

Bit Run Summary

Type		Petrofree SBM									
Mud weight	ppg	10.05									
Solids	%	13.3									
Chlorides	mg/L	204100									
Rm	ohm.m@°C	n/a									
Rmf	ohm.m@°C	n/a									
Rmc	ohm.m@°C	n/a									
Potassium	%	0.0									
Environmental data											
GR											
Mud weight	ppg	10.05									
Bit size	in.	8.5									
Resistivity											
Neutron porosity											
Hole Size	in.	8.5									
Mud weight	ppg	10.05									
Temperature	°C	120.0									
Mud salinity	ppm	27227									
Formation salinity											
Recording rate 1	SEC	5 sec.									
Recording rate 2	SEC	5 sec.									
Filtering GR		3 pt.									
Filtering density		3 pt.									
Filtering Neutron		3 pt.									
Company representative	B. Steel	T. Paltridge	R. Bain								
Schlumberger D&M Personnel	J. Dolan	M. Y. Tan	D. Hastie	T. Auger	C. Soper	B. Hanson					

DISCLAIMER

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OTHER SERVICES FOR RUN2

Xceed* RSS
D&I Survey

REMARKS: RUN NUMBER 2

8-1/2 in. hole section was drilled from 845.0 m to 4955.0 m.

Depth is referenced to Driller's Depth.

All data presented is from tool memory.

GR corrected for mud weight, tool and bit size.

ARC*6 resistivity is corrected for bit size, mud resistivity and borehole temperature.

Neutron porosity is calculated with a limestone matrix and is corrected for bit size, borehole salinity, temperature and mud hydrogen index.

PEF readings were affected by the presence of Barite in the mud system.

Caliper data spikes are due to stick and slip while drilling.

Mud type is Petrofree SBM.

POOH due to TD.

EQUIPMENT DESCRIPTION

RUN2

DOWNHOLE EQUIPMENT

6-3/4 in. ADN*6C	Neutron F	34.72	36.69
S/N: 0403	Neutron N	34.57	
8-1/4 in. Stabiliser	Density S	33.70	
NSR-M A202	Density L	33.60	
GSR-J A1994	UltraSonic	33.22	
Software: V8.3A02	R-O Port	32.46	
6-3/4 in. Sonic*6			30.09
S/N: 34641	Receiver	27.03	
Software: V6.4B01	R-O Port	26.63	
	Transmitter	23.59	
6-3/4 in. PowerPulse*			22.80
MDC FA28	D&I	18.55	
MEC 1080			
MDI 491			
MVC 095			
Software: V8.0C00			
	R-O Port	11.48	
8-3/8 in. In Line Stabiliser T5	T3	11.38	14.89
S/N: S15535-2	T1	11.07	
6-3/4 in. ARC*6	Gamma Ray	10.77	13.79
S/N: 669	Receiver	10.41	
Software: V9.0B00	T2	10.36	
	T4	10.11	
	ARC APRS	9.80	
		9.65	
6-3/4 in. Xceed* RSS			7.88

S/N: 059



Reed Hycalog PDC Bit
RSX 162 S/N: 209390
OD 8-1/2 in.

0.00

0.23

Maximum string diameter 8.50 in.
All lengths in Meters

IDEAL Version: ID10_0C_04
IDF

Format: VISION Service Log Vertical Scale: 1:200 Graphics File Created: 26-Jul-2005 11:47

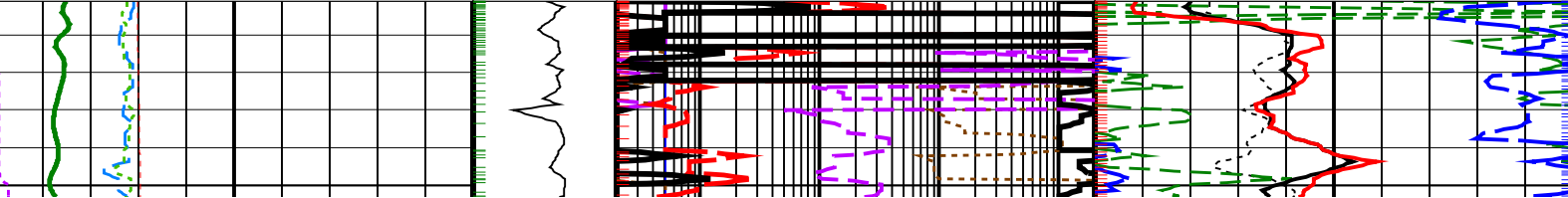
PIP SUMMARY

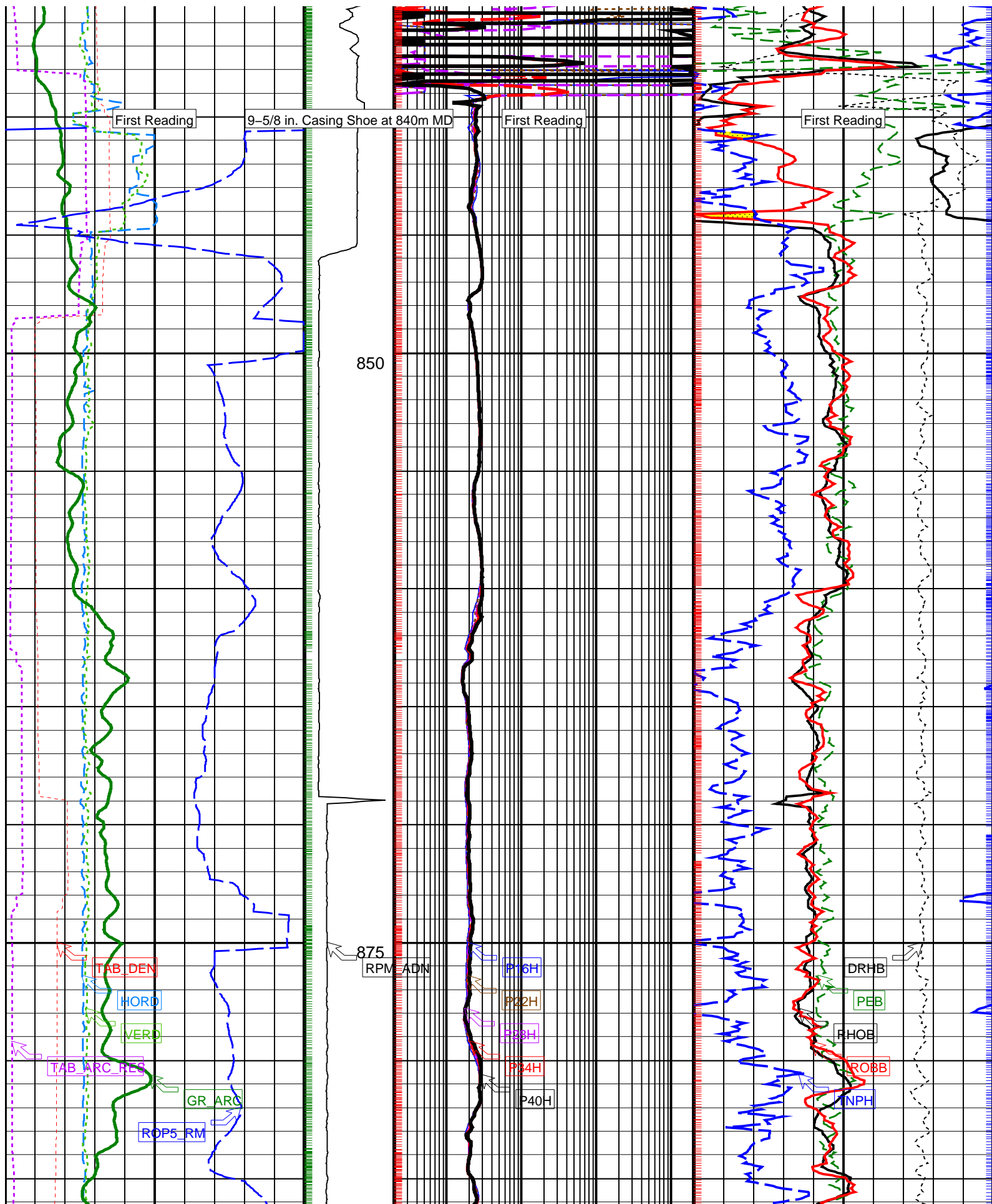
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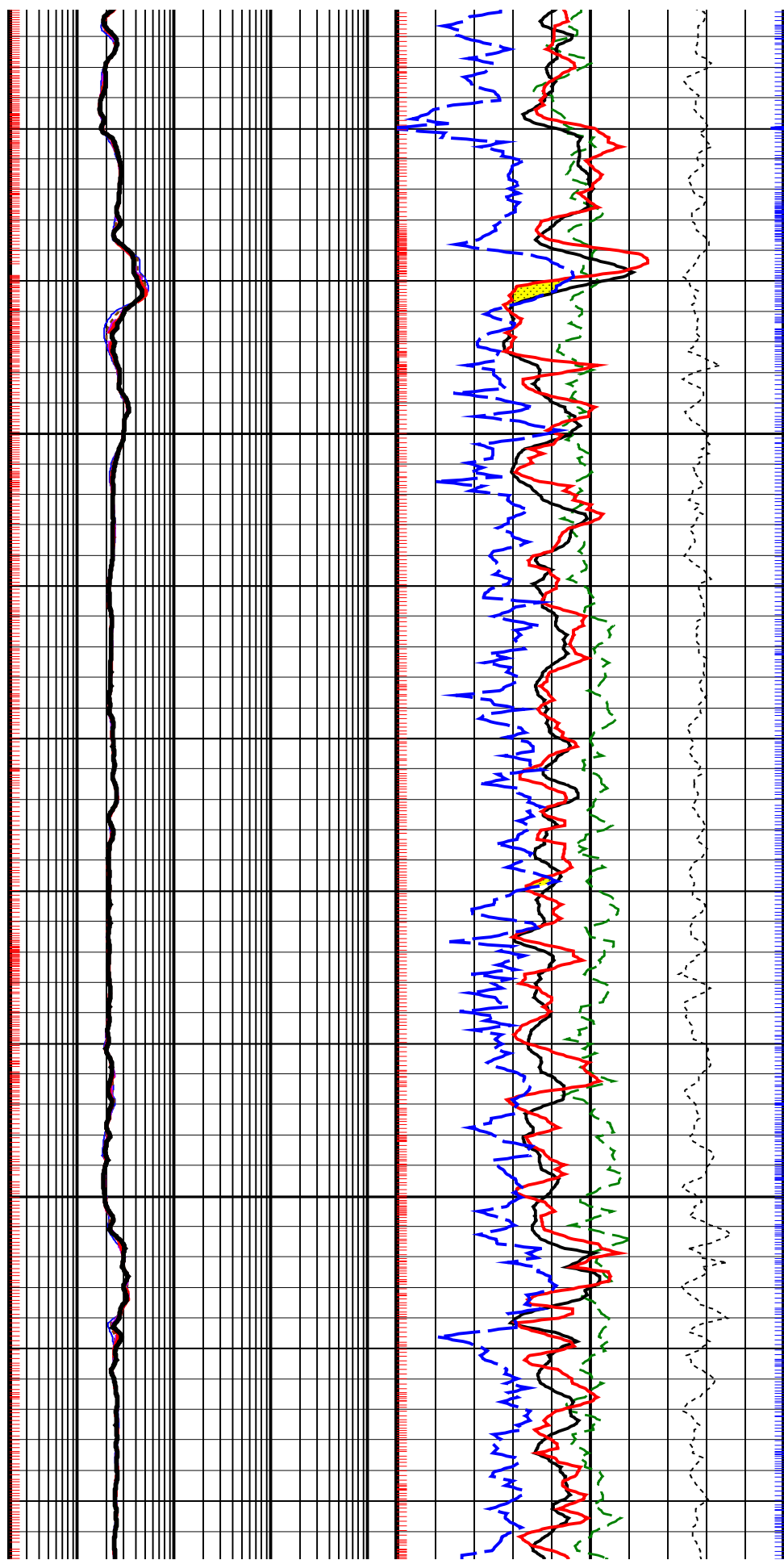
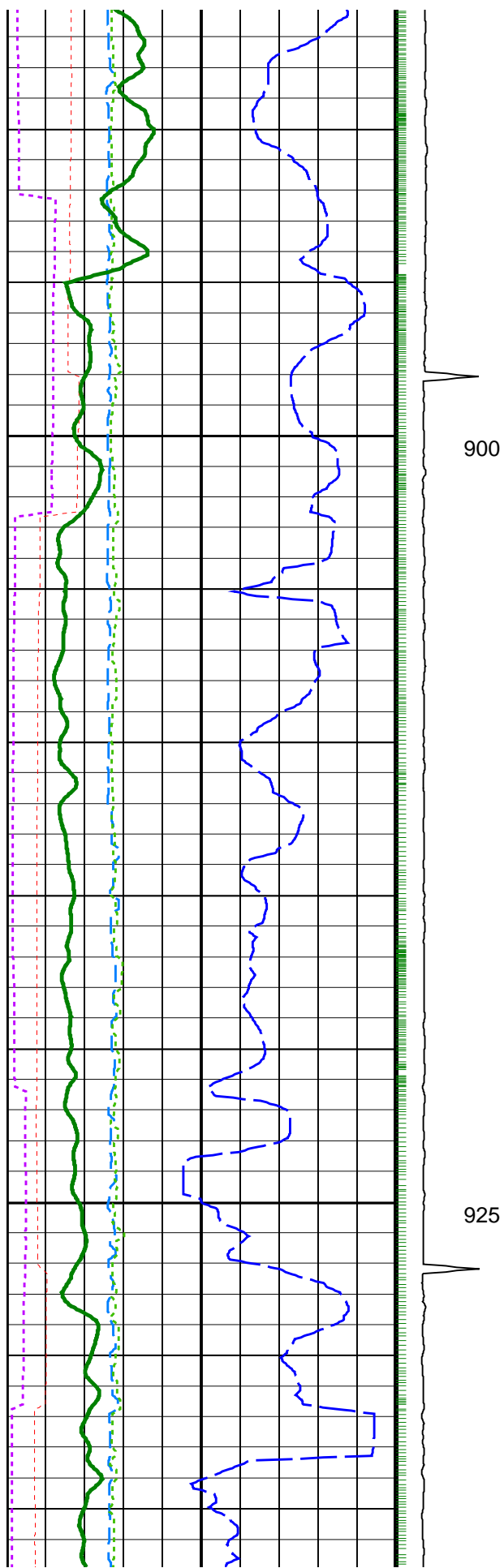
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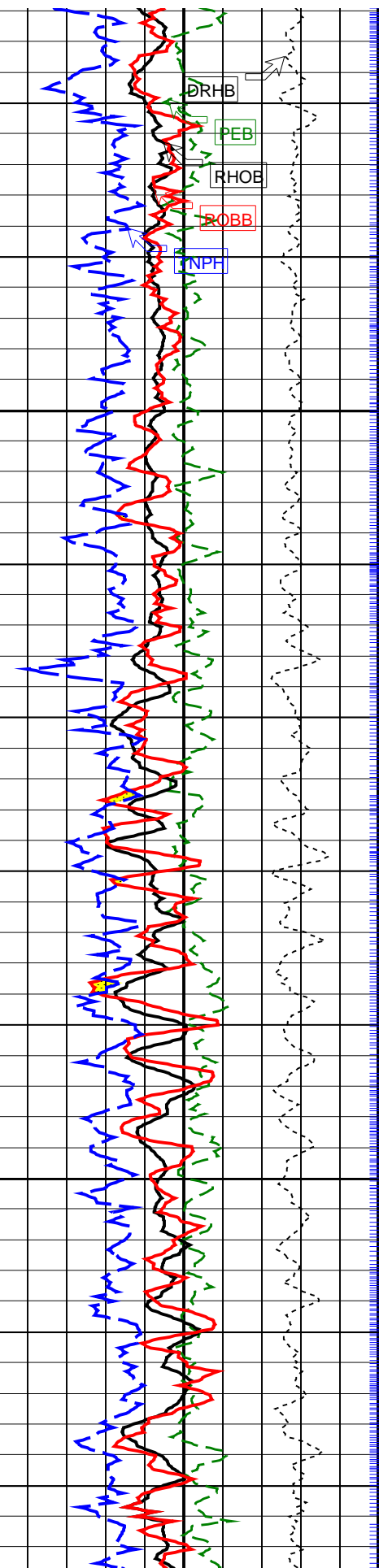
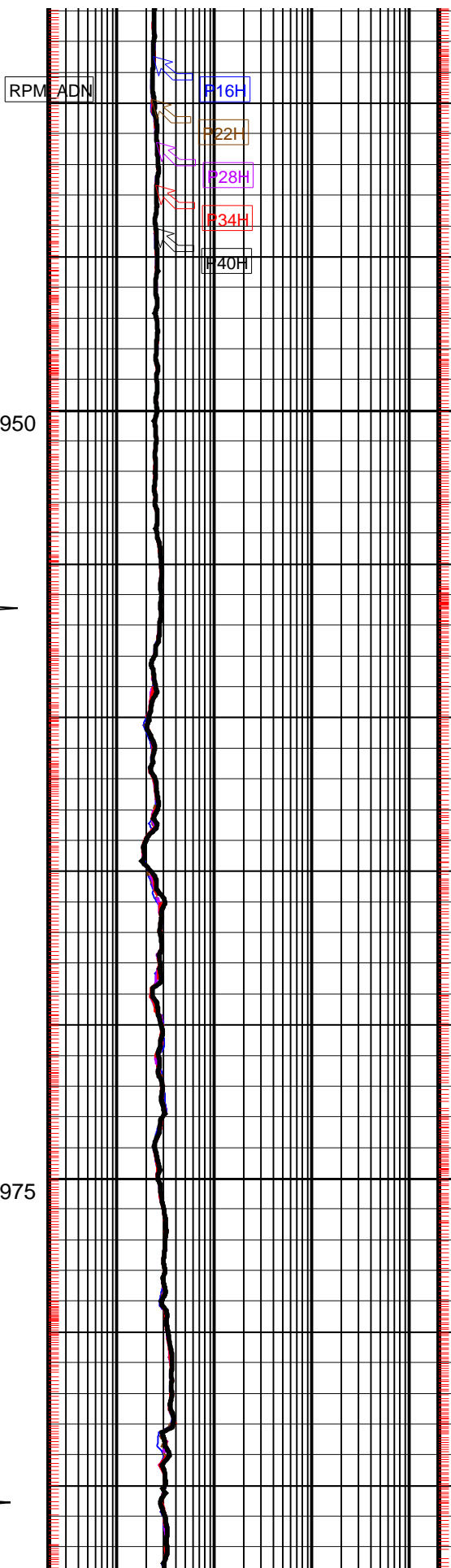
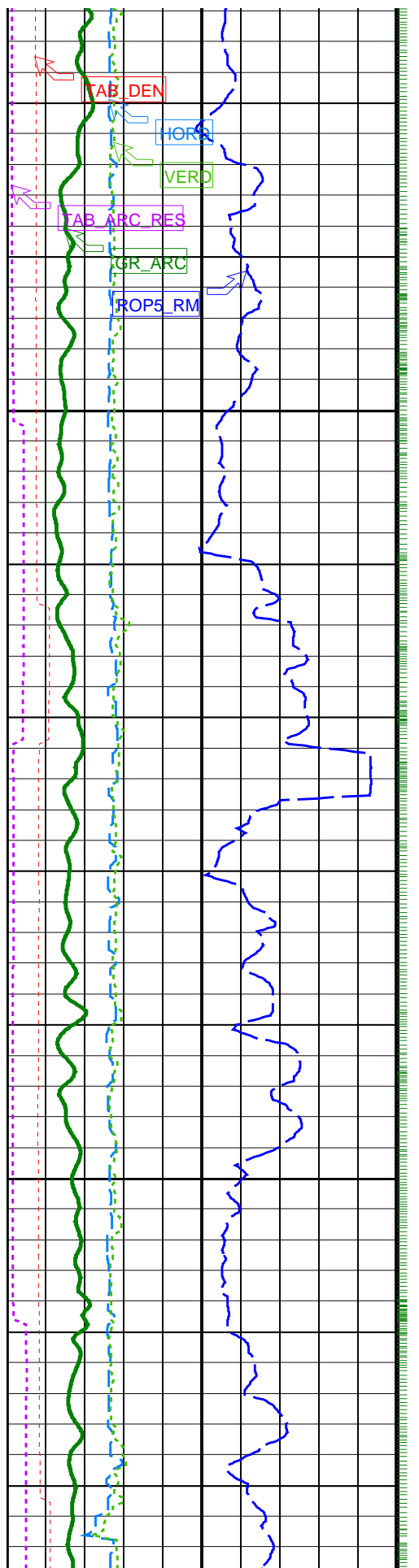
ARC Resistivity Samples
ARC Gamma Ray Samples

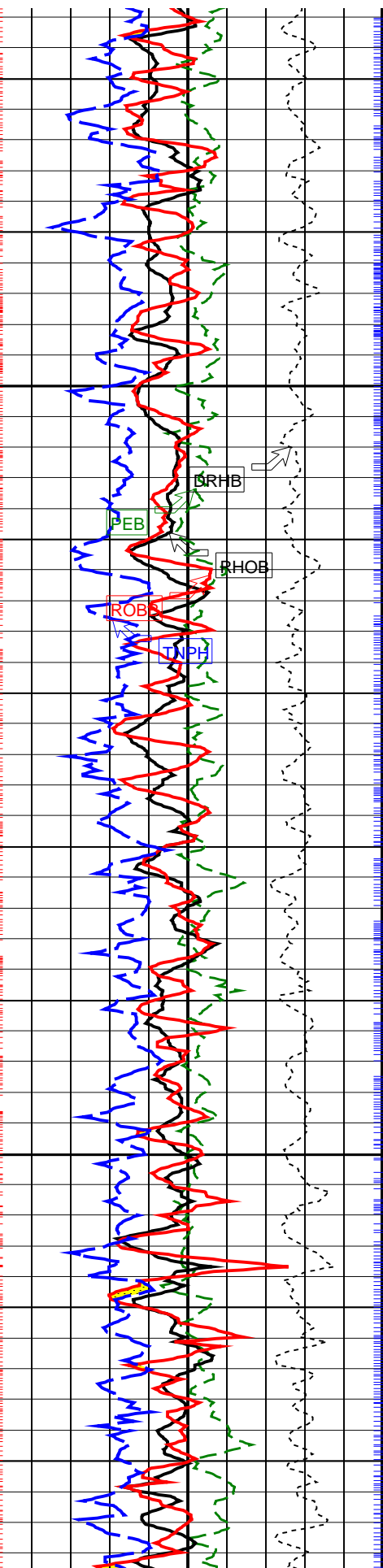
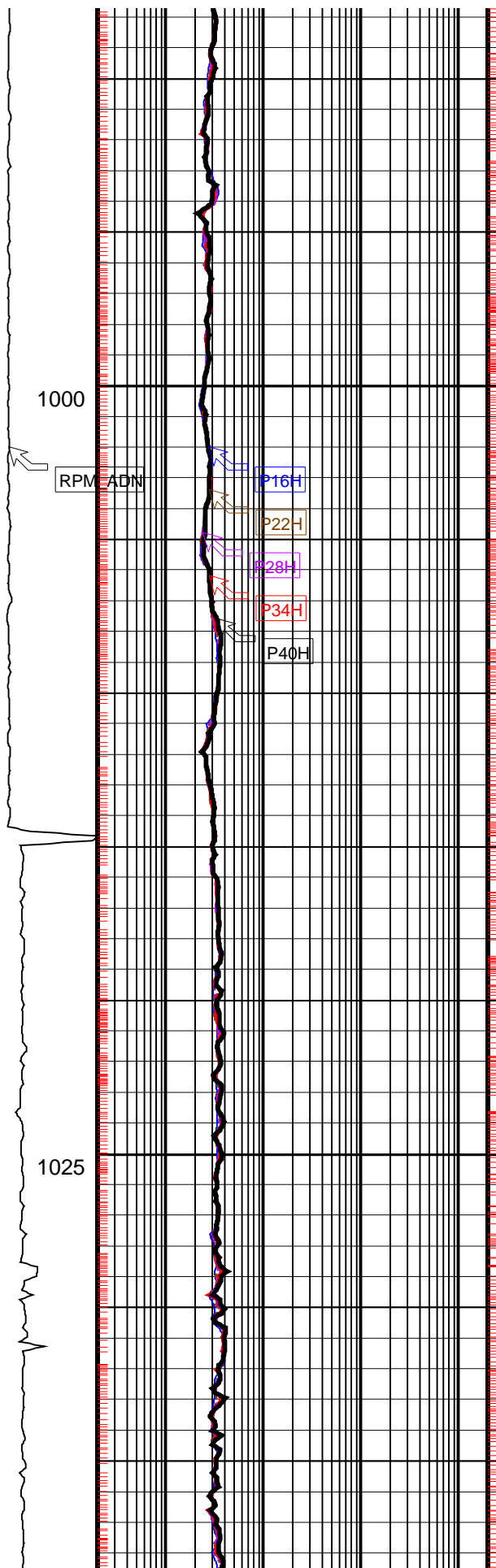
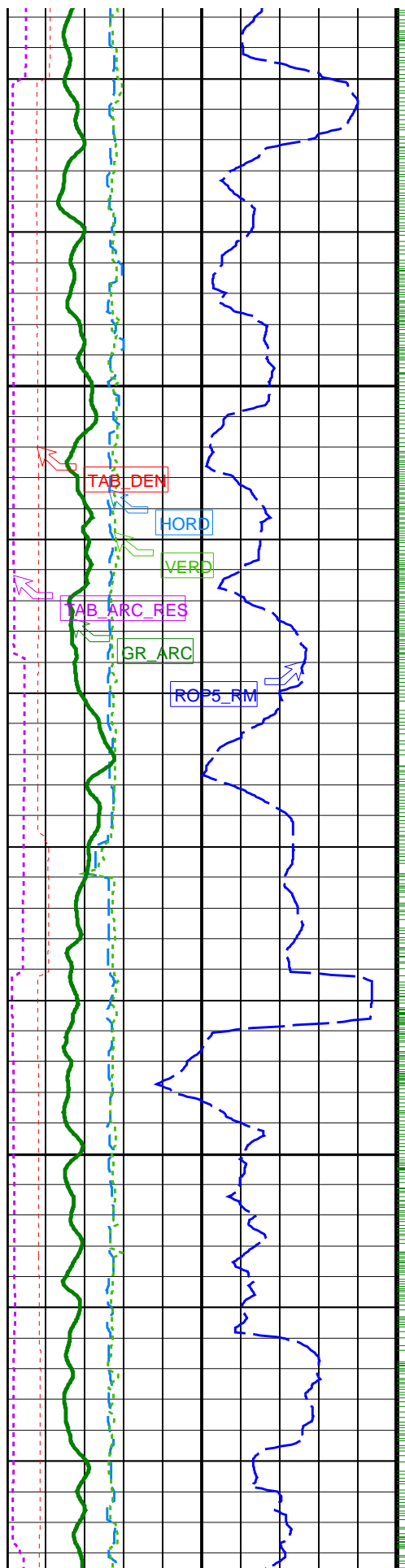
Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 200 (M/HR) 0		Gas Area From ADN/ROBB/DEPTH to ADN/TNPH/DEPTH	
ARC Resistivity Time After Bit (TAB_ARC_RES) 0 (HR) 10		Thermal Neutron Porosity (TNPH) 45 (PU) -15	
ARC Gamma Ray (GR_ARC) 0 (GAPI) 200		Bulk Density, Bottom (ROBB) 1.85 (G/C3) 2.85	
Vertical Hole Diameter (VERD) 6 (IN) 16		Bulk Density (RHOB) 1.85 (G/C3) 2.85	
Horizontal Hole Diameter (HORD) 6 (IN) 16		Photoelectric Factor, Bottom (PEB) 0 (----) 10	
Density Time After Bit (TAB_DEN) 0 (HR) 10		Bulk Density Correction, Bottom (DRHB) -0.75 (G/C3) 0.25	
ADN Rotational Speed (RPM_ADN) (RPM) 250 0		ARC Phase-Shift Resistivity 16-in. at 2 MHz (P16H) 0.2 (OHMM) 2000	
		ARC Phase-Shift Resistivity 40-in. at 2 MHz (P40H) 0.2 (OHMM) 2000	
		ARC Phase-Shift Resistivity 34-in. at 2 MHz (P34H) 0.2 (OHMM) 2000	
		ARC Phase-Shift Resistivity 28-in. at 2 MHz (P28H) 0.2 (OHMM) 2000	
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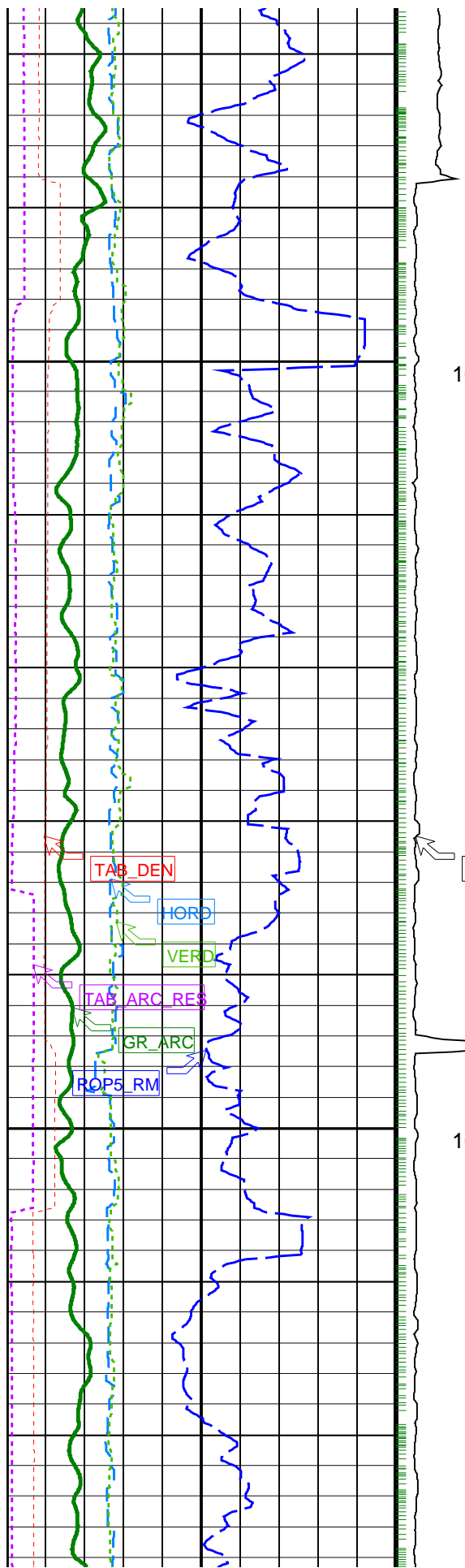








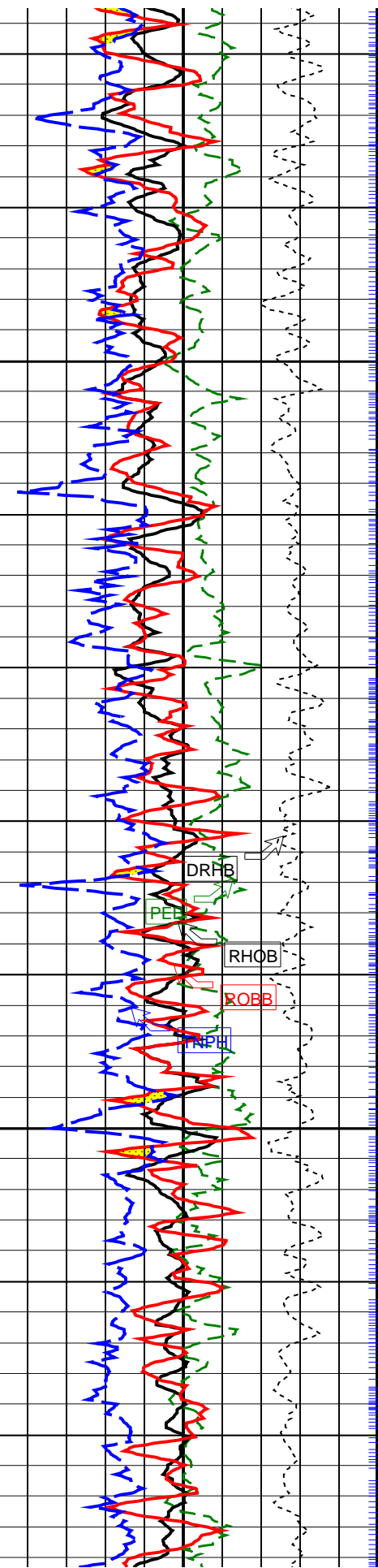
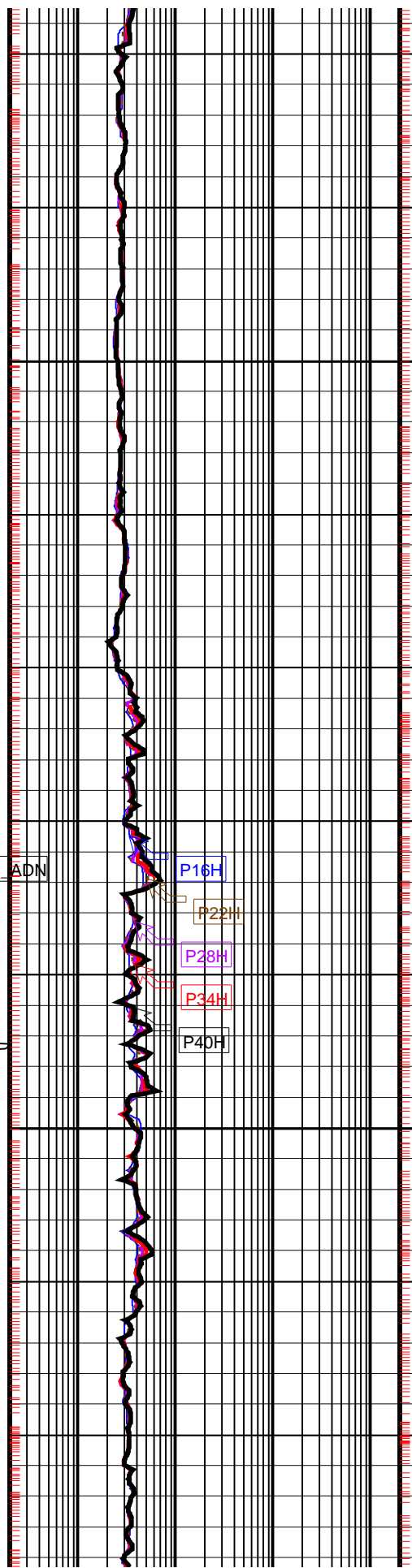


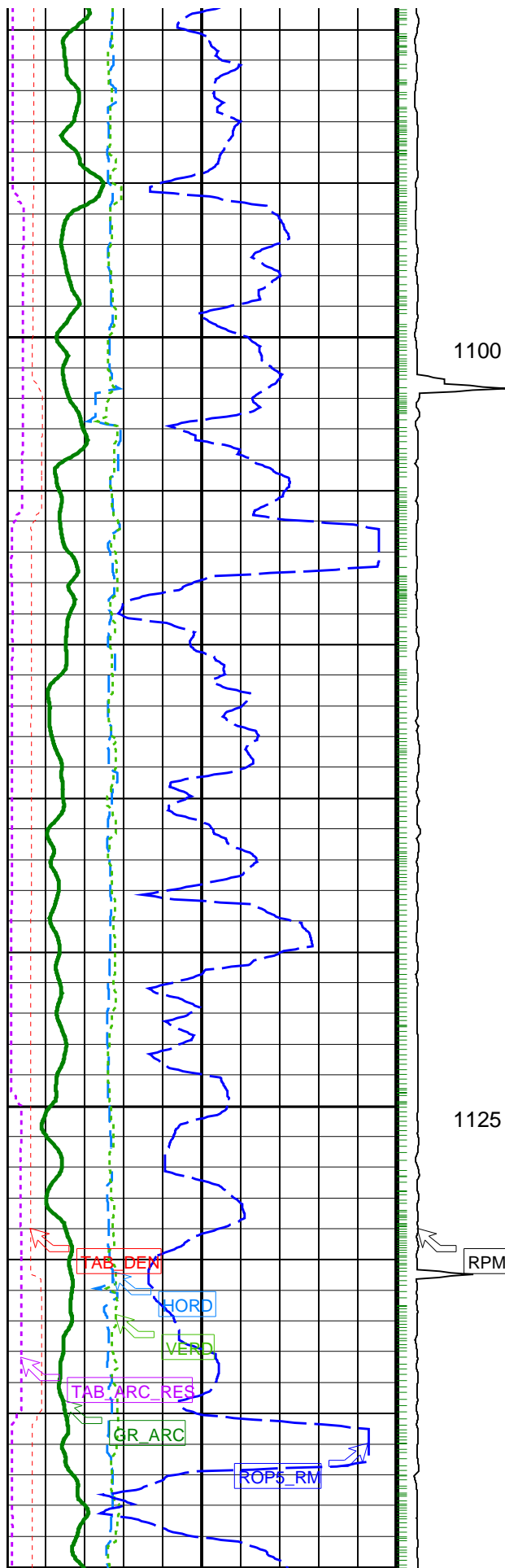


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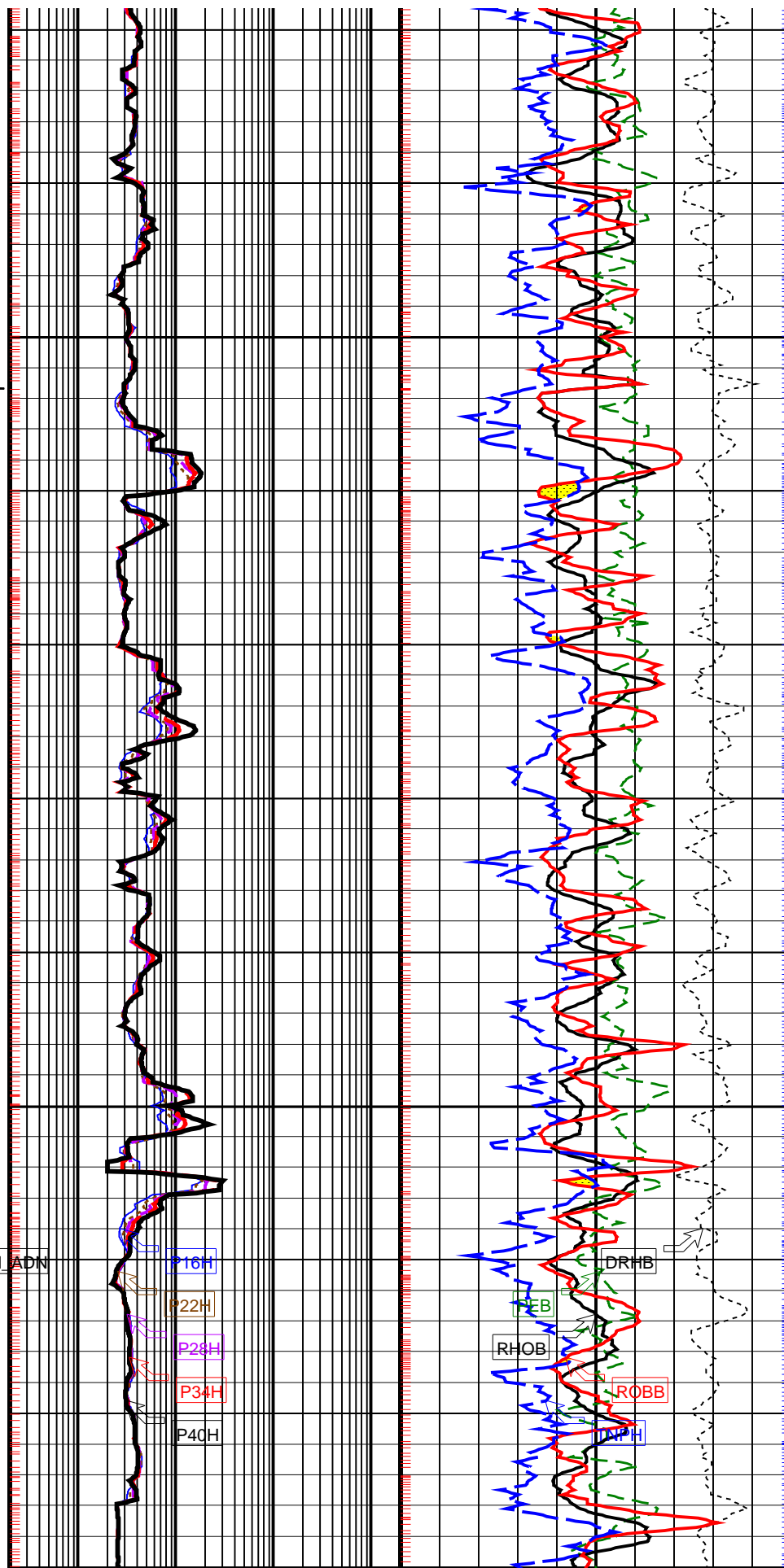
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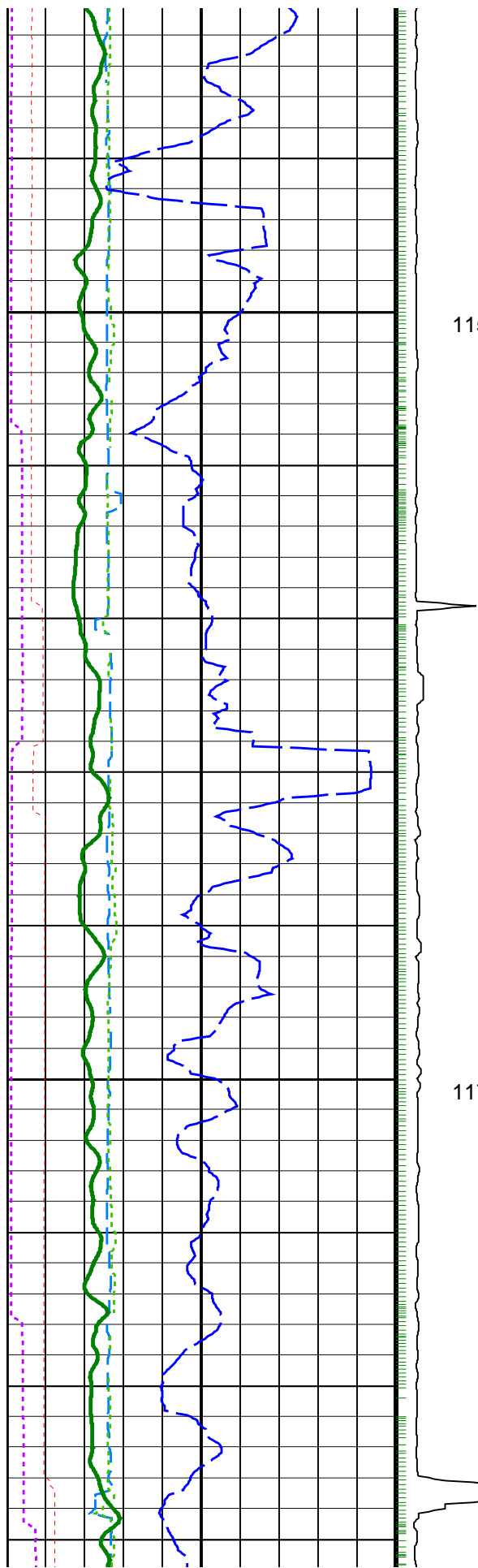
RPM ADN





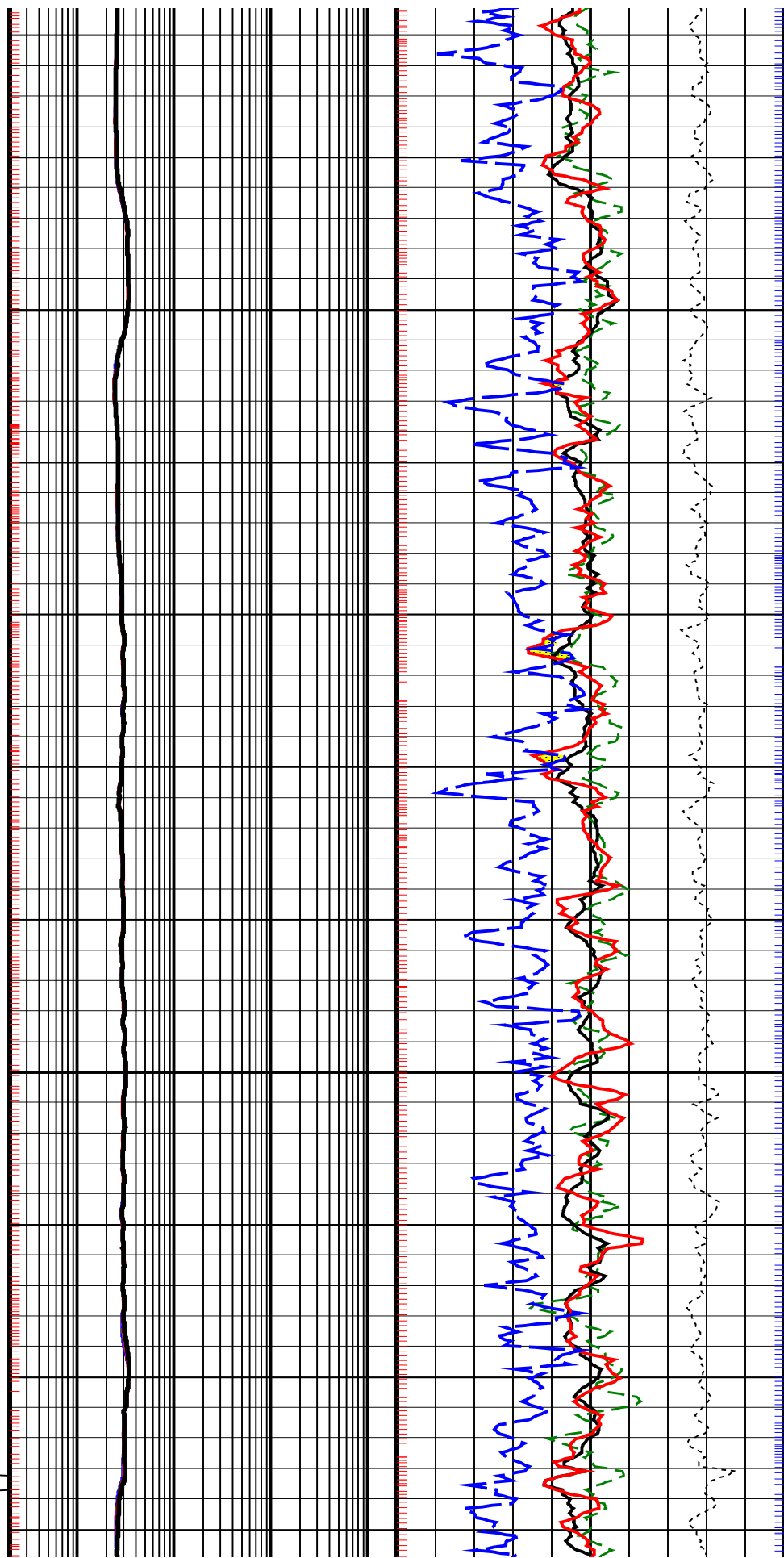
RPM ADN

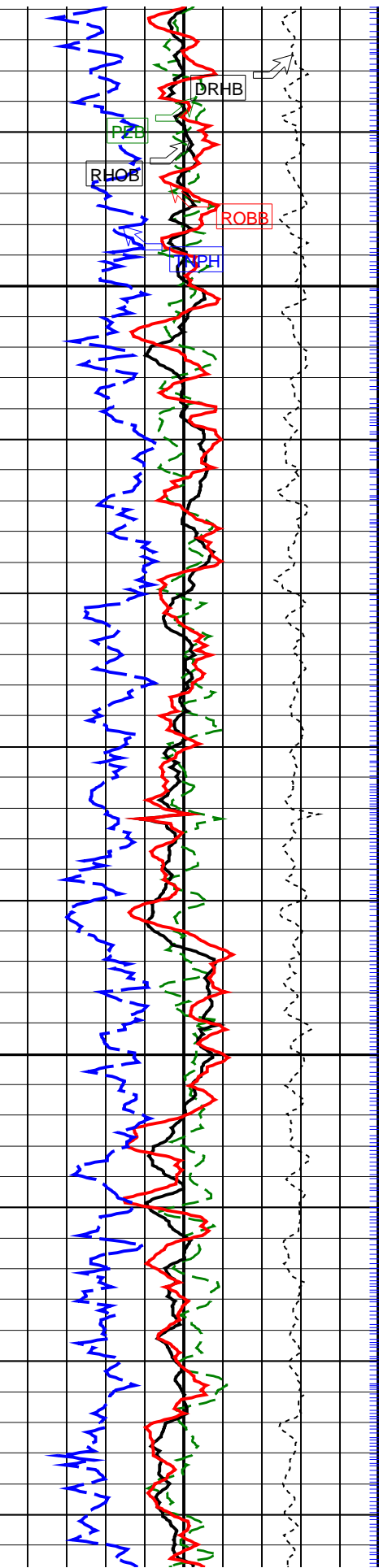
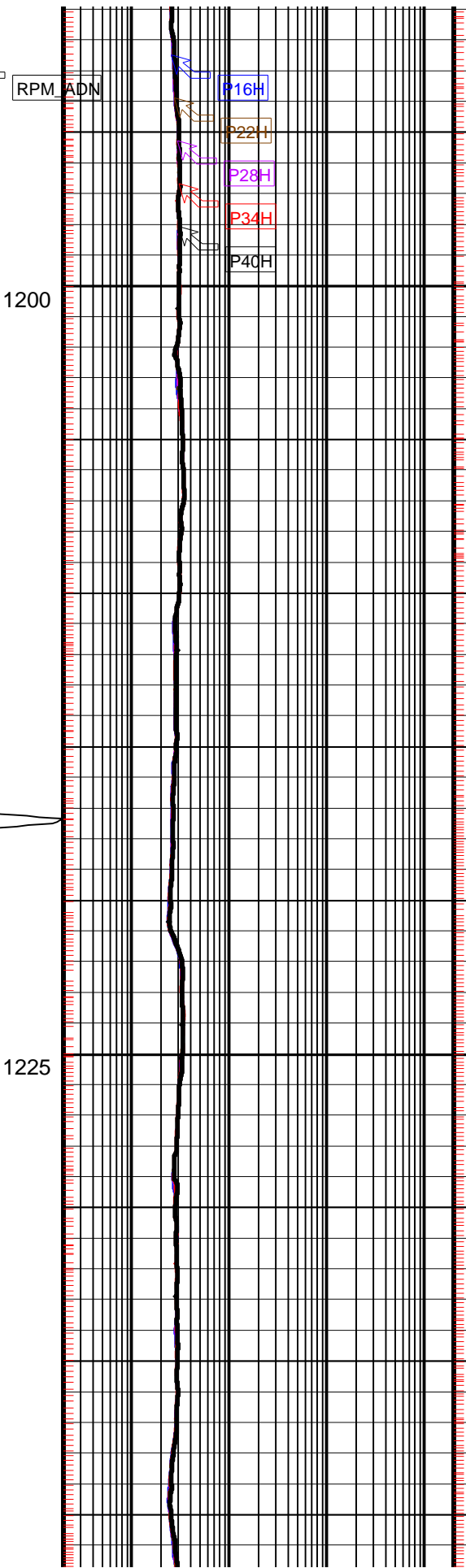
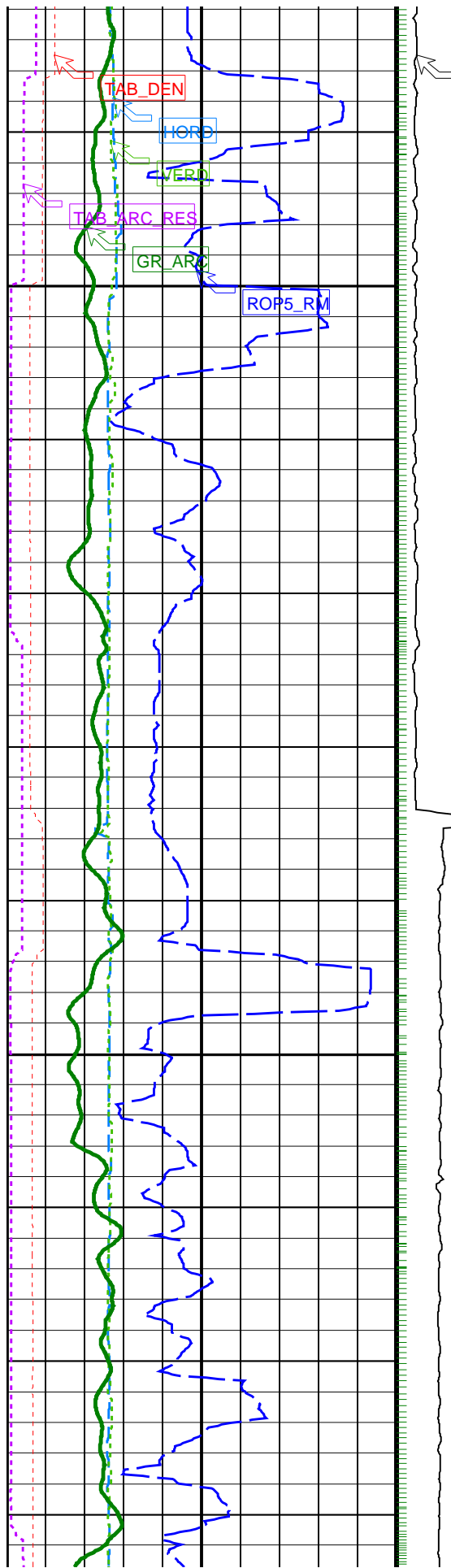


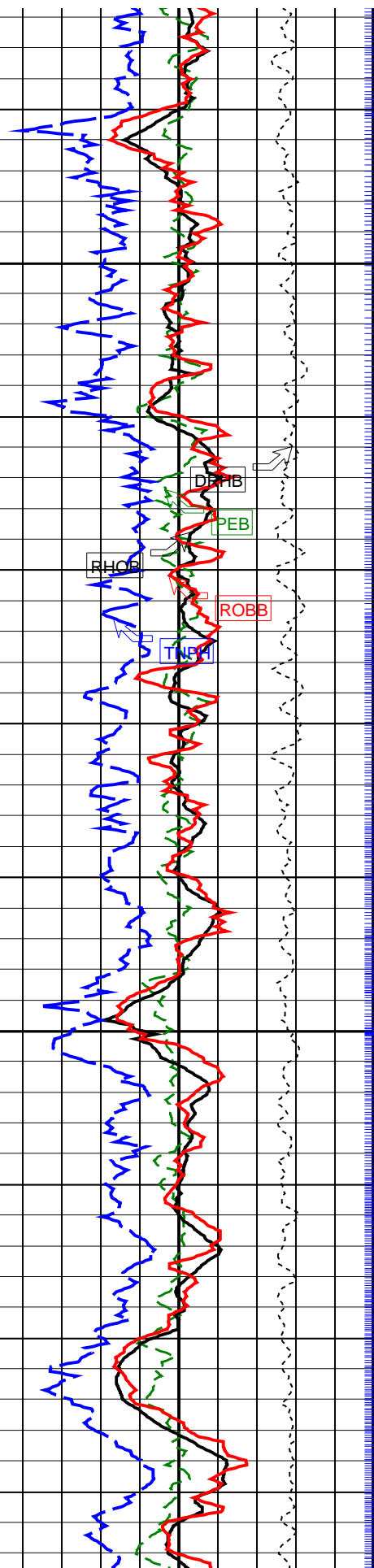
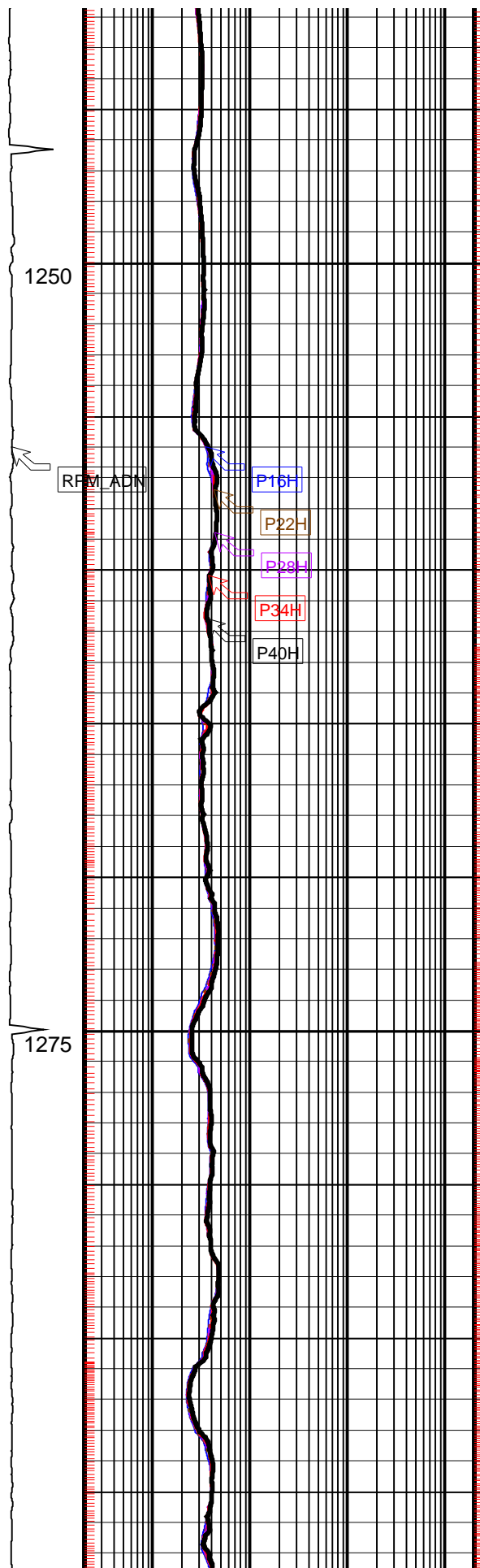
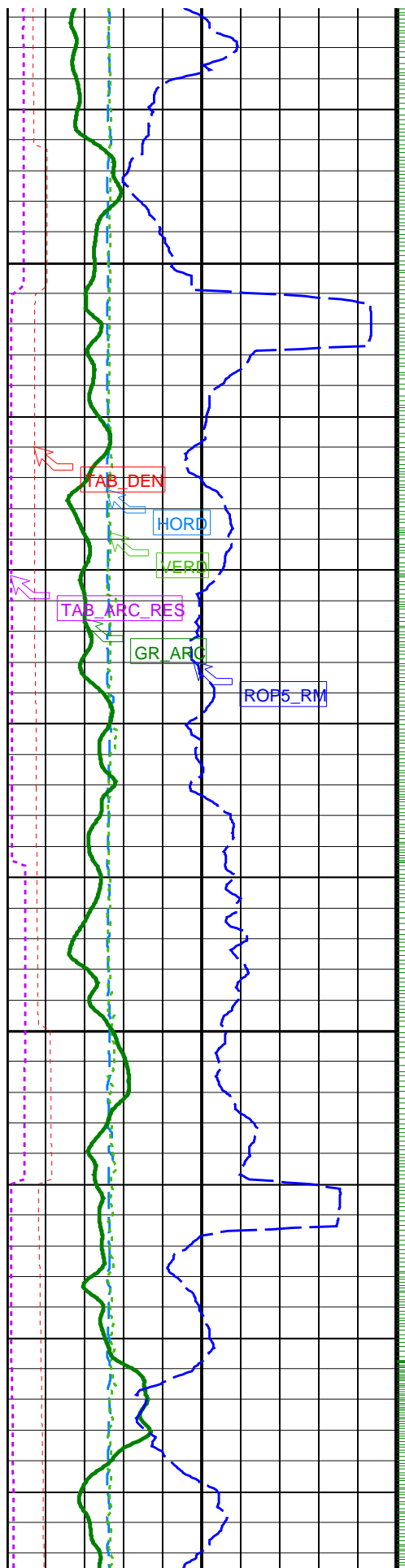


