

XEM Gamma Ray

5in/100ft Measured Depth

Recorded Mode, Composite Log

Schlumberger

Country: United States of America

State: Colorado

Weld

Field: Wattenberg

Schneider HD 11-102HNX

Great Western Operating Company LLC Well:

Company:

Company: Great Western Operating Company LLC

Well: Schneider HD 11-102HNX

Field: Wattenberg

County: Weld

State: Colorado

Country: United States of America

Latitude: 40° 19' 27.149" N

05-123-46417

Longitude: 104° 49' 35.594" W

APIN:

Precision Drilling 466

Rig Name:

Land Rig - Top Drive

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

FL1: Easting: 3187769.57 ftUS

FL2: Northing: 1361662.838 ftUS

Log Measured From: - Drill Floor: 4755.00 ft

Ground Level: 4735.00 ft

Permanent Datum: - Mean Sea Level

Acquisition Dates: 30-Oct-2019 -- 02-Nov-2019

Other Services:

Log Interval: 1580.00(ft) -- 17677.92(ft)

Directional Drilling

Index Types: Measured Depth

Direction and Inclination (Surveys)

Index Scales: 1:240 5" / 100'

Continuous D&I

Depth Source: Driller's Depth

Rotary Steerable System

Depth Sensor: 3rd Party Depth

Print Type: Field

Spud Date: 04-Sep-2019

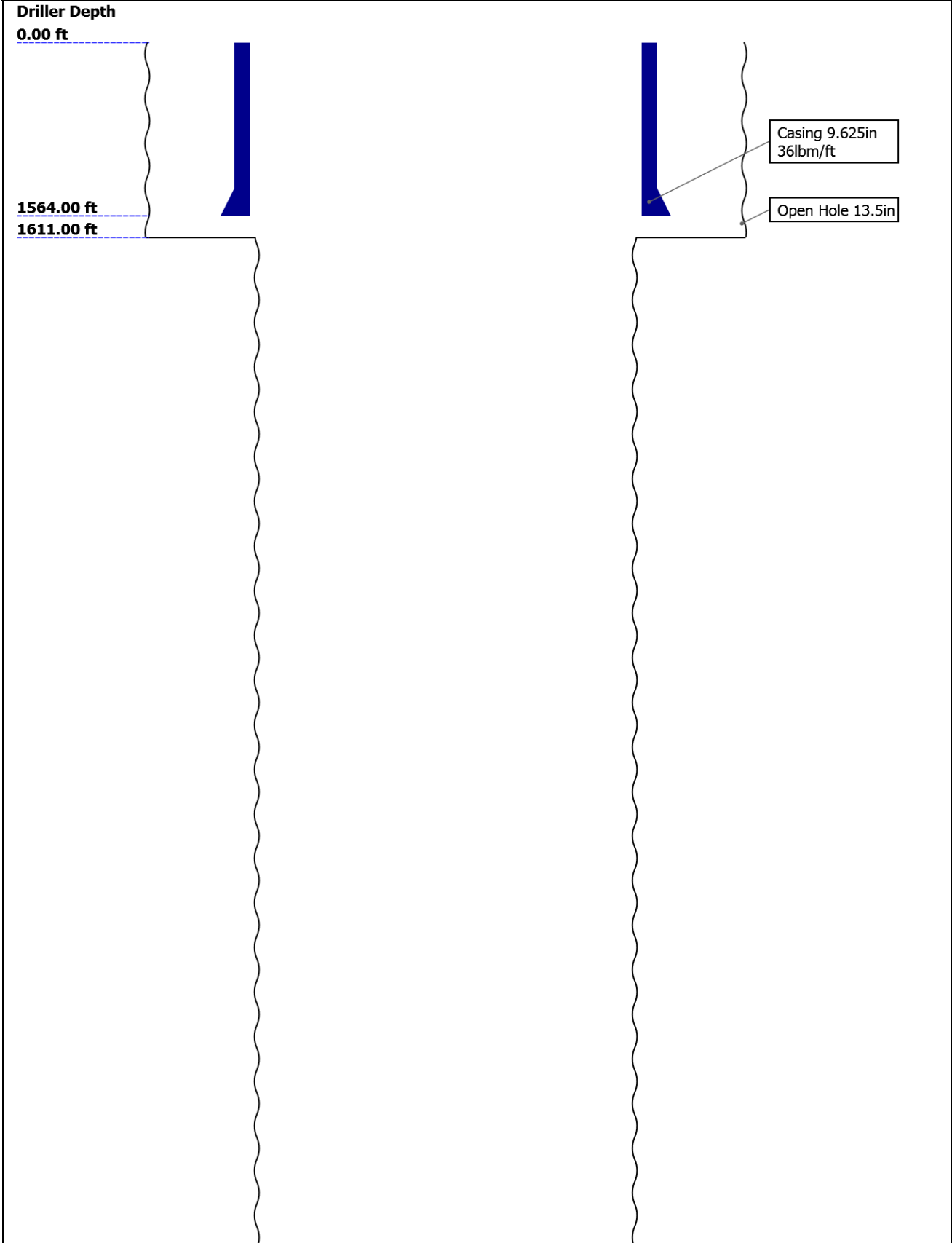
Disclaimer

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Well Sketch





Borehole Size/Casing Record

Bit						
Bit Size (in)	13.5	8.5				
Top Driller (ft)	0	1611				
Bottom Driller (ft)	1611	17677.92				
Casing						
Size (in)	9.625					
Weight (lbm/ft)	36					
Inner Diameter (in)	8.921					
Grade	J55					
Top Driller (ft)	0					
Bottom Driller (ft)	1564					

Operational Run Summary

Parameter (unit)	Run 1					
Date Log Started	30-Oct-2019					
Time Log Started	07:41:41					
Date Log Finished	02-Nov-2019					
Time Log Finished	11:36:50					
Bit Size (in)	8.500					
Bit Start Depth (ft)	1611.00					
Bit Stop Depth (ft)	17678.00					
Top Log Interval (ft)						
Bottom Log Interval (ft)						
Max Hole Deviation (deg)	91.15					
Azimuth of Max Deviation (deg)	268.61					
Logging Unit Number	Client Provided					
Logging Unit Location	Zone 2					
Recorded By	D. Goldfarb					
Witnessed By						
Service Order Number	19CCO1388					

Borehole Fluids

Remarks and Equipment Summary

Run 1: Toolstring	Run 2: Toolstring

Equipment	Length	MP name	Offset	
Equip name Filtr Sub: 6 3/4":SD 17871	122.14	Filter Sub		Run Objective: Drill curve and lateral to Well TD.
				Reason to POOH: Well TD.
Motor: 6 3/4":7075	116.33	Hunting		Drill Interval: 1611 ft MD to 17678 ft MD.
				Logged Interval: 1586 ft MD to 17653 ft MD.
				MWD Personnel: D. Goldfarb

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XEM650:SD36558H 40.84
S

GAP650:GSBR0882
XEM650DC:SD36558H
S
DPG:DDRP034
XHOP:XHOP1010
XTX:HVTX0237
DYN:SOCD1224
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XGM:XGM0744
DNI:SOCD1224

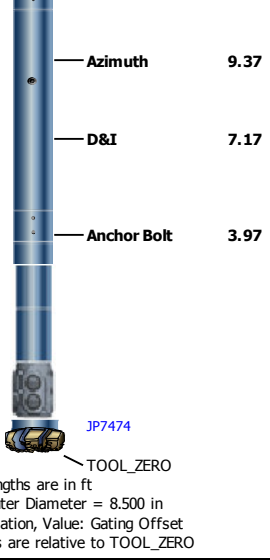
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ANN PRES 38.57
TEMP 38.57

GR 24.76

D&I 20.18

PDCOPIBANA_675 13.45

PD675CC
PDCU
Impeller Set
PDCOPIBANA_675PU



Well Composite

Software Version

Acquisition System	Version
Maxwell 2018 SP2	8.2.104493.3100

Composite Summary

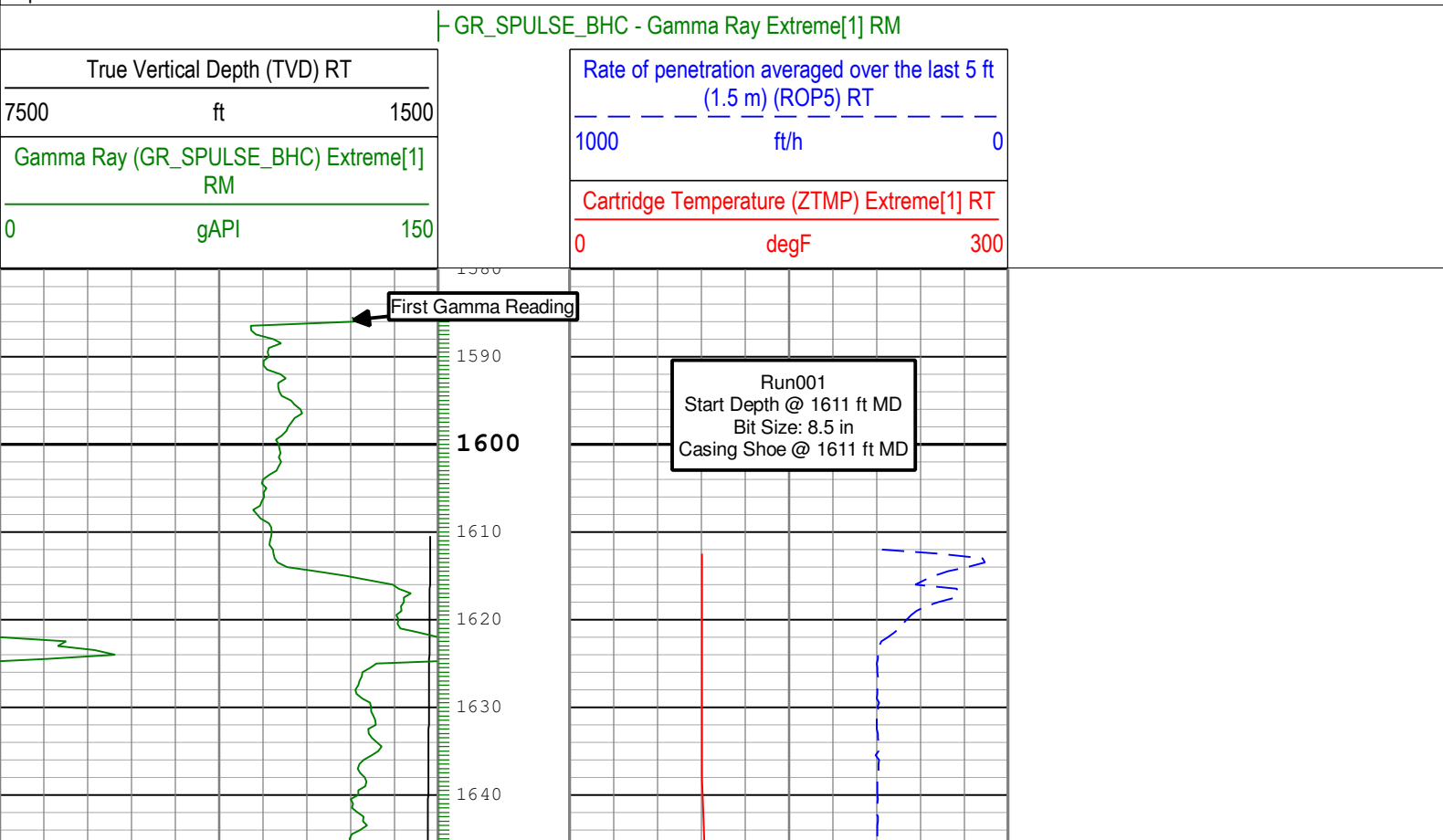
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 1	Drilling	Down	1610.17 ft	17677.92 ft	30-Oct-2019 2:31:59 PM	02-Nov-2019 11:36:50 AM	No

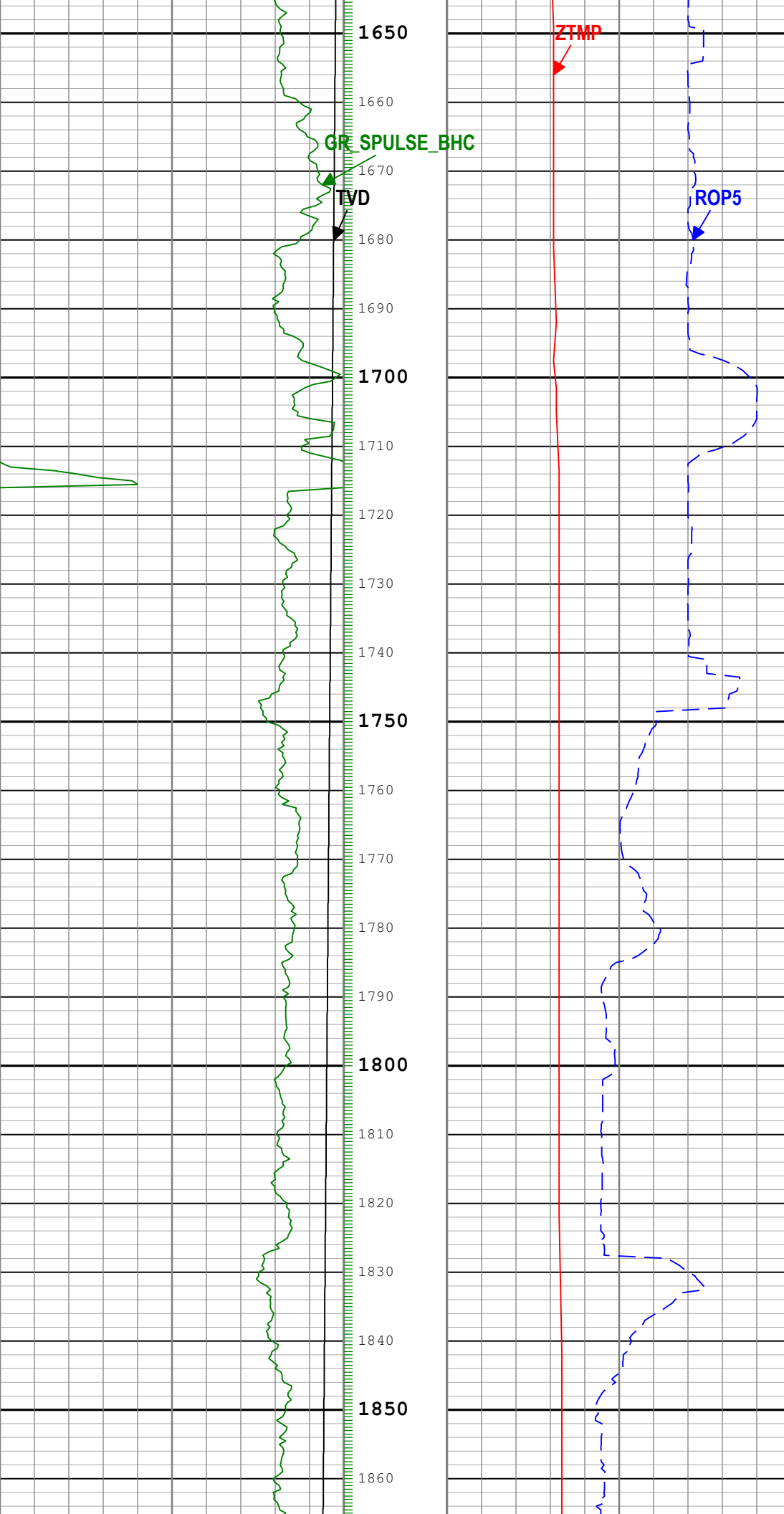
All depths are referenced to toolstring zero

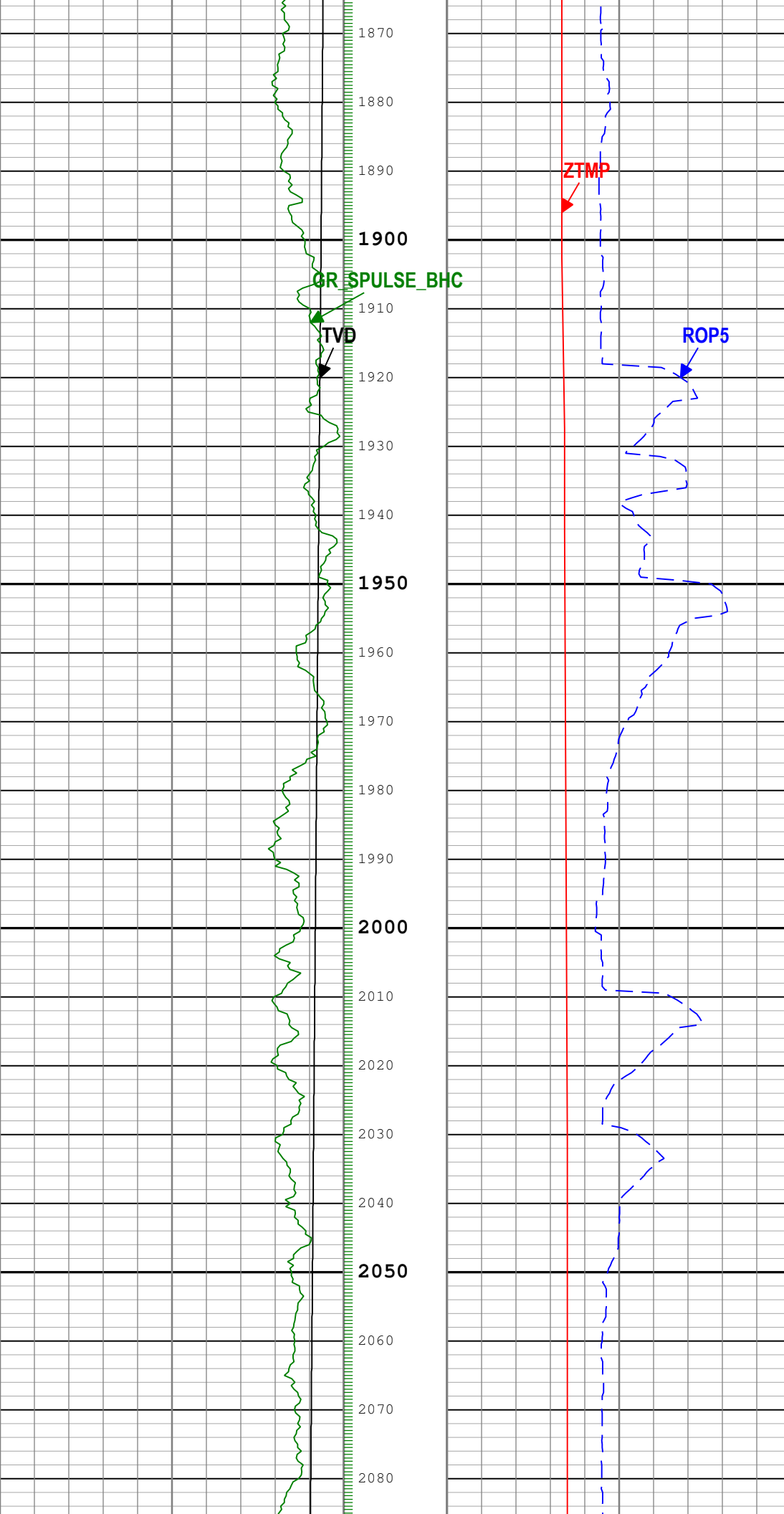
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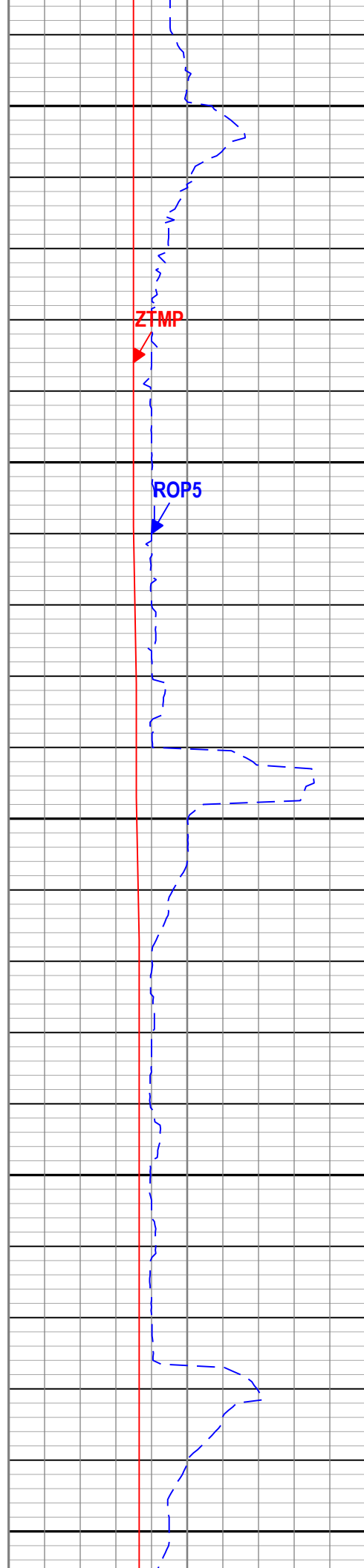
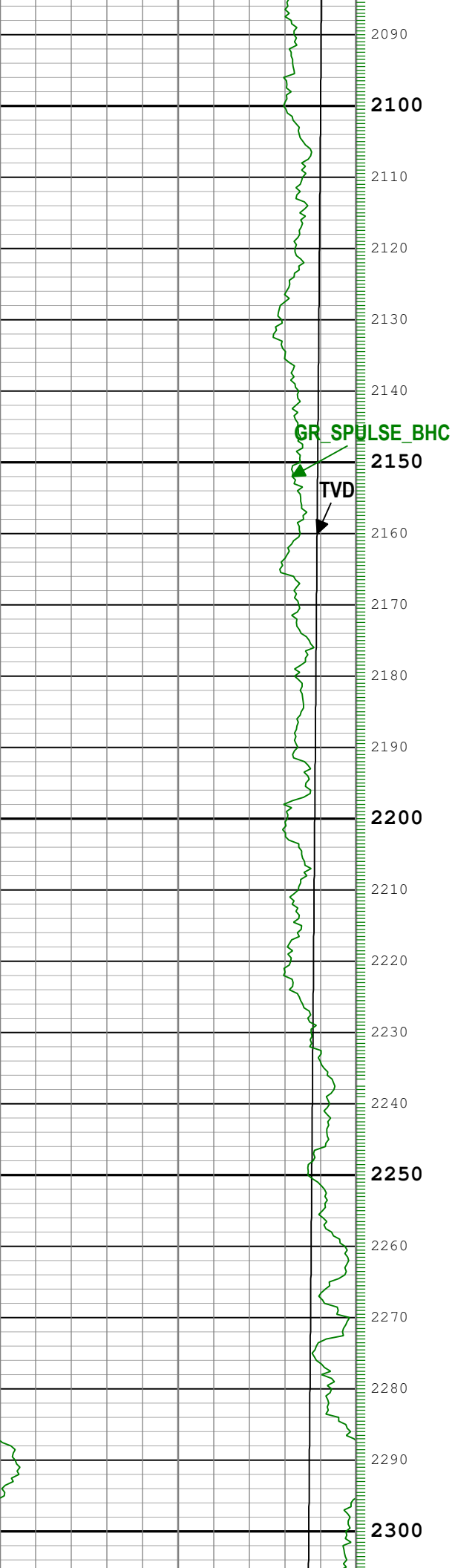
Company: Great Western Operating Company LLC Well: Schneider HD 11-102HNX
Well Composite: S187

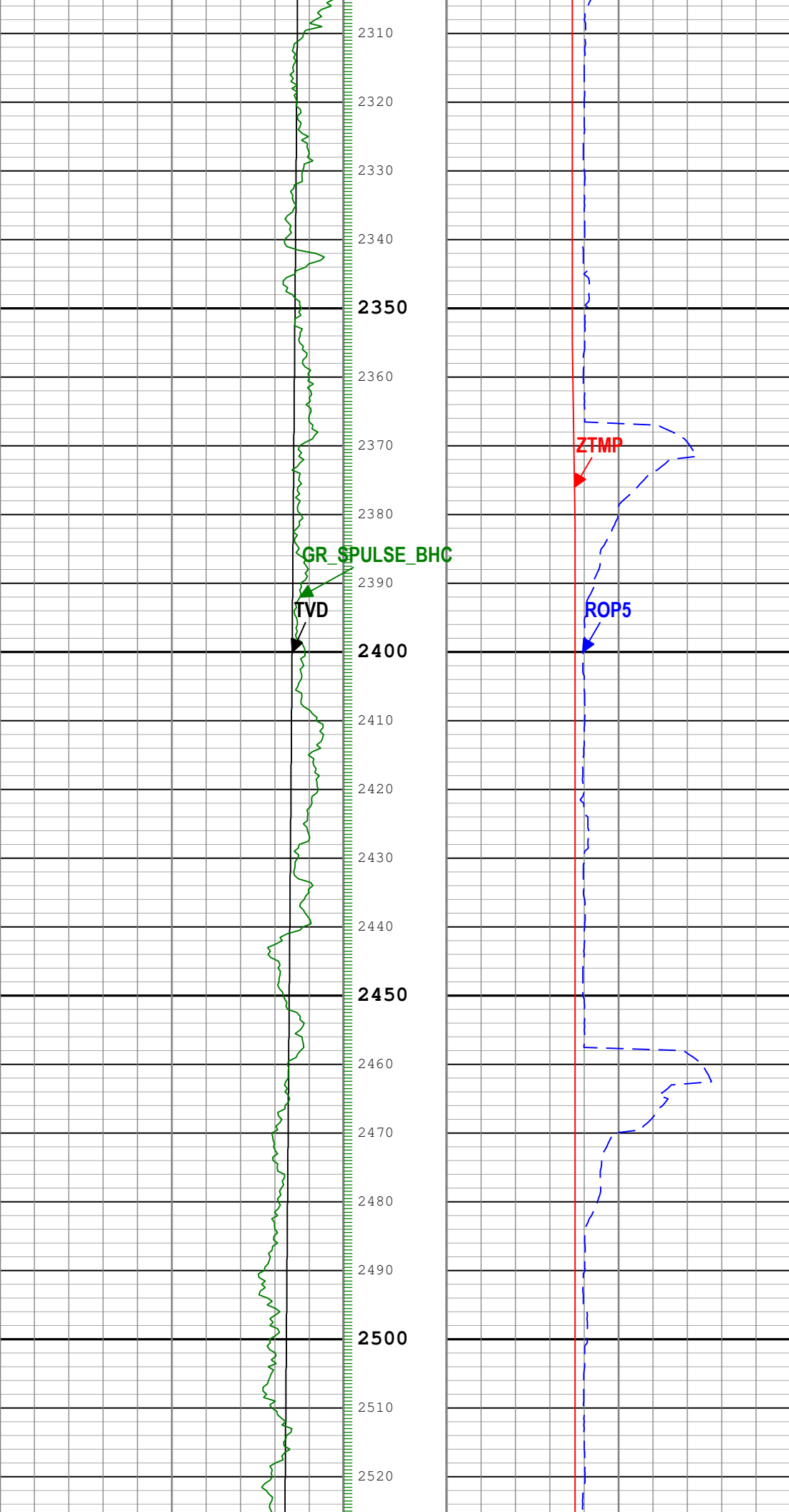
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Depth Creation Date: 03-Nov-2019 00:28:10

