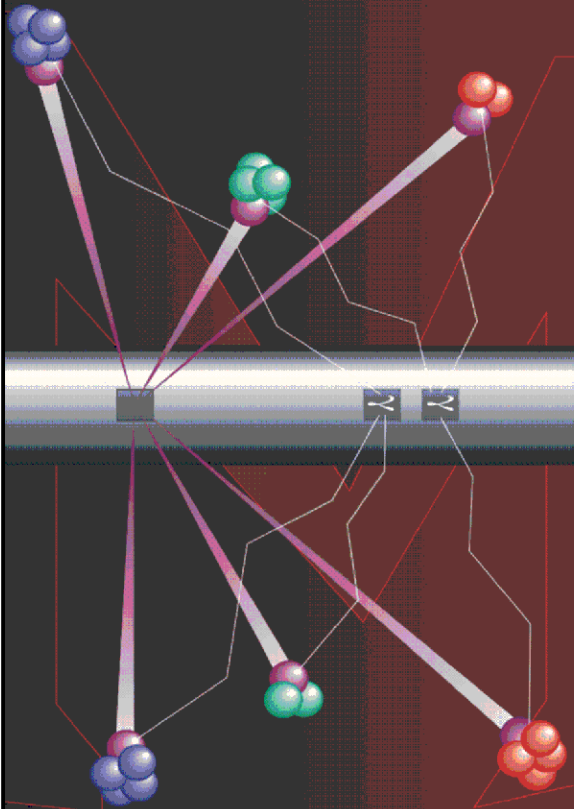


Pulsed Neutron Formation Evaluation



RESERVOIR PERFORMANCE MONITOR NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 19-04E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS

SEC 19 TWP 9S RGE 93W

ELEVATIONS:

KB 7286 FT DF 7286 FT GL 7262 FT

DATE 7-NOV-2017 ECC 29249.01

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>HOUSTON</u>	LOG ANALYST: <u>KIMBERLY ELLSWORTH</u>	DATE: <u>7-NOV-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S. YASSA</u>	DATE: <u>26-OCT-2017</u>
FROM	TO		
<u>2476 FT</u>	<u>8230 FT</u>		

REMARKS

LOCATION: SHL: LAT: 39.262830N LONG: 107.815107W
BHL: LAT: 39.267147N LONG: 107.806900W

TRAINING WELL:
BRUTON 19-07W

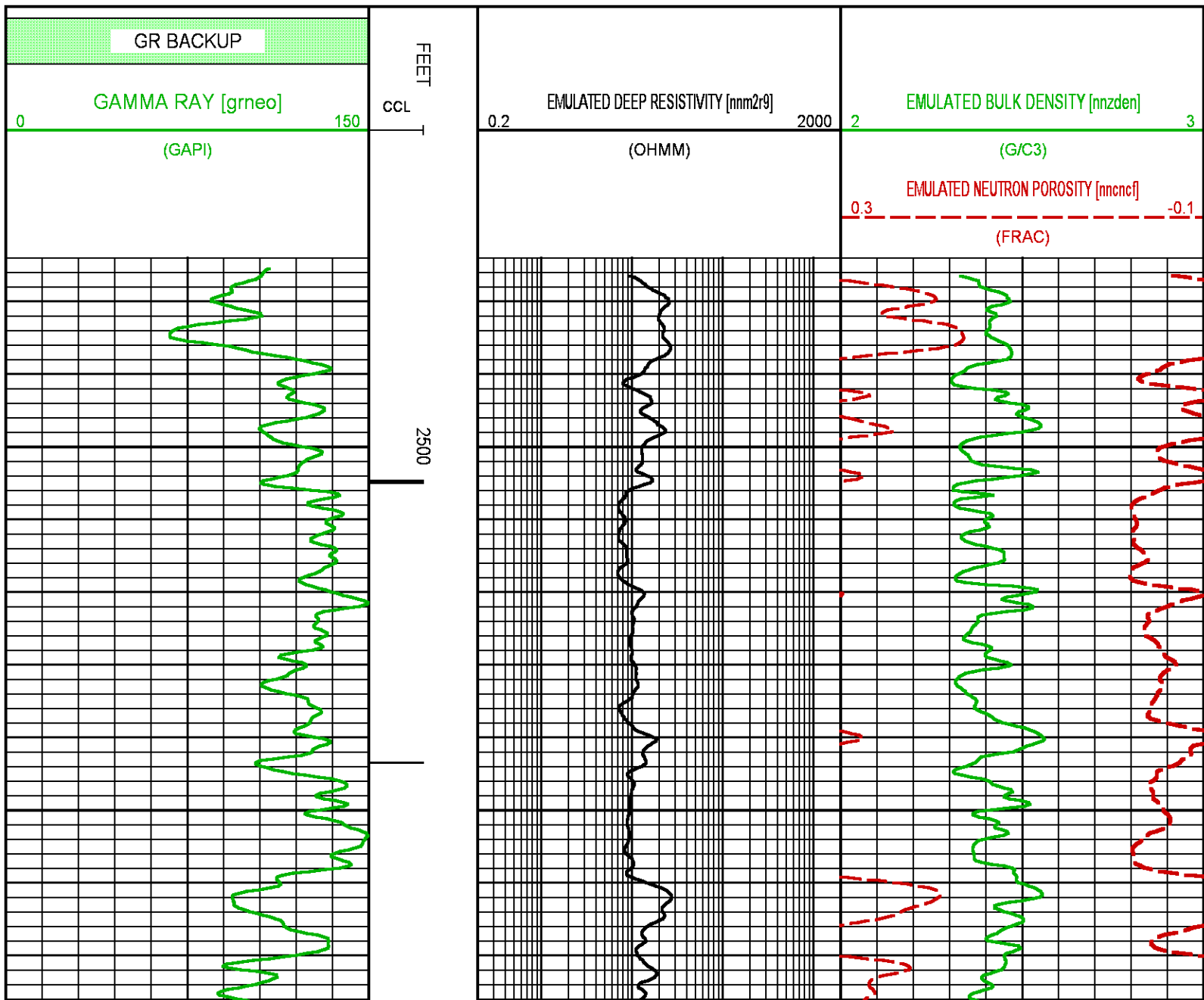
ANY ERRORS IN THE TRAINING WELL OPENHOLE DATA CAN PERETUATE THROUGH AS ERROR IN THE EMULATED RESULTS

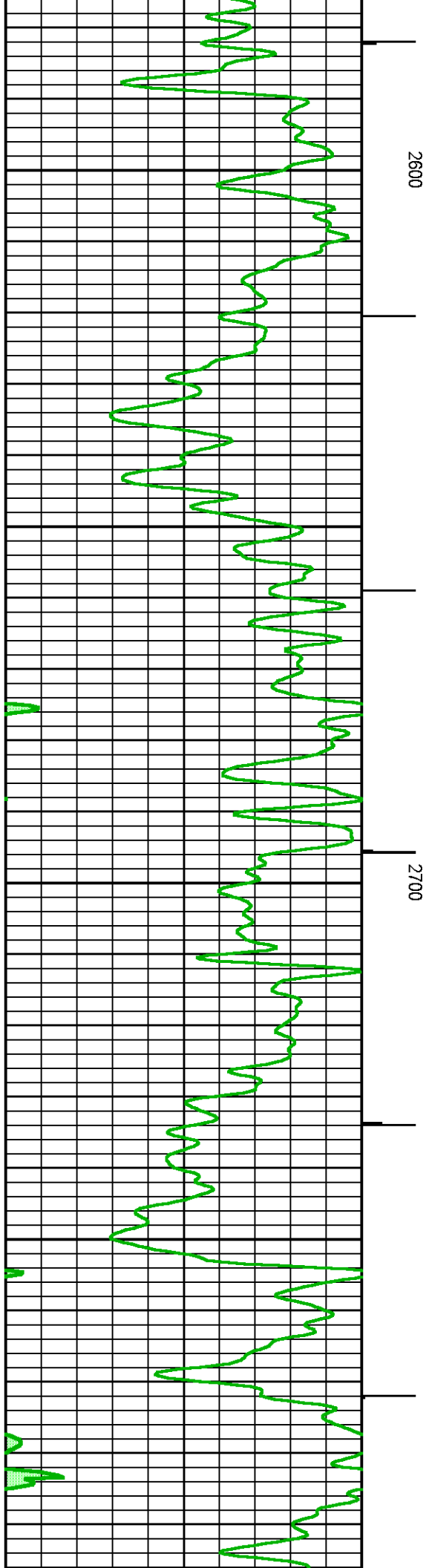
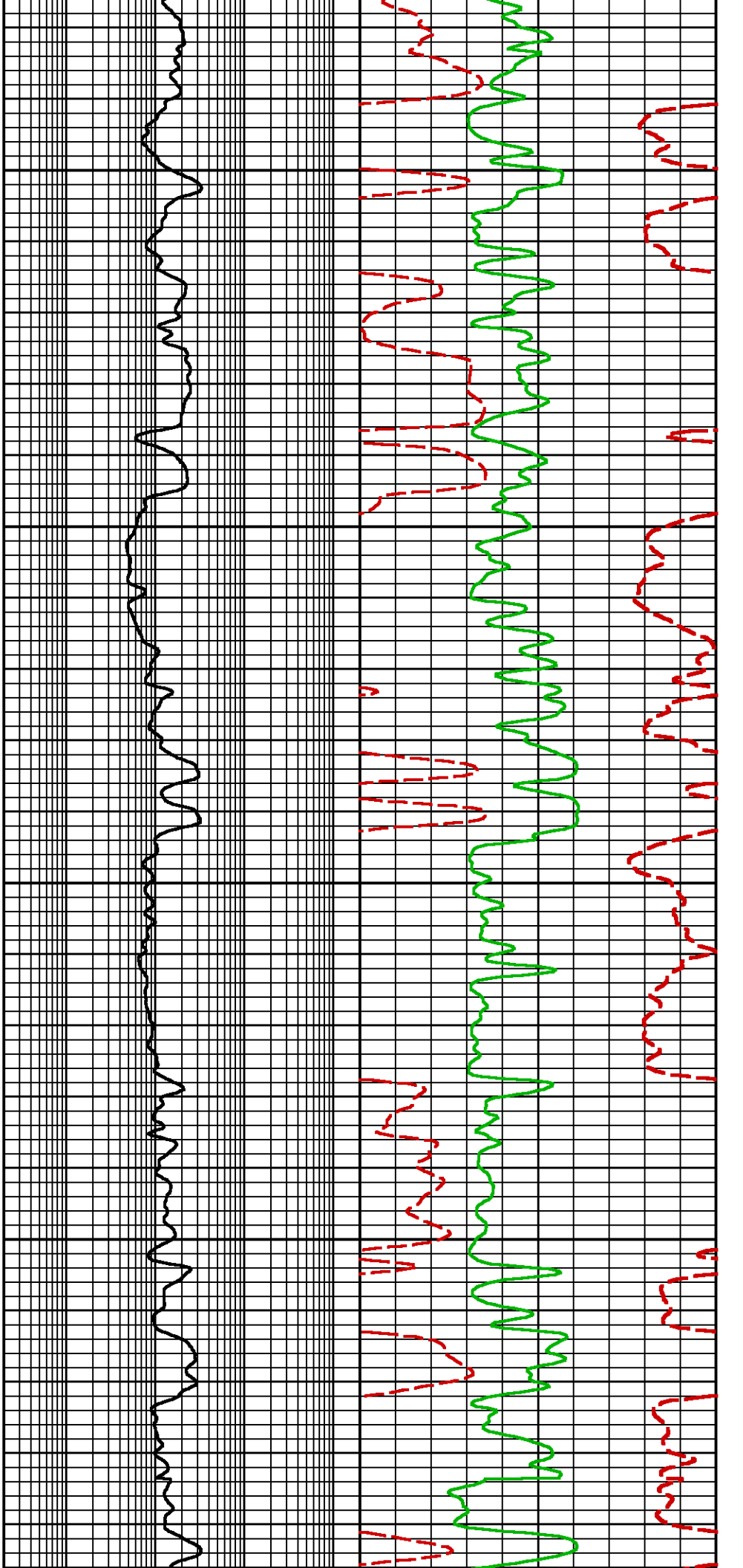
BOND LOG IS DEPTH REFERENCE LOG

