Schlumberger

Company: **ESSO Australia Pty Ltd**

12.25 In. Section

Well: **SNA A26A**
Field: **Moonfish**
Rig: **ISDL 175** State: **Victoria**

Rig: ISDL 175
Field: Moonfish
Location: Bass Strait
Well: SNA A26A
Company: ESSO Australia Pty Ltd

VISION Resistivity
1:200 Measured Depth
Recorded Mode Log

Location			Elevation		
Total depth:	5486.0 m		K.B.	Top Drive	
Spud date:	14−Nov−08		G.L.	−55.0 m	
Runs:	1	To 2	D.F.	41.7 m	
Permanent datum:	Mean Sea Level		Elev.:	0.0 m	
Log measured from:	Drill Floor		41.7 m	above Perm. datum	
Depth reference:	Driller's Depth				

Service order no.	X = E 589,802.393 m	Longitude	Latitude
08ASQ0030	Y = N 5,772,182.250 m	E 148° 1' 31.906''	S 38° 11' 37.774''

Depth logged:	910.0 m To 5474.7 m	Mag decl:	13.001 deg.	Other services:	
Date logged:	15−Nov−08 To 25−Nov−08	Mag dip:	−68.688 deg.	See Remarks	

Bore hole record			Casing record			
Hole size	from	to	Size	Density	from	to
12.25 in.	871.0 m	5486.0 m	13.375 in.	54.5 lbm/m	27.1 m	913.4 m

Mud record			Borehole deviation record			
Type	from	to	Min	Max	from	to
Accolade SBM	871.0 m	5486.0 m	45.50 deg	83.98 deg.	871.0 m	5486.0 m

Surface equipment		Software record			
Unit	OLU−KC−0801	IDEAL Wis	ID14_0c_02		
Depth system	PDA/CLT	HSPM	13_1c_04		
		LWD	See Remarks		
		MWD	See Remarks		

Bit Run Summary

Run number		1	2
Bit size	in	12.25	12.25
Bit start depth	m	871.0	976.0
Bit end depth	m	976.0	5486.0
Top interval logged	m	910.0	964.6
Bottom interval logged	m	964.6	5474.7
Begin log: time		09:10	16:25
Begin log: date		15−Nov−08	17−Nov−08
End log: time		17:10	22:44
End log: date		15−Nov−08	25−Nov−08
Mud data			
Depth	m	975.0	5486.0
Type		Accolade SBM	Accolade SBM
Mud weight	ppg	11.8	11.8
Solids	%	20	24
Chlorides	mg/L	46,835	39,296
Rm	ohm.m@°C	n.a	n.a
Rmf	ohm.m@°C	n.a	n.a
Rmc	ohm.m@°C	n.a	n.a

Potassium	%	n.a	n.a								
Environmental data											
GR											
Mud weight	ppg	11.8	11.8								
Bit size	in	12.25	12.25								
Resistivity											
Neutron porosity											
Hole Size	in	12.25	12.25								
Mud weight	ppg	11.8	11.8								
Temperature	°C	n.a	n.a								
Mud salinity	ppk	n.a	n.a								
Formation salinity		n.a	n.a								
Recording rate 1	SEC	6 (ARC)	6 (ARC)								
Recording rate 2	SEC	n.a	n.a								
Filtering GR		3 pts.	3 pts.								
Filtering density		n.a	n.a								
Filtering Neutron		n.a	n.a								
Company representative		G. Doty	R. Moore	A. Zernov	M. Calicutt						
Anadrill personnel		J. Oldridge	B. Low	R. Yap	C. Soper	D. B. Khanh					

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 OF 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.

OTHER SERVICES FOR RUN1	OTHER SERVICES FOR RUN2	
Directional Drilling Directional Surveys Annular Pressure & Temperature Shock & Vibrations	Directional Drilling Directional Surveys Annular Pressure & Temperature Shock & Vibrations	
REMARKS: RUN NUMBER 1 Depth is referenced to Driller's depth Gamma ray is corrected for mud weight, tool size and bit size Resistivity is borehole compensated and environmentally corrected POOH to change the bit	REMARKS: RUN NUMBER 2 Depth is referenced to Driller's depth Gamma ray is corrected for mud weight, tool size and bit size Resistivity is borehole compensated and environmentally corrected POOH due to reaching TD of 12.25" section	

EQUIPMENT DESCRIPTION

RUN1	RUN2	
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT	

DOWNHOLE EQUIPMENT

8−1/4" TeleScope* 23.71
S/N: E0416
DHS: 9.2C02

D&I 19.39
MVC 18.74

8−1/4" arcVISION* 14.76
S/N: 1854
DHS: 9.3B13

Gamma Ray 11.41
Resistivity 11.36

APWD 10.65

9" PowerDrive Xceed* 8.92
S/N: 015

12−1/4" Hycalog Milltooth 0.00 0.33
S/N: EL6428

Maximum string diameter 12−1/4"
All lengths in Meters

DOWNHOLE EQUIPMENT

8−1/4" TeleScope* 23.65
S/N: E0416
DHS: 9.2C02

D&I 19.34
MVC 18.69

8−1/4" arcVISION* 14.71
S/N: 1854
DHS: 9.3B13

Gamma Ray 11.36
Resistivity 11.31

APWD 10.60

9" PowerDrive Xceed* 8.87
S/N: 015

12−1/4" Hycalog PDC 0.00 0.28
S/N: 220374

Maximum string diameter 12−1/4"
All lengths in Meters

Variable Name	Variable Description	Run Name & Value		
	Run Number		1	2
	General Information			
BHT_RM	Bottom Hole Temperature (RM)	DEGC	60.000	100.000
BSAL_RM	Mud Salinity (RM)	PPK	0.000	0.000
BS_RM	Bit Size (RM)	IN	12.250	12.250
COEF_M	User Defined FEXP in Clean Sand	----	1.650	1.650
C_WS	Overpressure correction to Sw and M	----	1.000	1.000
FEXP	Formation Factor Exponent(RM)	----	2.000	2.000
FNUM	Formation Factor Enumerator(RM)	----	1.000	1.000
FPHI_RM	Formation Factor Porosity Source (RM)	----	XPLOT	XPLOT
MST_RM	Mud Sample temperature (RM)	DEGC	23.889	23.889
MW_RM	Mud Weight (RM)	LB/G	11.800	11.800
OBMF_RM	Oil Based Mud (RM)	----	YES	YES
RHOF_RM	Mud Filtrate Density (RM)	G/C3	1.000	1.000
RHOM_RM	Matrix density (RM)	G/C3	2.710	2.710
RMS_RM	Resistivity of Mud Sample (RM)	OHMM	1000.000	1000.000
RWA_COMP_M	Rwa computation model			
RWA_DEN_AD	Rwa Density Input ADN			
RWA_DEN_CD	Rwa Density Input CDN			
RWA_DEN_IN	Rwa Density Input			
RWA_FORM_M	Rwa computation formation model			
RWA_RES_IN	Rwa computation resistivity input			
RWS_RM	Resistivity of Connate Water (RM)	OHMM	1.000	1.000
SHT_RM	Ground Level Temperature (Mud-Line When Offshore) (RM)	DEGC	10.000	10.000
TD_RM	Total Measured Depth (RM)	M	976.000	5486.000
TWS_RM	Temperature of Connate Water (RM)	DEGC	23.889	23.889
VF_ILLI	Fraction of illite in shales	----	0.500	0.500
VF_KAOL	Fraction of kaolinite in shales	----	0.500	0.500
VF_MONT	Fraction of montmorillonite in shales	----	0.000	0.000
XPDM_RM	Cross plot density porosity multiplier	----	0.675	0.675
XPNM_RM	Cross plot neutron porosity multiplier	----	0.325	0.325
	ARC			
A12A	ARC Air Cal Attenuation From T1 at 2 MHz	DB	8.716	8.716
A14A	ARC Air Cal Attenuation From T1 at 400 KHz	DB	8.764	8.764
A22A	ARC Air Cal Attenuation From T2 at 2 MHz	DB	5.935	5.935
A24A	ARC Air Cal Attenuation From T2 at 400 KHz	DB	5.895	5.895
A32A	ARC Air Cal Attenuation From T3 at 2 MHz	DB	5.434	5.434
A34A	ARC Air Cal Attenuation From T3 at 400 KHz	DB	5.482	5.482
A42A	ARC Air Cal Attenuation From T4 at 2 MHz	DB	3.893	3.893
A44A	**ARC Air Cal Attenuation From T4 at 400 KHz**	**DB**	**3.852**	**3.852**
A52A	**ARC Air Cal Attenuation From T5 at 2 MHz**	**DB**	**4.028**	**4.028**
A54A	ARC Air Cal Attenuation From T5 at 400 KHz	DB	4.078	4.078
ABNT	Abnormal Transmitter Indicator	----	No_Tx_Failed	No_Tx_Failed
ADHS	ARC Down Hole Software Version	----	9.3B13	9.3B13
AM2A	ARC Air Cal Amplitude Offset at 2 MHz	----	-50000.000	-50000.000
ANISO_COMPUTE	Anisotropy Computation Option	----	YES	YES
APICG	ARC5 Gamma Ray Gain Factor	----	1.081	1.081
APIG	ARC Gamma Ray API Gain Factor	----	-1.000	-1.000
ARC_DATA_FIX	ARC: Create A Corrected ARC Time Data File	----	NO	NO
ARC_DATA_LTB	ARC: Create An ARC LTB Data File	----	NO	NO
ATMP_ARC	ARC Select Temperature Channel	----	Annulus_Temp	Annulus_Temp
ATRN	ARC Tool Run Number	----	1	2
ATSN	ARC Tool Serial Number	----	1854	1854
AZMF	Formation DIP Azimuth	DEG	0.000	0.000
BH_COMPUTE	Borehole Inversion Computation Option	----	YES	YES
CALG	ARC Gamma Ray Cal Gain Factor	----	1.081	1.081
CALI_SLCT_ARC	ARC Caliper Selection	----	BITSIZE	BITSIZE
CDPTH_ARC	Process Start Depth	M	30.480	30.480
DIELEC_COMPUTE	Dielectric Computation Option	----	YES	YES
DIPF	Formation DIP Angle	DEG	0.000	0.000
ERRCT	Percentage Error Cutoff	----	4.500	4.500
GRSH	GR Shale (Invasion Computation Cutoff)	GAPI	1000.000	1000.000
HIGH_BLEND	High Resistivity Threshold for Blending	OHMM	2.000	2.000
INCLIN_B0	ARC Bias Constant (mg)	----	0.000	0.000
INCLIN_B1	ARC Bias First-order Coefficient (mg/degC)	----	0.000	0.000
INCLIN_B2	ARC Bias Secod-order Coeeficient (mg/degC)	----	0.000	0.000
INCLIN_B3	ARC Bias Third-order Coeeficient (mg/degC)	----	0.000	0.000
INCLIN_C0	ARC Current Scale Factor Constant (mA/g)	----	1.000	1.000
INCLIN_C1	ARC Scale First-order Coeeficient (mA/g/degC)	----	0.000	0.000
INCLIN_C2	ARC Scale Second-order Coeeficient (mA/g/degC)	----	0.000	0.000
INCLIN_C3	ARC Scale Third-order Coeeficient (mA/g/degC)	----	0.000	0.000
INVAS_COMPUTE	Invasion Computation Option	----	YES	YES
JSD_ARC	ARC Acquisition start date	----	15-Nov-08	17-Nov-08
KPER	Potassium Concentration (RM)	----	0.000	0.000
LOW_BLEND	Low Resistivity Threshold for Blending	OHMM	1.000	1.000
MSWS	ARC Wizard Model Switch Window	M	1.524	1.524
MULTIEFFECT_COM	Multi Effect Option	----	YES	YES
P11AC_RM	ARC: Air Calibration For Phase T1 to R1	DEG	-999.250	-999.250
P12A	ARC Air Cal Phase-Shift From T1 at 2 MHz	DEG	1.231	1.231
P14A	ARC Air Cal Phase-Shift From T1 at 400 KHz	DEG	-0.203	-0.203
P22A	ARC Air Cal Phase-Shift From T2 at 2 MHz	DEG	-1.167	-1.167
P24A	ARC Air Cal Phase-Shift From T2 at 400 KHz	DEG	0.115	0.115
P32A	ARC Air Cal Phase-Shift From T3 at 2 MHz	DEG	1.139	1.139
P34A	ARC Air Cal Phase-Shift From T3 at 400 KHz	DEG	-0.177	-0.177
P42A	ARC Air Cal Phase-Shift From T4 at 2 MHz	DEG	-1.211	-1.211
P44A	ARC Air Cal Phase-Shift From T4 at 400 KHz	DEG	0.144	0.144
P52A	ARC Air Cal Phase-Shift From T5 at 2 MHz	DEG	1.153	1.153
P54A	ARC Air Cal Phase-Shift From T5 at 400 KHz	DEG	-0.177	-0.177

POFFSET_ARC	ARC: Pressure Offset	PSI	0.000	0.000
PRTD	Preferred Resistivity Log for Rt Display while Multi-Effects	----	P34B	P34B
PSOF_ADJ_T1	ARC: User Input Phase offset	DEG	0.000	0.000
RESTIK	ARC resistivity tick source	----	Phase	Phase
RSD	LWD run start date dd-mmm-yy	----	15-Nov-08	17-Nov-08
RWA_COMP_MOD	Rwa computation model	----	BASIC	BASIC
RWA_DEN_ADN	Rwa Density Input	----	RHOB	RHOB
RWA_DEN_CDN	Rwa Density Input	----	RHOB	RHOB
RWA_DEN_INPUT	Rwa Density Input	----	RHOB	RHOB
RWA_FORM_MOD	Rwa computation formation model	----	CLASTIC	CLASTIC
RWA_RES_INPUT	Rwa computation resistivity input	----	P34H	P34H
SHIG	ARC High Shock Risk Level	CPS	0.500	0.500
SMED	ARC Medium Shock Risk Level	CPS	0.330	0.330
SMIN	ARC Minimum Shock Risk Level	CPS	0.160	0.160
SUPD	ARC Real Time Shock Update Rate	S	30.000	30.000
TCODE_ARC	ARC Tool File Code	S	30.000	30.000
TSIZ_ARC	ARC Tool Size	IN	8.250	8.250
UNIFORM_COMPUTE	Uniform Rock Option	----	YES	YES
VERS_ARC	ARC Down hole software version Number	----	9.300	9.300
WRK	to Report Potassium Concentration (RM)	----	K_by_Wgt_%	K_by_Wgt_%

Schlumberger Drilling & Measurements ID13 Parameter Insert Header Software version 3.0c

IDEAL Version: ID14_0C_02

IDF

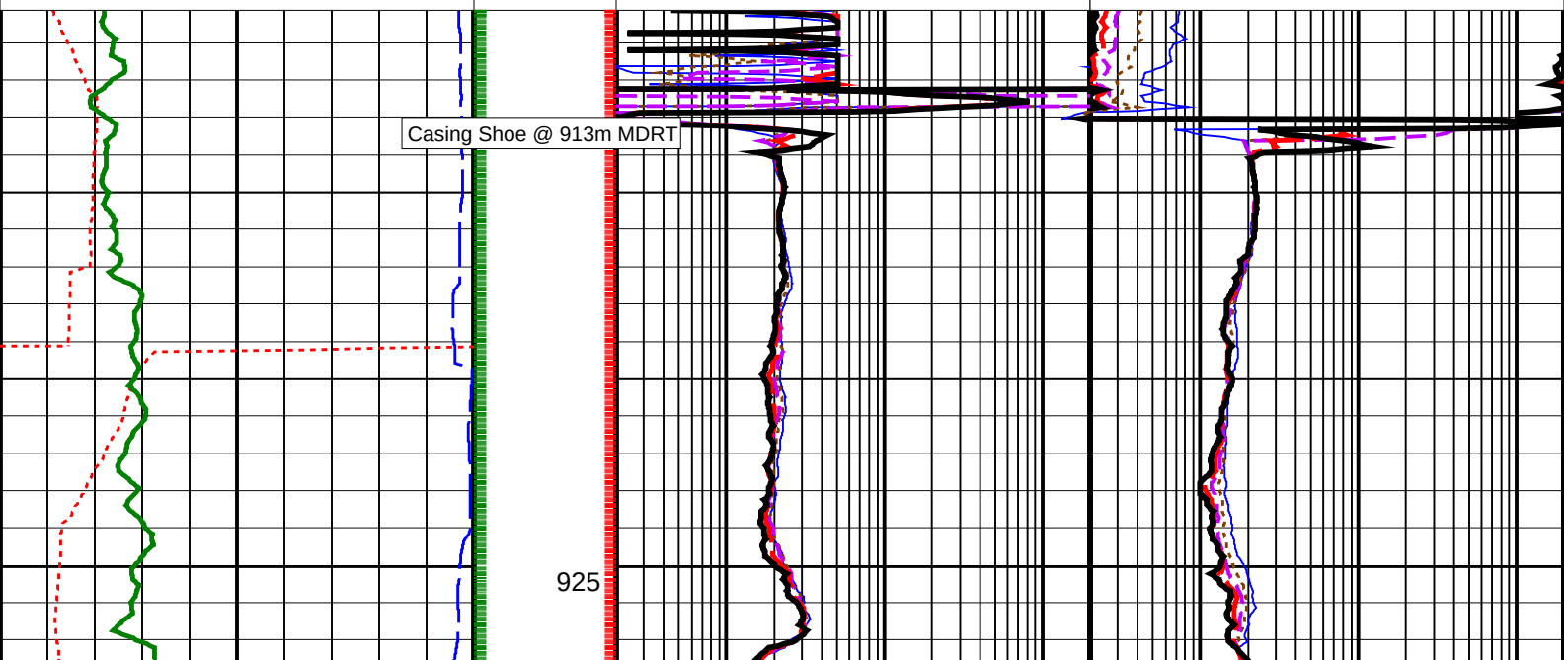
Format: VISION Resistivity 2MHz **Vertical Scale: 1:200** **Graphics File Created: 06−Dec−2008 21:09**

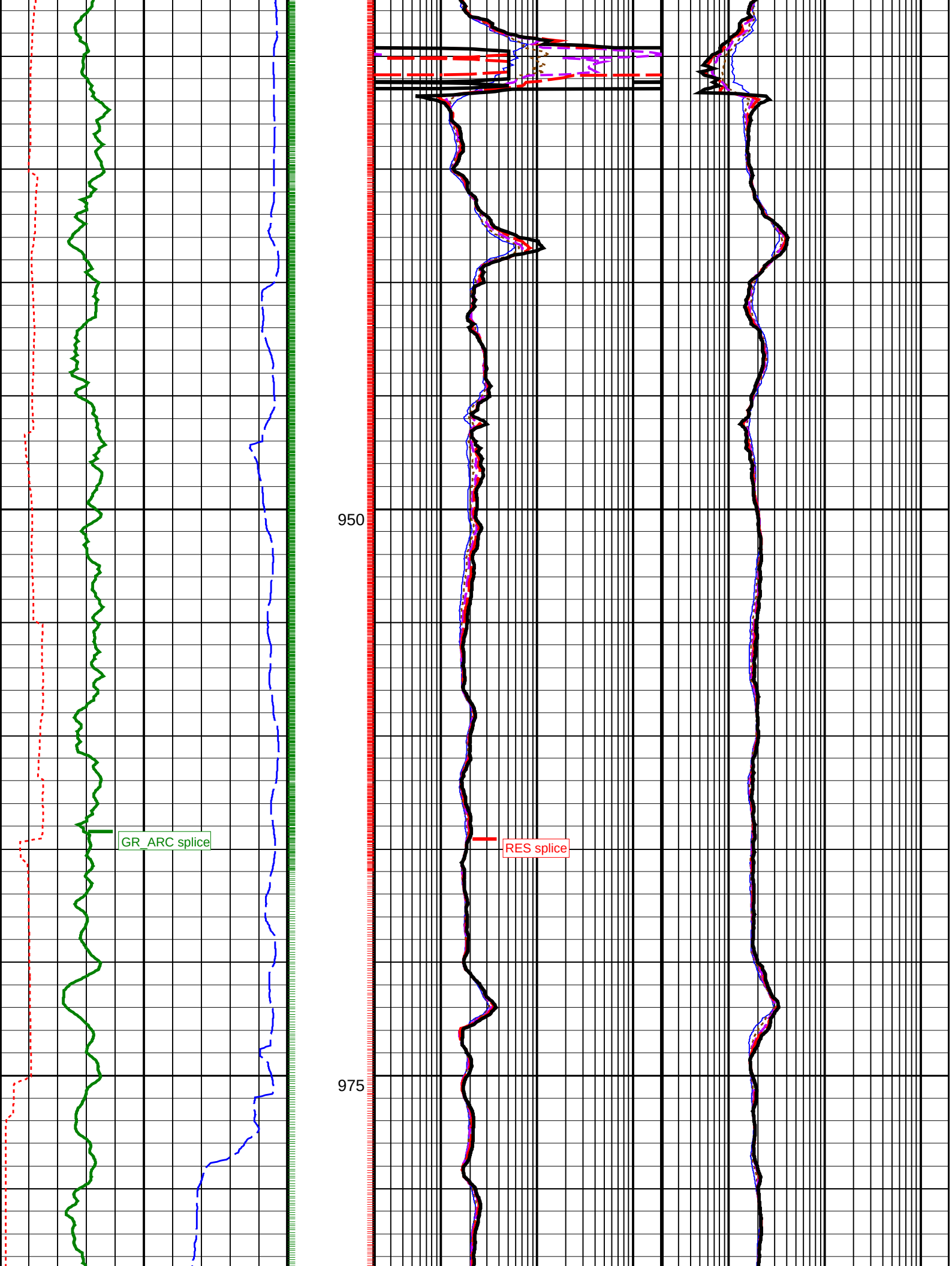
PIP SUMMARY

ARC Gamma Ray Samples

ARC Resistivity Samples

Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 200 (M/HR) 0	ARC Phase−Shift Resistivity 40−in. at 2 MHz (P40H) 0.2 (OHMM) 200	ARC Attenuation Resistivity 40−in. at 2 MHz (A40H) 0.2 (OHMM) 200
ARC Resistivity Time After Bit (TAB_ARC_RES) 0 (HR) 10	ARC Phase−Shift Resistivity 34−in. at 2 MHz (P34H) 0.2 (OHMM) 200	ARC Attenuation Resistivity 34−in. at 2 MHz (A34H) 0.2 (OHMM) 200
ARC Gamma Ray (GR_ARC) 0 (GAPI) 200	ARC Phase−Shift Resistivity 28−in. at 2 MHz (P28H) 0.2 (OHMM) 200	ARC Attenuation Resistivity 28−in. at 2 MHz (A28H) 0.2 (OHMM) 200
	ARC Phase−Shift Resistivity 22−in. at 2 MHz (P22H) 0.2 (OHMM) 200	ARC Attenuation Resistivity 22−in. at 2 MHz (A22H) 0.2 (OHMM) 200
	ARC Phase−Shift Resistivity 16−in. at 2 MHz (P16H) 0.2 (OHMM) 200	ARC Attenuation Resistivity 16−in. at 2 MHz (A16H) 0.2 (OHMM) 200

