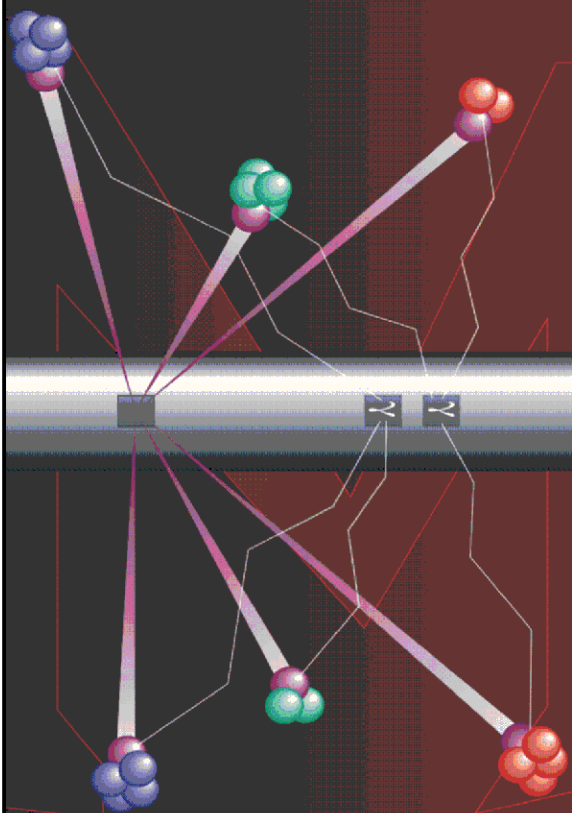


**BAKER  
HUGHES**  
a GE company



# Pulsed Neutron Formation Evaluation



## NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY LLC

WELL NICHOLS FEDERAL 0994-24-17E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 24 TWP 9S RGE 94W

ELEVATIONS:

KB 7236.0 FT DF GL 7212.0 FT

DATE 01-JUL-2018 ECC CALGARY GEOSCIENCE

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>10-JUL-2018</u>
FIELD DATA	LOCATION: <u>GRAND JCT.</u>		ENGINEER: <u>T.NEWELL/US137650</u>	DATE: <u>01-JUL-2018</u>
FROM	TO			
<u>2237 FT</u>	<u>7733 FT</u>			

### REMARKS

LOCATION:  
SHL: 2302' FNL & 2792' FWL  
BHL: 1176' FSL & 1433' FEL

TRAINING WELL:  
NICHOLS 0994-24-06W

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

BONG LOG IS DEPTH REFERENCE LOG

# NEO RESULTS FOR NICHOLS FEDERAL 0994-24-17E (G-SAND)

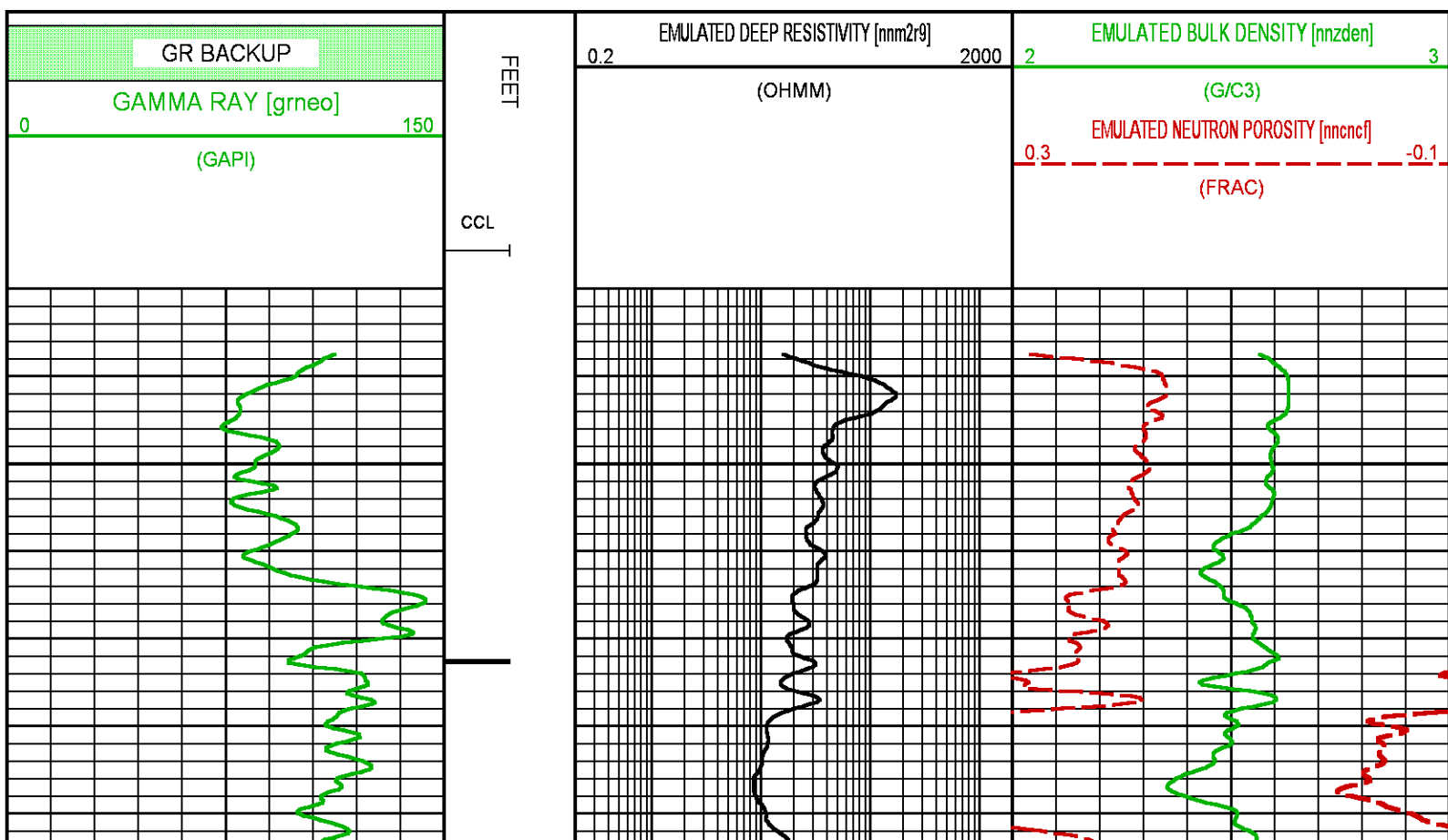
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 6.0.7905.1 Wed 08/23/2017 09:02:35.01

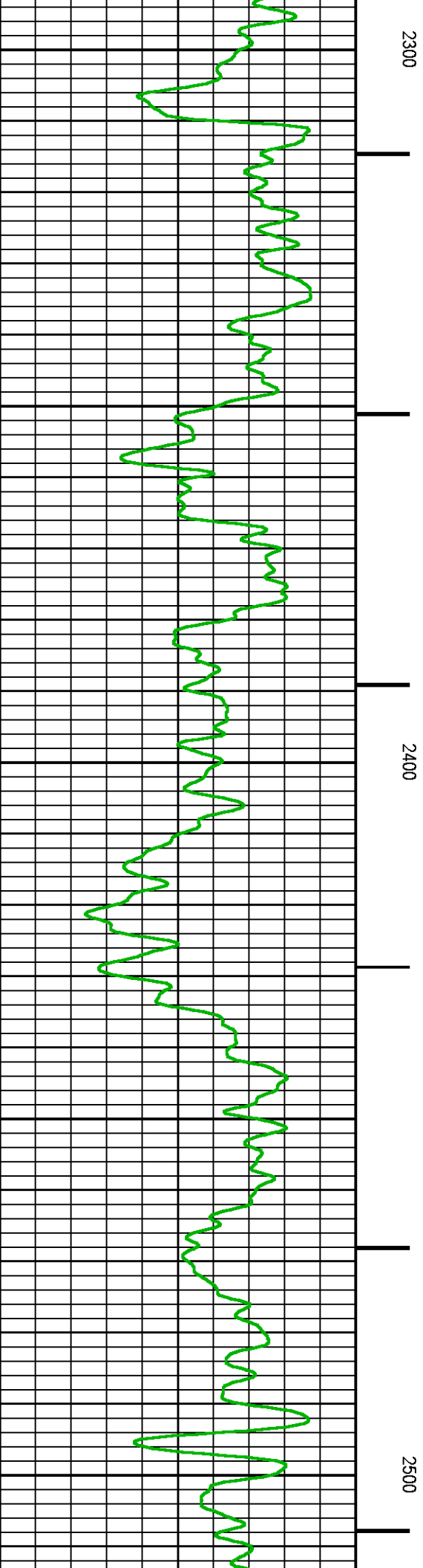
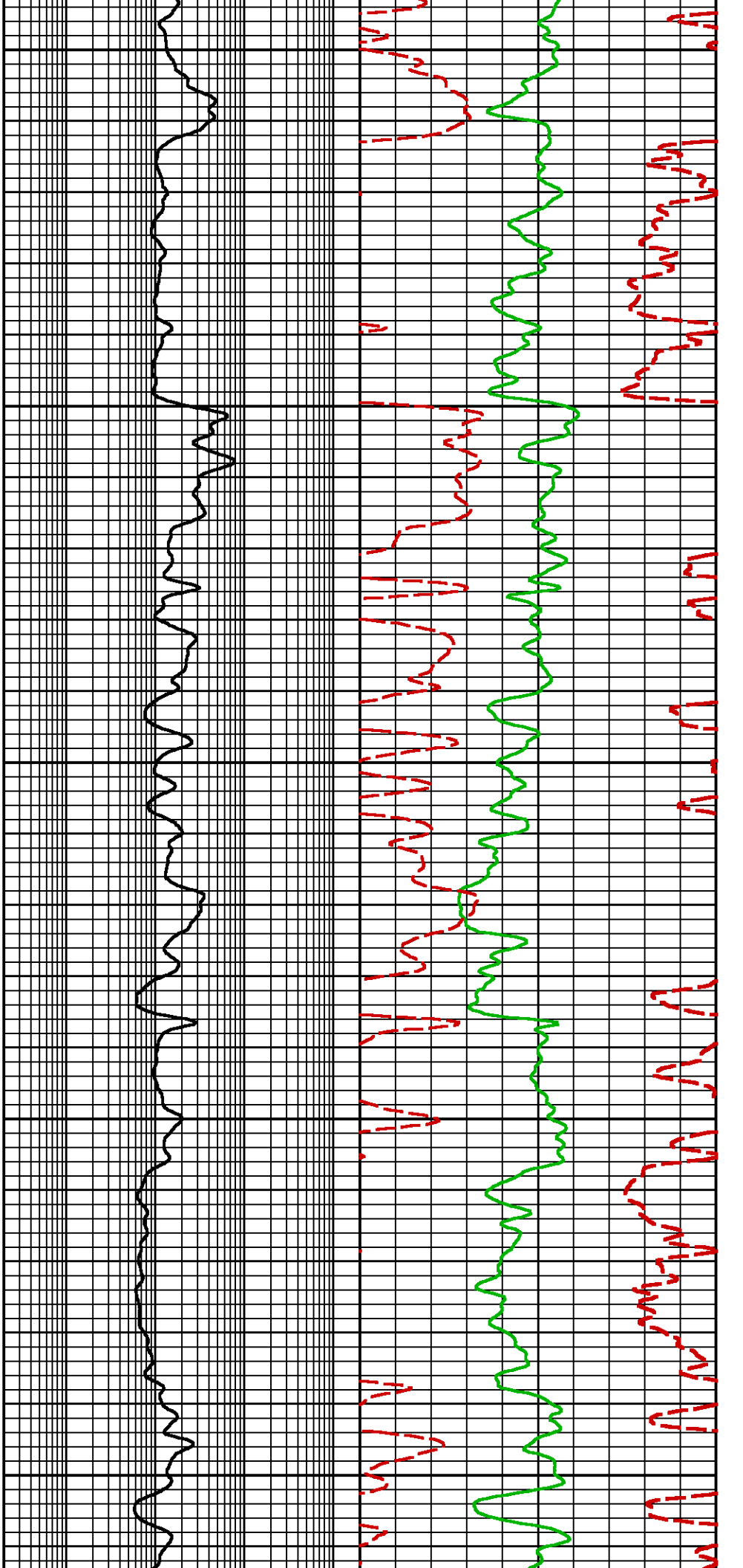
Plotted: Tue Jul 10 09:15:37 2018

