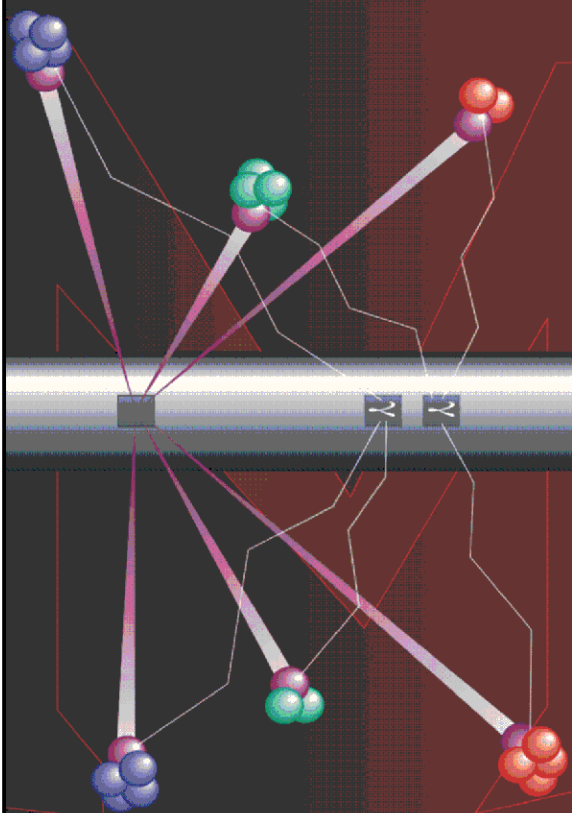


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Pulsed Neutron Formation Evaluation



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL BRUTON FEDERAL 19-09E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 19 TWP 9S RGE 93W

ELEVATIONS:

KB 7286.0 FT DF GL 7262 FT

DATE 06-DEC-2017 ECC 29658-01

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>14-DEC-2017</u>
FIELD DATA	LOCATION: <u>GRAND JCT.</u>	ENGINEER: <u>T.NEWELL/US130067</u>	DATE: <u>06-DEC-2017</u>
FROM	TO		
<u>2399 FT</u>	<u>8053 FT</u>		

REMARKS

LOCATION:
39.262729 N, 107.815084 W
BHL: 39.263774 N, 107.806459 W

TRAINING WELL: BRUTON 19-07W

EXTREMELY POOR BOREHOLE CONDITIONS ABOVE G-SAND ON THE TRAINING WELL PROBABLY AFFECTED QUALITY OF EMULATION ON CORRESPONDING INTERVAL OF THIS WELL.

ANY ERRORS IN THE TRAINING WELL OPEN HOLE DATA CAN PERPETUATE THROUGH AS AN

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

BOND LOG IS DEPTH REFERENCE LOG

ANALYST: ALEXANDR KOTOV

NEO RESULTS FOR BRUTON FEDERAL 19-09E (G-SAND)

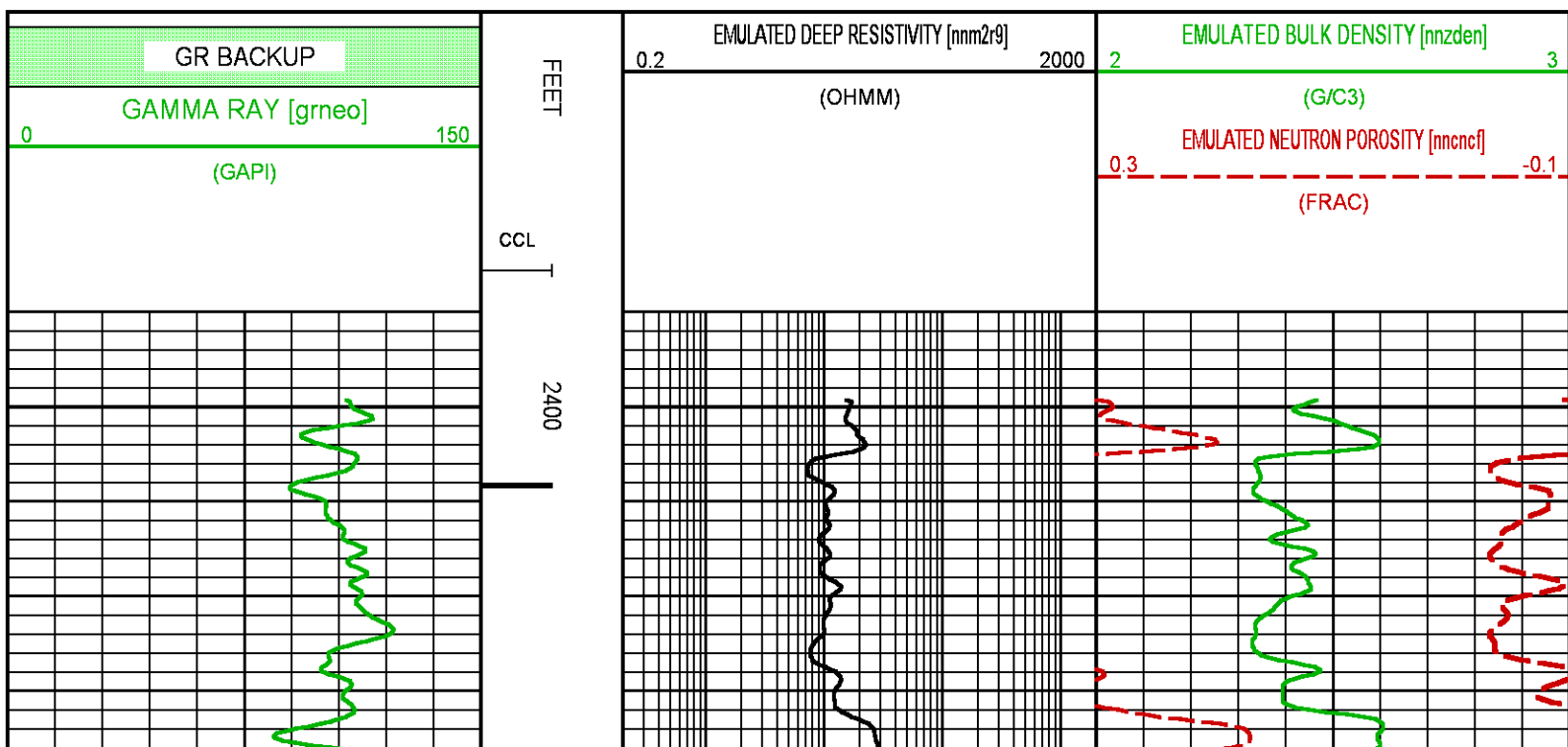
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 6.0.7905.1 Wed 08/23/2017 09:02:35.01

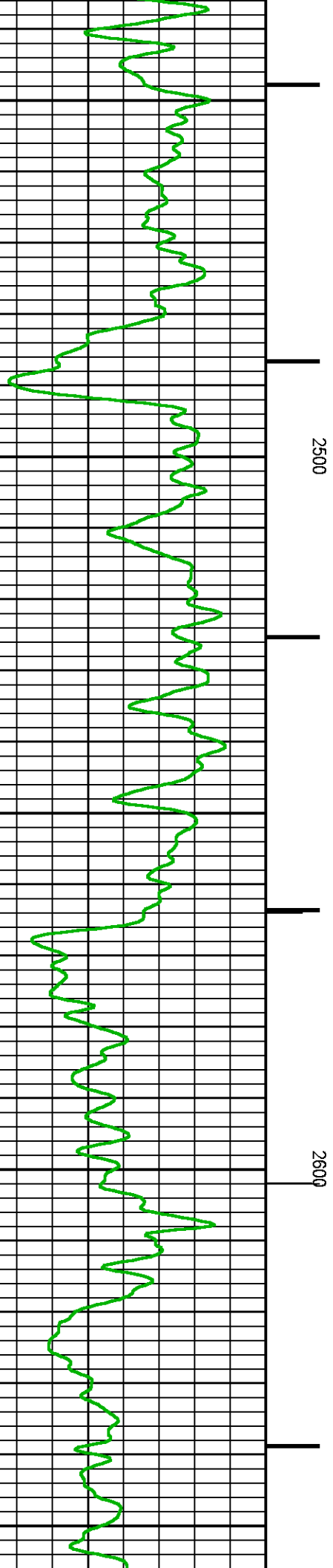
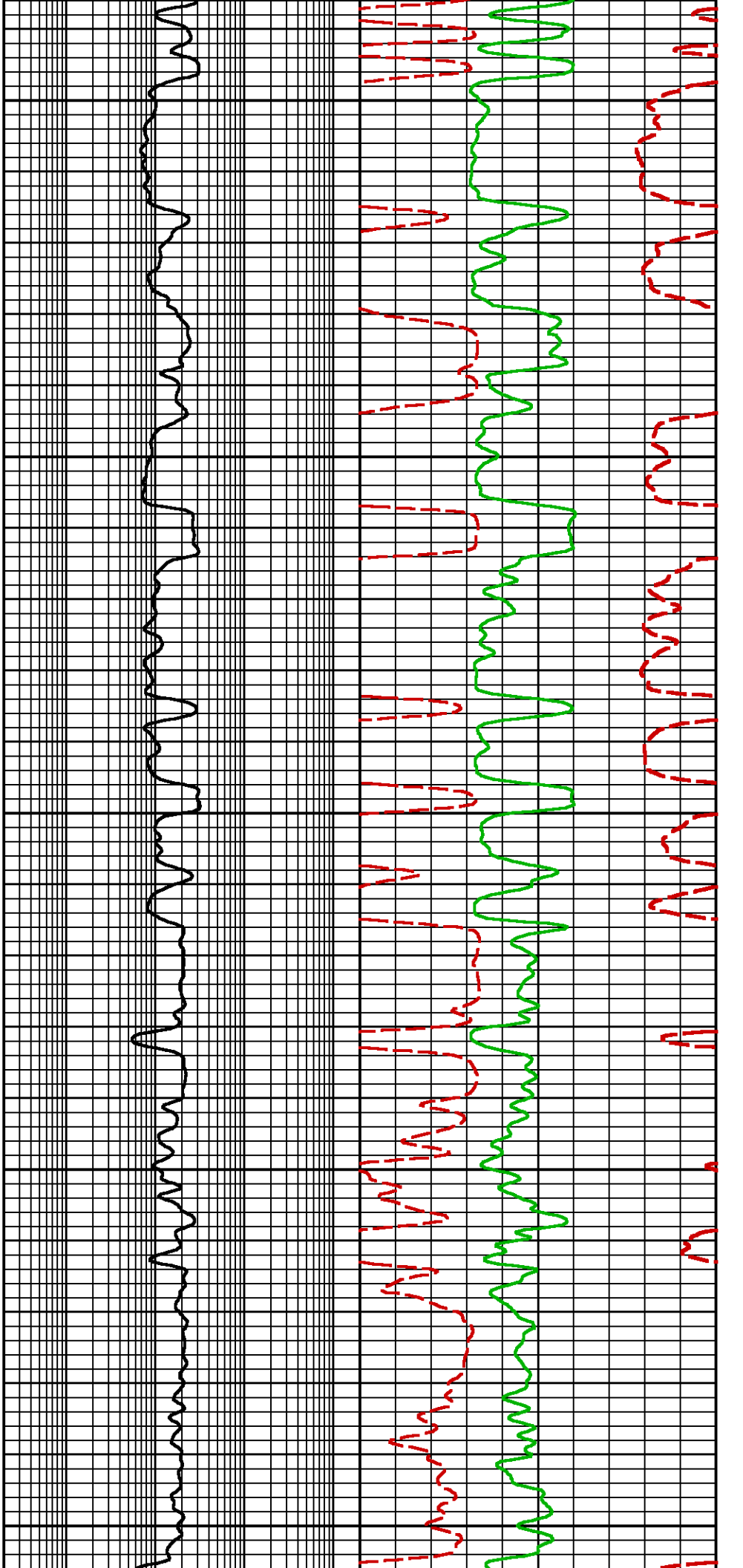
Plotted: Thu Dec 14 10:42:11 2017