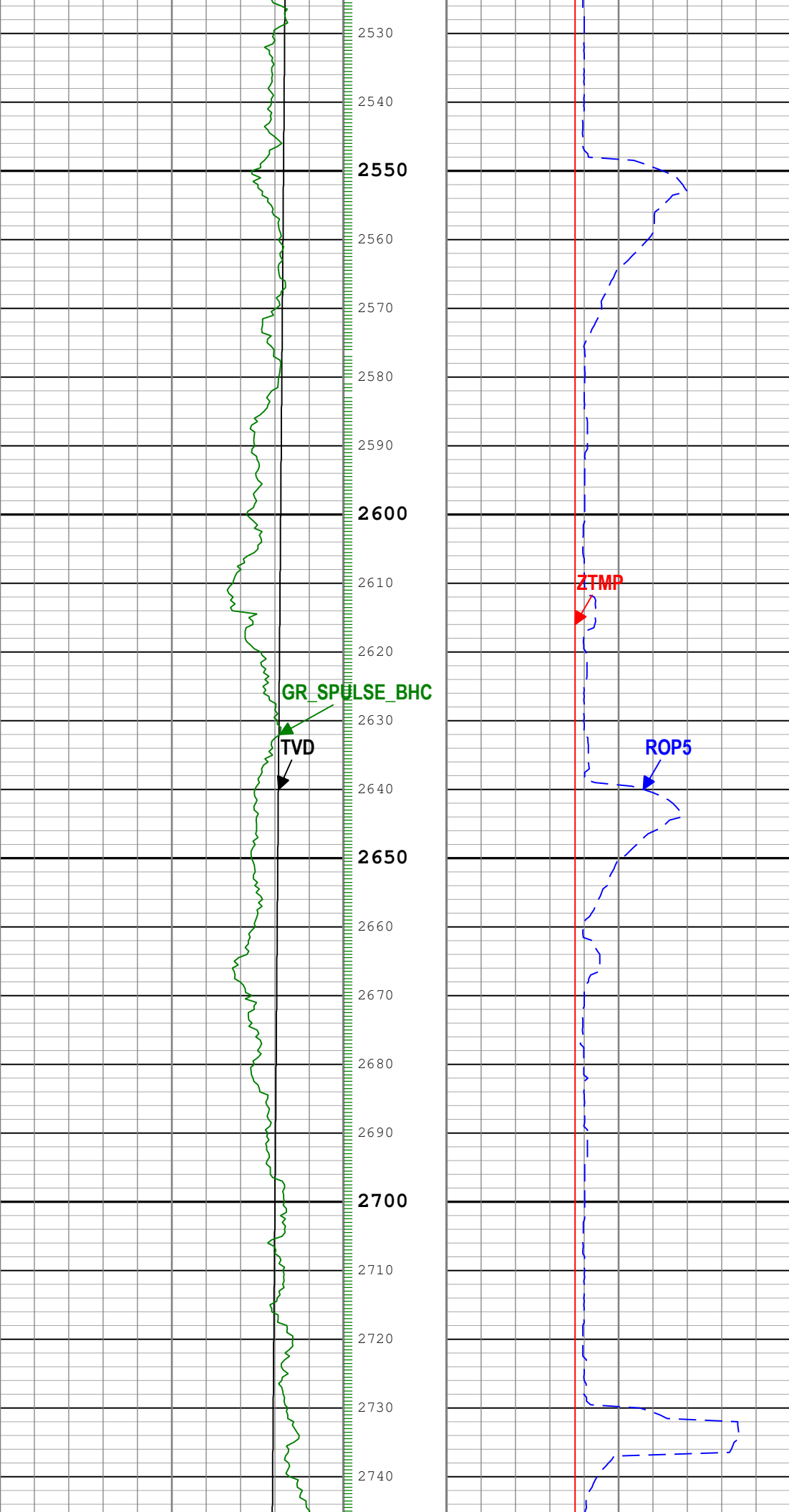


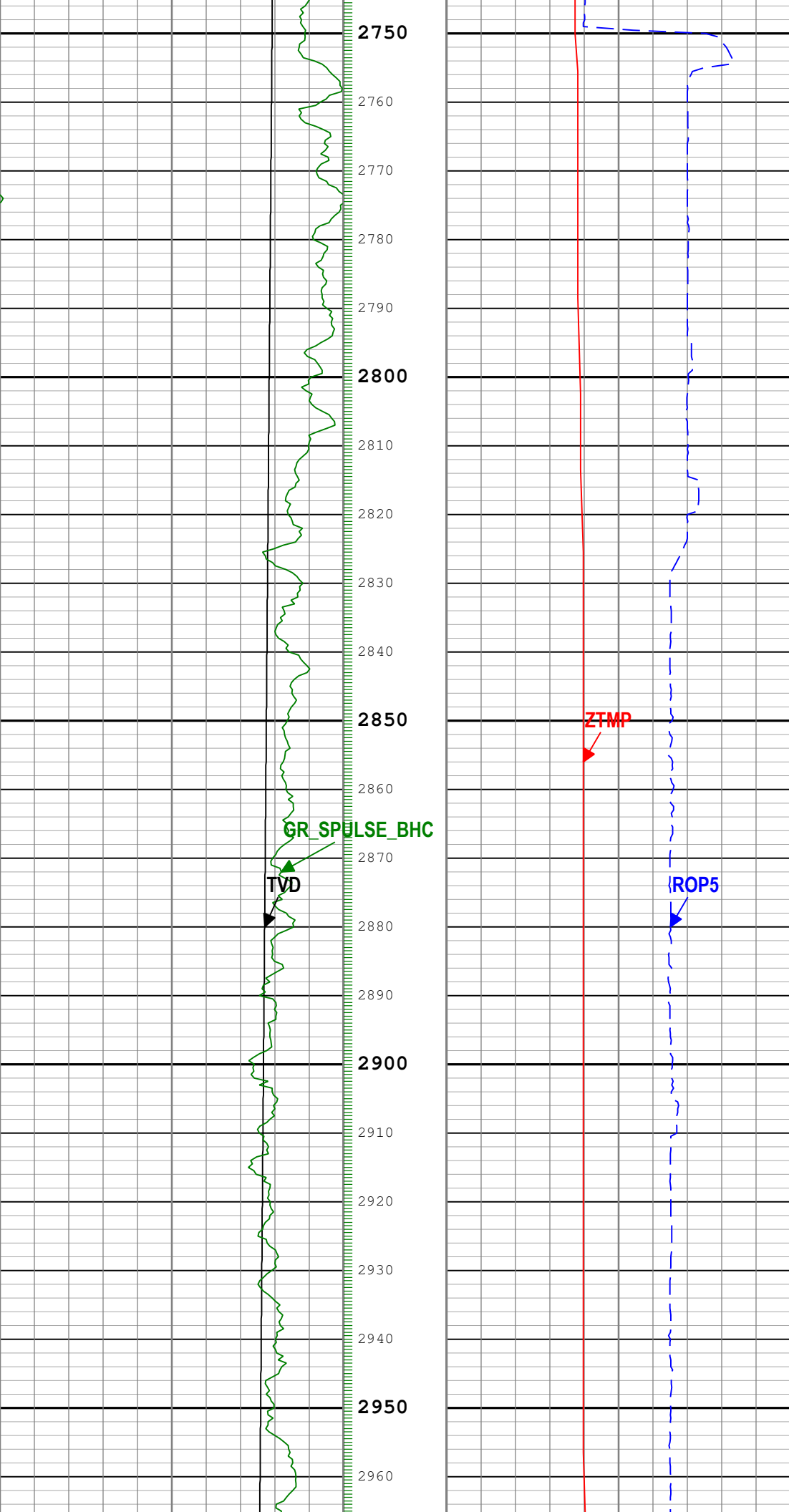


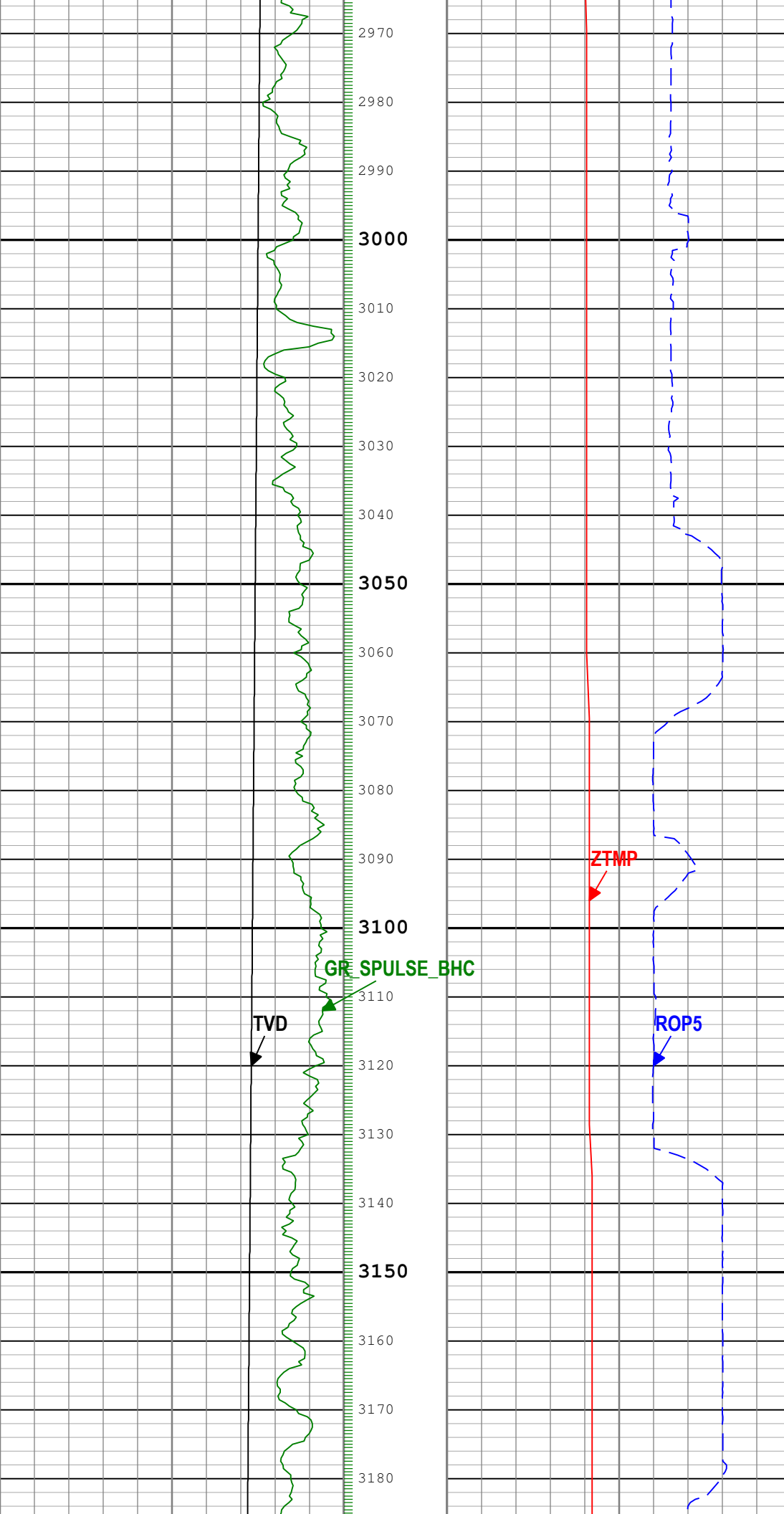


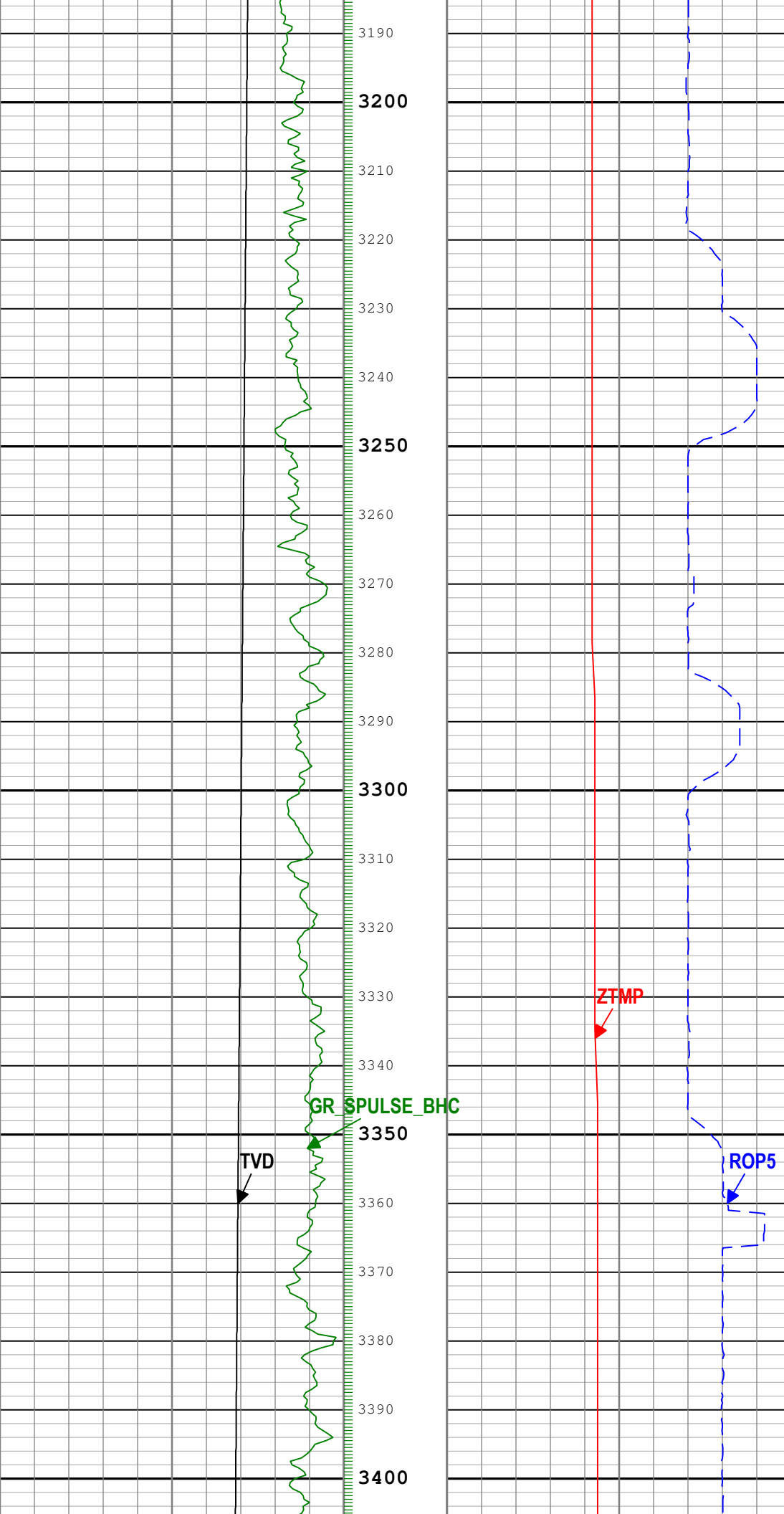


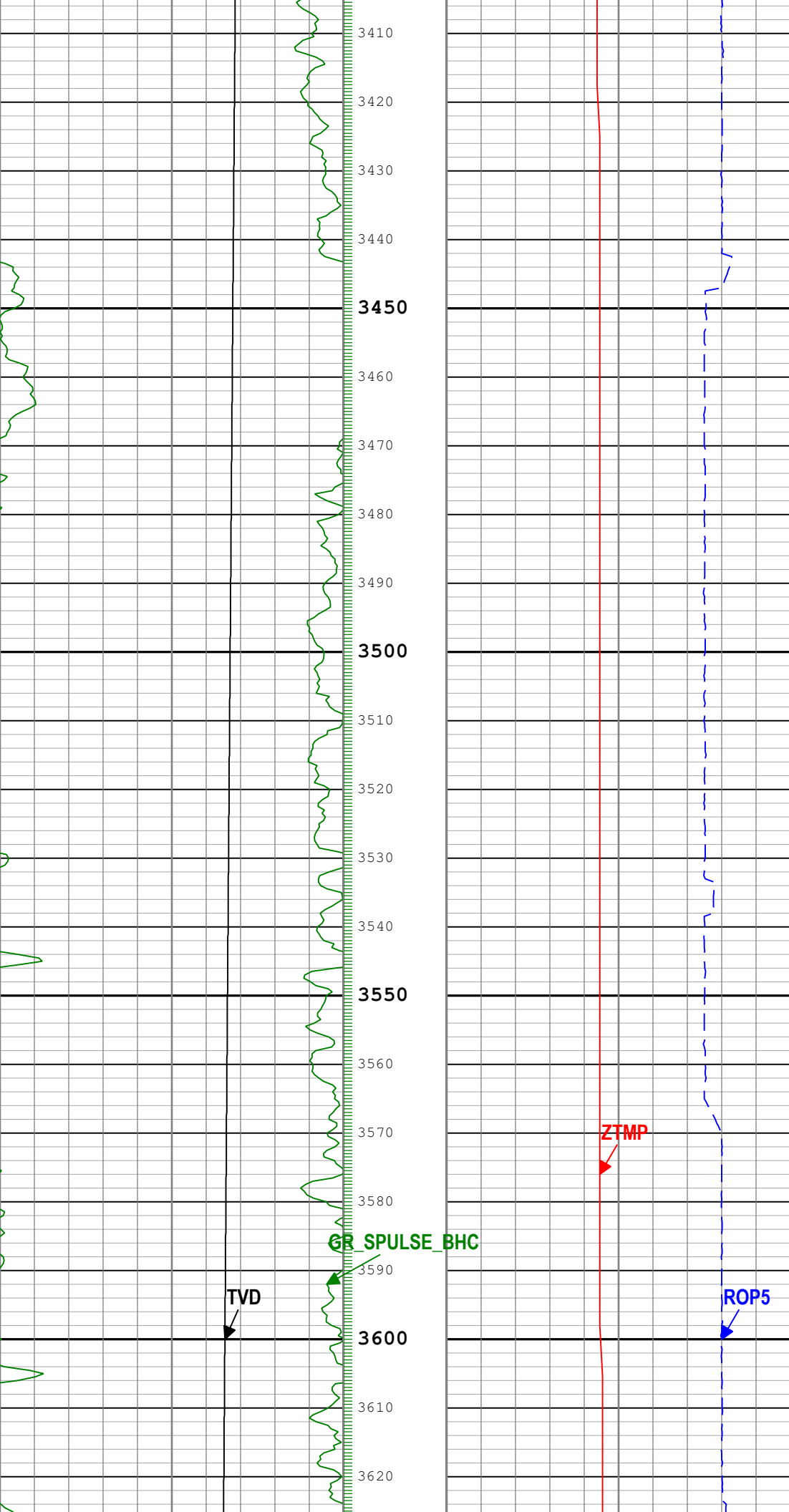


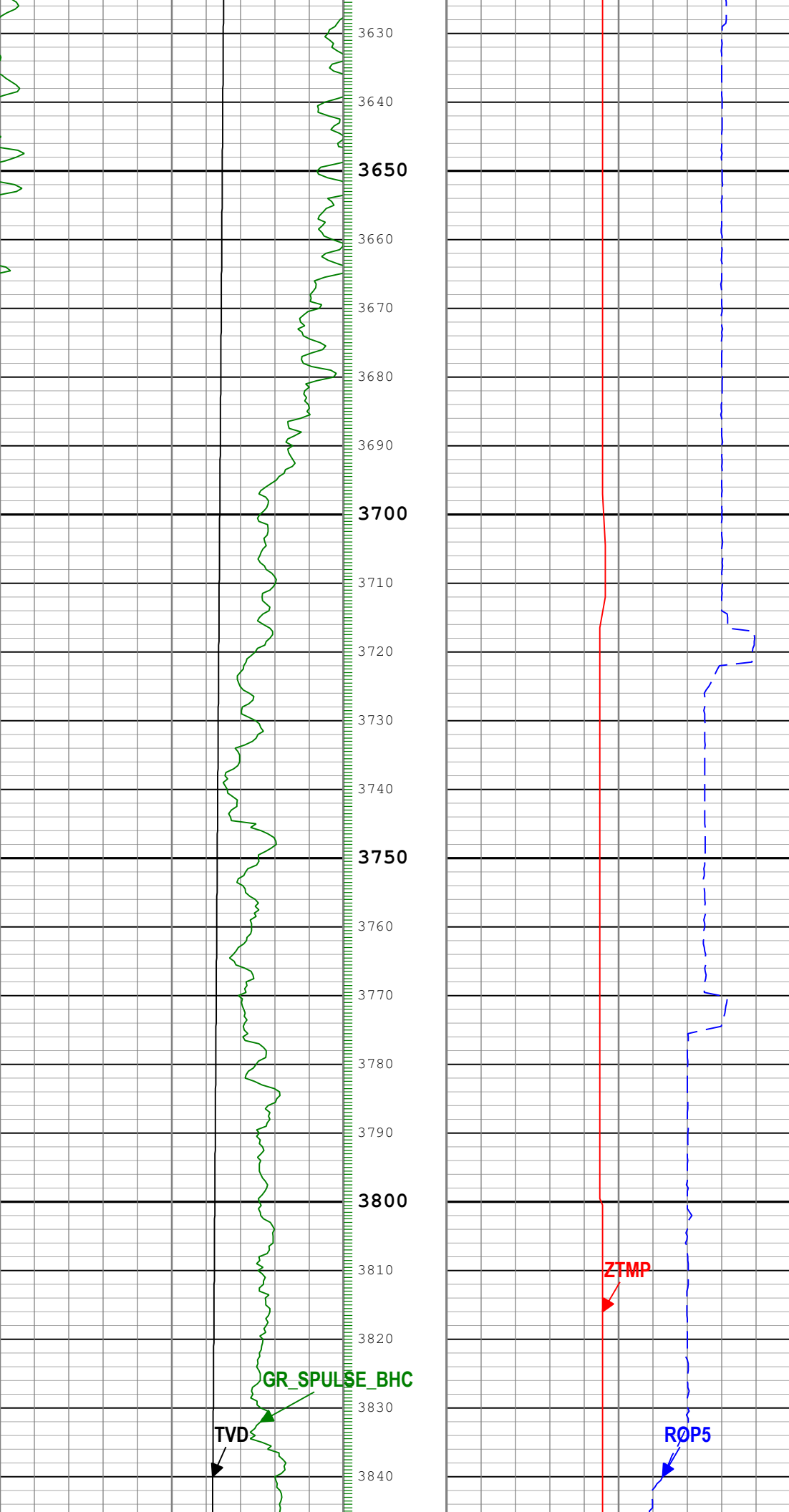


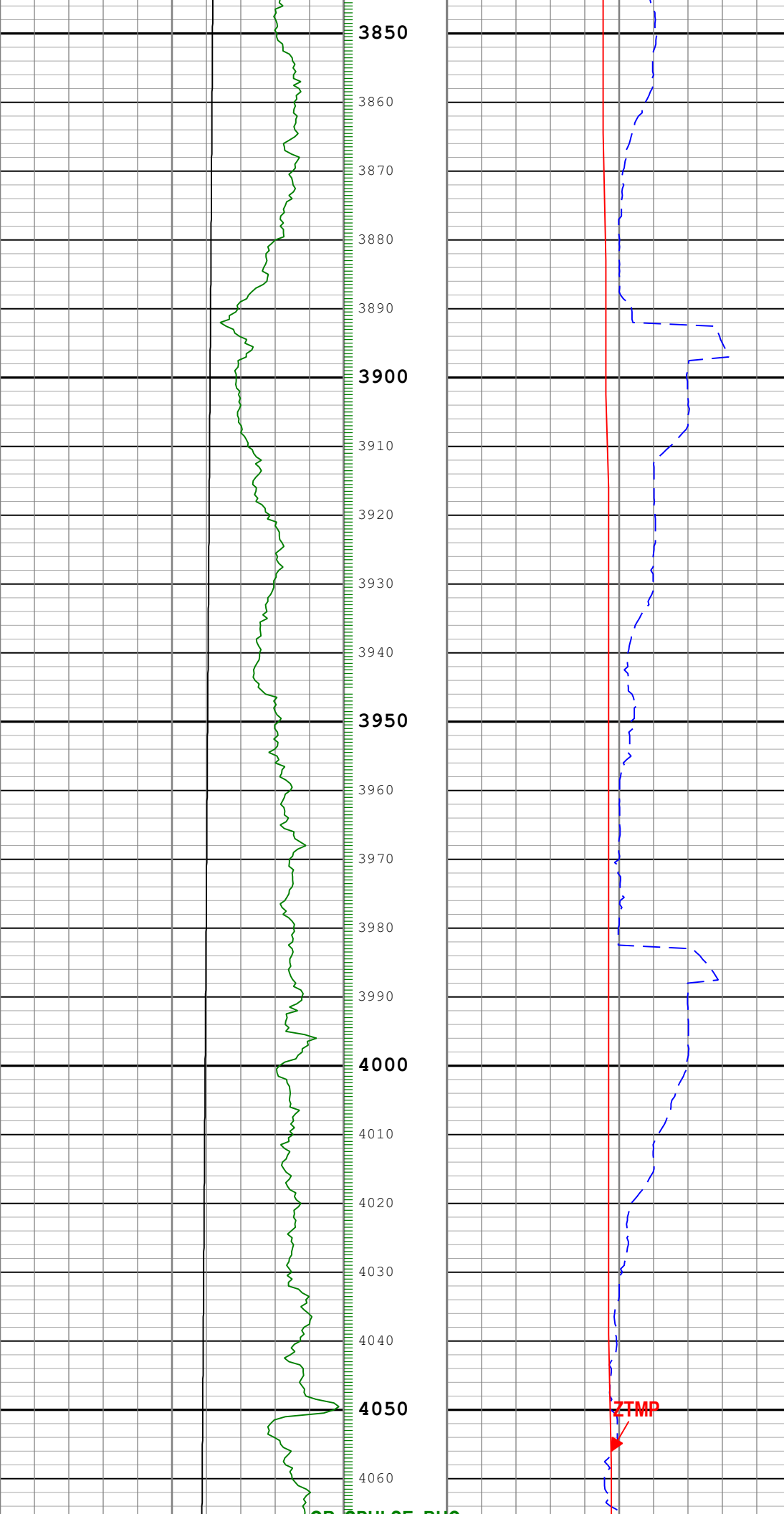


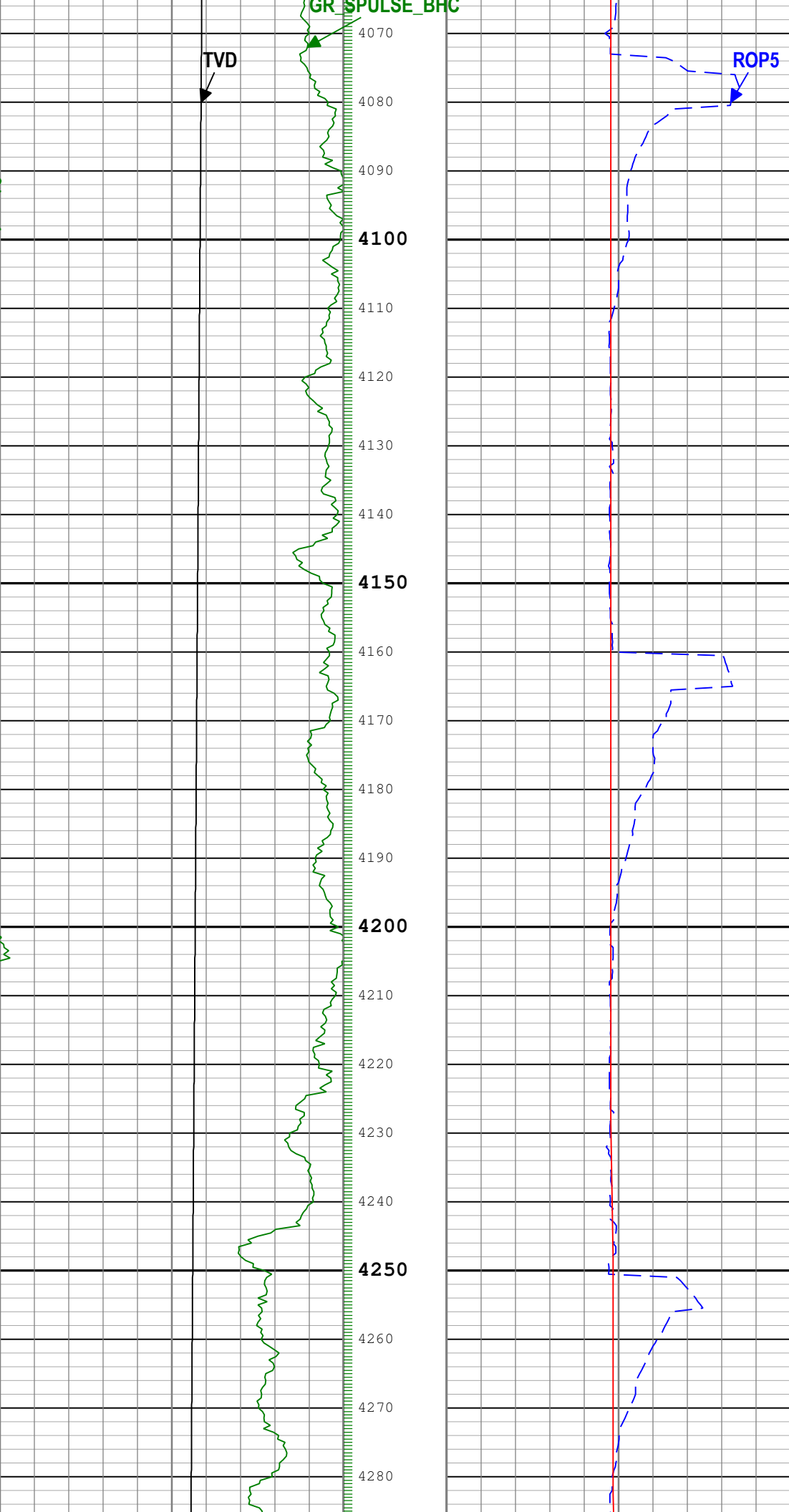


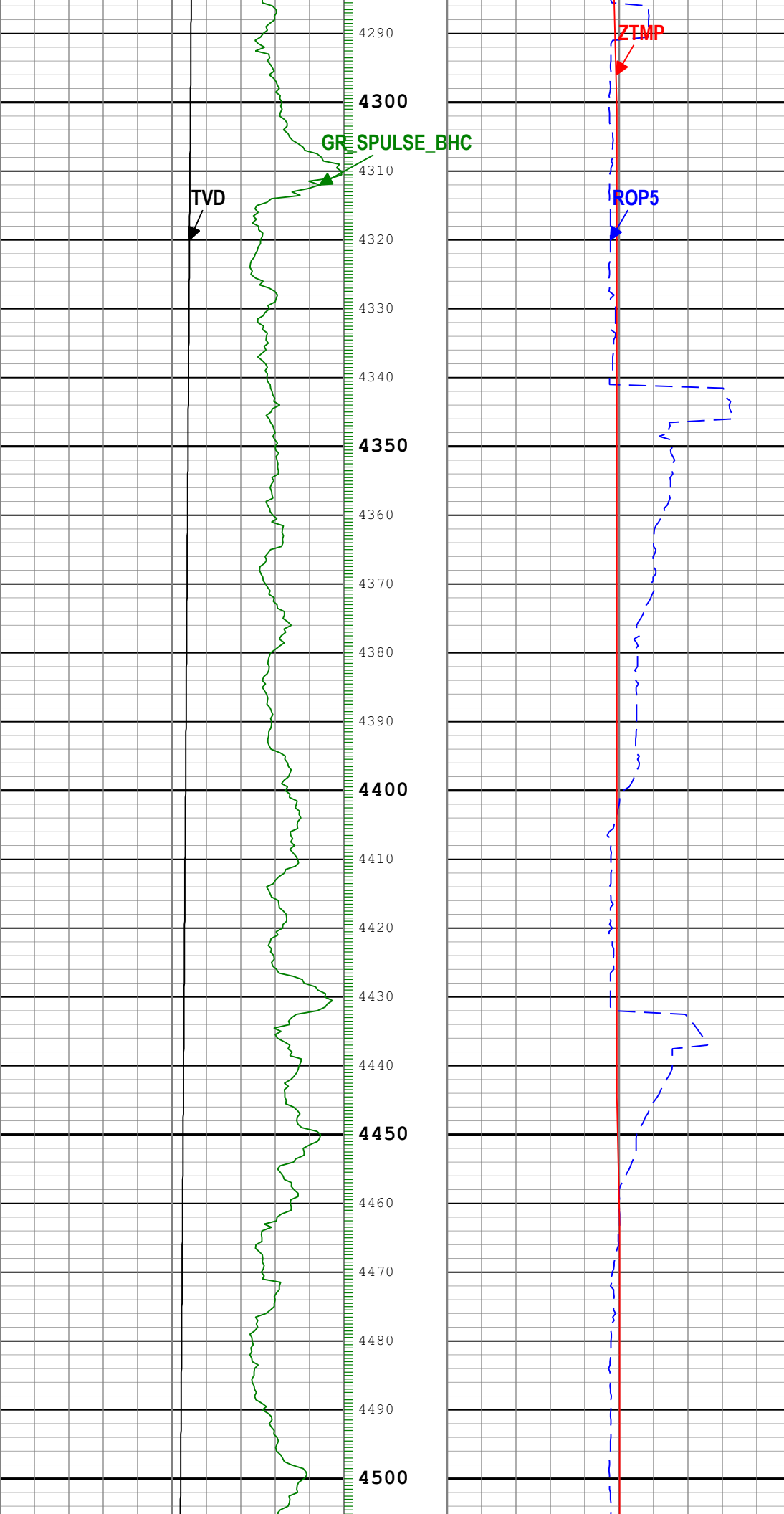


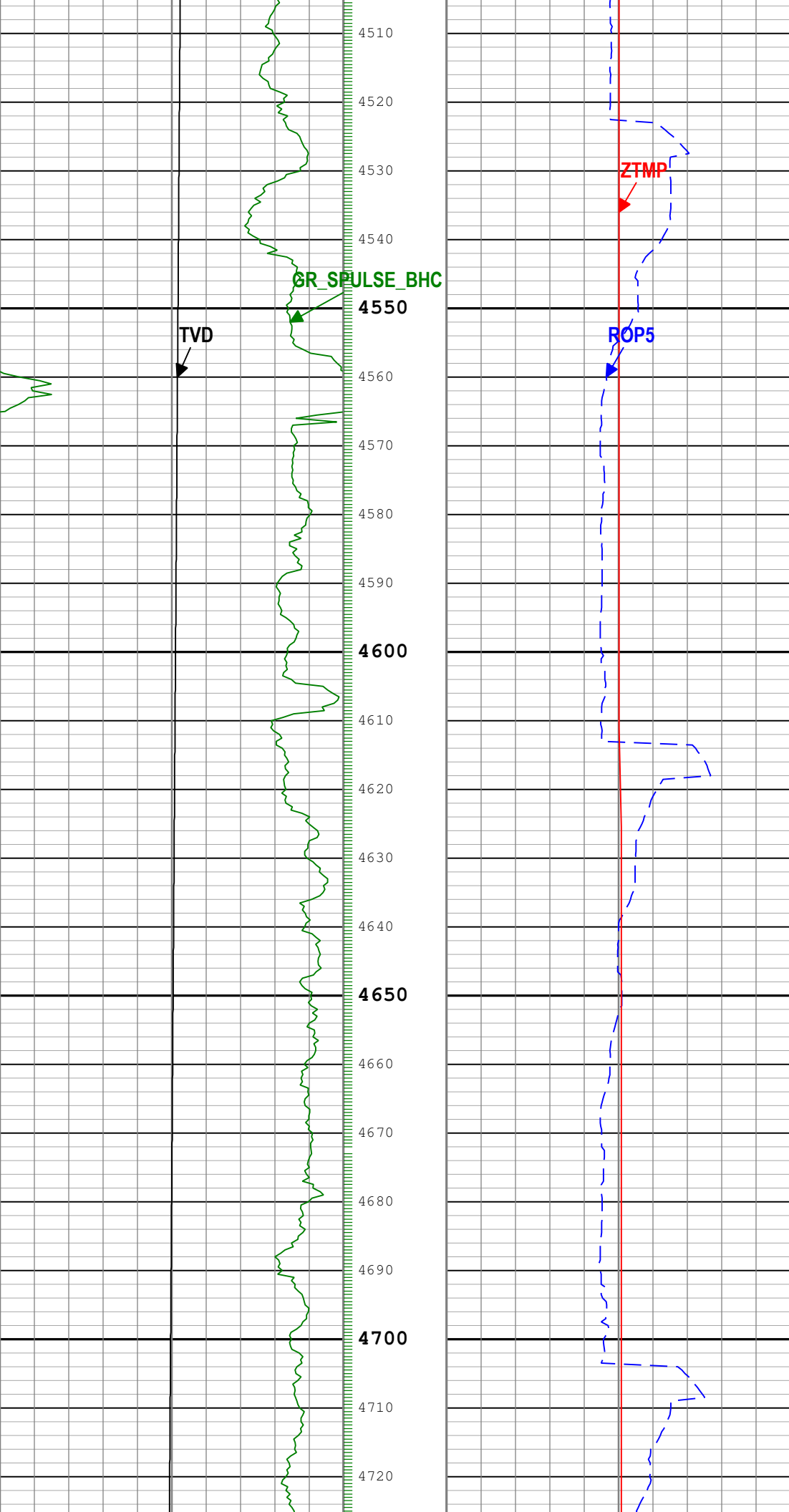


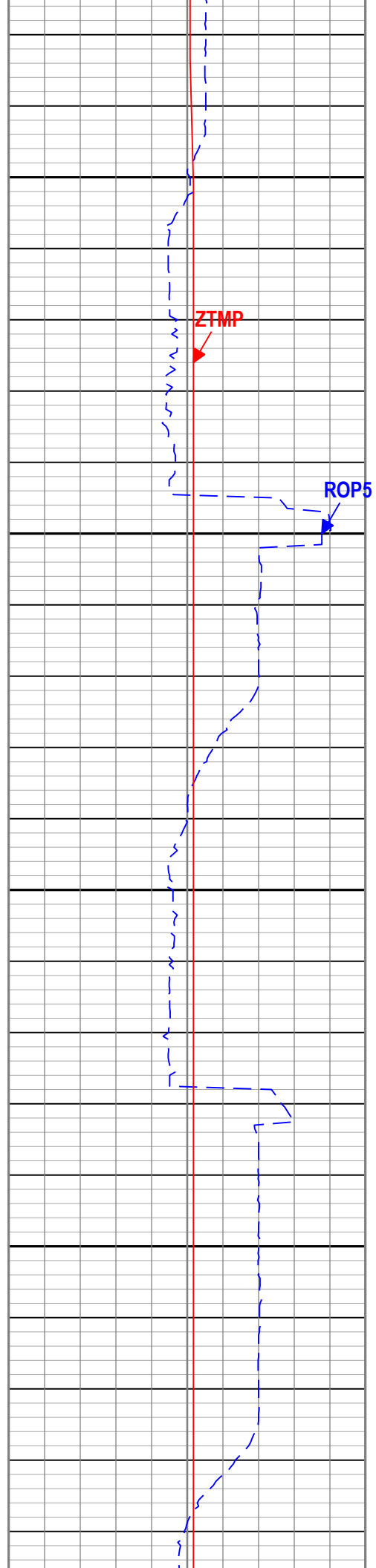
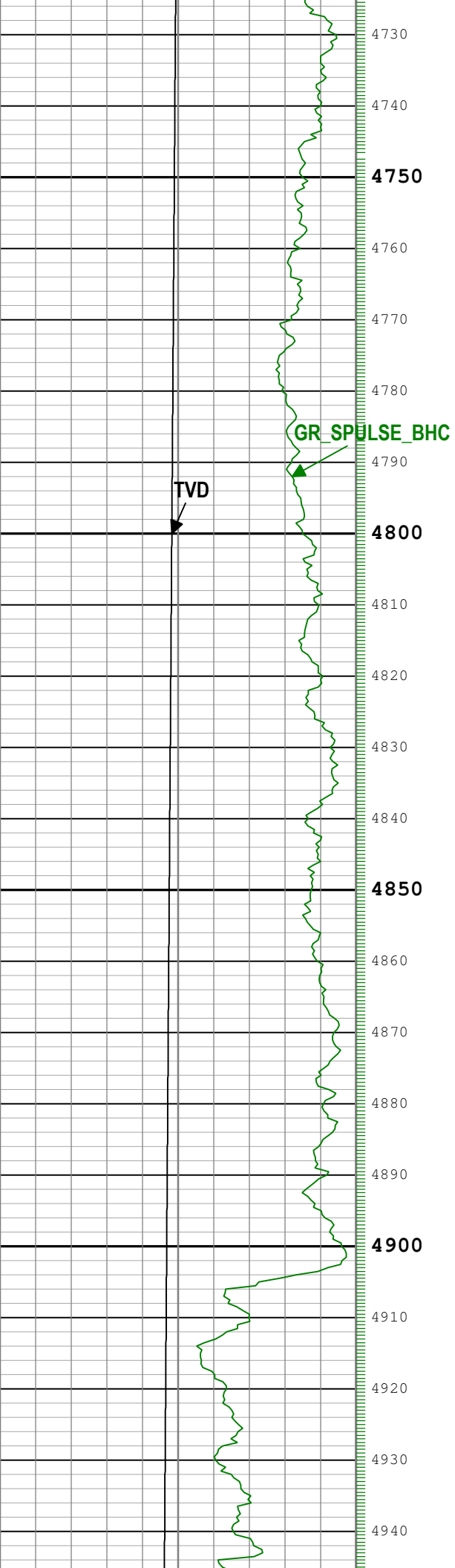


