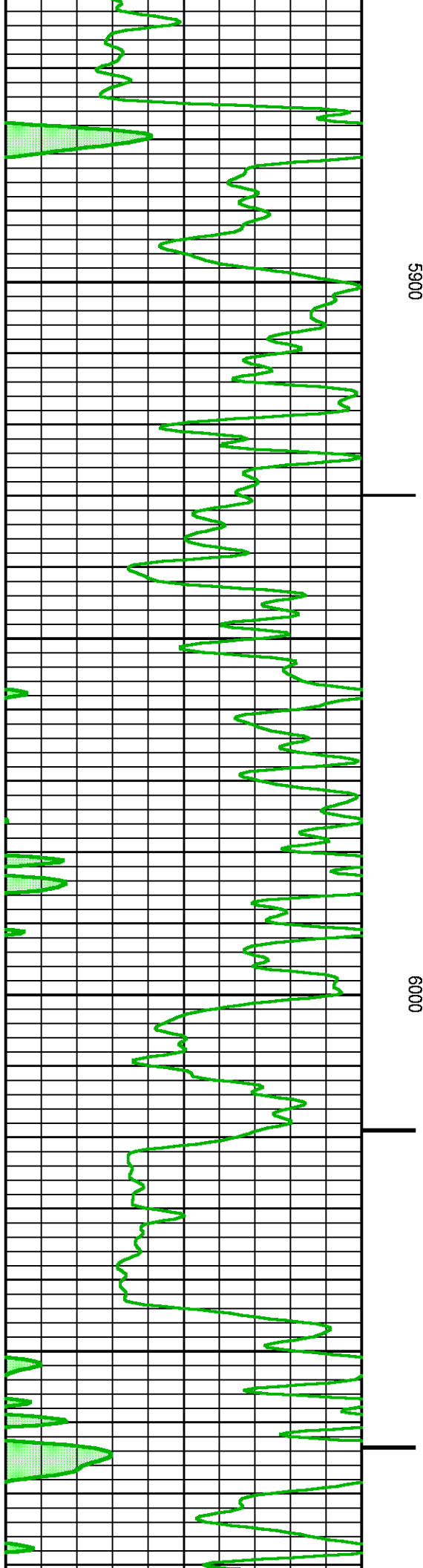






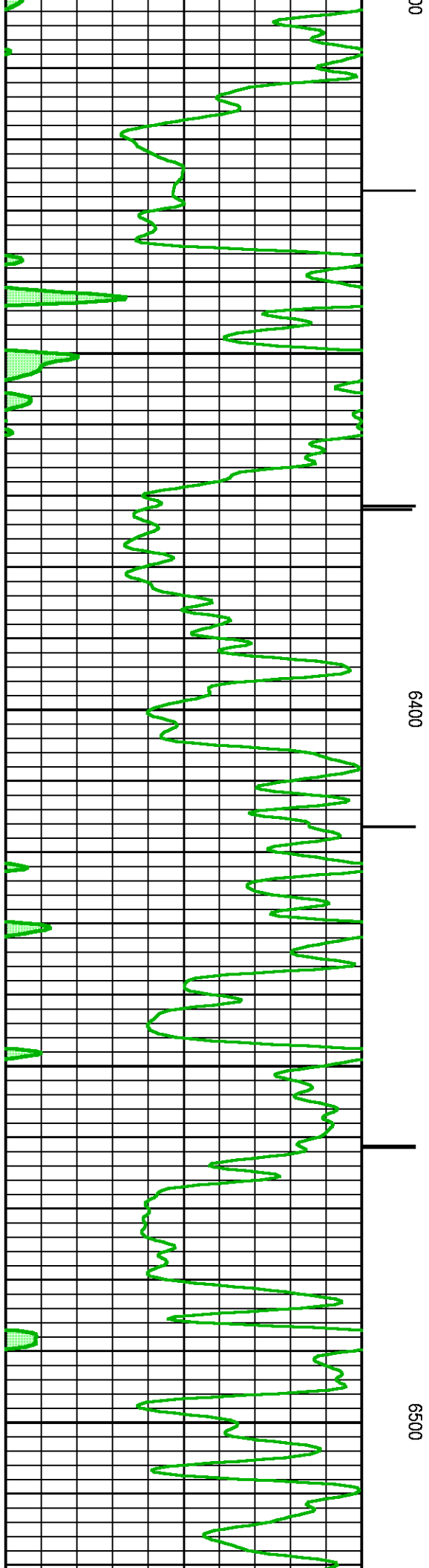
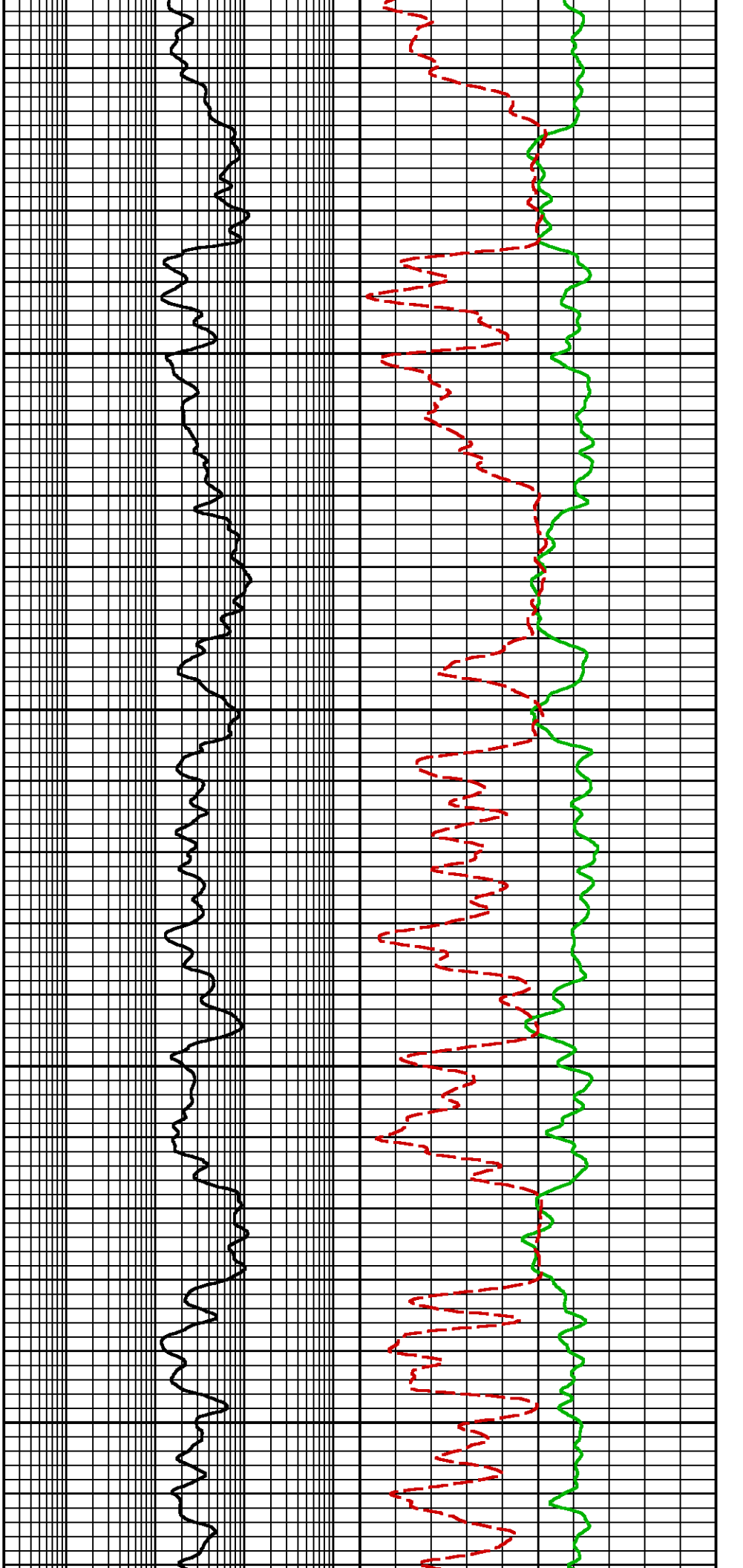


