

SlimPulse - Gamma Ray

2 in. / 100 ft., Measured Depth

Composite Log, Recorded Mode

Schlumberger

Company: Synergy

Well: Fagerberg 15N-7A-M

Field: WATTENBURG

County: WELD

State: CO

Country: USA

Section: 12 UWID: 05-123-43181

Township: 06N Rig Name: PRECISION DRILLING 462

Range: 66W Rig Type: TOP DRIVE

FL: MAD83 COLORADO STATE PLANE, NORTHERN ZONE, US FEET

FL1: LATITUDE: 40° 29' 56.61" N, NORTHING: 1425567.840 ftUS

FL2: LONGITUDE: 104° 44' 2.85" E, EASTING 3212989.786 ftUS



Acquisition Dates: 19-Jun-2016 -- 24-Jun-2016

Log Interval: 6000.00 ft - 15130.00 ft

Index Types: Measured Depth

Index Scales: 1:600 2" / 100'

Depth Source: Driller's Depth

Depth Sensor: PASON

Print Type: Final

Spud Date:

Other Services:

Directional Drilling

Downhole Shocks

Downhole Temperature

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.

Contents

- 1. Header
- 2. Disclaimer
- 3. Contents
- 4. Well Composite
  - 4.1 Integration Summary
  - 4.2 Software Version
  - 4.3 Composite Summary
  - 4.4 Log ( 5MD EOW )
  - 4.5 Parameter Listing
- 5. Tail

--	--

# Well Composite

--

## Software Version

Acquisition System	Version
Maxwell 2016 SP2	6.2.64464.3100

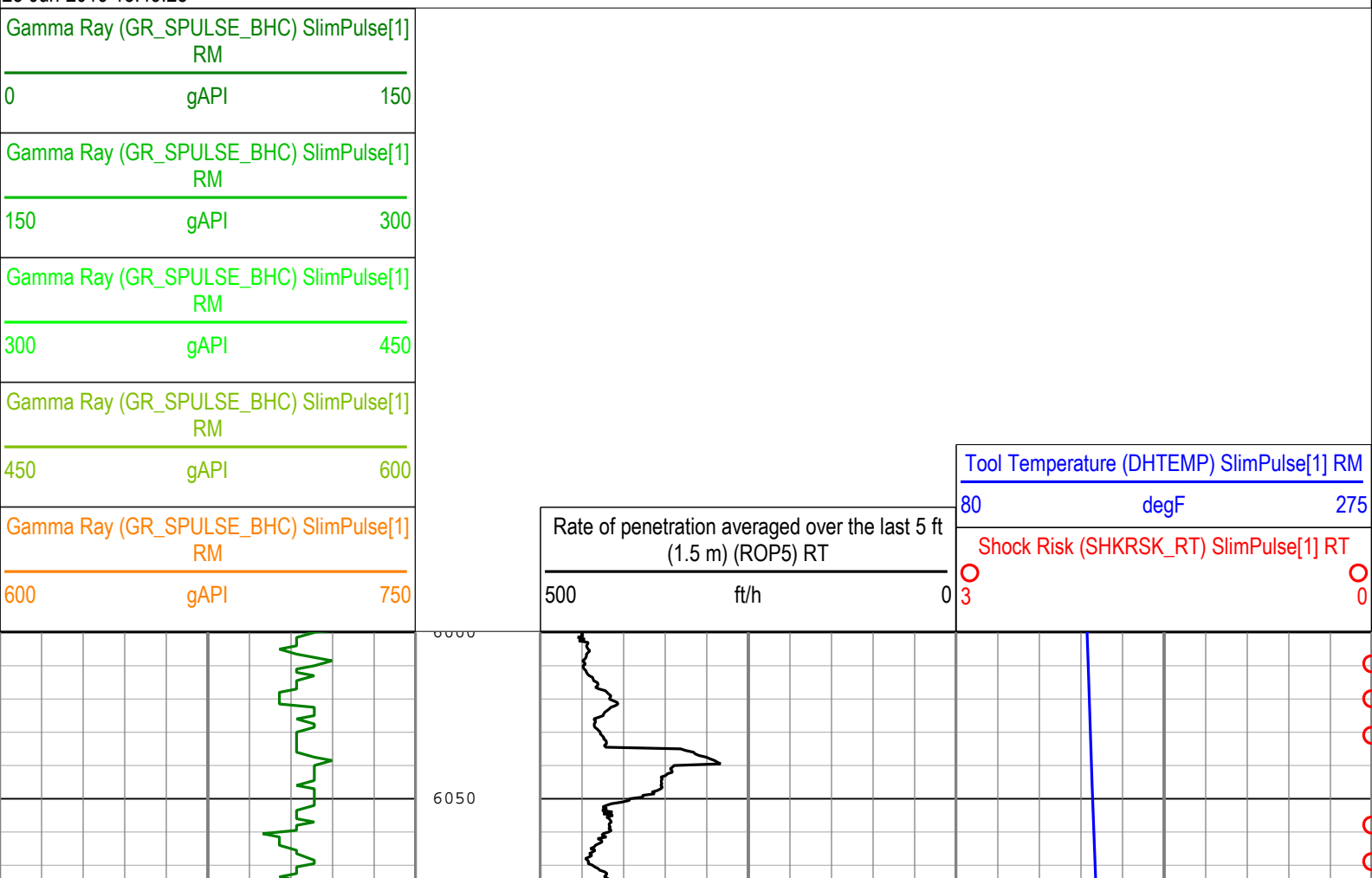
## Composite Summary

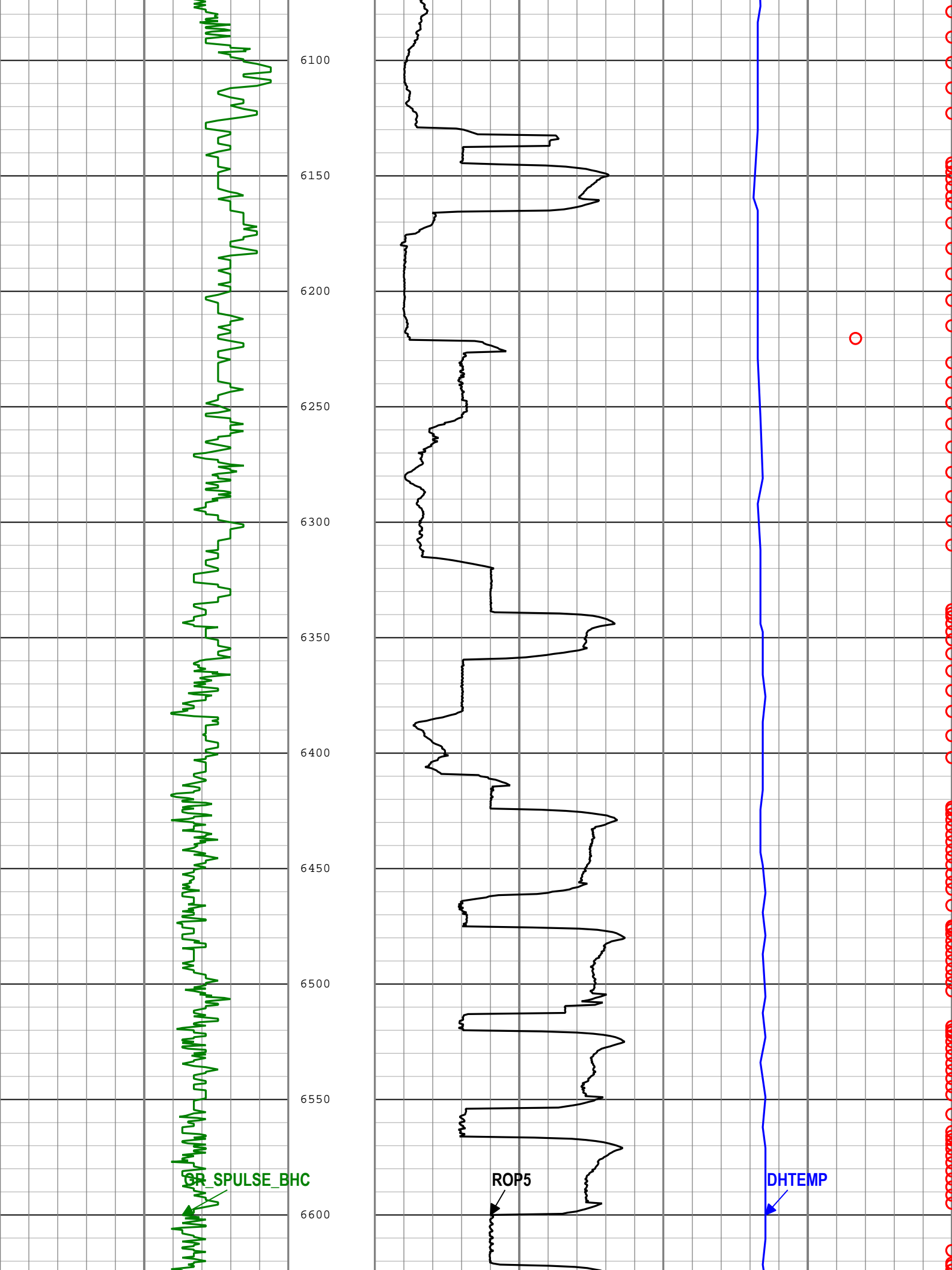
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
RUN02	Drilling	Down	1769.00 ft	5368.25 ft	19-Jun-2016 5:34:29 PM	20-Jun-2016 12:32:00 PM	Yes
RUN03	Drilling	Down	5388.58 ft	7541.08 ft	20-Jun-2016 5:11:01 PM	21-Jun-2016 5:43:23 PM	Yes
RUN004	Ream Down 1	Down	6369.67 ft	7534.00 ft	22-Jun-2016 6:46:00 AM	22-Jun-2016 10:15:00 AM	Yes
RUN004	Drilling	Down	7541.25 ft	15130.00 ft	22-Jun-2016 10:49:53 AM	24-Jun-2016 4:41:51 PM	Yes

