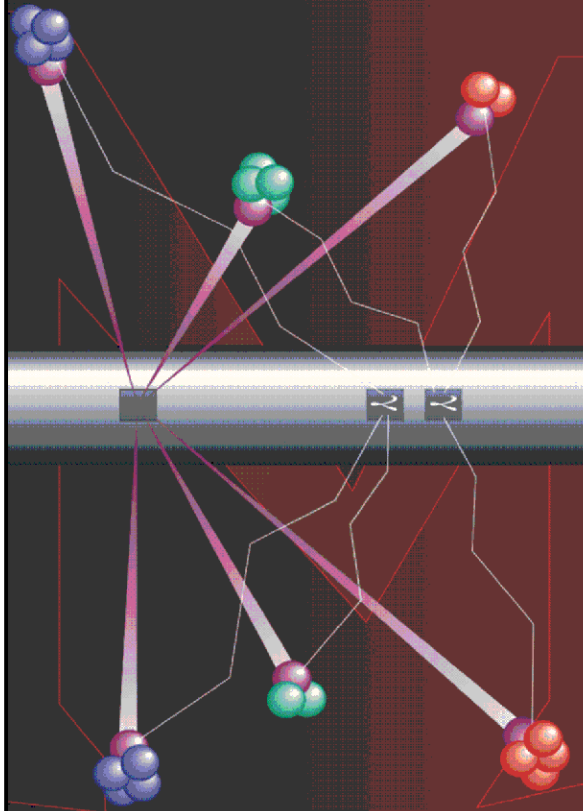


Pulsed Neutron Formation Evaluation



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON 30-05E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 30 TWP 9S RGE 93W

ELEVATIONS:

KB 7534.0 FT DF GL 7504.0 FT

DATE 20-NOV-2017 ECC 29451-01

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>28-NOV-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>C.COFFELT/US130061</u>	DATE: <u>20-NOV-2017</u>

FROM	TO								
<u>2492 FT</u>	<u>7992 FT</u>								

REMARKS

LOCATION:
SHL: LAT:39.2526444444N;LONG:107.814275000W
BHL: LAT:39.252169000N;LONG:107.806920000W

TRAINING WELL: BRUTON 30-04W

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

BOND LOG IS DEPTH REFERENCE LOG

NEO RESULTS FOR BRUTON 30-05E (G-SAND)

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

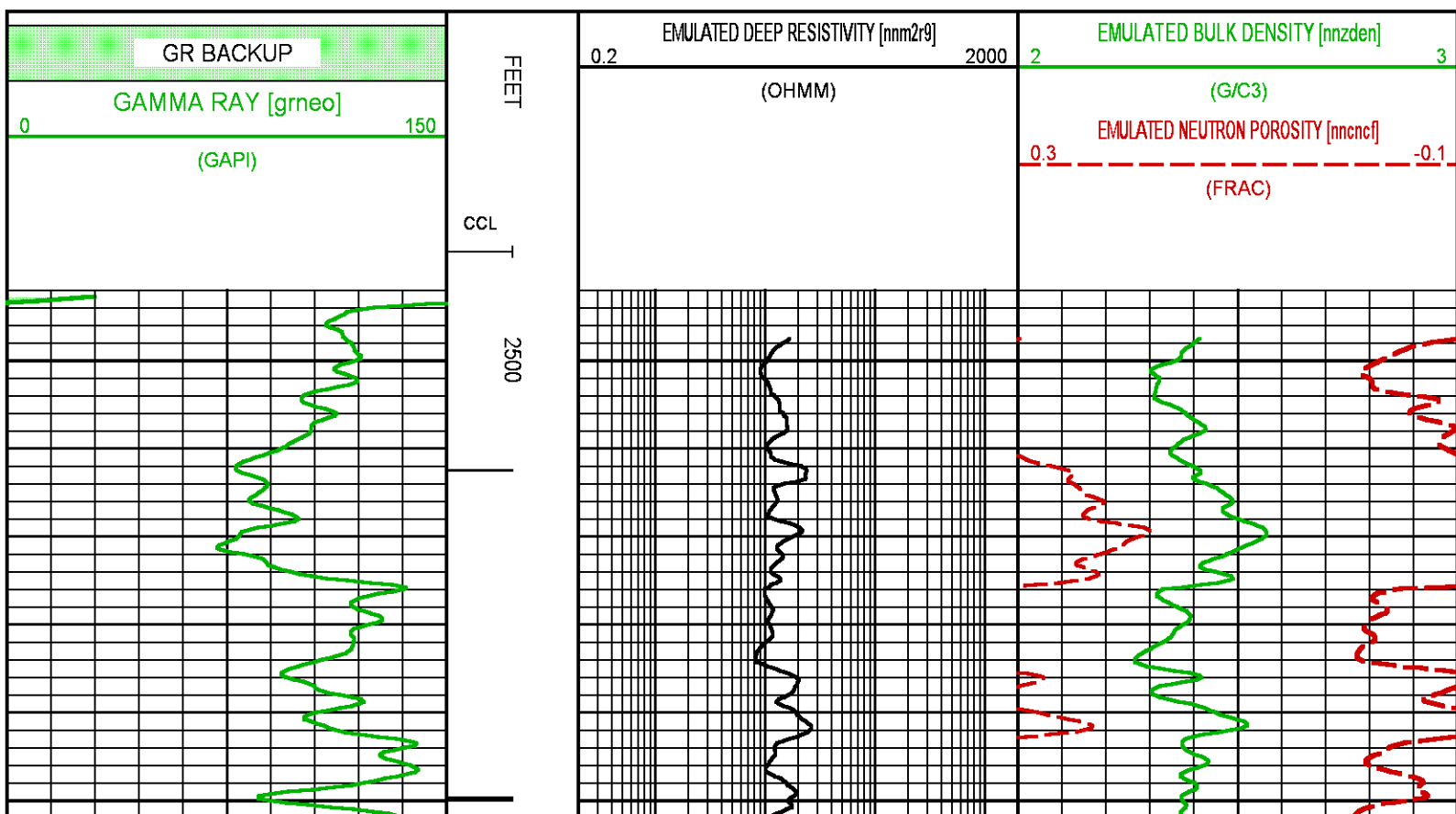
Plotted: Tue Nov 28 13:02:29 2017

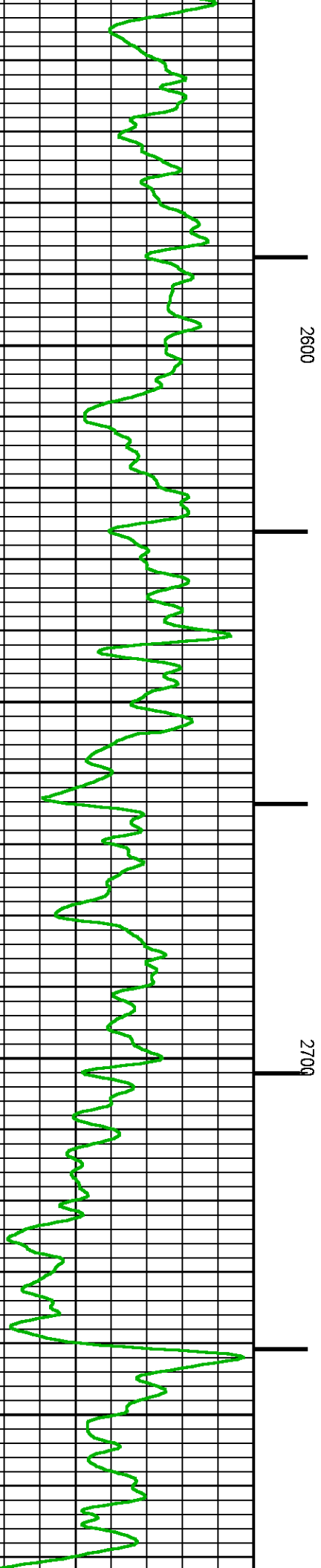
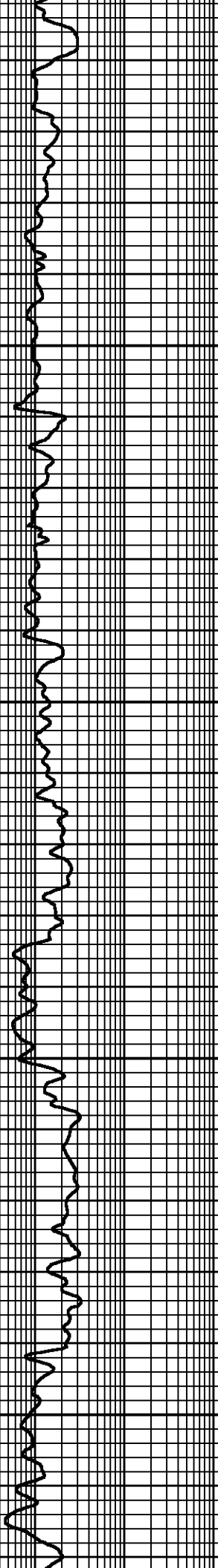
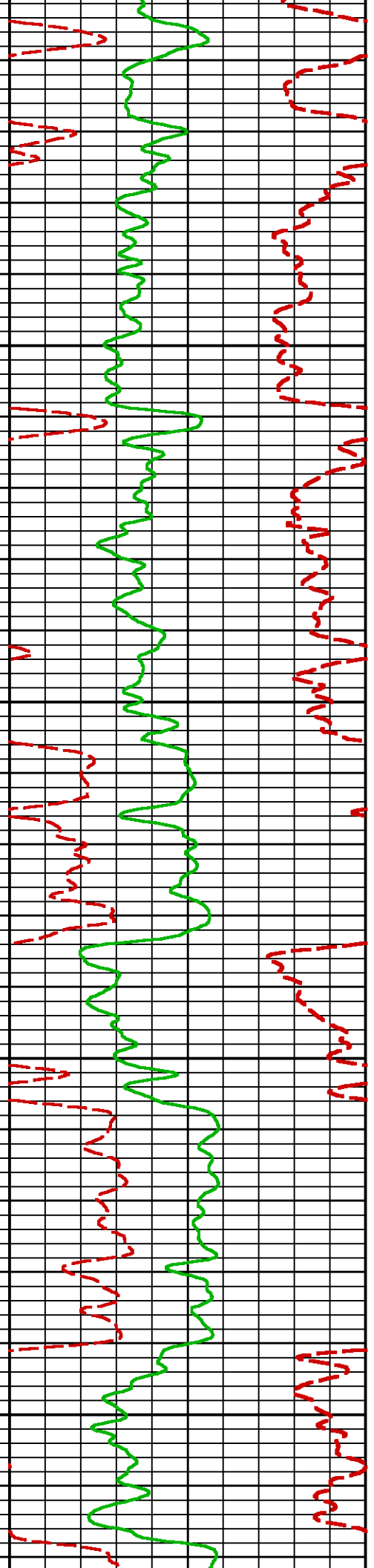
CURVE MEASURE POINT OFFSET

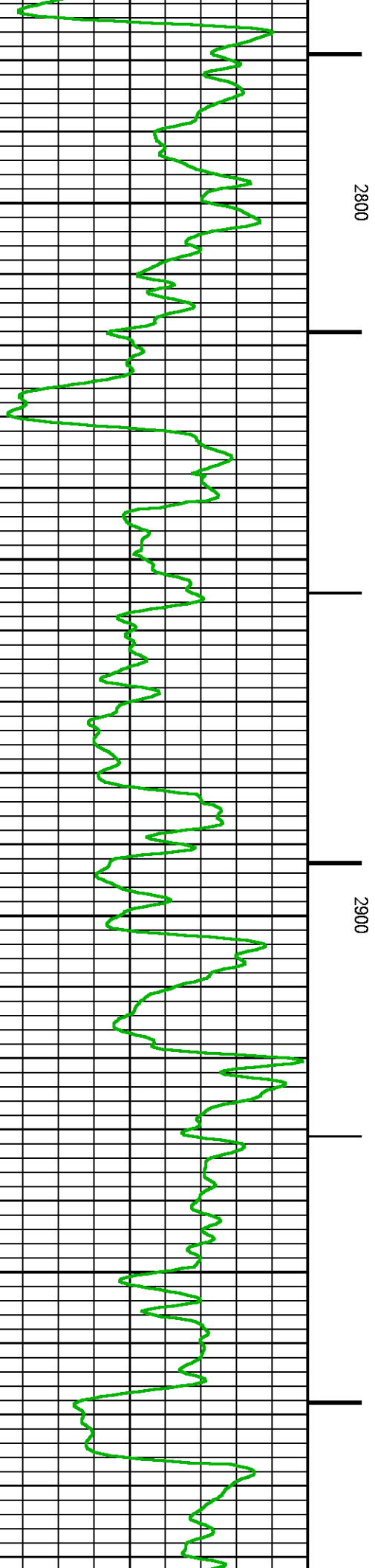
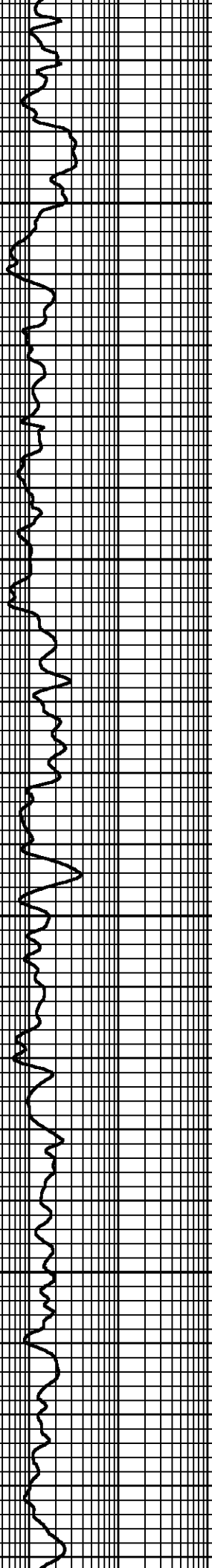
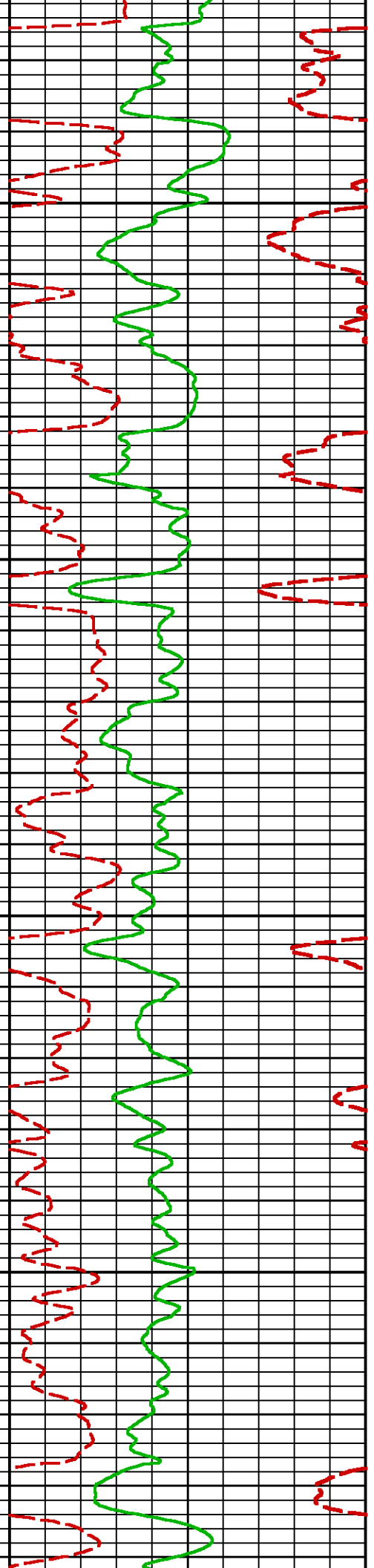
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\Laramie_30_05E\NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2492.75 - 3157 Feet

Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\Laramie_30_05E\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON 30-05E
Field : VEGA
File Interval : 2492.75 - 7992.75 Feet
OCT : NA

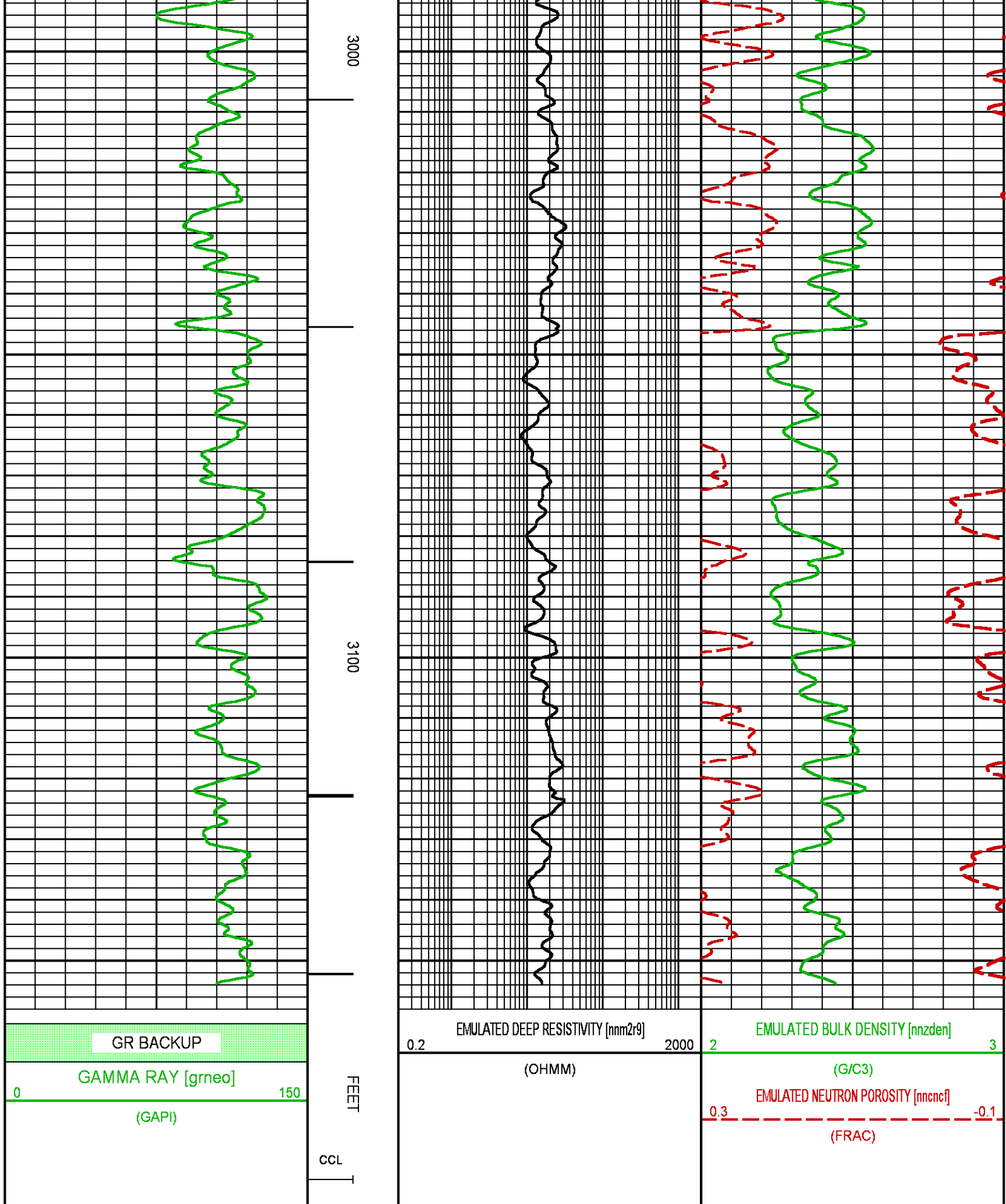






2800

2900



NEO RESULTS FOR BRUTON 30-05E (MAIN)

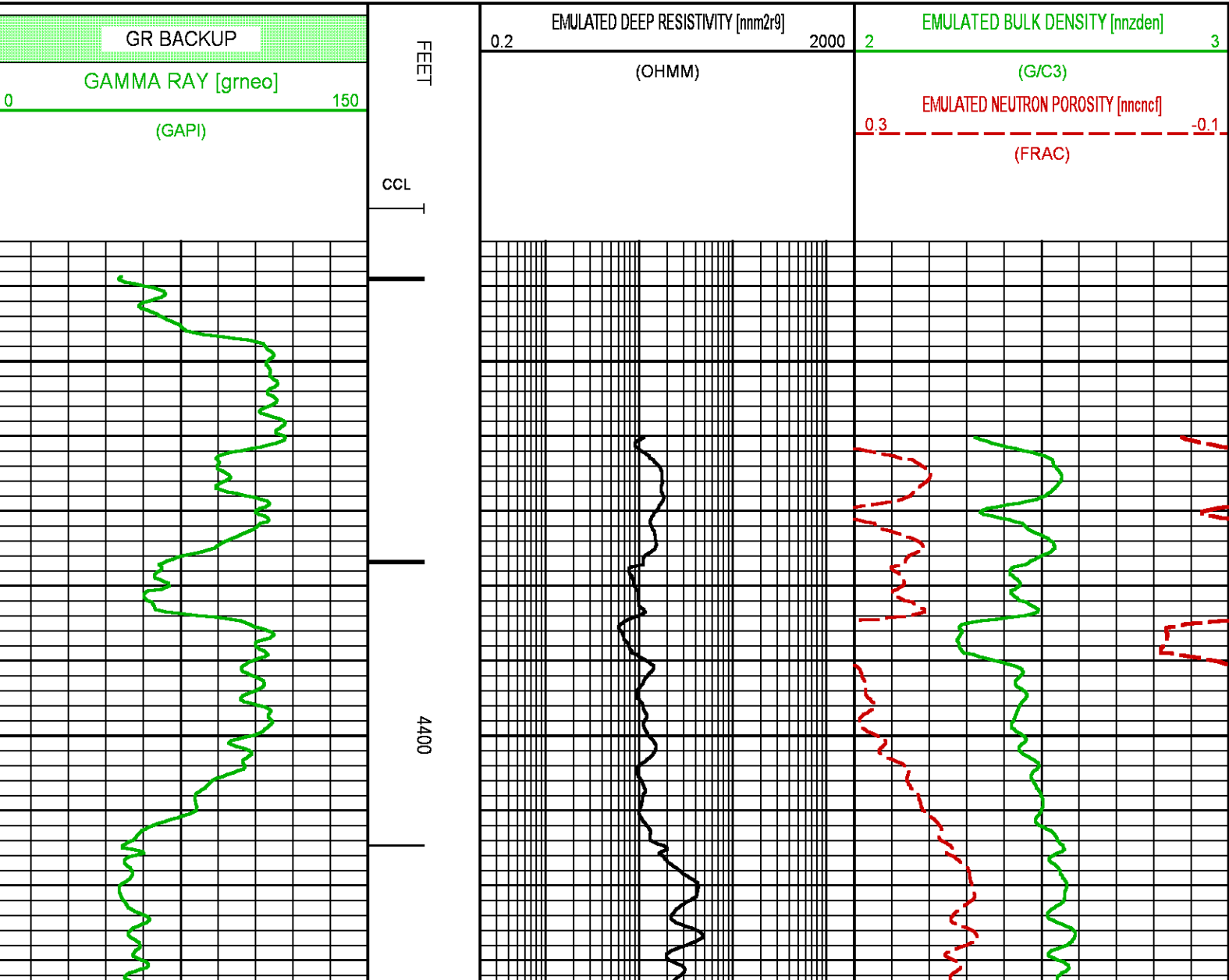
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

