



**PIONEER**  
Pioneer Energy Services

**DUAL IND / DUAL COMP  
POROSITY LOG**

Company **EXTRACTION OIL & GAS, LLC**  
Well **CS-KINKADE #C6-1-13**  
Field **WATTENBERG**  
County **WELD**  
State **COLORADO**

Company **EXTRACTION OIL & GAS, LLC**  
Well **CS-KINKADE #C6-1-13**  
Field **WATTENBERG**  
County **WELD** State **COLORADO**

Location: API #: 05-123-42915  
339' FSL & 1912' FEL  
SEC 36 TWP 6N RGE 66W  
Permanent Datum **GROUND LEVEL** Elevation **4665'**  
Log Measured From **KELLY BUSHING**  
Drilling Measured From **KELLY BUSHING**  
Other Services  
**NONE**  
Elevation  
K.B. 4690'  
D.F. N/A  
G.L. 4665'

Date	8/29/2017		
Run Number	ONE		
Depth Driller	N/A		
Depth Logger	N/A		
Bottom Logged Interval	6945'		
Top Log Interval	1550'		
Casing Driller	9.625" @ 1587'		
Casing Logger	1586'		
Bit Size	7.875"		
Type Fluid in Hole	OIL BASED MUD		
Salinity, ppm CL	N/A		
Density / Viscosity	8.8 N/A		
pH / Fluid Loss	N/A N/A		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	N/A @ N/A		
Rmf @ Meas. Temp	N/A @ N/A		
Rmc @ Meas. Temp	N/A @ N/A		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	N/A @ N/A		
Operating Rig Time	4 HOURS		
Max Rec. Temp. F	N/A		
Equipment Number	91		
Location	COLBY		
Recorded By	D. SCHMIDT		
Witnessed By	LARRY SIEGEL		

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

**Comments**

**N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.**

**S0 #1 - 402F**

**Log Measured From: KELLY BUSHING**

**25 Ft. Above Permanent Datum**

**THANK YOU FOR USING PIONEER ENERGY SERVICES**

**www.pioneerenergy.com**

**785-625-3858**

**Your Pioneer Energy Services Crew**

**Engineer: D. SCHMIDT**

**Operator:**

**Operator:**

**Operator:**

**This Log Record Was Witnessed By**

**Primary Witness: LARRY SIEGEL**


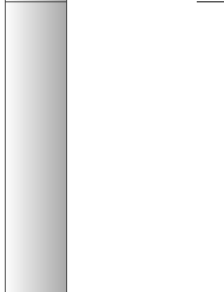
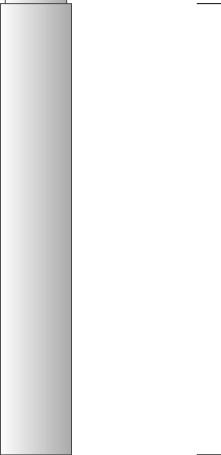

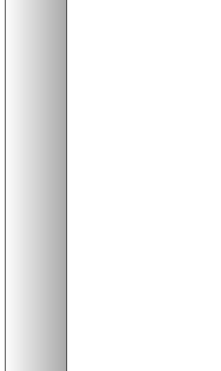
**Secondary Witness:**

**Secondary Witness:**

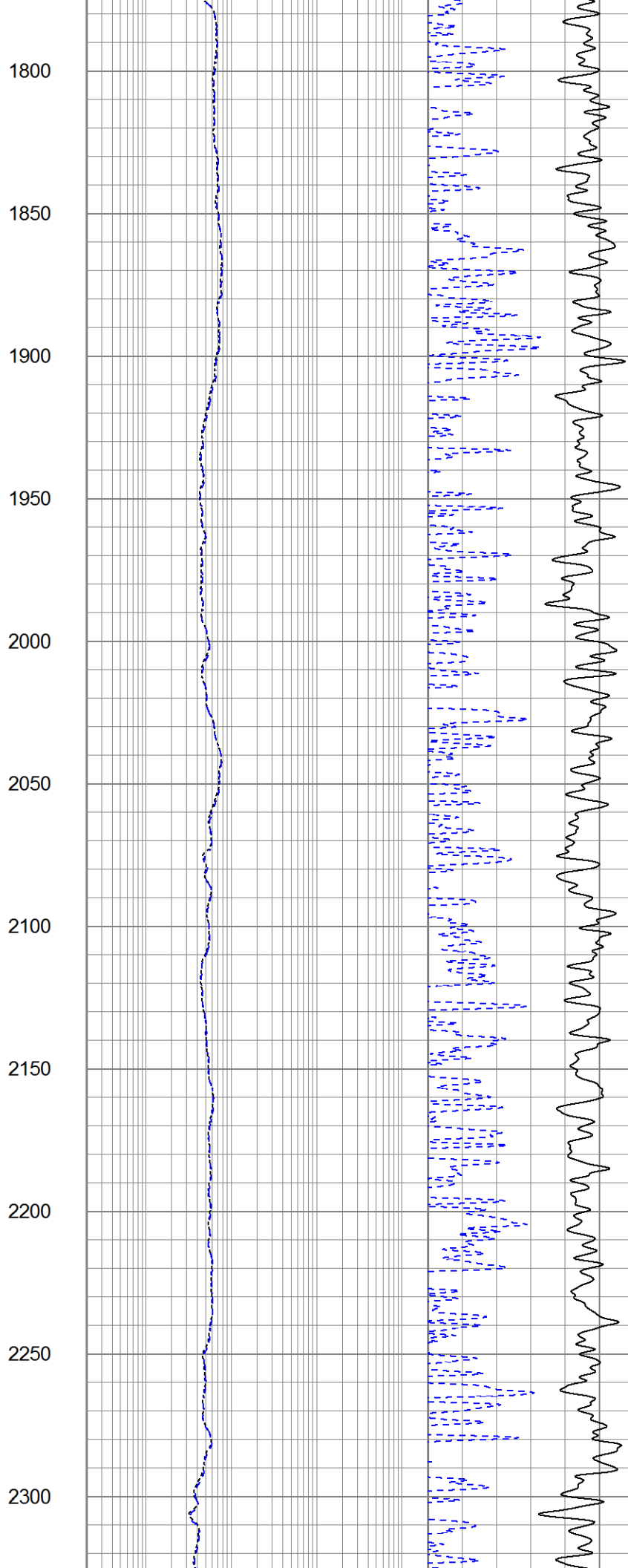
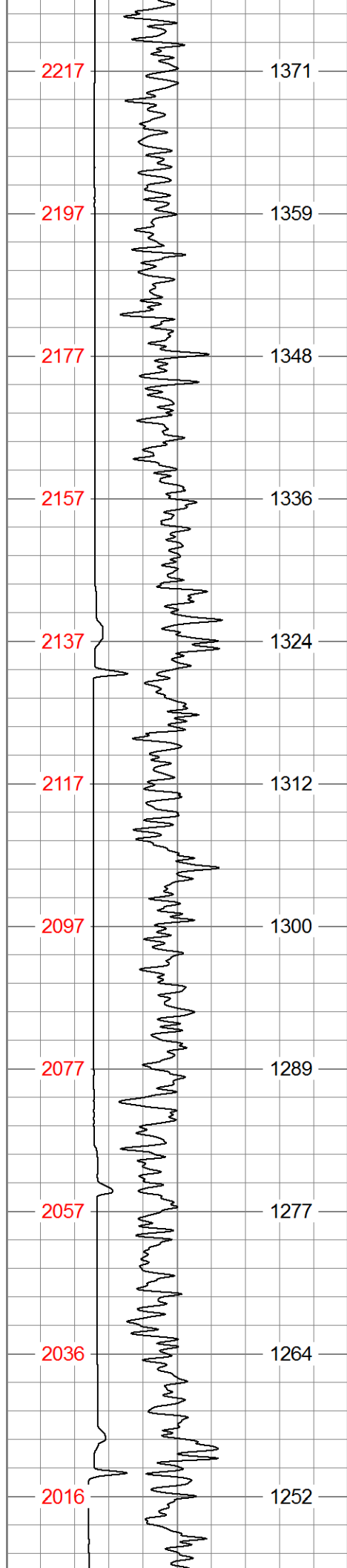
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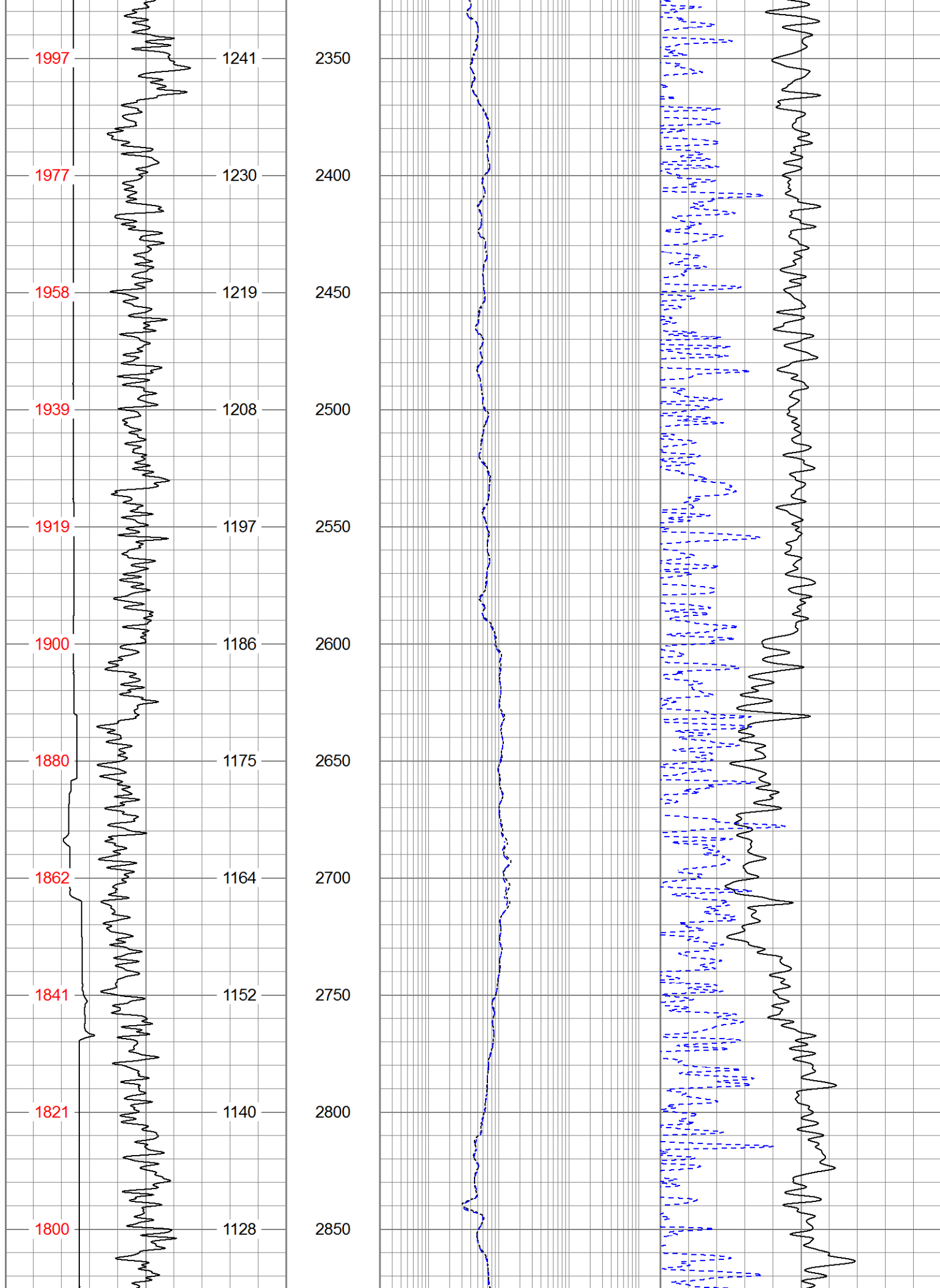
Top - Bottom

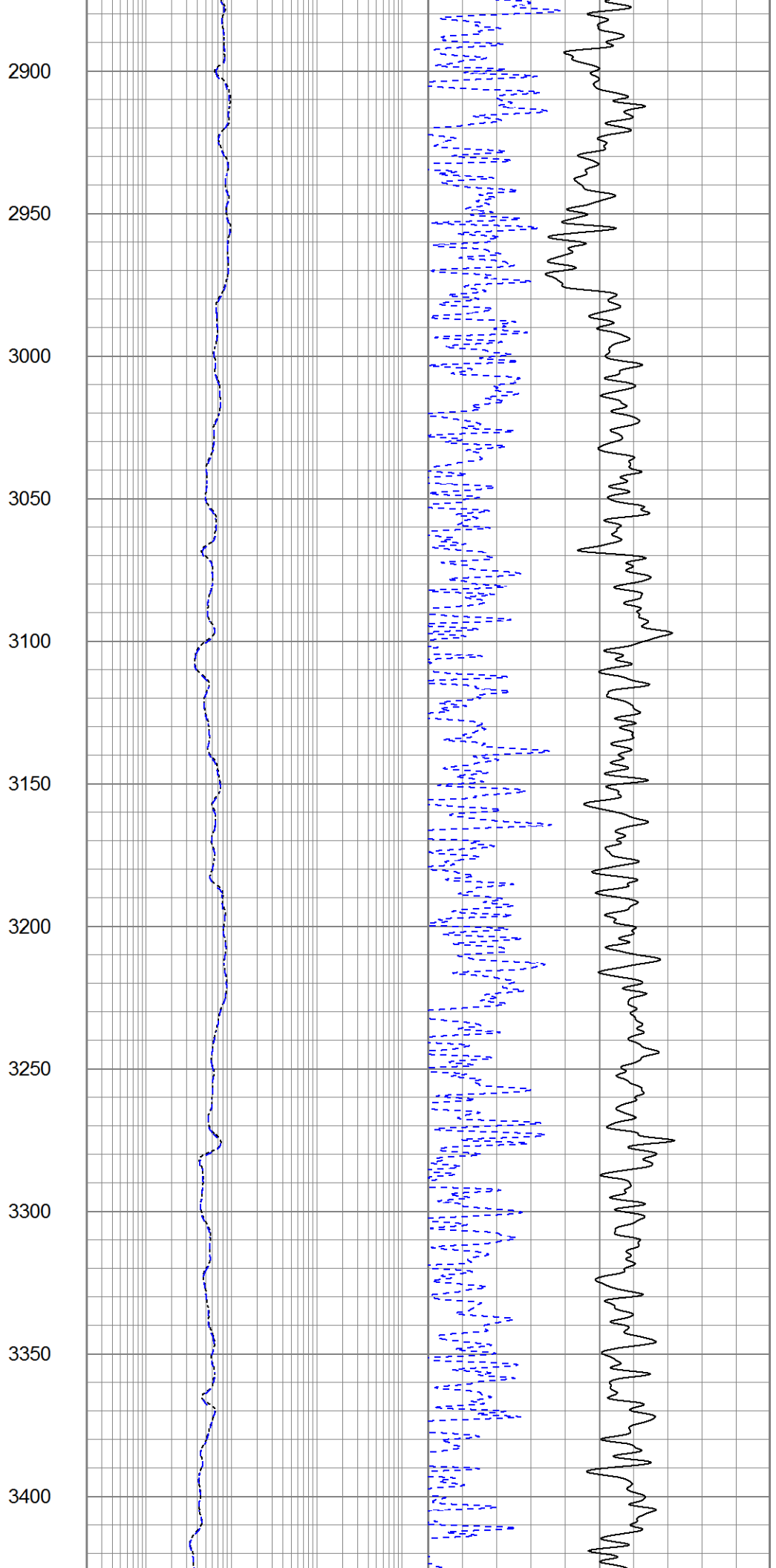
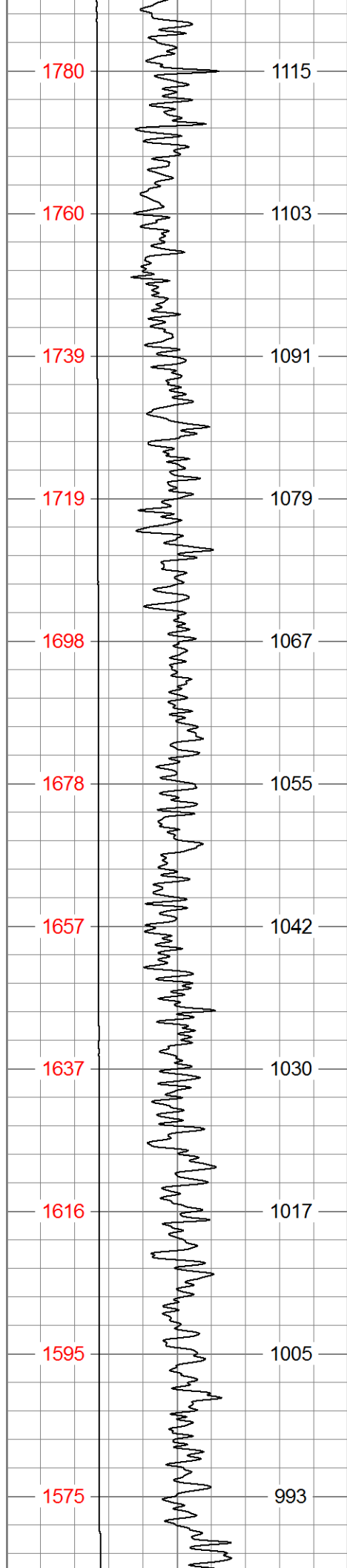
M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	0	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	80	0	5.5	0	6946	235	8.75

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	29.90 29.15		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	20.85 20.83 20.35		CDL-M&W (90-1031)	8.50	4.00	250.00
RLL3F RLL3	15.80 15.80					
CILD	8.00		DIL-M&W (PSI 91)	18.50	3.50	220.00

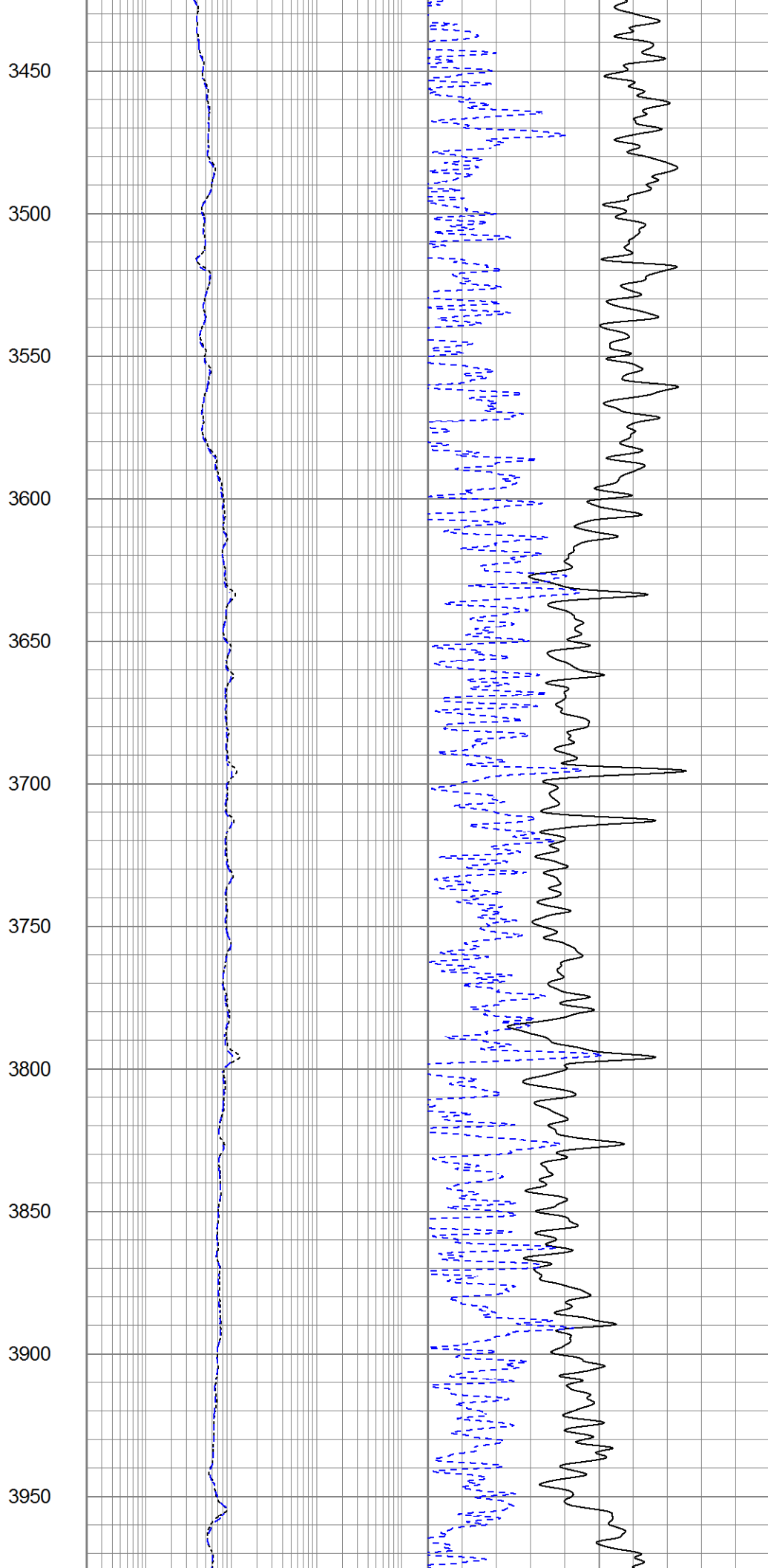
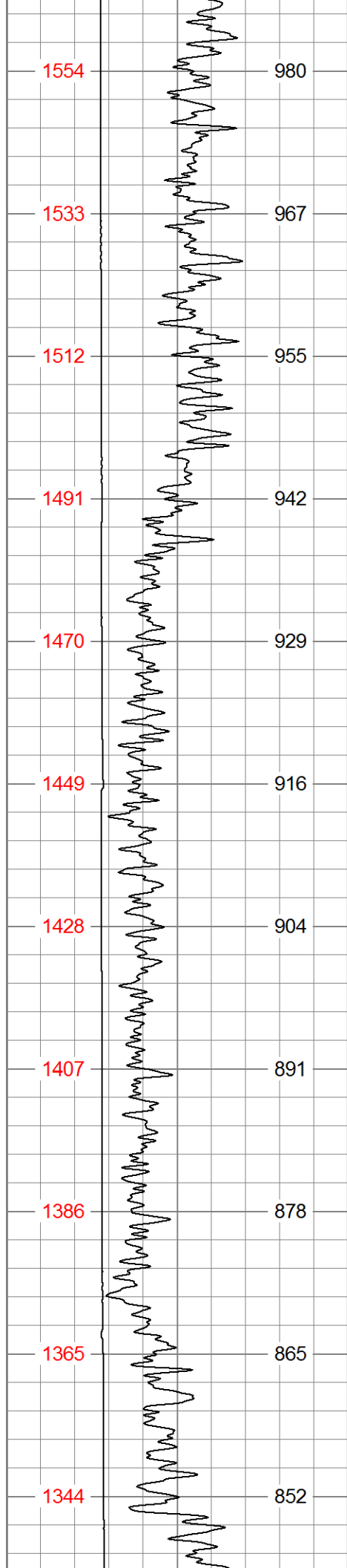