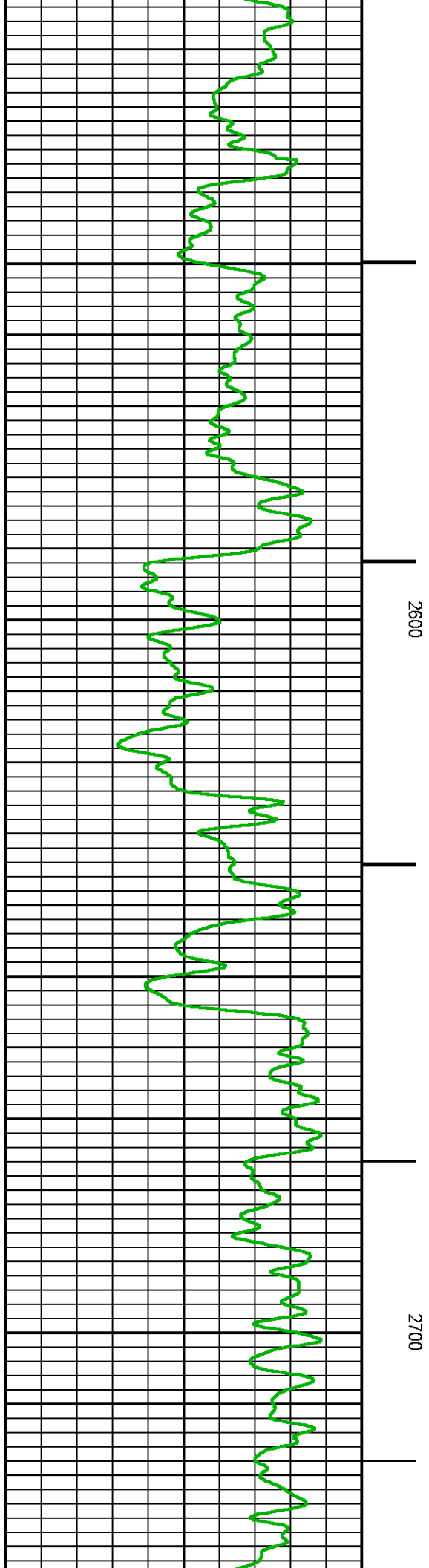
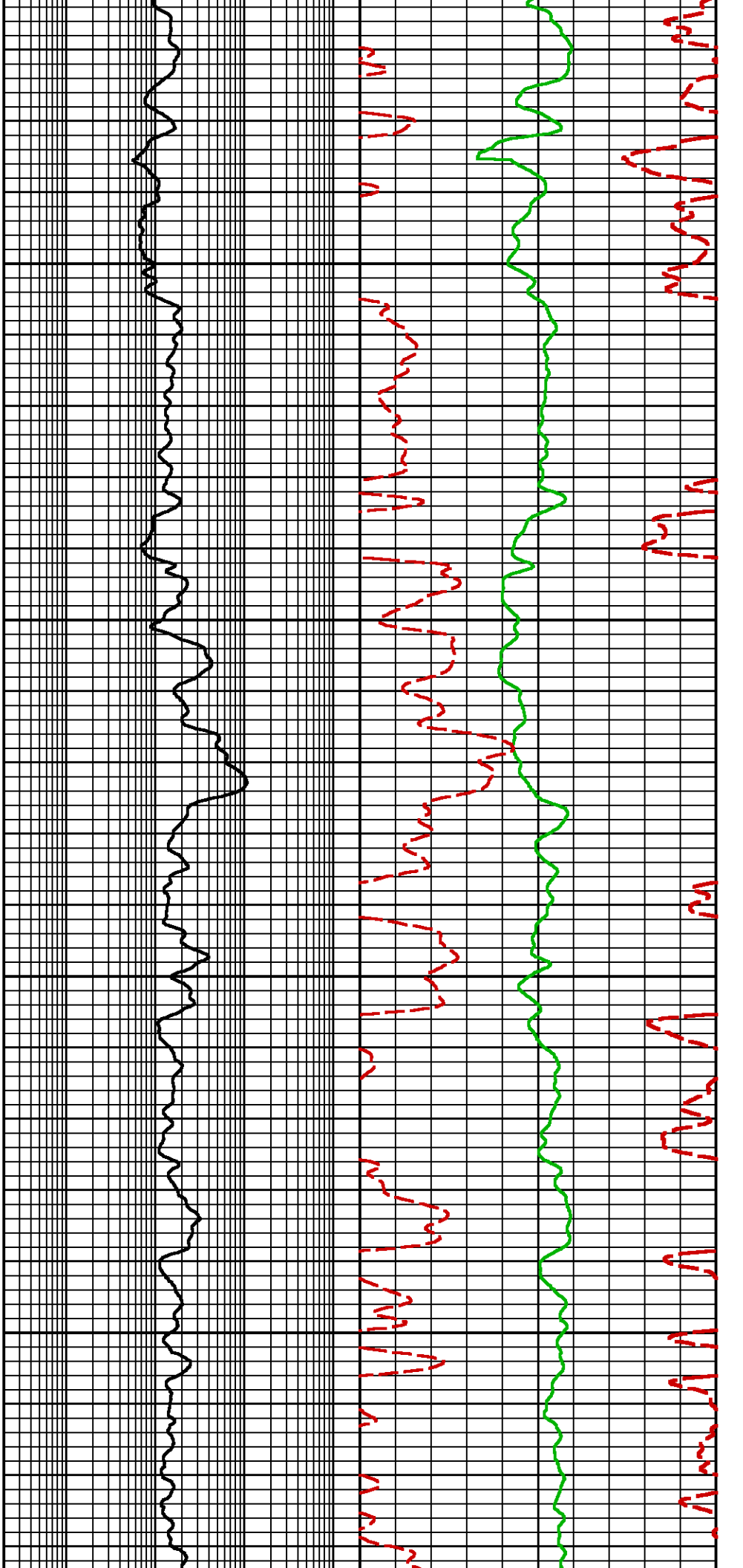
## CURVE MEASURE POINT OFFSET

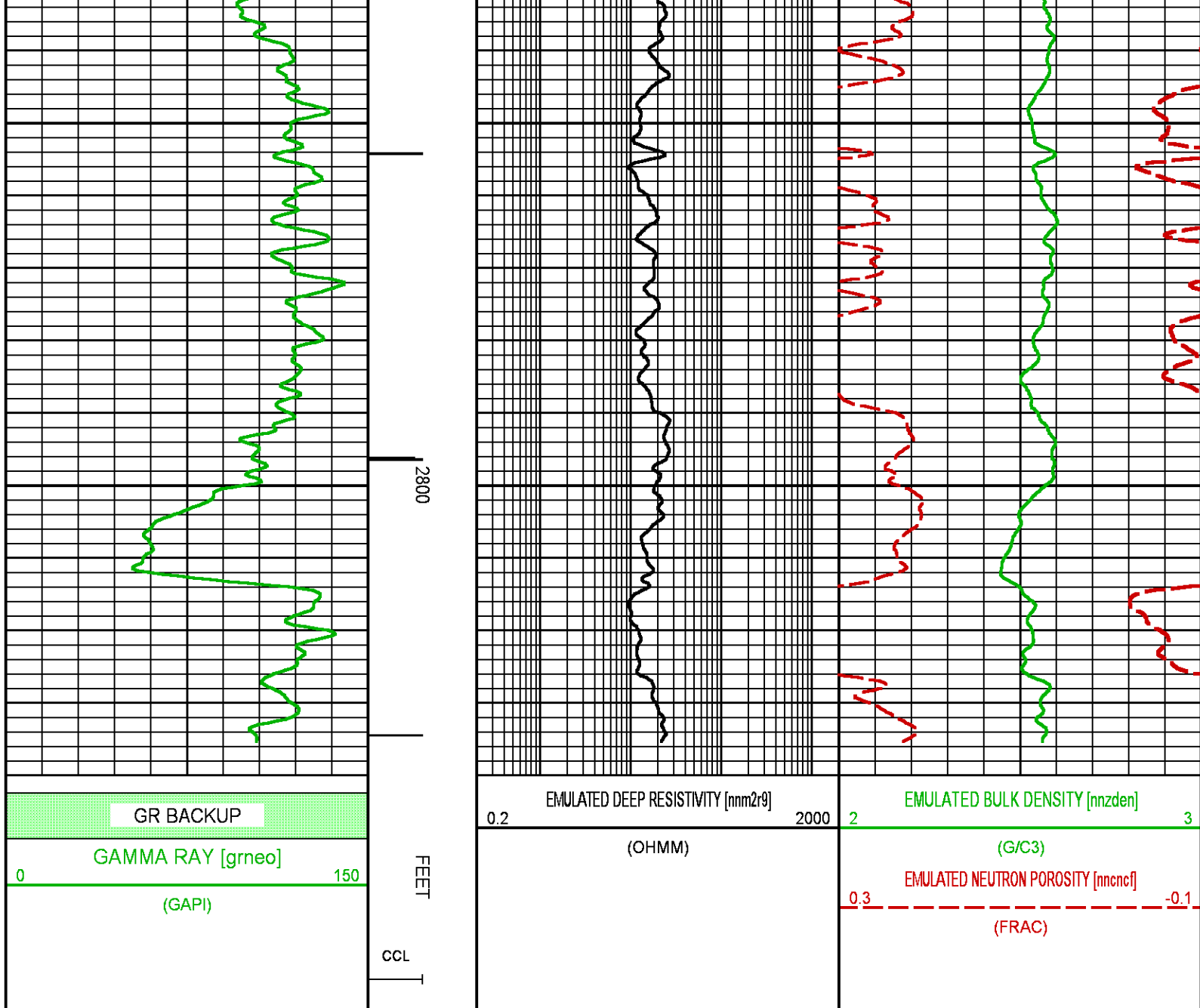
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