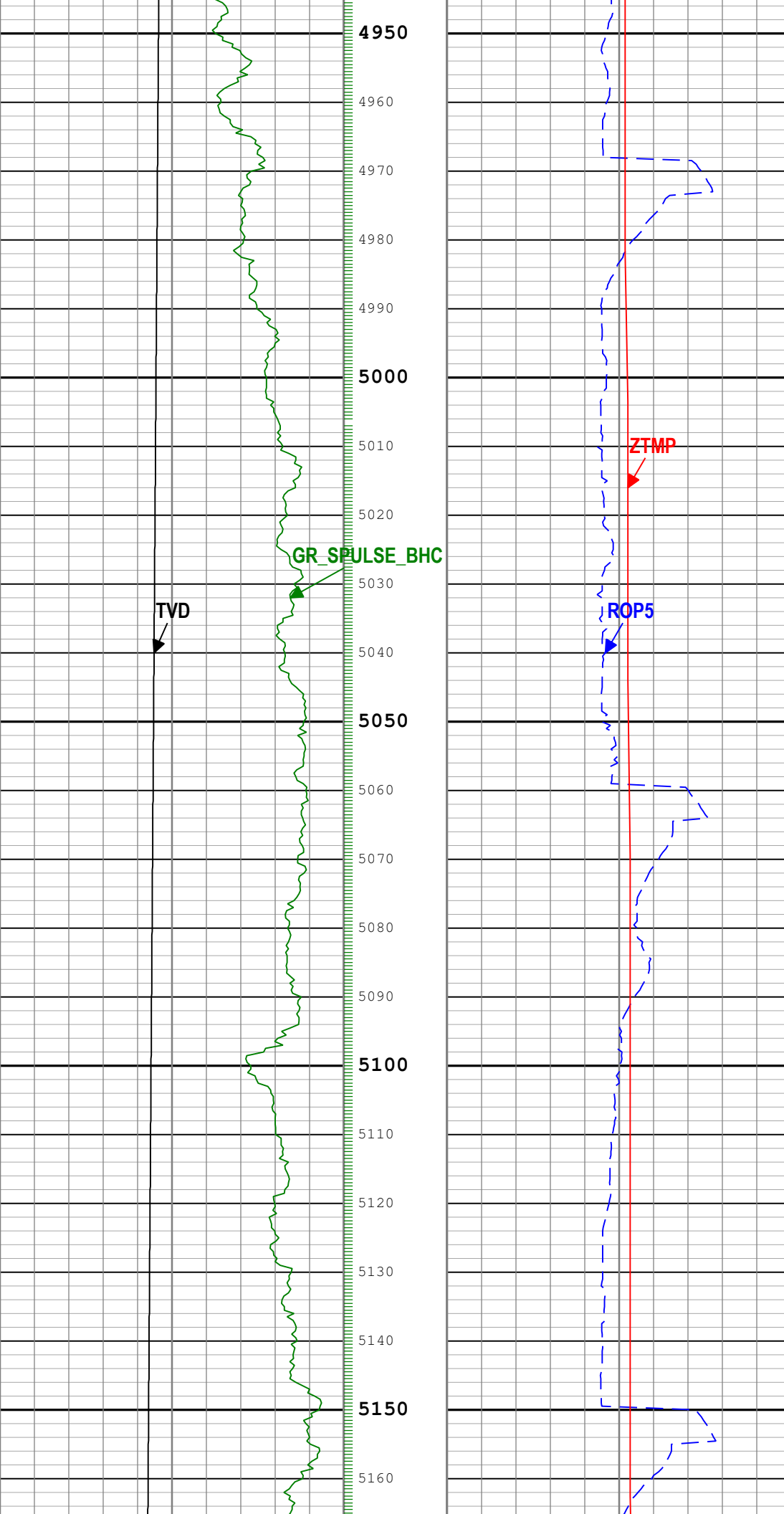


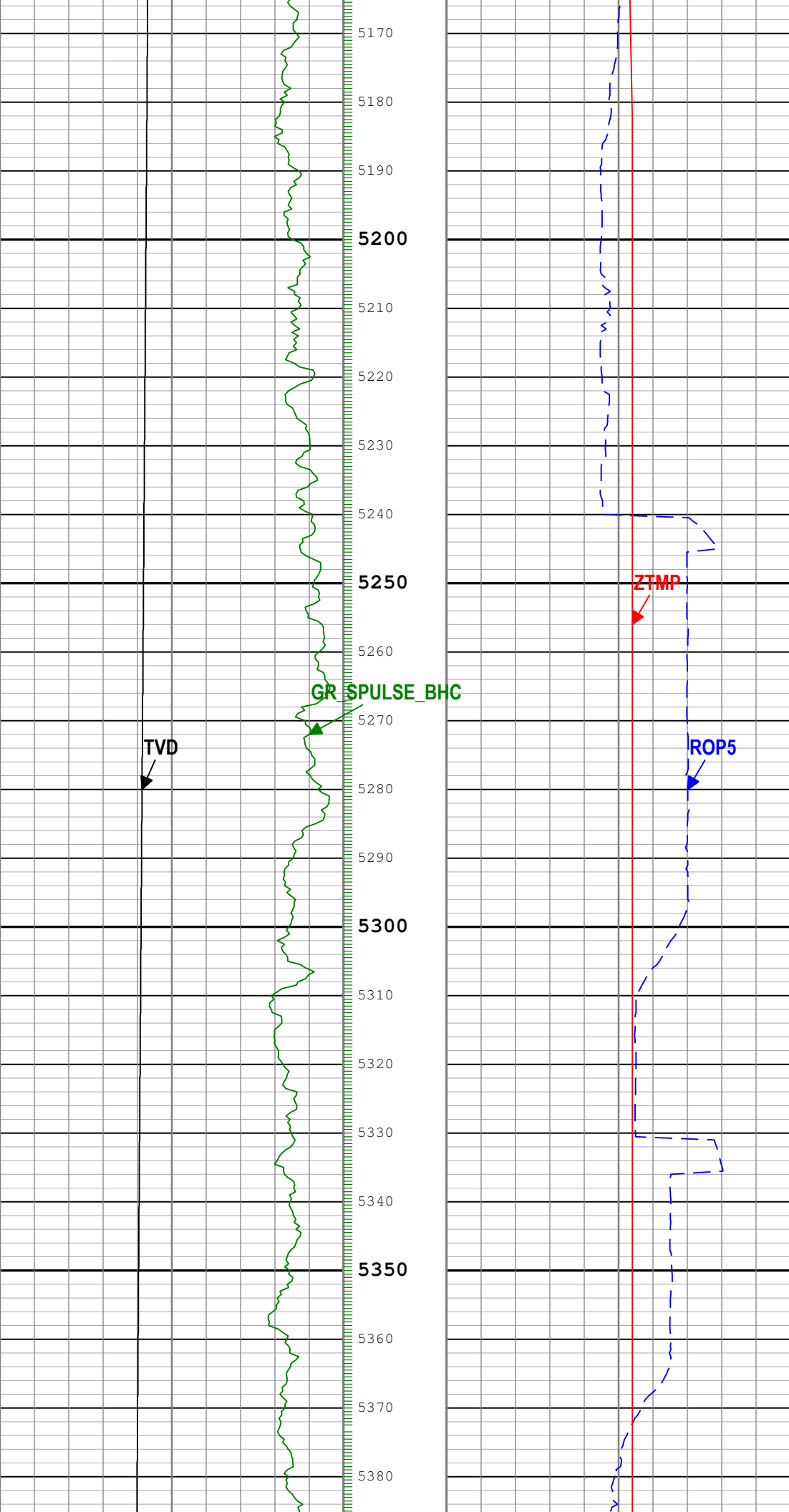


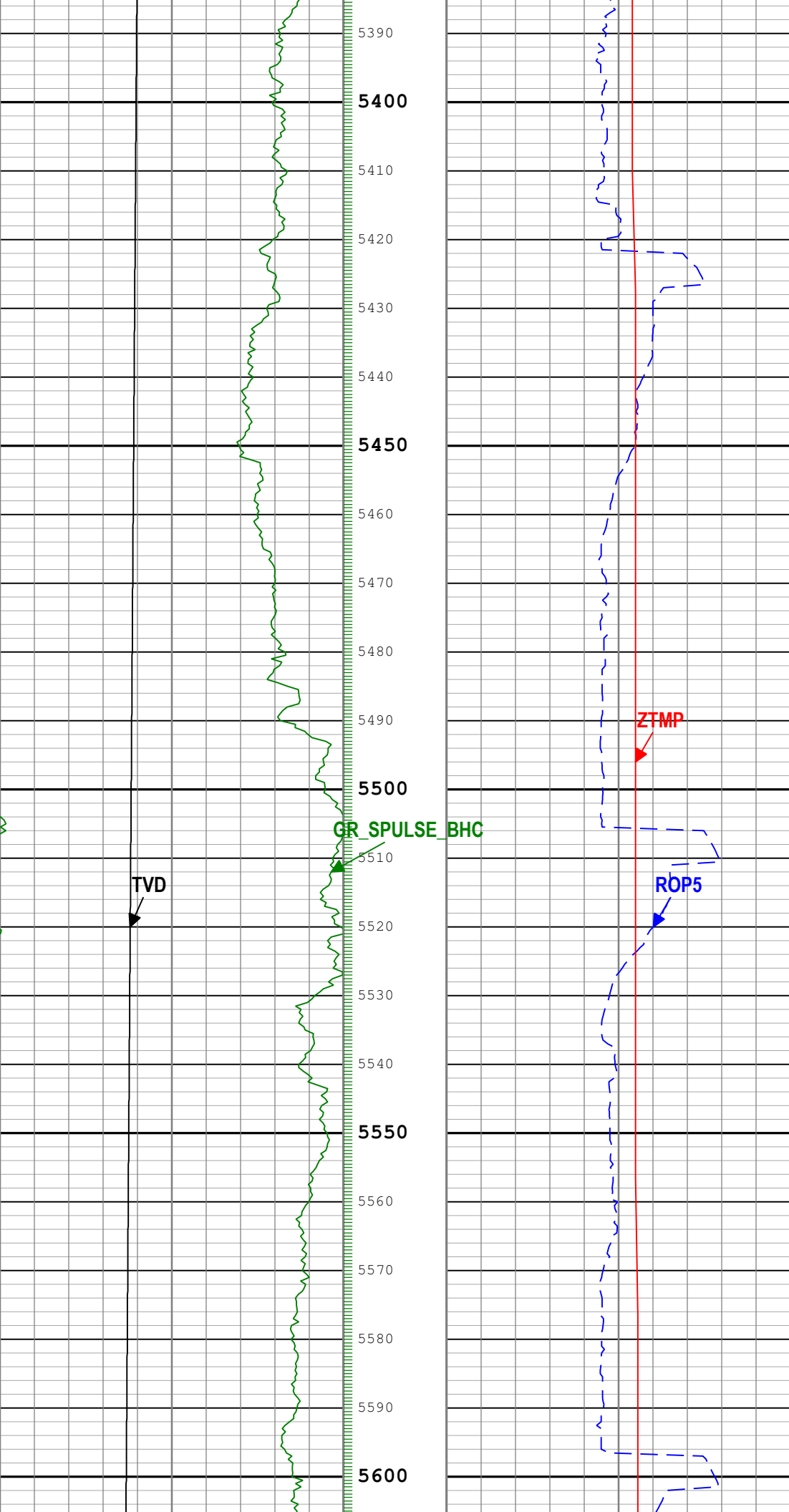


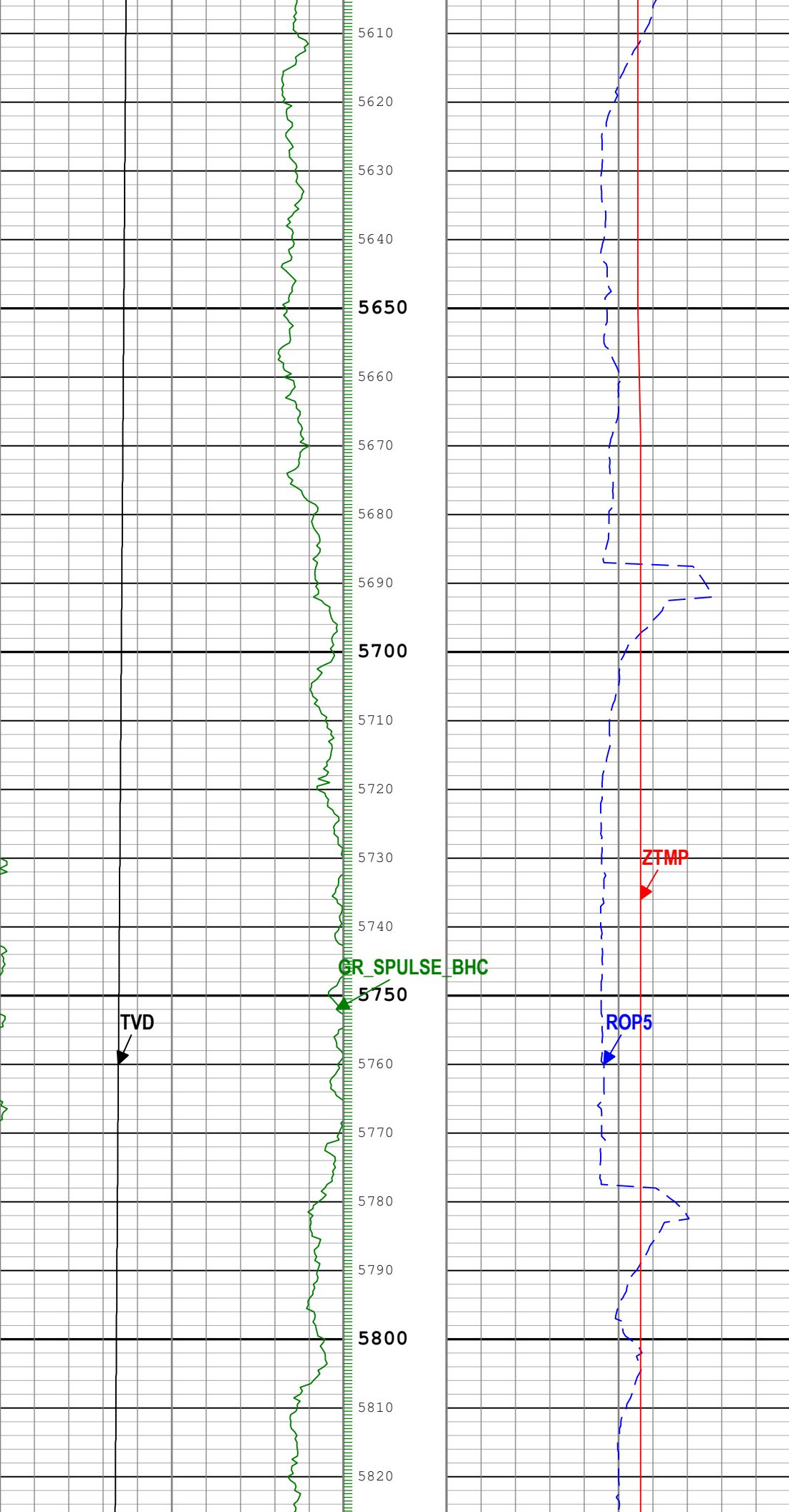


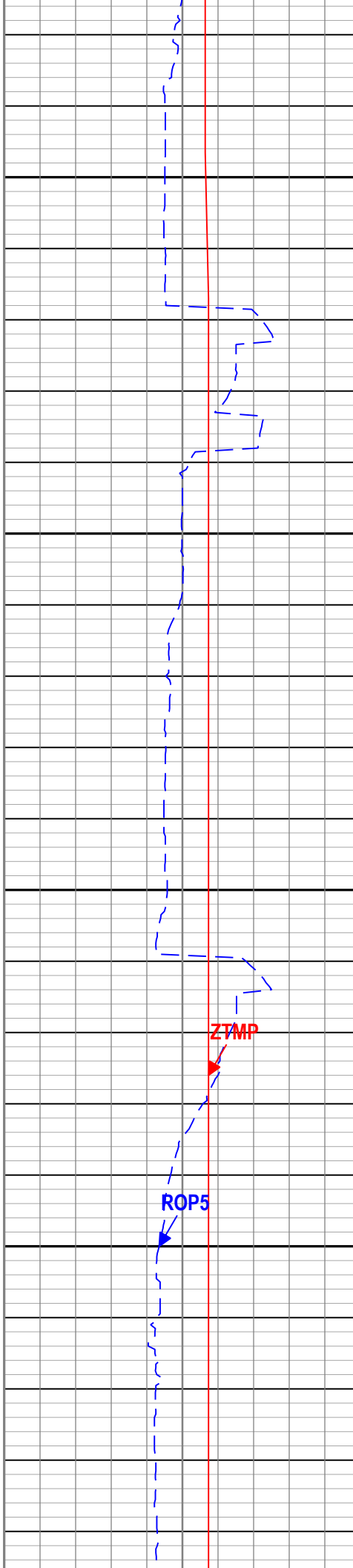
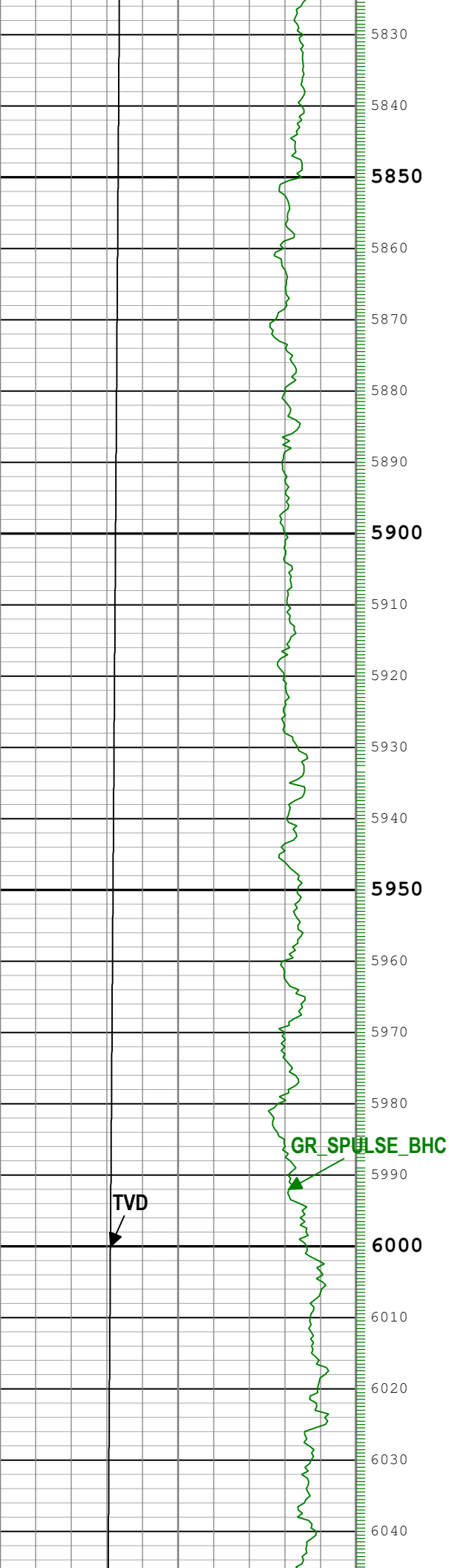


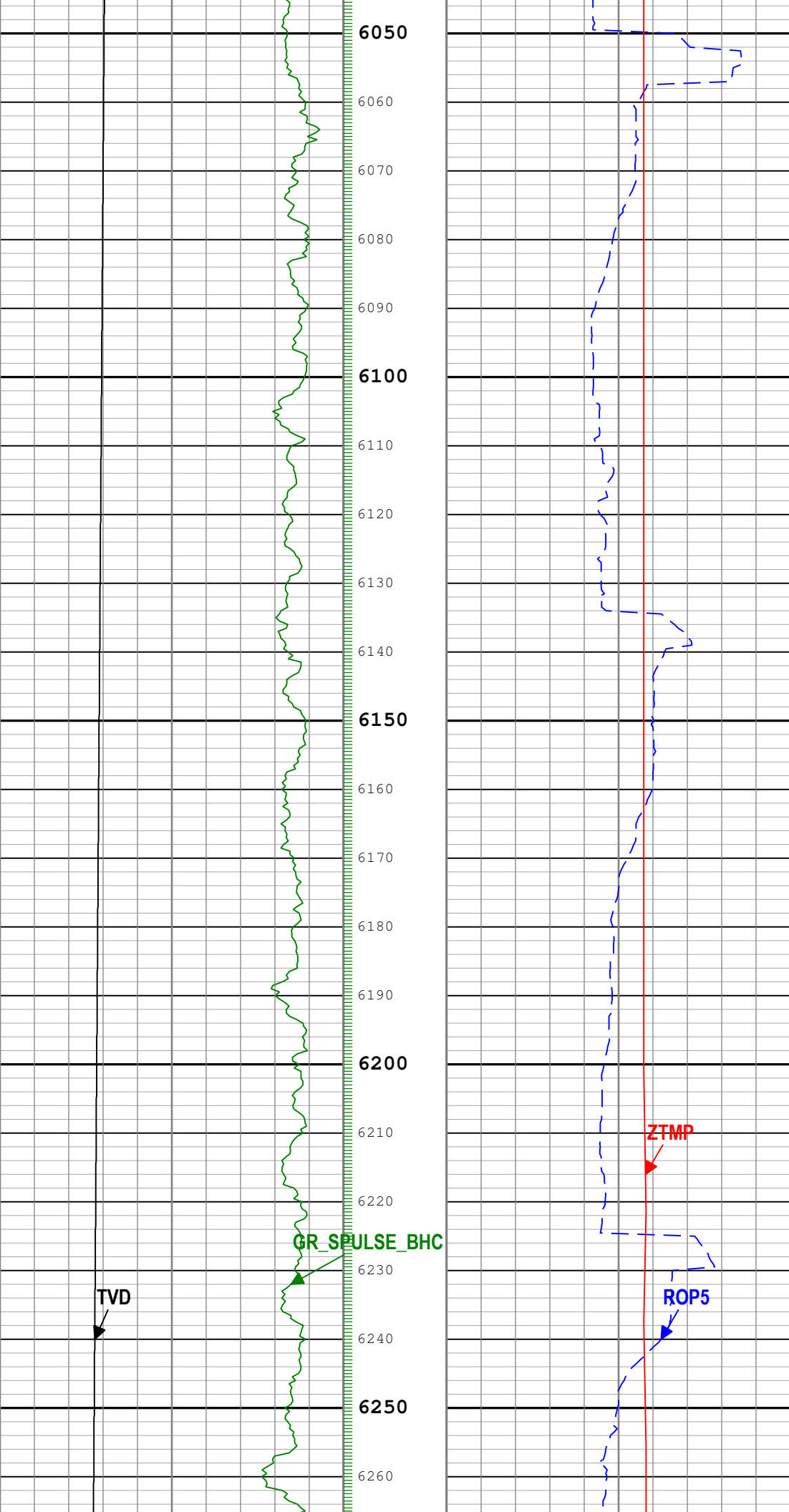


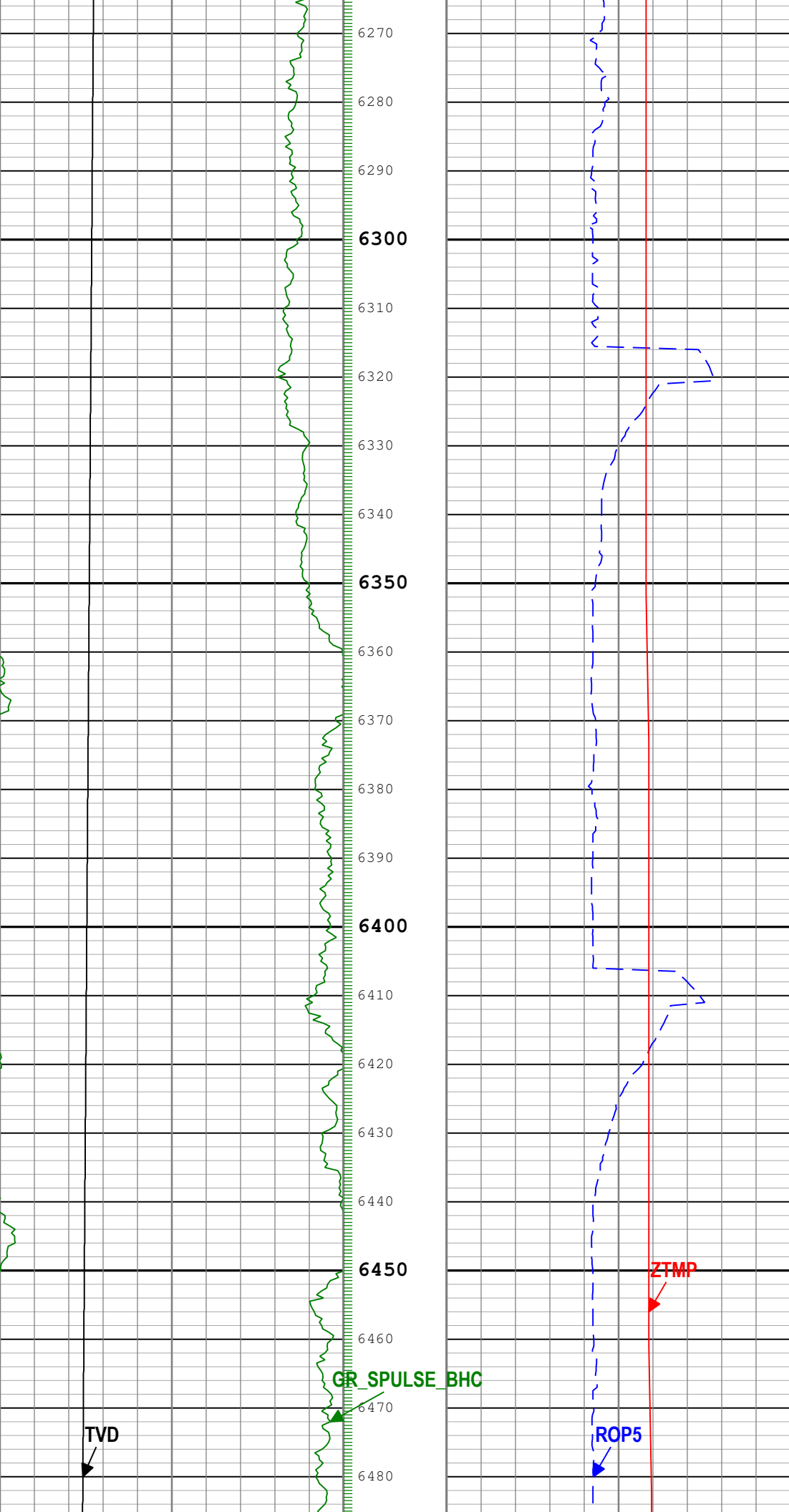


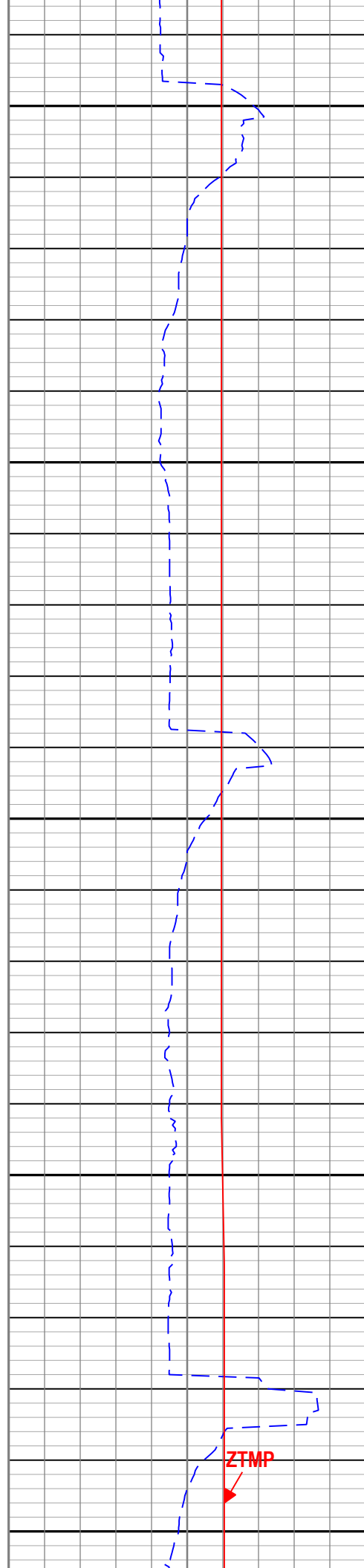
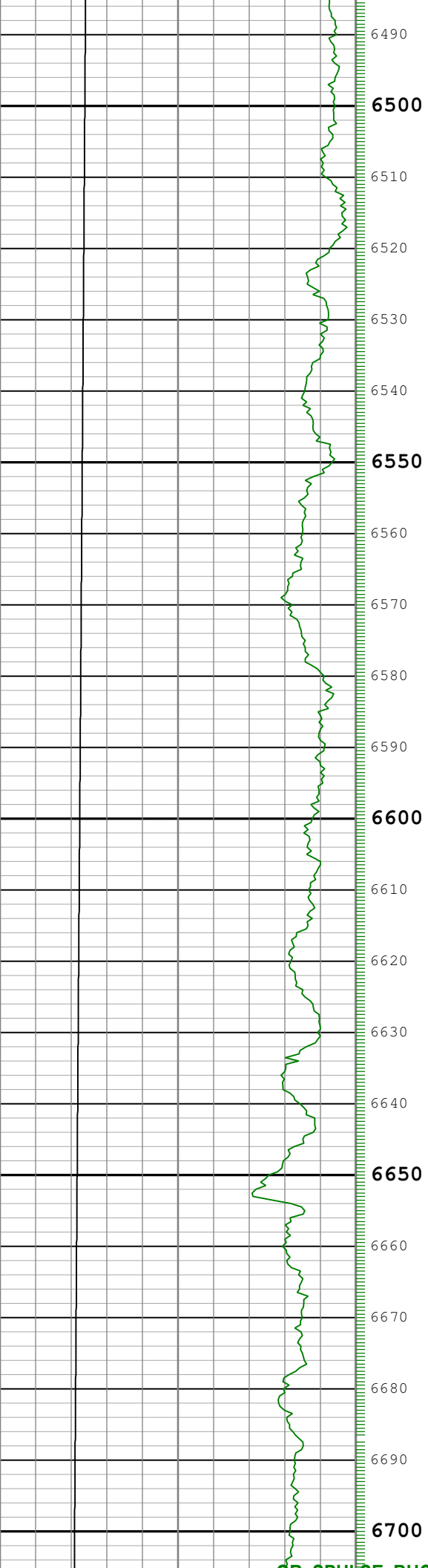


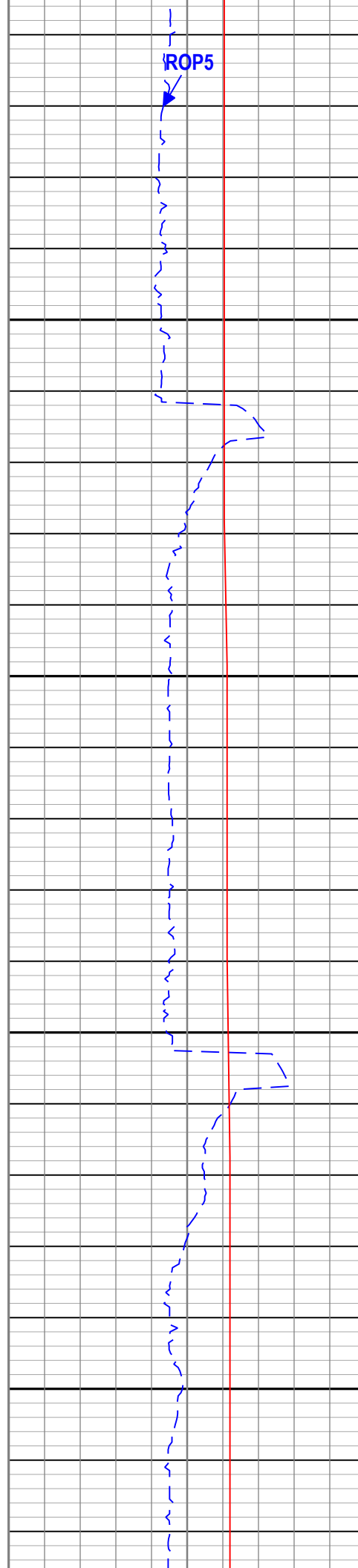
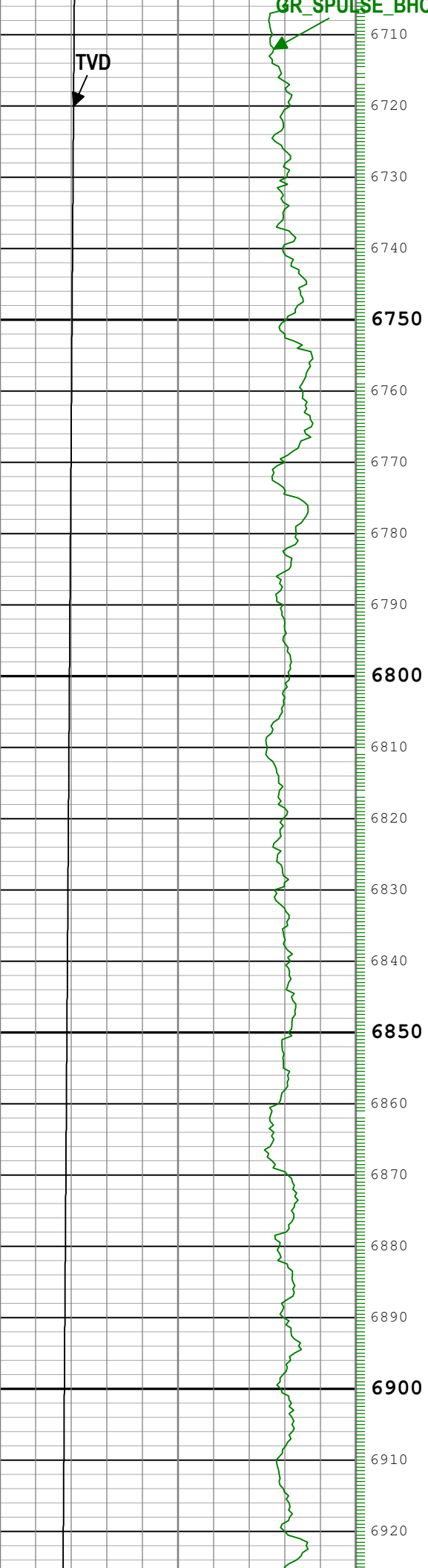


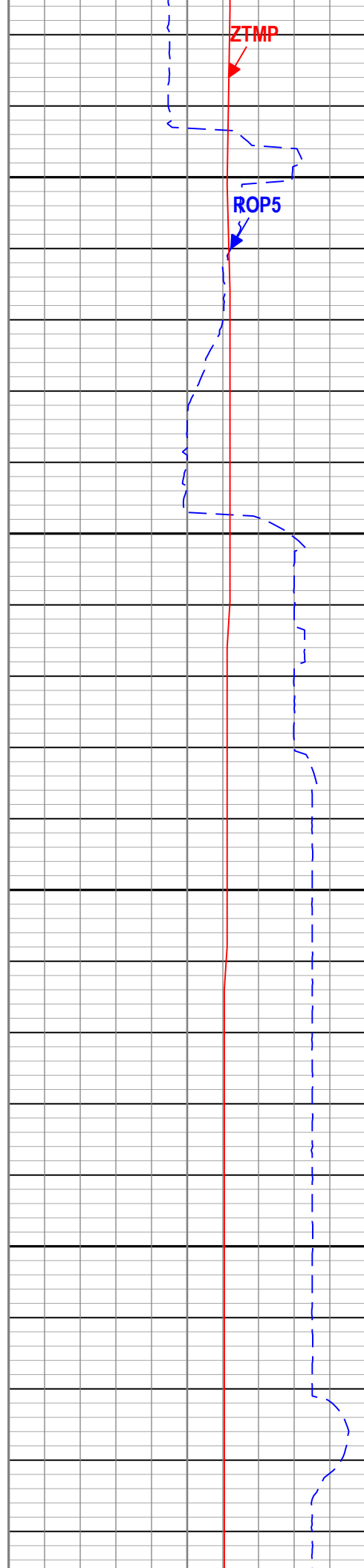
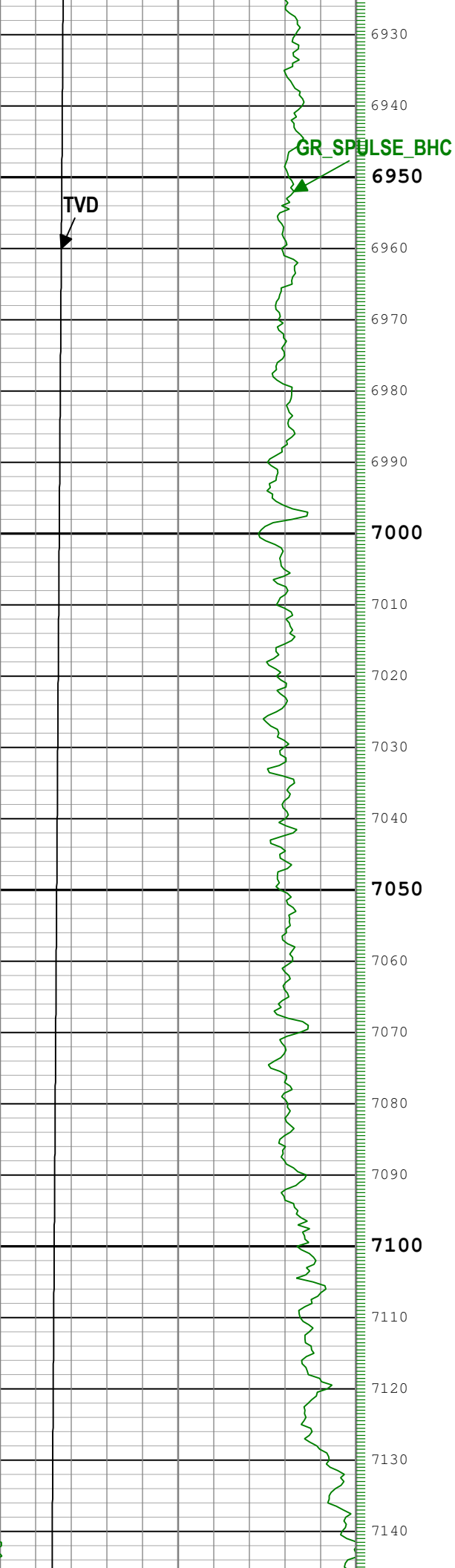


