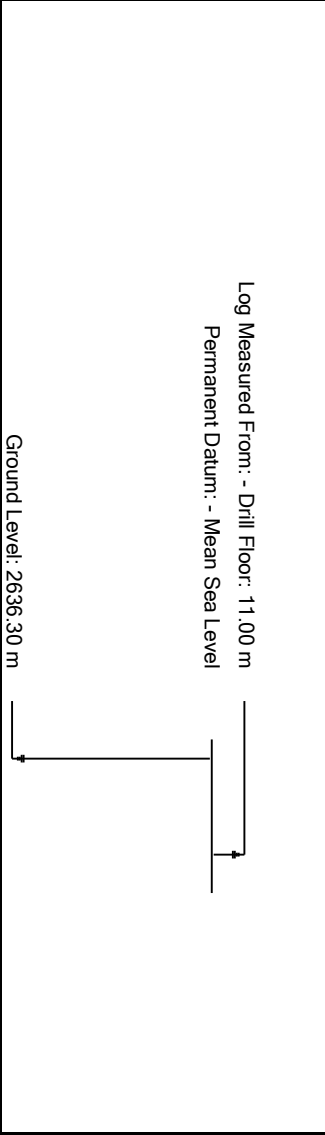


**EcoScope Resistivity**  
**1:240 Measured Depth**  
**Recorded Mode Data**



**Company:** IODP  
**Well:** U1518B  
**Field:** HSM-15A  
**Rig Name:** Joides Resolution  
**Expedition:** 372  
**Country:** New Zealand

**Latitude:** 38° 51' 32.202" S **UWID:**  
**Longitude:** 178° 53' 45.618" E **Rig Name:** Joides Resolution  
**Block:** EXP372 **Rig Type:** Drill Ship  
**FL1:**  
**FL2:**



<b>Acquisition Dates:</b>	20-Dec-2017 -- 23-Dec-2017	<b>Other Services:</b>
<b>Log Interval:</b>	2725.00(m) -- 3247.00(m)	<b>SonicScope</b>
<b>Index Types:</b>	Measured Depth	<b>proVISION Plus</b>
<b>Index Scales:</b>	1:240	<b>geoVISION Images</b>
<b>Depth Source:</b>	Driller's Depth	<b>StethoScope</b>
<b>Depth Sensor:</b>	DES	
<b>Print Type:</b>	Final	
<b>Spud Date:</b>	21-Dec-2017	

**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.

**Run 1**

**FINAL ECO LOG 3**

**Software Version**

<b>Acquisition System</b>		<b>Version</b>	
Maxwell 2017 SP3		7.3.92069.3100	
<b>Computation</b>	<b>Description</b>	<b>Version</b>	
ECO6GammaRay	Natural Gamma Ray Processing, ECO 6.75	7.3.92069.3100	
ARCResistivity	ARC Resistivity Computation Package for ARC Tool Family	7.3.92069.3100	
ECO6ResistivityComputation	Resistivity QC Processing, ECO 6.75	7.3.92069.3100	
<b>SoftwareVersion_Tool</b>	<b>SoftwareVersion_System Version</b>	<b>SoftwareVersion_Loaded Version</b>	
HSPM	20.3c.062	7.3.92069.3100	
<b>Tool Elements</b>	<b>Description</b>	<b>Software Version</b>	<b>Firmware Version</b>
DRILLING_SURFACE	DRILLING_SURFACE	7.3.92069.3100	
DVME	NeoScope 6.75 - Electronics Chassis	7.3.92069.3100	V5.300

# Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 1	Drilling	Down	2649.70 m	3247.31 m	20-Dec-2017 10:51:33 PM	23-Dec-2017 3:06:27 AM	Yes

All depths are referenced to toolstring zero

# Log

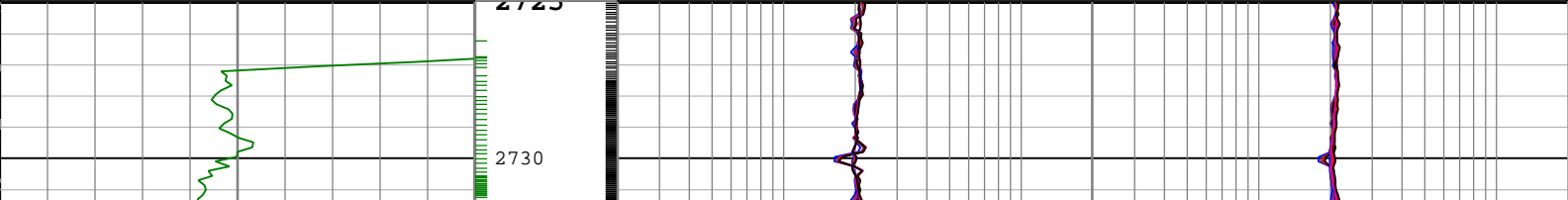
Company: IODP Well: U1518B  
Run 1: Drilling: S049

Description: ARC + sonicVISION Format: Log ( FINAL ECO LOG 3 ) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 30-Dec-2017 00:05:48