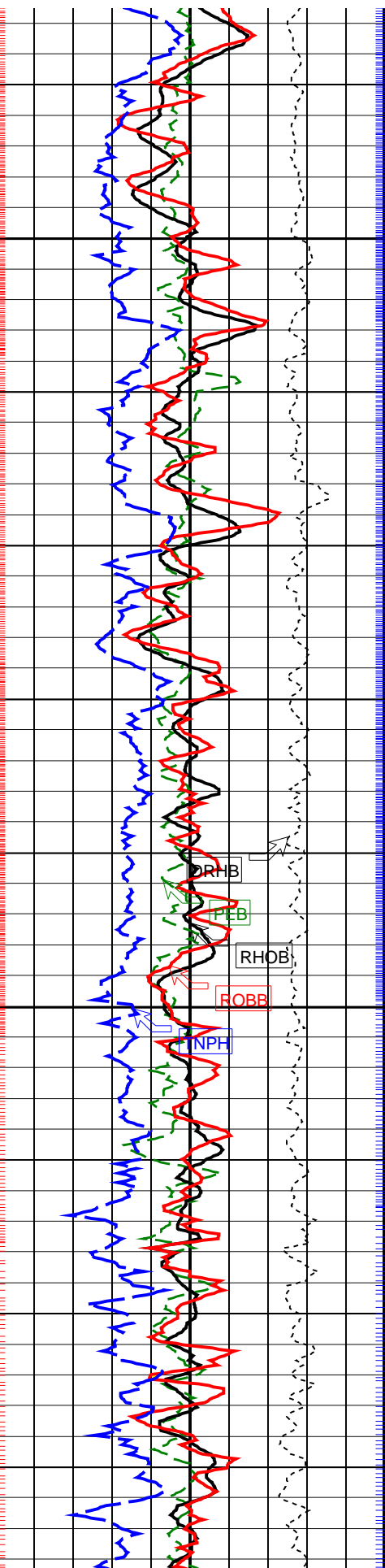
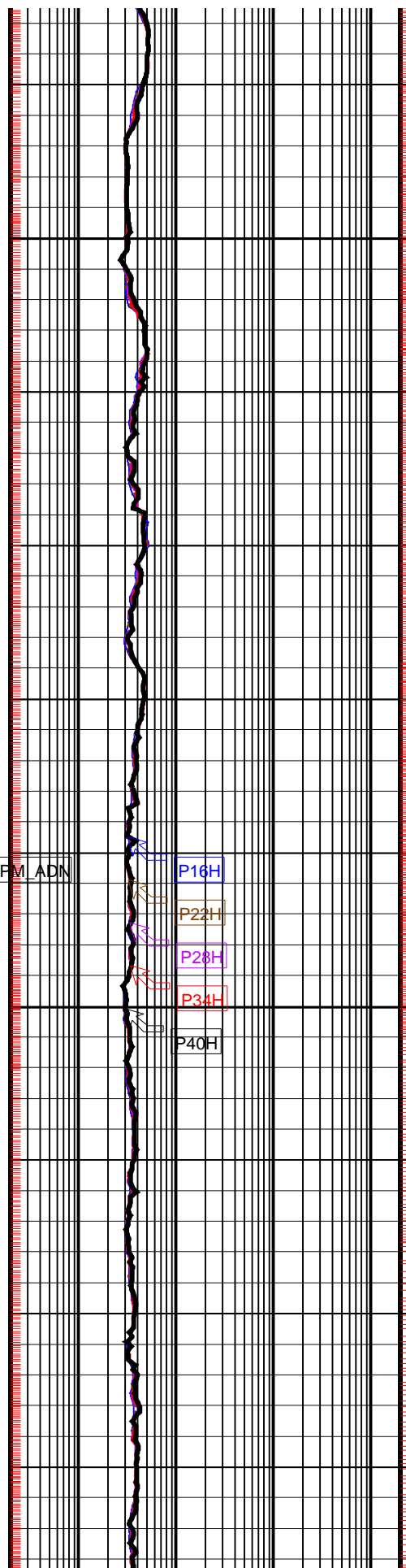
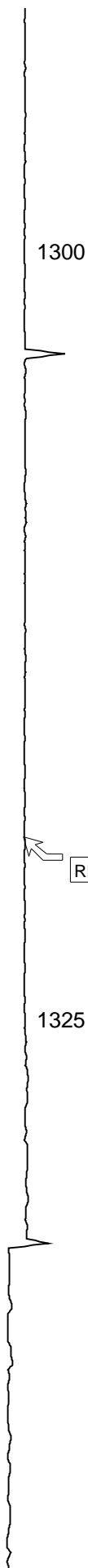
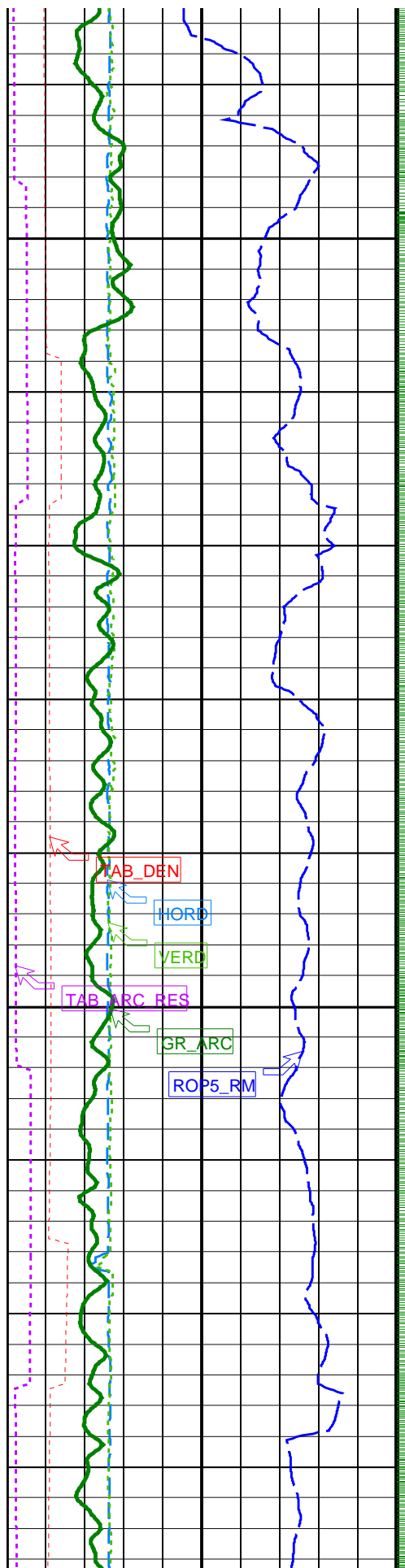
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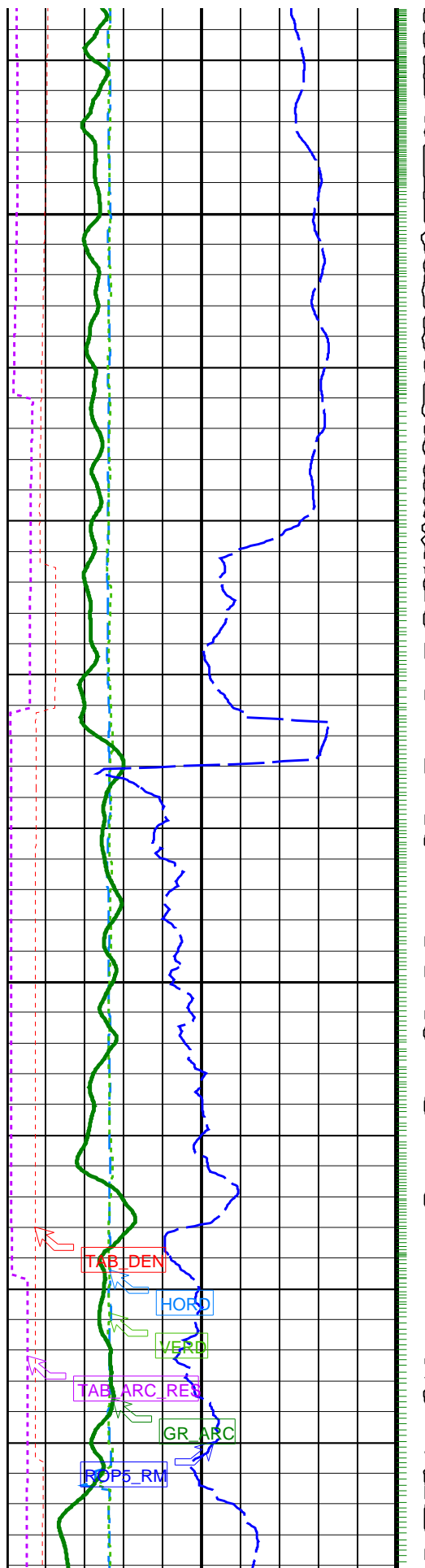
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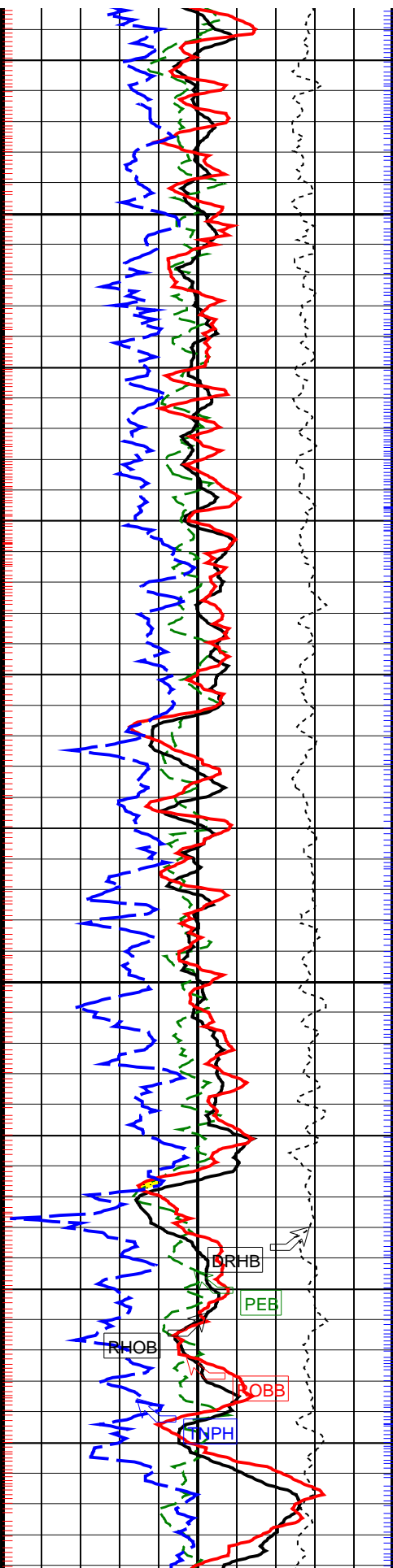
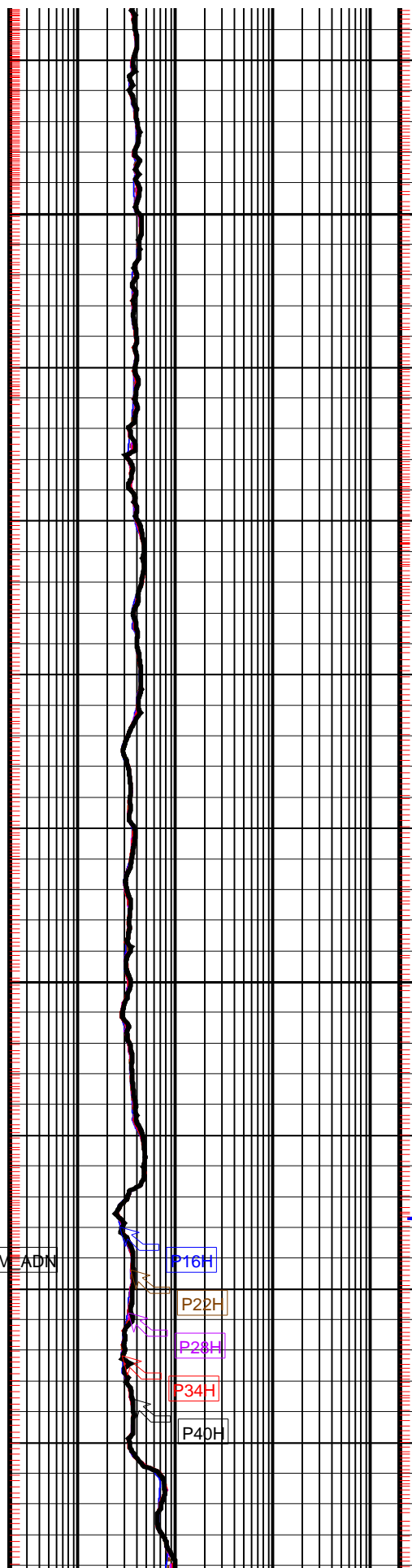


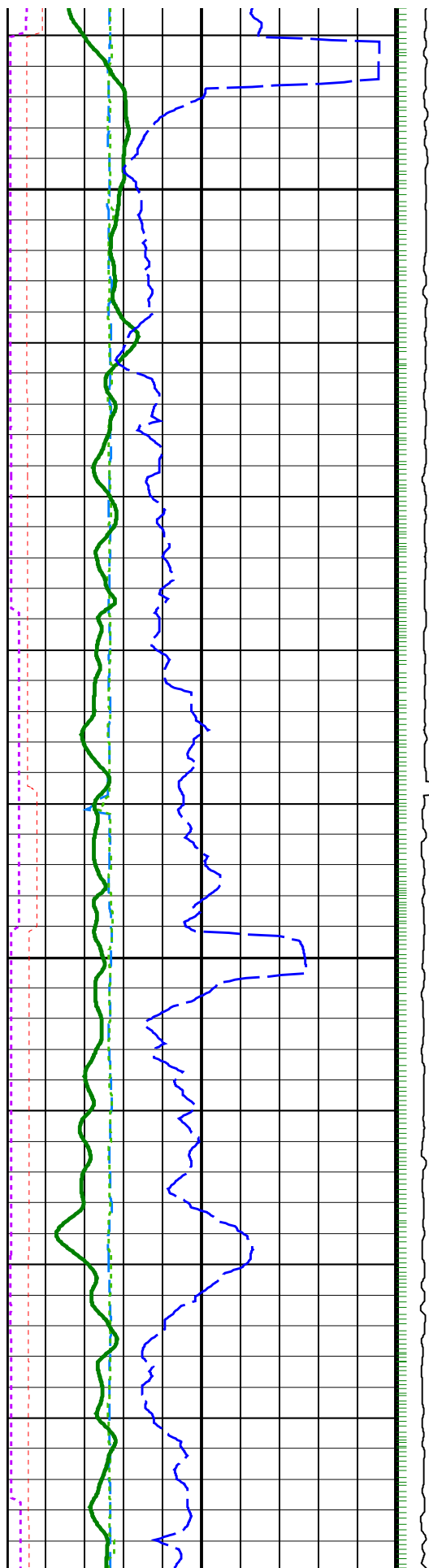


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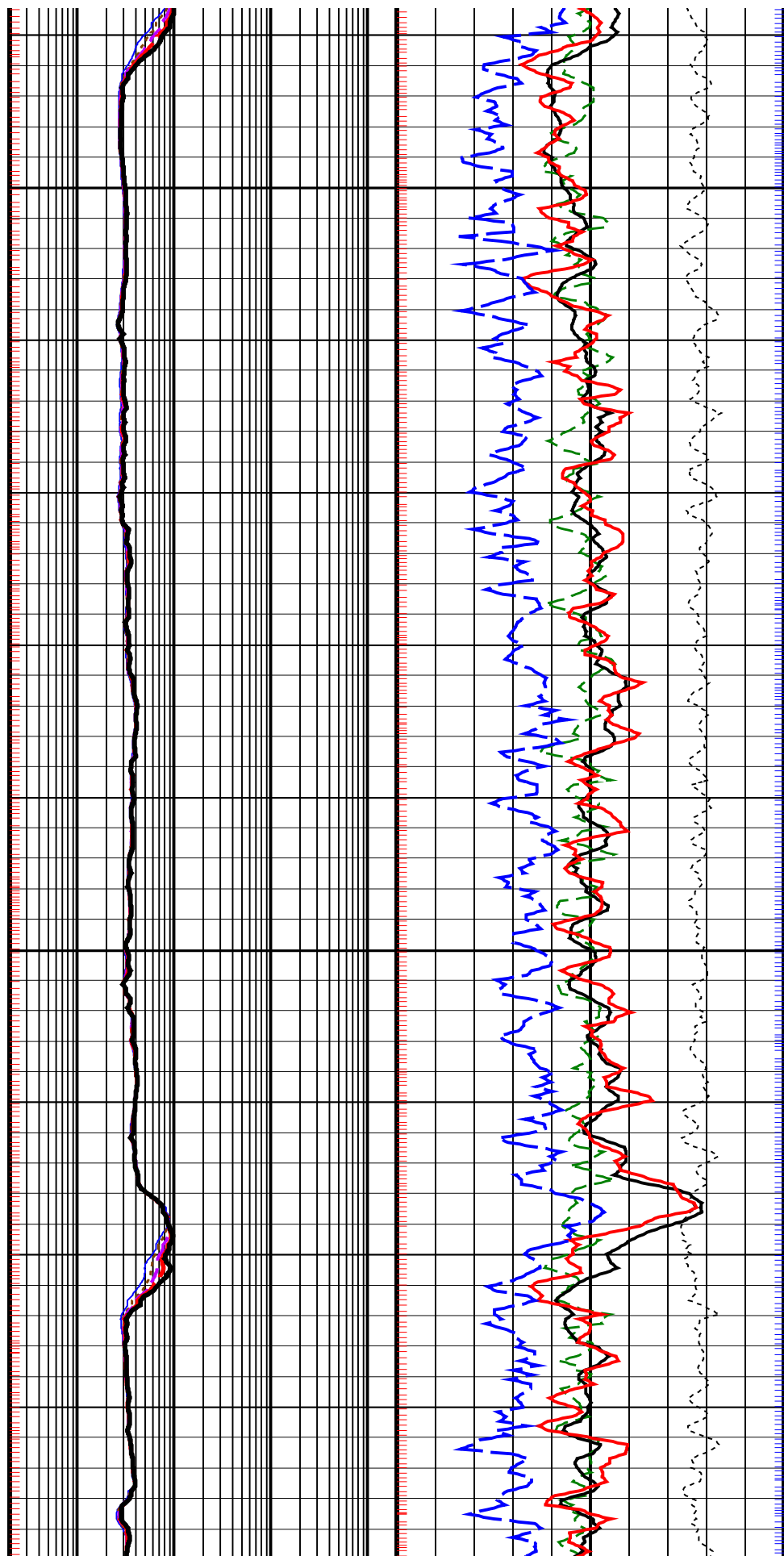
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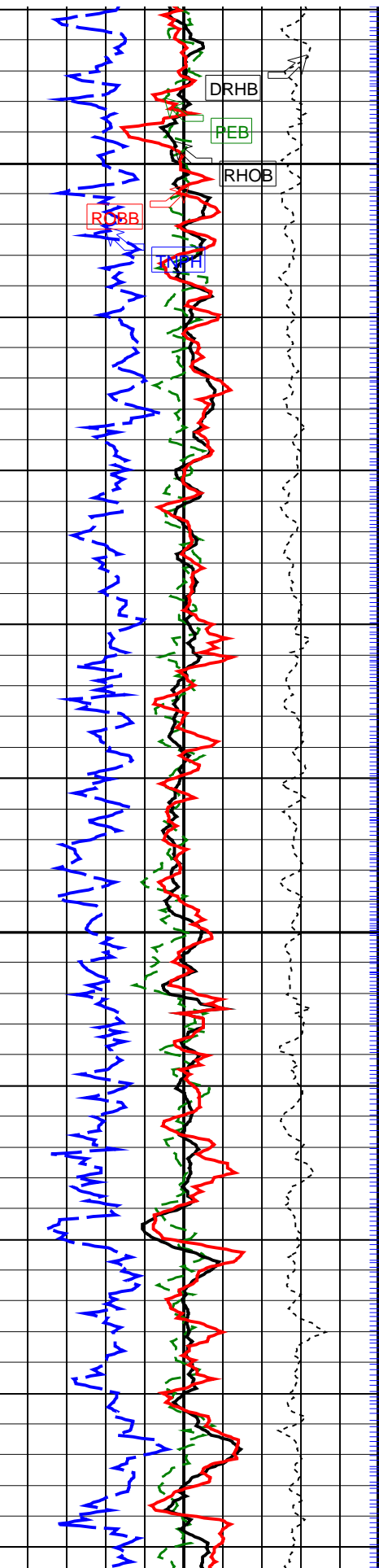
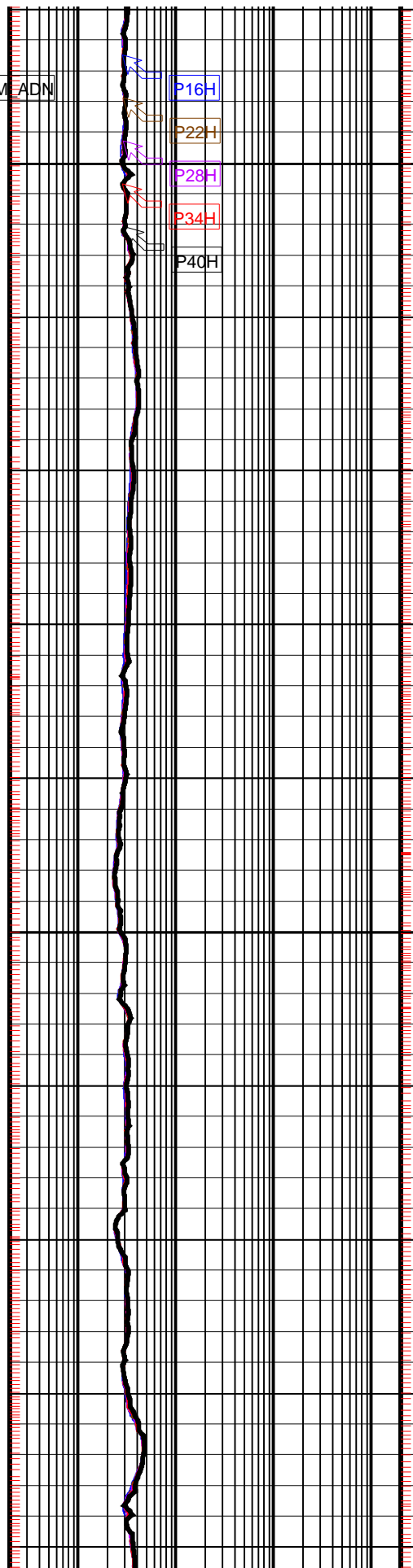
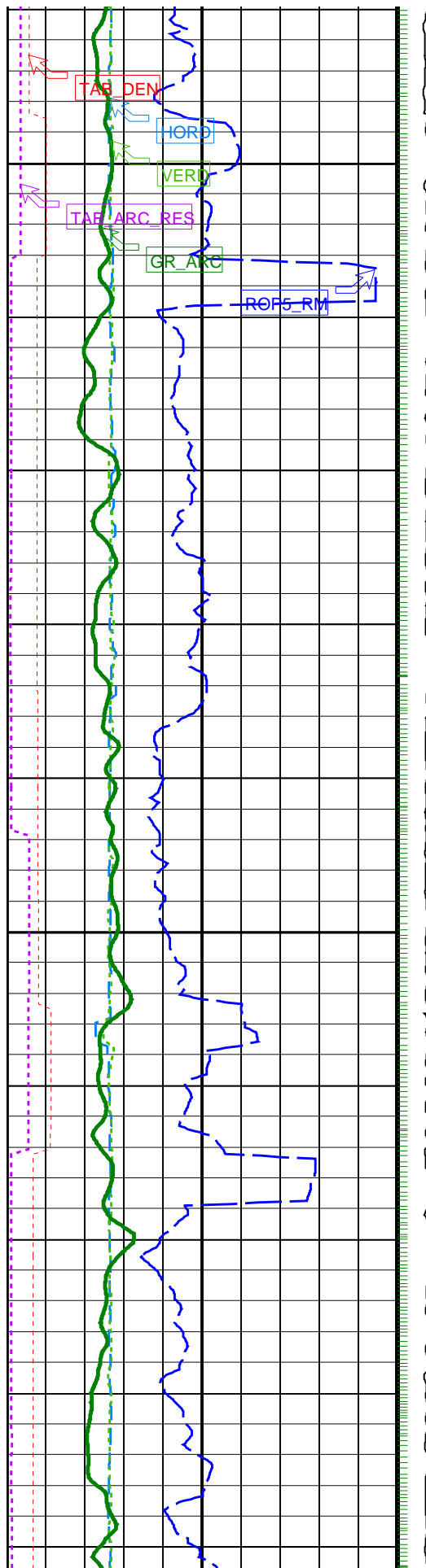


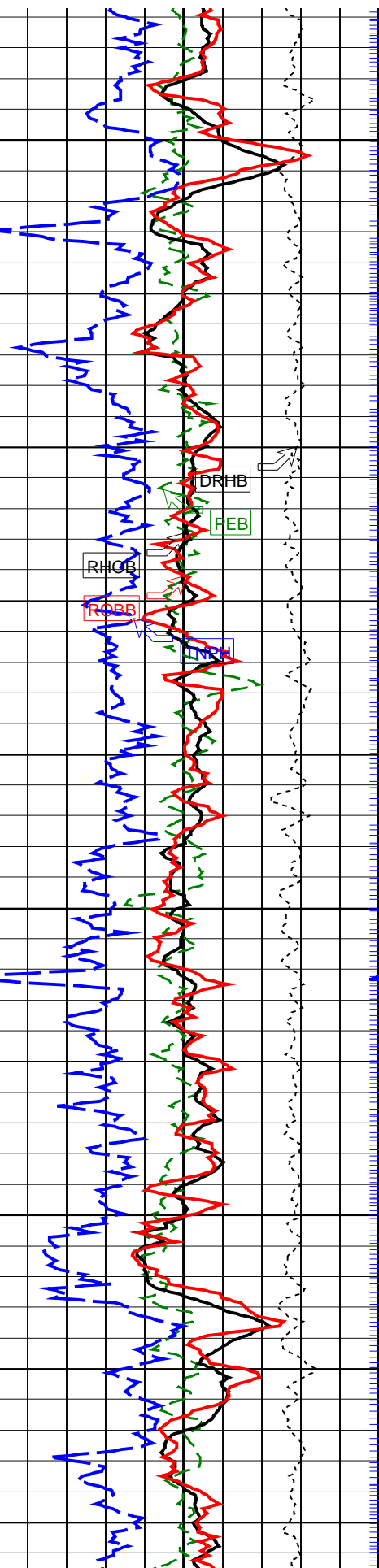
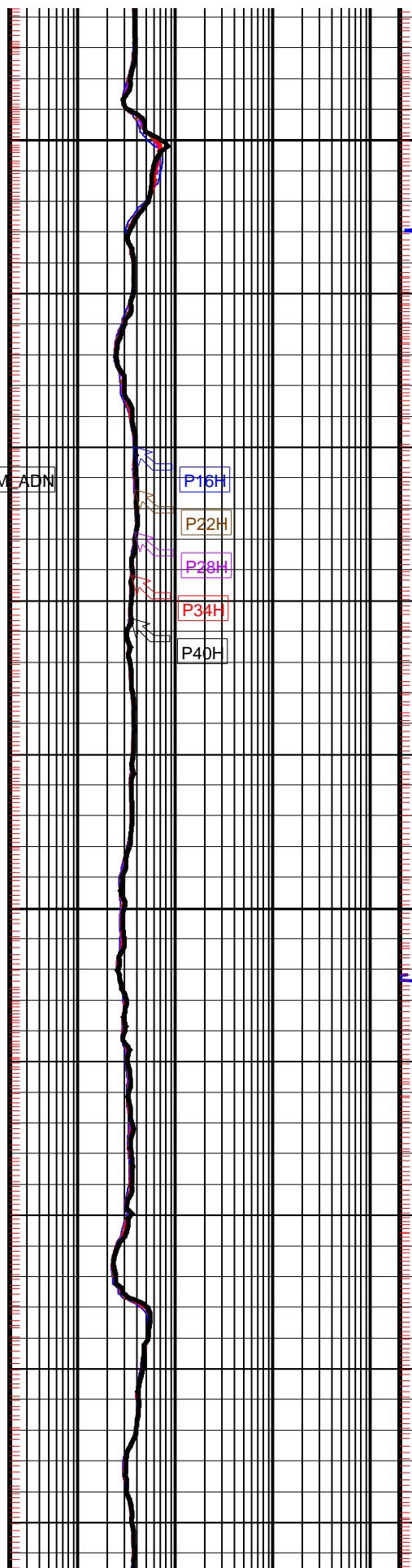
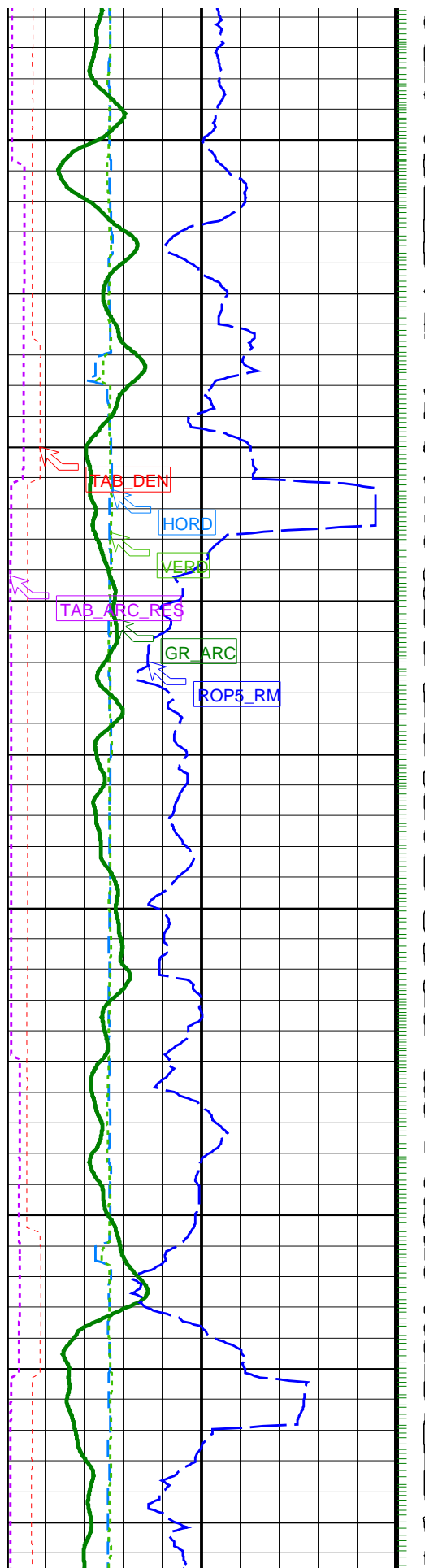


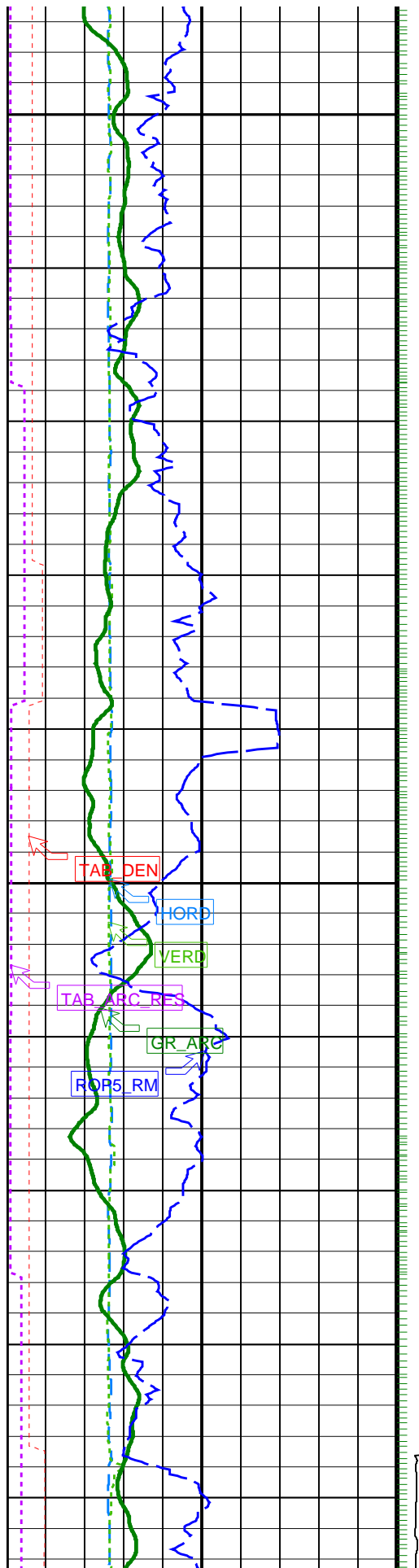
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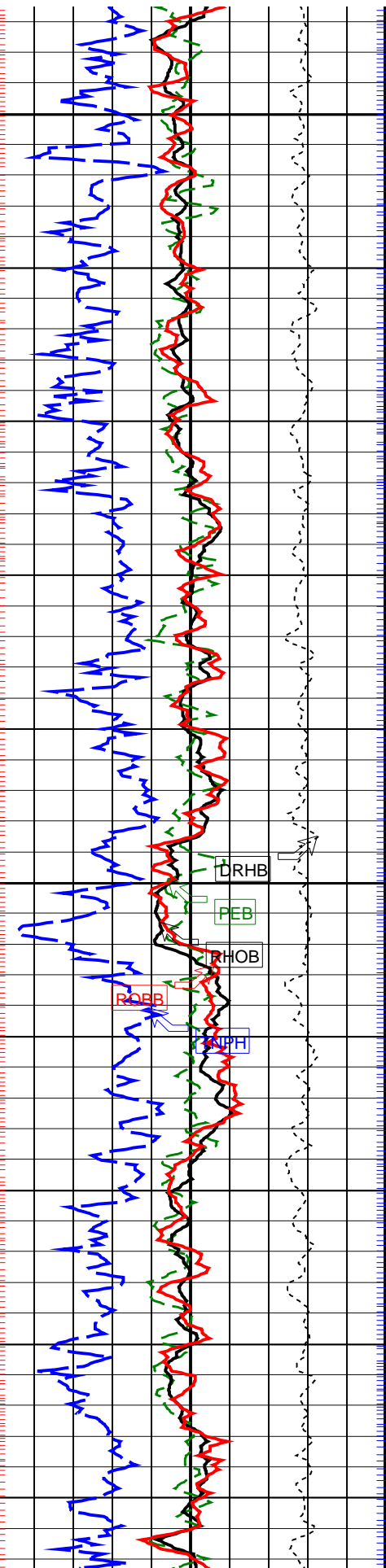
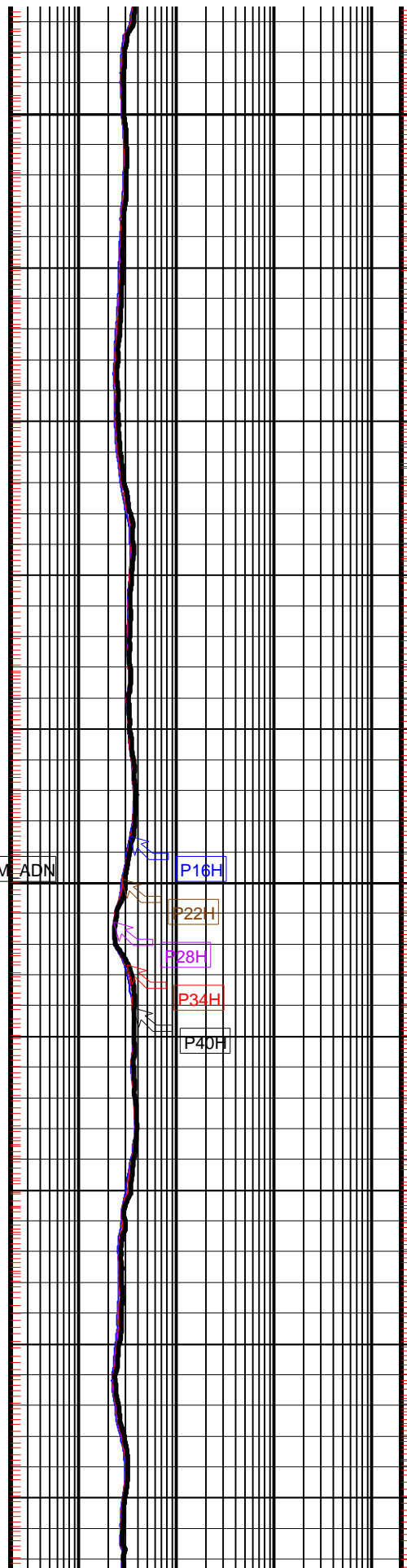


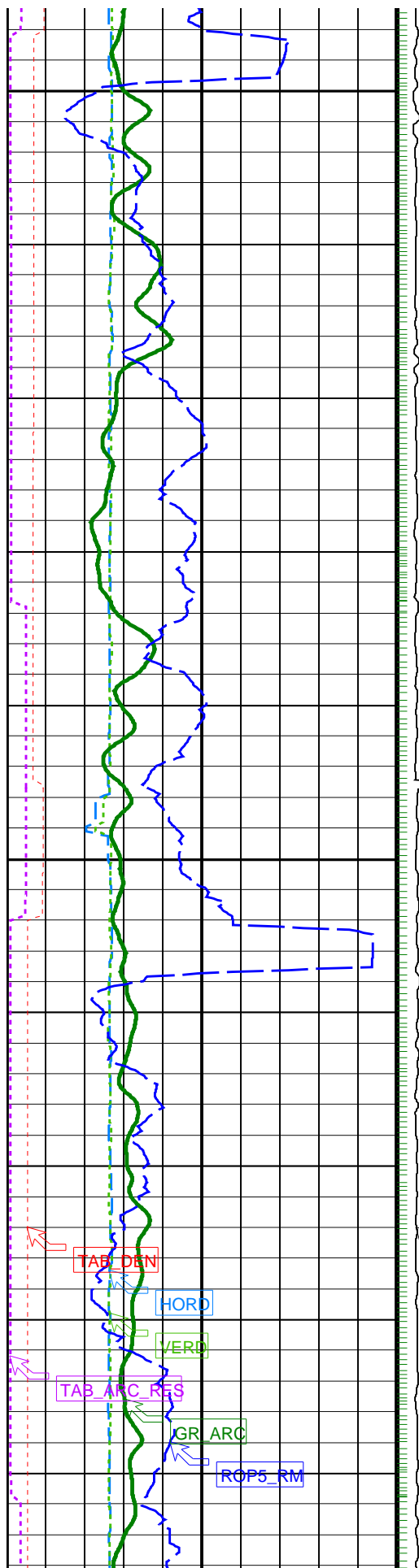


1550

1575

RPM ADN





1600

1625

RPM ADN

P16H

P22H

P28H

P34H

P40H

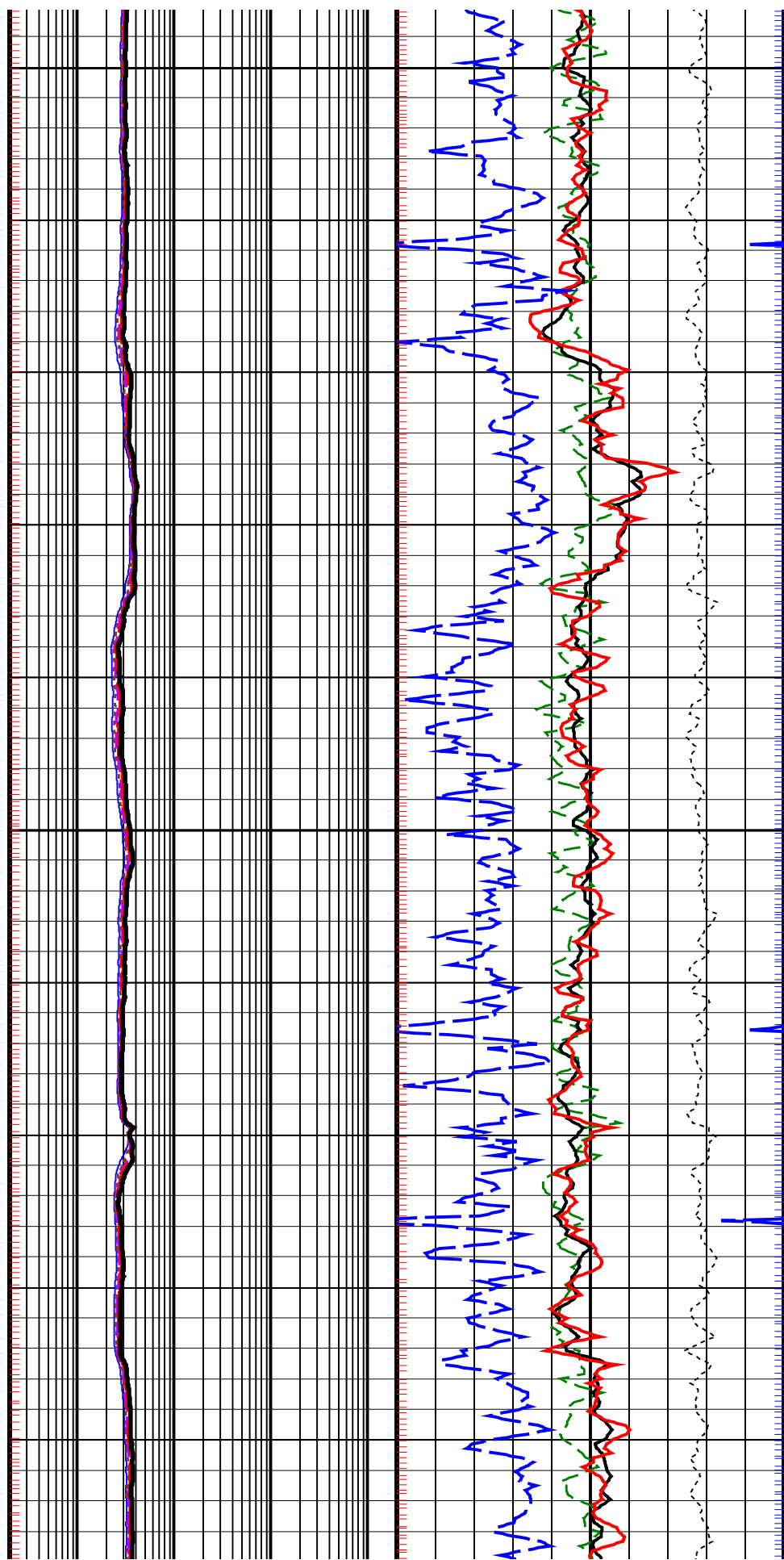
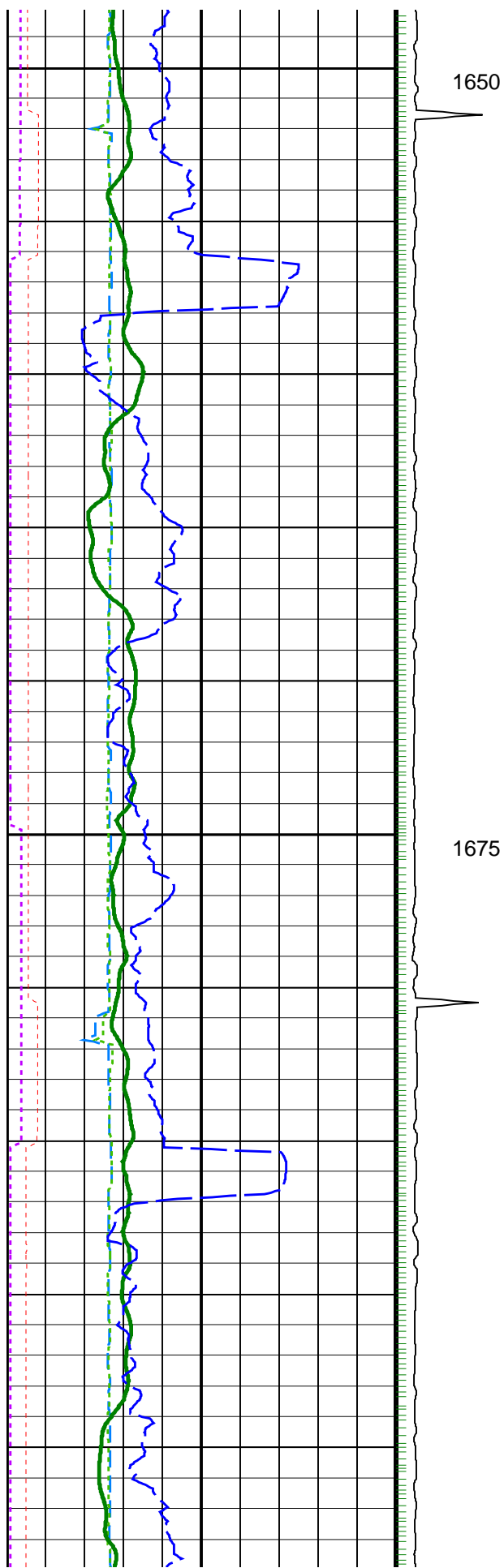
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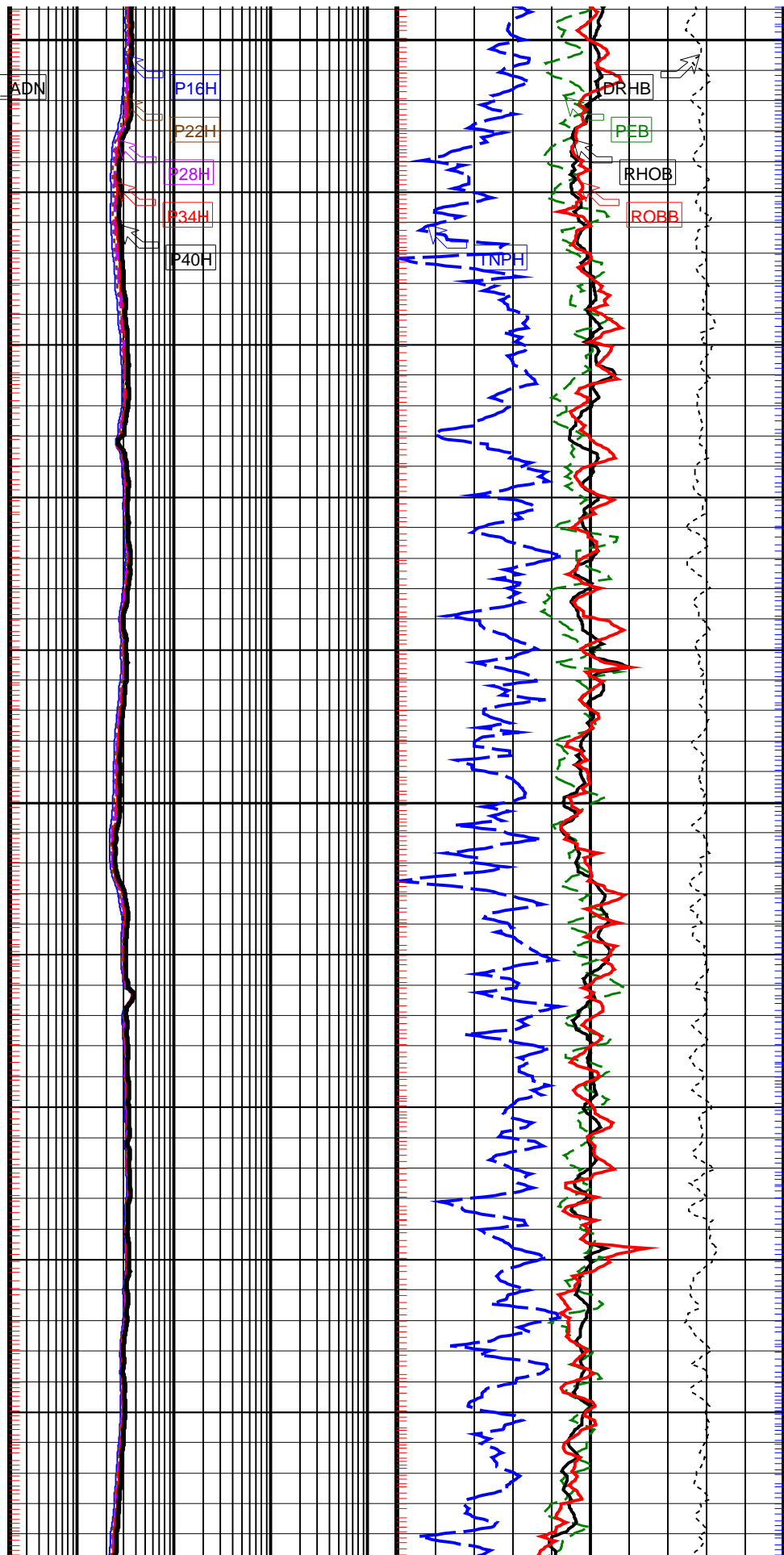
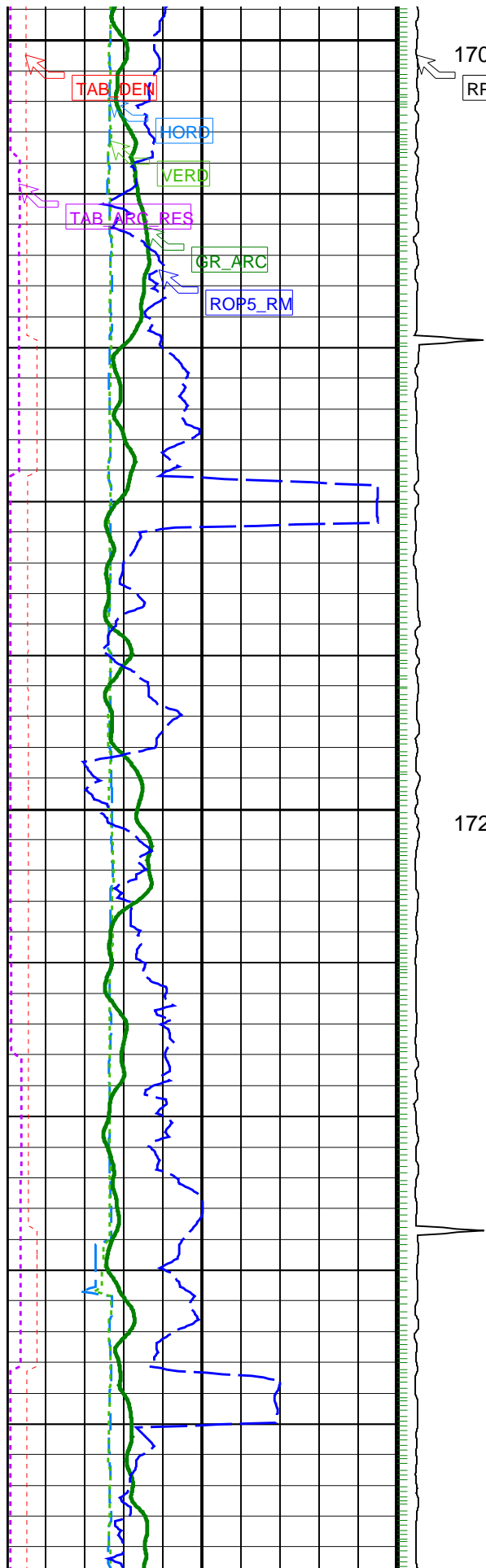
PEB

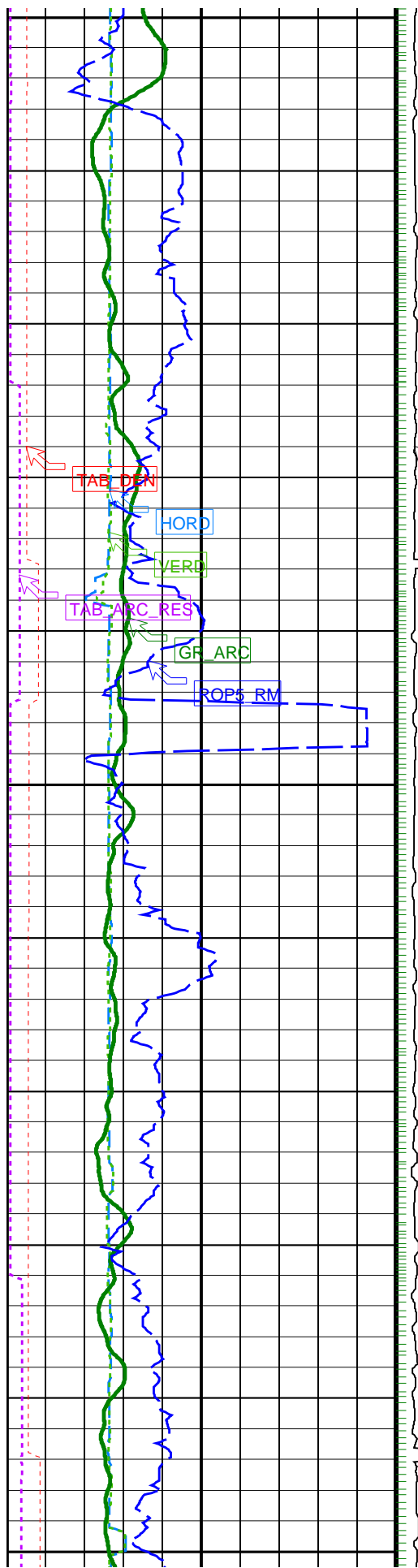
RHOB

ROBB

TRPH





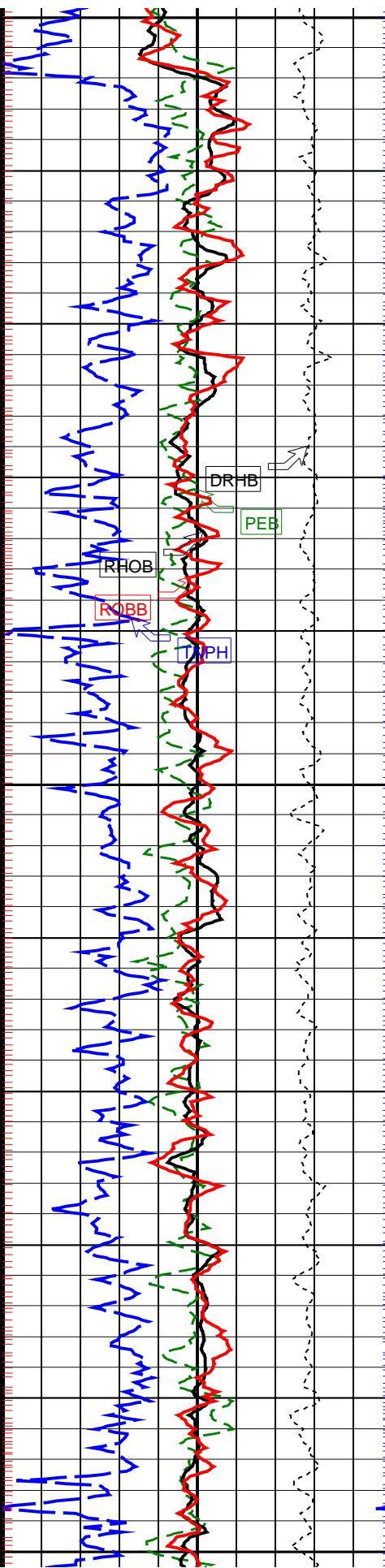
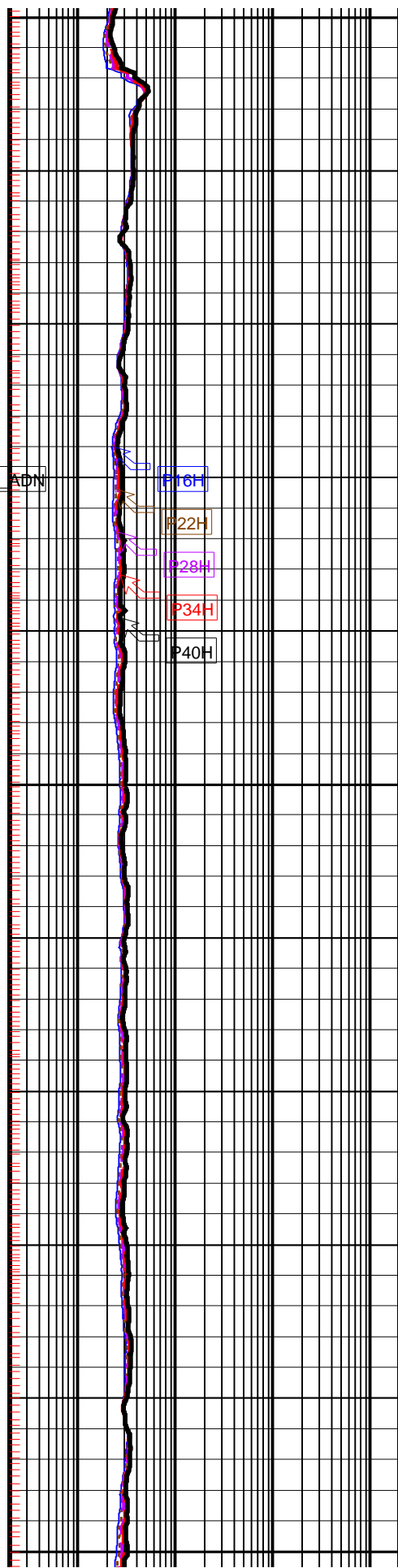


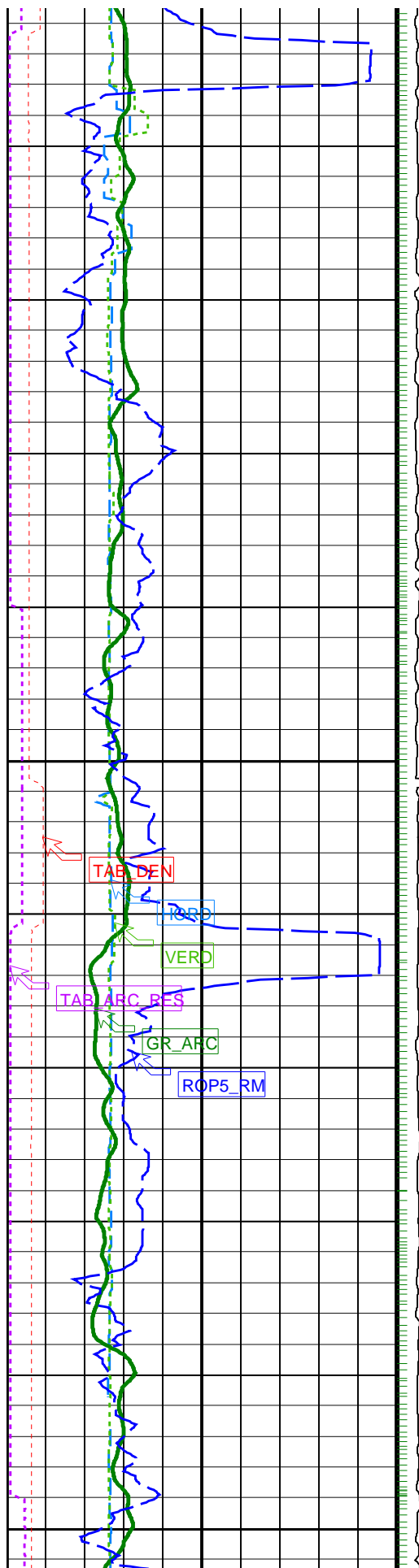
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RPM ADN

1775

1800





1800

1825

1850

RPM ADN

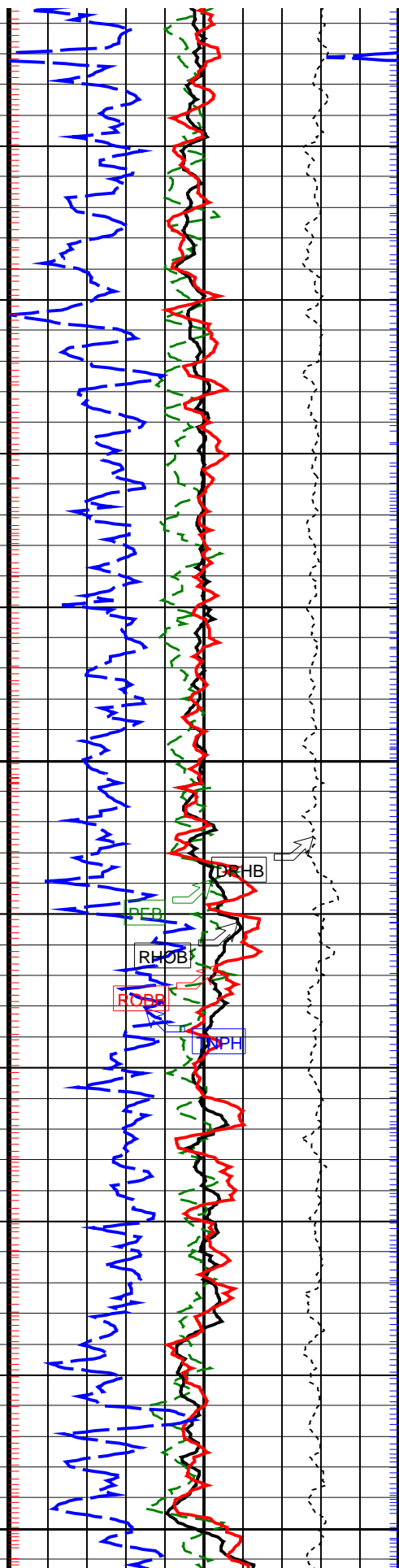
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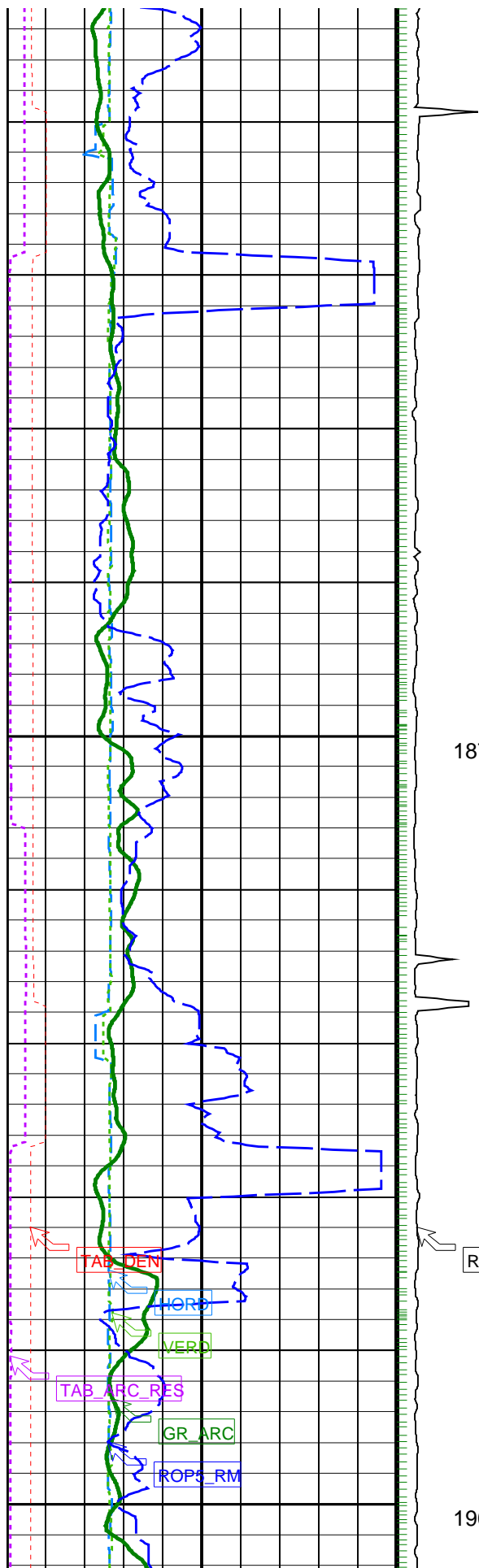
P22H

