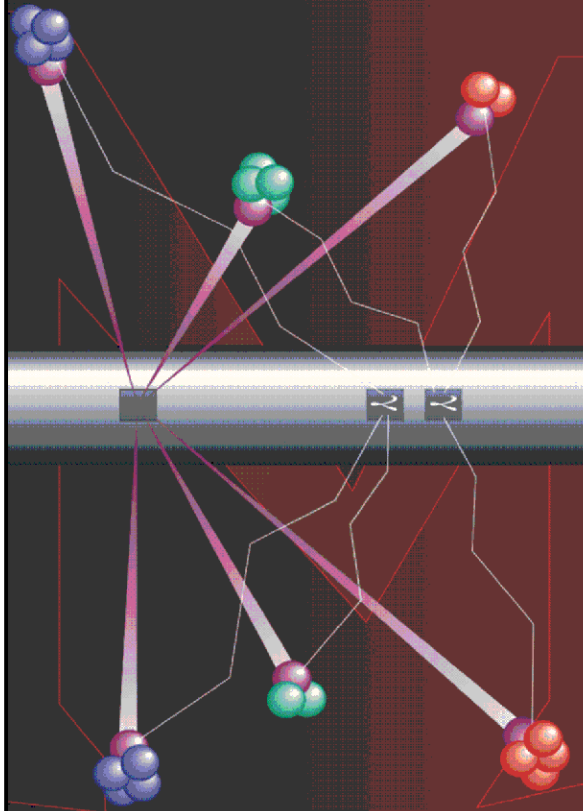


Pulsed Neutron Formation Evaluation



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL GUNDERSON 20-08W

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 24-AUG-2017 ECC 28224-01

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>05-SEP-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US126644</u>	DATE: <u>24-AUG-2017</u>

FROM	TO								
<u>2084 FT</u>	<u>7504 FT</u>								

REMARKS

LOCATION:
SHL: LAT:39.266756N;LONG:107.795317W
BHL: LAT:39.264461N;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

NEO RESULTS FOR GUNDERSON 20-08W (G-SAND)

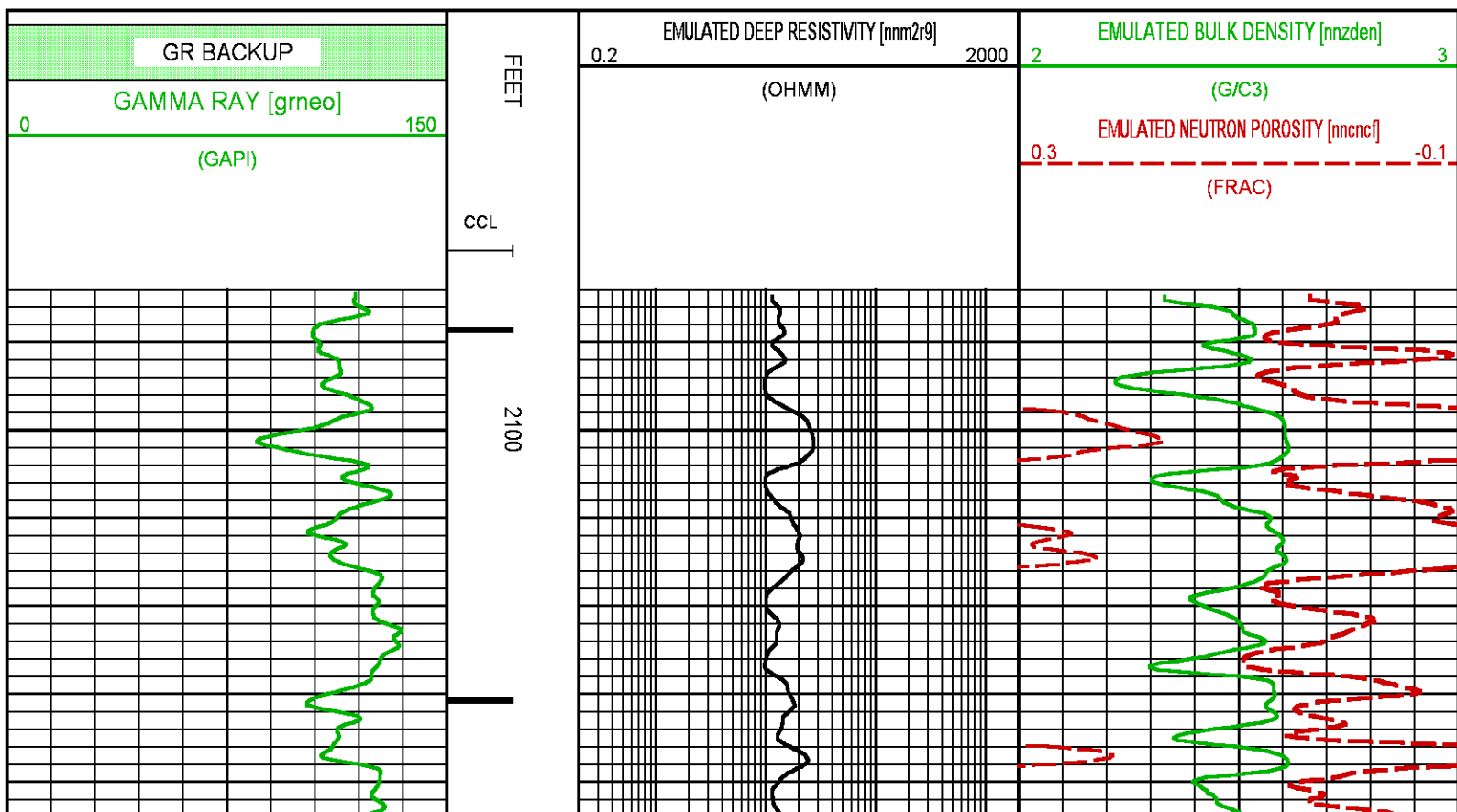
ECLIPS ECLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

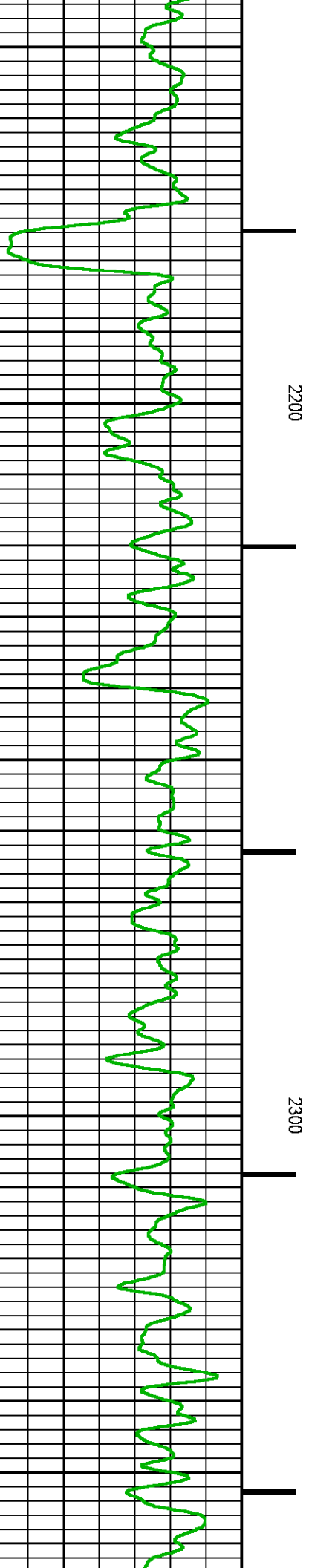
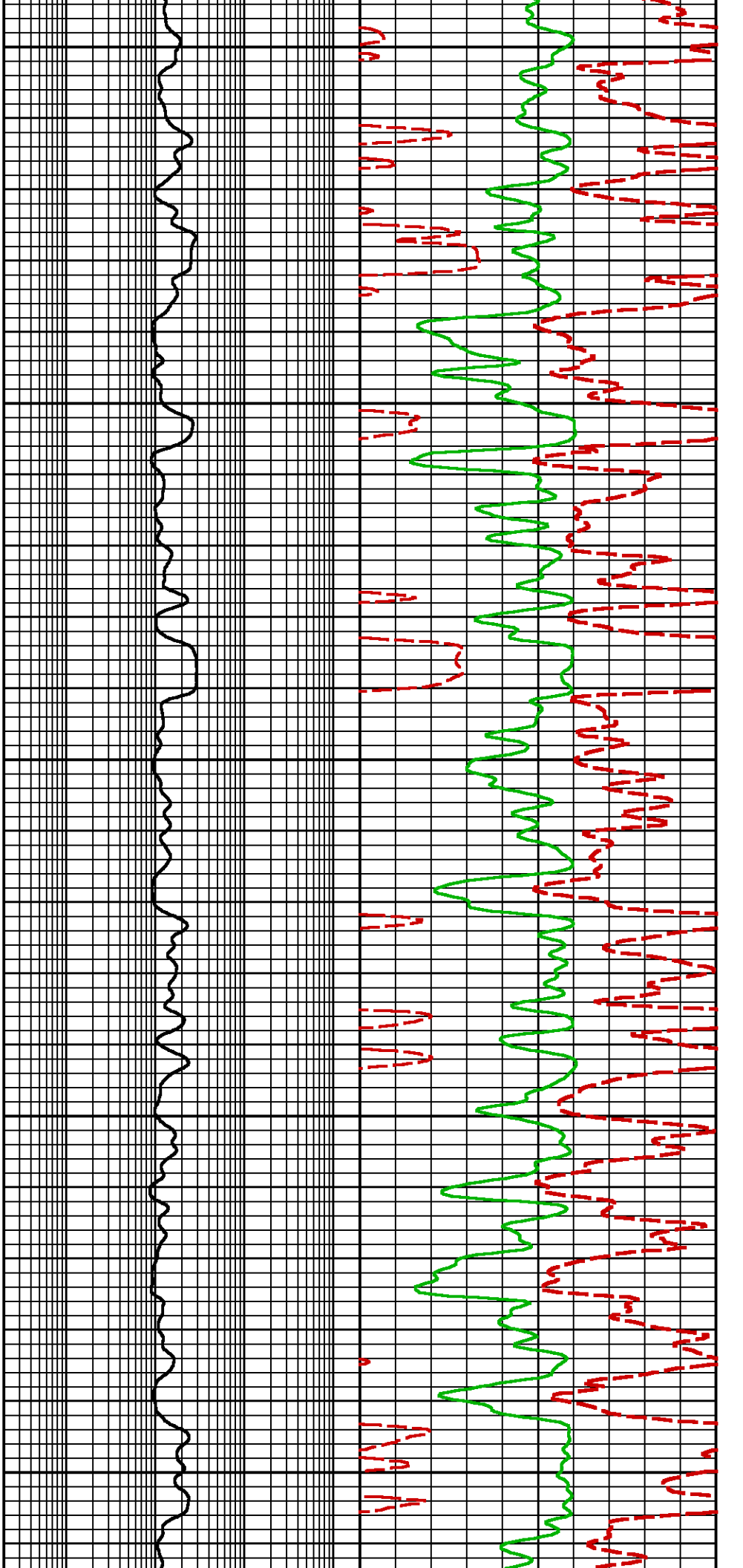
Plotted: Tue Sep 05 16:35:32 2017

