

Company: Great Western Operating Company LLC

Well: Schneider HD 11-142HN

Field: Wattenberg

County: Weld

State: Colorado

Country: United States of America

Latitude: 40° 19' 27.322" N APIN: 05-123-46418

Longitude: 104° 49' 35.303" W Rig Name: Precision Drilling 466

Rig Type: Land Rig - Top Drive

FL: NAD83 Colorado State Plane, Northern Zone, US Feet

FL1: Easting: 3187792.021 ftUS

FL2: Northing: 1361680.495 ftUS

Log Measured From: - Drill Floor: 4755.00 ft

Ground Level: 4735.00 ft

Permanent Datum: - Mean Sea Level

Acquisition Dates: 19-Oct-2019 -- 22-Oct-2019

Log Interval: 1573.00(ft) -- 17687.00(ft)

Index Types: Measured Depth

Index Scales: 1:240 5" / 100'

Depth Source: Driller's Depth

Depth Sensor: 3rd Party Depth

Print Type: Final

Spud Date: 05-Sep-2019

Other Services:

Directional Drilling

Direction and Inclination (Surveys)

Continuous D&I

Rotary Steerable System

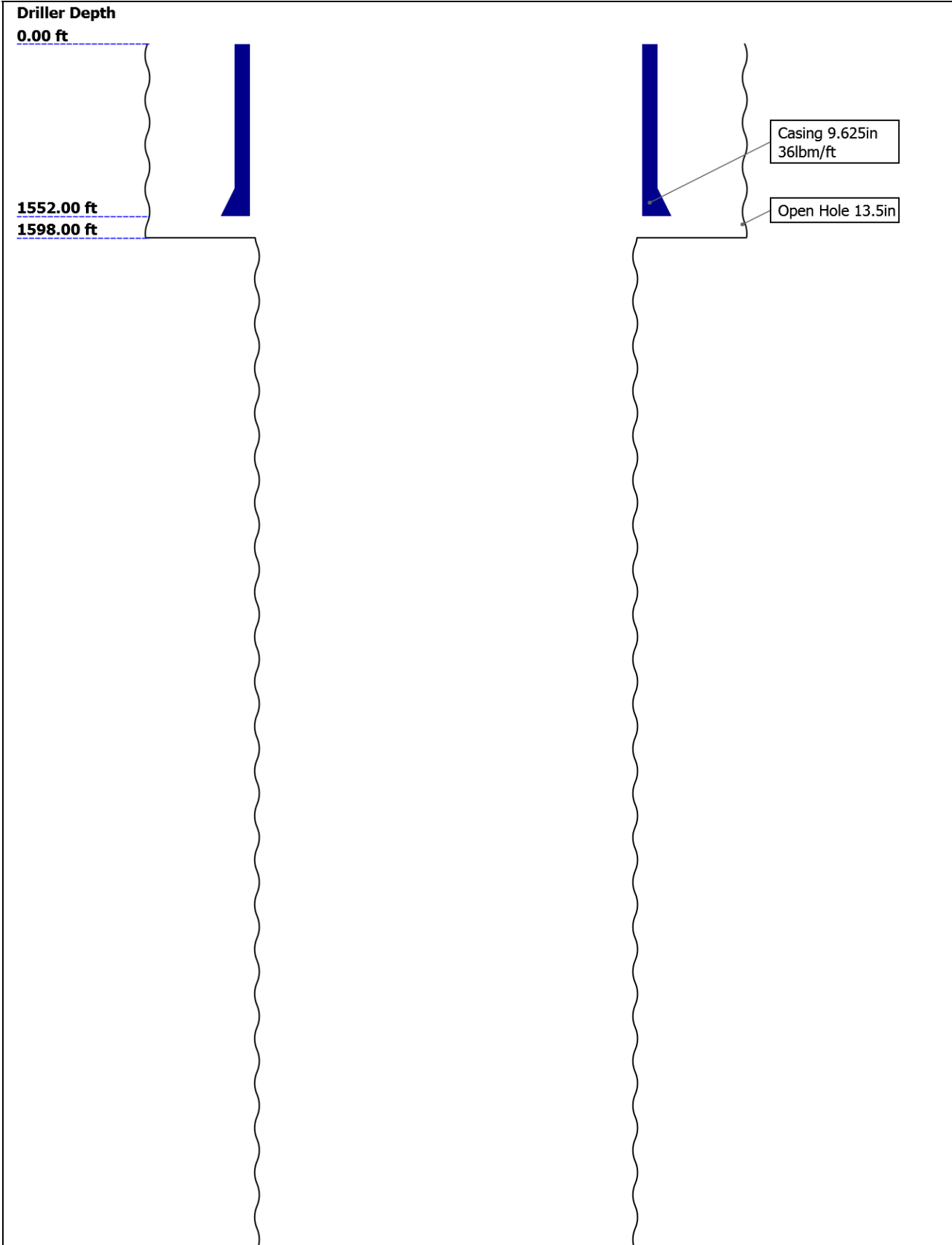
## Disclaimer

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Well Sketch





## Borehole Size/Casing Record

Bit						
Bit Size ( in )	13.5	8.5				
Top Driller ( ft )	0	1598				
Bottom Driller ( ft )	1598	17687				
Casing						
Size ( in )	9.625					
Weight ( lbm/ft )	36					
Inner Diameter ( in )	8.921					
Grade	J55					
Top Driller ( ft )	0					
Bottom Driller ( ft )	1552					

## Operational Run Summary

Parameter ( unit )	Run 1					
Date Log Started	18-Oct-2019					
Time Log Started	18:41:29					
Date Log Finished	22-Oct-2019					
Time Log Finished	21:12:13					
Bit Size ( in )	8.500					
Bit Start Depth ( ft )	1598.00					
Bit Stop Depth ( ft )	17687.00					
Top Log Interval ( ft )	1573.00					
Bottom Log Interval ( ft )	17662.00					
Max Hole Deviation ( deg )	91.10					
Azimuth of Max Deviation ( deg )	271.05					
Logging Unit Number	Client Provided					
Logging Unit Location	Zone 2					
Recorded By	D. Goldfarb					
Witnessed By	M.Hackworth					
Service Order Number	19CCO1386					

## Borehole Fluids

## Remarks and Equipment Summary

Run 1: Toolstring

Equip name	Length	MP name	Offset
Fitr Sub: 6 3/4":SD 17871	121.72	Filter Sub	

Motor: 63/4":7075 **117.01** Hunting

... ..


 The following table shows the results of the regression analysis for the dependent variable "Number of children in the household" (N = 1,000). The independent variables are "Age of the head of household" and "Gender of the head of household". The results are as follows:

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**Figure 1**

**Figure 1**

[illegible]

**Figure 1**

© 2006 The Authors  
Journal compilation © 2006 Blackwell Publishing Ltd

**Figure 1**

© 2006 The Authors  
Journal compilation © 2006 Blackwell Publishing Ltd

[illegible]

100%

© 2007 The Authors  
Journal compilation © 2007 Blackwell Publishing Ltd



Flex DC: 6 3/4" x SD	78.06	Archer Filter
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56503HS



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Run 1: Remarks

All Data Presented is from tool memory and acquired while drilling.
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Depth is referenced to Driller's Depth.

Barite was present in the mud.

Run Objective: Drill curve and lateral to Well TD.
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Reason to POOH: Well TD.

Drill Interval: 1598 ft MD to 17687 ft MD.

Logged Interval: 1573 ft MD to 17663 ft MD

Logged Interval: 1573 ft MD to 17662 ft MD.

MWD Personnel: D. Goldfarb

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XEM650:SD36558H 41.33

S  
GAP650:GSBR0882  
XEM650DC:SD36558H  
S  
DPG:DDR073  
XHOP:XHOP1010  
XTX:HVTX089o2  
DYN:SOCD1379  
BAT:DOBA2512  
XGM:XGM0813  
DNI:SOCD1379

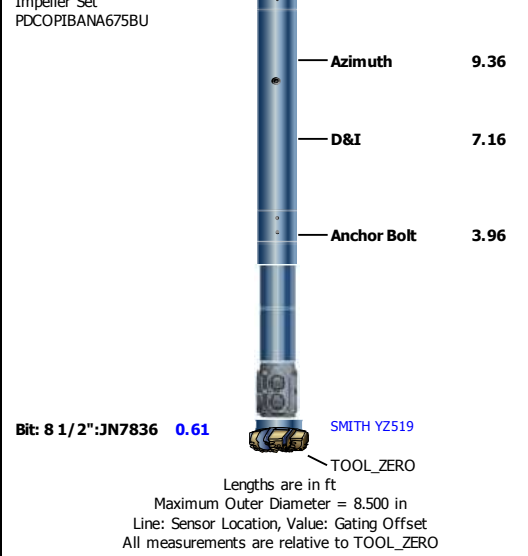
INT PRES	39.21
ANN PRES	39.06
TEMP	39.06

GR	24.74
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D&I	20.15
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PDCOPIBANA\_675 13.94

PD675CC:ENP051  
  
PDCU:ENP051  
Trenellen Gct



## Well Composite

### Software Version

Acquisition System	Version
Maxwell 2018 SP2	8.2.104493.3100

### Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 1	Drilling	Down	1601.00 ft	17686.92 ft	19-Oct-2019 2:29:14 PM	22-Oct-2019 9:12:13 PM	No

All depths are referenced to toolstring zero

### Log

Company:Great Western Operating Company LLC

Well:Schneider HD 11-142HN

Well Composite:S194

Description: Extreme Gamma Ray 1 RT Format: Log ( Extreme Gamma Ray 1 RT\_6 ) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured  
Depth Creation Date: 25-Oct-2019 10:24:07

GR\_SPULSE\_BHC - Gamma Ray Extreme[1] RM

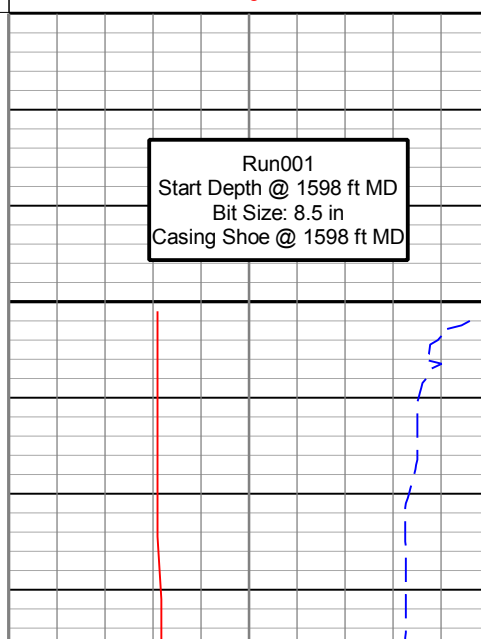
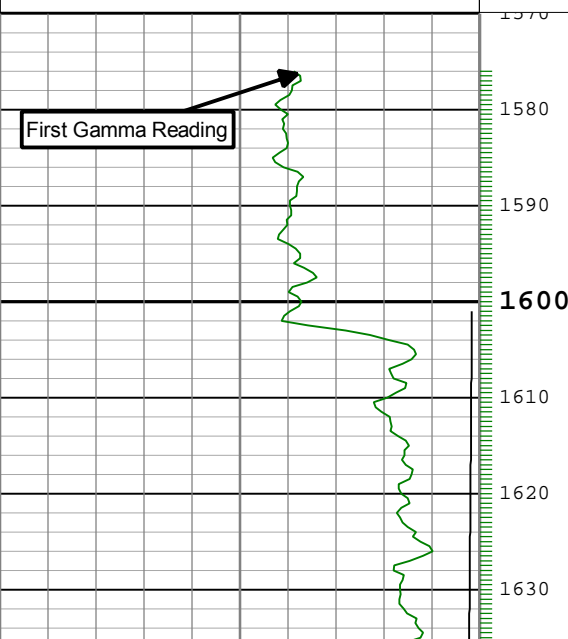
True Vertical Depth (TVD) RT		
7500	ft	1500
Gamma Ray (GR_SPULSE_BHC) Extreme[1] RM		
0	gAPI	150

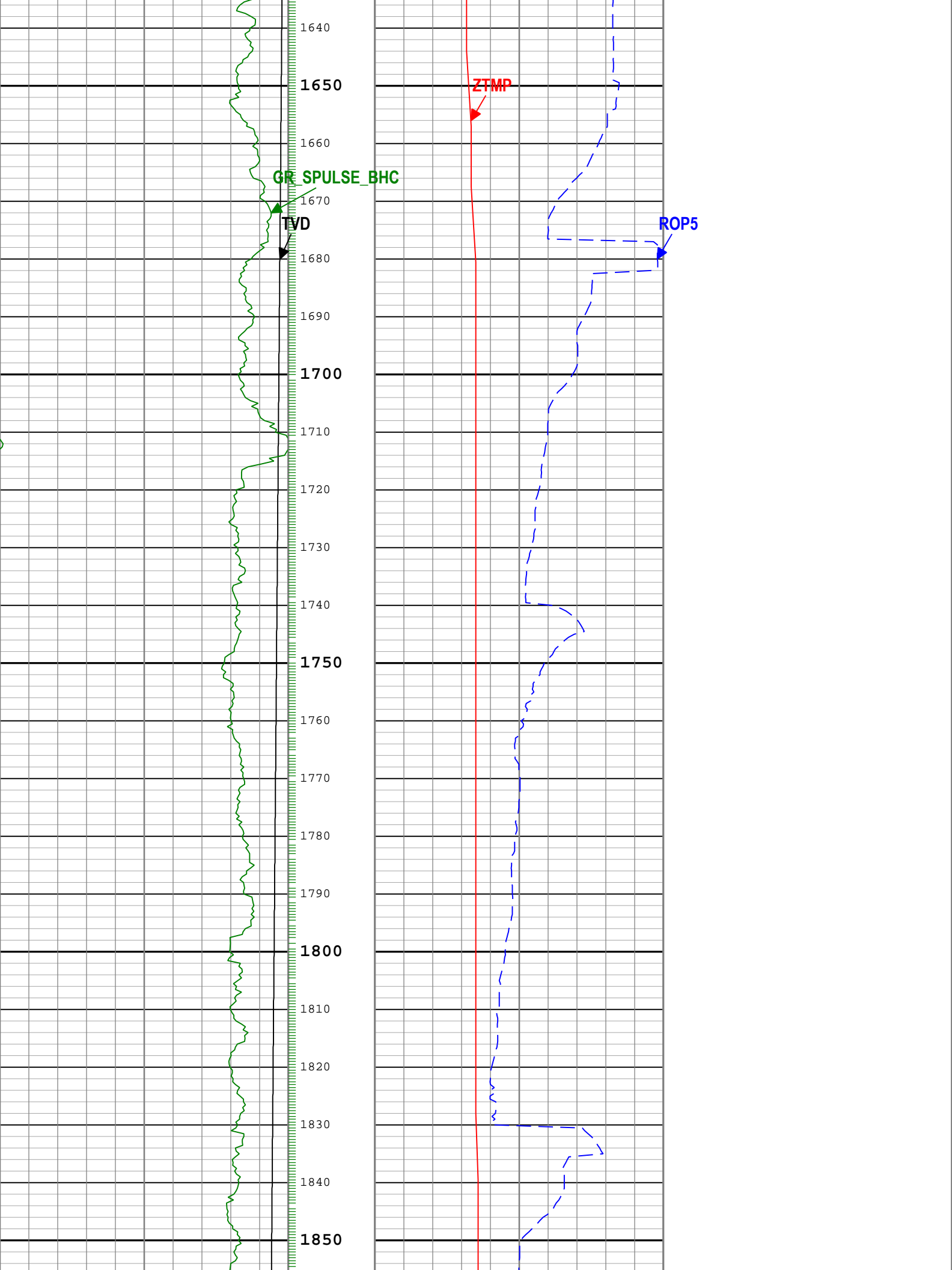
Rate of penetration averaged over the last 5 ft  
(1.5 m) (ROP5) RT

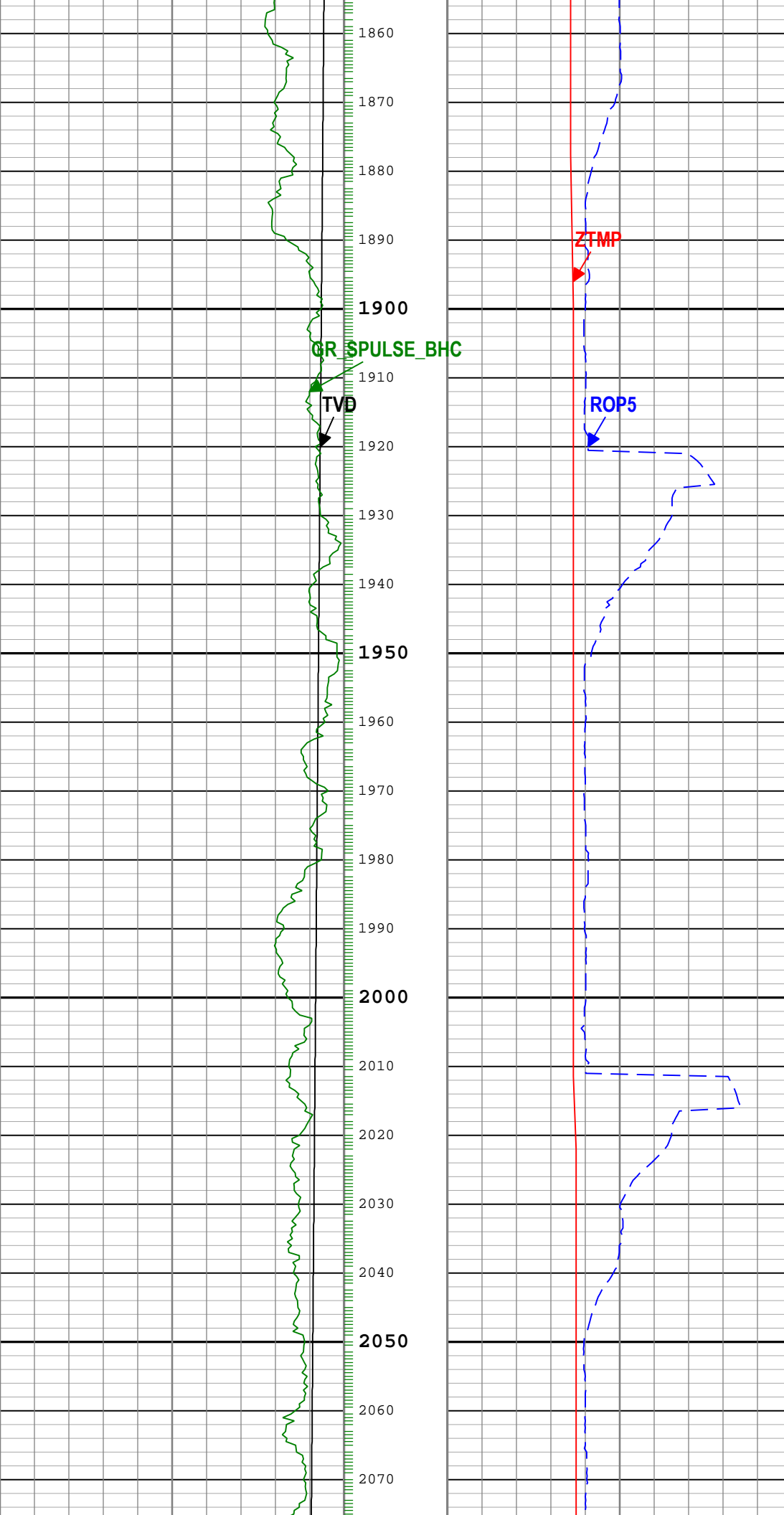
1000 ft/h 0

Cartridge Temperature (ZTMP) Extreme[1] RT

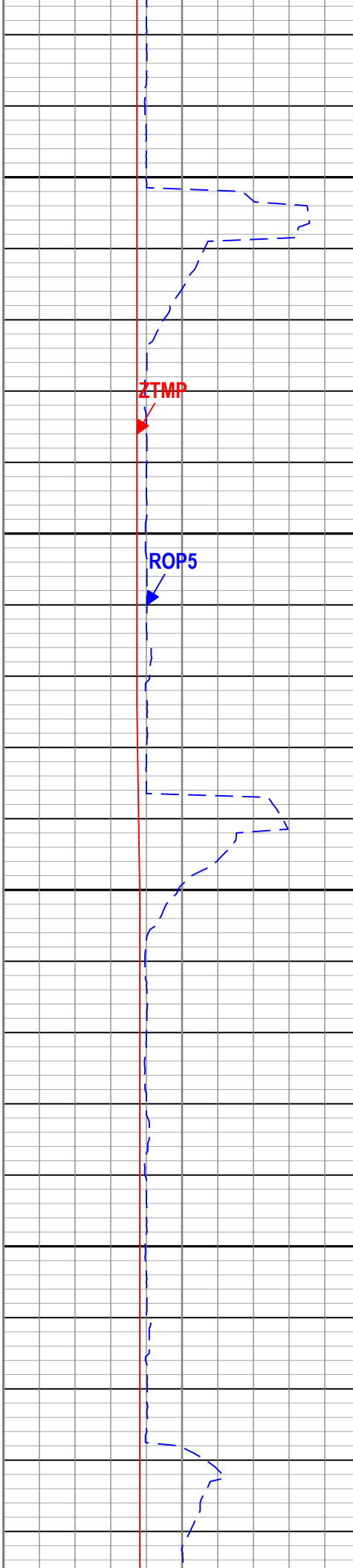
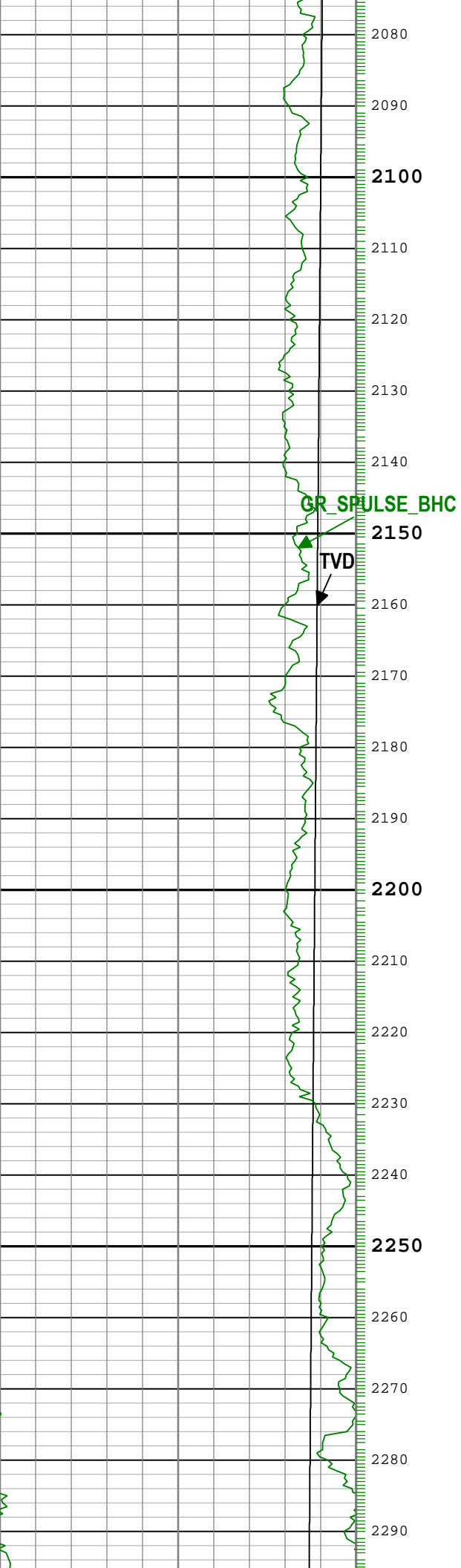
0 degF 300

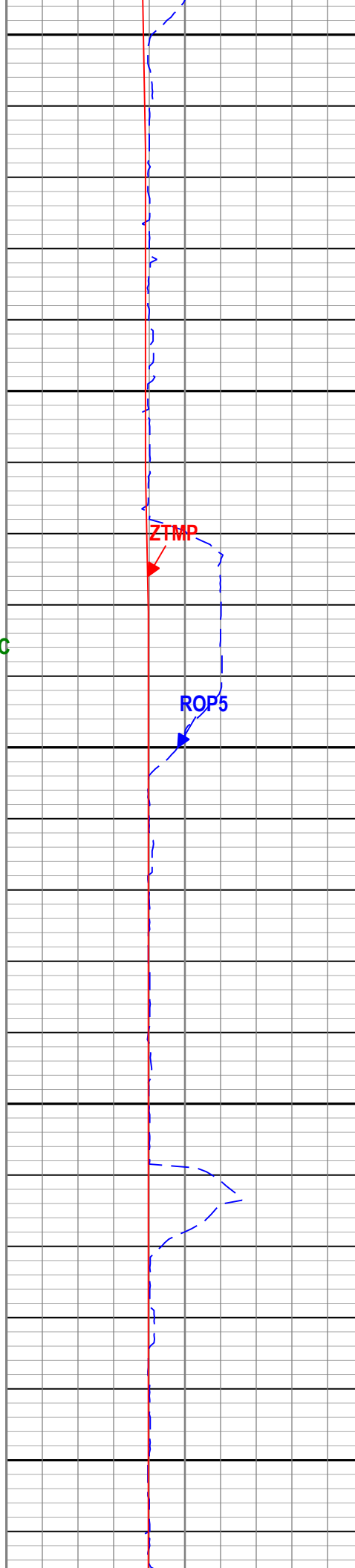
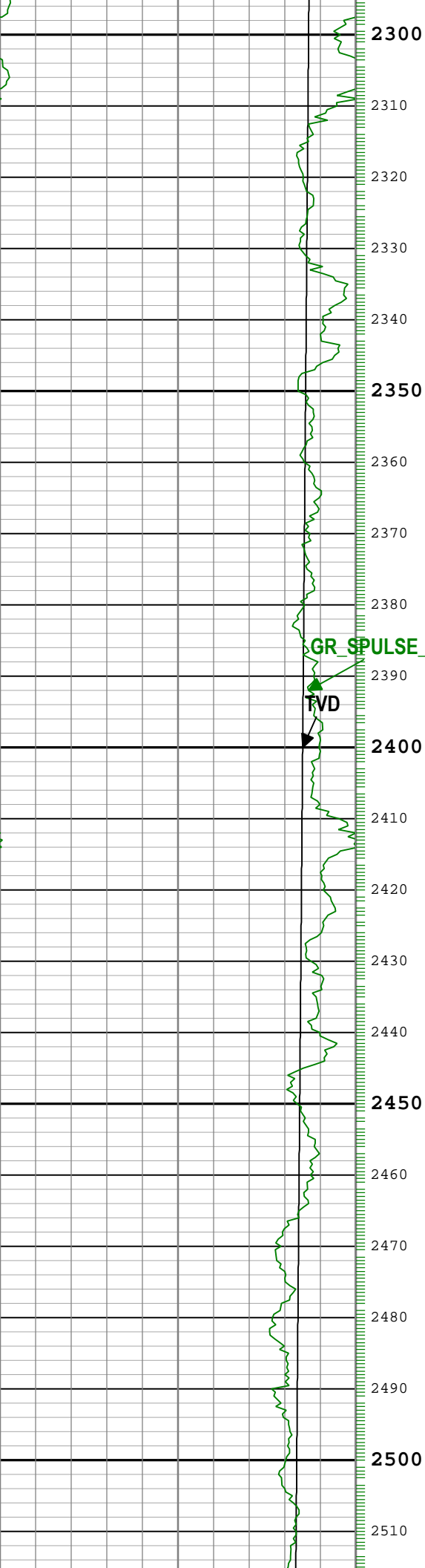


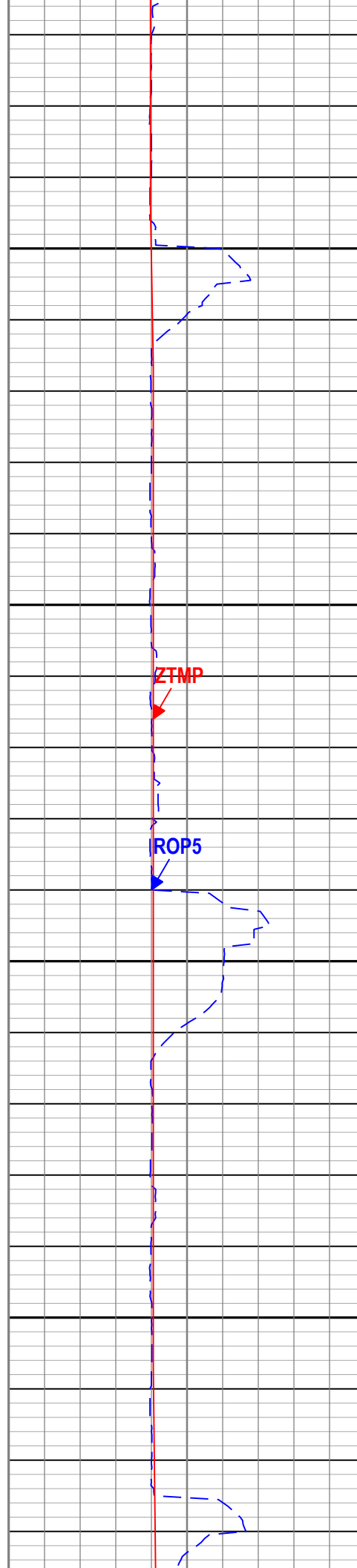
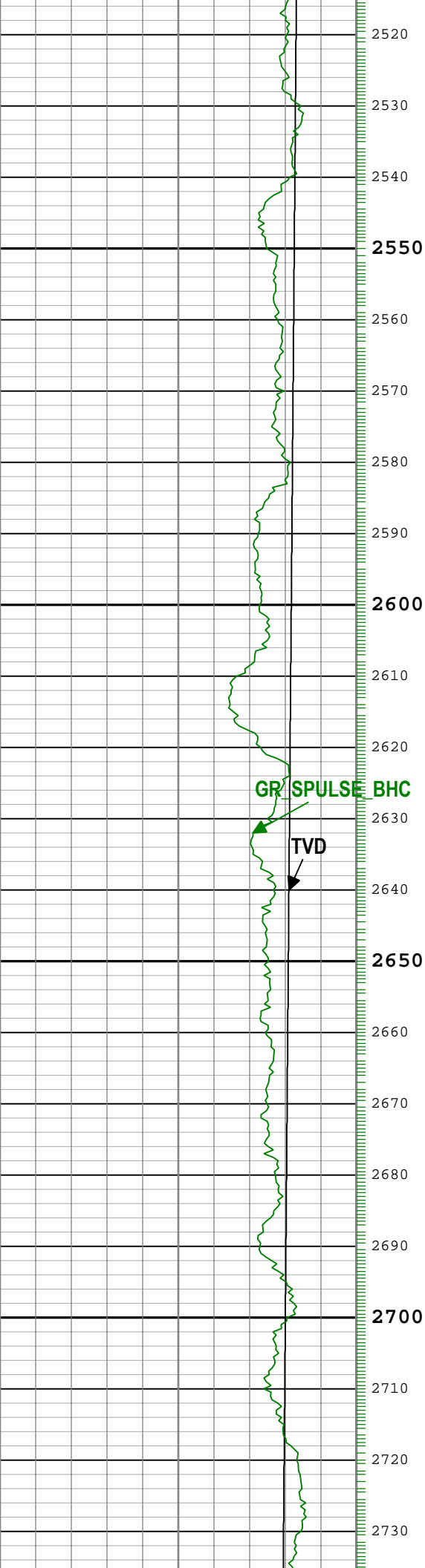


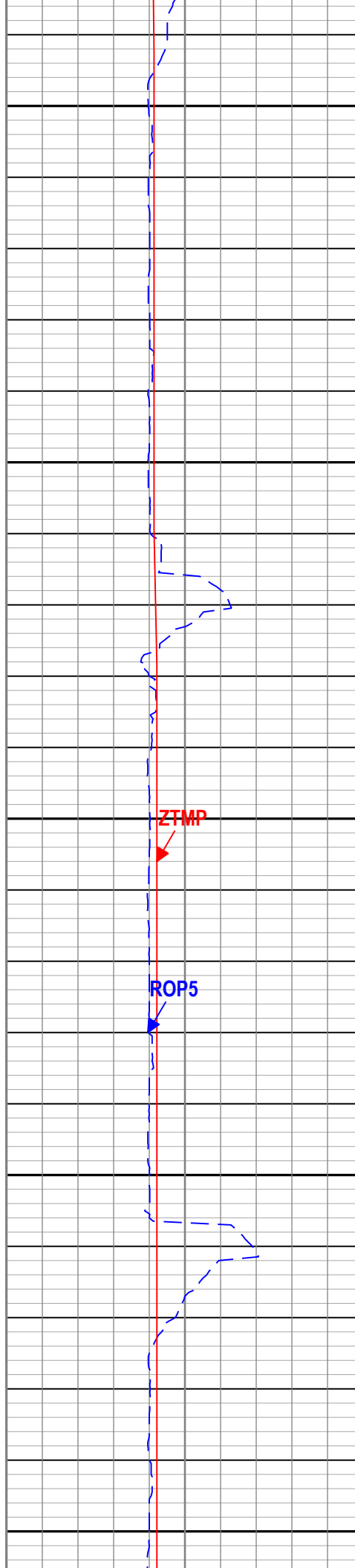
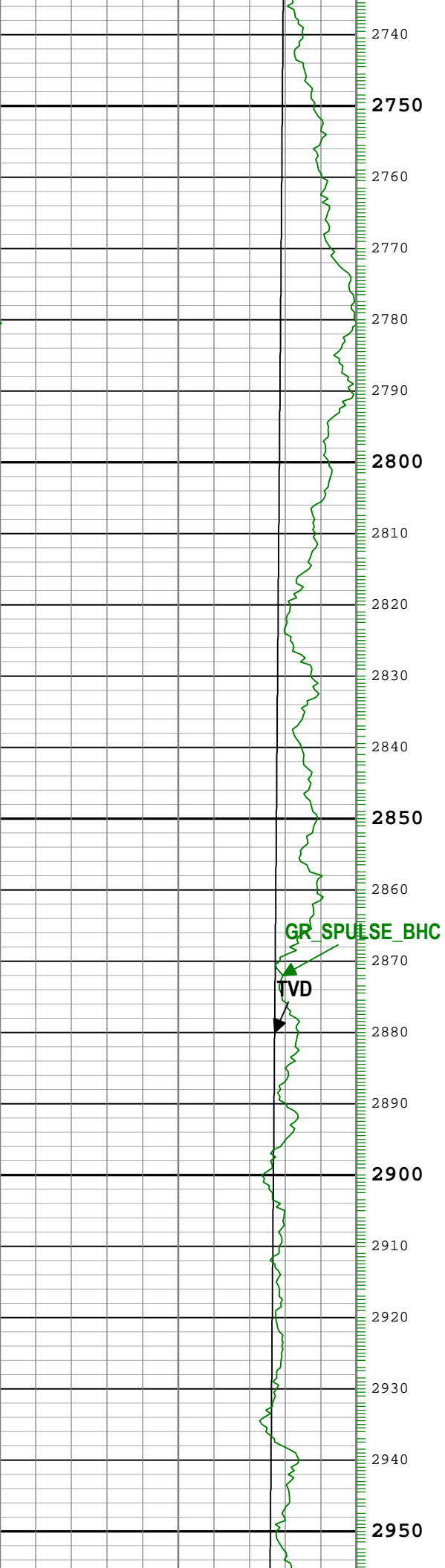