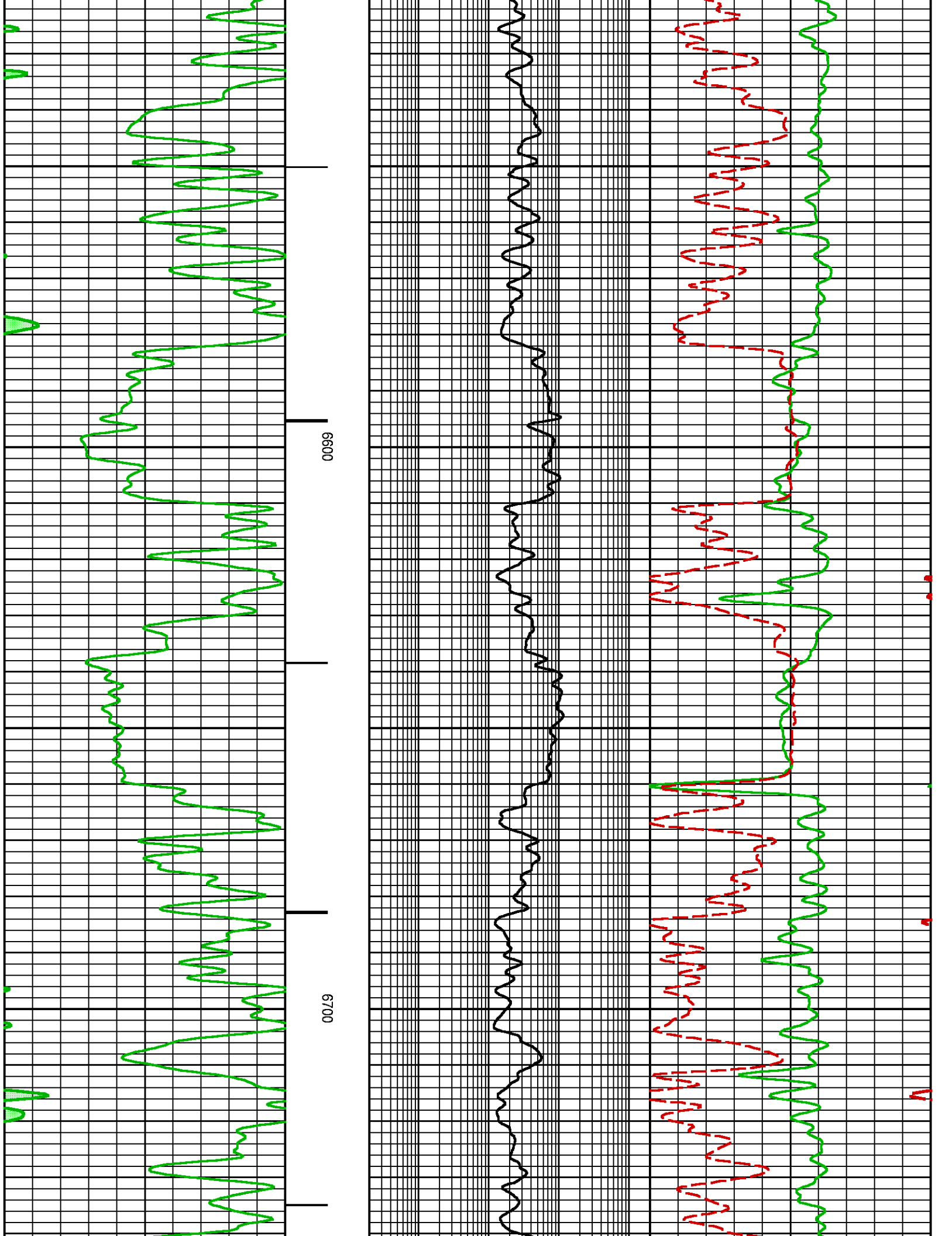


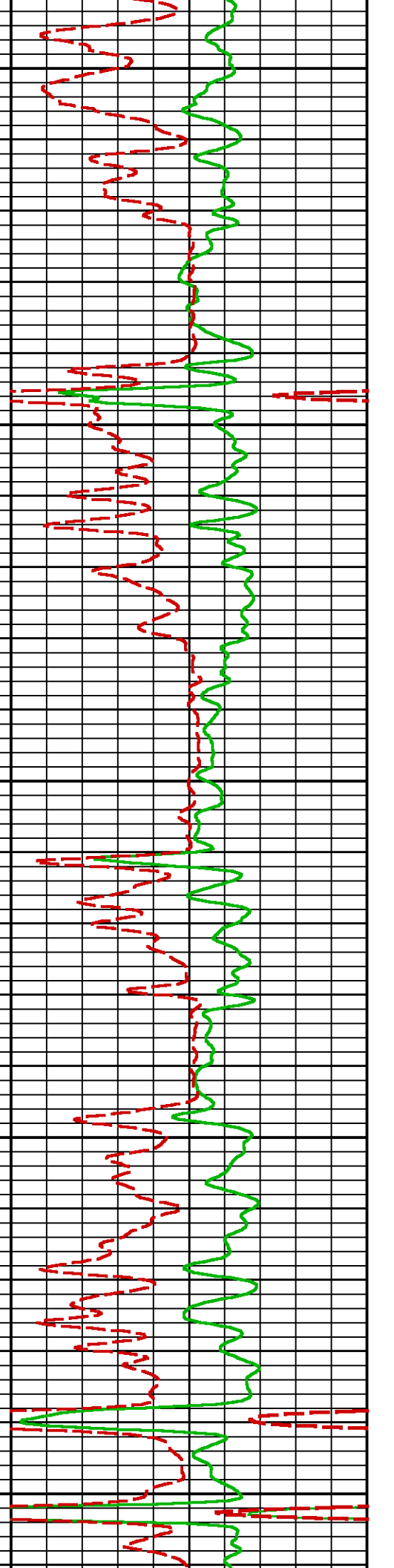
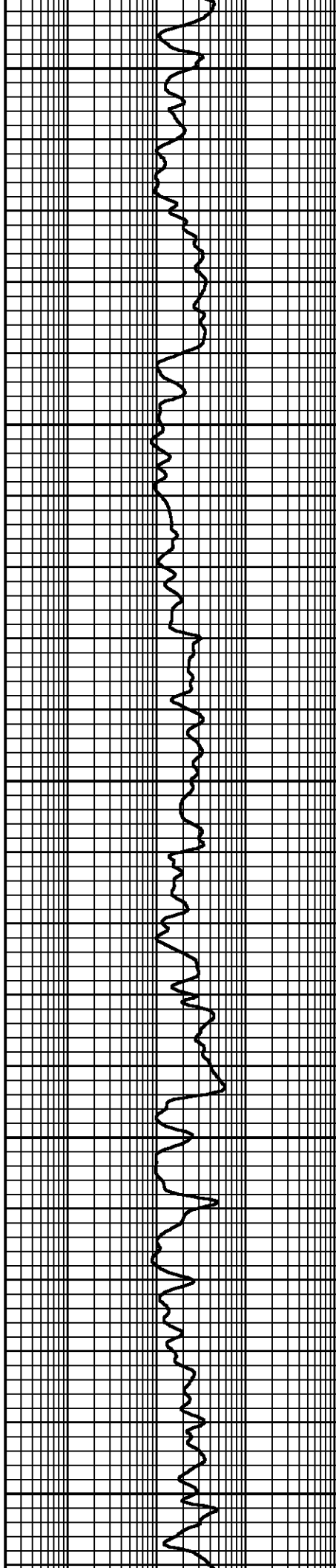