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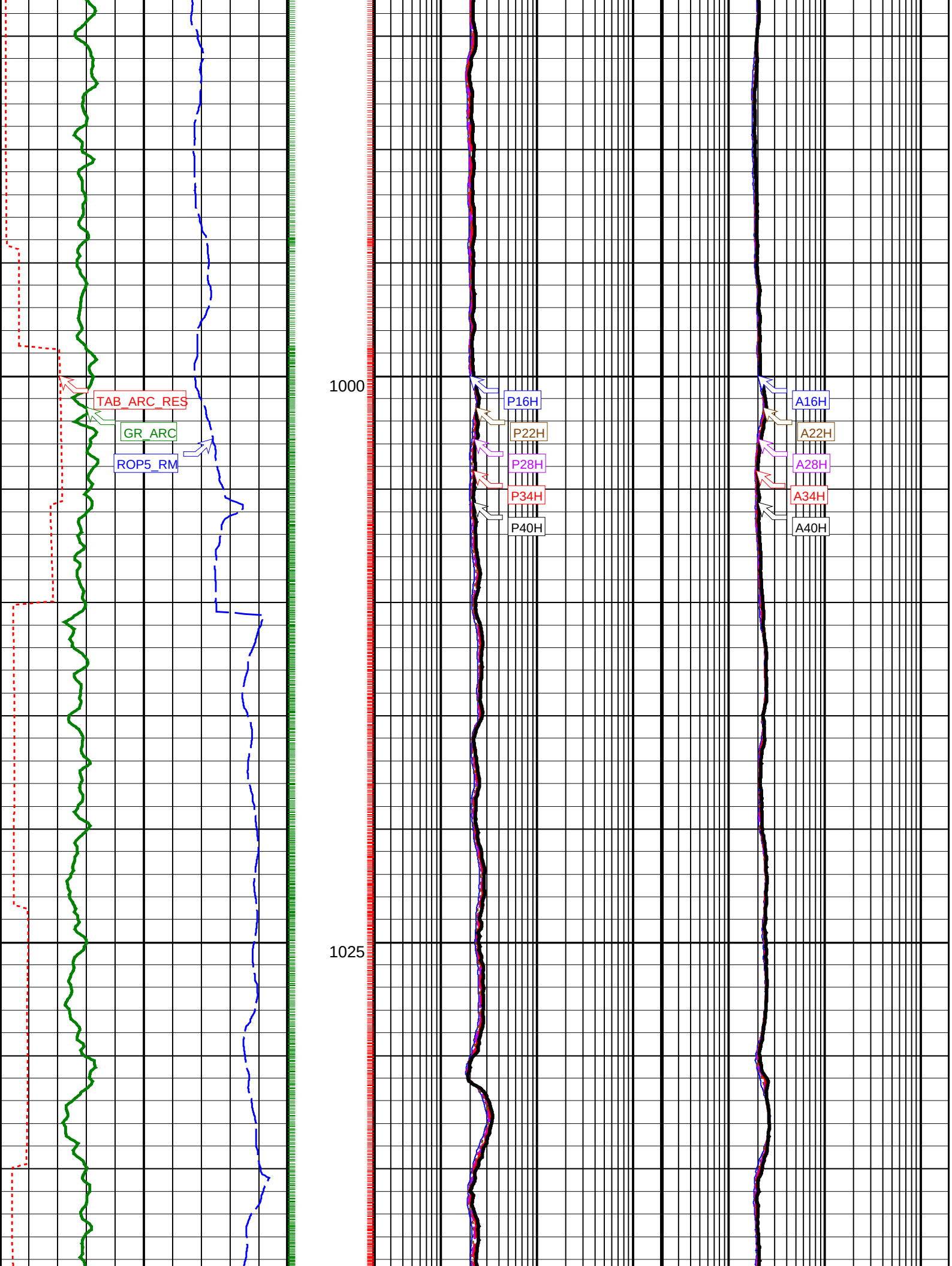
975
RES splice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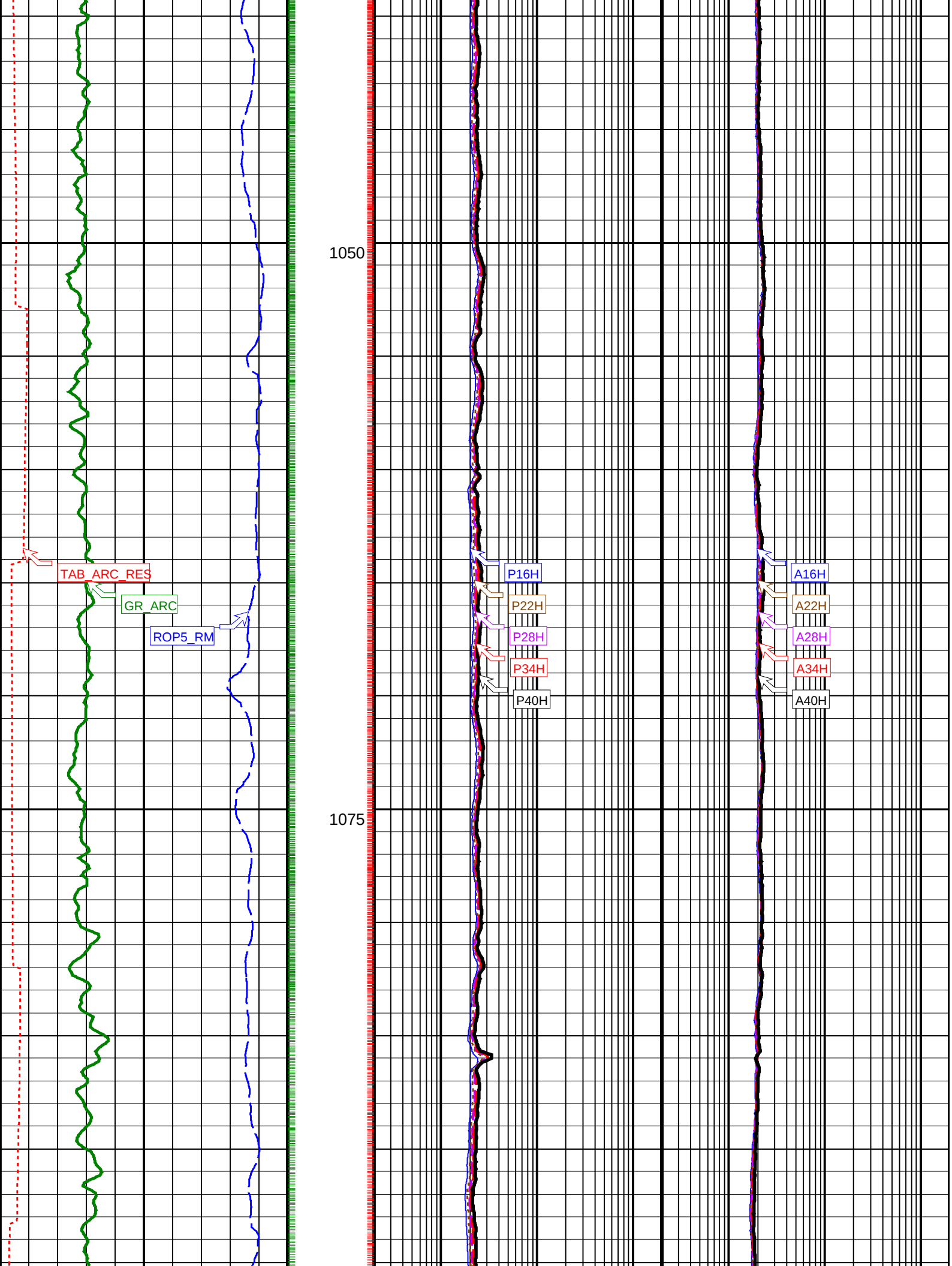
A40H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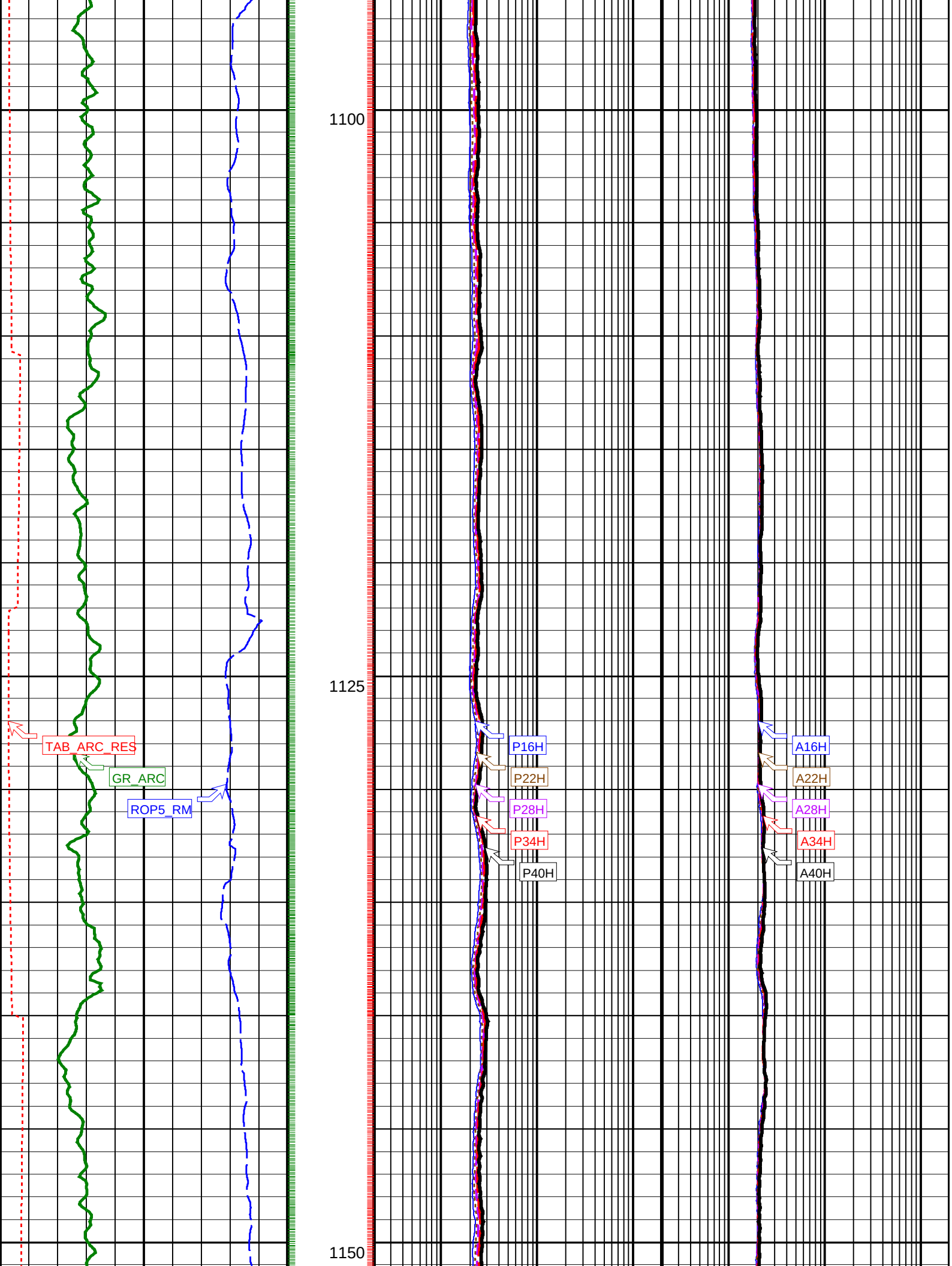
A40H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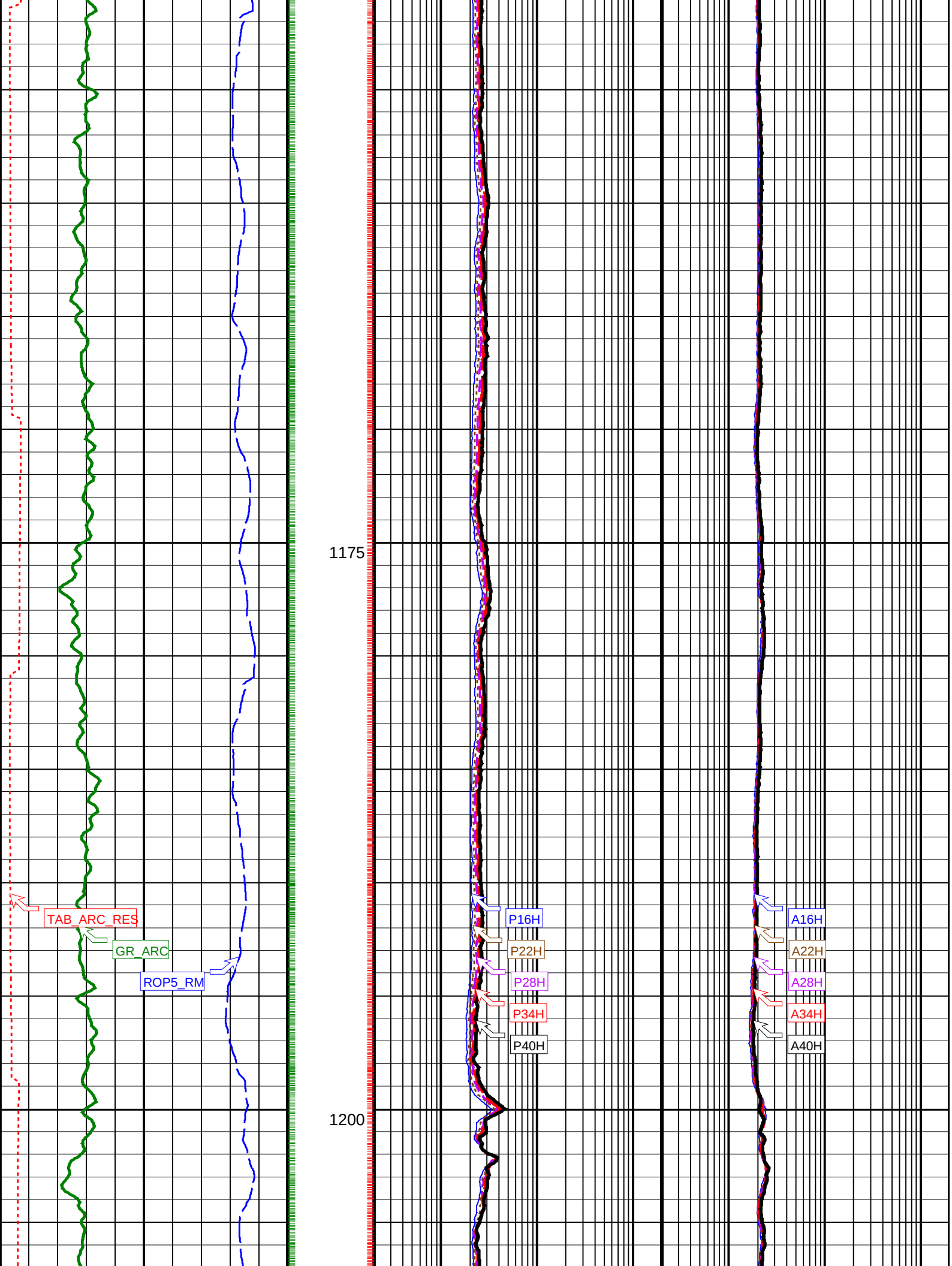
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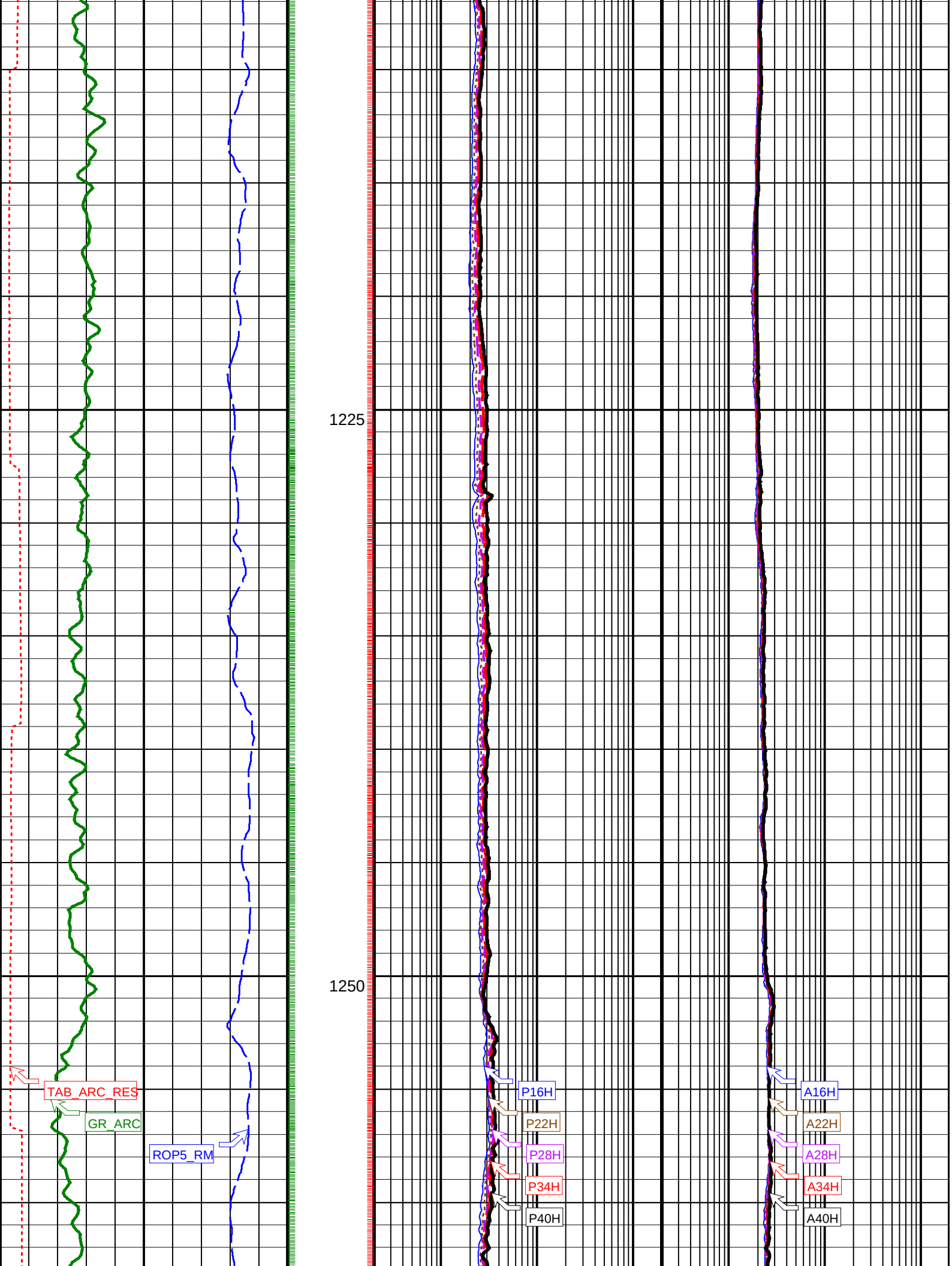
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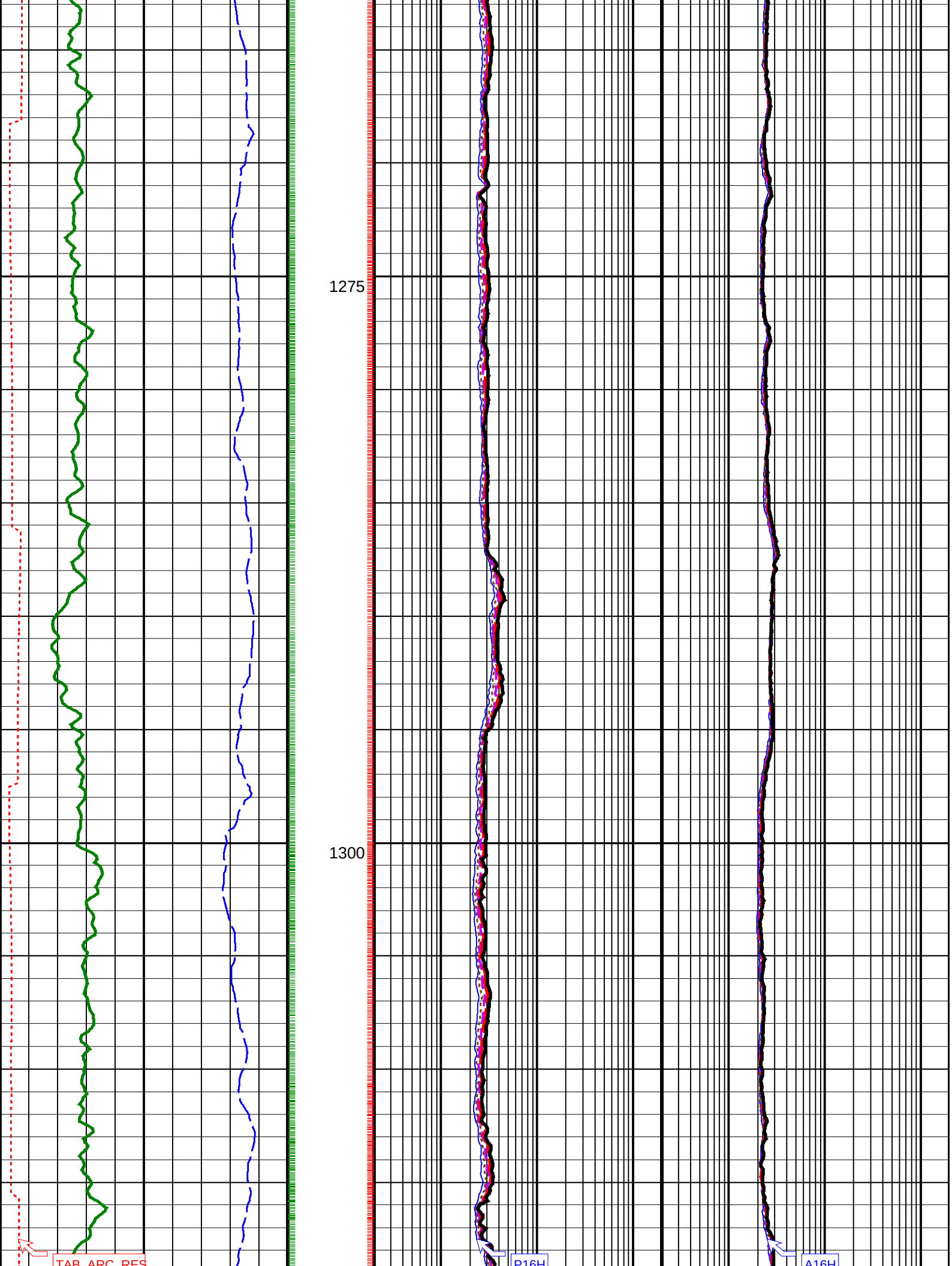
A40H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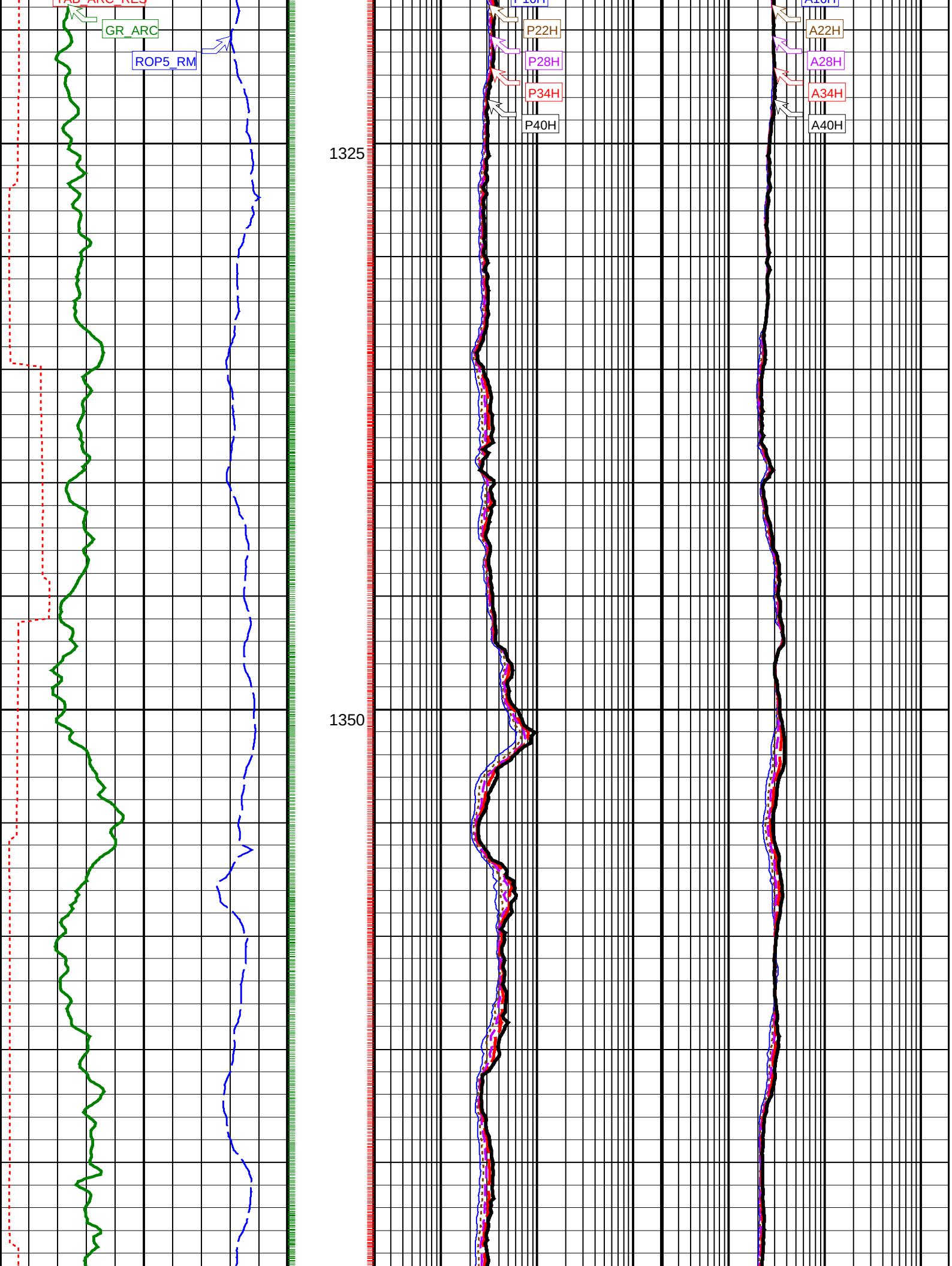
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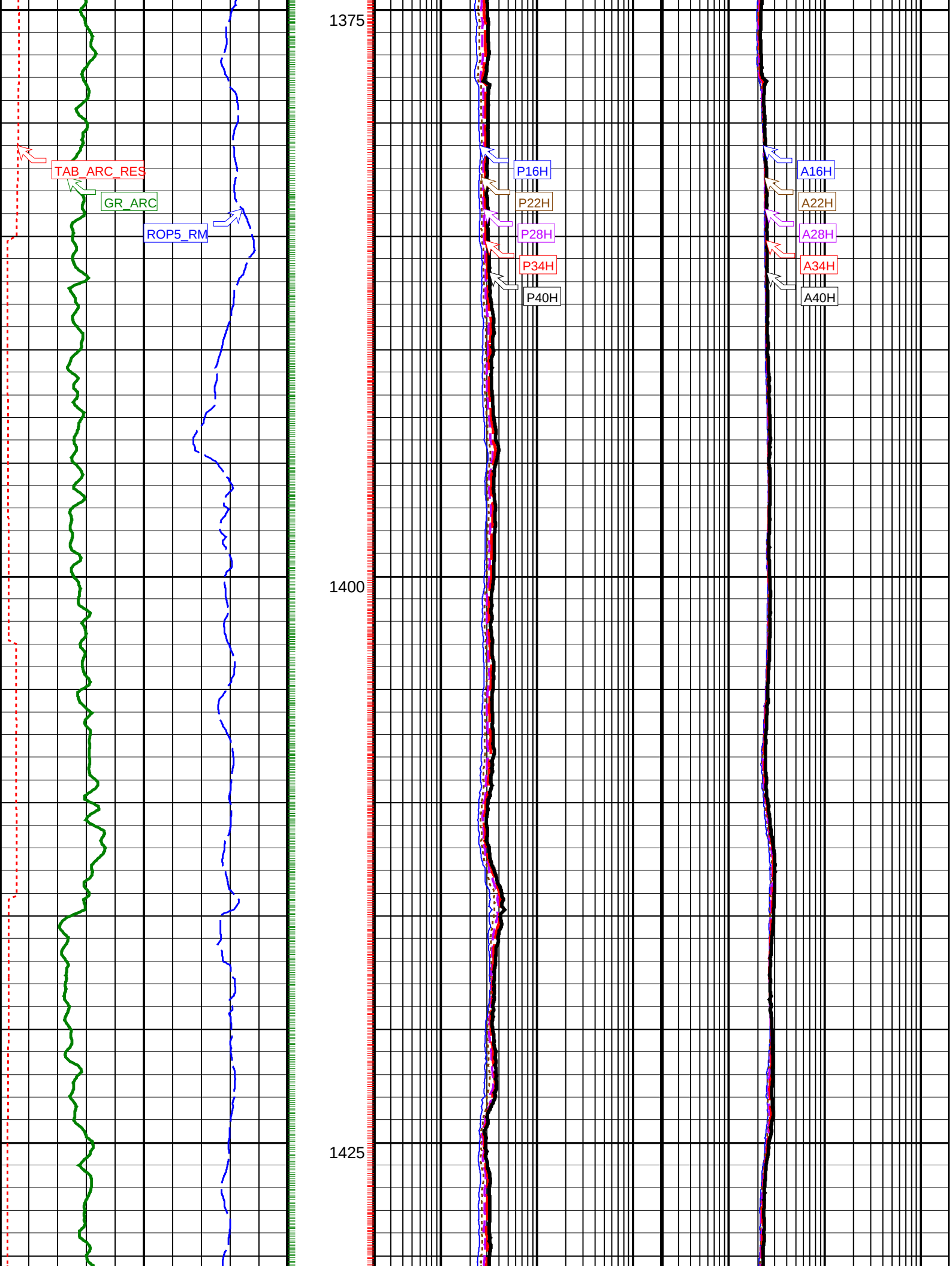
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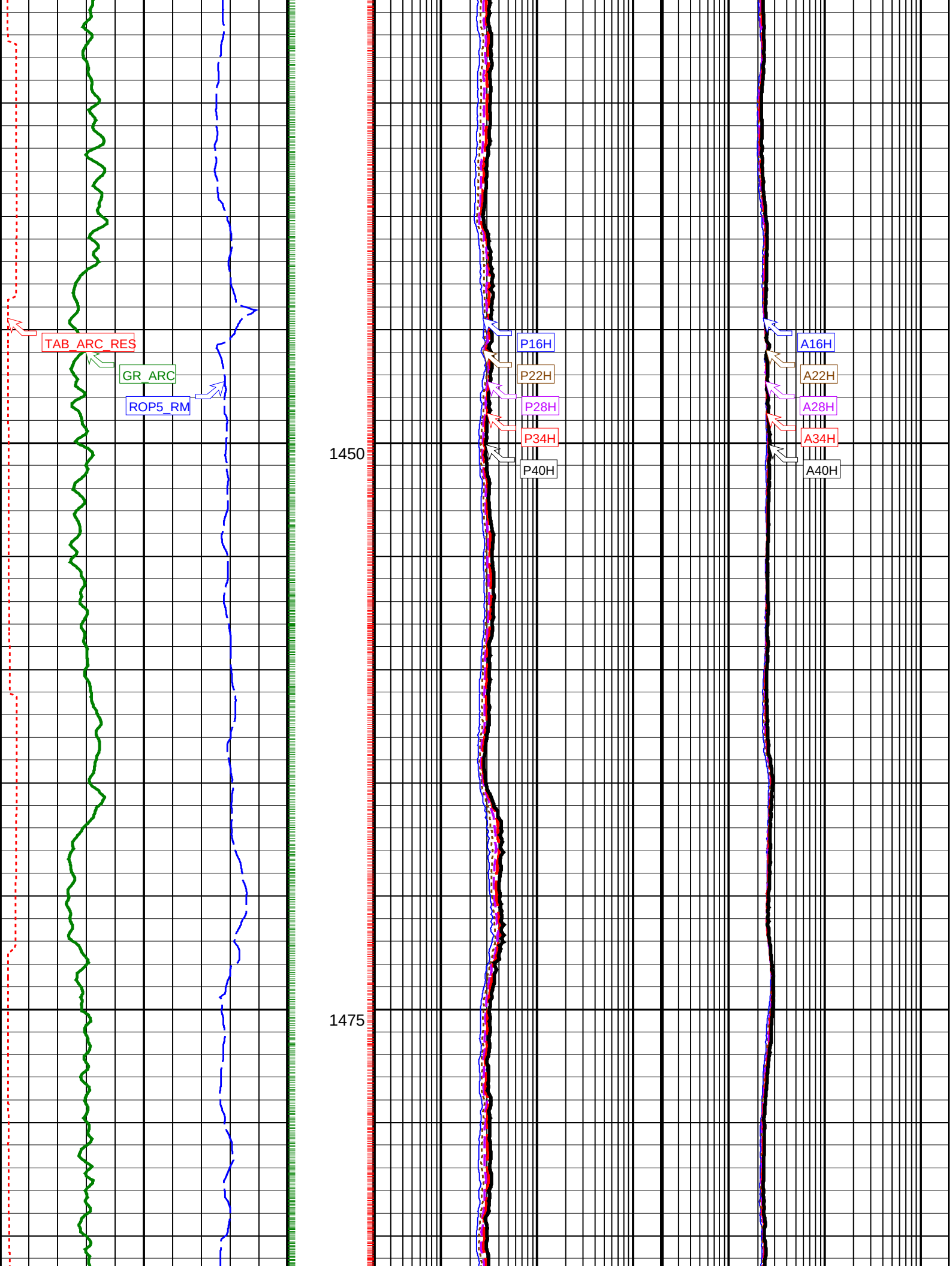
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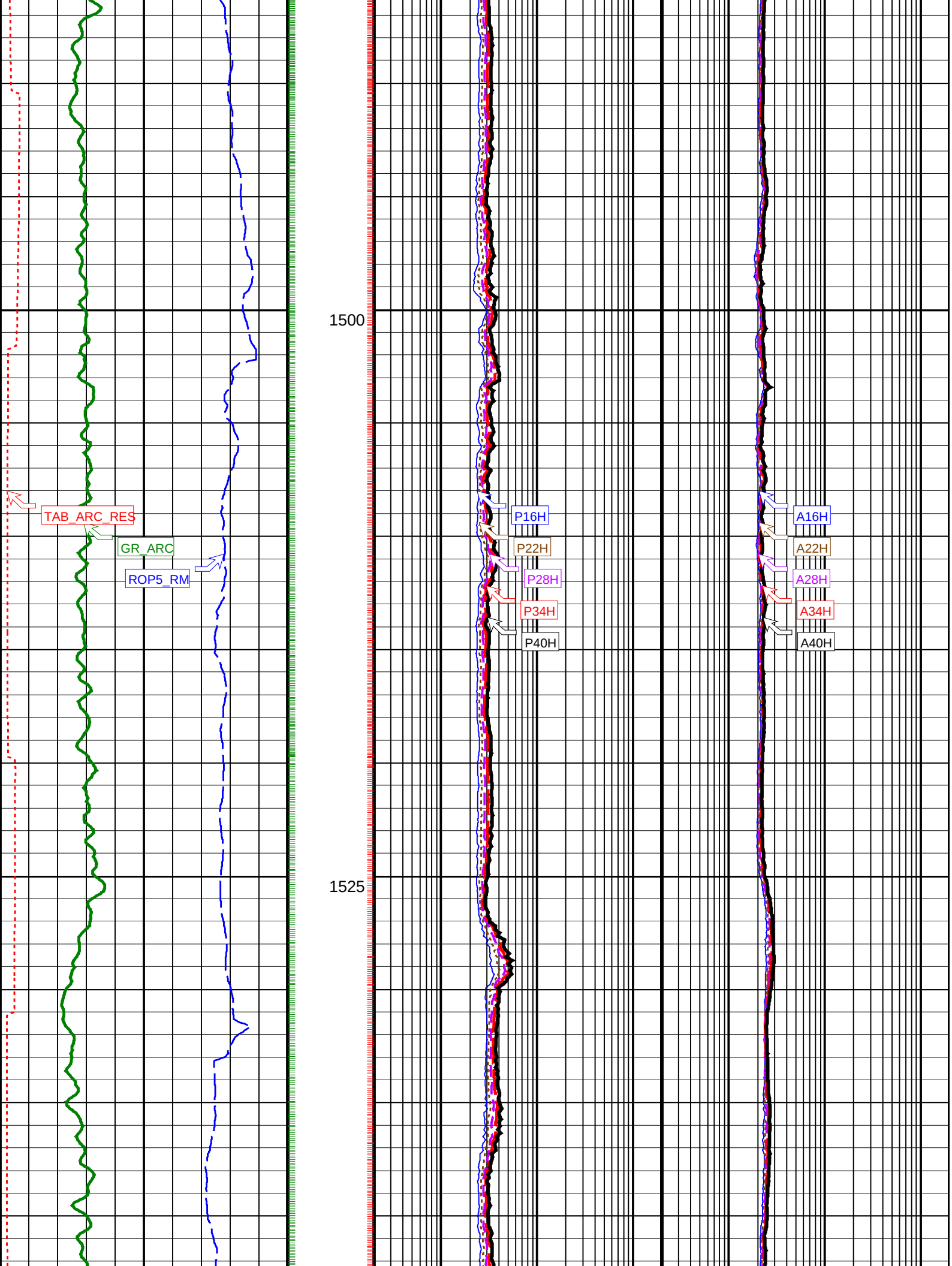
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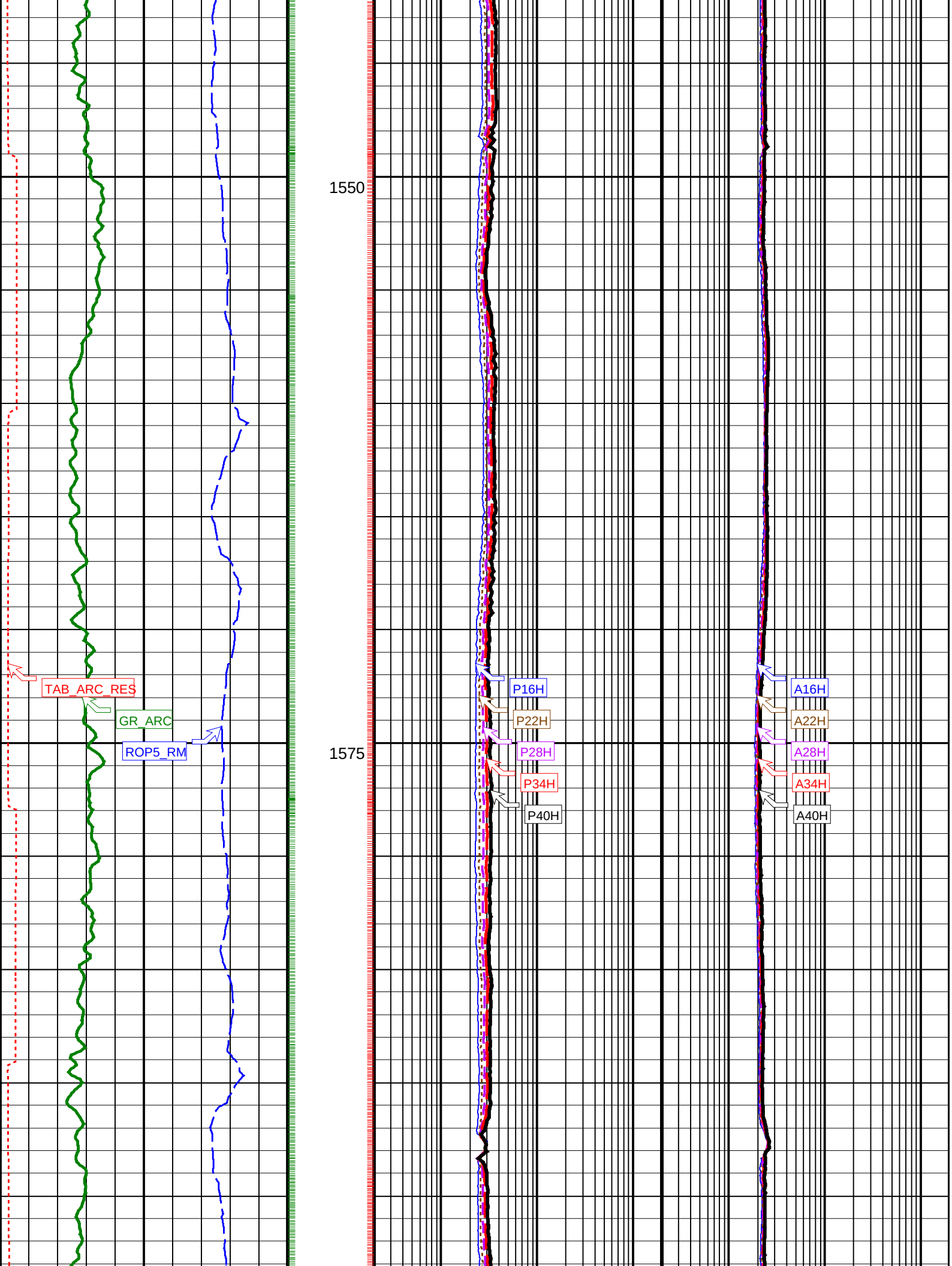
A28H
A34H
A40H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ROP5_RM
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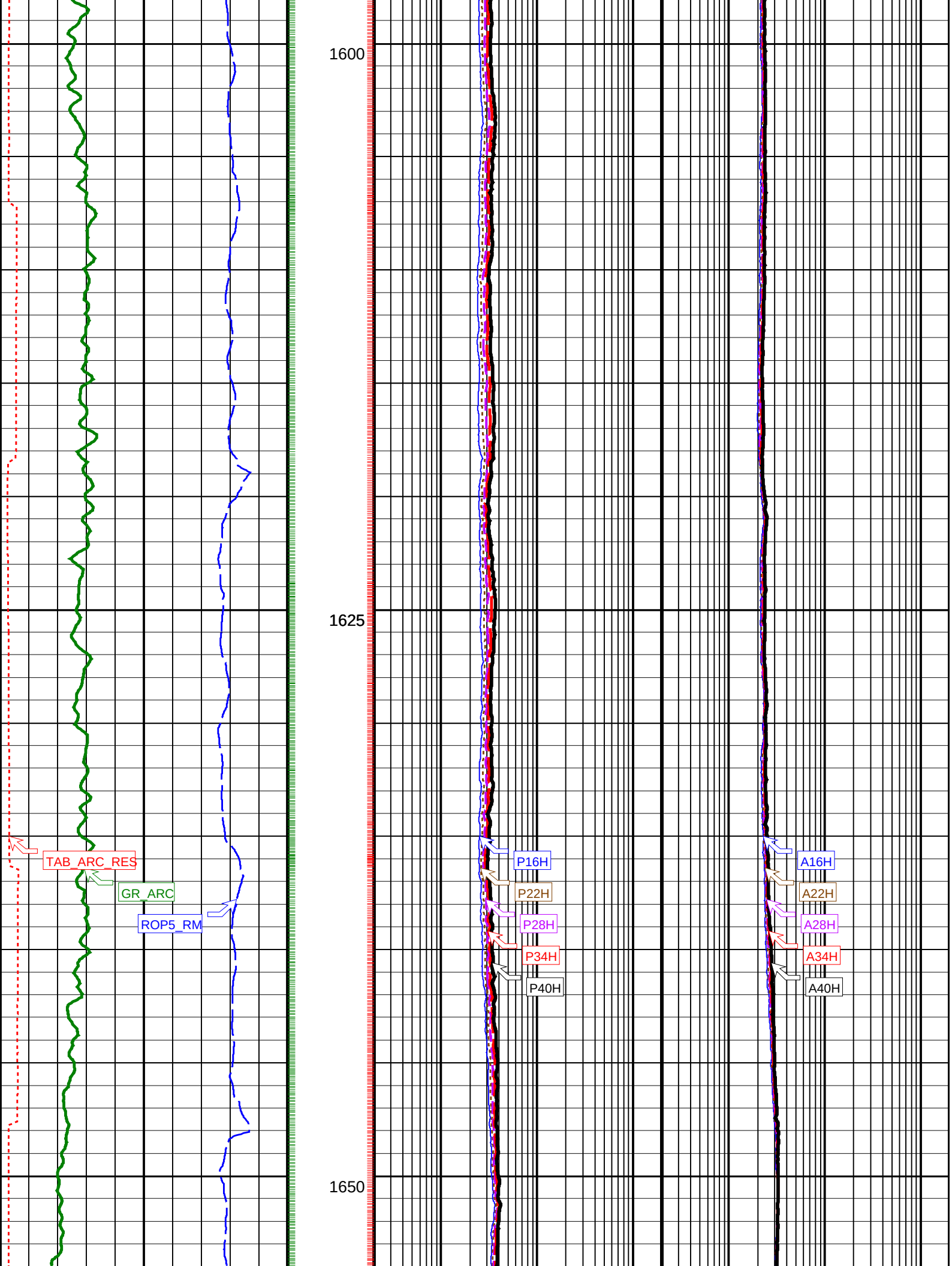
A28H
A34H
A40H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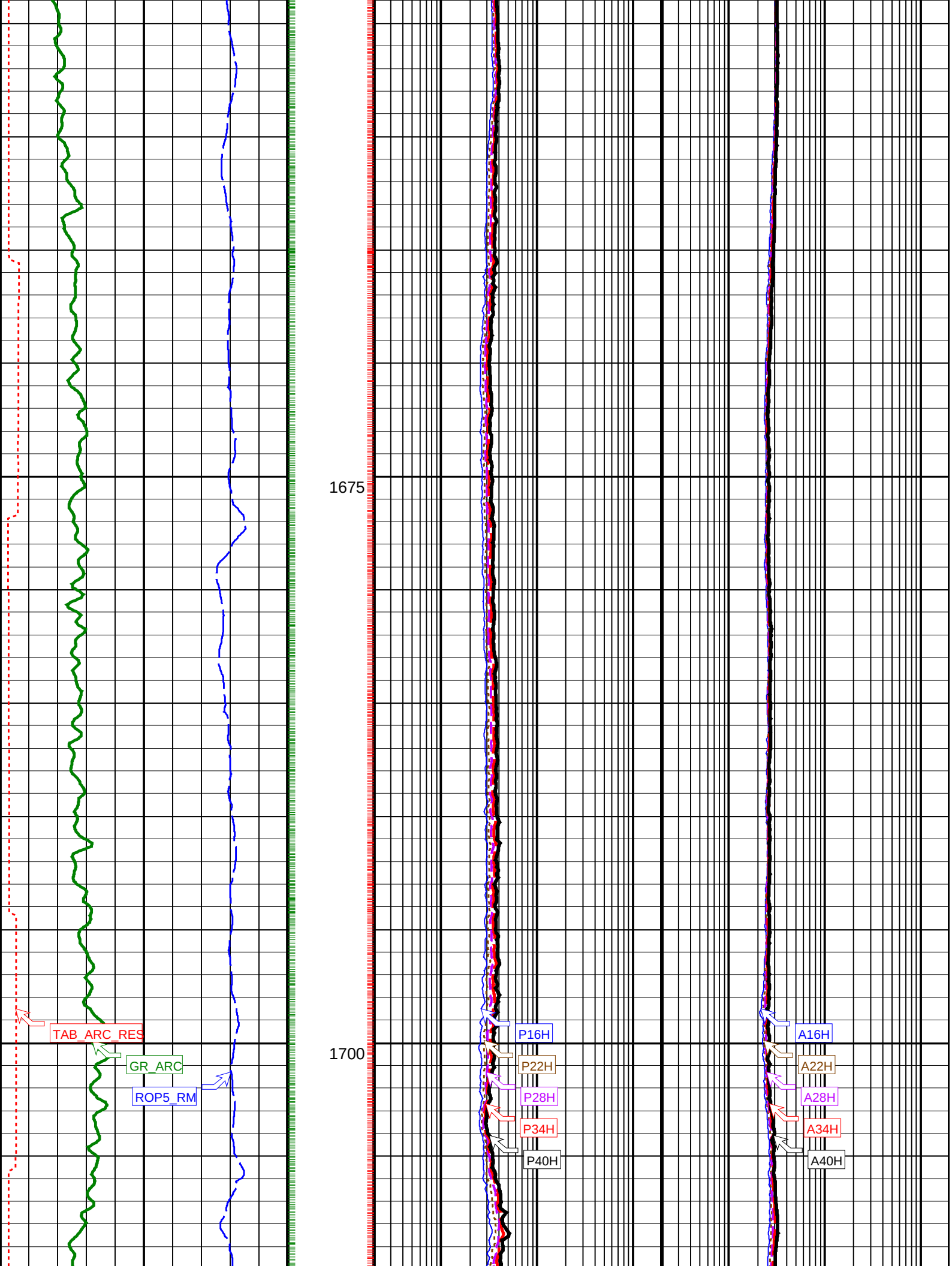
A34H
A40H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P34H
P40H
A16H
A22H
A28H
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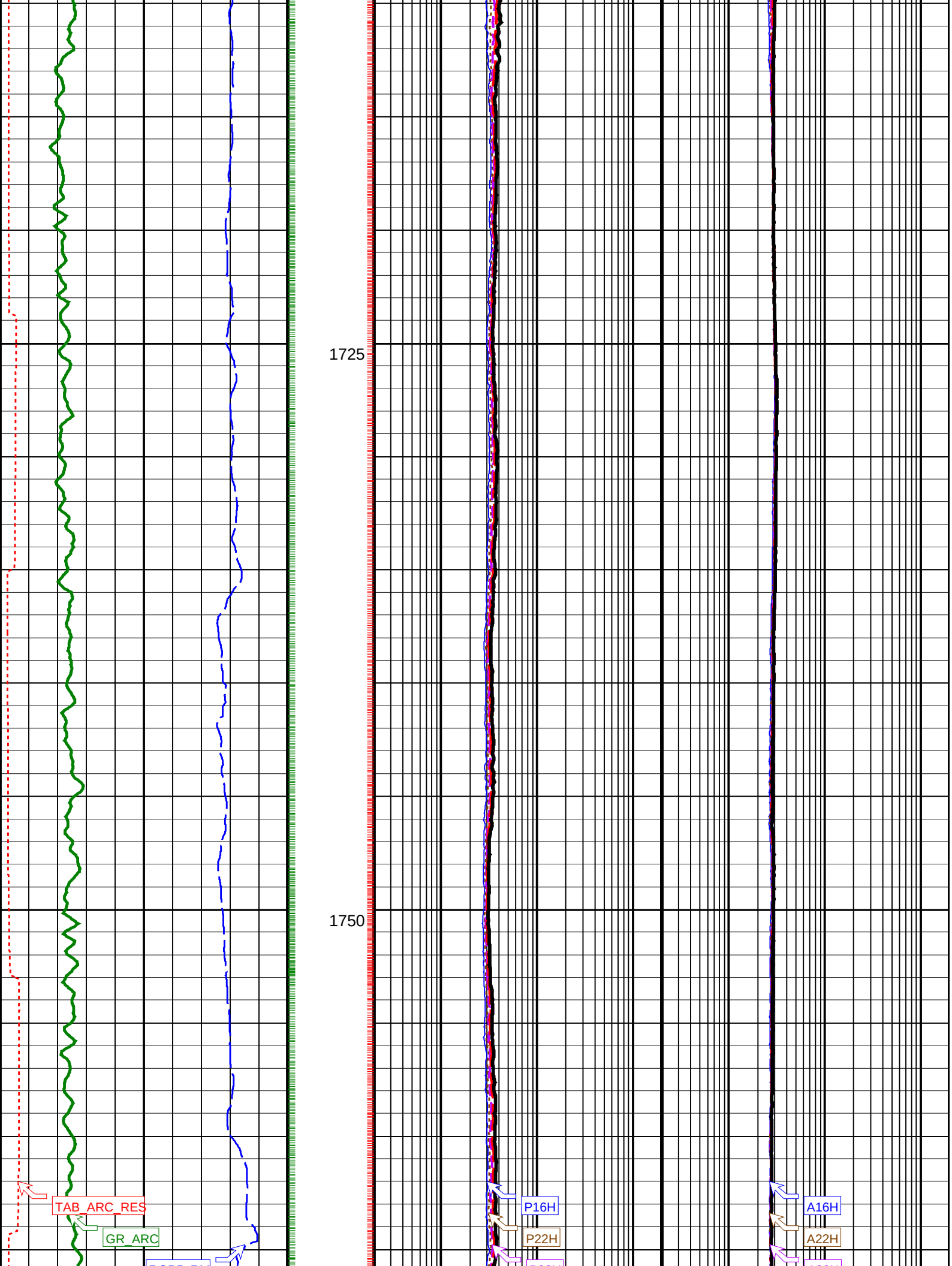
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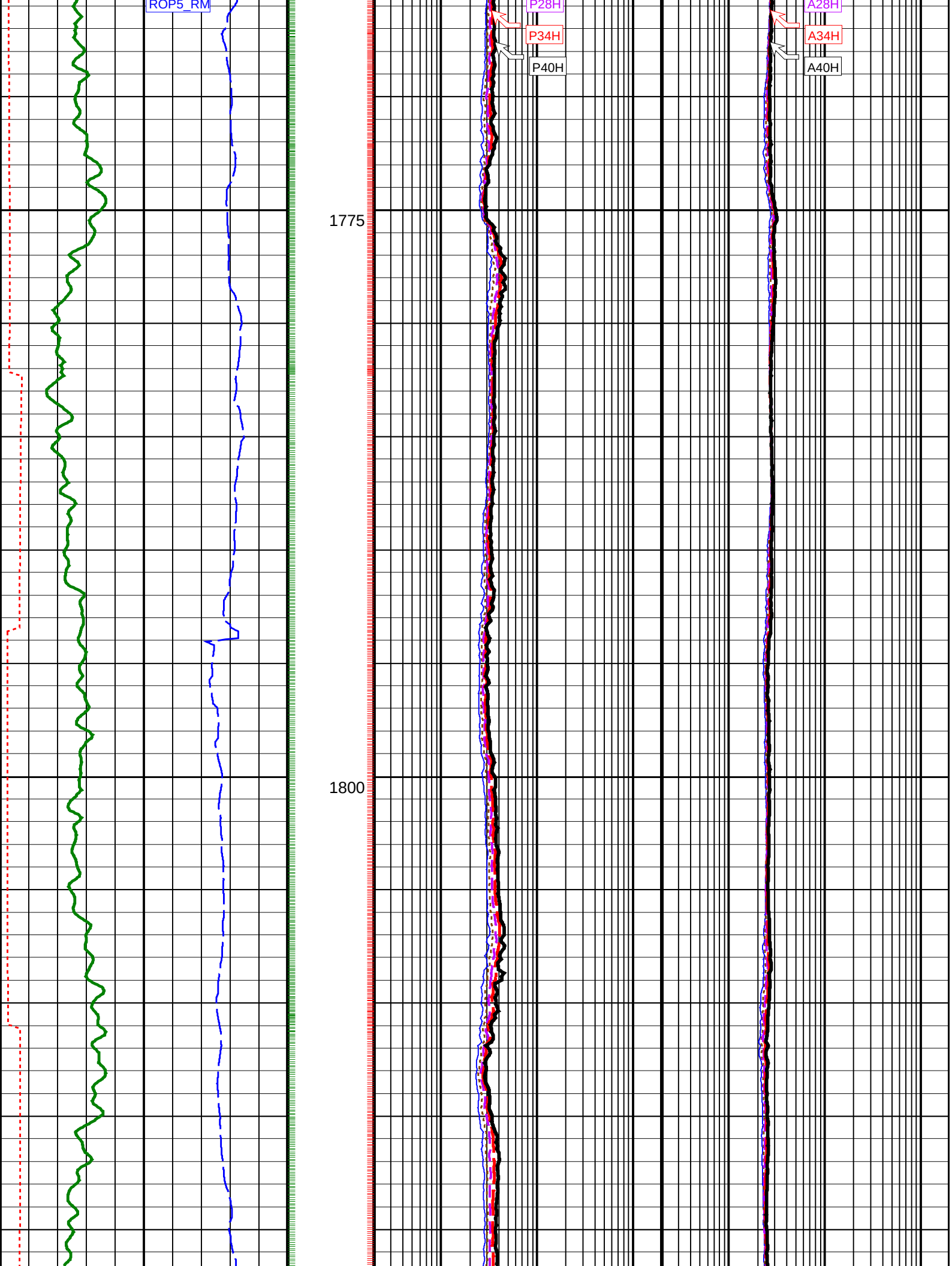
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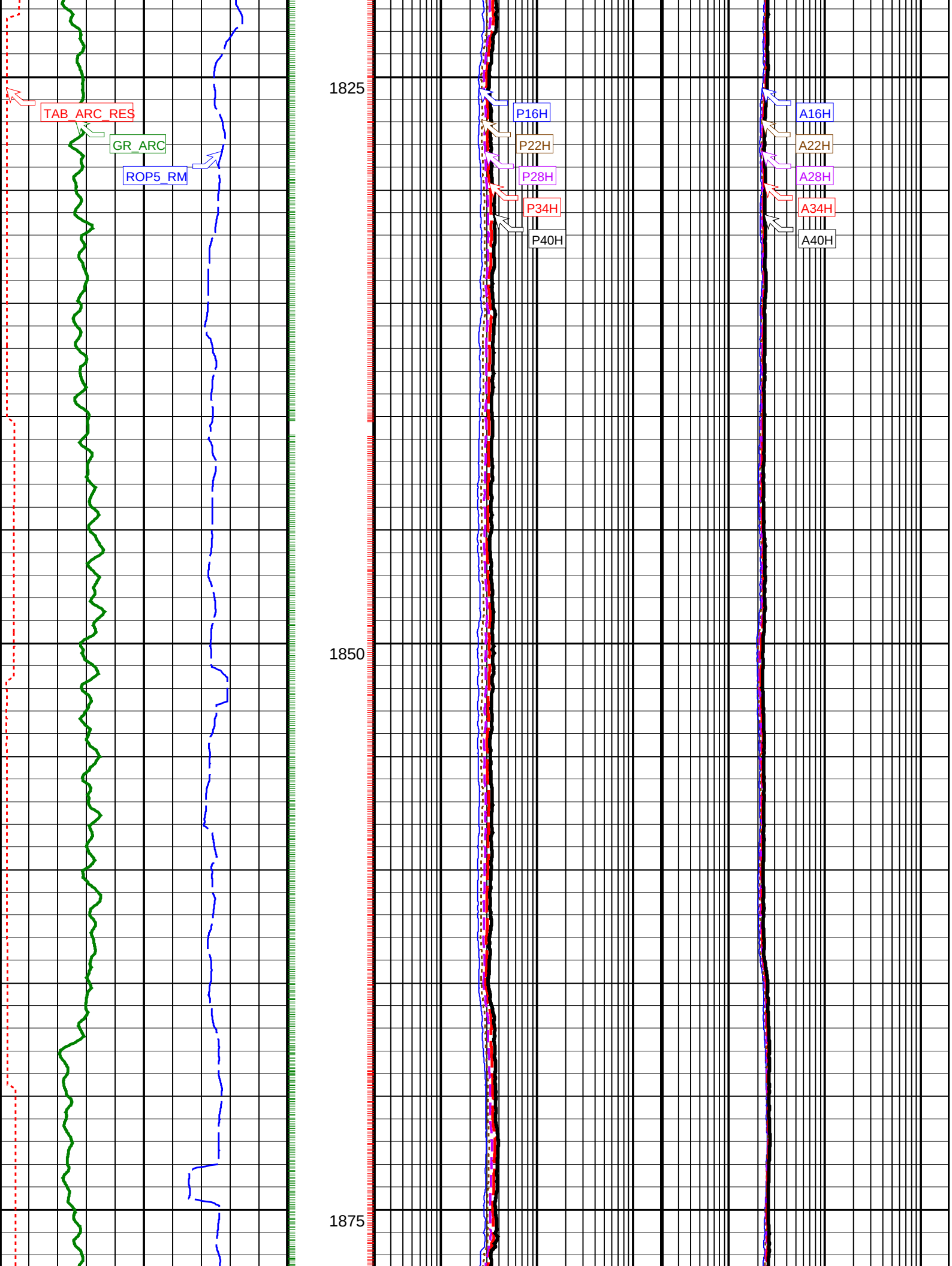
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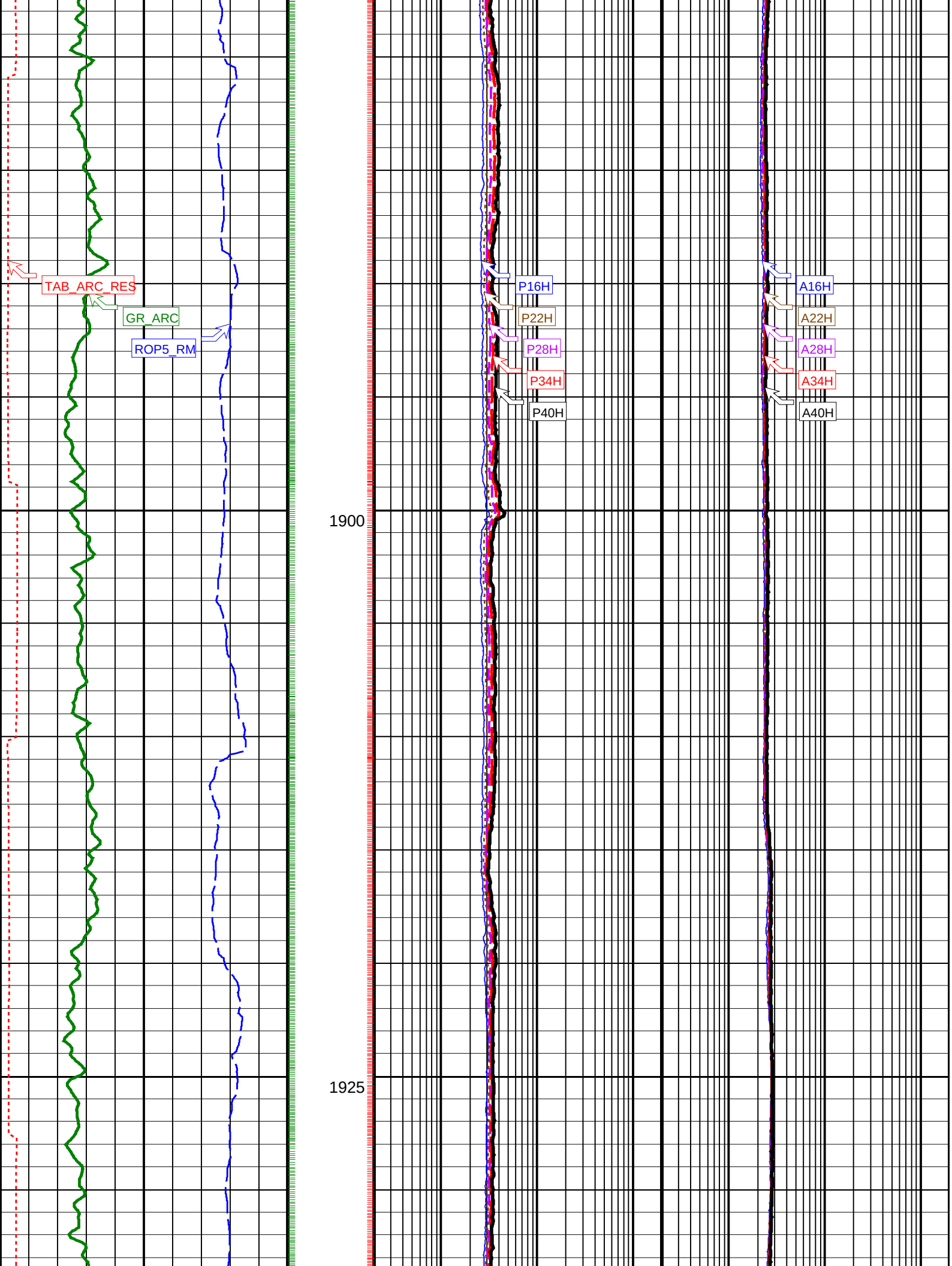
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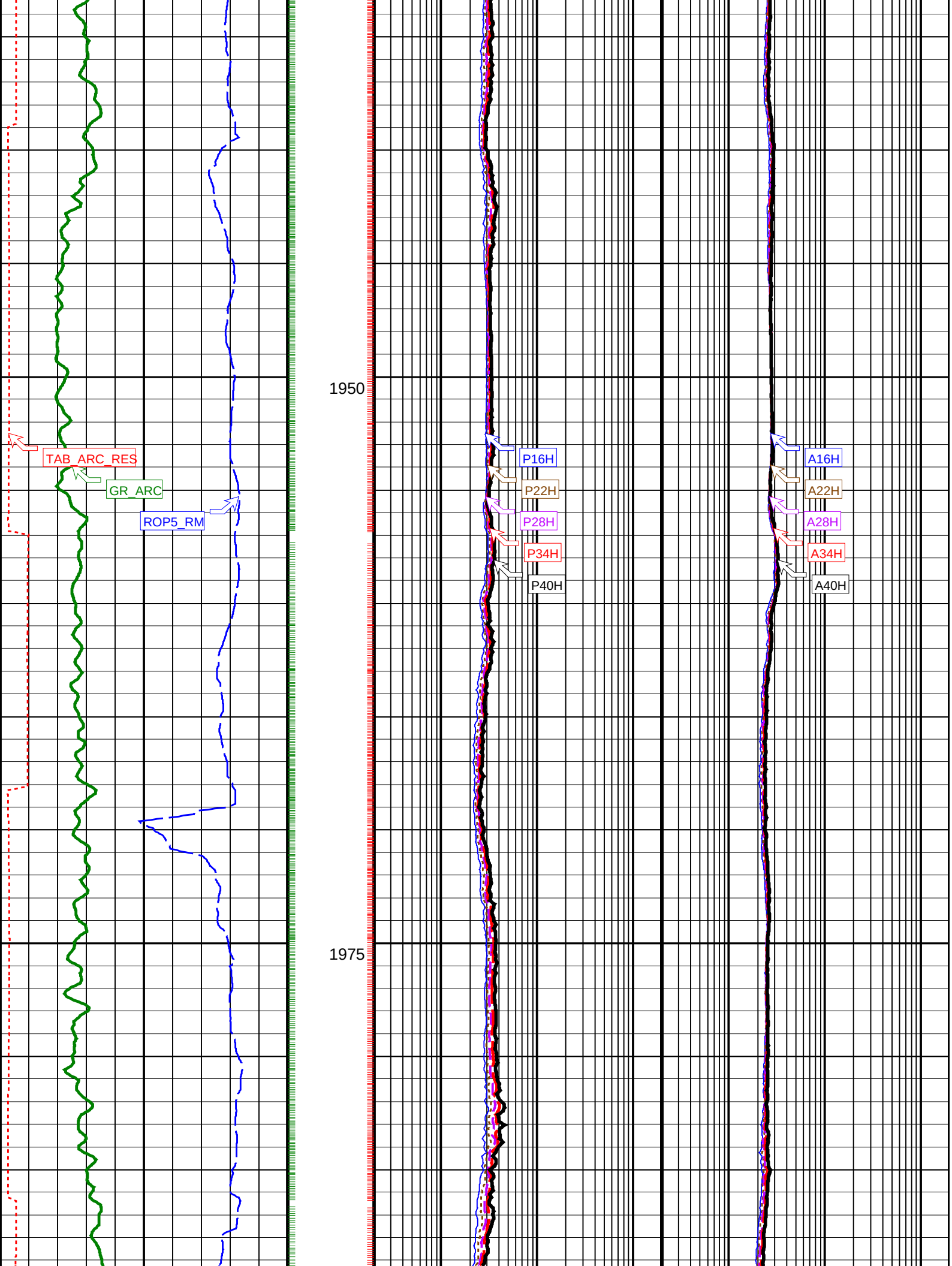
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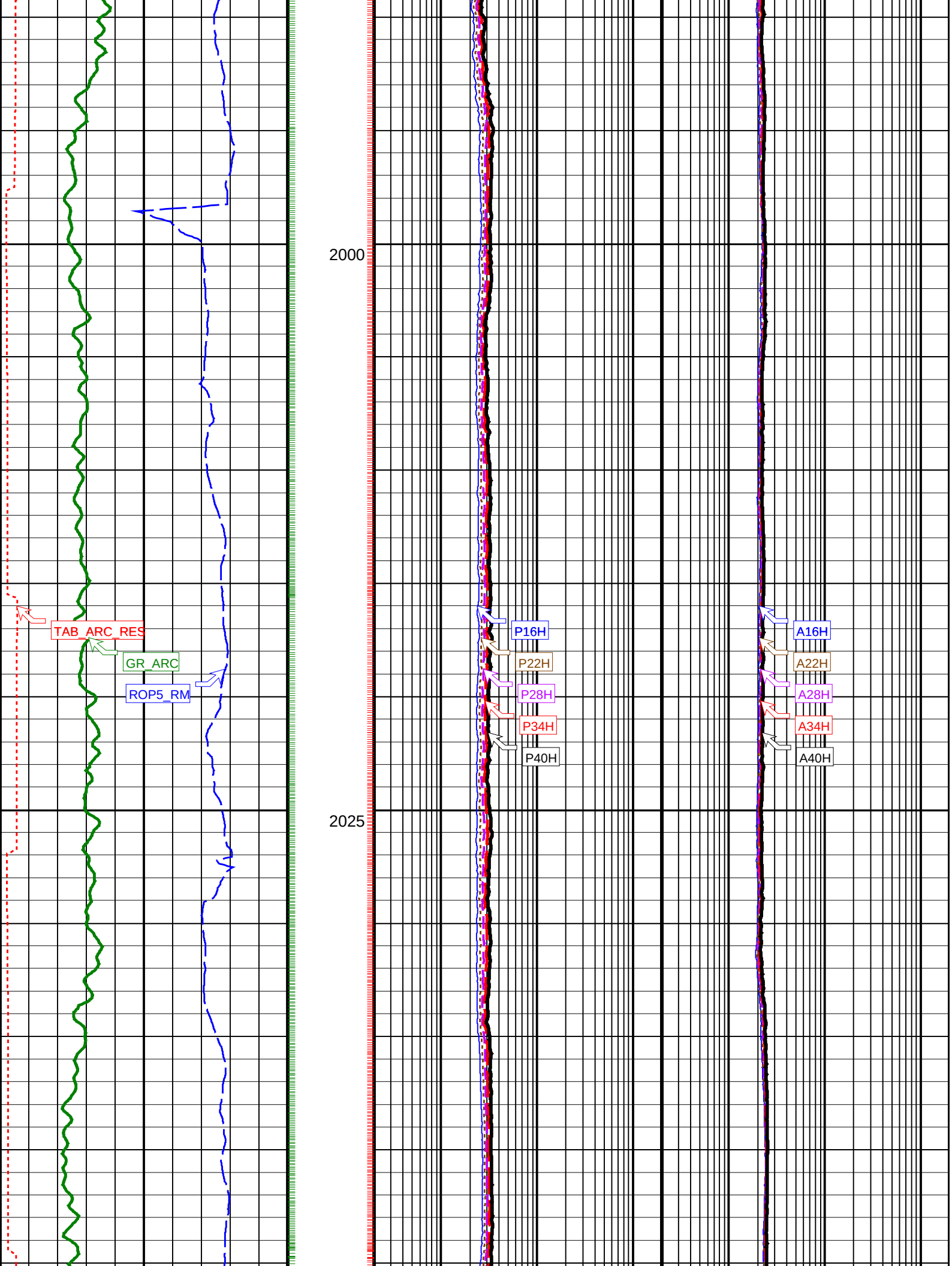
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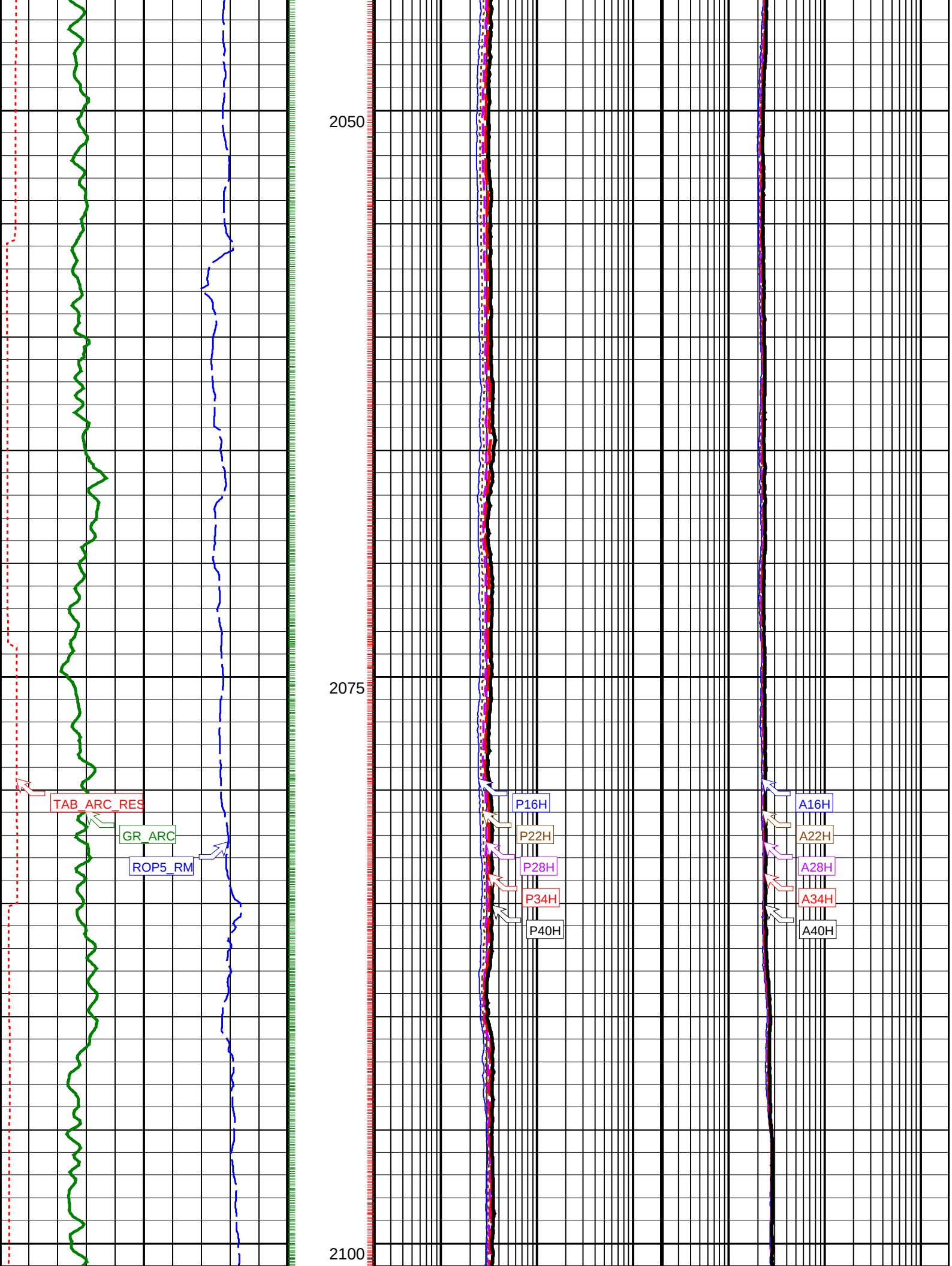
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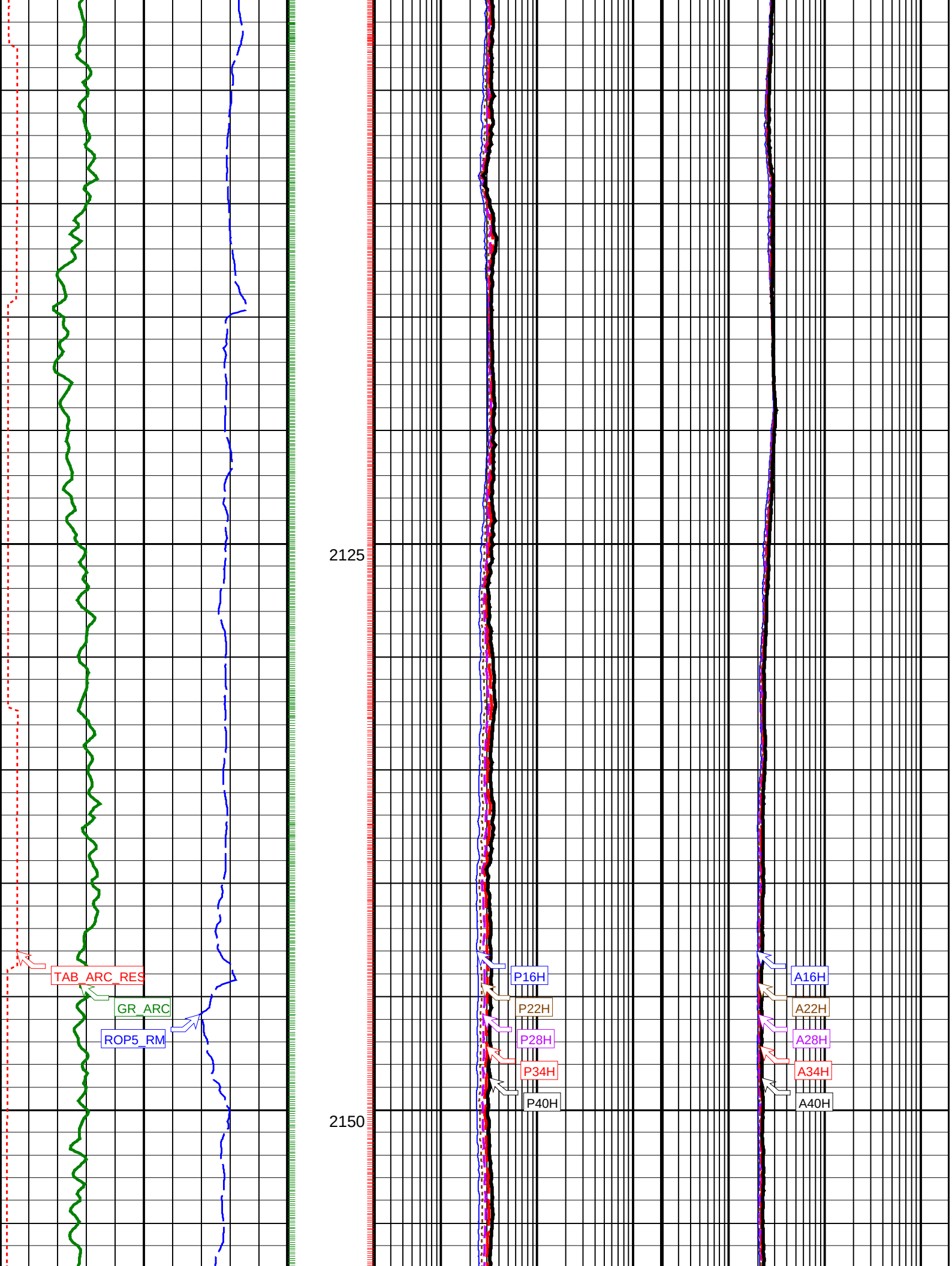
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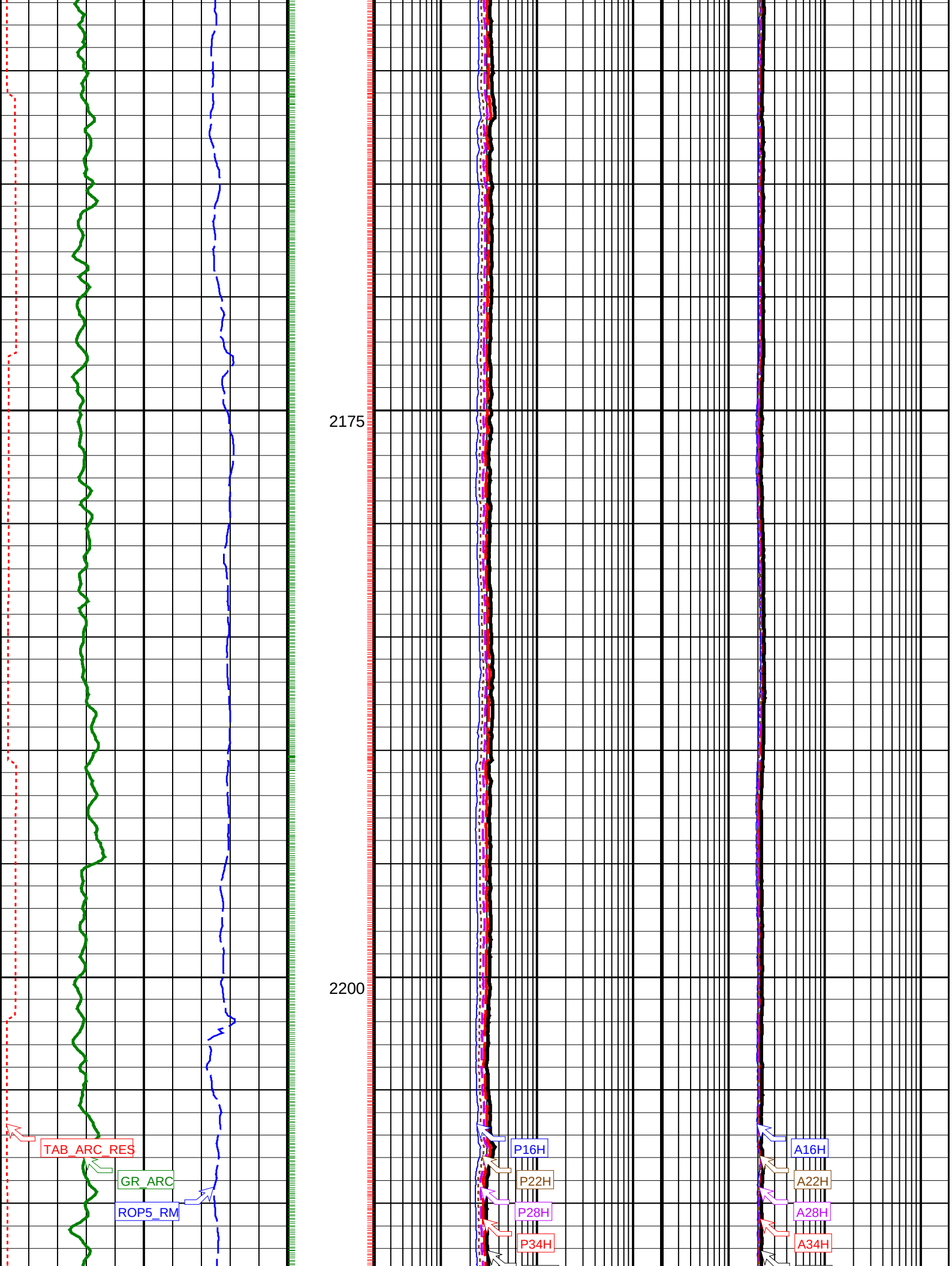
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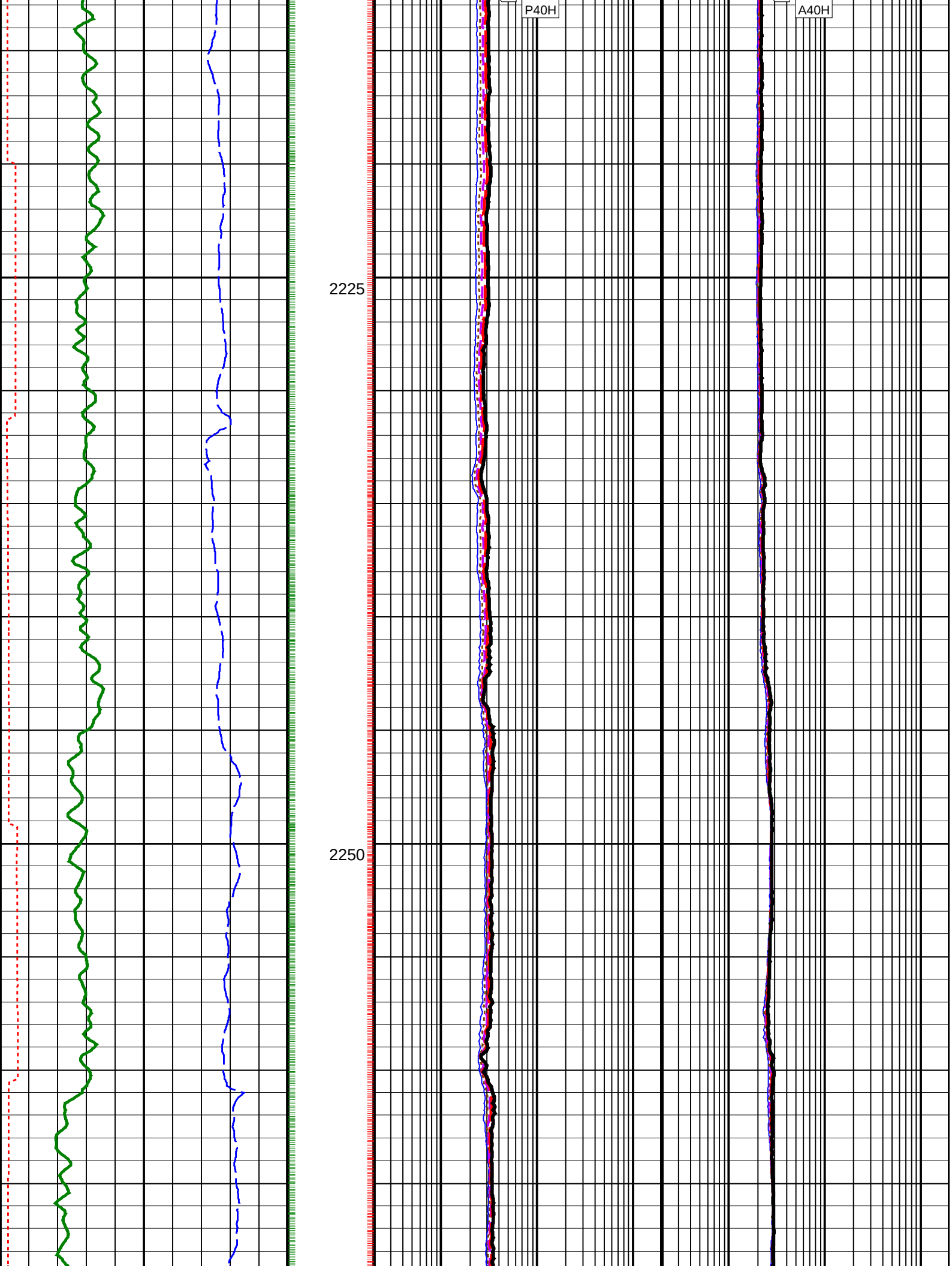
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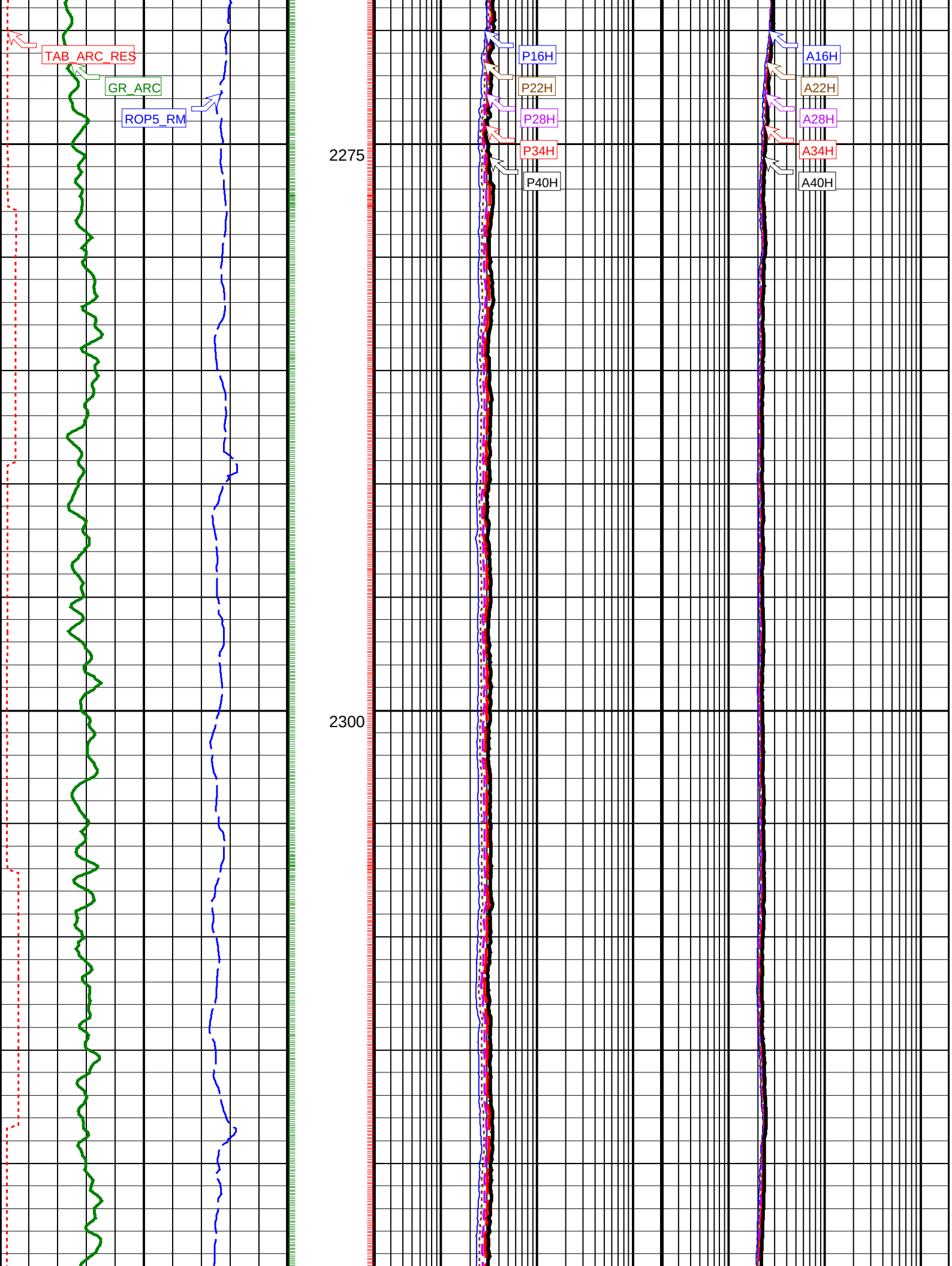
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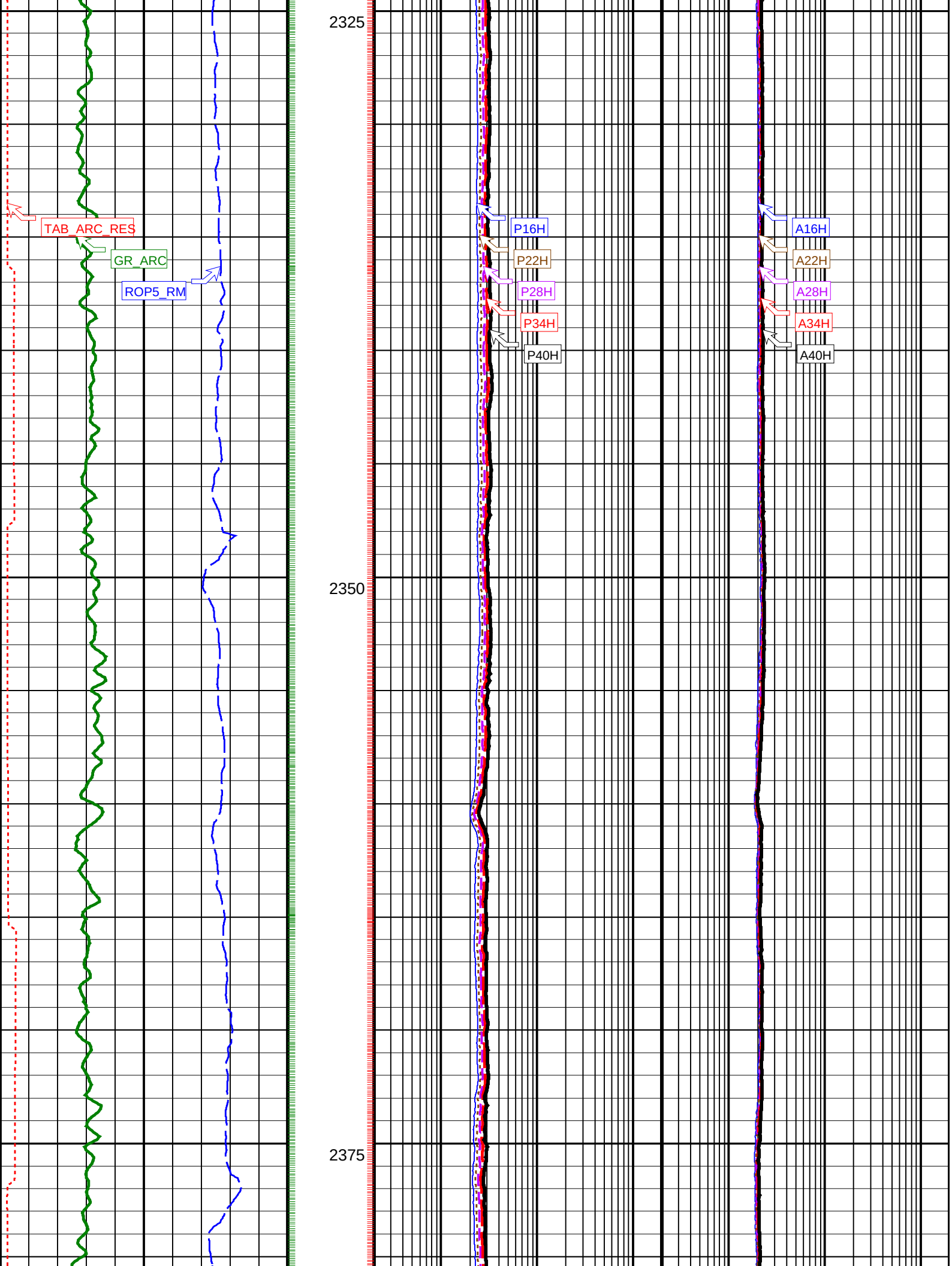