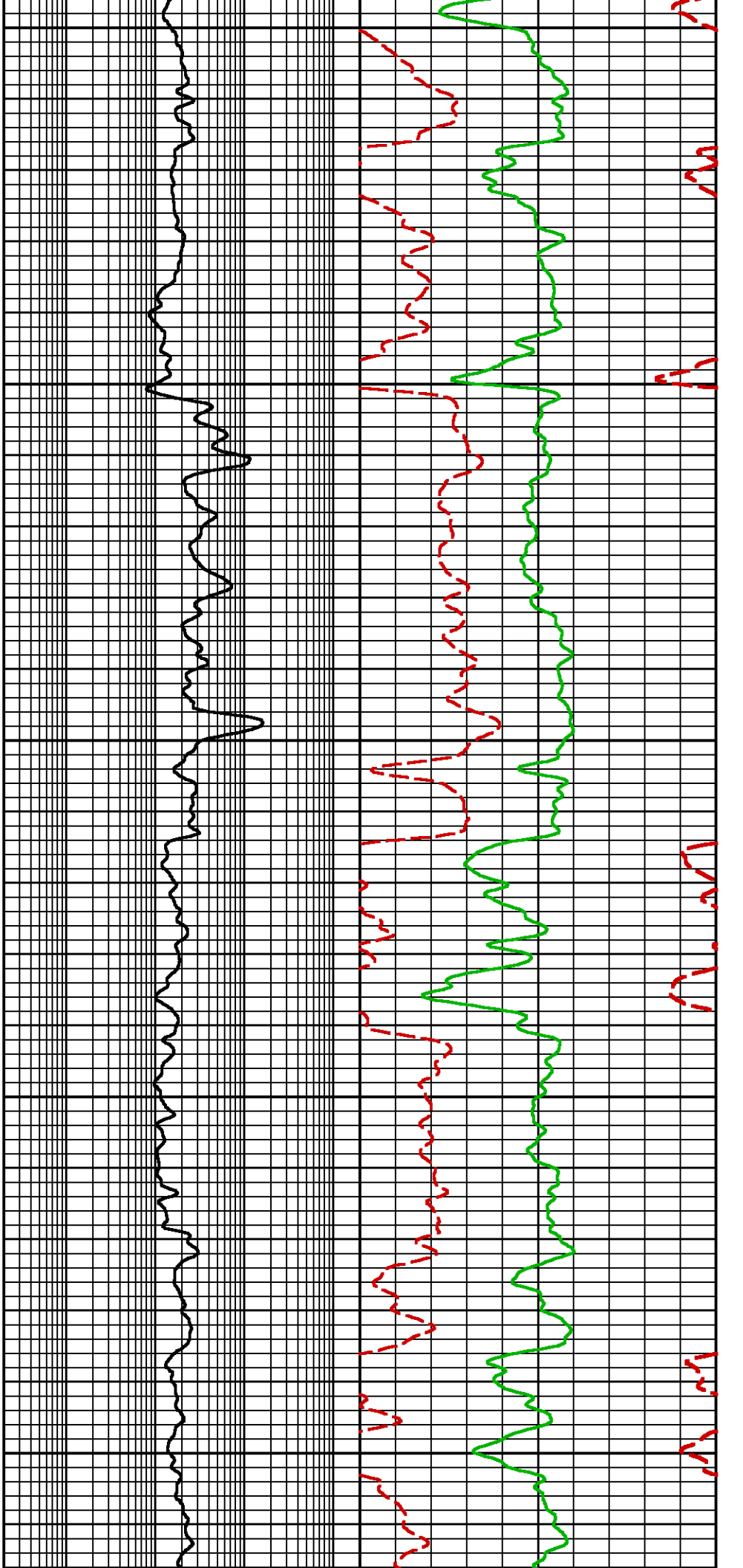
NEO RESULTS FOR BRUTON 19-04E (G-SAND)

Project : NA
User : ellskima
Presentation : BHI3BKZH12:C:\Ape_Projects\laramie_bruton_19_04e\NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2475.5 - 3080 Feet

Data File 1 : F1 : BHI3BKZH12:C:\Ape_Projects\laramie_bruton_19_04e\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON 19-04E
Field : VEGA
File Interval : 2475.5 - 8229.5 Feet
OCT : NA



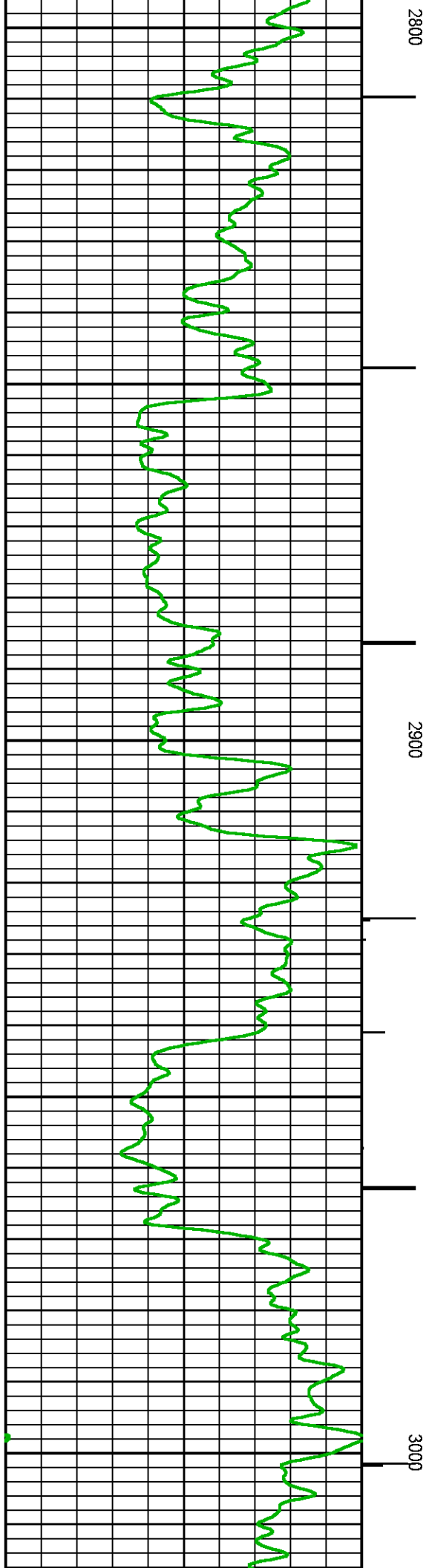


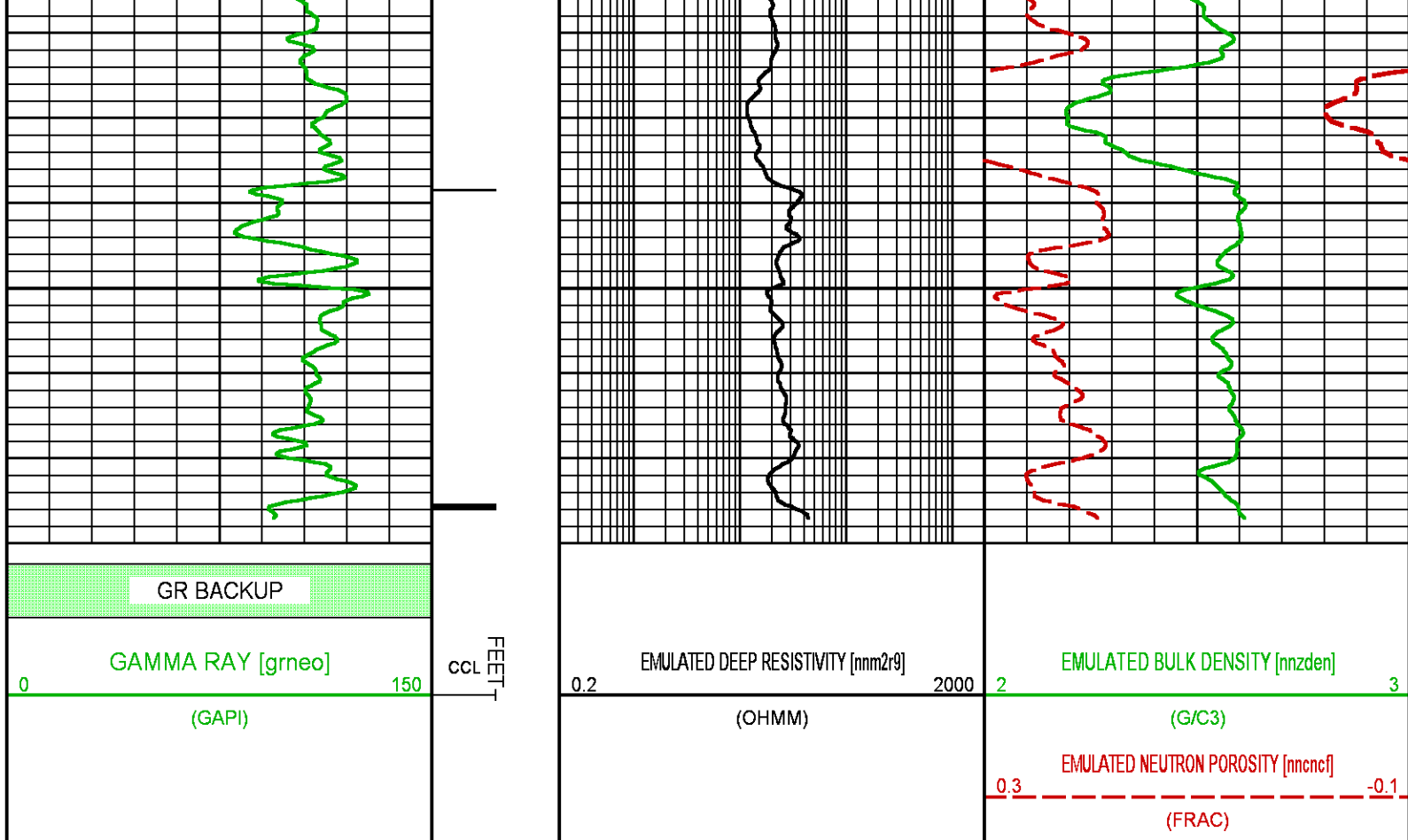


2800

2900

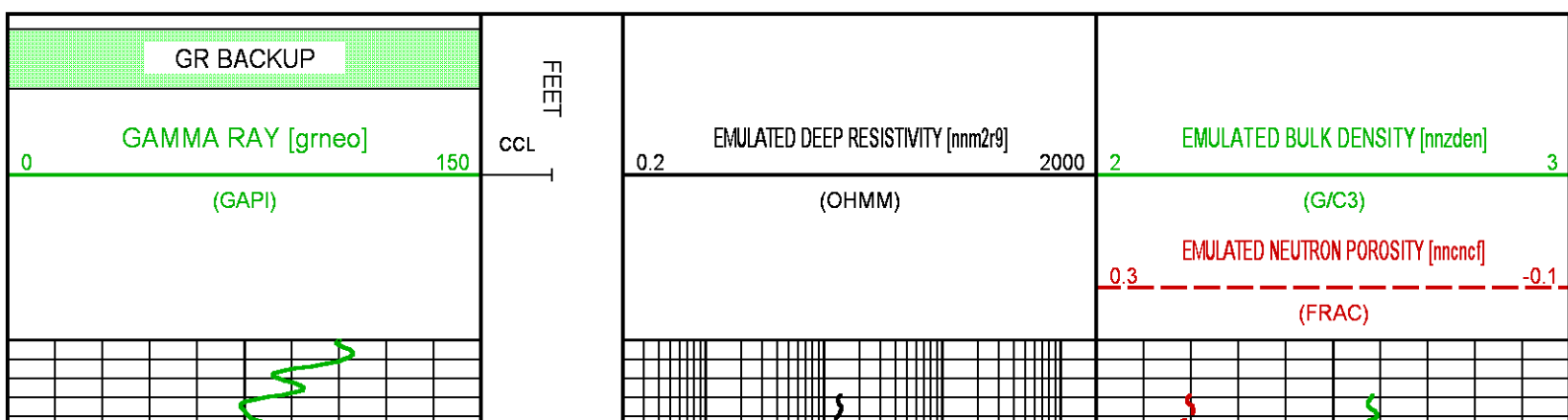
3000

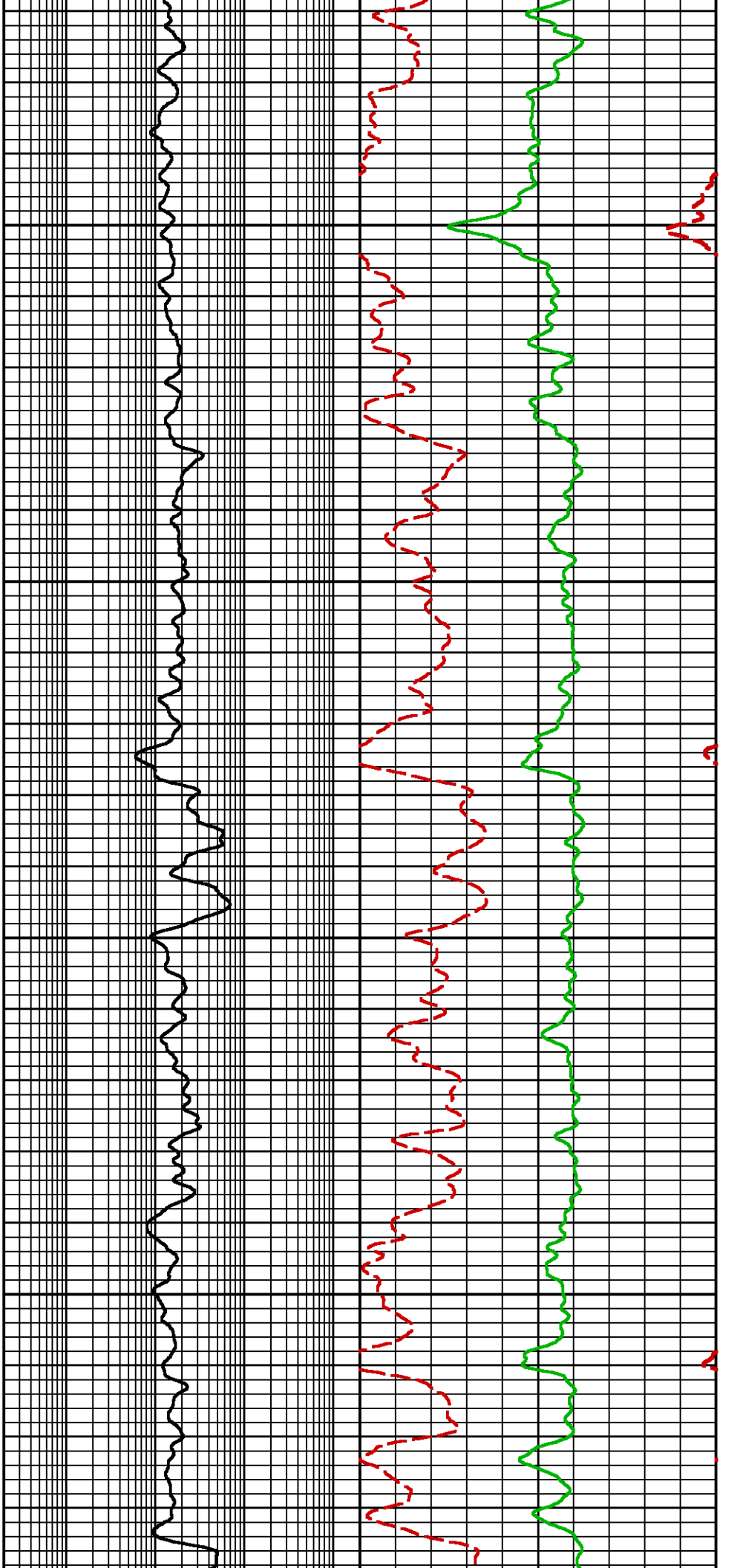




NEO RESULTS FOR BRUTON 19-04E (MAIN)