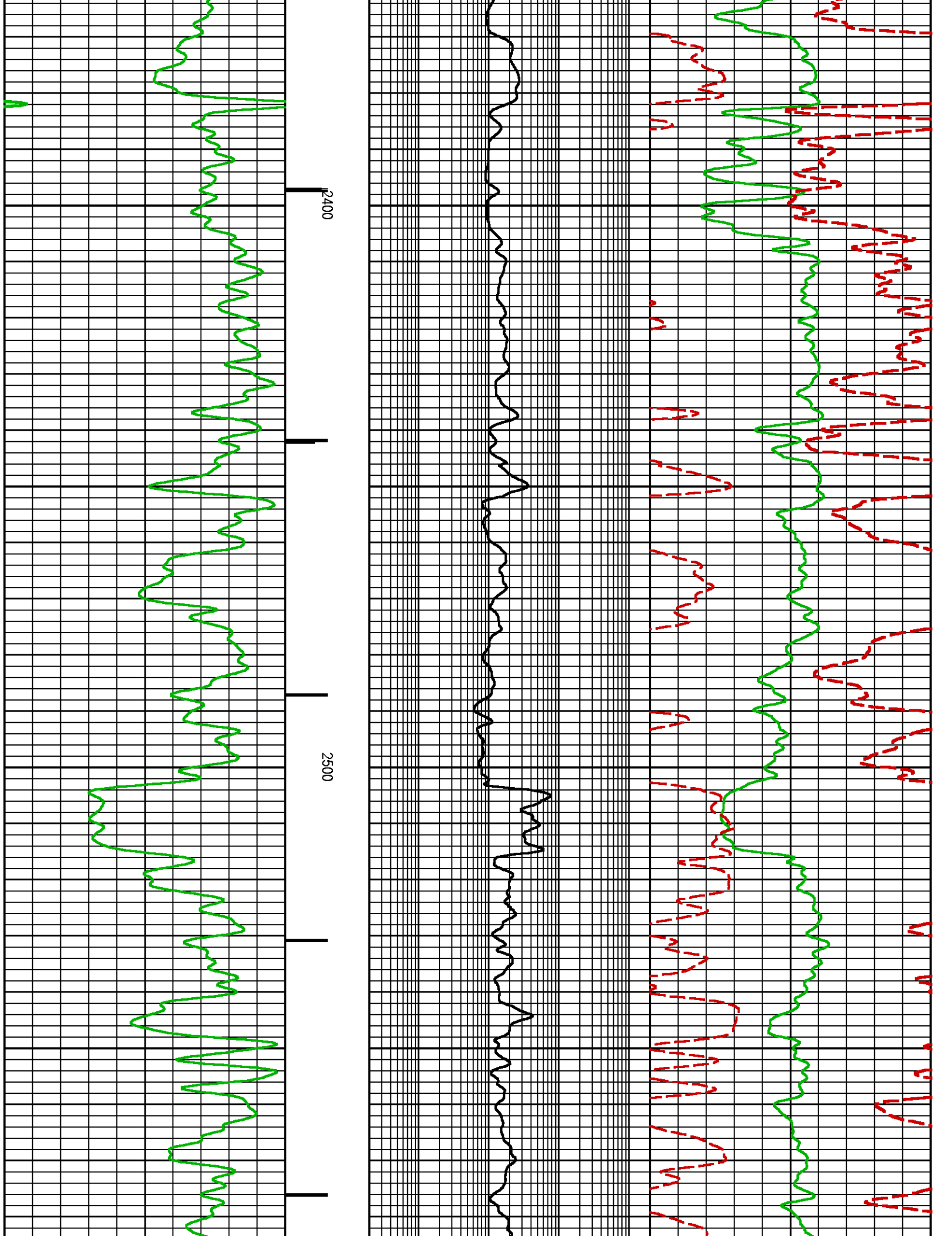
CURVE MEASURE POINT OFFSET

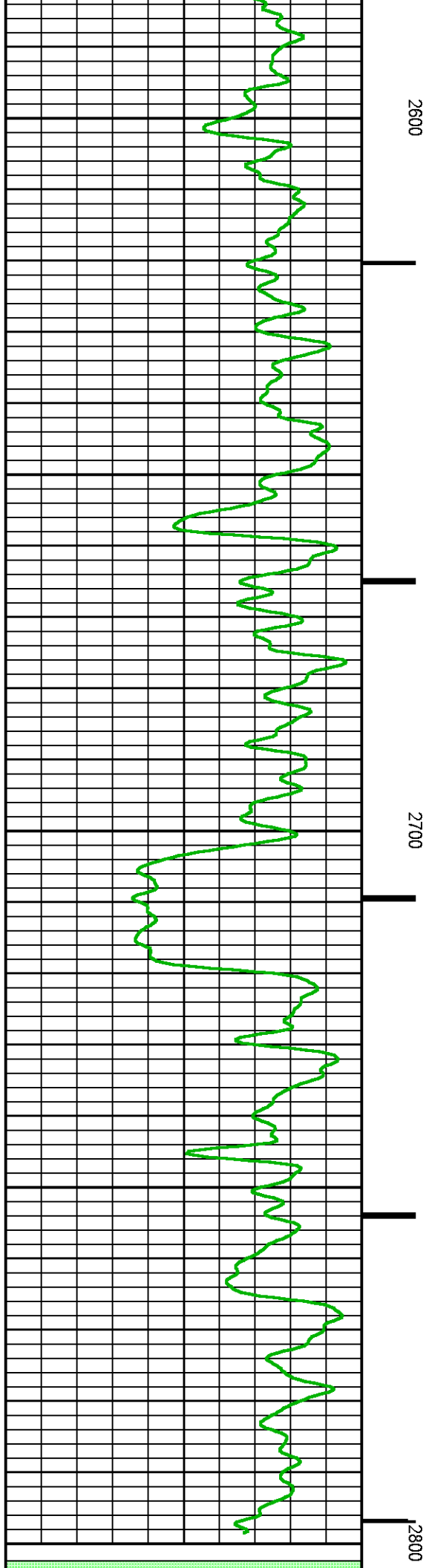
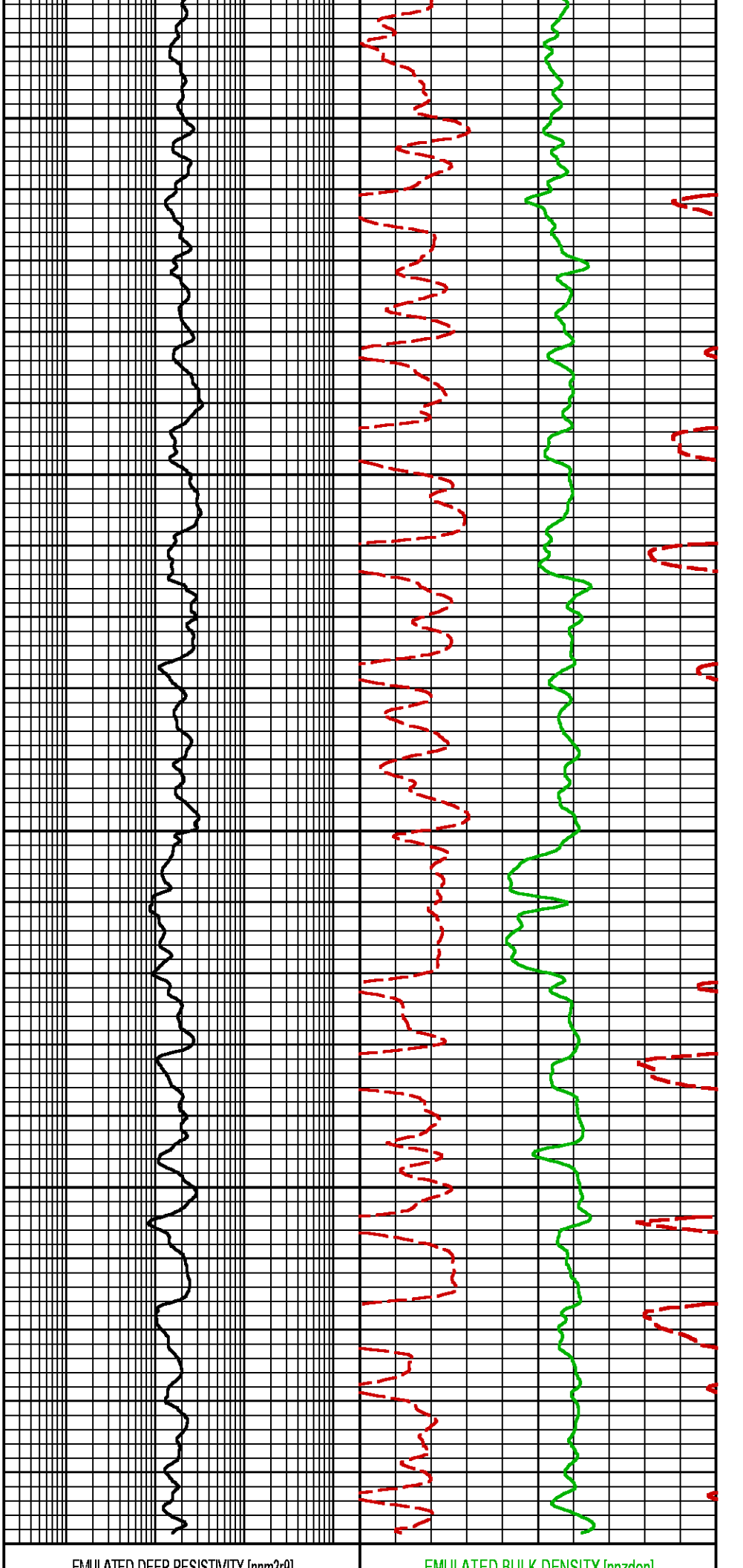
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

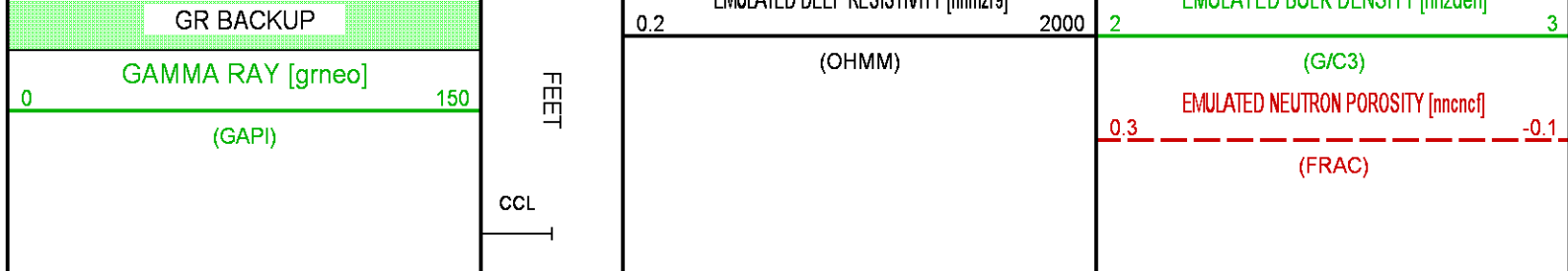
Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_08W_NEO\NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2084.5 - 2800 Feet
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_08W_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : GUNDERSON 20-08W
Field : VEGA
File Interval : 2084.5 - 7504.5 Feet
OCT : NA











NEO RESULTS FOR GUNDERSON 20-08W (MAIN)

