

Well HG FED 35-01W

County Mesa State Colorado

API #: 05077093060000

Other Services

LAT: 39.32834 N  
LONG: 107.63516 W

SEC 26 TWP 8S RGE 92W

Permanent Datum	Ground Level	E
Log Measured From	Kelly Bushing	14FT

Elevation

Drilling Measured from Kelly

August 23, 2019

	8594 ft
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val	8340 FT
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	0060
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Produced by

p. 227.3 °F

	ROA

HD03331

Original jurisdiction	C. Emmerich
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I. Roeloffs	
Robbala Daccard	

Bit	From	To
1	0	1
2	0	1
3	0	1
4	0	1
5	0	1
6	0	1
7	0	1
8	0	1
9	0	1
10	0	1
11	0	1
12	0	1
13	0	1
14	0	1
15	0	1
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139	0	


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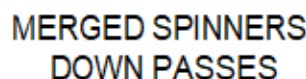
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Comments

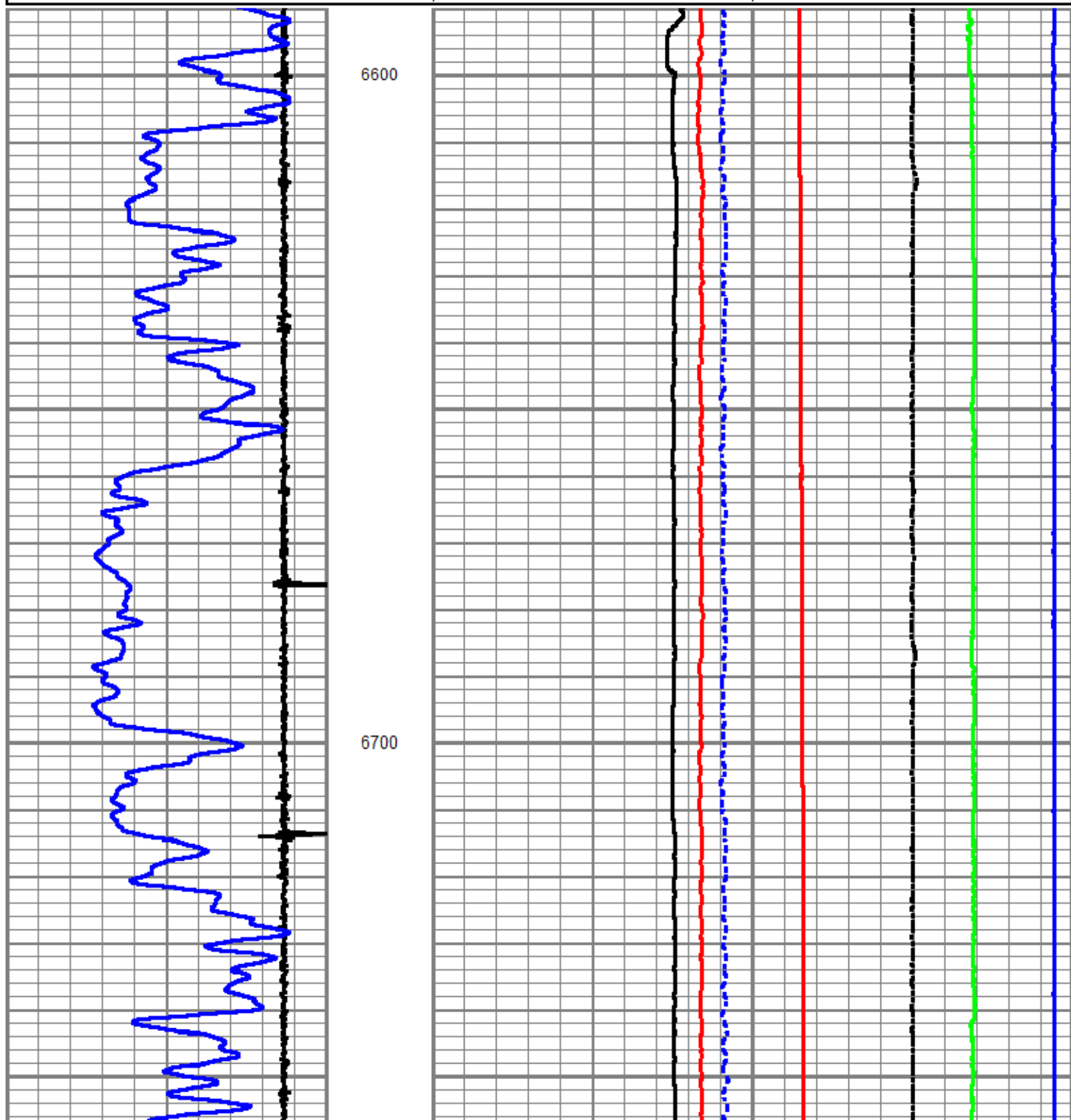
LOG RAN AS PER CUSTOMER REQUEST  
DEPTH CORRELATED TO BAKER HUGHES CBL LOG DATED MAY 17, 2018  
RAN UP / DOWN PASSES ACROSS PERF ZONES AT 35, 65, 95 FPM  
LOGGED STATION STOPS BETWEEN EACH PERF ZONE

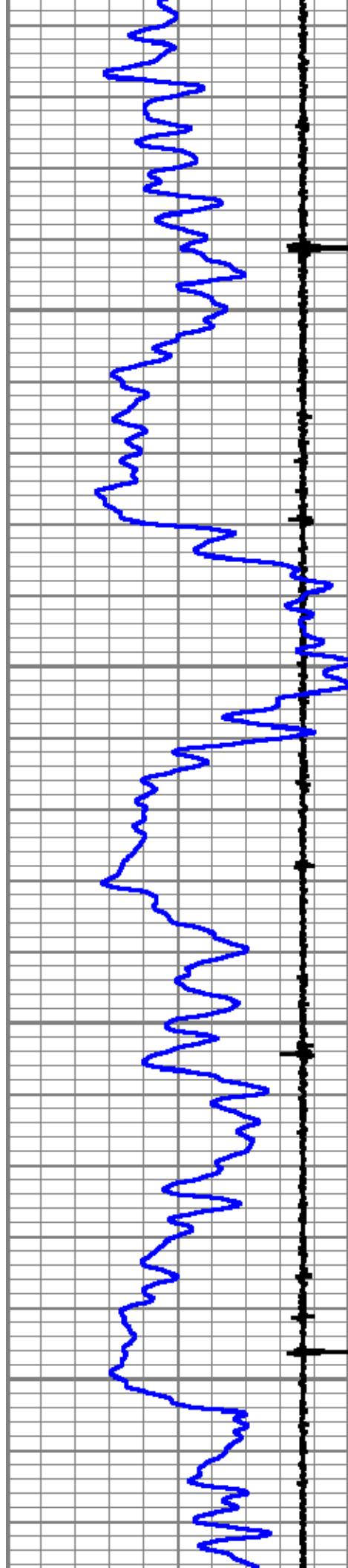
THANK YOU FOR CHOOSING RELIANCE OILFIELD SERVICES, LLC!!



Database File laramie energy 30-01w.db  
Dataset Pathname .\\merge4  
Presentation Format ros\_leepl  
Dataset Creation Sat Aug 24 10:50:17 2019  
Charted by Depth in Feet scaled 1:240

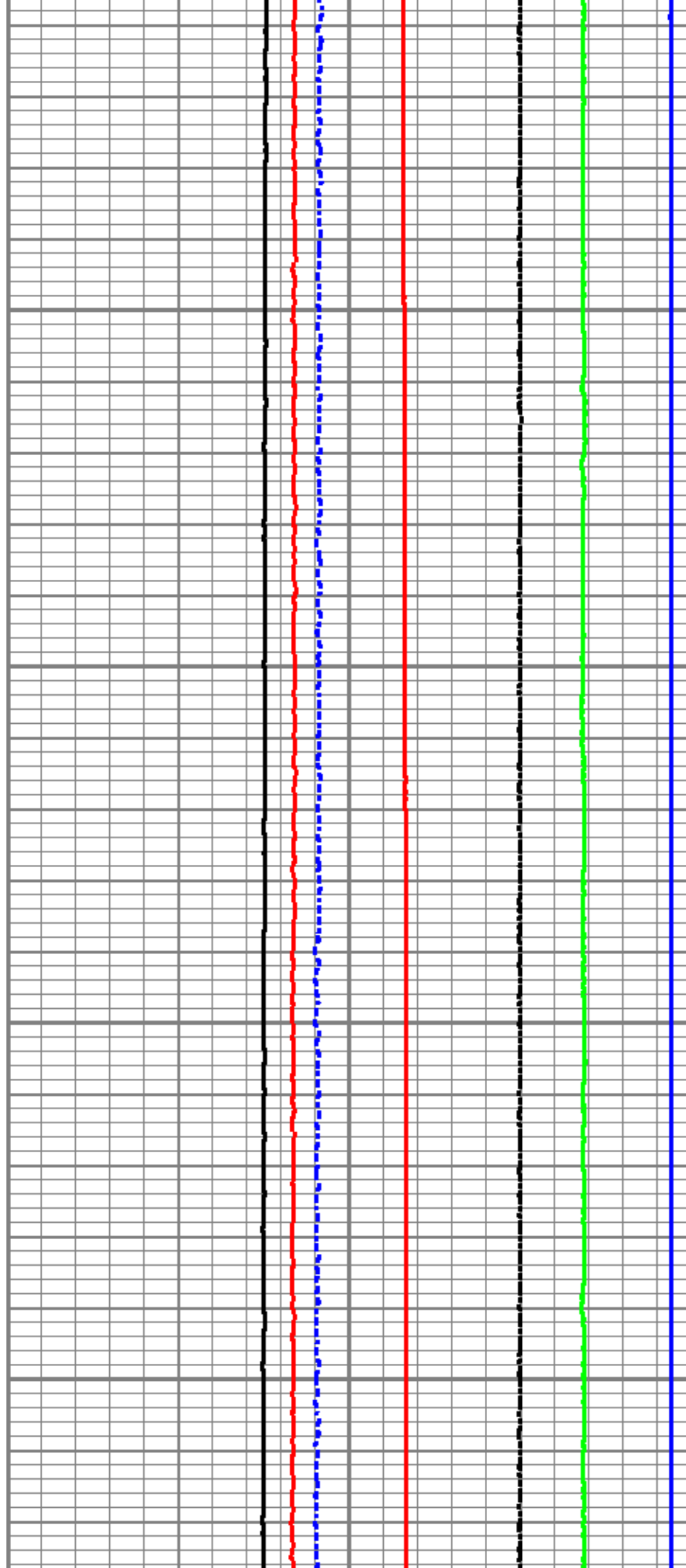
Casing Collar Locator			FLOWMETER 35 DOWN		TEMPERATURE FLOWING				
0	Gamma Ray (GAPI)	120							
			-100	(rps)	100	175	(degF)	230	
			FLOWMETER 65 DOWN (RPS)			-0.01	Grad (g/cc)	1.1	
						-0.1	CWH (DU)	1.1	
						-2	DTEMPsd351 (DegF/ft)	2	
						-100	(rps)	100	
						-100	FLOWMETER 95 DOWN (rps)	100	

