

MWD - Gamma Ray

Schlumberger

Recorded Mode

Country: The Netherlands

Company: Trias Westland B.V.

Well: NLW-GT-02-S1

Field: Naaldwijk

Rig Name: KCA Deutag T-207

Country: The Netherlands

Latitude: 51° 59' 26.962" N

UWID:

17HOL0035

Longitude: 4° 14' 22.357" E

Rig Name:

KCA Deutag T-207

Rig Type:

Land Rig

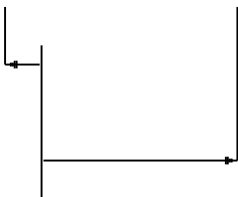
FL: NLW-GT-02-S1

FL1: Section: 12 1/4 in.

FL2: Job no.: 17HOL0035

Log Measured From: - Drill Floor: 8.42 m

Reference Datum - Mean Sea Level/Permanent Datum: - NAP
Ground Level: 0.90 m



Acquisition Dates: 24-Apr-2018 -- 28-Apr-2018

Other Services:

Log Interval: 2334.00(m) -- 2681.00(m)

Direction & Inclination (Surveys)

Index Types: Measured Depth

Directional Drilling

Index Scales: 1:200, 1:1000

Depth Source: Driller's Depth

Depth Sensor: 3rd Party Depth

Print Type: Final

Spud Date: 08-Mar-2018

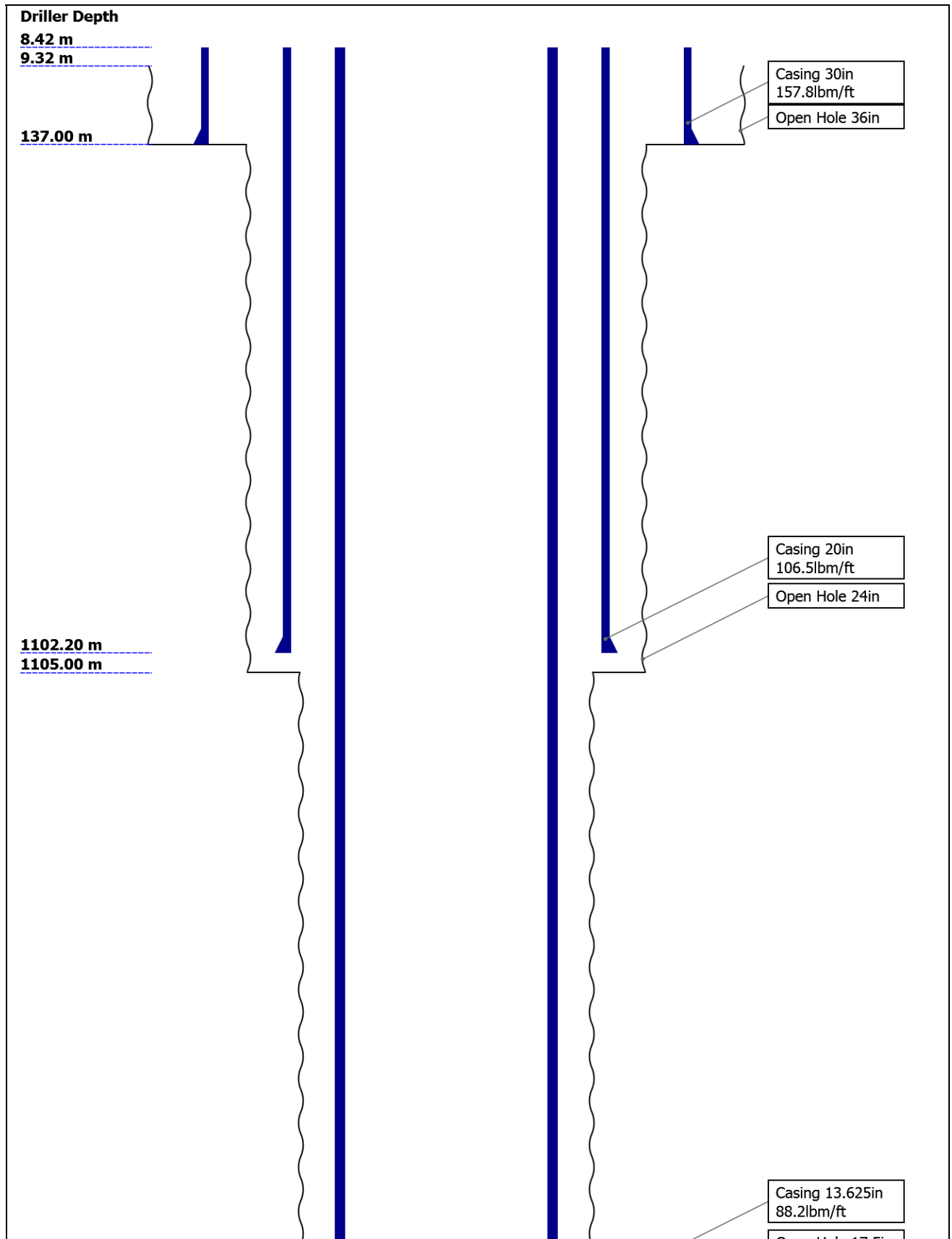
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Well Sketch



2376.50 m

2385.00 m

2680.00 m

Open Hole 12.25in

Open Hole 17.5in

Borehole Size/Casing Record

Bit						
Bit Size (in)	36	24	17.5	12.25		
Top Driller (m)	9.32	137	1105	2385		
Bottom Driller (m)	137	1105	2385	2680		
Casing						
Size (in)	30	20	13.625			
Weight (lbm/ft)	157.8	106.5	88.2			
Inner Diameter (in)	29.021	19	12.375			
Grade	X52	K55	L80			
Top Driller (m)	8.42	8.42	8.42			
Bottom Driller (m)	137	1102.2	2376.5			