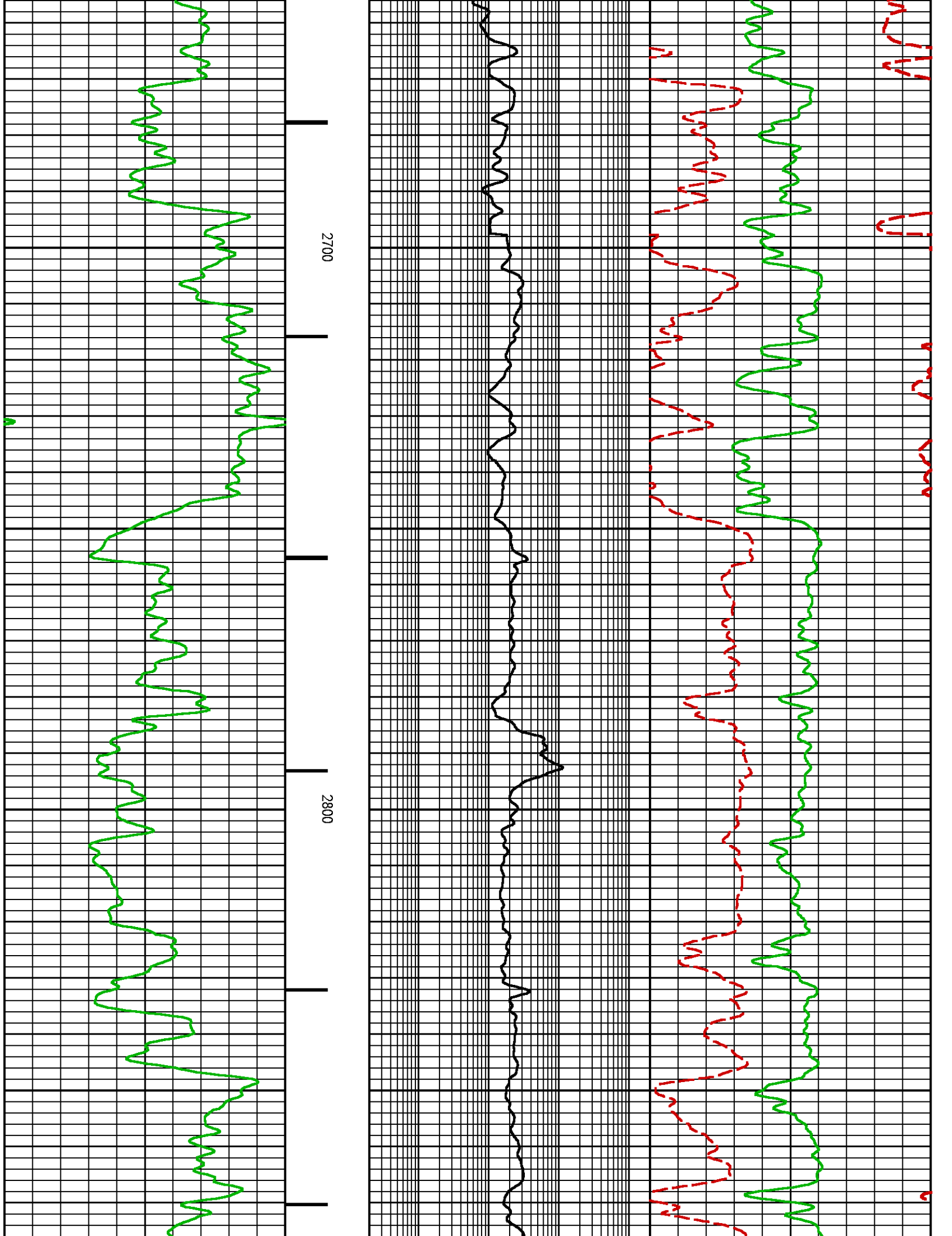
CURVE MEASURE POINT OFFSET

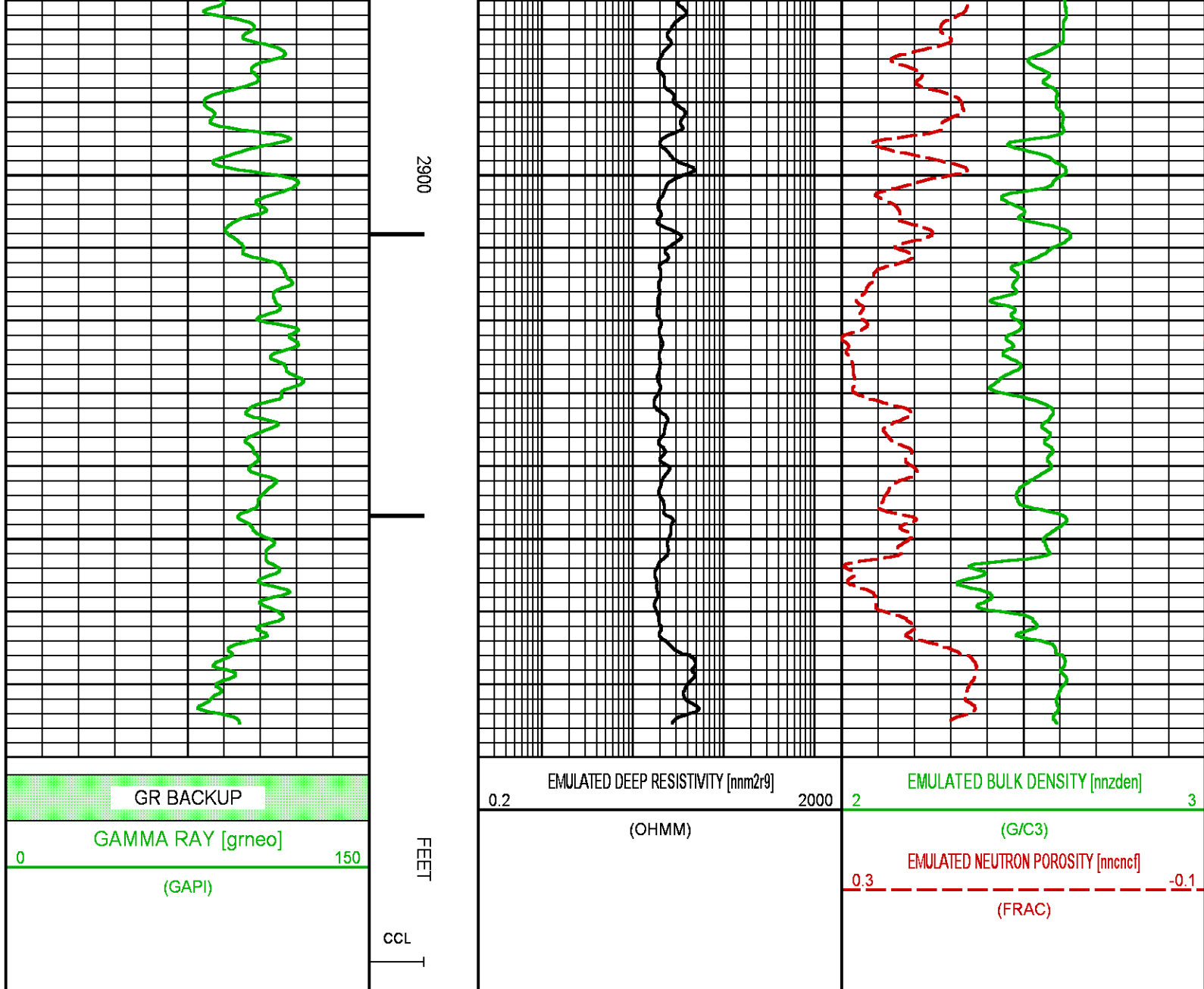
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNC	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_19_09E_NEO\
NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2390 - 2980 Feet
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_19_09E_NEO\Merged_Set_Final.txt
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON FEDERAL 19-09E
Field : VEGA
File Interval : 2399.25 - 8053.25 Feet
OCT : NA









NEO RESULTS FOR BRUTON FEDERAL 19-09E (MAIN)

ECLIPS ECPLLOT from ECLIPS 7.0 WFM 6.0.7905.1 Wed 08/23/2017 09:02:35.01

Plotted: Thu Dec 14 10:42:07 2017

CURVE MEASURE POINT OFFSET

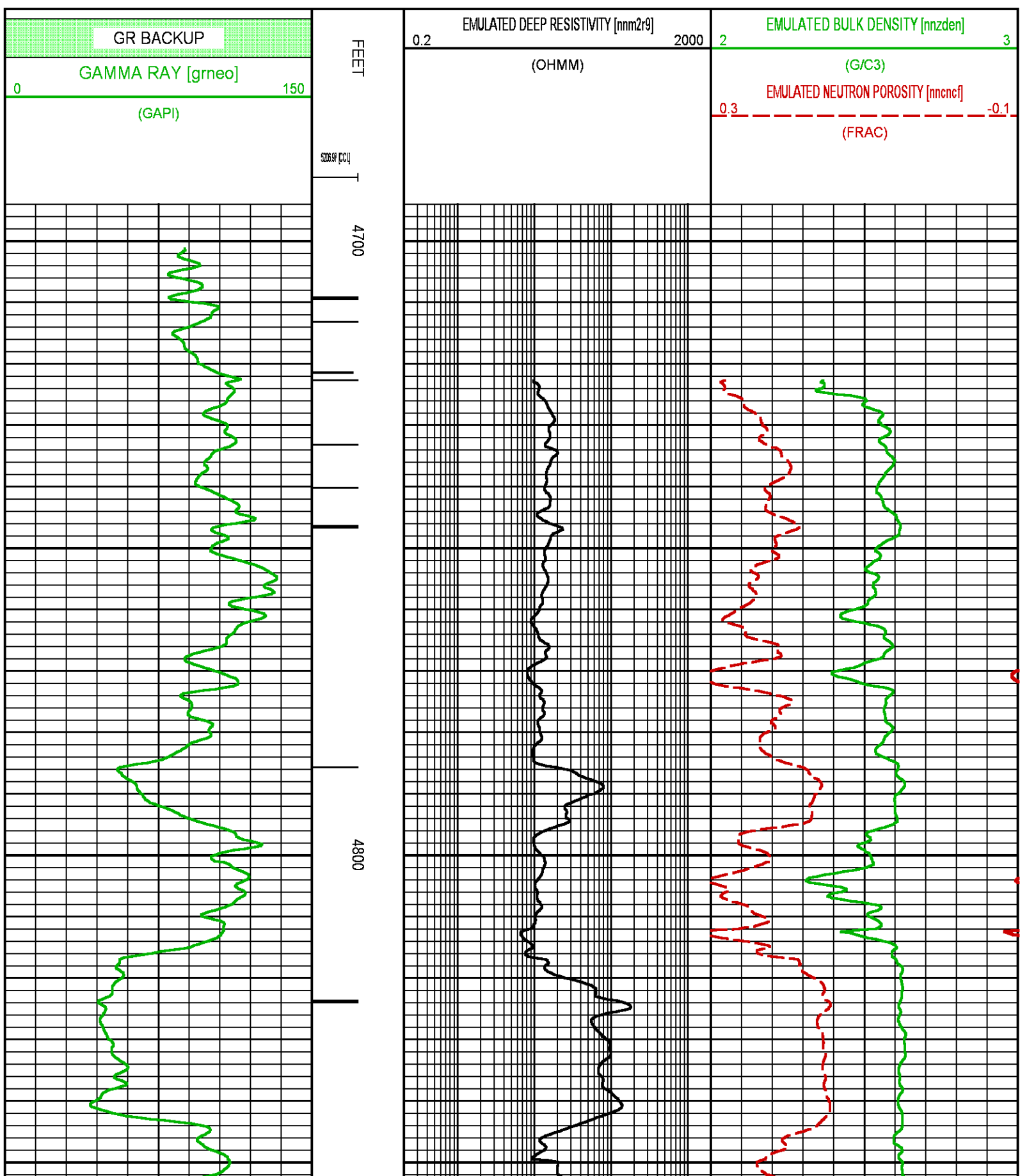
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

