

SlimPulse - Gamma Ray										Schlumberger									
1 in / 100 ft & 5 in / 100 ft Measured Depth																			
Recorded Mode, Composite Log																			
Company:					Noble Energy														
Well:					Oscar Y10-73-1HC														
Field:					Wattenberg														
County:					Weld														
State:					Colorado														
Country:					USA														
Section:					10					APIN:					0512337941				
Township:					2N					Rig Name:					H&P 277				
Range:					64W					Rig Type:					Top Drive				
FL:					NAD83 Colorado State Plane, Northern Zone, US Feet														
FL 1:					Latitude: N 40° 9' 7.99" Northing: 1299776.05 ftUS														
FL2:					Longitude: W 104° 31' 52.72" Easting: 3270770.85 ftUS														
<div>Log Measured From: - Kelly Bushing: 4951.00 ft</div> <div>Ground Level: 4927.00 ft</div> <div></div>																			
Permanent Datum: - Mean Sea Level																			
Acquisition Dates:					17-Oct-2014 -- 23-Oct-2014					Other Services:									
Log Interval:					1169(ft) to 14438(ft)					Directional Drilling									
Index Types:					Measured Depth					Surveys / Continuous D&I									
Index Scales:					1:1200 1" / 100', 1:240 5" / 100'					Downhole Temperature									
Depth Source:					Driller's Depth					Downhole Shocks									
Depth Sensor:					PASON														
Print Type:					Final														
Spud Date:					16-Oct-2014														

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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Borehole Size/Casing Record						
Bit						
Bit Size ( in )	13.75	8.75	6.125			
Top Driller ( ft )	0	1168	7182			
Bottom Driller ( ft )	1168	7182	14438			
Casing						
Size ( in )	9.625	7				
Weight ( lbm/ft )	36	32				
Inner Diameter ( in )	8.921	6.094				
Grade	J55	P110				
Top Driller ( ft )	0	1158				
Bottom Driller ( ft )	1158	7177				

Operational Run Summary						
Parameter ( unit )	Run001	Run002	Run003			
Date Log Started	16-Oct-2014	17-Oct-2014	20-Oct-2014			
Time Log Started	17:06:50	18:18:41	08:27:35			
Date Log Finished	17-Oct-2014	19-Oct-2014	23-Oct-2014			
Time Log Finished	16:56:36	09:32:06	22:41:21			
Bit Size ( in )	8.750	8.750	6.125			
Bit Start Depth ( ft )	1169.00	1467.00	7182.00			
Bit Stop Depth ( ft )	1467.00	7182.00	14438.00			
Top Log Interval ( ft )	1169.00	1404.00	7119.00			
Bottom Log Interval ( ft )	1404.00	7119.00	14393.00			
Max Hole Deviation ( deg )	0.60	79.60	91.65			
Azimuth of Max Deviation ( deg )	40.34	355.05	2.38			
Logging Unit Number	Command Center	Command Center	Command Center			
Logging Unit Location	Zone 2	Zone 2	Zone 2			
Recorded By	C. Welty	C. Welty	C. Welty			
Witnessed By	Cliff	Cliff	Cliff			
Service Order Number	14CCO0655	14CCO0655	14CCO0655			

Borehole Fluids						
Parameter( unit )	Run001	Run002	Run003			
Fluid Type	Water	Water	Water			
Max Recorded Temperatures ( degF )	86	175	245.3			
Source of Sample	Active Tank	Active Tank	Active Tank			
Salinity ( ppm )	800	900	1300			

Density ( lbm/gal )	Zoned	Zoned	Zoned			
Funnel Viscosity ( s )	29	32	36			
Fluid Loss ( cm3 )						
PH	9.2	10.2	10.8			
Source RMF						
RMC	Pressed	Pressed	Pressed			
RM @ Meas Temp ( ohm.m@degF )	0.2 @ 68	0.2 @ 68	0.2 @ 68			
RMF @ Meas Temp ( ohm.m@degF )	0.15 @ 68	0.15 @ 68	0.15 @ 68			
RMC @ Meas Temp ( ohm.m@degF )						
RM @ BHT ( ohm.m@degF )	0.07 @ 212	0.07 @ 212	0.07 @ 212			
RMF @ BHT ( ohm.m@degF )	0.05 @ 212	0.05 @ 212	0.05 @ 212			
RMC @ BHT ( ohm.m@degF )	NaN @ 212	NaN @ 212	NaN @ 212			
Total Solid ( % )	2.2	2.7	5.7			
High Gravity Solids ( % )	2.1	2.3	4.5			

## Zoned Borehole Fluids

### Run001

Parameter	Value	Start
Density	8.9	10/16/2014 5:06:50 PM
Density	8.6	10/17/2014 1:00:00 PM

### Run002

Parameter	Value	Start
Density	8.6	10/17/2014 6:18:41 PM
Density	9	10/18/2014 3:00:00 AM
Density	10.3	10/18/2014 1:30:00 PM
Density	10.8	10/19/2014 3:00:00 AM

### Run003

Parameter	Value	Start
Density	11	10/20/2014 8:27:35 AM
Density	9.45	10/20/2014 1:00:00 PM
Density	9.7	10/21/2014 3:00:00 AM
Density	9.6	10/21/2014 1:00:00 PM
Density	9.65	10/22/2014 3:00:00 AM
Density	9.75	10/23/2014 3:00:00 AM

## Remarks and Equipment Summary

Data presented is from tool memory and acquired while drilling from 1169 ft to 14438 ft.

Depth Reference: Driller's Depth

Environmental Corrections: Gamma Ray is corrected for bit size, mud weight, and tool collar thickness. Barite and Potassium in the mud affect Gamma Ray readings.

Run001: Remarks	Run002: Remarks	Run003: Remarks
Run Objective: Drill vertical then curve to landing point	Run Objective: Drill vertical then curve to landing point	Run Objective: Drill lateral to Well TD
Bit to Gamma Ray: 62.31 ft Bit to D&I: 59.28 ft	Bit to Gamma Ray: 62.31 ft Bit to D&I: 59.28 ft	Bit to Gamma Ray: 44.19 ft Bit to D&I: 41.16 ft
Drilled from: 1169 ft to 1467 ft Logged from: 1169 ft to 1404 ft	Drilled from: 1467 ft to 7182 ft Logged from: 1404 ft to 7119 ft	Drilled from: 7182 ft to 14438 ft Logged from: 7119 ft to 14393 ft
SlimPulse Software: 11.0C00 SlimPulse D&I calibrated on: Mar 5, 2014 SlimPulse GR calibrated on: Aug 21, 2014	SlimPulse Software: 11.0C00 SlimPulse D&I calibrated on: Jan 11, 2013 SlimPulse GR calibrated on: Sep 17, 2014	SlimPulse Software: 11.0C00 SlimPulse D&I calibrated on: Sep 15, 2014 SlimPulse GR calibrated on: Sep 25, 2014
PathFinder a Schlumberger Co. Personnel:	PathFinder a Schlumberger Co. Personnel:	PathFinder a Schlumberger Co. Personnel:

DD: Mike Hicks & Jordan Timbs  
MWD: Chad Welty & David Wahlquist

DD: Mike Hicks, Jordan Timbs, Dario Herrera,  
and Tony Butler  
MWD: Chad Welty & David Wahlquist

DD: Mike Hicks, Jordan Timbs, Dario Herrera,  
and Tony Butler  
MWD: Chad Welty & David Wahlquist

Reason for POOH: MWD Incident

Reason for POOH: Vertical/Curve section TD

Reason for POOH: Well TD

## Run001: Toolstring

## Run002: Toolstring

## Run003: Toolstring

Equip name	Length	MP name	Offset
Flex DC: 6 3/4	13829	NMFC	
J:DR18671			

Equip name	Length	MP name	Offset
Flex DC: 6 3/4	138289	NMFC	
J:DR18671			

Flex DC: 6 3/107183 NMFC  
J:DR20317

Flex DC: 6 3/4" 183 NMFC  
J:DR20317

Equip name	Length	MP name	Offset
NMDC: 4 3/4" 8100	10257	NMDC	

NM Stab: 4 3/4 [246] NM Spiral Sub  
J:DR9728

Motor:900	96.5	Straight Slick Motor
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SPULSE-GEN:DR83  
945  
FLOWSUB:DR22497  
SPCOLLAR:DR8945  
SPMA  
SPEC:639  
SPBA  
UBHO:675U185

GR 62.3  
D&I 59.2

Flt Sub: 6 3/4":DR  
R21309  
NMDC: 6 3/4":DR  
13223

NM FLOAT  
NM Pony

Motor:FH70B  
7

DynaFlex

SPULSE-GEN:DR83  
945  
FLOWSUB:DR22497  
SPCOLLAR:DR8945  
SPMA:918  
SPEC:717  
SPBA  
UBHO:675U185

GR 62.3  
D&I 59.2

Flt Sub: 6 3/4":DR  
R21309  
NMDC: 6 3/4":DR  
13223

NM FLOAT  
NM Pony

Motor:FH70B  
7

DynaFlex

NM Stab: 4 3/4":DR  
J:DR2229

NM Spiral Stab

Filtr Sub: 4 3/4":DR  
22592

Filter Sub

SPULSE-GEN:DR83  
907  
FLOWSUB:DR22795  
SPCOLLAR:DR26907  
SPMA:566  
SPEC:1004  
SPBA:01794

GR 44.1  
D&I 41.1

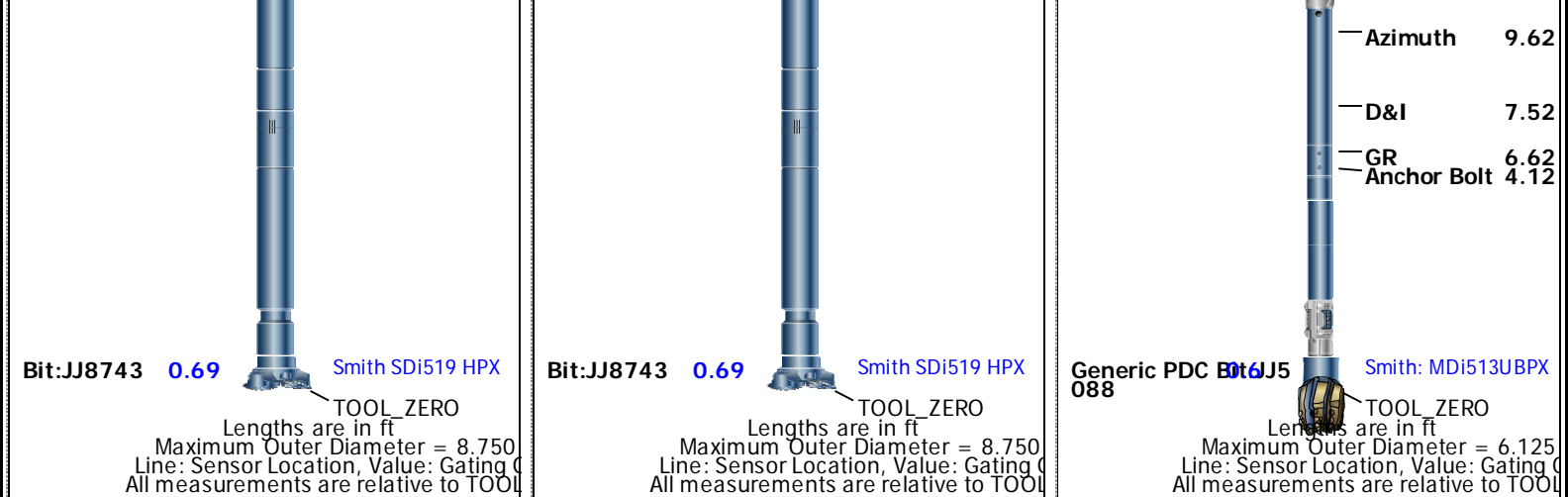
Sub:CC4002 24.98

CLPS Sub

UBHO: 4 3/4":DR  
128

NM

PDX5\_475:CC8844  
4  
Crossover  
PD475CC  
PDCU  
PDSC Sleeve  
PDX5GP  
Impeller Set  
PD475BU:CC84444



## Well Composite

## Software Version

Acquisition System		Version	
MaxWell		4.0.9163.3000	
Application Patch		Patch-SP-10767_26570-4.0.9163.3001	
		Patch-Hotfix_MRT_SP4-27464-4.0.9575.3002	
Tool Elements	Description	Software Version	Firmware Version
DRILLING_SURFACE	DRILLING_SURFACE	4.0.9469.3000	
SPEC	SlimPulse Electronics Cartridge	4.0.9469.3000	

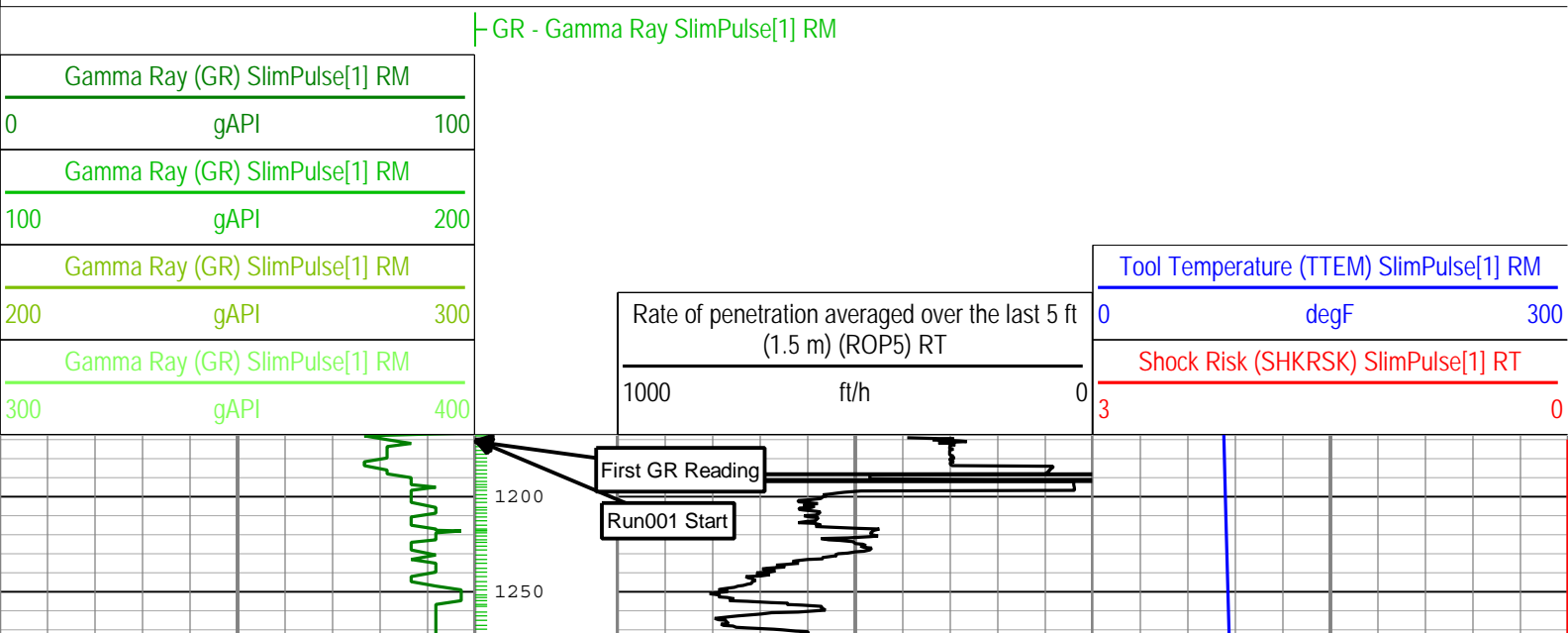
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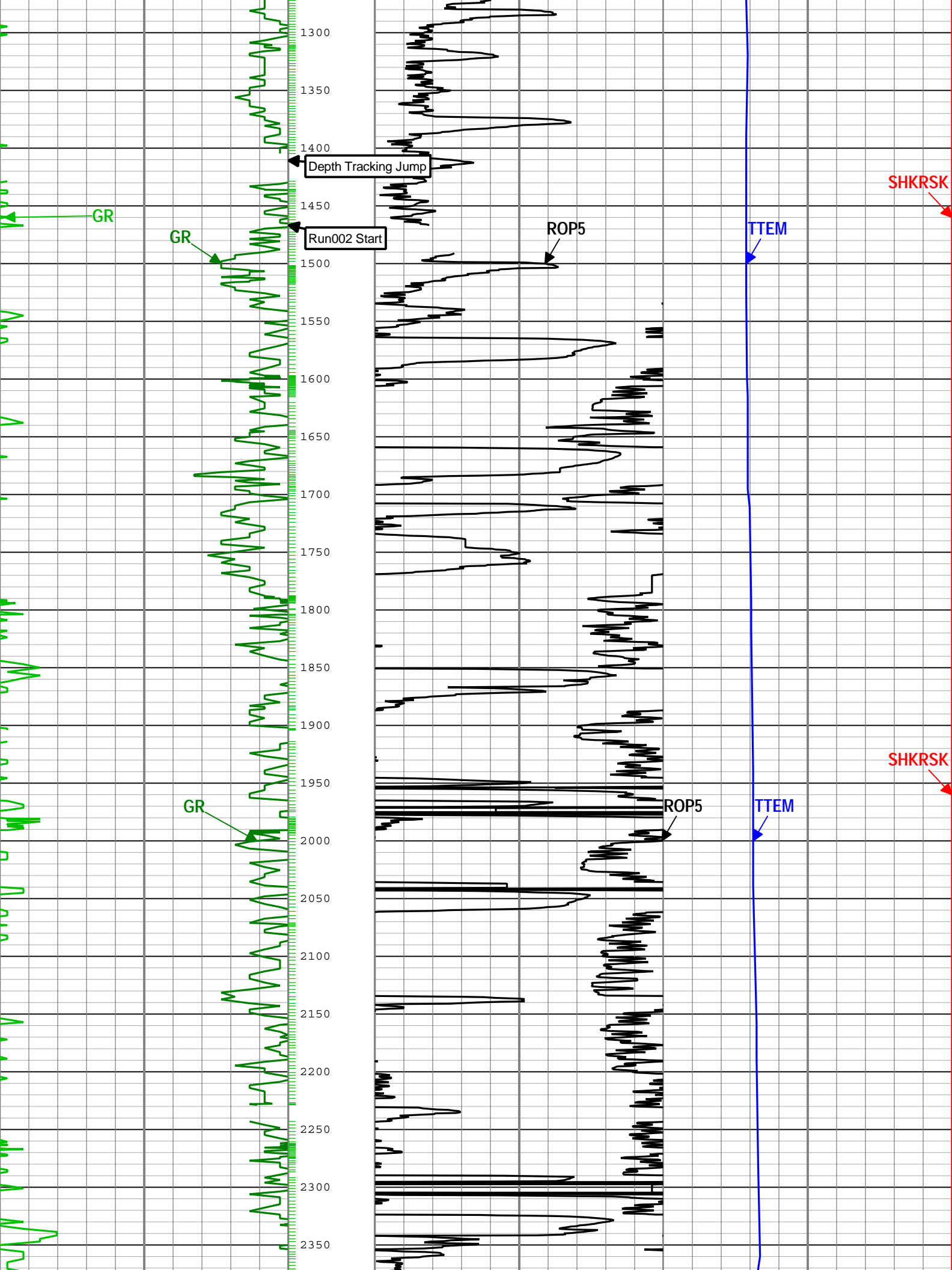
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run001	Drilling	Down	1168.33 ft	1467.00 ft	17-Oct-2014 2:03:51 PM	17-Oct-2014 4:56:36 PM	No
Run002	Drilling	Down	1490.92 ft	7184.75 ft	17-Oct-2014 6:18:41 PM	19-Oct-2014 9:32:06 AM	No
Run003	Drilling	Down	6999.08 ft	14439.58 ft	20-Oct-2014 8:27:35 AM	23-Oct-2014 10:41:21 PM	No

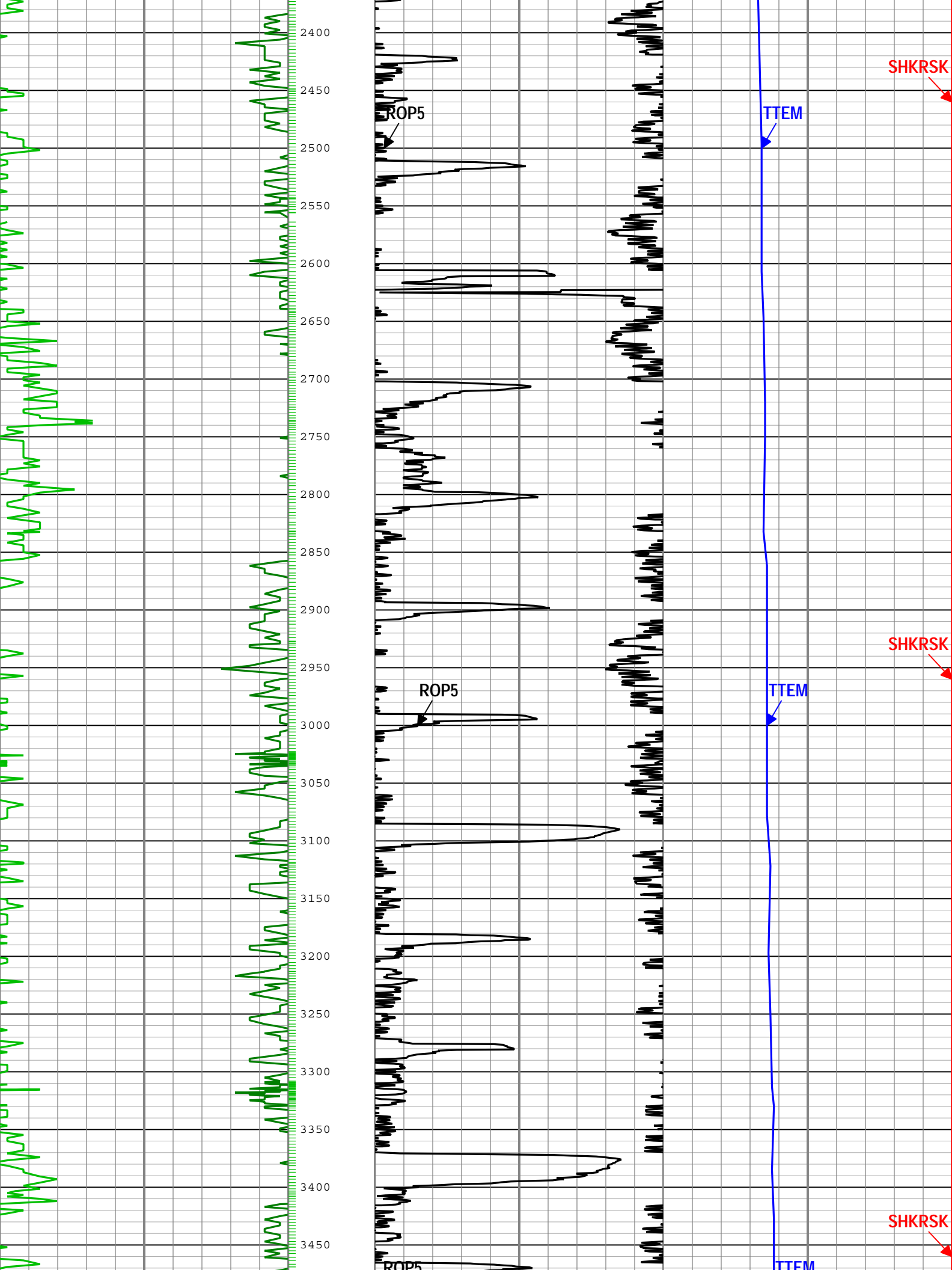
All depths are referenced to toolstring zero

Log	Company:Noble Energy	Well:Oscar Y10-73-1HC
		Well Composite:S280

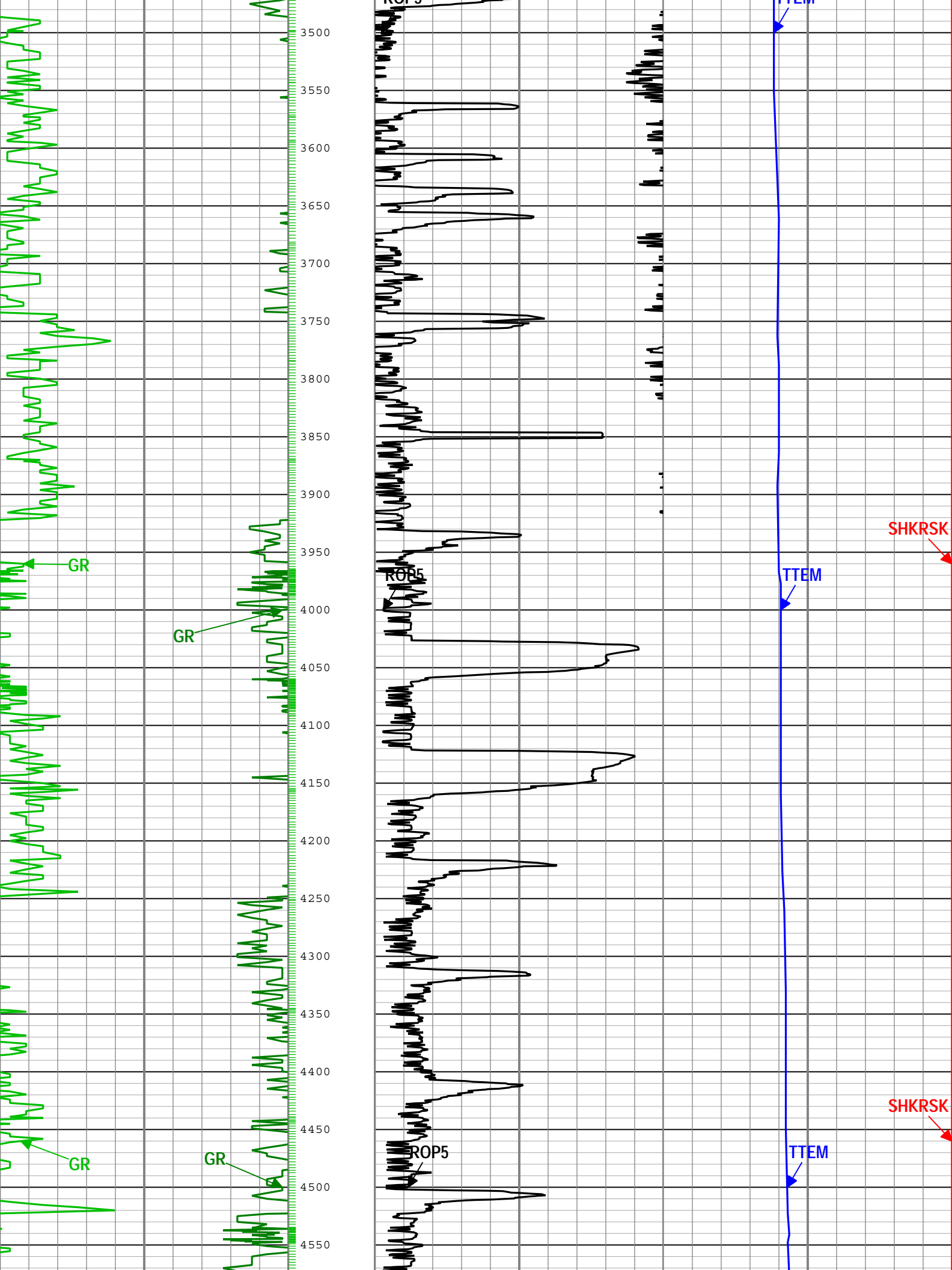
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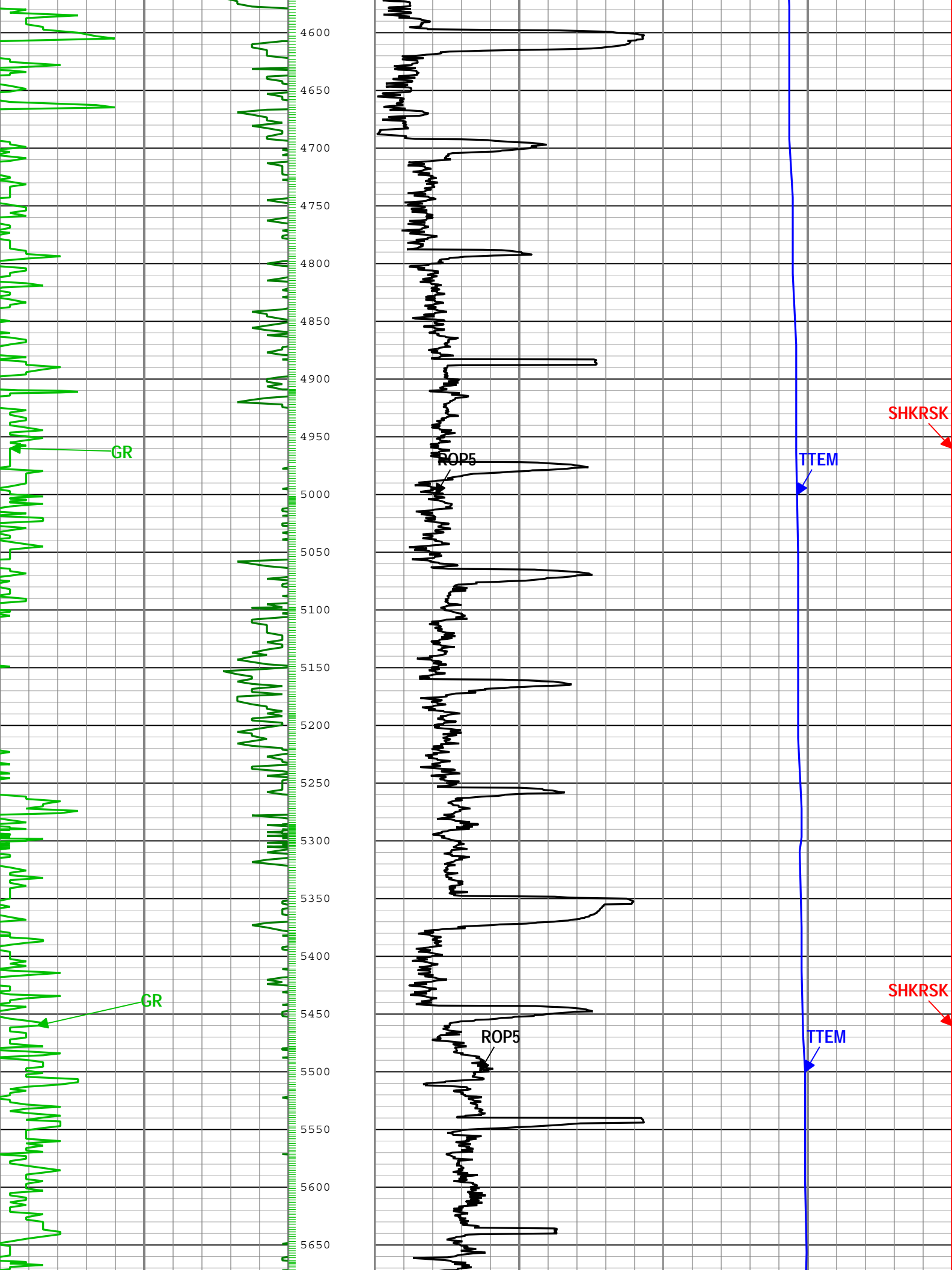


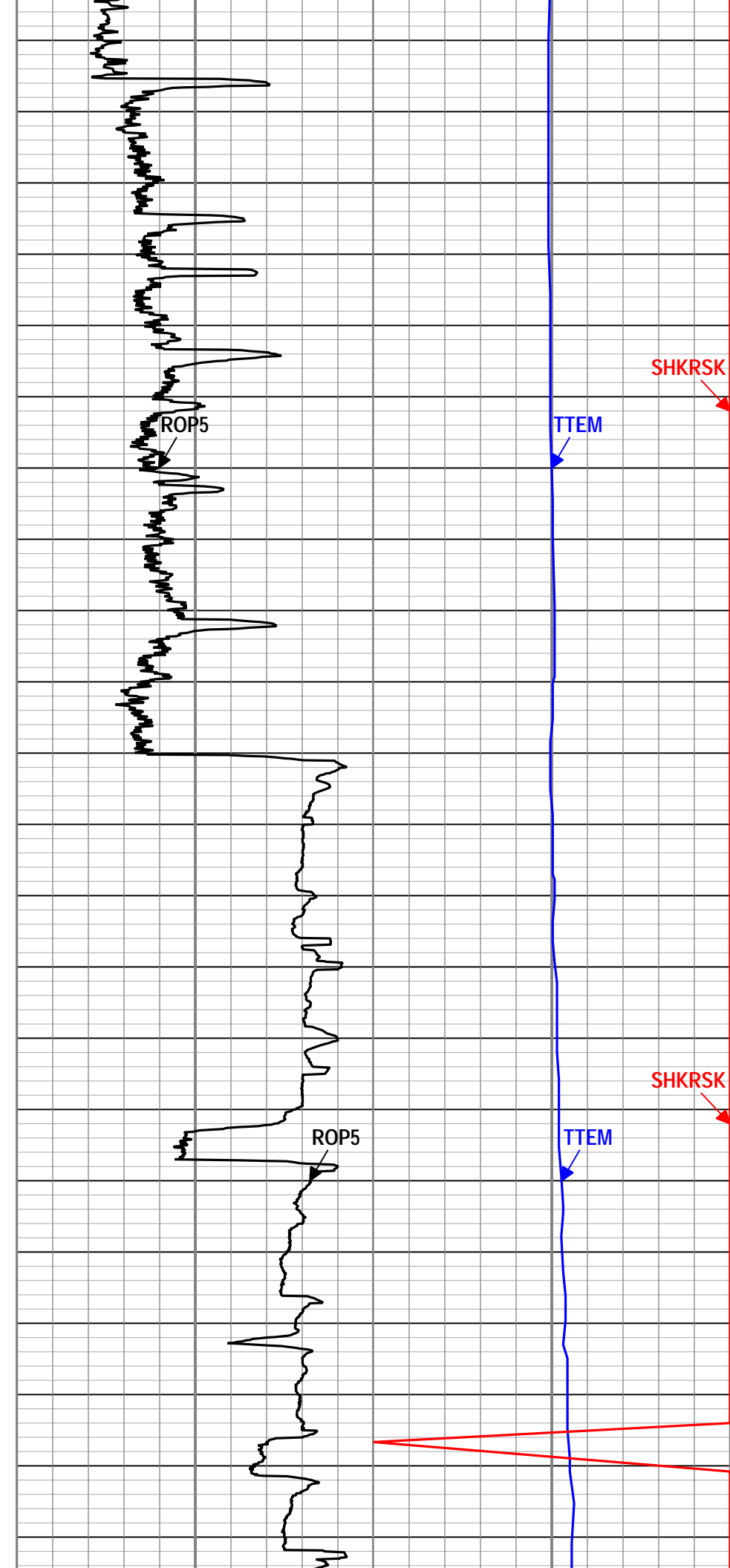
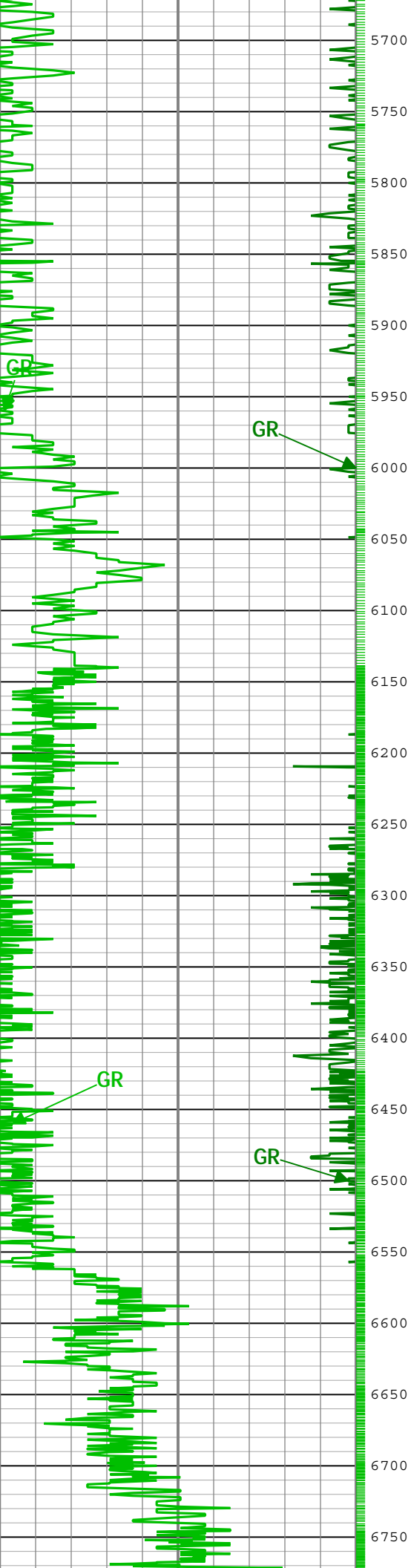


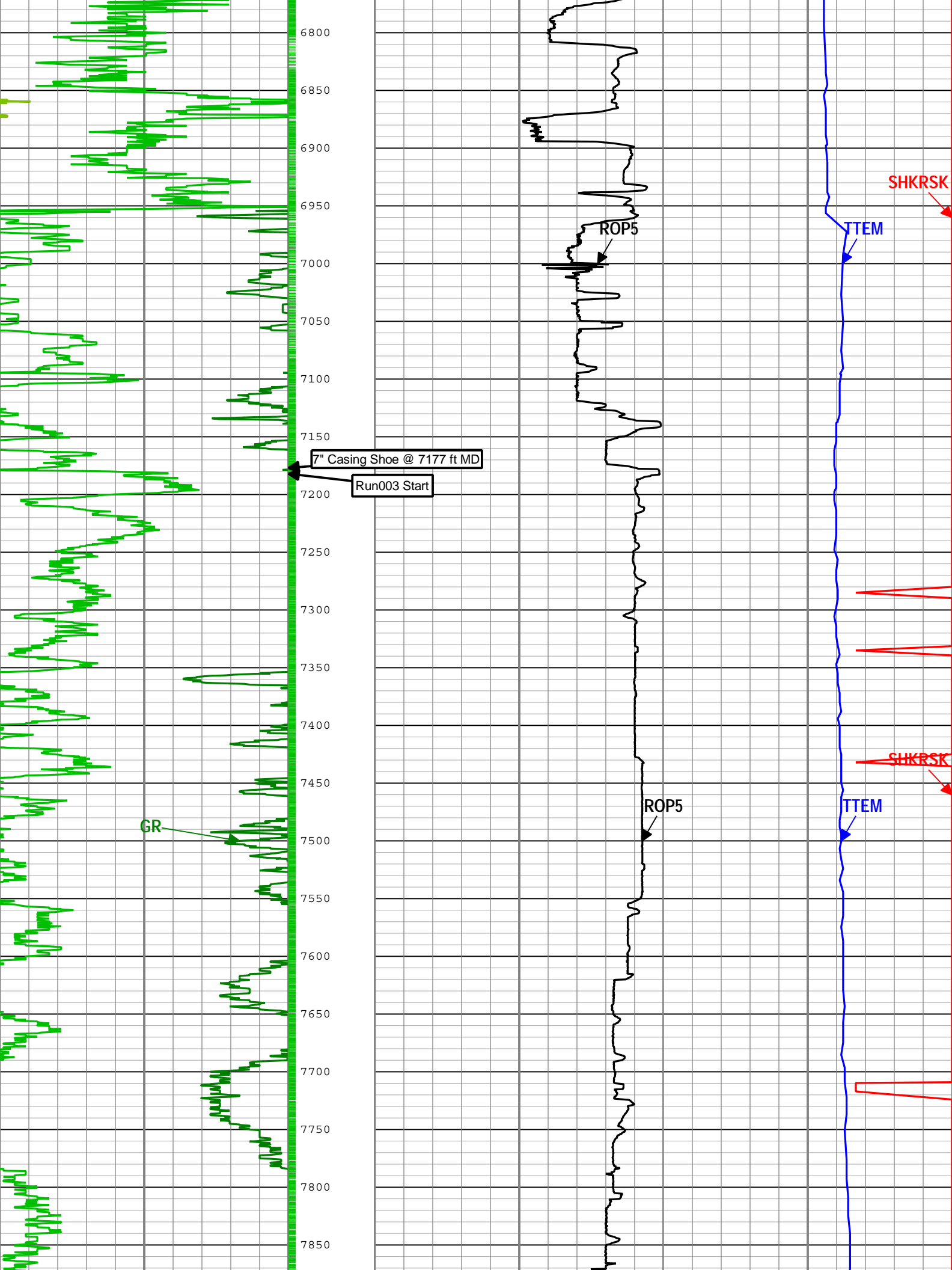


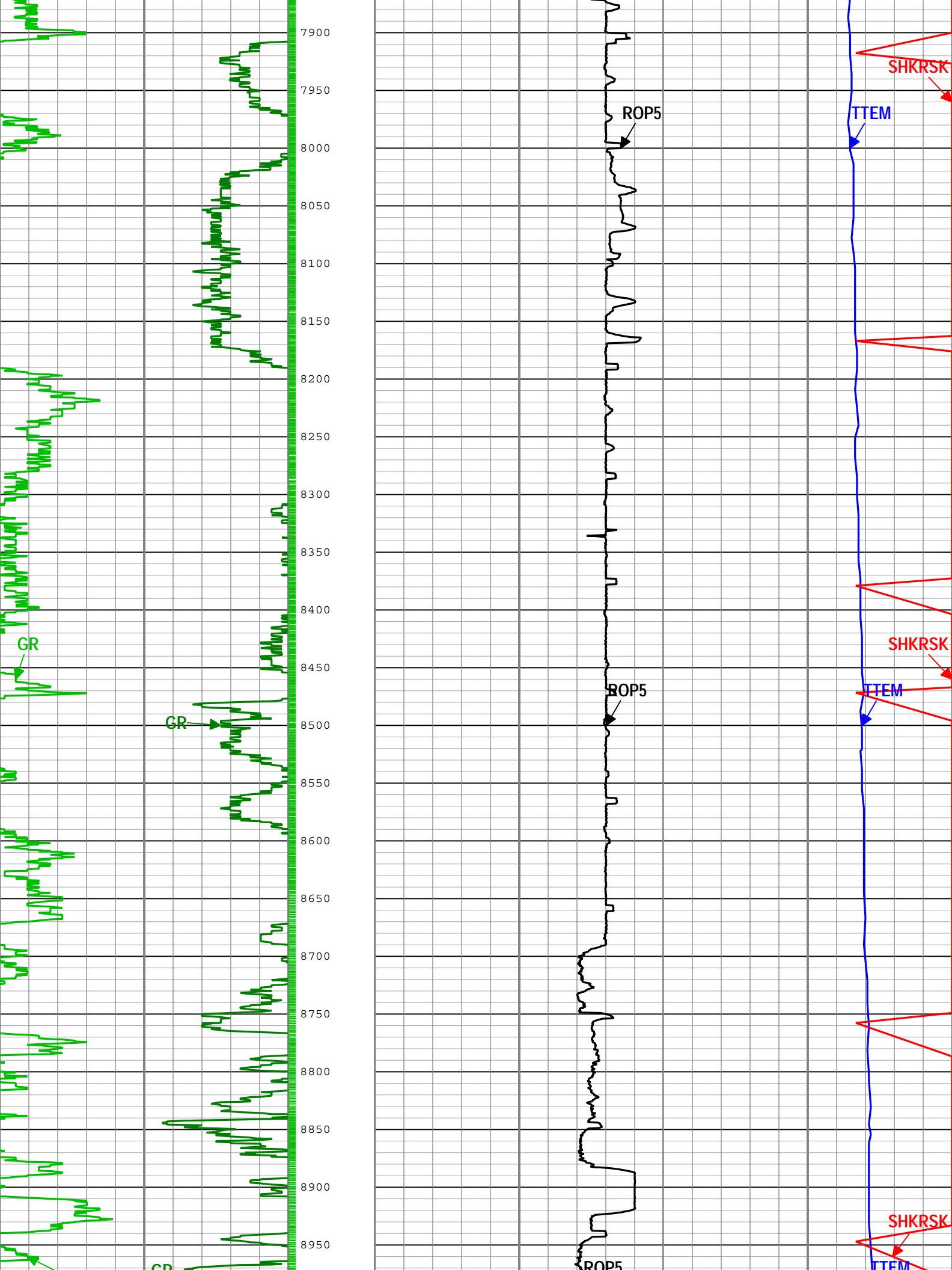


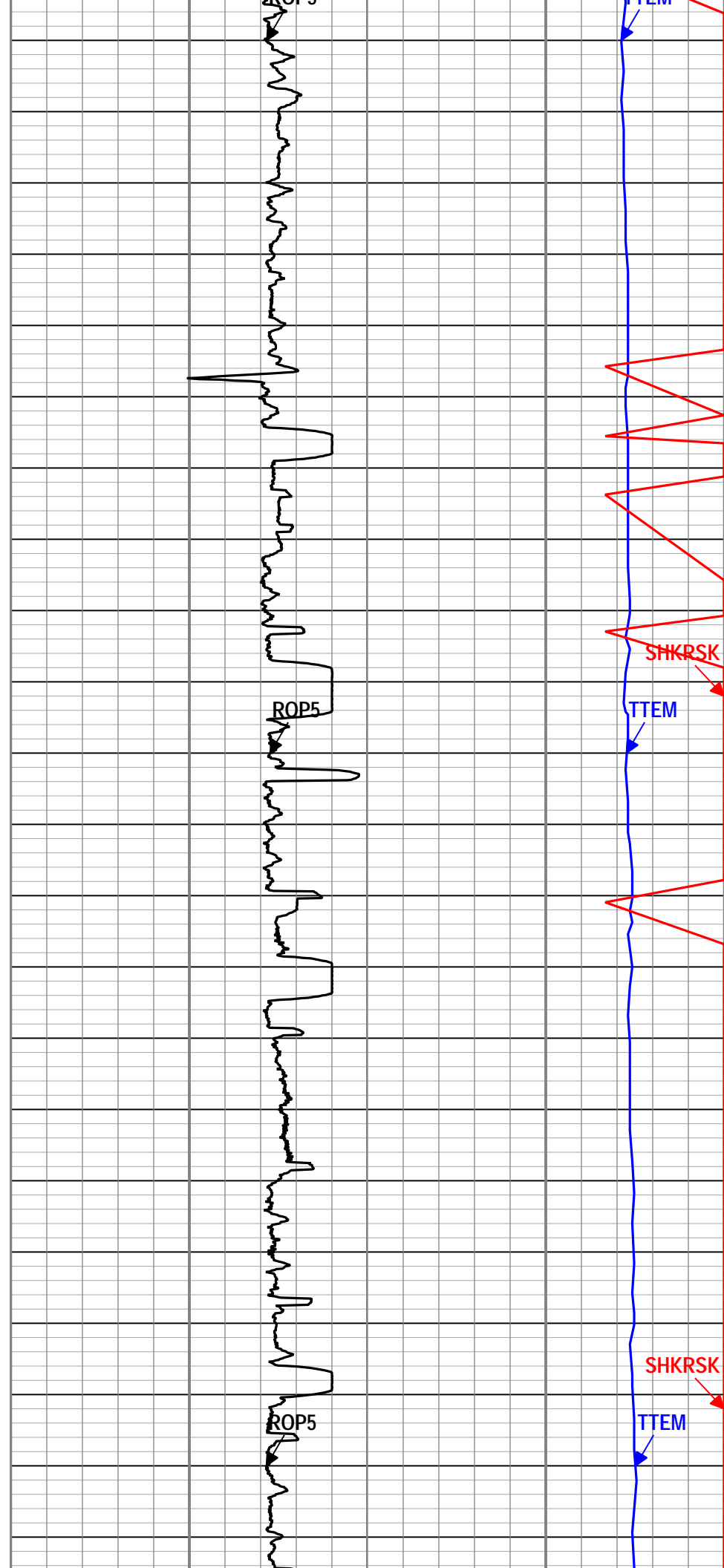
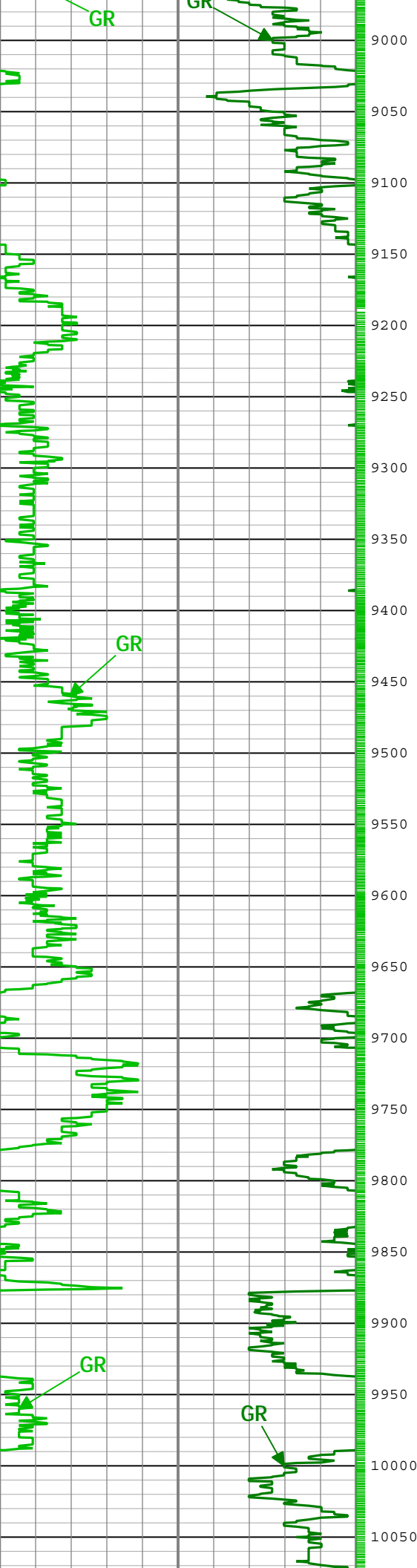