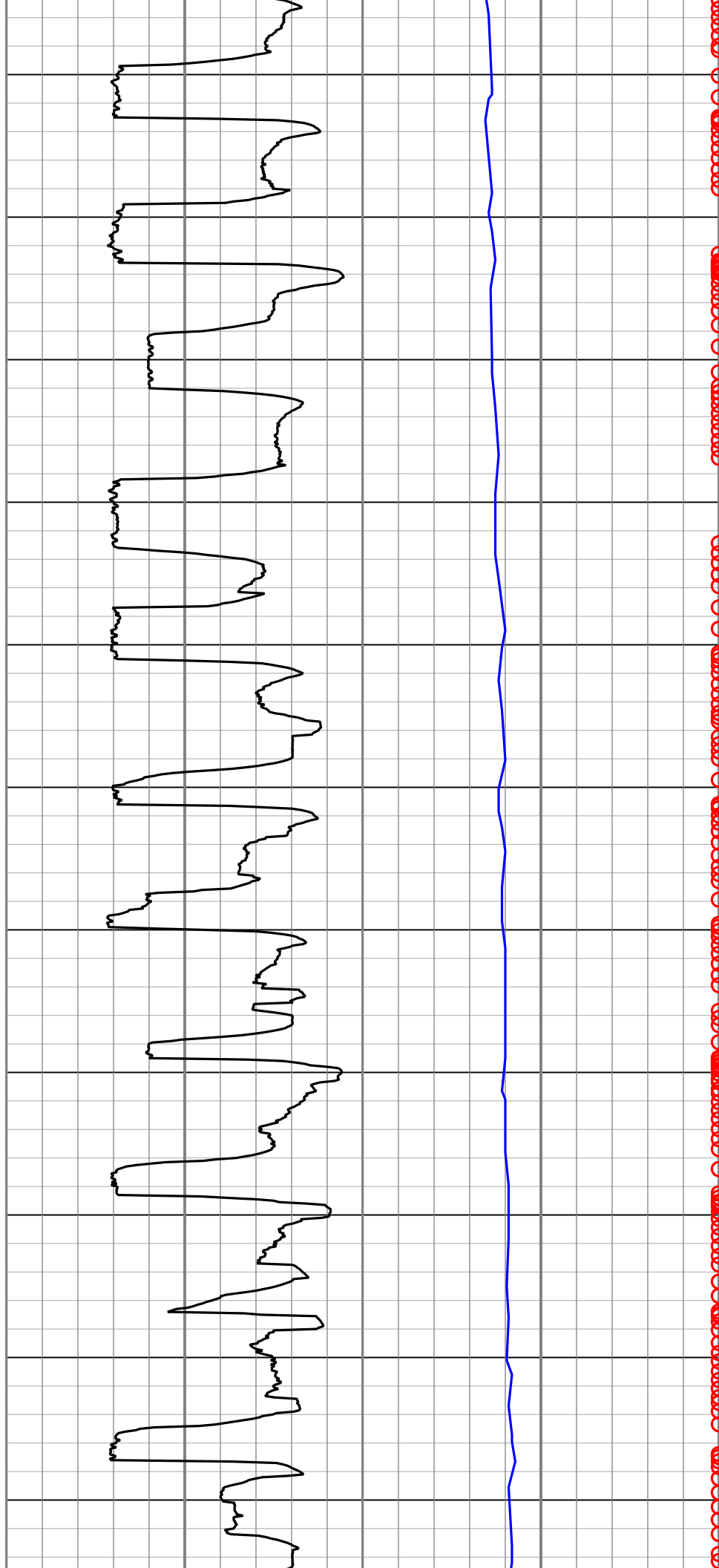
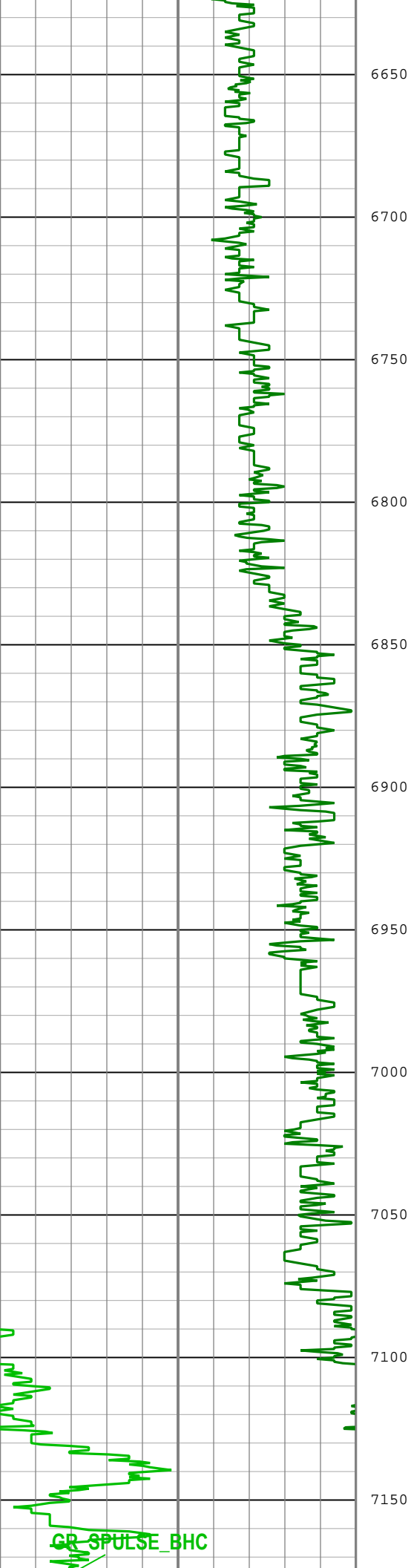
All depths are referenced to toolstring zero

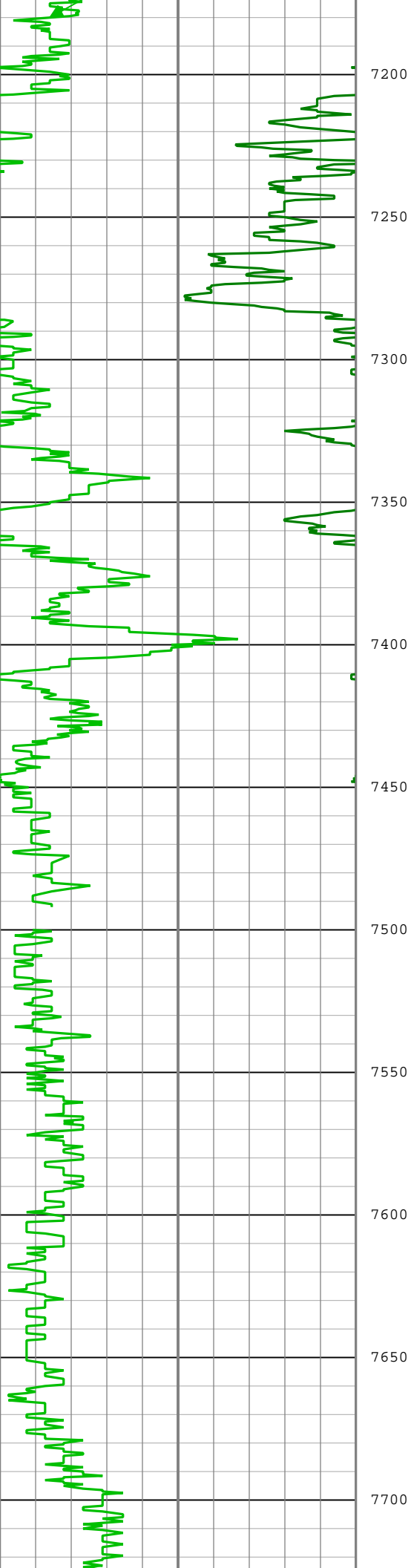
## Log

Description: SlimPulse Gamma Ray 1    Format: Log ( 5MD EOW )    Index Scale: 2 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 25-Jun-2016 13:49:25