**Project** : NA  
**User** : kotoale  
**Presentation** : BHI1F65XZ1:d:\Ape\_Projects\LARAMIE\_NICHOLS\_FEDERAL\_0994\_24\_17E\_NEO\NEO\_PRESENTATION\_LARAMIE\_G-Sand.pdf [5"/100' Scale]  
**Plot Interval** : 2230 - 2840 Feet  
**Data File 1** : F1 : BHI1F65XZ1:D:\Ape\_Projects\LARAMIE\_NICHOLS\_FEDERAL\_0994\_24\_17E\_NEO\Merged\_Set\_Final.xtf  
**Created On** : N/A  
**Company** : LARAMIE ENERGY LLC  
**Well** : NICHOLS FEDERAL 0994-24-17E  
**Field** : VEGA  
**File Interval** : 2237.5 - 7733.5 Feet  
**OCT** : NA









## NEO RESULTS FOR NICHOLS FEDERAL 0994-24-17E (MAIN)

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

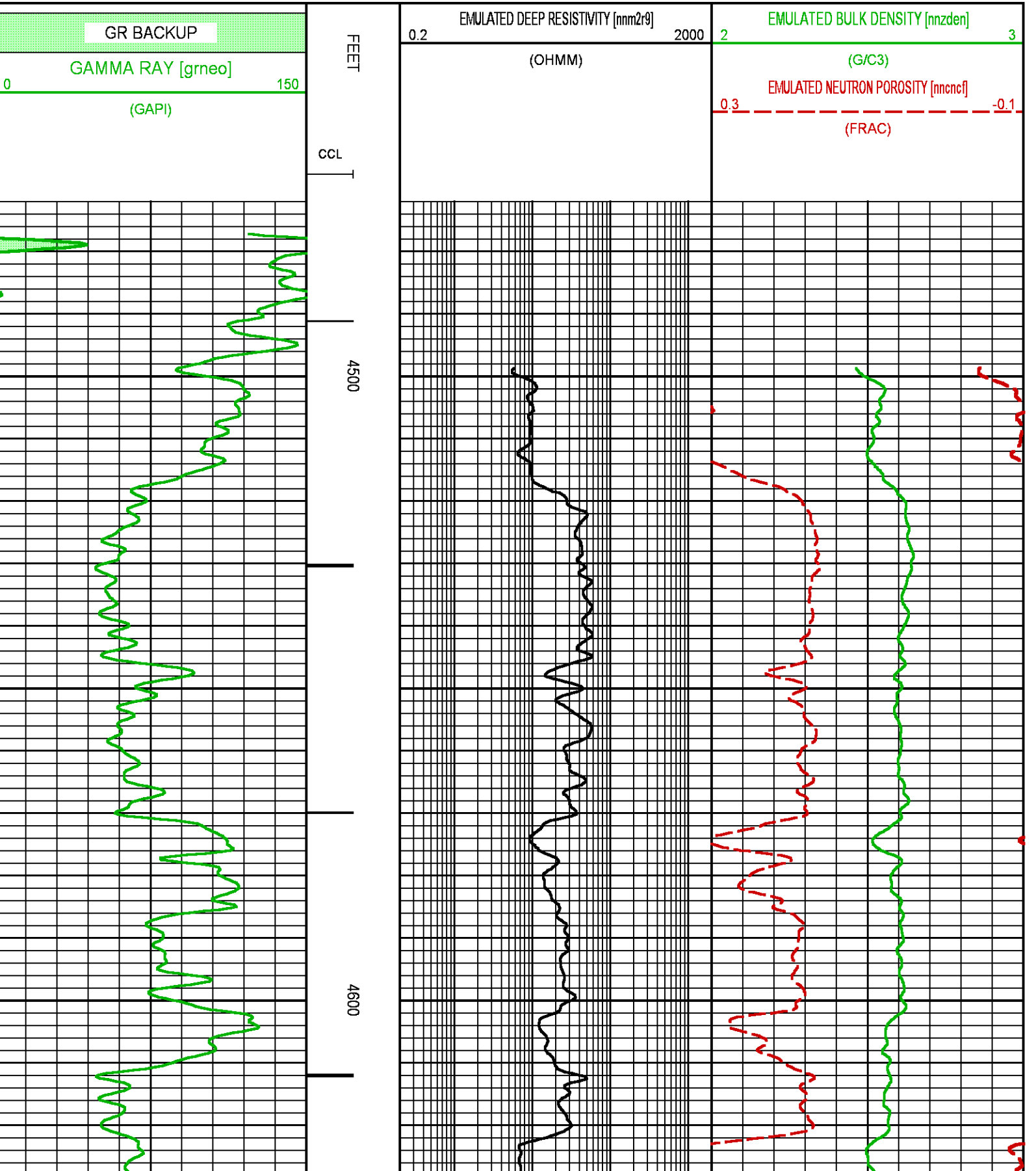
Plotted: Tue Jul 10 09:15:34 2018

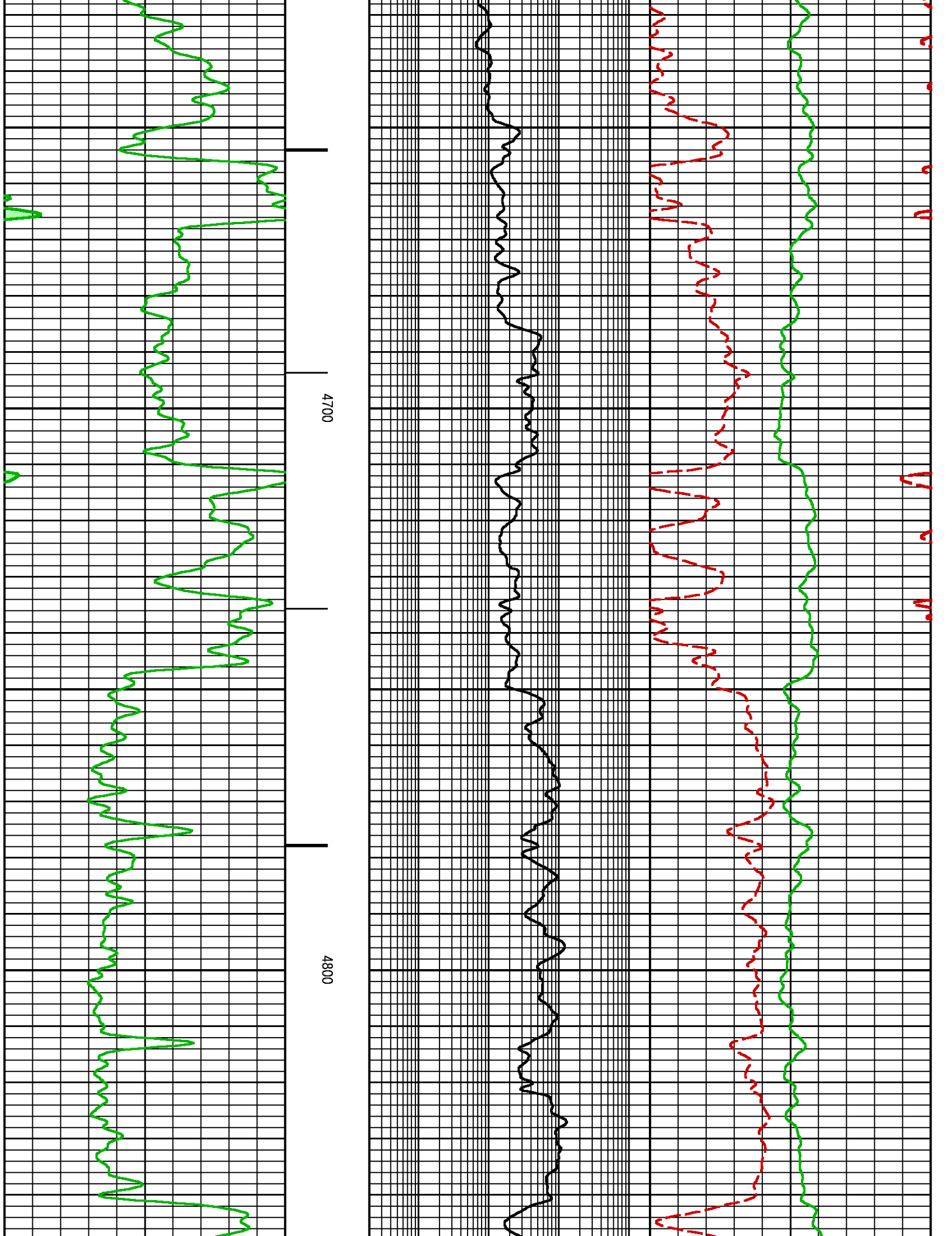
### CURVE MEASURE POINT OFFSET

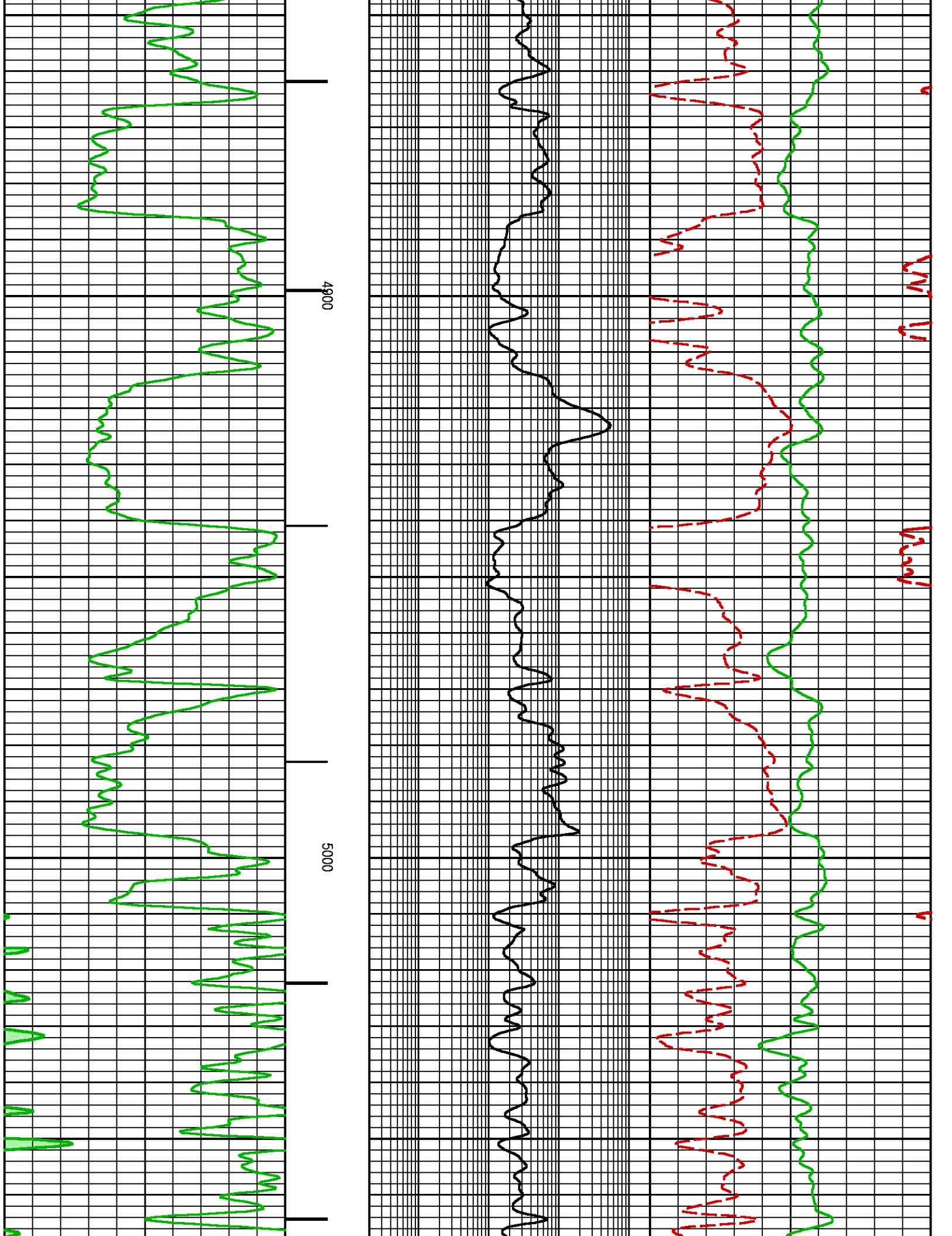
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCF	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