P23H

P34H

P40H

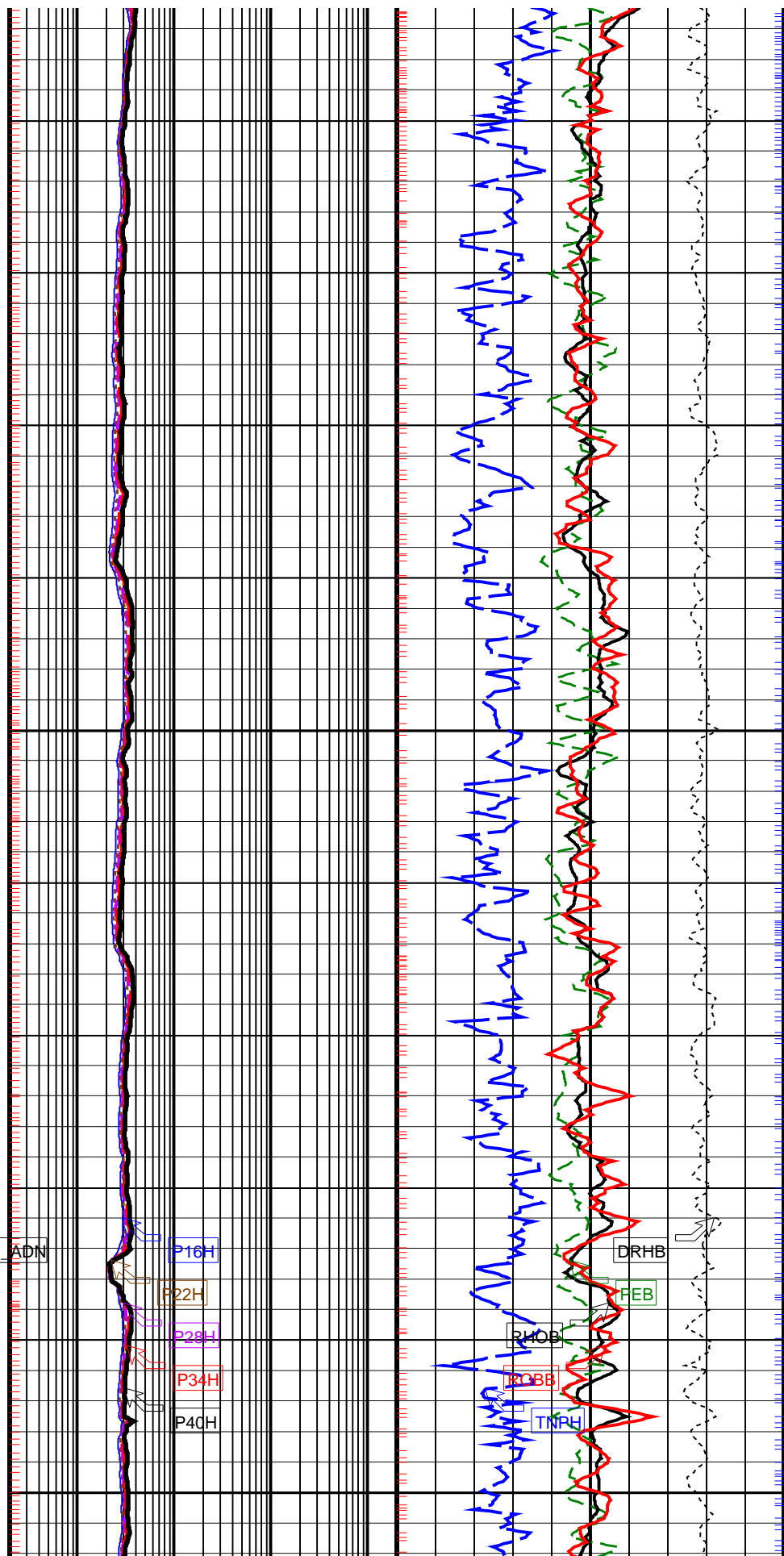


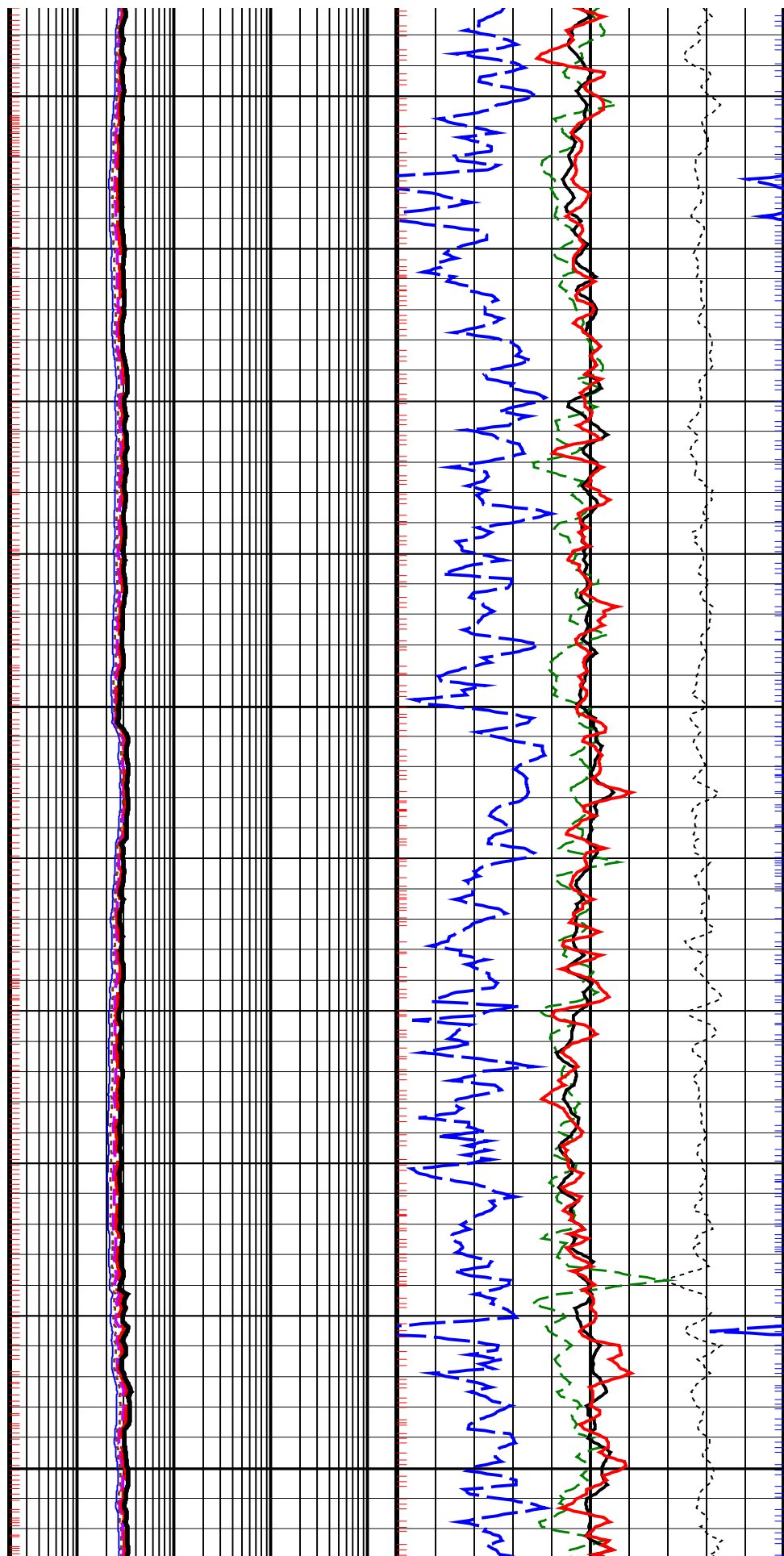
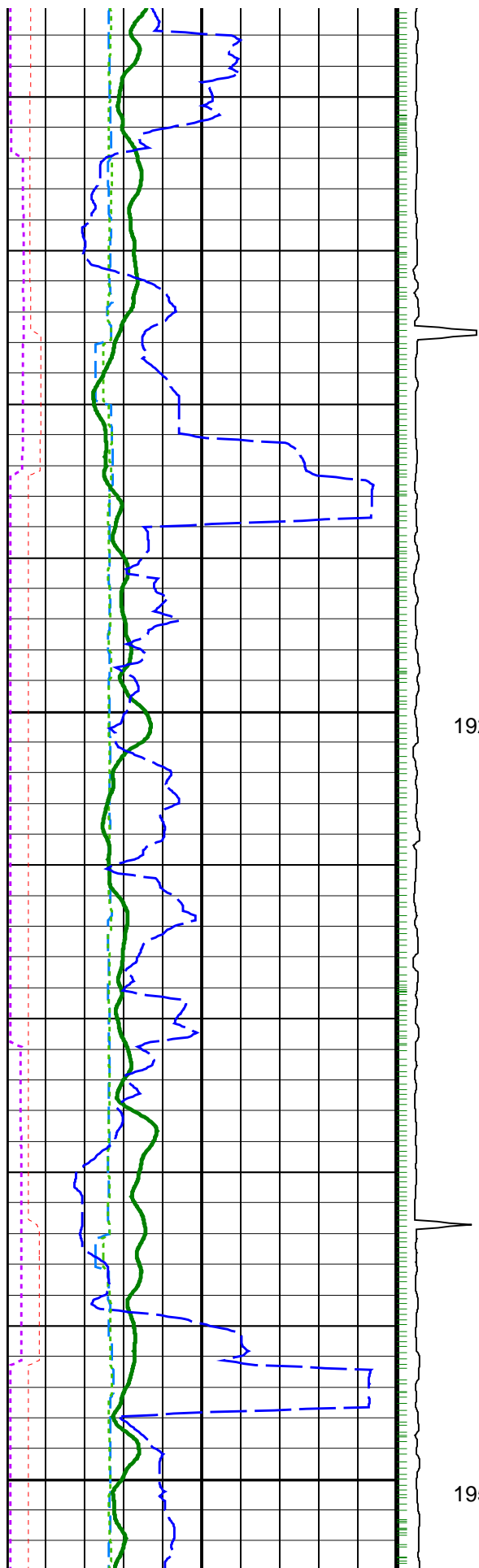


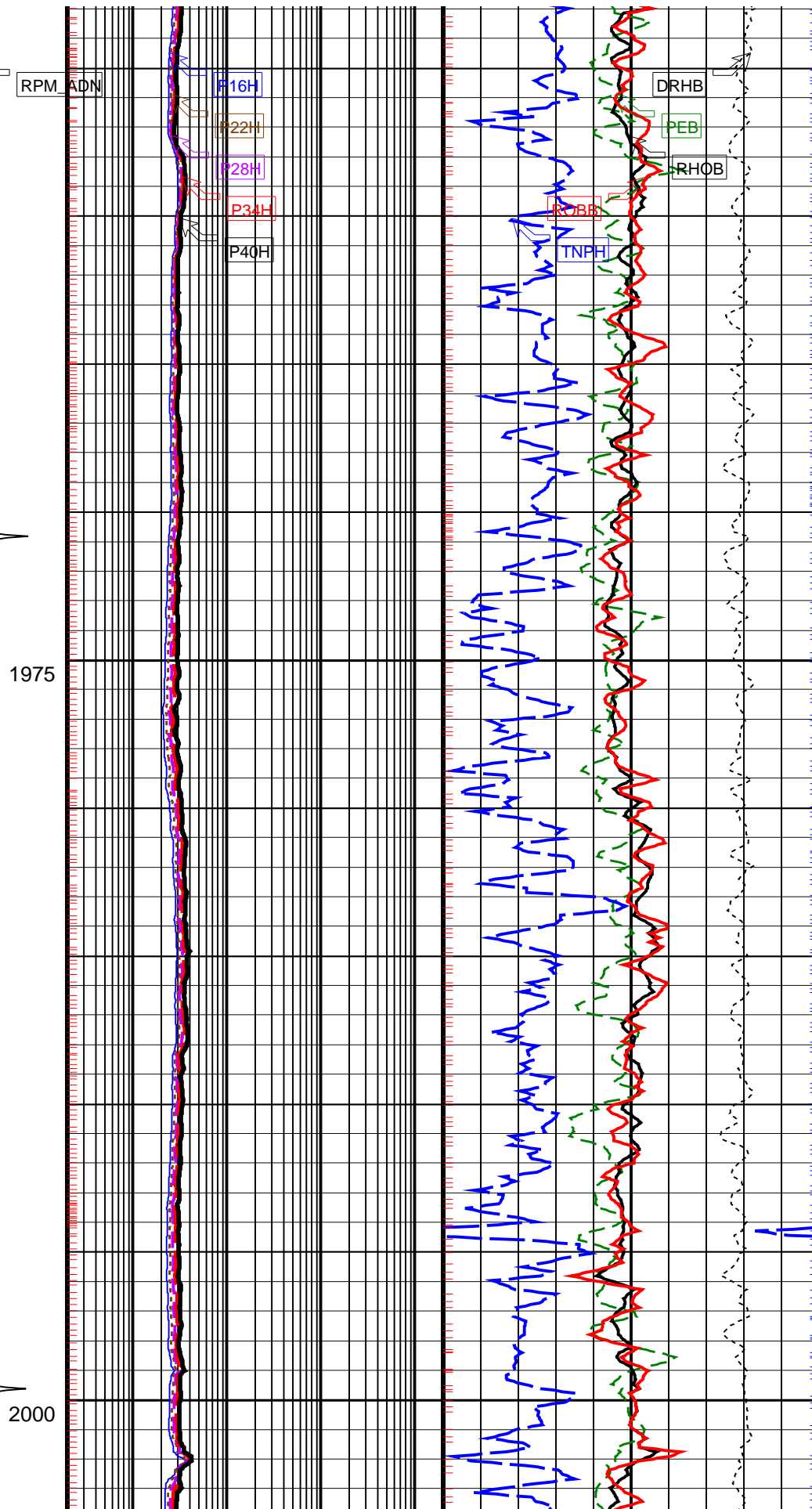
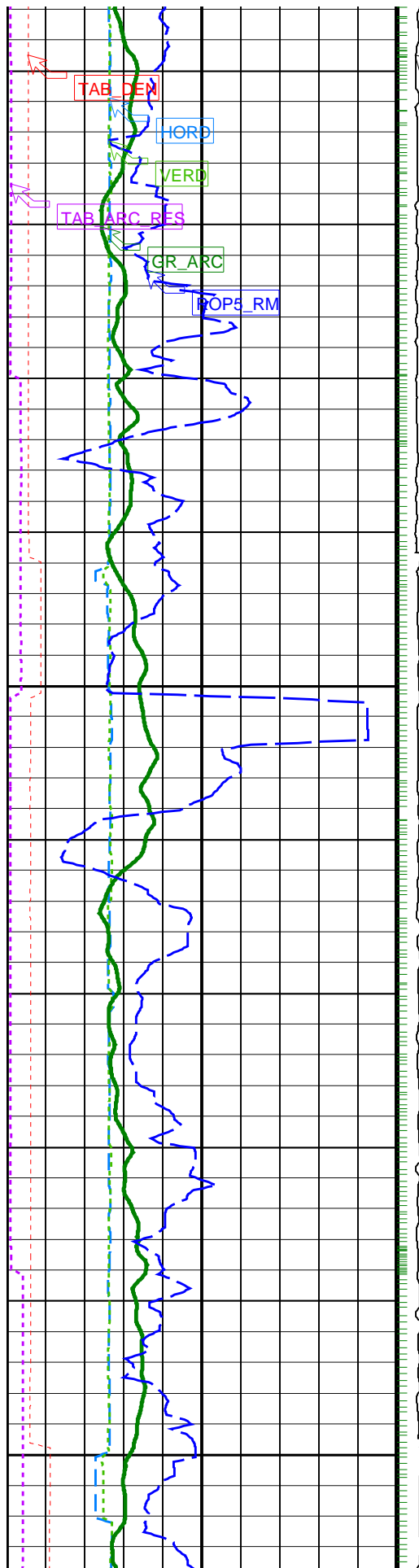
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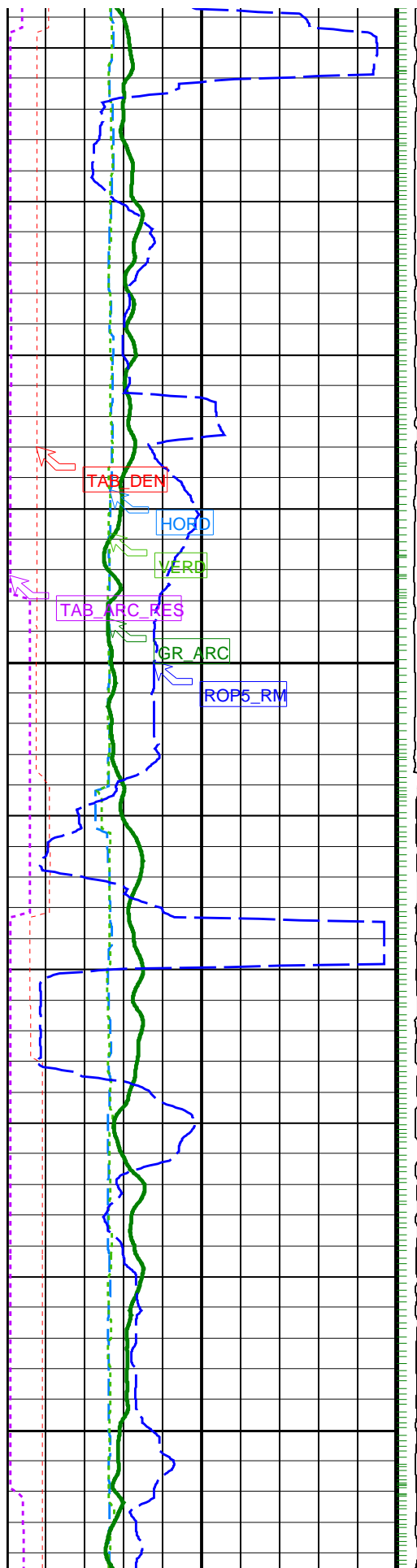
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RPM ADN





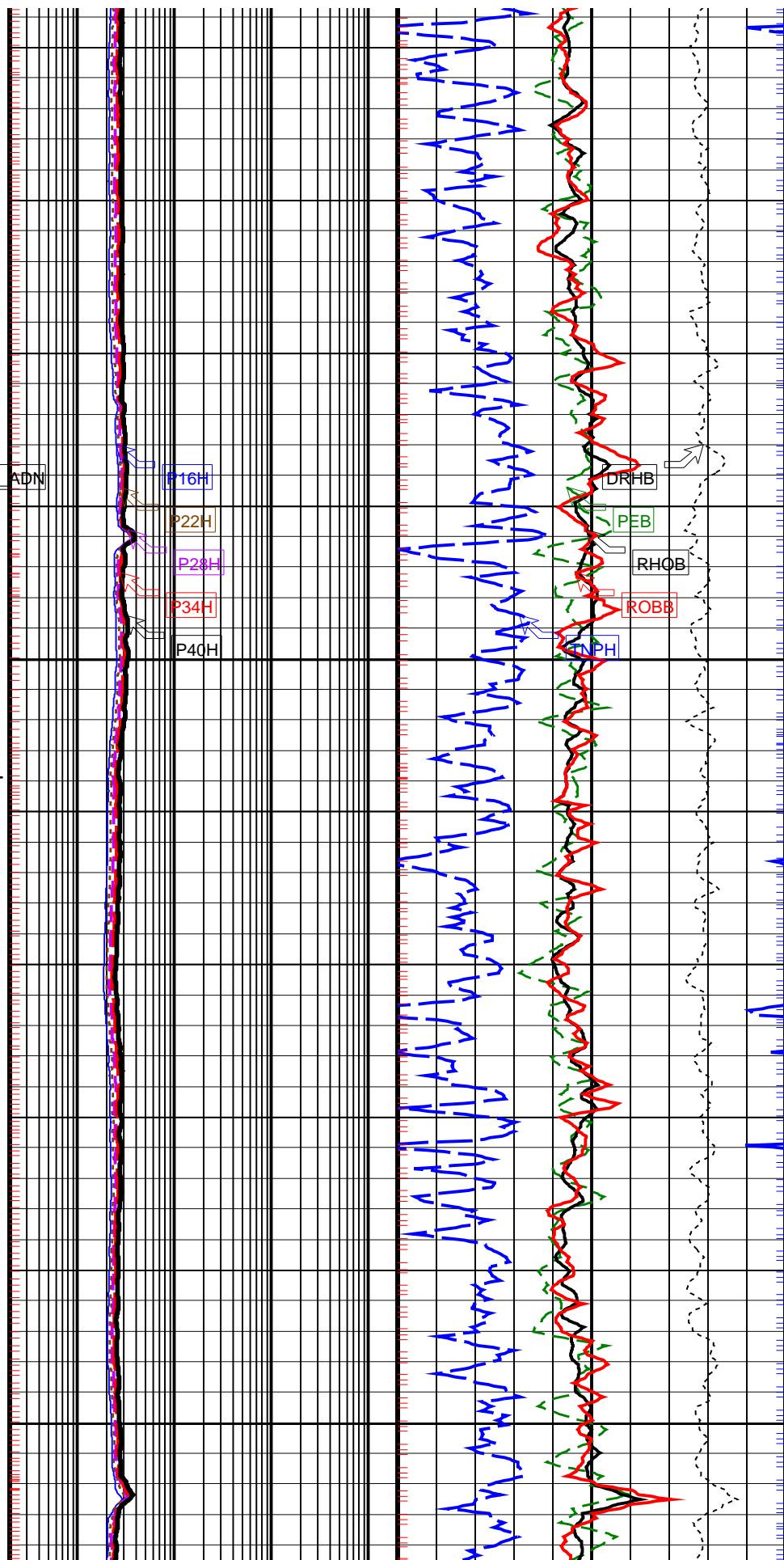


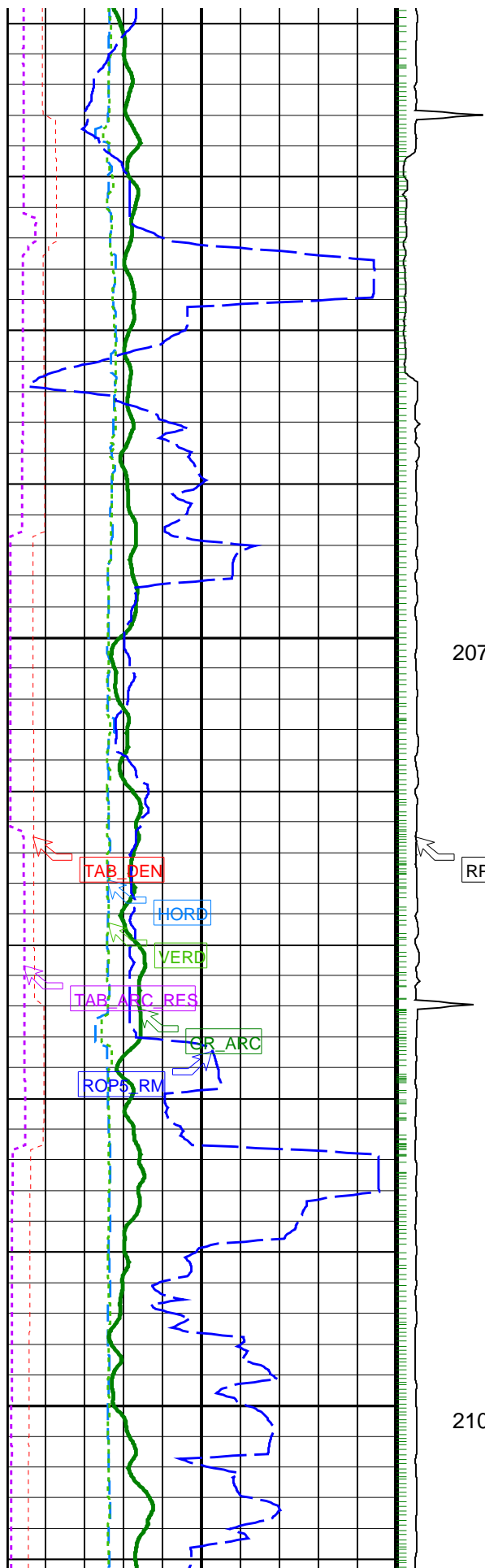


RPM ADN

2025

2050





2075

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RPM ADN

P16H

P32H

P28H

P34H

P40H

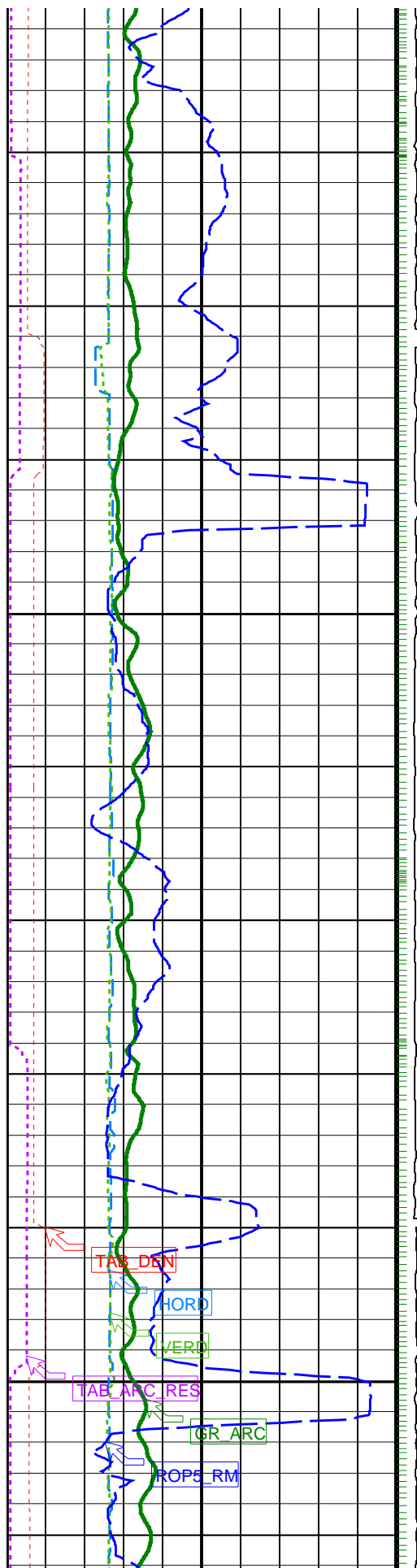
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PEB

RHCB

ROBE

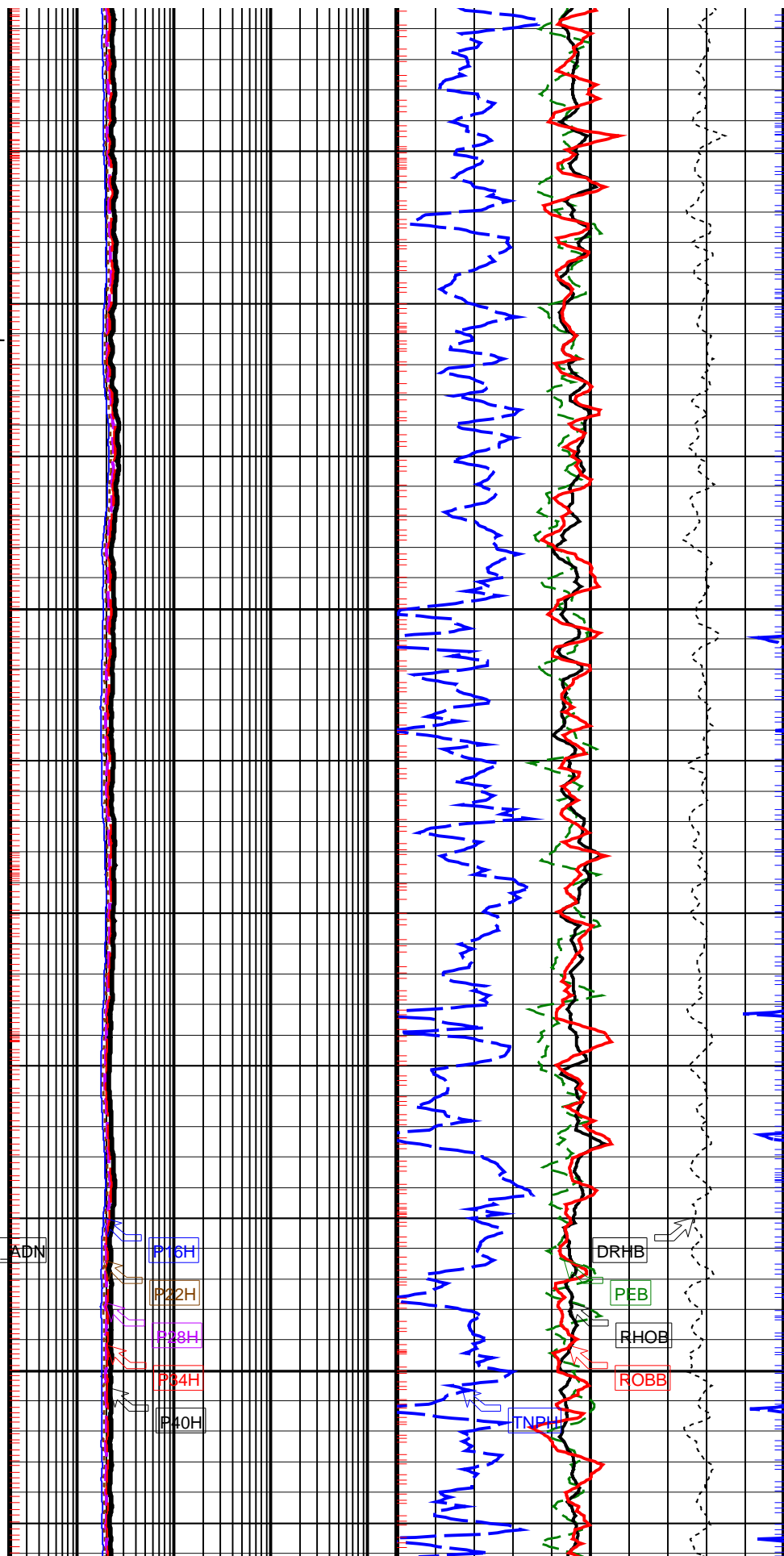
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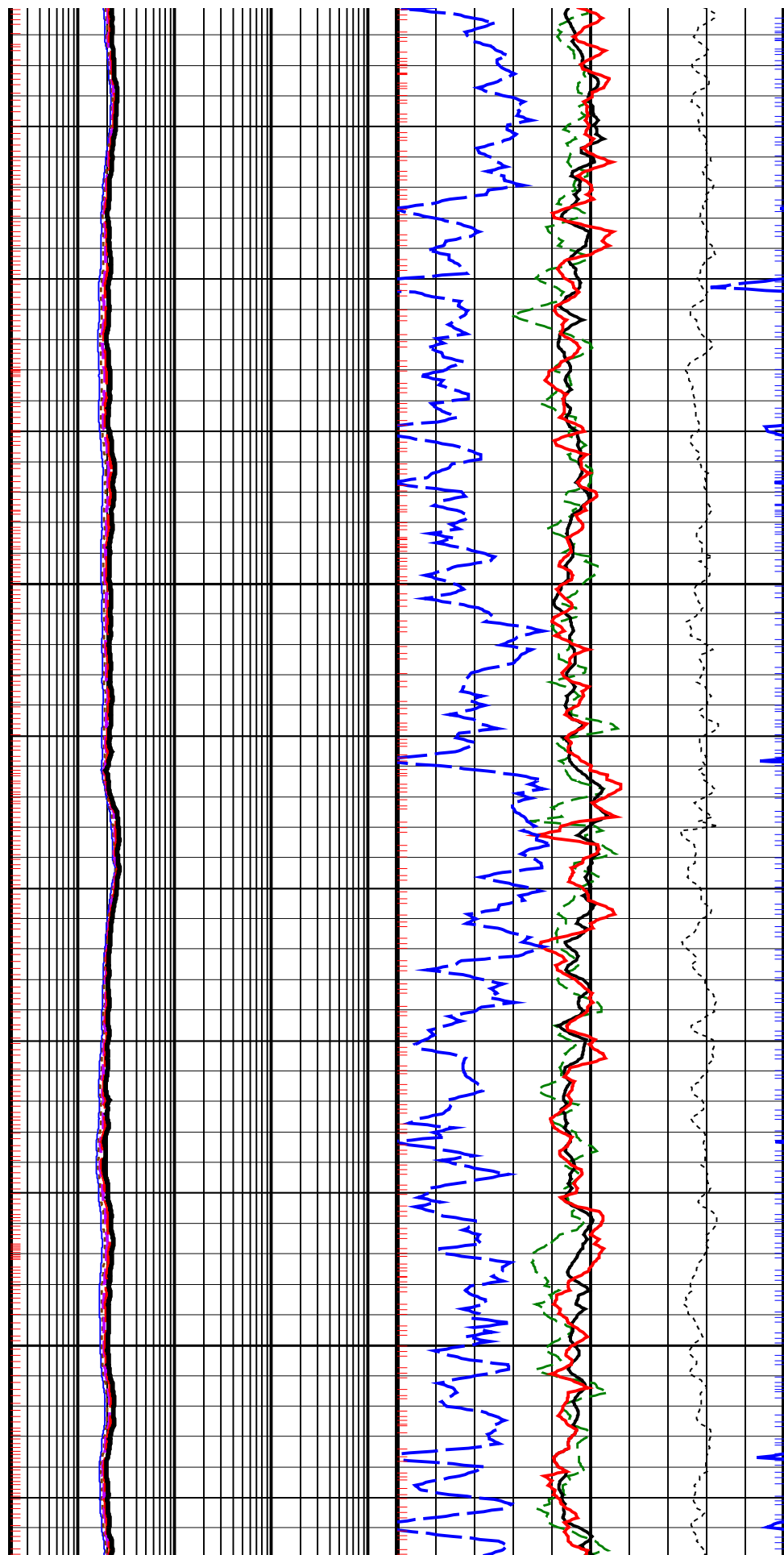
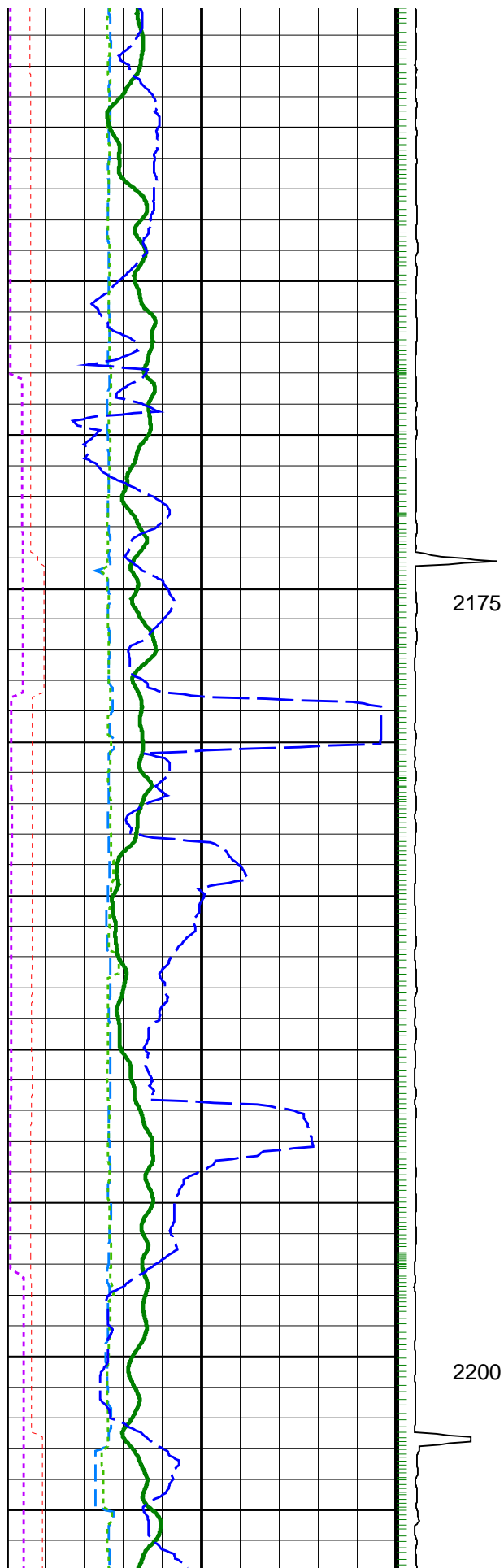


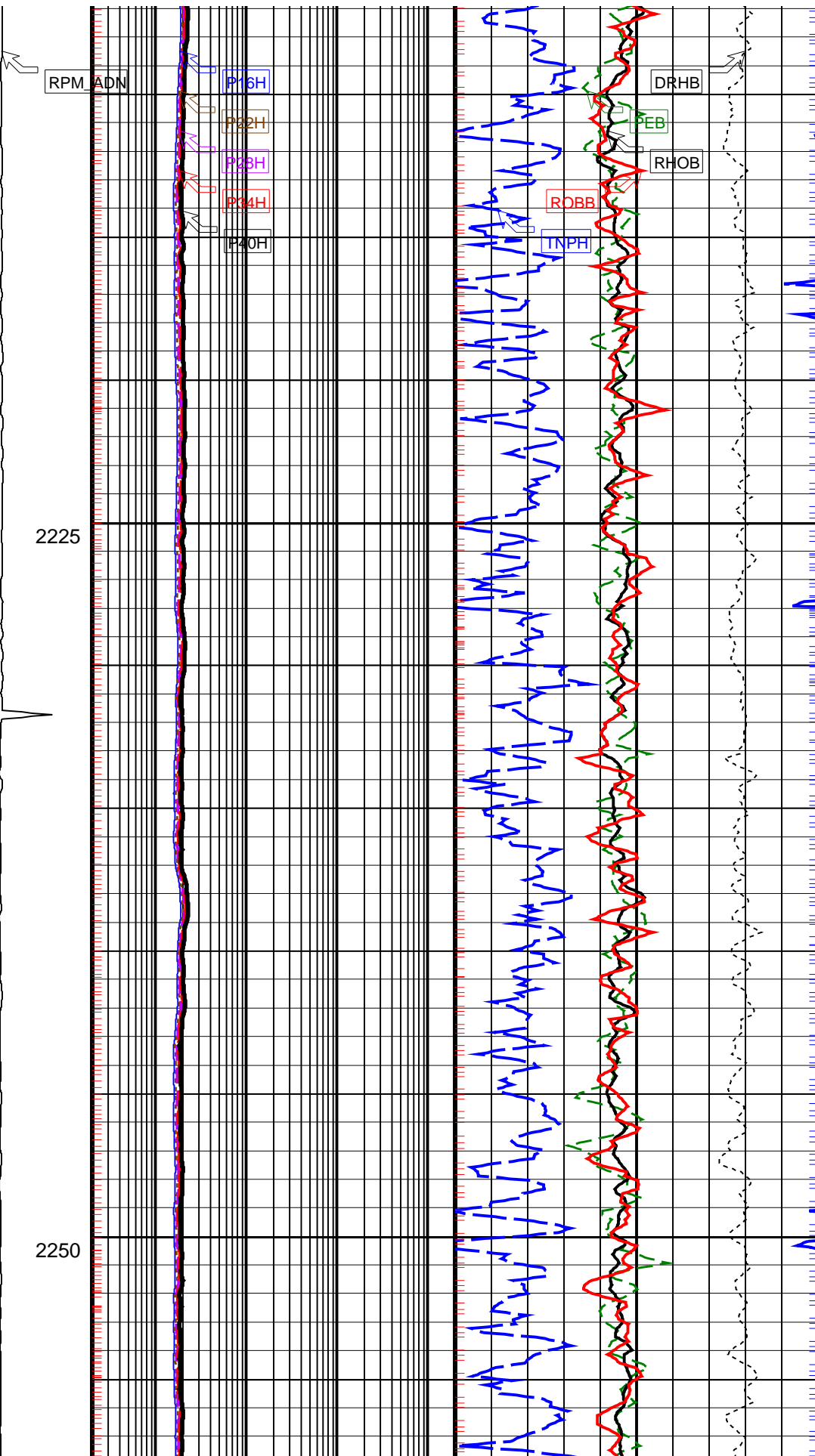
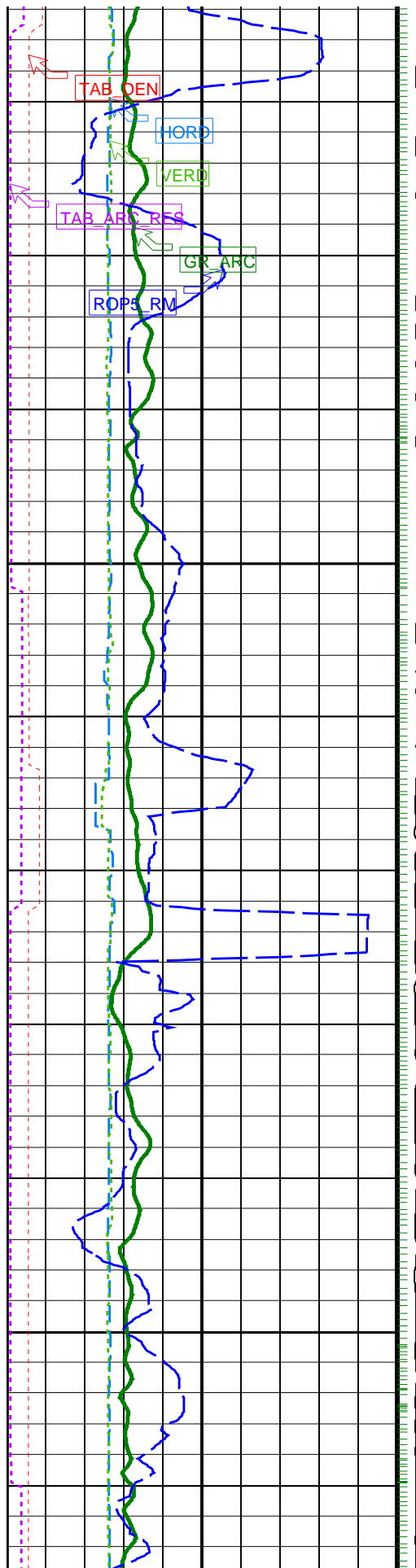
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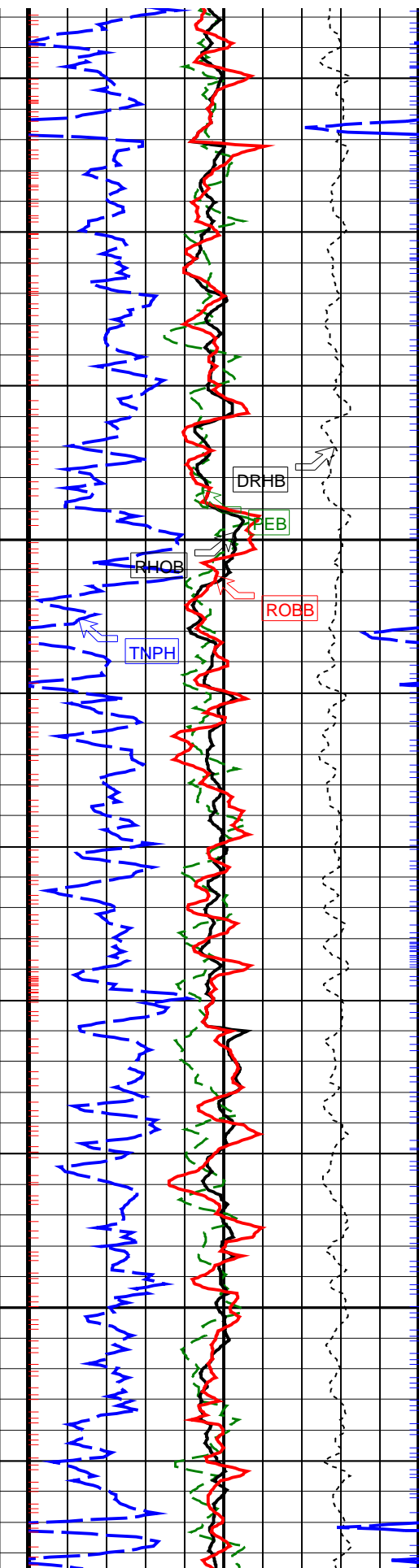
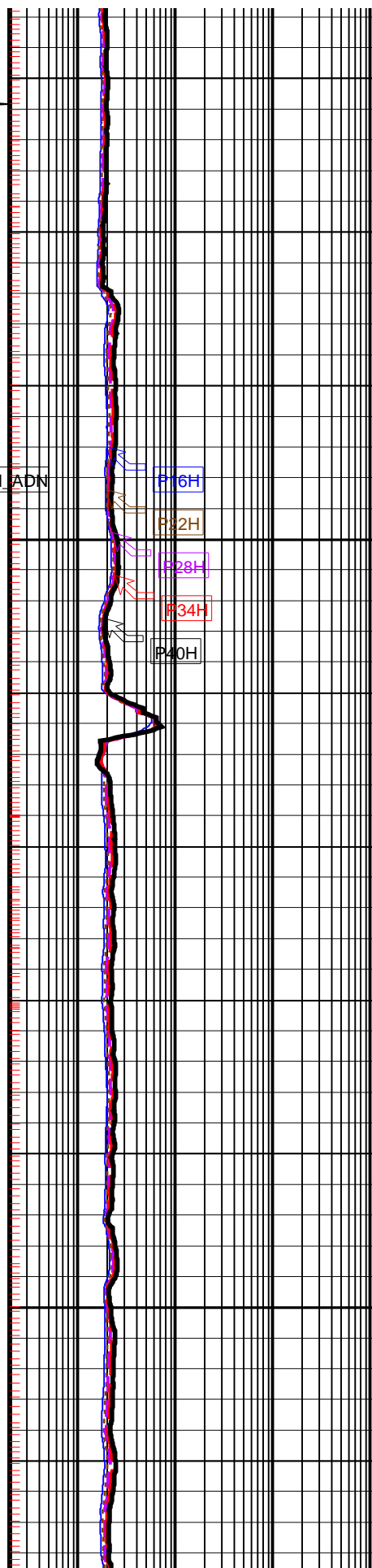
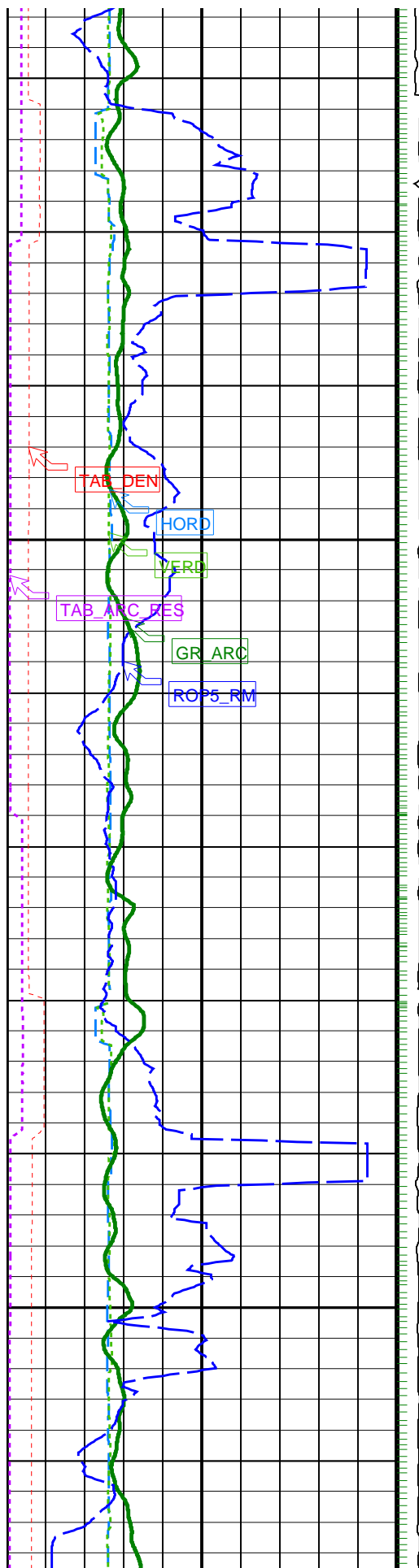
RPM ADN

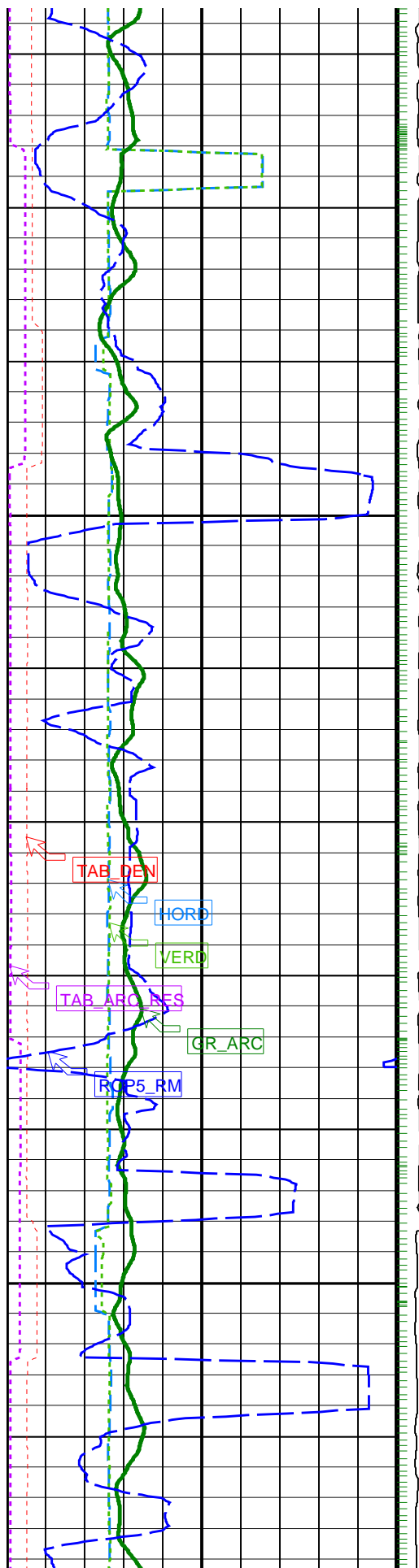
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2325

RPM ADN

P16H

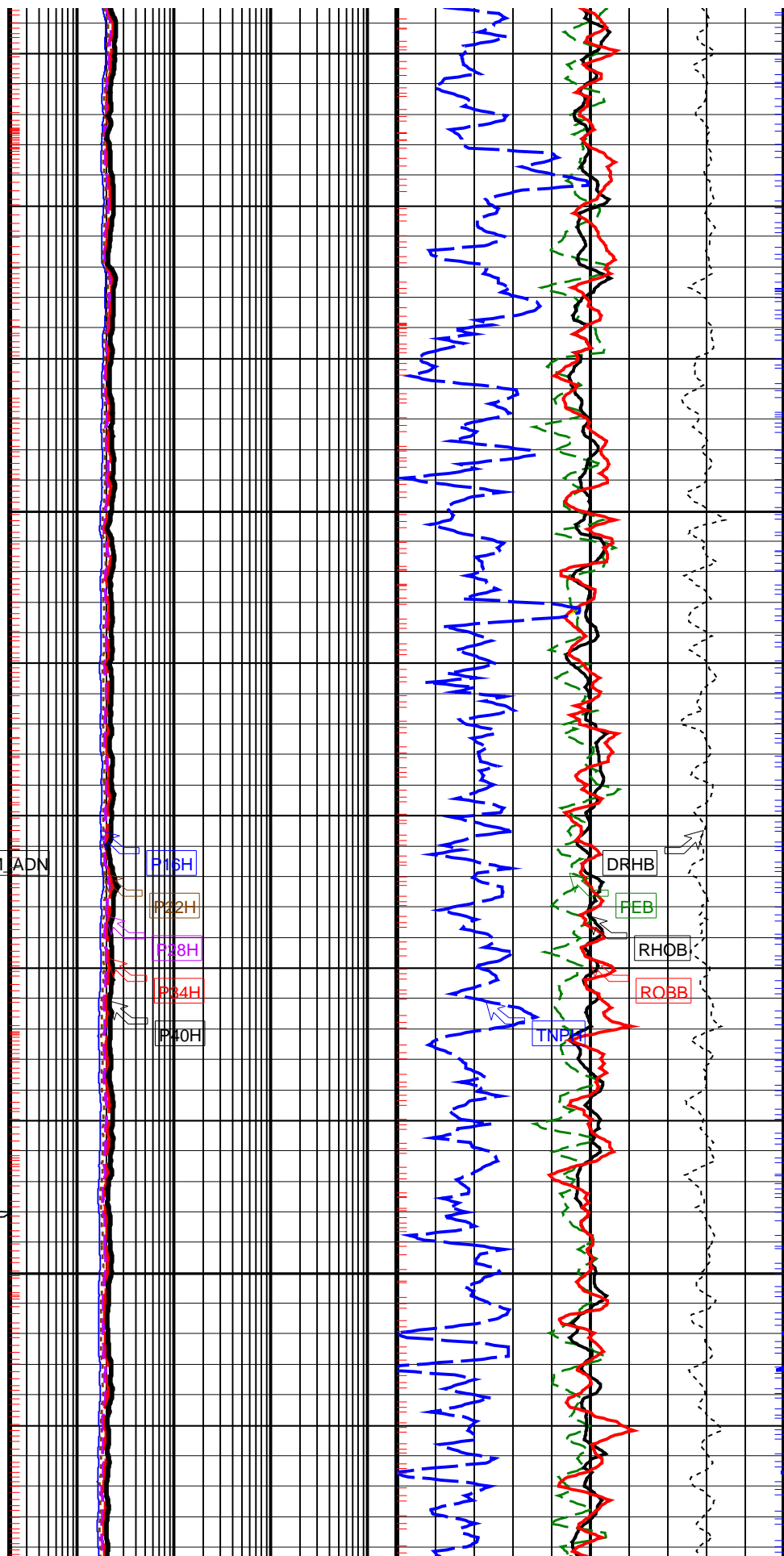
P22H

P38H

P34H

P40H

2350



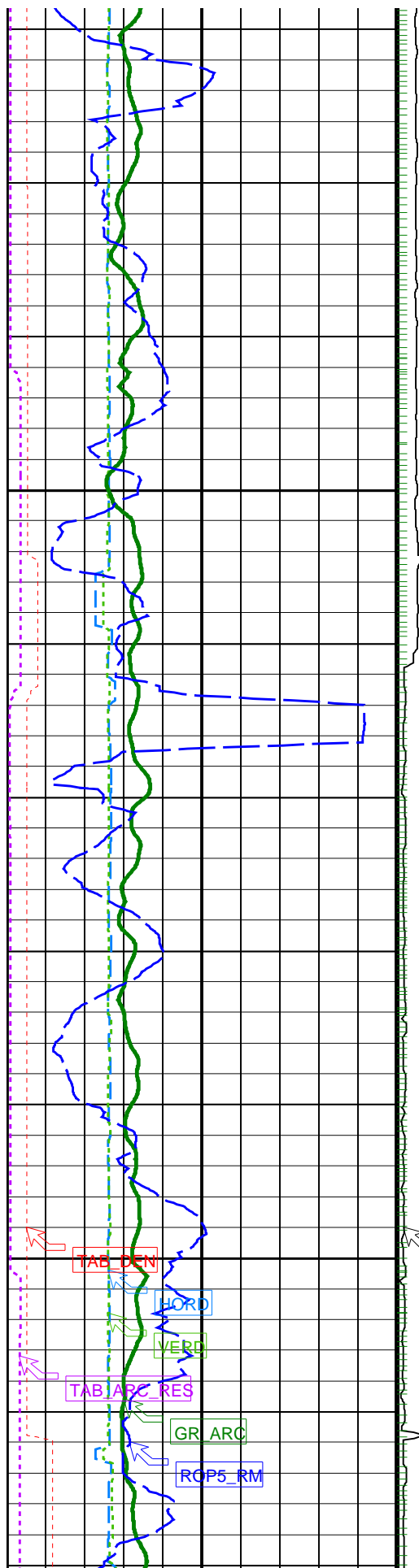
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FEB

RHOB

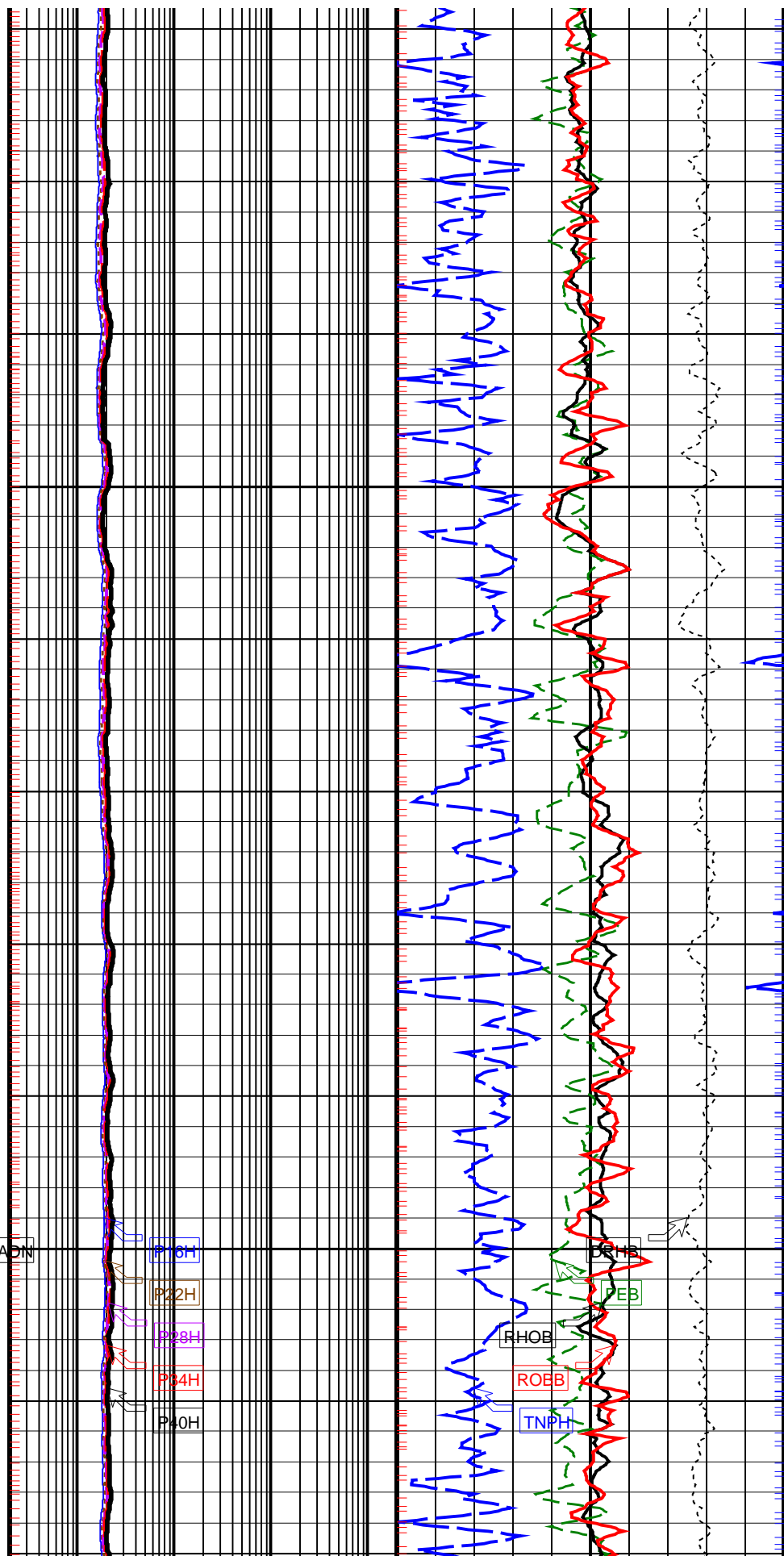
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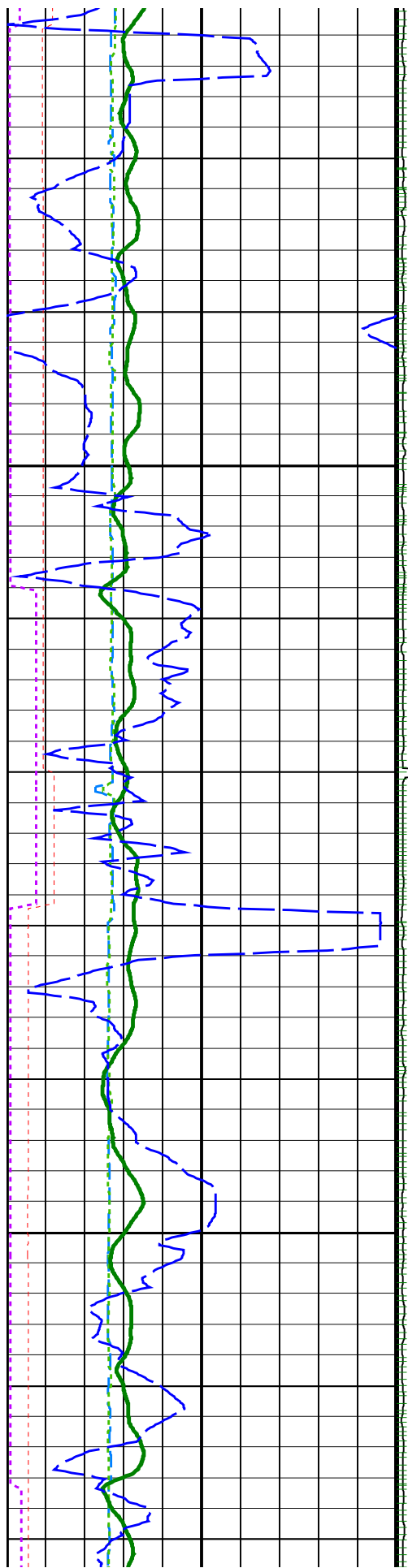
TNP



2375

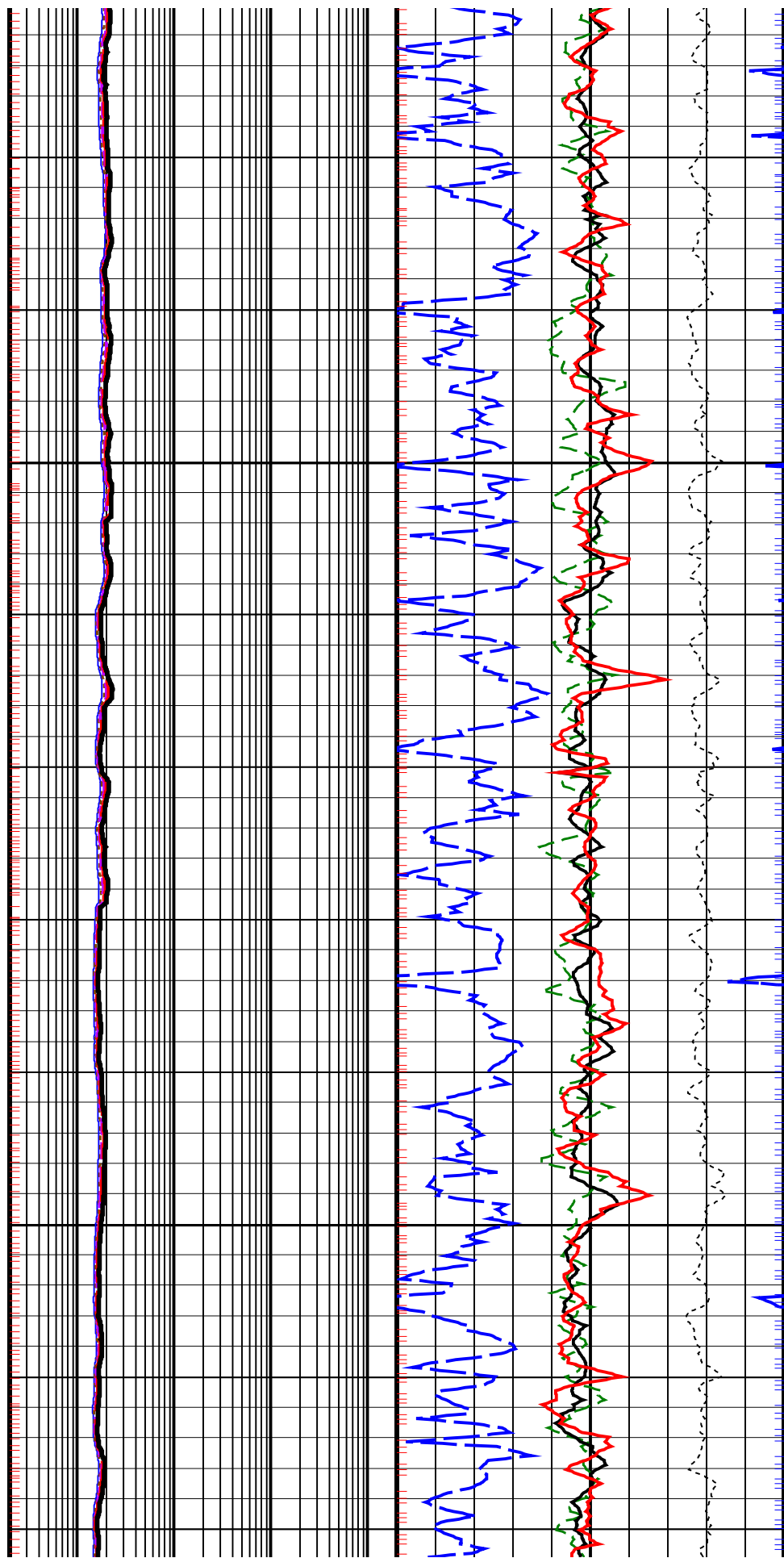
RPM ADN
2400

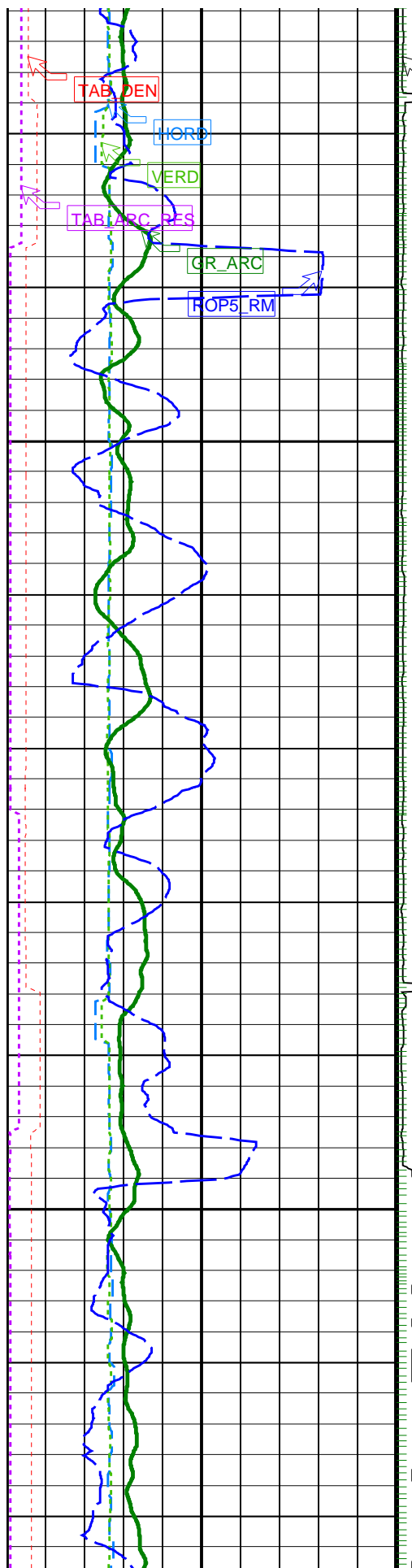




2425

2450

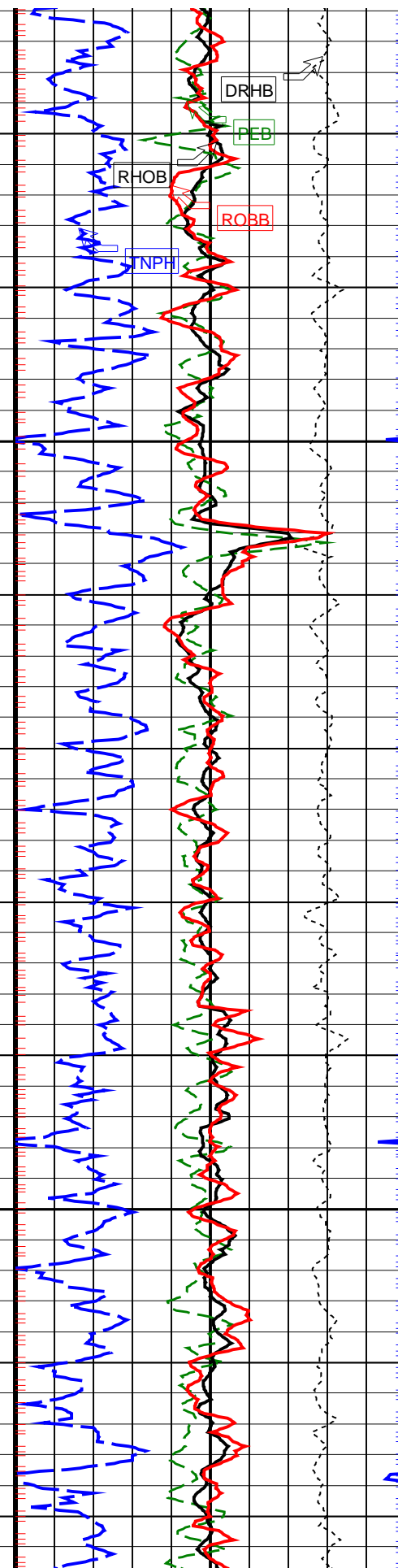
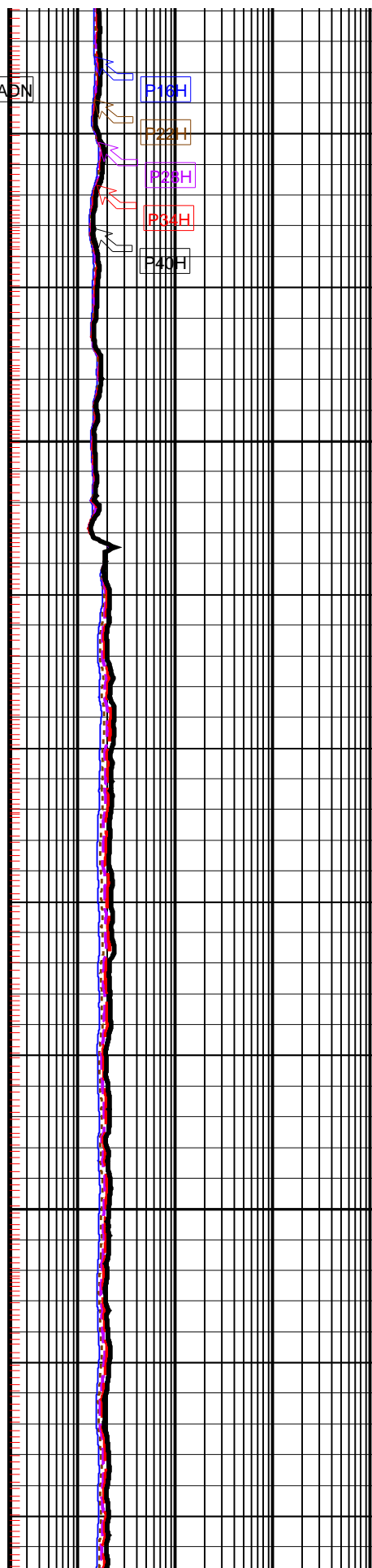