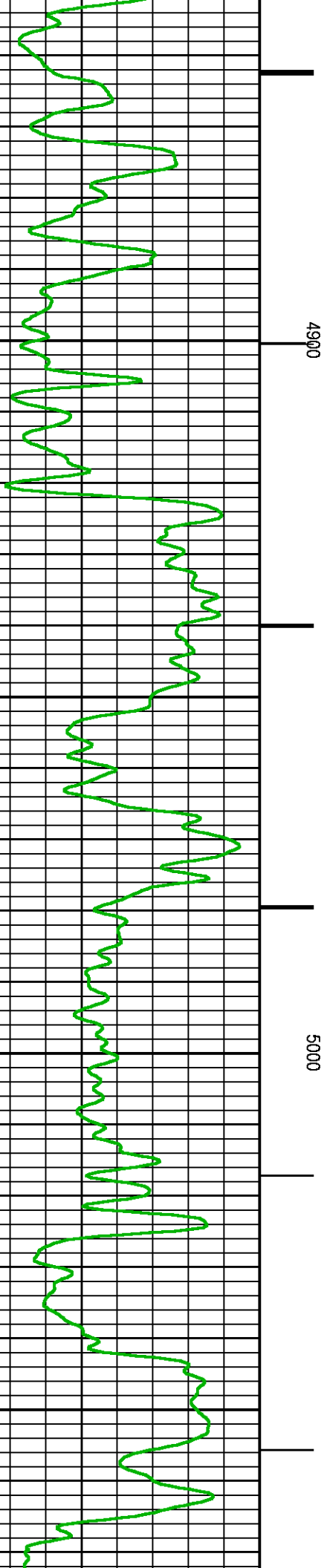
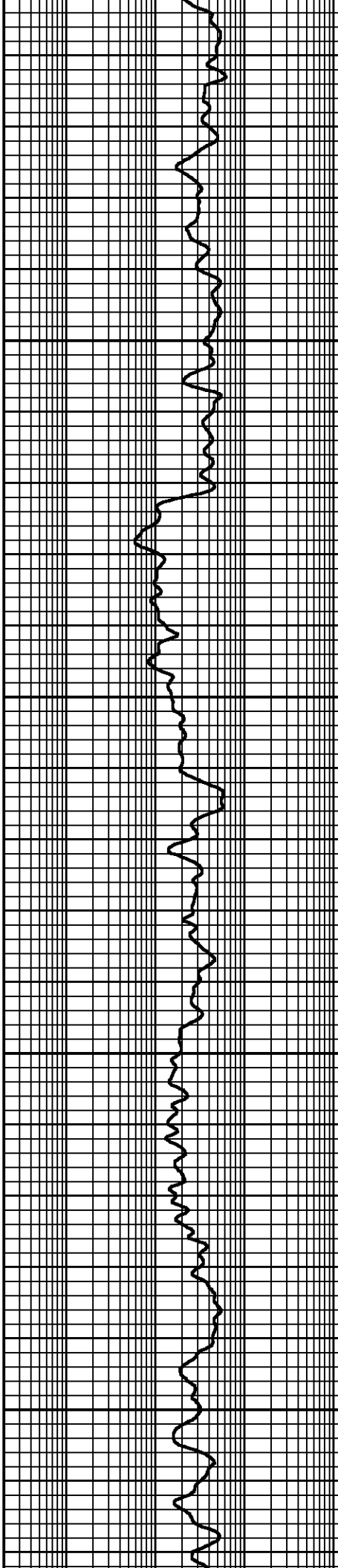
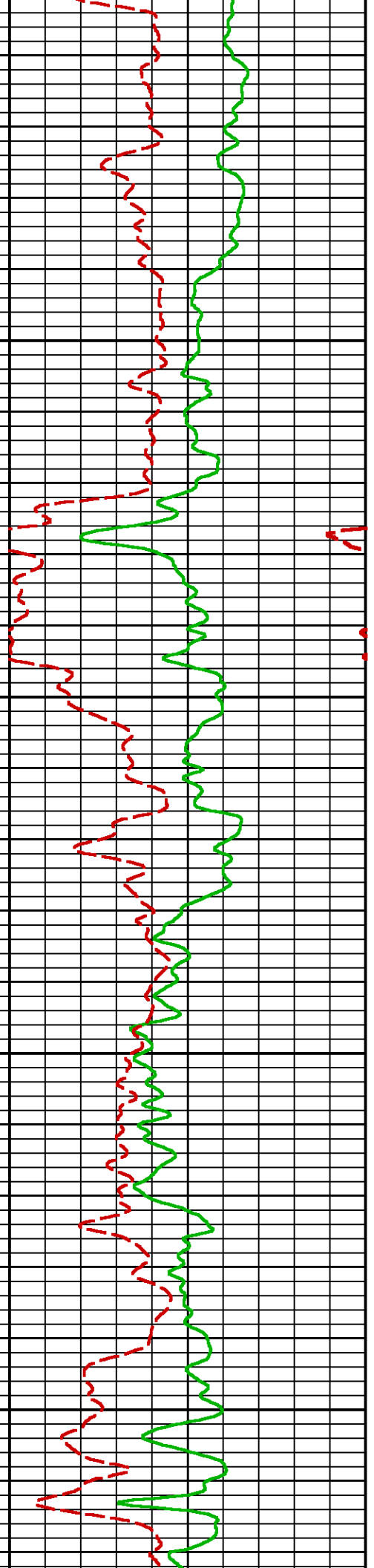
Project : NA
 User : kotoale
 Presentation : BH11F65XZ1:D:\Ape Projects\LARAMIE 19_09E NEO\
 NEO PRESENTATION LARAMIE MAIN.pdf [5"=100' Scale]

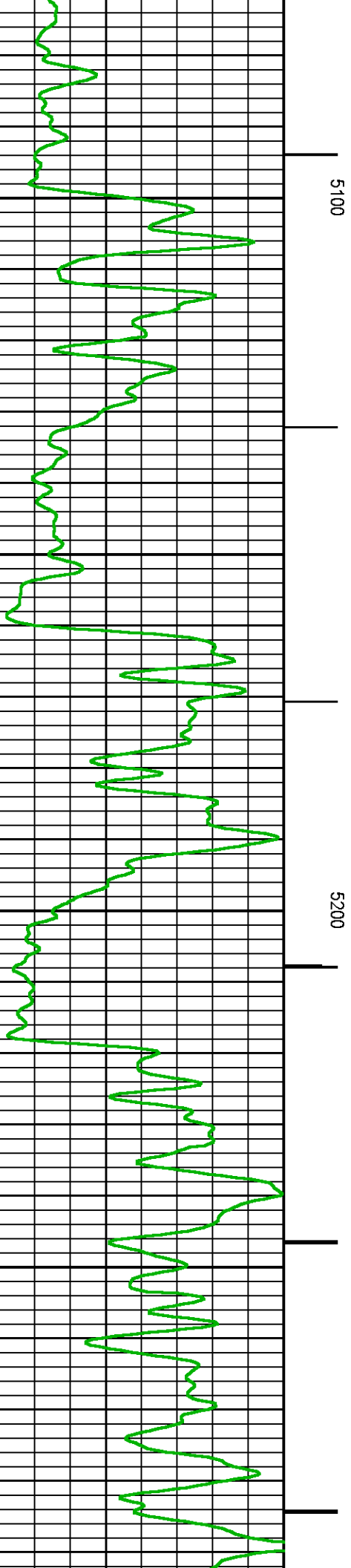
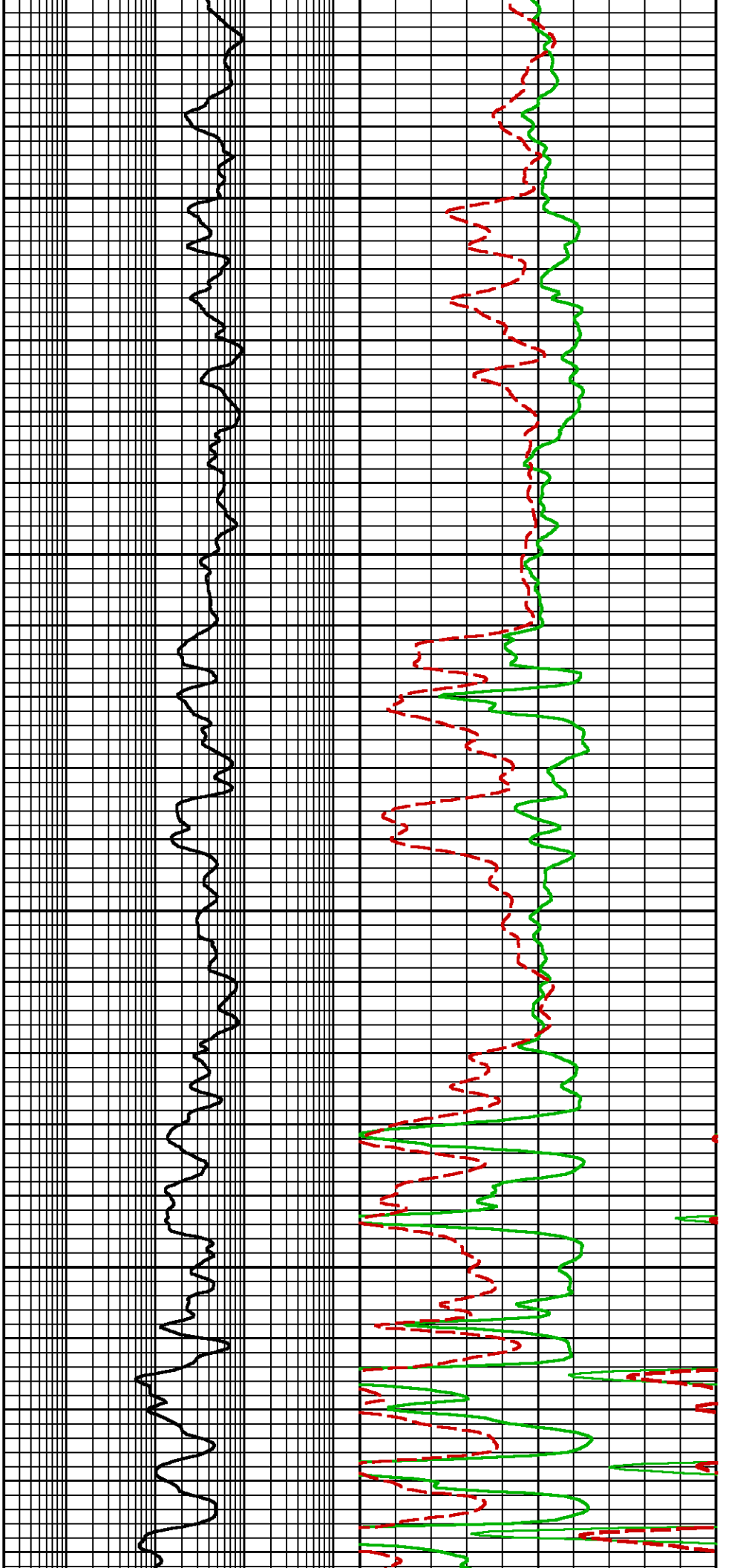
NEO REPRESENTATION_LARAMIE_MAIN.ppt [57100 Scale]