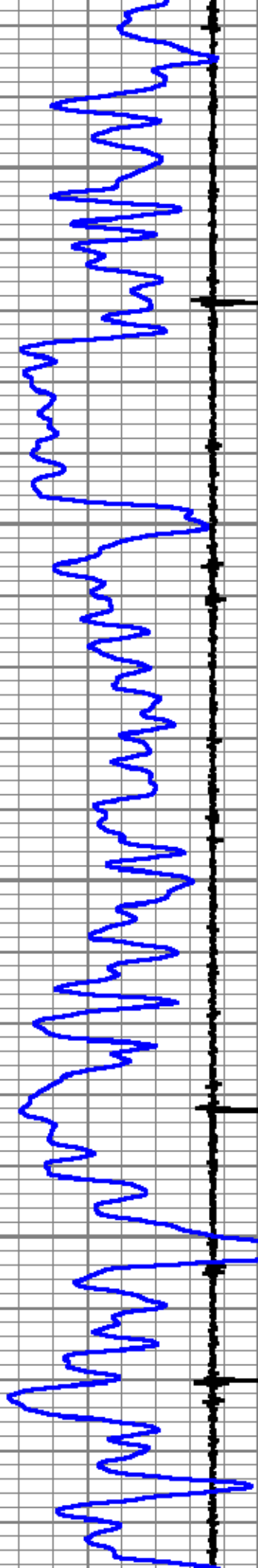




6800

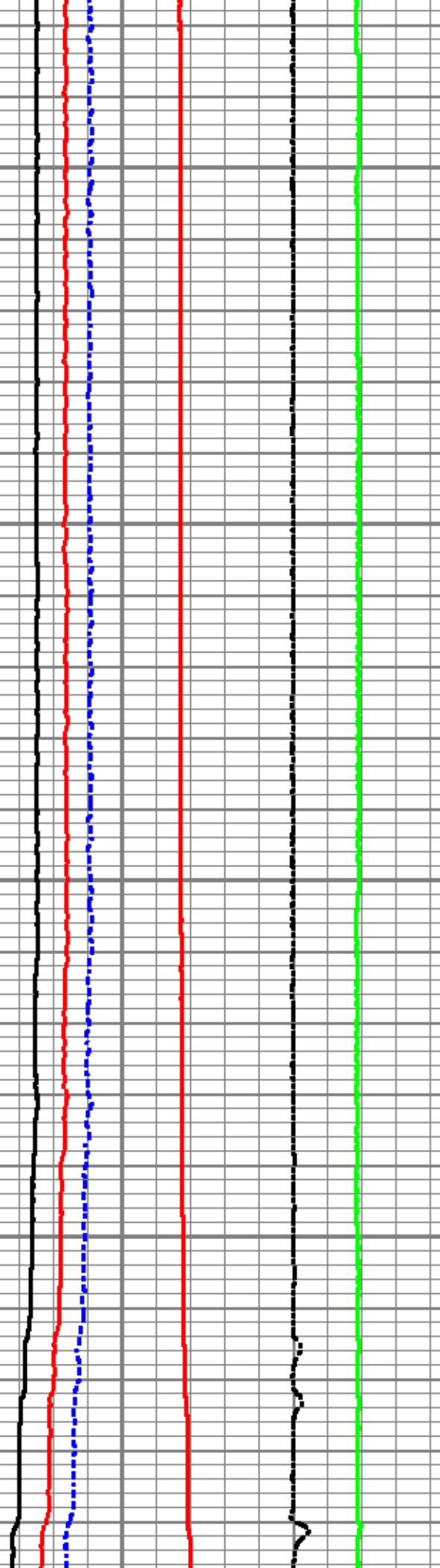
6900

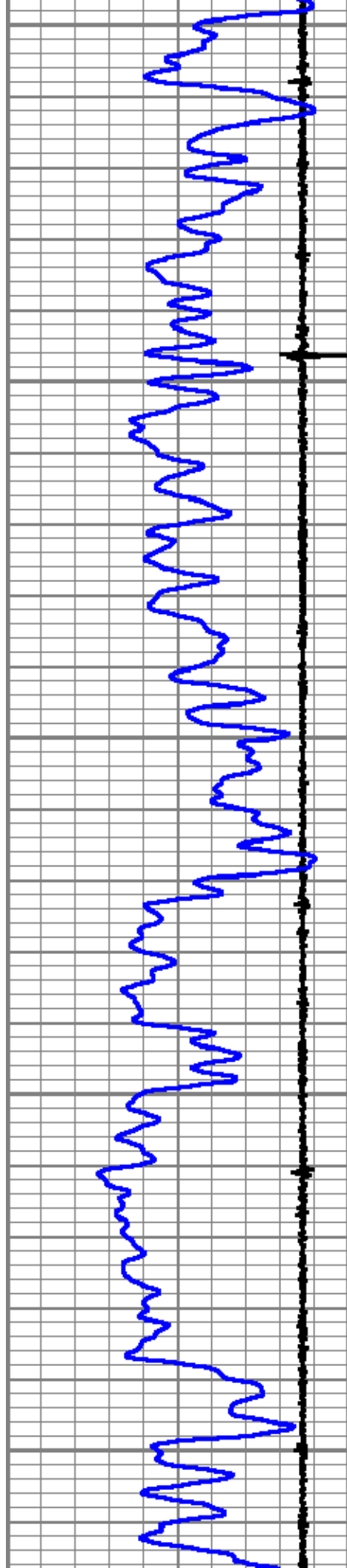




7000

7100

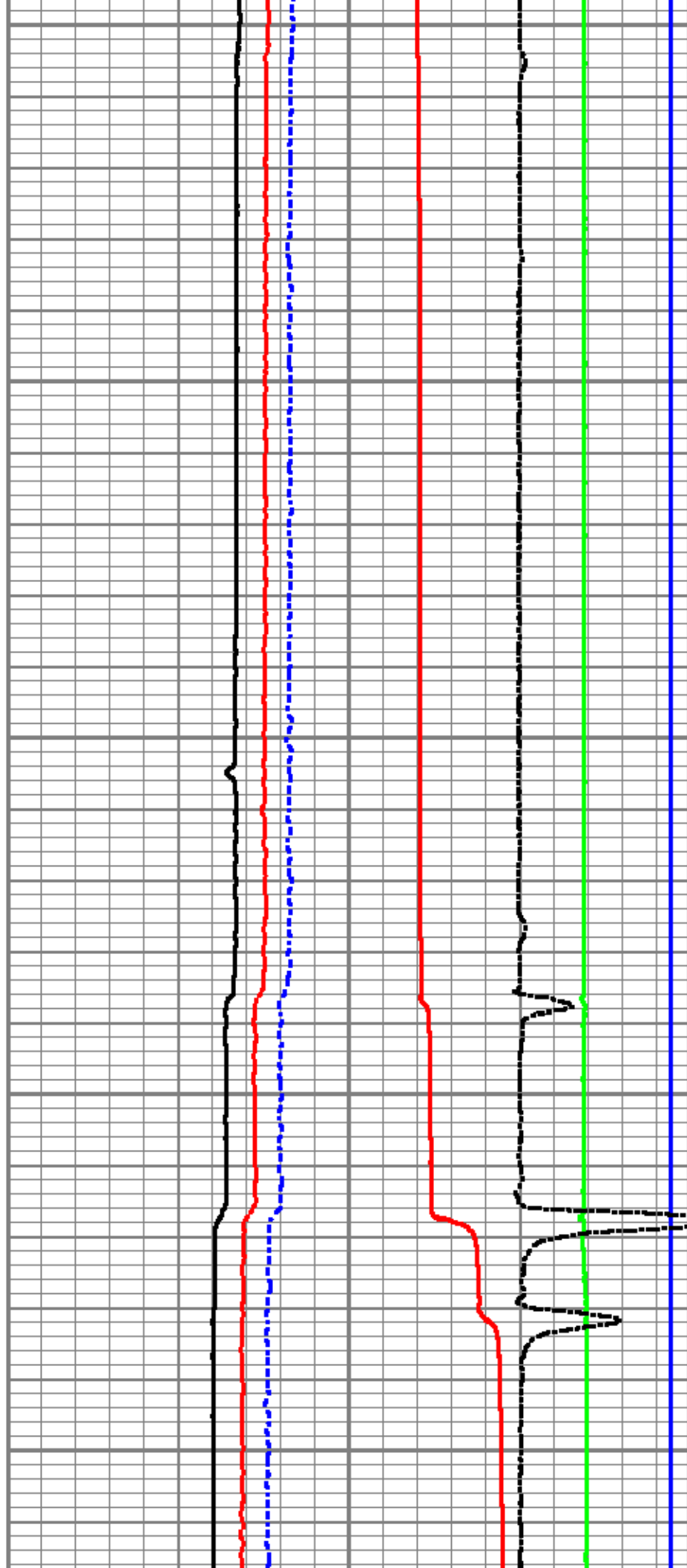


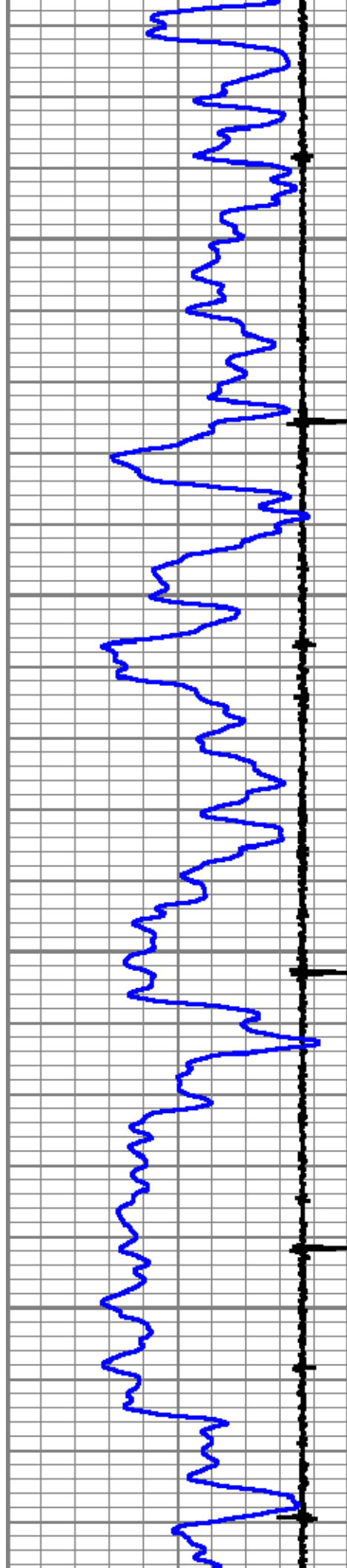


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7300

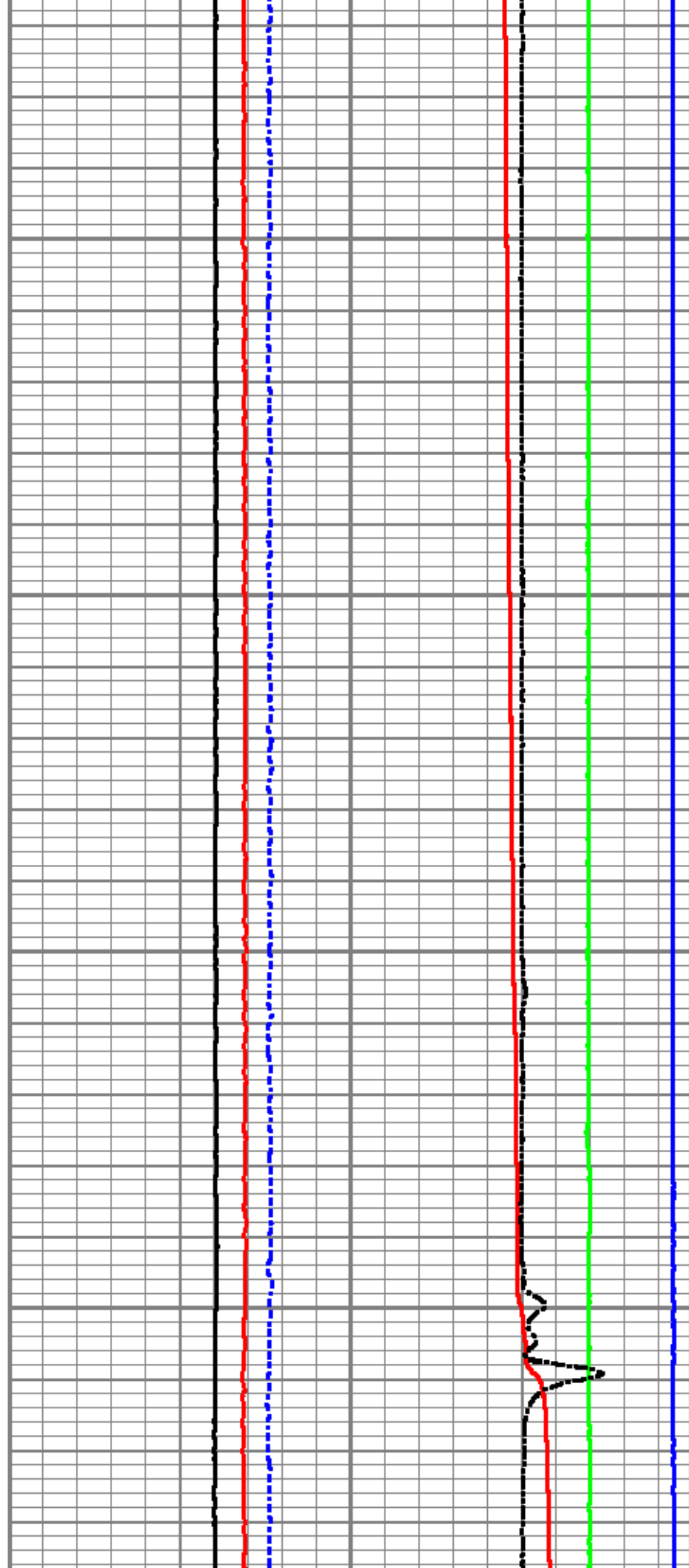
7400

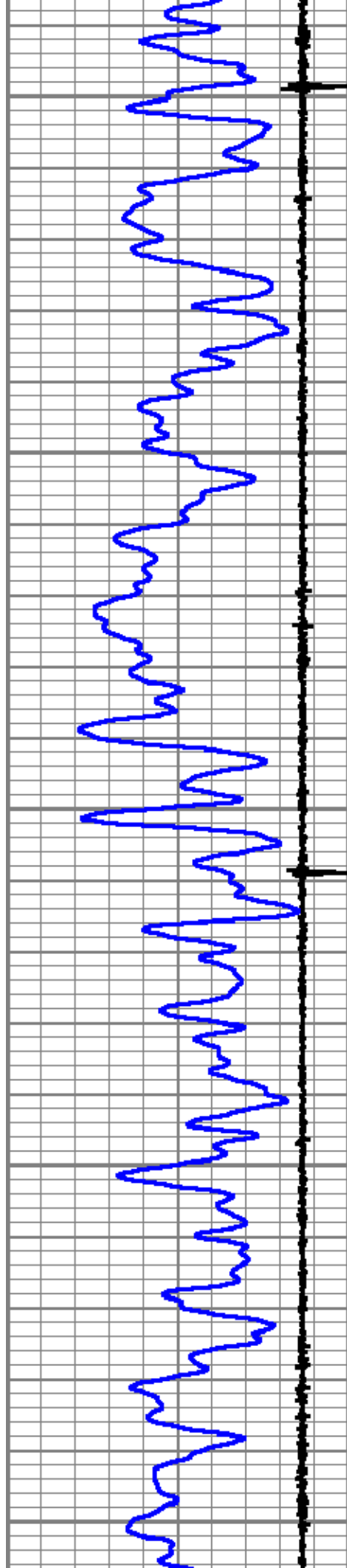




7500

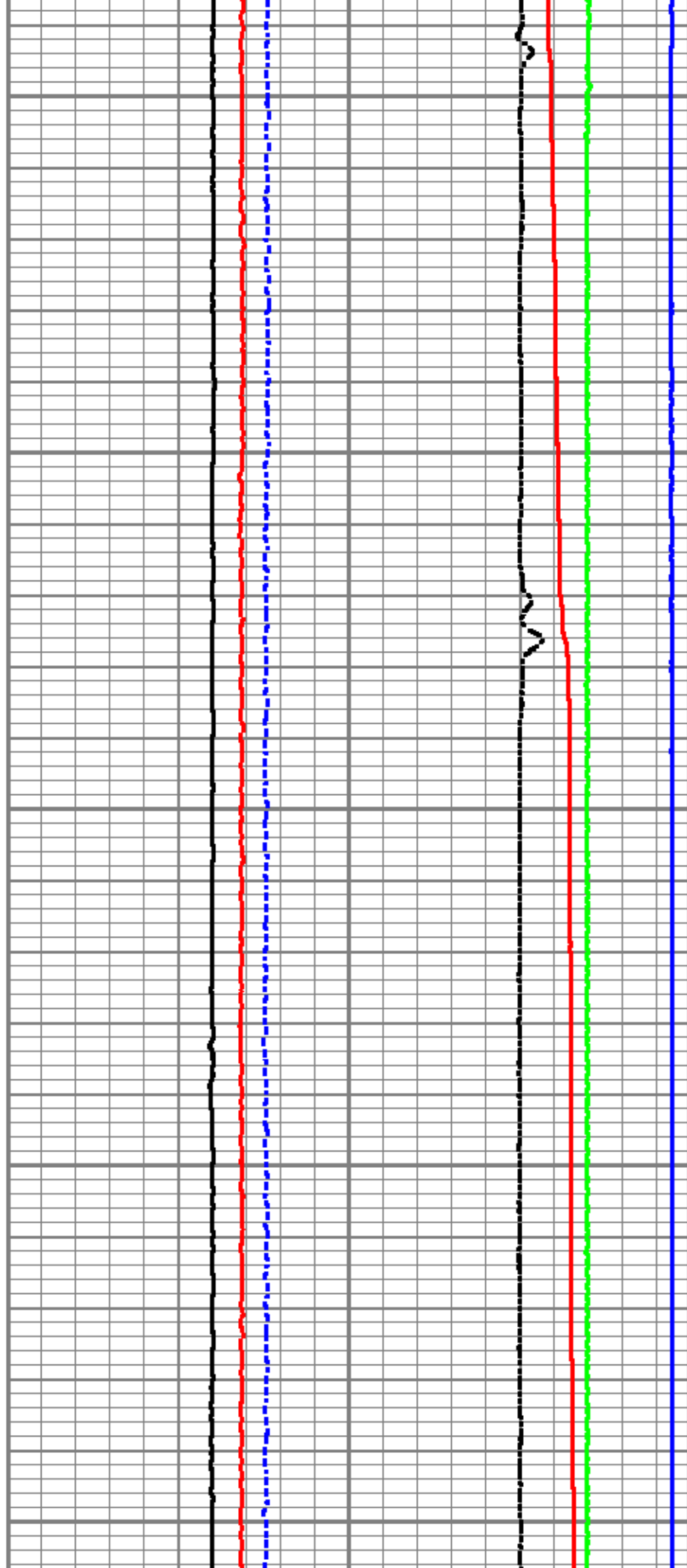
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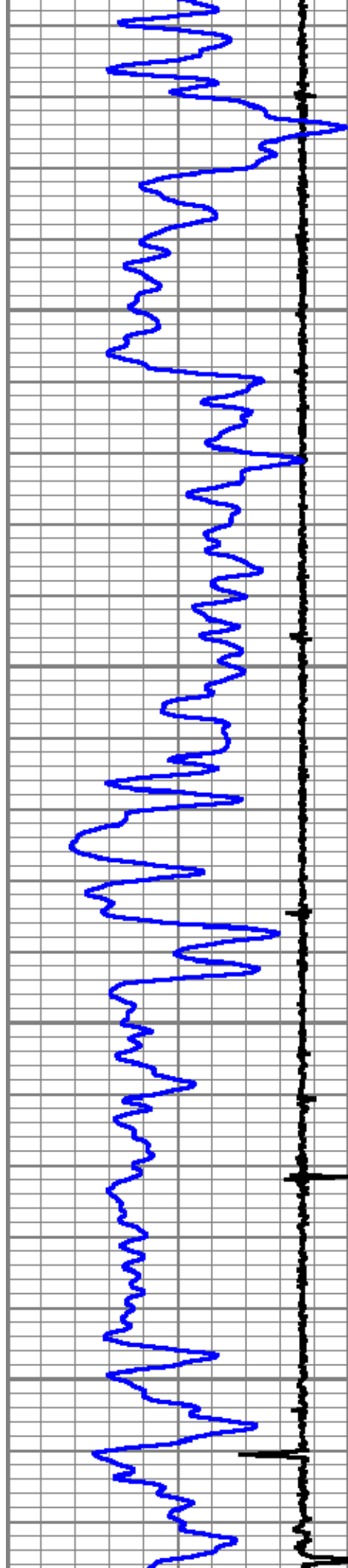




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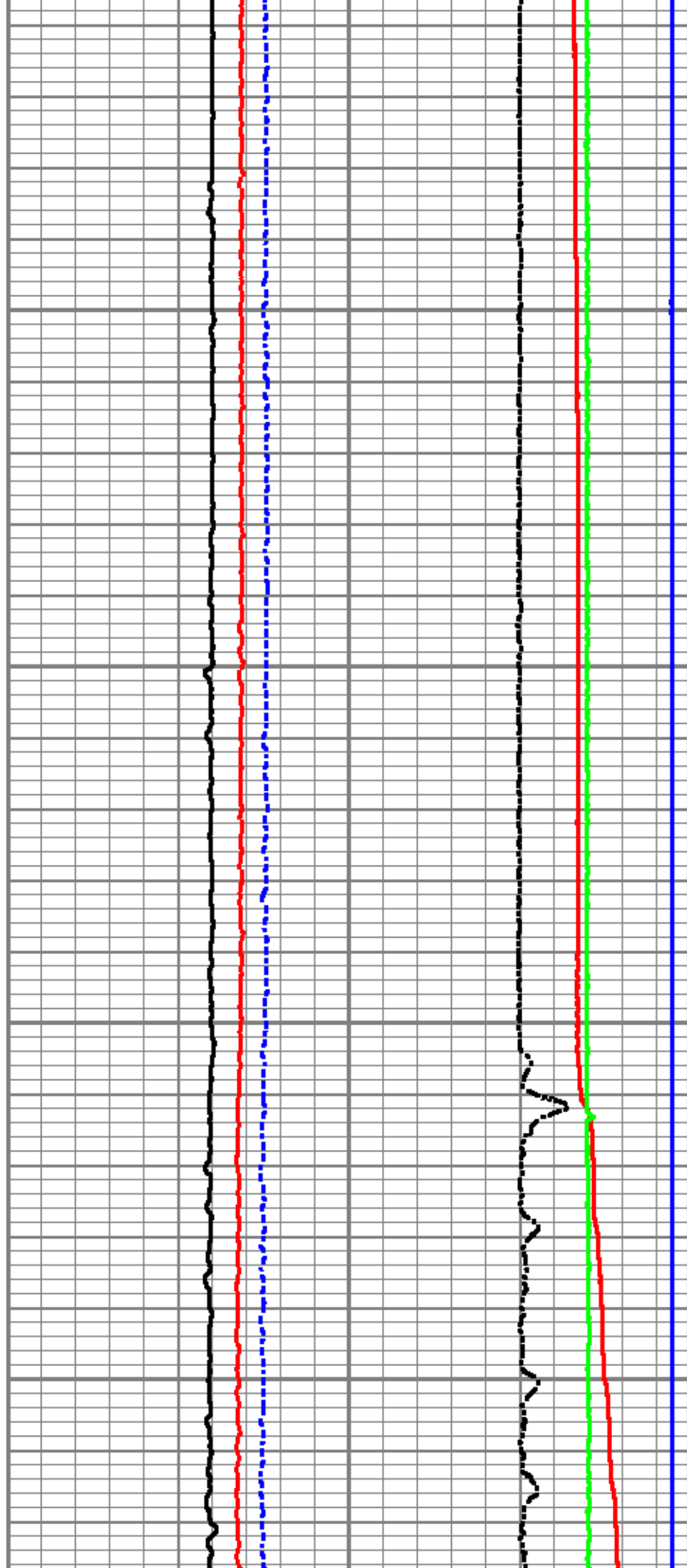
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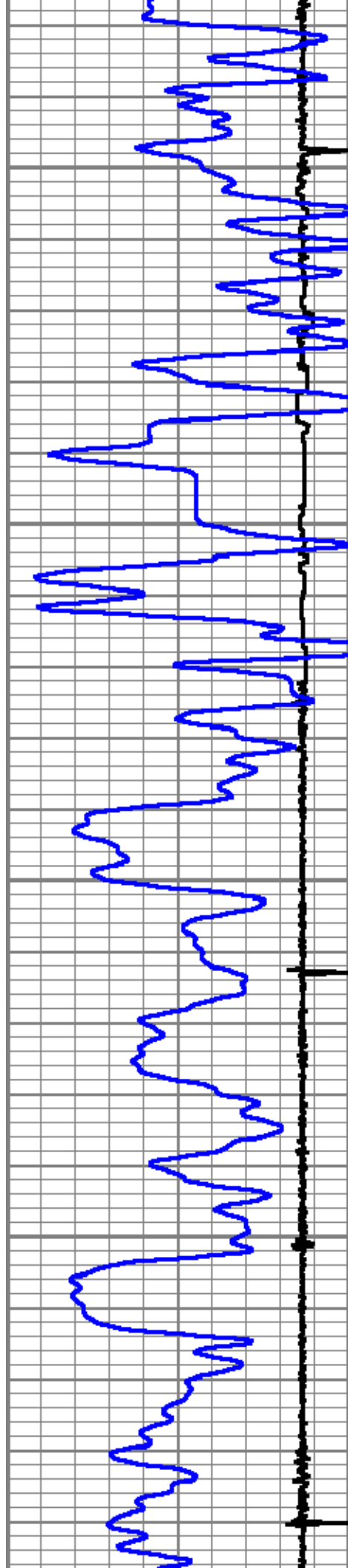