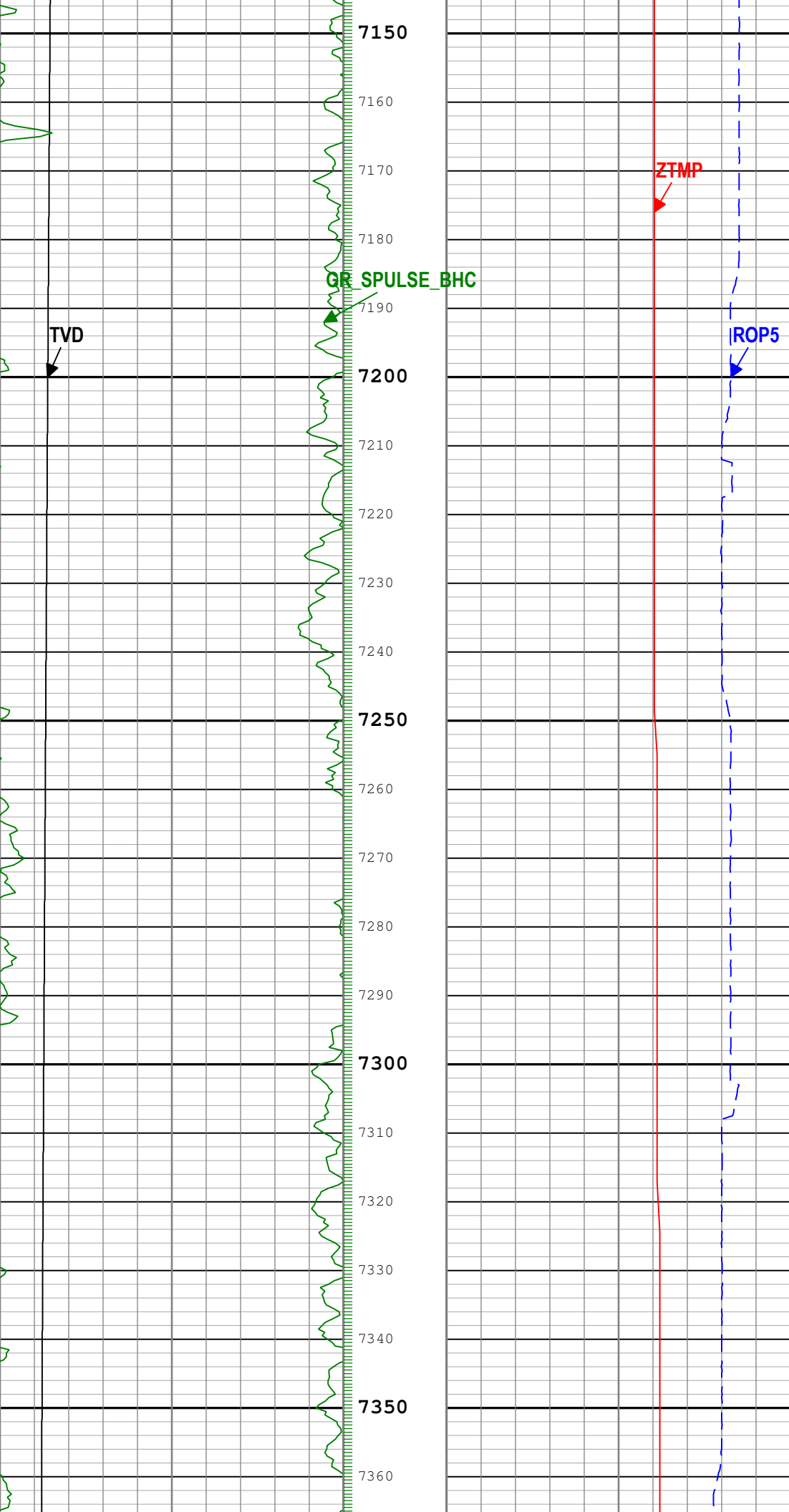


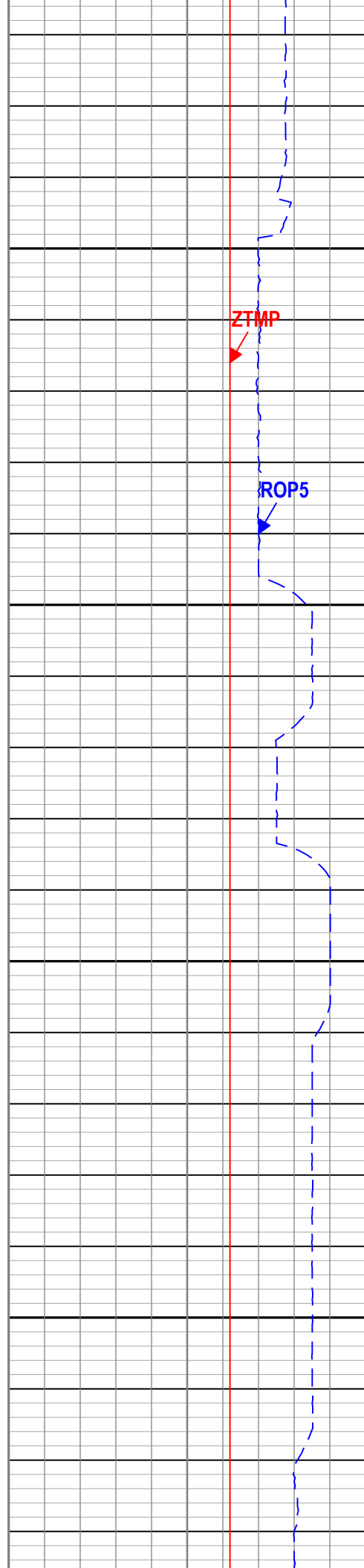
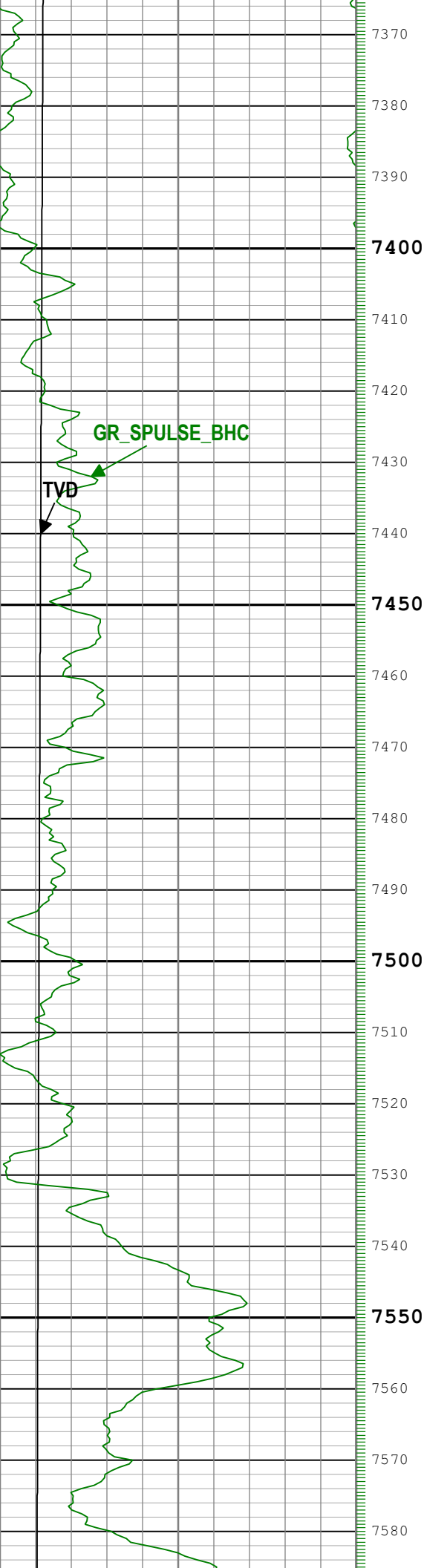


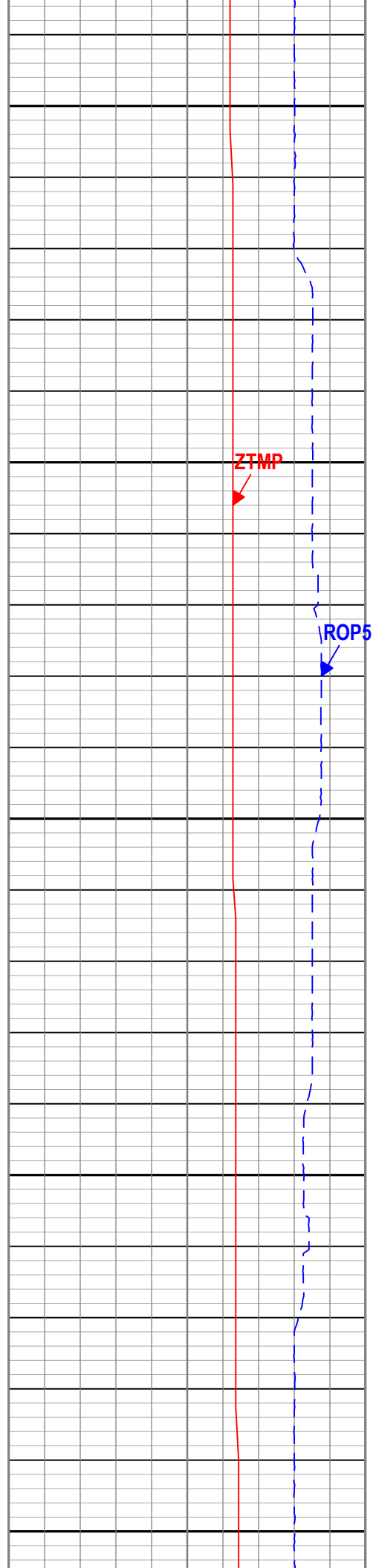
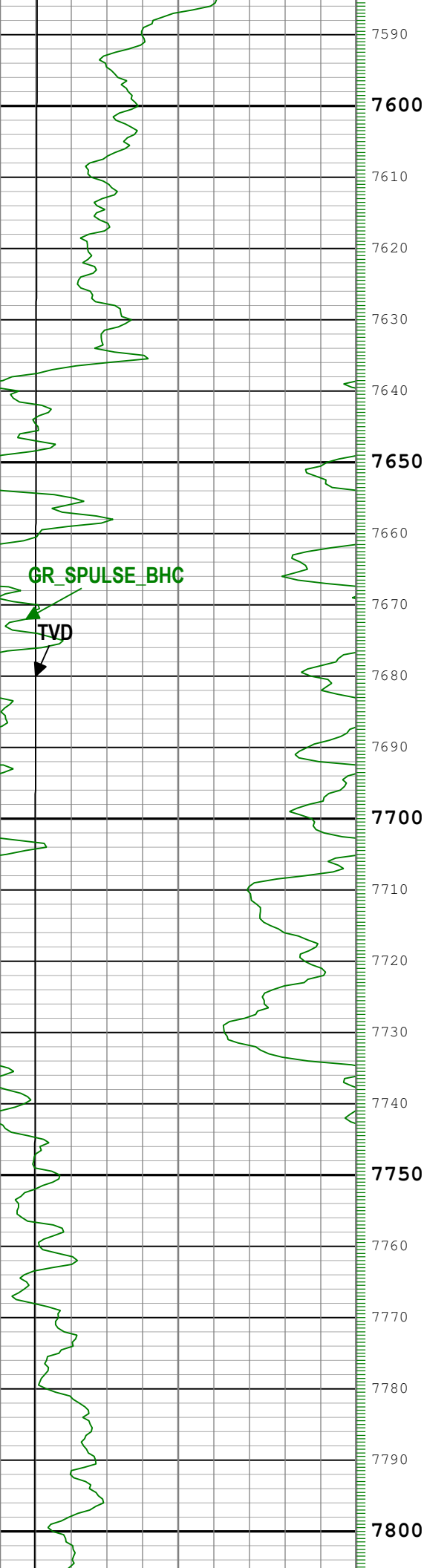


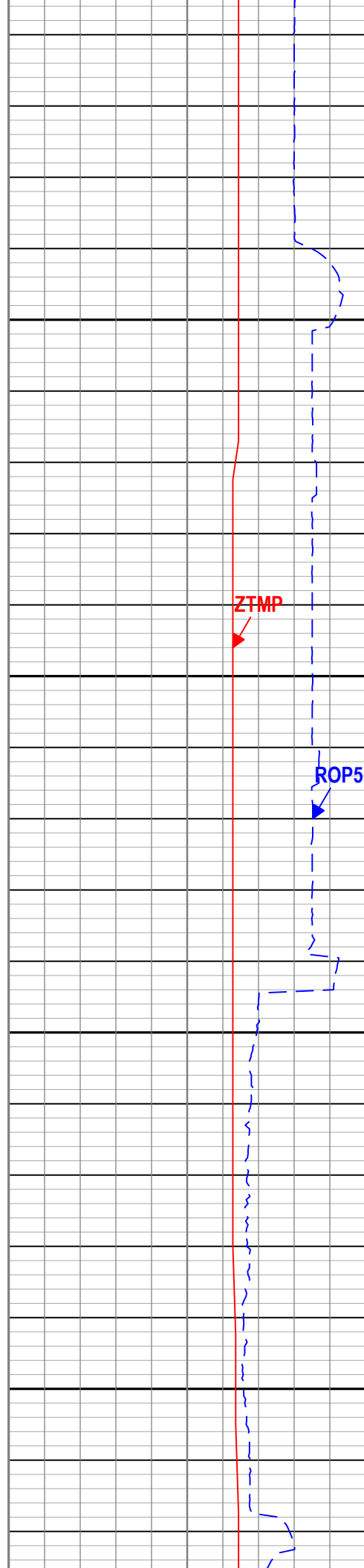
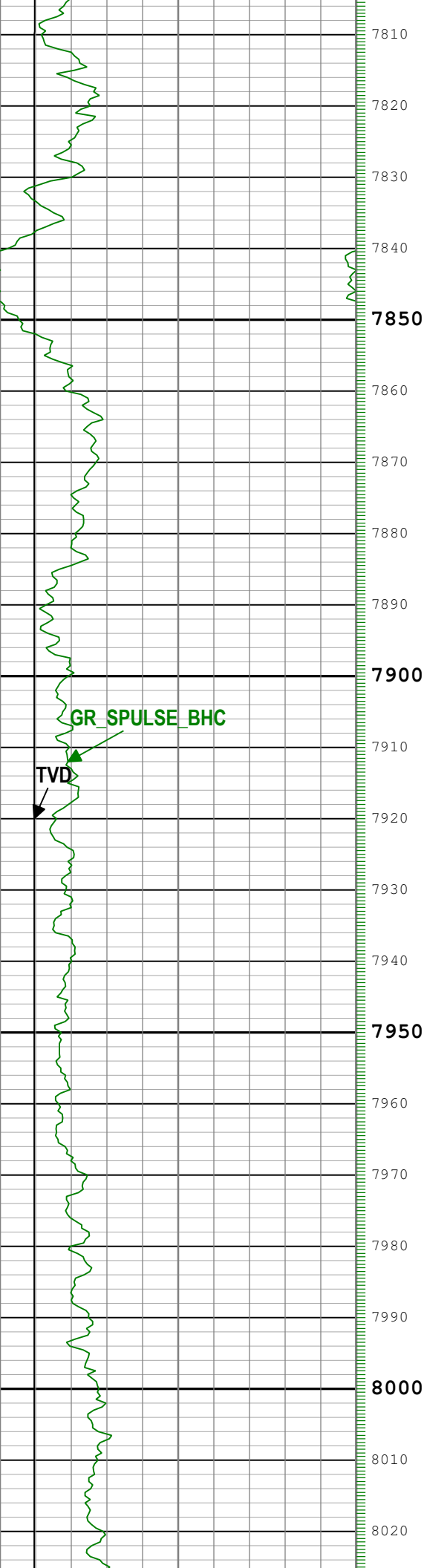


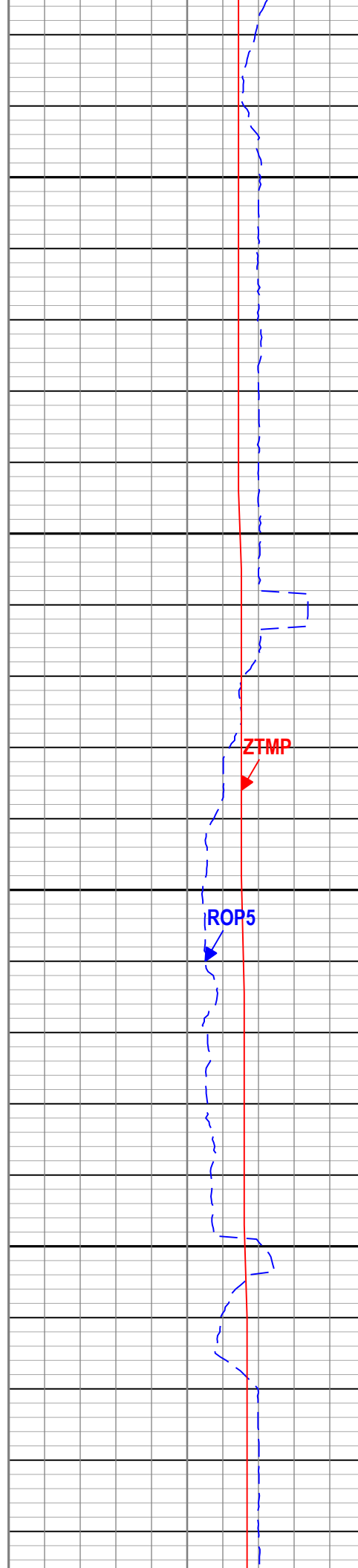
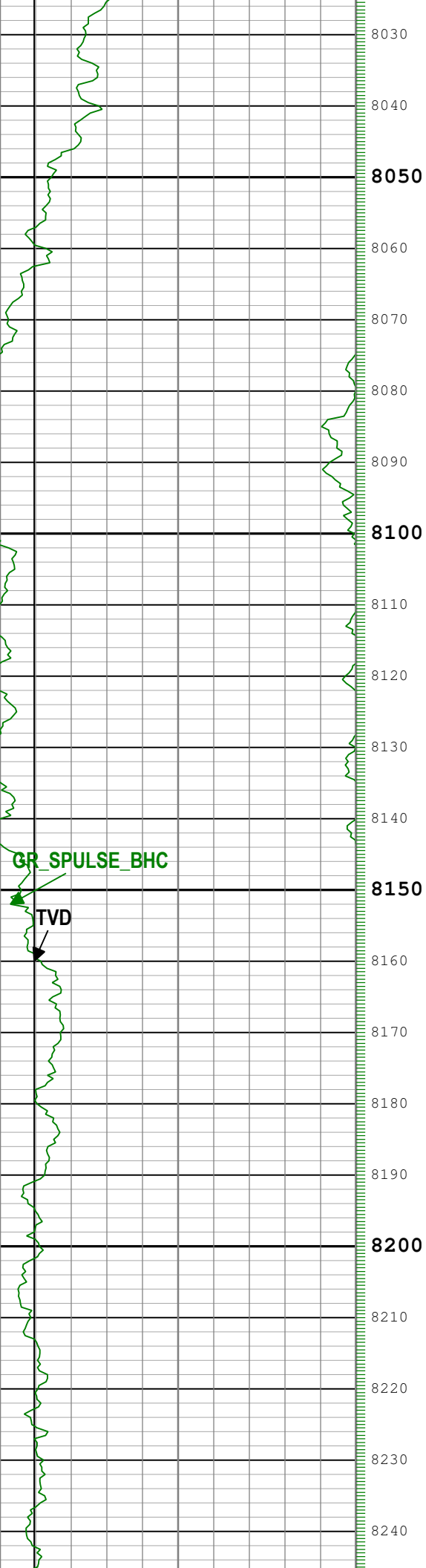


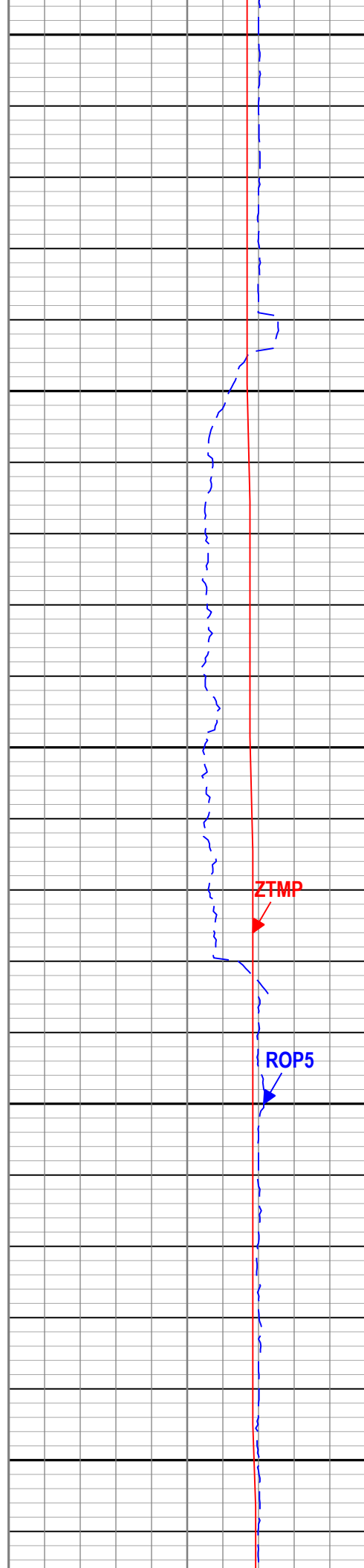
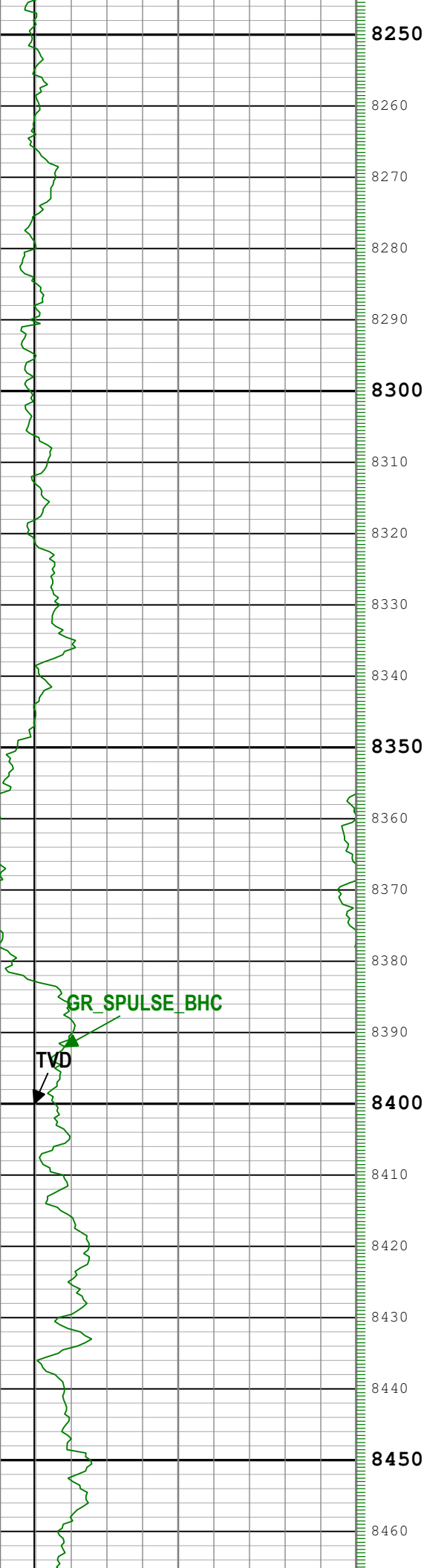


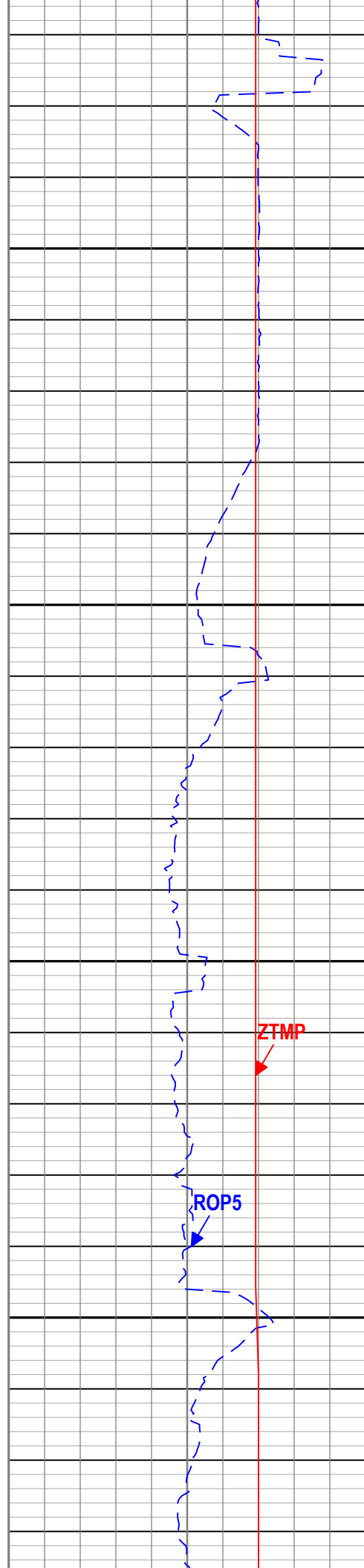
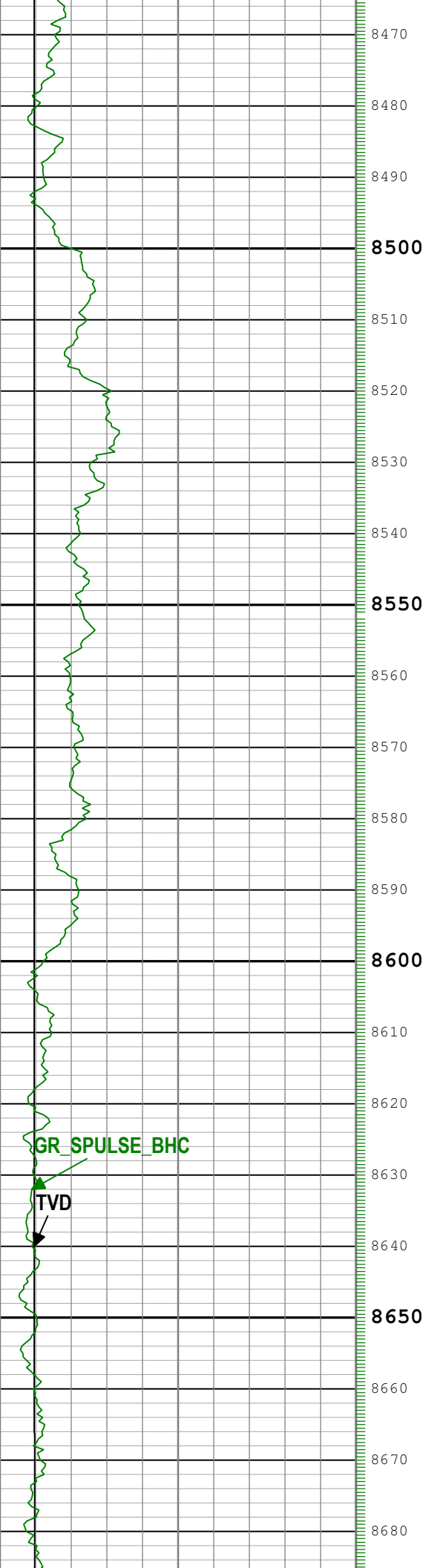


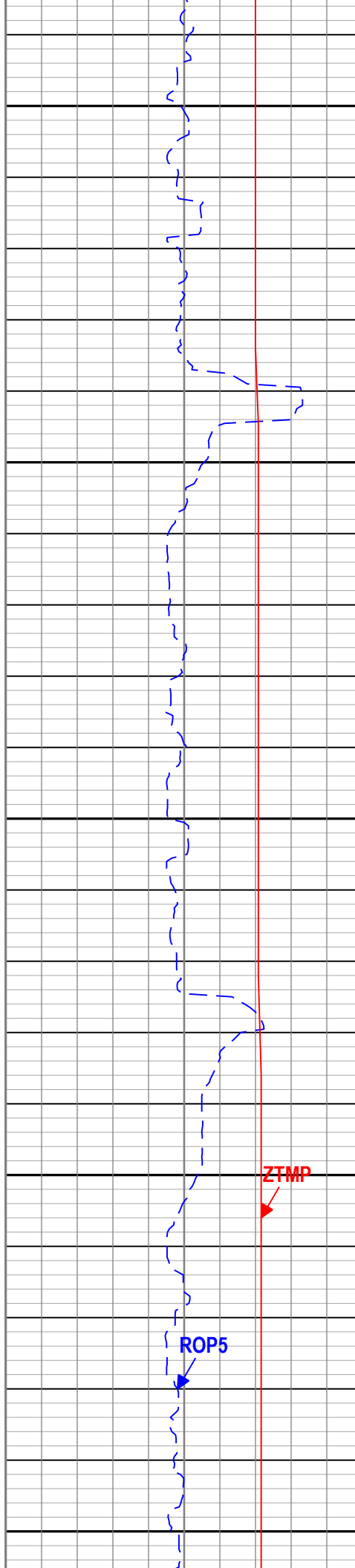
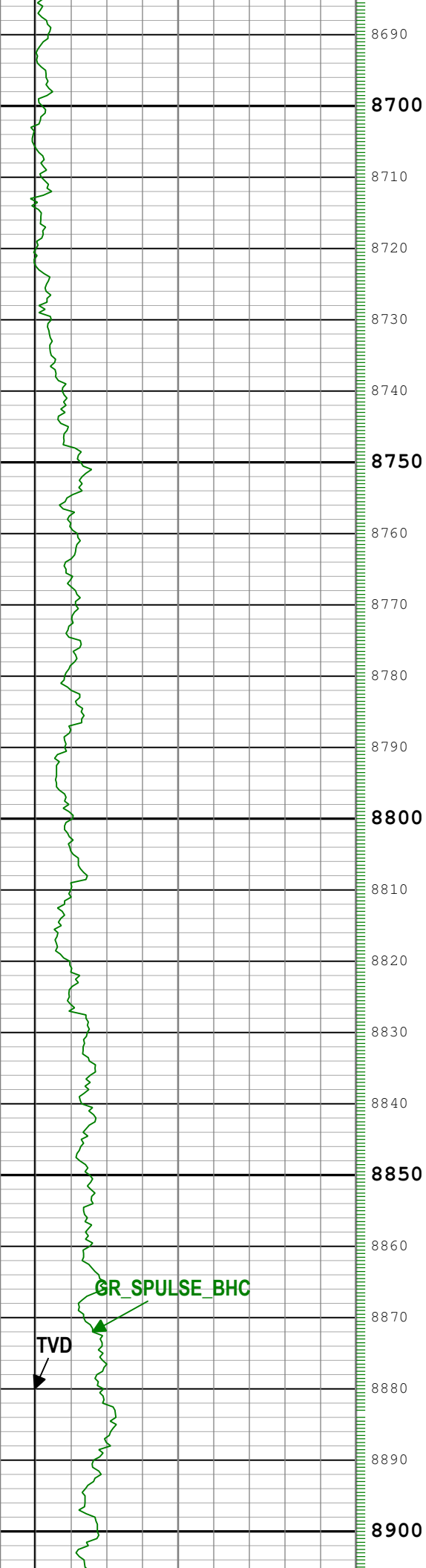


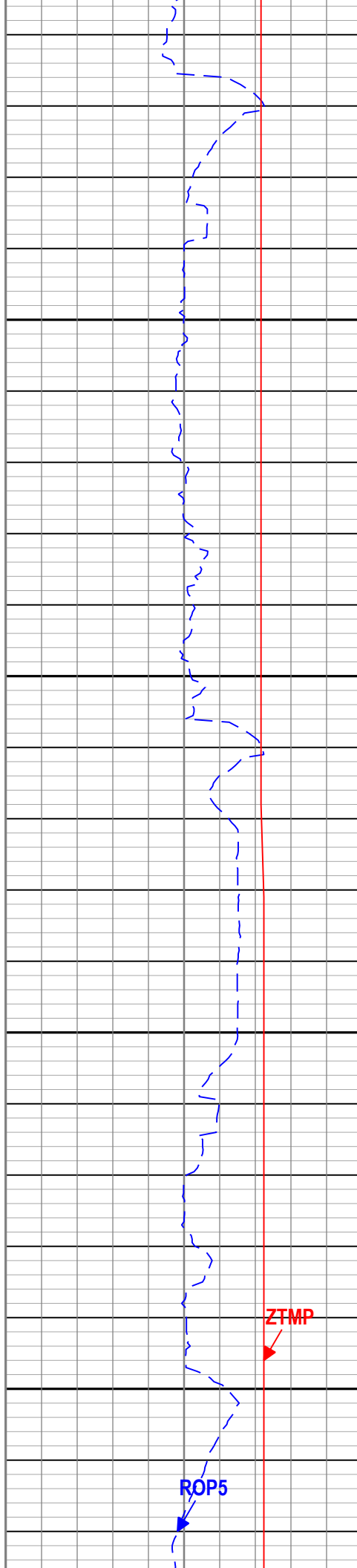
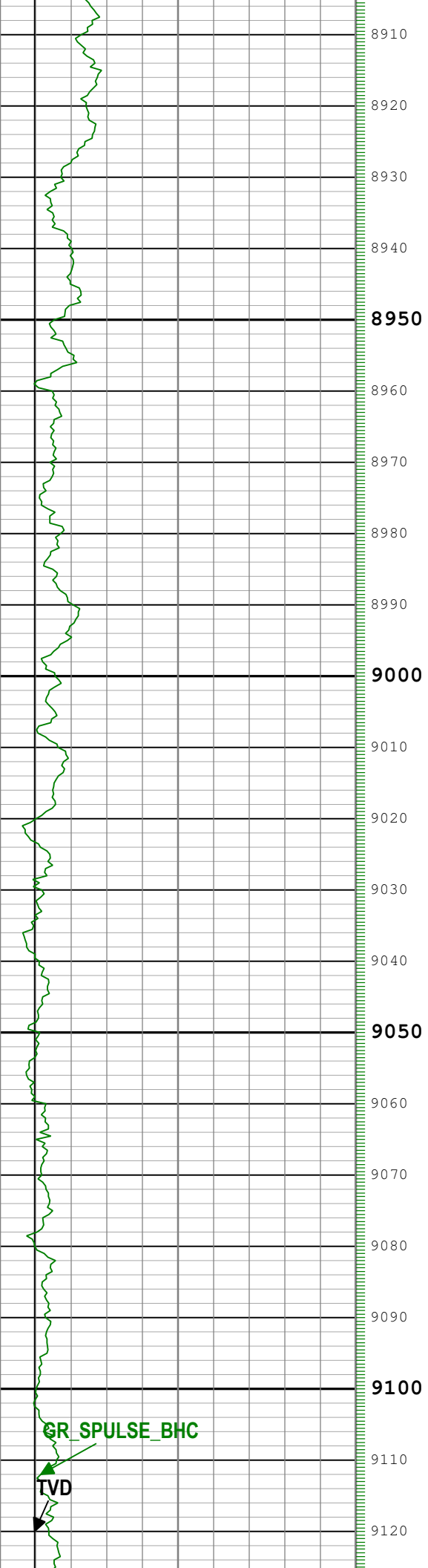


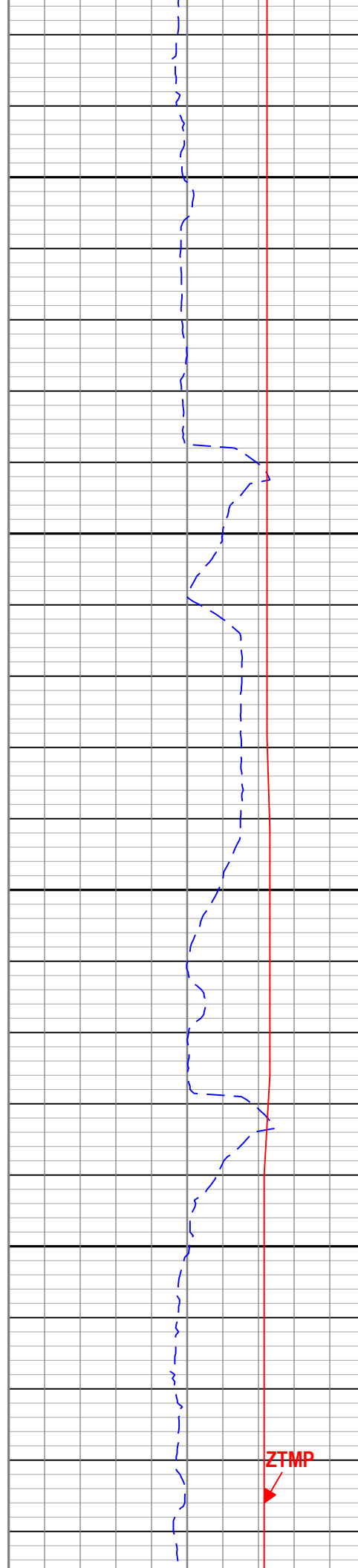
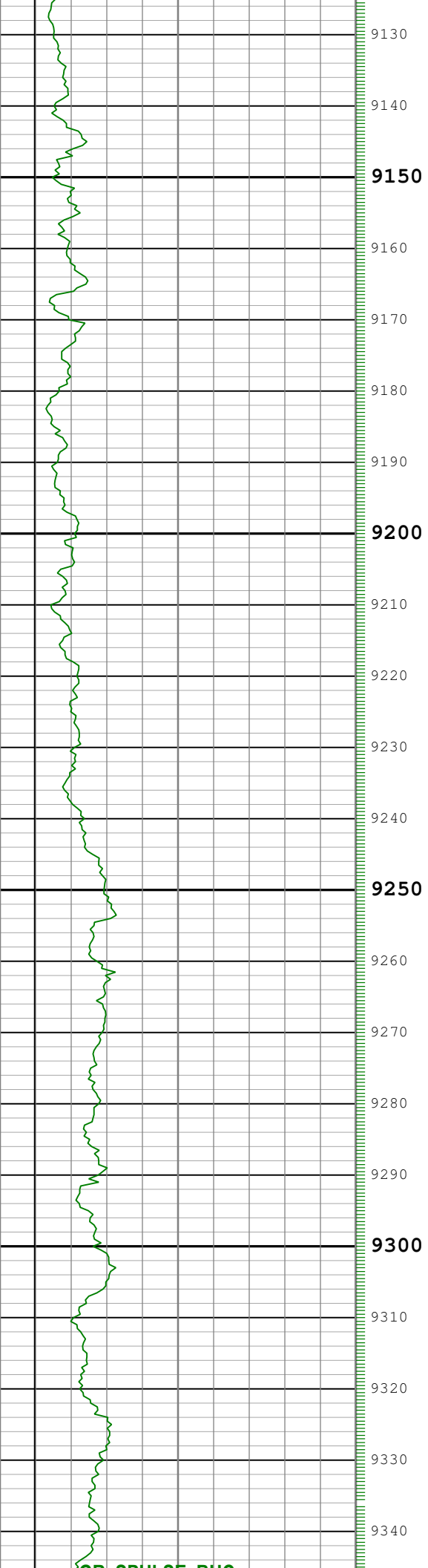