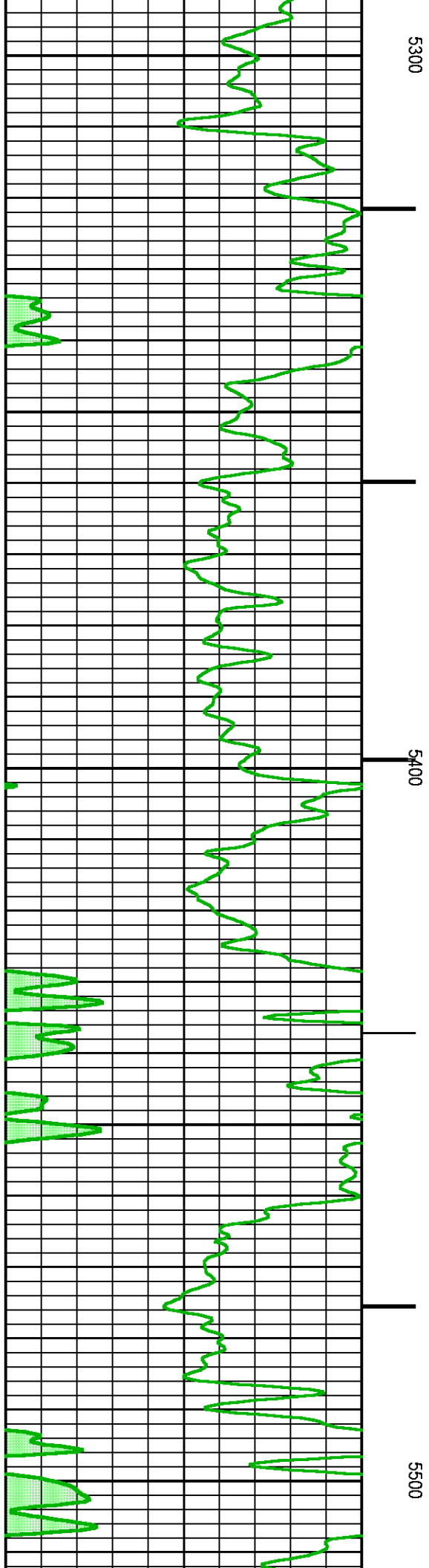
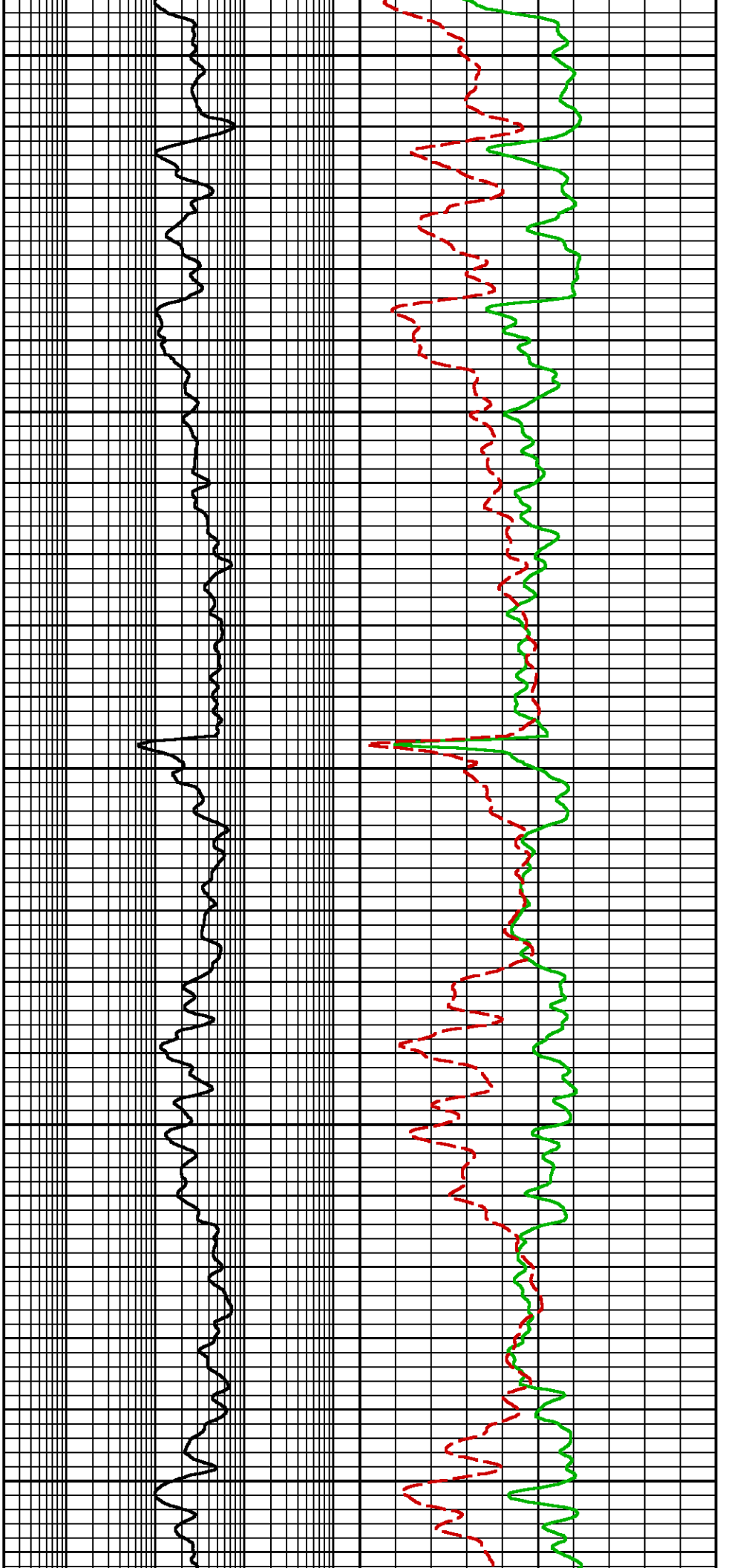
Plot Interval : 4695 - 8053.25 Feet

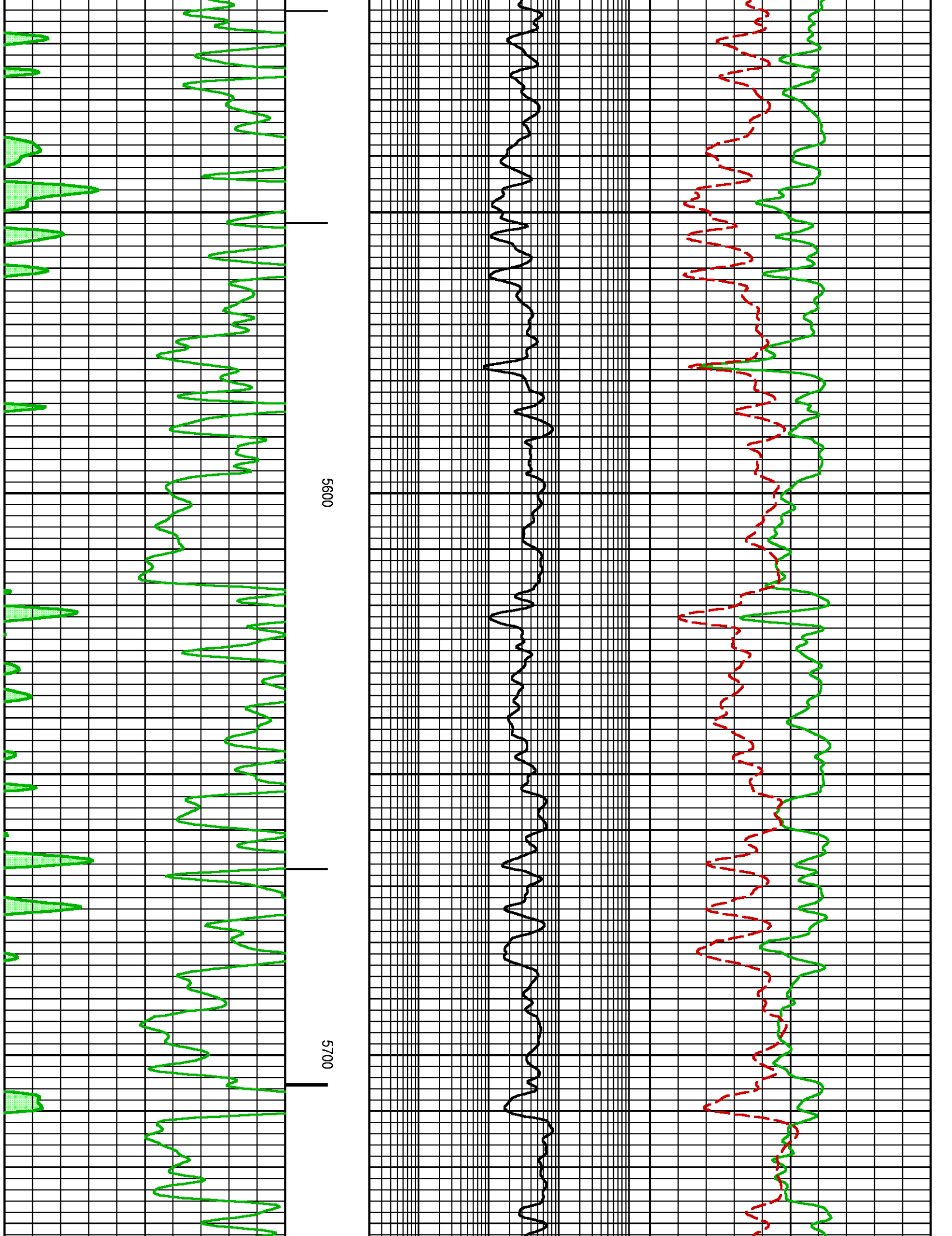
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\LARAMIE_19_09E_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : BRUTON FEDERAL 19-09E
Field : VEGA
File Interval : 2399.25 - 8053.25 Feet
OCT : NA

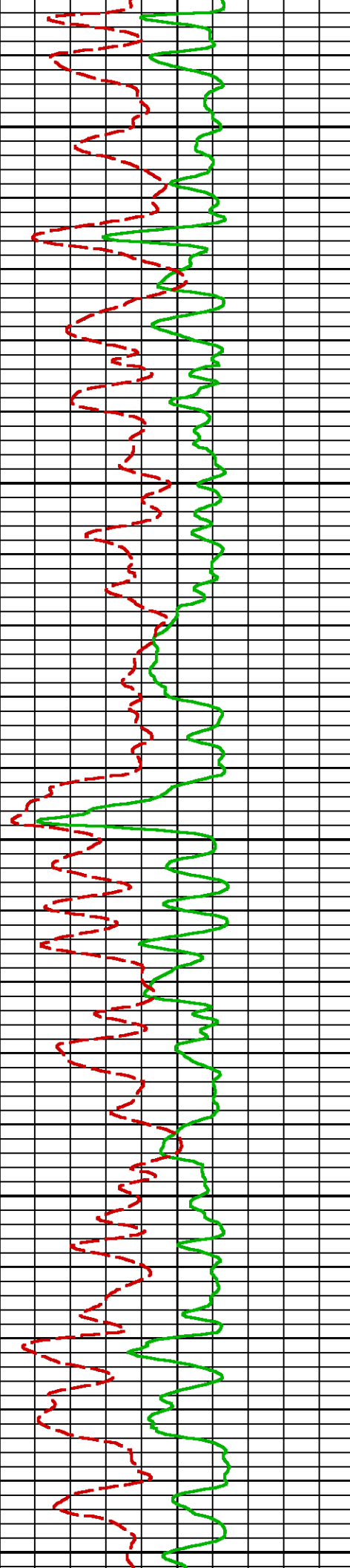
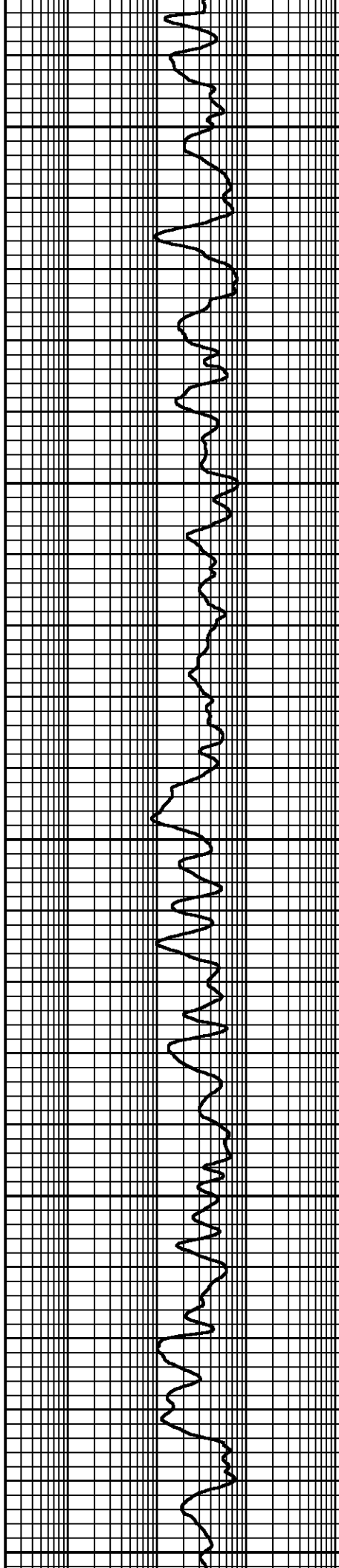
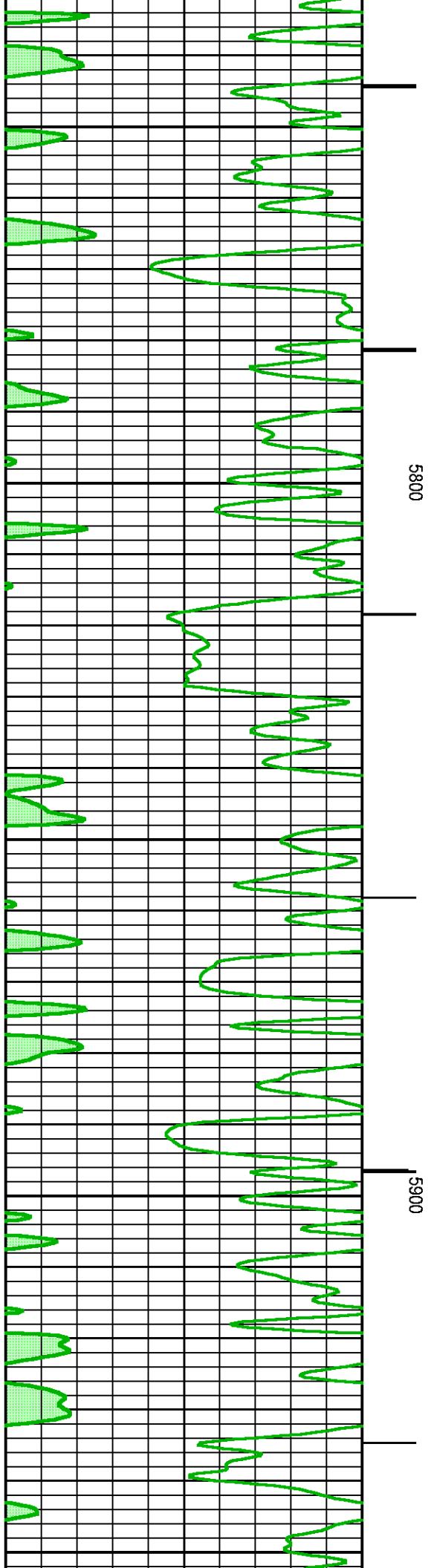