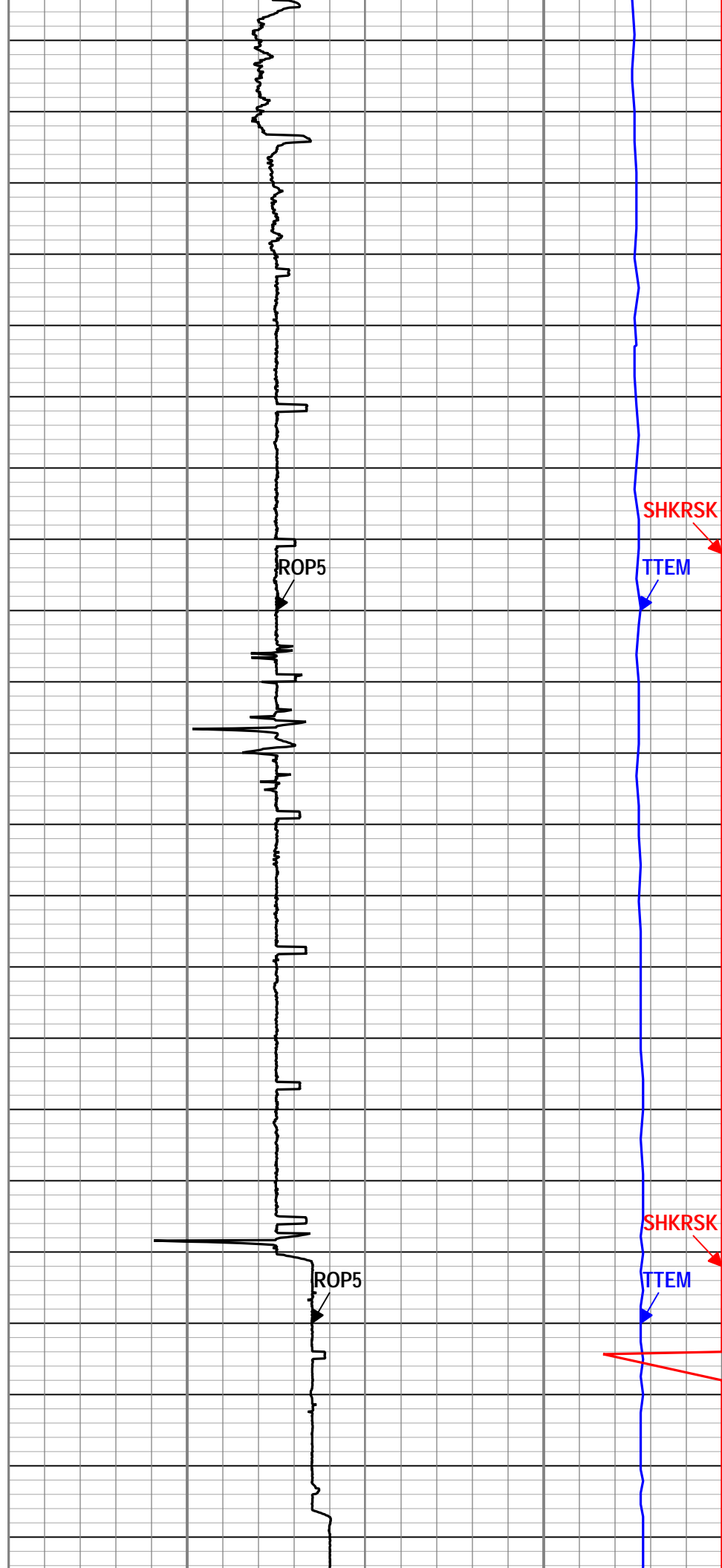
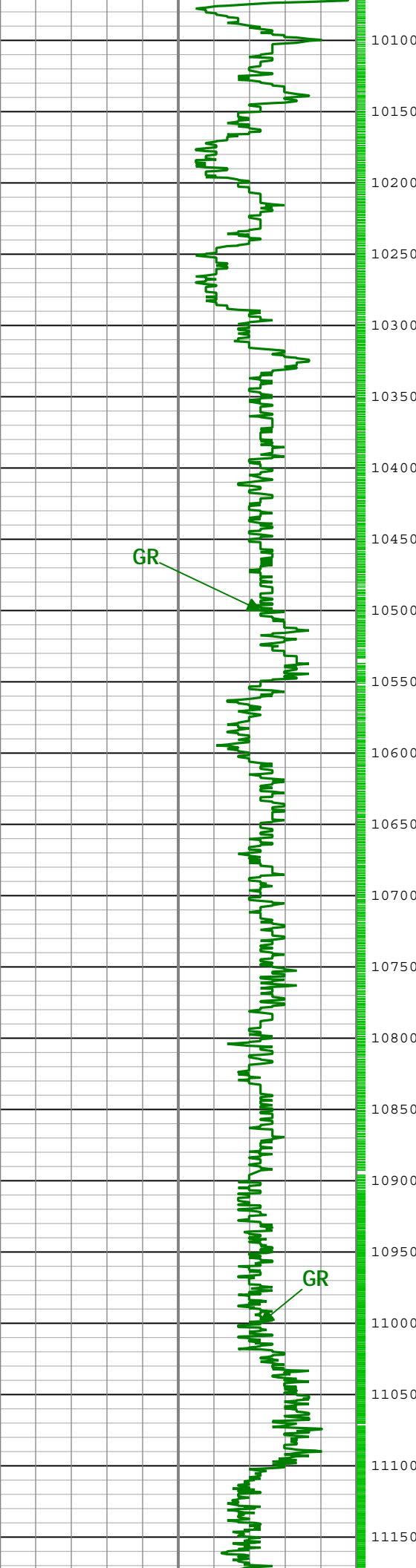


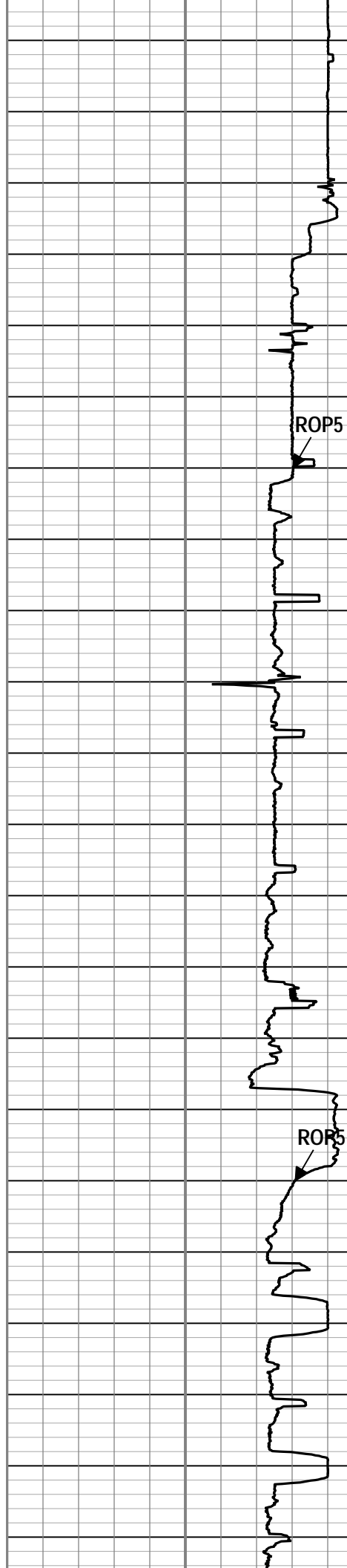
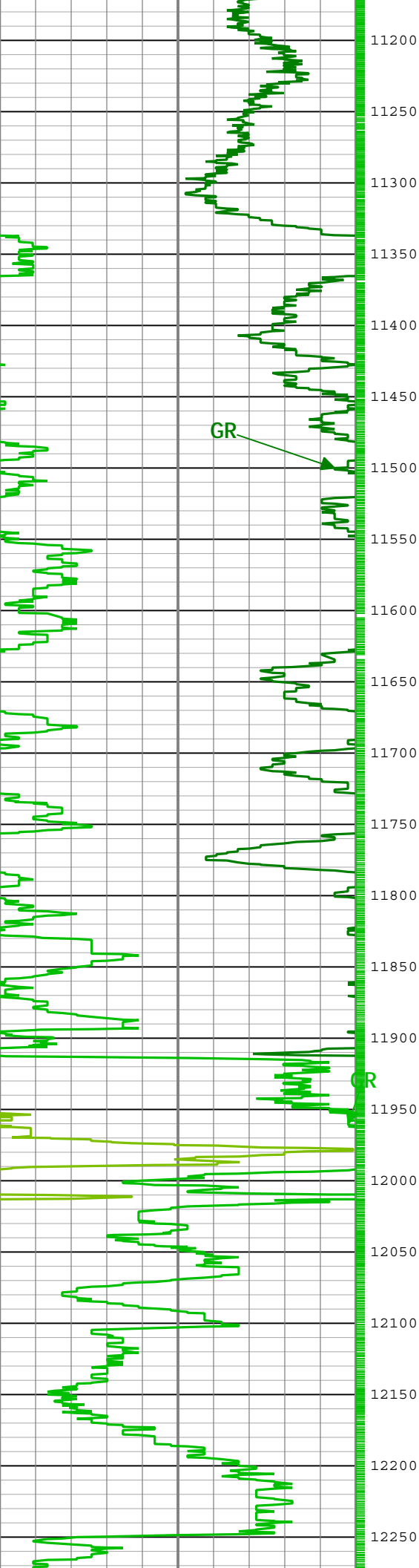




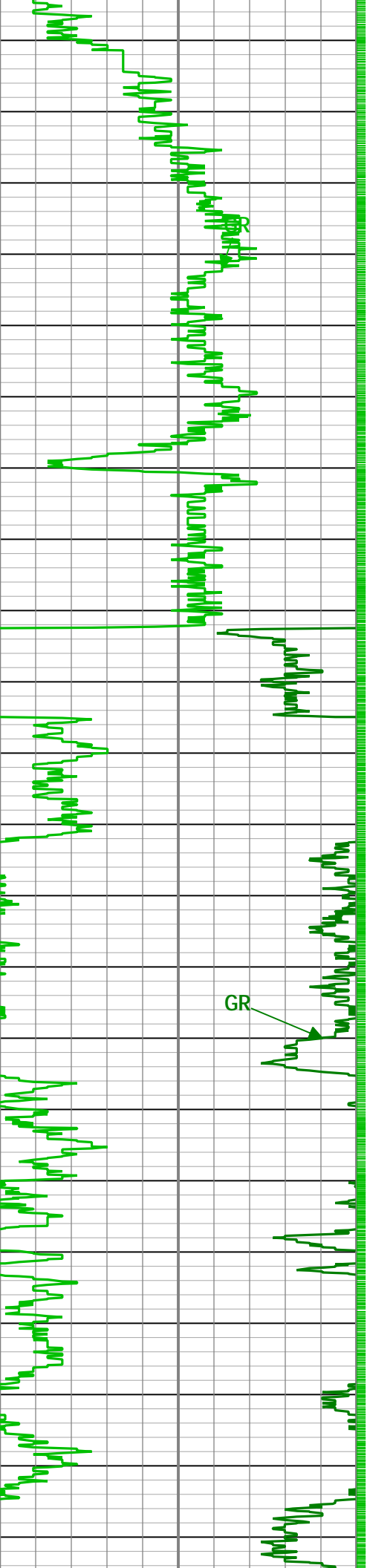




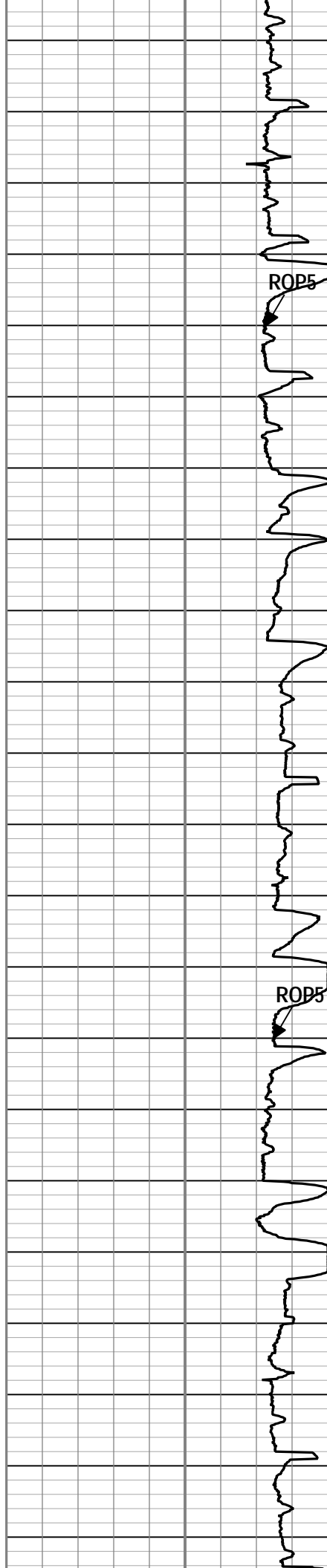




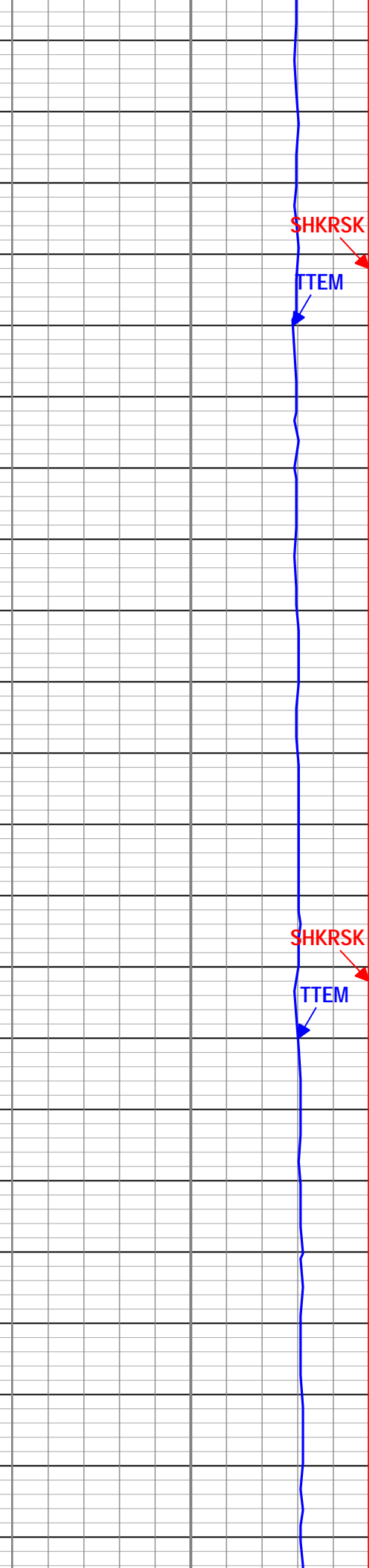




12300  
12350  
12400  
12450  
12500  
12550  
12600  
12650  
12700  
12750  
12800  
12850  
12900  
12950  
13000  
13050  
13100  
13150  
13200  
13250  
13300  
13350



12300  
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12500  
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13350



SHKRSK

TTEM

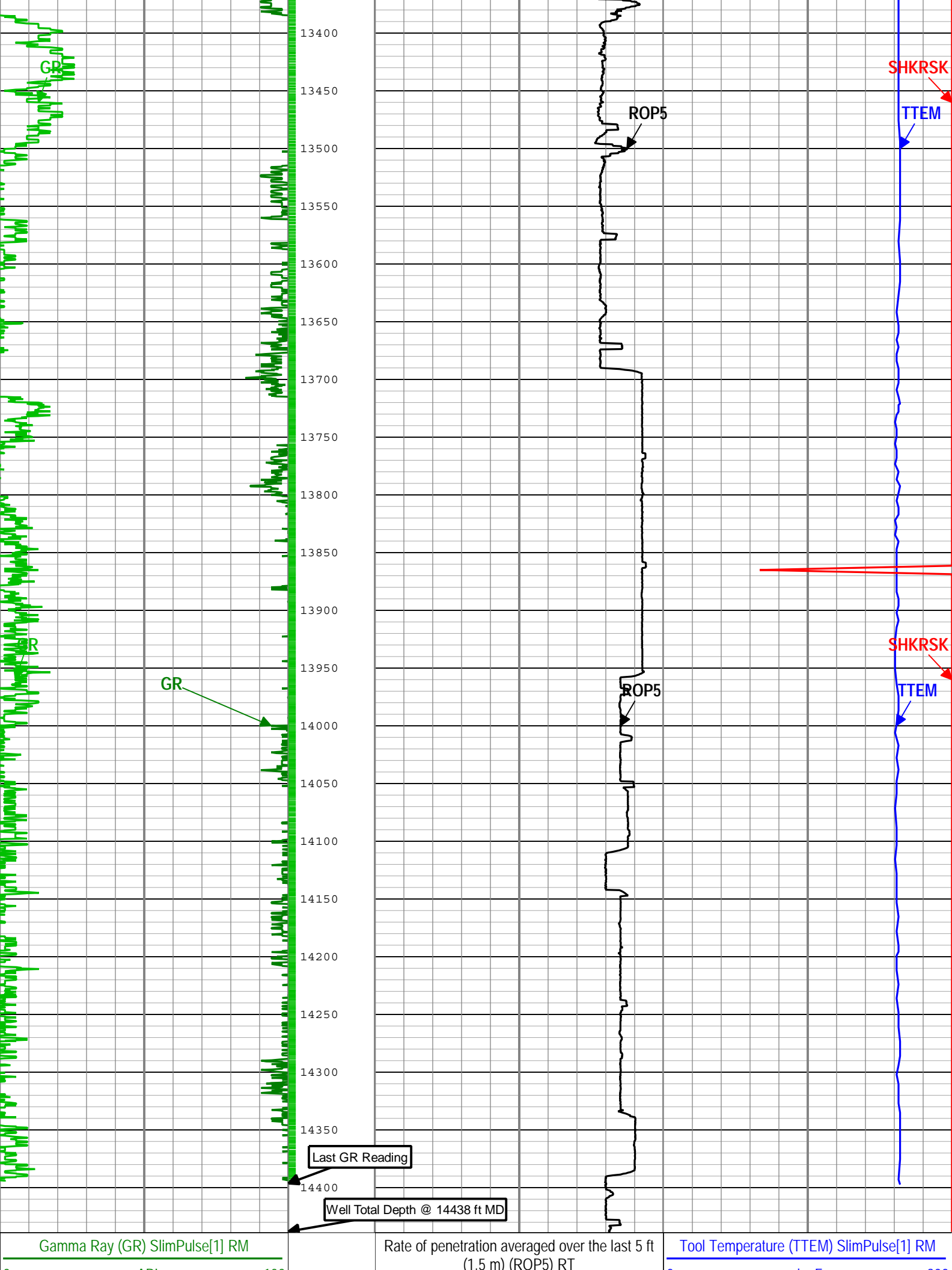
SHKRSK

TTEM

GR

ROP5

ROP5



	gAPI	100		(1000) (1000) ft	0	deg	300
Gamma Ray (GR) SlimPulse[1] RM				1000	ft/h	0	Shock Risk (SHKRSK) SlimPulse[1] RT
100	gAPI	200				3	0
Gamma Ray (GR) SlimPulse[1] RM							
200	gAPI	300					
Gamma Ray (GR) SlimPulse[1] RM							
300	gAPI	400					
└ GR - Gamma Ray SlimPulse[1] RM							

Description: SlimPulse Gamma Ray 1
Format: Log ( Final MD Log )
Index Scale: 1 in per 100 ft
Index Unit: ft
Index Type: Measured Depth
Creation Date: 28-Oct-2014 11:09:45

Channel Processing Parameters					
Run001: Parameters					
Parameter	Description	Tool	Value	Unit	
BS	Bit Size	DNMSESSION	Depth Zoned	in	
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal	
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT		
Run001Depth Zoned Parameters					
Parameter	Value	Start ( ft )	Stop ( ft )		
BS	13.75	1168	1168		
BS	8.75	1168	1467		
All depth are actual.					
Run002: Parameters					
Parameter	Description	Tool	Value	Unit	
BS	Bit Size	DNMSESSION	8.75	in	
DFD	Drilling Fluid Density	Borehole	Time Zoned	lbm/gal	
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT		
Run002Time Zoned Parameters					
Pass Drilling					
Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
DFD	8.6	17-Oct-2014 18:18:41	18-Oct-2014 03:00:00	1490.92	4029.75
DFD	9	18-Oct-2014 03:00:00	18-Oct-2014 13:30:00	4029.75	6674.67
DFD	10.3	18-Oct-2014 13:30:00	19-Oct-2014 09:32:06	6674.67	7184.75
All depth are at tool zero.					
Run003: Parameters					
Parameter	Description	Tool	Value	Unit	
BS	Bit Size	DNMSESSION	Depth Zoned	in	
DFD	Drilling Fluid Density	Borehole	Time Zoned	lbm/gal	
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT		
Run003Depth Zoned Parameters					
Parameter	Value	Start ( ft )	Stop ( ft )		
BS	8.75	6866.51	7182		
BS	6.125	7182	14438		
All depth are actual.					
Run003Time Zoned Parameters					
Pass Drilling					

Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
DFD	9.45	20-Oct-2014 08:27:35	21-Oct-2014 03:00:00	6999.08	8077.17
DFD	9.7	21-Oct-2014 03:00:00	21-Oct-2014 13:00:00	8077.17	9514
DFD	9.6	21-Oct-2014 13:00:00	22-Oct-2014 03:00:00	9512.5	11398.92
DFD	9.65	22-Oct-2014 03:00:00	23-Oct-2014 03:00:00	11398.92	14142.42
DFD	9.75	23-Oct-2014 03:00:00	23-Oct-2014 22:41:21	14142.42	14439.58

All depth are at tool zero.

Tool Control Parameters	
Well Composite	

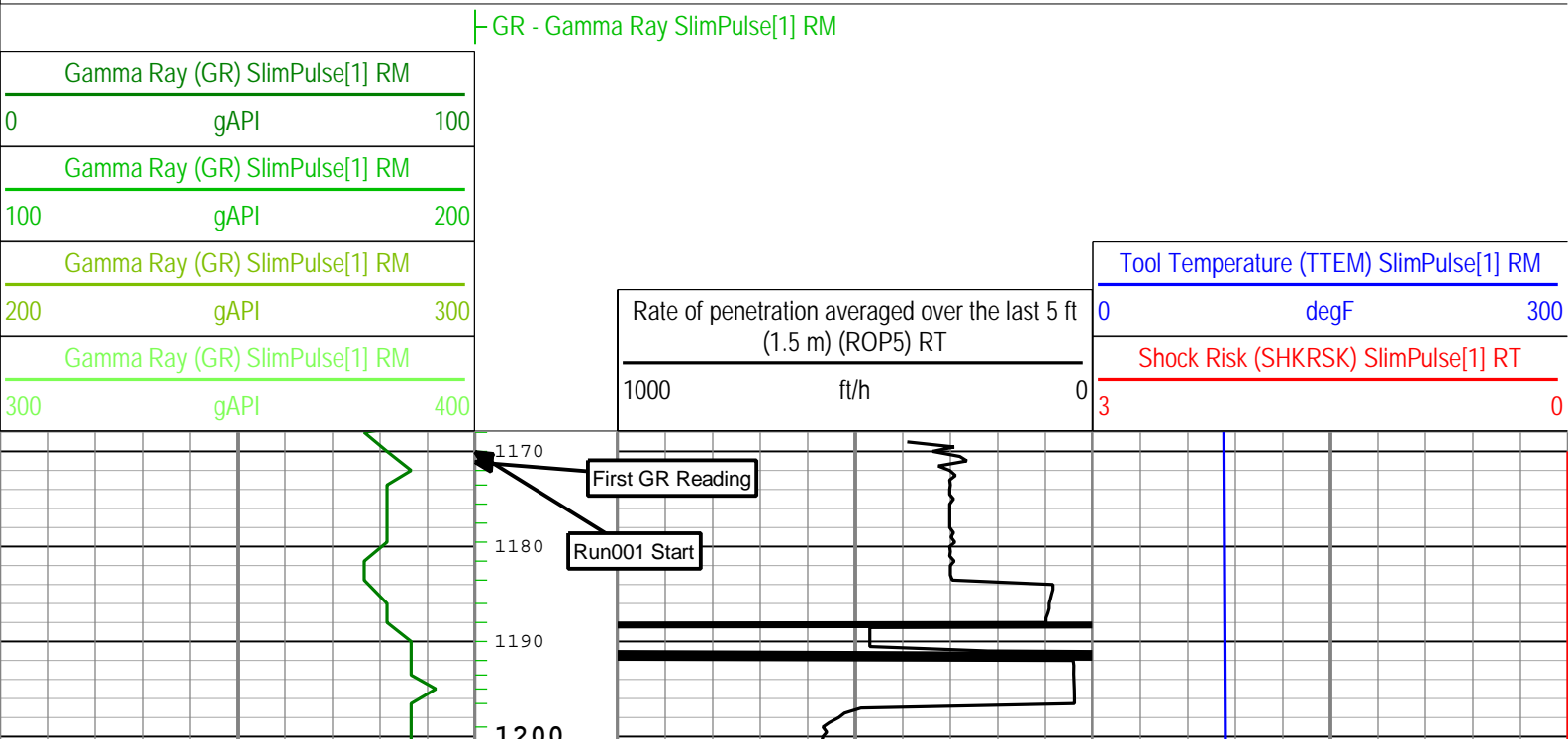
Software Version			
Acquisition System		Version	
MaxWell		4.0.9163.3000	
Application Patch		Patch-SP-10767_26570-4.0.9163.3001	
		Patch-Hotfix_MRT_SP4-27464-4.0.9575.3002	
Tool Elements	Description	Software Version	Firmware Version
DRILLING_SURFACE	DRILLING_SURFACE	4.0.9469.3000	
SPEC	SlimPulse Electronics Cartridge	4.0.9469.3000	

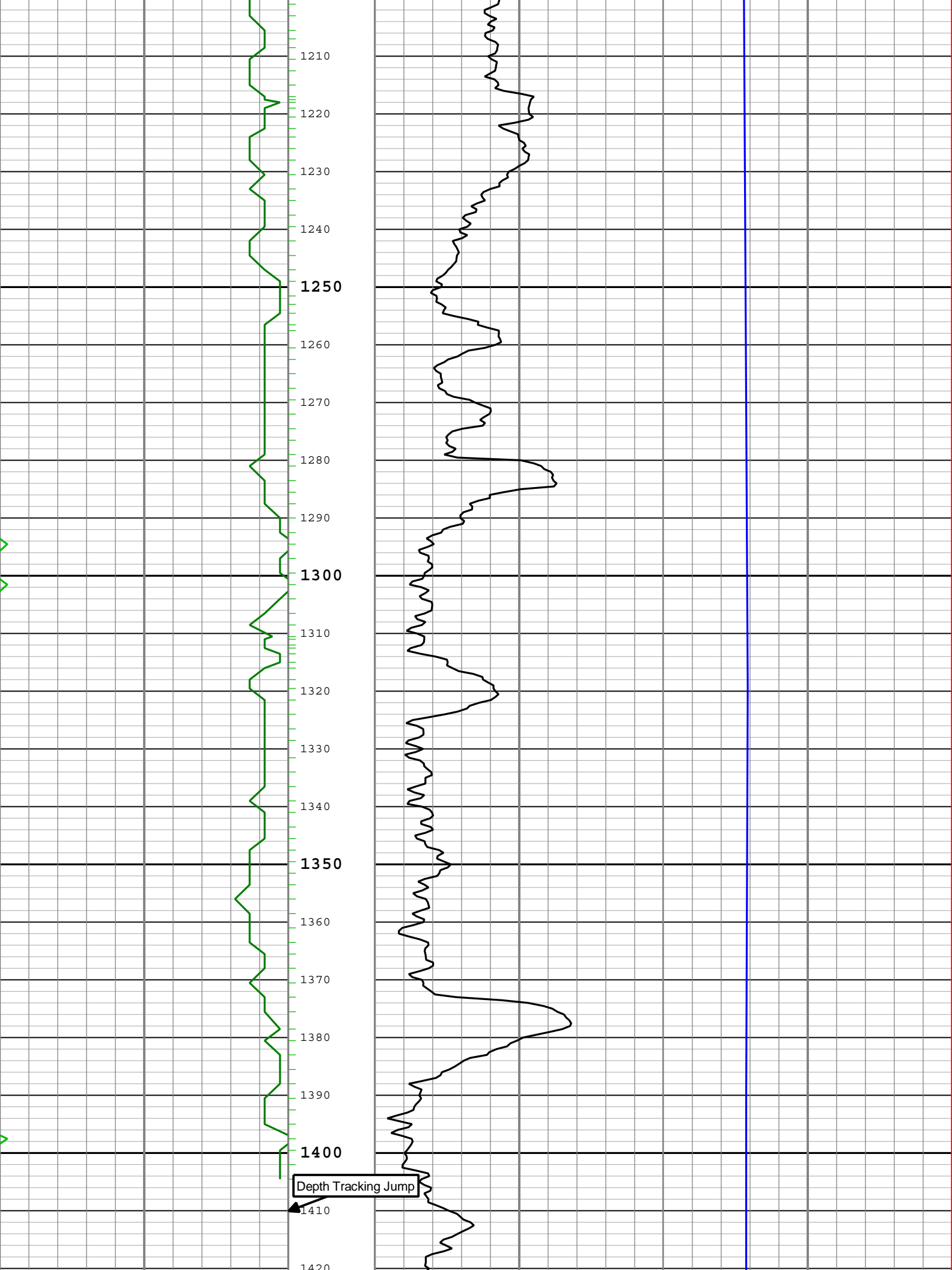
Composite Summary							
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run001	Drilling	Down	1168.33 ft	1467.00 ft	17-Oct-2014 2:03:51 PM	17-Oct-2014 4:56:36 PM	No
Run002	Drilling	Down	1490.92 ft	7184.75 ft	17-Oct-2014 6:18:41 PM	19-Oct-2014 9:32:06 AM	No
Run003	Drilling	Down	6999.08 ft	14439.58 ft	20-Oct-2014 8:27:35 AM	23-Oct-2014 10:41:21 PM	No

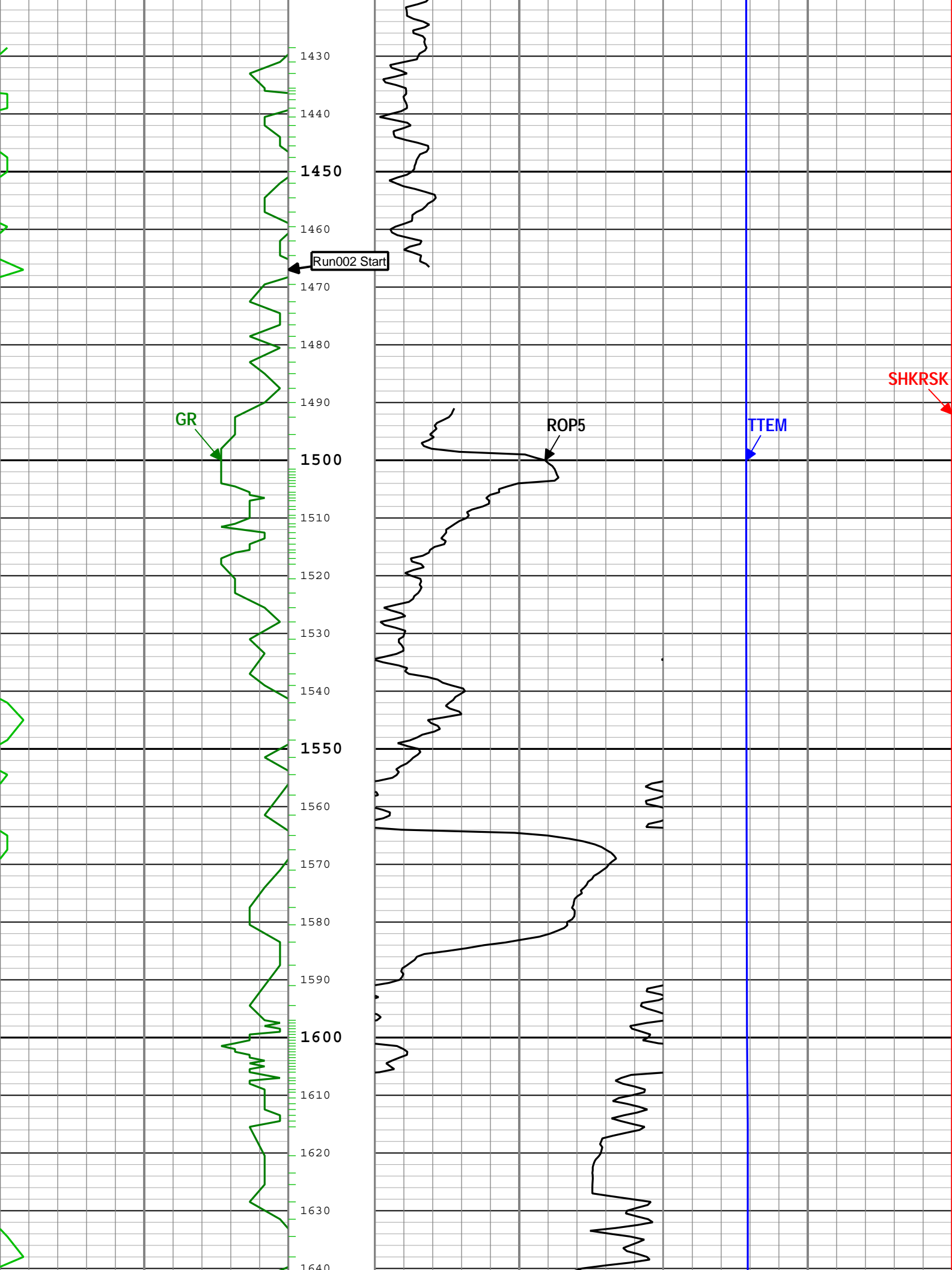
All depths are referenced to toolstring zero

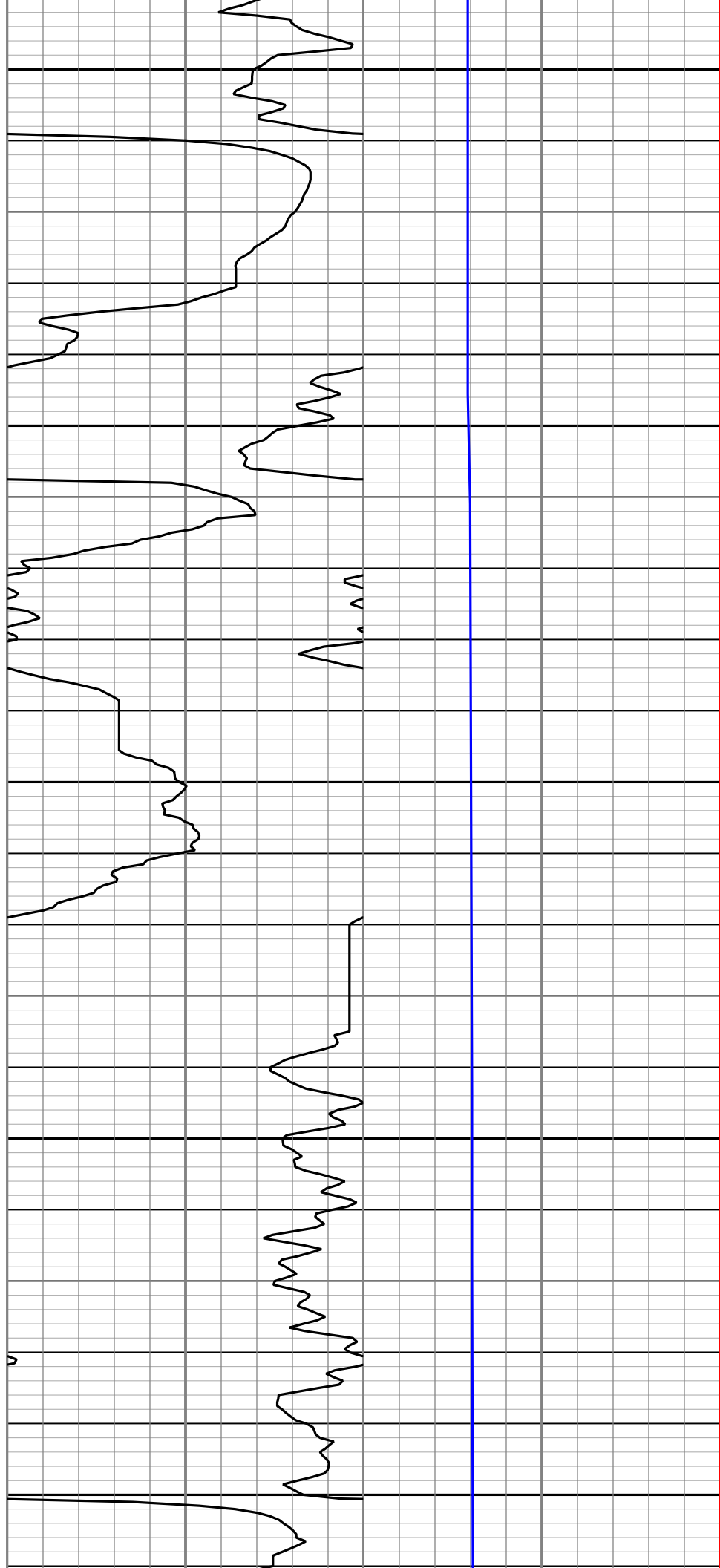
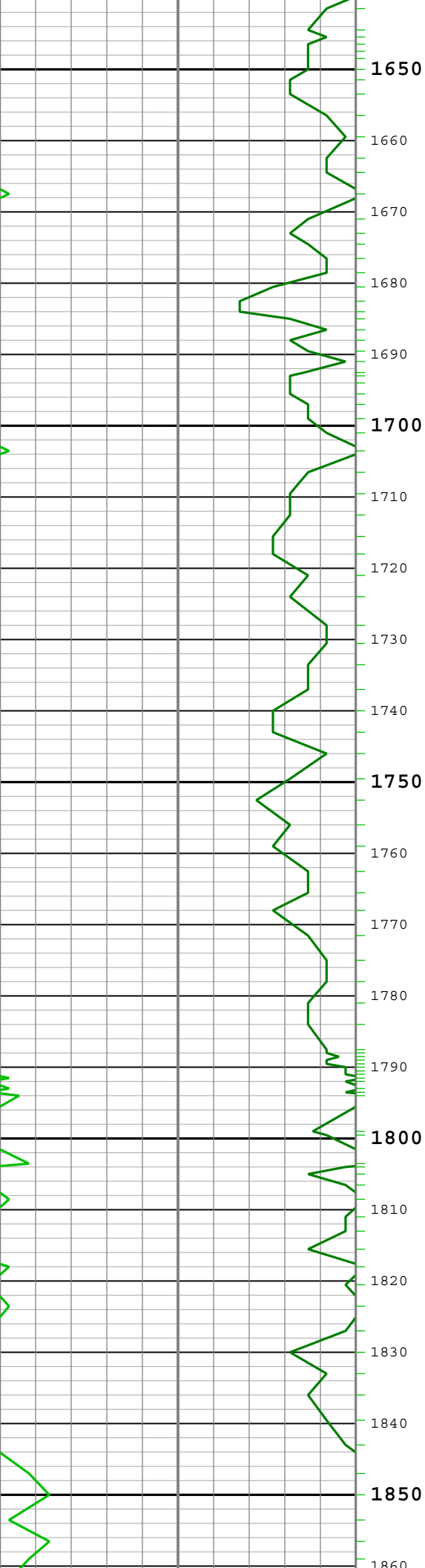
Log	Company:Noble Energy	Well:Oscar Y10-73-1HC
		Well Composite:S280