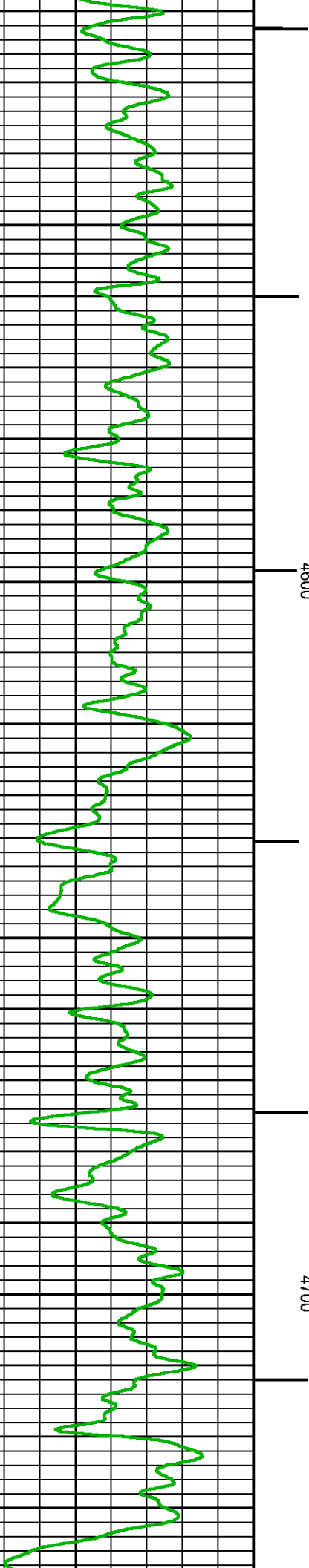
Project : NA
User : ellskima
Presentation : BHI3BKZH12:C:\Ape_Projects\laramie_bruton_19_04e\ NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100' Scale]
Plot Interval : 4510 - 8229.5 Feet
Data File 1 : F1 : BHI3BKZH12:C:\Ape_Projects\laramie_bruton_19_04e\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON 19-04E
Field : VEGA
File Interval : 2475.5 - 8229.5 Feet
OCT : NA

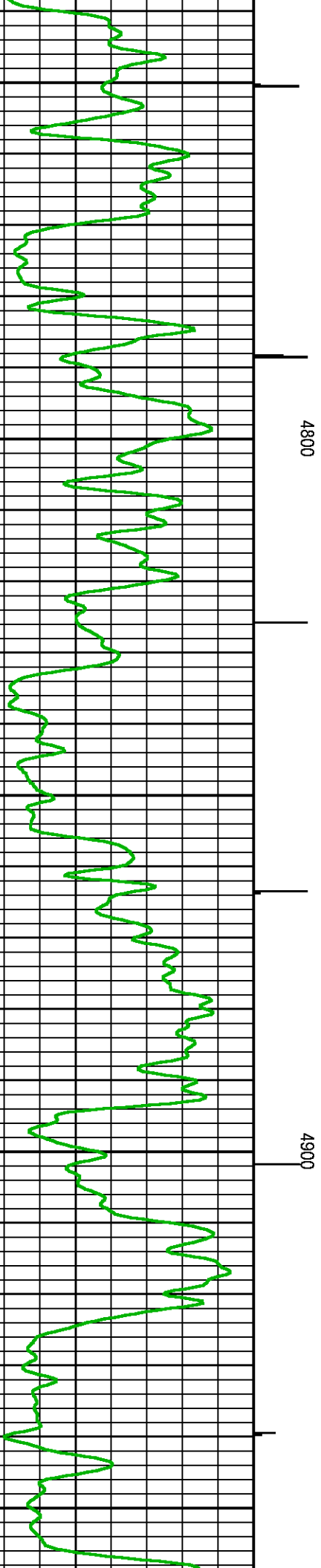
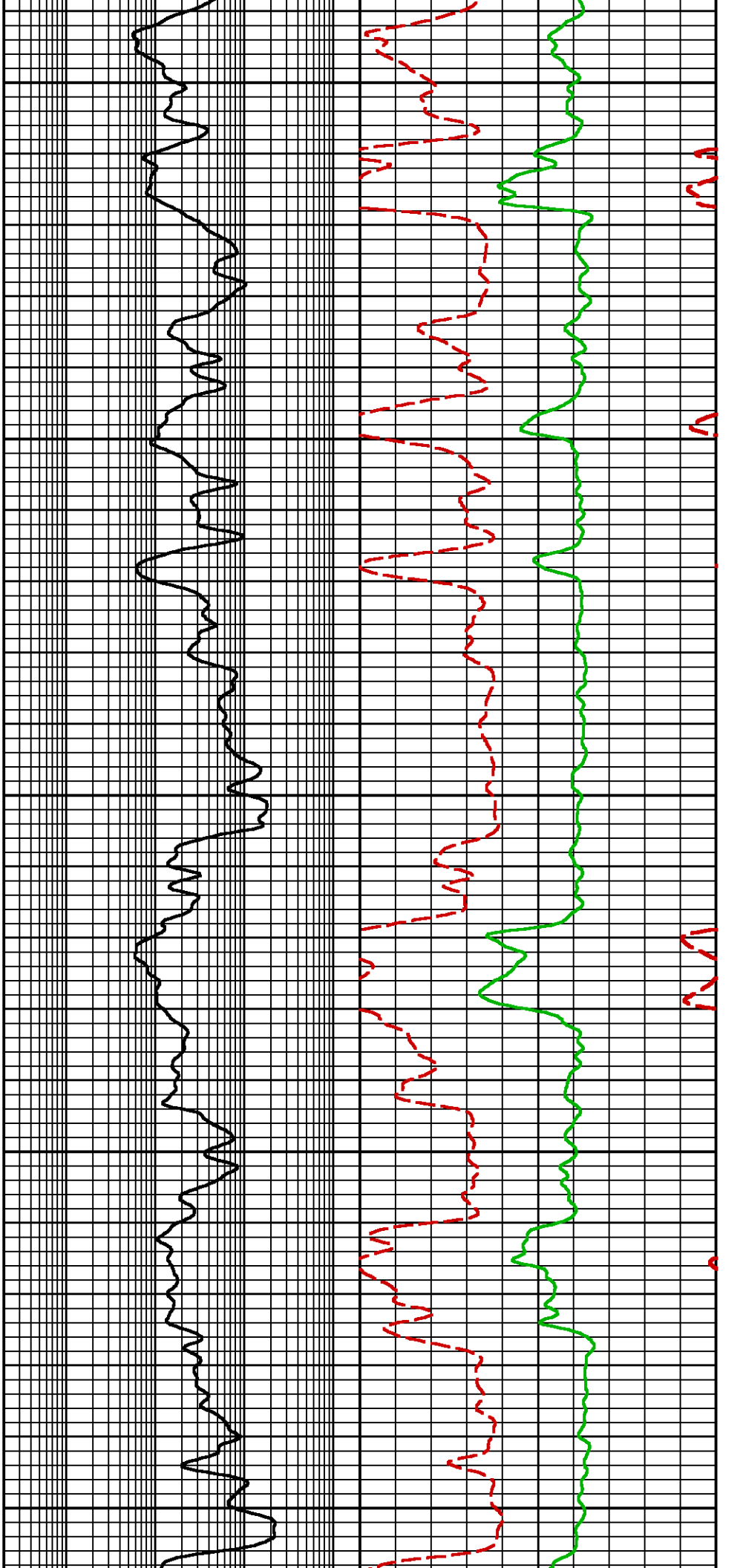