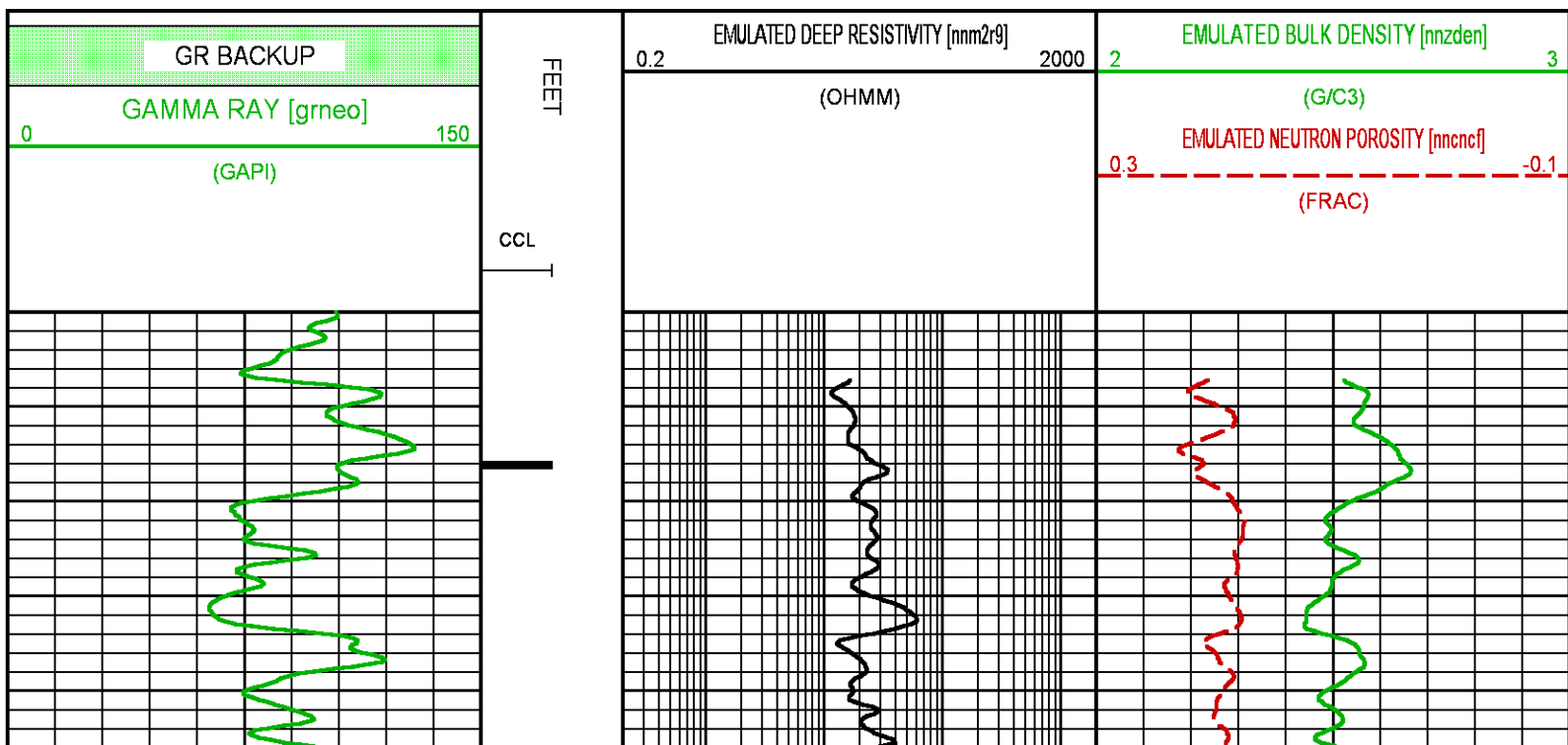
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

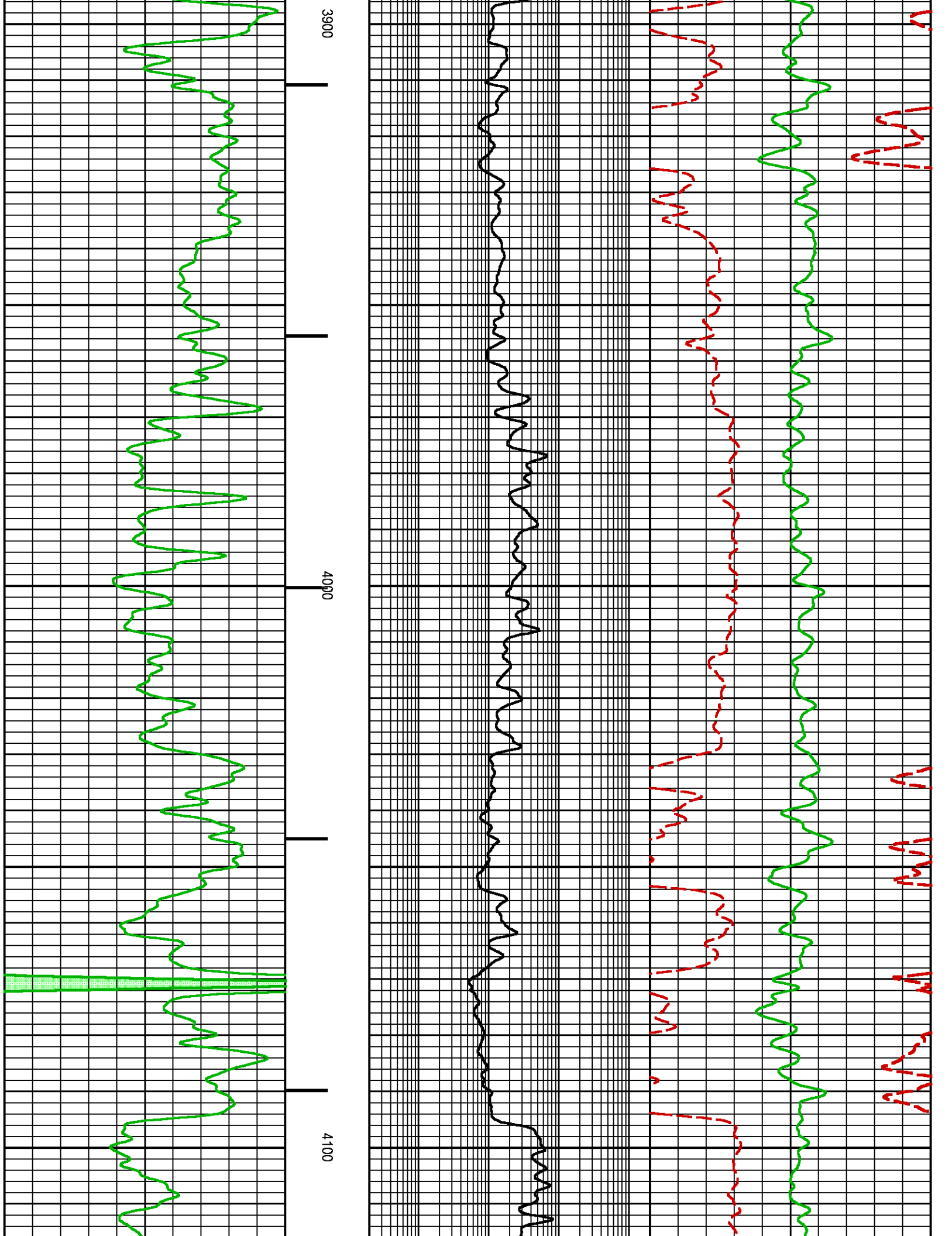
Plotted: Tue Sep 05 16:35:14 2017

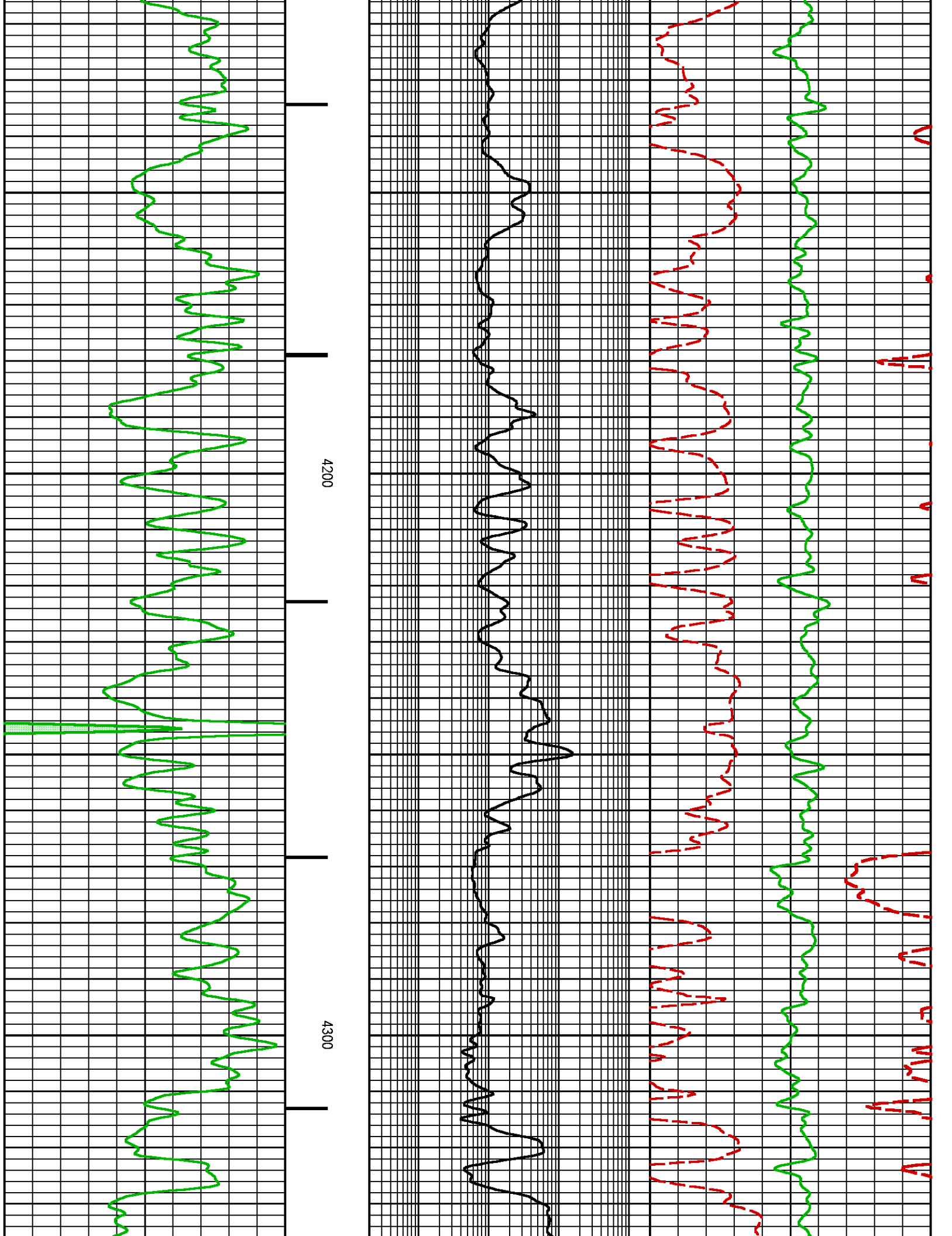
CURVE MEASURE POINT OFFSET

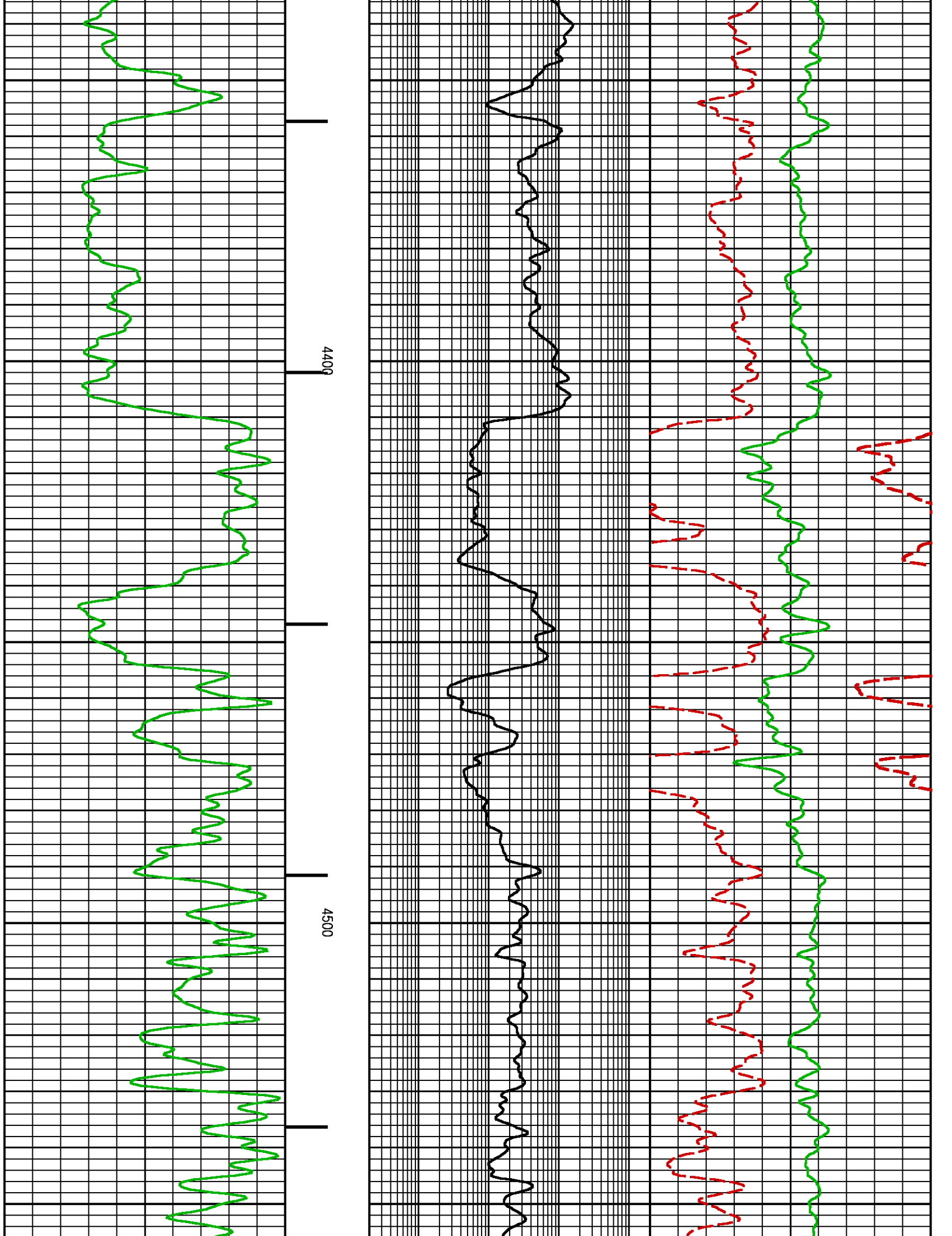
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCF	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