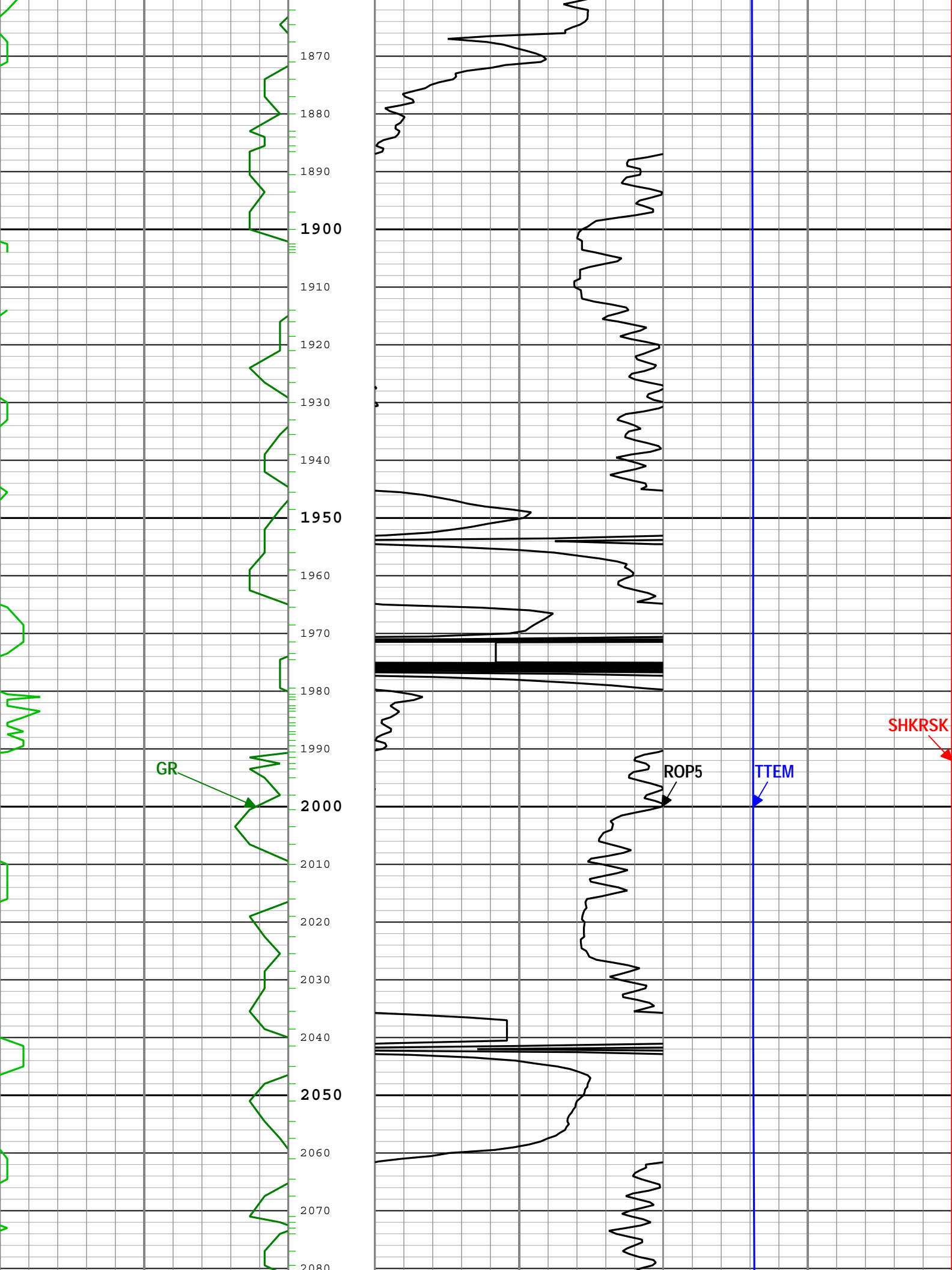
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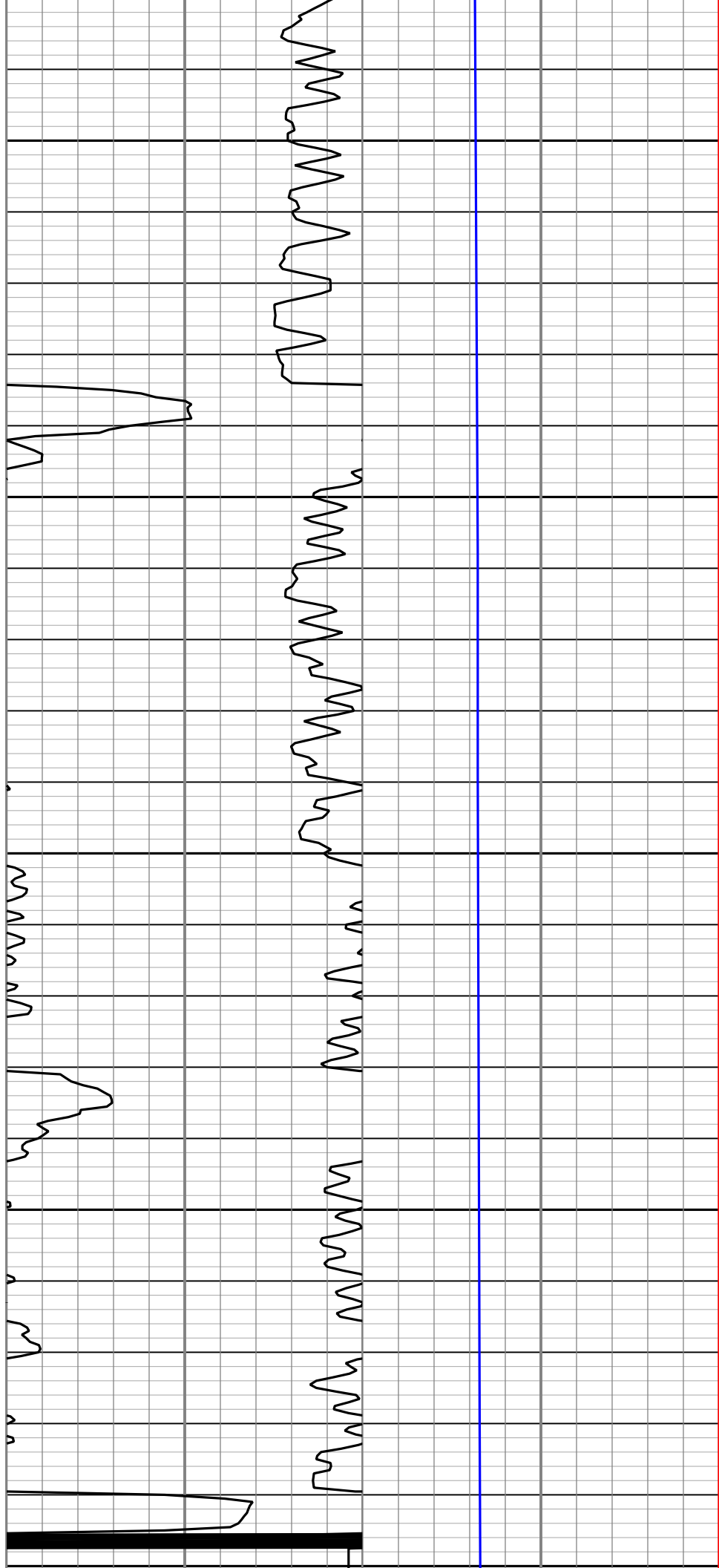
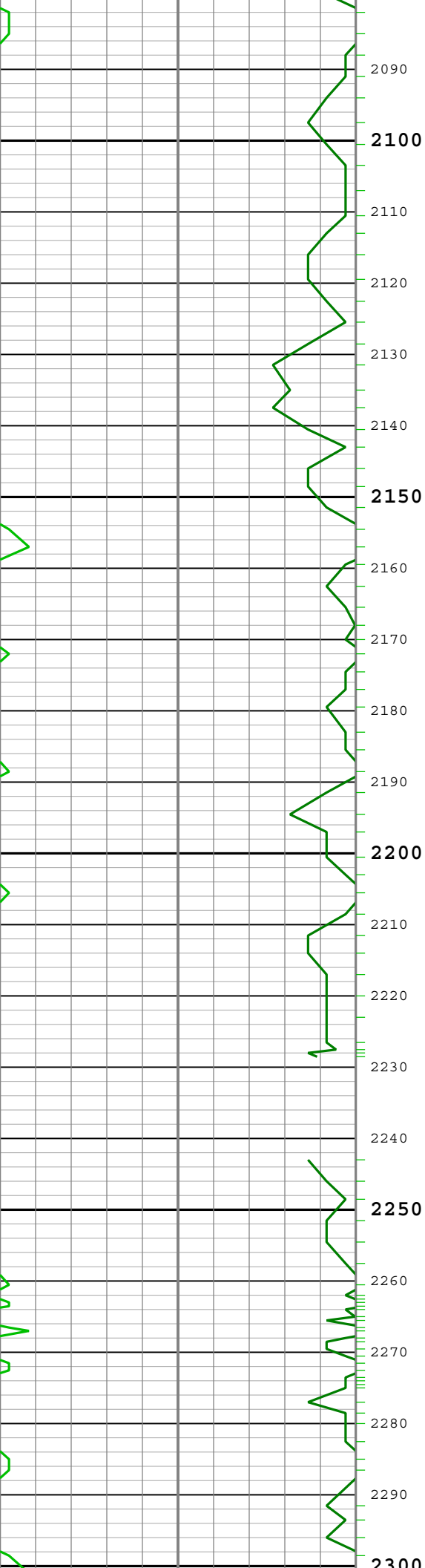


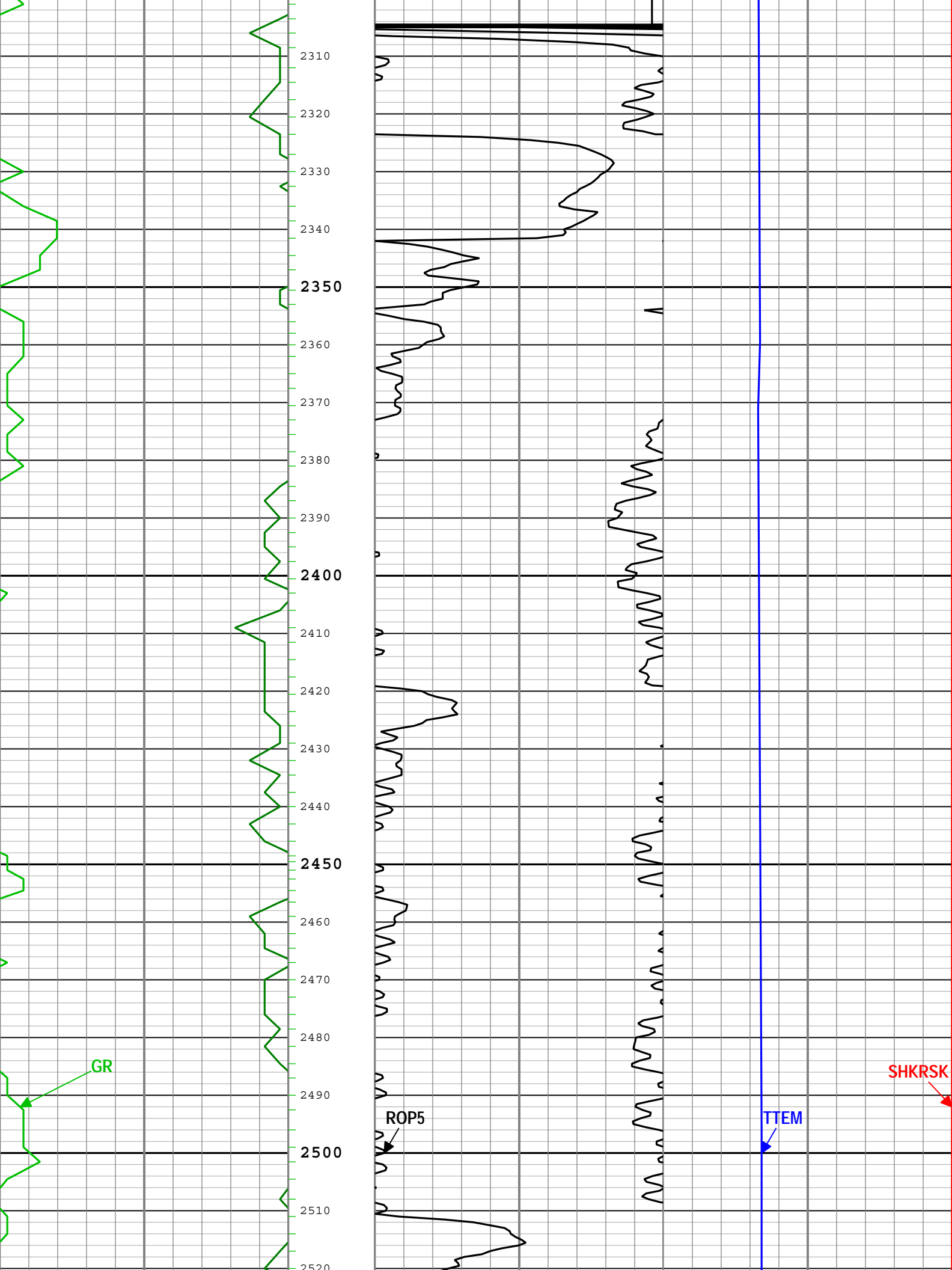


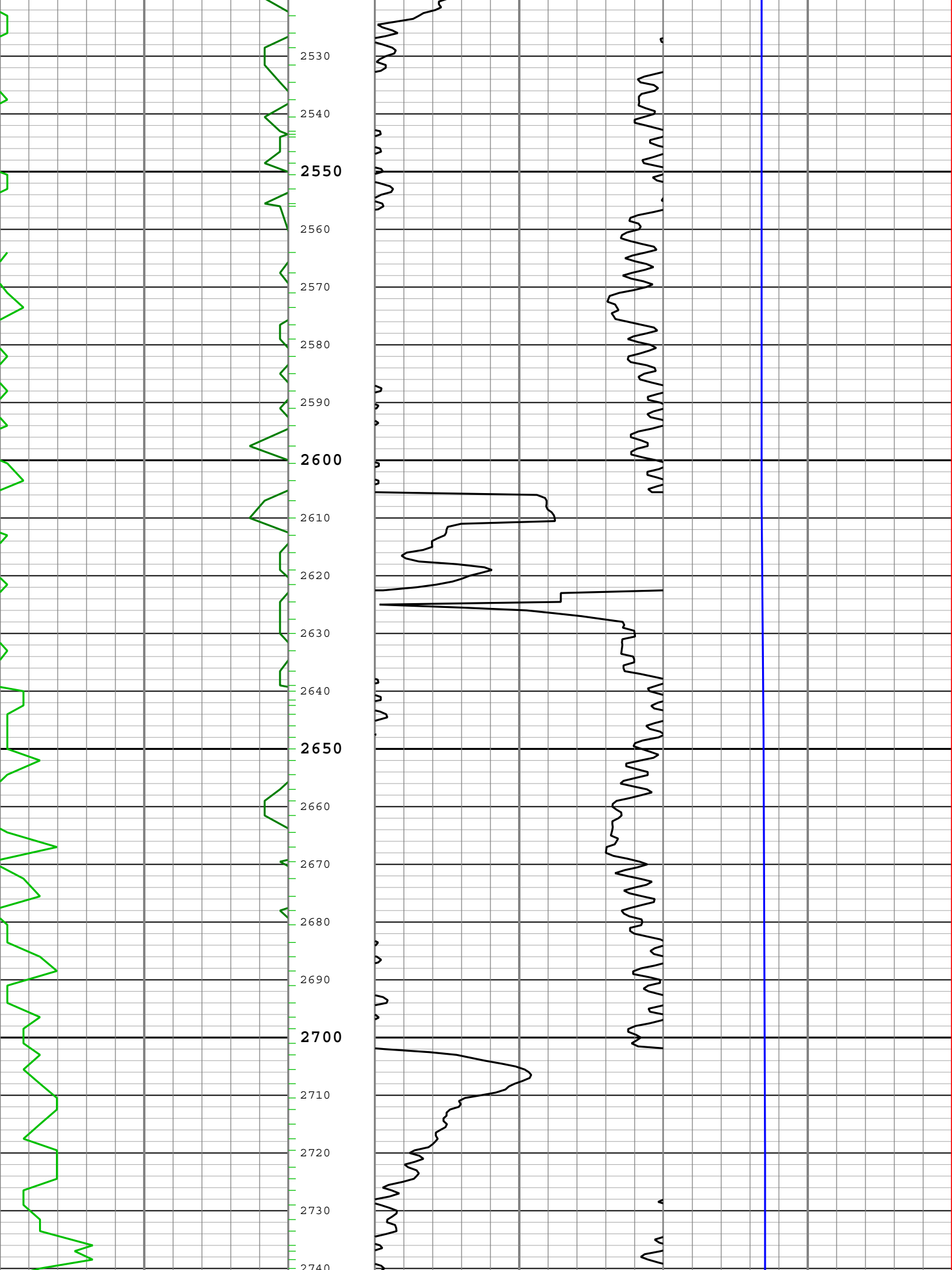


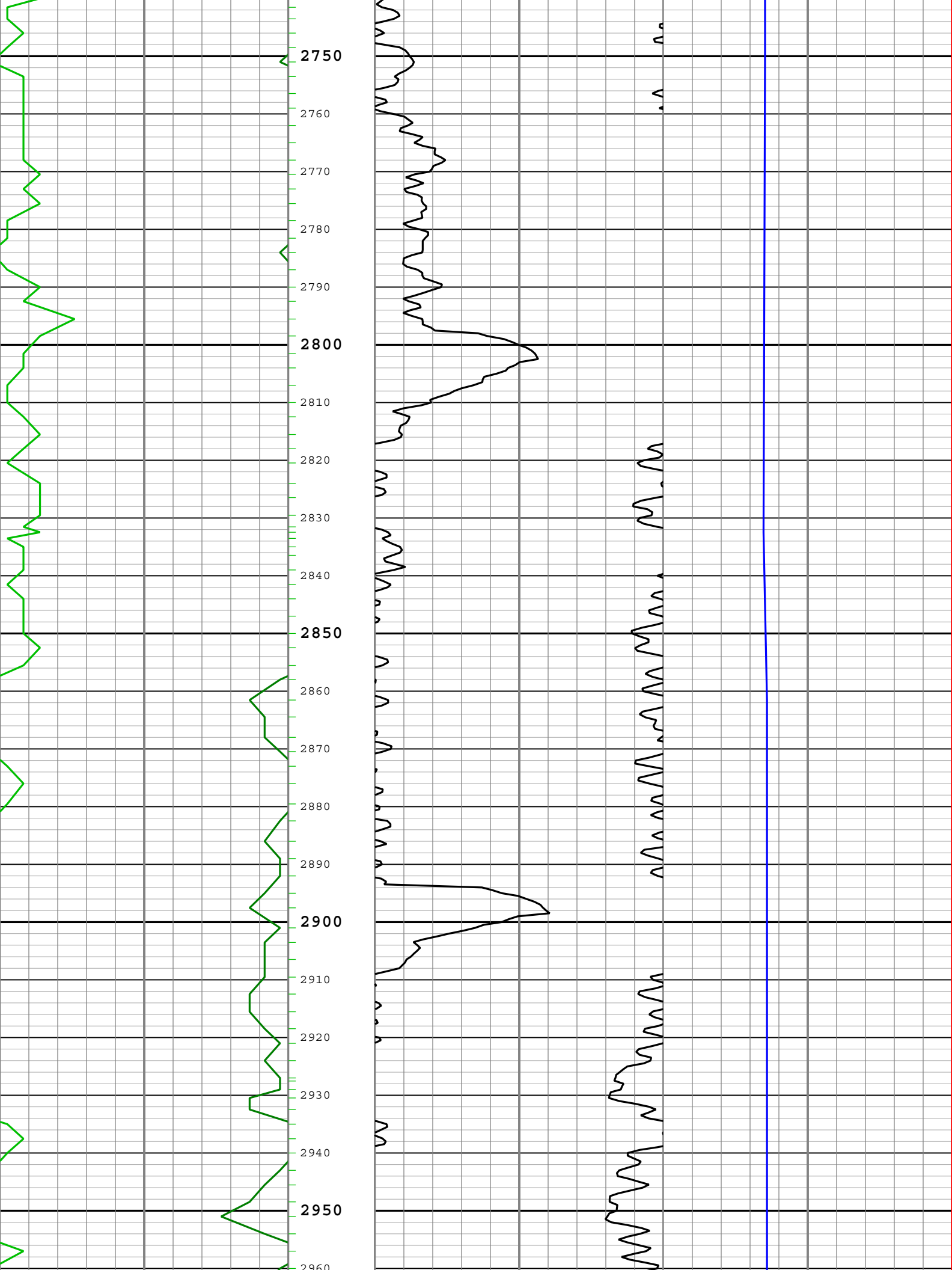


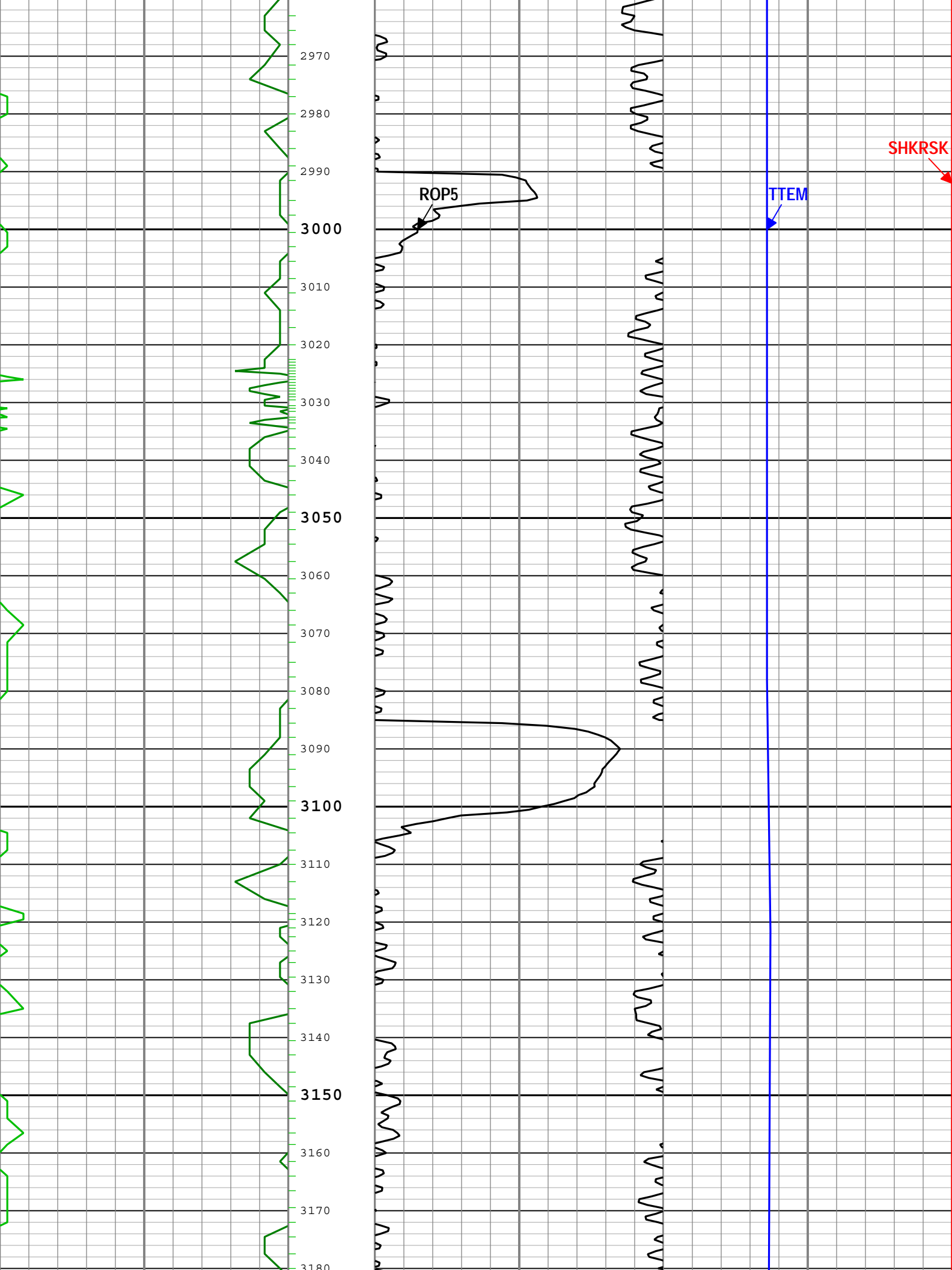


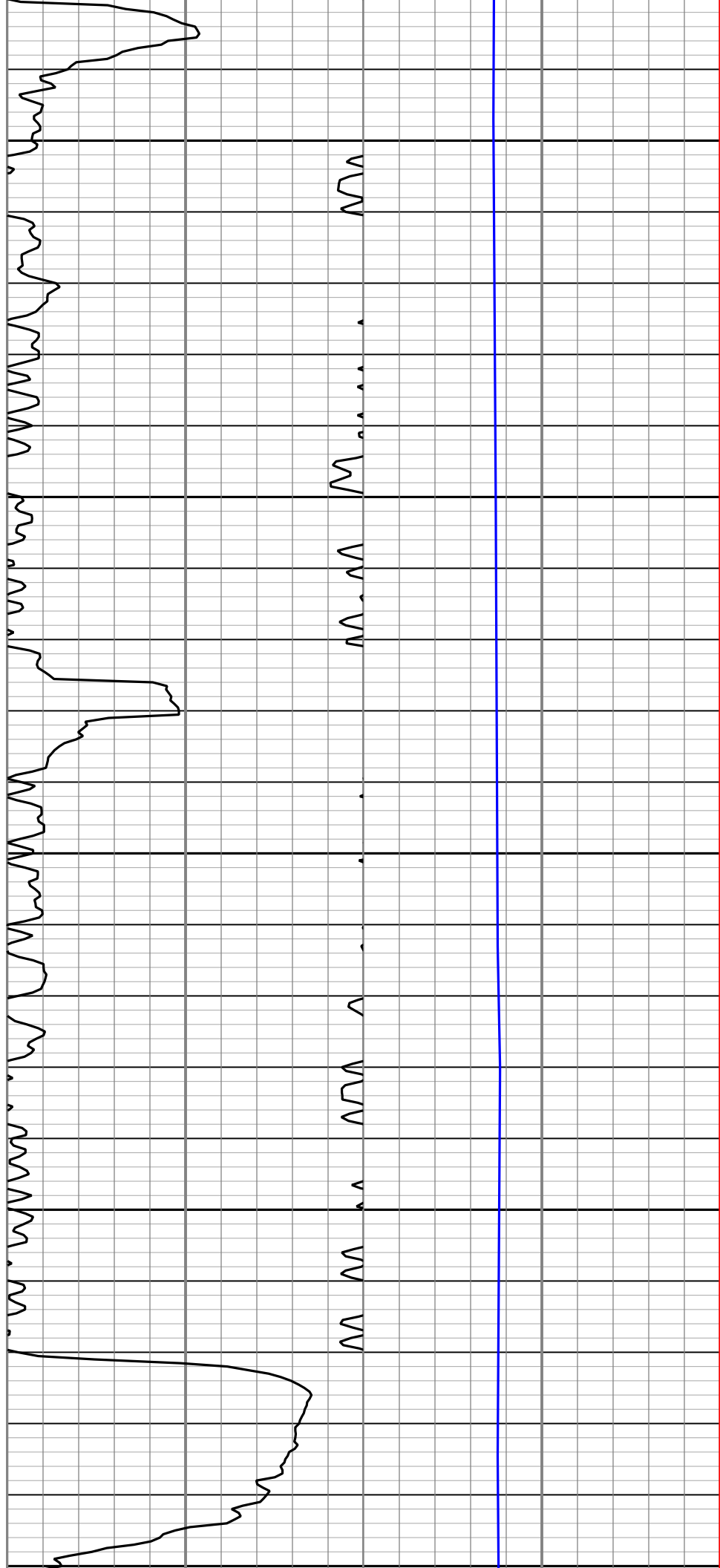
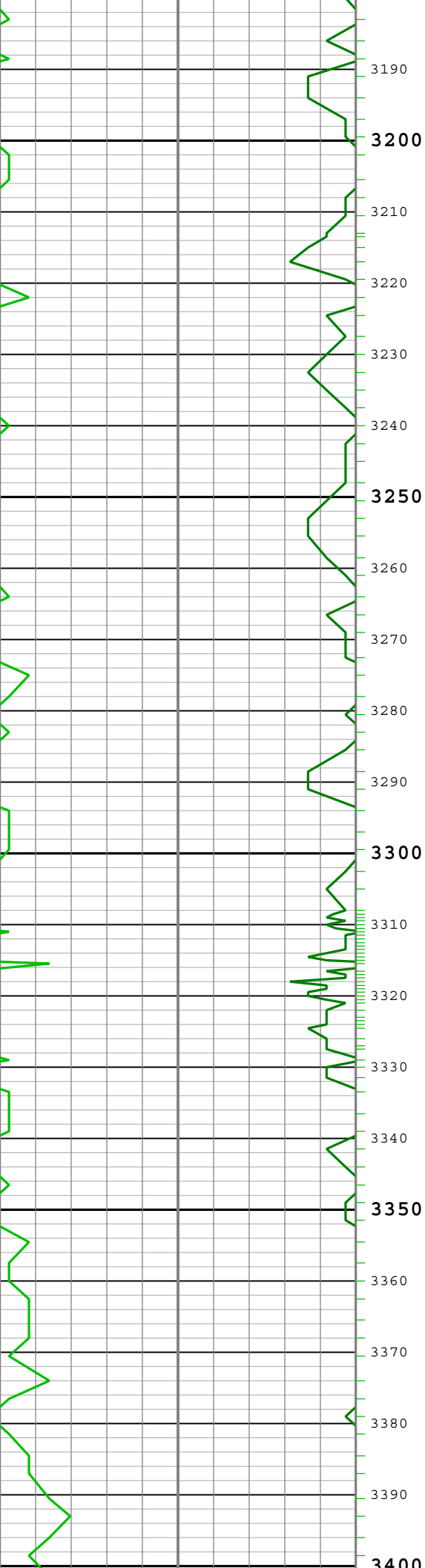


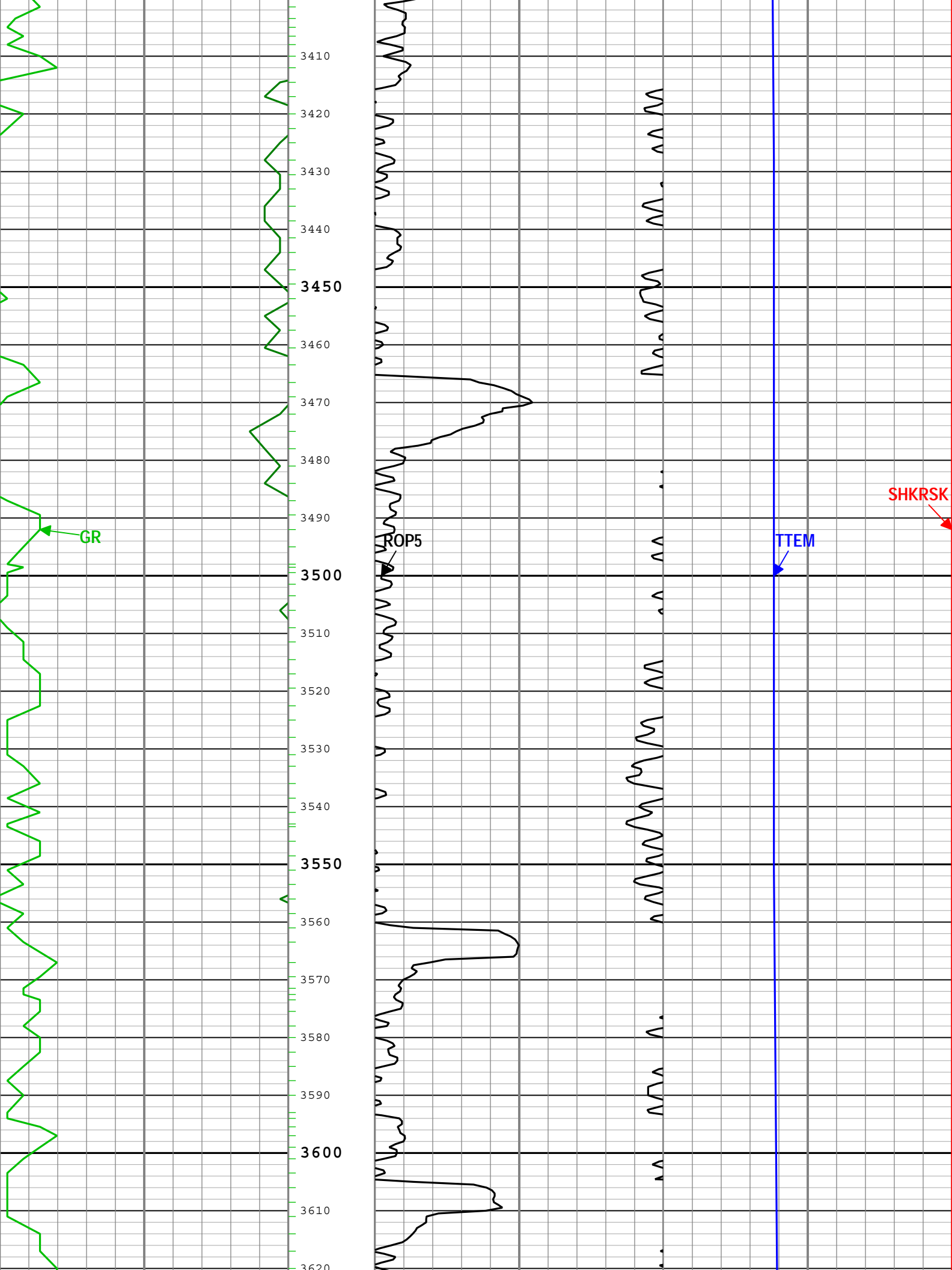


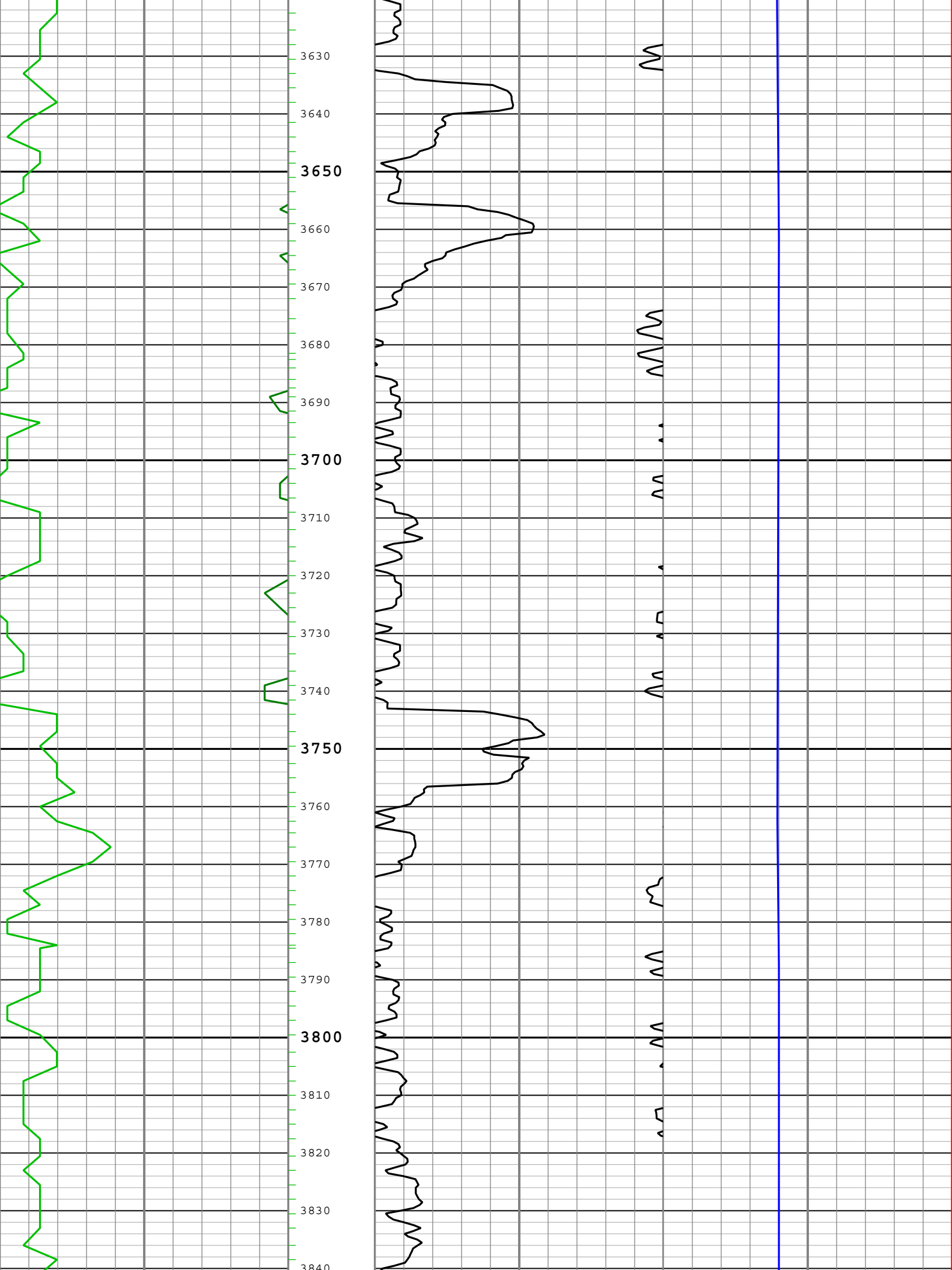




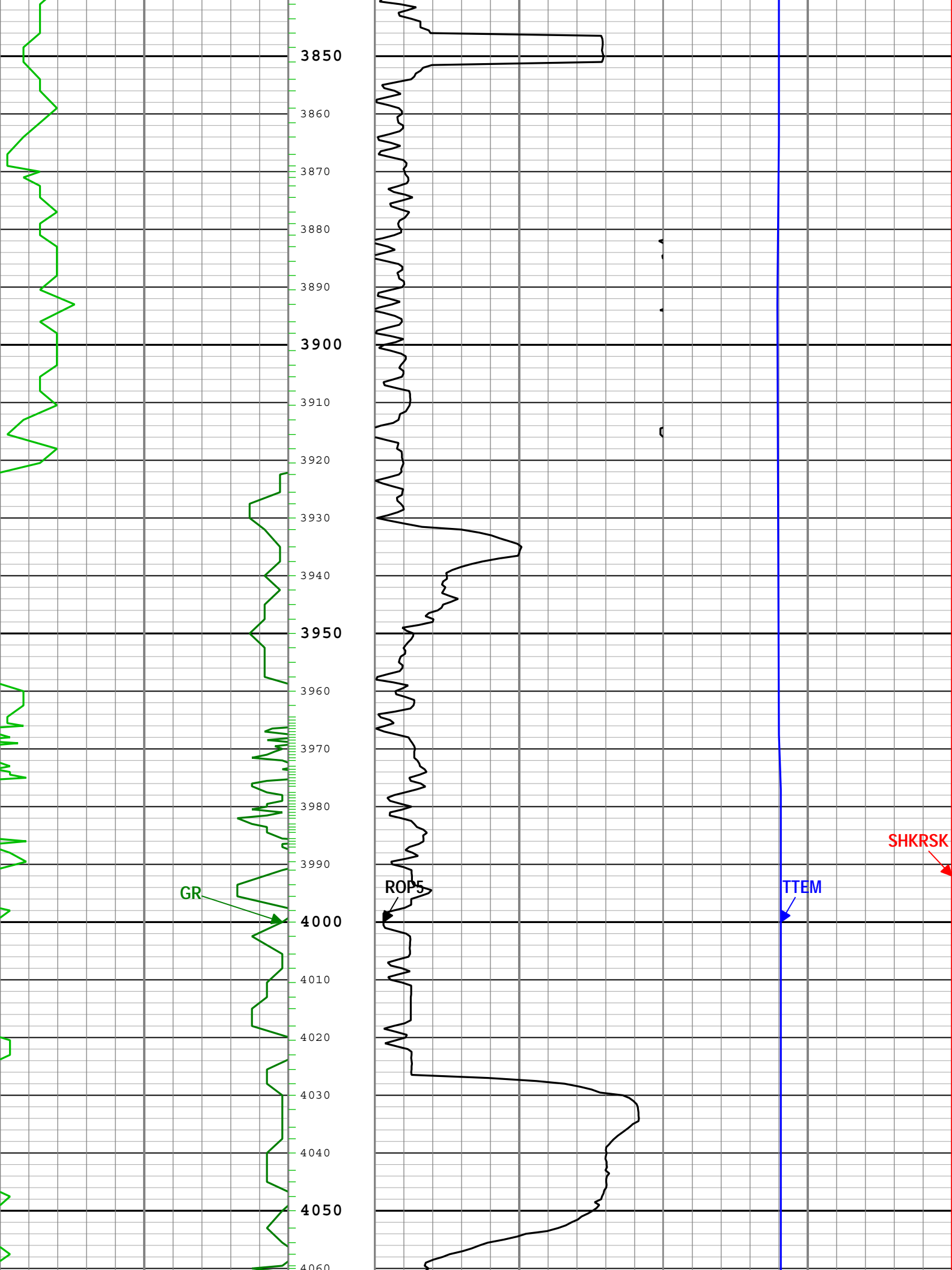


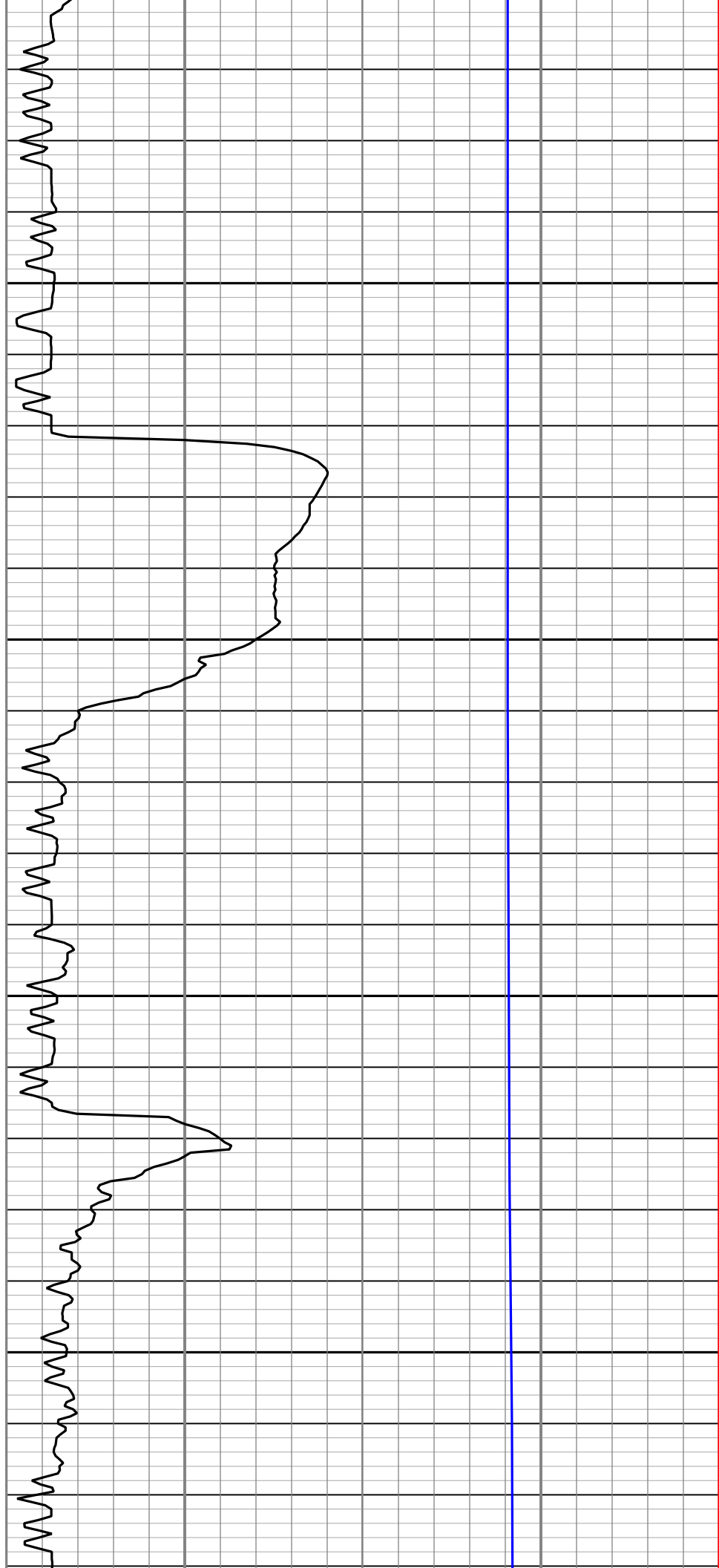
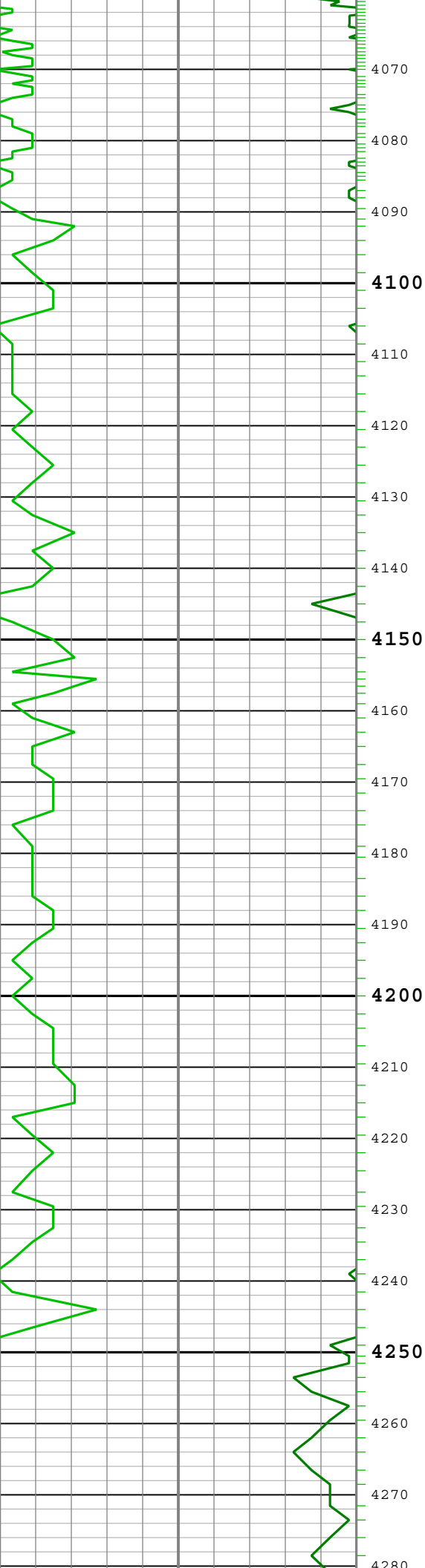