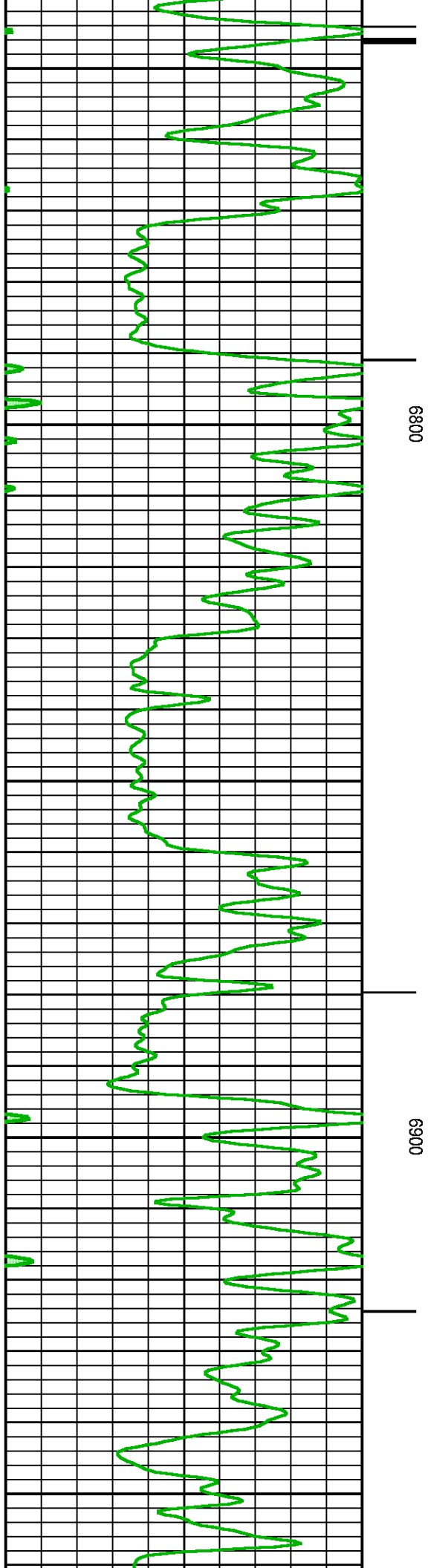


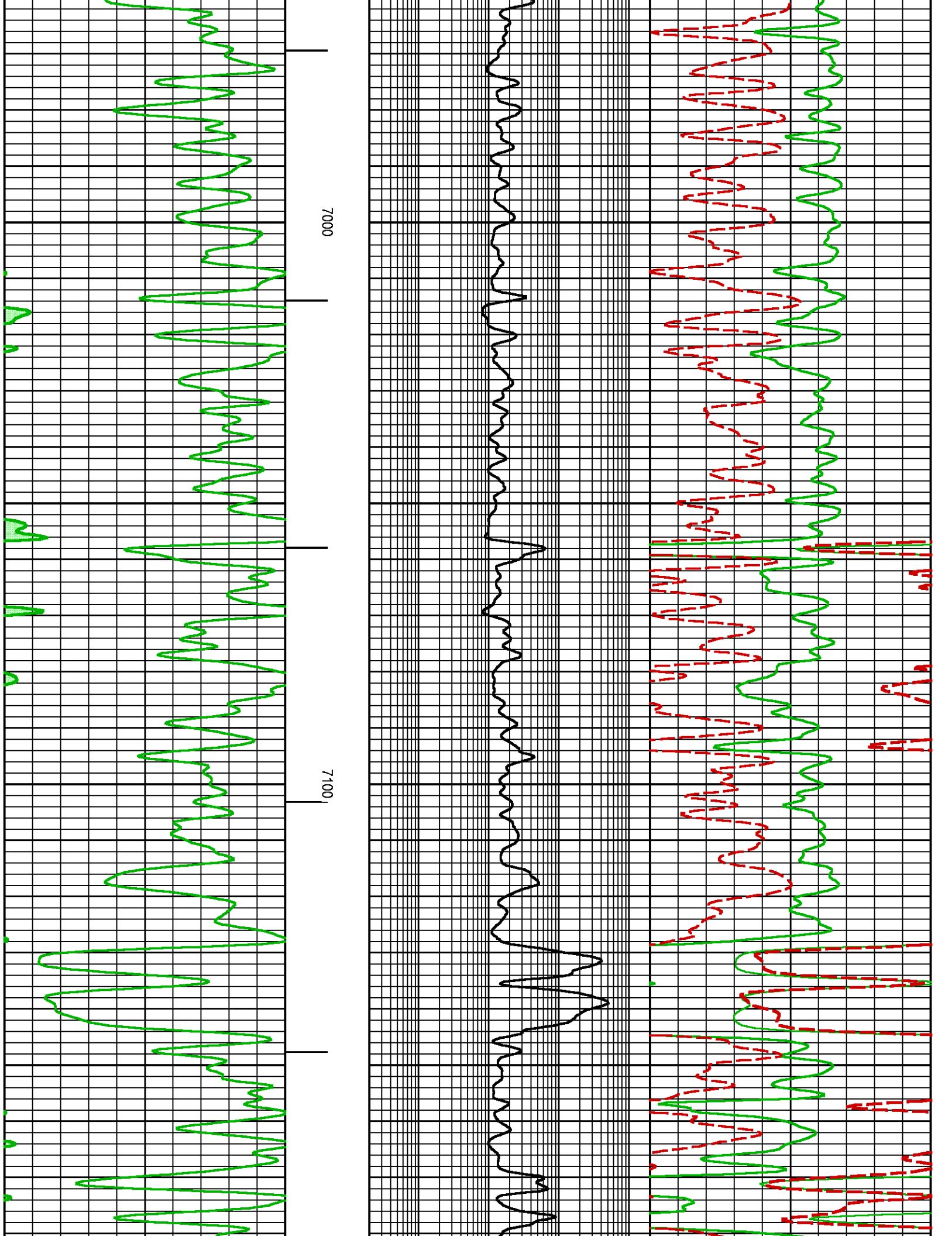