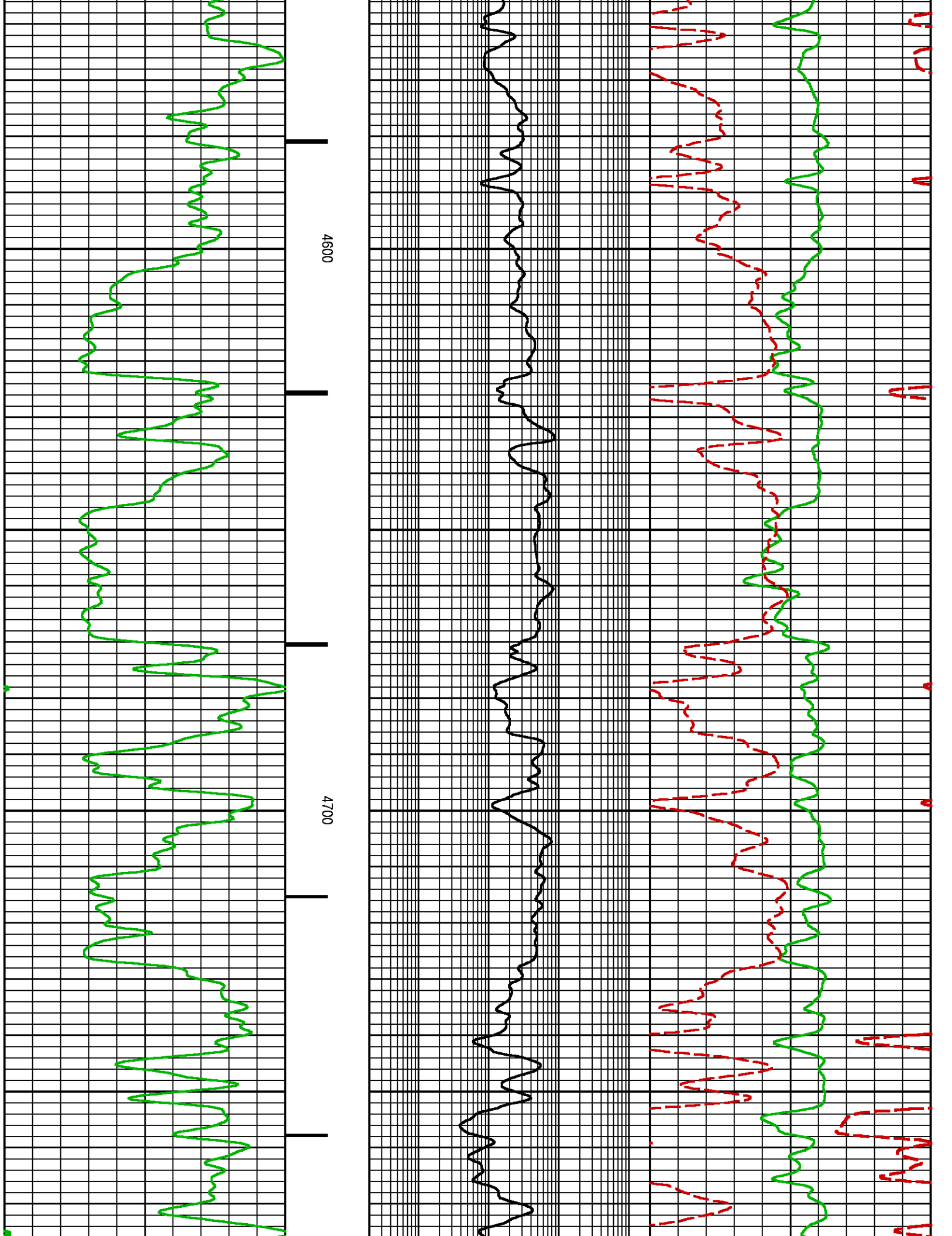
Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON 20_08W_NEO\NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100" Scale]
Plot Interval : 3850 - 7504.5 Feet
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON 20_08W_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : GUNDERSON 20-08W
Field : VEGA
File Interval : 2084.5 - 7504.5 Feet
OCT : NA

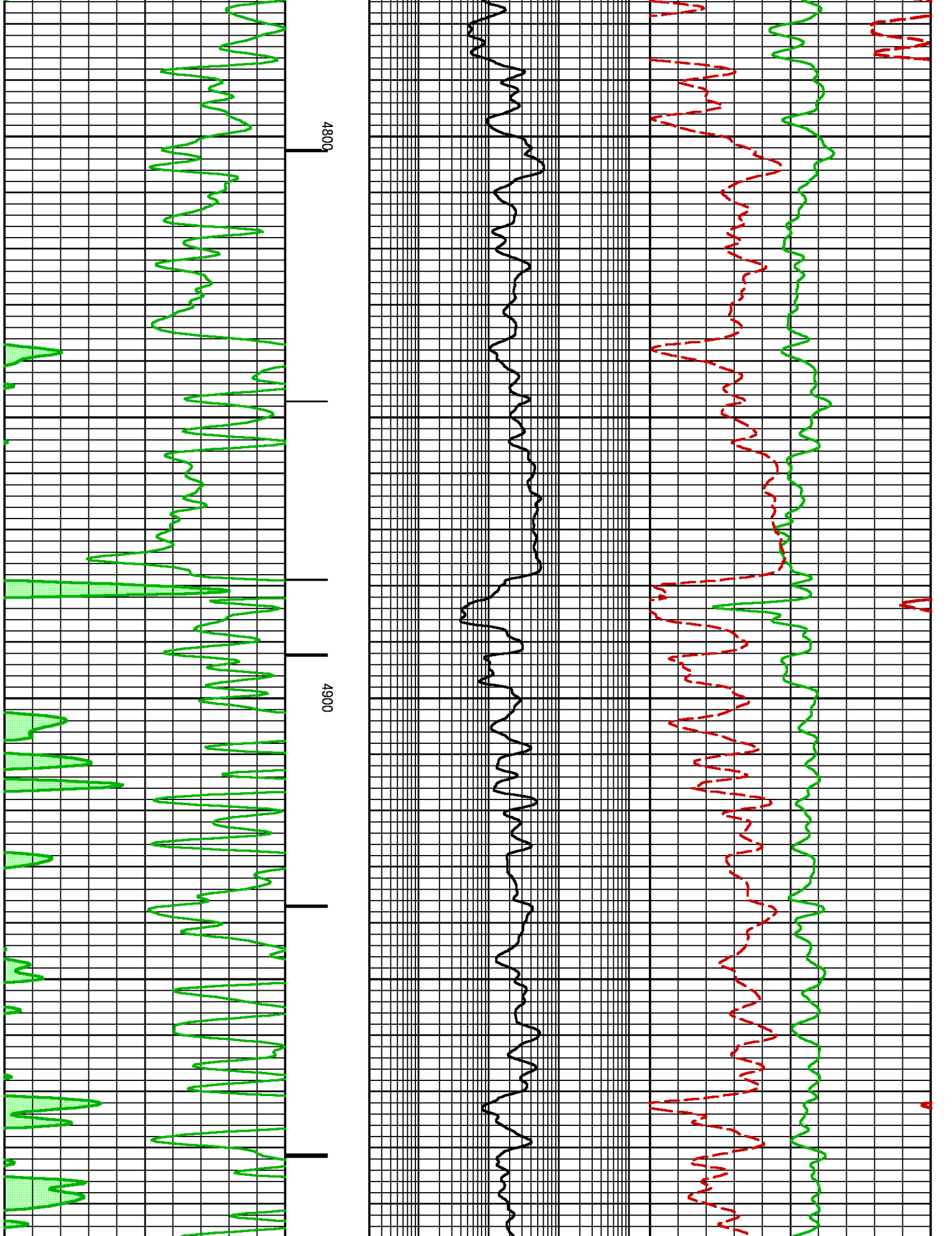


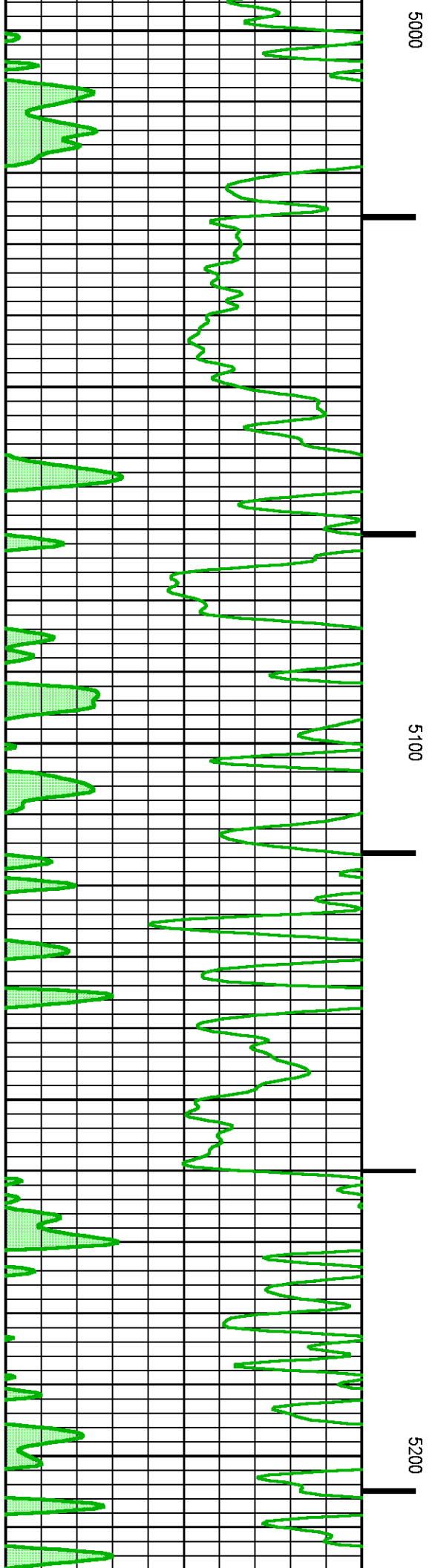
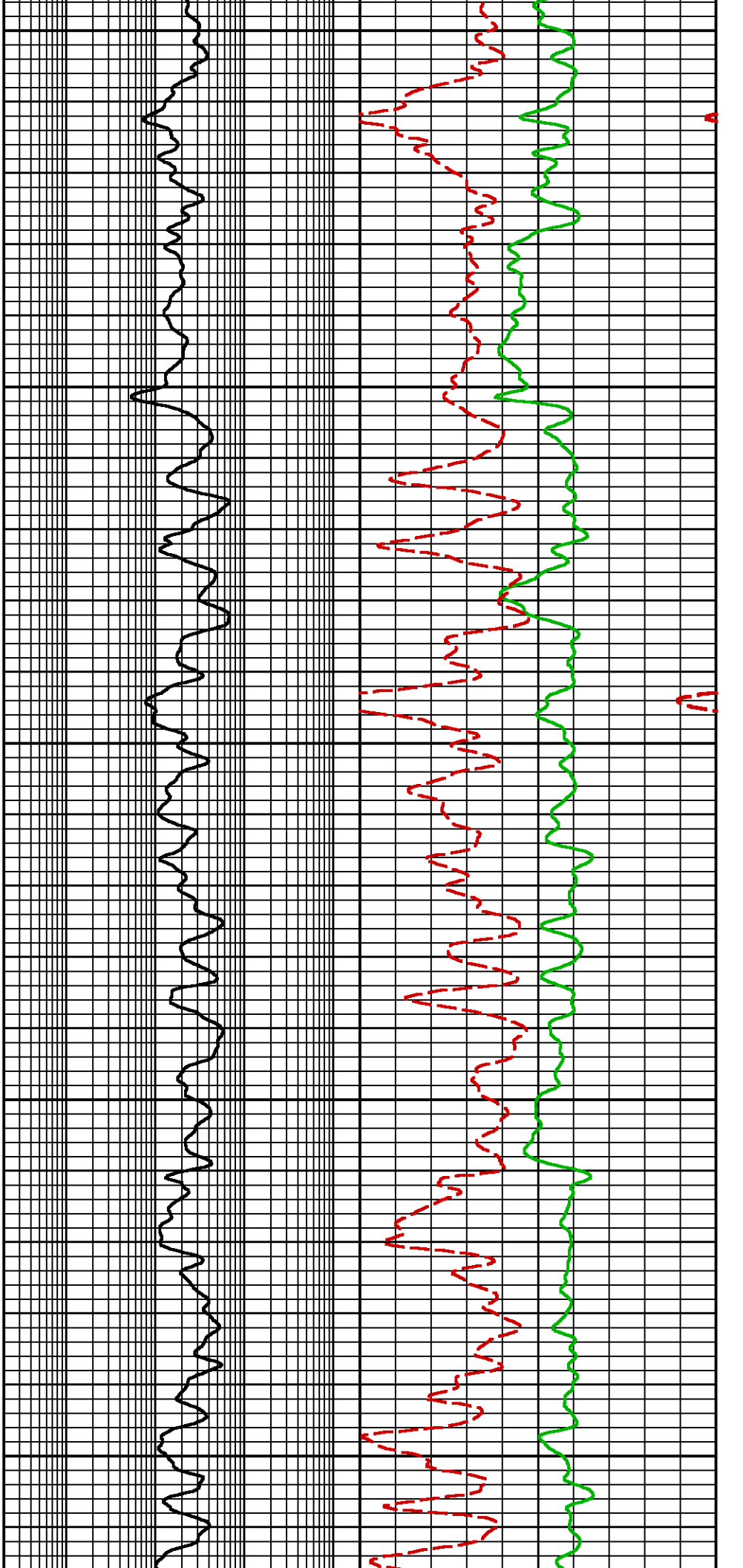