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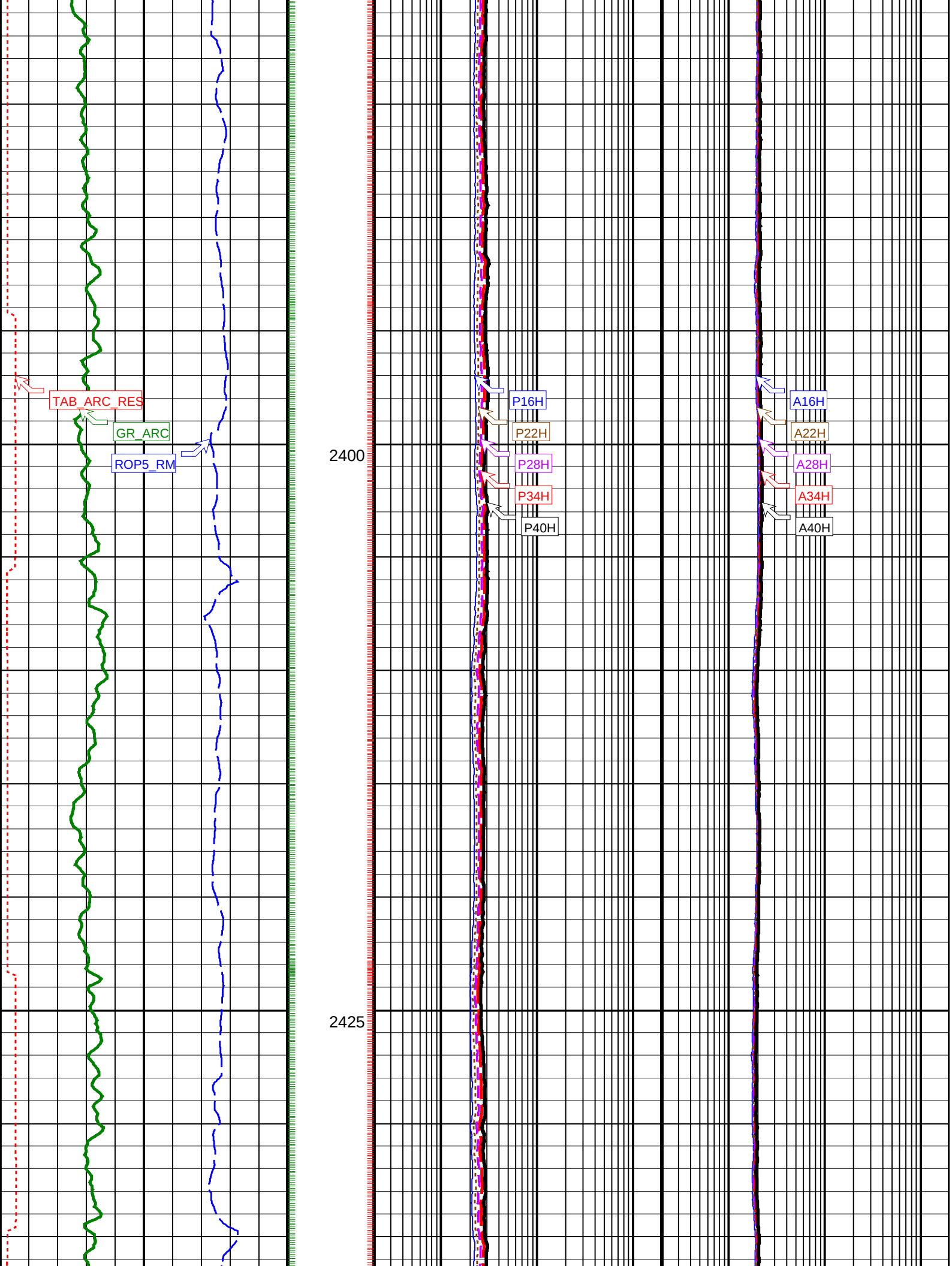
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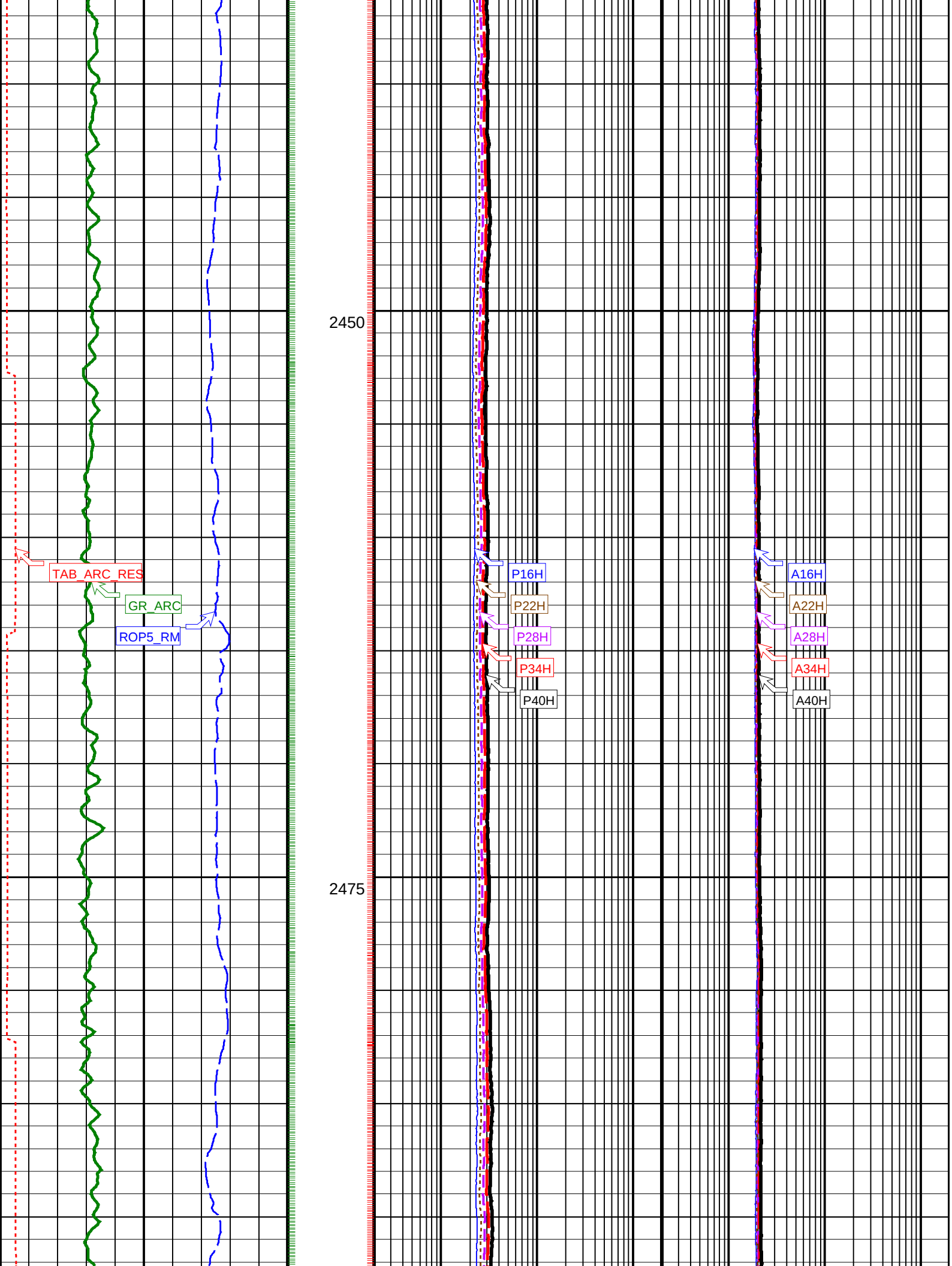
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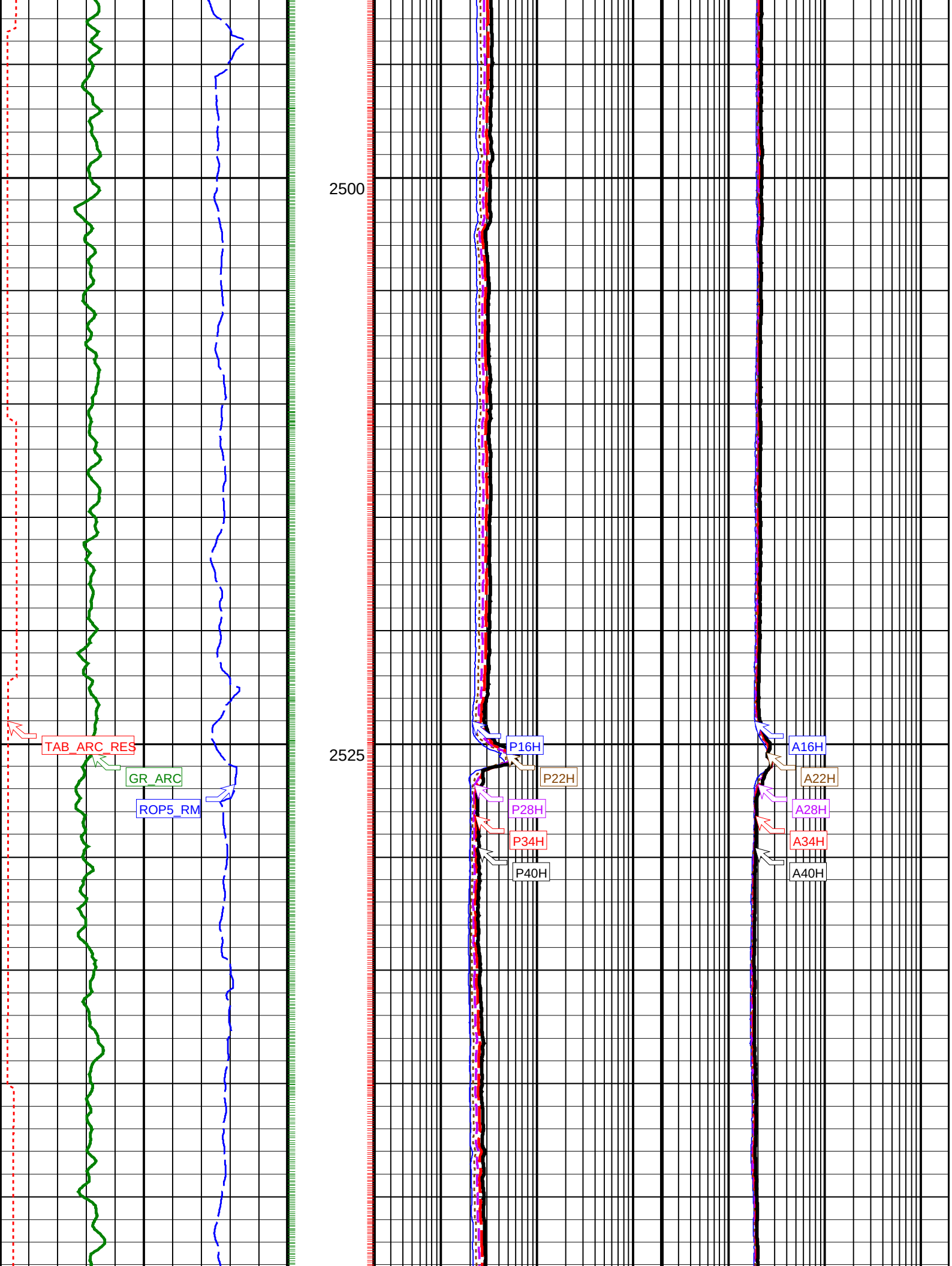
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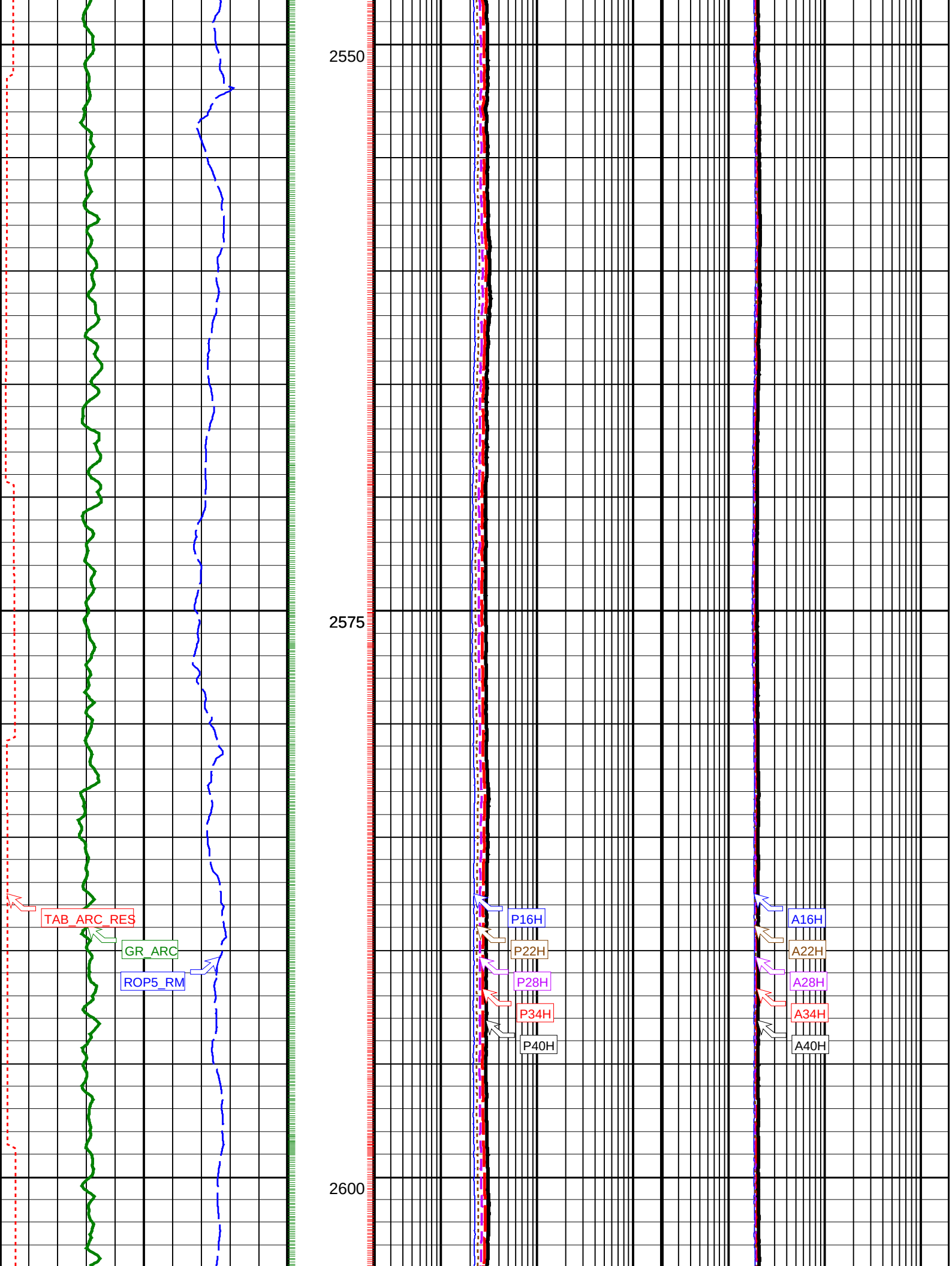
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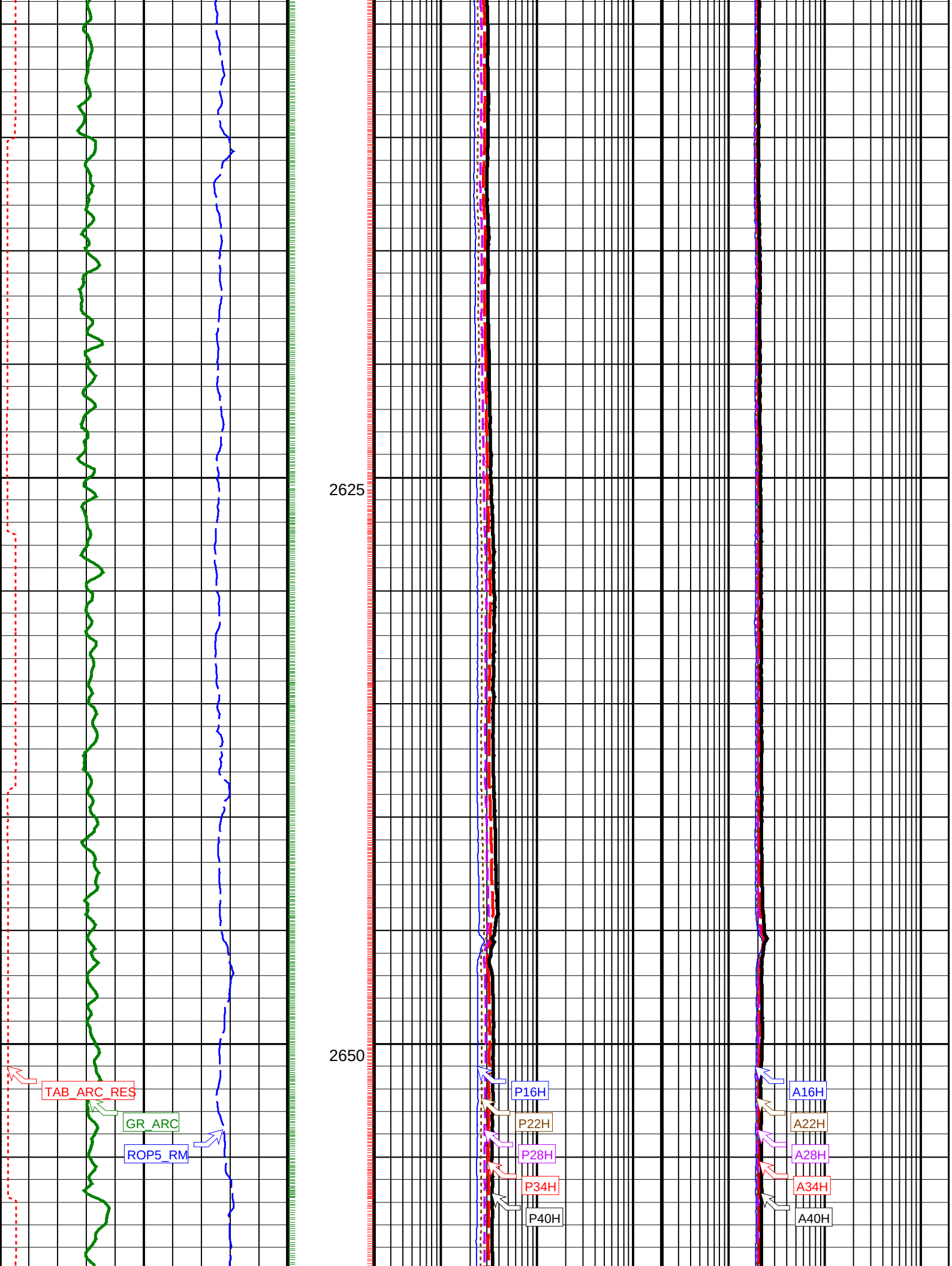
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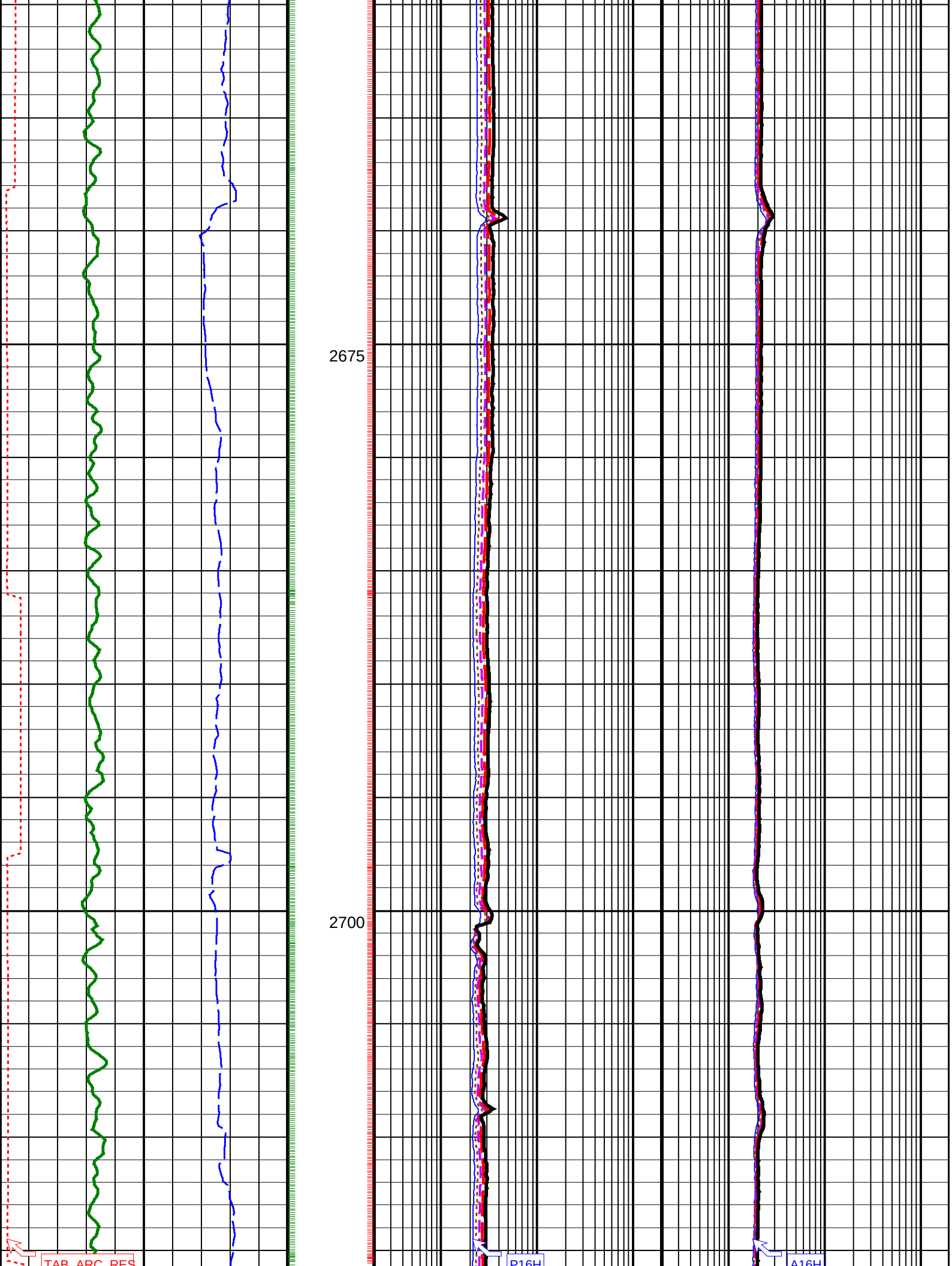
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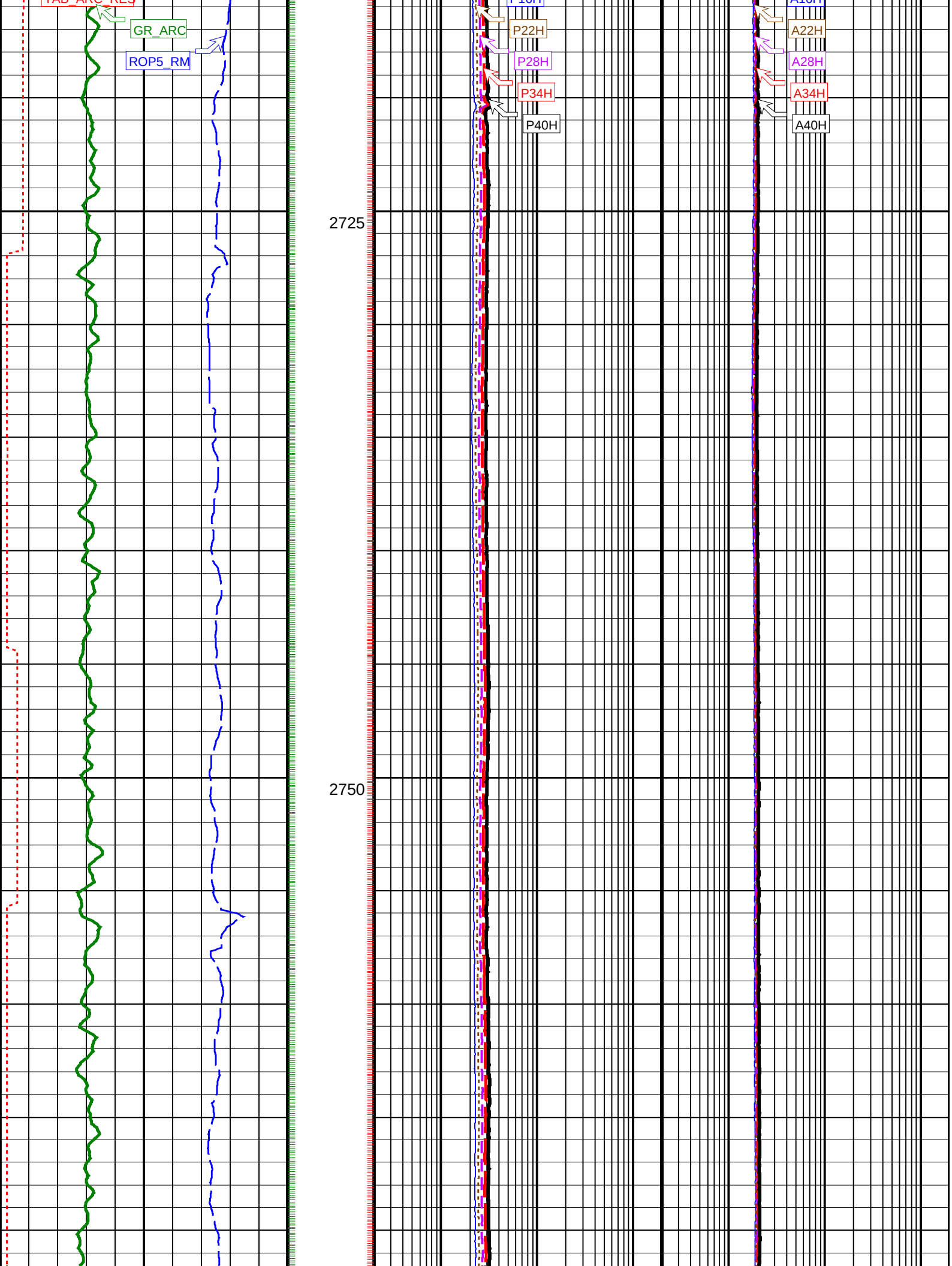
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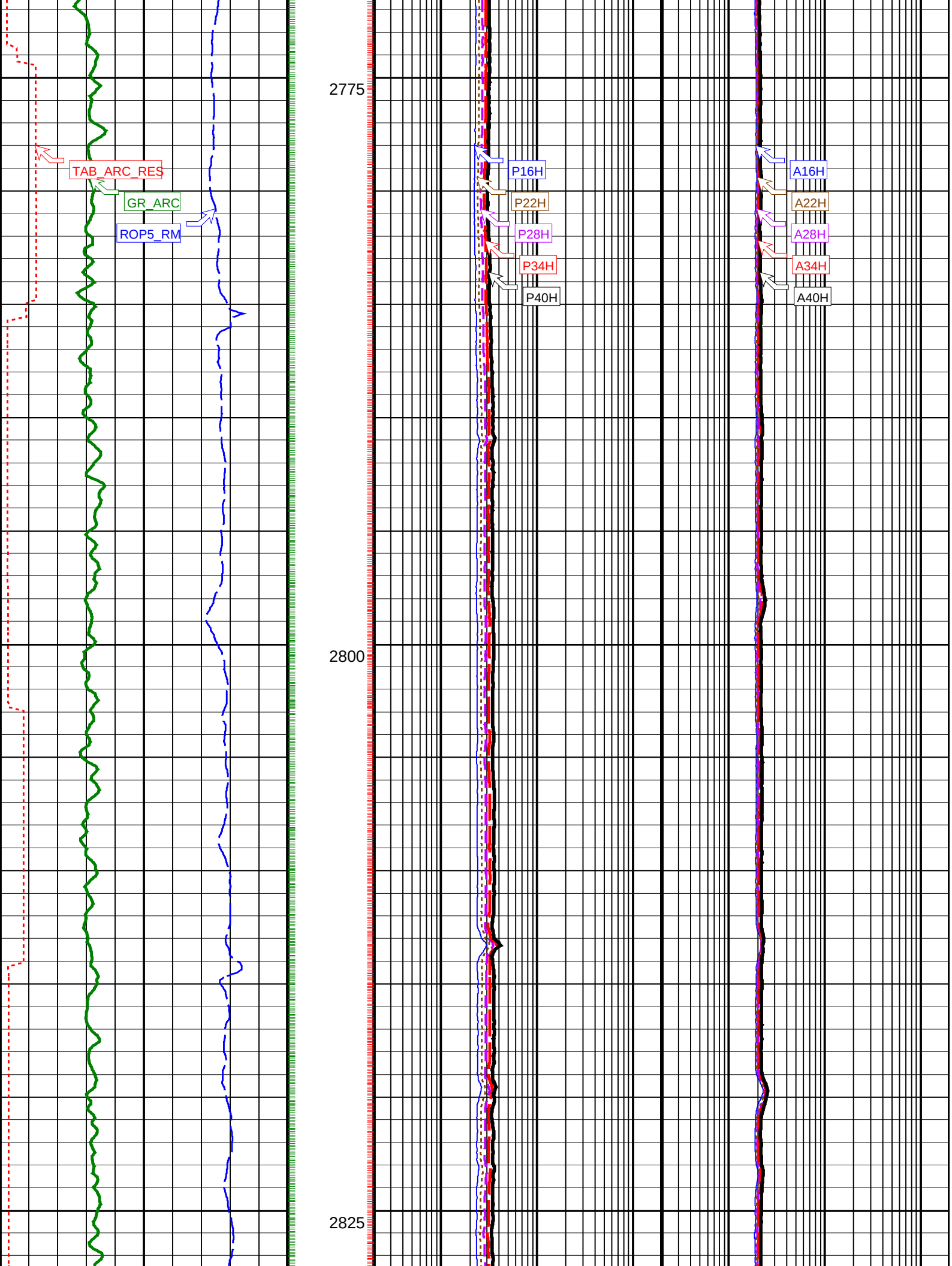
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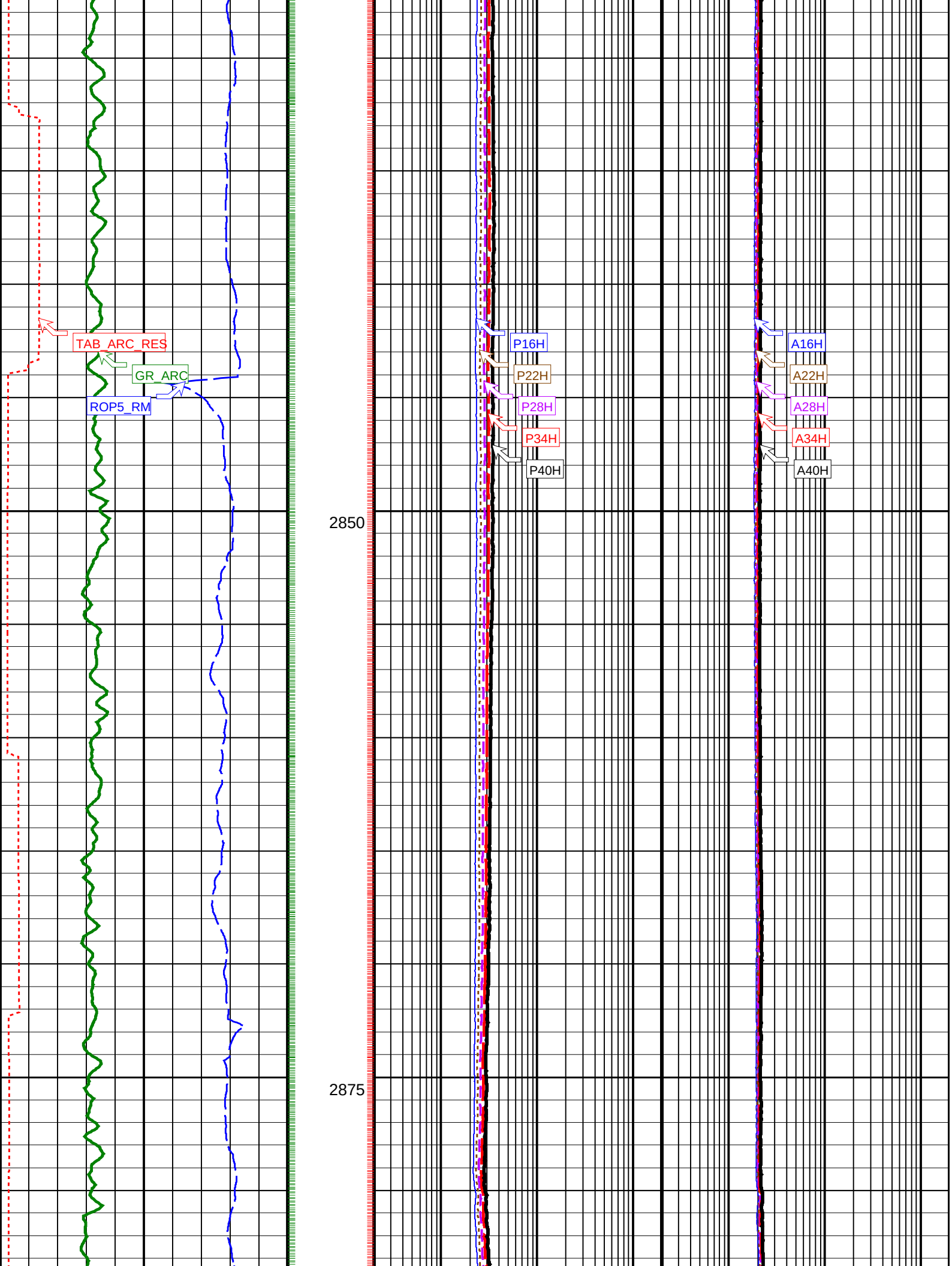
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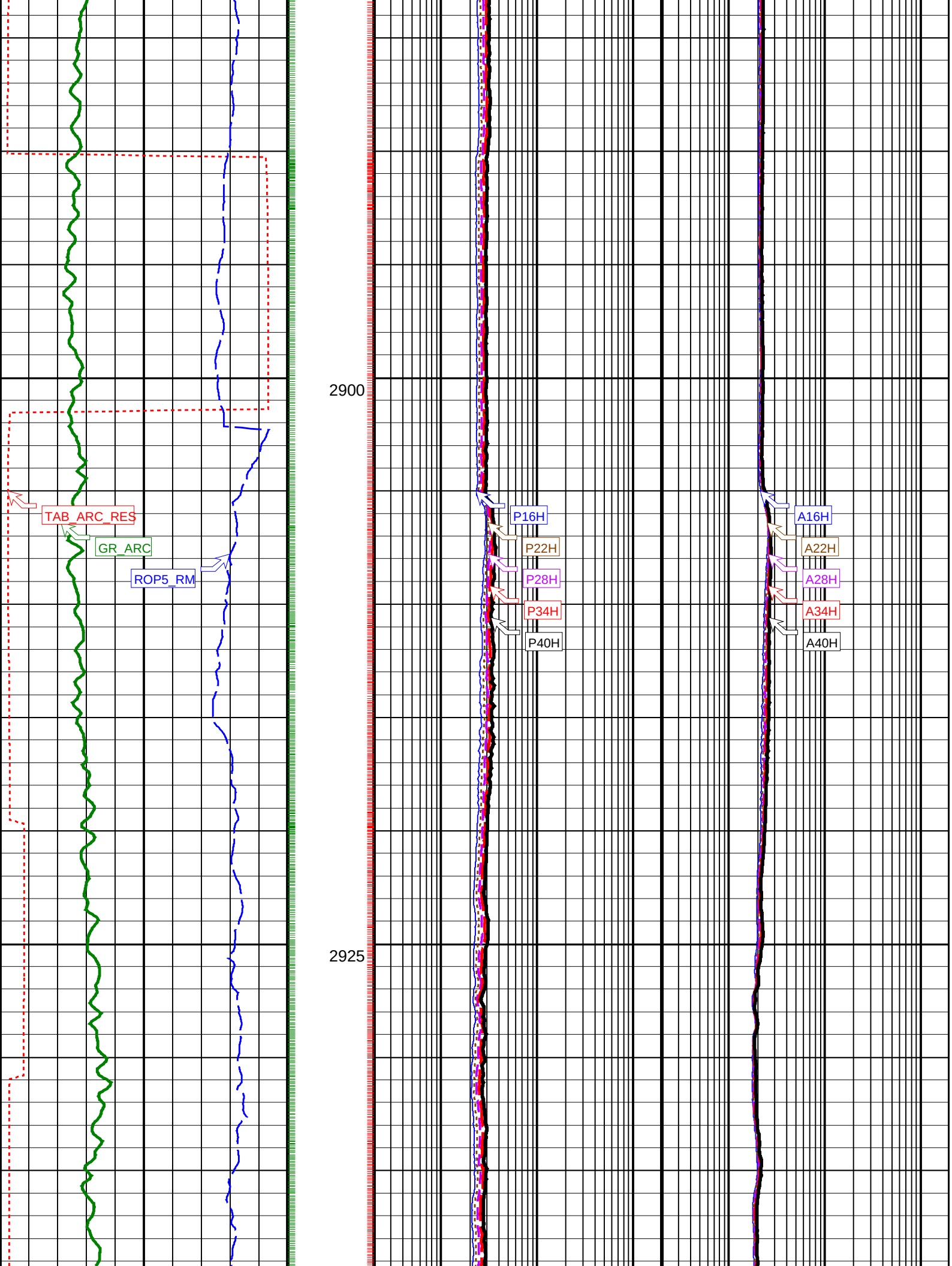
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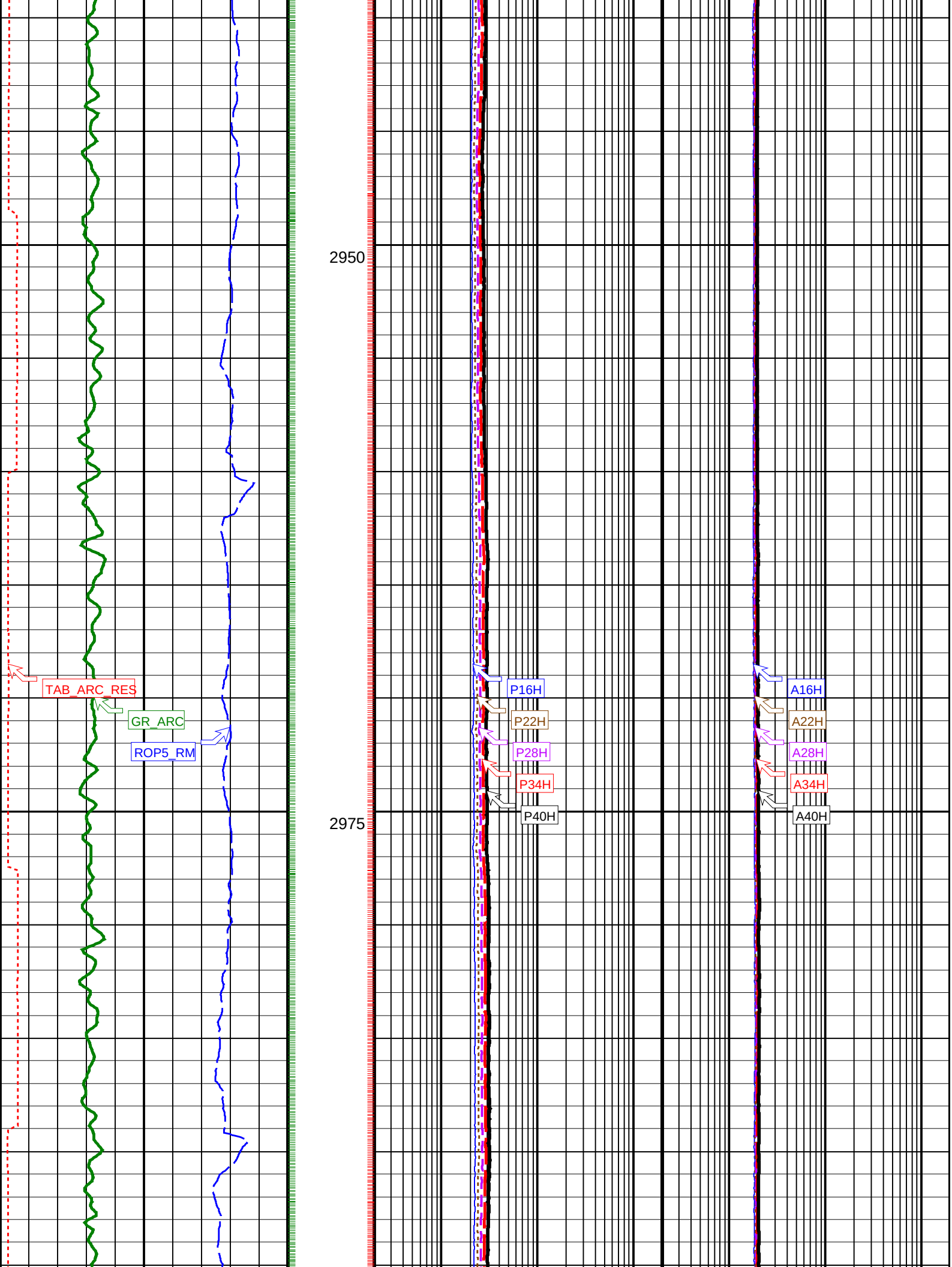
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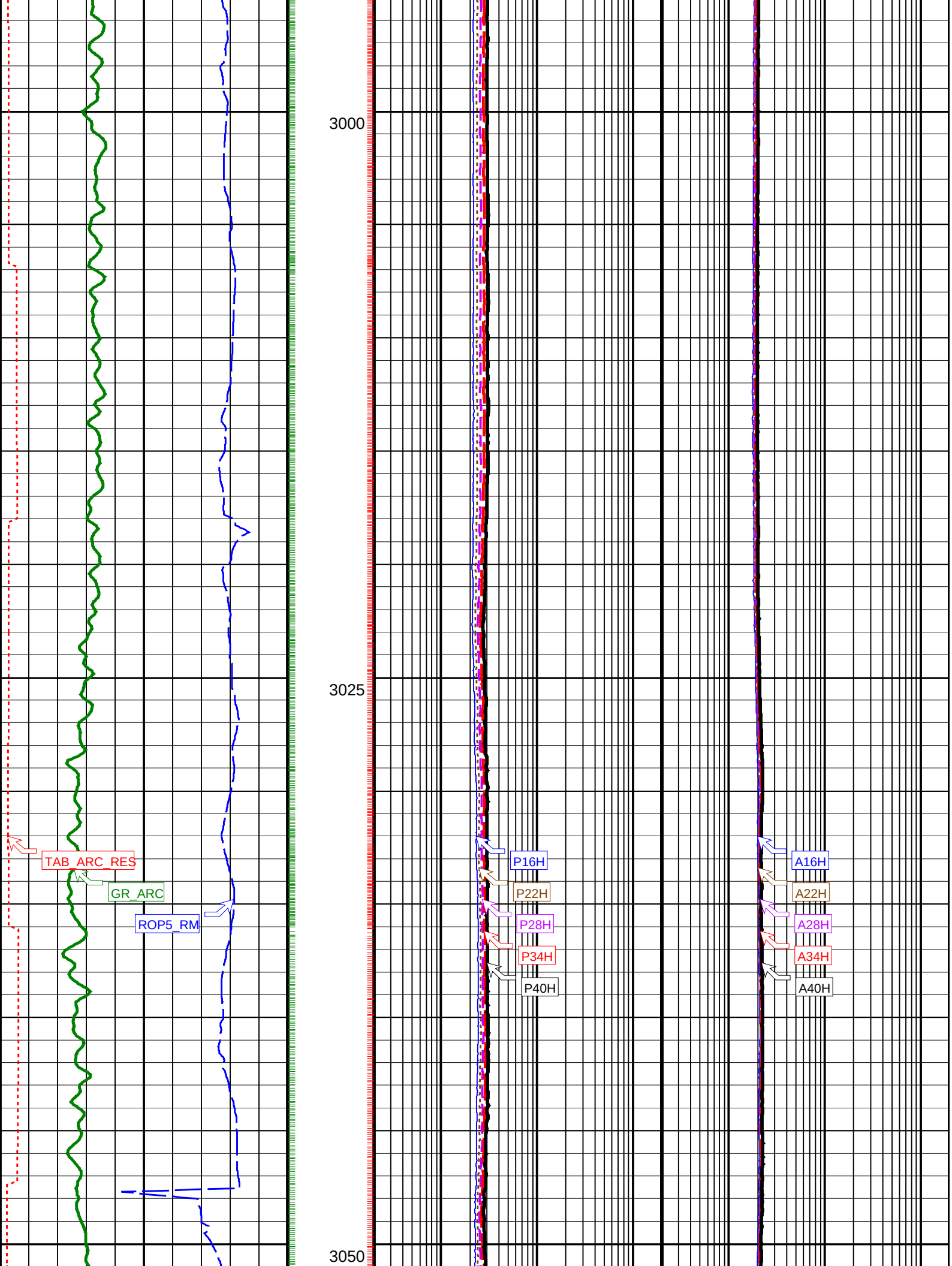
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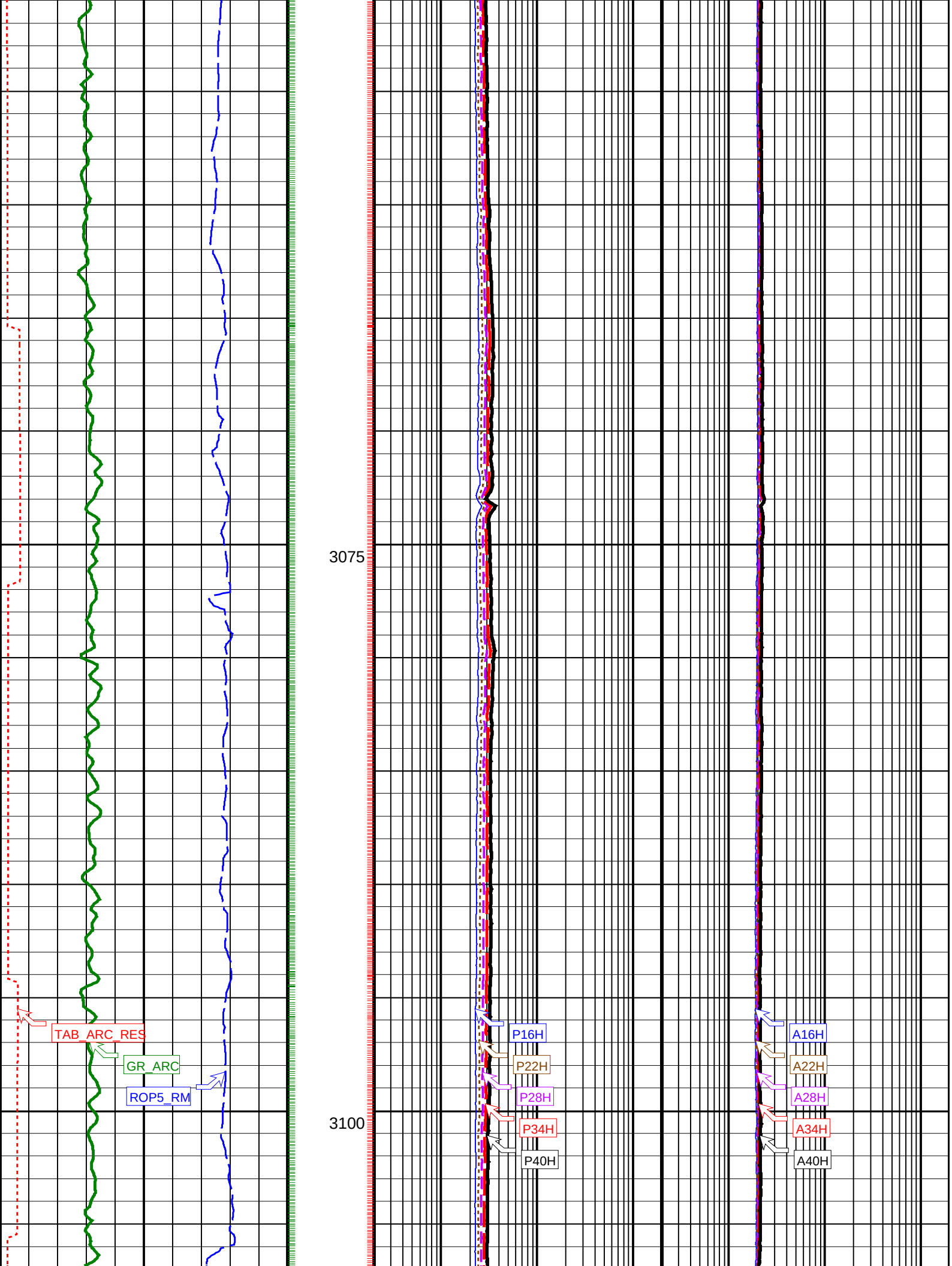
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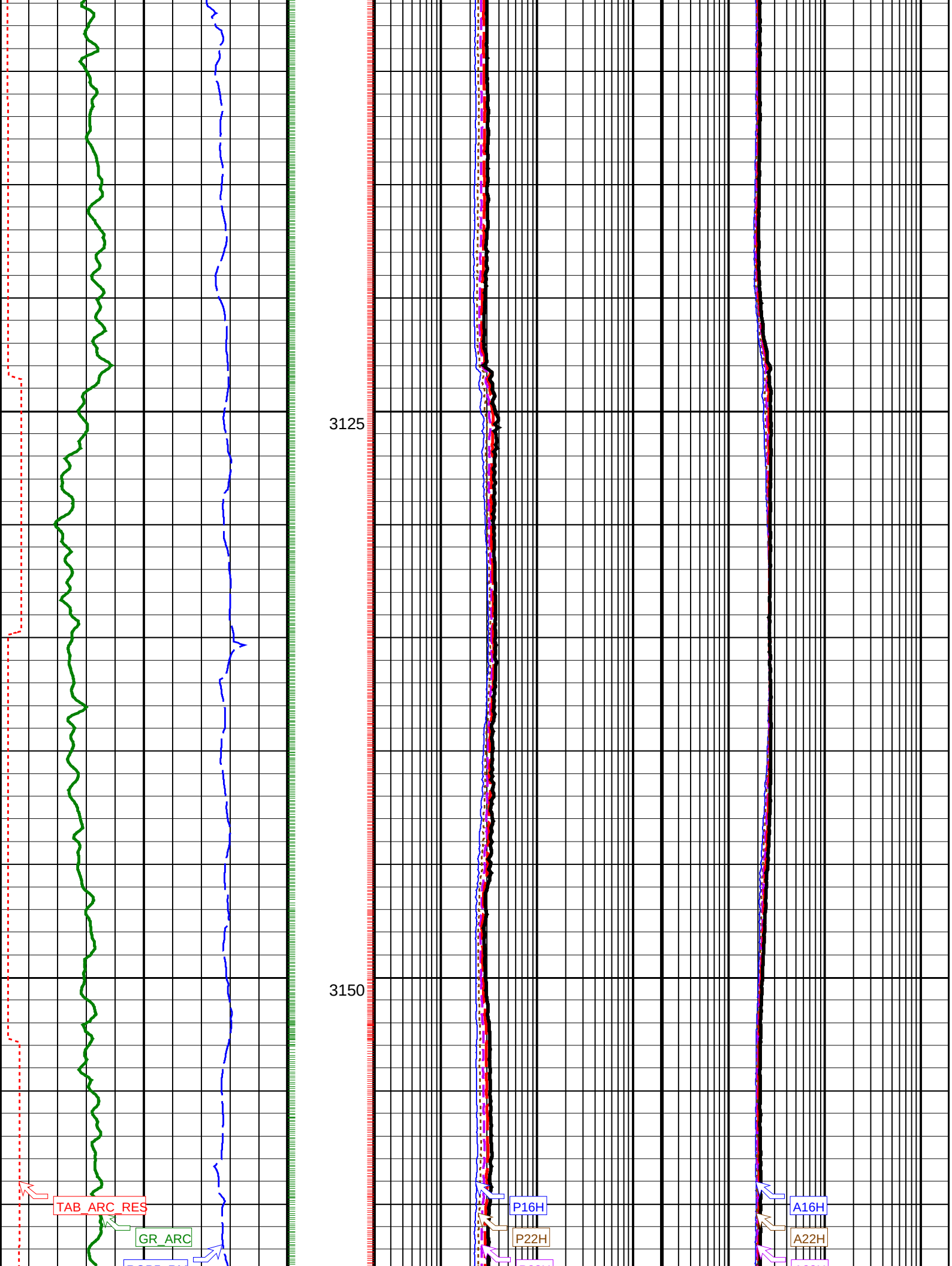
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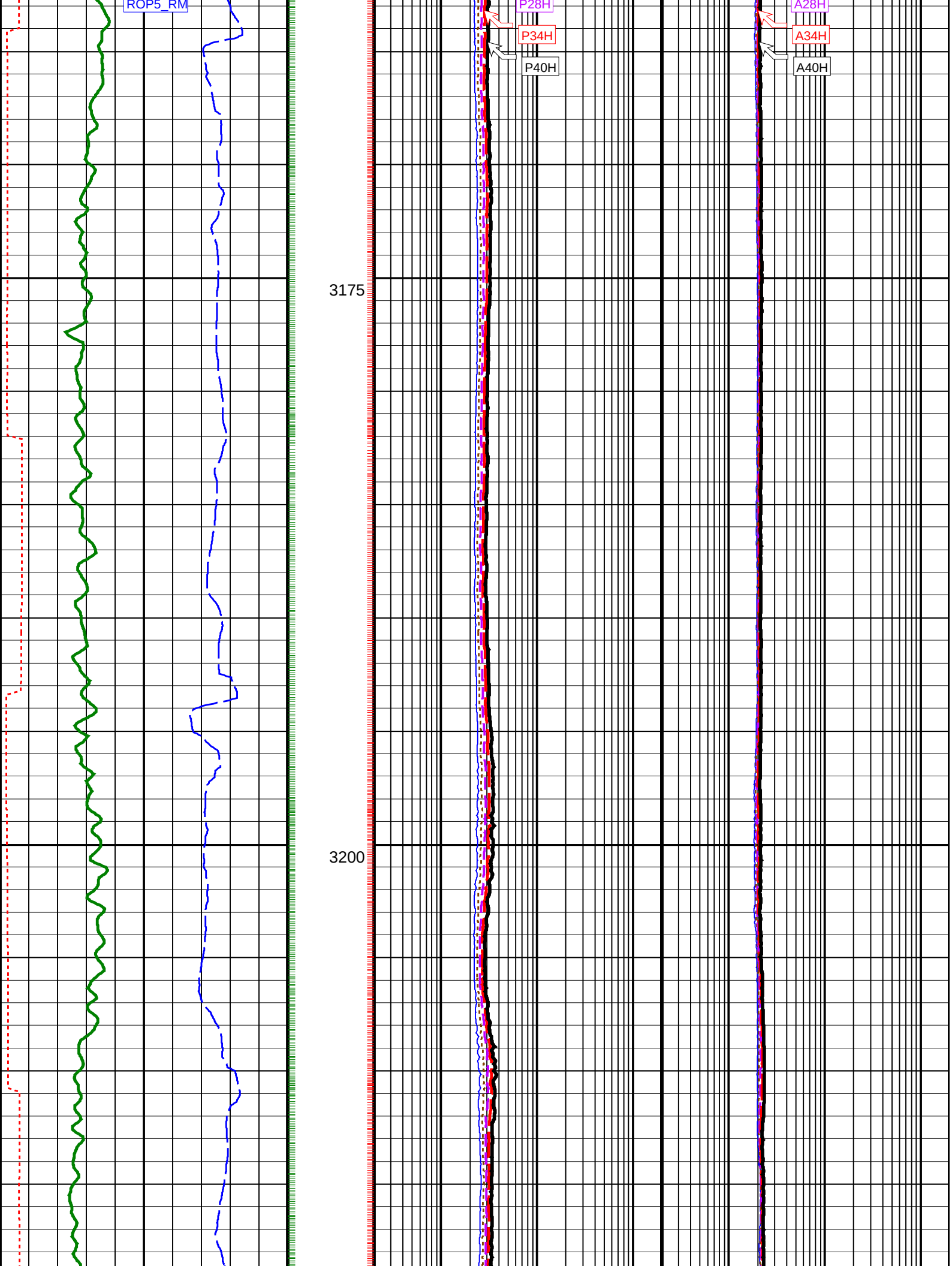
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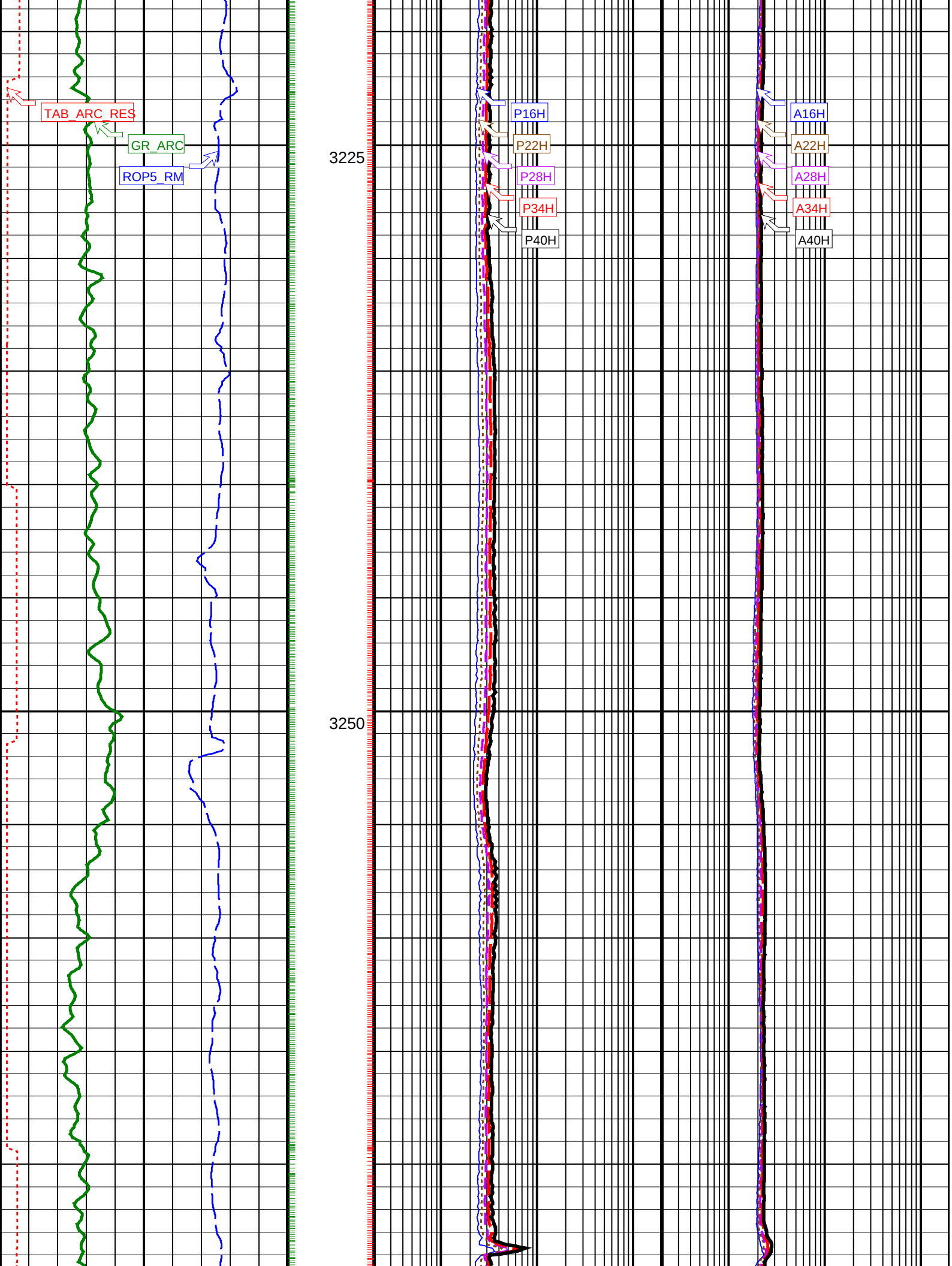
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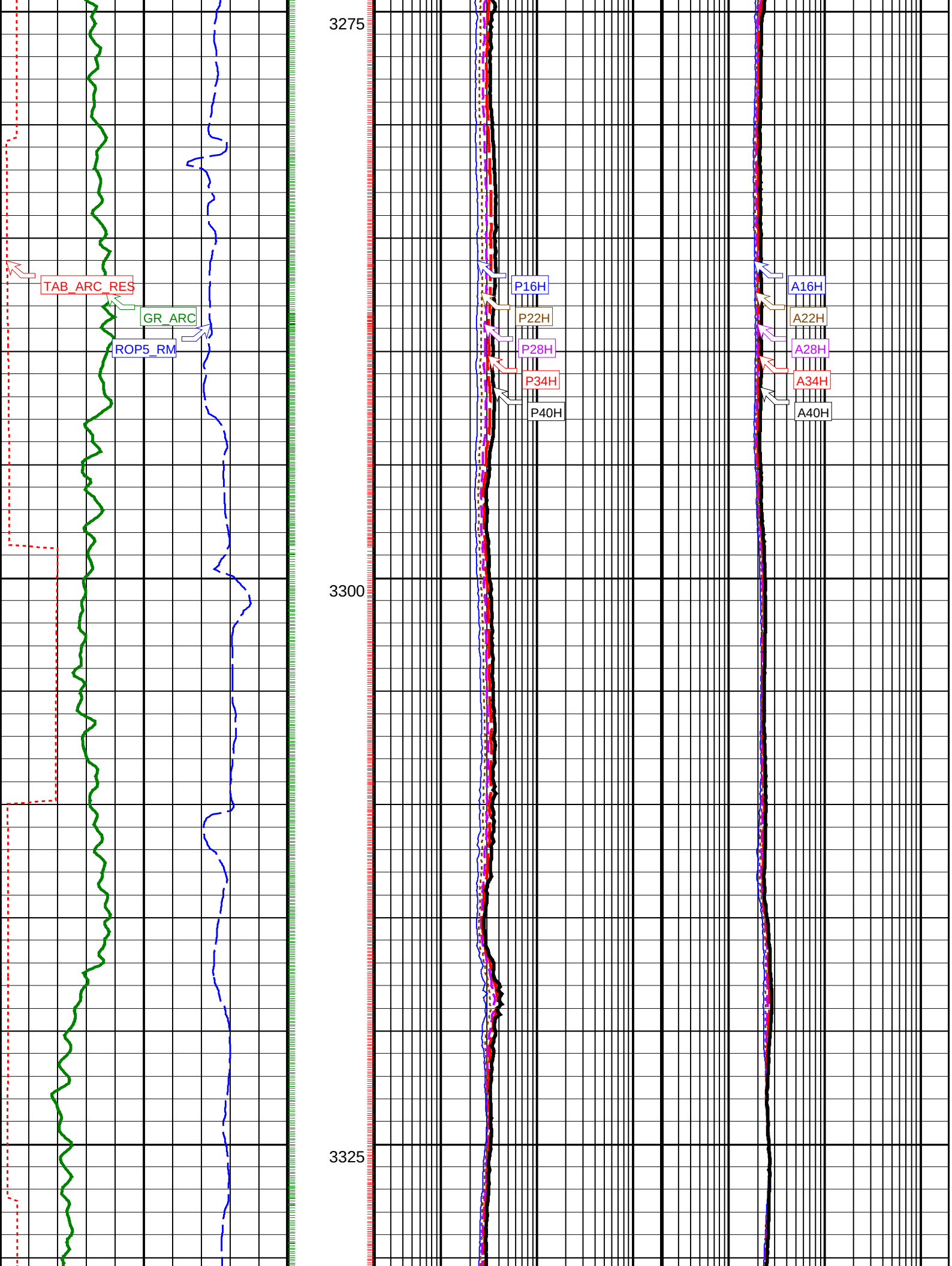
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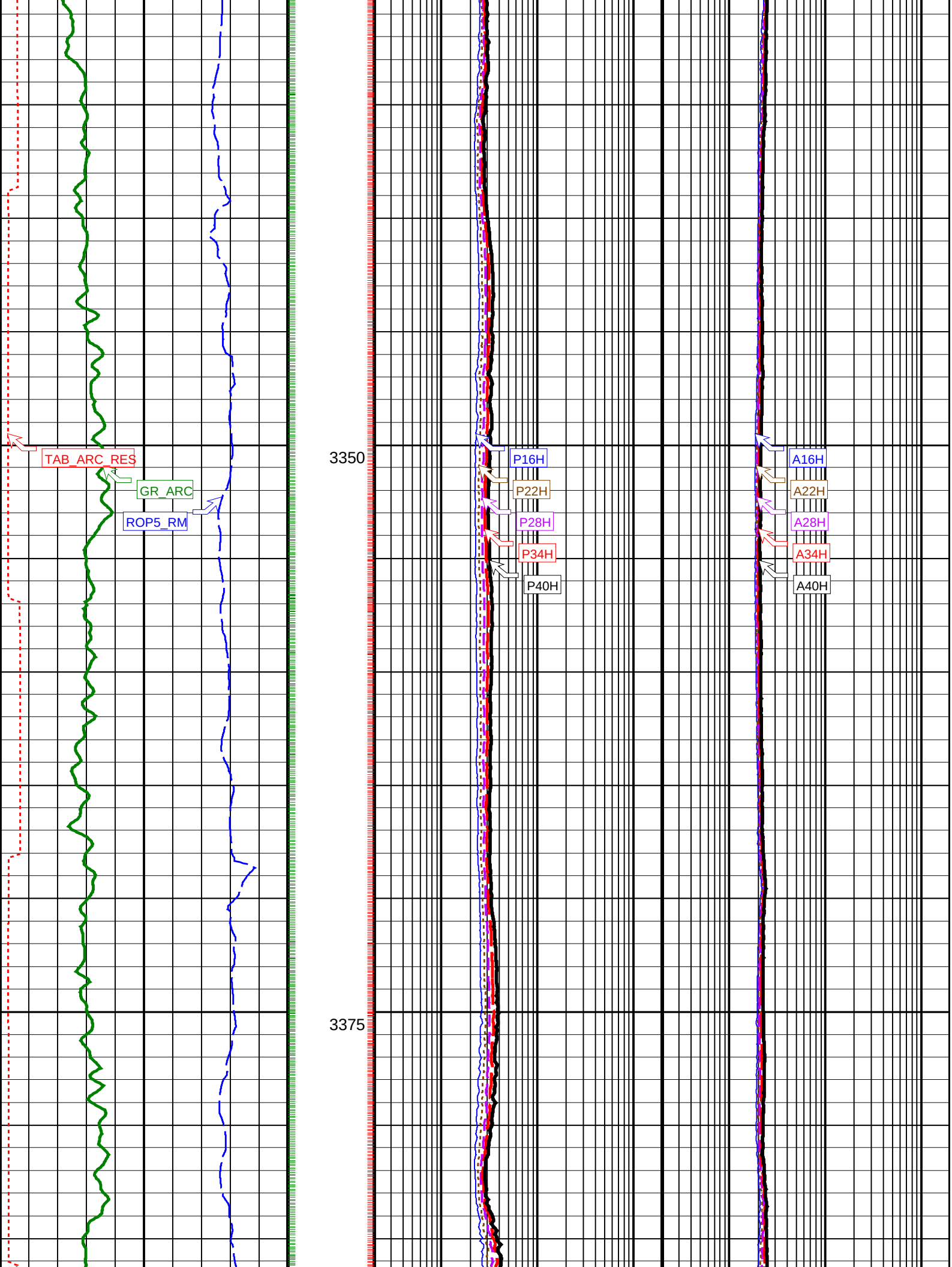
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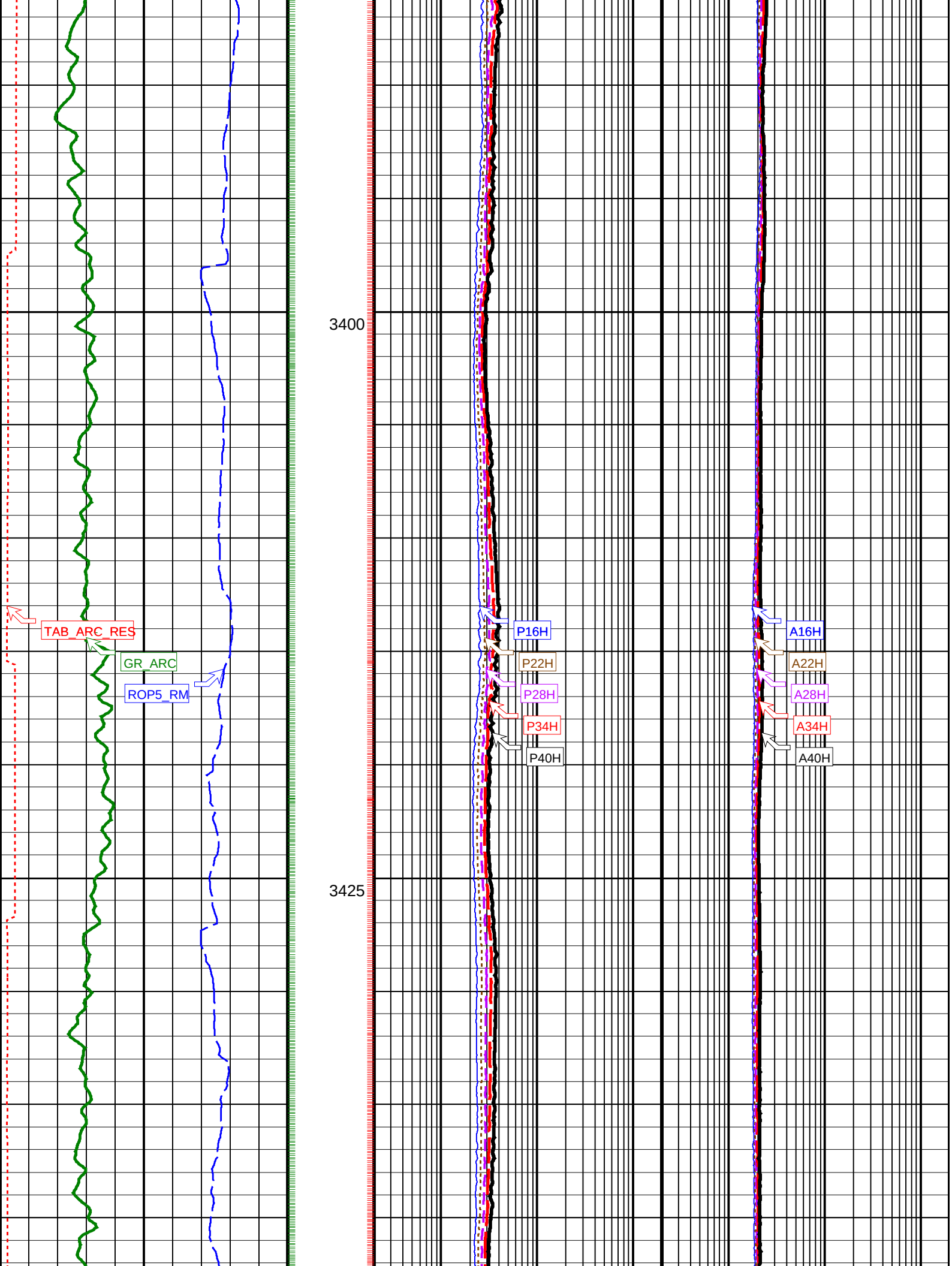
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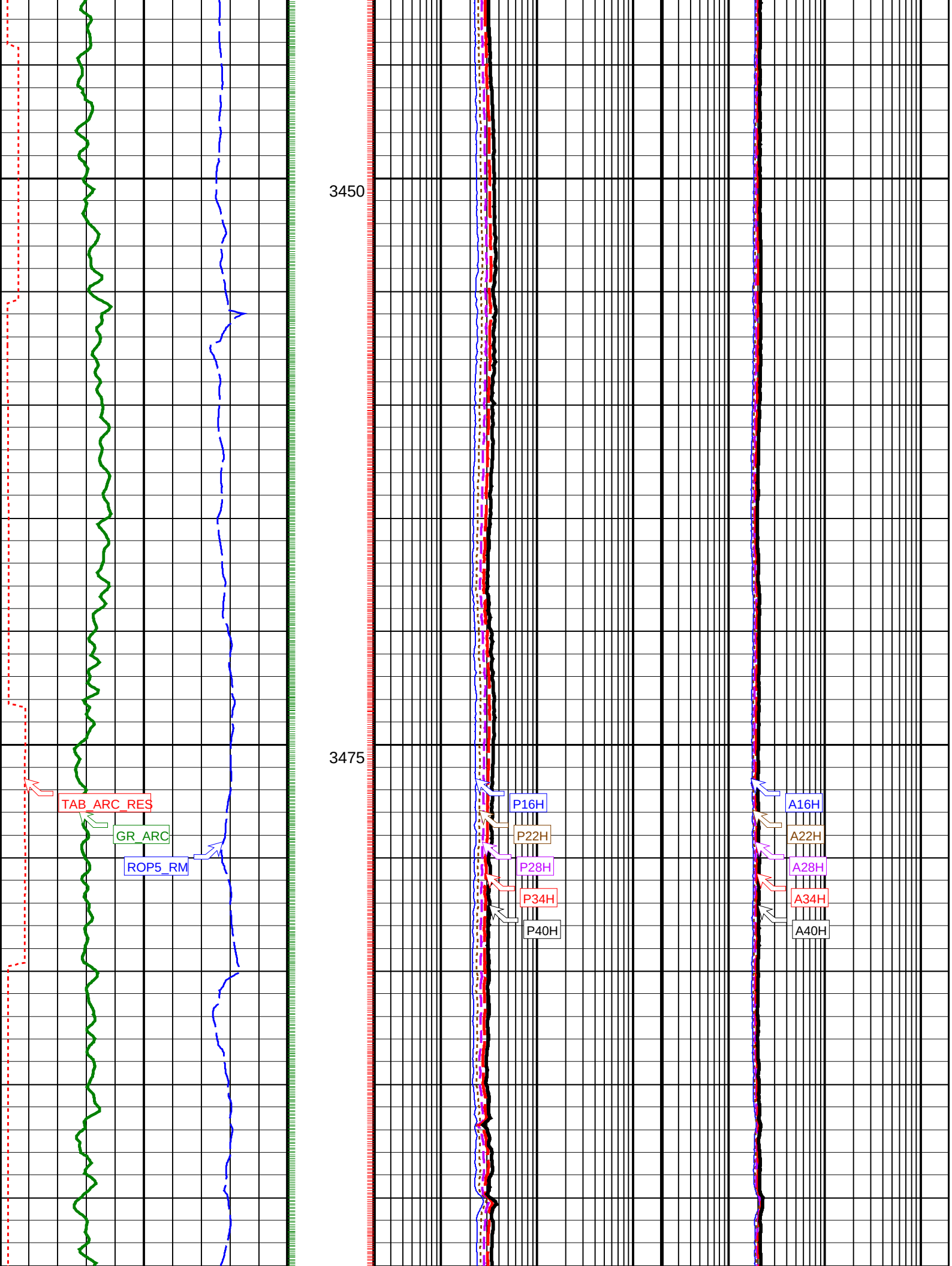
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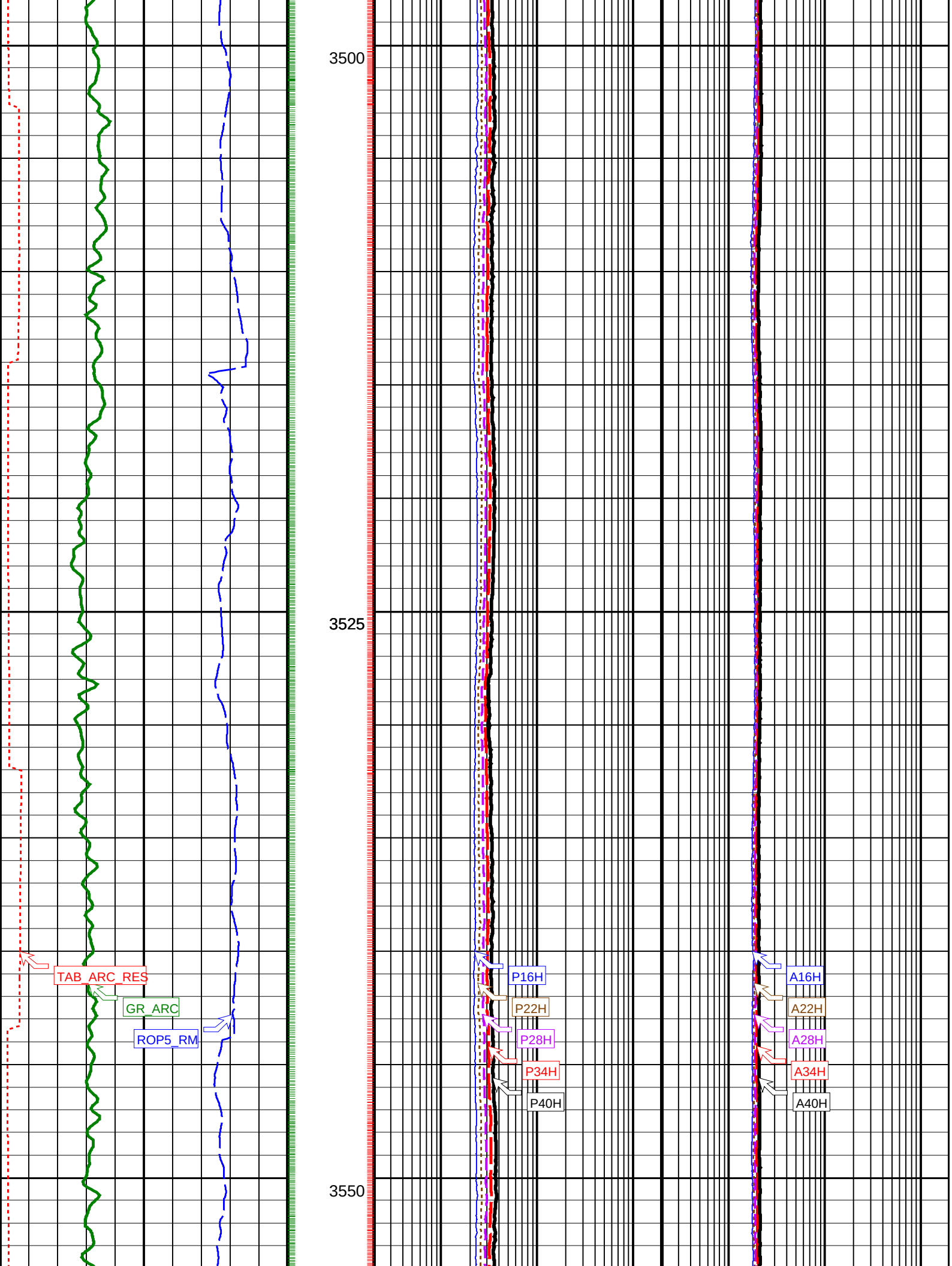
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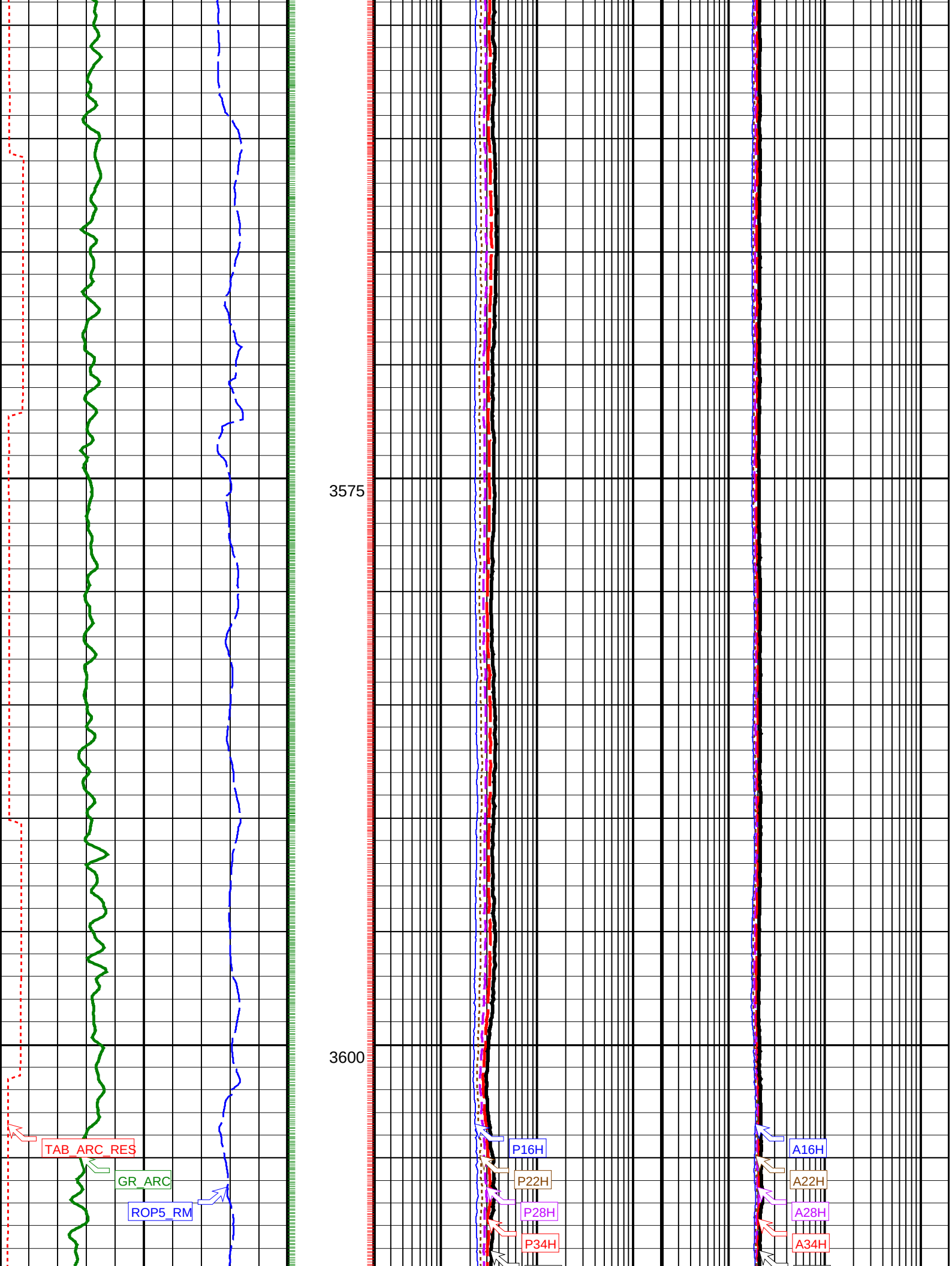
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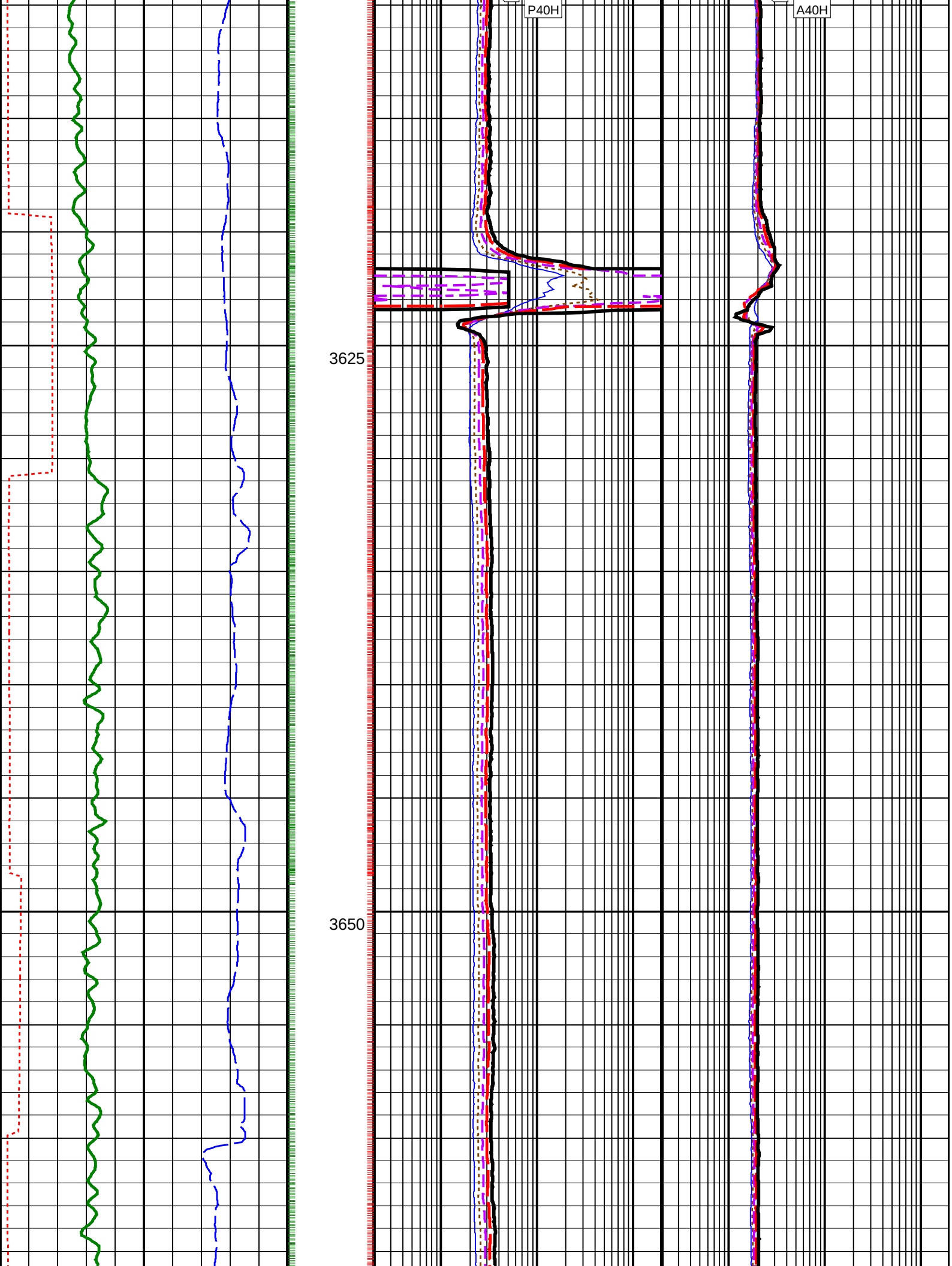
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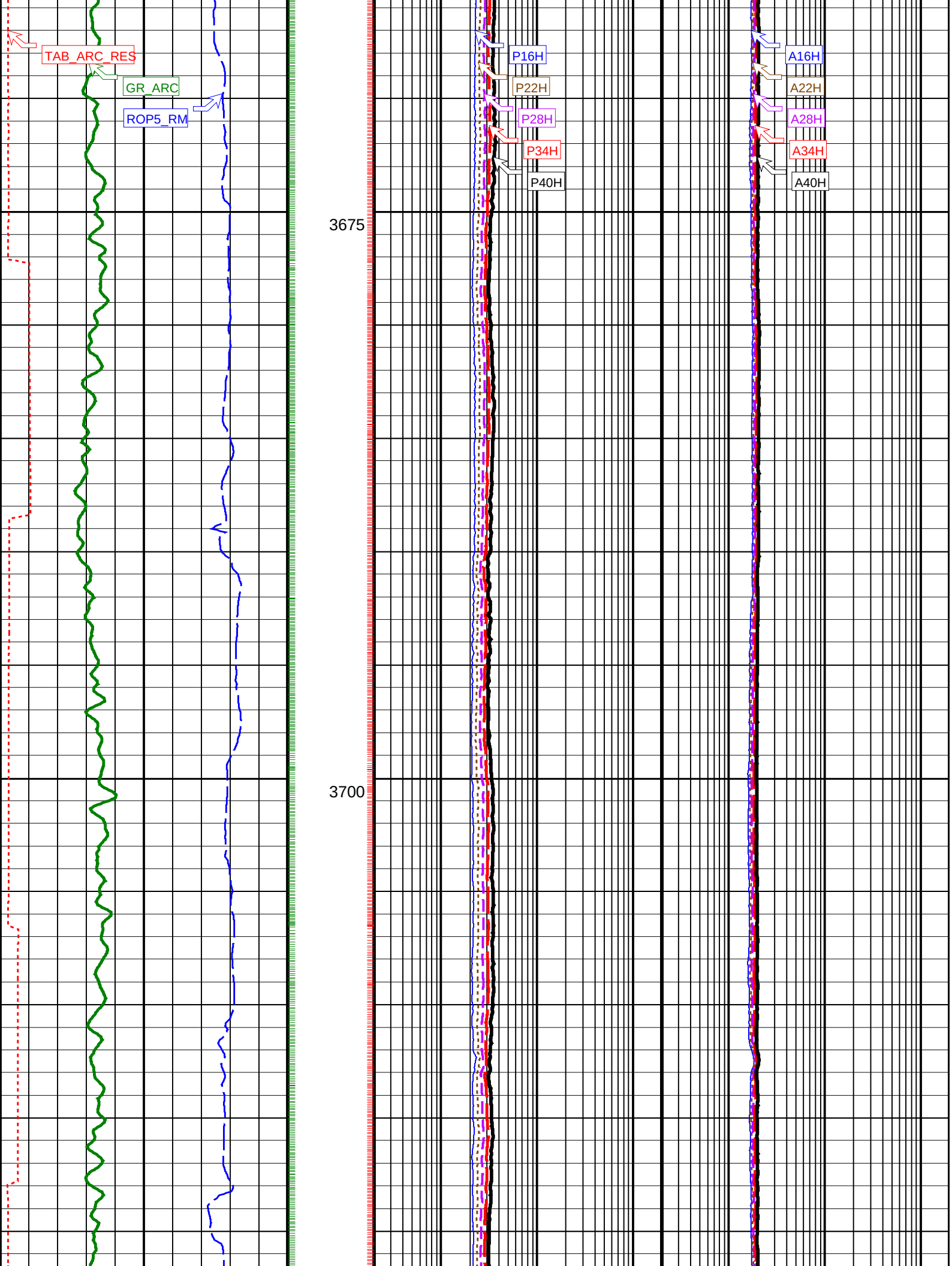
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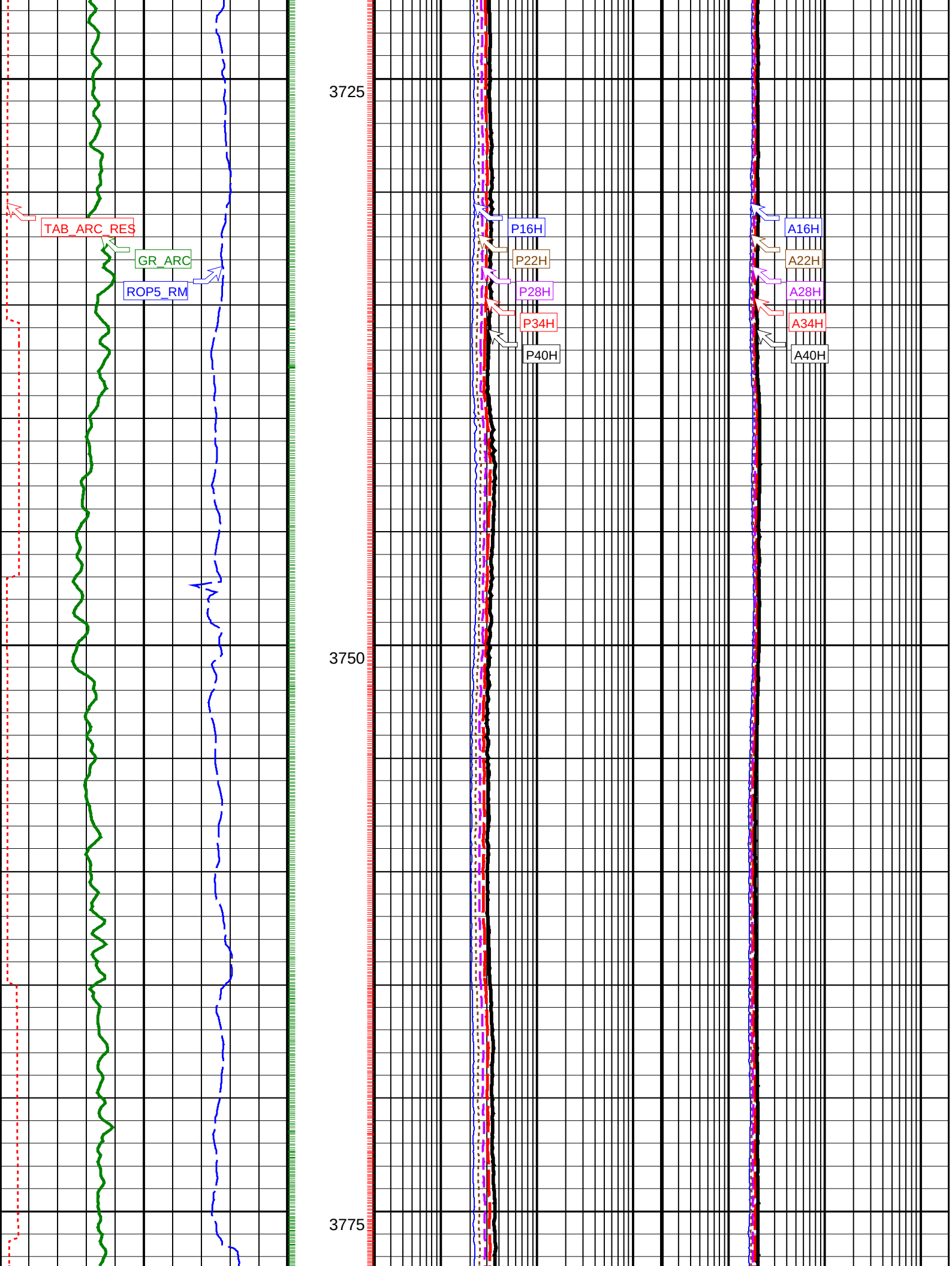
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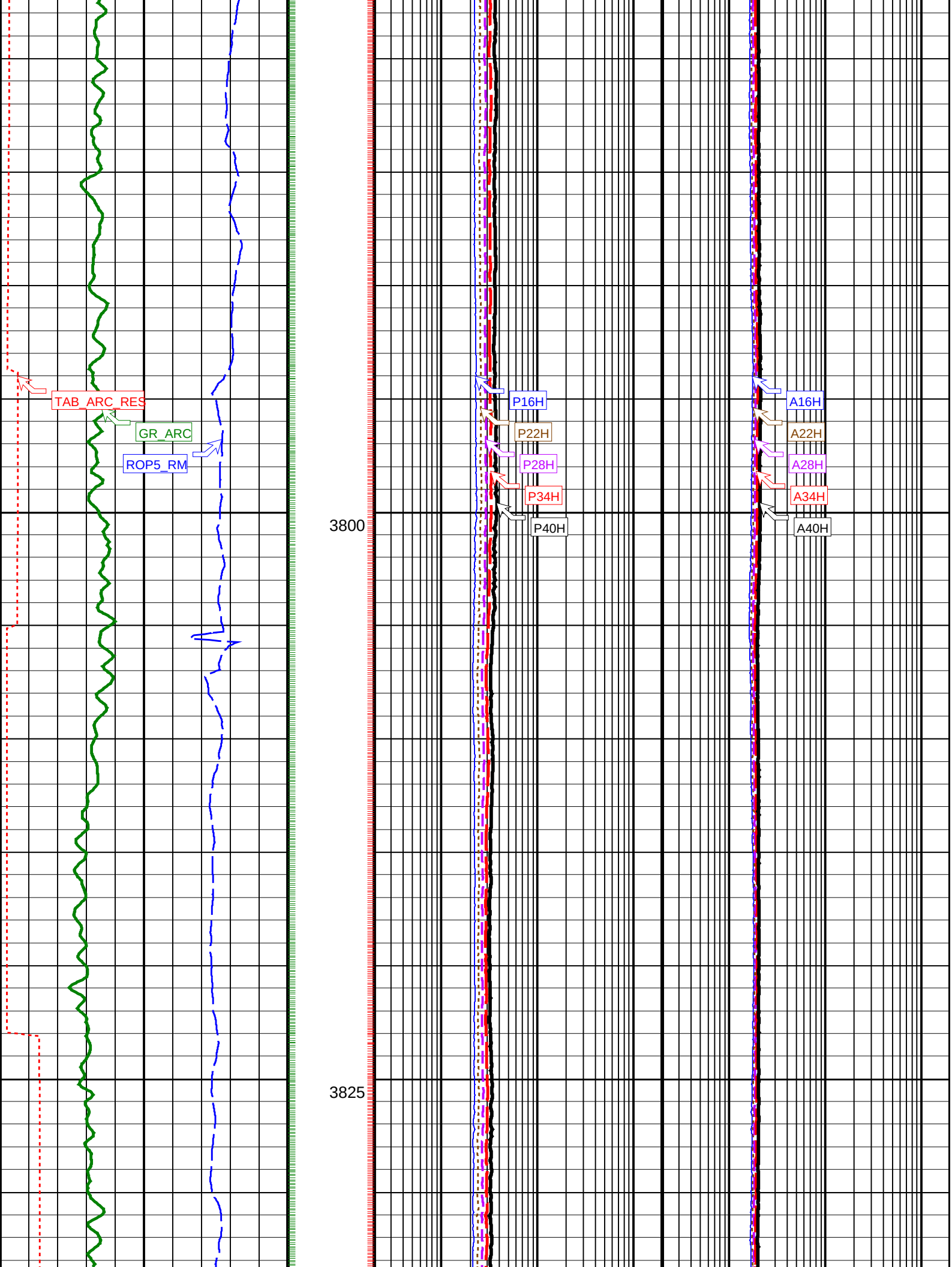
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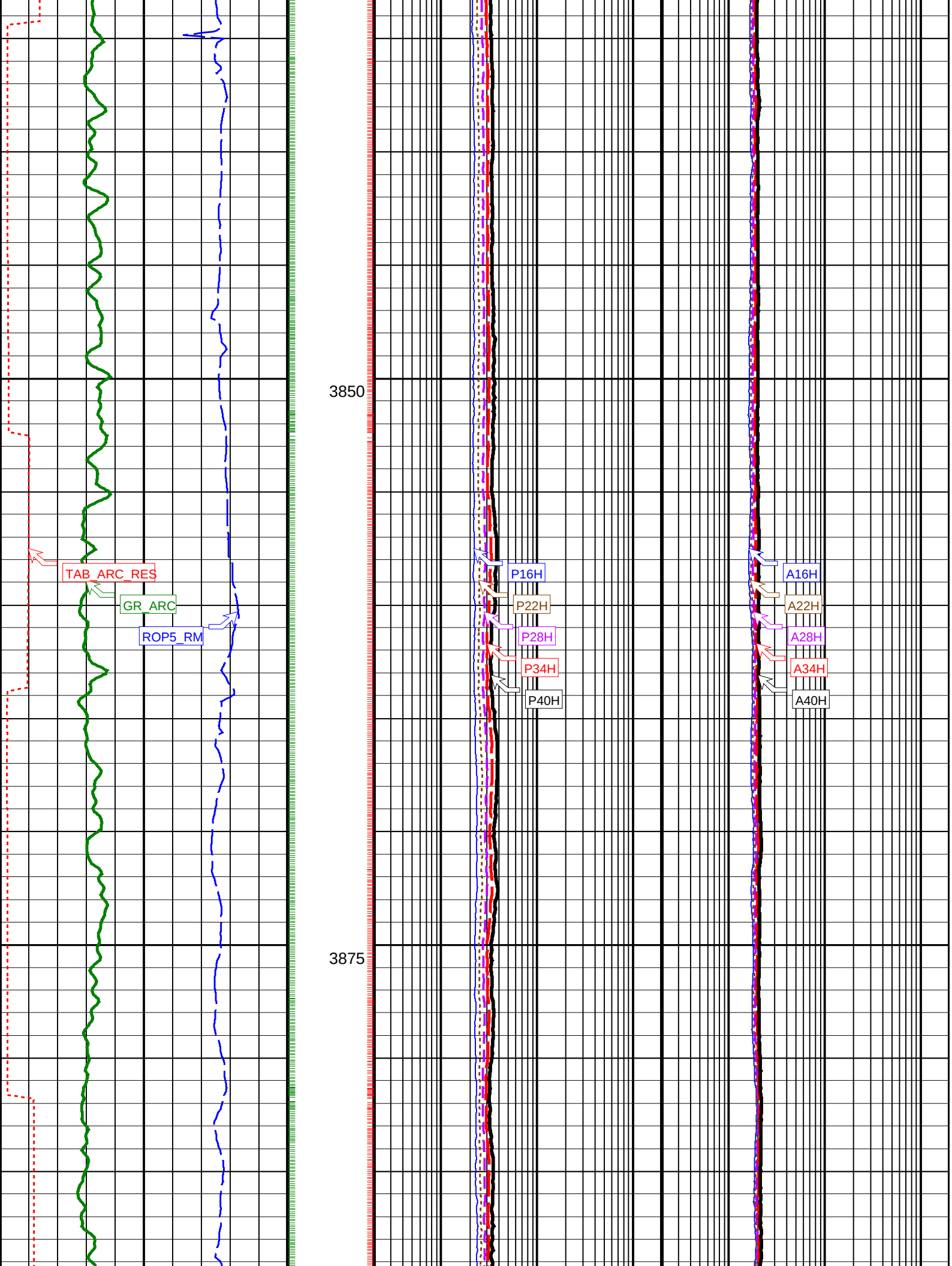
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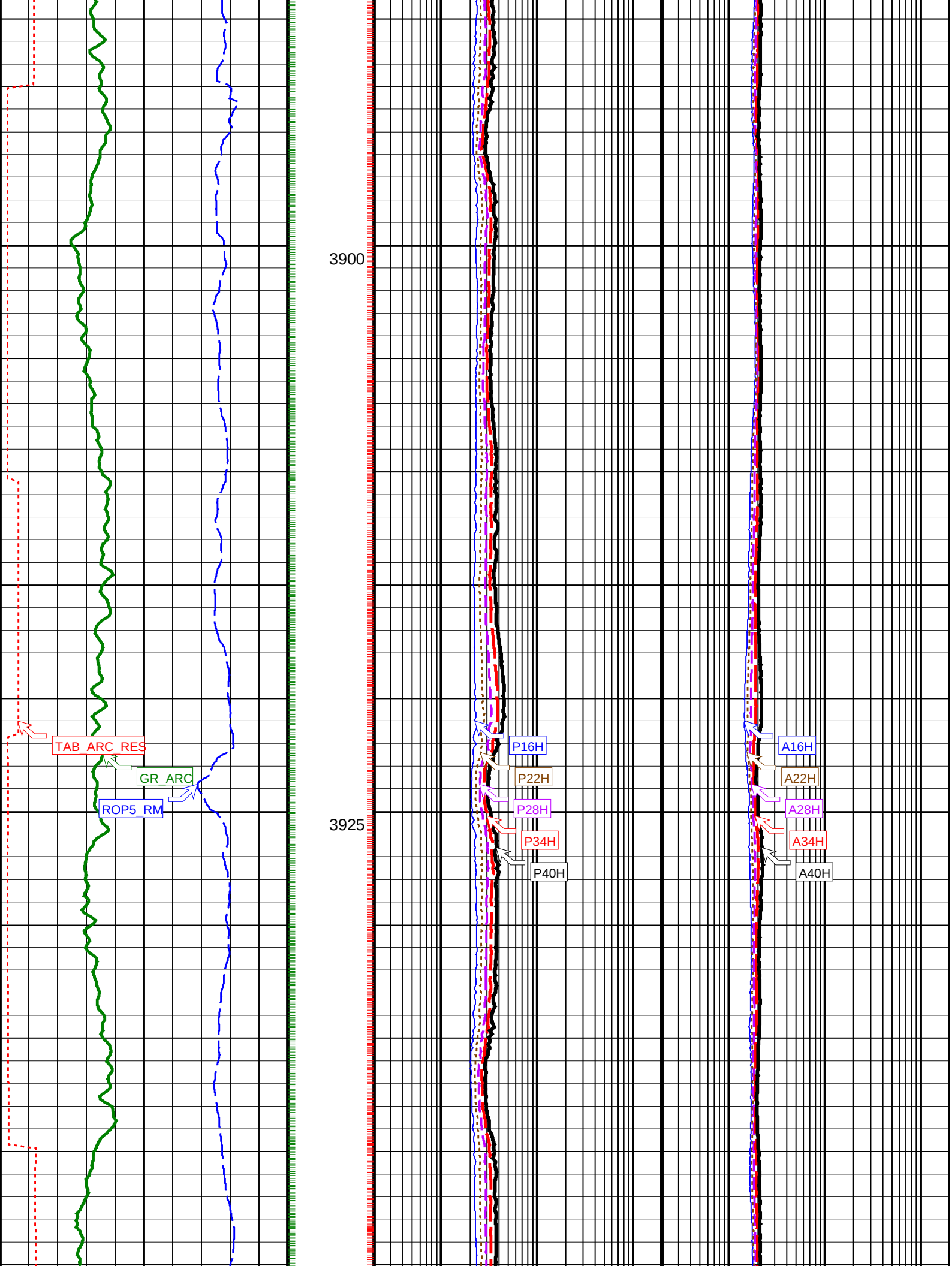
A40H