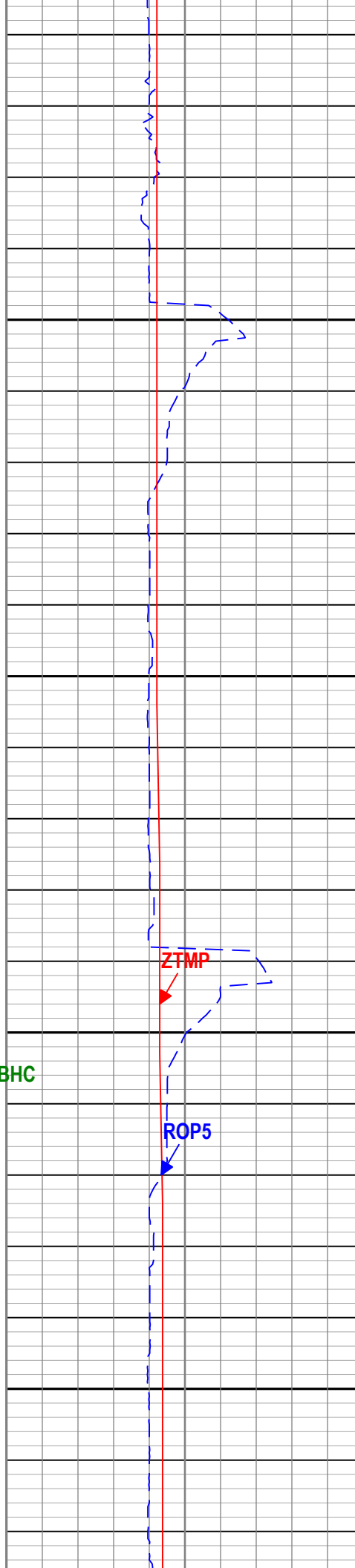
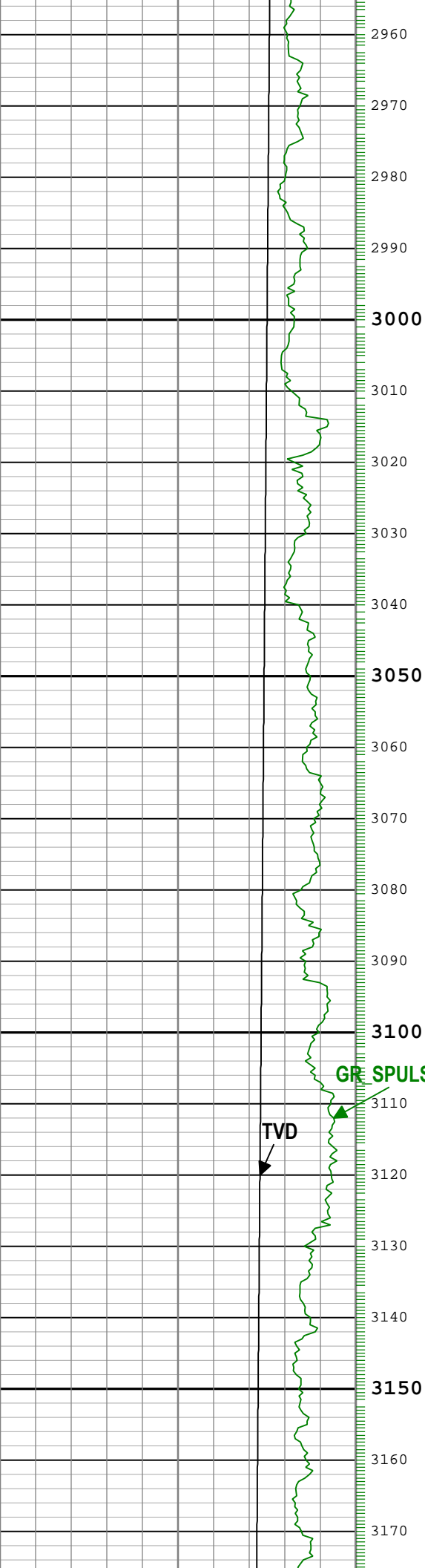


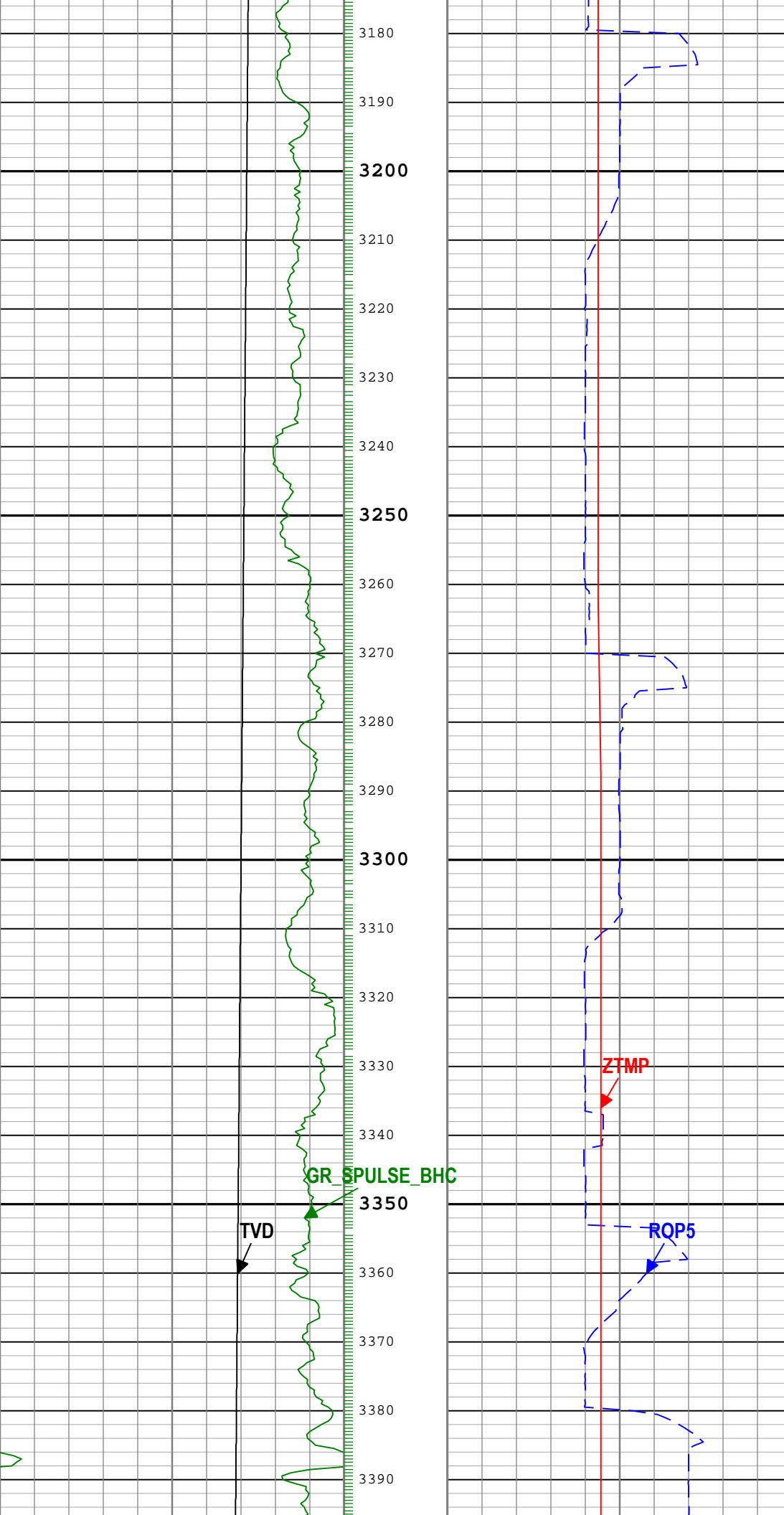


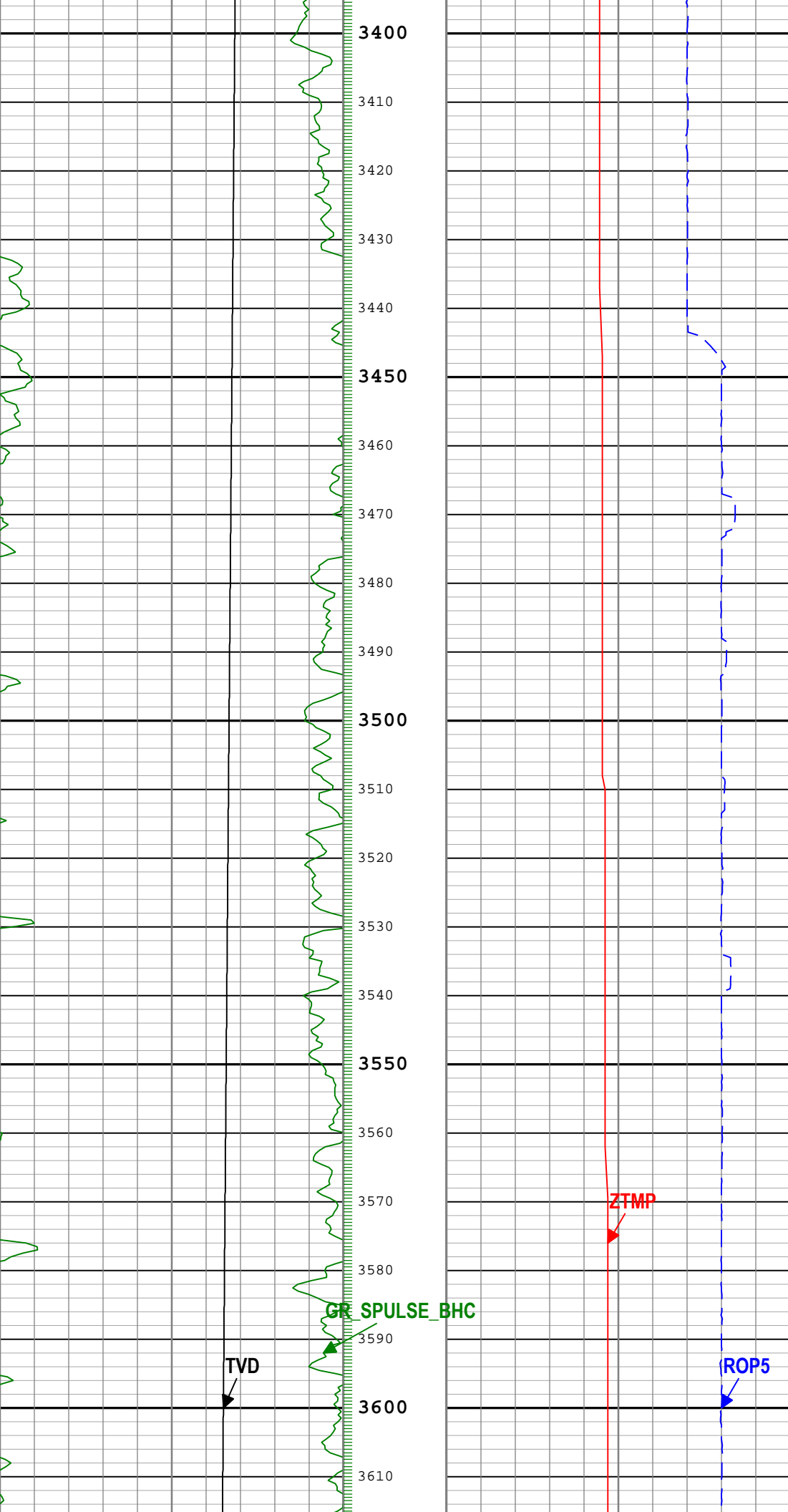


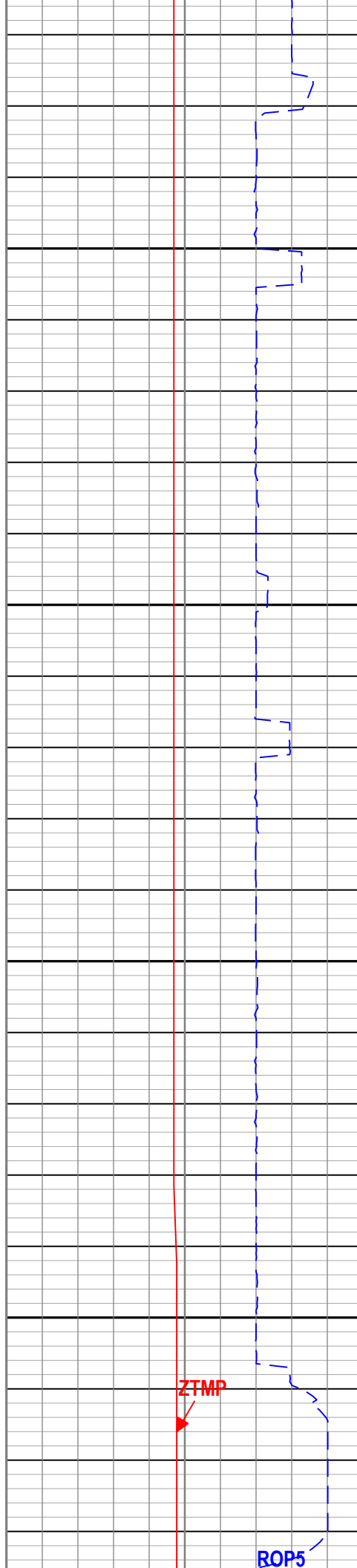
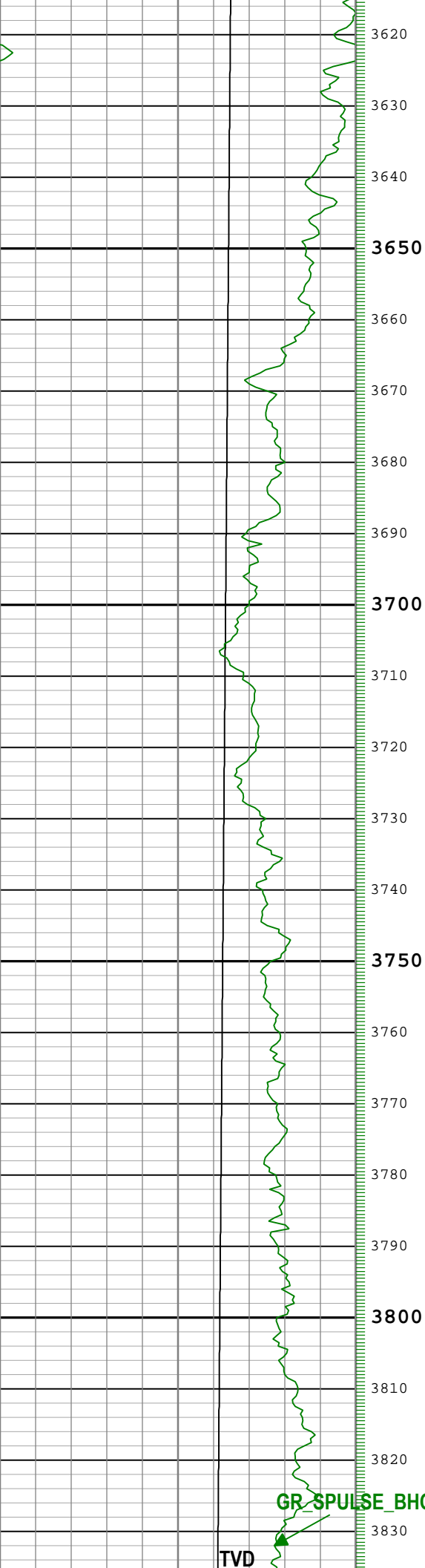




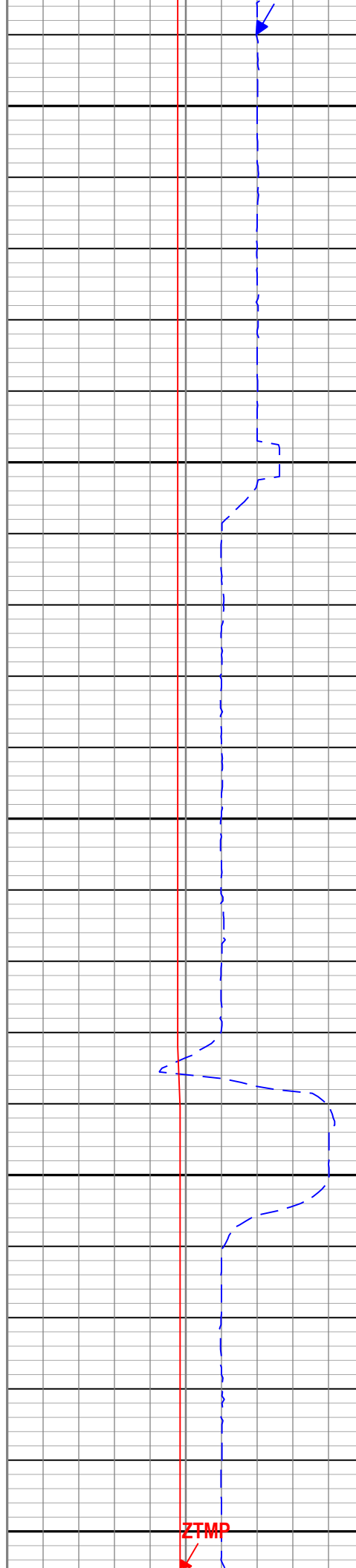
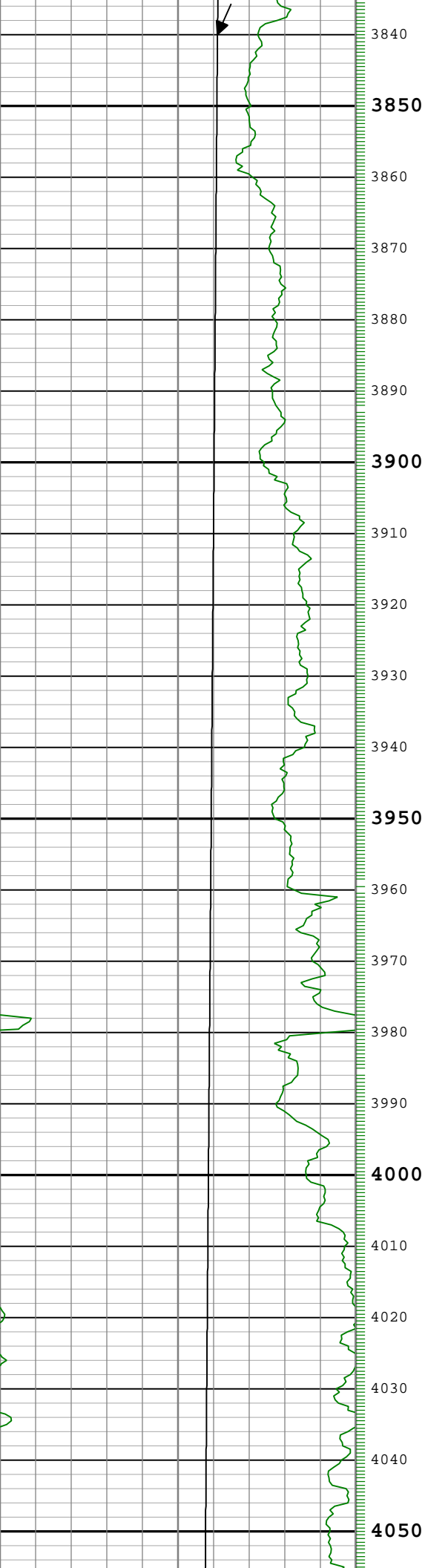




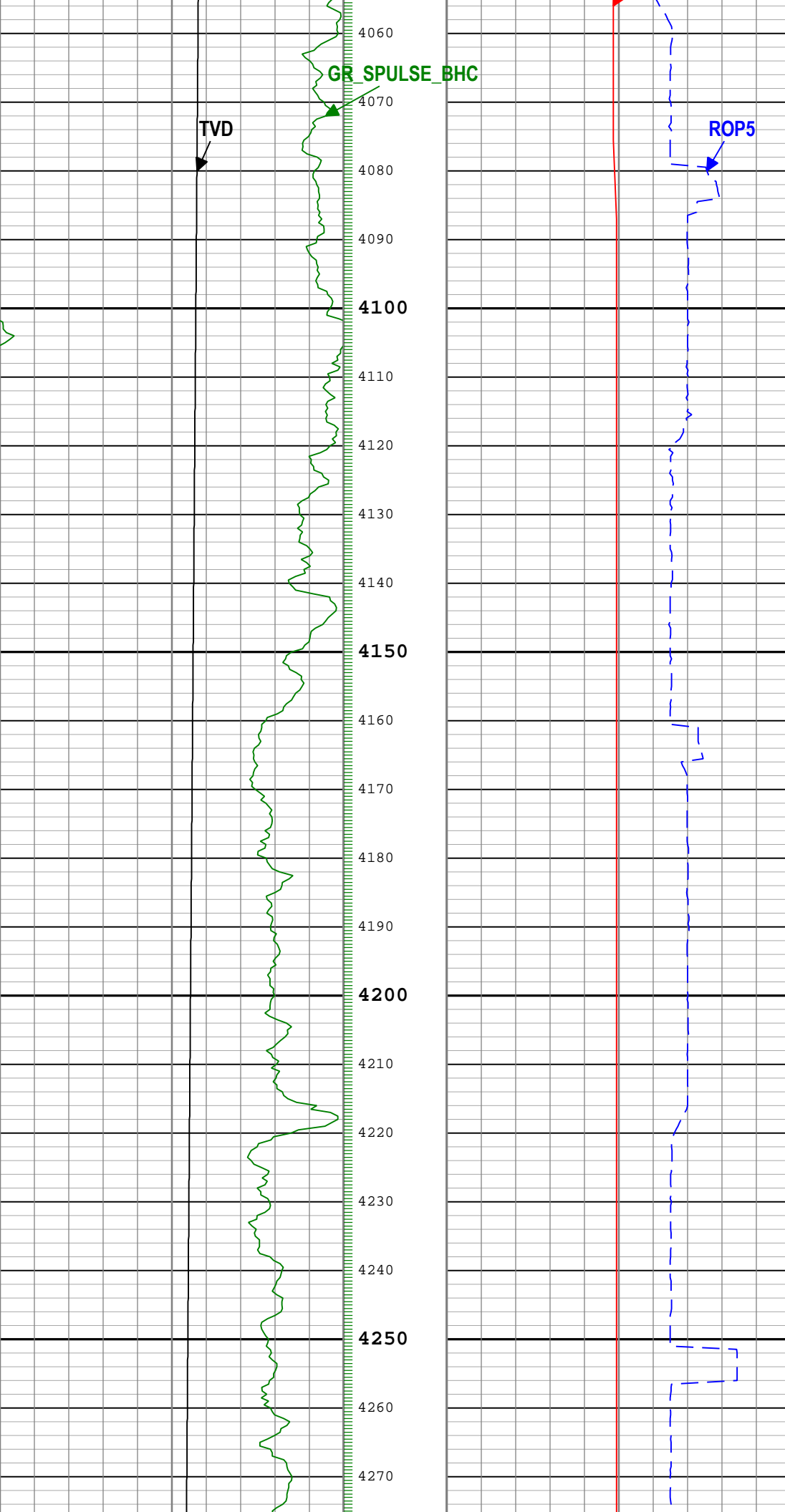


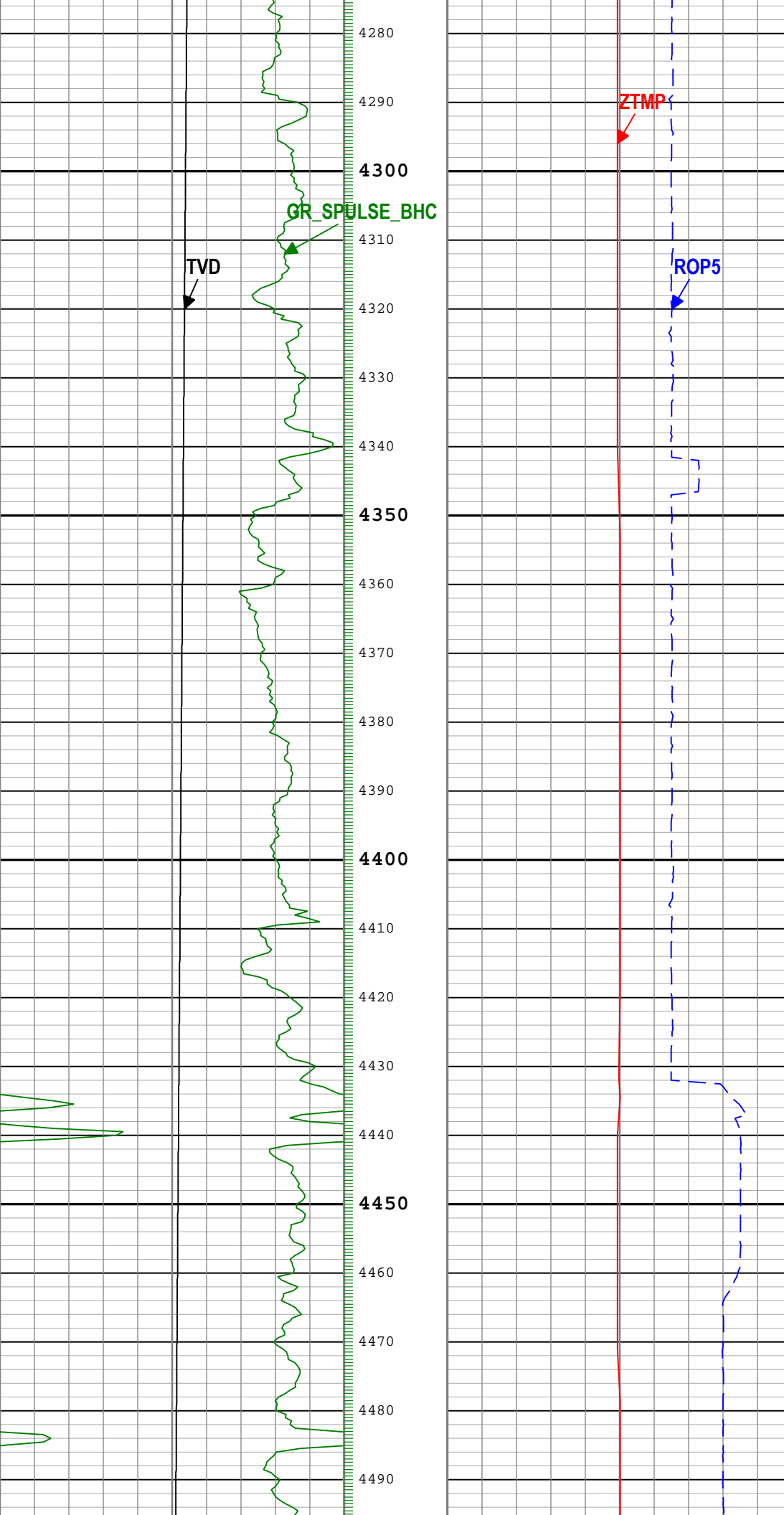


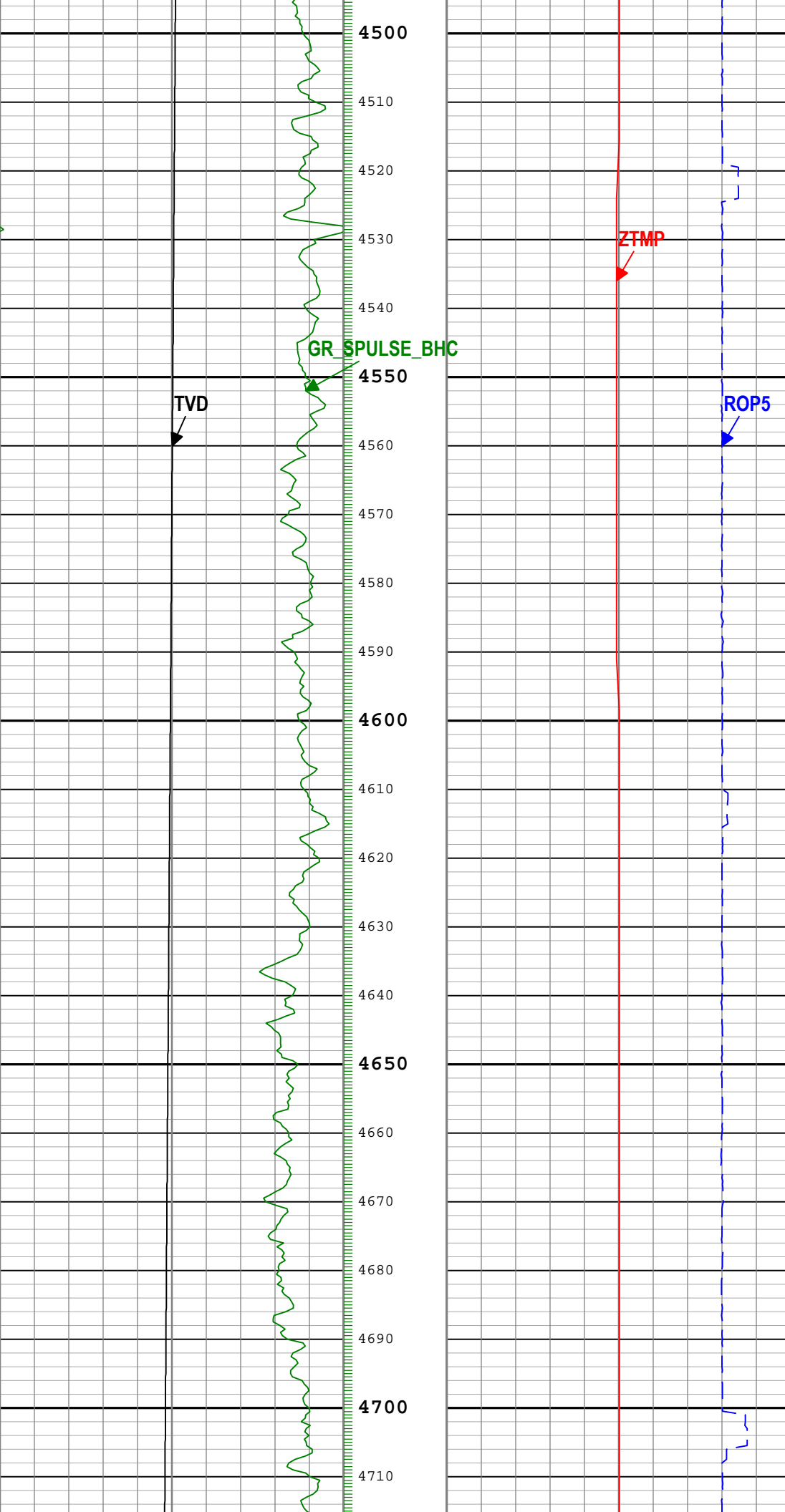


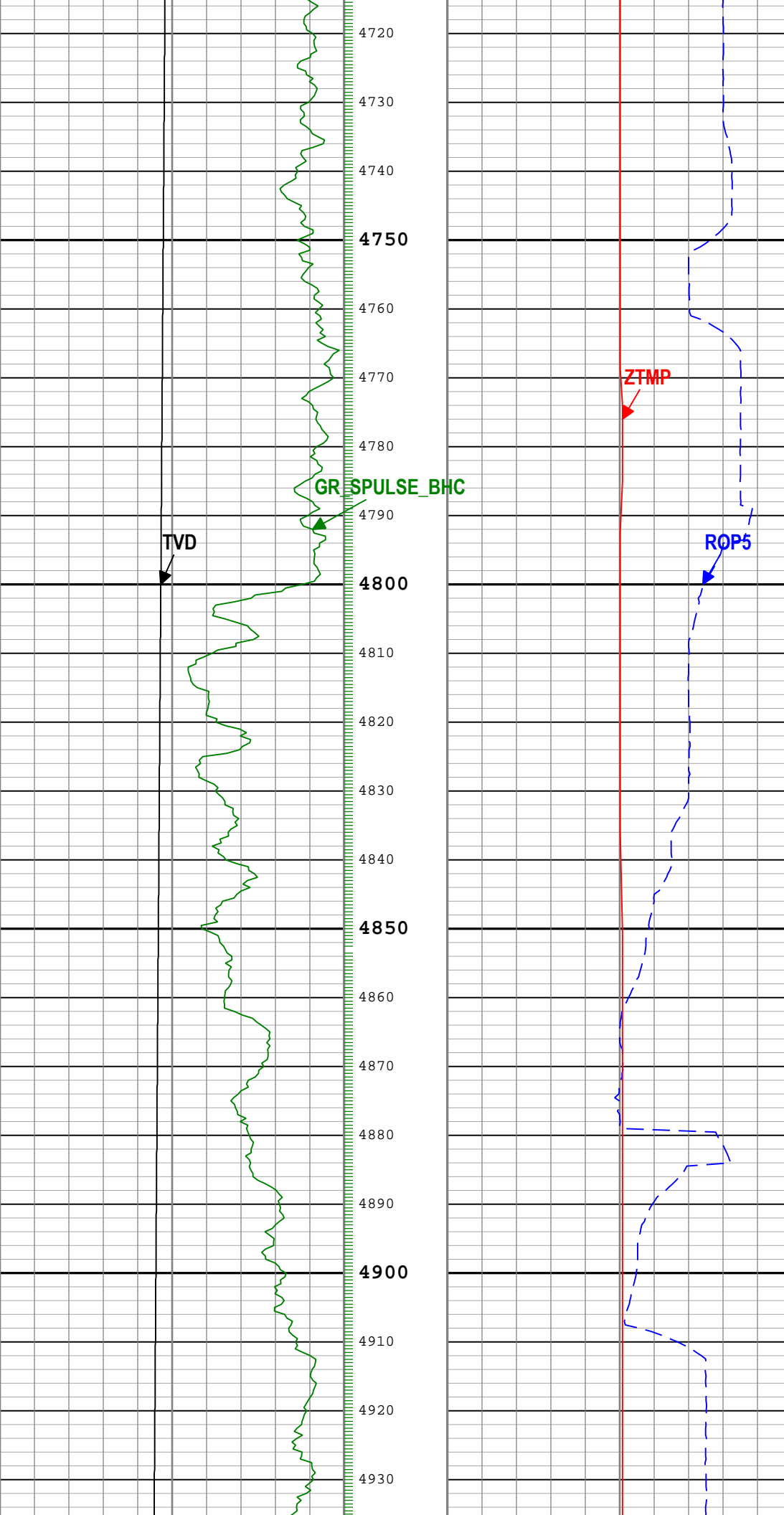


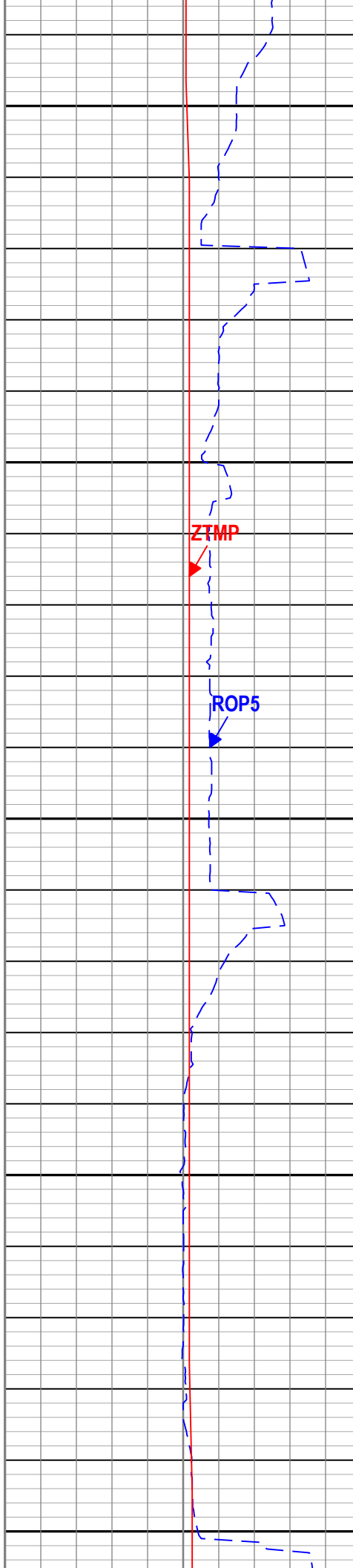
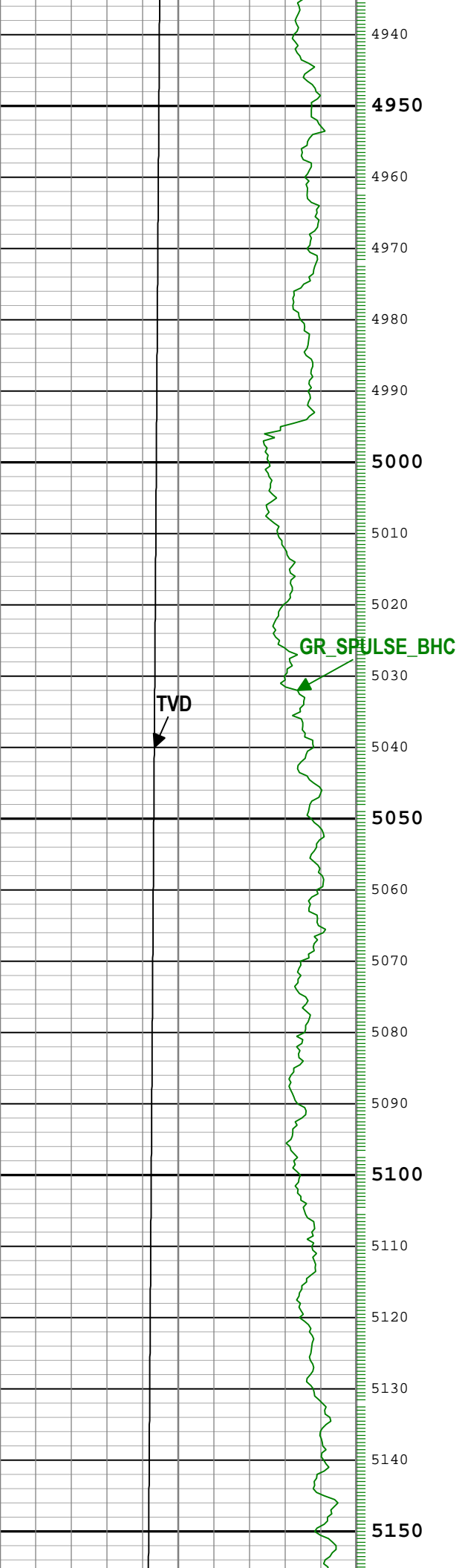
ZTMP