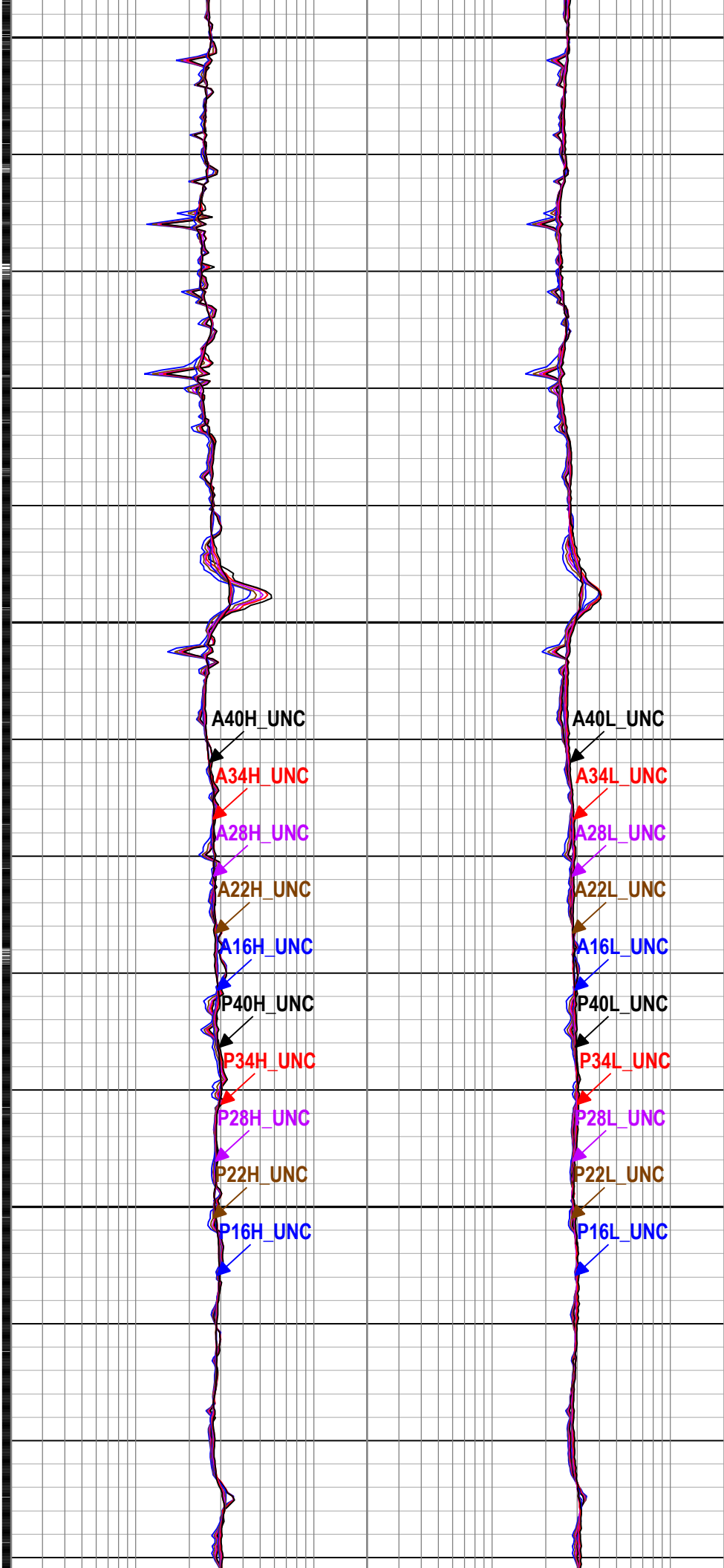
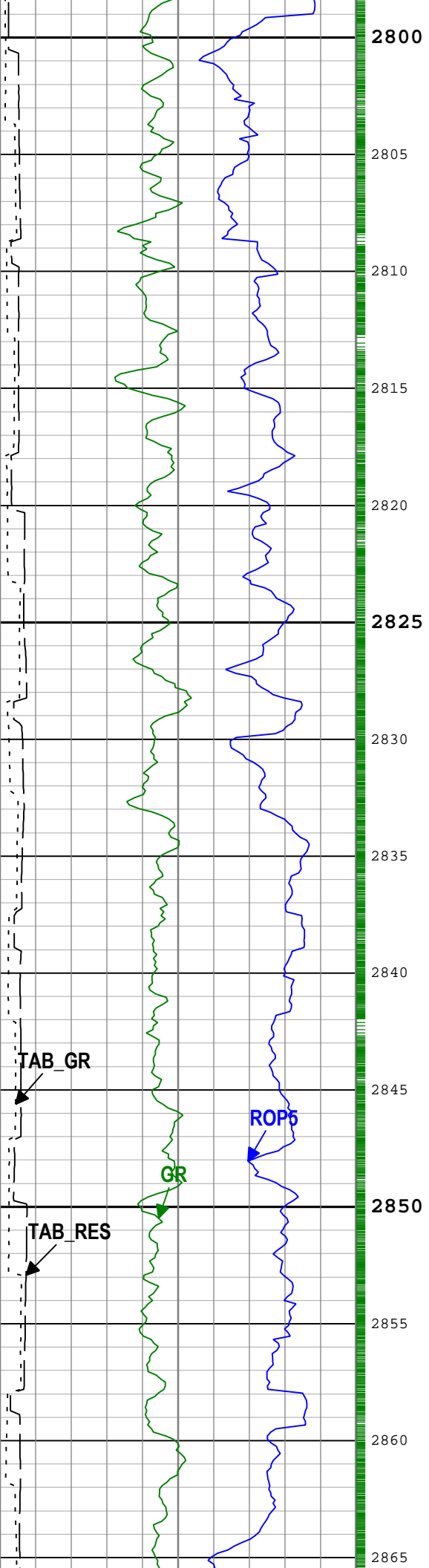
├ TICK\_GR - Gamma Ray Samples DV6MTN RM  
└ TICK\_ARC\_RES - ARC Resistivity Samples DV6MTN RM