7900

8000



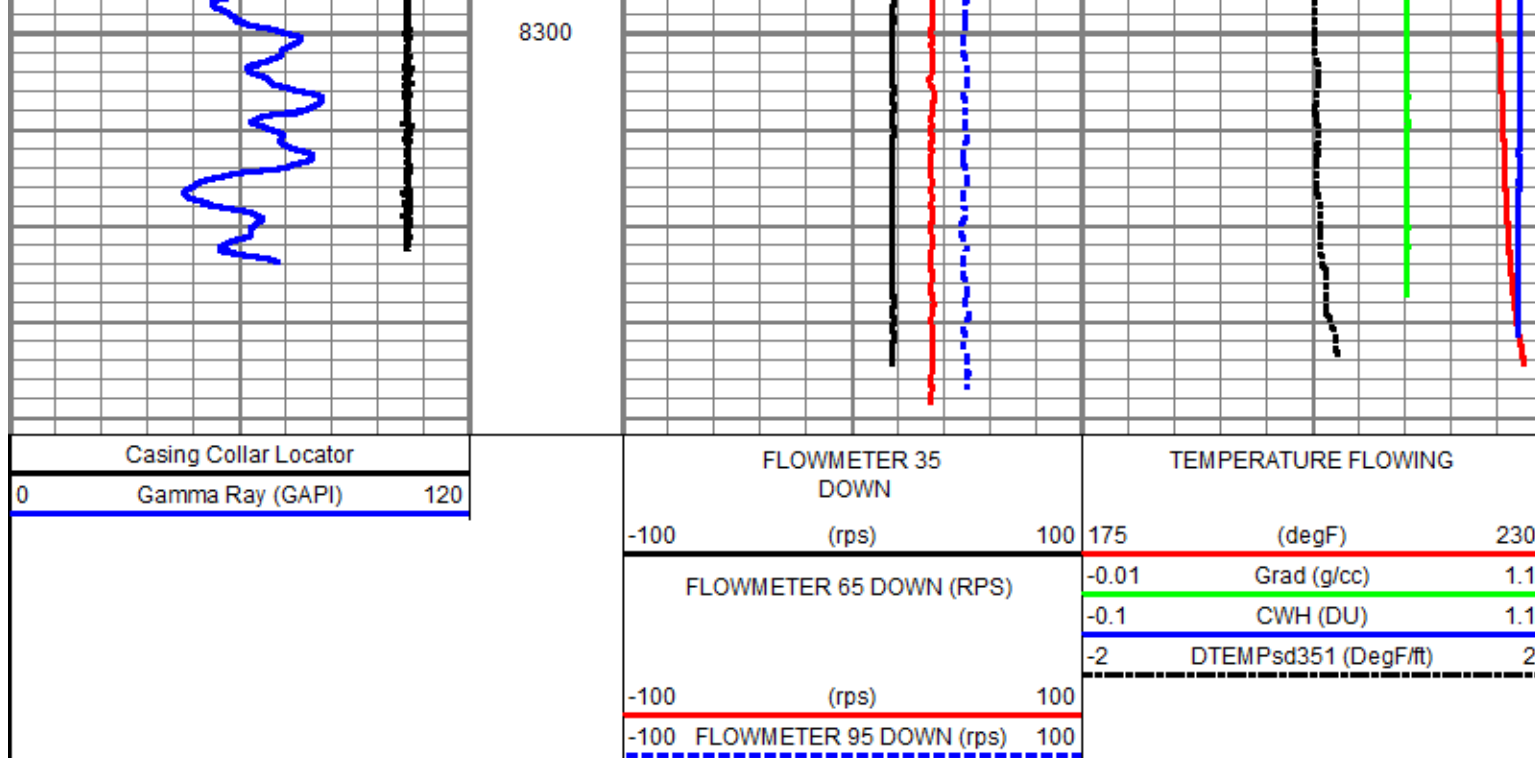




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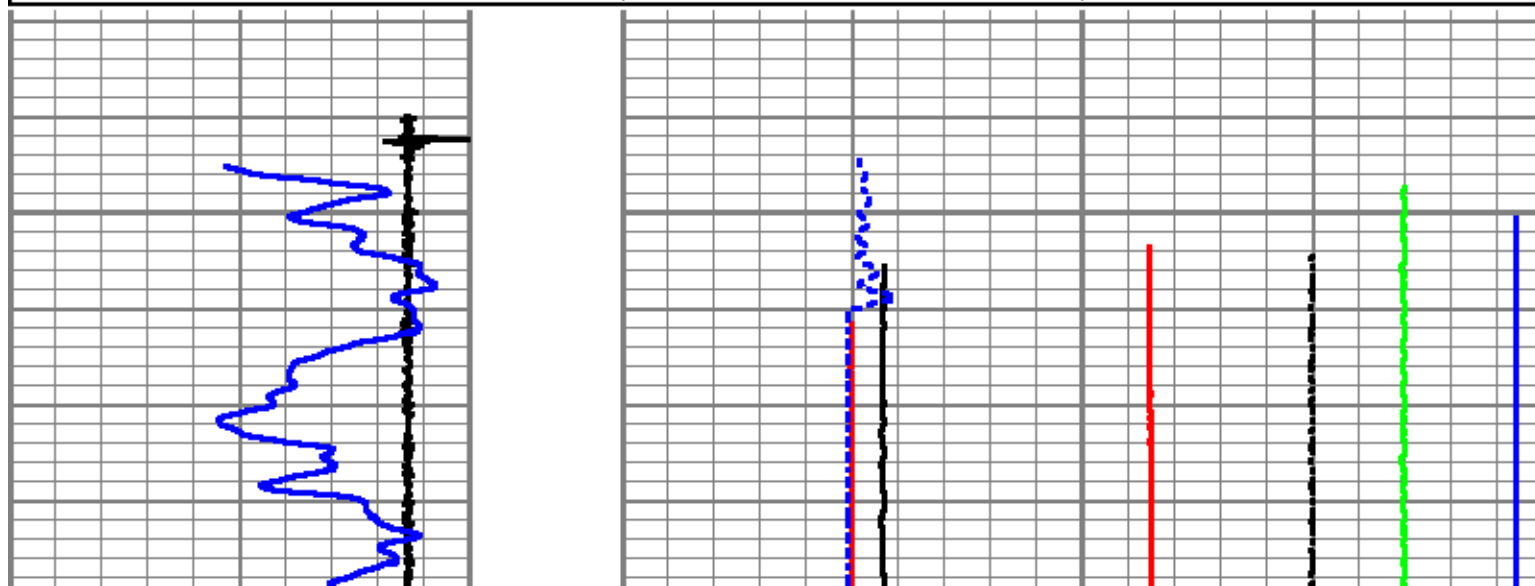
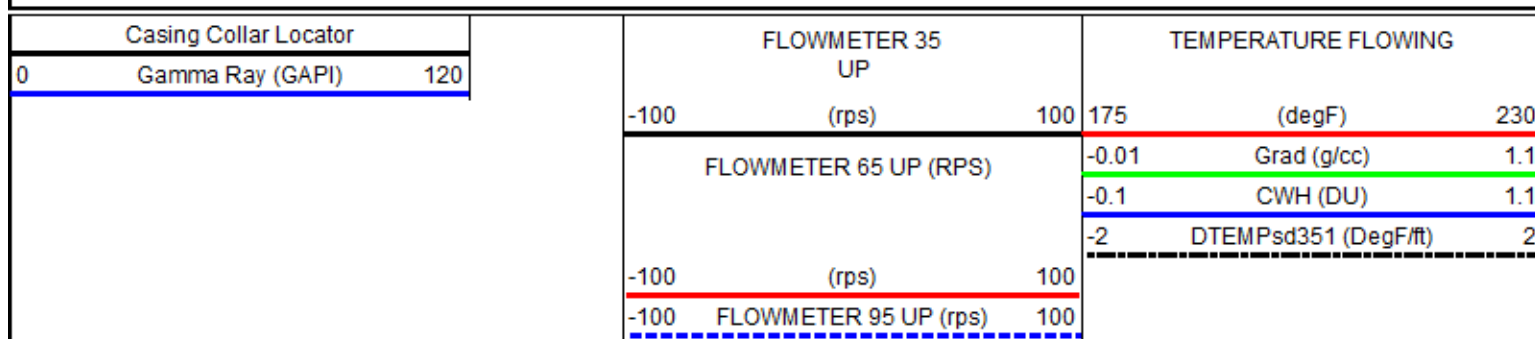
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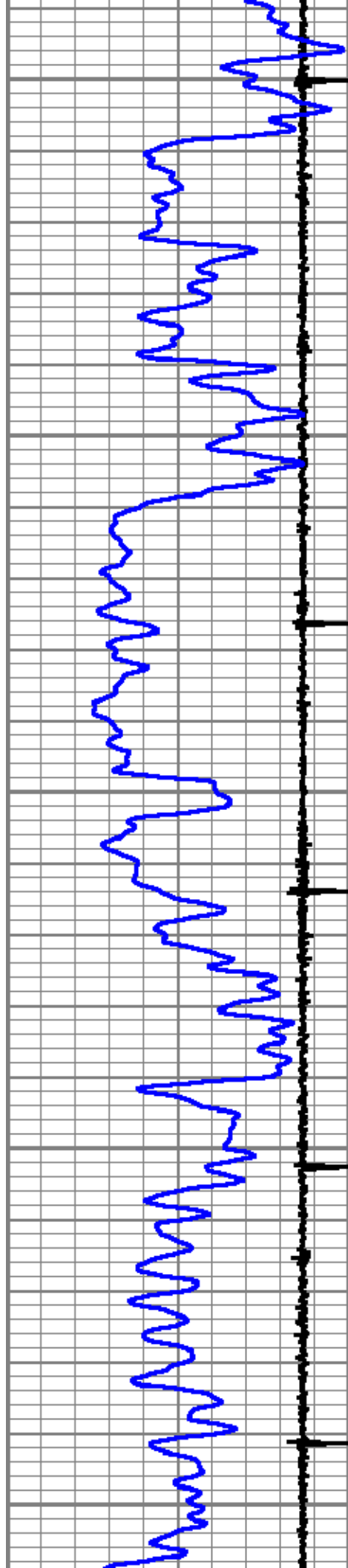




## MERGED SPINNERS UP PASSES

Database File laramie energy 30-01w.db  
 Dataset Pathname .\\merge5  
 Presentation Format ros\_leepl  
 Dataset Creation Sat Aug 24 10:59:36 2019  
 Charted by Depth in Feet scaled 1:240

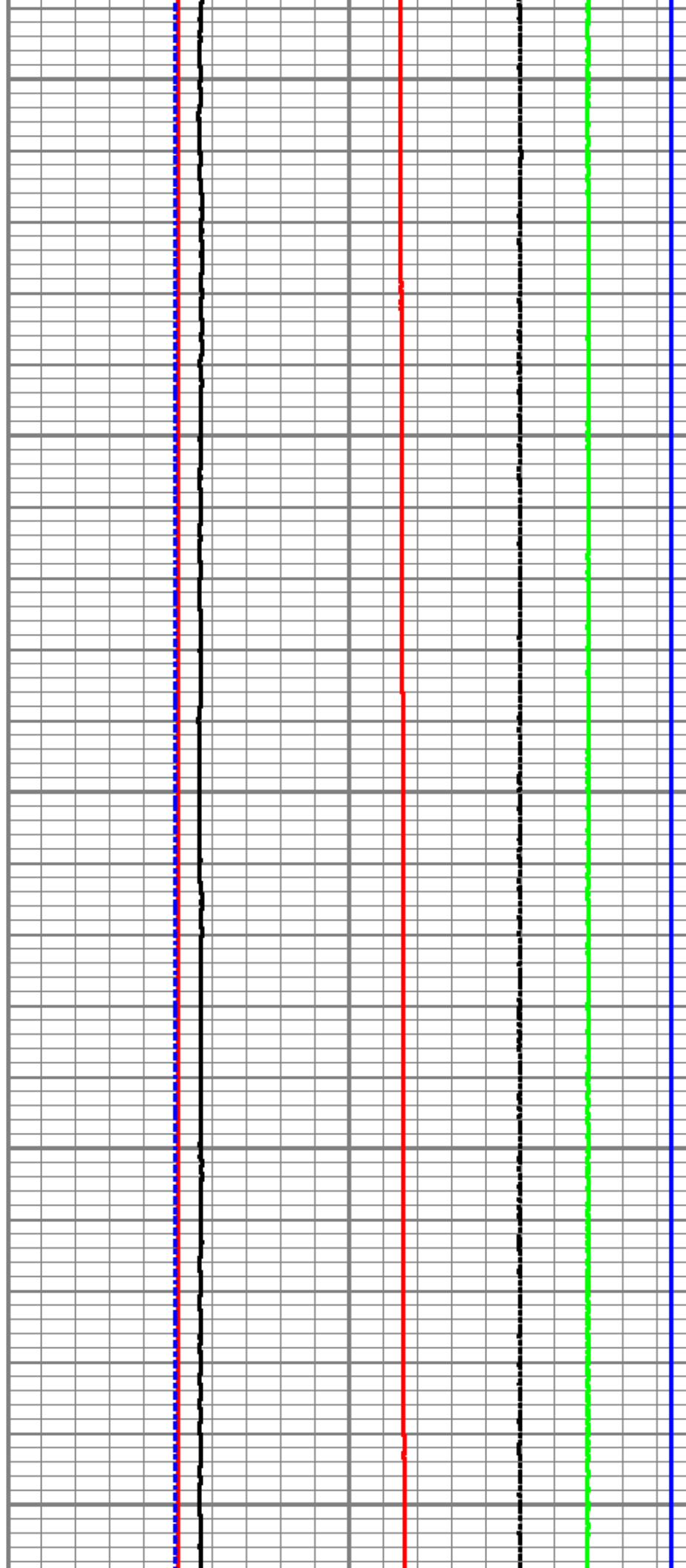


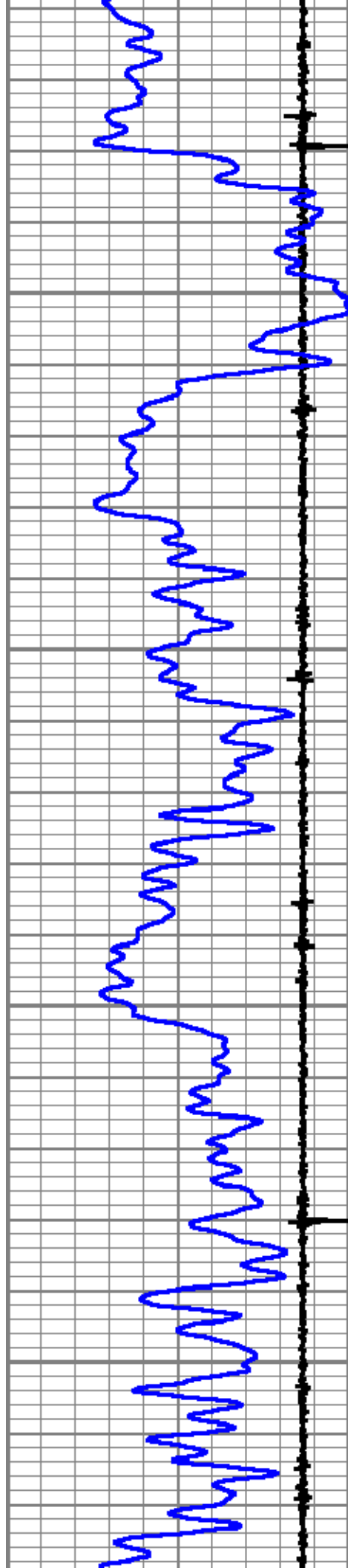


6600

6700

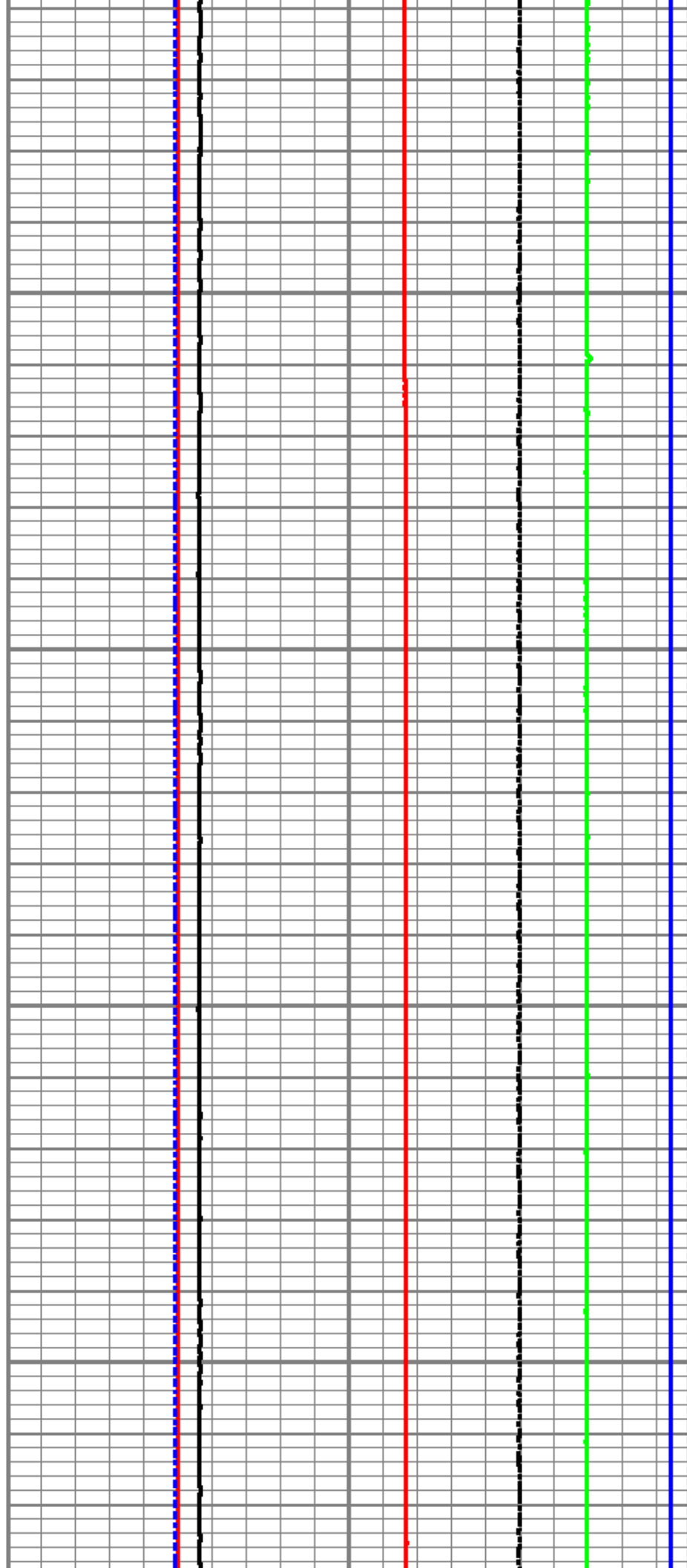
6800

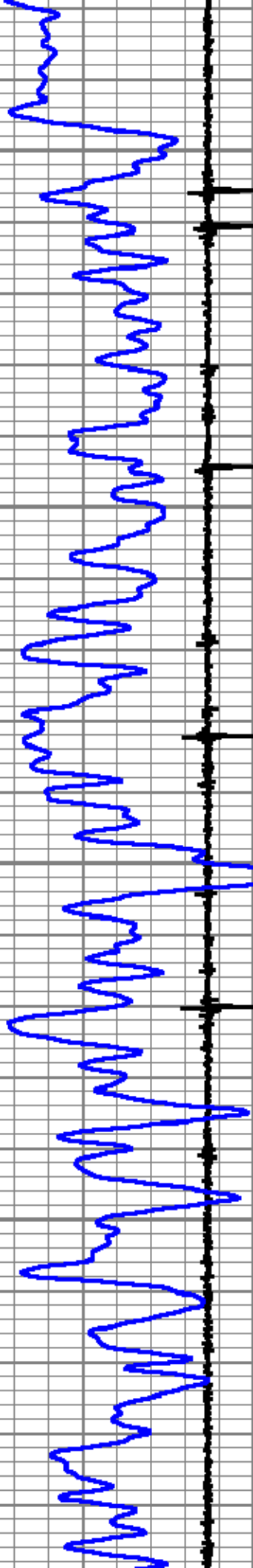




6900

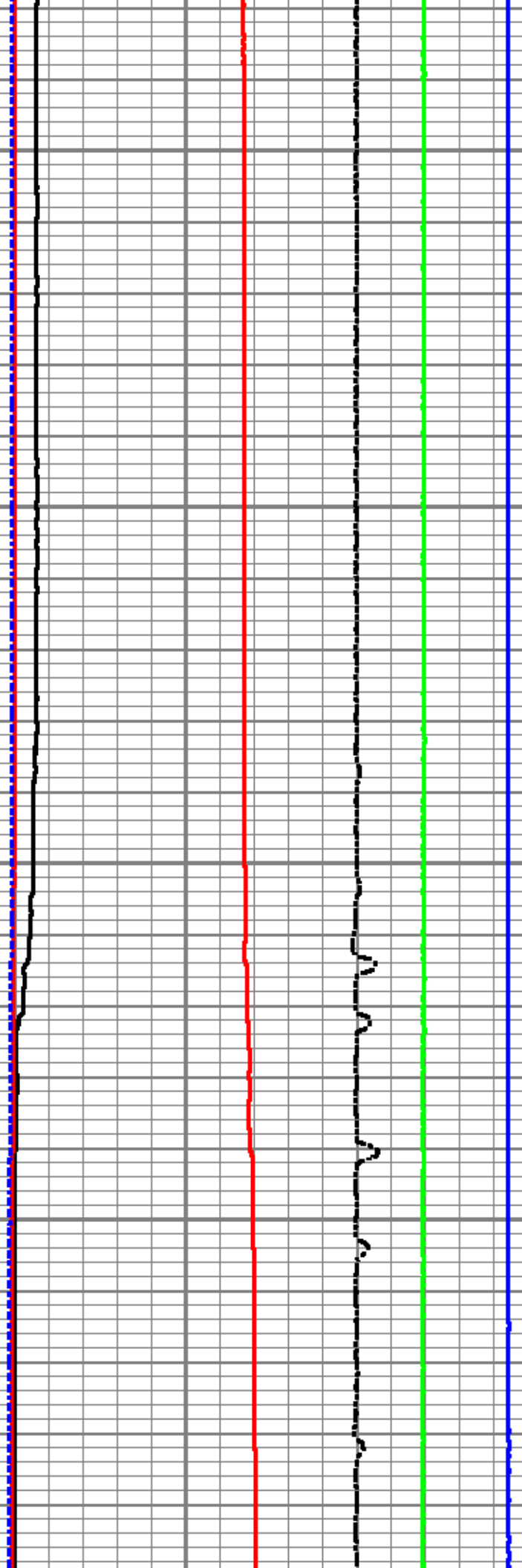
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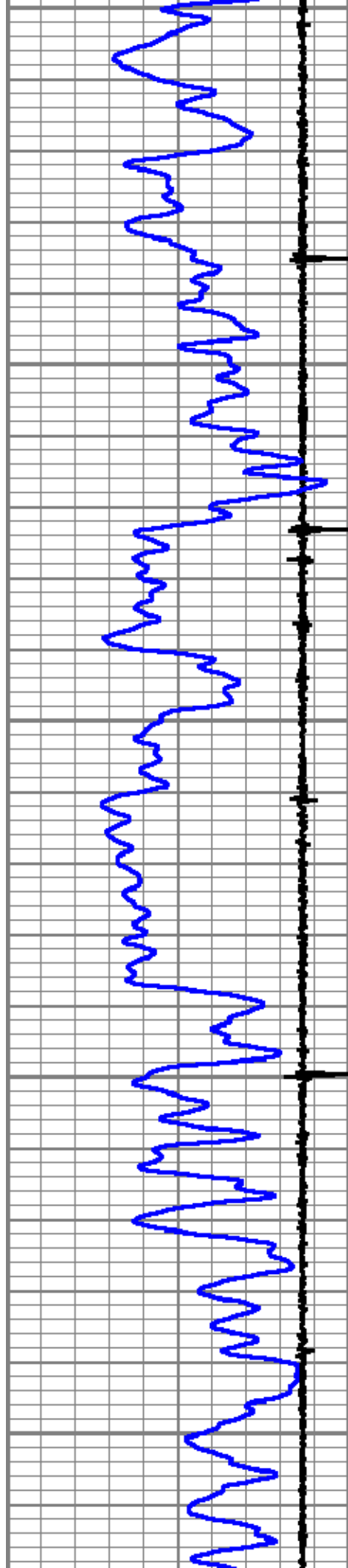