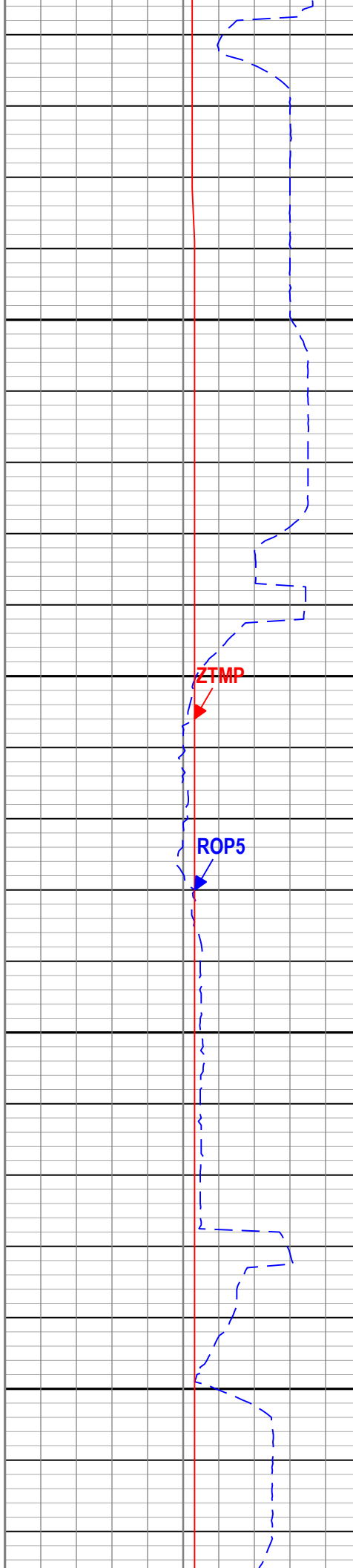
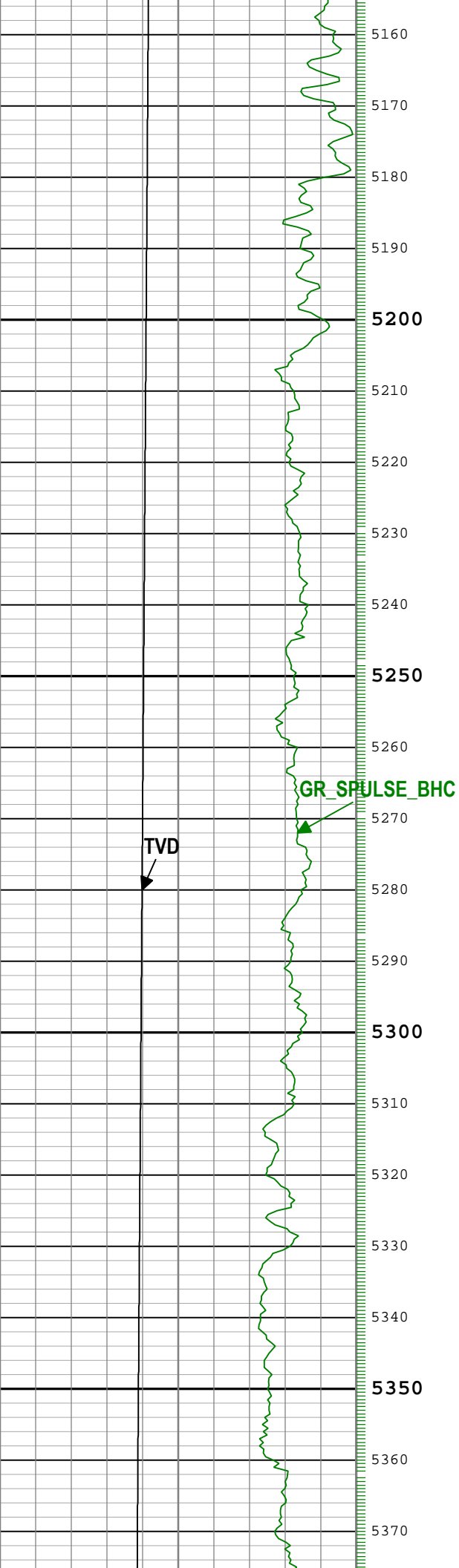


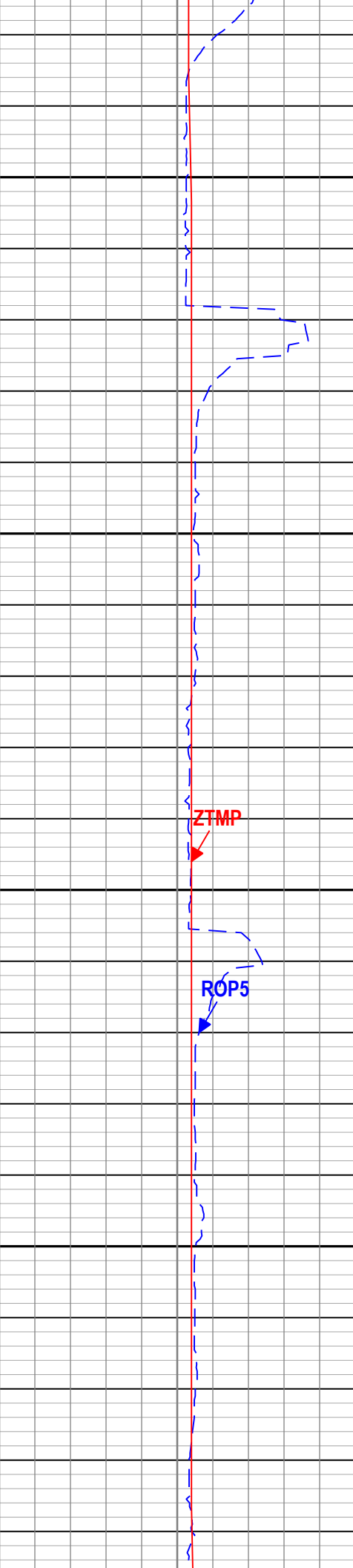
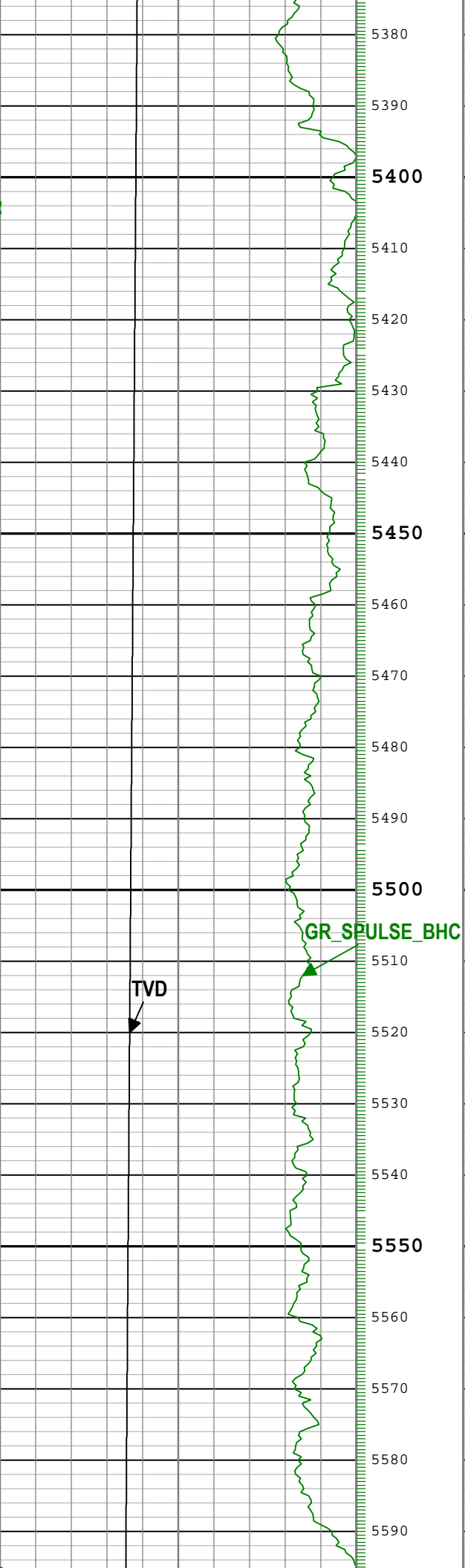




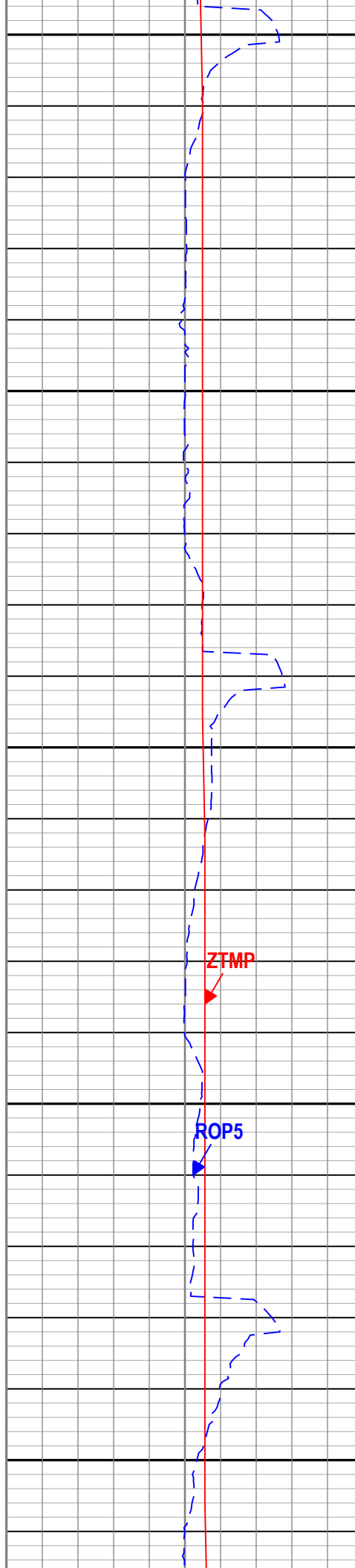
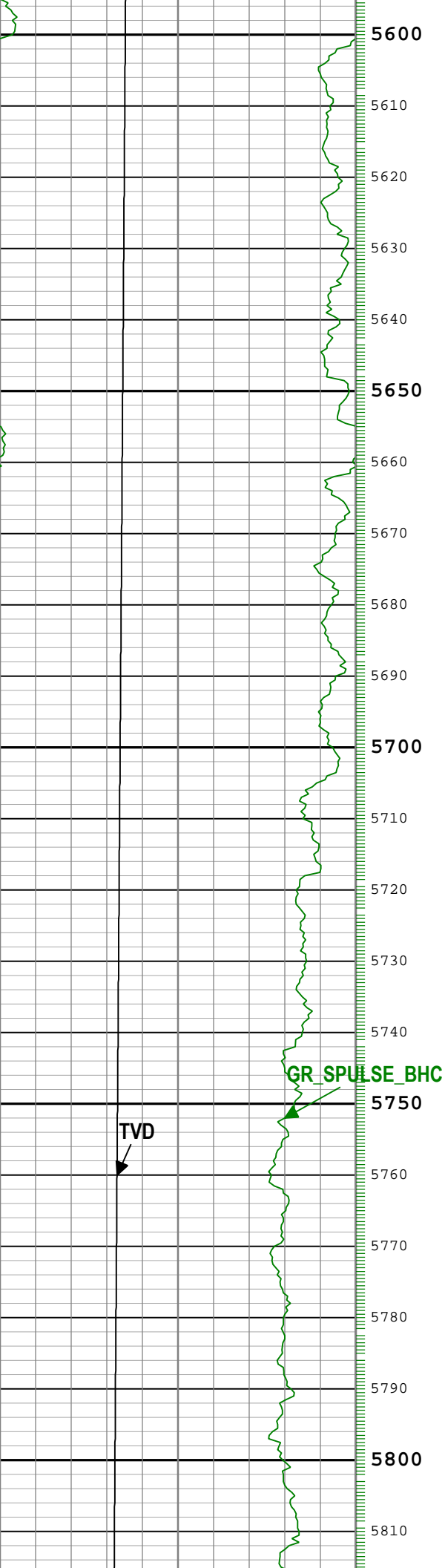


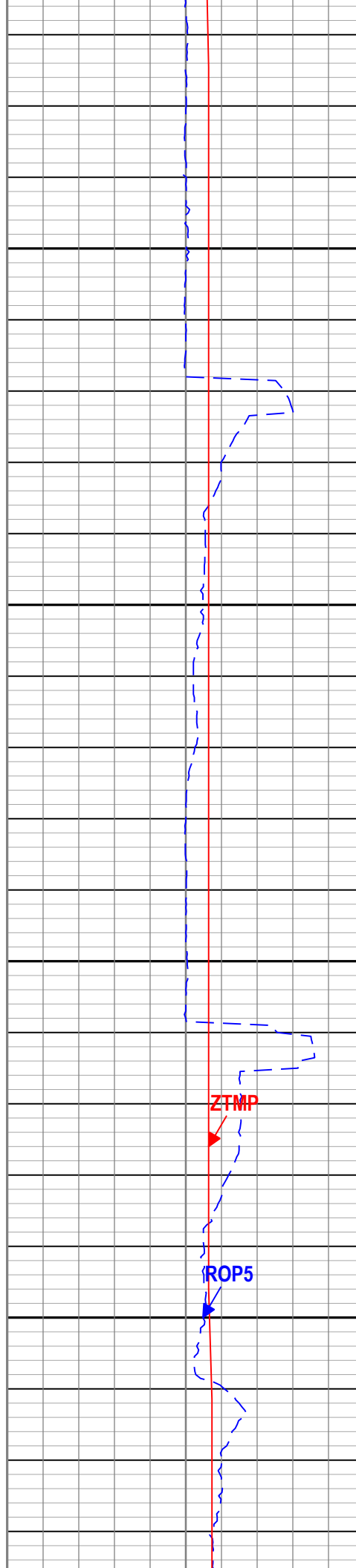
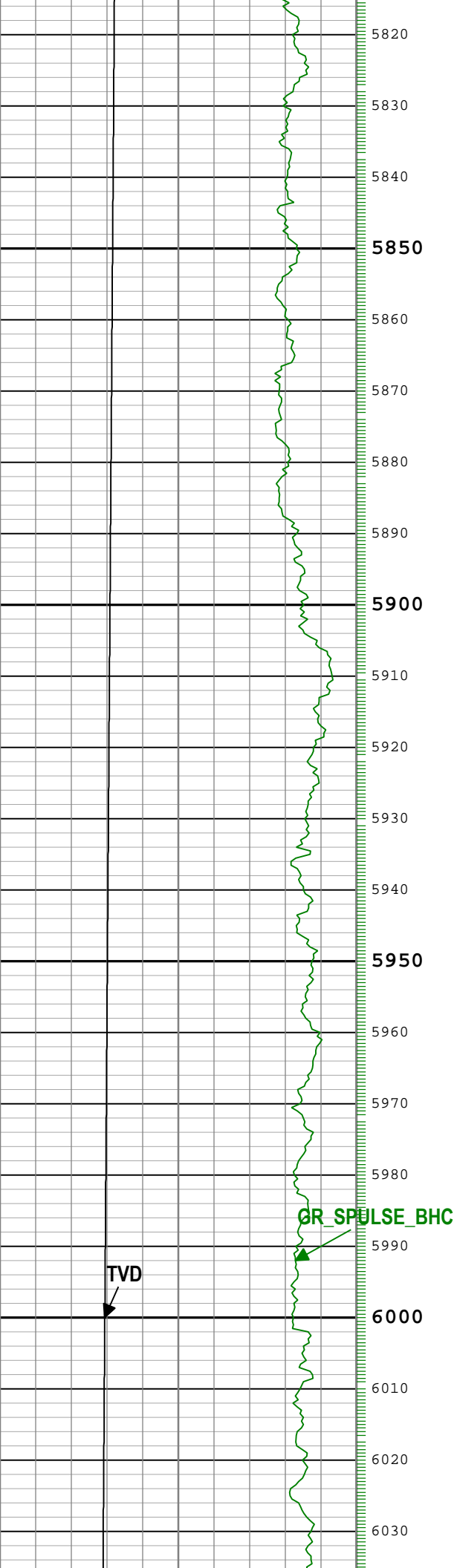


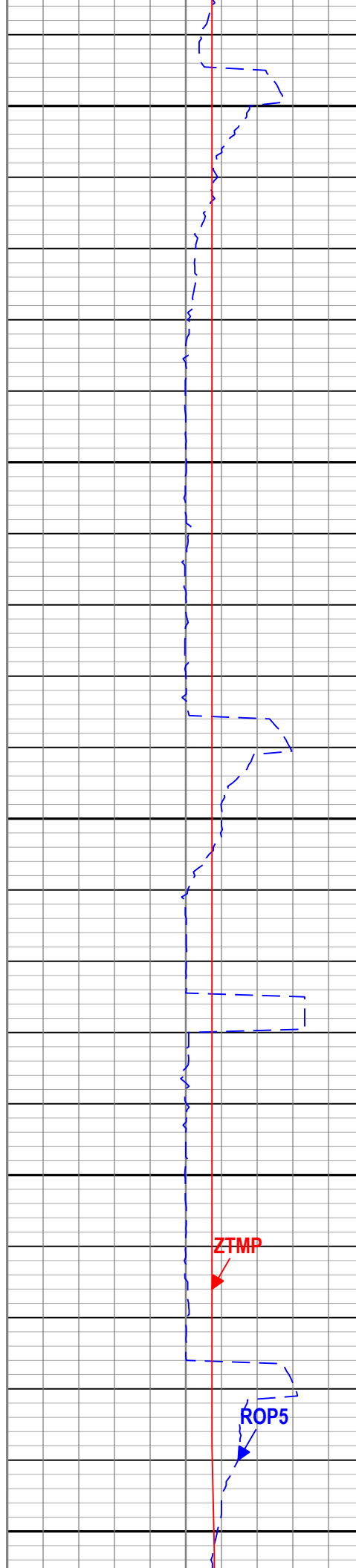
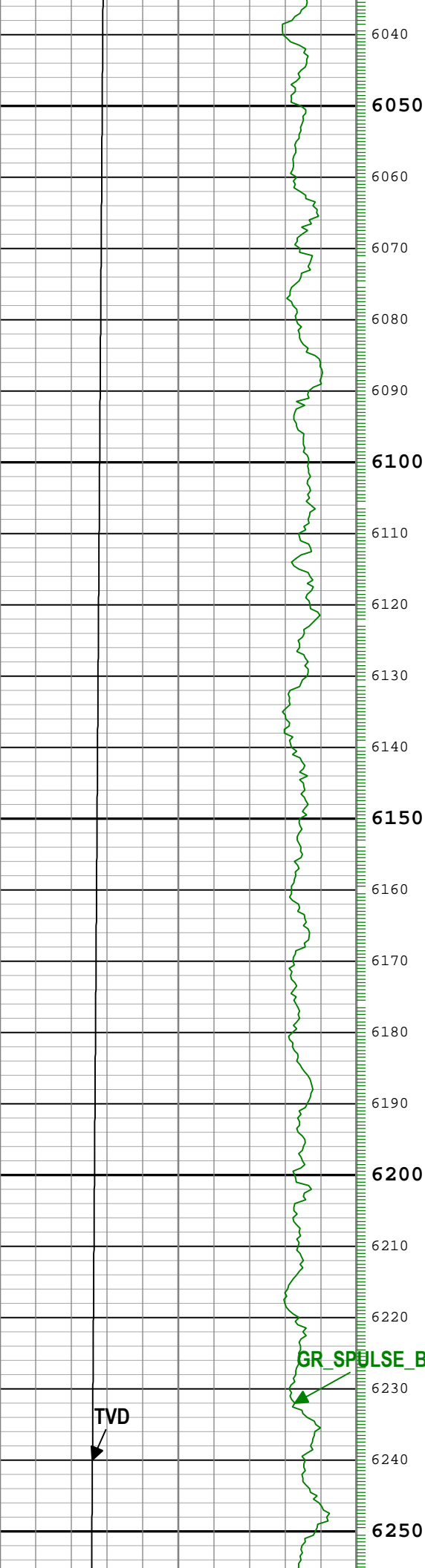


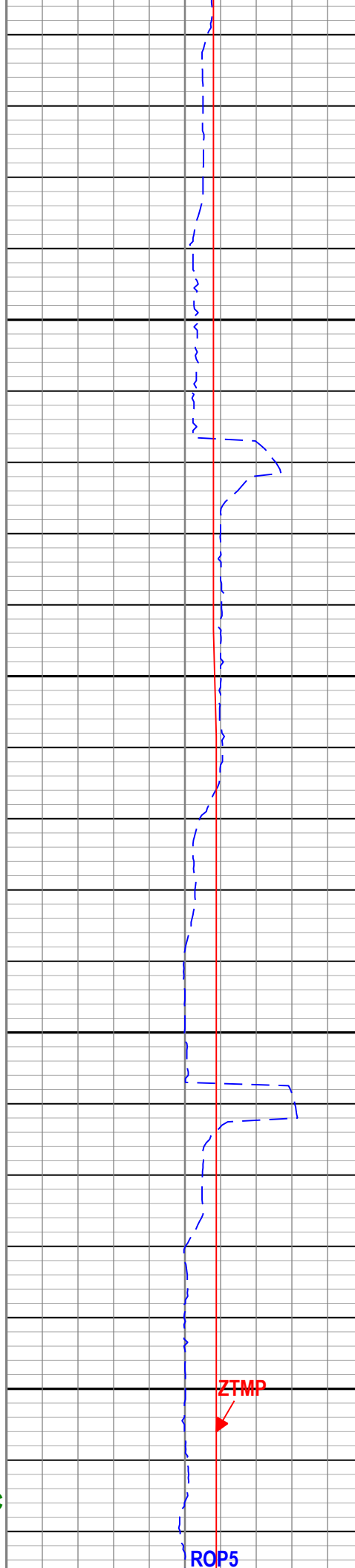
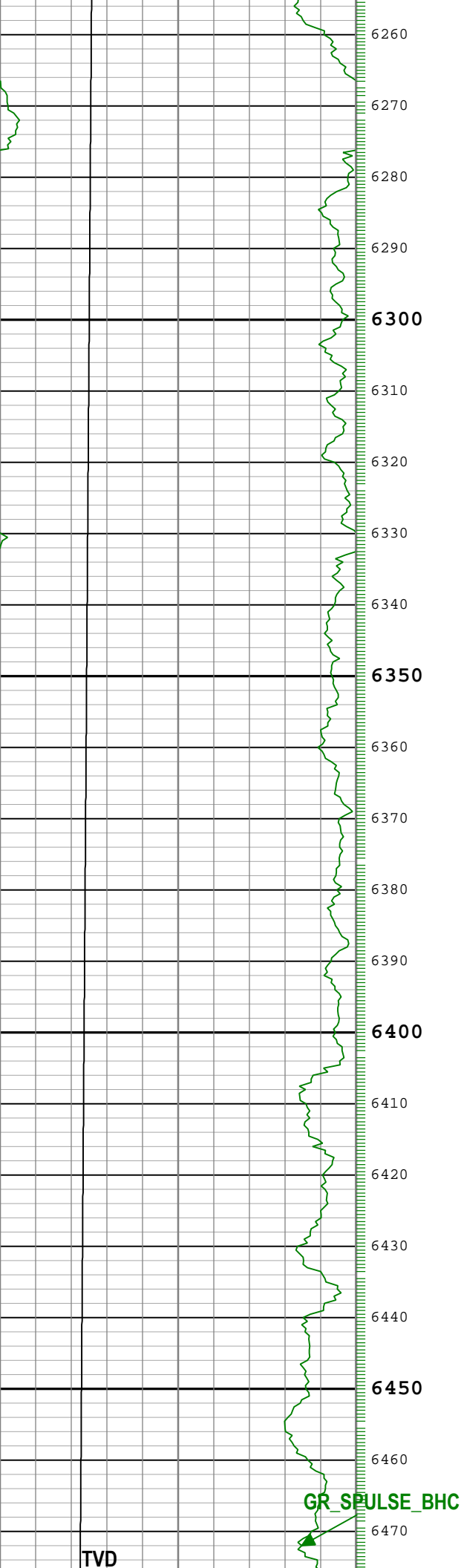


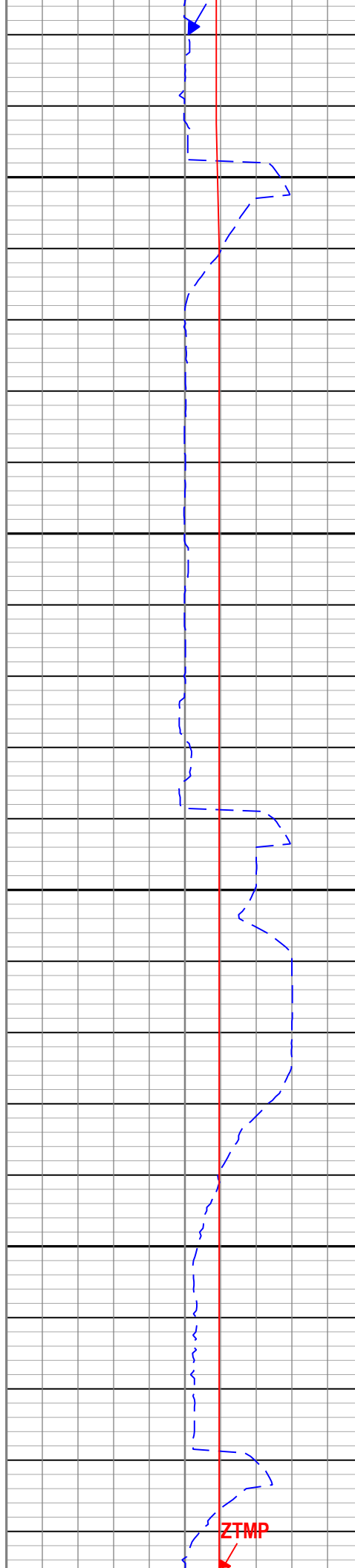
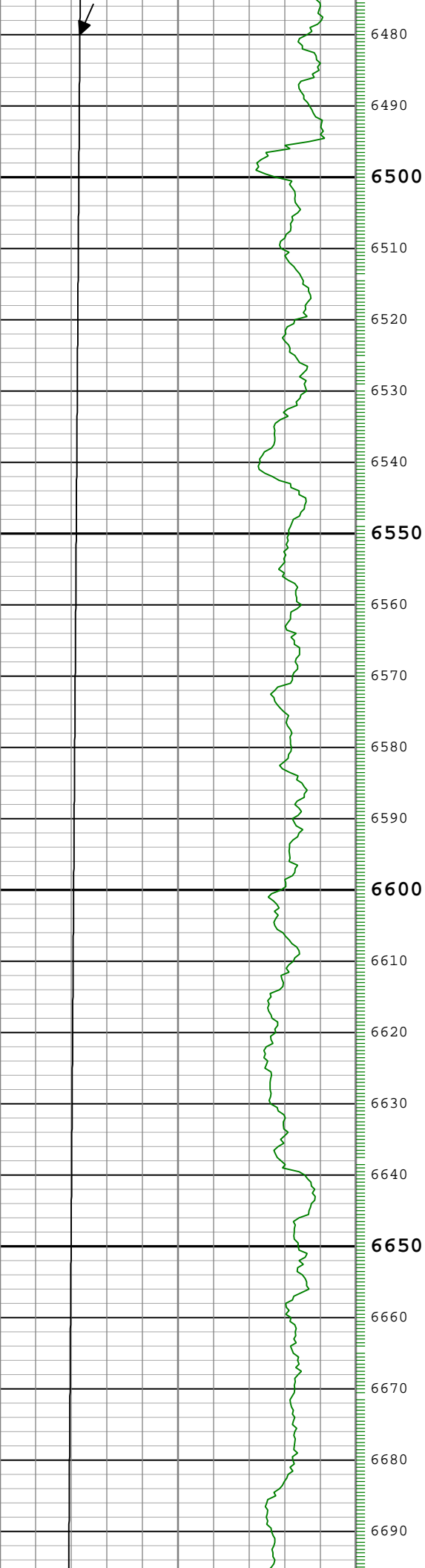


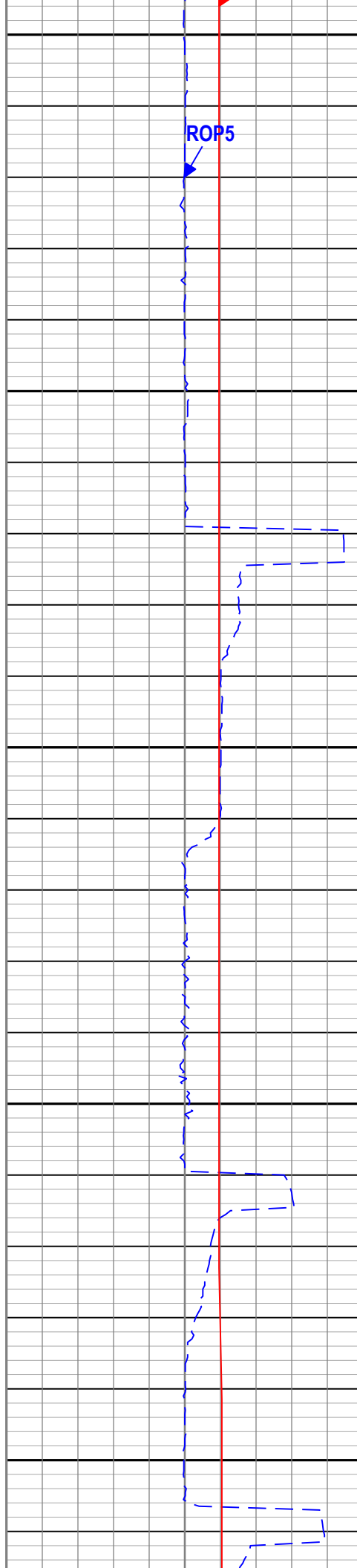
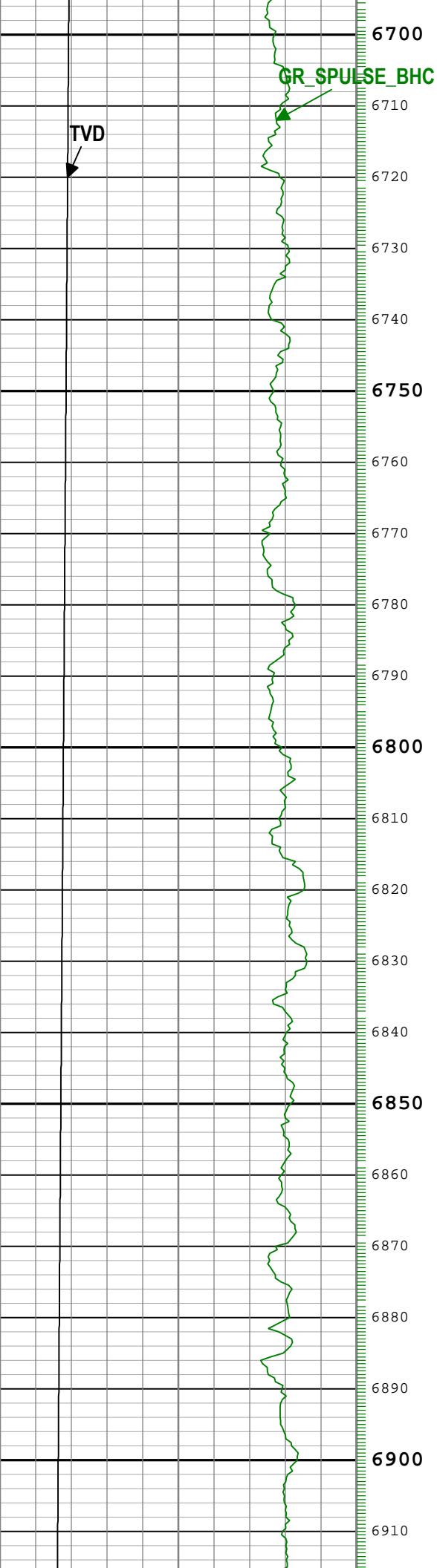