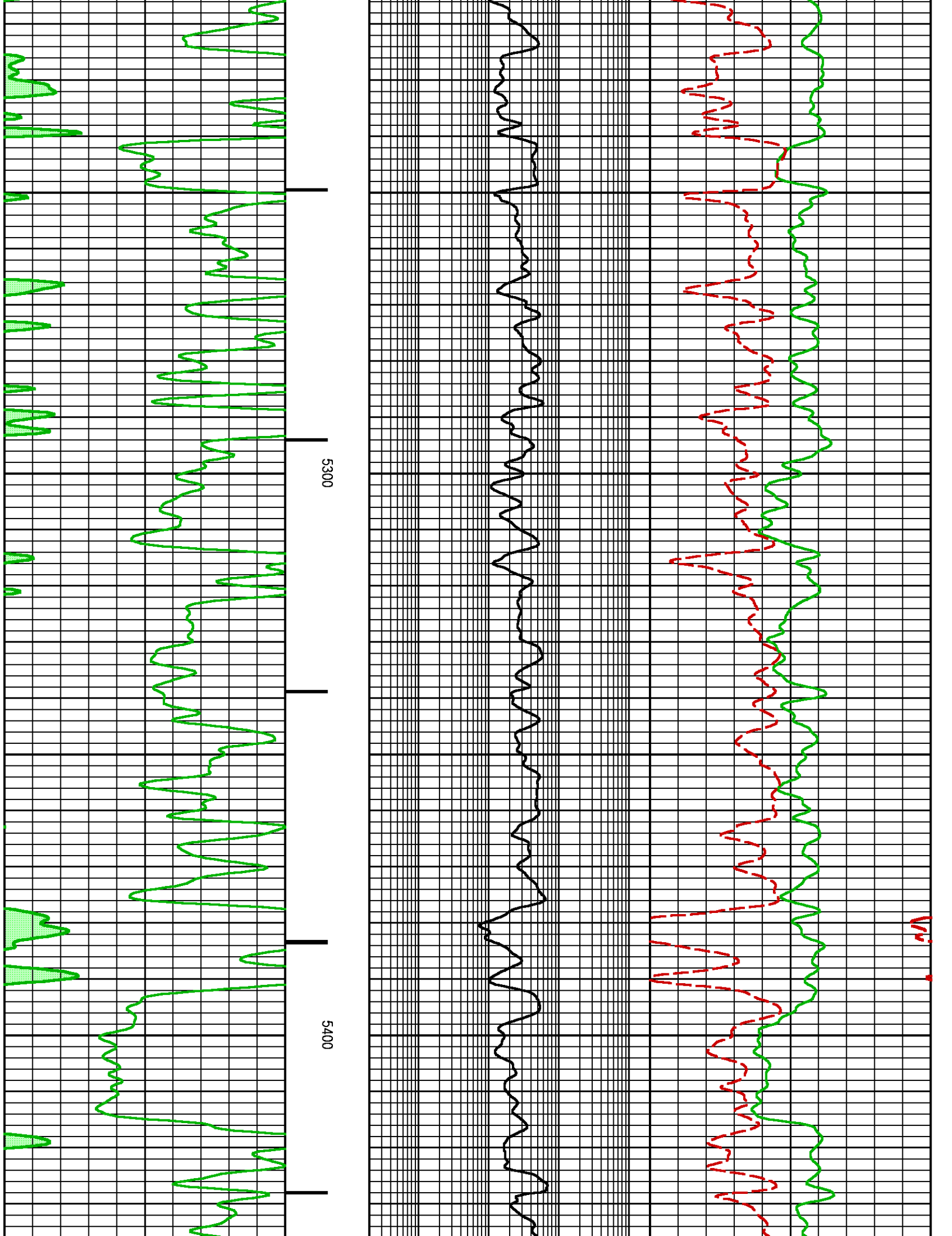


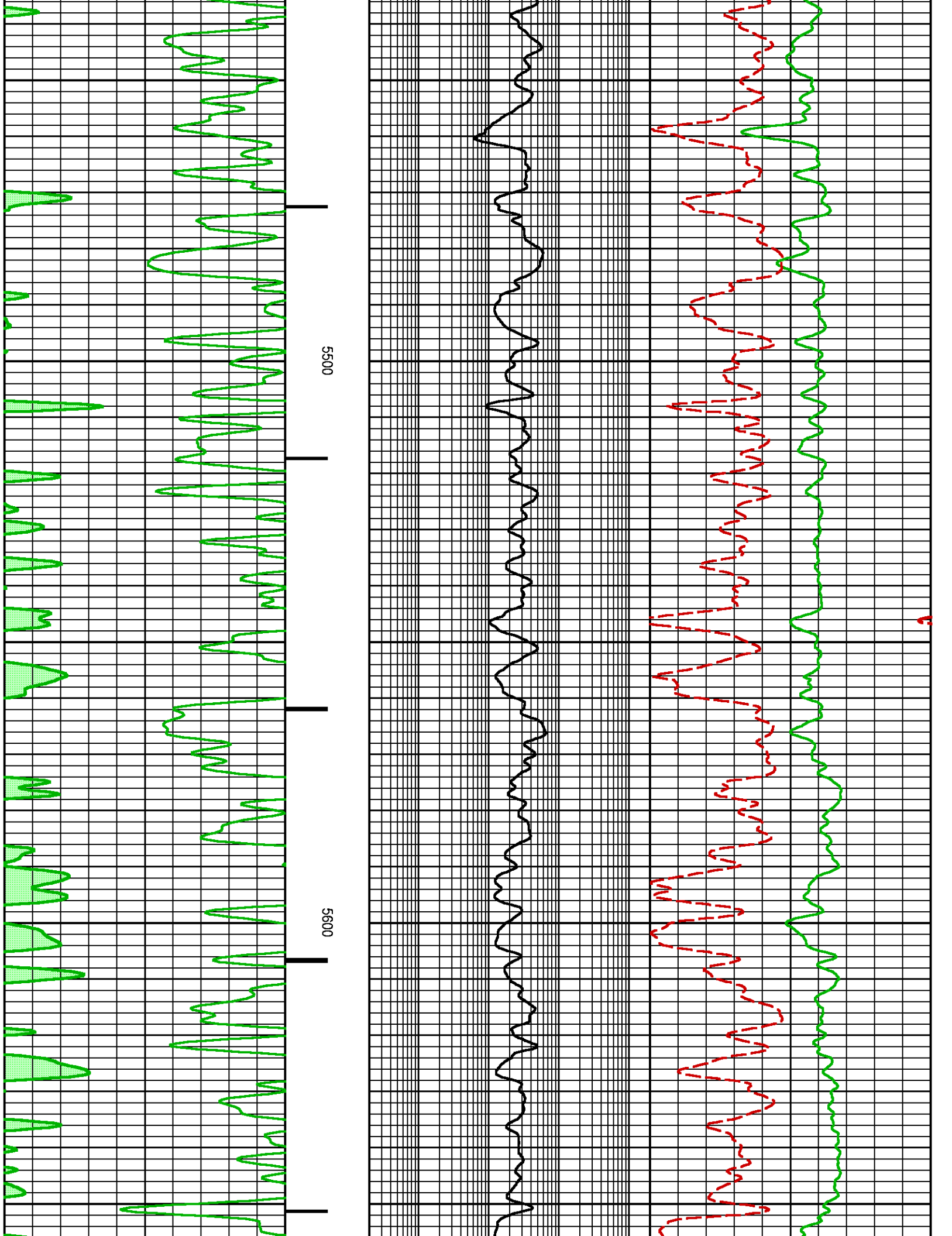


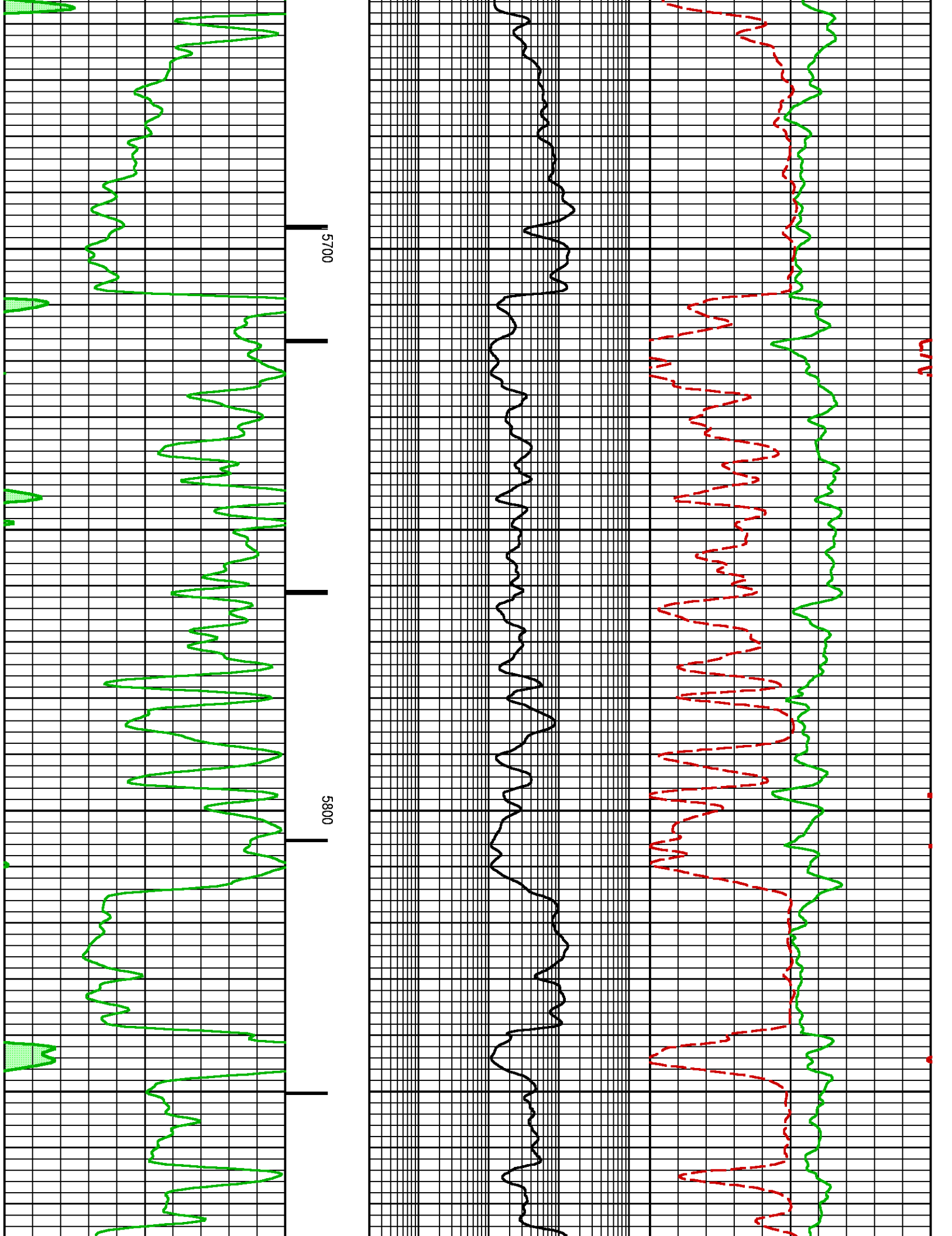