7100

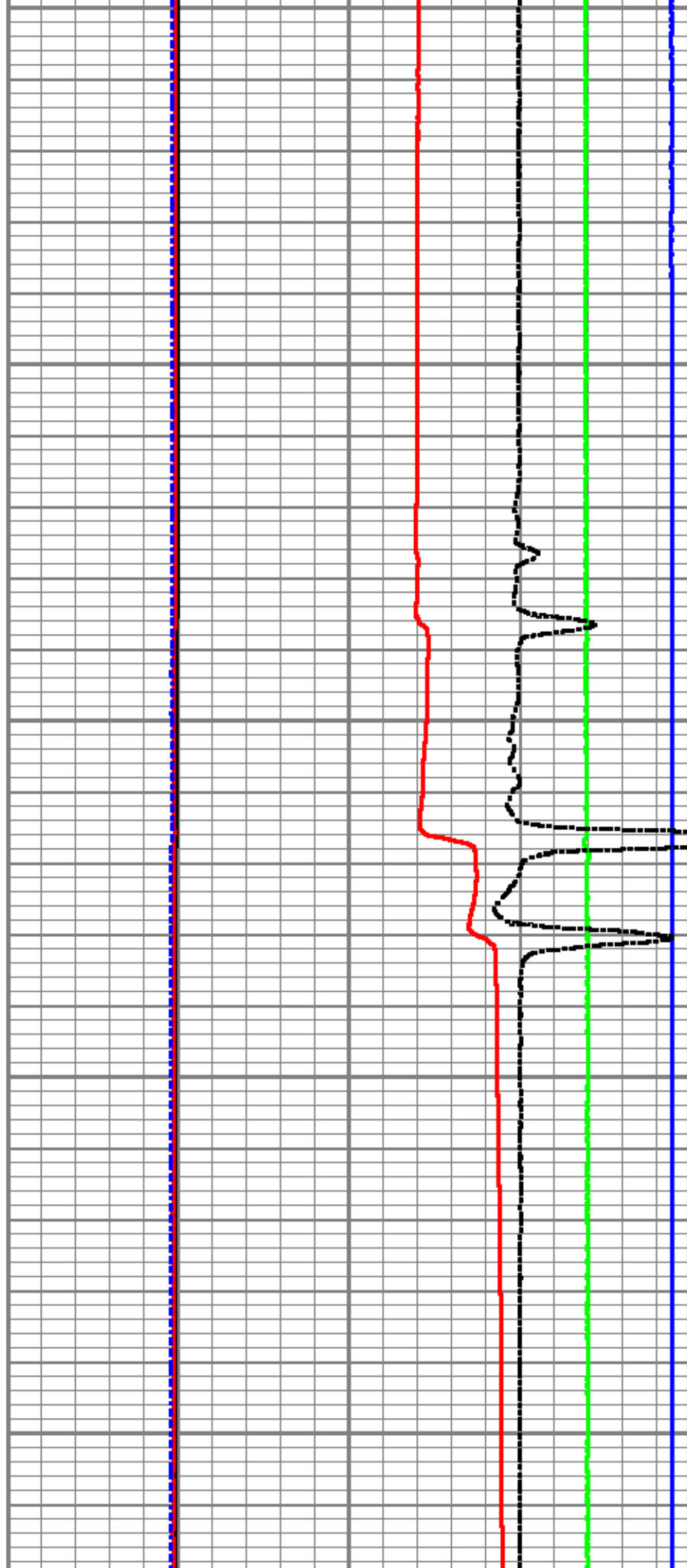
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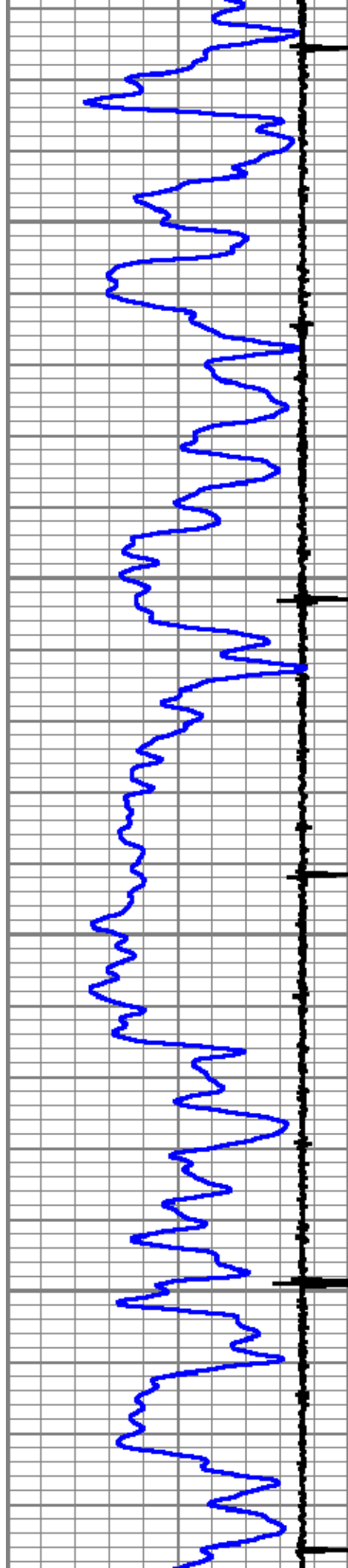




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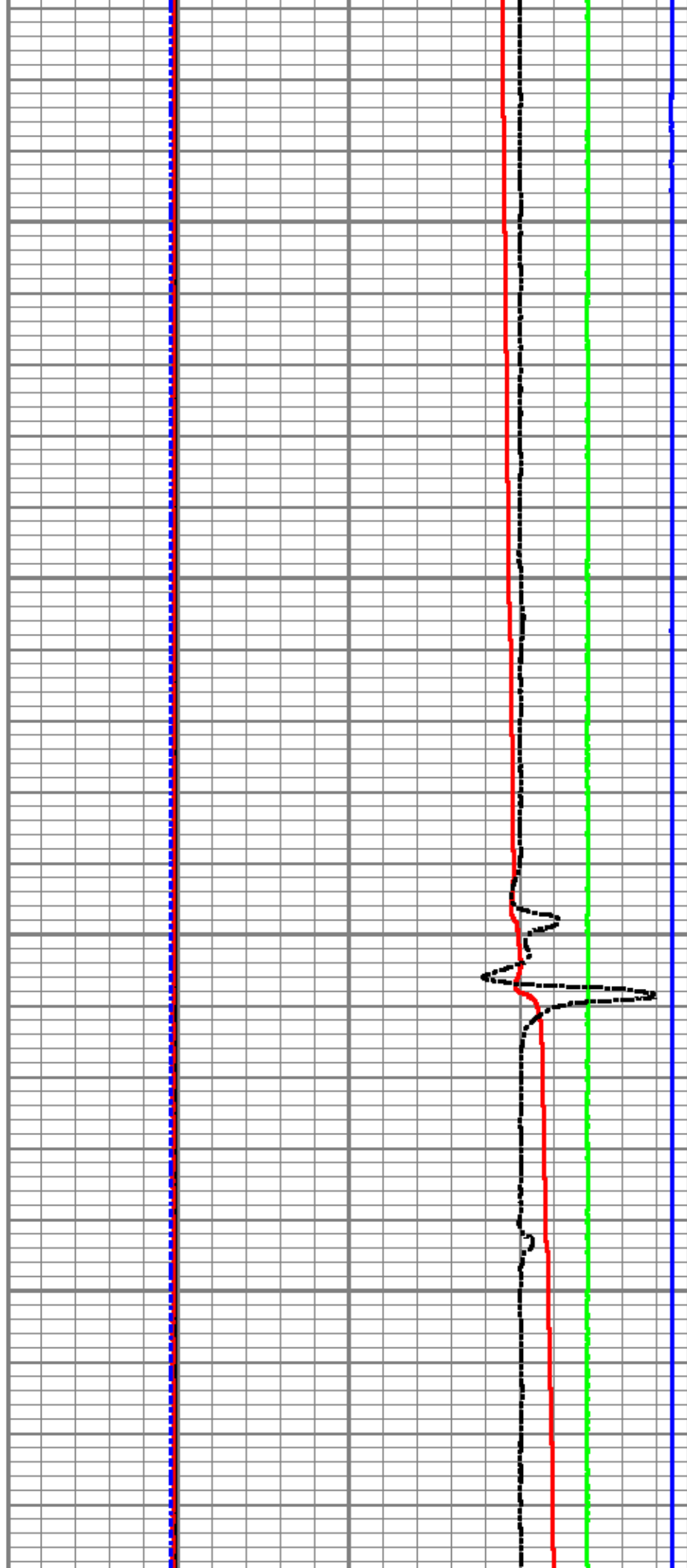
7400