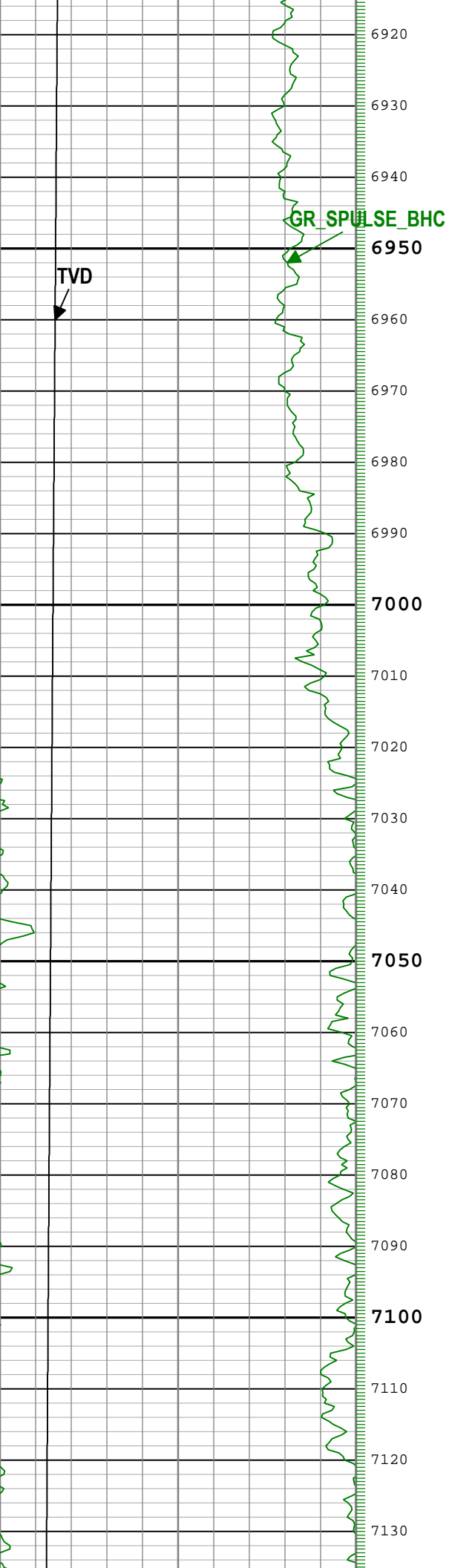


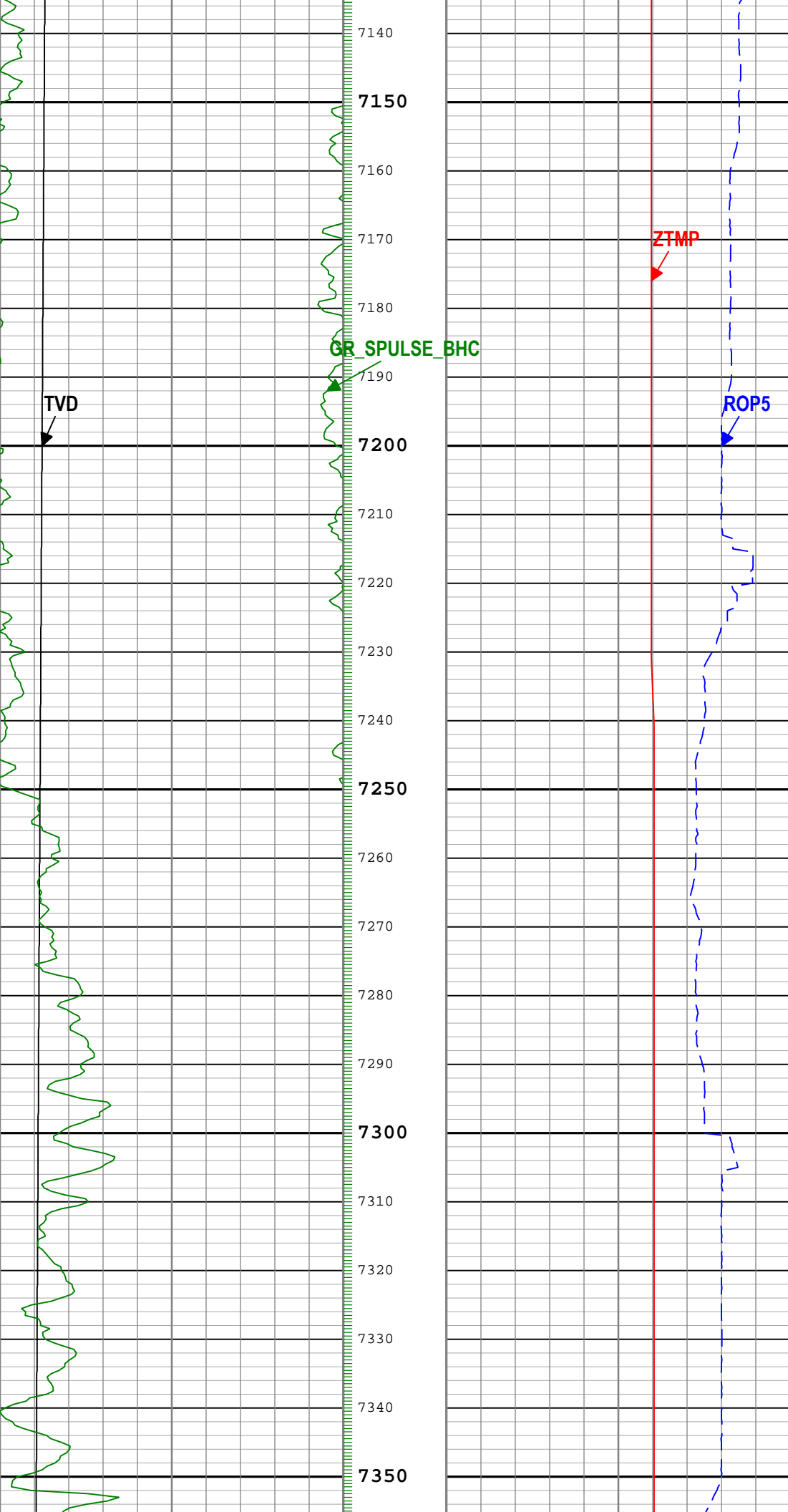




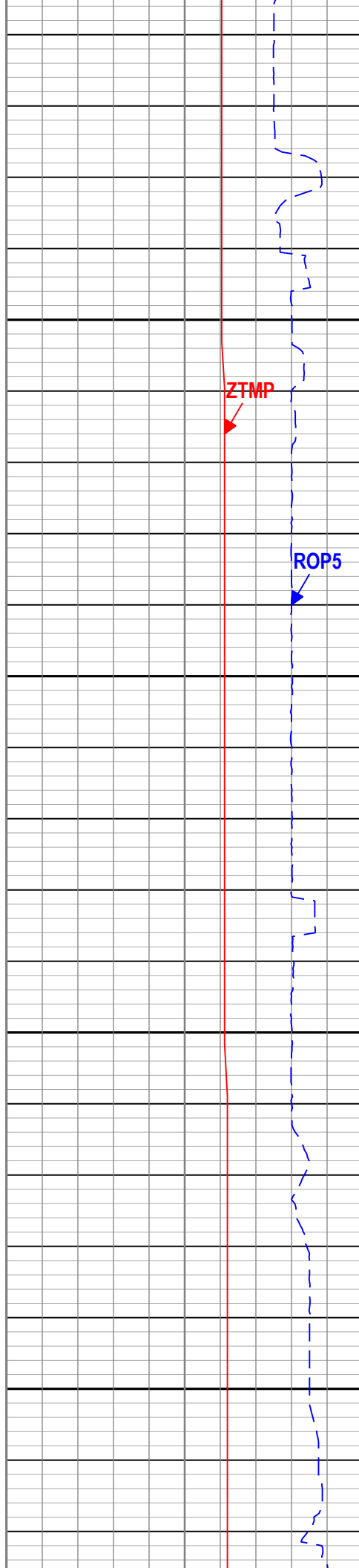
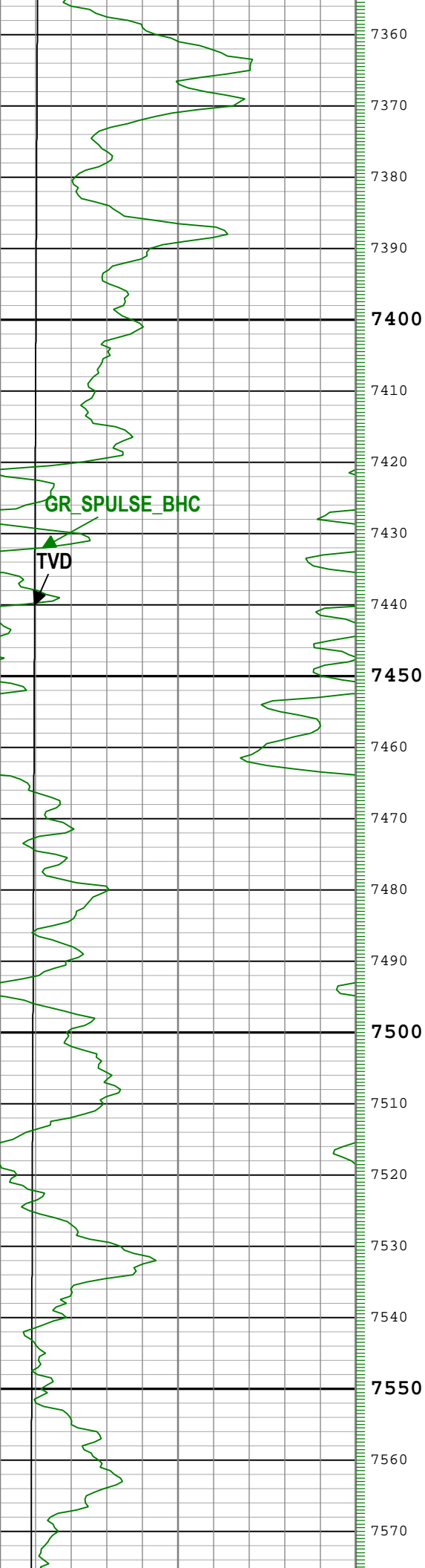


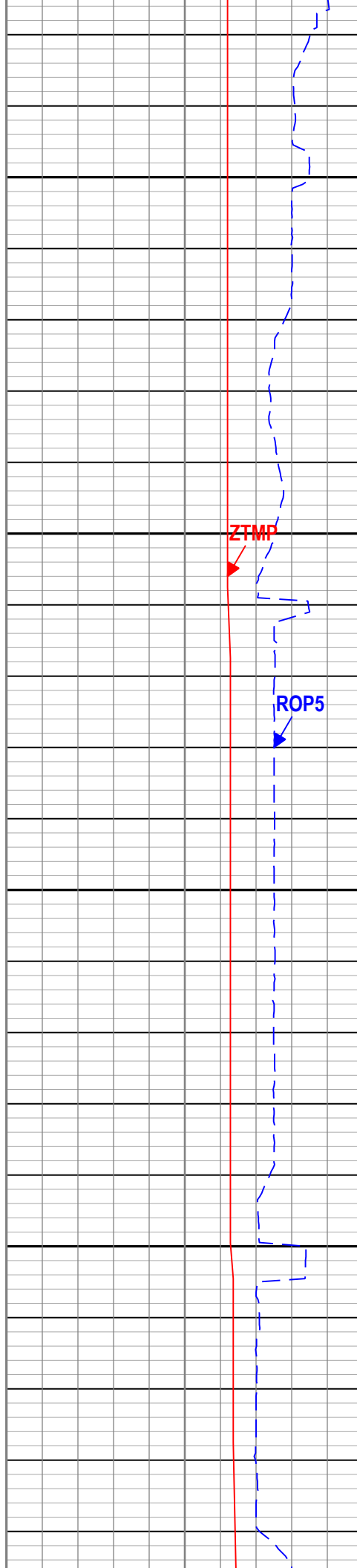
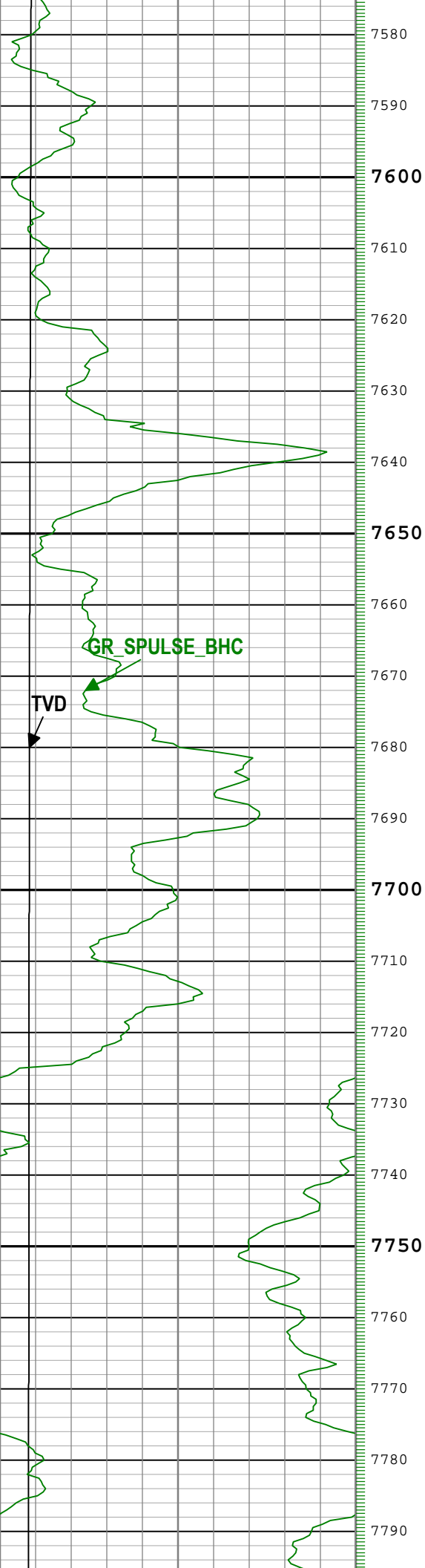


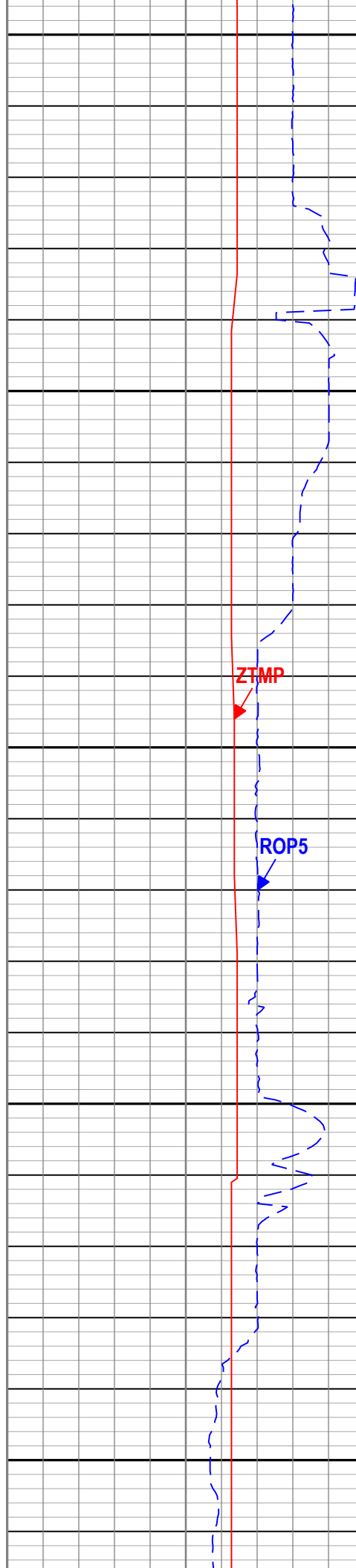
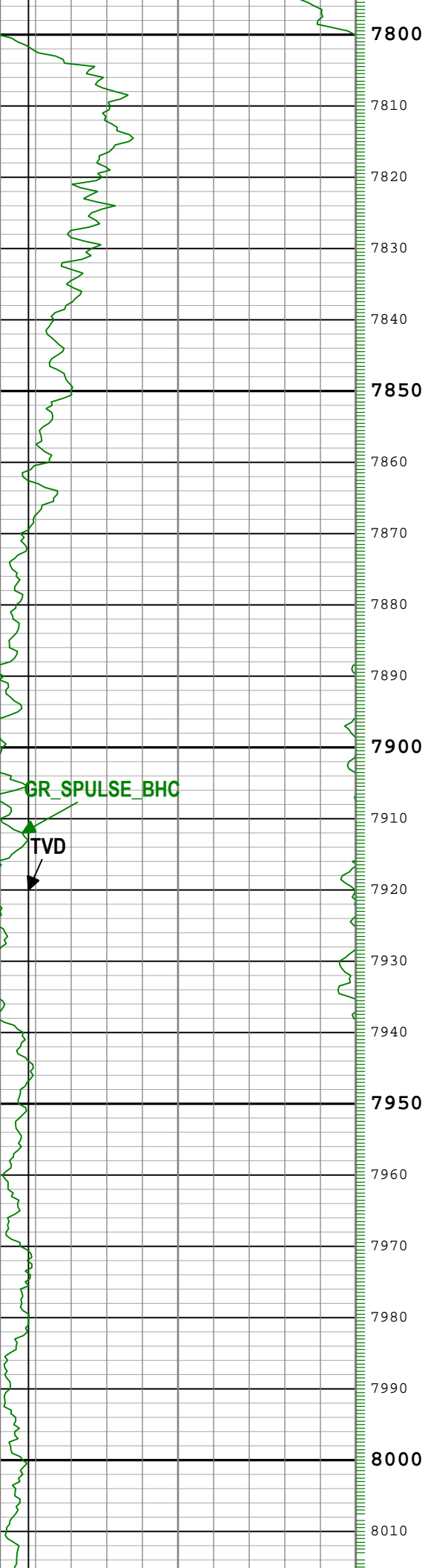


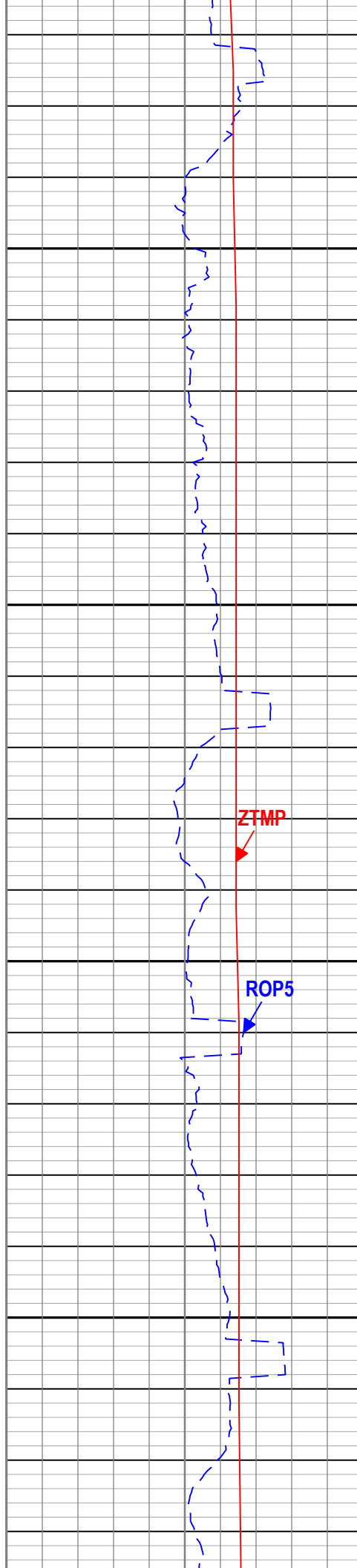
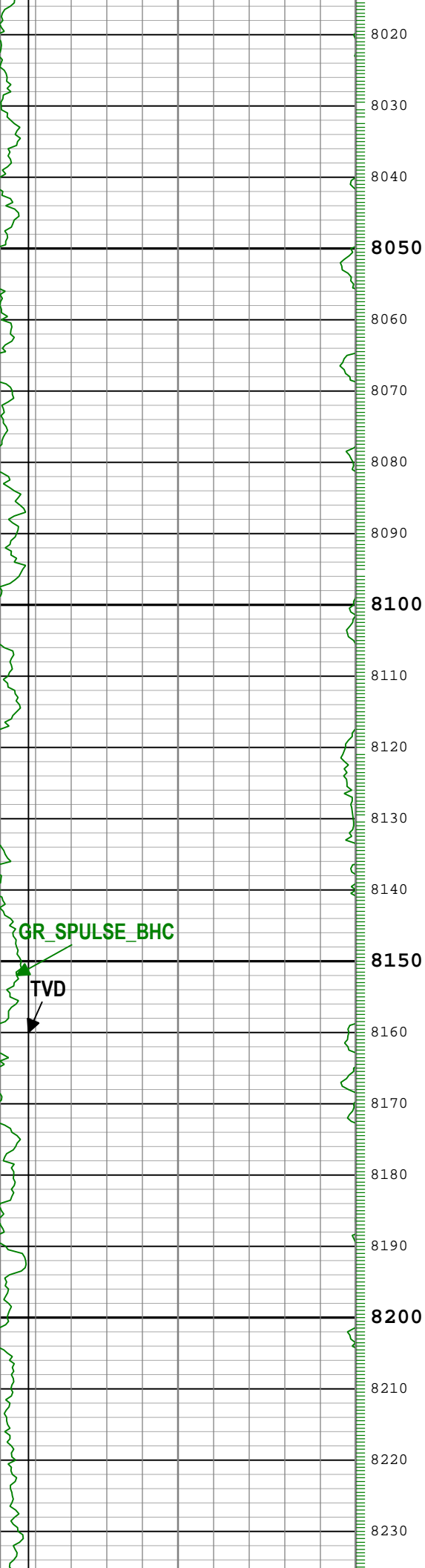


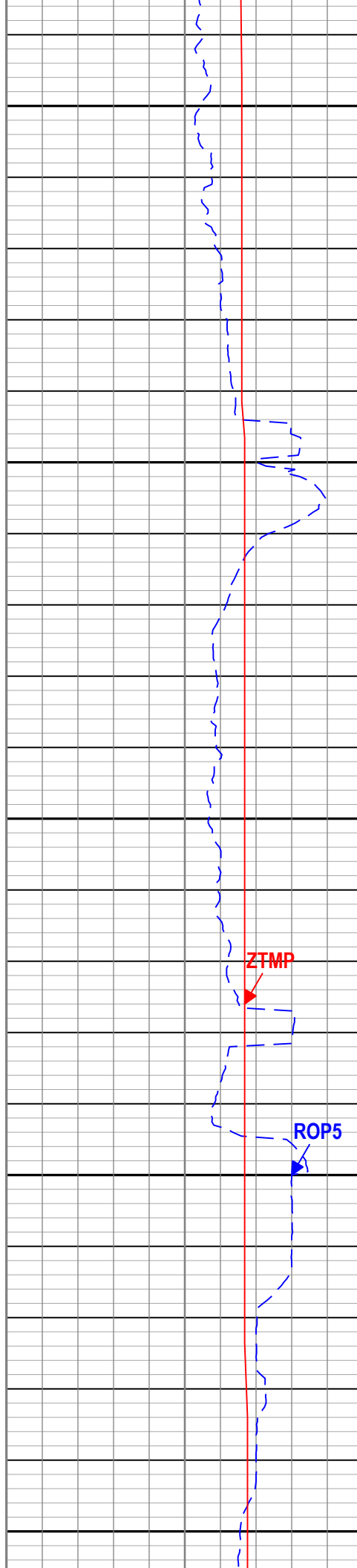
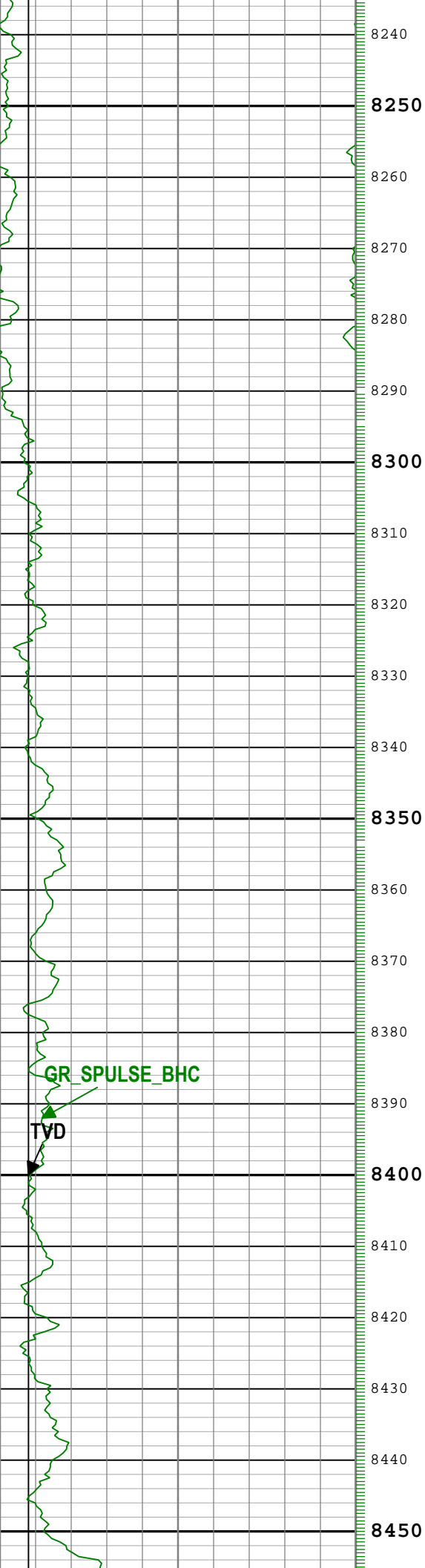


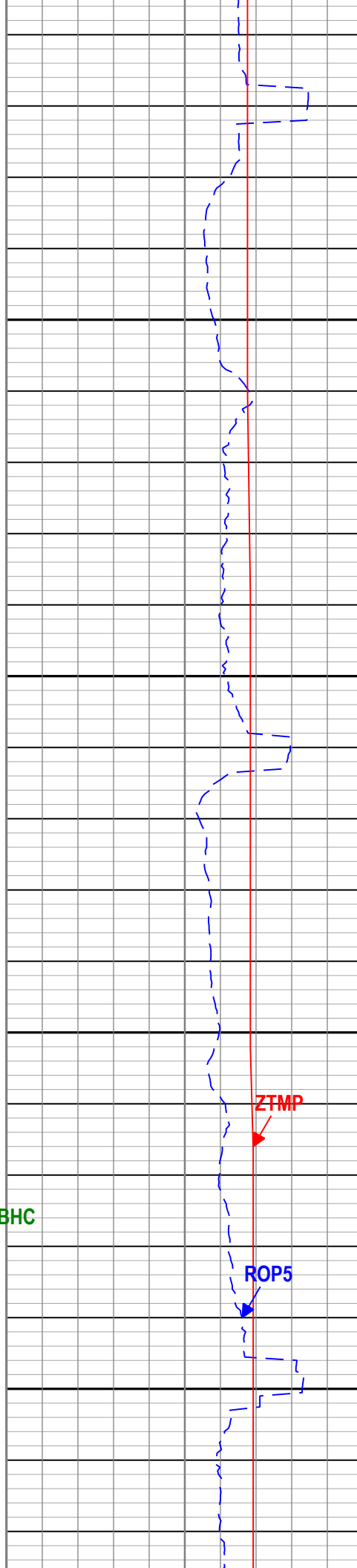
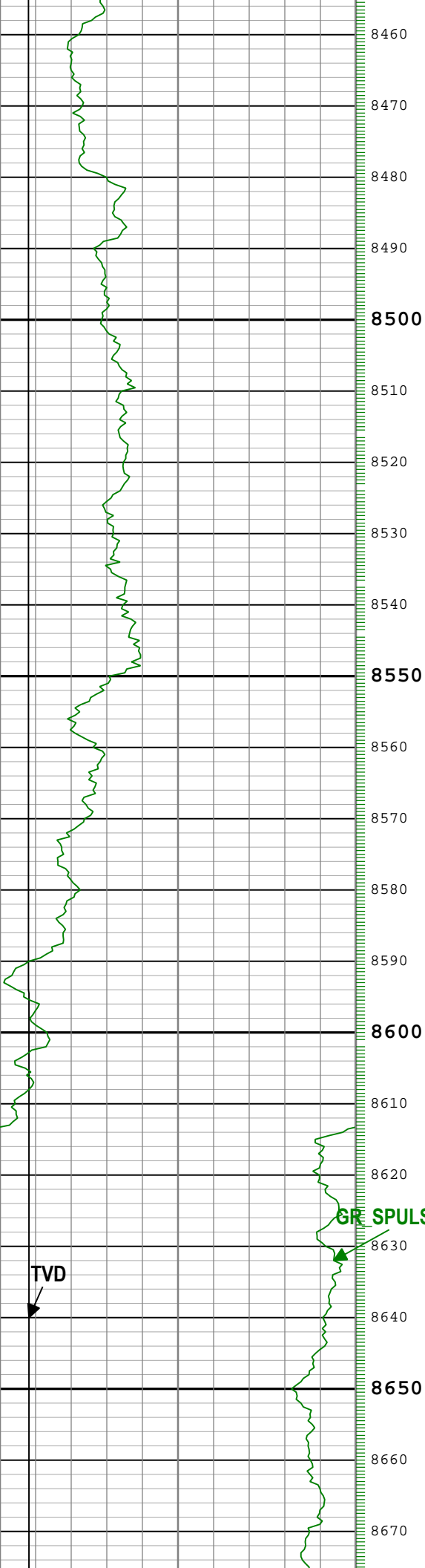


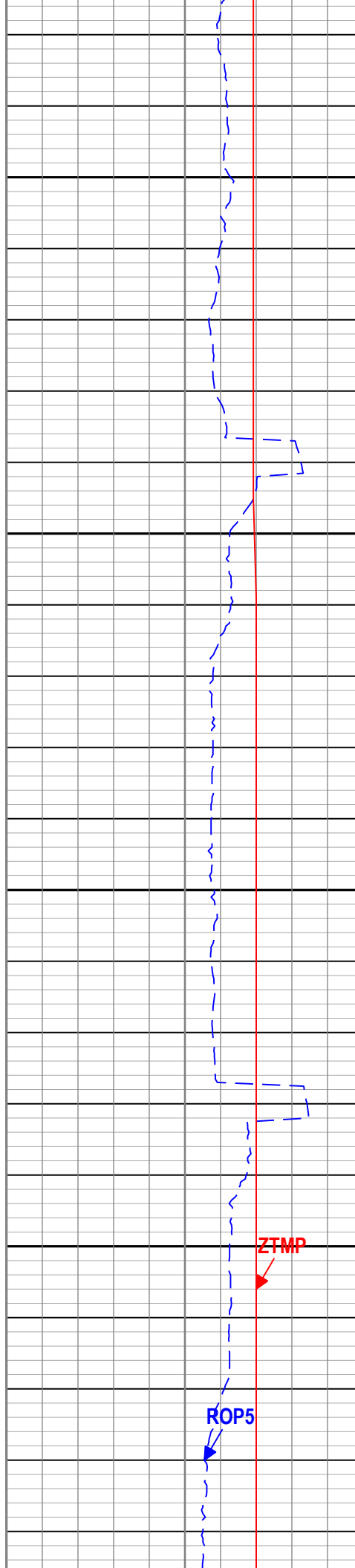
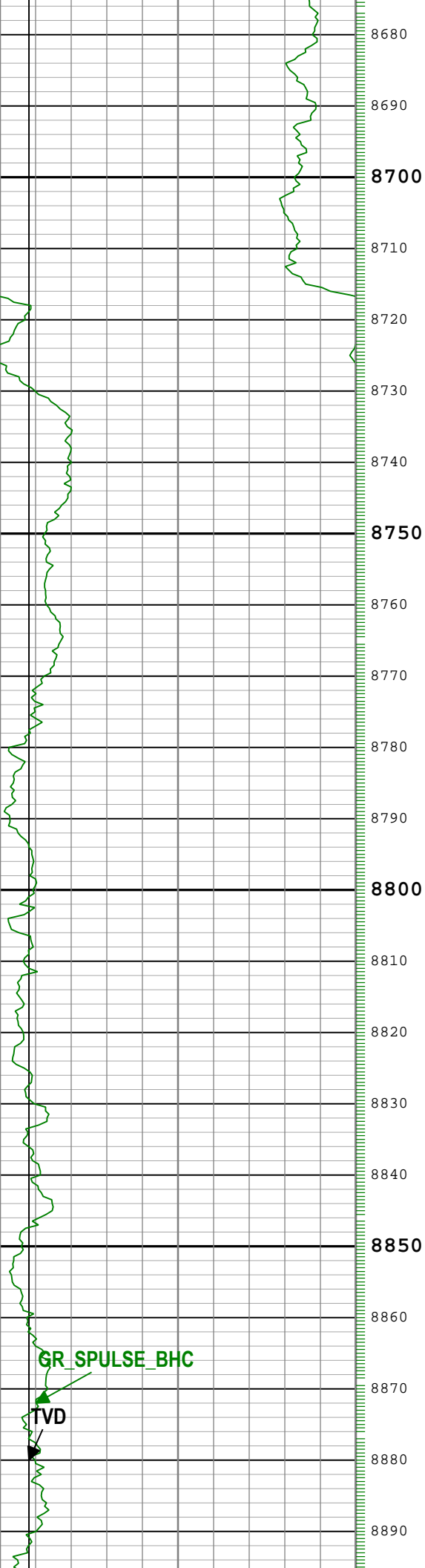


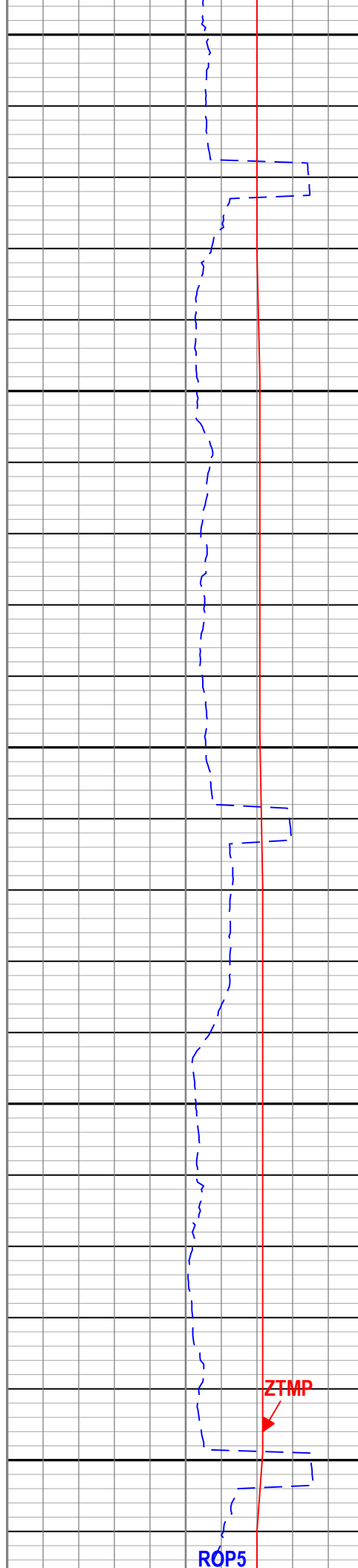
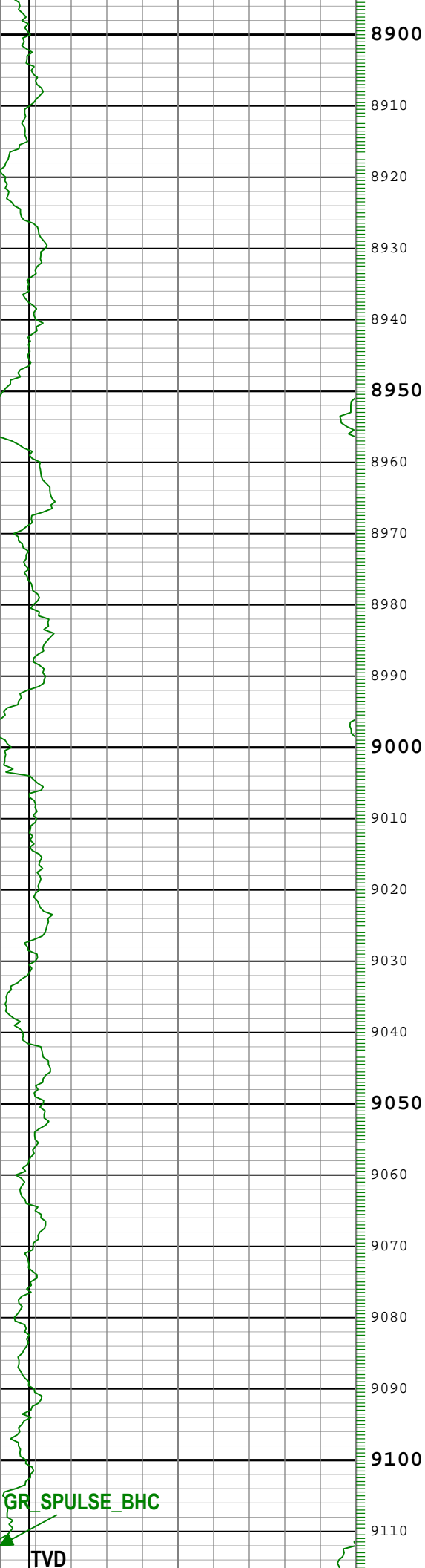




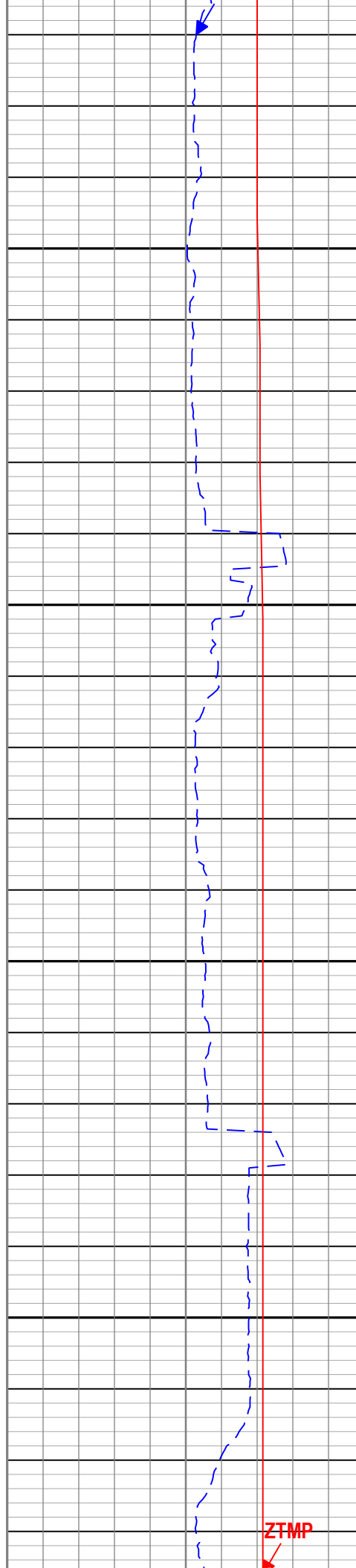
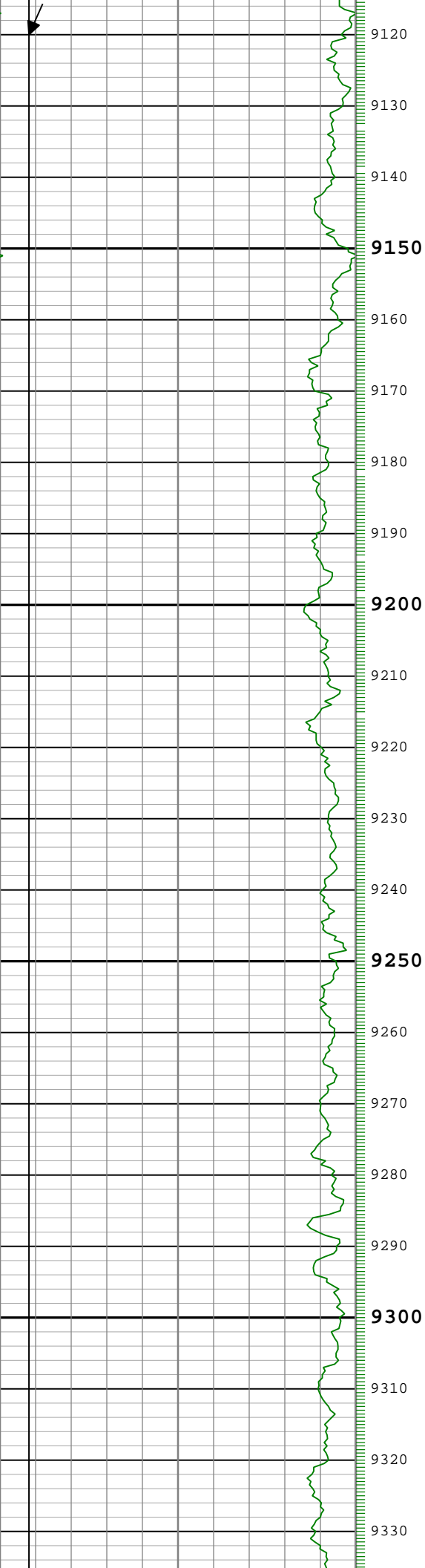