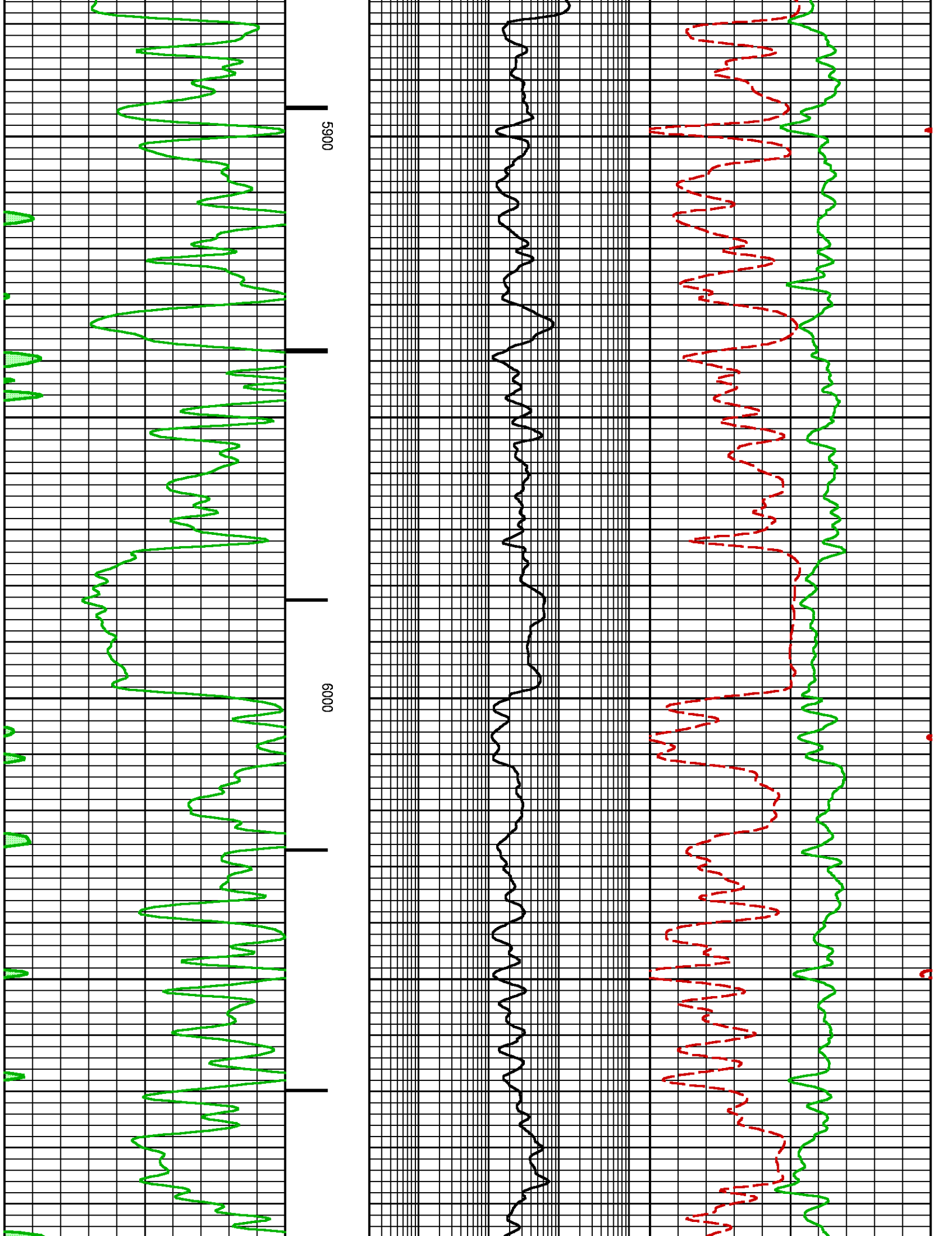


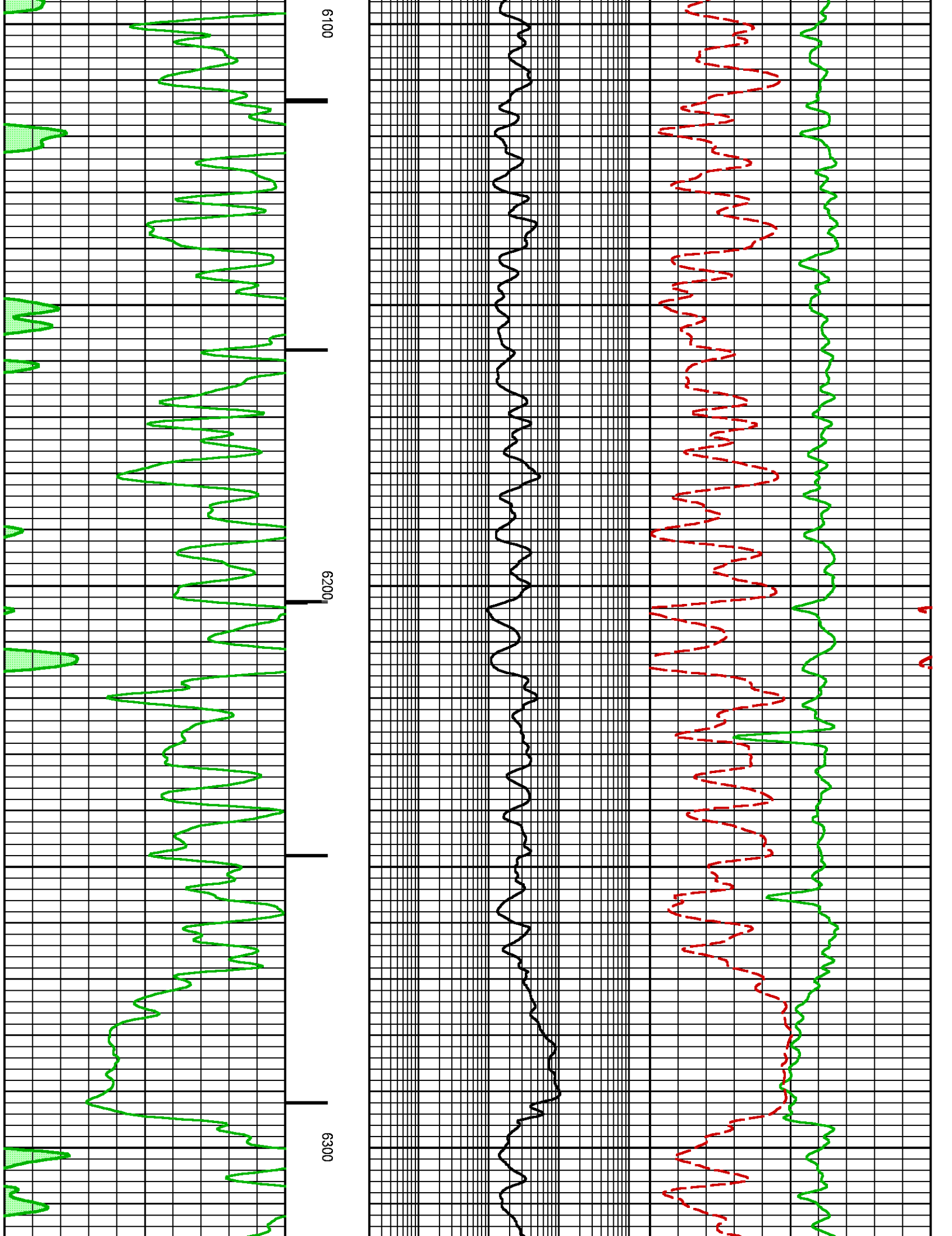


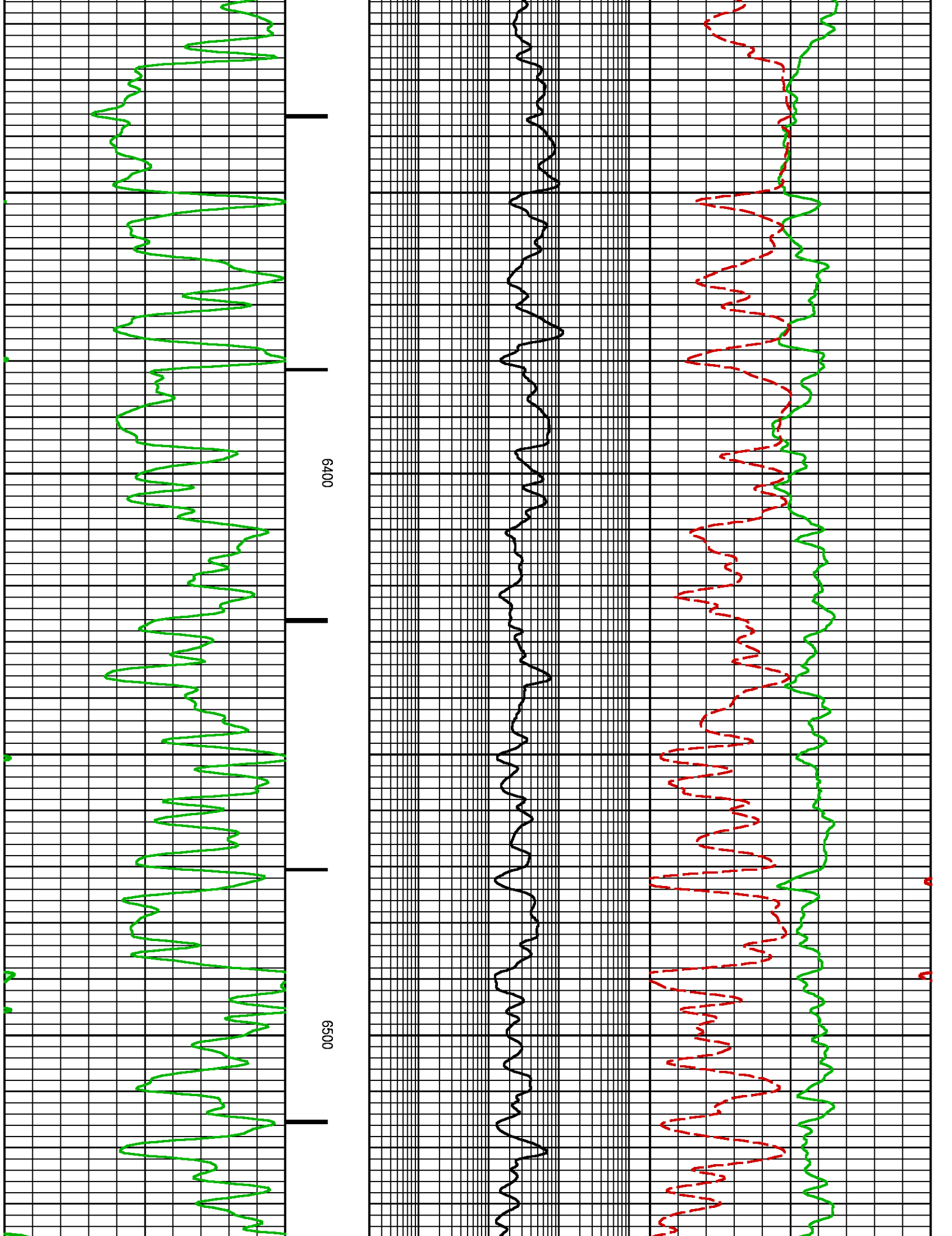