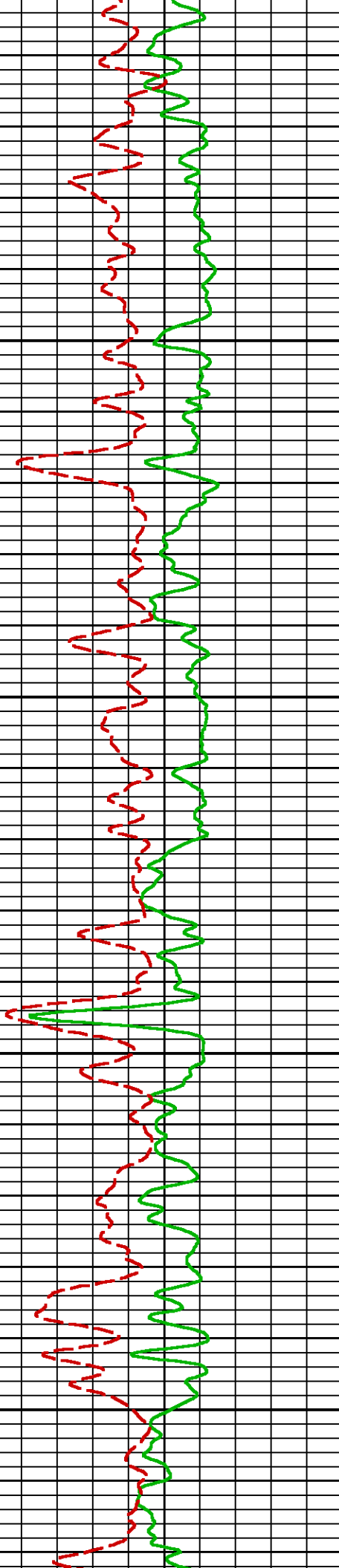
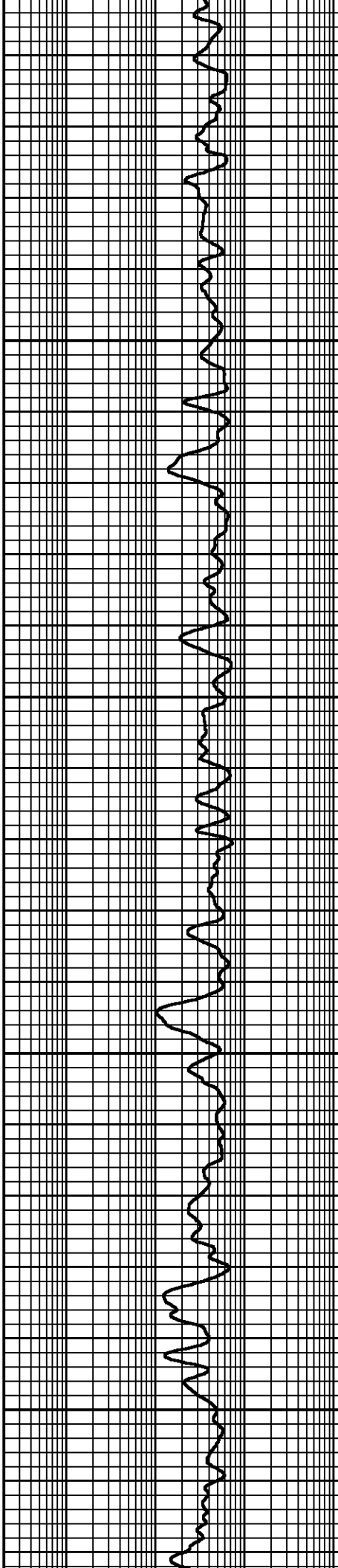
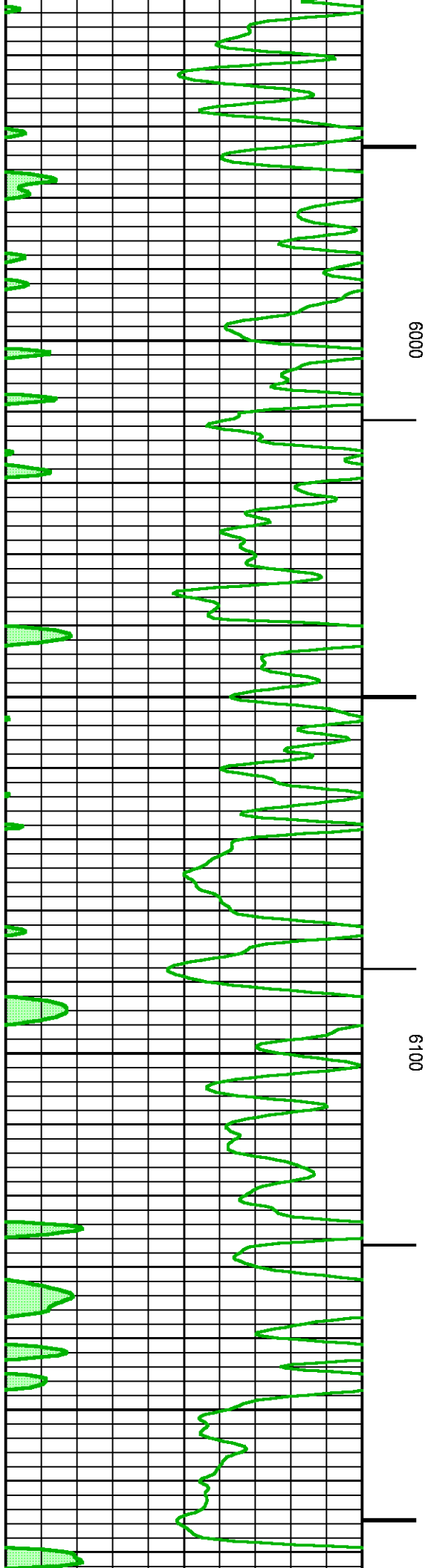