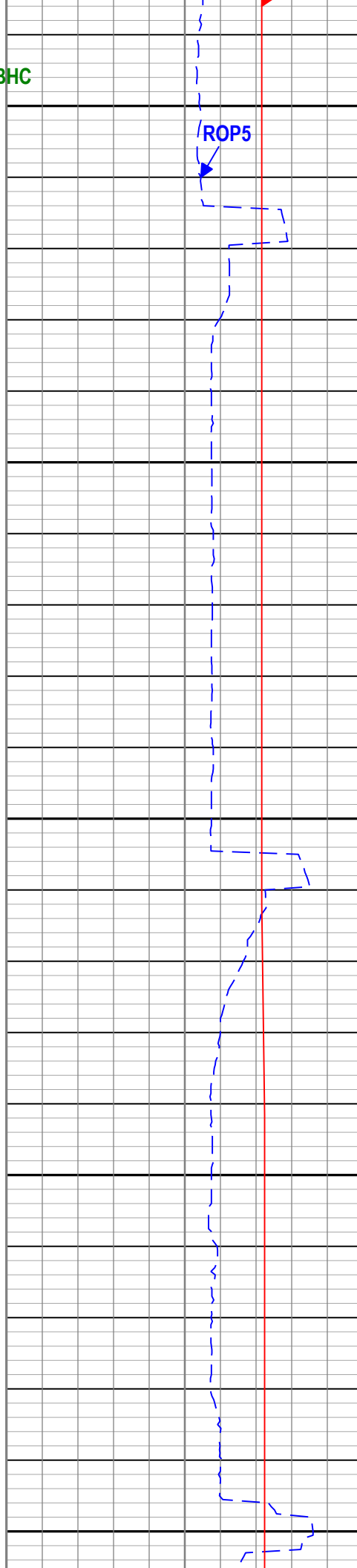
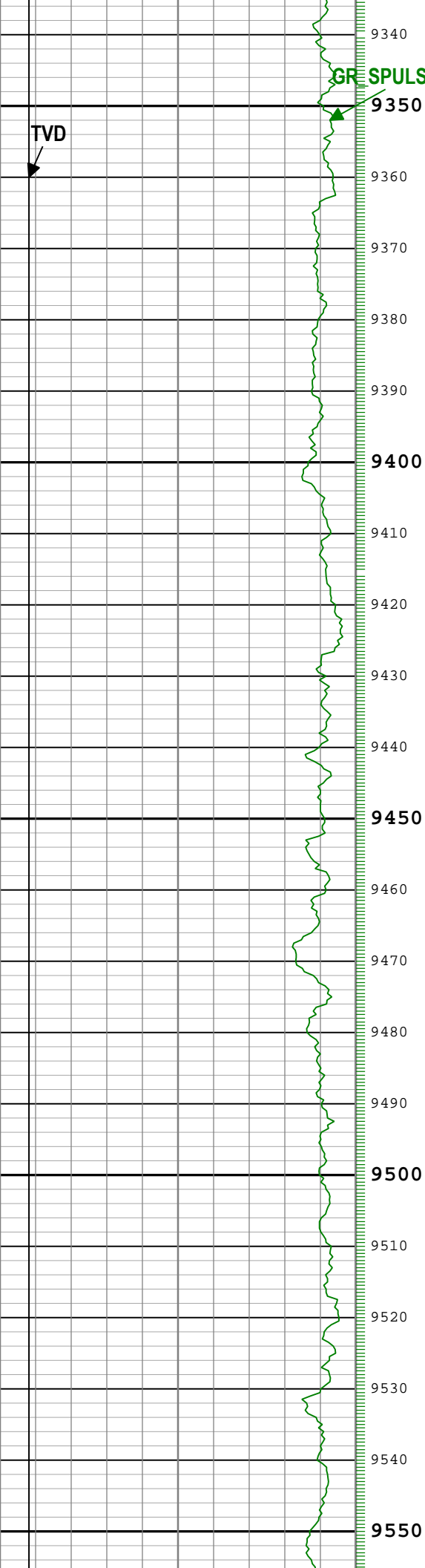


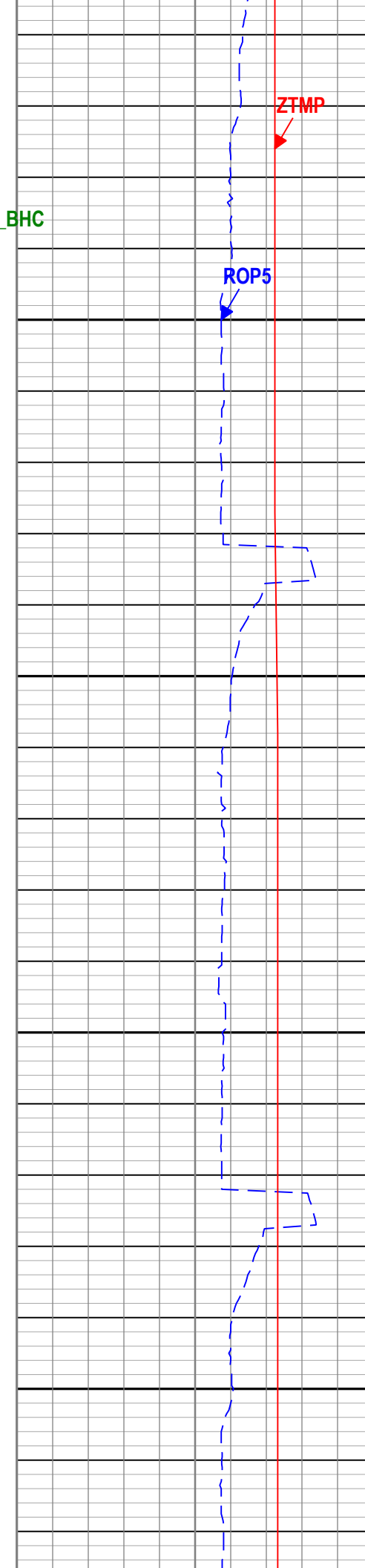
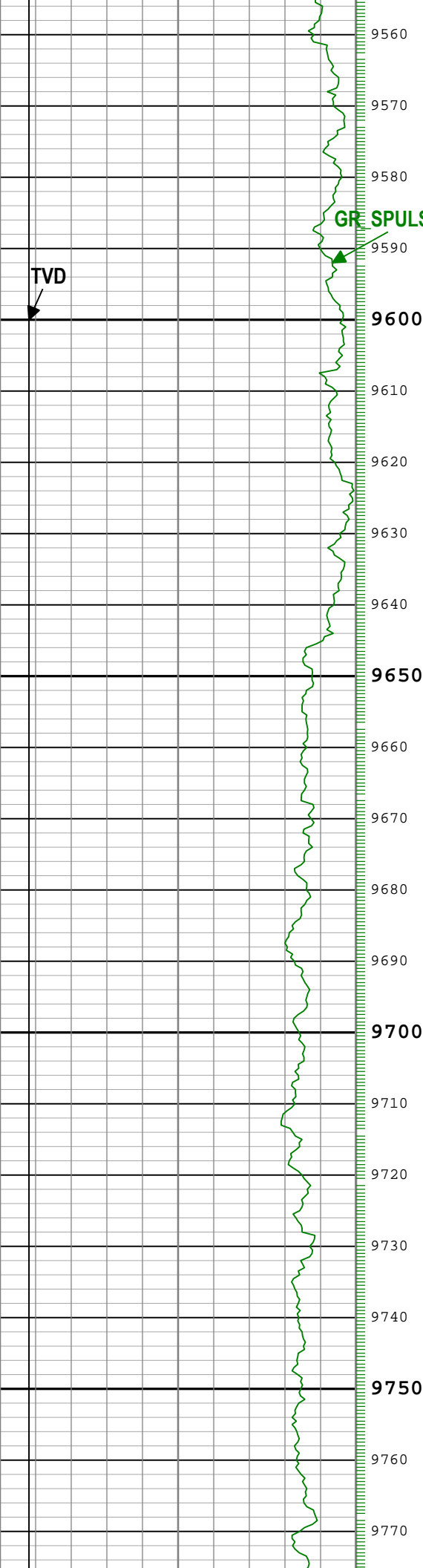


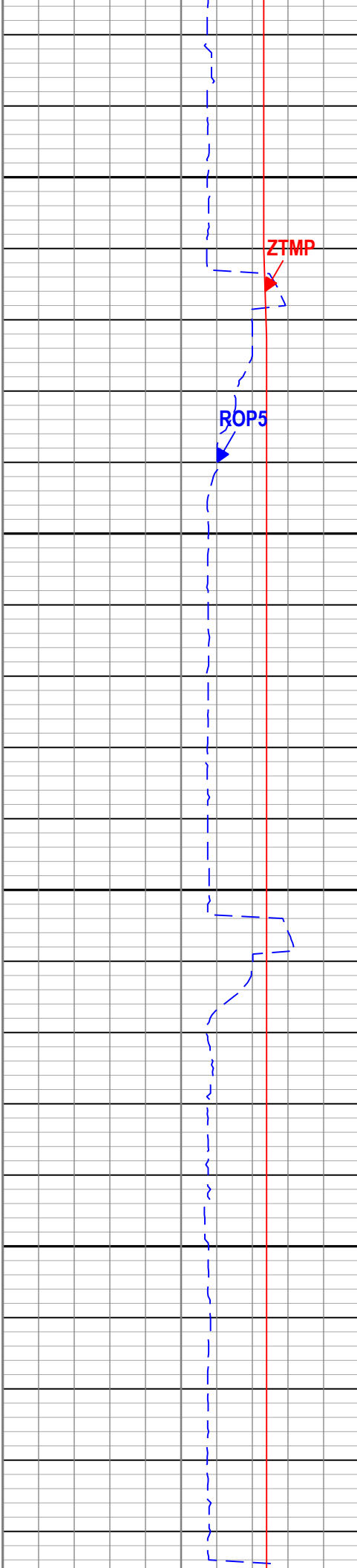
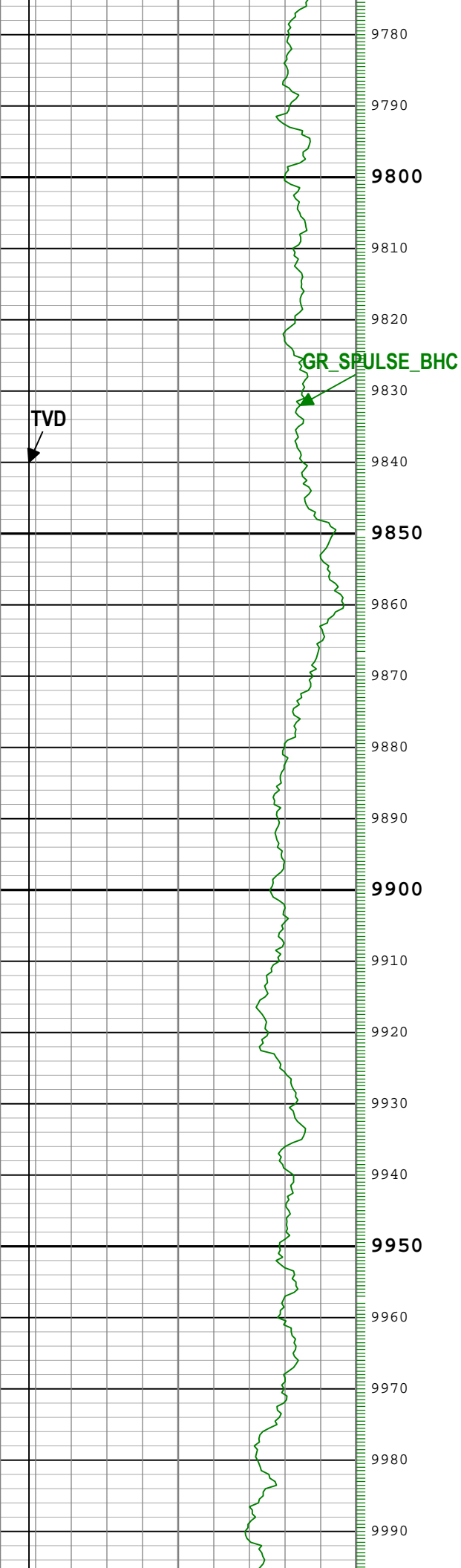


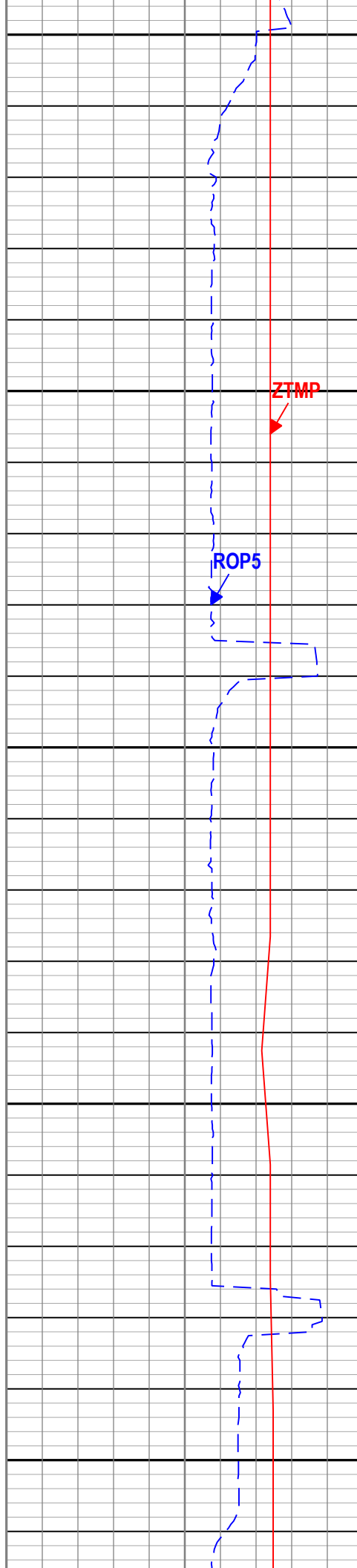
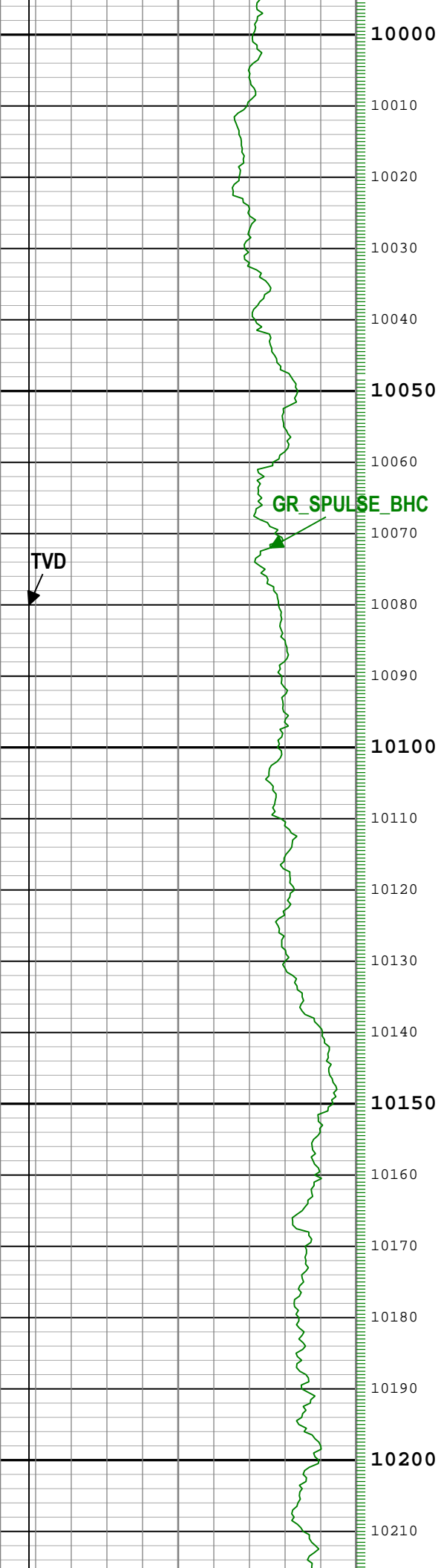


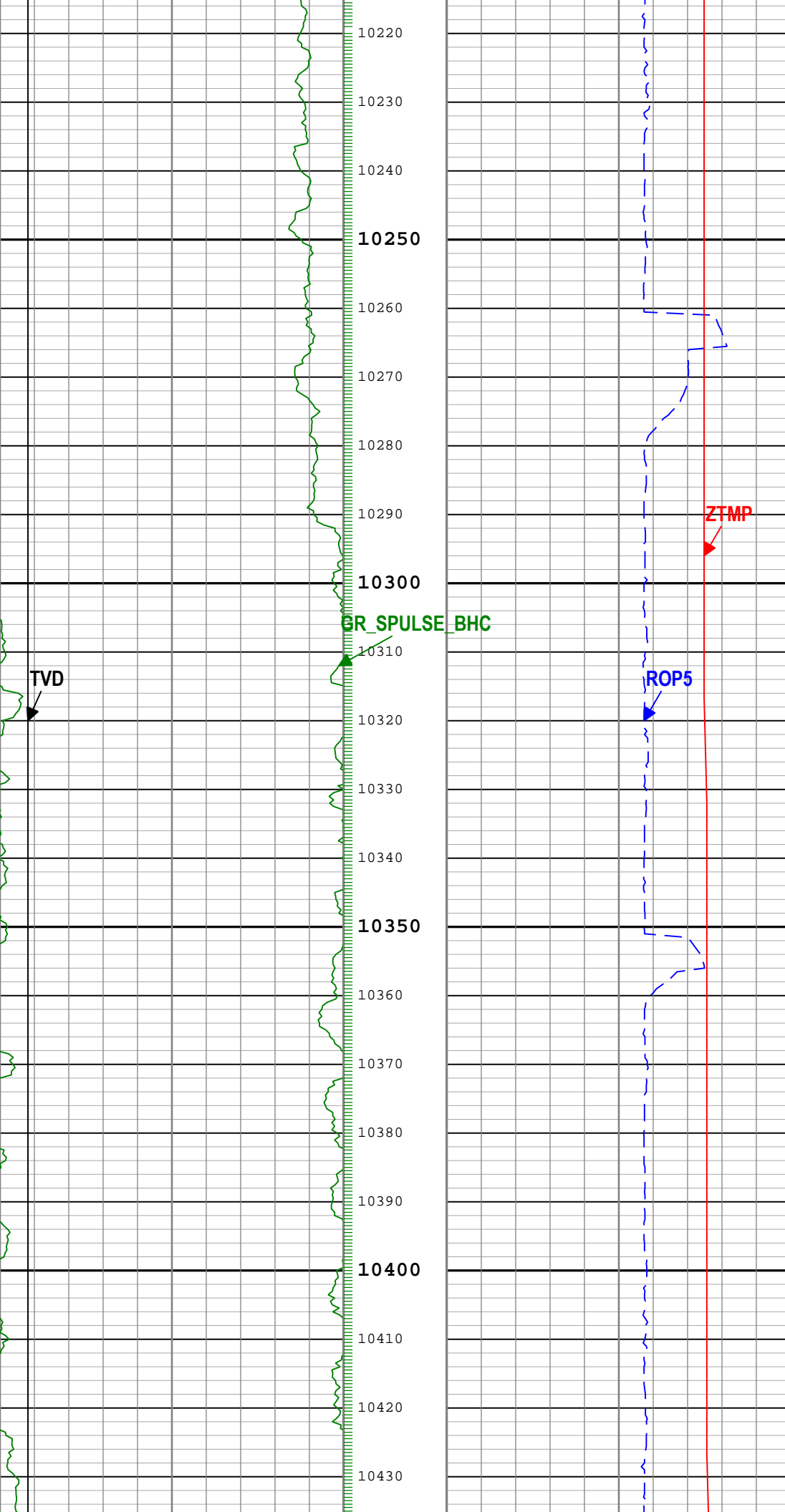


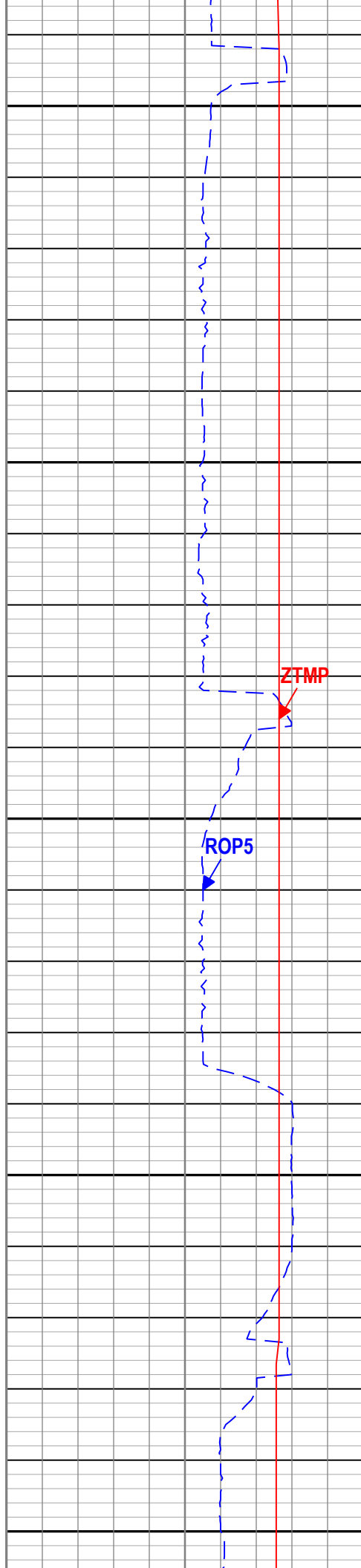
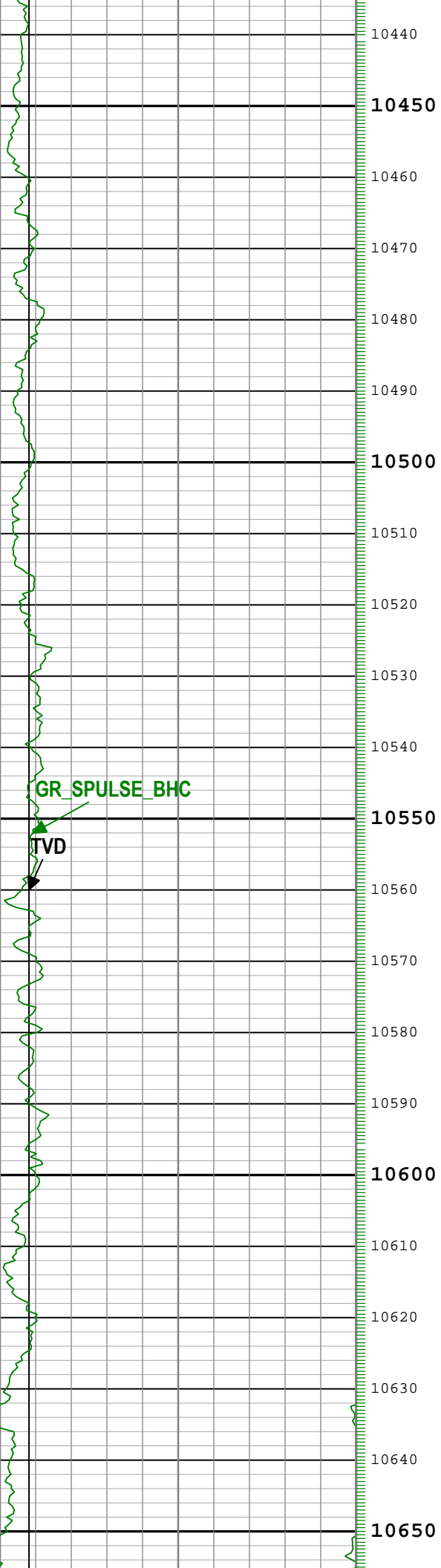


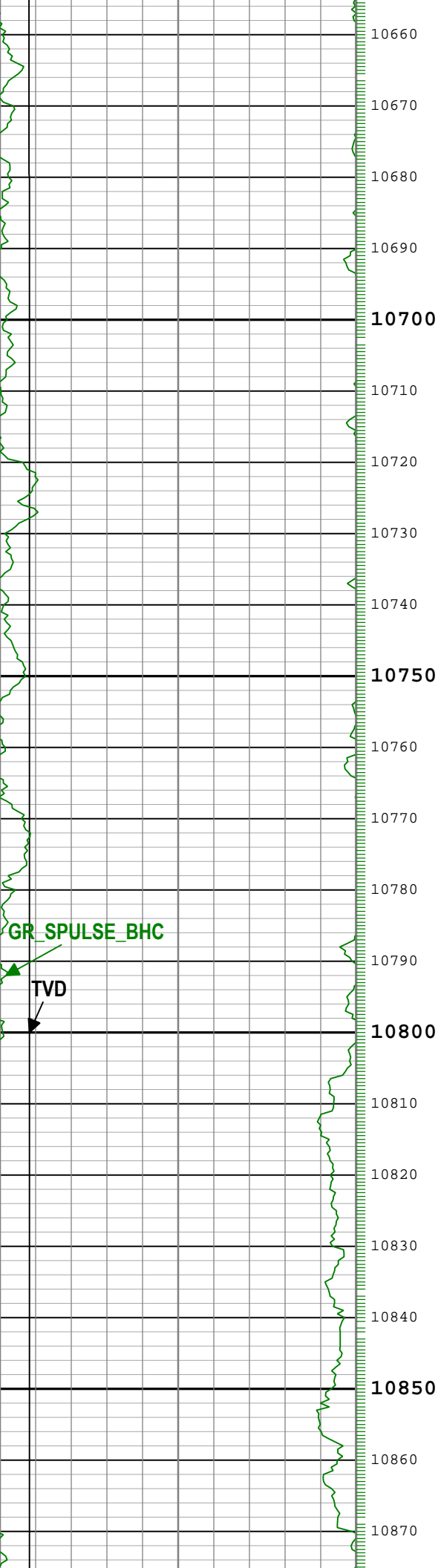




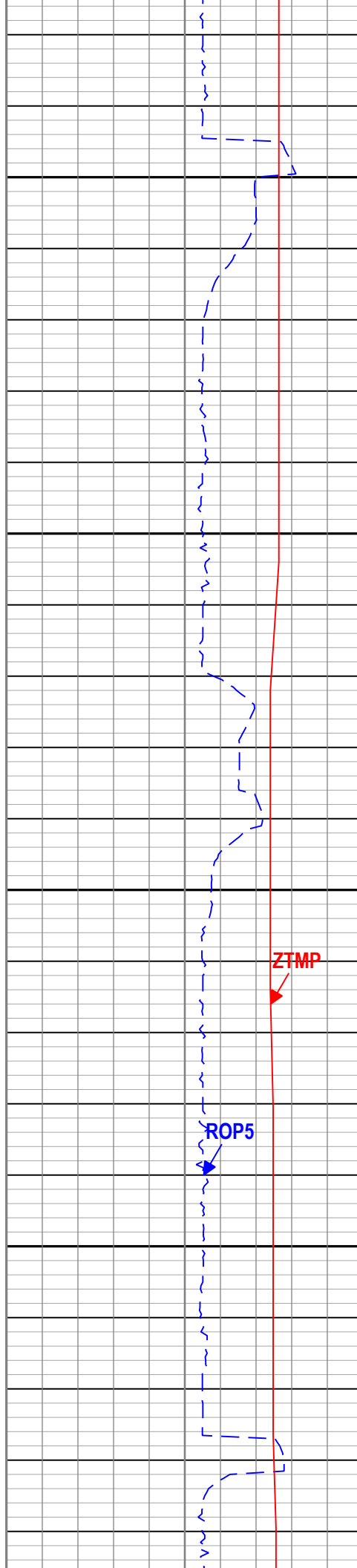
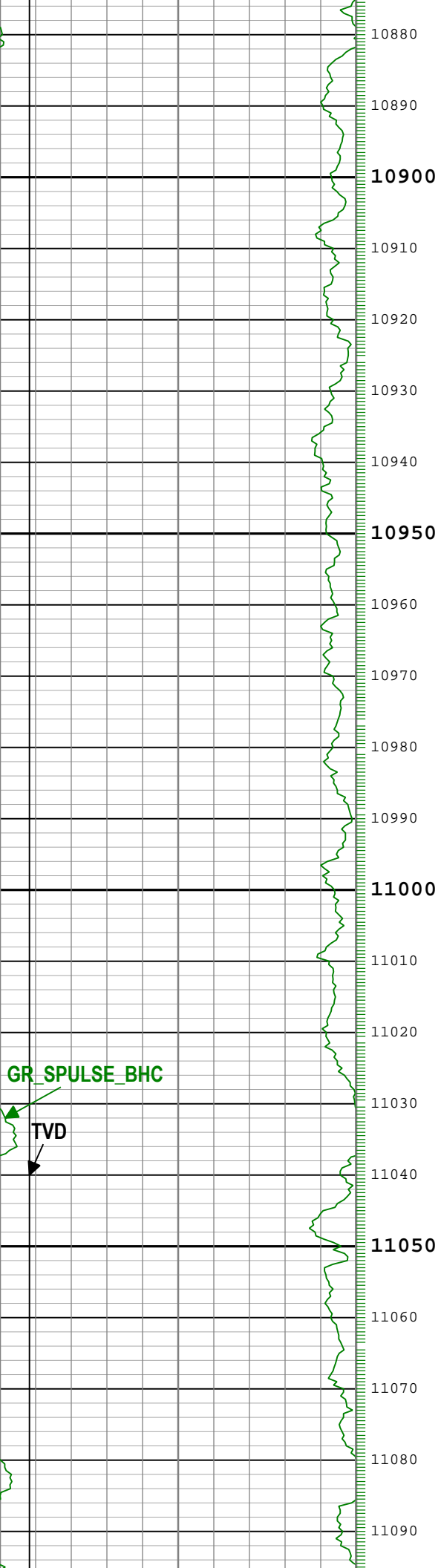


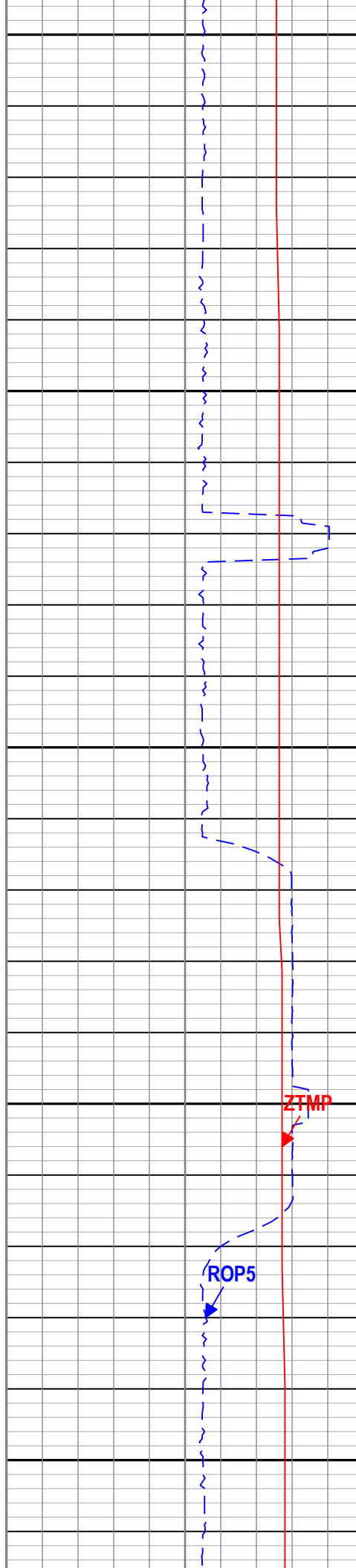
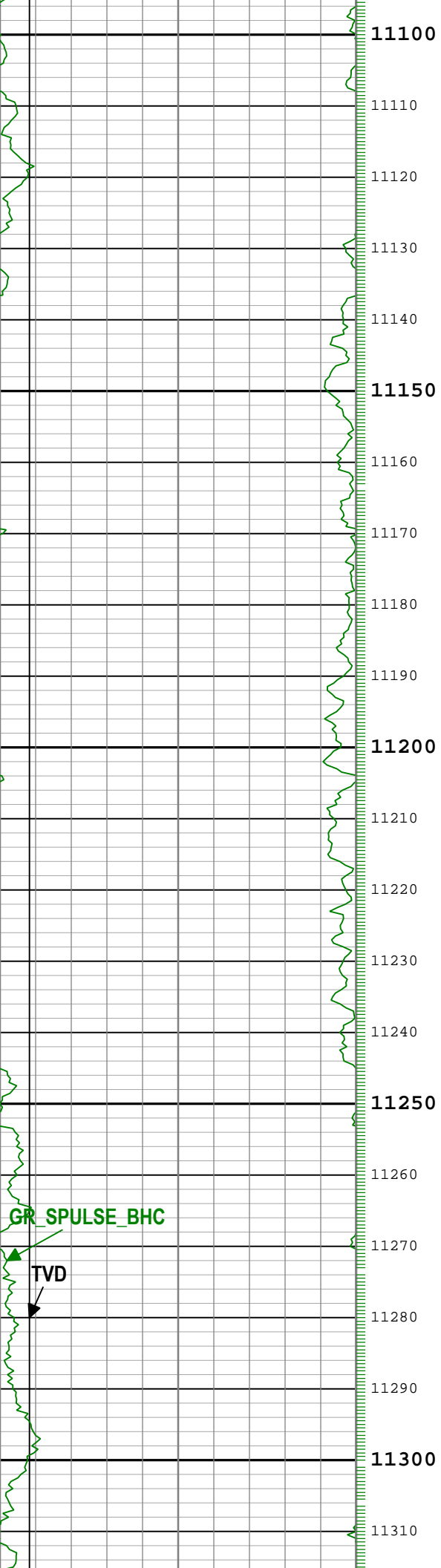