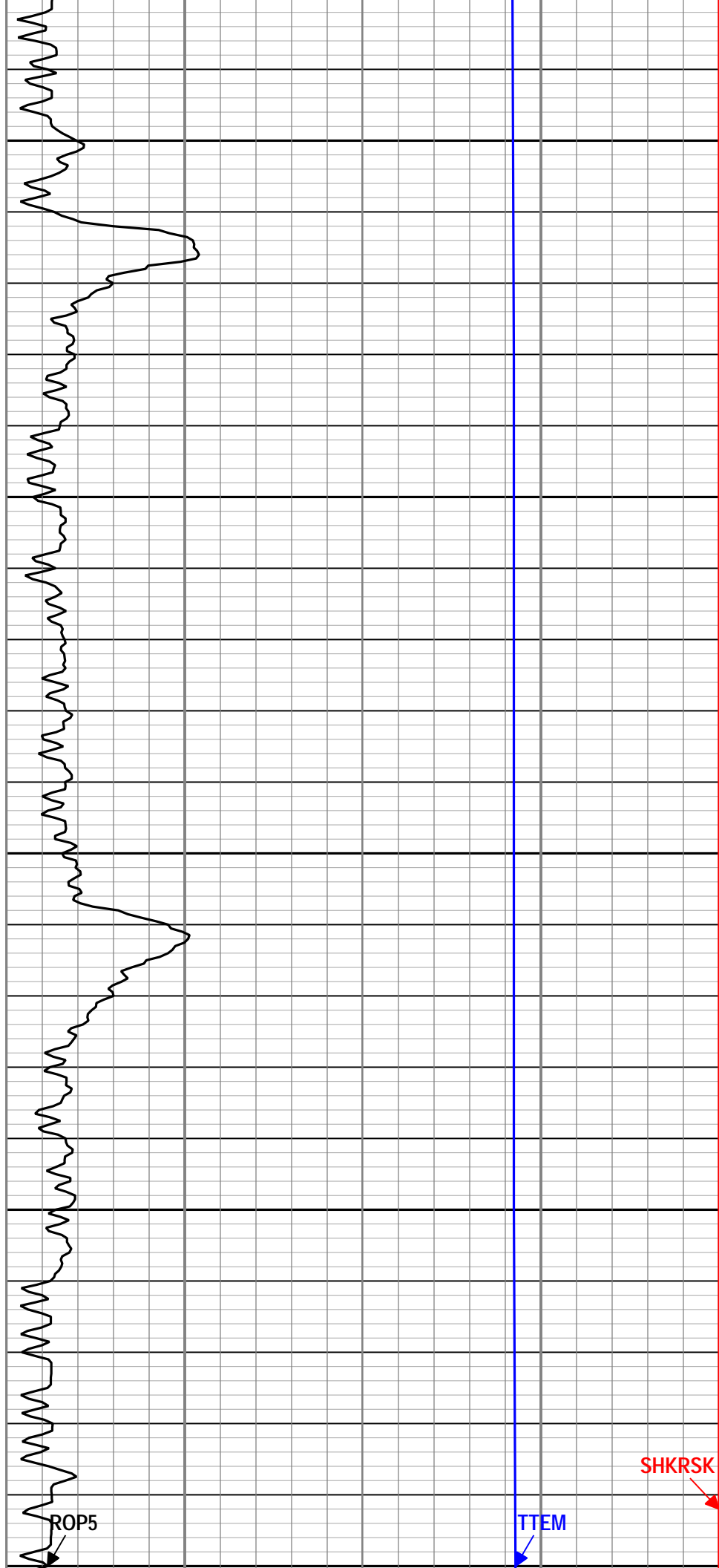
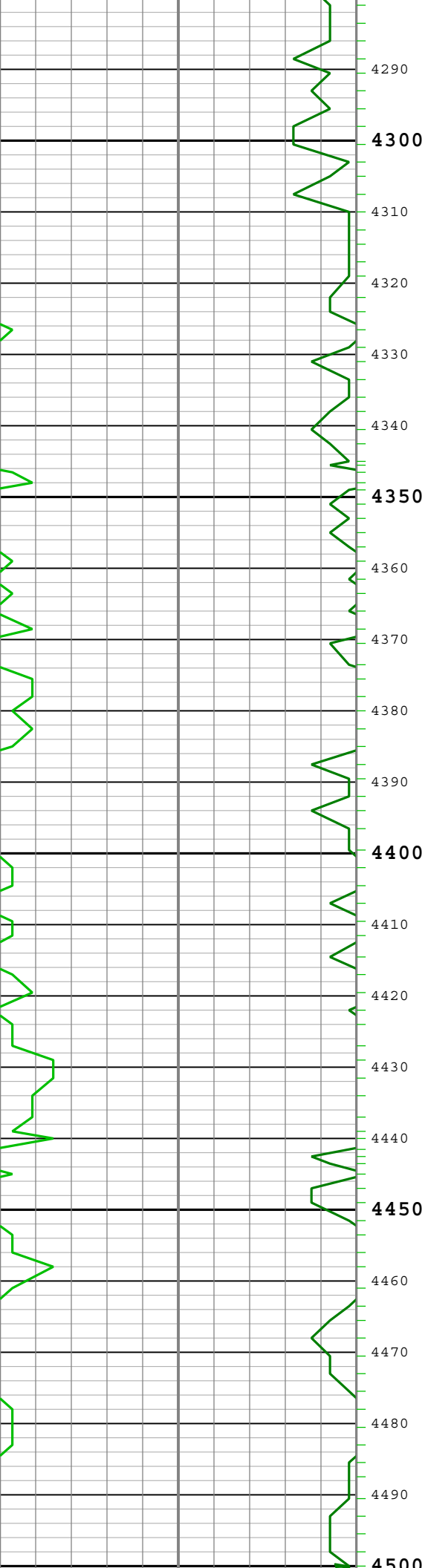


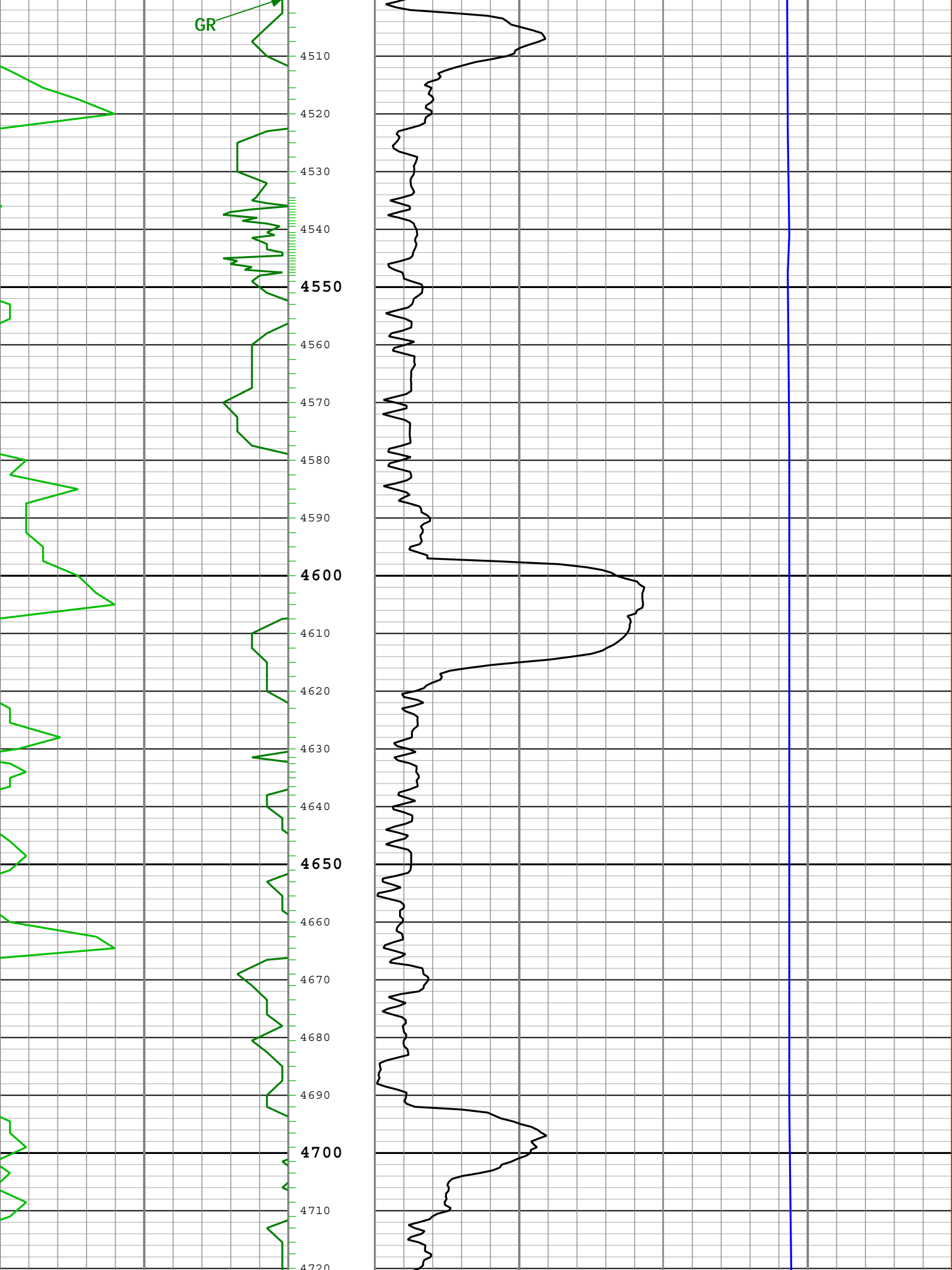


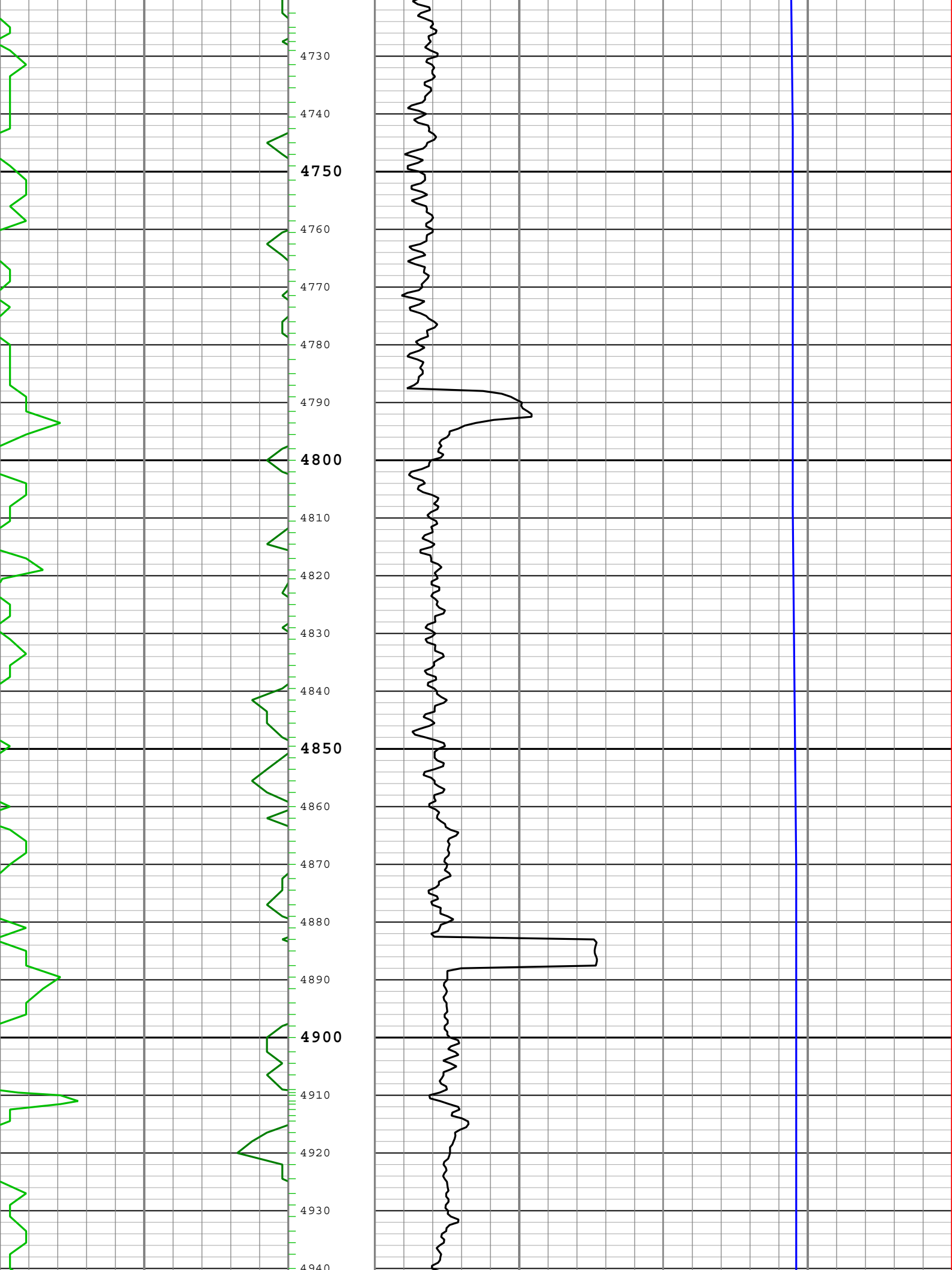


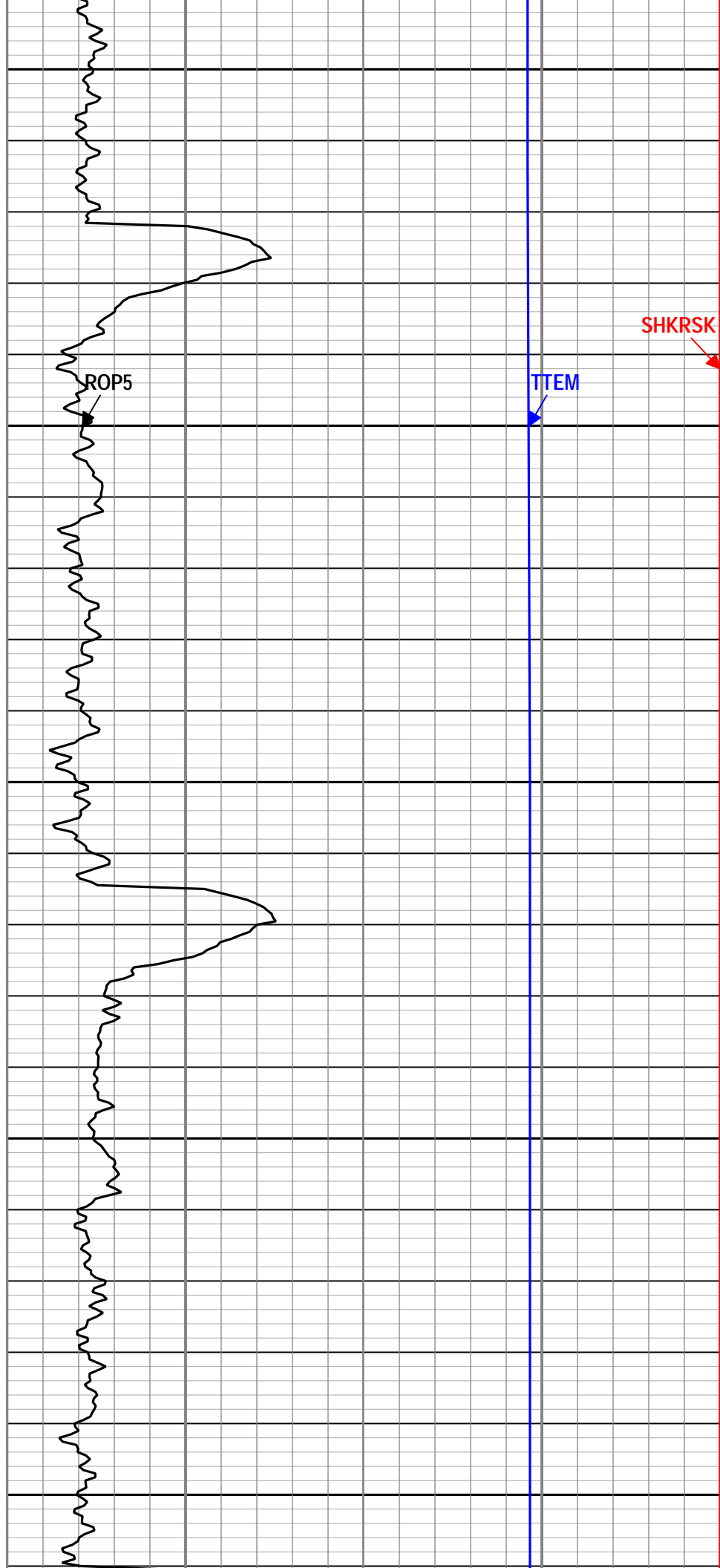
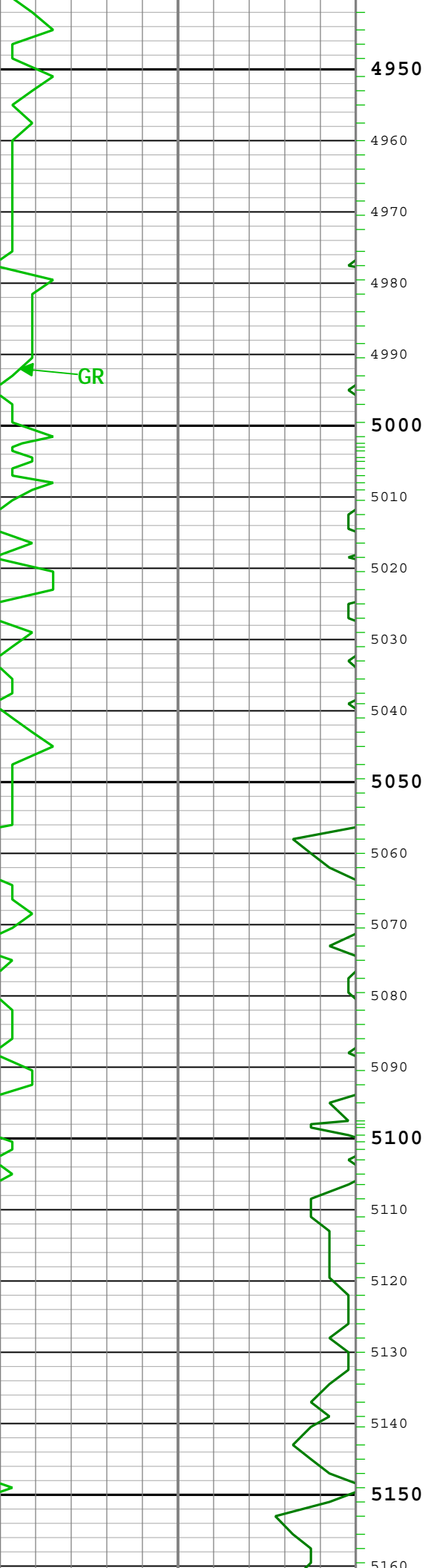


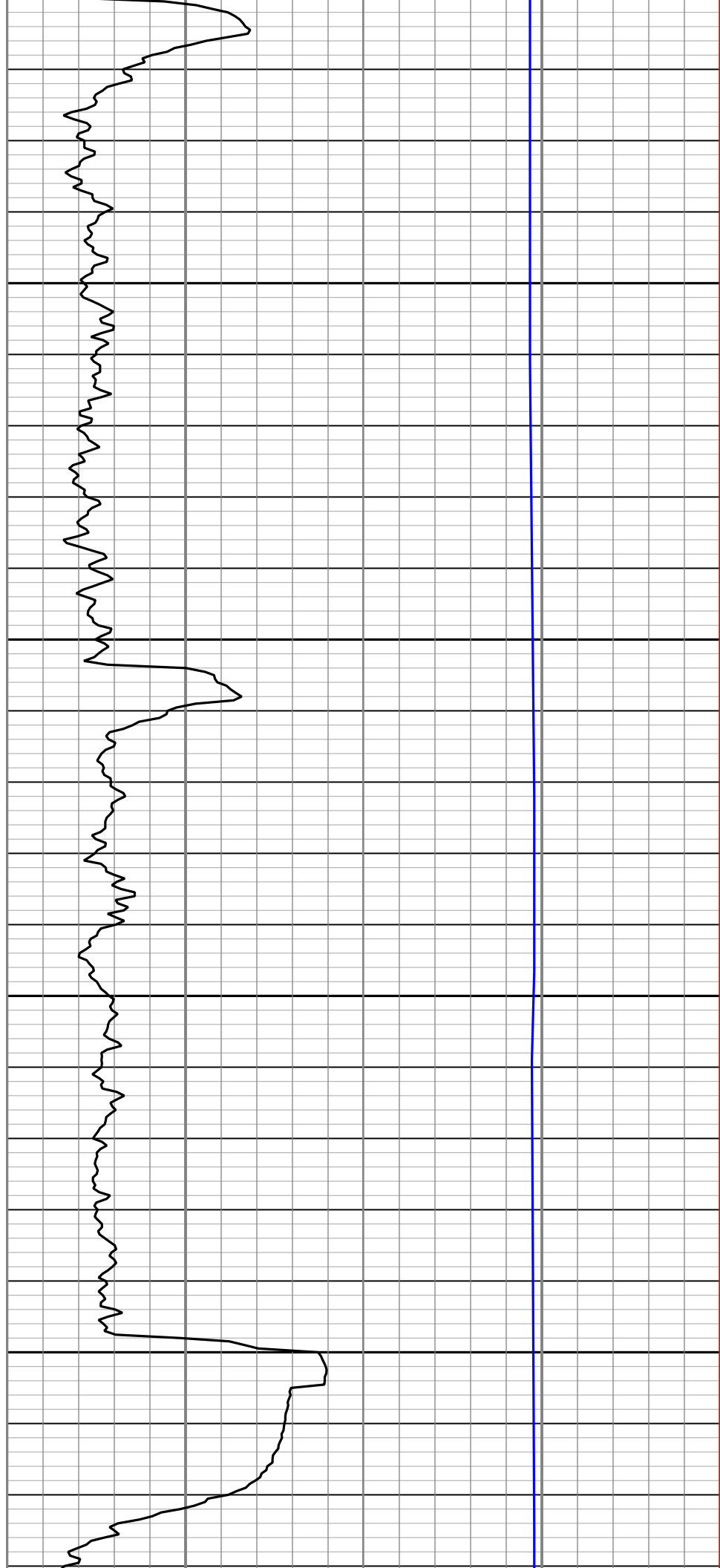
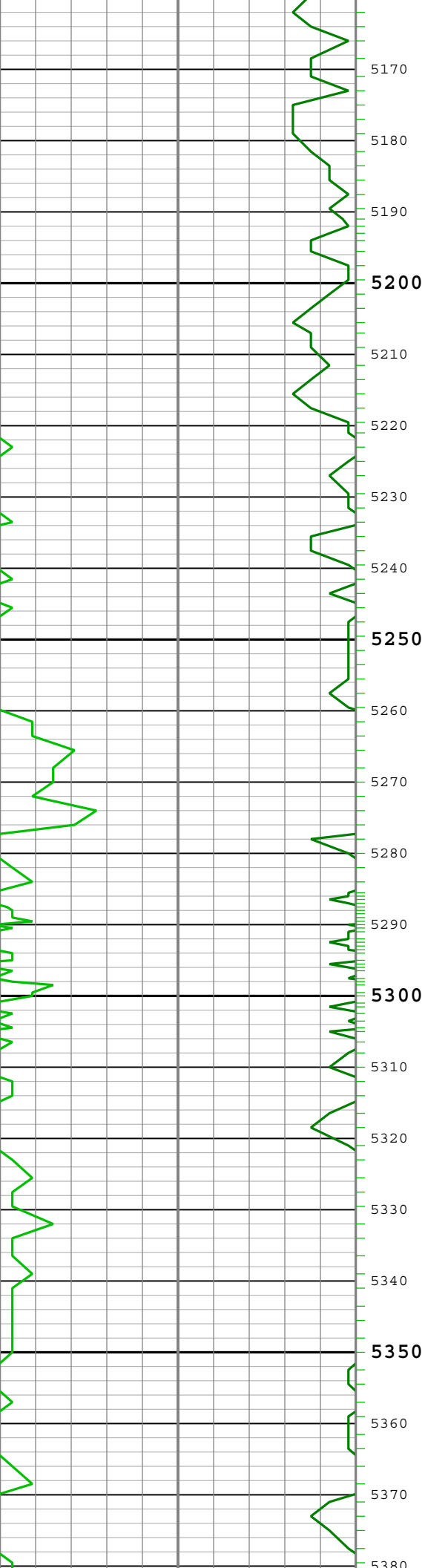


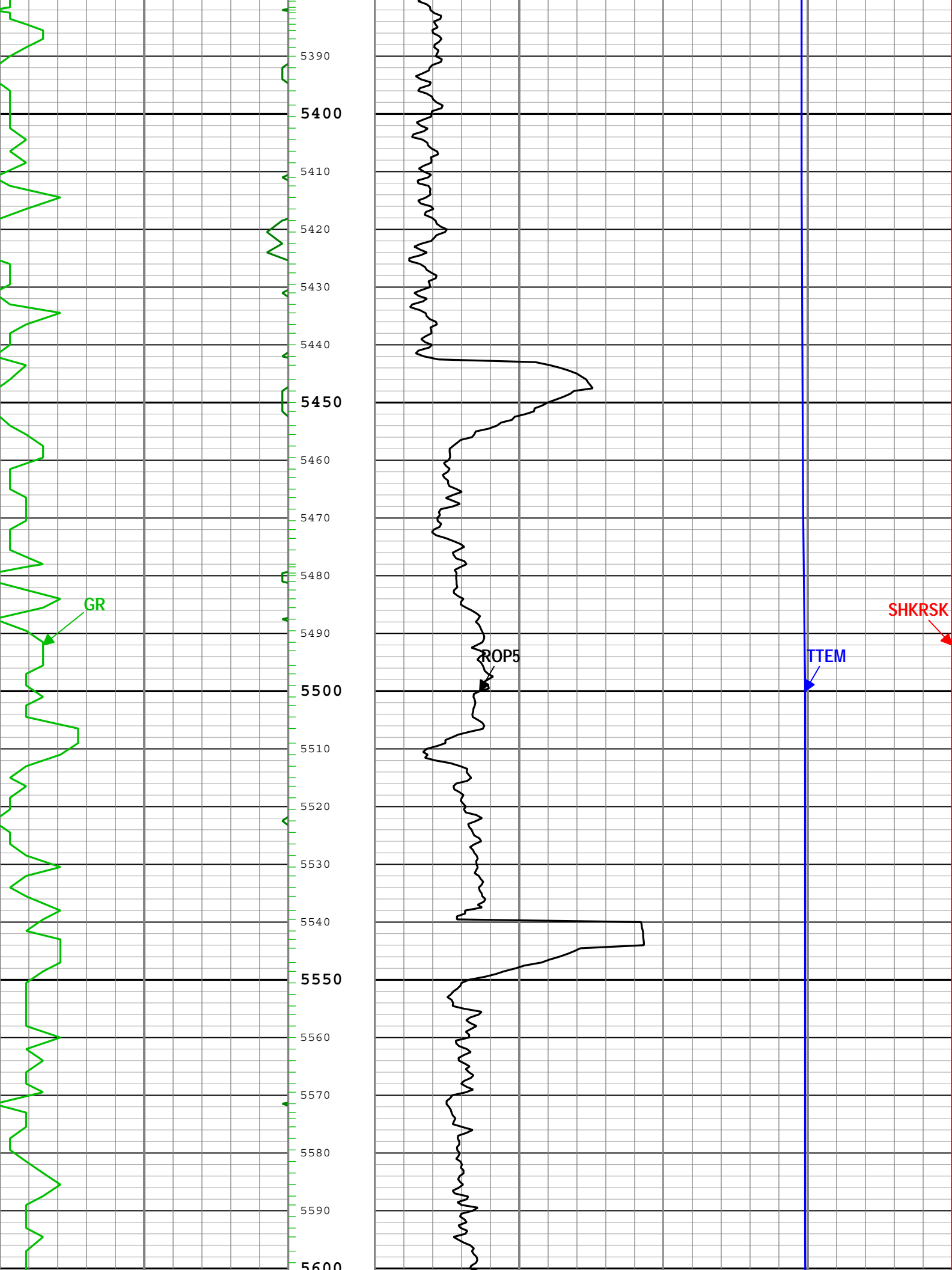




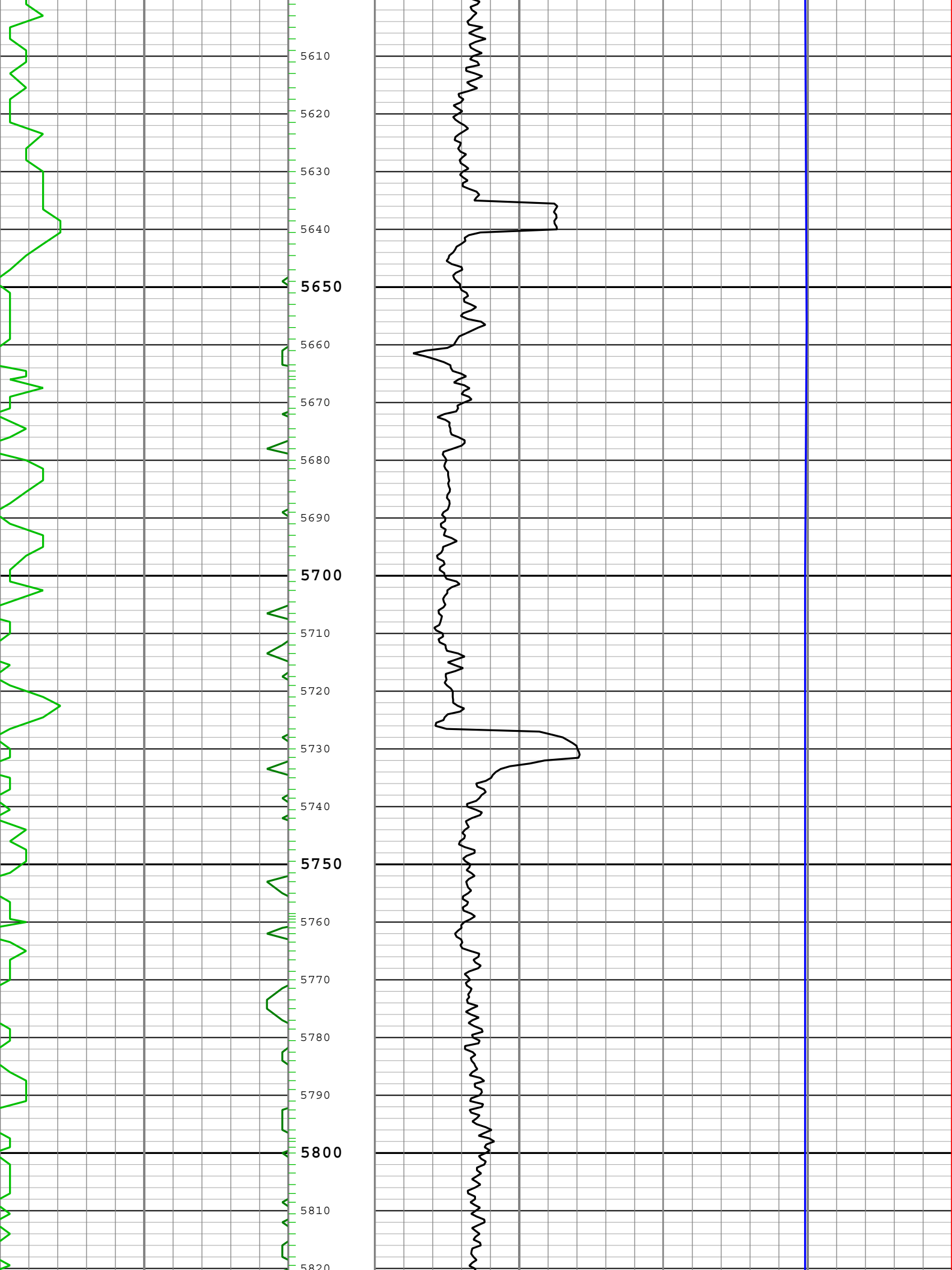


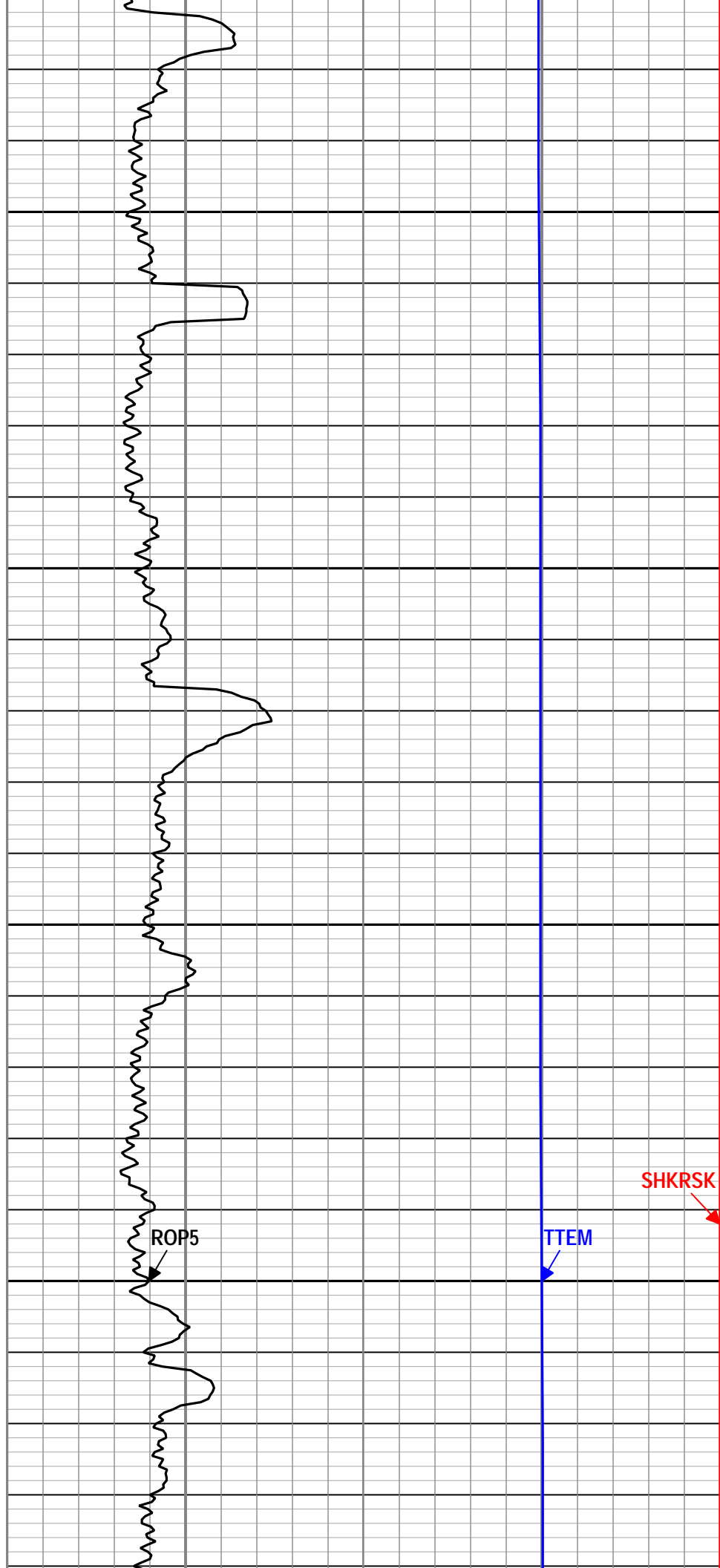
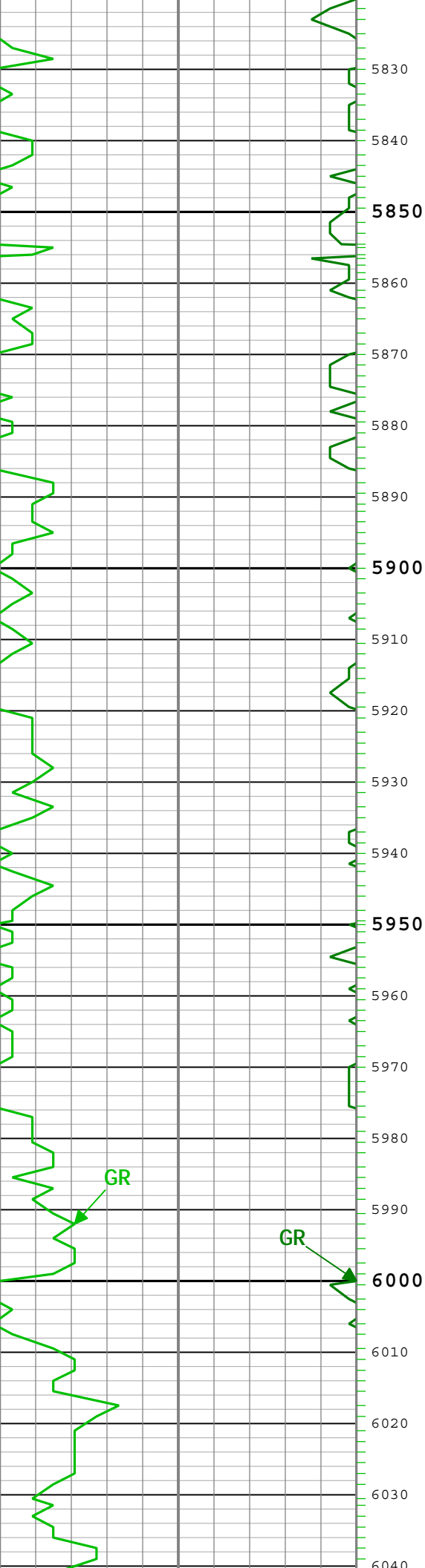


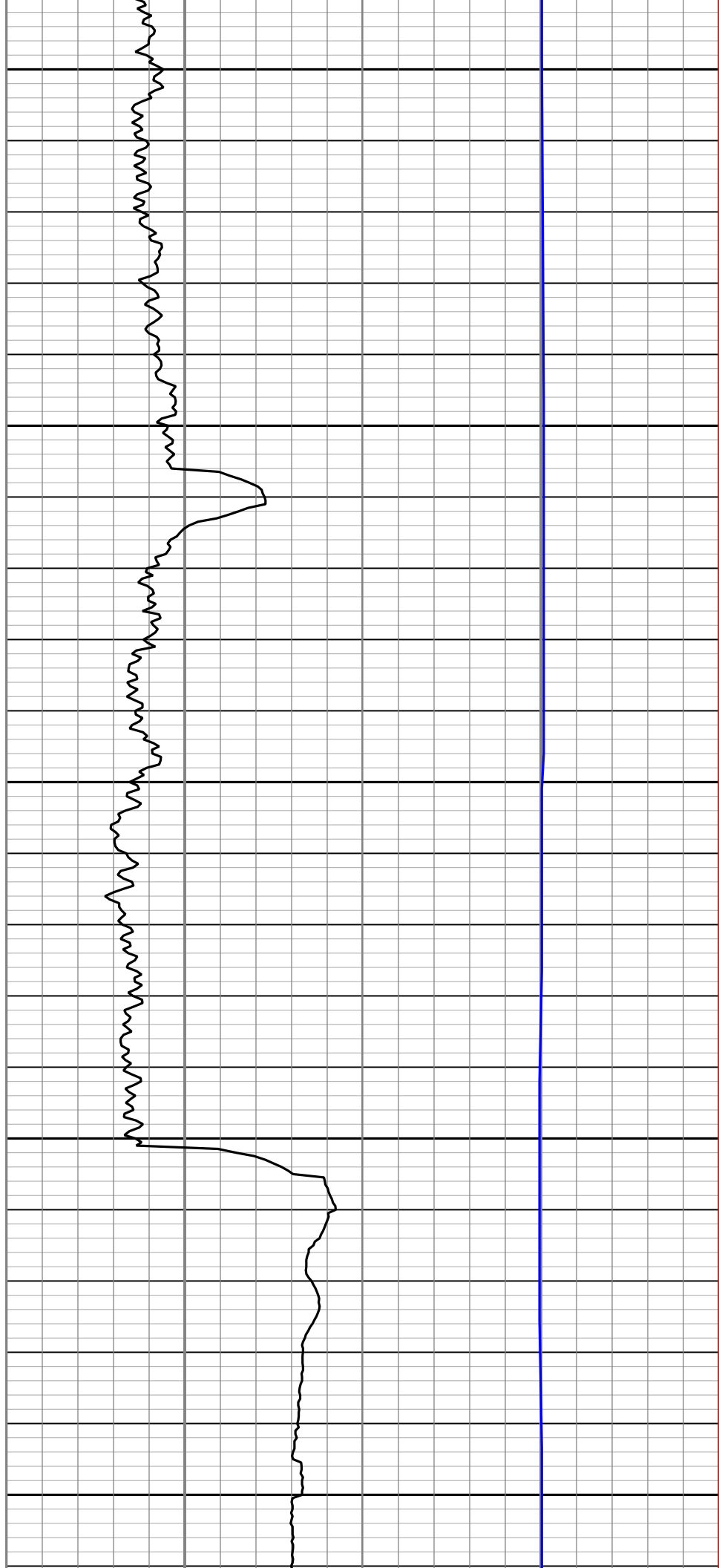
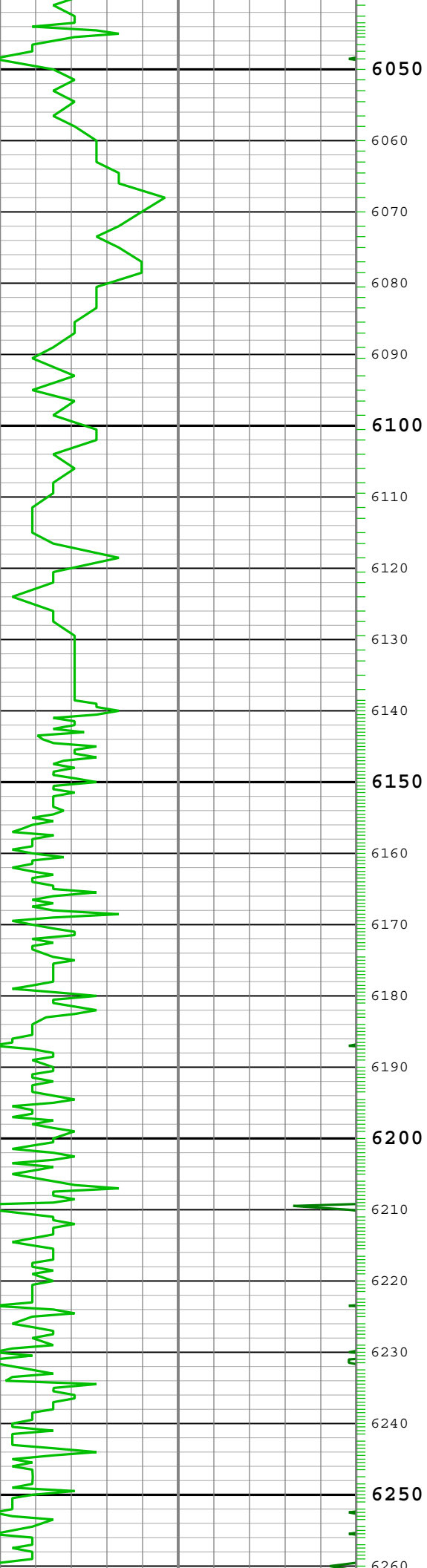


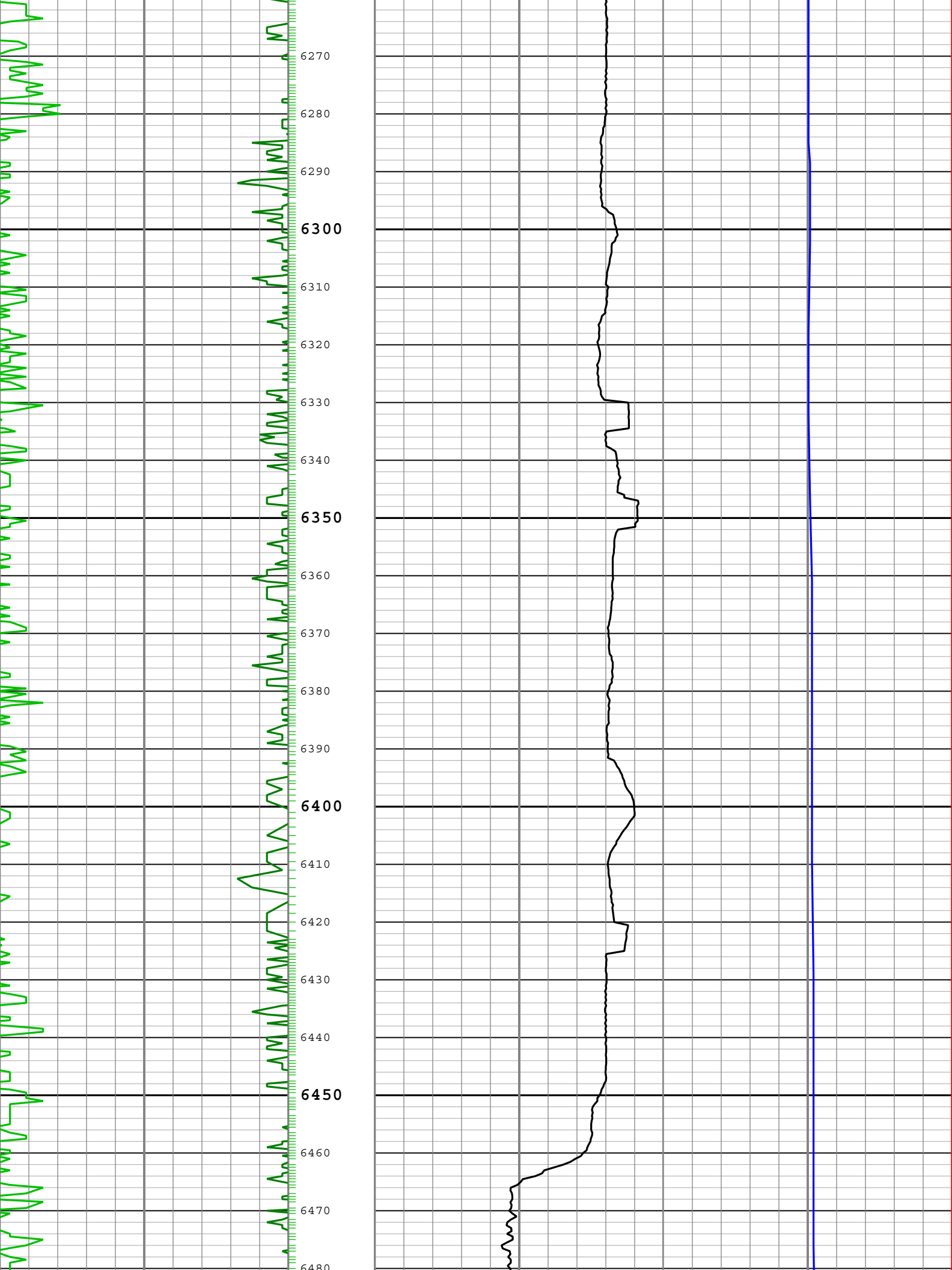


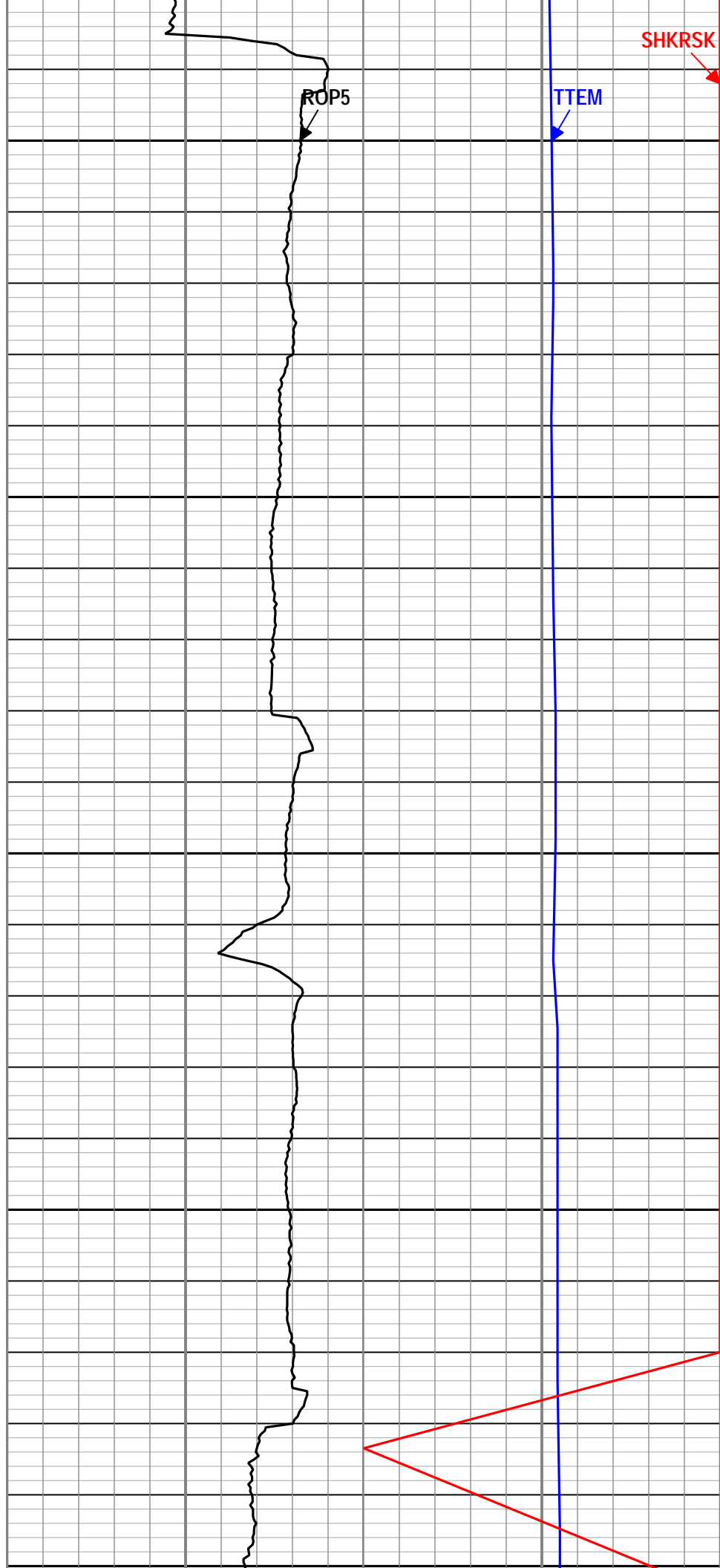
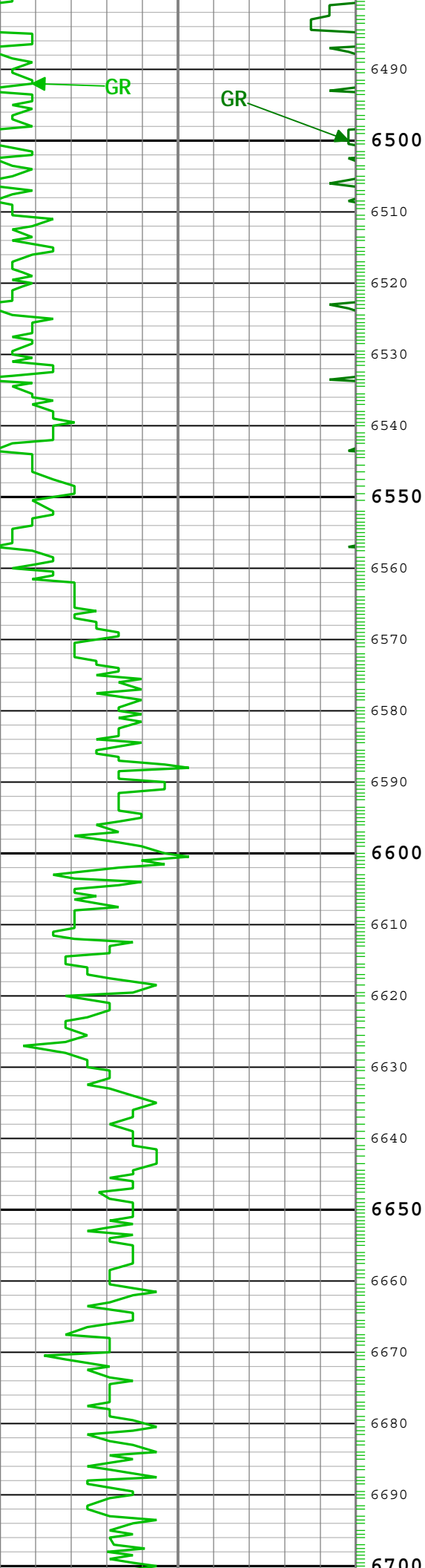