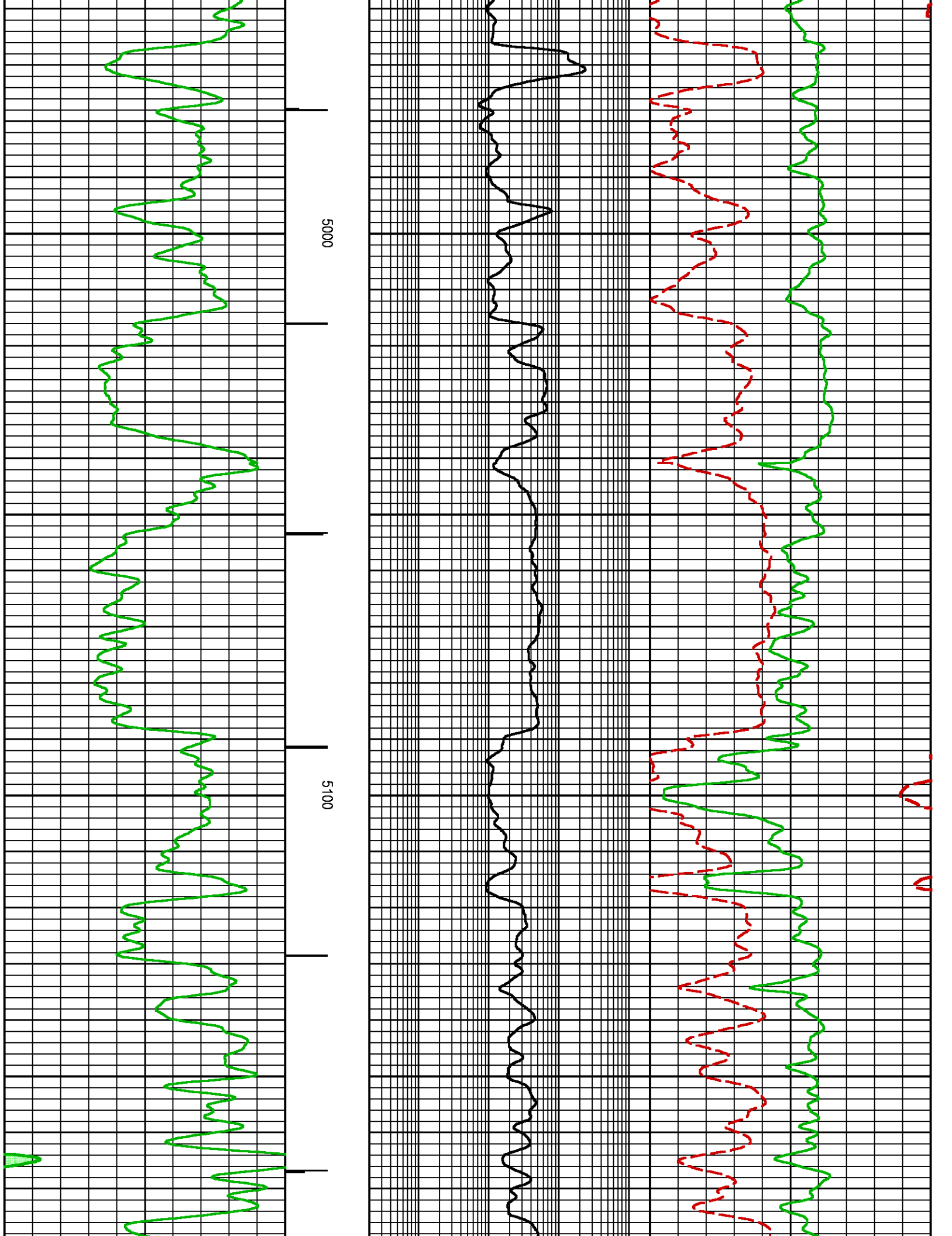


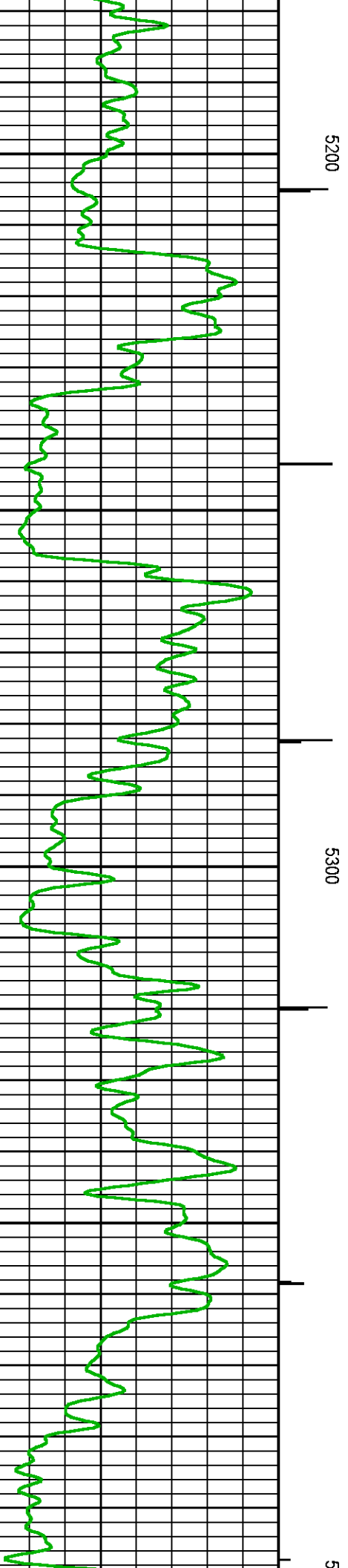
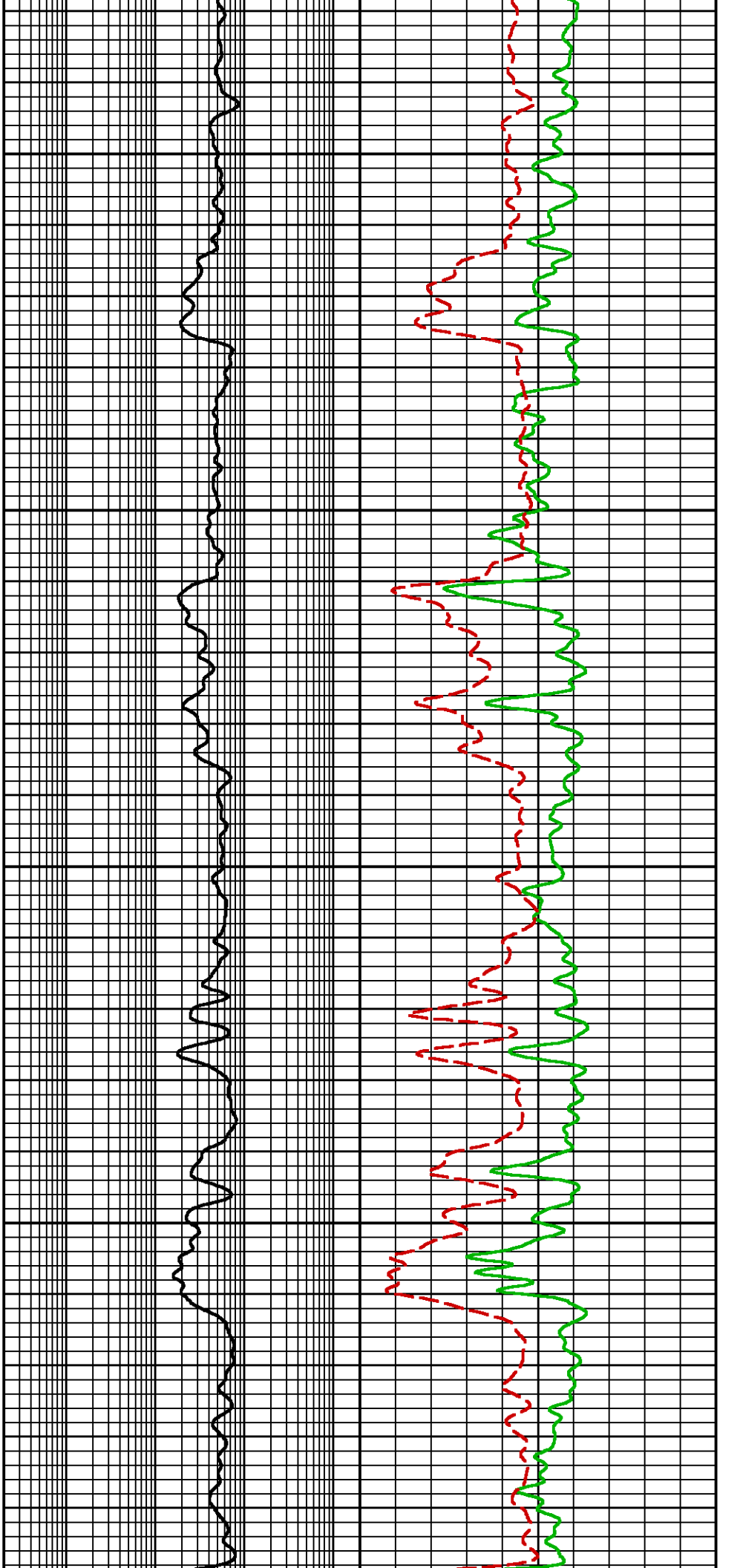
4600

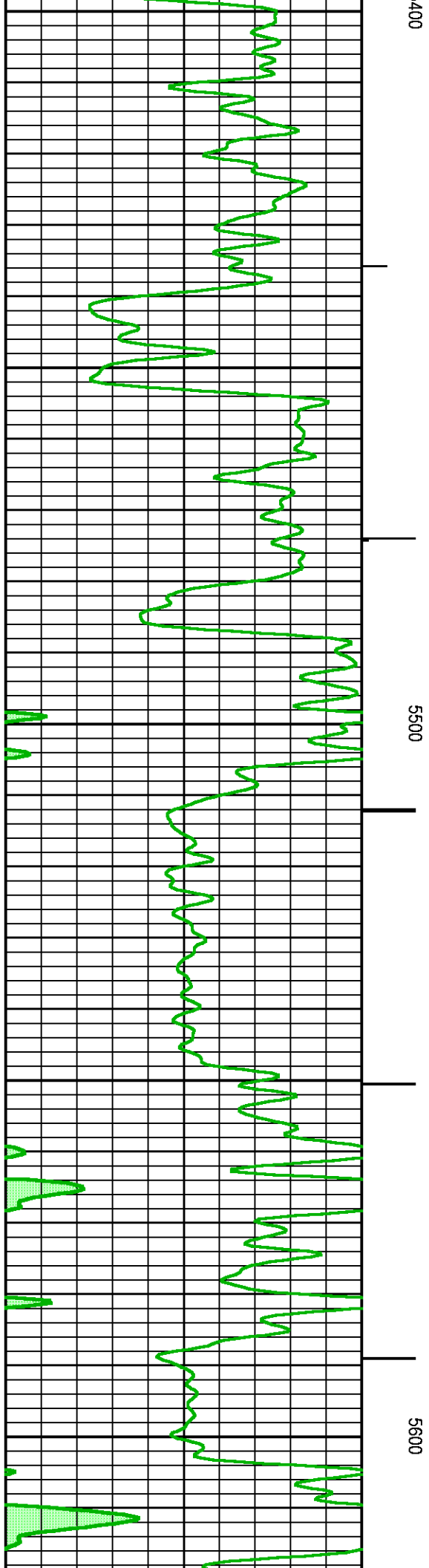
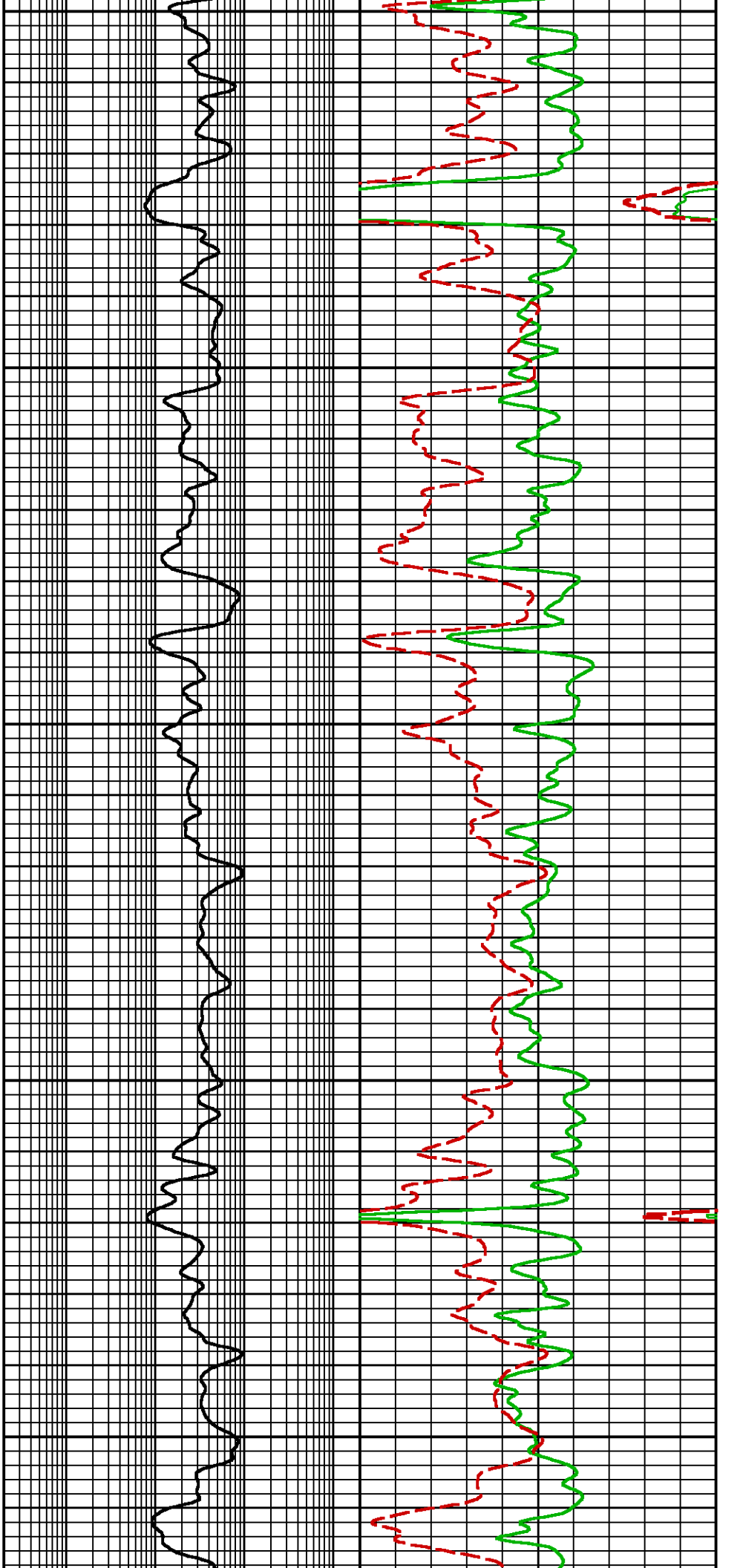
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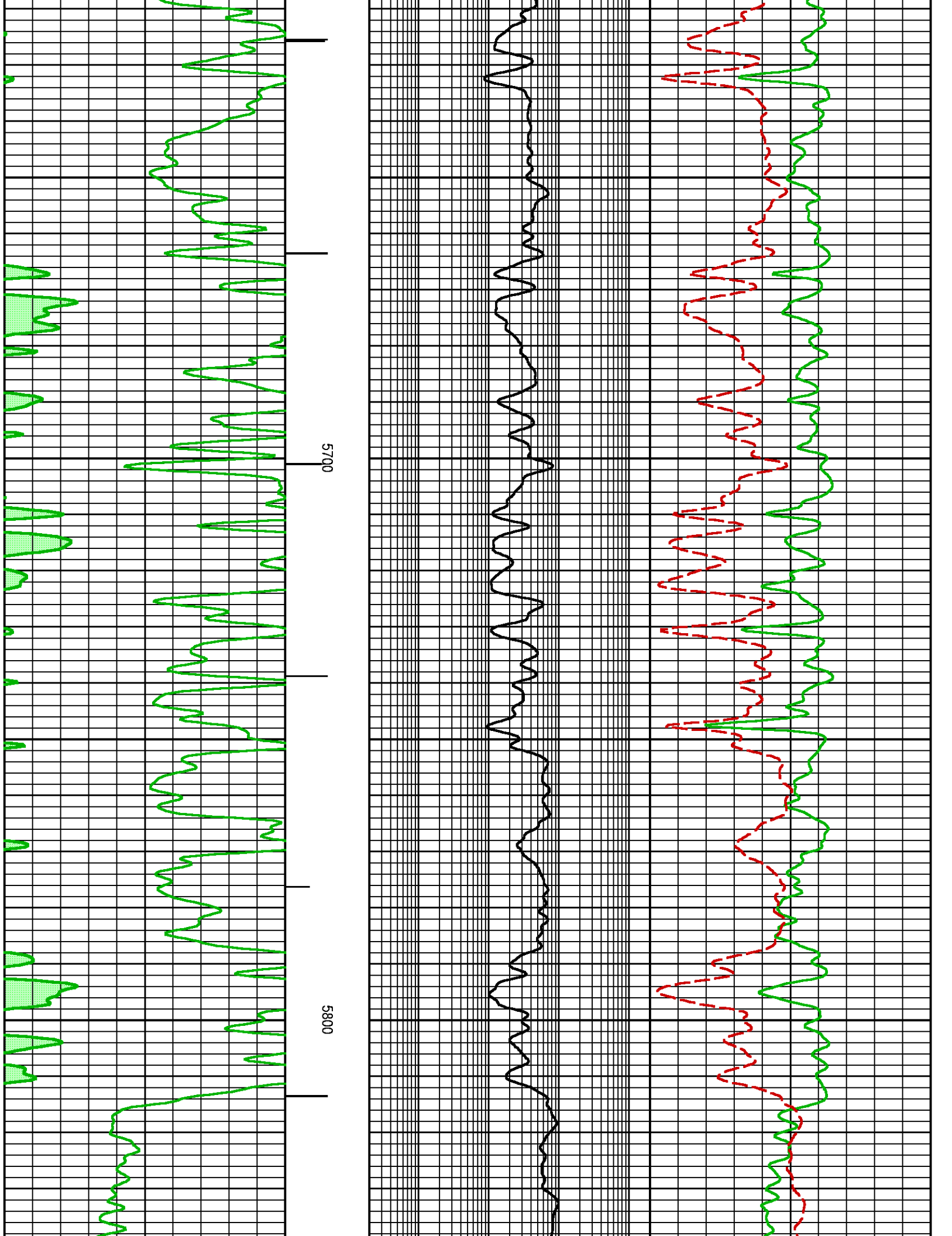