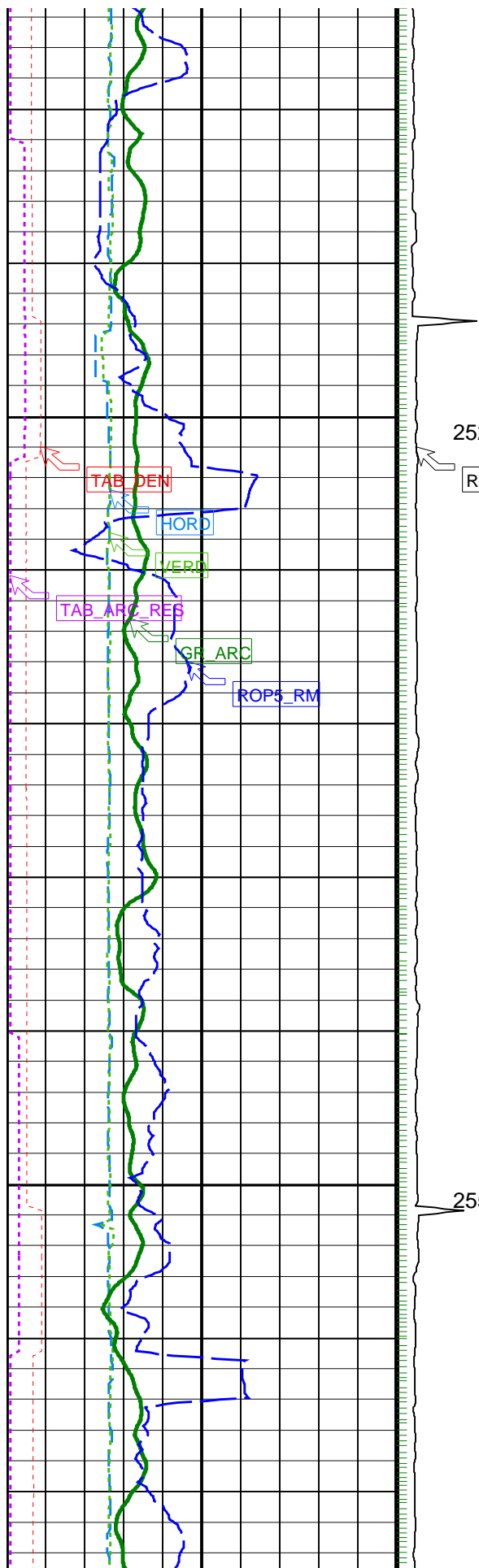


RPM ADN

2475

2500

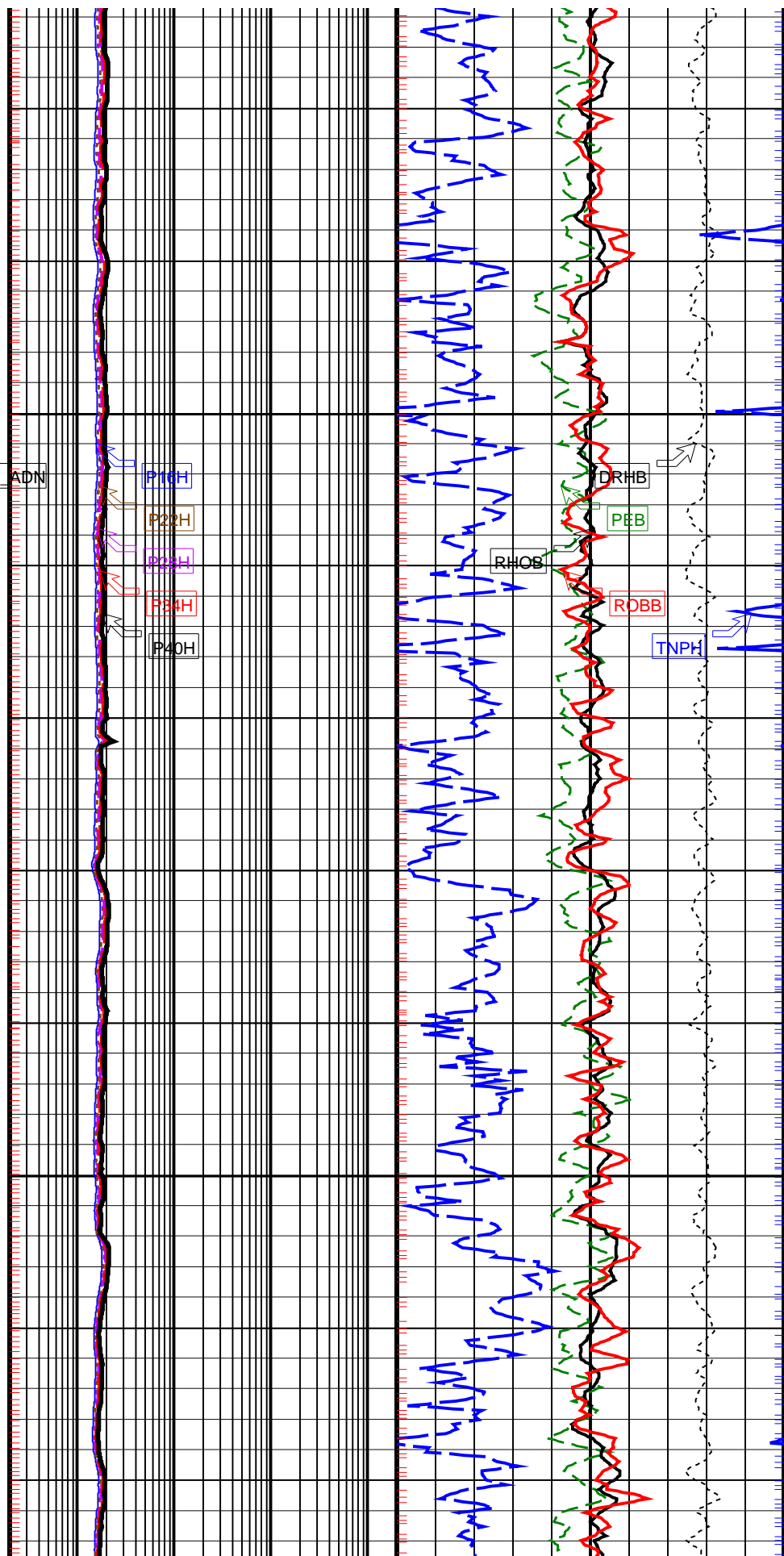




2525

RPM ADN

2550



P10H

P22H

P38H

P40H

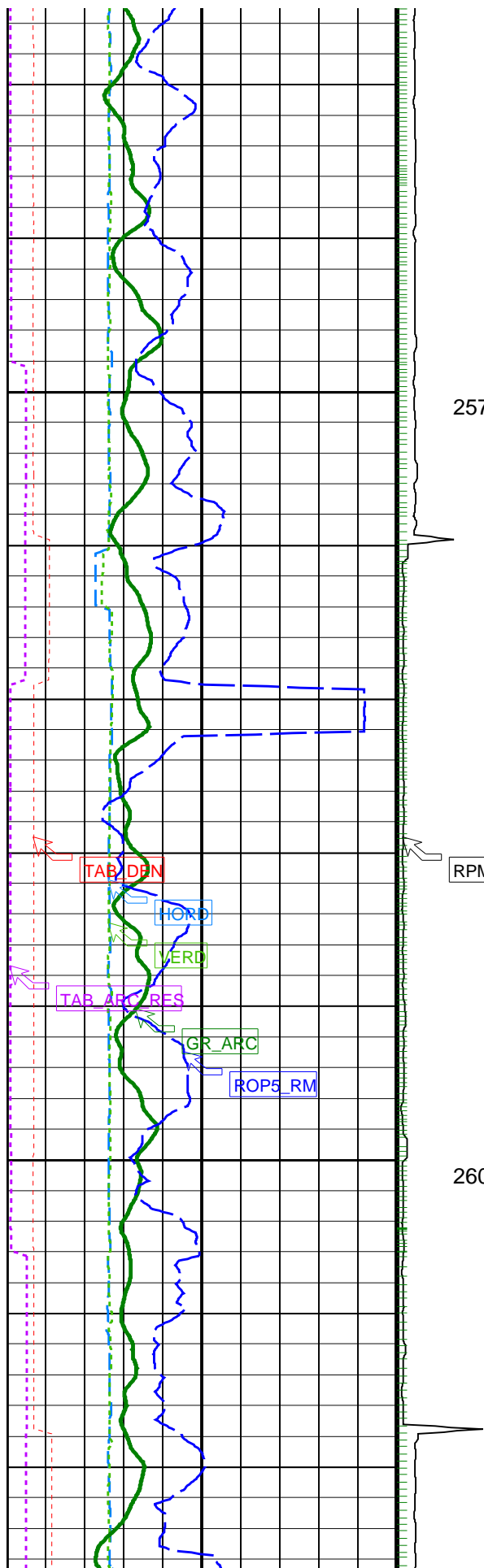
DRHB

PEB

RHOB

ROBB

TNPH



2575

RPM_ADN

P16H

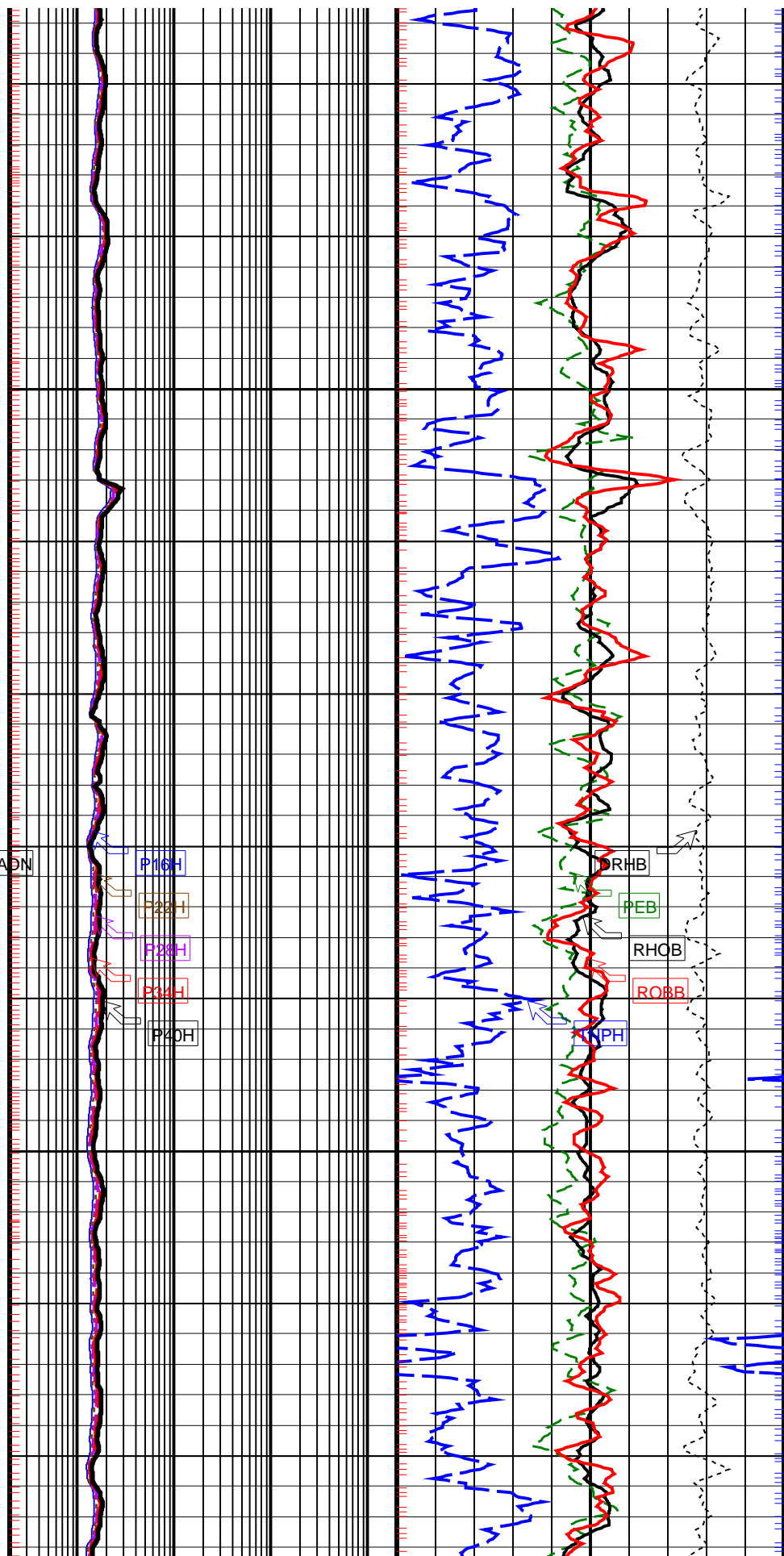
P22H

P28H

P34H

P40H

2600



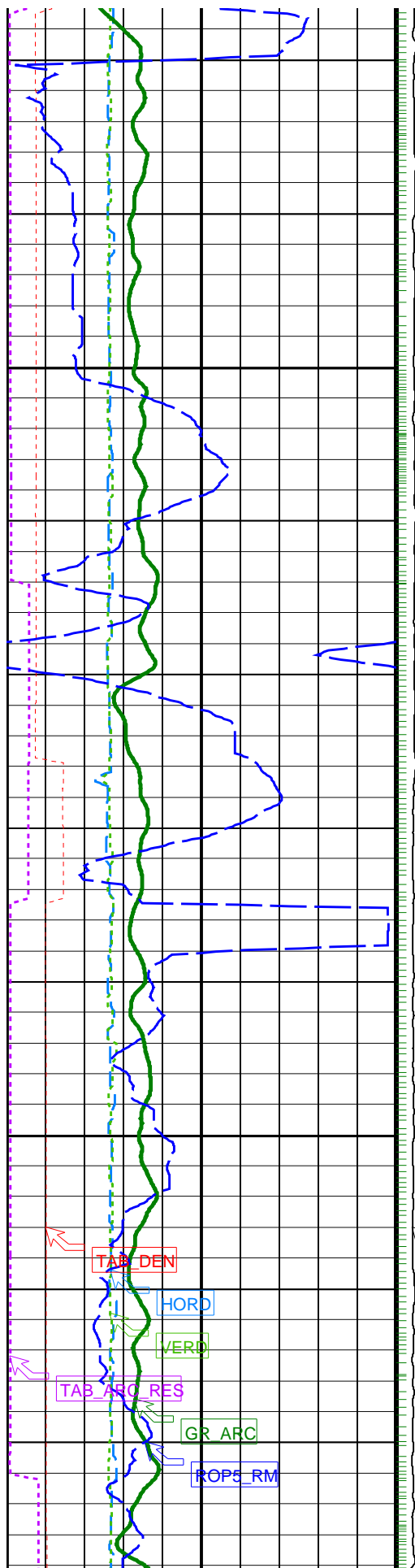
DRHB

PEB

RHOB

ROBB

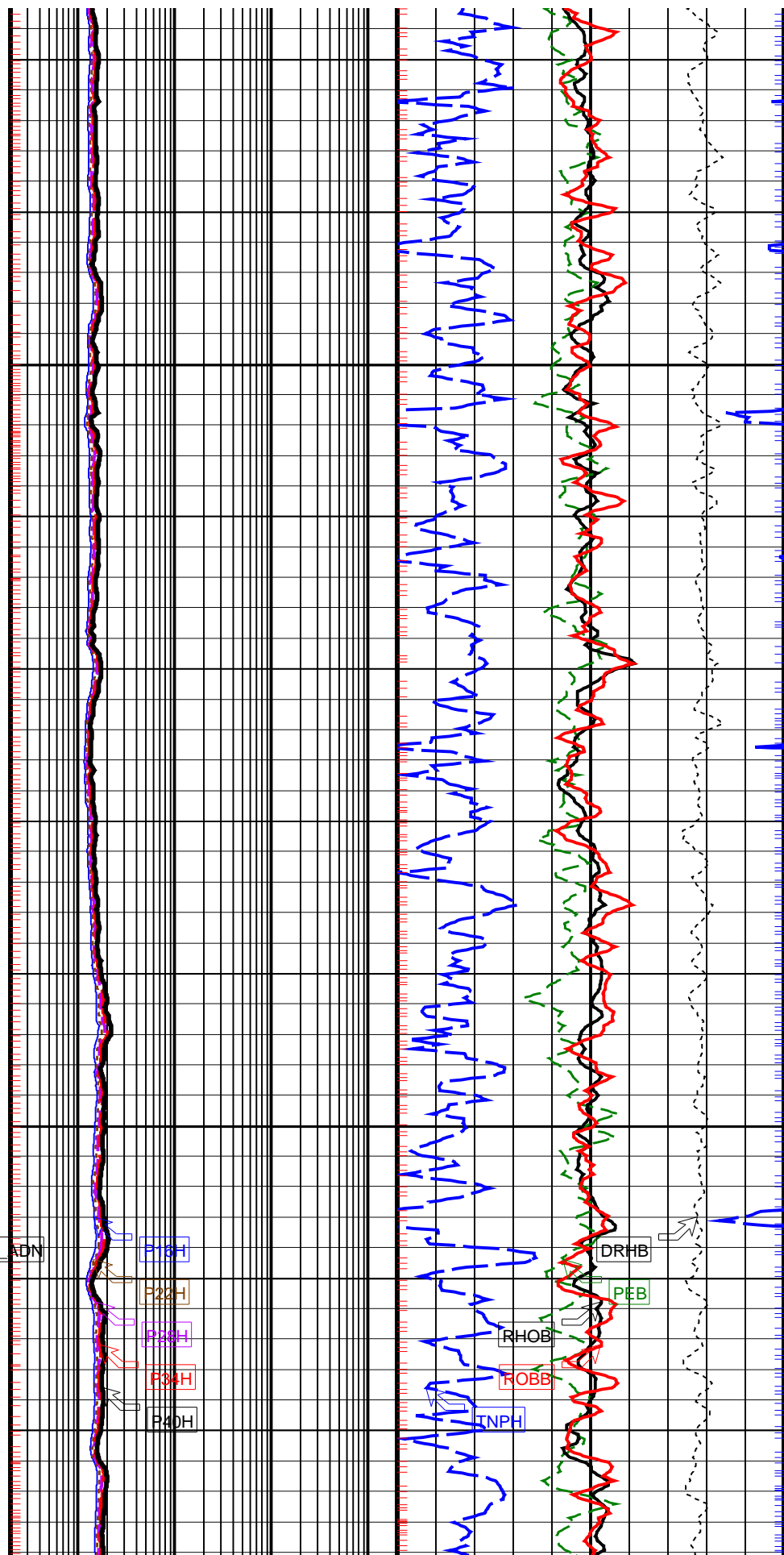
NPH

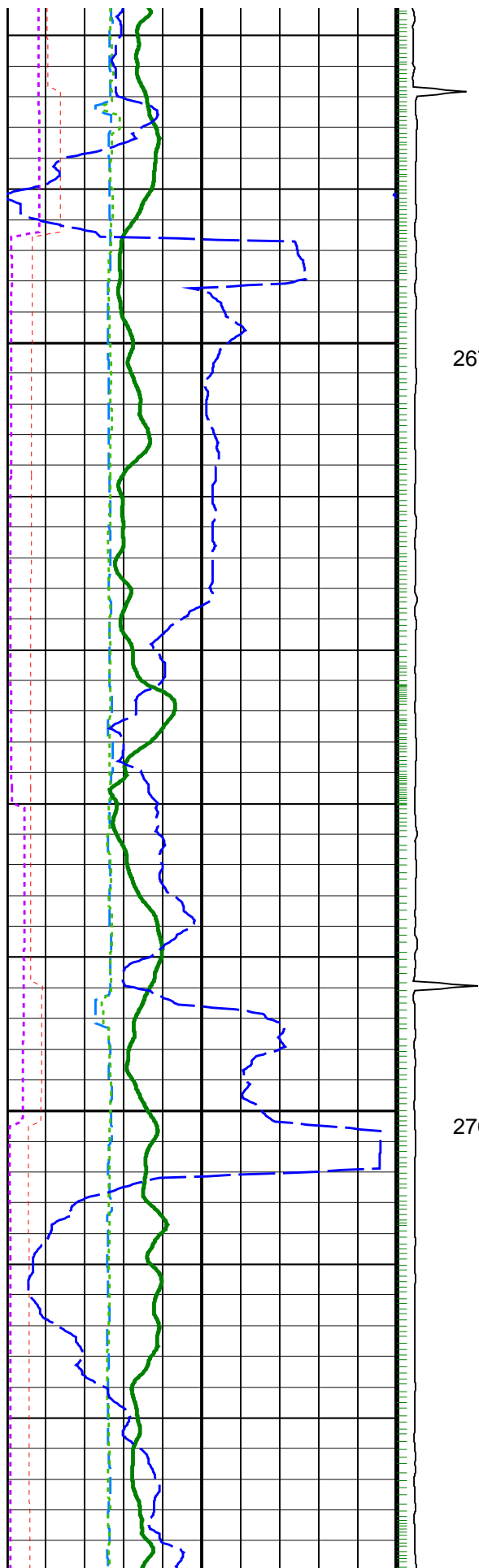


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2650

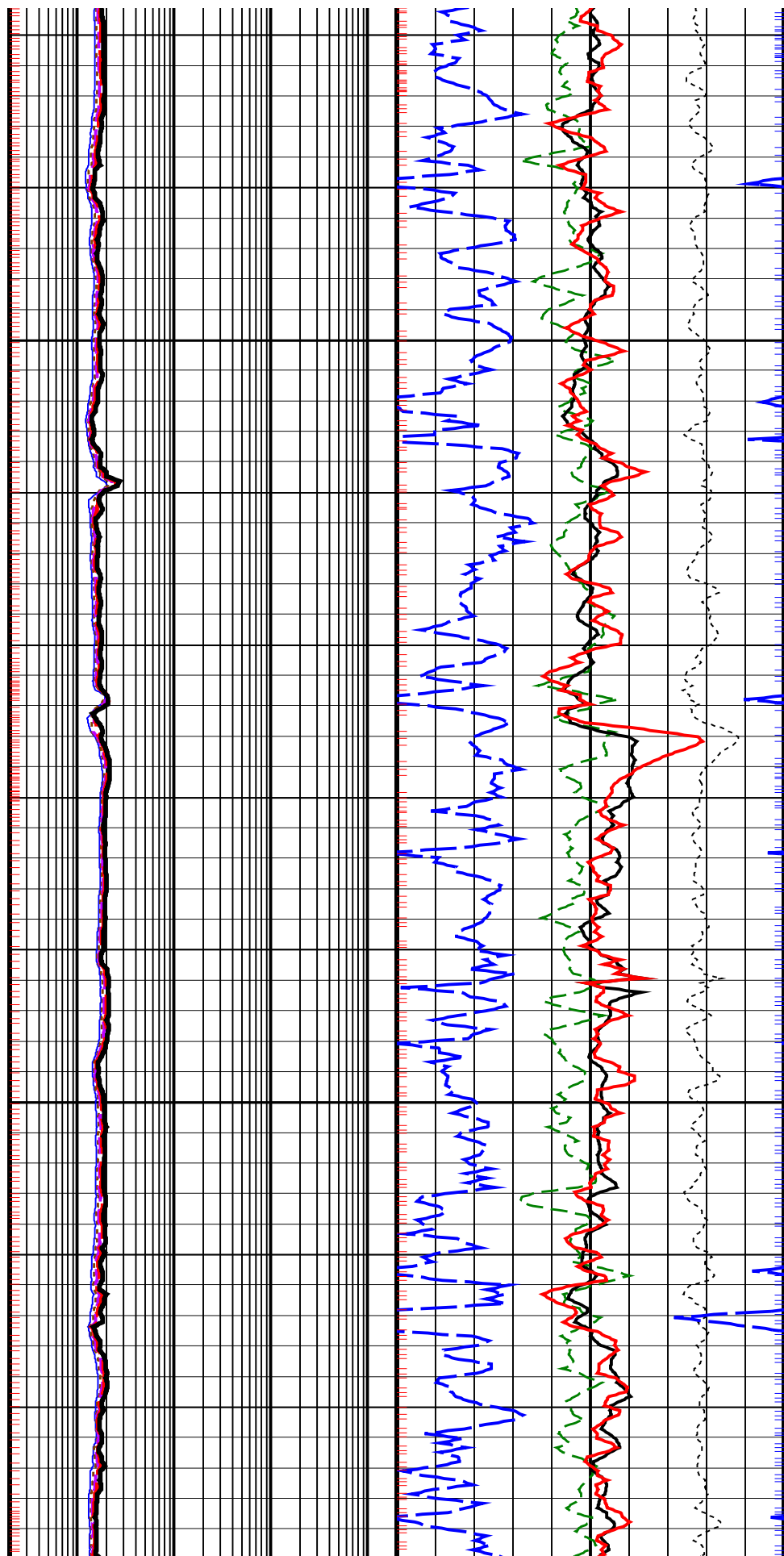
RPM ADN

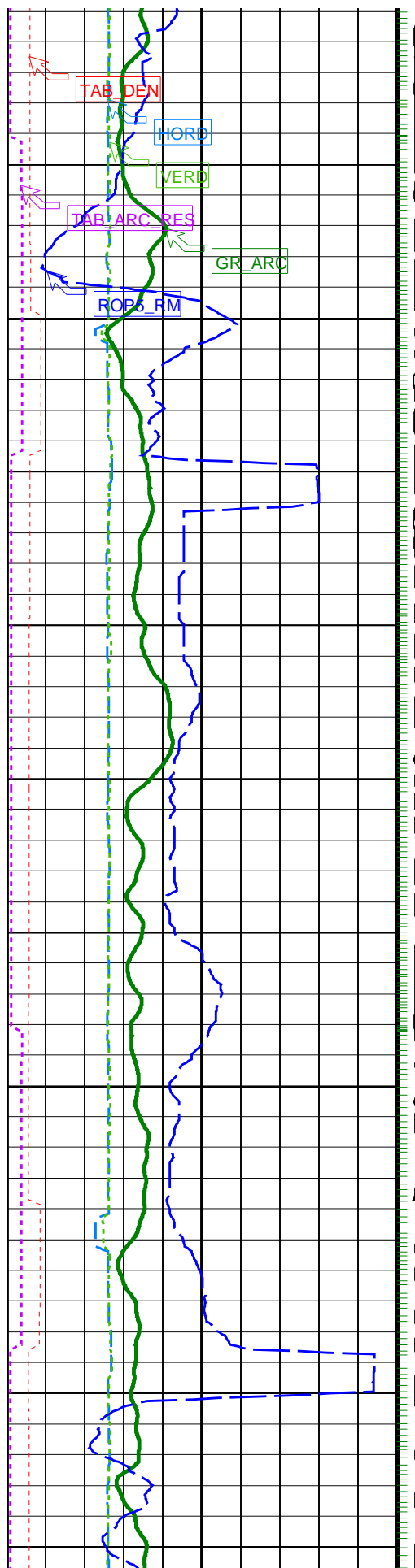




2675

2700

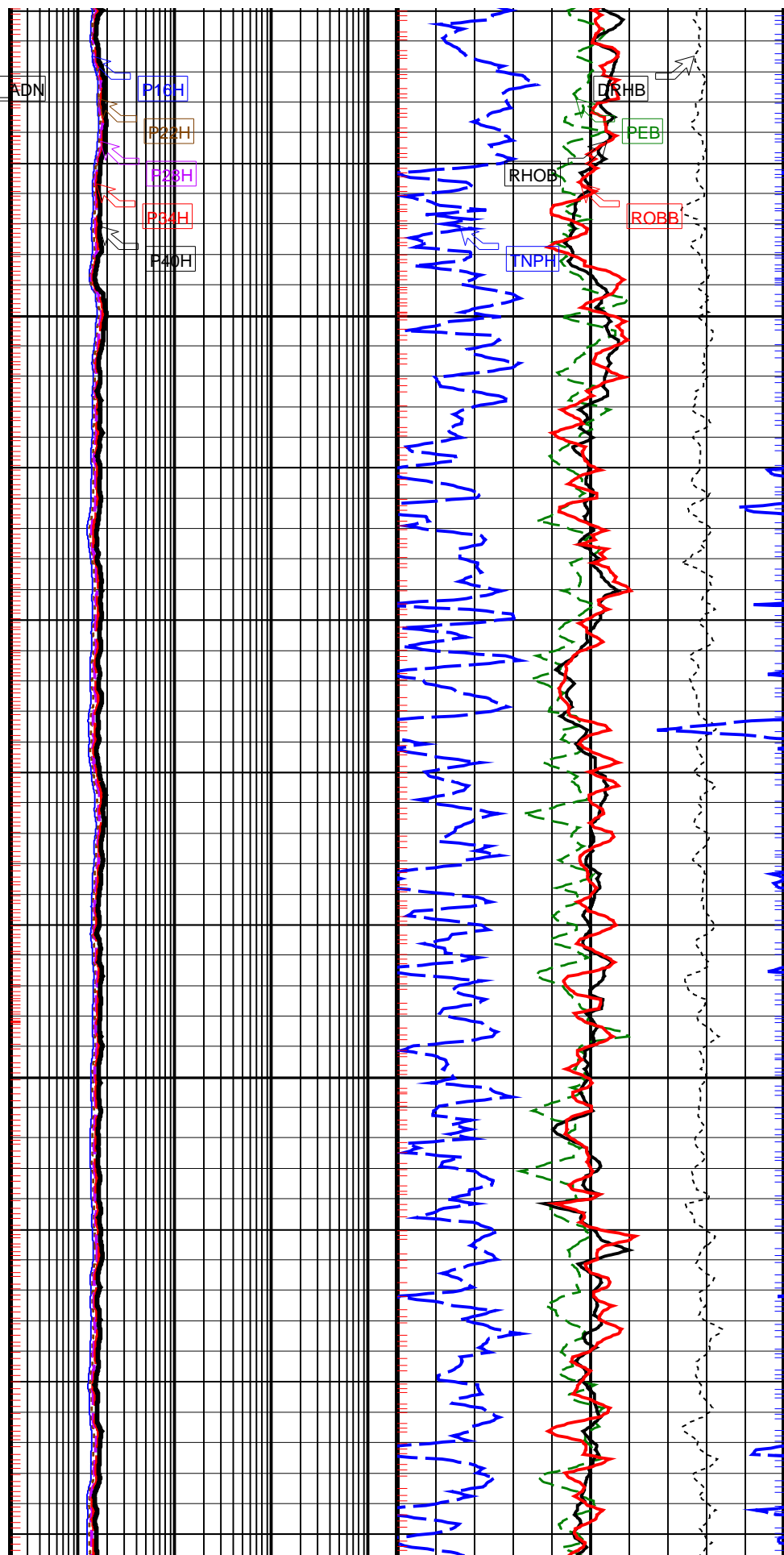




RPM ADN

2725

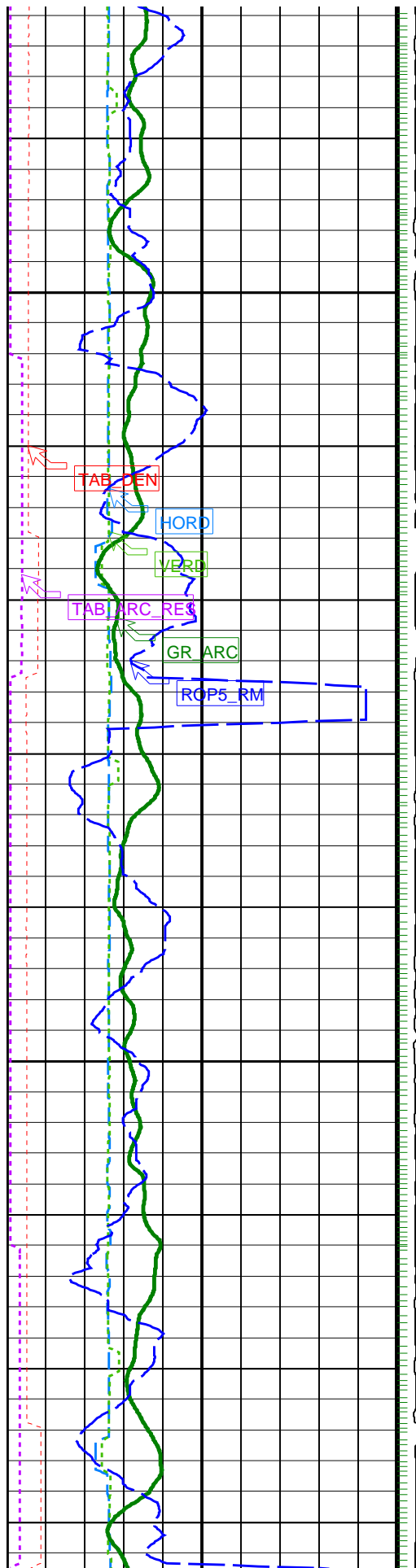
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RPM ADN

2725

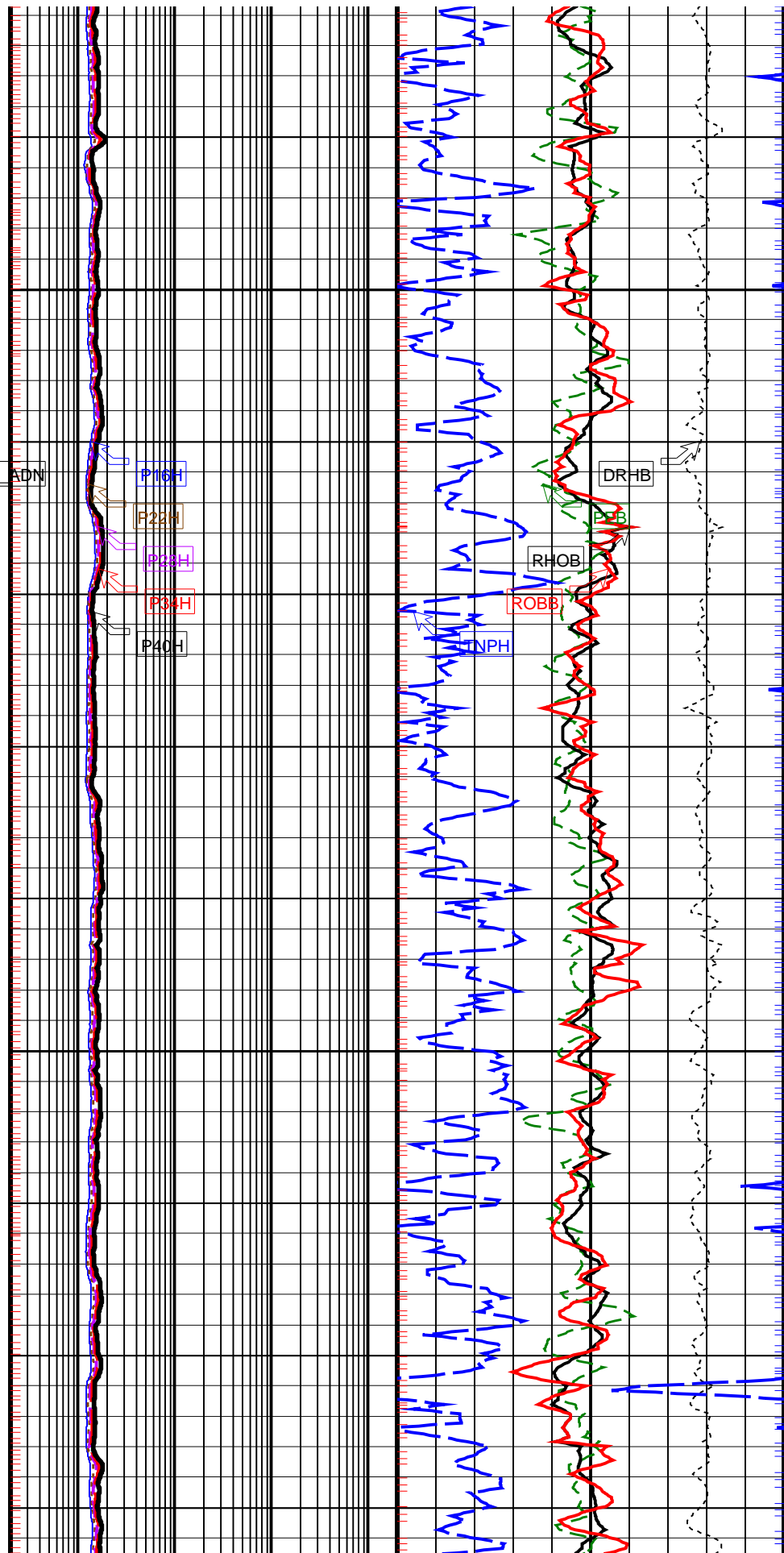
2750

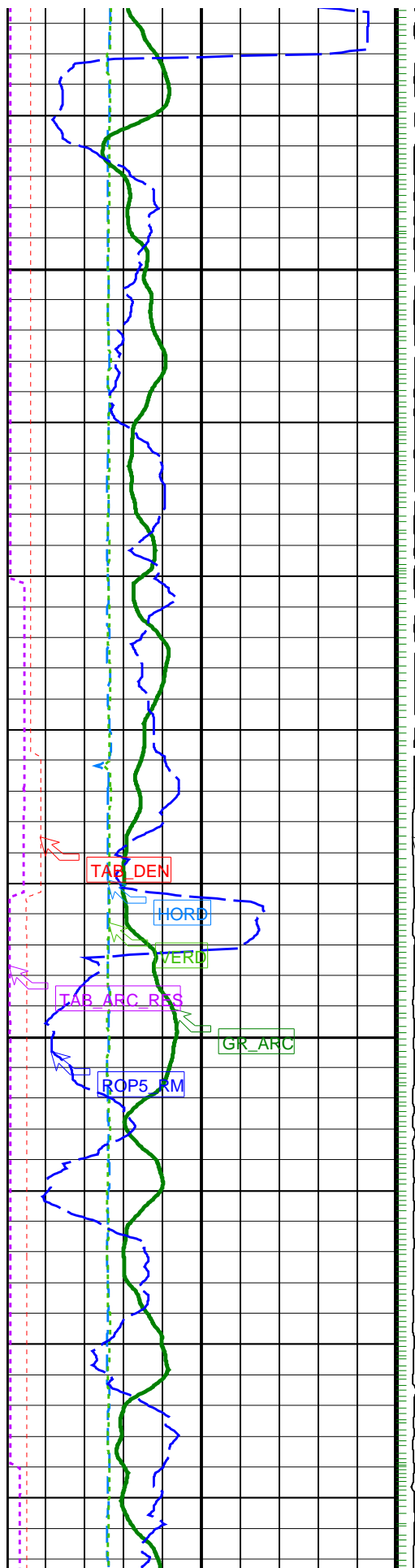


2775

RPM ADN

2800

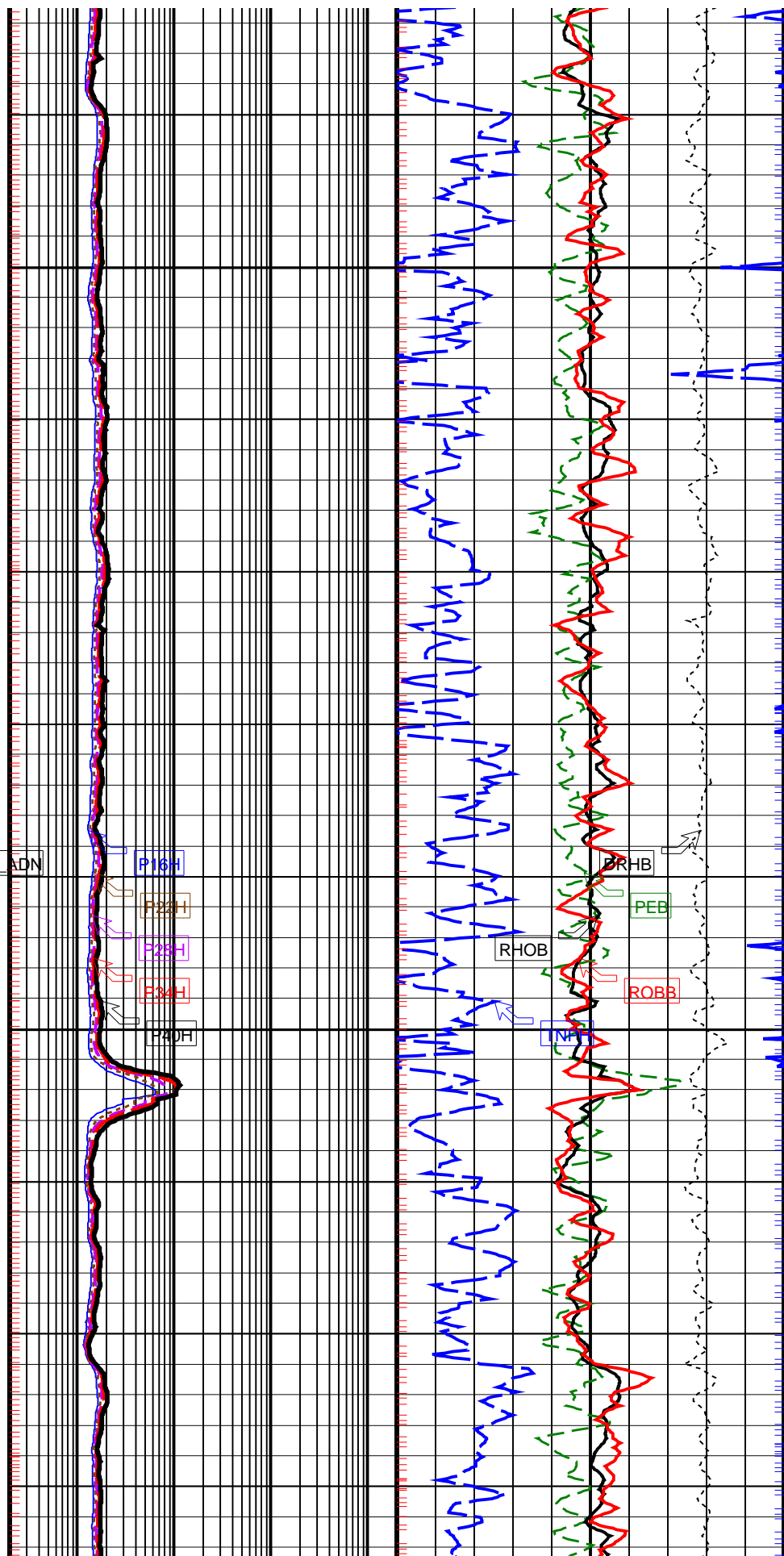


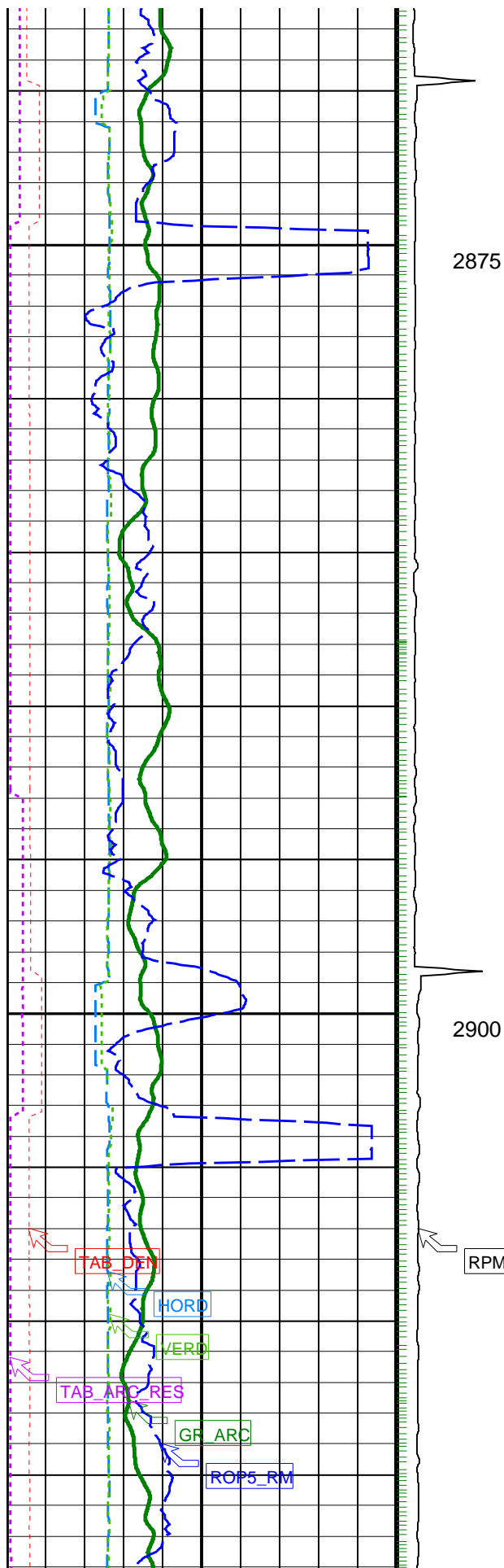


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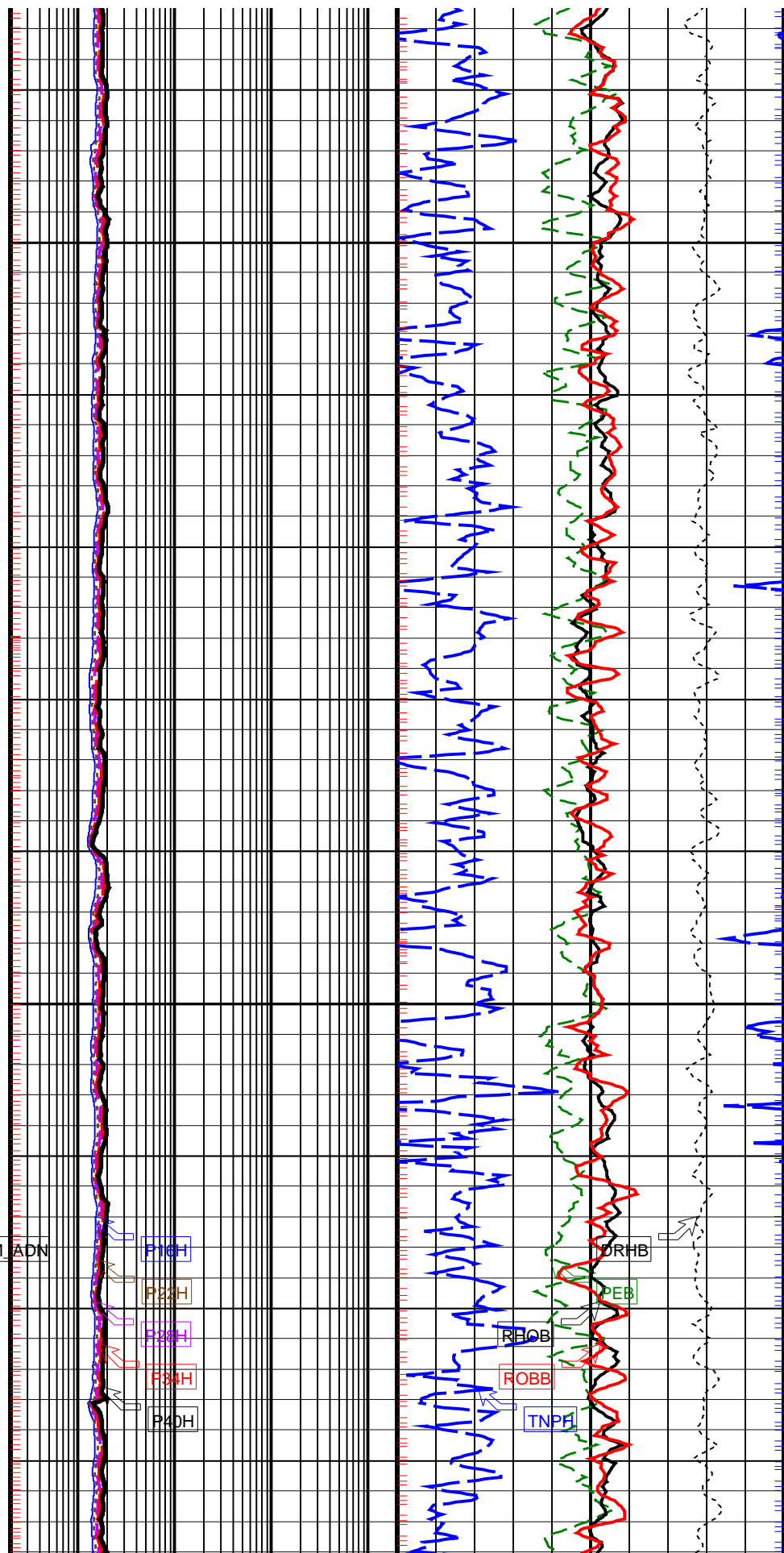
RPM ADN

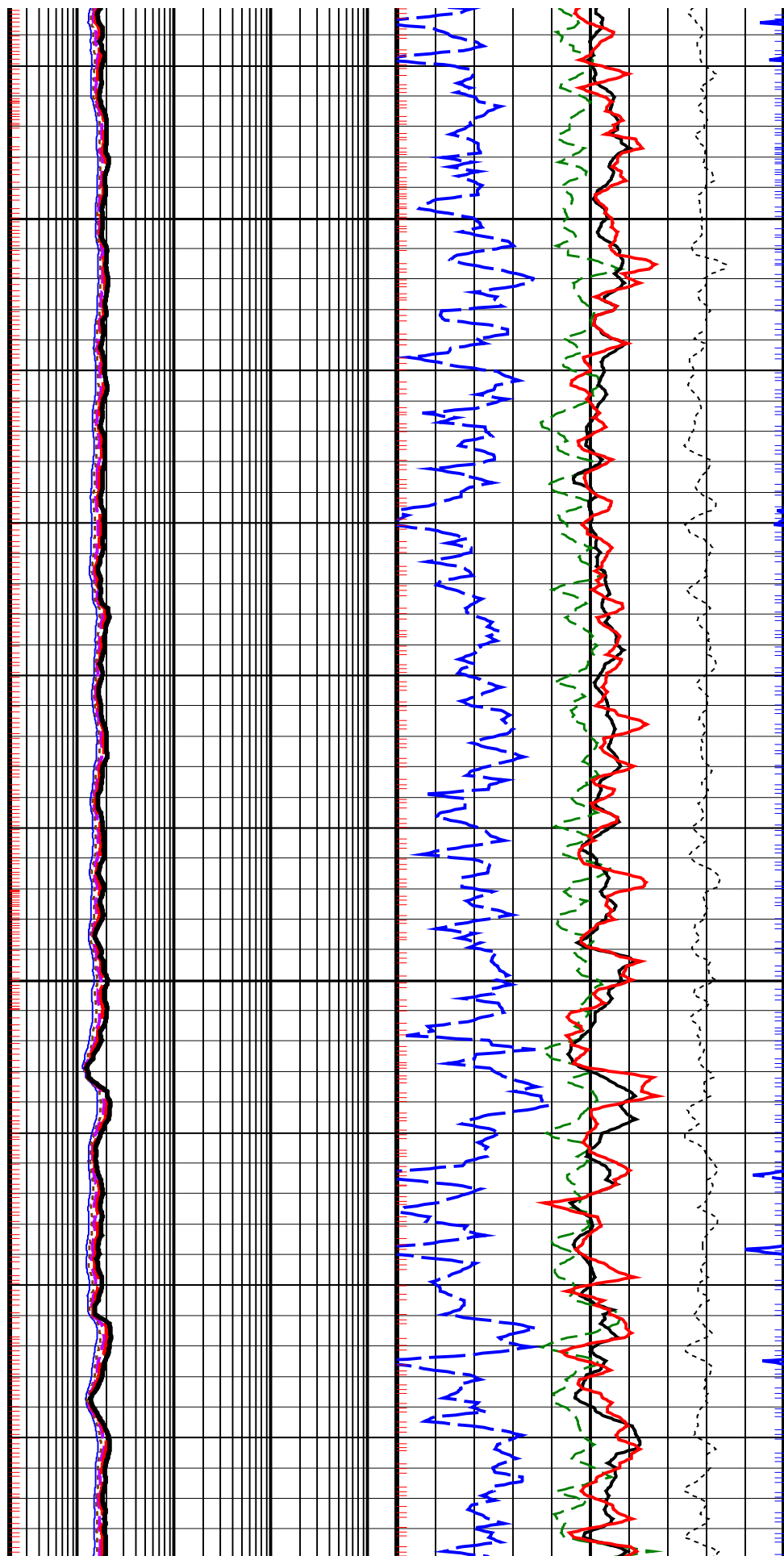
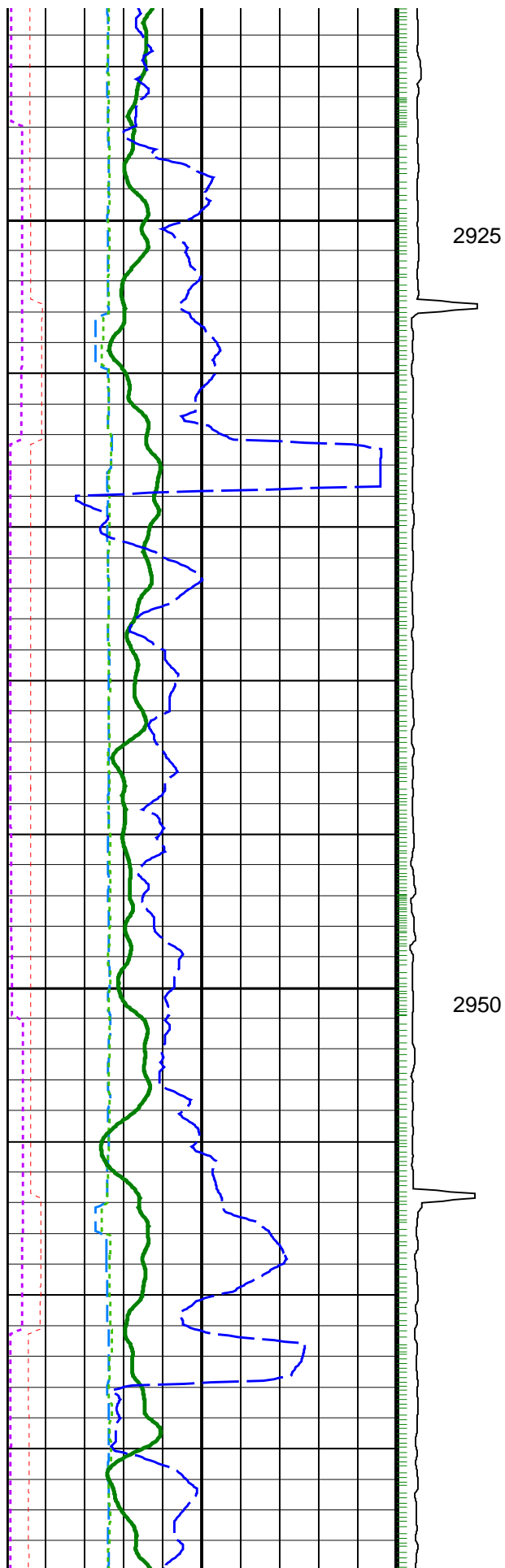
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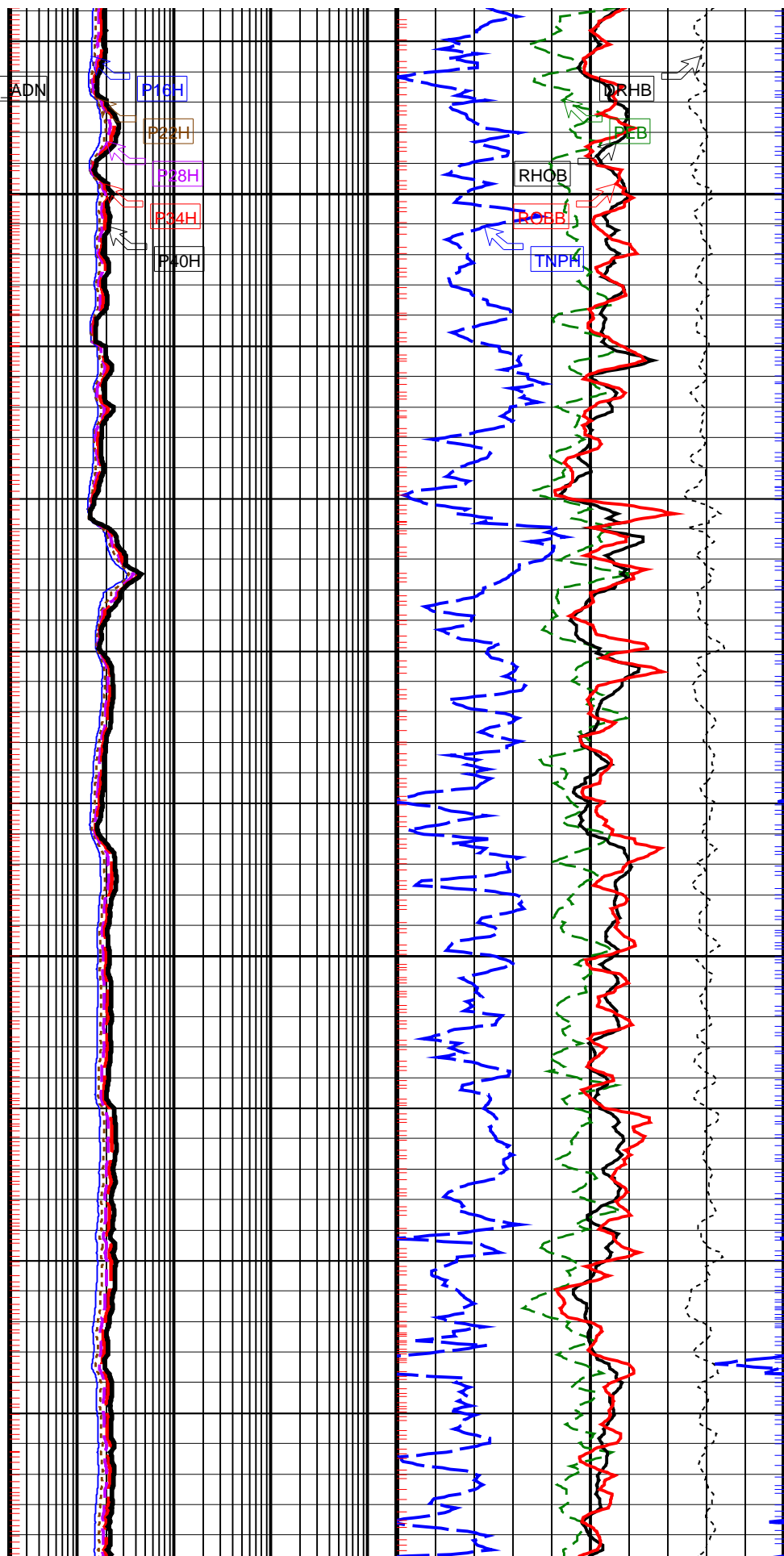
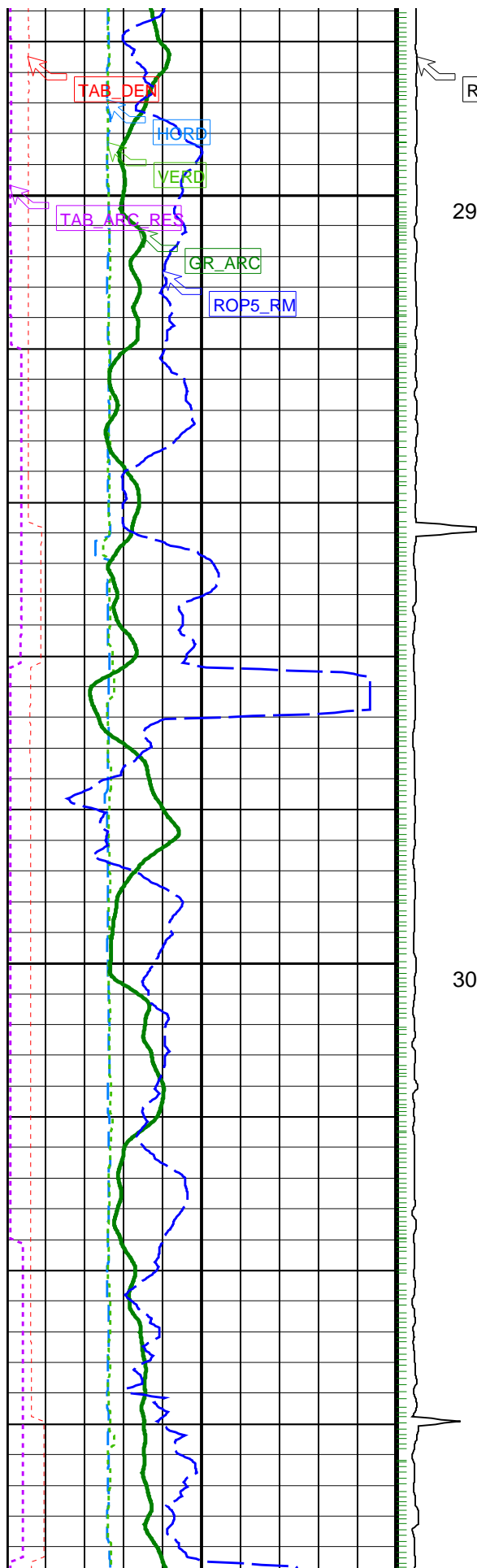