Project : NA  
 User : kotoale  
 Presentation : BH11E65Y71:d:\Ane Projects\11 ARAMIE NICHOLS FEDERAL 0994-24-17E-NEO

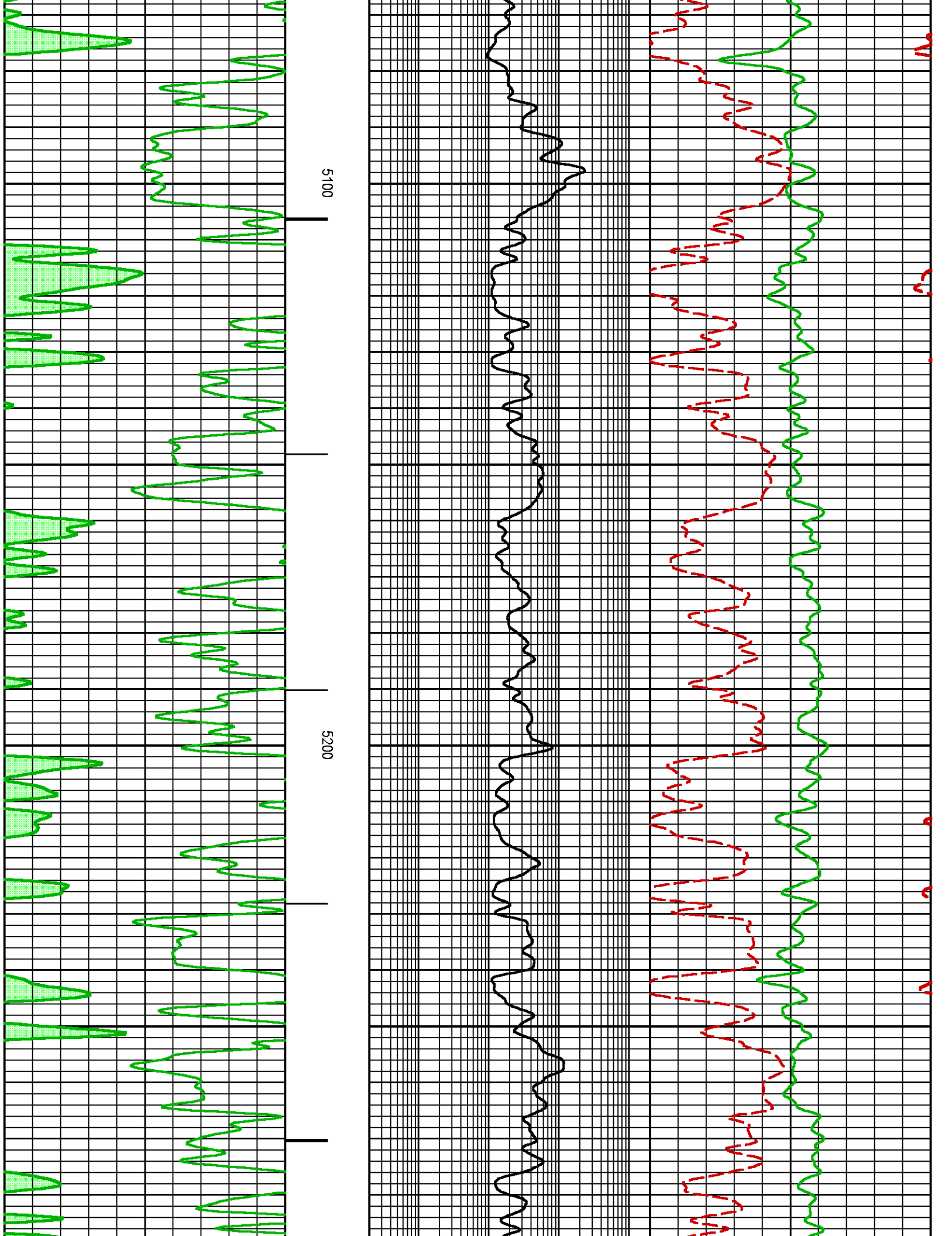
Presentation : BH11F65XZ1.D:\Ape\_Projects\LARAMIE\_NICHOLS\_FEDERAL\_0994\_24\_17E\_NEO  
NEO PRESENTATION\_LARAMIE\_MAIN.pdf [5"/100" Scale]  
Plot Interval : 4472 - 7733.5 Feet  
Data File 1 : F1 : BH11F65XZ1.D:\Ape\_Projects\LARAMIE\_NICHOLS\_FEDERAL\_0994\_24\_17E\_NEO\Merged\_Set\_Final.xtf  
Created On : N/A  
Company : LARAMIE ENERGY LLC  
Well : NICHOLS FEDERAL 0994-24-17E  
Field : VEGA  
File Interval : 2237.5 - 7733.5 Feet  
OCT : NA