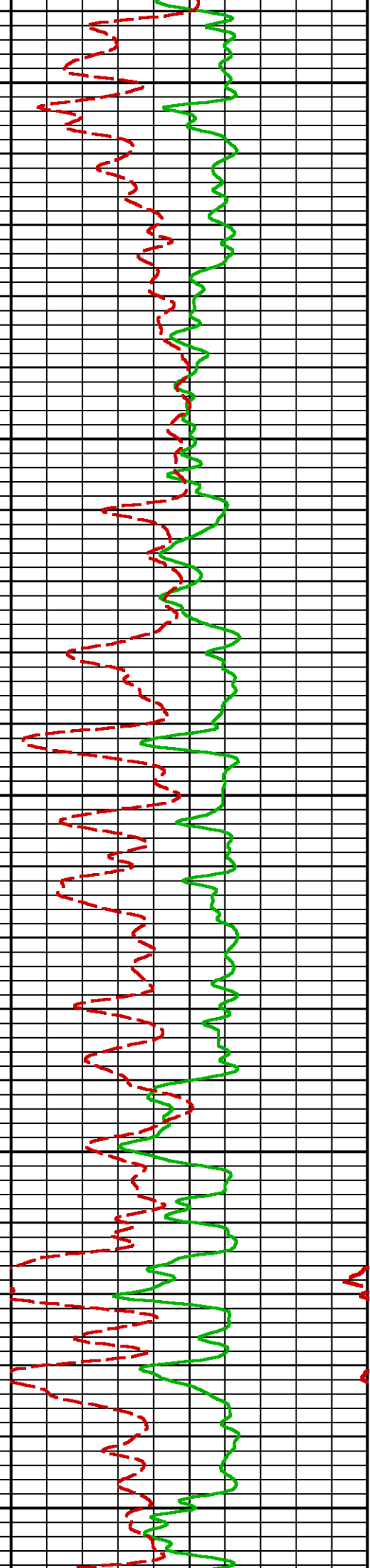
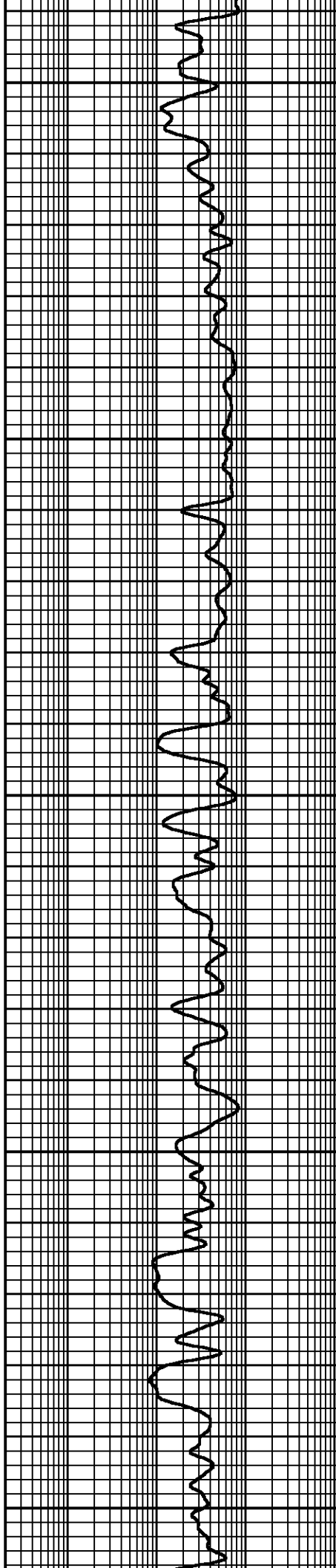
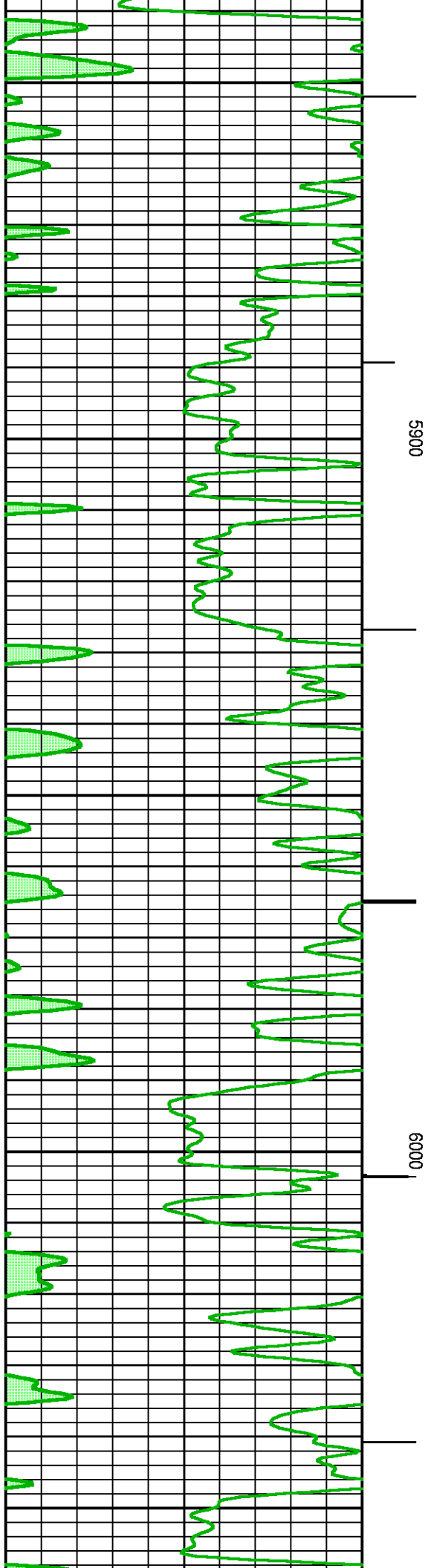


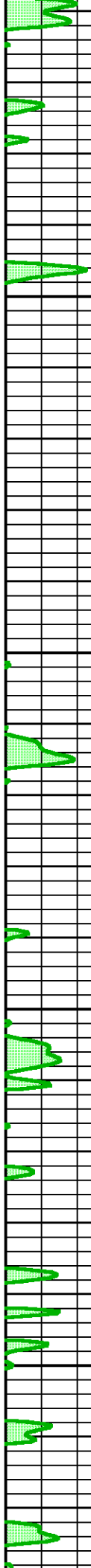
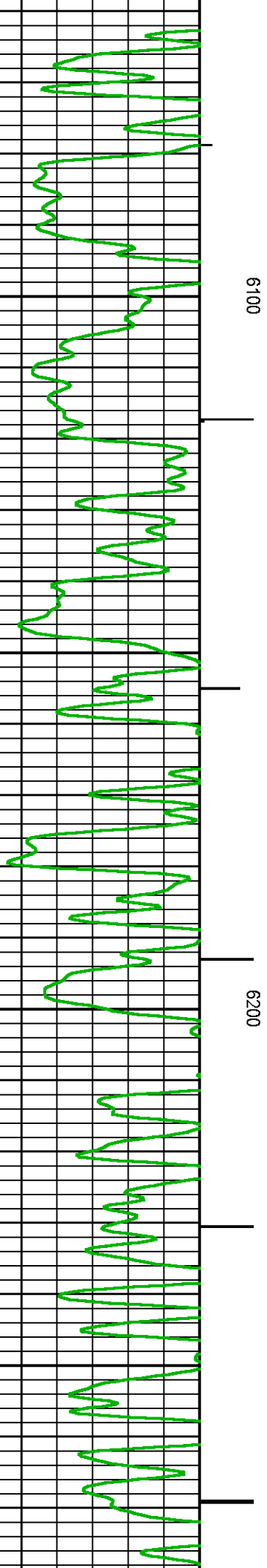
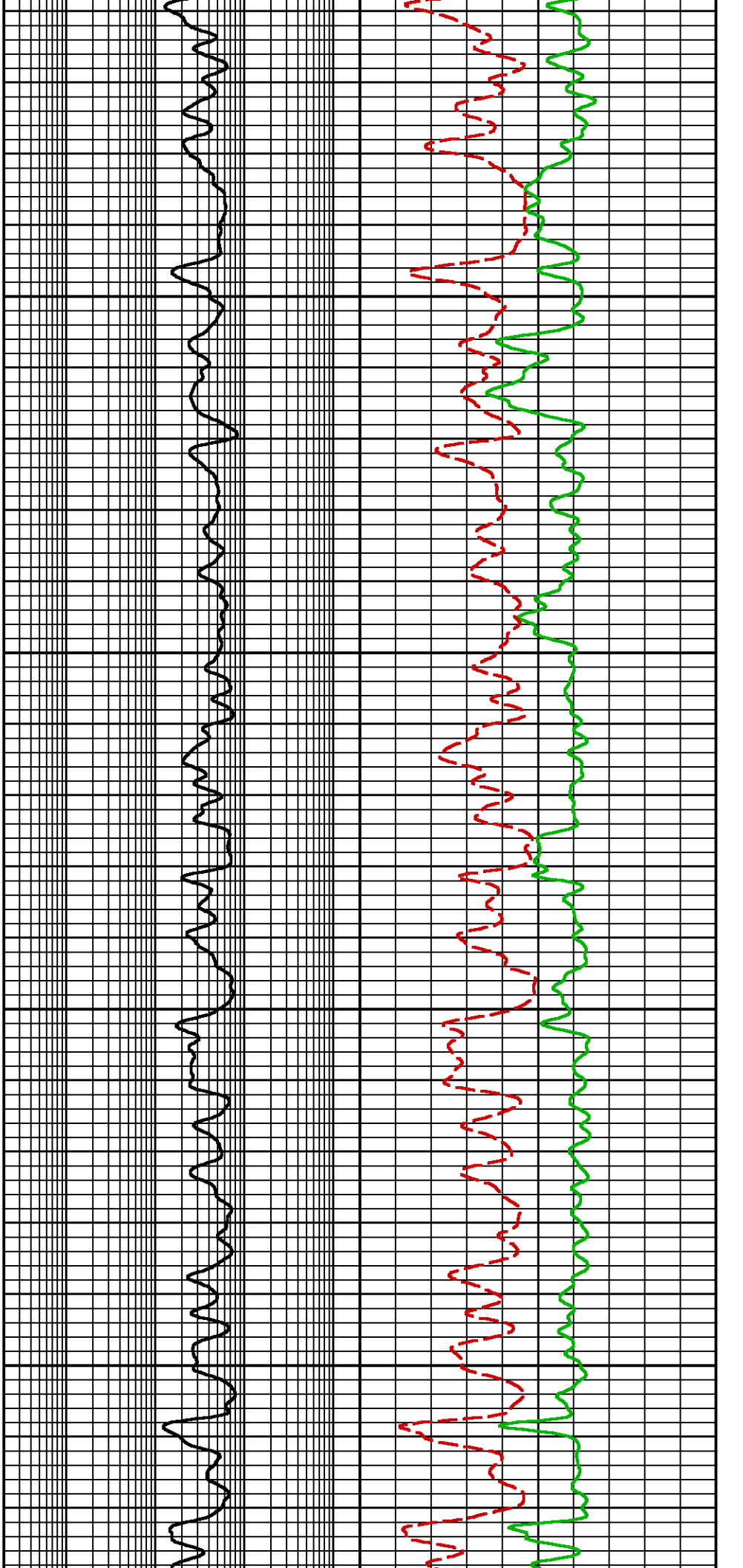