3900
3925
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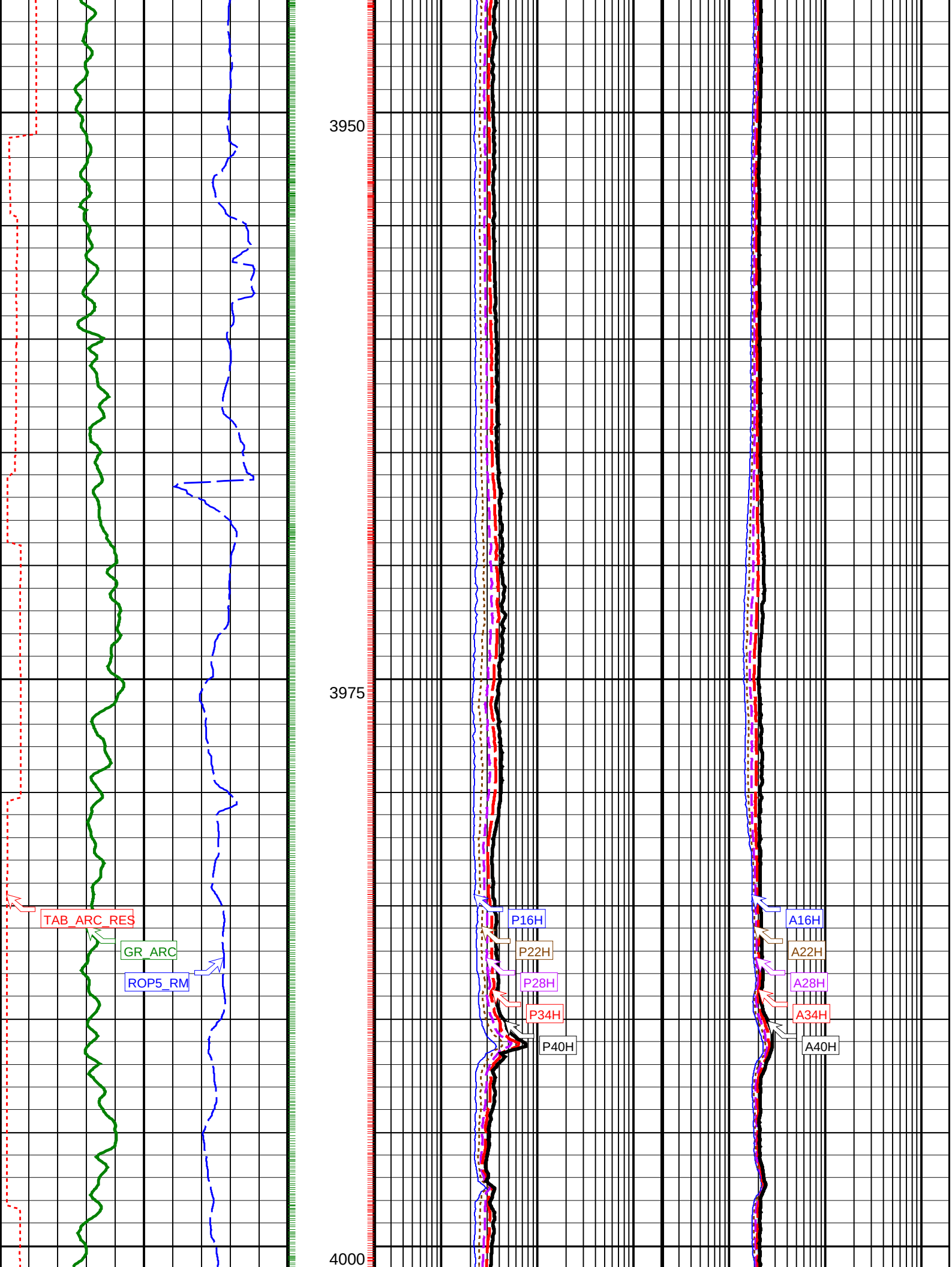
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H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3975
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P16H
P22H
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P34H
P40H
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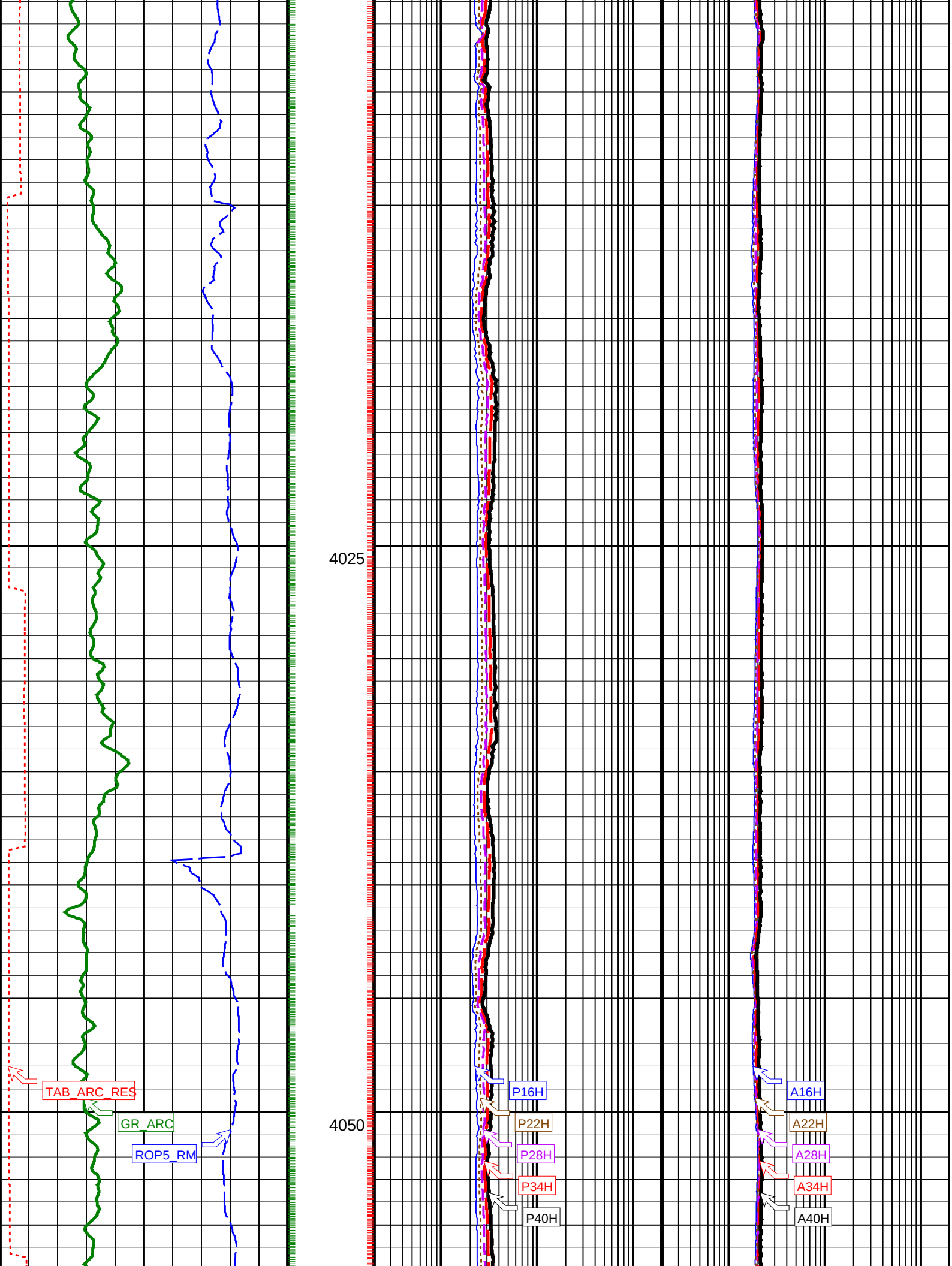
A28H
A34H
A40H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4050
TAB_ARC_RES
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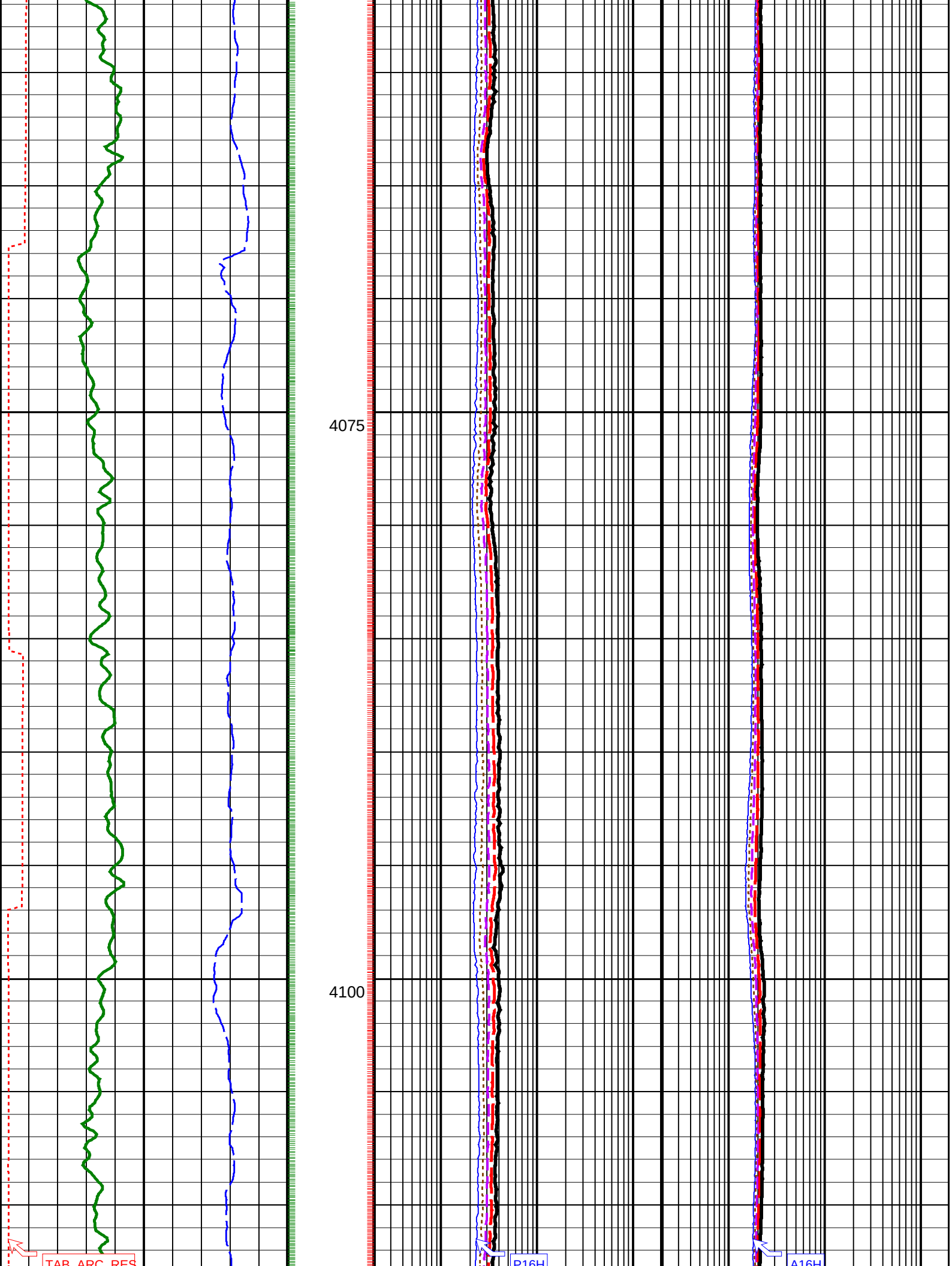
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H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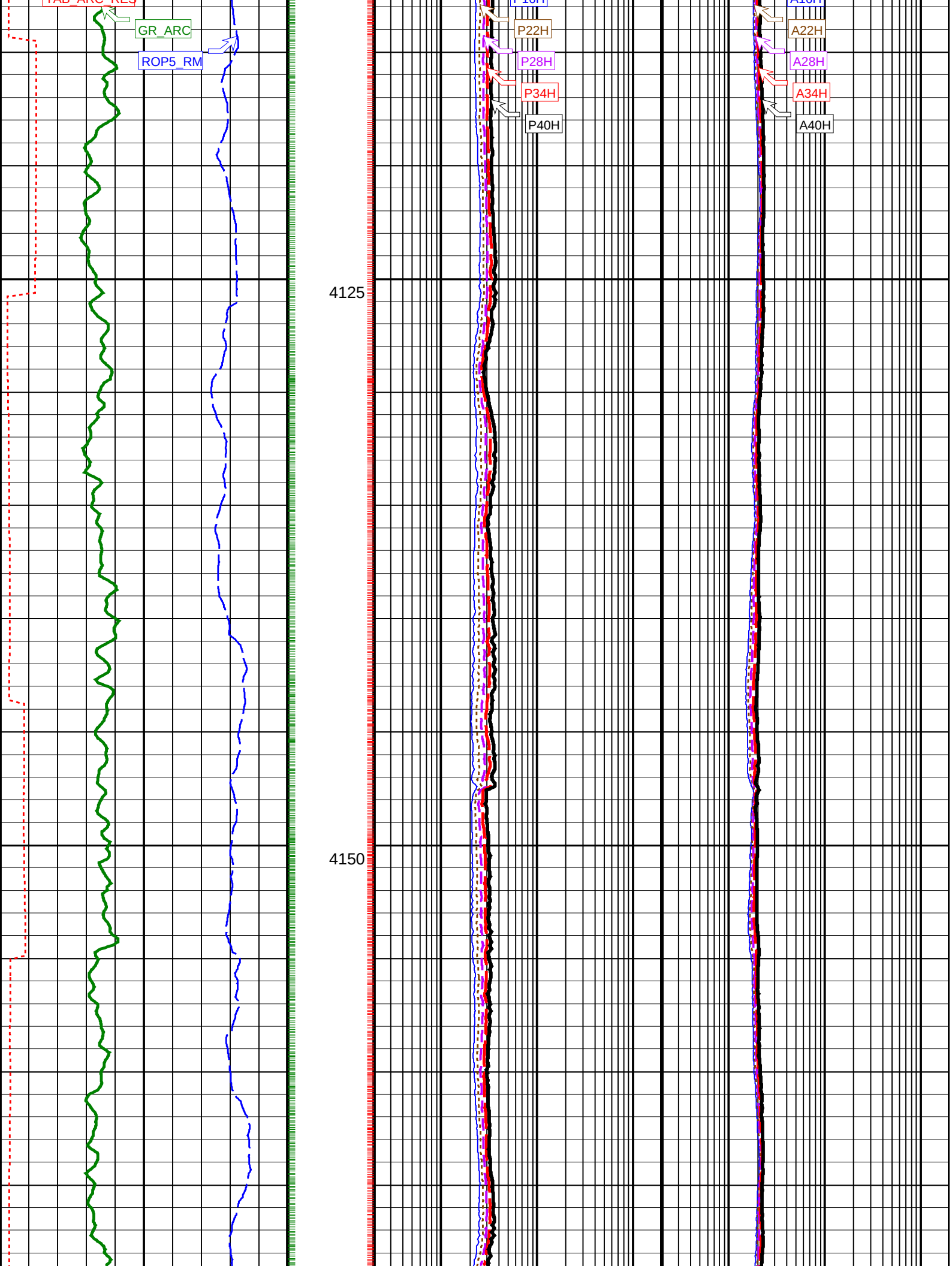
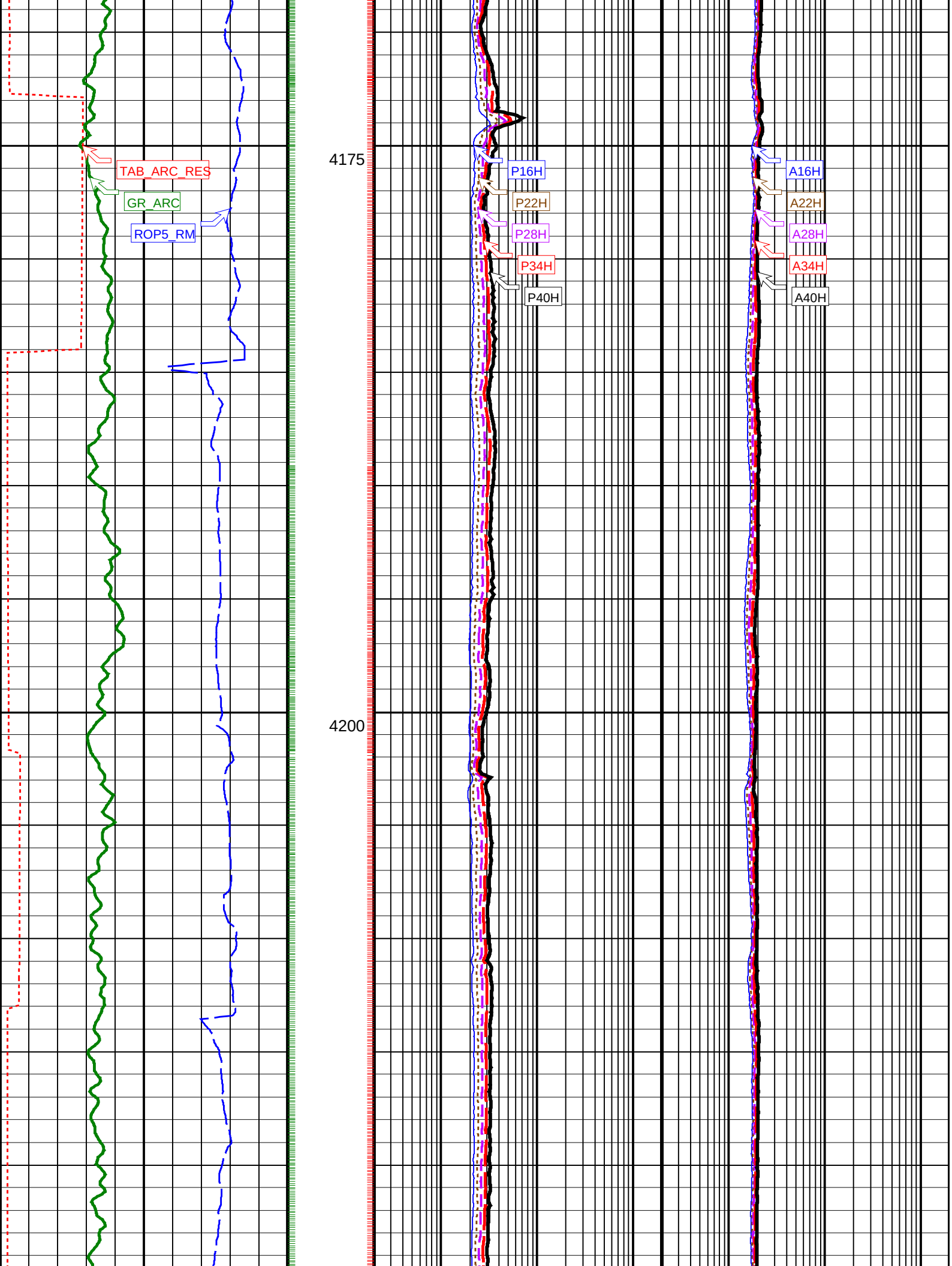
A16H