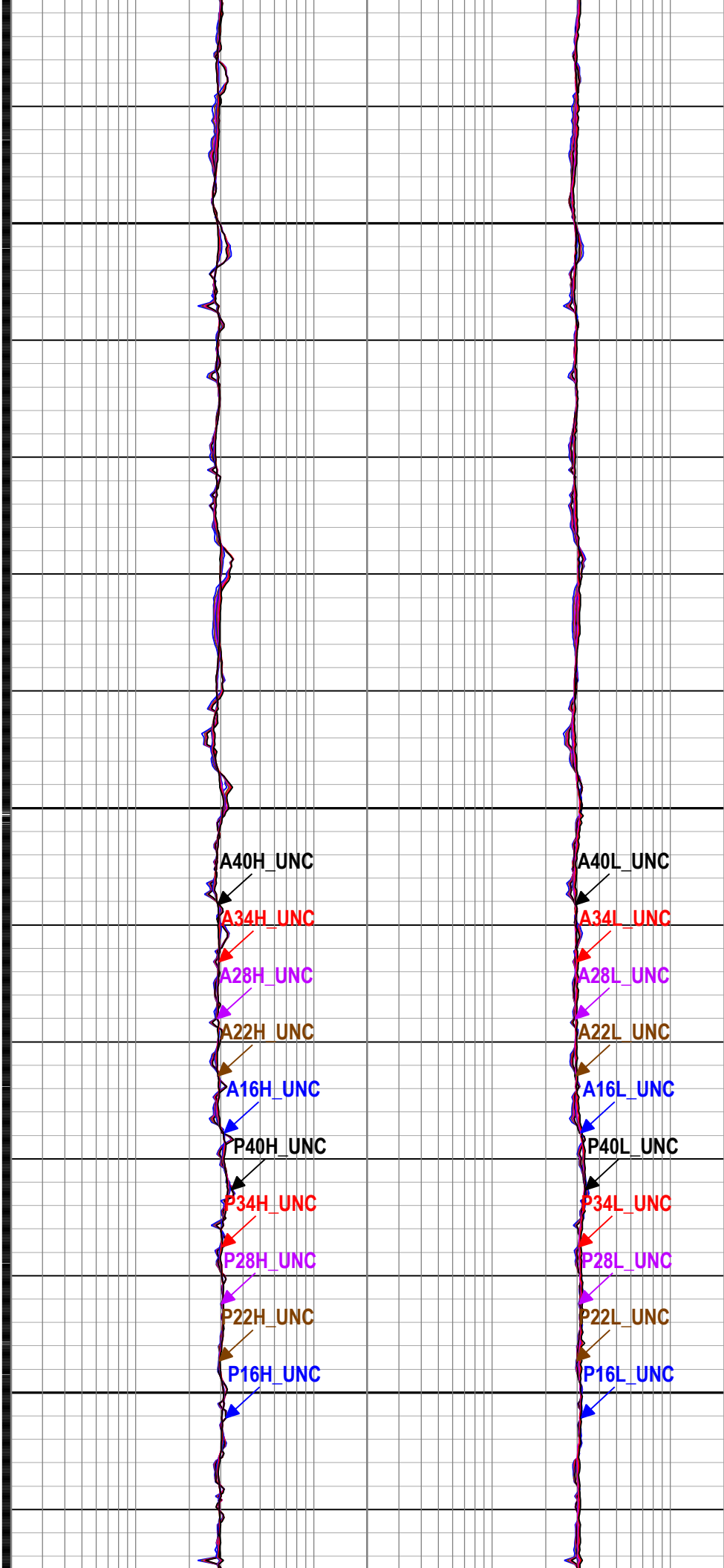
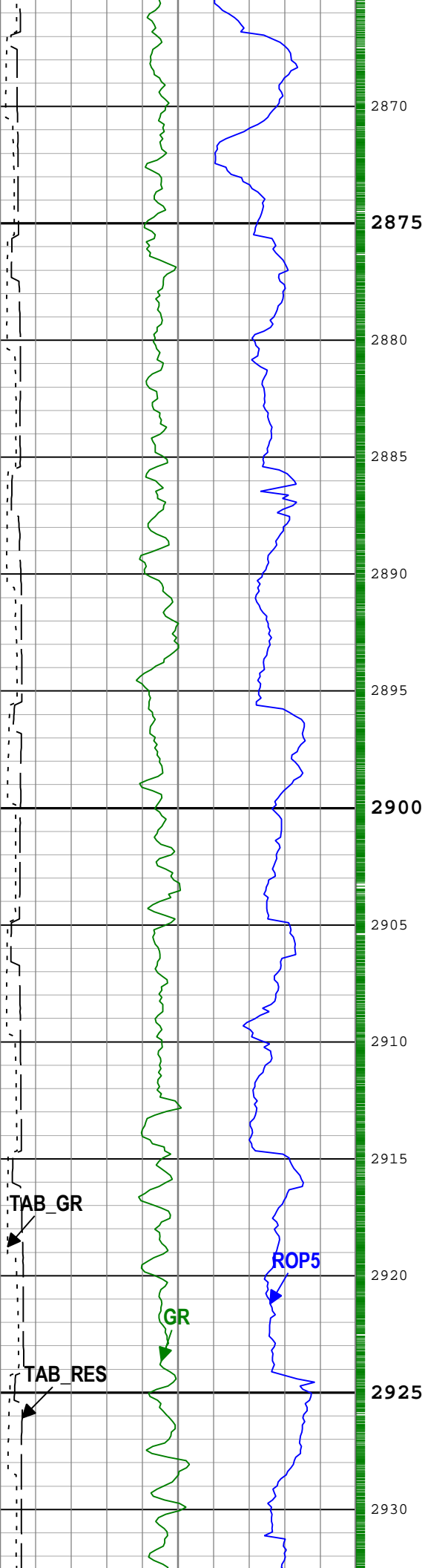
Uncorrected Phase Shift Resistivity for 16 inch Spacing at 2 MHz (P16H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 16 inch at 400 KHz (P16L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 22 inch Spacing at 2 MHz (P22H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 22 inch at 400 KHz (P22L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 28 inch Spacing at 2 MHz (P28H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 28 inch at 400 KHz (P28L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 34 inch Spacing at 2 MHz (P34H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 34 inch at 400 KHz (P34L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity 40 inch at 2 MHz (P40H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 40 inch at 400 KHz (P40L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 16 inch Spacing at 2 MHz (A16H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 16 inch at 400 KHz (A16L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 22 inch Spacing at 2 MHz (A22H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 22 inch at 400 KHz (A22L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 28 inch Spacing at 2 MHz (A28H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 28 inch at 400 KHz (A28L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 34 inch Spacing at 2 MHz (A34H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 34 inch at 400 KHz (A34L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity 40 inch at 2 MHz (A40H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 40 inch at 400 KHz (A40L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20