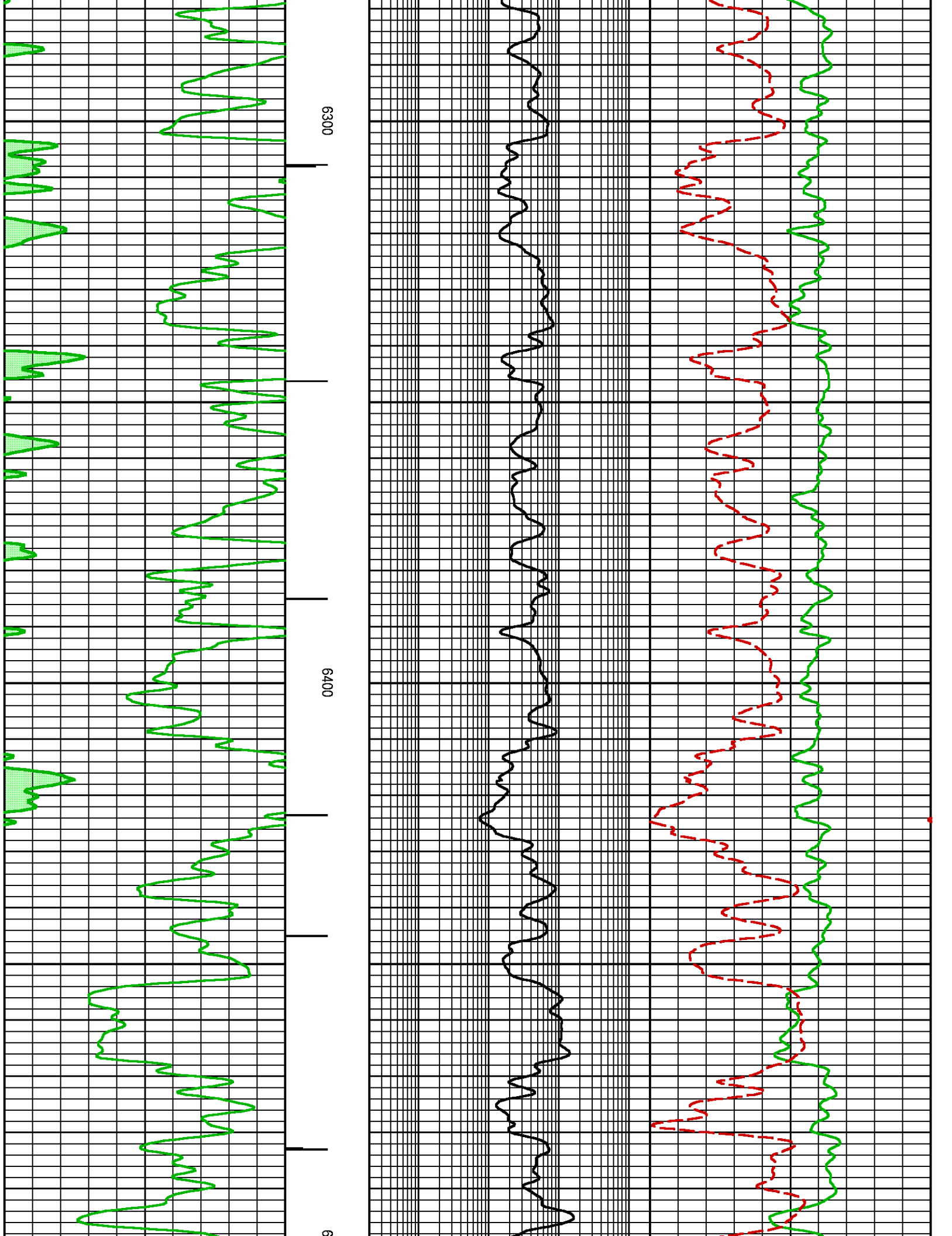


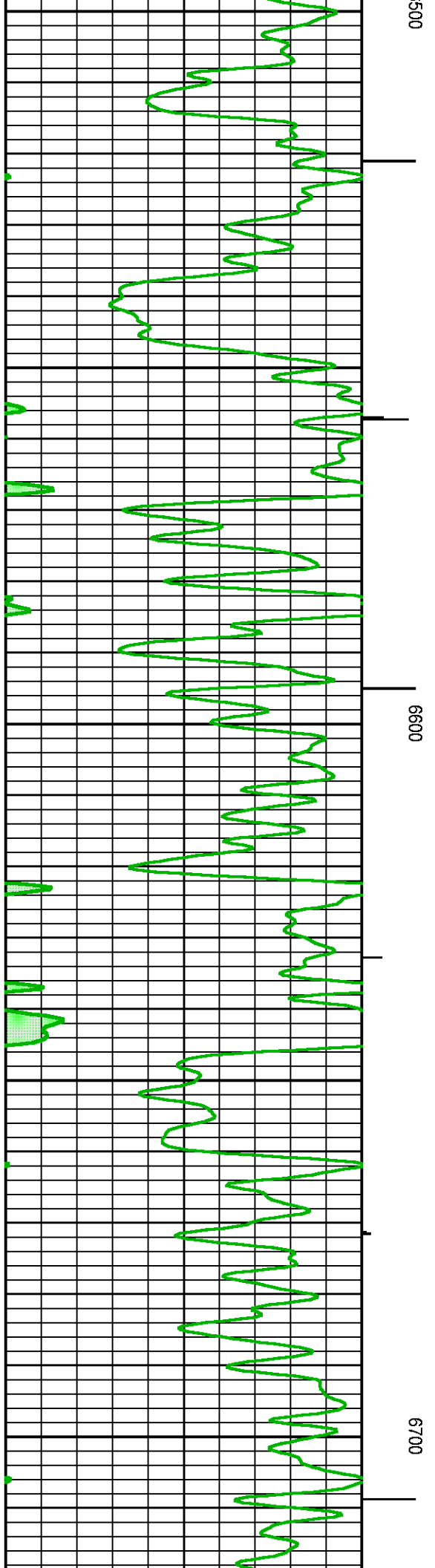
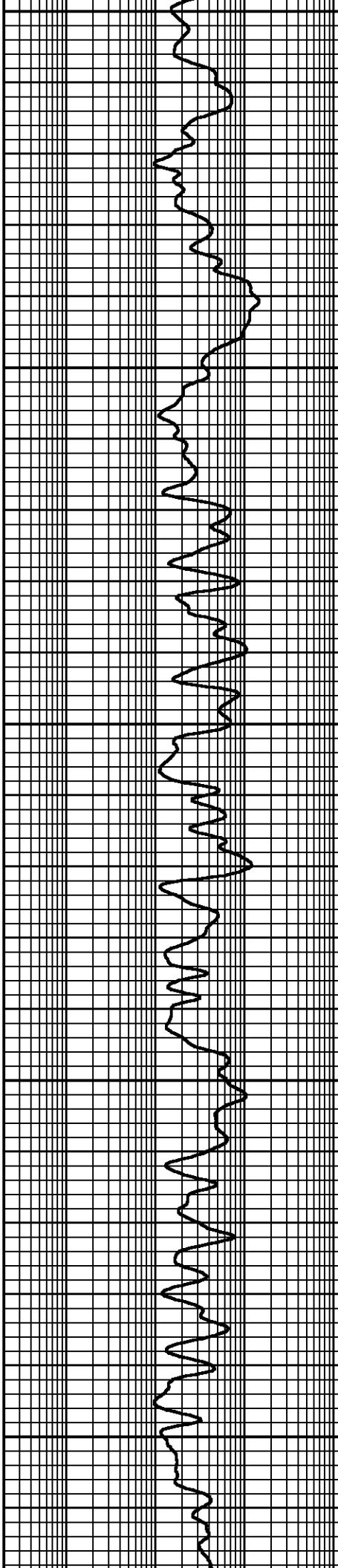
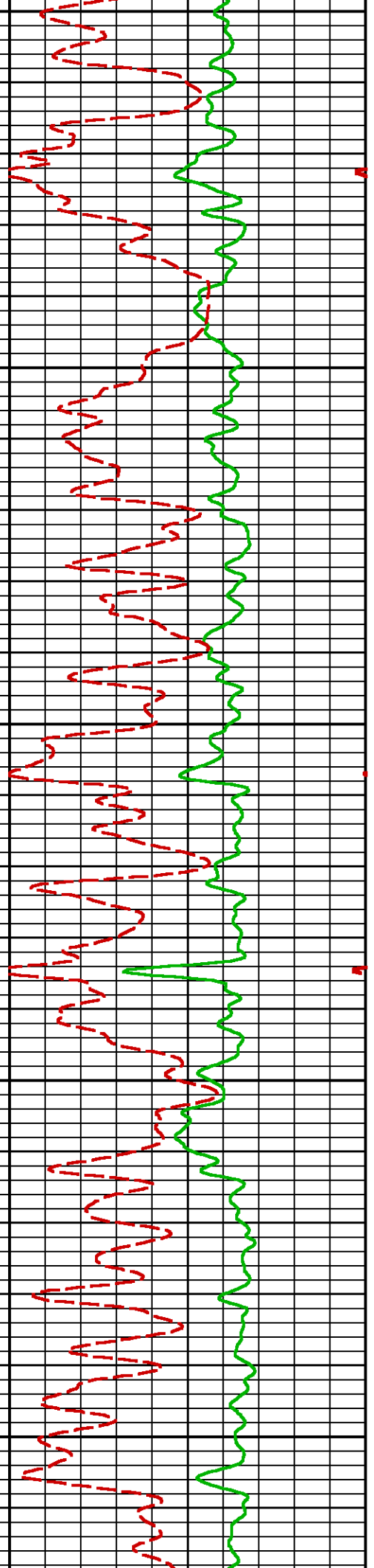


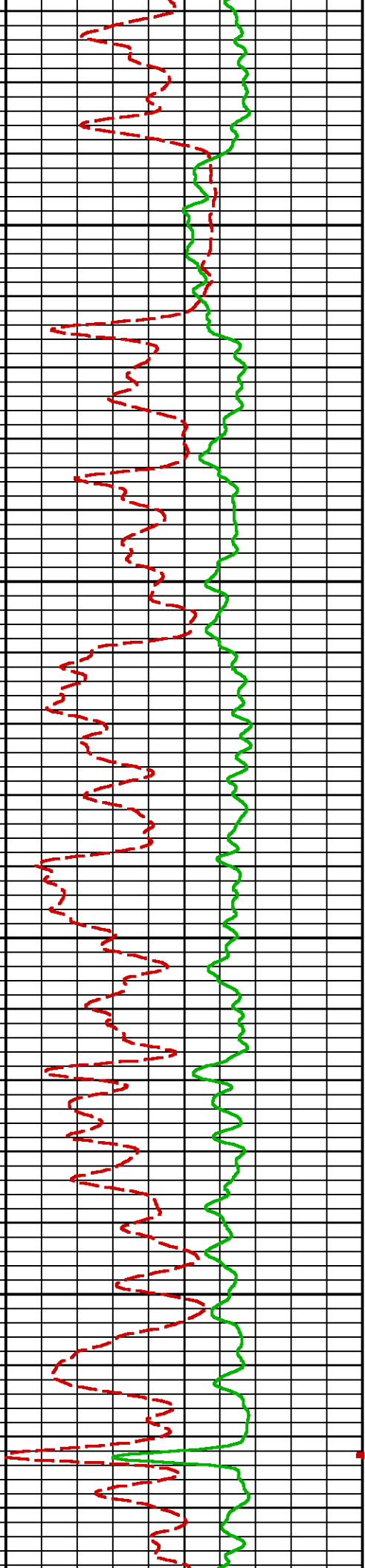
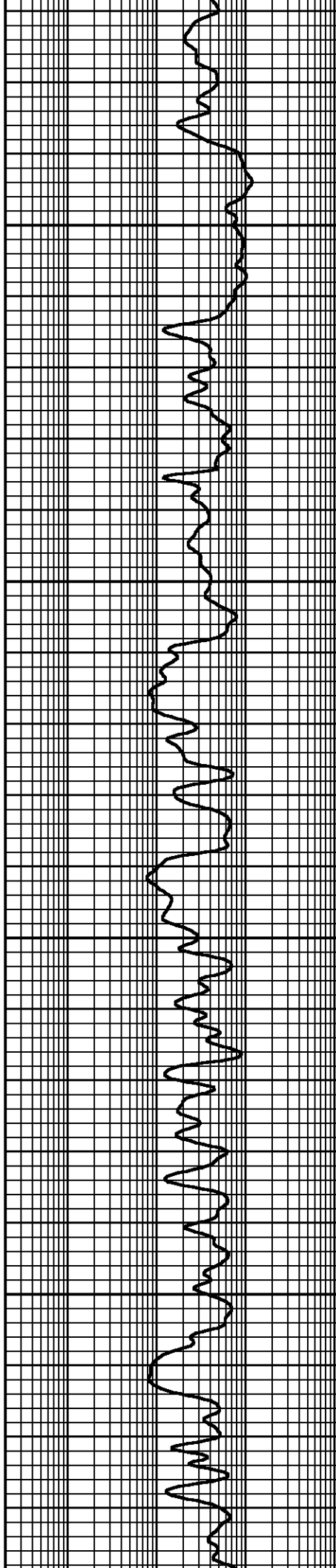
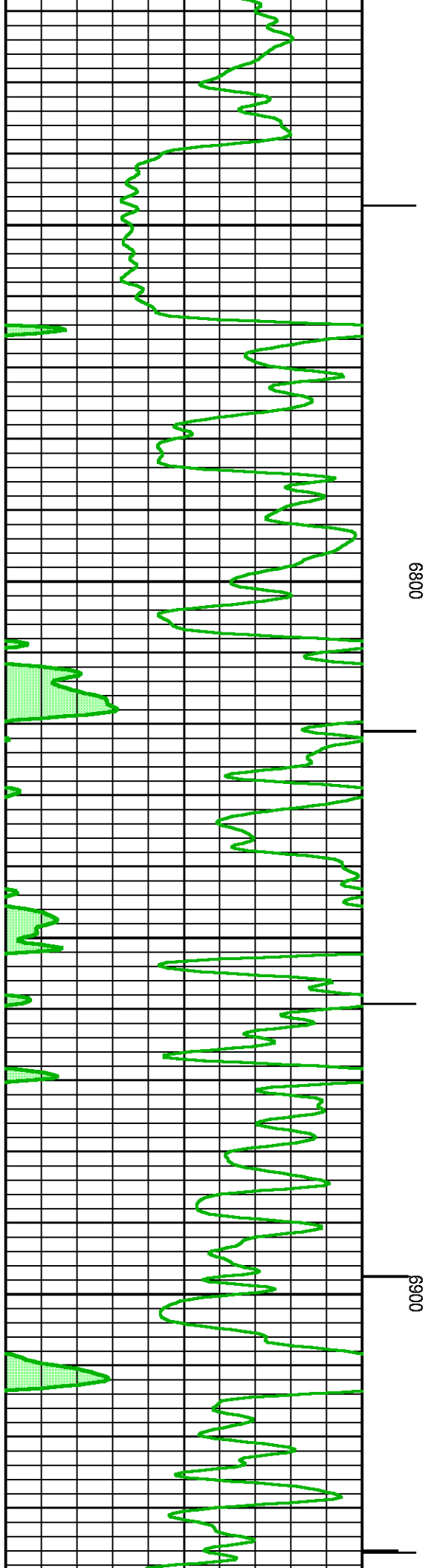