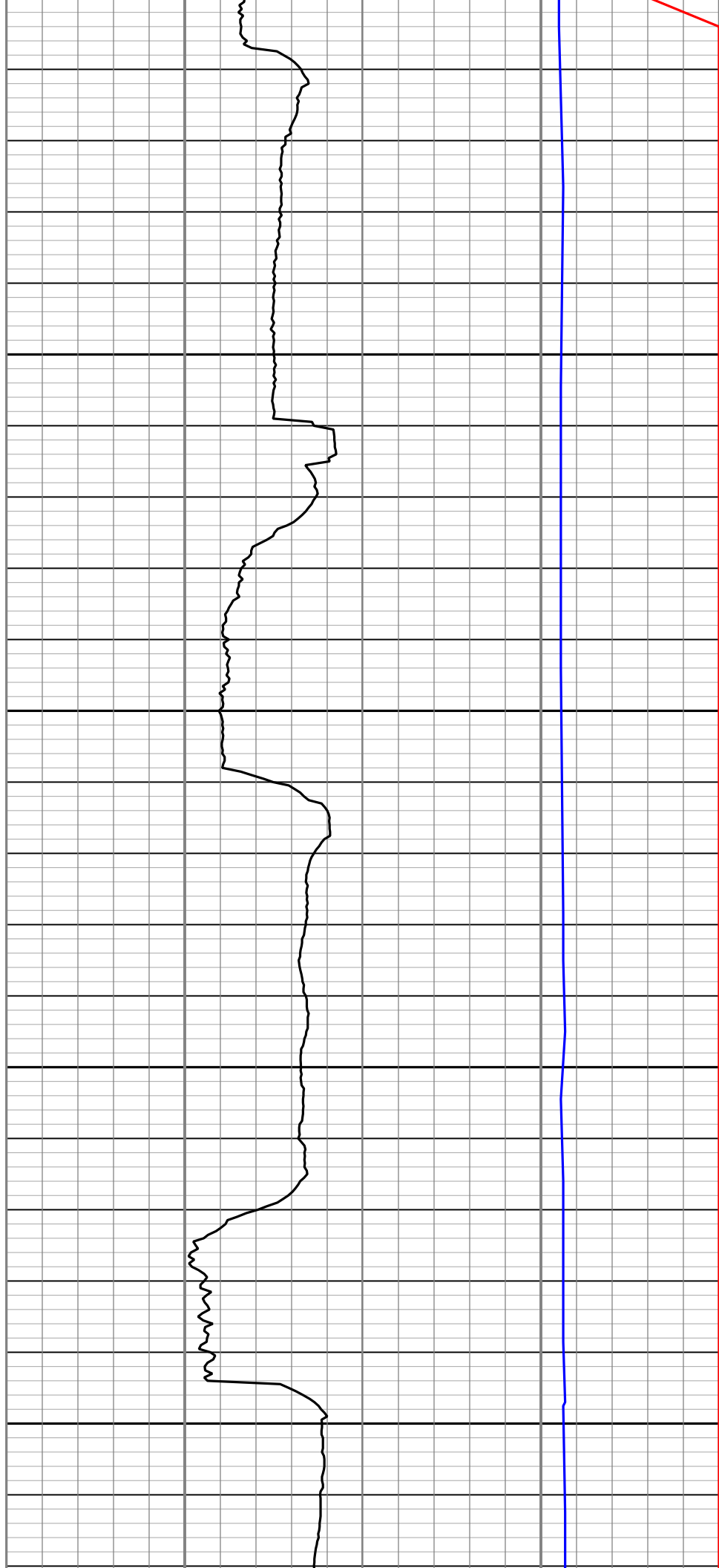
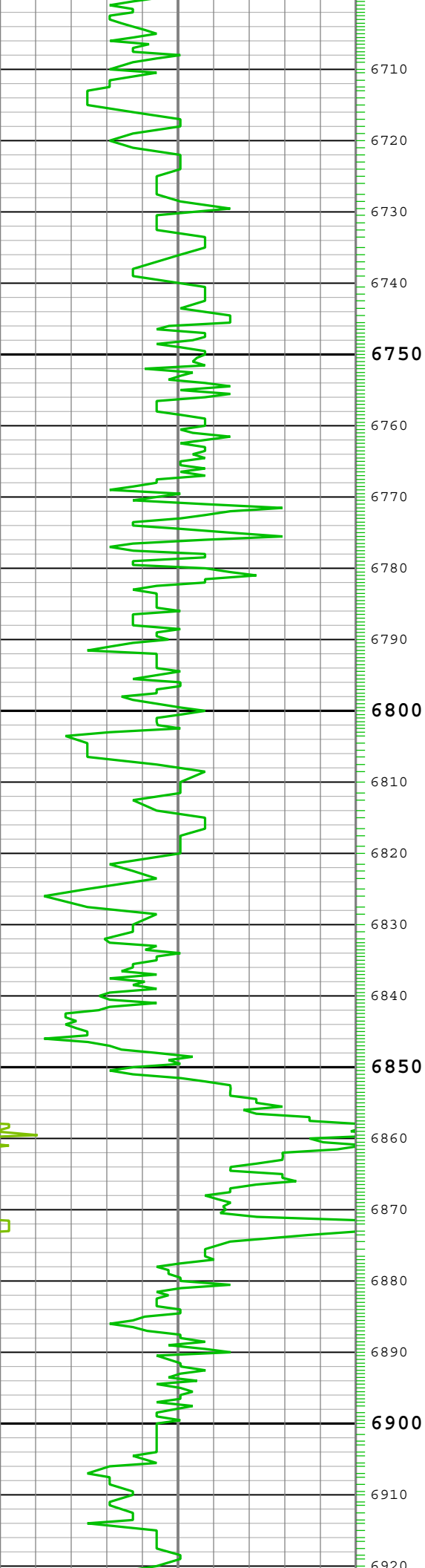


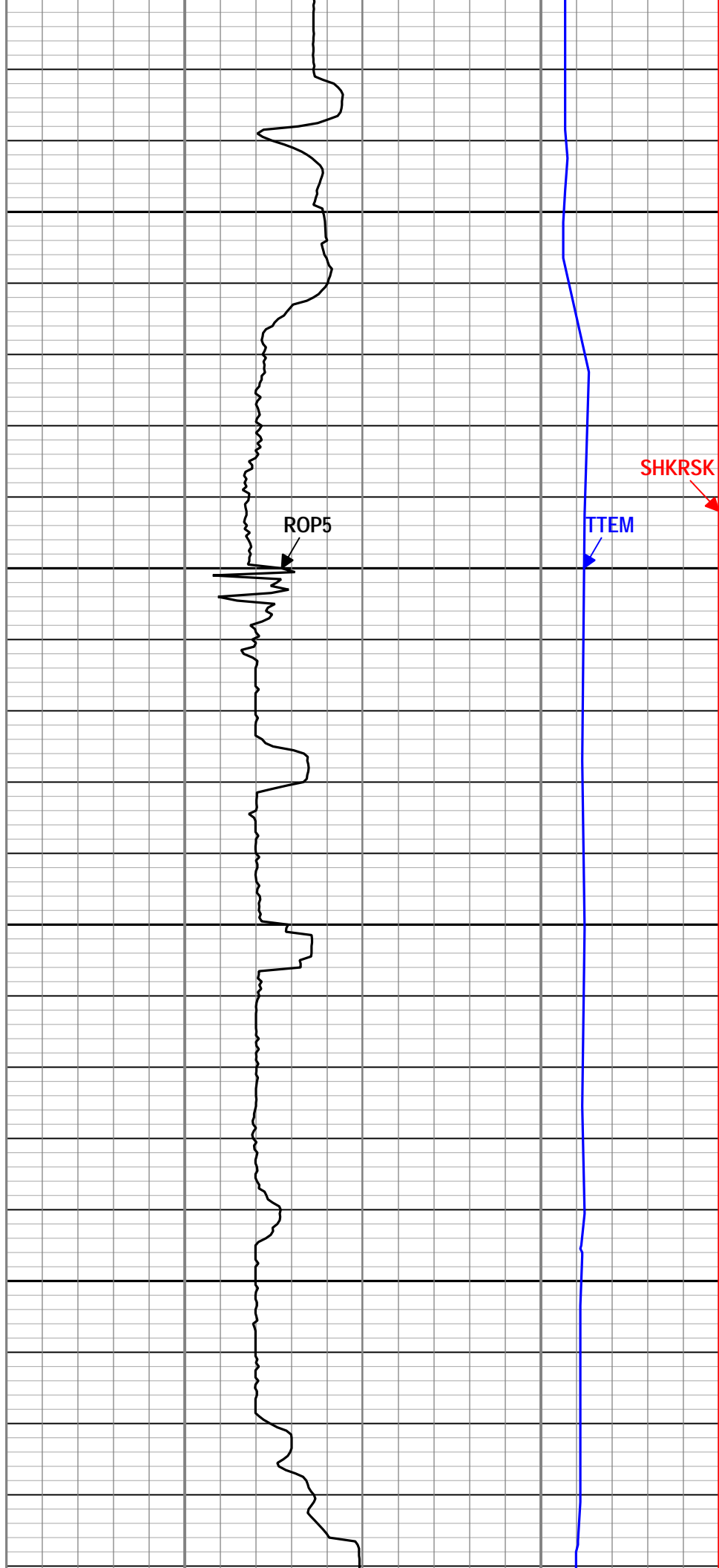
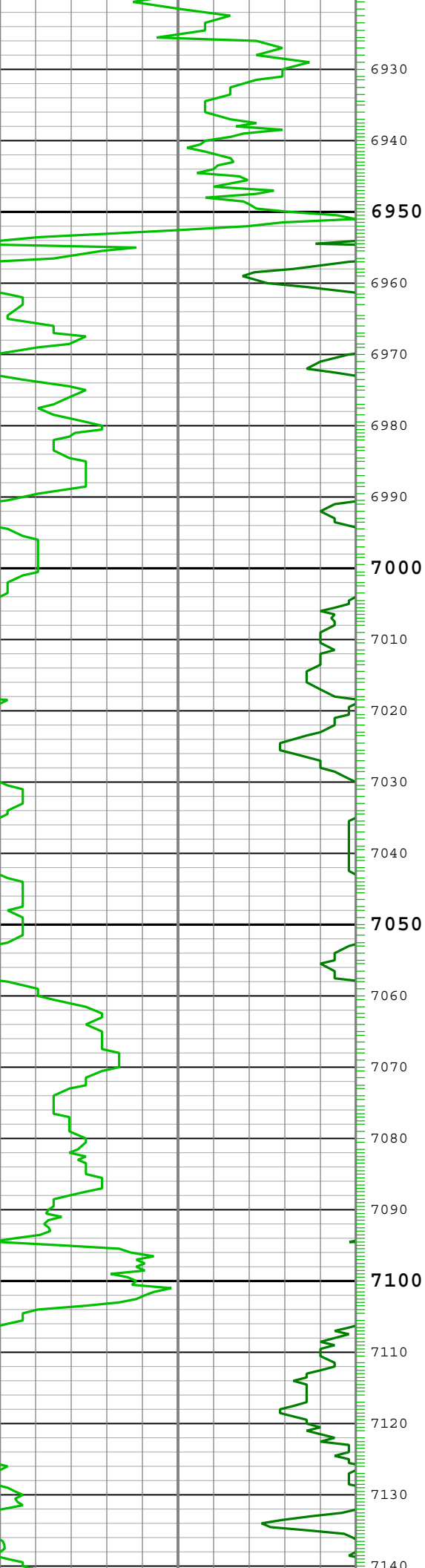


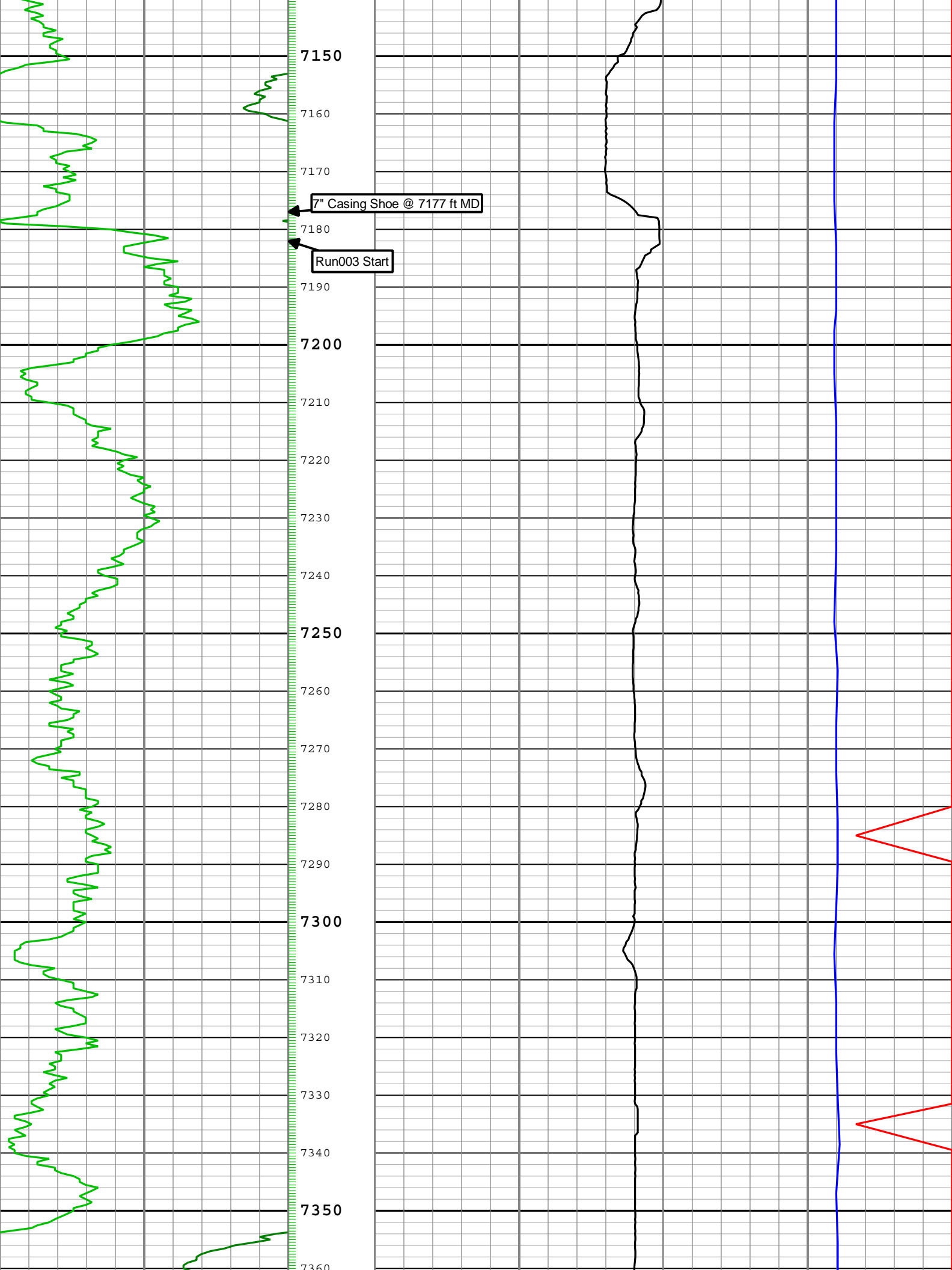




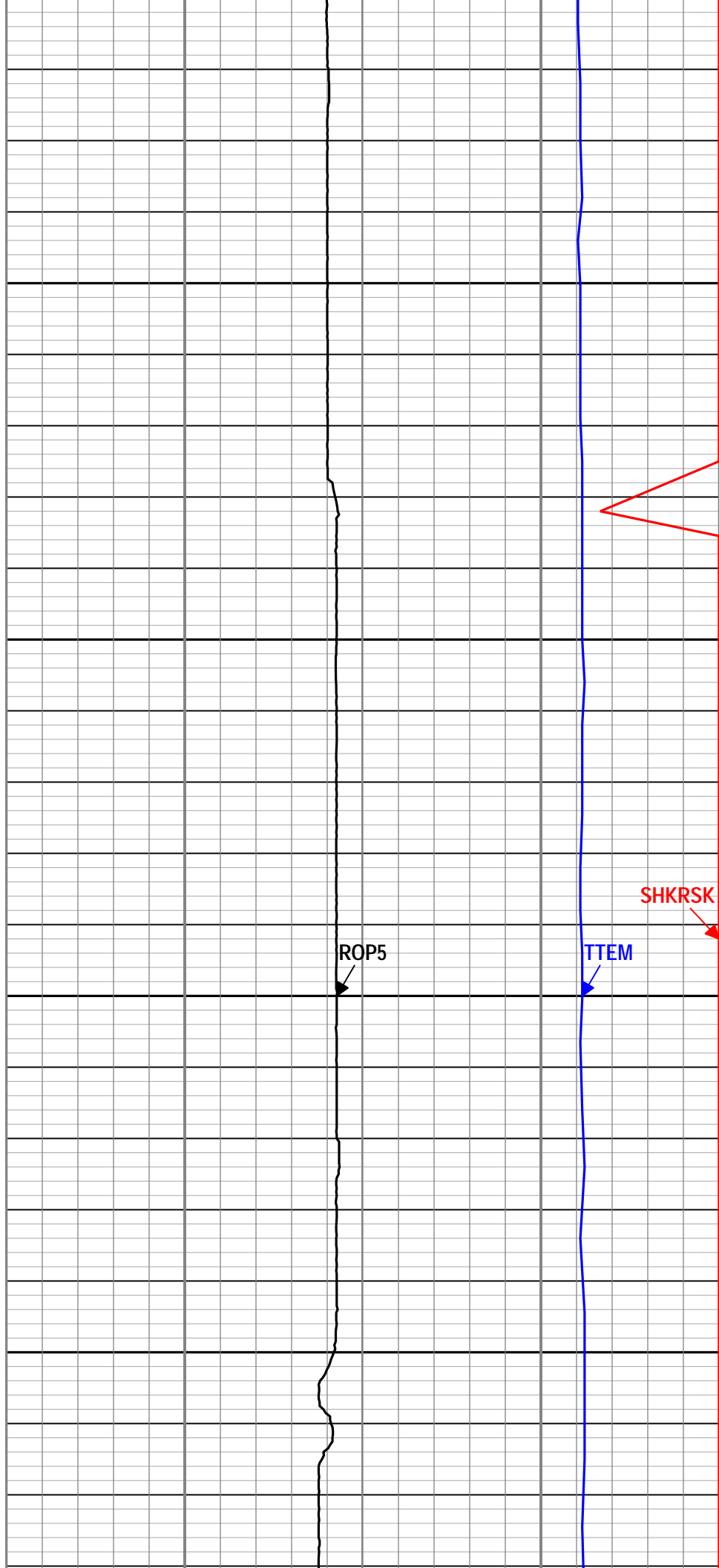
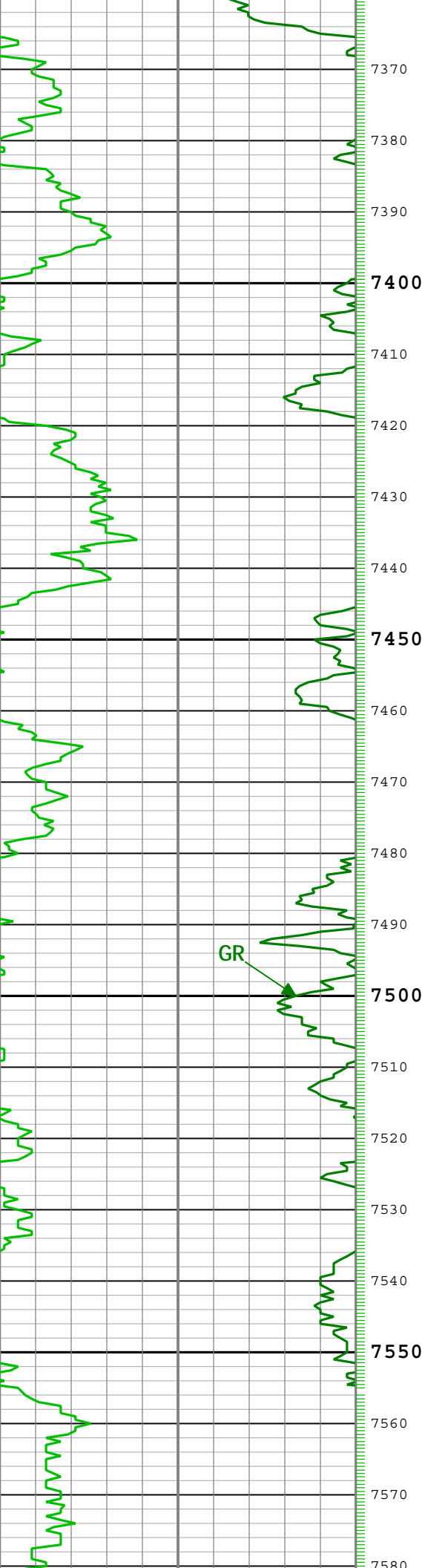


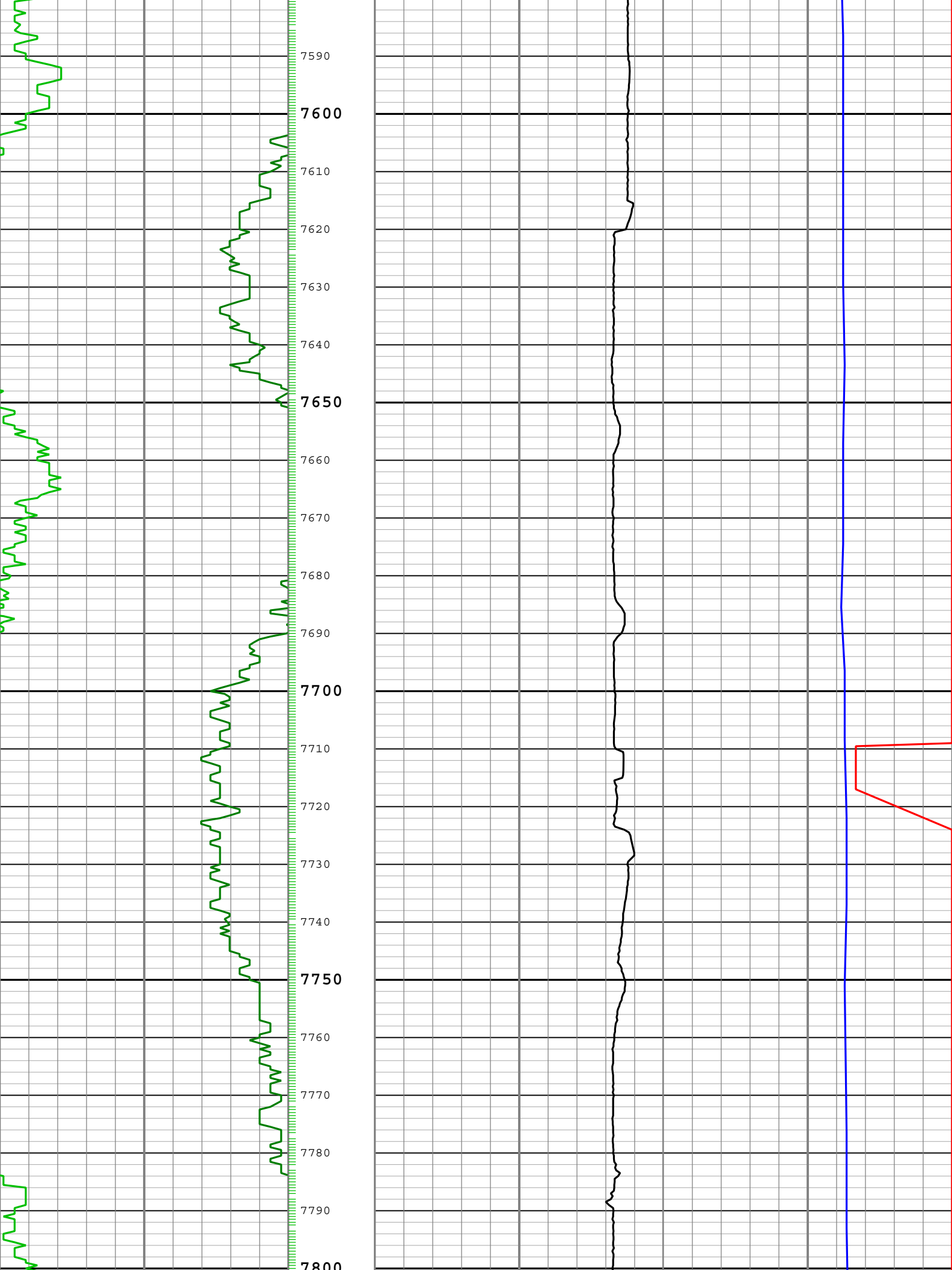


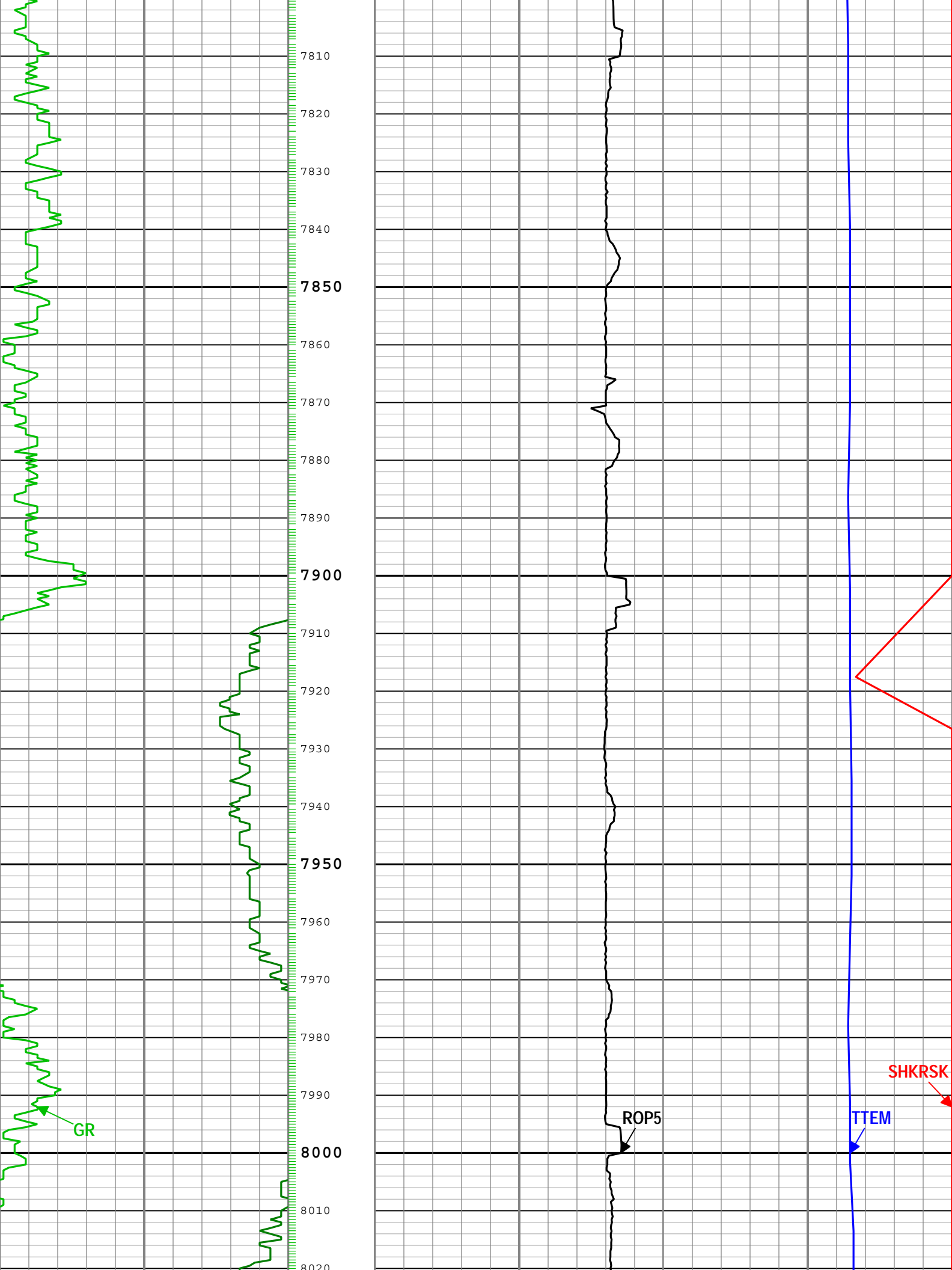


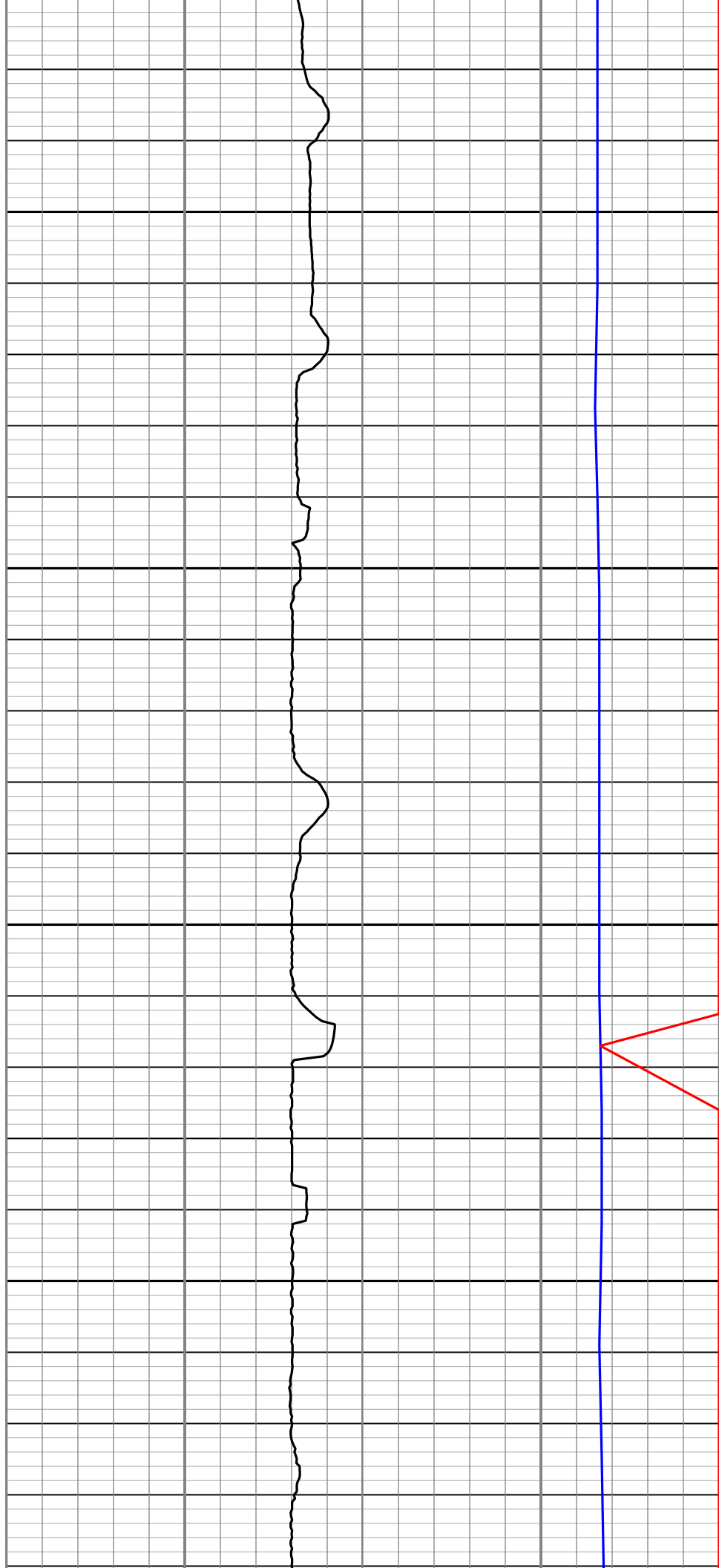
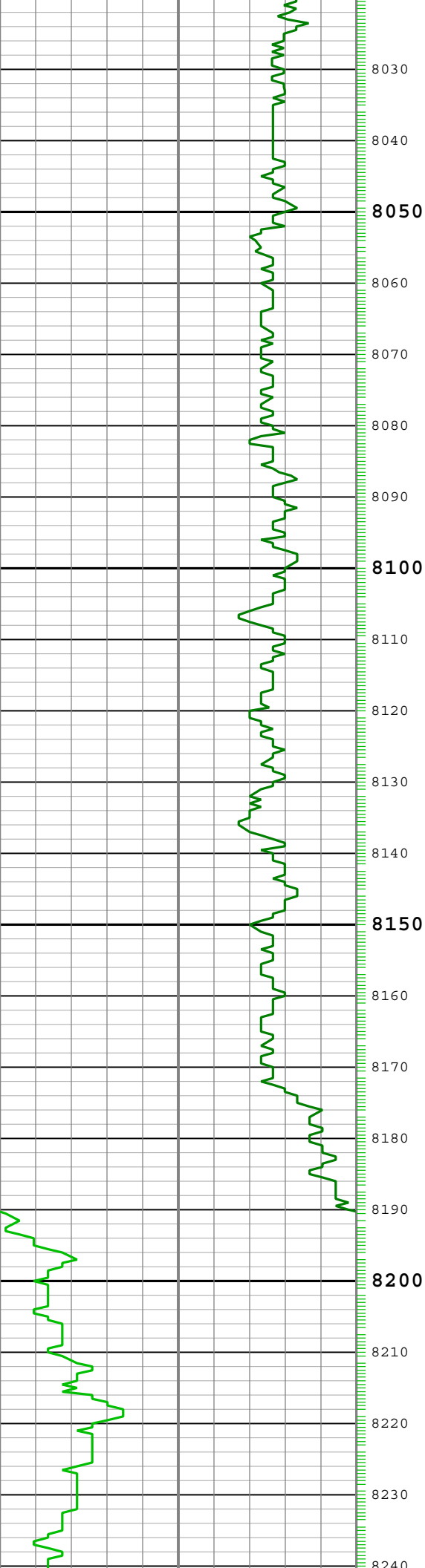


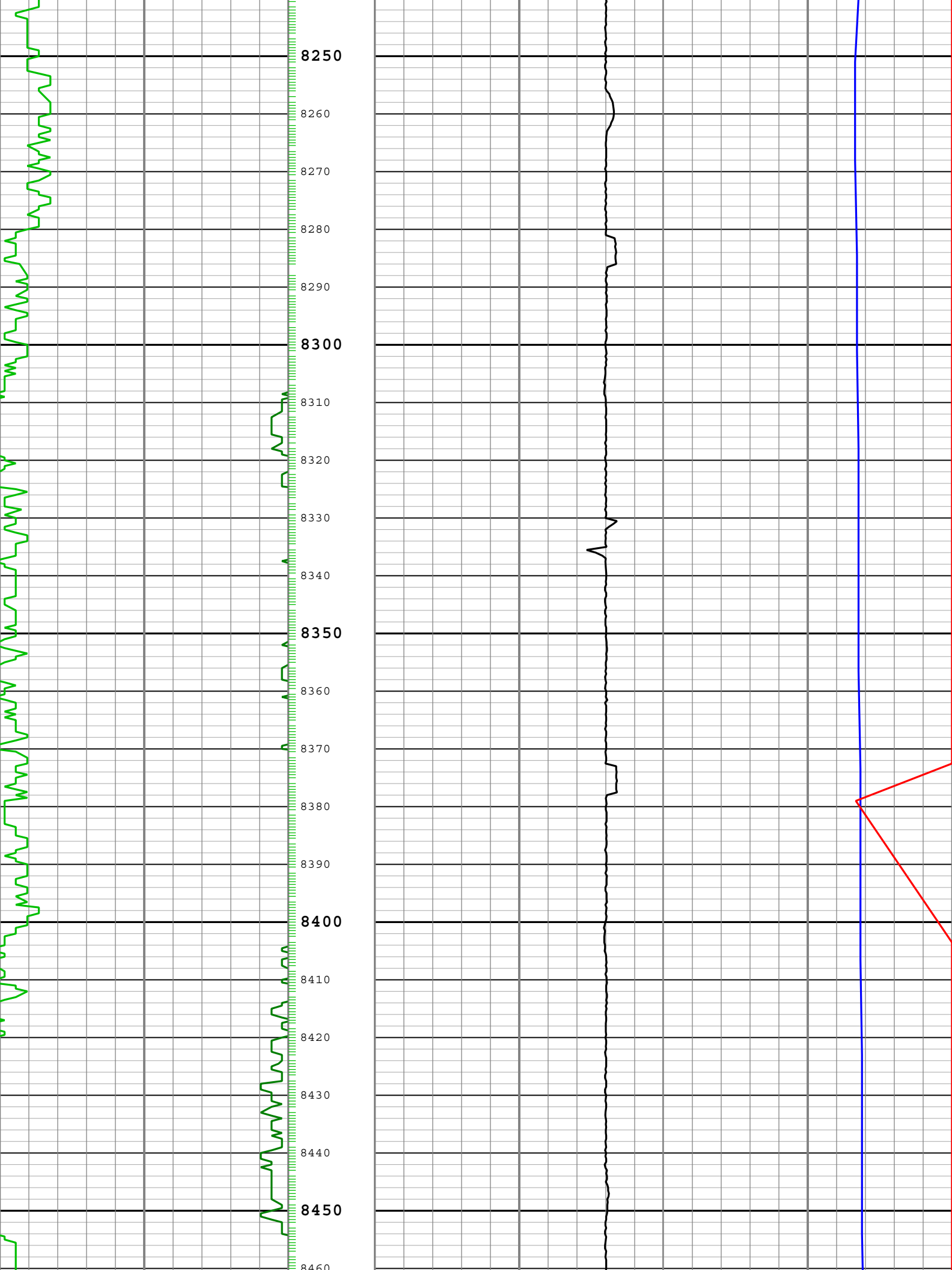


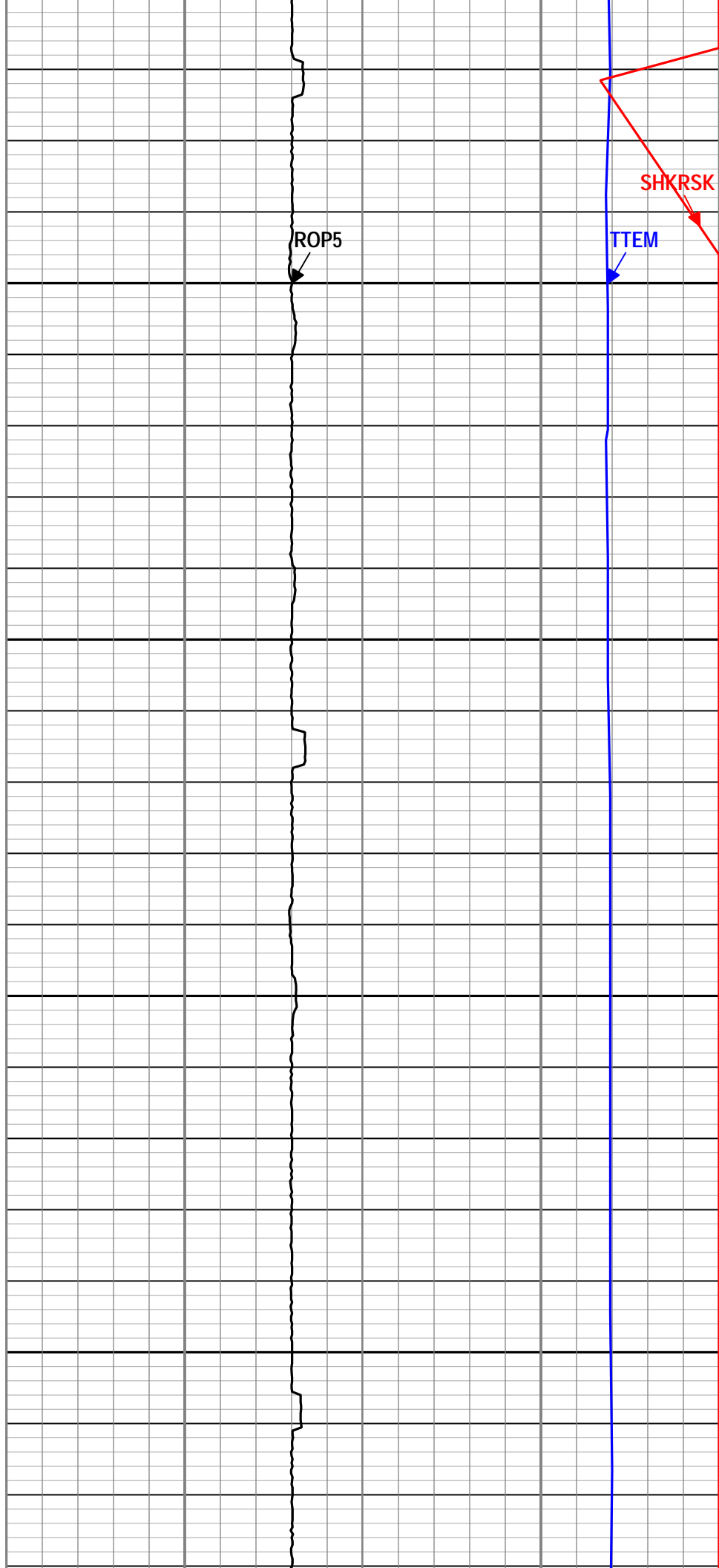
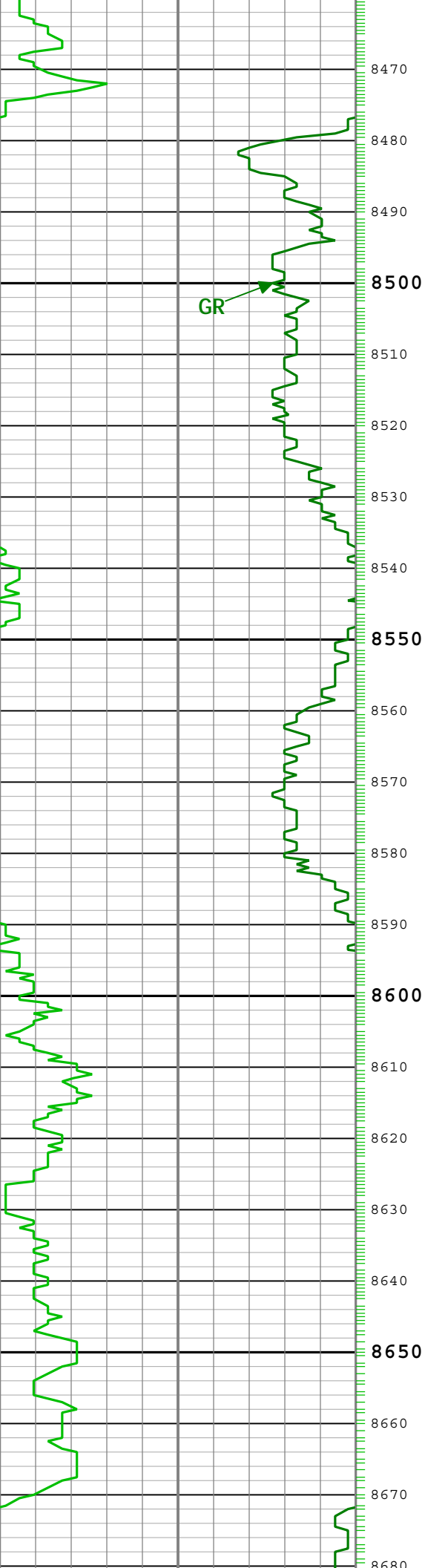