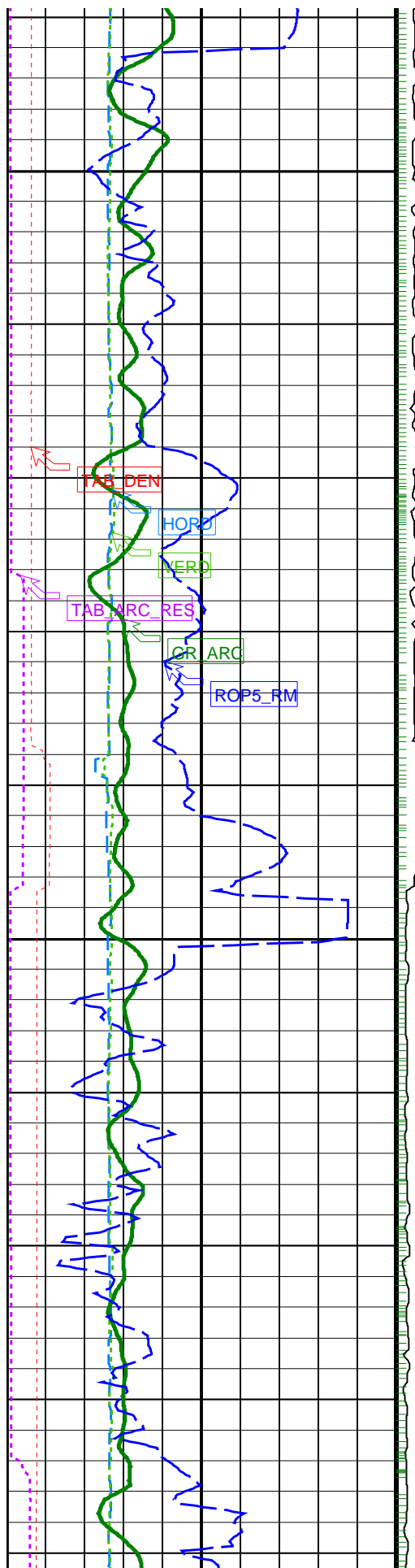


RPM ADN





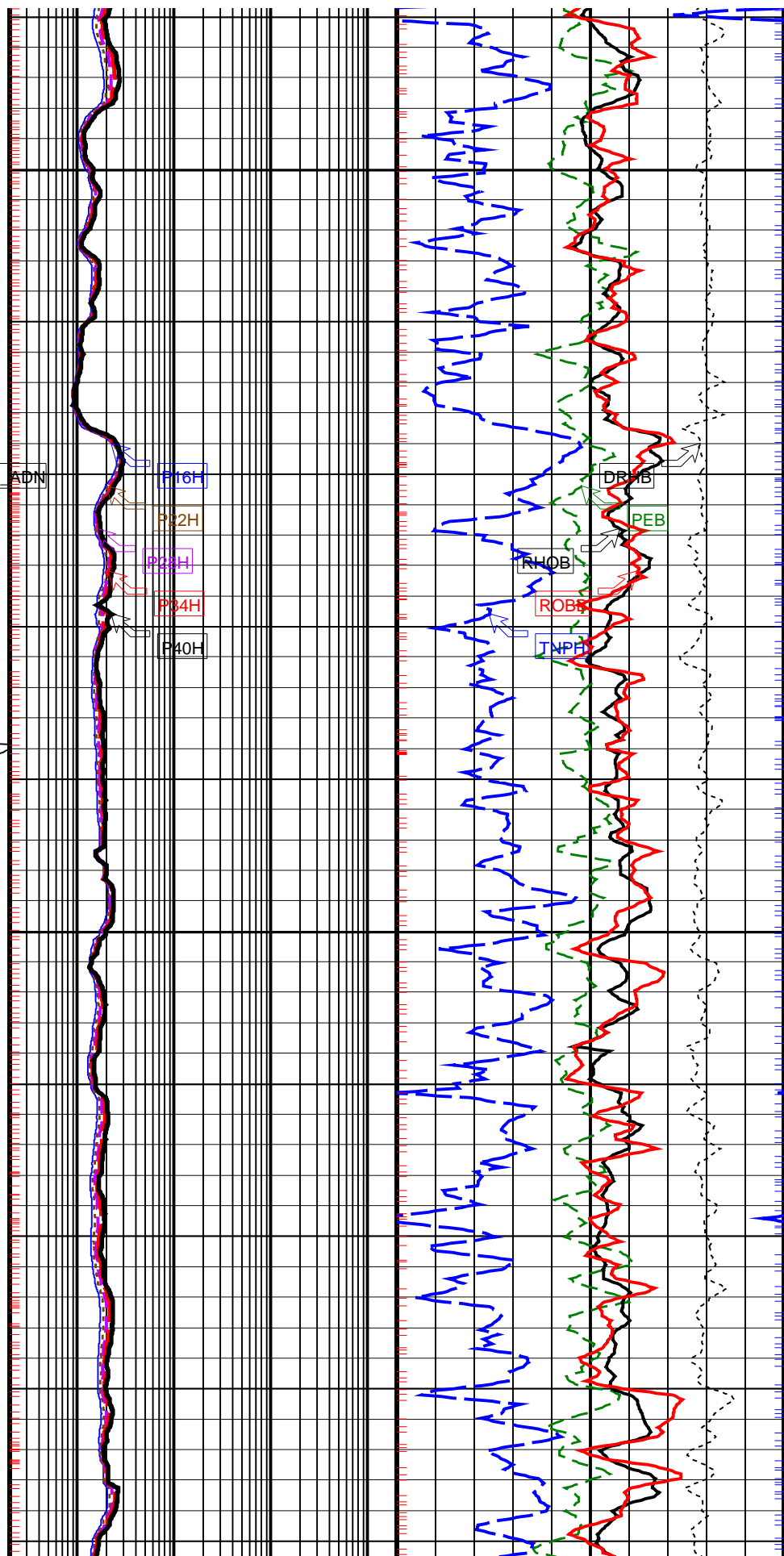


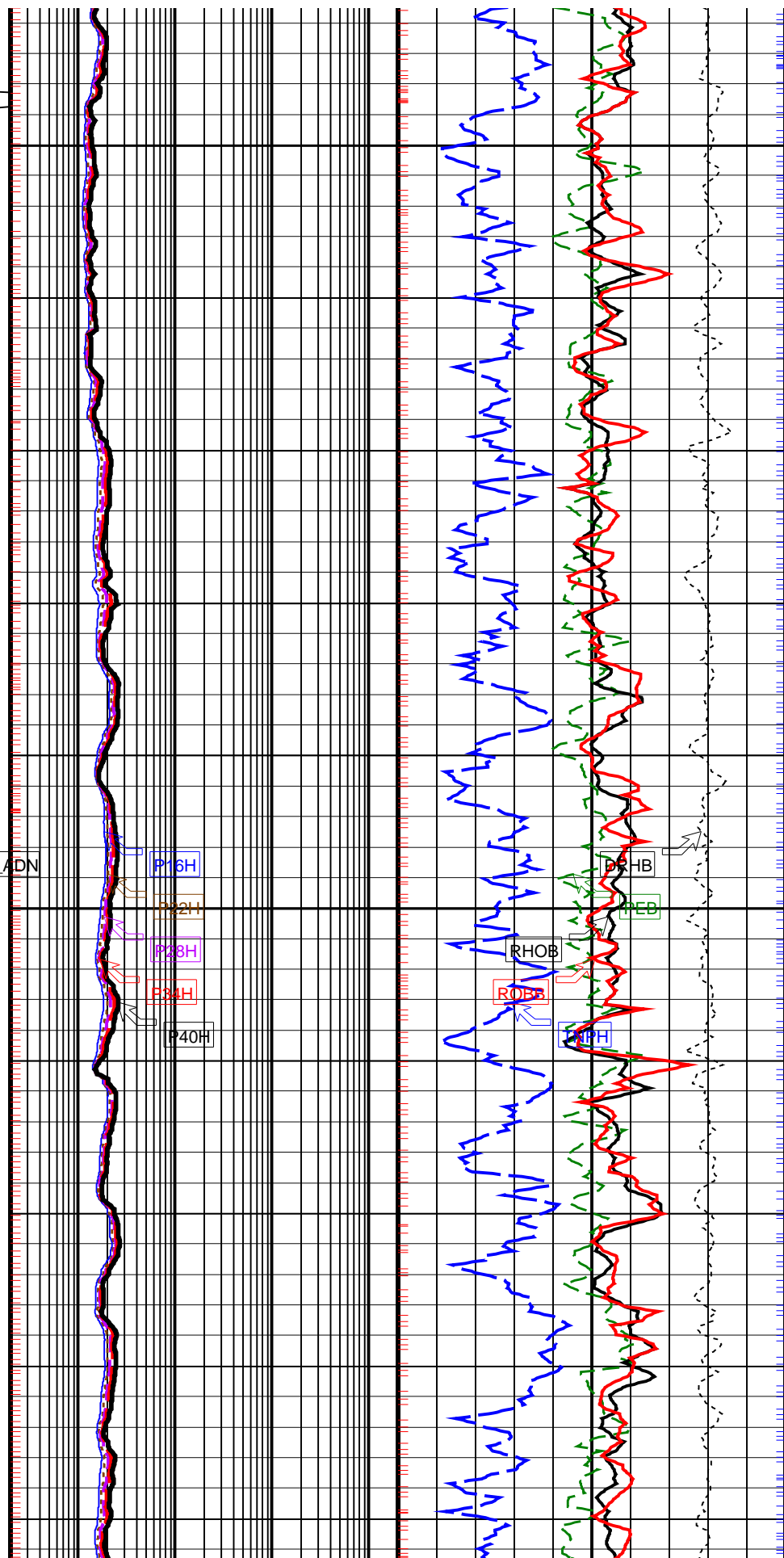
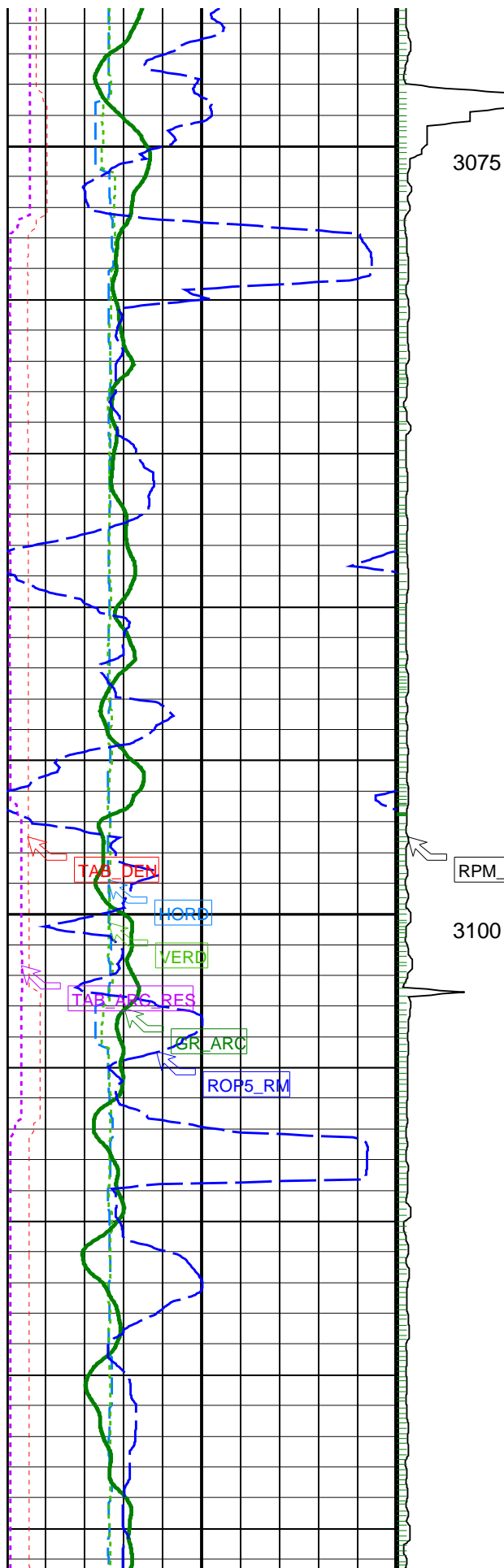


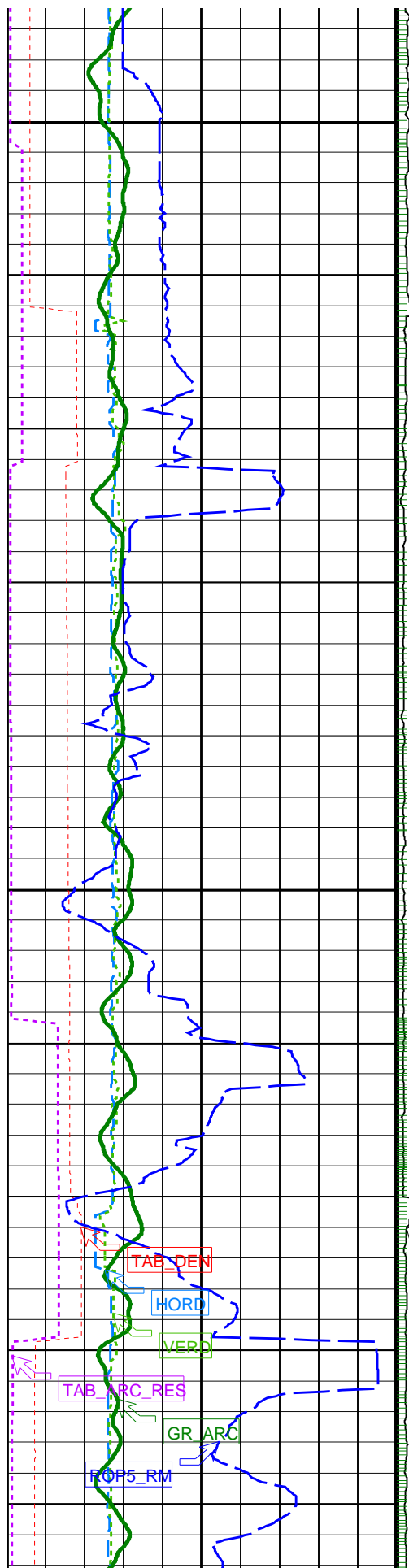
3025

RPM ADN

3050



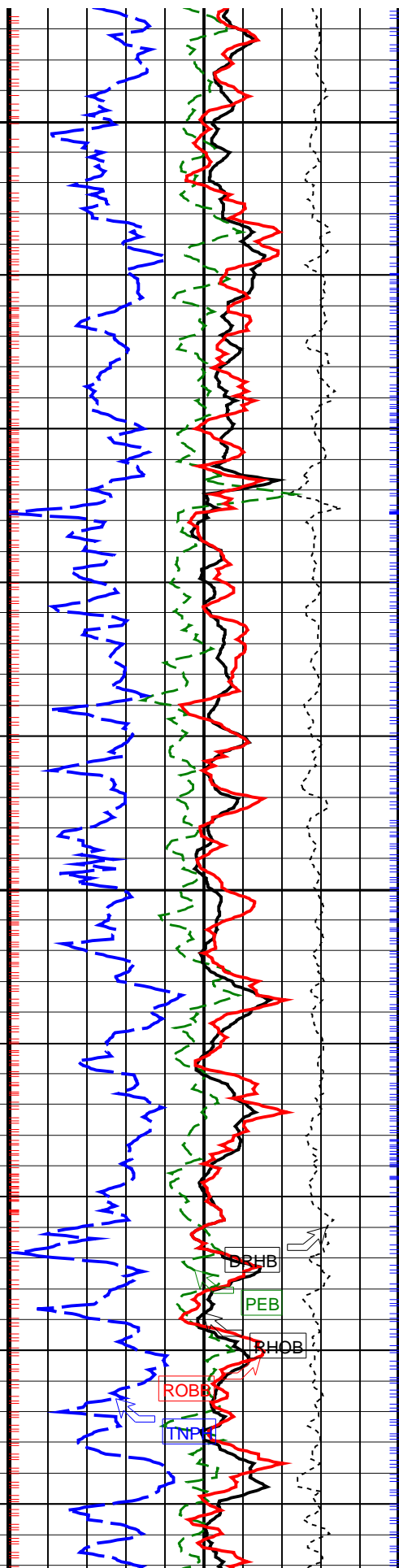
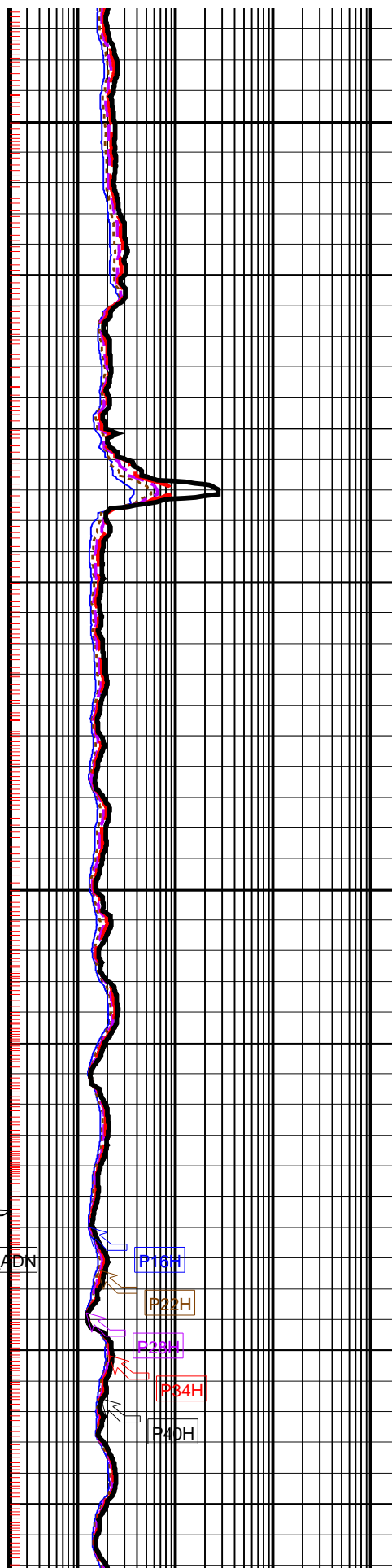


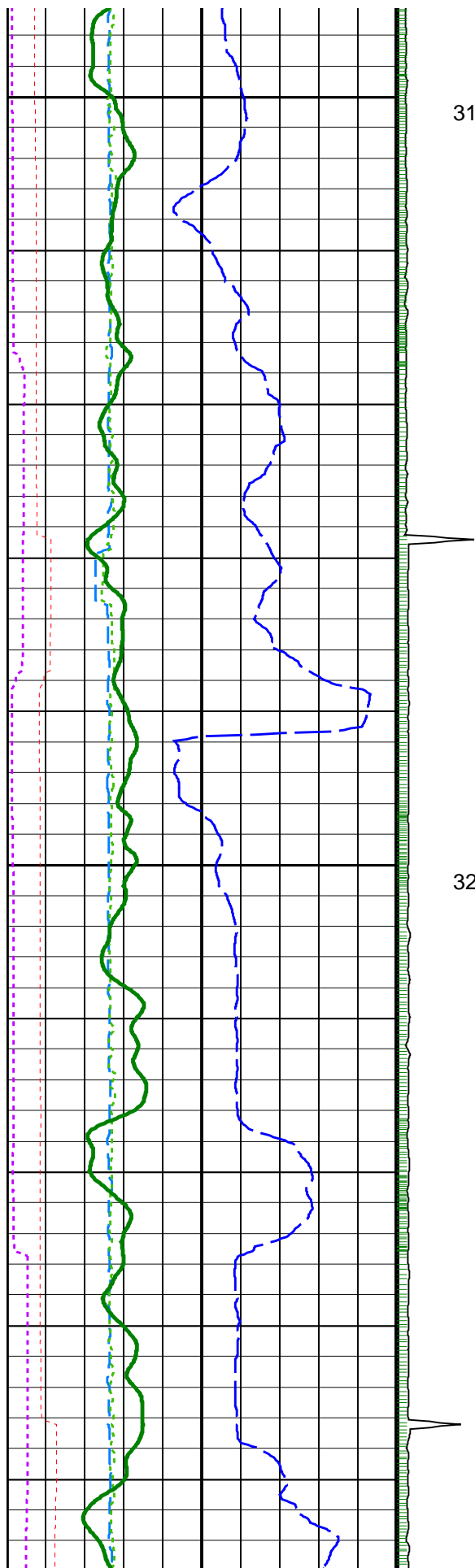


3125

3150

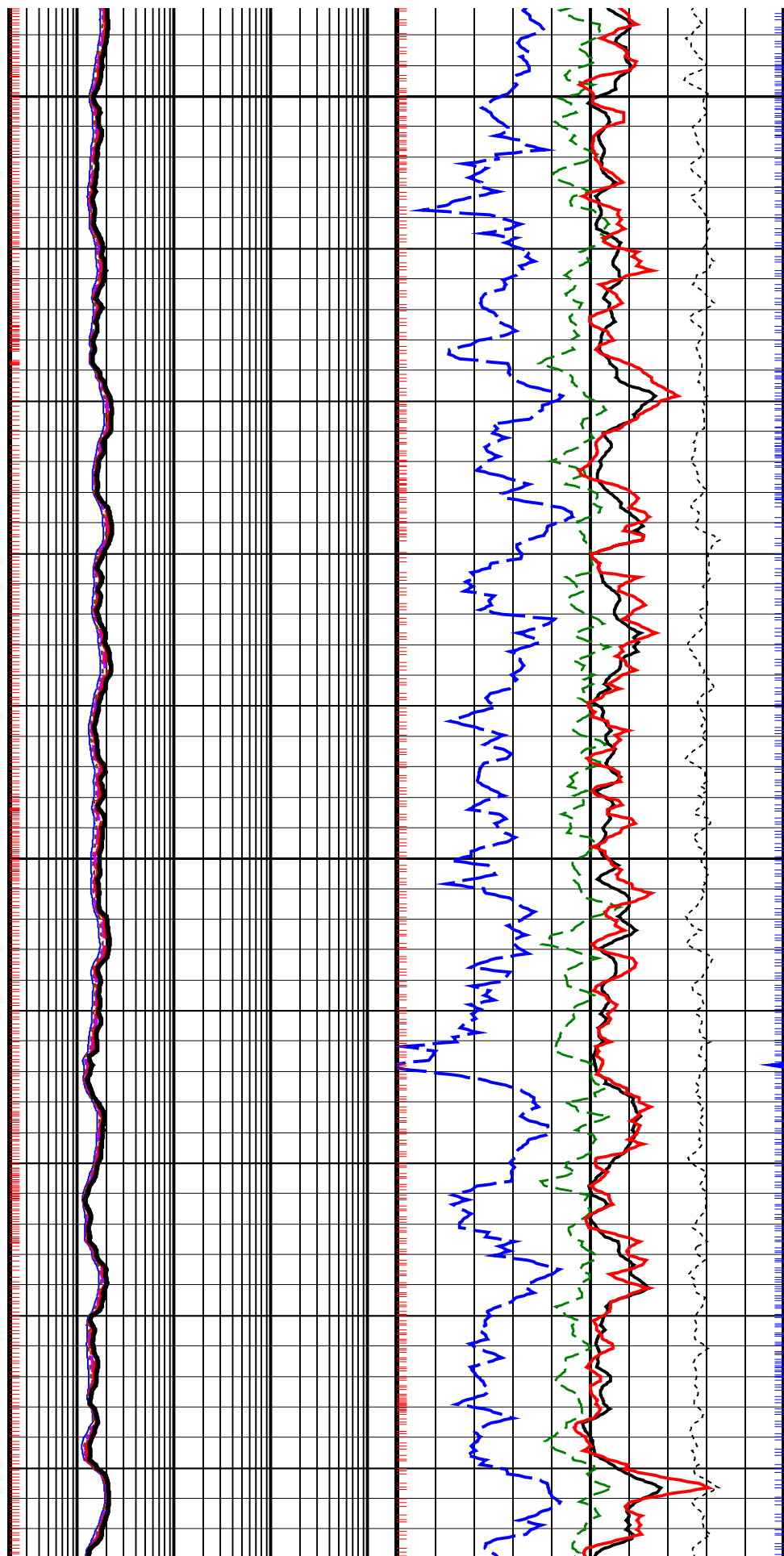
RPM ADN

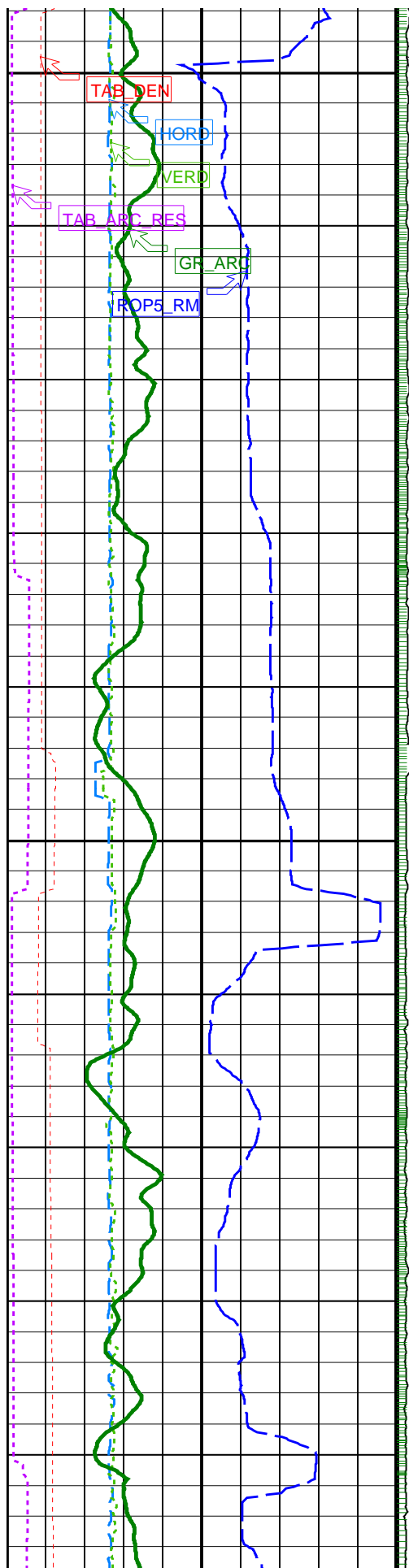




3175

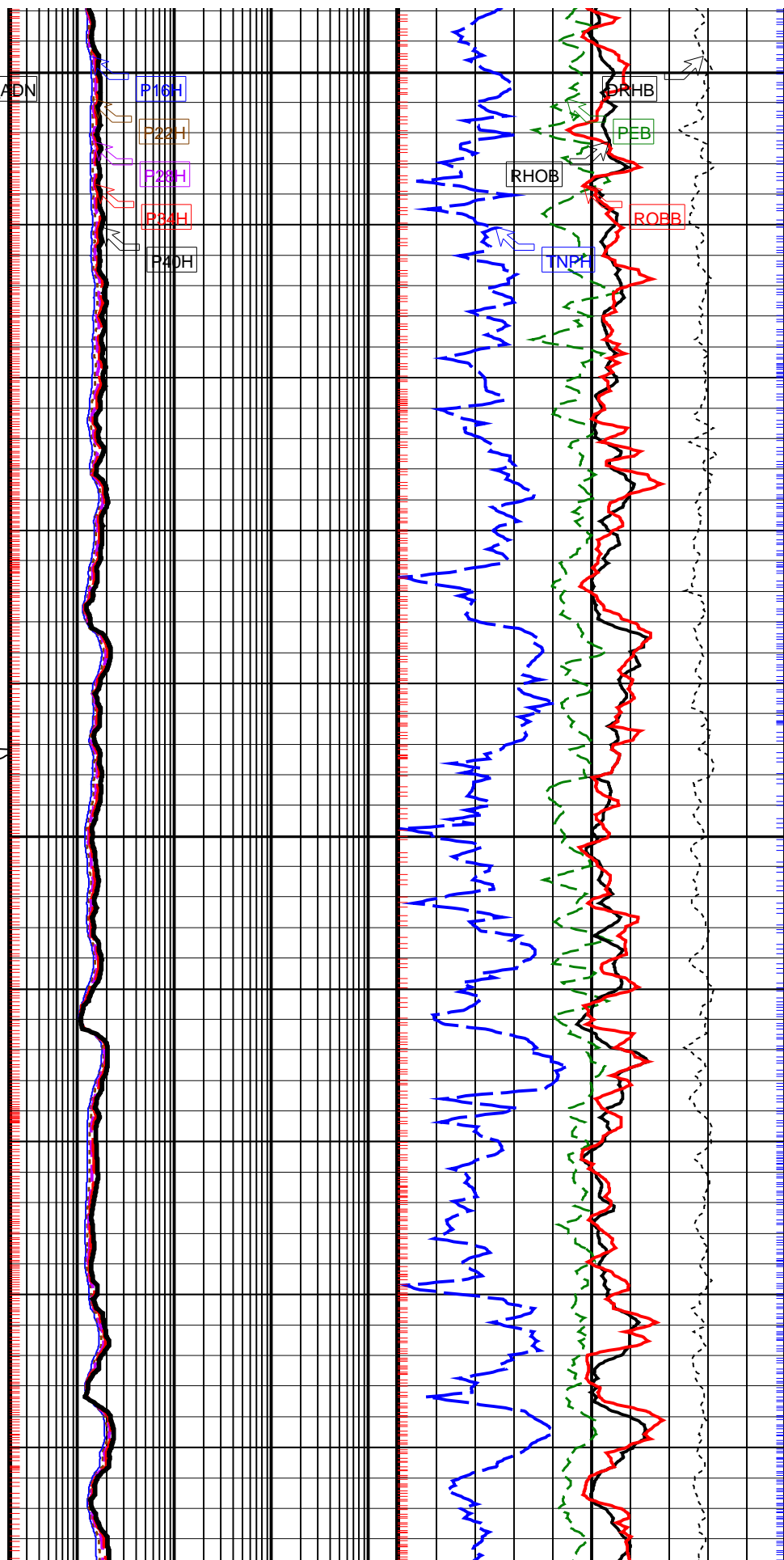
3200





3225 ADN

3250



P16H

P22H

P28H

P34H

P40H

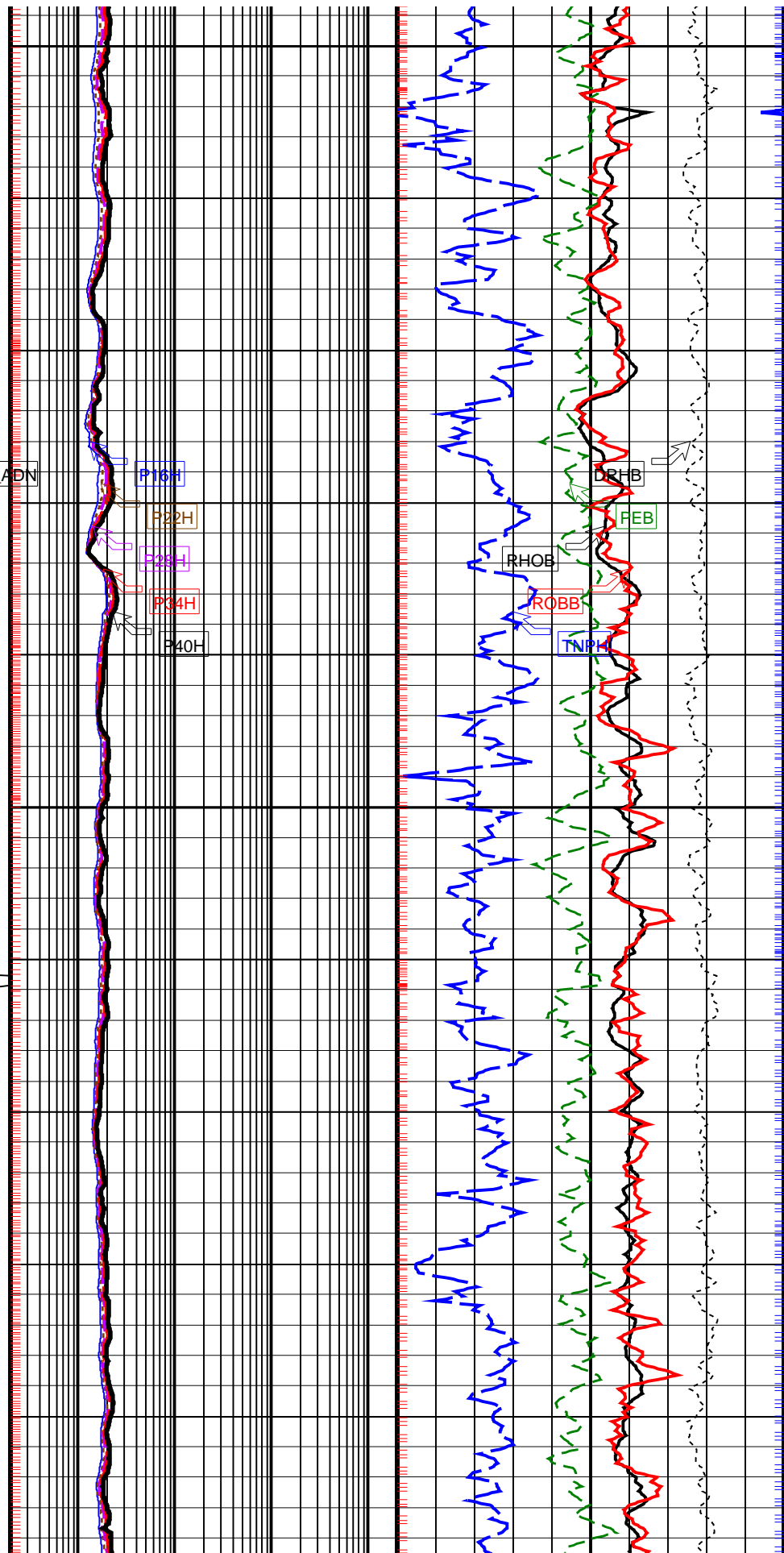
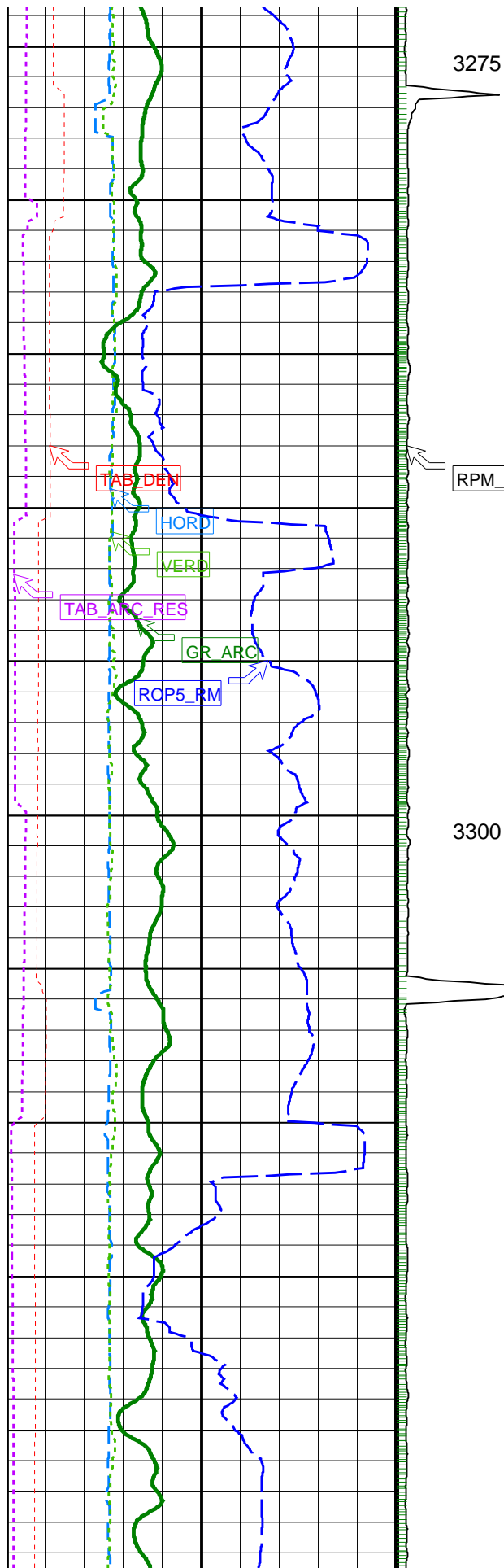
RHOB

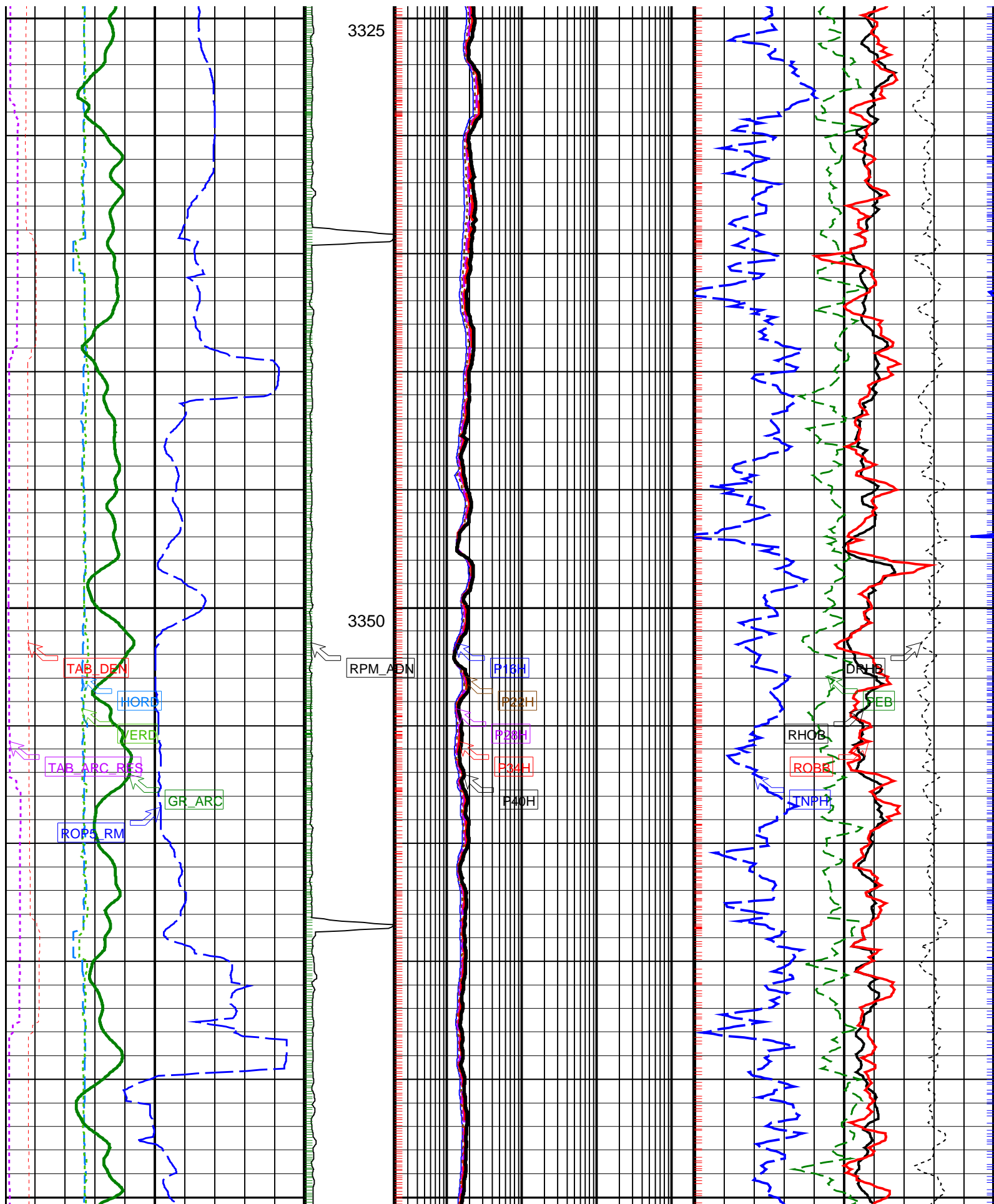
INPR

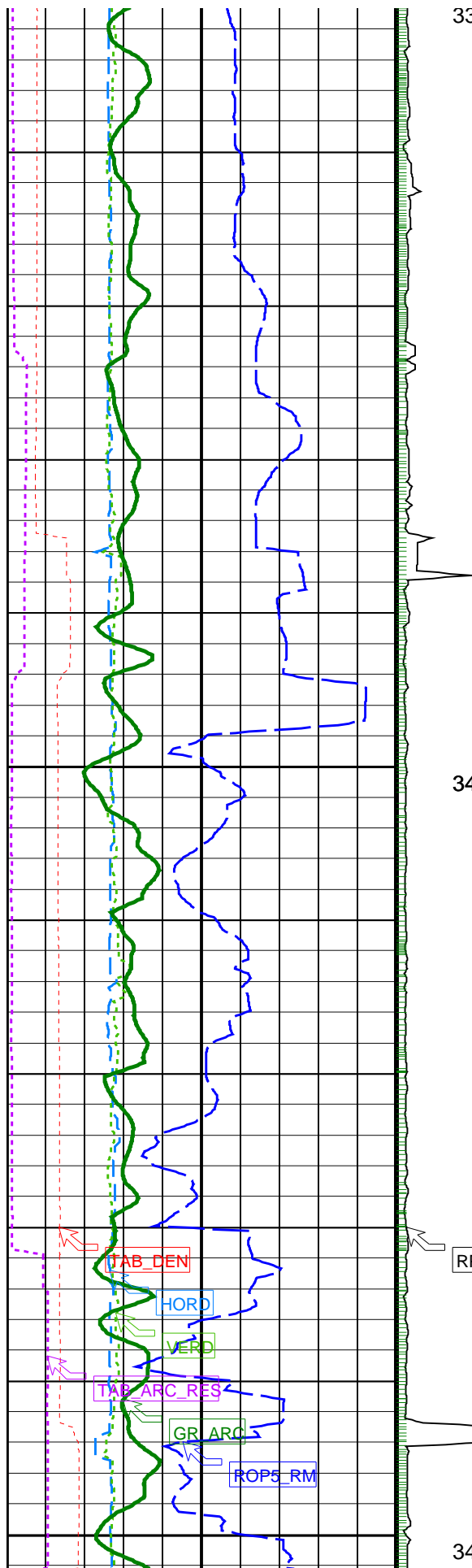
ROHB

PEB

ROBB





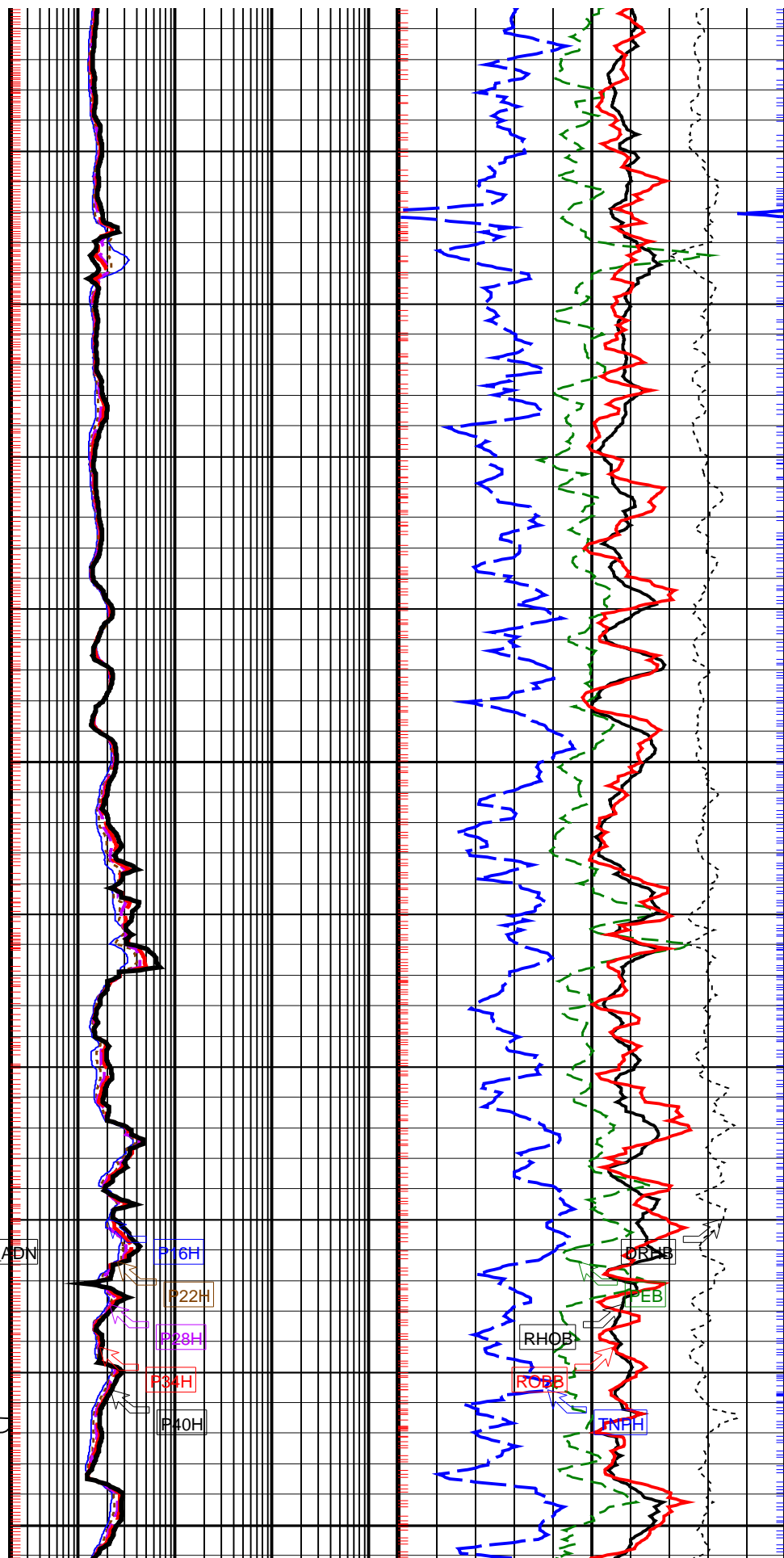


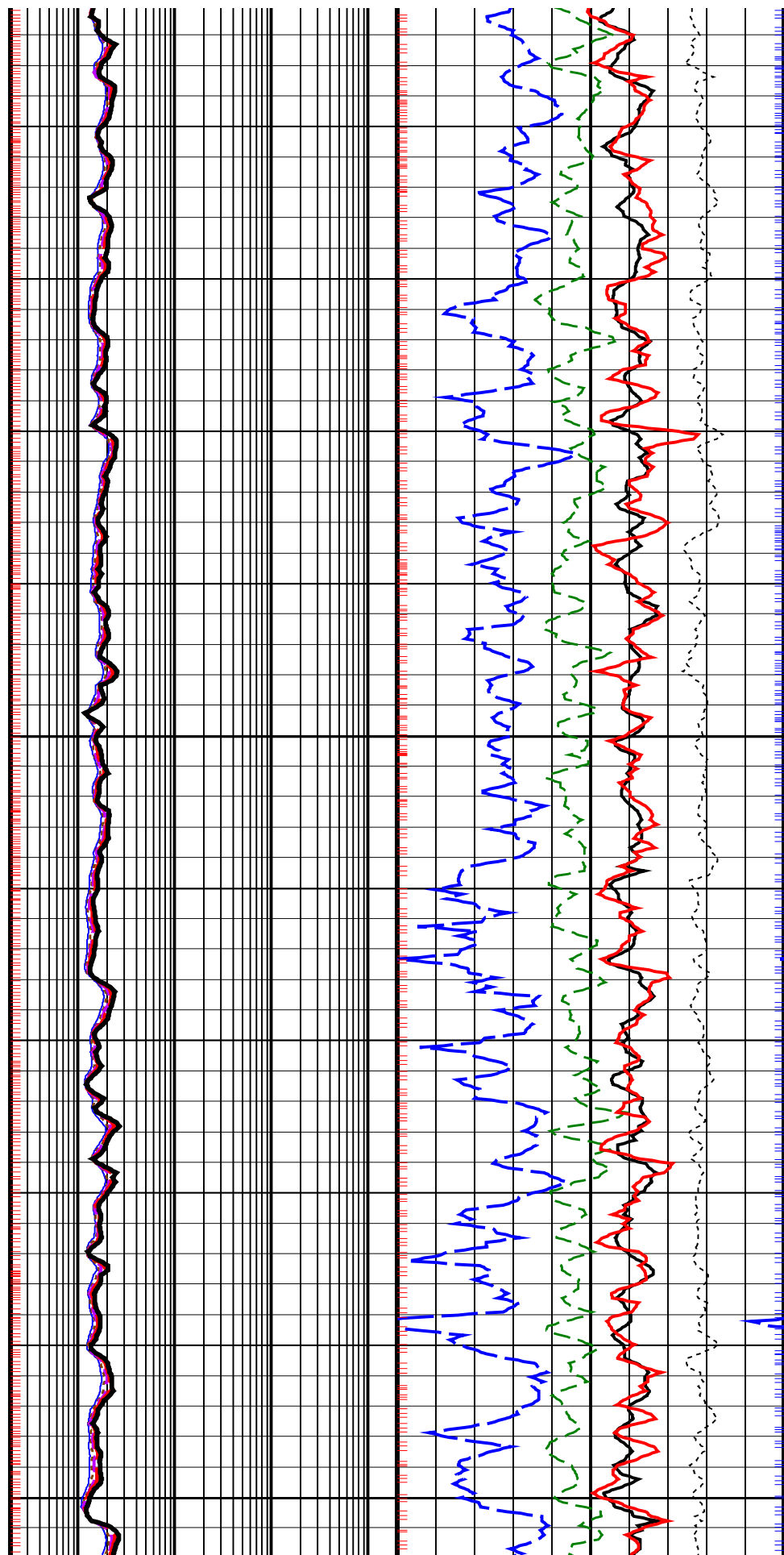
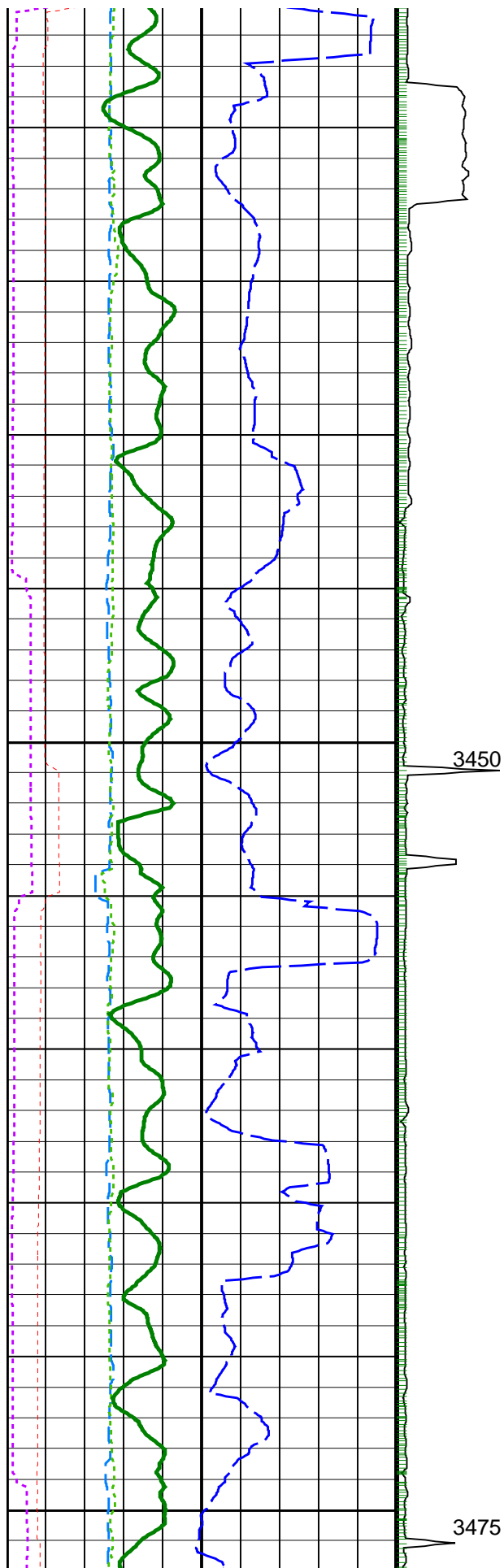
3375

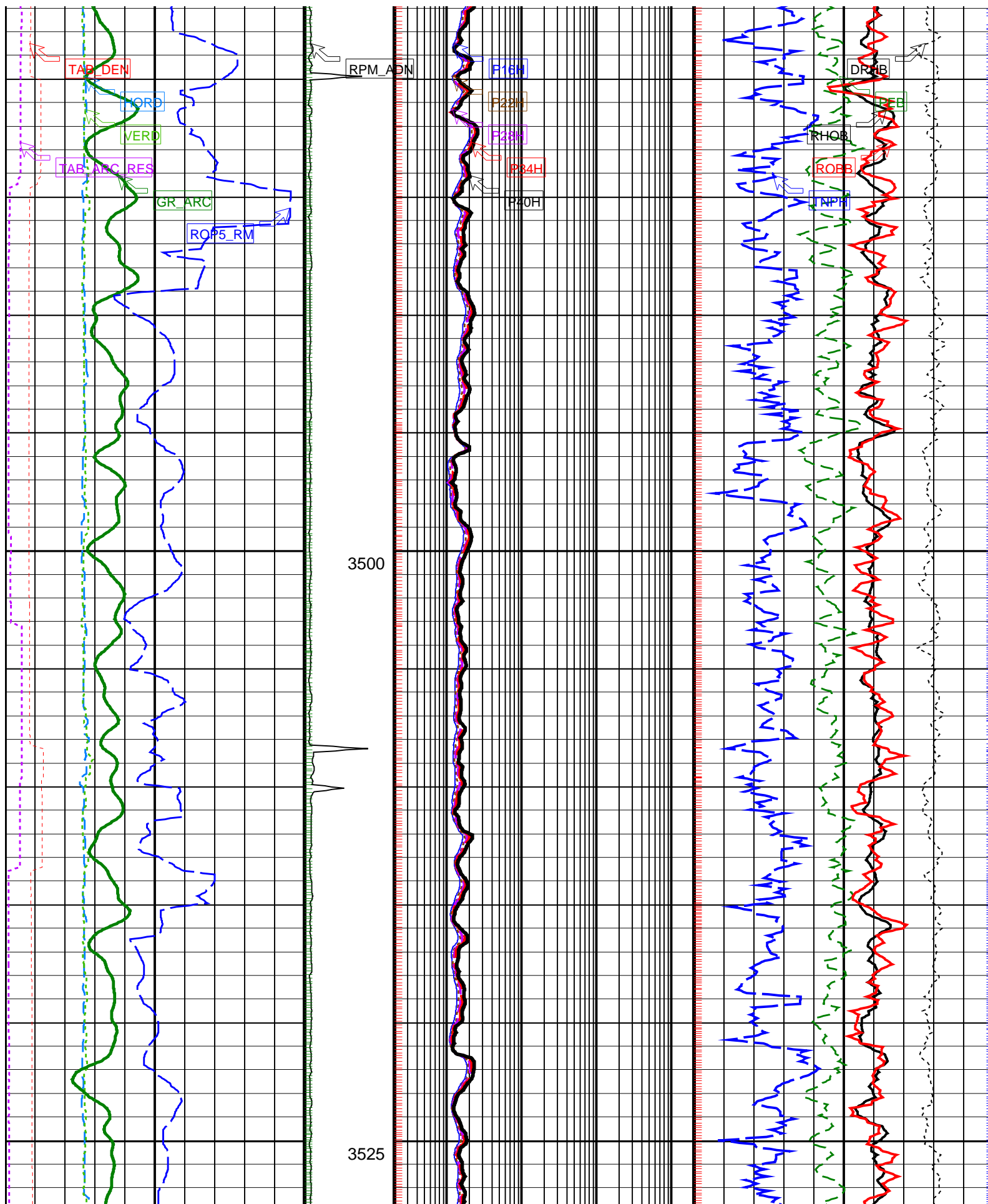
3400

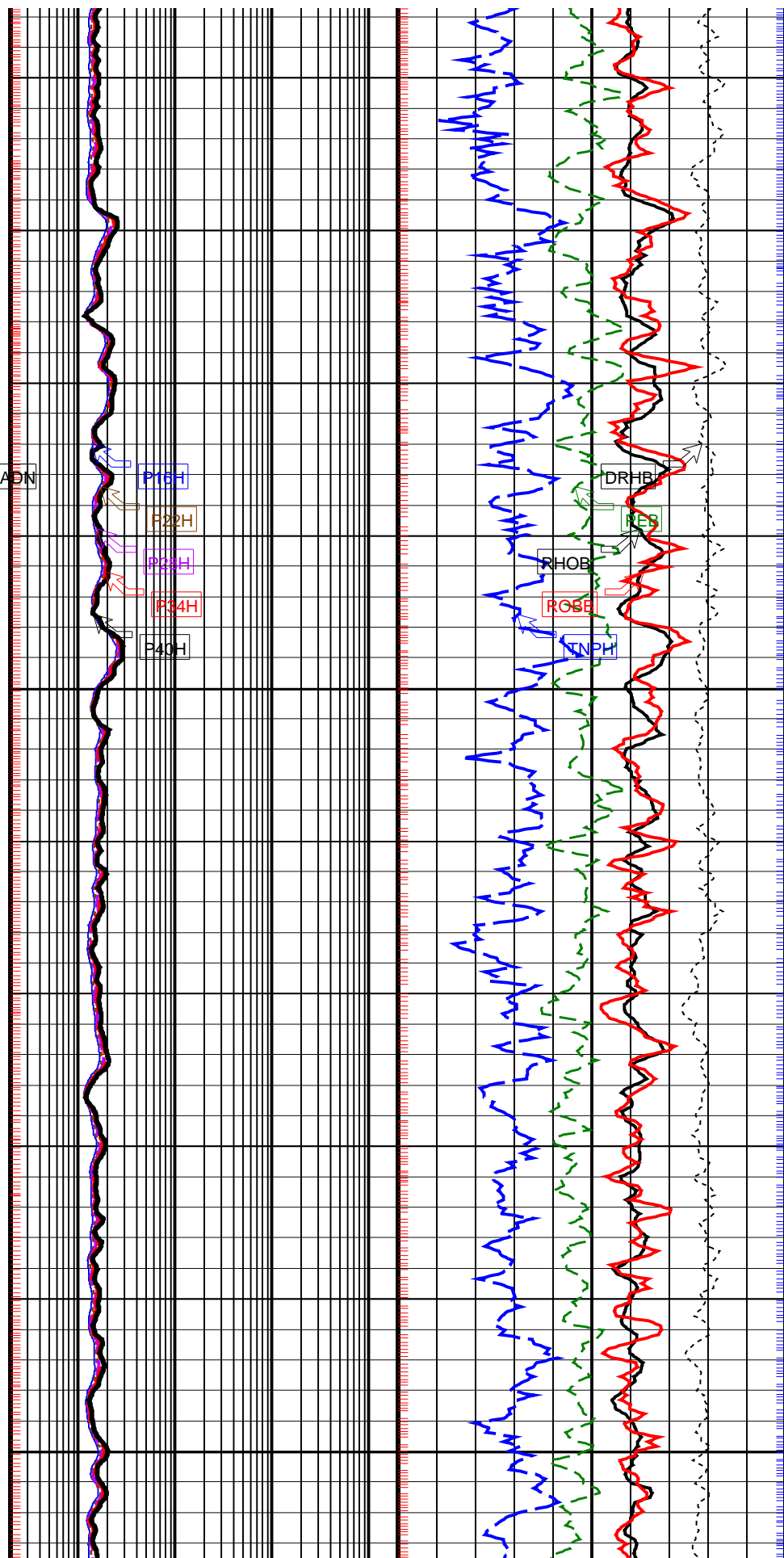
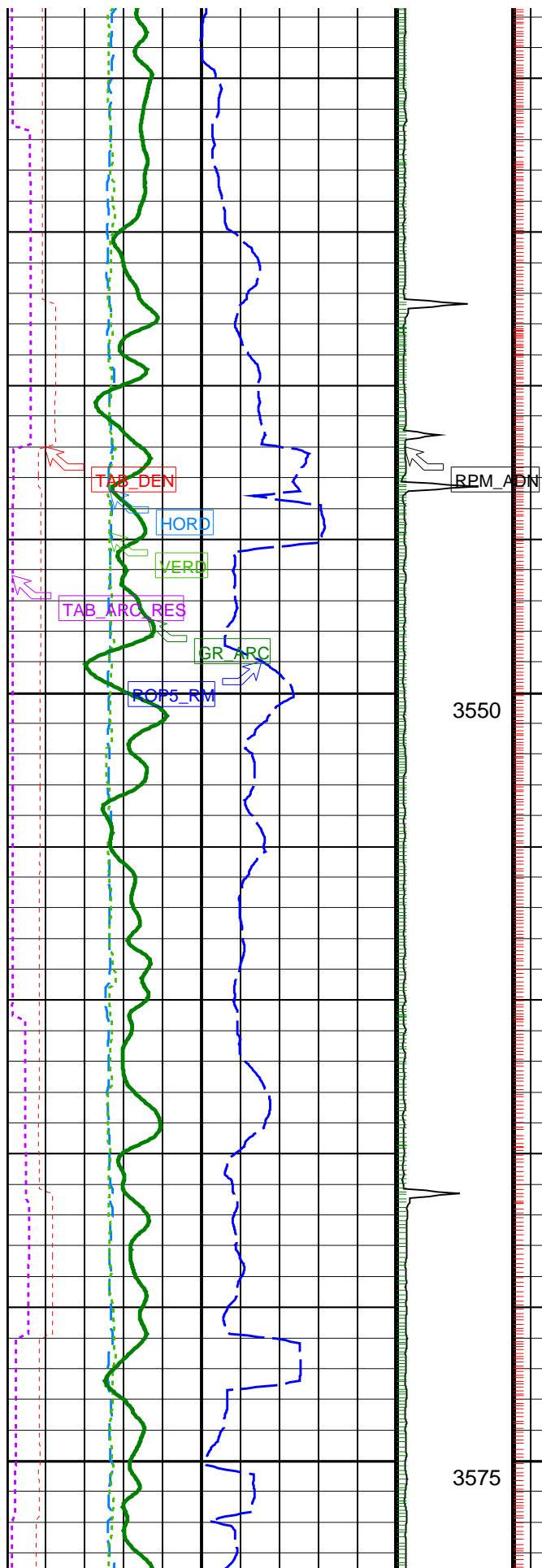
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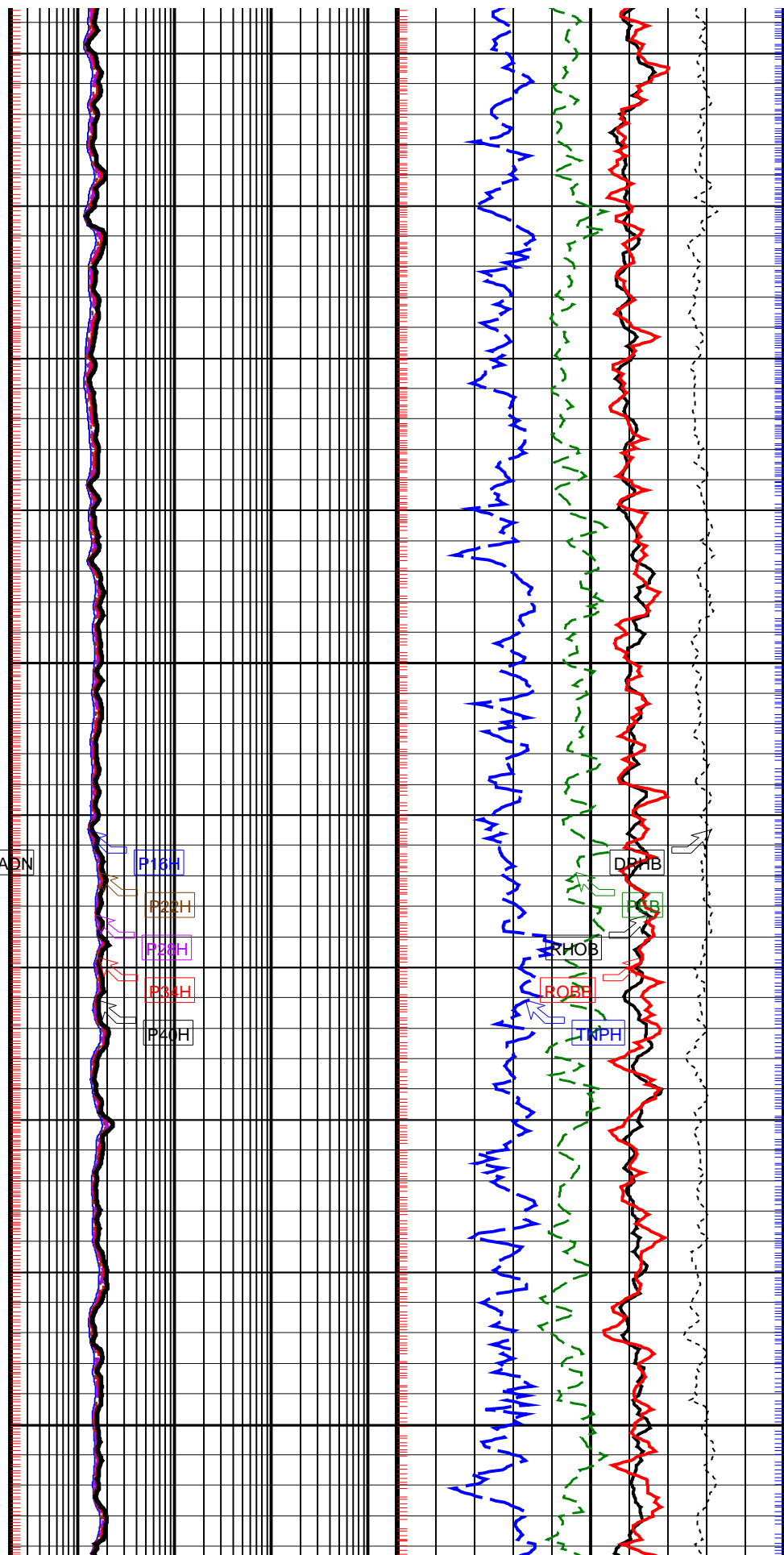
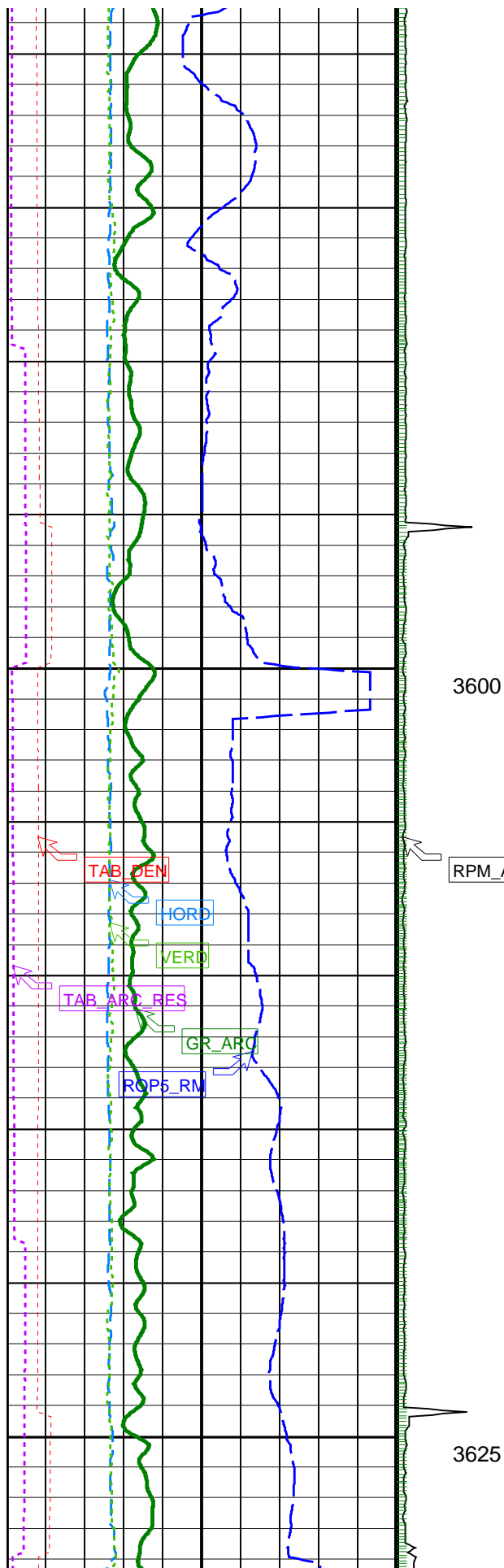
RPM_ADN