Operational Run Summary

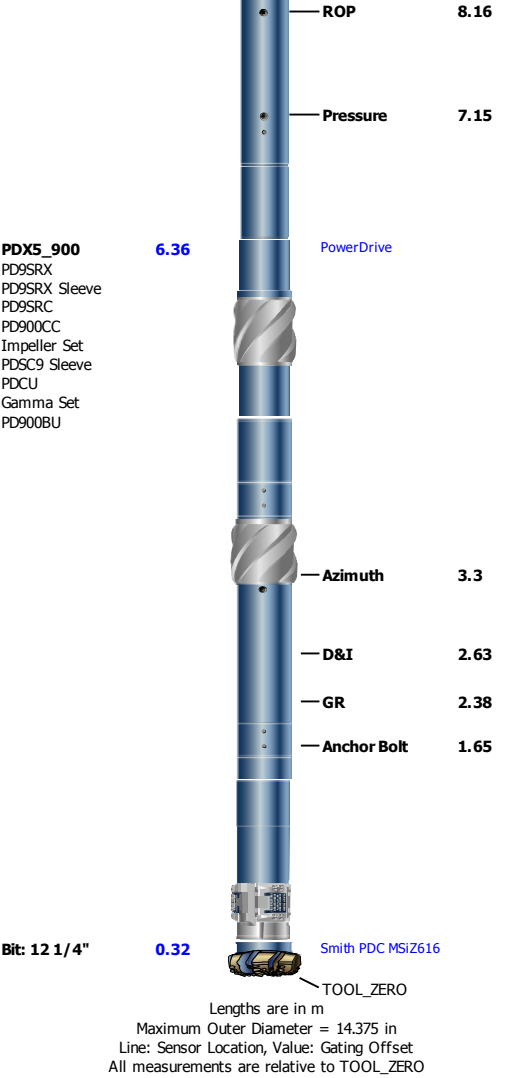
Parameter (unit)	Run 6					
Date Log Started	23-Apr-2018					
Time Log Started	20:41:53					
Date Log Finished	28-Apr-2018					
Time Log Finished	03:29:46					
Bit Size (in)	12.250					
Bit Start Depth (m)	2385.00					
Bit Stop Depth (m)	2680.00					
Top Log Interval (m)	2336.30					
Bottom Log Interval (m)	2669.90					
Max Hole Deviation (deg)	45.26					
Azimuth of Max Deviation (deg)	107.83					
Logging Unit Number	N/A					
Logging Unit Location						
Recorded By	I.Urazina					
Witnessed By	K.Gollob					
Service Order Number	17HOL0035					

Borehole Fluids

Parameter(unit)	Run 6					
Fluid Type	Water					
Fluid Name	KCl/Polymer					
Max Recorded Temperatures (degC)	71.4					
Source of Sample	Active Tank					
Salinity (ppm)	34972.18					
Density (g/cm3)	1.13					
Funnel Viscosity (s)						
Fluid Loss (cm3)	3					
PH	9.5					
Source RMF						
RMC	Pressed					
RM @ Meas Temp (ohm.m@degC)	0.2 @ 20					
RMF @ Meas Temp (ohm.m@degC)	0.15 @ 20					
RMC @ Meas Temp (ohm.m@degC)						
RM @ BHT (ohm.m@degC)	0.07 @ 71.4					
RMF @ BHT (ohm.m@degC)	0.05 @ 71.4					
RMC @ BHT (ohm.m@degC)	NaN @ 71.4					
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary

Run 6: Toolstring	Run 6: Remarks	
<div> <div> <div>Equip name</div> <div>NM Stab: 8 1/4":2 804</div> </div> <div> <div>Length</div> <div>16.58</div> </div> <div>  </div> <div> <div>MP name</div> <div>12 3/32 in Non-Mag Stabilizer</div> </div> <div> <div>Offset</div> <div></div> </div> </div>	All depths referenced to driller's depth. See EOWR for depth tracking details.	
	All data from tool memory. All data acquired while drilling.	
	Gamma Ray measurement is environmentally corrected for mud weight, bit size, collar thickness and Potassium content.	
	Run 6 and 12 1/4 in. section TD at 2680 m.	
<div> <div>X/O: 8 1/4":4126</div> <div>15.62</div> </div> <div> <div>Non-Mag X-Over</div> </div> <div> <div>TELE825:G4203</div> <div>14.76</div> </div> <div> <div>MSSU825:85397</div> <div>Upper Extender:aa U</div> <div>KA027</div> <div>MDC825:G4203</div> <div>MMA:704</div> <div>MDI:3711</div> <div>PMGR:1103</div> <div>PMEA:3711</div> <div>MTA:3446</div> <div>MTK825:2761</div> <div>APWD</div> <div>MSSD825:89142</div> <div>Lower Extender, Long</div> </div> <div> <div>D&I</div> <div>10.51</div> </div> <div> <div>GR</div> <div>9.86</div> </div>		



12.25 in. Section

MWD - Gamma Ray 1:200 MD

Software Version

Acquisition System		Version	
Maxwell 2018 SP1		8.1.99839.3100	
Tool Interface	System Version	Loaded Version	
HSPM	20.3c.062	8.1.99839.3100	
Tool Elements	Description	Software Version	Firmware Version
PMGR	TeleScope - M10 Gamma Ray Assembly	8.1.99839.3100	V14.0
DRILLING_SURFACE	DRILLING_SURFACE	8.1.99839.3100	

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 6	Ream Down 1	Down	2340.89 m	2384.83 m	24-Apr-2018 14:47:43	25-Apr-2018 05:13:30	Yes
Run 6	Drilling	Down	2389.43 m	2679.93 m	25-Apr-2018 05:13:30	28-Apr-2018 03:29:46	Yes