7200

7250

7300

7350

7400

7450

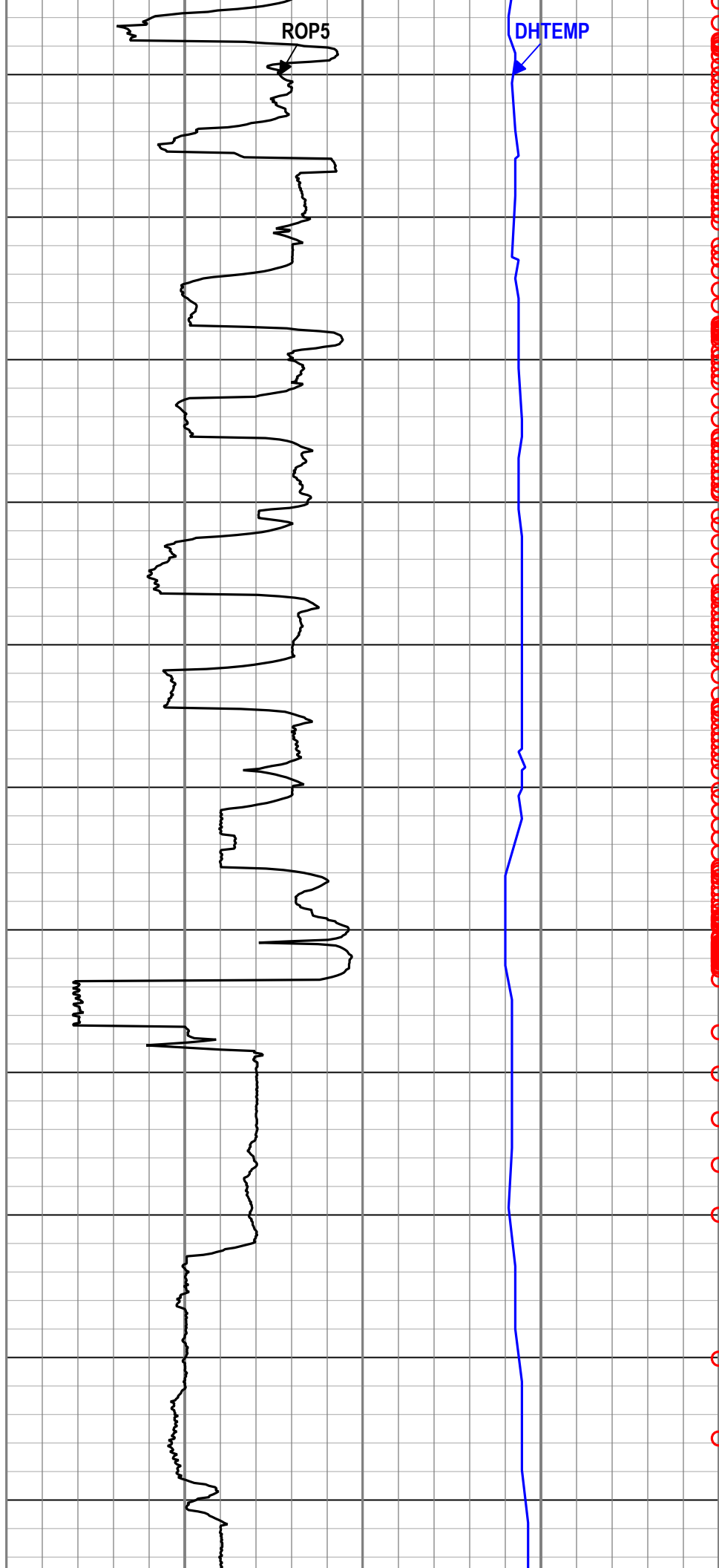
7500

7550

7600

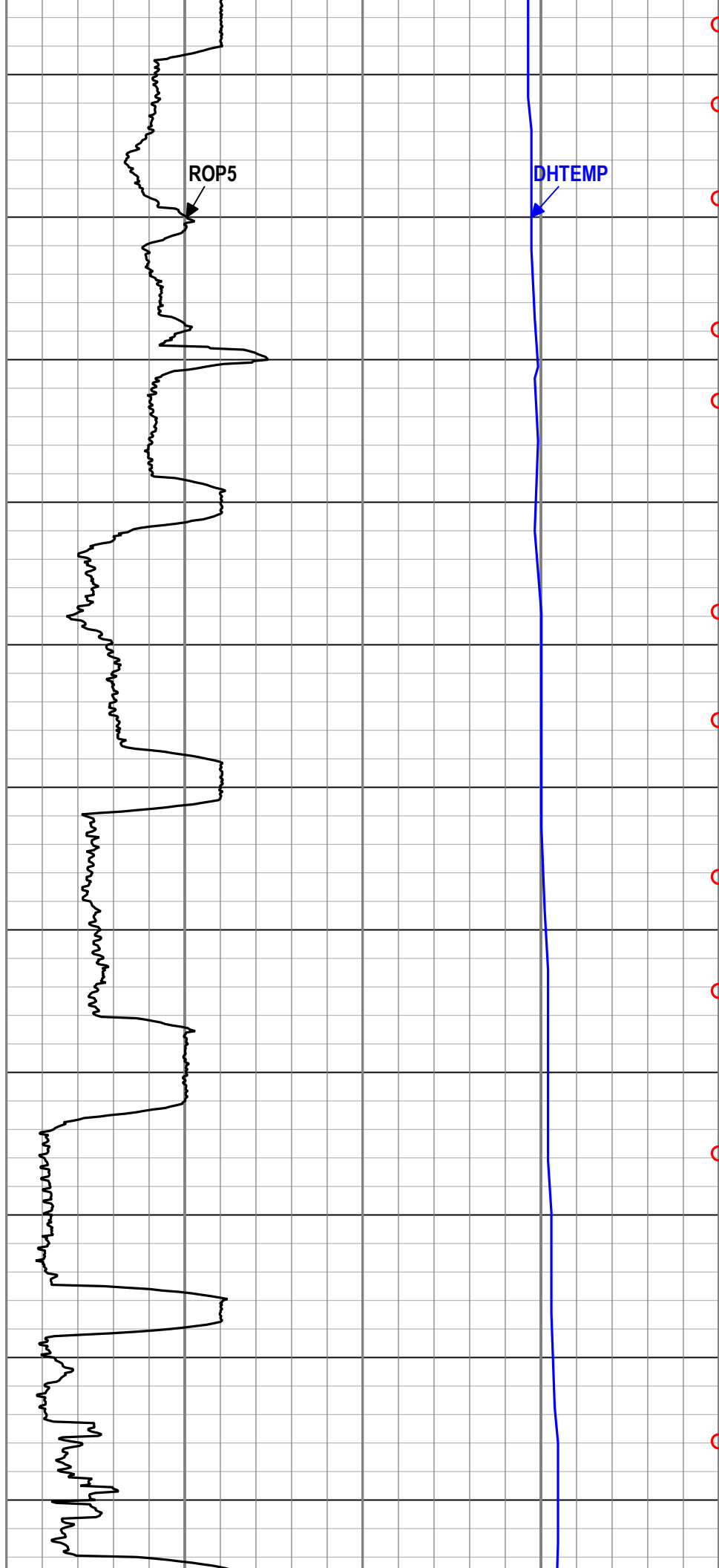
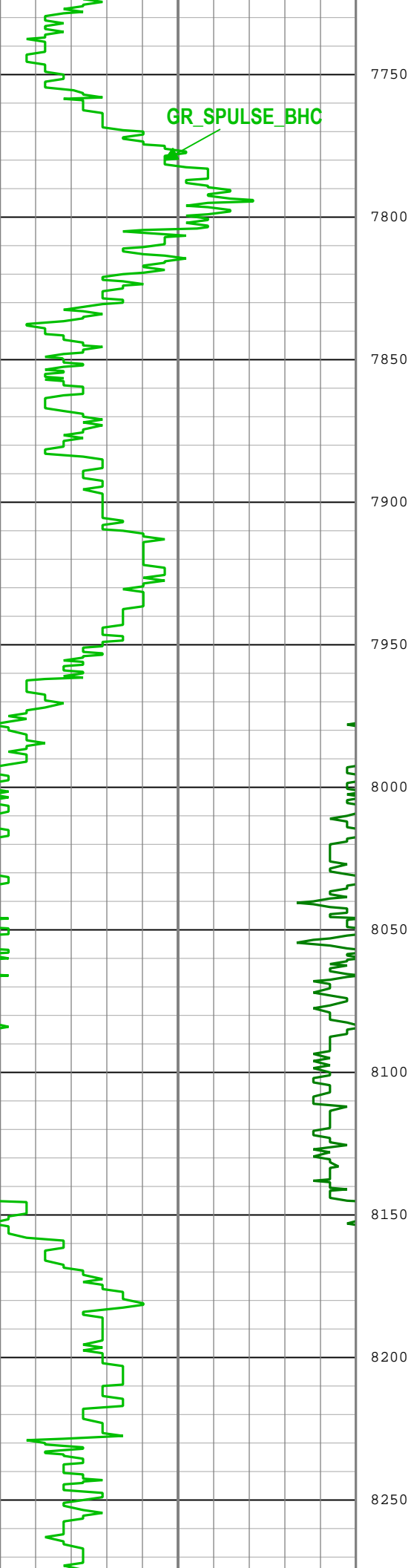
7650