GR_ARC
ROP5_RM
P22H
P28H
P34H
P40H
A22H
A28H
A34H
A40H
4125
4150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GR_ARC
ROP5_RM
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P16H
P22H
P28H
P34H
P40H
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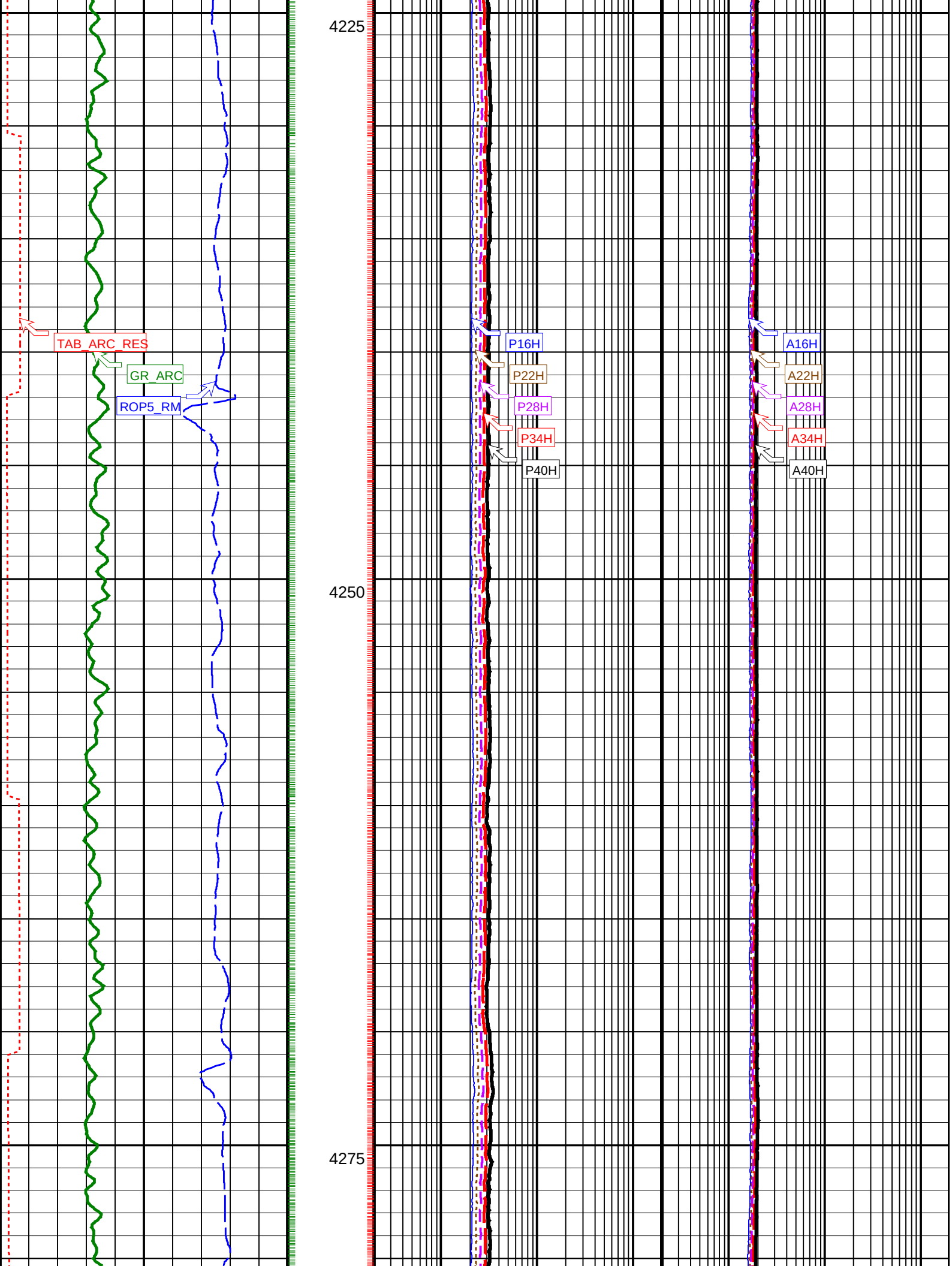
A28H
A34H
A40H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4250
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ROP5_RM
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P22H
P28H
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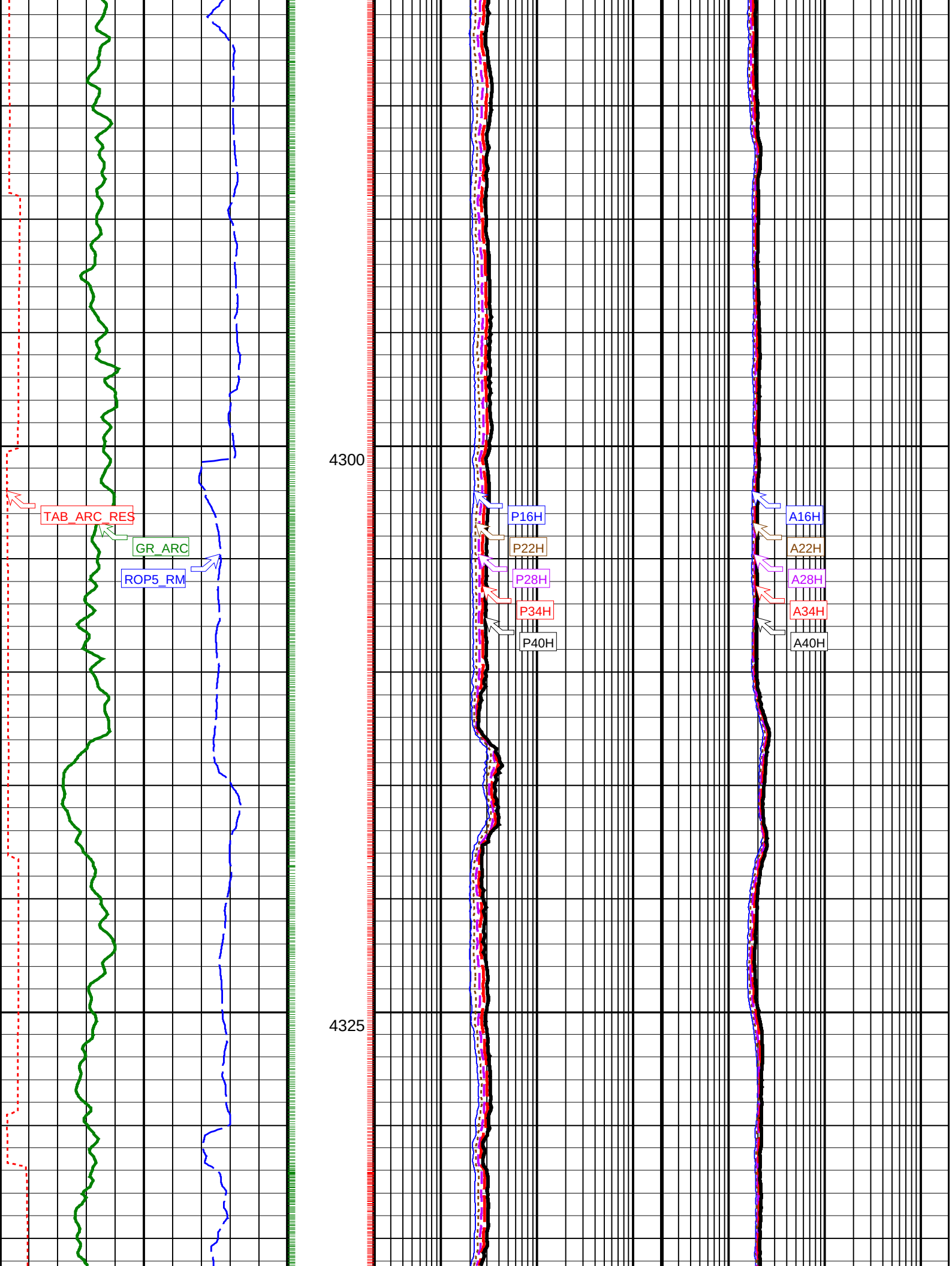
A22H
A28H
A34H
A40H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GR_ARC
ROP5_RM
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4325
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P22H
P28H
P34H
P40H
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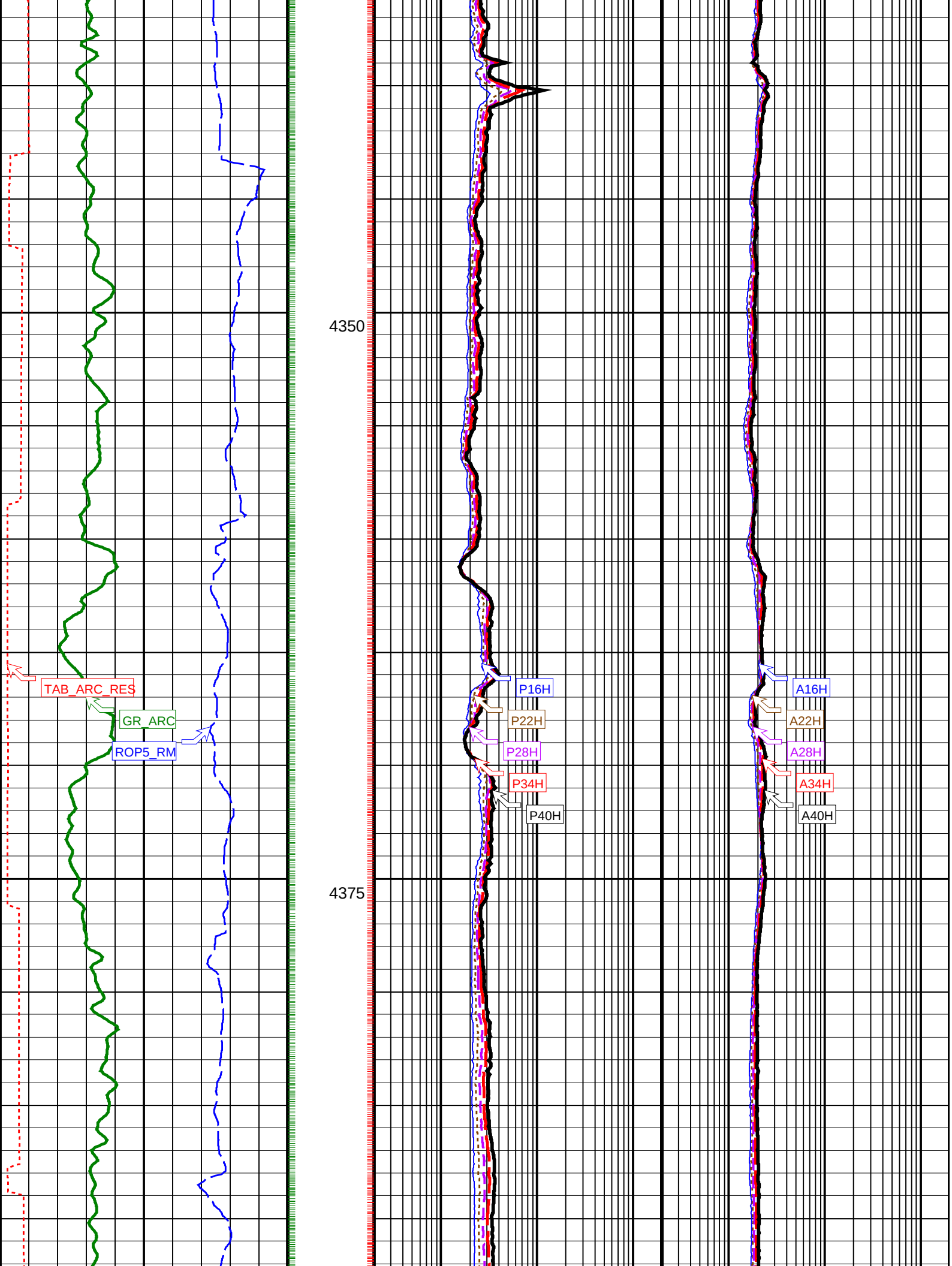
A22H
A28H
A34H
A40H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ROP5_RM
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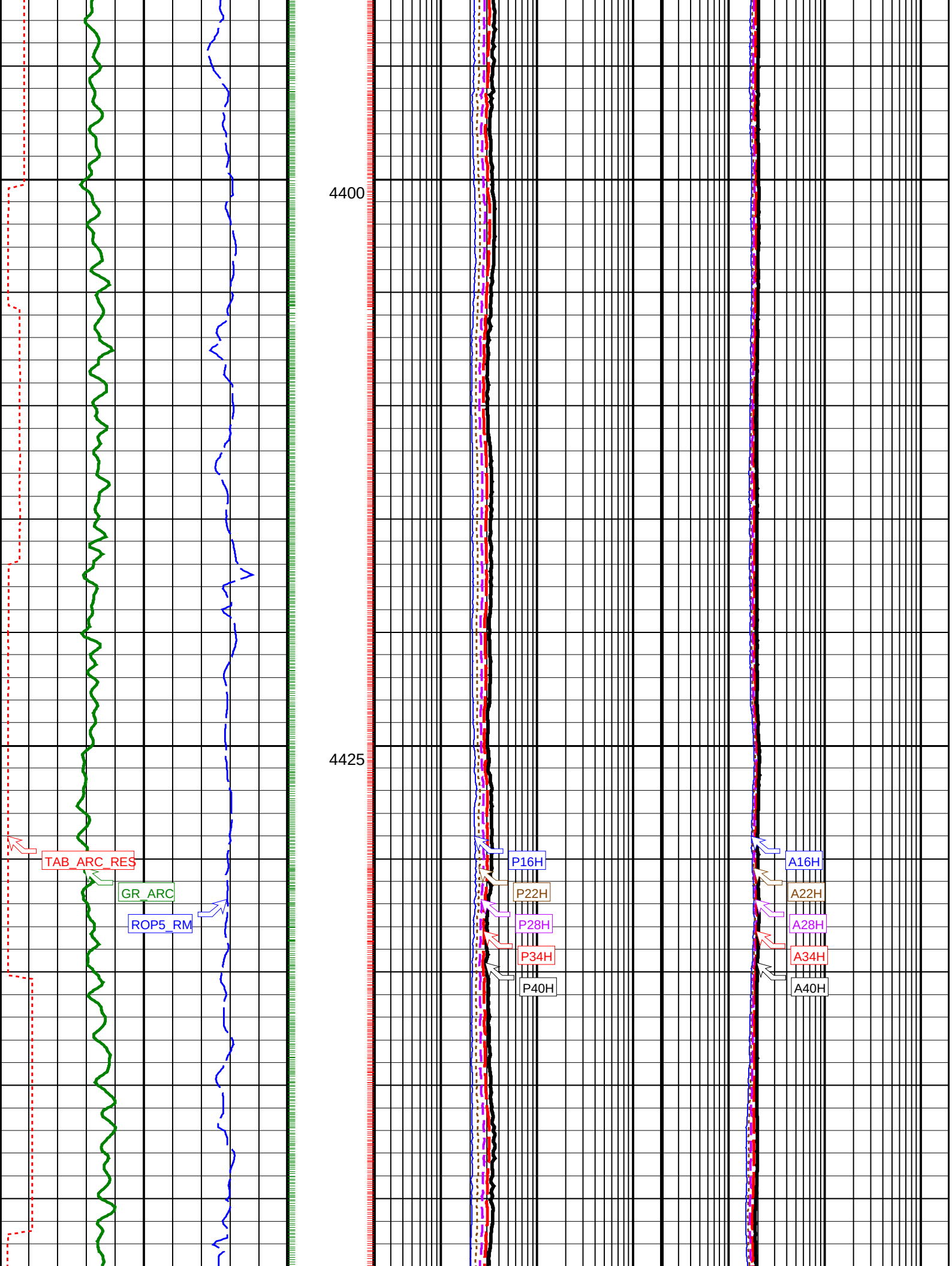
A40H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4425
TAB_ARC_RES
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ROP5_RM
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P22H
P28H
P34H
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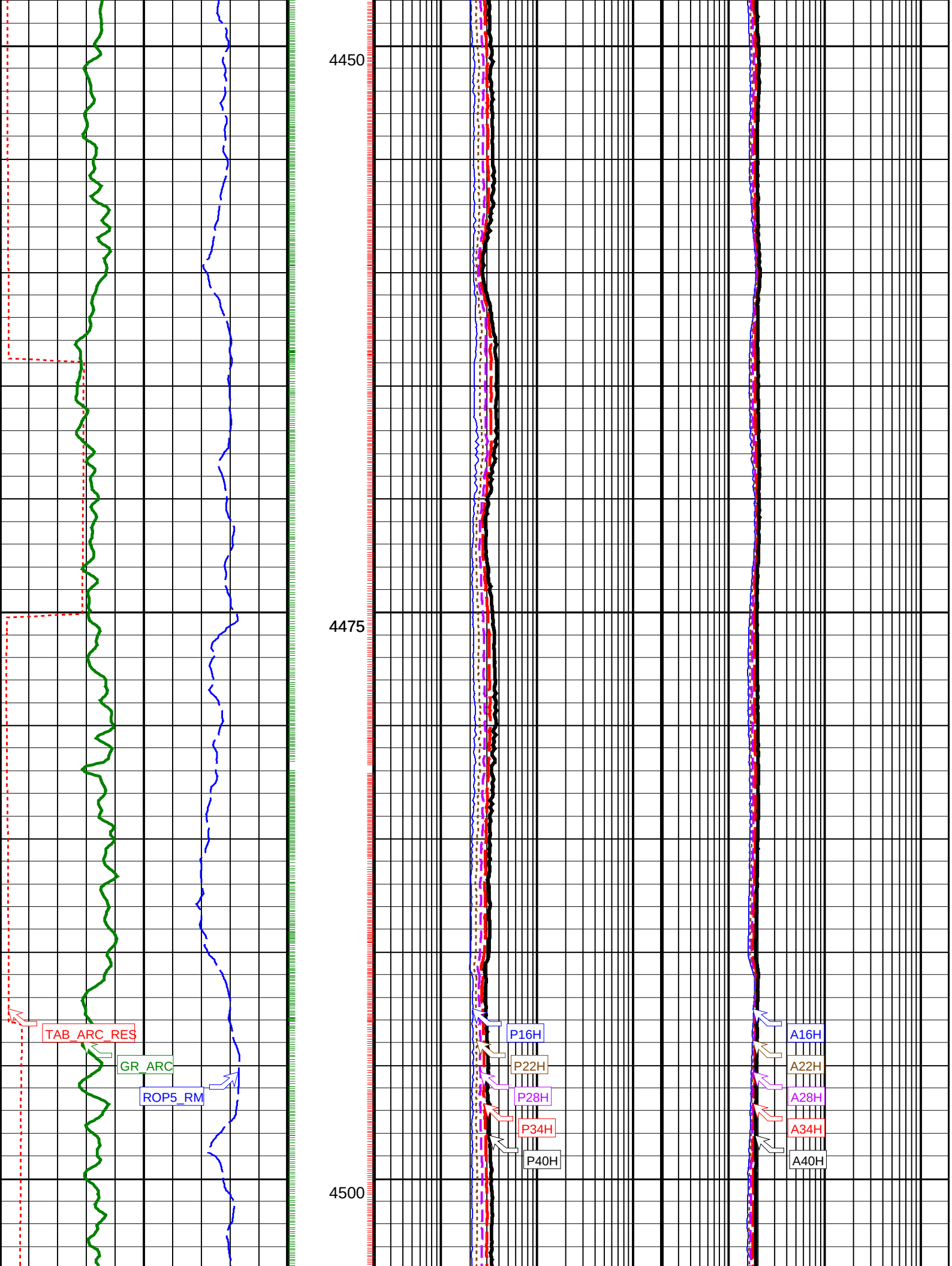
A22H
A28H
A34H
A40H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4475
4500
TAB_ARC_RES
GR_ARC
ROP5_RM
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P22H
P28H
P34H
P40H
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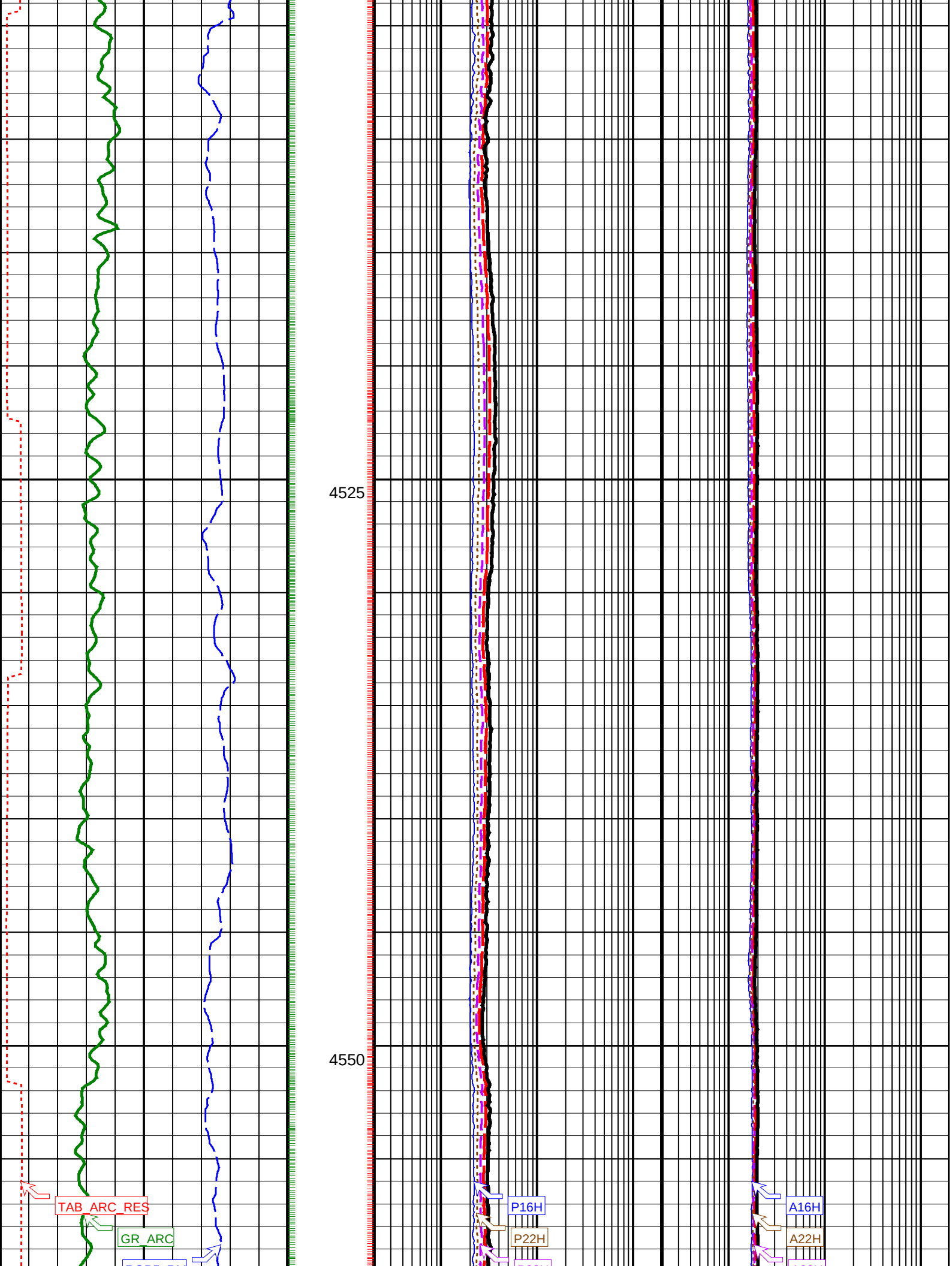
A22H
A28H
A34H
A40H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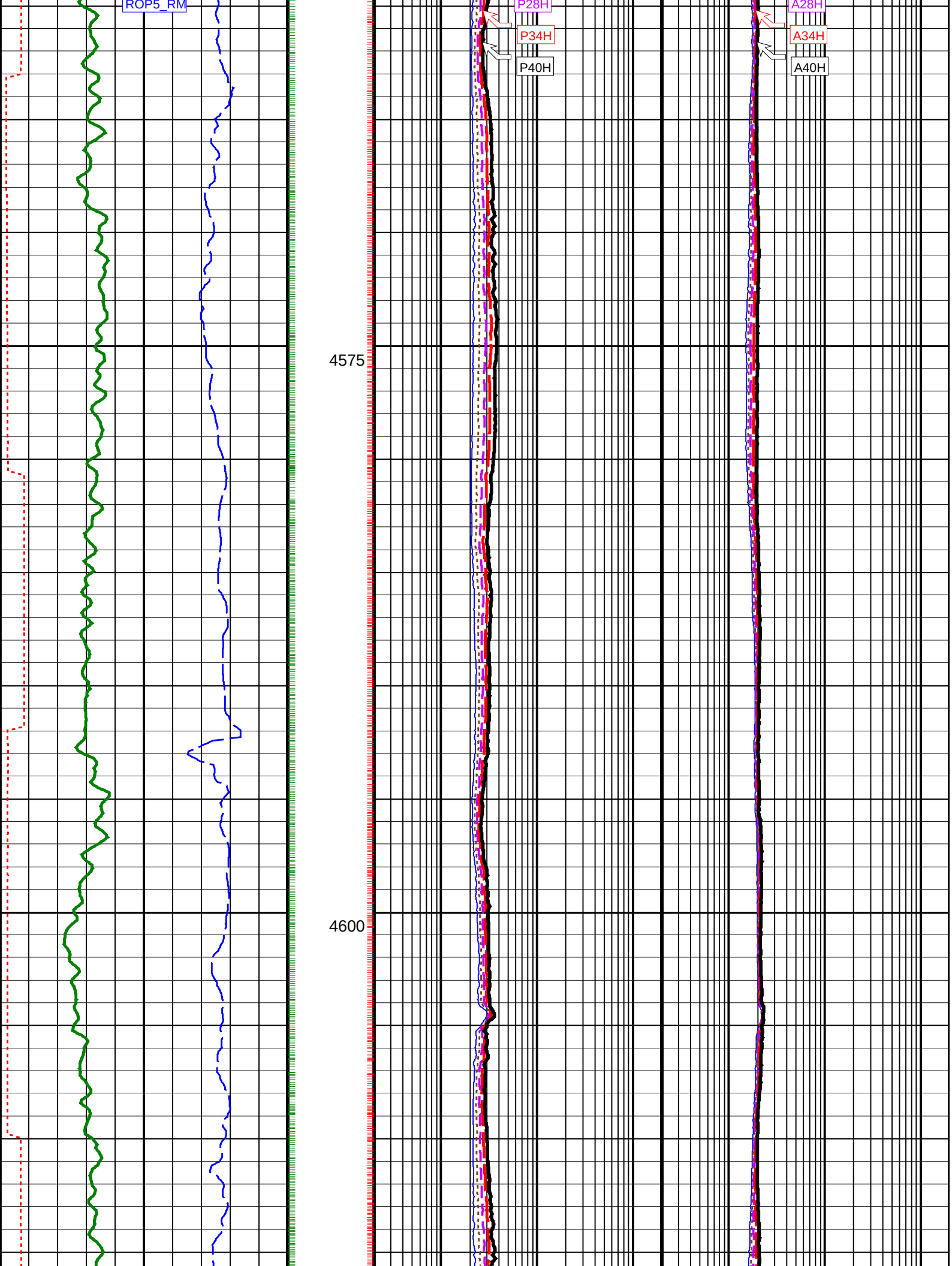
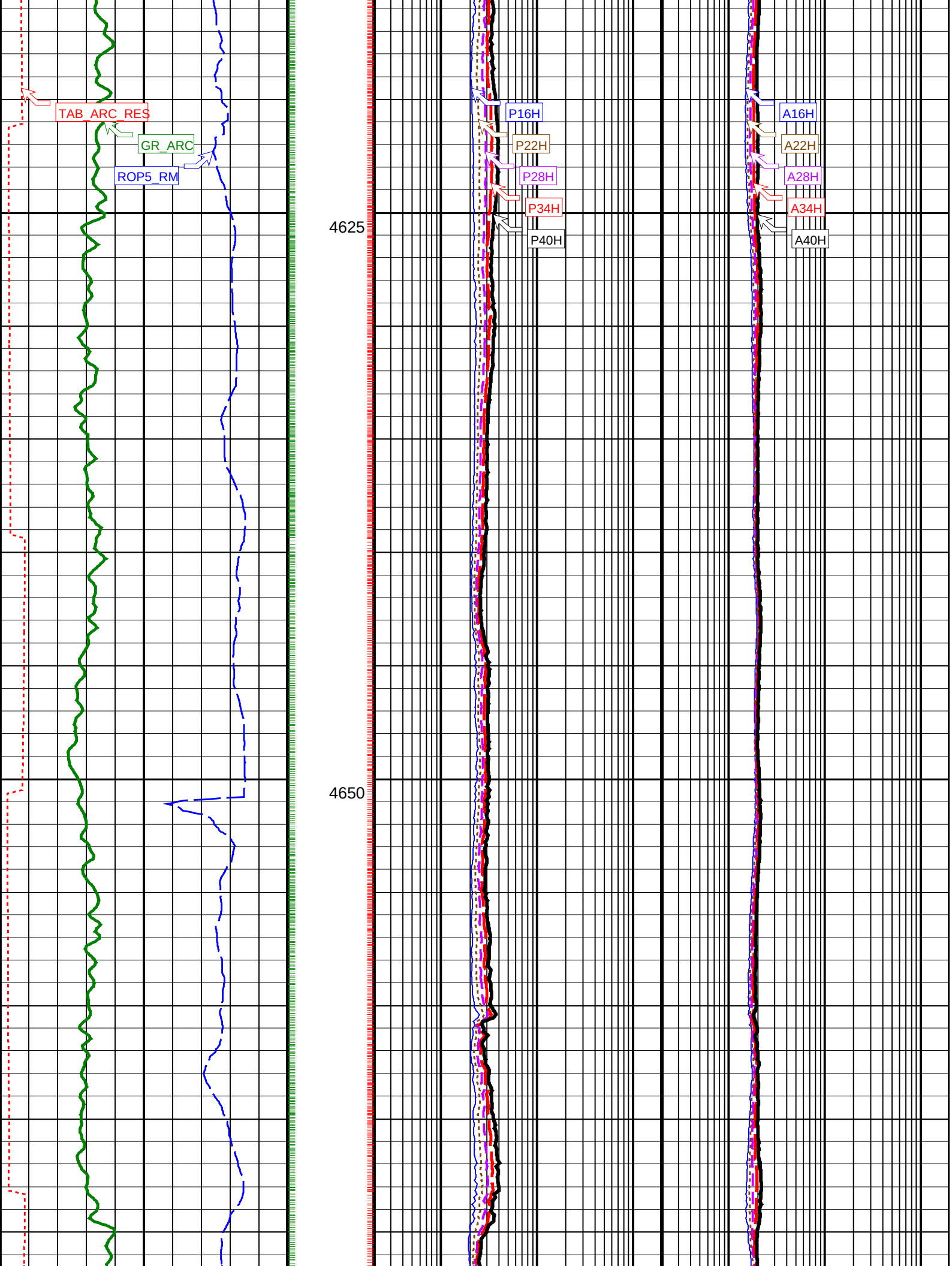
GR_ARC
P16H
P22H
A16H
A22H