All depths are referenced to toolstring zero

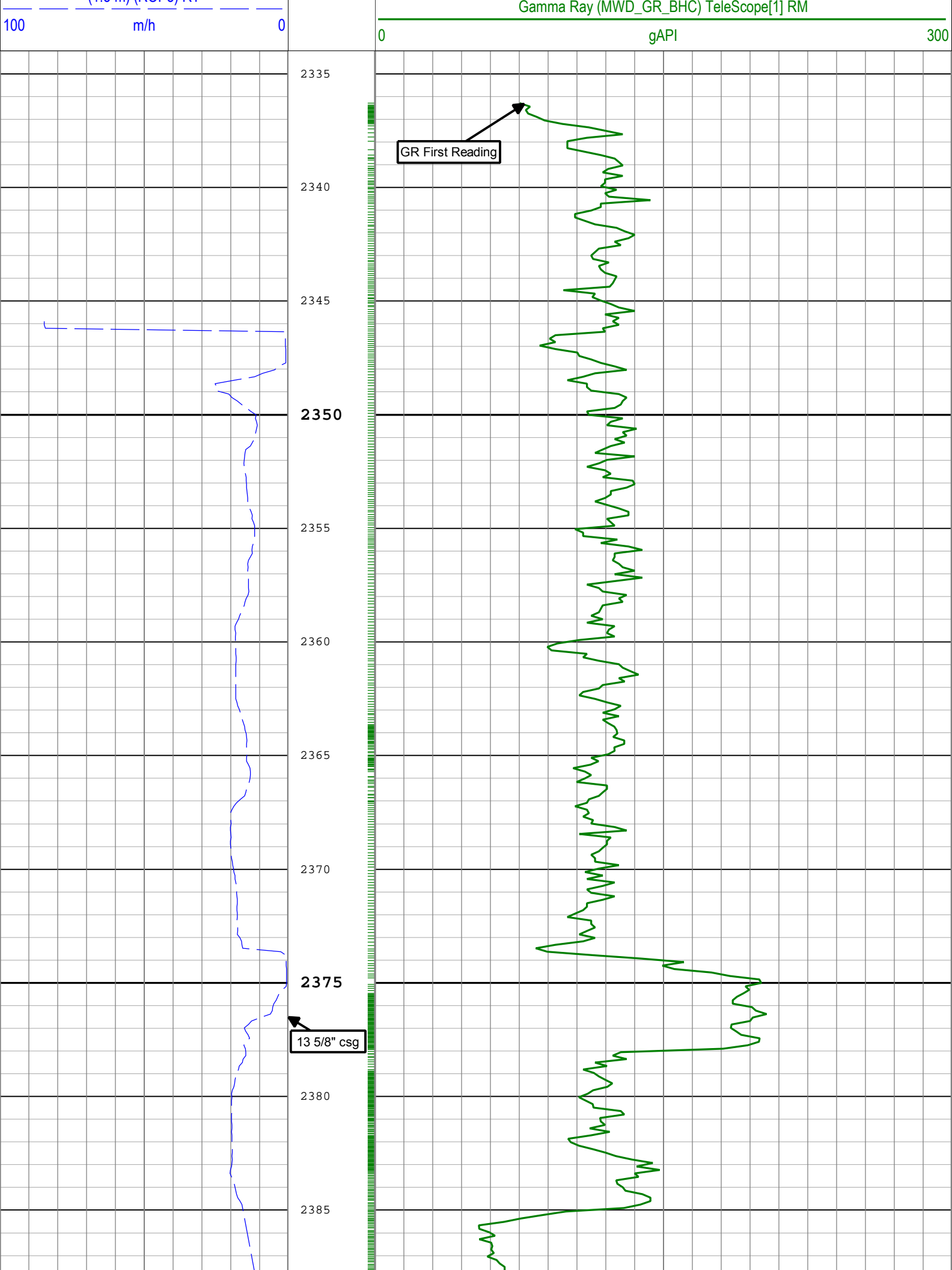
Log

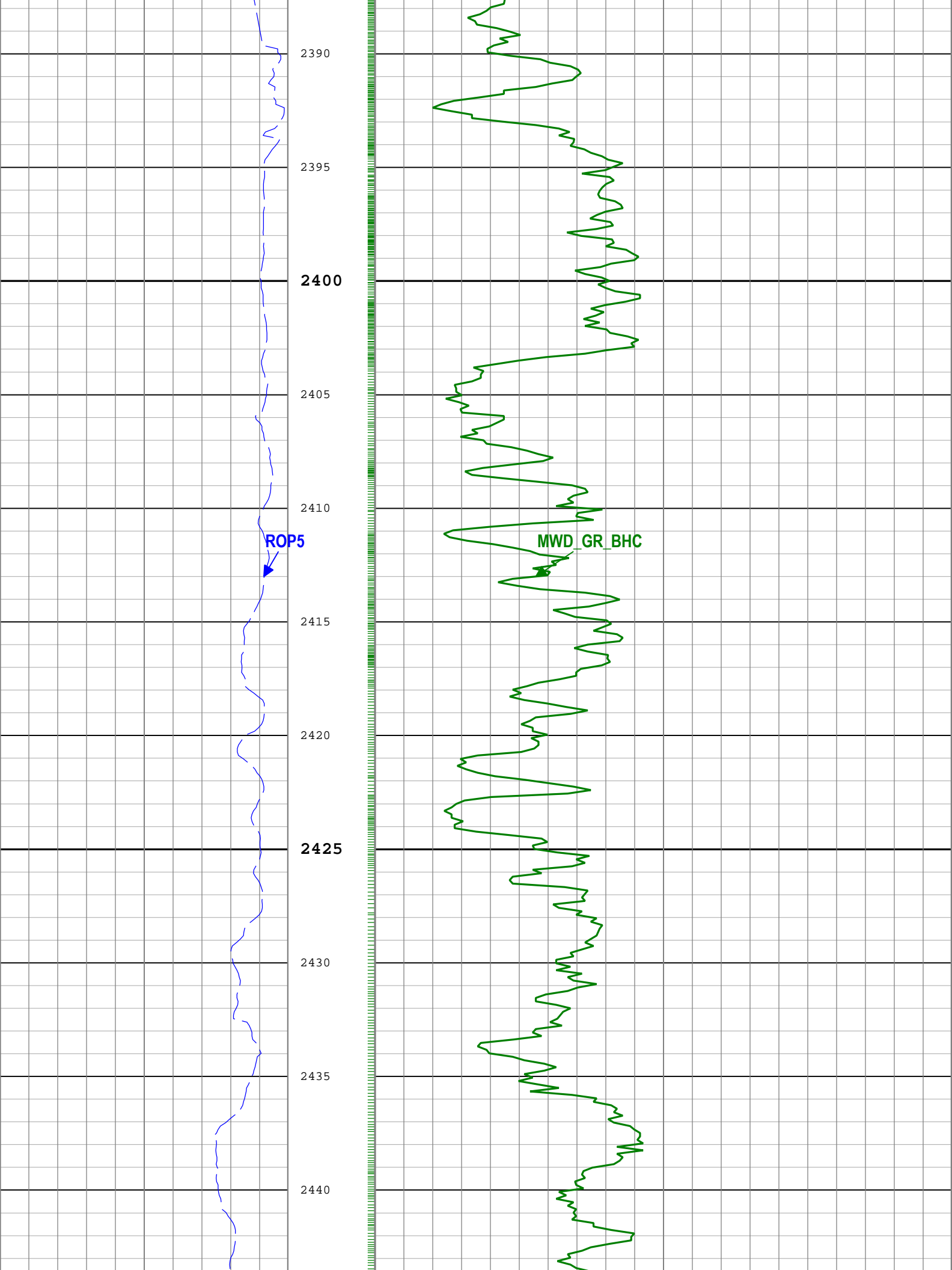
Company: Trias Westland B.V. Well: NLW-GT-02-S1
12.25 in. Section: S196