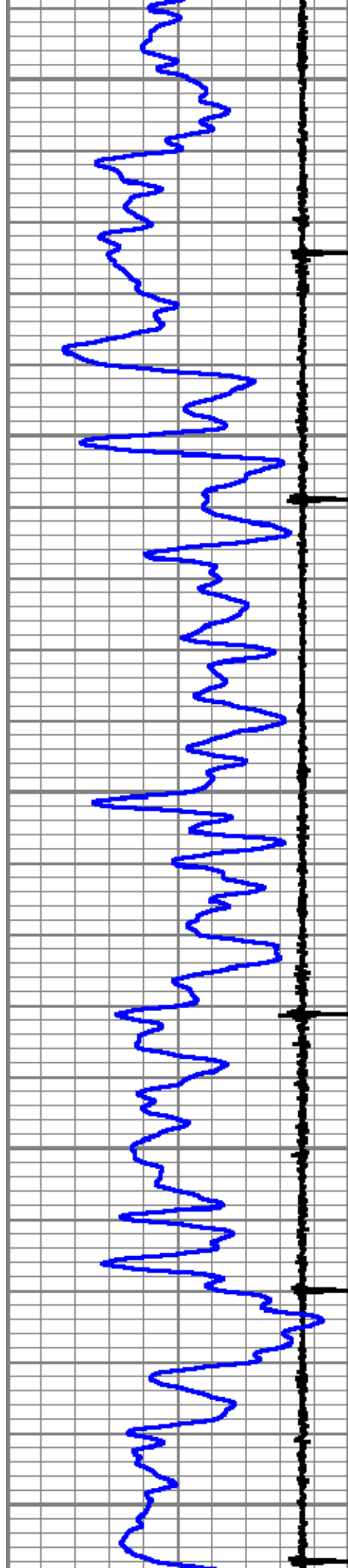




7500

7600

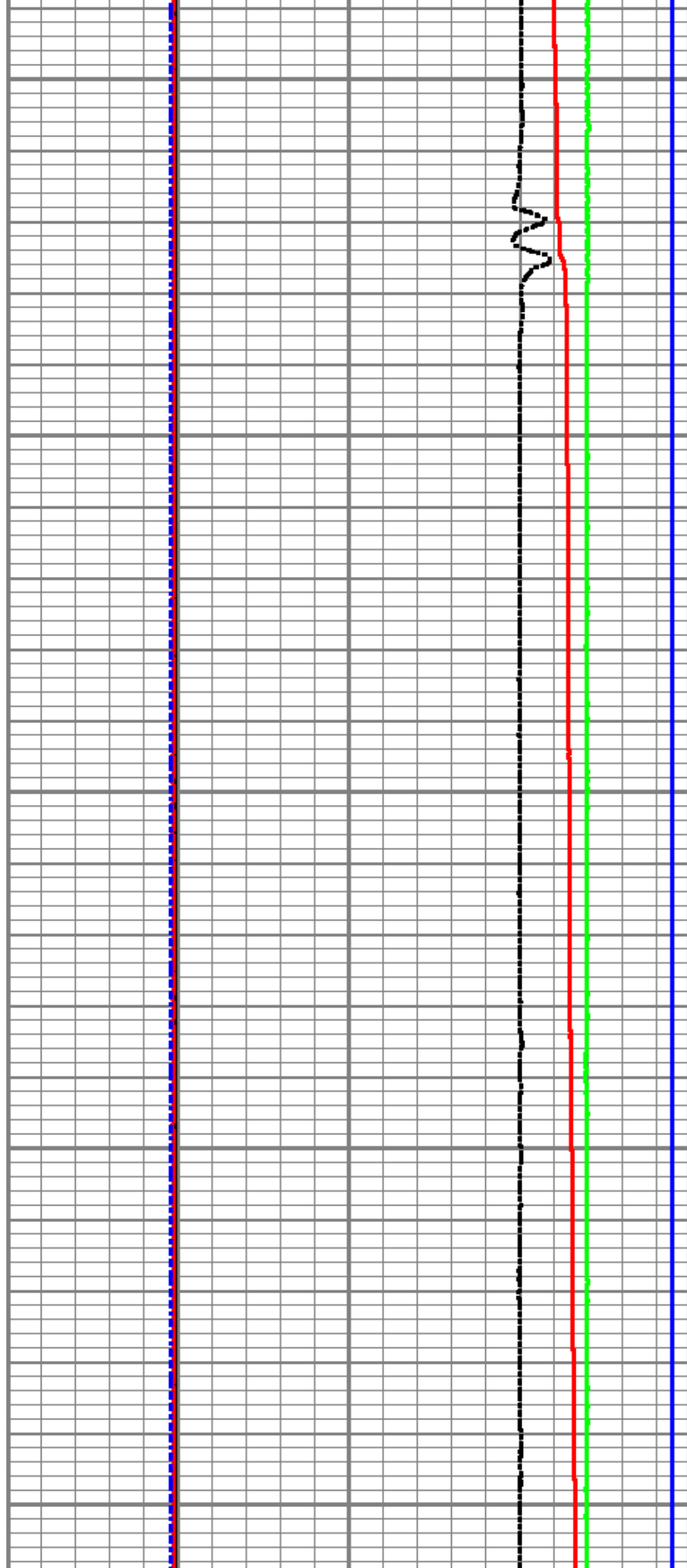




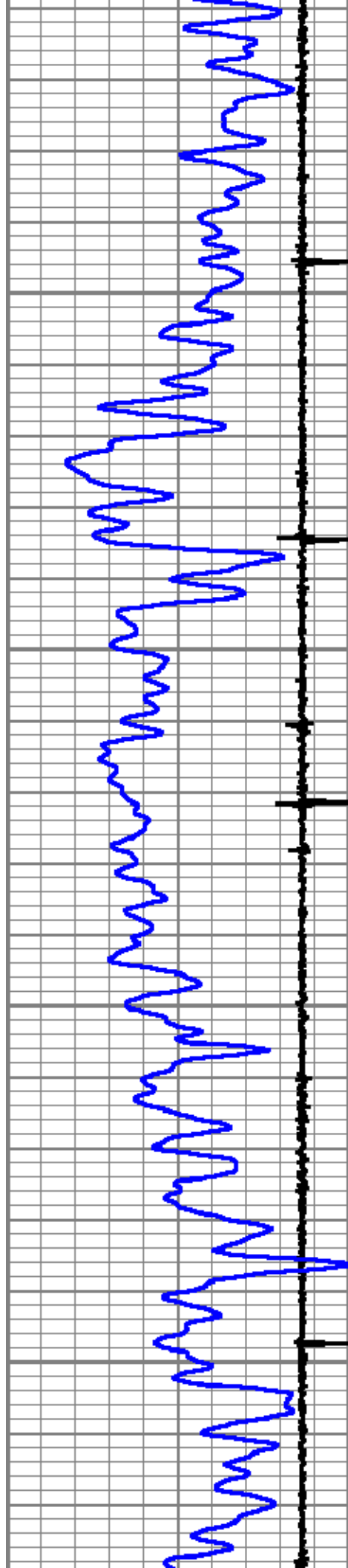
7700

7800

7900

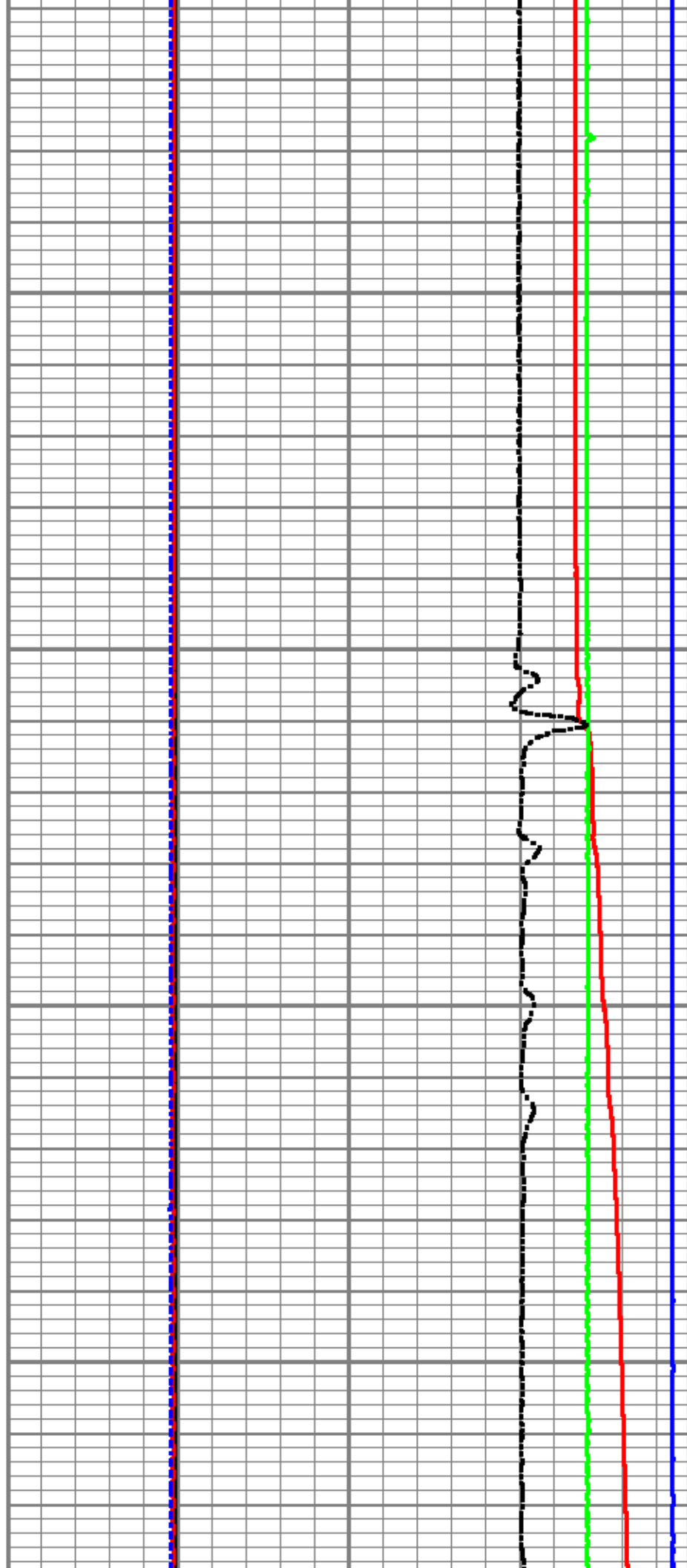


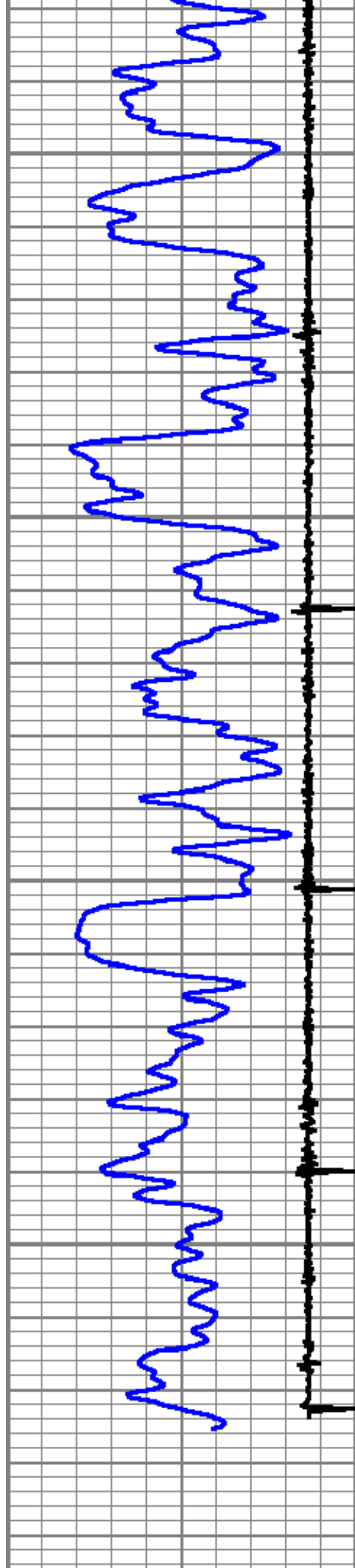




8000

8100

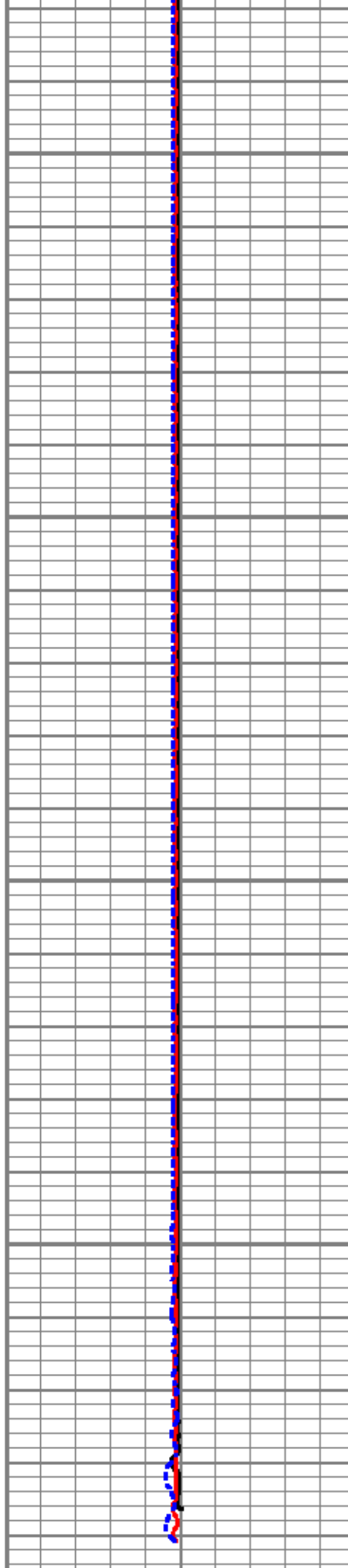




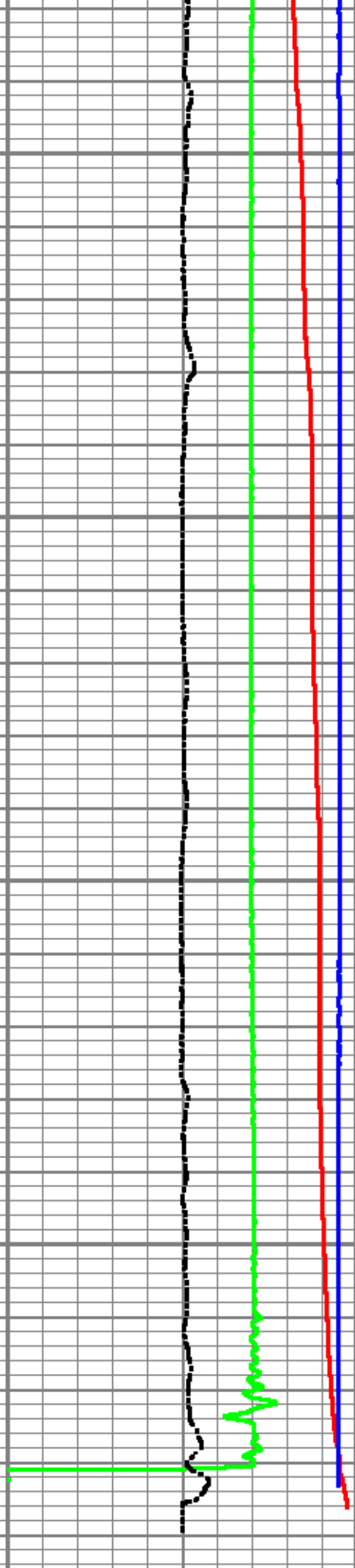
Casing Collar Locator

8200

8300



FLOWMETER 35



TEMPERATURE FLOWING

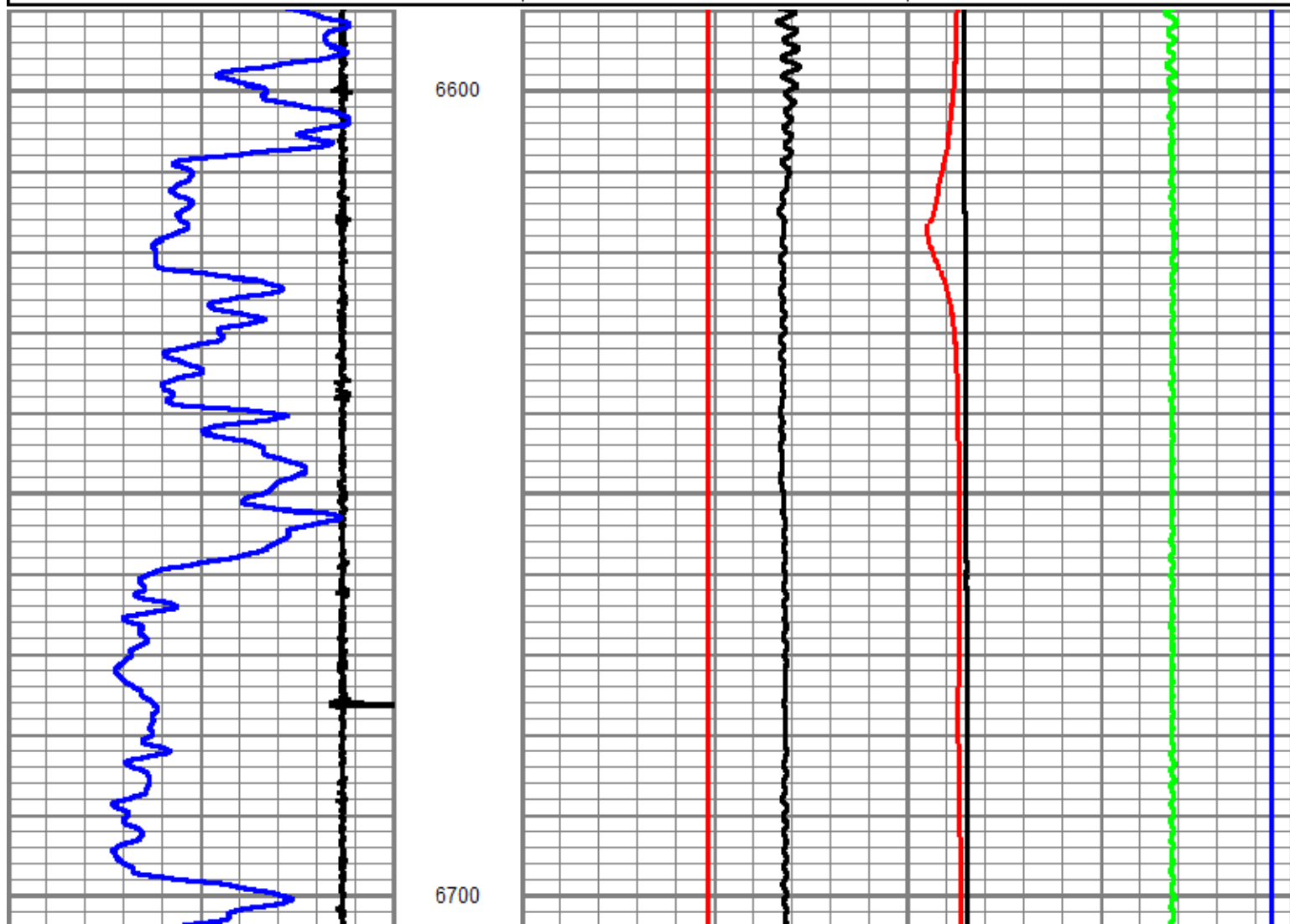
0	Gamma Ray (GAPI)	120	UP		-100	(rps)	100	175	(degF)	230
			FLOWMETER 65 UP (RPS)		-0.01	Grad (g/cc)	1.1			
					-0.1	CWH (DU)	1.1			
					-2	DTEMPsd351 (DegF/ft)	2			
					-100	(rps)	100			
			FLOWMETER 95 UP (rps)		-100		100			

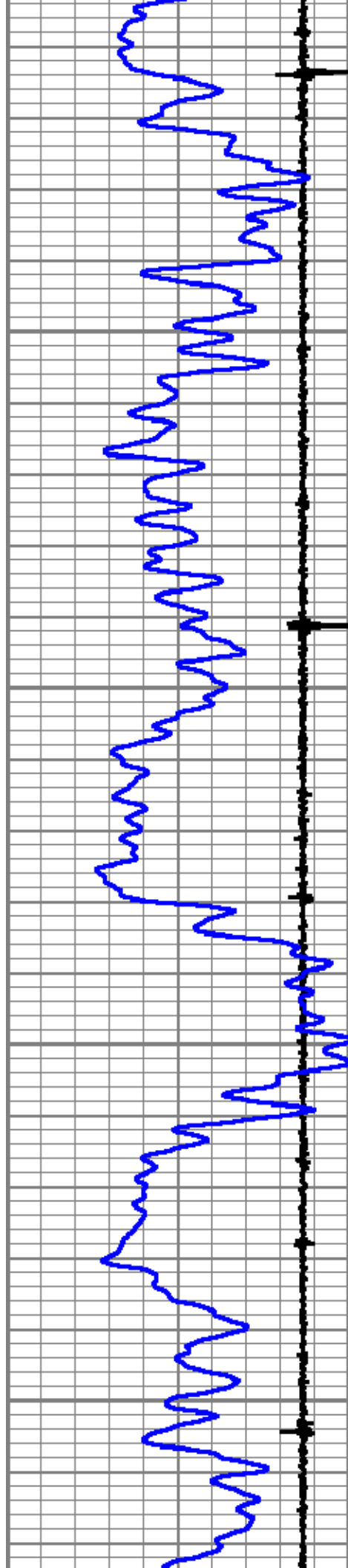


## SHUT IN SPINNERS UP AND DOWN

Database File laramie energy 30-01w.db  
 Dataset Pathname .\\merge7  
 Presentation Format ros\_leepl  
 Dataset Creation Sat Aug 24 11:36:12 2019  
 Charted by Depth in Feet scaled 1:240

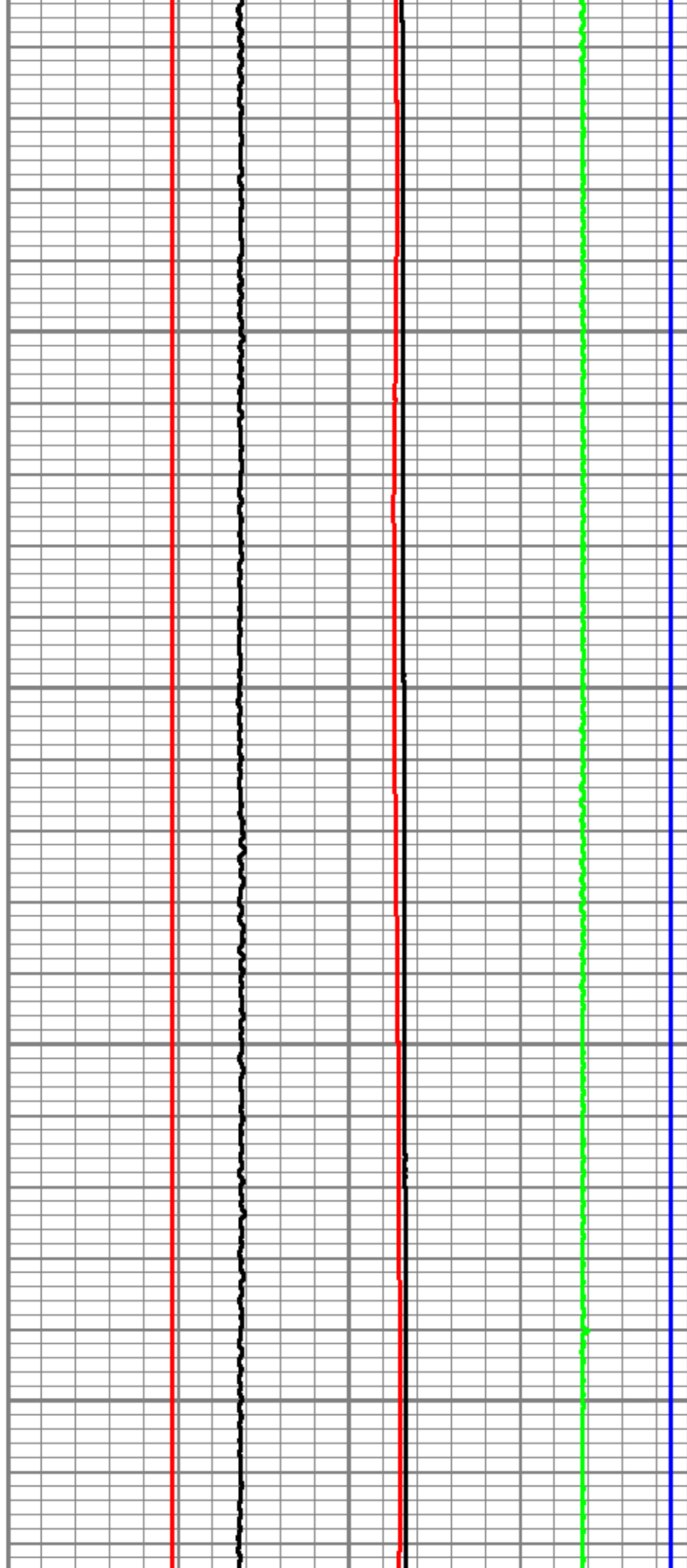
Casing Collar Locator			FLOWMETER 50 DOWN			TEMPERATURE FLOWING		
0	Gamma Ray (GAPI)	120				-75	(rps)	75
			FLOWMETER 50 (RPS) UP			-0.01	Grad (g/cc)	1.1
						-0.1	CWH (DU)	1.1
			175			TEMPERATURE SHUT IN (degF)	230	
			-75	(rps)	75			

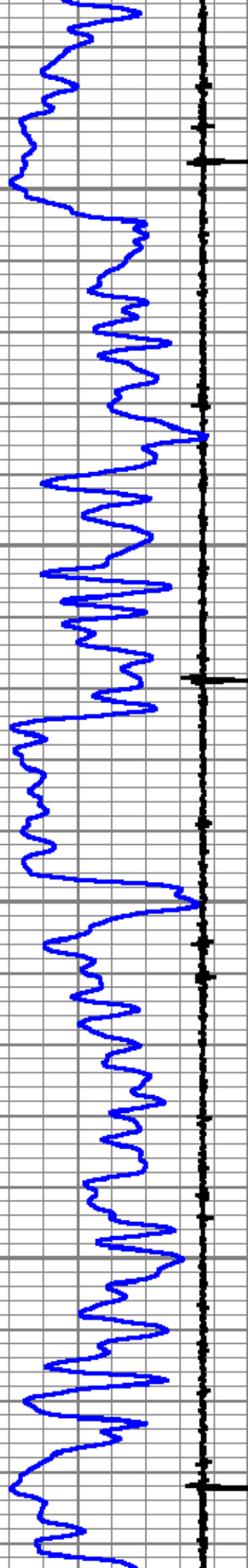




6800

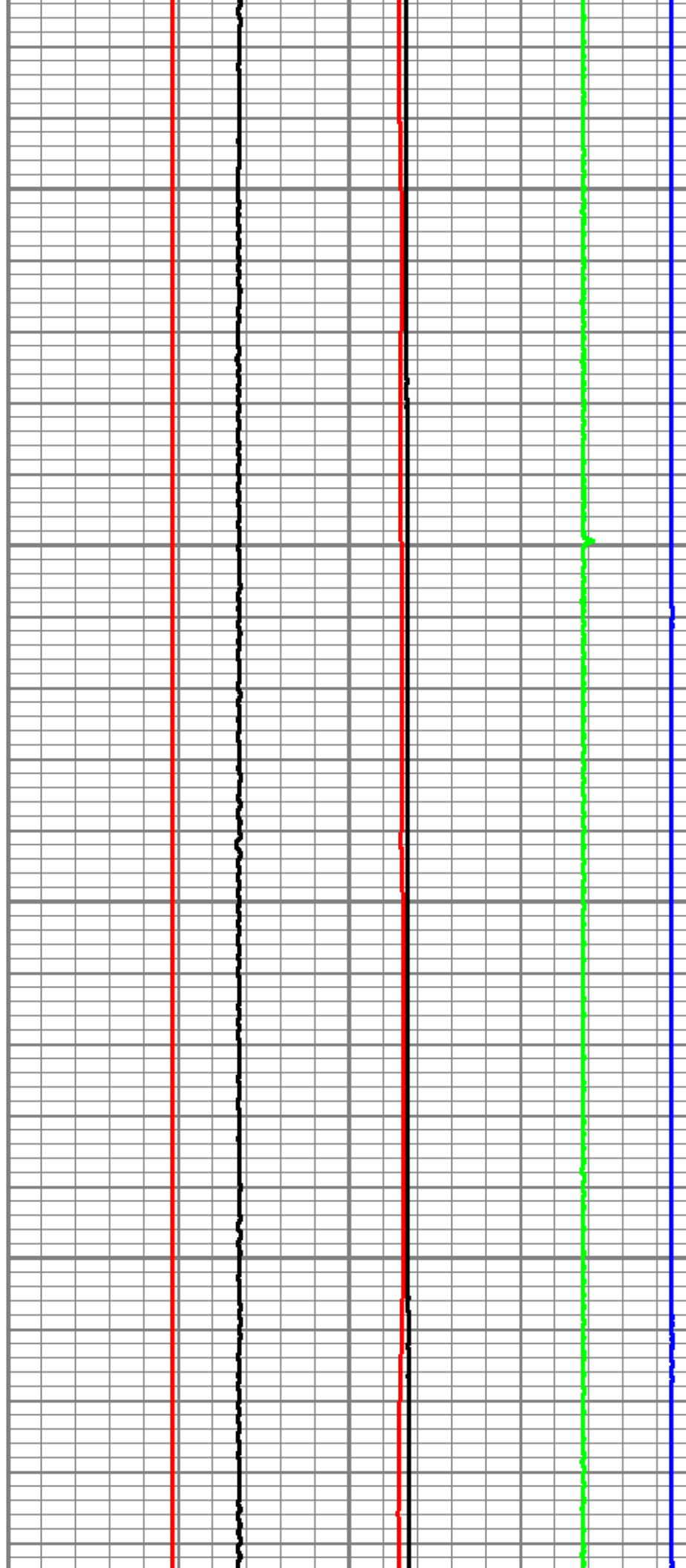
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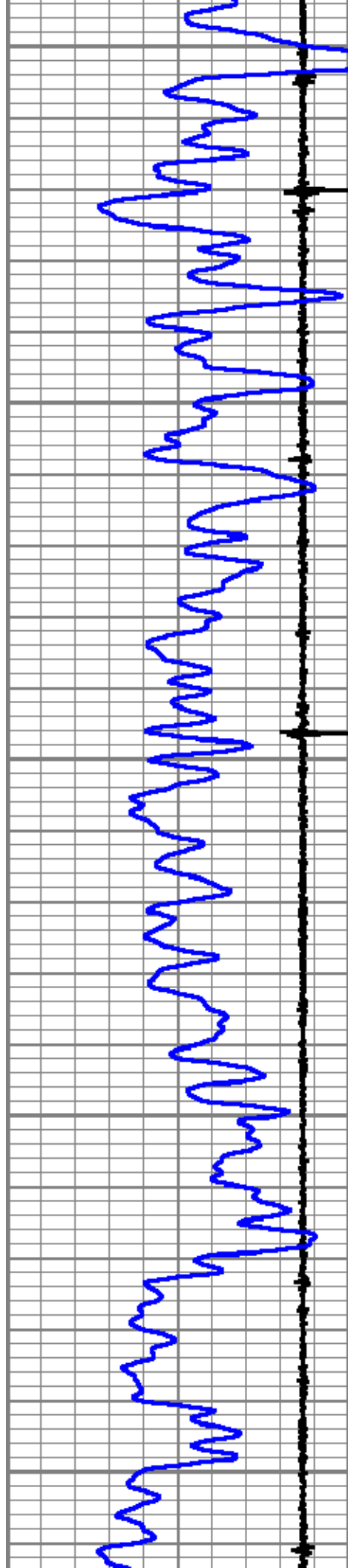




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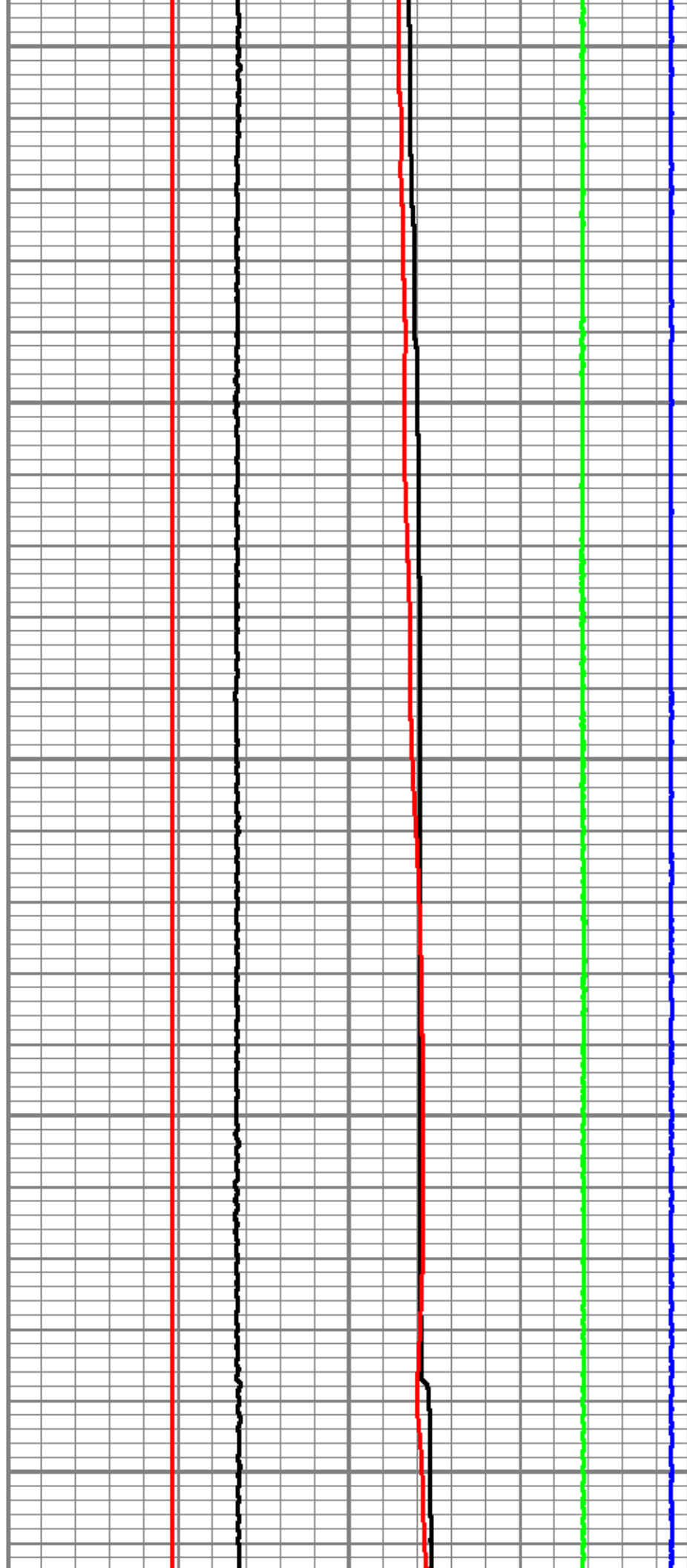
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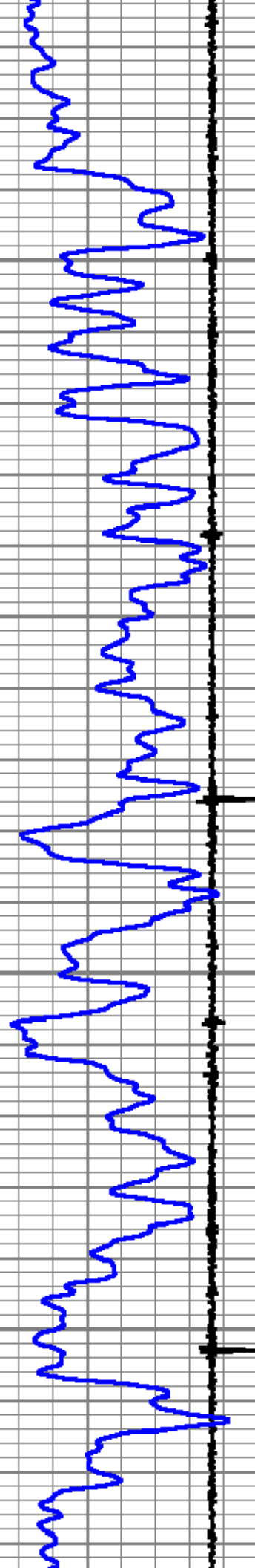