ROP5_RM
P28H
P34H
P40H
A28H
A34H
A40H
4575
4600


TAB_ARC_RES
GR_ARC
ROP5_RM
4625
4650
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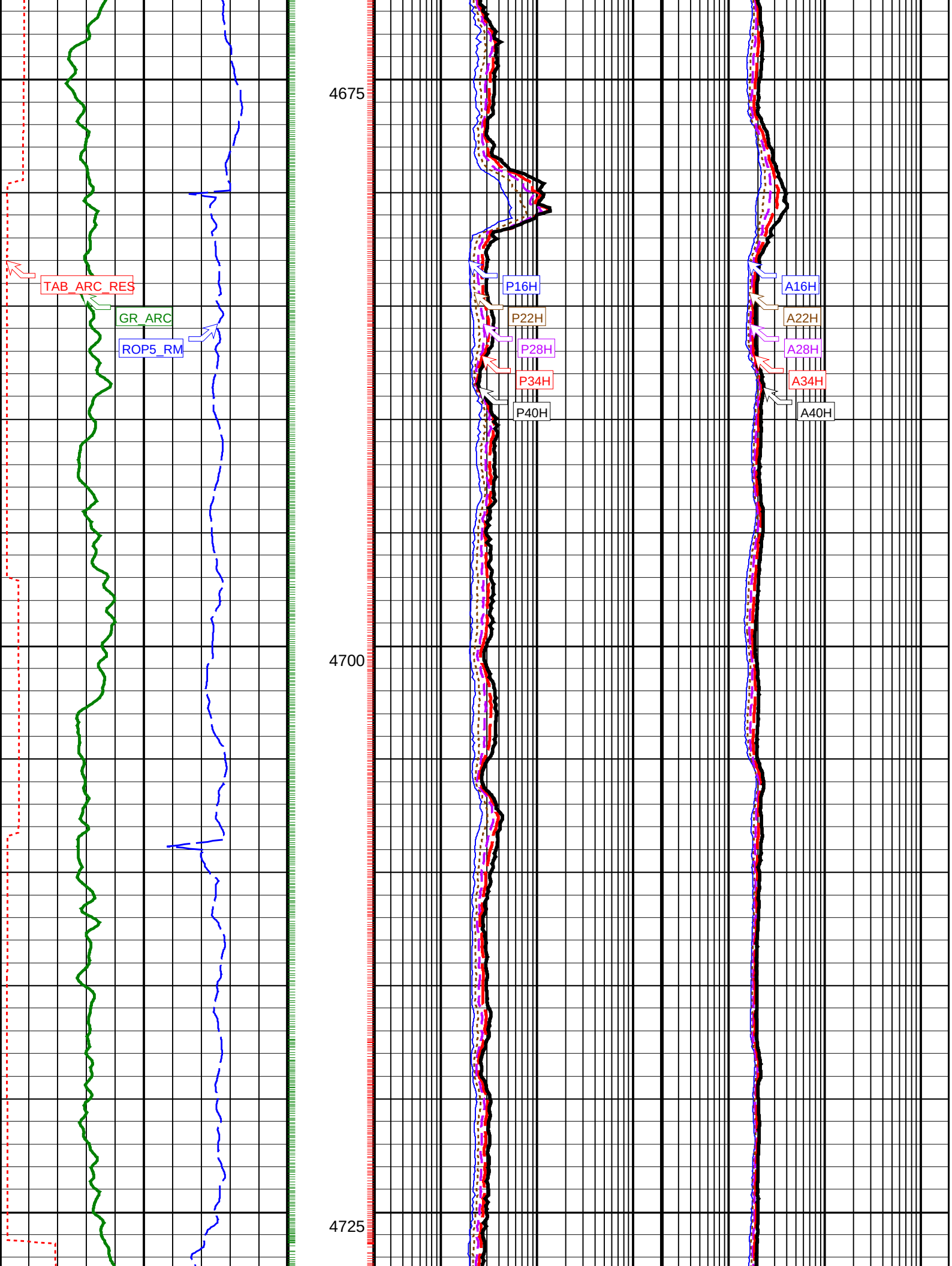
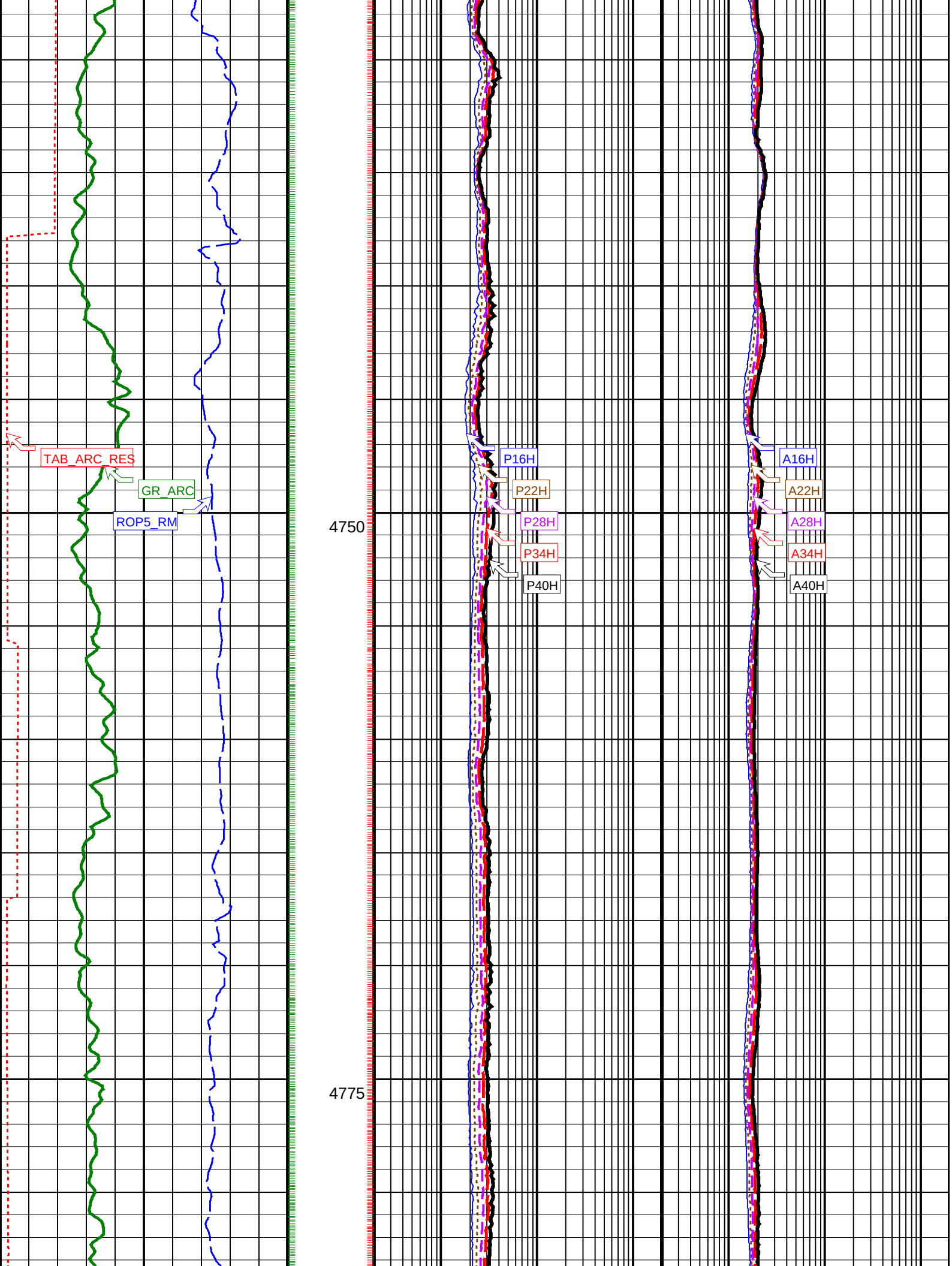
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


TAB_ARC_RES
GR_ARC
ROP5_RM
4675
4700
4725
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H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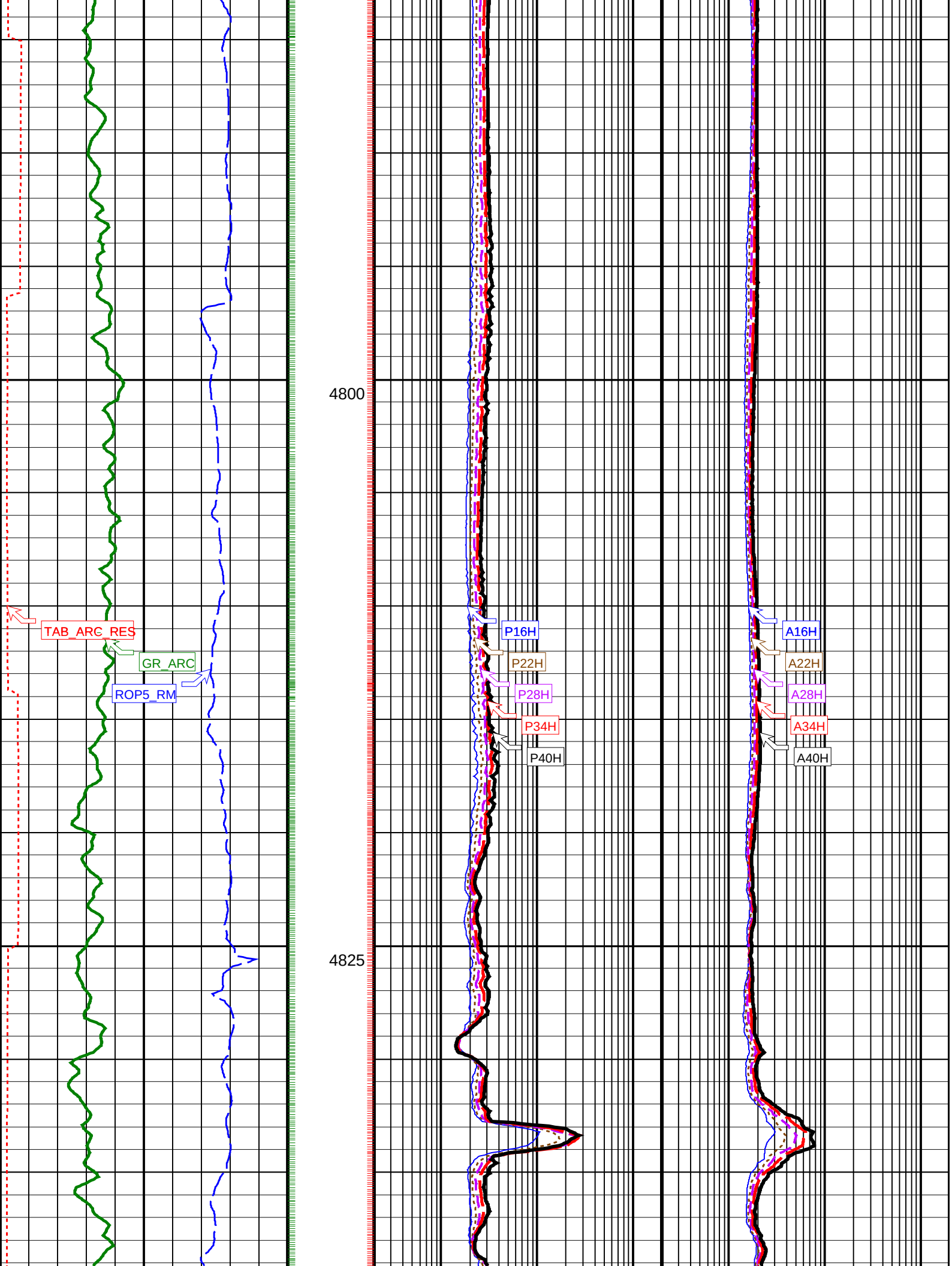
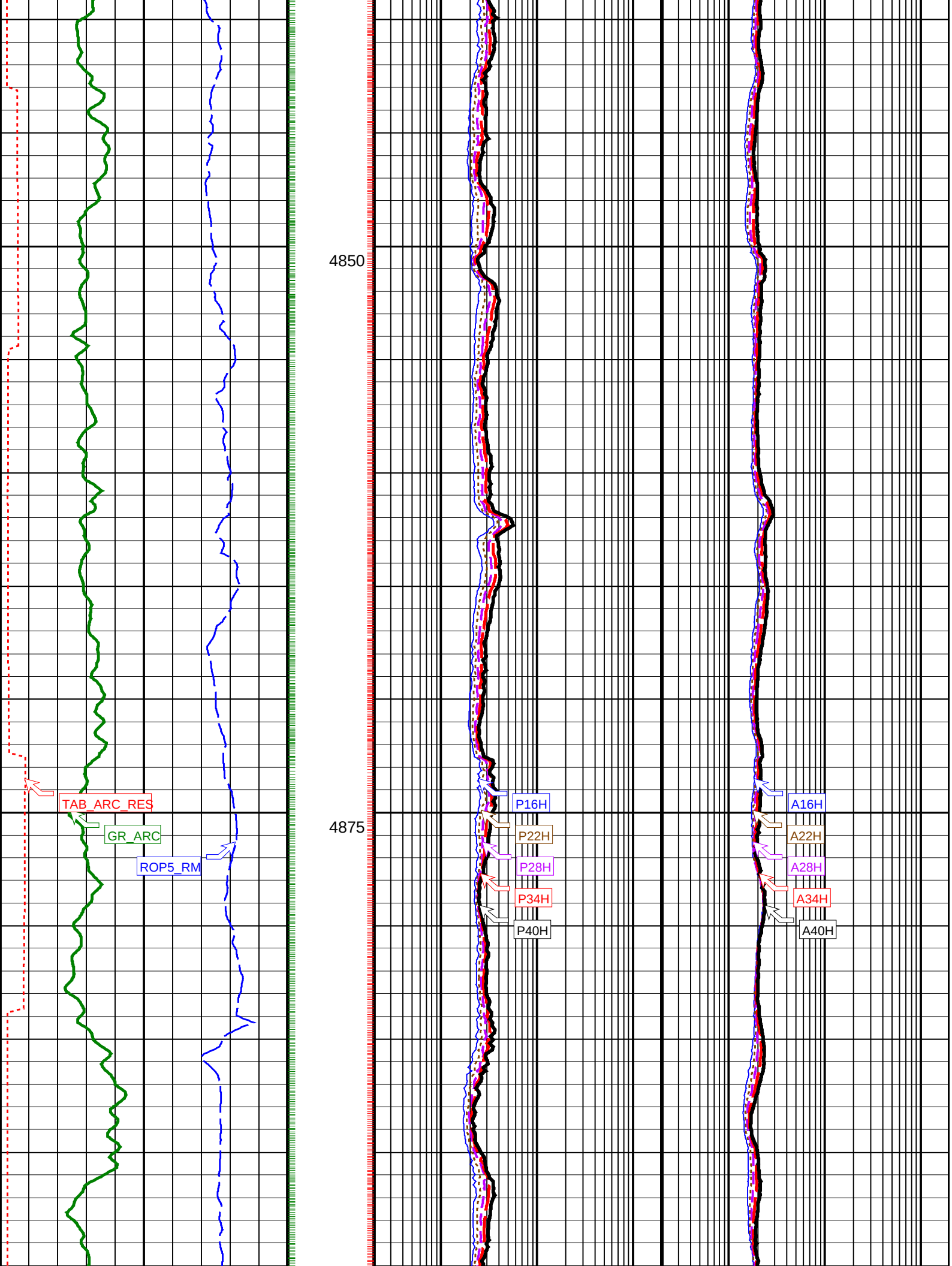
GR_ARC
ROP5_RM
4750
4775
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


TAB_ARC_RES
GR_ARC
ROP5_RM
4800
4825
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