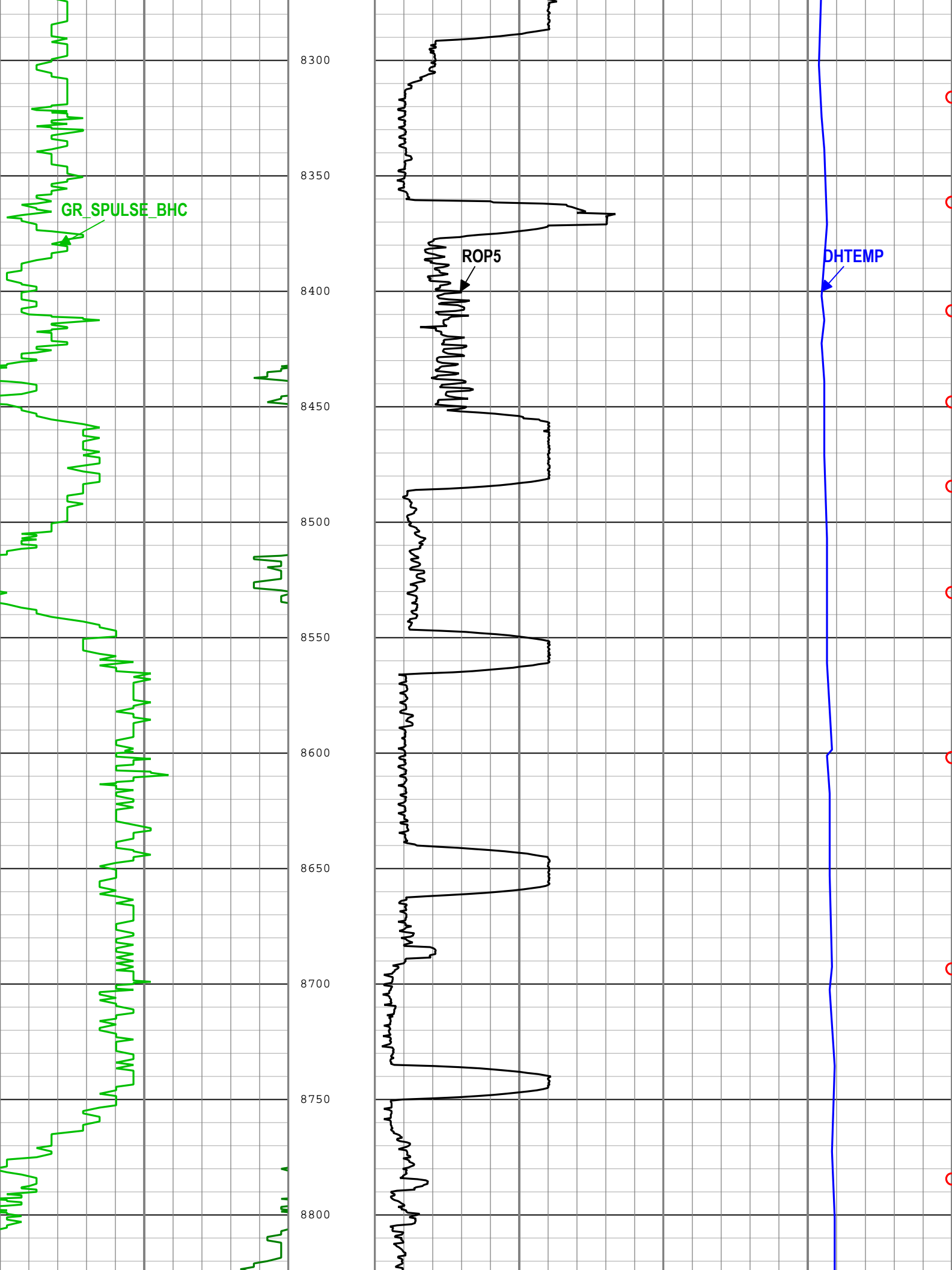
7700

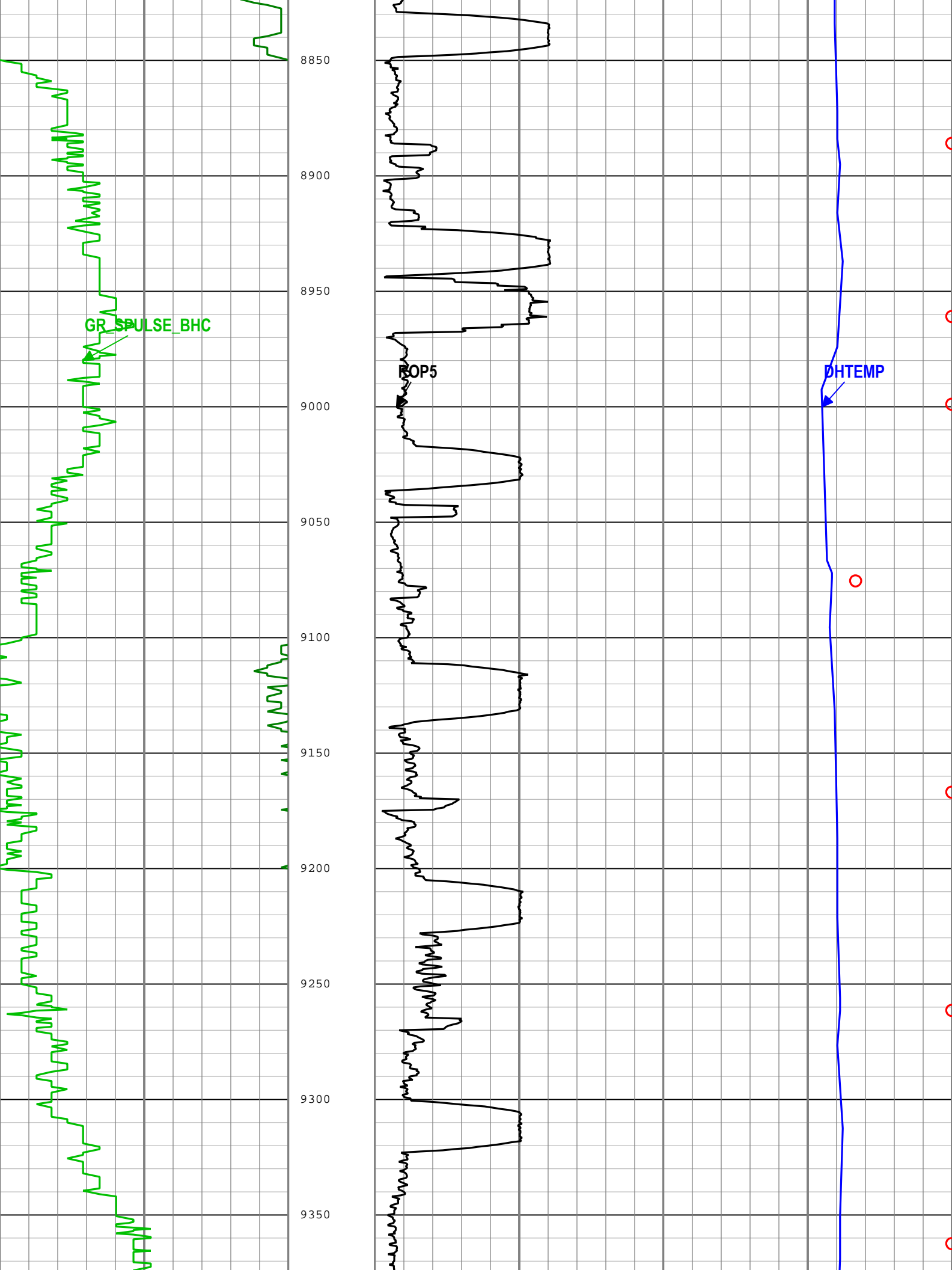


ROP5

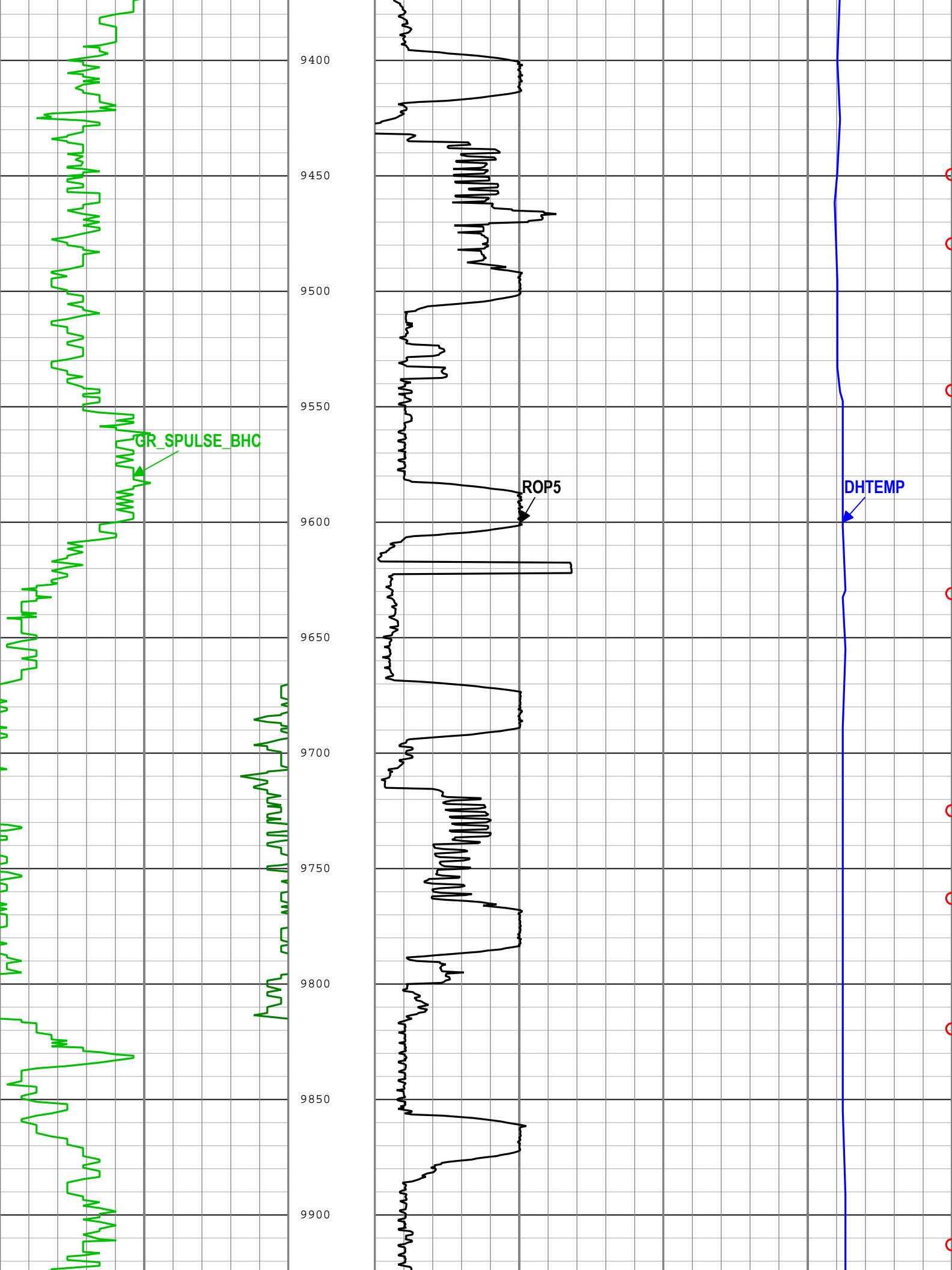