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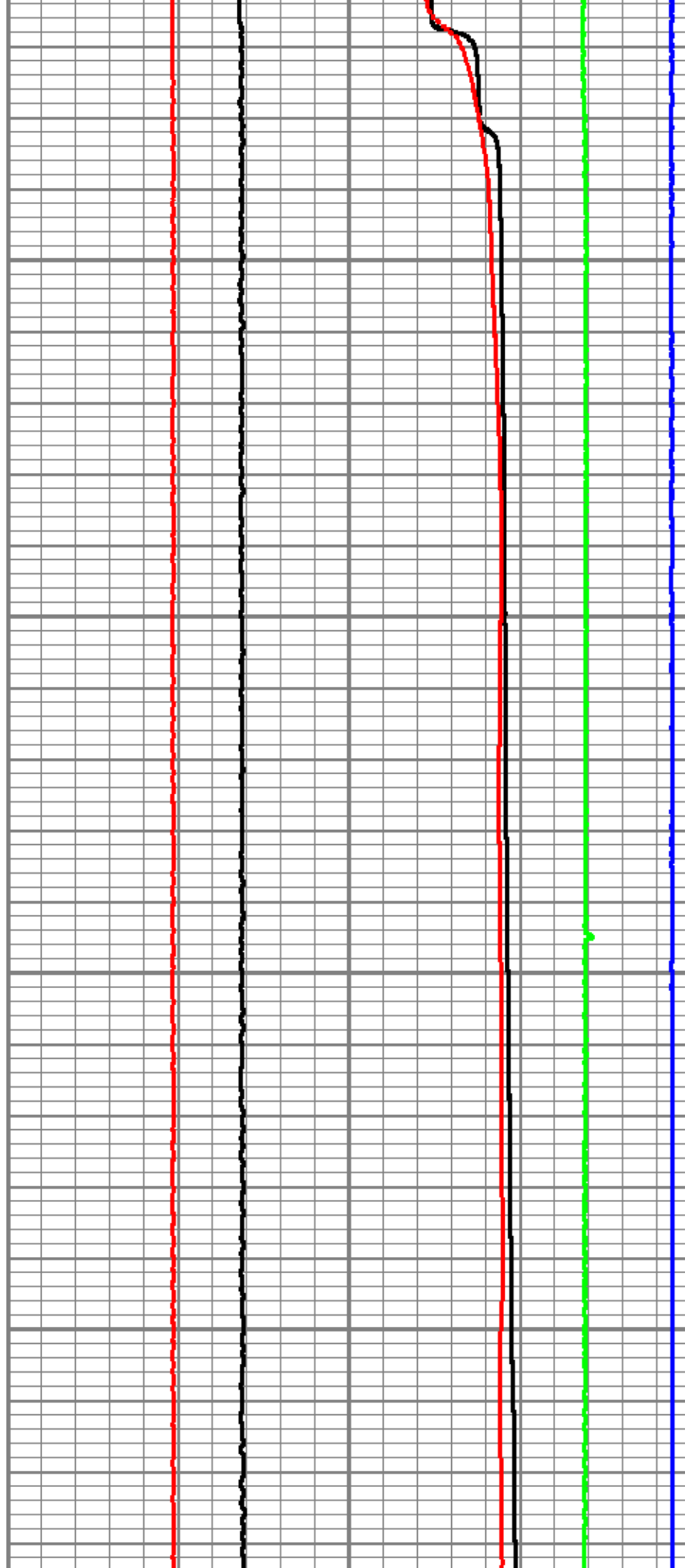
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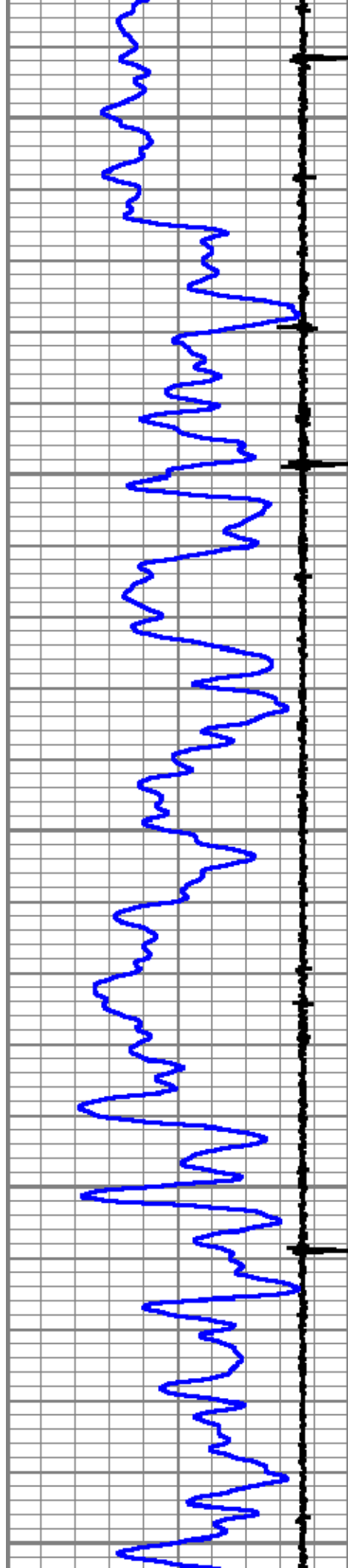




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7500

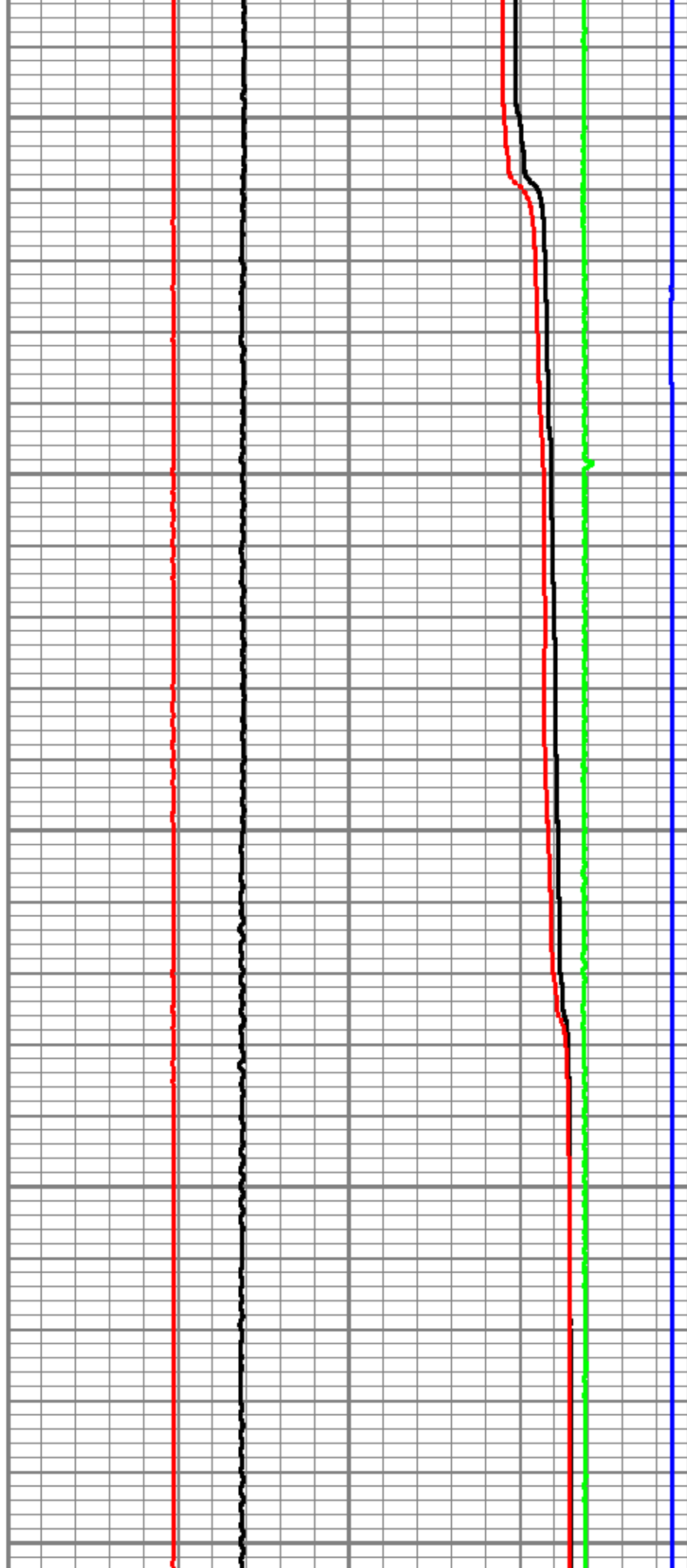




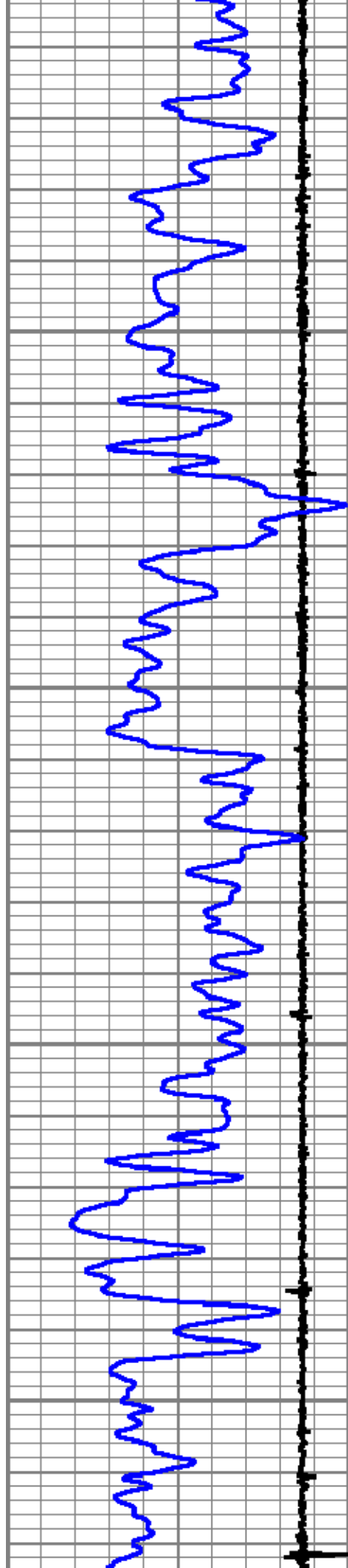
7600

7700

7800

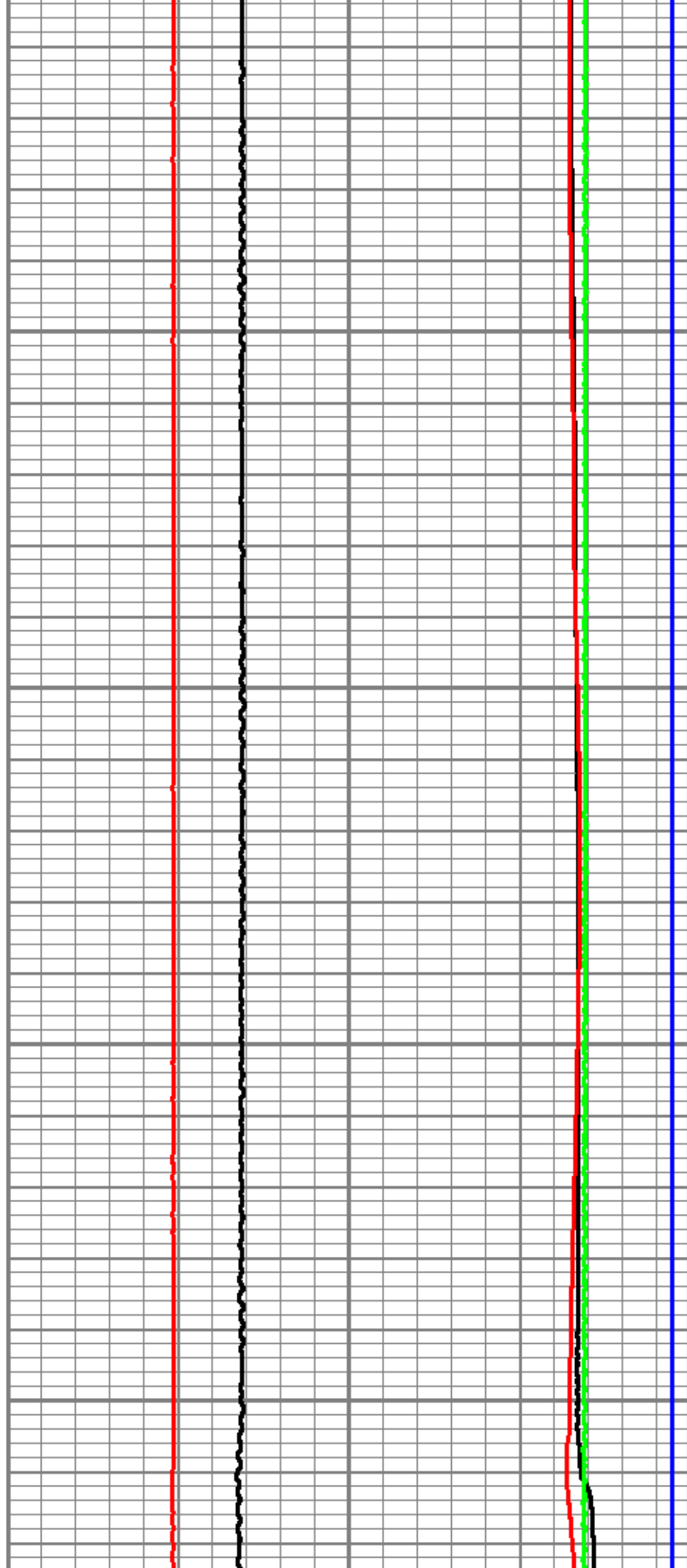


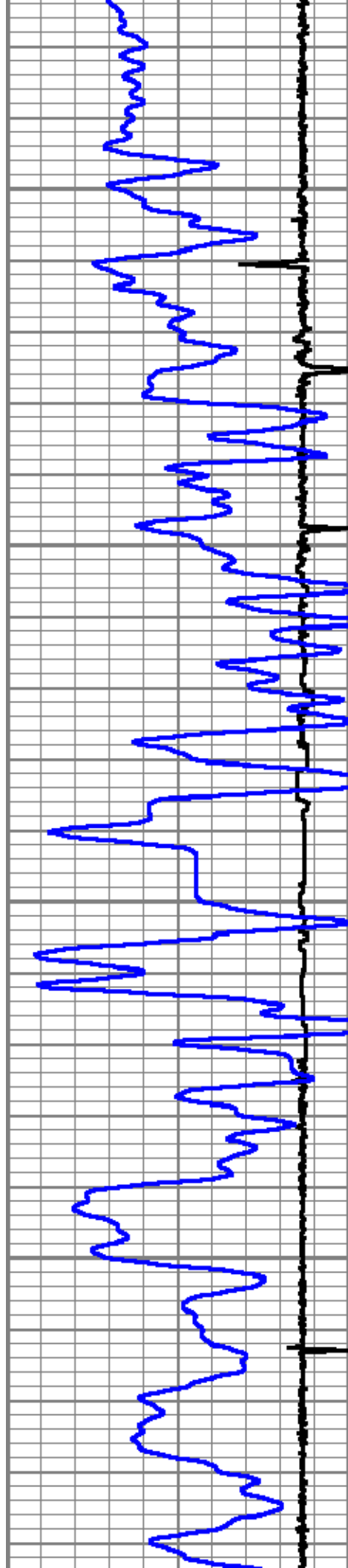




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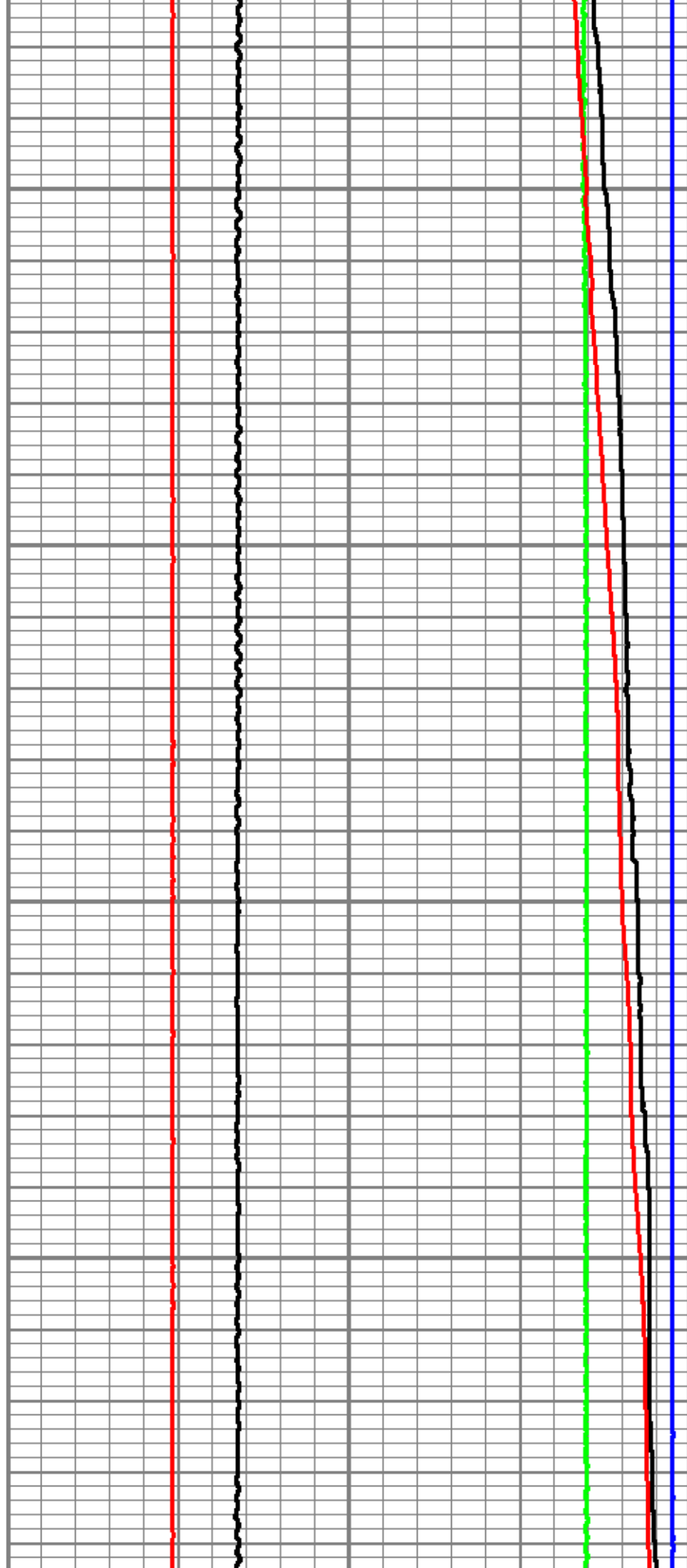
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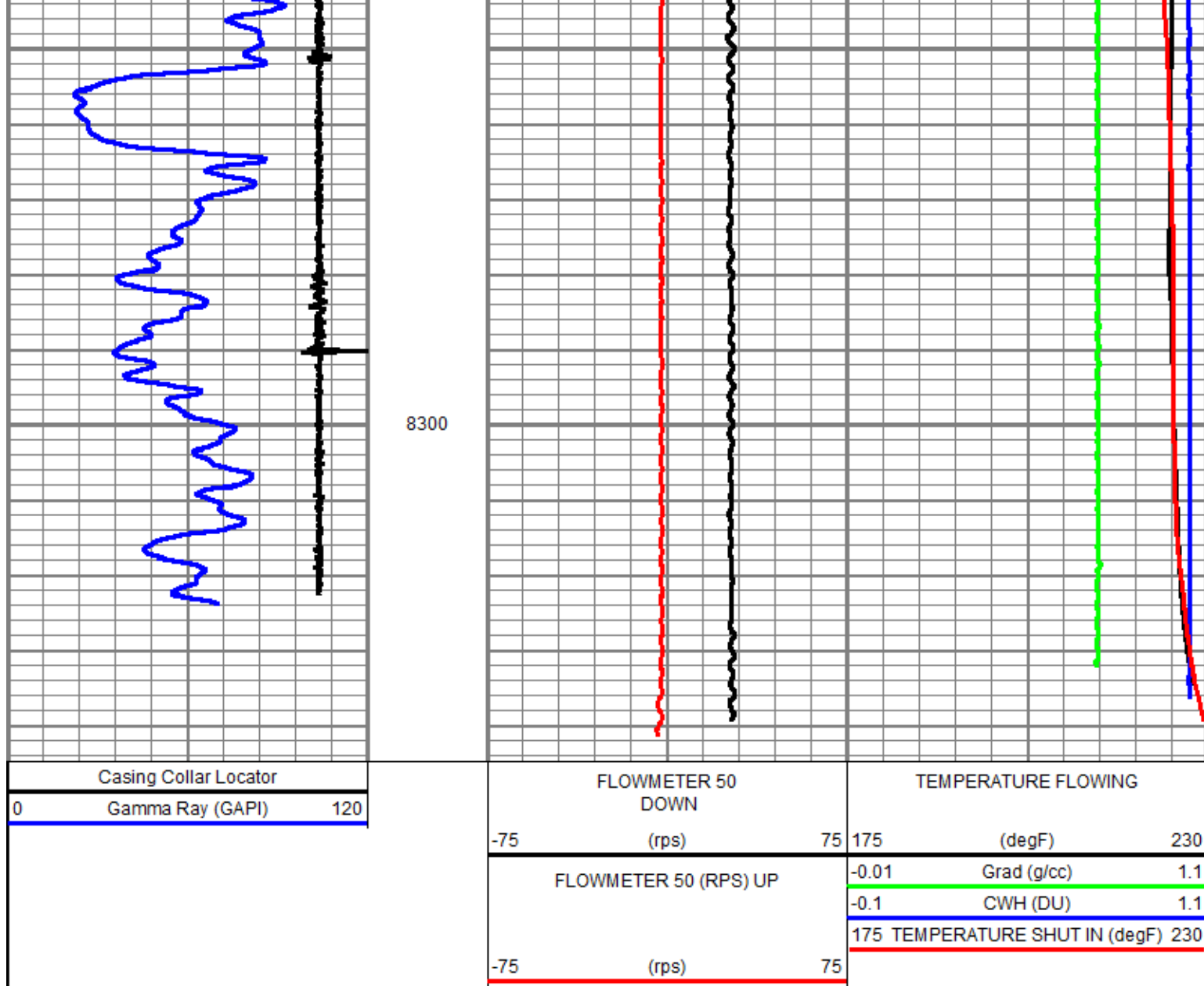