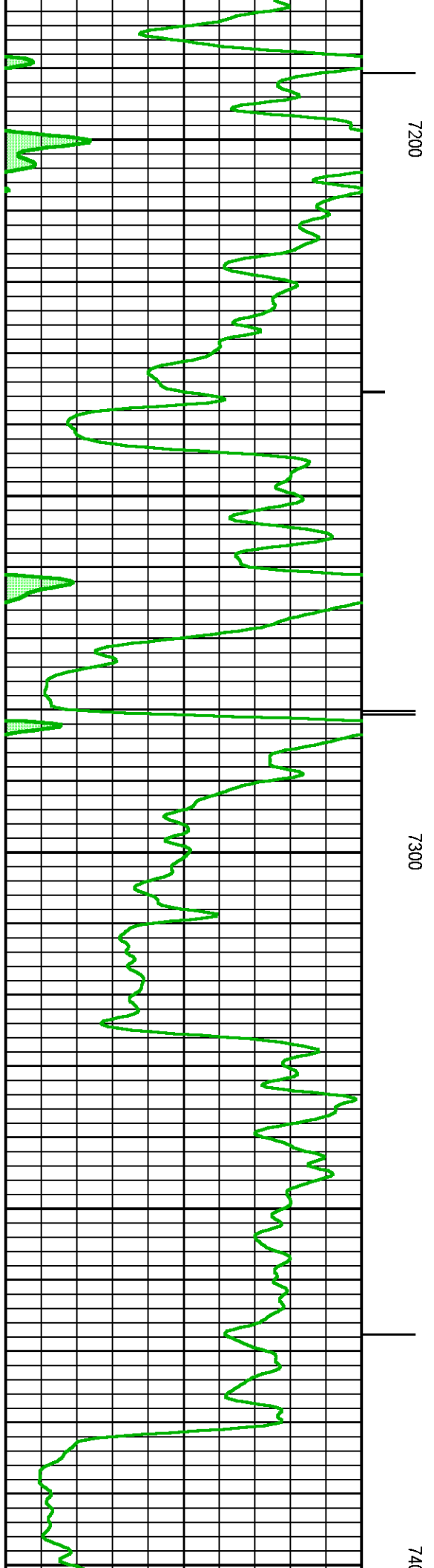
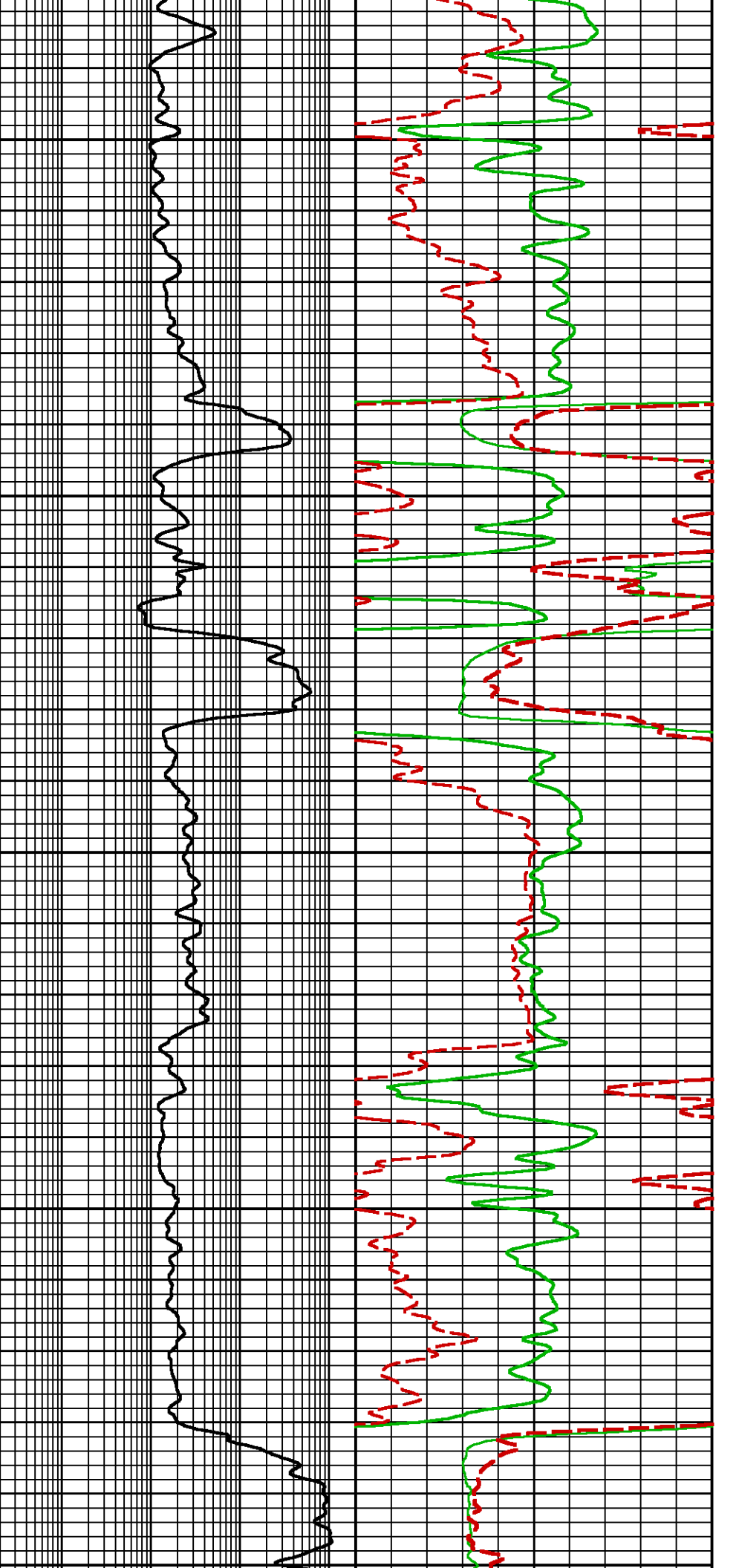


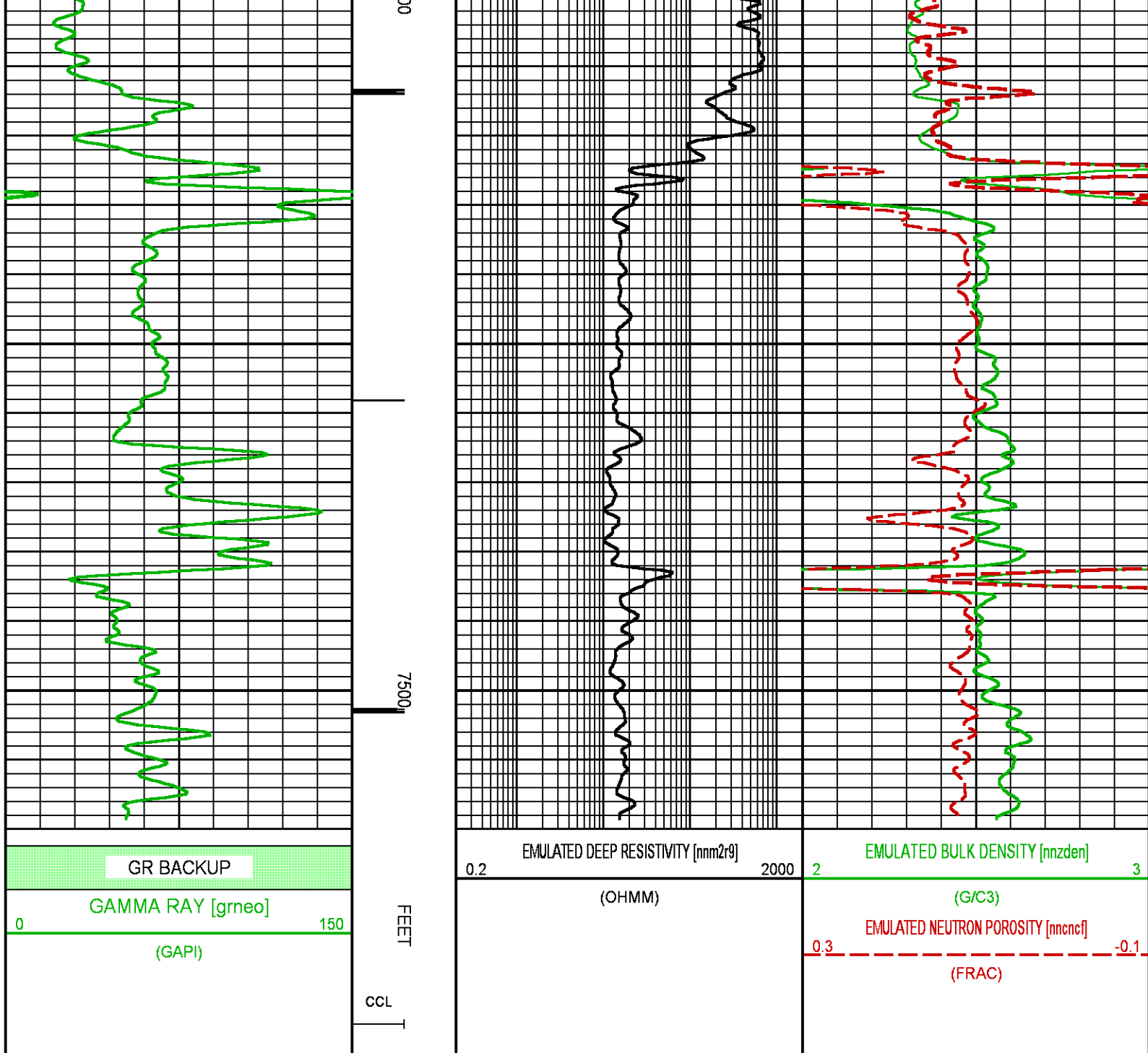



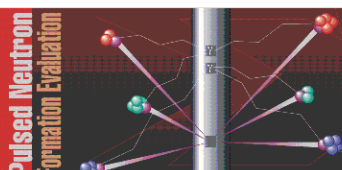










 	<b>COMPANY</b> <u>LARAMIE ENERGY</u> <b>WELL</b> <u>GUNDERSON 20-09W</u> <b>FIELD</b> <u>VEGA</u> <b>COUNTY</b> <u>MESA</u> <b>STATE</b> <u>COLORADO</u>	<b>FILE NO:</b> <u>28341-01</u> <b>API NO:</b> <u>05077103500000</u>
	<b>LOCATION:</b> <u>SEE REMARKS SECTION</u>	<b>ELEVATIONS:</b> KB <u>7176.0 FT</u> DF <u>7175.0 FT</u> GL <u>7146.0 FT</u>
<b>SEC</b> <u>20</u> <b>TWP</b> <u>9S</u> <b>RGE</b> <u>93W</u>	<b>DATE</b> <u>23-AUG-2017</u>	