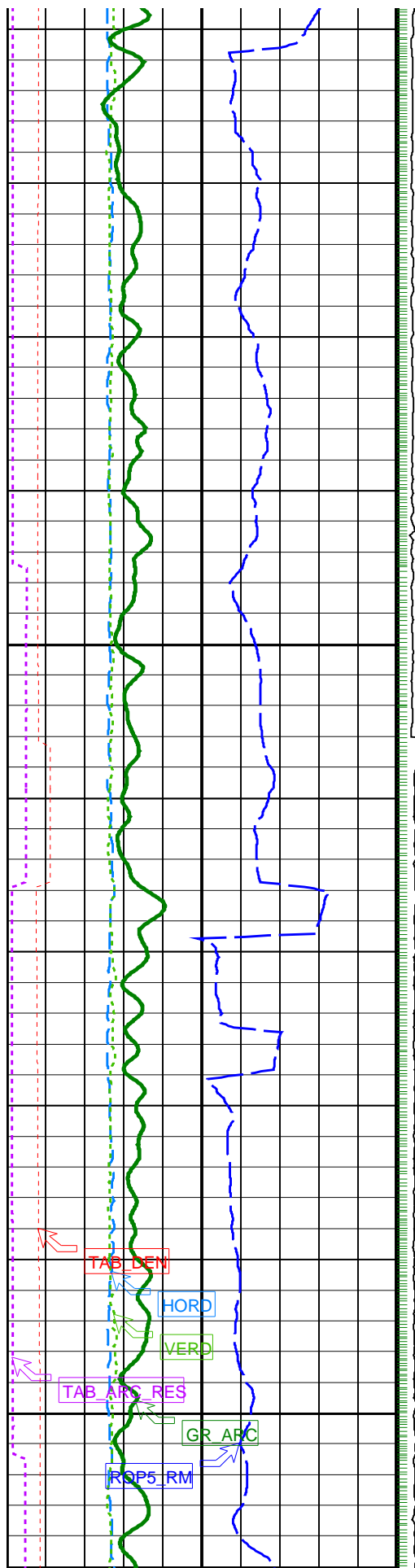








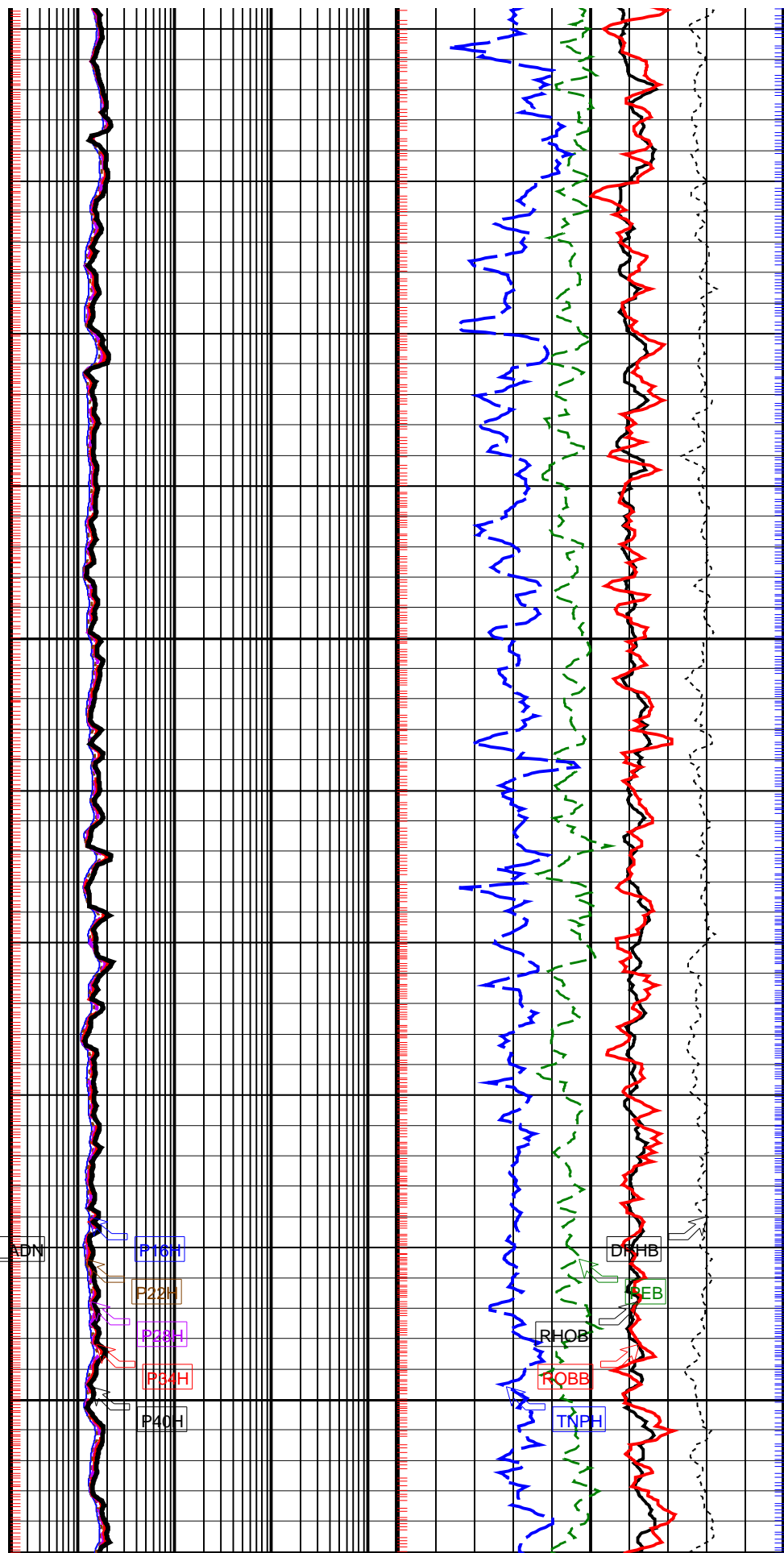


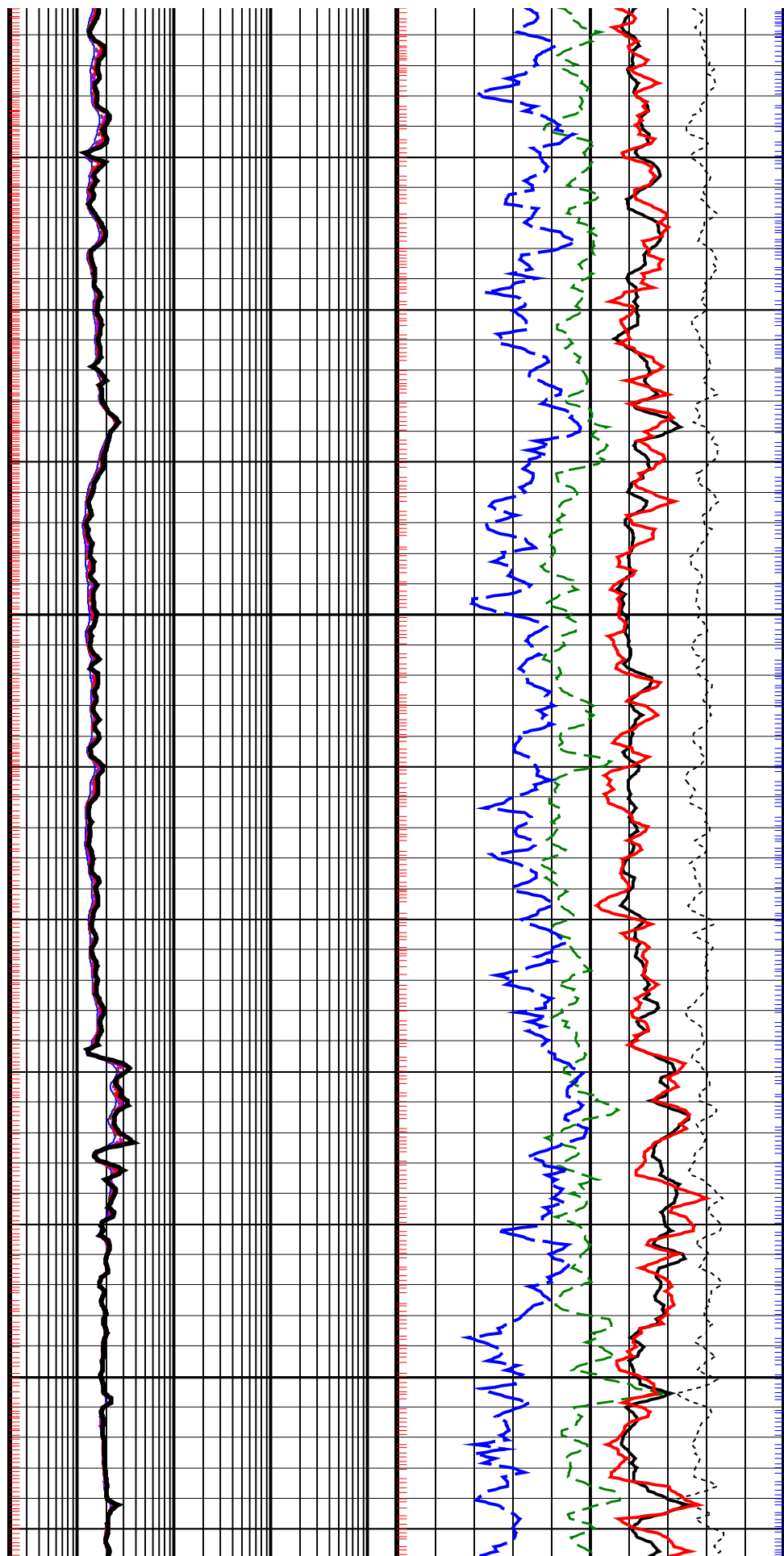
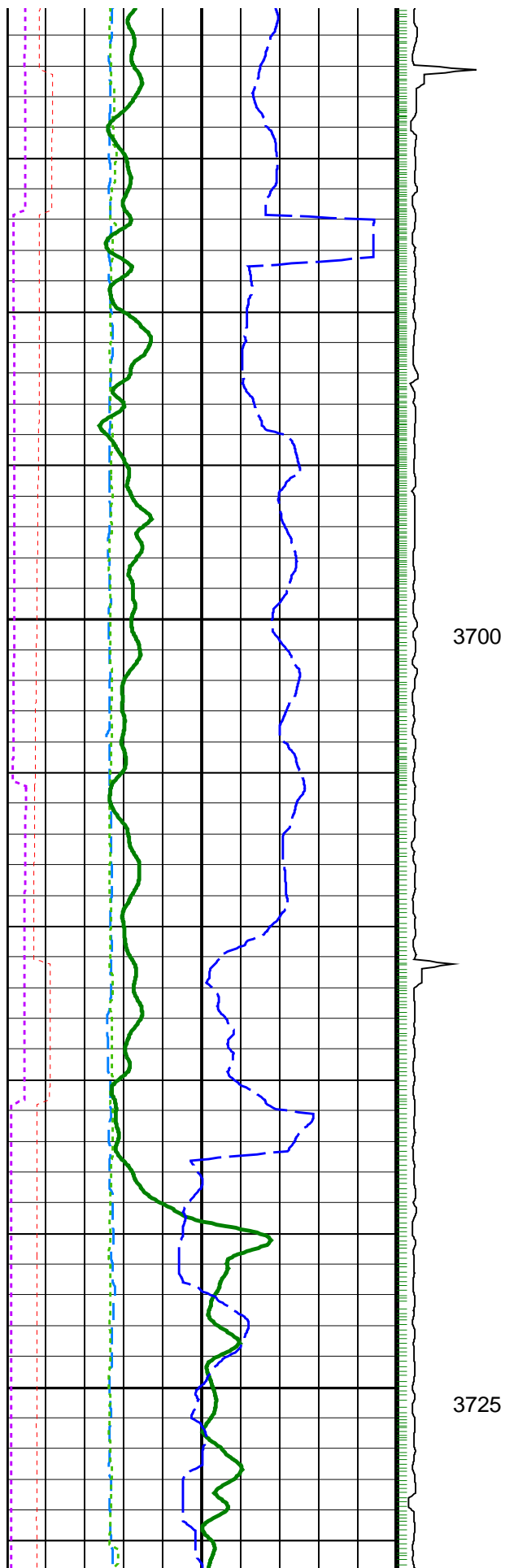


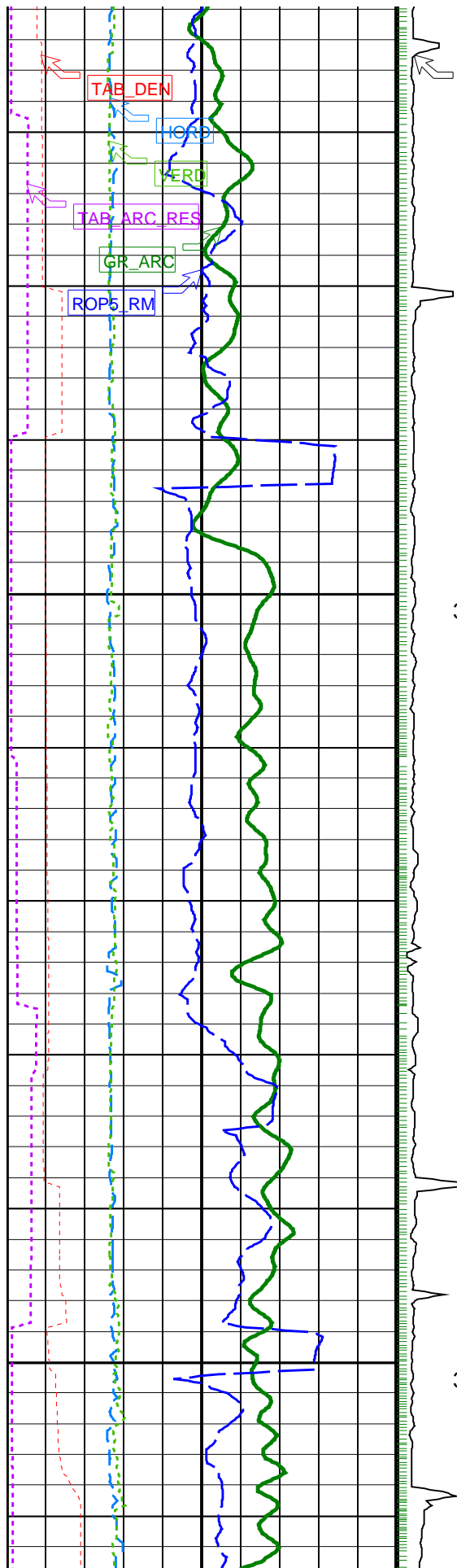
3650

RPM ADN

3675



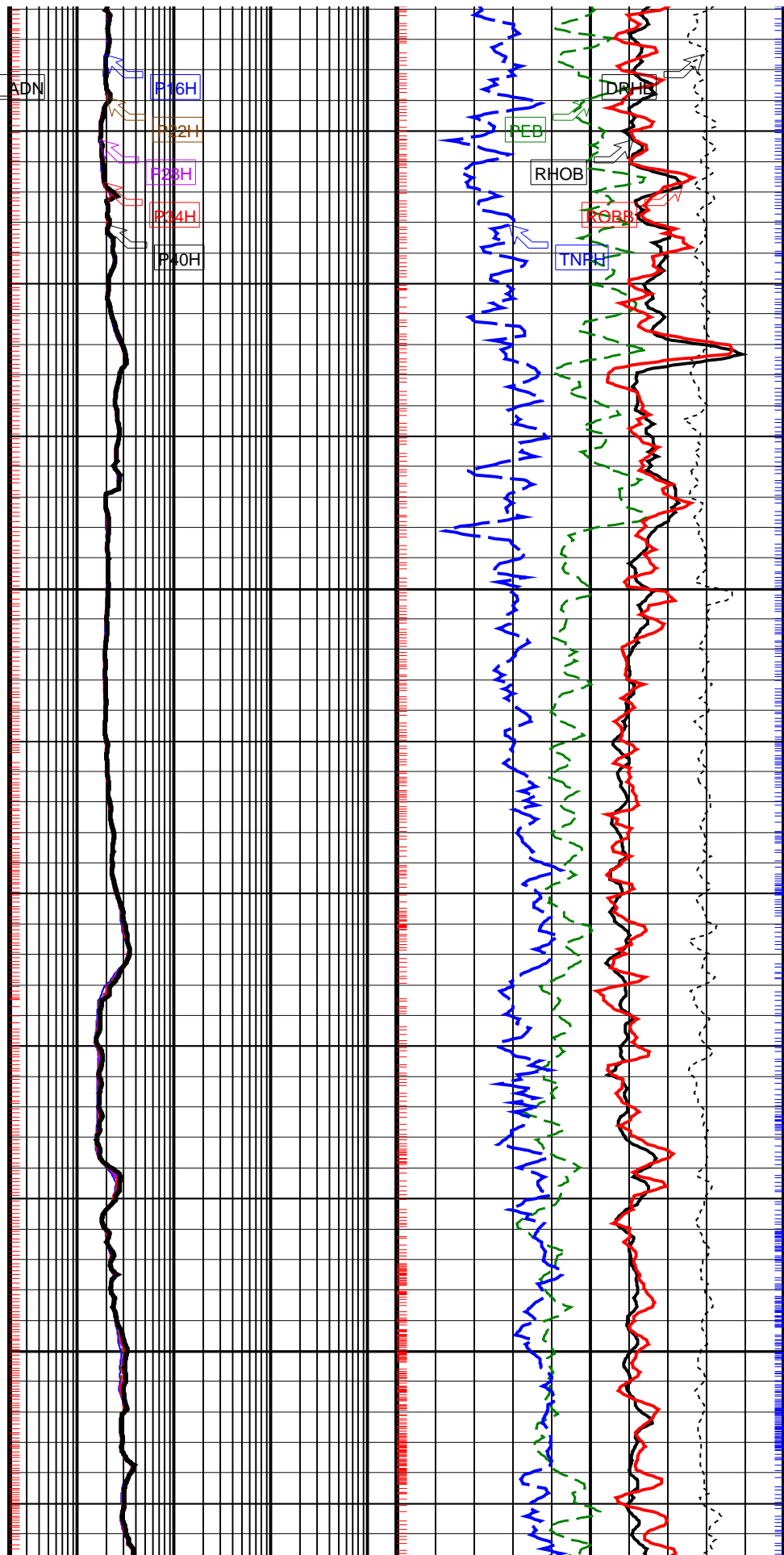




RPM ADN

3750

3775



P16H

P321H

P33H

P34H

P40H

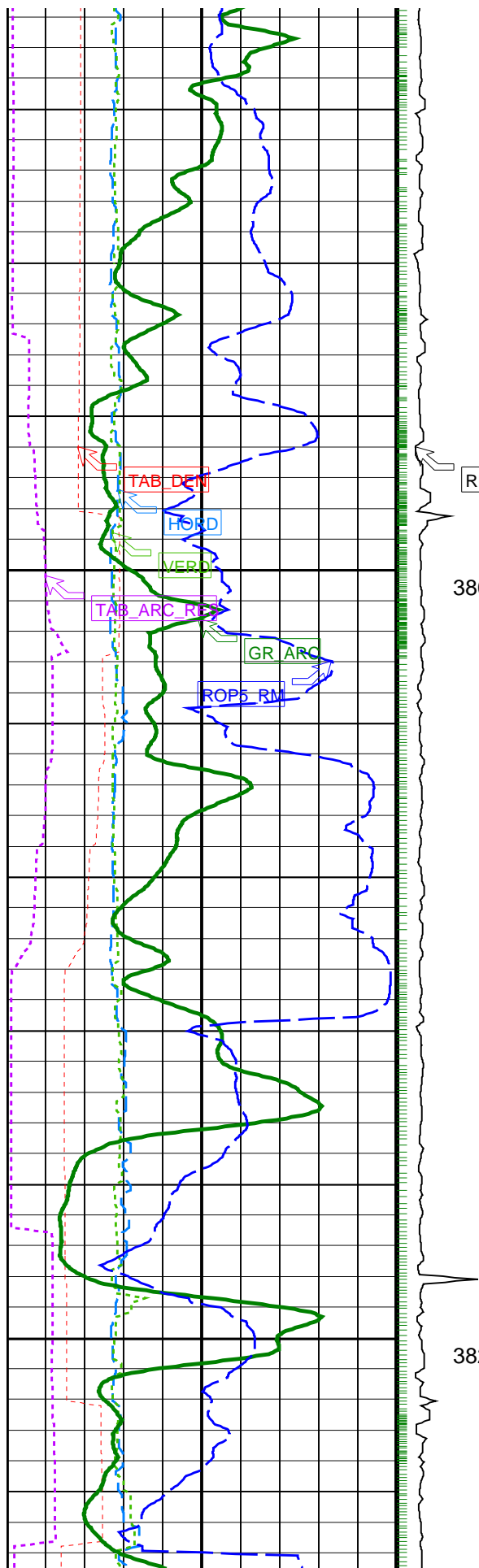
DRTH

PEB

RHOB

ROBB

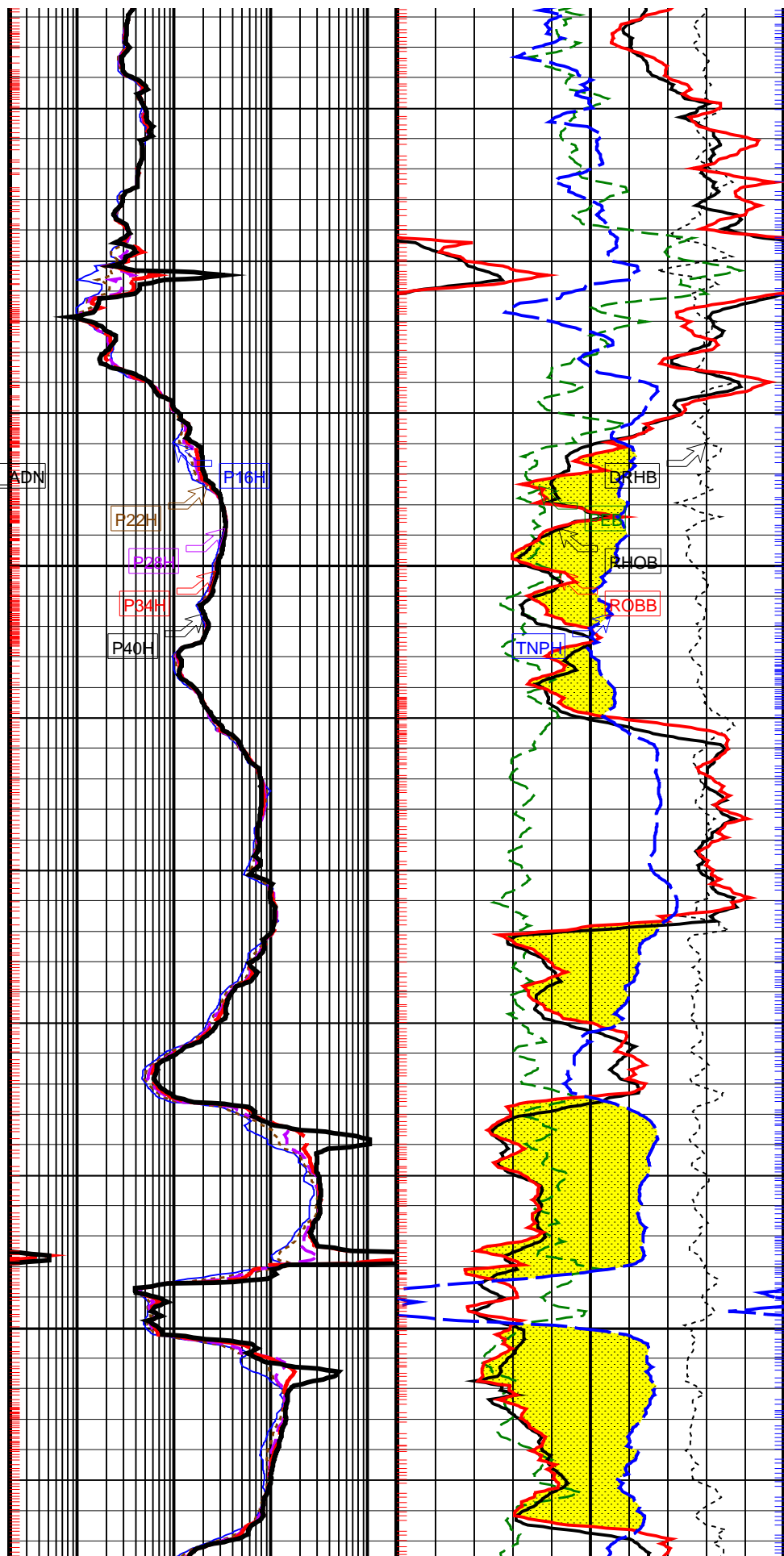
TNPR

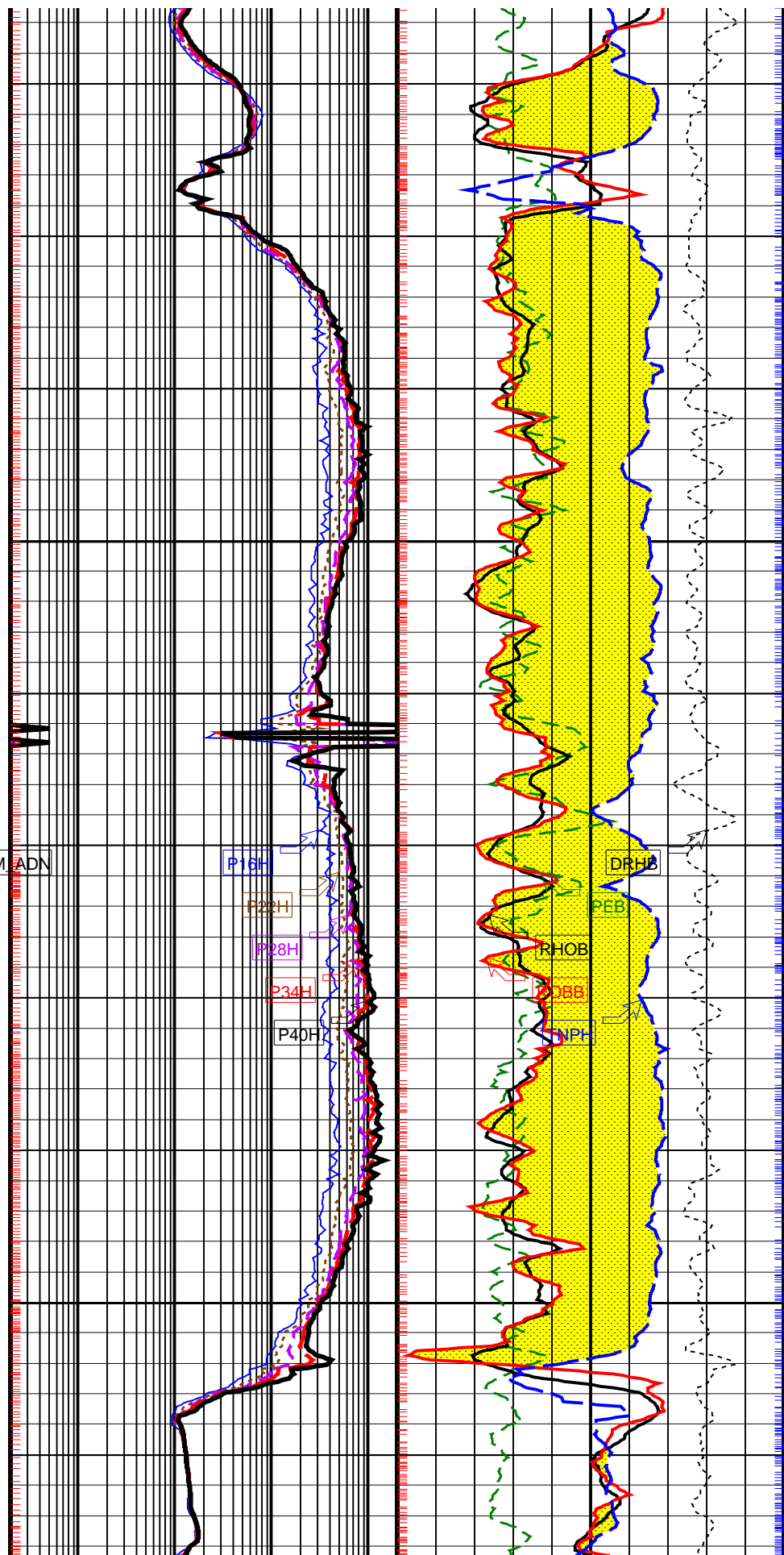
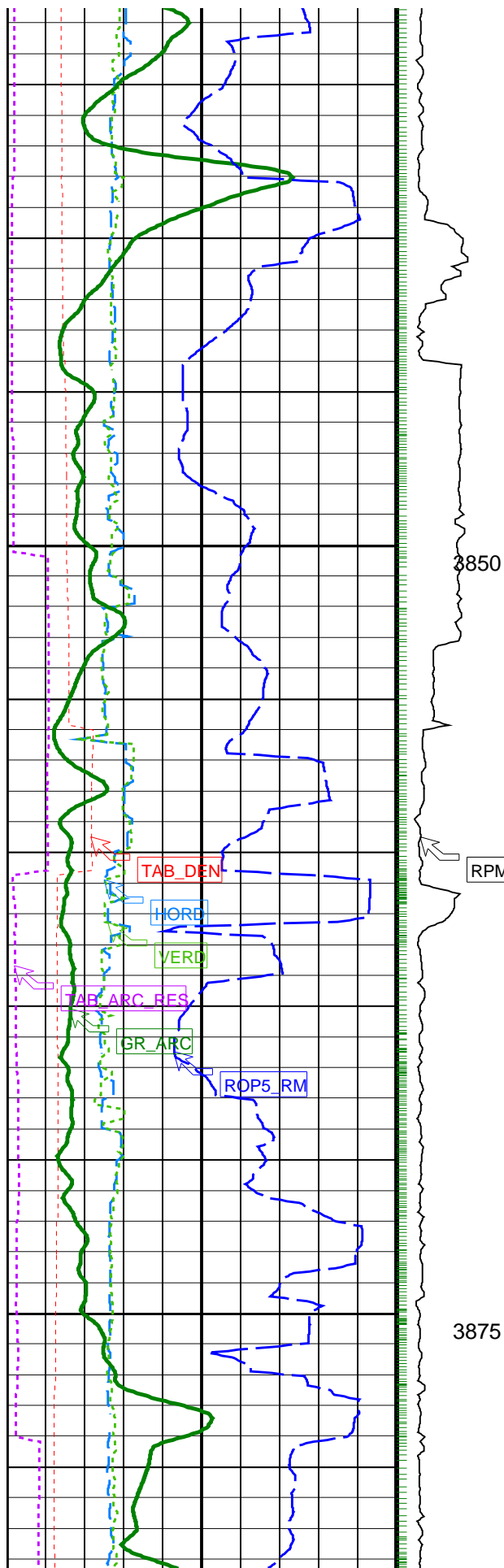


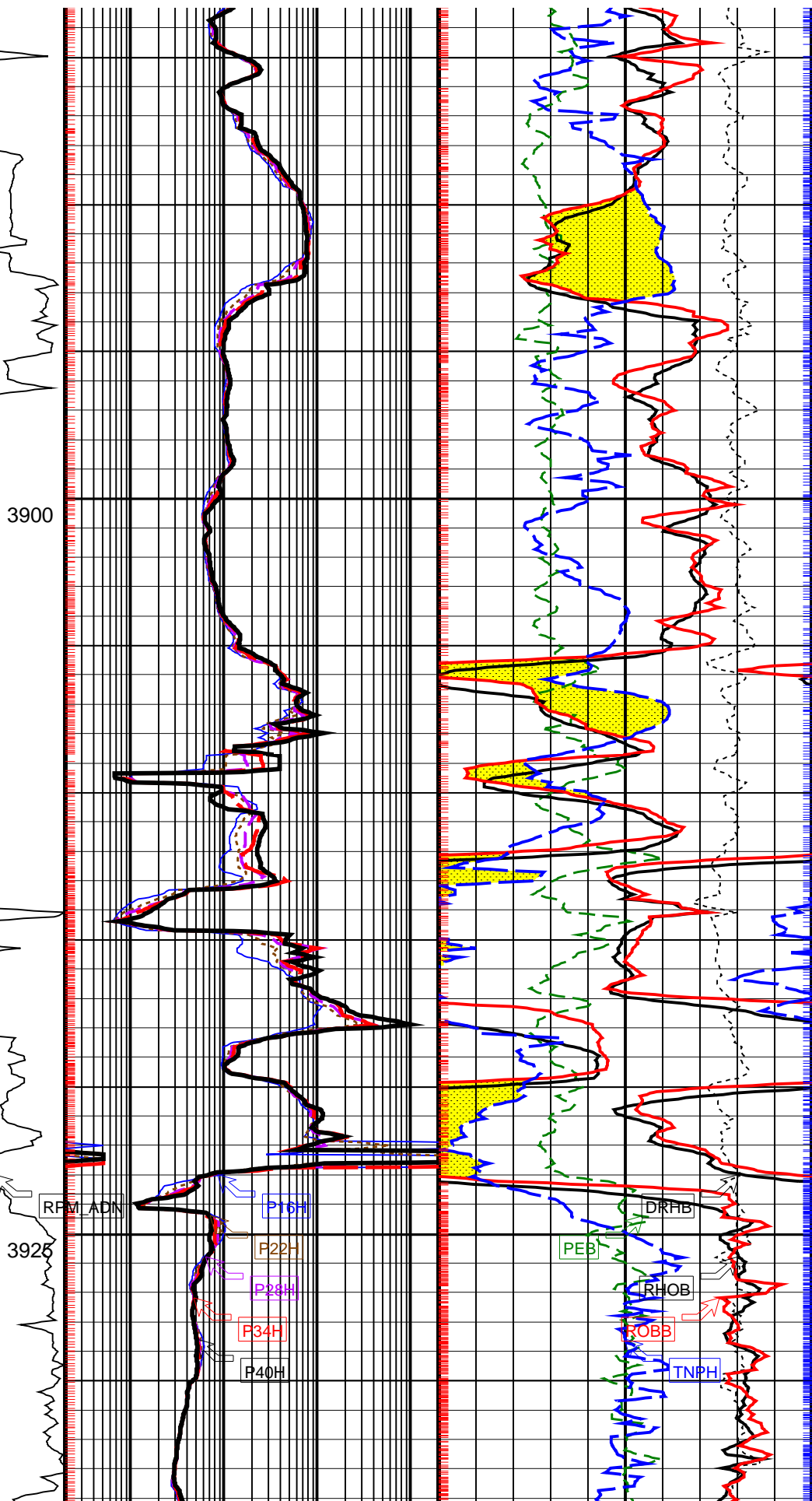
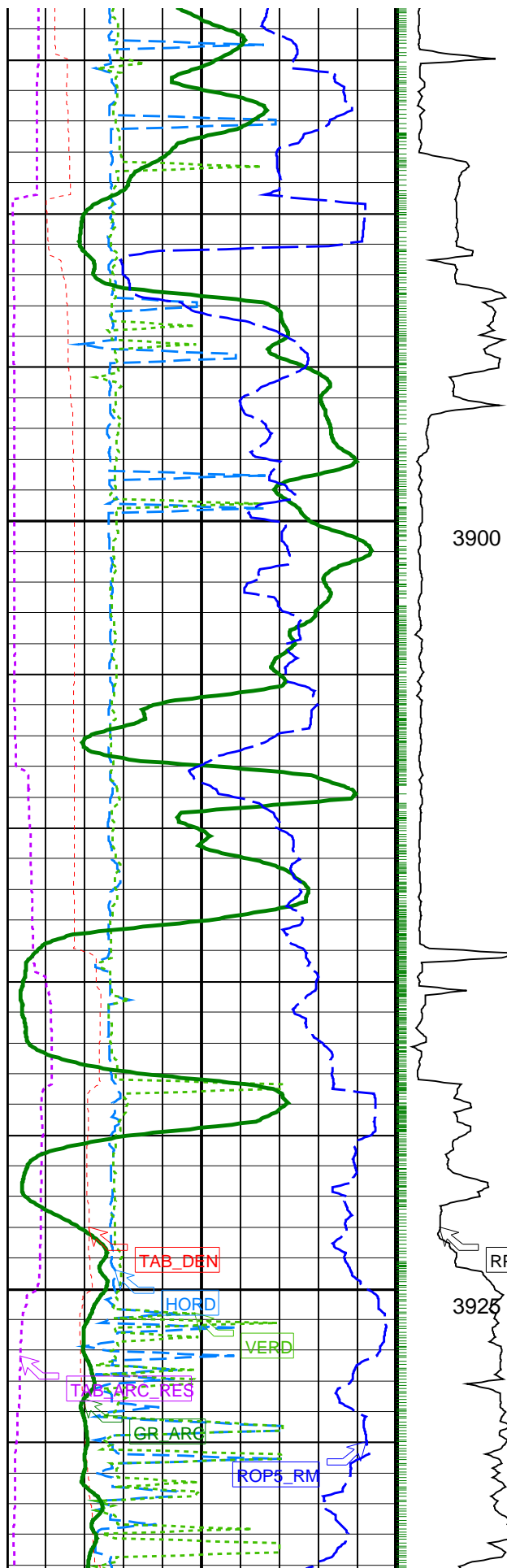
RPM ADN

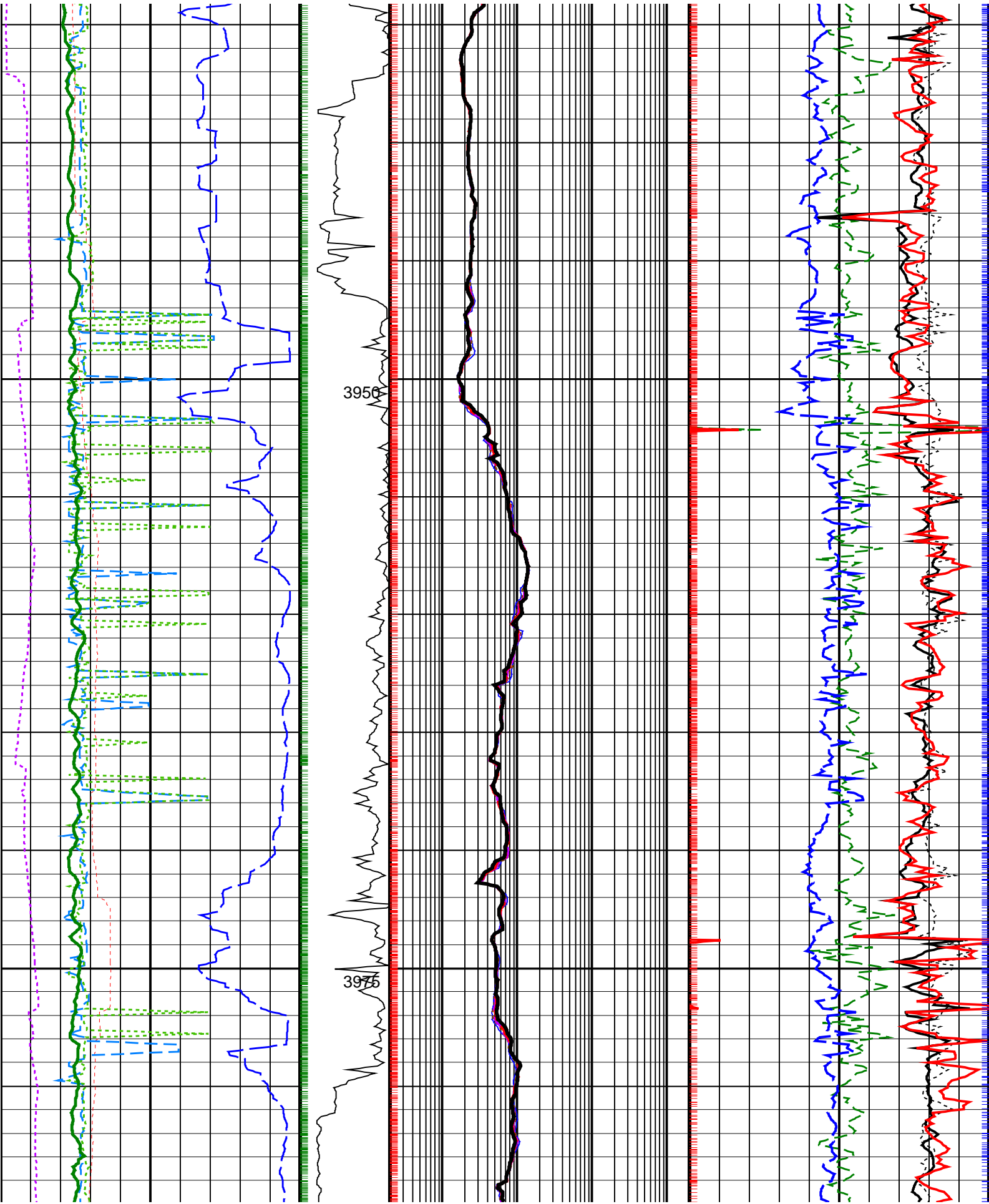
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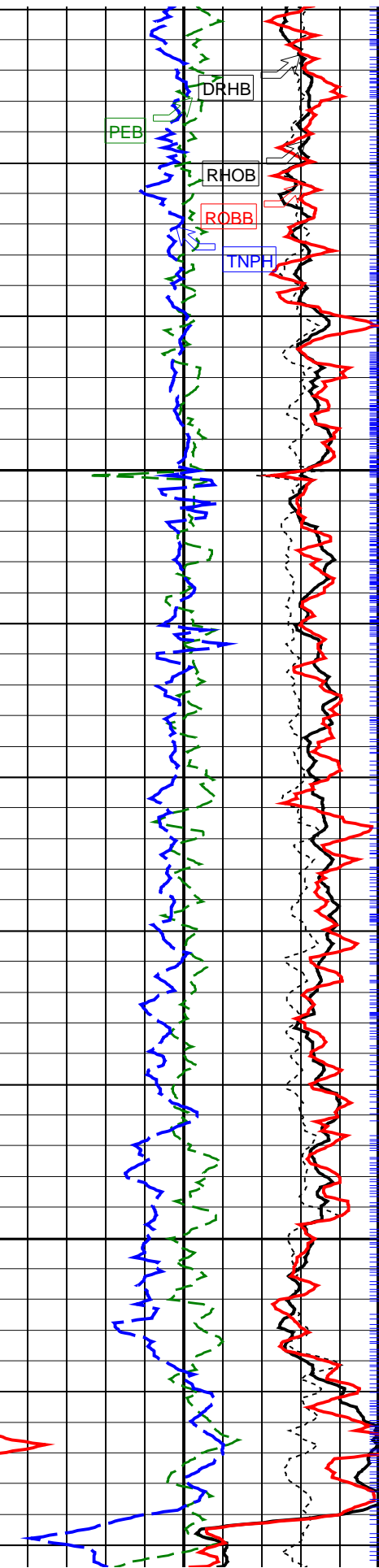
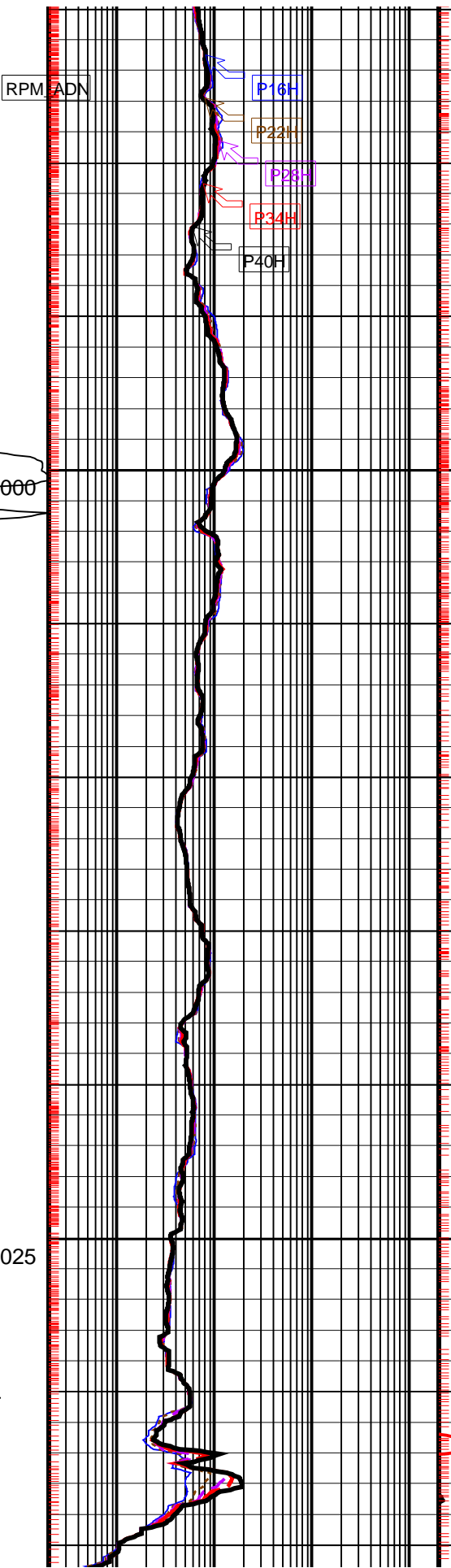
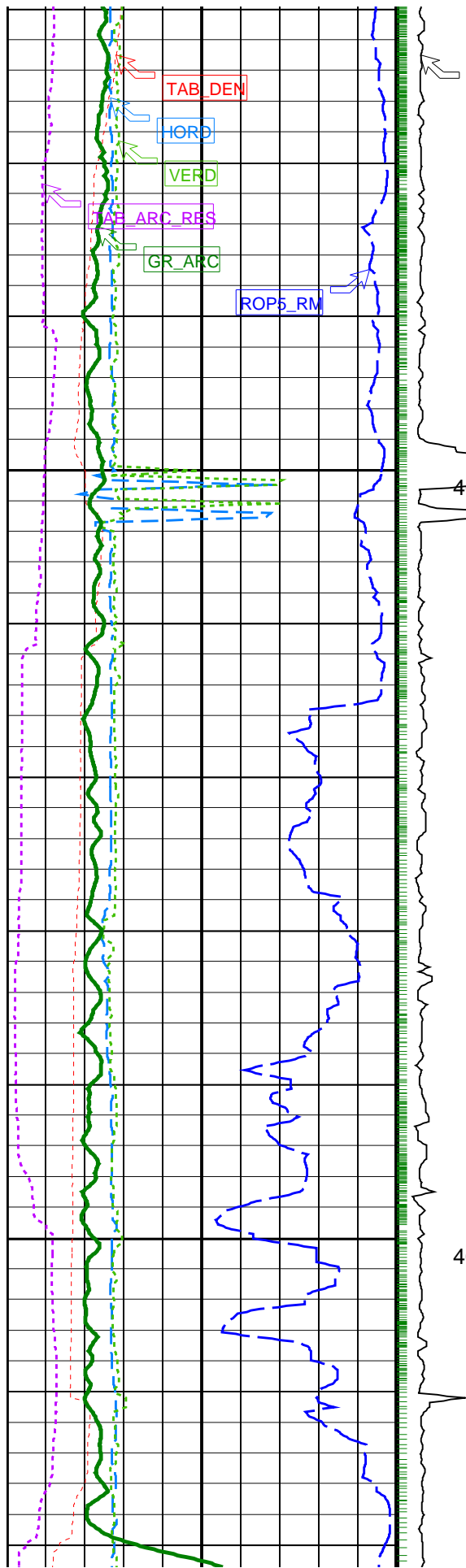
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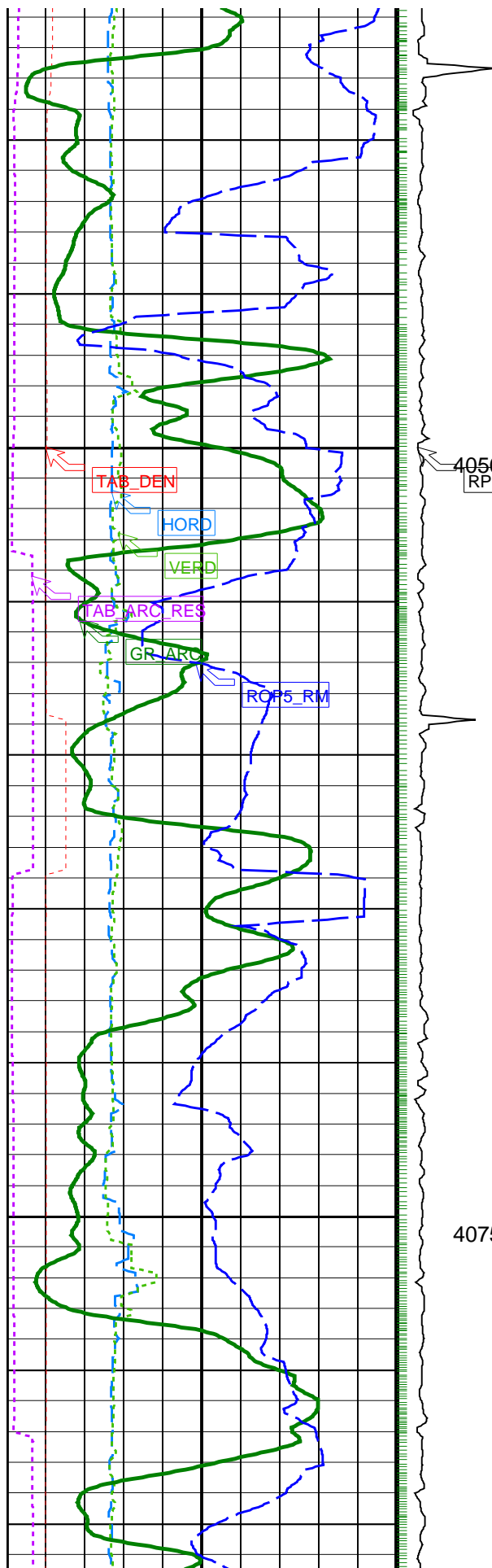






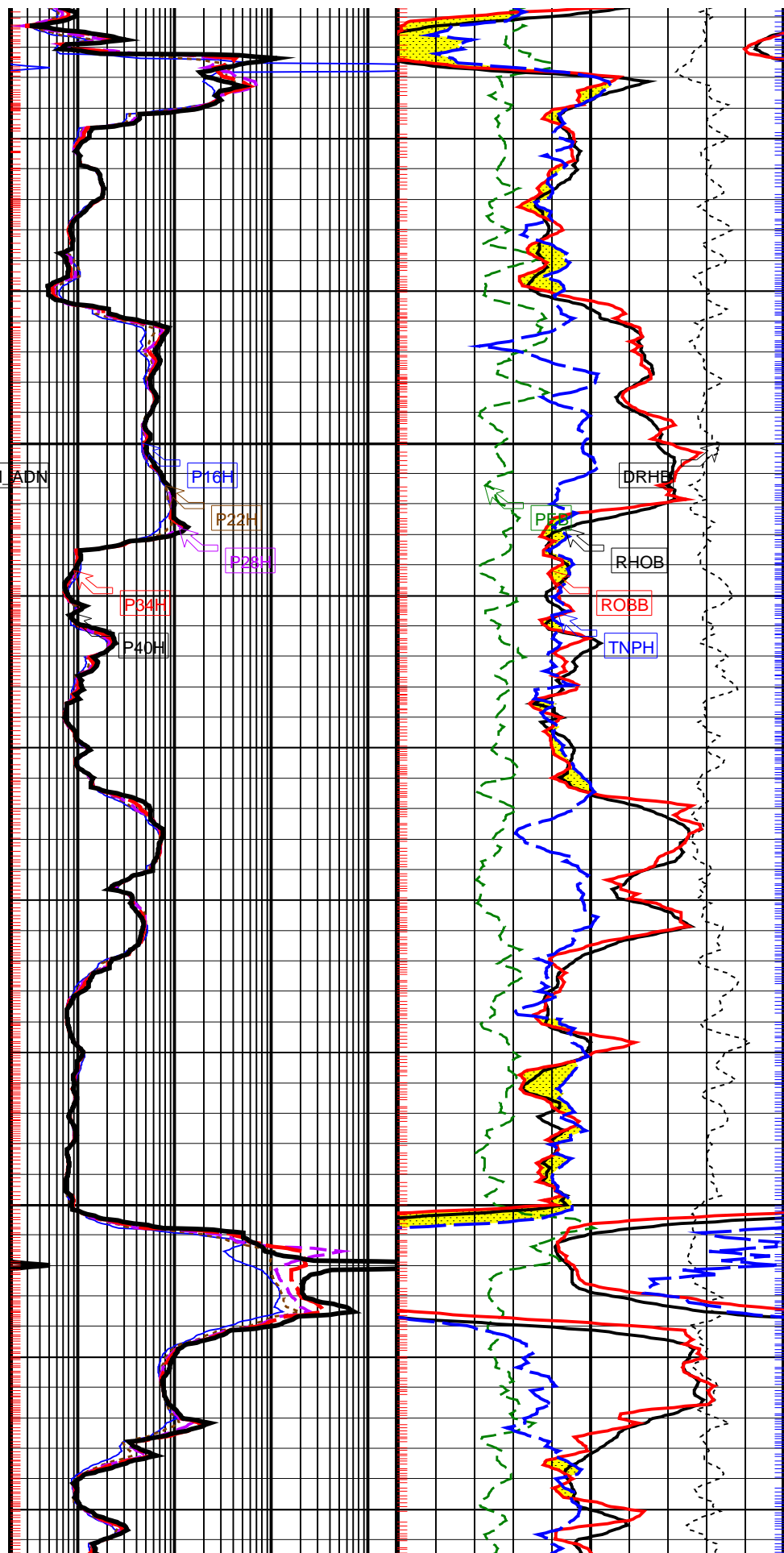


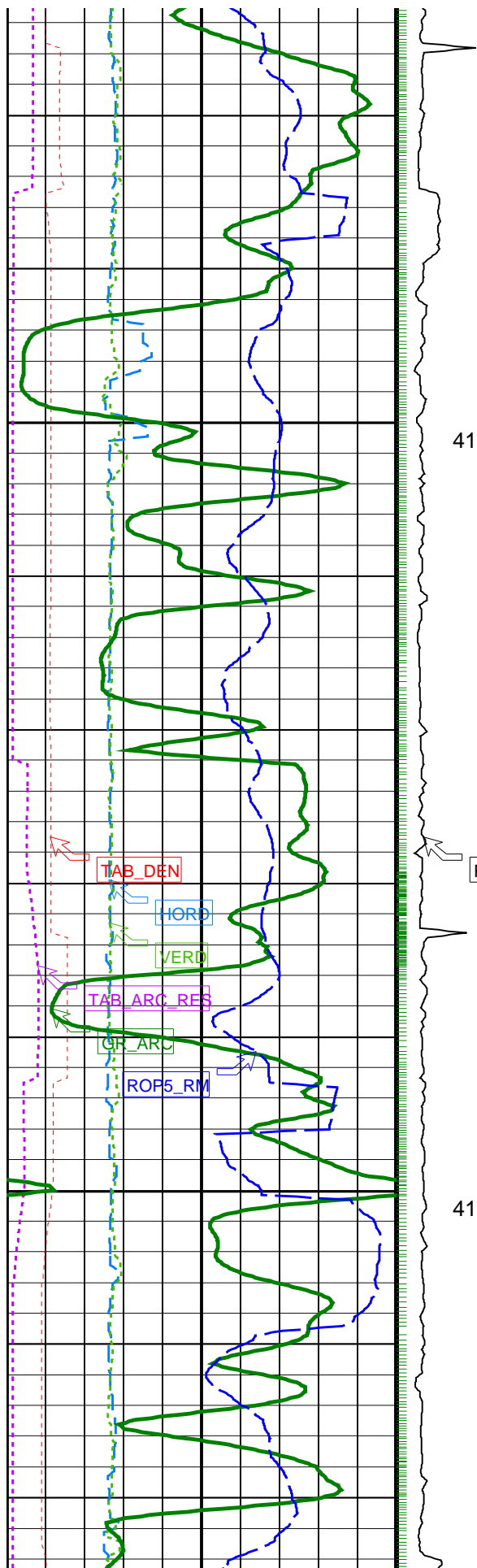




4050
RPM

4075

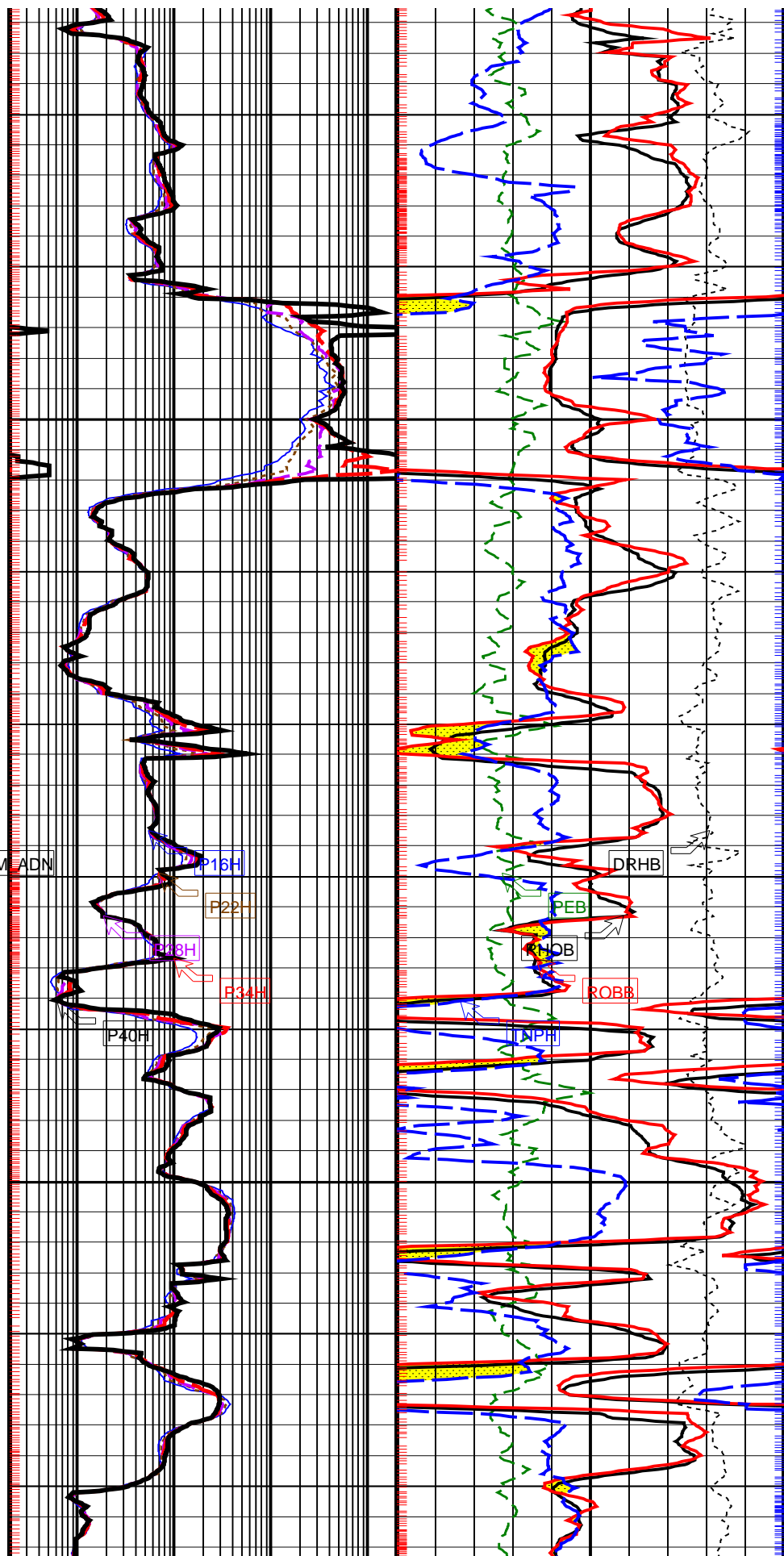


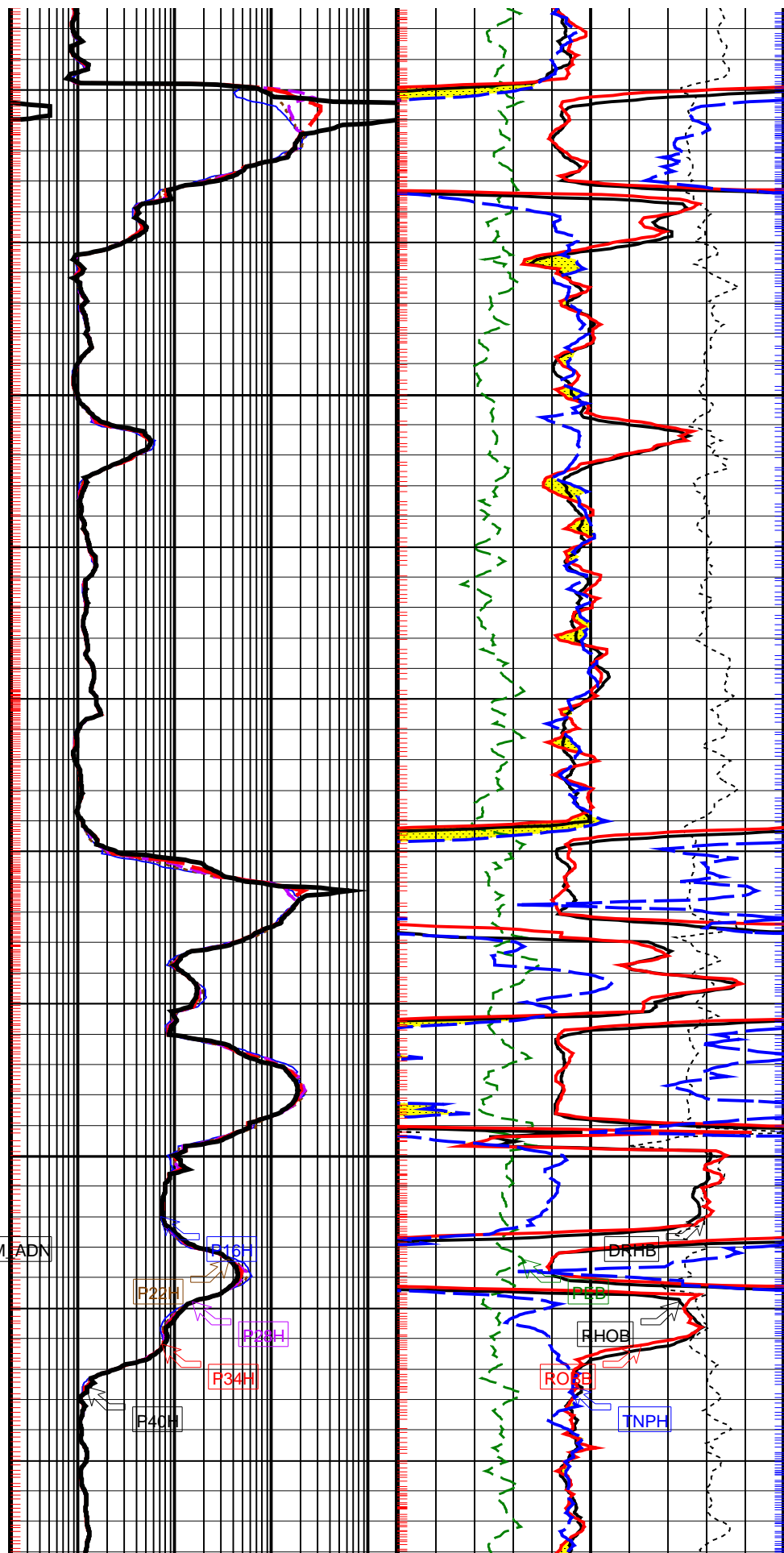
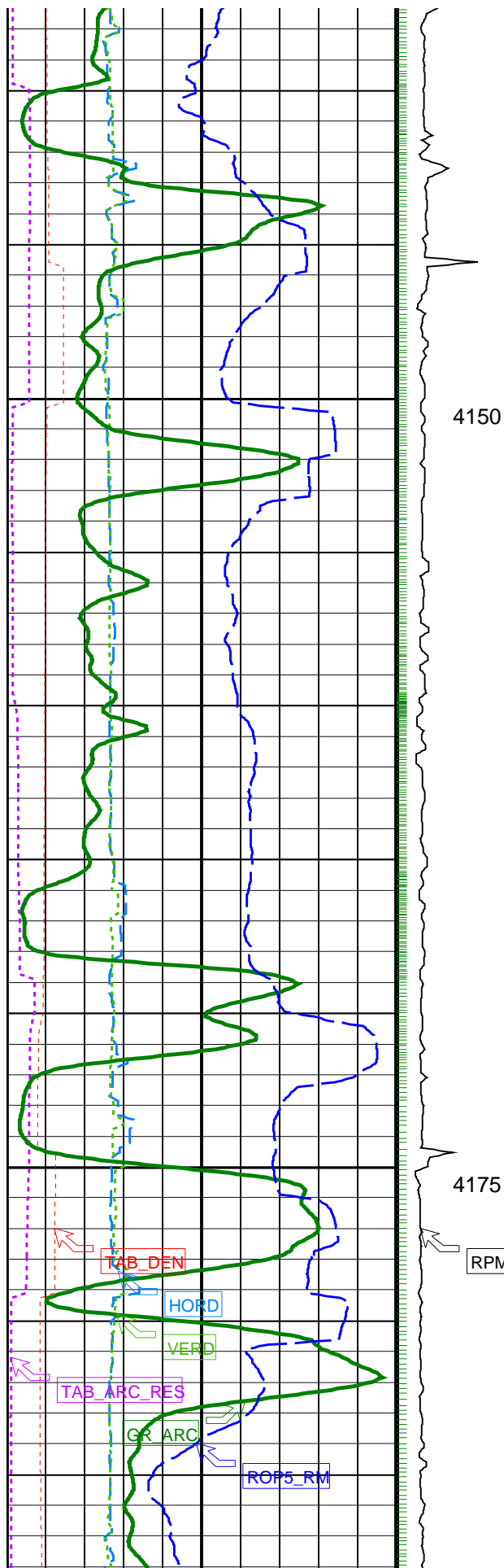