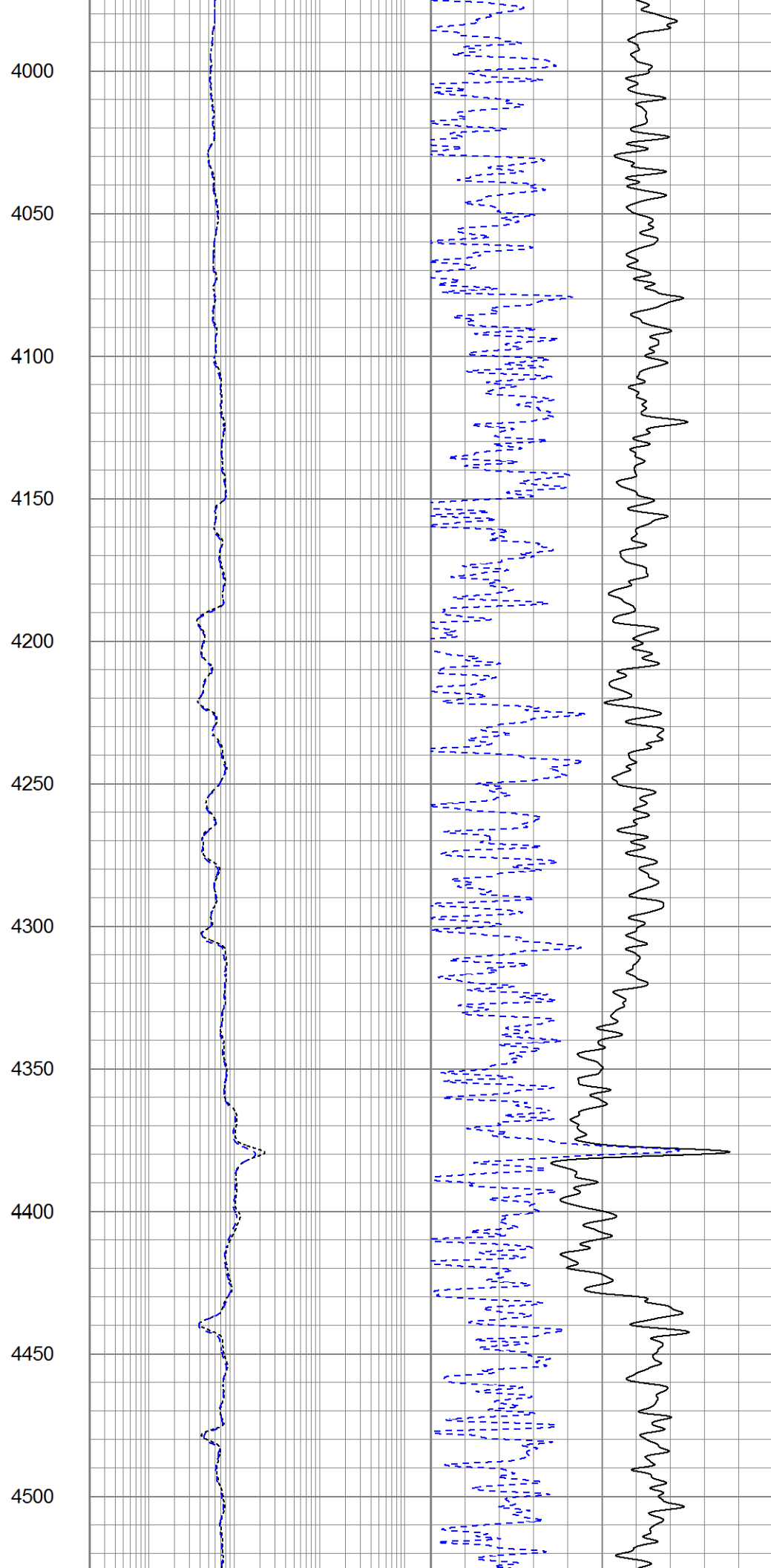
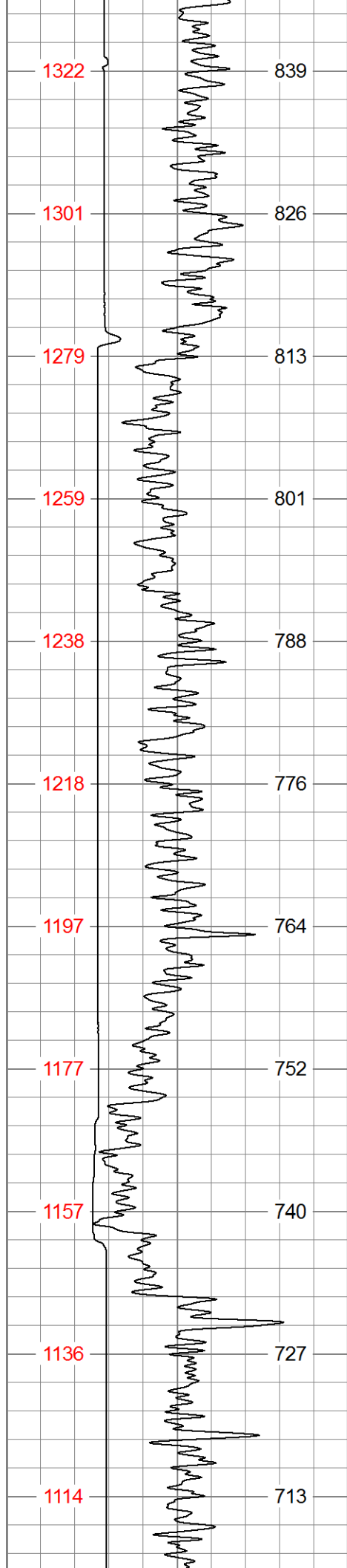




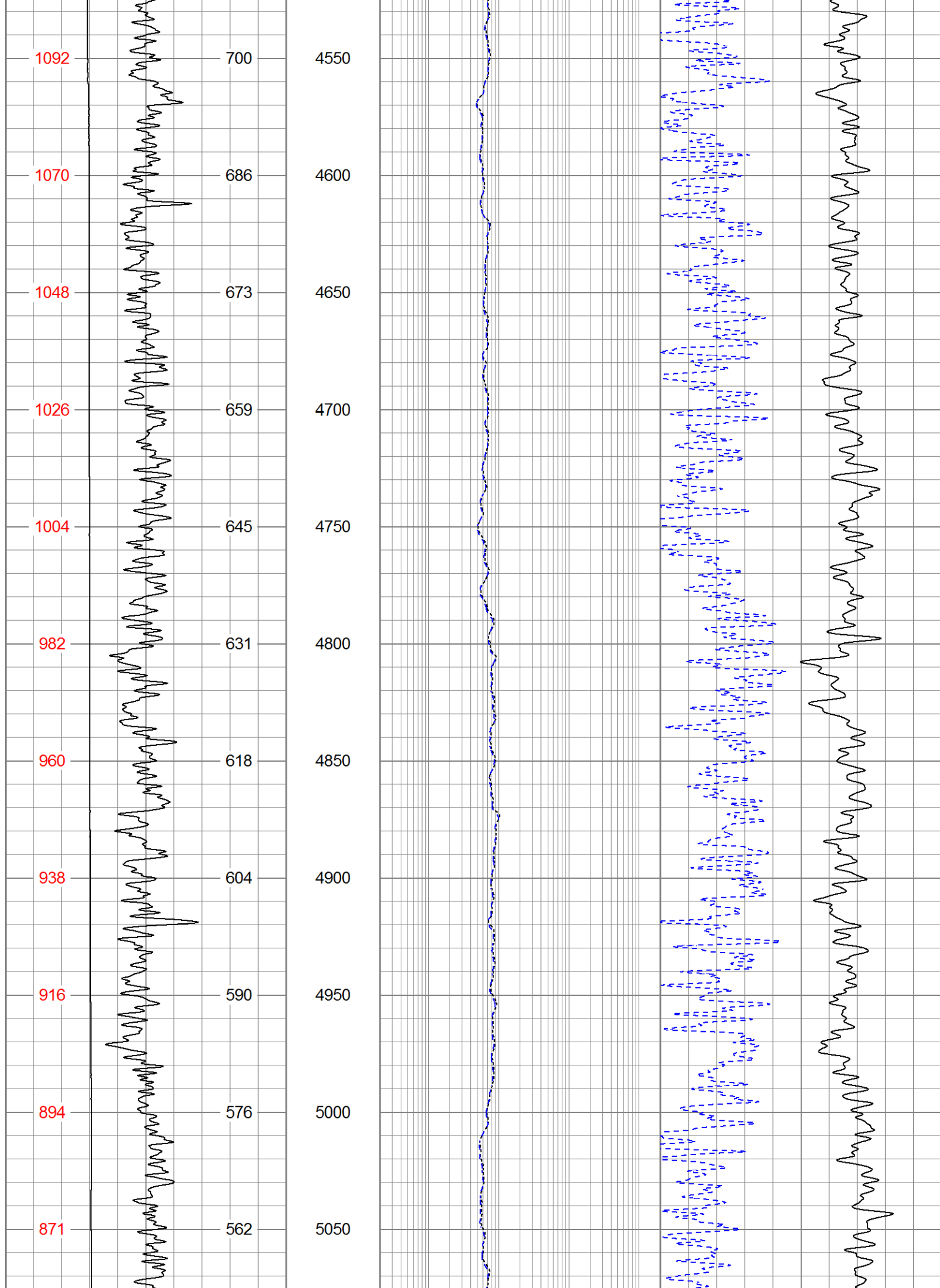


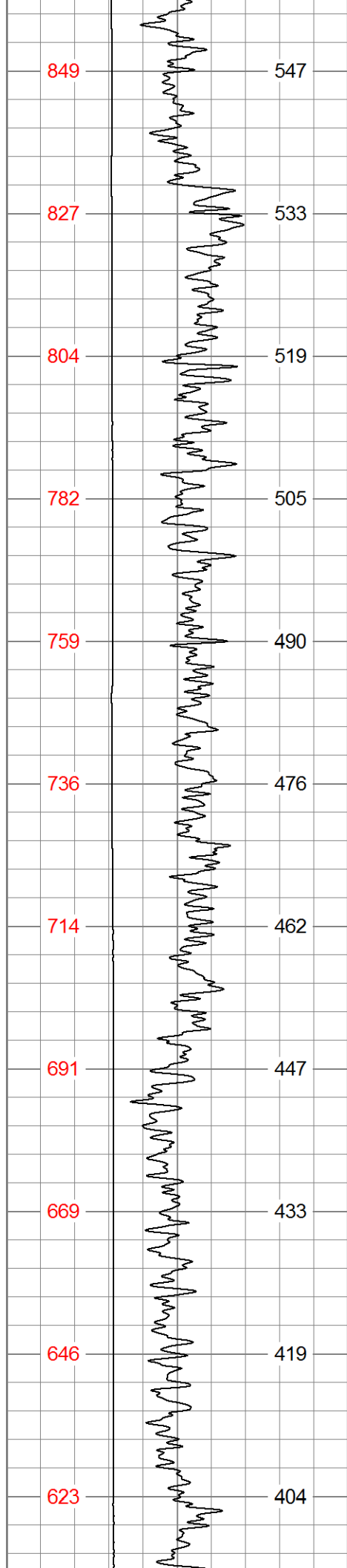












5100

5150

5200

5250

5300

5350

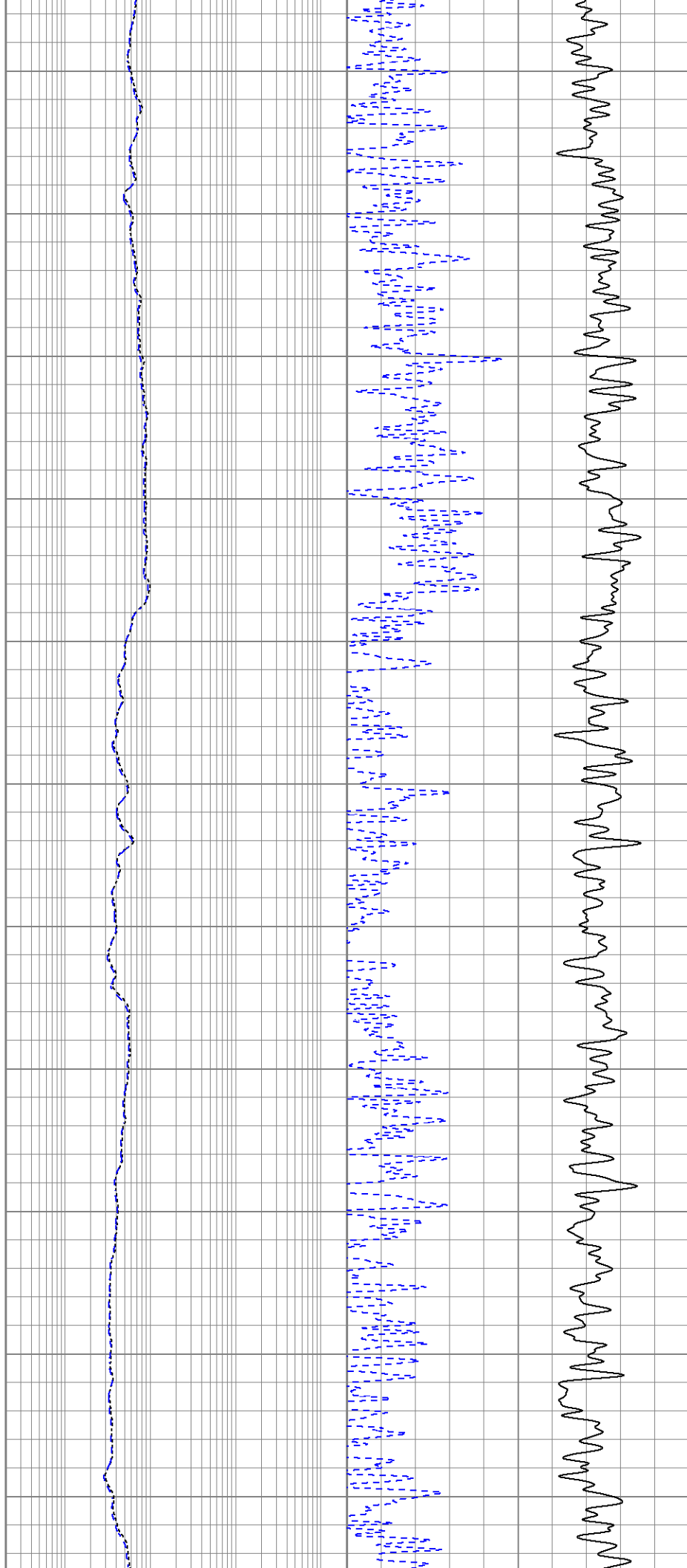
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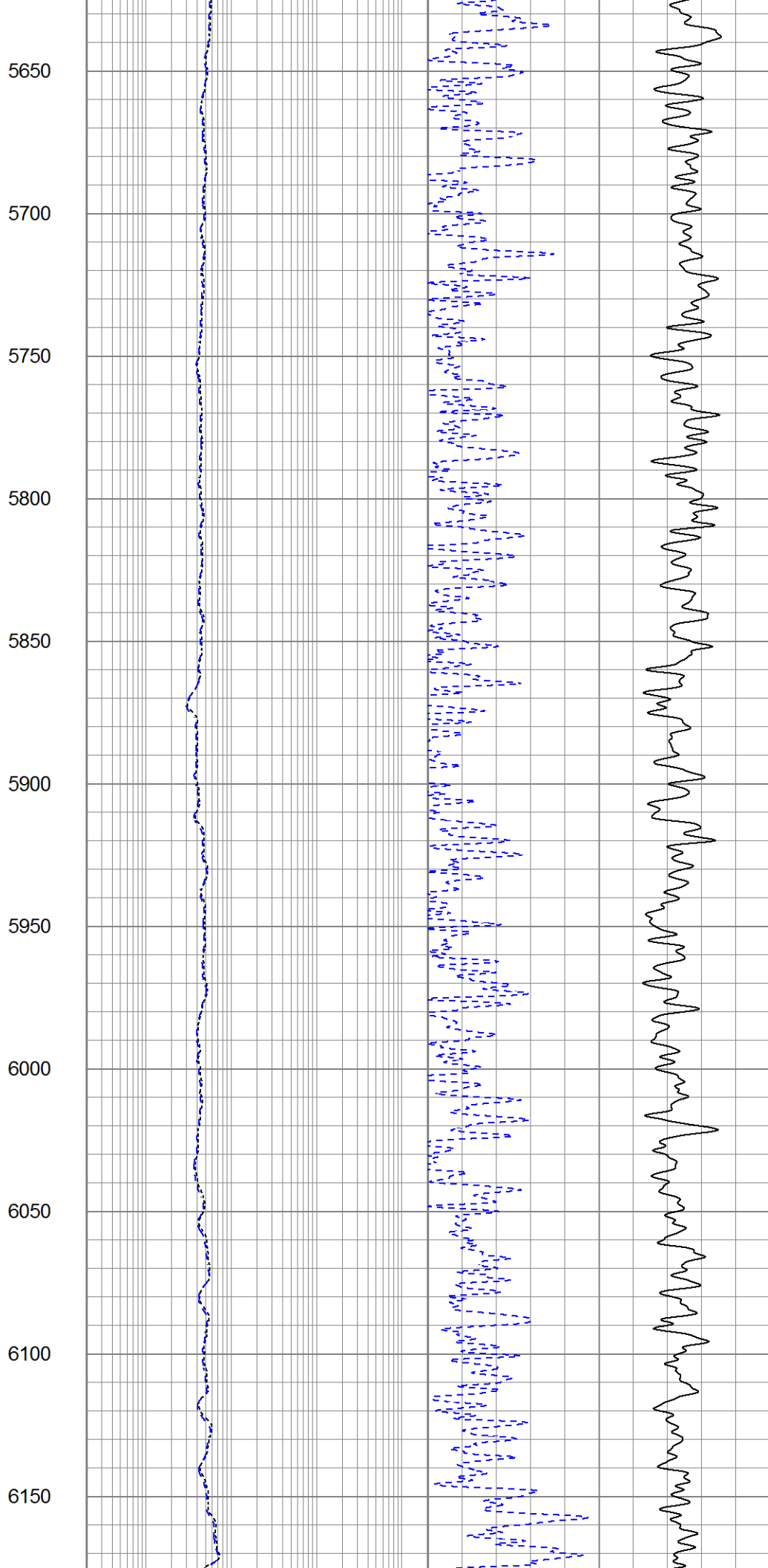
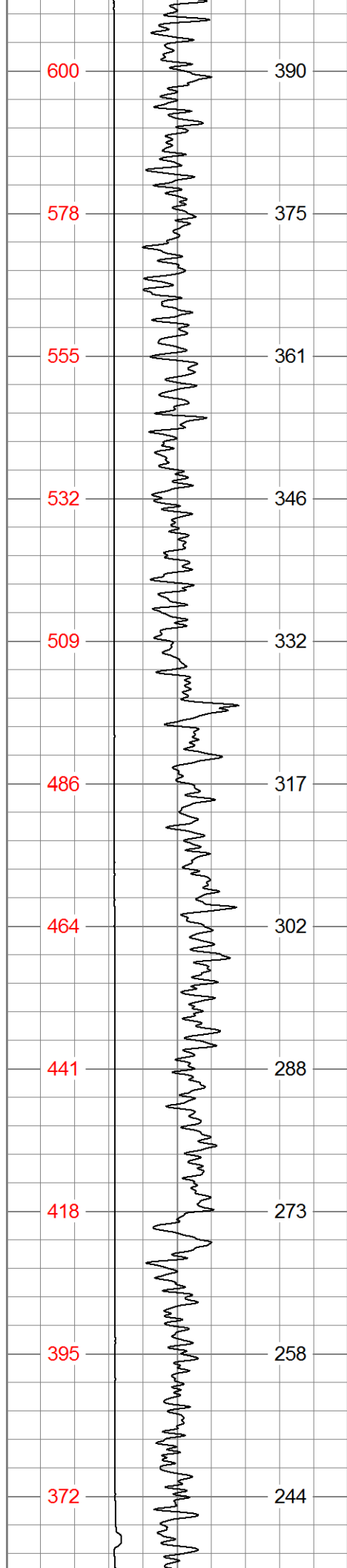
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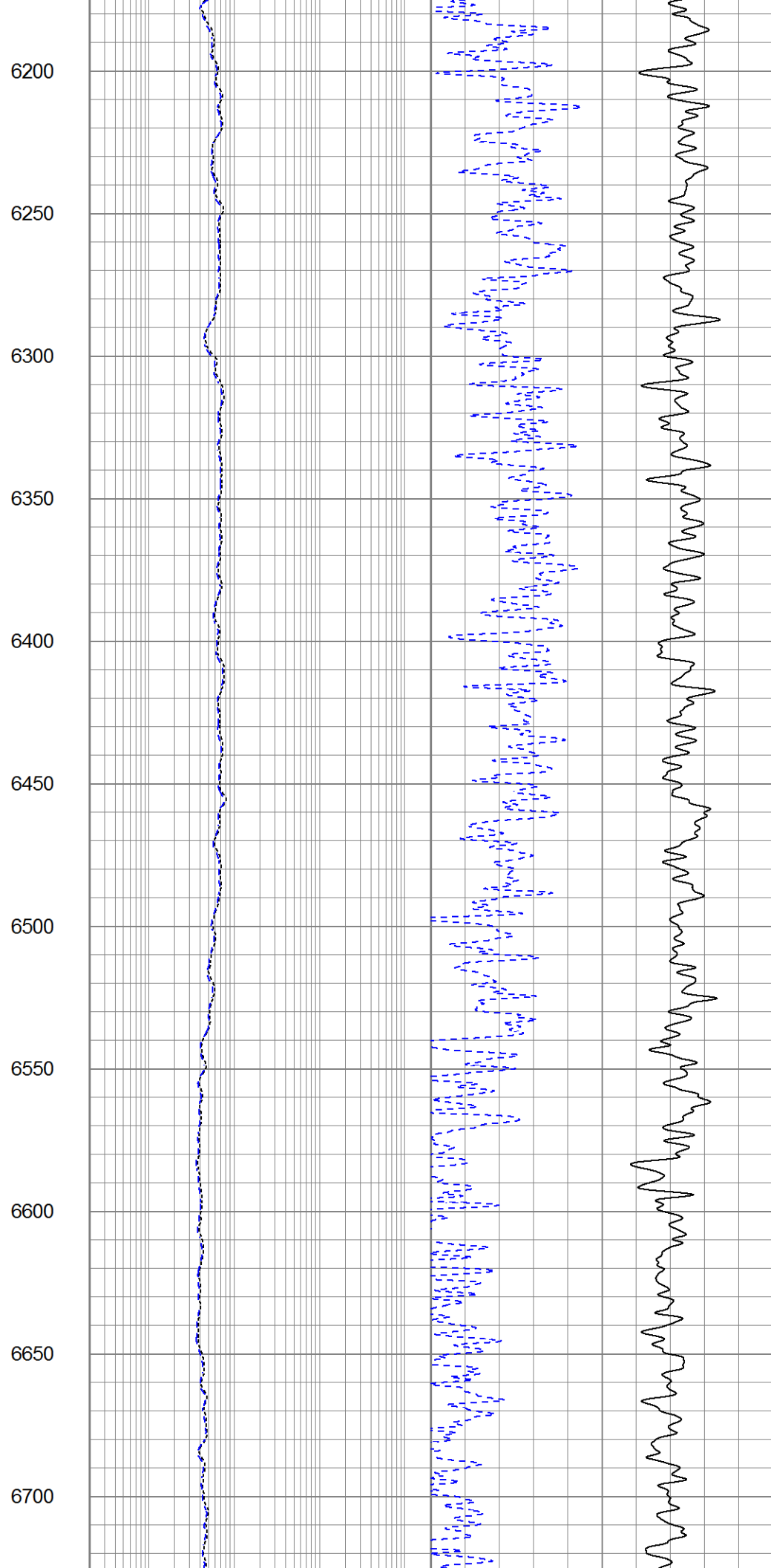
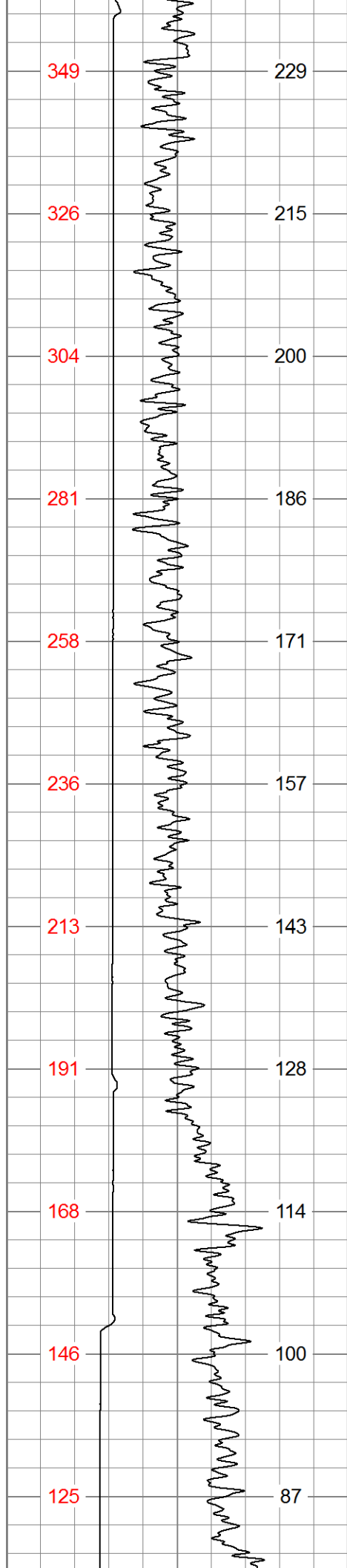
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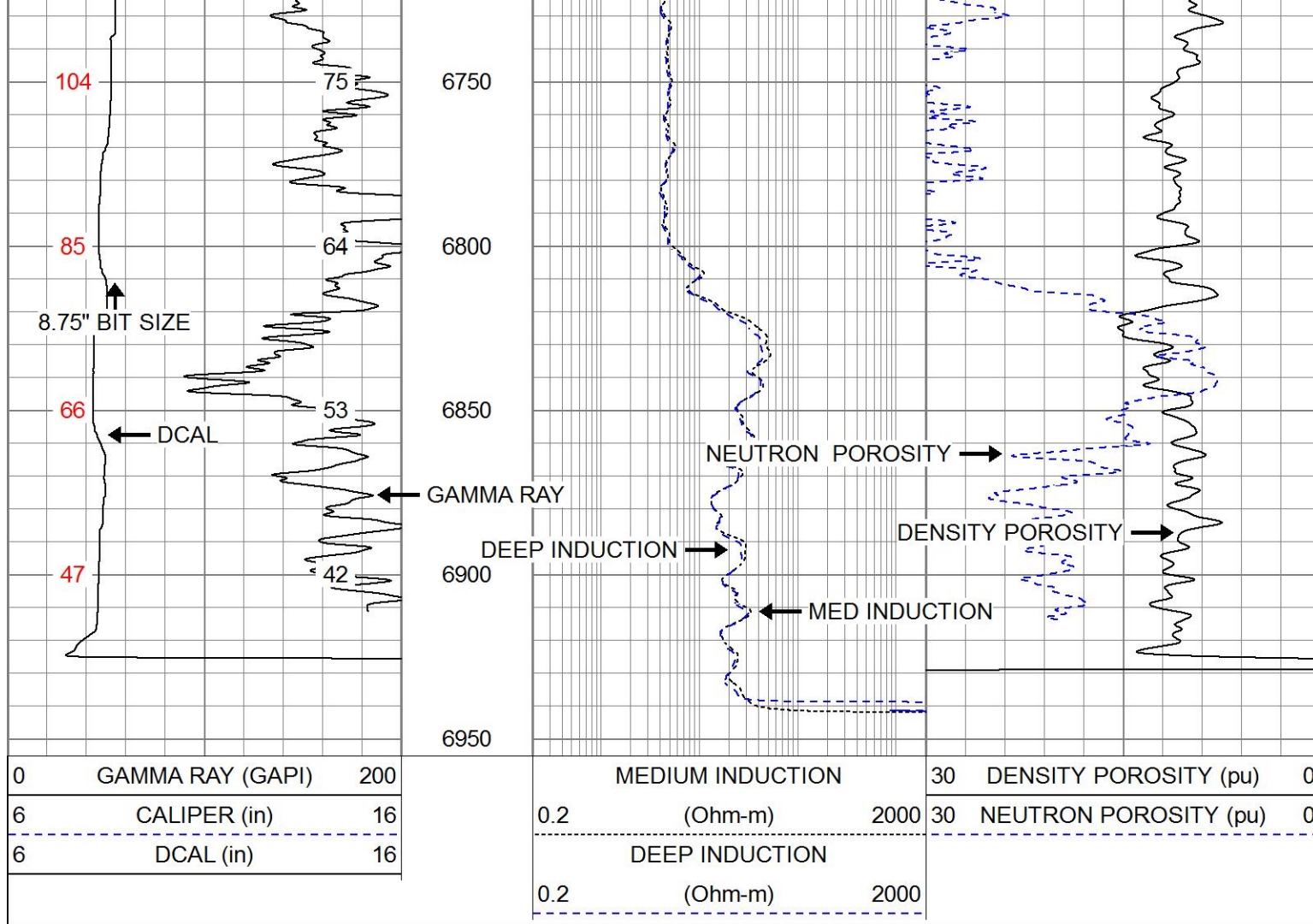
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5600