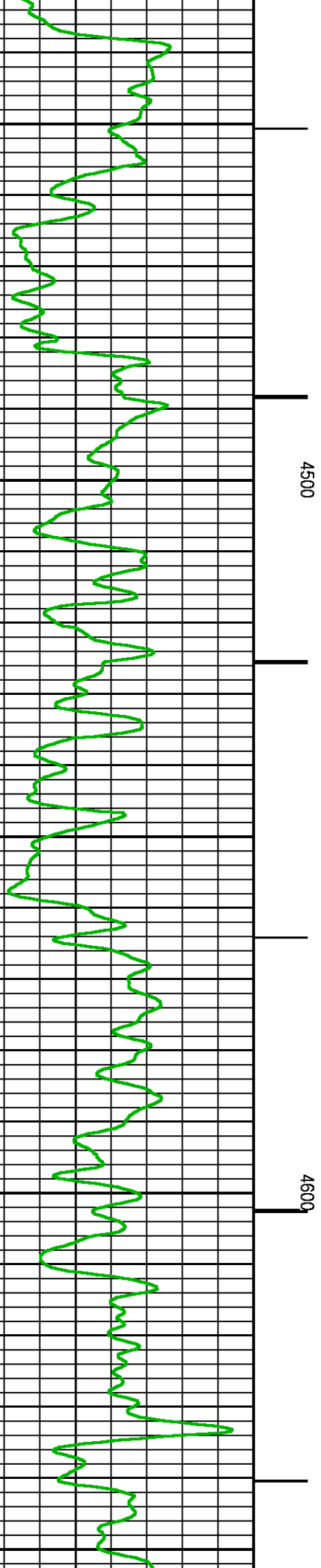
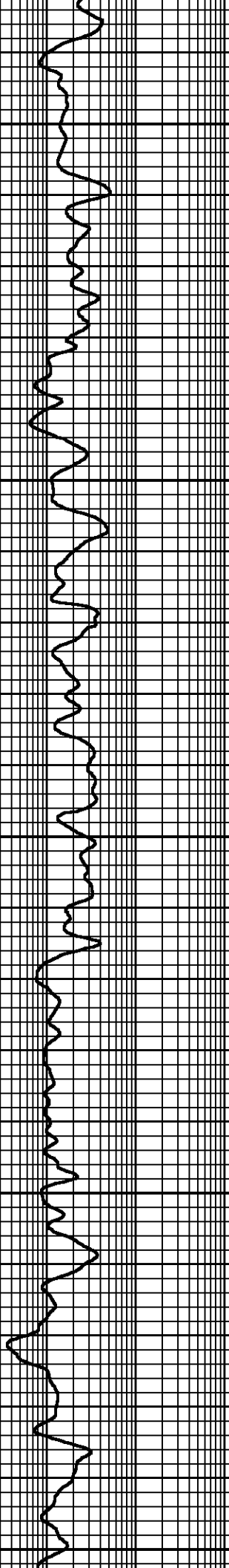
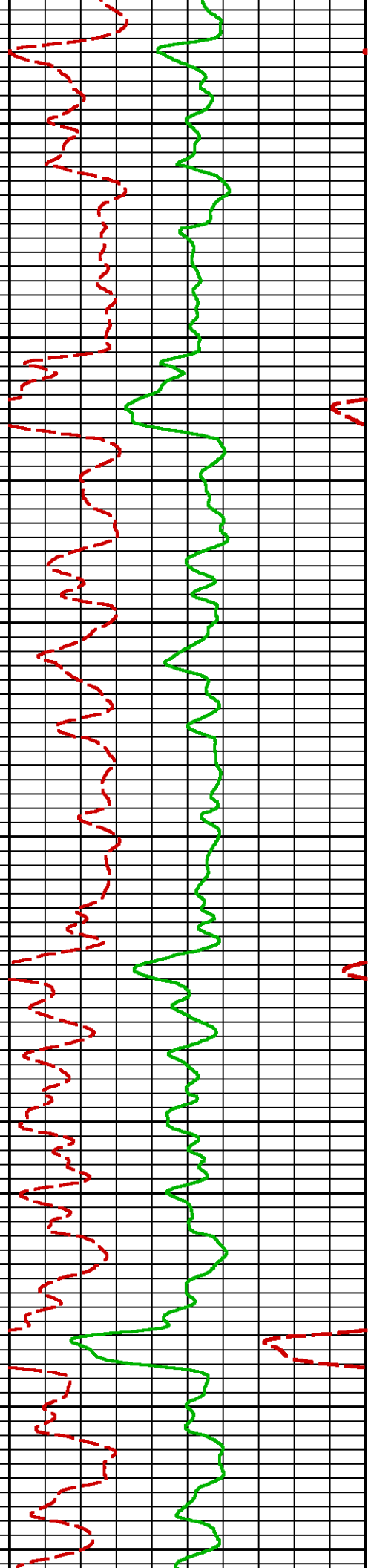
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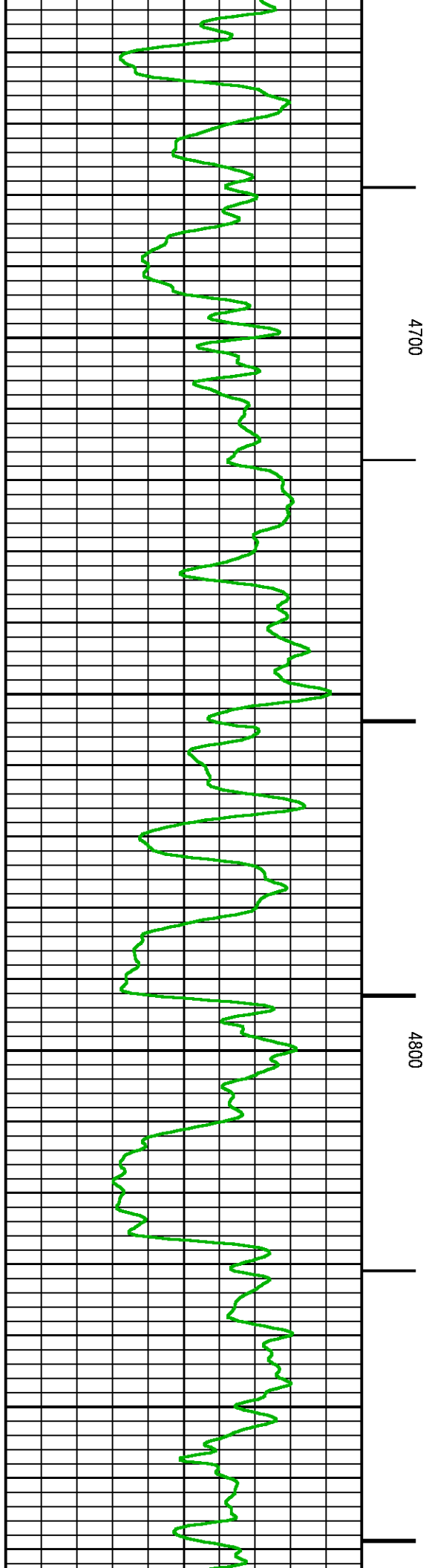
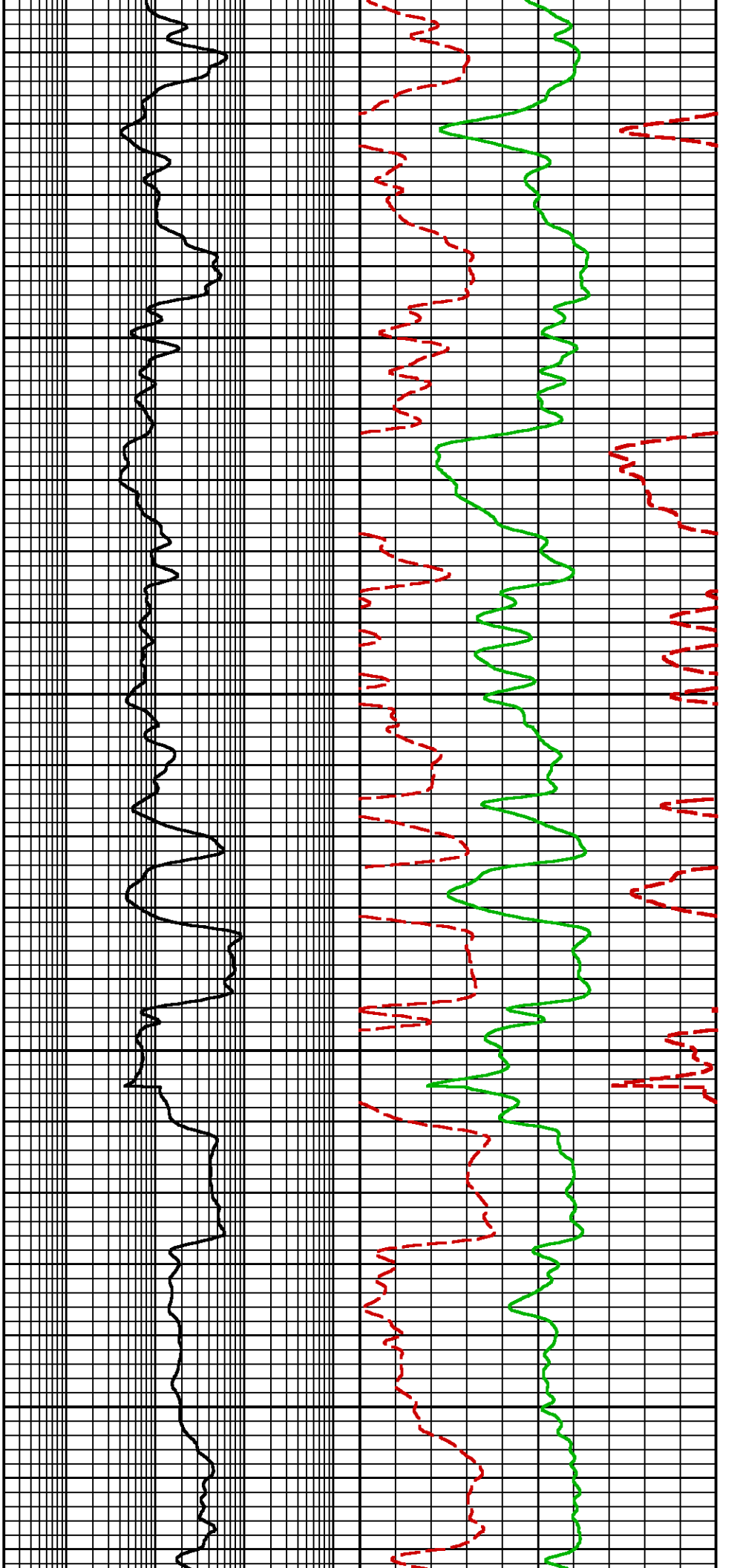
CURVE MEASURE POINT OFFSET

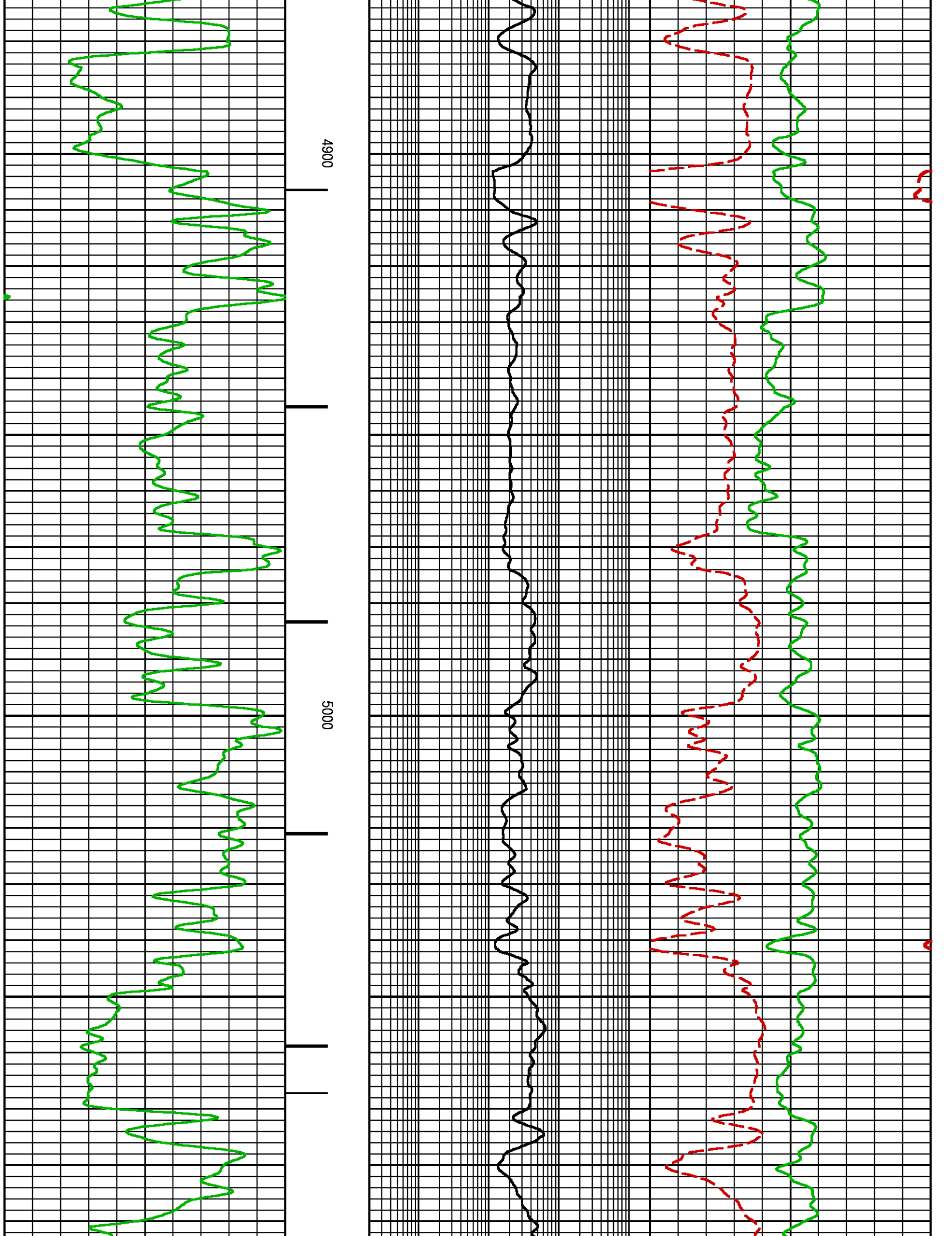
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNC	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