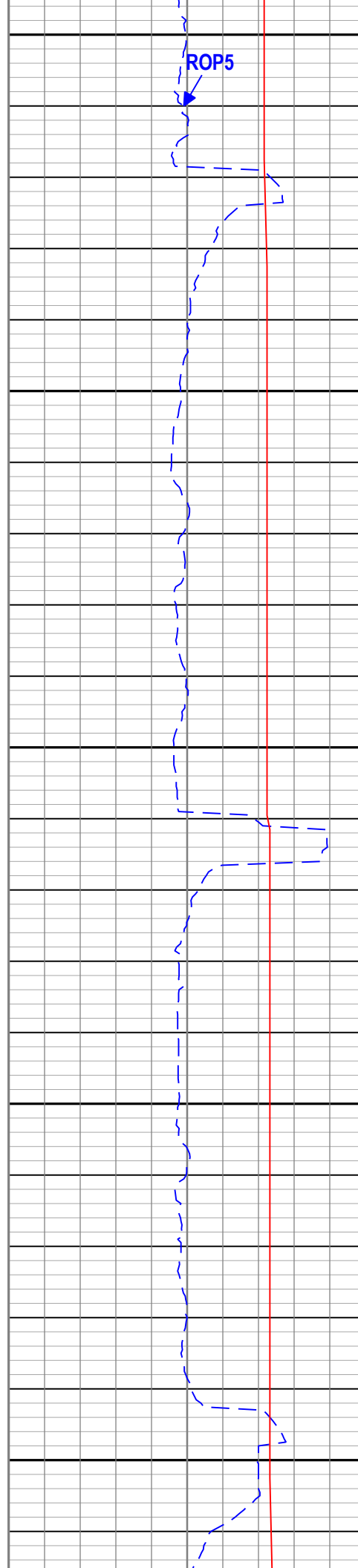
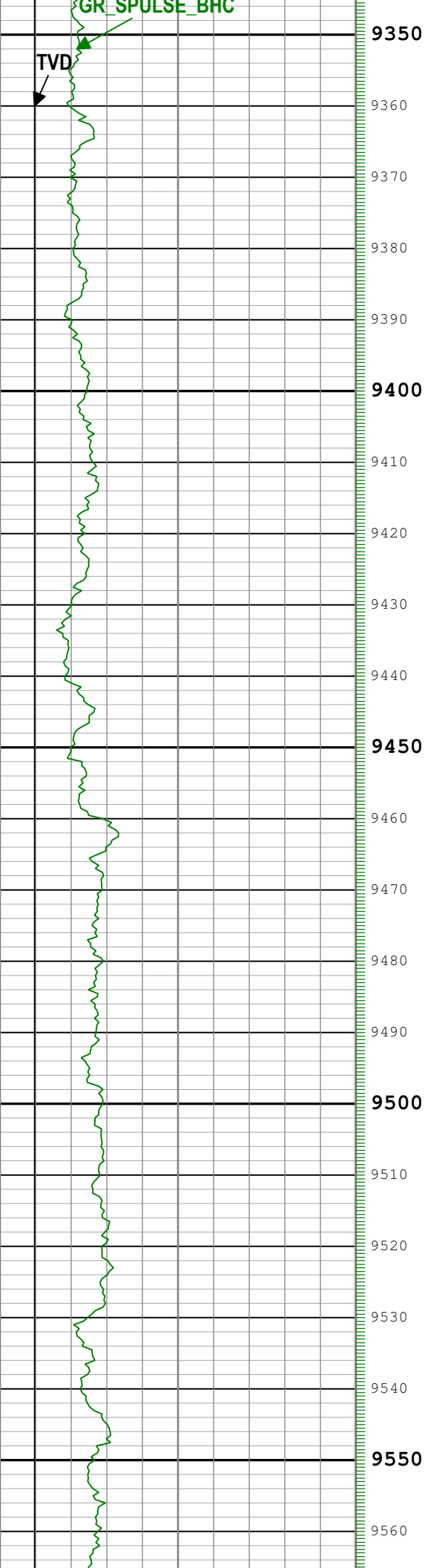


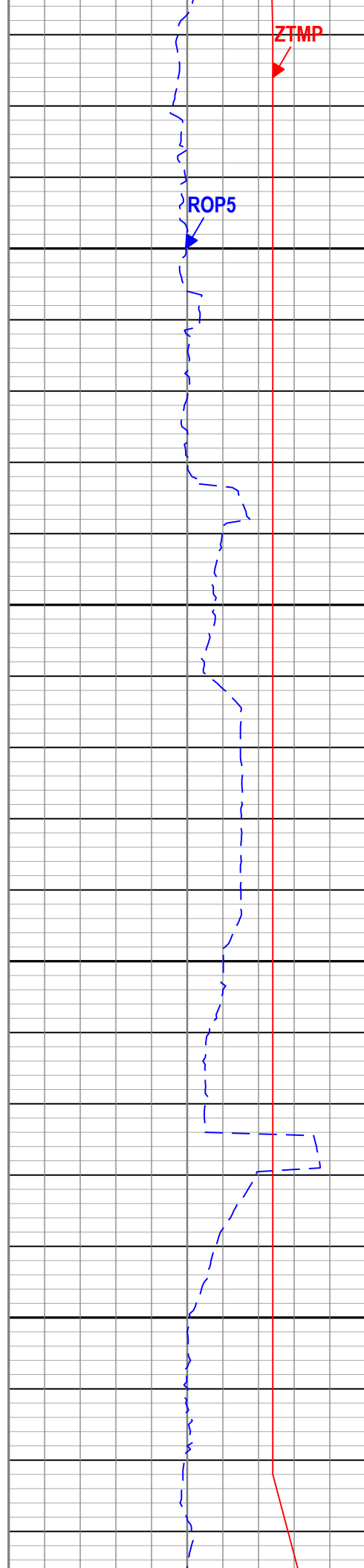
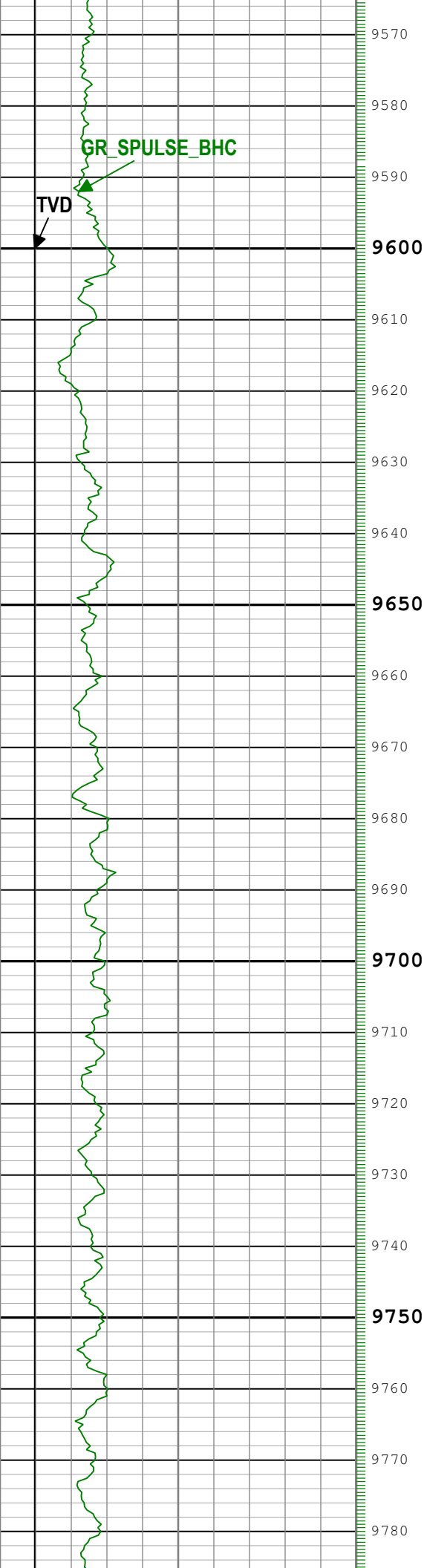


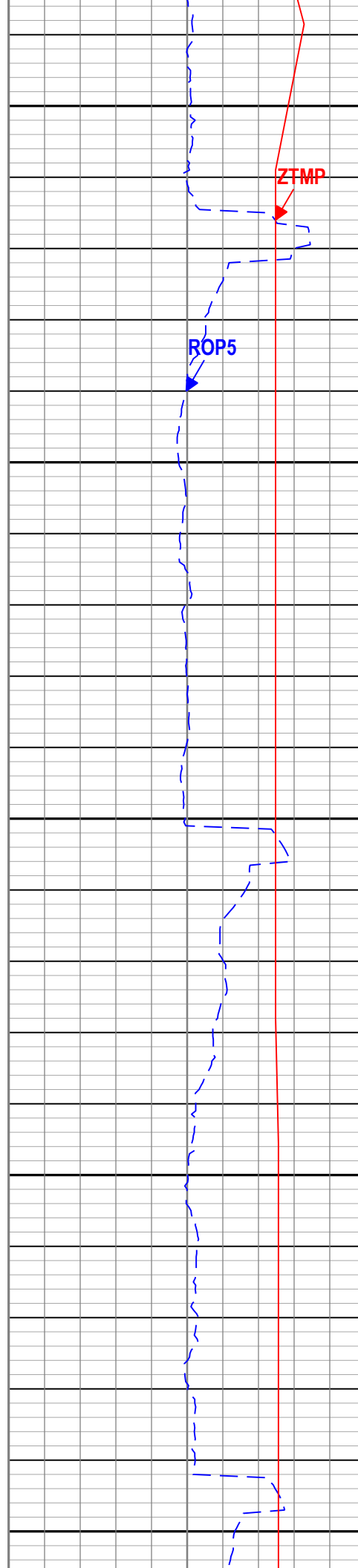
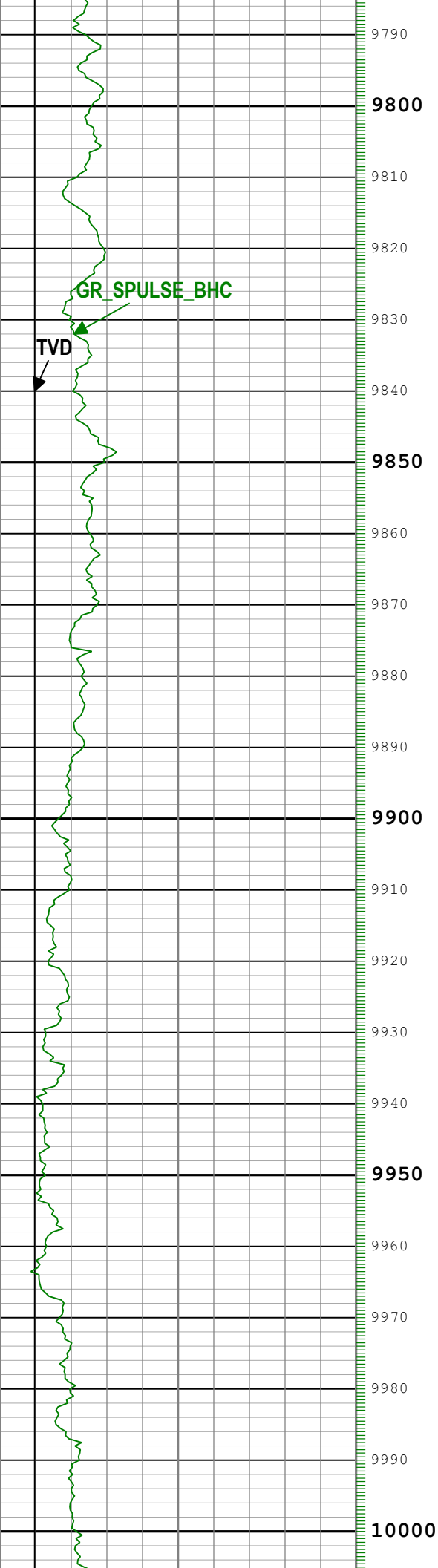


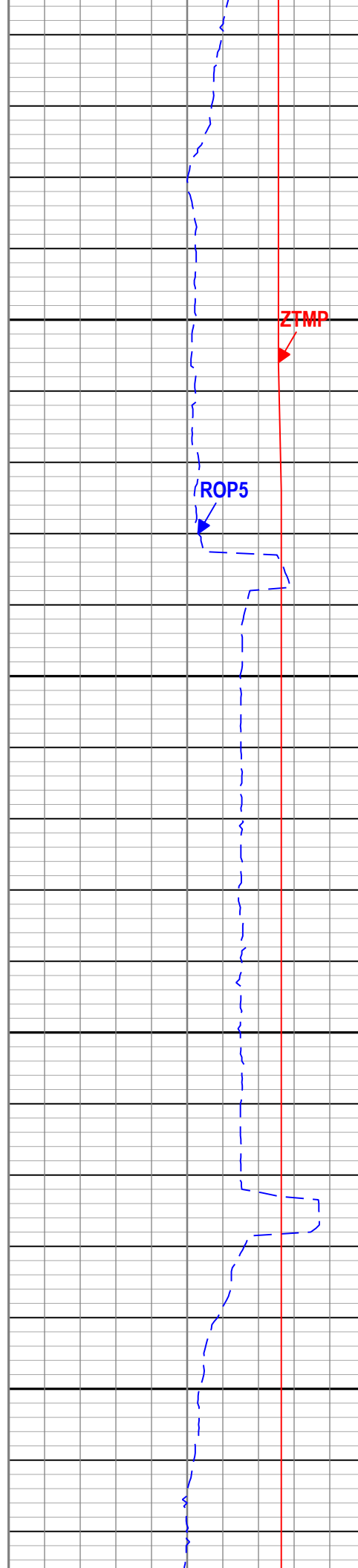
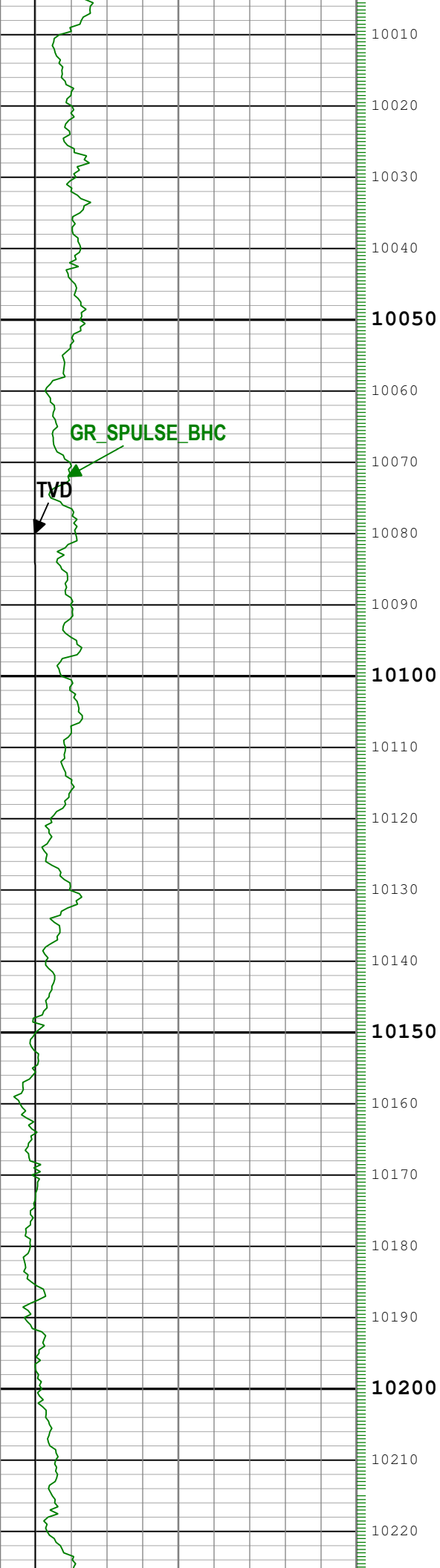


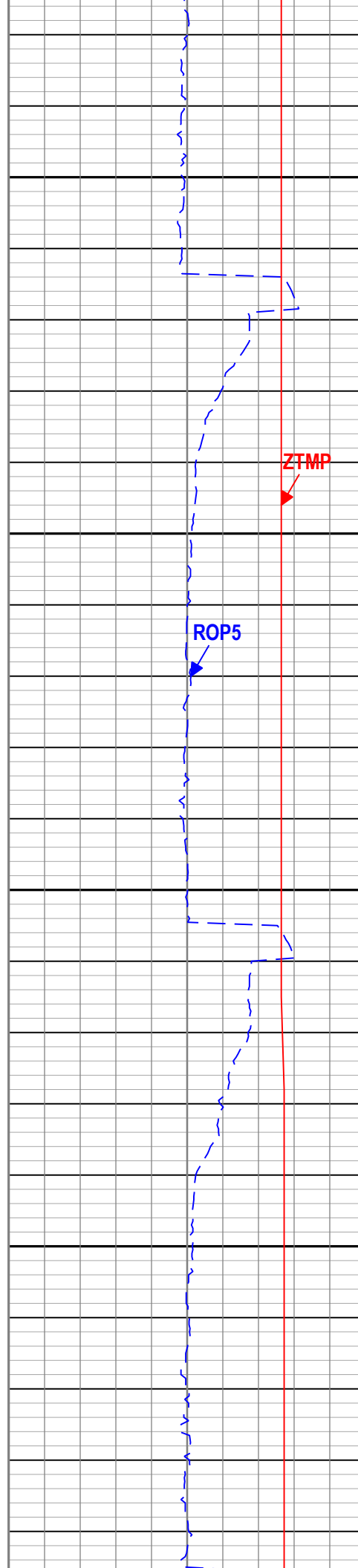
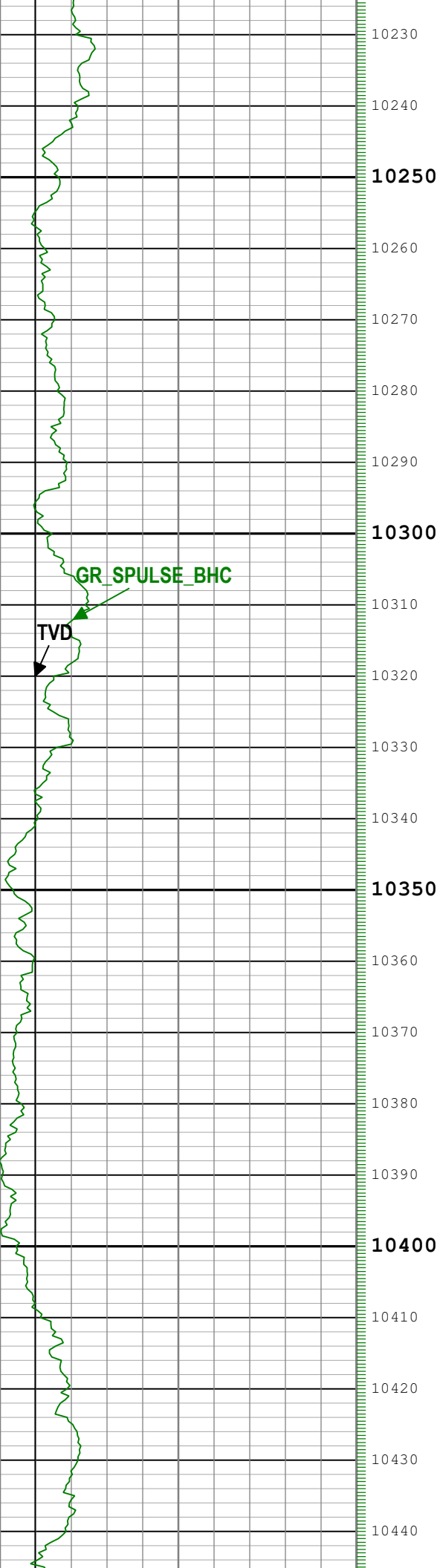


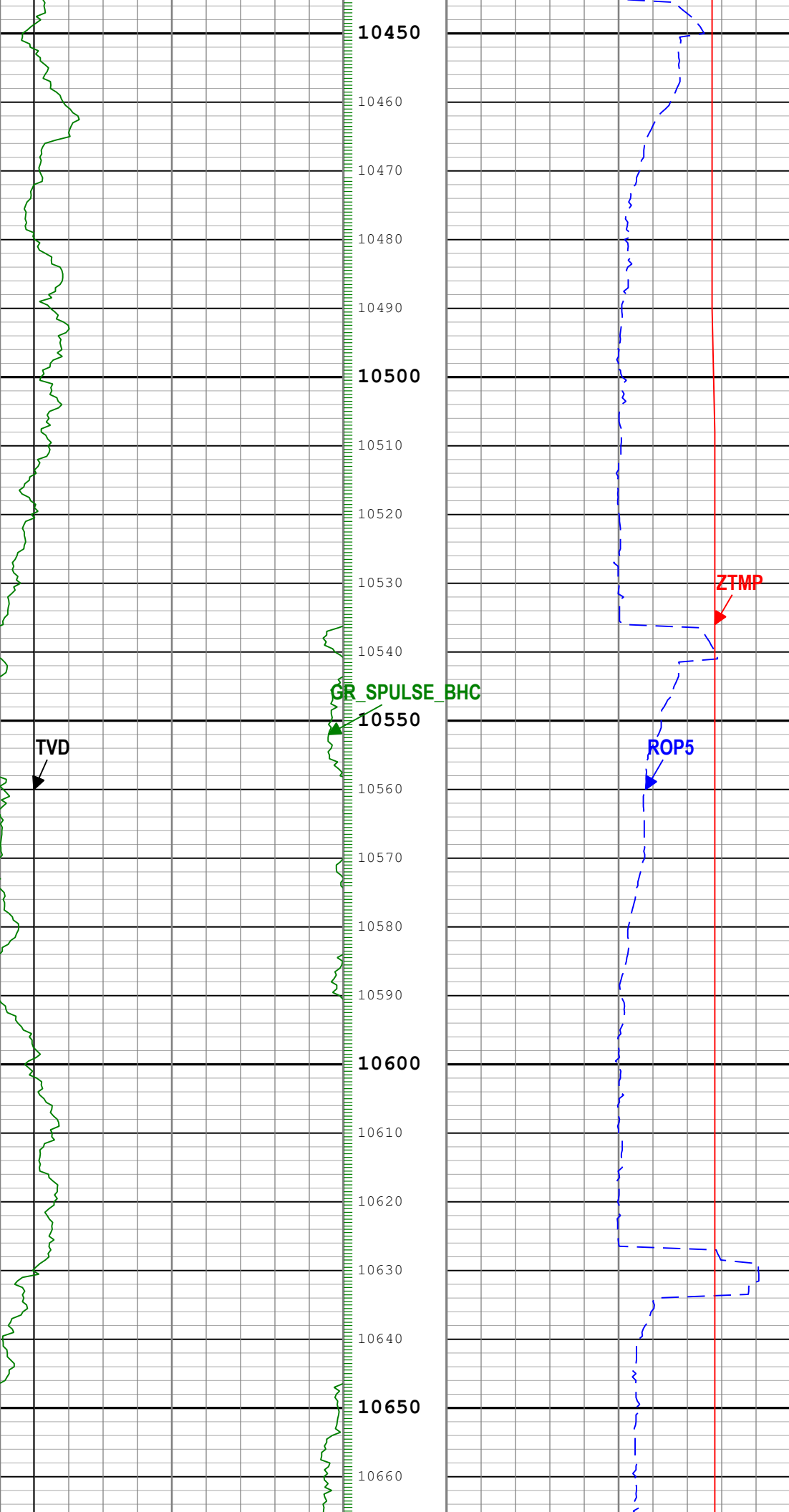


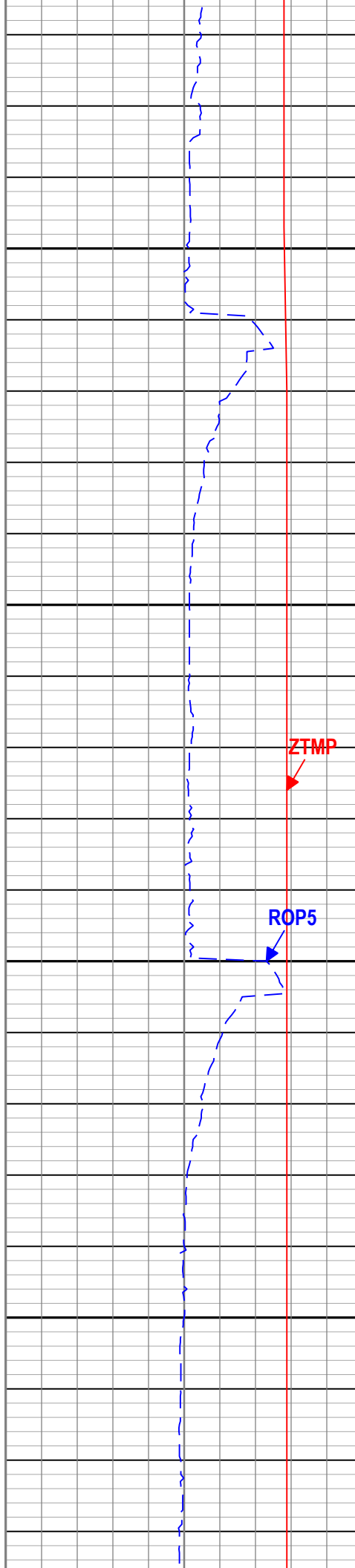
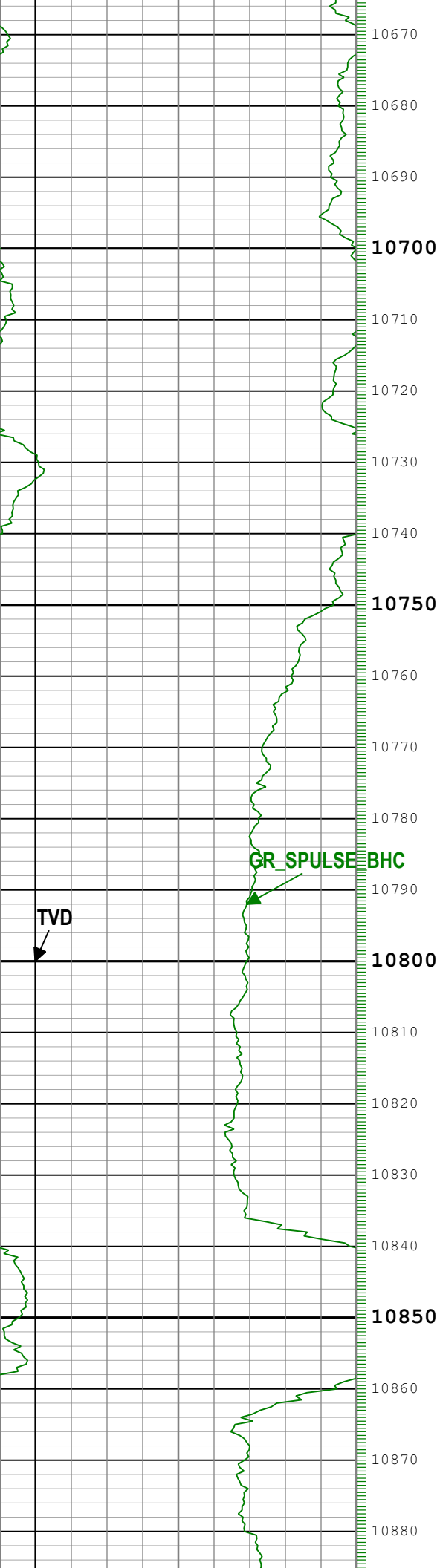