DHTEMP

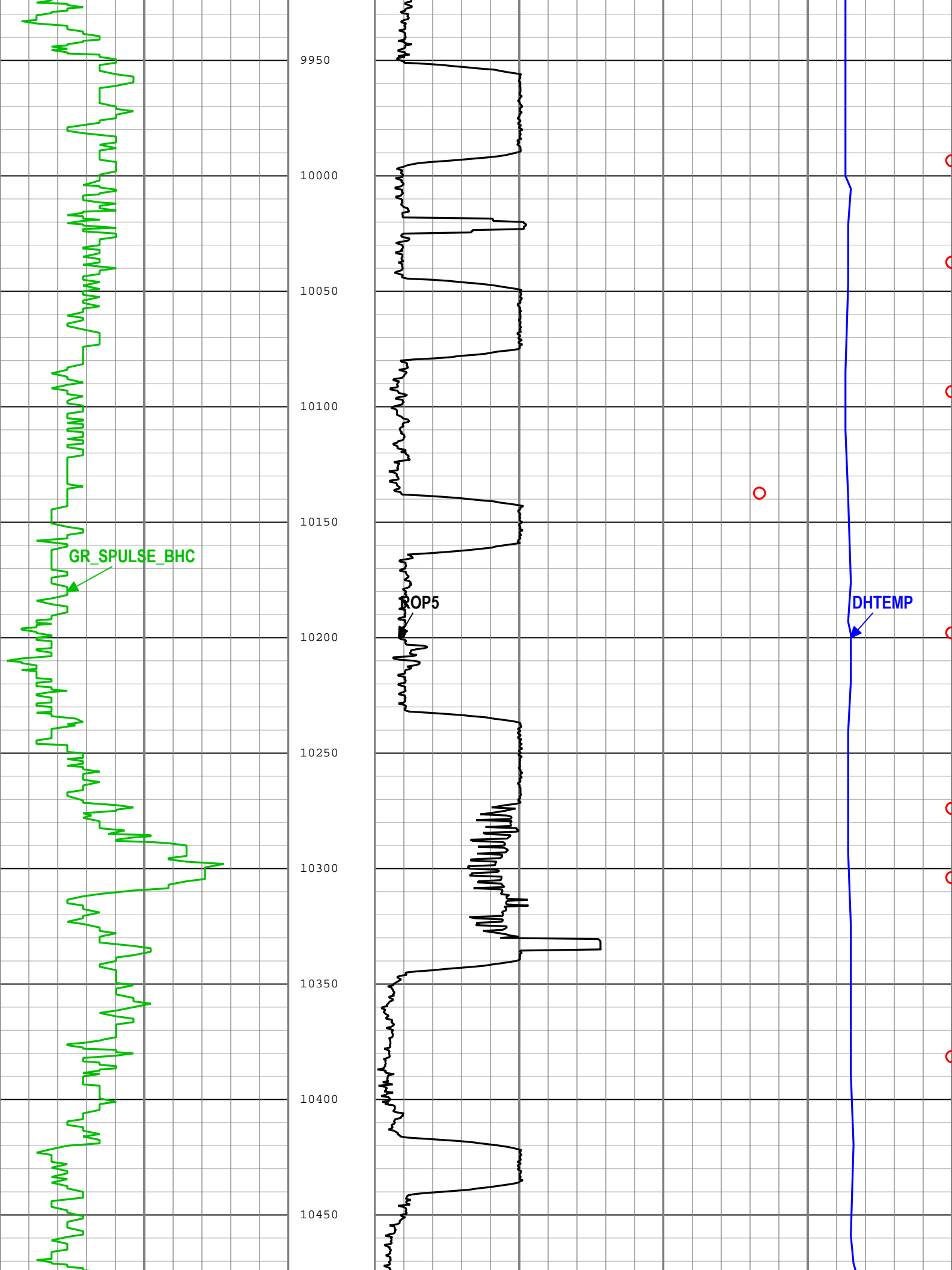


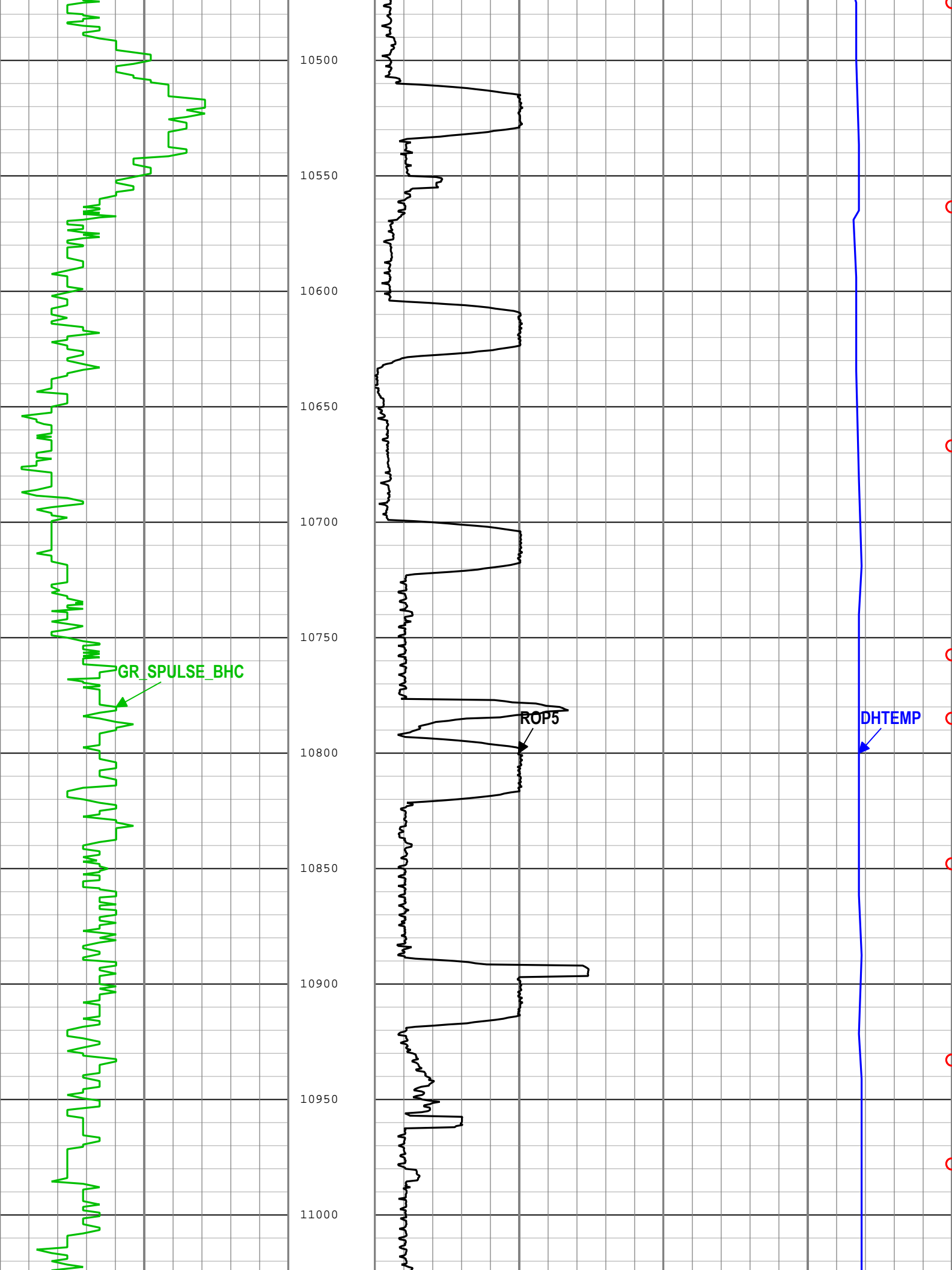


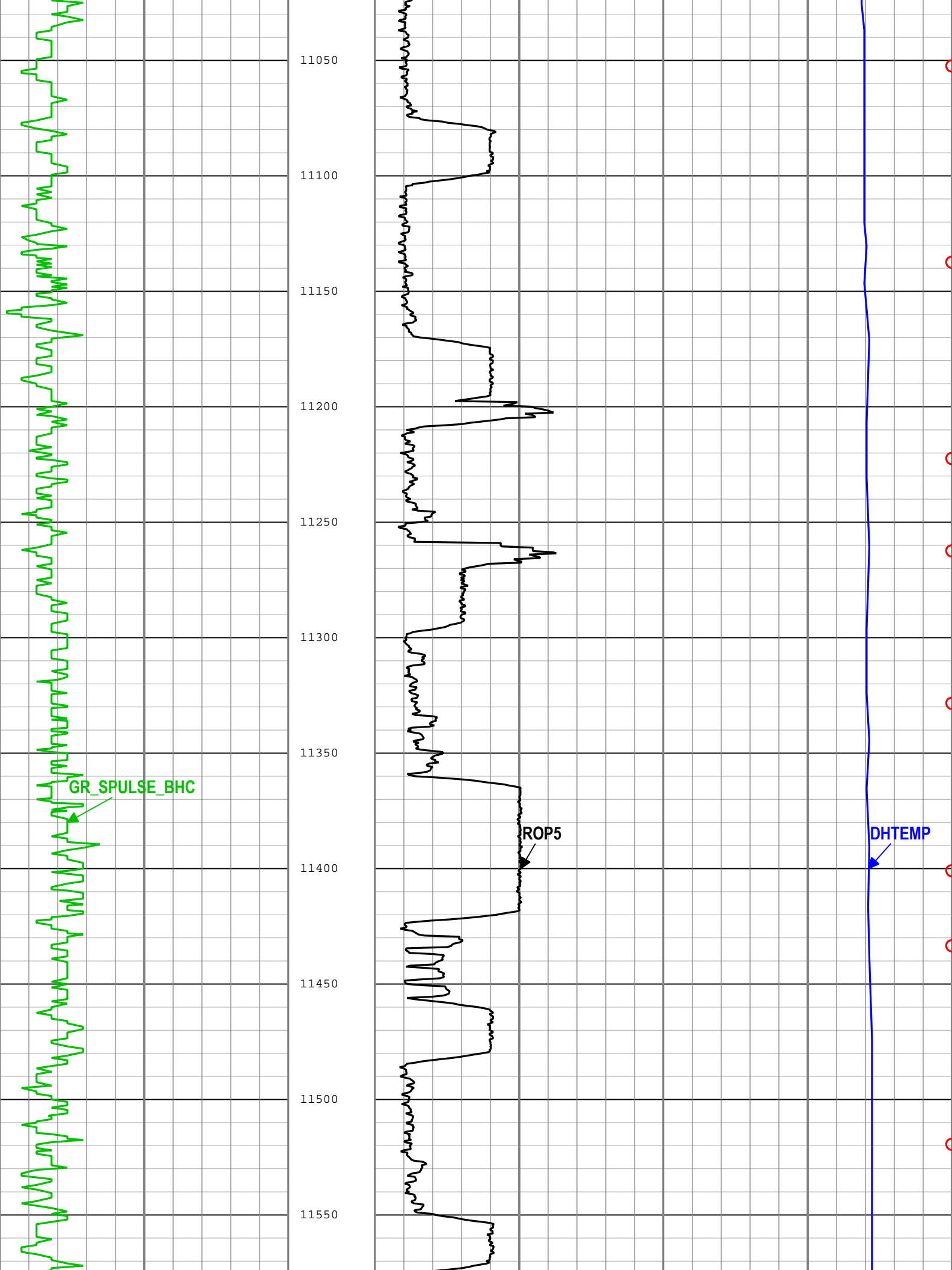