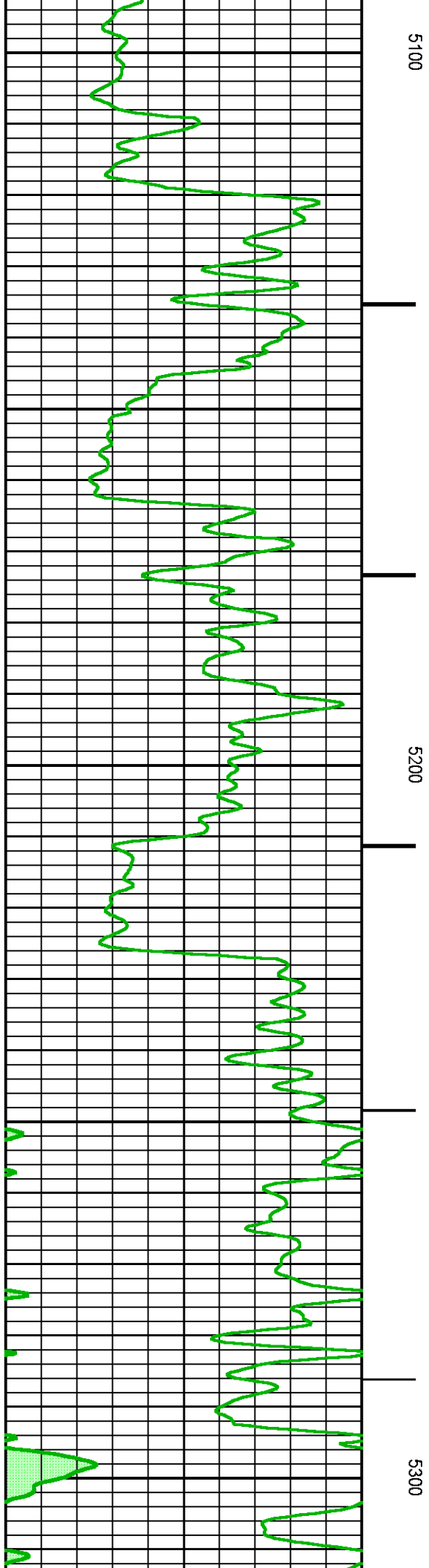
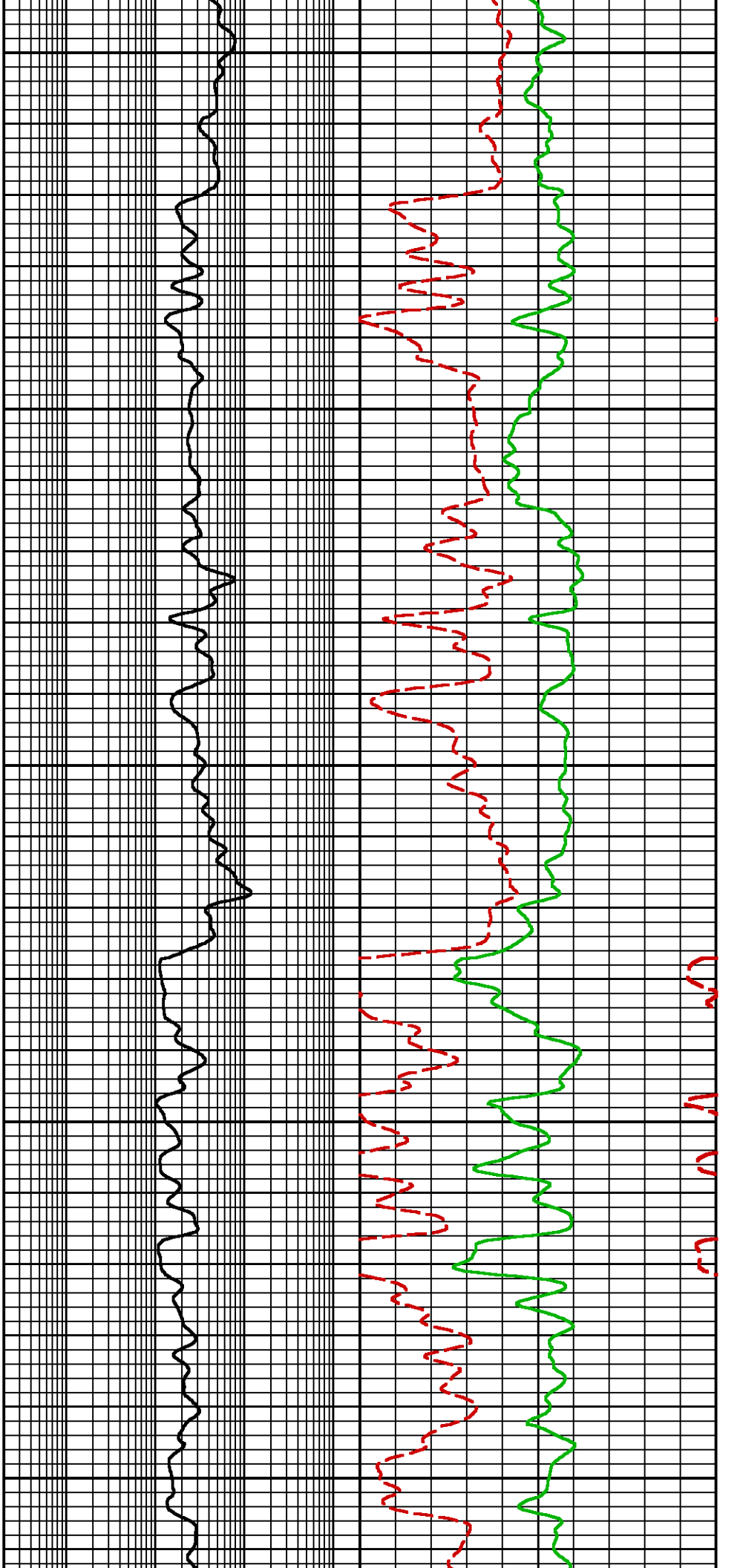
Project	: NA
User	: kotoale
Presentation	: BHI1F65XZ1:D:\Ape_Projects\Laramie_30_05E\NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100' Scale]
Plot Interval	: 4335 - 7992.75 Feet
Data File 1	: F1 : BHI1F65XZ1:D:\Ape_Projects\Laramie_30_05E\Merged_Set_Final.txt
Created On	: N/A
Company	: LARAMIE ENERGY
Well	: BRUTON 30-05E
Field	: VEGA
File Interval	: 2492.75 - 7992.75 Feet
OCT	: NA