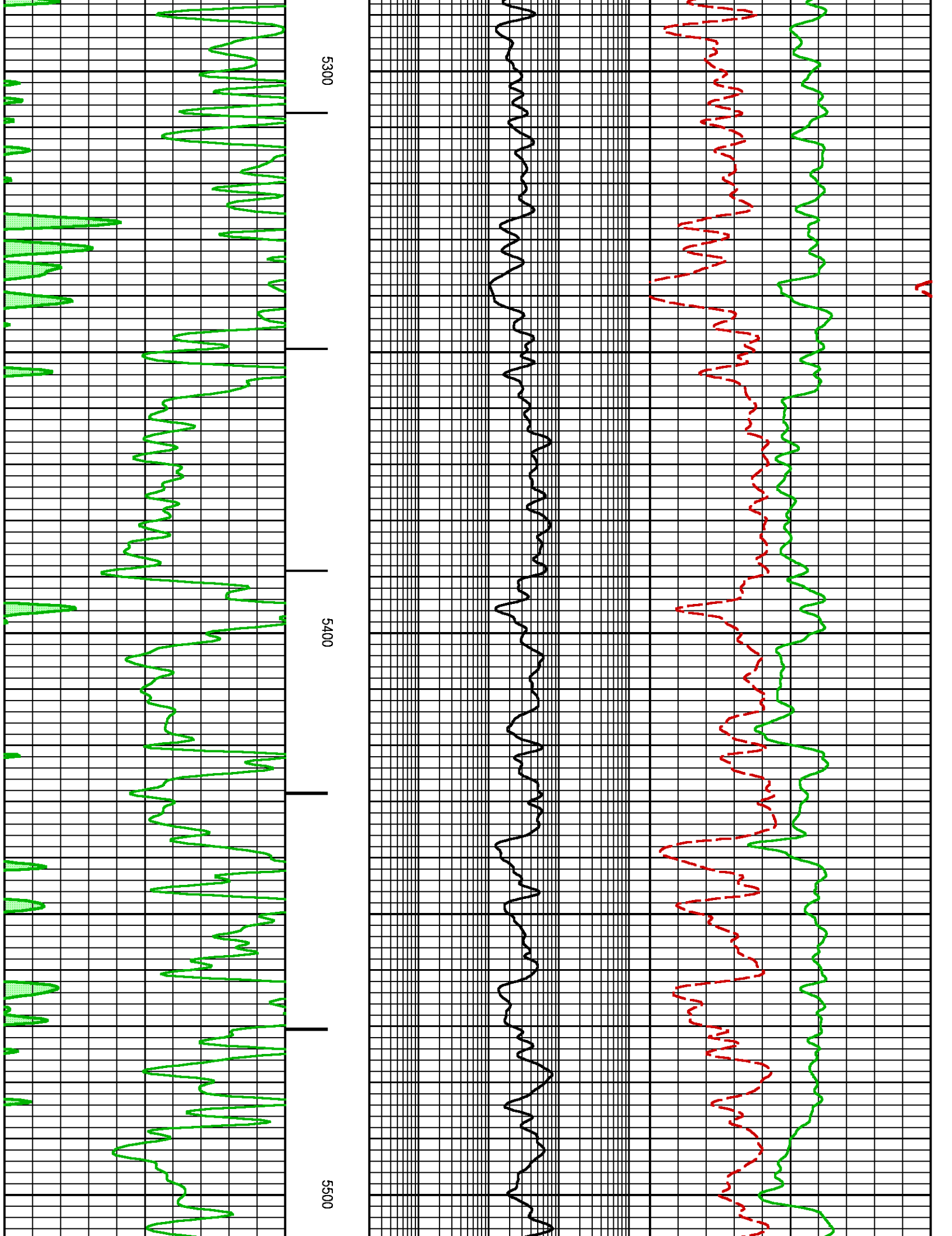


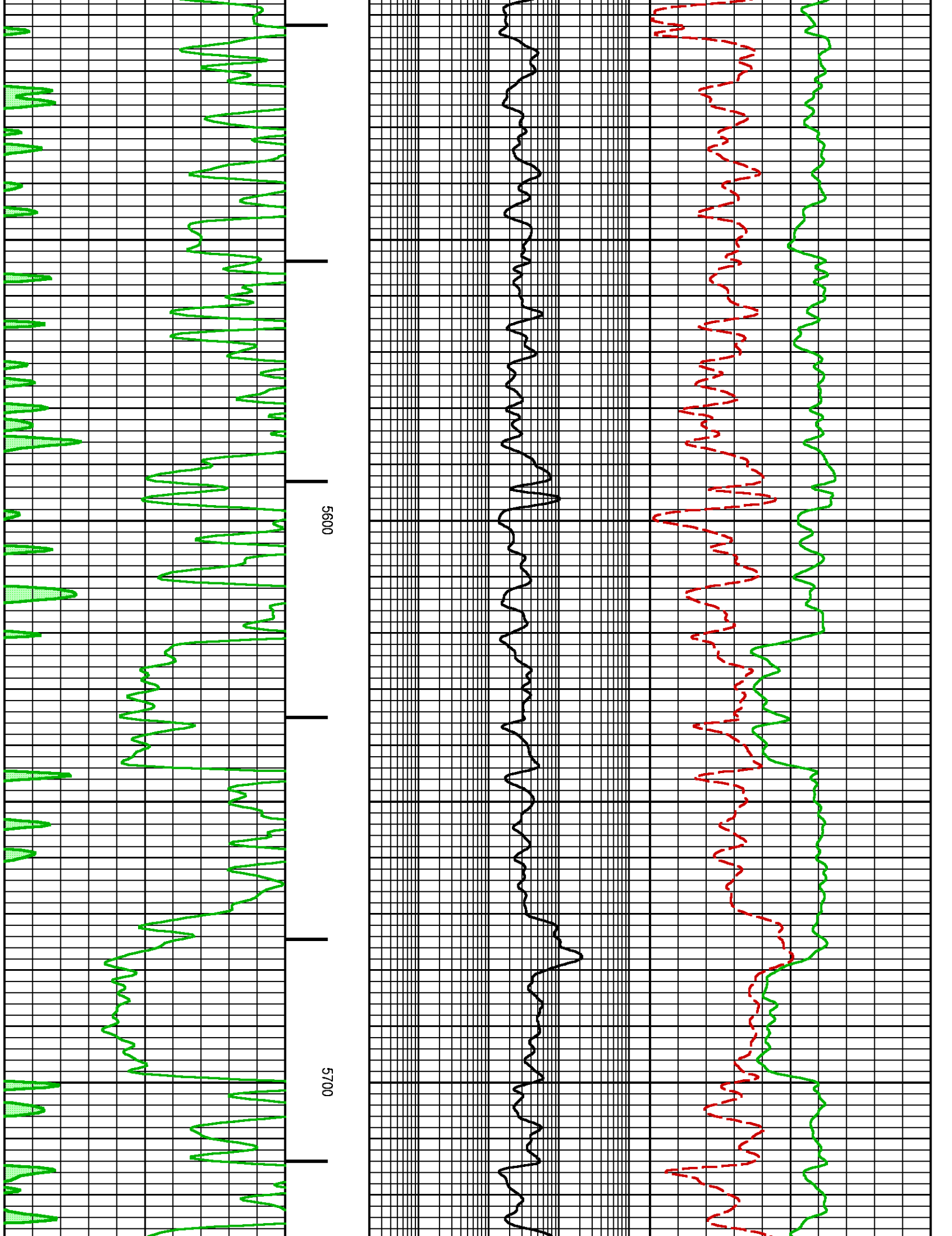


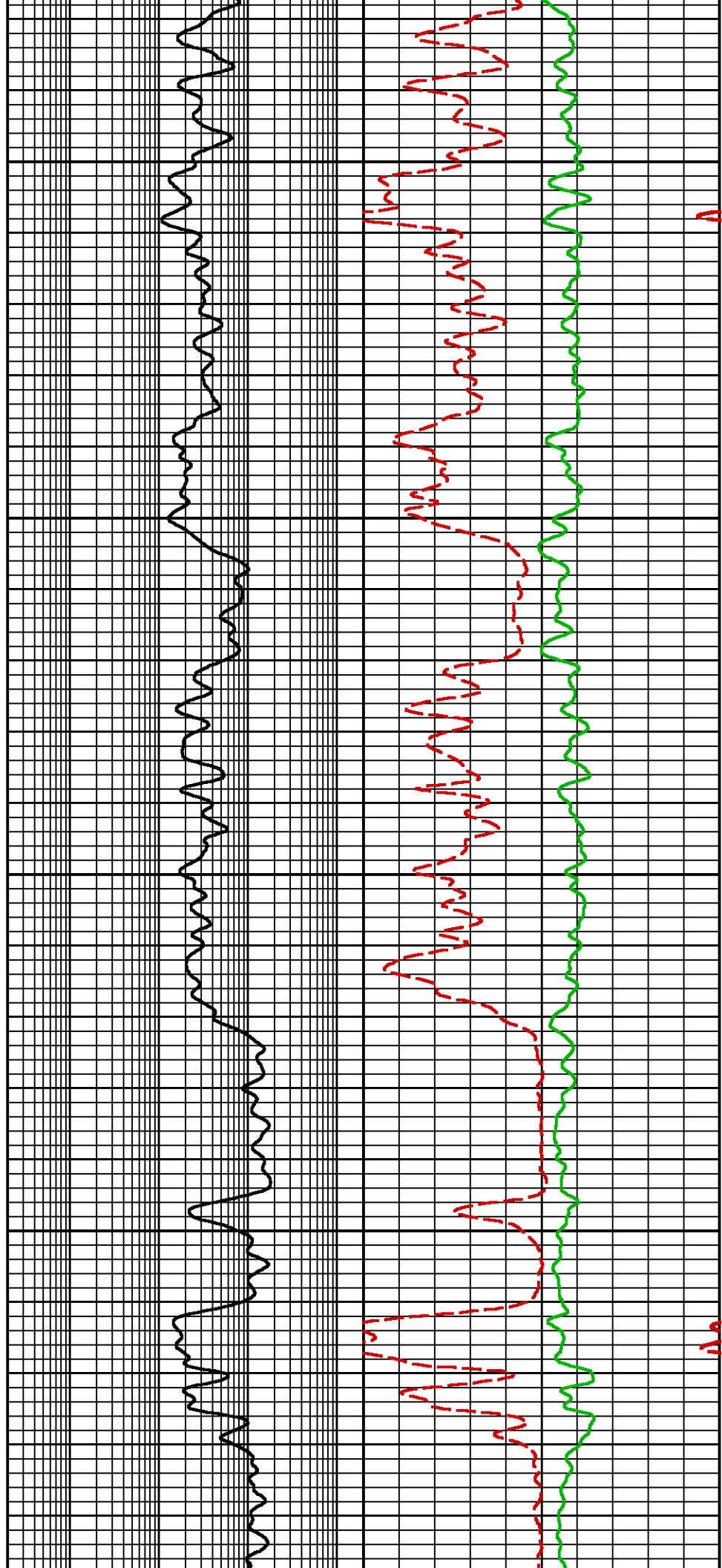
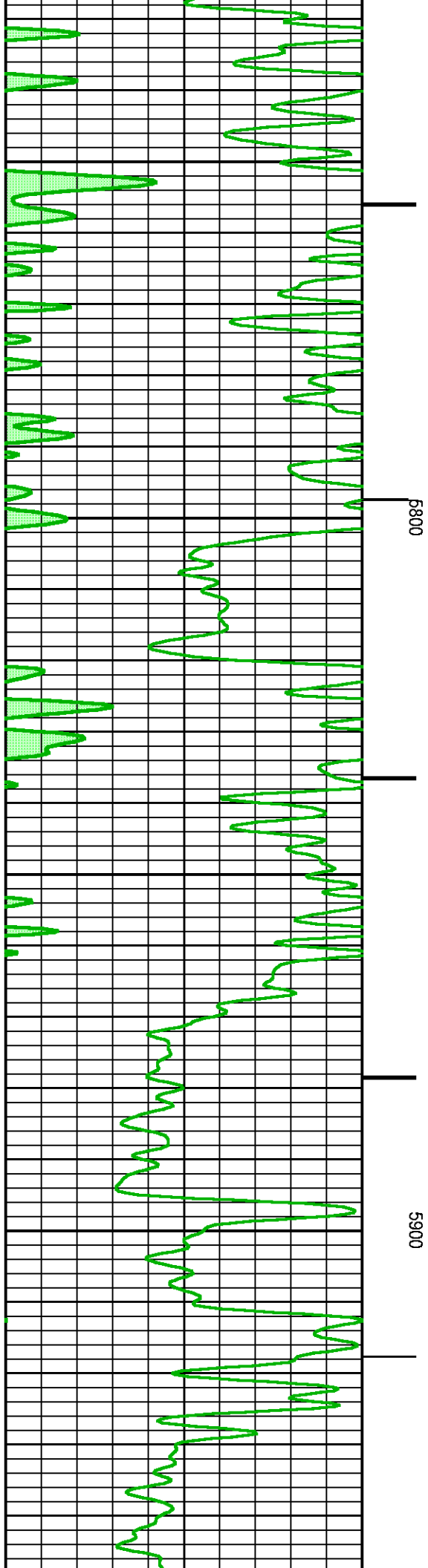