**PIONEER**  
Pioneer Energy Services

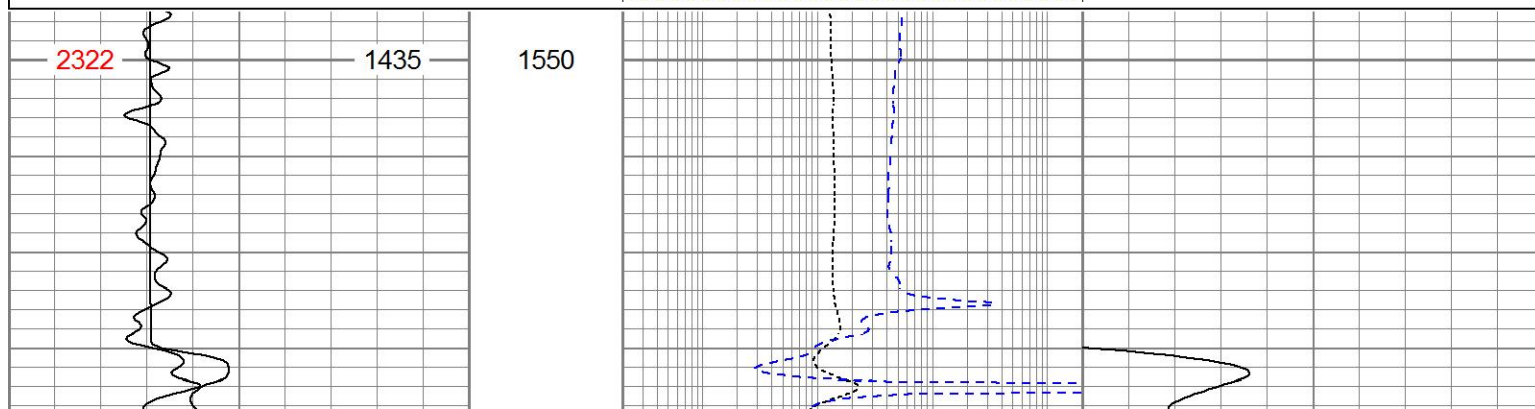
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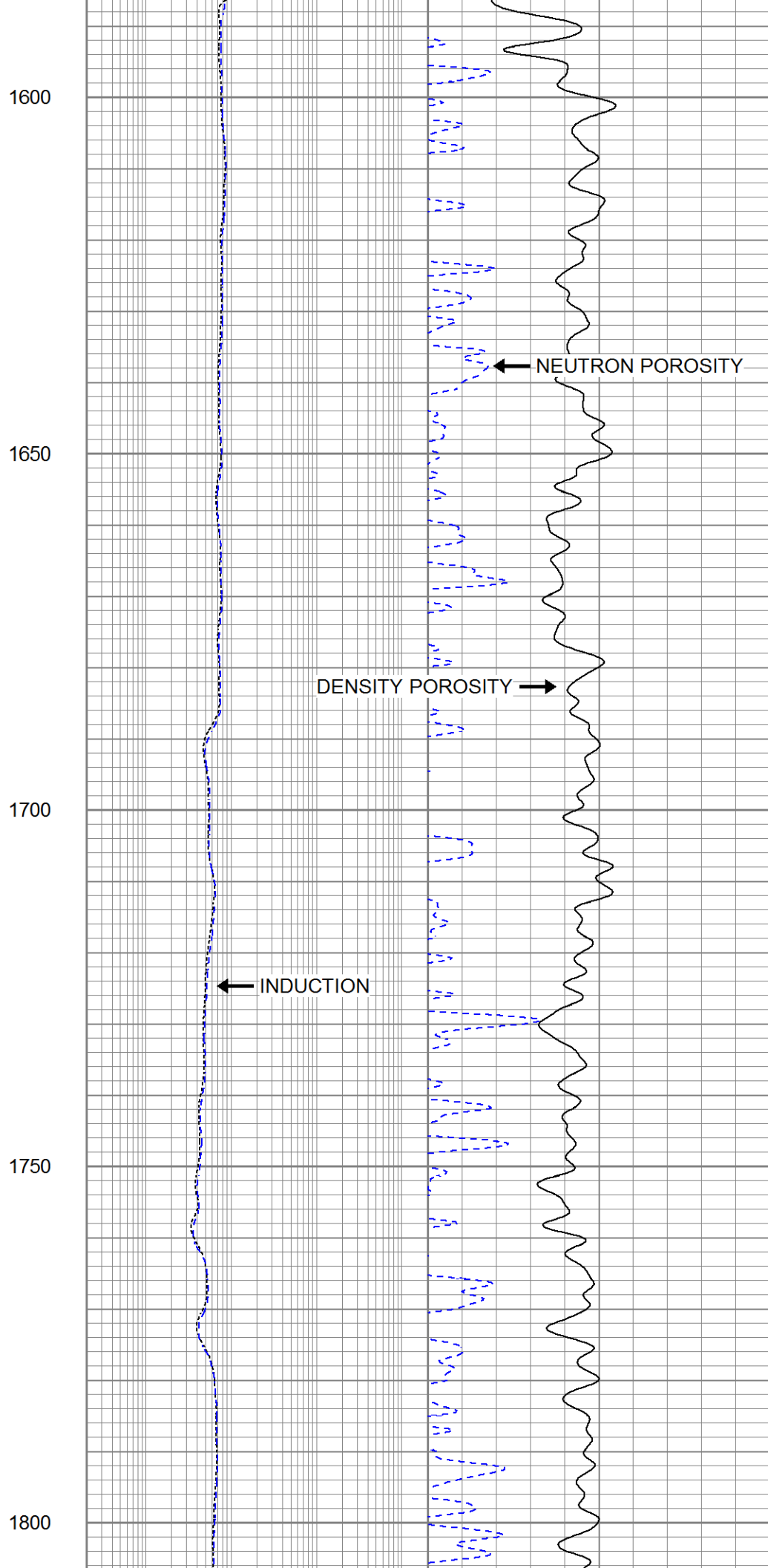
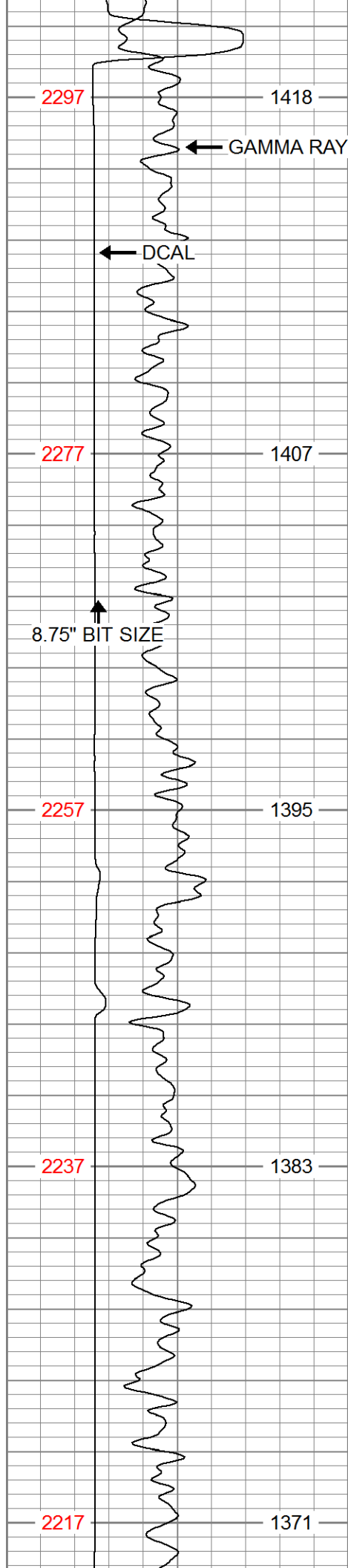
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Dataset Pathname	STACK/pass3.1
Presentation Format	split
Dataset Creation	Tue Aug 29 11:58:33 2017
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	200
6	CALIPER (in)	16
6	DCAL (in)	16

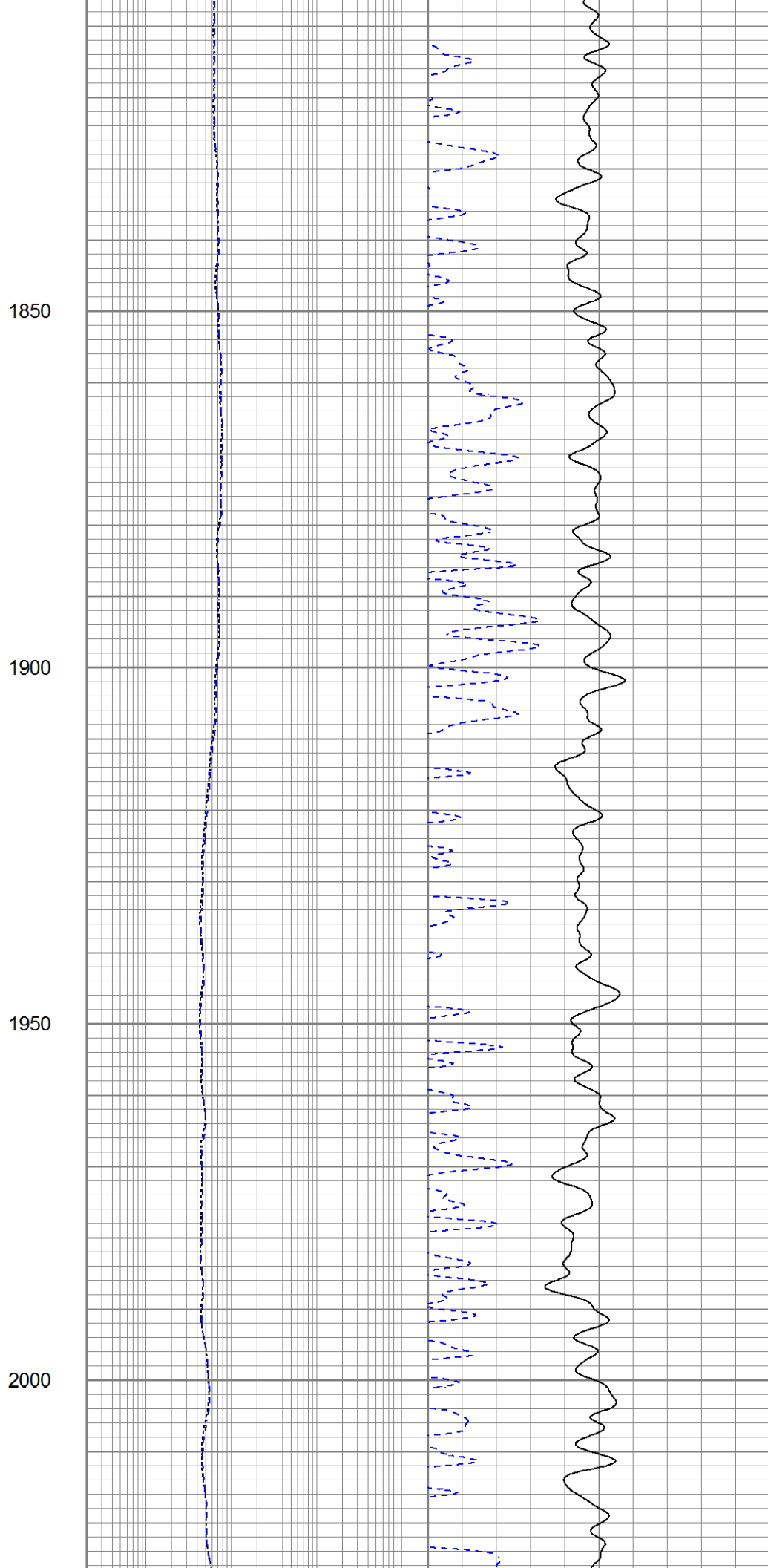
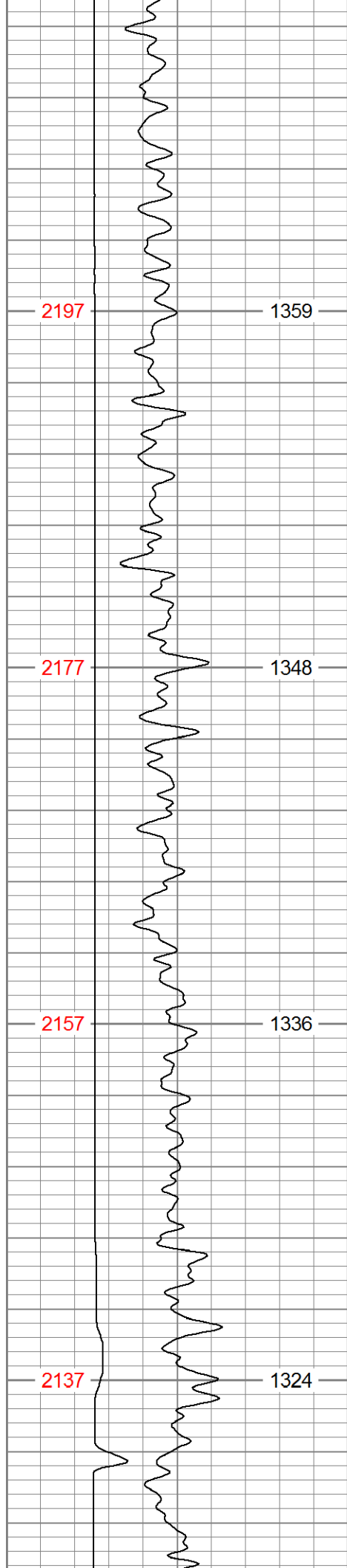
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

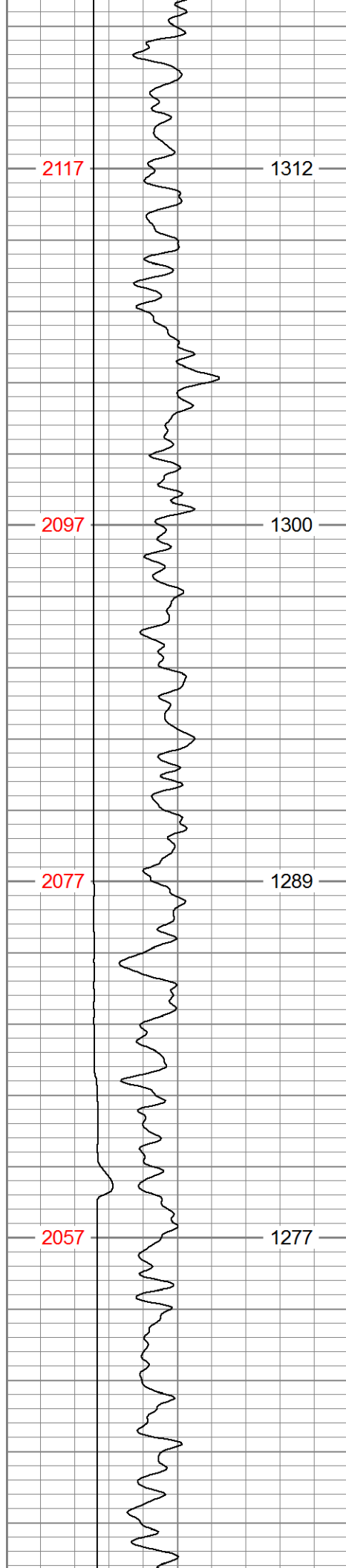
30	DENSITY POROSITY (pu)	0
30	NEUTRON POROSITY (pu)	0