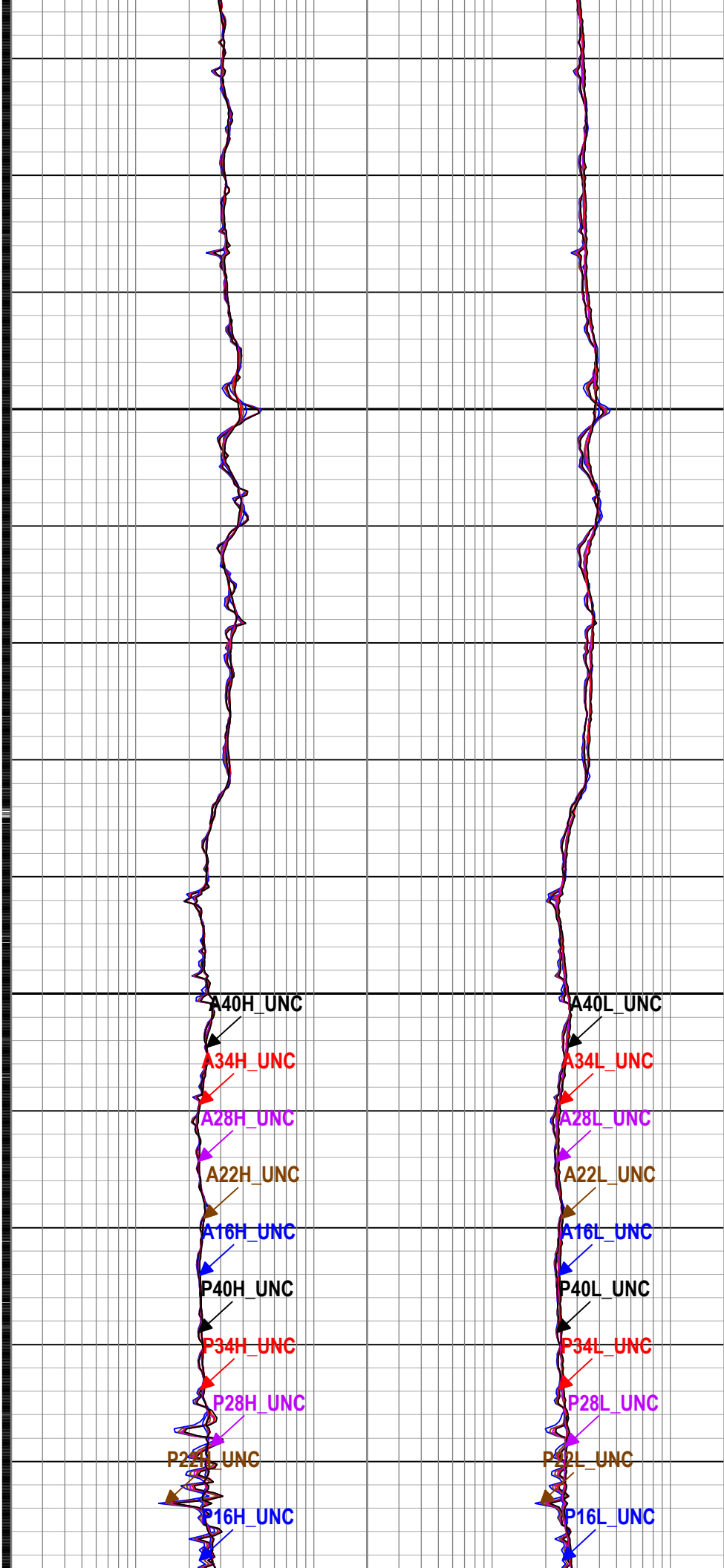
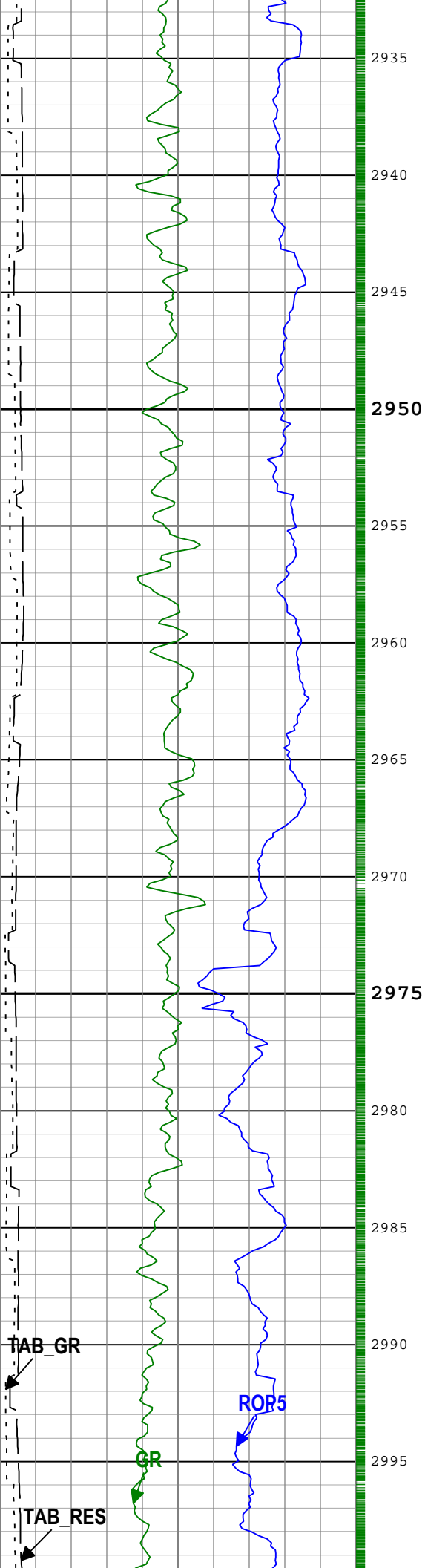
Resistivity Time After Bit (TAB_RES) DV6MTN	0	h	10
Gamma Ray (GR) DV6MTN RM	0	gAPI	150
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT	100	m/h	0
Gamma Ray Time after Bit (TAB_GR) DV6MTN	0	h	10

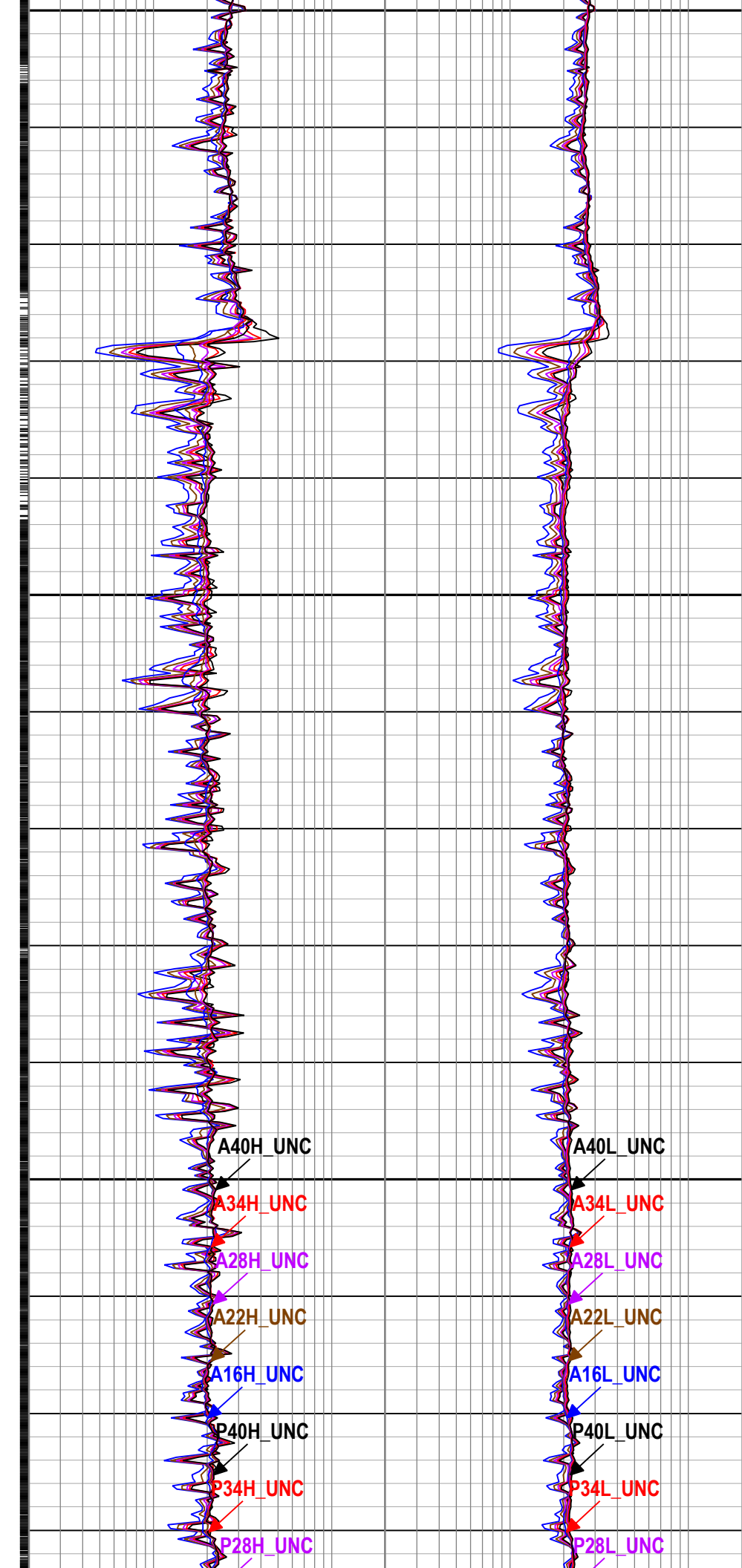
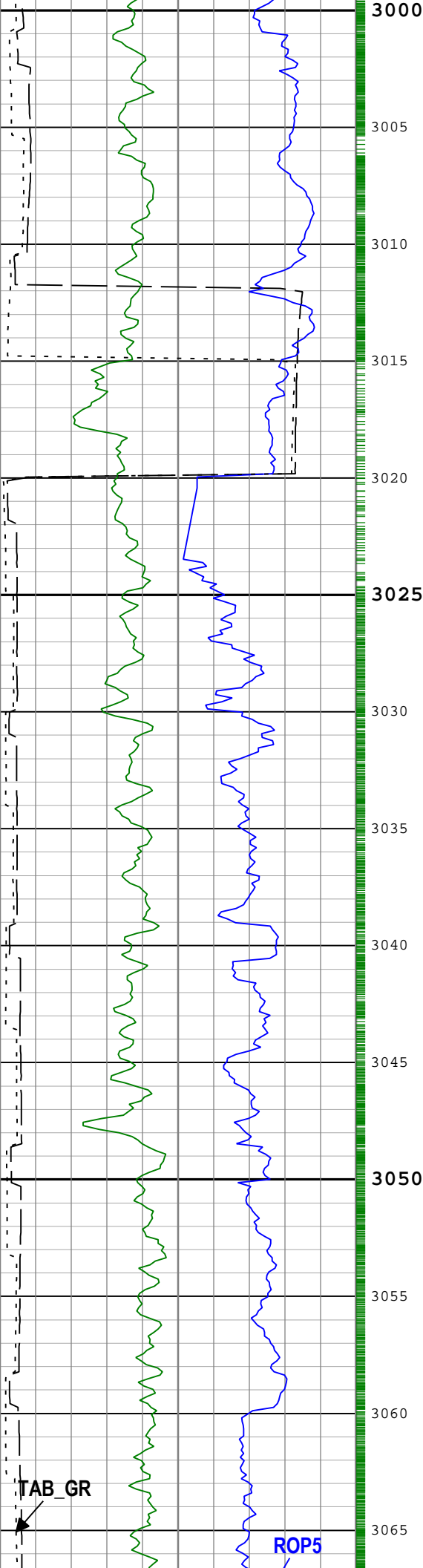