4850
4875
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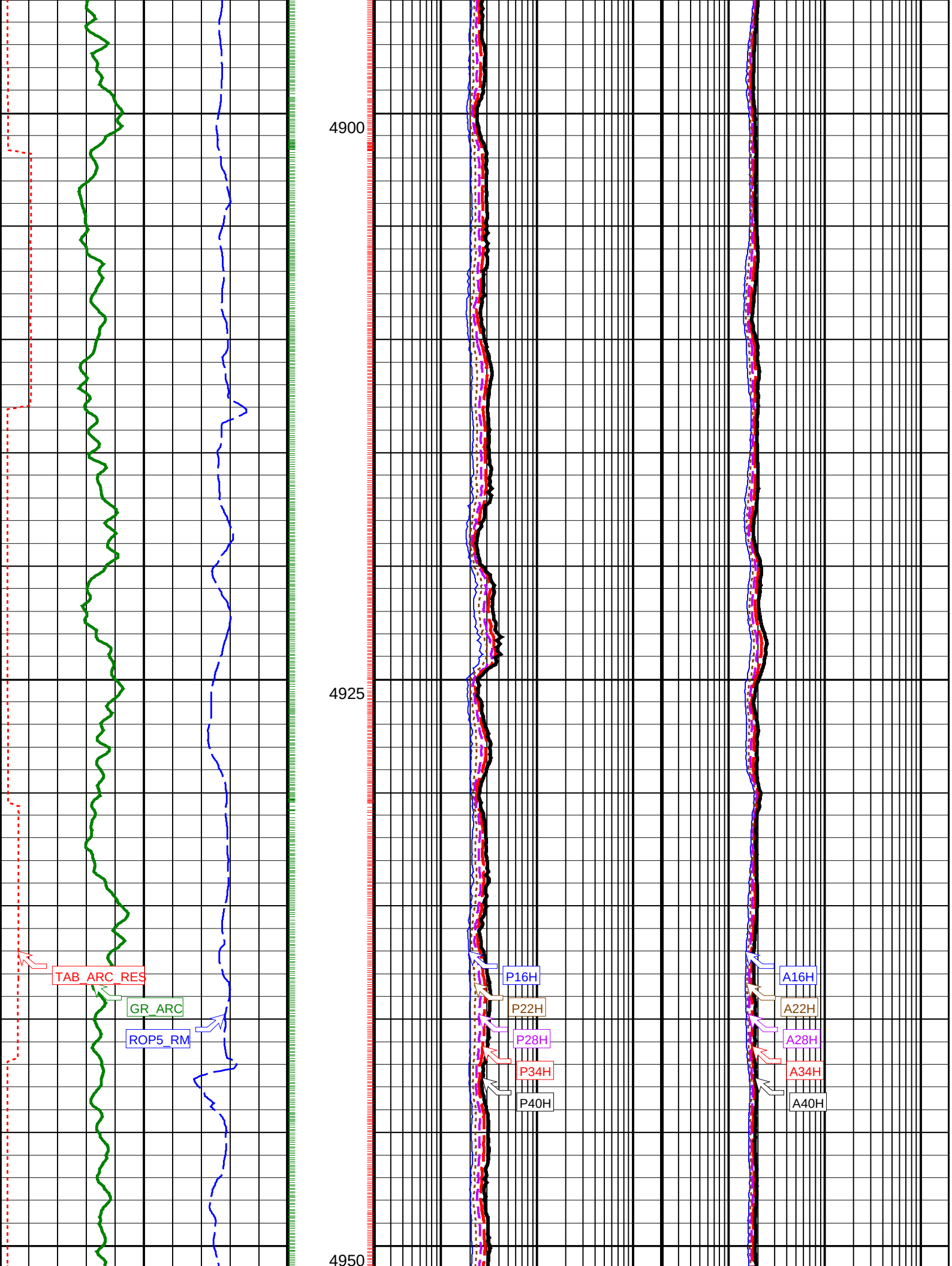
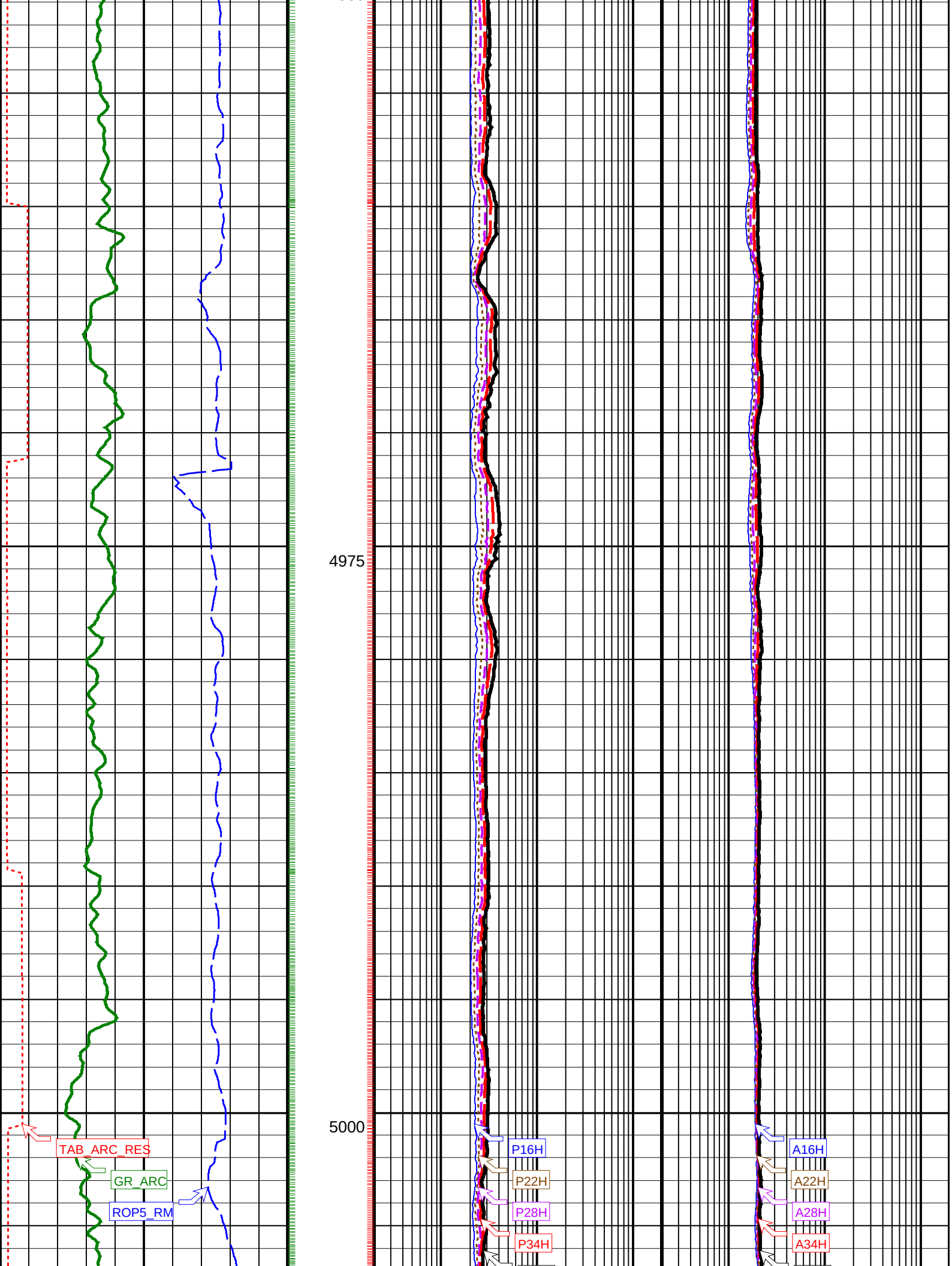
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


4900
4925
4950
TAB_ARC_RES
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


4975
5000
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ROP5_RM
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P28H
P34H
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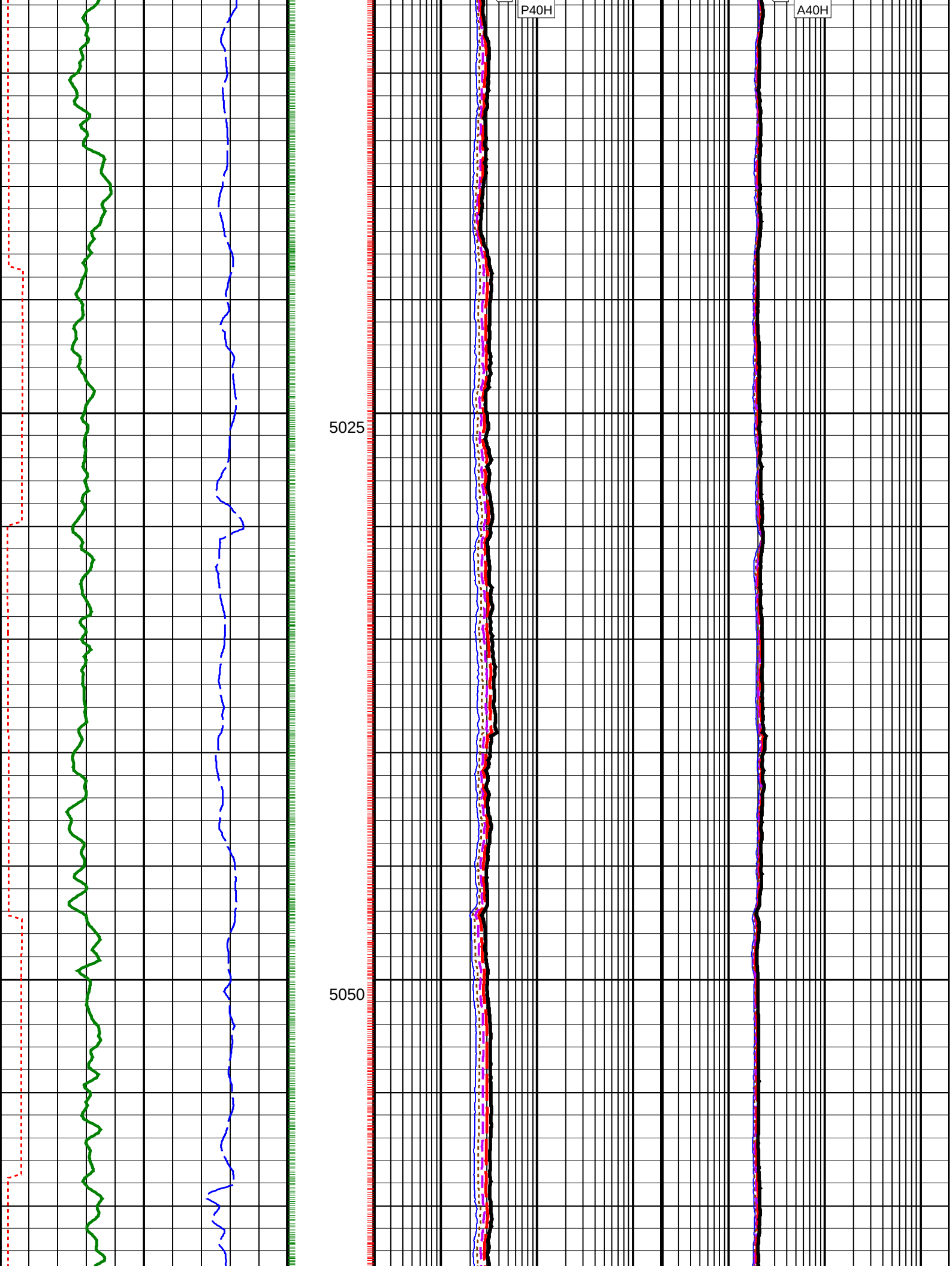
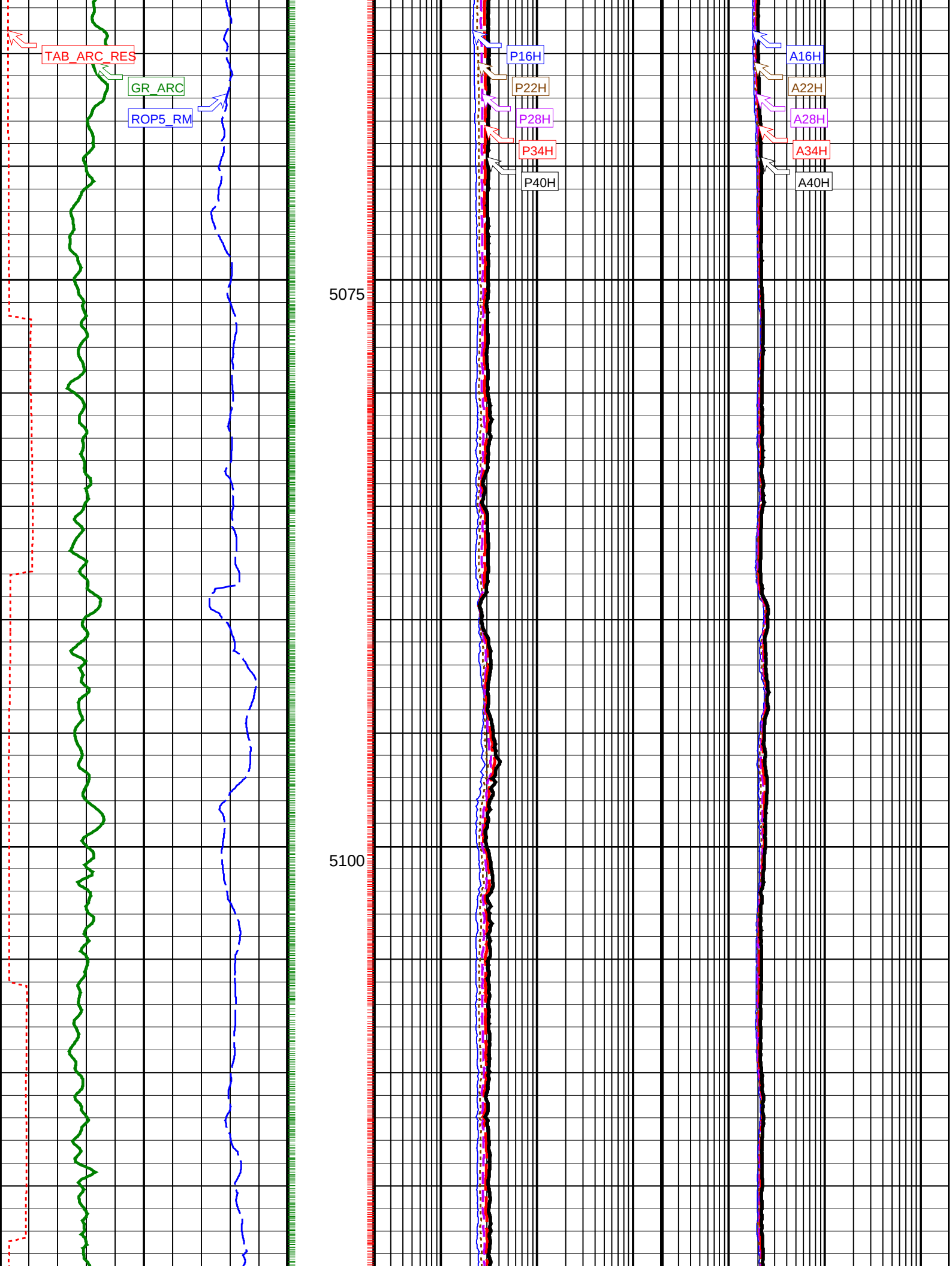
A22H
A28H
A34H


P40H
A40H
5025
5050


TAB_ARC_RES
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
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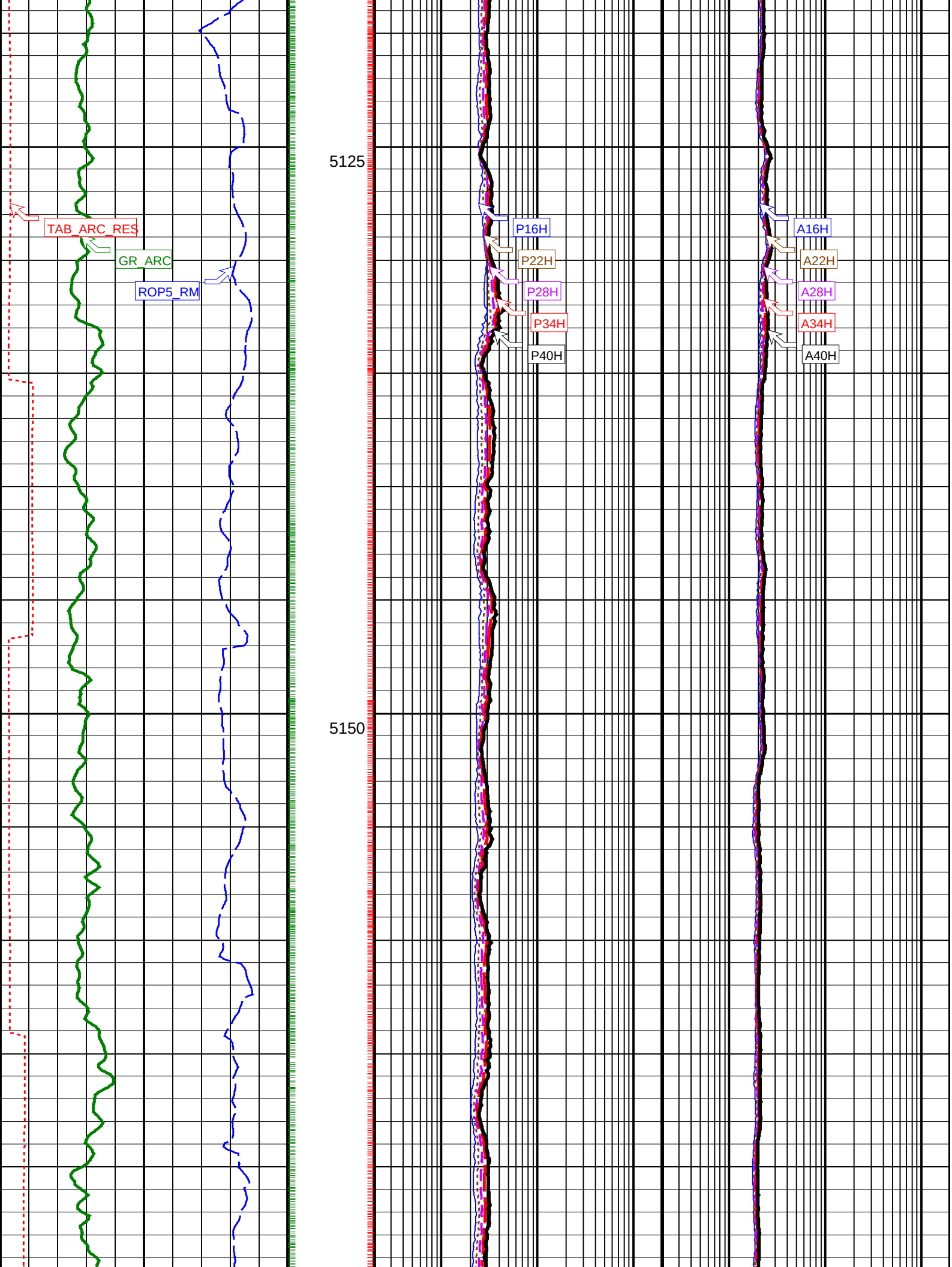
A40H
5075
5100


TAB_ARC_RES
GR_ARC
ROP5_RM
5125
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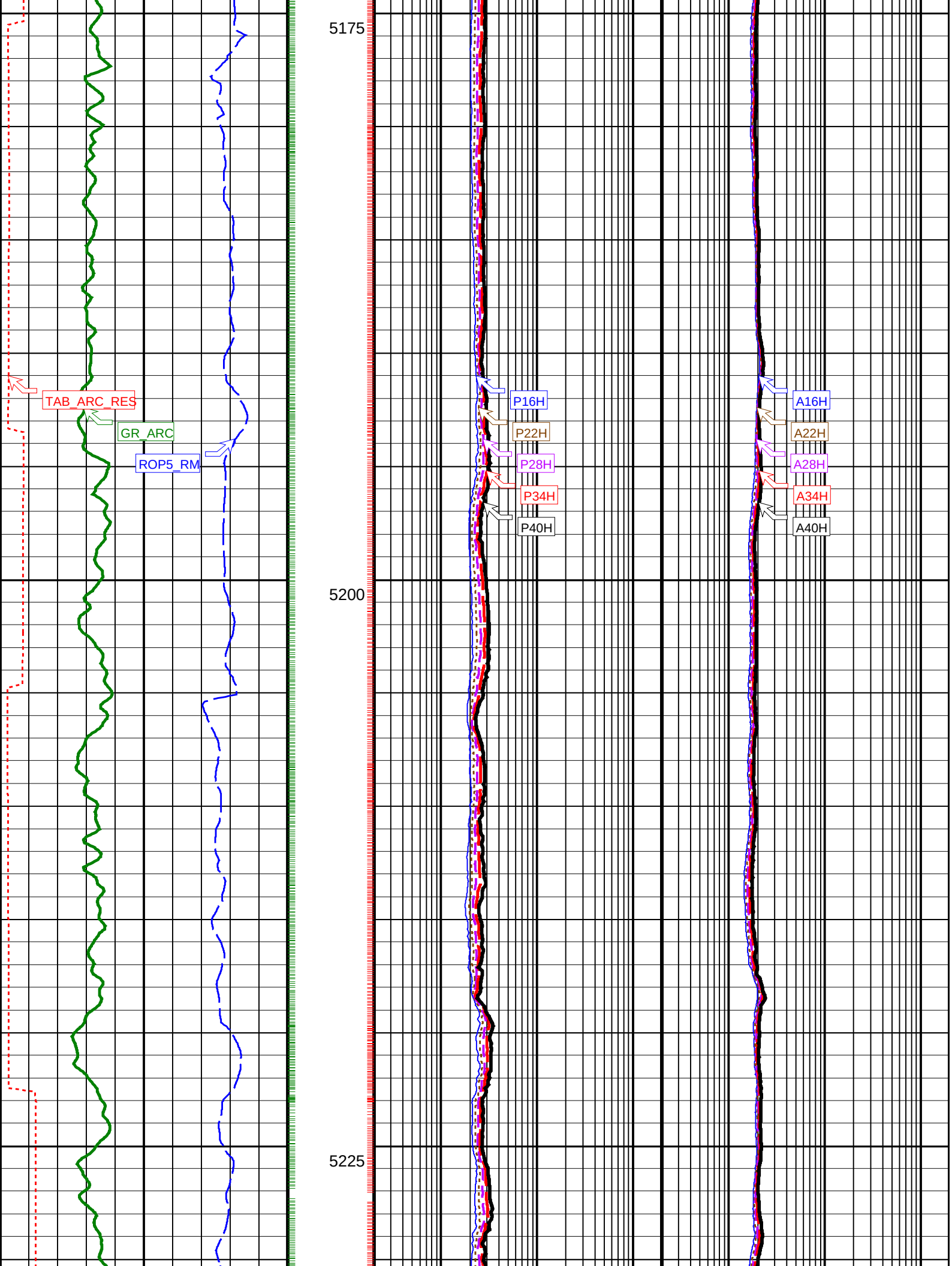
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


5175
5200
5225
TAB_ARC_RES
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
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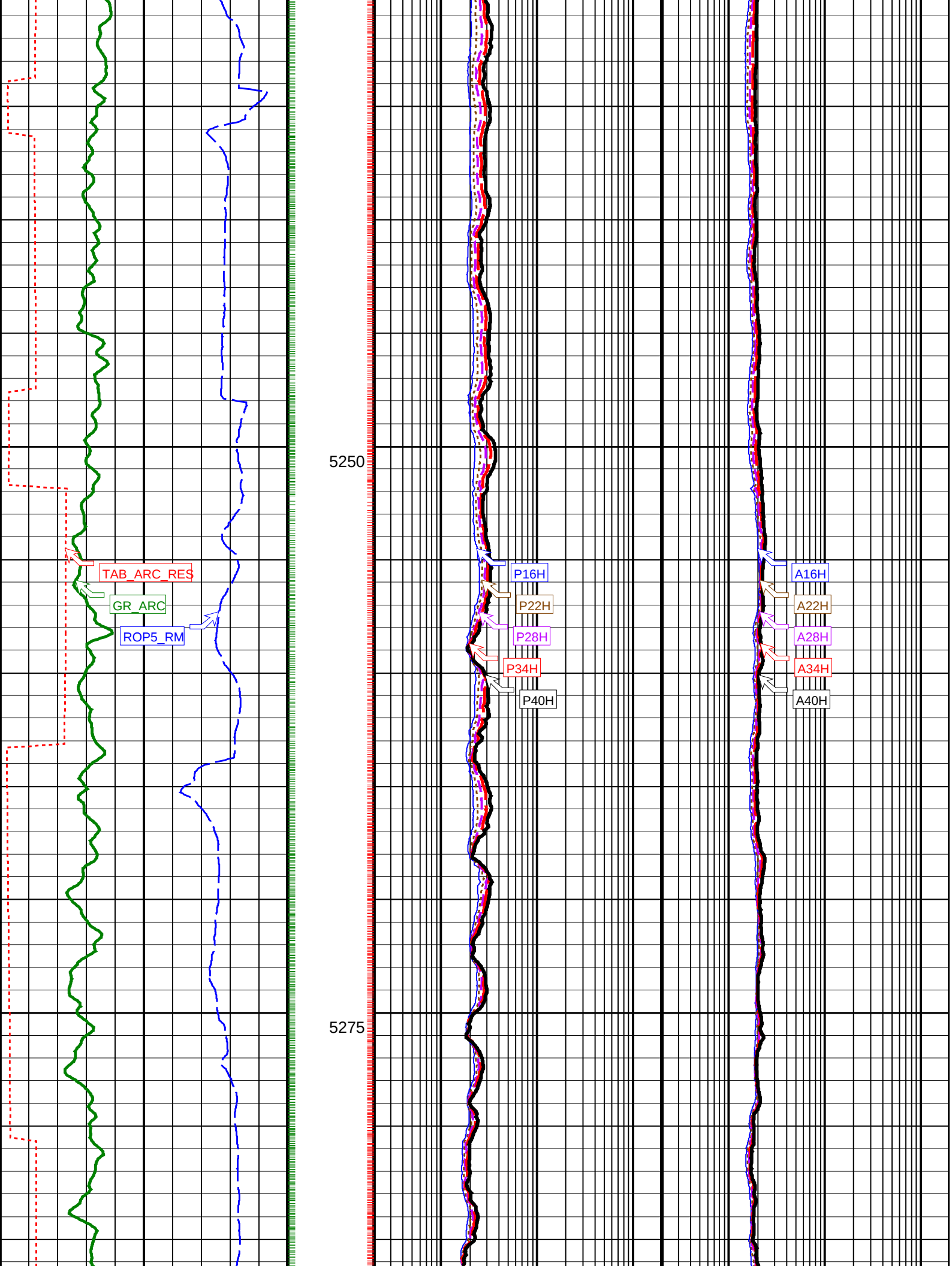
A22H
A28H
A34H
A40H


TAB_ARC_RES
GR_ARC
ROP5_RM
5250
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P16H
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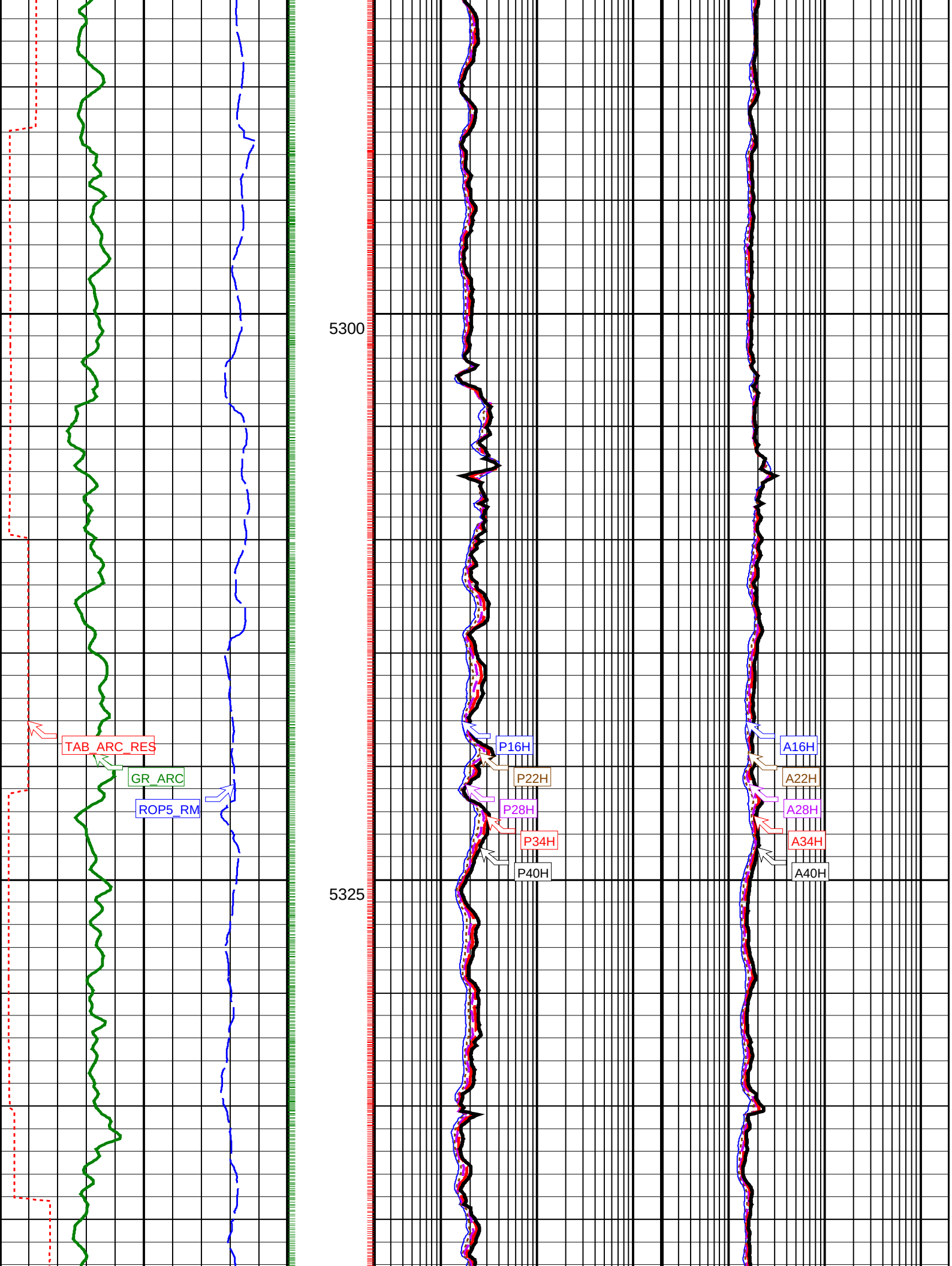
A34H
A40H


TAB_ARC_RES
GR_ARC
ROP5_RM
5300
5325
P16H
P22H
P28H
P34H
P40H
A16H
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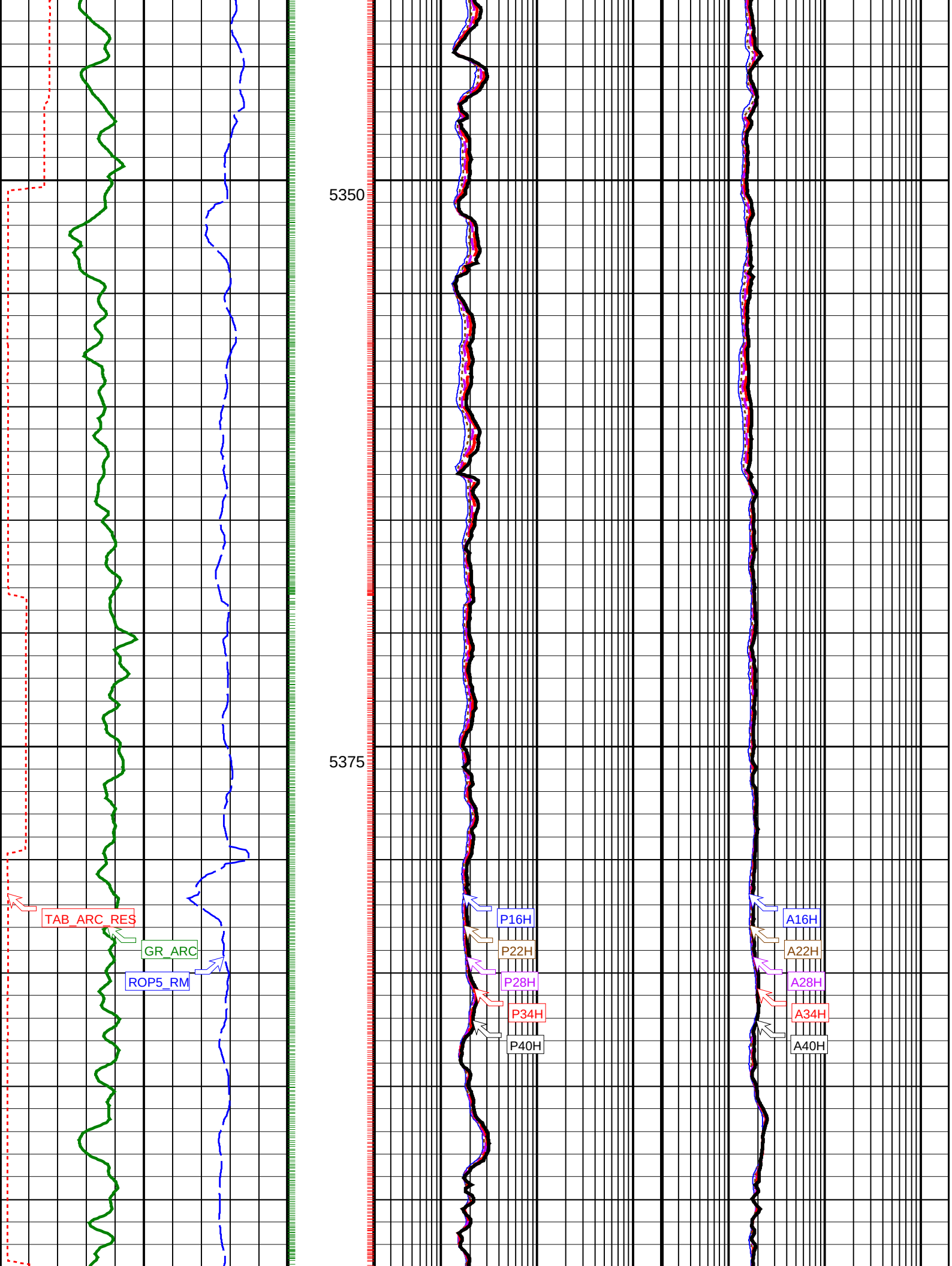
A34H
A40H


5350
5375
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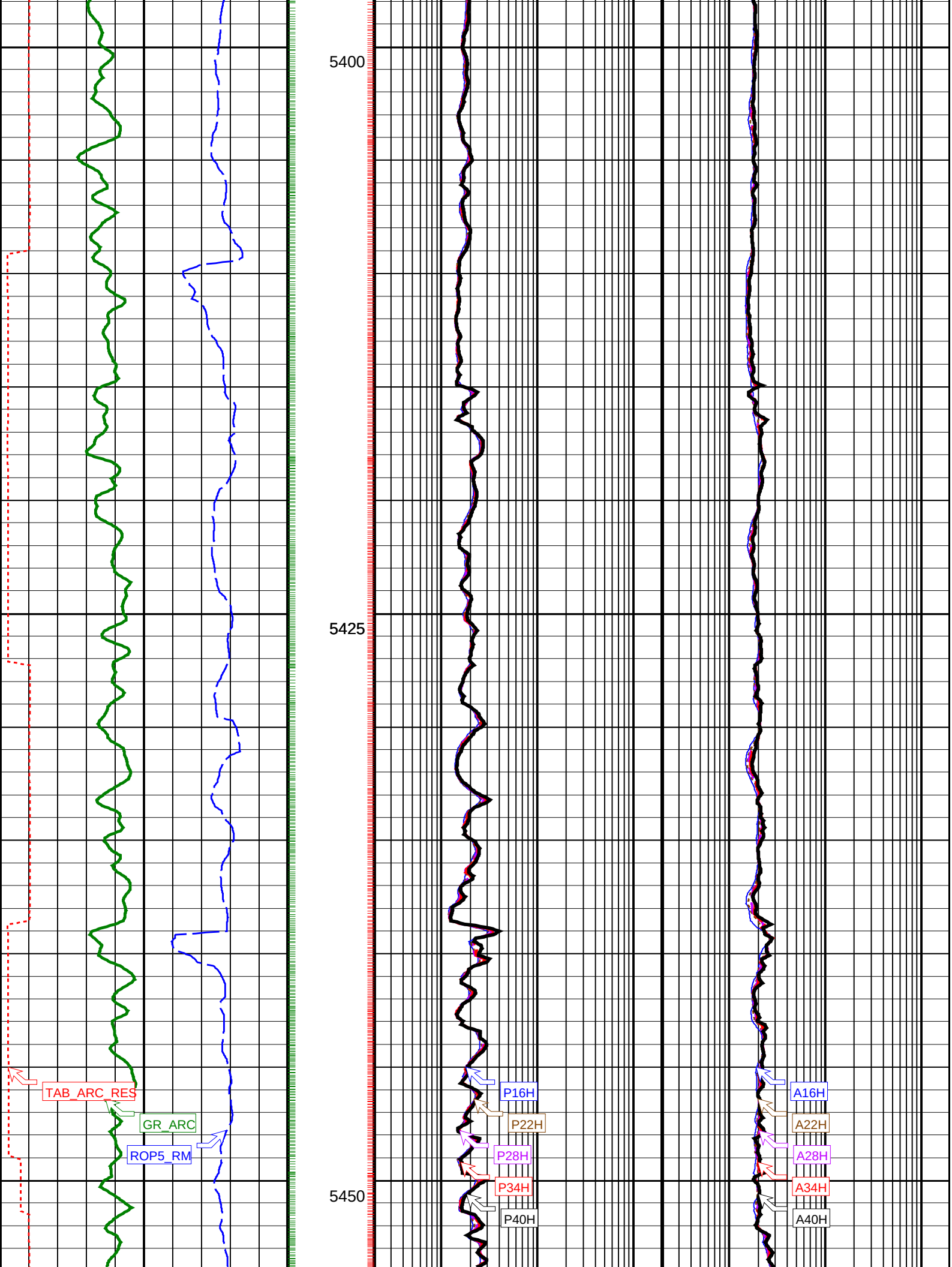
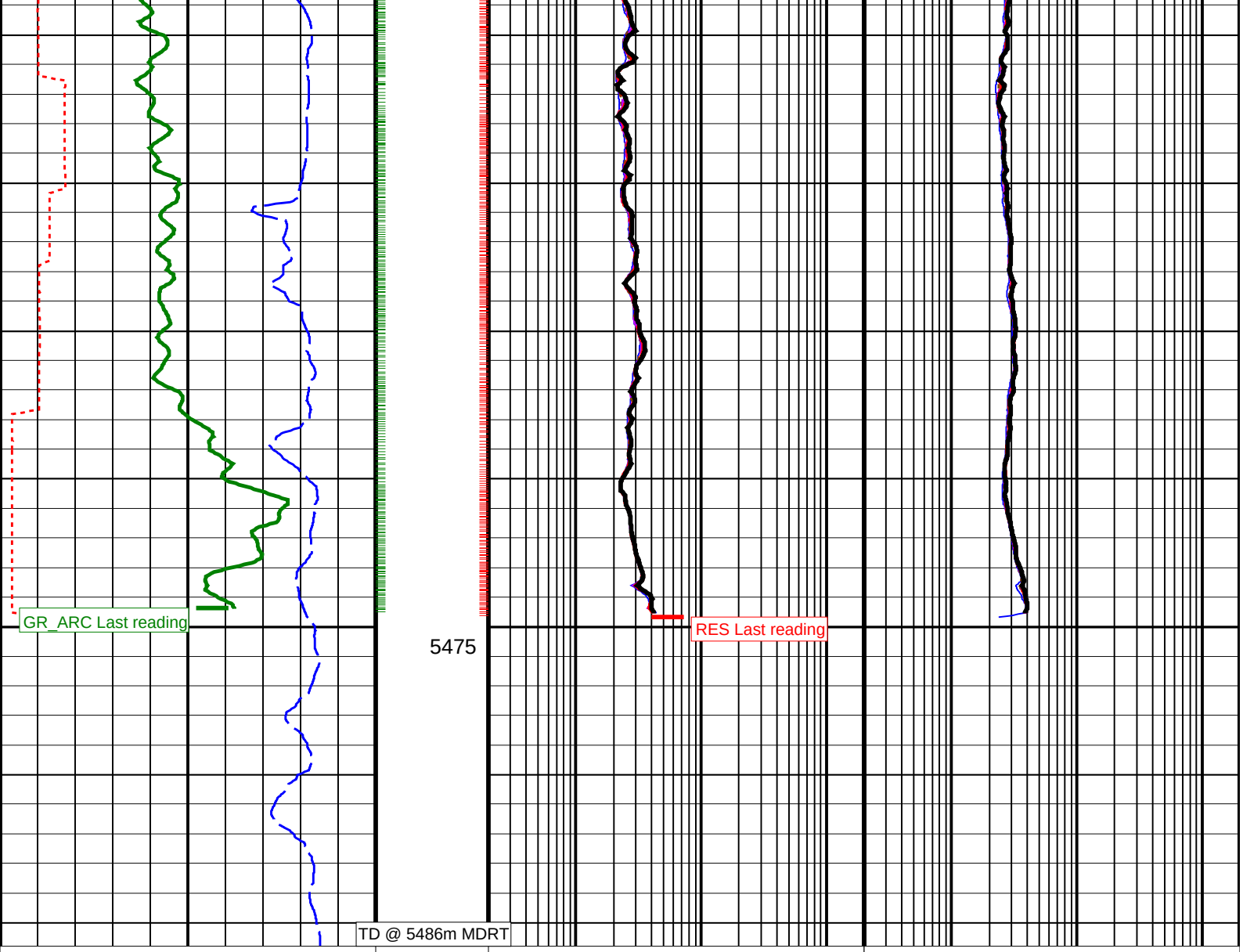
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H


5400
5425
5450
TAB_ARC_RES
GR_ARC
ROP5_RM
P16H
P22H
P28H
P34H
P40H
A16H
A22H
A28H
A34H
A40H



ARC Gamma Ray (GR_ARC)	ARC Phase−Shift Resistivity 16−in. at 2 MHz (P16H)	ARC Attenuation Resistivity 16−in. at 2 MHz (A16H)
0 (GAPI) 200	0.2 (OHMM) 200	0.2 (OHMM) 200
ARC Resistivity Time After Bit (TAB_ARC_RES)	ARC Phase−Shift Resistivity 22−in. at 2 MHz (P22H)	ARC Attenuation Resistivity 22−in. at 2 MHz (A22H)
0 (HR) 10	0.2 (OHMM) 200	0.2 (OHMM) 200
Rate of Penetration, Averaged over Last 5ft (ROP5_RM)	ARC Phase−Shift Resistivity 28−in. at 2 MHz (P28H)	ARC Attenuation Resistivity 28−in. at 2 MHz (A28H)
200 (M/HR) 0	0.2 (OHMM) 200	0.2 (OHMM) 200
	ARC Phase−Shift Resistivity 34−in. at 2 MHz (P34H)	ARC Attenuation Resistivity 34−in. at 2 MHz (A34H)
	0.2 (OHMM) 200	0.2 (OHMM) 200
	ARC Phase−Shift Resistivity 40−in. at 2 MHz (P40H)	ARC Attenuation Resistivity 40−in. at 2 MHz (A40H)
	0.2 (OHMM) 200	0.2 (OHMM) 200

PIP SUMMARY

ARC Gamma Ray Samples

ARC Resistivity Samples

IDEAL Version: ID14_0C_02

IDF

8.25−in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	ARC8 − AA	8084
ARC825 Calibration Status	AUTO −	

Master: 6−Nov−2008 5:32

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Phase−Shift T1	Value
Master		1.231
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T2	Value
Master		−1.167
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T3	Value
Master		1.139
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T4	Value
Master		−1.211
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T5	Value
Master		1.153
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T1 at 400KHz	Value
Master		−0.2034
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T2 at 400KHz	Value
Master		0.1151
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T3 at 400KHz	Value
Master		−0.1767
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T4 at 400KHz	Value
Master		0.1439
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T5 at 400KHz	Value
Master		−0.1767
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Master: 6−Nov−2008 5:32

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Attenuation T1	Value
Master		8.716
6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)

Phase	Attenuation T2	Value
Master		5.935
4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)

Phase	Attenuation T3	Value
Master		5.434
2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)

Phase	Attenuation T4	Value
Master		3.893
2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)

Phase	Attenuation T5	Value
Master		4.028
1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)

Phase	Attenuation T1 at 400KHz	Value
Master		8.764
6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)

Phase	Attenuation T2 at 400KHz	Value
Master		5.895
4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)

Phase	Attenuation T3 at 400KHz	Value
Master		5.482
2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)

Phase	Attenuation T4 at 400KHz	Value
Master		3.852
2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)

Phase	Attenuation T5 at 400KHz	Value
Master		4.078
1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)

Master: 23−Oct−2008 14:21

8.25−in. Array Resistivity Compensated Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor (equals Calibration Gain multiplied by API Gain Factor) CPS	Value
Master		7.780
4.960 (Minimum)	7.200 (Nominal)	9.650 (Maximum)

SCHLUMBERGER

Survey report 14-Dec-2008 17:15:56

Client.....: ESSO AUSTRALIA PTY LTD
Field.....: MOONFISH

Well.....: SNA A-26A
API number.....: 08ASO0030

Spud date.....: 10-NOV-08
Last survey date.....: 11-Dec-08

API number.....: 08ASQ0030
Engineer.....: MA/MRG/JO

RIG:.....: ISDL 175
STATE:.....: VICTORIA

----- Survey calculation methods----------
Method for positions.....: Minimum curvature
Method for DLS.....: Mason & Taylor

----- Depth reference ----------
Permanent datum.....: MEAN SEA LEVEL
Depth reference.....: DRILLER'S DEPTH
GL above permanent.....: -55.00 m
KB above permanent.....: TOP DRIVE
DF above permanent.....: 41.70 m

----- Vertical section origin----------
Latitude (+N/S-).....: 15.35 m
Departure (+E/W-).....: -2.36 m

----- Platform reference point----------
Latitude (+N/S-).....:
Departure (+E/W-).....:

Azimuth from Vsect Origin to target: 15.36 degrees

Last survey date.....: 11-Dec-08
Total accepted surveys...: 363
MD of first survey.....: 0.00 m
MD of last survey.....: 6456.00 m

----- Geomagnetic data ----------
Magnetic model.....: BGGM version 2008
Magnetic date.....: 05-Dec-2008
Magnetic field strength..: 1197.99 HCNT
Magnetic dec (+E/W-).....: 13.00 degrees
Magnetic dip.....: -68.69 degrees

----- MWD survey Reference Criteria ---------
Reference G.....: 1000.02 mGal
Reference H.....: 1197.99 HCNT
Reference Dip.....: -68.69 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections ----------
Magnetic dec (+E/W-).....: 13.00 degrees
Grid convergence (+E/W-).: -0.63 degrees
Total az corr (+E/W-)....: 13.63 degrees
(Total az corr = magnetic dec - grid conv)
Survey Correction Type ...:
I=Sag Corrected Inclination
M=Schlumberger Magnetic Correction
S=Shell Magnetic Correction
F=Failed Axis Correction
R=Magnetic Resonance Tool Correction
D=Dmag Magnetic Correction