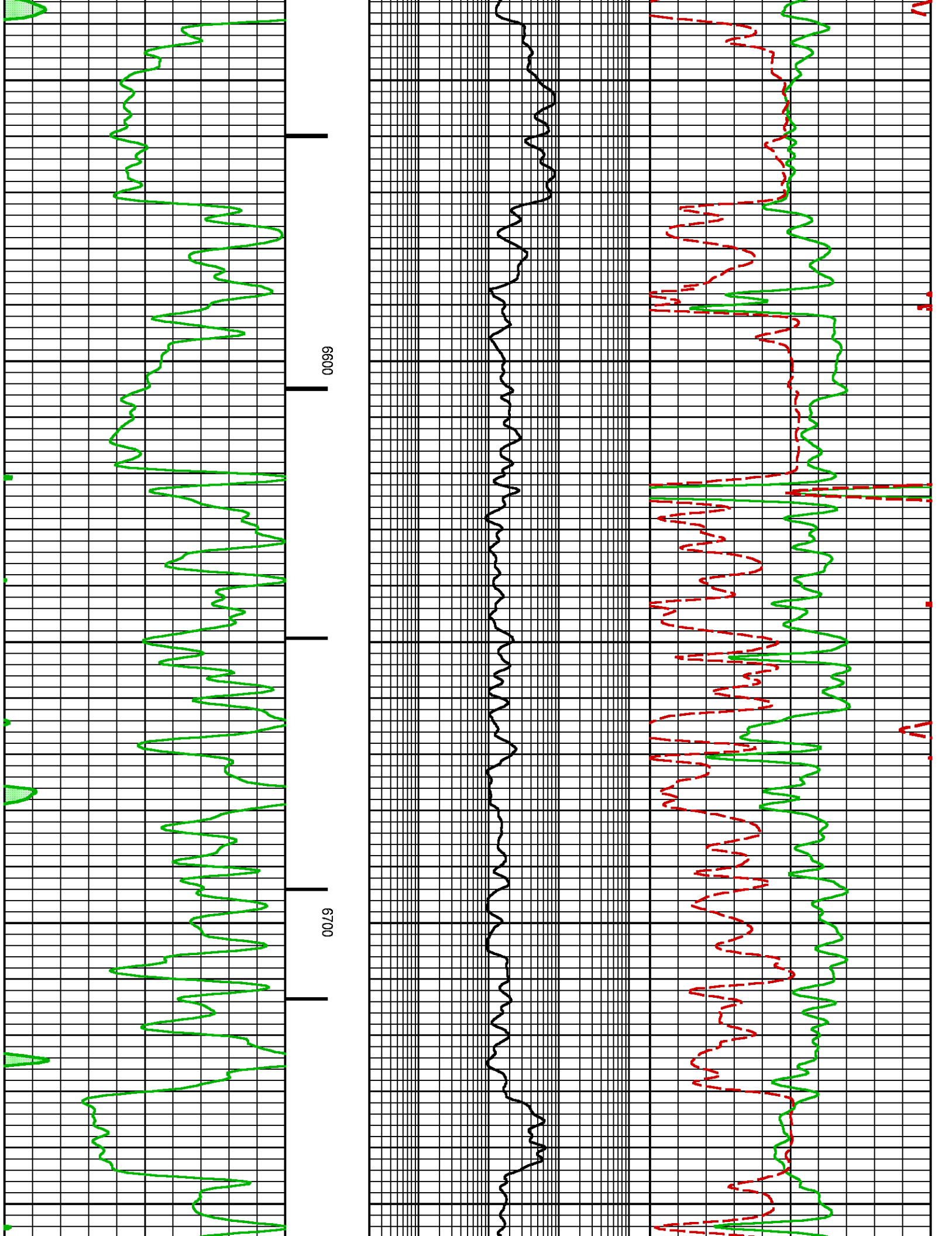


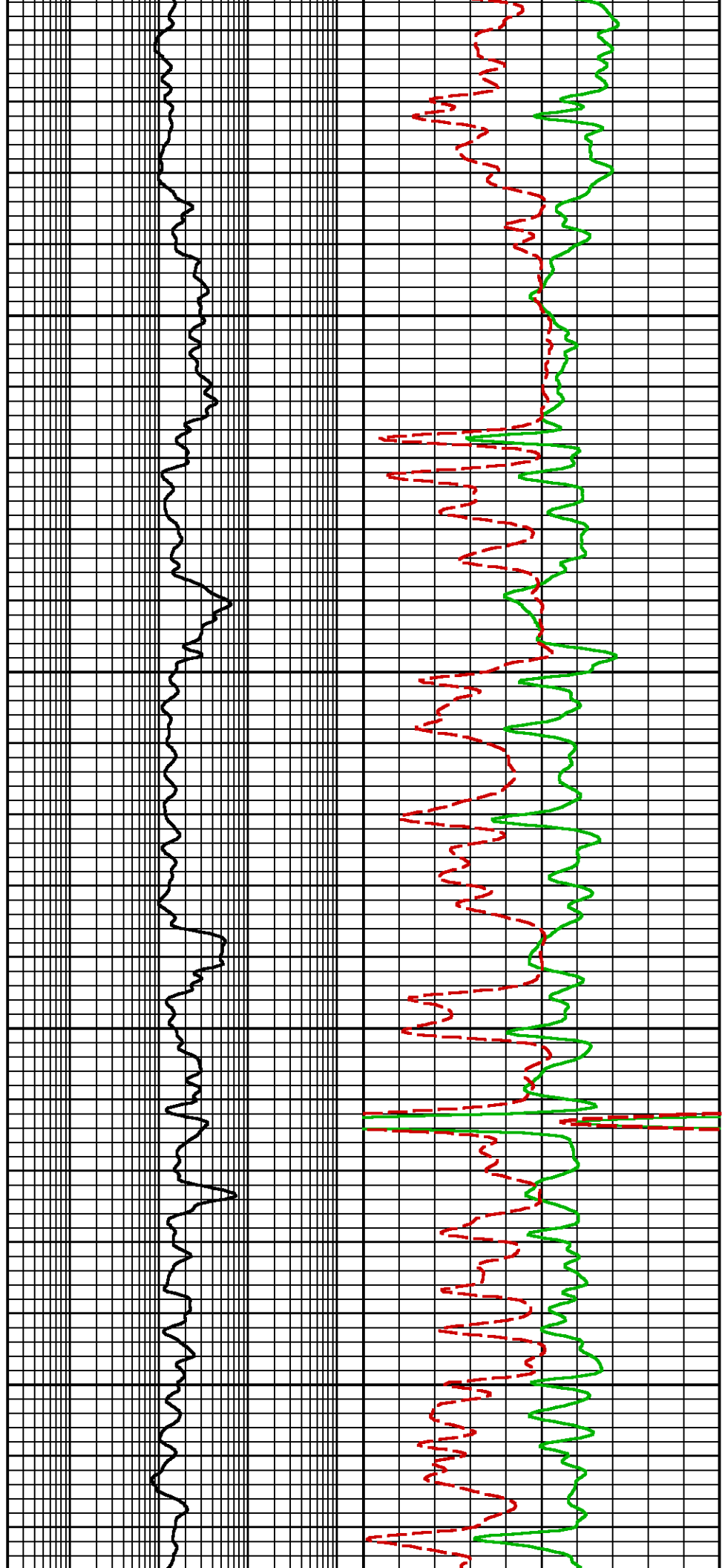
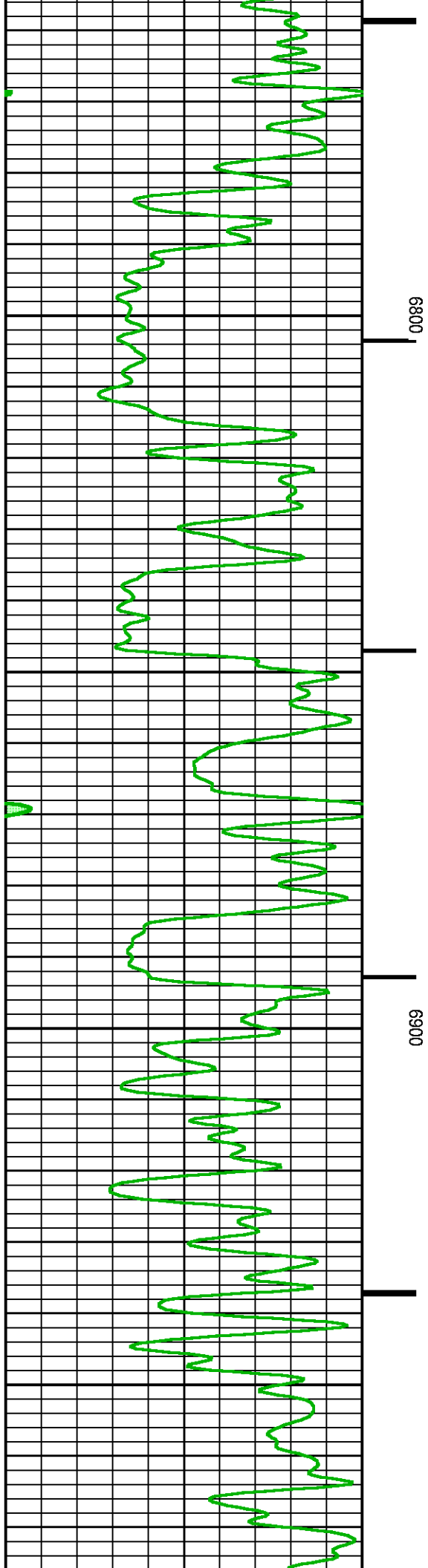