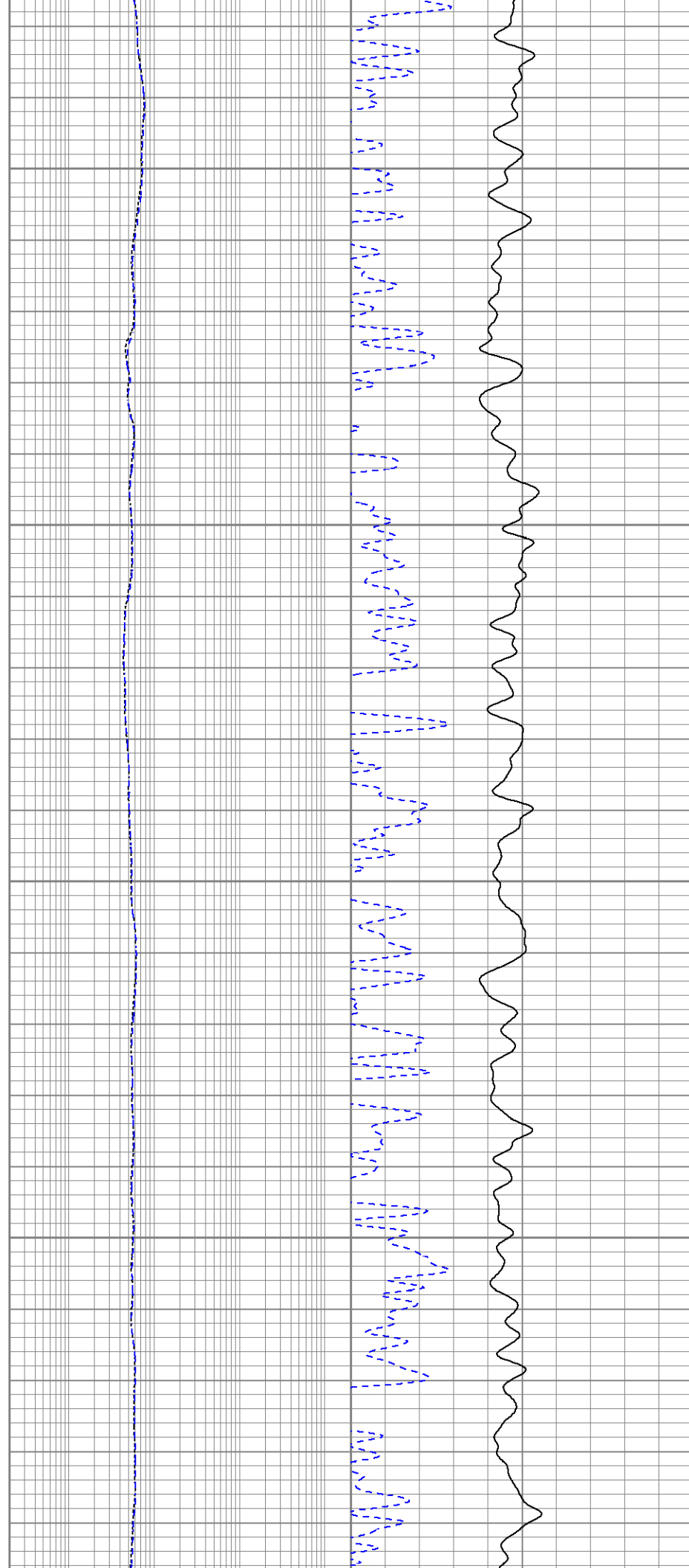


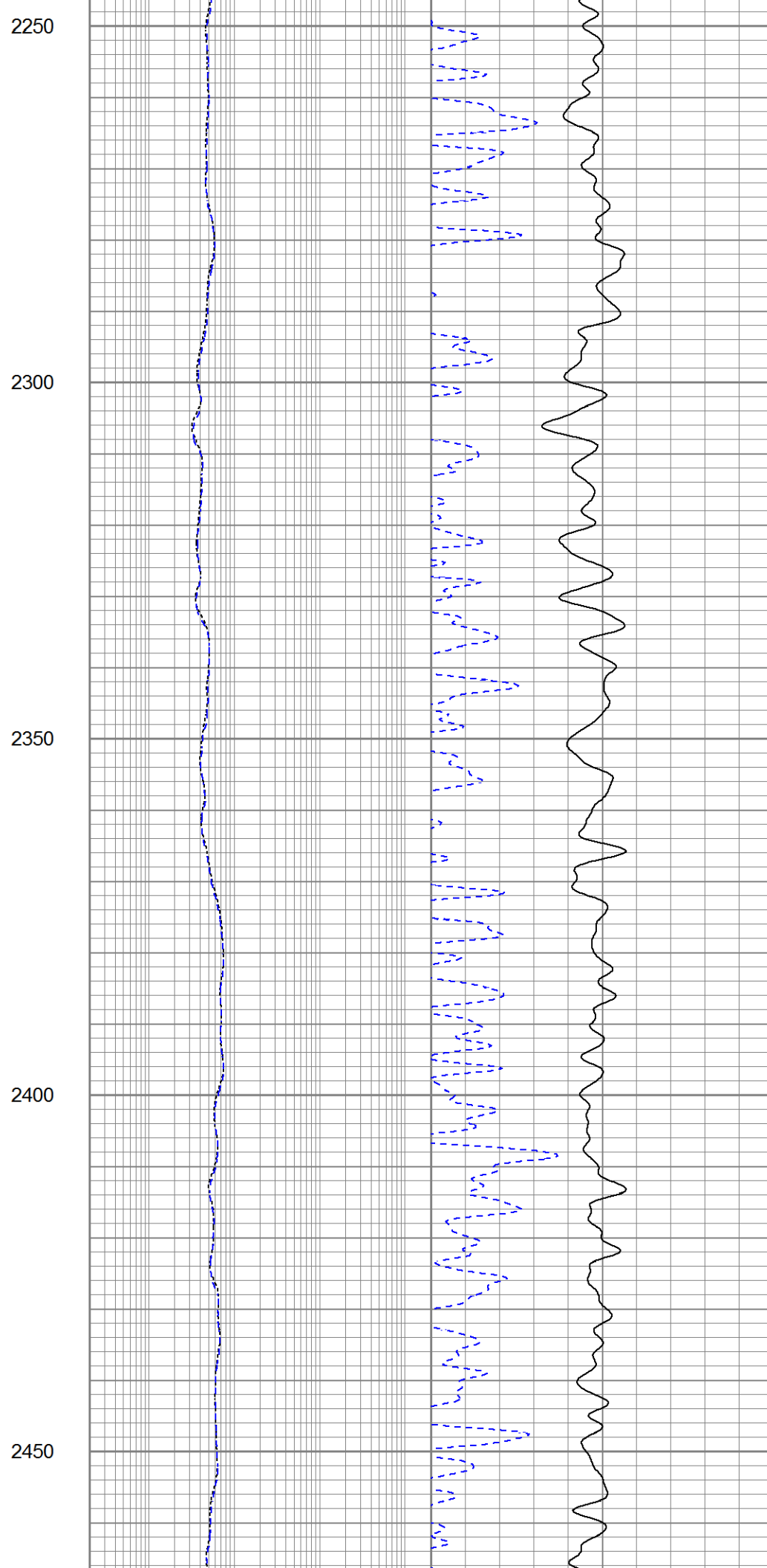
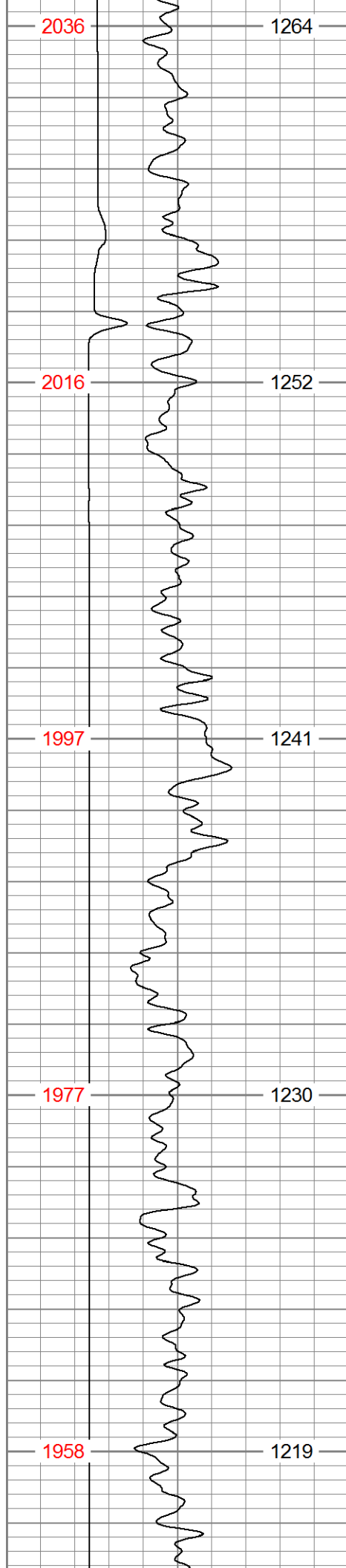
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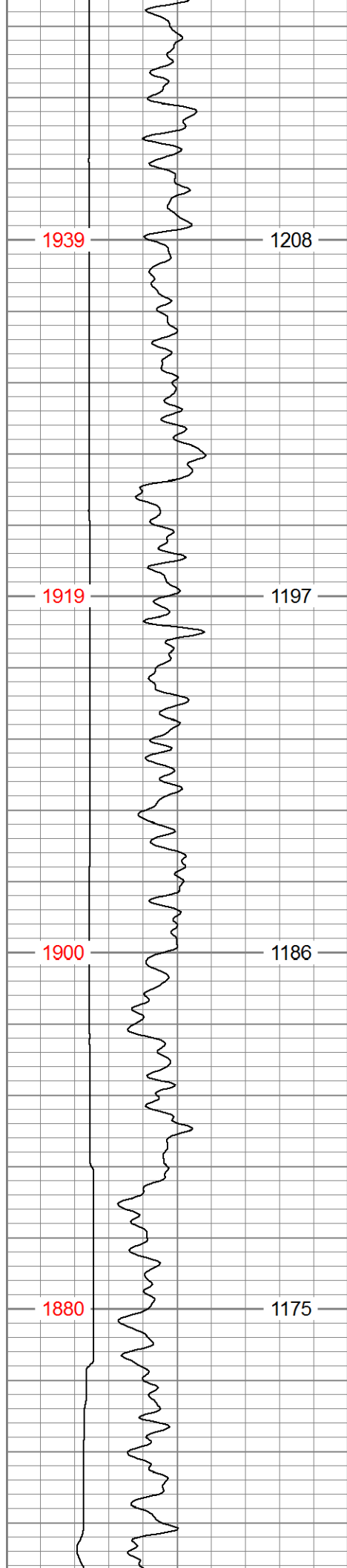
2100

2150

2200





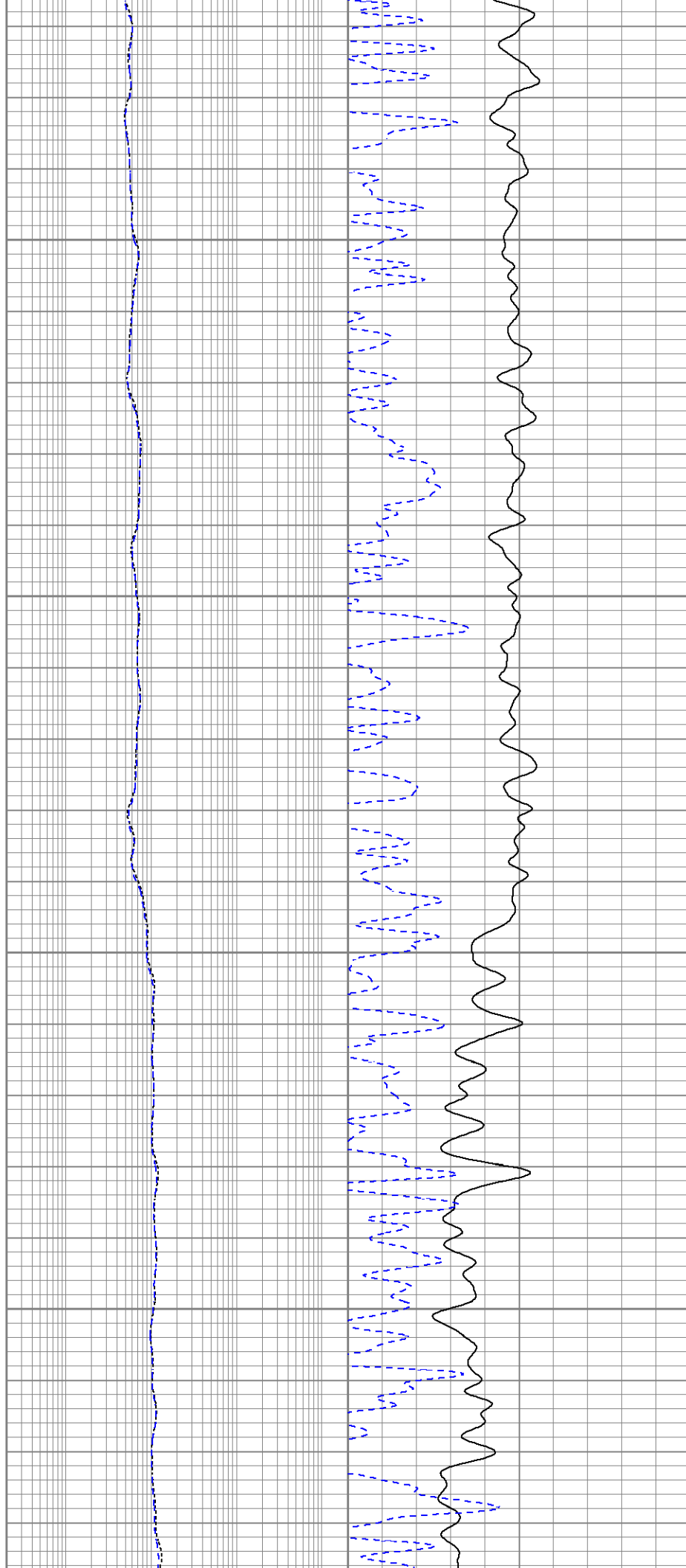


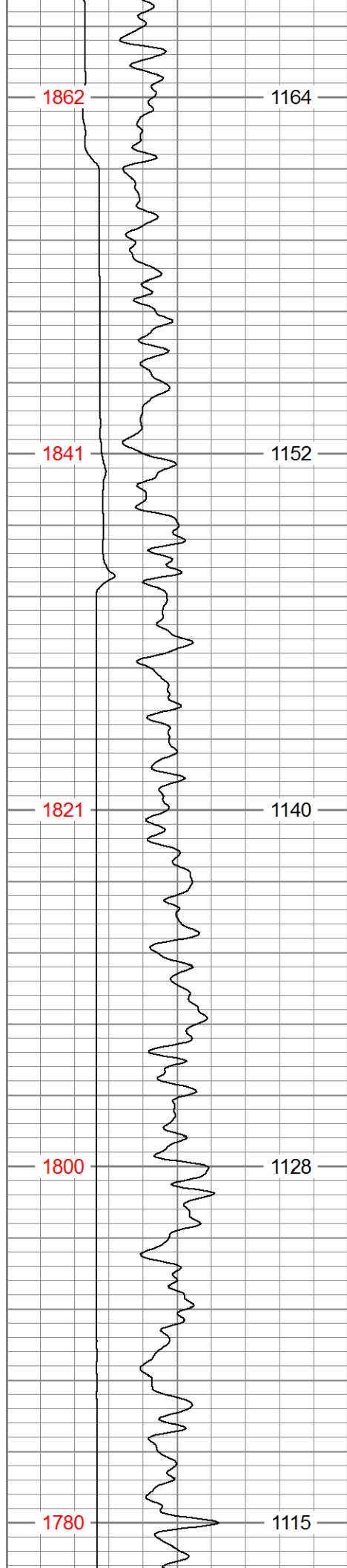
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2550

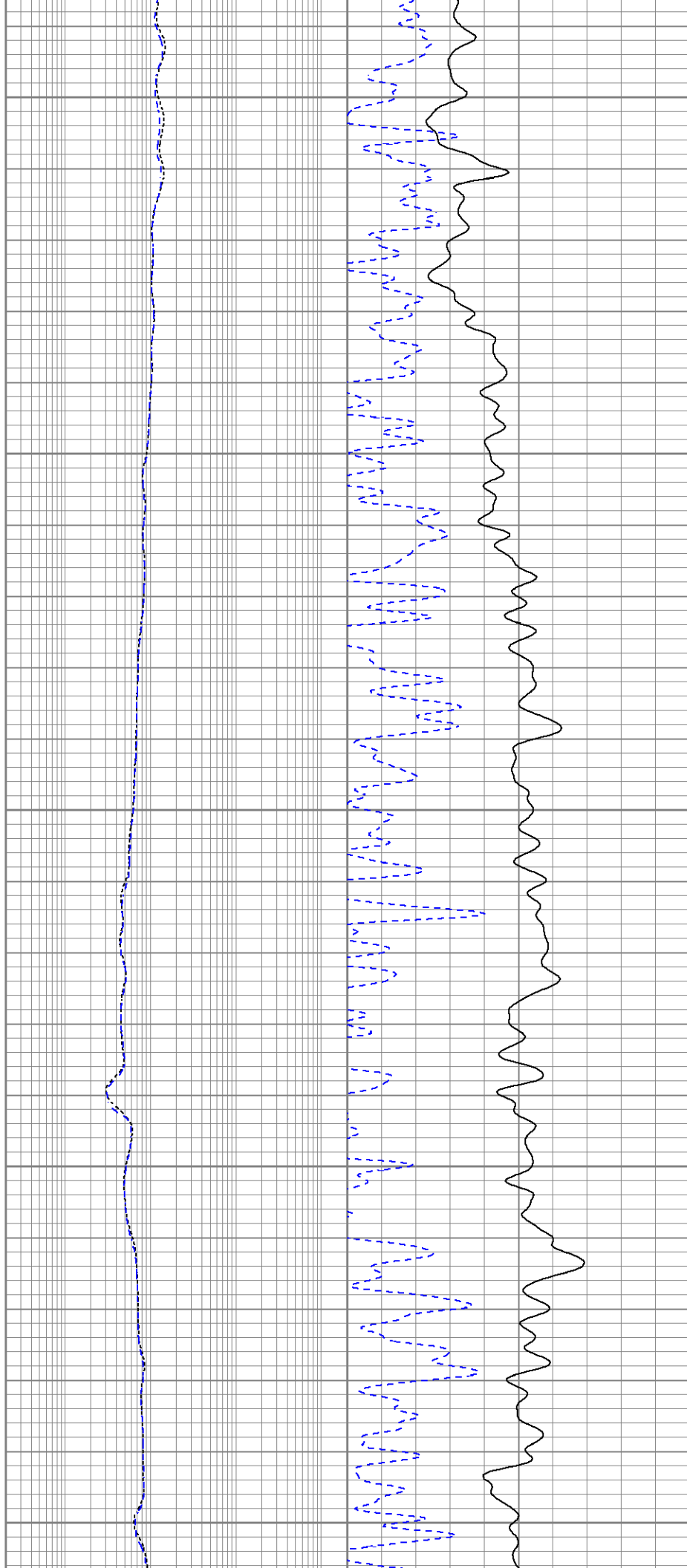
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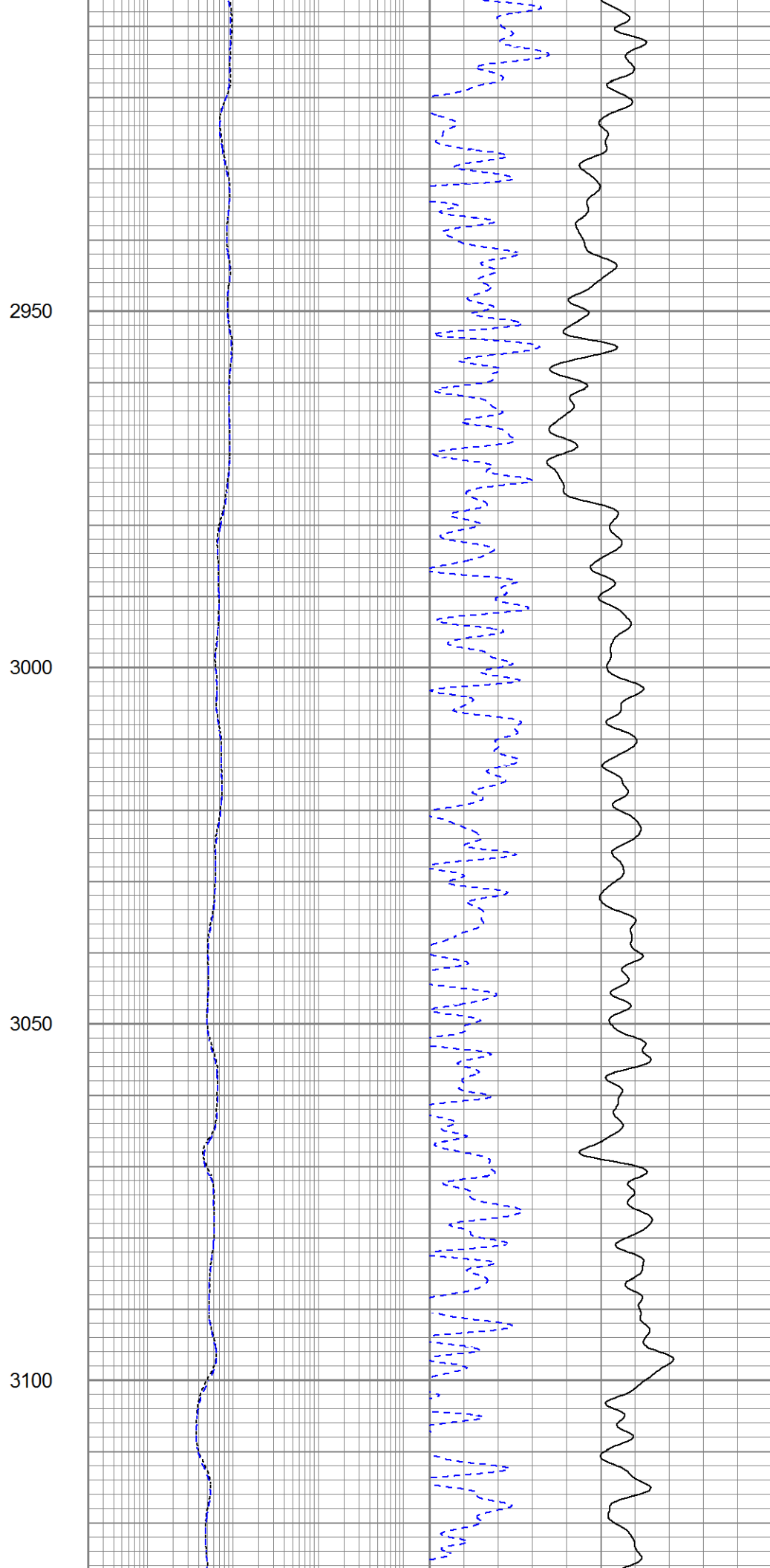
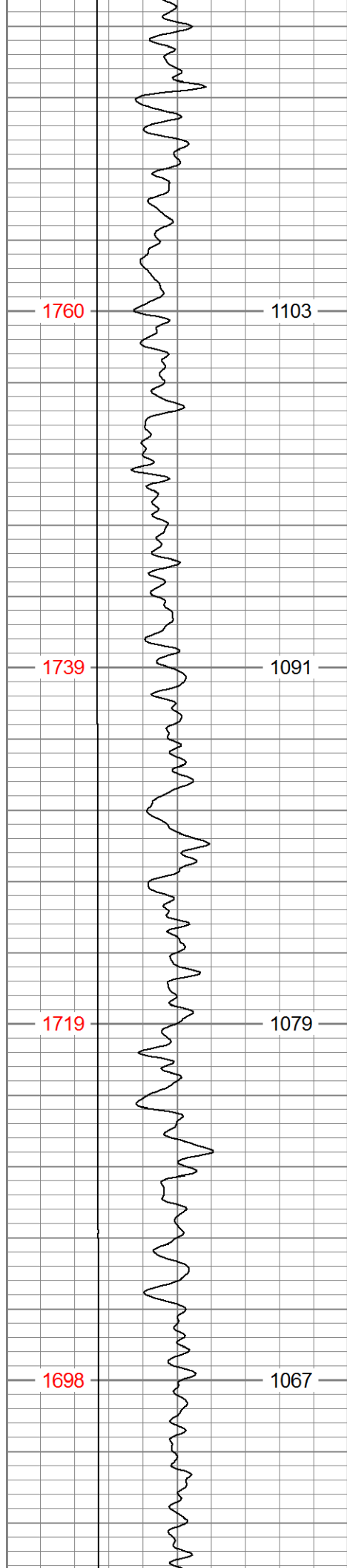
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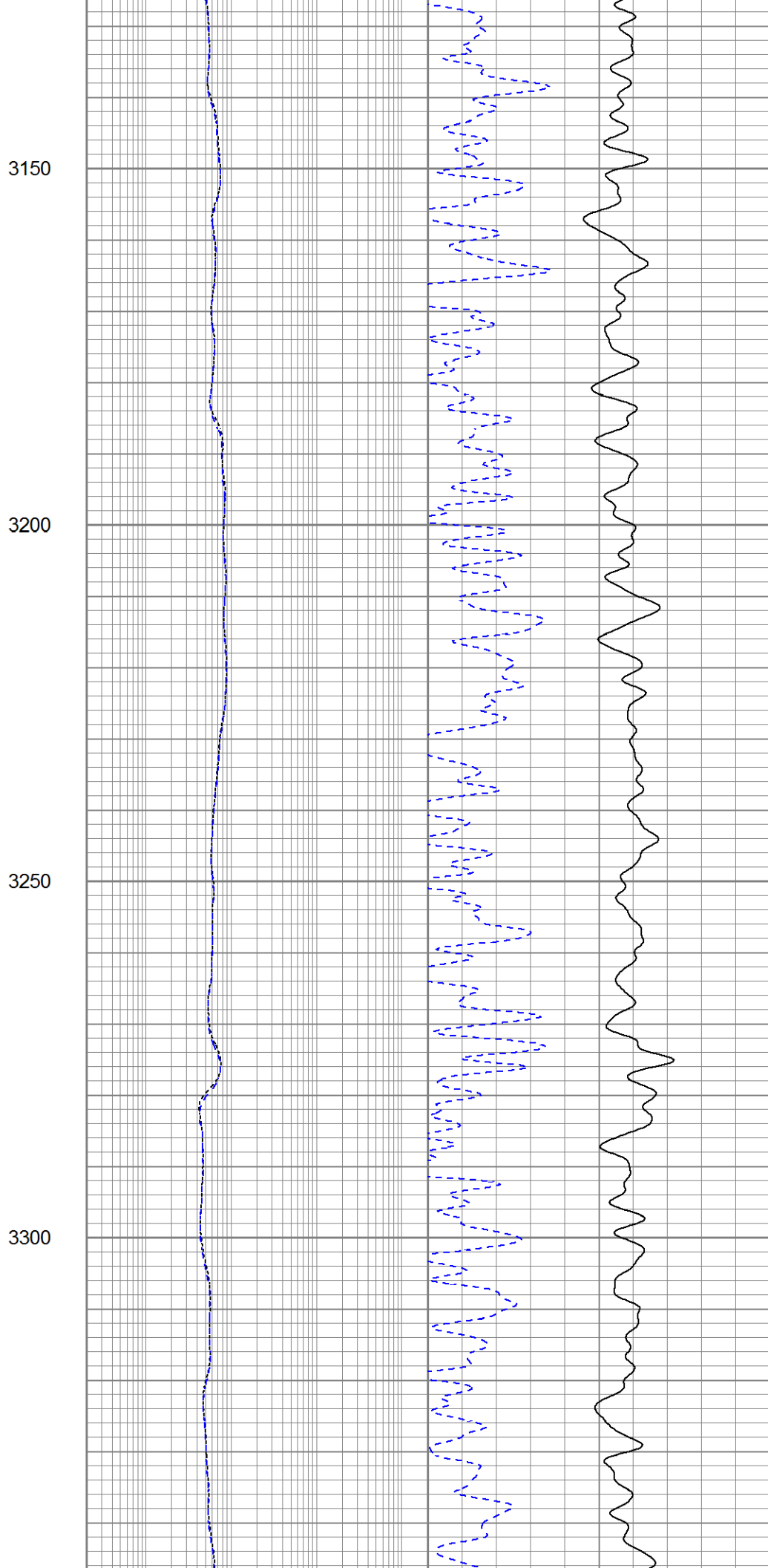
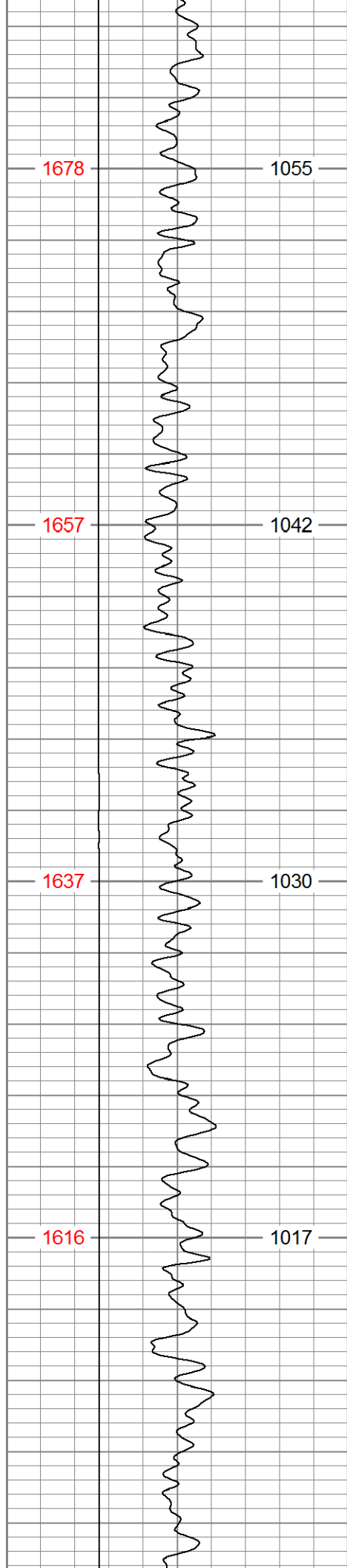