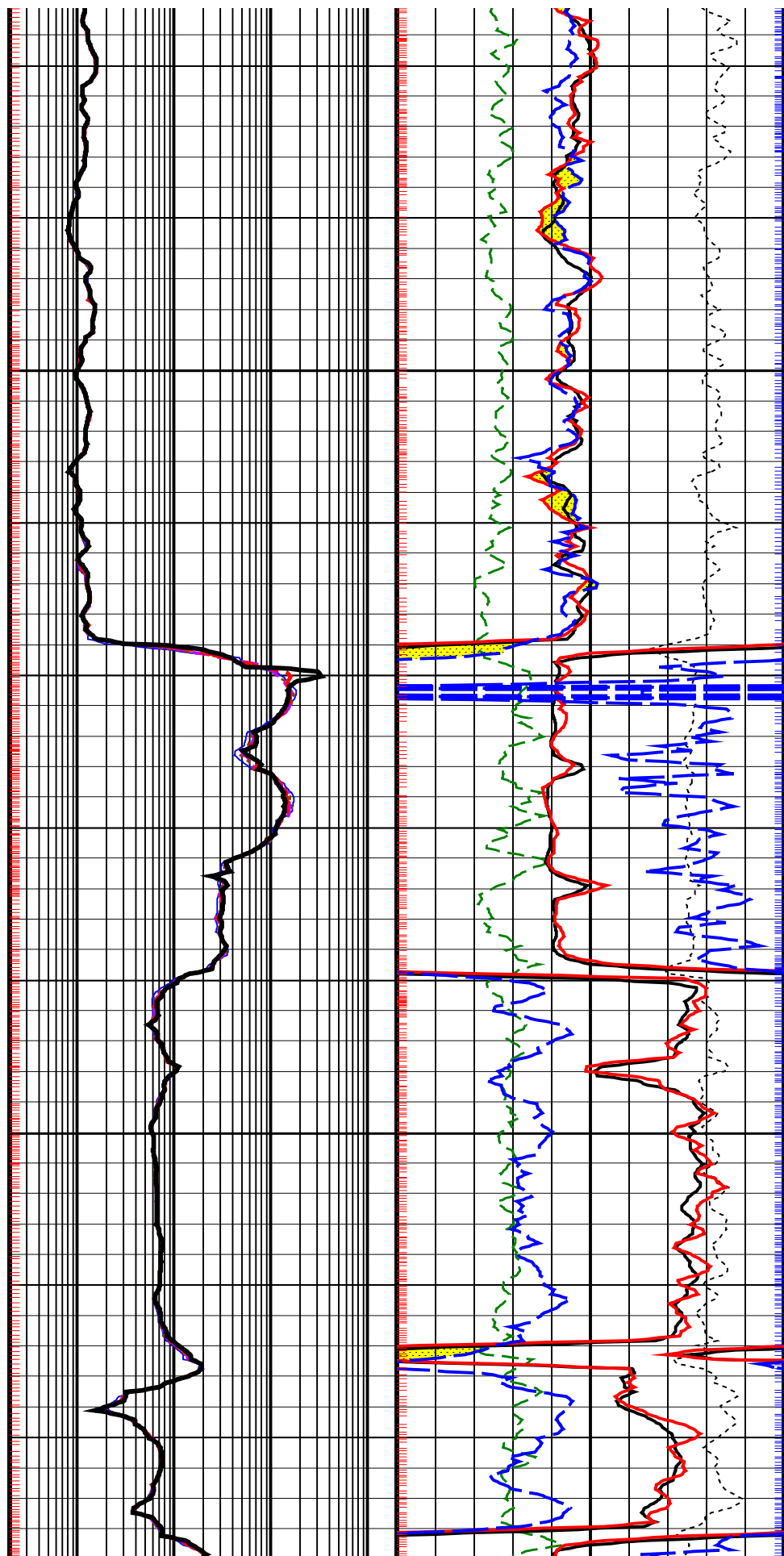
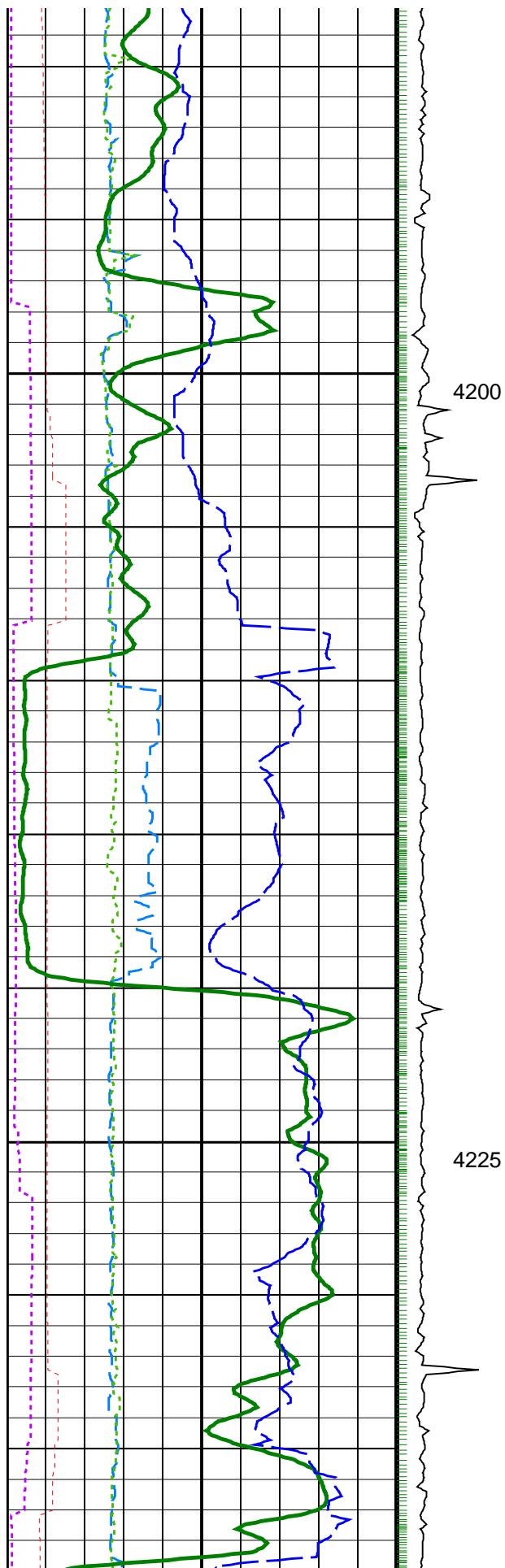
4100

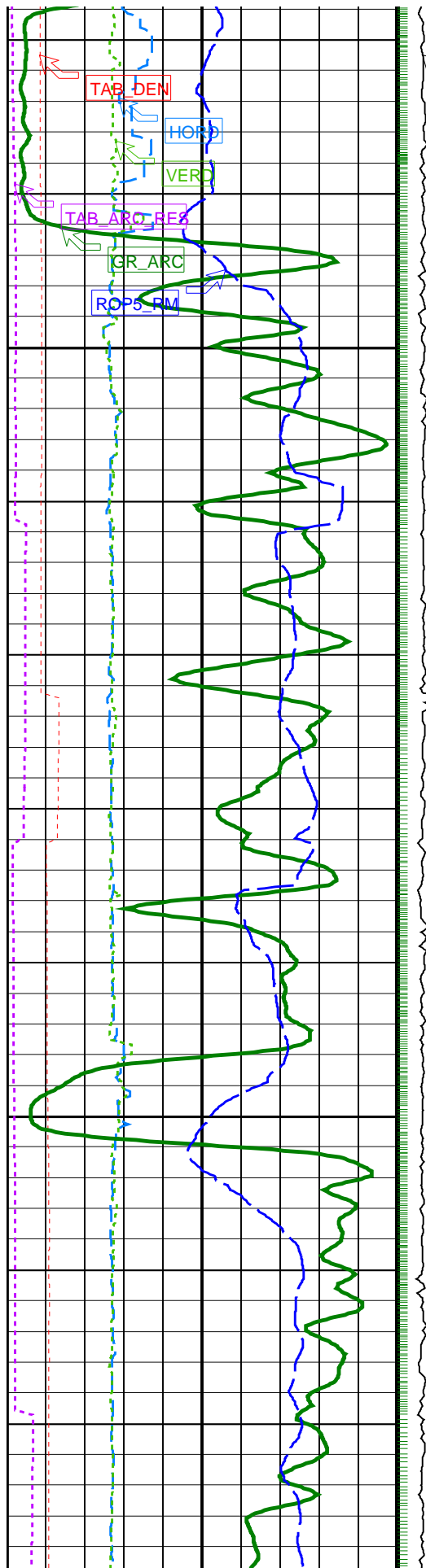
RPM ADN

4125





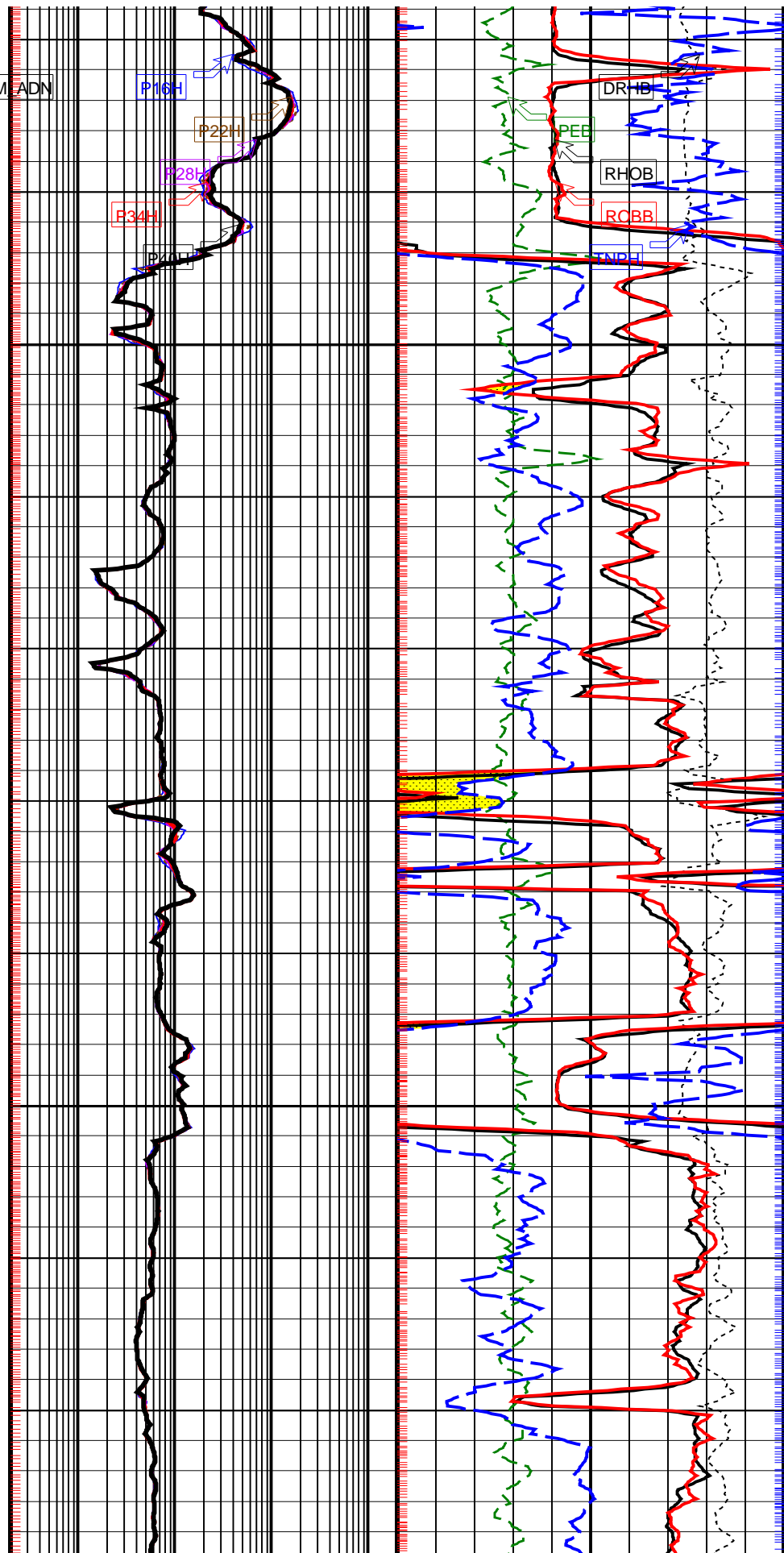


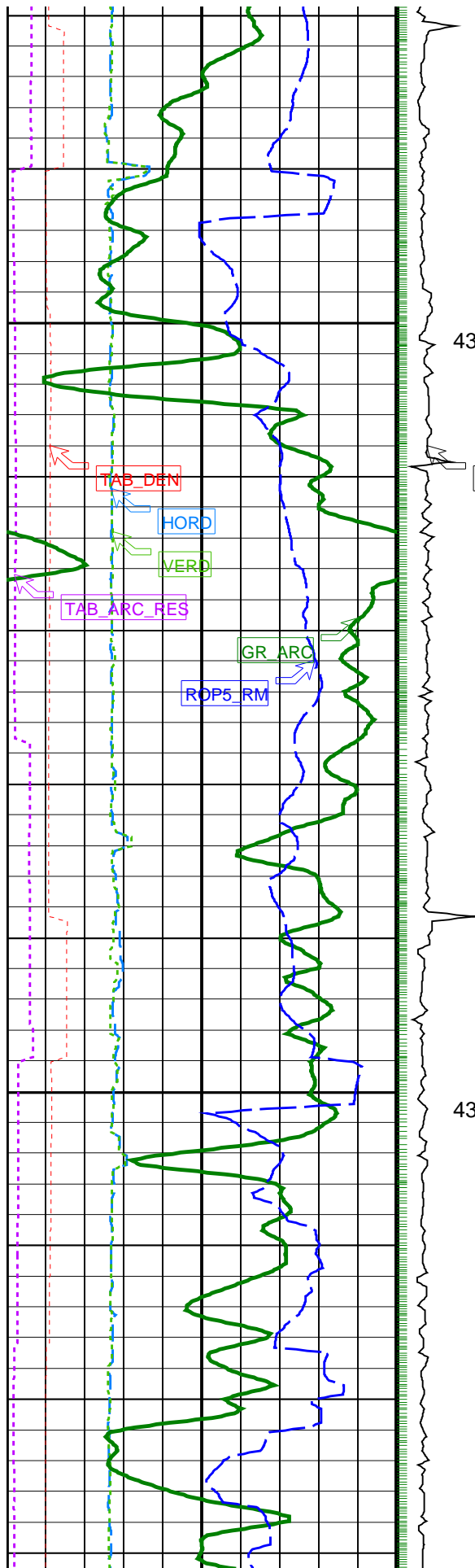


RPM ADN

4250

4275





4300

RPM ADN

P16H

P22H

P28H

P34H

P40H

4325

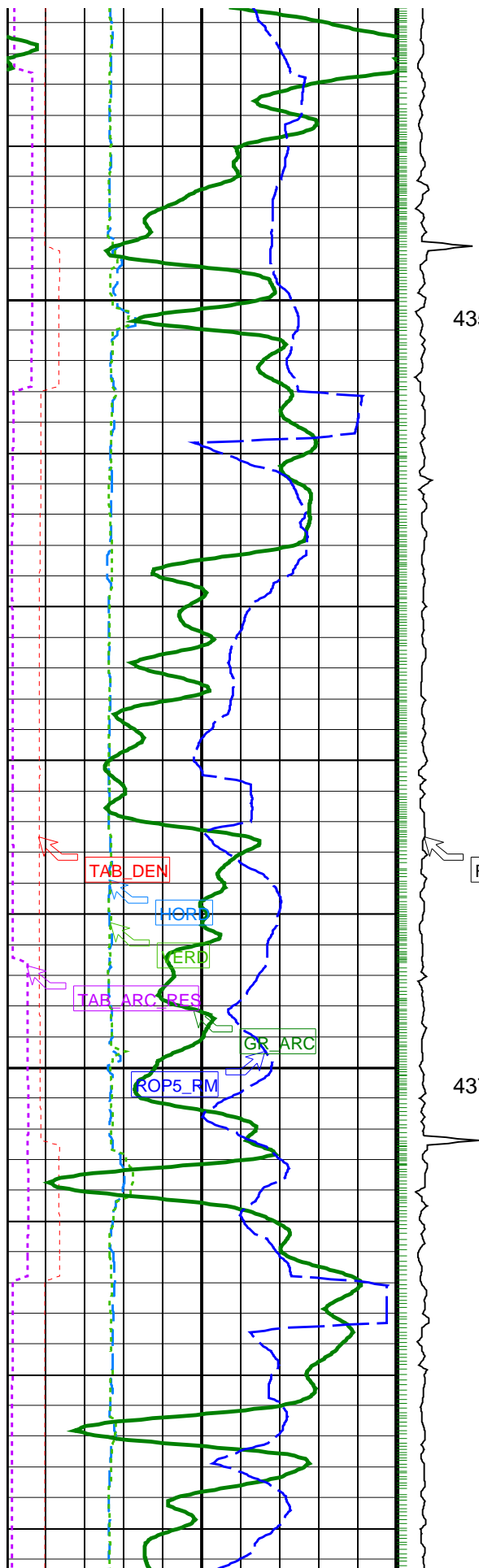
DRFB

PEB

RHOB

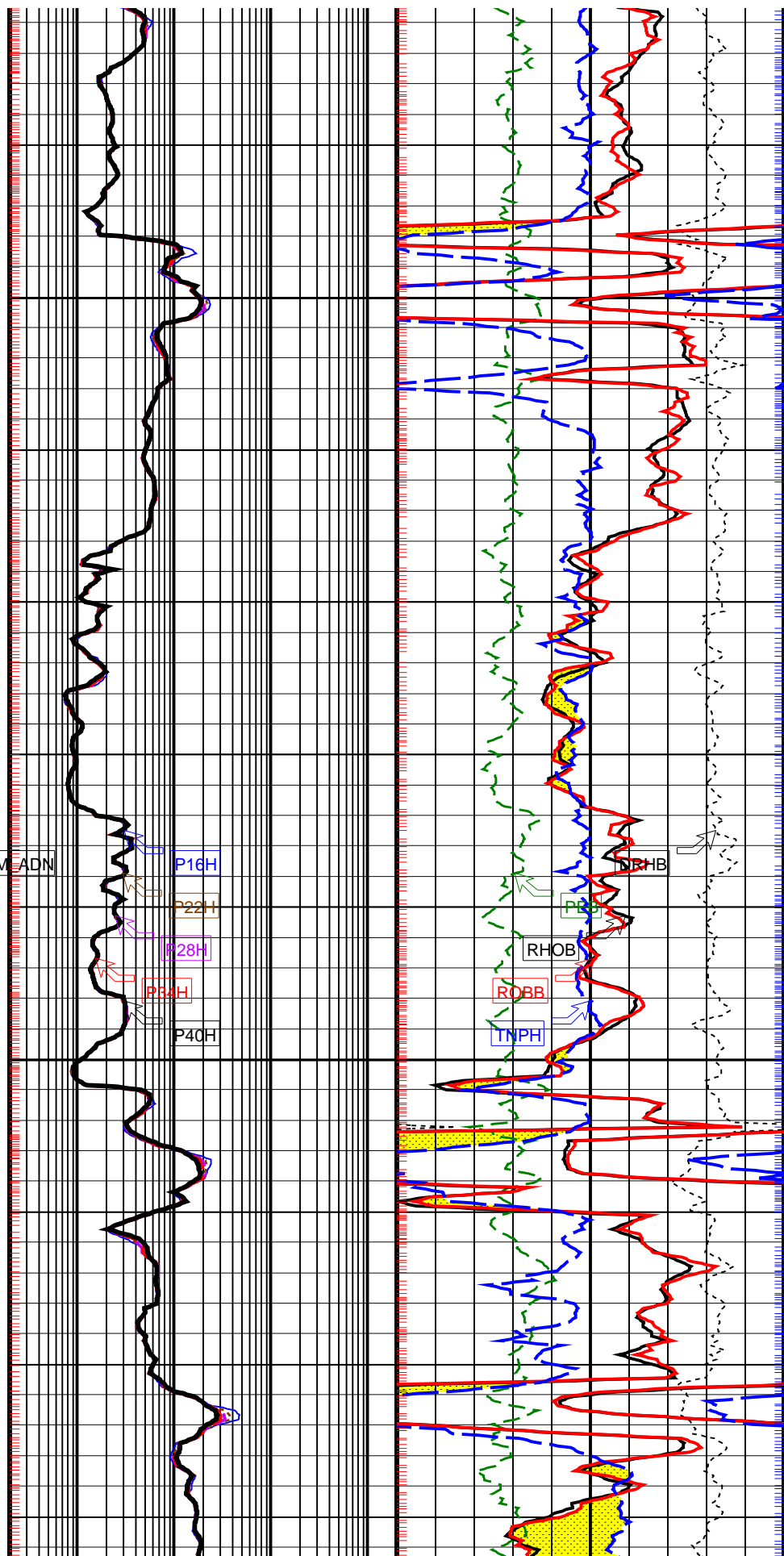
ROBB

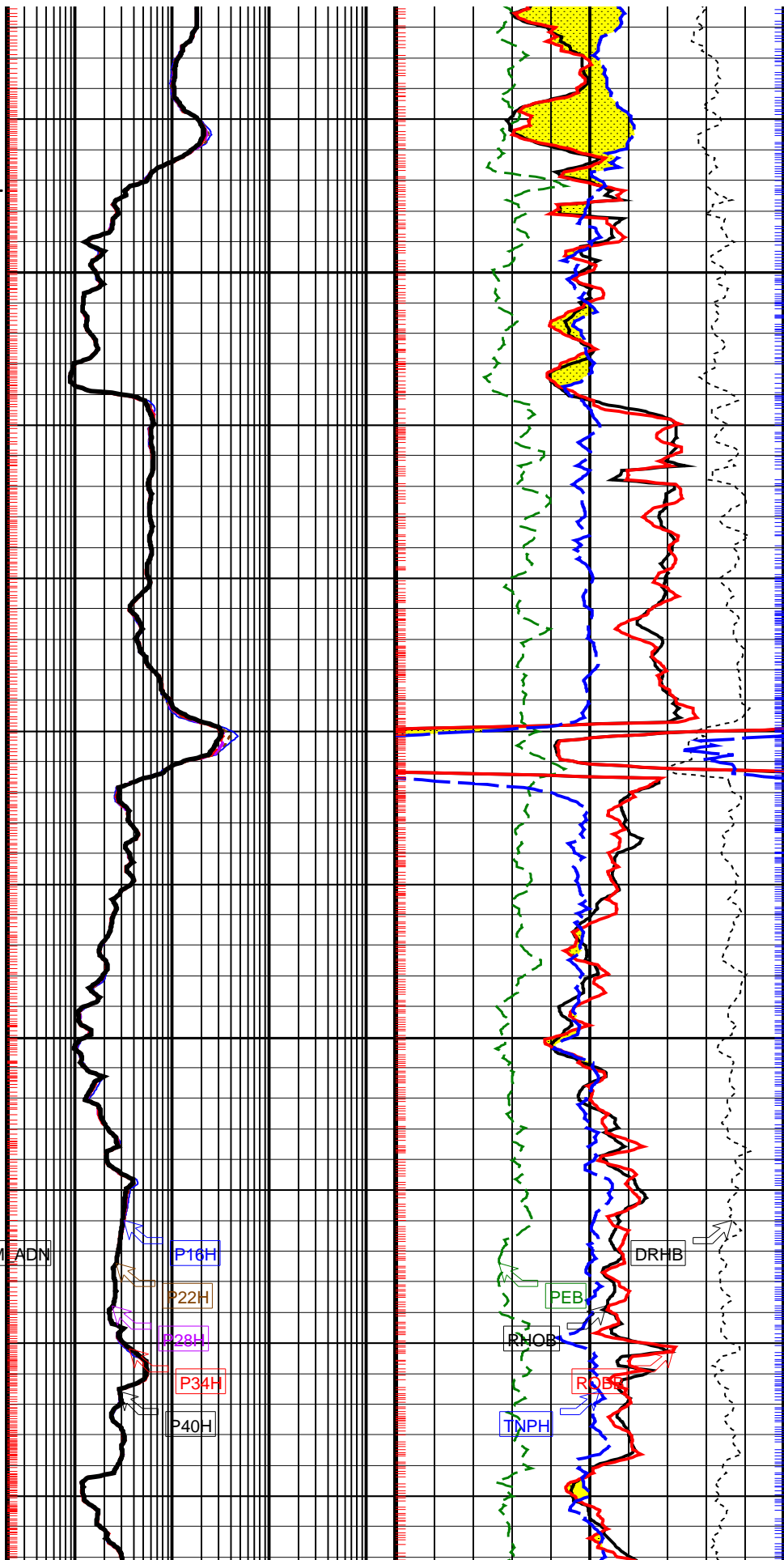
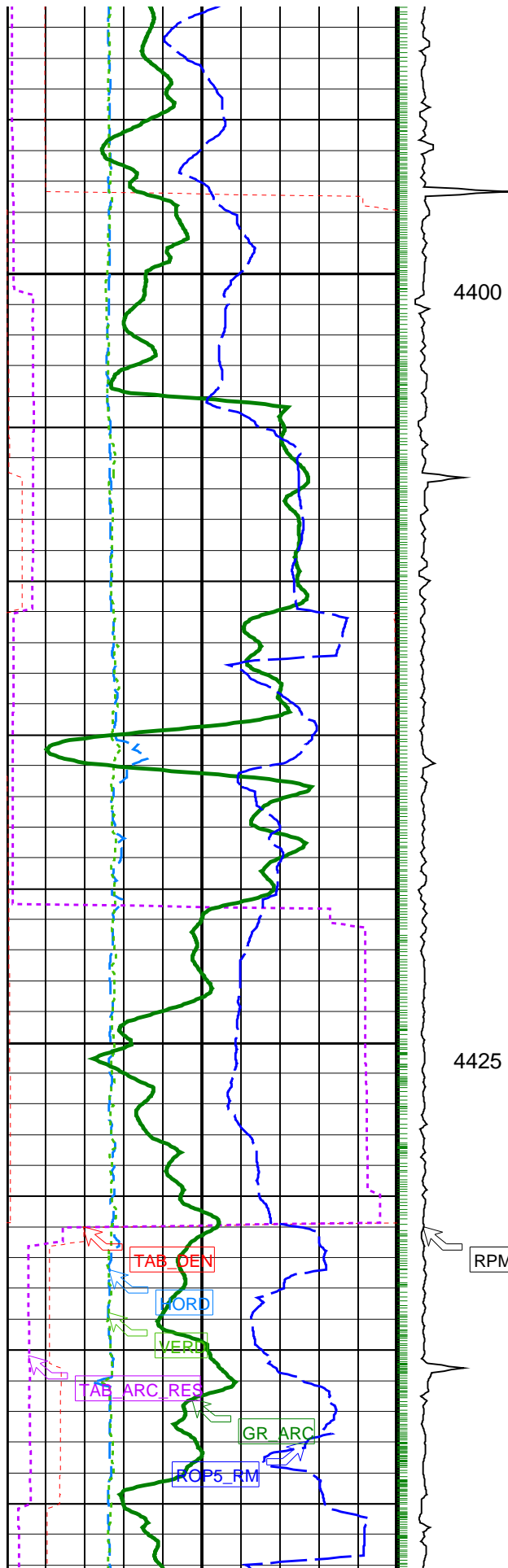
TNPH

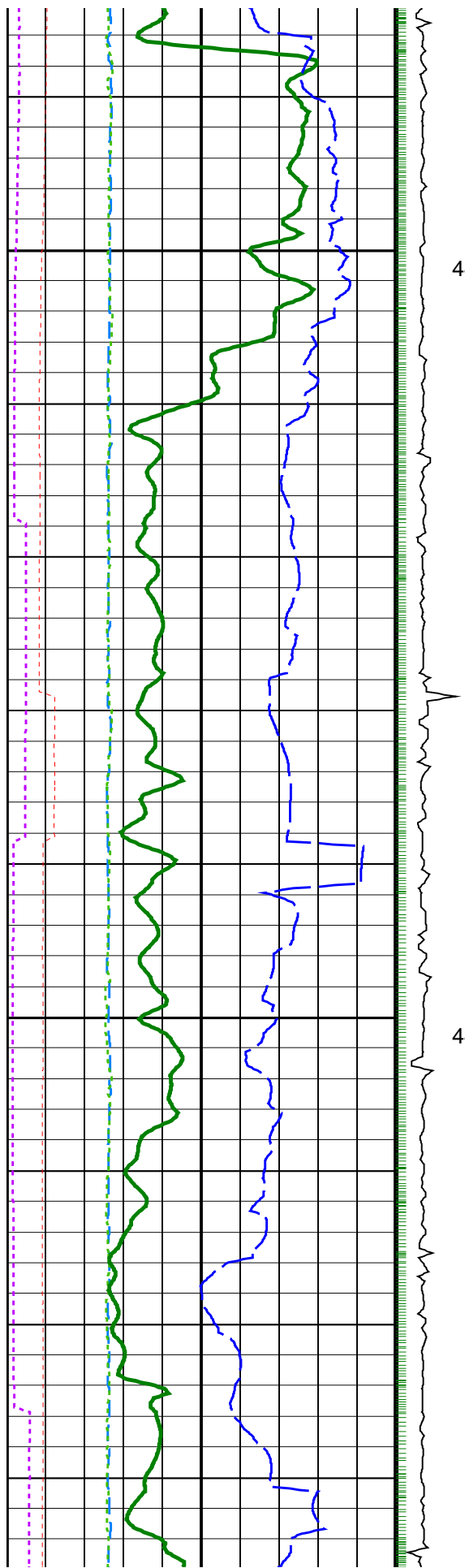


RPM ADN

4375

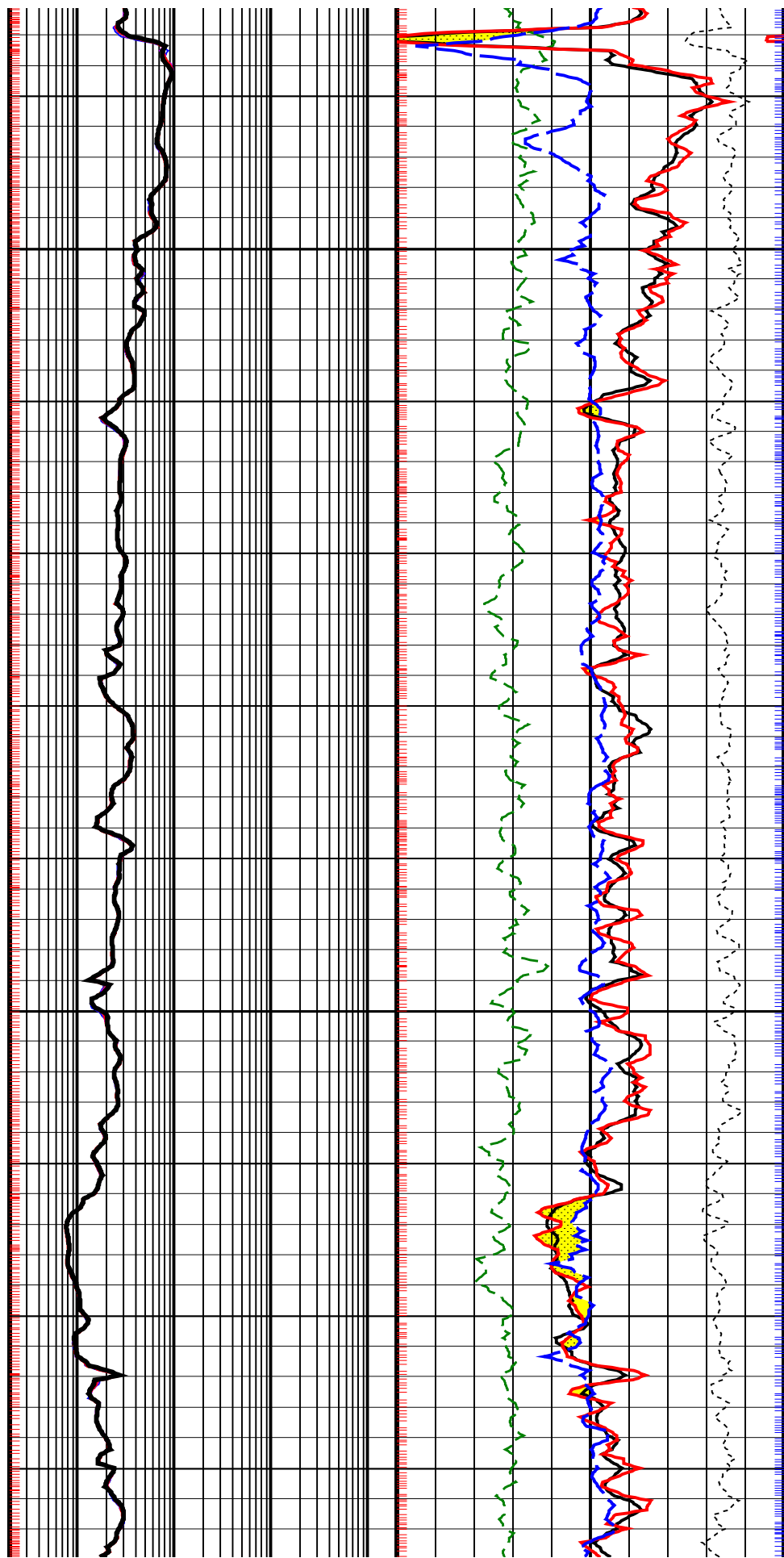






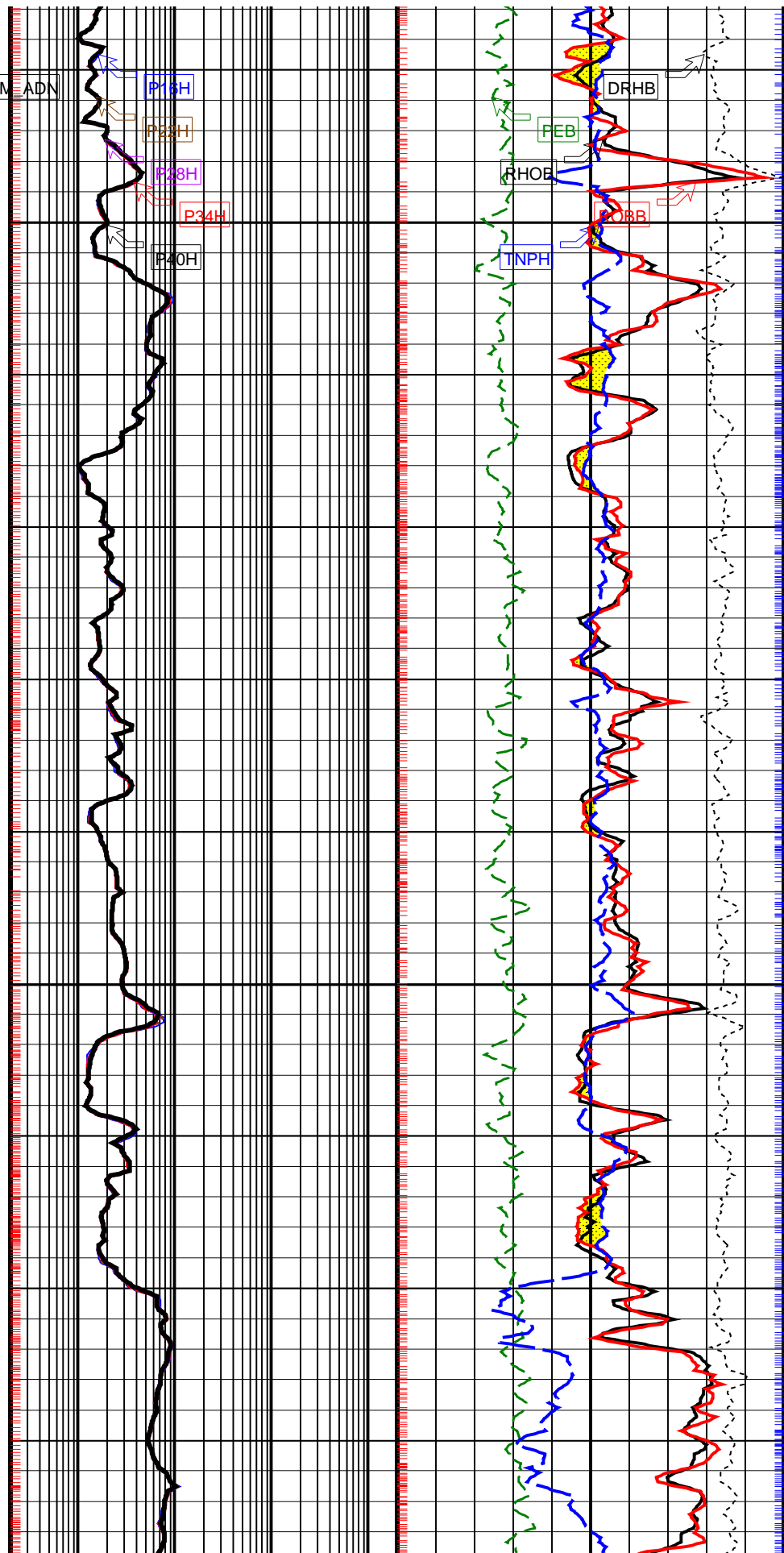
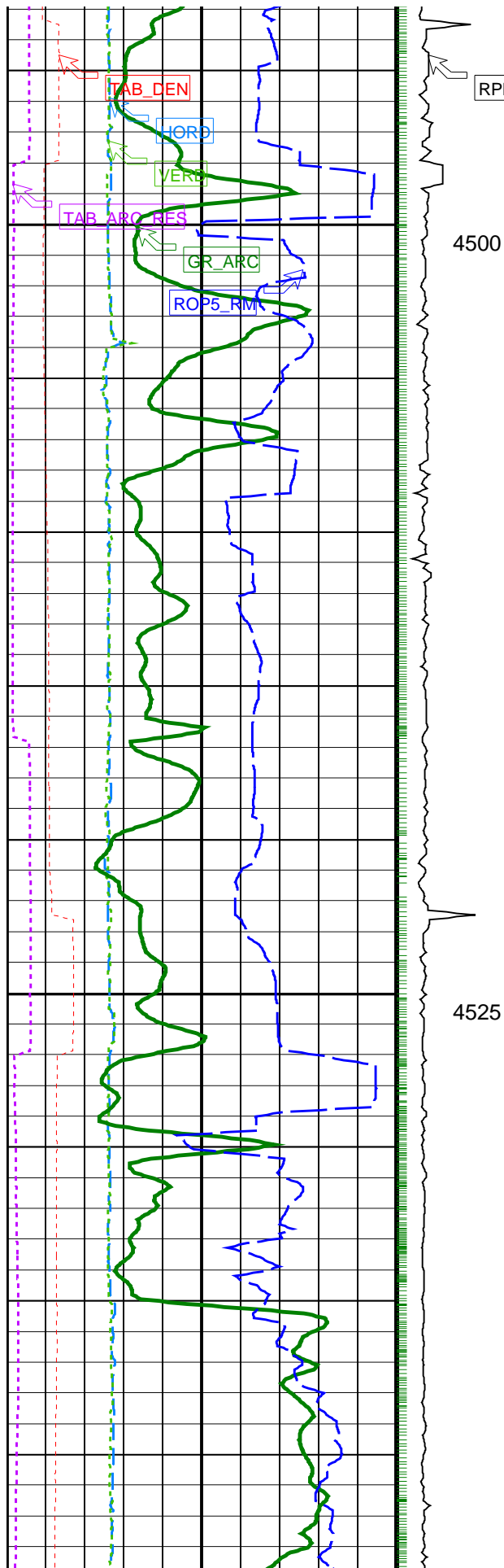
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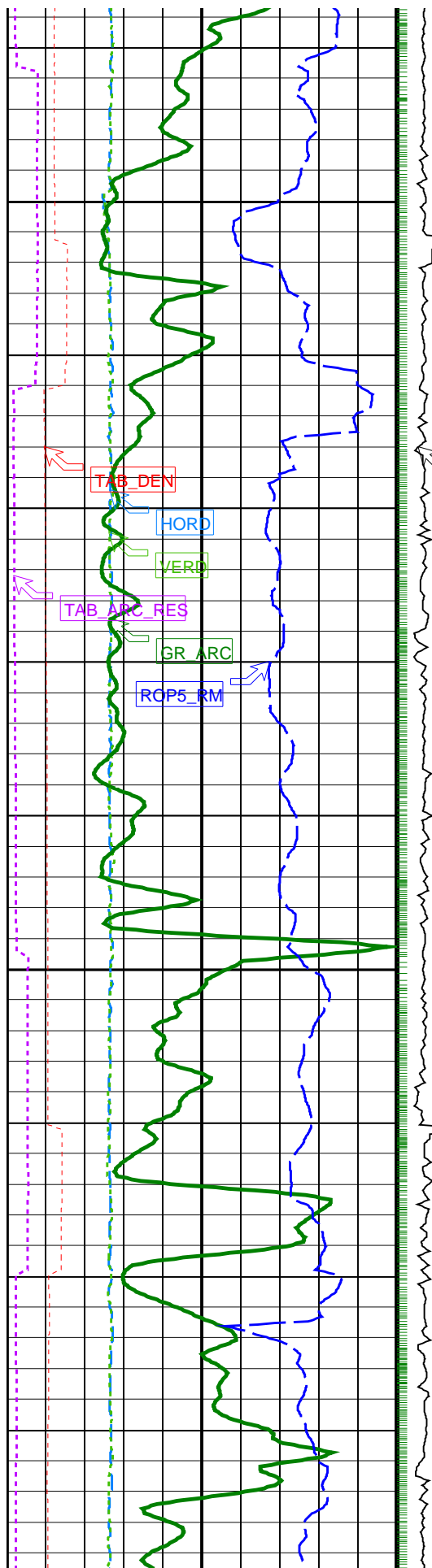
4475



4450

4475





4550

4575

RPM ADN

P18H

P22H

P28H

P34H

P40H

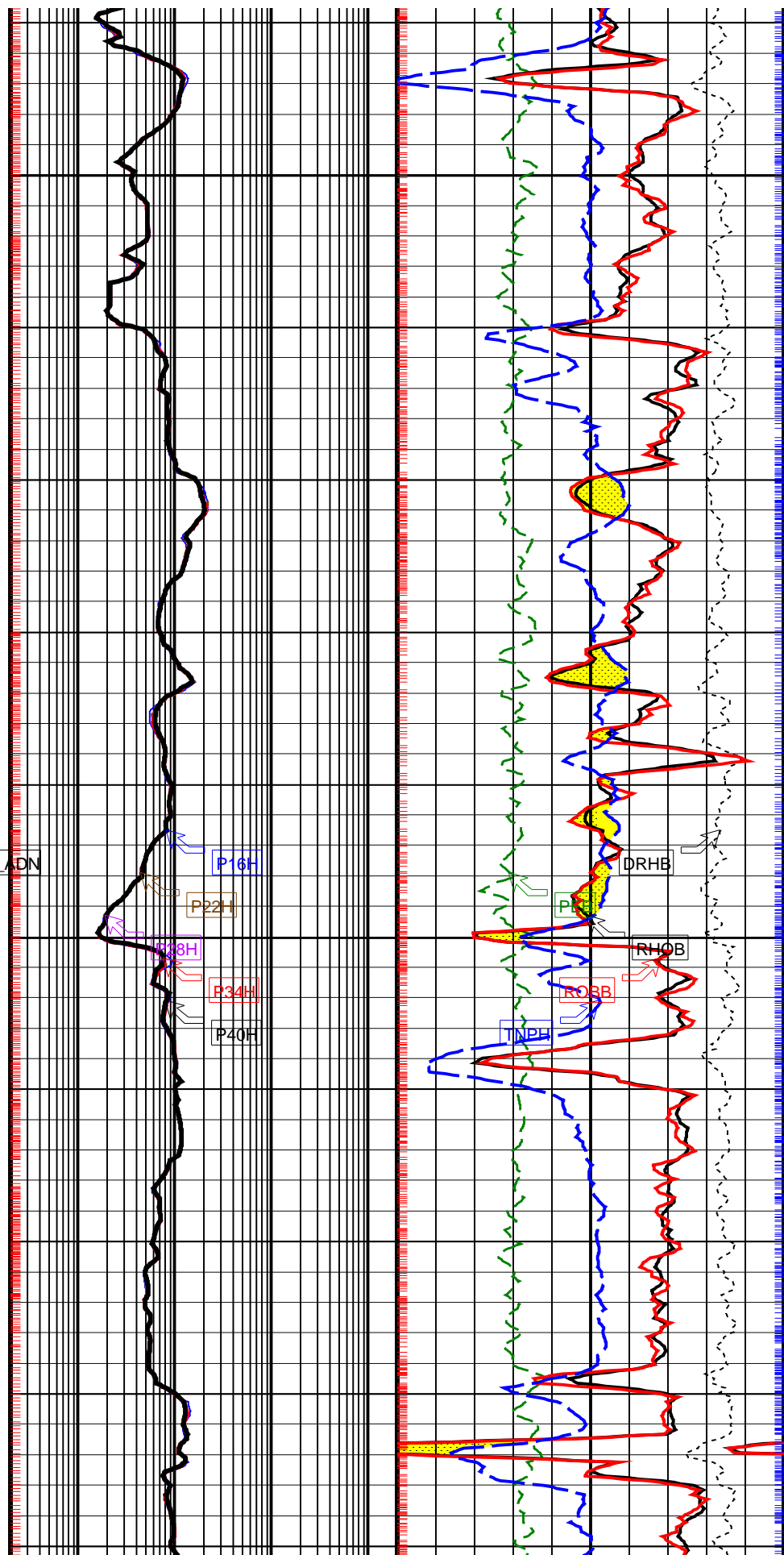
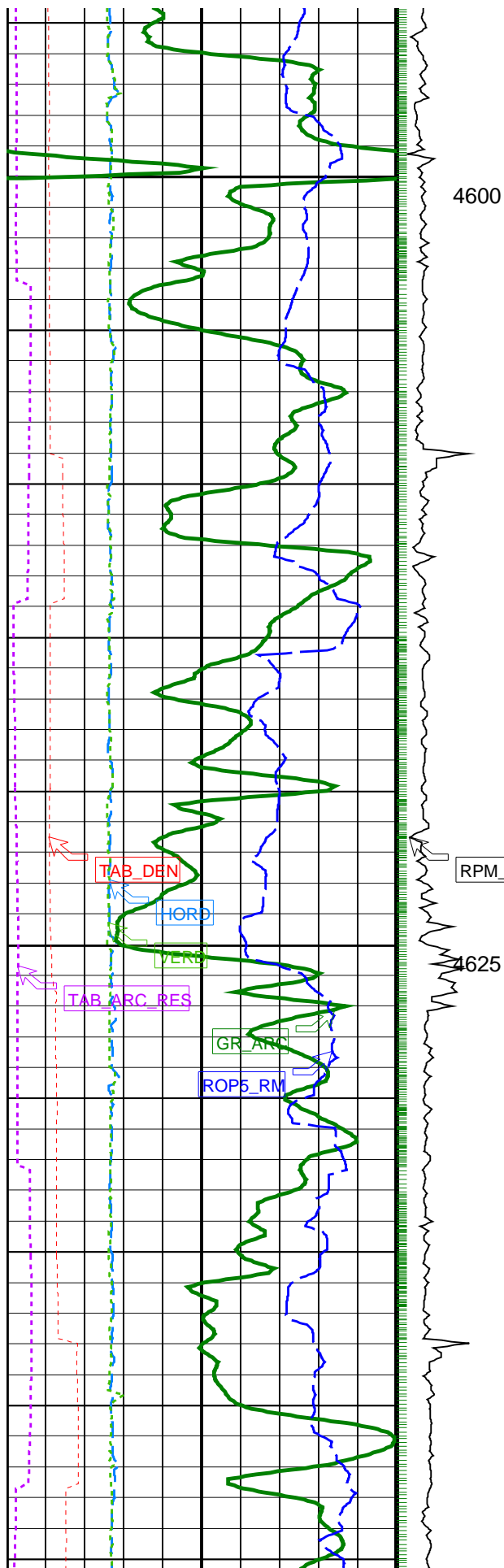
DRHB

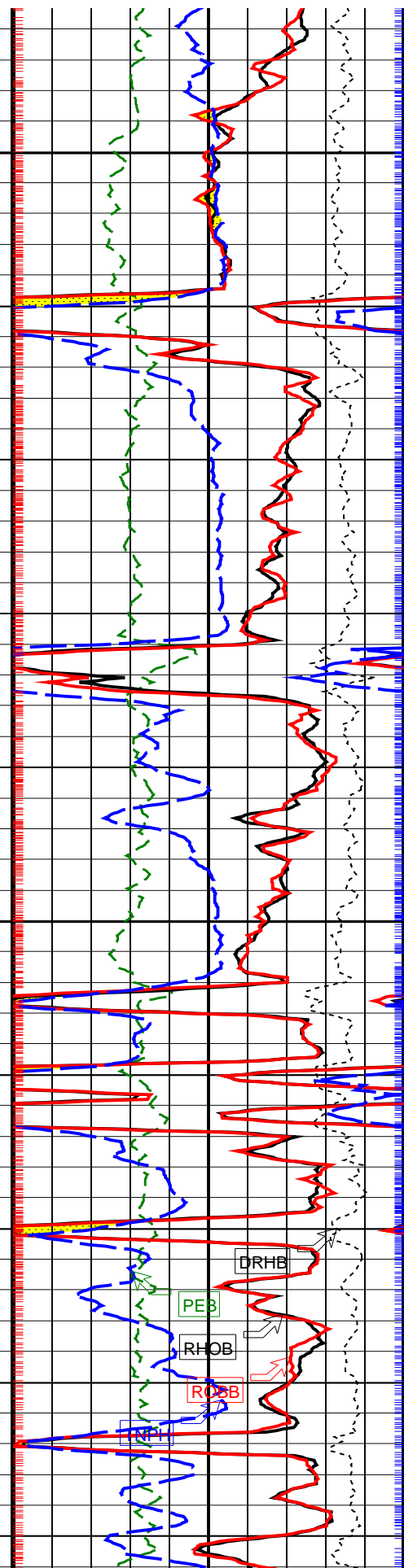
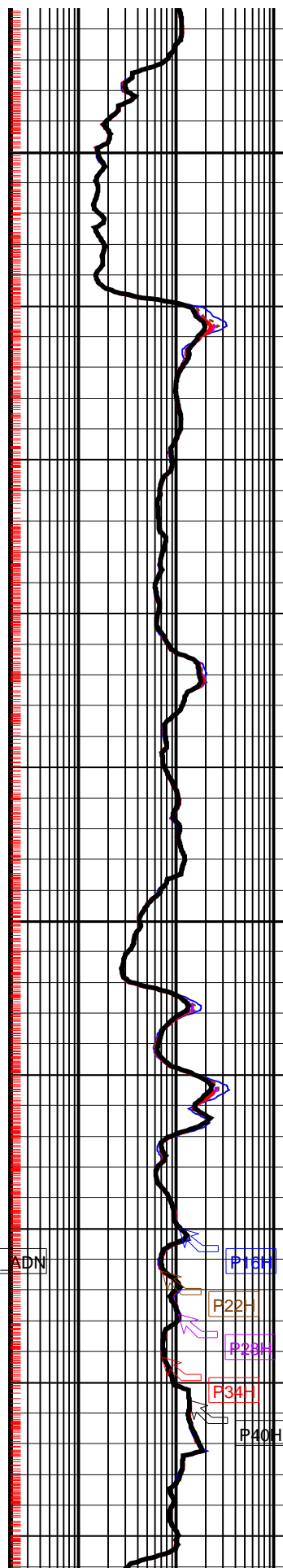
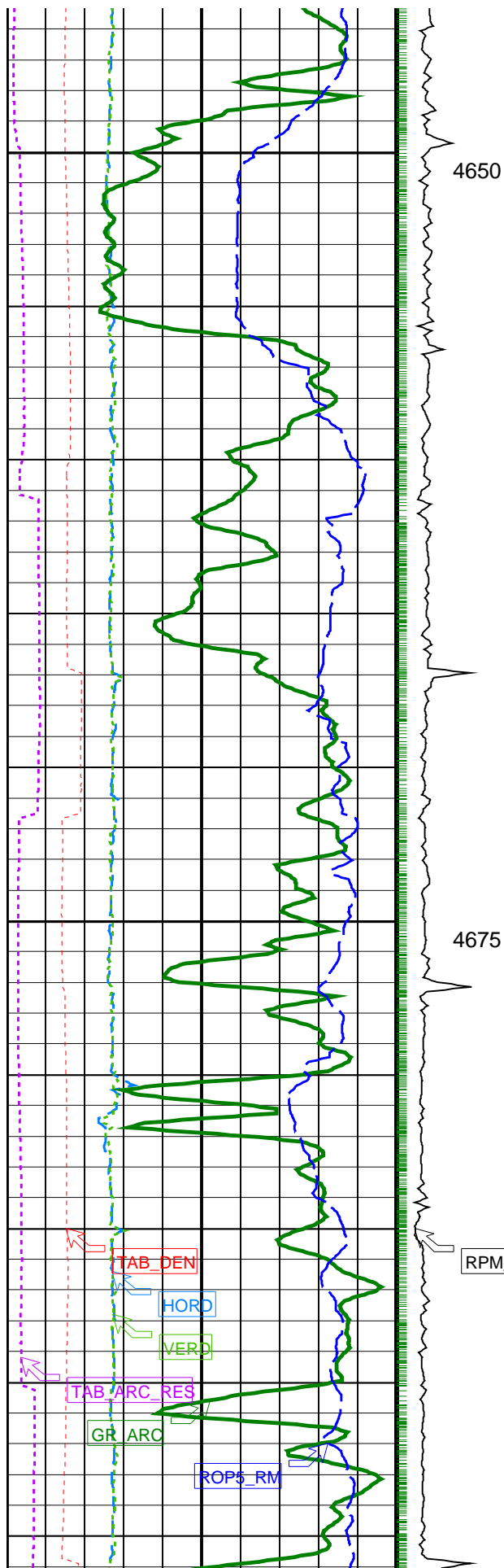
PEB