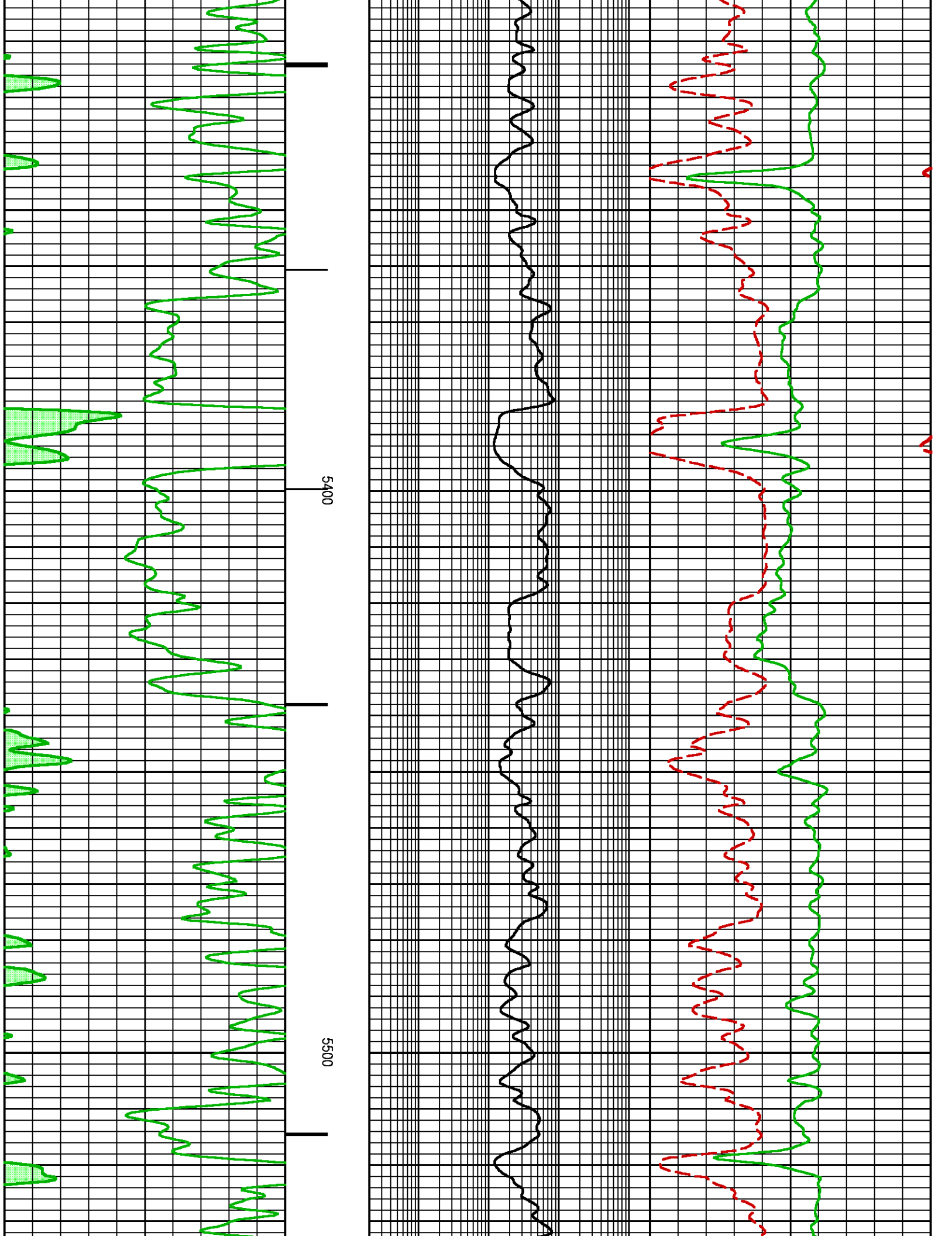


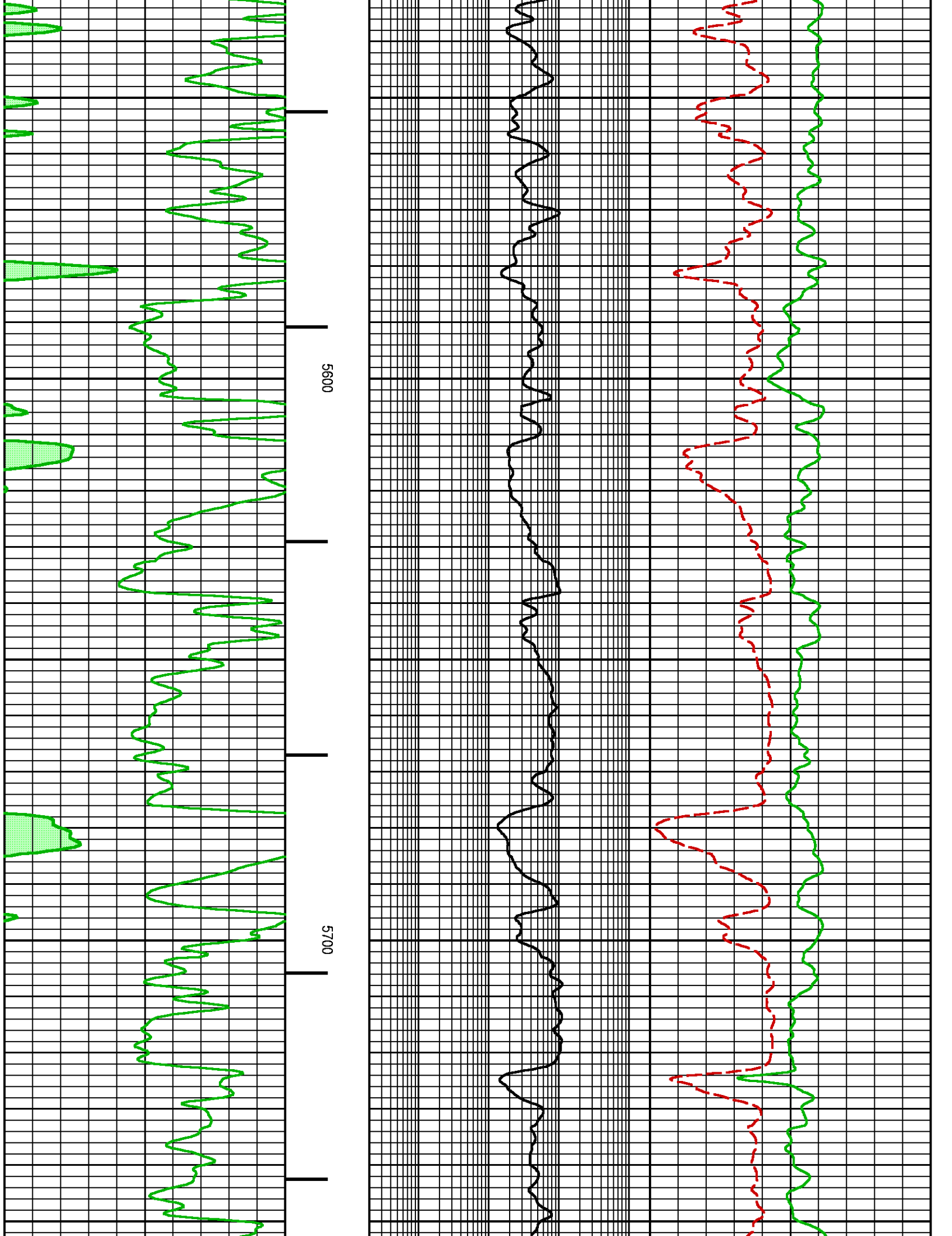


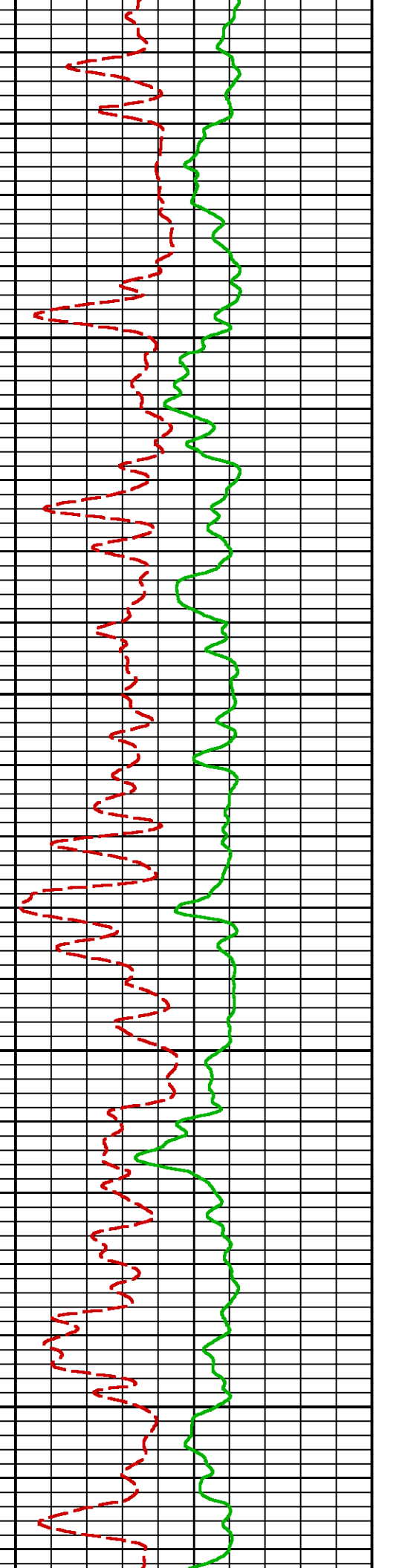
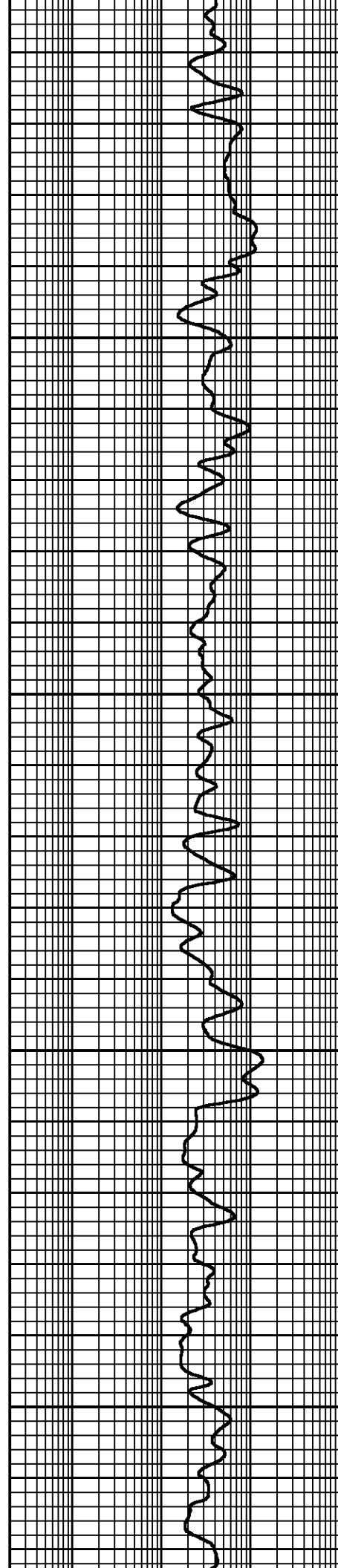
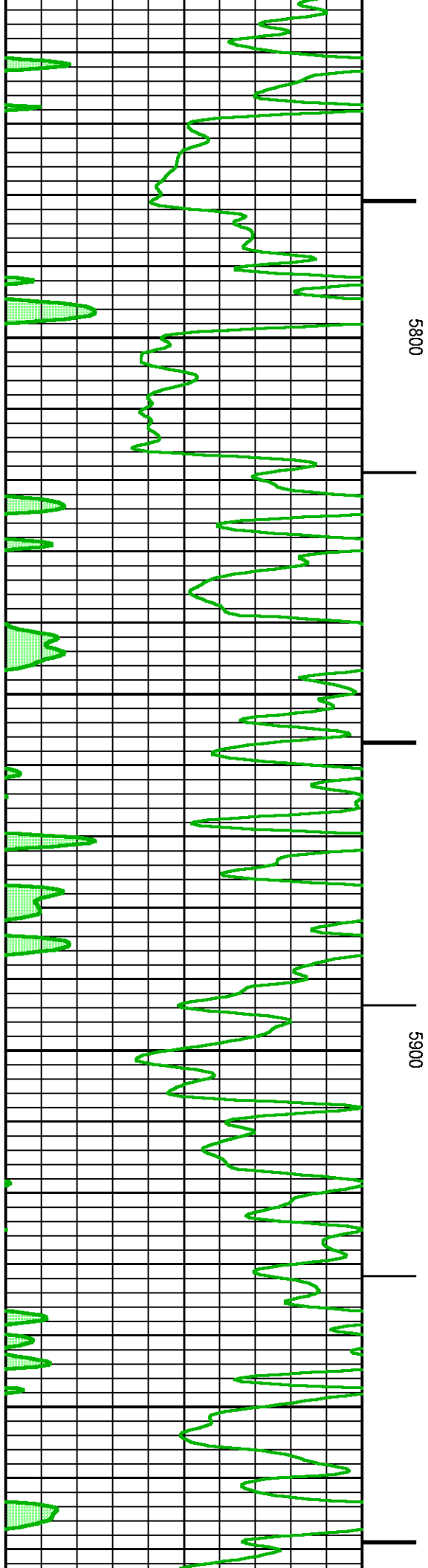


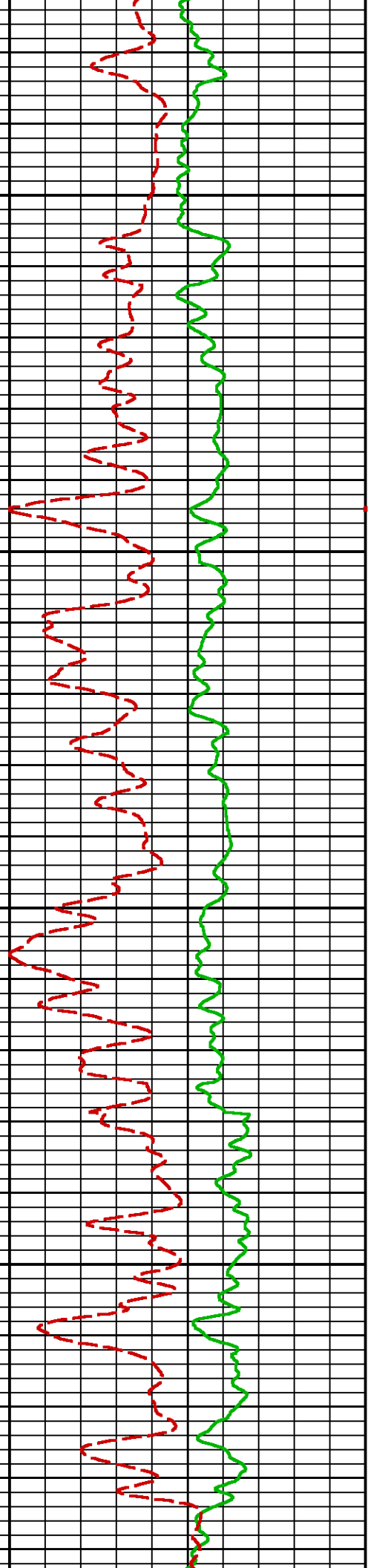
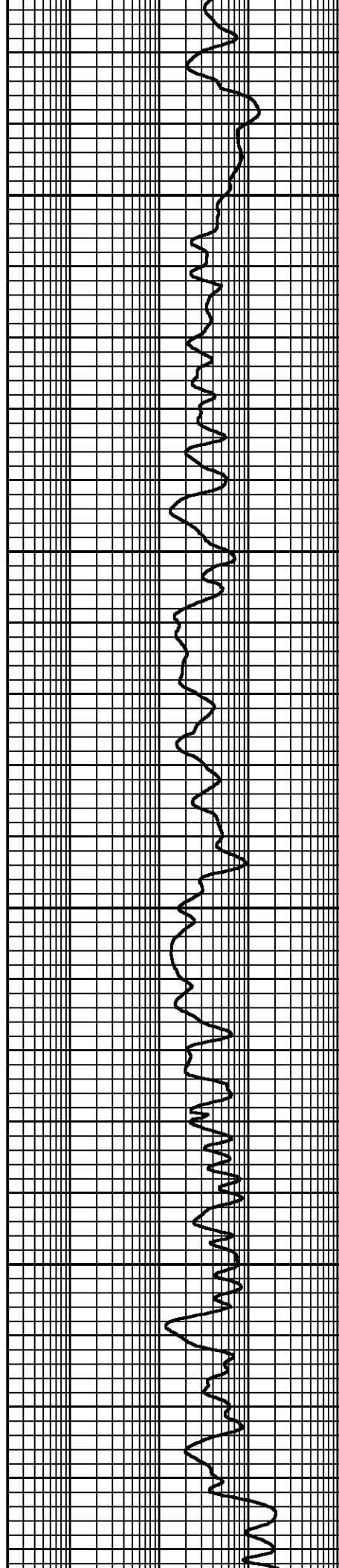
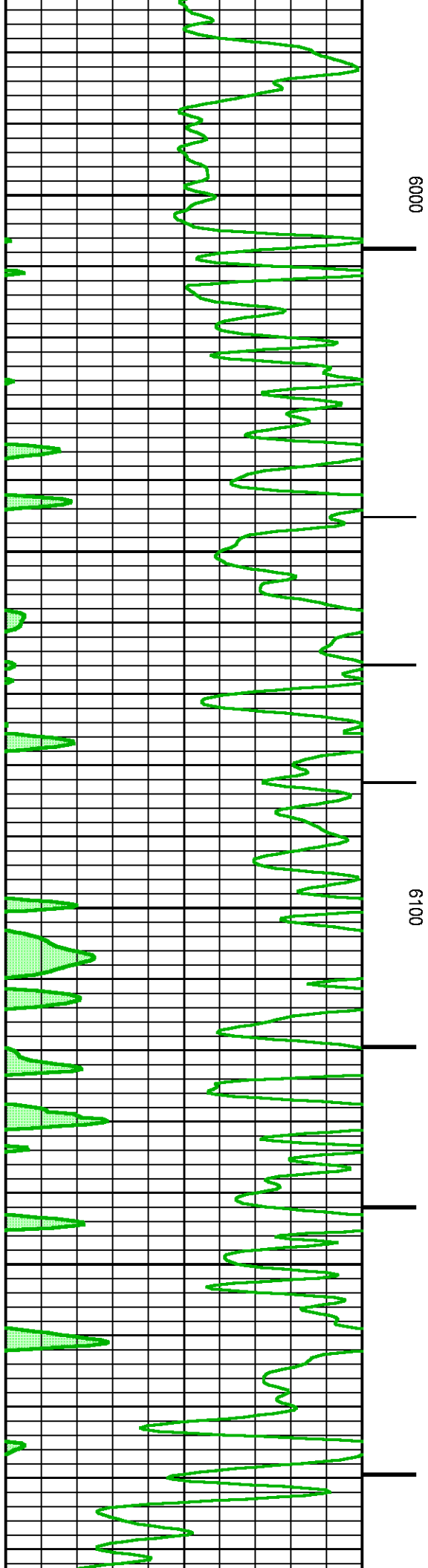


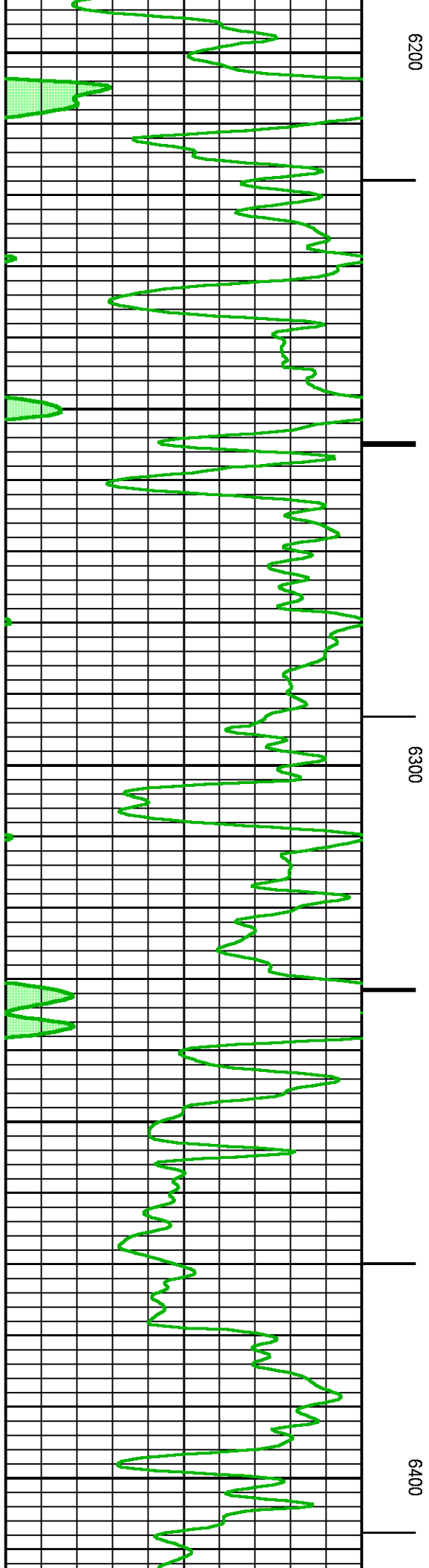
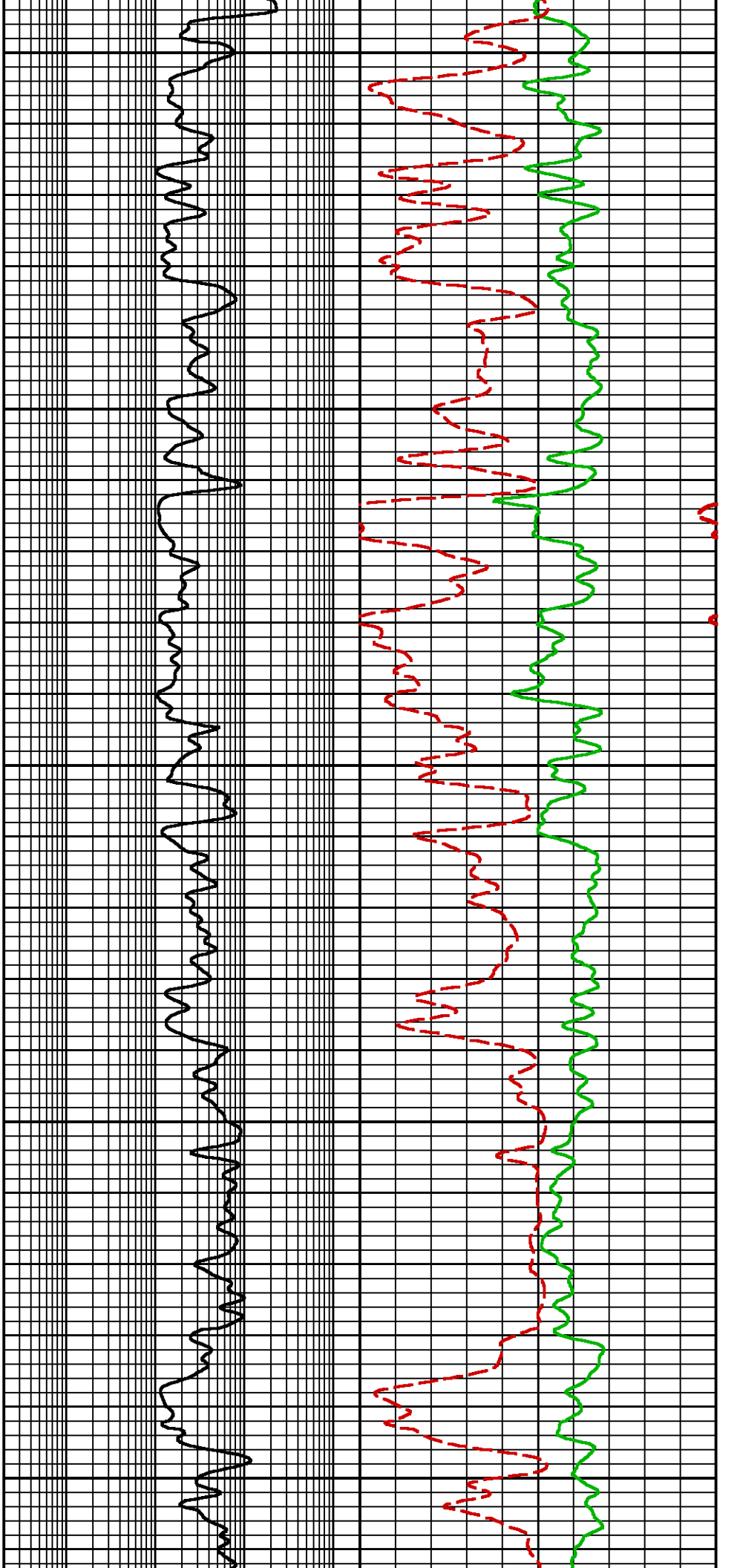