TAB\_GR

ROP5

A40H\_UNC

A40L\_UNC

A34H\_UNC

A34L\_UNC

A28H\_UNC

A28L\_UNC

A22H\_UNC

A22L\_UNC

A16H\_UNC

A16L\_UNC

P40H\_UNC

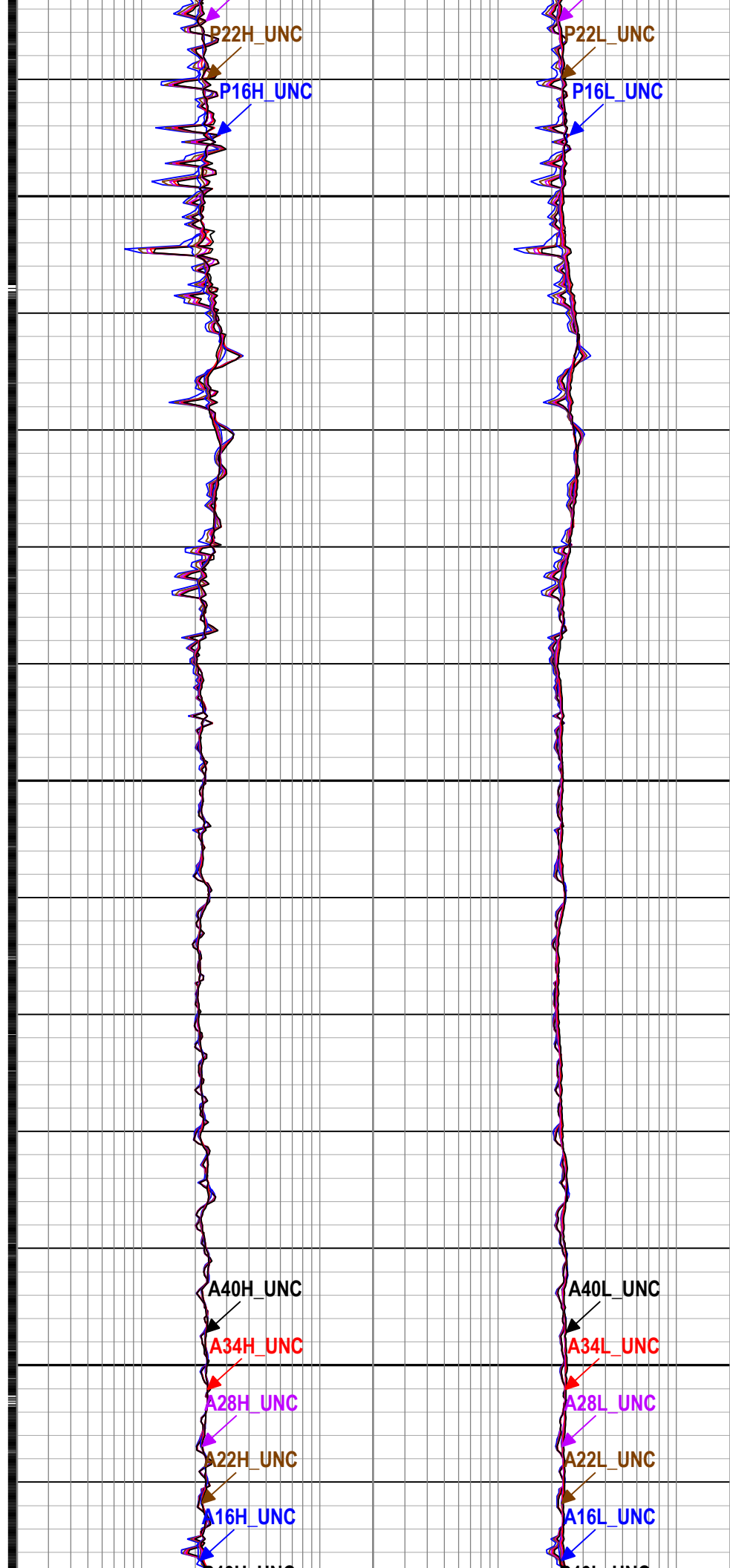
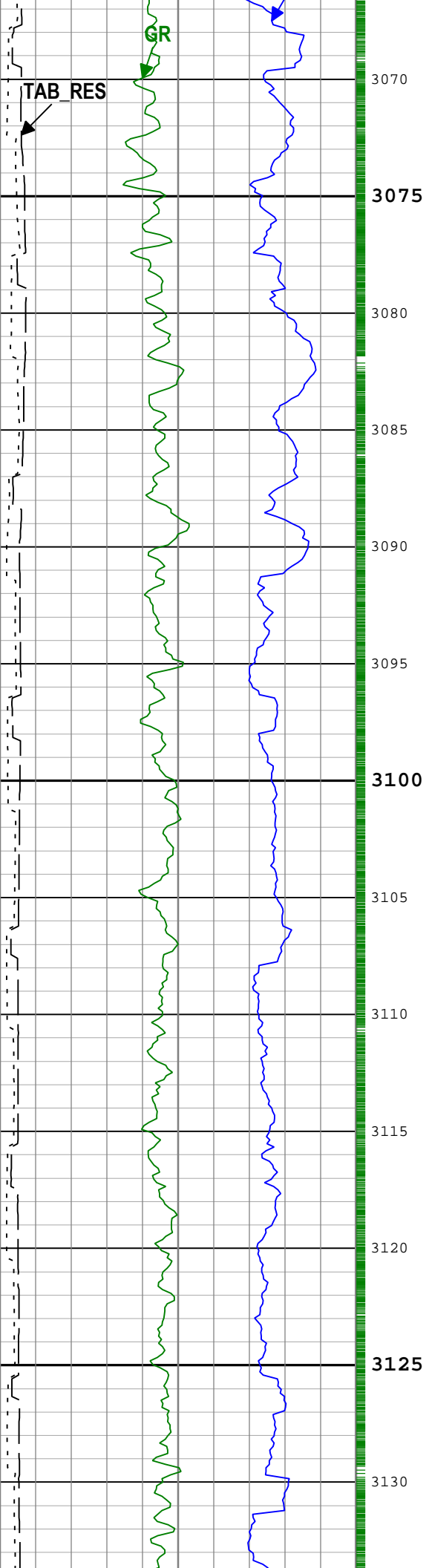
P40L\_UNC