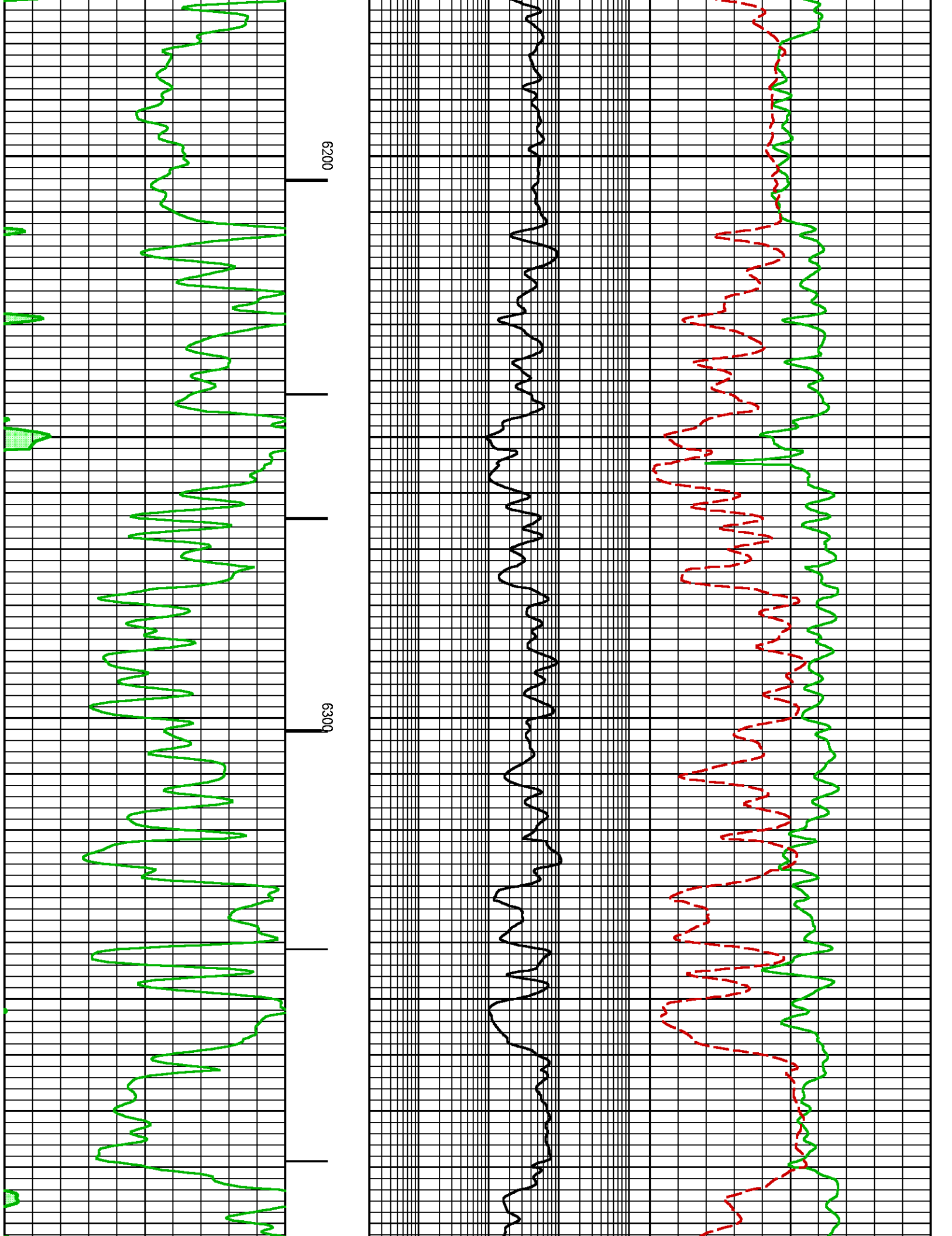


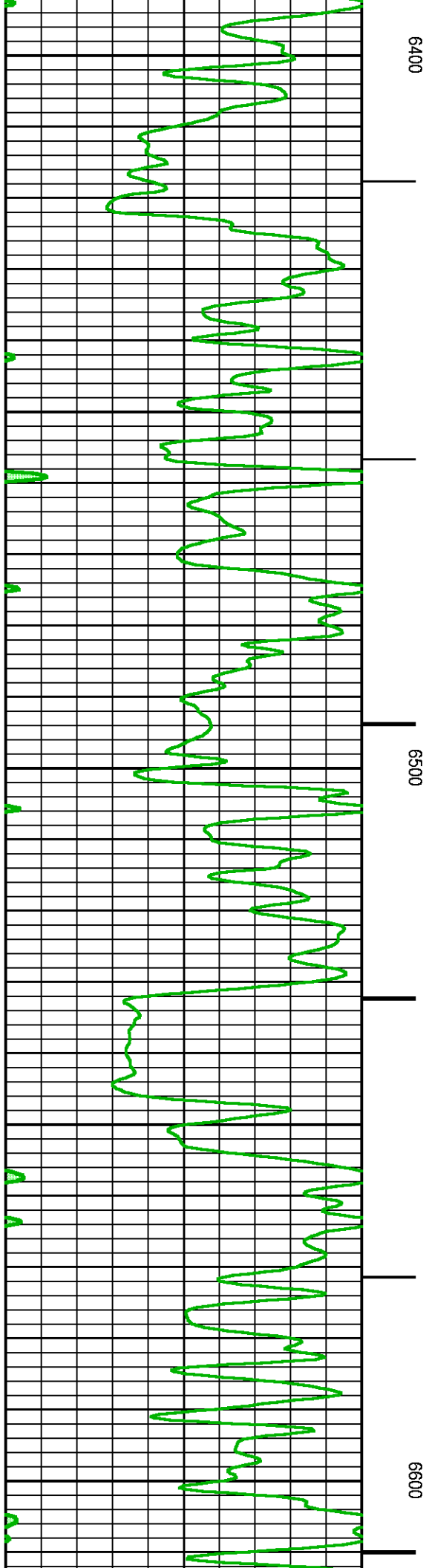
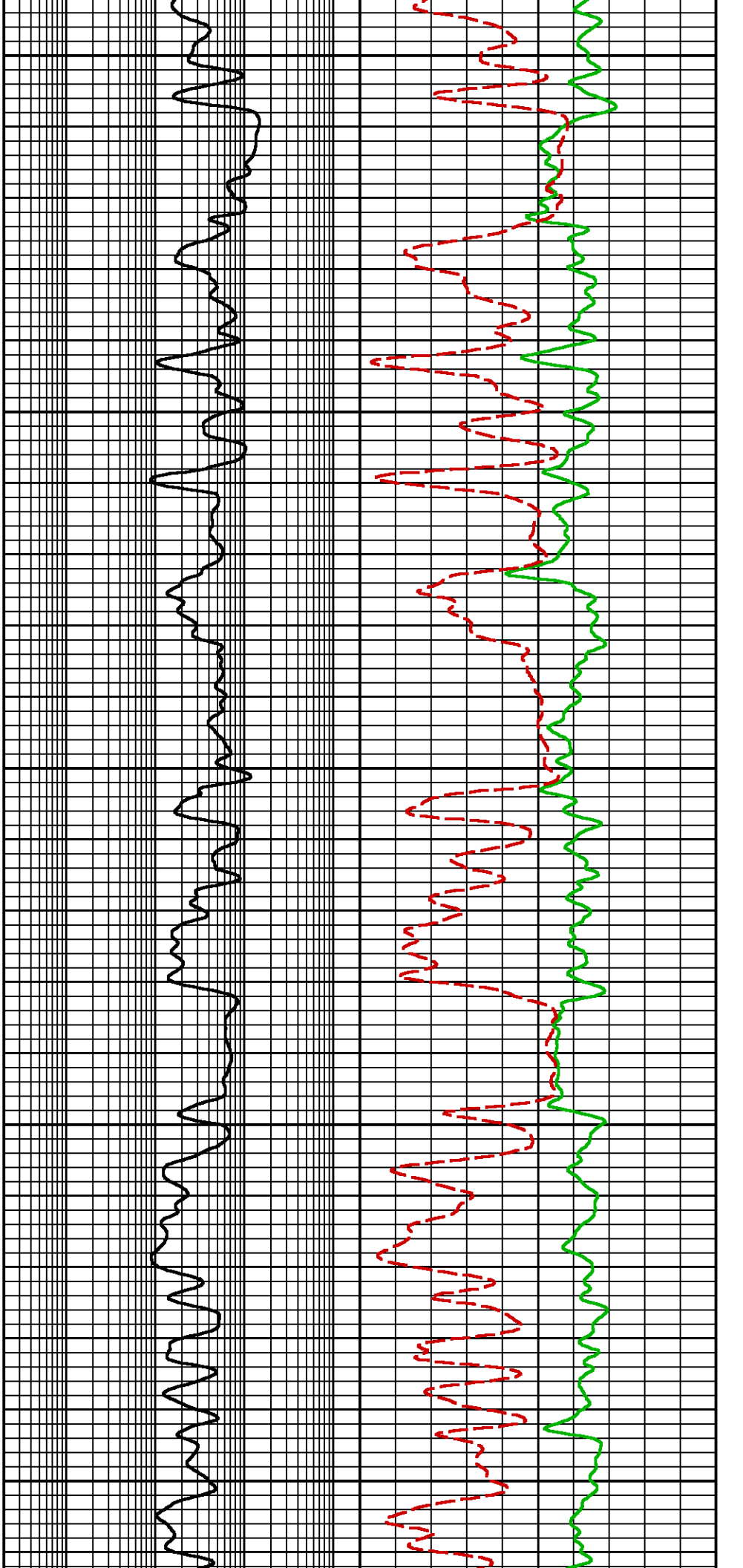