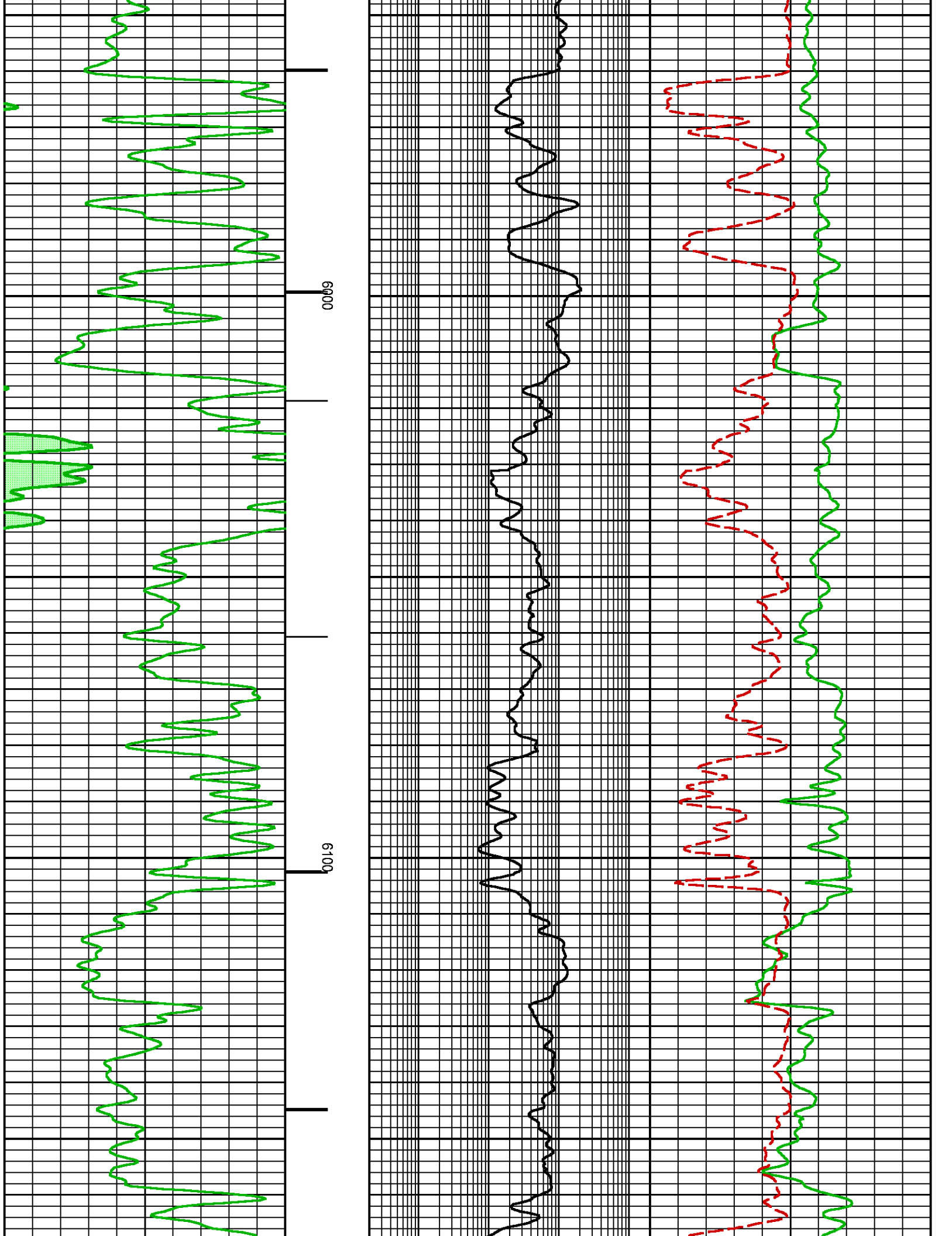


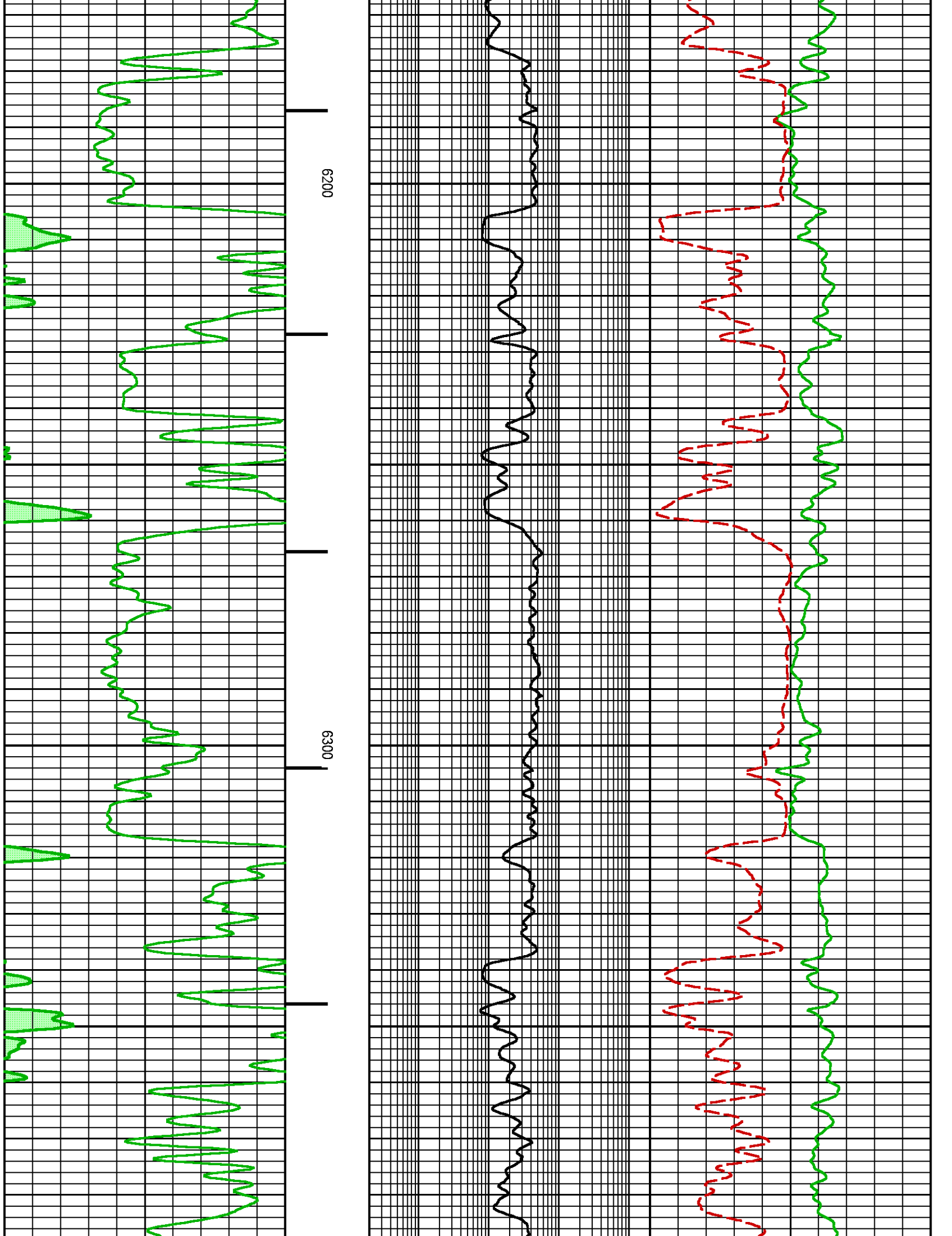


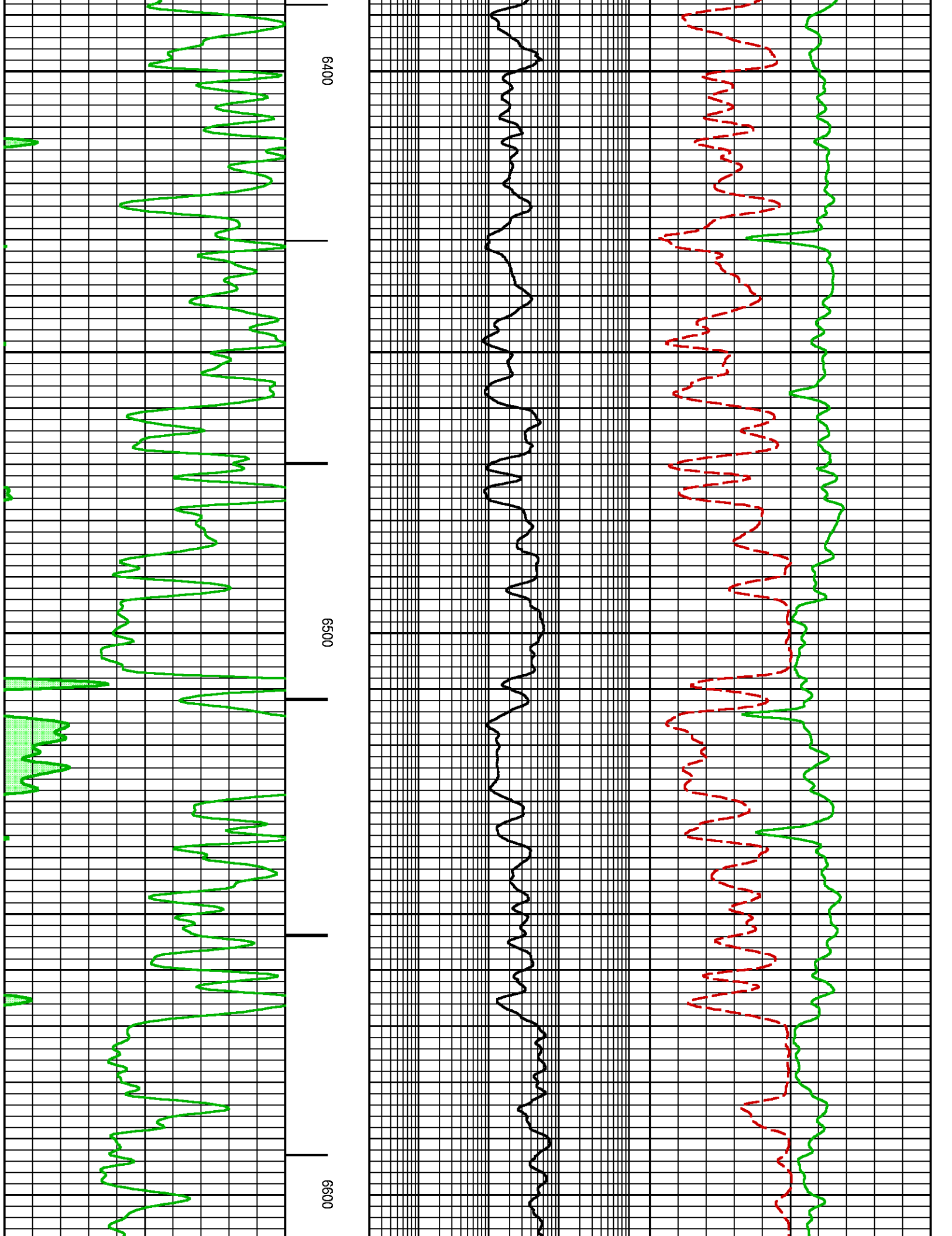


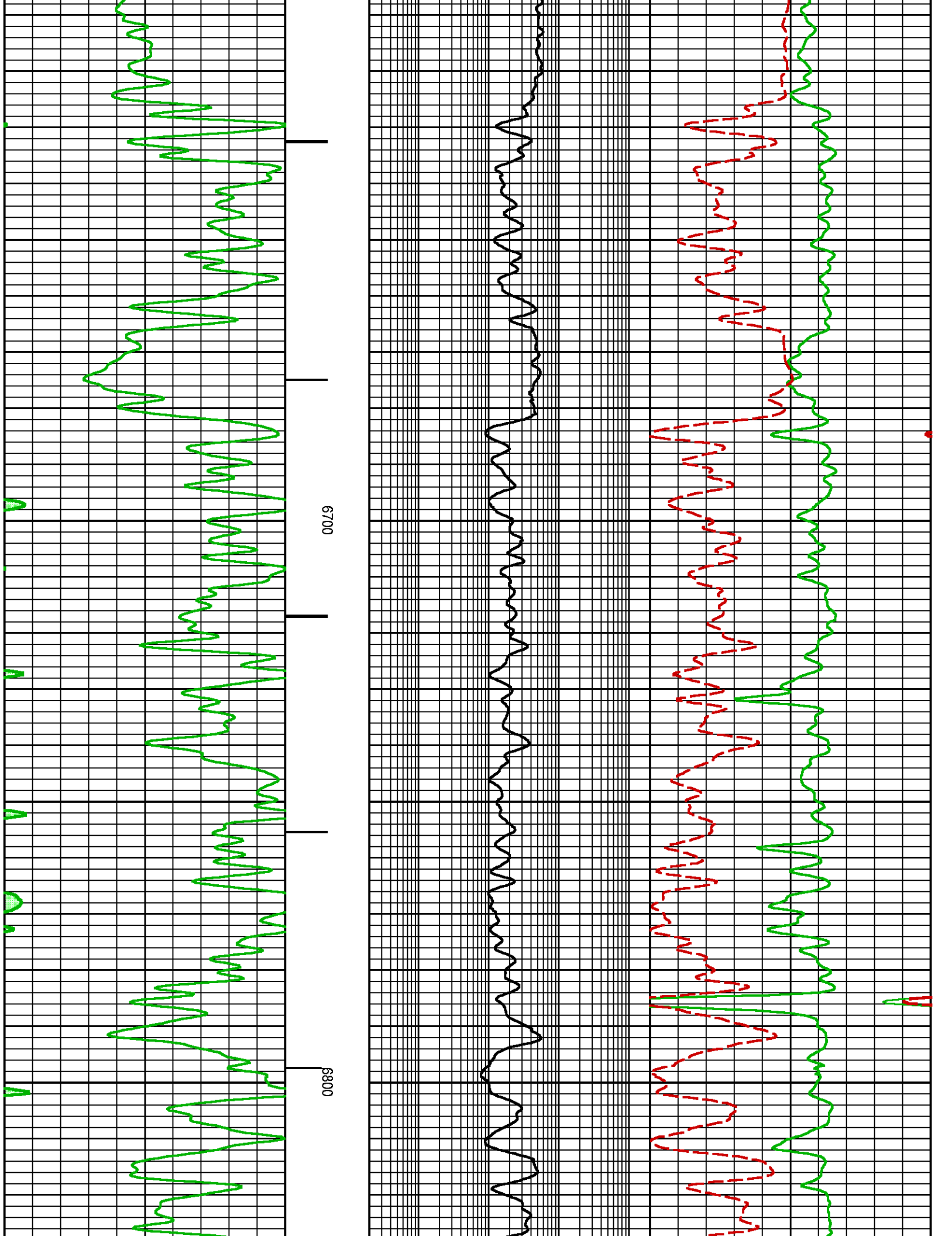




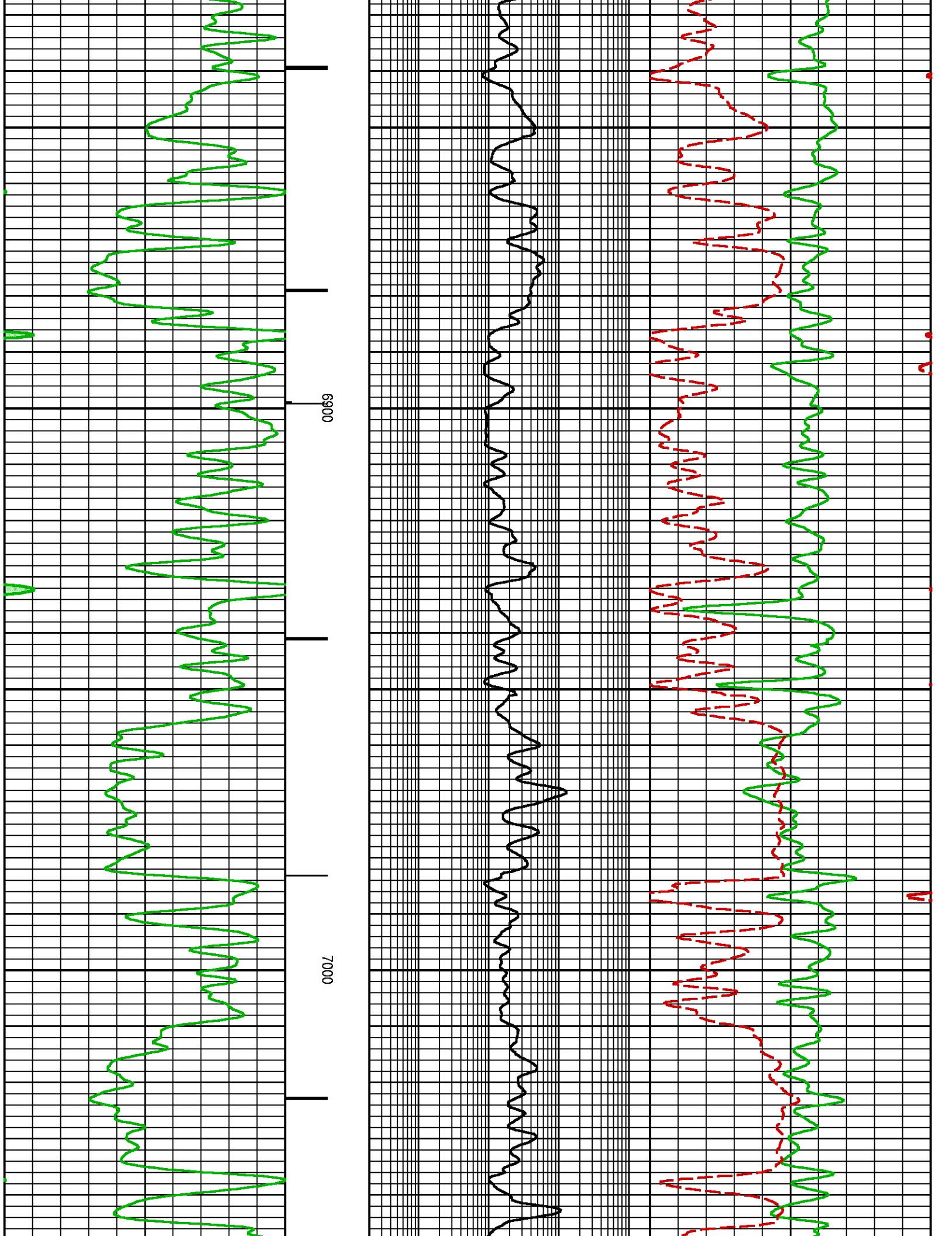


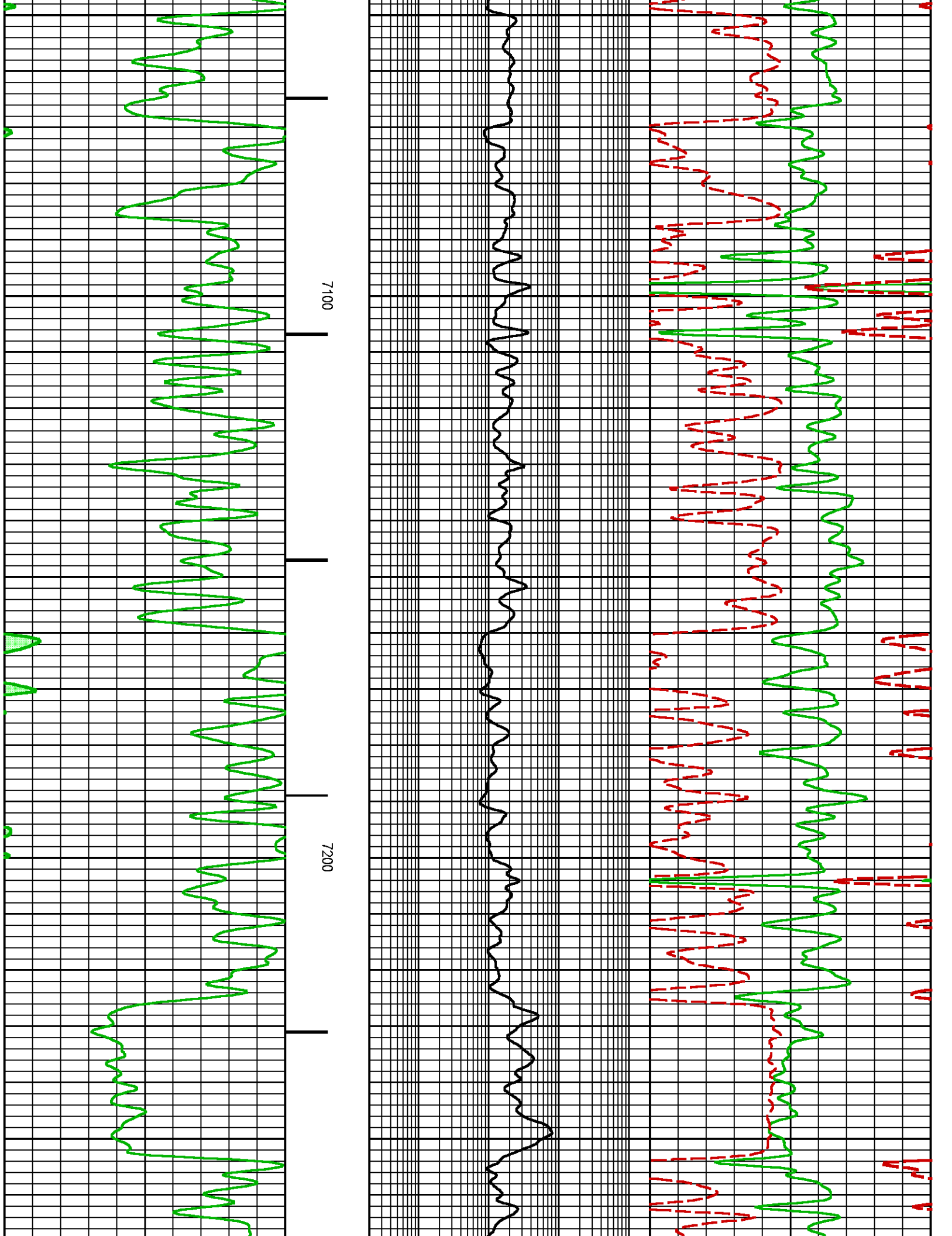


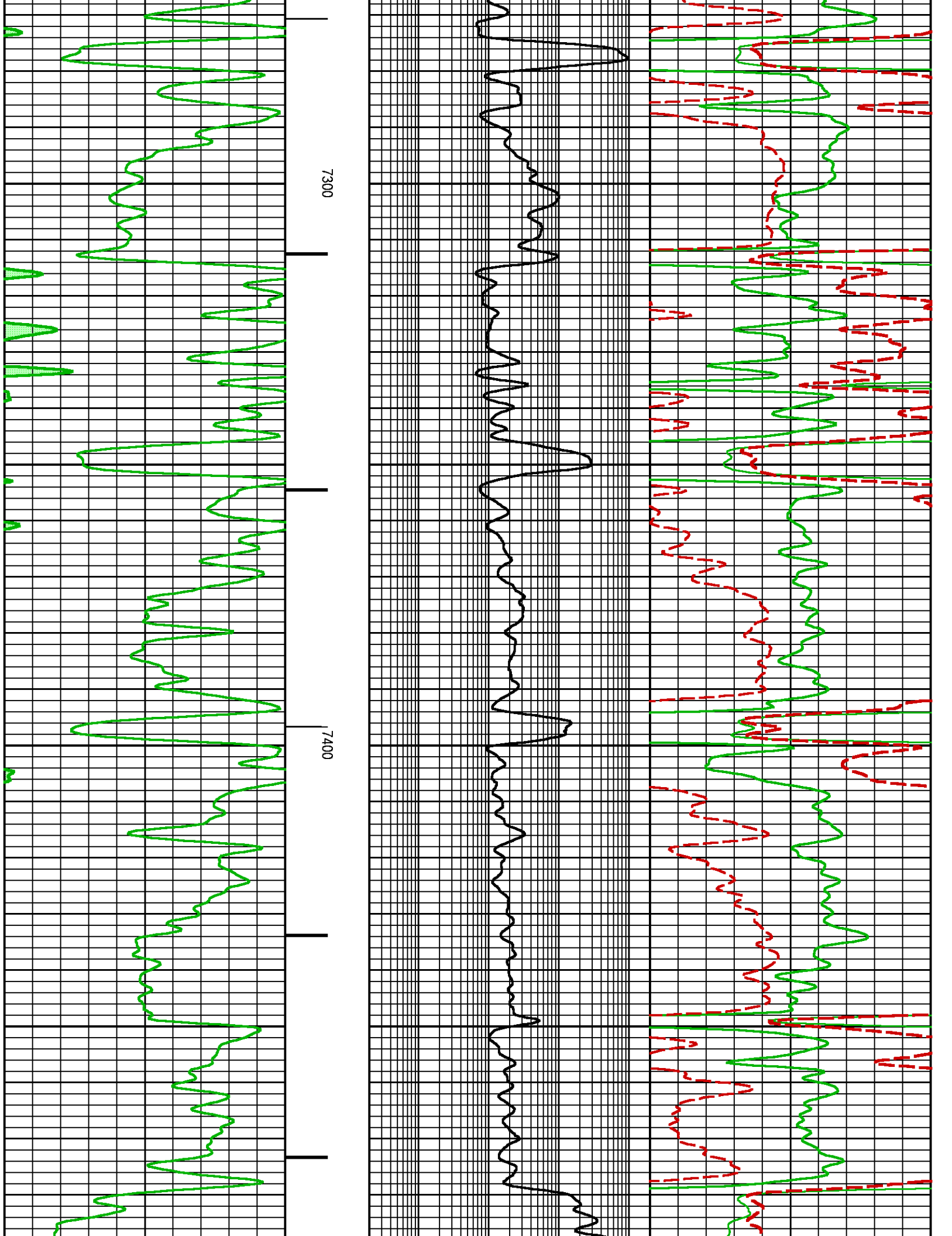