8100

8200

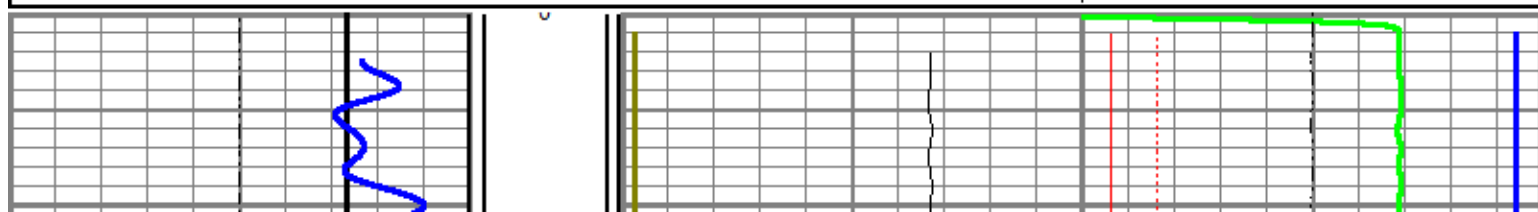


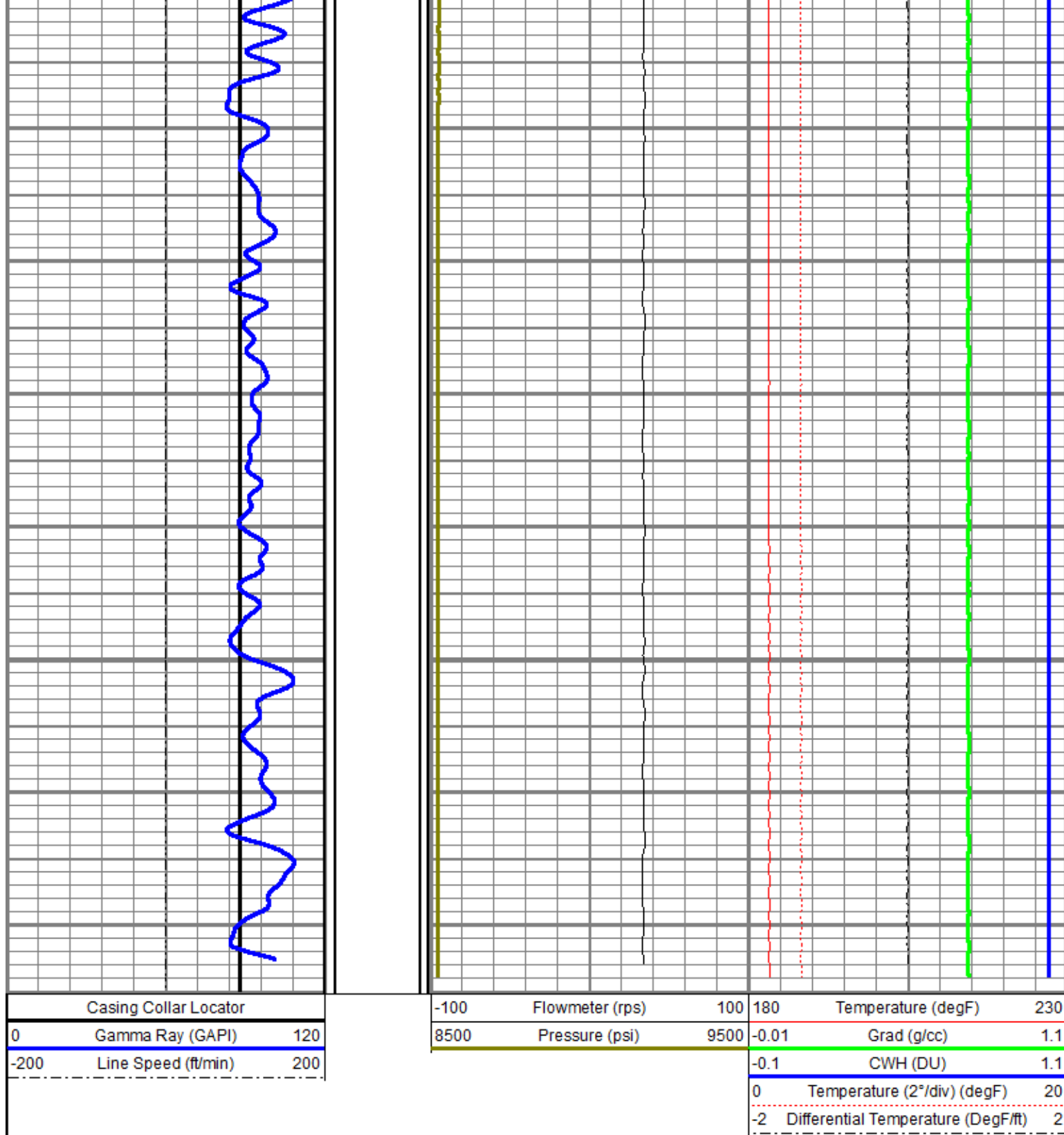


STOP COUNT @ 6575

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 Dataset Pathname sc\_6575  
 Presentation Format ros\_leepl  
 Dataset Creation Fri Aug 23 12:14:04 2019  
 Charted by Time scaled 360/hour

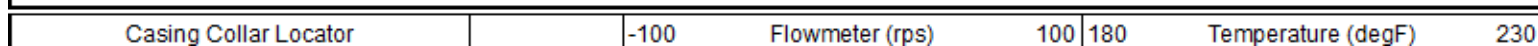
Casing Collar Locator			-100	Flowmeter (rps)	100	180	Temperature (degF)	230
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2





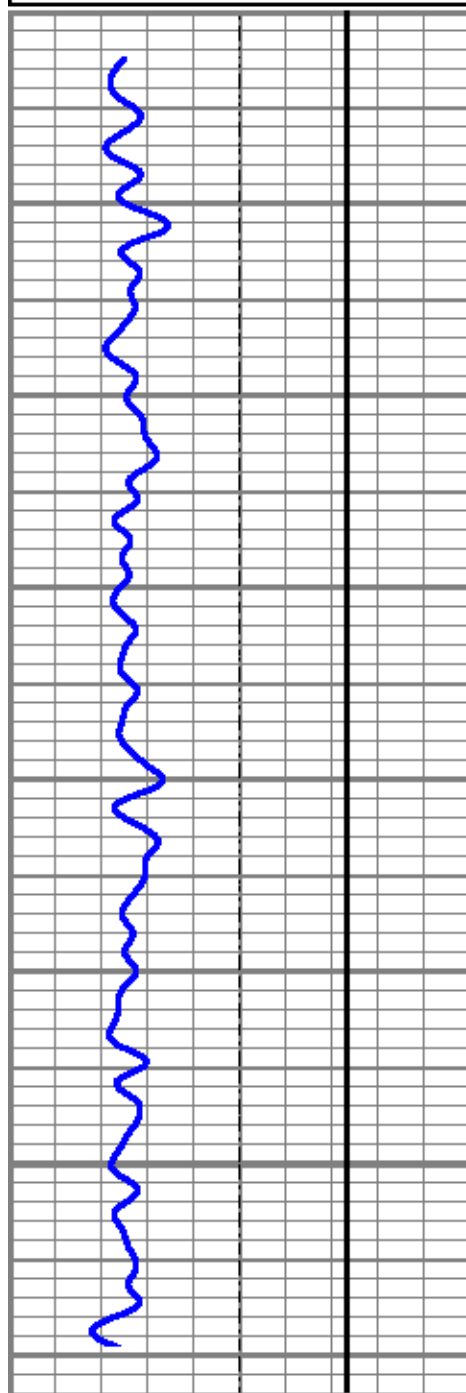
STOP COUNT @ 6840

Database File laramie energy 30-01w.db  
 Dataset Pathname sc\_6840  
 Presentation Format ros\_leepl  
 Dataset Creation Fri Aug 23 12:18:47 2019  
 Charted by Time scaled 360/hour

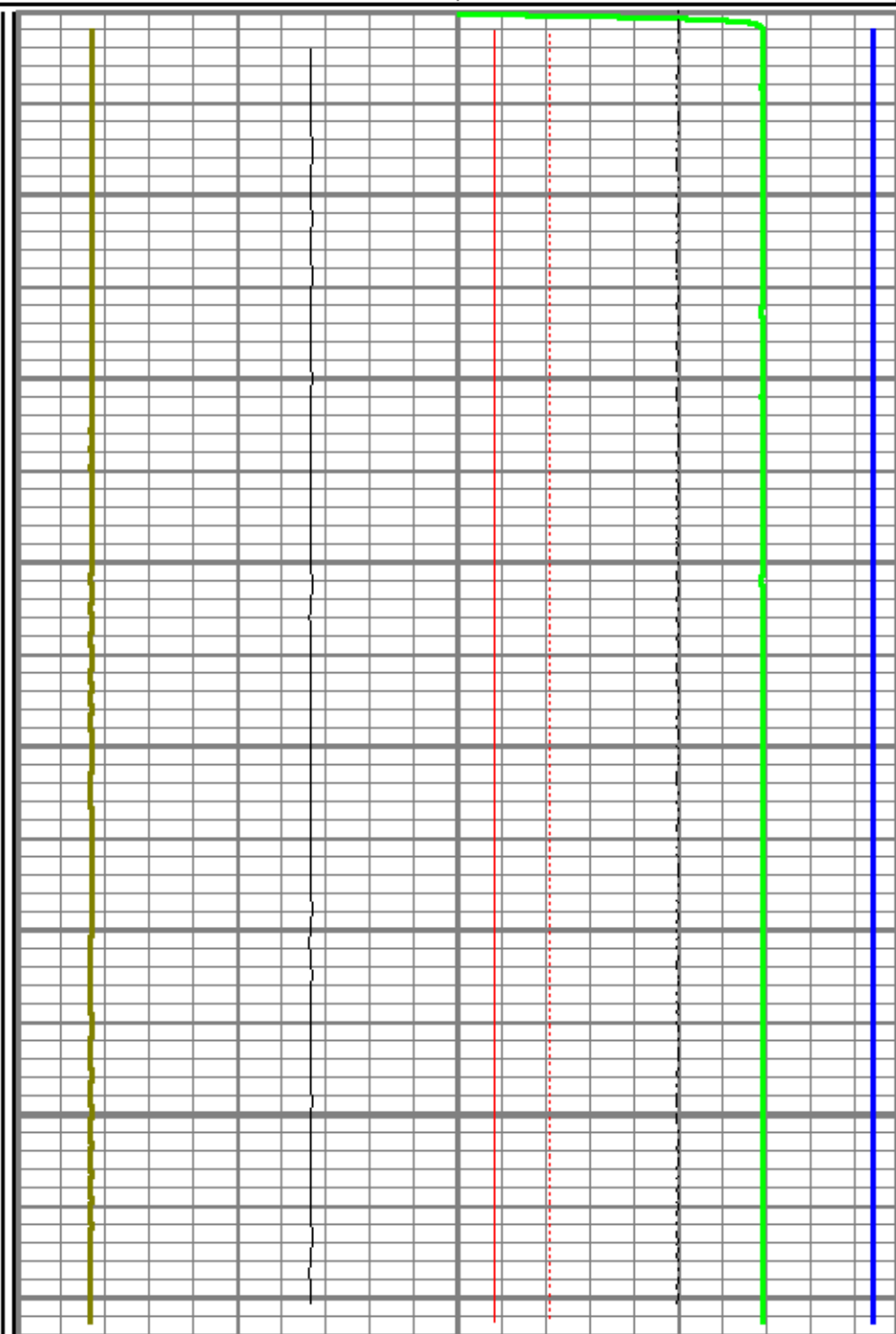


0	Gamma Ray (GAPI)	120
-200	Line Speed (ft/min)	200

8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
			-0.1	CWH (DU)	1.1
			0	Temperature (2°/div) (degF)	20
			-2	Differential Temperature (DegF/ft)	2



Casing Collar Locator		
0	Gamma Ray (GAPI)	120
-200	Line Speed (ft/min)	200

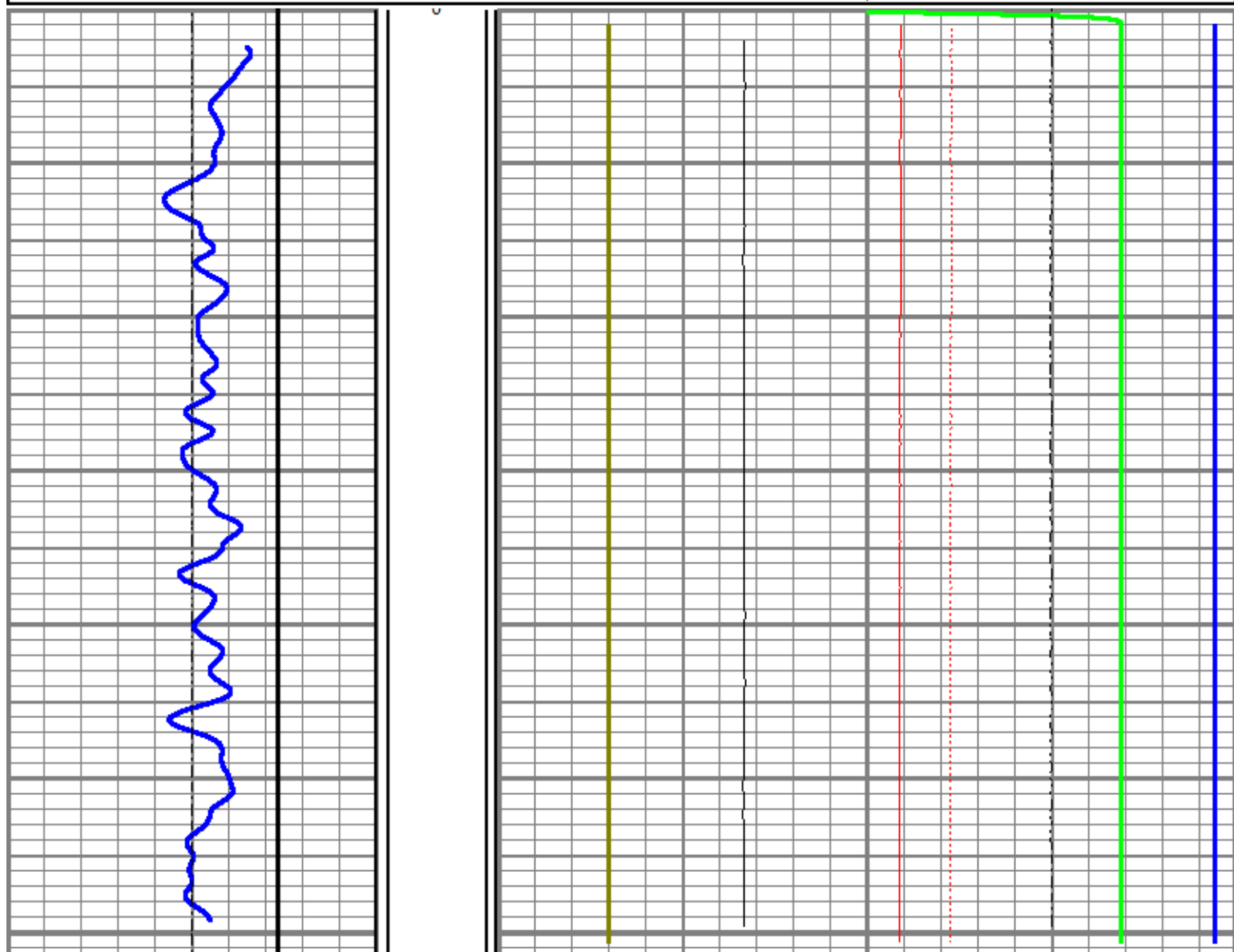


-100	Flowmeter (rps)	100	180	Temperature (degF)	230
8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
			-0.1	CWH (DU)	1.1
			0	Temperature (2°/div) (degF)	20
			-2	Differential Temperature (DegF/ft)	2



STOP COUNT @ 7080

Casing Collar Locator			-100	Flowmeter (rps)	100	180	Temperature (degF)	230
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2



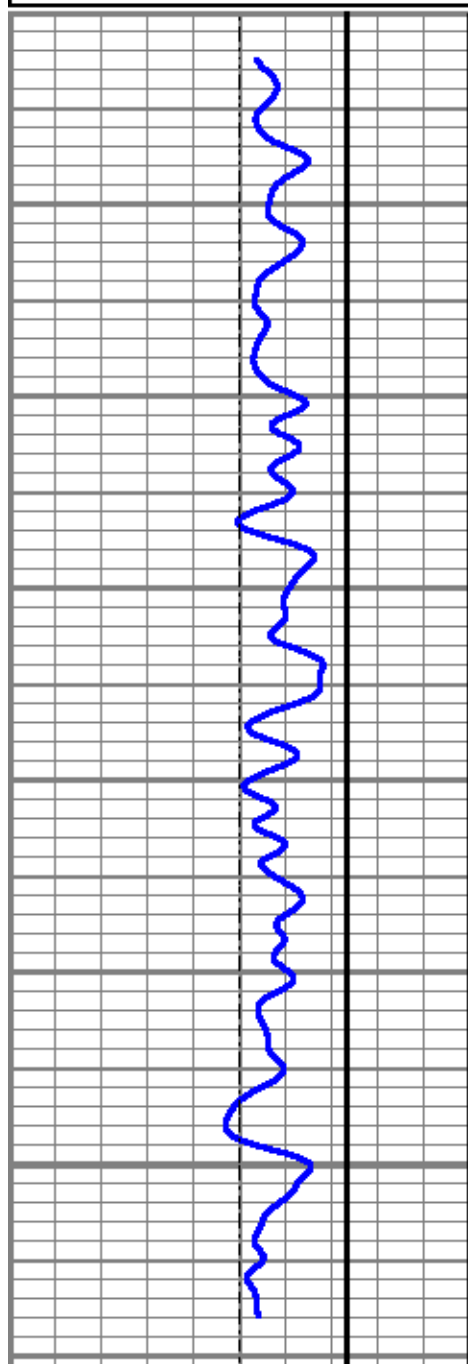
Casing Collar Locator			-100	Flowmeter (rps)	100	180	Temperature (degF)	230
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2