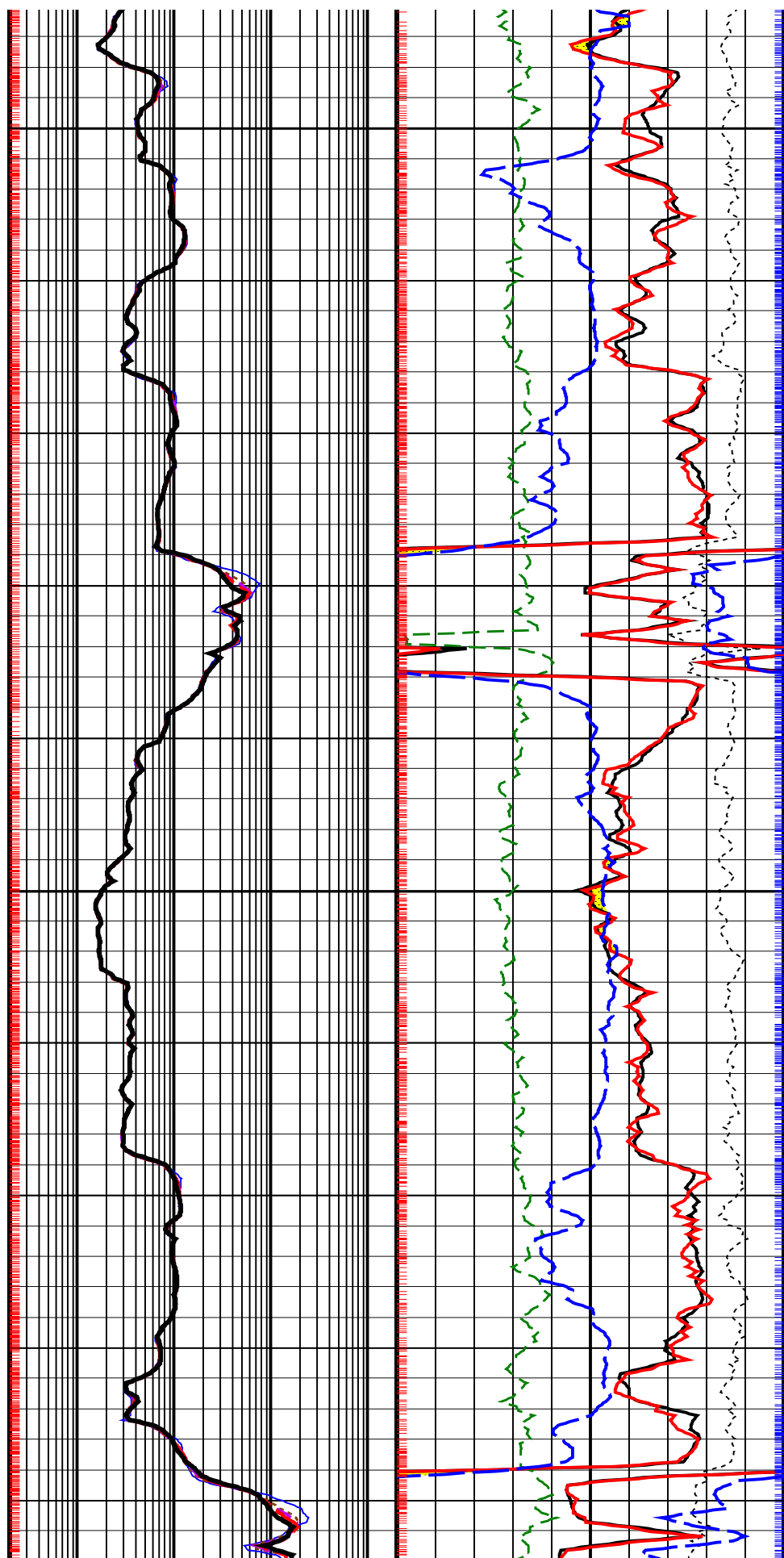
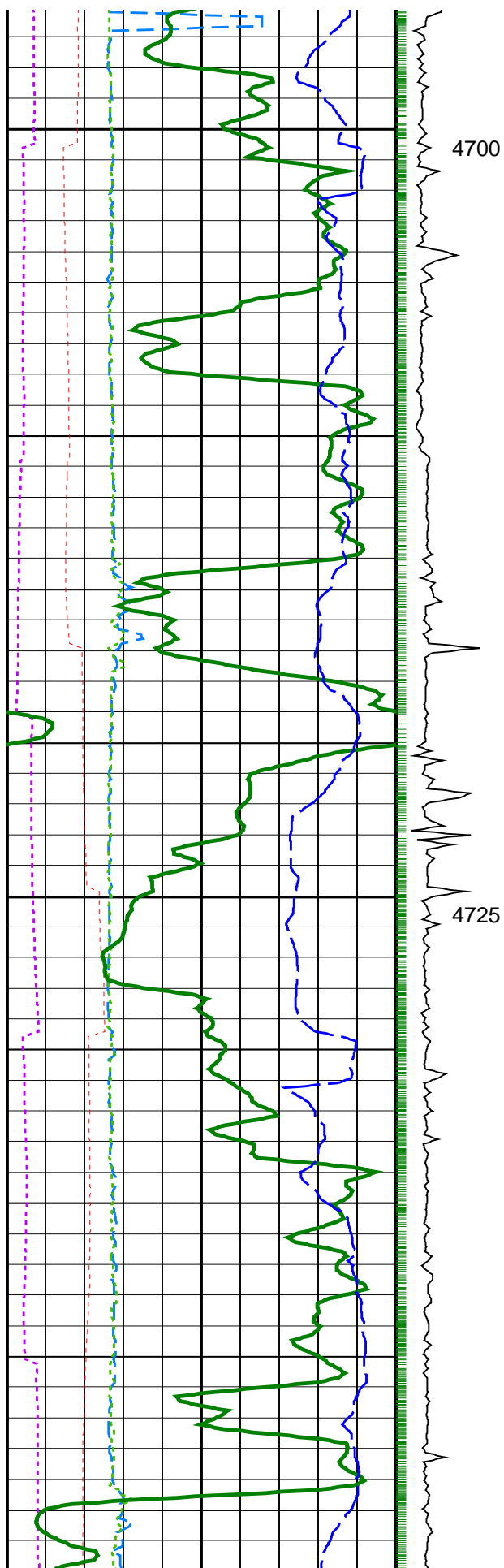
PHOB

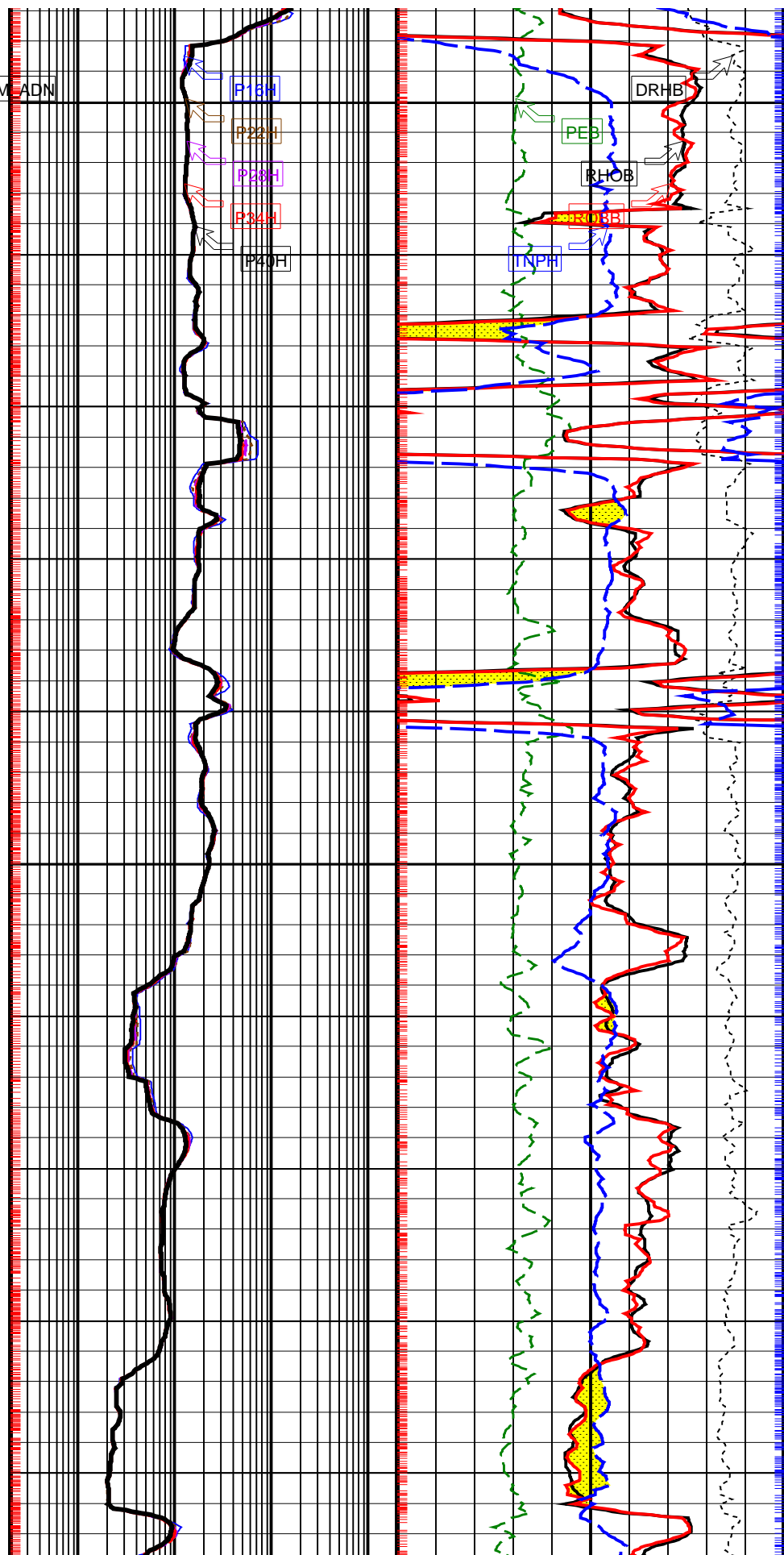
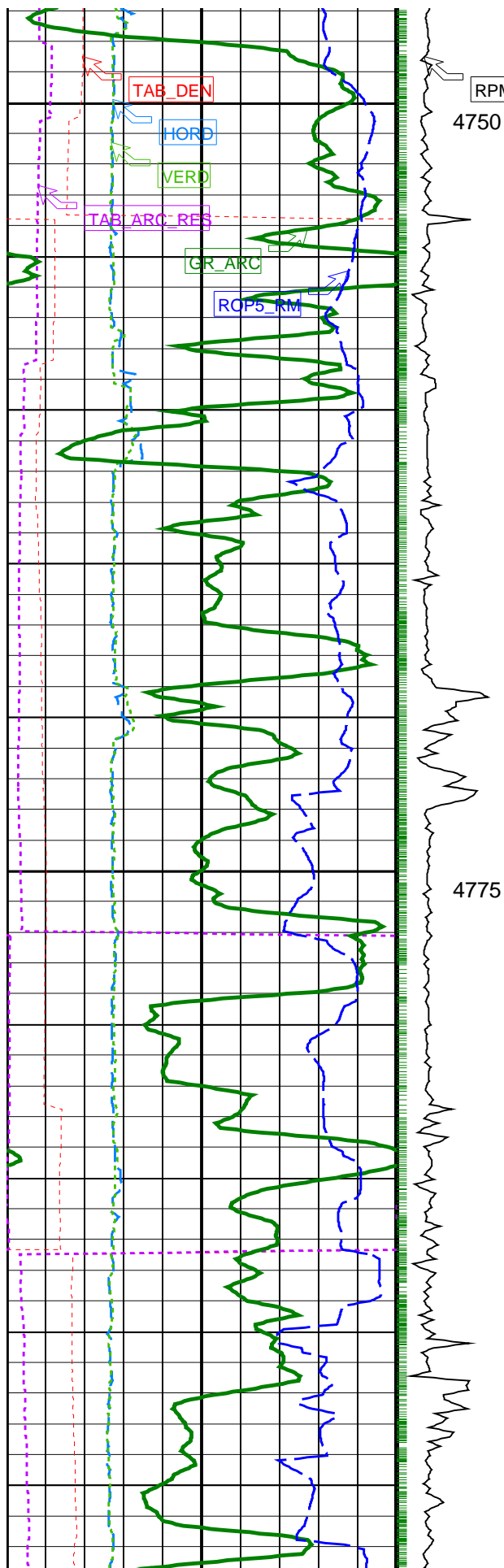
ROBB

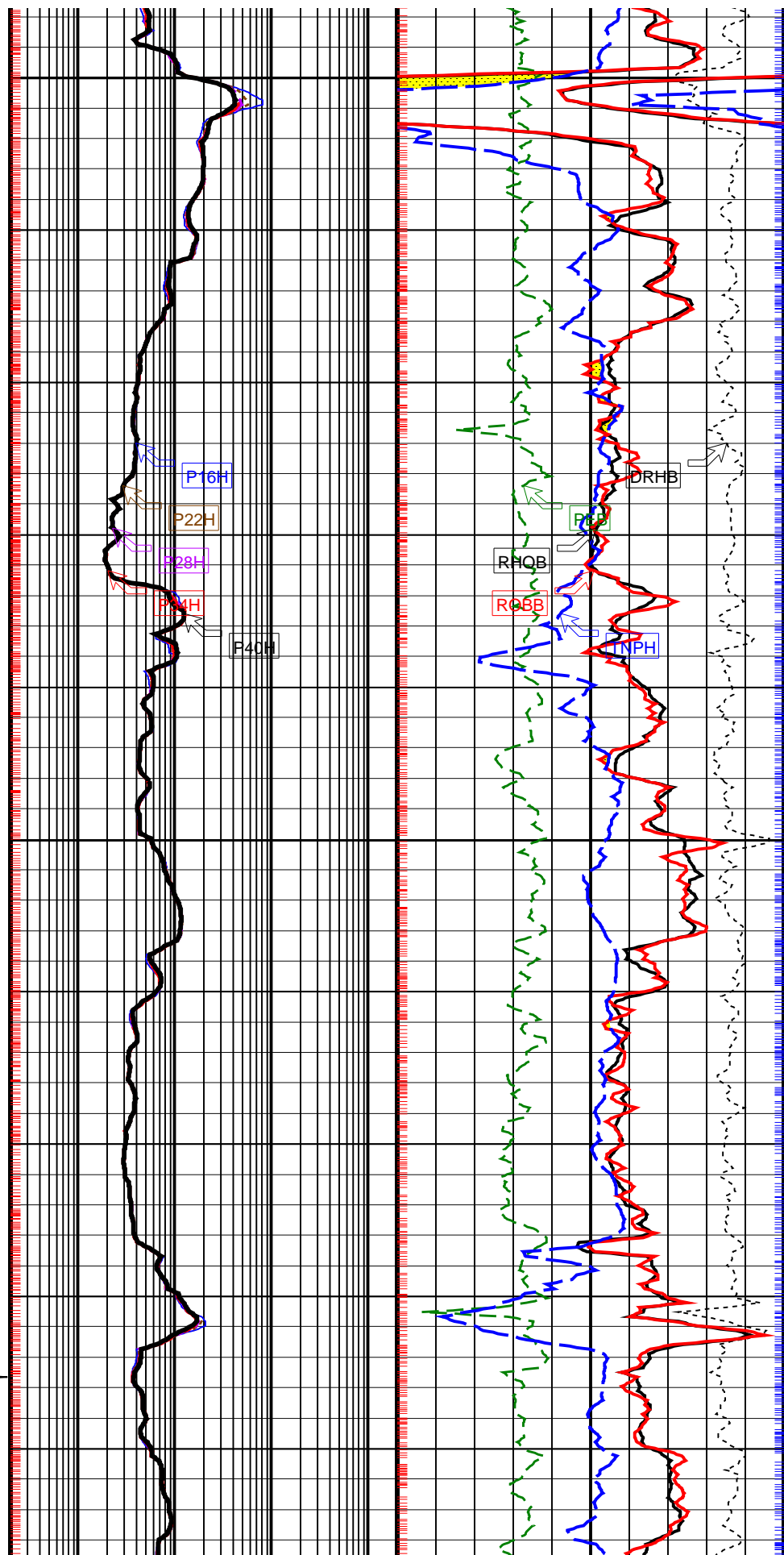
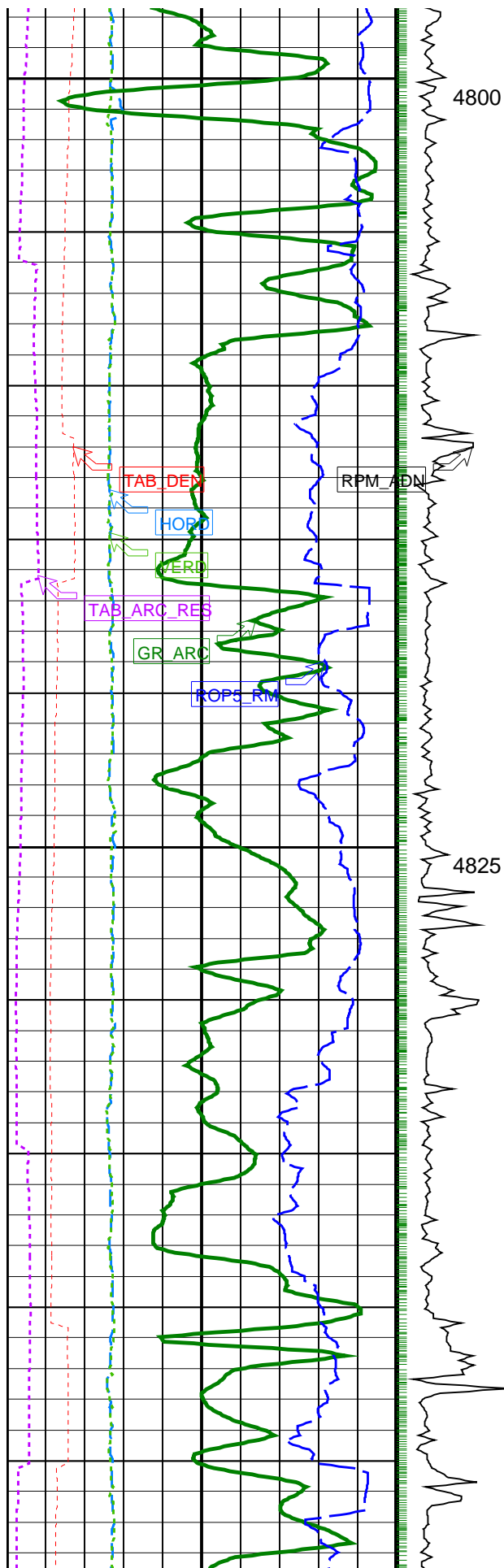
TNPH

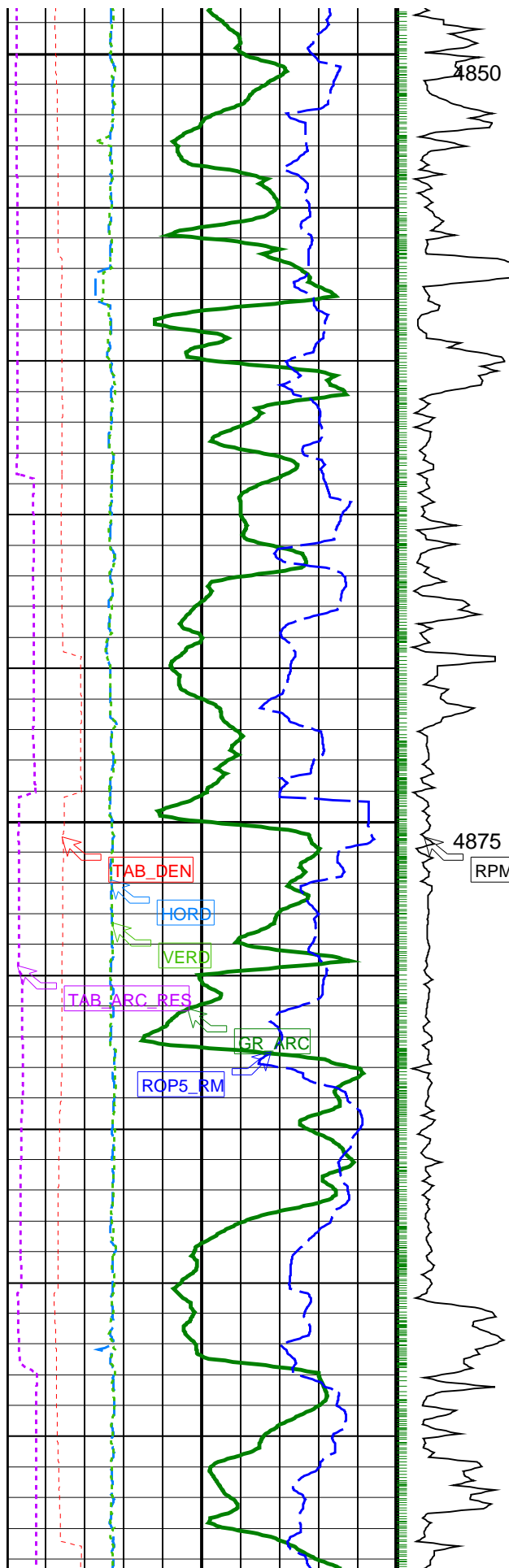




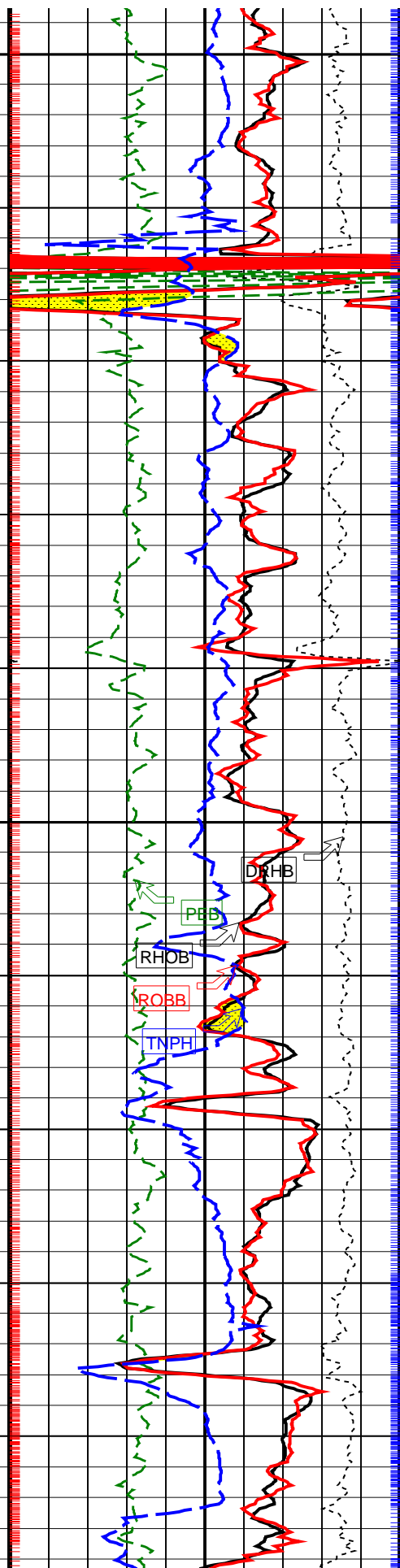
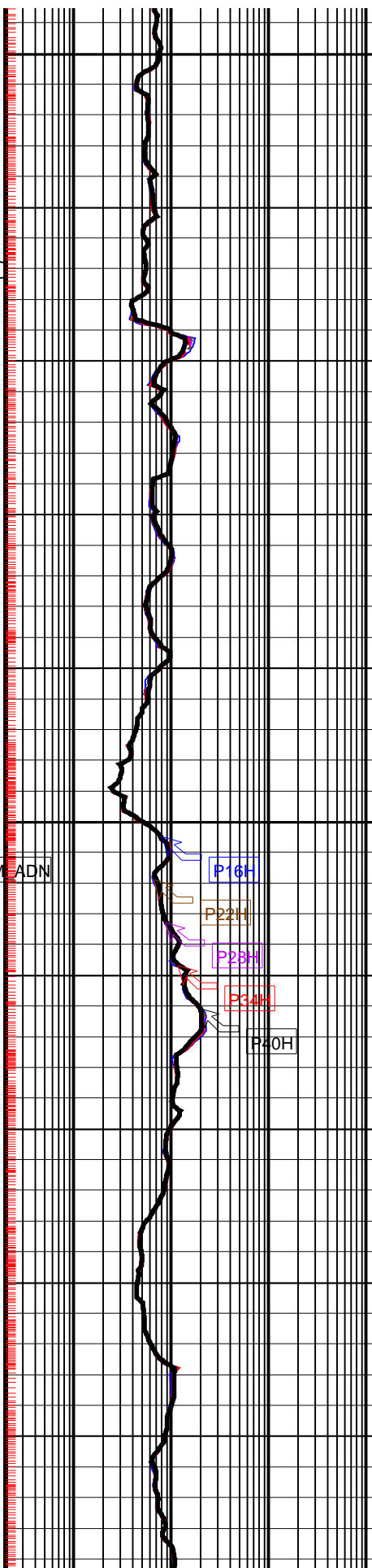


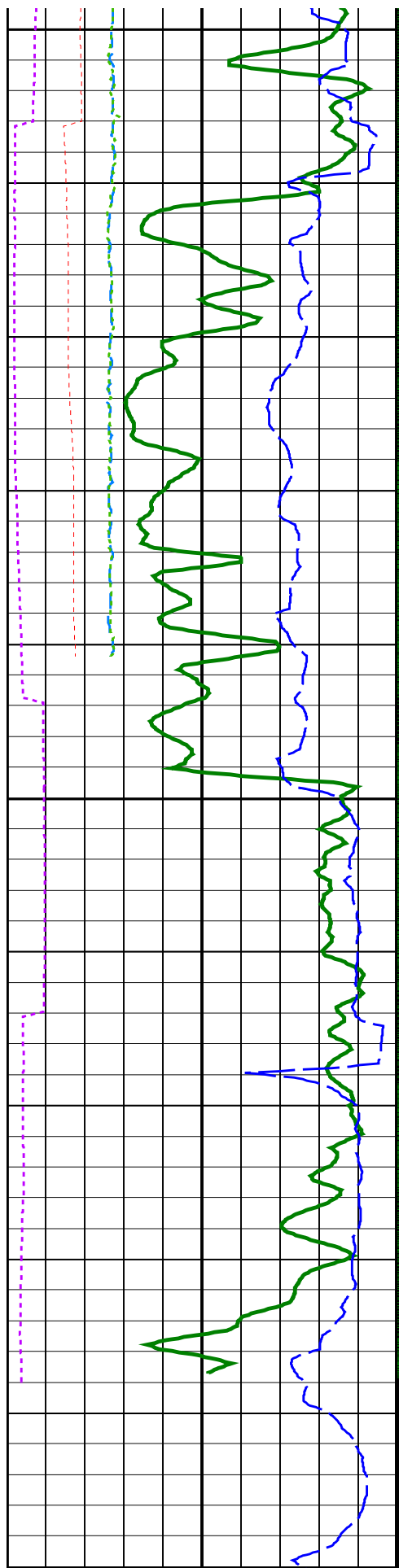




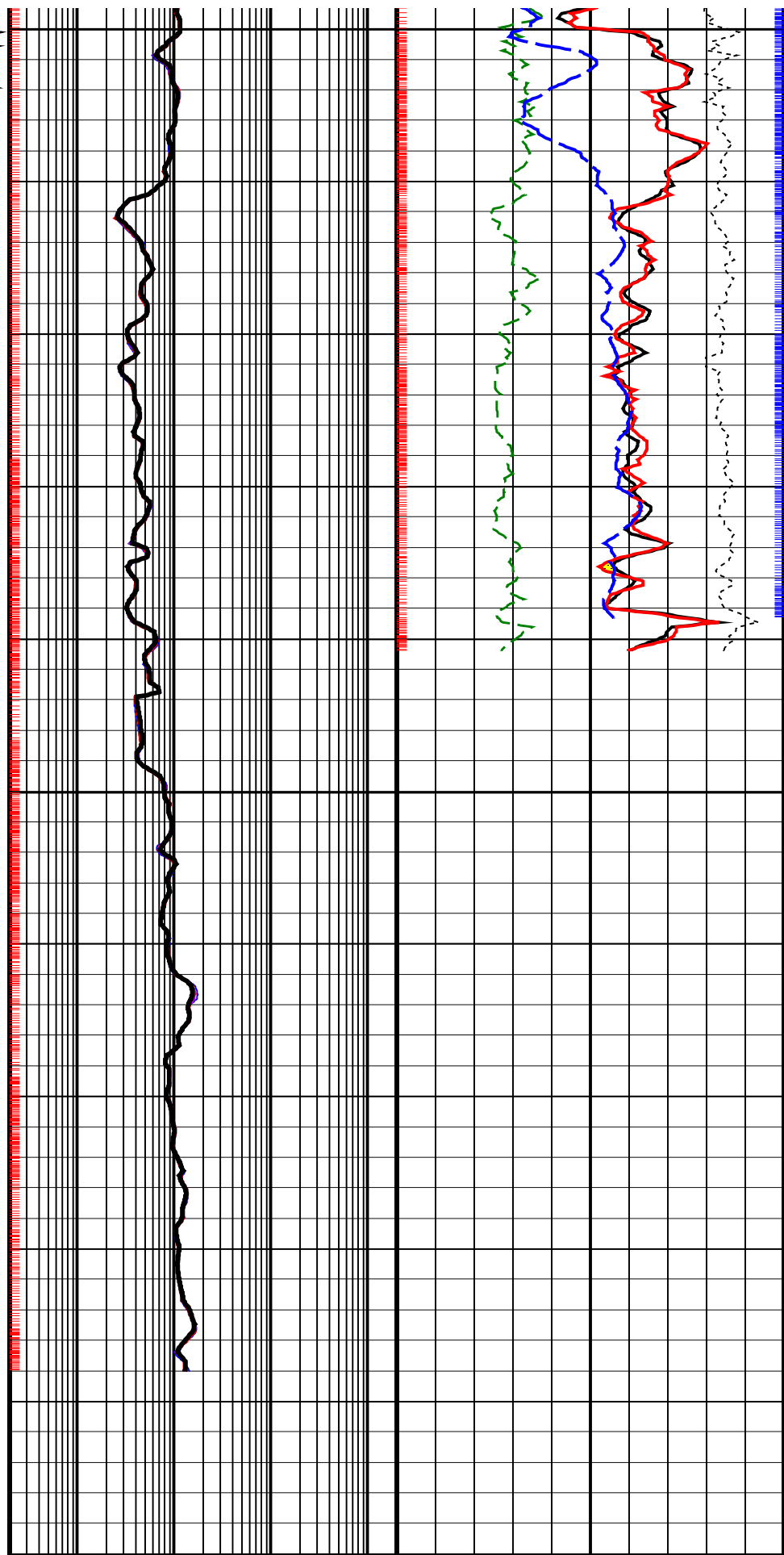


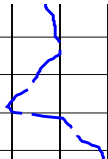
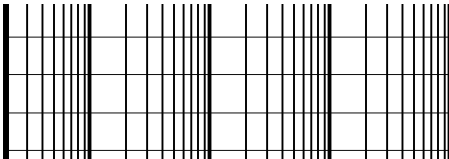
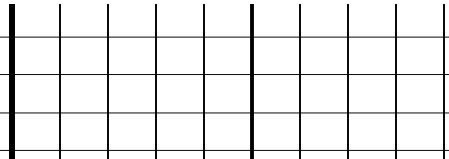
4875
RPM ADN





4925









			4950						
<div>Density Time After Bit (TAB_DEN)</div> <div>(HR)</div> <div>010</div>			<div>ADN</div> <div>Rotational</div> <div>Speed</div> <div>(RPM_ADN)</div> <div>(RPM)</div> <div>2500</div>	<div>ARC Phase-Shift Resistivity 16-in. at 2</div> <div>MHz (P16H)</div> <div>0.22000</div> <div>(OHMM)</div>			<div>Bulk Density Correction, Bottom</div> <div>(DRHB)</div> <div>-0.750.25</div> <div>(G/C3)</div>		
<div>Horizontal Hole Diameter (HORD)</div> <div>(IN)</div> <div>616</div>				<div>ARC Phase-Shift Resistivity 22-in. at 2</div> <div>MHz (P22H)</div> <div>0.22000</div> <div>(OHMM)</div>			<div>Photoelectric Factor, Bottom (PEB)</div> <div>(----</div> <div>010</div>		
<div>Vertical Hole Diameter (VERD)</div> <div>(IN)</div> <div>616</div>				<div>ARC Phase-Shift Resistivity 28-in. at 2</div> <div>MHz (P28H)</div> <div>0.22000</div> <div>(OHMM)</div>			<div>Bulk Density (RHOB)</div> <div>(G/C3)</div> <div>1.852.85</div>		
<div>ARC Gamma Ray (GR_ARC)</div> <div>(GAPI)</div> <div>0200</div>				<div>ARC Phase-Shift Resistivity 34-in. at 2</div> <div>MHz (P34H)</div> <div>0.22000</div> <div>(OHMM)</div>			<div>Bulk Density, Bottom (ROBB)</div> <div>(G/C3)</div> <div>1.852.85</div>		
<div>ARC Resistivity Time After Bit (TAB_</div> <div>ARC_RES)</div> <div>(HR)</div> <div>010</div>				<div>ARC Phase-Shift Resistivity 40-in. at 2</div> <div>MHz (P40H)</div> <div>0.22000</div> <div>(OHMM)</div>			<div>Thermal Neutron Porosity (TNPH)</div> <div>(PU)</div> <div>45-15</div>		
<div>Rate of Penetration, Averaged over Last</div> <div>5ft (ROP5_RM)</div> <div>(M/HR)</div> <div>2000</div>							<div>Gas Area</div> <div>From ADN/ROBB/DEPTH to</div> <div>ADN/TNPH/DEPTH</div>		



PIP SUMMARY			Density Ticks, 0.1 ft			Neutron Ticks, 0.1 ft		
ARC Resistivity Samples								
ARC Gamma Ray Samples								

























IDEAL Version: ID10_0C_04			IDF					
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6.75-in. Azimuthal Density Neutron / Equipment Identification		
Primary Equipment:		
Tool Name and Serial Number	ADN6 - CA	0403
Collar Type and Serial Number	ADDC - AA	0403
Chassis Type and Serial Number	ADSE - EA	18
Stabilizer Type and Serial Number	Clamp-On Stabiliser	689198
Neutron Logging Source	ZAP - M	202
Density Logging Source	QAP - M/Z	1994
Stabilizer Size	8.25 - in.	
Calibration Status	Valid	


Phase	LS window 3 – AI	CPS	Value	Phase	SS window 1 – AI	CPS	Value	Phase	SS window 3 – AI	CPS	Value
Master			163.3	Master			1238	Master			3922
	50.00	725.0	1400		500.0	4250	8000		1500	15750	30000
	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)

Master: 21-Jun-2005 11:22											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Background											
Phase	LS window 3 – Background	CPS	Value	Phase	SS window 1 – Background	CPS	Value	Phase	SS window 3 – Background	CPS	Value
Master			33.84	Master			106.5	Master			474.2
	15.00	82.50	150.0		40.00	220.0	400.0		150.0	825.0	1500
	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)

Master: 21-Jun-2005 11:22									
6.75-in. Azimuthal Density Neutron Calibration									
Density: Water Block Check									
Phase	Long spacing water density G/C3			Value	Phase	Short spacing water density G/C3			Value
Master				1.030	Master				1.120
	1.024 (Minimum)	1.039 (Nominal)	1.054 (Maximum)			1.096 (Minimum)	1.126 (Nominal)	1.156 (Maximum)	

Master: 21-Jun-2005 11:22														
6.75-in. Azimuthal Density Neutron Calibration														
Neutron: 3-Point Calibration														
Phase	Far 1 tube 1 Air	Point Measure	CPS	Value	Phase	Far 1 tube 1 Rod	Point Measure	CPS	Value	Phase	Far 1 tube 1 H2O	Point Measure	CPS	Value
Master				17.01	Master				4.142	Master				2.060
	15.00 (Minimum)	19.05 (Nominal)	21.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.700 (Maximum)	
Phase	Far 1 tube 2 Air	Point Measure	CPS	Value	Phase	Far 1 tube 2 Rod	Point Measure	CPS	Value	Phase	Far 1 tube 2 H2O	Point Measure	CPS	Value
Master				18.12	Master				4.335	Master				2.137
	16.00 (Minimum)	19.05 (Nominal)	22.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.800 (Maximum)	
Phase	Far 1 tube 3 Air	Point Measure	CPS	Value	Phase	Far 1 tube 3 Rod	Point Measure	CPS	Value	Phase	Far 1 tube 3 H2O	Point Measure	CPS	Value
Master				17.15	Master				4.188	Master				2.066
	15.00 (Minimum)	19.05 (Nominal)	21.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.700 (Maximum)	
Phase	Far 2 tube 1 Air	Point Measure	CPS	Value	Phase	Far 2 tube 1 Rod	Point Measure	CPS	Value	Phase	Far 2 tube 1 H2O	Point Measure	CPS	Value
Master				17.52	Master				4.365	Master				2.173
	15.00 (Minimum)	19.05 (Nominal)	21.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.700 (Maximum)	
Phase	Far 2 tube 2 Air	Point Measure	CPS	Value	Phase	Far 2 tube 2 Rod	Point Measure	CPS	Value	Phase	Far 2 tube 2 H2O	Point Measure	CPS	Value
Master				18.07	Master				4.211	Master				1.982
	16.00 (Minimum)	19.05 (Nominal)	22.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.800 (Maximum)	
Phase	Far 2 tube 3 Air	Point Measure	CPS	Value	Phase	Far 2 tube 3 Rod	Point Measure	CPS	Value	Phase	Far 2 tube 3 H2O	Point Measure	CPS	Value
Master				17.03	Master				4.348	Master				2.060
	15.00 (Minimum)	19.05 (Nominal)	21.00 (Maximum)			4.000 (Minimum)	4.857 (Nominal)	5.500 (Maximum)			1.900 (Minimum)	2.363 (Nominal)	2.700 (Maximum)	
Phase	Near 1 tube 1 Air	Point Measure	CPS	Value	Phase	Near 1 tube 1 Rod	Point Measure	CPS	Value	Phase	Near 1 tube 1 H2O	Point Measure	CPS	Value
Master				458.8	Master				722.7	Master				319.9
	400.0 (Minimum)	487.5 (Nominal)	540.0 (Maximum)			610.0 (Minimum)	768.8 (Nominal)	850.0 (Maximum)			270.0 (Minimum)	343.7 (Nominal)	390.0 (Maximum)	
Phase	Near 2 tube 1 Air	Point Measure	CPS	Value	Phase	Near 2 tube 1 Rod	Point Measure	CPS	Value	Phase	Near 2 tube 1 H2O	Point Measure	CPS	Value
Master				454.0	Master				727.3	Master				320.0
	400.0 (Minimum)	487.5 (Nominal)	540.0 (Maximum)			610.0 (Minimum)	768.8 (Nominal)	850.0 (Maximum)			270.0 (Minimum)	343.7 (Nominal)	390.0 (Maximum)	

Master: 21-Jun-2005 11:22
6.75-in. Azimuthal Density Neutron Calibration

Neutron: Water Block Check		
Phase	Far Neutron water porosity PU	Value
Master		92.83
	90.00 (Minimum) 100.0 (Nominal) 125.0 (Maximum)	

6.75-in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number

ARC6 – BA

669











ARC675 Calibration Status

Valid

Master: 21-Jun-2005 17:38

6.75-in. Array Resistivity Compensated Calibration











Resistivity: Air

Phase	Phase-Shift T1	Value	Phase	Phase-Shift T2	Value	Phase	Phase-Shift T3	Value
Master		1.268	Master		-1.170	Master		1.197
	-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	
Phase	Phase-Shift T4	Value	Phase	Phase-Shift T5	Value	Phase	Phase-Shift T1 at 400KHz	Value
Master		-1.217	Master		1.178	Master		-0.01753
	-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	
Phase	Phase-Shift T2 at 400KHz	Value	Phase	Phase-Shift T3 at 400KHz	Value	Phase	Phase-Shift T4 at 400KHz	Value
Master		-0.06656	Master		0.006531	Master		-0.06732
	-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)			-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	
Phase	Phase-Shift T5 at 400KHz	Value						
Master		-0.002529						
	-3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)							

Master: 21-Jun-2005 17:38

6.75-in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Attenuation T1	Value	Phase	Attenuation T2	Value	Phase	Attenuation T3	Value
Master		8.679	Master		6.273	Master		5.309
	6.500 (Minimum) 8.500 (Nominal) 10.50 (Maximum)			4.500 (Minimum) 6.500 (Nominal) 8.500 (Maximum)			2.500 (Minimum) 4.500 (Nominal) 6.500 (Maximum)	
Phase	Attenuation T4	Value	Phase	Attenuation T5	Value	Phase	Attenuation T1 at 400KHz	Value
Master		4.192	Master		3.867	Master		8.755
	2.600 (Minimum) 4.600 (Nominal) 6.600 (Maximum)			1.600 (Minimum) 3.600 (Nominal) 5.600 (Maximum)			6.500 (Minimum) 8.500 (Nominal) 10.50 (Maximum)	
Phase	Attenuation T2 at 400KHz	Value	Phase	Attenuation T3 at 400KHz	Value	Phase	Attenuation T4 at 400KHz	Value
Master		6.204	Master		5.371	Master		4.116
	4.500 (Minimum) 6.500 (Nominal) 8.500 (Maximum)			2.500 (Minimum) 4.500 (Nominal) 6.500 (Maximum)			2.600 (Minimum) 4.600 (Nominal) 6.600 (Maximum)	
Phase	Attenuation T5 at 400KHz	Value						
Master		3.943						
	1.600 (Minimum) 3.600 (Nominal) 5.600 (Maximum)							

Master: 21-Jun-2005 14:57			
6.75-in. Array Resistivity Compensated Calibration			
Gamma Ray: Blanket			
Phase	Gamma ray factor (equals Calibration Gain multiplied by API Gain Factor) CPS		Value
Master			5.205
	2.780 (Minimum)	4.800 (Nominal)	6.000 (Maximum)

SCHLUMBERGER

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Client.....: ESSO Australia Pty. Ltd.
Field.....: Bream B
Well.....: BMB-B17
API number.....:
Engineer.....: J.Dolan, M.Y.Tan, D.Hastie
RIG.....: ENSCO 102
STATE.....: Victoria

Spud date.....: 03-Jul-05
Last survey date.....: 20-Jul-05
Total accepted surveys....: 166
MD of first survey.....: 176.60 m
MD of last survey.....: 4955.00 m

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

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2004
Magnetic date.....: 07-Jul-2005
Magnetic field strength...: 1202.98 HCNT
Magnetic dec (+E/W-).....: 13.13 degrees
Magnetic dip.....: -69.03 degrees

----- Depth reference -----
Permanent datum.....: Mean Sea Level
Depth reference.....: Driller's Depth
GL above permanent.....: -61.00 m
KB above permanent.....: Top Drive
DF above permanent.....: 47.17 m

----- MWD survey Reference Criteria -----
Reference G.....: 1000.05 mGal
Reference H.....: 1202.98 HCNT
Reference Dip.....: -69.03 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Vertical section origin-----
Latitude (+N/S-).....: -8.30 m
Departure (+E/W-).....: 1.90 m

----- Corrections -----
Magnetic dec (+E/W-).....: 13.13 degrees
Grid convergence (+E/W-)..: -0.52 degrees
Total az corr (+E/W-)....: 13.65 degrees
(Total az corr = magnetic dec - grid conv)

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

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

Azimuth from Vsect Origin to target: 262.95 degrees

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SCHLUMBERGER Survey Report

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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	176.60	0.04	183.64	0.00	176.60	-0.02	-8.30	1.92	8.52	166.98	0.00	TIP	None
2	184.83	1.13	182.03	8.23	184.83	-0.01	-8.38	1.92	8.60	167.12	4.04	GYR	None
3	213.43	3.56	179.37	28.60	213.40	0.14	-9.55	1.92	9.74	168.66	2.59	GYR	None
4	223.59	3.72	184.92	10.16	223.54	0.24	-10.20	1.89	10.37	169.47	1.04	GYR	None
5	242.62	4.46	196.22	19.03	242.52	0.65	-11.52	1.64	11.64	171.88	1.80	GYR	None
6	271.64	8.75	218.77	29.02	271.35	2.68	-14.32	-0.05	14.32	180.21	5.18	GYR	None
7	300.55	10.26	241.47	28.91	299.87	6.65	-17.27	-3.69	17.66	192.07	4.23	GYR	None
8	329.43	14.91	265.50	28.88	328.07	12.76	-18.79	-9.66	21.12	207.21	7.28	GYR	None
9	358.38	18.09	268.20	28.95	355.83	20.96	-19.22	-17.87	26.24	222.91	3.45	GYR	None
10	376.71	19.26	267.42	18.33	373.19	26.80	-19.45	-23.73	30.68	230.67	1.99	MWD	None
11	405.38	22.00	267.42	28.67	400.02	36.87	-19.90	-33.82	39.24	239.53	2.91	MWD	None
12	434.55	26.55	267.16	29.17	426.60	48.83	-20.47	-45.80	50.16	245.92	4.76	MWD	None
13	463.47	30.39	267.57	28.92	452.02	62.57	-21.10	-59.57	63.19	250.49	4.05	MWD	None
14	492.68	34.12	269.90	29.21	476.72	78.07	-21.43	-75.15	78.14	254.08	4.10	MWD	None
15	521.56	37.60	271.58	28.88	500.12	94.83	-21.20	-92.06	94.47	257.03	3.82	MWD	None
16	550.51	41.70	271.67	28.95	522.41	113.09	-20.68	-110.52	112.44	259.40	4.32	MWD	None
17	579.54	44.80	271.95	29.03	543.55	132.74	-20.05	-130.40	131.93	261.26	3.26	MWD	None
18	608.87	48.46	271.91	29.33	563.69	153.80	-19.33	-151.70	152.93	262.74	3.80	MWD	None
19	638.03	52.67	271.80	29.16	582.21	176.04	-18.60	-174.21	175.20	263.90	4.40	MWD	None
20	667.20	55.95	271.13	29.17	599.22	199.47	-18.00	-197.89	198.71	264.80	3.47	MWD	None
21	695.98	60.12	271.59	28.78	614.46	223.62	-17.42	-222.29	222.97	265.52	4.44	MWD	None
22	725.38	64.35	273.81	29.40	628.15	249.25	-16.18	-248.27	248.80	266.27	4.83	MWD	None
23	754.29	64.78	274.68	28.91	640.57	274.85	-14.25	-274.31	274.68	267.03	0.94	MWD	None
24	783.25	65.32	275.18	28.96	652.78	300.53	-11.99	-300.47	300.70	267.71	0.74	MWD	None

25	818.77	67.01	273.50	35.52	667.14	332.38	-9.54	-332.86	333.00	268.36	1.96	MWD	None
26	854.11	67.18	274.13	35.34	680.89	364.35	-7.37	-365.34	365.42	268.84	0.52	MWD	None
27	883.53	67.37	274.24	29.42	692.26	390.97	-5.39	-392.41	392.44	269.21	0.22	MWD	None
28	912.19	67.47	274.39	28.66	703.26	416.91	-3.40	-418.79	418.81	269.53	0.18	MWD	None
29	941.56	67.64	274.39	29.37	714.47	443.52	-1.32	-445.86	445.86	269.83	0.18	MWD	None
30	970.95	67.57	274.58	29.39	725.67	470.14	0.80	-472.95	472.95	270.10	0.20	MWD	None

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SCHLUMBERGER Survey Report

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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)
31	1000.05	67.26	274.68	29.10	736.85	496.45	2.97	-499.73	499.74	270.34	0.34	MWD	None
32	1029.41	66.85	275.24	29.36	748.29	522.90	5.31	-526.66	526.69	270.58	0.68	MWD	None
33	1057.37	66.83	275.77	27.96	759.29	547.99	7.77	-552.25	552.31	270.81	0.53	MWD	None
34	1087.17	65.53	276.46	29.80	771.33	574.53	10.68	-579.36	579.46	271.06	1.48	MWD	None
35	1115.97	65.95	276.52	28.80	783.16	600.06	13.65	-605.45	605.60	271.29	0.45	MWD	None
36	1144.88	66.14	276.01	28.91	794.90	625.77	16.53	-631.71	631.93	271.50	0.53	MWD	None
37	1173.62	66.62	273.57	28.74	806.41	651.54	18.73	-657.95	658.21	271.63	2.42	MWD	None
38	1202.81	66.84	271.28	29.19	817.95	677.99	19.86	-684.74	685.02	271.66	2.21	MWD	None
39	1231.62	66.76	271.15	28.81	829.30	704.19	20.42	-711.21	711.50	271.64	0.15	MWD	None
40	1260.58	66.85	271.17	28.96	840.70	730.54	20.96	-737.82	738.12	271.63	0.10	MWD	None
41	1289.26	66.39	271.05	28.68	852.08	756.60	21.47	-764.14	764.45	271.61	0.50	MWD	None
42	1318.24	66.25	271.26	28.98	863.72	782.87	22.01	-790.68	790.98	271.59	0.25	MWD	None
43	1347.08	66.51	270.71	28.84	875.28	809.03	22.46	-817.10	817.41	271.57	0.60	MWD	None
44	1376.15	67.18	270.40	29.07	886.71	835.52	22.72	-843.82	844.13	271.54	0.76	MWD	None
45	1405.05	67.15	270.07	28.90	897.92	861.94	22.83	-870.46	870.76	271.50	0.32	MWD	None
46	1434.14	67.43	269.66	29.09	909.15	888.58	22.76	-897.29	897.58	271.45	0.49	MWD	None
47	1462.93	67.01	268.80	28.79	920.30	914.97	22.41	-923.84	924.11	271.39	0.95	MWD	None
48	1492.22	67.44	268.83	29.29	931.64	941.83	21.85	-950.84	951.09	271.32	0.45	MWD	None
49	1521.04	67.82	268.79	28.82	942.61	968.34	21.30	-977.48	977.71	271.25	0.40	MWD	None
50	1549.99	67.58	268.90	28.95	953.59	994.99	20.76	-1004.26	1004.48	271.18	0.27	MWD	None
51	1579.01	68.11	269.05	29.02	964.54	1021.72	20.28	-1031.13	1031.33	271.13	0.58	MWD	None
52	1608.07	68.31	269.31	29.06	975.33	1048.54	19.89	-1058.11	1058.30	271.08	0.33	MWD	None
53	1636.95	68.63	269.58	28.88	985.92	1075.23	19.63	-1084.98	1085.16	271.04	0.43	MWD	None
54	1666.13	68.90	270.38	29.18	996.49	1102.23	19.62	-1112.18	1112.35	271.01	0.83	MWD	None
55	1695.25	68.90	271.14	29.12	1006.98	1129.14	19.98	-1139.34	1139.52	271.00	0.74	MWD	None
56	1724.30	69.09	271.81	29.05	1017.39	1155.96	20.68	-1166.45	1166.64	271.02	0.69	MWD	None
57	1753.32	69.21	272.75	29.02	1027.72	1182.72	21.76	-1193.55	1193.75	271.04	0.93	MWD	None
58	1782.48	69.09	272.97	29.15	1038.09	1209.56	23.12	-1220.76	1220.98	271.08	0.25	MWD	None
59	1811.46	69.33	273.59	28.99	1048.38	1236.22	24.67	-1247.81	1248.06	271.13	0.66	MWD	None
60	1840.15	69.21	274.40	28.69	1058.54	1262.56	26.54	-1274.58	1274.86	271.19	0.81	MWD	None

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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)
61	1869.23	69.00	274.33	29.08	1068.91	1289.19	28.60	-1301.67	1301.98	271.26	0.23	MWD	None
62	1897.95	68.96	274.92	28.72	1079.21	1315.44	30.77	-1328.39	1328.75	271.33	0.59	MWD	None
63	1926.96	68.73	275.07	29.01	1089.68	1341.90	33.12	-1355.34	1355.75	271.40	0.28	MWD	None
64	1956.12	68.62	275.18	29.16	1100.29	1368.45	35.55	-1382.40	1382.86	271.47	0.16	MWD	None
65	1985.11	68.49	275.64	28.99	1110.89	1394.80	38.09	-1409.26	1409.78	271.55	0.47	MWD	None
66	2013.72	68.42	275.77	28.61	1121.39	1420.75	40.74	-1435.74	1436.32	271.63	0.15	MWD	None
67	2043.27	68.42	276.11	29.55	1132.26	1447.53	43.58	-1463.07	1463.72	271.71	0.33	MWD	None
68	2072.90	68.54	276.03	29.63	1143.13	1474.37	46.50	-1490.48	1491.21	271.79	0.15	MWD	None
69	2101.21	68.59	276.22	28.31	1153.47	1500.03	49.31	-1516.68	1517.48	271.86	0.20	MWD	None
70	2130.32	68.73	276.28	29.11	1164.07	1526.42	52.26	-1543.64	1544.52	271.94	0.16	MWD	None
71	2159.55	68.71	275.76	29.23	1174.68	1552.95	55.12	-1570.72	1571.69	272.01	0.51	MWD	None
72	2187.89	68.23	275.09	28.34	1185.08	1578.69	57.61	-1596.97	1598.01	272.07	0.85	MWD	None
73	2217.05	67.62	273.94	29.16	1196.04	1605.16	59.74	-1623.91	1625.00	272.11	1.28	MWD	None
74	2246.05	67.18	272.93	29.00	1207.18	1631.49	61.34	-1650.63	1651.77	272.13	1.08	MWD	None
75	2275.35	67.02	272.33	29.30	1218.58	1658.09	62.58	-1677.59	1678.76	272.14	0.60	MWD	None
76	2303.96	66.99	272.08	28.61	1229.76	1684.09	63.59	-1703.91	1705.09	272.14	0.25	MWD	None
77	2333.53	66.77	271.98	29.57	1241.37	1710.94	64.56	-1731.09	1732.29	272.14	0.25	MWD	None
78	2362.66	66.57	271.60	29.13	1252.91	1737.37	65.39	-1757.82	1759.04	272.13	0.42	MWD	None
79	2391.16	66.42	271.10	28.50	1264.27	1763.23	66.01	-1783.95	1785.17	272.12	0.52	MWD	None
80	2420.52	66.29	270.97	29.36	1276.05	1789.86	66.49	-1810.84	1812.06	272.10	0.18	MWD	None
81	2449.48	66.28	270.92	28.96	1287.70	1816.11	66.93	-1837.35	1838.57	272.09	0.05	MWD	None
82	2478.43	65.90	271.06	28.95	1299.43	1842.32	67.39	-1863.81	1865.03	272.07	0.42	MWD	None
83	2507.38	65.86	271.31	28.95	1311.26	1868.47	67.93	-1890.23	1891.45	272.06	0.24	MWD	None
84	2536.36	65.70	271.62	28.98	1323.15	1894.60	68.61	-1916.65	1917.88	272.05	0.34	MWD	None
85	2565.38	65.56	271.63	29.02	1335.12	1920.74	69.36	-1943.07	1944.31	272.04	0.15	MWD	None
86	2594.40	65.45	271.70	29.02	1347.15	1946.84	70.13	-1969.47	1970.72	272.04	0.13	MWD	None
87	2623.43	65.17	271.70	29.03	1359.28	1972.91	70.91	-1995.83	1997.09	272.03	0.29	MWD	None
88	2652.00	64.93	271.51	28.57	1371.33	1998.52	71.63	-2021.73	2023.00	272.03	0.32	MWD	None
89	2681.57	64.64	272.01	29.57	1383.93	2024.95	72.46	-2048.47	2049.75	272.03	0.55	MWD	None

90	2710.44	64.64	271.97	28.87	1396.29	2050.72	73.36	-2074.54	2075.84	272.03	0.04	MWD	None
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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)
91	2739.43	65.30	272.01	28.99	1408.56	2076.66	74.27	-2100.79	2102.10	272.02	0.69	MWD	None
92	2768.43	65.78	271.99	29.00	1420.57	2102.73	75.20	-2127.17	2128.50	272.02	0.50	MWD	None
93	2797.42	66.38	272.44	28.99	1432.32	2128.88	76.22	-2153.65	2155.00	272.03	0.76	MWD	None
94	2826.48	66.53	272.48	29.06	1443.93	2155.16	77.36	-2180.27	2181.64	272.03	0.16	MWD	None
95	2855.34	66.71	272.69	28.86	1455.38	2181.27	78.56	-2206.73	2208.13	272.04	0.28	MWD	None
96	2884.25	67.03	272.95	28.91	1466.74	2207.47	79.87	-2233.29	2234.71	272.05	0.42	MWD	None
97	2913.38	67.05	273.01	29.13	1478.10	2233.88	81.26	-2260.07	2261.53	272.06	0.06	MWD	None
98	2942.34	67.73	273.21	28.96	1489.24	2260.19	82.71	-2286.77	2288.26	272.07	0.74	MWD	None
99	2971.33	68.13	273.23	28.99	1500.13	2286.63	84.22	-2313.59	2315.12	272.08	0.42	MWD	None
100	3000.41	68.89	273.44	29.08	1510.78	2313.24	85.79	-2340.60	2342.17	272.10	0.82	MWD	None
101	3029.44	69.28	273.36	29.03	1521.15	2339.91	87.40	-2367.67	2369.28	272.11	0.42	MWD	None
102	3058.81	69.90	273.38	29.37	1531.39	2366.98	89.02	-2395.15	2396.80	272.13	0.64	MWD	None
103	3088.07	69.80	273.29	29.26	1541.47	2394.00	90.62	-2422.57	2424.27	272.14	0.14	MWD	None
104	3116.50	69.65	273.74	28.43	1551.32	2420.22	92.25	-2449.19	2450.93	272.16	0.48	MWD	None
105	3145.03	69.35	274.06	28.53	1561.31	2446.45	94.07	-2475.85	2477.64	272.18	0.45	MWD	None
106	3174.90	69.05	274.28	29.87	1571.92	2473.84	96.10	-2503.70	2505.55	272.20	0.37	MWD	None
107	3203.62	69.10	274.16	28.72	1582.17	2500.15	98.08	-2530.45	2532.35	272.22	0.13	MWD	None
108	3231.95	69.12	273.82	28.33	1592.28	2526.13	99.92	-2556.86	2558.81	272.24	0.34	MWD	None
109	3261.85	69.20	274.34	29.90	1602.91	2553.55	101.91	-2584.73	2586.74	272.26	0.50	MWD	None
110	3290.76	69.38	274.16	28.91	1613.14	2580.07	103.91	-2611.70	2613.77	272.28	0.26	MWD	None
111	3320.19	68.08	272.09	29.43	1623.81	2607.06	105.41	-2639.08	2641.18	272.29	2.41	MWD	None
112	3348.99	66.80	269.60	28.80	1634.86	2633.40	105.80	-2665.67	2667.77	272.27	2.79	MWD	None
113	3378.00	65.47	267.82	29.01	1646.60	2659.79	105.21	-2692.19	2694.25	272.24	2.21	MWD	None
114	3406.72	64.01	265.64	28.72	1658.86	2685.71	103.73	-2718.12	2720.10	272.19	2.60	MWD	None
115	3436.65	62.50	263.31	29.93	1672.33	2712.42	101.16	-2744.72	2746.58	272.11	2.62	MWD	None
116	3465.56	61.00	260.46	28.91	1686.01	2737.88	97.57	-2769.93	2771.65	272.02	3.08	MWD	None
117	3493.87	59.97	257.54	28.31	1699.96	2762.45	92.87	-2794.11	2795.65	271.90	2.95	MWD	None
118	3522.76	58.80	254.12	28.89	1714.68	2787.12	86.79	-2818.21	2819.55	271.76	3.34	MWD	None
119	3551.72	57.78	250.60	28.96	1729.90	2811.33	79.33	-2841.68	2842.79	271.60	3.33	MWD	None
120	3580.80	56.75	246.98	29.08	1745.63	2835.04	70.49	-2864.48	2865.35	271.41	3.37	MWD	None

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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)
121	3609.60	55.55	243.69	28.80	1761.68	2857.84	60.51	-2886.22	2886.85	271.20	3.16	MWD	None
122	3638.76	54.93	240.03	29.16	1778.31	2880.18	49.22	-2907.34	2907.75	270.97	3.21	MWD	None
123	3667.68	54.16	235.71	28.92	1795.09	2901.51	36.70	-2927.28	2927.51	270.72	3.80	MWD	None
124	3696.68	53.30	231.28	29.00	1812.25	2921.86	22.80	-2946.07	2946.16	270.44	3.86	MWD	None
125	3725.76	53.25	227.13	29.08	1829.64	2941.24	7.58	-2963.71	2963.72	270.15	3.49	MWD	None
126	3754.65	53.96	223.06	28.89	1846.79	2959.59	-8.83	-2980.17	2980.18	269.83	3.54	MWD	None
127	3783.54	54.77	220.16	28.89	1863.62	2977.21	-26.39	-2995.76	2995.87	269.50	2.63	MWD	None
128	3812.61	56.01	216.05	29.07	1880.14	2994.17	-45.21	-3010.51	3010.85	269.14	3.78	MWD	None
129	3841.38	57.08	212.30	28.77	1896.00	3009.98	-65.07	-3023.99	3024.69	268.77	3.50	MWD	None
130	3870.13	58.41	211.89	28.75	1911.35	3025.32	-85.67	-3036.90	3038.11	268.38	1.46	MWD	None
131	3899.29	57.91	210.71	29.16	1926.73	3040.69	-106.83	-3049.77	3051.64	267.99	1.17	MWD	None
132	3928.90	57.02	210.67	29.61	1942.65	3055.97	-128.30	-3062.51	3065.20	267.60	0.92	MWD	None
133	4015.78	53.81	210.04	86.88	1991.96	3099.42	-190.01	-3098.66	3104.48	266.49	1.14	MWD	None
134	4044.33	51.58	209.51	28.55	2009.27	3113.03	-209.72	-3109.94	3117.00	266.14	2.42	MWD	None
135	4073.26	50.24	207.64	28.93	2027.51	3126.11	-229.43	-3120.68	3129.11	265.80	2.08	MWD	None
136	4102.29	46.16	206.56	29.03	2046.85	3138.27	-248.69	-3130.54	3140.41	265.46	4.37	MWD	None
137	4131.17	40.46	206.33	28.88	2067.86	3149.20	-266.42	-3139.37	3150.65	265.15	6.02	MWD	None
138	4159.95	38.23	206.44	28.78	2090.12	3159.25	-282.76	-3147.47	3160.15	264.87	2.36	MWD	None
139	4188.95	34.73	205.10	29.00	2113.43	3168.60	-298.28	-3154.98	3169.04	264.60	3.77	MWD	None
140	4217.63	33.53	204.72	28.68	2137.17	3177.12	-312.88	-3161.75	3177.20	264.35	1.30	MWD	None
141	4246.94	29.53	204.89	29.31	2162.15	3185.20	-326.79	-3168.18	3184.99	264.11	4.16	MWD	None
142	4275.84	25.05	205.43	28.90	2187.82	3192.26	-338.78	-3173.81	3191.84	263.91	4.73	MWD	None
143	4304.81	21.47	206.80	28.97	2214.44	3198.51	-349.05	-3178.83	3197.94	263.73	3.81	MWD	None
144	4333.81	16.56	208.03	29.00	2241.85	3203.84	-357.44	-3183.17	3203.18	263.59	5.18	MWD	None
145	4362.92	15.37	209.00	29.11	2269.83	3208.50	-364.48	-3186.99	3207.77	263.48	1.28	MWD	None
146	4391.85	14.29	210.79	28.93	2297.80	3212.94	-370.90	-3190.68	3212.16	263.37	1.24	MWD	None
147	4420.81	13.66	214.12	28.96	2325.90	3217.39	-376.80	-3194.43	3216.57	263.27	1.07	MWD	None
148	4450.08	13.49	215.04	29.27	2354.35	3221.95	-382.46	-3198.32	3221.11	263.18	0.29	MWD	None
149	4478.92	13.79	215.54	28.84	2382.38	3226.53	-388.01	-3202.25	3225.68	263.09	0.34	MWD	None
150	4507.60	13.77	217.99	28.68	2410.23	3231.26	-393.48	-3206.34	3230.40	263.00	0.62	MWD	None

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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)
151	4536.72	13.73	218.40	29.12	2438.52	3236.18	-398.92	-3210.62	3235.31	262.92	0.11	MWD	None
152	4565.55	13.24	221.77	28.82	2466.55	3241.10	-404.06	-3214.94	3240.24	262.84	0.98	MWD	None
153	4594.41	12.52	224.81	28.87	2494.69	3246.05	-408.75	-3219.35	3245.20	262.76	1.04	MWD	None
154	4623.34	11.59	227.49	28.93	2522.98	3250.88	-412.94	-3223.70	3250.04	262.70	1.14	MWD	None
155	4652.25	10.43	224.62	28.91	2551.36	3255.30	-416.76	-3227.68	3254.48	262.64	1.35	MWD	None
156	4681.21	9.15	221.43	28.96	2579.90	3259.08	-420.36	-3231.05	3258.28	262.59	1.46	MWD	None
157	4710.37	8.01	218.08	29.16	2608.73	3262.26	-423.69	-3233.84	3261.47	262.54	1.30	MWD	None
158	4739.18	7.04	216.13	28.81	2637.29	3264.89	-426.70	-3236.12	3264.13	262.49	1.06	MWD	None
159	4768.38	6.52	215.64	29.20	2666.29	3267.23	-429.49	-3238.14	3266.49	262.44	0.55	MWD	None
160	4797.13	5.98	217.69	28.75	2694.87	3269.40	-432.00	-3240.00	3268.68	262.41	0.62	MWD	None
161	4826.21	5.62	212.03	29.08	2723.80	3271.36	-434.41	-3241.68	3270.66	262.37	0.71	MWD	None
162	4855.07	5.36	211.06	28.86	2752.53	3273.08	-436.76	-3243.13	3272.41	262.33	0.29	MWD	None
163	4883.83	5.16	209.56	28.76	2781.16	3274.68	-439.04	-3244.46	3274.03	262.29	0.26	MWD	None
164	4913.00	5.07	210.11	29.17	2810.22	3276.24	-441.29	-3245.75	3275.62	262.26	0.11	MWD	None
165	4934.41	4.85	211.39	21.41	2831.55	3277.38	-442.88	-3246.70	3276.77	262.23	0.35	MWD	None
166	4955.00	4.80	211.50	20.59	2852.07	3278.46	-444.36	-3247.60	3277.86	262.21	0.08	Projection to TD	

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Company: **ESSO Australia Pty. Ltd.**

Schlumberger

Well: **BMB-B17**

Field: **Bream B**

Rig: **ENSCO 102**

8.5 in. Section

State: **Victoria**

**VISION Service
1:200 Measured Depth
Recorded Mode Log**