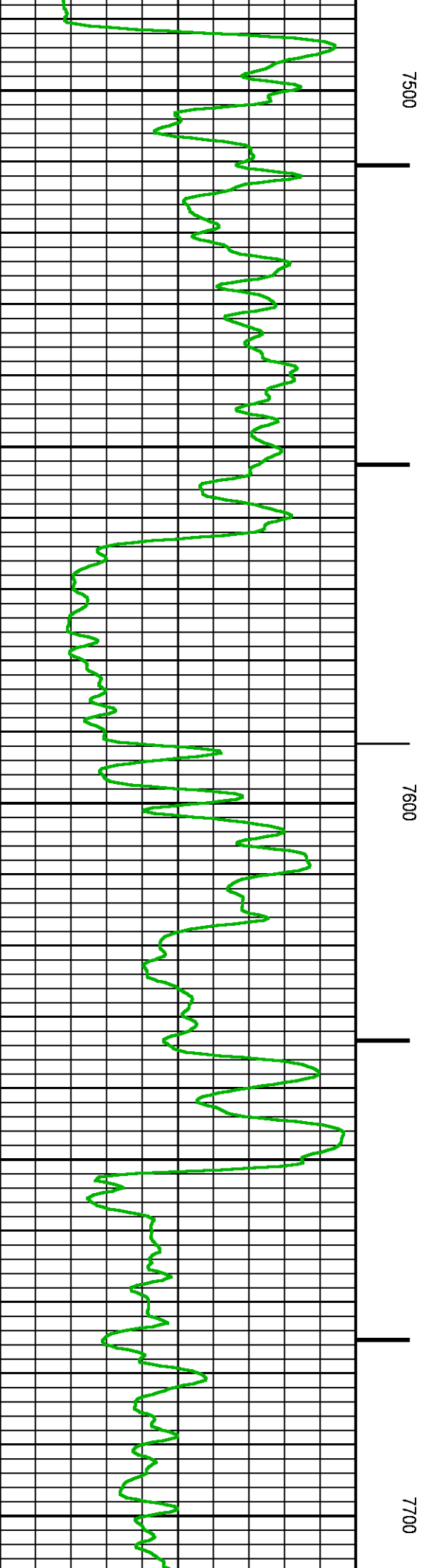
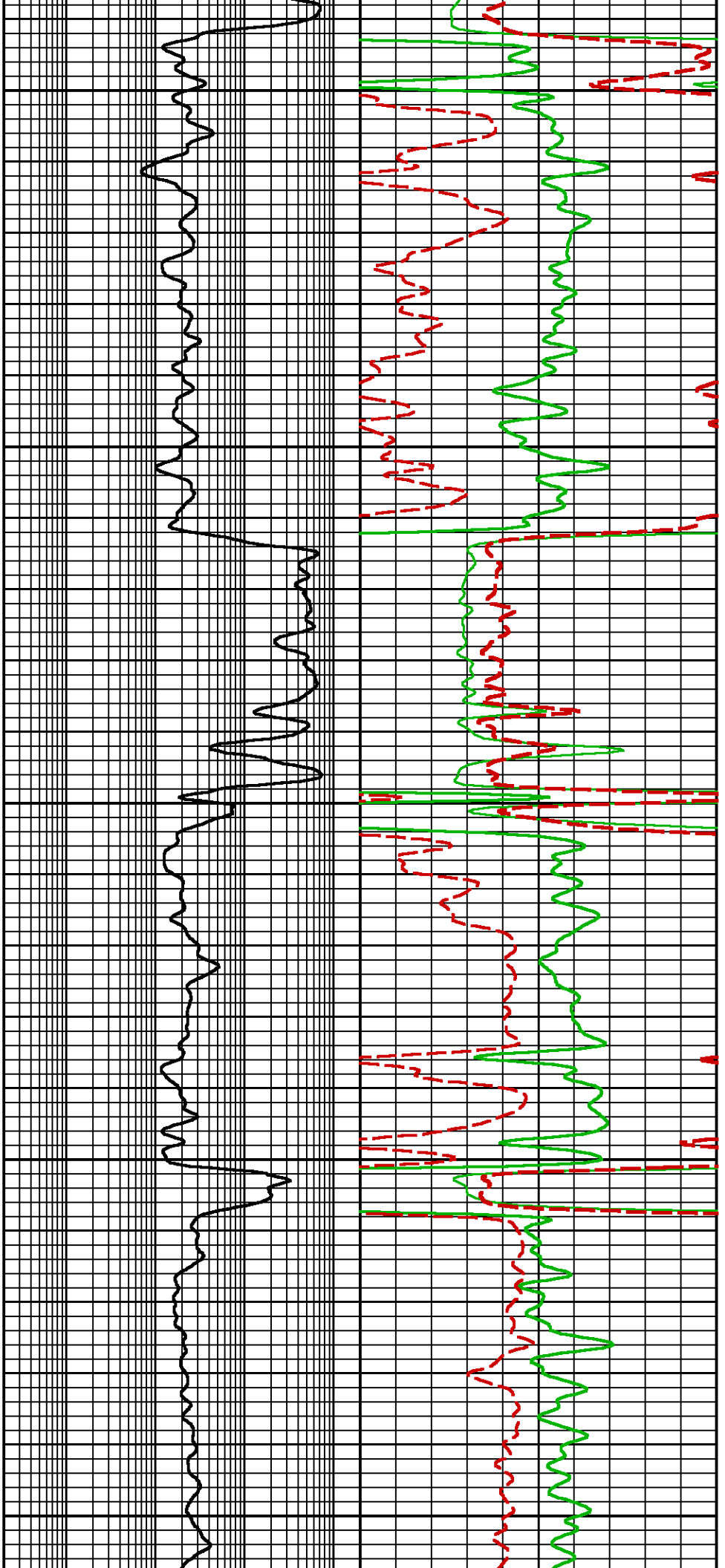


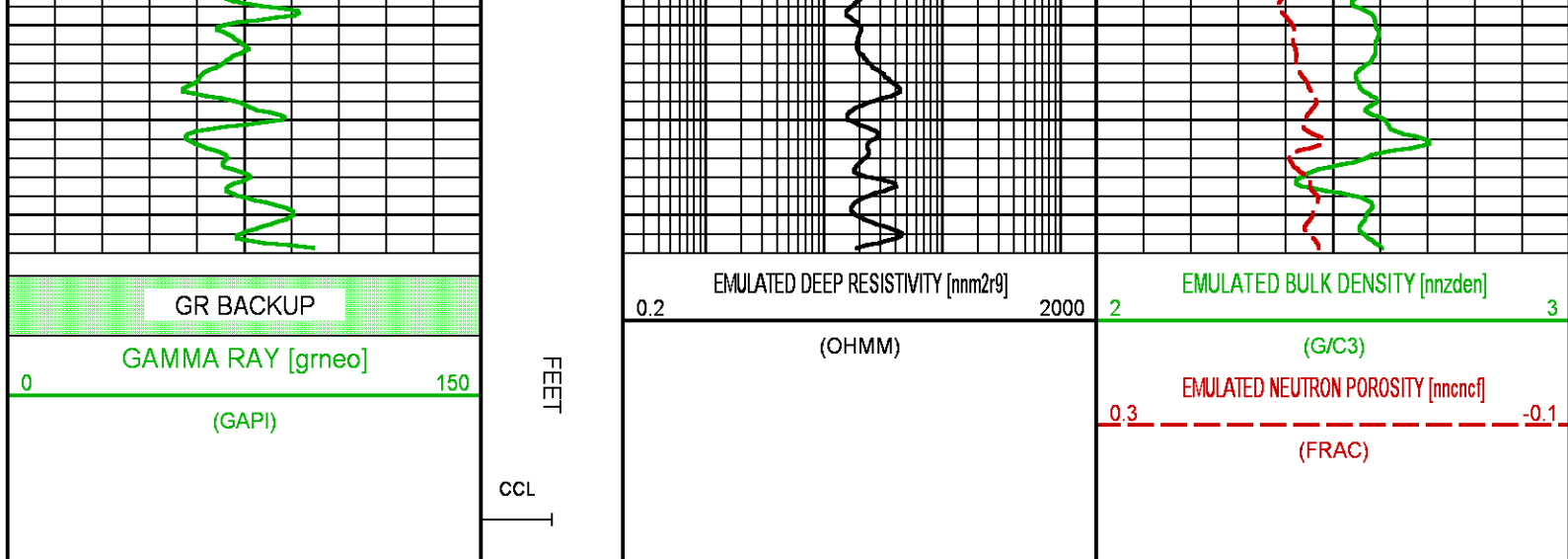



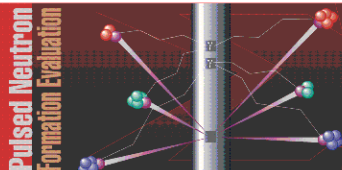










 	<b>COMPANY</b> <u>LARAMIE ENERGY LLC</u> <b>WELL</b> <u>NICHOLS FEDERAL 0994-24-17E</u> <b>FIELD</b> <u>VEGA</u> <b>COUNTY</b> <u>MESA</u> <b>STATE</b> <u>COLORADO</u>	<b>FILE NO:</b> _____  <b>API NO:</b> <u>05077103940000</u>	
	<b>LOCATION:</b> <u>SEE REMARKS SECTION</u>	<b>ELEVATIONS:</b> KB <u>7236.0 FT</u> DF _____ GL <u>7212.0 FT</u>	
	<b>SEC</b> <u>24</u> <b>TWP</b> <u>9S</u> <b>RGE</b> <u>94W</u>	<b>DATE</b> <u>01-JUL-2018</u>	