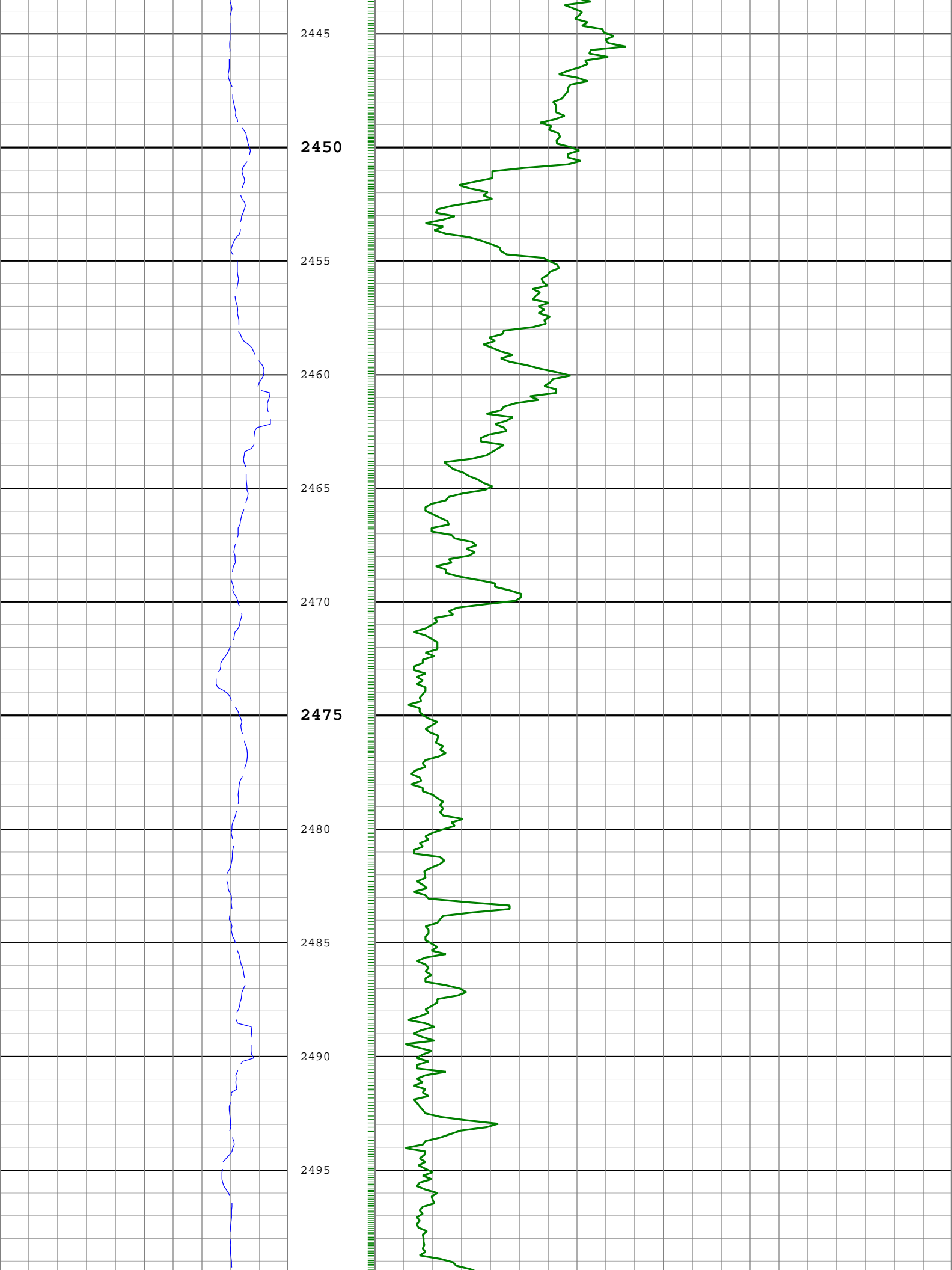
Description: TeleScope Gamma Ray Depth RT Format: Log (GR MWD and PD with ticks) Index Scale: 1:200 Index Unit: m Index Type: Measured
Depth Creation Date: 02-May-2018 19:50:11

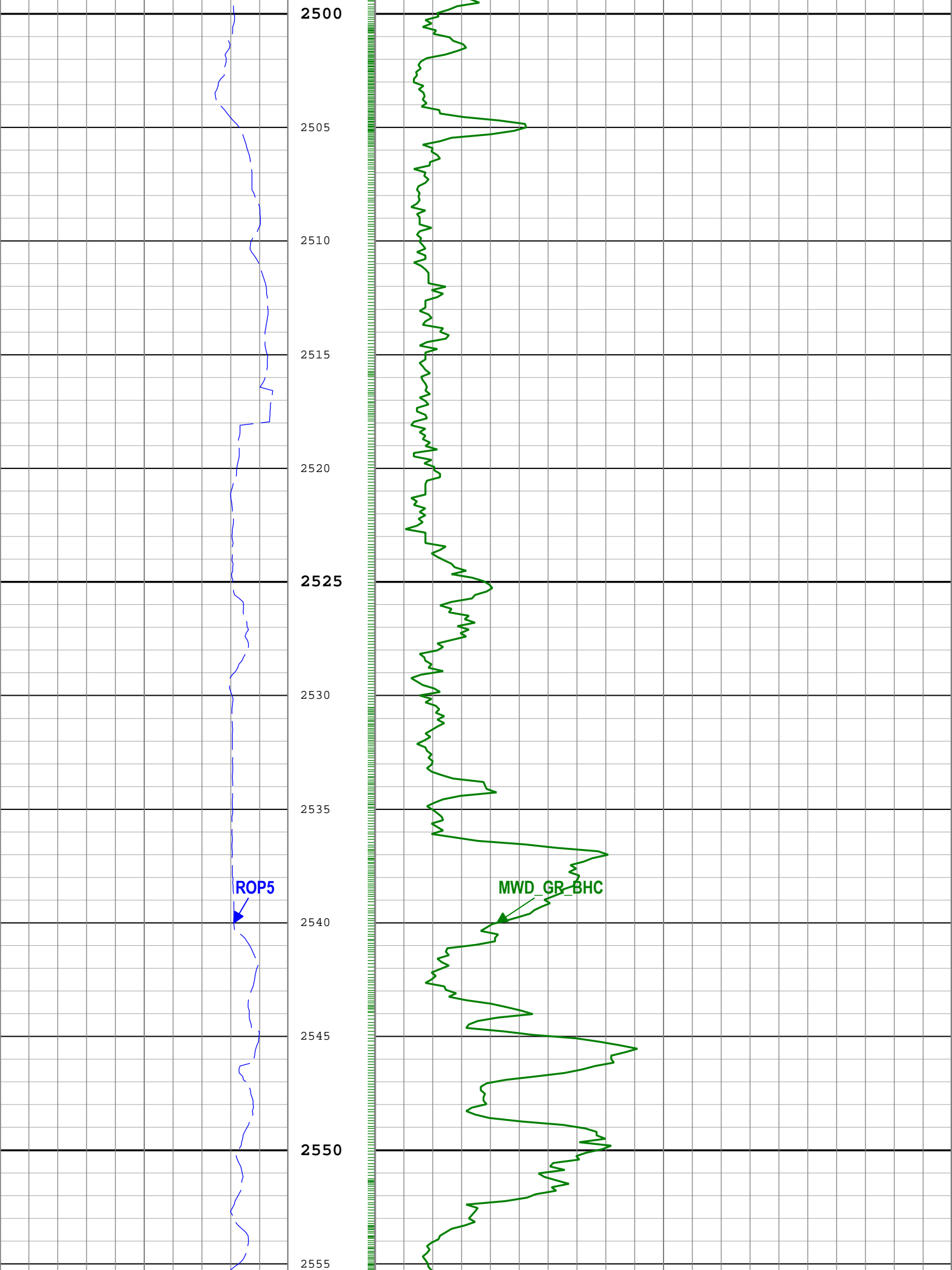
—TICKS_GR - Gamma Ray Tick Marks TeleScope[1] RM