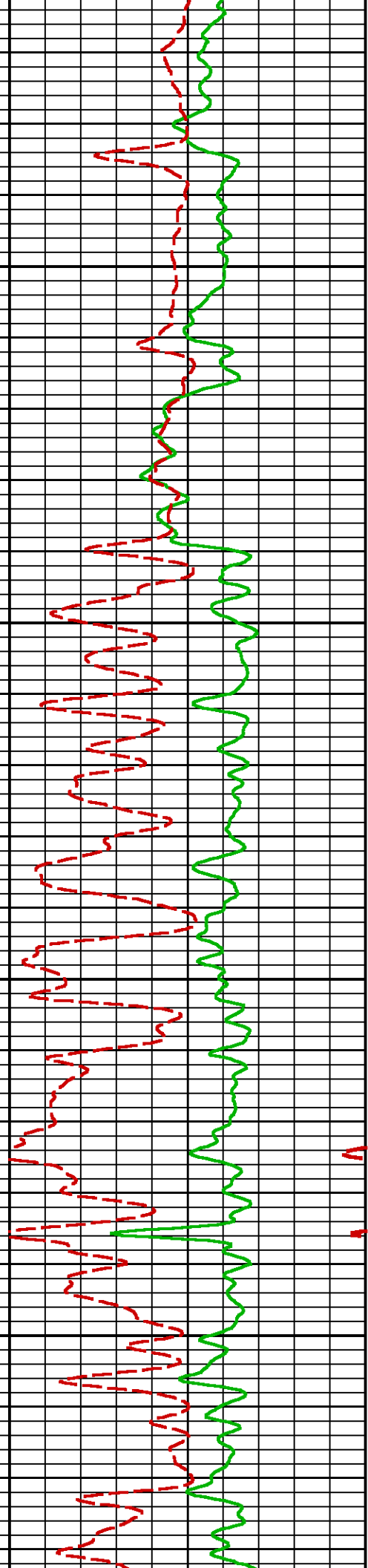
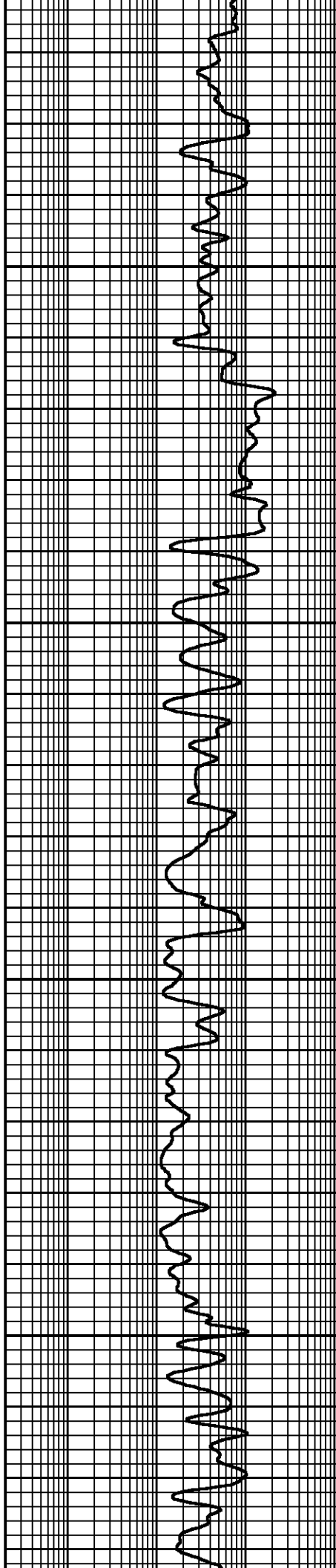
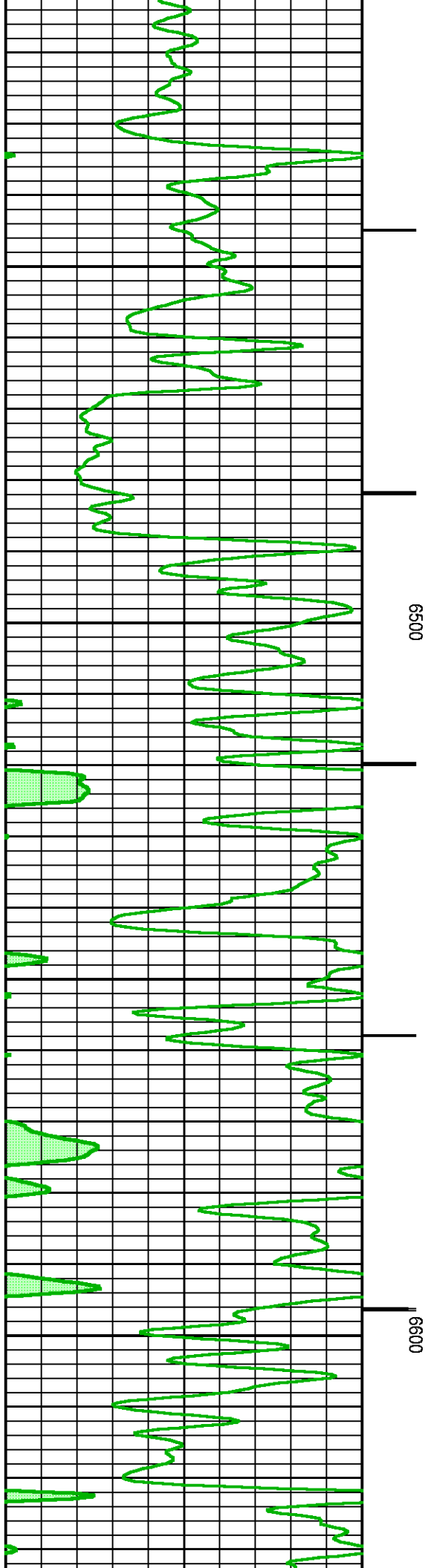