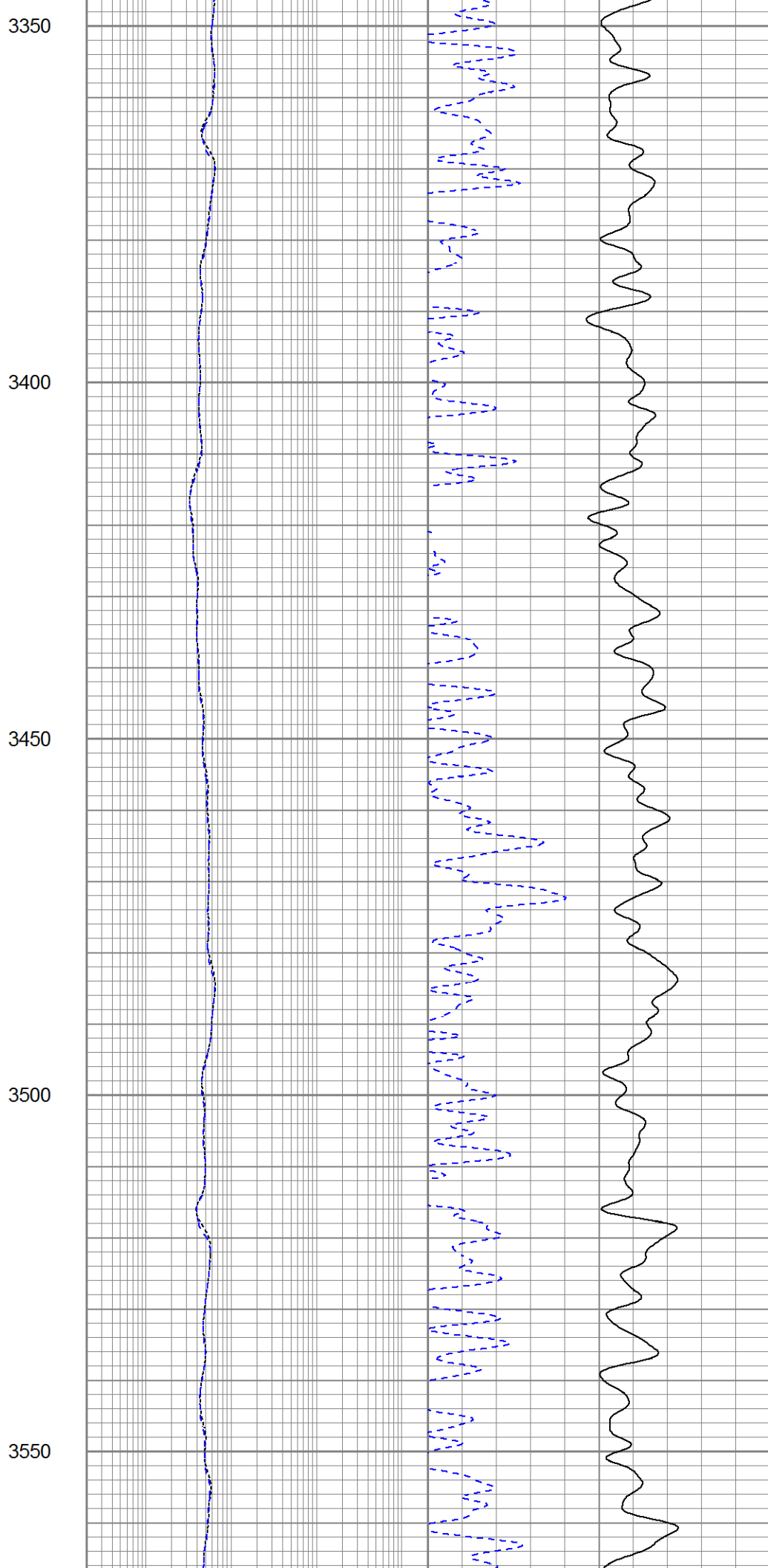
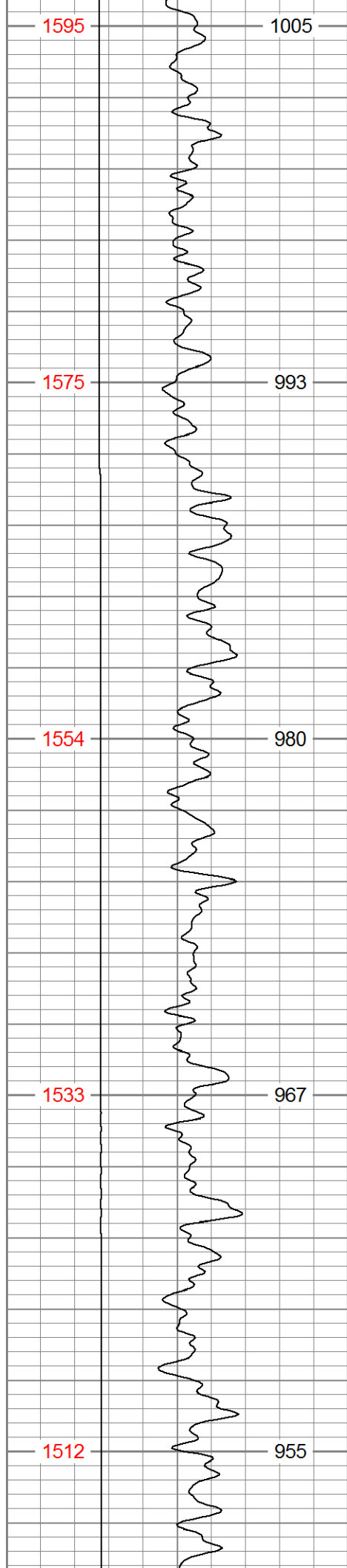
2700  
2750  
2800  
2850  
2900

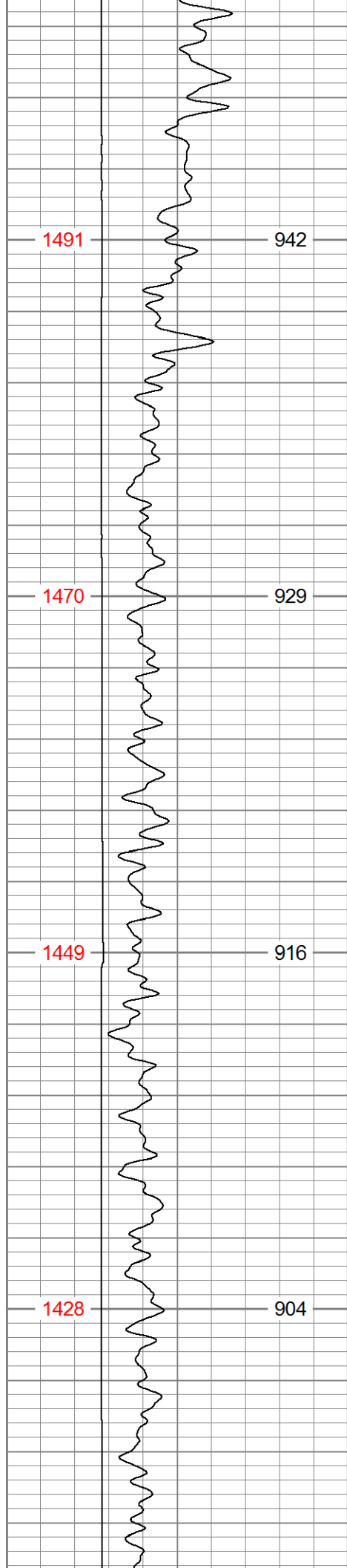










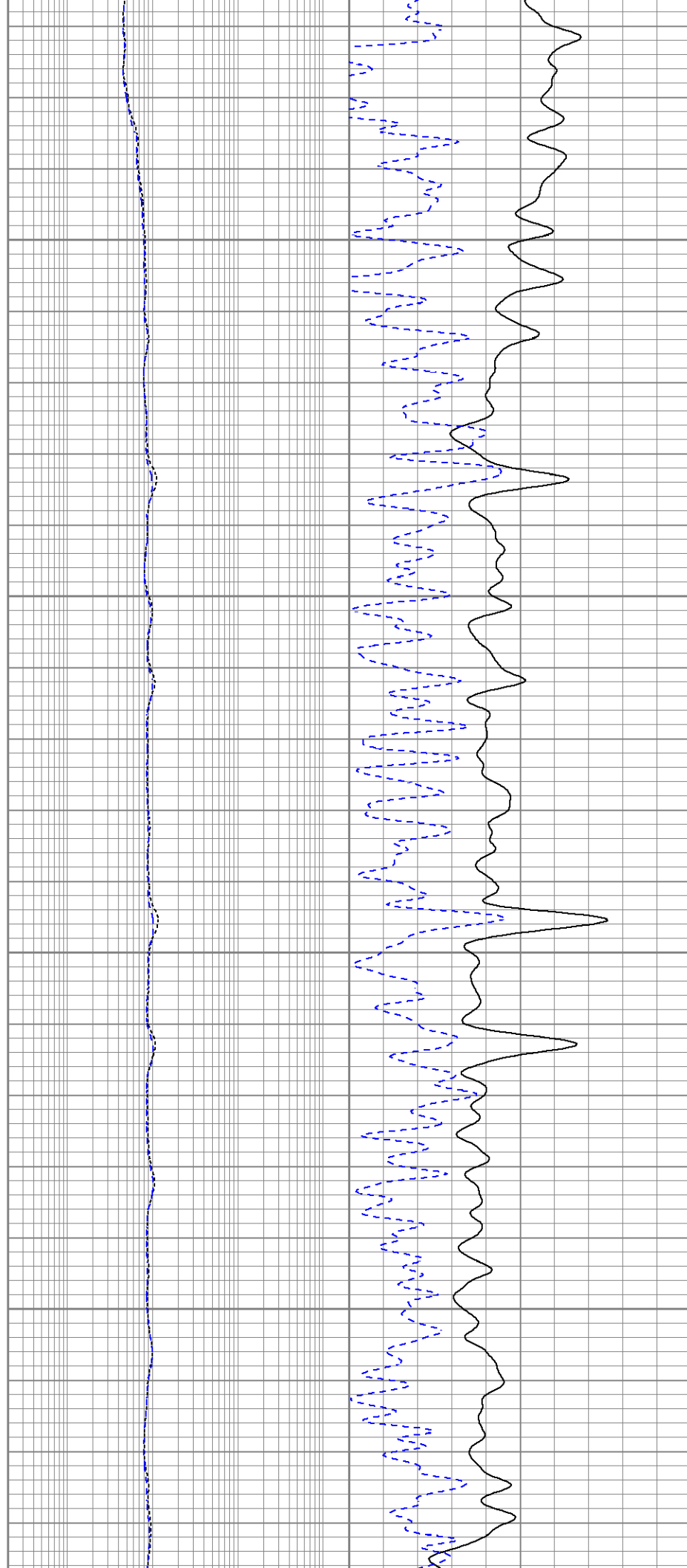


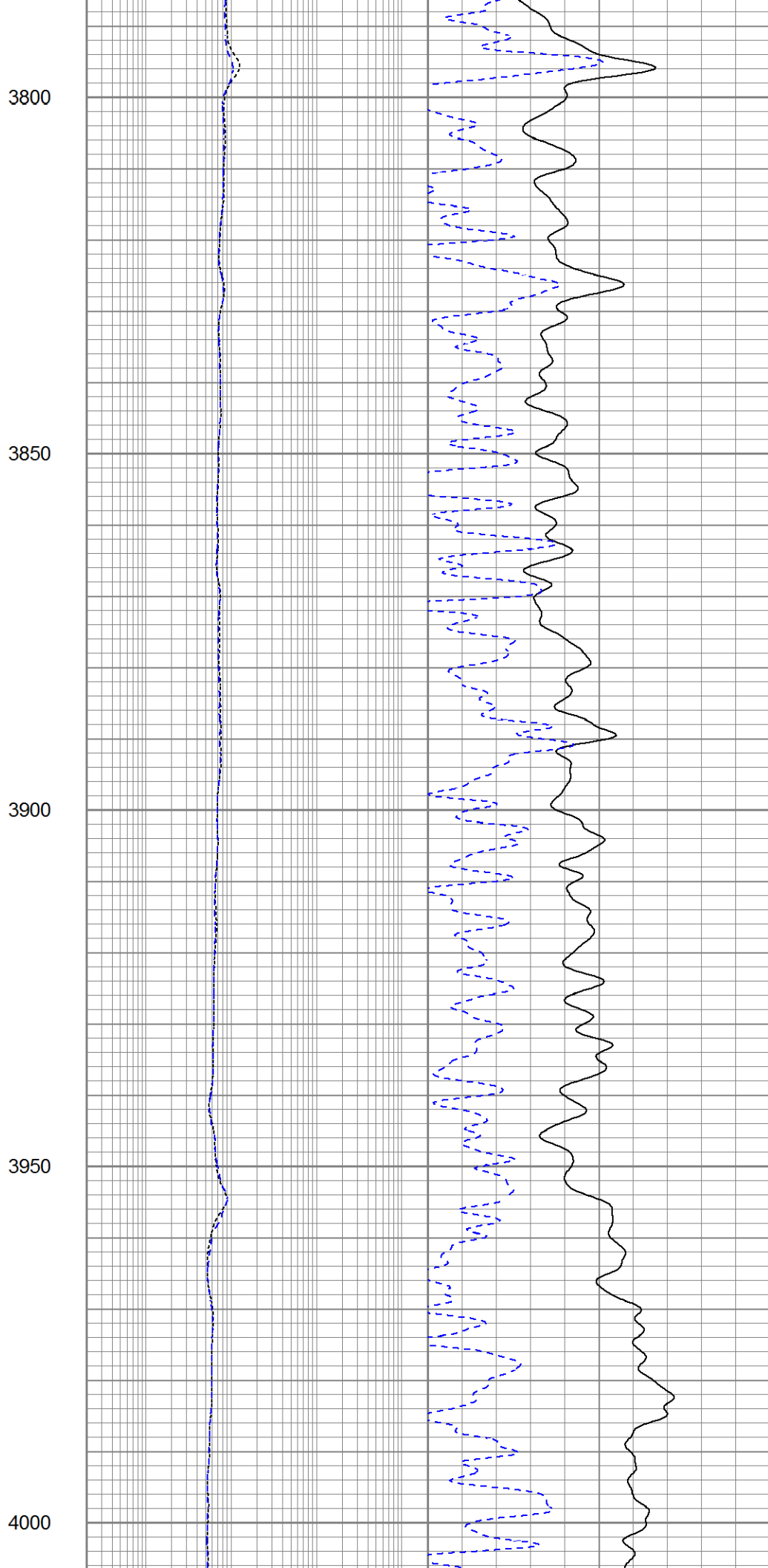
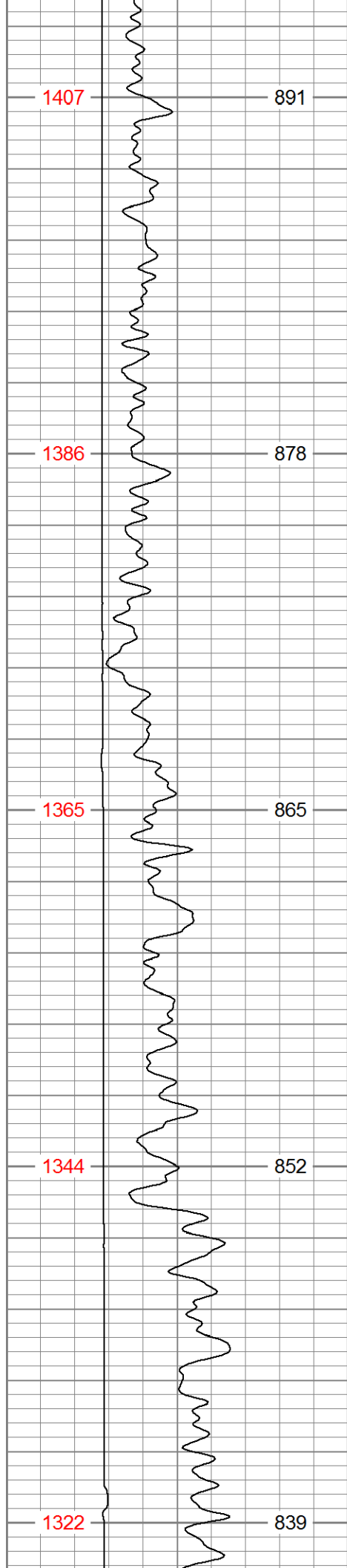
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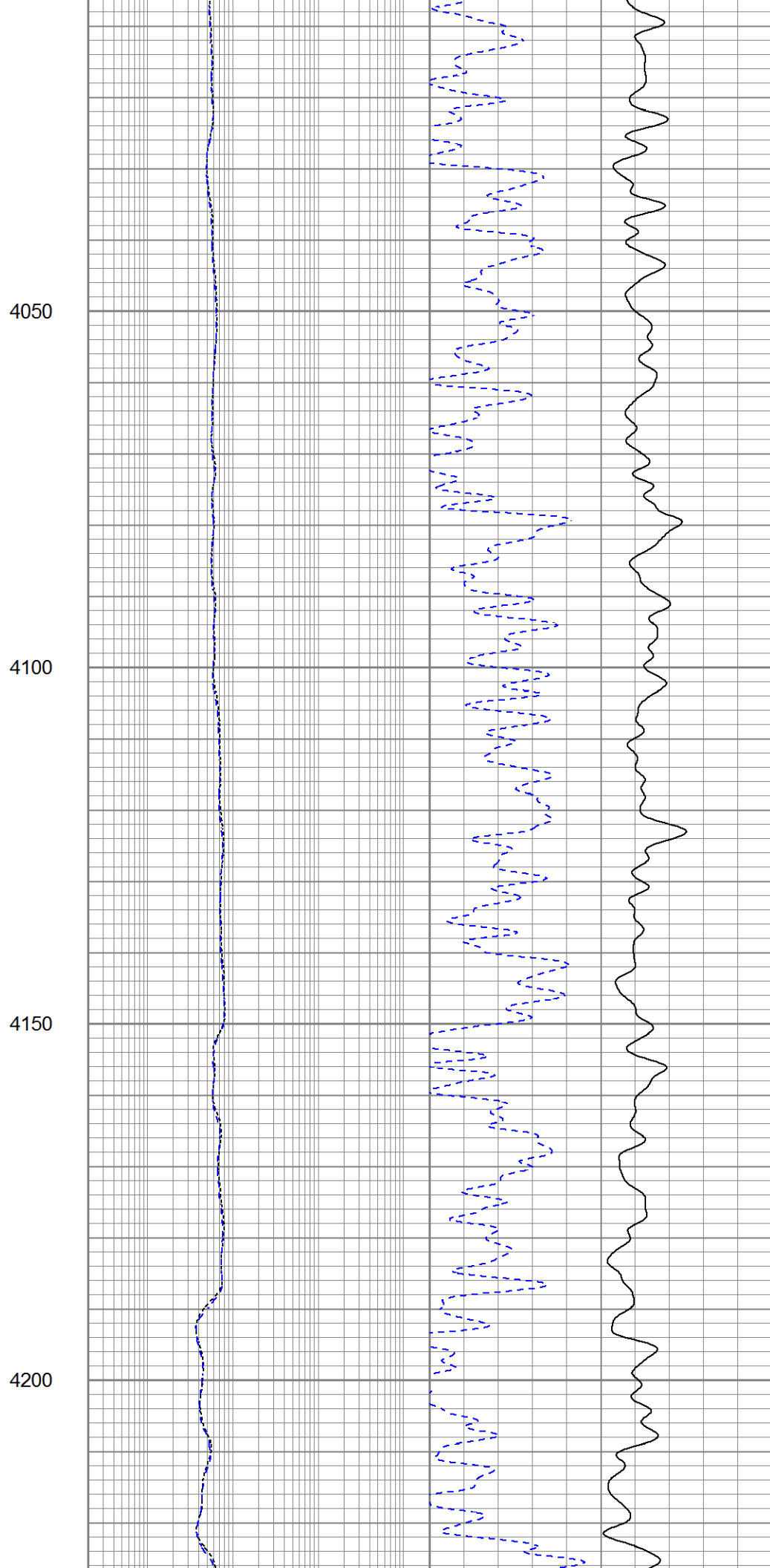
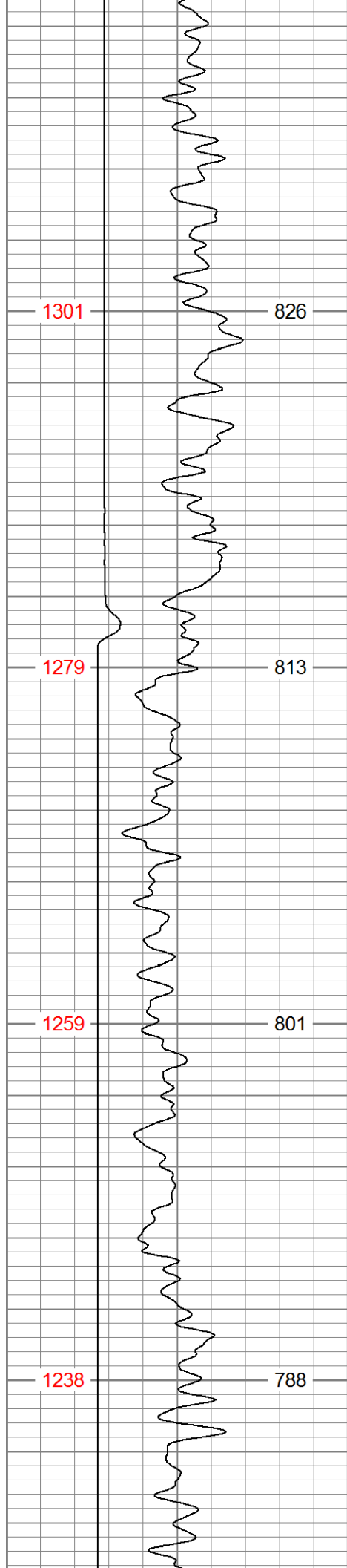
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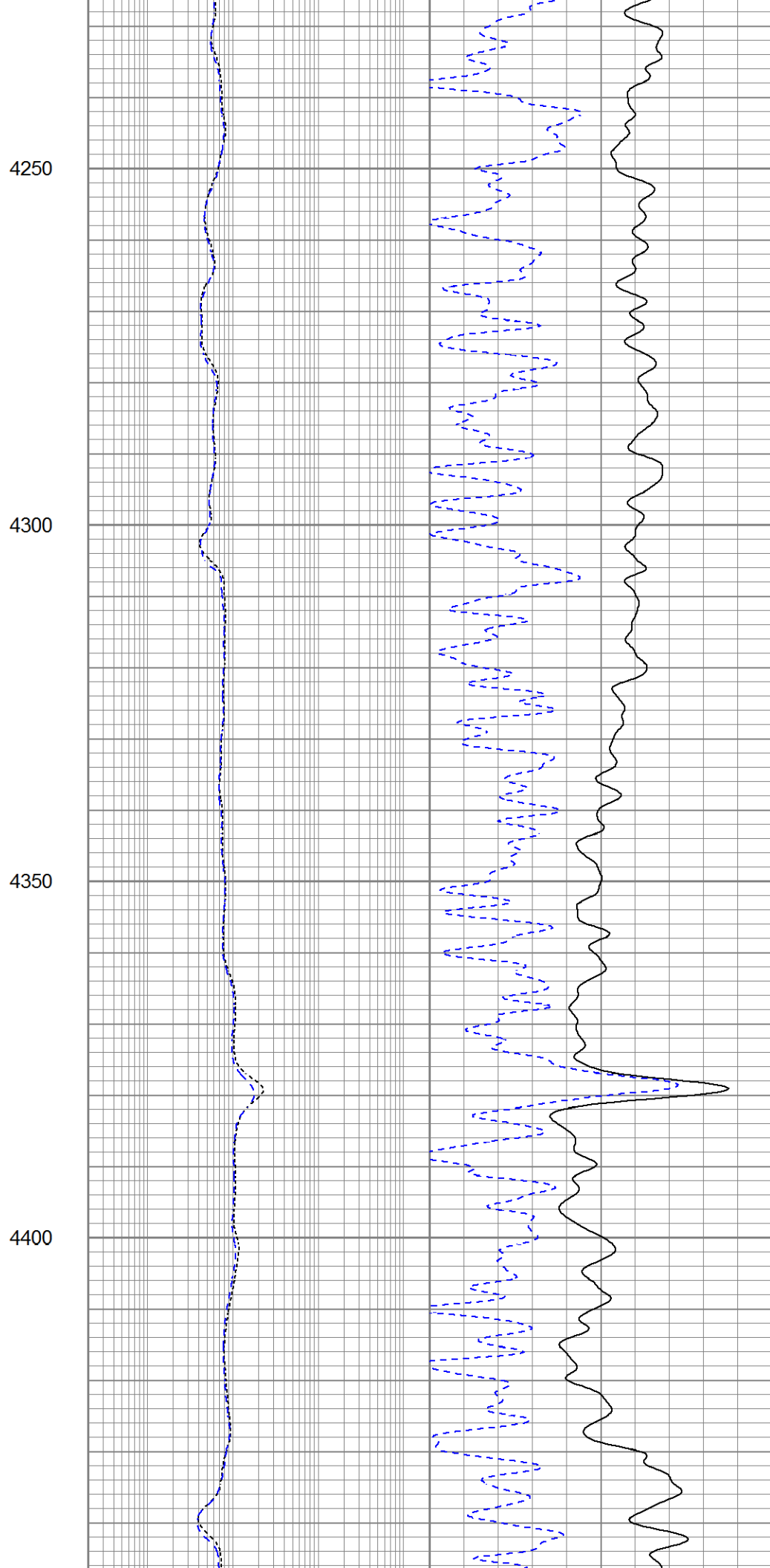
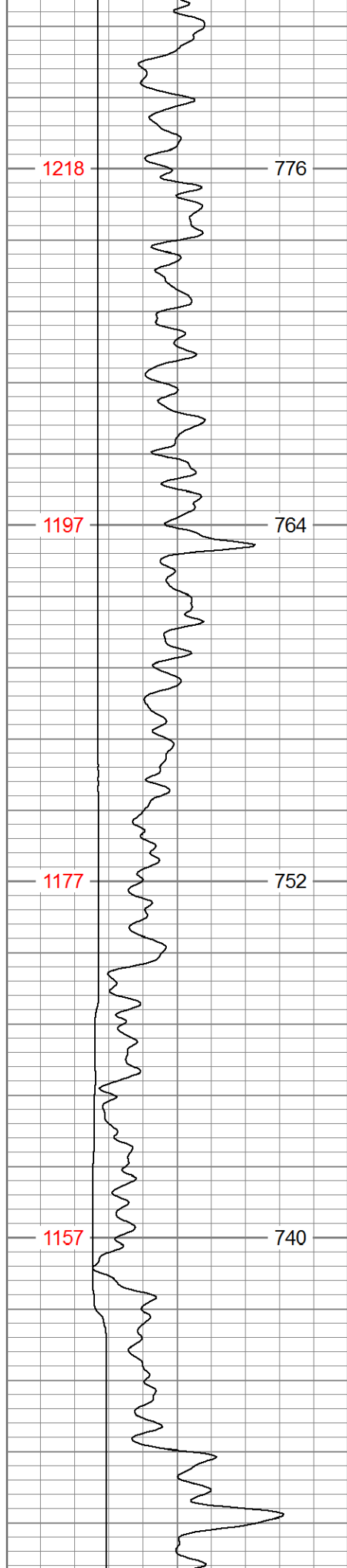
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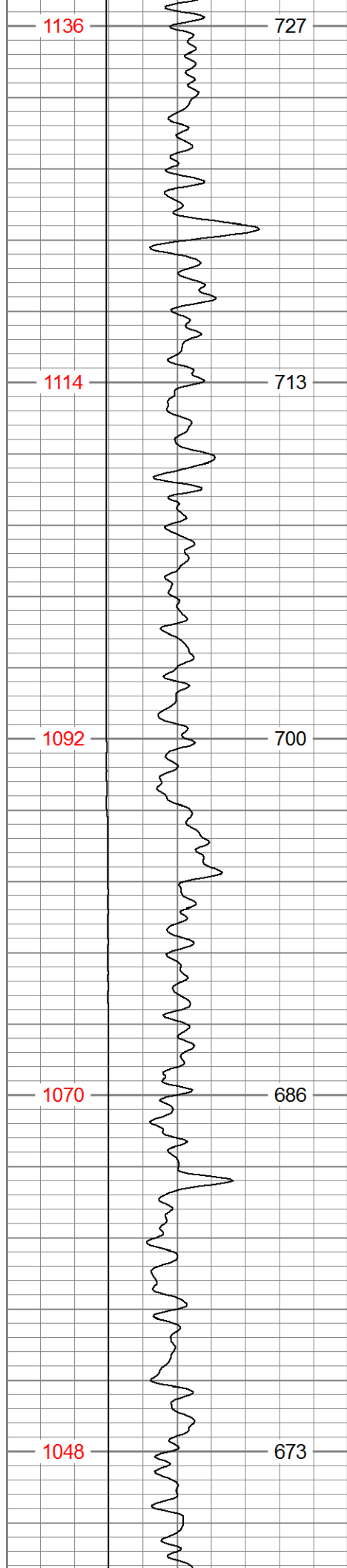