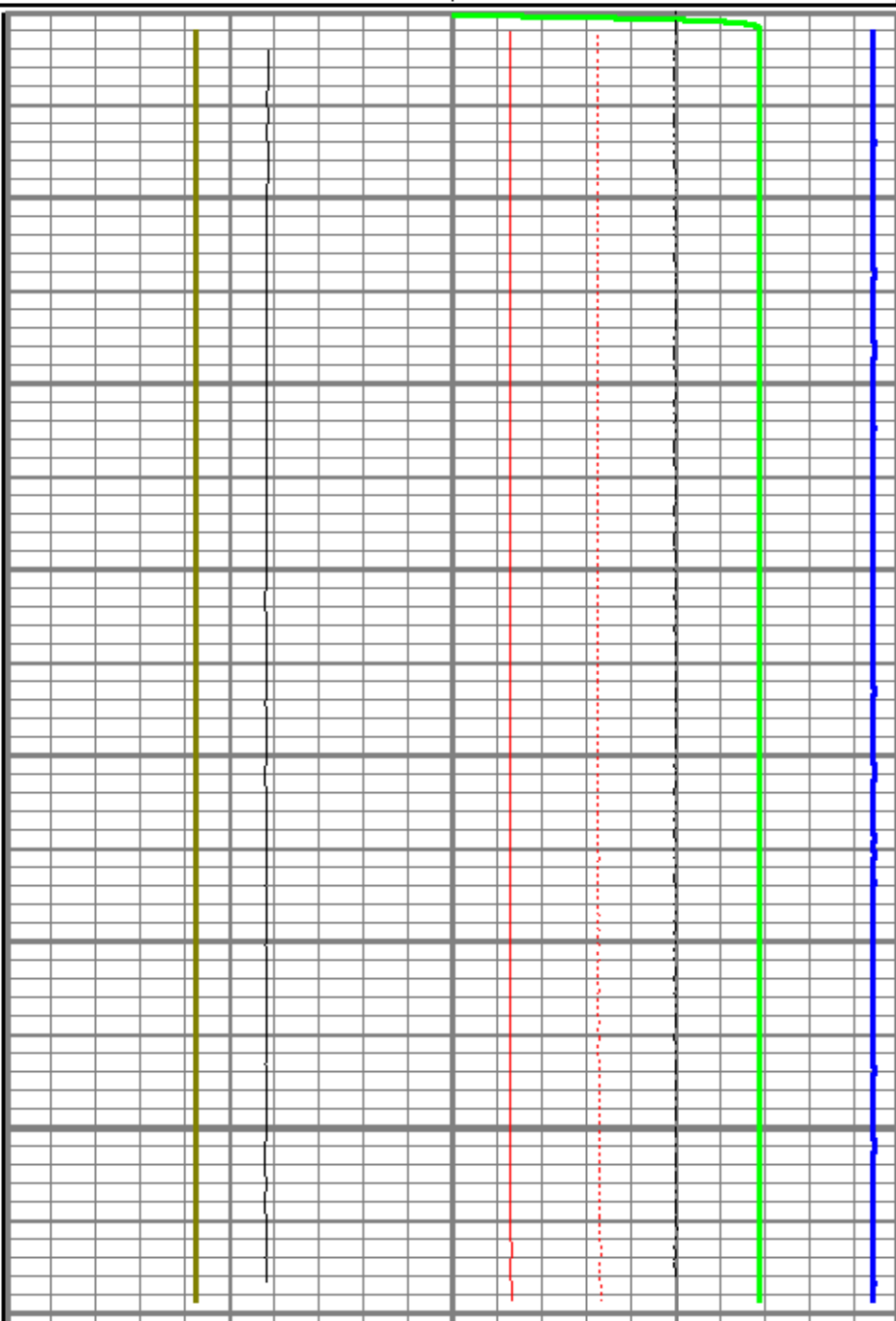
STOP COUNT @ 7300

Casing Collar Locator		
0	Gamma Ray (GAPI)	120
-200	Line Speed (ft/min)	200

-100	Flowmeter (rps)	100	180	Temperature (degF)	230
8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
			-0.1	CWH (DU)	1.1
			0	Temperature (2°/div) (degF)	20
			-2	Differential Temperature (DegF/ft)	2



Casing Collar Locator		
0	Gamma Ray (GAPI)	120
-200	Line Speed (ft/min)	200



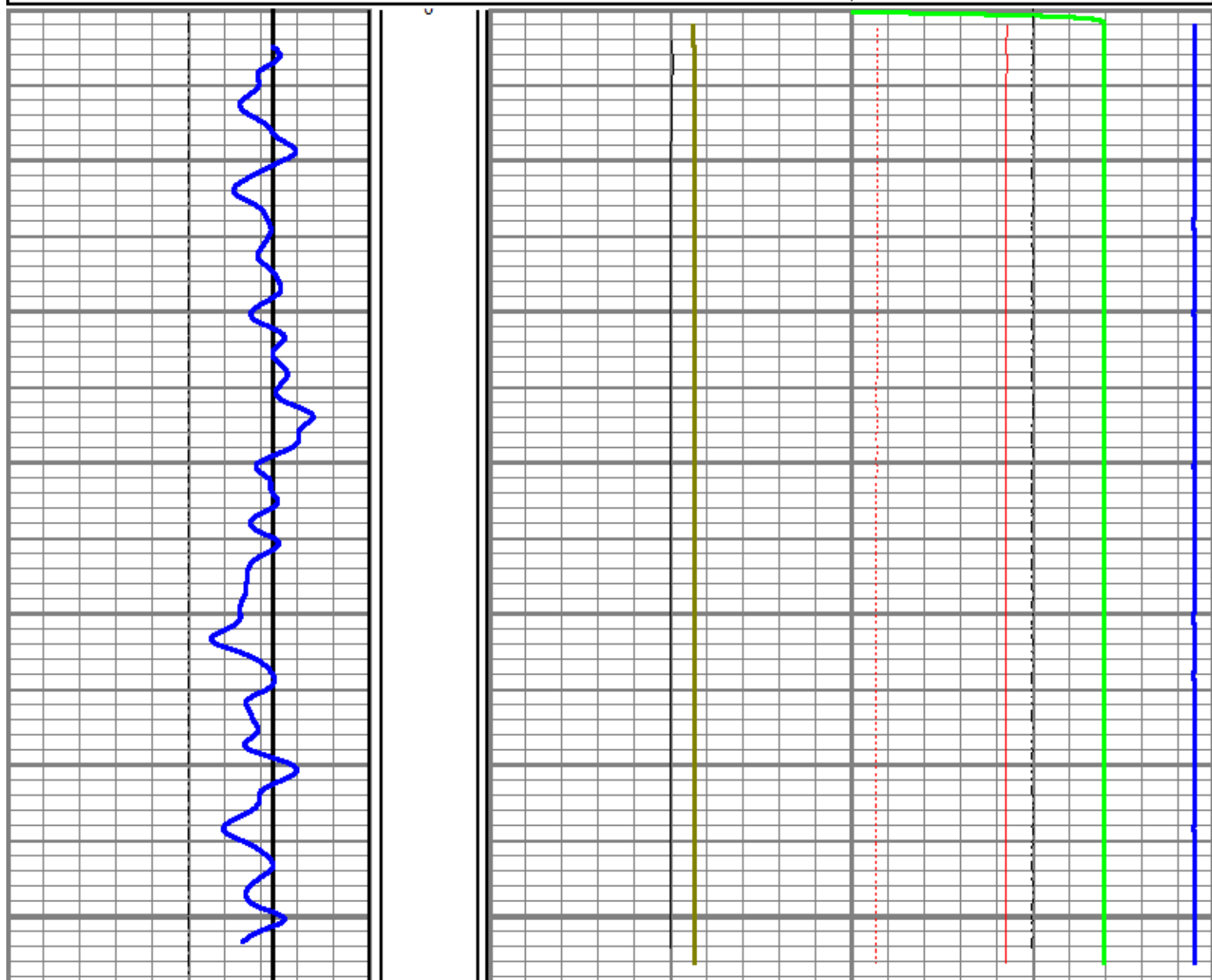
-100	Flowmeter (rps)	100	180	Temperature (degF)	230
8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
			-0.1	CWH (DU)	1.1
			0	Temperature (2°/div) (degF)	20
			-2	Differential Temperature (DegF/ft)	2



STOP COUNT @ 7545

Dataset Pathname sc\_7545  
Presentation Format ros\_leep1  
Dataset Creation Fri Aug 23 12:32:12 2019  
Charted by Time scaled 360/hour

Casing Collar Locator			-100	Flowmeter (rps)	100	180	Temperature (degF)	230
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2



Casing Collar Locator			-100	Flowmeter (rps)	100	180	Temperature (degF)	230
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2

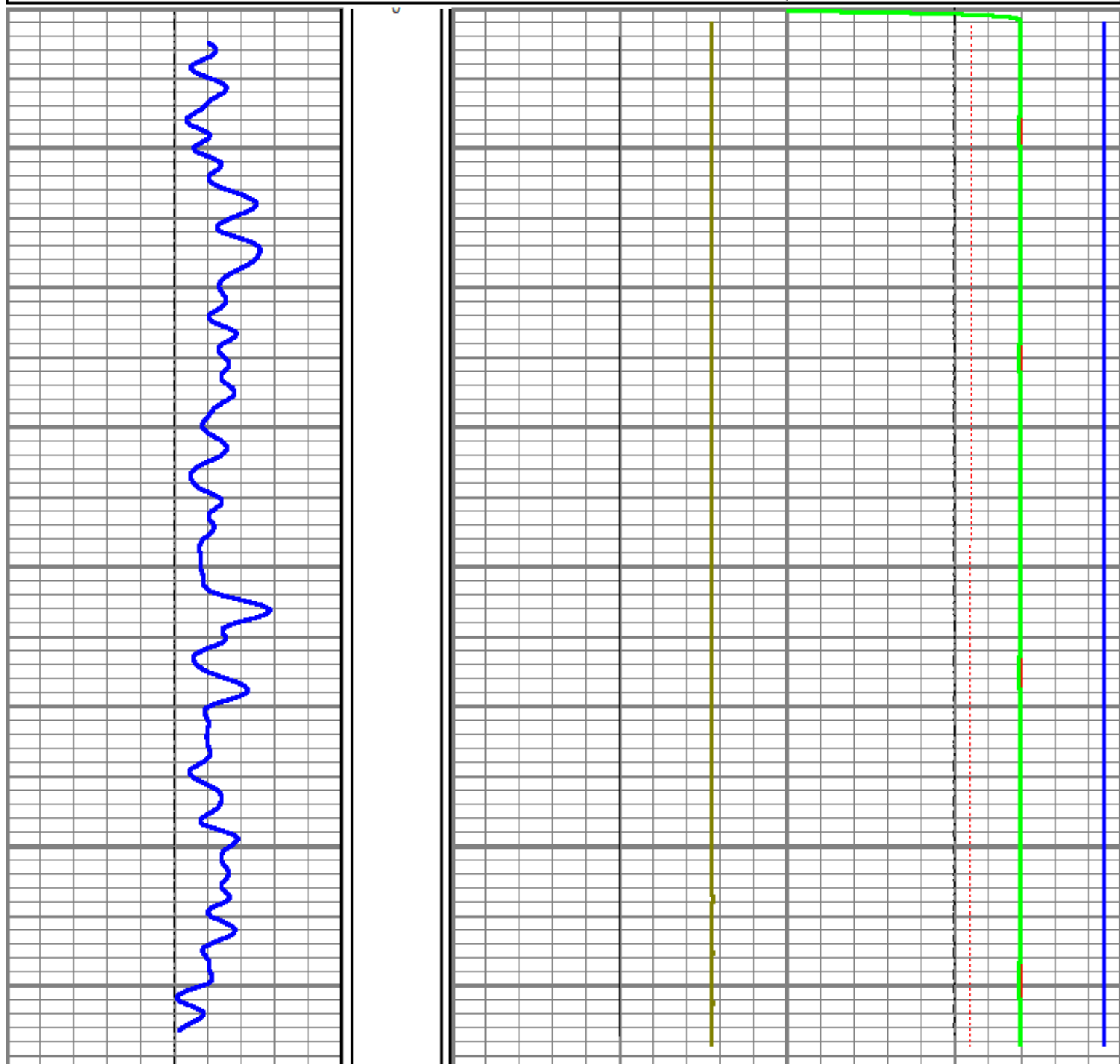


STOP COUNT @ 7811



Dataset Pathname sc\_7811  
Presentation Format ros\_jeep1  
Dataset Creation Fri Aug 23 13:00:56 2019  
Charted by Time scaled 360/hour

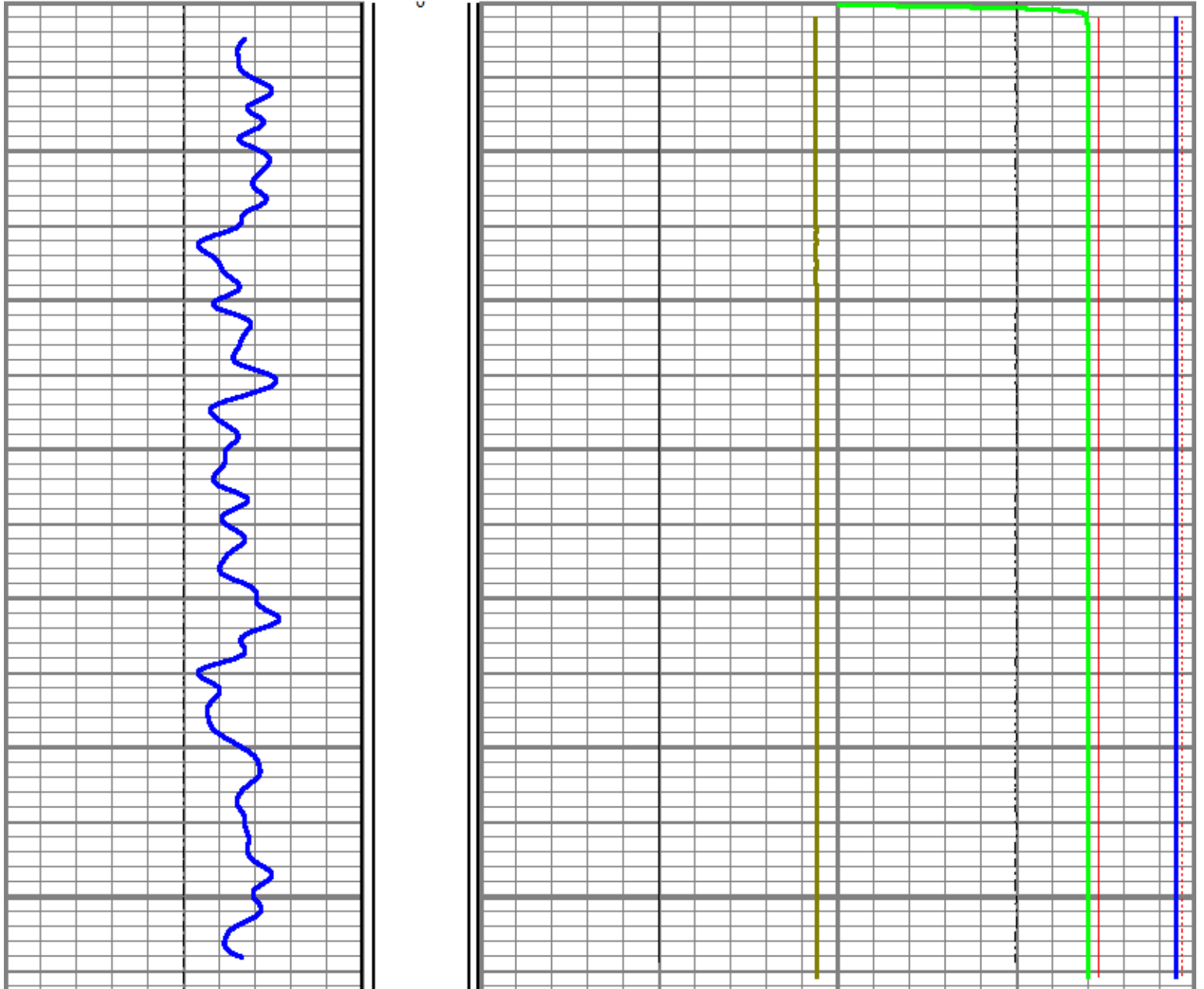
Casing Collar Locator			-50	Flowmeter (rps)	50	0	Temperature (degF)	300
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2



Casing Collar Locator			-50	Flowmeter (rps)	50	0	Temperature (degF)	300
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2

Database File laramie energy 30-01w.db  
 Dataset Pathname sc\_8095  
 Presentation Format ros\_jeep1  
 Dataset Creation Fri Aug 23 13:04:57 2019  
 Charted by Time scaled 360/hour

Casing Collar Locator			-50	Flowmeter (rps)	50	0	Temperature (degF)	300
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2



Casing Collar Locator			-50	Flowmeter (rps)	50	0	Temperature (degF)	300
0	Gamma Ray (GAPI)	120	8500	Pressure (psi)	9500	-0.01	Grad (g/cc)	1.1
-200	Line Speed (ft/min)	200				-0.1	CWH (DU)	1.1
						0	Temperature (2°/div) (degF)	20
						-2	Differential Temperature (DegF/ft)	2

## Calibration Report

Database File laramie energy 30-01w.db  
 Dataset Pathname sd35  
 Dataset Creation Fri Aug 23 08:52:51 2019

## Capacitance Water Hold Up Calibration Report

Type / Serial: PD 1375 / 0205-018

SHOP CALIBRATION

Thu Aug 22 15:13:53 2019

	Counts/Sec.	Units
Gas Counts	16619.35	cps
Water Counts	7205.00	cps
Oil Counts	0.00	cps

## Gradiometer Shop Calibration Calibration Report

Serial Number: 0205-016g  
 Tool Model: PGM 1375 G  
 Performed: Thu Aug 22 15:01:20 2019

	Reference	Reading
Low Reference:	0.000 g/cc	43022.700 cps
High Reference:	1.000 g/cc	52702.800 cps
Gain:	0.000	
Offset:	-4.444	


## Gamma Ray Calibration Report

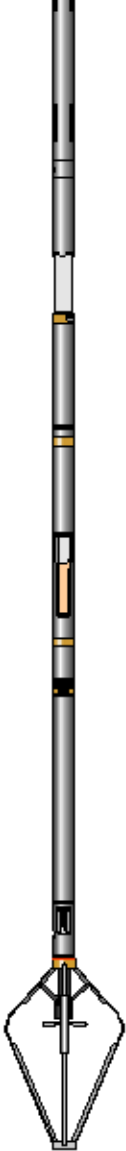
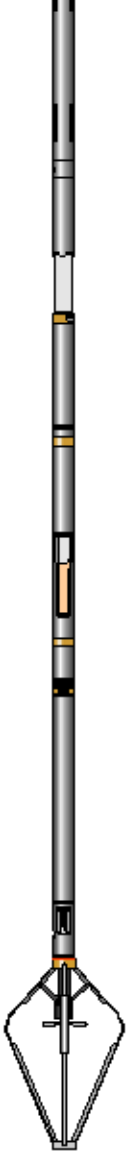
Serial Number: 0111-055  
 Tool Model: PTM 1375  
 Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	14.76		Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	3.60
			Lee TM-PTM 1375 (0111-055) Lee 1-3/8" Production Wireline Telemetry / Gamma / CCL	4.95	1.38	14.20
GR	11.65					

GRAD	8.36		Lee GRAD-PGM 1375 G (0205-016g) Lee 1-3/8" Gradiomanometer running GRADIO SM	4.30	1.38	20.00
CWH	4.99		Lee DIEL-PD 1375 (0205-018) Lee 1-3/8" Dielectric Tool	2.23	1.38	6.60
			Lee LRPTF-1375 (0111-056) Lee 1-3/8" Low Resolution Pressure Temperature Flow Tool	2.43	1.38	5.00
PTEMP	2.19			1.67	1.38	4.00
PRESS	2.19					
PTEMP	2.19					
TEMP	1.93					
CUPSPIN	1.08		Lee FB-PFS 1375 5 35 (1208-356) Lee 5" Full Bore Basket with 3-1/2" Collapsible Spinner			
CDWSPIN	1.08					
Dataset: laramie energy 30-01w.db: field/well/run1/sd35 Total length: 16.61 ft Total weight: 53.40 lb O.D.: 1.44 in						



**RELIANCE**  
OILFIELD SERVICES

**Company** Laramie Energy LLC.  
**Well** HG FED 35-01W  
**Field** ALKALI CREEK  
**County** Mesa  
**State** Colorado

Laramie Hells Gulch Federal 35-01w\_field notes  
Company : Laramie Energy LLC.  
Well : Hells Gulch 35-01W  
Date : 08/23/2019

#### Production Log Field Notes

All passes have been correlated to the gamma ray of baker hughes cement bond log dated: 17-May-2018

Surface data recorded by client.

Well was flowing and Steady upon arrival (No Choke)

#### Pass Summary

07:38 RIH from surface to 6590  
08:47 down 35f/min 6590 - 8340  
09:50 Up 35ft/min 8340 - 6590  
10:15 Down 65ft/min 6580 - 8340  
11:00 UP 65ft/min 8340 - 6580  
11:27 Down 95 ft/min 6580 - 8340  
11:47 UP 95ft/min 8340 - 6540

Spinner Stop Counts (CCL DEPTH) Tools are at least 15 ft above perf

6575  
6840  
7080  
7300  
7545  
7811  
8095

13:00 Shut well in  
13:30 down 50ft/min 6577 - 8340  
14:04 Up 50 ft/min

14:38 P00H

Tools Used  
Tele 0111-055  
Gradio 0205-016  
Cwh 0205-018  
Ptf 0111-056  
3.5 inch Blade on Fullbore Flowmeter