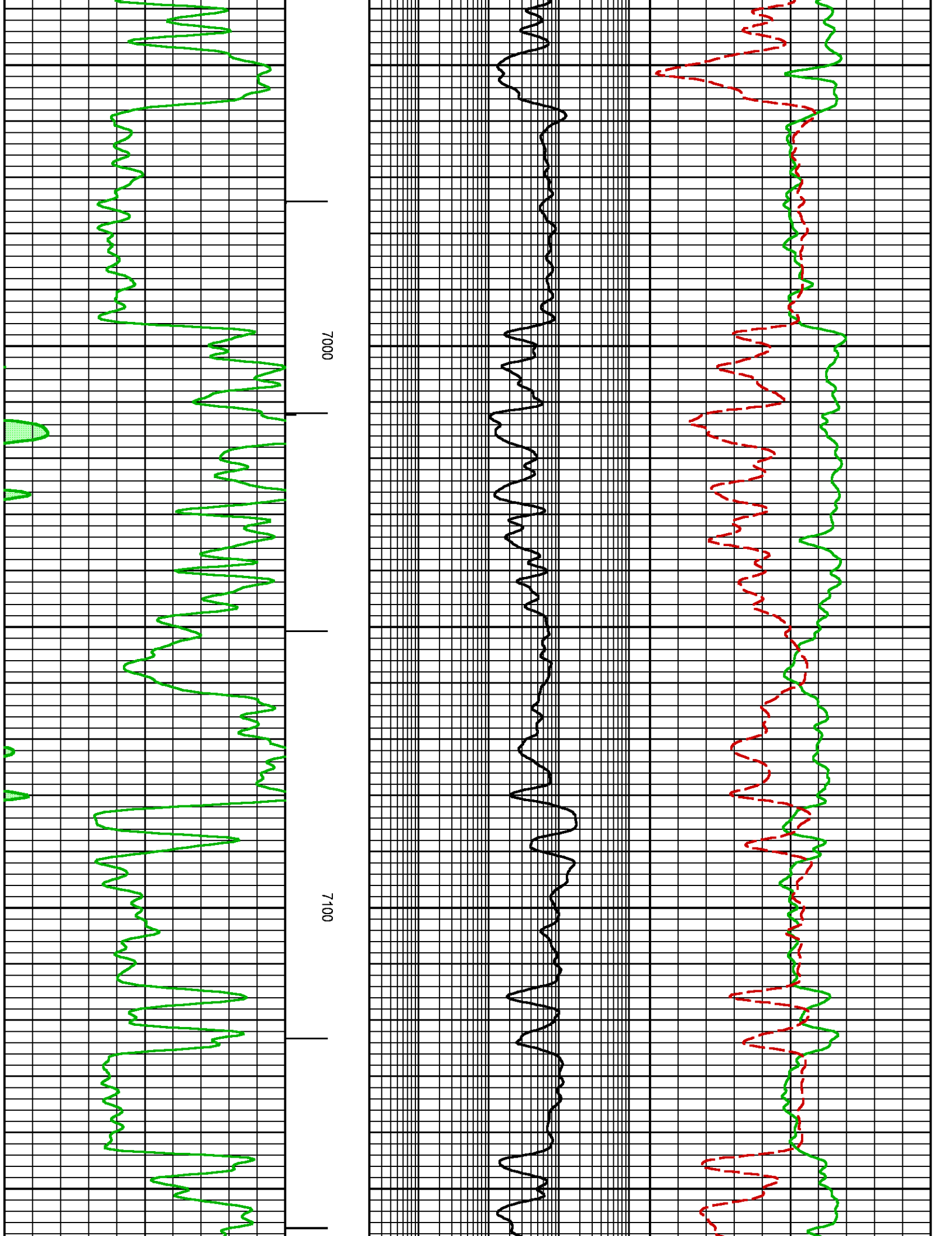


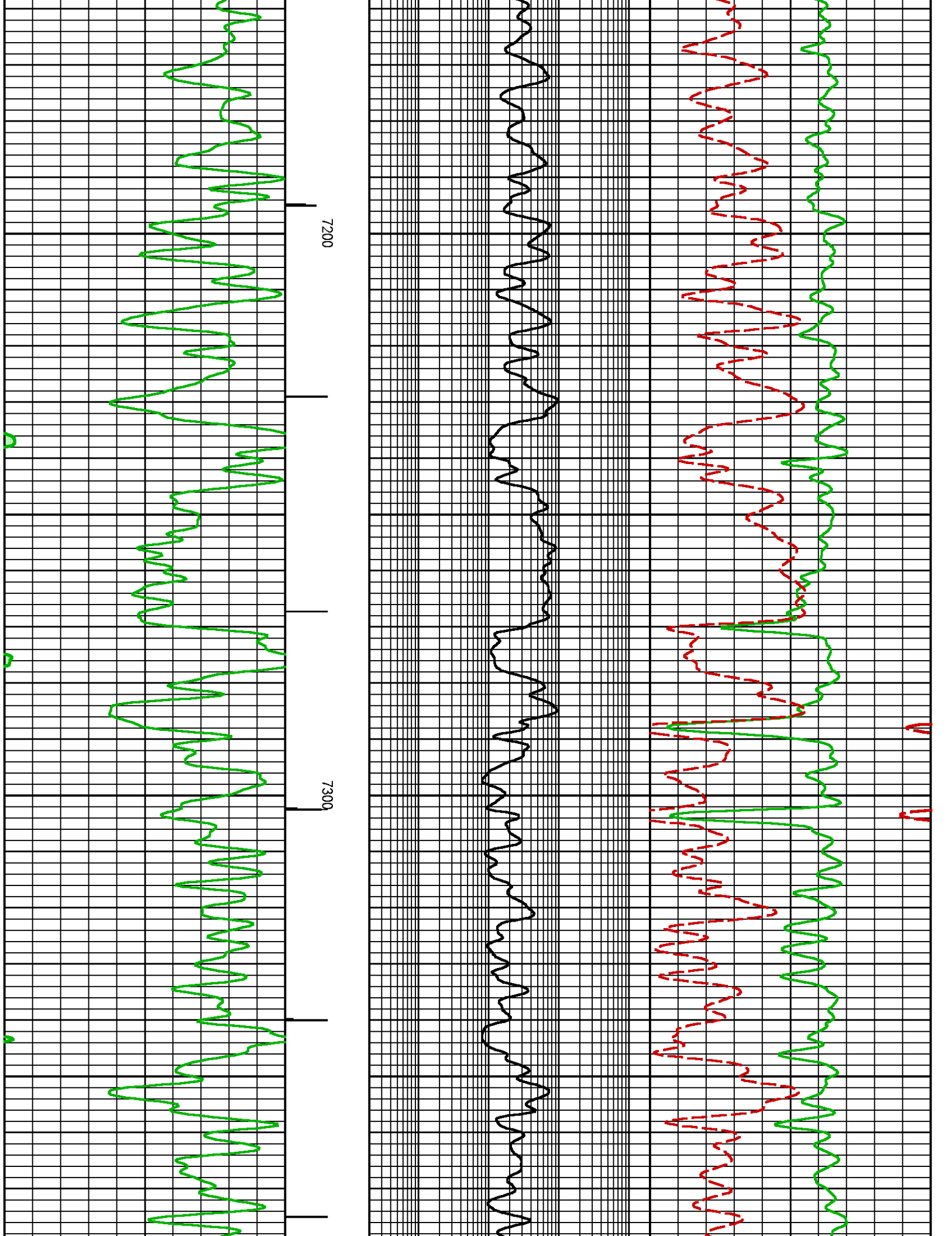


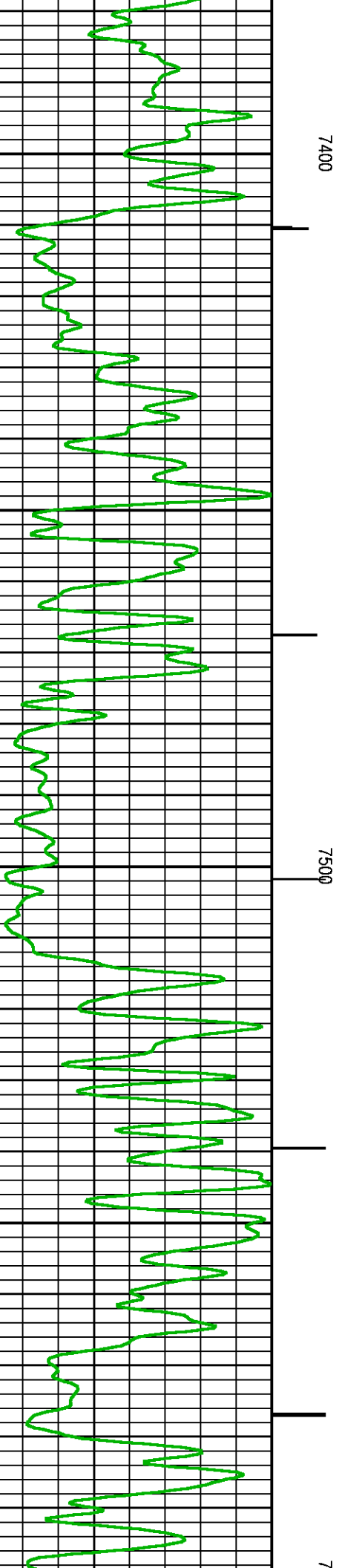
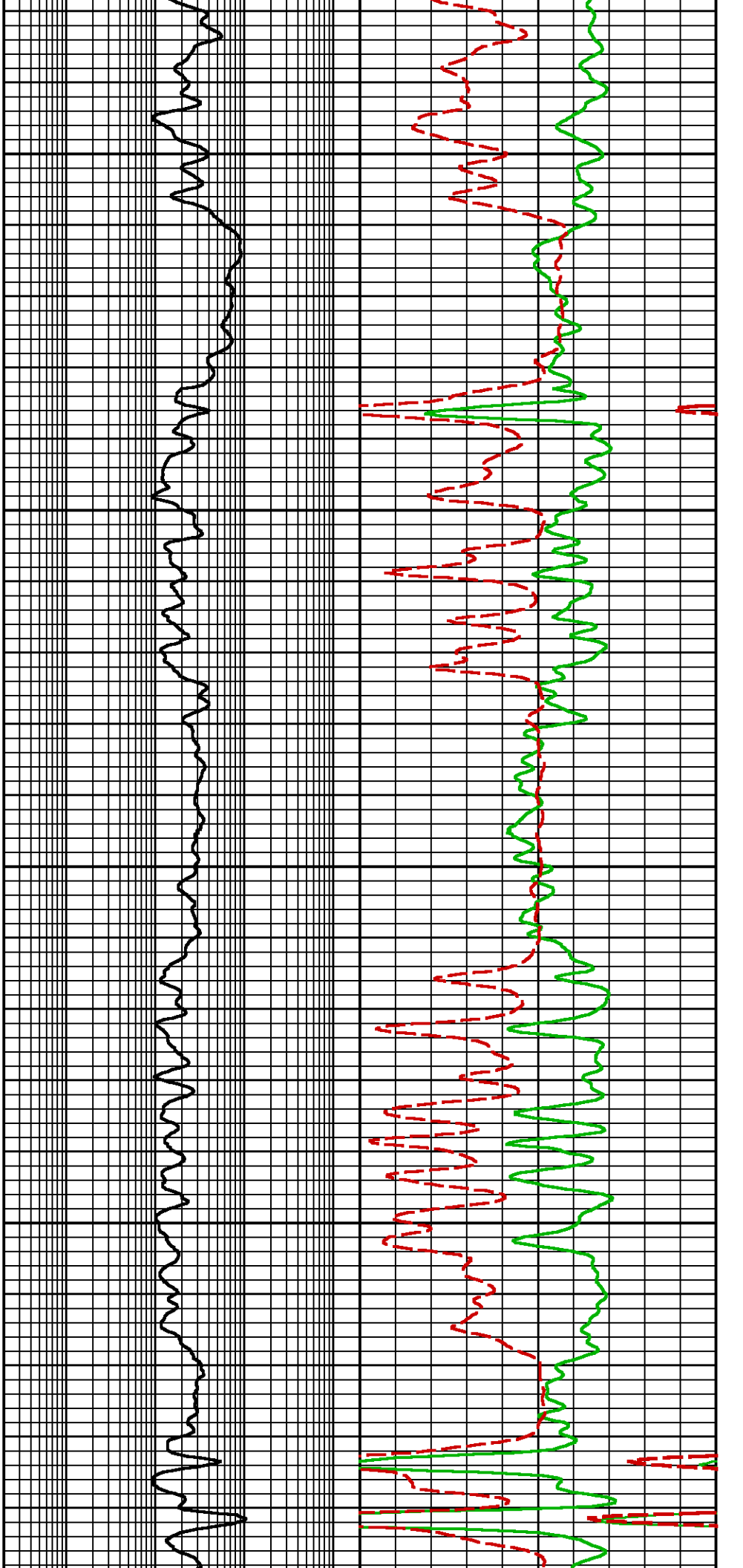


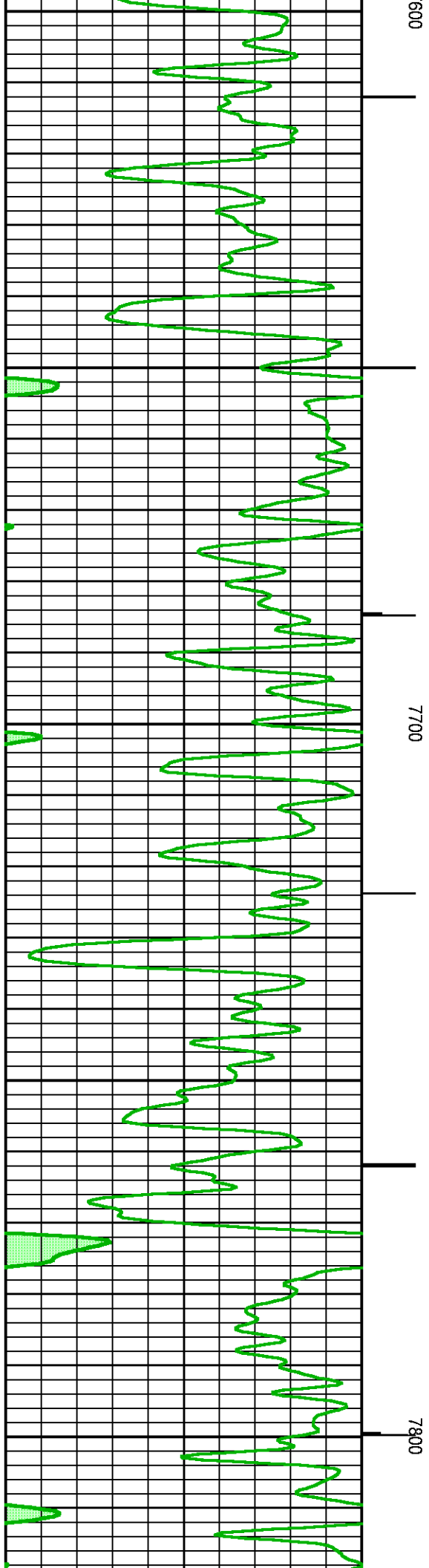
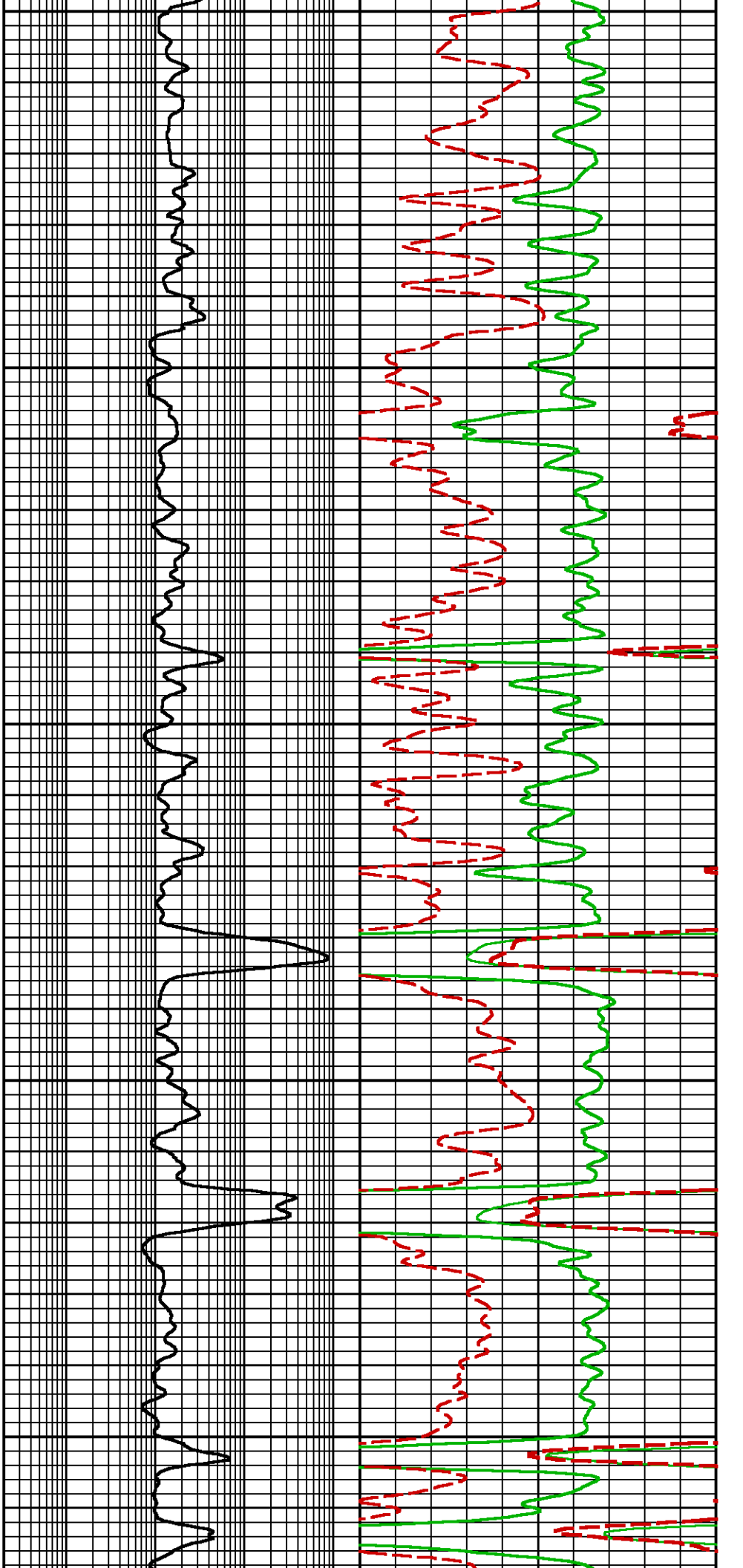