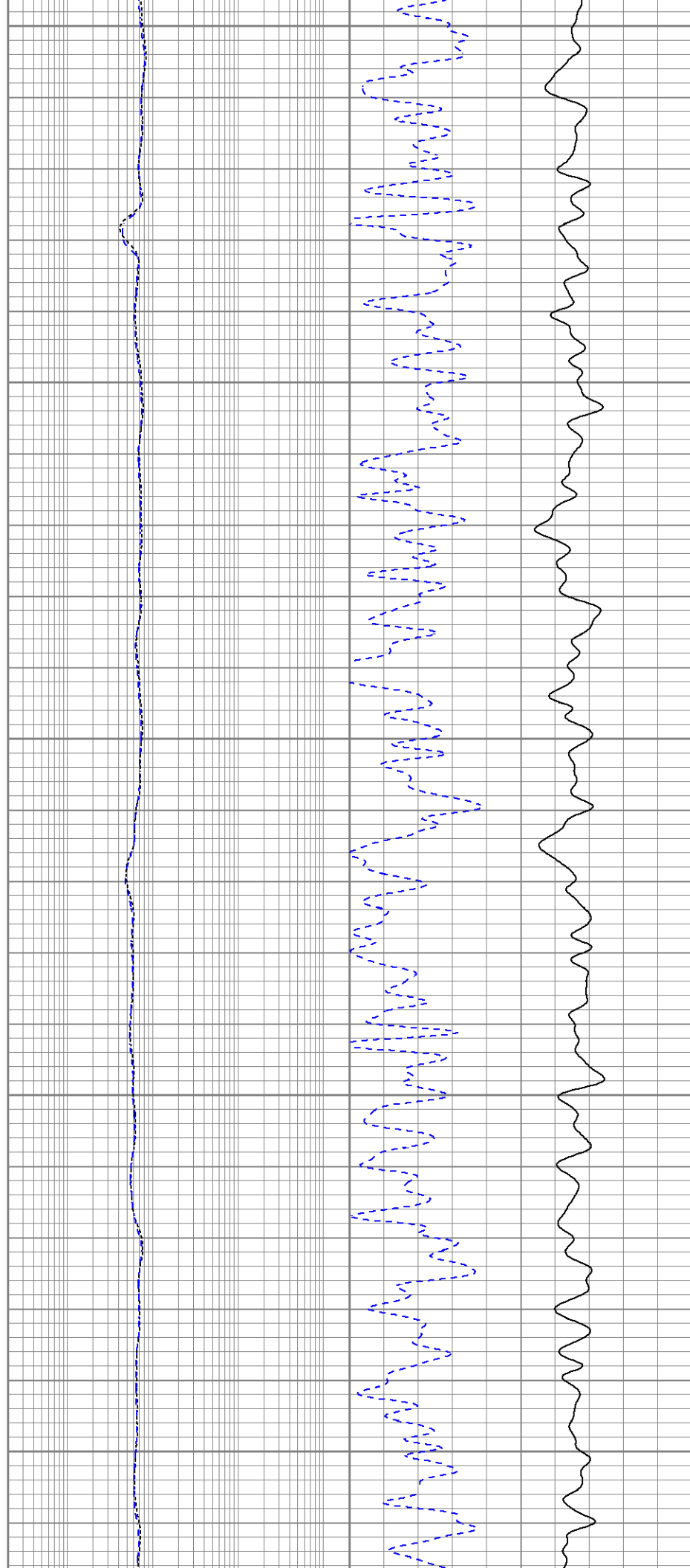
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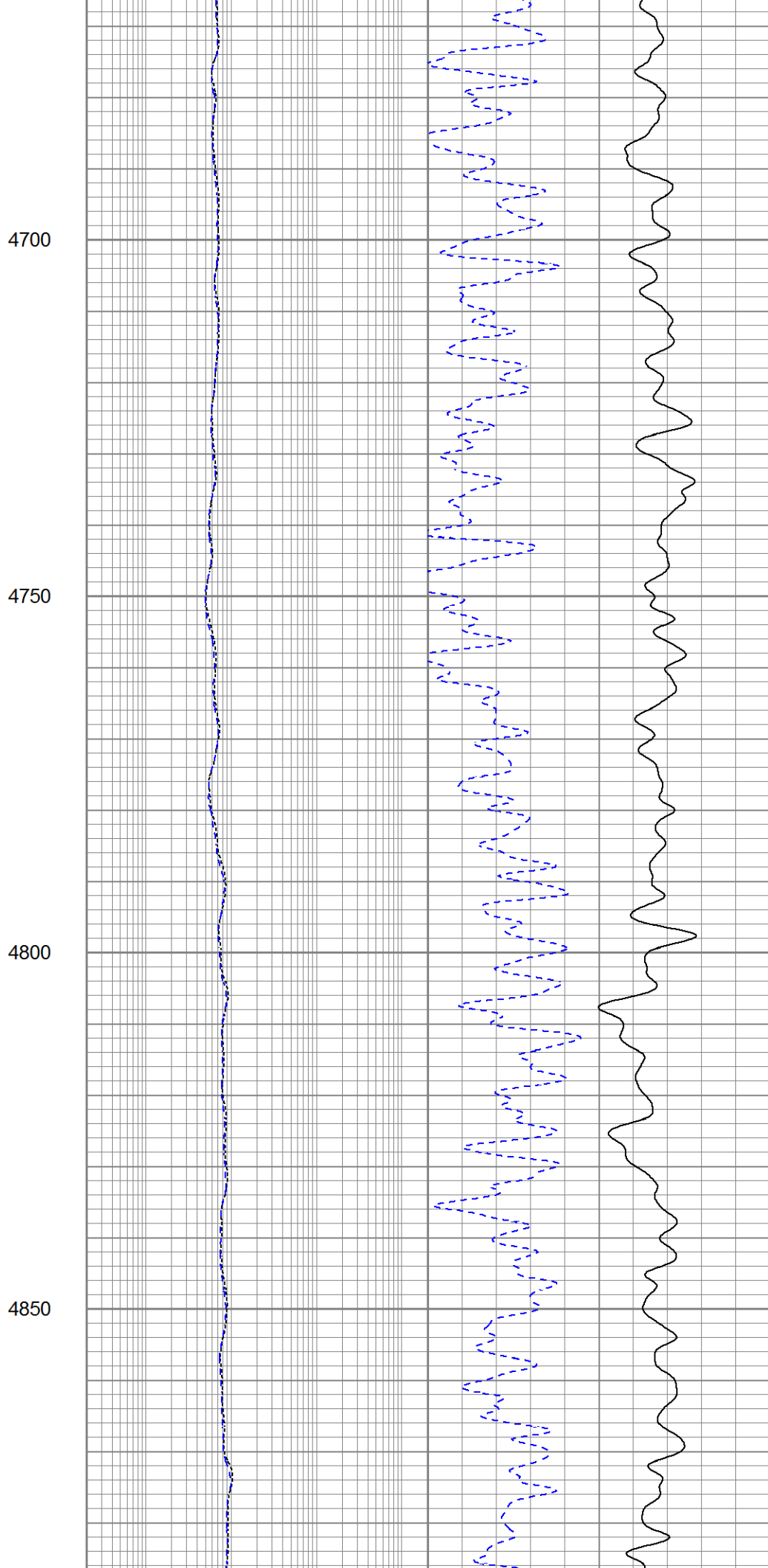
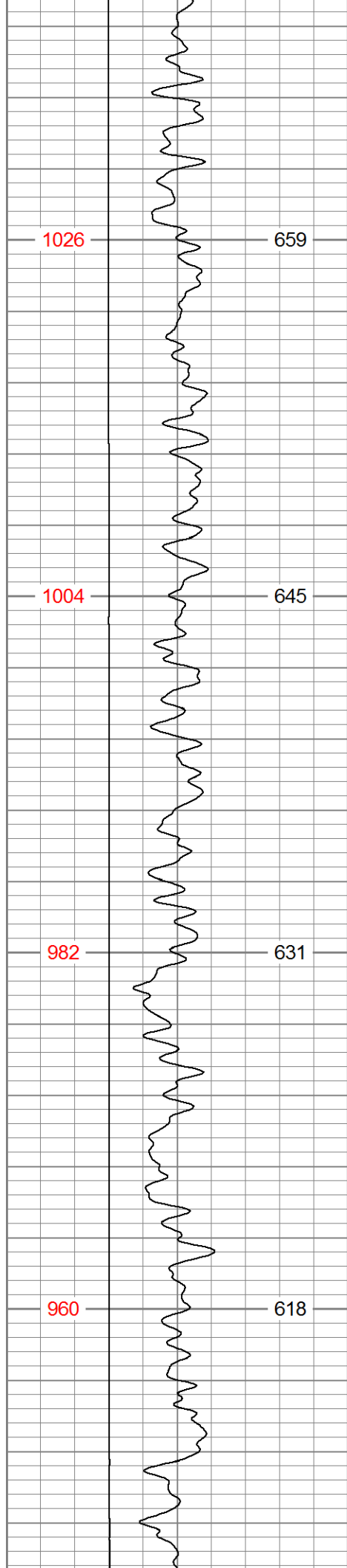
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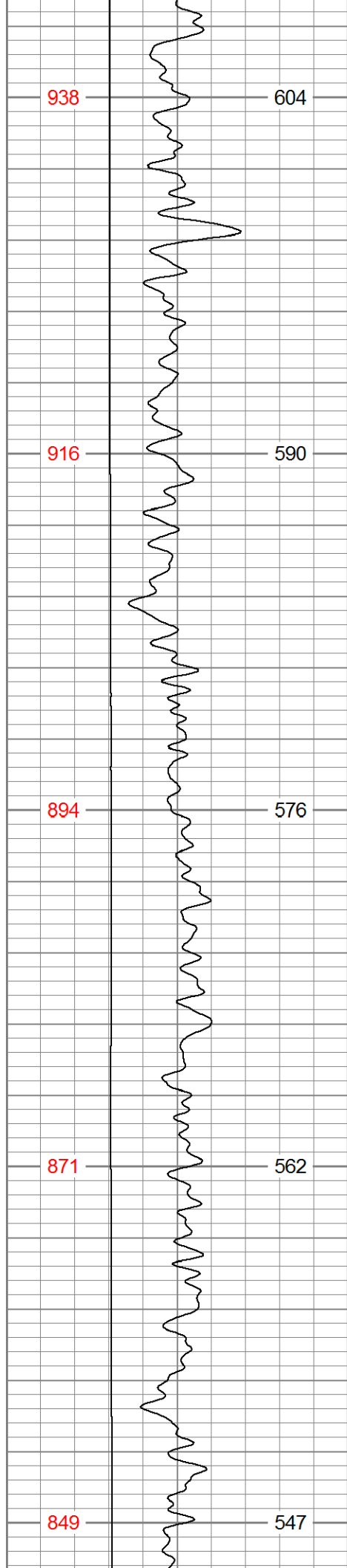
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4650