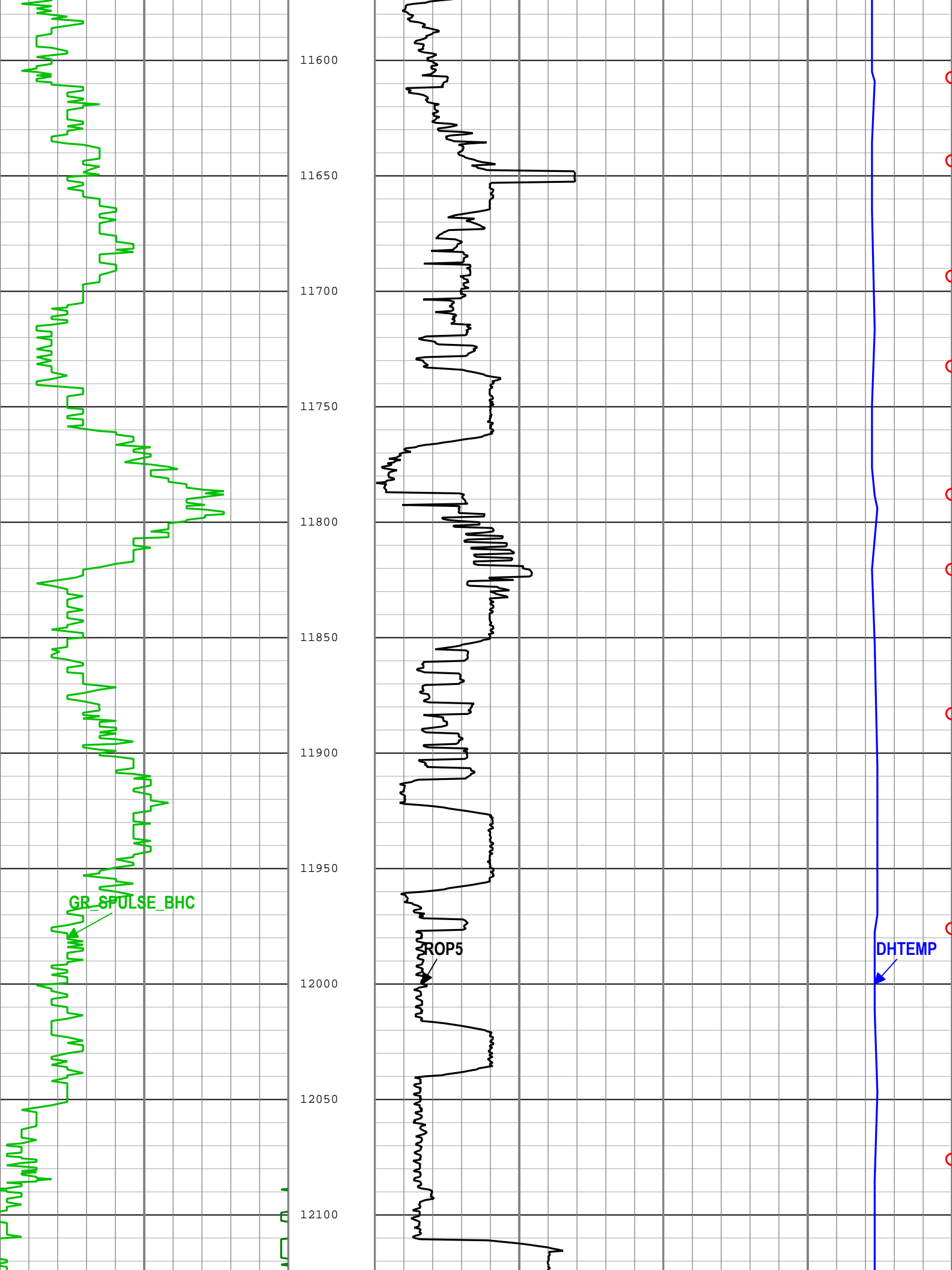


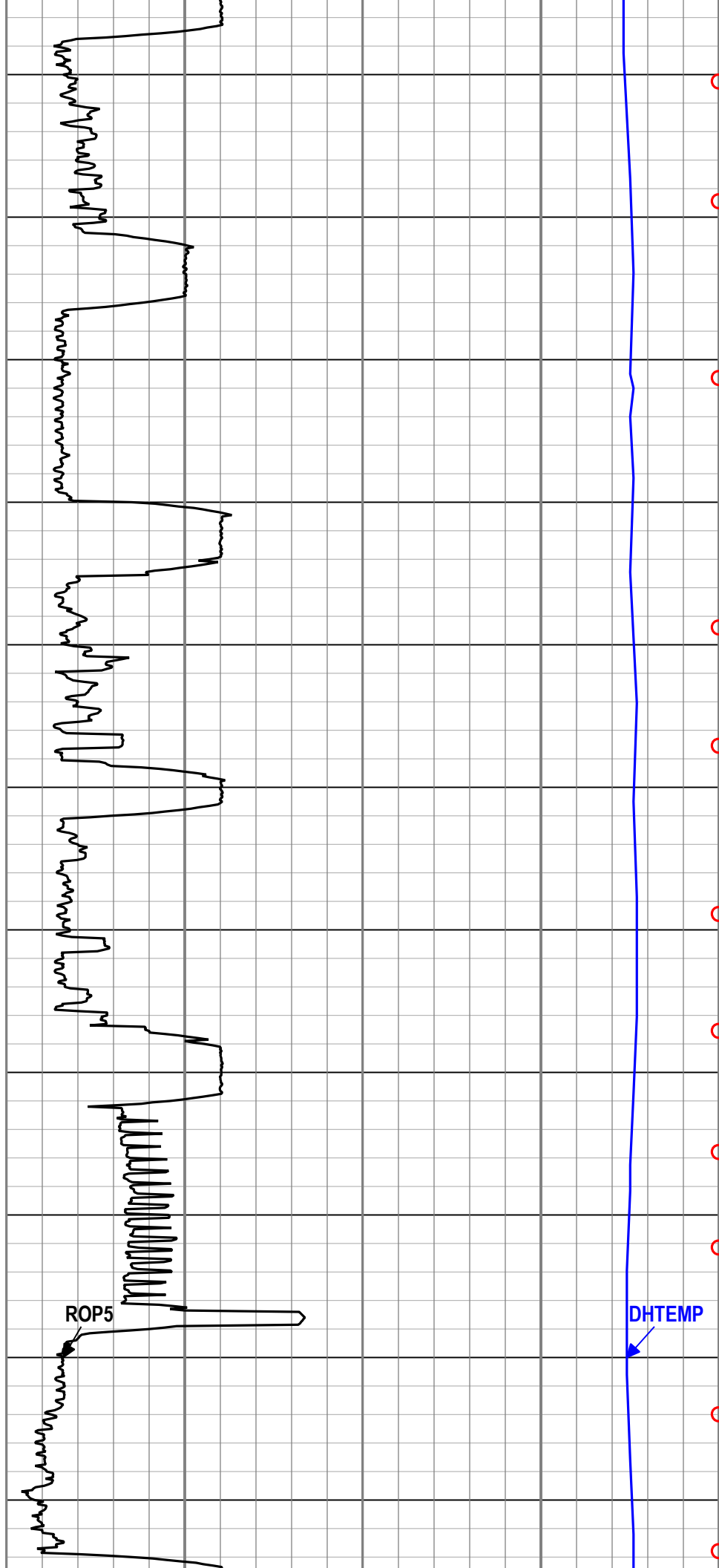
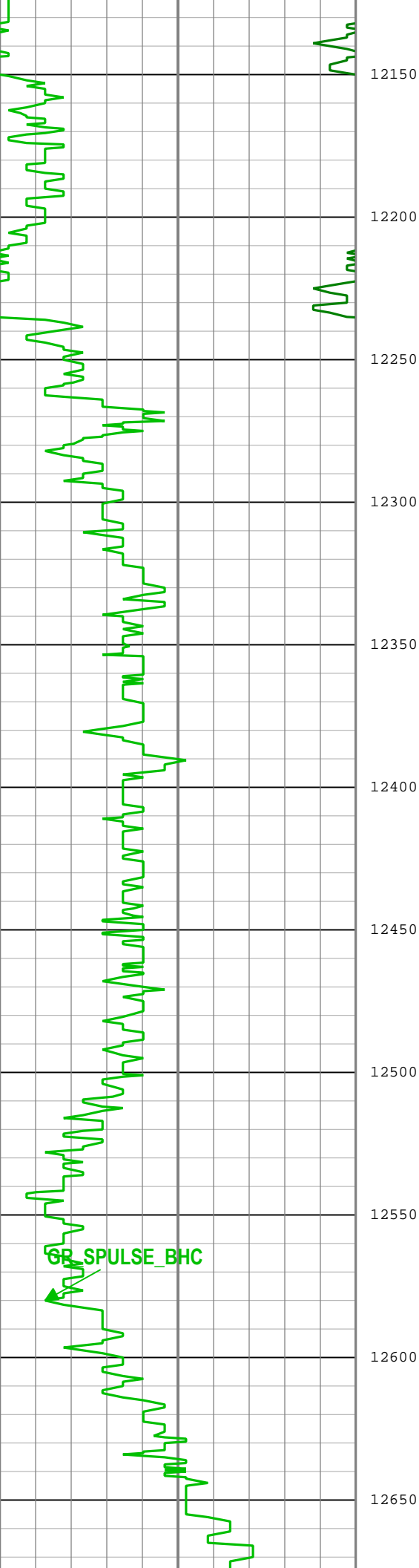