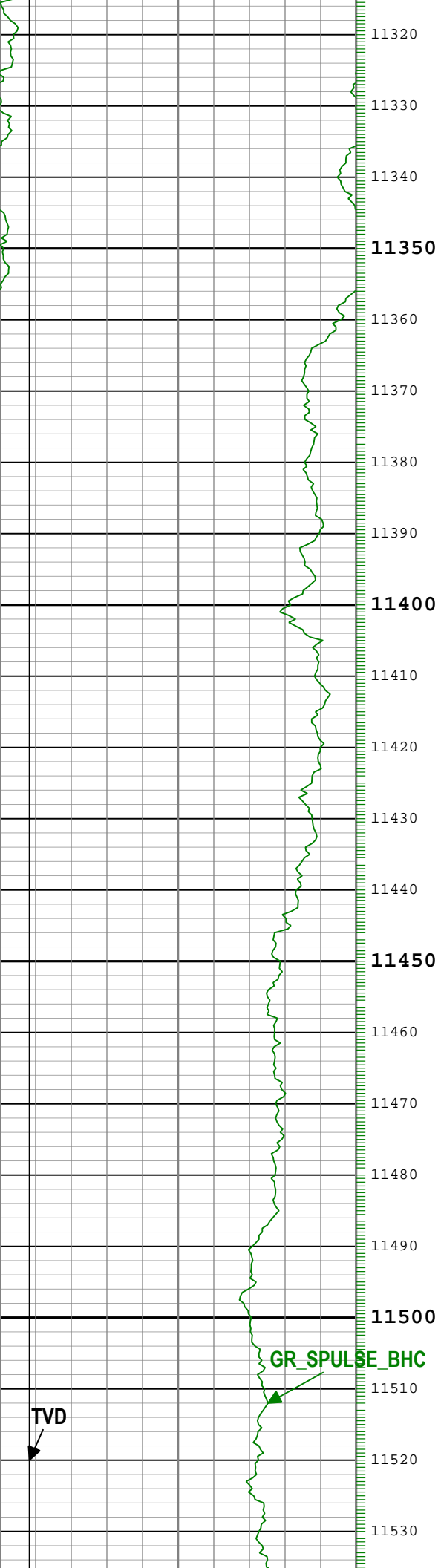


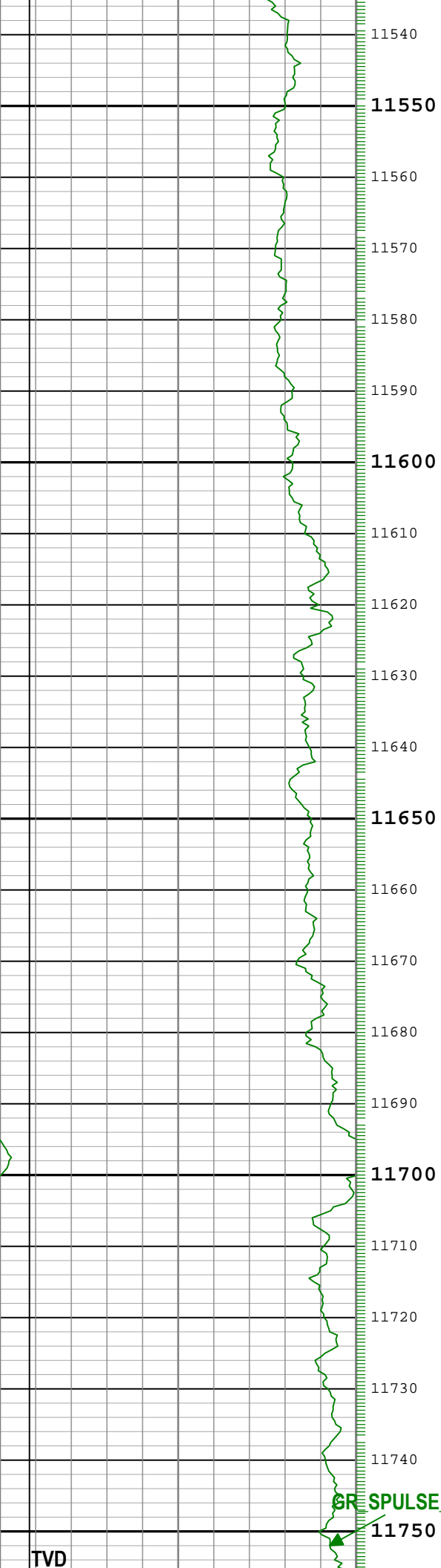


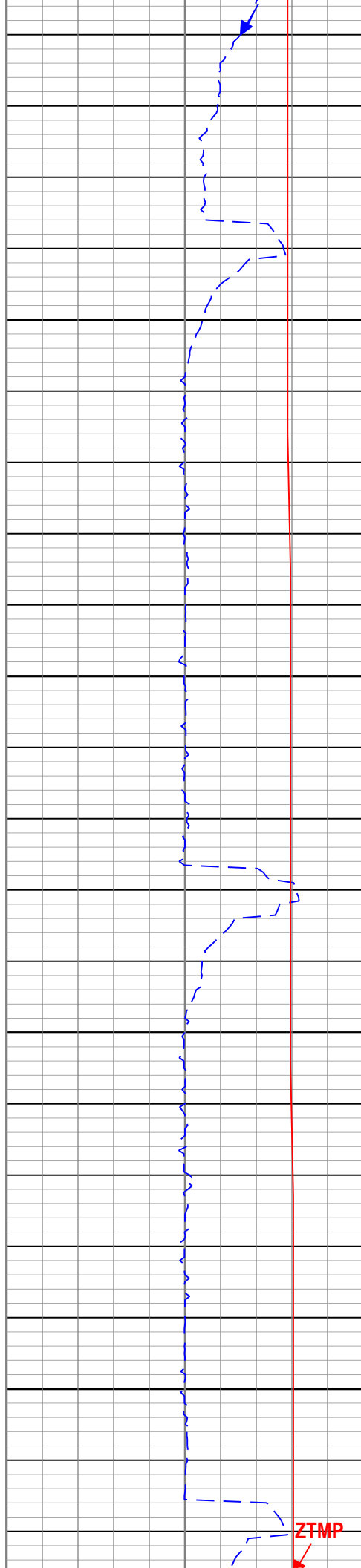
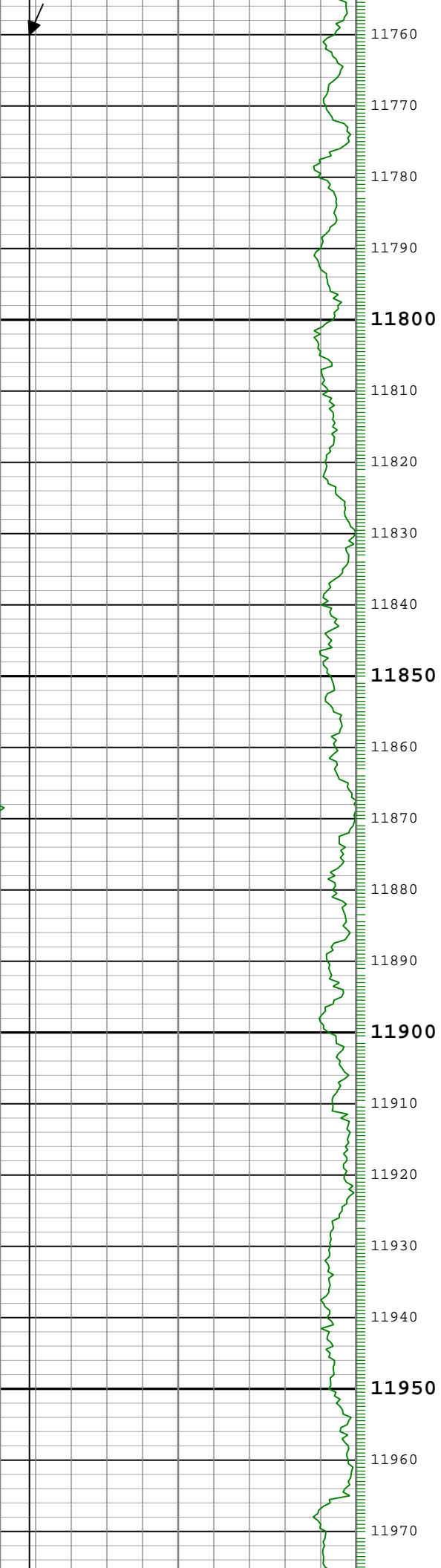


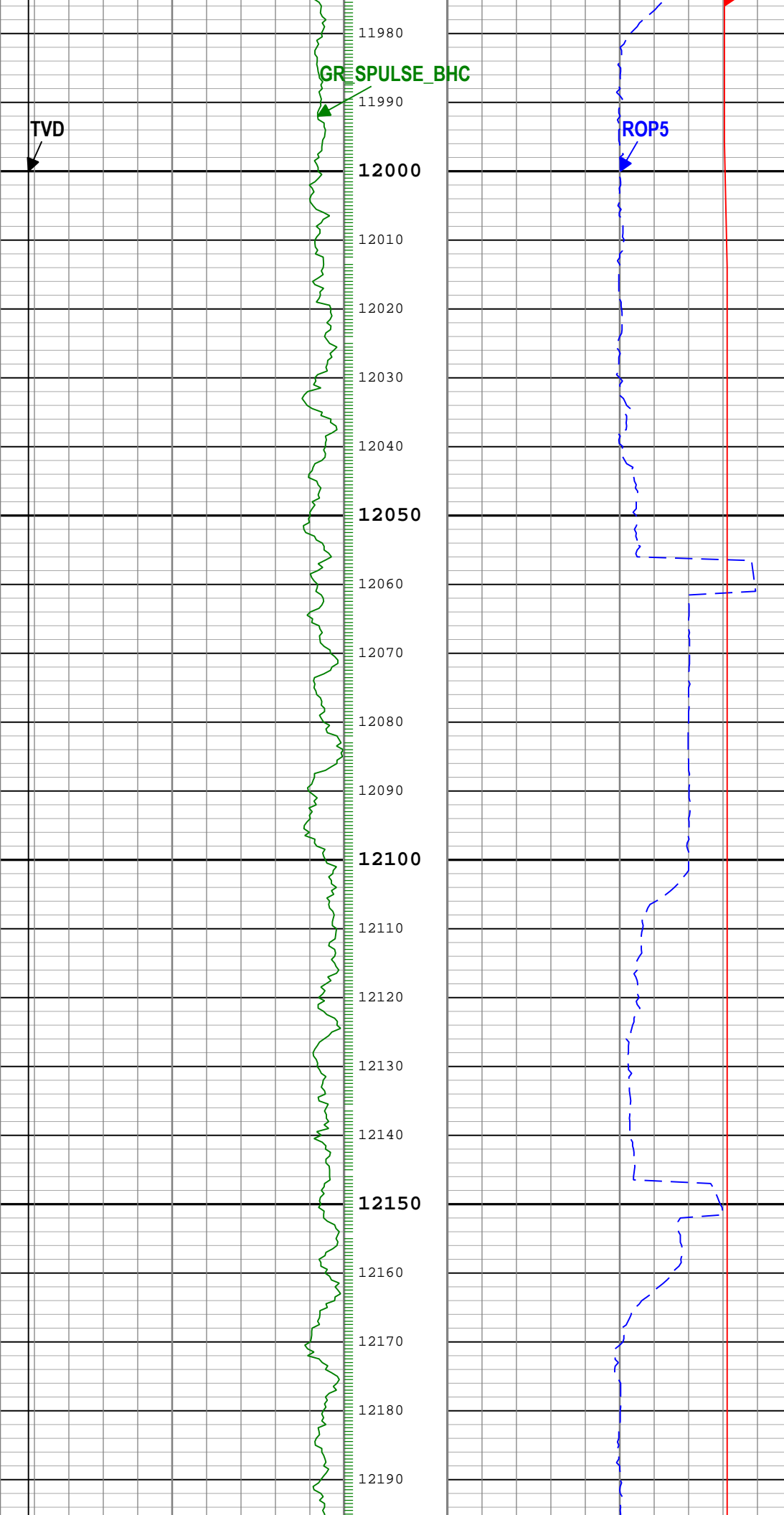


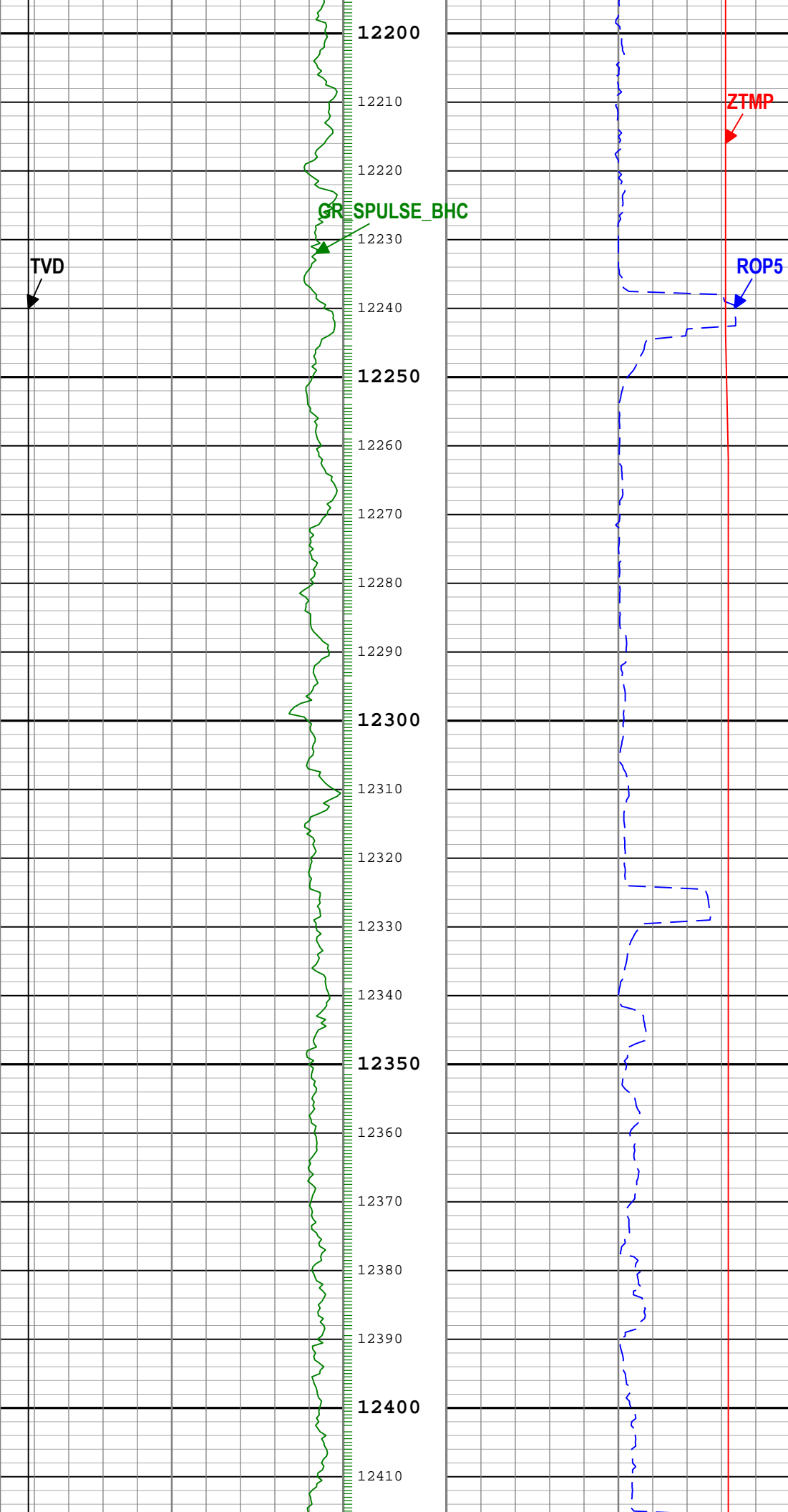


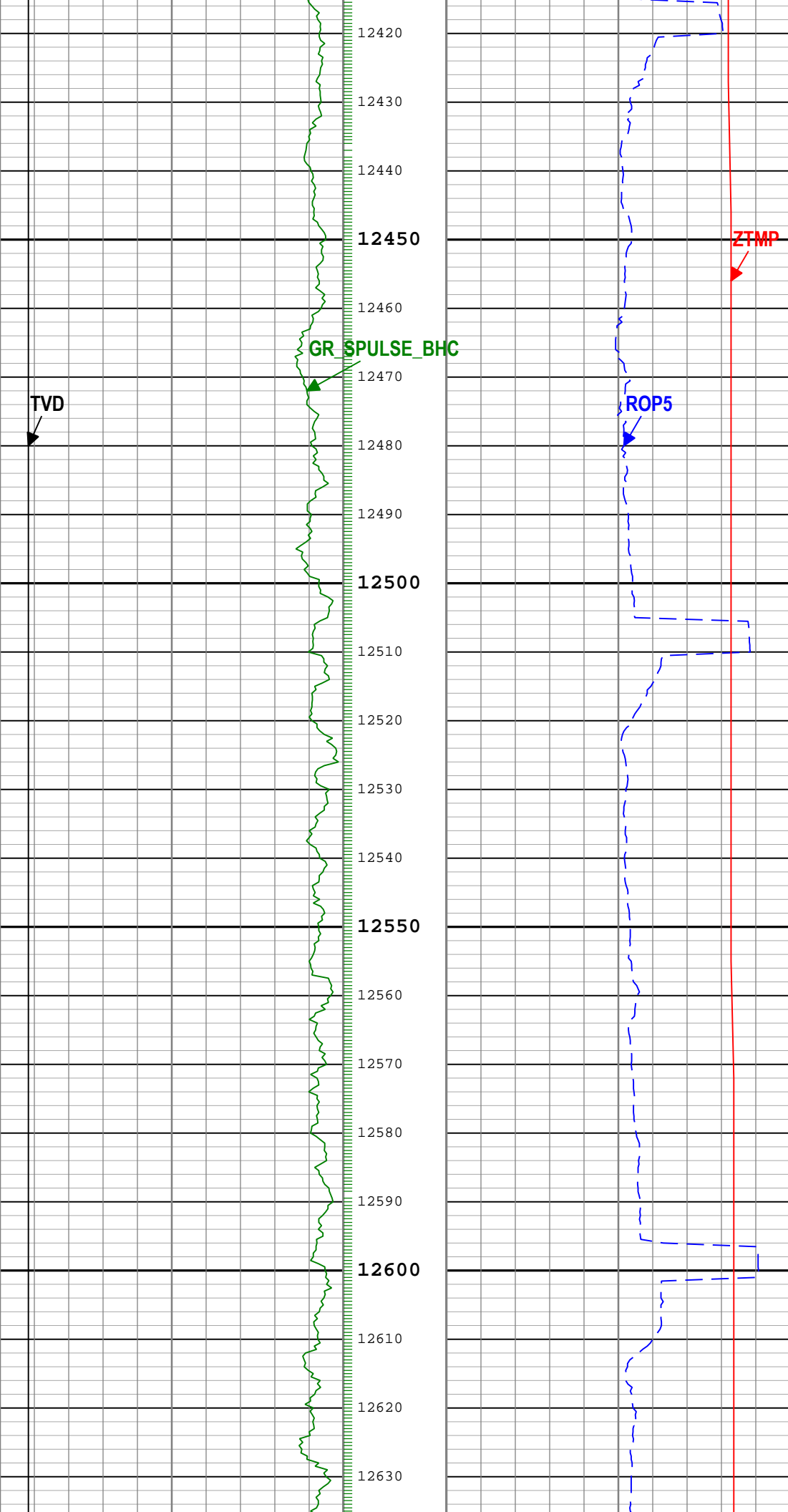




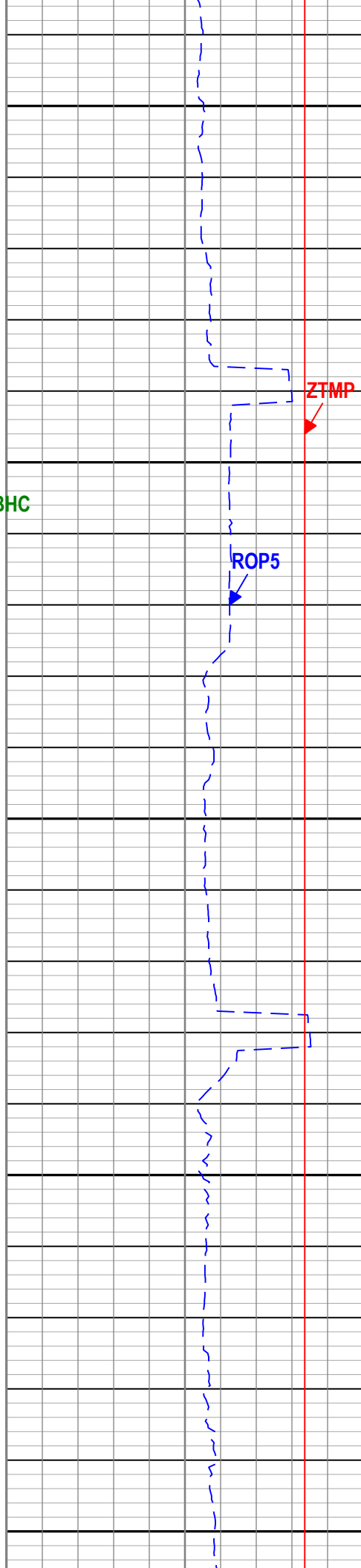
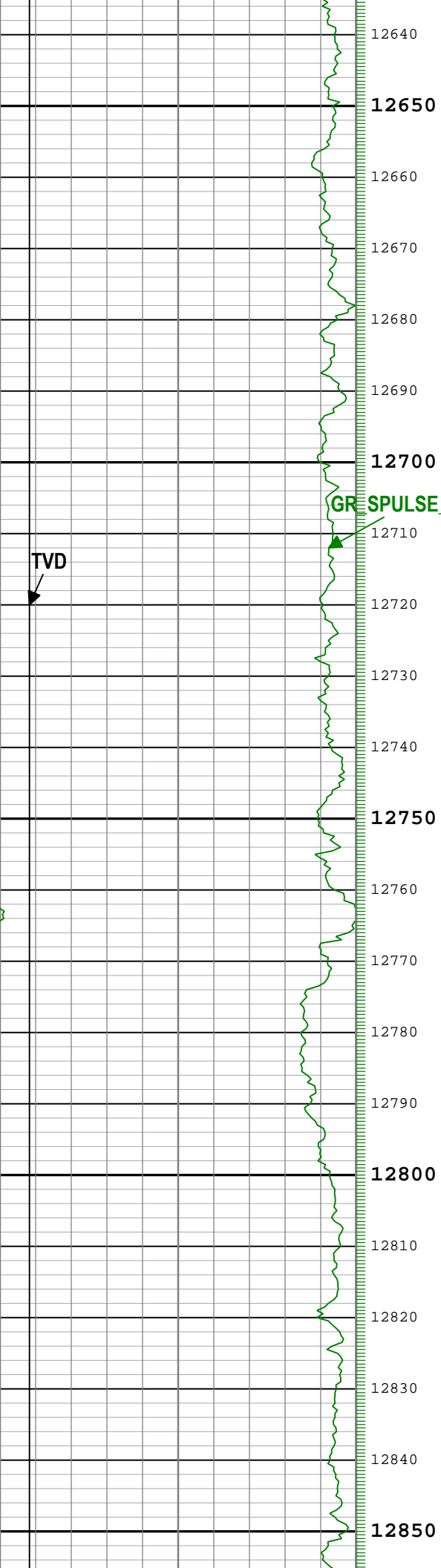


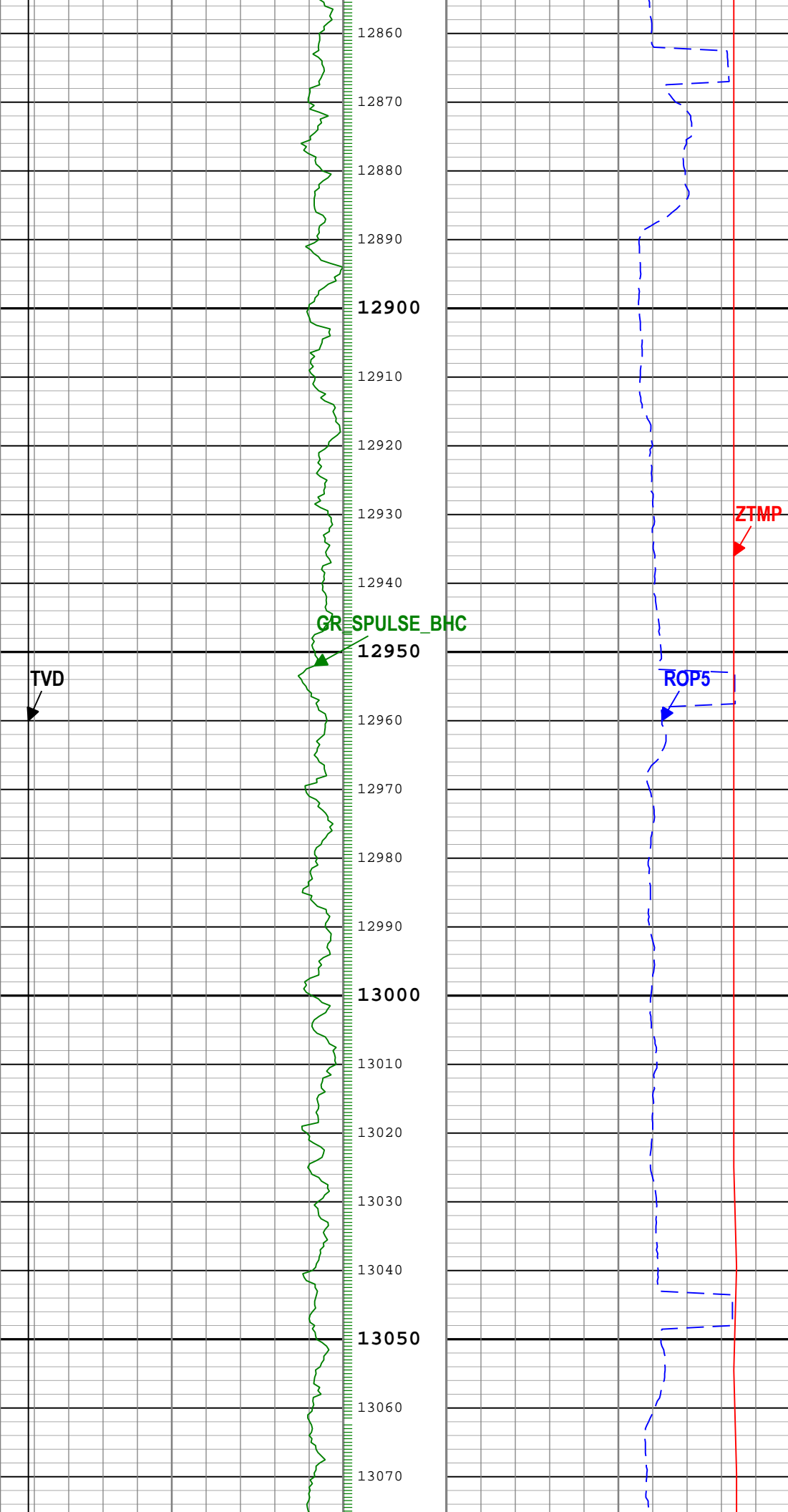


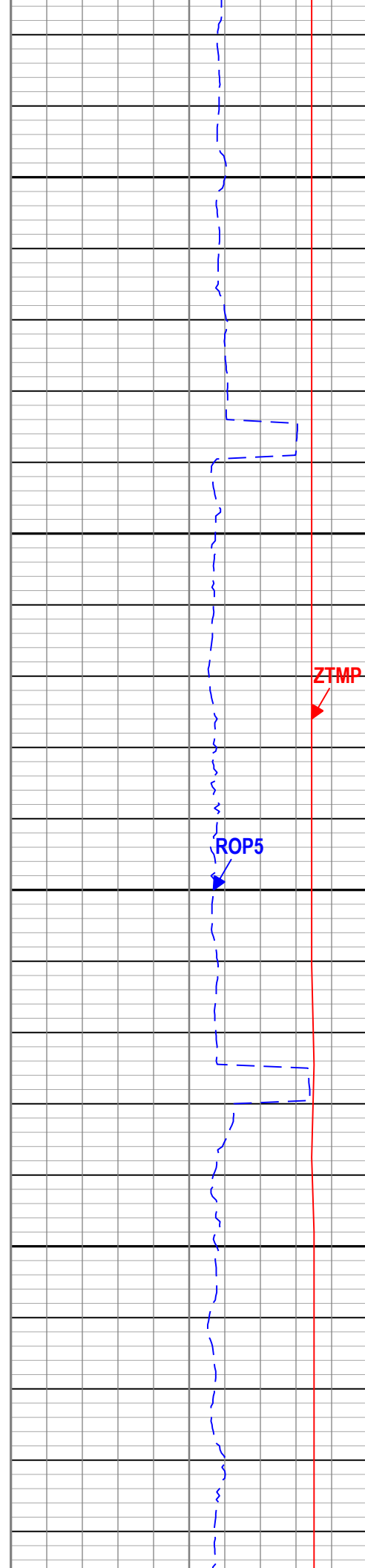
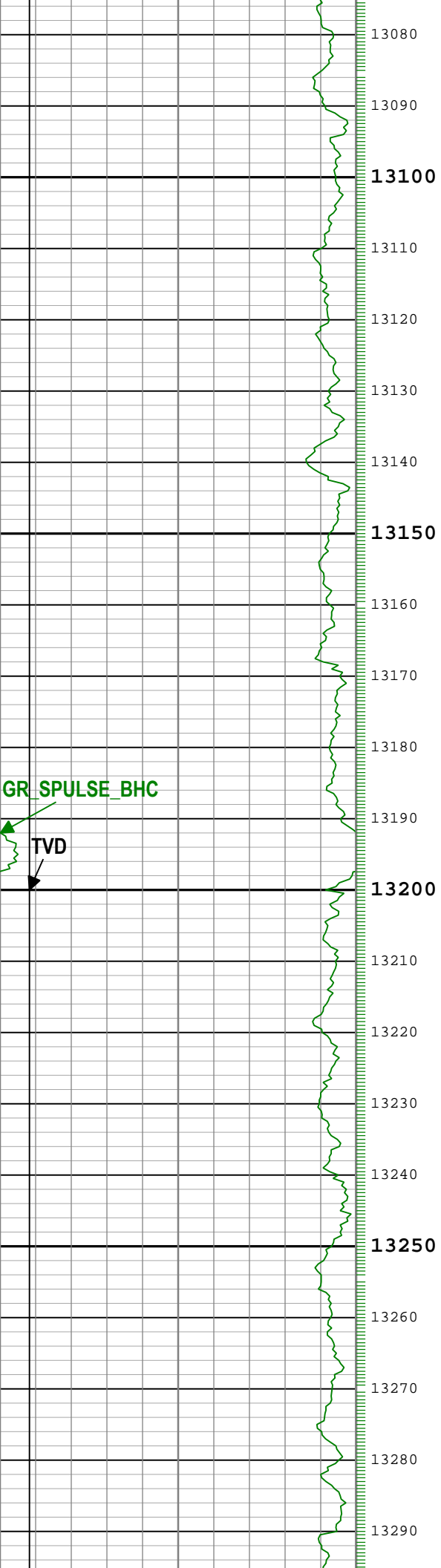


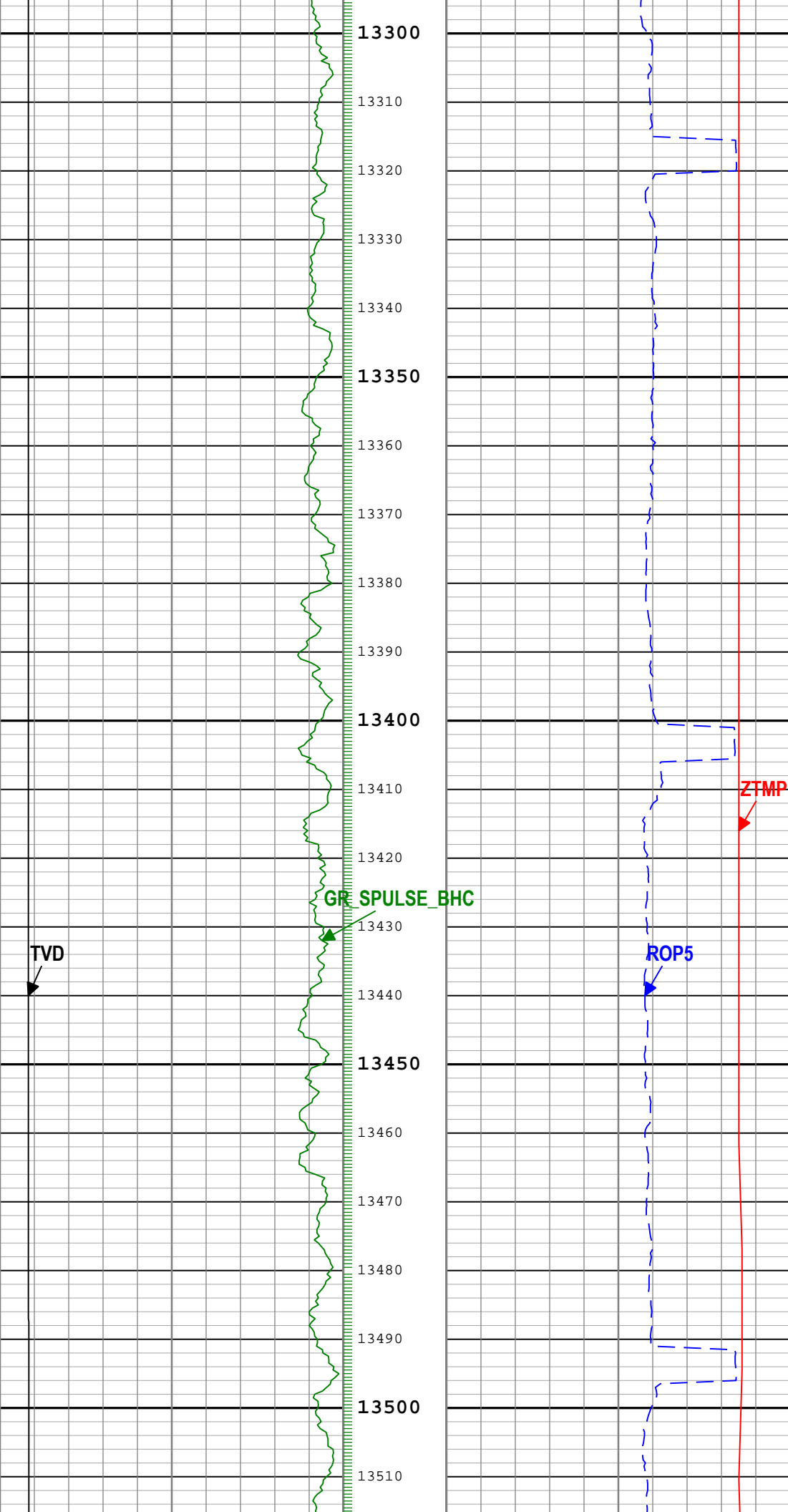


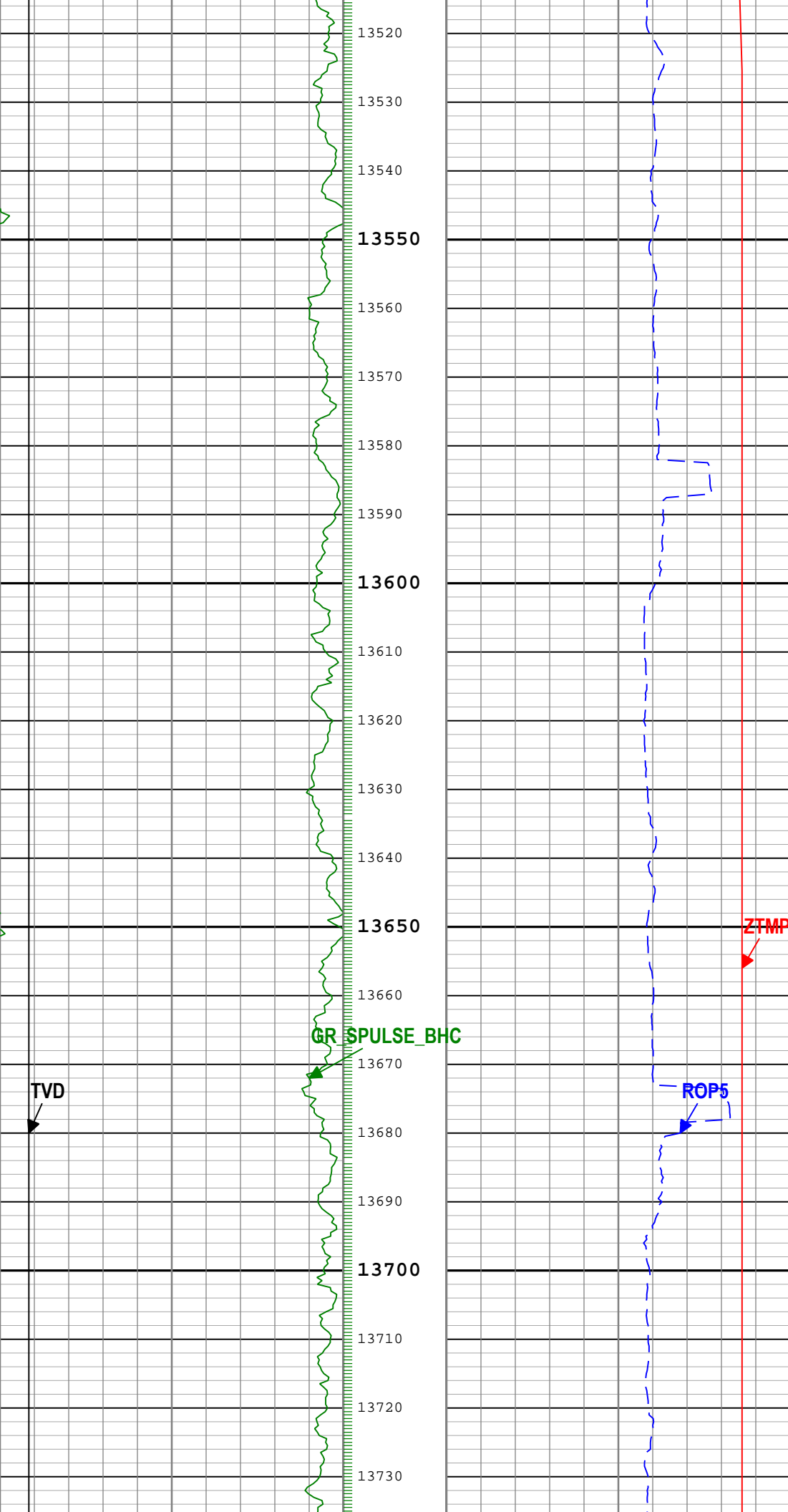


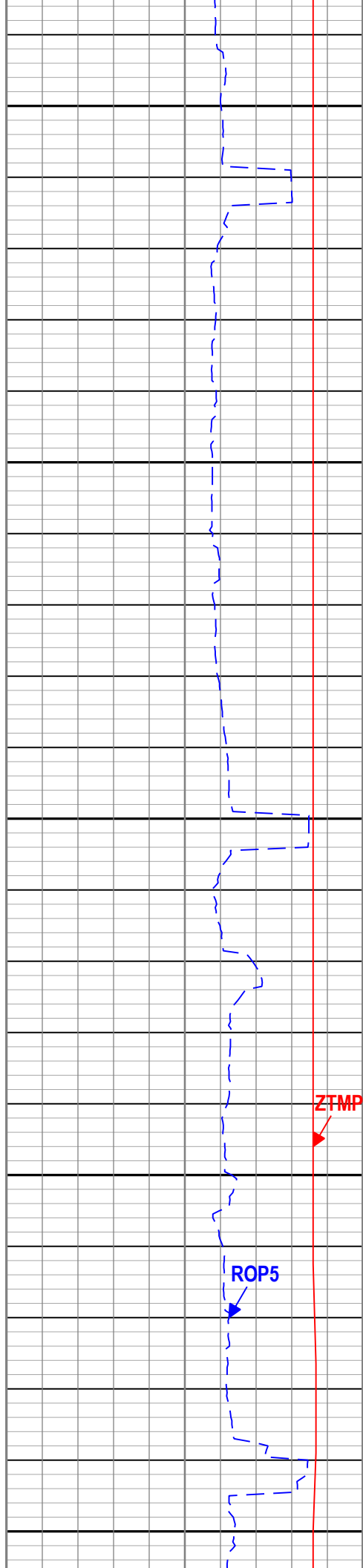
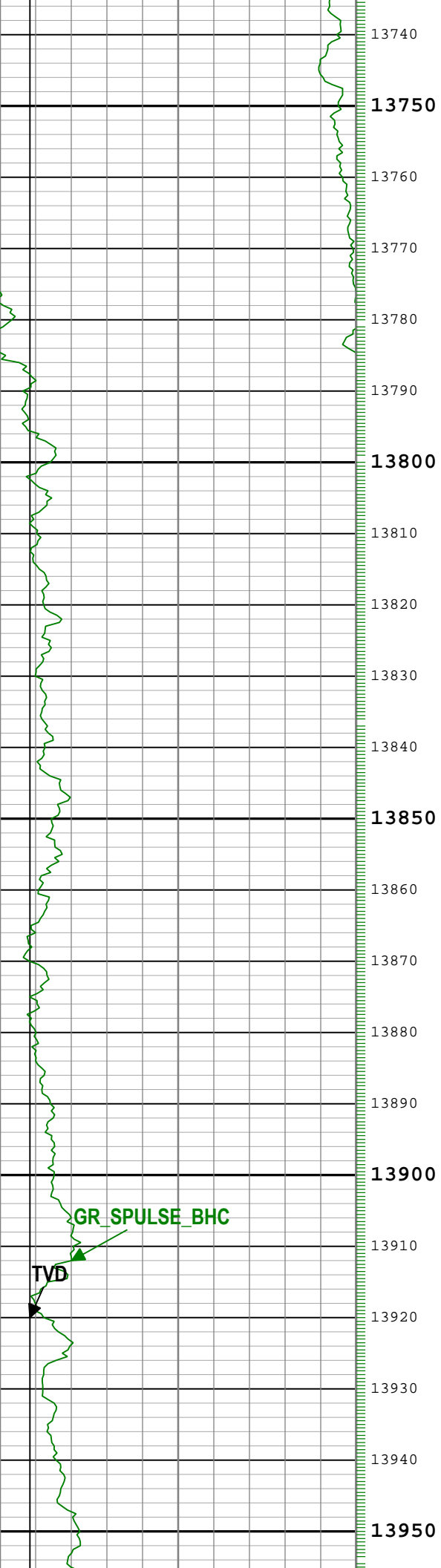