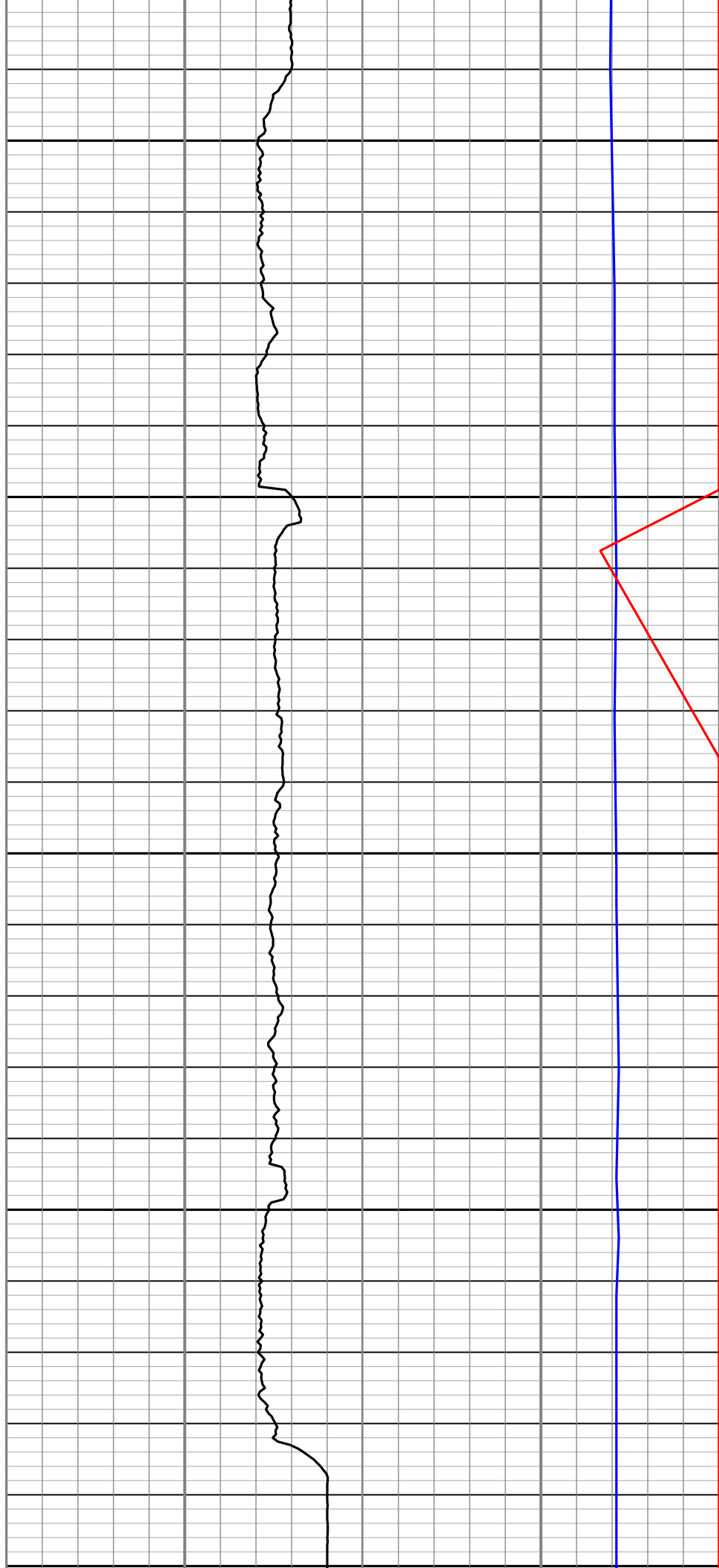
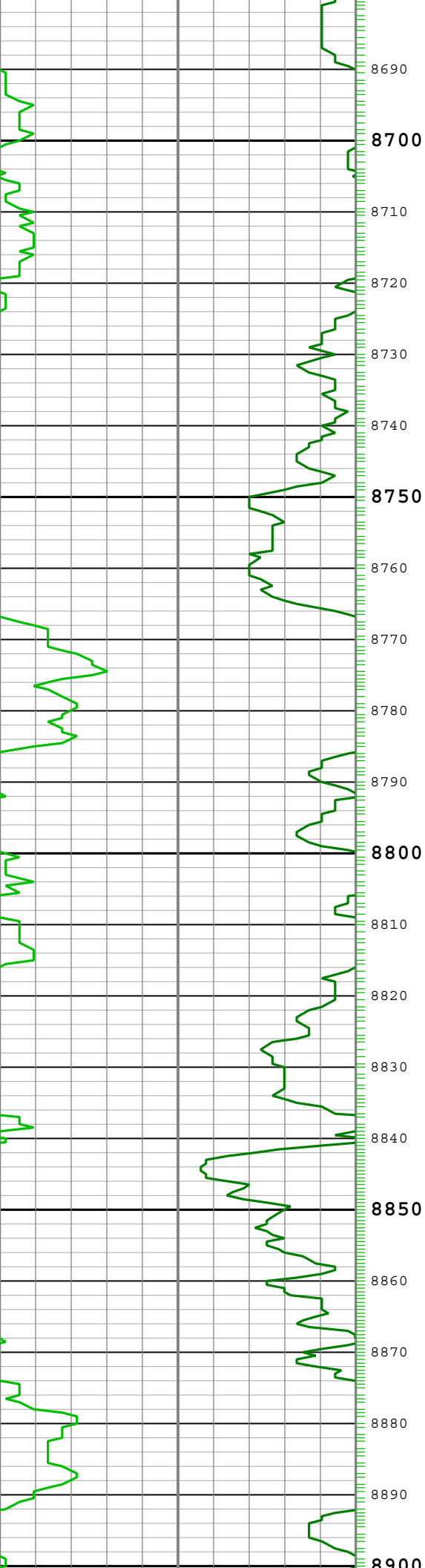


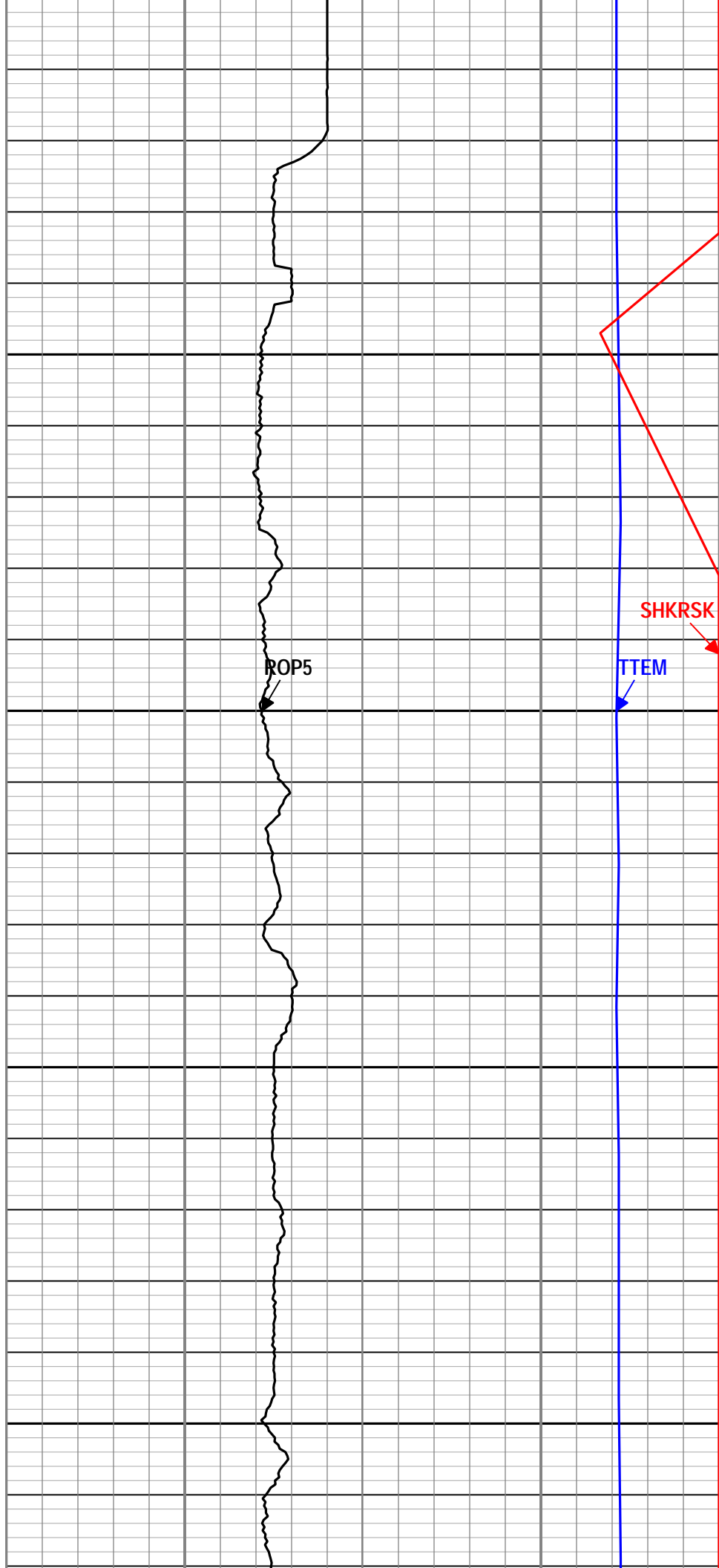
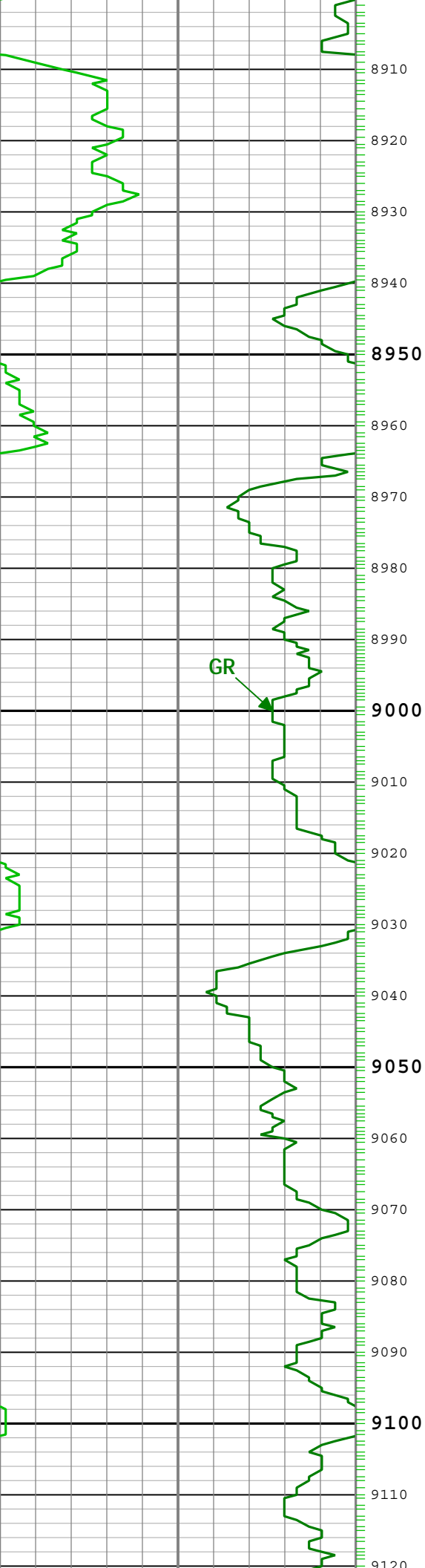




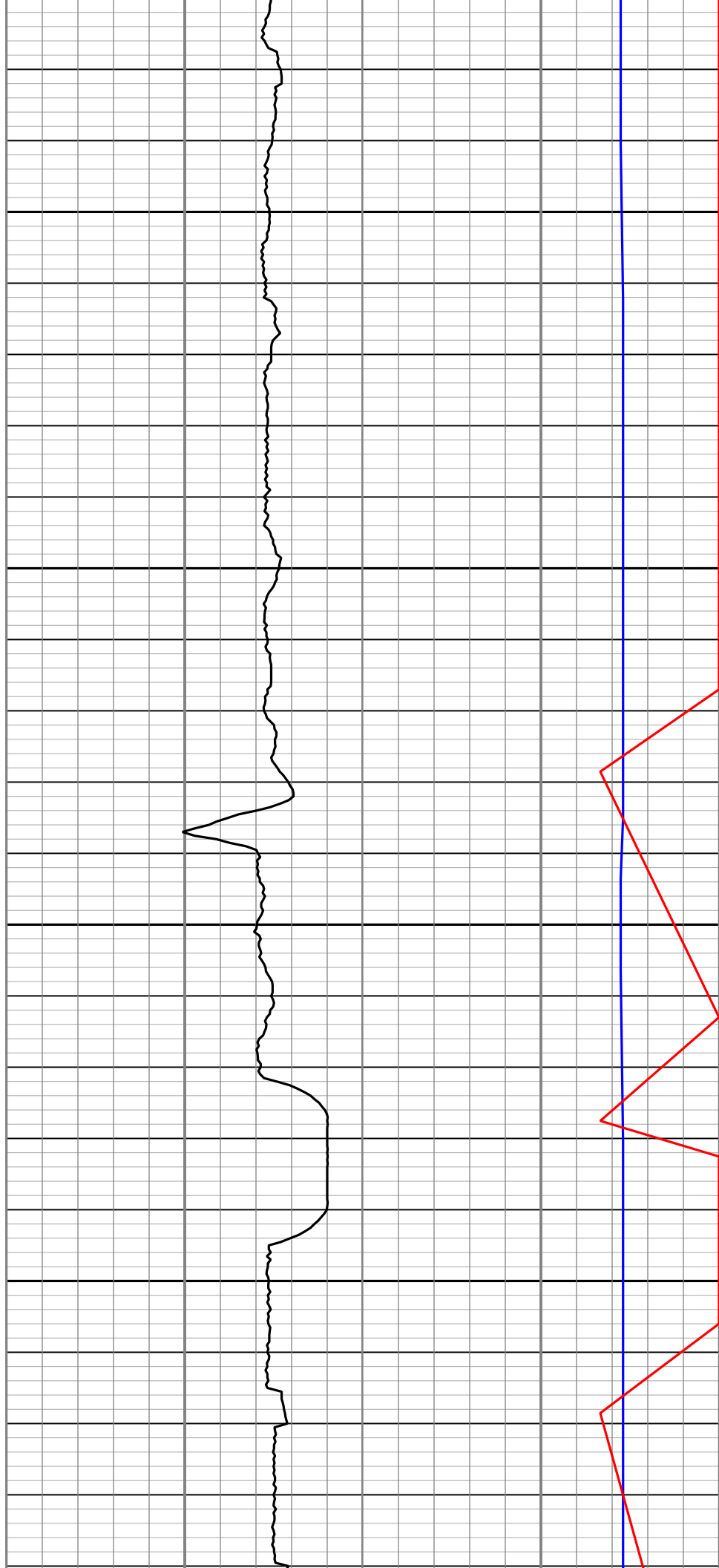
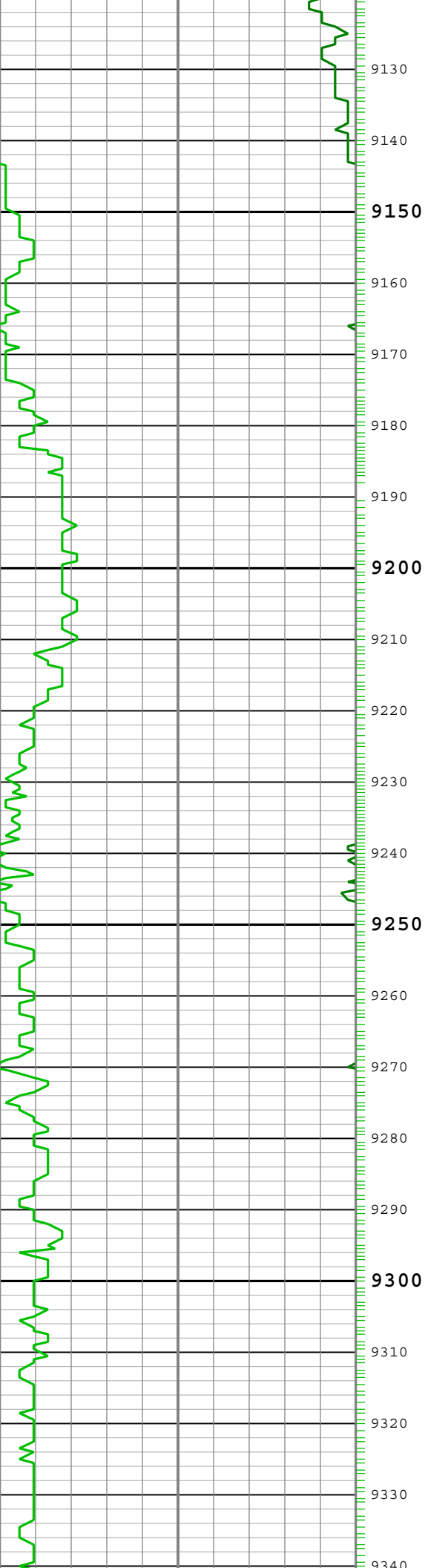


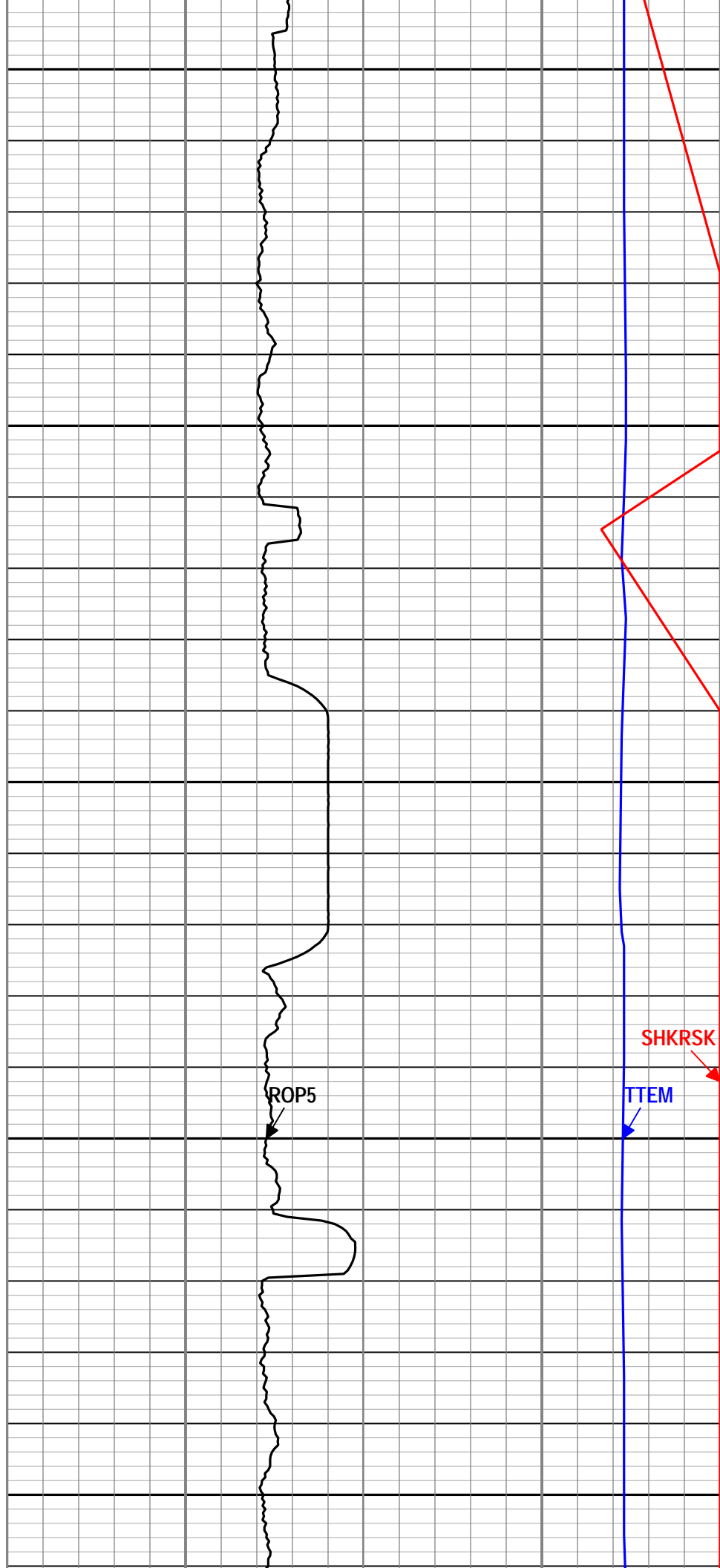
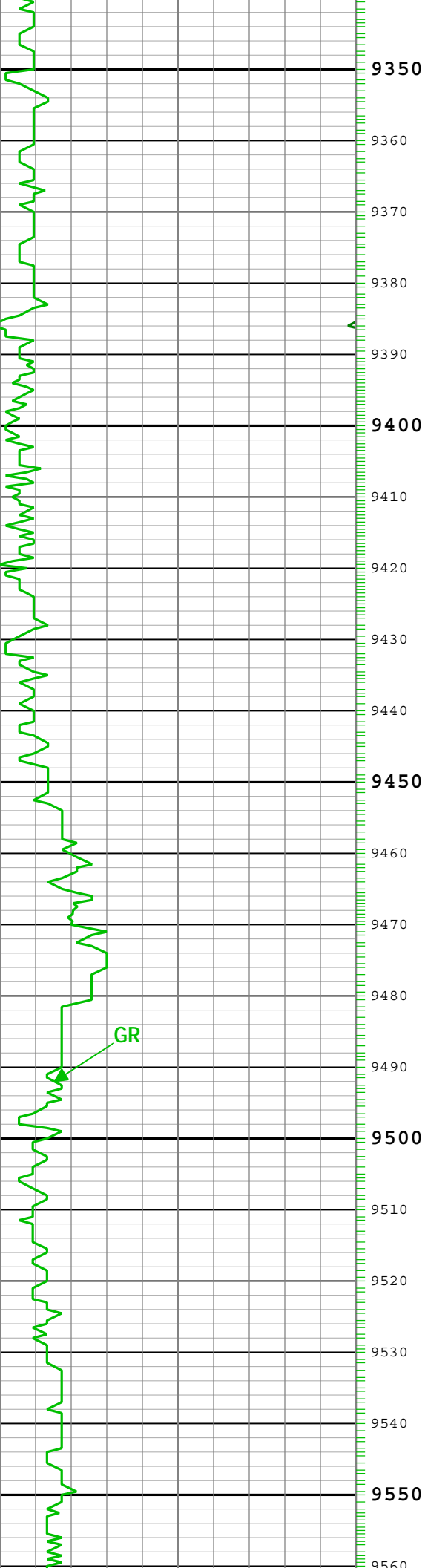


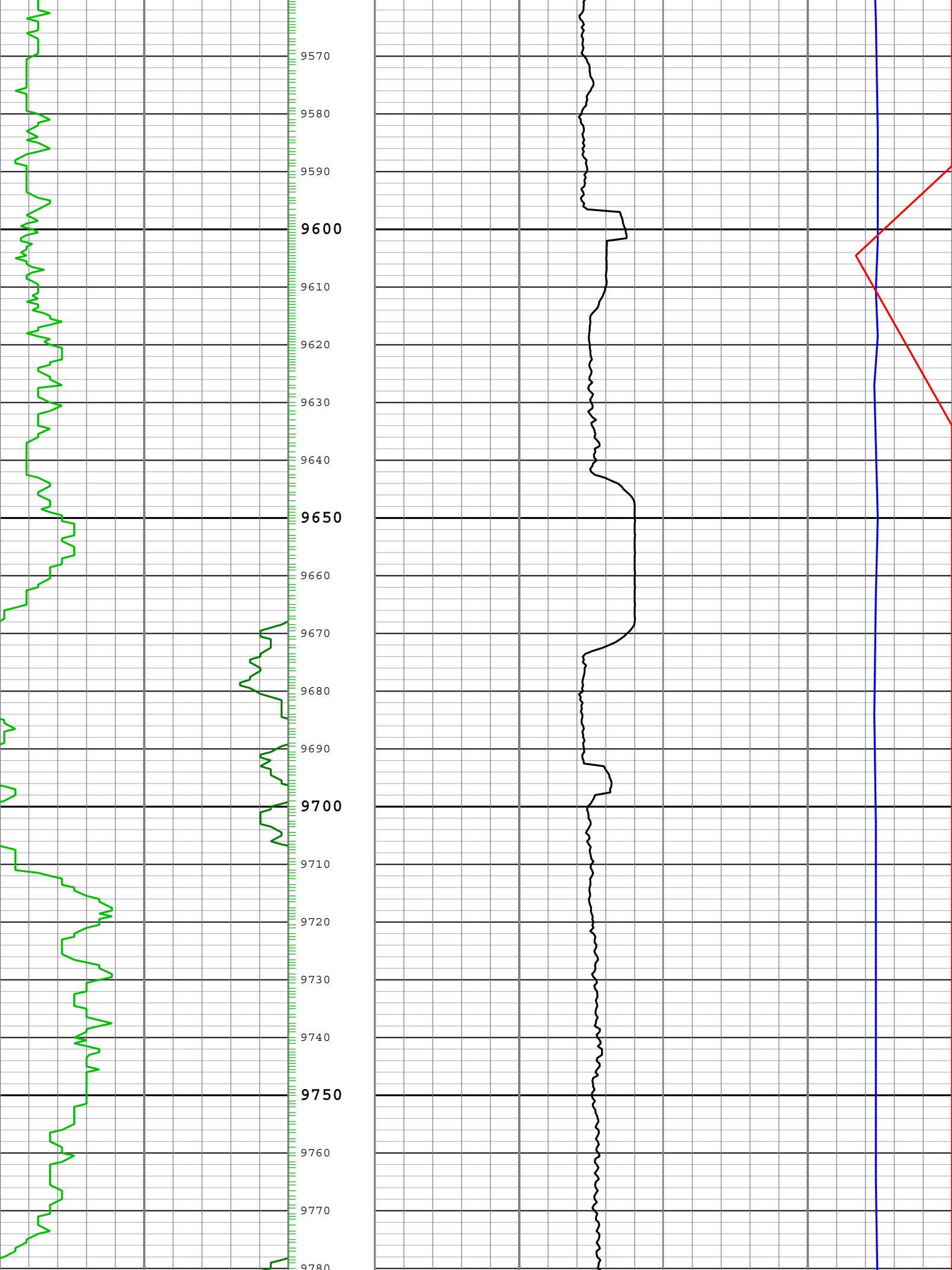


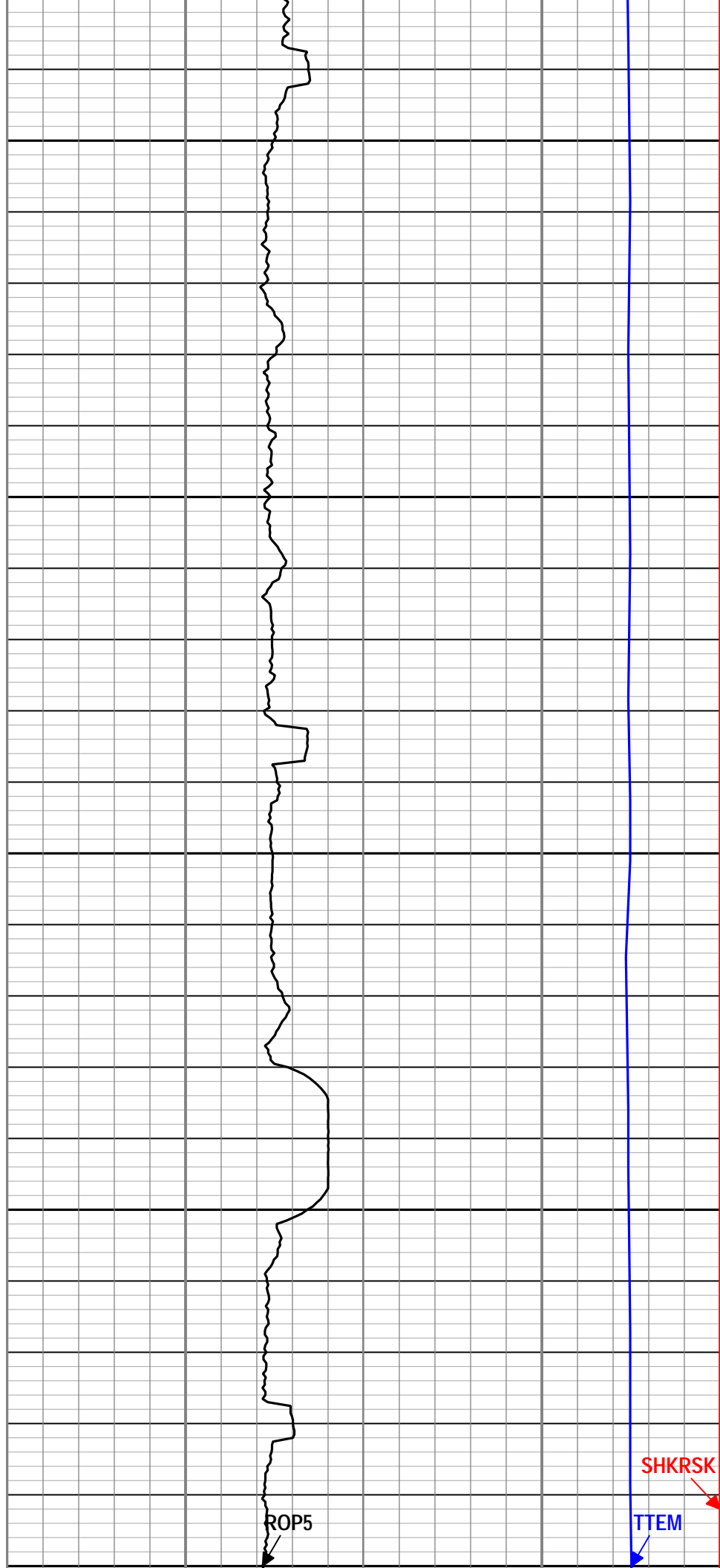
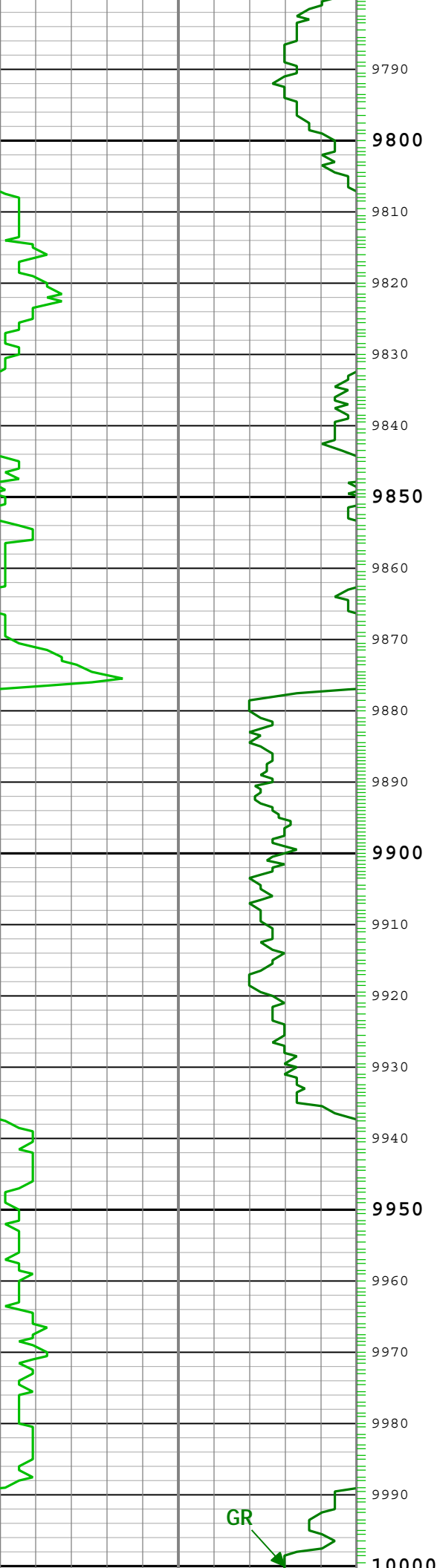


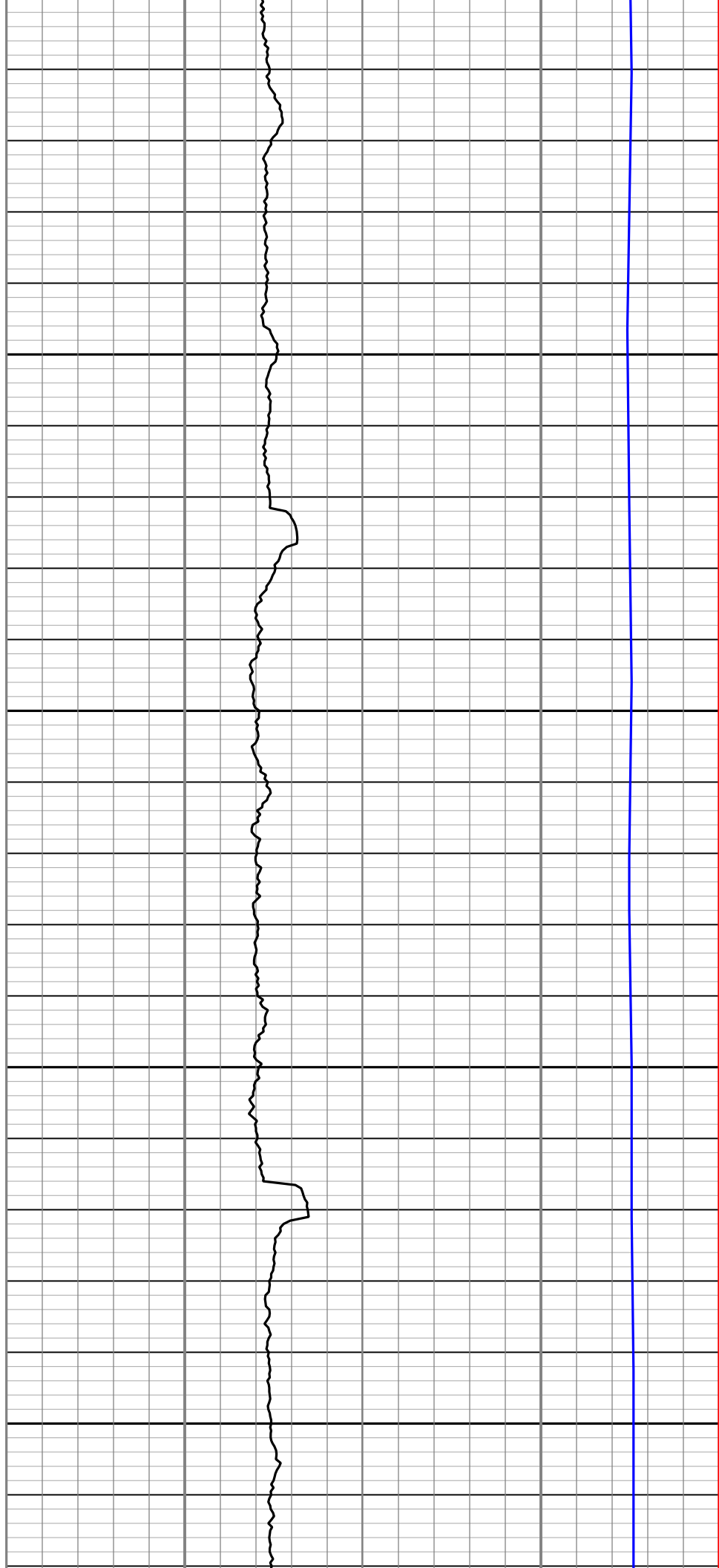
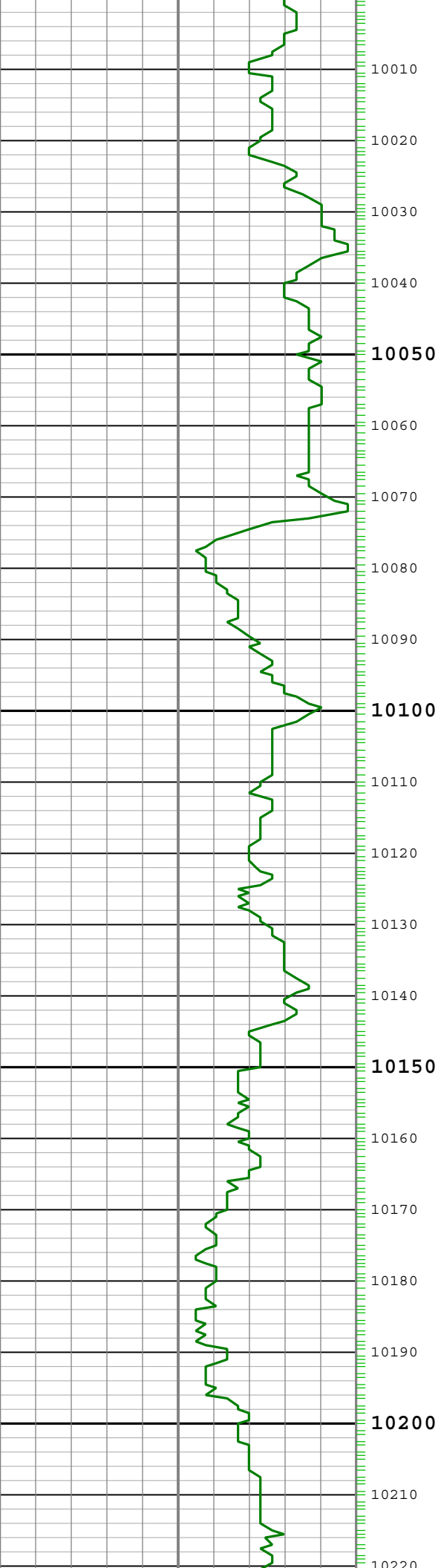


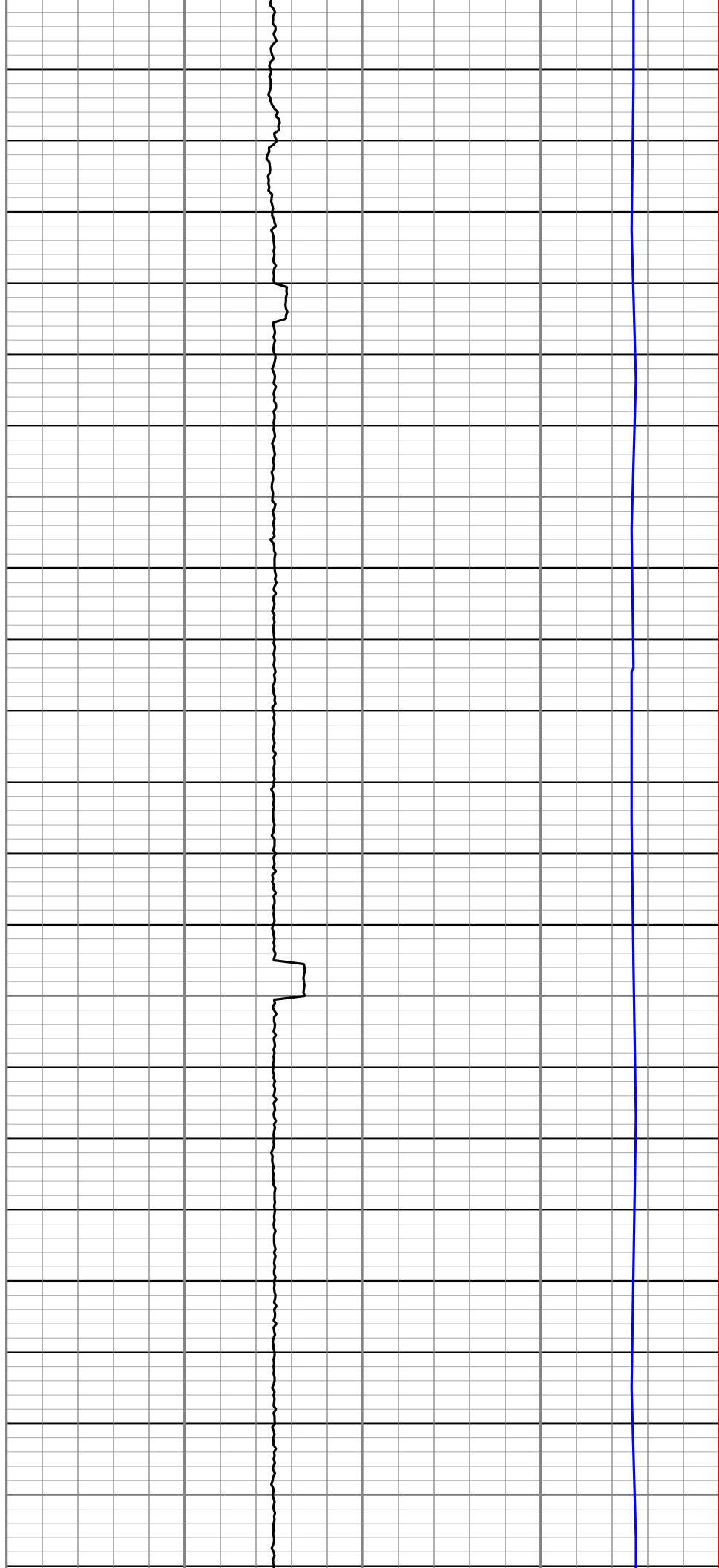
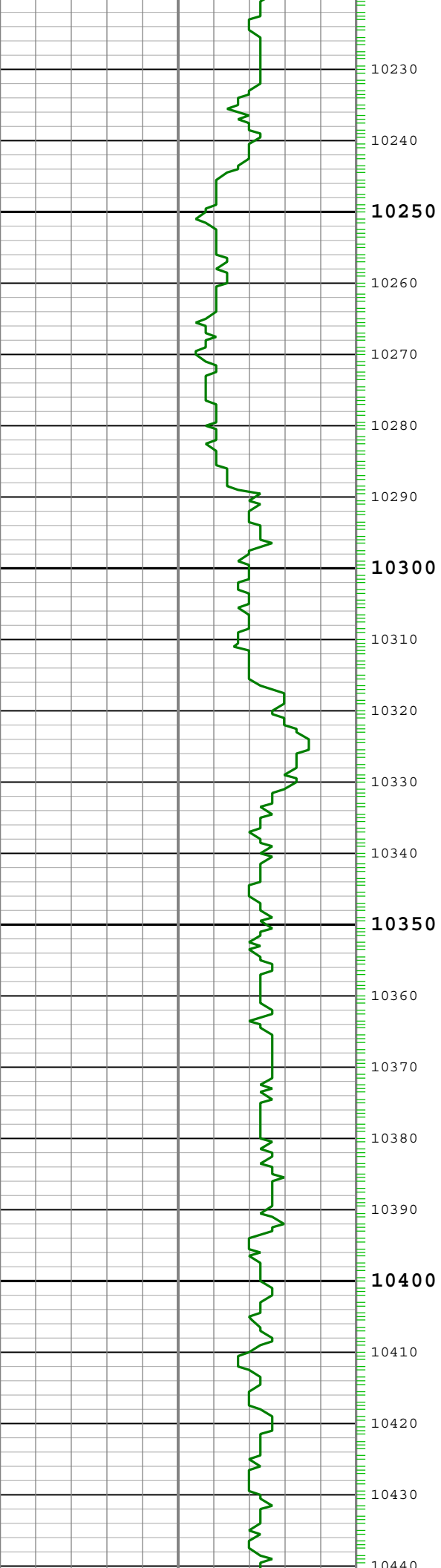