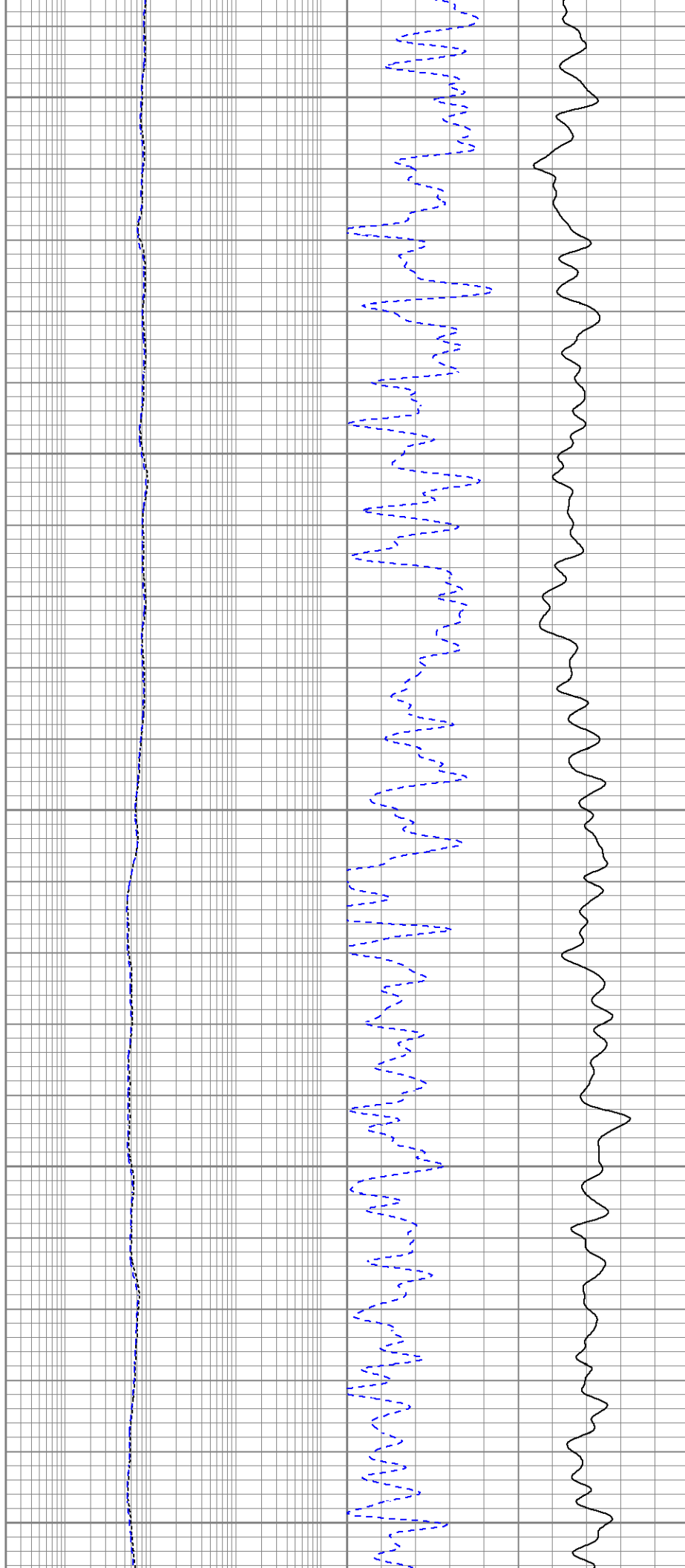
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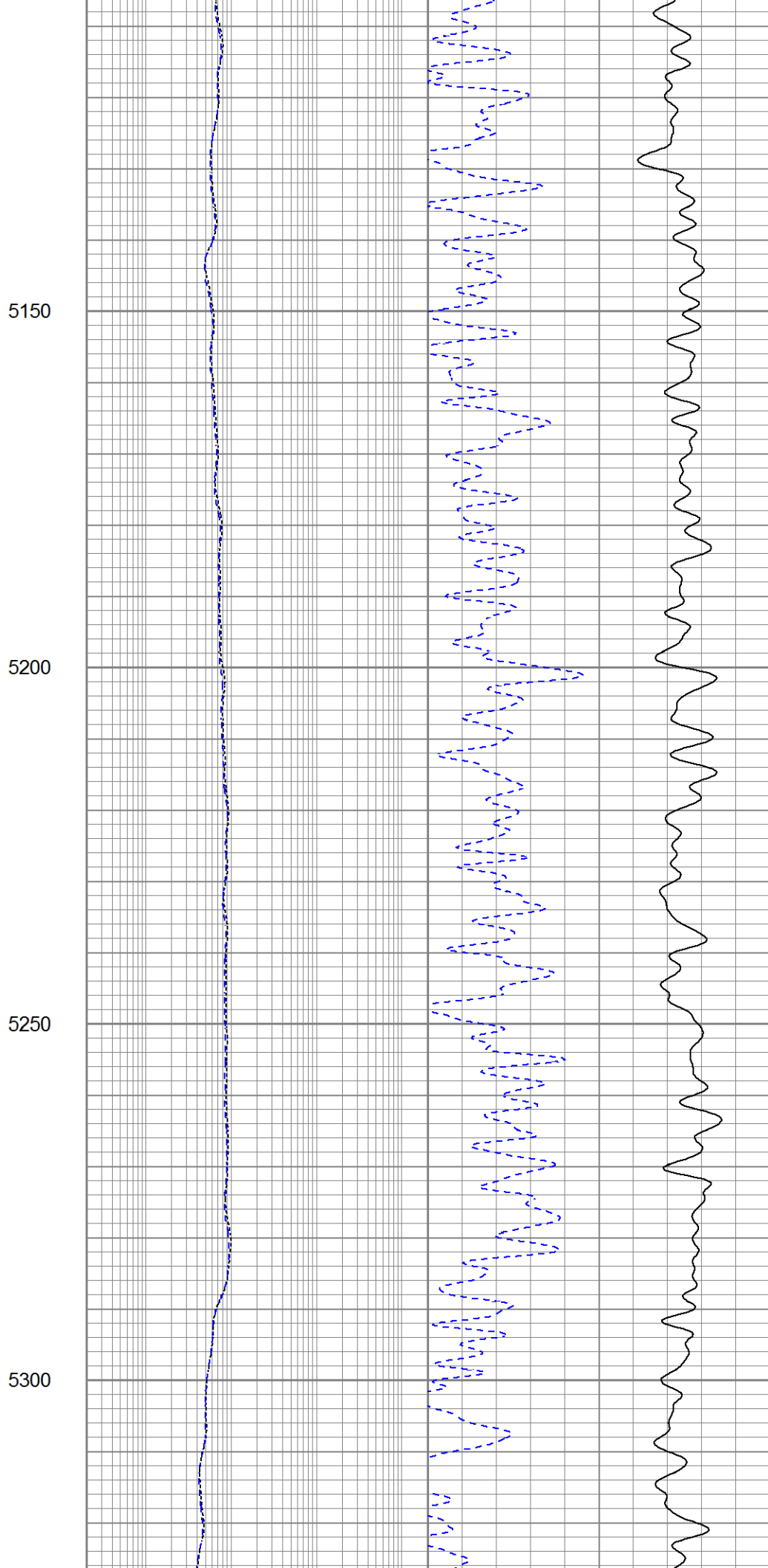
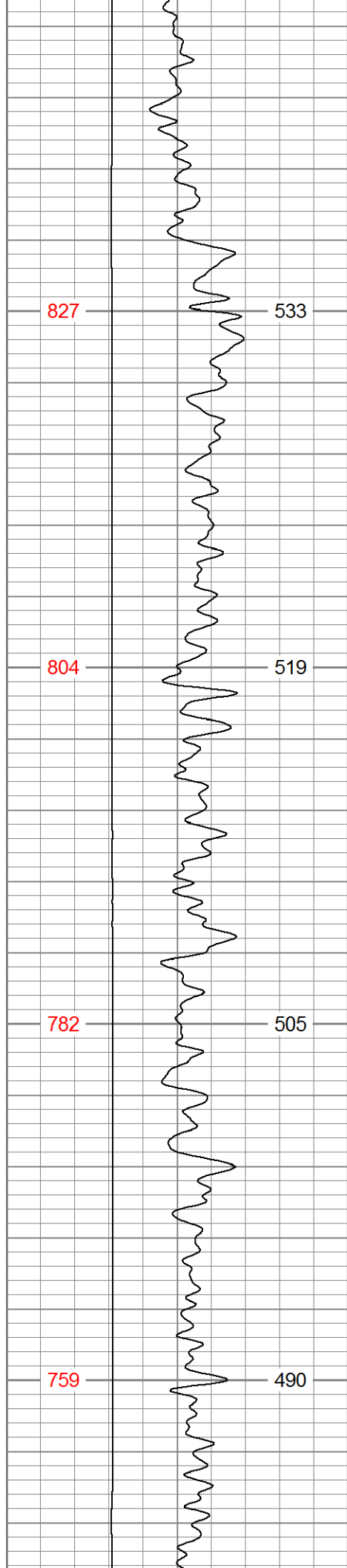
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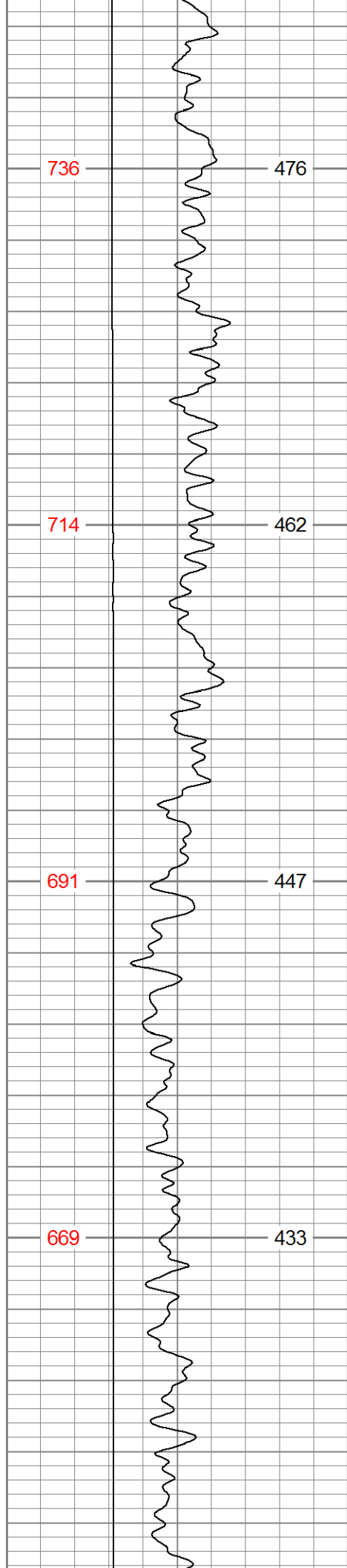
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5050

5100





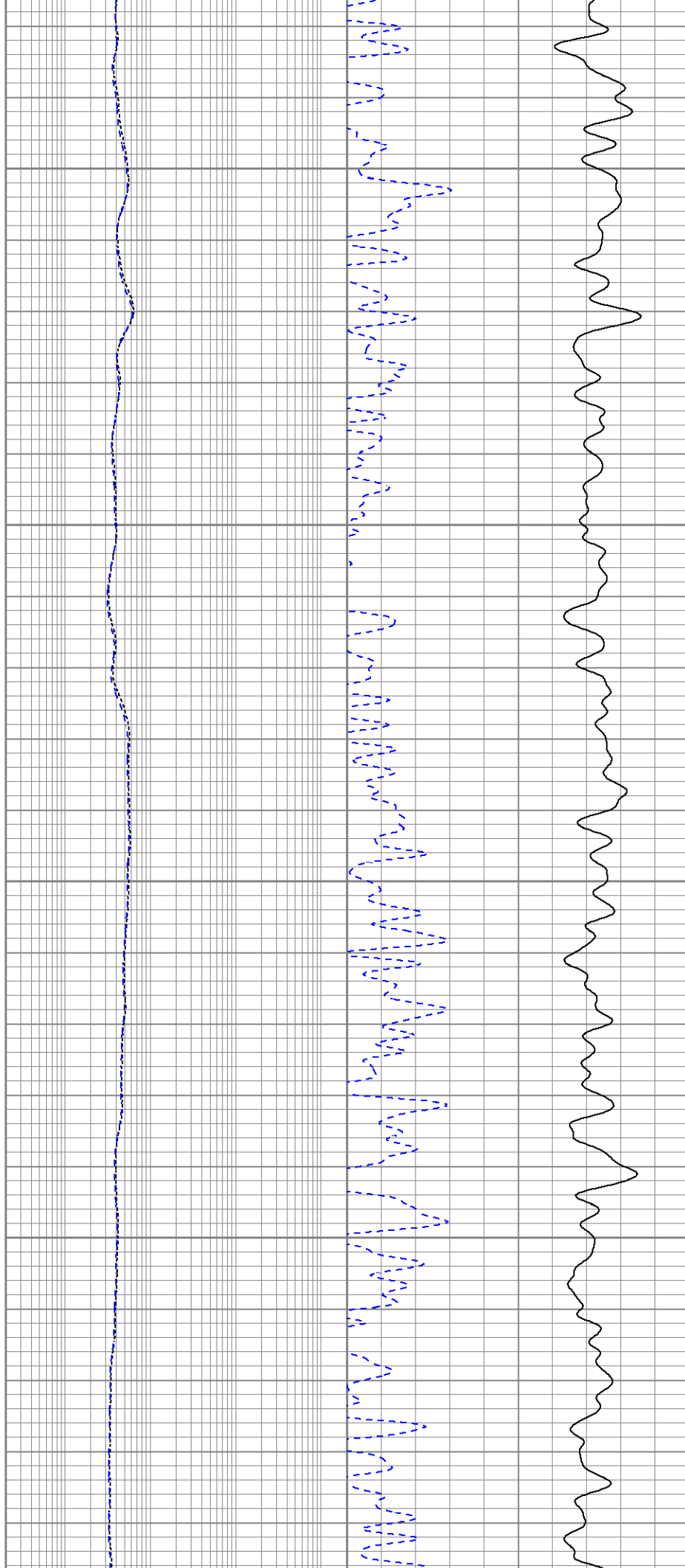


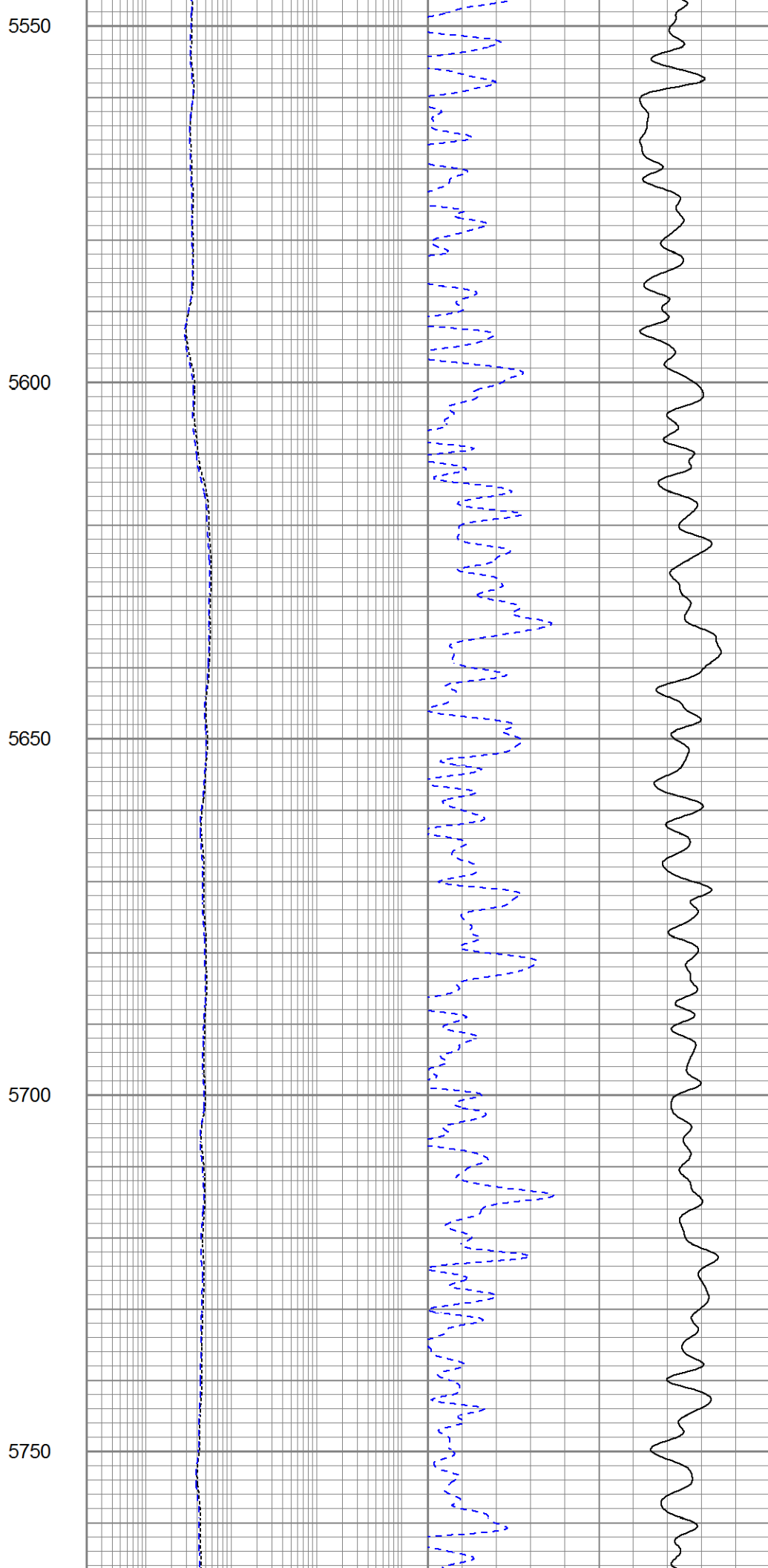
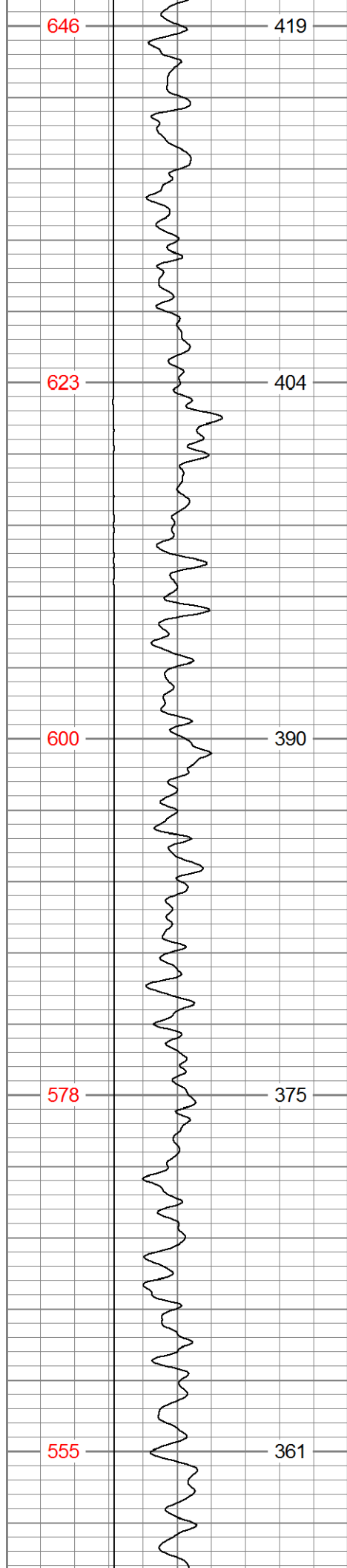
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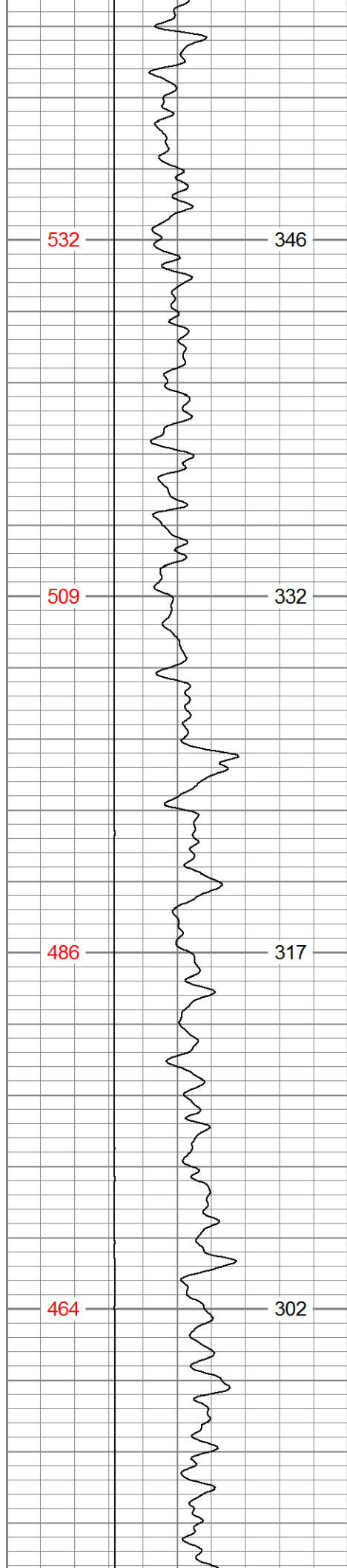
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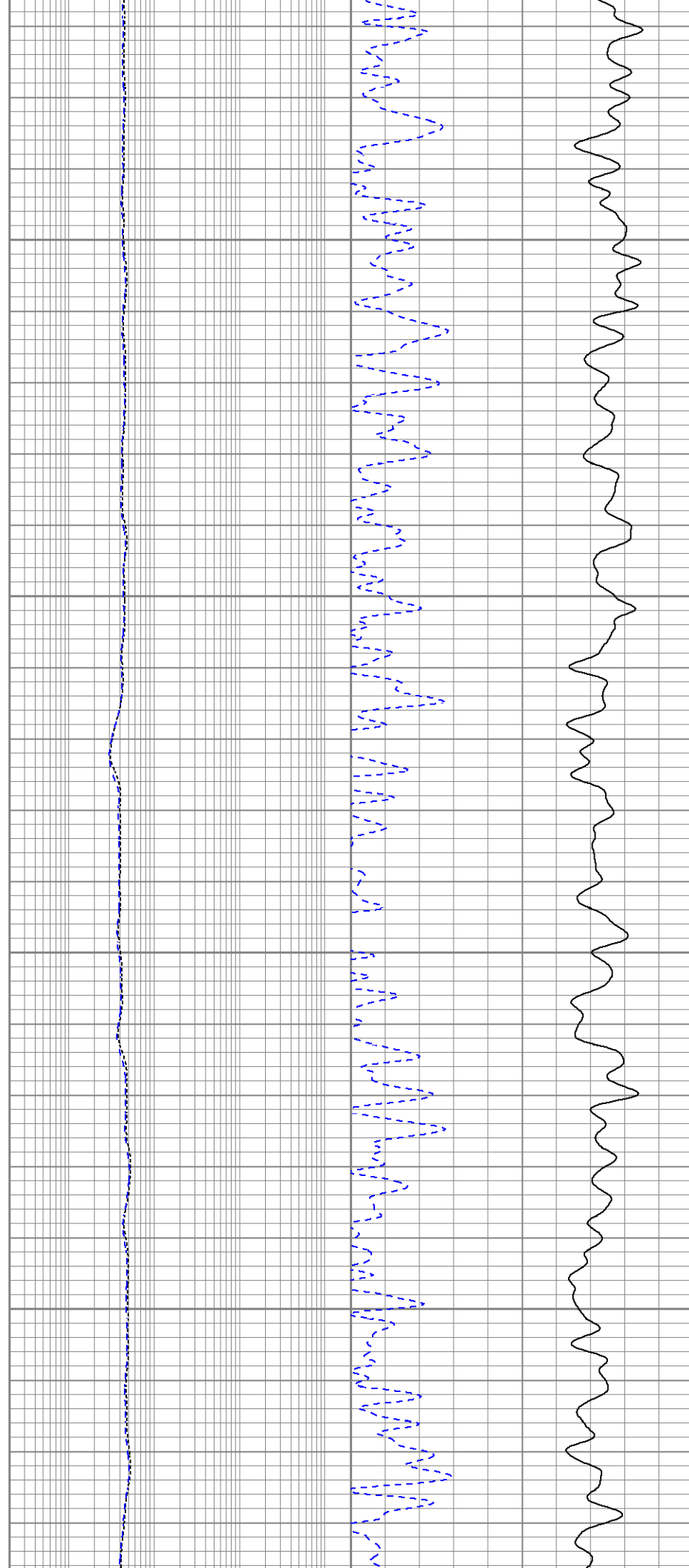


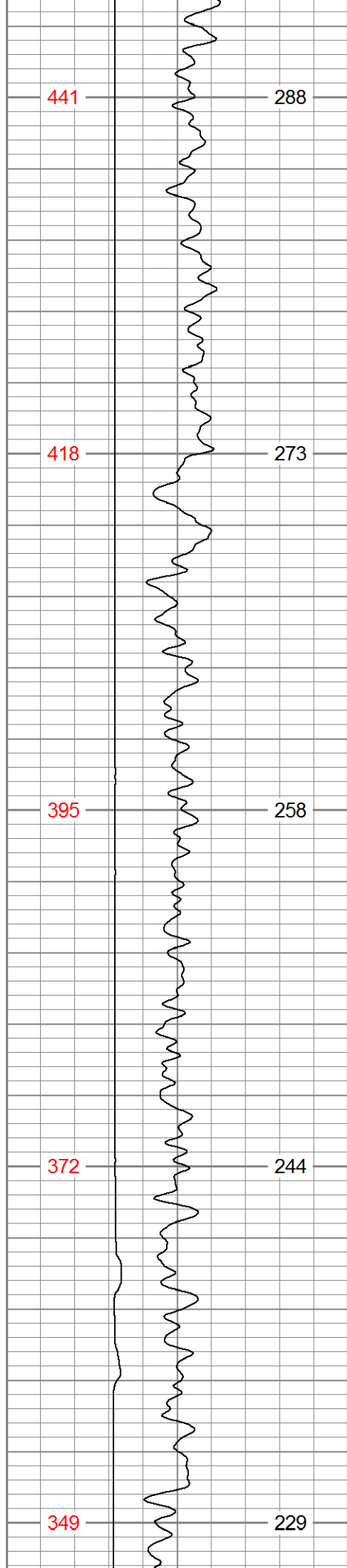
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5900