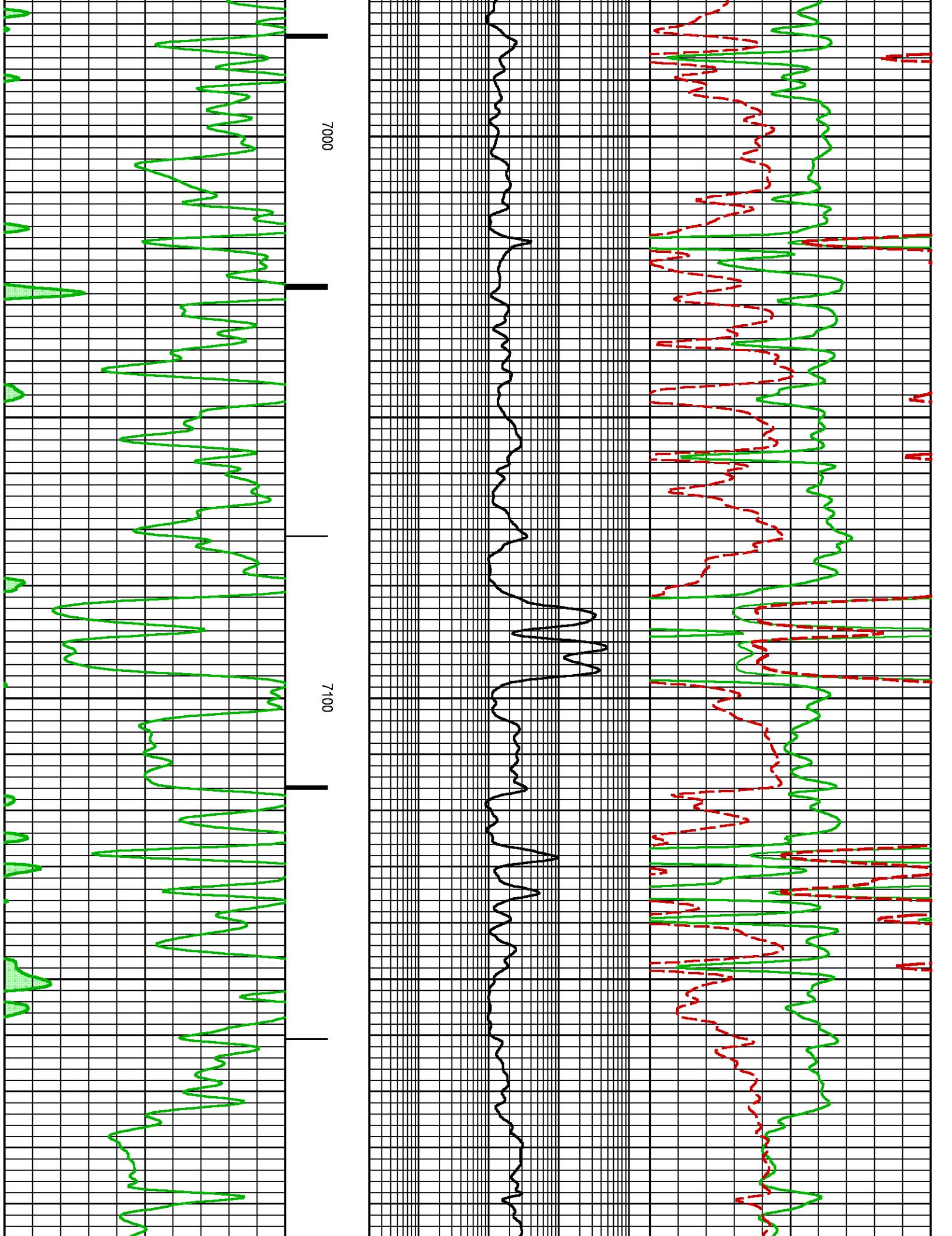


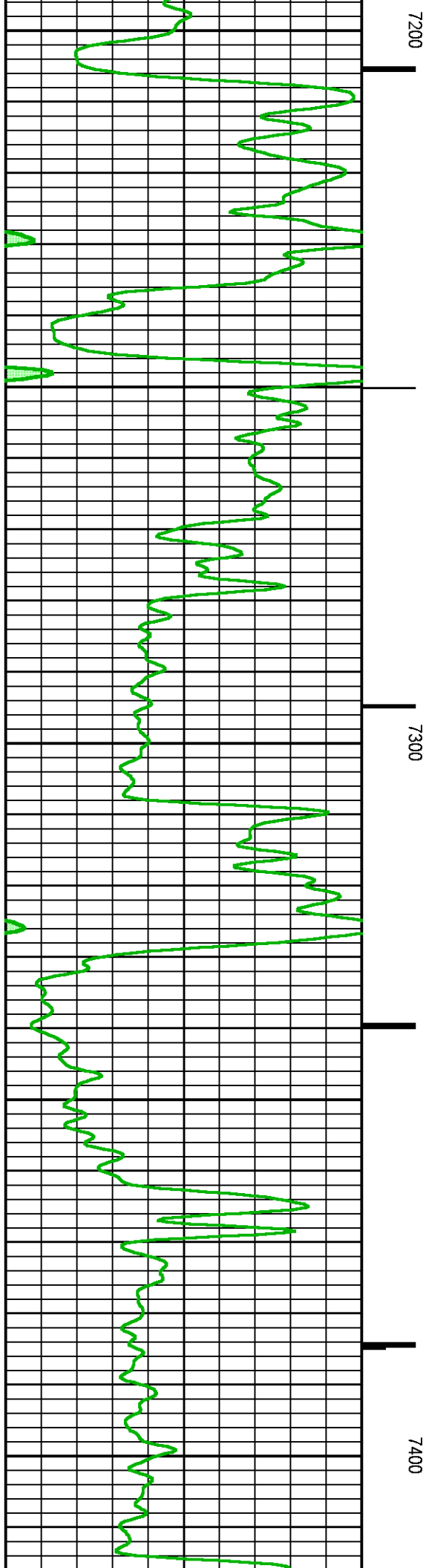
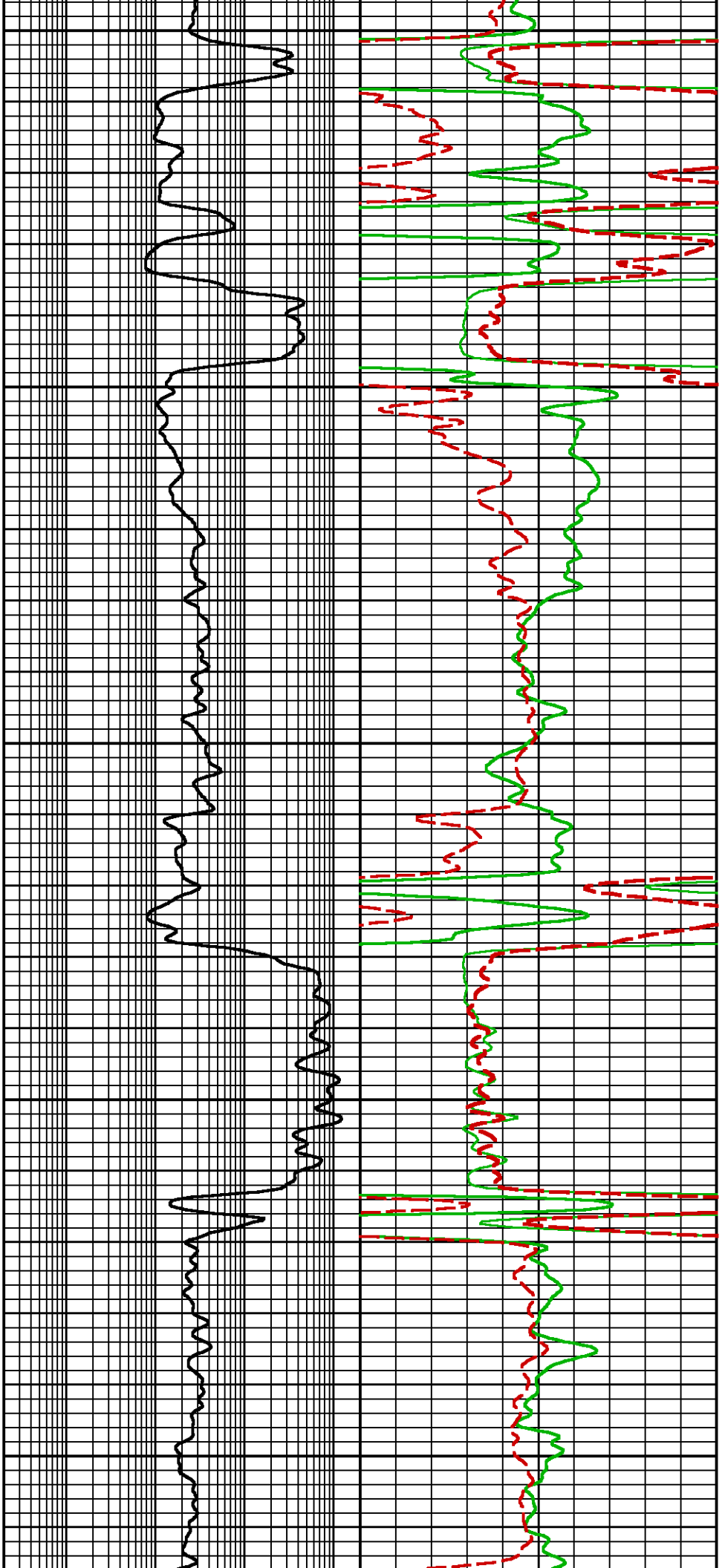


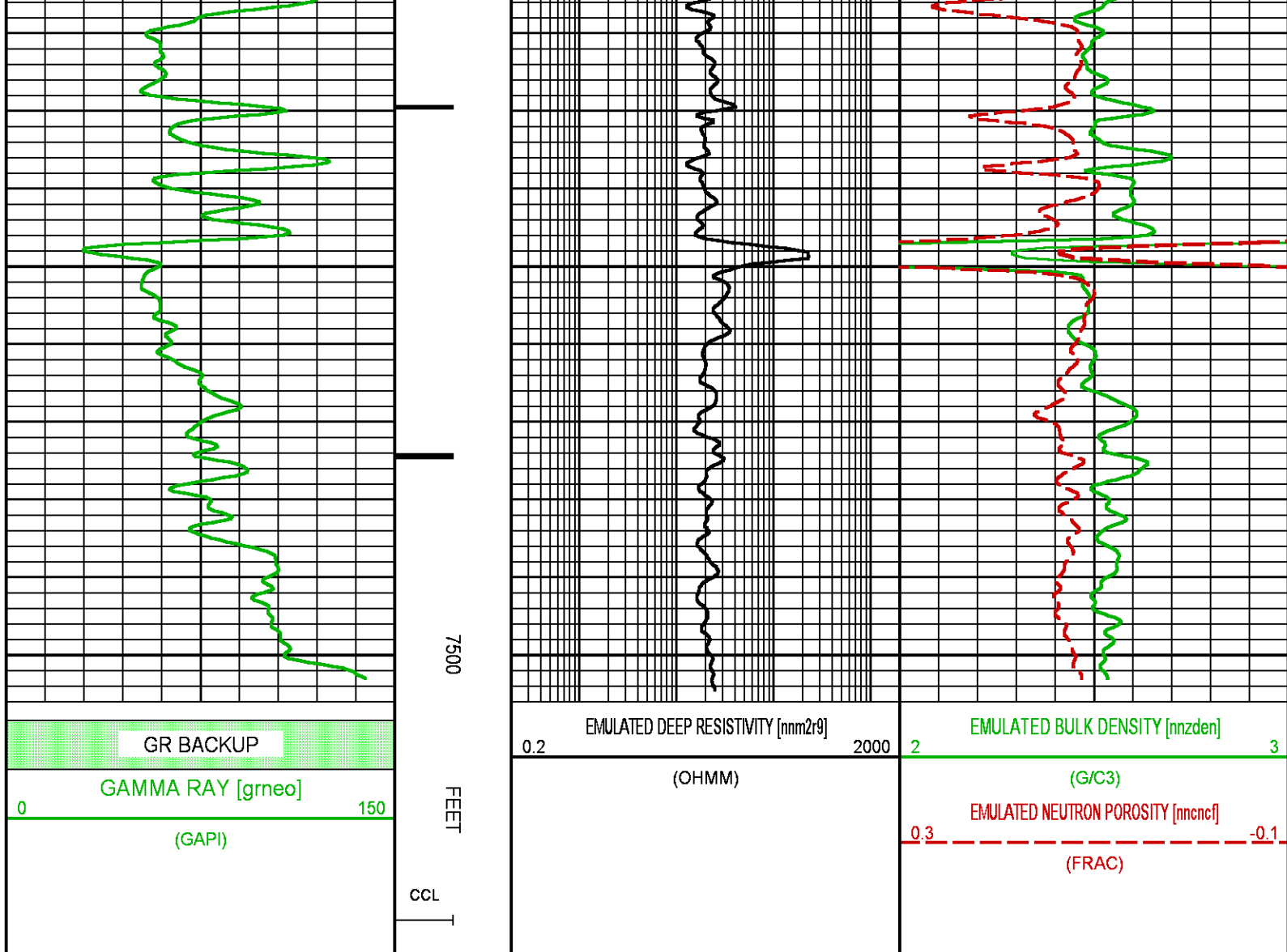














 	COMPANY <u>LARAMIE ENERGY</u> WELL <u>GUNDERSON 20-08W</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>COLORADO</u>	FILE NO: <u>28224-01</u> API NO: <u>05077103400000</u>
	LOCATION: <u>SEE REMARKS SECTION</u> SEC <u>20</u> TWP <u>9S</u> RGE <u>93W</u>	ELEVATIONS: KB <u>7176.0 FT</u> DF <u>7175.0 FT</u> GL <u>7146.0 FT</u>
DATE <u>24-AUG-2017</u>		