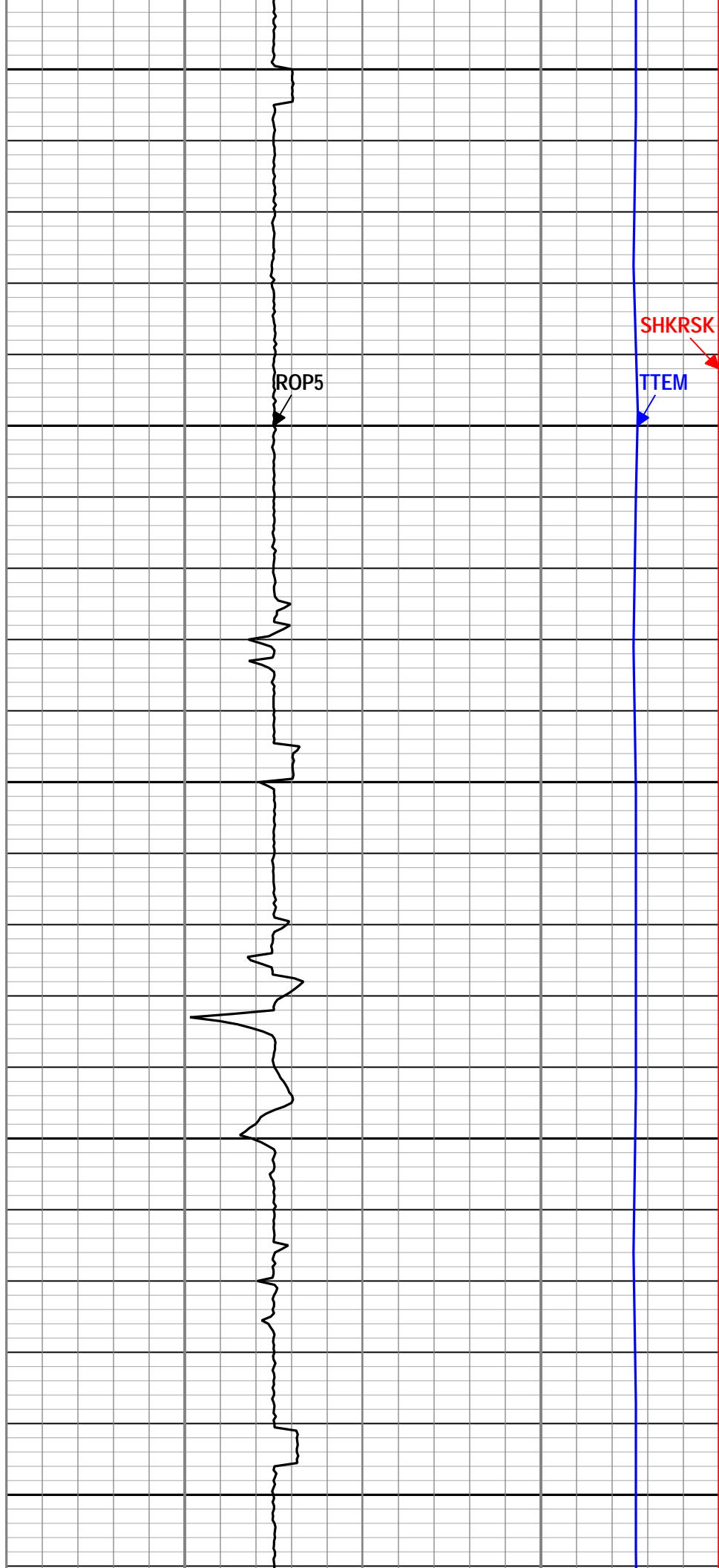
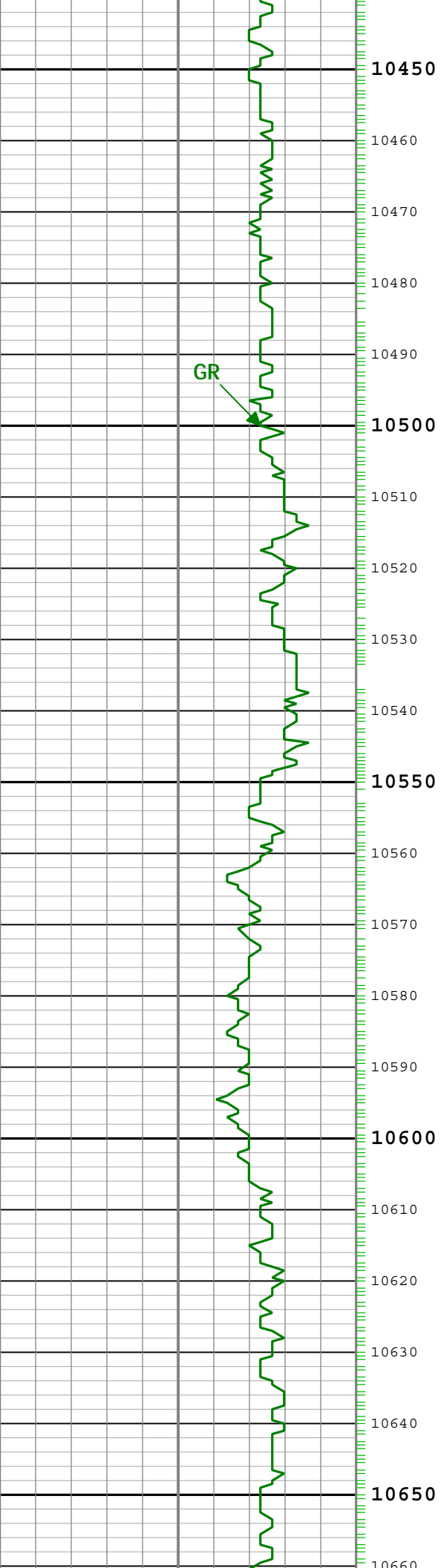


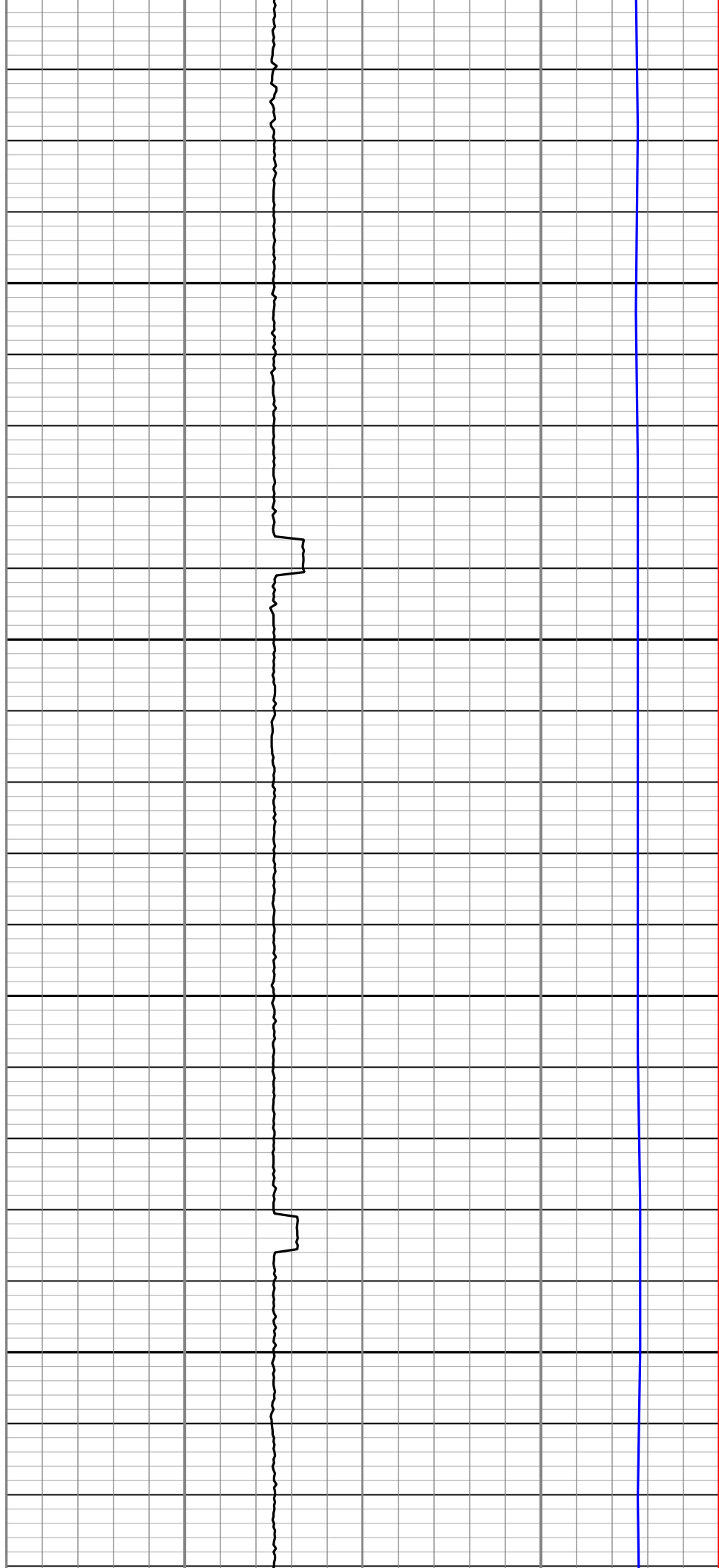
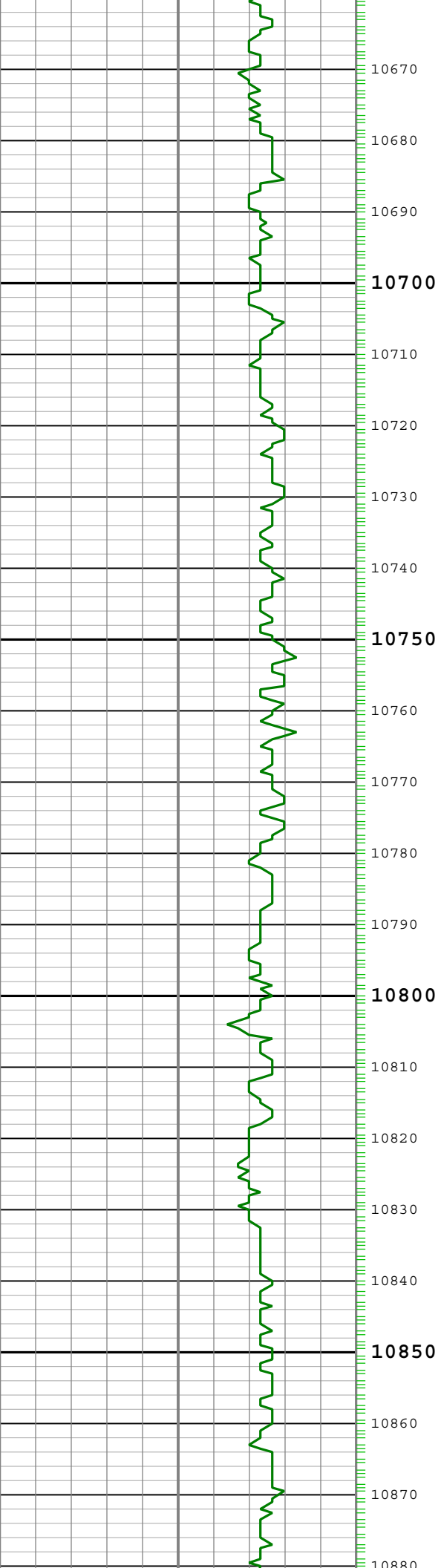




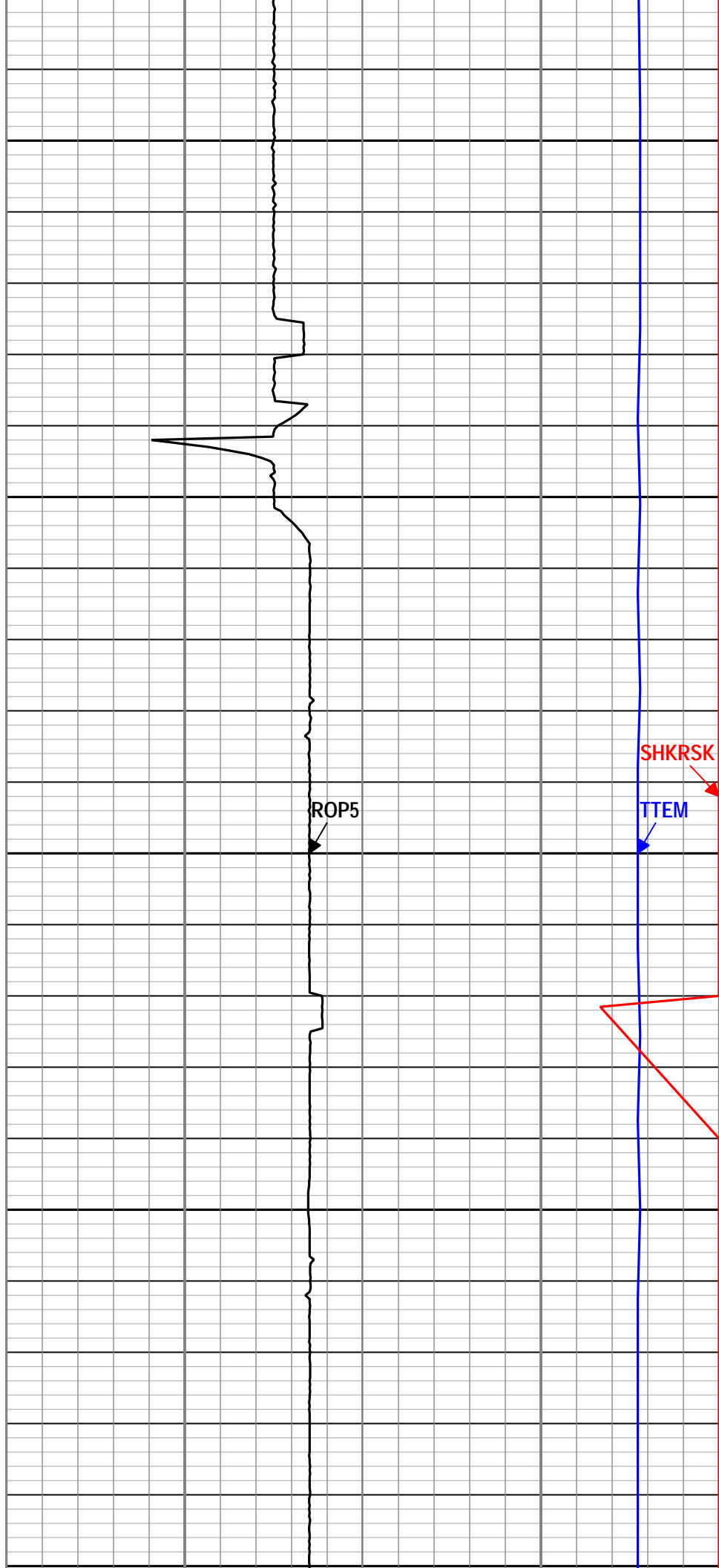
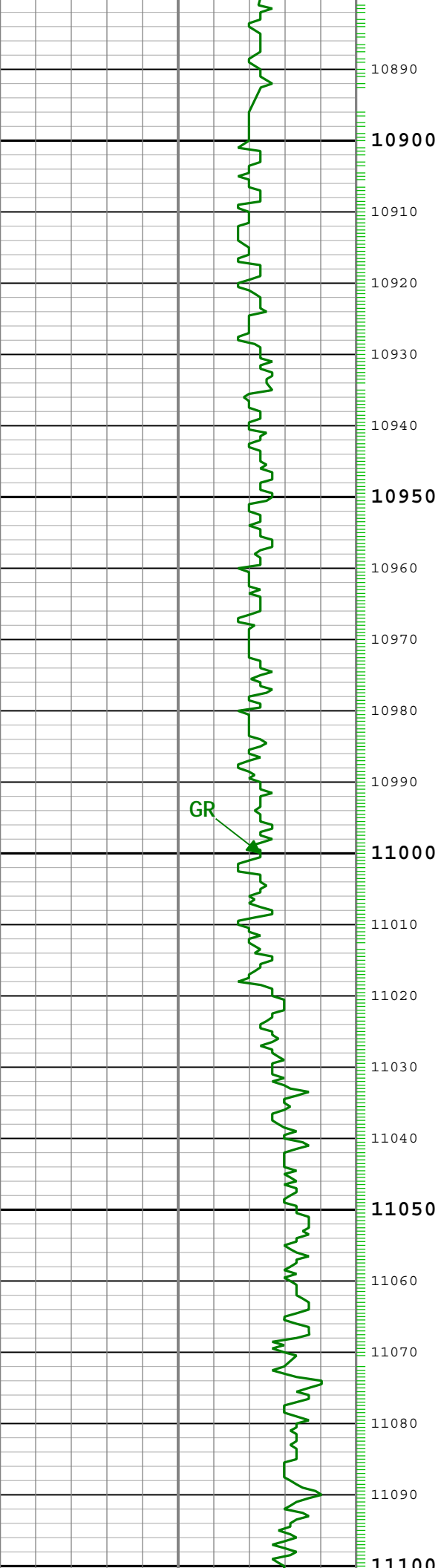


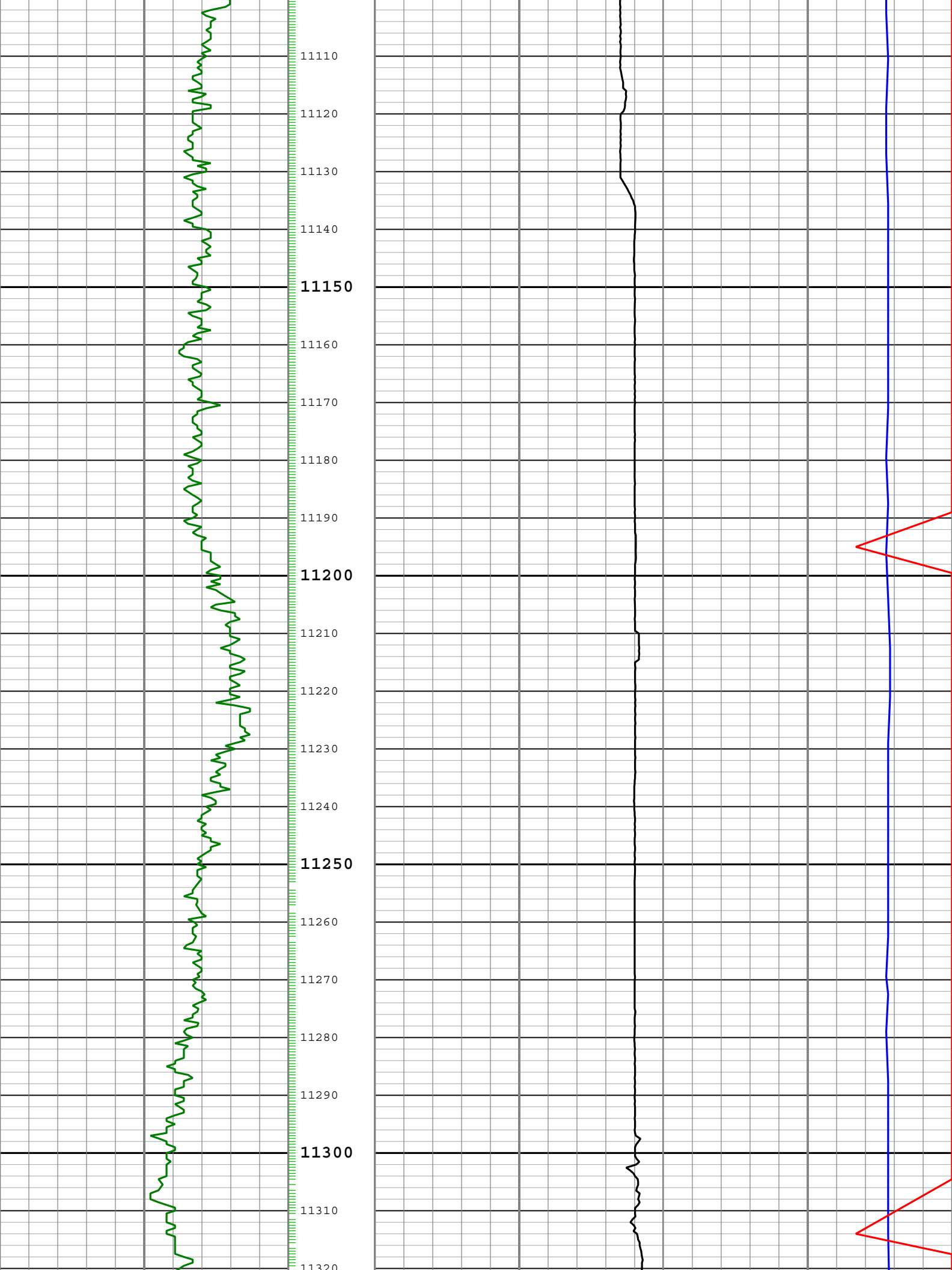


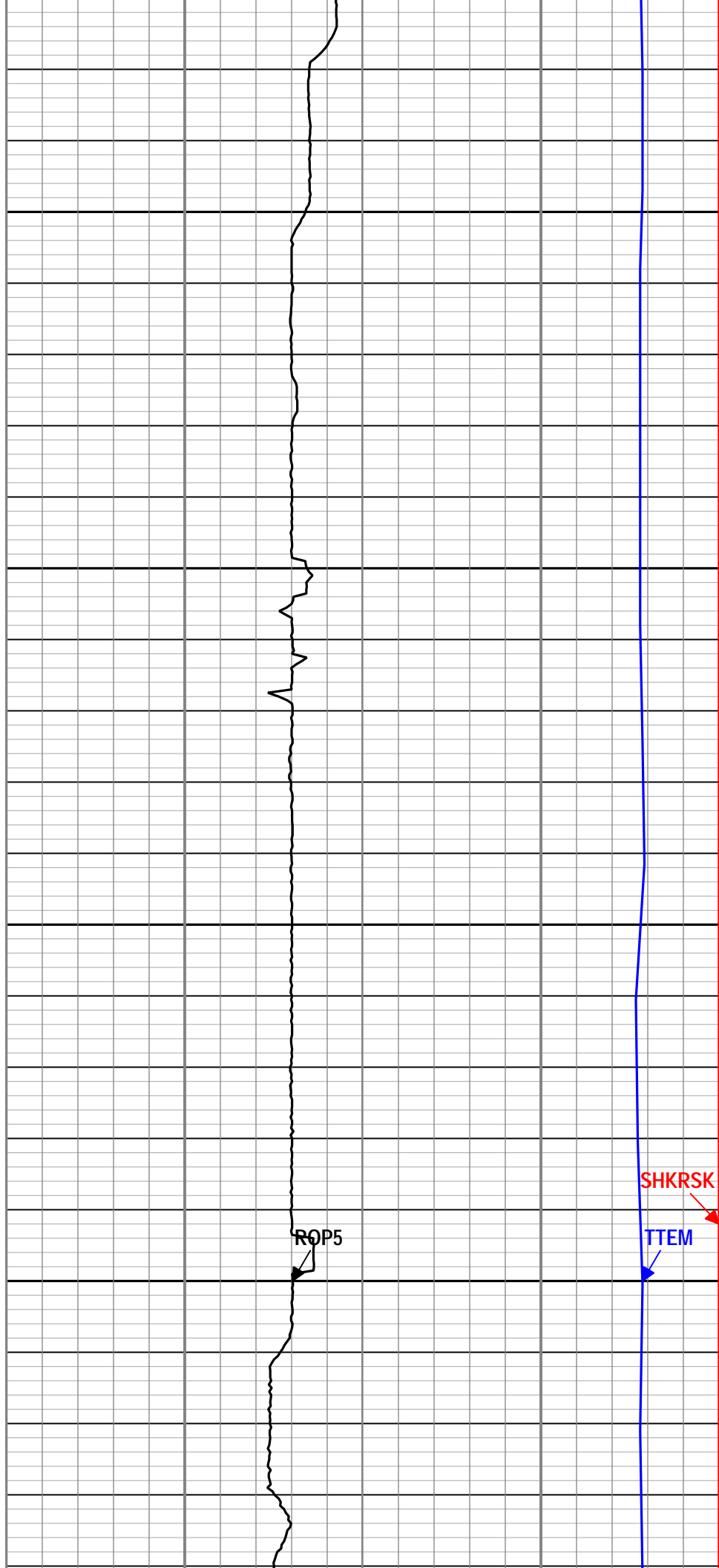
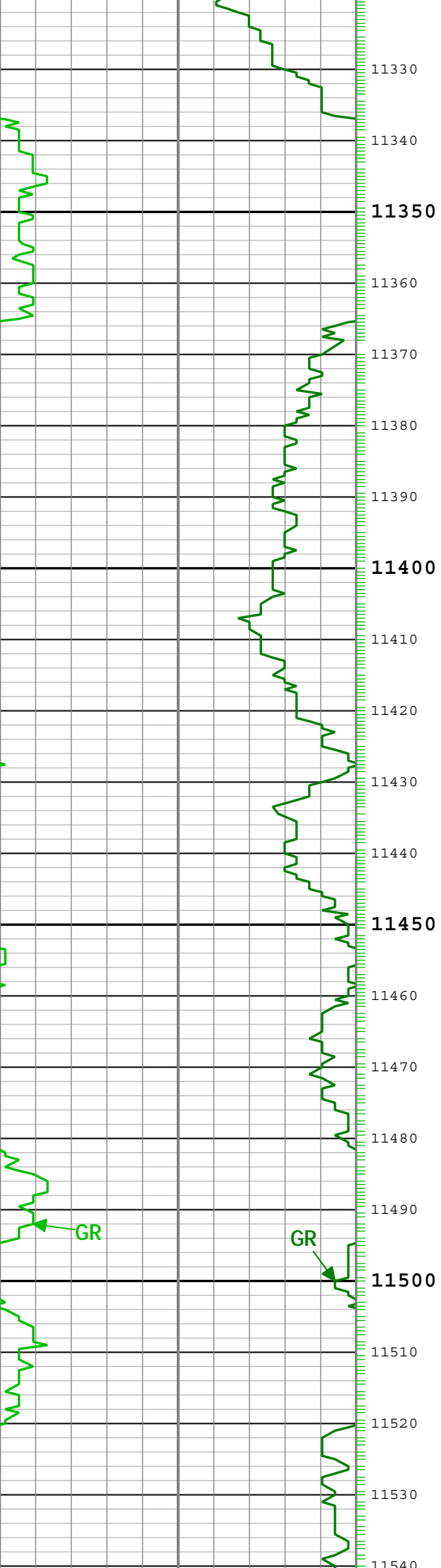


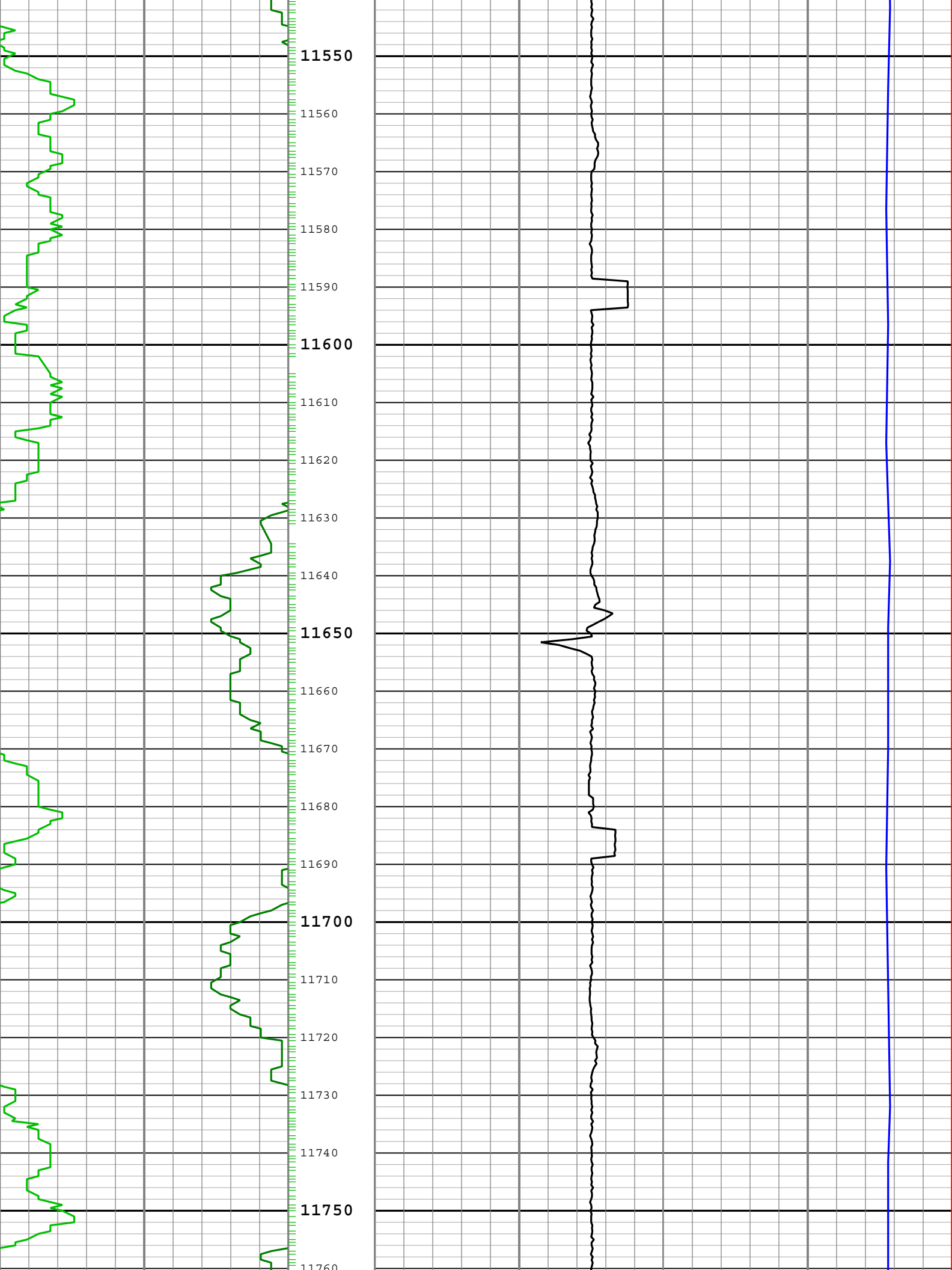


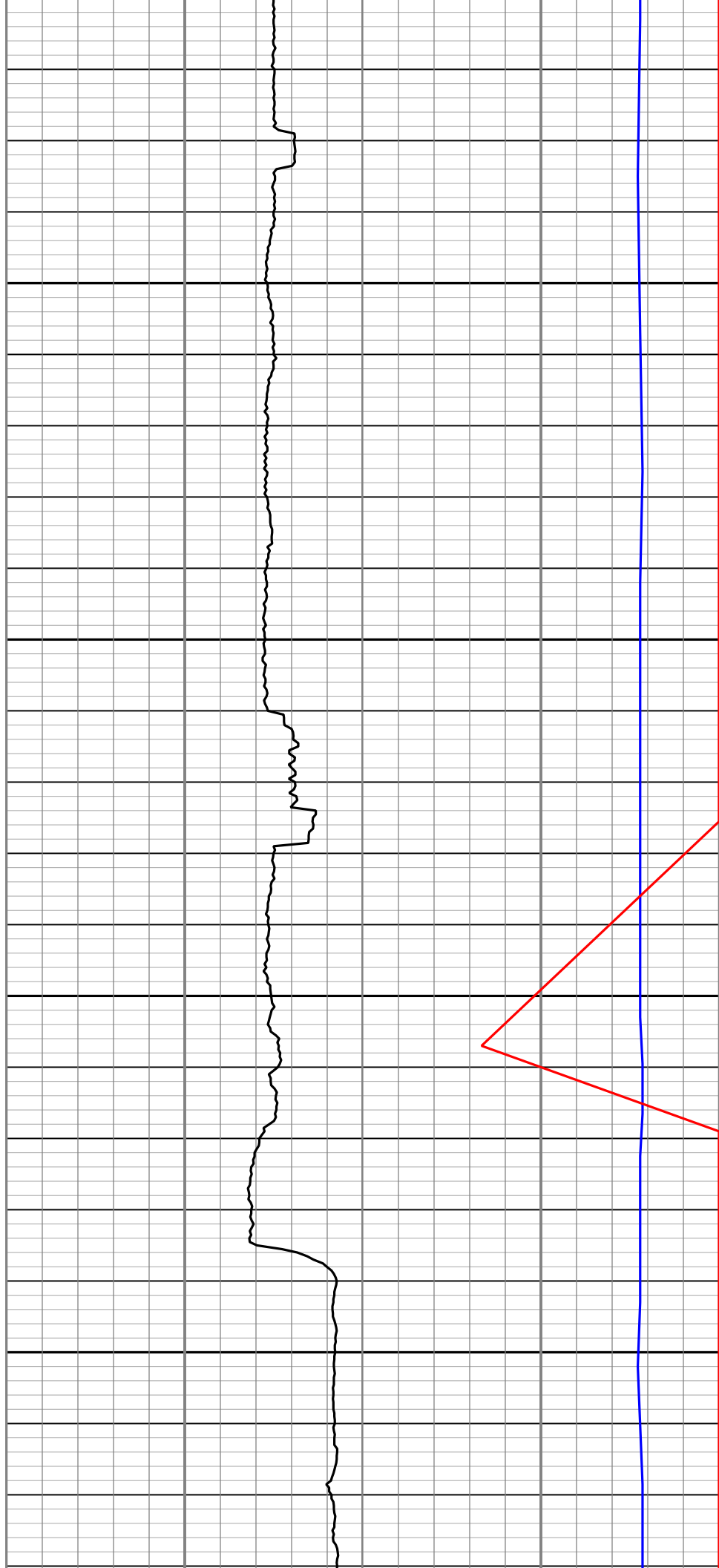
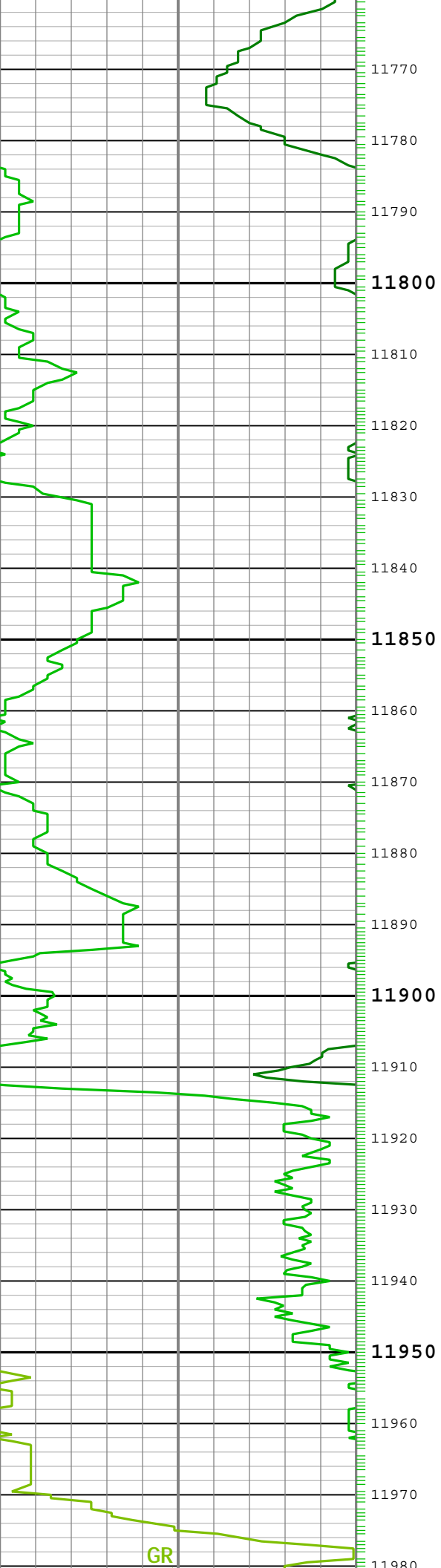


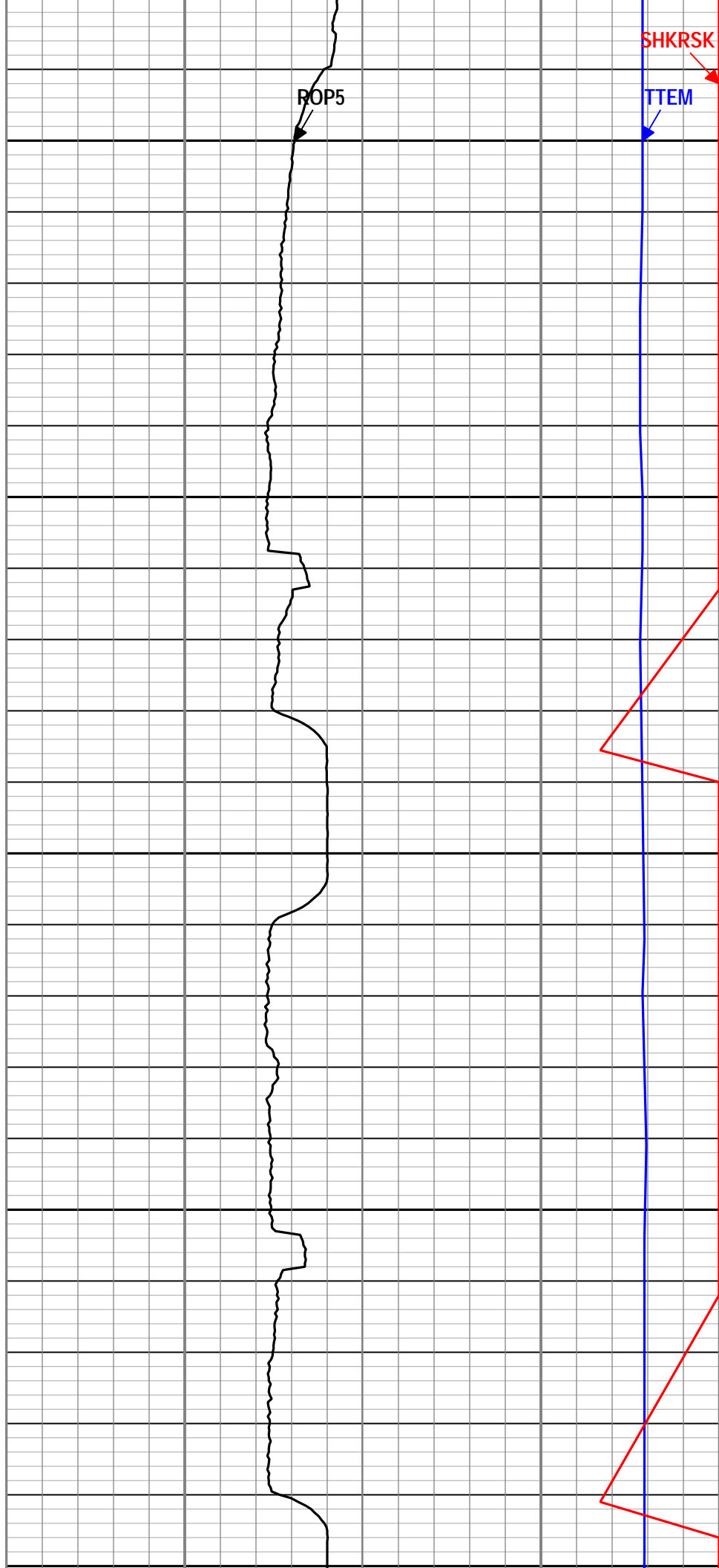
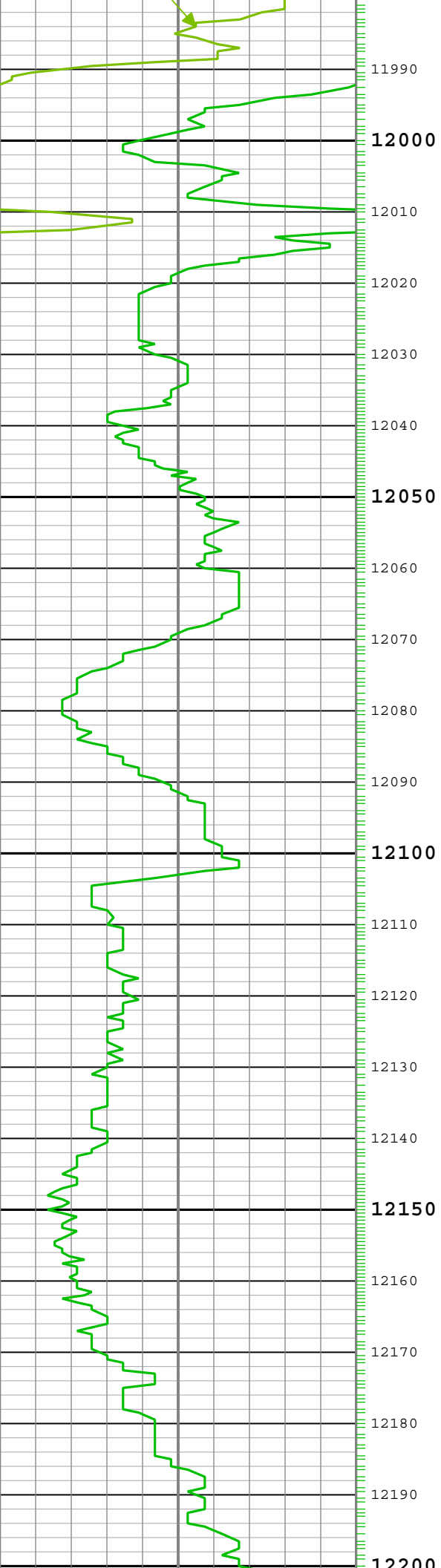


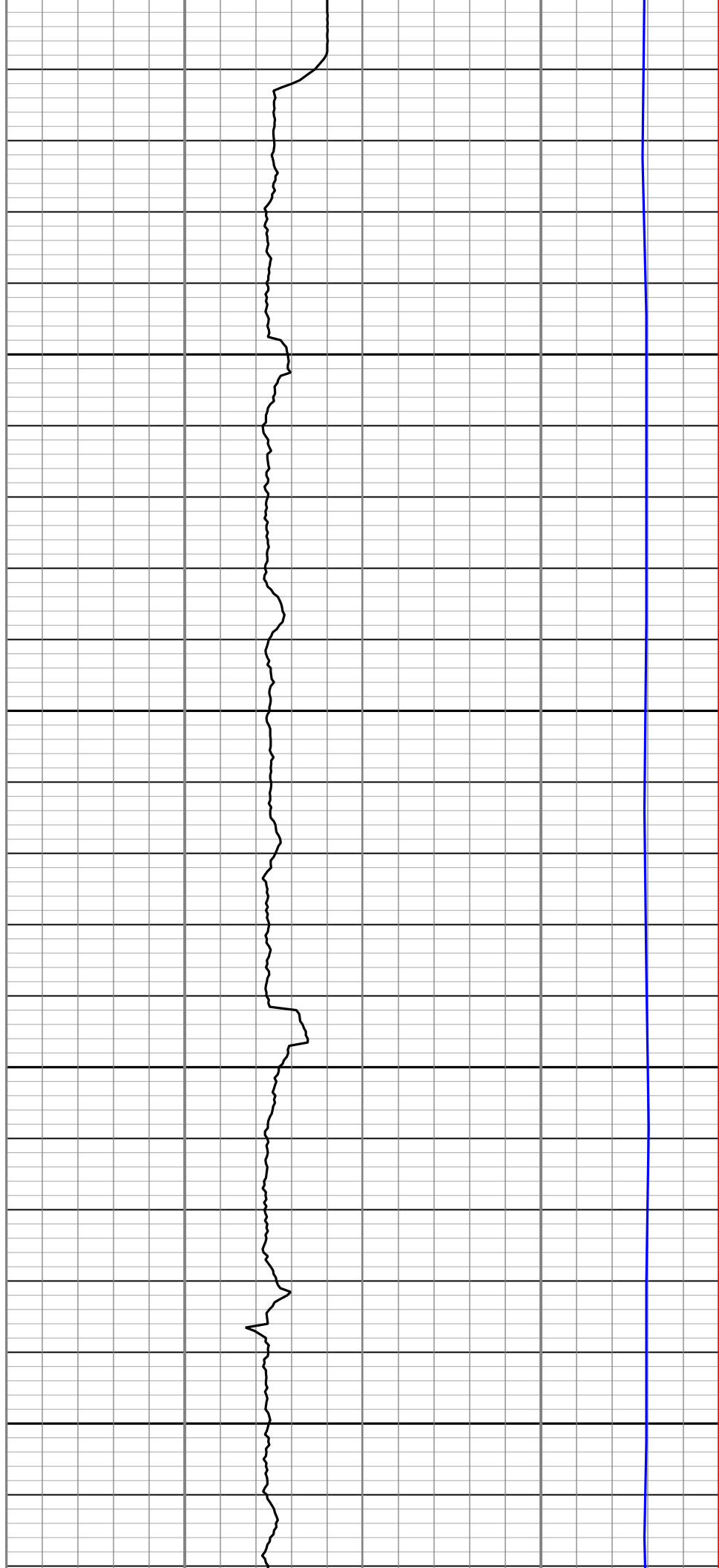
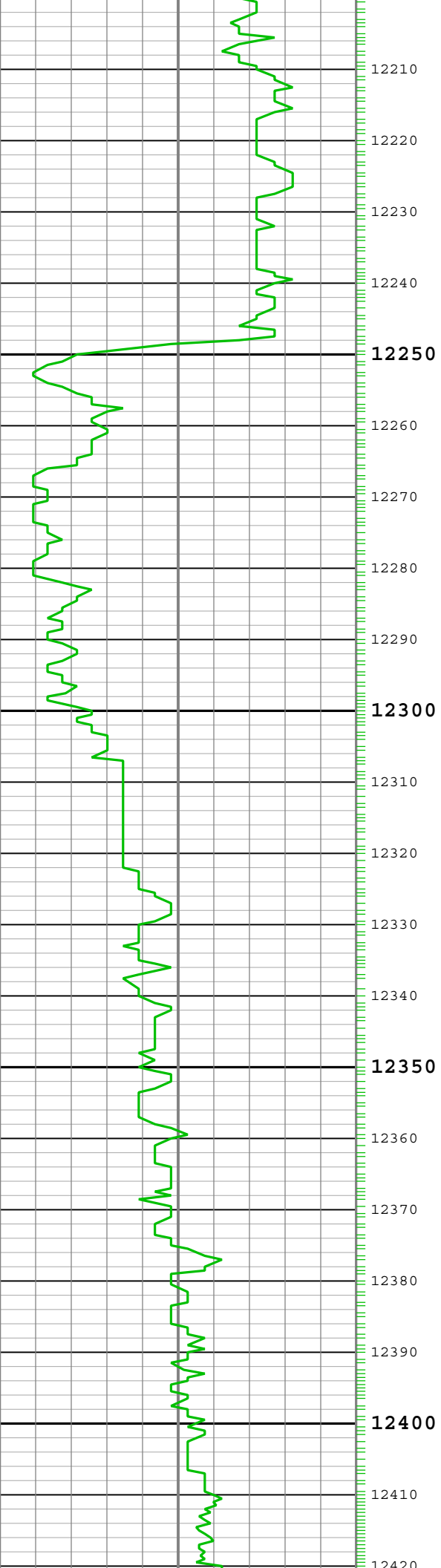