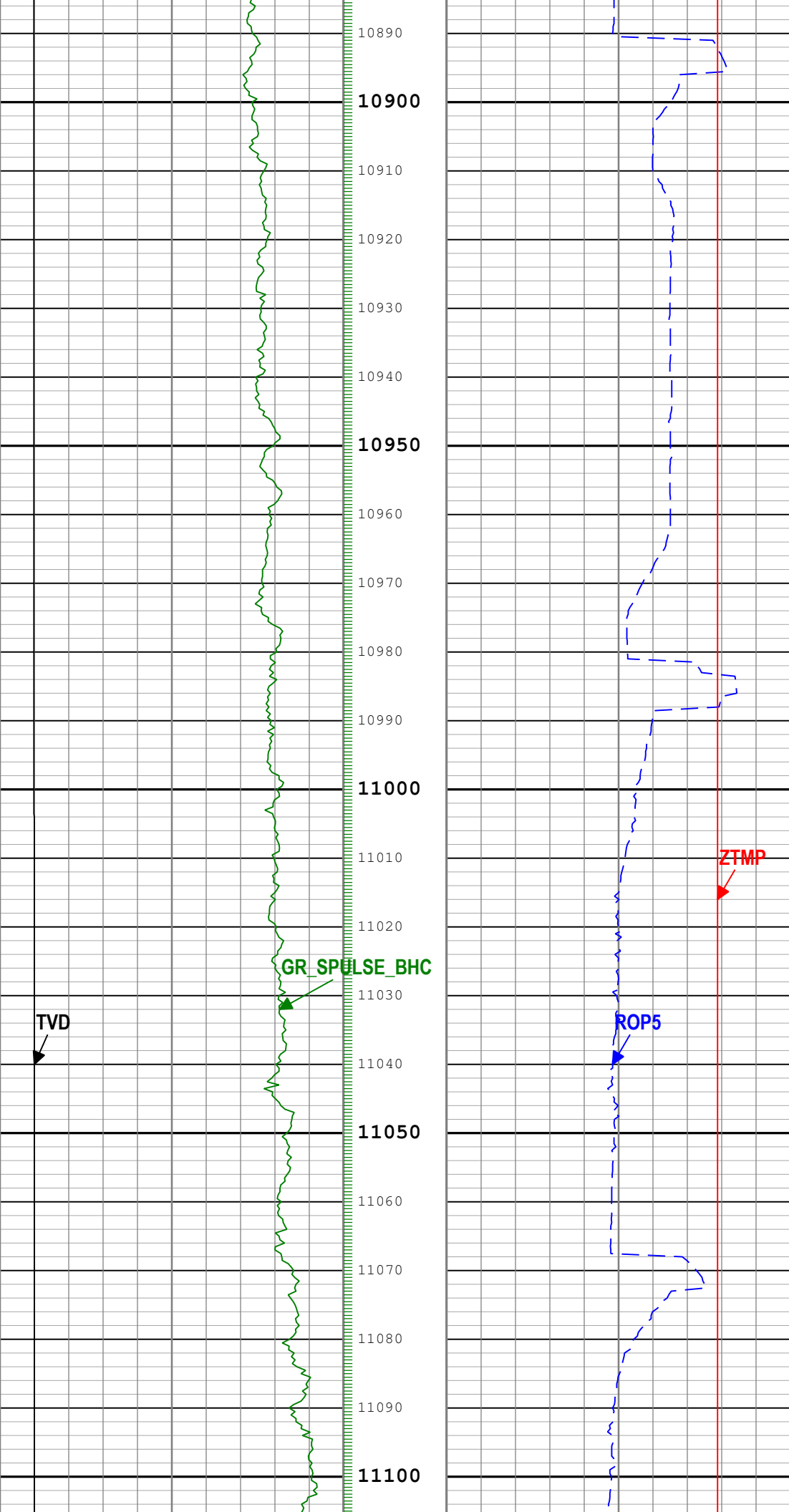


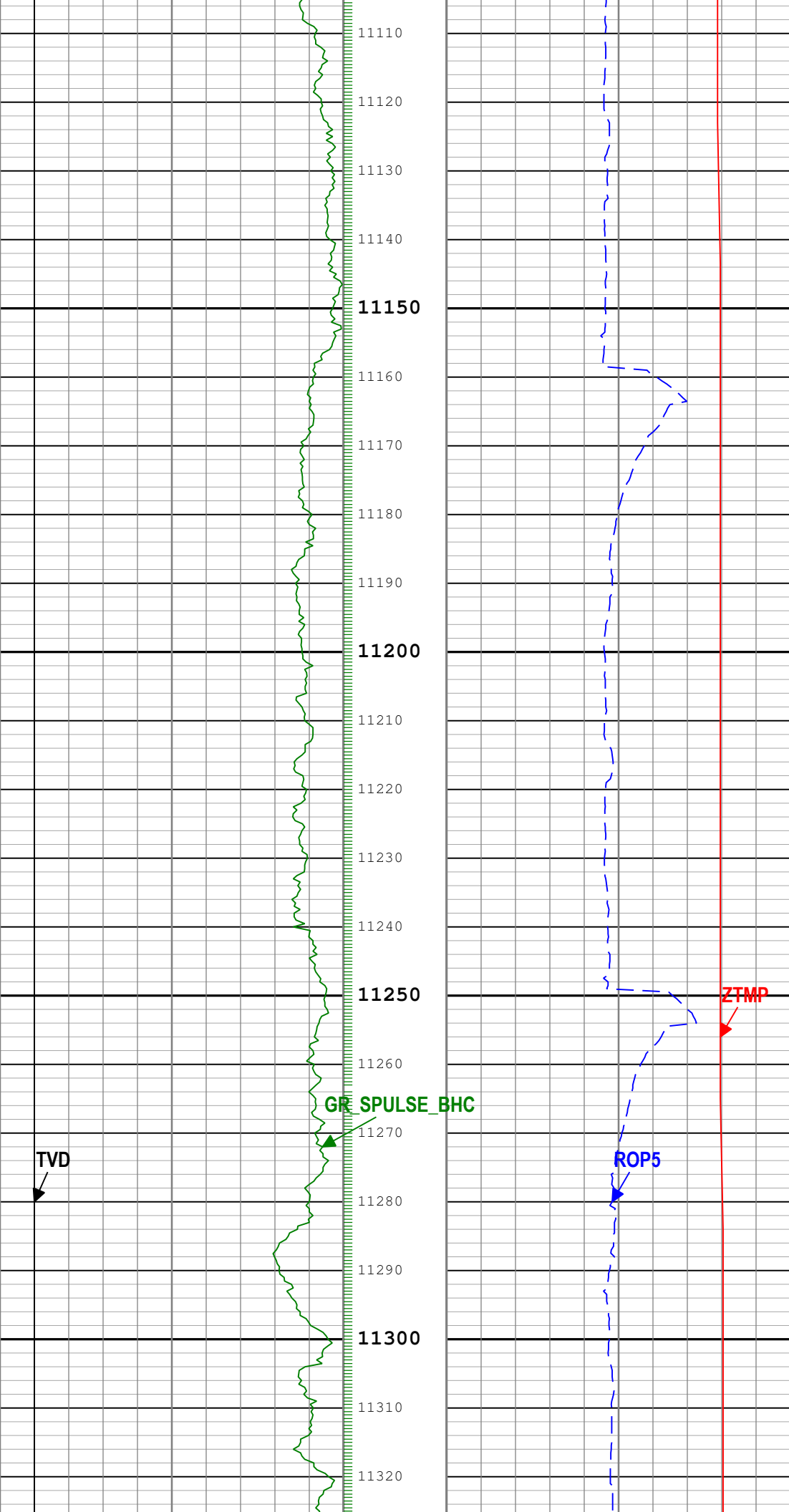


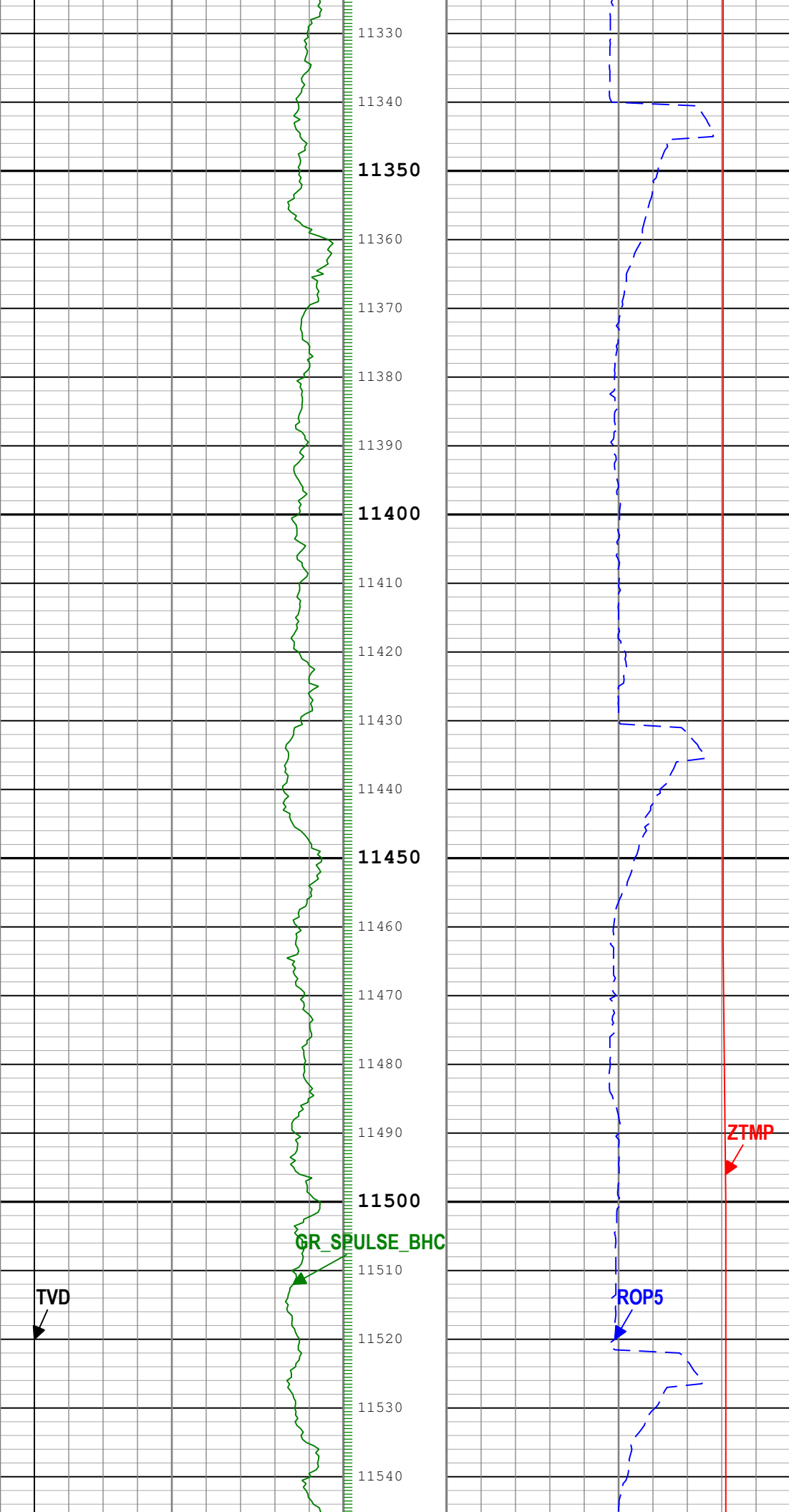


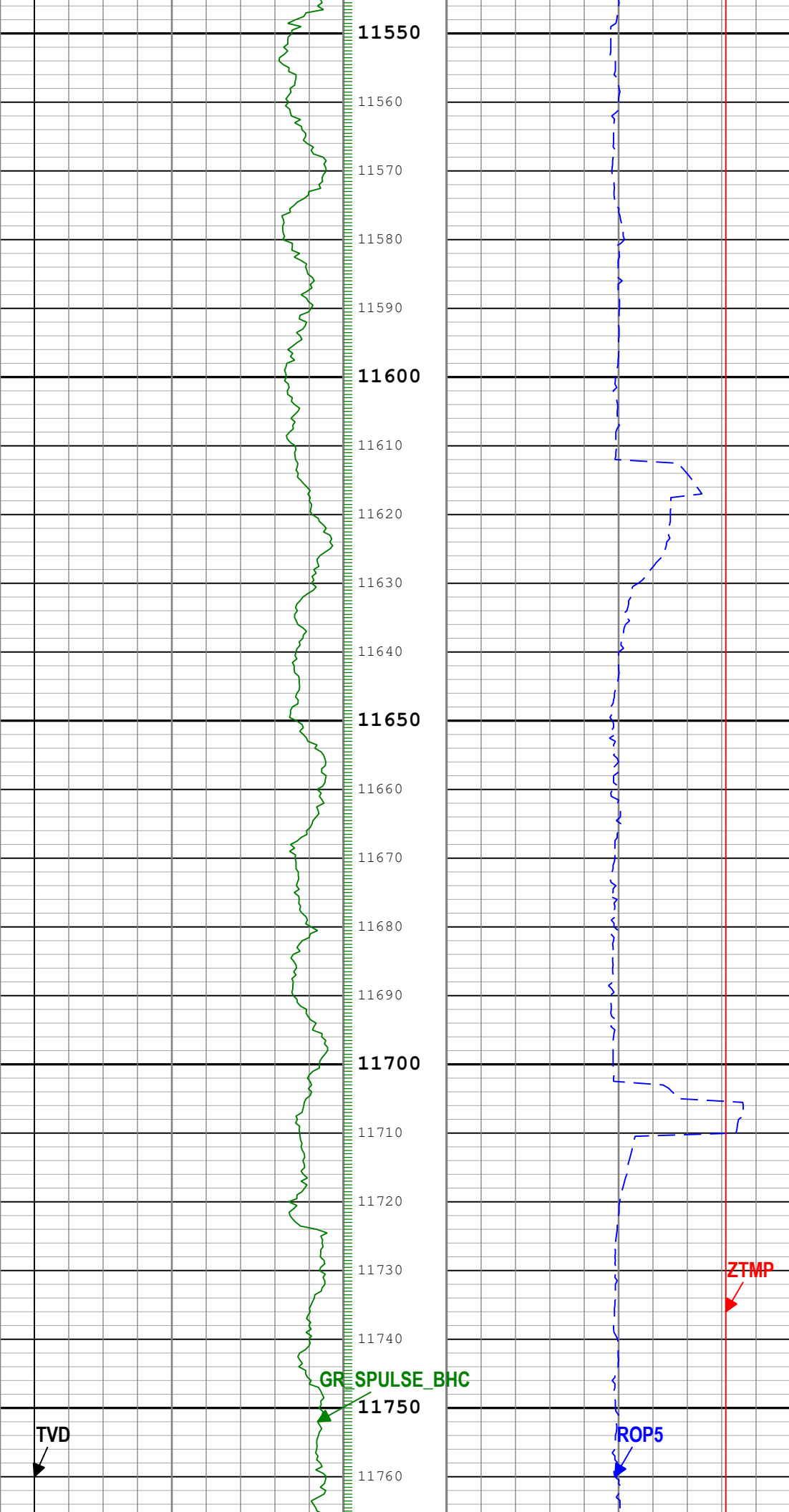


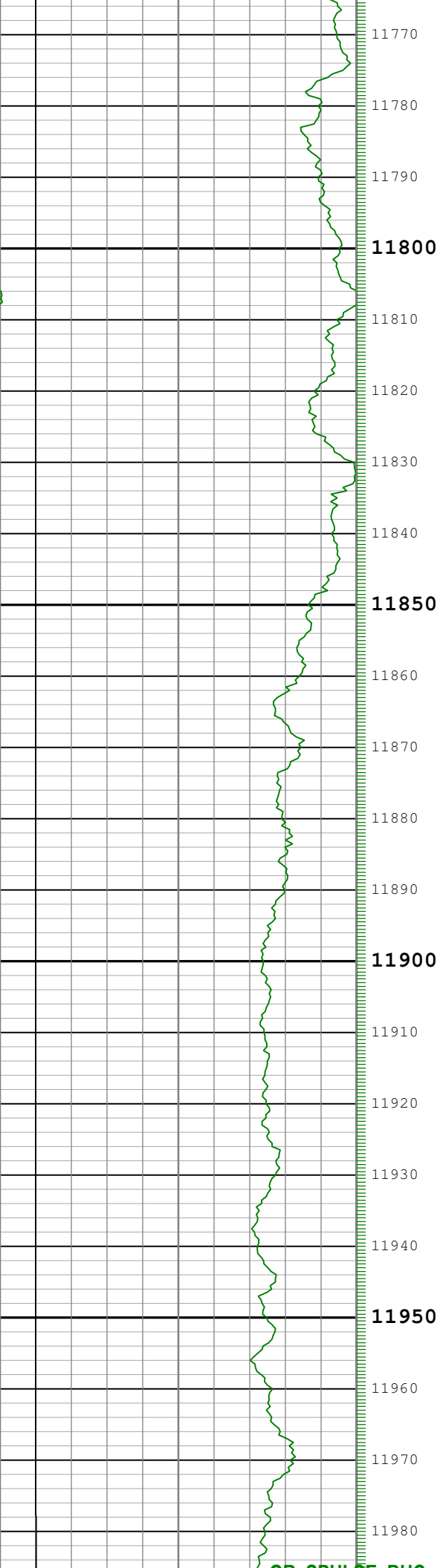


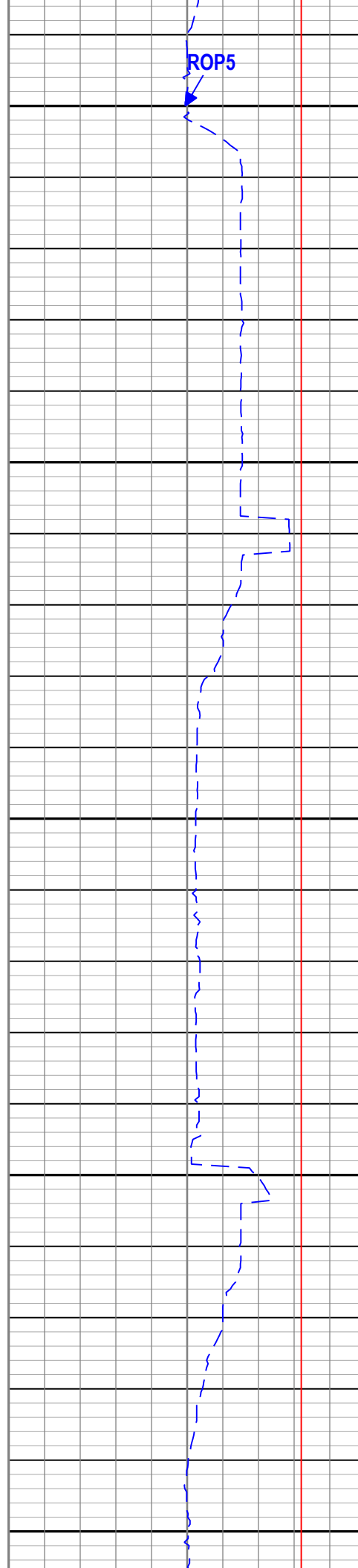
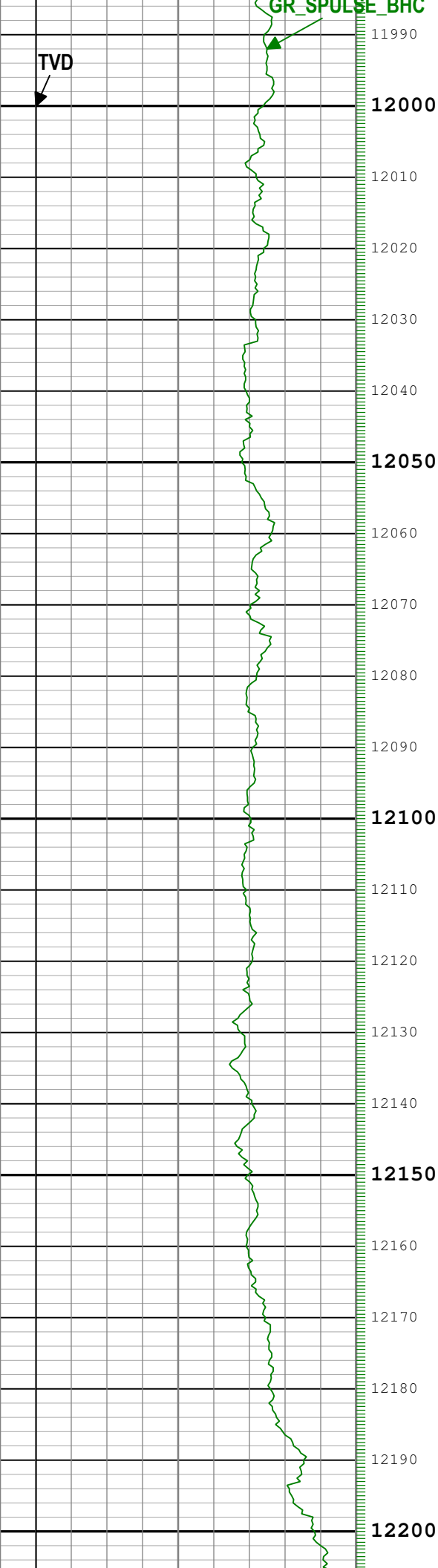