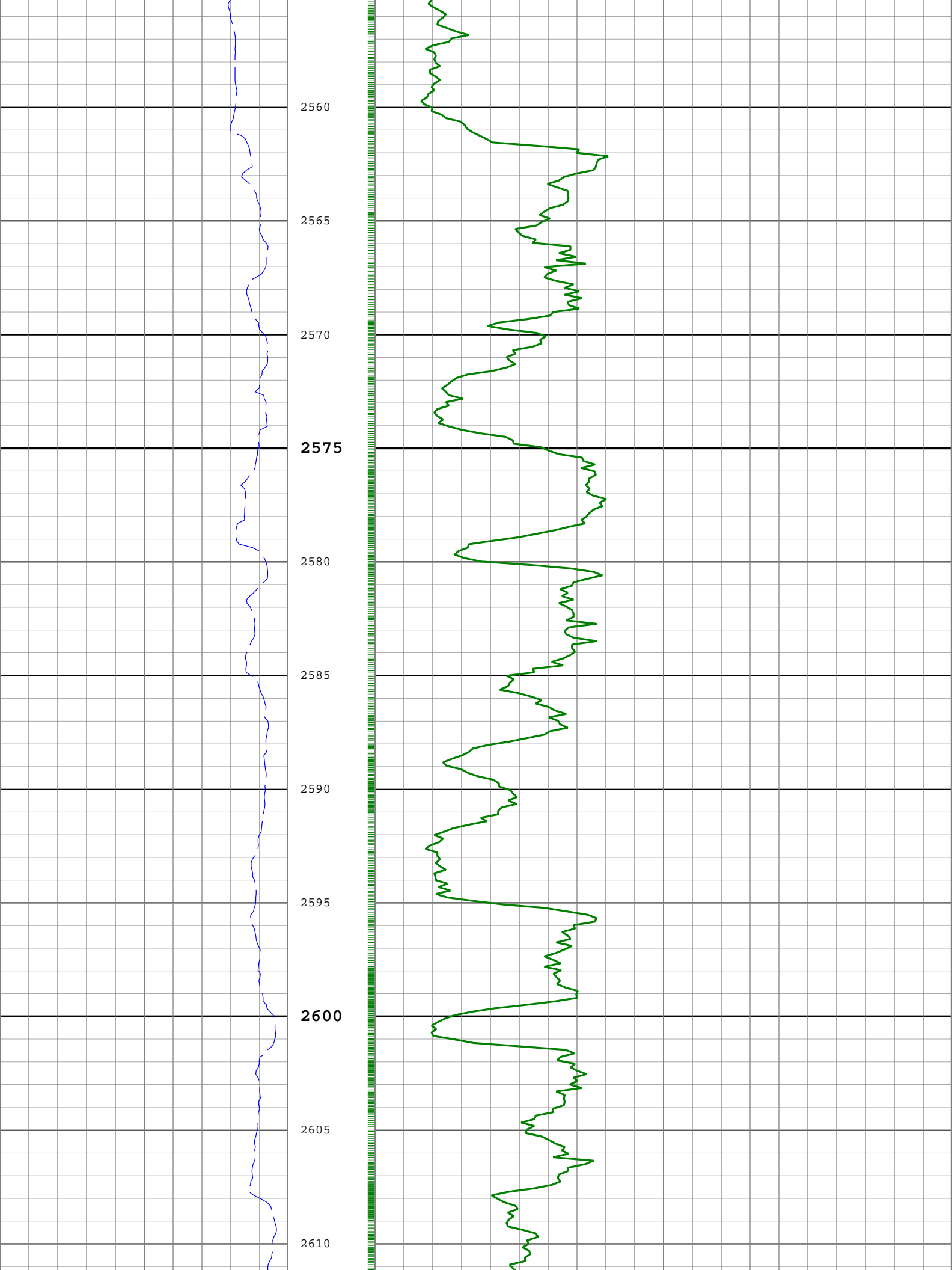
Rate of penetration averaged over the last 5 ft
(1 5 m) (ROP5) RT