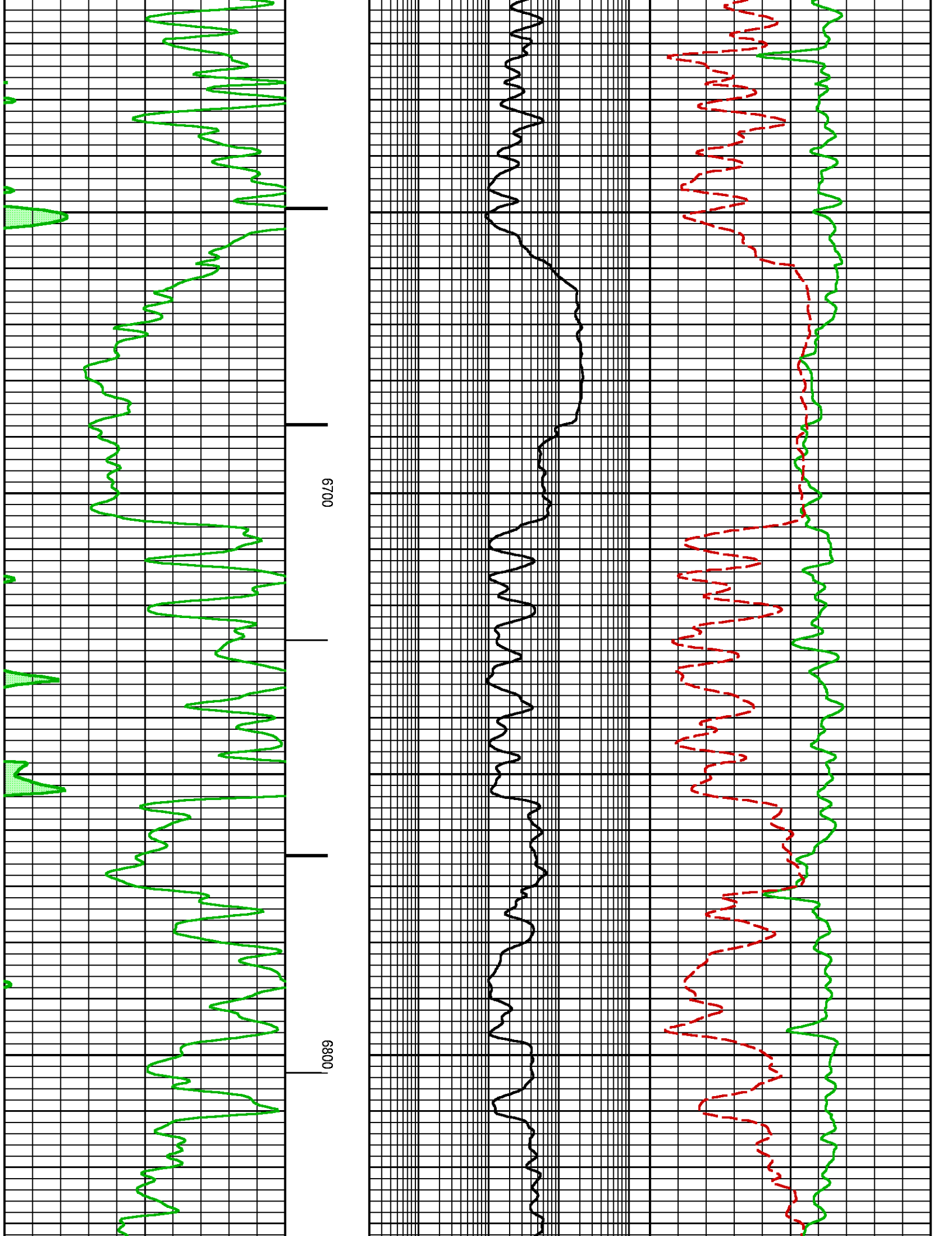


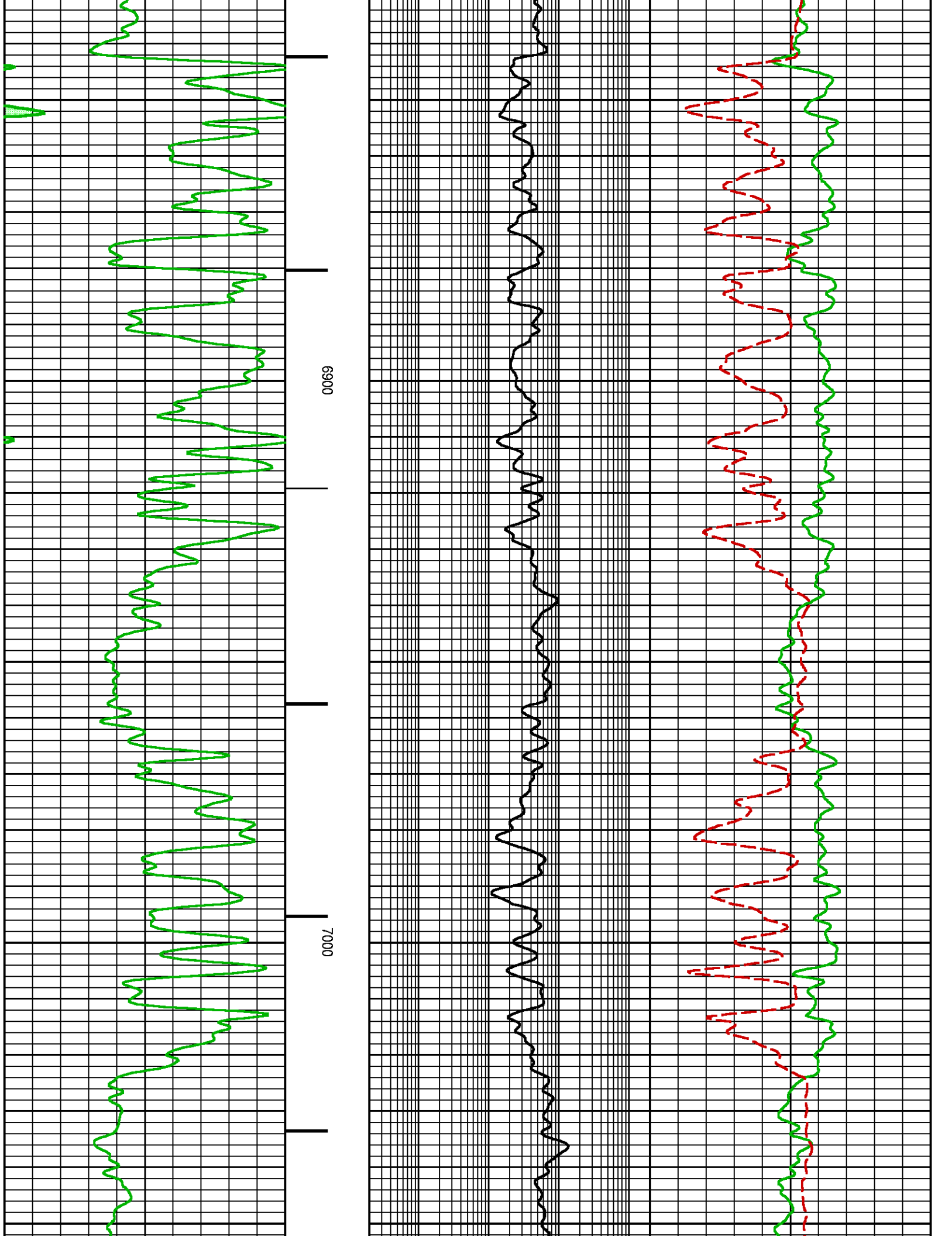


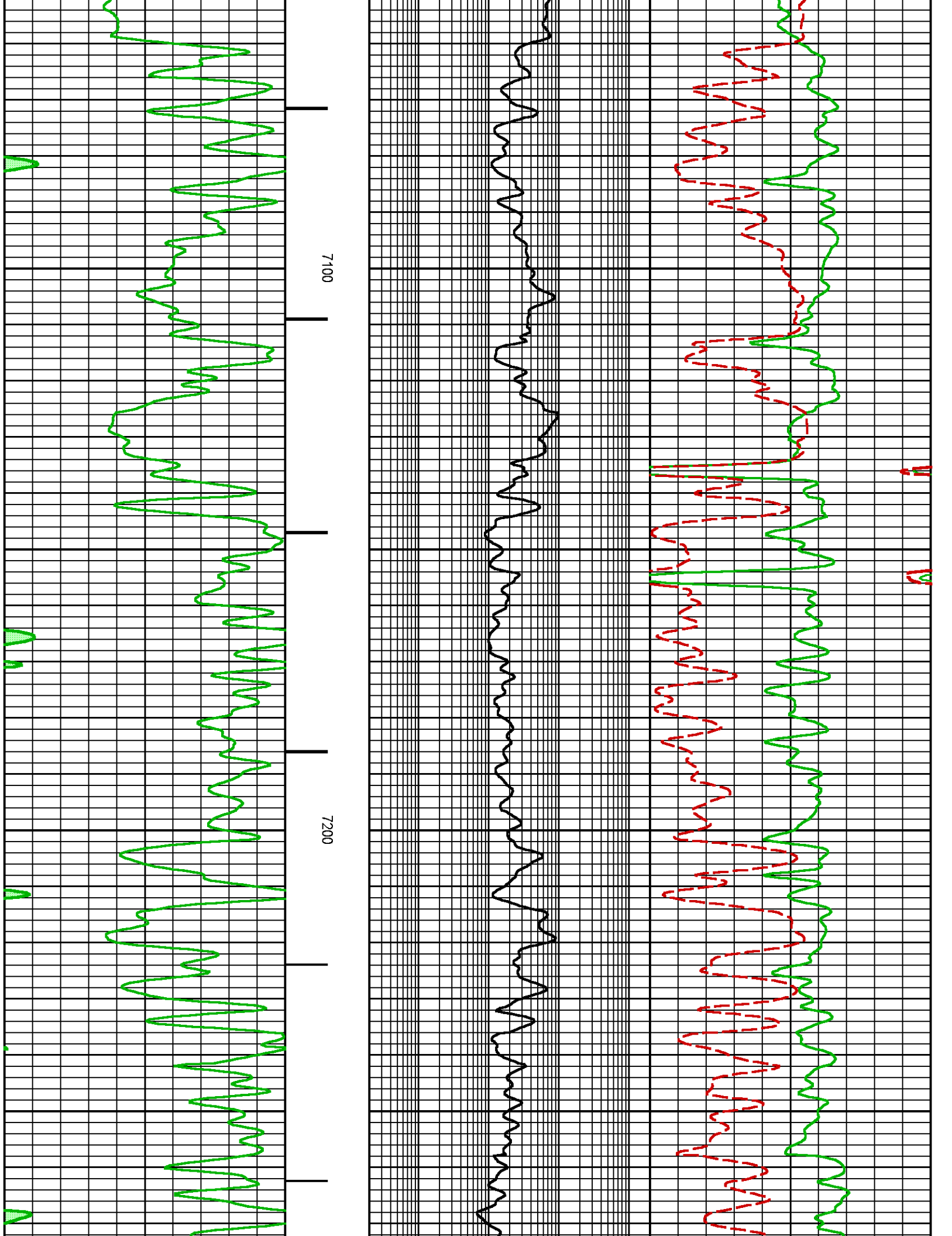


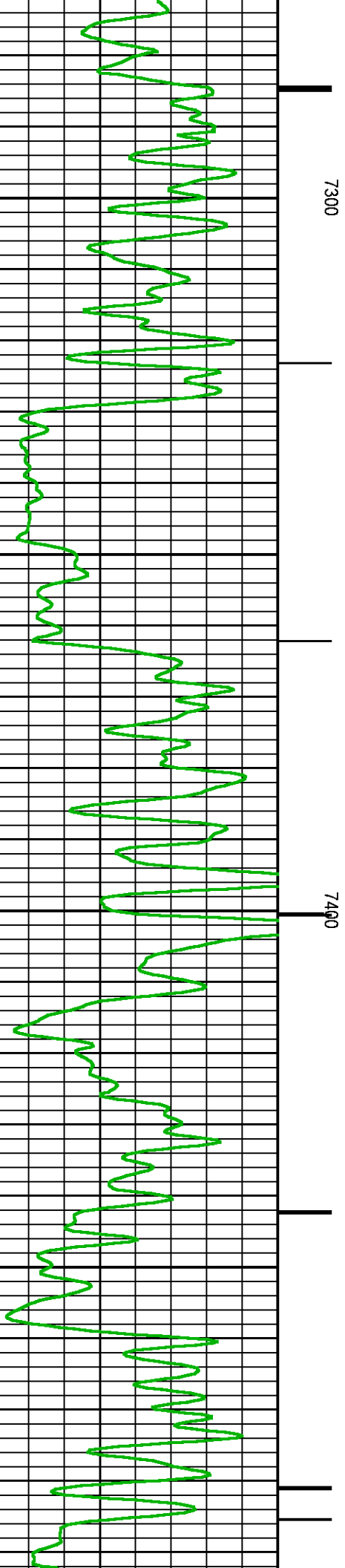
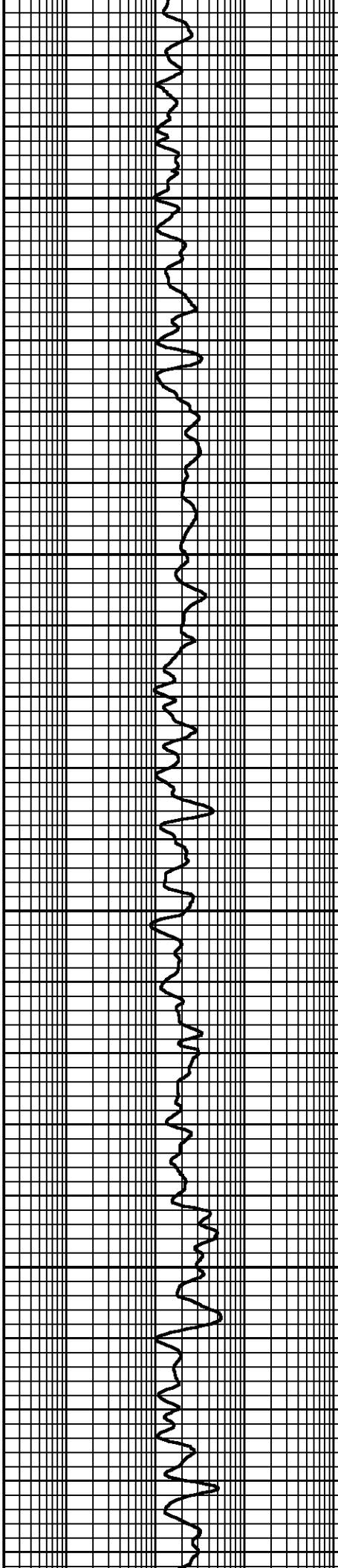
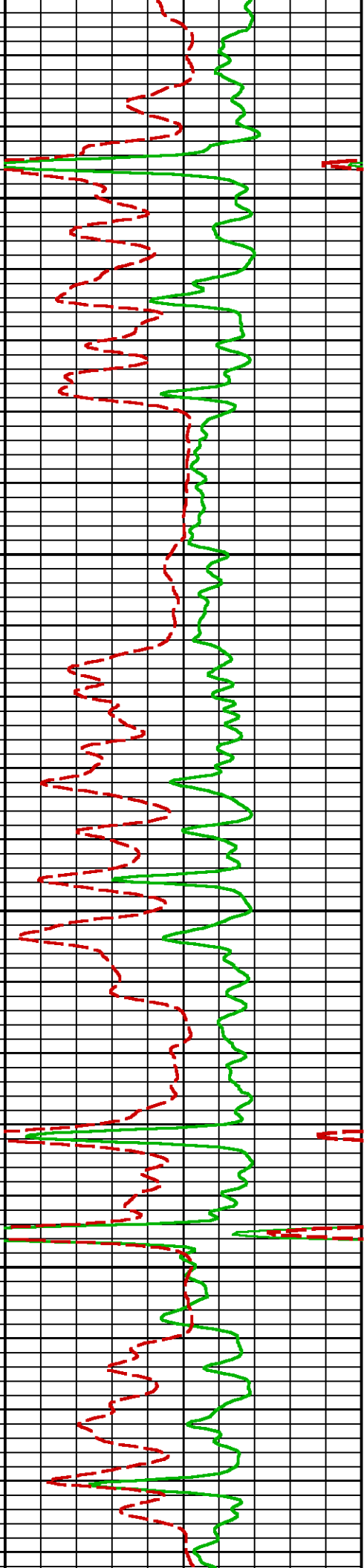