P34H\_UNC

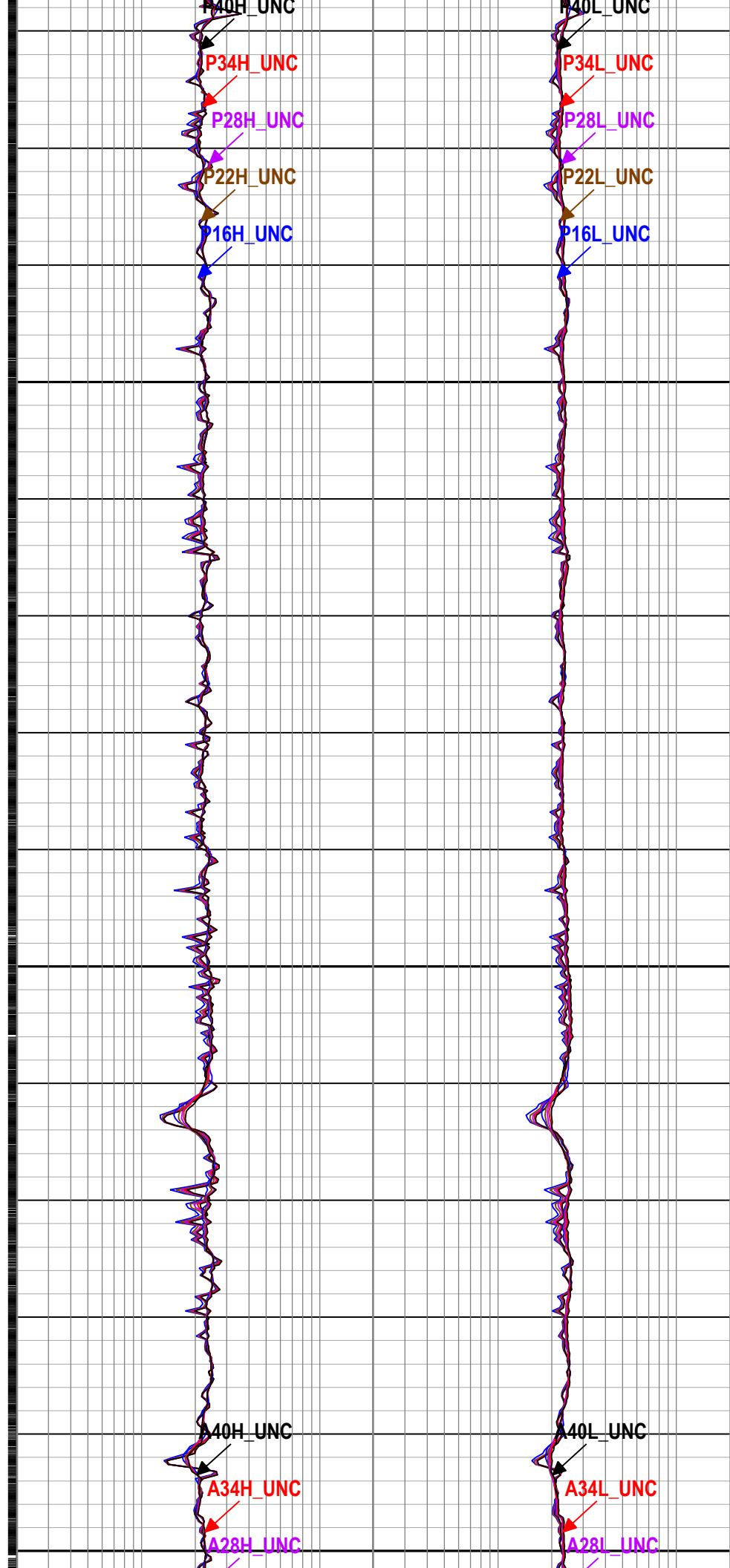
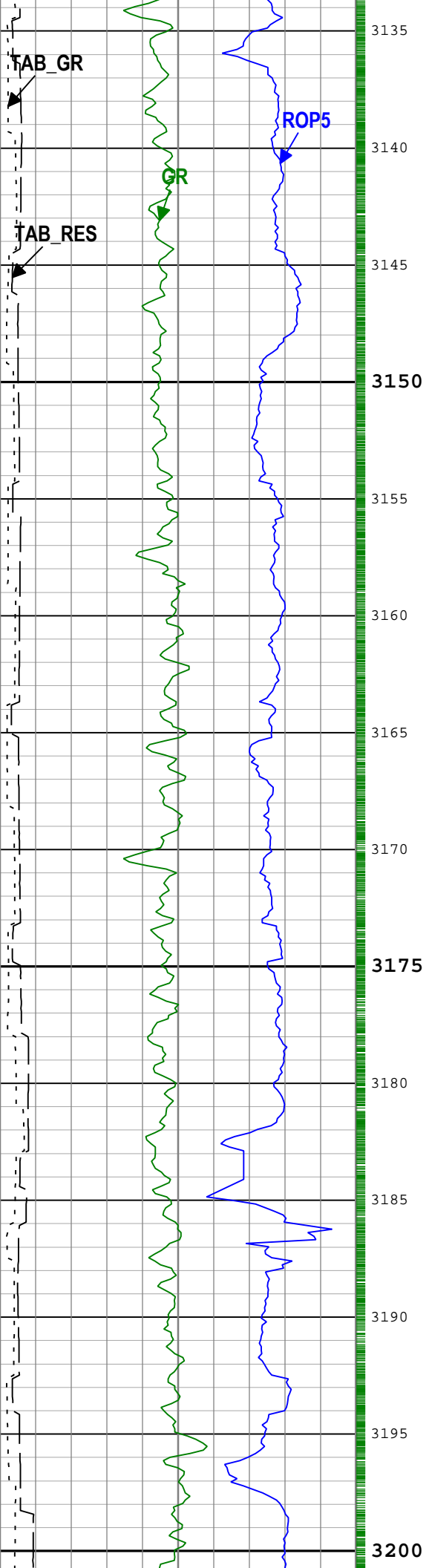
P34L\_UNC