[(c)2008 IDEAL ID14_0C_02]
SCHLUMBERGER Survey Report

Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 100f)	Srvy tool type	Tool Corr (deg)
1	0.00	0.00	0.00	0.00	0.00	-14.80	0.00	-2.36	2.36	270.00	0.00	TIP	None
2	9.08	0.00	0.00	9.08	9.08	-14.80	0.00	-2.36	2.36	270.00	0.00	MWD_M	None
3	59.08	0.58	240.11	50.00	59.08	-14.98	-0.13	-2.58	2.58	267.20	0.35	MWD_M	None
4	64.08	0.57	237.77	5.00	64.08	-15.02	-0.15	-2.62	2.63	266.68	0.16	MWD_M	None
5	**69.08**	**0.57**	**235.38**	**5.00**	**69.08**	**-15.06**	**-0.18**	**-2.66**	**2.67**	**266.15**	**0.14**	**MWD_M**	**None**
6	74.08	0.56	232.95	5.00	74.08	-15.09	-0.21	-2.70	2.71	265.60	0.16	MWD_M	None
7	79.08	0.56	230.49	5.00	79.08	-15.13	-0.24	-2.74	2.75	265.03	0.15	MWD_M	None
8	84.08	0.56	228.01	5.00	84.08	-15.17	-0.27	-2.78	2.79	264.44	0.15	MWD_M	None
9	89.08	0.62	224.12	5.00	89.08	-15.22	-0.31	-2.82	2.83	263.80	0.44	MWD_M	None
10	94.08	0.63	213.04	5.00	94.08	-15.27	-0.35	-2.85	2.87	263.03	0.74	MWD_M	None
11	99.08	0.68	206.26	5.00	99.08	-15.32	-0.40	-2.88	2.91	262.12	0.56	MWD_M	None
12	104.08	0.74	198.91	5.00	104.08	-15.38	-0.46	-2.90	2.94	261.08	0.66	MWD_M	None
13	109.08	0.87	187.03	5.00	109.08	-15.45	-0.52	-2.92	2.96	259.82	1.29	MWD_M	None
14	114.08	0.92	187.58	5.00	114.08	-15.53	-0.60	-2.93	2.99	258.39	0.31	MWD_M	None
15	119.08	1.18	171.81	5.00	119.07	-15.62	-0.69	-2.92	3.01	256.69	2.36	MWD_M	None
16	124.08	1.15	177.50	5.00	124.07	-15.71	-0.79	-2.92	3.02	254.78	0.73	MWD_M	None
17	129.08	1.45	168.32	5.00	129.07	-15.82	-0.91	-2.90	3.04	252.67	2.22	MWD_M	None
18	134.08	1.51	168.00	5.00	134.07	-15.93	-1.03	-2.87	3.05	250.26	0.37	MWD_M	None
19	139.08	1.63	169.37	5.00	139.07	-16.05	-1.17	-2.85	3.08	247.73	0.77	MWD_M	None
20	144.08	1.80	165.89	5.00	144.07	-16.19	-1.31	-2.81	3.11	245.01	1.21	MWD_M	None
21	149.08	1.87	165.61	5.00	149.06	-16.33	-1.47	-2.78	3.14	242.14	0.43	MWD_M	None
22	154.08	2.12	159.45	5.00	154.06	-16.47	-1.63	-2.72	3.17	239.05	2.01	MWD_M	None
23	159.08	2.26	157.59	5.00	159.06	-16.62	-1.81	-2.65	3.21	235.69	0.96	MWD_M	None
24	164.08	2.43	153.14	5.00	164.05	-16.78	-2.00	-2.57	3.25	232.13	1.52	MWD_M	None
25	169.08	2.69	147.79	5.00	169.05	-16.94	-2.19	-2.46	3.29	228.28	2.15	MWD_M	None
26	174.08	2.91	141.78	5.00	174.04	-17.09	-2.39	-2.32	3.33	224.11	2.23	MWD_M	None
27	179.08	3.23	135.78	5.00	179.04	-17.24	-2.59	-2.14	3.36	219.55	2.76	MWD_M	None
28	184.08	3.40	133.46	5.00	184.03	-17.38	-2.79	-1.93	3.40	214.69	1.32	MWD_M	None
29	189.08	3.47	132.44	5.00	189.02	-17.52	-3.00	-1.71	3.45	209.76	0.57	MWD_M	None
30	194.08	3.53	132.35	5.00	194.01	-17.66	-3.20	-1.49	3.53	204.92	0.37	MWD_M	None
31	199.08	3.54	132.38	5.00	199.00	-17.80	-3.41	-1.26	3.64	200.28	0.06	MWD_M	None
32	204.08	3.59	131.53	5.00	203.99	-17.94	-3.62	-1.03	3.76	195.88	0.44	MWD_M	None
33	209.08	3.58	132.77	5.00	208.98	-18.08	-3.83	-0.80	3.91	191.77	0.48	MWD_M	None
34	214.08	3.61	131.87	5.00	213.97	-18.22	-4.04	-0.57	4.08	187.97	0.39	MWD_M	None
35	219.08	3.67	131.81	5.00	218.96	-18.36	-4.25	-0.33	4.26	184.43	0.37	MWD_M	None
36	224.08	3.61	130.96	5.00	223.95	-18.50	-4.46	-0.09	4.46	181.17	0.49	MWD_M	None
37	229.08	3.59	130.21	5.00	228.94	-18.64	-4.66	0.15	4.67	178.19	0.31	MWD_M	None
38	234.08	3.40	128.42	5.00	233.93	-18.76	-4.86	0.38	4.87	175.49	1.34	MWD_M	None
39	239.08	3.38	127.46	5.00	238.92	-18.87	-5.04	0.62	5.08	173.03	0.37	MWD_M	None
40	244.08	3.12	126.03	5.00	243.91	-18.98	-5.21	0.84	5.28	170.80	1.66	MWD_M	None
41	249.08	2.95	125.30	5.00	248.91	-19.07	-5.36	1.06	5.47	168.84	1.06	MWD_M	None
42	254.08	2.63	124.32	5.00	253.90	-19.15	-5.50	1.26	5.64	167.12	1.97	MWD_M	None
43	259.08	2.49	123.71	5.00	258.90	-19.22	-5.63	1.44	5.81	165.62	0.87	MWD_M	None
44	264.08	2.14	123.21	5.00	263.89	-19.28	-5.74	1.61	5.96	164.31	2.14	MWD_M	None

45	269.08	2.04	122.13	5.00	268.89	-19.34	-5.84	1.77	6.10	163.18	0.66	MWD_M	None
46	274.08	2.20	119.82	5.00	273.88	-19.39	-5.93	1.92	6.24	162.03	1.11	MWD_M	None
47	279.08	1.79	120.65	5.00	278.88	-19.43	-6.02	2.07	6.37	160.99	2.51	MWD_M	None
48	284.08	1.55	121.14	5.00	283.88	-19.47	-6.09	2.20	6.48	160.16	1.47	MWD_M	None
49	289.08	1.45	117.86	5.00	288.88	-19.50	-6.16	2.31	6.58	159.42	0.80	MWD_M	None
50	294.08	1.25	116.65	5.00	293.88	-19.53	-6.21	2.42	6.67	158.74	1.23	MWD_M	None
51	299.08	1.15	115.17	5.00	298.88	-19.55	-6.26	2.51	6.74	158.13	0.64	MWD_M	None
52	304.08	1.03	110.72	5.00	303.87	-19.56	-6.30	2.60	6.81	157.57	0.89	MWD_M	None
53	309.08	1.05	109.80	5.00	308.87	-19.57	-6.33	2.68	6.87	157.01	0.16	MWD_M	None
54	314.08	1.02	110.36	5.00	313.87	-19.57	-6.36	2.77	6.94	156.47	0.19	MWD_M	None
55	319.08	1.01	107.44	5.00	318.87	-19.58	-6.39	2.85	7.00	155.93	0.32	MWD_M	None
56	324.08	0.97	106.83	5.00	323.87	-19.58	-6.41	2.94	7.05	155.40	0.25	MWD_M	None
57	329.08	0.96	102.31	5.00	328.87	-19.58	-6.43	3.02	7.11	154.88	0.47	MWD_M	None
58	334.08	0.91	101.40	5.00	333.87	-19.58	-6.45	3.10	7.16	154.36	0.32	MWD_M	None
59	339.08	0.94	89.80	5.00	338.87	-19.56	-6.46	3.18	7.20	153.81	1.15	MWD_M	None
60	344.08	0.95	85.21	5.00	343.87	-19.54	-6.46	3.26	7.23	153.21	0.47	MWD_M	None
61	349.08	1.09	63.96	5.00	348.87	-19.49	-6.43	3.34	7.25	152.53	2.44	MWD_M	None
62	354.08	1.23	59.45	5.00	353.87	-19.42	-6.38	3.43	7.25	151.73	1.02	MWD_M	None
63	359.08	1.53	47.32	5.00	358.87	-19.33	-6.31	3.53	7.23	150.79	2.54	MWD_M	None
64	364.08	1.66	44.19	5.00	363.86	-19.21	-6.21	3.63	7.19	149.72	0.95	MWD_M	None
65	369.08	1.95	37.33	5.00	368.86	-19.06	-6.09	3.73	7.14	148.53	2.20	MWD_M	None
66	374.08	2.14	33.74	5.00	373.86	-18.90	-5.95	3.83	7.08	147.20	1.40	MWD_M	None
67	379.08	2.50	32.64	5.00	378.85	-18.70	-5.78	3.94	7.00	145.69	2.21	MWD_M	None
68	384.08	2.71	29.00	5.00	383.85	-18.49	-5.58	4.06	6.90	143.98	1.63	MWD_M	None
69	389.08	3.13	26.71	5.00	388.84	-18.24	-5.36	4.18	6.79	142.05	2.66	MWD_M	None
70	394.08	3.37	24.24	5.00	393.83	-17.96	-5.10	4.30	6.67	139.88	1.69	MWD_M	None
71	399.08	3.70	22.28	5.00	398.82	-17.65	-4.82	4.42	6.54	137.46	2.14	MWD_M	None
72	404.08	3.93	20.75	5.00	403.81	-17.32	-4.51	4.54	6.40	134.79	1.53	MWD_M	None
73	409.08	4.40	20.41	5.00	408.80	-16.96	-4.17	4.67	6.26	131.75	2.87	MWD_M	None
74	414.08	4.59	20.18	5.00	413.78	-16.57	-3.80	4.81	6.13	128.34	1.16	MWD_M	None
75	419.08	5.03	19.34	5.00	418.77	-16.15	-3.41	4.95	6.01	124.55	2.72	MWD_M	None
76	424.08	5.27	19.31	5.00	423.75	-15.70	-2.98	5.10	5.91	120.35	1.46	MWD_M	None
77	429.08	5.60	19.04	5.00	428.72	-15.23	-2.54	5.25	5.83	115.78	2.02	MWD_M	None
78	434.08	5.96	18.28	5.00	433.70	-14.73	-2.06	5.41	5.79	110.83	2.24	MWD_M	None
79	439.08	6.39	17.47	5.00	438.67	-14.19	-1.55	5.58	5.79	105.50	2.67	MWD_M	None
80	444.08	6.82	15.96	5.00	443.64	-13.62	-1.00	5.74	5.83	99.84	2.83	MWD_M	None
81	449.08	7.25	15.10	5.00	448.60	-13.00	-0.41	5.91	5.92	93.94	2.70	MWD_M	None
82	454.08	7.60	14.33	5.00	453.56	-12.36	0.22	6.07	6.08	87.94	2.22	MWD_M	None
83	459.08	7.96	13.75	5.00	458.51	-11.68	0.88	6.24	6.30	82.01	2.25	MWD_M	None
84	**464.08**	**8.44**	**13.43**	**5.00**	**463.46**	**-10.97**	**1.57**	**6.40**	**6.59**	**76.24**	**2.94**	**MWD_M**	**None**
85	**469.08**	**8.92**	**12.86**	**5.00**	**468.40**	**-10.21**	**2.30**	**6.57**	**6.97**	**70.69**	**2.97**	**MWD_M**	**None**
86	474.08	9.40	12.31	5.00	473.34	-9.42	3.08	6.75	7.42	65.47	2.97	MWD_M	None
87	479.08	9.85	11.95	5.00	478.27	-8.58	3.90	6.92	7.94	60.62	2.77	MWD_M	None
88	484.08	10.24	11.95	5.00	483.19	-7.71	4.75	7.10	8.55	56.23	2.38	MWD_M	None
89	489.08	10.66	11.77	5.00	488.11	-6.81	5.64	7.29	9.22	52.28	2.57	MWD_M	None
90	494.08	11.08	11.79	5.00	493.02	-5.87	6.56	7.48	9.95	48.75	2.56	MWD_M	None
91	499.08	11.53	11.83	5.00	497.92	-4.89	7.52	7.68	10.75	45.61	2.74	MWD_M	None
92	504.08	12.20	11.77	5.00	502.82	-3.86	8.53	7.89	11.62	42.79	4.09	MWD_M	None
93	509.08	12.72	11.78	5.00	507.70	-2.79	9.58	8.11	12.56	40.25	3.17	MWD_M	None
94	514.08	13.18	11.95	5.00	512.57	-1.67	10.68	8.34	13.55	38.00	2.81	MWD_M	None
95	519.08	13.63	11.61	5.00	517.43	-0.51	11.81	8.58	14.60	35.99	2.78	MWD_M	None
96	524.08	14.09	11.55	5.00	522.29	0.68	12.99	8.82	15.70	34.18	2.81	MWD_M	None
97	529.08	14.50	11.48	5.00	527.13	1.92	14.20	9.07	16.85	32.57	2.50	MWD_M	None
98	534.08	14.92	11.90	5.00	531.97	3.18	15.44	9.32	18.04	31.13	2.64	MWD_M	None
99	539.08	15.36	11.71	5.00	536.80	4.49	16.72	9.59	19.27	29.84	2.70	MWD_M	None
100	544.08	15.76	12.02	5.00	541.61	5.82	18.03	9.87	20.55	28.69	2.49	MWD_M	None
101	549.08	16.15	12.28	5.00	546.42	7.20	19.37	10.16	21.88	27.67	2.42	MWD_M	None
102	554.08	16.63	12.98	5.00	551.22	8.61	20.75	10.47	23.24	26.76	3.16	MWD_M	None
103	559.08	17.06	12.96	5.00	556.00	10.05	22.16	10.79	24.65	25.96	2.62	MWD_M	None
104	564.08	17.49	13.07	5.00	560.78	11.54	23.61	11.13	26.10	25.23	2.63	MWD_M	None
105	569.08	17.97	13.22	5.00	565.54	13.06	25.09	11.47	27.59	24.57	2.94	MWD_M	None
106	574.08	18.39	13.17	5.00	570.29	14.62	26.61	11.83	29.12	23.96	2.56	MWD_M	None
107	579.08	18.79	13.22	5.00	575.03	16.21	28.16	12.19	30.69	23.41	2.44	MWD_M	None
108	584.08	19.22	13.20	5.00	579.76	17.84	29.75	12.56	32.29	22.90	2.62	MWD_M	None
109	589.08	19.56	13.54	5.00	584.47	19.50	31.36	12.95	33.93	22.43	2.18	MWD_M	None
110	594.08	19.95	13.19	5.00	589.18	21.19	33.01	13.34	35.60	22.00	2.48	MWD_M	None
111	599.08	20.33	13.16	5.00	593.87	22.91	34.68	13.73	37.30	21.60	2.32	MWD_M	None
112	604.08	20.74	13.17	5.00	598.56	24.66	36.39	14.13	39.04	21.22	2.50	MWD_M	None
113	609.08	21.04	13.19	5.00	603.23	26.44	38.13	14.54	40.81	20.87	1.83	MWD_M	None
114	614.08	21.50	13.22	5.00	607.89	28.25	39.89	14.95	42.60	20.54	2.80	MWD_M	None
115	619.08	21.94	13.33	5.00	612.53	30.10	41.69	15.38	44.44	20.24	2.69	MWD_M	None
116	624.08	22.39	13.17	5.00	617.16	31.99	43.53	15.81	46.31	19.96	2.77	MWD_M	None
117	629.08	22.74	13.37	5.00	621.78	33.90	45.40	16.25	48.22	19.69	2.18	MWD_M	None
118	634.08	23.24	13.26	5.00	626.38	35.86	47.30	16.70	50.16	19.44	3.06	MWD_M	None
119	639.08	23.59	13.38	5.00	630.97	37.84	49.23	17.16	52.14	19.21	2.15	MWD_M	None
120	644.08	24.12	13.25	5.00	635.54	39.86	51.20	17.62	54.15	18.99	3.25	MWD_M	None
121	649.08	24.46	13.58	5.00	640.10	41.92	53.20	18.10	56.19	18.79	2.23	MWD_M	None
122	654.08	24.89	13.55	5.00	644.64	44.00	55.23	18.59	58.27	18.60	2.62	MWD_M	None
123	659.08	25.18	13.79	5.00	649.17	46.12	57.29	19.09	60.38	18.43	1.87	MWD_M	None
124	664.08	25.74	13.77	5.00	653.69	48.27	59.37	19.60	62.52	18.27	3.41	MWD_M	None

125	669.08	26.12	14.13	5.00	658.18	50.45	61.49	20.13	64.71	18.12	2.51	MWD_M	None
126	674.08	26.66	14.31	5.00	662.66	52.68	63.65	20.67	66.92	17.99	3.33	MWD_M	None
127	679.08	26.97	14.34	5.00	667.13	54.93	65.83	21.23	69.17	17.87	1.89	MWD_M	None
128	684.08	27.45	14.63	5.00	671.57	57.22	68.05	21.80	71.46	17.77	3.04	MWD_M	None
129	689.08	27.68	15.50	5.00	676.01	59.53	70.28	22.40	73.77	17.68	2.83	MWD_M	None
130	694.08	28.28	14.99	5.00	680.42	61.88	72.55	23.02	76.11	17.61	3.94	MWD_M	None
131	699.08	28.76	15.19	5.00	684.81	64.26	74.85	23.64	78.50	17.53	2.98	MWD_M	None
132	704.08	29.36	15.37	5.00	689.18	66.69	77.19	24.28	80.92	17.46	3.70	MWD_M	None
133	709.08	29.91	15.44	5.00	693.53	69.16	79.58	24.94	83.39	17.40	3.36	MWD_M	None
134	714.08	30.46	15.51	5.00	697.85	71.68	82.00	25.61	85.91	17.35	3.36	MWD_M	None
135	719.08	30.98	15.88	5.00	702.15	74.23	84.46	26.30	88.46	17.30	3.37	MWD_M	None
136	724.08	31.50	15.91	5.00	706.43	76.83	86.95	27.01	91.05	17.26	3.17	MWD_M	None
137	729.08	32.15	16.13	5.00	710.67	79.46	89.49	27.74	93.69	17.22	4.02	MWD_M	None
138	734.08	32.53	16.22	5.00	714.90	82.14	92.06	28.48	96.36	17.19	2.34	MWD_M	None
139	739.08	33.12	16.56	5.00	719.10	84.85	94.66	29.25	99.07	17.17	3.77	MWD_M	None
140	744.08	33.58	16.63	5.00	723.28	87.59	97.29	30.03	101.82	17.16	2.81	MWD_M	None
141	749.08	34.23	16.64	5.00	727.43	90.38	99.96	30.83	104.61	17.14	3.96	MWD_M	None
142	754.08	34.68	16.71	5.00	731.55	93.21	102.67	31.64	107.44	17.13	2.75	MWD_M	None
143	759.08	35.33	16.71	5.00	735.64	96.08	105.42	32.47	110.31	17.12	3.96	MWD_M	None
144	764.08	35.74	16.90	5.00	739.71	98.98	108.20	33.31	113.21	17.11	2.59	MWD_M	None
145	769.08	36.44	16.94	5.00	743.75	101.93	111.02	34.17	116.16	17.11	4.27	MWD_M	None
146	774.08	36.88	17.00	5.00	747.77	104.91	113.87	35.04	119.14	17.10	2.69	MWD_M	None
147	779.08	37.65	17.10	5.00	751.74	107.94	116.77	35.93	122.17	17.10	4.71	MWD_M	None
148	784.08	37.96	17.09	5.00	755.69	111.00	119.70	36.83	125.24	17.10	1.89	MWD_M	None
149	789.08	38.71	17.08	5.00	759.62	114.10	122.66	37.74	128.34	17.10	4.57	MWD_M	None
150	794.08	39.01	17.21	5.00	763.51	117.24	125.66	38.66	131.47	17.10	1.90	MWD_M	None
151	799.08	39.73	17.32	5.00	767.38	120.41	128.69	39.60	134.65	17.11	4.41	MWD_M	None
152	804.08	40.04	17.35	5.00	771.21	123.61	131.75	40.56	137.85	17.11	1.89	MWD_M	None
153	809.08	40.79	17.37	5.00	775.02	126.85	134.84	41.53	141.09	17.12	4.57	MWD_M	None
154	814.08	41.26	16.88	5.00	778.79	130.13	137.98	42.49	144.38	17.12	3.47	MWD_M	None
155	819.08	41.82	17.36	5.00	782.53	133.44	141.15	43.47	147.69	17.12	3.93	MWD_M	None
156	824.08	42.27	17.45	5.00	786.25	136.79	144.34	44.47	151.04	17.12	2.77	MWD_M	None
157	829.08	42.86	17.48	5.00	789.93	140.17	147.57	45.49	154.42	17.13	3.60	MWD_M	None
158	834.08	43.41	17.44	5.00	793.58	143.59	150.83	46.51	157.84	17.14	3.36	MWD_M	None
159	839.08	43.87	17.47	5.00	797.20	147.04	154.12	47.55	161.29	17.14	2.81	MWD_M	None
160	844.08	44.42	17.45	5.00	800.78	150.52	157.44	48.59	164.77	17.15	3.35	MWD_M	None
161	849.08	44.93	17.49	5.00	804.34	154.03	160.80	49.65	168.29	17.16	3.11	MWD_M	None
162	854.08	45.62	17.46	5.00	807.86	157.58	164.19	50.71	171.84	17.16	4.21	MWD_M	None
163	859.08	46.11	17.41	5.00	811.34	161.16	167.61	51.79	175.43	17.17	3.00	MWD_M	None
164	**864.08**	**46.86**	**17.42**	**5.00**	**814.78**	**164.79**	**171.07**	**52.87**	**179.05**	**17.18**	**4.57**	**MWD_M**	**None**
165	**869.08**	**47.24**	**17.38**	**5.00**	**818.19**	**168.45**	**174.56**	**53.97**	**182.71**	**17.18**	**2.32**	**MWD_M**	**None**
166	874.08	48.14	17.36	5.00	821.56	172.14	178.09	55.07	186.41	17.18	5.49	MWD_M	None
167	879.08	48.59	17.53	5.00	824.88	175.88	181.66	56.19	190.15	17.19	2.85	MWD_M	None
168	884.08	49.52	17.60	5.00	828.15	179.65	185.26	57.33	193.93	17.20	5.68	MWD_M	None
169	889.08	49.88	17.60	5.00	831.39	183.46	188.89	58.49	197.74	17.20	2.19	MWD_M	None
170	894.08	50.70	17.56	5.00	834.58	187.30	192.56	59.65	201.59	17.21	5.00	MWD_M	None
171	899.08	50.97	17.67	5.00	837.74	191.18	196.25	60.82	205.46	17.22	1.73	MWD_M	None
172	904.08	51.84	17.65	5.00	840.86	195.08	199.98	62.01	209.37	17.23	5.30	MWD_M	None
173	909.08	51.98	17.68	5.00	843.94	199.01	203.73	63.20	213.30	17.23	0.87	MWD_M	None
174	925.83	52.78	16.71	16.75	854.17	212.27	216.40	67.12	226.57	17.23	2.02	MWD_M	None
175	942.60	56.44	15.08	16.77	863.88	225.94	229.55	70.86	240.24	17.16	7.08	MWD_M	None
176	985.12	61.91	10.72	42.52	885.67	262.39	265.12	78.97	276.63	16.59	4.75	MWD_M	None
177	1014.73	64.76	8.76	29.61	898.95	288.72	291.20	83.44	302.92	15.99	3.44	MWD_M	None
178	1043.64	66.87	7.23	28.91	910.80	314.87	317.31	87.10	329.05	15.35	2.67	MWD_M	None
179	1072.81	69.09	5.78	29.17	921.73	341.59	344.18	90.16	355.79	14.68	2.71	MWD_M	None
180	1101.53	71.57	3.80	28.72	931.40	368.17	371.12	92.42	382.46	13.98	3.29	MWD_M	None
181	1131.12	74.14	2.13	29.59	940.12	395.78	399.36	93.88	410.24	13.23	3.12	MWD_M	None
182	1160.48	76.77	0.56	29.36	947.50	423.35	427.77	94.54	438.09	12.46	3.15	MWD_M	None
183	1189.75	79.35	358.98	29.27	953.55	450.93	456.40	94.42	466.06	11.69	3.13	MWD_M	None
184	1218.32	81.27	359.33	28.57	958.36	477.97	484.56	94.01	493.59	10.98	2.08	MWD_M	None
185	1247.65	82.54	358.97	29.33	962.49	505.86	513.59	93.58	522.05	10.33	1.37	MWD_M	None
186	1276.98	83.95	358.89	29.33	965.94	533.79	542.71	93.04	550.63	9.73	1.47	MWD_M	None
187	1306.40	83.61	358.52	29.42	969.13	561.81	571.95	92.37	579.36	9.17	0.52	MWD_M	None
188	1335.18	83.58	358.72	28.78	972.34	589.20	600.54	91.69	607.50	8.68	0.21	MWD_M	None
189	1364.58	83.72	357.92	29.40	975.59	617.14	629.75	90.83	636.27	8.21	0.84	MWD_M	None
190	1393.68	83.61	357.93	29.10	978.80	644.73	658.65	89.78	664.74	7.76	0.12	MWD_M	None
191	1423.26	83.49	357.72	29.58	982.13	672.76	688.02	88.67	693.71	7.34	0.25	MWD_M	None
192	1451.95	83.52	357.71	28.69	985.37	699.92	716.51	87.53	721.83	6.96	0.03	MWD_M	None
193	1481.51	83.93	357.89	29.56	988.60	727.94	745.87	86.40	750.86	6.61	0.46	MWD_M	None
194	1510.51	83.64	358.18	29.00	991.74	755.46	774.68	85.41	779.38	6.29	0.43	MWD_M	None
195	1539.79	83.67	357.97	29.28	994.98	783.24	803.76	84.44	808.19	6.00	0.22	MWD_M	None
196	1568.63	83.72	358.01	28.84	998.14	810.60	832.41	83.43	836.58	5.72	0.07	MWD_M	None
197	1597.73	83.89	357.90	29.10	1001.28	838.21	861.32	82.40	865.26	5.46	0.21	MWD_M	None
198	1627.14	83.95	357.90	29.41	1004.40	866.10	890.55	81.33	894.26	5.22	0.06	MWD_M	None
199	1656.35	83.75	358.23	29.21	1007.53	893.83	919.57	80.35	923.08	4.99	0.40	MWD_M	None
200	1685.17	83.81	358.13	28.82	1010.65	921.21	948.21	79.44	951.53	4.79	0.12	MWD_M	None
201	1714.54	83.95	358.06	29.37	1013.78	949.09	977.40	78.46	980.54	4.59	0.16	MWD_M	None
202	1744.05	83.89	357.99	29.51	1016.91	977.10	1006.72	77.45	1009.70	4.40	0.09	MWD_M	None
203	1773.27	83.81	358.17	29.22	1020.04	1004.84	1035.76	76.48	1038.58	4.22	0.20	MWD_M	None
204	1801.85	83.81	358.45	28.58	1023.12	1032.01	1064.16	75.64	1066.84	4.07	0.30	MWD_M	None

204	1801.85	83.81	358.45	28.58	1023.12	1032.01	1064.16	75.64	1066.84	4.07	0.30	MWD_M	None
205	1830.92	83.87	358.29	29.07	1026.24	1059.65	1093.05	74.82	1095.61	3.92	0.18	MWD_M	None
206	1860.59	83.83	358.31	29.67	1029.42	1087.85	1122.54	73.94	1124.97	3.77	0.05	MWD_M	None
207	1889.80	83.89	358.19	29.21	1032.54	1115.61	1151.57	73.06	1153.88	3.63	0.14	MWD_M	None
208	1918.20	83.98	358.28	28.40	1035.54	1142.60	1179.79	72.19	1182.00	3.50	0.14	MWD_M	None
209	1947.29	83.92	358.03	29.09	1038.61	1170.23	1208.71	71.26	1210.80	3.37	0.27	MWD_M	None
210	1976.94	83.75	358.20	29.65	1041.79	1198.38	1238.17	70.29	1240.16	3.25	0.25	MWD_M	None
211	2006.35	83.84	357.62	29.41	1044.97	1226.28	1267.39	69.22	1269.28	3.13	0.60	MWD_M	None
212	2035.33	83.75	357.60	28.98	1048.10	1253.71	1296.17	68.02	1297.96	3.00	0.10	MWD_M	None
213	2064.96	83.78	357.54	29.63	1051.32	1281.76	1325.60	66.77	1327.28	2.88	0.07	MWD_M	None
214	2093.93	83.95	357.77	28.97	1054.42	1309.20	1354.38	65.59	1355.97	2.77	0.30	MWD_M	None
215	2123.22	83.98	357.50	29.29	1057.50	1336.94	1383.48	64.39	1384.98	2.66	0.28	MWD_M	None
216	2152.02	83.95	357.57	28.80	1060.53	1364.21	1412.10	63.16	1413.51	2.56	0.08	MWD_M	None
217	2181.27	83.75	357.55	29.25	1063.66	1391.90	1441.15	61.92	1442.48	2.46	0.21	MWD_M	None
218	2210.82	83.98	357.42	29.55	1066.82	1419.86	1470.50	60.63	1471.75	2.36	0.27	MWD_M	None
219	2240.04	83.81	357.91	29.22	1069.93	1447.54	1499.53	59.45	1500.71	2.27	0.54	MWD_M	None
220	2268.82	83.72	358.04	28.78	1073.05	1474.84	1528.13	58.44	1529.24	2.19	0.17	MWD_M	None
221	2297.96	83.87	358.30	29.14	1076.20	1502.52	1557.08	57.51	1558.14	2.12	0.31	MWD_M	None
222	2327.20	83.72	358.23	29.24	1079.36	1530.30	1586.14	56.63	1587.15	2.04	0.17	MWD_M	None
223	2356.53	83.81	358.16	29.33	1082.55	1558.16	1615.28	55.71	1616.24	1.98	0.12	MWD_M	None
224	2385.14	83.87	358.00	28.61	1085.62	1585.32	1643.71	54.76	1644.62	1.91	0.18	MWD_M	None
225	2414.60	83.78	358.05	29.46	1088.79	1613.28	1672.98	53.75	1673.84	1.84	0.11	MWD_M	None
226	2443.99	83.84	358.07	29.39	1091.95	1641.18	1702.18	52.76	1703.00	1.78	0.07	MWD_M	None
227	2473.13	83.83	358.05	29.14	1095.08	1668.84	1731.14	51.78	1731.91	1.71	0.02	MWD_M	None
228	2501.94	83.89	357.98	28.81	1098.17	1696.18	1759.76	50.79	1760.50	1.65	0.10	MWD_M	None
229	2531.15	83.83	357.97	29.21	1101.29	1723.90	1788.79	49.76	1789.48	1.59	0.06	MWD_M	None
230	2560.36	83.69	357.86	29.21	1104.46	1751.60	1817.81	48.71	1818.46	1.53	0.19	MWD_M	None
231	2589.71	83.75	358.08	29.35	1107.67	1779.44	1846.96	47.67	1847.58	1.48	0.24	MWD_M	None
232	2618.49	83.72	358.05	28.78	1110.82	1806.75	1875.55	46.71	1876.13	1.43	0.04	MWD_M	None
233	2647.50	83.66	358.08	29.01	1114.00	1834.28	1904.37	45.73	1904.92	1.38	0.07	MWD_M	None
234	2676.96	83.66	358.05	29.46	1117.26	1862.24	1933.63	44.74	1934.15	1.33	0.03	MWD_M	None
235	2705.94	83.63	358.14	28.98	1120.47	1889.74	1962.42	43.79	1962.91	1.28	0.10	MWD_M	None
236	2735.06	83.75	358.31	29.12	1123.67	1917.40	1991.35	42.89	1991.81	1.23	0.22	MWD_M	None
237	2764.38	83.90	358.23	29.32	1126.82	1945.27	2020.48	42.01	2020.92	1.19	0.18	MWD_M	None
238	2793.63	83.81	358.33	29.25	1129.95	1973.06	2049.55	41.14	2049.97	1.15	0.14	MWD_M	None
239	2822.87	83.75	358.06	29.24	1133.12	2000.84	2078.61	40.22	2079.00	1.11	0.29	MWD_M	None
240	2851.62	83.78	358.11	28.75	1136.24	2028.13	2107.17	39.27	2107.54	1.07	0.06	MWD_M	None
241	2879.56	83.75	357.94	27.94	1139.28	2054.64	2134.93	38.31	2135.27	1.03	0.19	MWD_M	None
242	2910.12	83.83	357.88	30.56	1142.58	2083.62	2165.29	37.20	2165.61	0.98	0.10	MWD_M	None
243	2939.72	83.83	356.99	29.60	1145.76	2111.62	2194.69	35.88	2194.98	0.94	0.91	MWD_M	None
244	**2967.89**	**83.81**	**357.60**	**28.17**	**1148.80**	**2138.25**	**2222.66**	**34.56**	**2222.93**	**0.89**	**0.66**	**MWD_M**	**None**
245	2997.83	83.81	357.91	29.94	1152.02	2166.62	2252.41	33.40	2252.65	0.85	0.31	MWD_M	None
246	3026.45	83.78	357.90	28.62	1155.12	2193.76	2280.84	32.36	2281.07	0.81	0.03	MWD_M	None
247	3056.43	83.75	357.79	29.98	1158.37	2222.18	2310.62	31.24	2310.83	0.77	0.12	MWD_M	None
248	3084.75	83.72	357.72	28.32	1161.46	2249.02	2338.75	30.13	2338.94	0.74	0.08	MWD_M	None
249	3113.98	83.78	357.85	29.23	1164.65	2276.72	2367.78	29.01	2367.96	0.70	0.15	MWD_M	None
250	3143.28	83.69	357.64	29.30	1167.84	2304.48	2396.89	27.86	2397.05	0.67	0.24	MWD_M	None
251	3172.76	83.81	357.78	29.48	1171.05	2332.40	2426.17	26.69	2426.32	0.63	0.19	MWD_M	None
252	3201.21	83.66	357.50	28.45	1174.16	2359.34	2454.42	25.53	2454.56	0.60	0.34	MWD_M	None
253	3230.78	83.78	357.84	29.57	1177.39	2387.34	2483.79	24.33	2483.91	0.56	0.37	MWD_M	None
254	3260.24	83.75	357.88	29.46	1180.59	2415.27	2513.06	23.24	2513.17	0.53	0.05	MWD_M	None
255	3289.18	83.69	357.86	28.94	1183.76	2442.71	2541.80	22.17	2541.90	0.50	0.07	MWD_M	None
256	3318.13	83.69	358.42	28.95	1186.94	2470.19	2570.56	21.24	2570.65	0.47	0.59	MWD_M	None
257	3347.57	83.81	358.66	29.44	1190.14	2498.21	2599.82	20.49	2599.90	0.45	0.28	MWD_M	None
258	3377.12	83.69	358.85	29.55	1193.36	2526.36	2629.19	19.85	2629.26	0.43	0.23	MWD_M	None
259	3406.44	83.78	358.79	29.32	1196.56	2554.29	2658.33	19.25	2658.40	0.41	0.11	MWD_M	None
260	3435.20	83.78	359.05	28.76	1199.68	2581.72	2686.91	18.71	2686.98	0.40	0.27	MWD_M	None
261	3464.13	83.81	359.07	28.93	1202.80	2609.32	2715.67	18.24	2715.73	0.38	0.04	MWD_M	None
262	3493.42	83.86	359.20	29.29	1205.95	2637.28	2744.79	17.80	2744.84	0.37	0.14	MWD_M	None
263	3522.89	83.90	359.25	29.47	1209.09	2665.43	2774.08	17.41	2774.14	0.36	0.07	MWD_M	None
264	3551.59	83.84	359.18	28.70	1212.16	2692.84	2802.62	17.02	2802.67	0.35	0.10	MWD_M	None
265	3580.88	83.84	359.05	29.29	1215.30	2720.80	2831.73	16.57	2831.78	0.34	0.13	MWD_M	None
266	3610.21	83.84	359.07	29.33	1218.45	2748.79	2860.89	16.09	2860.94	0.32	0.02	MWD_M	None
267	3639.20	83.75	358.93	28.99	1221.58	2776.44	2889.71	15.58	2889.75	0.31	0.17	MWD_M	None
268	3667.94	83.83	359.08	28.74	1224.69	2803.86	2918.27	15.09	2918.31	0.30	0.18	MWD_M	None
269	3697.38	83.72	358.90	29.44	1227.88	2831.94	2947.54	14.57	2947.57	0.28	0.22	MWD_M	None
270	3726.30	83.84	358.61	28.92	1231.01	2859.49	2976.28	13.95	2976.31	0.27	0.33	MWD_M	None
271	3755.91	83.78	358.49	29.61	1234.21	2887.67	3005.71	13.20	3005.74	0.25	0.14	MWD_M	None
272	3784.42	83.52	358.58	28.51	1237.36	2914.79	3034.03	12.48	3034.06	0.24	0.29	MWD_M	None
273	3813.73	83.52	358.49	29.31	1240.67	2942.66	3063.15	11.73	3063.17	0.22	0.09	MWD_M	None
274	3843.18	83.61	358.25	29.45	1243.97	2970.65	3092.40	10.90	3092.42	0.20	0.26	MWD_M	None
275	3872.58	83.58	358.27	29.40	1247.25	2998.58	3121.60	10.01	3121.62	0.18	0.04	MWD_M	None
276	3901.17	83.63	358.36	28.59	1250.43	3025.74	3150.00	9.18	3150.01	0.17	0.11	MWD_M	None
277	3930.54	83.55	358.00	29.37	1253.71	3053.62	3179.17	8.25	3179.18	0.15	0.38	MWD_M	None
278	3959.96	83.43	358.01	29.42	1257.05	3081.52	3208.39	7.23	3208.39	0.13	0.12	MWD_M	None
279	3989.15	83.55	358.11	29.19	1260.36	3109.21	3237.37	6.25	3237.38	0.11	0.16	MWD_M	None
280	4017.43	83.69	358.25	28.28	1263.50	3136.06	3265.46	5.36	3265.47	0.09	0.21	MWD_M	None
281	4047.15	83.66	358.27	29.72	1266.77	3164.30	3294.99	4.46	3294.99	0.08	0.04	MWD_M	None
282	4076.39	83.69	357.94	29.24	1269.99	3192.05	3324.03	3.50	3324.04	0.06	0.34	MWD_M	None
283	4105.12	83.66	357.67	28.73	1273.16	3219.28	3352.57	2.41	3352.57	0.04	0.29	MWD_M	None

284	4134.59	83.52	357.69	29.47	1276.45	3247.18	3381.83	1.22	3381.83	0.02	0.15	MWD_M	None
285	4163.51	83.61	357.96	28.92	1279.69	3274.58	3410.55	0.13	3410.55	0.00	0.30	MWD_M	None
286	4192.60	83.55	357.78	29.09	1282.94	3302.15	3439.43	-0.94	3439.43	359.98	0.20	MWD_M	None
287	4221.10	83.55	357.98	28.50	1286.15	3329.16	3467.73	-1.99	3467.73	359.97	0.21	MWD_M	None
288	4250.55	83.55	357.75	29.45	1289.45	3357.07	3496.98	-3.08	3496.98	359.95	0.24	MWD_M	None
289	4279.61	83.55	357.64	29.06	1292.72	3384.59	3525.83	-4.24	3525.83	359.93	0.11	MWD_M	None
290	4308.95	83.55	358.01	29.34	1296.01	3412.39	3554.96	-5.35	3554.97	359.91	0.38	MWD_M	None
291	4337.80	83.40	357.78	28.85	1299.29	3439.73	3583.61	-6.40	3583.61	359.90	0.29	MWD_M	None
292	4367.03	83.63	357.70	29.23	1302.59	3467.41	3612.63	-7.55	3612.63	359.88	0.25	MWD_M	None
293	4396.41	83.60	357.78	29.38	1305.86	3495.24	3641.80	-8.70	3641.81	359.86	0.09	MWD_M	None
294	4425.87	83.66	358.03	29.46	1309.13	3523.17	3671.06	-9.77	3671.07	359.85	0.26	MWD_M	None
295	4454.60	83.72	357.76	28.73	1312.29	3550.41	3699.60	-10.82	3699.61	359.83	0.29	MWD_M	None
296	4483.91	83.78	357.58	29.31	1315.48	3578.17	3728.71	-12.00	3728.73	359.82	0.20	MWD_M	None
297	4513.33	83.72	357.44	29.42	1318.68	3606.00	3757.93	-13.27	3757.95	359.80	0.16	MWD_M	None
298	4542.48	83.75	357.29	29.15	1321.86	3633.56	3786.87	-14.60	3786.90	359.78	0.16	MWD_M	None
299	4571.38	83.66	357.37	28.90	1325.03	3660.88	3815.57	-15.94	3815.60	359.76	0.13	MWD_M	None
300	4600.33	83.69	357.39	28.95	1328.22	3688.25	3844.31	-17.26	3844.35	359.74	0.04	MWD_M	None
301	4630.05	83.78	357.52	29.72	1331.46	3716.36	3873.82	-18.57	3873.87	359.73	0.16	MWD_M	None
302	4659.08	83.69	357.71	29.03	1334.63	3743.84	3902.65	-19.77	3902.70	359.71	0.22	MWD_M	None
303	4687.99	83.52	357.57	28.91	1337.85	3771.21	3931.36	-20.95	3931.42	359.69	0.23	MWD_M	None
304	4717.29	83.90	357.98	29.30	1341.06	3798.97	3960.46	-22.08	3960.52	359.68	0.58	MWD_M	None
305	4746.43	83.81	358.01	29.14	1344.18	3826.62	3989.42	-23.10	3989.48	359.67	0.10	MWD_M	None
306	4775.73	83.72	357.84	29.30	1347.36	3854.41	4018.52	-24.15	4018.60	359.66	0.20	MWD_M	None
307	4804.51	83.81	357.54	28.78	1350.49	3881.67	4047.11	-25.31	4047.19	359.64	0.33	MWD_M	None
308	4833.86	83.84	358.67	29.35	1353.65	3909.54	4076.27	-26.27	4076.36	359.63	1.17	MWD_M	None
309	4863.36	83.60	358.34	29.50	1356.87	3937.60	4105.59	-27.04	4105.68	359.62	0.42	MWD_M	None
310	4892.48	83.83	358.33	29.12	1360.06	3965.28	4134.52	-27.88	4134.61	359.61	0.24	MWD_M	None
311	4921.35	83.69	358.21	28.87	1363.20	3992.71	4163.21	-28.74	4163.30	359.60	0.19	MWD_M	None
312	4950.53	83.84	358.42	29.18	1366.37	4020.44	4192.20	-29.60	4192.30	359.60	0.27	MWD_M	None
313	4980.12	83.66	358.43	29.59	1369.59	4048.58	4221.60	-30.40	4221.71	359.59	0.19	MWD_M	None
314	5009.46	83.78	358.89	29.34	1372.80	4076.51	4250.76	-31.09	4250.87	359.58	0.49	MWD_M	None
315	5037.97	83.66	359.11	28.51	1375.92	4103.71	4279.09	-31.58	4279.21	359.58	0.27	MWD_M	None
316	5067.57	83.66	359.33	29.60	1379.19	4131.96	4308.51	-31.98	4308.63	359.57	0.23	MWD_M	None
317	5096.52	83.61	359.54	28.95	1382.40	4159.63	4337.28	-32.26	4337.40	359.57	0.23	MWD_M	None
318	5126.20	83.63	359.95	29.68	1385.69	4188.04	4366.78	-32.40	4366.90	359.58	0.42	MWD_M	None
319	5154.85	82.91	0.04	28.65	1389.05	4215.48	4395.23	-32.40	4395.35	359.58	0.77	MWD_M	None
320	5184.26	79.96	359.88	29.41	1393.43	4243.51	4424.31	-32.42	4424.43	359.58	3.06	MWD_M	None
321	5242.51	72.28	358.99	58.25	1407.39	4297.85	4480.81	-32.97	4480.93	359.58	4.04	MWD_M	None
322	5271.33	69.03	358.04	28.82	1416.94	4323.87	4507.99	-33.67	4508.12	359.57	3.57	MWD_M	None
323	**5300.84**	**66.13**	**356.70**	**29.51**	**1428.19**	**4349.82**	**4535.24**	**-34.92**	**4535.37**	**359.56**	**3.26**	**MWD_M**	**None**
324	**5329.62**	**63.37**	**355.77**	**28.78**	**1440.47**	**4374.41**	**4561.21**	**-36.63**	**4561.36**	**359.54**	**3.06**	**MWD_M**	**None**
325	5359.12	60.23	355.31	29.50	1454.41	4398.86	4587.13	-38.65	4587.29	359.52	3.27	MWD_M	None
326	5388.65	57.25	355.08	29.53	1469.73	4422.56	4612.28	-40.76	4612.46	359.49	3.08	MWD_M	None
327	5417.97	53.51	355.34	29.32	1486.39	4445.20	4636.32	-42.77	4636.51	359.47	3.89	MWD_M	None
328	5447.17	49.80	357.07	29.20	1504.50	4466.83	4659.16	-44.30	4659.37	359.46	4.12	MWD_M	None
329	5465.29	47.44	358.20	18.12	1516.48	4479.78	4672.75	-44.86	4672.96	359.45	4.22	MWD_M	None
330	5504.48	44.01	358.64	39.19	1543.83	4506.61	4700.79	-45.64	4701.01	359.44	2.68	MWD_M	None
331	5532.97	40.34	358.53	28.49	1564.94	4524.93	4719.91	-46.11	4720.13	359.44	3.93	MWD_M	None
332	5562.30	36.75	358.53	29.33	1587.88	4542.42	4738.18	-46.58	4738.41	359.44	3.73	MWD_M	None
333	5591.53	34.63	358.43	29.23	1611.62	4558.73	4755.22	-47.03	4755.45	359.43	2.21	MWD_M	None
334	5620.80	32.71	358.02	29.27	1635.97	4574.24	4771.44	-47.53	4771.68	359.43	2.01	MWD_M	None
335	5649.72	31.49	358.04	28.92	1660.47	4588.91	4786.80	-48.06	4787.04	359.42	1.29	MWD_M	None
336	5679.01	31.44	357.12	29.29	1685.46	4603.47	4802.07	-48.71	4802.32	359.42	0.50	MWD_M	None
337	5708.73	31.64	356.93	29.72	1710.79	4618.23	4817.60	-49.51	4817.85	359.41	0.23	MWD_M	None
338	5737.78	31.67	356.55	29.05	1735.51	4632.67	4832.82	-50.38	4833.08	359.40	0.21	MWD_M	None
339	5766.77	29.44	355.60	28.99	1760.48	4646.58	4847.52	-51.39	4847.79	359.39	2.40	MWD_M	None
340	5795.91	27.64	356.38	29.14	1786.07	4659.72	4861.41	-52.36	4861.69	359.38	1.92	MWD_M	None
341	5825.35	26.89	355.68	29.44	1812.24	4672.44	4874.86	-53.29	4875.15	359.37	0.84	MWD_M	None
342	5854.53	27.34	355.94	29.18	1838.22	4684.98	4888.13	-54.27	4888.43	359.36	0.49	MWD_M	None
343	5883.50	27.60	357.84	28.97	1863.92	4697.65	4901.47	-54.99	4901.78	359.36	0.96	MWD_M	None
344	5912.24	27.77	359.77	28.74	1889.37	4710.45	4914.82	-55.27	4915.13	359.36	0.97	MWD_M	None
345	5941.77	27.64	359.21	29.53	1915.52	4723.65	4928.55	-55.39	4928.86	359.36	0.30	MWD_M	None
346	5971.02	27.38	359.28	29.25	1941.46	4736.63	4942.06	-55.57	4942.37	359.36	0.27	MWD_M	None
347	6000.53	27.41	359.59	29.51	1967.66	4749.69	4955.63	-55.70	4955.95	359.36	0.15	MWD_M	None
348	6029.73	27.69	1.31	29.20	1993.55	4762.74	4969.14	-55.59	4969.45	359.36	0.88	MWD_M	None
349	6059.06	27.62	0.02	29.33	2019.53	4775.91	4982.75	-55.44	4983.06	359.36	0.63	MWD_M	None
350	6088.26	27.80	359.49	29.20	2045.38	4788.98	4996.33	-55.49	4996.63	359.36	0.32	MWD_M	None
351	6117.69	27.61	357.48	29.43	2071.43	4802.08	5010.00	-55.86	5010.31	359.36	0.99	MWD_M	None
352	6146.78	27.48	355.74	29.09	2097.23	4814.81	5023.43	-56.65	5023.75	359.35	0.85	MWD_M	None
353	6176.12	27.44	356.35	29.34	2123.26	4827.58	5036.93	-57.58	5037.26	359.35	0.30	MWD_M	None
354	6205.61	27.56	354.21	29.49	2149.42	4840.37	5050.50	-58.70	5050.84	359.33	1.03	MWD_M	None
355	6234.75	27.37	353.94	29.14	2175.28	4852.89	5063.86	-60.09	5064.22	359.32	0.24	MWD_M	None
356	6263.96	27.52	354.19	29.21	2201.20	4865.43	5077.25	-61.48	5077.63	359.31	0.20	MWD_M	None
357	6293.53	27.37	355.16	29.57	2227.44	4878.18	5090.82	-62.75	5091.21	359.29	0.49	MWD_M	None
358	6322.54	27.53	357.02	29.01	2253.19	4890.81	5104.16	-63.66	5104.56	359.29	0.92	MWD_M	None
359	6351.94	27.49	357.66	29.40	2279.26	4903.72	5117.73	-64.29	5118.13	359.28	0.31	MWD_M	None
360	6381.24	27.31	357.62	29.30	2305.28	4916.56	5131.20	-64.85	5131.61	359.28	0.19	MWD_M	None
361	6410.48	27.54	358.05	29.24	2331.23	4929.41	5144.66	-65.35	5145.07	359.27	0.32	MWD_M	None
362	6434.27	27.52	356.65	23.79	2352.32	4939.86	5155.64	-65.86	5156.06	359.27	0.83	MWD_M	None
363	6456.00	27.50	358.00	21.73	2371.60	4949.41	5165.67	-66.33	5166.09	359.26	0.88	Proj. to TD	

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Company:	**ESSO Australia Pty Ltd**	Schlumberger
Well:	**SNA A26A**	
Field:	**Snapper**	
Rig:	**ISDL 175**	**12.25 In. Section**
State:	**Victoria**	

VISION* Resistivity
1:200 Measured Depth
Recorded Mode Log