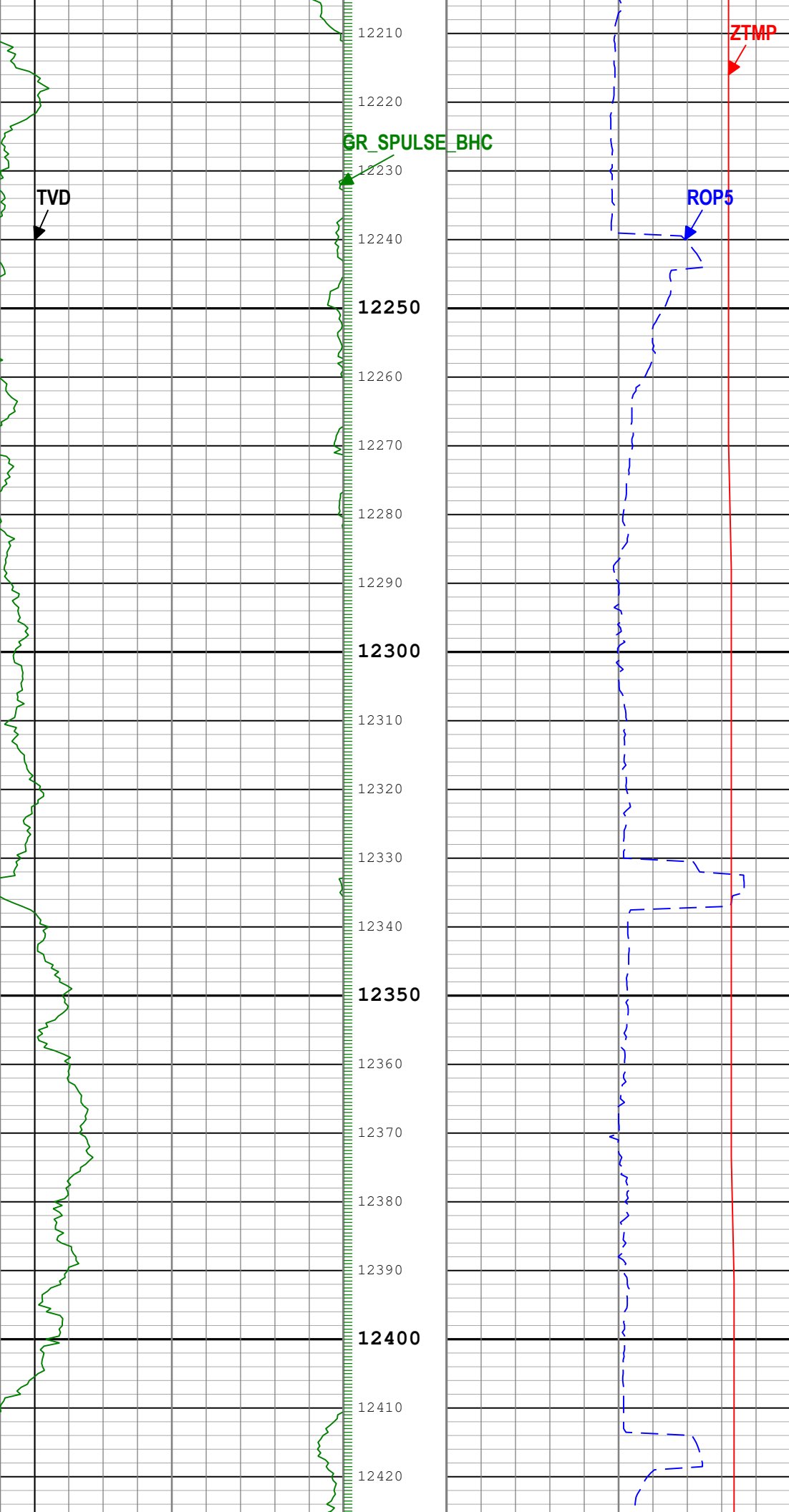


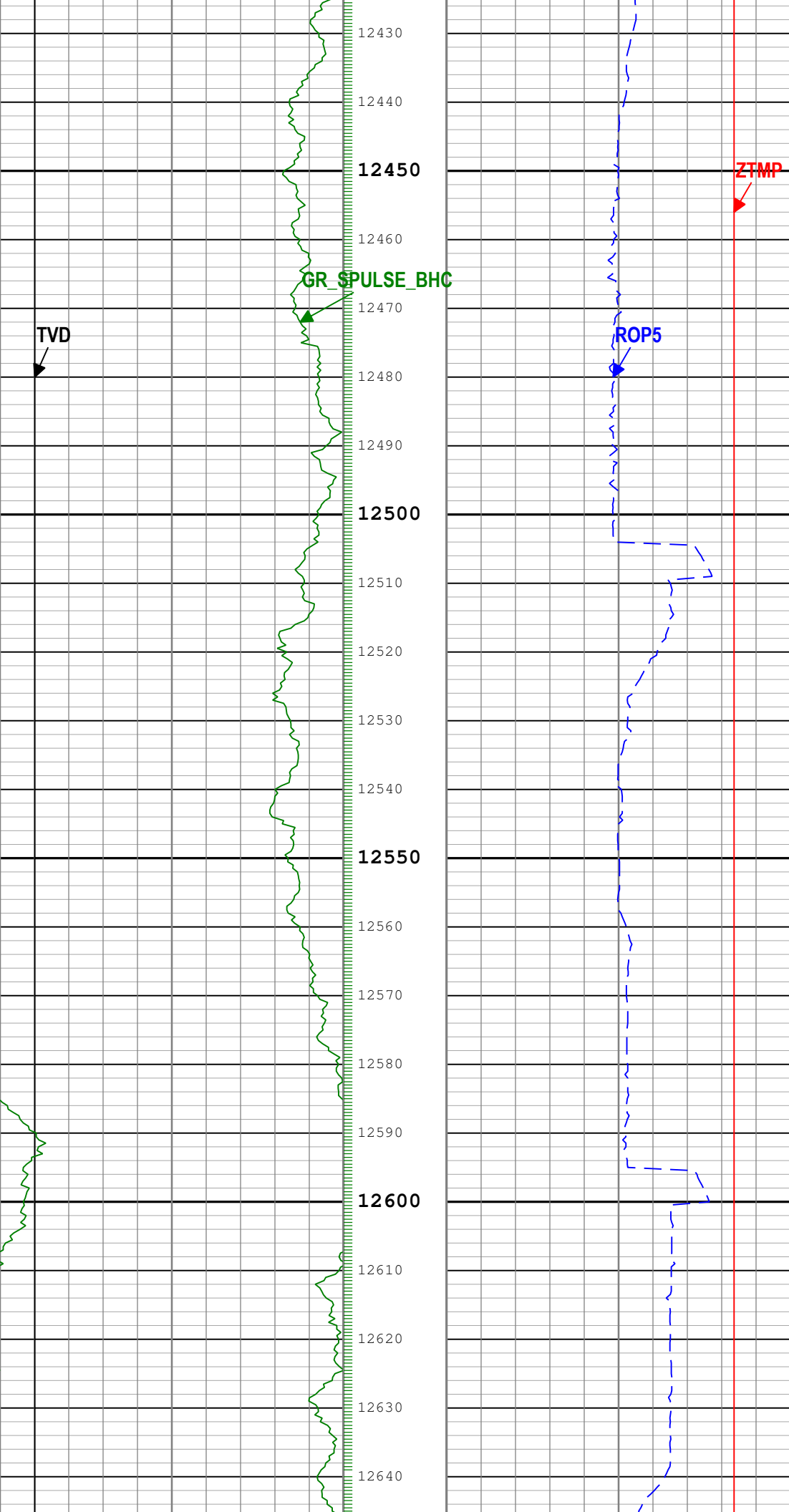


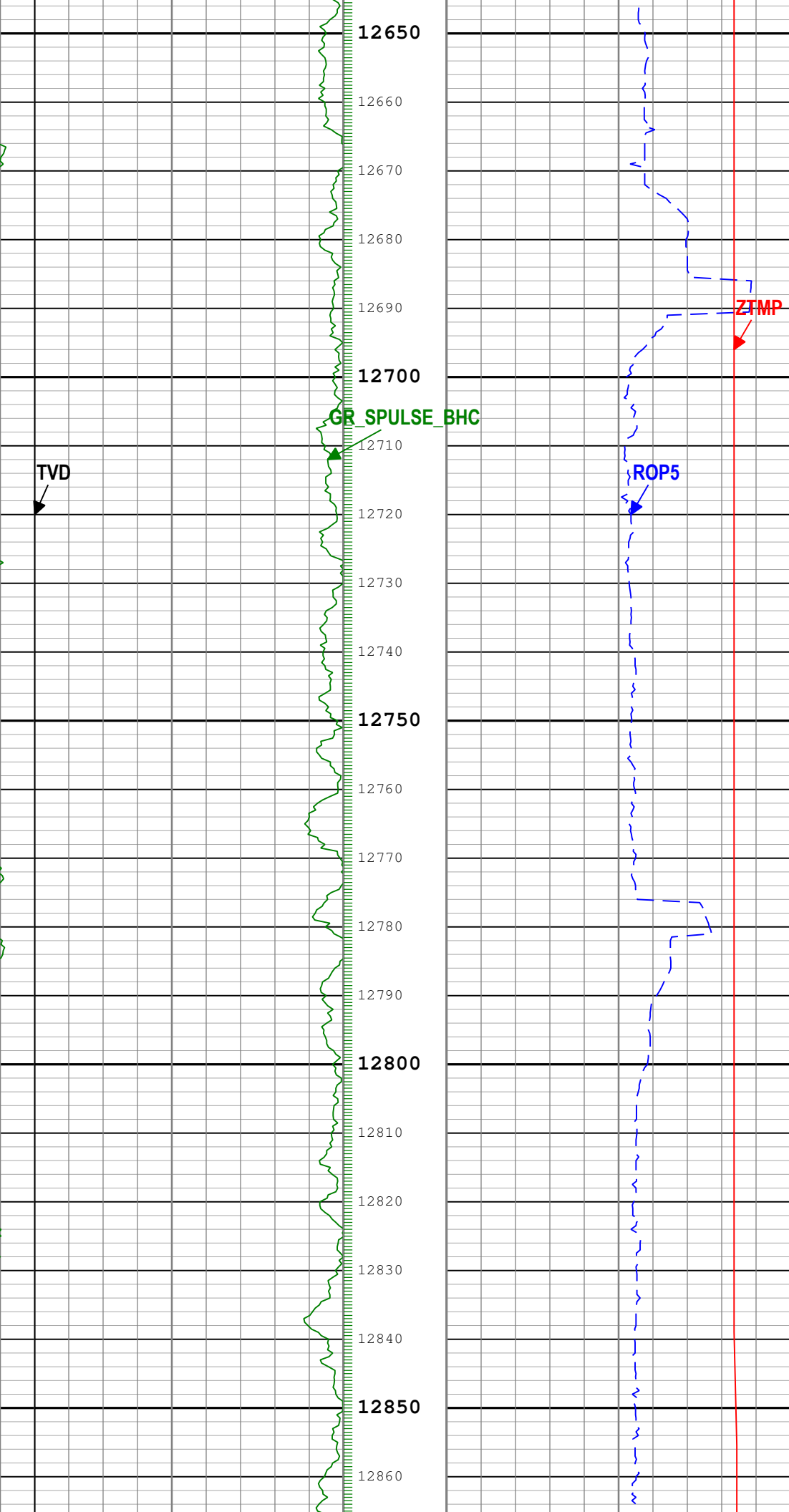


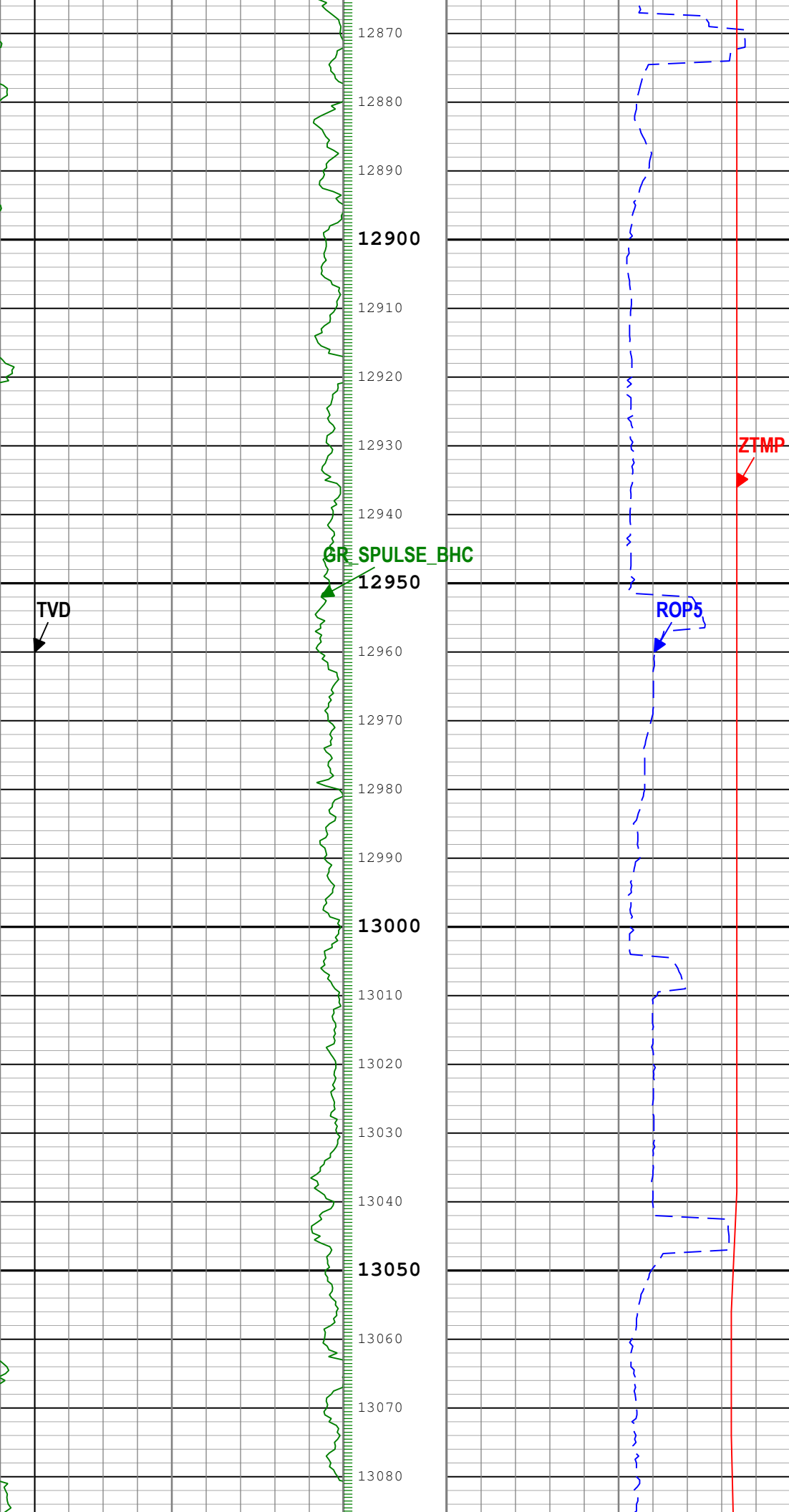


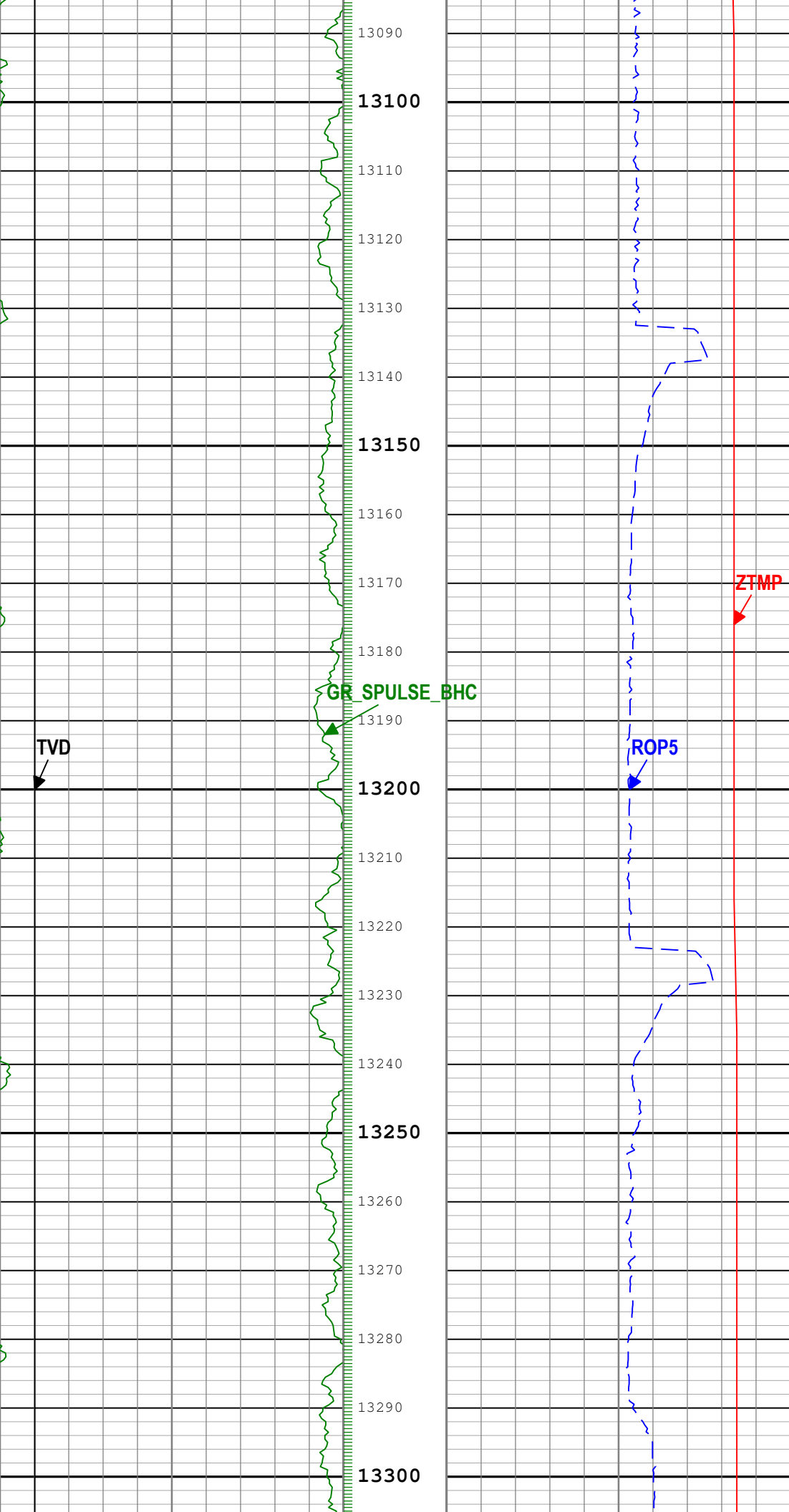


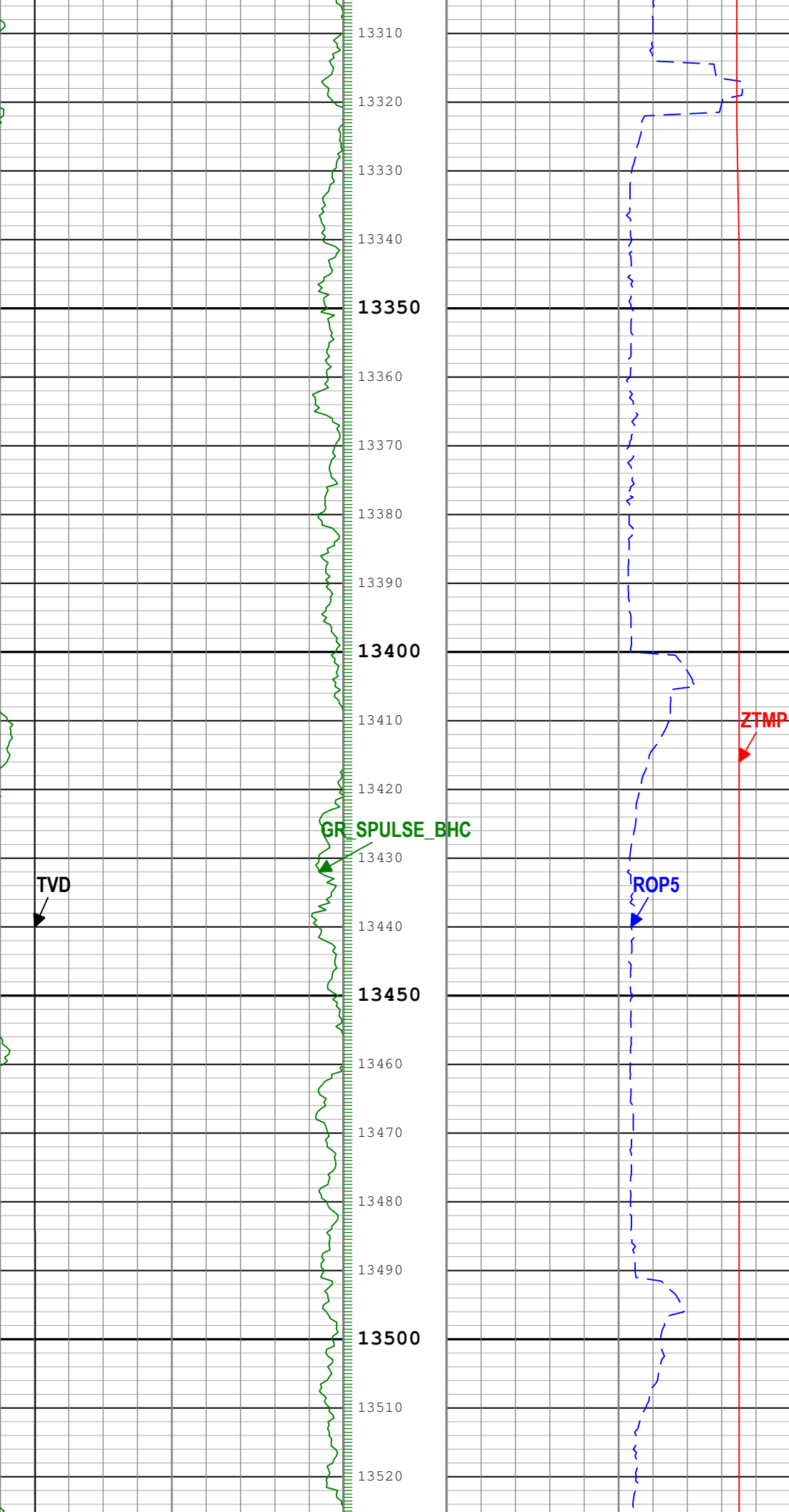


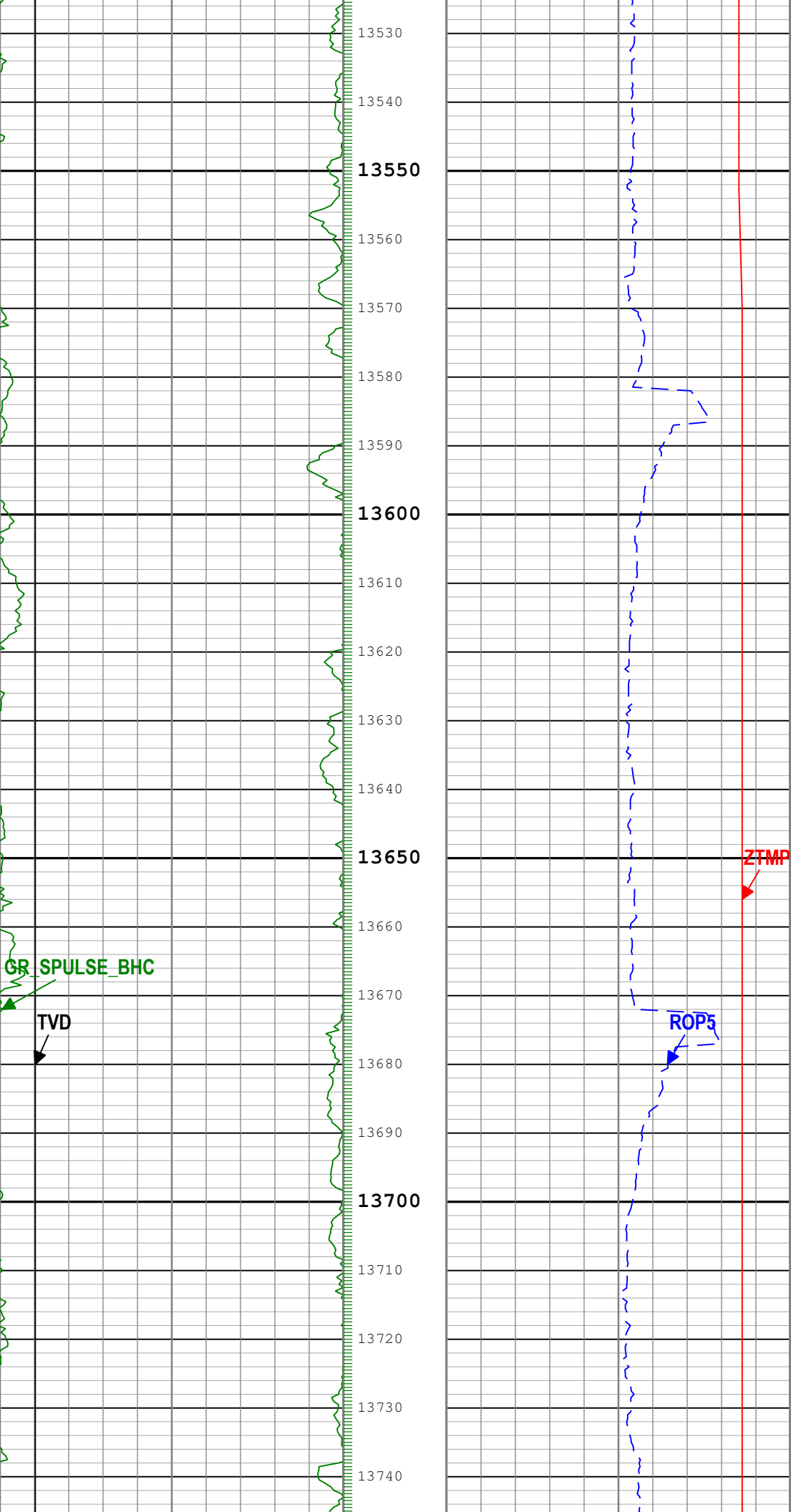


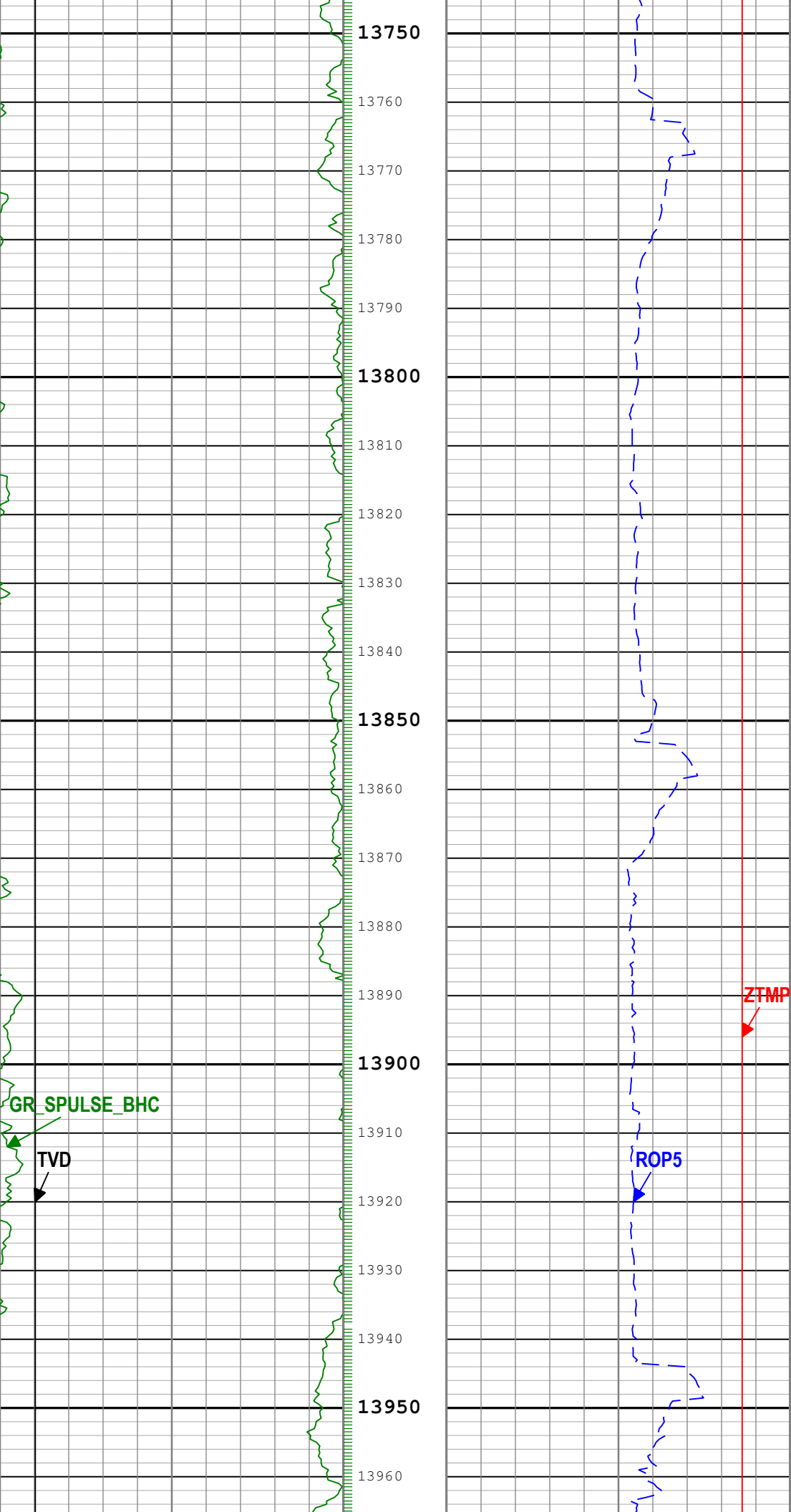


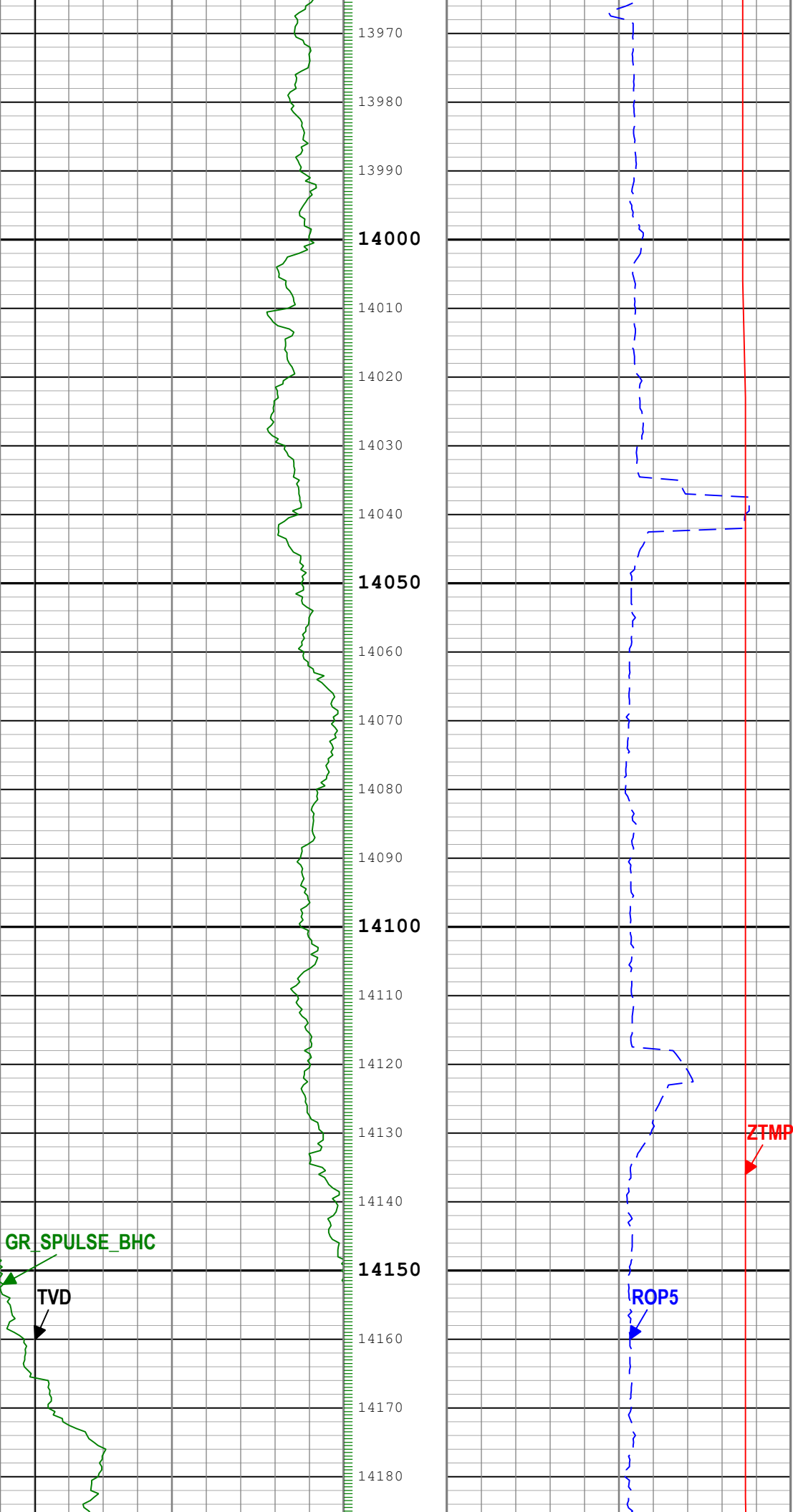


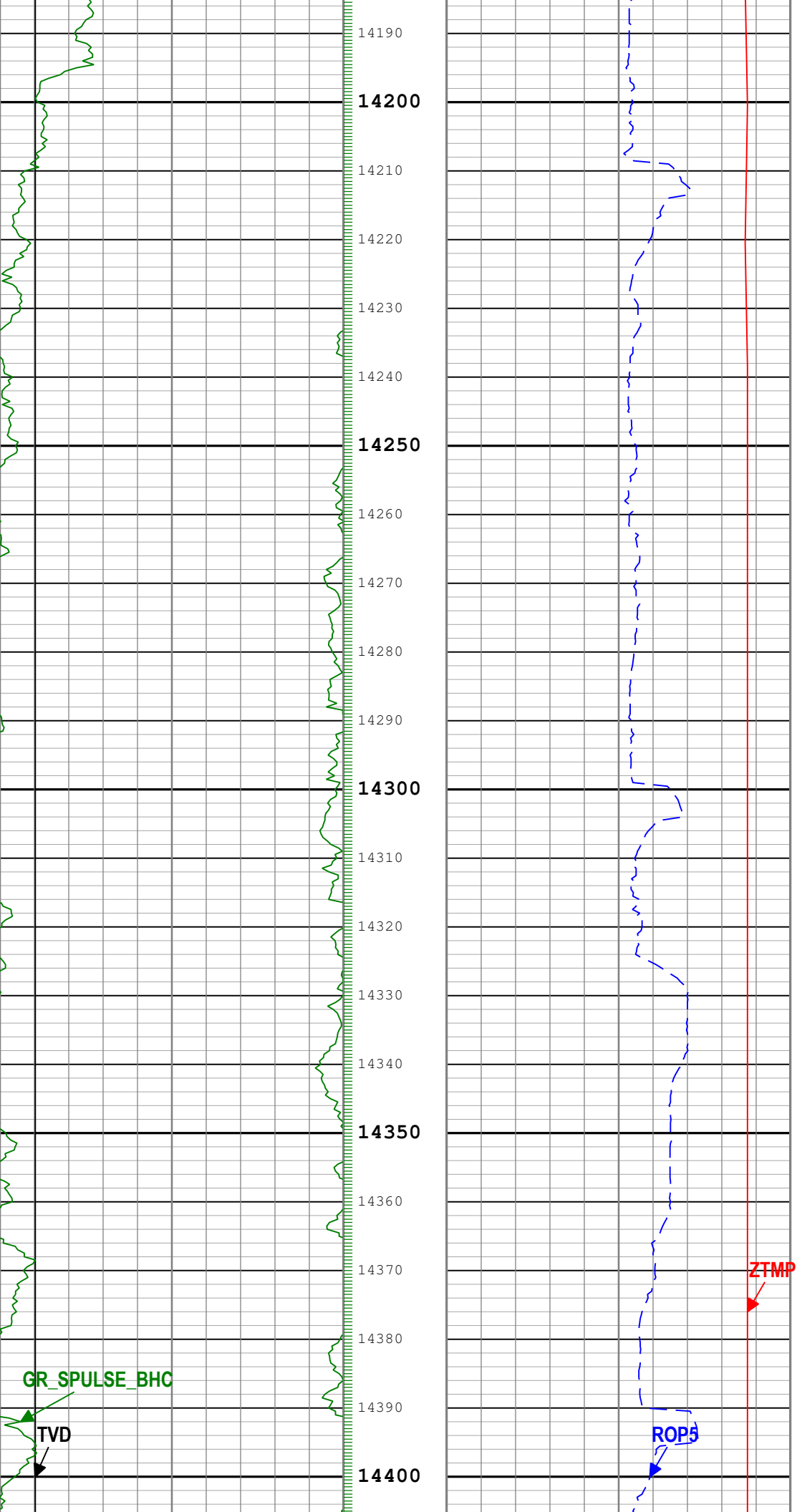


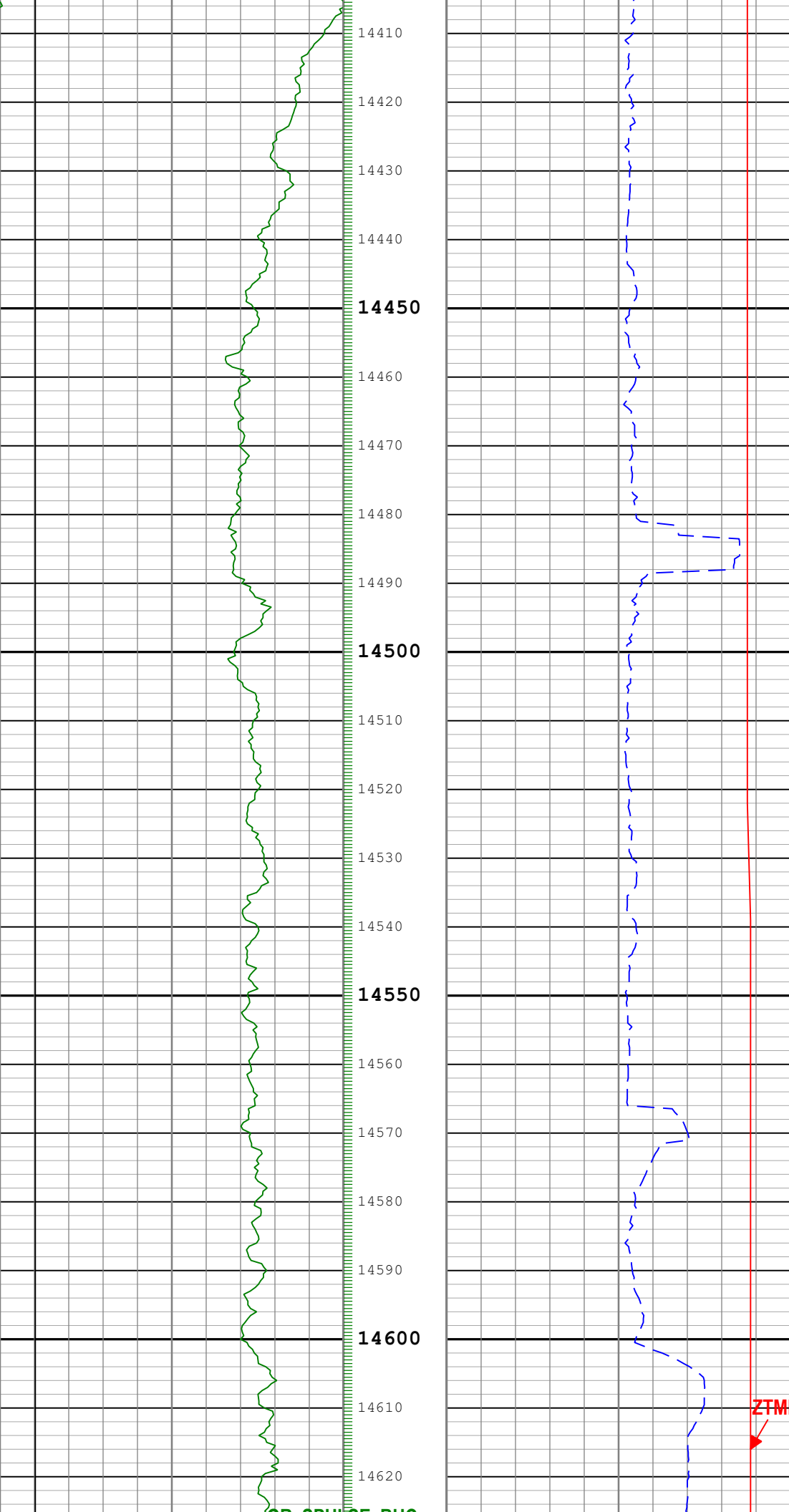


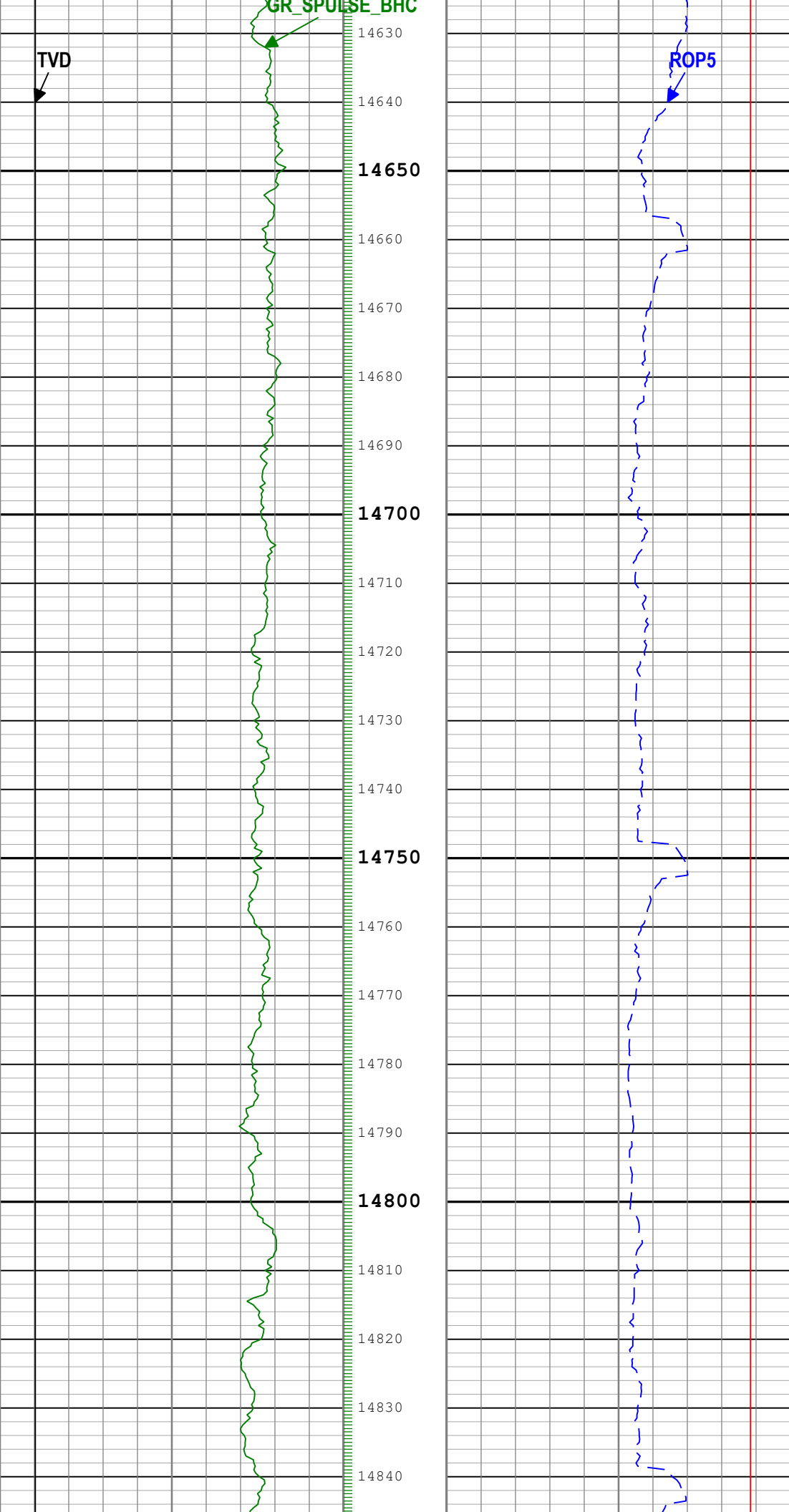


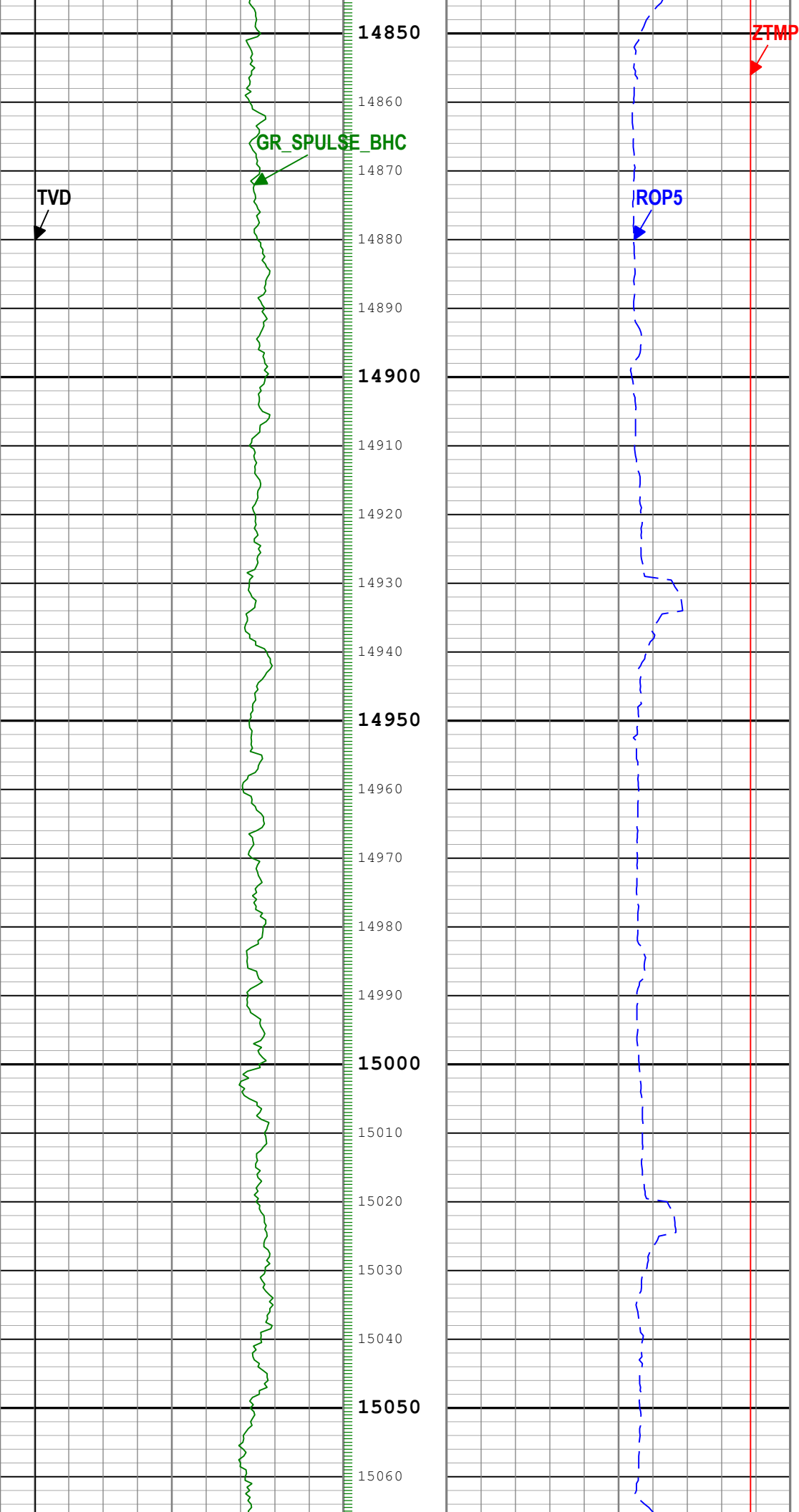


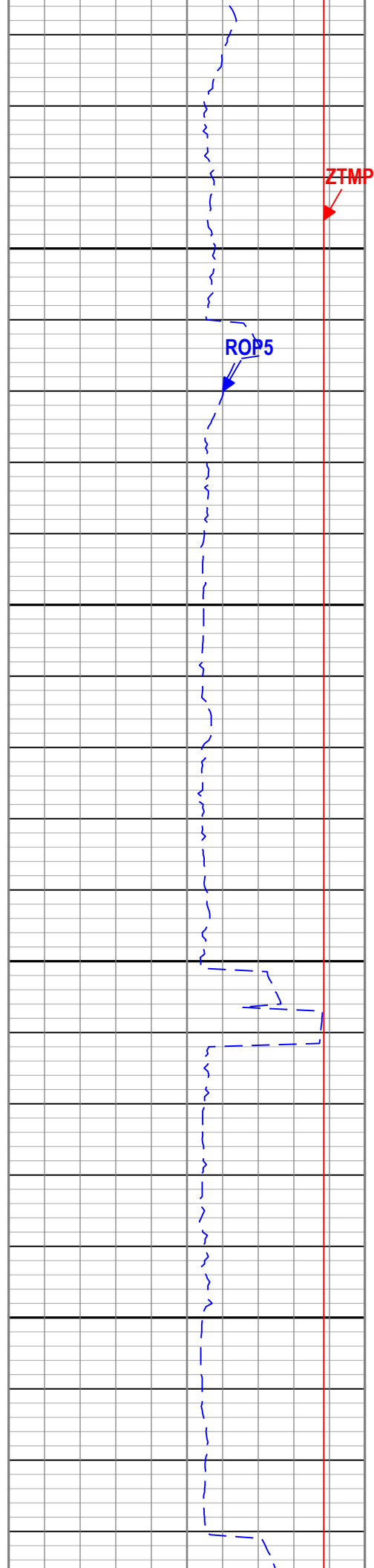
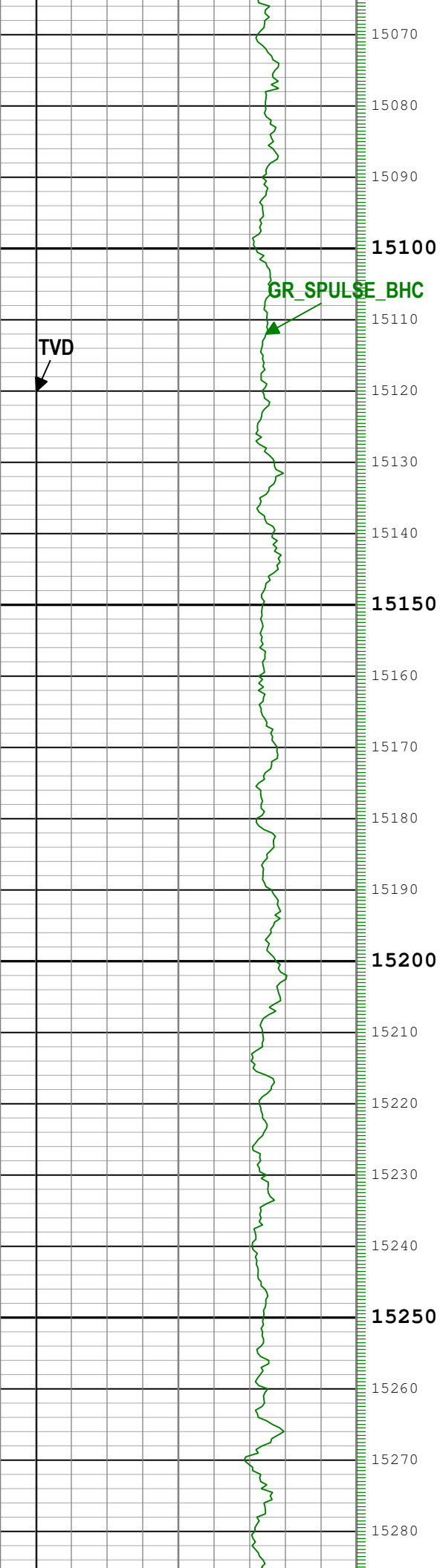