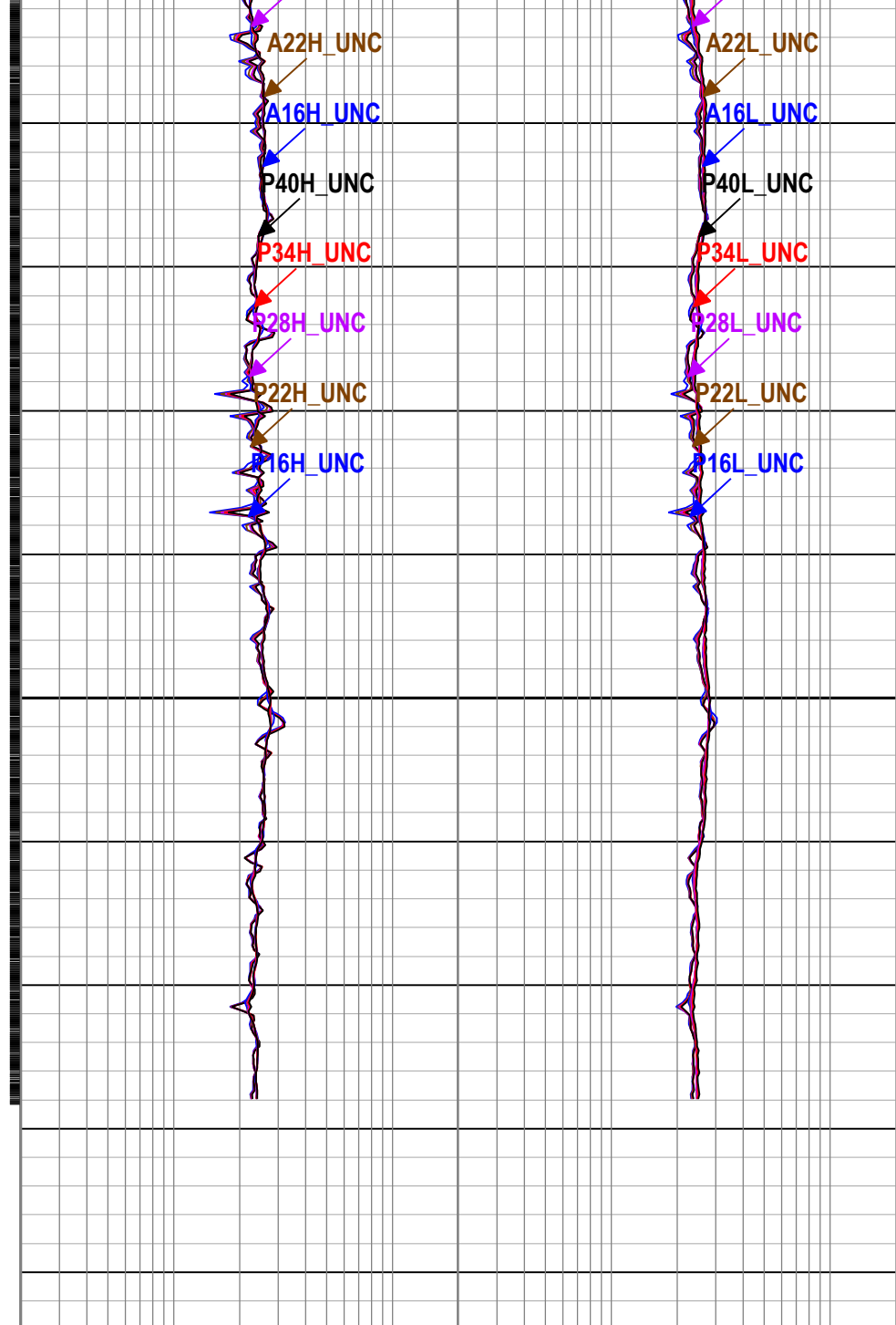
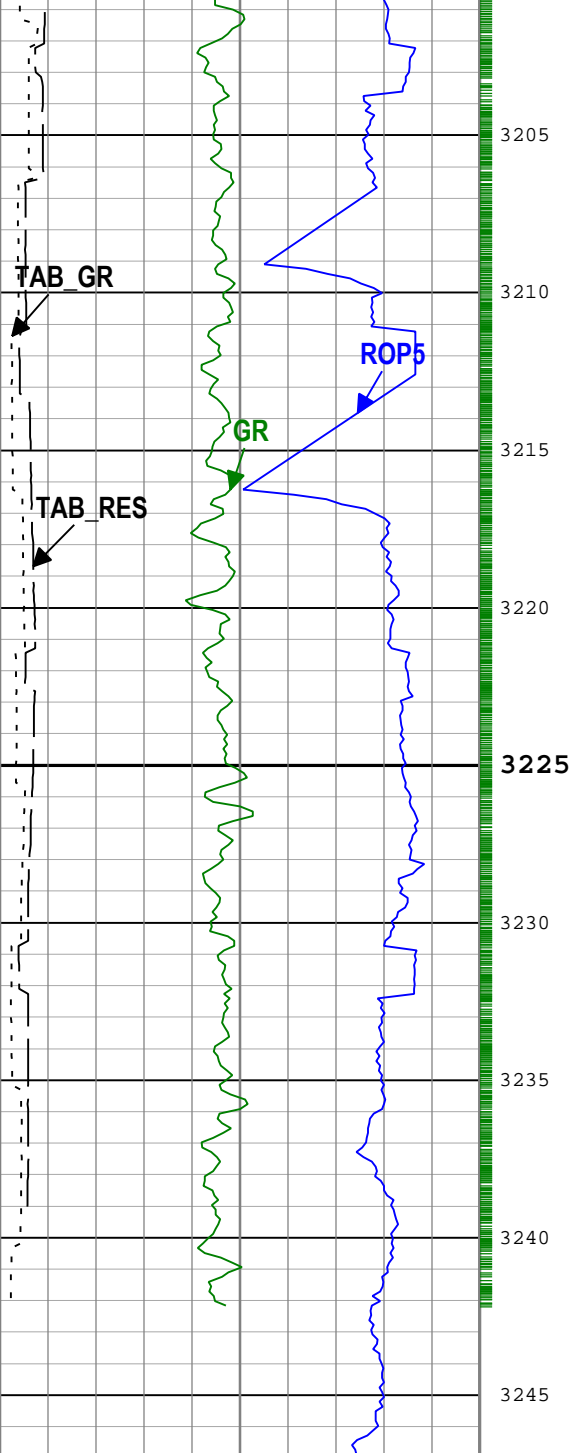
P28H\_UNC