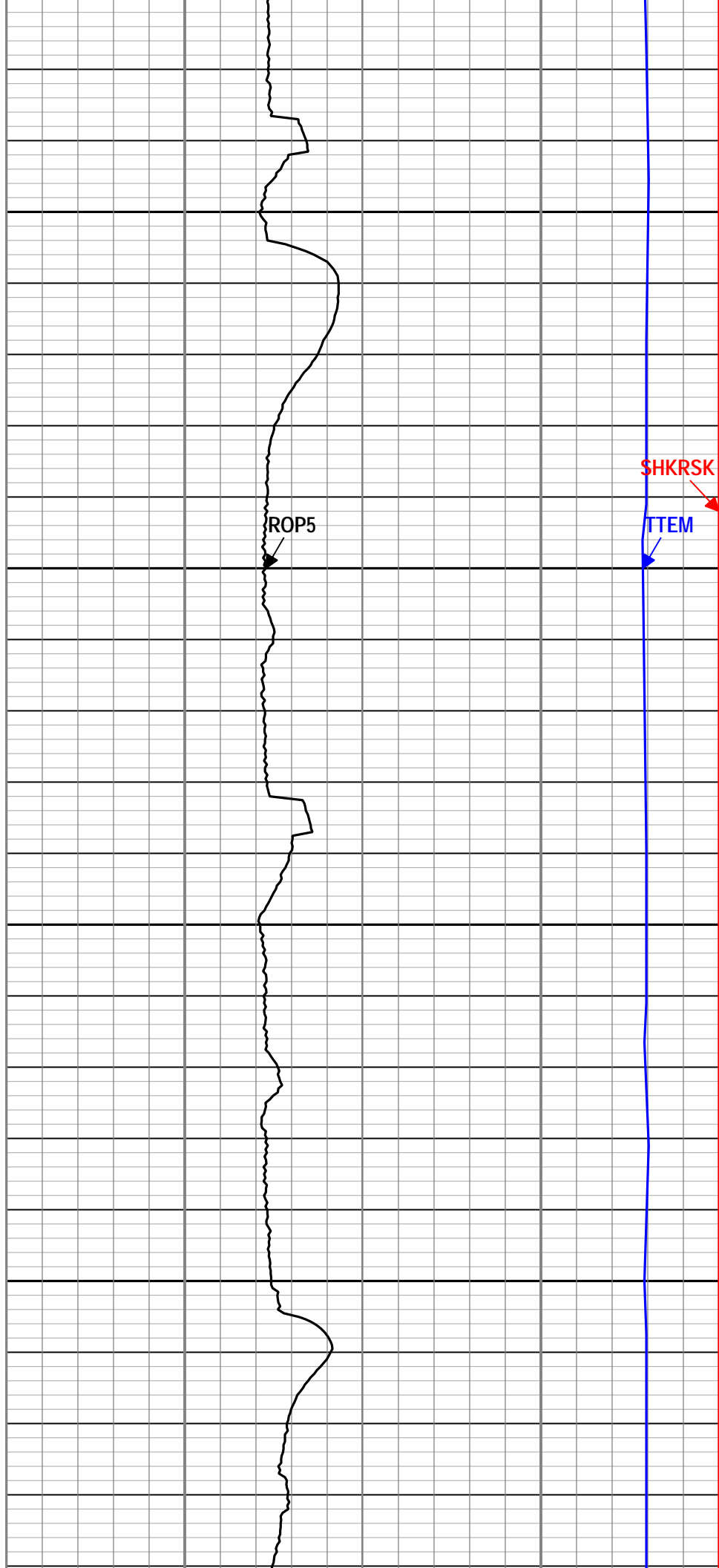
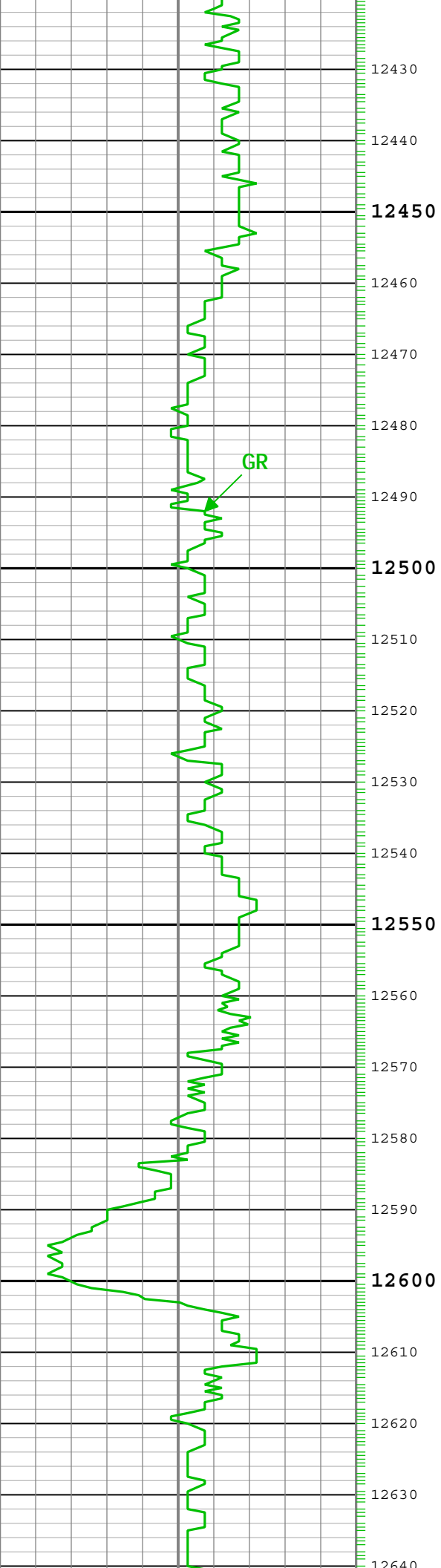




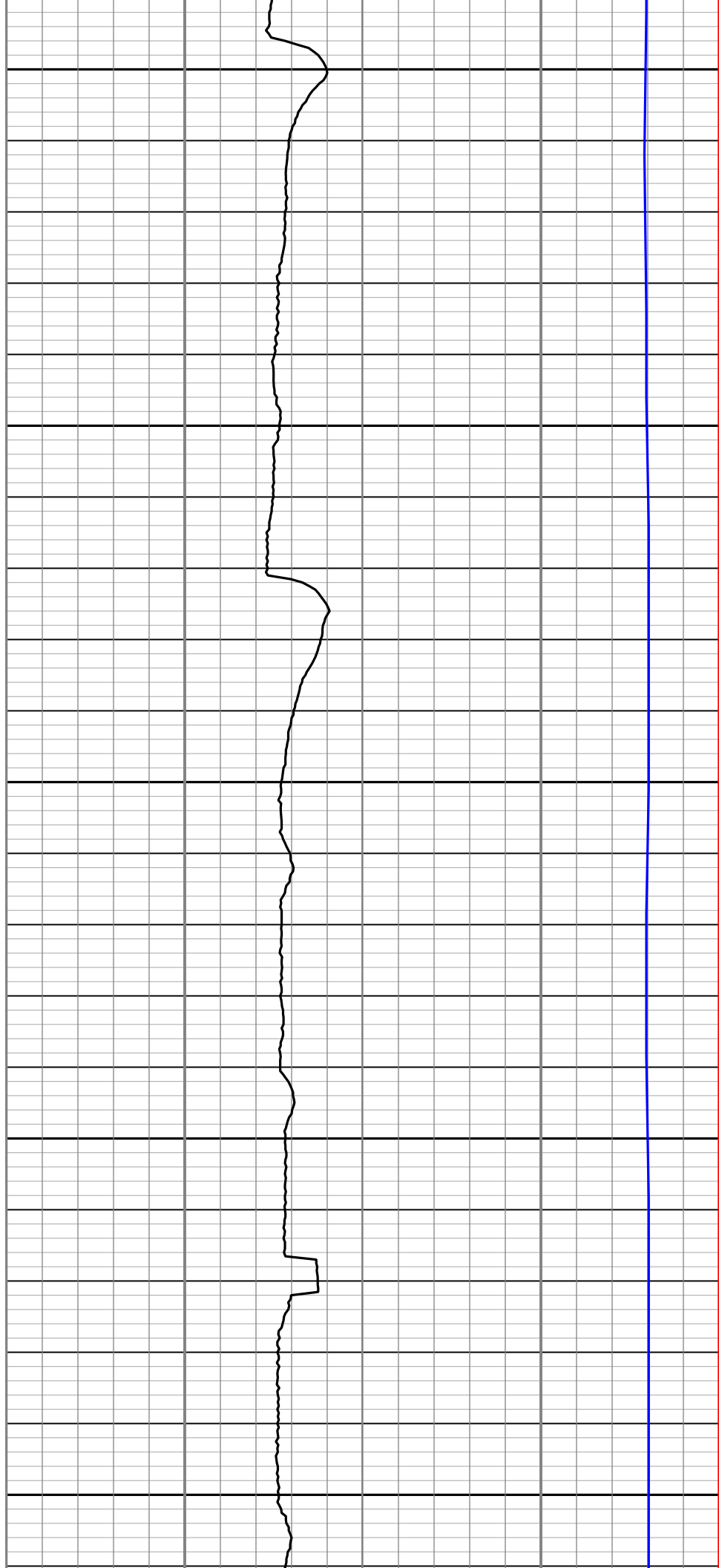
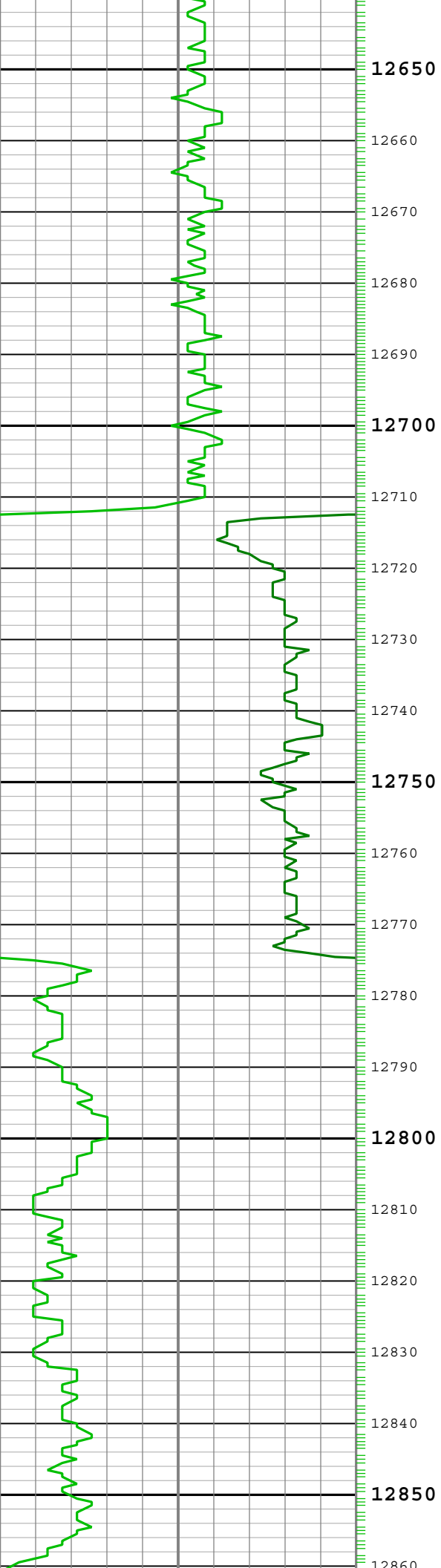


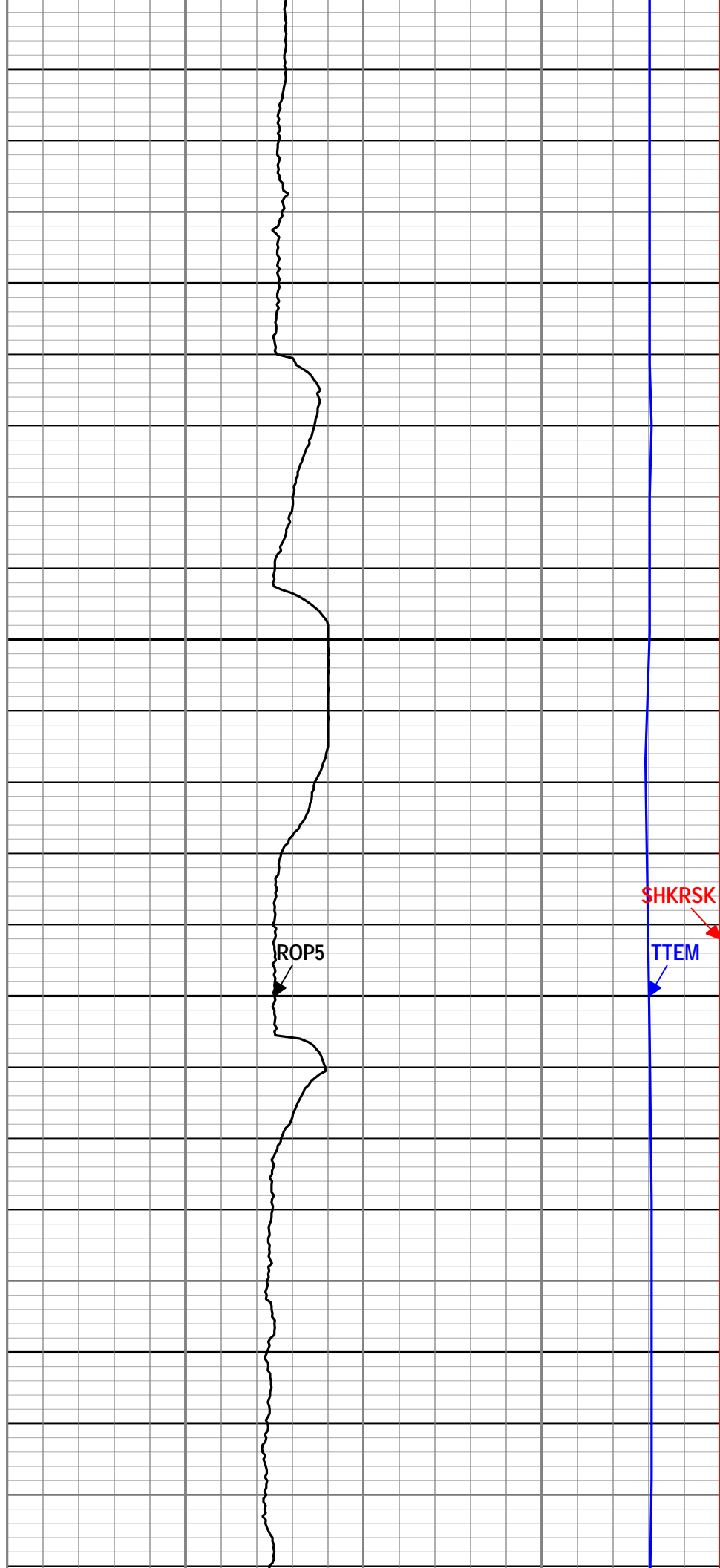
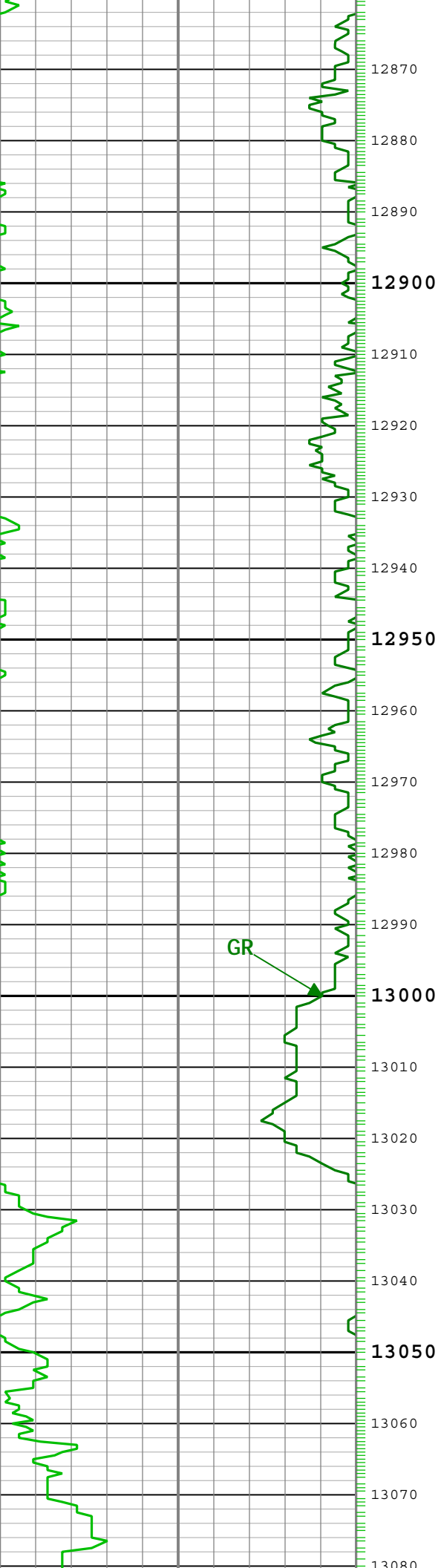


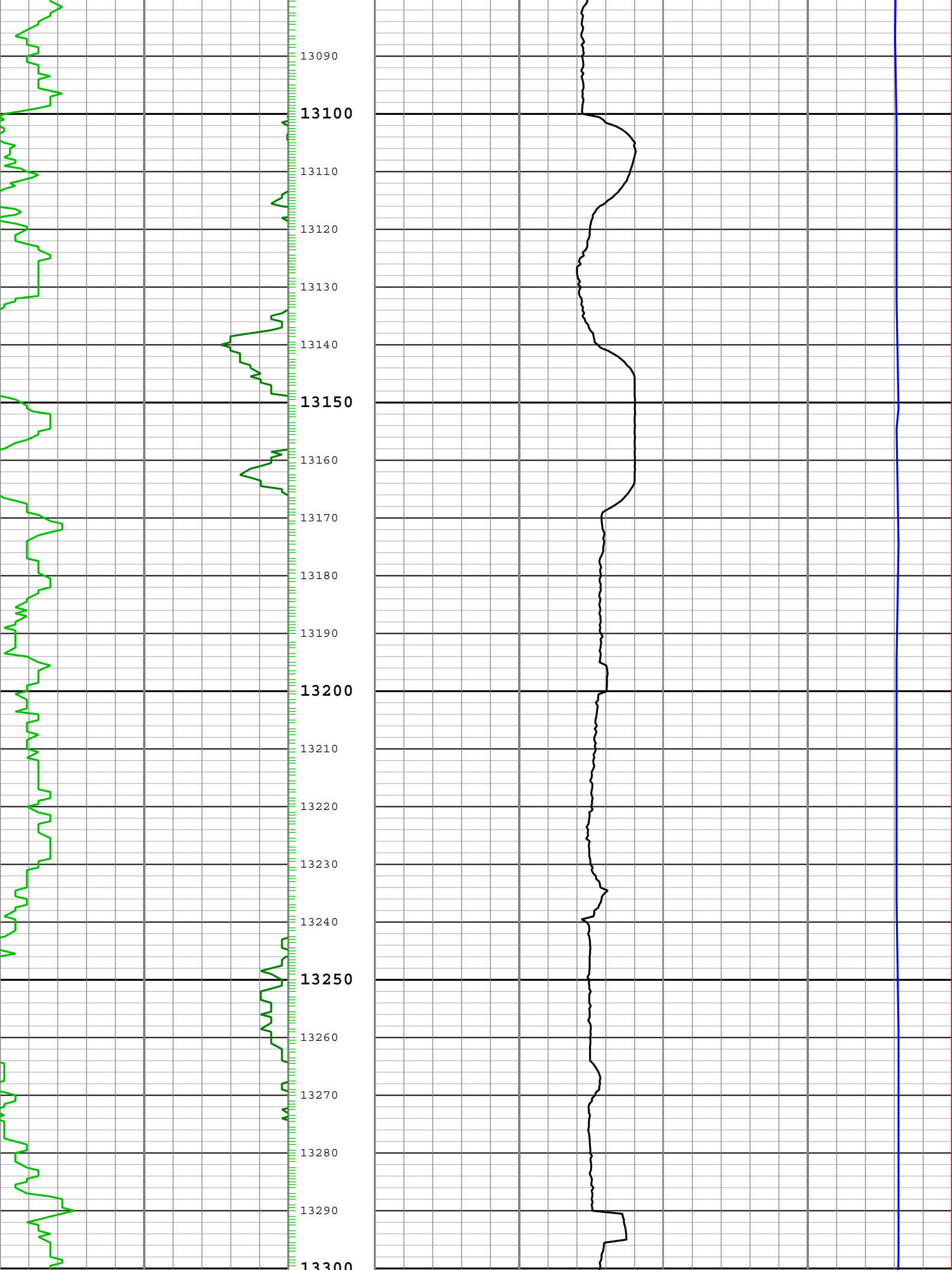


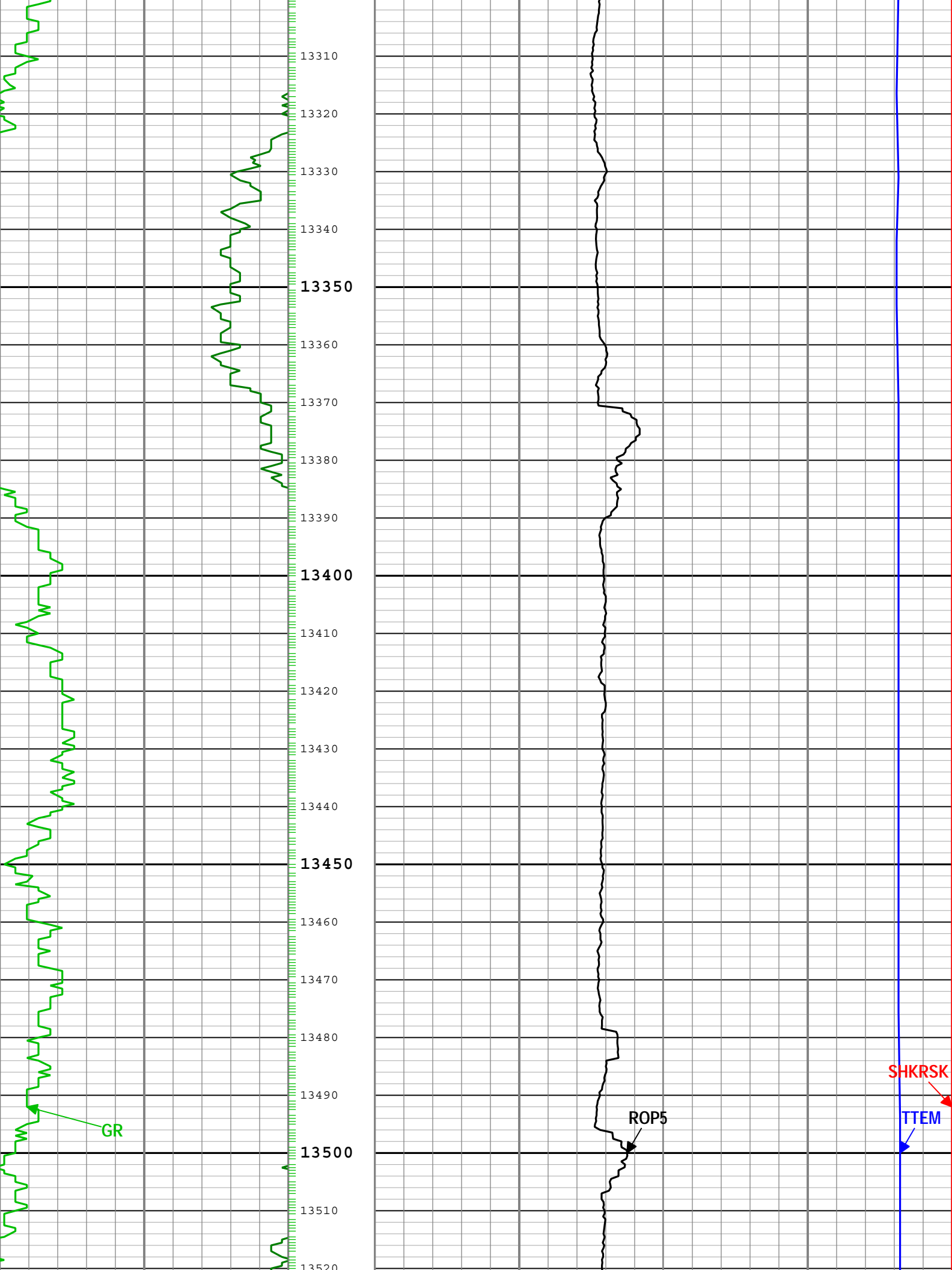


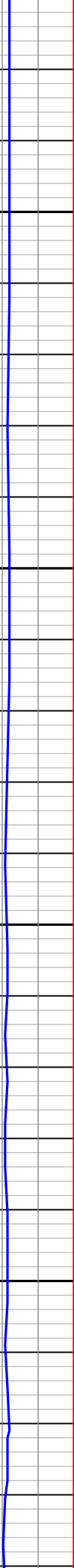
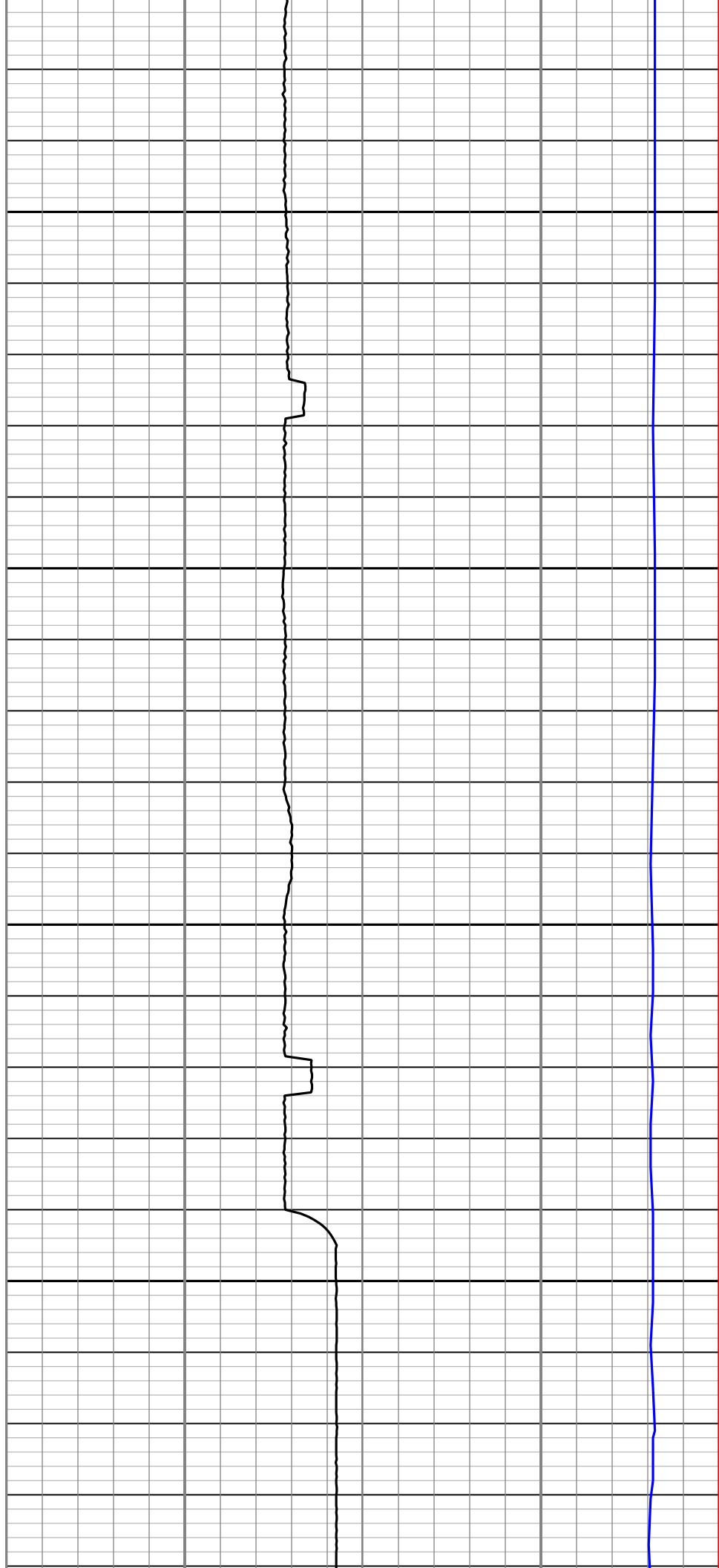
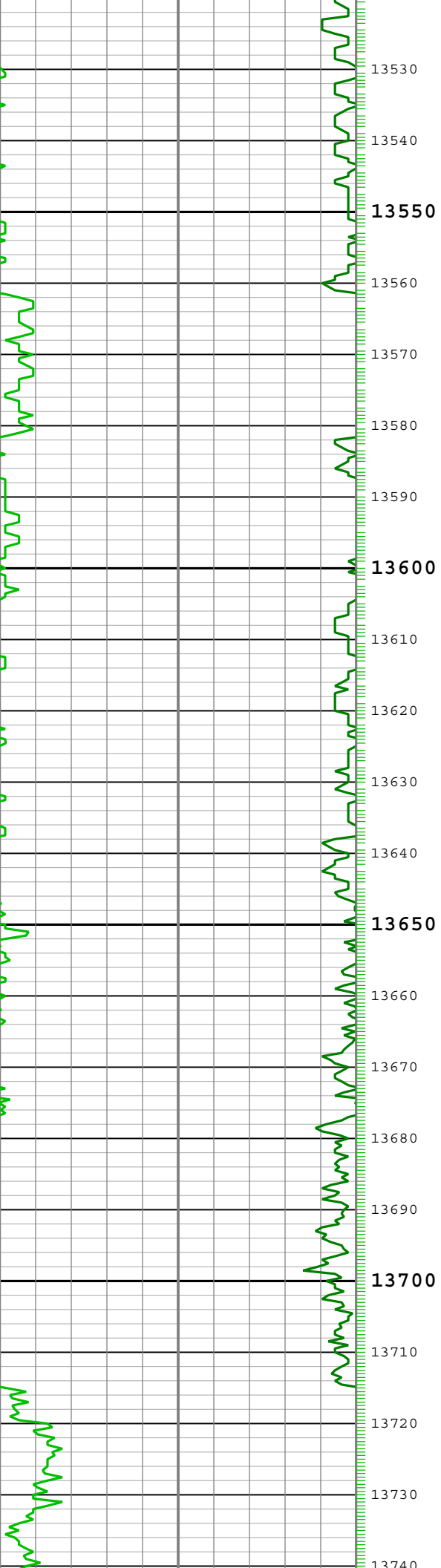


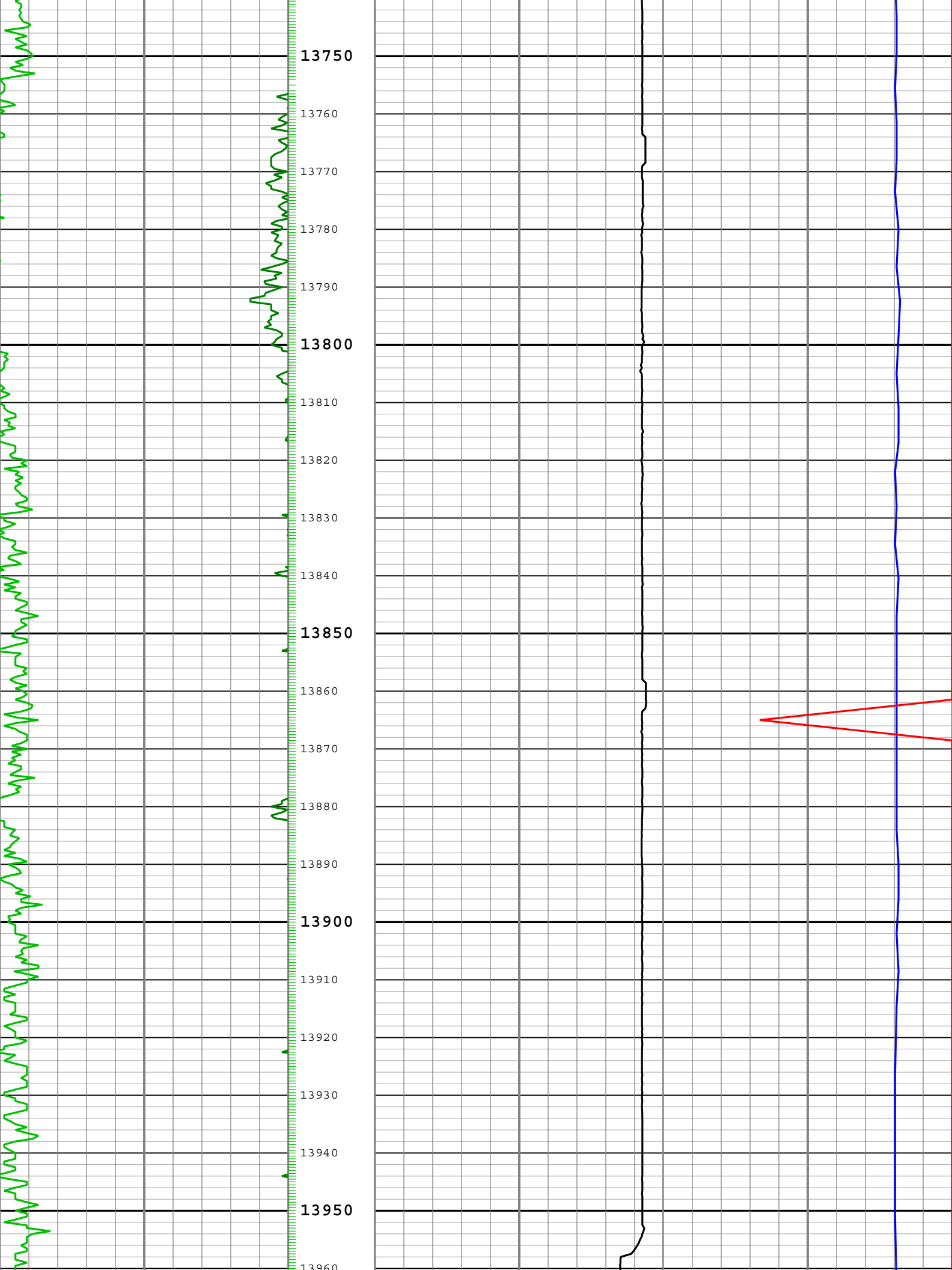


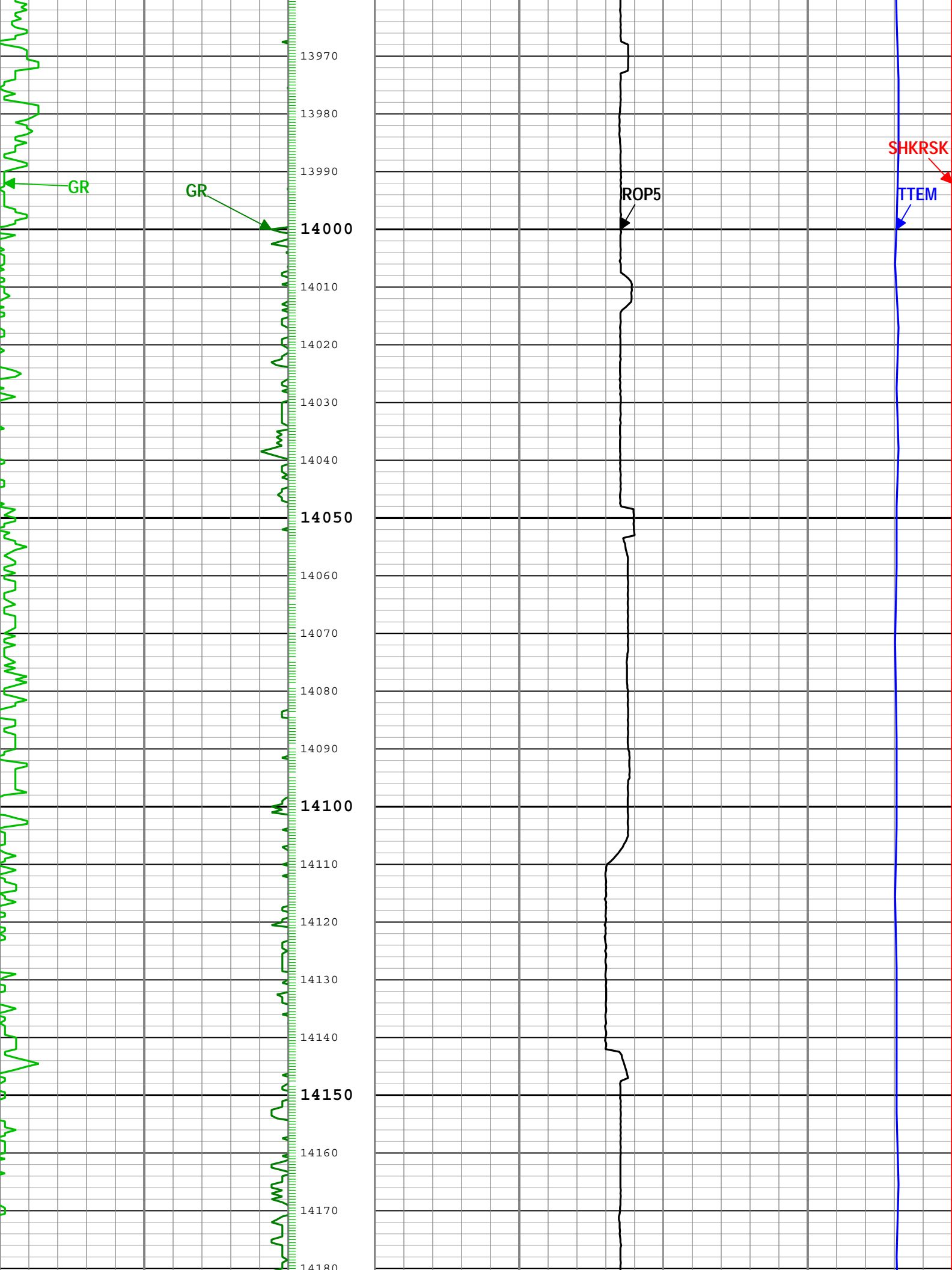


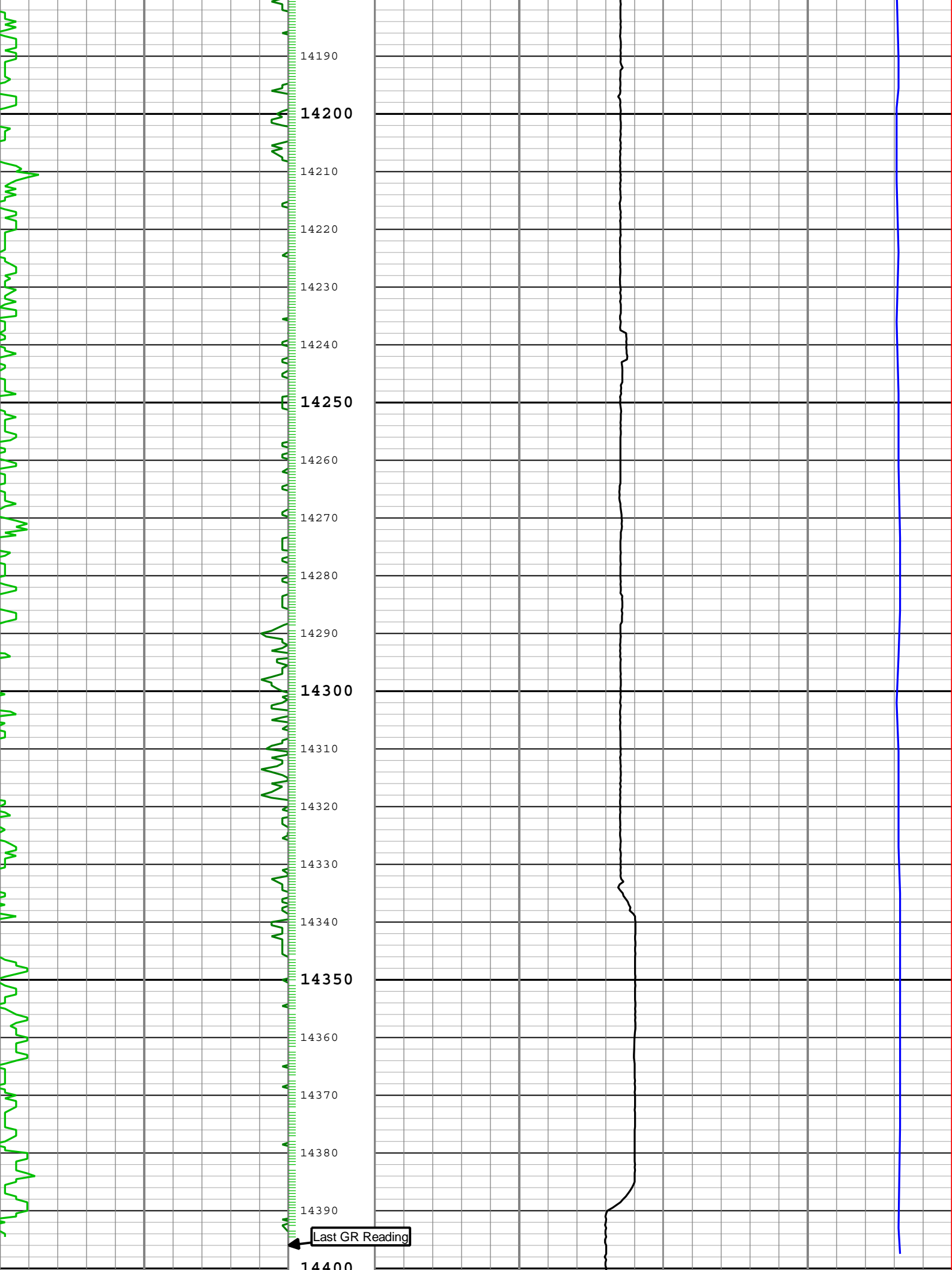




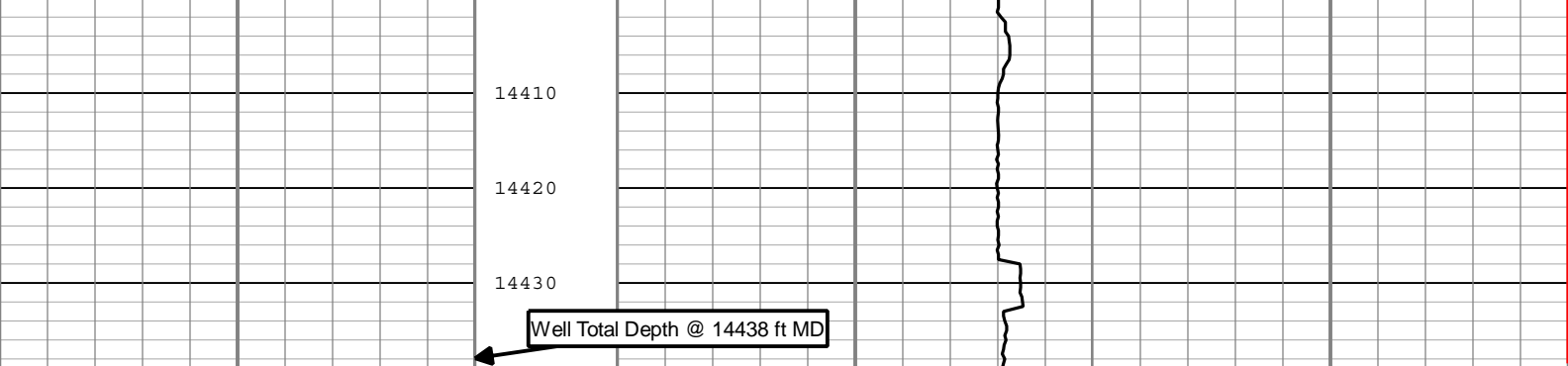












Gamma Ray (GR) SlimPulse[1] RM		
0	gAPI	100
Gamma Ray (GR) SlimPulse[1] RM		
100	gAPI	200
Gamma Ray (GR) SlimPulse[1] RM		
200	gAPI	300
Gamma Ray (GR) SlimPulse[1] RM		
300	gAPI	400

Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT		
1000	ft/h	0

Tool Temperature (TTEM) SlimPulse[1] RM		
0	degF	300
Shock Risk (SHKRSK) SlimPulse[1] RT		
3		0

└ GR - Gamma Ray SlimPulse[1] RM

Description: SlimPulse Gamma Ray 1   Format: Log ( Final MD Log )   Index Scale: 5 in per 100 ft   Index Unit: ft   Index Type: Measured Depth   Creation Date: 2014-10-20 11:09:48

## Channel Processing Parameters

### Run001: Parameters

Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	Depth Zoned	in
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	

### Run001Depth Zoned Parameters

Parameter	Value	Start ( ft )	Stop ( ft )
BS	13.75	1168	1168
BS	8.75	1168	1467

All depth are actual.

### Run002: Parameters

Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	8.75	in
DFD	Drilling Fluid Density	Borehole	Time Zoned	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	

### Run002Time Zoned Parameters

### Pass Drilling

Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
DFD	8.6	17-Oct-2014 18:18:41	18-Oct-2014 03:00:00	1490.92	4029.75
DFD	9	18-Oct-2014 03:00:00	18-Oct-2014 13:30:00	4029.75	6674.67
DFD	10.3	18-Oct-2014 13:30:00	19-Oct-2014 09:32:06	6674.67	7184.75

All depth are at tool zero.

### Run003: Parameters

Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	Depth Zoned	in

DFD	Drilling Fluid Density	Borehole	Time Zoned	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	

Run003Depth Zoned Parameters				
Parameter	Value	Start ( ft )	Stop ( ft )	
BS	8.75	6866.51	7182	
BS	6.125	7182	14438	
All depth are actual.				

Run003Time Zoned Parameters
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Pass Drilling					
Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
DFD	9.45	20-Oct-2014 08:27:35	21-Oct-2014 03:00:00	6999.08	8077.17
DFD	9.7	21-Oct-2014 03:00:00	21-Oct-2014 13:00:00	8077.17	9514
DFD	9.6	21-Oct-2014 13:00:00	22-Oct-2014 03:00:00	9512.5	11398.92
DFD	9.65	22-Oct-2014 03:00:00	23-Oct-2014 03:00:00	11398.92	14142.42
DFD	9.75	23-Oct-2014 03:00:00	23-Oct-2014 22:41:21	14142.42	14439.58
All depth are at tool zero.					

Tool Control Parameters	
Calibration Report	

SPULSE-GEN (SlimPulse with Generic Collar) Calibration - Run Run001							
Primary Equipment : Elec. cartridge, 175C max with GRSPEC639							
GRGain - Gamma Ray: Blanket							
Master (Time Frame File): 12:00:00 21-Aug-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div></div>
Gamma Ray Calibration Gain		Master	1.0000	0.9000	1.0075	1.1000	<div><div></div><div></div><div></div><div></div></div>

SPULSE-GEN (SlimPulse with Generic Collar) Calibration - Run Run002							
Primary Equipment : Elec. cartridge, 150C max with GRSPEC717							
GRGain - Gamma Ray: Blanket							
Master (Time Frame File): 12:00:00 17-Sep-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div></div>
Gamma Ray Calibration Gain		Master	1.0000	0.9000	1.0208	1.1000	<div><div></div><div></div><div></div><div></div></div>

SPULSE-GEN (SlimPulse with Generic Collar) Calibration - Run Run003							
Primary Equipment : Elec. cartridge, 150C max with GRSPEC1004							
GRGain - Gamma Ray: Blanket							
Master (Time Frame File): 12:00:00 25-Sep-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div></div>
Gamma Ray Calibration Gain		Master	1.0000	0.9000	1.0075	1.1000	<div><div></div><div></div><div></div><div></div></div>

**Company:** Noble Energy

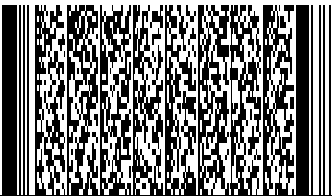
**Well:** Oscar Y10-73-1HC

**Field:** Wattenberg

**County:** Weld

**State:** Colorado

**Country:** USA



**SlimPulse - Gamma Ray**

1 in / 100 ft & 5 in / 100 ft Measured Depth

**Recorded Mode, Composite Log**