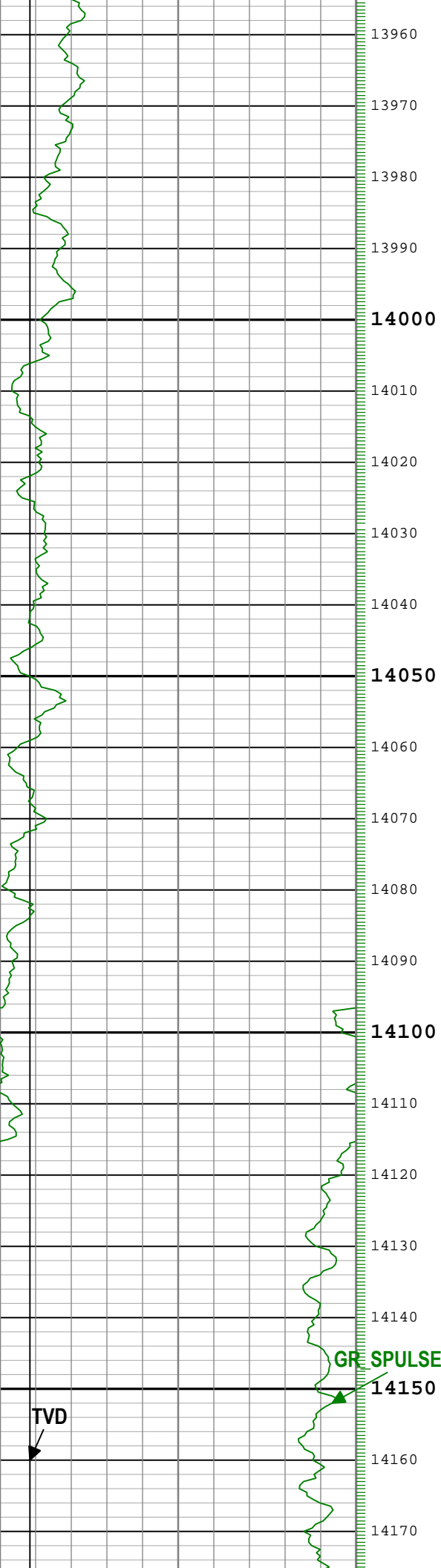






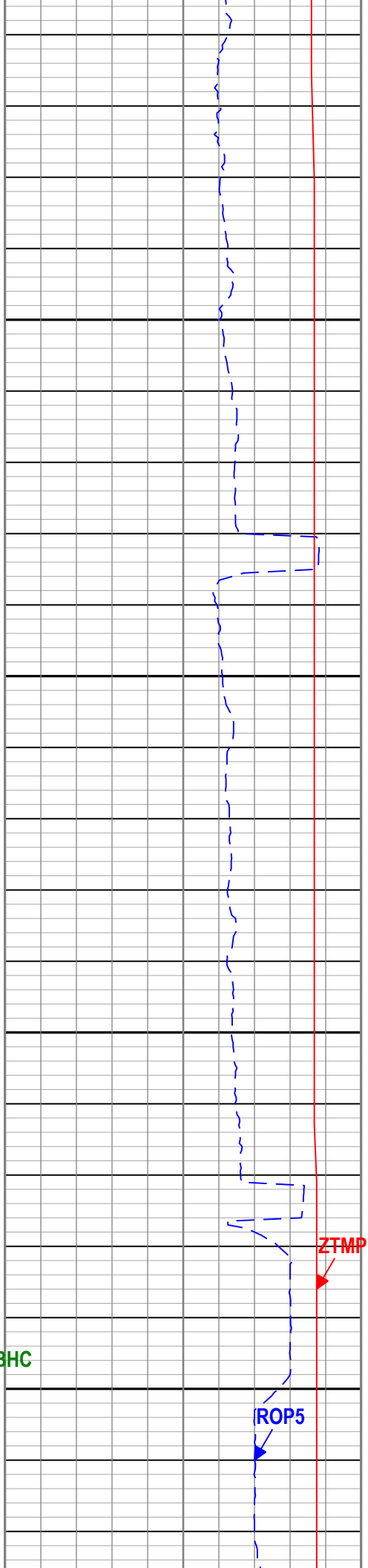


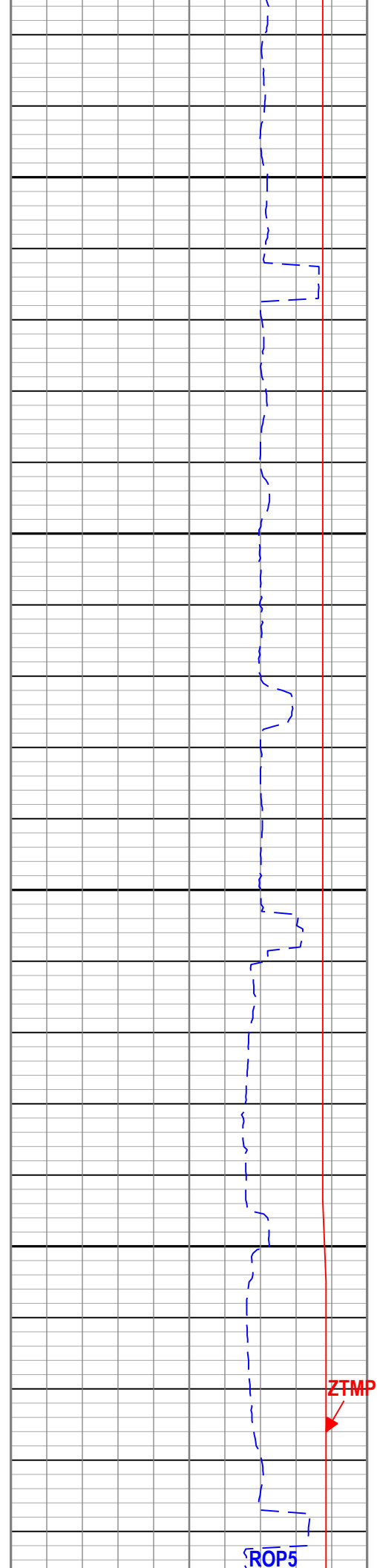
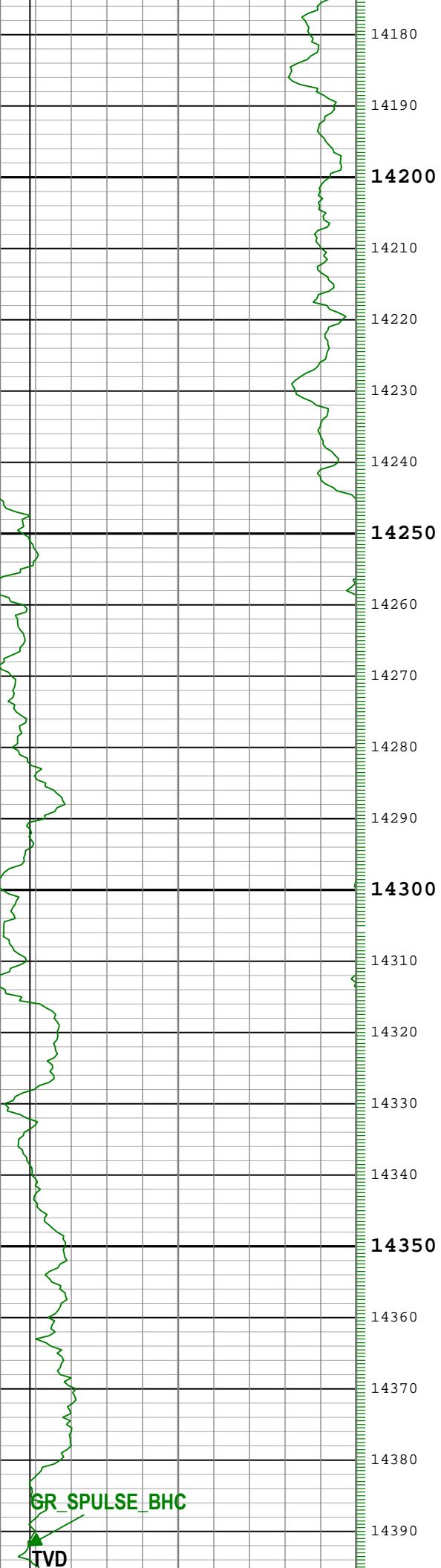




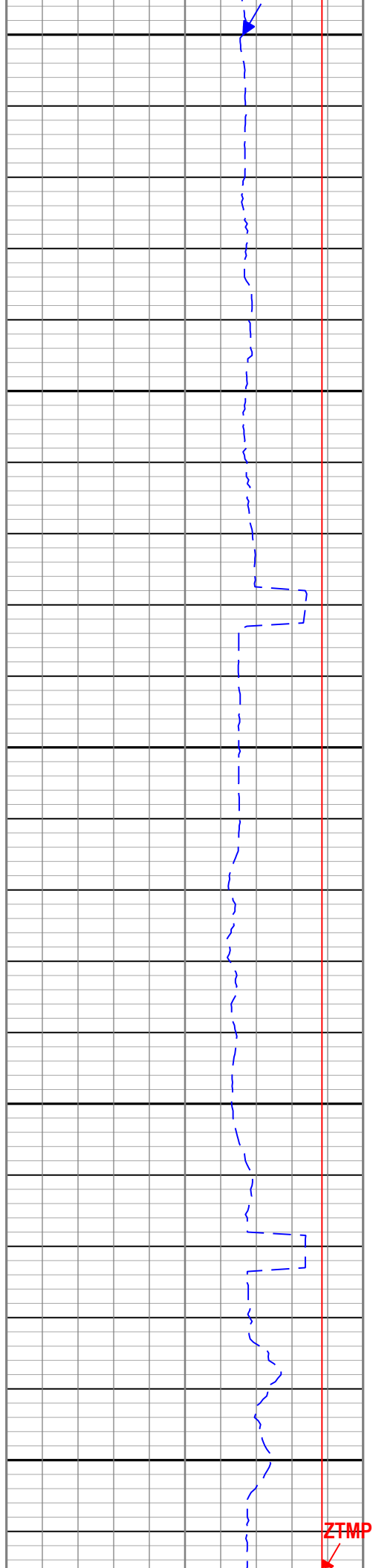
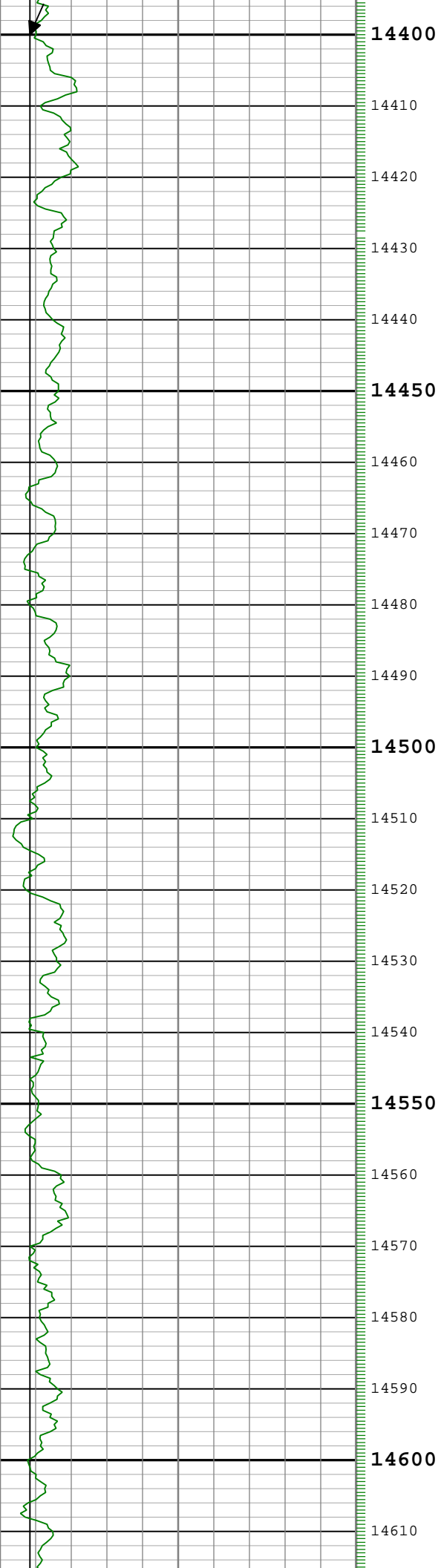
GR SPULSE\_BHC

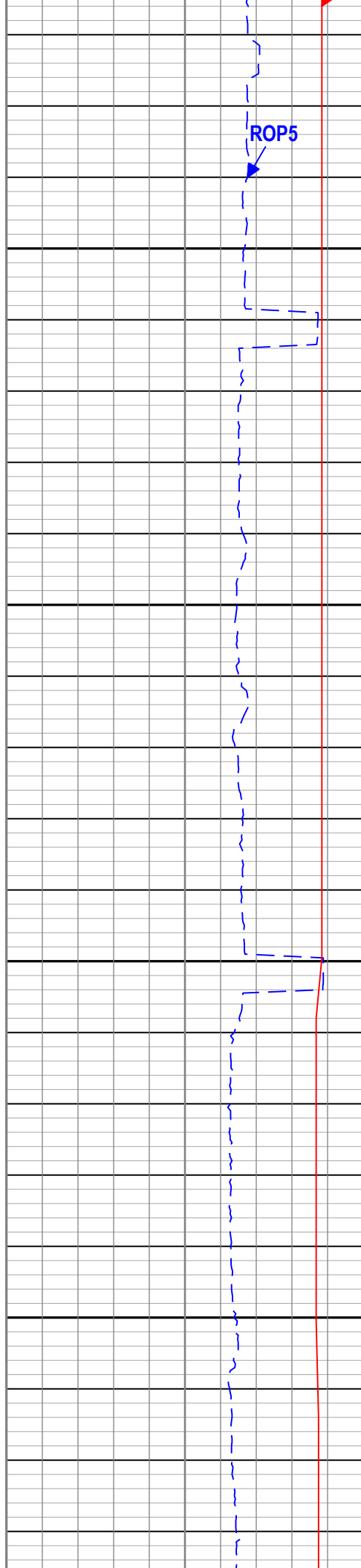
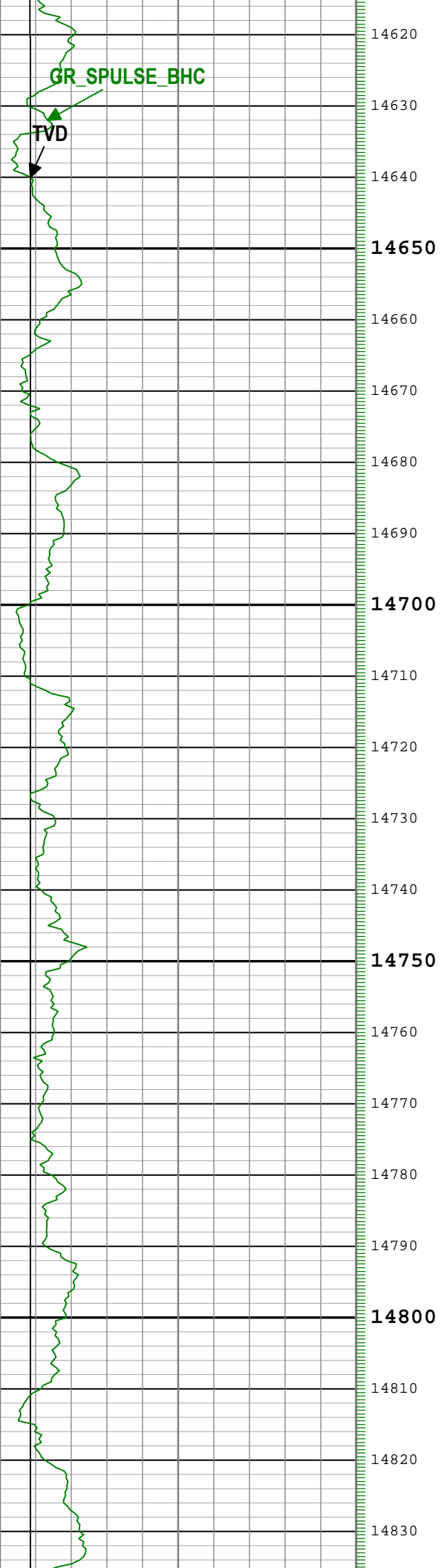
TVD

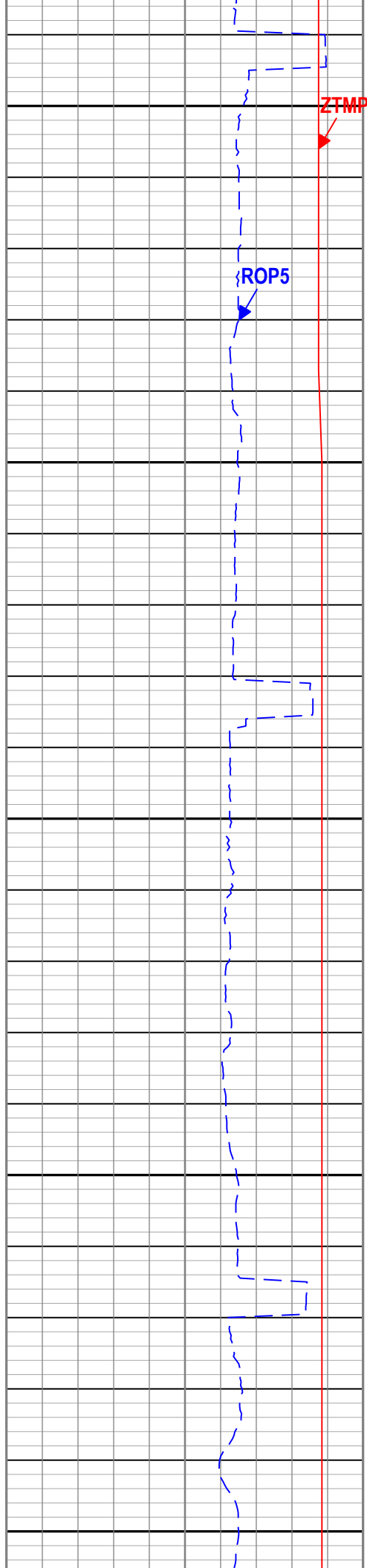
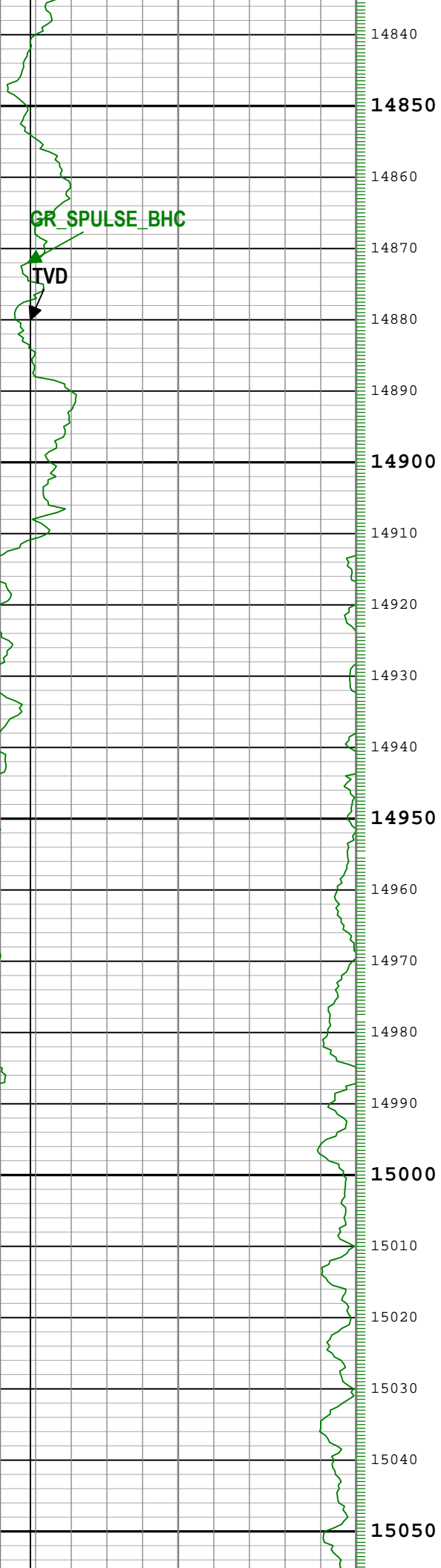


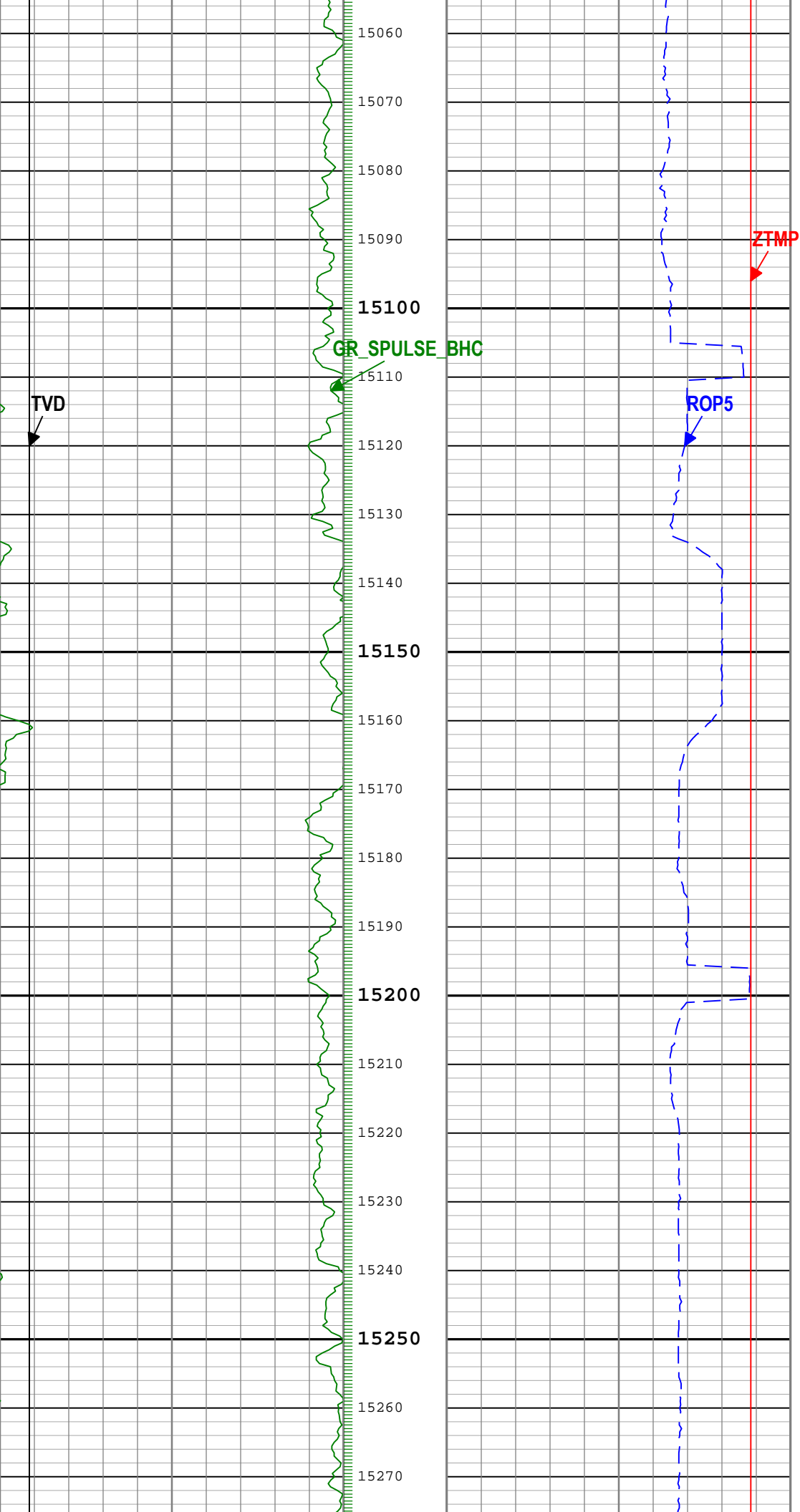


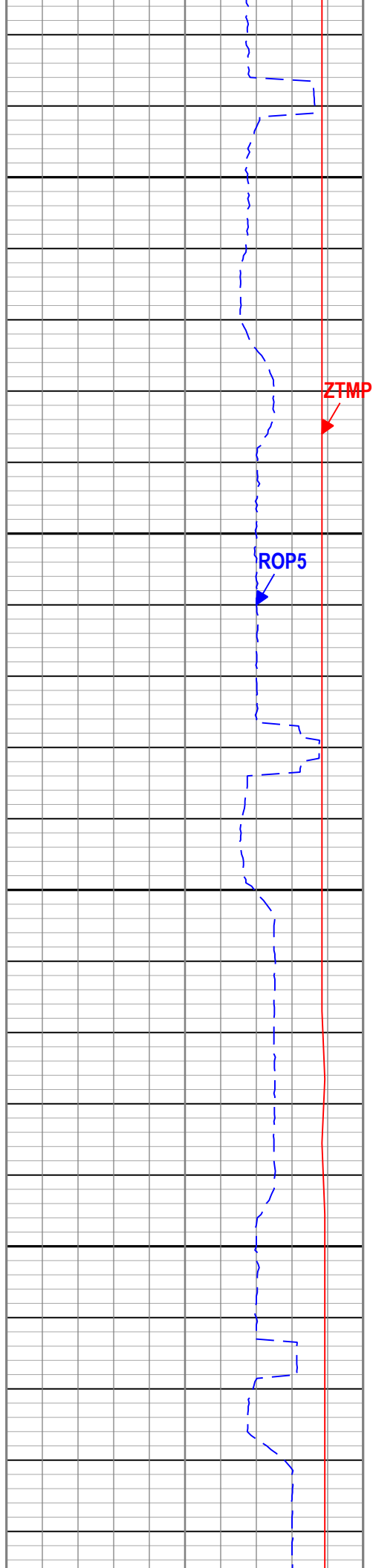
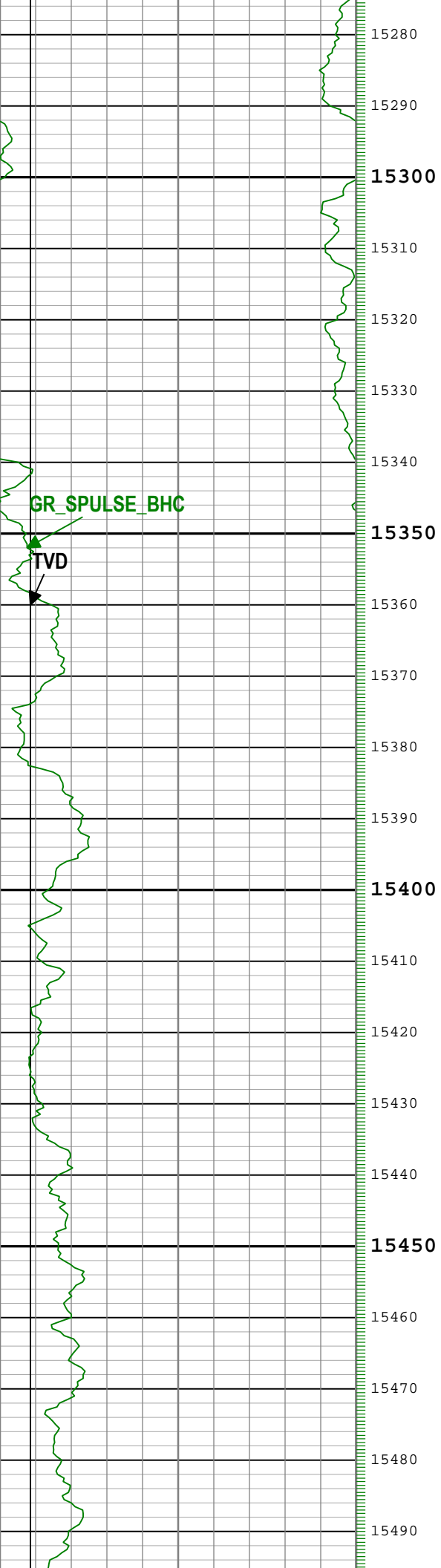


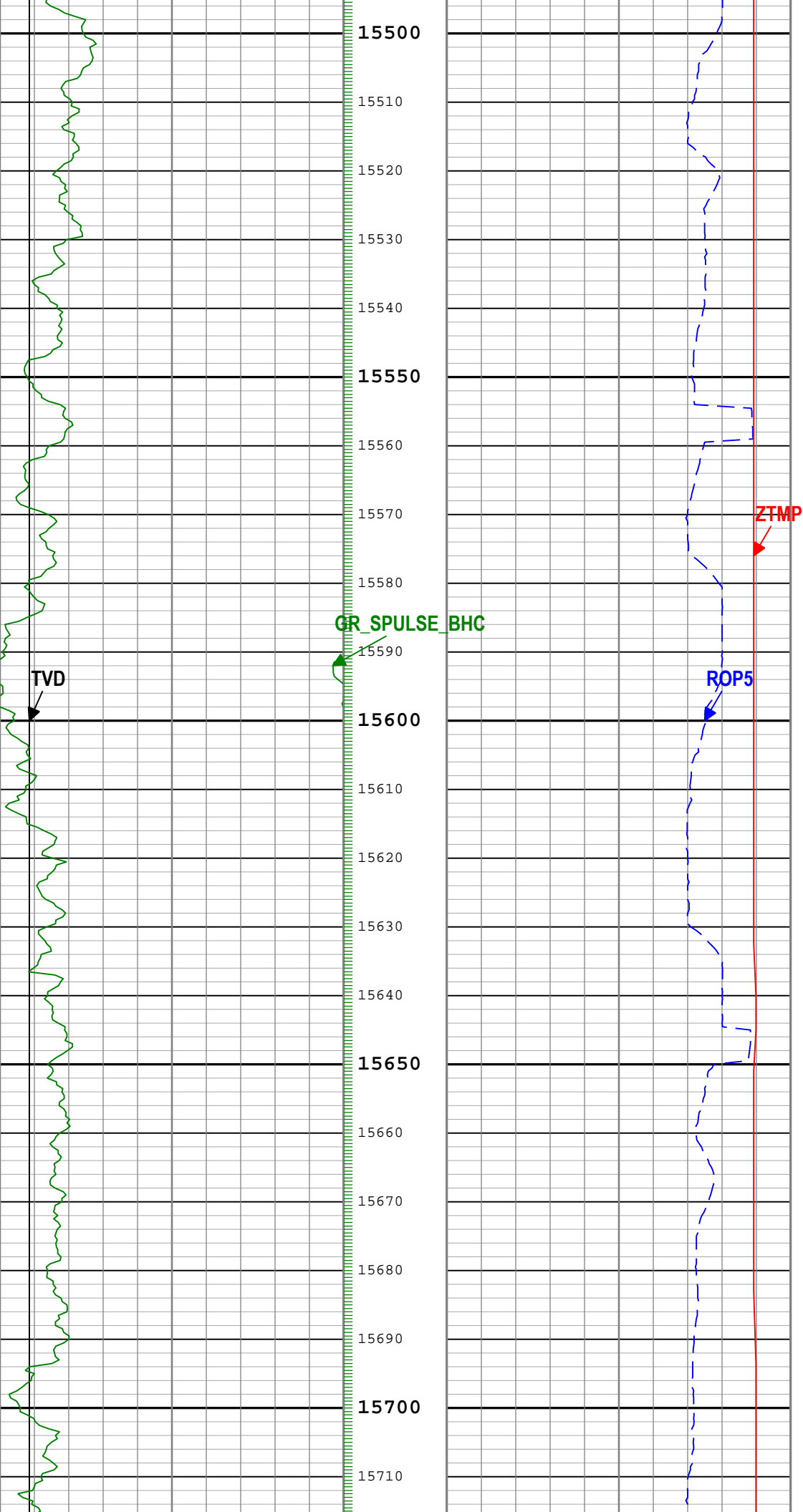


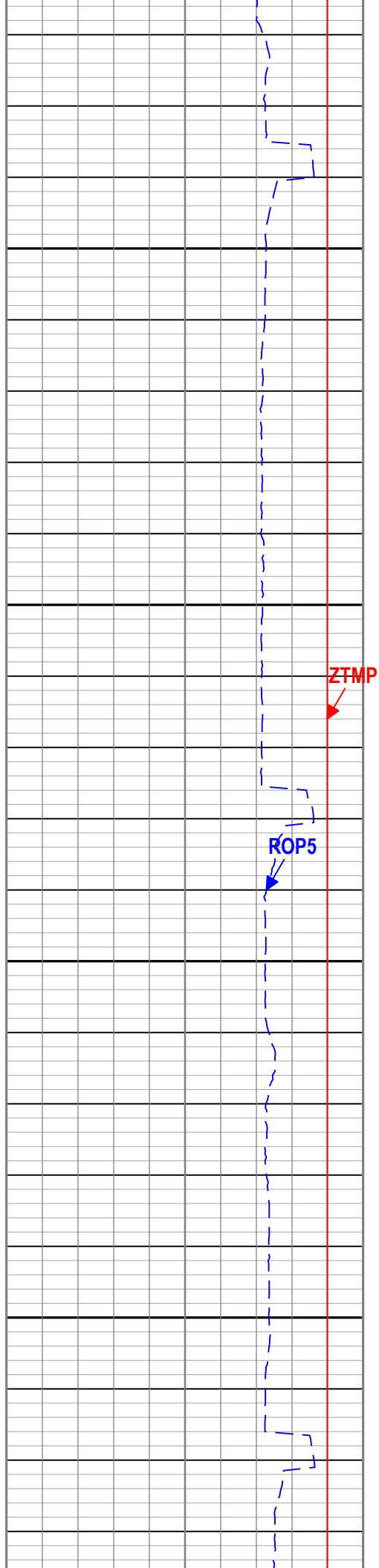
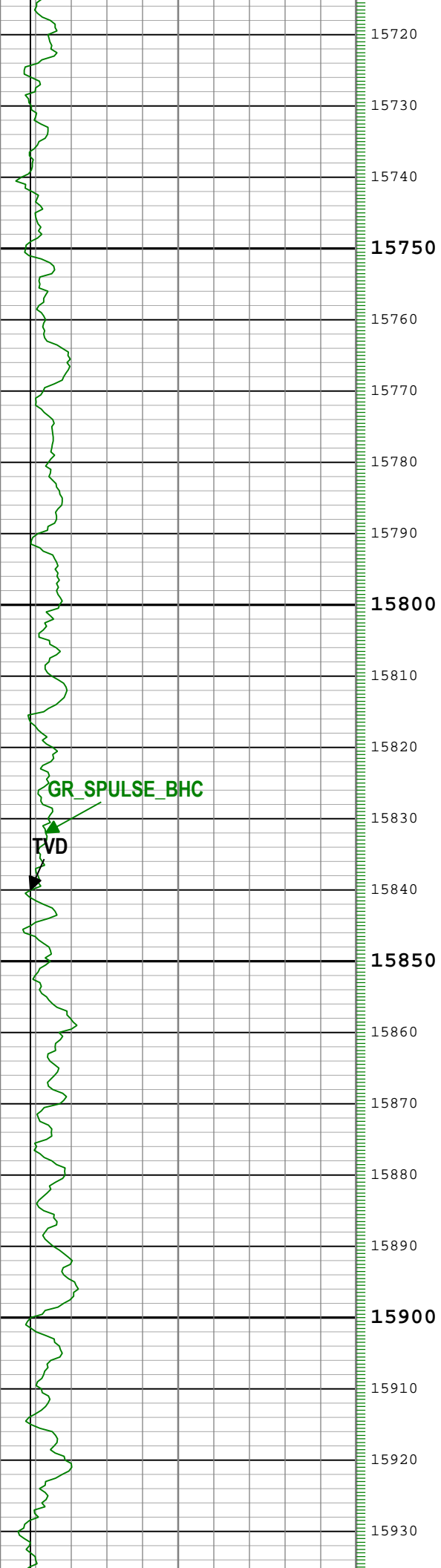