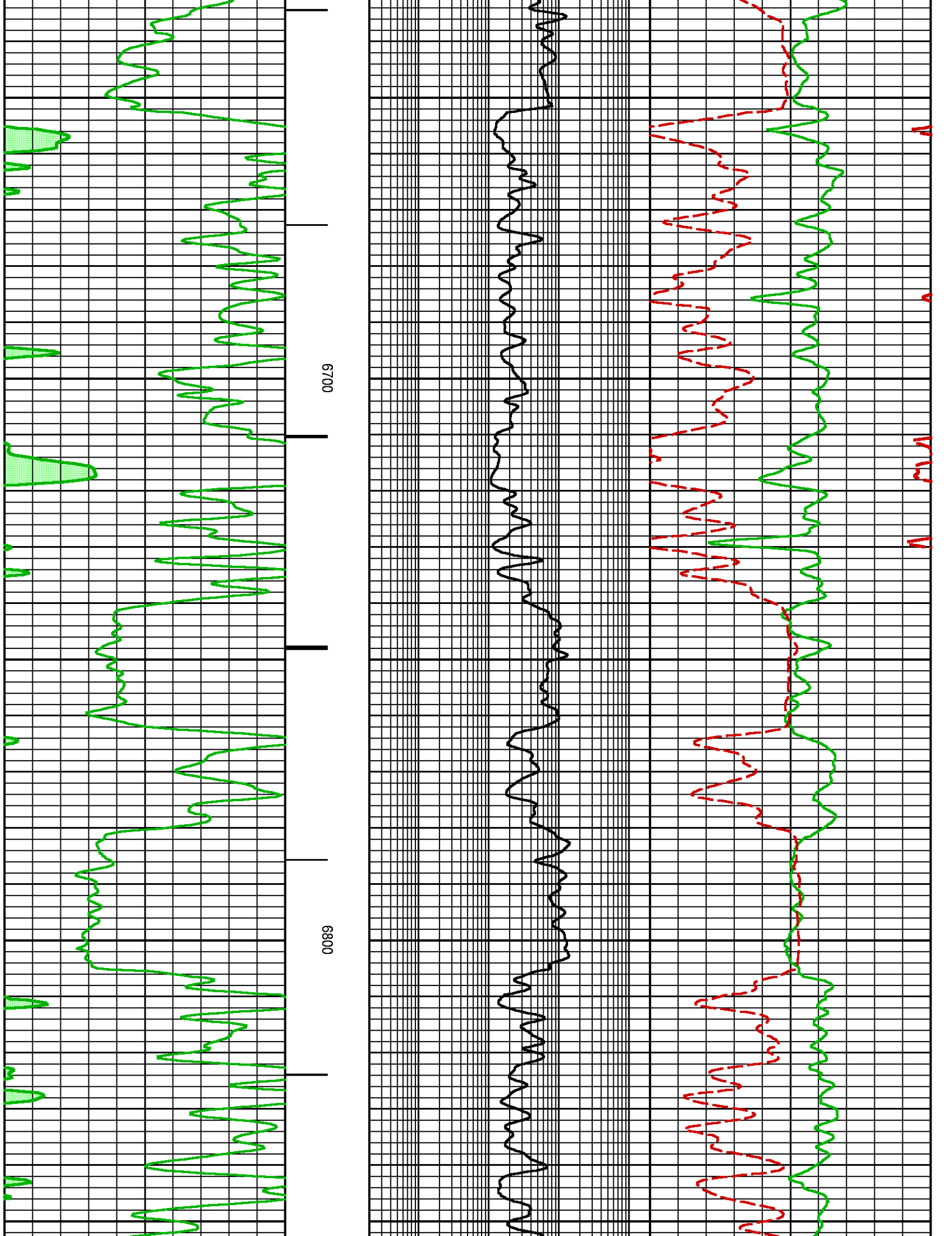


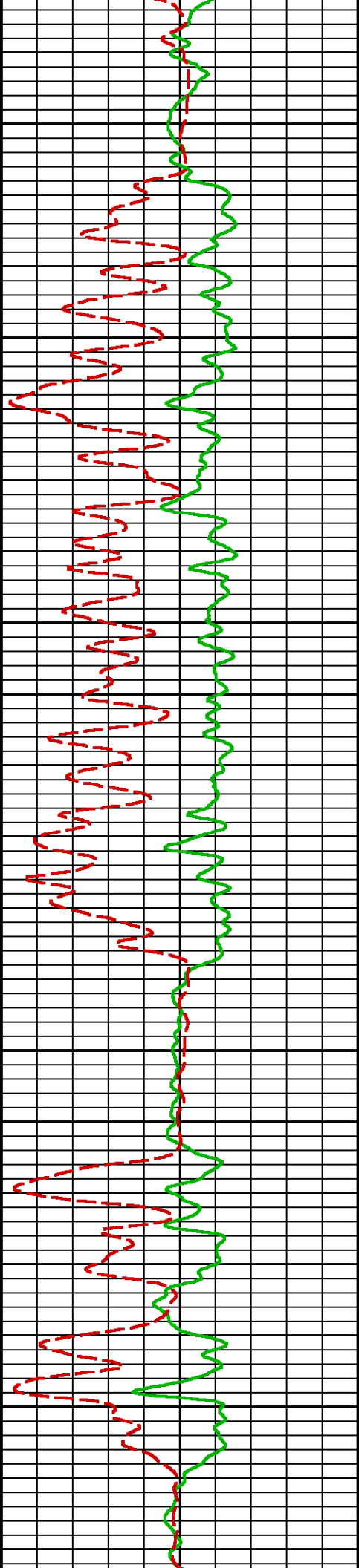
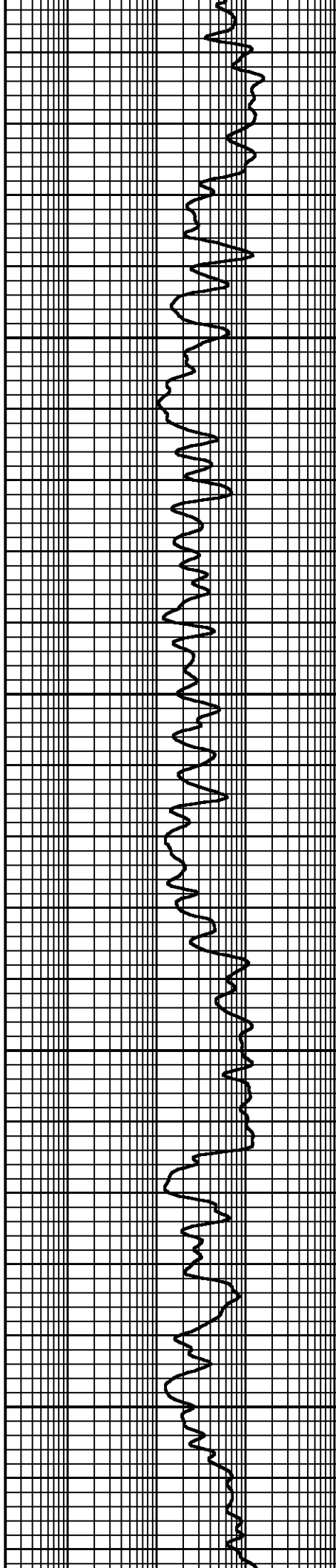
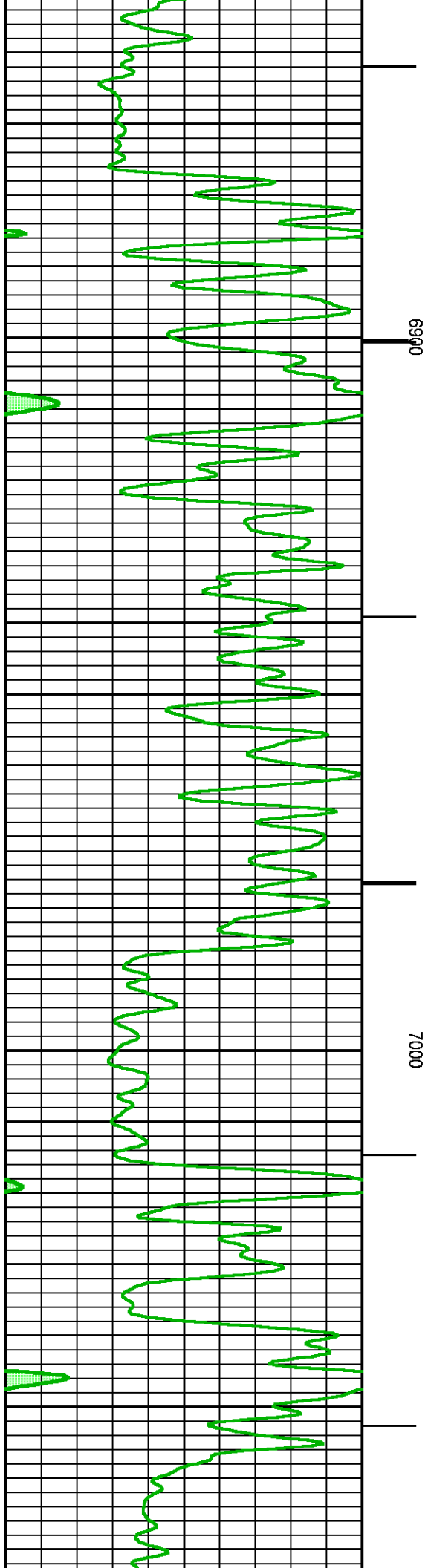


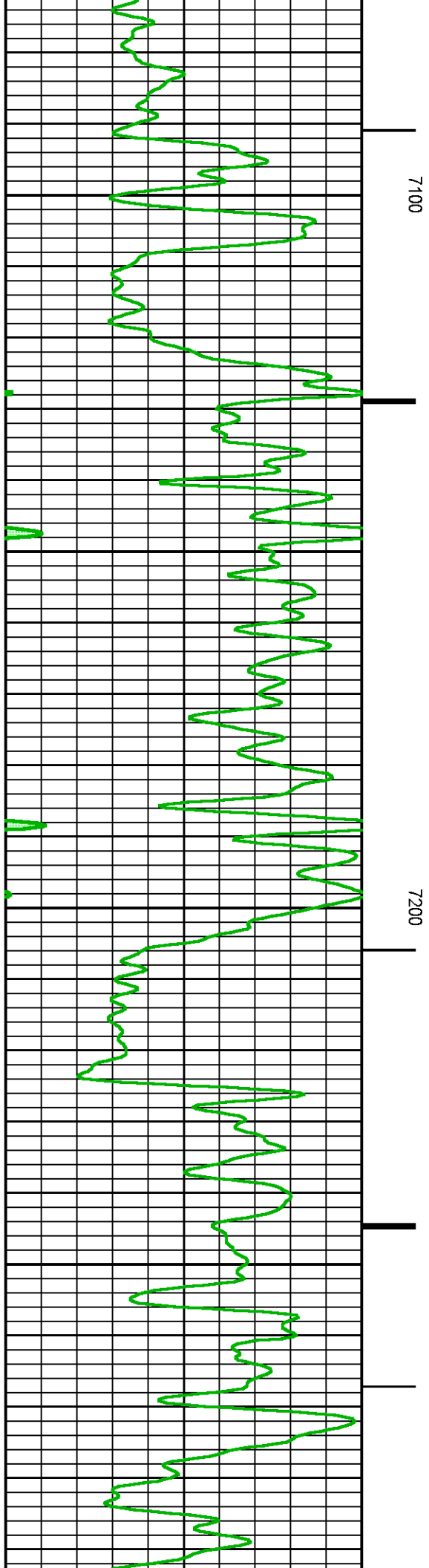
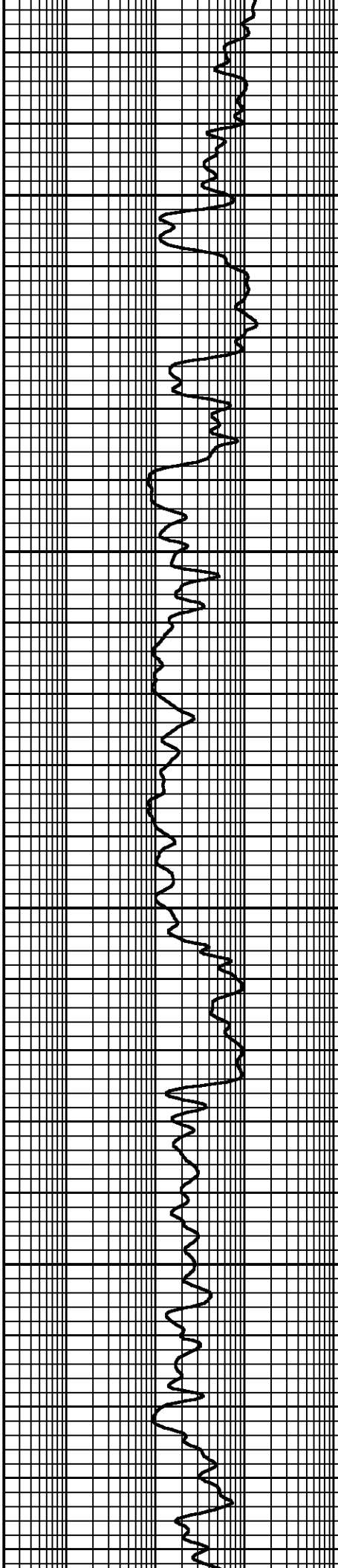
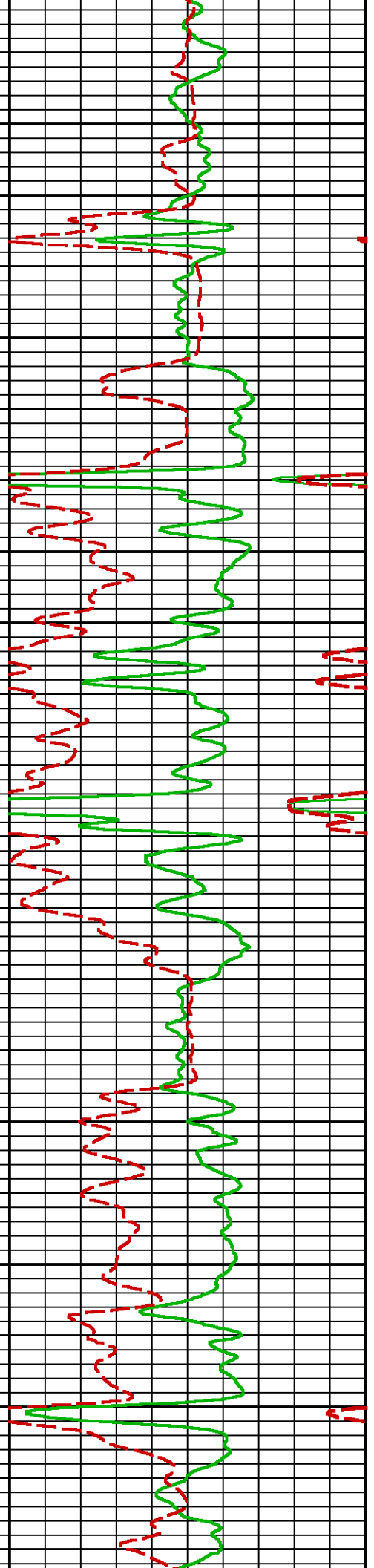


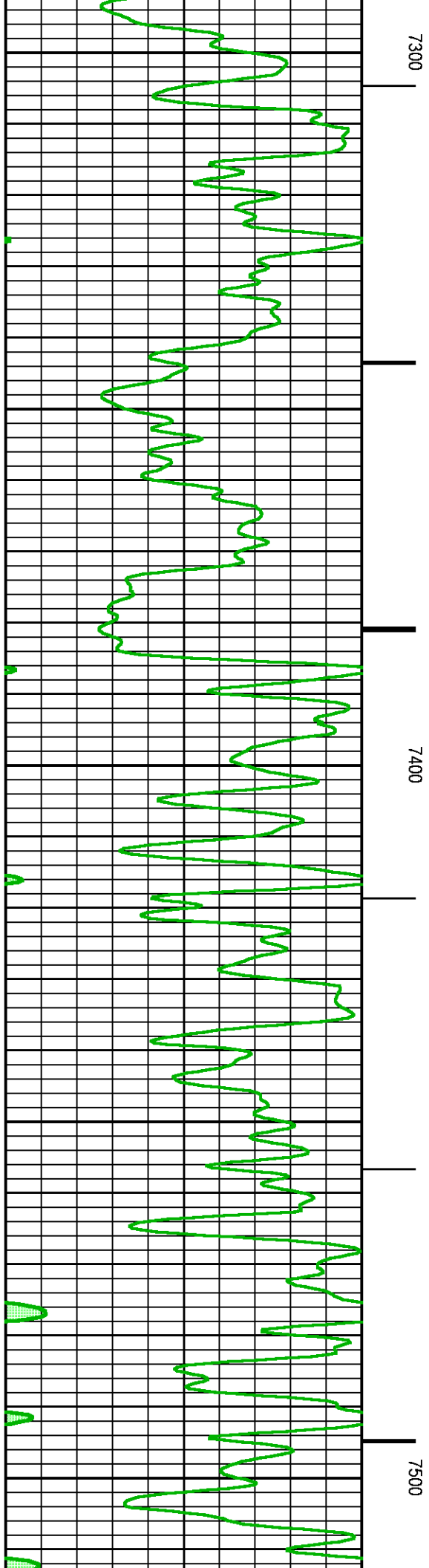
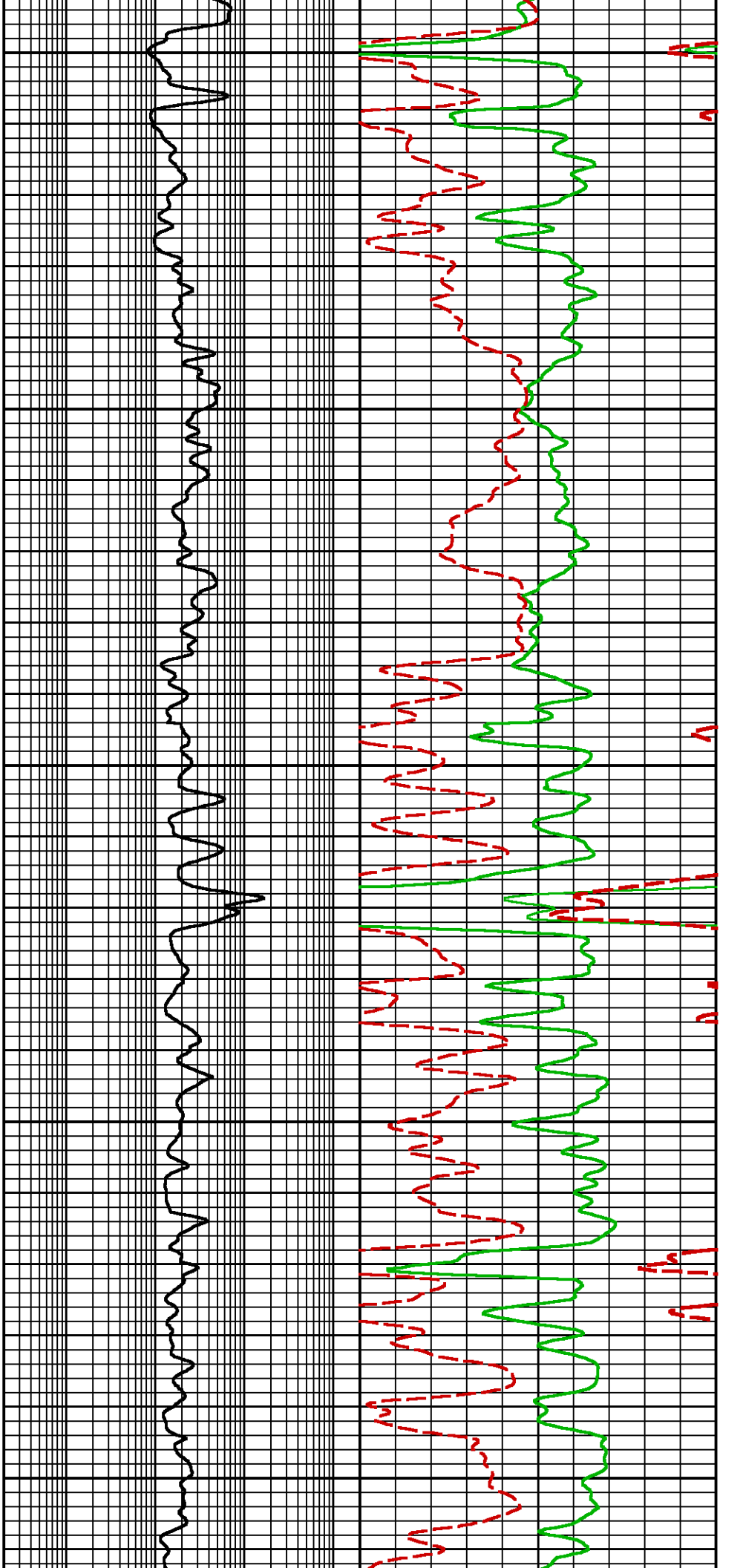