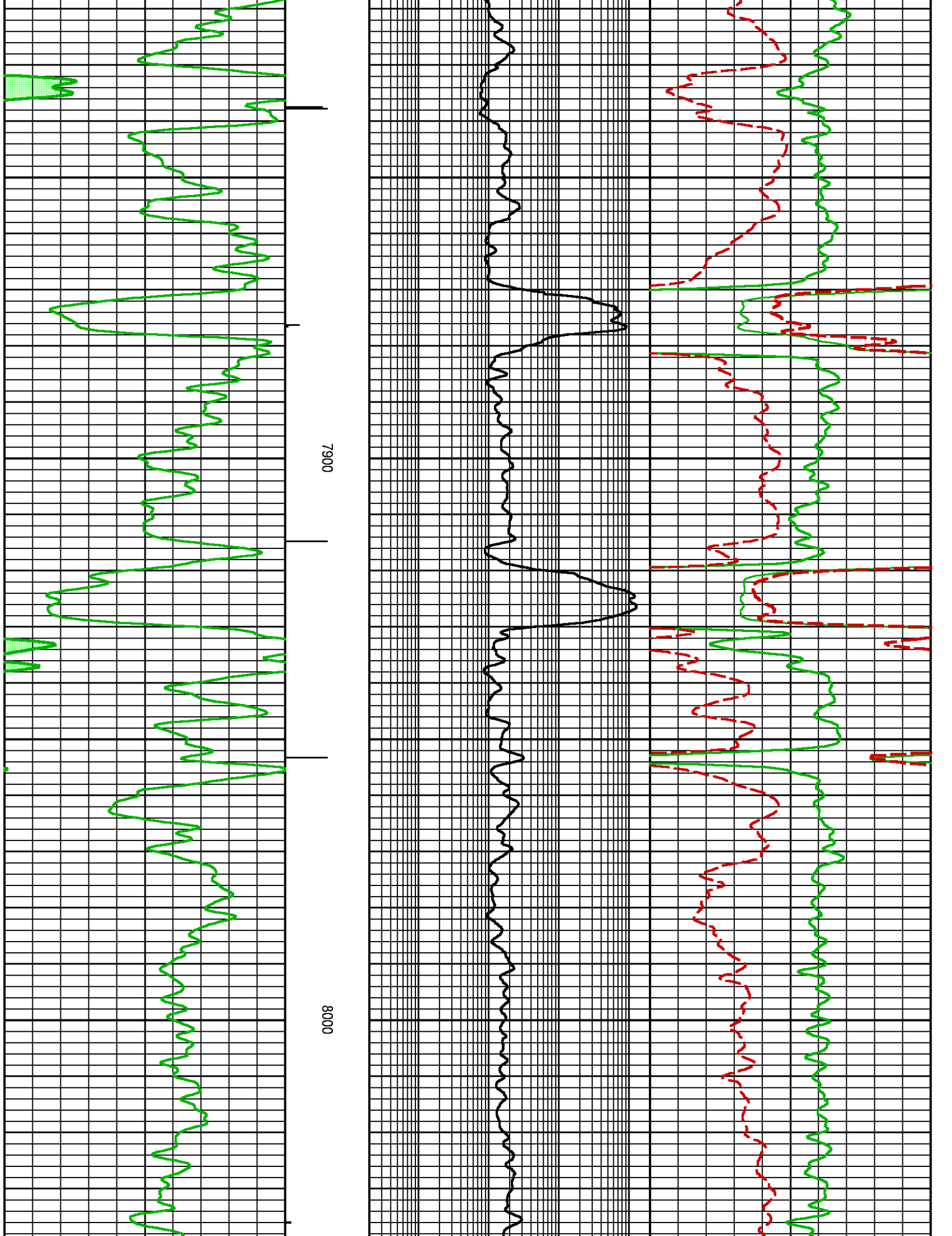


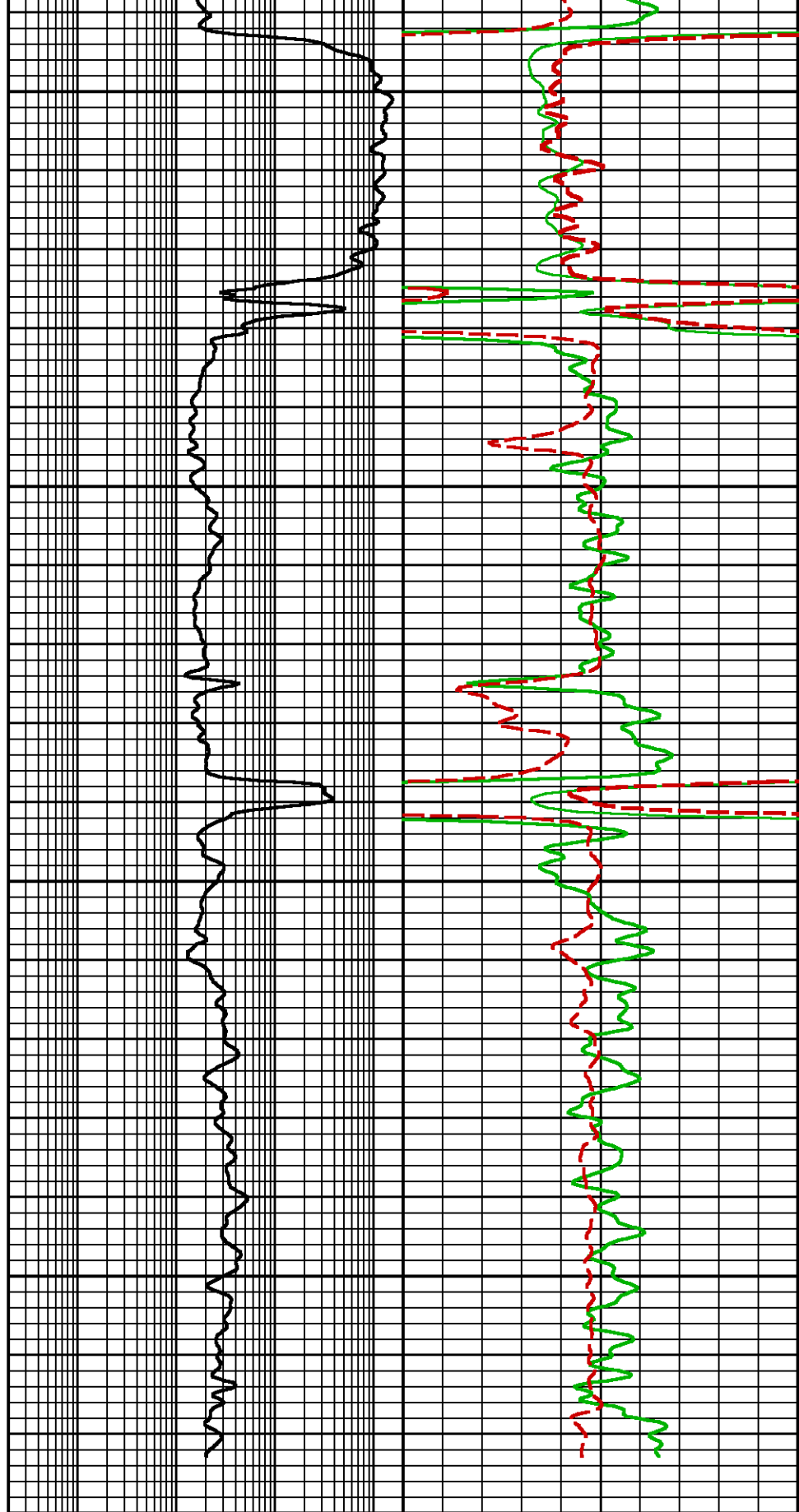
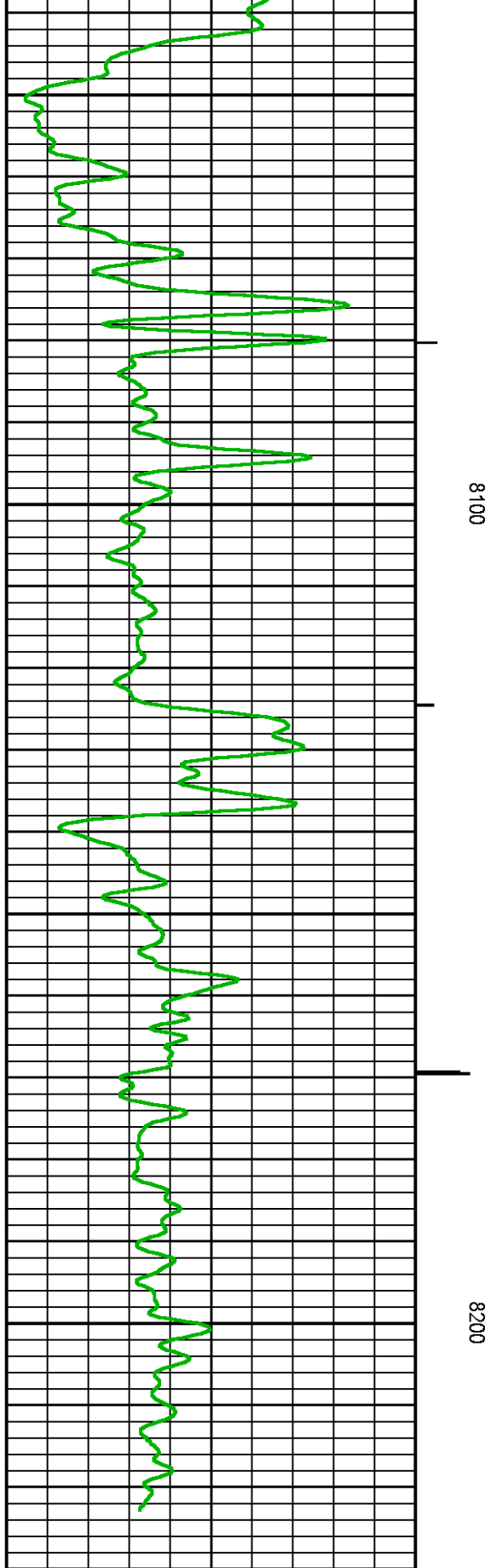












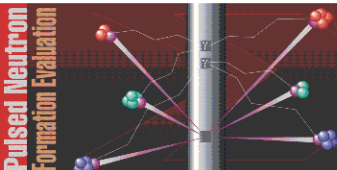


GR BACKUP	
GAMMA RAY [grneo]	150
(GAPI)	

EMULATED DEEP RESISTIVITY [nm2r9]	2000
(OHMM)	

EMULATED BULK DENSITY [nnzden]	3
(G/C3)	
EMULATED NEUTRON POROSITY [nnncf]	0.1

			0.5 (FRAC)	-0.1
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<div>   </div> <div>  </div>	<div> <div>COMPANY</div> <div>LARAMIE ENERGY</div> </div> <div> <div>WELL</div> <div>BRUTON 19-04E</div> </div> <div> <div>FIELD</div> <div>VEGA</div> </div> <div> <div>COUNTY</div> <div>MESA</div> <div>STATE</div> <div>COLORADO</div> </div>		<div>FILE NO:</div> <div></div>	
	<div> <div>LOCATION:</div> <div>SEE REMARKS</div> </div> <div> <div>SEC</div> <div>19</div> <div>TWP</div> <div>9S</div> <div>RGE</div> <div>93W</div> </div>		<div>ELEVATIONS:</div> <div>KB 7286 FT</div> <div>DF 7286 FT</div> <div>GL 7262 FT</div>	<div>API NO:</div> <div>05-077-10428-0000</div>
			<div>DATE</div> <div>7-NOV-20177</div>	