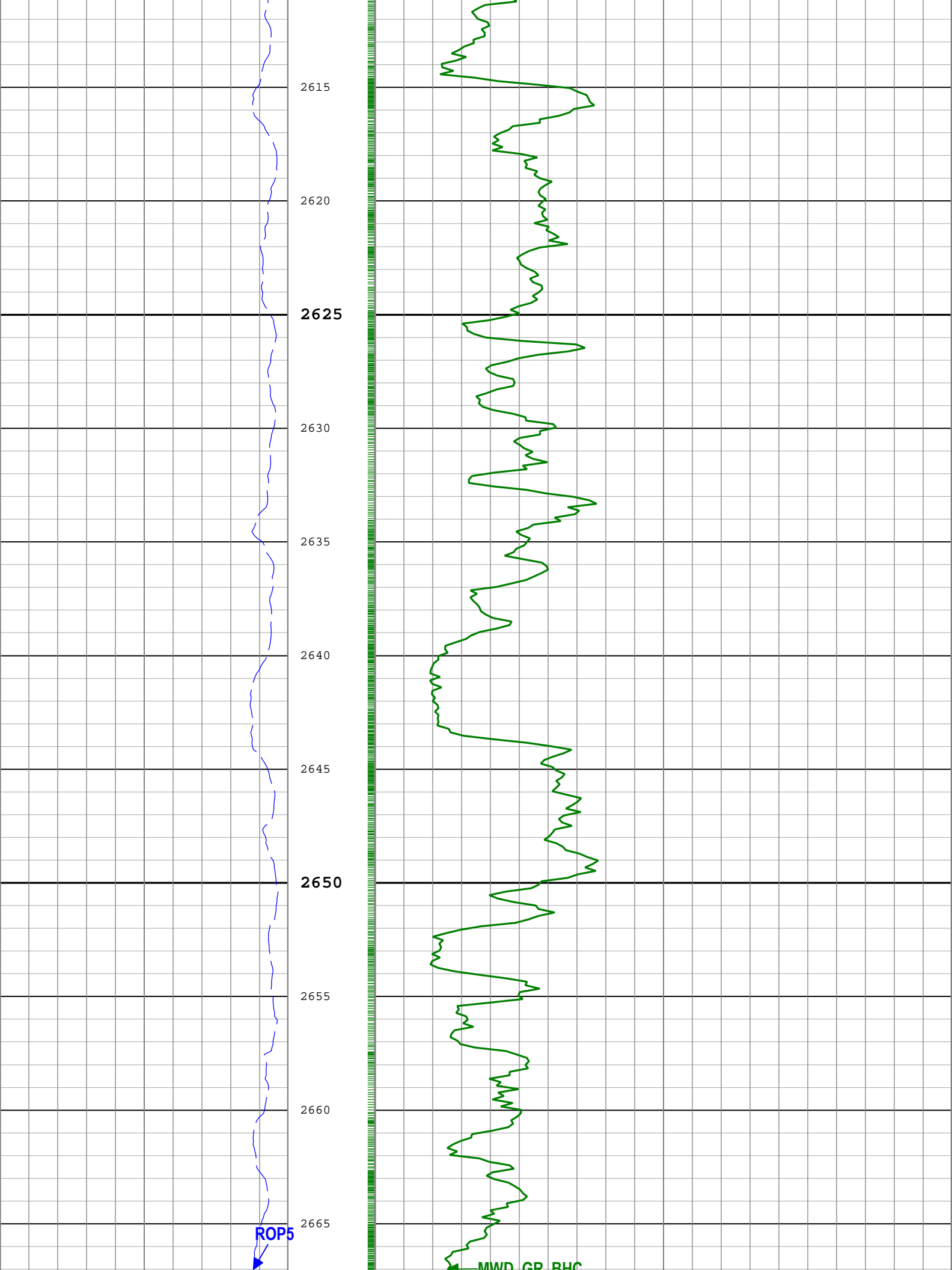


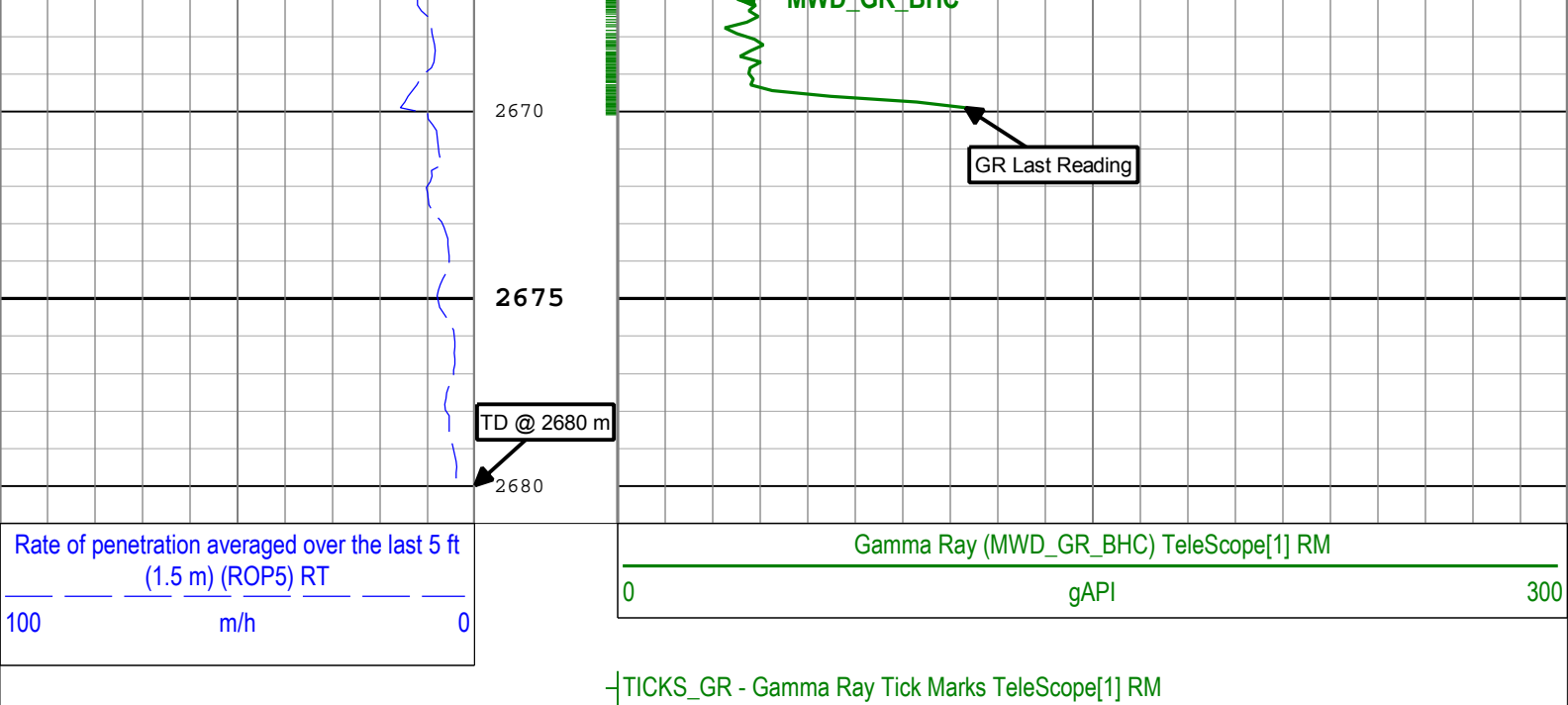












Description: TeleScope Gamma Ray Depth RT Format: Log (GR MWD and PD with ticks) Index Scale: 1:200 Index Unit: m Index Type: Measured
Depth Creation Date: 02-May-2018 19:50:11