P28L\_UNC









Resistivity Time After Bit (TAB_RES) DV6MTN		
0	h	10
Gamma Ray (GR) DV6MTN RM		
0	gAPI	150
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT		
100	m/h	0
Gamma Ray Time after Bit (TAB_GR) DV6MTN		
0	h	10

Uncorrected Phase Shift Resistivity for 16 inch Spacing at 2 MHz (P16H_UNC) DV6MTN RM			Uncorrected Phase Shift Resistivity 16 inch at 400 KHz (P16L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Phase Shift Resistivity for 22 inch Spacing at 2 MHz (P22H_UNC) DV6MTN RM			Uncorrected Phase Shift Resistivity 22 inch at 400 KHz (P22L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Phase Shift Resistivity for 28 inch Spacing at 2 MHz (P28H_UNC) DV6MTN RM			Uncorrected Phase Shift Resistivity 28 inch at 400 KHz (P28L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Phase Shift Resistivity for 34 inch Spacing at 2 MHz (P34H_UNC) DV6MTN RM			Uncorrected Phase Shift Resistivity 34 inch at 400 KHz (P34L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Phase Shift Resistivity 40 inch at 2 MHz (P40H_UNC) DV6MTN RM			Uncorrected Phase Shift Resistivity 40 inch at 400 KHz (P40L_UNC) DV6MTN RM		

0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Attenuation Resistivity for 16 inch Spacing at 2 MHz (A16H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 16 inch at 400 KHz (A16L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Attenuation Resistivity for 22 inch Spacing at 2 MHz (A22H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 22 inch at 400 KHz (A22L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Attenuation Resistivity for 28 inch Spacing at 2 MHz (A28H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 28 inch at 400 KHz (A28L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Attenuation Resistivity for 34 inch Spacing at 2 MHz (A34H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 34 inch at 400 KHz (A34L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20
Uncorrected Attenuation Resistivity 40 inch at 2 MHz (A40H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 40 inch at 400 KHz (A40L_UNC) DV6MTN RM		
0.2	ohm.m	20	0.2	ohm.m	20

└TICK\_ARC\_RES - ARC Resistivity Samples DV6MTN RM

└TICK\_GR - Gamma Ray Samples DV6MTN RM

Description: ARC + sonicVISION Format: Log ( FINAL ECO LOG 3 ) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 30-Dec-2017 00:05:48

## Channel Processing Parameters

### Run 1: Parameters

Parameter	Description	Tool	Value	Unit
ABNT	Abnormal Transmitter Indicator	DV6MTN	NO_TX_FAILED	
BH_OPT	Borehole Effect Computation Option	DV6MTN	No	
BHK	Drilling Fluid Potassium Concentration	Borehole	0	%
BHT	Bottom Hole Temperature	Borehole	5	degC
BS	Bit Size	DNMSESSION	8.5	in
CALI_SEL_GR	Hole-Size Correction Source for Gamma-Ray Processing	DV6MTN	GCSE	
DEPTH_SEL	Depth Selection Parameter	DNMSESSION	Driller's Depth	
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
ERRCT	Percentage Error Cutoff	DV6MTN	4.5	%
GCSE_RM	Generalized Caliper Selection for DnM recorded mode	Borehole	BS	
GR_O2COR_OPT	Enable Gamma Ray Oxygen Activation Correction	DV6MTN	Yes	
GRSE_RM	Generalized Mud Resistivity Selection for Recorded Mode	Borehole	REMS(RM)	
GRSH	Gamma Ray Shale	DV6MTN	1000	gAPI
GTSE_RM	Generalized Temperature Selection for Recorded Mode	Borehole	DHAT(RM)	
HIGH_BLEND	High Resistivity Threshold for Blending	DV6MTN	2	ohm.m
INVAS_OPT	Invasion Computation Option	DV6MTN	No	
LOW_BLEND	Low Resistivity Threshold for Blending	DV6MTN	1	ohm.m
MST	Mud Sample Temperature	Borehole	23.89	degC
MSWS	ARCWizard Model Switch Window Size	DV6MTN	152.4	cm
MULTIEFF_OPT	Multi-effect Computation Option	DV6MTN	No	
OACF	O2 Activation Correction Factor (RM)	DV6MTN	8	
PRTD	ARCWizard Preferred Resistivity Log for Rt Display while Multi-Effects	DV6MTN	P34B	
RMS	Resistivity of Mud Sample	Borehole	0.2	ohm.m

RMC	Resistivity of Mud Sample	DV6MTN	0.2	Ohm.m
STOH	Top of Hole Sector	DV6MTN	SECTOR_0	
T1WM	ARCWizard Weight Multiplier to Measurements for Transmitter 1	DV6MTN	1	
T2WM	ARCWizard Weight Multiplier to Measurements for Transmitter 2	DV6MTN	1	
T3WM	ARCWizard Weight Multiplier to Measurements for Transmitter 3	DV6MTN	1	
T4WM	ARCWizard Weight Multiplier to Measurements for Transmitter 4	DV6MTN	1	
T5WM	ARCWizard Weight Multiplier to Measurements for Transmitter 5	DV6MTN	1	
TEMP_SEL_ARC	ARC Temperature Selection	DV6MTN	Annular	
UNIFORM_OPT	Uniform Rock Computation Option	DV6MTN	No	

## Tool Control Parameters

### Run 1: Parameters

Parameter	Description	Tool	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DNMSESSION	0.3	m

**Company:** IODP  
**Well:** U1518B  
**Field:** HSM-15A  
**Rig Name:** Joides Resolution  
**Expedition:** 372  
**Country:** New Zealand



EcoScope Resistivity  
1:240 Measured Depth  
Recorded Mode Data