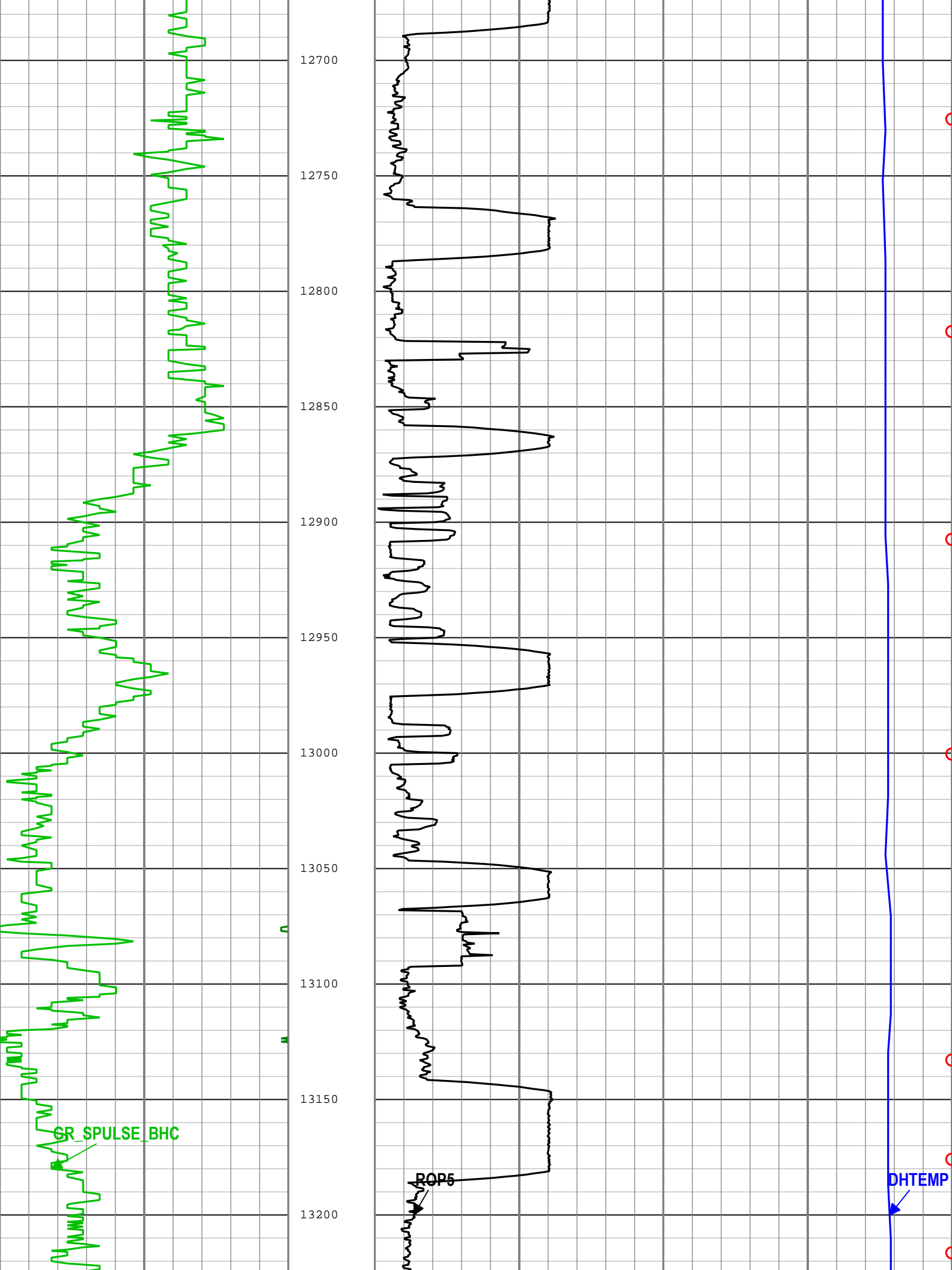


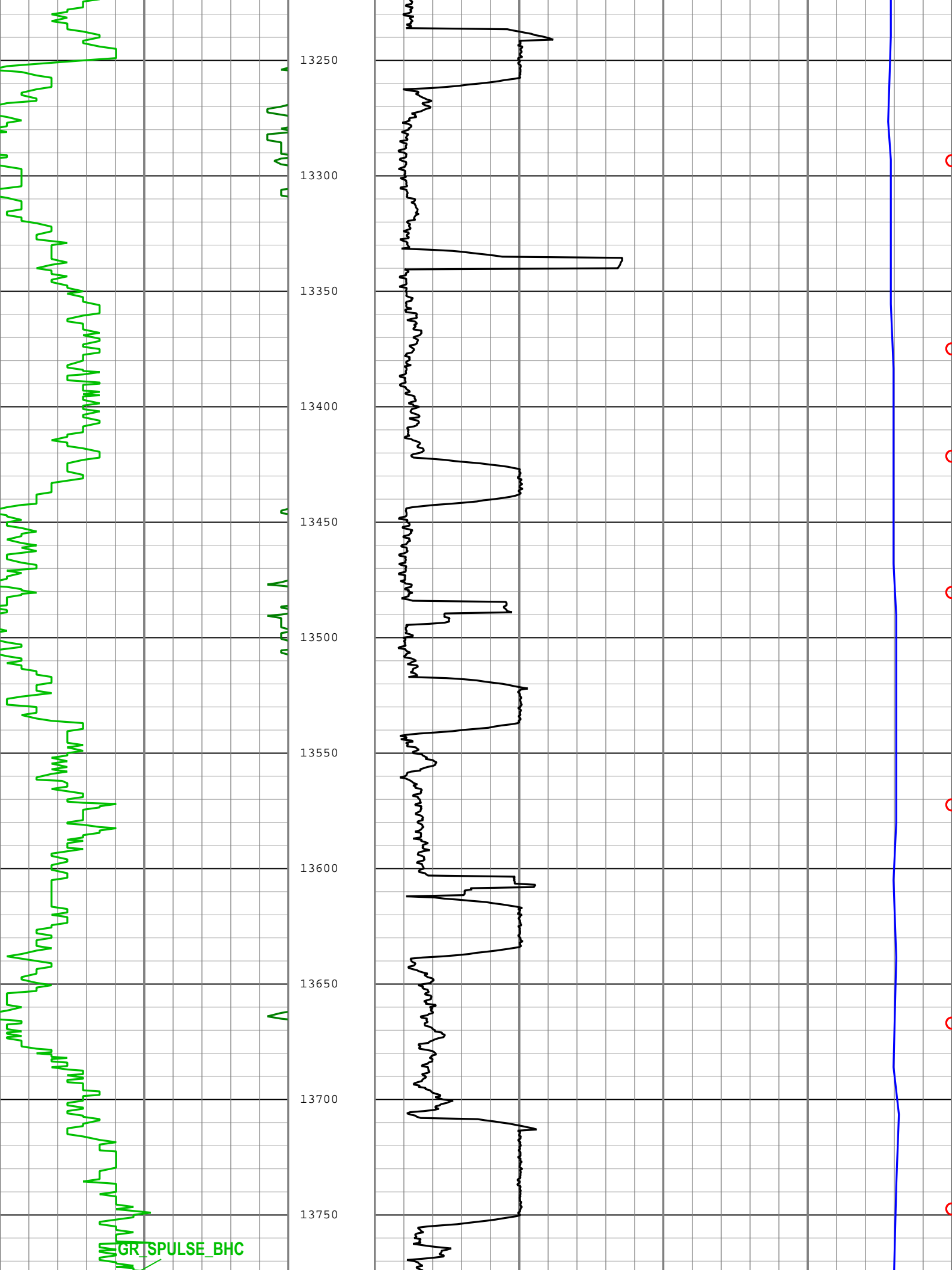




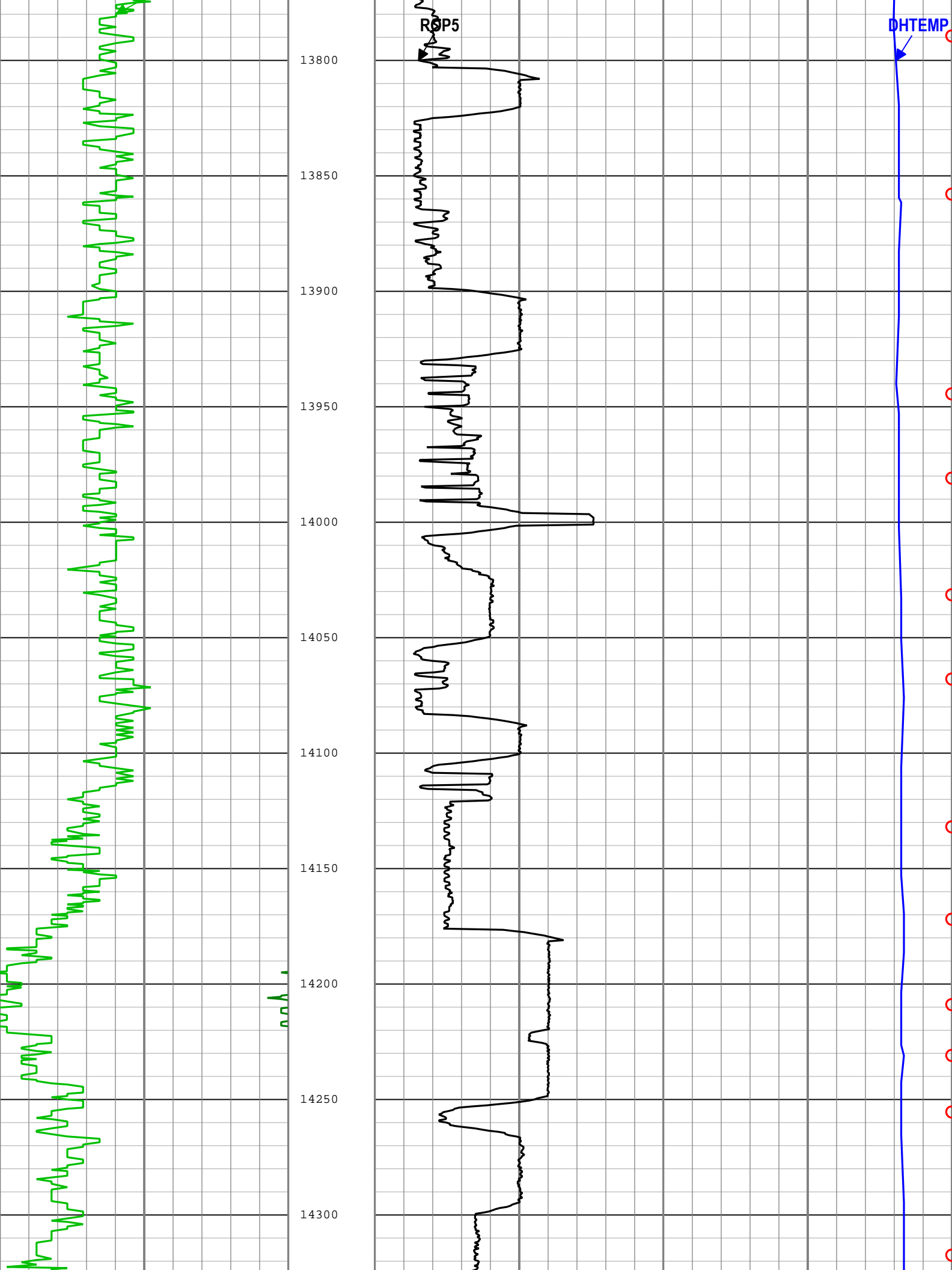


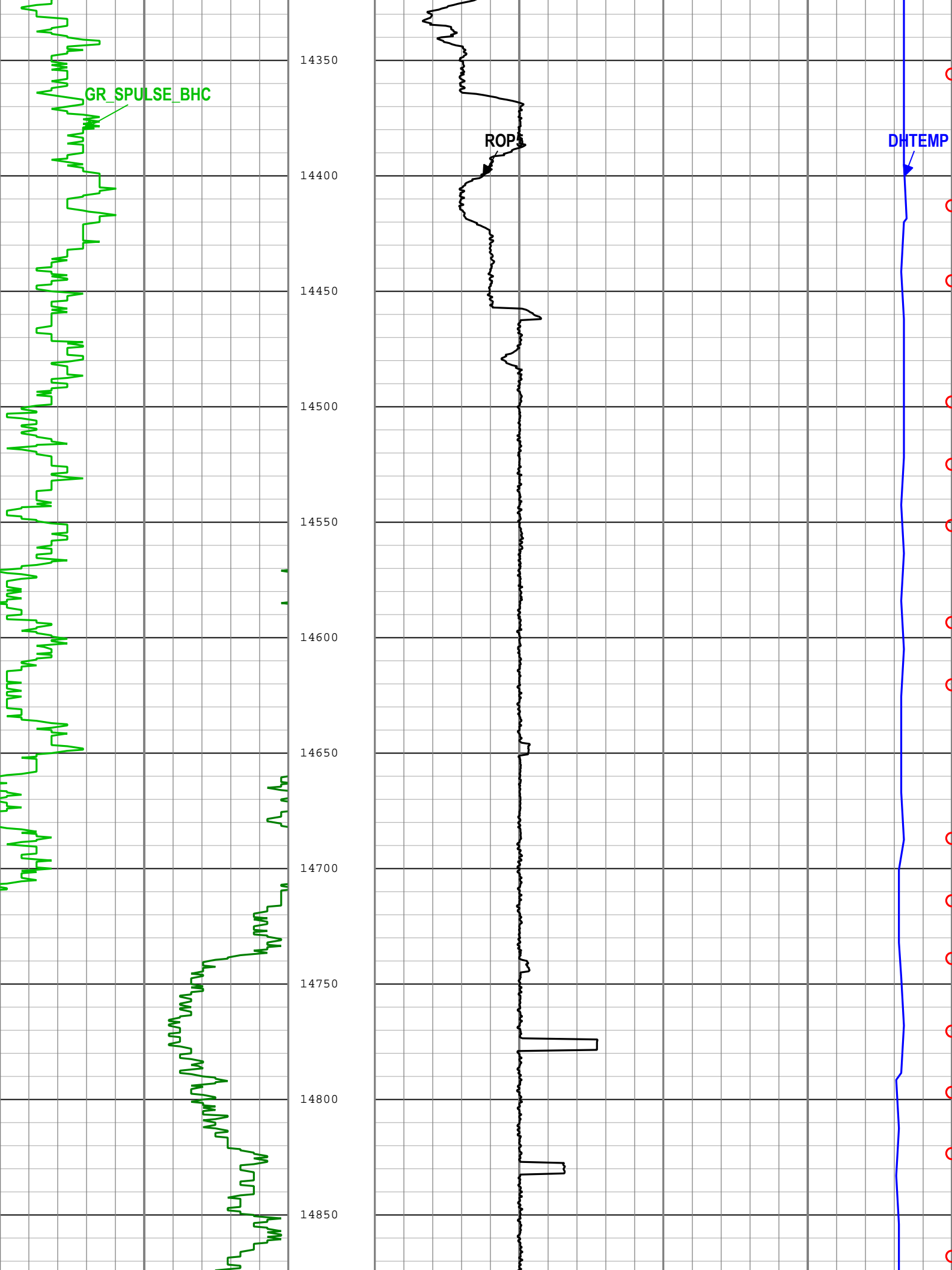
DHTEMP

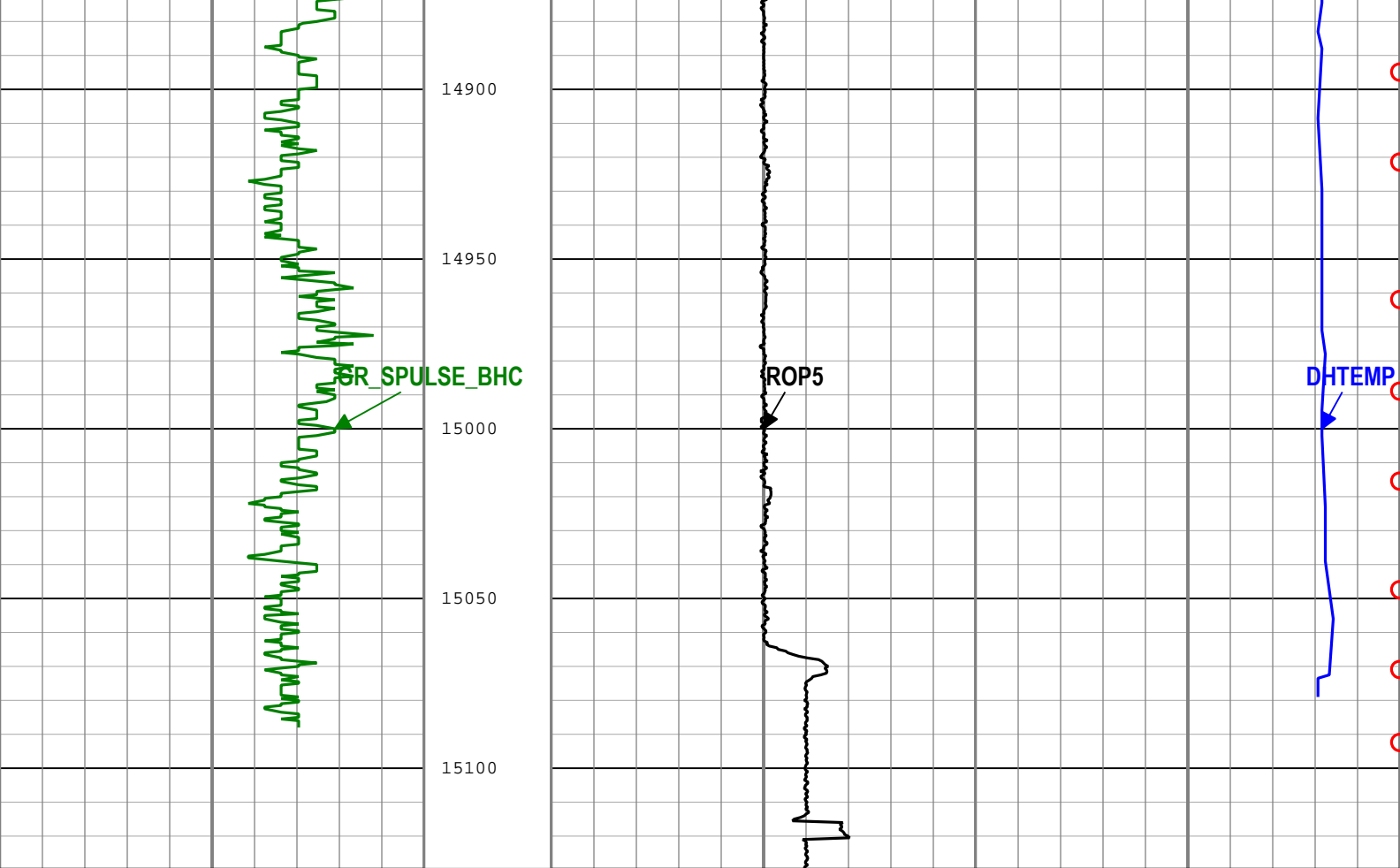












Gamma Ray (GR_SPULSE_BHC) SlimPulse[1] RM		
0	gAPI	150
Gamma Ray (GR_SPULSE_BHC) SlimPulse[1] RM		
150	gAPI	300
Gamma Ray (GR_SPULSE_BHC) SlimPulse[1] RM		
300	gAPI	450
Gamma Ray (GR_SPULSE_BHC) SlimPulse[1] RM		
450	gAPI	600
Gamma Ray (GR_SPULSE_BHC) SlimPulse[1] RM		
600	gAPI	750

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

Tool Temperature (DHTEMP) SlimPulse[1] RM		
80	degF	275
Shock Risk (SHKRSK_RT) SlimPulse[1] RT		
3		0

Description: SlimPulse Gamma Ray 1    Format: Log ( 5MD EOW )    Index Scale: 2 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 25-Jun-2016 13:49:25

Channel Processing Parameters				
RUN02: Parameters				
Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	Depth Zoned	in
DFD	Drilling Fluid Density	Borehole	9.2	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	

### RUN03: Parameters

Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	8.75	in
DFD	Drilling Fluid Density	Borehole	9.7	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	
RUN004: Parameters				
Parameter	Description	Tool	Value	Unit
BS	Bit Size	DNMSESSION	Depth Zoned	in
DFD	Drilling Fluid Density	Borehole	9.9	lbm/gal
GR_SRC	GR Source Selection	SPULSE-GEN	GAMMA_EXT	
RUN004Depth Zoned Parameters				
Parameter	Value	Start ( ft )	Stop ( ft )	
BS	8.75	6246.21	7541	
BS	8.5	7541	15129.5	
All depth are actual.				
Tool Control Parameters				

**Company:** Synergy

**Well:** Fagerberg 15N-7A-M

**Field:** WATTENBURG

**County:** WELD

**State:** CO

**Country:** USA



**Schlumberger**

SlimPulse - Gamma Ray  
2 in. / 100 ft., Measured Depth  
Composite Log, Recorded Mode