12.25 in. Section

MWD - Gamma Ray 1:1000 MD

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 6	Ream Down 1	Down	2340.89 m	2384.83 m	24-Apr-2018 14:47:43	25-Apr-2018 05:13:30	Yes
Run 6	Drilling	Down	2389.43 m	2679.93 m	25-Apr-2018 05:13:30	28-Apr-2018 03:29:46	Yes

All depths are referenced to toolstring zero

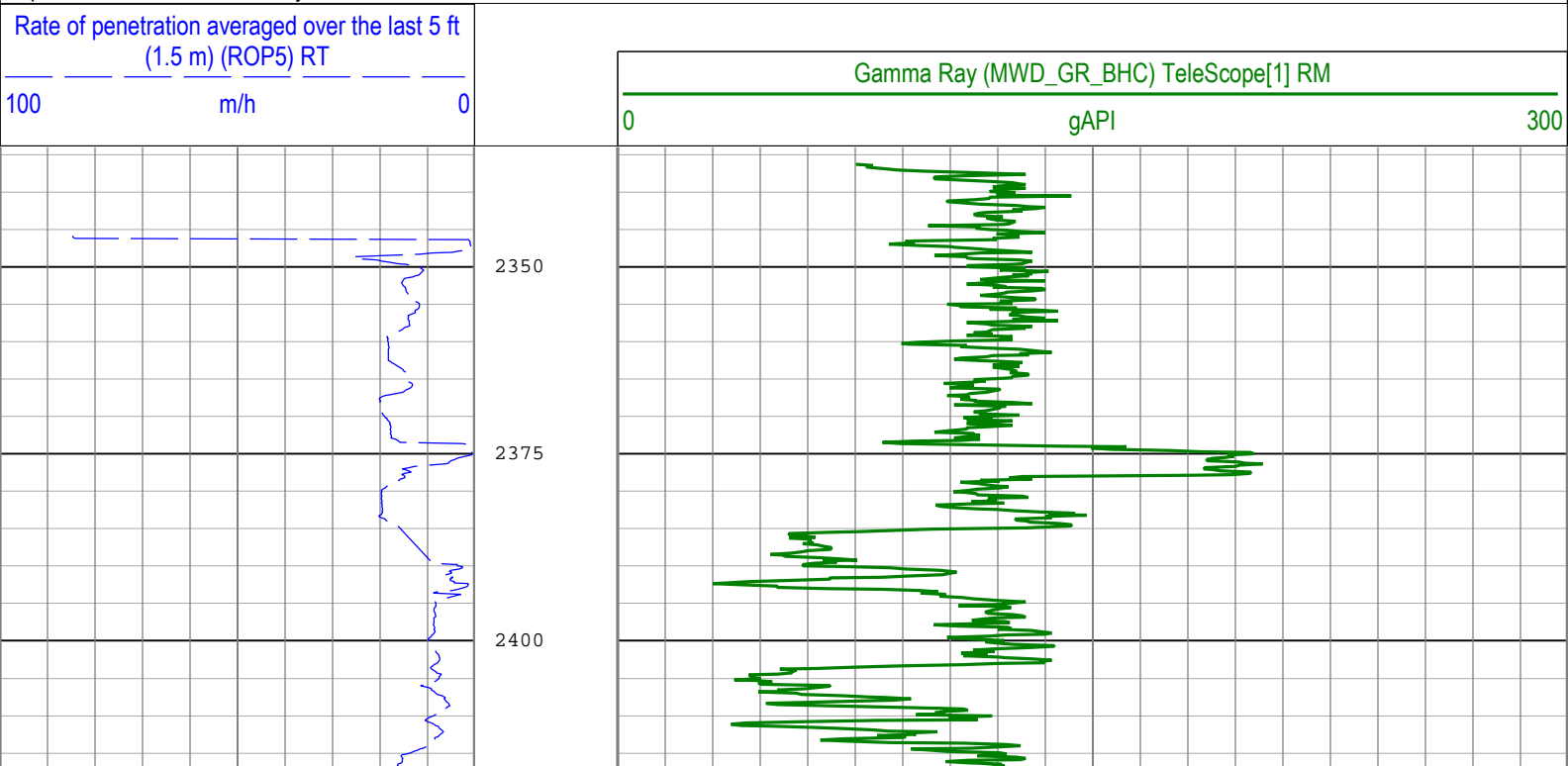
Log

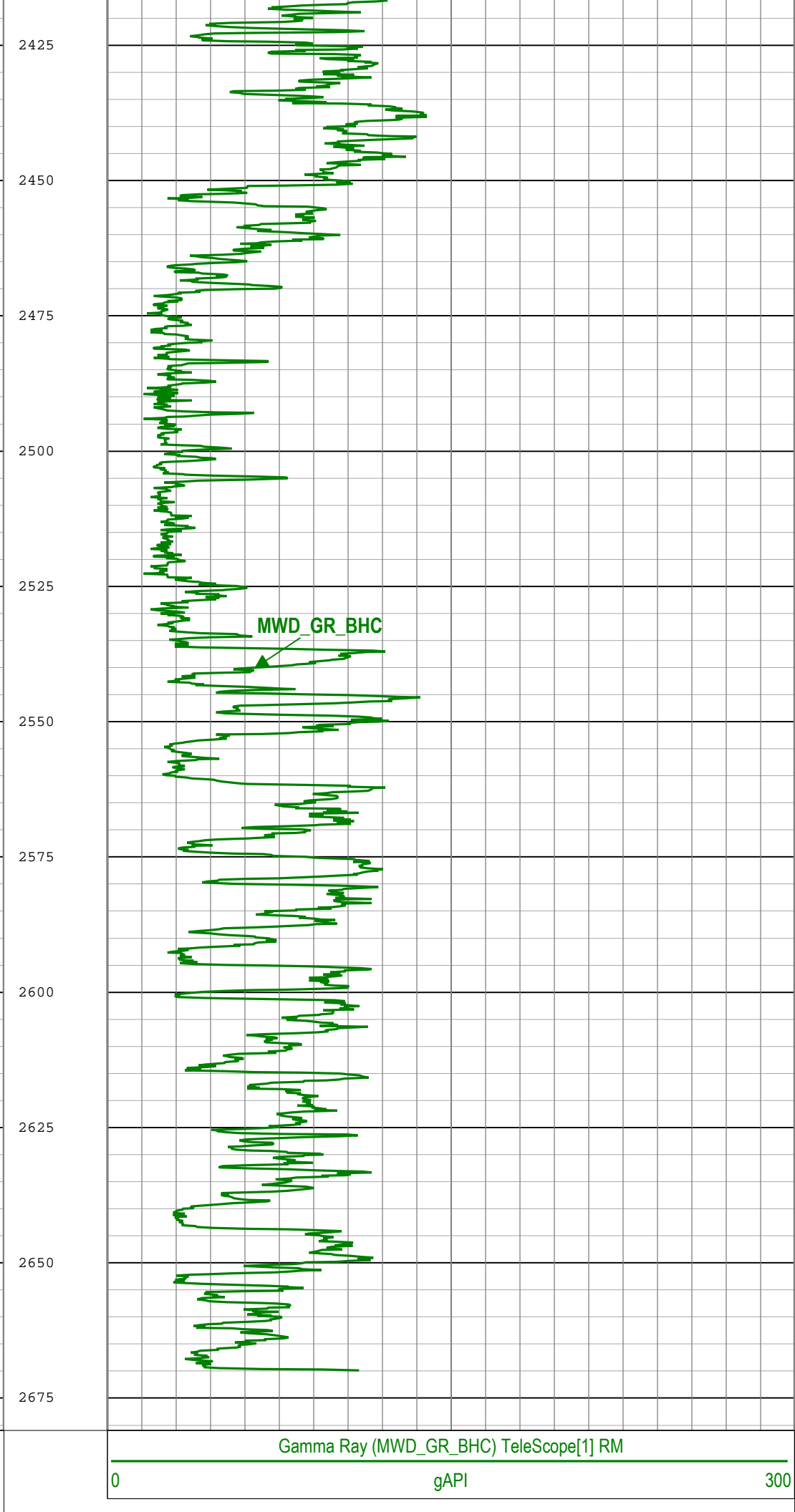
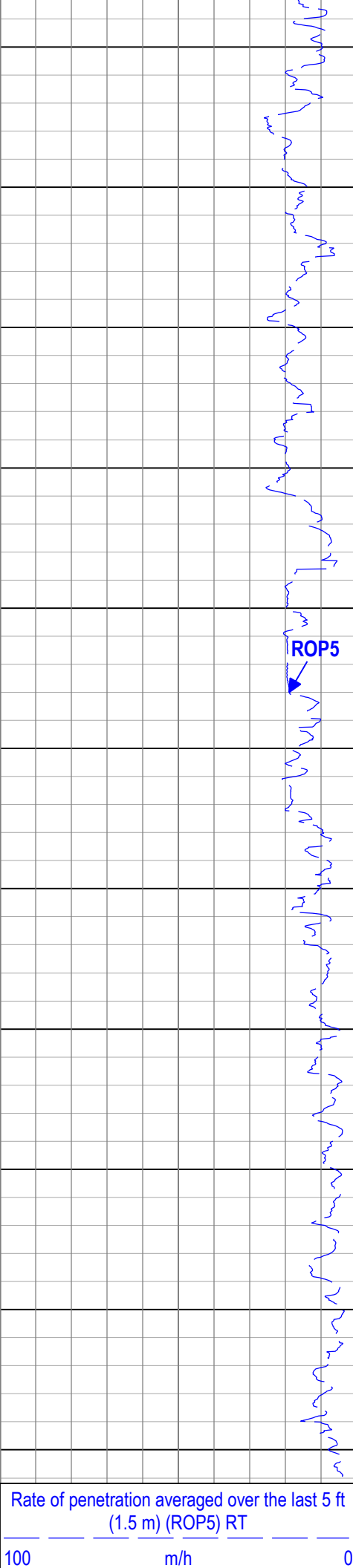
Company: Trias Westland B.V.

Well: NLW-GT-02-S1

12.25 in. Section: S196

Description: TeleScope Gamma Ray Depth RT Format: Log (GR MWD and PD no ticks) Index Scale: 1:1000 Index Unit: m Index Type: Measured
Depth Creation Date: 02-May-2018 19:50:14





Description: TeleScope Gamma Ray Depth RT		Format: Log (GR MWD and PD no ticks)		Index Scale: 1:1000		Index Unit: m		Index Type: Measured	
Depth		Creation Date: 02-May-2018 19:50:14							
Channel Processing Parameters									
Run 6: Parameters									
Parameter	Description	Tool	Value	Unit					
BHK	Drilling Fluid Potassium Concentration	Borehole	3.5	%					
BS	Bit Size	DNMSESSION	Depth Zoned	in					
DFD	Drilling Fluid Density	Borehole	1.13	g/cm3					
GR_SRC	GR Input Channel Name	TELE825	GAMMA_CPS						
Run 6Depth Zoned Parameters									
Parameter	Value	Start (m)	Stop (m)						
BS	17.5	2334	2385						
BS	12.25	2385	2679.93						
All depth are actual.									
Tool Control Parameters									
Calibration Report									
TELE825 (TeleScope 825) Calibration - Run 6									
Primary Equipment :									
Gamma Ray Cartridge			PMGR			1103			
GAMMA_SF - Gamma Ray: Blanket									
Master (Time Frame File): 12:22:51 20-Apr-2018									
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>		
Gamma Ray Calibration Gain		Master	1.0000	0.7500	0.8804	1.2500	<div></div>		

Company: Trias Westland B.V.

Well: NLW-GT-02-S1

Field: Naaldwijk

Rig Name: KCA Deutag T-207

Country: The Netherlands



MWD - Gamma Ray

Schlumberger

Recorded Mode