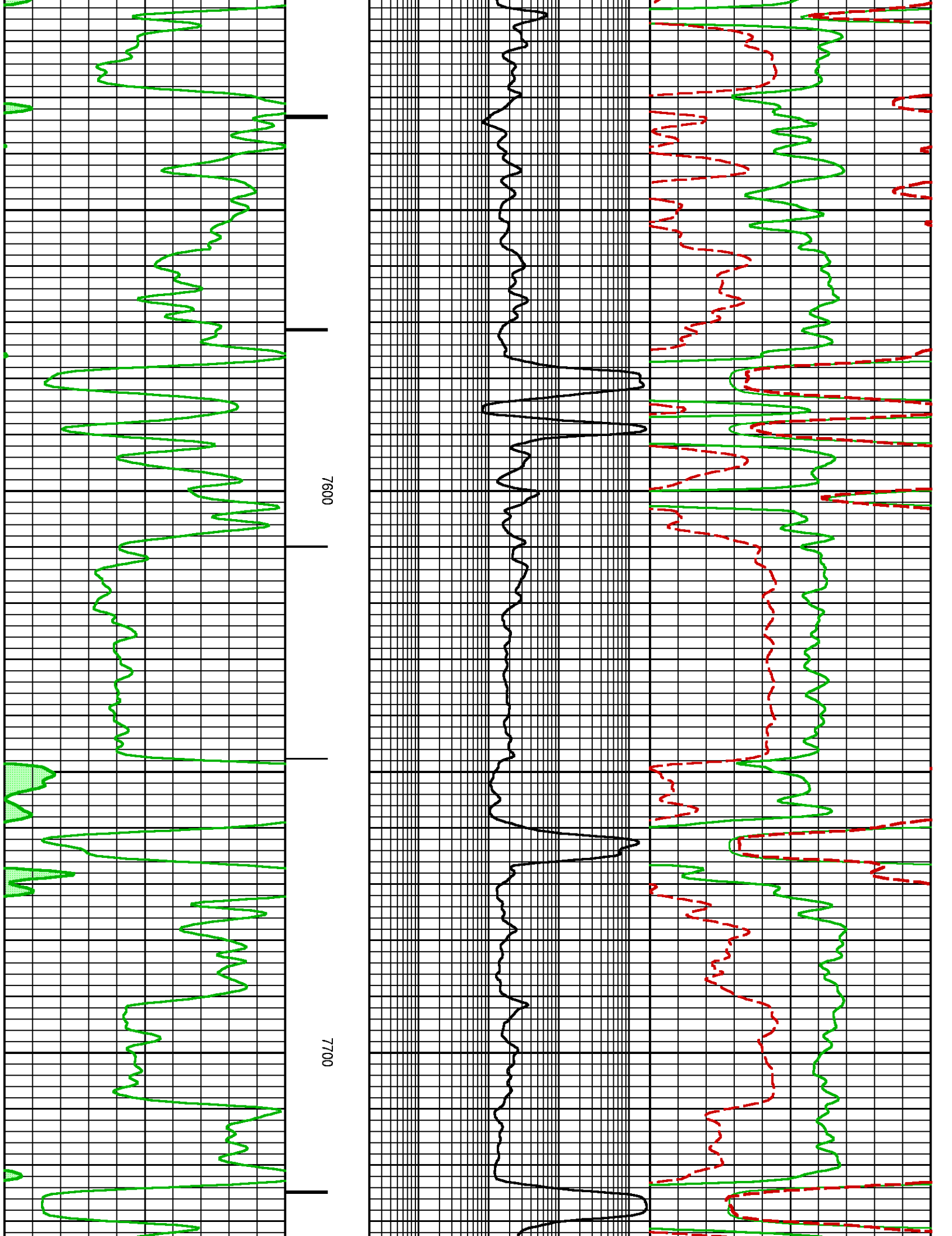


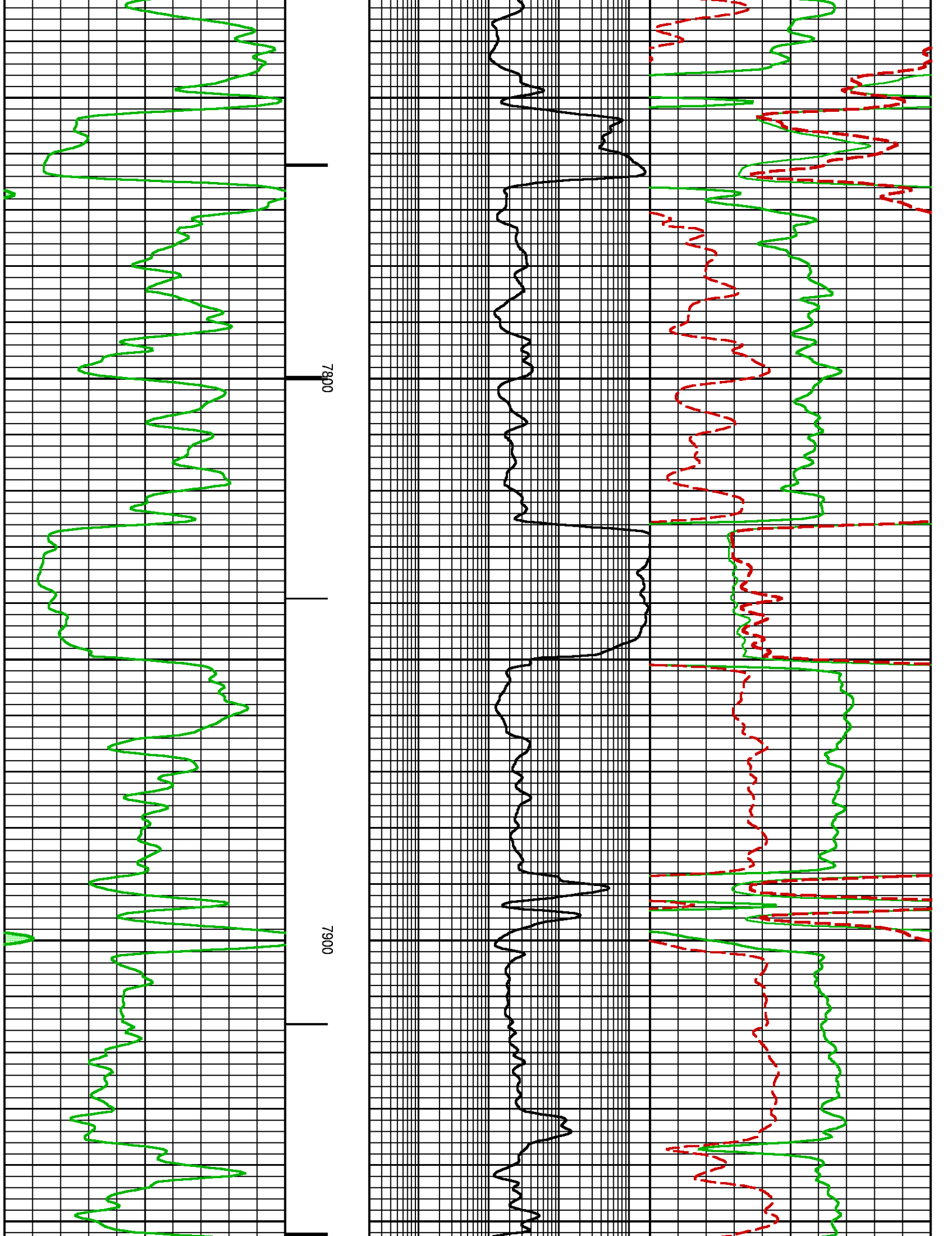


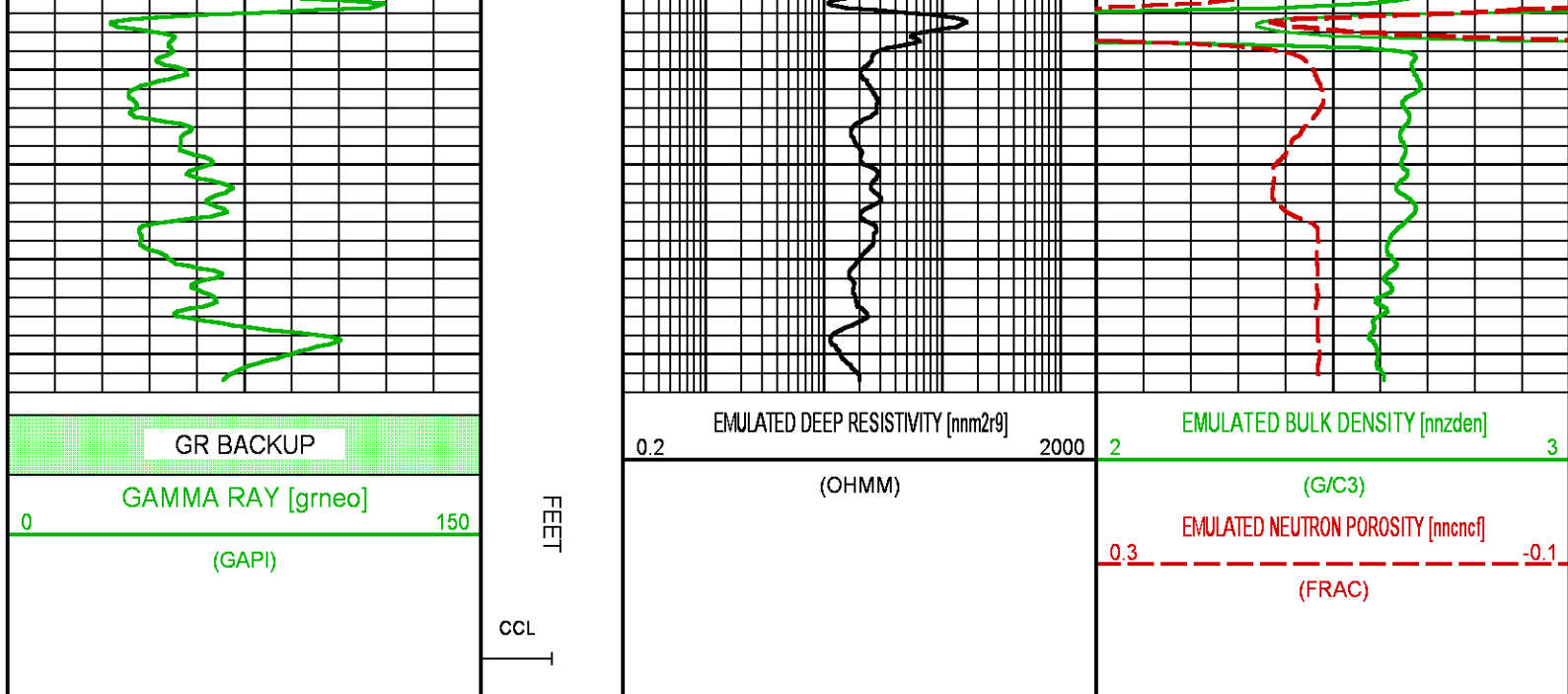



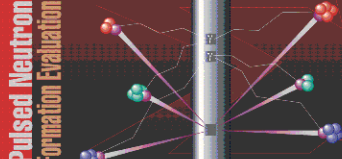










 	COMPANY <u>LARAMIE ENERGY</u> WELL <u>BRUTON 30-05E</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>COLORADO</u>	FILE NO: <u>29451-01</u> API NO: <u>05077104510000</u>	
	LOCATION: <u>SEE REMARKS SECTION</u>	ELEVATIONS: KB <u>7534.0 FT</u> DF GL <u>7504.0 FT</u>	
	SEC <u>30</u> TWP <u>9S</u> RGE <u>93W</u>	DATE <u>20-NOV-2017</u>	