5950





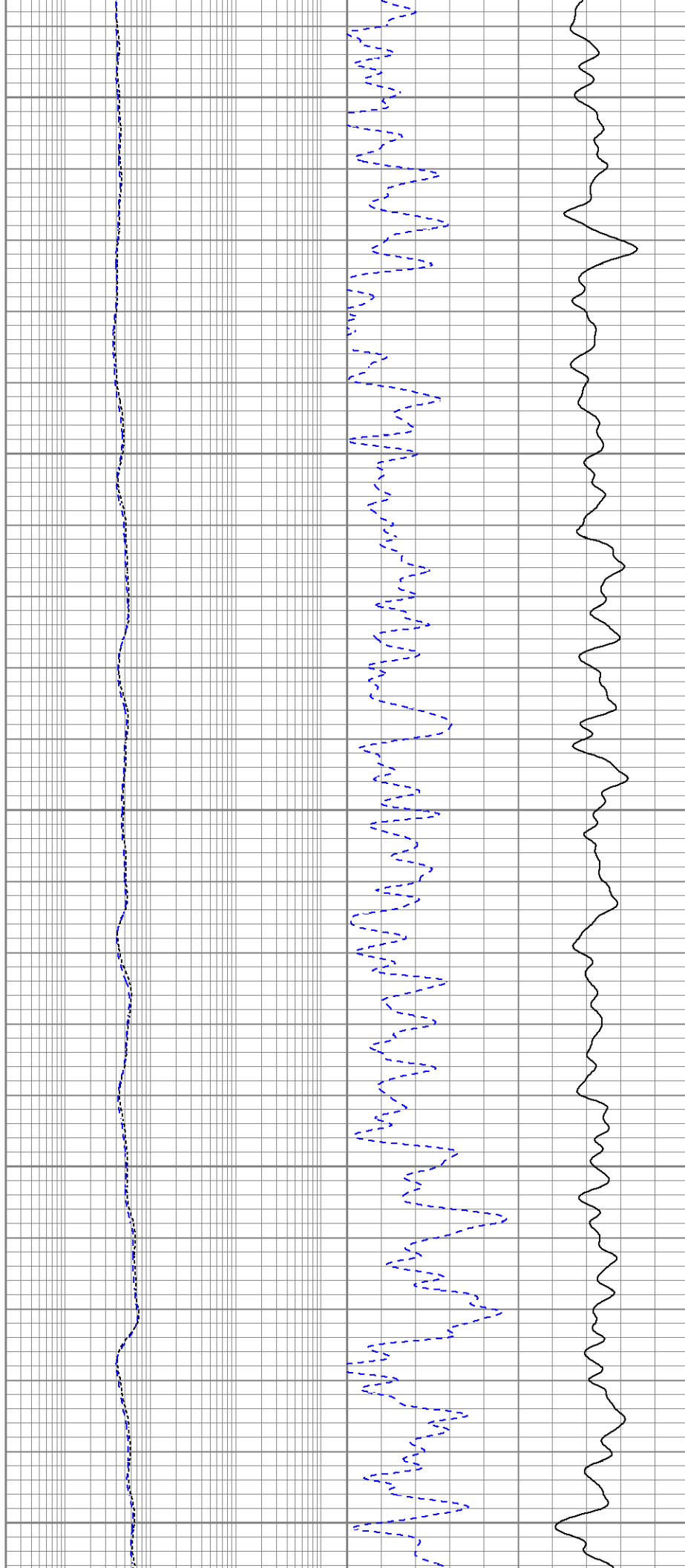
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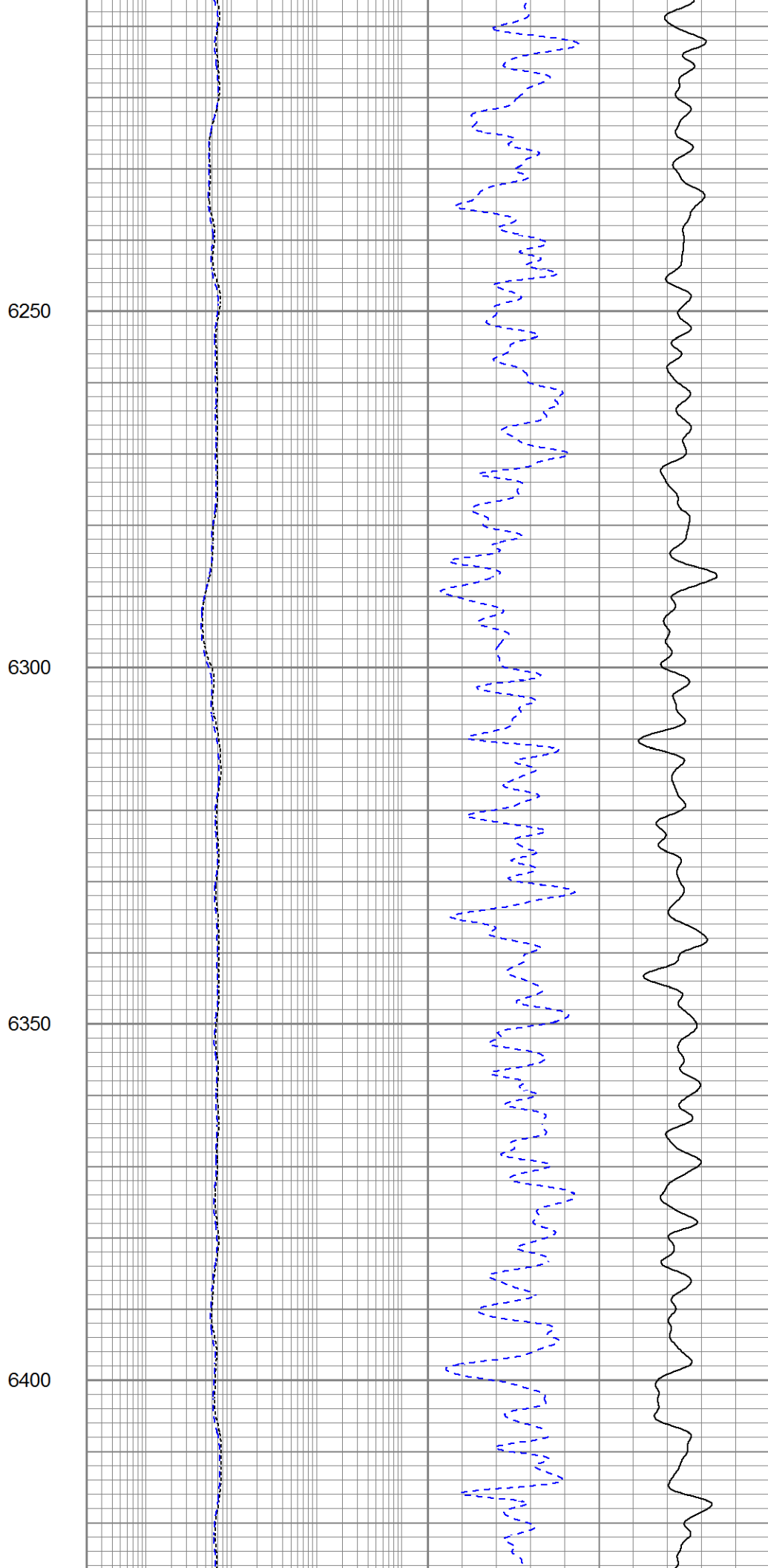
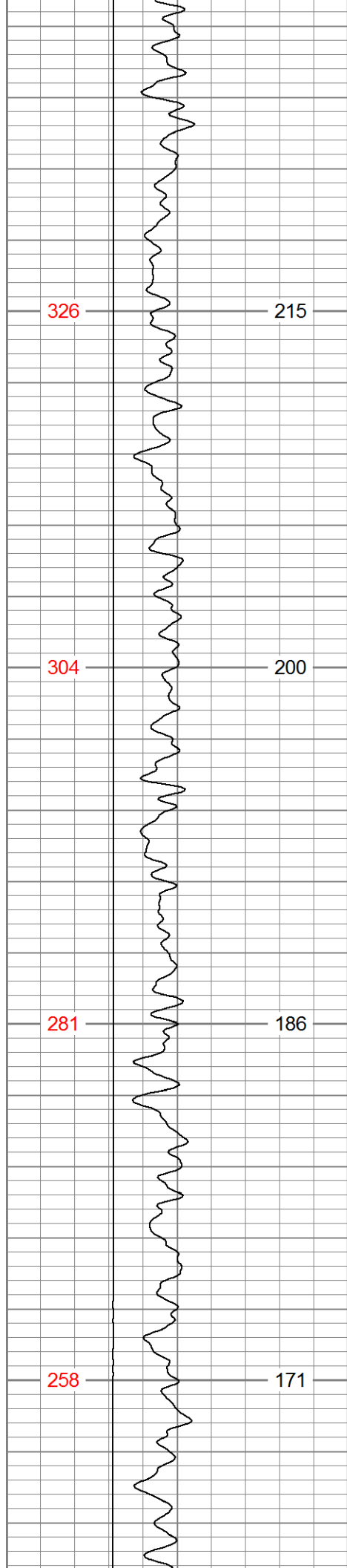
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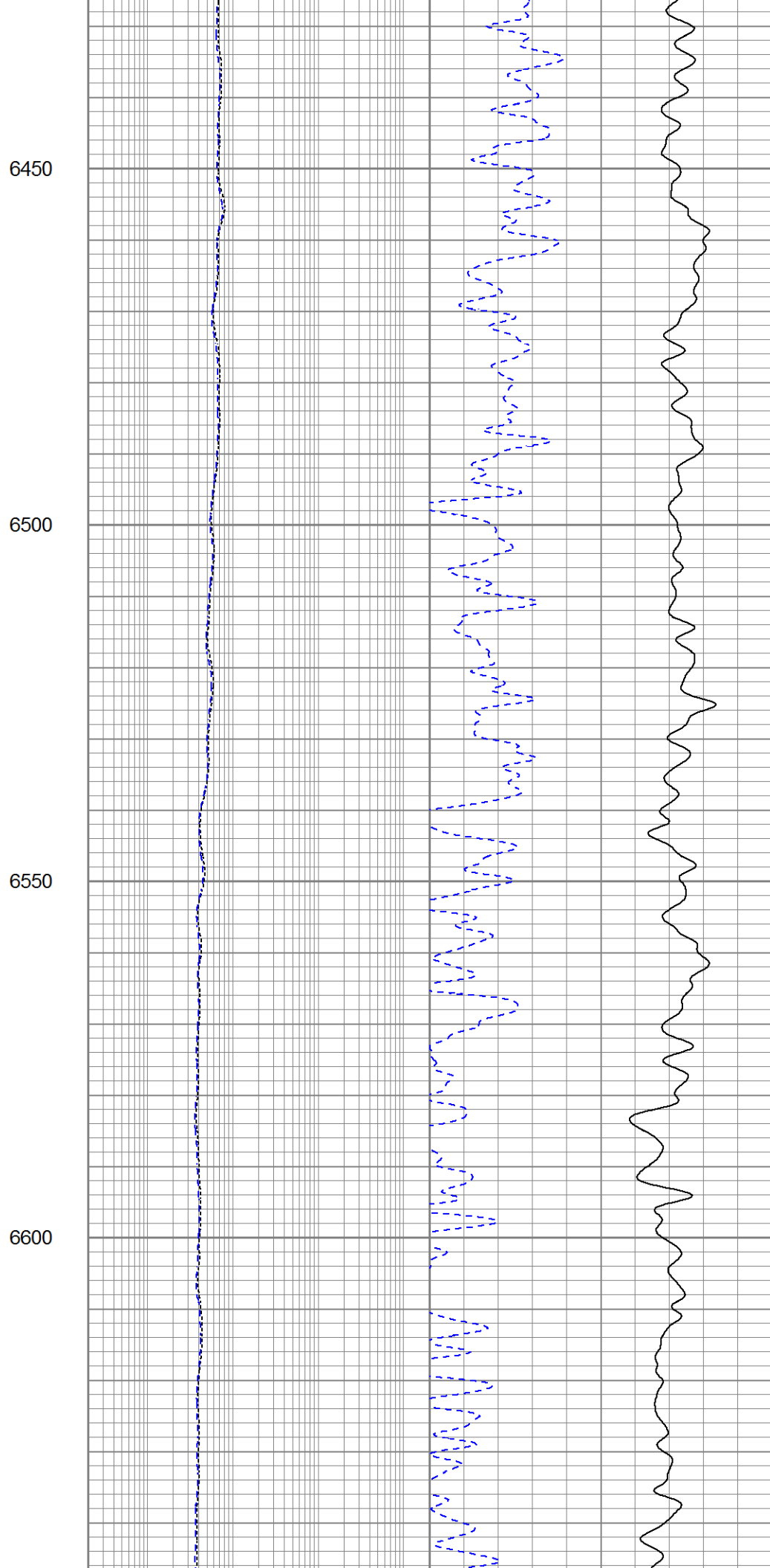
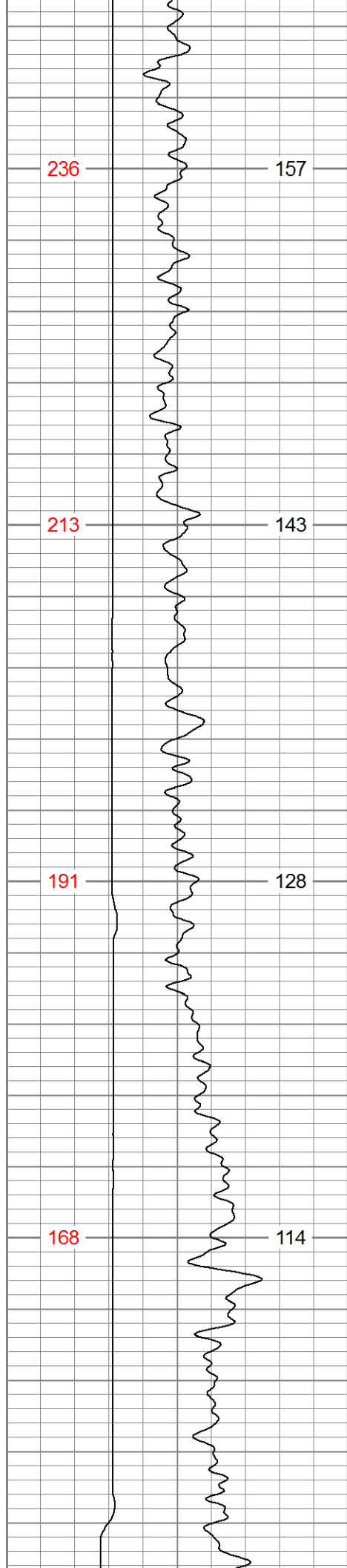
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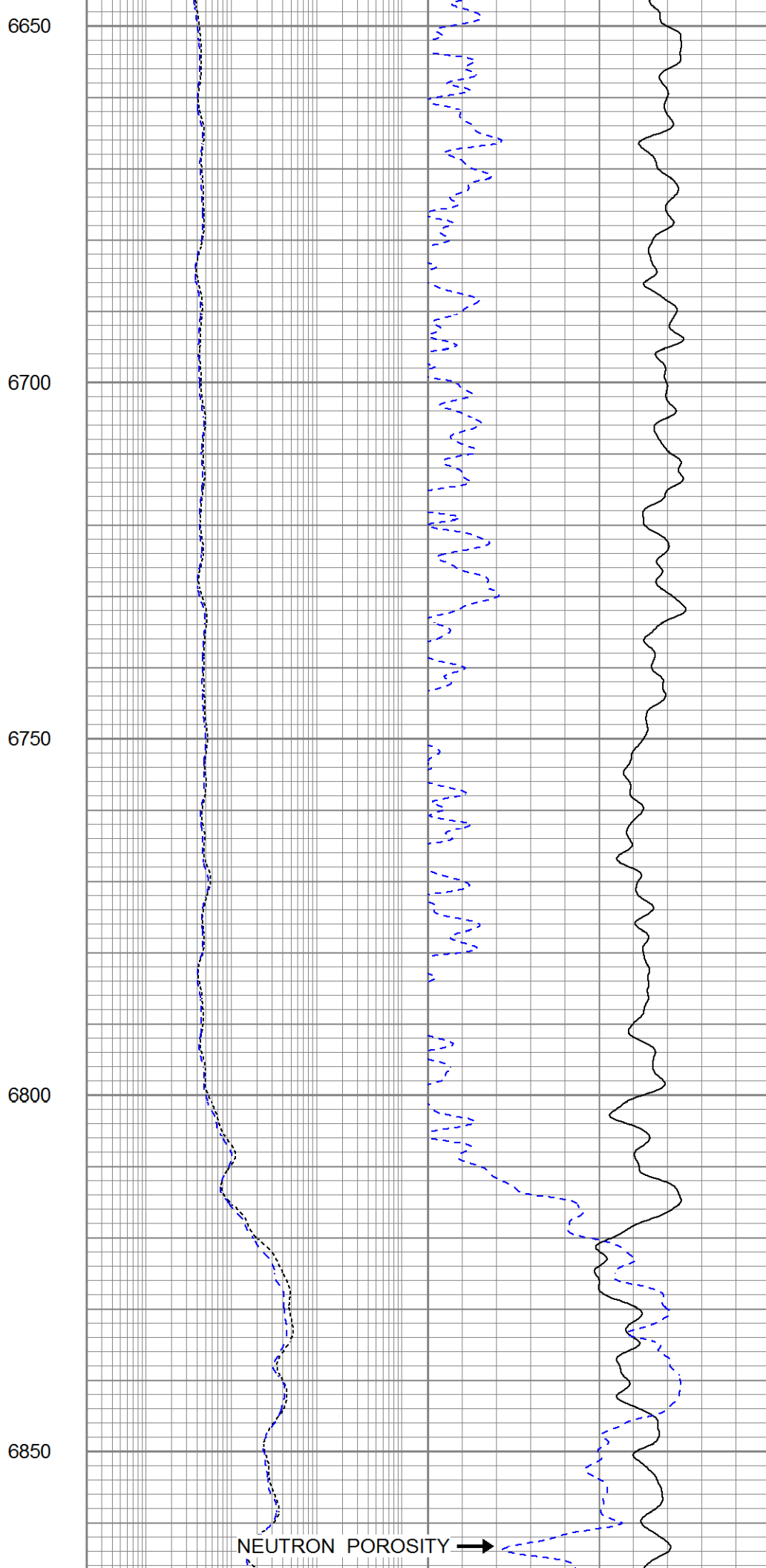
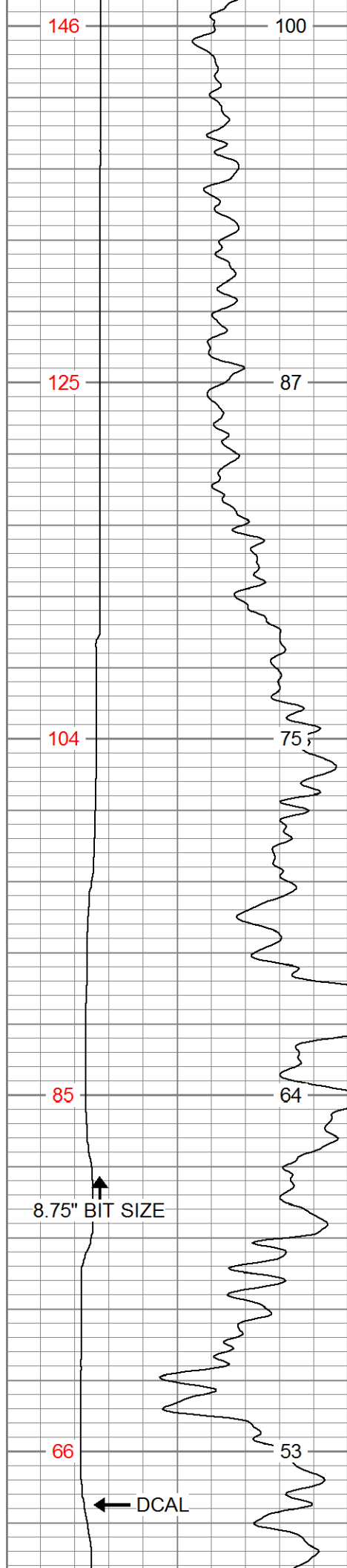
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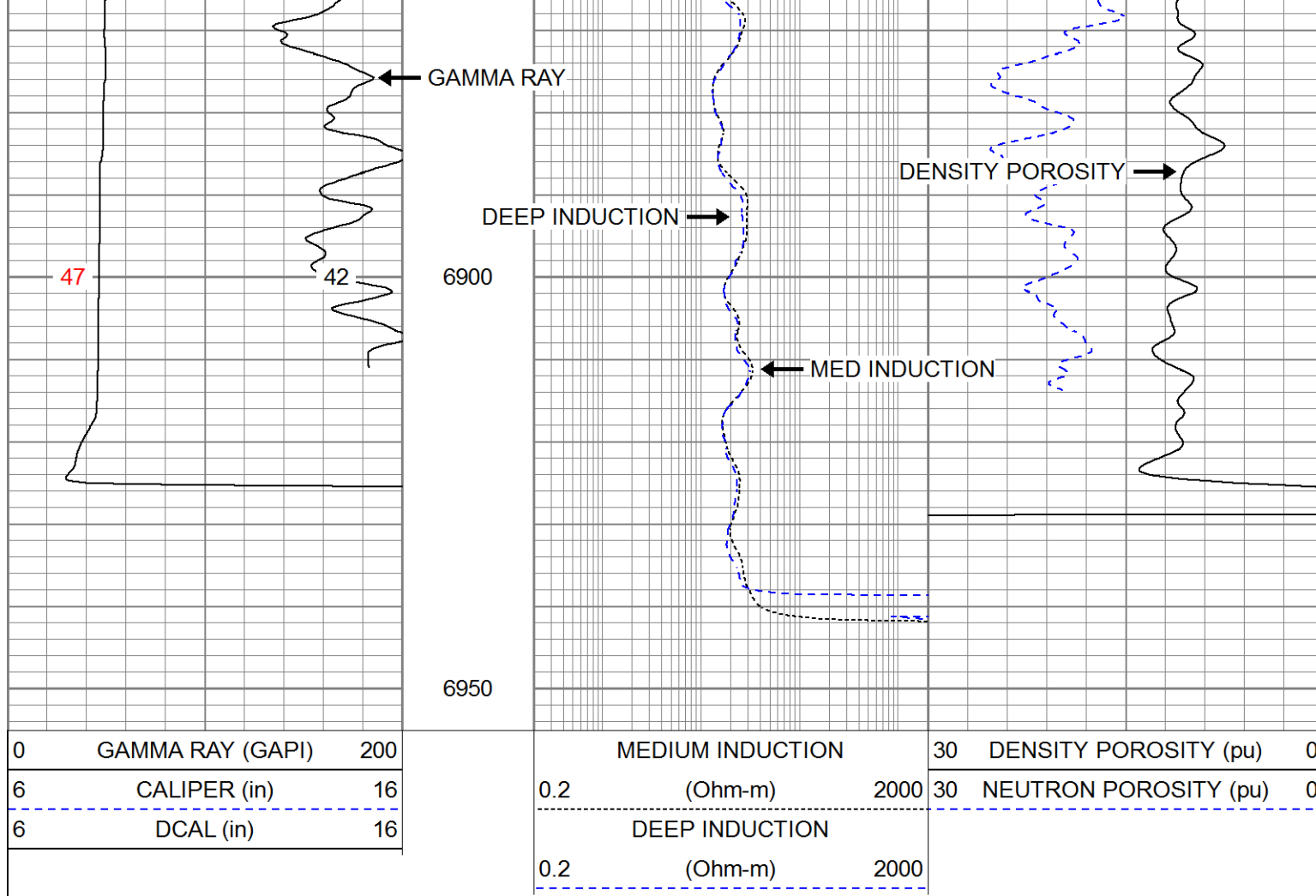
6200











Calibration Report							
Database File	extractioin_cs kinkade_c6-1-13.db						
Dataset Pathname	STACK/pass3.1						
Dataset Creation	Tue Aug 29 11:58:33 2017						
Dual Induction Calibration Report							
Serial-Model:				PSI 91-M&W			
Calibration Performed:				Thu Aug 10 08:41:25 2017			
		Readings		References		Results	
Loop:	Air	Loop		Air	Loop	Gain	Offset
Deep	166.796	835.089		0.000	255.800 mmho/m	0.430	-32.000
Medium	142.009	1348.560		0.000	255.800 mmho/m	0.360	-31.000
Compensated Density Calibration Report							
Serial-Model:				90-1031-M&W			
Source / Verifier:				16955B / 2ci			
Master Calibration Performed:				Wed Aug 02 00:28:57 2017			
Master Calibration							
		Density		Far Detector		Near Detector	
Magnesium	1.755	g/cc		4903.44		6153.79	cps

Aluminum

2.685 g/cc

934.50

4021.31 cps

Spine Angle = 75.61

Density/Spine Ratio = 0.543

Size

Reading

Small Ring  
Large Ring8.00 in  
22.00 in1.84  
1.46

## Compensated Neutron Calibration Report

Serial Number: 207-MW  
Tool Model: M&W  
Calibration Performed: Tues Aug 1 10:30:30 2017

Detector	Readings	Target	Normalization
Short Space	6240.00 cps	1000.00 cps	1.6025
Long Space	460.00 cps	1000.00 cps	1.9500

## Gamma Ray Calibration Report

Serial Number: 89  
Tool Model: M&W  
Calibration Performed: Wed Aug 02 00:29:15 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps



Company	EXTRACTION OIL & GAS, LLC
Well	CS-KINKADE #C6-1-13
Field	WATTENBERG
County	WELD
State	COLORADO