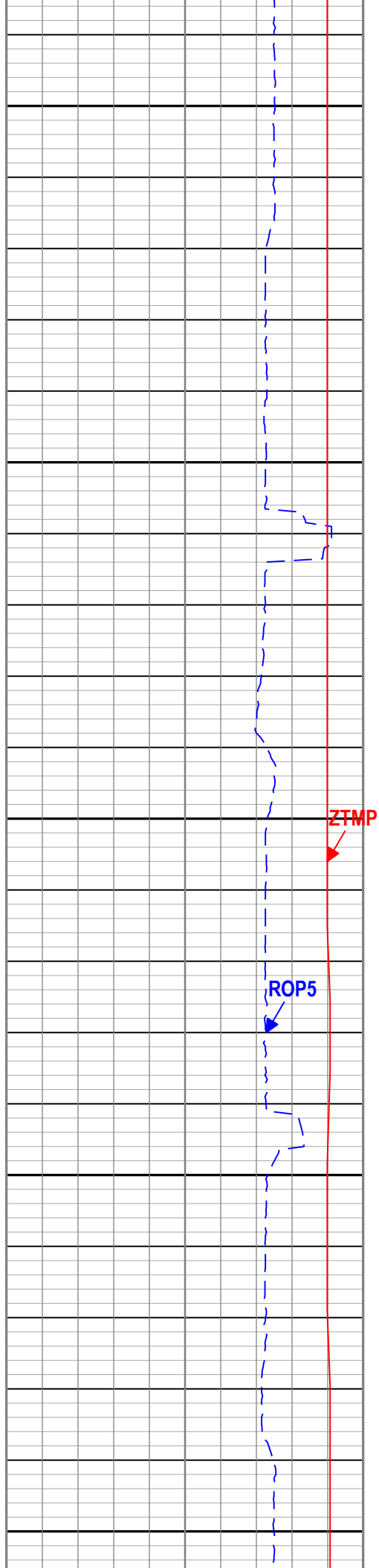
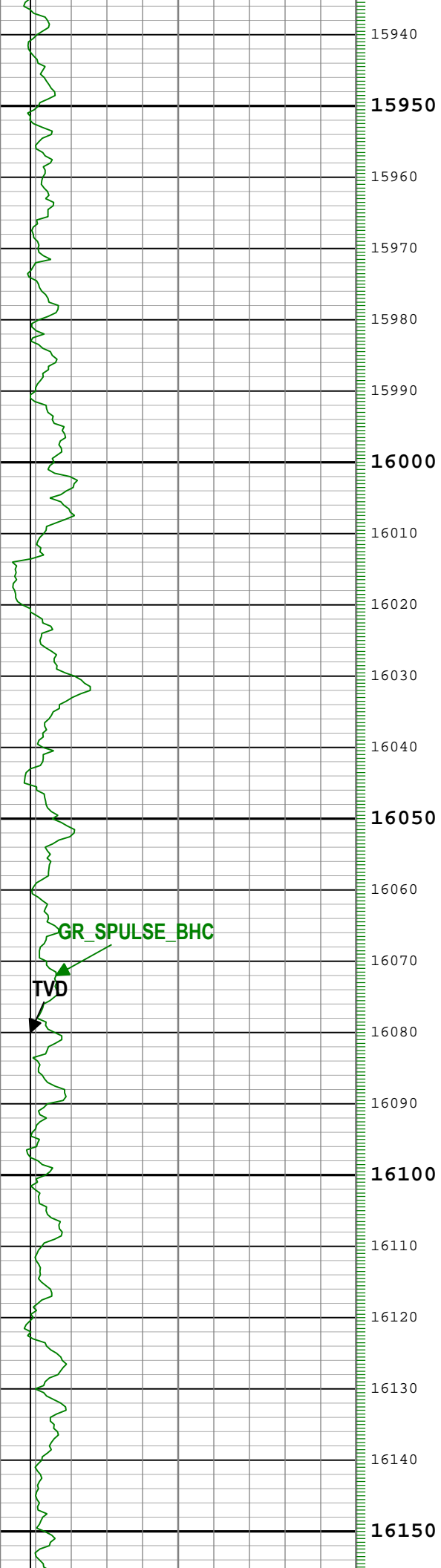




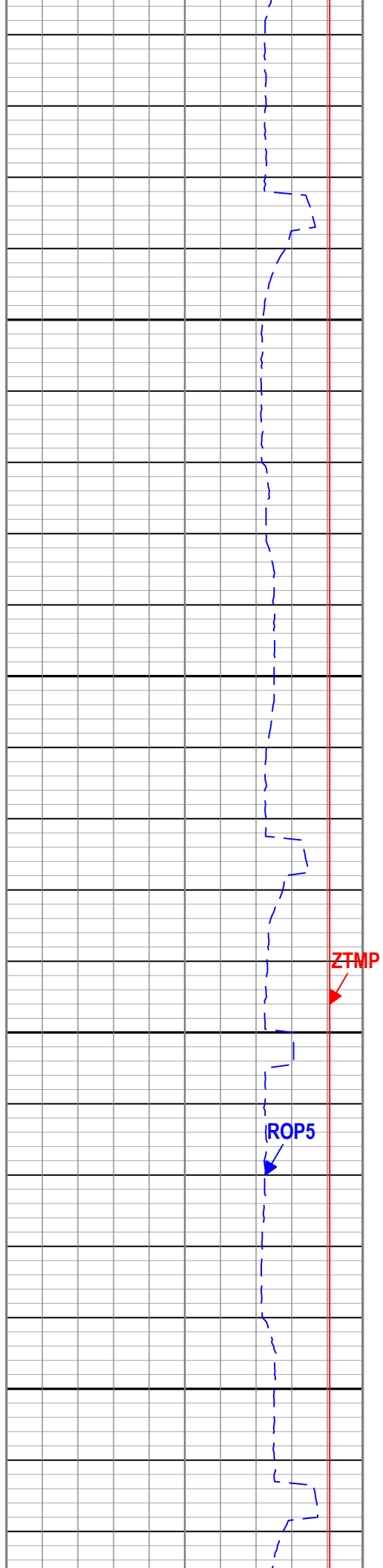
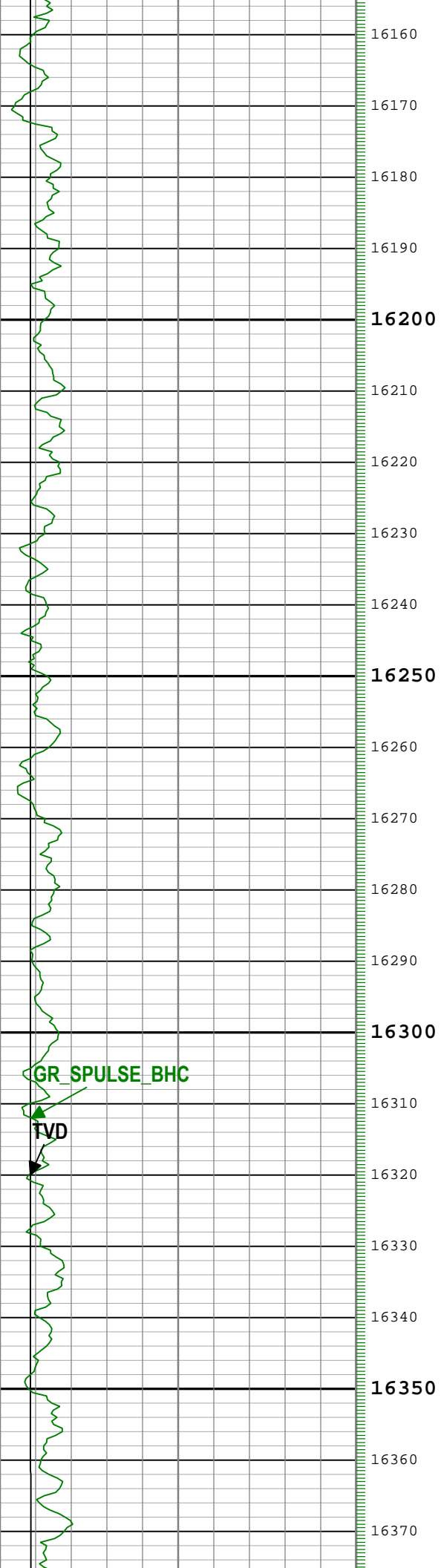


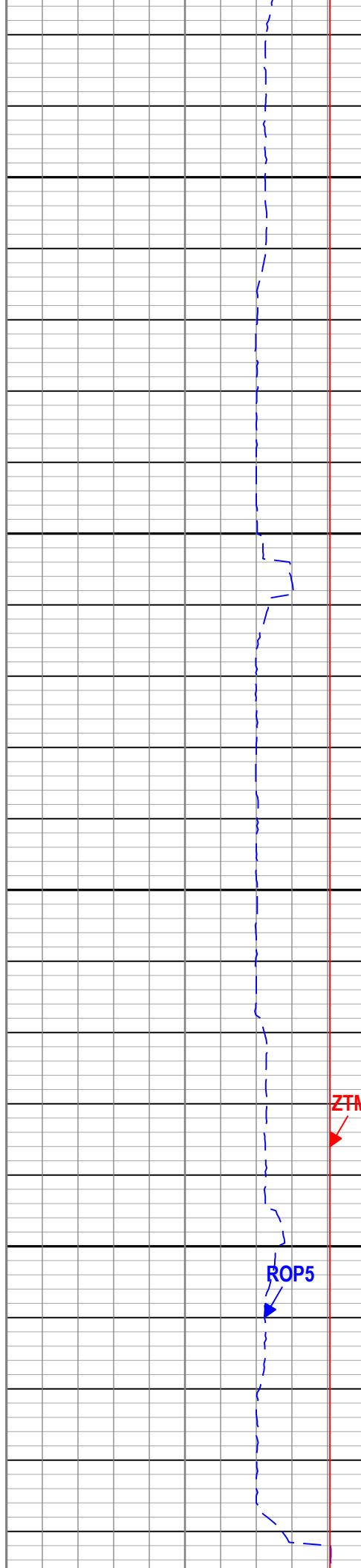
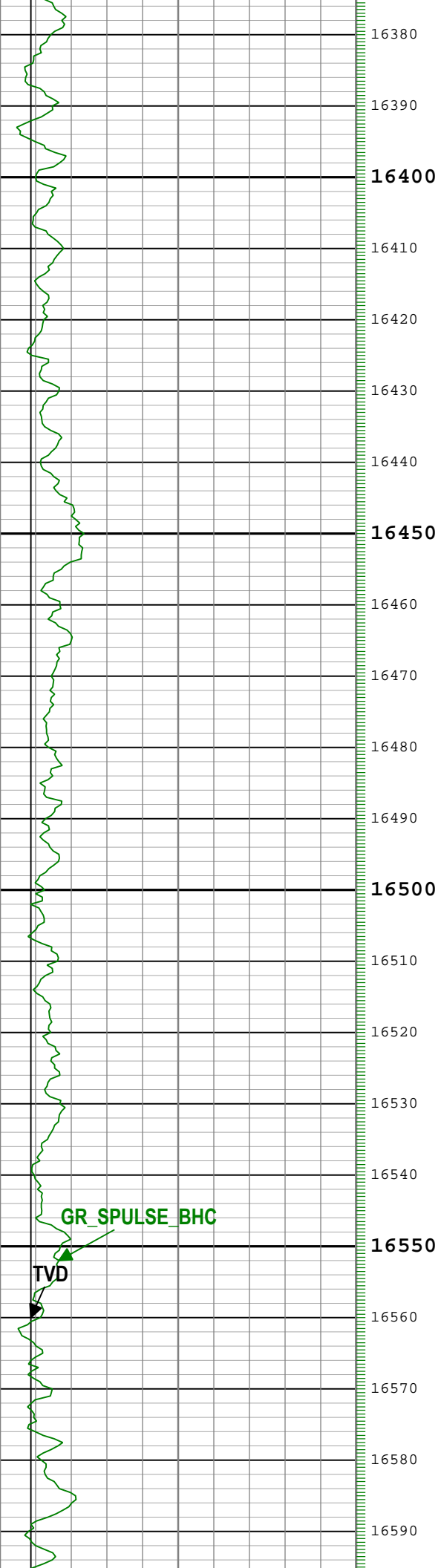


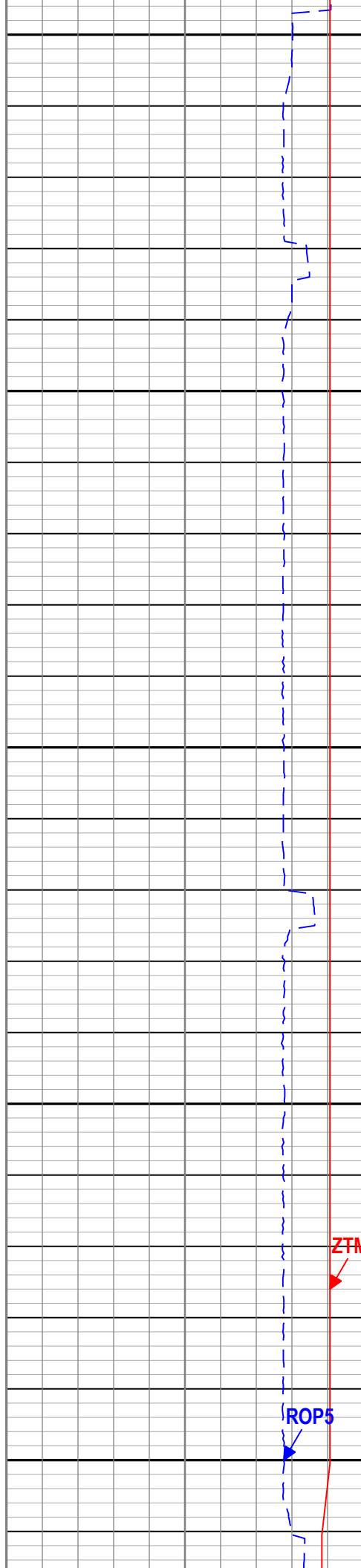
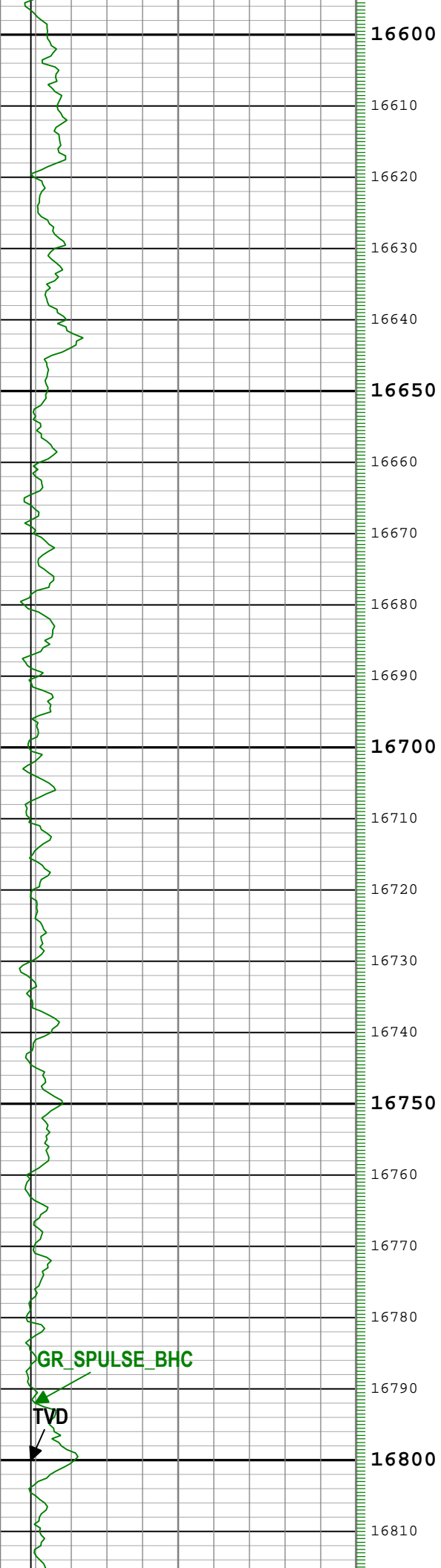


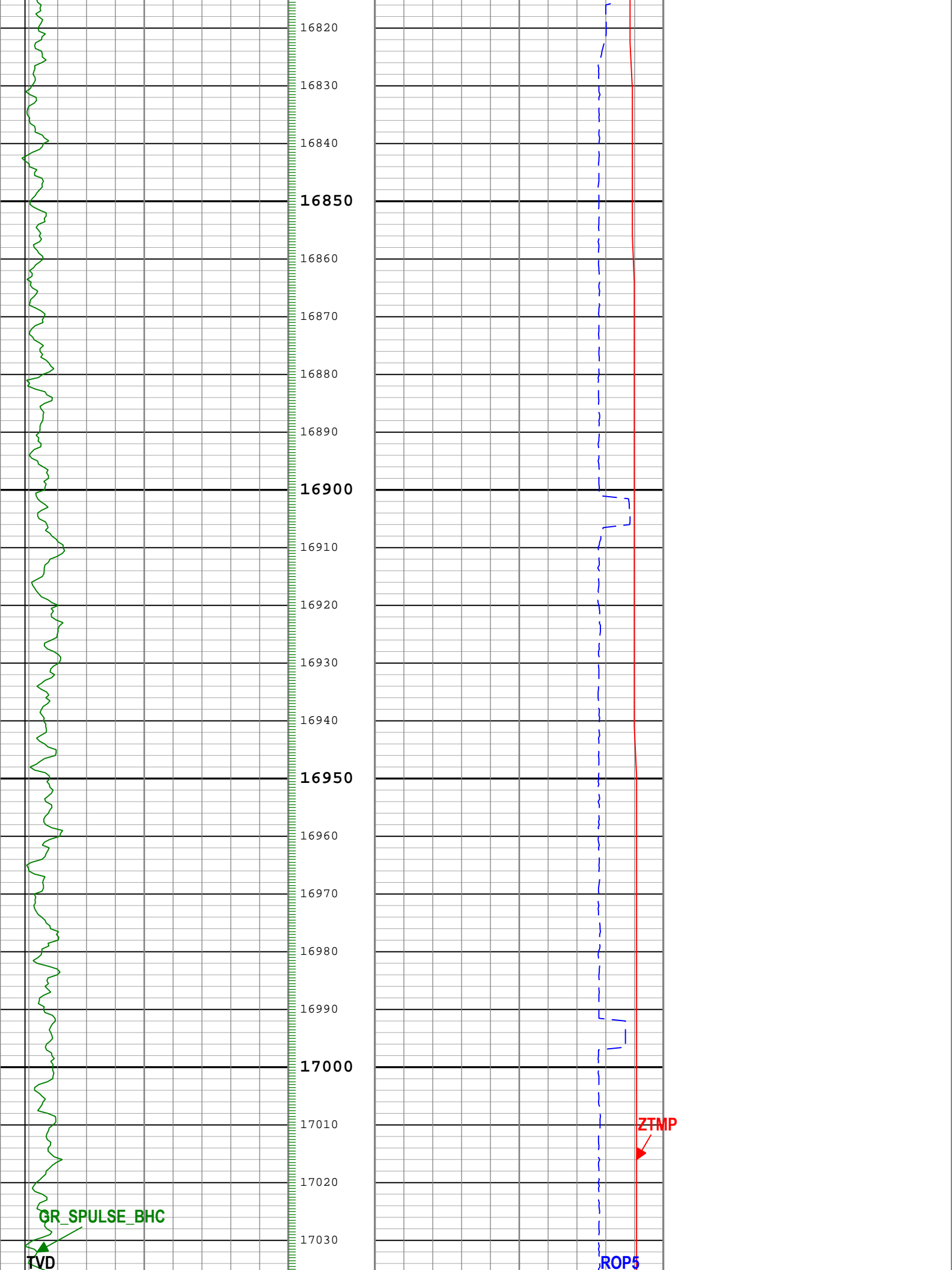


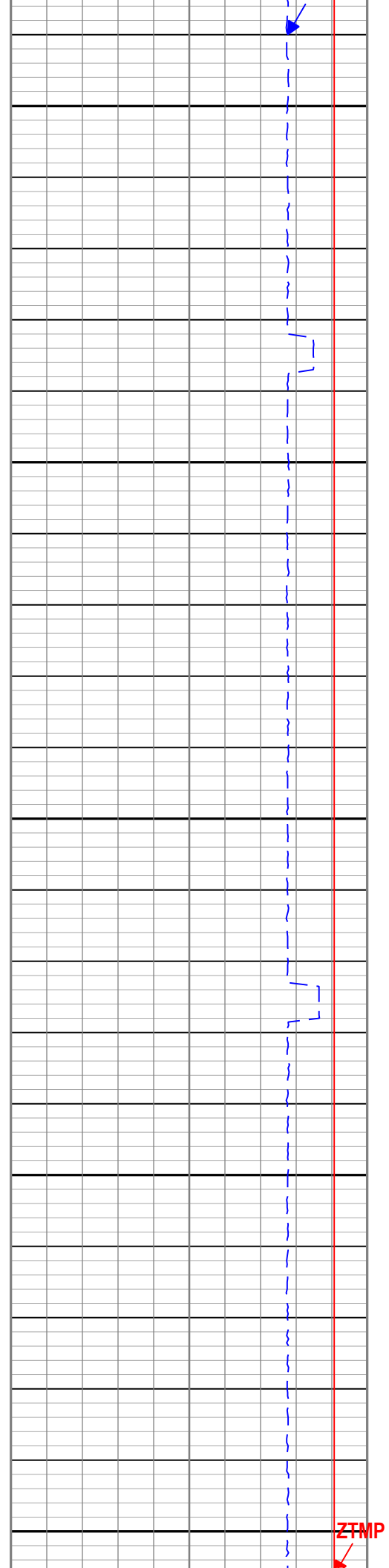
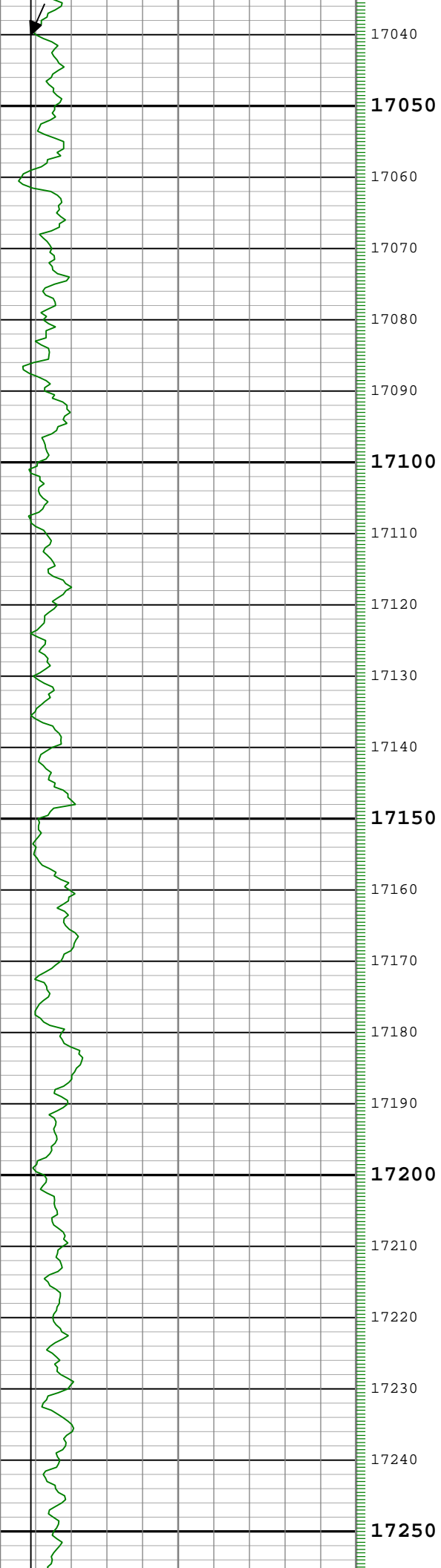


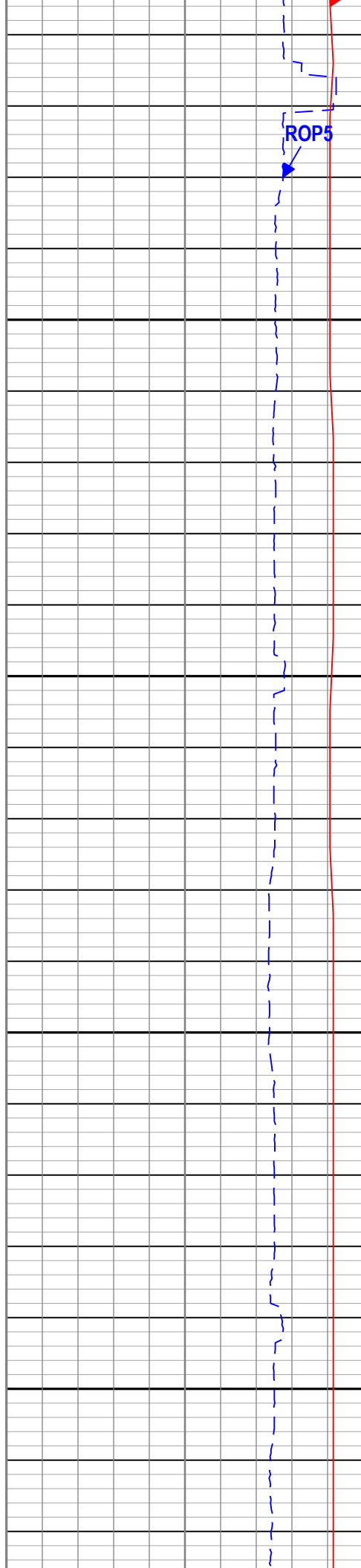
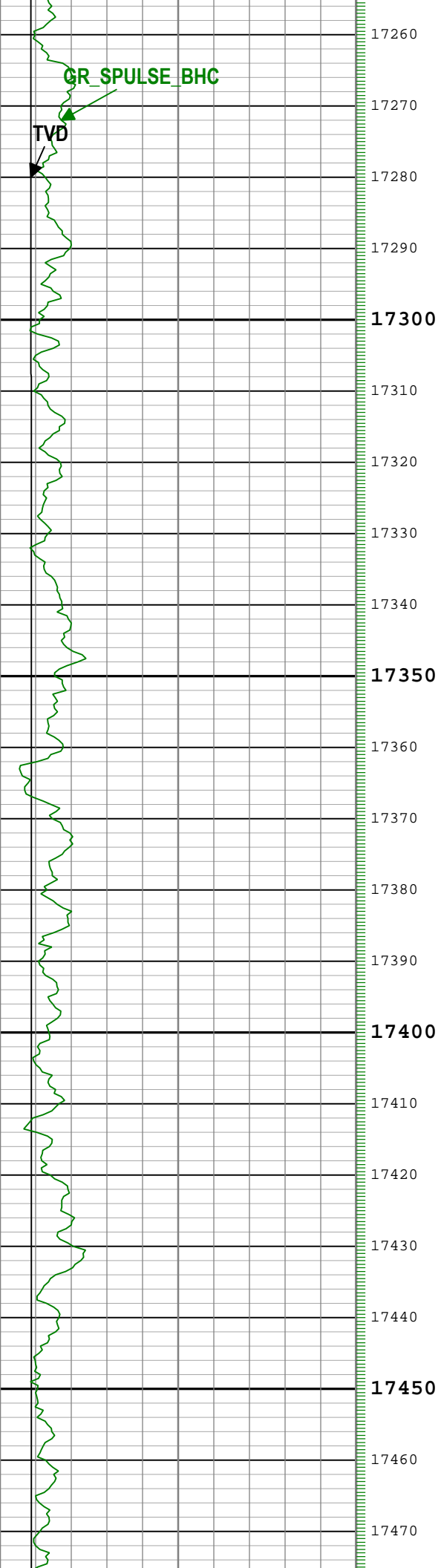


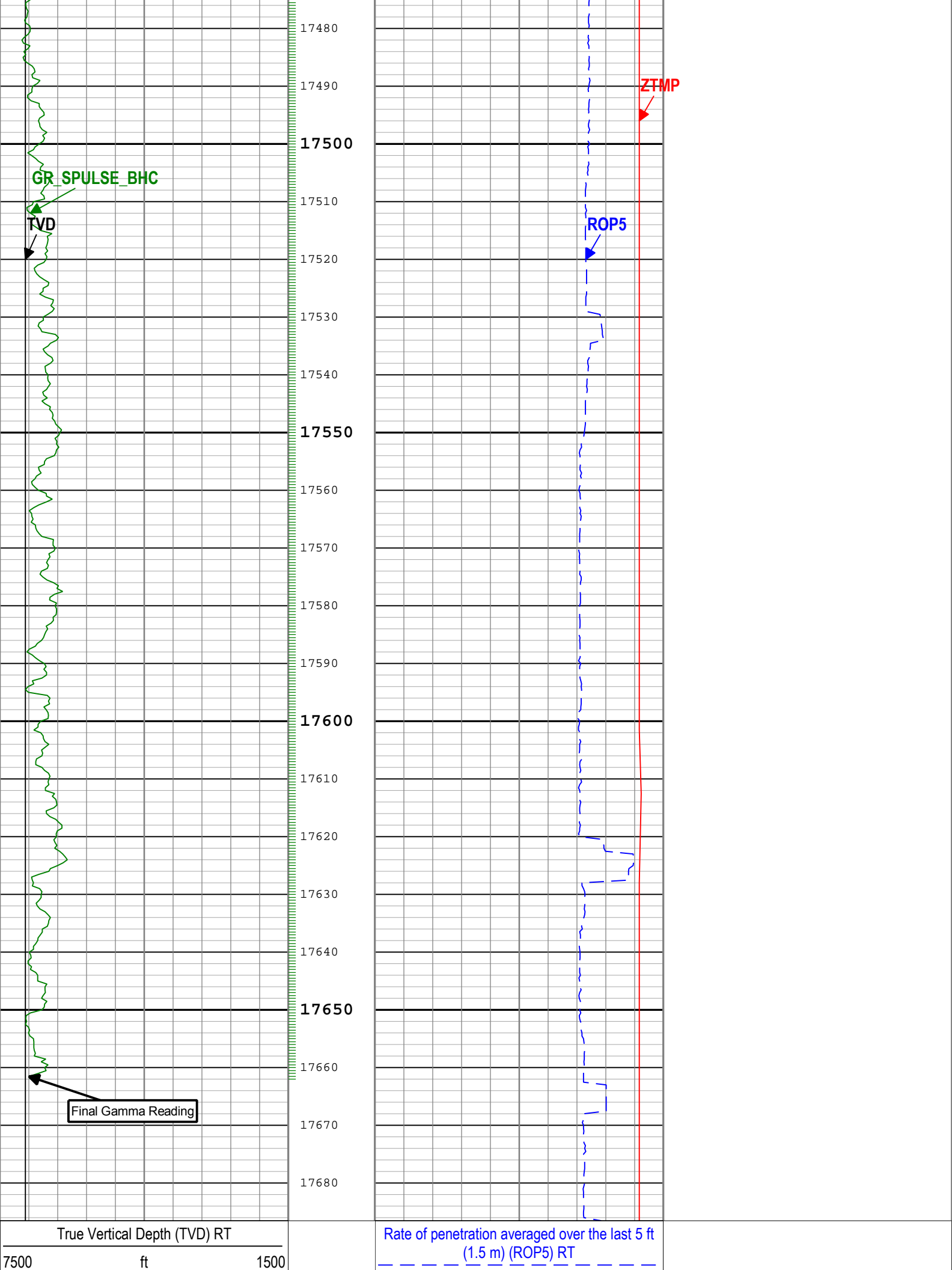












Gamma Ray (GR_SPULSE_BHC) Extreme[1] RM		
0	gAPI	150

1000	ft/h	0
Cartridge Temperature (ZTMP) Extreme[1] RT		
0	degF	300

└ GR\_SPULSE\_BHC - Gamma Ray Extreme[1] RM

Description: Extreme Gamma Ray 1 RT    Format: Log ( Extreme Gamma Ray 1 RT\_6 )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured  
Depth    Creation Date: 25-Oct-2019 10:24:07

Channel Processing Parameters	
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Run 1: Parameters
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Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	Depth Zoned	in
DEPTH_SEL	Depth Selection Parameter	DNMSESSION	Driller's Depth	
DFD	Drilling Fluid Density	Borehole	10.5	lbm/gal

Run 1Depth Zoned Parameters
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Parameter	Value	Start ( ft )	Stop ( ft )
BS	13.5	1570	1598
BS	8.5	1598	17686.5

All depth are actual.

Tool Control Parameters	
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Run 1: Parameters
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Parameter	Description	Tool	Value	Unit
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Calibration Report	
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**Company:** Great Western Operating Company LLC

**Well:** Schneider HD 11-142HN

**Field:** Wattenberg

**County:** Weld

**State:** Colorado

**Country:** United States of America



XEM Gamma Ray  
5in/100ft Measured Depth  
Recorded Mode, Composite Log