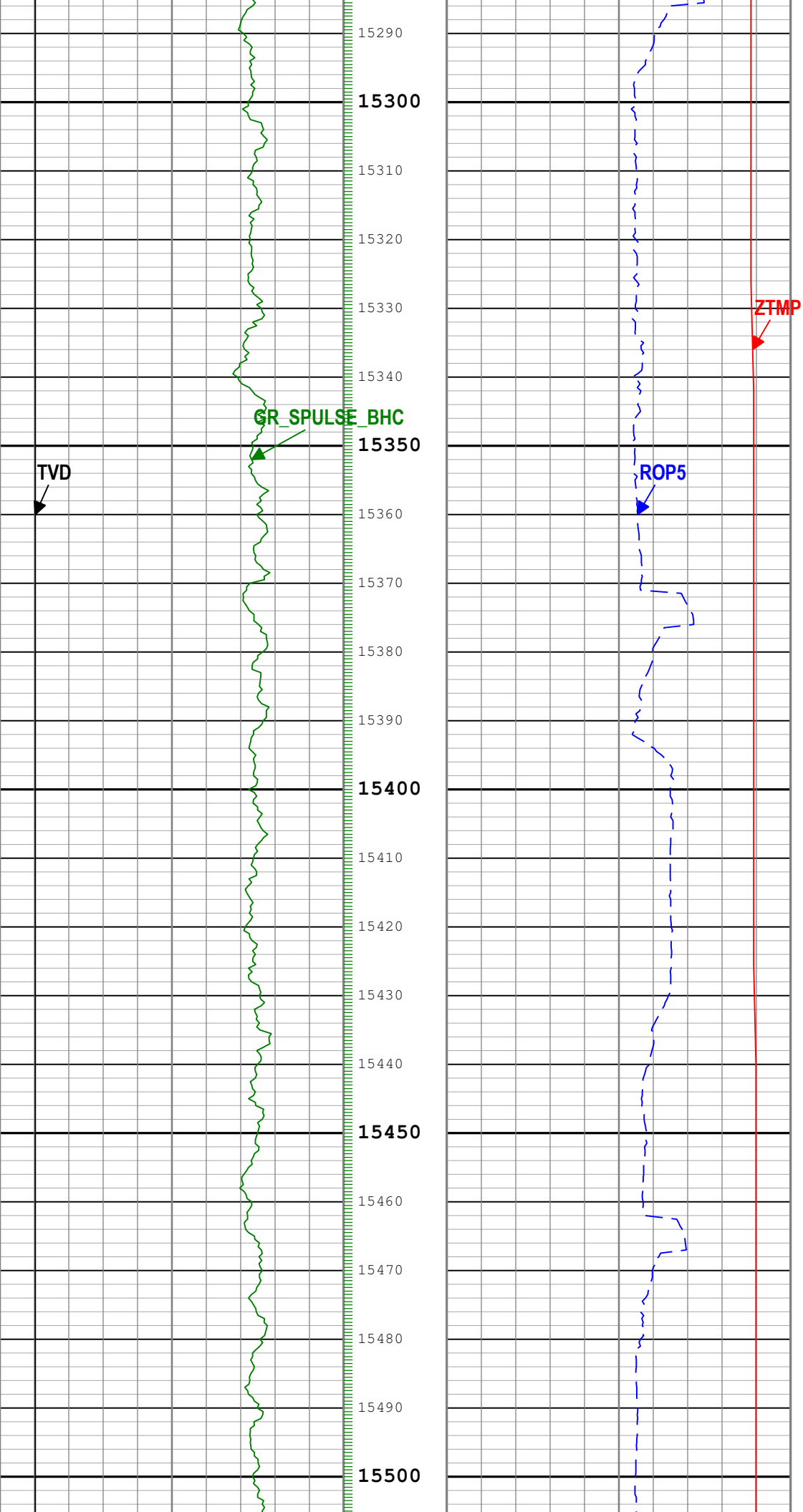


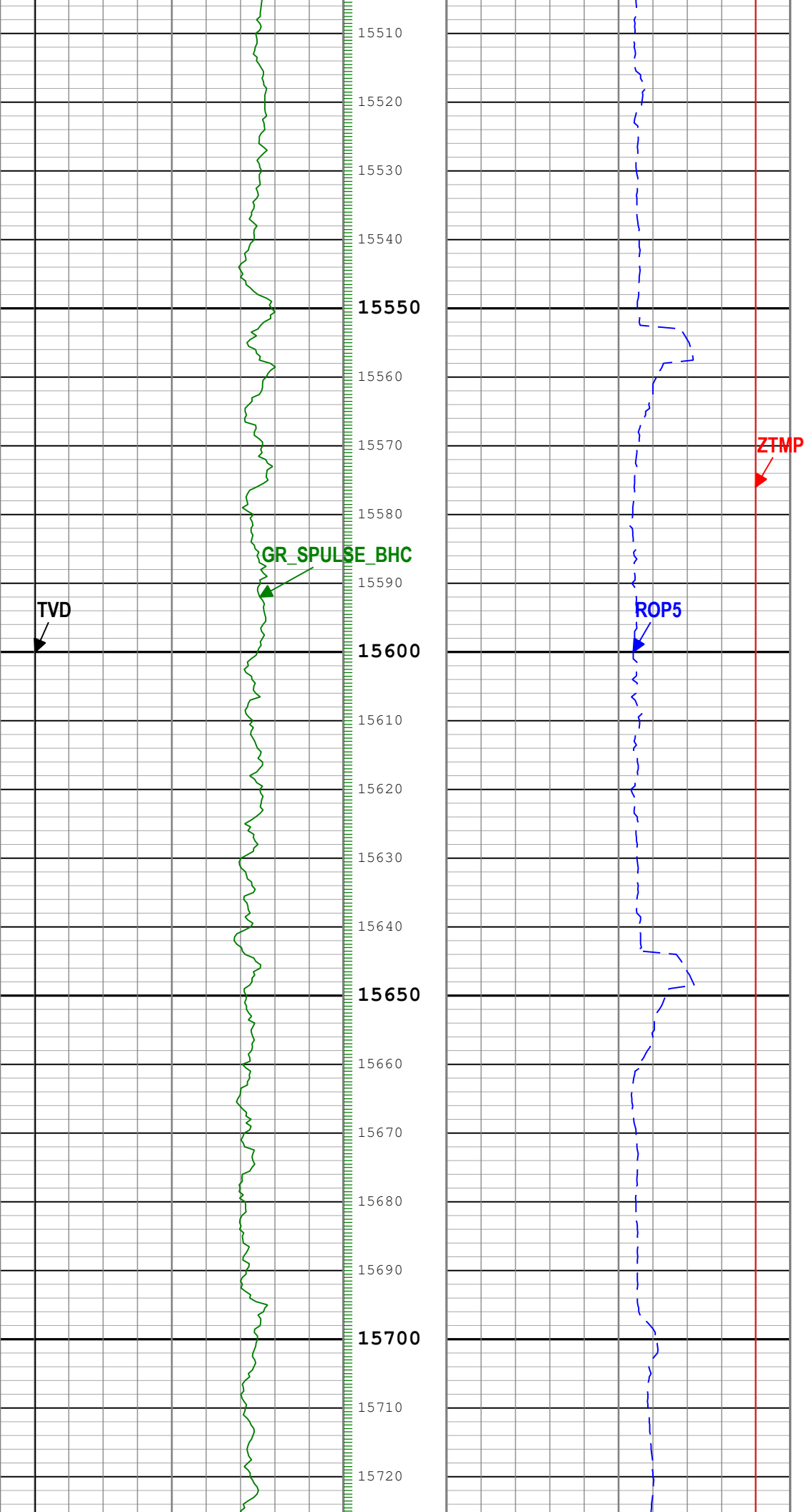


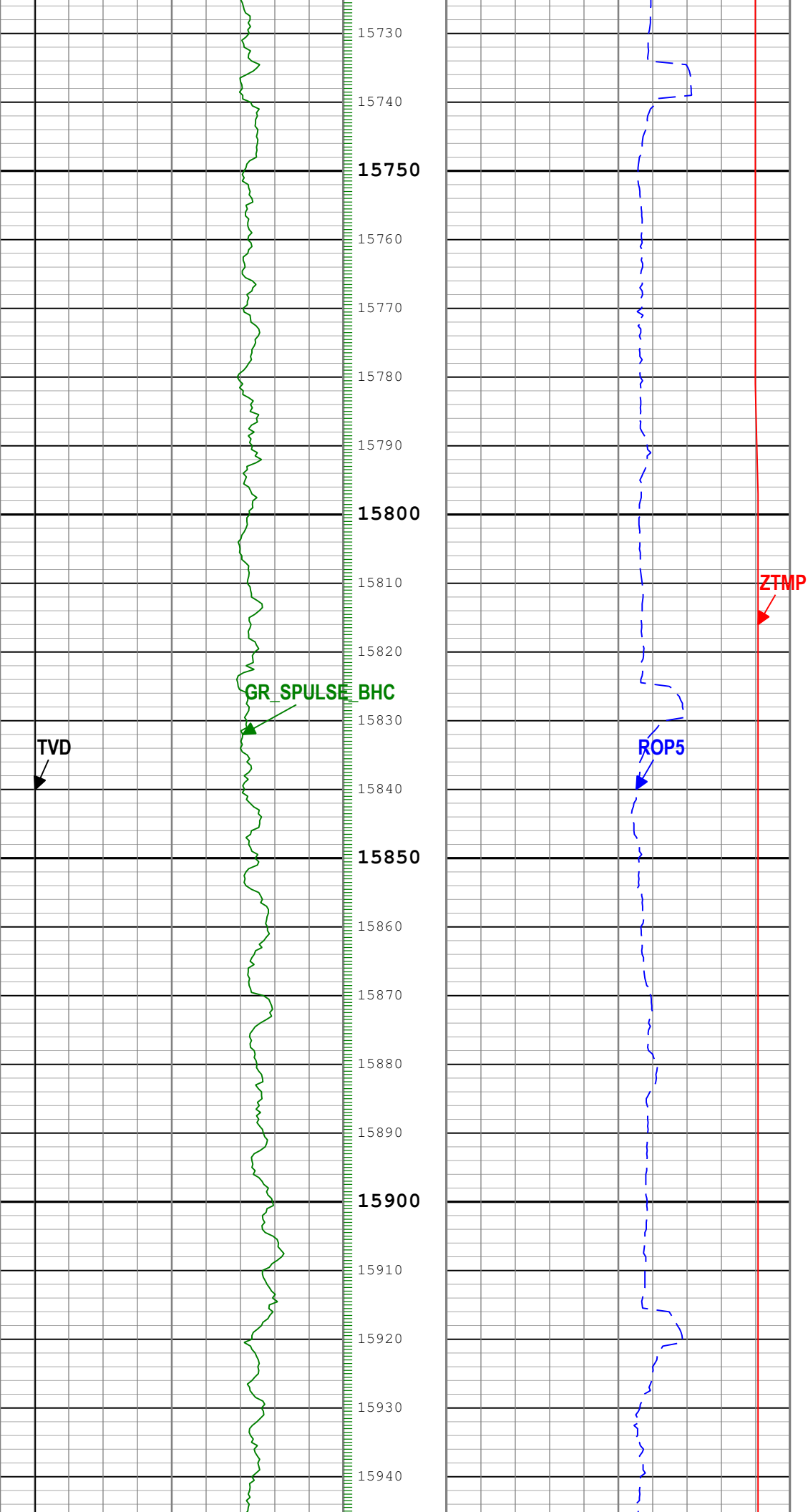


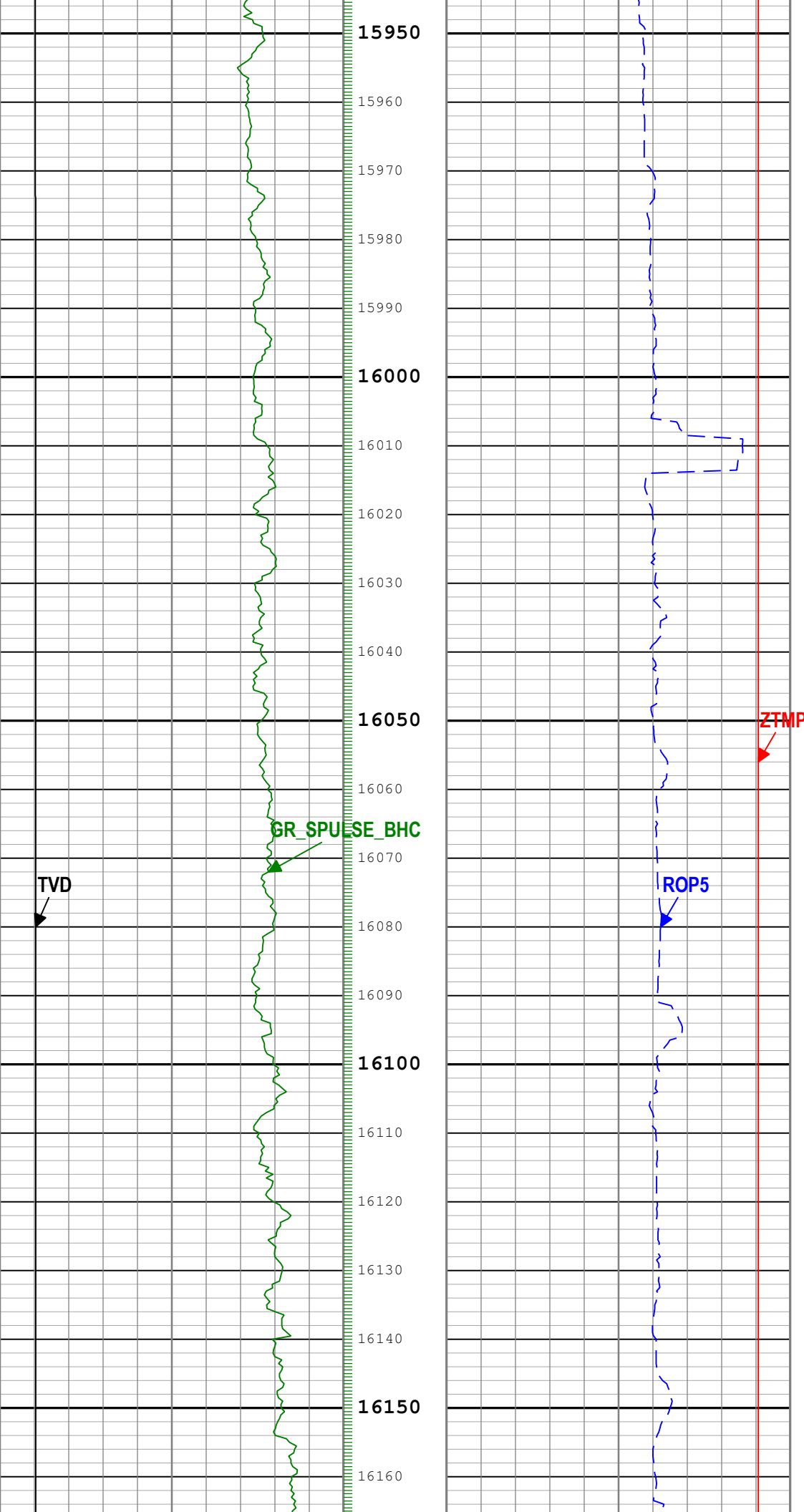


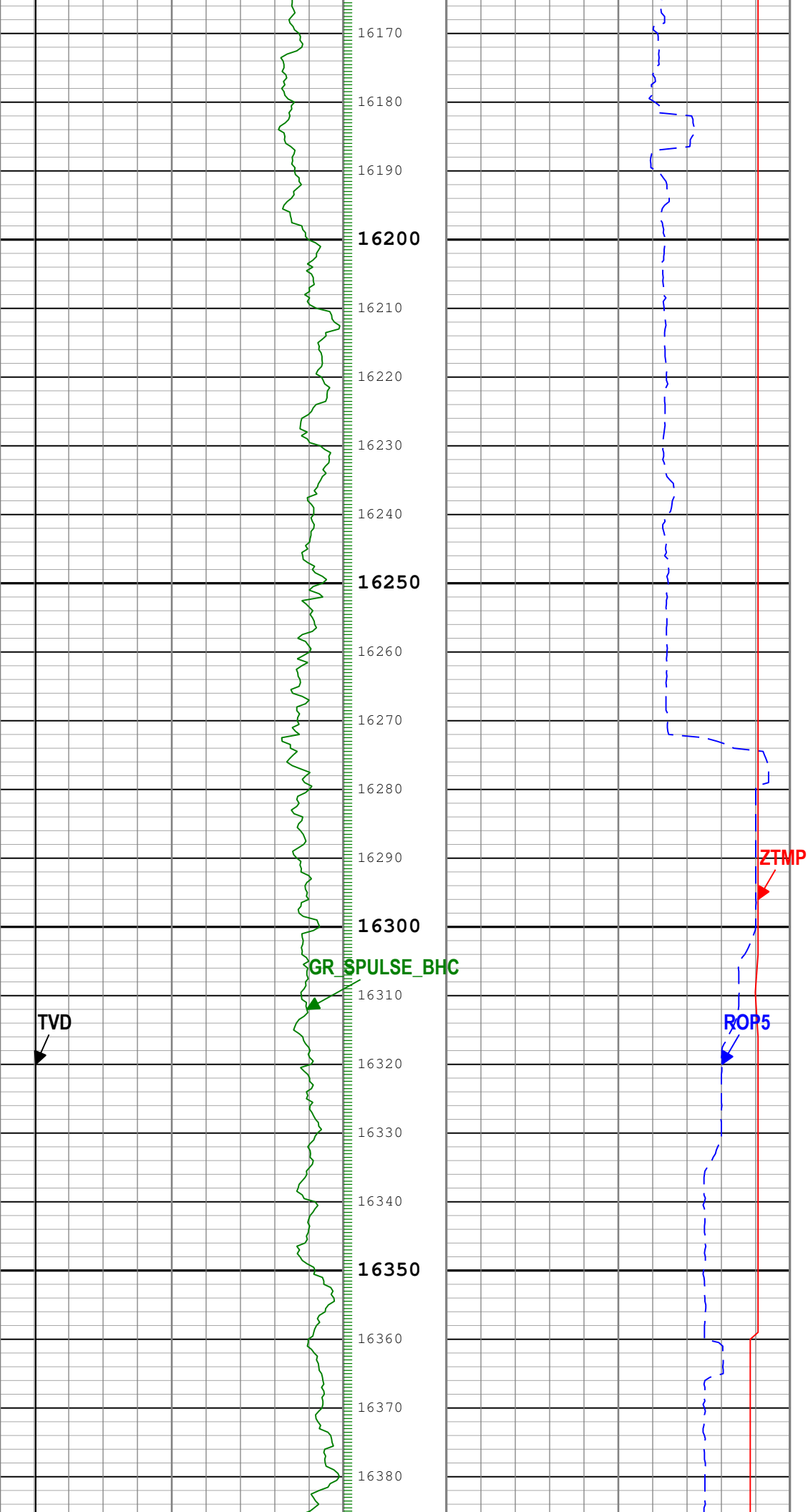


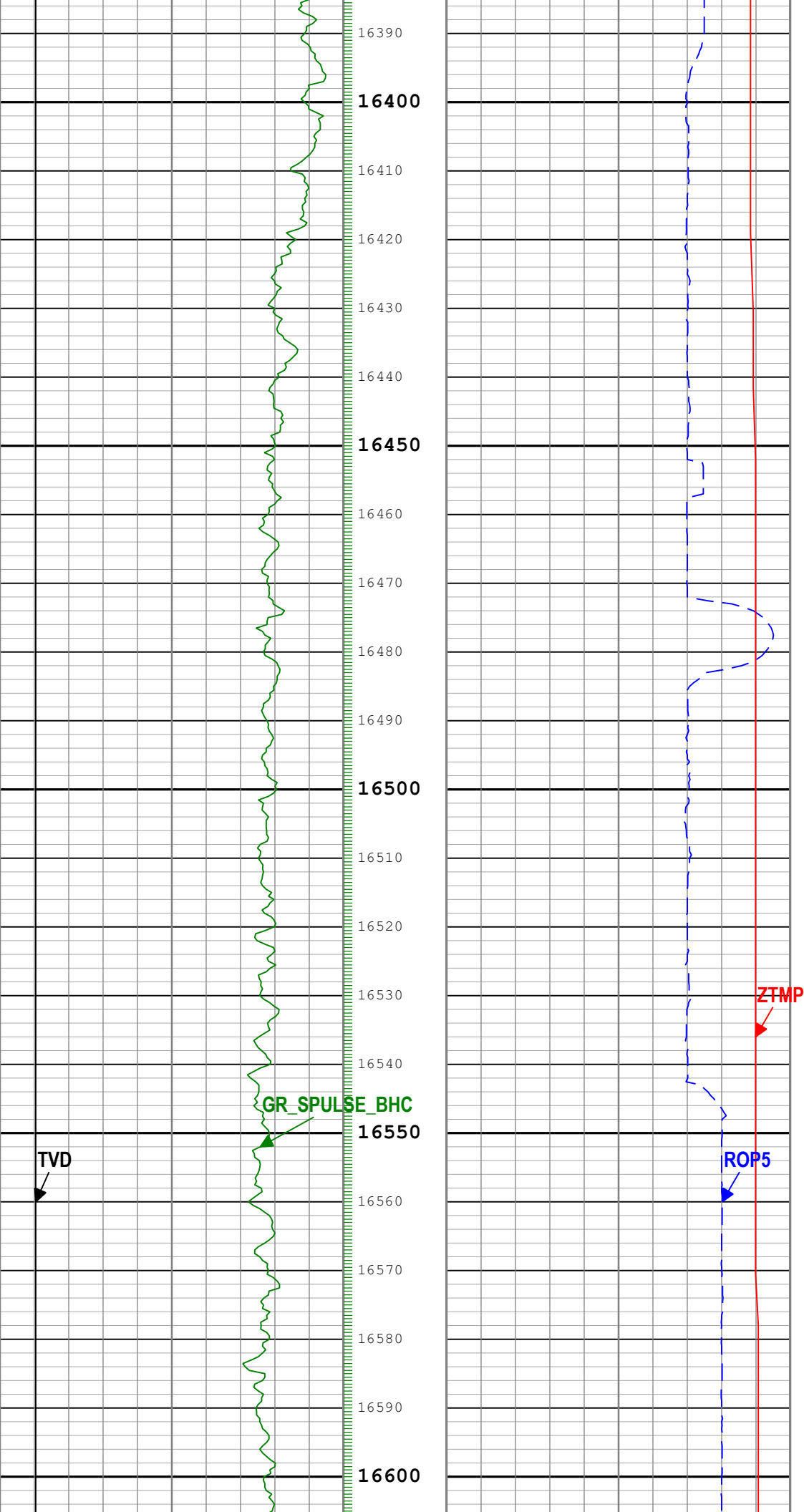


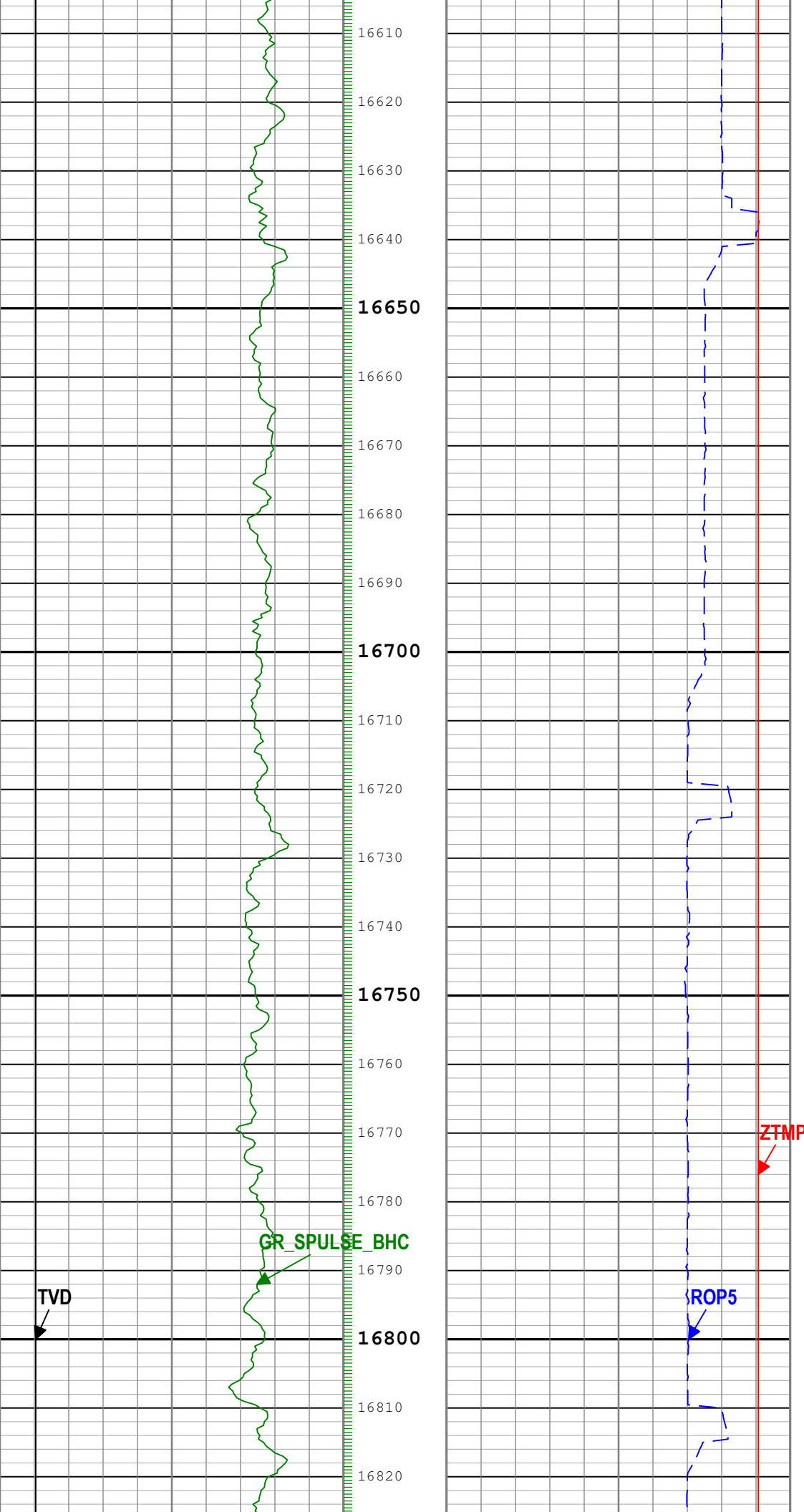


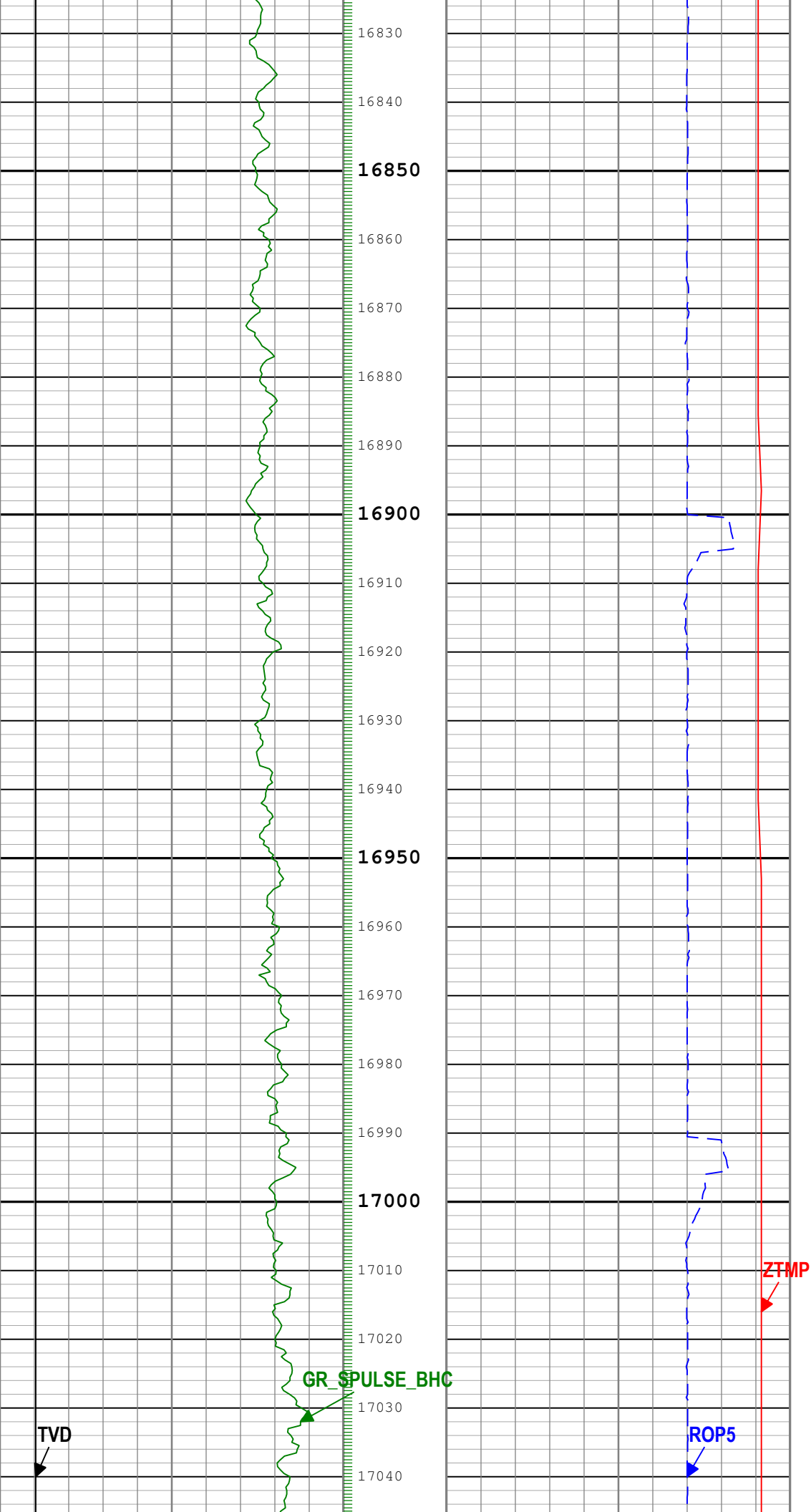


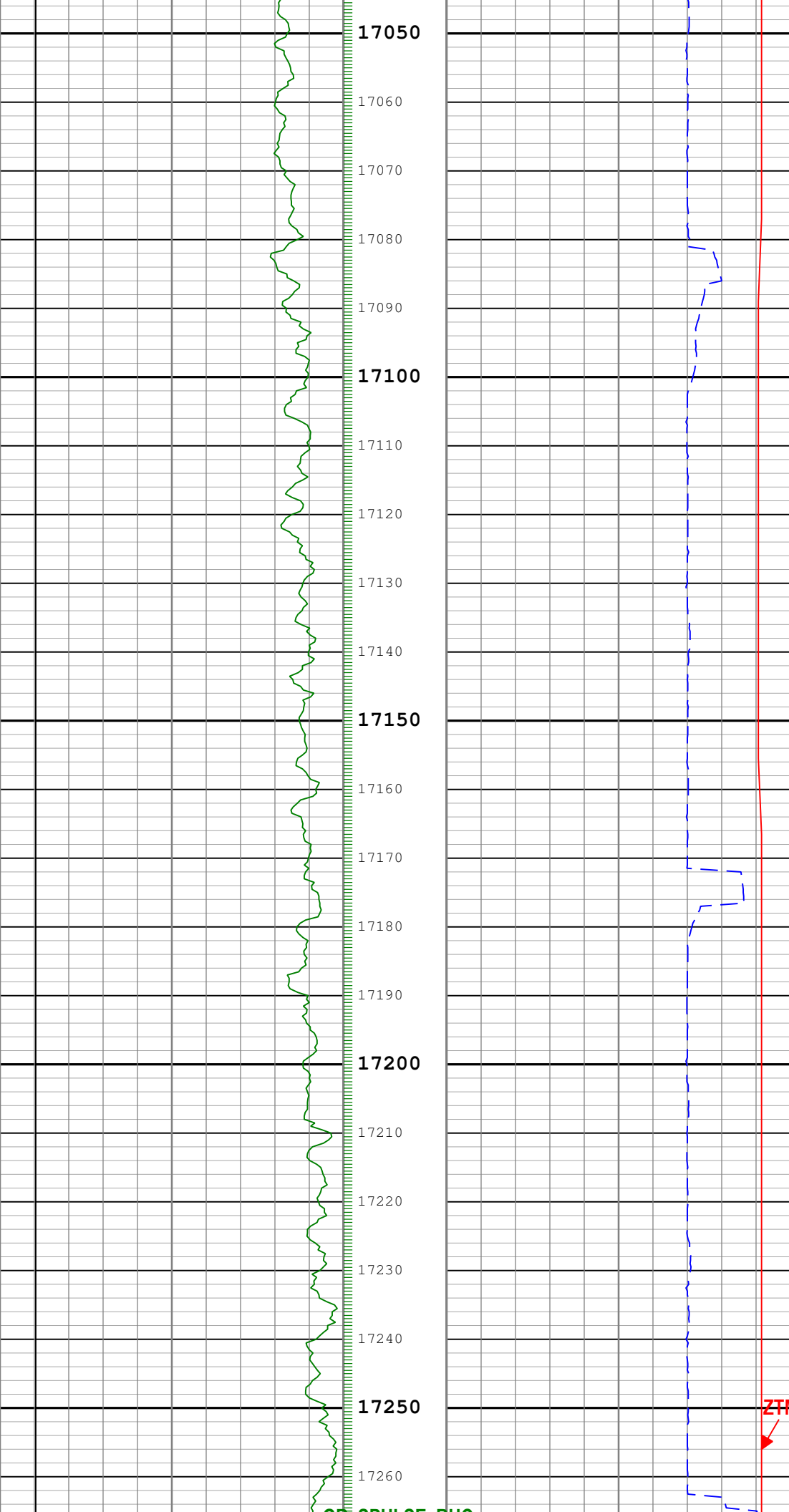










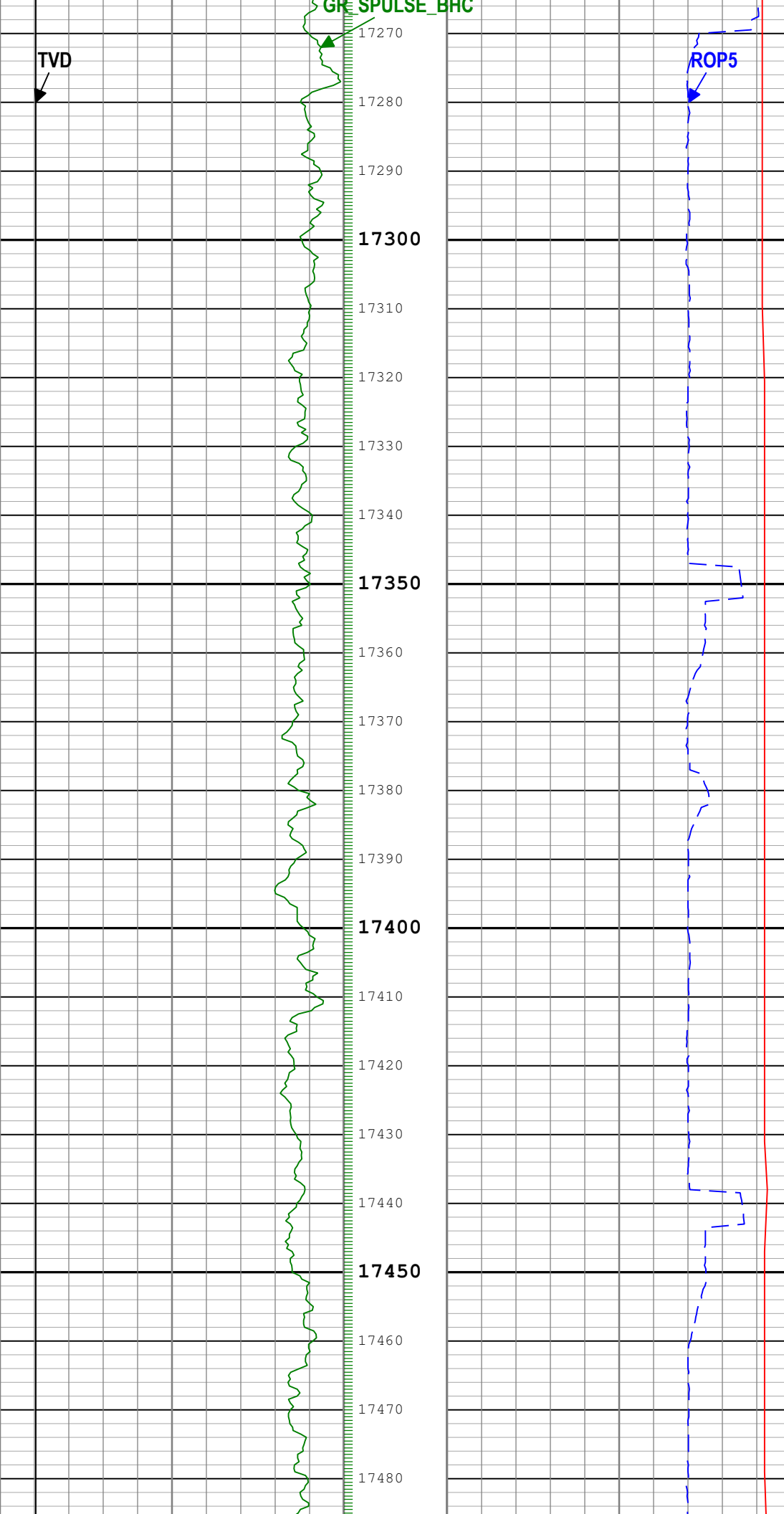


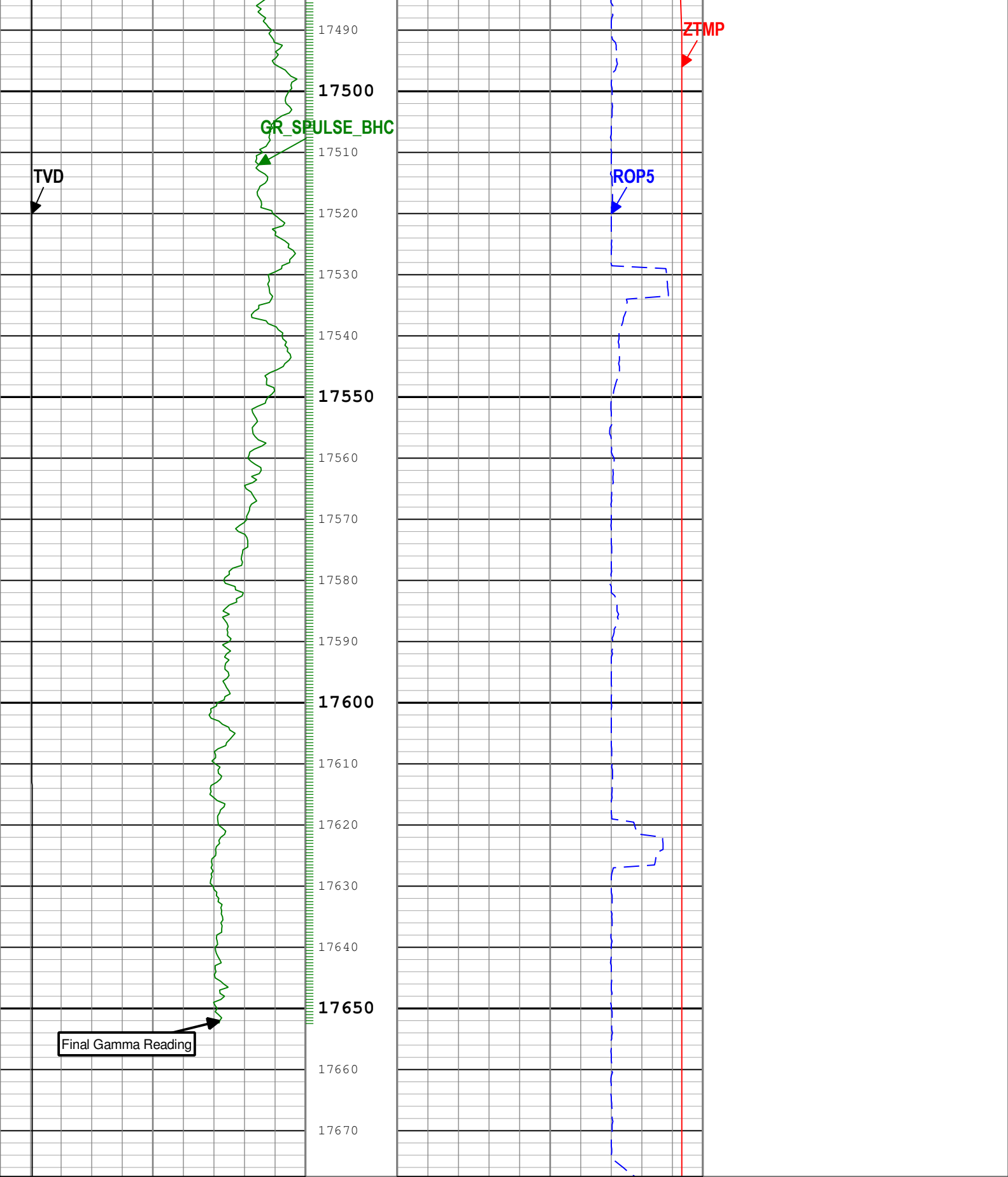
ZTMP

GR SPULSE_BHC

TVD

ROP5





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

GR_SPULSE_BHC - Gamma Ray Extreme[1] RM

Channel Processing Parameters				
Run 1: Parameters				
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				
Parameter	Value	Start (ft)	Stop (ft)	
BS	13.5	1580	1611	
BS	8.5	1611	17677.5	
All depth are actual.				
Tool Control Parameters				
Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
Calibration Report				

Company: Great Western Operating Company LLC

Well: Schneider HD 11-102HNX

Field: Wattenberg

County: Weld

State: Colorado

Country: United States of America



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