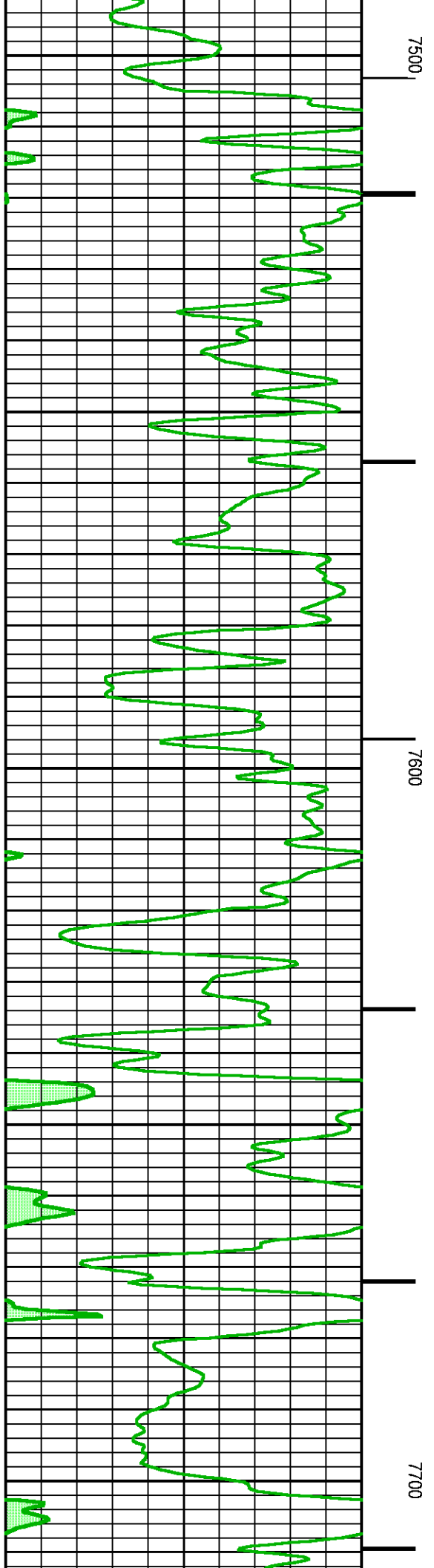
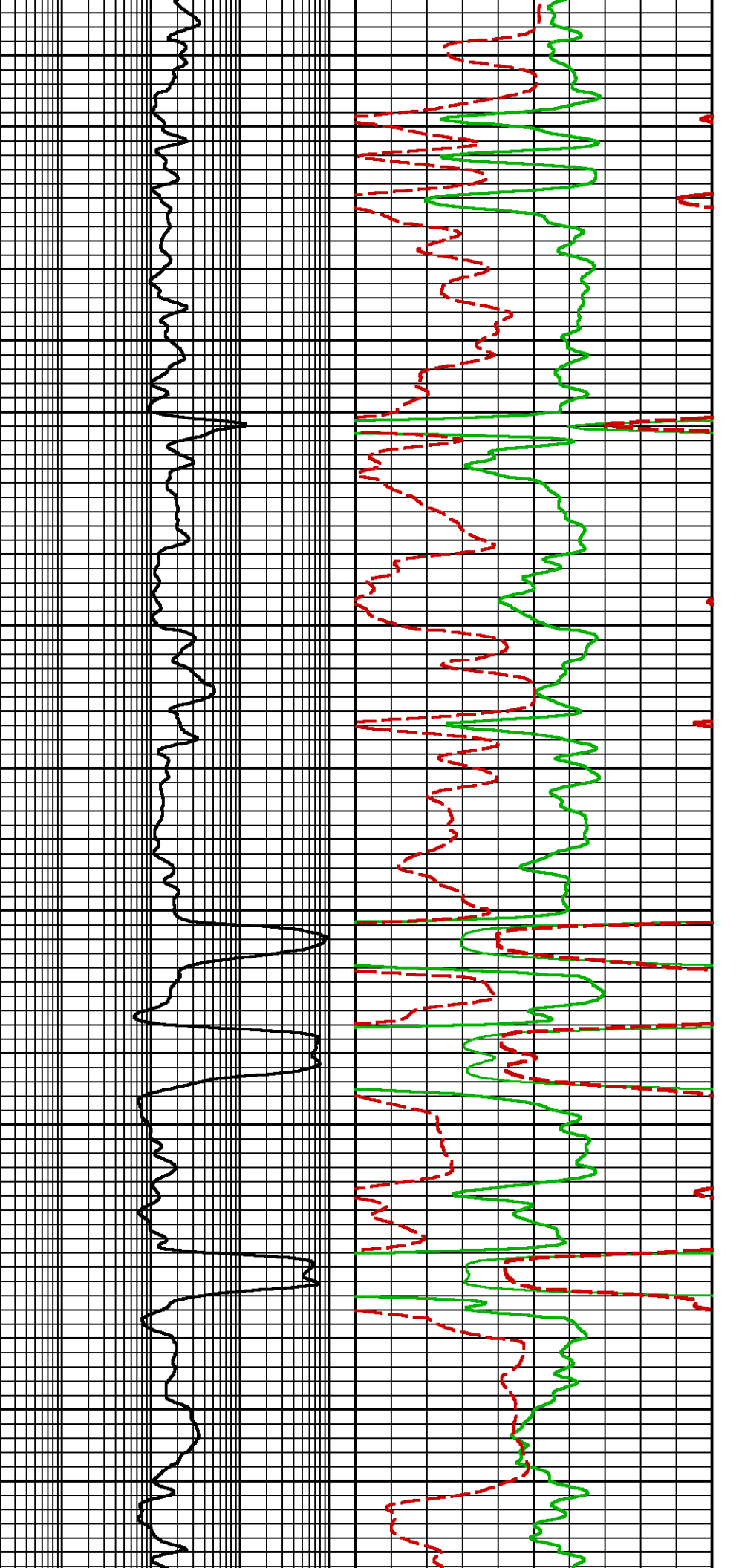


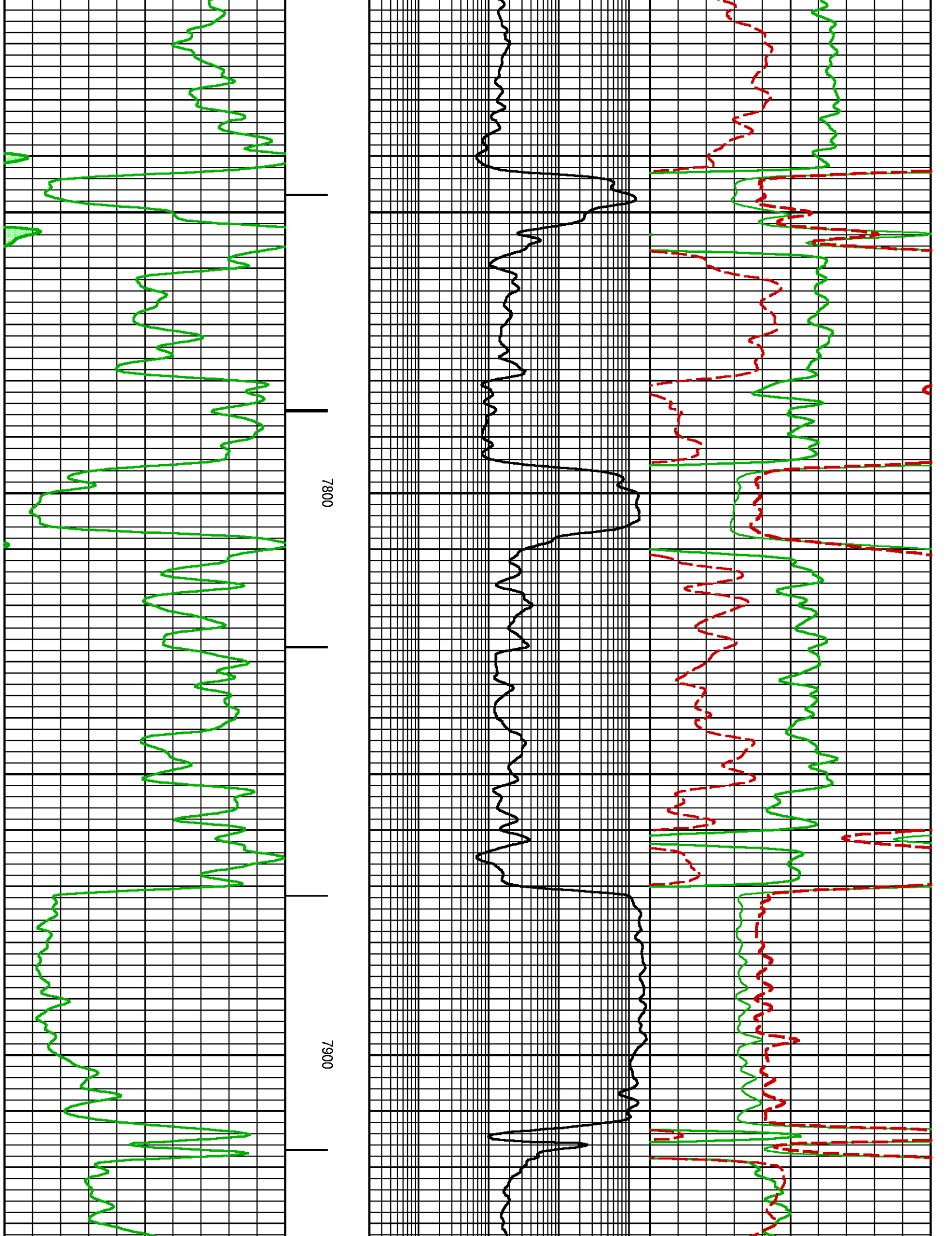


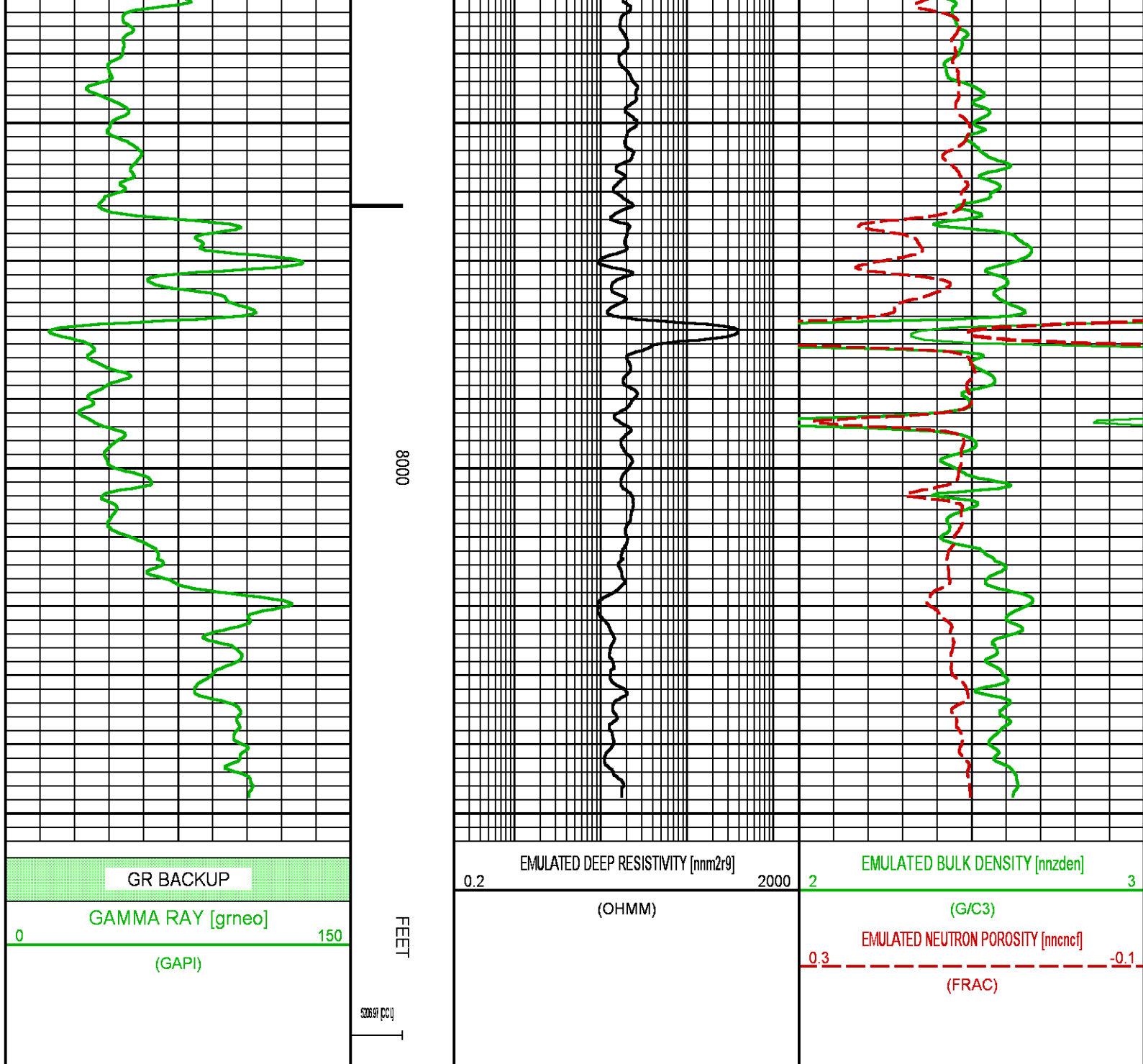












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COMPANY
WELL
FIELD
COUNTY

LARAMIE ENERGY
BRUTON FEDERAL 19-09E
VEGA
MESA STATE **COLORADO**

FILE NO:
29658-01
API NO:
05077104330000

LOCATION:

SEE REMARKS SECTION

ELEVATIONS:

KB 7286.0 FT
DF
GL 7262 FT

SEC 19 TWP 9S RGE 93W

DATE 06-DEC-2017

